

Pantheon Report

Generated at 2018-02-01 10:11:39 (UTC).

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

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.

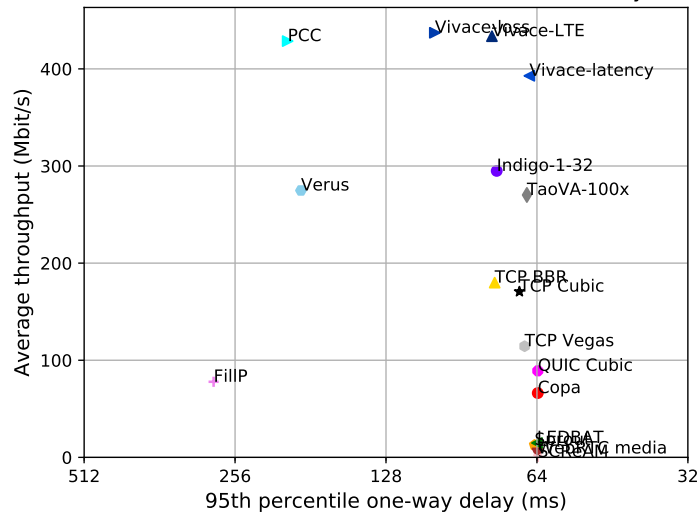
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

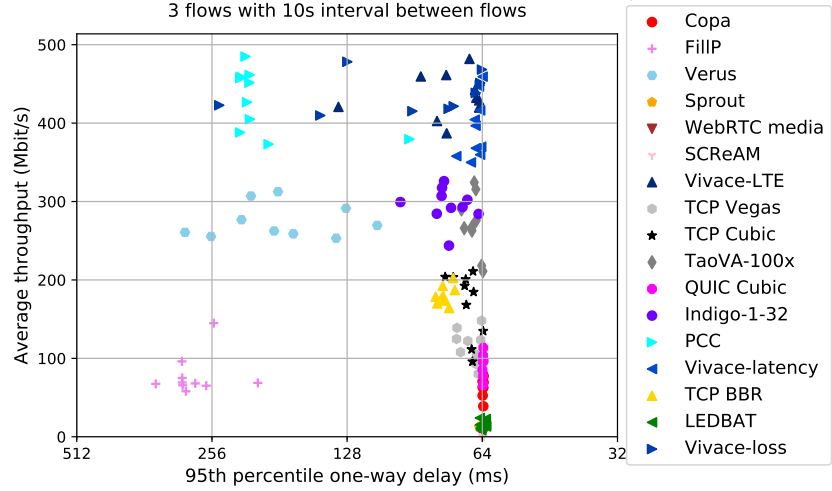
Git summary:

```
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1c1b0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	84.13	92.95	102.91	76.30	78.07	79.57	0.25	0.05	0.10
TCP Cubic	10	89.58	79.18	85.84	69.14	68.89	68.97	0.14	0.04	0.27
LEDBAT	10	8.38	7.16	5.03	64.06	63.88	63.72	0.57	0.69	0.56
PCC	10	392.86	37.18	33.60	201.02	200.07	182.98	1.20	0.82	0.80
QUIC Cubic	9	43.43	52.76	32.93	63.54	63.55	79.96	0.00	0.00	0.00
SCReAM	9	0.22	0.22	0.22	63.62	63.76	63.17	0.00	0.00	0.00
WebRTC media	10	2.15	1.35	0.54	63.67	63.63	63.87	0.00	0.00	0.00
Sprout	10	6.49	6.43	6.14	64.65	64.72	64.78	0.19	0.21	0.03
TaoVA-100x	9	149.02	132.86	113.83	65.64	67.91	68.72	0.00	0.00	0.00
TCP Vegas	10	59.38	53.42	58.77	67.28	66.50	66.42	0.10	0.08	0.02
Verus	10	161.29	135.54	73.20	159.67	200.21	162.22	0.36	0.75	0.84
Copa	10	33.68	33.17	31.79	63.75	63.67	63.84	0.00	0.00	0.00
FillP	10	24.60	45.07	70.14	300.37	253.13	274.90	6.85	5.82	7.22
