

Pantheon Report

Generated at 2018-03-01 04:28:57 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

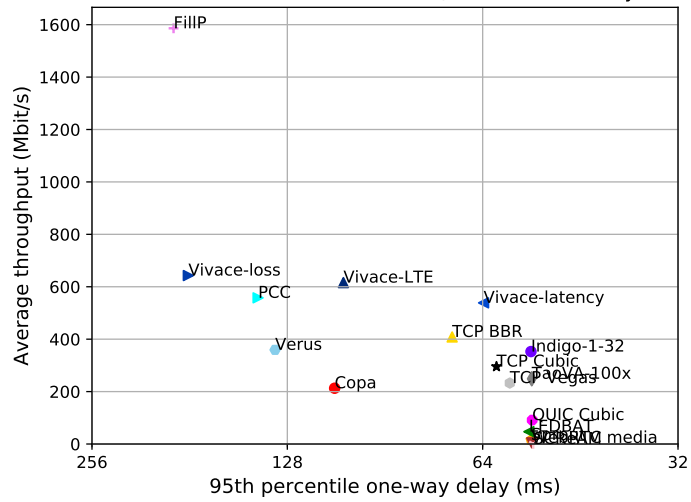
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

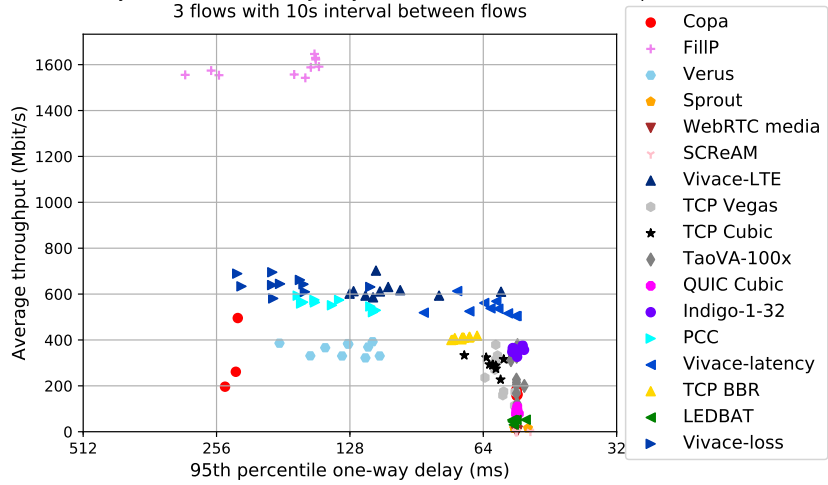
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



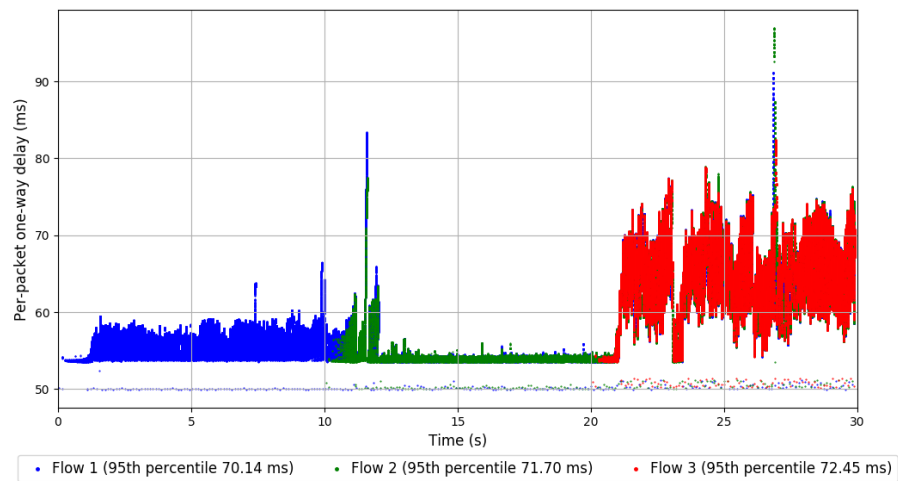
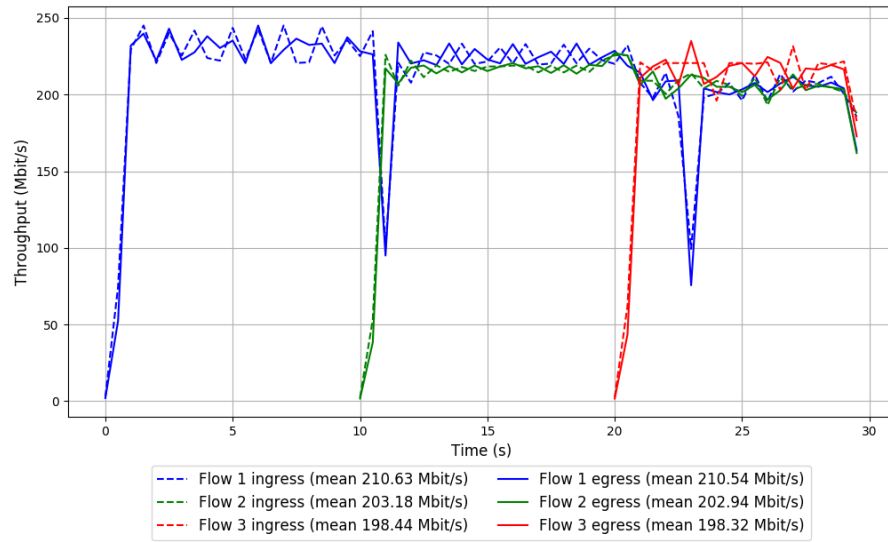
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	211.37	203.79	187.55	70.08	71.22	73.00	0.36	0.58	1.28
TCP Cubic	10	149.51	150.55	139.41	60.00	60.63	62.06	0.39	0.64	1.48
LEDBAT	10	29.56	21.13	10.44	54.38	54.05	53.85	0.71	1.01	2.14
PCC	10	520.84	44.05	23.58	142.23	139.98	118.97	0.98	0.93	1.47
QUIC Cubic	10	52.76	40.97	34.53	52.89	52.79	52.06	0.47	0.90	1.48
SCReAM	10	0.21	0.21	0.22	53.13	52.04	51.96	0.35	0.46	1.07
WebRTC media	10	2.28	1.46	0.64	52.70	53.11	53.16	0.41	0.59	1.16
Sprout	10	7.86	7.78	7.41	53.92	53.62	53.50	0.34	0.54	0.99
TaoVA-100x	10	133.93	128.40	133.00	53.12	54.32	53.48	0.18	0.41	0.74
TCP Vegas	10	124.84	114.68	95.79	57.23	57.71	56.91	0.24	0.51	1.08
Verus	10	209.86	166.41	119.78	121.35	142.26	149.55	0.70	1.13	2.51
Copa	10	132.31	109.84	68.96	89.06	91.23	65.53	7.63	8.18	1.91
FillP	10	844.95	773.65	690.94	181.96	183.08	173.43	6.96	10.43	12.90
Indigo-1-32	10	187.09	174.80	154.27	53.64	54.13	53.97	0.29	0.48	1.20
Vivace-latency	10	327.64	271.61	93.91	77.83	64.91	53.07	0.41	0.75	1.87
Vivace-loss	10	349.46	308.59	271.13	148.87	148.10	167.10	2.48	1.56	3.21
Vivace-LTE	10	361.61	279.25	211.81	106.17	95.36	95.02	0.44	0.87	1.68

```
Run 1: Statistics of TCP BBR

Start at: 2018-02-28 19:56:03
End at: 2018-02-28 19:56:33

# Below is generated by plot.py at 2018-03-01 02:07:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 410.68 Mbit/s
95th percentile per-packet one-way delay: 71.401 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 210.54 Mbit/s
95th percentile per-packet one-way delay: 70.145 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 202.94 Mbit/s
95th percentile per-packet one-way delay: 71.696 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 198.32 Mbit/s
95th percentile per-packet one-way delay: 72.448 ms
Loss rate: 1.12%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-28 20:14:03

End at: 2018-02-28 20:14:33

Below is generated by plot.py at 2018-03-01 02:07:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 410.85 Mbit/s

95th percentile per-packet one-way delay: 68.919 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 211.25 Mbit/s

95th percentile per-packet one-way delay: 68.099 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 202.61 Mbit/s

95th percentile per-packet one-way delay: 69.212 ms

Loss rate: 0.59%

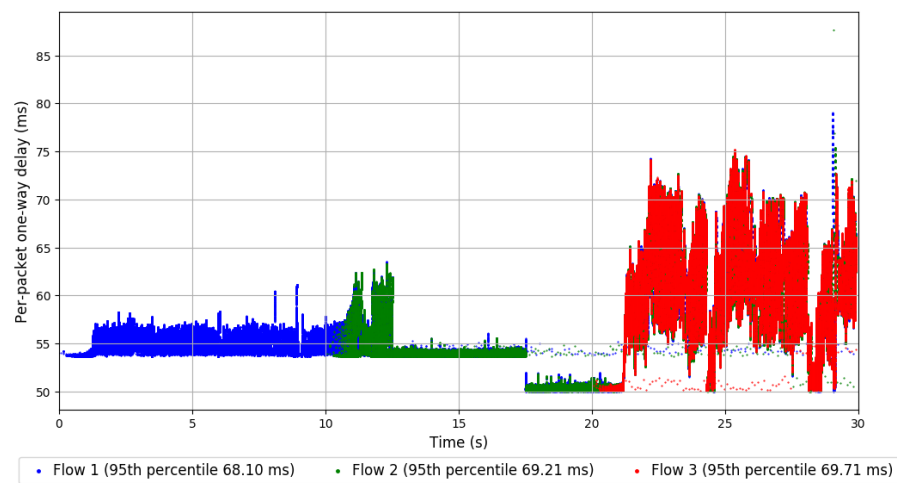
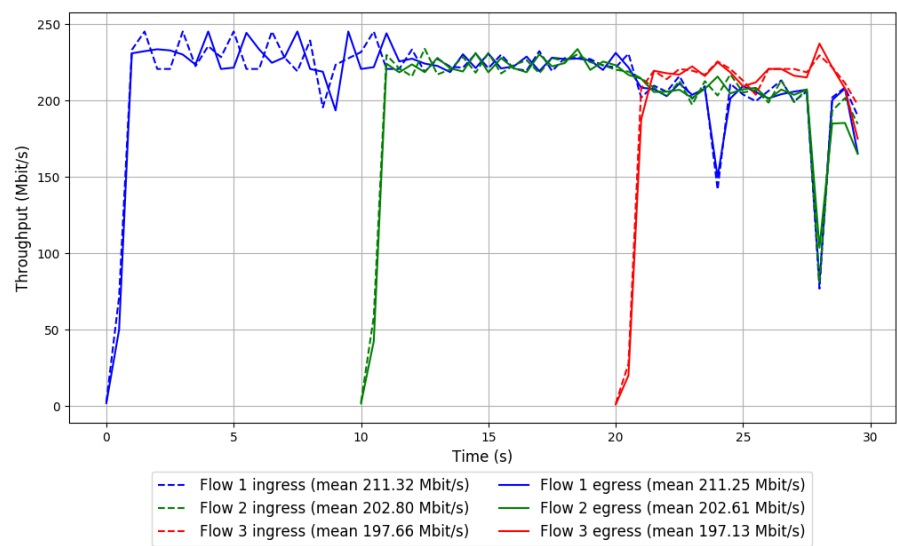
-- Flow 3:

Average throughput: 197.13 Mbit/s

95th percentile per-packet one-way delay: 69.708 ms

Loss rate: 1.28%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-28 20:32:15

End at: 2018-02-28 20:32:45

Below is generated by plot.py at 2018-03-01 02:07:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 413.95 Mbit/s

95th percentile per-packet one-way delay: 68.717 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 215.62 Mbit/s

95th percentile per-packet one-way delay: 67.221 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 206.23 Mbit/s

95th percentile per-packet one-way delay: 68.638 ms

Loss rate: 0.57%

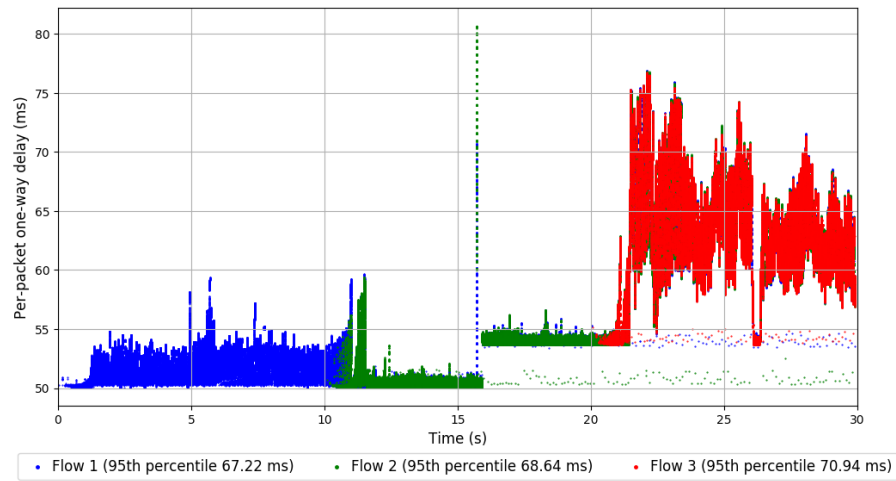
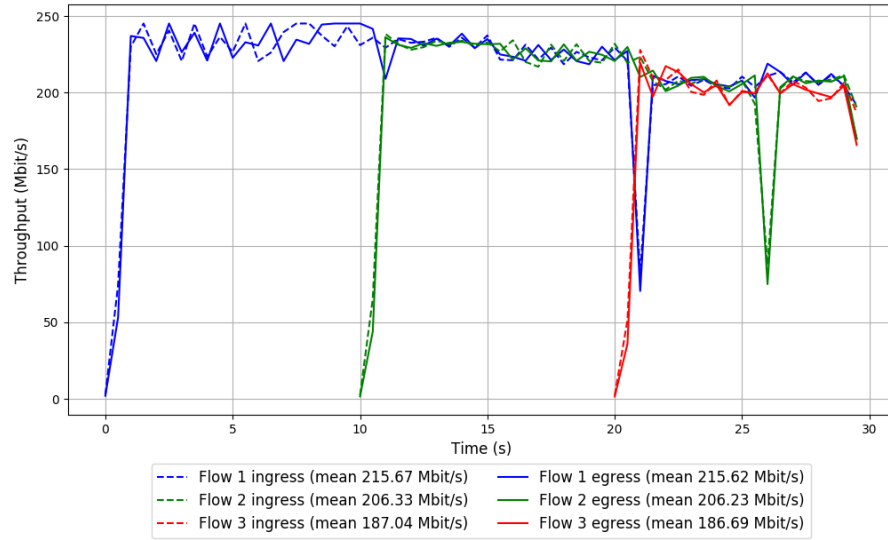
-- Flow 3:

Average throughput: 186.69 Mbit/s

95th percentile per-packet one-way delay: 70.937 ms

Loss rate: 1.24%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-28 20:50:08

End at: 2018-02-28 20:50:38

Below is generated by plot.py at 2018-03-01 02:07:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 418.59 Mbit/s

95th percentile per-packet one-way delay: 66.087 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 216.89 Mbit/s

95th percentile per-packet one-way delay: 64.641 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 213.45 Mbit/s

95th percentile per-packet one-way delay: 66.483 ms

Loss rate: 0.45%

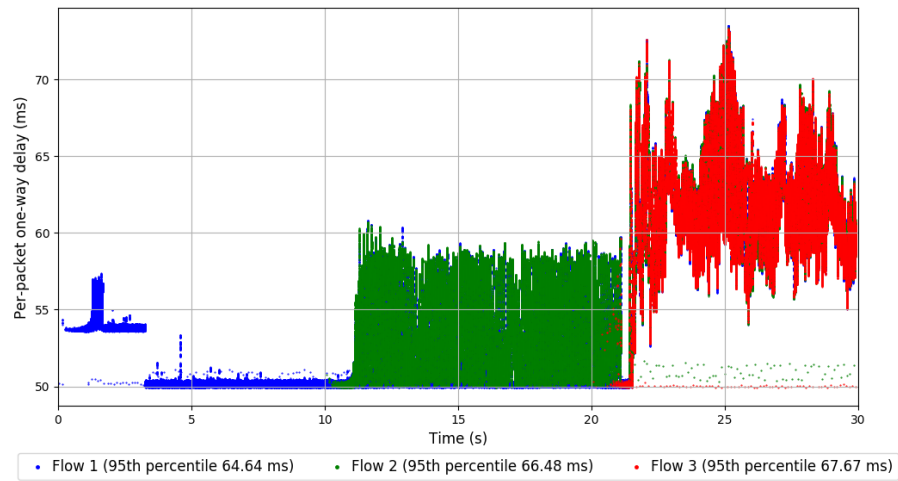
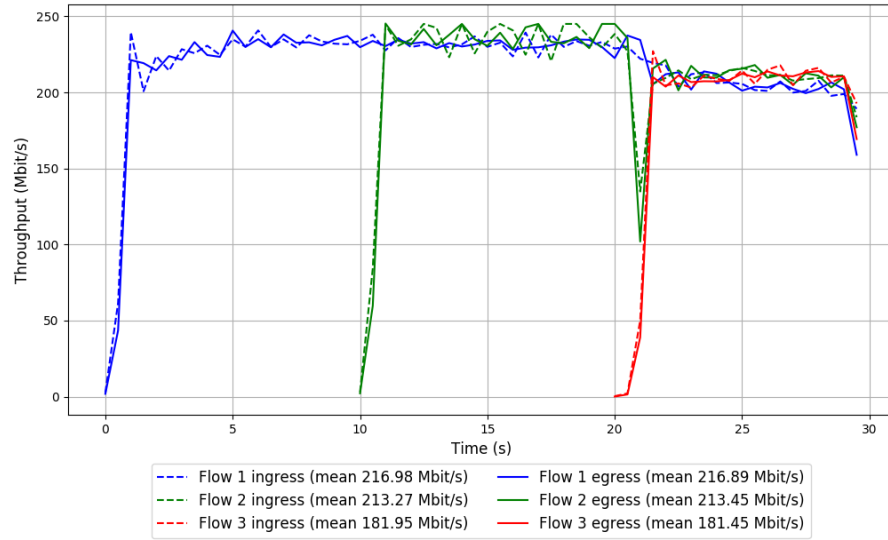
-- Flow 3:

Average throughput: 181.45 Mbit/s

95th percentile per-packet one-way delay: 67.669 ms

Loss rate: 1.33%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-28 21:08:00

End at: 2018-02-28 21:08:30

Below is generated by plot.py at 2018-03-01 02:07:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 409.60 Mbit/s

95th percentile per-packet one-way delay: 70.942 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 211.58 Mbit/s

95th percentile per-packet one-way delay: 71.399 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 204.30 Mbit/s

95th percentile per-packet one-way delay: 69.105 ms

Loss rate: 0.61%

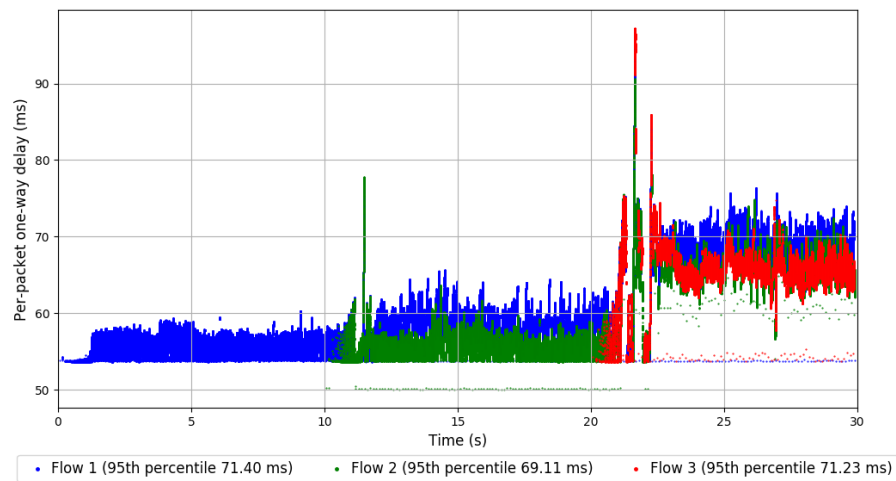
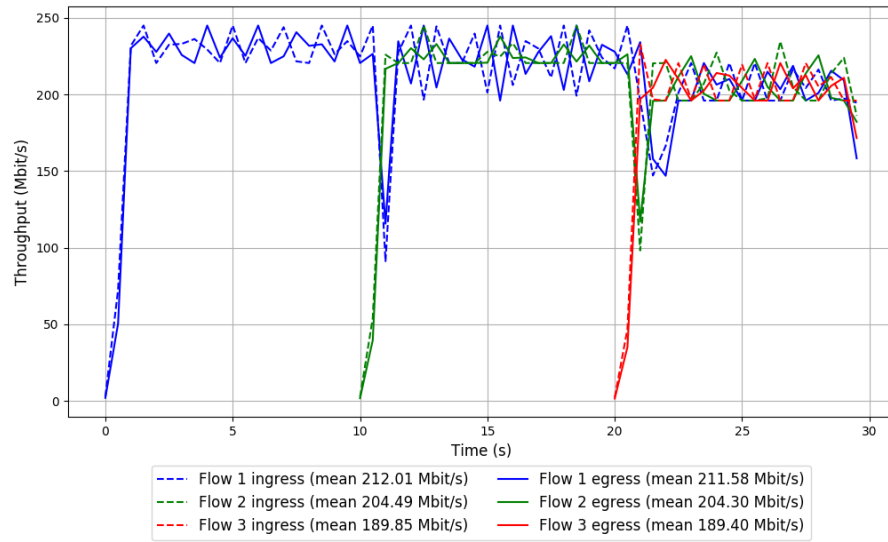
-- Flow 3:

Average throughput: 189.40 Mbit/s

95th percentile per-packet one-way delay: 71.228 ms

Loss rate: 1.30%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-28 21:26:11

End at: 2018-02-28 21:26:41

Below is generated by plot.py at 2018-03-01 02:07:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 408.12 Mbit/s

95th percentile per-packet one-way delay: 74.207 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 210.50 Mbit/s

95th percentile per-packet one-way delay: 72.985 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 203.98 Mbit/s

95th percentile per-packet one-way delay: 74.270 ms

Loss rate: 0.58%

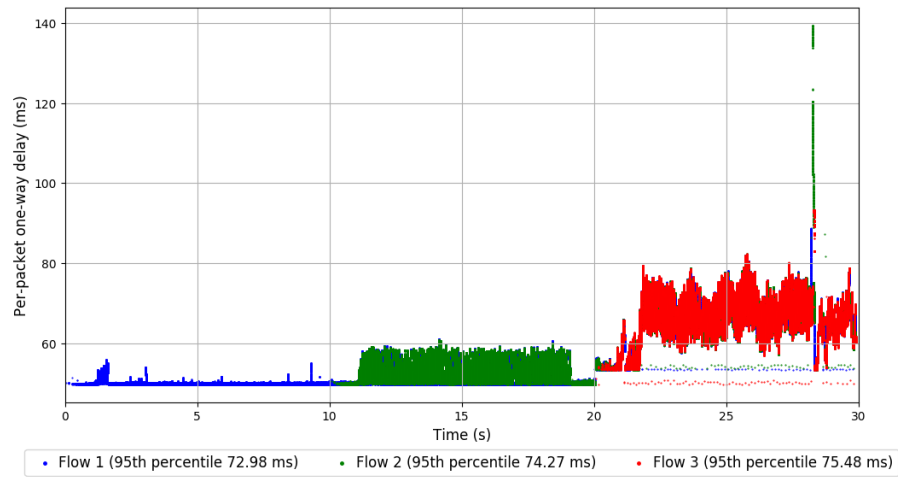
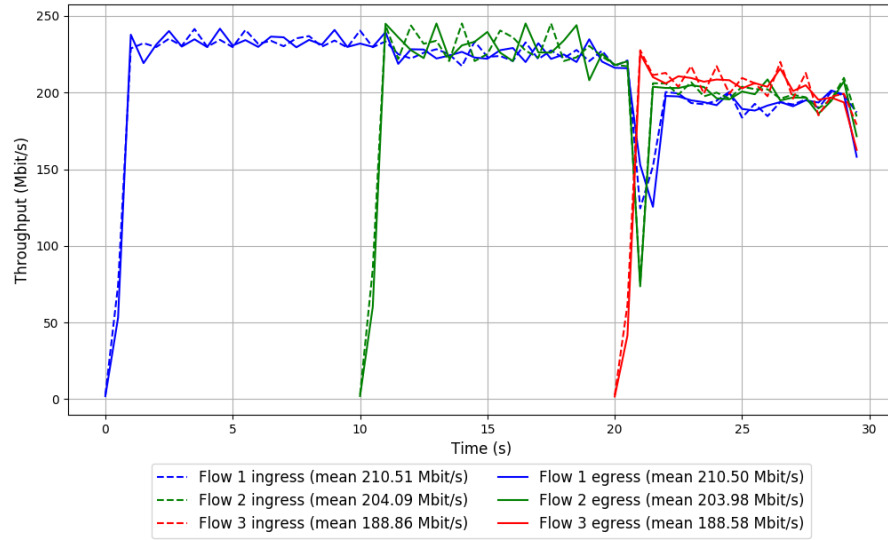
-- Flow 3:

Average throughput: 188.58 Mbit/s

95th percentile per-packet one-way delay: 75.484 ms

Loss rate: 1.20%

Run 6: Report of TCP BBR — Data Link

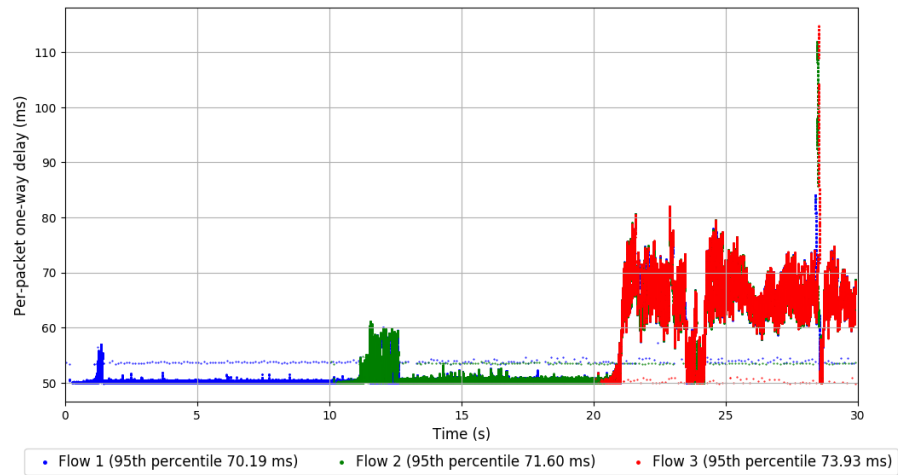
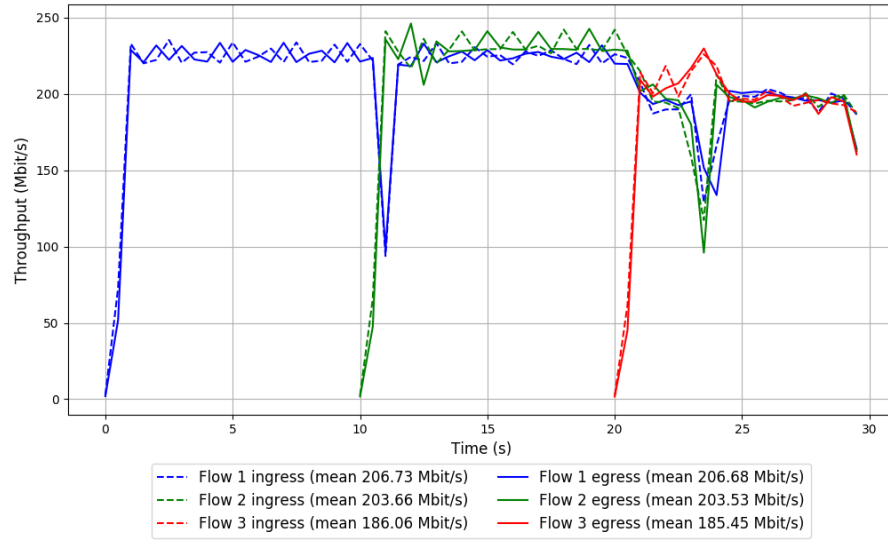


```
Run 7: Statistics of TCP BBR

Start at: 2018-02-28 21:44:19
End at: 2018-02-28 21:44:49

# Below is generated by plot.py at 2018-03-01 02:07:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 403.04 Mbit/s
95th percentile per-packet one-way delay: 71.663 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 206.68 Mbit/s
95th percentile per-packet one-way delay: 70.187 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 203.53 Mbit/s
95th percentile per-packet one-way delay: 71.596 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 185.45 Mbit/s
95th percentile per-packet one-way delay: 73.933 ms
Loss rate: 1.39%
```

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-28 22:02:18

End at: 2018-02-28 22:02:48

Below is generated by plot.py at 2018-03-01 02:07:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 401.09 Mbit/s

95th percentile per-packet one-way delay: 74.911 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 209.96 Mbit/s

95th percentile per-packet one-way delay: 73.390 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 195.04 Mbit/s

95th percentile per-packet one-way delay: 75.127 ms

Loss rate: 0.61%

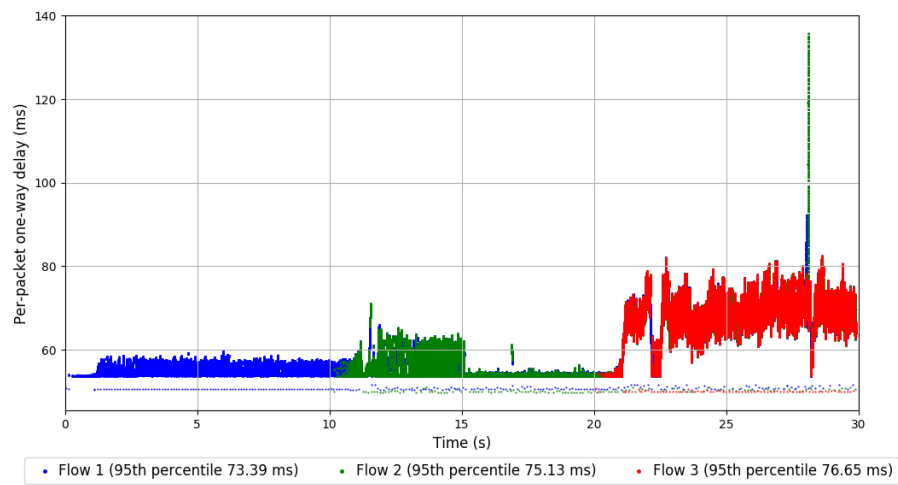
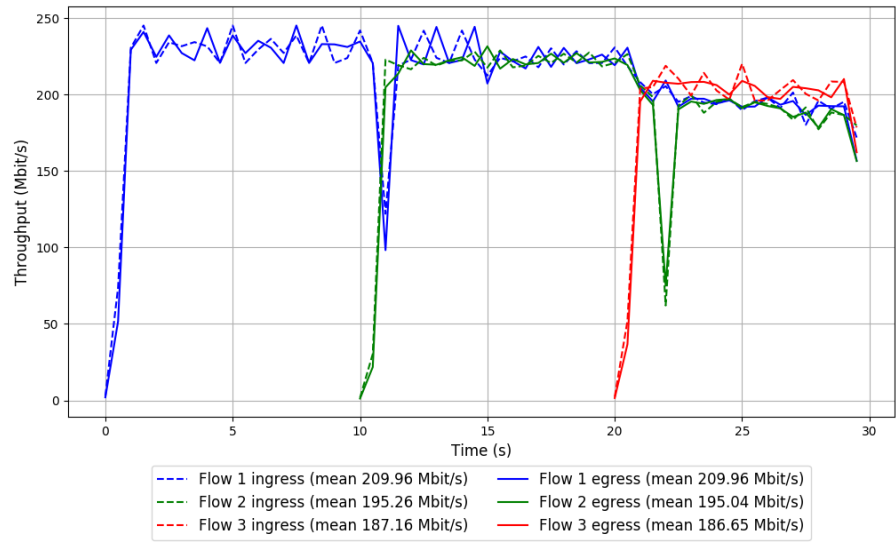
-- Flow 3:

Average throughput: 186.65 Mbit/s

95th percentile per-packet one-way delay: 76.652 ms

Loss rate: 1.32%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-28 22:19:59

End at: 2018-02-28 22:20:29

Below is generated by plot.py at 2018-03-01 02:13:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 409.61 Mbit/s

95th percentile per-packet one-way delay: 70.825 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 213.88 Mbit/s

95th percentile per-packet one-way delay: 69.667 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 203.90 Mbit/s

95th percentile per-packet one-way delay: 70.743 ms

Loss rate: 0.58%

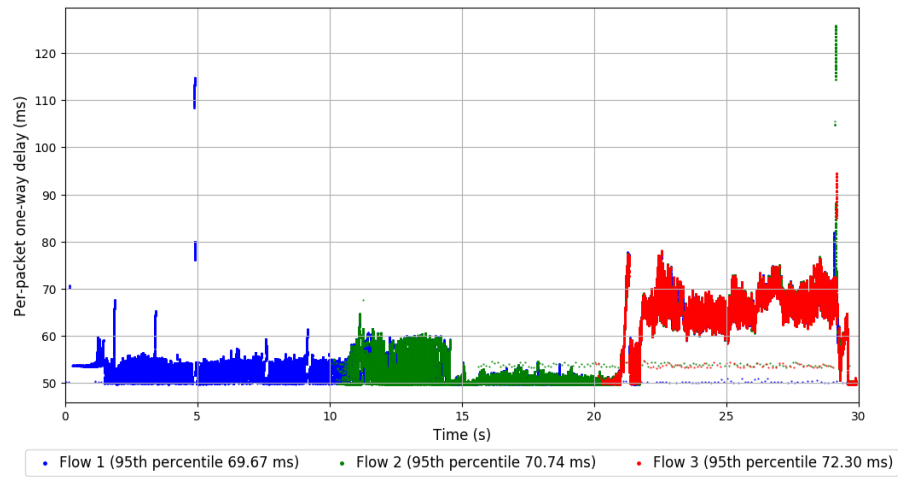
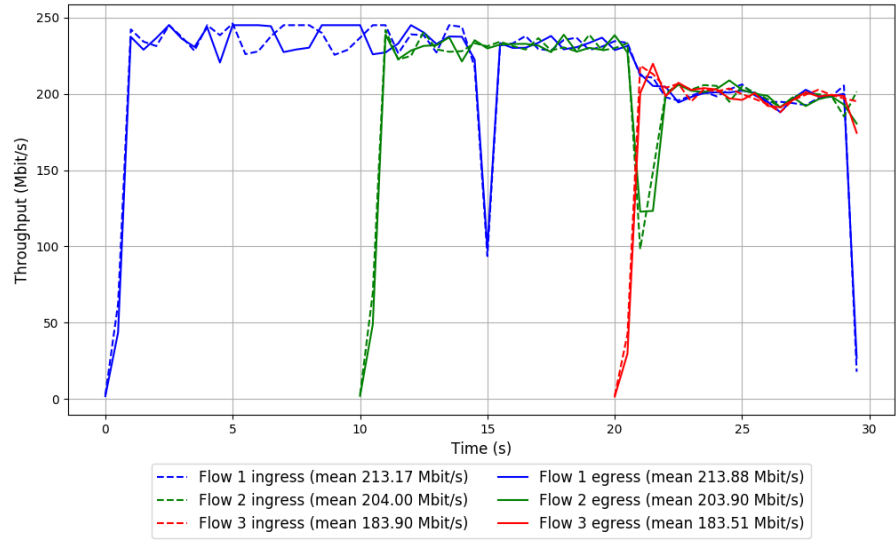
-- Flow 3:

Average throughput: 183.51 Mbit/s

95th percentile per-packet one-way delay: 72.298 ms

Loss rate: 1.27%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-28 22:38:09

End at: 2018-02-28 22:38:39

Below is generated by plot.py at 2018-03-01 02:13:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 399.89 Mbit/s

95th percentile per-packet one-way delay: 75.530 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 206.77 Mbit/s

95th percentile per-packet one-way delay: 73.104 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 201.95 Mbit/s

95th percentile per-packet one-way delay: 75.287 ms

Loss rate: 0.52%

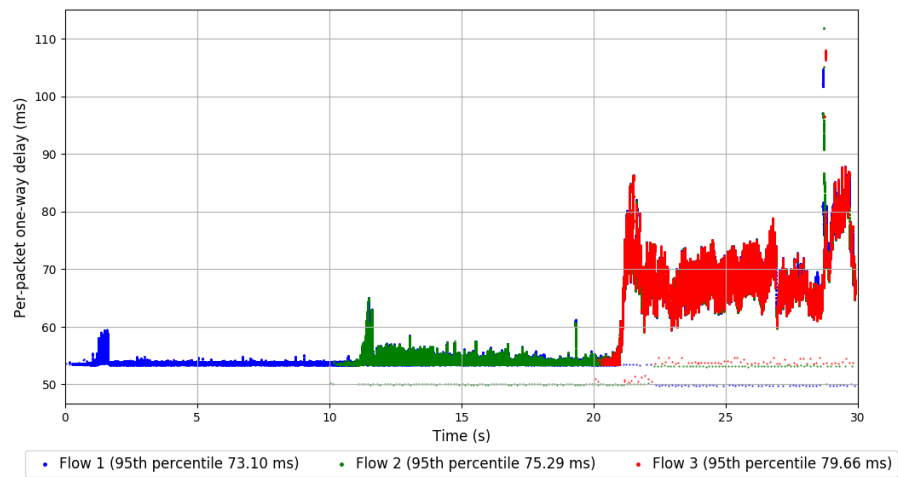
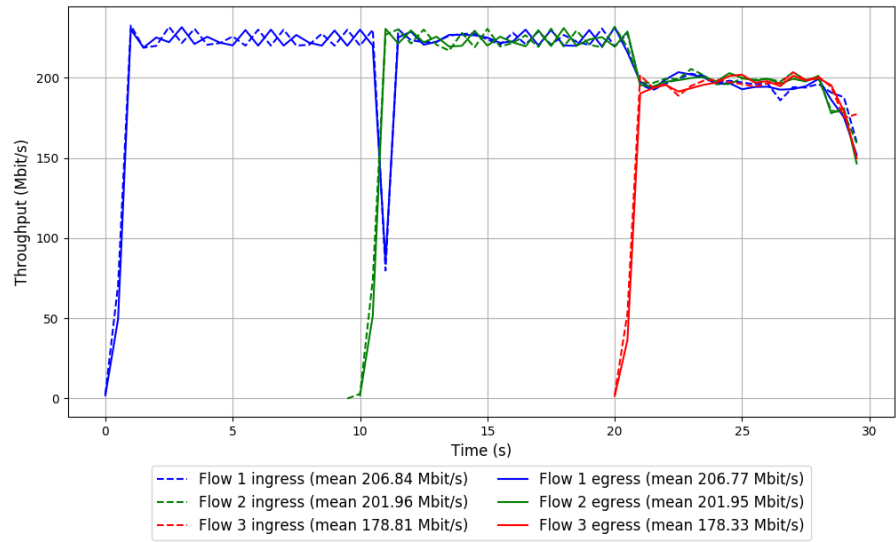
-- Flow 3:

Average throughput: 178.33 Mbit/s

95th percentile per-packet one-way delay: 79.663 ms

Loss rate: 1.31%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-28 19:58:03

End at: 2018-02-28 19:58:33

Below is generated by plot.py at 2018-03-01 02:13:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 292.37 Mbit/s

95th percentile per-packet one-way delay: 60.904 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 154.73 Mbit/s

95th percentile per-packet one-way delay: 60.353 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 204.64 Mbit/s

95th percentile per-packet one-way delay: 61.539 ms

Loss rate: 0.33%

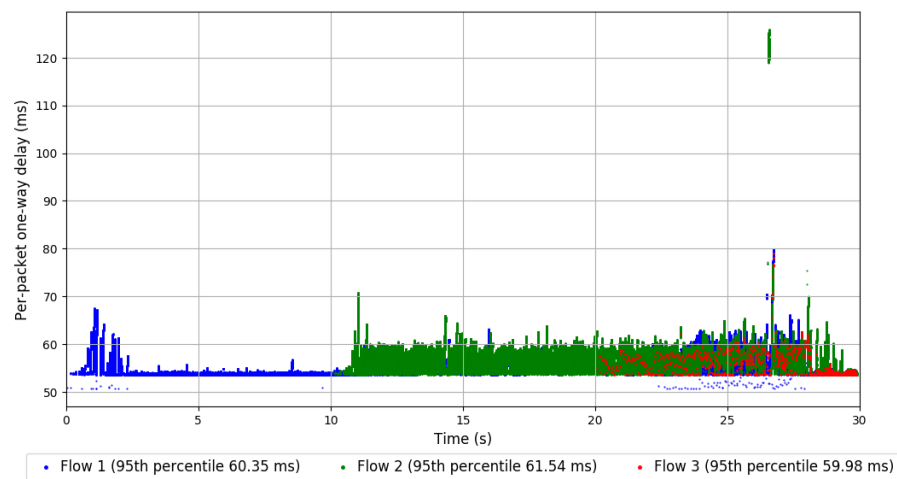
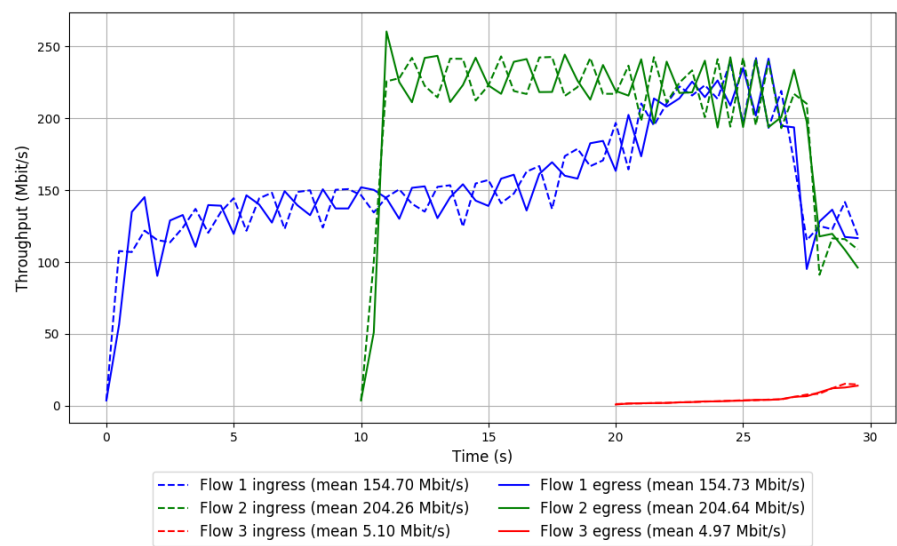
-- Flow 3:

Average throughput: 4.97 Mbit/s

95th percentile per-packet one-way delay: 59.975 ms

Loss rate: 3.93%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-28 20:16:03

End at: 2018-02-28 20:16:33

Below is generated by plot.py at 2018-03-01 02:13:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.08 Mbit/s

95th percentile per-packet one-way delay: 61.992 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 124.36 Mbit/s

95th percentile per-packet one-way delay: 61.128 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 151.16 Mbit/s

95th percentile per-packet one-way delay: 60.044 ms

Loss rate: 0.68%

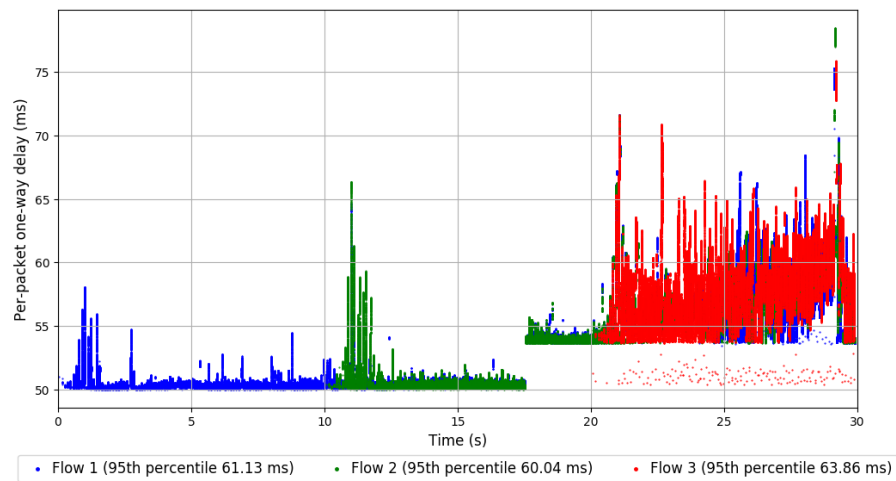
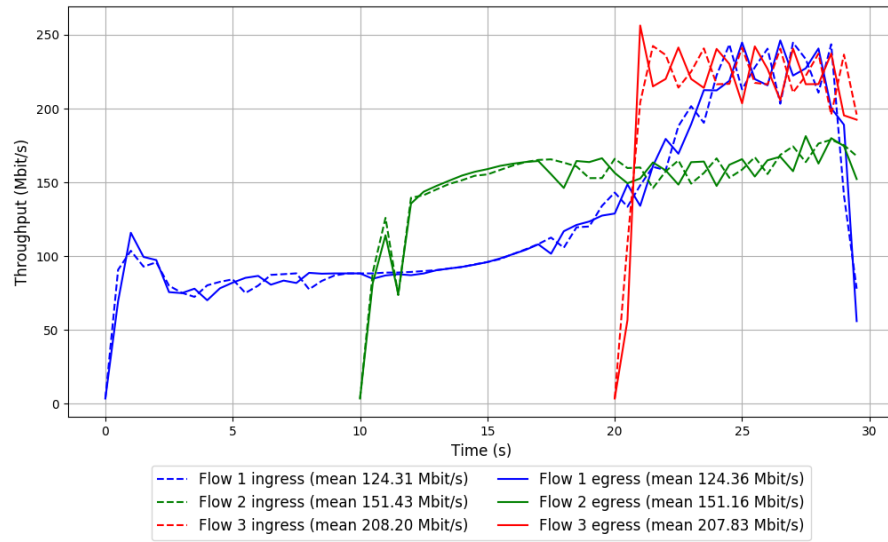
-- Flow 3:

Average throughput: 207.83 Mbit/s

95th percentile per-packet one-way delay: 63.864 ms

Loss rate: 1.17%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-28 20:34:17

End at: 2018-02-28 20:34:47

Below is generated by plot.py at 2018-03-01 02:13:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.23 Mbit/s

95th percentile per-packet one-way delay: 58.499 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 171.47 Mbit/s

95th percentile per-packet one-way delay: 57.738 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 26.69 Mbit/s

95th percentile per-packet one-way delay: 58.246 ms

Loss rate: 1.57%

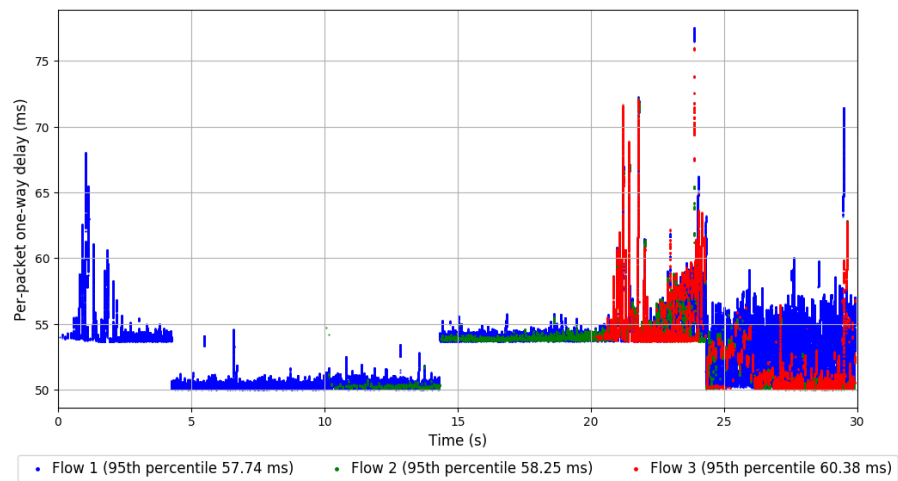
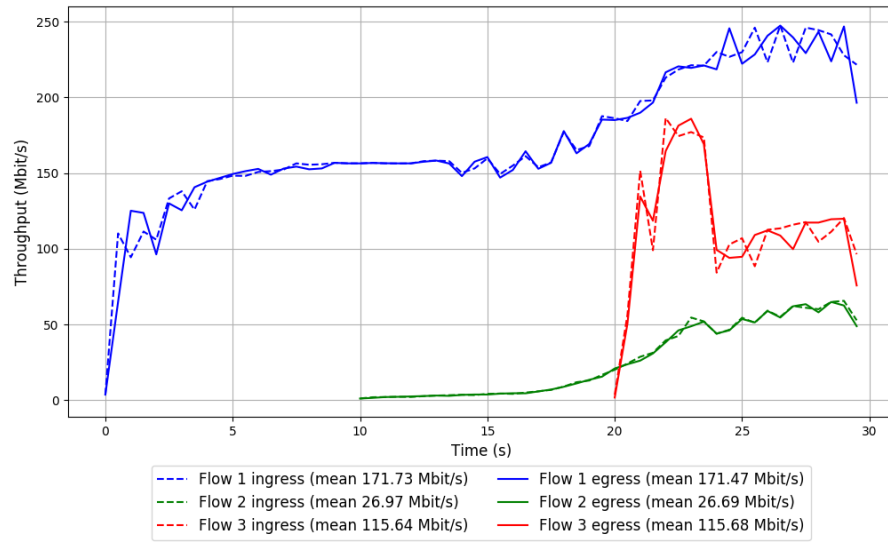
-- Flow 3:

Average throughput: 115.68 Mbit/s

95th percentile per-packet one-way delay: 60.385 ms

Loss rate: 1.01%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-28 20:52:08

End at: 2018-02-28 20:52:38

Below is generated by plot.py at 2018-03-01 02:13:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.88 Mbit/s

95th percentile per-packet one-way delay: 57.553 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 126.28 Mbit/s

95th percentile per-packet one-way delay: 56.612 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 216.98 Mbit/s

95th percentile per-packet one-way delay: 58.261 ms

Loss rate: 0.34%

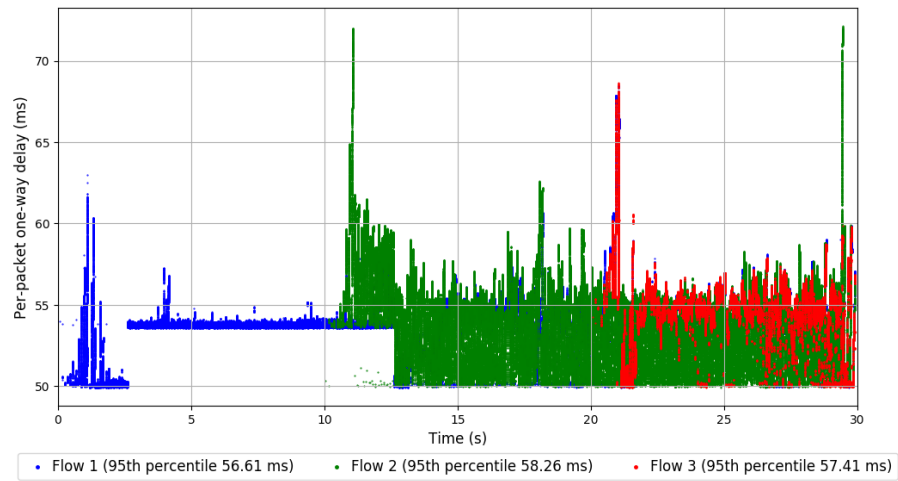
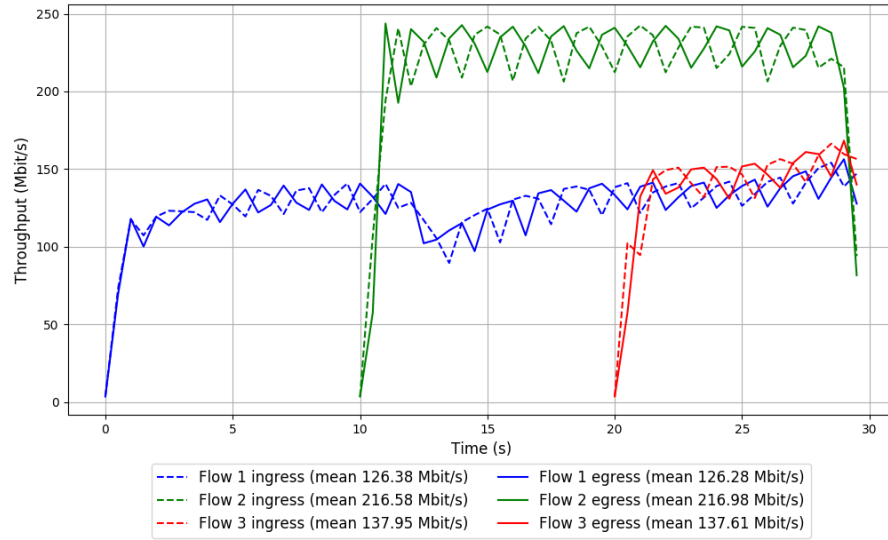
-- Flow 3:

Average throughput: 137.61 Mbit/s

95th percentile per-packet one-way delay: 57.405 ms

Loss rate: 1.29%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-28 21:09:59

End at: 2018-02-28 21:10:29

Below is generated by plot.py at 2018-03-01 02:13:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.33 Mbit/s

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

Loss rate: 0.67%

-- Flow 1:

Average throughput: 166.50 Mbit/s

95th percentile per-packet one-way delay: 59.811 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 123.30 Mbit/s

95th percentile per-packet one-way delay: 60.287 ms

Loss rate: 0.73%

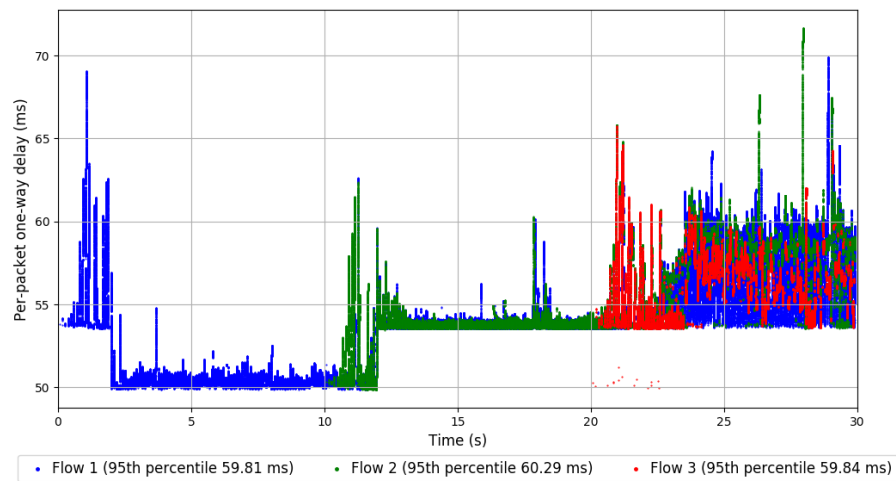
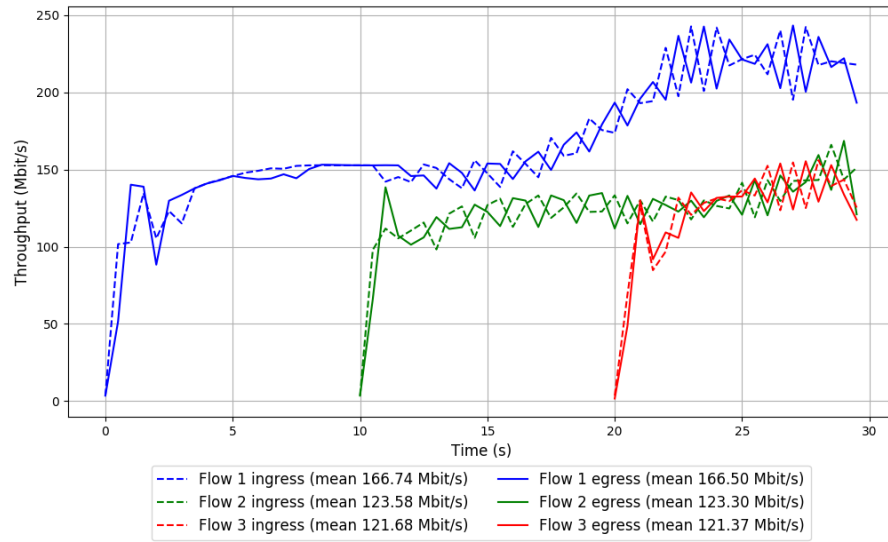
-- Flow 3:

Average throughput: 121.37 Mbit/s

95th percentile per-packet one-way delay: 59.839 ms

Loss rate: 1.29%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-28 21:28:11

End at: 2018-02-28 21:28:41

Below is generated by plot.py at 2018-03-01 02:13:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 333.16 Mbit/s

95th percentile per-packet one-way delay: 70.630 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 161.49 Mbit/s

95th percentile per-packet one-way delay: 69.247 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 192.23 Mbit/s

95th percentile per-packet one-way delay: 70.386 ms

Loss rate: 0.27%

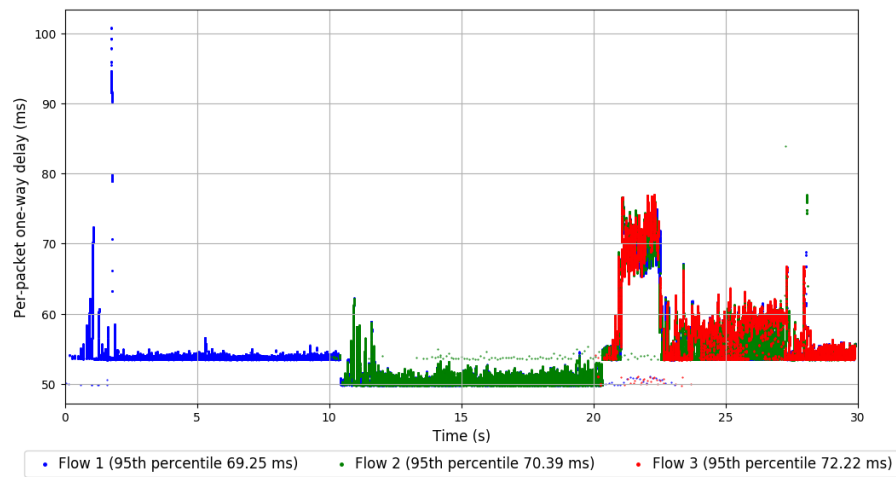
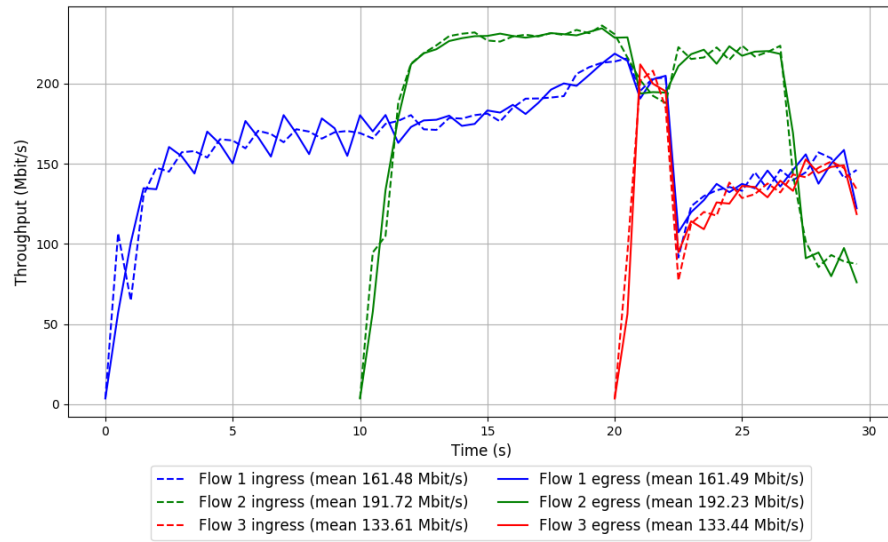
-- Flow 3:

Average throughput: 133.44 Mbit/s

95th percentile per-packet one-way delay: 72.223 ms

Loss rate: 1.18%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-28 21:46:18

End at: 2018-02-28 21:46:48

Below is generated by plot.py at 2018-03-01 02:16:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 323.53 Mbit/s

95th percentile per-packet one-way delay: 63.037 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 108.77 Mbit/s

95th percentile per-packet one-way delay: 60.070 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 219.53 Mbit/s

95th percentile per-packet one-way delay: 61.156 ms

Loss rate: 0.56%

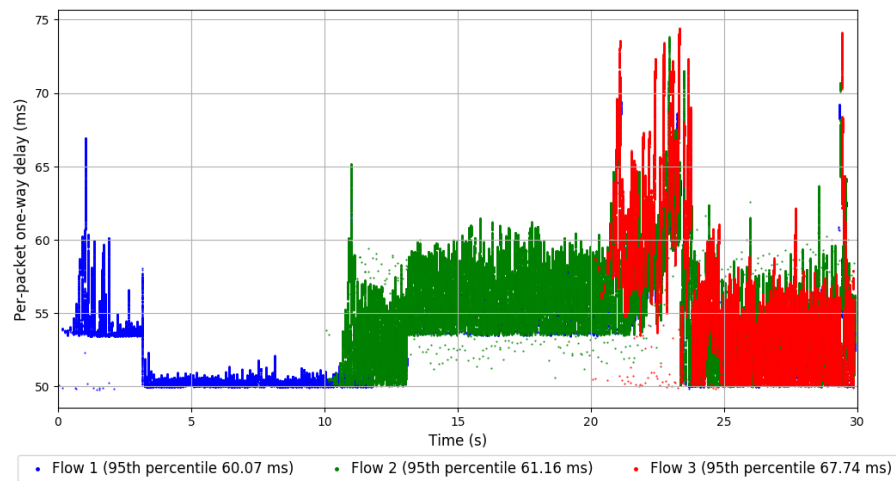
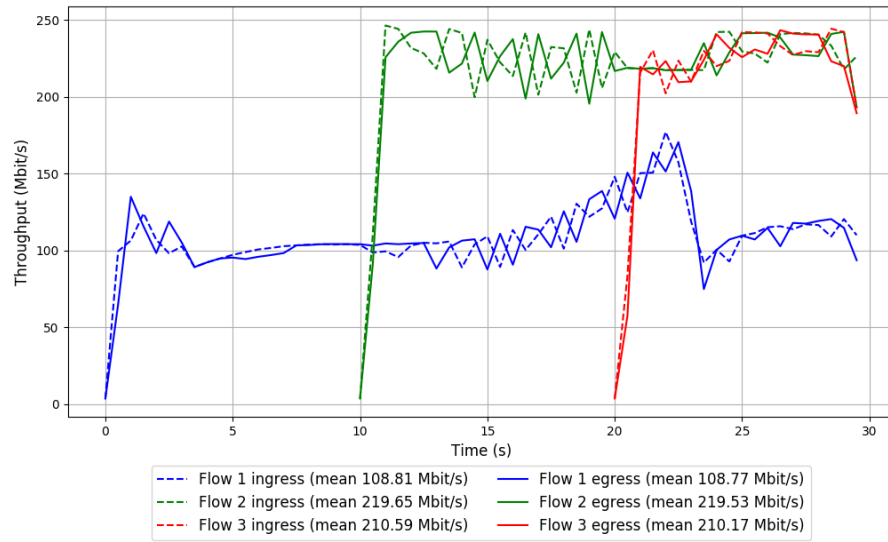
-- Flow 3:

Average throughput: 210.17 Mbit/s

95th percentile per-packet one-way delay: 67.744 ms

Loss rate: 1.17%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-28 22:04:16

End at: 2018-02-28 22:04:46

Below is generated by plot.py at 2018-03-01 02:16:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.55 Mbit/s

95th percentile per-packet one-way delay: 61.031 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 152.90 Mbit/s

95th percentile per-packet one-way delay: 60.034 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 103.08 Mbit/s

95th percentile per-packet one-way delay: 59.983 ms

Loss rate: 0.81%

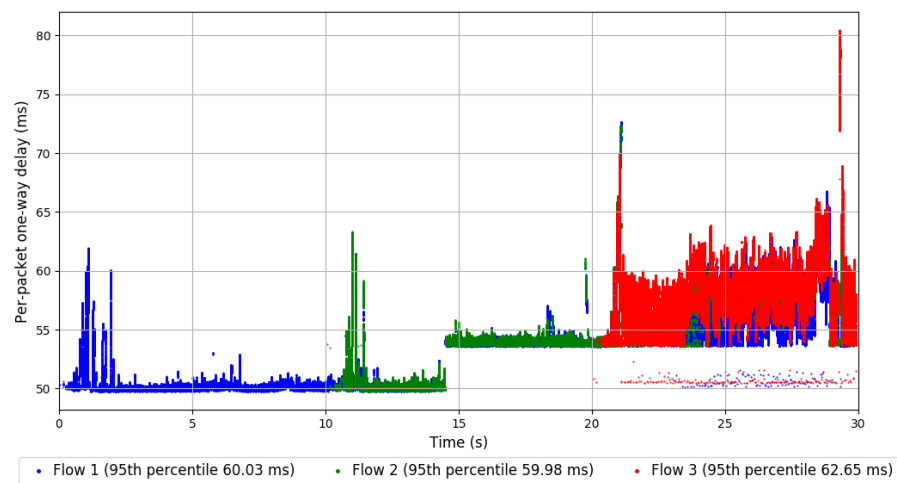
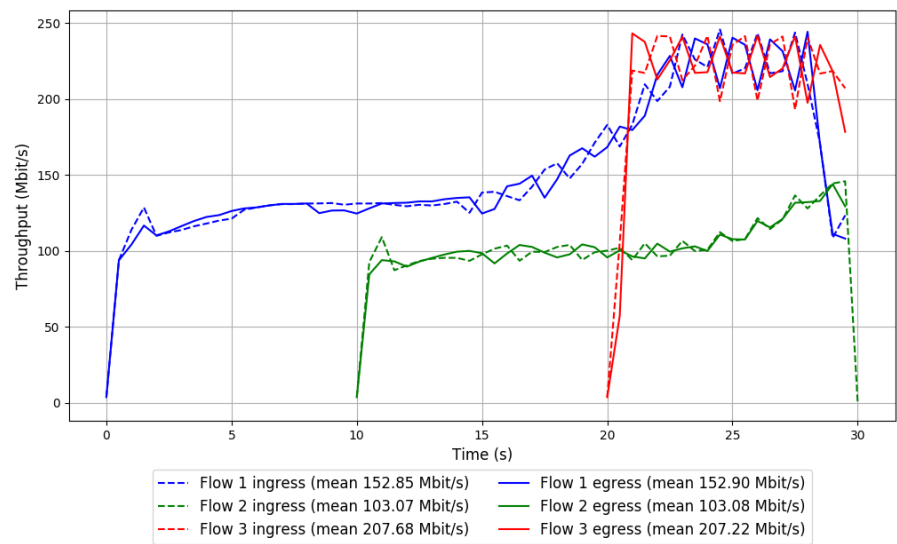
-- Flow 3:

Average throughput: 207.22 Mbit/s

95th percentile per-packet one-way delay: 62.654 ms

Loss rate: 1.28%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-28 22:21:59

End at: 2018-02-28 22:22:29

Below is generated by plot.py at 2018-03-01 02:17:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.02 Mbit/s

95th percentile per-packet one-way delay: 55.812 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 188.32 Mbit/s

95th percentile per-packet one-way delay: 55.391 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 127.81 Mbit/s

95th percentile per-packet one-way delay: 56.222 ms

Loss rate: 0.72%

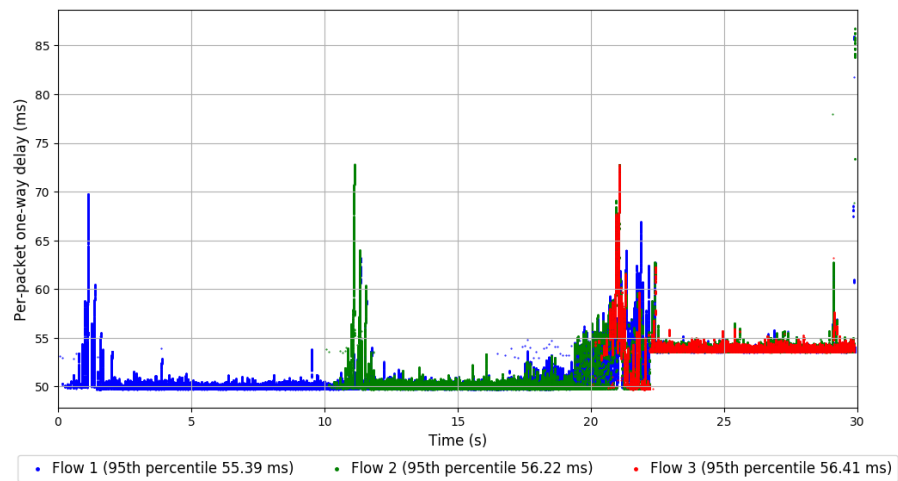
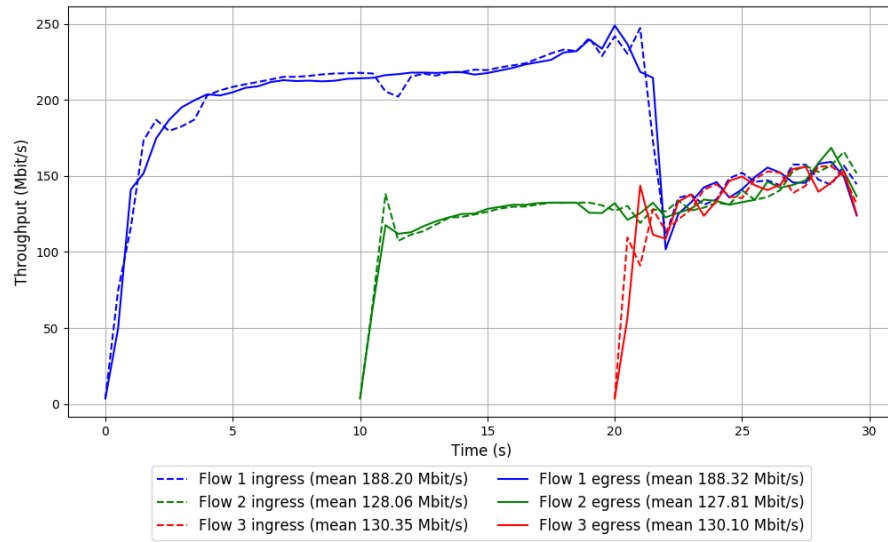
-- Flow 3:

Average throughput: 130.10 Mbit/s

95th percentile per-packet one-way delay: 56.405 ms

Loss rate: 1.21%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-28 22:40:06

End at: 2018-02-28 22:40:36

Below is generated by plot.py at 2018-03-01 02:17:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.77 Mbit/s

95th percentile per-packet one-way delay: 59.933 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 140.30 Mbit/s

95th percentile per-packet one-way delay: 59.595 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 140.04 Mbit/s

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

Loss rate: 0.41%

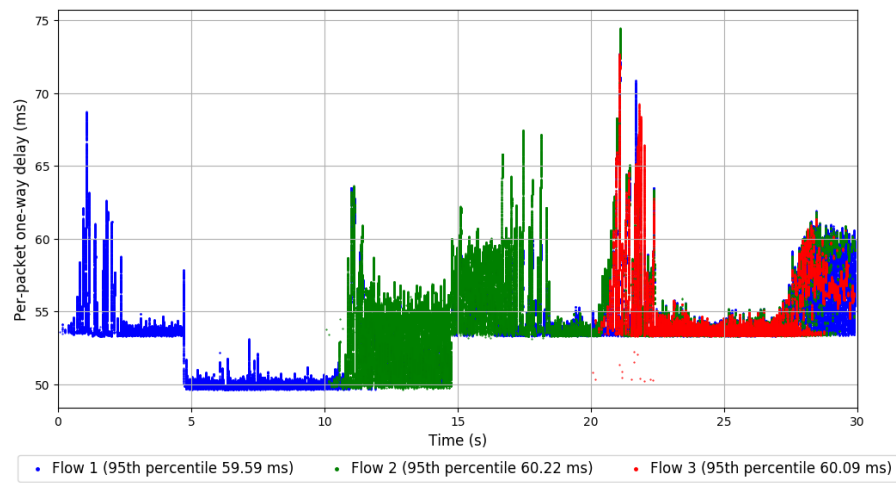
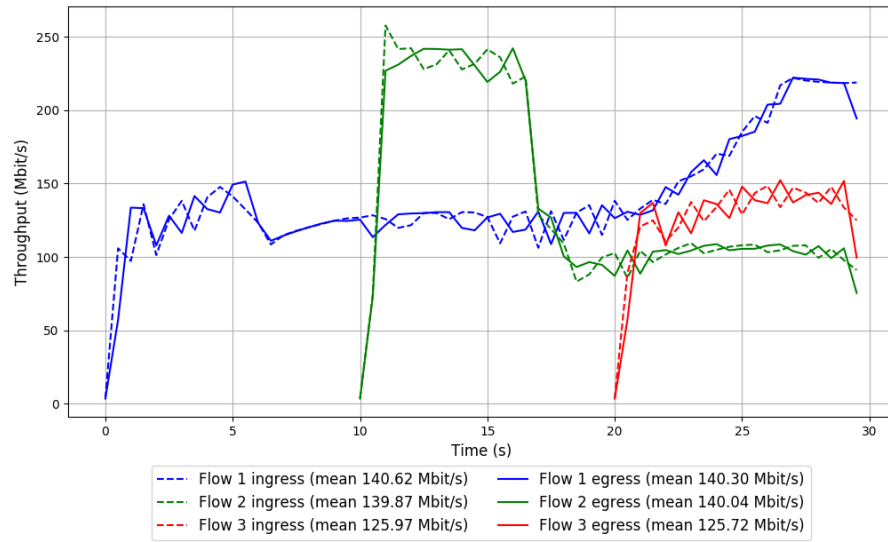
-- Flow 3:

Average throughput: 125.72 Mbit/s

95th percentile per-packet one-way delay: 60.095 ms

Loss rate: 1.25%

Run 10: Report of TCP Cubic — Data Link

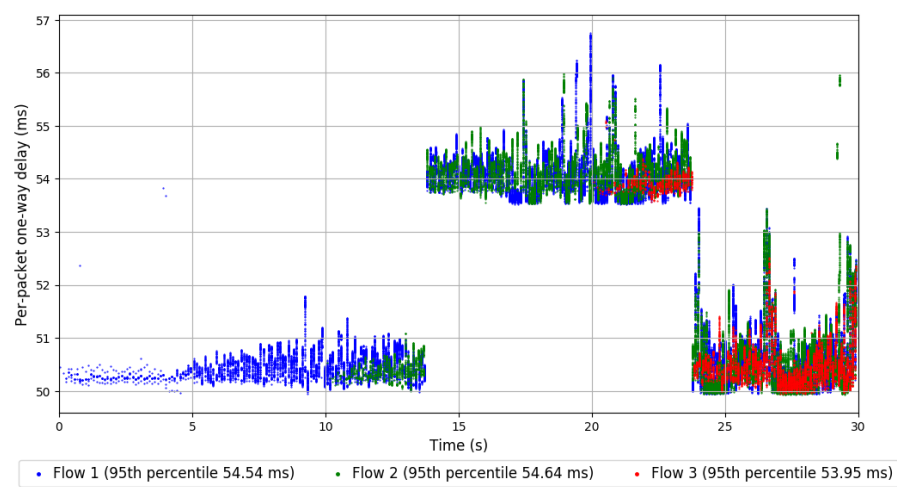
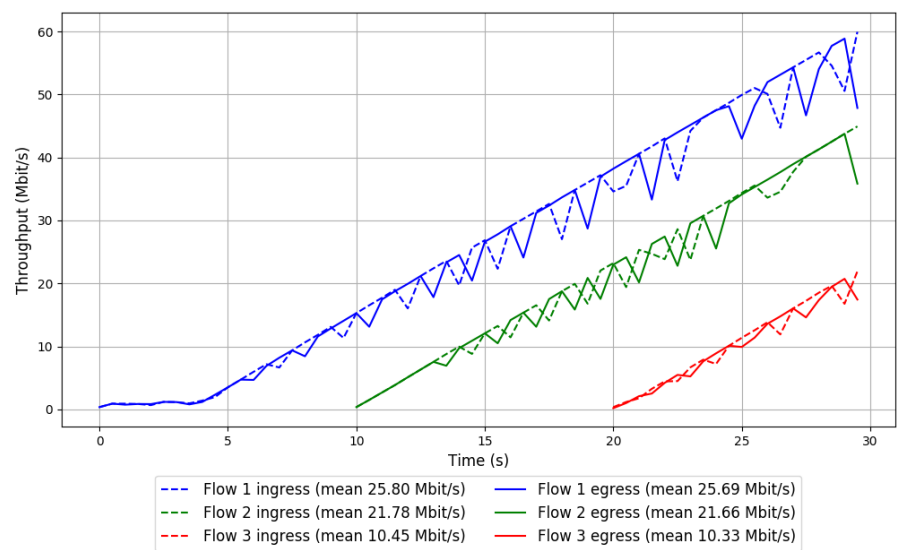


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-28 19:59:37
End at: 2018-02-28 20:00:07

# Below is generated by plot.py at 2018-03-01 02:17:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.48 Mbit/s
95th percentile per-packet one-way delay: 54.552 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 25.69 Mbit/s
95th percentile per-packet one-way delay: 54.540 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 21.66 Mbit/s
95th percentile per-packet one-way delay: 54.643 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 10.33 Mbit/s
95th percentile per-packet one-way delay: 53.947 ms
Loss rate: 2.16%
```