Indigo-1-32	10	156.74	148.28	123.78	73.45	77.50	81.74	0.01	0.01	0.01
Vivace-latency	10	221.60	199.22	118.16	71.01	67.98	68.06	0.00	0.00	0.00
Vivace-loss	10	237.47	216.88	170.88	105.95	106.56	68.56	0.30	0.47	0.07
Vivace-LTE	10	242.54	205.80	165.28	79.47	86.86	77.58	0.03	0.01	0.29

Run 1: Statistics of TCP BBR

Start at: 2018-02-01 04:16:32

End at: 2018-02-01 04:17:02

Below is generated by plot.py at 2018-02-01 08:46:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.86 Mbit/s

95th percentile per-packet one-way delay: 78.134 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 82.54 Mbit/s

95th percentile per-packet one-way delay: 75.608 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 81.74 Mbit/s

95th percentile per-packet one-way delay: 78.799 ms

Loss rate: 0.02%

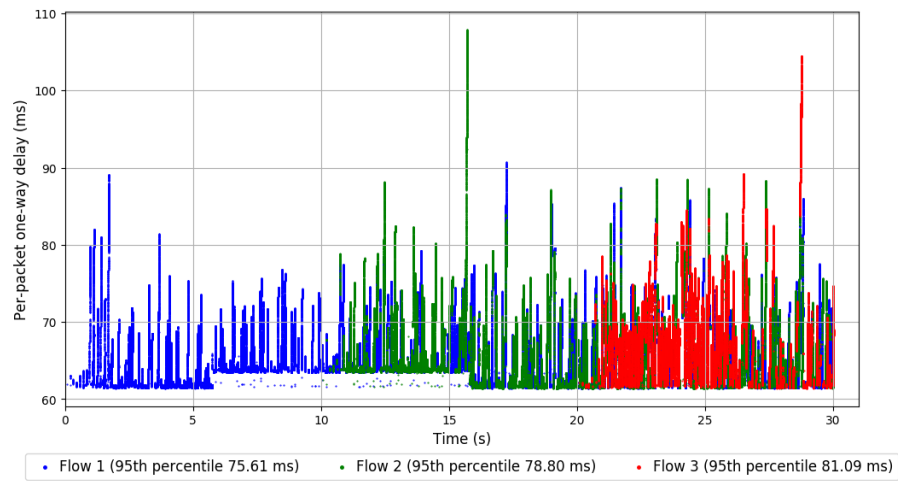
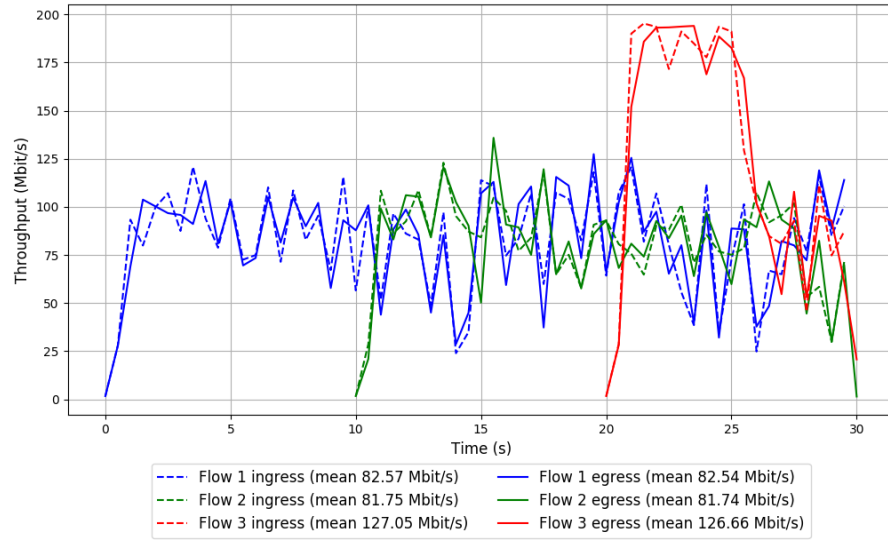
-- Flow 3:

Average throughput: 126.66 Mbit/s

95th percentile per-packet one-way delay: 81.088 ms

Loss rate: 0.28%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-01 04:32:54

End at: 2018-02-01 04:33:24

Below is generated by plot.py at 2018-02-01 08:46:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 173.76 Mbit/s

95th percentile per-packet one-way delay: 78.415 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 84.40 Mbit/s

95th percentile per-packet one-way delay: 77.714 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 84.89 Mbit/s

95th percentile per-packet one-way delay: 77.001 ms

Loss rate: 0.00%

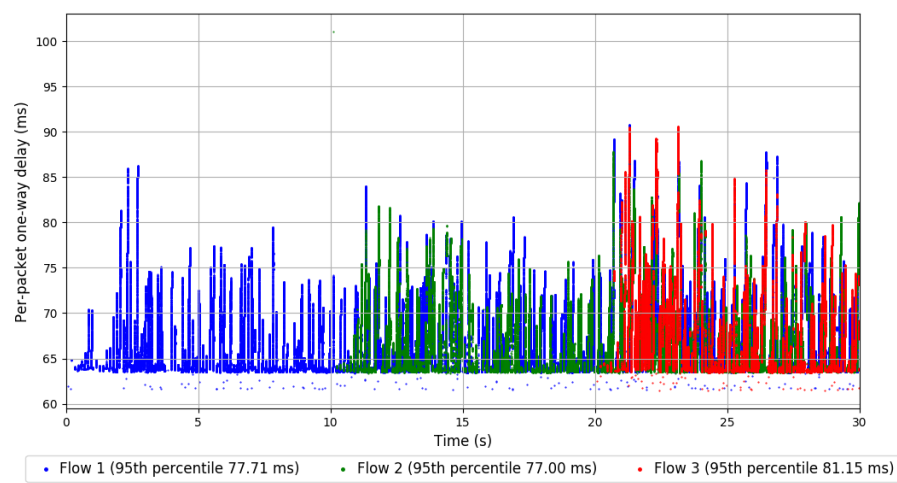
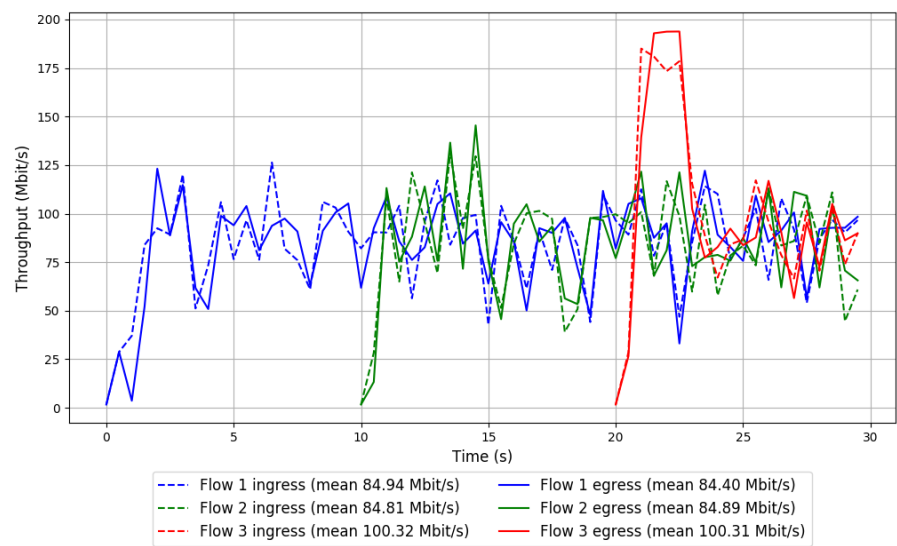
-- Flow 3:

Average throughput: 100.31 Mbit/s

95th percentile per-packet one-way delay: 81.149 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-01 04:49:03

End at: 2018-02-01 04:49:33

Below is generated by plot.py at 2018-02-01 08:46:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.61 Mbit/s

95th percentile per-packet one-way delay: 81.309 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 89.43 Mbit/s

95th percentile per-packet one-way delay: 79.235 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.44 Mbit/s

95th percentile per-packet one-way delay: 83.275 ms

Loss rate: 0.01%

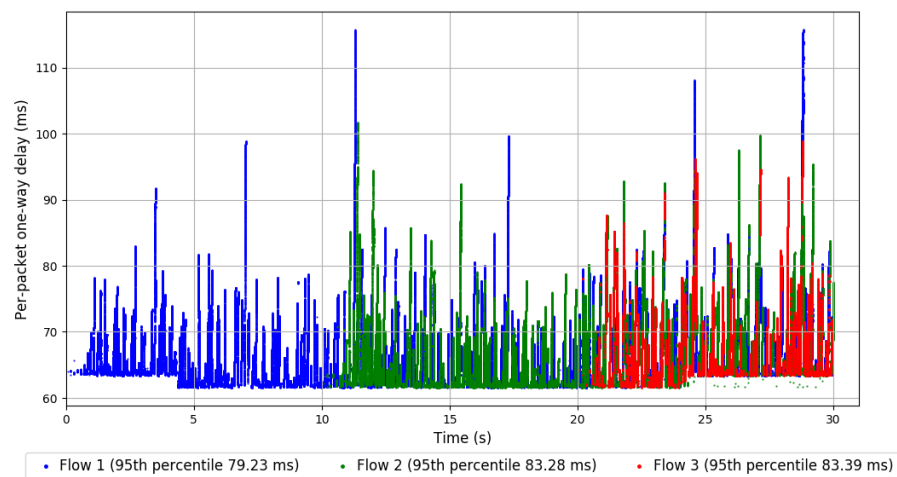
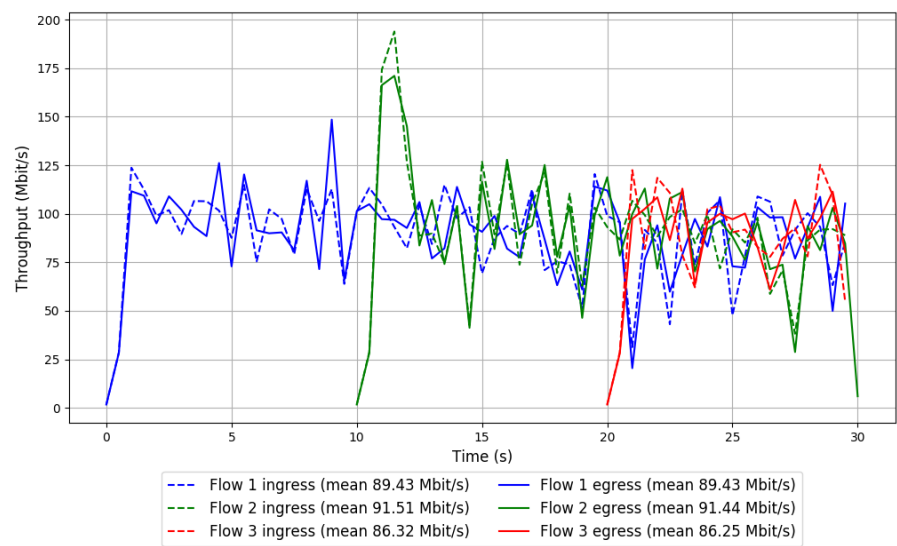
-- Flow 3:

Average throughput: 86.25 Mbit/s

95th percentile per-packet one-way delay: 83.391 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-01 05:05:17