Run 1: Report of LEDBAT — Data Link

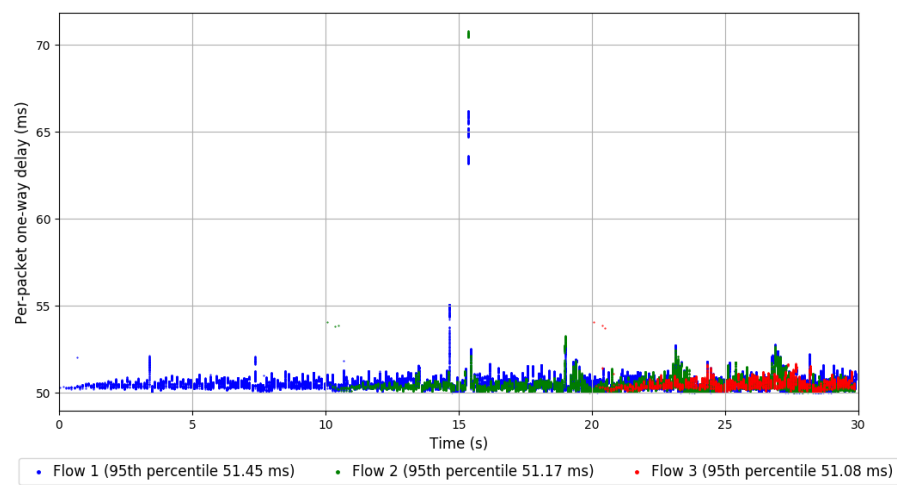
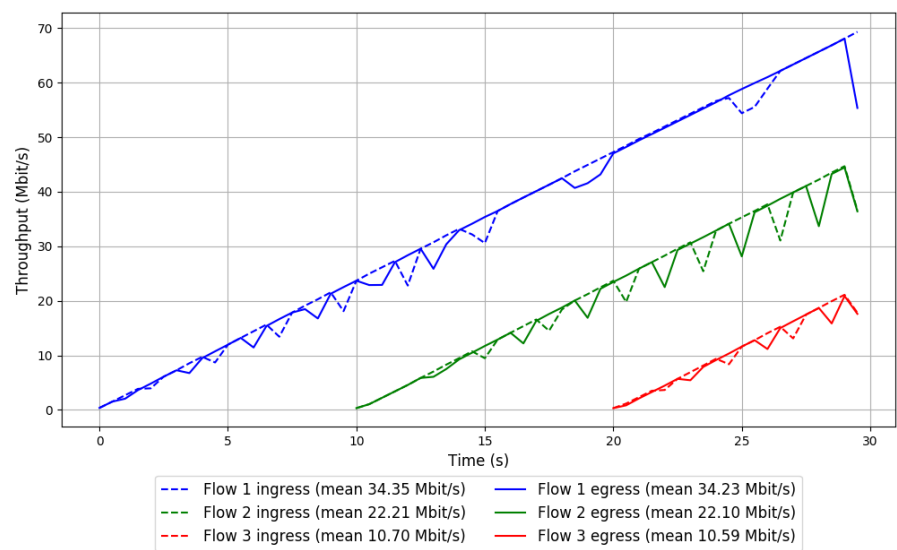


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-28 20:17:38
End at: 2018-02-28 20:18:08

# Below is generated by plot.py at 2018-03-01 02:17:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.35 Mbit/s
95th percentile per-packet one-way delay: 51.339 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 34.23 Mbit/s
95th percentile per-packet one-way delay: 51.448 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 22.10 Mbit/s
95th percentile per-packet one-way delay: 51.169 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 10.59 Mbit/s
95th percentile per-packet one-way delay: 51.084 ms
Loss rate: 2.14%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-28 20:35:47

End at: 2018-02-28 20:36:17

Below is generated by plot.py at 2018-03-01 02:17:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.53 Mbit/s

95th percentile per-packet one-way delay: 54.765 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 31.59 Mbit/s

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

Loss rate: 0.70%

-- Flow 2:

Average throughput: 21.79 Mbit/s

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

Loss rate: 1.04%

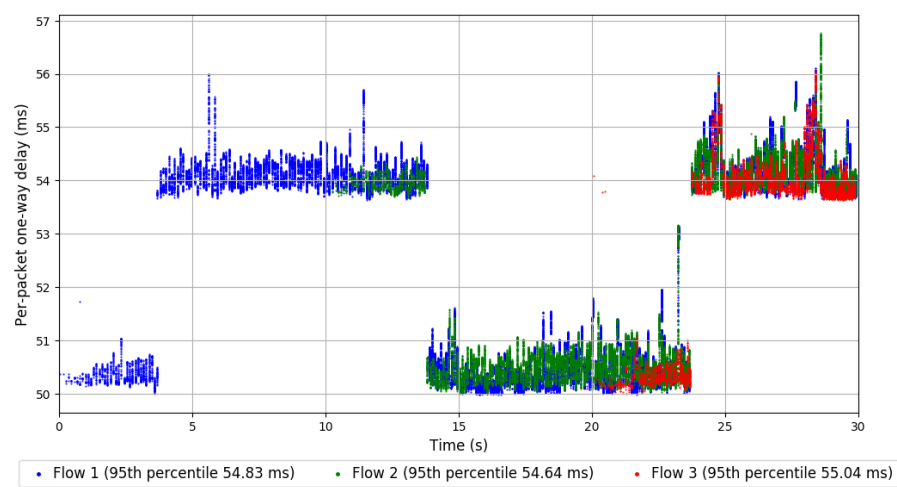
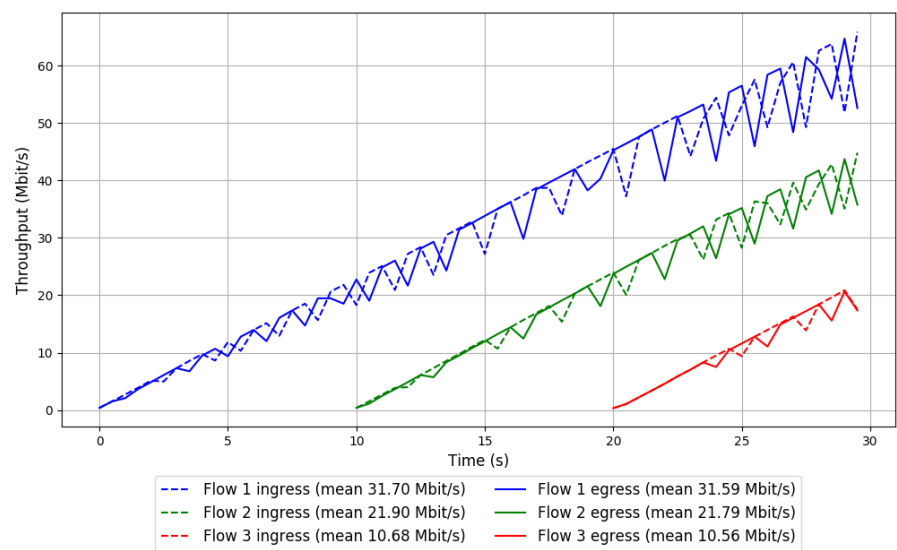
-- Flow 3:

Average throughput: 10.56 Mbit/s

95th percentile per-packet one-way delay: 55.038 ms

Loss rate: 2.11%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-28 20:53:43

End at: 2018-02-28 20:54:13

Below is generated by plot.py at 2018-03-01 02:17:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.11 Mbit/s

95th percentile per-packet one-way delay: 54.915 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 27.79 Mbit/s

95th percentile per-packet one-way delay: 54.925 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 19.18 Mbit/s

95th percentile per-packet one-way delay: 54.987 ms

Loss rate: 0.66%

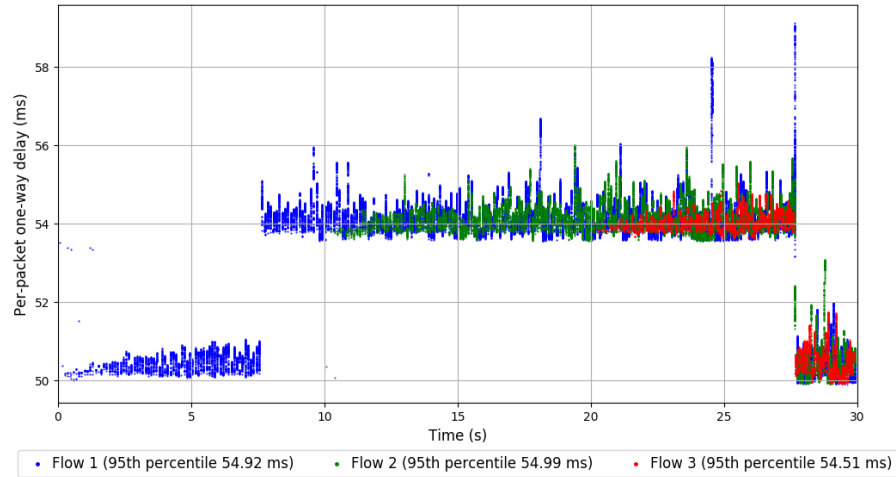
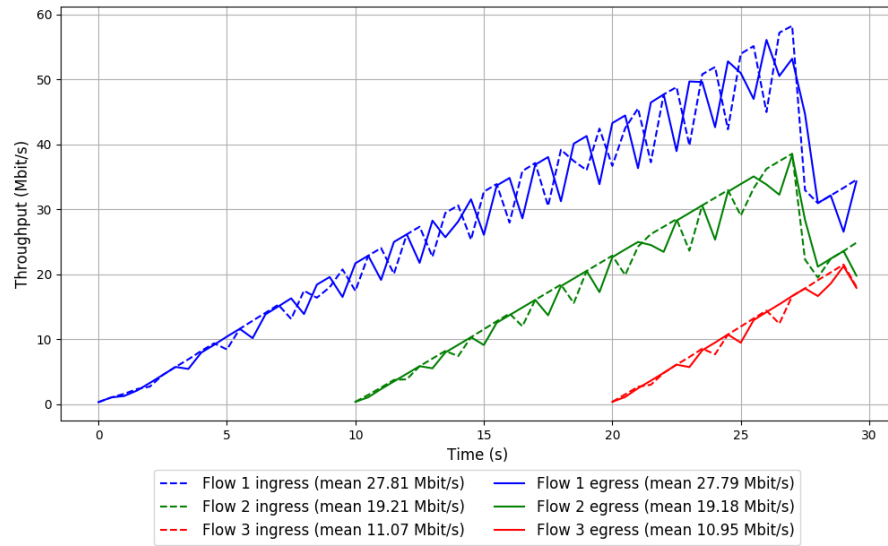
-- Flow 3:

Average throughput: 10.95 Mbit/s

95th percentile per-packet one-way delay: 54.505 ms

Loss rate: 2.11%

Run 4: Report of LEDBAT — Data Link

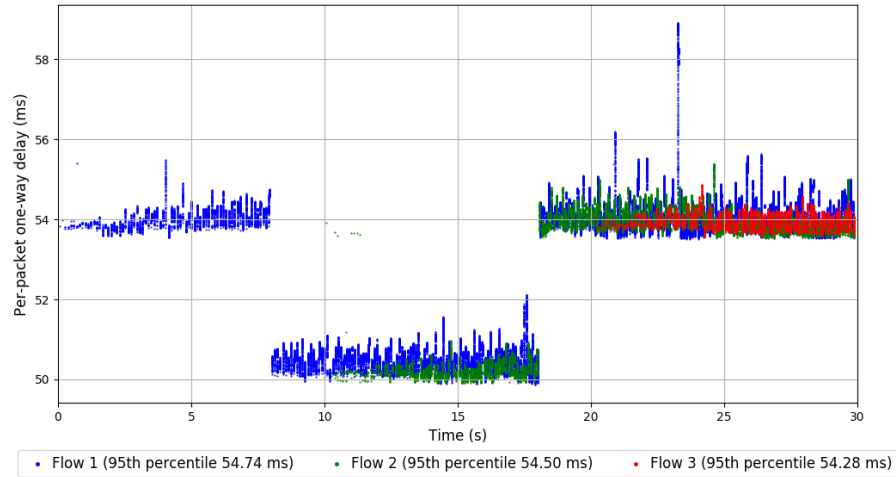
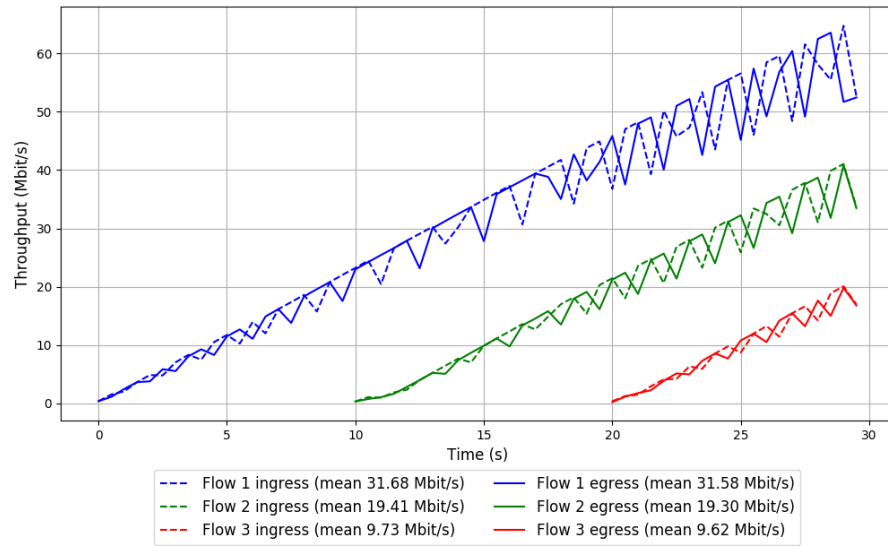


```
Run 5: Statistics of LEDBAT

Start at: 2018-02-28 21:11:33
End at: 2018-02-28 21:12:03

# Below is generated by plot.py at 2018-03-01 02:17:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.53 Mbit/s
95th percentile per-packet one-way delay: 54.654 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 31.58 Mbit/s
95th percentile per-packet one-way delay: 54.745 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 19.30 Mbit/s
95th percentile per-packet one-way delay: 54.502 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 9.62 Mbit/s
95th percentile per-packet one-way delay: 54.282 ms
Loss rate: 2.24%
```


Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-28 21:29:47

End at: 2018-02-28 21:30:17

Below is generated by plot.py at 2018-03-01 02:17:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.92 Mbit/s

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

Loss rate: 0.89%

-- Flow 1:

Average throughput: 31.62 Mbit/s

95th percentile per-packet one-way delay: 54.545 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 22.47 Mbit/s

95th percentile per-packet one-way delay: 54.904 ms

Loss rate: 1.02%

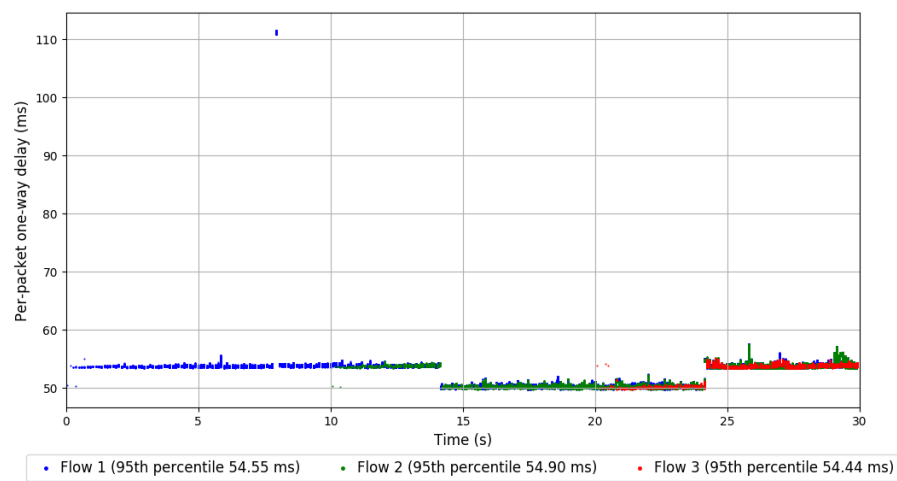
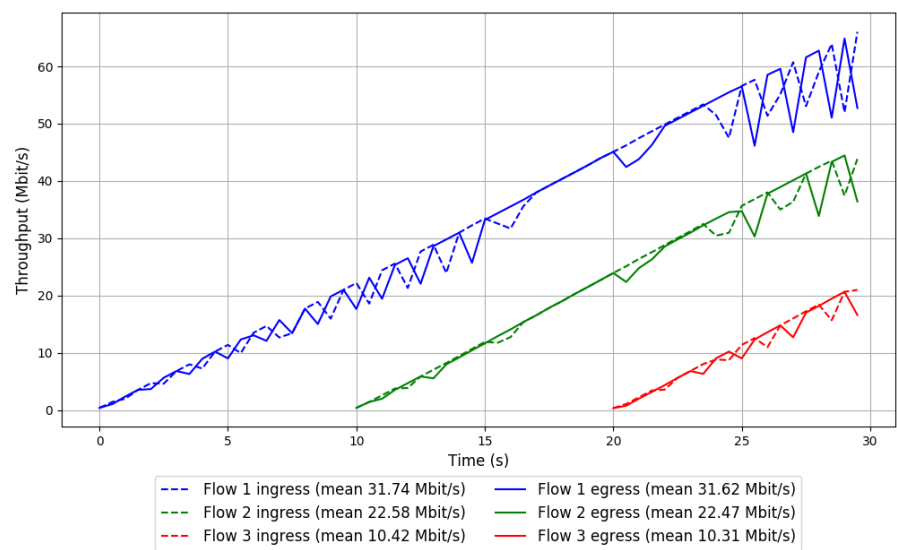
-- Flow 3:

Average throughput: 10.31 Mbit/s

95th percentile per-packet one-way delay: 54.444 ms

Loss rate: 2.12%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-28 21:47:54

End at: 2018-02-28 21:48:24

Below is generated by plot.py at 2018-03-01 02:17:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.43 Mbit/s

95th percentile per-packet one-way delay: 55.057 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 33.28 Mbit/s

95th percentile per-packet one-way delay: 54.868 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 22.21 Mbit/s

95th percentile per-packet one-way delay: 55.171 ms

Loss rate: 1.02%

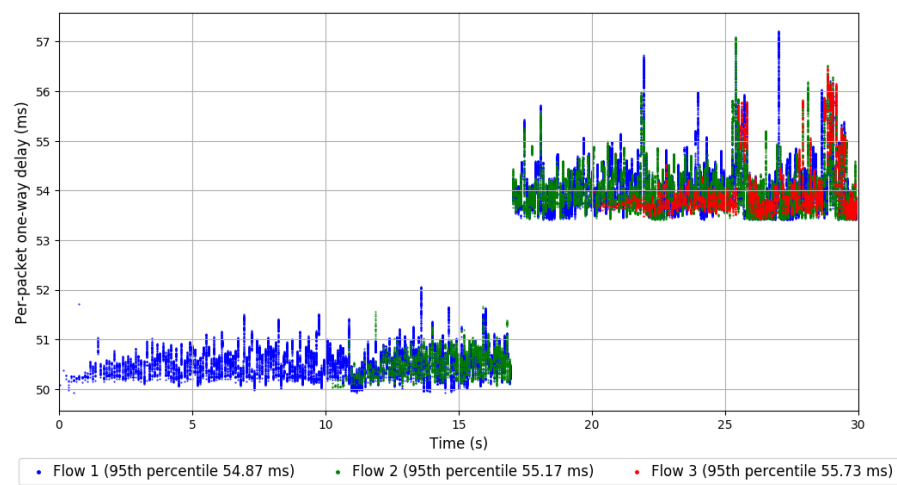
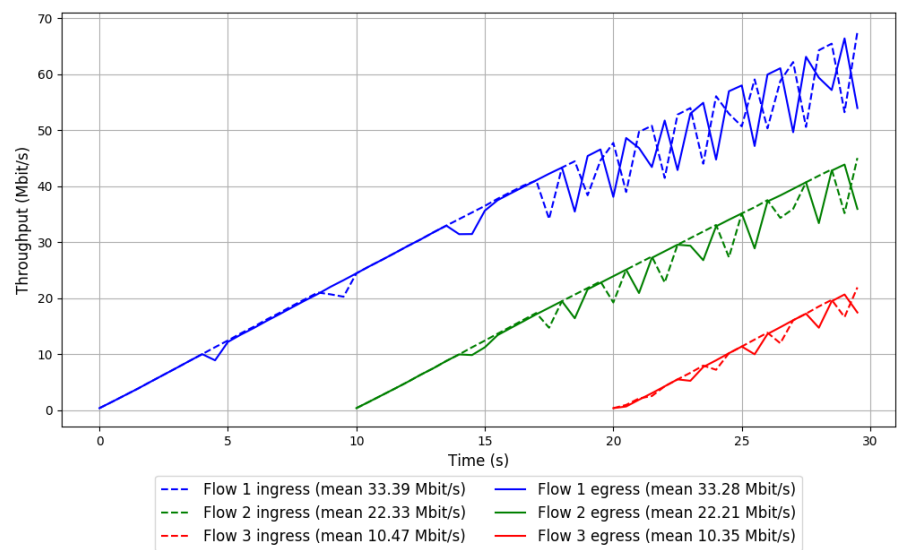
-- Flow 3:

Average throughput: 10.35 Mbit/s

95th percentile per-packet one-way delay: 55.726 ms

Loss rate: 2.16%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-28 22:05:51

End at: 2018-02-28 22:06:21

Below is generated by plot.py at 2018-03-01 02:17:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.43 Mbit/s

95th percentile per-packet one-way delay: 53.856 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 33.39 Mbit/s

95th percentile per-packet one-way delay: 53.949 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 21.76 Mbit/s

95th percentile per-packet one-way delay: 51.285 ms

Loss rate: 0.99%

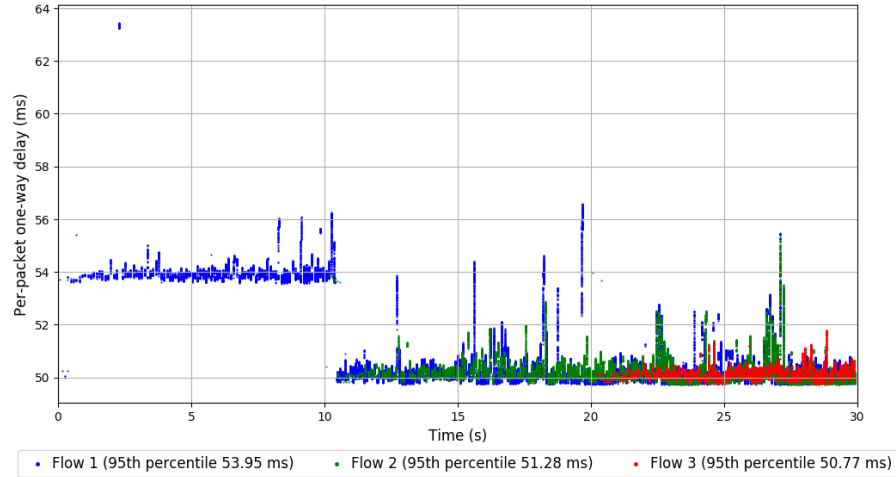
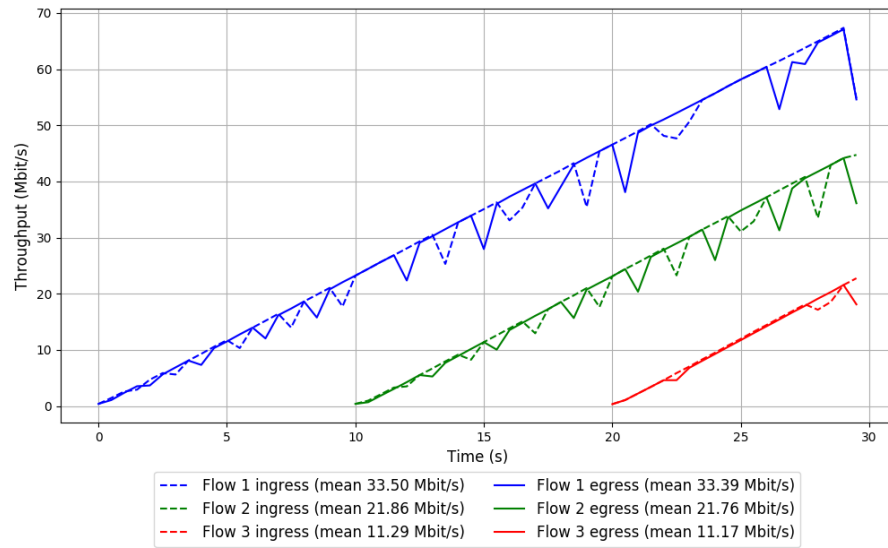
-- Flow 3:

Average throughput: 11.17 Mbit/s

95th percentile per-packet one-way delay: 50.769 ms

Loss rate: 2.08%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-28 22:23:34

End at: 2018-02-28 22:24:04

Below is generated by plot.py at 2018-03-01 02:17:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.59 Mbit/s

95th percentile per-packet one-way delay: 54.869 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 32.01 Mbit/s

95th percentile per-packet one-way delay: 54.981 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 21.21 Mbit/s

95th percentile per-packet one-way delay: 54.599 ms

Loss rate: 1.05%

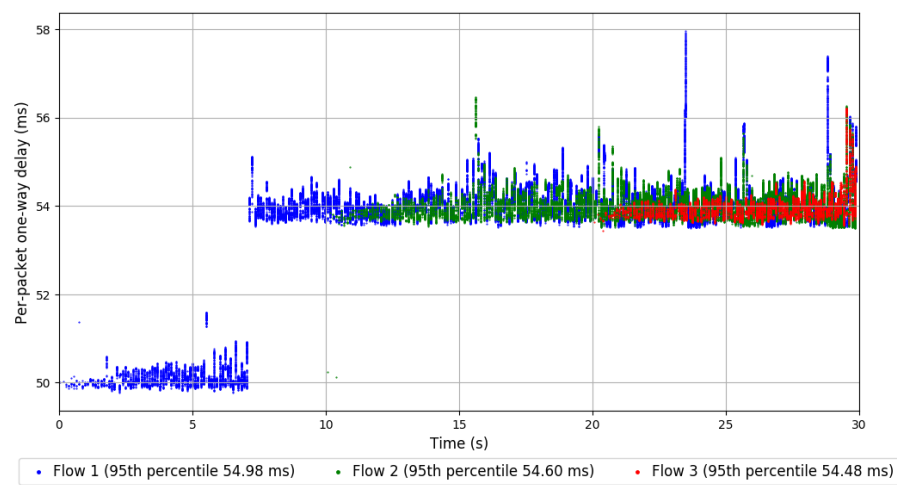
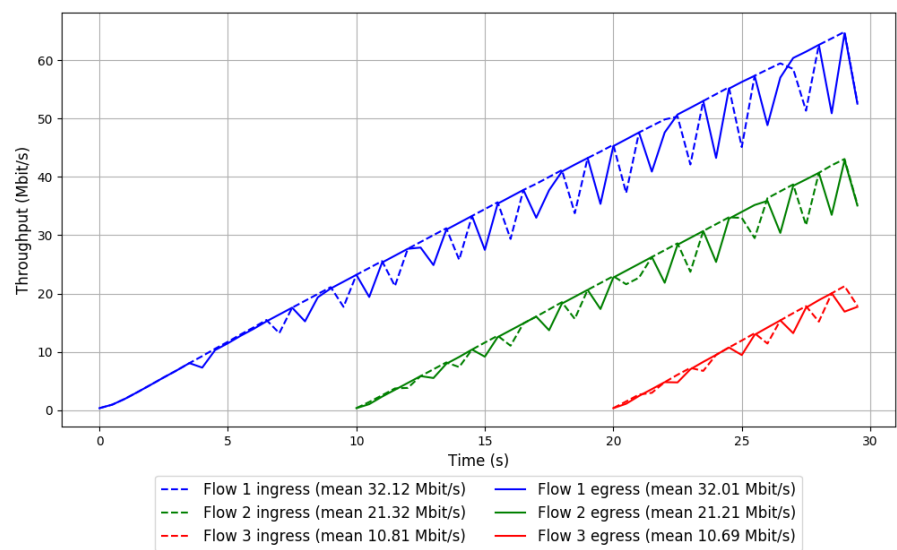
-- Flow 3:

Average throughput: 10.69 Mbit/s

95th percentile per-packet one-way delay: 54.475 ms

Loss rate: 2.13%

Run 9: Report of LEDBAT — Data Link

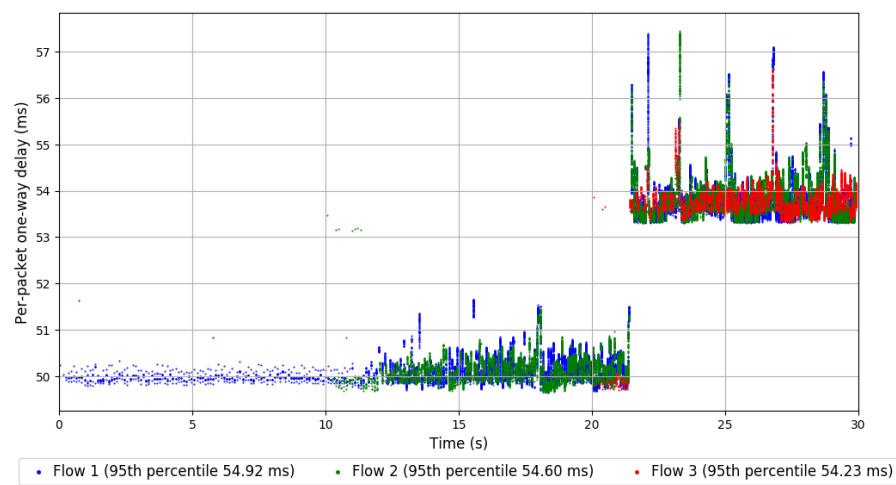
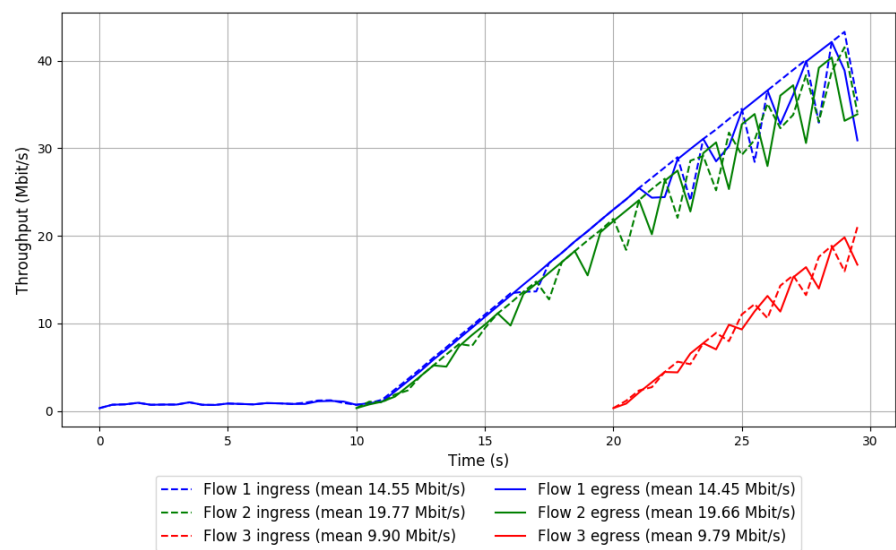


```
Run 10: Statistics of LEDBAT

Start at: 2018-02-28 22:41:40
End at: 2018-02-28 22:42:10

# Below is generated by plot.py at 2018-03-01 02:17:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.66 Mbit/s
95th percentile per-packet one-way delay: 54.635 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 14.45 Mbit/s
95th percentile per-packet one-way delay: 54.924 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 19.66 Mbit/s
95th percentile per-packet one-way delay: 54.597 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 9.79 Mbit/s
95th percentile per-packet one-way delay: 54.234 ms
Loss rate: 2.18%
```

Run 10: Report of LEDBAT — Data Link

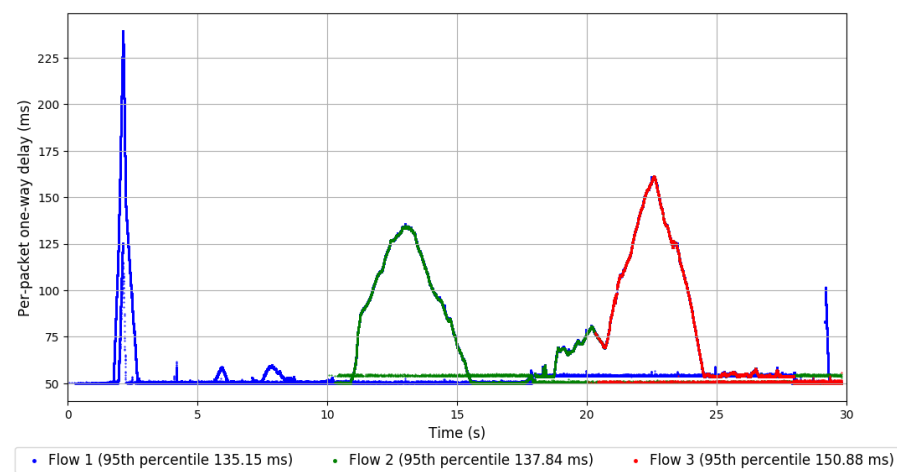
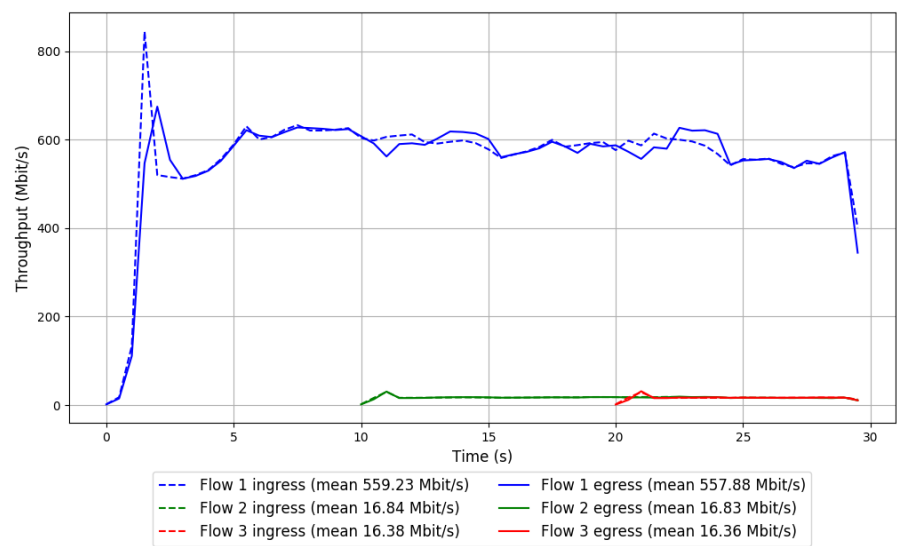


```
Run 1: Statistics of PCC

Start at: 2018-02-28 19:57:03
End at: 2018-02-28 19:57:33

# Below is generated by plot.py at 2018-03-01 02:25:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 574.30 Mbit/s
95th percentile per-packet one-way delay: 135.375 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 557.88 Mbit/s
95th percentile per-packet one-way delay: 135.153 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 16.83 Mbit/s
95th percentile per-packet one-way delay: 137.840 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 16.36 Mbit/s
95th percentile per-packet one-way delay: 150.878 ms
Loss rate: 1.07%
```

Run 1: Report of PCC — Data Link

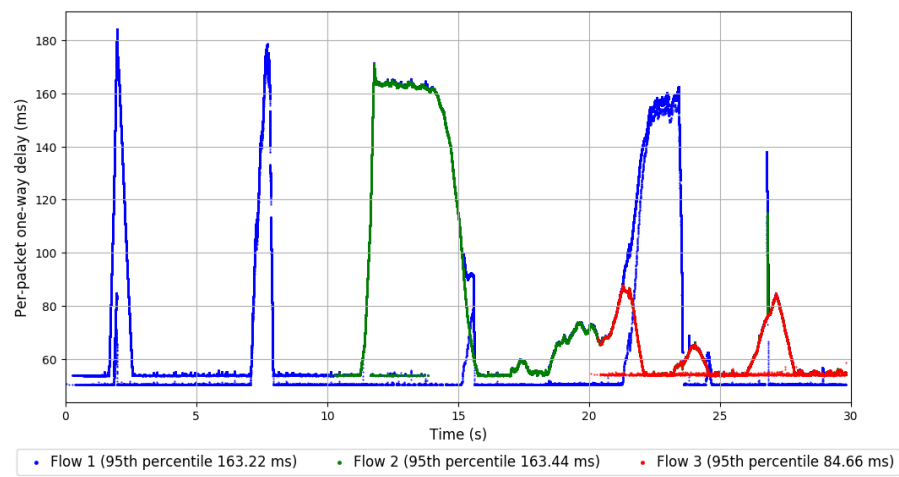
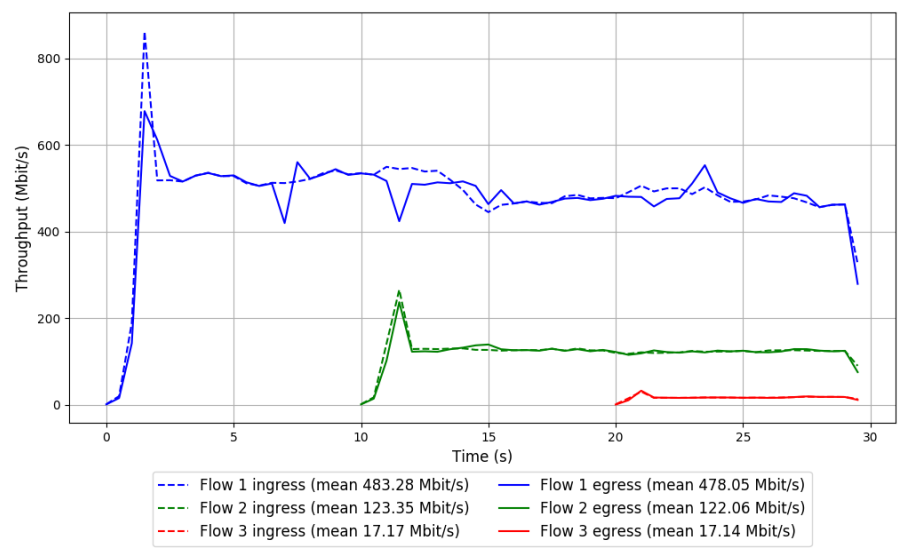


```
Run 2: Statistics of PCC

Start at: 2018-02-28 20:15:03
End at: 2018-02-28 20:15:33

# Below is generated by plot.py at 2018-03-01 02:25:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 564.58 Mbit/s
95th percentile per-packet one-way delay: 163.241 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 478.05 Mbit/s
95th percentile per-packet one-way delay: 163.222 ms
Loss rate: 1.43%
-- Flow 2:
Average throughput: 122.06 Mbit/s
95th percentile per-packet one-way delay: 163.435 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 17.14 Mbit/s
95th percentile per-packet one-way delay: 84.656 ms
Loss rate: 1.21%
```

Run 2: Report of PCC — Data Link

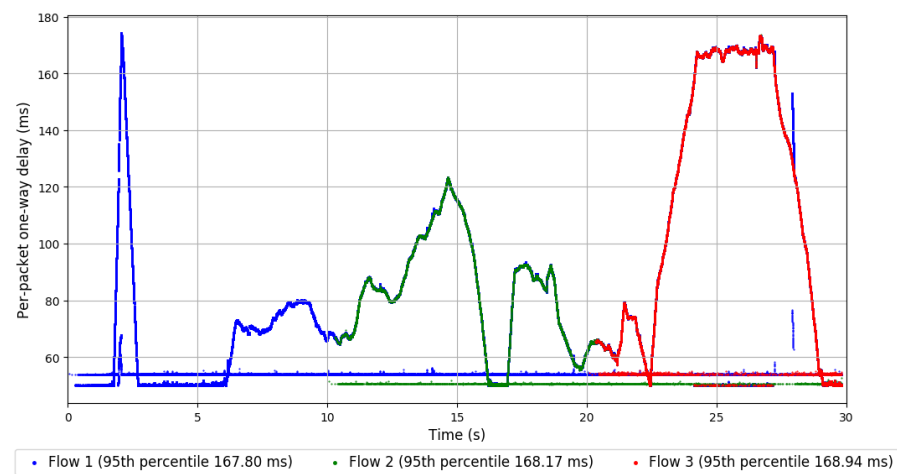
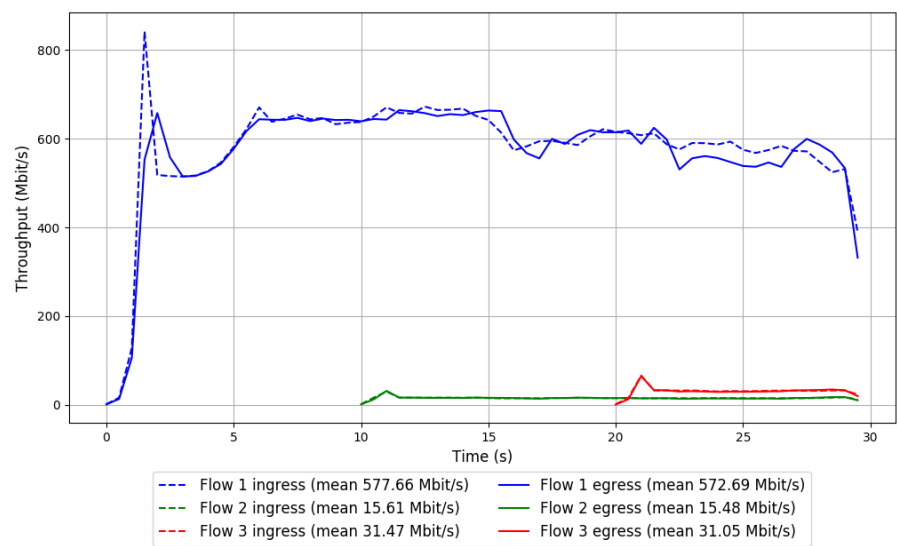


```
Run 3: Statistics of PCC

Start at: 2018-02-28 20:33:16
End at: 2018-02-28 20:33:46

# Below is generated by plot.py at 2018-03-01 02:25:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 593.05 Mbit/s
95th percentile per-packet one-way delay: 167.859 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 572.69 Mbit/s
95th percentile per-packet one-way delay: 167.798 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 15.48 Mbit/s
95th percentile per-packet one-way delay: 168.171 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 31.05 Mbit/s
95th percentile per-packet one-way delay: 168.940 ms
Loss rate: 2.39%
```


Run 3: Report of PCC — Data Link

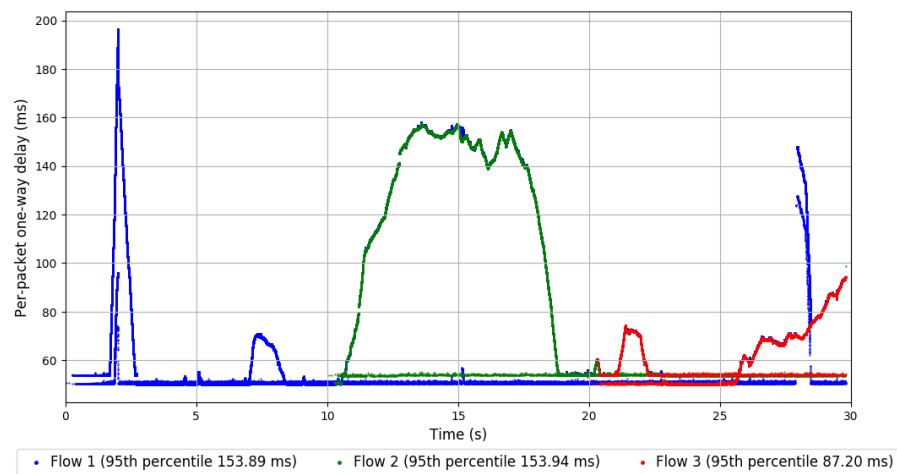
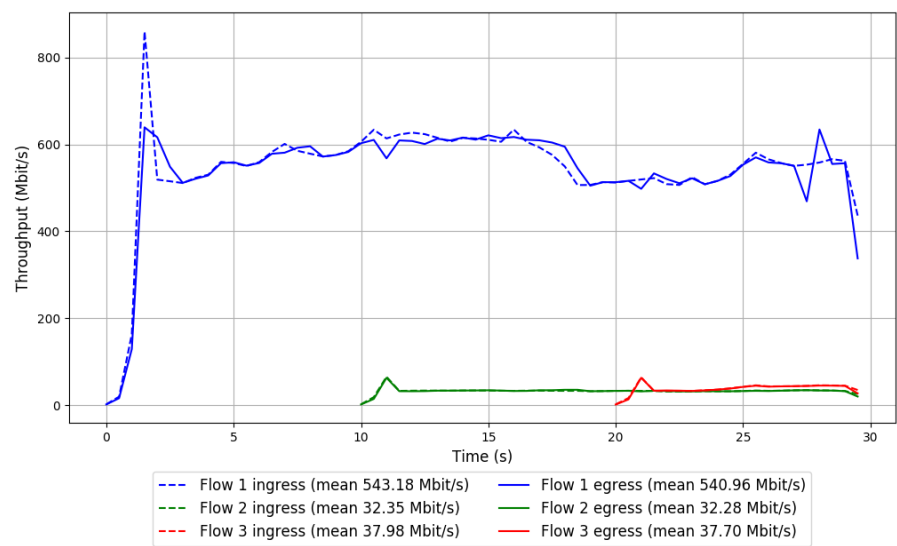


```
Run 4: Statistics of PCC

Start at: 2018-02-28 20:51:08
End at: 2018-02-28 20:51:38

# Below is generated by plot.py at 2018-03-01 02:25:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 574.61 Mbit/s
95th percentile per-packet one-way delay: 153.862 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 540.96 Mbit/s
95th percentile per-packet one-way delay: 153.893 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 32.28 Mbit/s
95th percentile per-packet one-way delay: 153.940 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 37.70 Mbit/s
95th percentile per-packet one-way delay: 87.204 ms
Loss rate: 2.07%
```

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-28 21:08:59

End at: 2018-02-28 21:09:29

Below is generated by plot.py at 2018-03-01 02:26:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 563.85 Mbit/s

95th percentile per-packet one-way delay: 153.521 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 533.17 Mbit/s

95th percentile per-packet one-way delay: 153.428 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 38.06 Mbit/s

95th percentile per-packet one-way delay: 154.146 ms

Loss rate: 0.60%

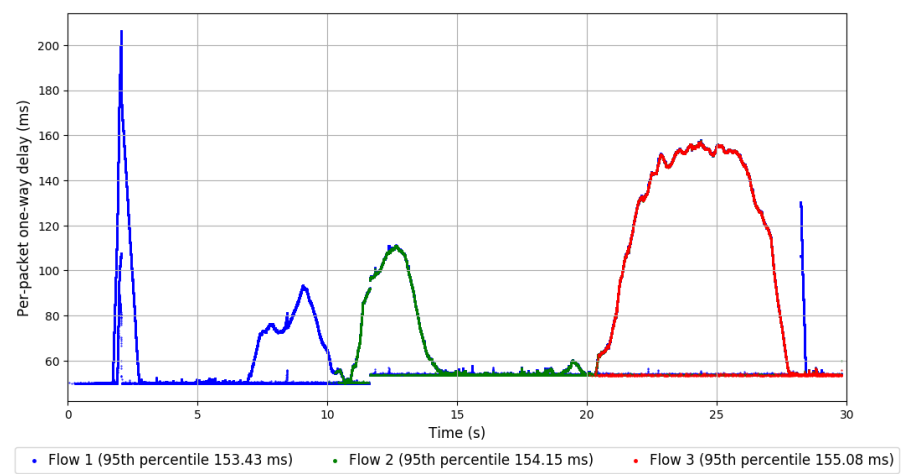
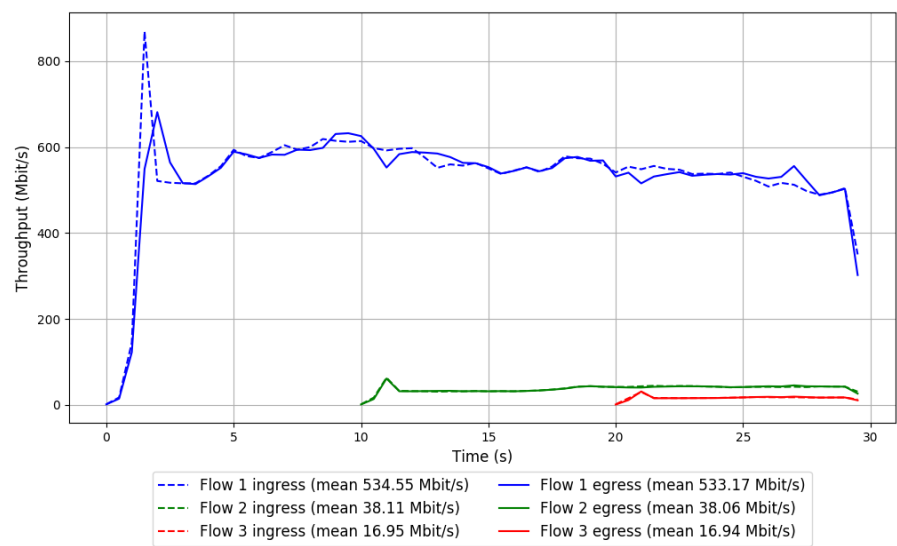
-- Flow 3:

Average throughput: 16.94 Mbit/s

95th percentile per-packet one-way delay: 155.078 ms

Loss rate: 1.12%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-28 21:27:11

End at: 2018-02-28 21:27:41

Below is generated by plot.py at 2018-03-01 02:26:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 558.88 Mbit/s

95th percentile per-packet one-way delay: 164.924 ms

Loss rate: 1.48%

-- Flow 1:

Average throughput: 554.88 Mbit/s

95th percentile per-packet one-way delay: 164.927 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 164.947 ms

Loss rate: 1.63%

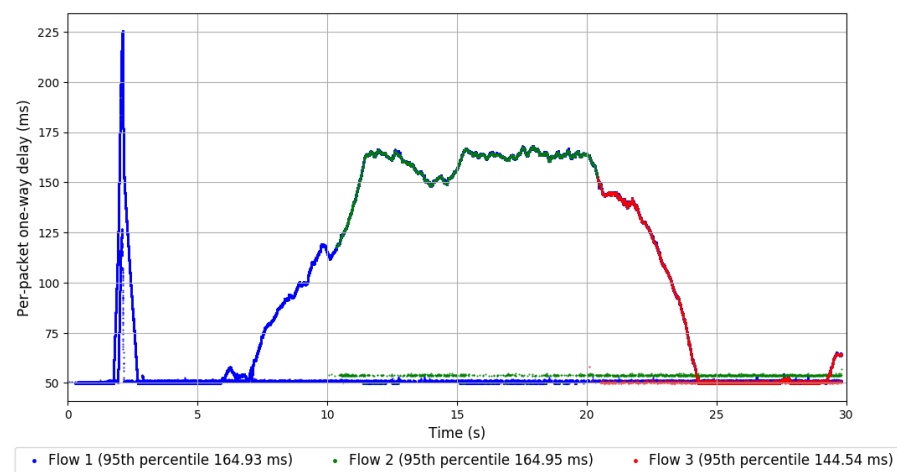
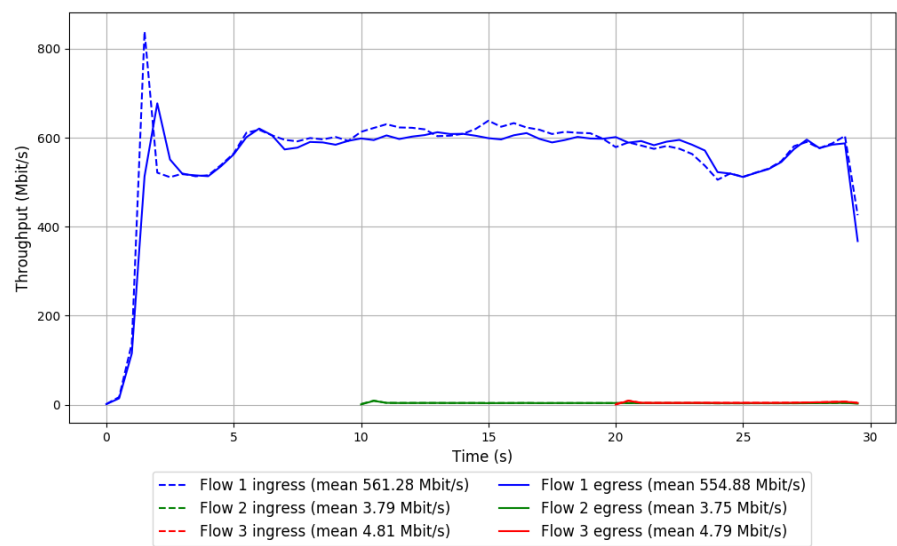
-- Flow 3:

Average throughput: 4.79 Mbit/s

95th percentile per-packet one-way delay: 144.539 ms

Loss rate: 1.56%

Run 6: Report of PCC — Data Link

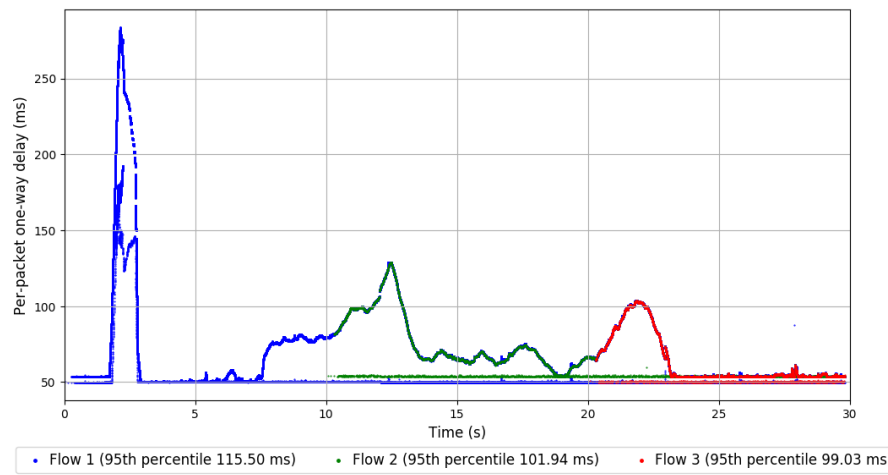
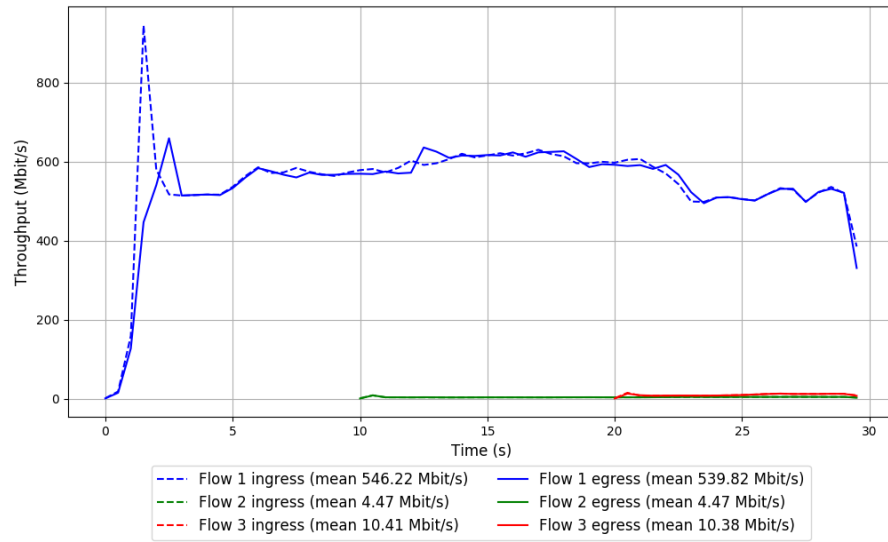


```
Run 7: Statistics of PCC

Start at: 2018-02-28 21:45:19
End at: 2018-02-28 21:45:49

# Below is generated by plot.py at 2018-03-01 02:26:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 546.16 Mbit/s
95th percentile per-packet one-way delay: 115.087 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 539.82 Mbit/s
95th percentile per-packet one-way delay: 115.501 ms
Loss rate: 1.51%
-- Flow 2:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 101.940 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 10.38 Mbit/s
95th percentile per-packet one-way delay: 99.028 ms
Loss rate: 1.32%
```


Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-28 22:03:18

End at: 2018-02-28 22:03:48

Below is generated by plot.py at 2018-03-01 02:26:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 529.31 Mbit/s

95th percentile per-packet one-way delay: 111.853 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 481.72 Mbit/s

95th percentile per-packet one-way delay: 112.123 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 69.51 Mbit/s

95th percentile per-packet one-way delay: 110.042 ms

Loss rate: 0.66%

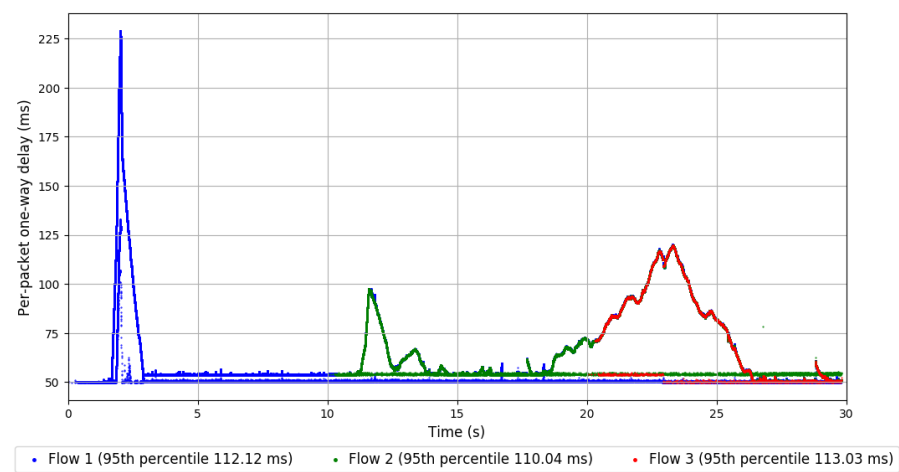
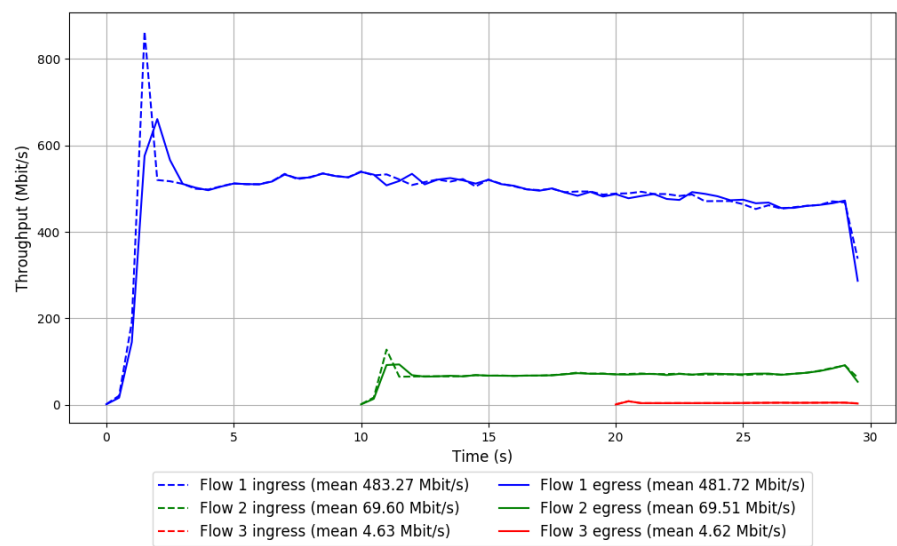
-- Flow 3:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 113.029 ms

Loss rate: 1.17%

Run 8: Report of PCC — Data Link

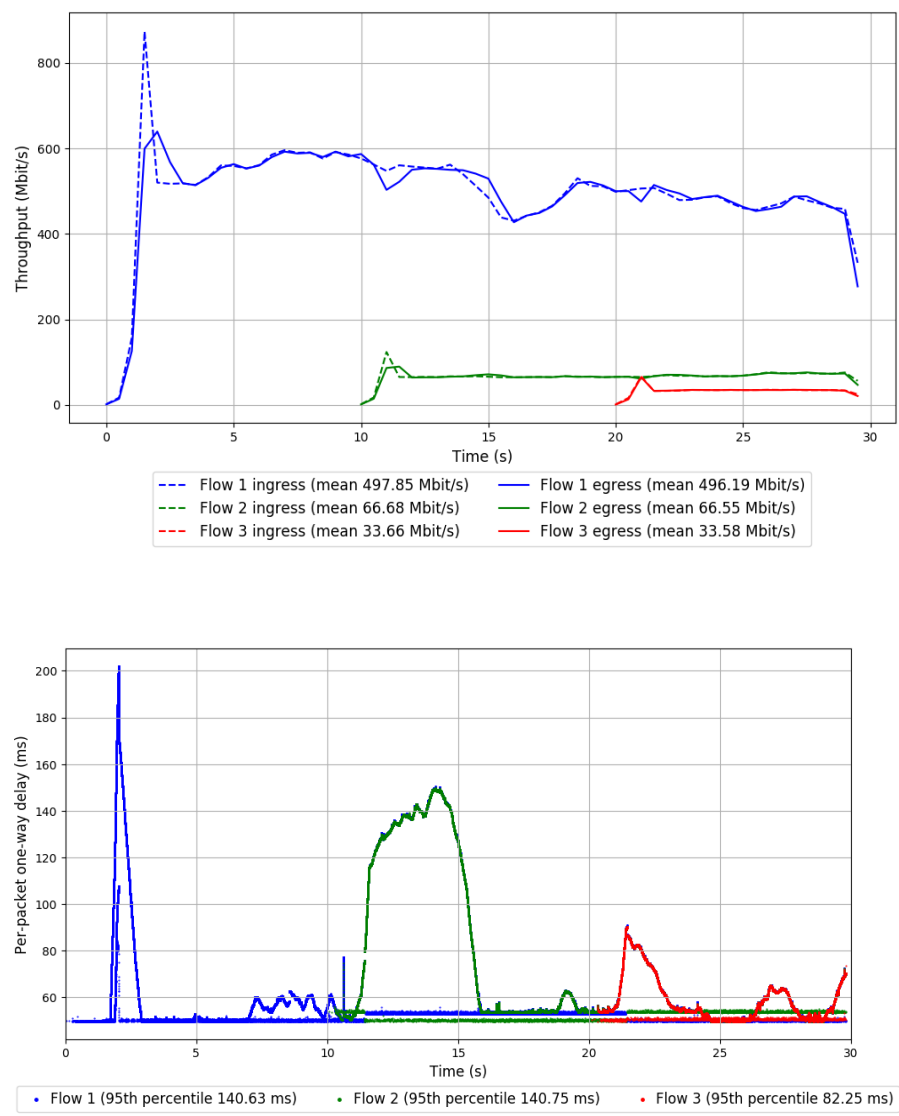


```
Run 9: Statistics of PCC

Start at: 2018-02-28 22:20:59
End at: 2018-02-28 22:21:29

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 551.25 Mbit/s
95th percentile per-packet one-way delay: 140.497 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 496.19 Mbit/s
95th percentile per-packet one-way delay: 140.633 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 66.55 Mbit/s
95th percentile per-packet one-way delay: 140.752 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 33.58 Mbit/s
95th percentile per-packet one-way delay: 82.255 ms
Loss rate: 1.25%
```

Run 9: Report of PCC — Data Link

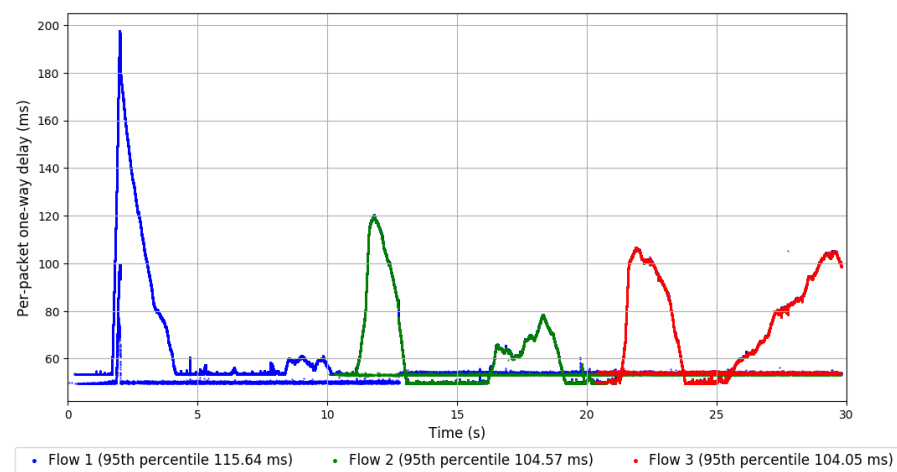
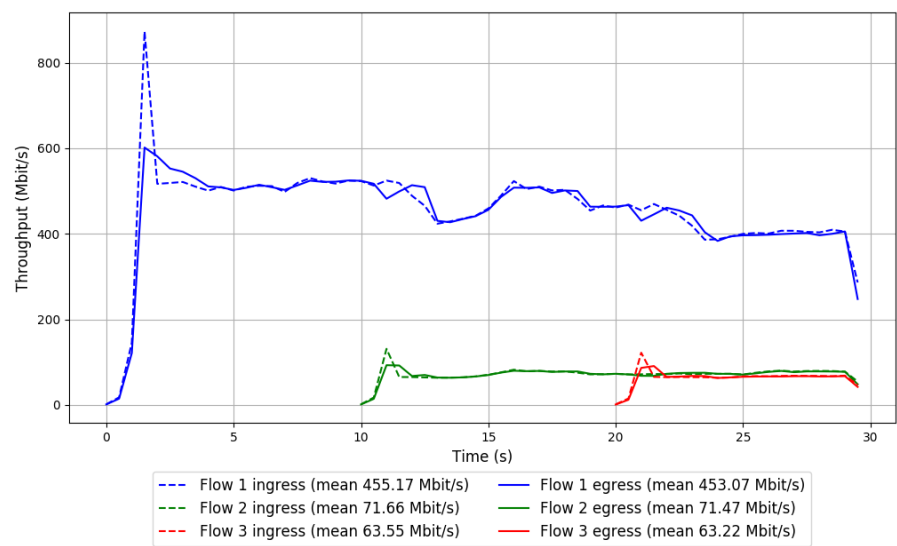


```
Run 10: Statistics of PCC

Start at: 2018-02-28 22:39:08
End at: 2018-02-28 22:39:38

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 521.13 Mbit/s
95th percentile per-packet one-way delay: 113.550 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 453.07 Mbit/s
95th percentile per-packet one-way delay: 115.643 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 71.47 Mbit/s
95th percentile per-packet one-way delay: 104.570 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 63.22 Mbit/s
95th percentile per-packet one-way delay: 104.047 ms
Loss rate: 1.58%
```

Run 10: Report of PCC — Data Link

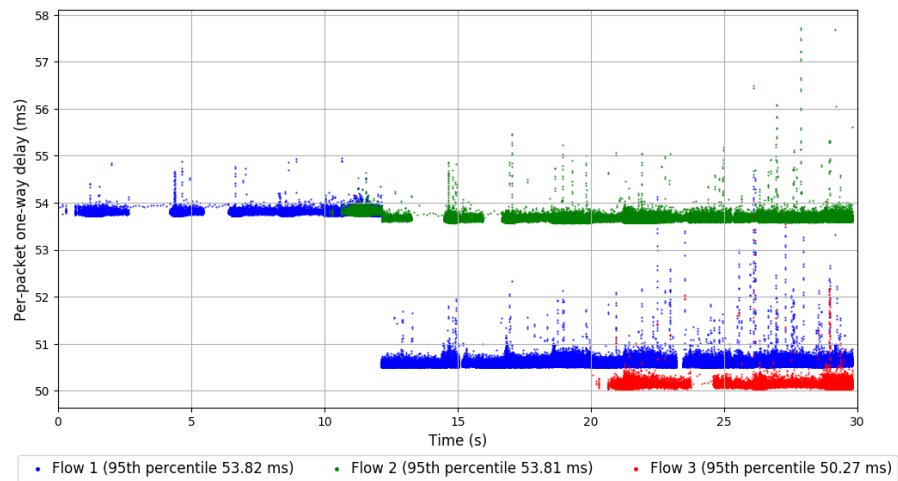
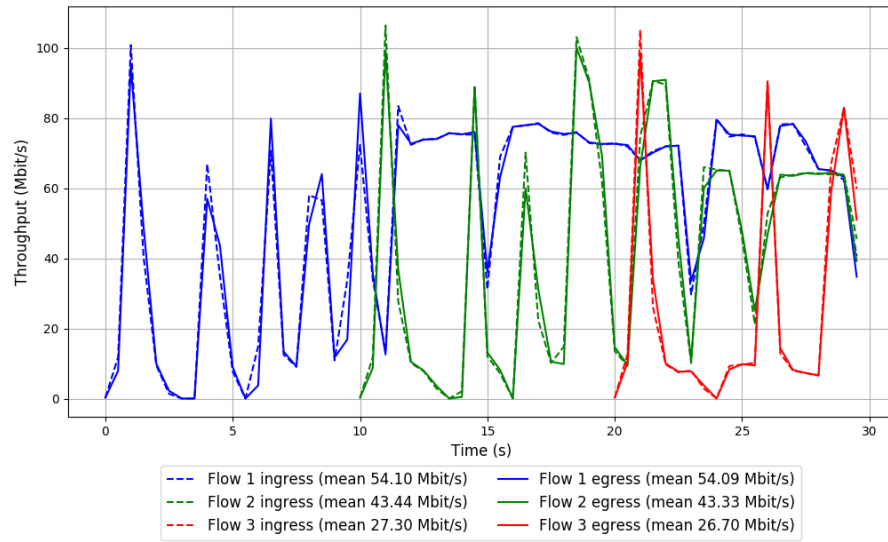


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-28 19:50:59
End at: 2018-02-28 19:51:29

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.56 Mbit/s
95th percentile per-packet one-way delay: 53.809 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 54.09 Mbit/s
95th percentile per-packet one-way delay: 53.817 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 43.33 Mbit/s
95th percentile per-packet one-way delay: 53.806 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 26.70 Mbit/s
95th percentile per-packet one-way delay: 50.269 ms
Loss rate: 3.22%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-28 20:08:53

End at: 2018-02-28 20:09:23

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.67 Mbit/s

95th percentile per-packet one-way delay: 53.886 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 43.78 Mbit/s

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

Loss rate: 0.50%

-- Flow 2:

Average throughput: 50.20 Mbit/s

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

Loss rate: 0.85%

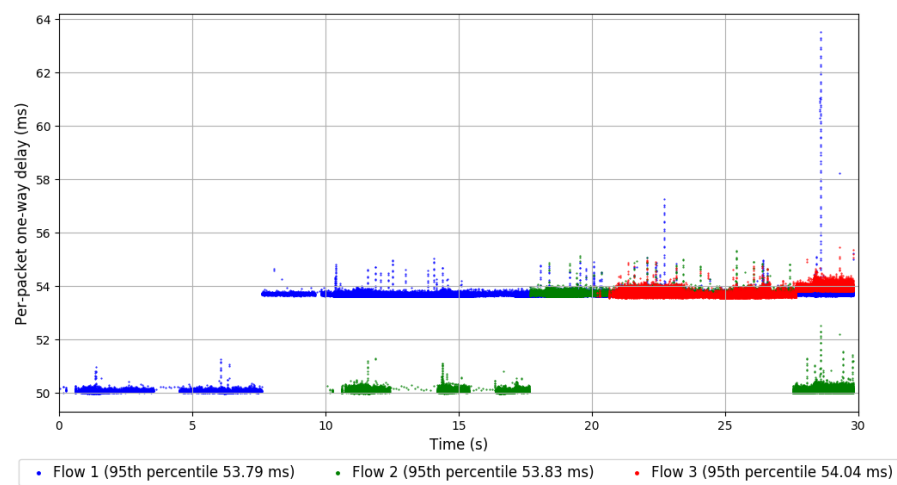
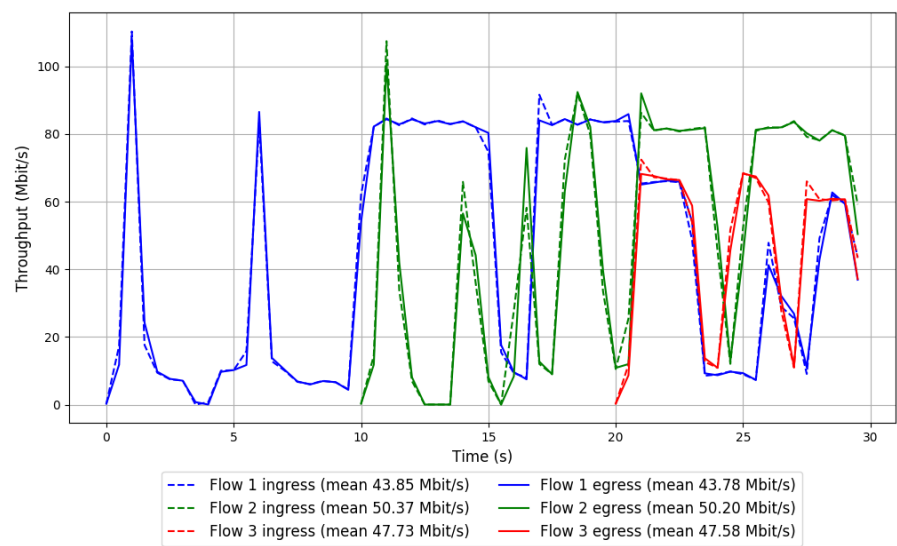
-- Flow 3:

Average throughput: 47.58 Mbit/s

95th percentile per-packet one-way delay: 54.041 ms

Loss rate: 1.35%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-28 20:27:02

End at: 2018-02-28 20:27:32

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 110.08 Mbit/s

95th percentile per-packet one-way delay: 53.632 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 62.87 Mbit/s

95th percentile per-packet one-way delay: 53.663 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 41.96 Mbit/s

95th percentile per-packet one-way delay: 50.506 ms

Loss rate: 0.79%

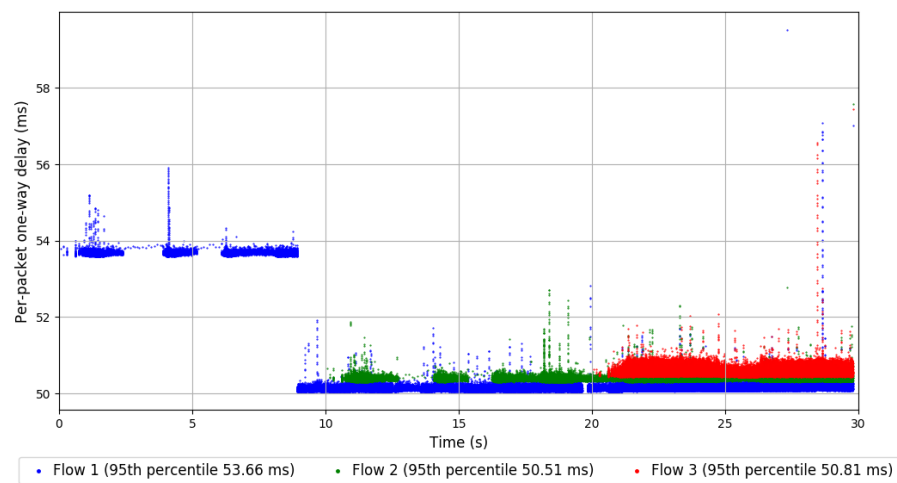
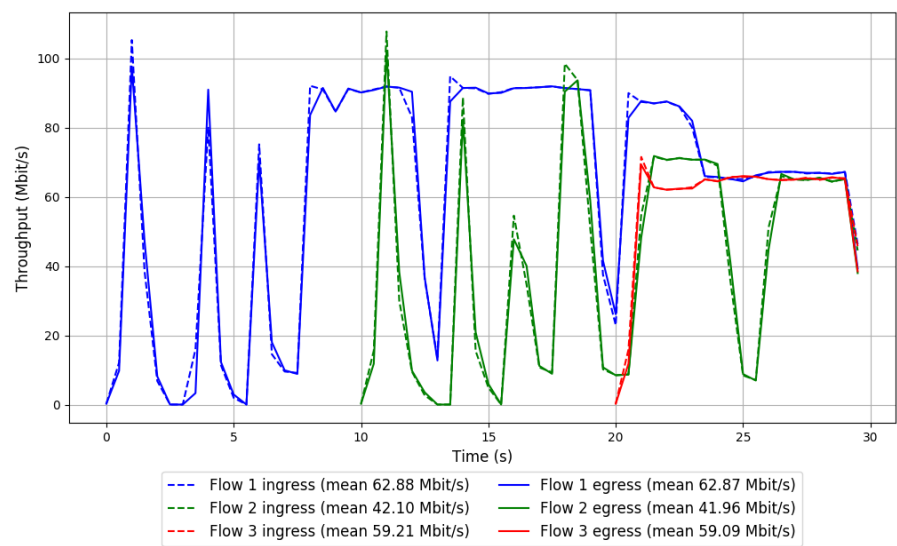
-- Flow 3:

Average throughput: 59.09 Mbit/s

95th percentile per-packet one-way delay: 50.811 ms

Loss rate: 1.19%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-28 20:45:00

End at: 2018-02-28 20:45:30

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.97 Mbit/s

95th percentile per-packet one-way delay: 54.004 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 51.43 Mbit/s

95th percentile per-packet one-way delay: 53.967 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 27.53 Mbit/s

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

Loss rate: 1.43%

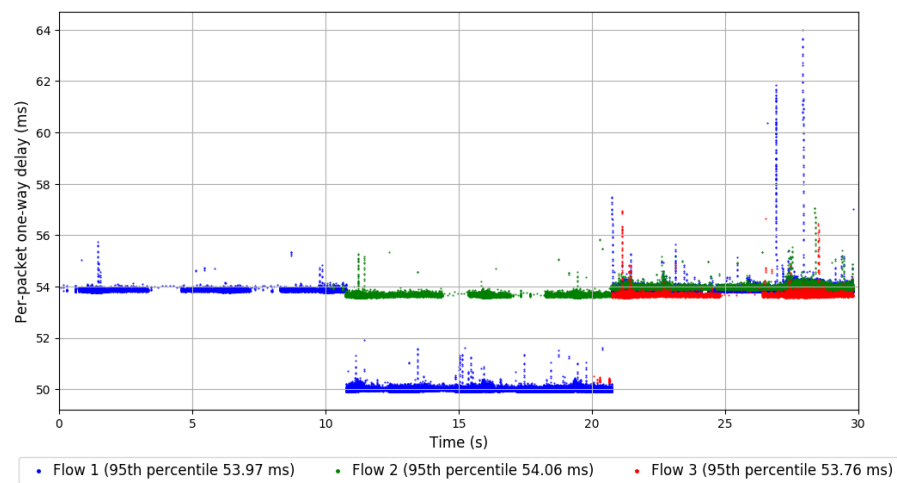
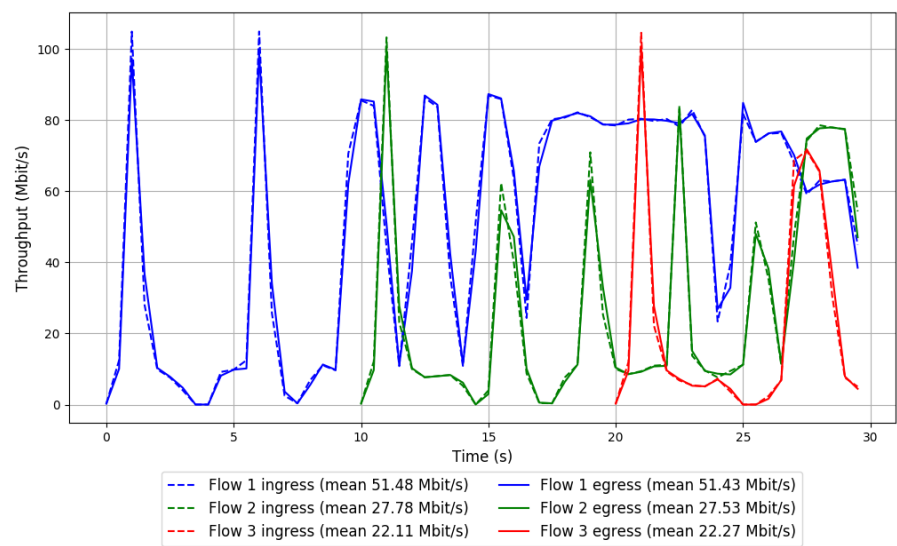
-- Flow 3:

Average throughput: 22.27 Mbit/s

95th percentile per-packet one-way delay: 53.762 ms

Loss rate: 0.30%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-28 21:02:51

End at: 2018-02-28 21:03:21

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.75 Mbit/s

95th percentile per-packet one-way delay: 53.825 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 52.20 Mbit/s

95th percentile per-packet one-way delay: 53.606 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 51.81 Mbit/s

95th percentile per-packet one-way delay: 53.906 ms

Loss rate: 0.82%

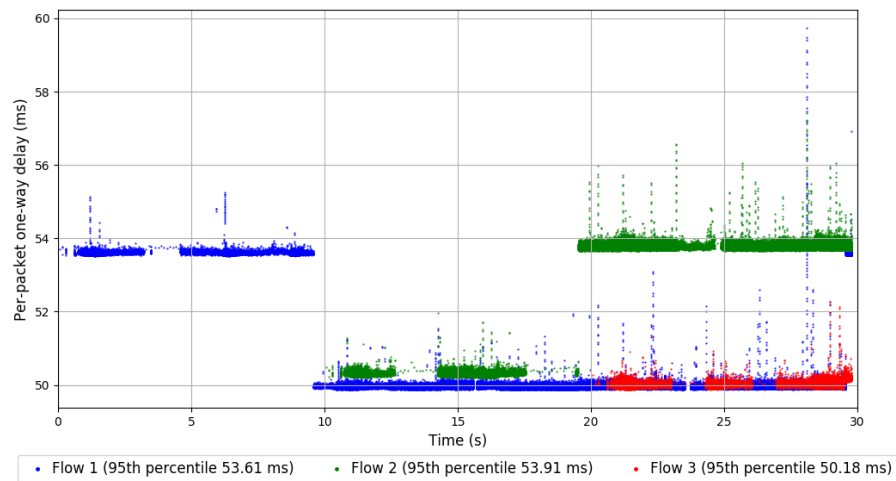
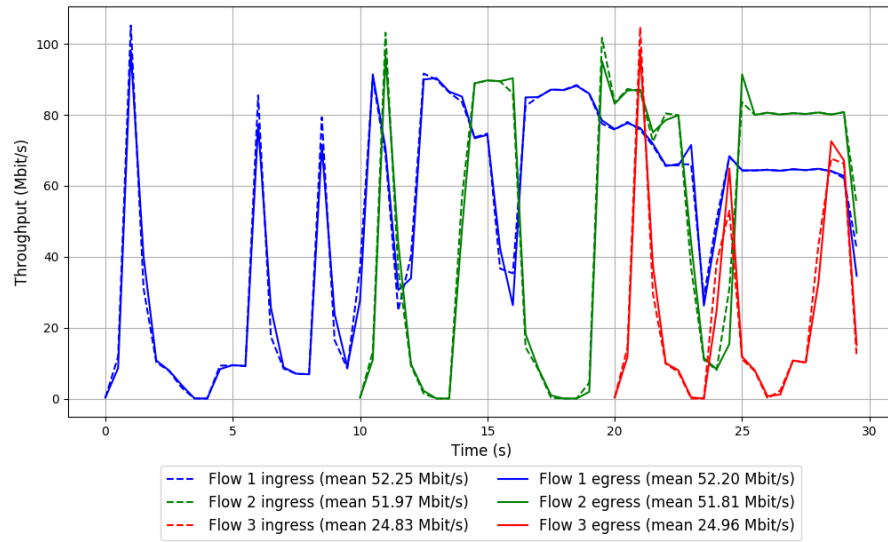
-- Flow 3:

Average throughput: 24.96 Mbit/s

95th percentile per-packet one-way delay: 50.176 ms

Loss rate: 0.51%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-28 21:21:05

End at: 2018-02-28 21:21:35

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.71 Mbit/s

95th percentile per-packet one-way delay: 53.566 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 48.70 Mbit/s

95th percentile per-packet one-way delay: 53.613 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 31.08 Mbit/s

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

Loss rate: 0.87%

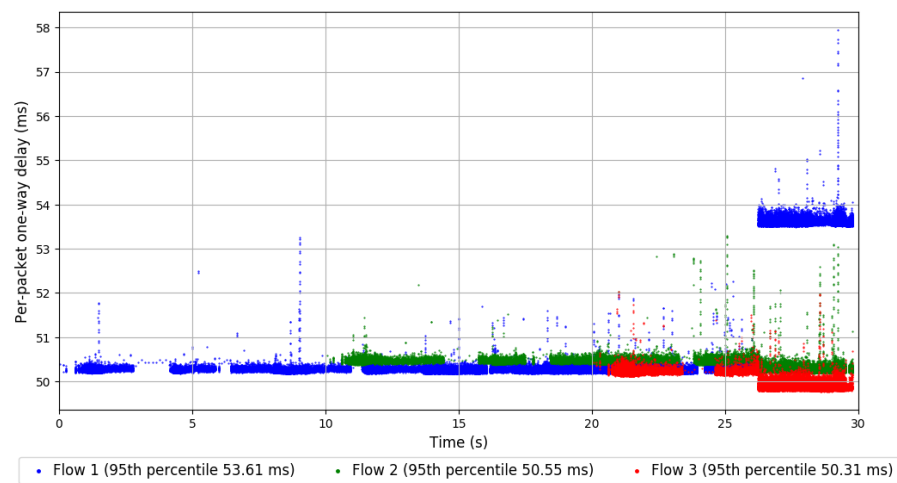
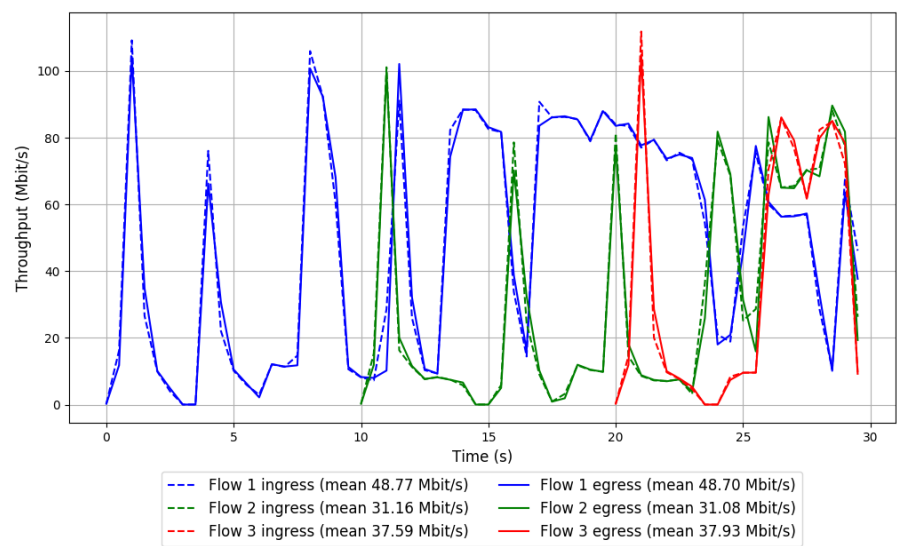
-- Flow 3:

Average throughput: 37.93 Mbit/s

95th percentile per-packet one-way delay: 50.308 ms

Loss rate: 0.37%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-28 21:39:05

End at: 2018-02-28 21:39:35

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.25 Mbit/s

95th percentile per-packet one-way delay: 53.677 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 59.22 Mbit/s

95th percentile per-packet one-way delay: 49.914 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 37.82 Mbit/s

95th percentile per-packet one-way delay: 53.728 ms

Loss rate: 0.82%

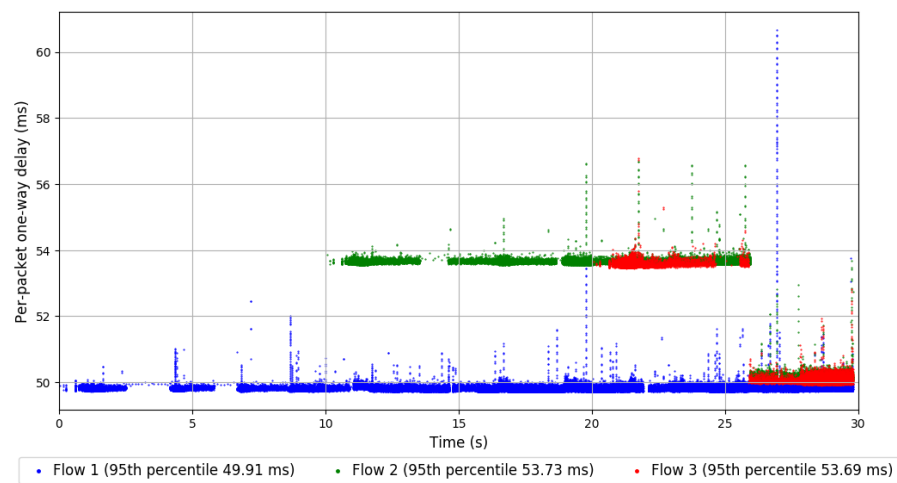
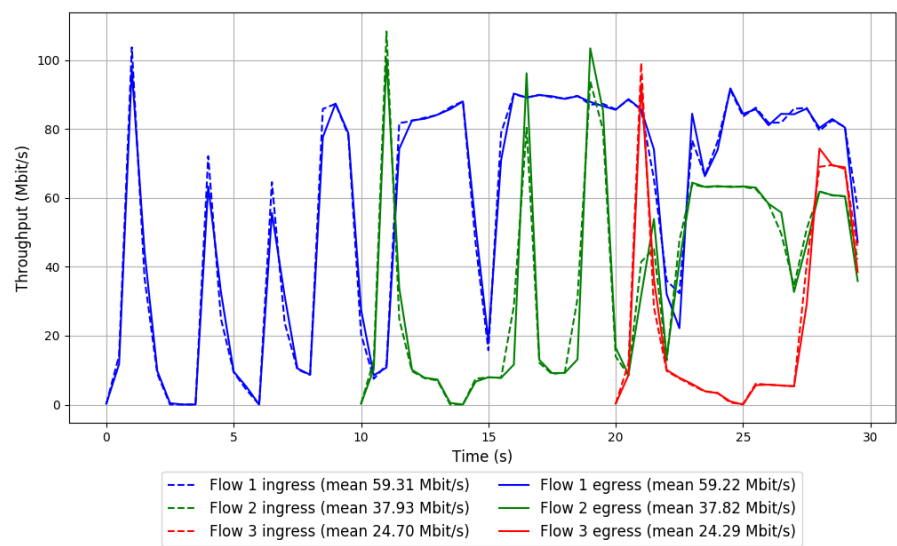
-- Flow 3:

Average throughput: 24.29 Mbit/s

95th percentile per-packet one-way delay: 53.691 ms

Loss rate: 2.72%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-28 21:57:11

End at: 2018-02-28 21:57:41

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.00 Mbit/s

95th percentile per-packet one-way delay: 53.559 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 47.35 Mbit/s

95th percentile per-packet one-way delay: 53.488 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 34.09 Mbit/s

95th percentile per-packet one-way delay: 53.646 ms

Loss rate: 0.93%

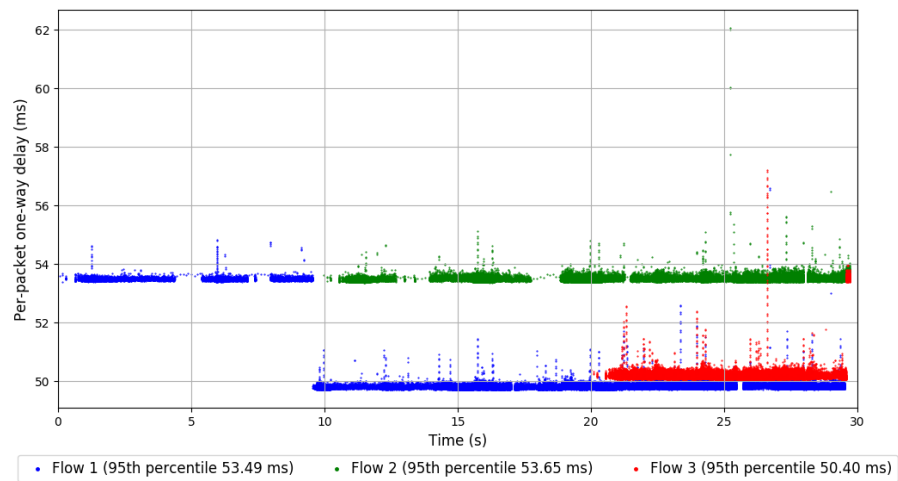
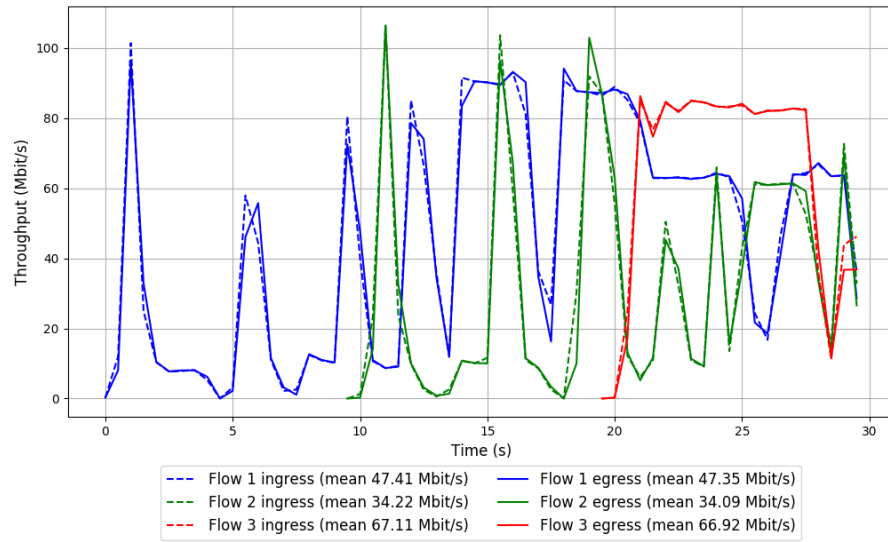
-- Flow 3:

Average throughput: 66.92 Mbit/s

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

Loss rate: 1.33%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-28 22:14:52

End at: 2018-02-28 22:15:22

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.44 Mbit/s

95th percentile per-packet one-way delay: 53.759 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 67.29 Mbit/s

95th percentile per-packet one-way delay: 49.869 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 44.10 Mbit/s

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

Loss rate: 0.76%

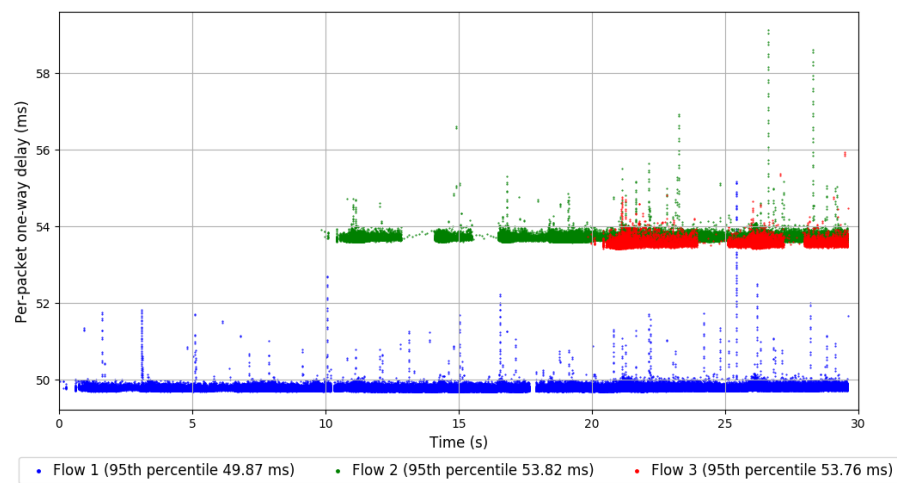
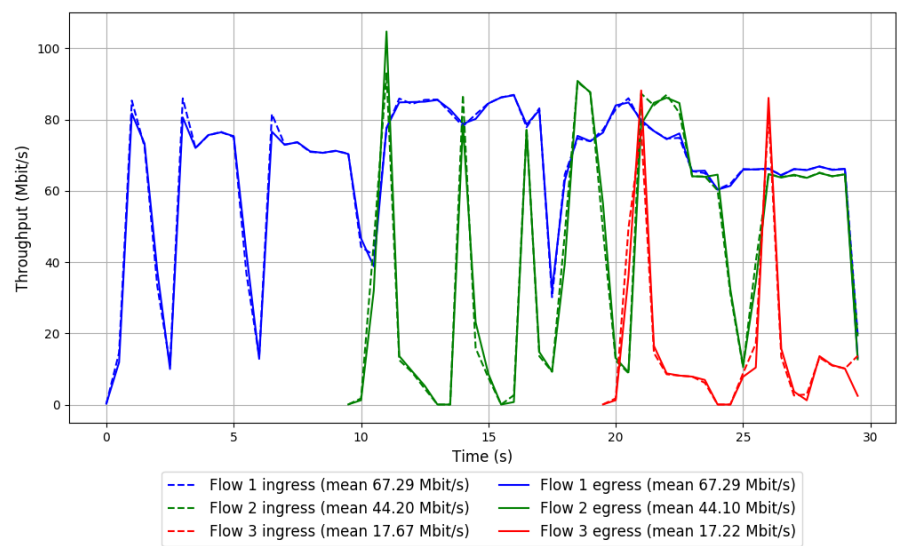
-- Flow 3:

Average throughput: 17.22 Mbit/s

95th percentile per-packet one-way delay: 53.761 ms

Loss rate: 3.55%

Run 9: Report of QUIC Cubic — Data Link

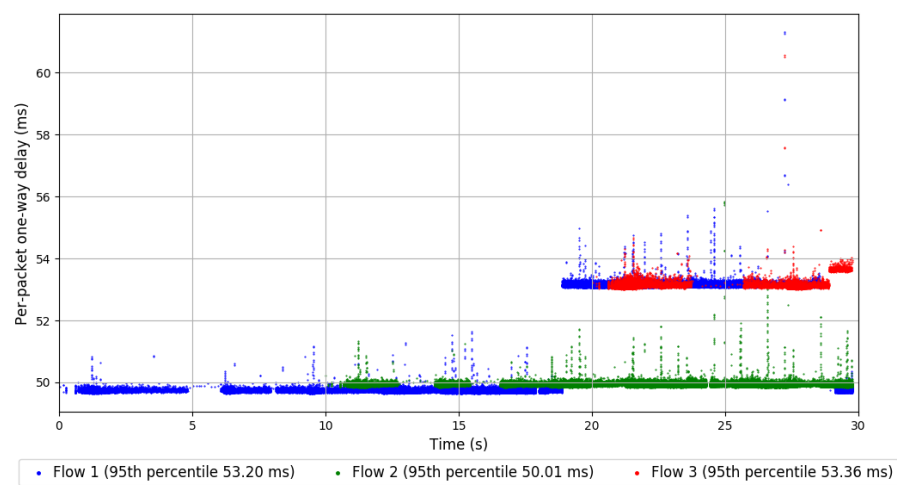
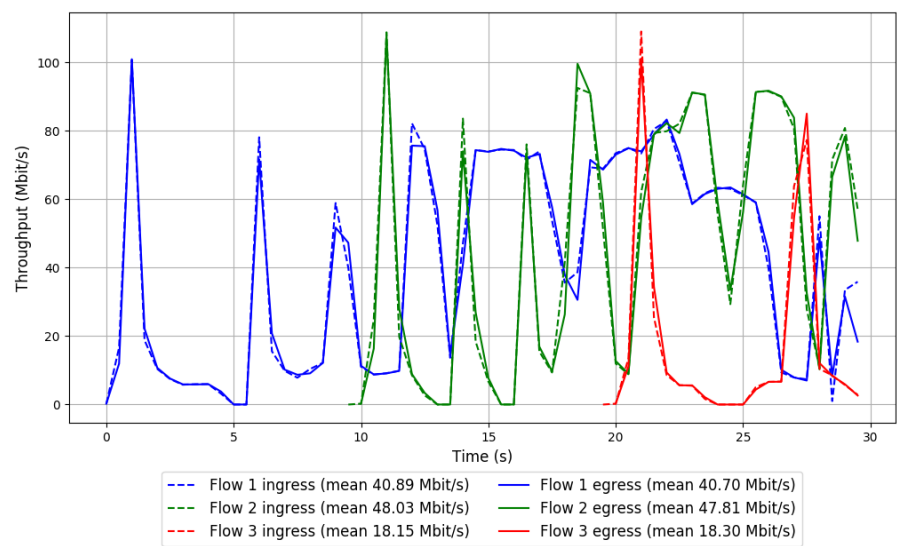


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-28 22:33:02
End at: 2018-02-28 22:33:32

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.48 Mbit/s
95th percentile per-packet one-way delay: 53.187 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 40.70 Mbit/s
95th percentile per-packet one-way delay: 53.199 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 47.81 Mbit/s
95th percentile per-packet one-way delay: 50.007 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 18.30 Mbit/s
95th percentile per-packet one-way delay: 53.359 ms
Loss rate: 0.22%
```

Run 10: Report of QUIC Cubic — Data Link

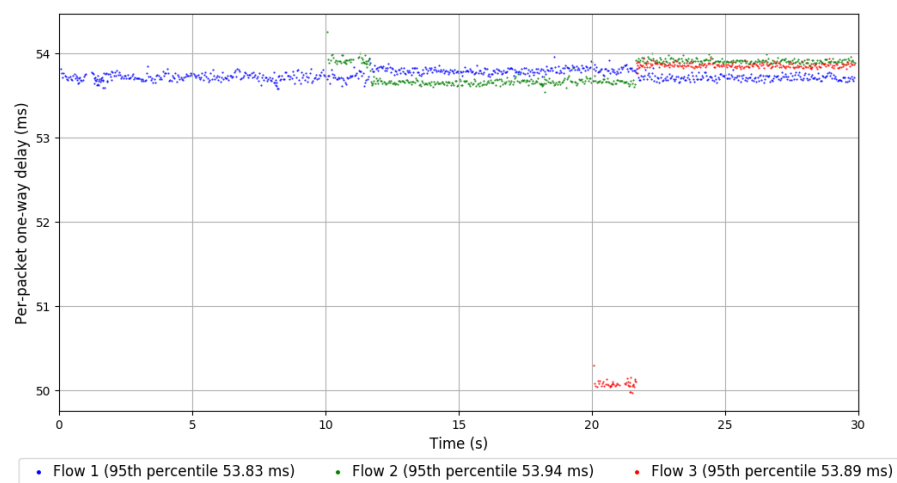
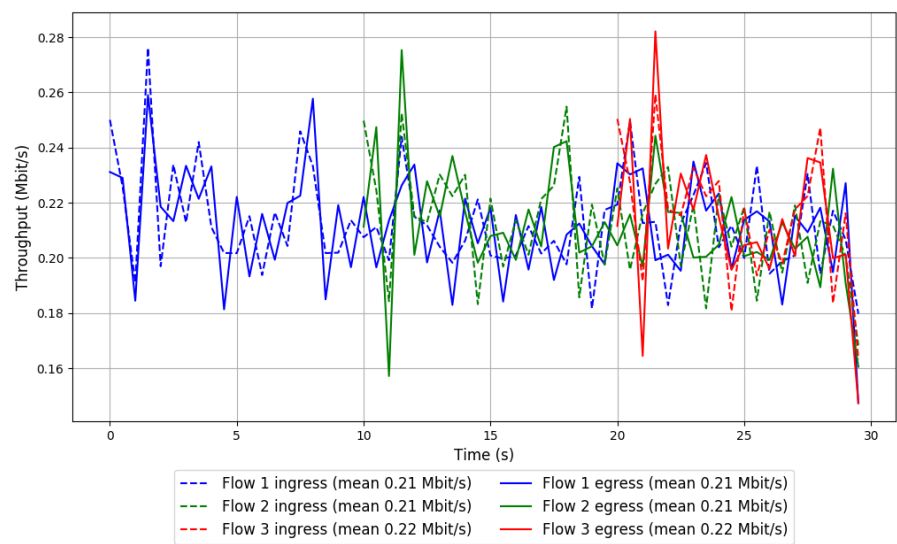


```
Run 1: Statistics of SCReAM

Start at: 2018-02-28 19:50:19
End at: 2018-02-28 19:50:49

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.919 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.830 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.940 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.890 ms
Loss rate: 1.10%
```

Run 1: Report of SReAM — Data Link

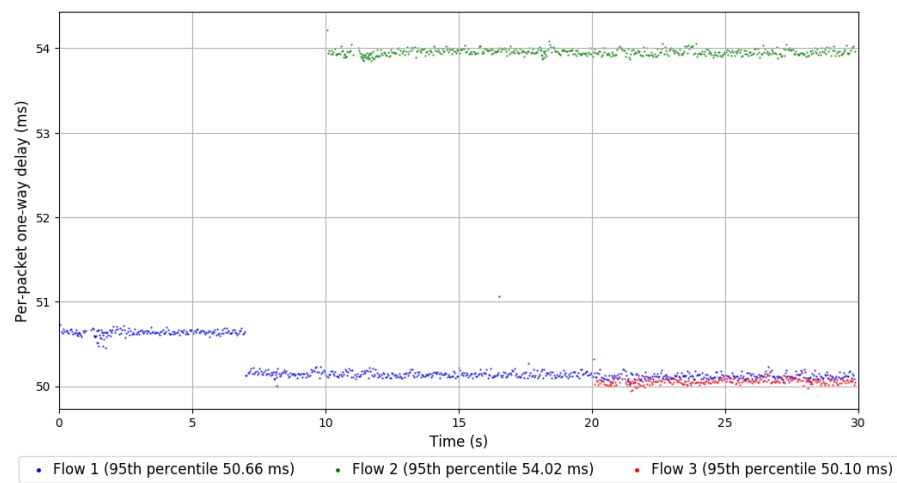
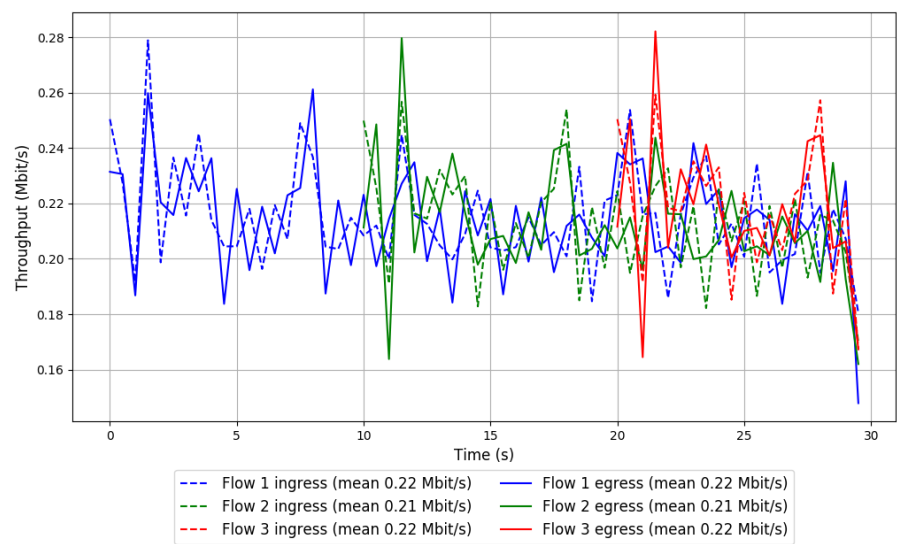


```
Run 2: Statistics of SReAM

Start at: 2018-02-28 20:08:14
End at: 2018-02-28 20:08:44

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.994 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.663 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.017 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.103 ms
Loss rate: 0.74%
```

Run 2: Report of SReAM — Data Link

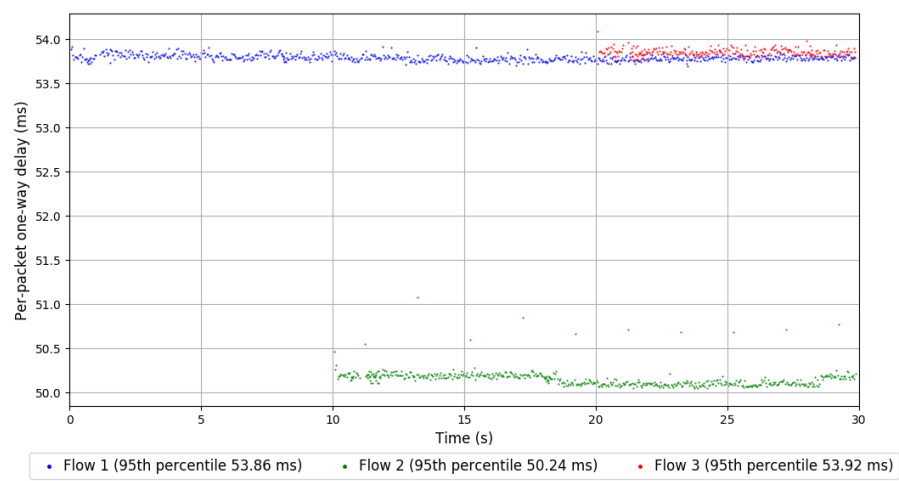
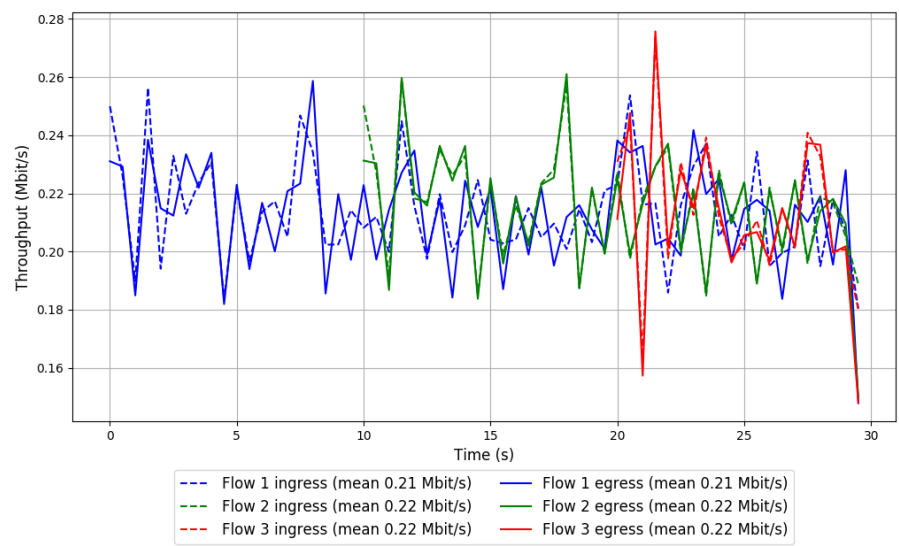


```
Run 3: Statistics of SReAM

Start at: 2018-02-28 20:26:22
End at: 2018-02-28 20:26:52

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.880 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.858 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.237 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.921 ms
Loss rate: 1.11%
```


Run 3: Report of SReAM — Data Link

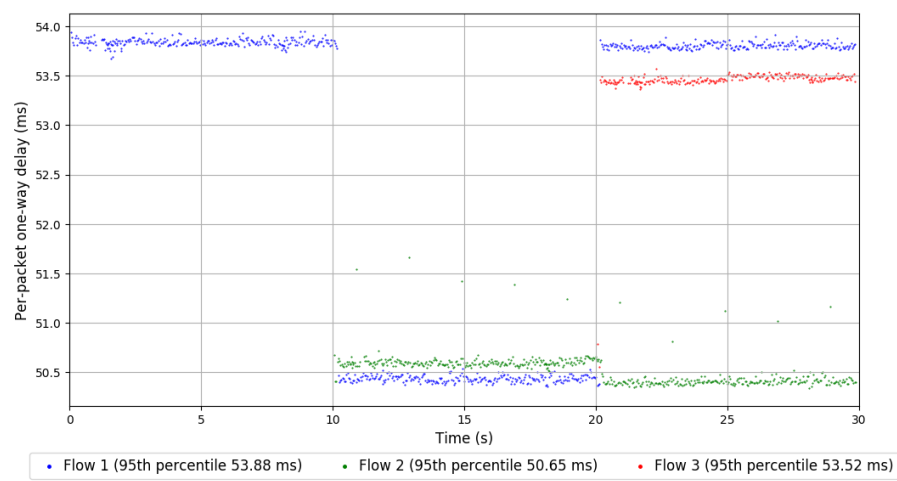
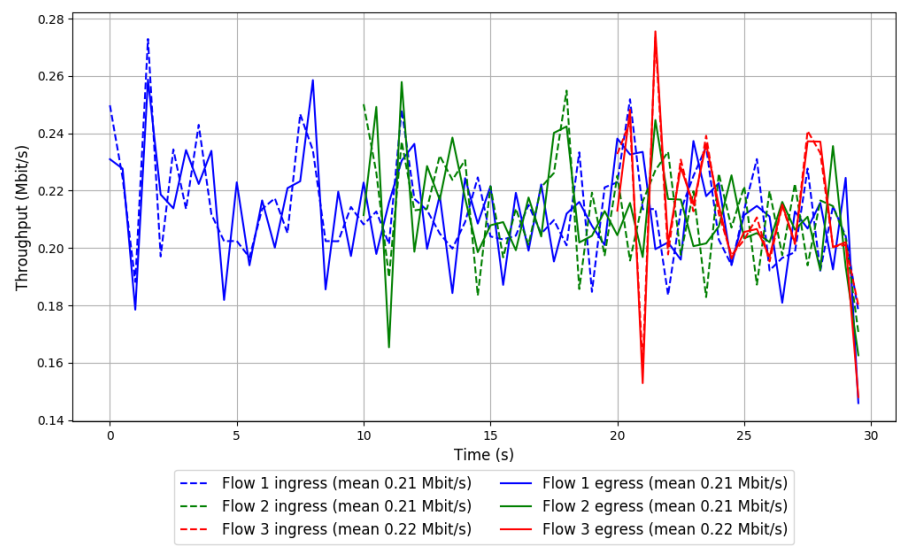


```
Run 4: Statistics of SReAM

Start at: 2018-02-28 20:44:21
End at: 2018-02-28 20:44:51

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.864 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.880 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.648 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.522 ms
Loss rate: 1.11%
```

Run 4: Report of SReAM — Data Link

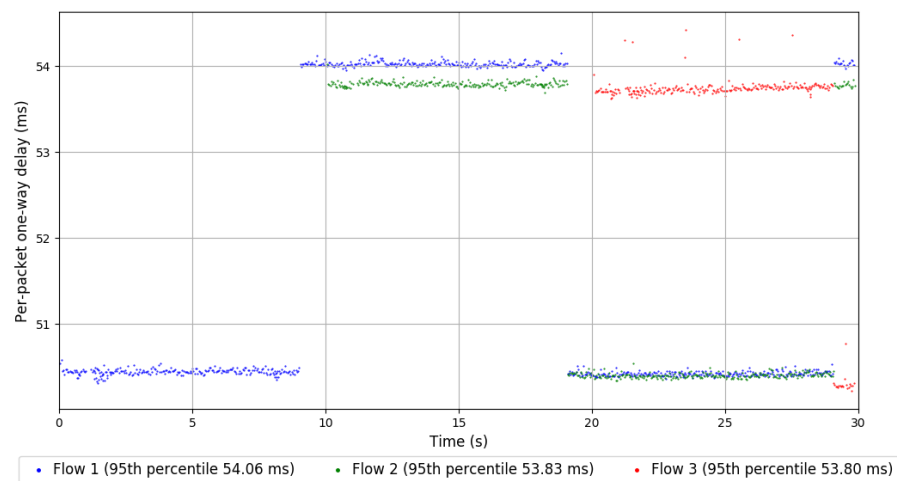
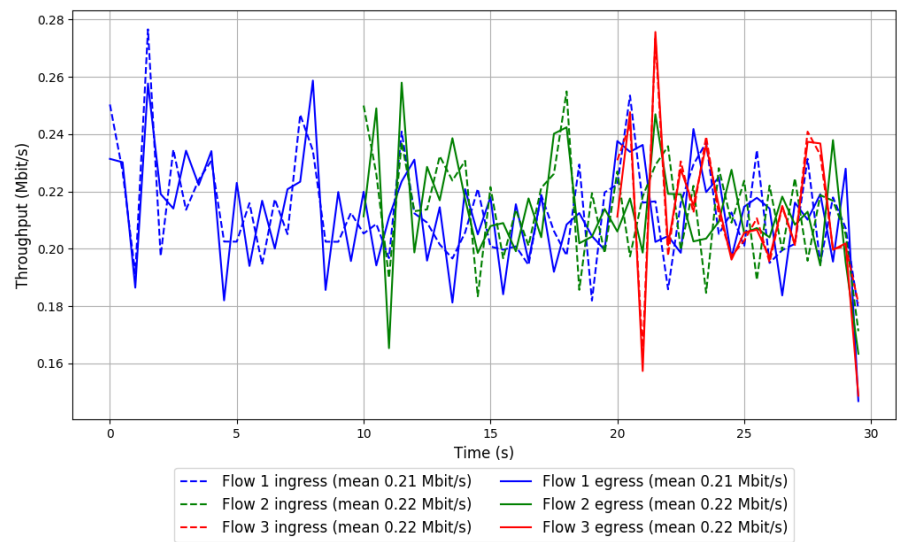


```
Run 5: Statistics of SReAM

Start at: 2018-02-28 21:02:12
End at: 2018-02-28 21:02:42

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.039 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.056 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.832 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.804 ms
Loss rate: 1.11%
```

Run 5: Report of SReAM — Data Link

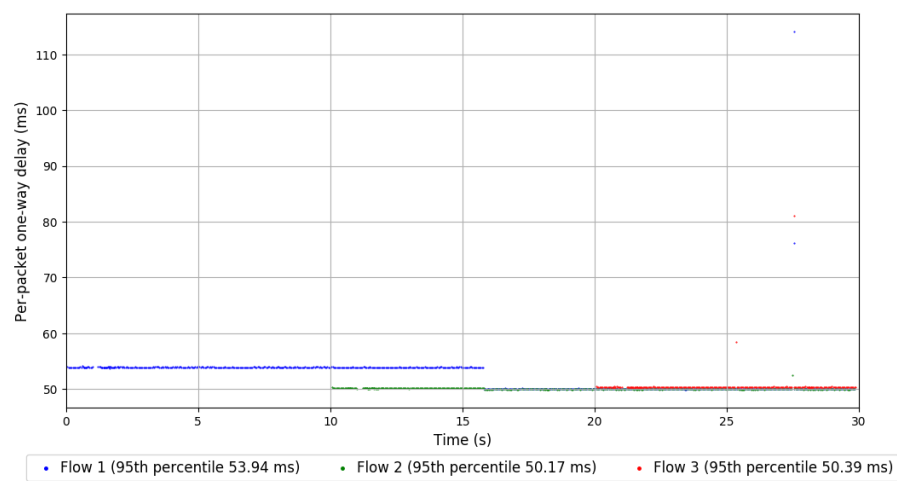
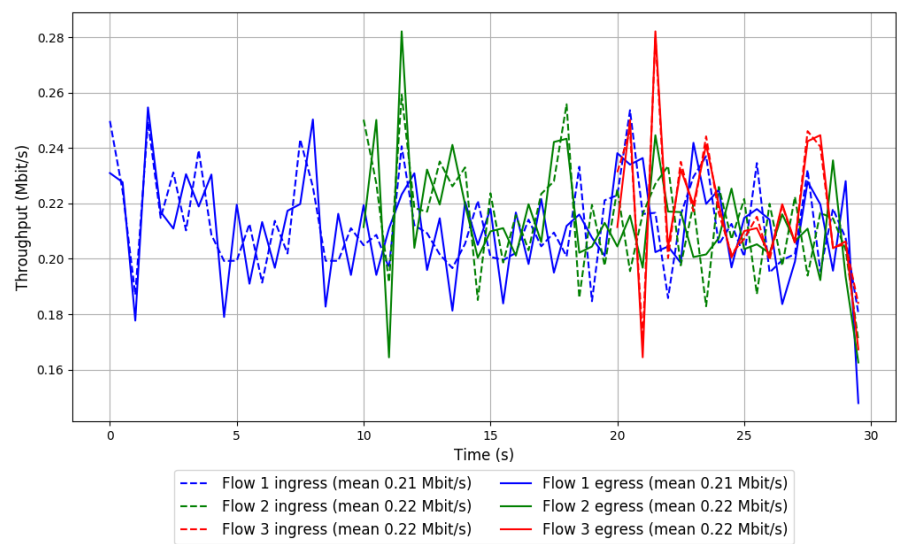


```
Run 6: Statistics of SCReAM

Start at: 2018-02-28 21:20:25
End at: 2018-02-28 21:20:55

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.928 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.943 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.168 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.392 ms
Loss rate: 0.74%
```

Run 6: Report of SReAM — Data Link

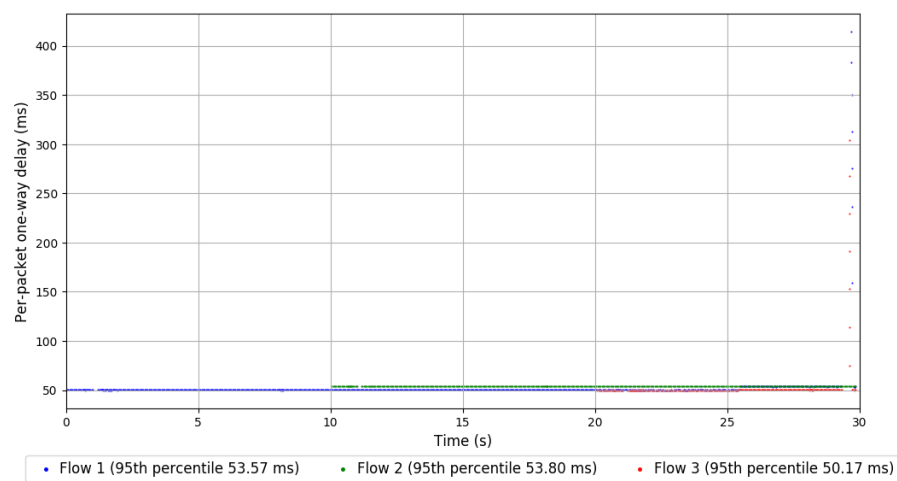
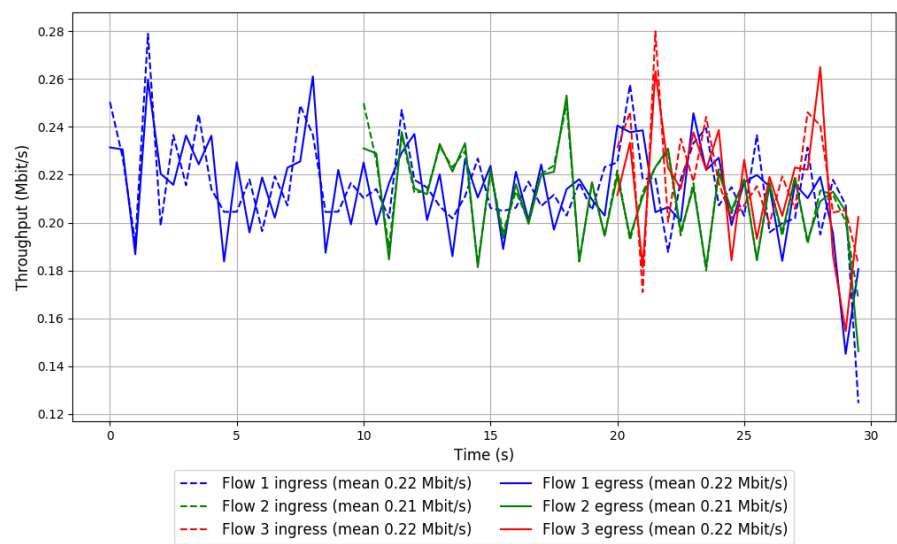


```
Run 7: Statistics of SReAM

Start at: 2018-02-28 21:38:25
End at: 2018-02-28 21:38:55

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.782 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.572 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.798 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.172 ms
Loss rate: 1.49%
```


Run 7: Report of SReAM — Data Link

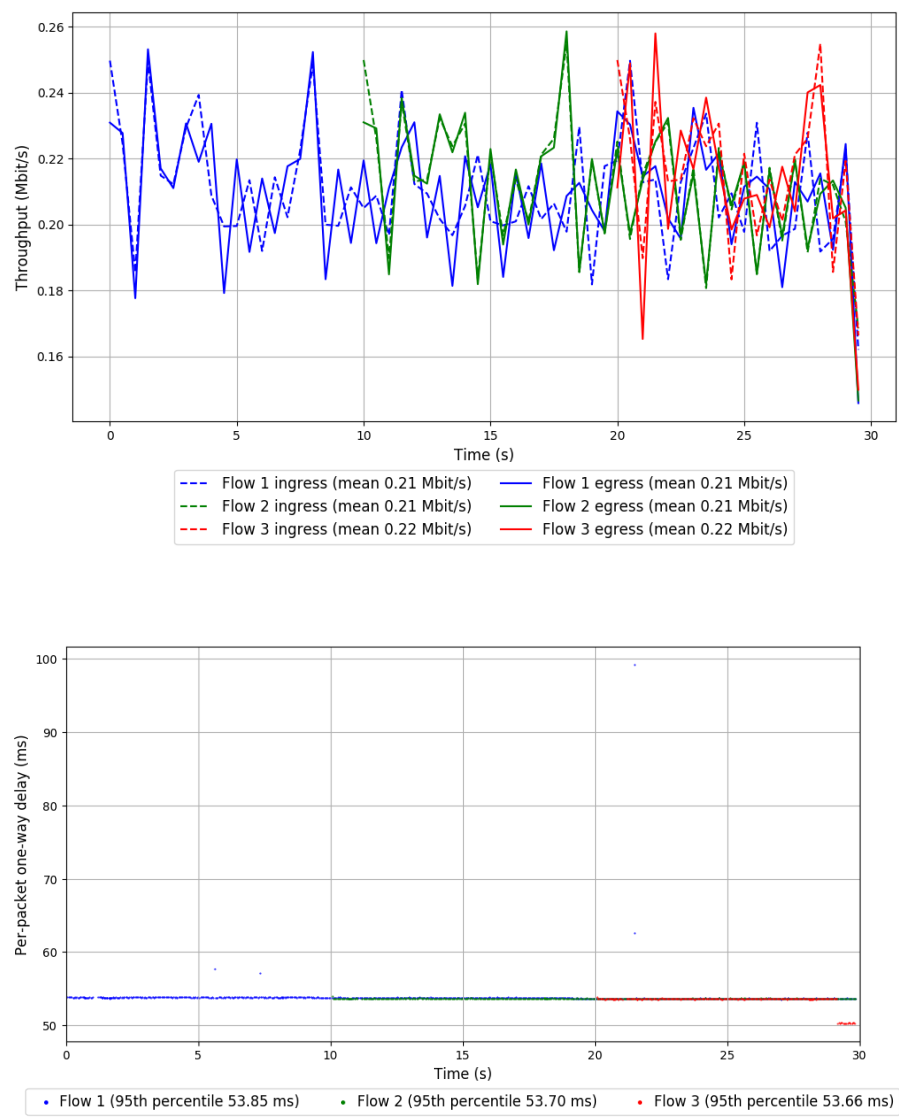


```
Run 8: Statistics of SCReAM

Start at: 2018-02-28 21:56:32
End at: 2018-02-28 21:57:02

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 53.831 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.850 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.695 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.659 ms
Loss rate: 1.12%
```

Run 8: Report of SReAM — Data Link

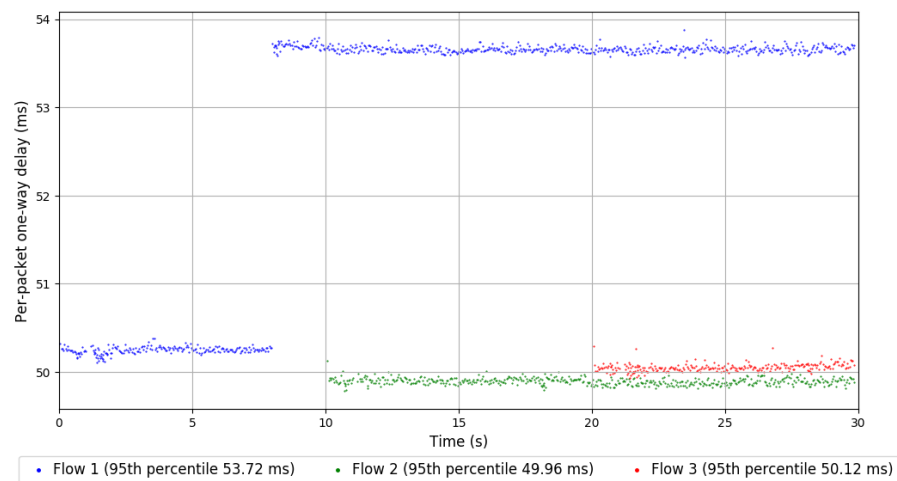
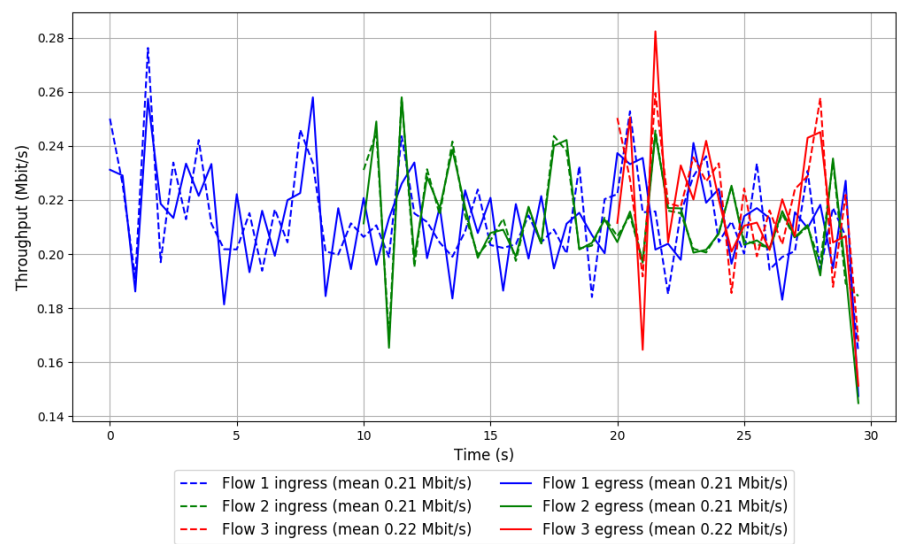


```
Run 9: Statistics of SCReAM

Start at: 2018-02-28 22:14:13
End at: 2018-02-28 22:14:43

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.701 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.720 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 49.958 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.123 ms
Loss rate: 1.11%
```

Run 9: Report of SReAM — Data Link

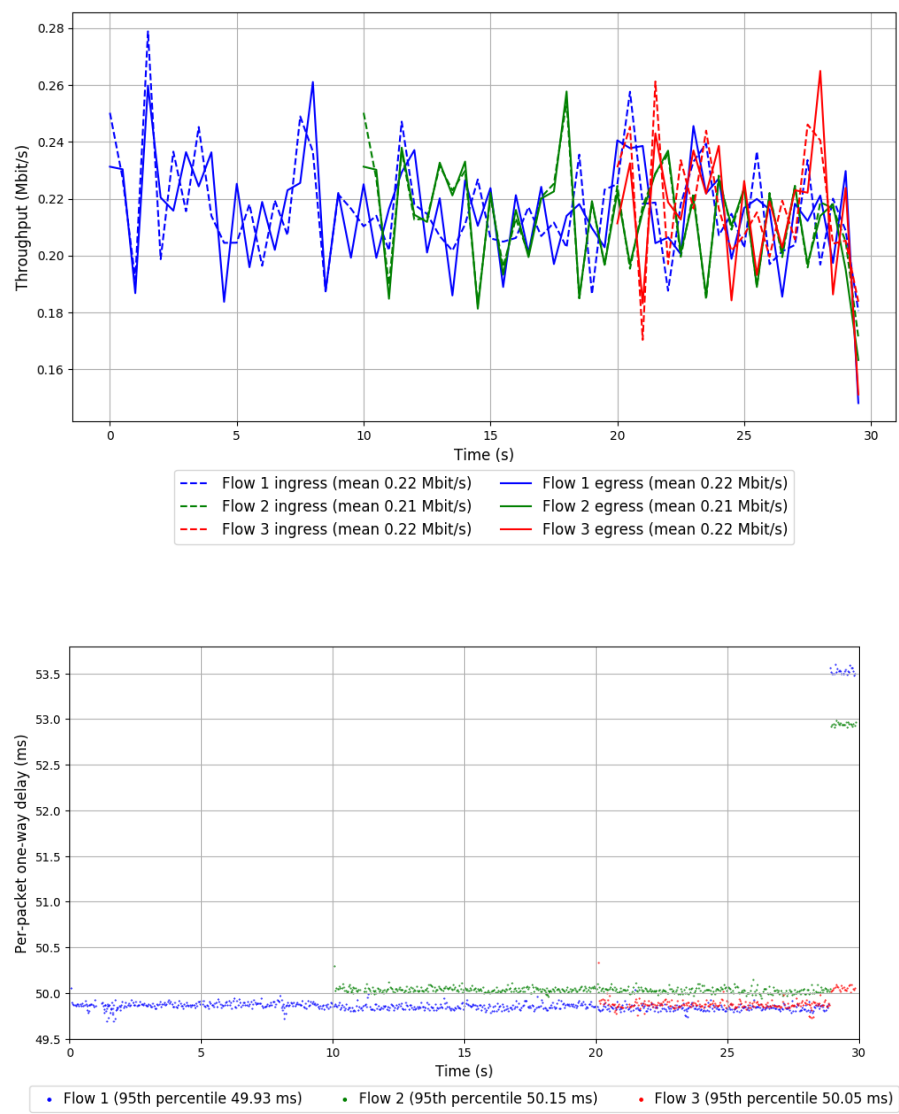