End at: 2018-02-01 05:05:47

Below is generated by plot.py at 2018-02-01 08:46:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 174.42 Mbit/s

95th percentile per-packet one-way delay: 77.512 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 86.35 Mbit/s

95th percentile per-packet one-way delay: 76.354 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 84.15 Mbit/s

95th percentile per-packet one-way delay: 78.142 ms

Loss rate: 0.01%

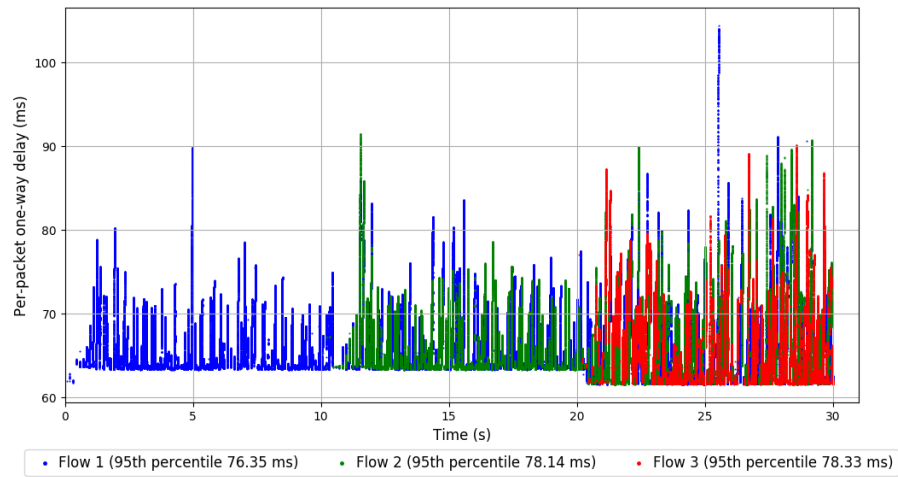
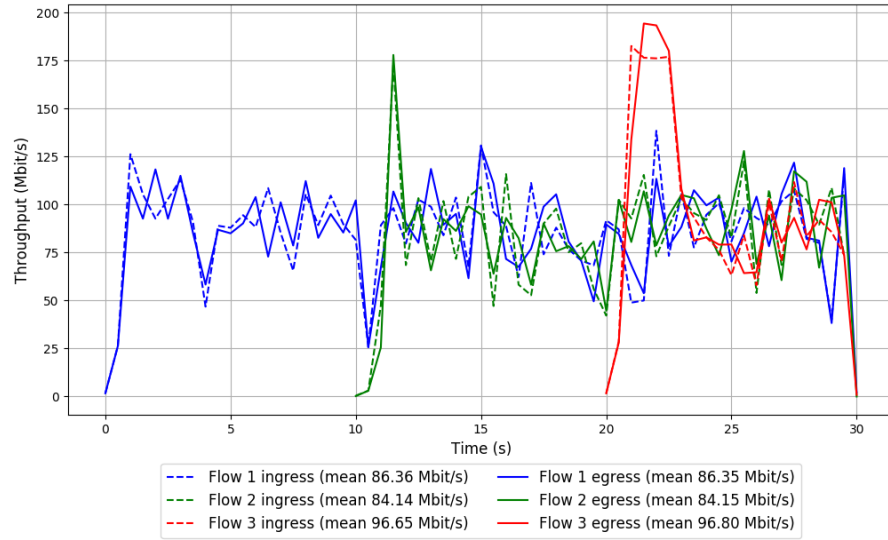
-- Flow 3:

Average throughput: 96.80 Mbit/s

95th percentile per-packet one-way delay: 78.325 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-01 05:21:42

End at: 2018-02-01 05:22:12

Below is generated by plot.py at 2018-02-01 08:46:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 177.43 Mbit/s

95th percentile per-packet one-way delay: 78.811 ms

Loss rate: 0.24%

-- Flow 1:

Average throughput: 83.42 Mbit/s

95th percentile per-packet one-way delay: 77.448 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 83.09 Mbit/s

95th percentile per-packet one-way delay: 78.829 ms

Loss rate: 0.01%

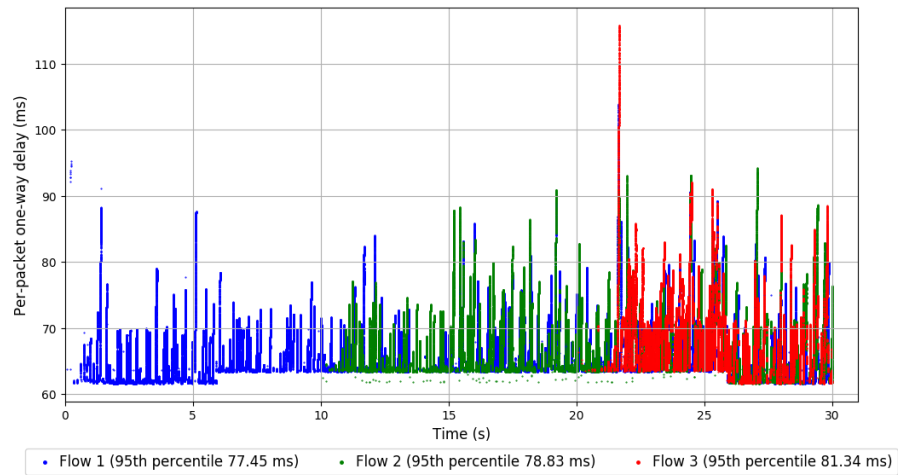
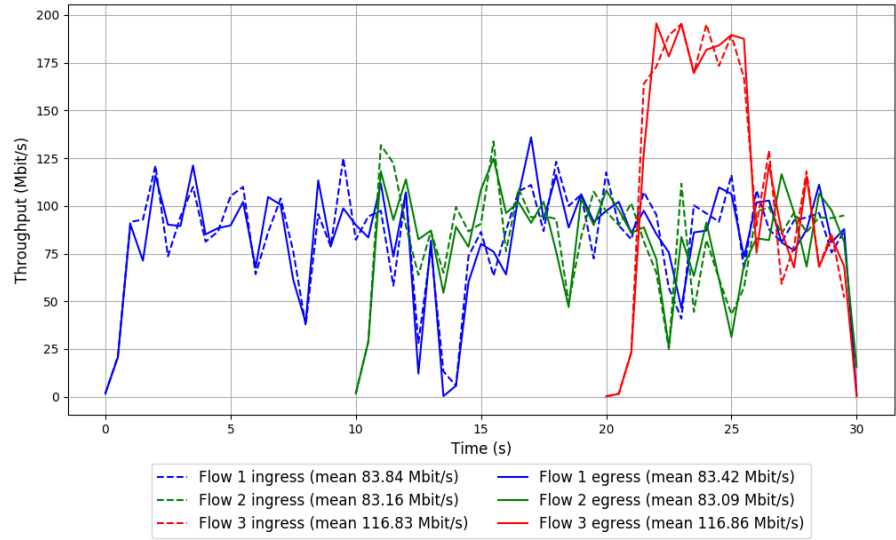
-- Flow 3:

Average throughput: 116.86 Mbit/s

95th percentile per-packet one-way delay: 81.336 ms

Loss rate: 0.02%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-01 05:38:13

End at: 2018-02-01 05:38:43

Below is generated by plot.py at 2018-02-01 08:46:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 192.38 Mbit/s

95th percentile per-packet one-way delay: 78.412 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 82.87 Mbit/s

95th percentile per-packet one-way delay: 75.196 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.73 Mbit/s

95th percentile per-packet one-way delay: 78.576 ms

Loss rate: 0.00%

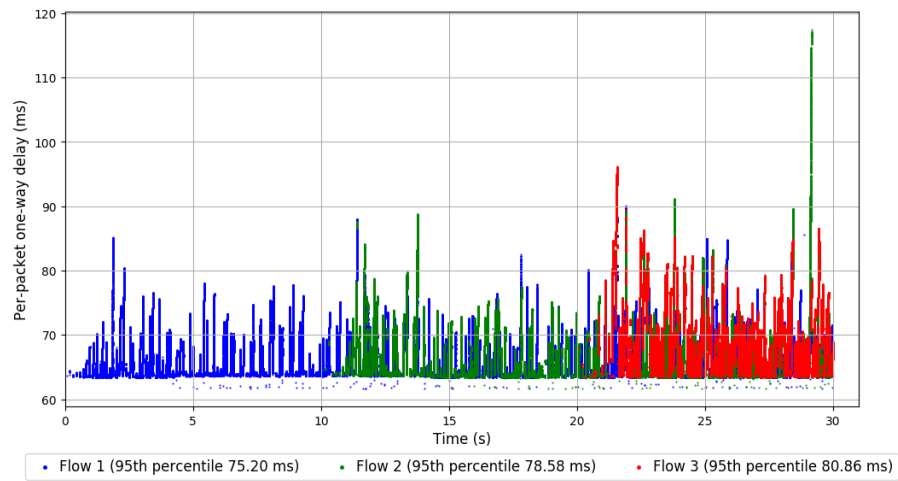
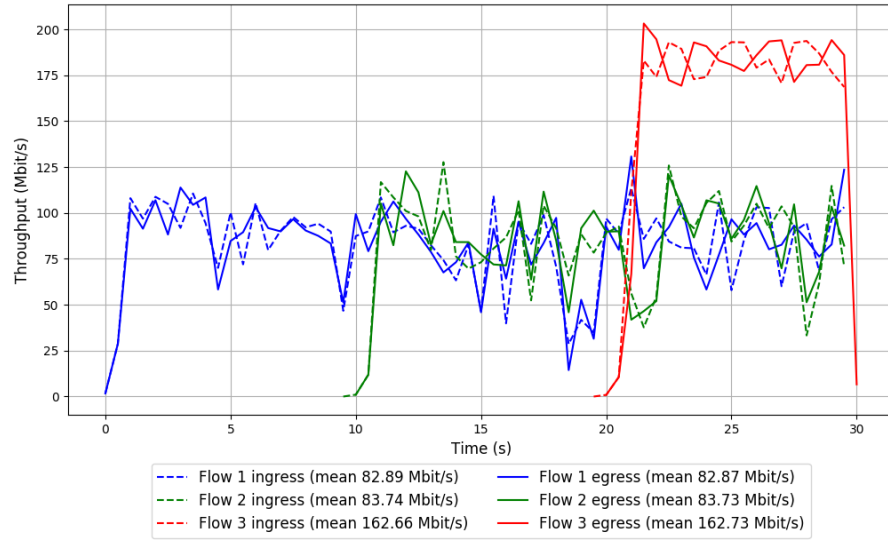
-- Flow 3:

Average throughput: 162.73 Mbit/s

95th percentile per-packet one-way delay: 80.858 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-01 05:55:04

End at: 2018-02-01 05:55:34

Below is generated by plot.py at 2018-02-01 08:46:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.21 Mbit/s

95th percentile per-packet one-way delay: 75.882 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 82.76 Mbit/s

95th percentile per-packet one-way delay: 74.744 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 80.03 Mbit/s