```
Run 10: Statistics of SCReAM

Start at: 2018-02-28 22:32:22
End at: 2018-02-28 22:32:52

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.089 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.928 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.147 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.055 ms
Loss rate: 1.11%
```

Run 10: Report of SCReAM — Data Link

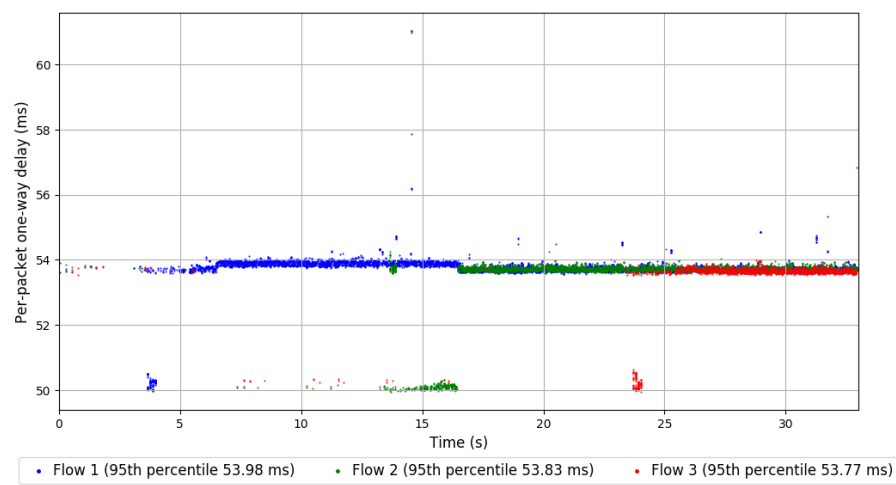
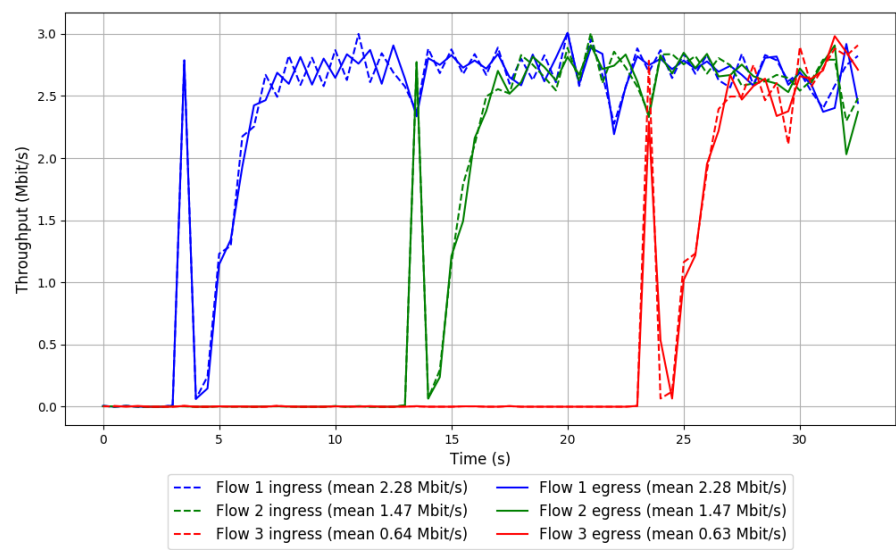


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-28 19:58:57
End at: 2018-02-28 19:59:27

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 53.952 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 53.980 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 53.830 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 53.774 ms
Loss rate: 1.13%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-28 20:16:58

End at: 2018-02-28 20:17:28

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 53.990 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 54.022 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 53.874 ms

Loss rate: 0.50%

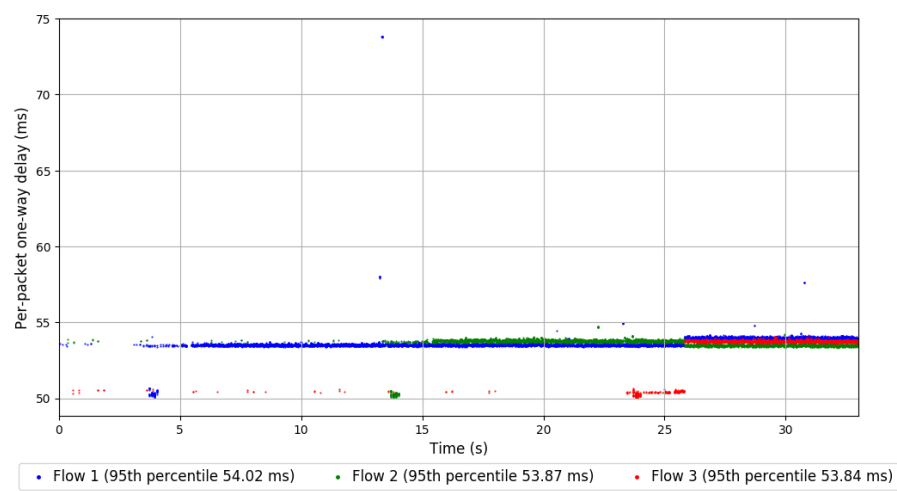
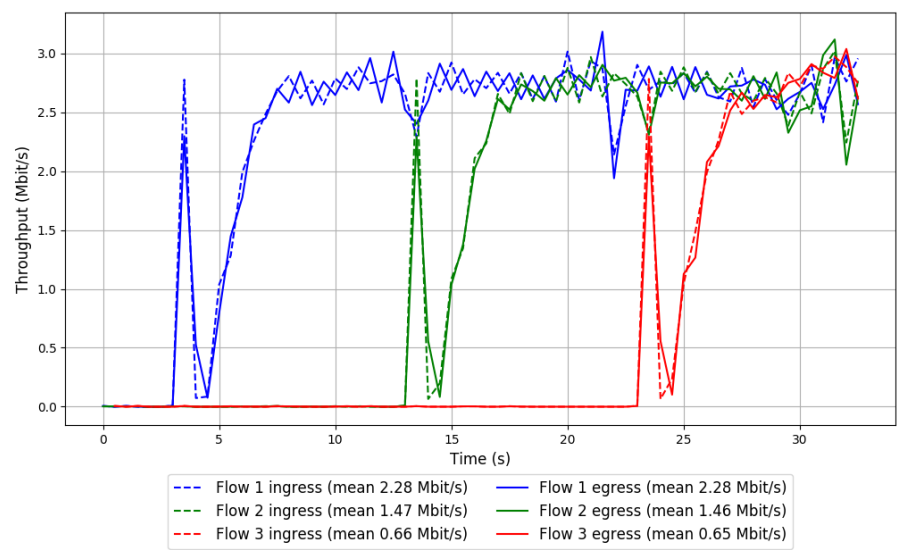
-- Flow 3:

Average throughput: 0.65 Mbit/s

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

Loss rate: 0.97%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-28 20:35:07

End at: 2018-02-28 20:35:37

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 53.651 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.659 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 50.888 ms

Loss rate: 0.70%

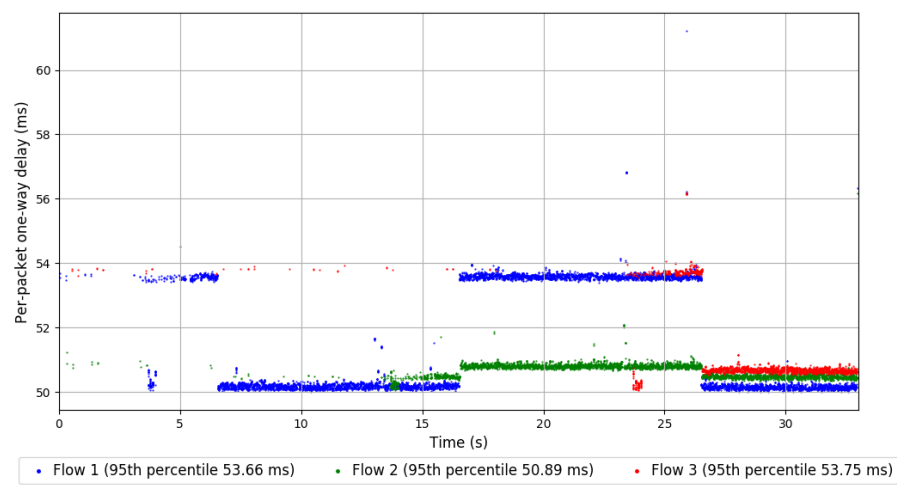
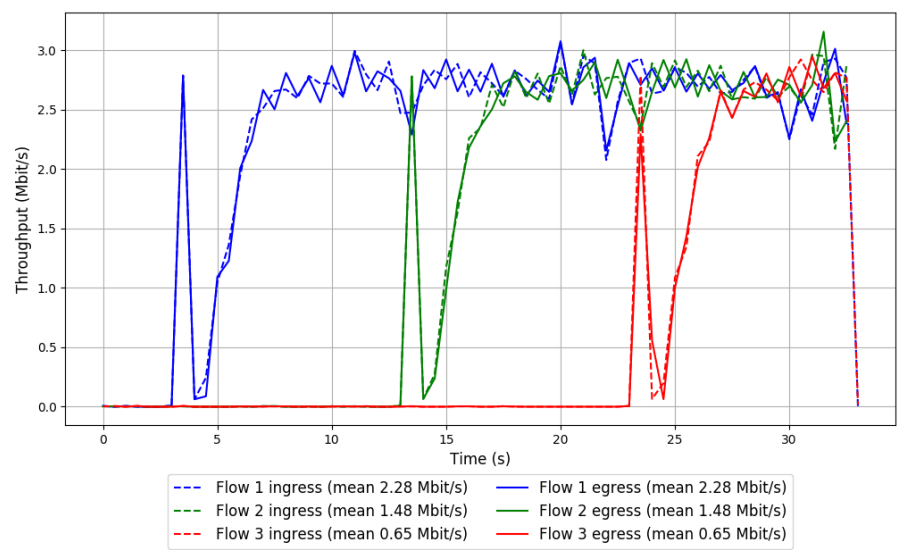
-- Flow 3:

Average throughput: 0.65 Mbit/s

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

Loss rate: 1.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-28 20:53:04

End at: 2018-02-28 20:53:34

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 53.857 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.179 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 1.46 Mbit/s

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

Loss rate: 0.56%

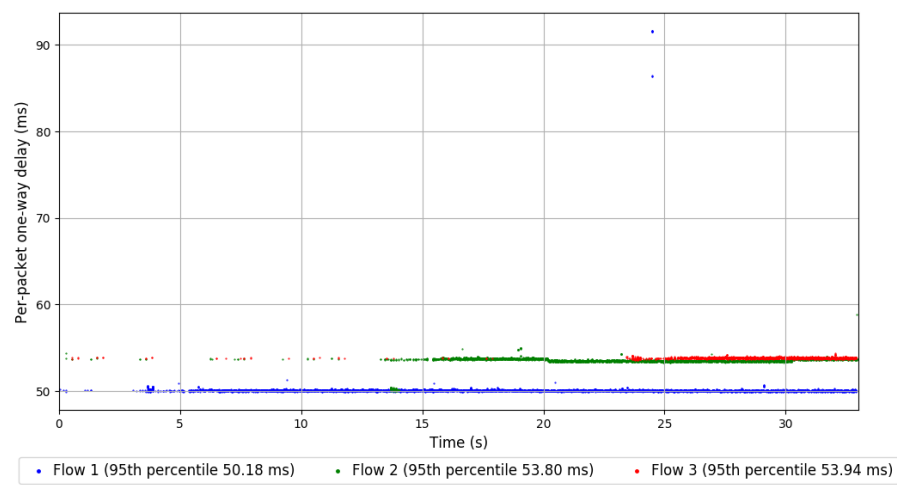
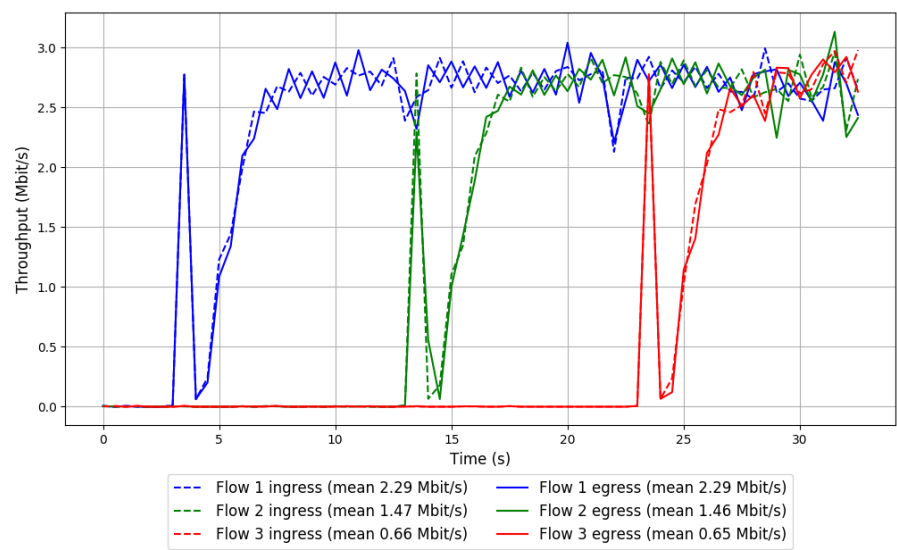
-- Flow 3:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 53.940 ms

Loss rate: 1.33%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-28 21:10:53

End at: 2018-02-28 21:11:23

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.36 Mbit/s

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

Loss rate: 0.62%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.728 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 1.46 Mbit/s

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

Loss rate: 0.67%

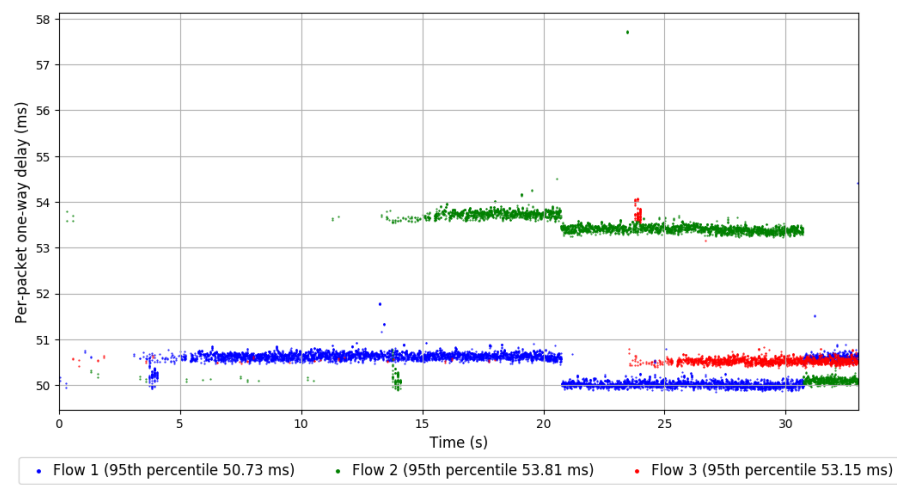
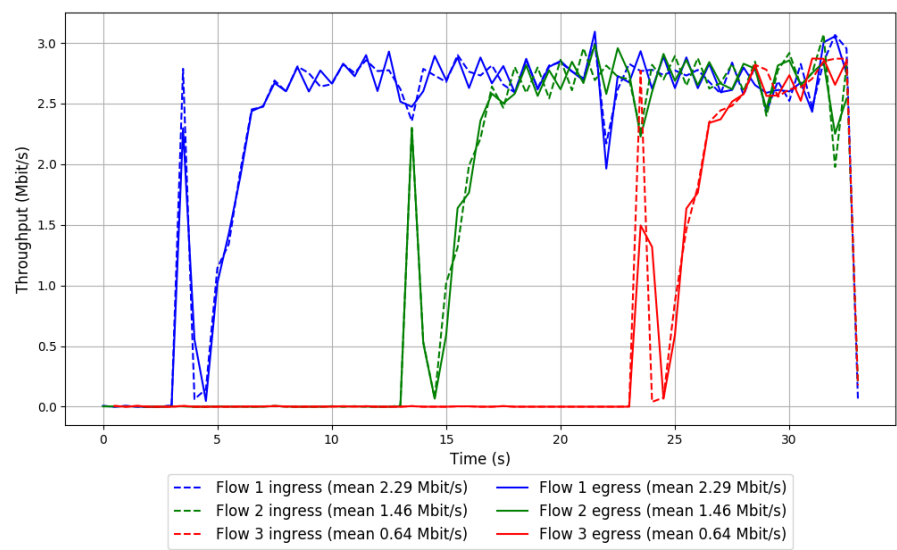
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.148 ms

Loss rate: 1.53%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-28 21:29:07

End at: 2018-02-28 21:29:37

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

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

Loss rate: 0.59%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.707 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 50.051 ms

Loss rate: 0.68%

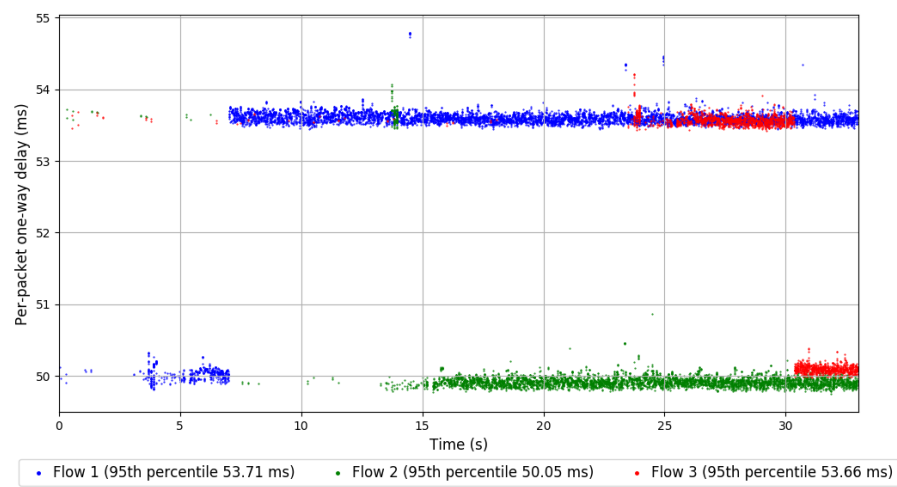
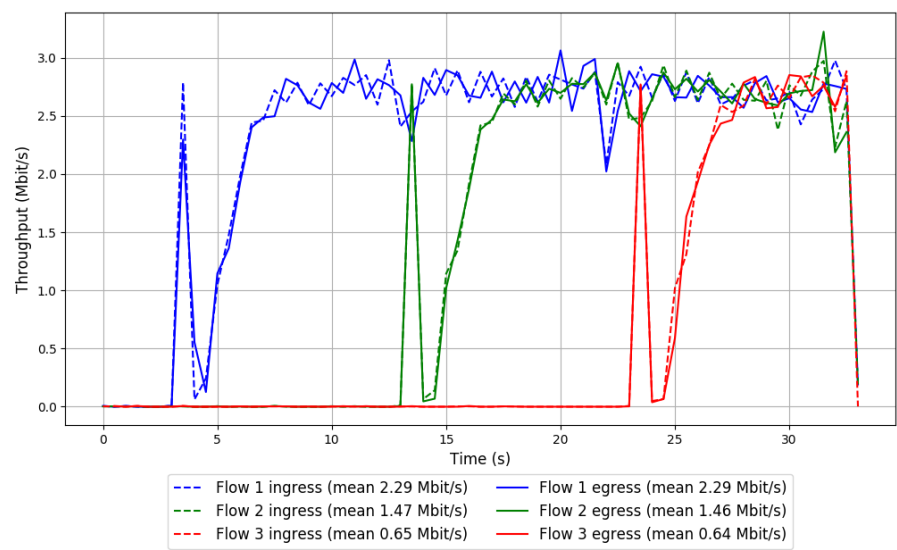
-- Flow 3:

Average throughput: 0.64 Mbit/s

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

Loss rate: 1.03%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-28 21:47:14

End at: 2018-02-28 21:47:44

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 53.863 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.048 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 53.902 ms

Loss rate: 0.50%

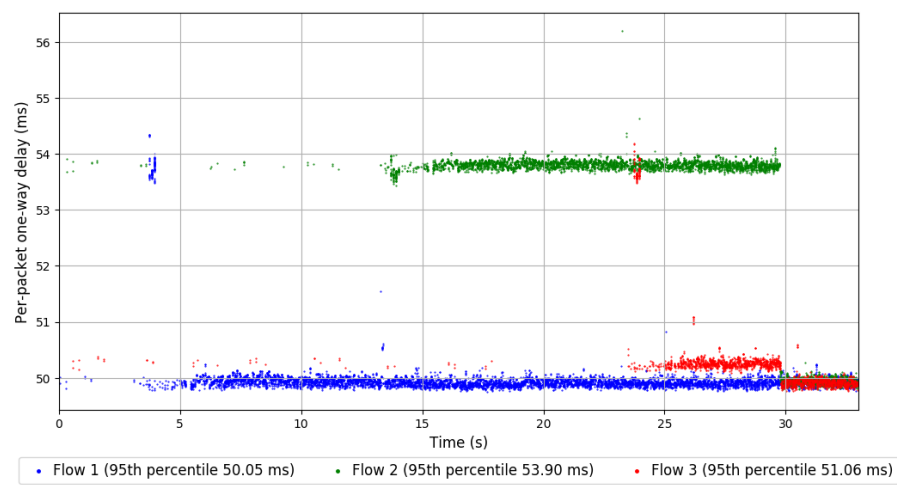
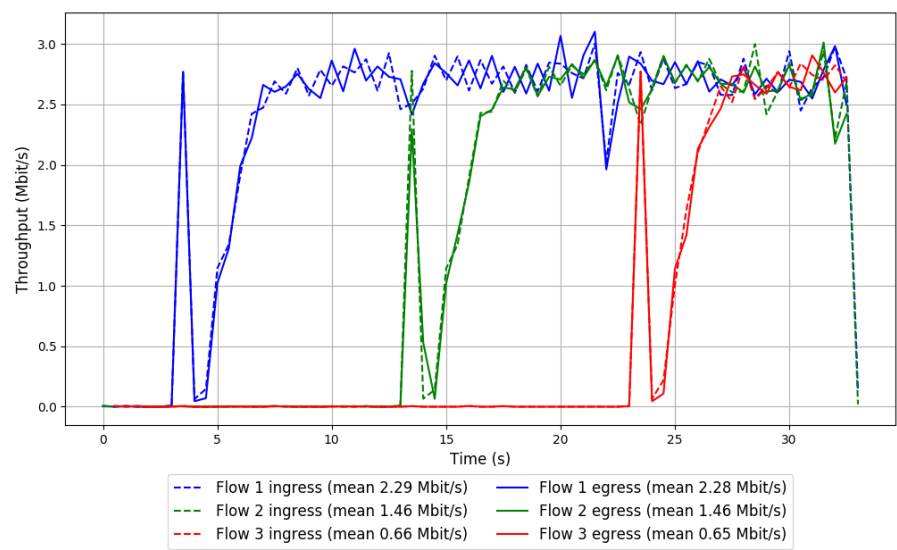
-- Flow 3:

Average throughput: 0.65 Mbit/s

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

Loss rate: 0.95%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-28 22:05:11

End at: 2018-02-28 22:05:41

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.33 Mbit/s

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

Loss rate: 0.62%

-- Flow 1:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 53.687 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 53.672 ms

Loss rate: 0.55%

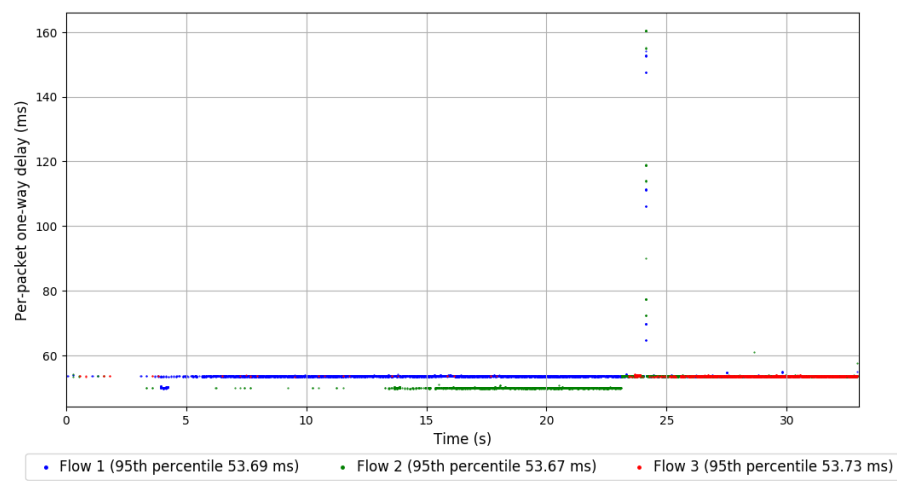
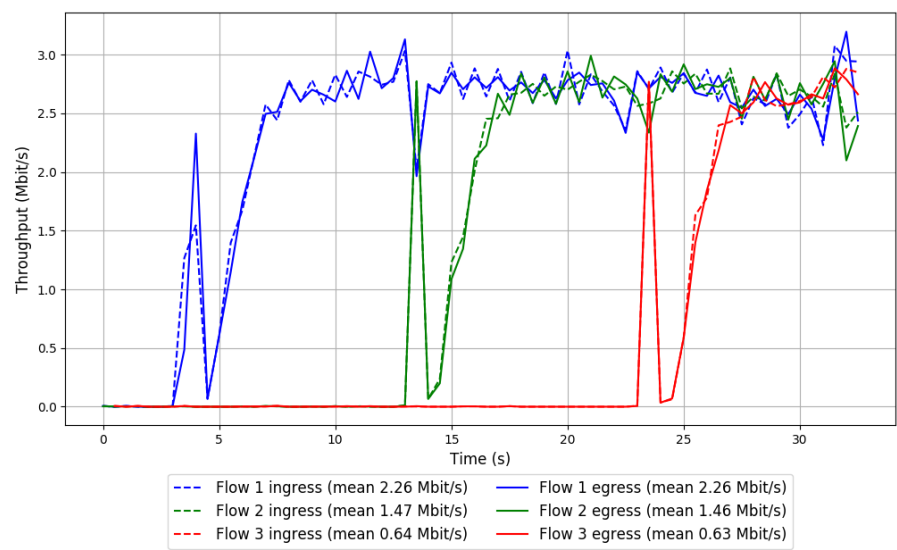
-- Flow 3:

Average throughput: 0.63 Mbit/s

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

Loss rate: 1.21%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-28 22:22:54

End at: 2018-02-28 22:23:24

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 53.583 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.353 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 53.628 ms

Loss rate: 0.65%

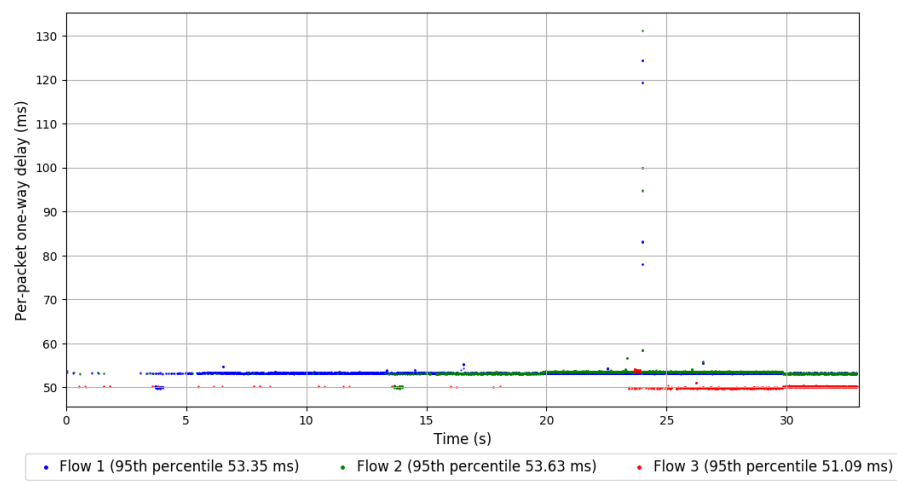
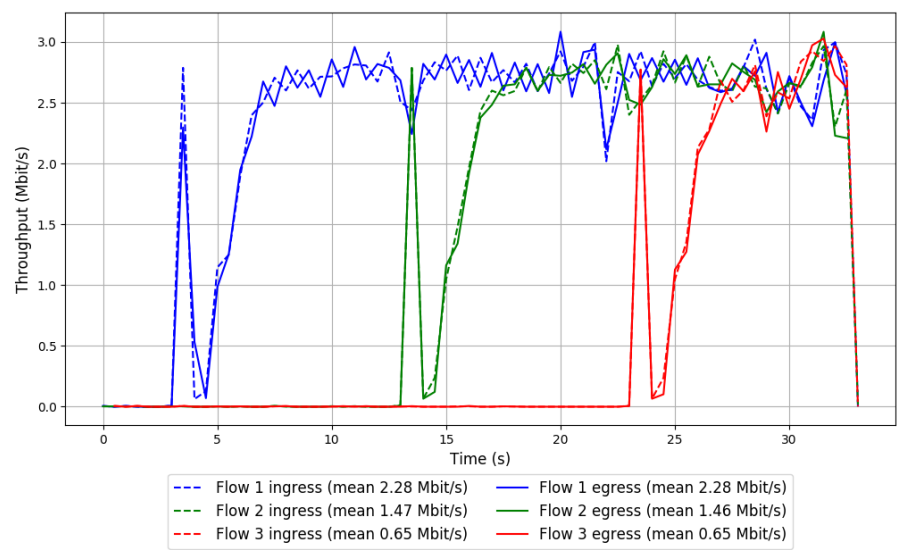
-- Flow 3:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 51.085 ms

Loss rate: 1.52%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-28 22:41:00

End at: 2018-02-28 22:41:30

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 53.625 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.611 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 53.646 ms

Loss rate: 0.53%

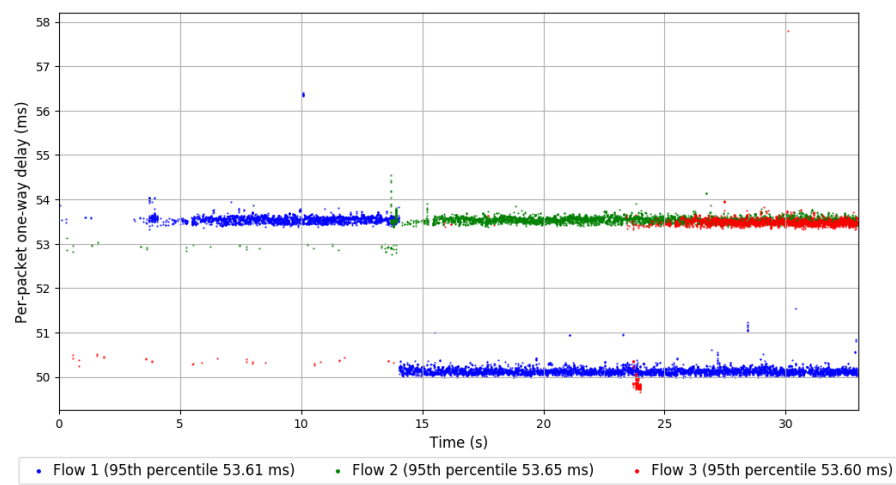
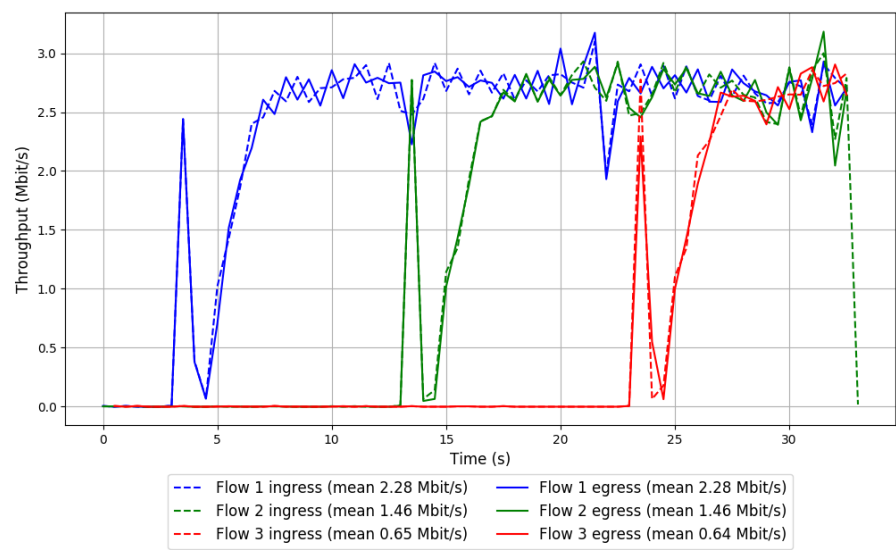
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.598 ms

Loss rate: 0.97%

Run 10: Report of WebRTC media — Data Link

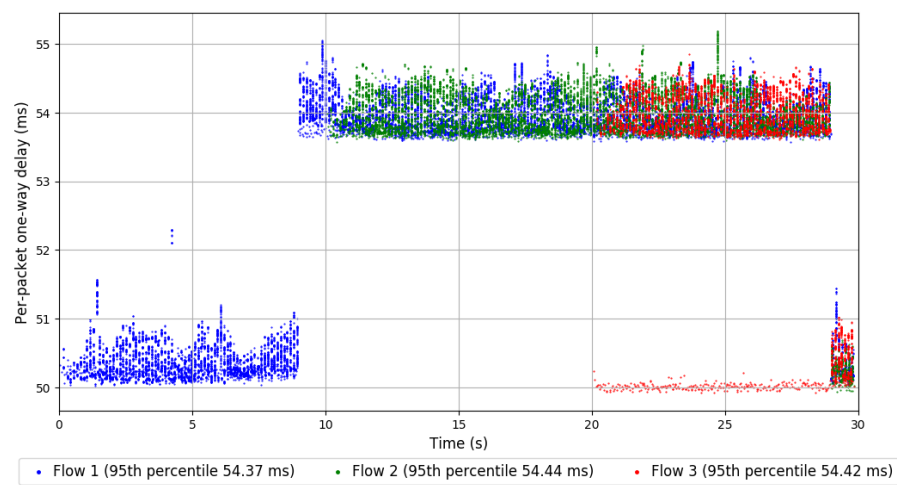
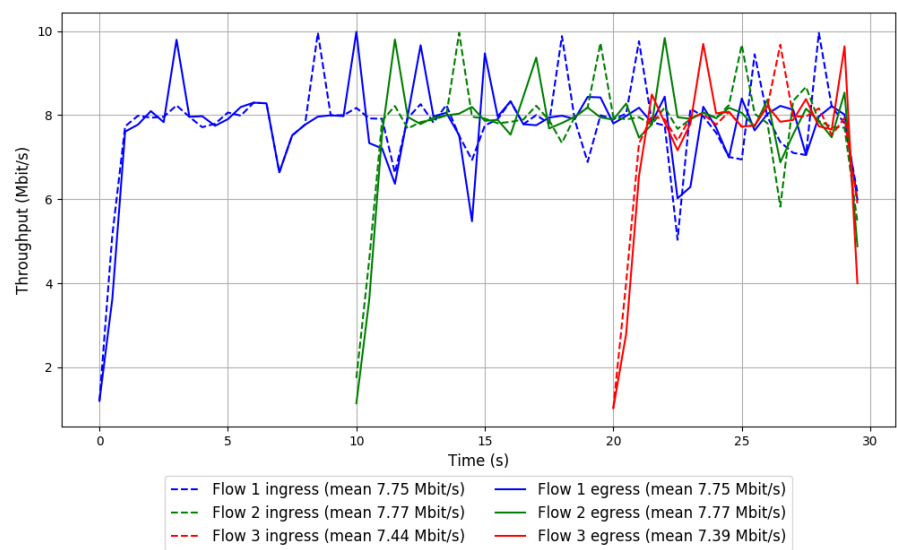


```
Run 1: Statistics of Sprout

Start at: 2018-02-28 19:46:22
End at: 2018-02-28 19:46:52

# Below is generated by plot.py at 2018-03-01 02:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.32 Mbit/s
95th percentile per-packet one-way delay: 54.407 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 7.75 Mbit/s
95th percentile per-packet one-way delay: 54.367 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 7.77 Mbit/s
95th percentile per-packet one-way delay: 54.441 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 7.39 Mbit/s
95th percentile per-packet one-way delay: 54.422 ms
Loss rate: 1.37%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-28 20:04:15

End at: 2018-02-28 20:04:45

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.37 Mbit/s

95th percentile per-packet one-way delay: 54.263 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 54.225 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 7.82 Mbit/s

95th percentile per-packet one-way delay: 54.199 ms

Loss rate: 0.63%

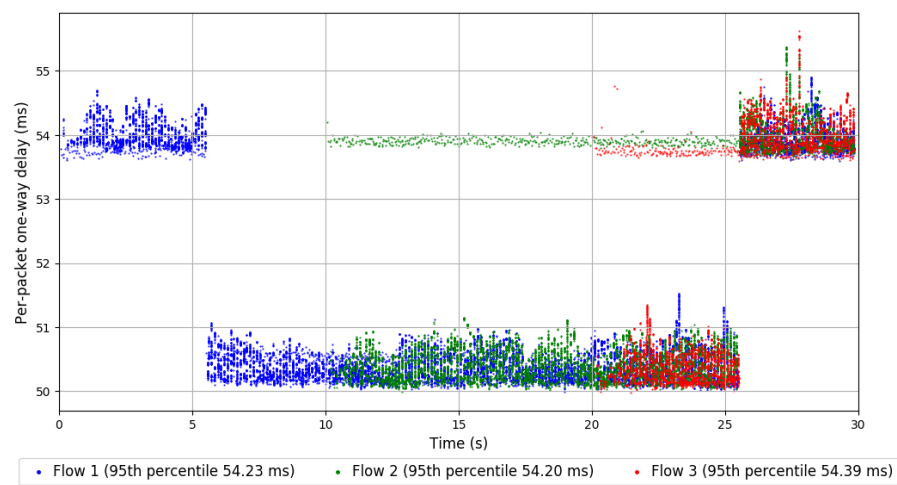
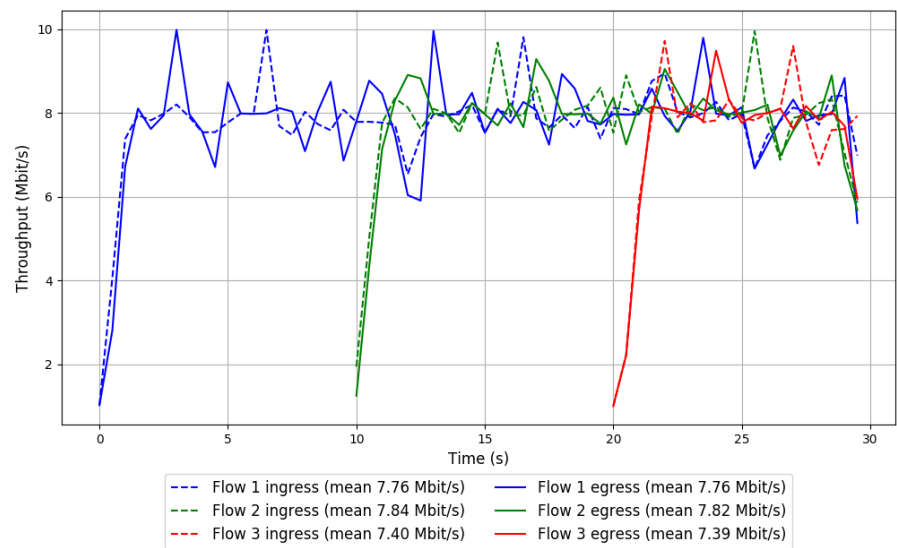
-- Flow 3:

Average throughput: 7.39 Mbit/s

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

Loss rate: 1.36%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-28 20:22:27

End at: 2018-02-28 20:22:57

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.48 Mbit/s

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

Loss rate: 0.32%

-- Flow 1:

Average throughput: 7.84 Mbit/s

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

Loss rate: 0.18%

-- Flow 2:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 54.391 ms

Loss rate: 0.58%

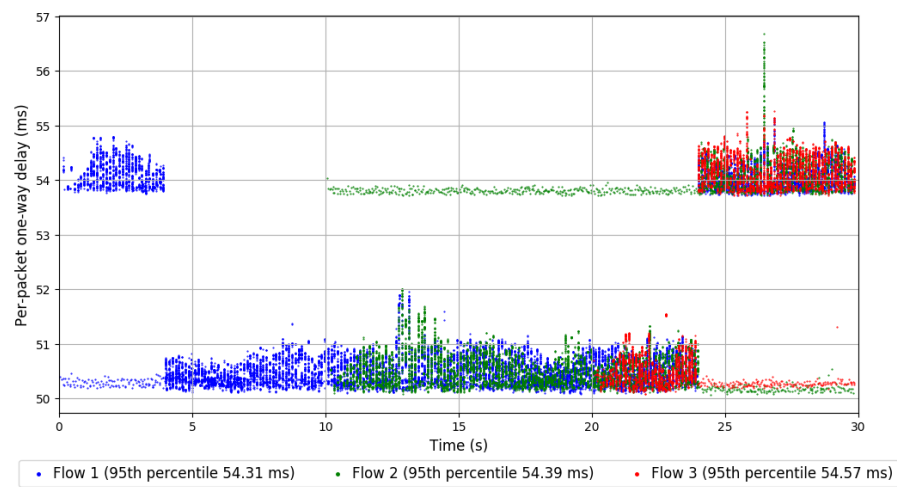
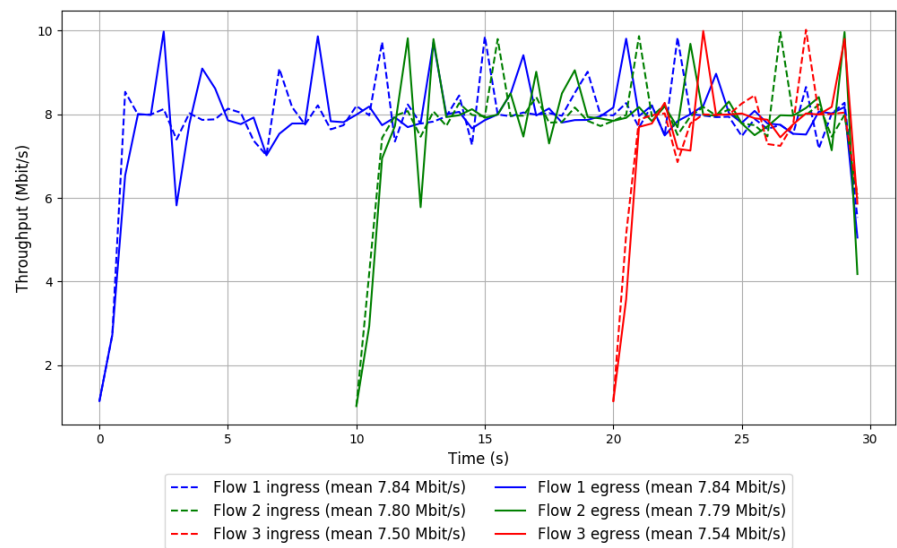
-- Flow 3:

Average throughput: 7.54 Mbit/s

95th percentile per-packet one-way delay: 54.568 ms

Loss rate: 0.19%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-28 20:40:26

End at: 2018-02-28 20:40:56

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.52 Mbit/s

95th percentile per-packet one-way delay: 54.436 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 7.86 Mbit/s

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

Loss rate: 0.35%

-- Flow 2:

Average throughput: 7.79 Mbit/s

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

Loss rate: 0.47%

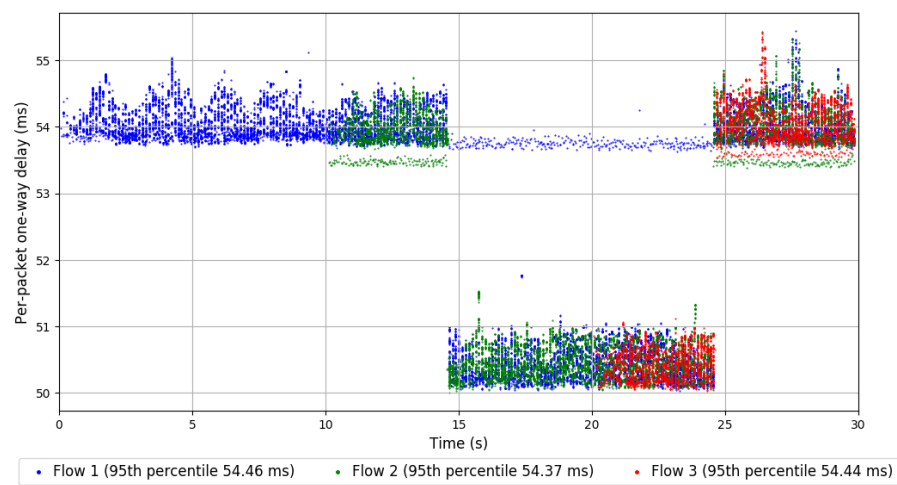
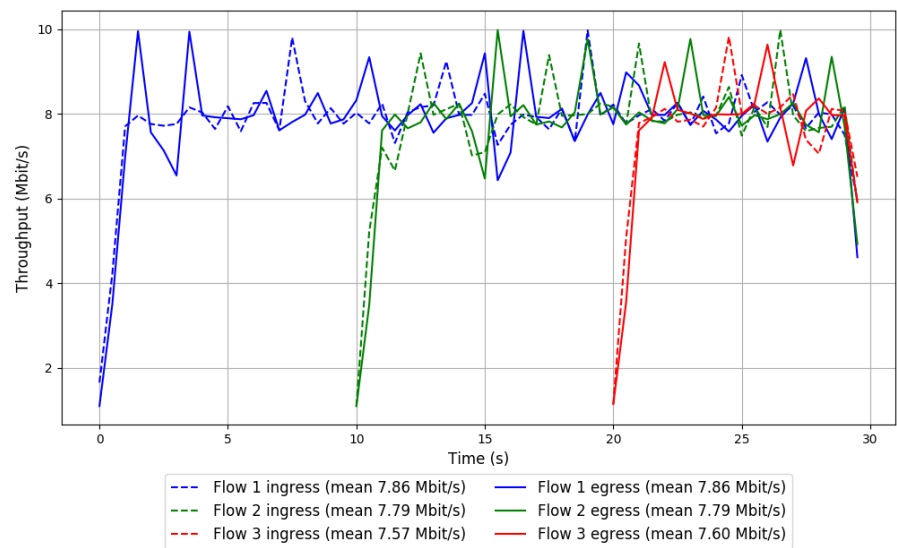
-- Flow 3:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 54.443 ms

Loss rate: 0.58%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-28 20:58:22

End at: 2018-02-28 20:58:52

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.60 Mbit/s

95th percentile per-packet one-way delay: 54.053 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 54.222 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 7.91 Mbit/s

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

Loss rate: 0.62%

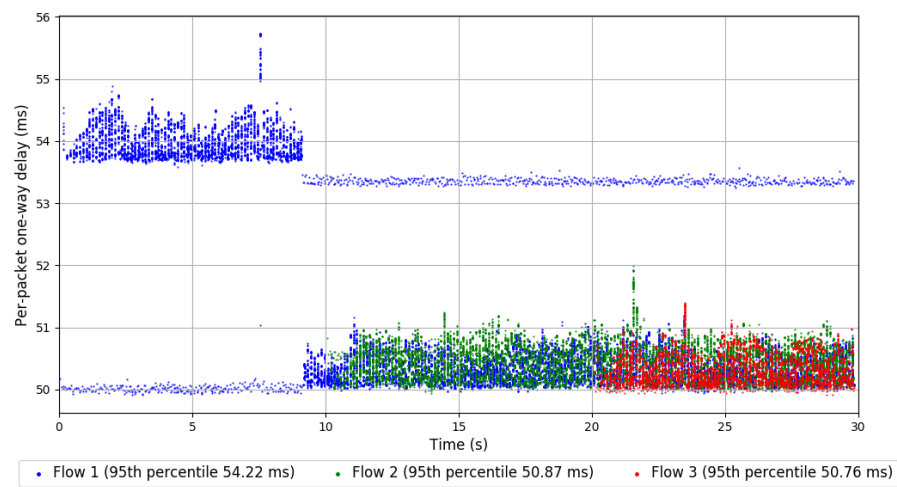
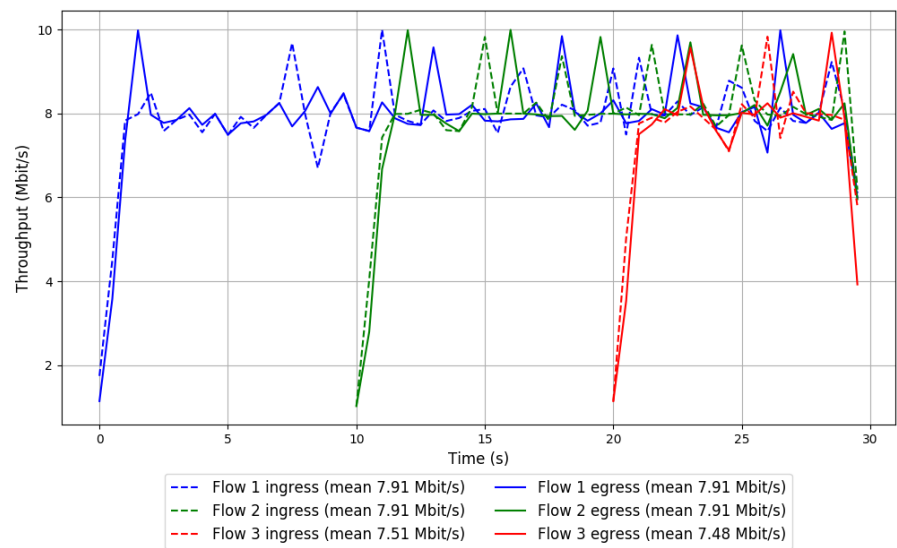
-- Flow 3:

Average throughput: 7.48 Mbit/s

95th percentile per-packet one-way delay: 50.762 ms

Loss rate: 1.26%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-28 21:16:14

End at: 2018-02-28 21:16:44

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.32 Mbit/s

95th percentile per-packet one-way delay: 54.317 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 54.374 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 7.53 Mbit/s

95th percentile per-packet one-way delay: 54.230 ms

Loss rate: 0.76%

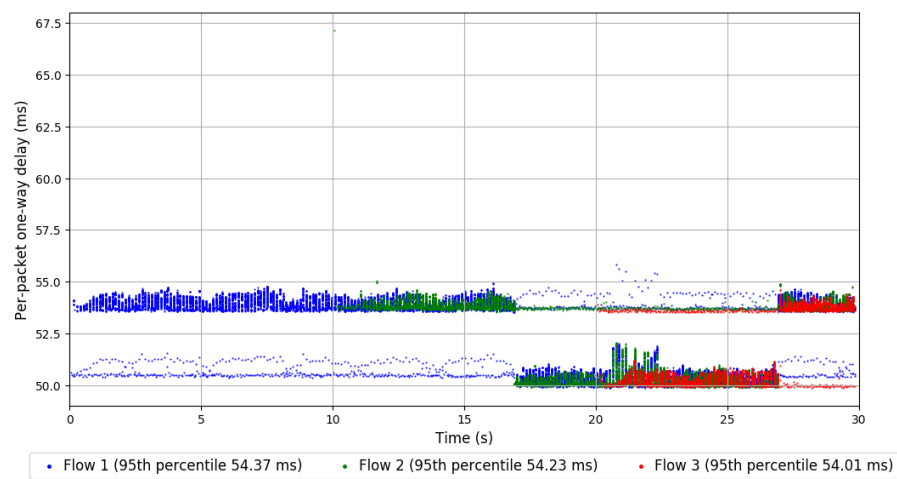
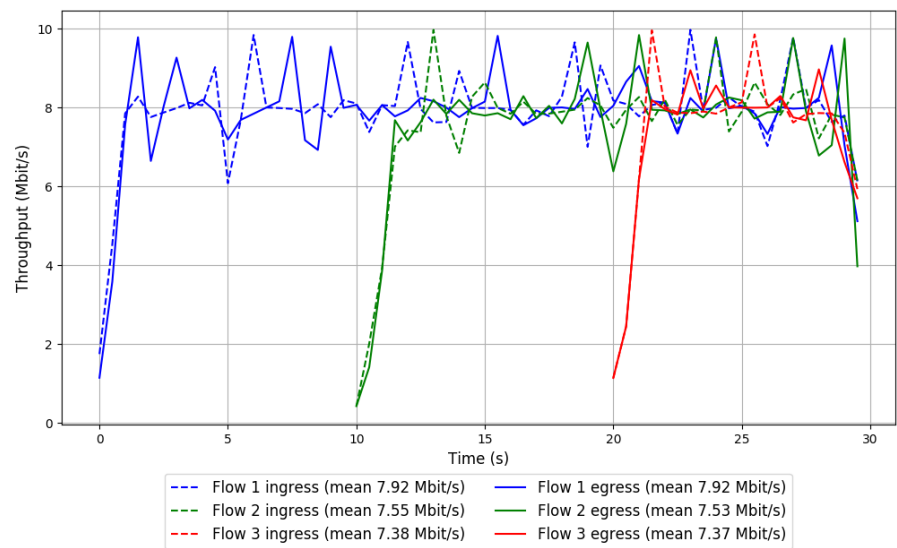
-- Flow 3:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 54.012 ms

Loss rate: 1.37%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-28 21:34:39

End at: 2018-02-28 21:35:09

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.50 Mbit/s

95th percentile per-packet one-way delay: 54.235 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 7.90 Mbit/s

95th percentile per-packet one-way delay: 54.226 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 54.304 ms

Loss rate: 0.01%

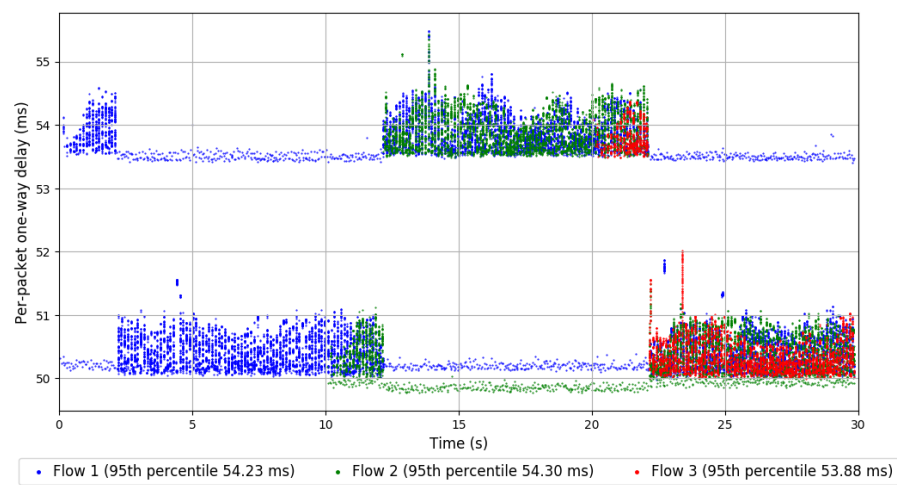
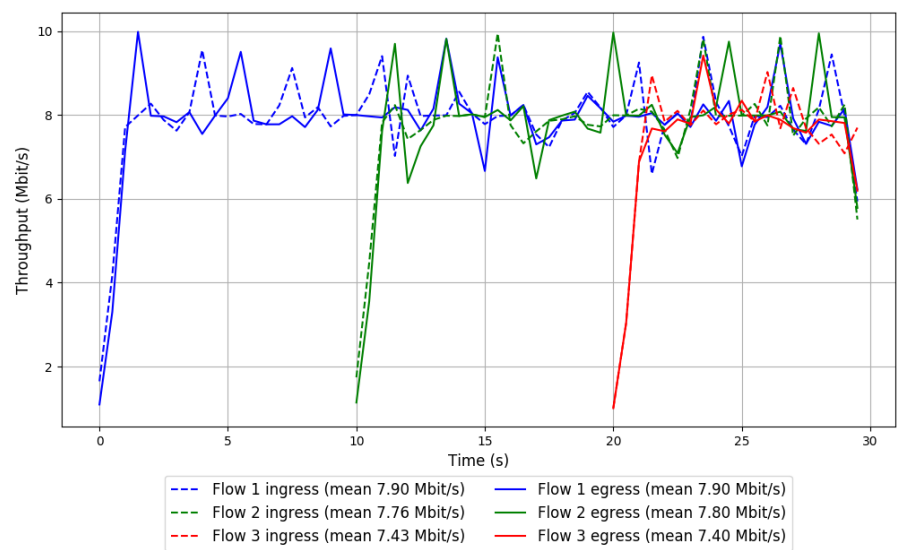
-- Flow 3:

Average throughput: 7.40 Mbit/s

95th percentile per-packet one-way delay: 53.884 ms

Loss rate: 1.22%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-28 21:52:33

End at: 2018-02-28 21:53:03

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.44 Mbit/s

95th percentile per-packet one-way delay: 54.287 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 54.240 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 54.268 ms

Loss rate: 0.49%

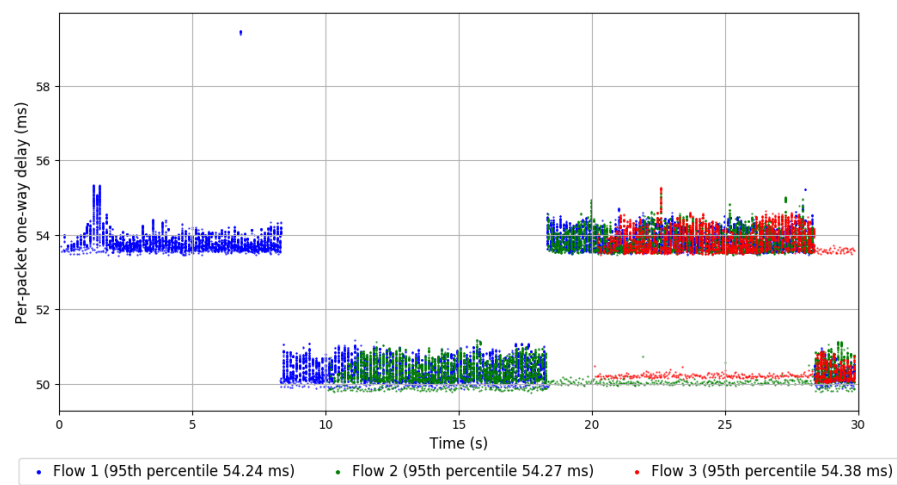
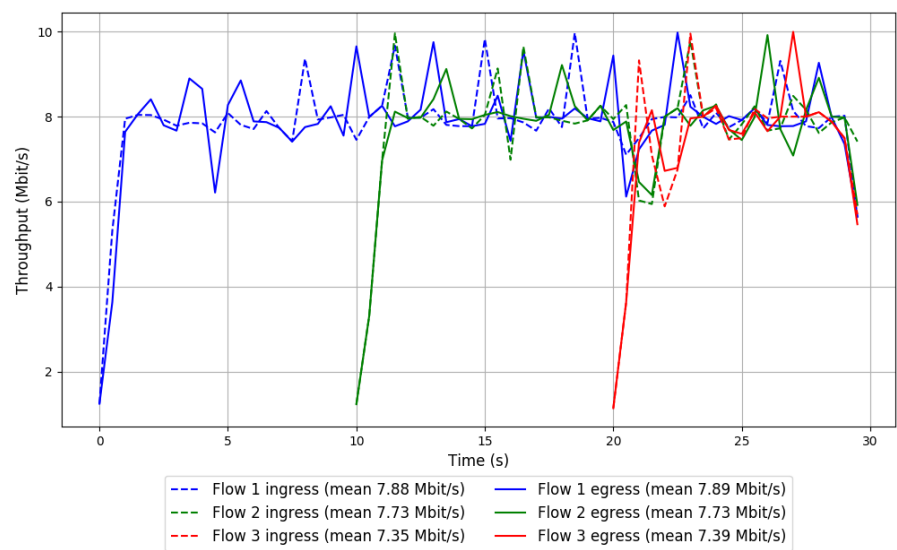
-- Flow 3:

Average throughput: 7.39 Mbit/s

95th percentile per-packet one-way delay: 54.385 ms

Loss rate: 0.16%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-28 22:10:30

End at: 2018-02-28 22:11:00

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.52 Mbit/s

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

Loss rate: 0.54%

-- Flow 1:

Average throughput: 7.85 Mbit/s

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

Loss rate: 0.34%

-- Flow 2:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 50.915 ms

Loss rate: 0.56%

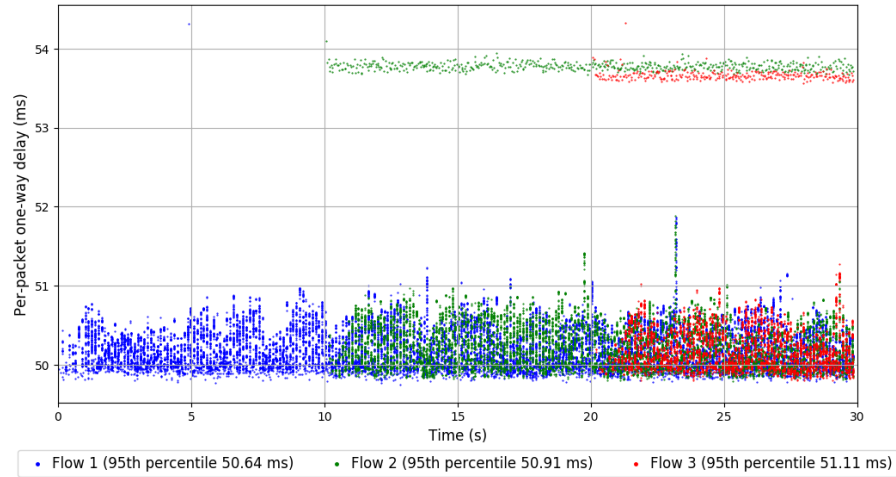
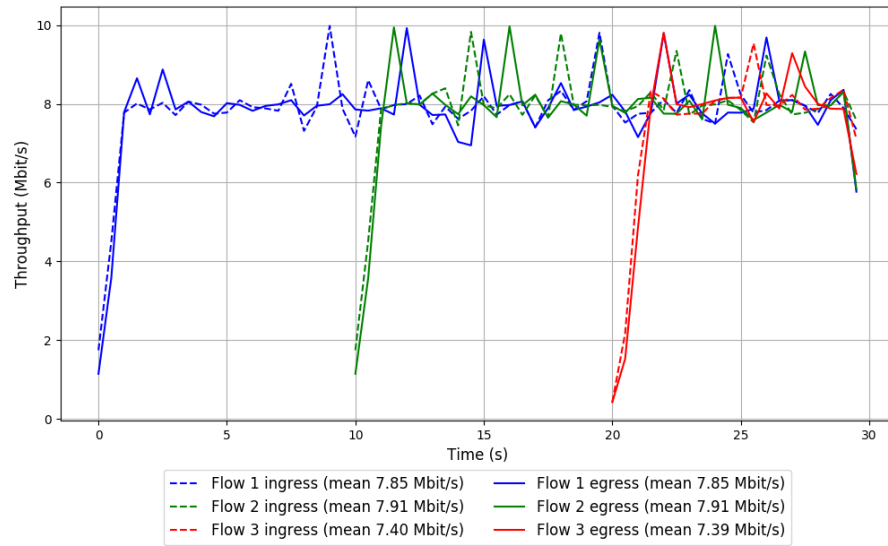
-- Flow 3:

Average throughput: 7.39 Mbit/s

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

Loss rate: 1.13%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-28 22:28:20

End at: 2018-02-28 22:28:50

Below is generated by plot.py at 2018-03-01 02:35:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.39 Mbit/s

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

Loss rate: 0.63%

-- Flow 1:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 54.099 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 54.173 ms

Loss rate: 0.72%

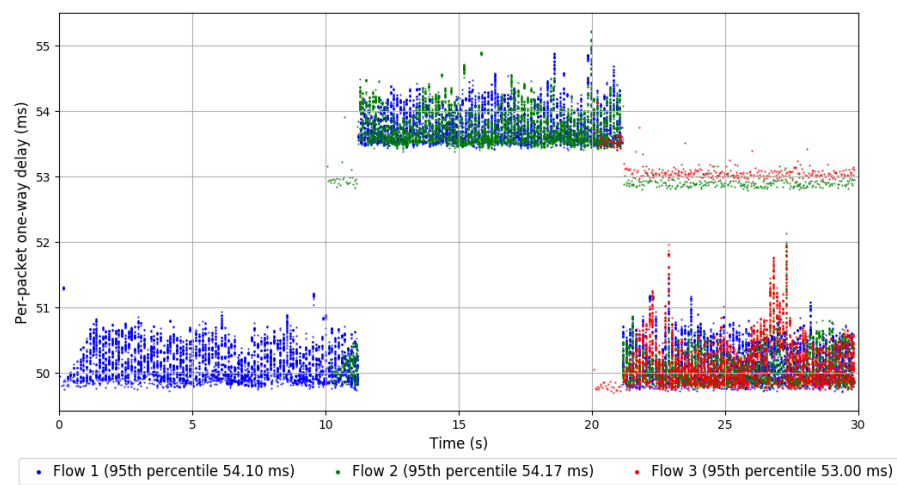
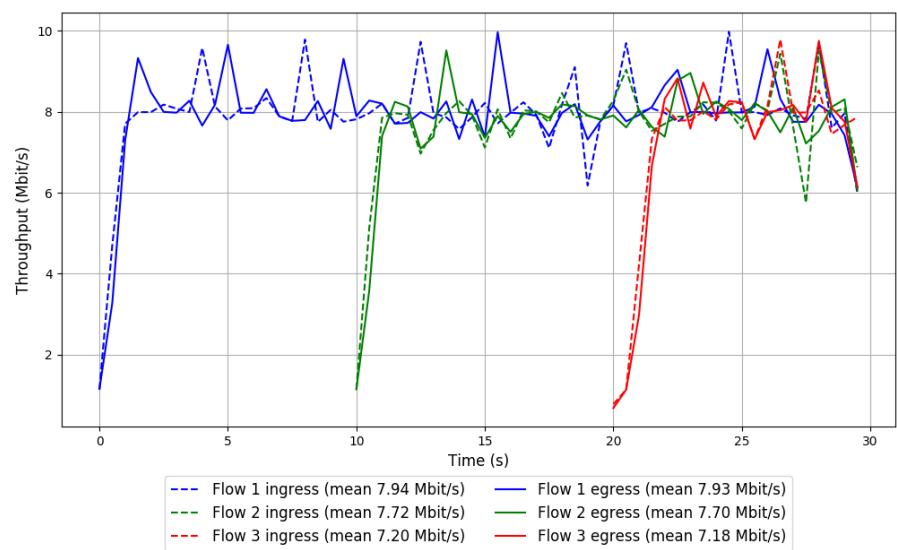
-- Flow 3:

Average throughput: 7.18 Mbit/s

95th percentile per-packet one-way delay: 53.003 ms

Loss rate: 1.27%

Run 10: Report of Sprout — Data Link

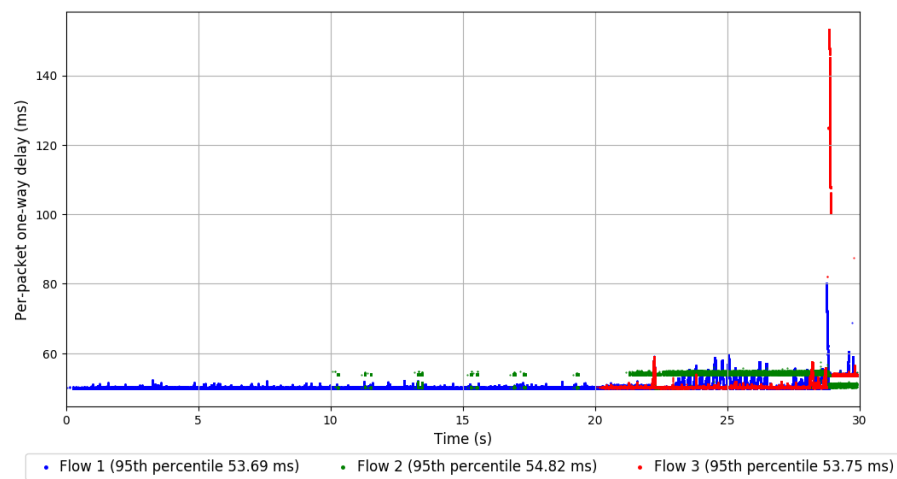
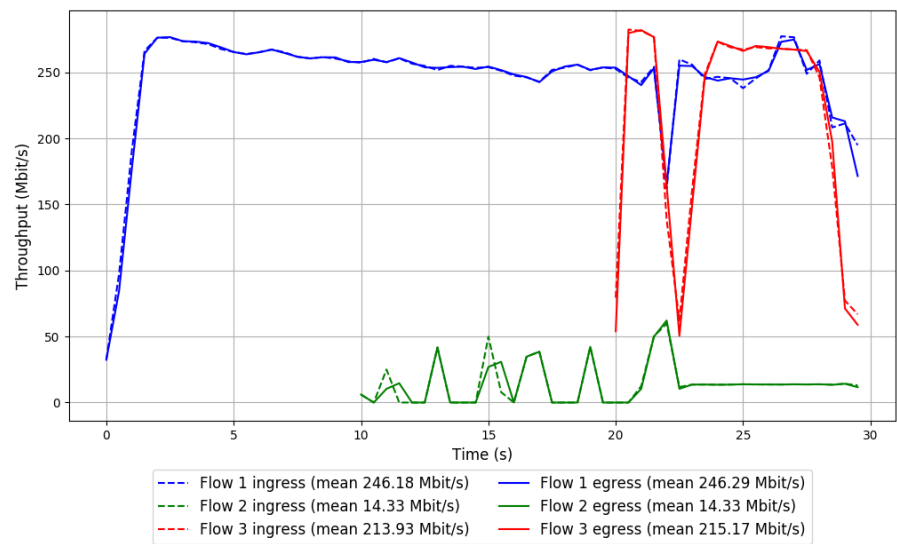


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-28 19:47:02
End at: 2018-02-28 19:47:32

# Below is generated by plot.py at 2018-03-01 02:40:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.66 Mbit/s
95th percentile per-packet one-way delay: 53.814 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 246.29 Mbit/s
95th percentile per-packet one-way delay: 53.689 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 14.33 Mbit/s
95th percentile per-packet one-way delay: 54.822 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 215.17 Mbit/s
95th percentile per-packet one-way delay: 53.748 ms
Loss rate: 0.41%
```


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

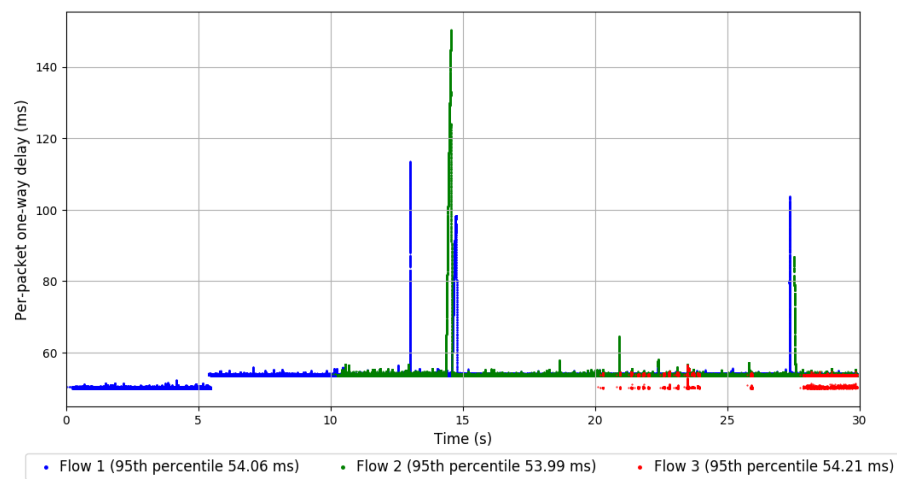
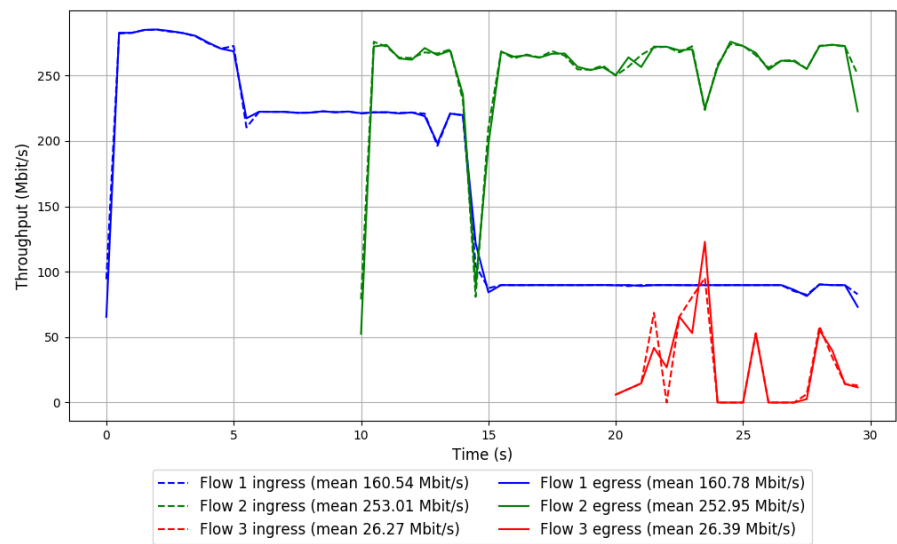


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-28 20:04:55
End at: 2018-02-28 20:05:26

# Below is generated by plot.py at 2018-03-01 02:40:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 337.52 Mbit/s
95th percentile per-packet one-way delay: 54.055 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 160.78 Mbit/s
95th percentile per-packet one-way delay: 54.064 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 252.95 Mbit/s
95th percentile per-packet one-way delay: 53.995 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 26.39 Mbit/s
95th percentile per-packet one-way delay: 54.213 ms
Loss rate: 0.59%
```

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

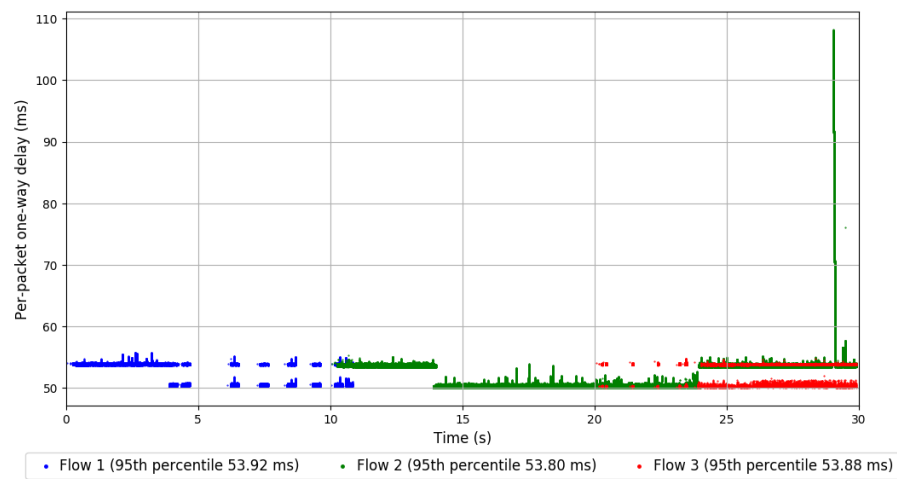
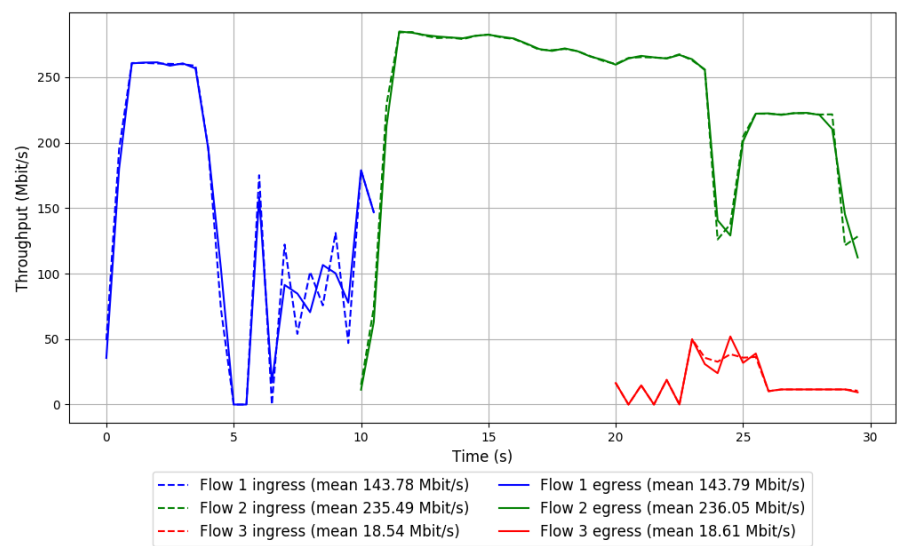


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-28 20:23:07
End at: 2018-02-28 20:23:37

# Below is generated by plot.py at 2018-03-01 02:40:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 215.04 Mbit/s
95th percentile per-packet one-way delay: 53.858 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 143.79 Mbit/s
95th percentile per-packet one-way delay: 53.917 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 236.05 Mbit/s
95th percentile per-packet one-way delay: 53.799 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 18.61 Mbit/s
95th percentile per-packet one-way delay: 53.879 ms
Loss rate: 0.65%
```

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

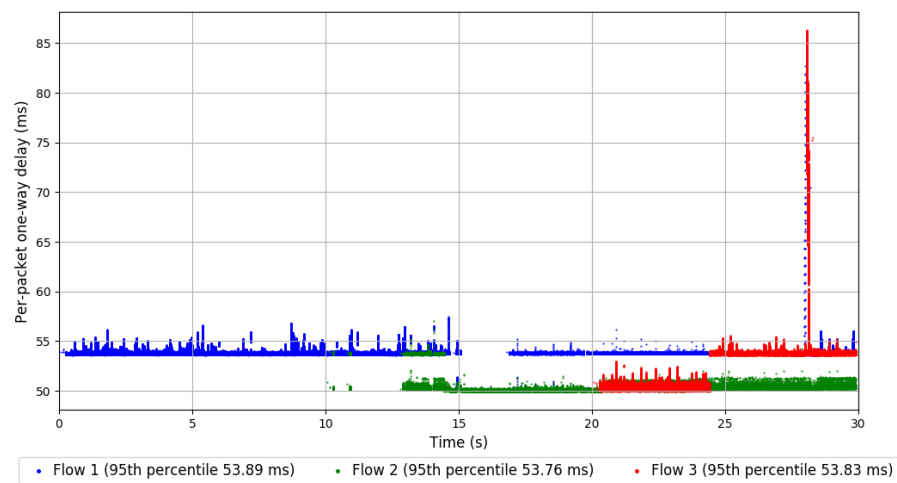
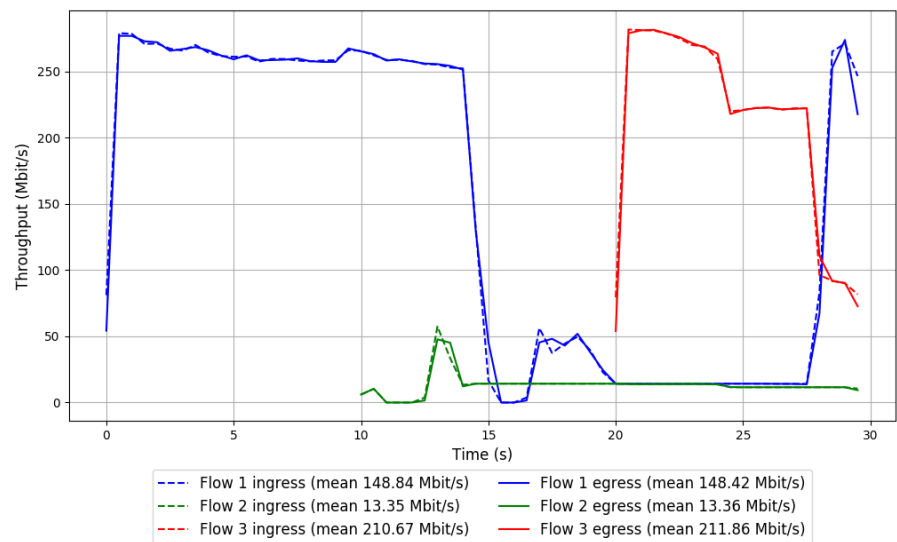


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-28 20:41:06
End at: 2018-02-28 20:41:36

# Below is generated by plot.py at 2018-03-01 02:40:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 227.06 Mbit/s
95th percentile per-packet one-way delay: 53.865 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 148.42 Mbit/s
95th percentile per-packet one-way delay: 53.893 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 13.36 Mbit/s
95th percentile per-packet one-way delay: 53.764 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 211.86 Mbit/s
95th percentile per-packet one-way delay: 53.825 ms
Loss rate: 0.45%
```

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

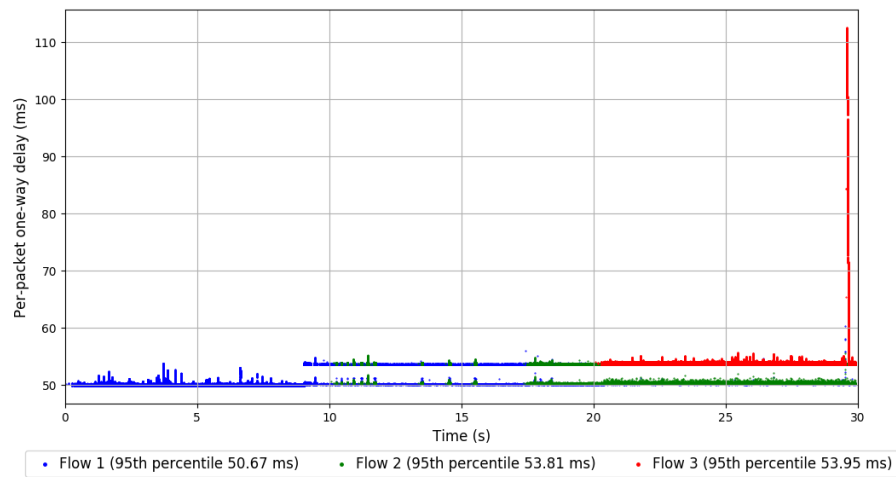
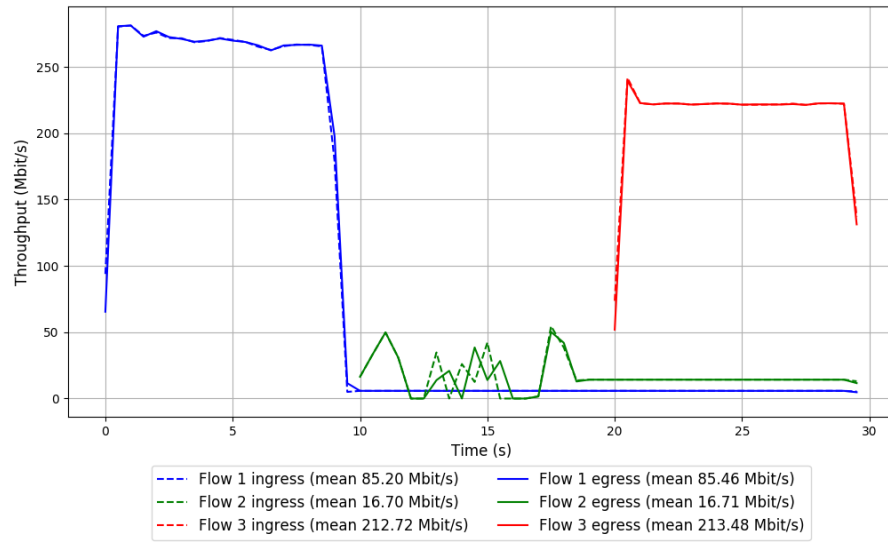


```
Run 5: Statistics of TaoVA-100x

Start at: 2018-02-28 20:59:02
End at: 2018-02-28 20:59:32

# Below is generated by plot.py at 2018-03-01 02:40:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 166.86 Mbit/s
95th percentile per-packet one-way delay: 53.897 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 85.46 Mbit/s
95th percentile per-packet one-way delay: 50.668 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 16.71 Mbit/s
95th percentile per-packet one-way delay: 53.808 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 213.48 Mbit/s
95th percentile per-packet one-way delay: 53.955 ms
Loss rate: 0.70%
```