95th percentile per-packet one-way delay: 75.739 ms

Loss rate: 0.20%

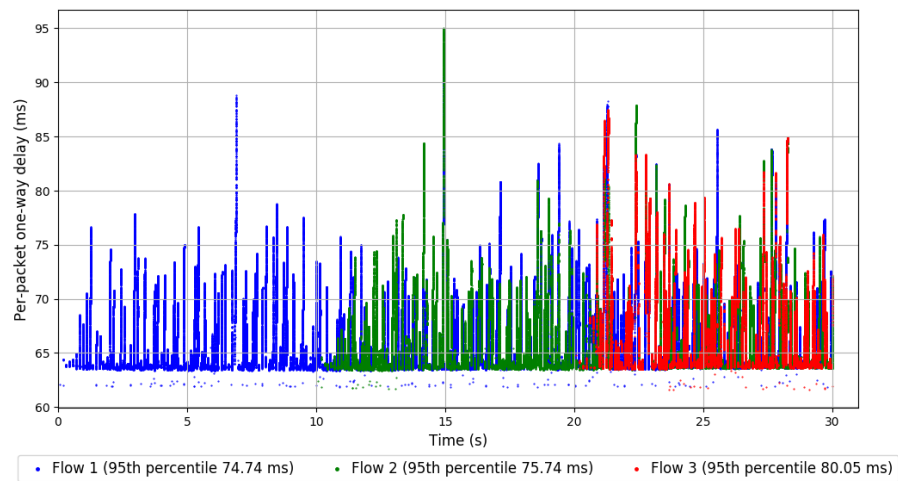
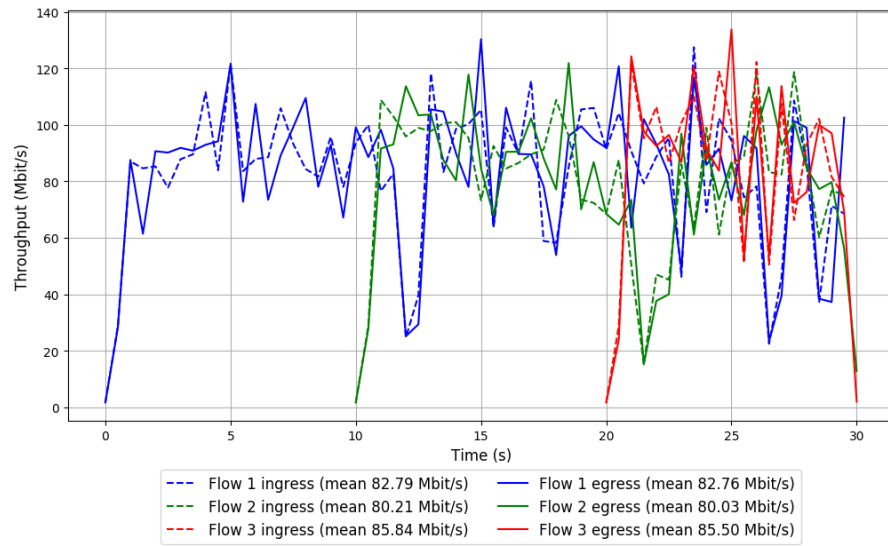
-- Flow 3:

Average throughput: 85.50 Mbit/s

95th percentile per-packet one-way delay: 80.054 ms

Loss rate: 0.40%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-01 06:11:57

End at: 2018-02-01 06:12:27

Below is generated by plot.py at 2018-02-01 08:46:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.05 Mbit/s

95th percentile per-packet one-way delay: 73.680 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 82.40 Mbit/s

95th percentile per-packet one-way delay: 72.328 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 115.88 Mbit/s

95th percentile per-packet one-way delay: 74.961 ms

Loss rate: 0.28%

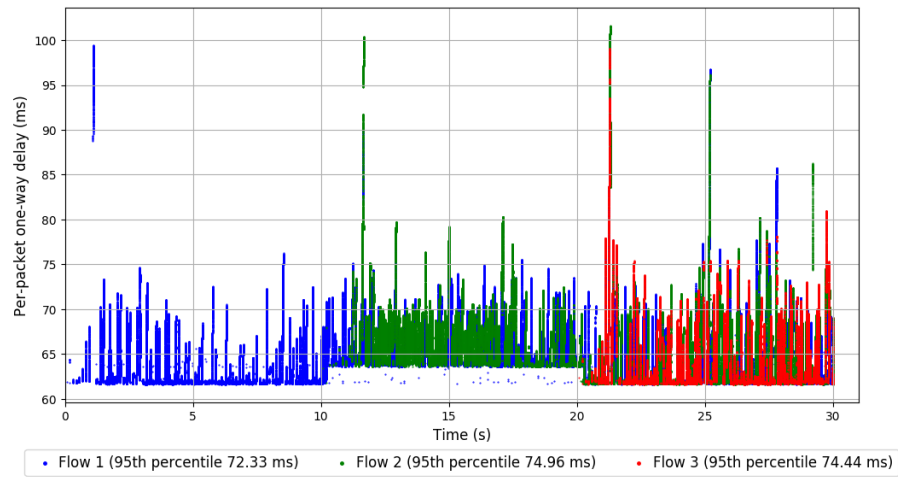
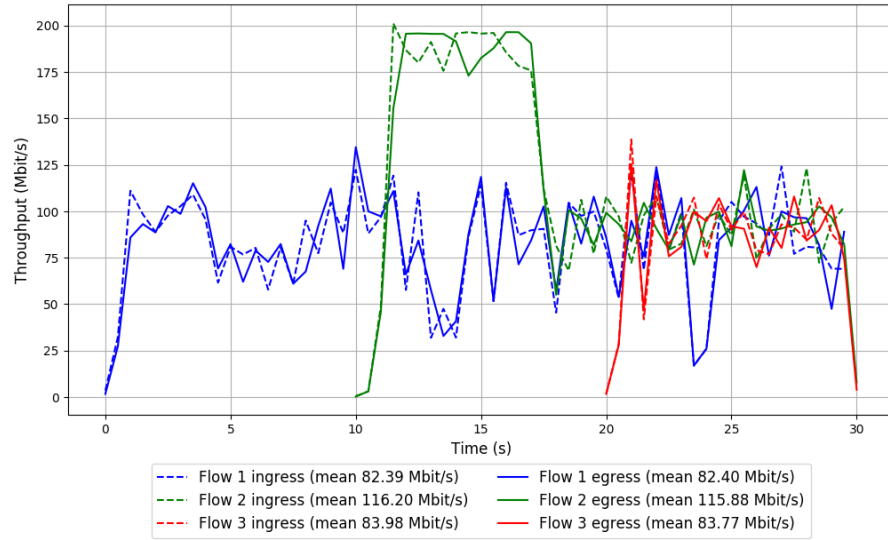
-- Flow 3:

Average throughput: 83.77 Mbit/s

95th percentile per-packet one-way delay: 74.443 ms

Loss rate: 0.23%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-01 06:28:33

End at: 2018-02-01 06:29:03

Below is generated by plot.py at 2018-02-01 08:50:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 202.40 Mbit/s

95th percentile per-packet one-way delay: 74.315 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 86.40 Mbit/s

95th percentile per-packet one-way delay: 73.240 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 133.10 Mbit/s

95th percentile per-packet one-way delay: 75.121 ms

Loss rate: 0.00%

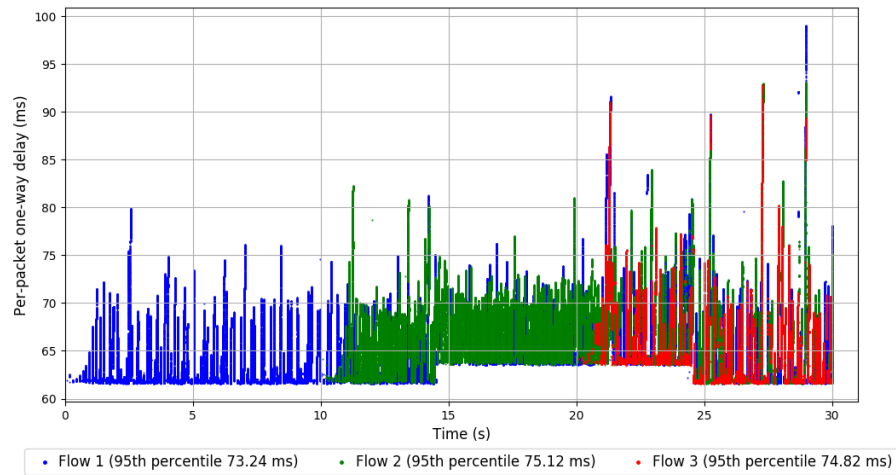
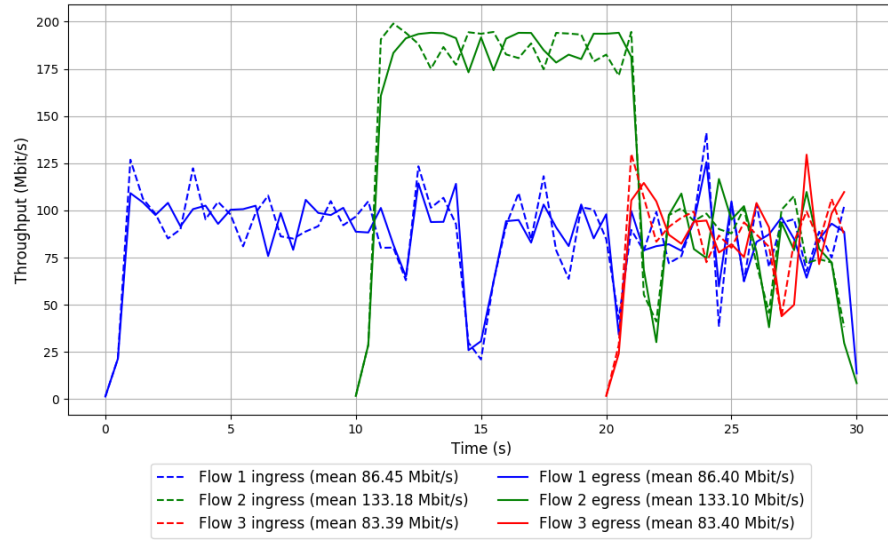
-- Flow 3:

Average throughput: 83.40 Mbit/s

95th percentile per-packet one-way delay: 74.823 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-01 06:45:13

End at: 2018-02-01 06:45:43

Below is generated by plot.py at 2018-02-01 08:50:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 170.06 Mbit/s

95th percentile per-packet one-way delay: 80.634 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 80.74 Mbit/s

95th percentile per-packet one-way delay: 81.179 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 91.48 Mbit/s

95th percentile per-packet one-way delay: 80.280 ms

Loss rate: 0.01%

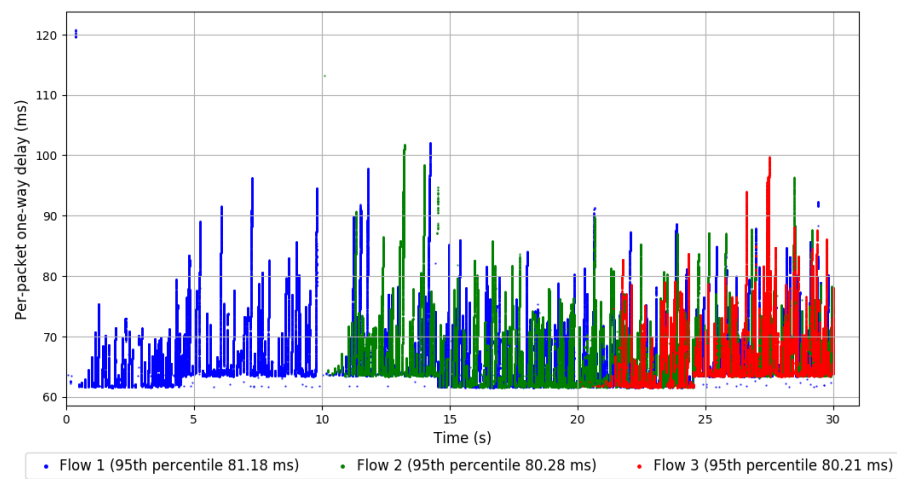
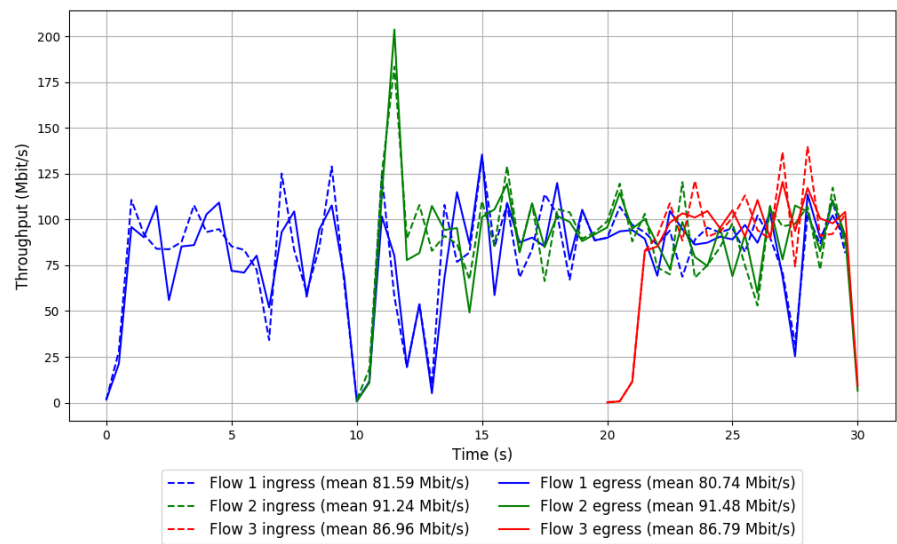
-- Flow 3:

Average throughput: 86.79 Mbit/s

95th percentile per-packet one-way delay: 80.208 ms