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

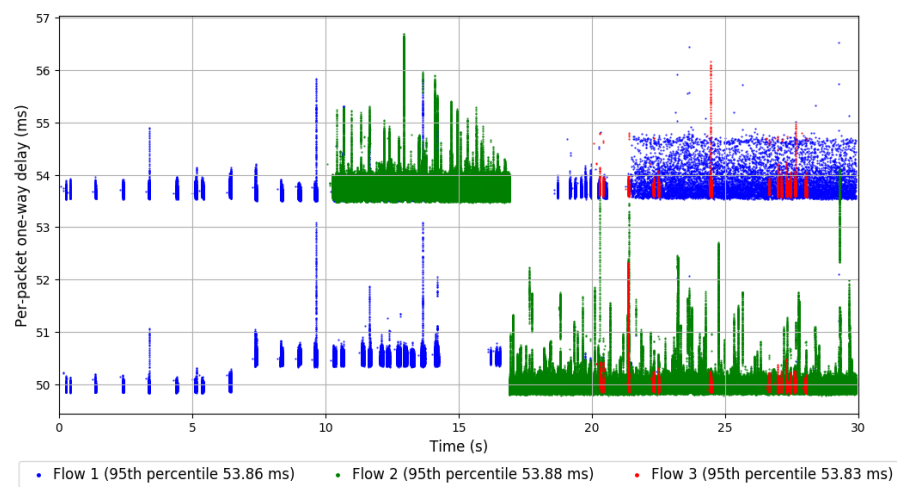
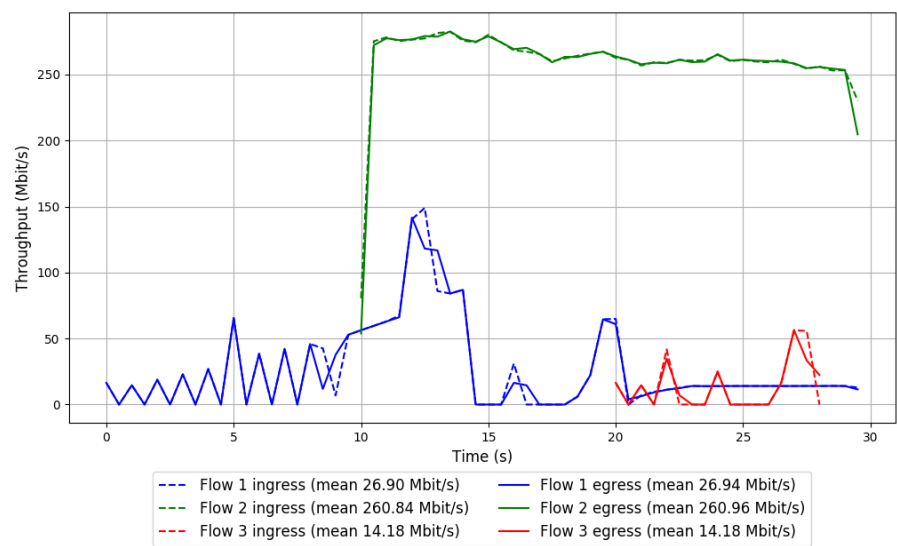


```
Run 6: Statistics of TaoVA-100x

Start at: 2018-02-28 21:16:54
End at: 2018-02-28 21:17:24

# Below is generated by plot.py at 2018-03-01 02:40:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 204.19 Mbit/s
95th percentile per-packet one-way delay: 53.882 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 26.94 Mbit/s
95th percentile per-packet one-way delay: 53.864 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 260.96 Mbit/s
95th percentile per-packet one-way delay: 53.884 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 14.18 Mbit/s
95th percentile per-packet one-way delay: 53.830 ms
Loss rate: 0.00%
```

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

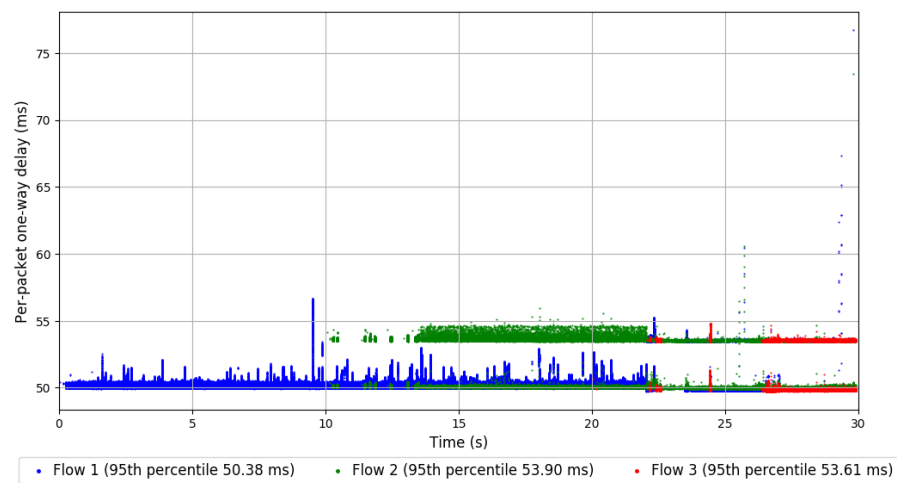
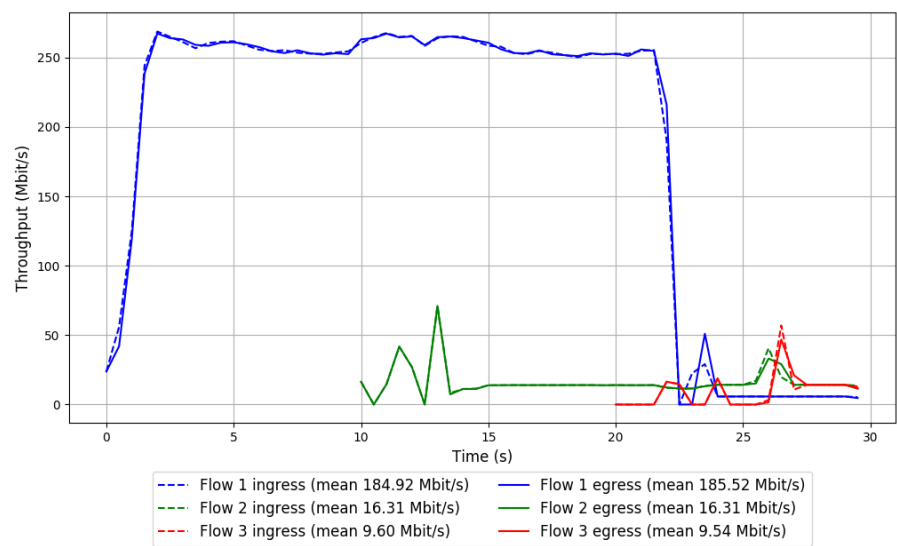


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-28 21:35:19
End at: 2018-02-28 21:35:49

# Below is generated by plot.py at 2018-03-01 02:40:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 199.50 Mbit/s
95th percentile per-packet one-way delay: 51.699 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 185.52 Mbit/s
95th percentile per-packet one-way delay: 50.379 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 16.31 Mbit/s
95th percentile per-packet one-way delay: 53.895 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 53.612 ms
Loss rate: 1.57%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-28 21:53:13

End at: 2018-02-28 21:53:43

Below is generated by plot.py at 2018-03-01 02:45:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.10 Mbit/s

95th percentile per-packet one-way delay: 55.429 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 78.63 Mbit/s

95th percentile per-packet one-way delay: 53.465 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 249.88 Mbit/s

95th percentile per-packet one-way delay: 57.418 ms

Loss rate: 0.00%

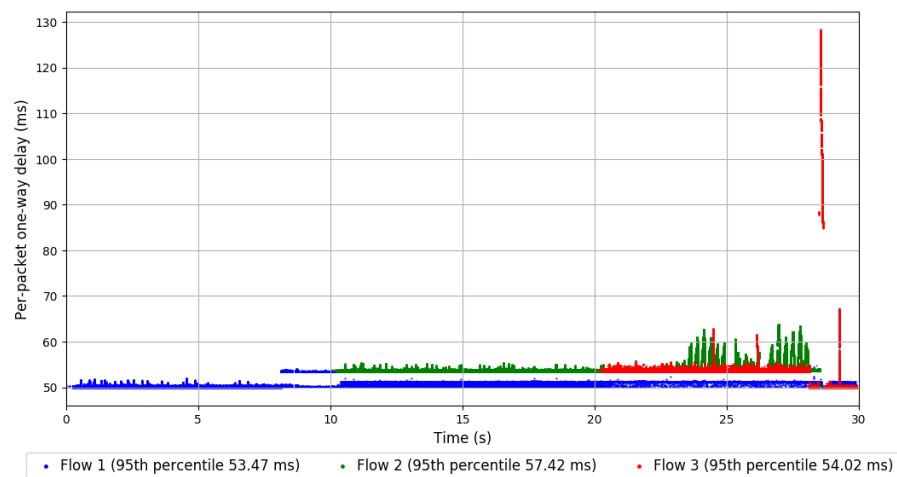
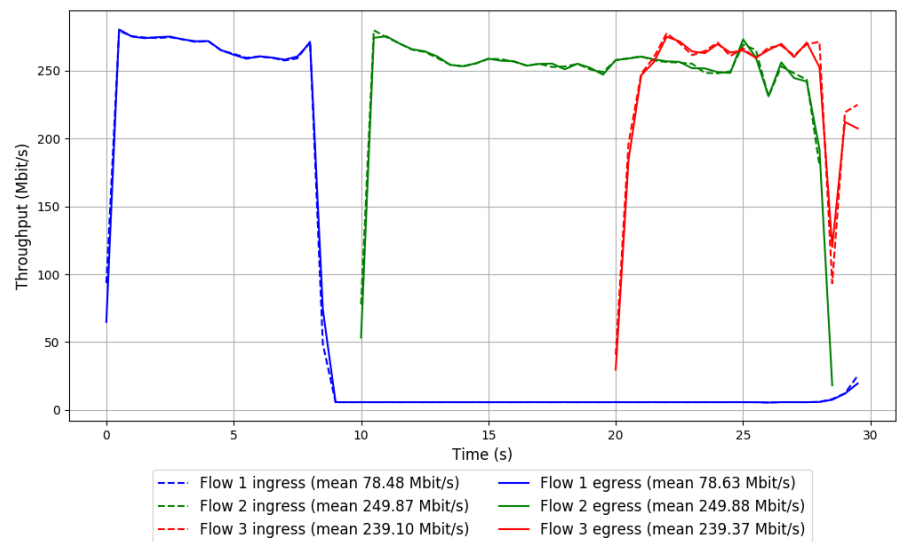
-- Flow 3:

Average throughput: 239.37 Mbit/s

95th percentile per-packet one-way delay: 54.018 ms

Loss rate: 0.94%

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

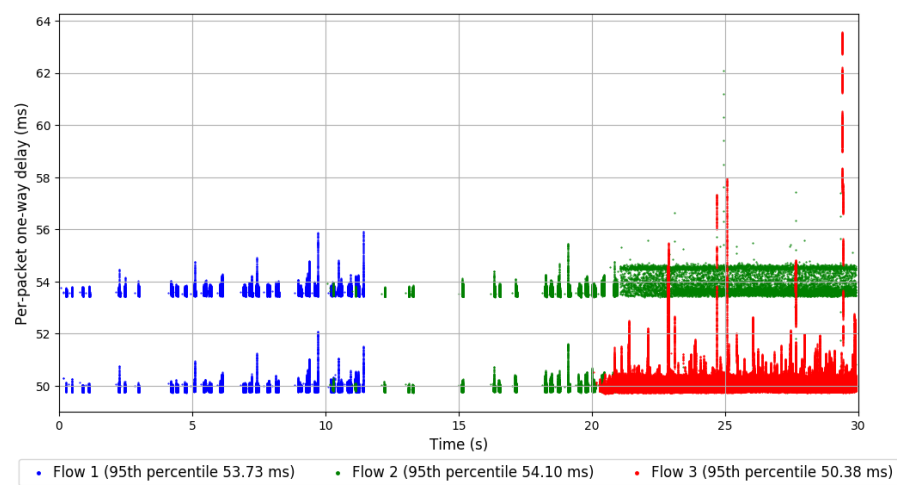
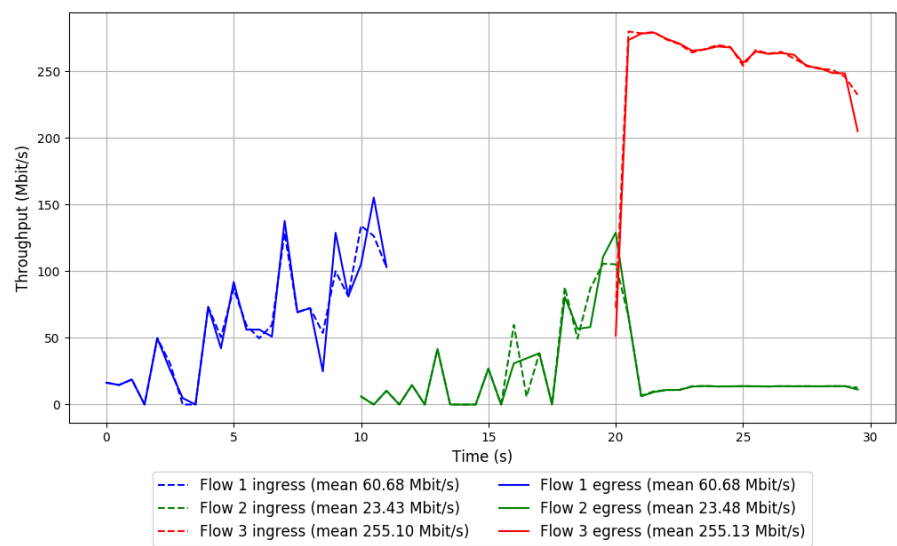


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-28 22:11:10
End at: 2018-02-28 22:11:40

# Below is generated by plot.py at 2018-03-01 02:45:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.73 Mbit/s
95th percentile per-packet one-way delay: 53.672 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 60.68 Mbit/s
95th percentile per-packet one-way delay: 53.732 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.48 Mbit/s
95th percentile per-packet one-way delay: 54.096 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 255.13 Mbit/s
95th percentile per-packet one-way delay: 50.375 ms
Loss rate: 1.02%
```


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

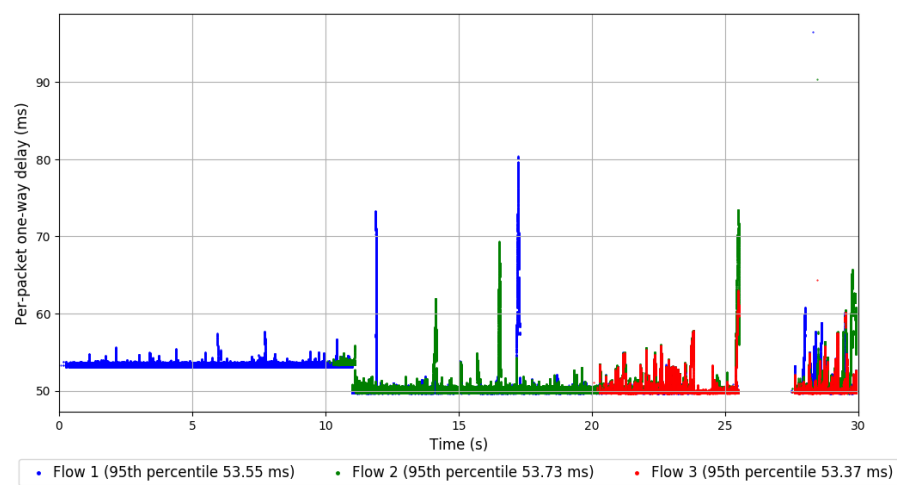
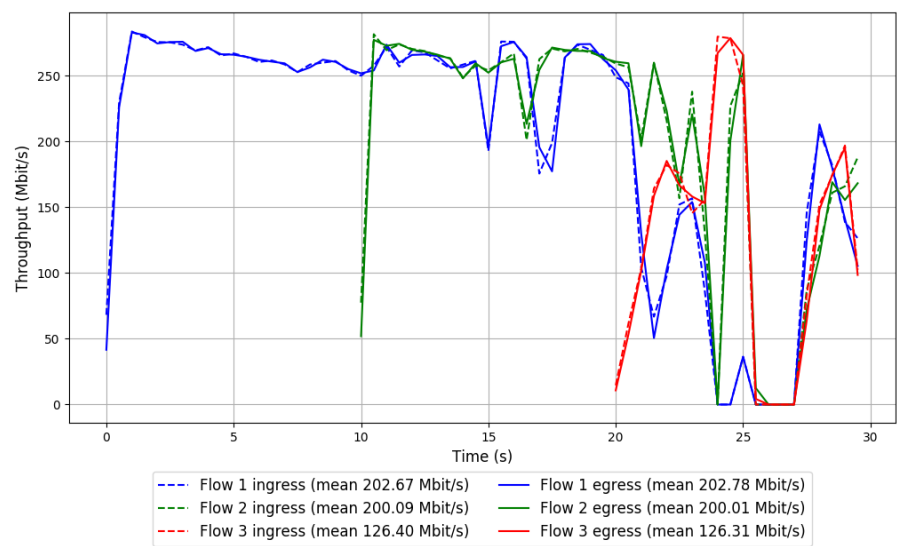


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-28 22:29:00
End at: 2018-02-28 22:29:30

# Below is generated by plot.py at 2018-03-01 02:48:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 377.27 Mbit/s
95th percentile per-packet one-way delay: 53.573 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 202.78 Mbit/s
95th percentile per-packet one-way delay: 53.552 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 200.01 Mbit/s
95th percentile per-packet one-way delay: 53.733 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 126.31 Mbit/s
95th percentile per-packet one-way delay: 53.367 ms
Loss rate: 1.12%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-28 19:45:37

End at: 2018-02-28 19:46:07

Below is generated by plot.py at 2018-03-01 02:48:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.06 Mbit/s

95th percentile per-packet one-way delay: 54.405 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 14.61 Mbit/s

95th percentile per-packet one-way delay: 54.250 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 111.43 Mbit/s

95th percentile per-packet one-way delay: 54.728 ms

Loss rate: 0.51%

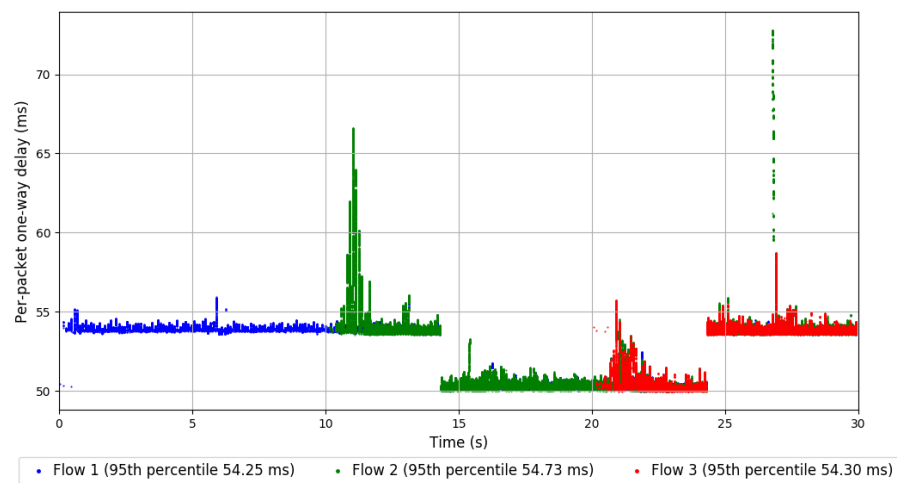
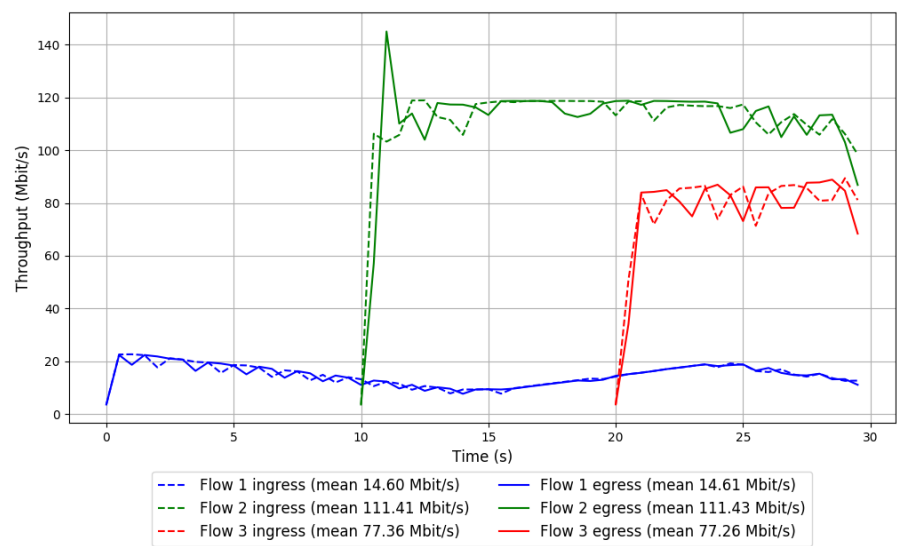
-- Flow 3:

Average throughput: 77.26 Mbit/s

95th percentile per-packet one-way delay: 54.303 ms

Loss rate: 1.17%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-28 20:03:24

End at: 2018-02-28 20:03:54

Below is generated by plot.py at 2018-03-01 02:48:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 235.80 Mbit/s

95th percentile per-packet one-way delay: 63.442 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 27.22 Mbit/s

95th percentile per-packet one-way delay: 57.237 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 213.35 Mbit/s

95th percentile per-packet one-way delay: 64.001 ms

Loss rate: 0.57%

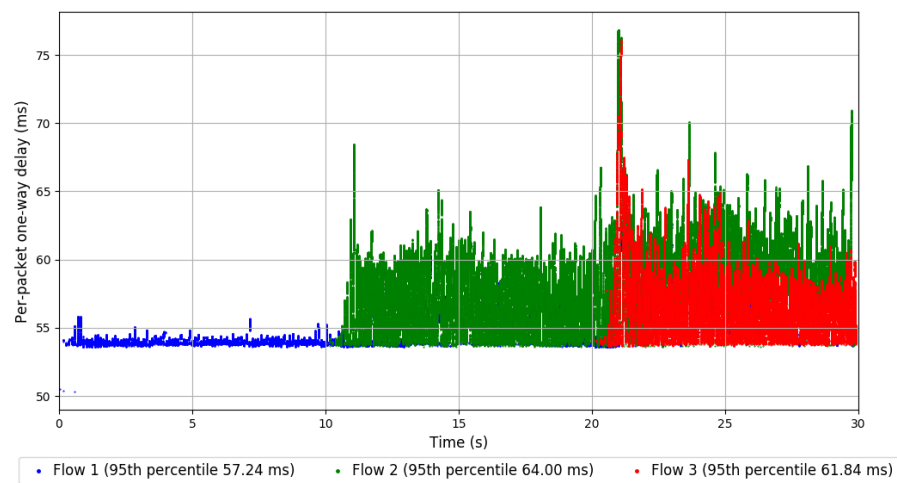
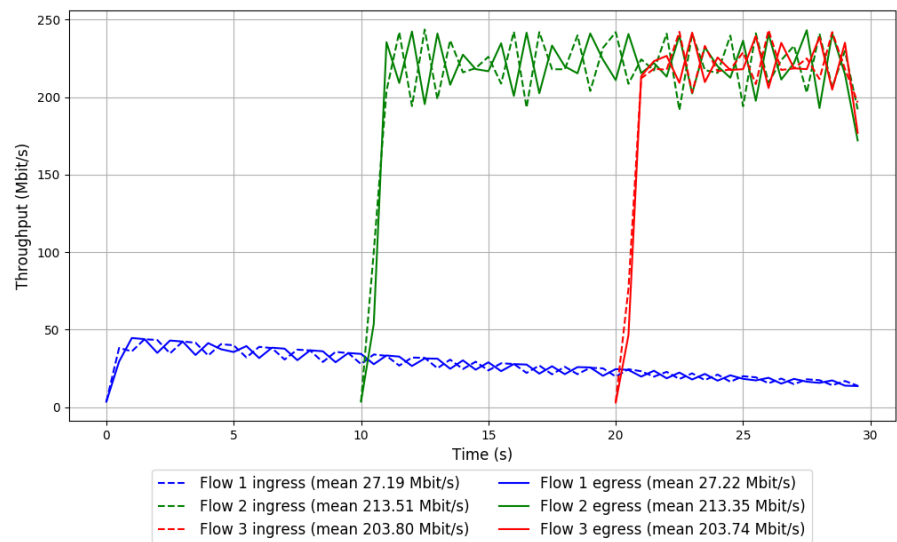
-- Flow 3:

Average throughput: 203.74 Mbit/s

95th percentile per-packet one-way delay: 61.845 ms

Loss rate: 1.08%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-28 20:21:30

End at: 2018-02-28 20:22:00

Below is generated by plot.py at 2018-03-01 02:48:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 332.27 Mbit/s

95th percentile per-packet one-way delay: 59.444 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 221.25 Mbit/s

95th percentile per-packet one-way delay: 59.905 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 137.22 Mbit/s

95th percentile per-packet one-way delay: 56.584 ms

Loss rate: 0.50%

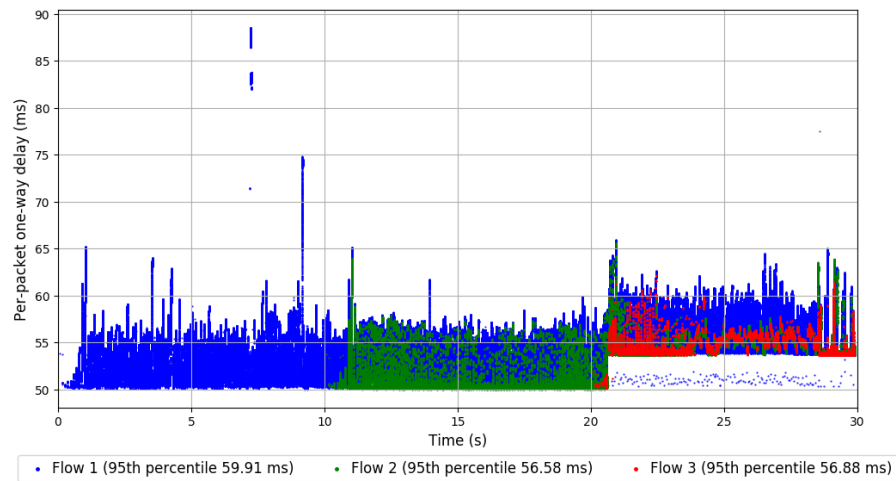
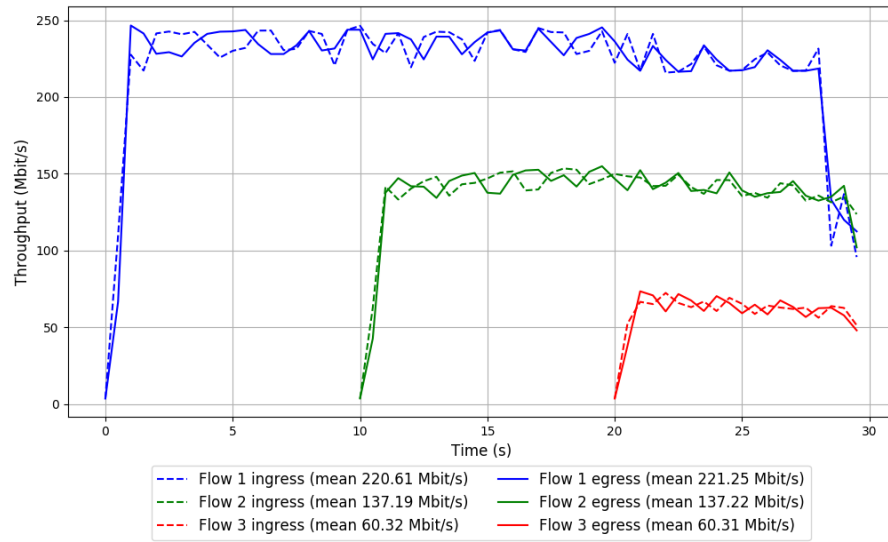
-- Flow 3:

Average throughput: 60.31 Mbit/s

95th percentile per-packet one-way delay: 56.876 ms

Loss rate: 1.07%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-28 20:39:39

End at: 2018-02-28 20:40:09

Below is generated by plot.py at 2018-03-01 02:48:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 158.87 Mbit/s

95th percentile per-packet one-way delay: 57.825 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 42.35 Mbit/s

95th percentile per-packet one-way delay: 55.361 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 69.73 Mbit/s

95th percentile per-packet one-way delay: 57.560 ms

Loss rate: 0.57%

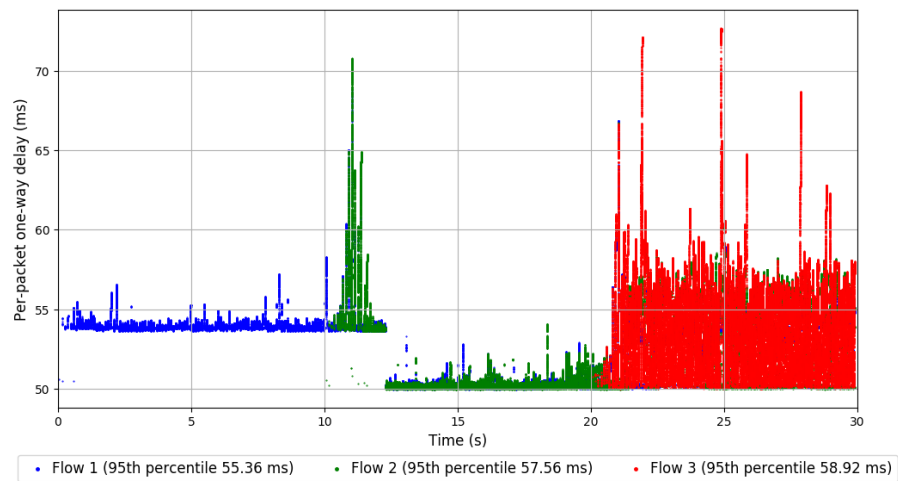
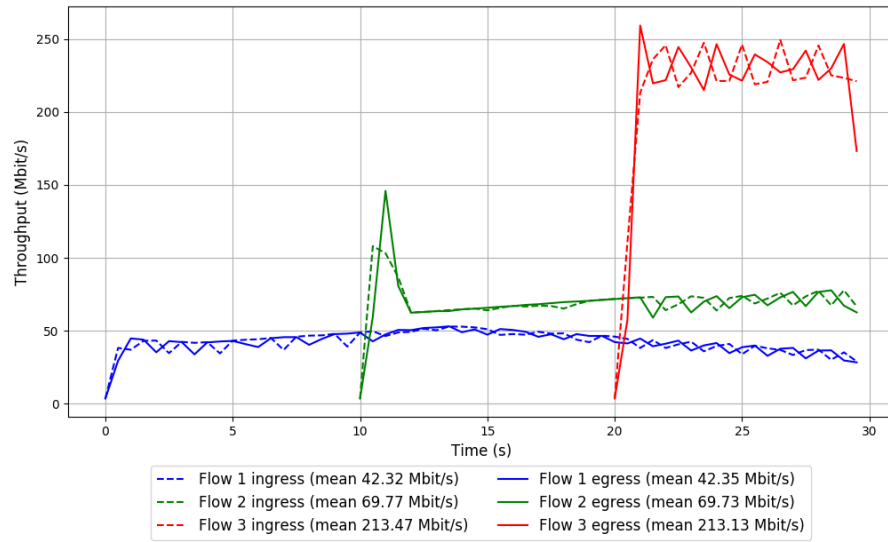
-- Flow 3:

Average throughput: 213.13 Mbit/s

95th percentile per-packet one-way delay: 58.922 ms

Loss rate: 1.18%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-28 20:57:33

End at: 2018-02-28 20:58:03

Below is generated by plot.py at 2018-03-01 02:48:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 175.25 Mbit/s

95th percentile per-packet one-way delay: 57.581 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 60.97 Mbit/s

95th percentile per-packet one-way delay: 57.457 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 117.53 Mbit/s

95th percentile per-packet one-way delay: 57.825 ms

Loss rate: 0.30%

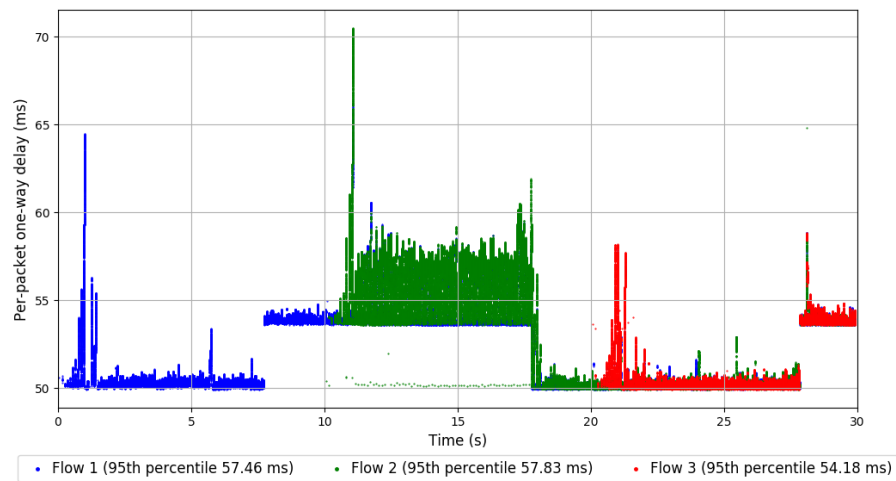
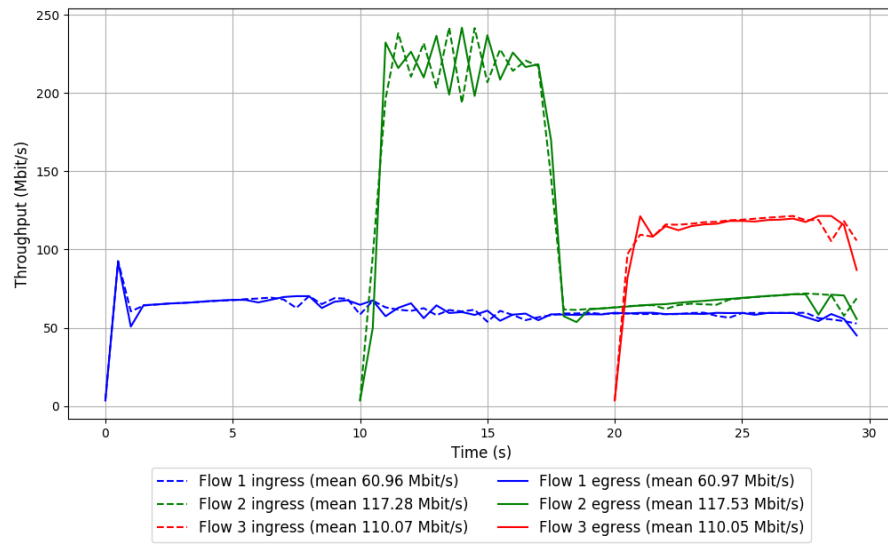
-- Flow 3:

Average throughput: 110.05 Mbit/s

95th percentile per-packet one-way delay: 54.181 ms

Loss rate: 1.09%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-28 21:15:21

End at: 2018-02-28 21:15:51

Below is generated by plot.py at 2018-03-01 02:48:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 270.37 Mbit/s

95th percentile per-packet one-way delay: 60.259 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 210.15 Mbit/s

95th percentile per-packet one-way delay: 60.625 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 72.88 Mbit/s

95th percentile per-packet one-way delay: 58.352 ms

Loss rate: 0.49%

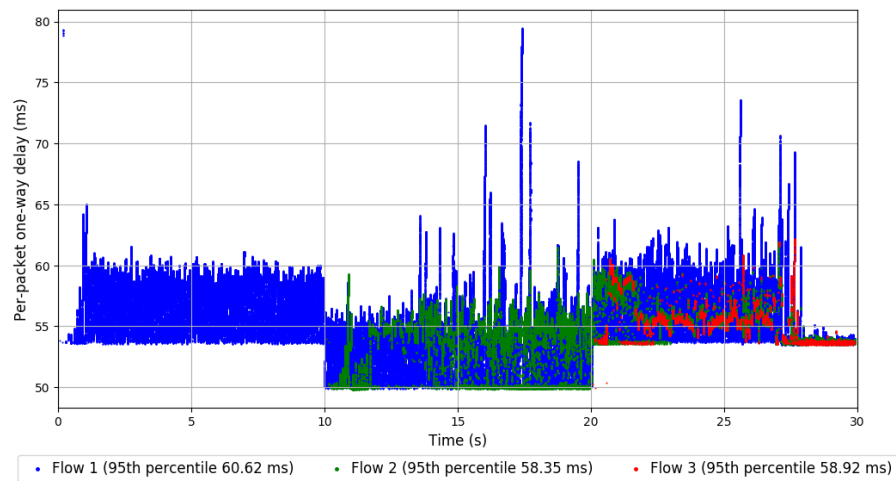
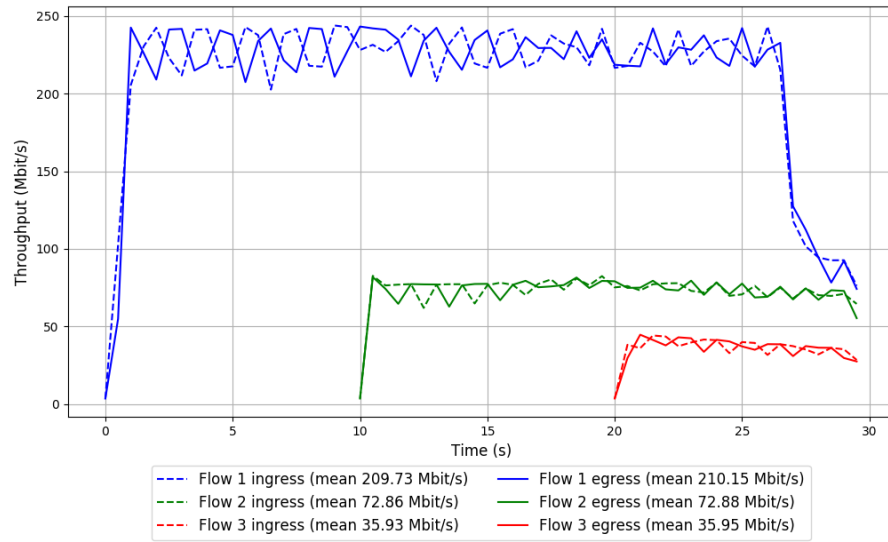
-- Flow 3:

Average throughput: 35.95 Mbit/s

95th percentile per-packet one-way delay: 58.918 ms

Loss rate: 0.98%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-28 21:33:40

End at: 2018-02-28 21:34:10

Below is generated by plot.py at 2018-03-01 02:48:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 379.11 Mbit/s

95th percentile per-packet one-way delay: 59.984 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 221.41 Mbit/s

95th percentile per-packet one-way delay: 59.192 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 219.44 Mbit/s

95th percentile per-packet one-way delay: 61.139 ms

Loss rate: 0.55%

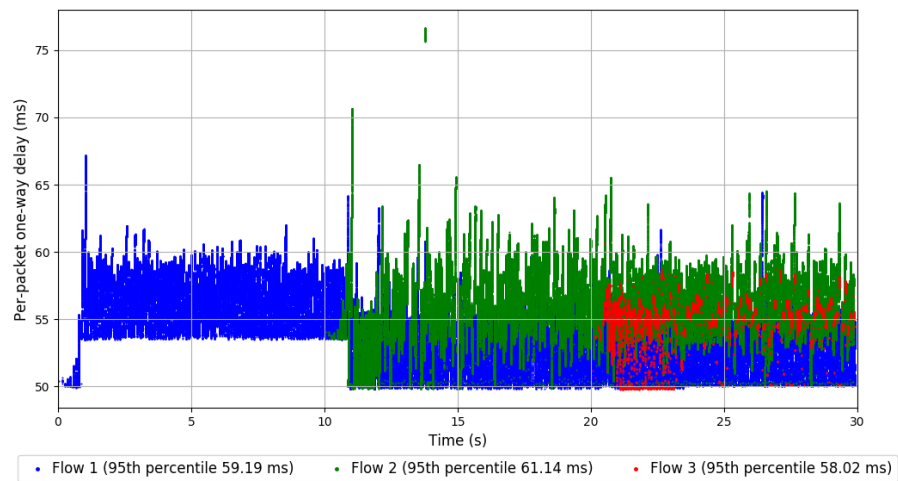
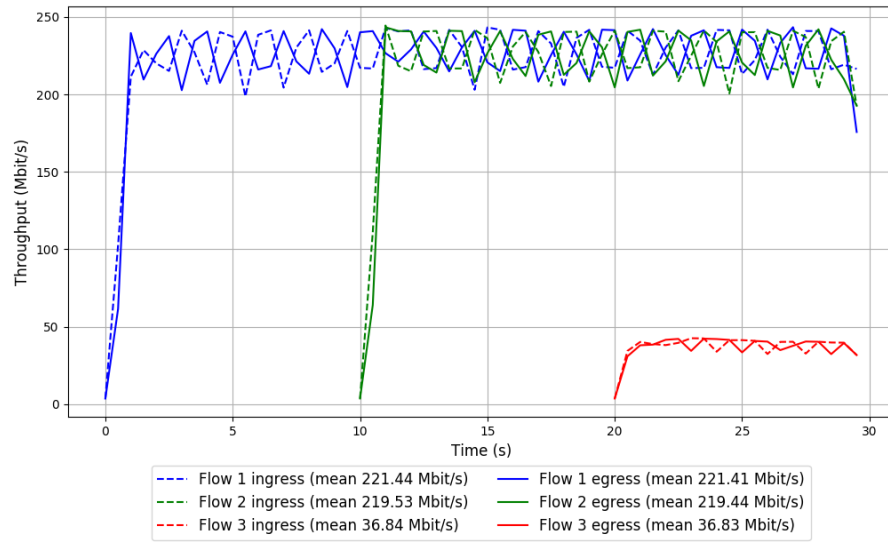
-- Flow 3:

Average throughput: 36.83 Mbit/s

95th percentile per-packet one-way delay: 58.021 ms

Loss rate: 1.07%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-28 21:51:44

End at: 2018-02-28 21:52:14

Below is generated by plot.py at 2018-03-01 02:48:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 172.72 Mbit/s

95th percentile per-packet one-way delay: 54.045 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 103.36 Mbit/s

95th percentile per-packet one-way delay: 53.703 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 76.12 Mbit/s

95th percentile per-packet one-way delay: 54.524 ms

Loss rate: 0.54%

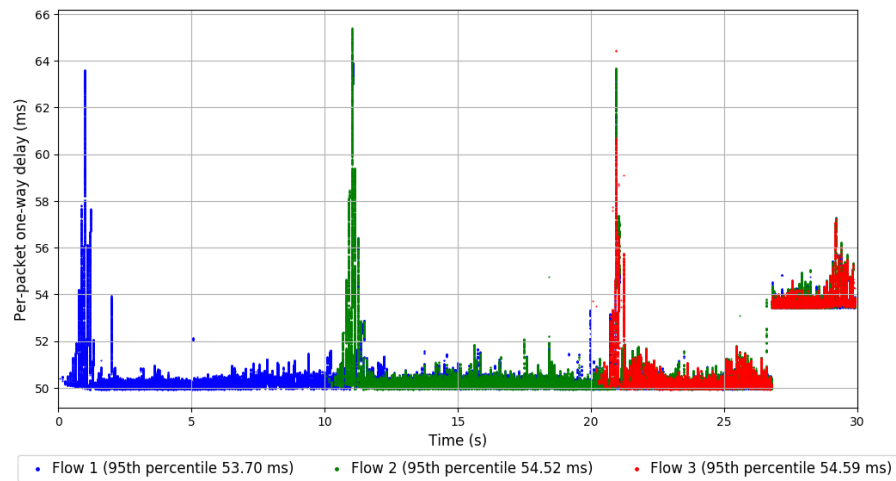
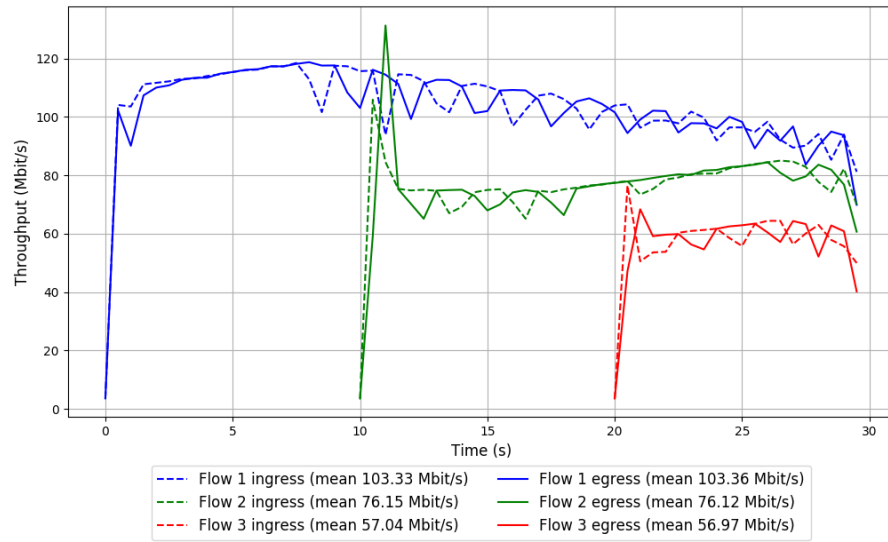
-- Flow 3:

Average throughput: 56.97 Mbit/s

95th percentile per-packet one-way delay: 54.595 ms

Loss rate: 1.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-28 22:09:42

End at: 2018-02-28 22:10:12

Below is generated by plot.py at 2018-03-01 02:48:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 173.27 Mbit/s

95th percentile per-packet one-way delay: 54.260 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 125.48 Mbit/s

95th percentile per-packet one-way delay: 54.304 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 9.26 Mbit/s

95th percentile per-packet one-way delay: 54.015 ms

Loss rate: 0.68%

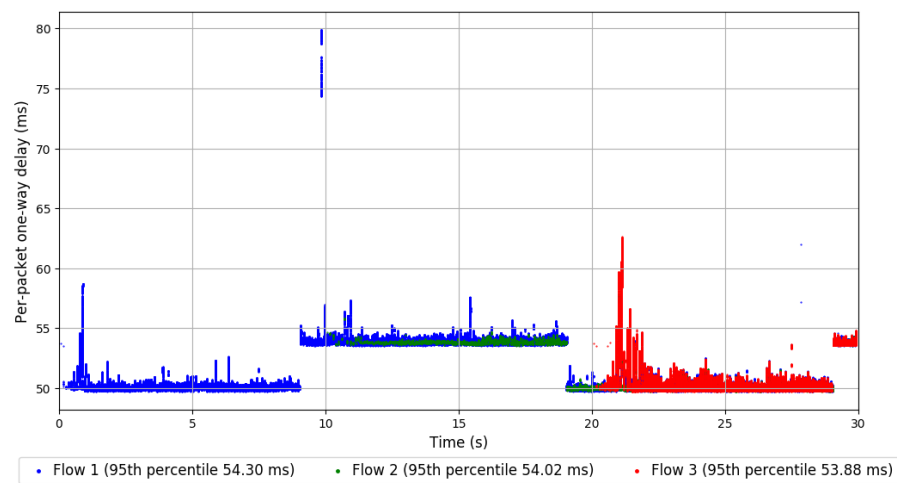
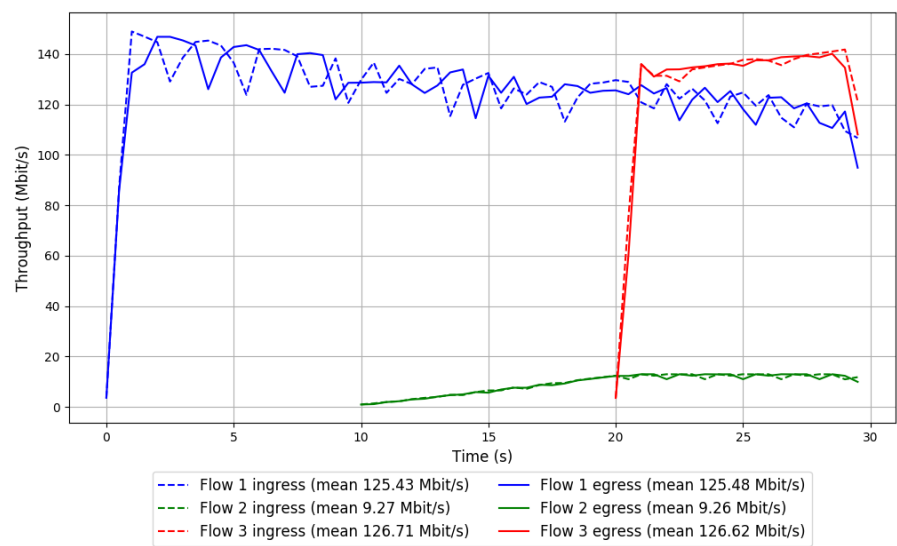
-- Flow 3:

Average throughput: 126.62 Mbit/s

95th percentile per-packet one-way delay: 53.879 ms

Loss rate: 1.12%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-28 22:27:24

End at: 2018-02-28 22:27:54

Below is generated by plot.py at 2018-03-01 02:48:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 313.39 Mbit/s

95th percentile per-packet one-way delay: 60.036 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 221.60 Mbit/s

95th percentile per-packet one-way delay: 60.258 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 119.82 Mbit/s

95th percentile per-packet one-way delay: 58.369 ms

Loss rate: 0.37%

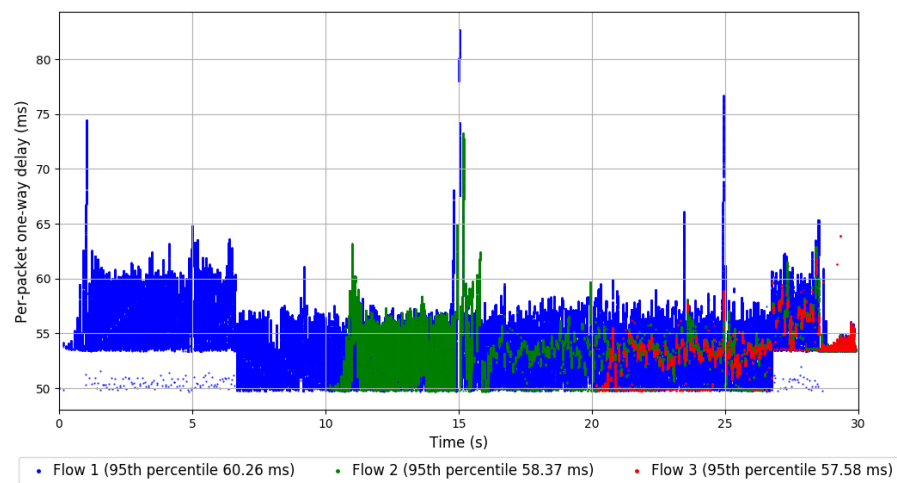
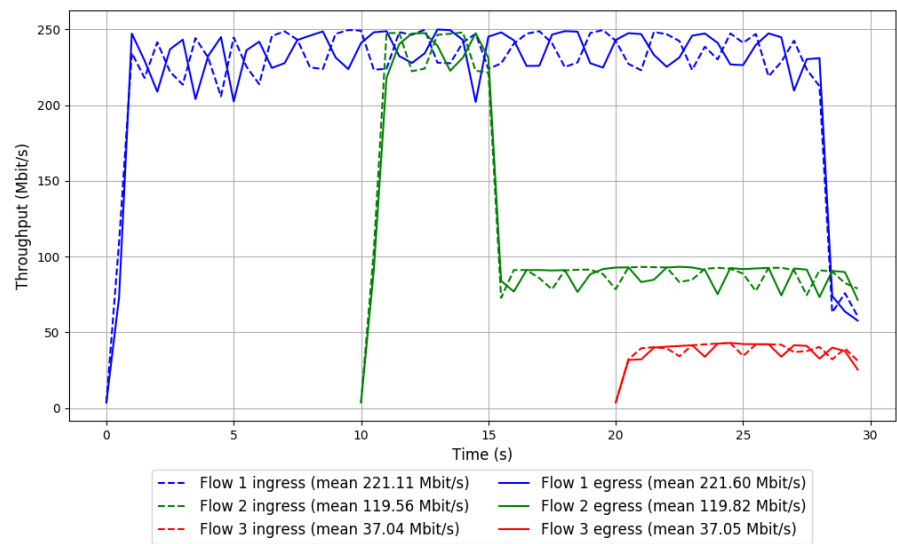
-- Flow 3:

Average throughput: 37.05 Mbit/s

95th percentile per-packet one-way delay: 57.584 ms

Loss rate: 1.05%

Run 10: Report of TCP Vegas — Data Link

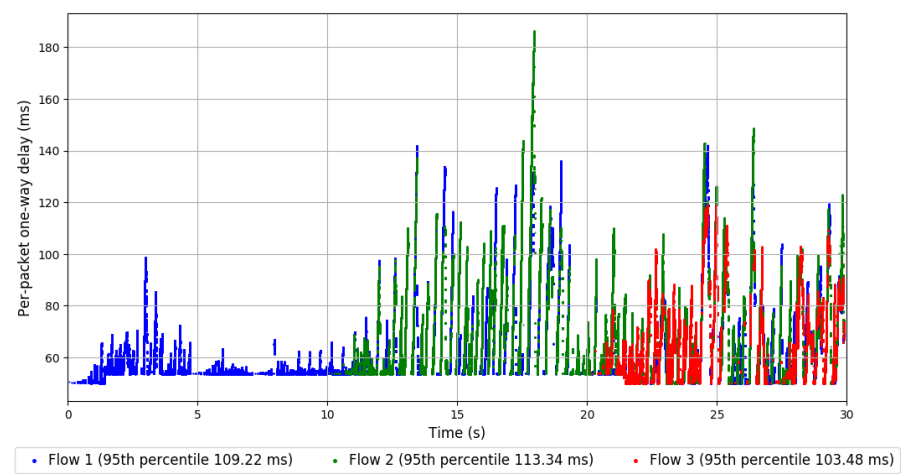
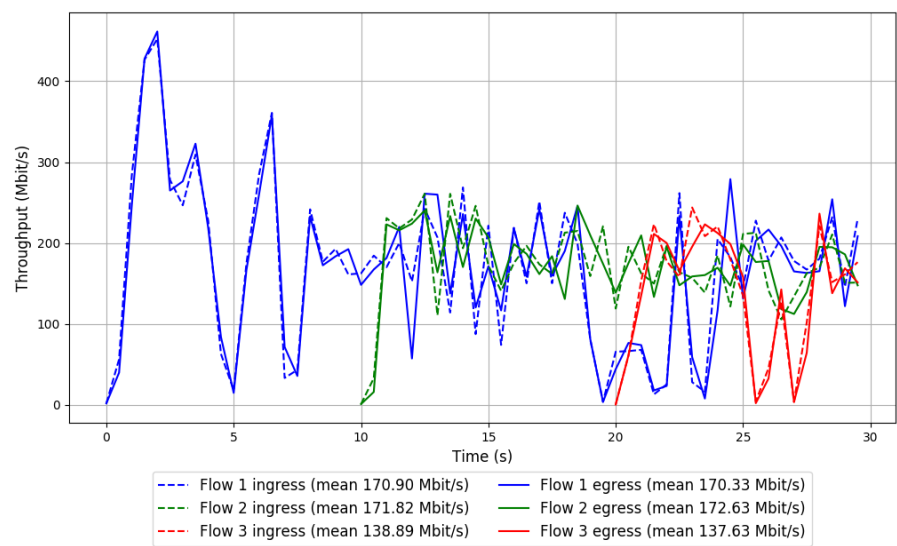


```
Run 1: Statistics of Verus

Start at: 2018-02-28 20:00:19
End at: 2018-02-28 20:00:49

# Below is generated by plot.py at 2018-03-01 02:50:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.30 Mbit/s
95th percentile per-packet one-way delay: 109.634 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 170.33 Mbit/s
95th percentile per-packet one-way delay: 109.222 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 172.63 Mbit/s
95th percentile per-packet one-way delay: 113.340 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 137.63 Mbit/s
95th percentile per-packet one-way delay: 103.480 ms
Loss rate: 1.95%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-28 20:18:21

End at: 2018-02-28 20:18:51

Below is generated by plot.py at 2018-03-01 02:51:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 384.25 Mbit/s

95th percentile per-packet one-way delay: 129.345 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 240.54 Mbit/s

95th percentile per-packet one-way delay: 124.319 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 172.23 Mbit/s

95th percentile per-packet one-way delay: 155.339 ms

Loss rate: 0.97%

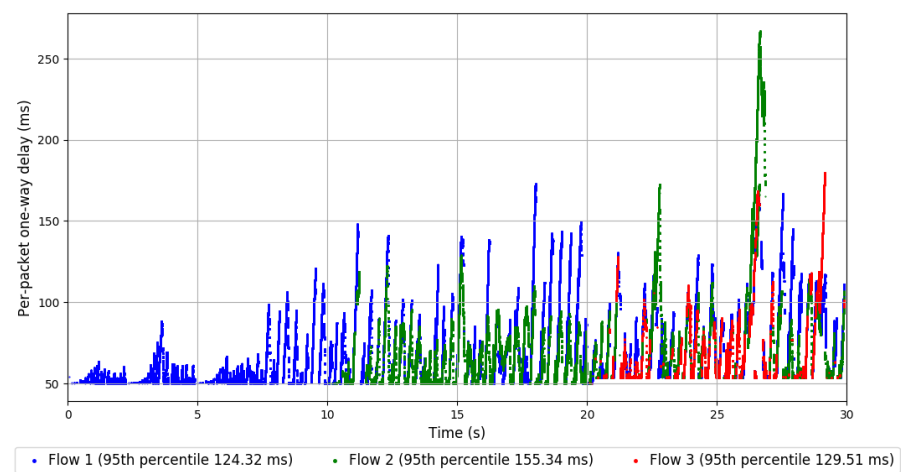
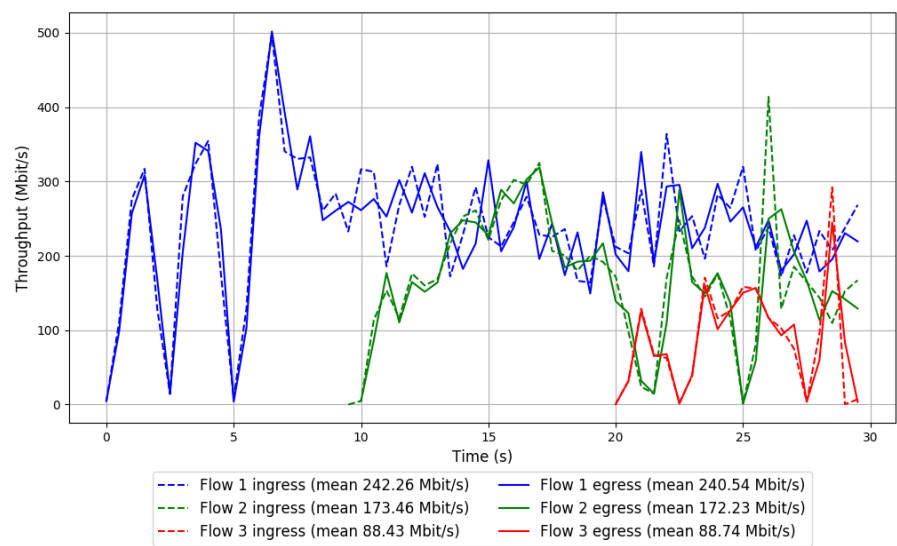
-- Flow 3:

Average throughput: 88.74 Mbit/s

95th percentile per-packet one-way delay: 129.511 ms

Loss rate: 0.67%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-28 20:36:30

End at: 2018-02-28 20:37:00

Below is generated by plot.py at 2018-03-01 02:51:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 381.64 Mbit/s

95th percentile per-packet one-way delay: 129.017 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 230.08 Mbit/s

95th percentile per-packet one-way delay: 125.904 ms

Loss rate: 1.48%

-- Flow 2:

Average throughput: 151.23 Mbit/s

95th percentile per-packet one-way delay: 135.326 ms

Loss rate: 0.31%

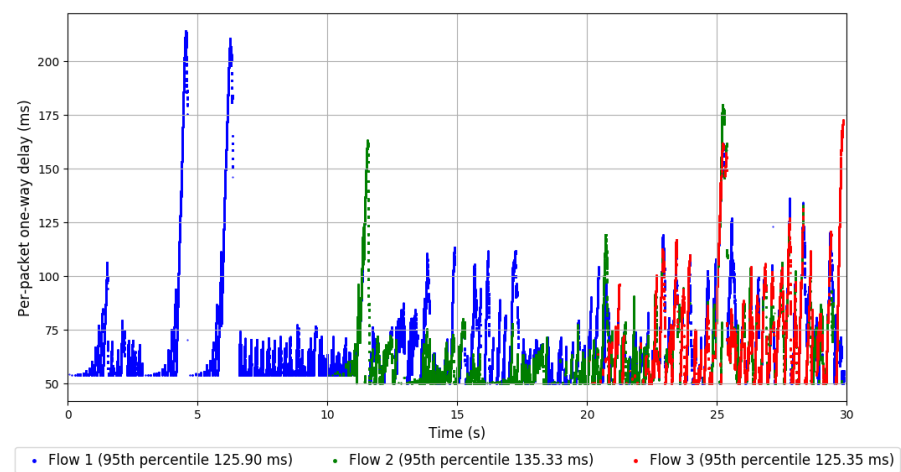
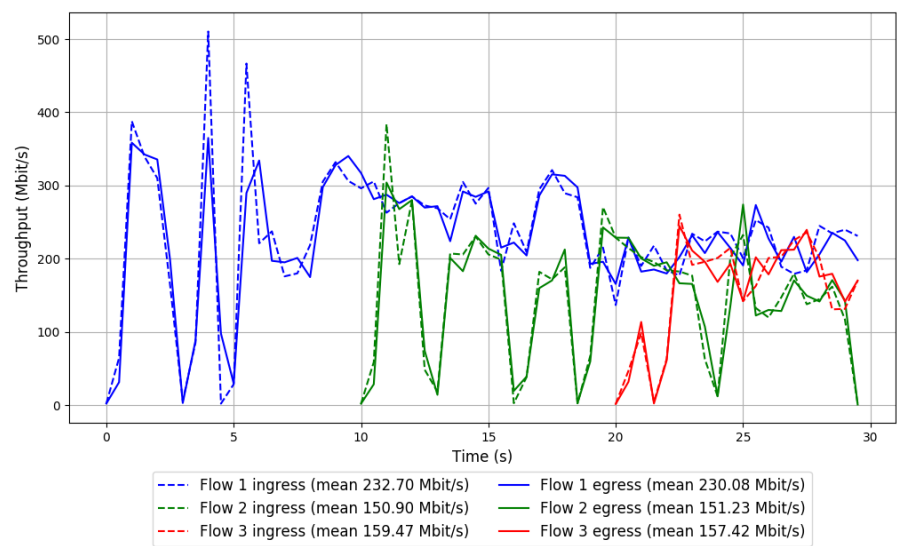
-- Flow 3:

Average throughput: 157.42 Mbit/s

95th percentile per-packet one-way delay: 125.346 ms

Loss rate: 0.14%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-28 20:54:26

End at: 2018-02-28 20:54:56

Below is generated by plot.py at 2018-03-01 02:51:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 330.25 Mbit/s

95th percentile per-packet one-way delay: 133.322 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 233.71 Mbit/s

95th percentile per-packet one-way delay: 142.500 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 95.35 Mbit/s

95th percentile per-packet one-way delay: 106.827 ms

Loss rate: 1.05%

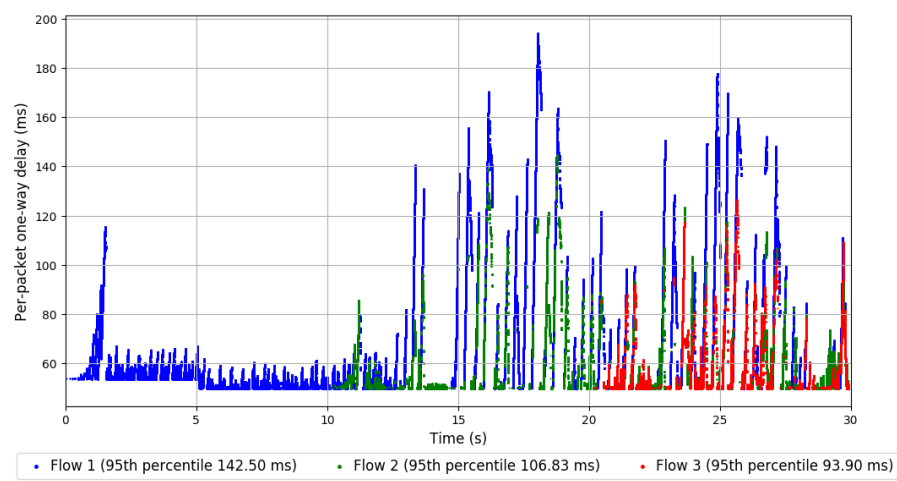
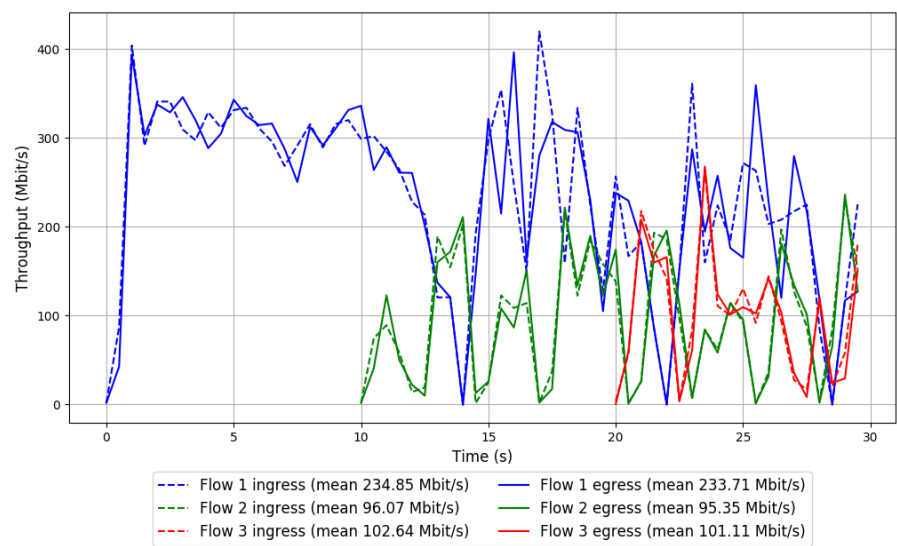
-- Flow 3:

Average throughput: 101.11 Mbit/s

95th percentile per-packet one-way delay: 93.899 ms

Loss rate: 2.84%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-28 21:12:15

End at: 2018-02-28 21:12:45

Below is generated by plot.py at 2018-03-01 02:51:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 330.85 Mbit/s

95th percentile per-packet one-way delay: 157.241 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 164.24 Mbit/s

95th percentile per-packet one-way delay: 97.606 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 179.12 Mbit/s

95th percentile per-packet one-way delay: 153.668 ms

Loss rate: 2.49%

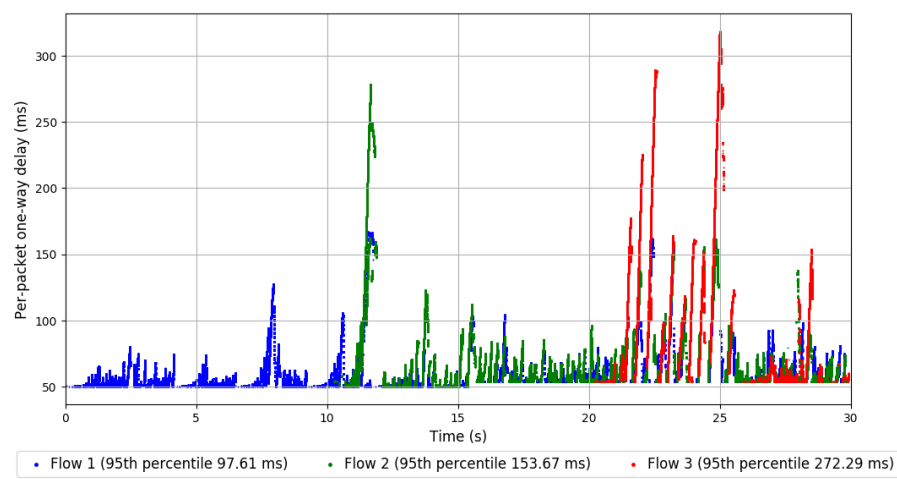
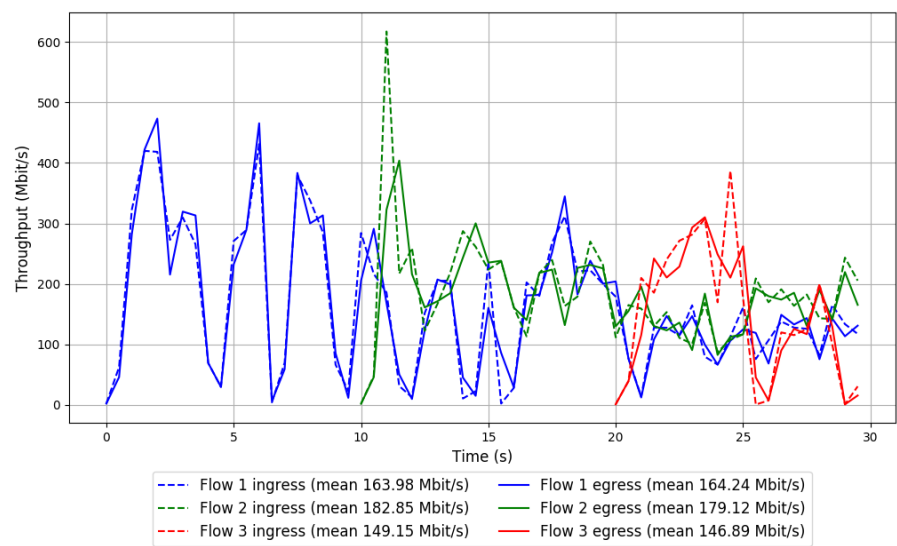
-- Flow 3:

Average throughput: 146.89 Mbit/s

95th percentile per-packet one-way delay: 272.286 ms

Loss rate: 2.65%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-28 21:30:30

End at: 2018-02-28 21:31:00

Below is generated by plot.py at 2018-03-01 02:54:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 392.34 Mbit/s

95th percentile per-packet one-way delay: 113.744 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 233.92 Mbit/s

95th percentile per-packet one-way delay: 101.748 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 182.39 Mbit/s

95th percentile per-packet one-way delay: 122.381 ms

Loss rate: 2.60%

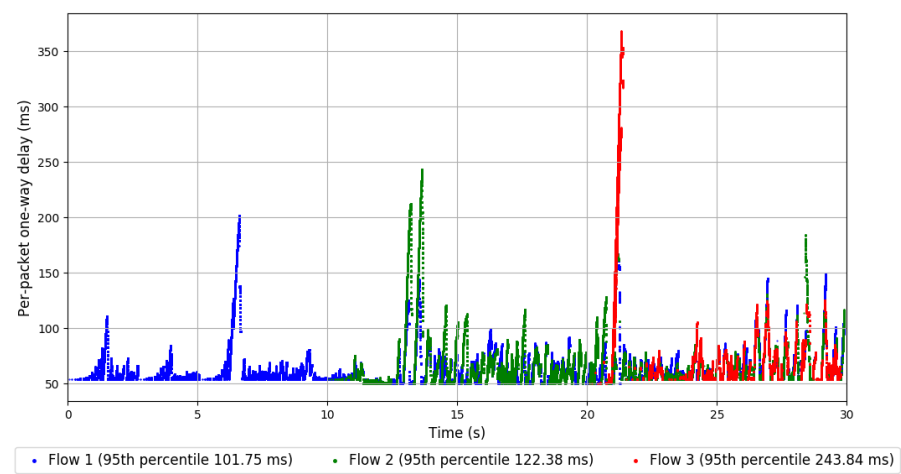
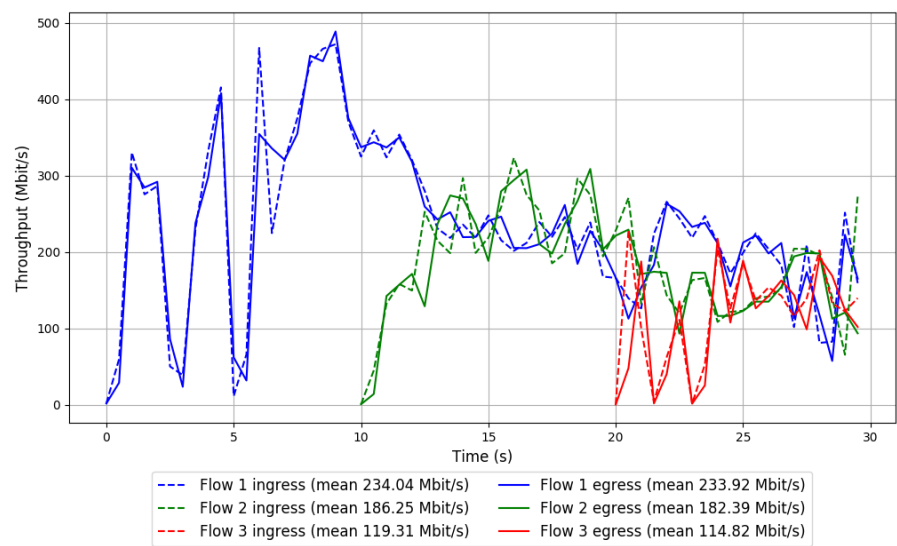
-- Flow 3:

Average throughput: 114.82 Mbit/s

95th percentile per-packet one-way delay: 243.845 ms

Loss rate: 6.14%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-28 21:48:37

End at: 2018-02-28 21:49:07

Below is generated by plot.py at 2018-03-01 02:55:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 366.21 Mbit/s

95th percentile per-packet one-way delay: 145.531 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 191.93 Mbit/s

95th percentile per-packet one-way delay: 156.384 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 195.06 Mbit/s

95th percentile per-packet one-way delay: 126.098 ms

Loss rate: 0.68%

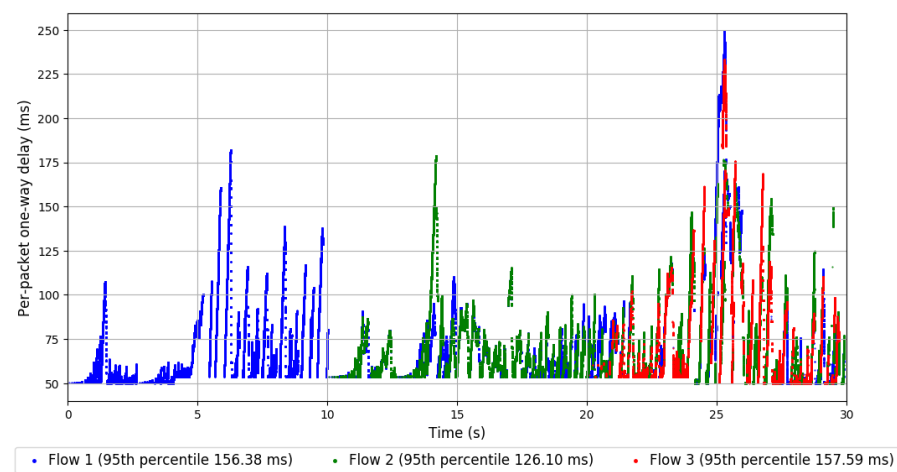
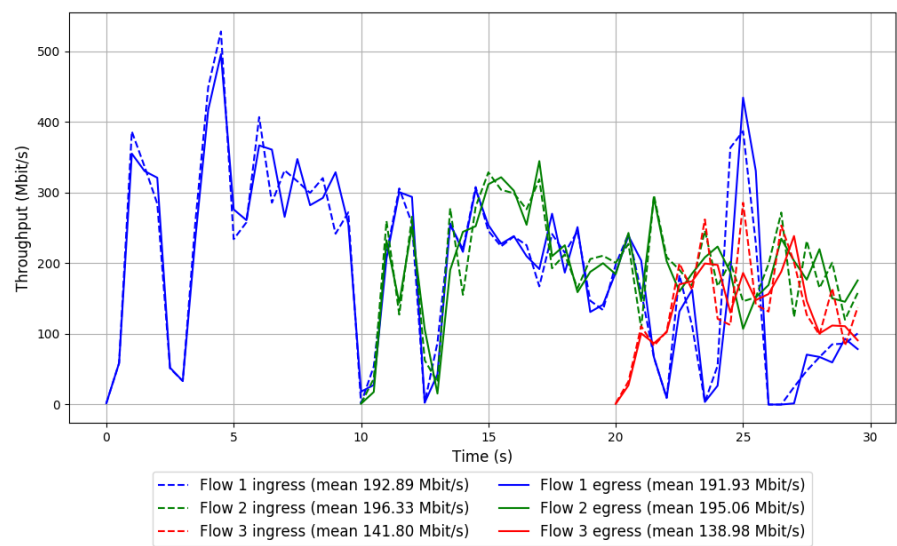
-- Flow 3:

Average throughput: 138.98 Mbit/s

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

Loss rate: 5.21%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-28 22:06:33

End at: 2018-02-28 22:07:03

Below is generated by plot.py at 2018-03-01 02:55:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 385.91 Mbit/s

95th percentile per-packet one-way delay: 184.586 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 214.08 Mbit/s

95th percentile per-packet one-way delay: 146.161 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 238.83 Mbit/s

95th percentile per-packet one-way delay: 209.614 ms

Loss rate: 2.29%

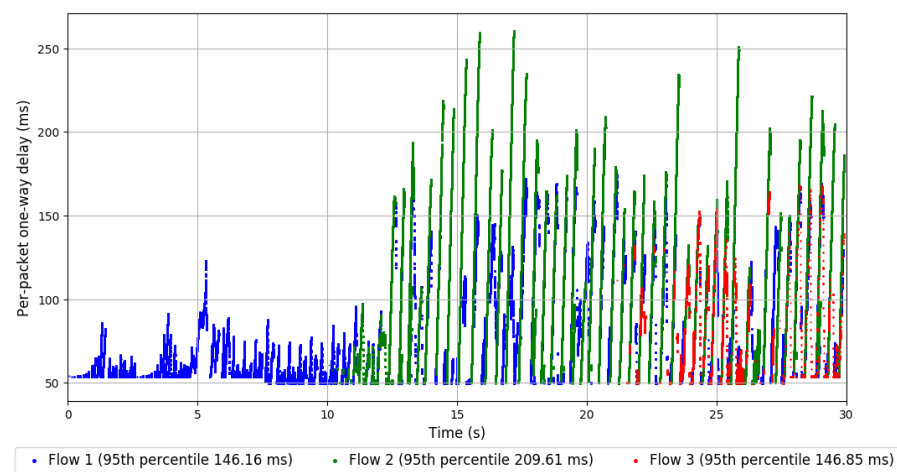
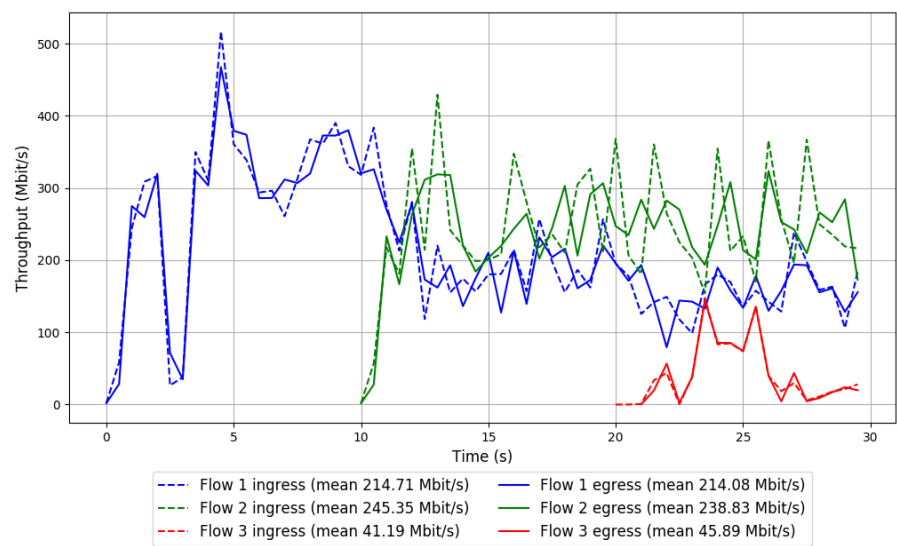
-- Flow 3:

Average throughput: 45.89 Mbit/s

95th percentile per-packet one-way delay: 146.848 ms

Loss rate: 1.24%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-28 22:24:17

End at: 2018-02-28 22:24:47

Below is generated by plot.py at 2018-03-01 02:55:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 321.93 Mbit/s

95th percentile per-packet one-way delay: 118.083 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 177.29 Mbit/s

95th percentile per-packet one-way delay: 99.835 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 139.33 Mbit/s

95th percentile per-packet one-way delay: 178.614 ms

Loss rate: 0.72%

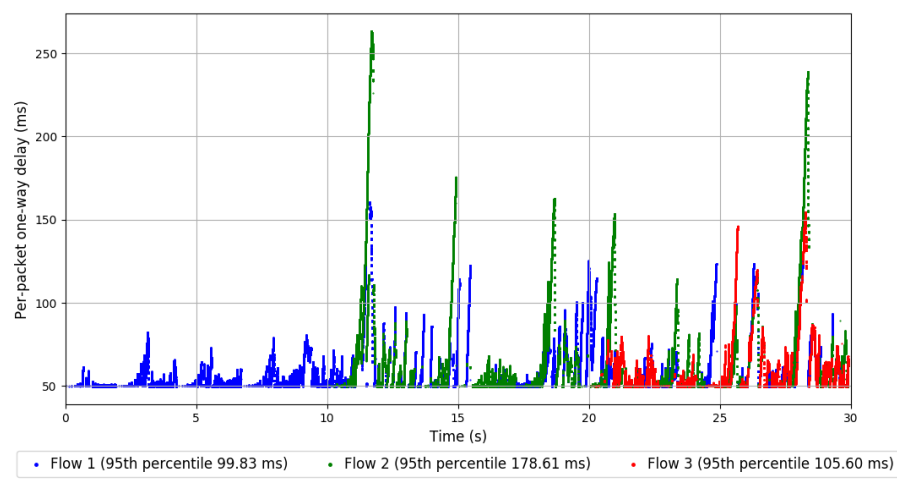
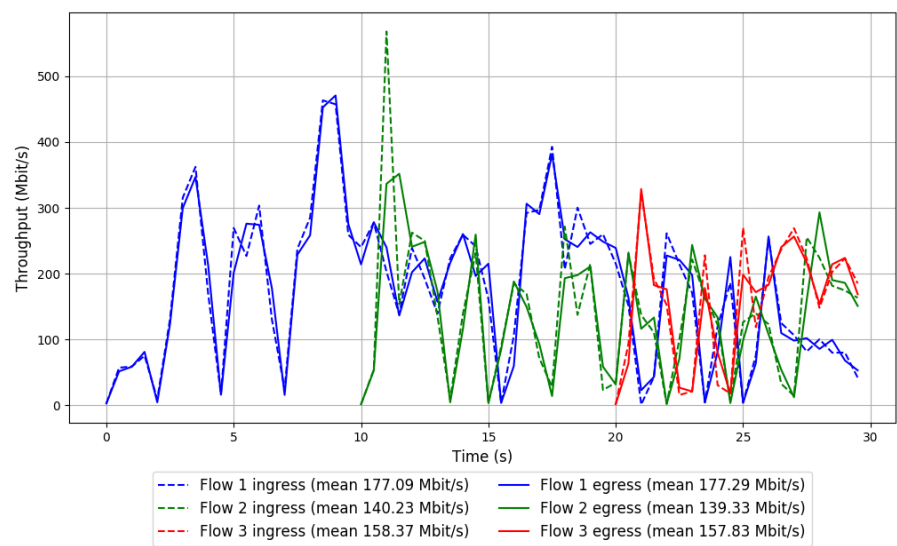
-- Flow 3:

Average throughput: 157.83 Mbit/s

95th percentile per-packet one-way delay: 105.602 ms

Loss rate: 1.40%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-28 22:42:21

End at: 2018-02-28 22:42:51

Below is generated by plot.py at 2018-03-01 02:57:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 369.16 Mbit/s

95th percentile per-packet one-way delay: 116.421 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 242.48 Mbit/s

95th percentile per-packet one-way delay: 109.807 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 137.88 Mbit/s

95th percentile per-packet one-way delay: 121.378 ms

Loss rate: 0.16%

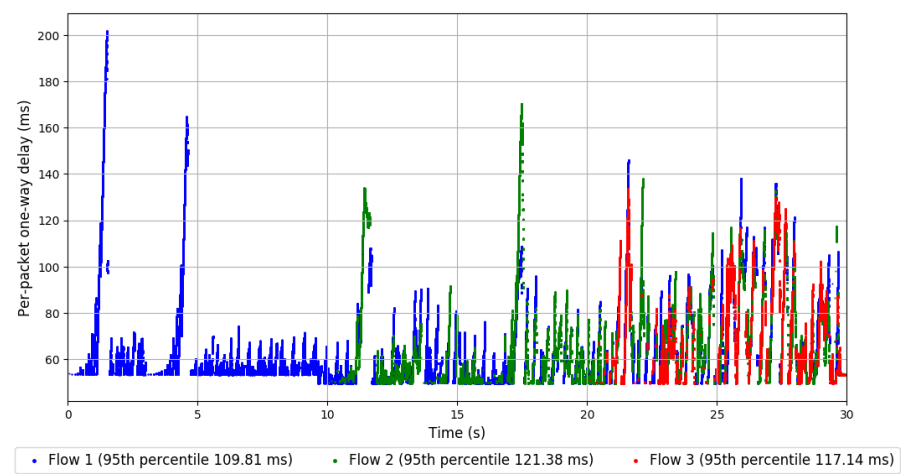
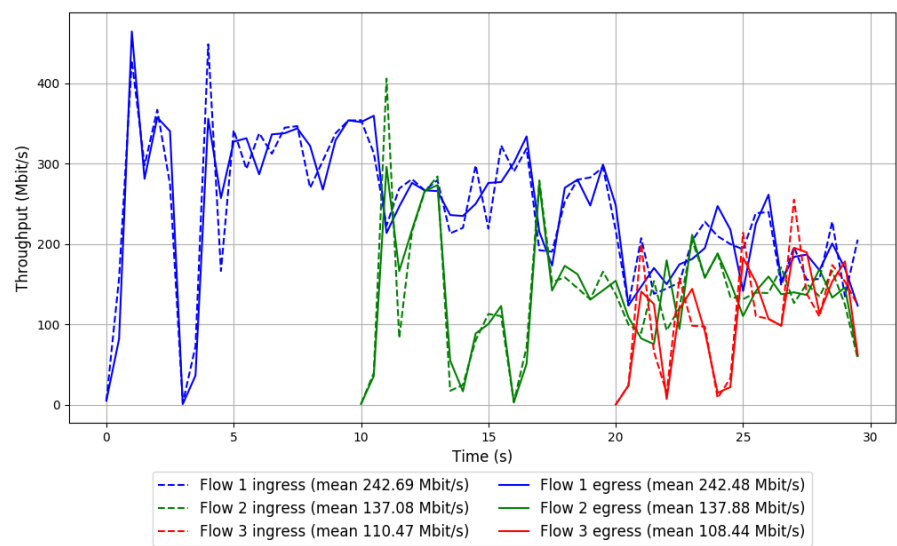
-- Flow 3:

Average throughput: 108.44 Mbit/s

95th percentile per-packet one-way delay: 117.138 ms

Loss rate: 2.84%

Run 10: Report of Verus — Data Link

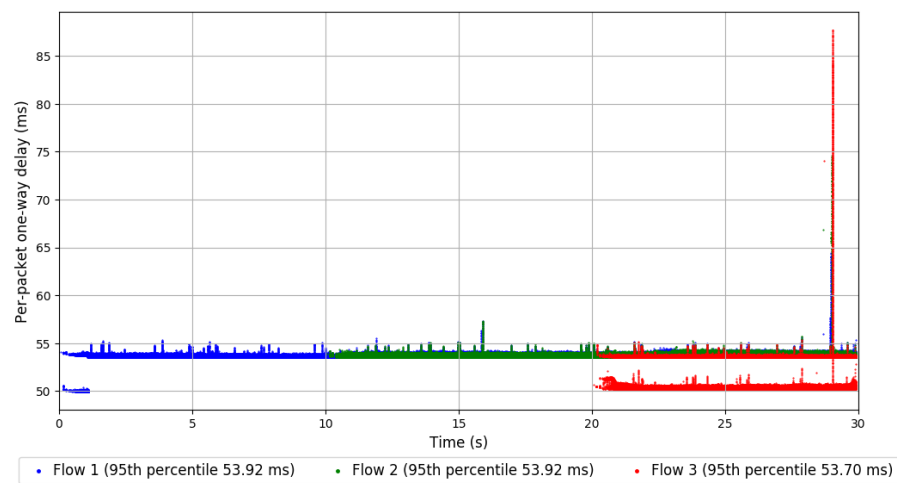
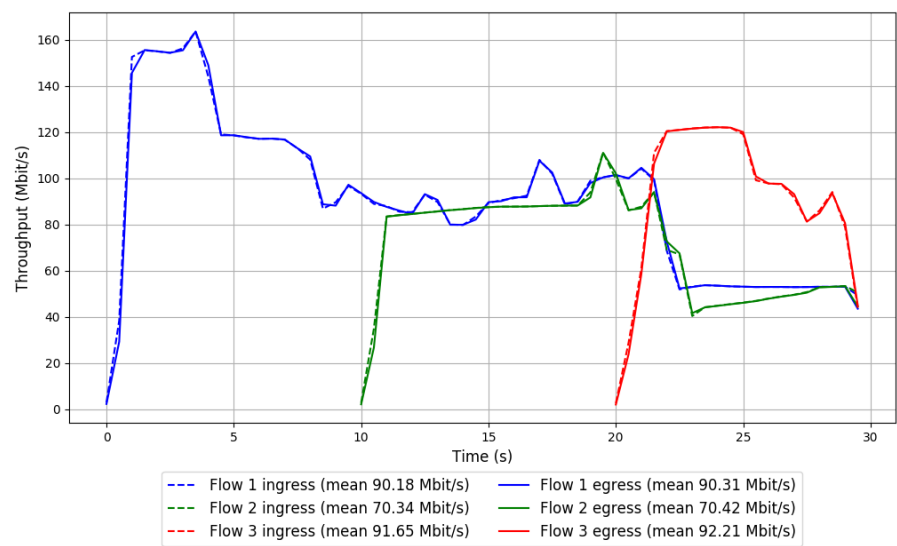


```
Run 1: Statistics of Copa

Start at: 2018-02-28 19:48:10
End at: 2018-02-28 19:48:40

# Below is generated by plot.py at 2018-03-01 02:57:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 167.47 Mbit/s
95th percentile per-packet one-way delay: 53.902 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 90.31 Mbit/s
95th percentile per-packet one-way delay: 53.921 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 70.42 Mbit/s
95th percentile per-packet one-way delay: 53.918 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 92.21 Mbit/s
95th percentile per-packet one-way delay: 53.700 ms
Loss rate: 0.43%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-28 20:06:05

End at: 2018-02-28 20:06:35

Below is generated by plot.py at 2018-03-01 02:57:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 156.75 Mbit/s

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

Loss rate: 0.53%

-- Flow 1:

Average throughput: 86.13 Mbit/s

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

Loss rate: 0.12%

-- Flow 2:

Average throughput: 63.63 Mbit/s

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

Loss rate: 0.84%

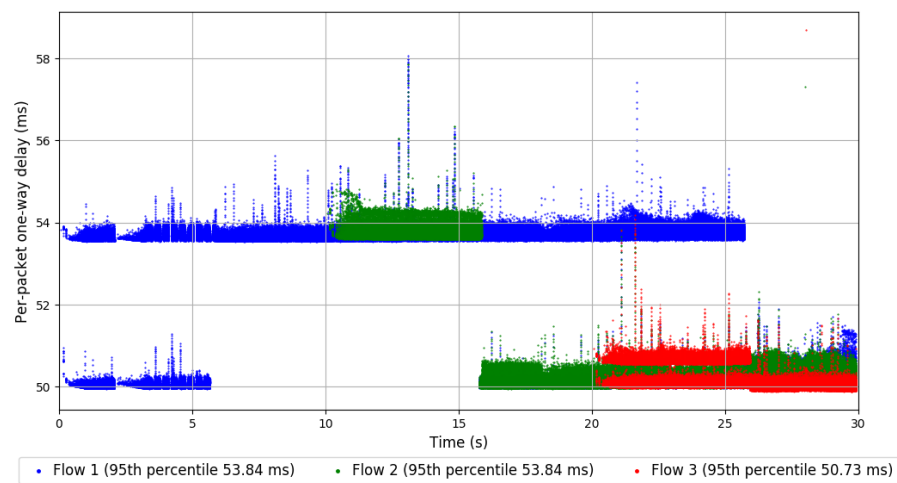
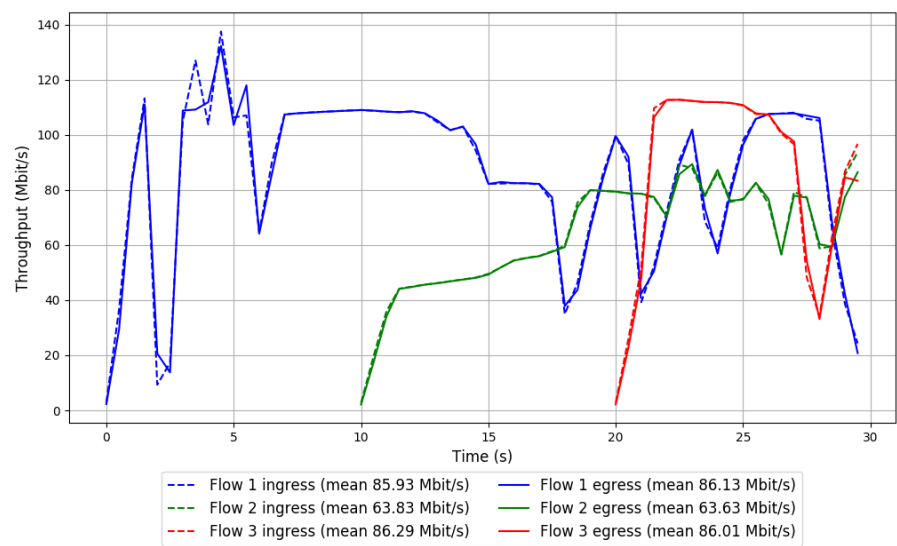
-- Flow 3:

Average throughput: 86.01 Mbit/s

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

Loss rate: 1.33%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-28 20:24:05

End at: 2018-02-28 20:24:35

Below is generated by plot.py at 2018-03-01 03:02:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 261.36 Mbit/s

95th percentile per-packet one-way delay: 231.576 ms

Loss rate: 35.77%

-- Flow 1:

Average throughput: 299.19 Mbit/s

95th percentile per-packet one-way delay: 232.034 ms

Loss rate: 40.55%

-- Flow 2:

Average throughput: 34.18 Mbit/s

95th percentile per-packet one-way delay: 54.185 ms

Loss rate: 1.44%

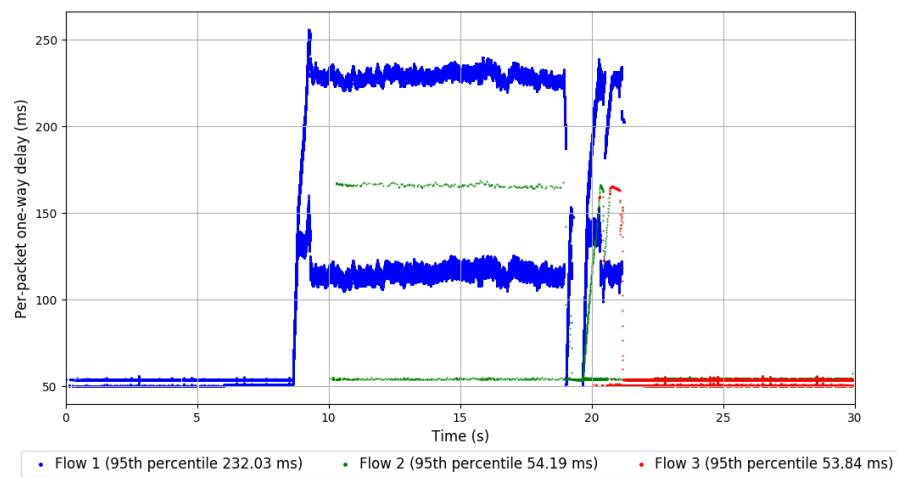
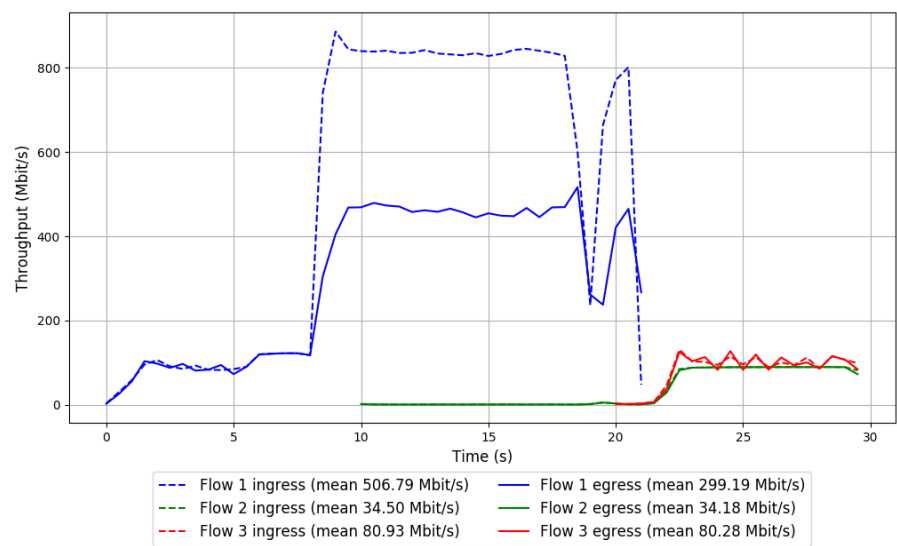
-- Flow 3:

Average throughput: 80.28 Mbit/s

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

Loss rate: 1.82%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-28 20:42:06

End at: 2018-02-28 20:42:36

Below is generated by plot.py at 2018-03-01 03:02:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.37 Mbit/s

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

Loss rate: 0.50%

-- Flow 1:

Average throughput: 112.56 Mbit/s

95th percentile per-packet one-way delay: 53.769 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 77.82 Mbit/s

95th percentile per-packet one-way delay: 53.911 ms

Loss rate: 0.48%

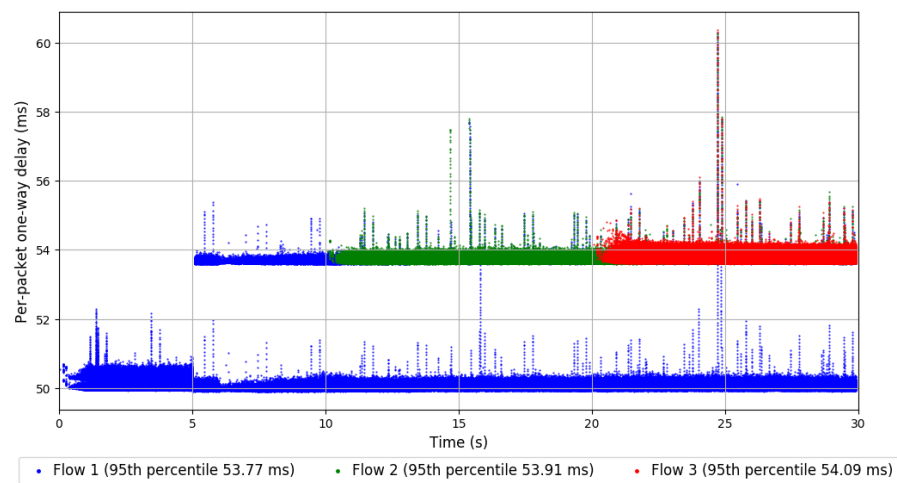
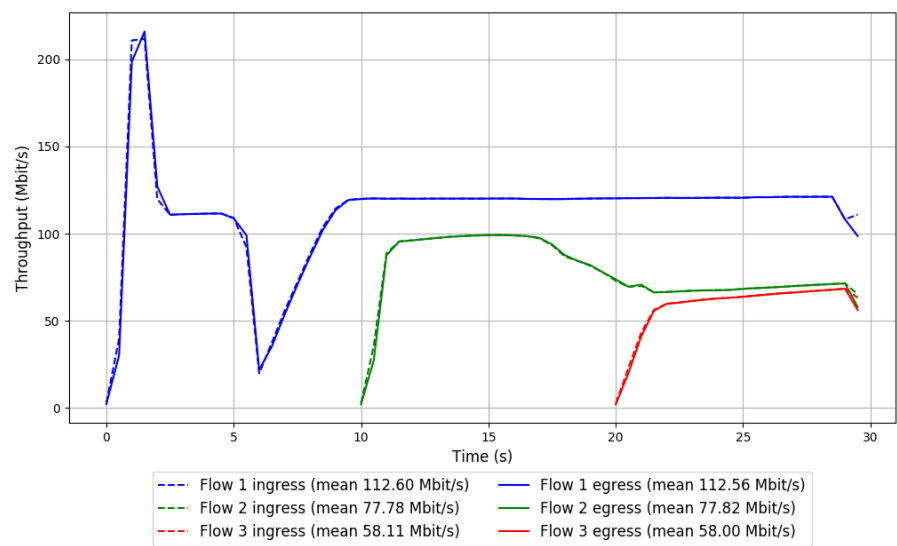
-- Flow 3:

Average throughput: 58.00 Mbit/s

95th percentile per-packet one-way delay: 54.091 ms

Loss rate: 1.25%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-28 20:59:56

End at: 2018-02-28 21:00:26

Below is generated by plot.py at 2018-03-01 03:02:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 196.35 Mbit/s

95th percentile per-packet one-way delay: 244.949 ms

Loss rate: 27.79%

-- Flow 1:

Average throughput: 82.88 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 151.43 Mbit/s

95th percentile per-packet one-way delay: 250.840 ms

Loss rate: 42.87%

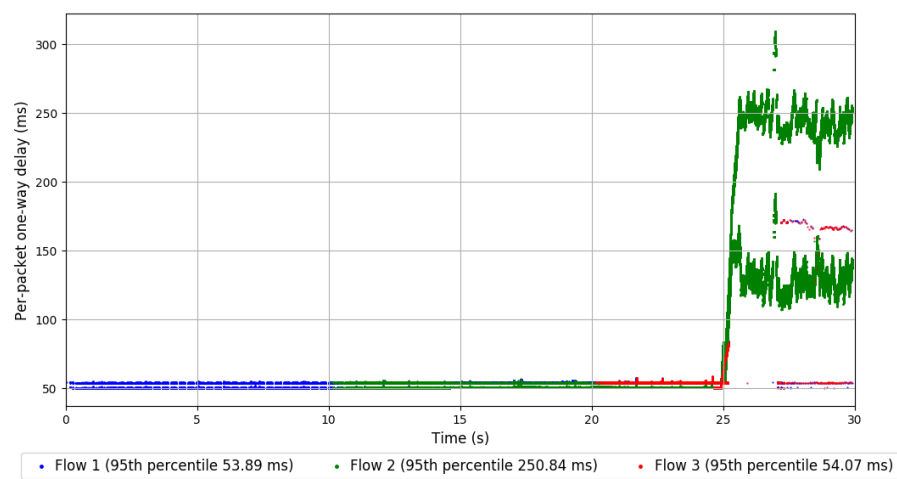
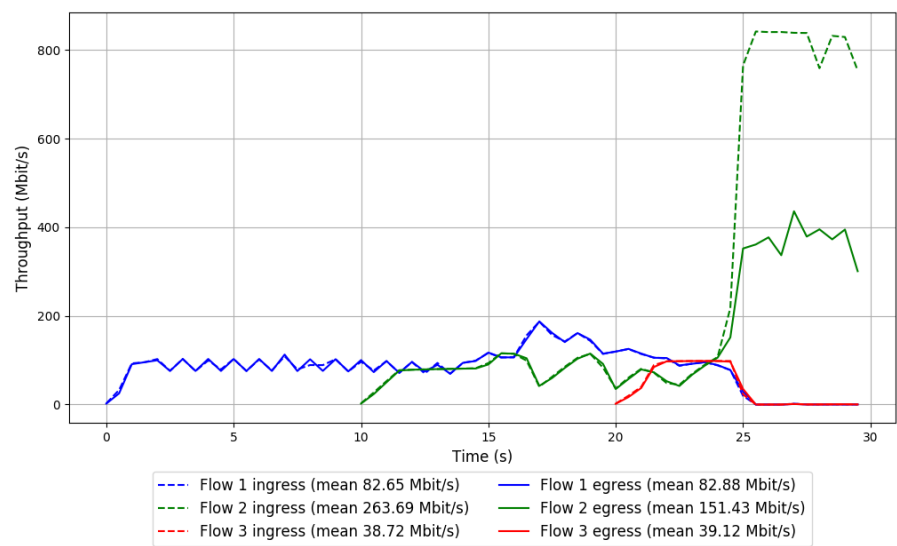
-- Flow 3:

Average throughput: 39.12 Mbit/s

95th percentile per-packet one-way delay: 54.068 ms

Loss rate: 0.08%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-28 21:17:51

End at: 2018-02-28 21:18:21

Below is generated by plot.py at 2018-03-01 03:12:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 495.59 Mbit/s

95th percentile per-packet one-way delay: 229.255 ms

Loss rate: 33.77%

-- Flow 1:

Average throughput: 284.32 Mbit/s

95th percentile per-packet one-way delay: 228.569 ms

Loss rate: 33.55%

-- Flow 2:

Average throughput: 414.79 Mbit/s

95th percentile per-packet one-way delay: 230.565 ms

Loss rate: 34.07%

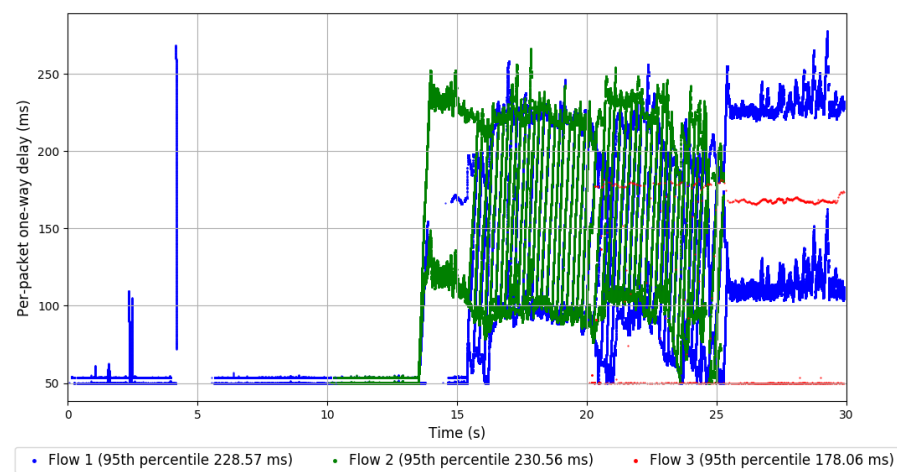
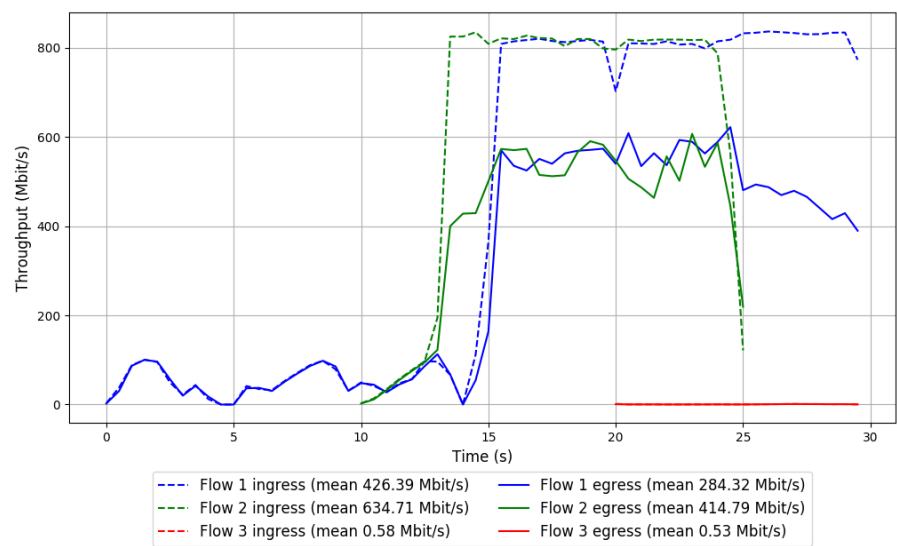
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 178.057 ms

Loss rate: 10.09%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-28 21:36:16

End at: 2018-02-28 21:36:46

Below is generated by plot.py at 2018-03-01 03:12:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 165.61 Mbit/s

95th percentile per-packet one-way delay: 53.658 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 93.68 Mbit/s

95th percentile per-packet one-way delay: 53.604 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 67.22 Mbit/s

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

Loss rate: 0.40%

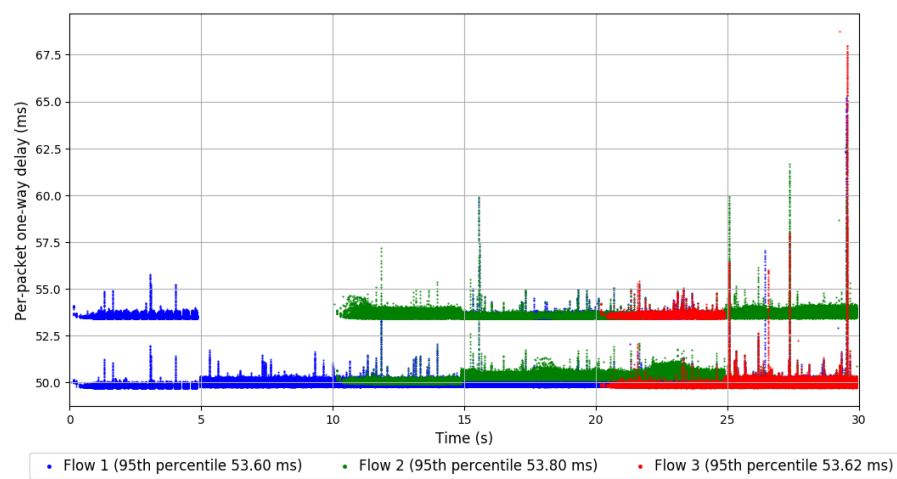
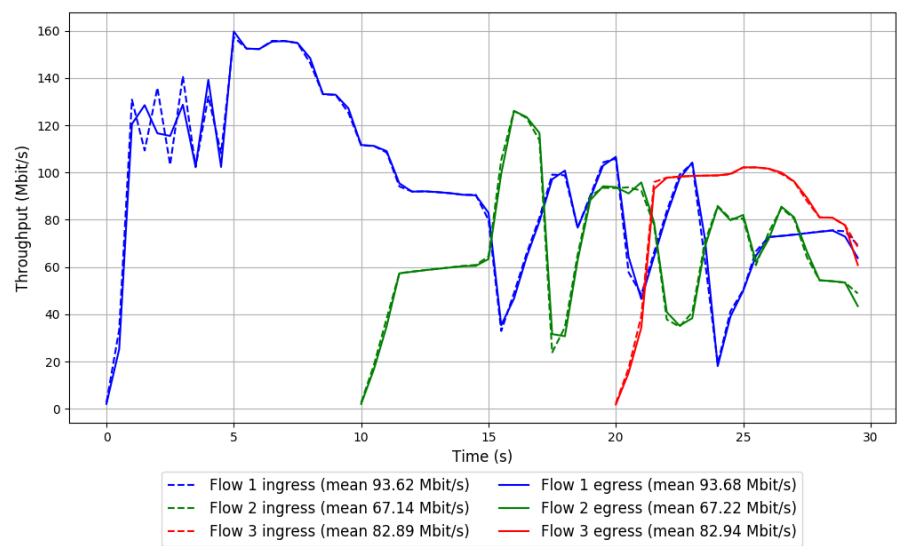
-- Flow 3:

Average throughput: 82.94 Mbit/s

95th percentile per-packet one-way delay: 53.616 ms

Loss rate: 0.96%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-28 21:54:20

End at: 2018-02-28 21:54:50

Below is generated by plot.py at 2018-03-01 03:12:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 180.19 Mbit/s

95th percentile per-packet one-way delay: 53.786 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 96.57 Mbit/s

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

Loss rate: 0.43%

-- Flow 2:

Average throughput: 82.34 Mbit/s

95th percentile per-packet one-way delay: 53.918 ms

Loss rate: 0.28%

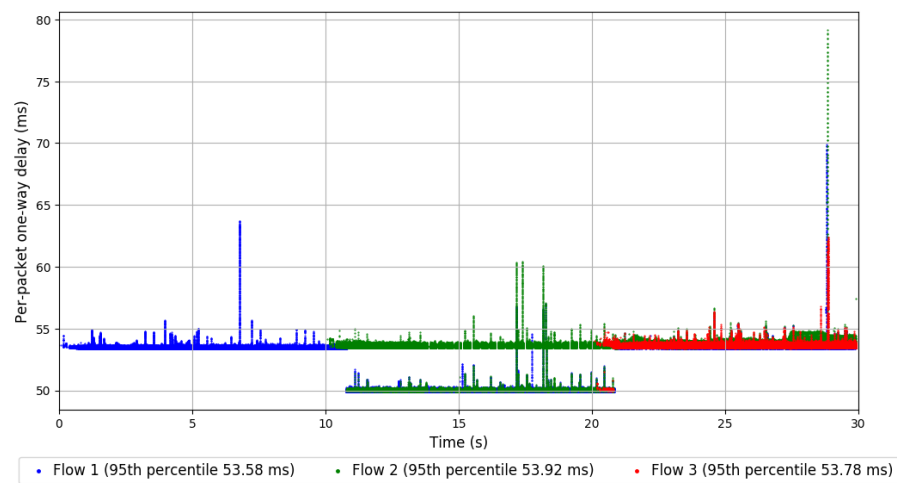
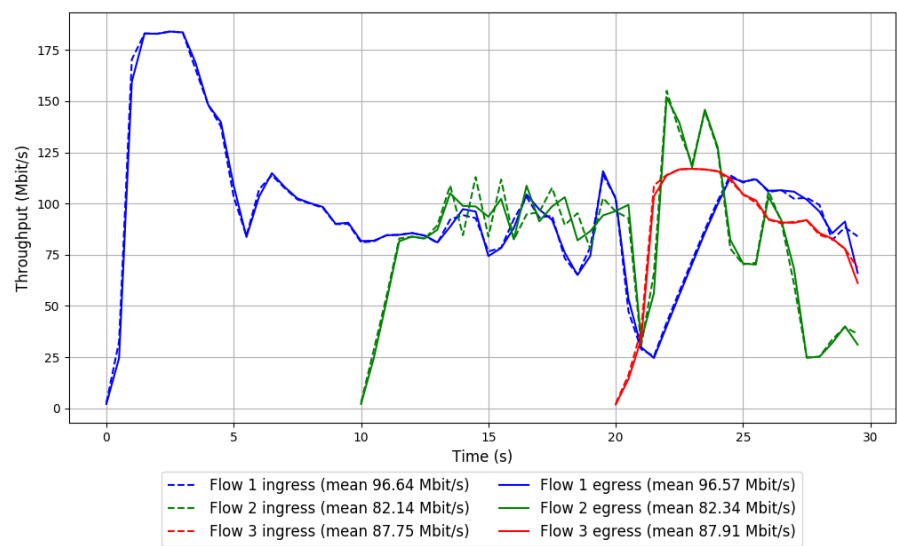
-- Flow 3:

Average throughput: 87.91 Mbit/s

95th percentile per-packet one-way delay: 53.779 ms

Loss rate: 0.91%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-28 22:12:00

End at: 2018-02-28 22:12:30

Below is generated by plot.py at 2018-03-01 03:12:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 160.71 Mbit/s

95th percentile per-packet one-way delay: 53.777 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 89.80 Mbit/s

95th percentile per-packet one-way delay: 53.765 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 64.67 Mbit/s

95th percentile per-packet one-way delay: 53.831 ms

Loss rate: 0.53%

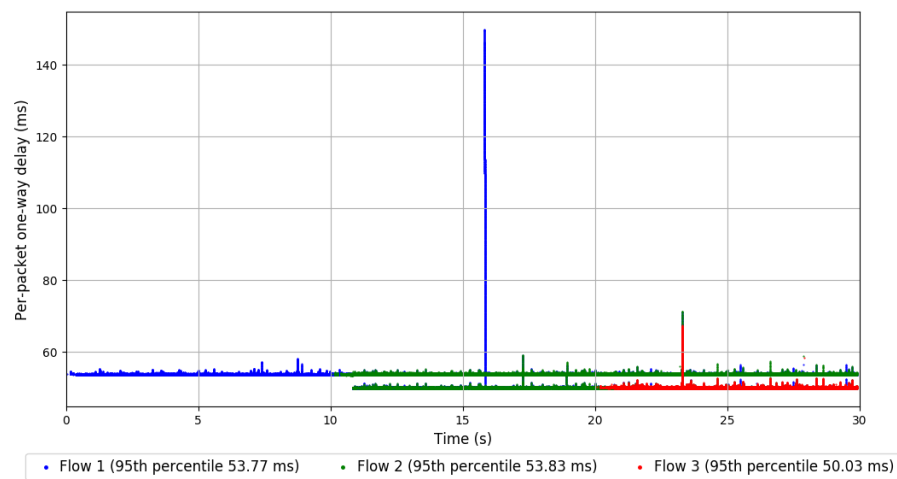
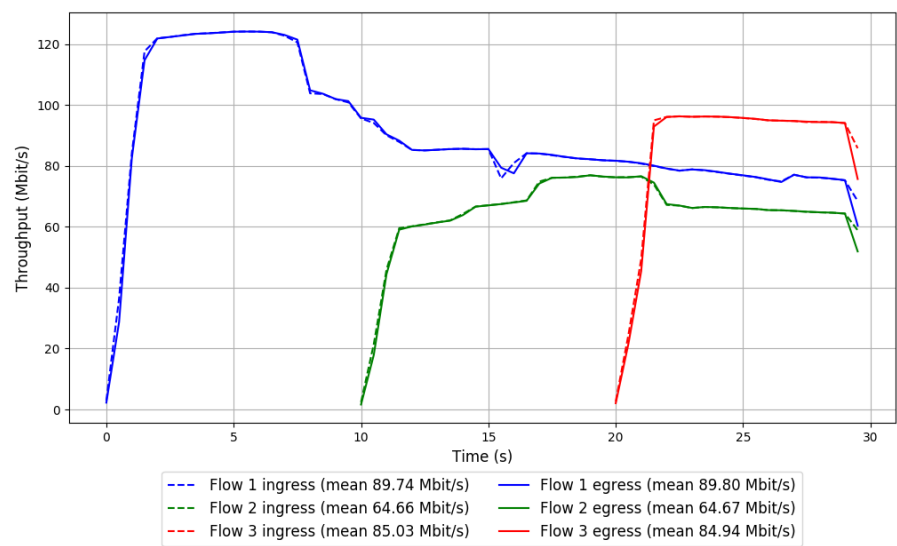
-- Flow 3:

Average throughput: 84.94 Mbit/s

95th percentile per-packet one-way delay: 50.032 ms

Loss rate: 1.16%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-28 22:30:13

End at: 2018-02-28 22:30:43

Below is generated by plot.py at 2018-03-01 03:12:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 160.92 Mbit/s

95th percentile per-packet one-way delay: 53.567 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 87.64 Mbit/s

95th percentile per-packet one-way delay: 53.590 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 71.87 Mbit/s

95th percentile per-packet one-way delay: 53.492 ms

Loss rate: 0.50%

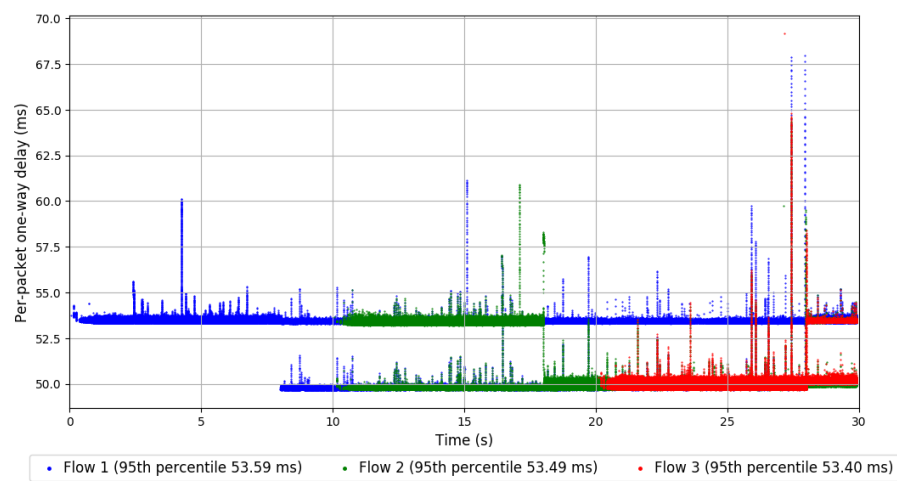
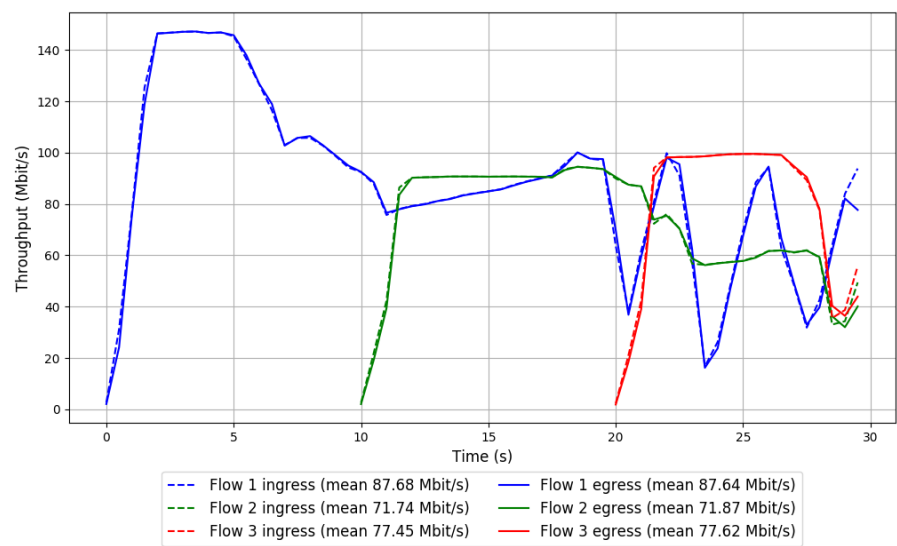
-- Flow 3:

Average throughput: 77.62 Mbit/s

95th percentile per-packet one-way delay: 53.402 ms

Loss rate: 1.10%

Run 10: Report of Copa — Data Link

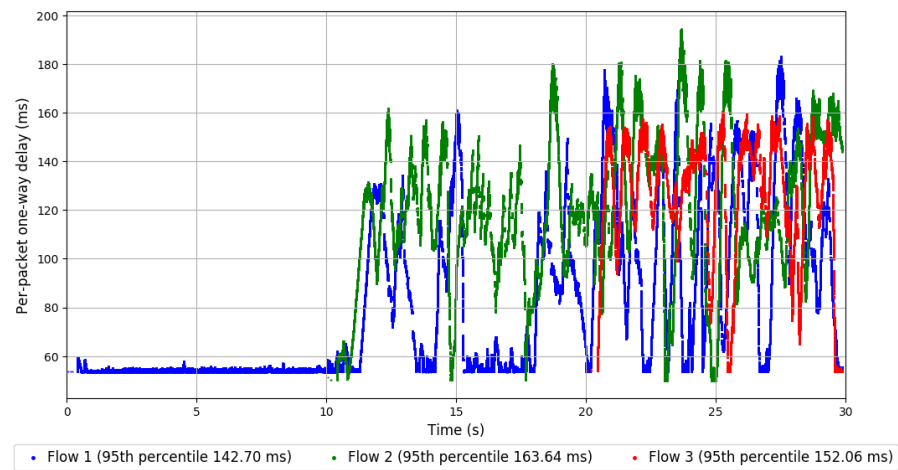
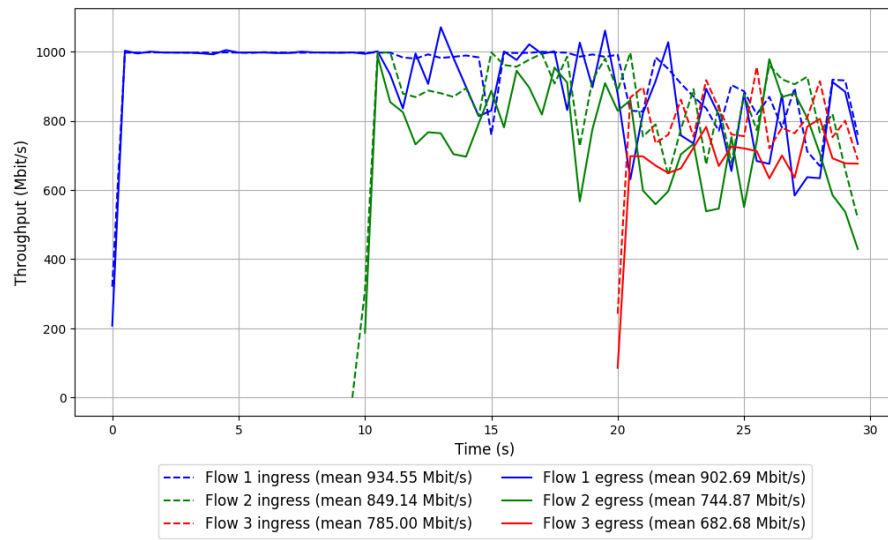


```
Run 1: Statistics of FillP

Start at: 2018-02-28 19:51:43
End at: 2018-02-28 19:52:13

# Below is generated by plot.py at 2018-03-01 03:30:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1622.59 Mbit/s
95th percentile per-packet one-way delay: 152.874 ms
Loss rate: 8.14%
-- Flow 1:
Average throughput: 902.69 Mbit/s
95th percentile per-packet one-way delay: 142.697 ms
Loss rate: 3.75%
-- Flow 2:
Average throughput: 744.87 Mbit/s
95th percentile per-packet one-way delay: 163.636 ms
Loss rate: 12.73%
-- Flow 3:
Average throughput: 682.68 Mbit/s
95th percentile per-packet one-way delay: 152.059 ms
Loss rate: 13.96%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-28 20:09:38

End at: 2018-02-28 20:10:08

Below is generated by plot.py at 2018-03-01 03:30:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 1591.34 Mbit/s

95th percentile per-packet one-way delay: 150.348 ms

Loss rate: 9.25%

-- Flow 1:

Average throughput: 826.43 Mbit/s

95th percentile per-packet one-way delay: 154.608 ms

Loss rate: 7.50%

-- Flow 2:

Average throughput: 775.39 Mbit/s

95th percentile per-packet one-way delay: 152.244 ms

Loss rate: 11.38%

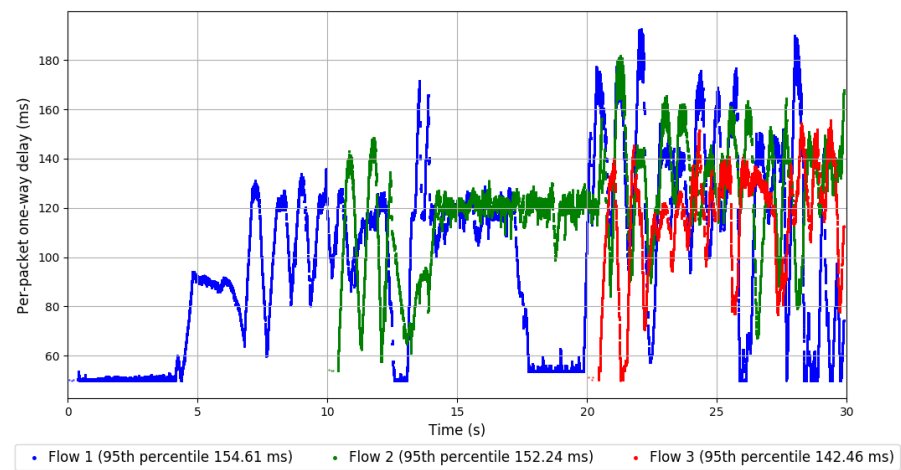
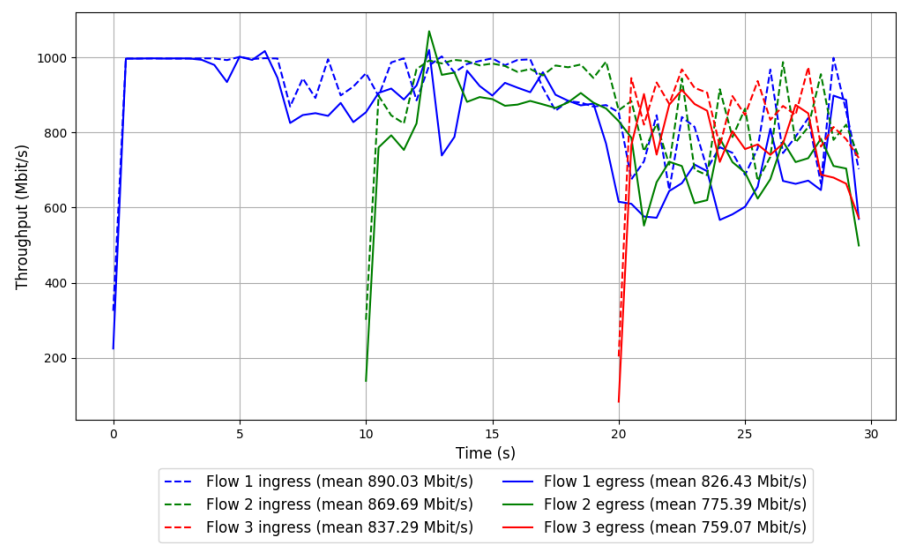
-- Flow 3:

Average throughput: 759.07 Mbit/s

95th percentile per-packet one-way delay: 142.458 ms

Loss rate: 10.41%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-28 20:27:47

End at: 2018-02-28 20:28:17

Below is generated by plot.py at 2018-03-01 03:31:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 1646.52 Mbit/s

95th percentile per-packet one-way delay: 153.861 ms

Loss rate: 7.11%

-- Flow 1:

Average throughput: 854.69 Mbit/s

95th percentile per-packet one-way delay: 152.355 ms

Loss rate: 7.12%

-- Flow 2:

Average throughput: 852.03 Mbit/s

95th percentile per-packet one-way delay: 147.690 ms

Loss rate: 5.48%

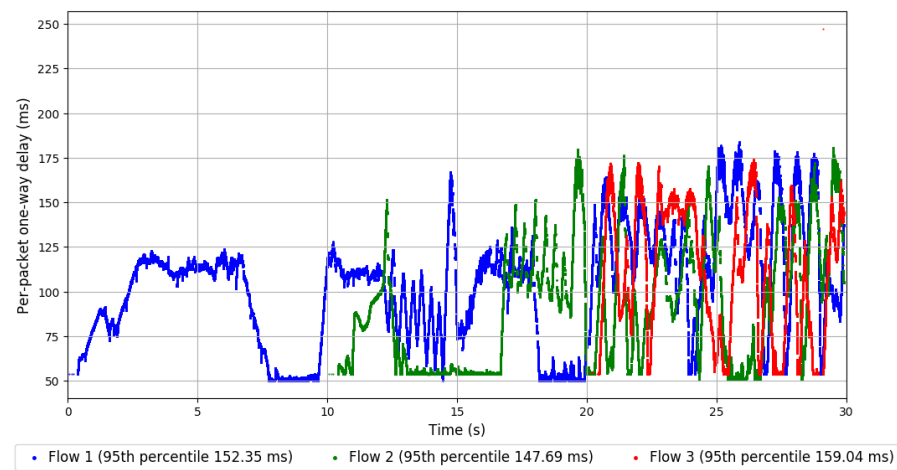
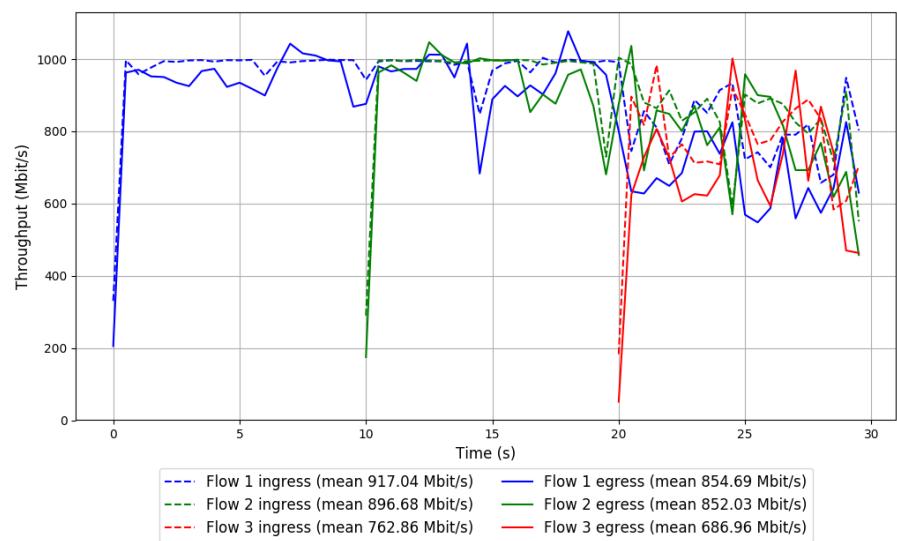
-- Flow 3:

Average throughput: 686.96 Mbit/s

95th percentile per-packet one-way delay: 159.036 ms

Loss rate: 10.90%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-28 20:45:44

End at: 2018-02-28 20:46:14

Below is generated by plot.py at 2018-03-01 03:32:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 1629.63 Mbit/s

95th percentile per-packet one-way delay: 153.042 ms

Loss rate: 8.50%

-- Flow 1:

Average throughput: 854.91 Mbit/s

95th percentile per-packet one-way delay: 148.741 ms

Loss rate: 6.74%

-- Flow 2:

Average throughput: 821.65 Mbit/s

95th percentile per-packet one-way delay: 152.623 ms

Loss rate: 8.77%

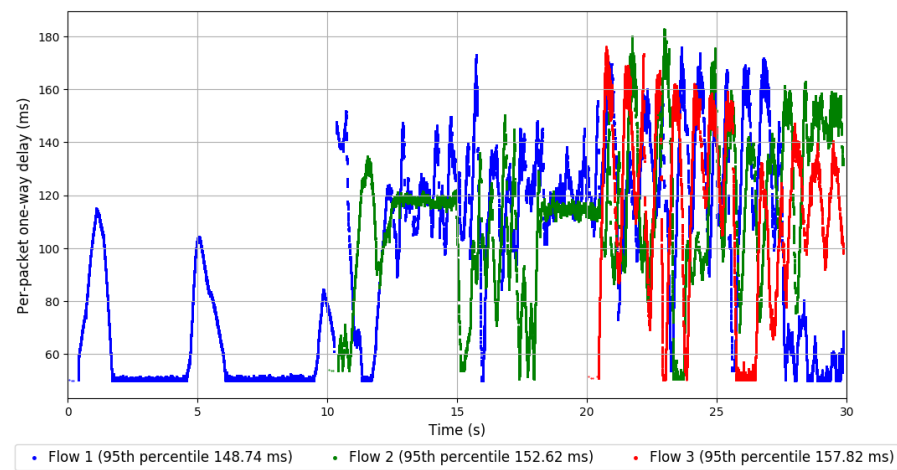
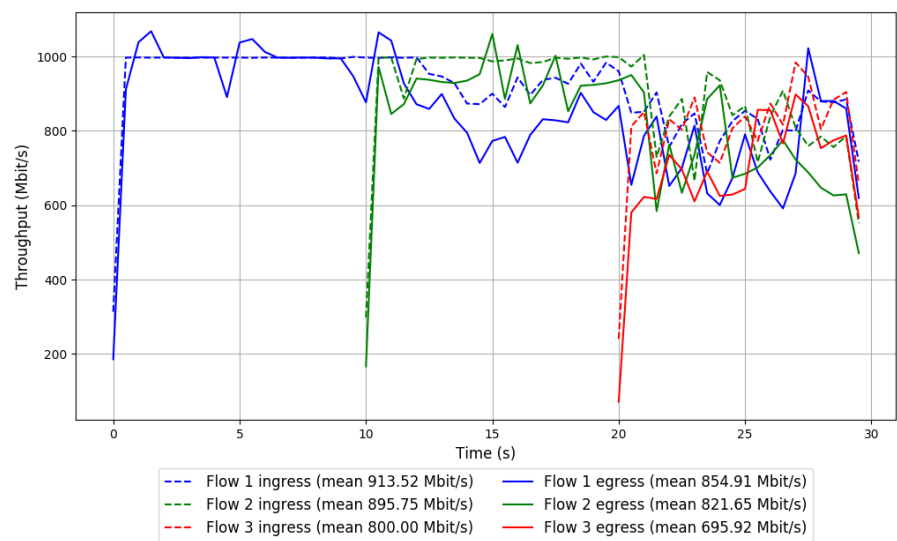
-- Flow 3:

Average throughput: 695.92 Mbit/s

95th percentile per-packet one-way delay: 157.822 ms

Loss rate: 13.94%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-28 21:03:36

End at: 2018-02-28 21:04:06

Below is generated by plot.py at 2018-03-01 03:32:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 1557.10 Mbit/s

95th percentile per-packet one-way delay: 170.990 ms

Loss rate: 10.01%

-- Flow 1:

Average throughput: 820.97 Mbit/s

95th percentile per-packet one-way delay: 231.865 ms

Loss rate: 8.17%

-- Flow 2:

Average throughput: 771.20 Mbit/s

95th percentile per-packet one-way delay: 155.282 ms

Loss rate: 10.48%

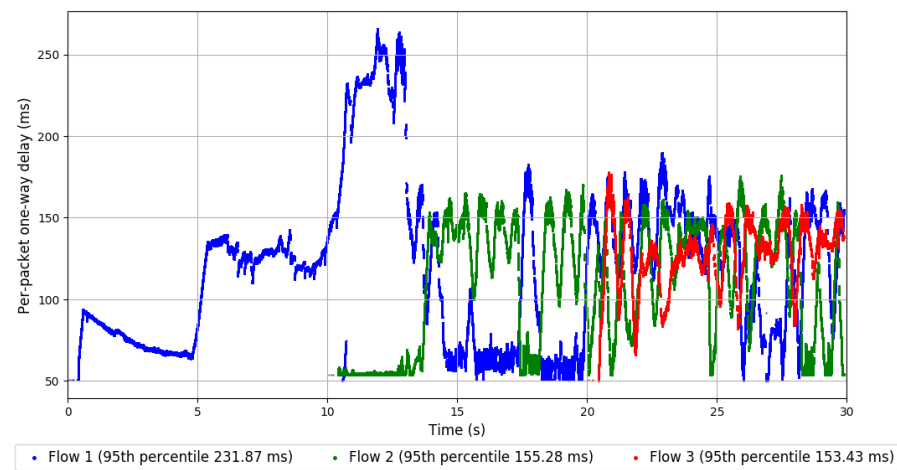
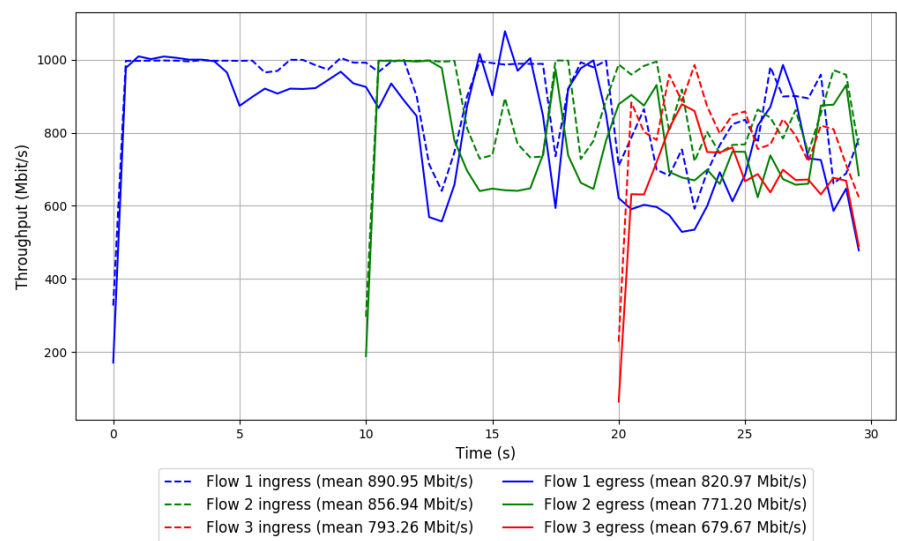
-- Flow 3:

Average throughput: 679.67 Mbit/s

95th percentile per-packet one-way delay: 153.425 ms

Loss rate: 15.21%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-28 21:21:49

End at: 2018-02-28 21:22:19

Below is generated by plot.py at 2018-03-01 03:32:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 1574.23 Mbit/s

95th percentile per-packet one-way delay: 263.266 ms

Loss rate: 8.91%

-- Flow 1:

Average throughput: 826.75 Mbit/s

95th percentile per-packet one-way delay: 261.154 ms

Loss rate: 7.14%

-- Flow 2:

Average throughput: 762.85 Mbit/s

95th percentile per-packet one-way delay: 279.370 ms

Loss rate: 10.05%

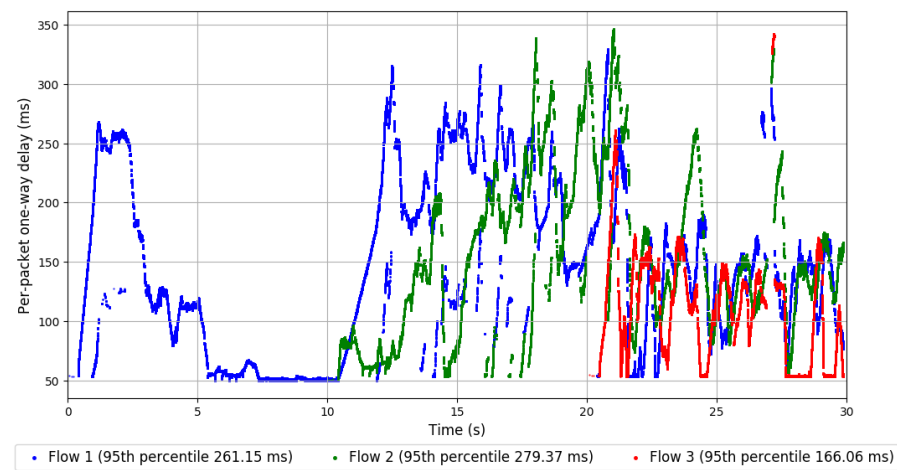
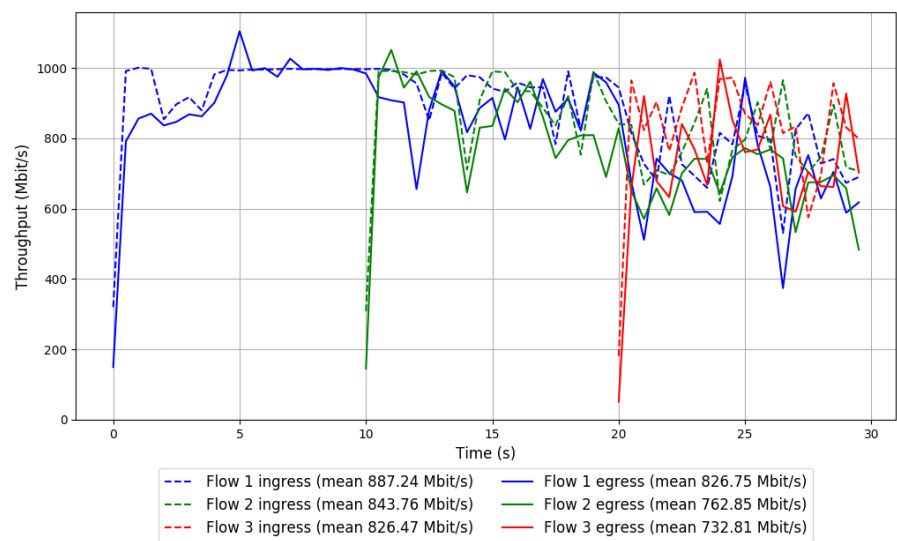
-- Flow 3:

Average throughput: 732.81 Mbit/s

95th percentile per-packet one-way delay: 166.061 ms

Loss rate: 12.28%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-28 21:39:50

End at: 2018-02-28 21:40:20

Below is generated by plot.py at 2018-03-01 03:32:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 1555.47 Mbit/s

95th percentile per-packet one-way delay: 301.298 ms

Loss rate: 7.93%

-- Flow 1:

Average throughput: 890.09 Mbit/s

95th percentile per-packet one-way delay: 146.154 ms

Loss rate: 4.79%

-- Flow 2:

Average throughput: 717.20 Mbit/s

95th percentile per-packet one-way delay: 307.882 ms

Loss rate: 11.78%

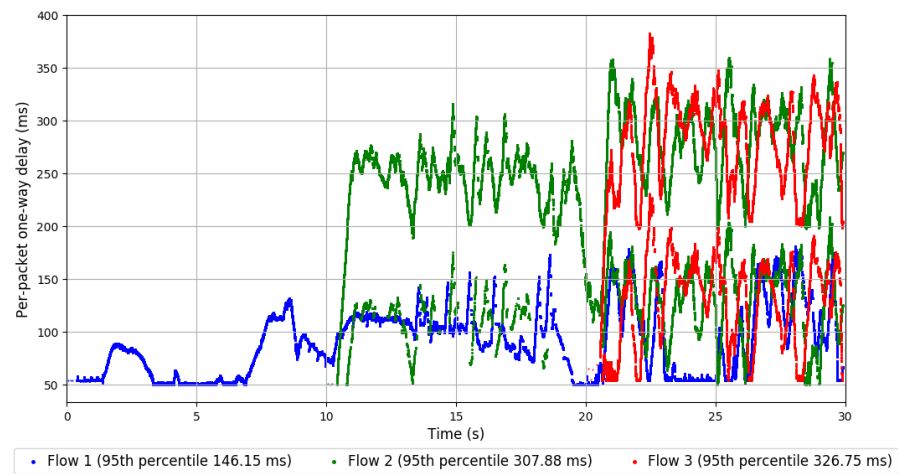
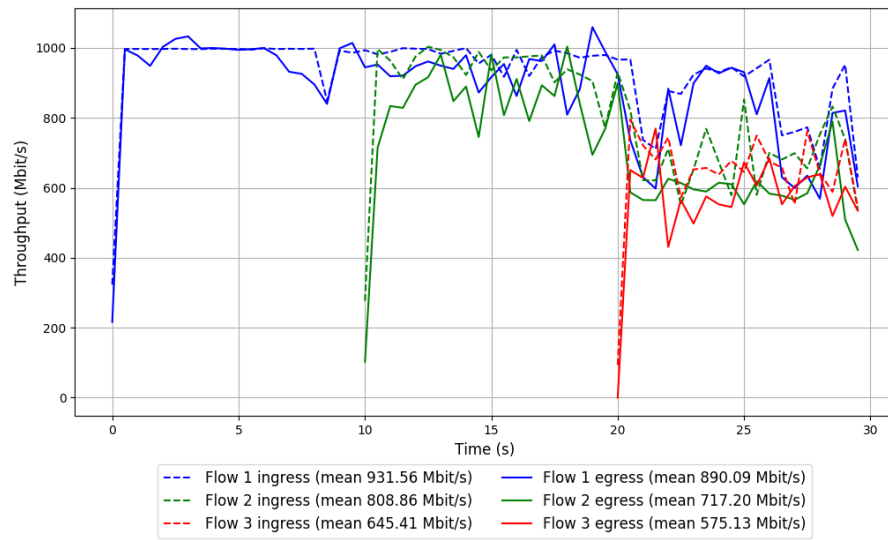
-- Flow 3:

Average throughput: 575.13 Mbit/s

95th percentile per-packet one-way delay: 326.747 ms

Loss rate: 11.93%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-28 21:57:56

End at: 2018-02-28 21:58:26

Below is generated by plot.py at 2018-03-01 03:48:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 1588.17 Mbit/s

95th percentile per-packet one-way delay: 156.813 ms

Loss rate: 9.77%

-- Flow 1:

Average throughput: 849.41 Mbit/s

95th percentile per-packet one-way delay: 146.505 ms

Loss rate: 7.20%

-- Flow 2:

Average throughput: 792.92 Mbit/s

95th percentile per-packet one-way delay: 156.539 ms

Loss rate: 10.53%

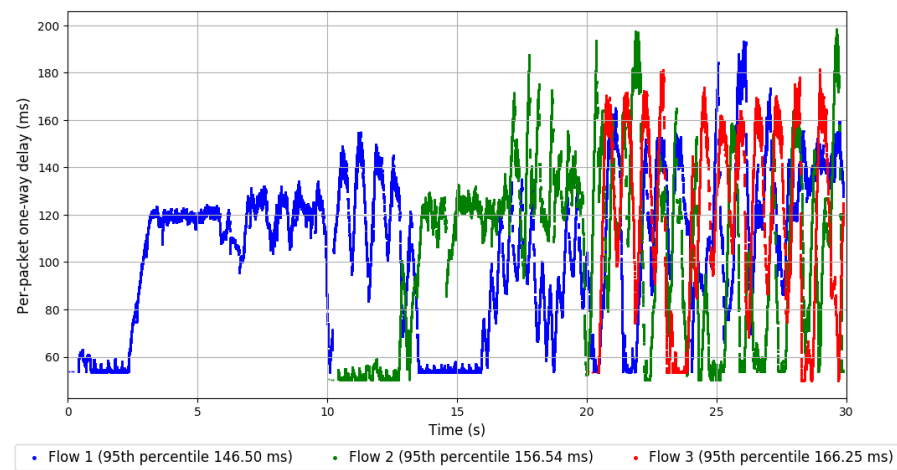
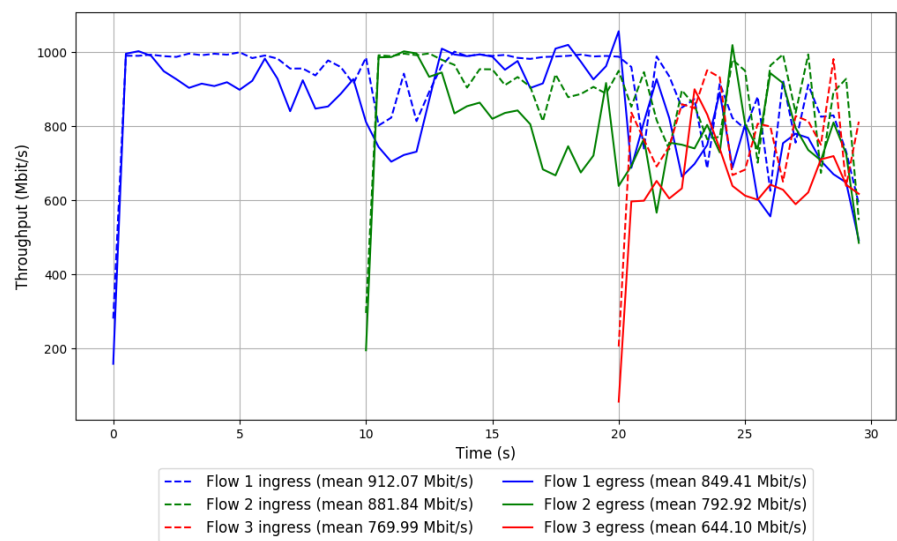
-- Flow 3:

Average throughput: 644.10 Mbit/s

95th percentile per-packet one-way delay: 166.247 ms

Loss rate: 17.23%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-28 22:15:37

End at: 2018-02-28 22:16:07

Below is generated by plot.py at 2018-03-01 04:00:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 1542.50 Mbit/s

95th percentile per-packet one-way delay: 161.364 ms

Loss rate: 9.67%

-- Flow 1:

Average throughput: 842.60 Mbit/s

95th percentile per-packet one-way delay: 174.545 ms

Loss rate: 6.80%

-- Flow 2:

Average throughput: 713.33 Mbit/s

95th percentile per-packet one-way delay: 151.568 ms

Loss rate: 13.14%

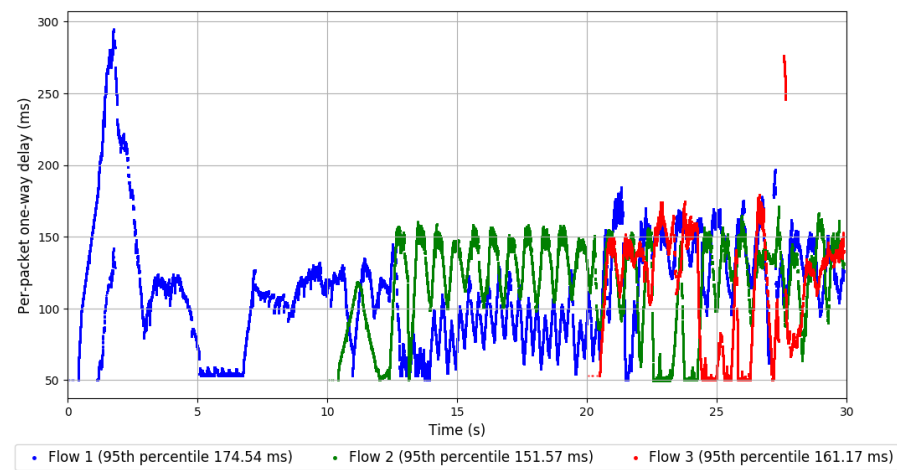
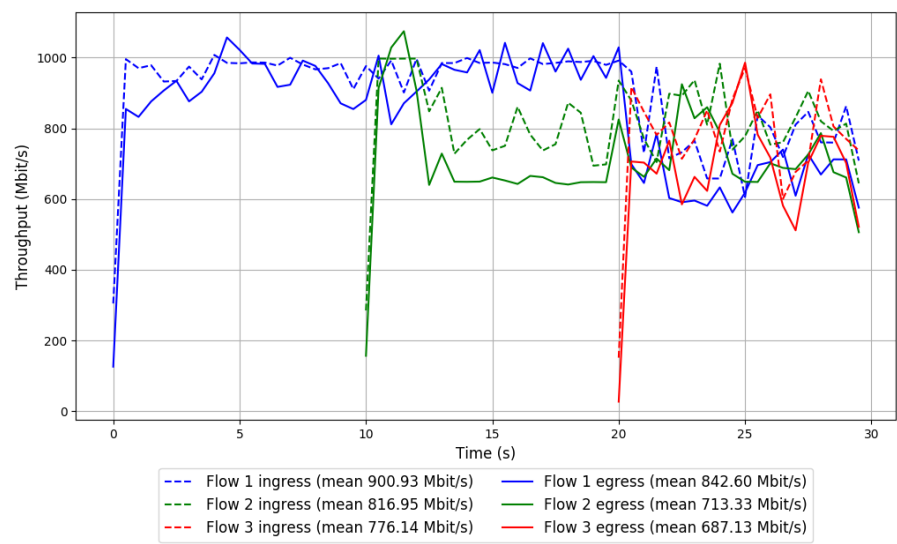
-- Flow 3:

Average throughput: 687.13 Mbit/s

95th percentile per-packet one-way delay: 161.172 ms

Loss rate: 12.42%

Run 9: Report of FillP — Data Link

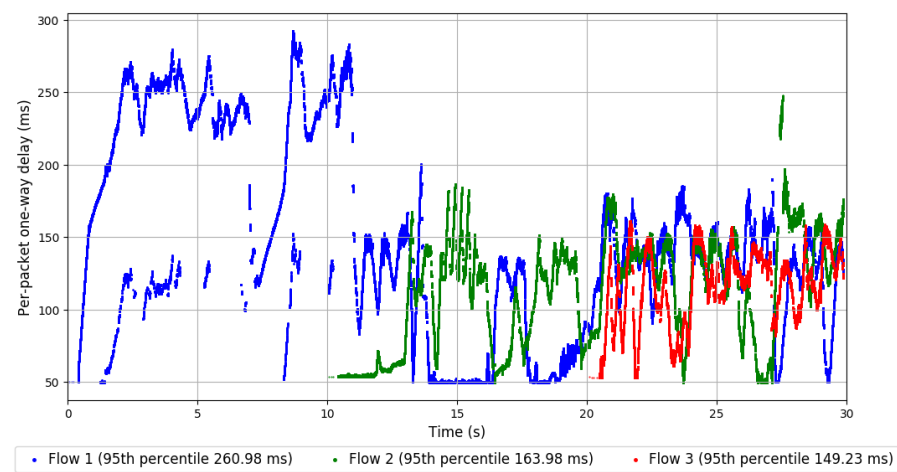
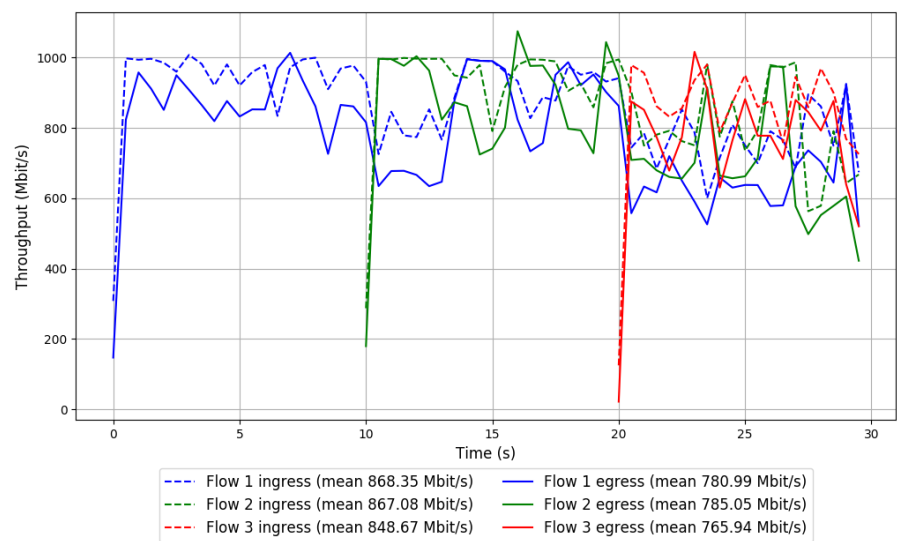


```
Run 10: Statistics of FillP

Start at: 2018-02-28 22:33:46
End at: 2018-02-28 22:34:16

# Below is generated by plot.py at 2018-03-01 04:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1554.10 Mbit/s
95th percentile per-packet one-way delay: 252.804 ms
Loss rate: 10.29%
-- Flow 1:
Average throughput: 780.99 Mbit/s
95th percentile per-packet one-way delay: 260.983 ms
Loss rate: 10.37%
-- Flow 2:
Average throughput: 785.05 Mbit/s
95th percentile per-packet one-way delay: 163.983 ms
Loss rate: 9.95%
-- Flow 3:
Average throughput: 765.94 Mbit/s
95th percentile per-packet one-way delay: 149.234 ms
Loss rate: 10.73%
```

Run 10: Report of FillP — Data Link

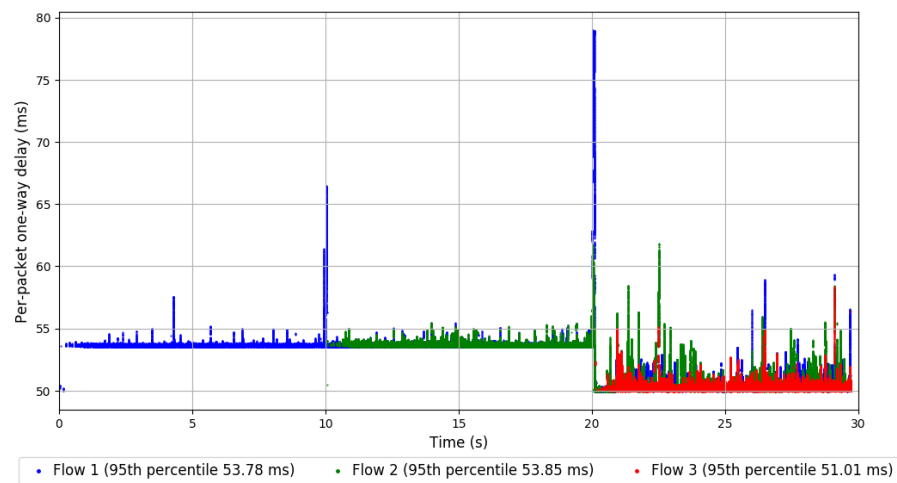
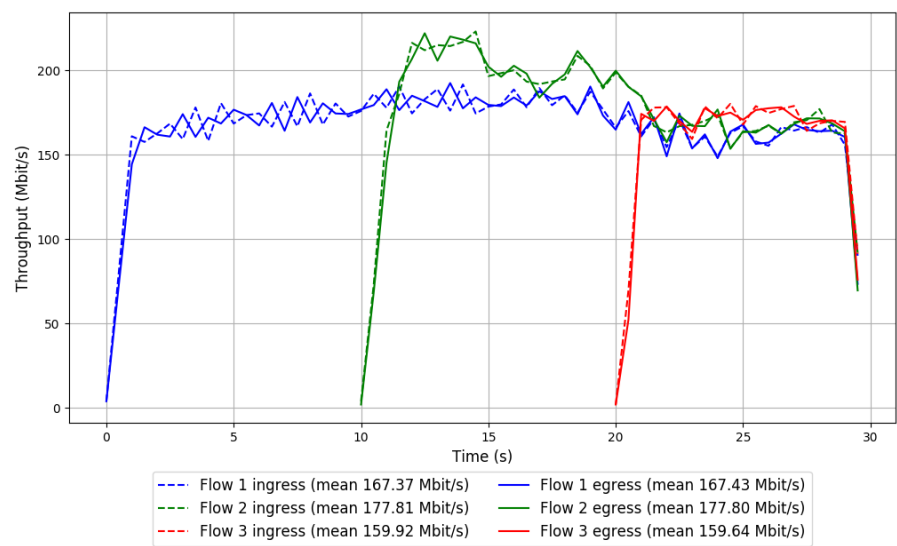


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-28 20:01:21
End at: 2018-02-28 20:01:51

# Below is generated by plot.py at 2018-03-01 04:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 336.66 Mbit/s
95th percentile per-packet one-way delay: 53.781 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 167.43 Mbit/s
95th percentile per-packet one-way delay: 53.778 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 177.80 Mbit/s
95th percentile per-packet one-way delay: 53.855 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 159.64 Mbit/s
95th percentile per-packet one-way delay: 51.006 ms
Loss rate: 1.15%
```

Run 1: Report of Indigo-1-32 — Data Link

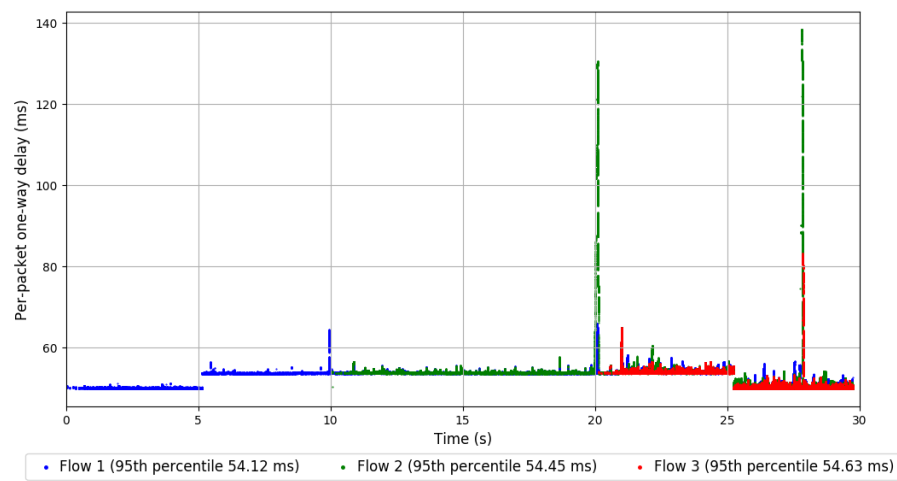
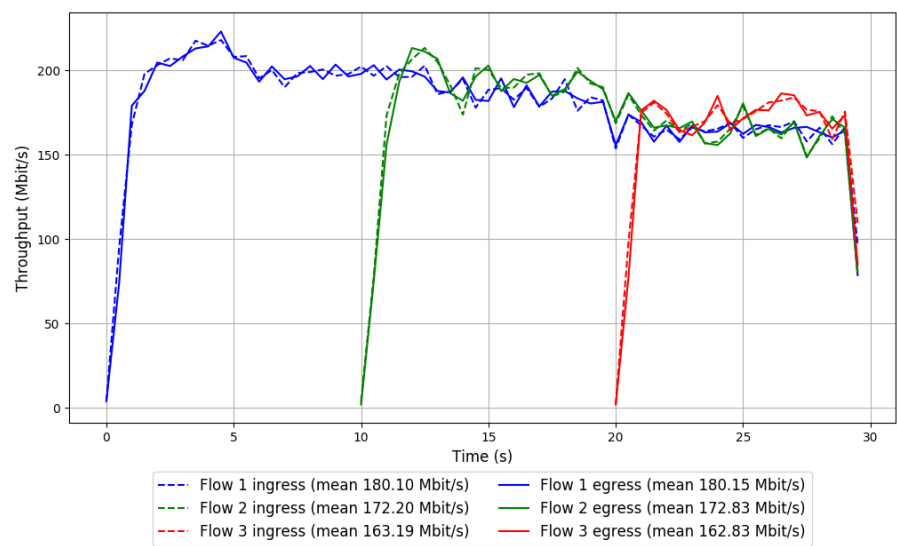


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-28 20:19:26
End at: 2018-02-28 20:19:56

# Below is generated by plot.py at 2018-03-01 04:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 347.23 Mbit/s
95th percentile per-packet one-way delay: 54.324 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 180.15 Mbit/s
95th percentile per-packet one-way delay: 54.117 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 172.83 Mbit/s
95th percentile per-packet one-way delay: 54.454 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 162.83 Mbit/s
95th percentile per-packet one-way delay: 54.627 ms
Loss rate: 1.29%
```

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-28 20:37:34

End at: 2018-02-28 20:38:04

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 364.76 Mbit/s

95th percentile per-packet one-way delay: 54.907 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 200.39 Mbit/s

95th percentile per-packet one-way delay: 54.669 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 174.87 Mbit/s

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

Loss rate: 0.59%

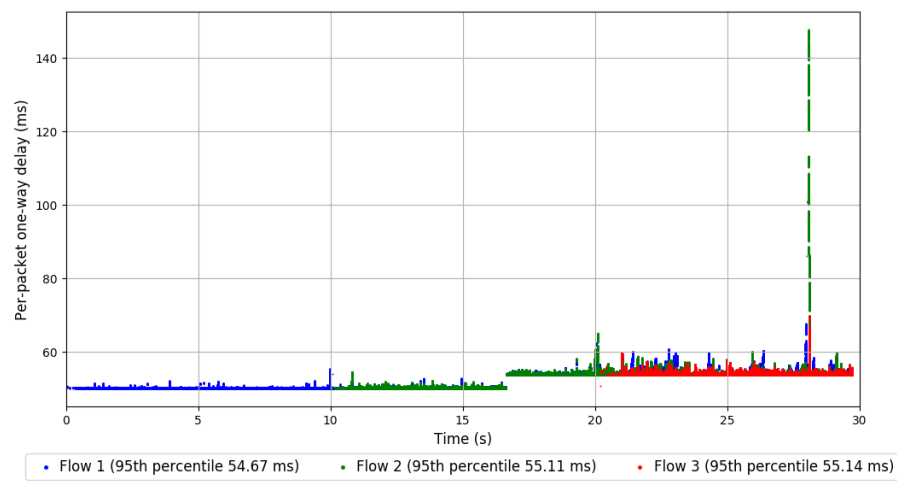
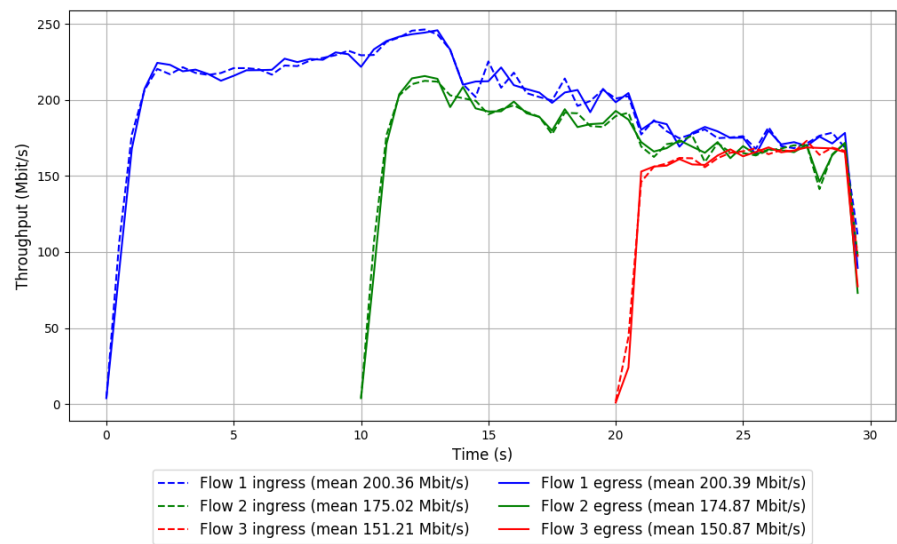
-- Flow 3:

Average throughput: 150.87 Mbit/s

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

Loss rate: 1.28%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-28 20:55:28

End at: 2018-02-28 20:55:58

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 375.77 Mbit/s

95th percentile per-packet one-way delay: 52.169 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 197.95 Mbit/s

95th percentile per-packet one-way delay: 51.409 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 189.65 Mbit/s

95th percentile per-packet one-way delay: 52.903 ms

Loss rate: 0.50%

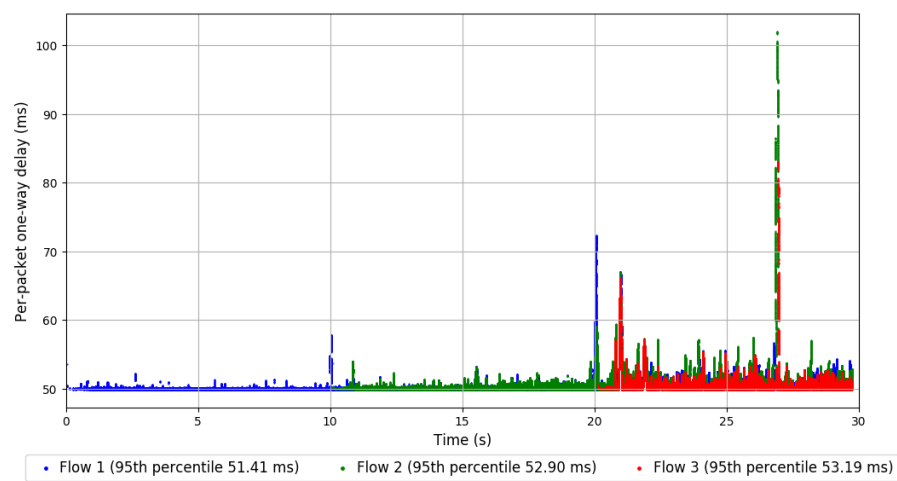
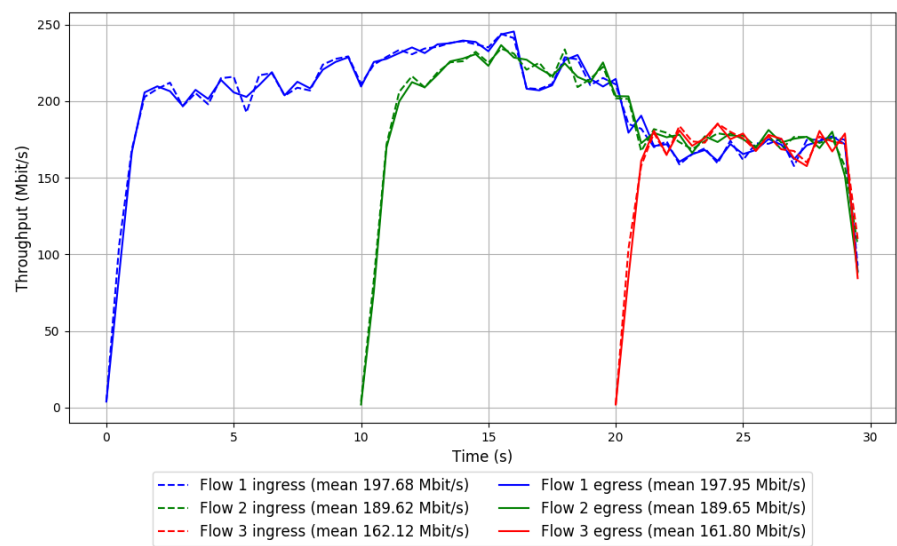
-- Flow 3:

Average throughput: 161.80 Mbit/s

95th percentile per-packet one-way delay: 53.185 ms

Loss rate: 1.25%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-28 21:13:17

End at: 2018-02-28 21:13:47

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 352.81 Mbit/s

95th percentile per-packet one-way delay: 54.199 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 189.01 Mbit/s

95th percentile per-packet one-way delay: 54.055 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 175.64 Mbit/s

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

Loss rate: 0.50%

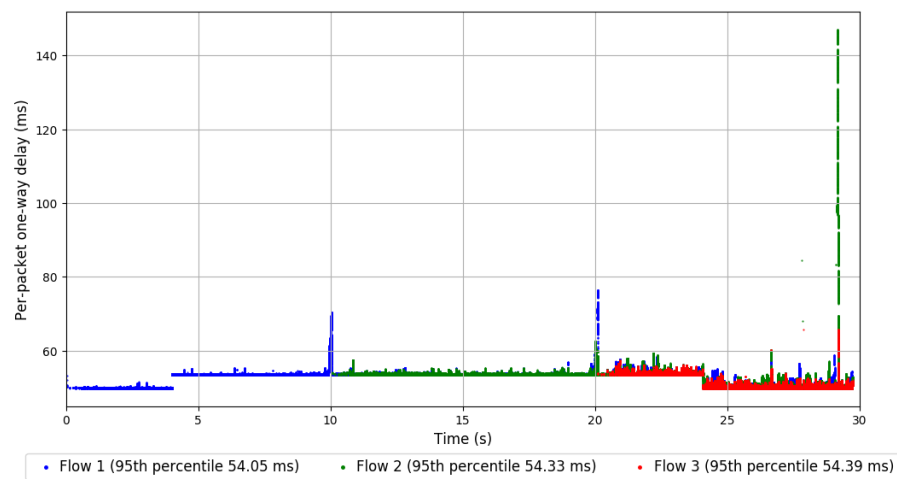
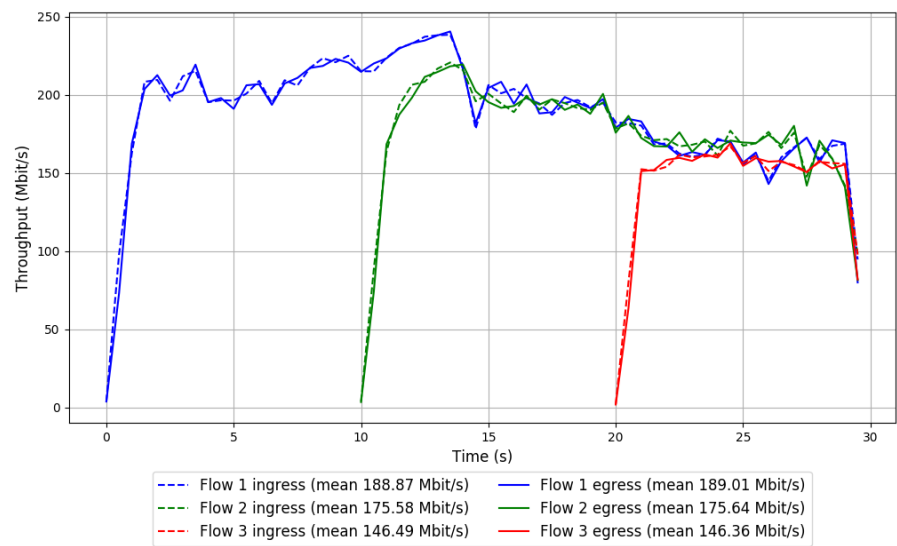
-- Flow 3:

Average throughput: 146.36 Mbit/s

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

Loss rate: 1.17%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-28 21:31:35

End at: 2018-02-28 21:32:05

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 356.61 Mbit/s

95th percentile per-packet one-way delay: 54.836 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 192.51 Mbit/s

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

Loss rate: 0.29%

-- Flow 2:

Average throughput: 170.07 Mbit/s

95th percentile per-packet one-way delay: 55.133 ms

Loss rate: 0.53%

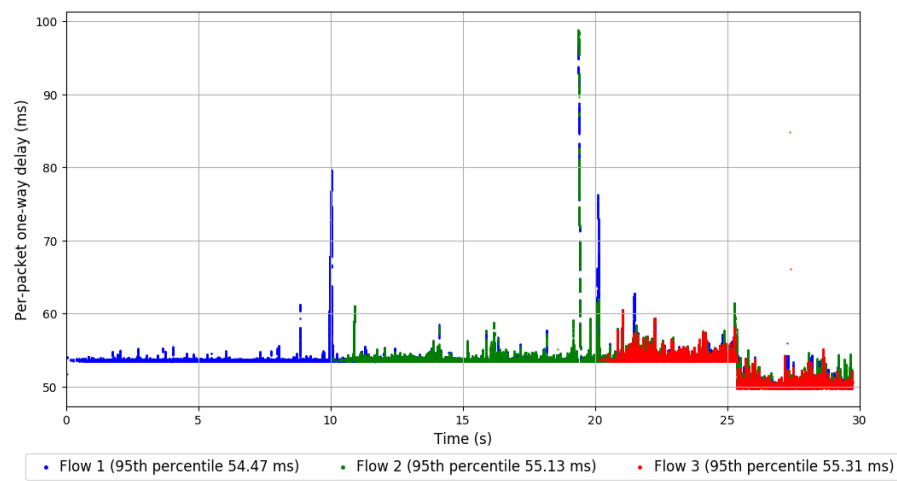
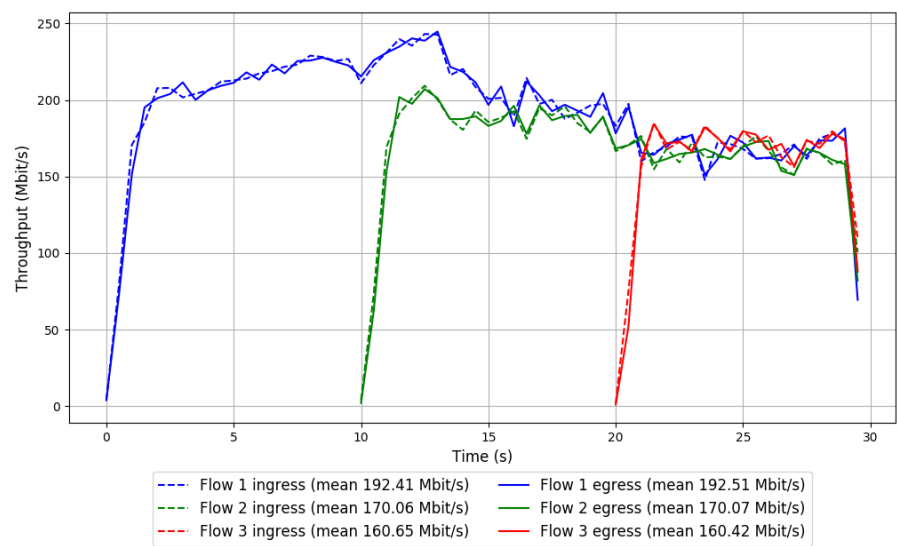
-- Flow 3:

Average throughput: 160.42 Mbit/s

95th percentile per-packet one-way delay: 55.315 ms

Loss rate: 1.22%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-28 21:49:41

End at: 2018-02-28 21:50:11

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.65 Mbit/s

95th percentile per-packet one-way delay: 53.682 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 167.05 Mbit/s

95th percentile per-packet one-way delay: 53.649 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 171.50 Mbit/s

95th percentile per-packet one-way delay: 53.853 ms

Loss rate: 0.51%

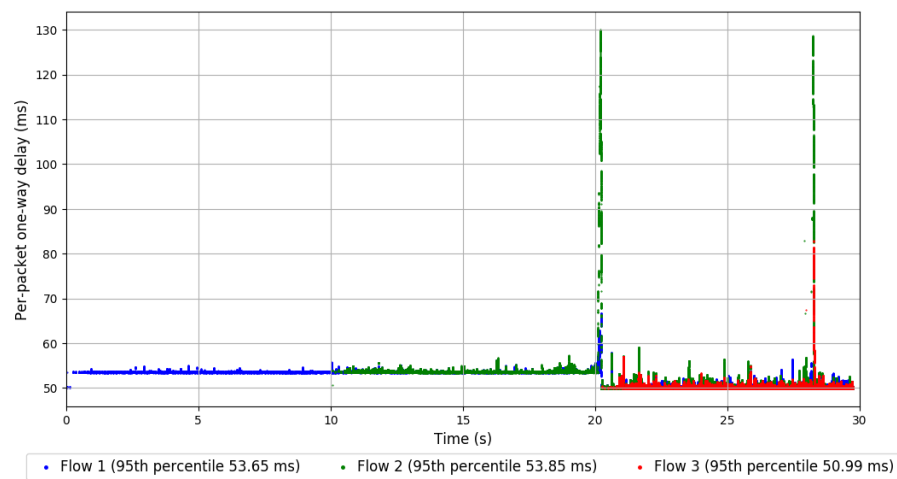
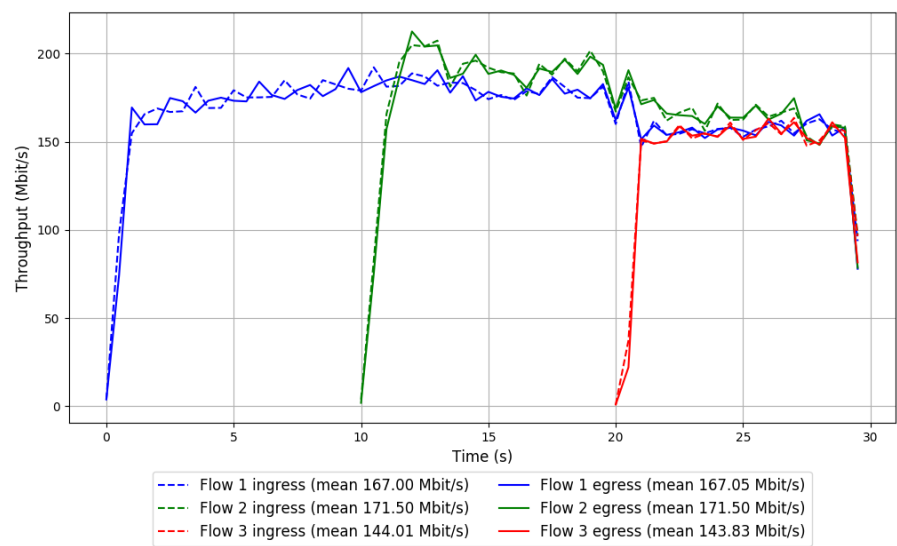
-- Flow 3:

Average throughput: 143.83 Mbit/s

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

Loss rate: 1.18%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-28 22:07:38

End at: 2018-02-28 22:08:08

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 348.08 Mbit/s

95th percentile per-packet one-way delay: 55.038 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 187.70 Mbit/s

95th percentile per-packet one-way delay: 55.080 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 169.37 Mbit/s

95th percentile per-packet one-way delay: 54.928 ms

Loss rate: 0.51%

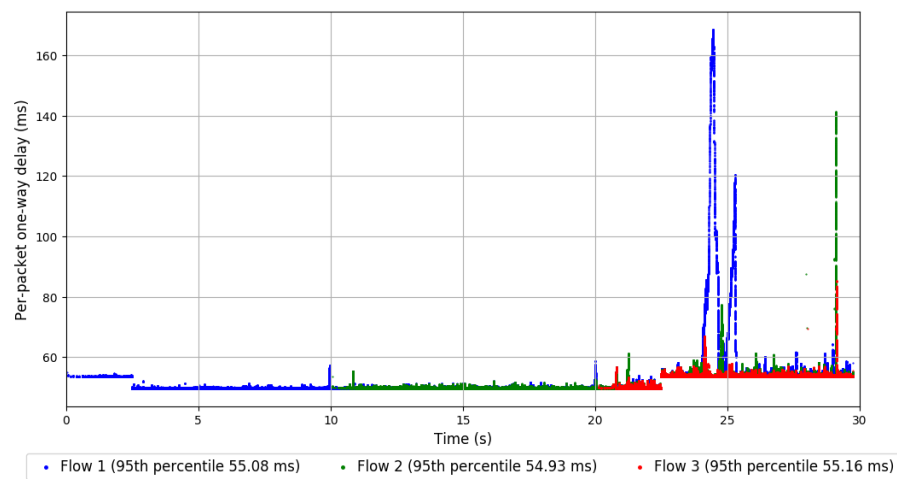
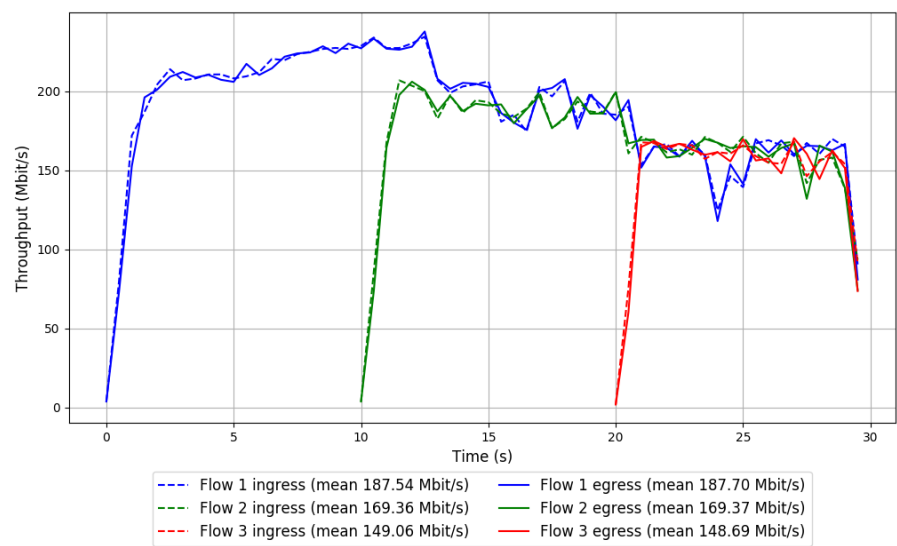
-- Flow 3:

Average throughput: 148.69 Mbit/s

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

Loss rate: 1.25%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-28 22:25:18

End at: 2018-02-28 22:25:48

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 361.71 Mbit/s

95th percentile per-packet one-way delay: 54.471 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 194.73 Mbit/s

95th percentile per-packet one-way delay: 54.102 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 173.68 Mbit/s

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

Loss rate: 0.48%

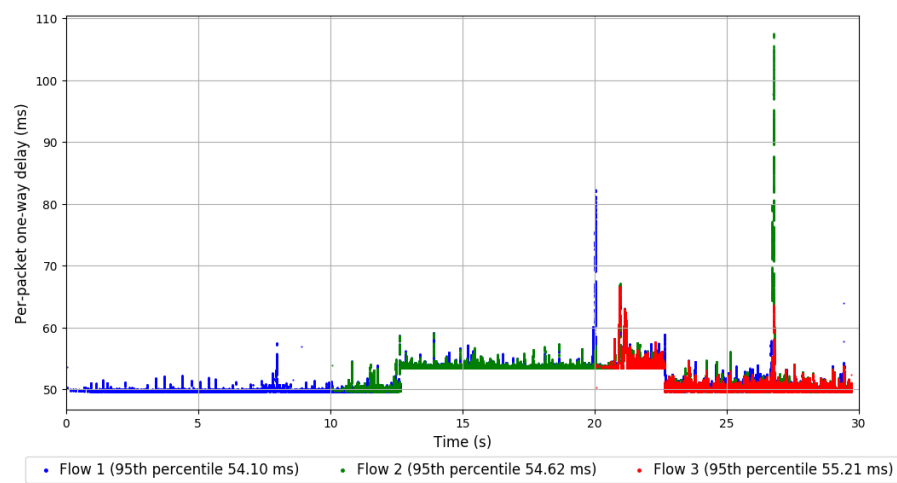
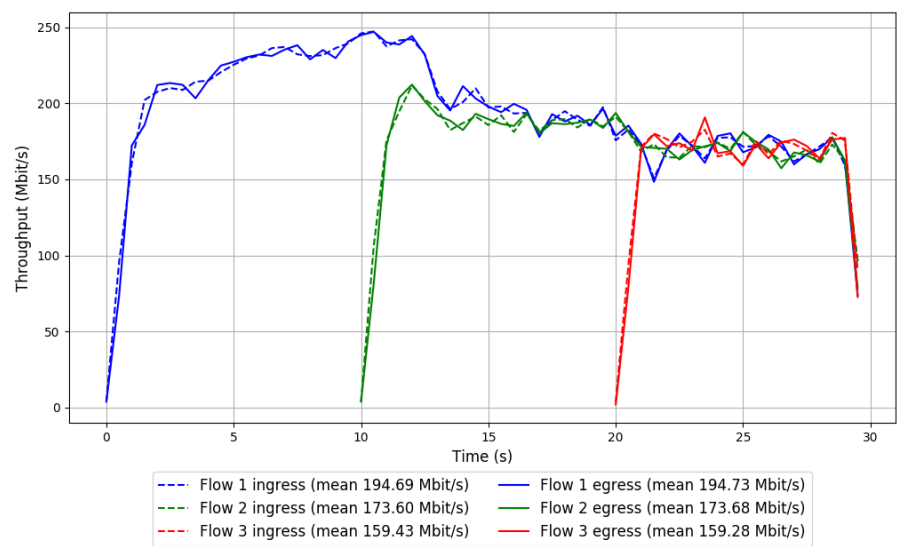
-- Flow 3:

Average throughput: 159.28 Mbit/s

95th percentile per-packet one-way delay: 55.214 ms

Loss rate: 1.11%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-28 22:43:25

End at: 2018-02-28 22:43:55

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 356.92 Mbit/s

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

Loss rate: 0.44%

-- Flow 1:

Average throughput: 194.02 Mbit/s

95th percentile per-packet one-way delay: 51.084 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 172.62 Mbit/s

95th percentile per-packet one-way delay: 52.109 ms

Loss rate: 0.49%

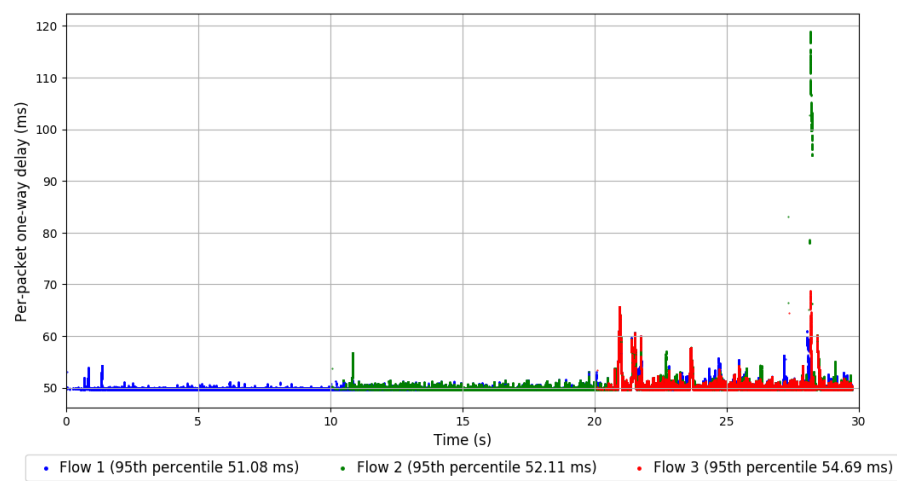
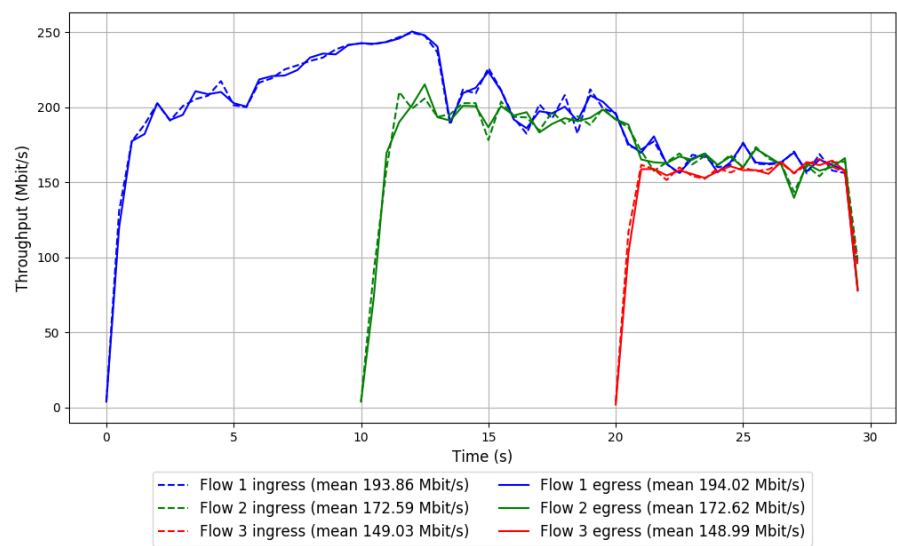
-- Flow 3:

Average throughput: 148.99 Mbit/s

95th percentile per-packet one-way delay: 54.694 ms

Loss rate: 1.06%

Run 10: Report of Indigo-1-32 — Data Link

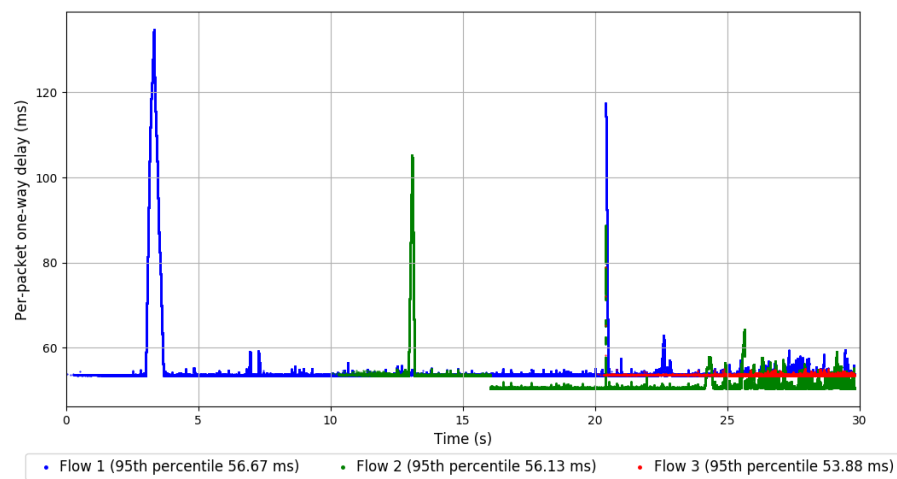
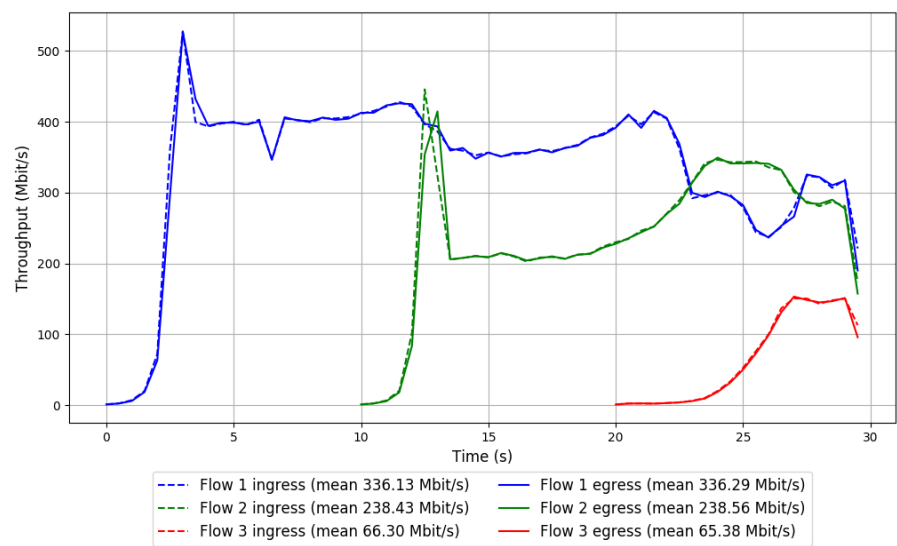


```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-28 19:49:05
End at: 2018-02-28 19:49:35

# Below is generated by plot.py at 2018-03-01 04:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 515.89 Mbit/s
95th percentile per-packet one-way delay: 56.279 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 336.29 Mbit/s
95th percentile per-packet one-way delay: 56.672 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 238.56 Mbit/s
95th percentile per-packet one-way delay: 56.135 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 65.38 Mbit/s
95th percentile per-packet one-way delay: 53.882 ms
Loss rate: 2.46%
```


Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-28 20:06:59

End at: 2018-02-28 20:07:29

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 524.91 Mbit/s

95th percentile per-packet one-way delay: 68.809 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 334.50 Mbit/s

95th percentile per-packet one-way delay: 55.743 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 262.97 Mbit/s

95th percentile per-packet one-way delay: 79.332 ms

Loss rate: 0.82%

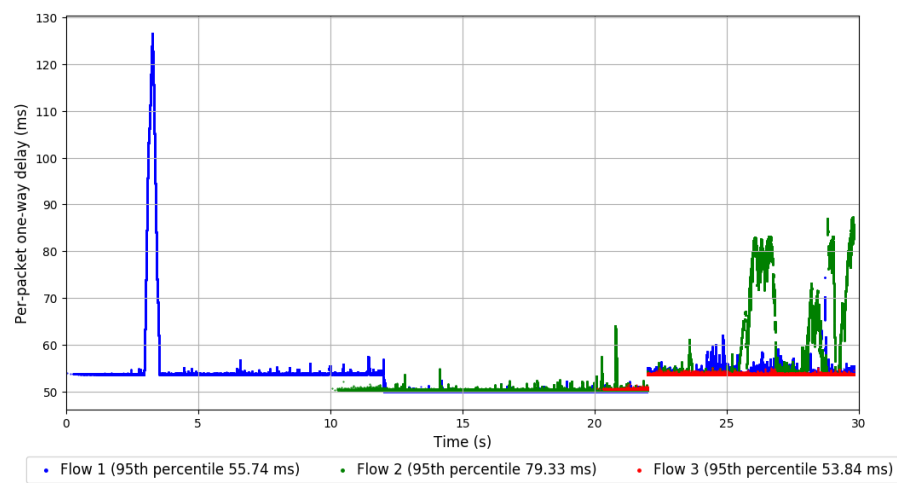
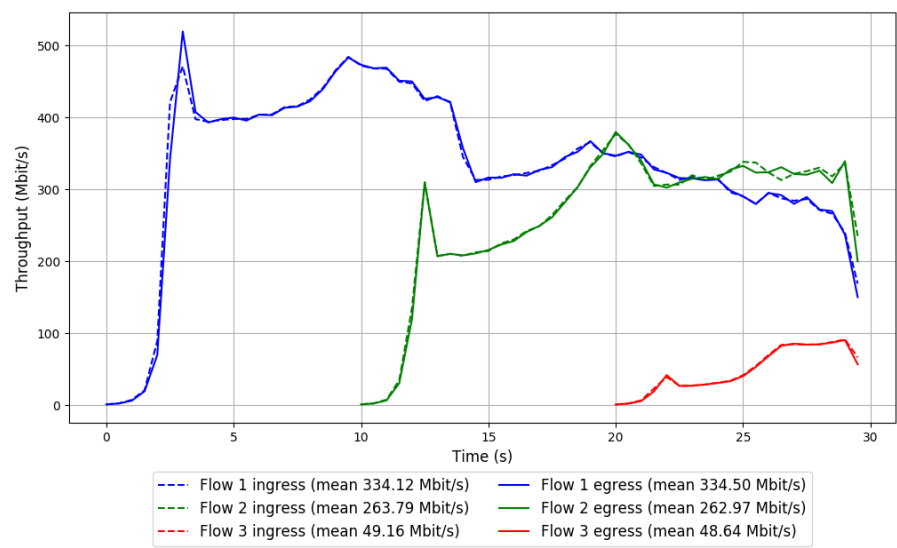
-- Flow 3:

Average throughput: 48.64 Mbit/s

95th percentile per-packet one-way delay: 53.844 ms

Loss rate: 2.07%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-28 20:25:07

End at: 2018-02-28 20:25:37

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 535.88 Mbit/s

95th percentile per-packet one-way delay: 59.194 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 333.05 Mbit/s

95th percentile per-packet one-way delay: 104.417 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 278.57 Mbit/s

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

Loss rate: 0.48%

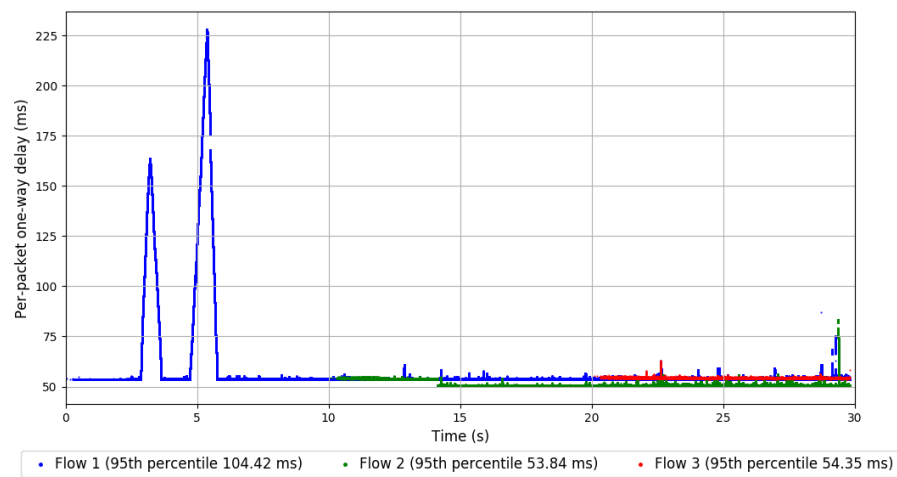
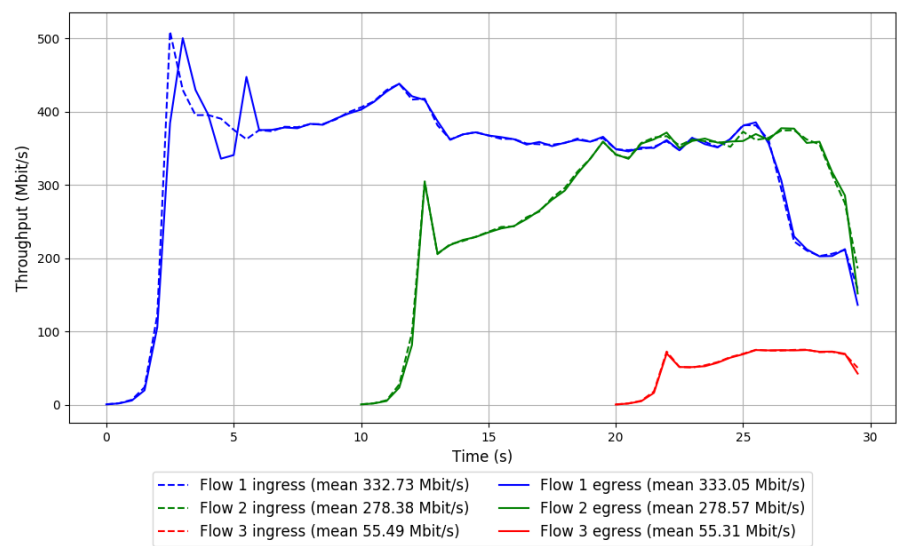
-- Flow 3:

Average throughput: 55.31 Mbit/s

95th percentile per-packet one-way delay: 54.350 ms

Loss rate: 1.39%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-28 20:43:00

End at: 2018-02-28 20:43:30

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 613.13 Mbit/s

95th percentile per-packet one-way delay: 73.300 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 363.68 Mbit/s

95th percentile per-packet one-way delay: 171.383 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 295.29 Mbit/s

95th percentile per-packet one-way delay: 57.076 ms

Loss rate: 0.66%

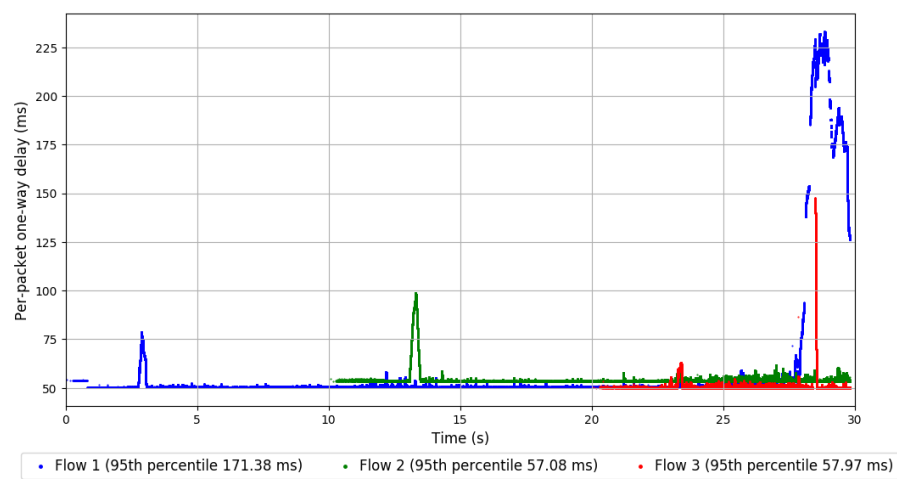
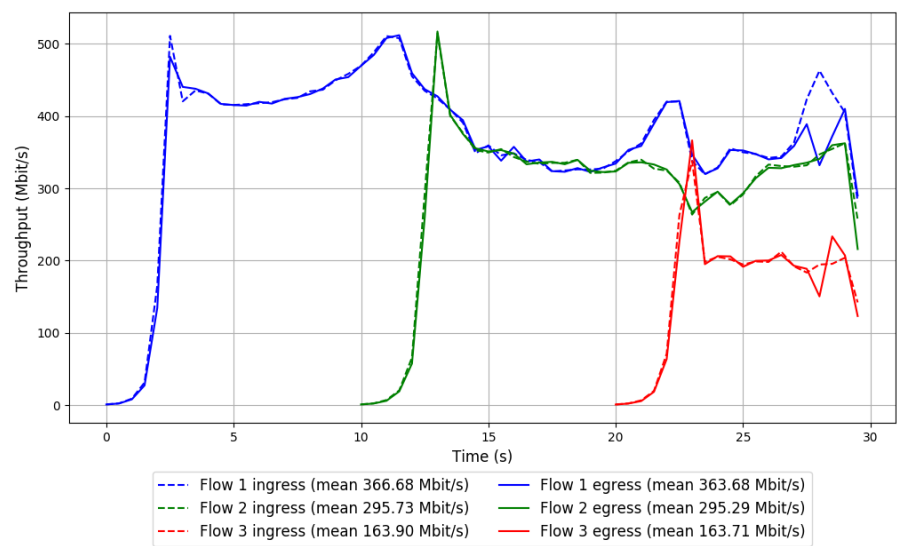
-- Flow 3:

Average throughput: 163.71 Mbit/s

95th percentile per-packet one-way delay: 57.968 ms

Loss rate: 1.14%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-28 21:00:54

End at: 2018-02-28 21:01:24

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 561.21 Mbit/s

95th percentile per-packet one-way delay: 63.695 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 312.35 Mbit/s

95th percentile per-packet one-way delay: 55.503 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 324.36 Mbit/s

95th percentile per-packet one-way delay: 78.284 ms

Loss rate: 0.49%

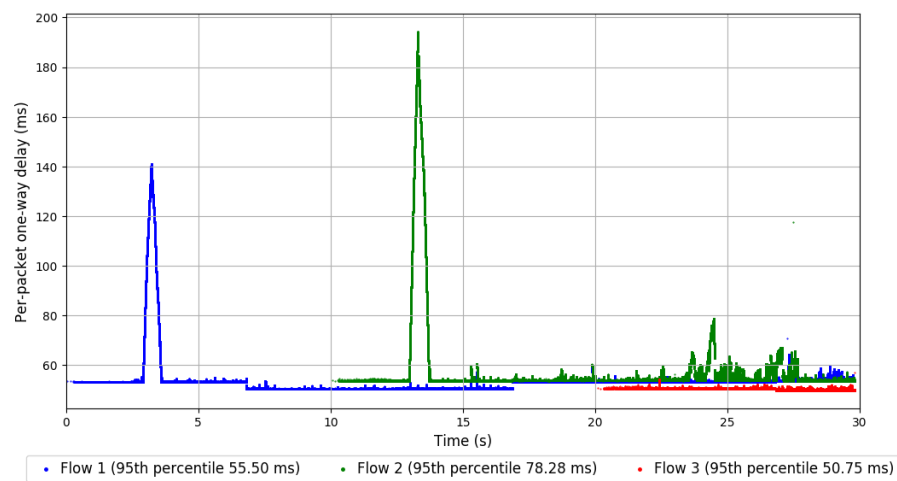
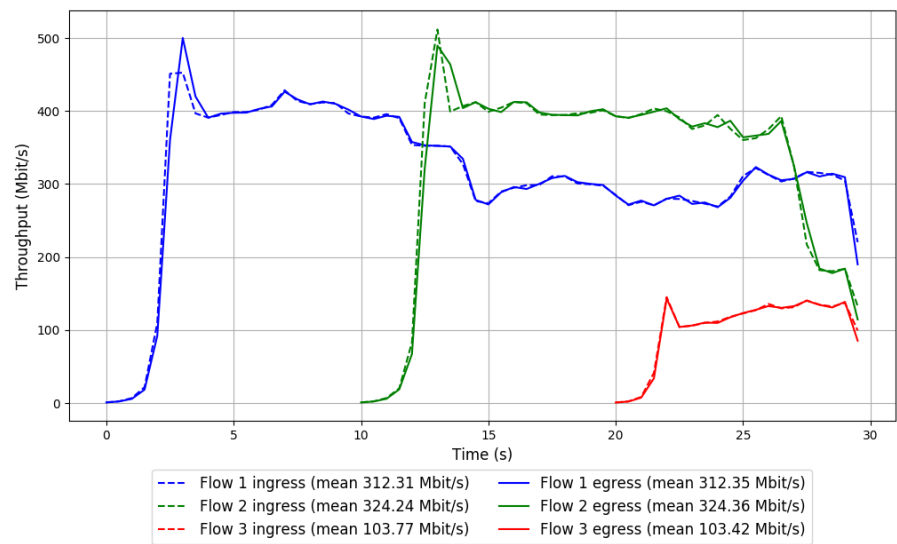
-- Flow 3:

Average throughput: 103.42 Mbit/s

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

Loss rate: 1.34%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-28 21:19:11

End at: 2018-02-28 21:19:41

Below is generated by plot.py at 2018-03-01 04:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 504.27 Mbit/s

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

Loss rate: 0.54%

-- Flow 1:

Average throughput: 278.57 Mbit/s

95th percentile per-packet one-way delay: 53.848 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 262.10 Mbit/s

95th percentile per-packet one-way delay: 54.016 ms

Loss rate: 0.60%

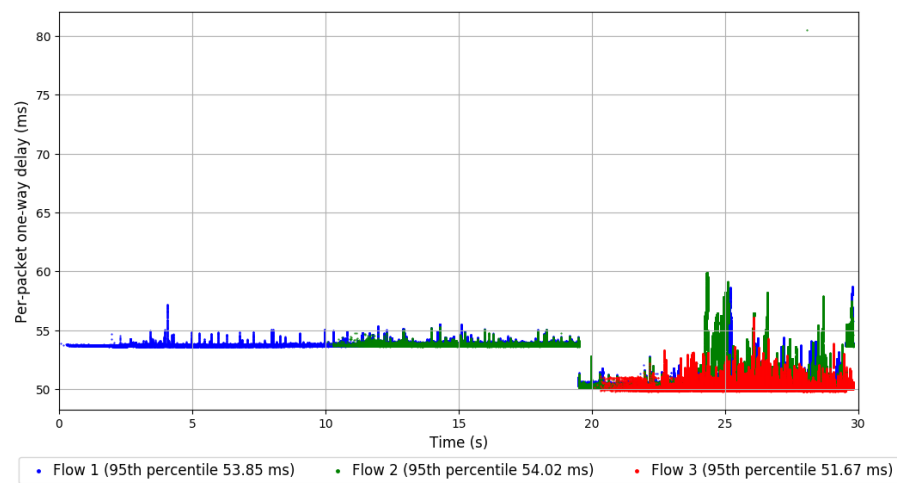
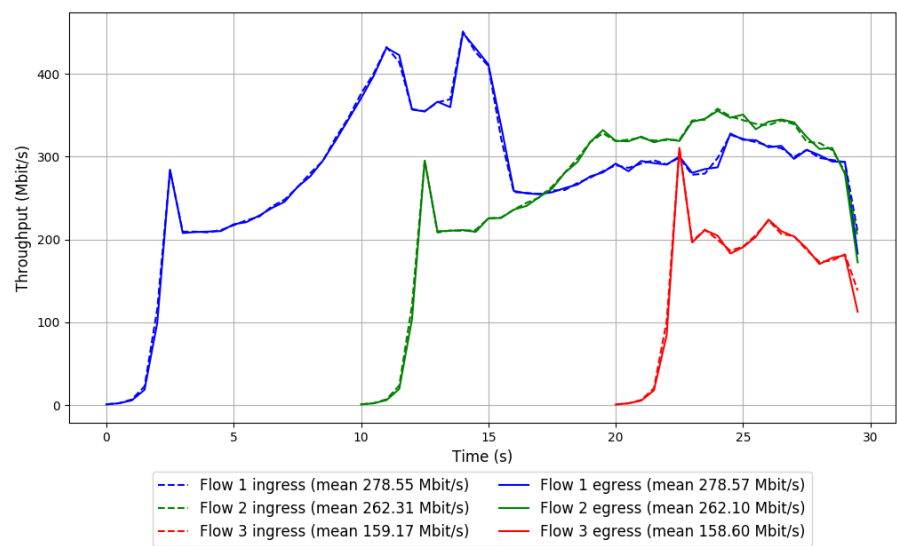
-- Flow 3:

Average throughput: 158.60 Mbit/s

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

Loss rate: 1.38%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-28 21:37:10

End at: 2018-02-28 21:37:40

Below is generated by plot.py at 2018-03-01 04:01:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 518.99 Mbit/s

95th percentile per-packet one-way delay: 87.196 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 308.44 Mbit/s

95th percentile per-packet one-way delay: 80.306 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 238.66 Mbit/s

95th percentile per-packet one-way delay: 105.252 ms

Loss rate: 2.13%

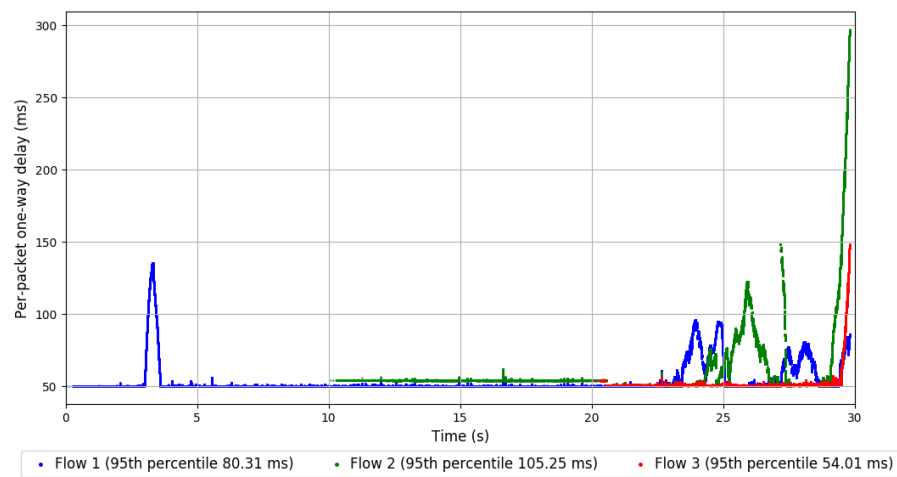
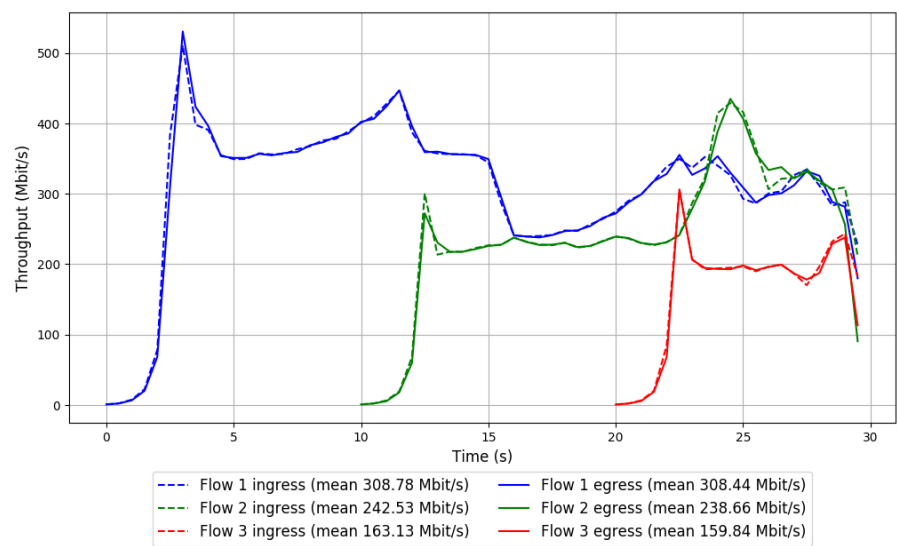
-- Flow 3:

Average throughput: 159.84 Mbit/s

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

Loss rate: 3.08%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-28 21:55:16

End at: 2018-02-28 21:55:46

Below is generated by plot.py at 2018-03-01 04:01:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 537.89 Mbit/s

95th percentile per-packet one-way delay: 61.662 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 305.72 Mbit/s

95th percentile per-packet one-way delay: 83.218 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 311.63 Mbit/s

95th percentile per-packet one-way delay: 59.234 ms

Loss rate: 0.54%

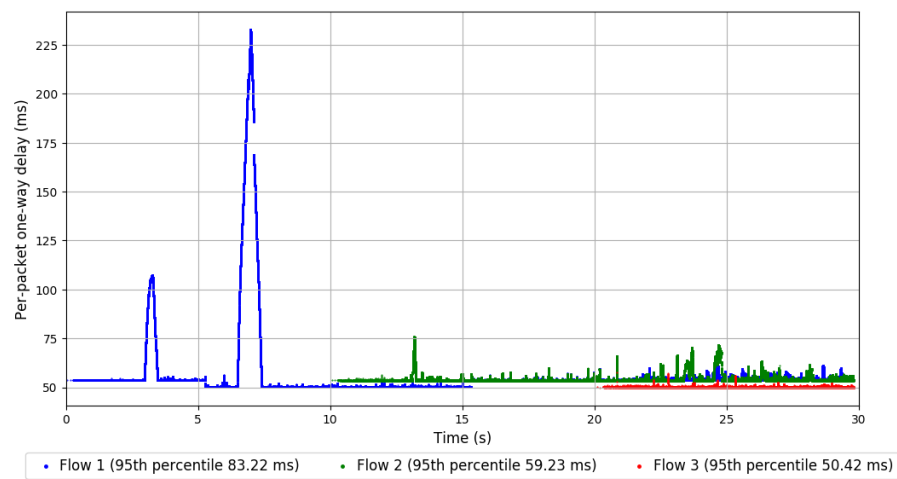
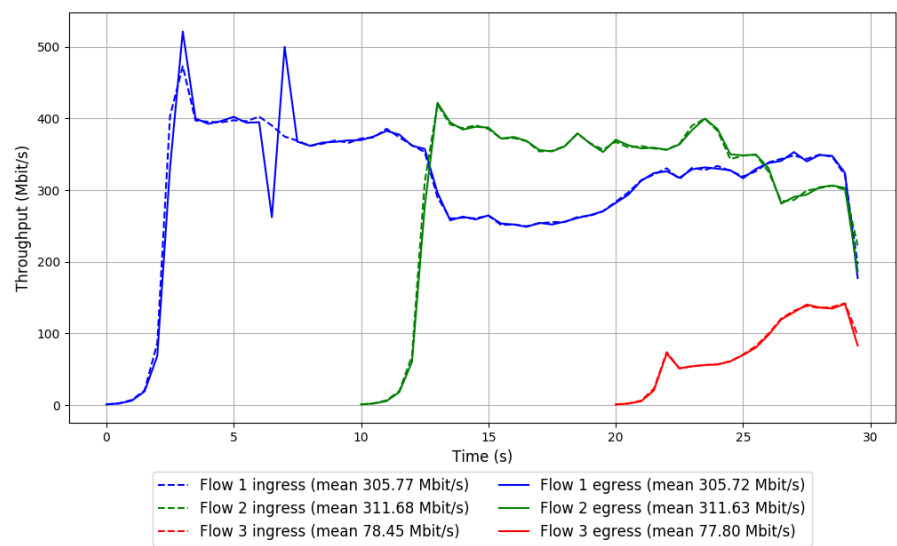
-- Flow 3:

Average throughput: 77.80 Mbit/s

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

Loss rate: 1.84%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-28 22:12:55

End at: 2018-02-28 22:13:25

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 568.64 Mbit/s

95th percentile per-packet one-way delay: 59.827 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 383.25 Mbit/s

95th percentile per-packet one-way delay: 63.078 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 266.36 Mbit/s

95th percentile per-packet one-way delay: 51.389 ms

Loss rate: 0.58%

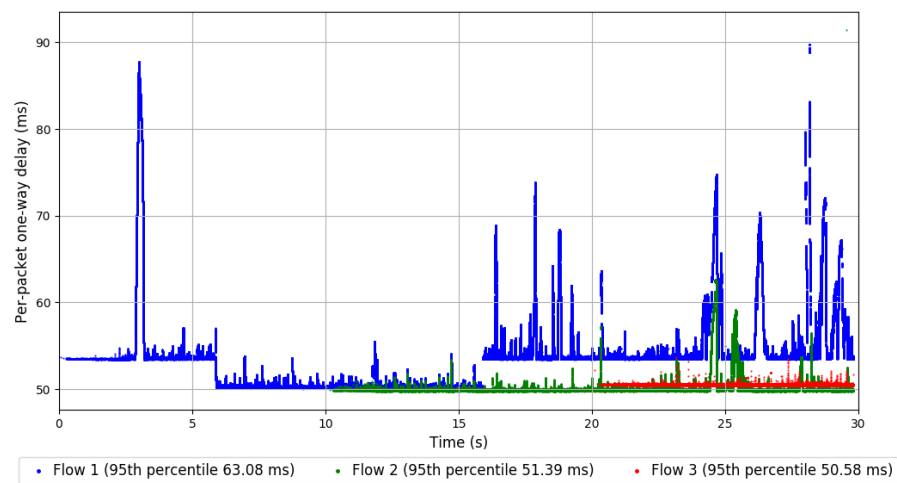
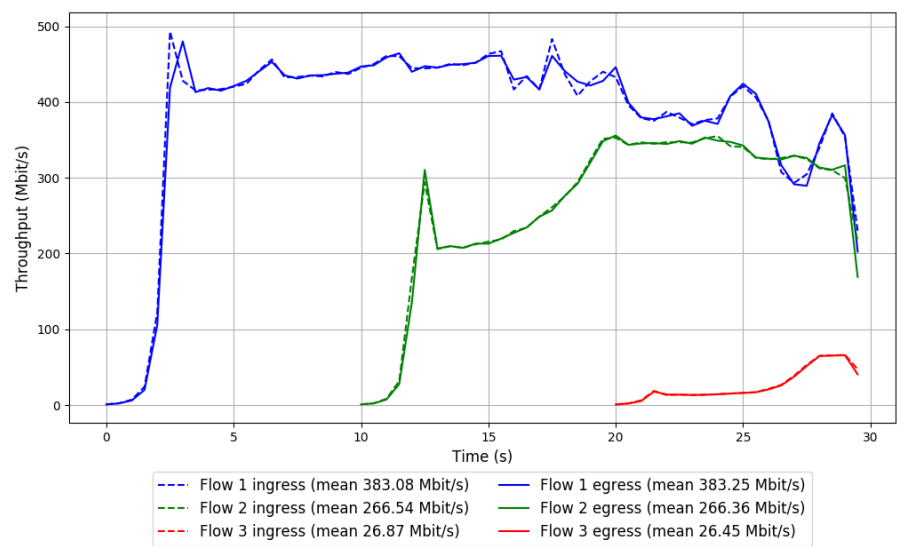
-- Flow 3:

Average throughput: 26.45 Mbit/s

95th percentile per-packet one-way delay: 50.583 ms

Loss rate: 2.58%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-28 22:31:08

End at: 2018-02-28 22:31:38

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 504.24 Mbit/s

95th percentile per-packet one-way delay: 54.197 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 320.53 Mbit/s

95th percentile per-packet one-way delay: 54.145 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 237.58 Mbit/s

95th percentile per-packet one-way delay: 54.575 ms

Loss rate: 0.72%

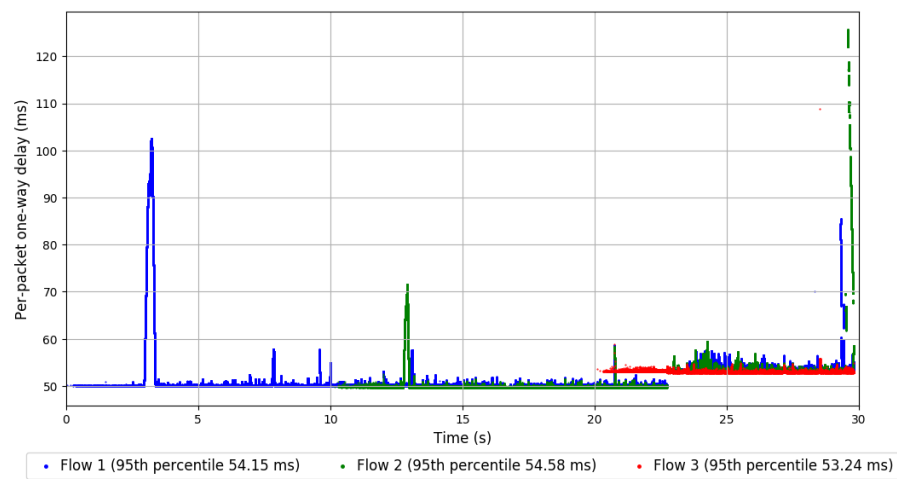
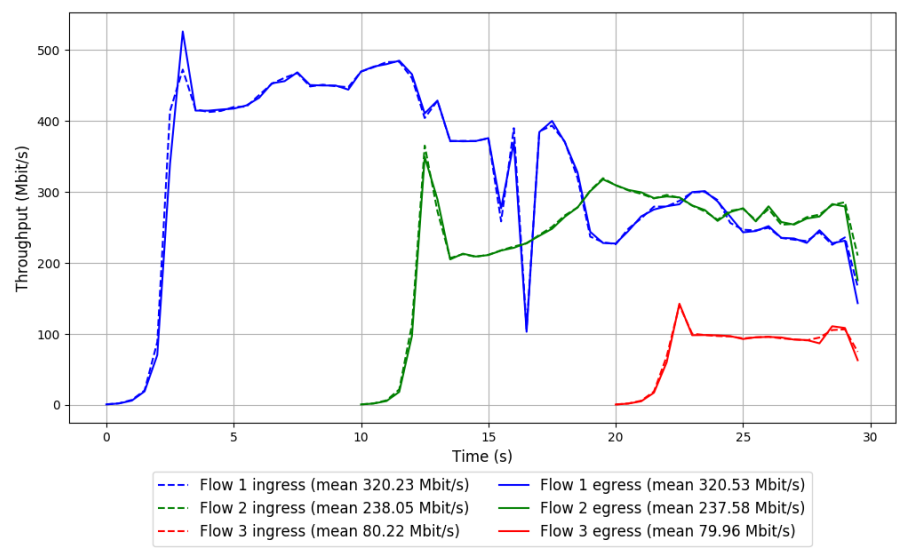
-- Flow 3:

Average throughput: 79.96 Mbit/s

95th percentile per-packet one-way delay: 53.243 ms

Loss rate: 1.40%

Run 10: Report of Vivace-latency — Data Link

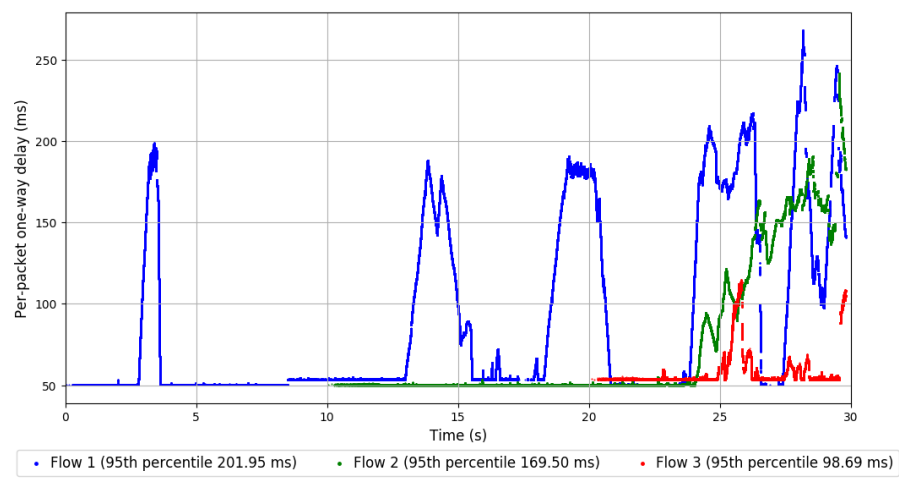
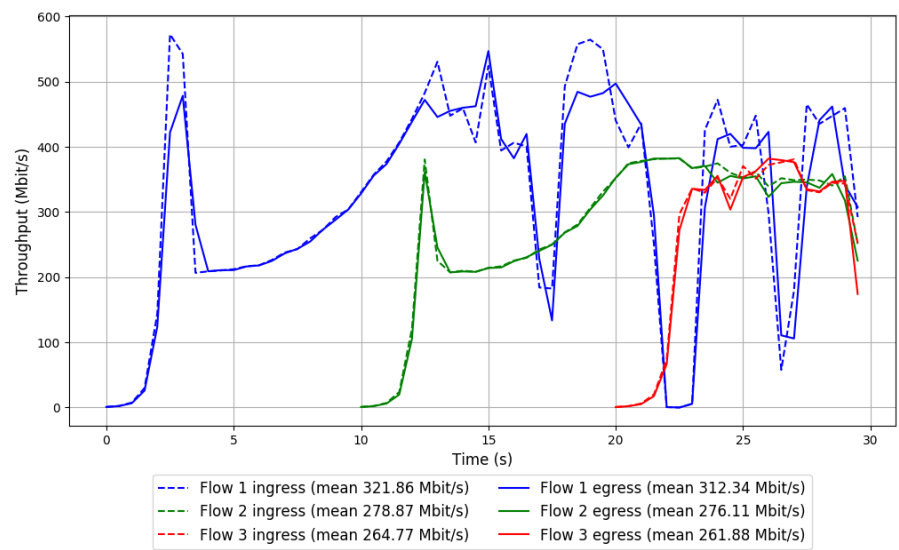


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-28 19:53:22
End at: 2018-02-28 19:53:52

# Below is generated by plot.py at 2018-03-01 04:05:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 580.97 Mbit/s
95th percentile per-packet one-way delay: 190.661 ms
Loss rate: 2.56%
-- Flow 1:
Average throughput: 312.34 Mbit/s
95th percentile per-packet one-way delay: 201.951 ms
Loss rate: 3.29%
-- Flow 2:
Average throughput: 276.11 Mbit/s
95th percentile per-packet one-way delay: 169.499 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 261.88 Mbit/s
95th percentile per-packet one-way delay: 98.687 ms
Loss rate: 2.15%
```

Run 1: Report of Vivace-loss — Data Link

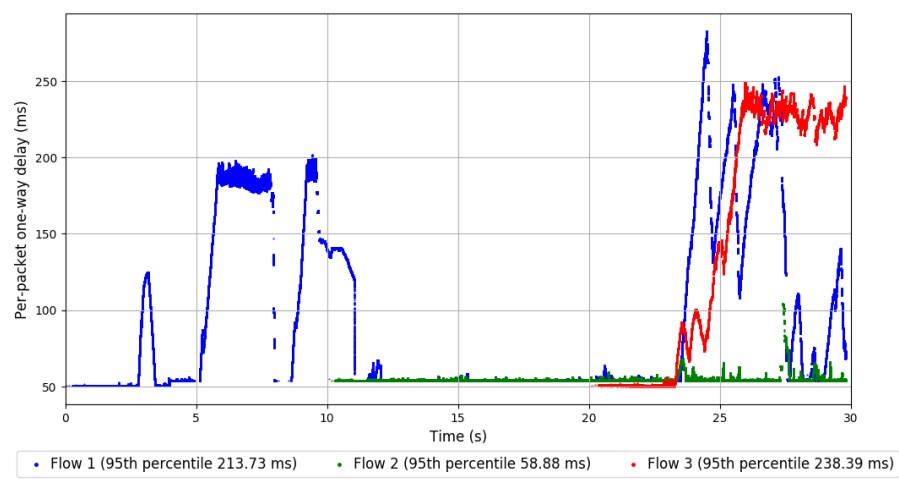
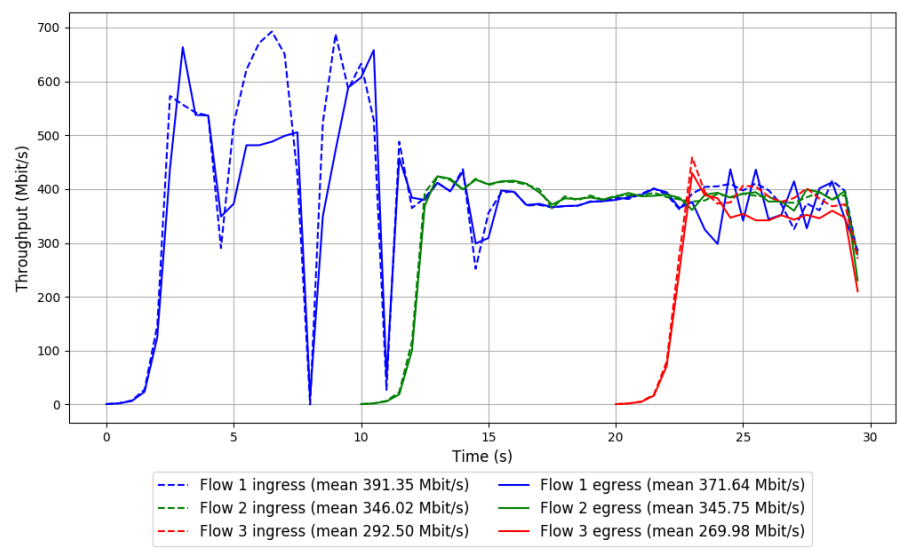


```
Run 2: Statistics of Vivace-loss

Start at: 2018-02-28 20:11:17
End at: 2018-02-28 20:11:47

# Below is generated by plot.py at 2018-03-01 04:10:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 689.05 Mbit/s
95th percentile per-packet one-way delay: 229.893 ms
Loss rate: 4.28%
-- Flow 1:
Average throughput: 371.64 Mbit/s
95th percentile per-packet one-way delay: 213.733 ms
Loss rate: 5.36%
-- Flow 2:
Average throughput: 345.75 Mbit/s
95th percentile per-packet one-way delay: 58.883 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 269.98 Mbit/s
95th percentile per-packet one-way delay: 238.389 ms
Loss rate: 8.65%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-28 20:29:27

End at: 2018-02-28 20:29:57

Below is generated by plot.py at 2018-03-01 04:10:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 609.59 Mbit/s

95th percentile per-packet one-way delay: 161.714 ms

Loss rate: 1.60%

-- Flow 1:

Average throughput: 317.17 Mbit/s

95th percentile per-packet one-way delay: 83.644 ms

Loss rate: 1.51%

-- Flow 2:

Average throughput: 292.70 Mbit/s

95th percentile per-packet one-way delay: 228.313 ms

Loss rate: 1.68%

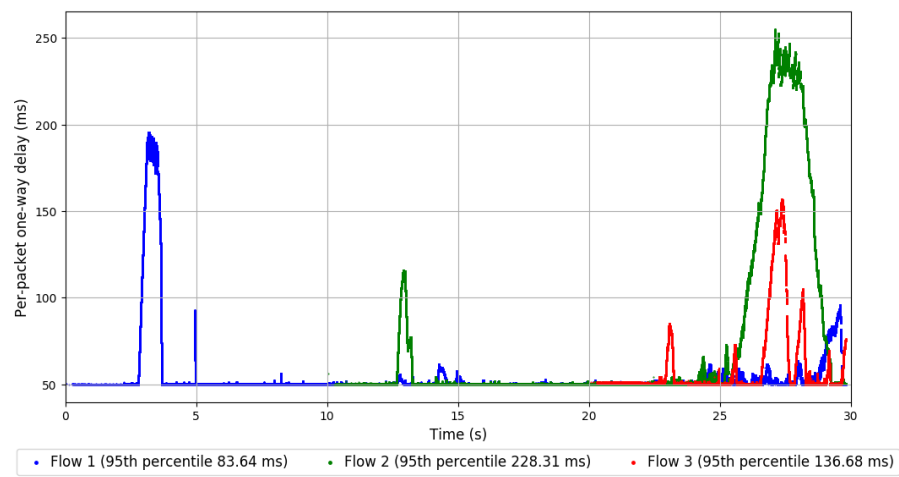
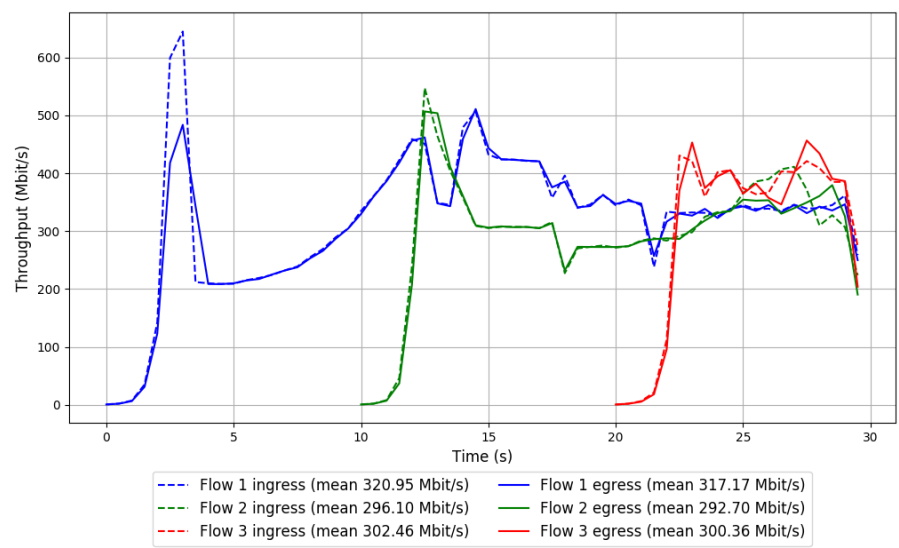
-- Flow 3:

Average throughput: 300.36 Mbit/s

95th percentile per-packet one-way delay: 136.675 ms

Loss rate: 1.73%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-28 20:47:23

End at: 2018-02-28 20:47:53

Below is generated by plot.py at 2018-03-01 04:12:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 661.61 Mbit/s

95th percentile per-packet one-way delay: 165.977 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 347.52 Mbit/s

95th percentile per-packet one-way delay: 55.888 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 327.11 Mbit/s

95th percentile per-packet one-way delay: 51.459 ms

Loss rate: 0.59%

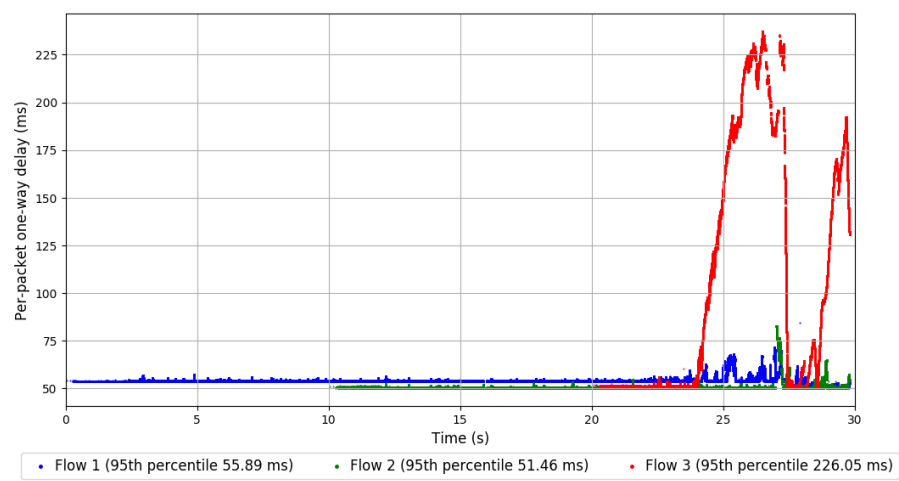
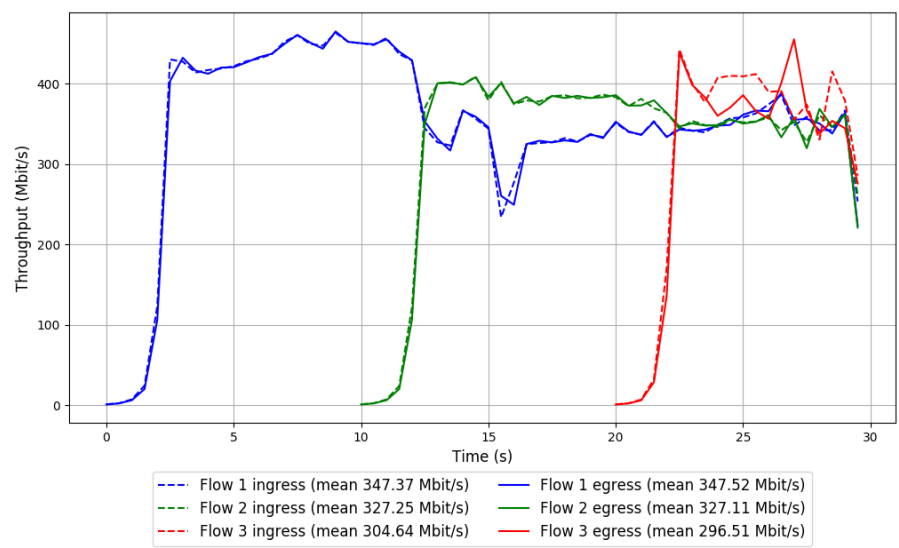
-- Flow 3:

Average throughput: 296.51 Mbit/s

95th percentile per-packet one-way delay: 226.054 ms

Loss rate: 3.75%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-28 21:05:14

End at: 2018-02-28 21:05:44

Below is generated by plot.py at 2018-03-01 04:12:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 642.81 Mbit/s

95th percentile per-packet one-way delay: 162.899 ms

Loss rate: 1.48%

-- Flow 1:

Average throughput: 359.64 Mbit/s

95th percentile per-packet one-way delay: 180.077 ms

Loss rate: 1.69%

-- Flow 2:

Average throughput: 284.78 Mbit/s

95th percentile per-packet one-way delay: 81.817 ms

Loss rate: 0.38%

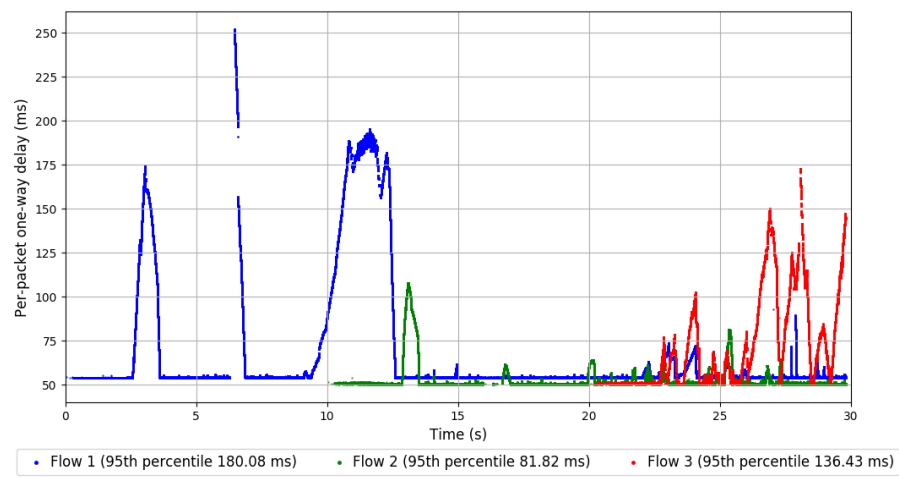
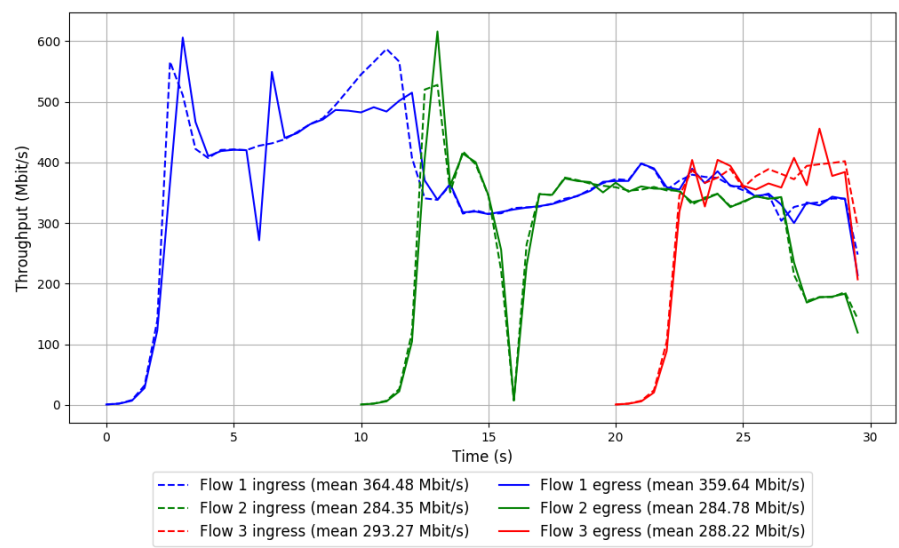
-- Flow 3:

Average throughput: 288.22 Mbit/s

95th percentile per-packet one-way delay: 136.432 ms

Loss rate: 2.84%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-28 21:23:28

End at: 2018-02-28 21:23:58

Below is generated by plot.py at 2018-03-01 04:13:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 633.74 Mbit/s

95th percentile per-packet one-way delay: 224.867 ms

Loss rate: 2.98%

-- Flow 1:

Average throughput: 362.19 Mbit/s

95th percentile per-packet one-way delay: 188.979 ms

Loss rate: 1.82%

-- Flow 2:

Average throughput: 276.56 Mbit/s

95th percentile per-packet one-way delay: 254.801 ms

Loss rate: 5.53%

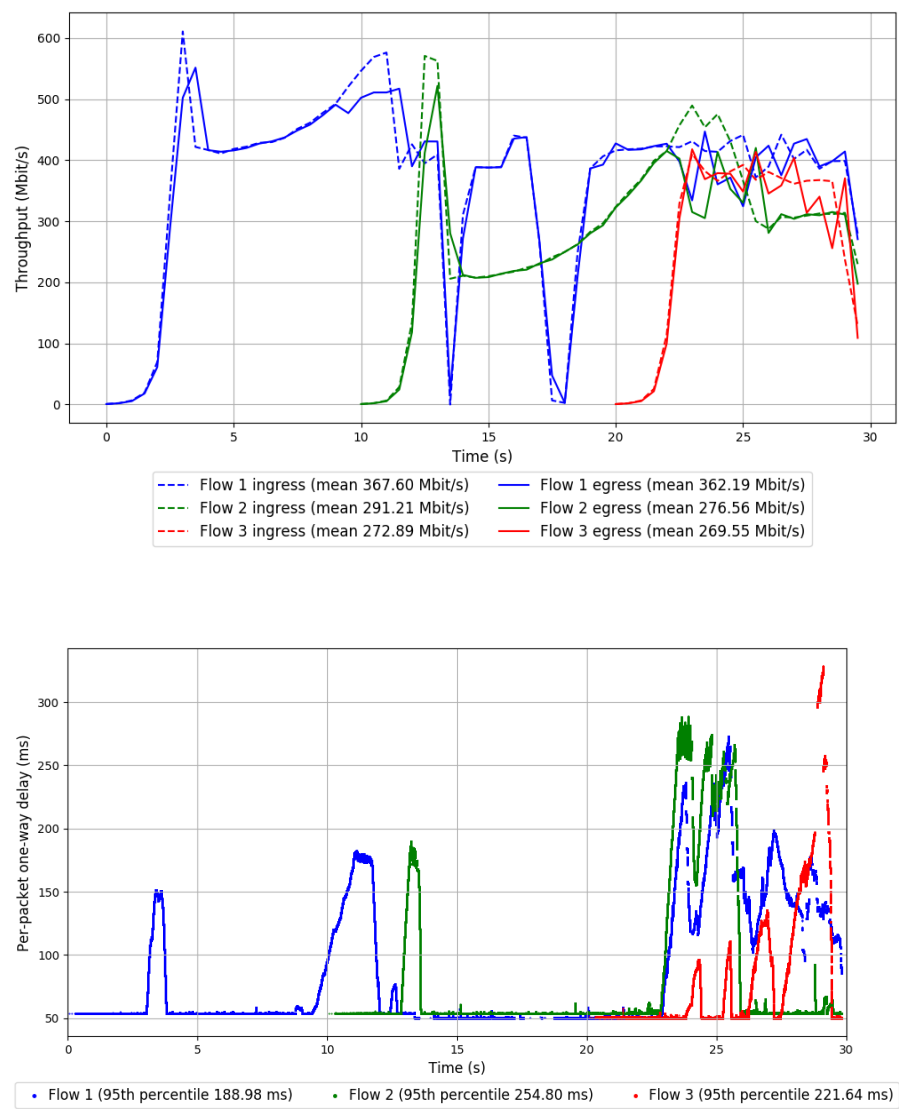
-- Flow 3:

Average throughput: 269.55 Mbit/s

95th percentile per-packet one-way delay: 221.644 ms

Loss rate: 2.25%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-28 21:41:31

End at: 2018-02-28 21:42:01

Below is generated by plot.py at 2018-03-01 04:15:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 695.09 Mbit/s

95th percentile per-packet one-way delay: 191.597 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 363.03 Mbit/s

95th percentile per-packet one-way delay: 109.341 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 362.58 Mbit/s

95th percentile per-packet one-way delay: 221.143 ms

Loss rate: 1.68%

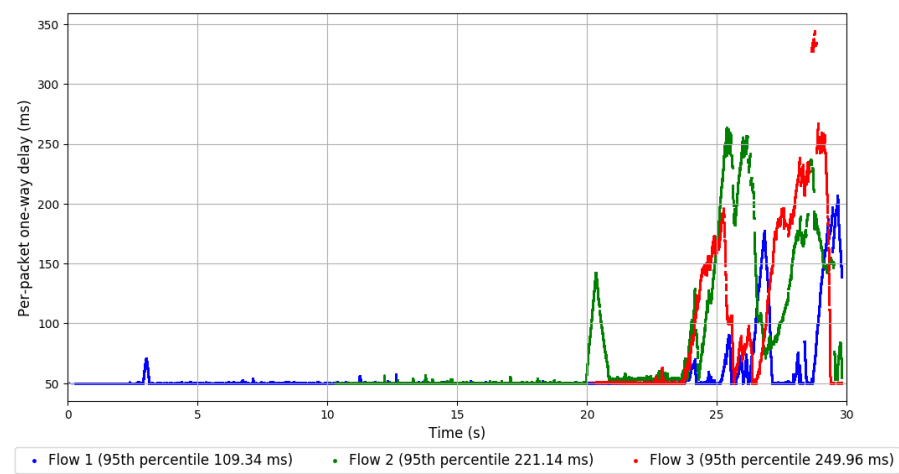
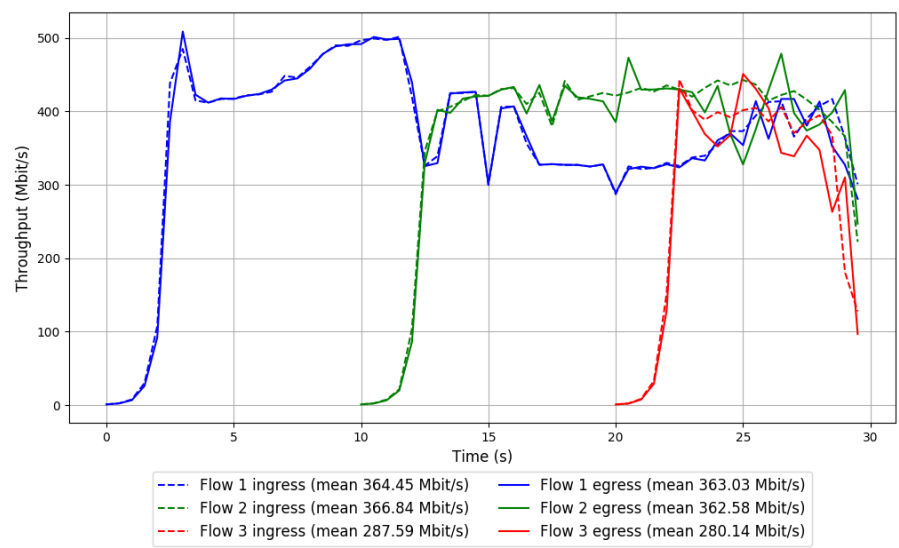
-- Flow 3:

Average throughput: 280.14 Mbit/s

95th percentile per-packet one-way delay: 249.955 ms

Loss rate: 3.63%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-28 21:59:35

End at: 2018-02-28 22:00:05

Below is generated by plot.py at 2018-03-01 04:15:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 639.22 Mbit/s

95th percentile per-packet one-way delay: 191.751 ms

Loss rate: 2.95%

-- Flow 1:

Average throughput: 349.37 Mbit/s

95th percentile per-packet one-way delay: 209.160 ms

Loss rate: 4.52%

-- Flow 2:

Average throughput: 349.44 Mbit/s

95th percentile per-packet one-way delay: 172.658 ms

Loss rate: 0.88%

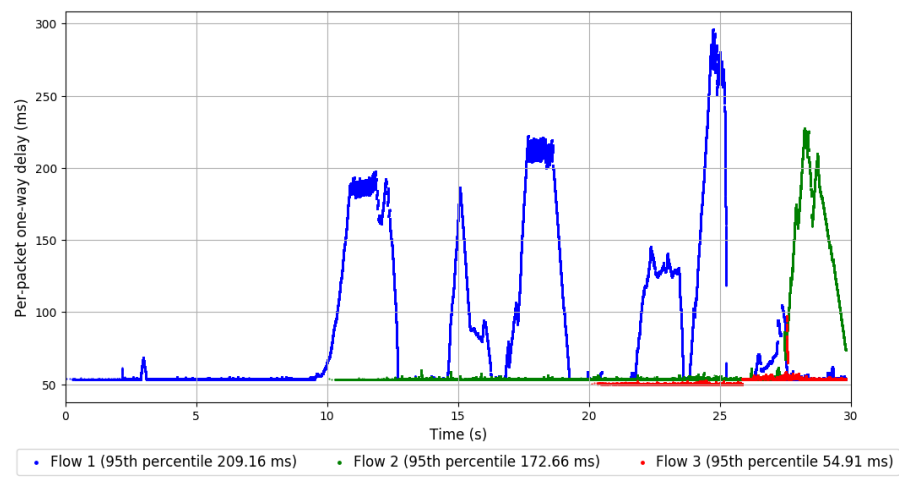
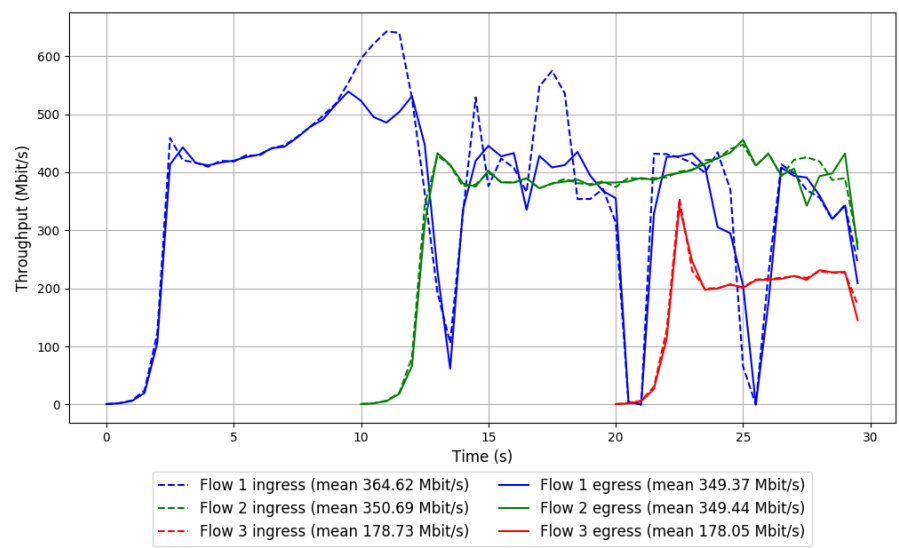
-- Flow 3:

Average throughput: 178.05 Mbit/s

95th percentile per-packet one-way delay: 54.909 ms

Loss rate: 1.41%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-28 22:17:15

End at: 2018-02-28 22:17:45

Below is generated by plot.py at 2018-03-01 04:17:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 644.48 Mbit/s

95th percentile per-packet one-way delay: 184.052 ms

Loss rate: 2.93%

-- Flow 1:

Average throughput: 361.30 Mbit/s

95th percentile per-packet one-way delay: 187.264 ms

Loss rate: 4.19%

-- Flow 2:

Average throughput: 285.86 Mbit/s

95th percentile per-packet one-way delay: 115.714 ms

Loss rate: 0.73%

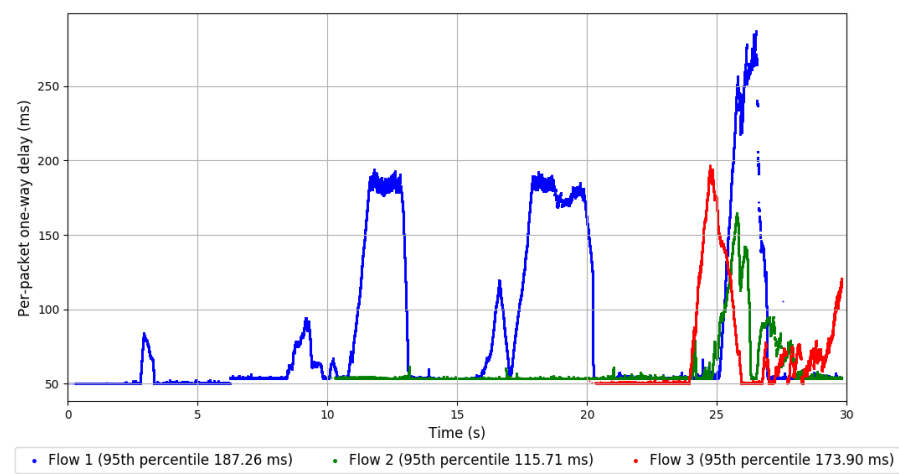
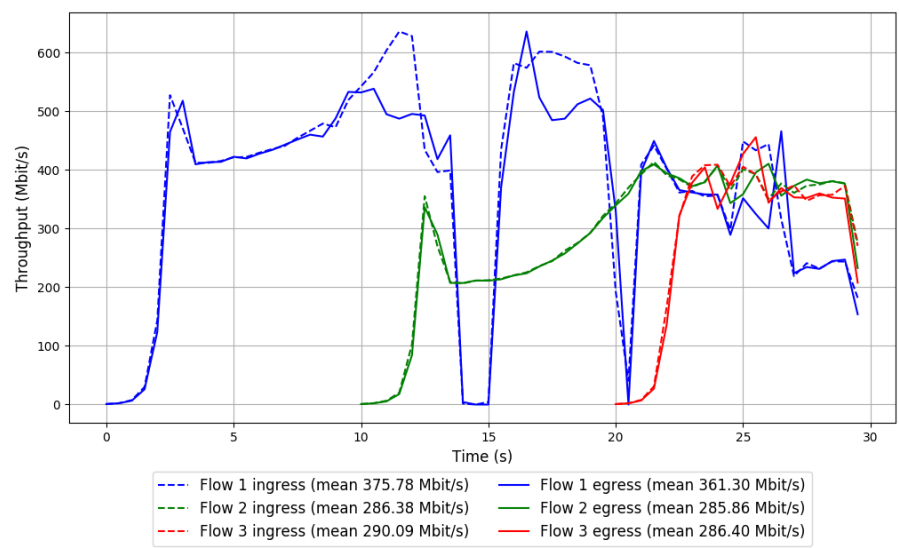
-- Flow 3:

Average throughput: 286.40 Mbit/s

95th percentile per-packet one-way delay: 173.900 ms

Loss rate: 2.33%

Run 9: Report of Vivace-loss — Data Link

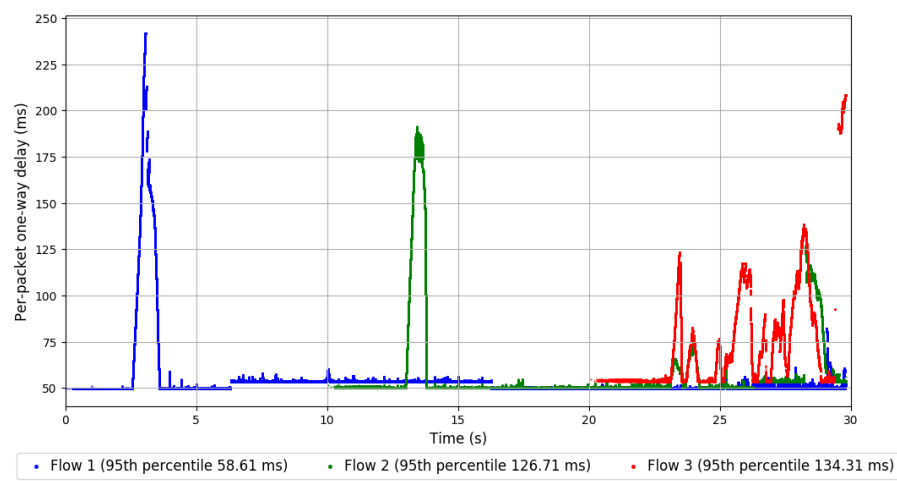
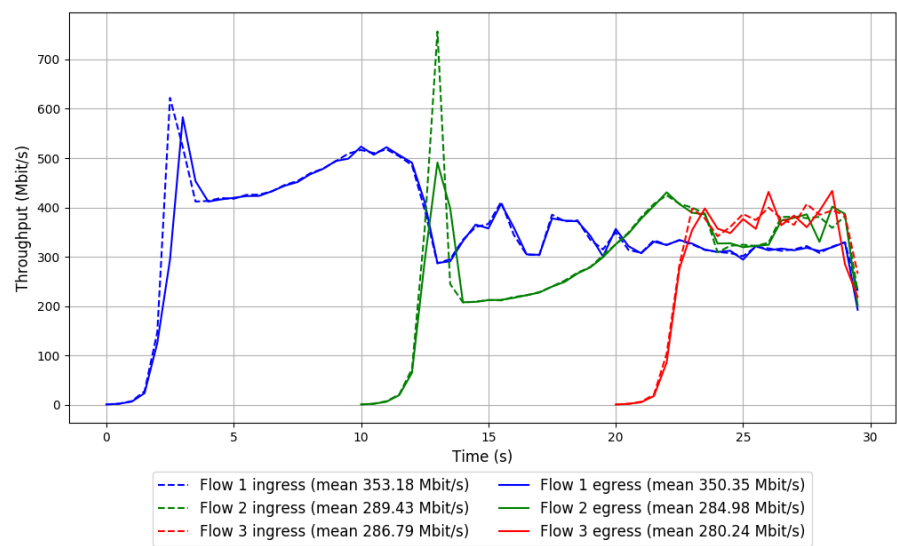


```
Run 10: Statistics of Vivace-loss

Start at: 2018-02-28 22:35:25
End at: 2018-02-28 22:35:55

# Below is generated by plot.py at 2018-03-01 04:22:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 631.03 Mbit/s
95th percentile per-packet one-way delay: 115.133 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 350.35 Mbit/s
95th percentile per-packet one-way delay: 58.613 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 284.98 Mbit/s
95th percentile per-packet one-way delay: 126.712 ms
Loss rate: 2.04%
-- Flow 3:
Average throughput: 280.24 Mbit/s
95th percentile per-packet one-way delay: 134.308 ms
Loss rate: 3.34%
```

Run 10: Report of Vivace-loss — Data Link

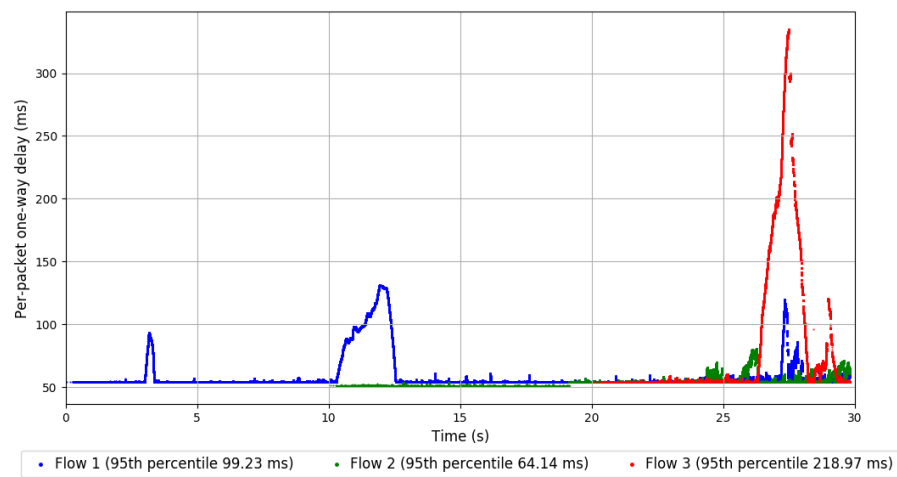
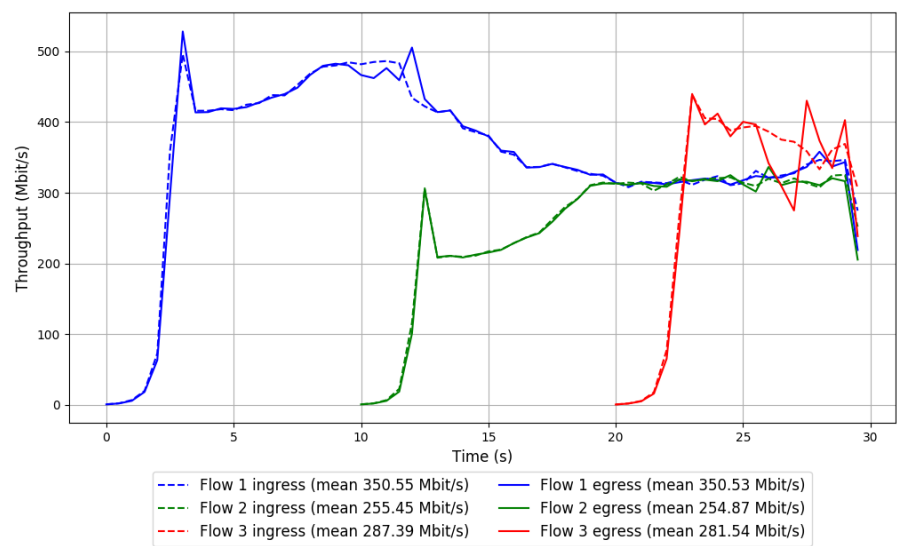


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-28 19:54:42
End at: 2018-02-28 19:55:12

# Below is generated by plot.py at 2018-03-01 04:22:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 611.49 Mbit/s
95th percentile per-packet one-way delay: 109.524 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 350.53 Mbit/s
95th percentile per-packet one-way delay: 99.231 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 254.87 Mbit/s
95th percentile per-packet one-way delay: 64.142 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 281.54 Mbit/s
95th percentile per-packet one-way delay: 218.967 ms
Loss rate: 3.41%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-28 20:12:43

End at: 2018-02-28 20:13:13

Below is generated by plot.py at 2018-03-01 04:22:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 585.90 Mbit/s

95th percentile per-packet one-way delay: 113.511 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 358.53 Mbit/s

95th percentile per-packet one-way delay: 135.453 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 260.57 Mbit/s

95th percentile per-packet one-way delay: 59.652 ms

Loss rate: 0.68%

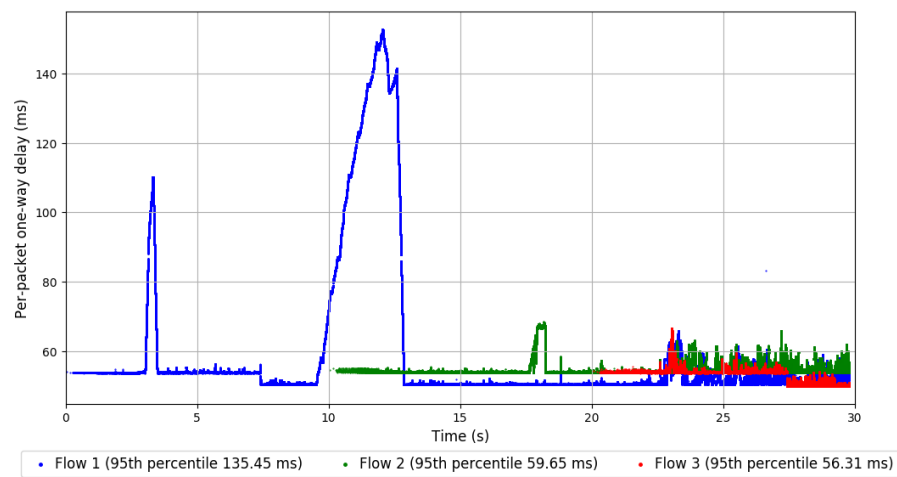
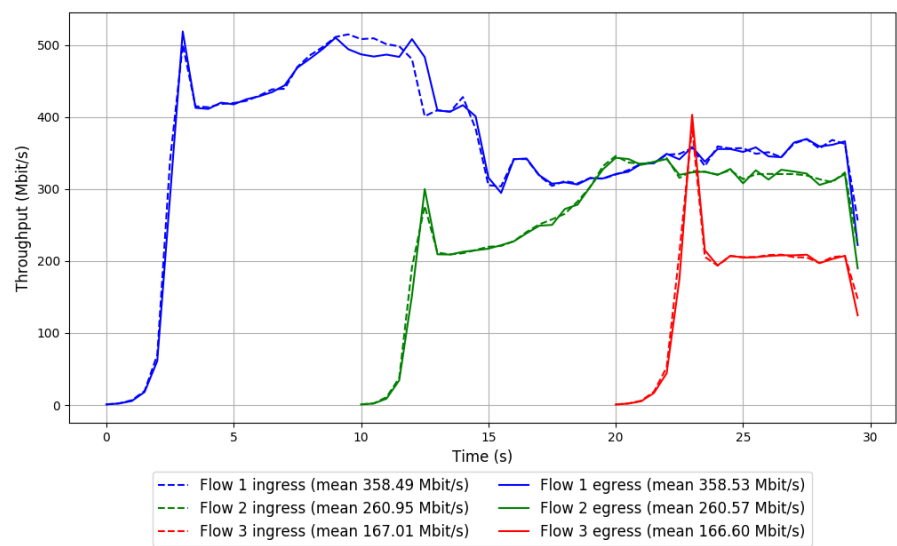
-- Flow 3:

Average throughput: 166.60 Mbit/s

95th percentile per-packet one-way delay: 56.309 ms

Loss rate: 1.31%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-28 20:30:48

End at: 2018-02-28 20:31:18

Below is generated by plot.py at 2018-03-01 04:25:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 702.38 Mbit/s

95th percentile per-packet one-way delay: 111.785 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 389.69 Mbit/s

95th percentile per-packet one-way delay: 105.238 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 320.63 Mbit/s

95th percentile per-packet one-way delay: 79.128 ms

Loss rate: 0.56%

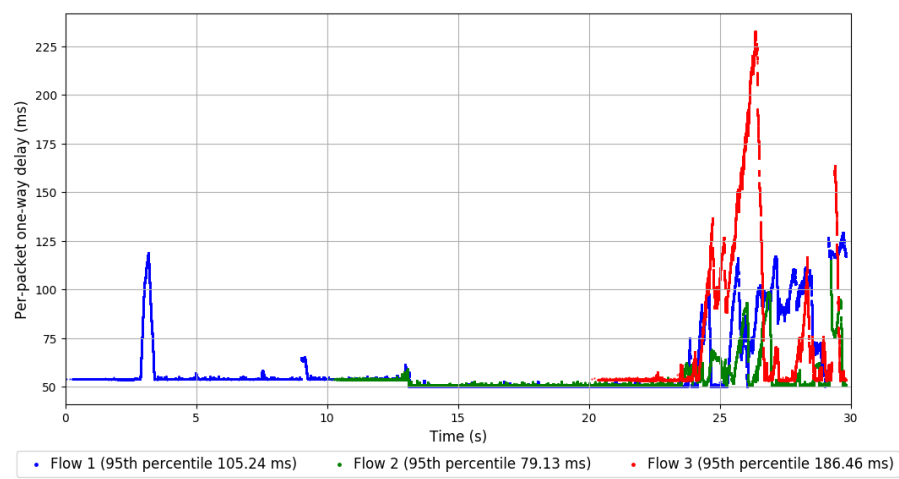
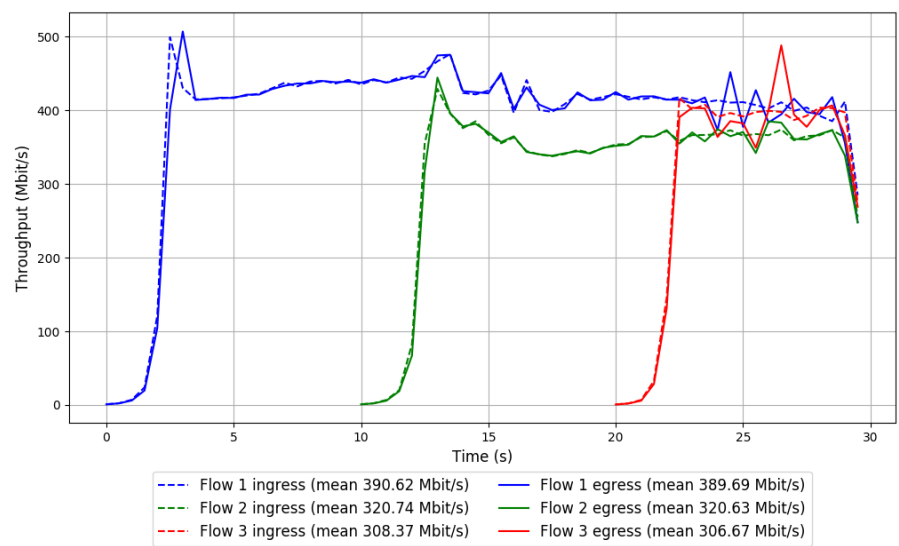
-- Flow 3:

Average throughput: 306.67 Mbit/s

95th percentile per-packet one-way delay: 186.458 ms

Loss rate: 1.61%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-28 20:48:48

End at: 2018-02-28 20:49:18

Below is generated by plot.py at 2018-03-01 04:25:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 593.42 Mbit/s

95th percentile per-packet one-way delay: 80.539 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 369.55 Mbit/s

95th percentile per-packet one-way delay: 81.711 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 238.17 Mbit/s

95th percentile per-packet one-way delay: 59.845 ms

Loss rate: 0.69%

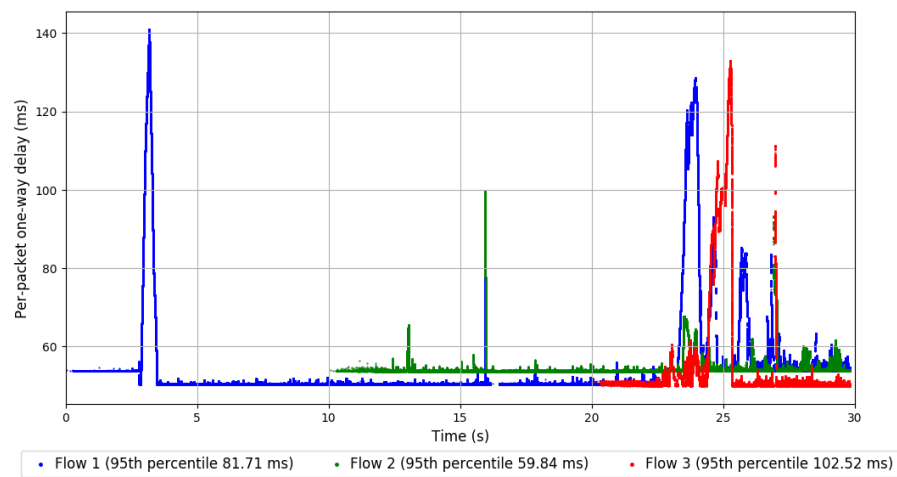
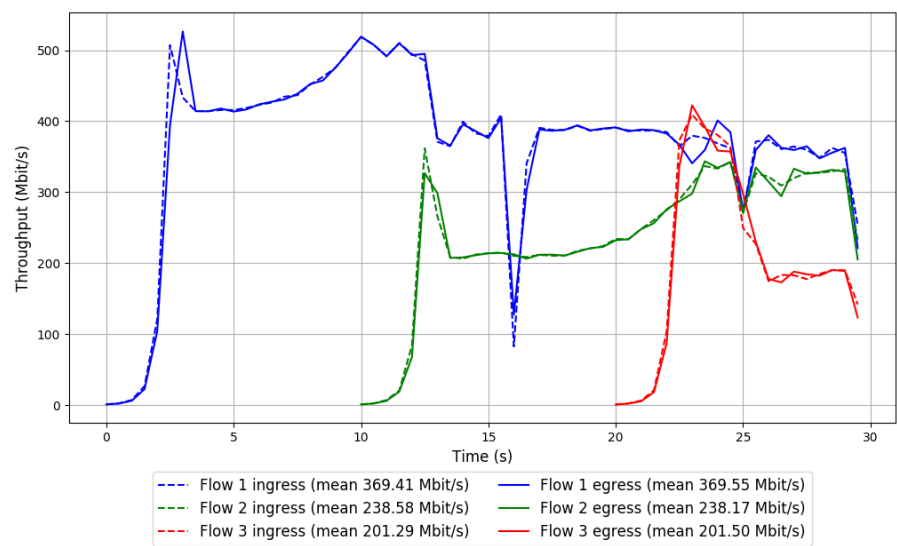
-- Flow 3:

Average throughput: 201.50 Mbit/s

95th percentile per-packet one-way delay: 102.521 ms

Loss rate: 0.93%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-28 21:06:37

End at: 2018-02-28 21:07:07

Below is generated by plot.py at 2018-03-01 04:26:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 610.36 Mbit/s

95th percentile per-packet one-way delay: 58.354 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 352.96 Mbit/s

95th percentile per-packet one-way delay: 56.776 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 257.61 Mbit/s

95th percentile per-packet one-way delay: 56.458 ms

Loss rate: 0.62%

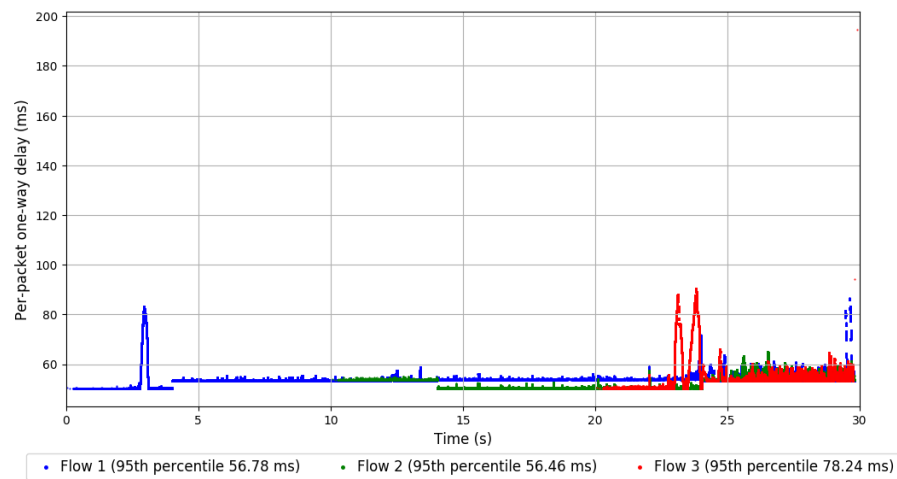
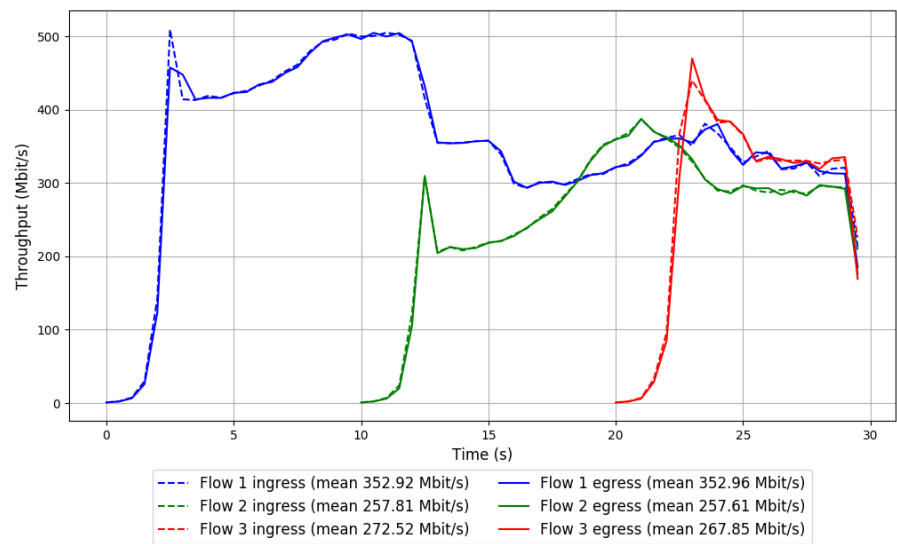
-- Flow 3:

Average throughput: 267.85 Mbit/s

95th percentile per-packet one-way delay: 78.240 ms

Loss rate: 1.75%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-28 21:24:50

End at: 2018-02-28 21:25:20

Below is generated by plot.py at 2018-03-01 04:26:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 593.37 Mbit/s

95th percentile per-packet one-way delay: 118.058 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 363.04 Mbit/s

95th percentile per-packet one-way delay: 122.469 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 261.89 Mbit/s

95th percentile per-packet one-way delay: 122.580 ms

Loss rate: 1.47%

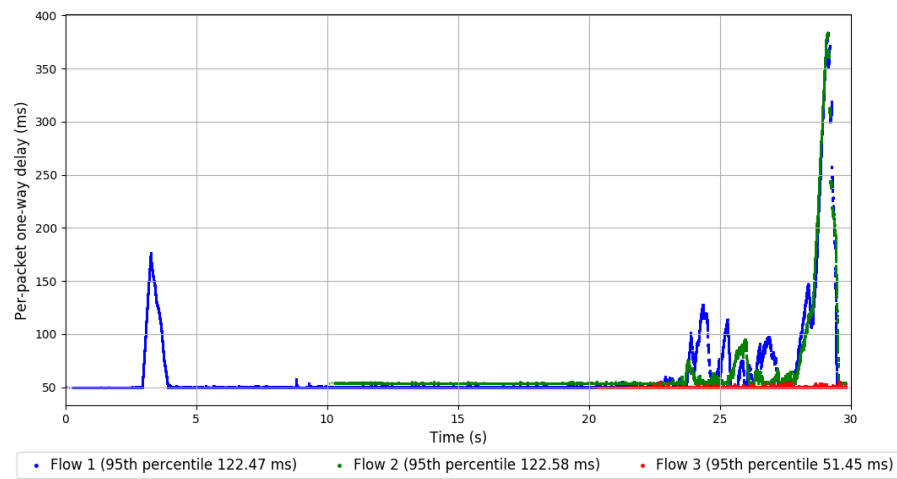
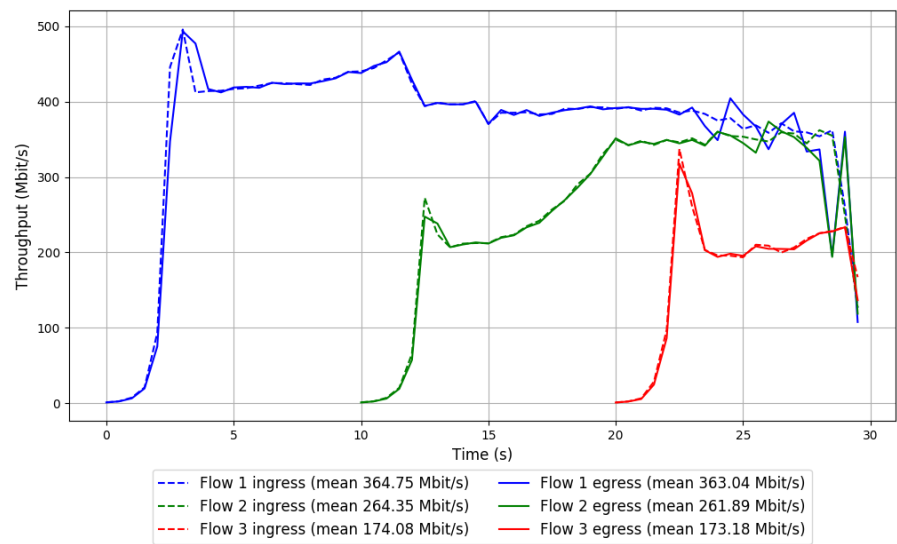
-- Flow 3:

Average throughput: 173.18 Mbit/s

95th percentile per-packet one-way delay: 51.450 ms

Loss rate: 1.57%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-28 21:42:58

End at: 2018-02-28 21:43:28

Below is generated by plot.py at 2018-03-01 04:27:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 617.12 Mbit/s

95th percentile per-packet one-way delay: 98.552 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 339.13 Mbit/s

95th percentile per-packet one-way delay: 85.446 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 323.81 Mbit/s

95th percentile per-packet one-way delay: 108.724 ms

Loss rate: 0.89%

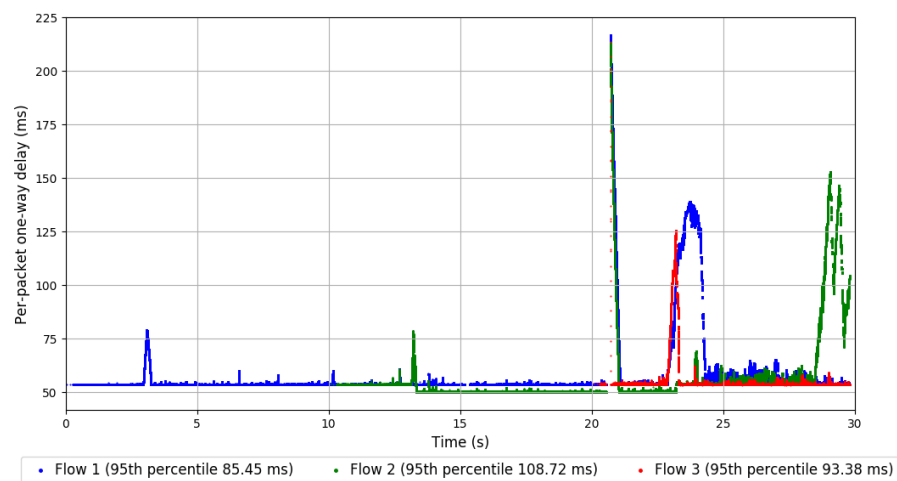
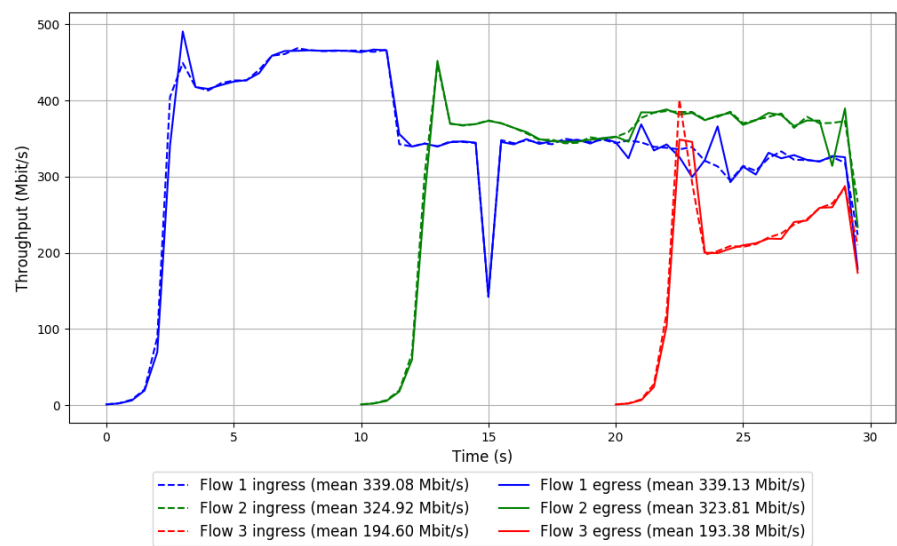
-- Flow 3:

Average throughput: 193.38 Mbit/s

95th percentile per-packet one-way delay: 93.380 ms

Loss rate: 1.72%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-28 22:00:58

End at: 2018-02-28 22:01:28

Below is generated by plot.py at 2018-03-01 04:28:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 601.90 Mbit/s

95th percentile per-packet one-way delay: 128.193 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 346.15 Mbit/s

95th percentile per-packet one-way delay: 149.651 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 301.01 Mbit/s

95th percentile per-packet one-way delay: 82.839 ms

Loss rate: 0.77%

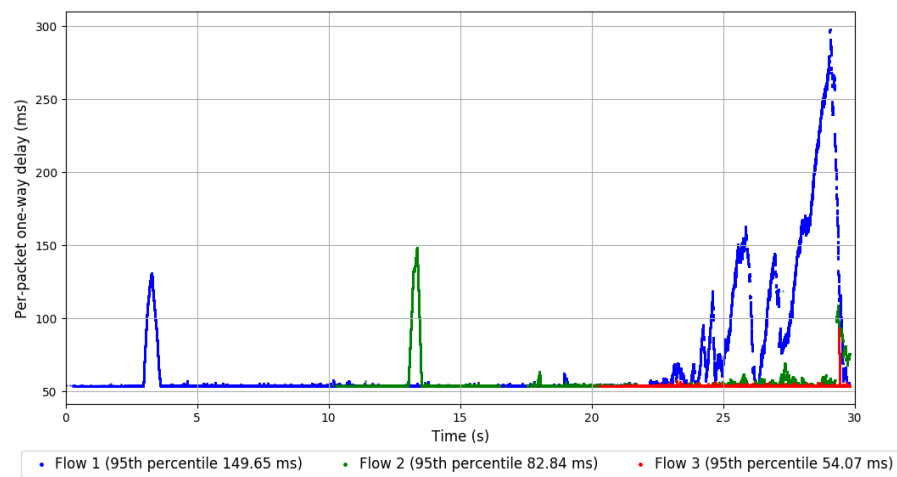
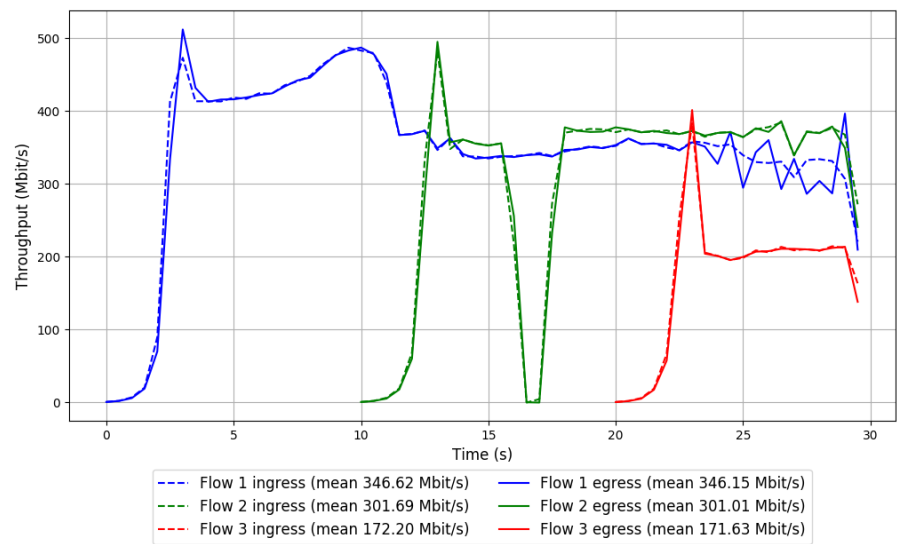
-- Flow 3:

Average throughput: 171.63 Mbit/s

95th percentile per-packet one-way delay: 54.070 ms

Loss rate: 1.42%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-28 22:18:37

End at: 2018-02-28 22:19:07

Below is generated by plot.py at 2018-03-01 04:28:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 612.71 Mbit/s

95th percentile per-packet one-way delay: 125.613 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 364.26 Mbit/s

95th percentile per-packet one-way delay: 155.811 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 281.90 Mbit/s

95th percentile per-packet one-way delay: 118.518 ms

Loss rate: 0.68%

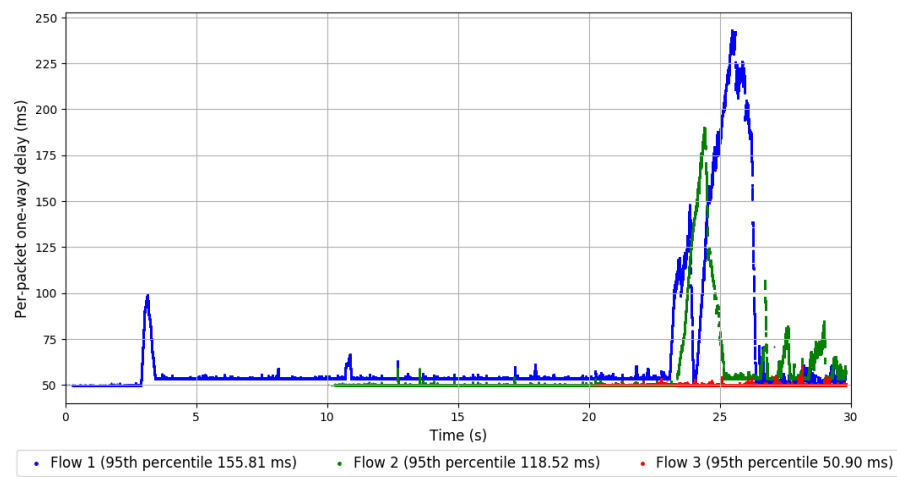
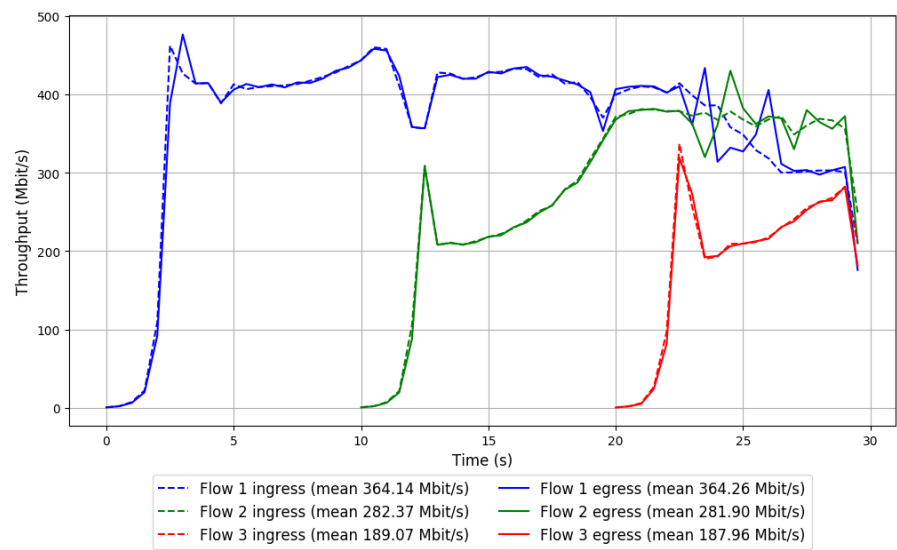
-- Flow 3:

Average throughput: 187.96 Mbit/s

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

Loss rate: 1.61%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-28 22:36:47

End at: 2018-02-28 22:37:17

Below is generated by plot.py at 2018-03-01 04:28:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 630.88 Mbit/s

95th percentile per-packet one-way delay: 104.914 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 382.22 Mbit/s

95th percentile per-packet one-way delay: 69.934 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 292.09 Mbit/s

95th percentile per-packet one-way delay: 201.694 ms

Loss rate: 1.42%

-- Flow 3:

Average throughput: 167.81 Mbit/s

95th percentile per-packet one-way delay: 57.943 ms

Loss rate: 1.42%

Run 10: Report of Vivace-LTE — Data Link