Loss rate: 0.04%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-01 04:18:23

End at: 2018-02-01 04:18:53

Below is generated by plot.py at 2018-02-01 08:50:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 203.47 Mbit/s

95th percentile per-packet one-way delay: 74.294 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 101.87 Mbit/s

95th percentile per-packet one-way delay: 73.975 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.79 Mbit/s

95th percentile per-packet one-way delay: 73.815 ms

Loss rate: 0.00%

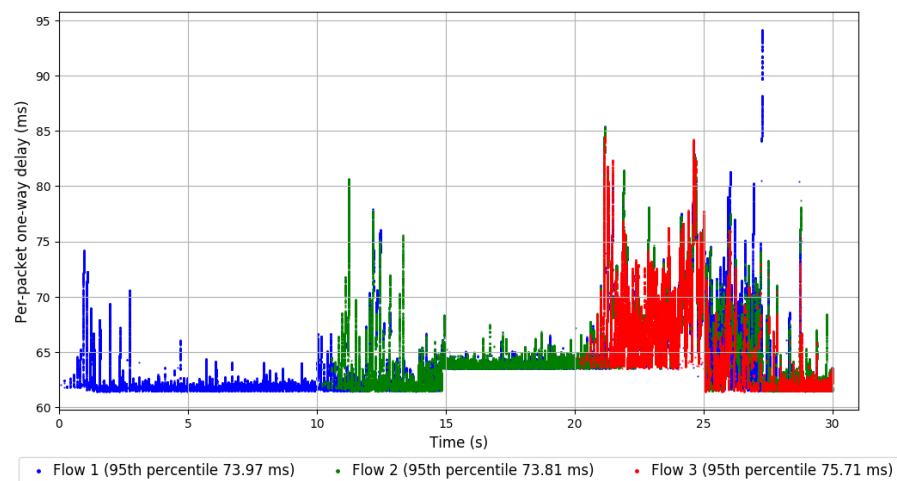
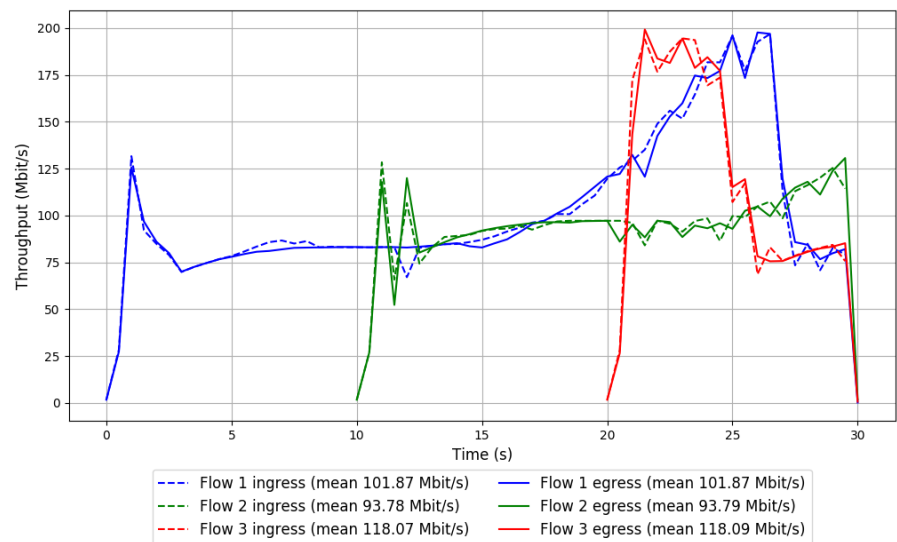
-- Flow 3:

Average throughput: 118.09 Mbit/s

95th percentile per-packet one-way delay: 75.709 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-01 04:34:43

End at: 2018-02-01 04:35:13

Below is generated by plot.py at 2018-02-01 08:50:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.83 Mbit/s

95th percentile per-packet one-way delay: 67.322 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 67.56 Mbit/s

95th percentile per-packet one-way delay: 68.173 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 8.72 Mbit/s

95th percentile per-packet one-way delay: 63.233 ms

Loss rate: 0.30%

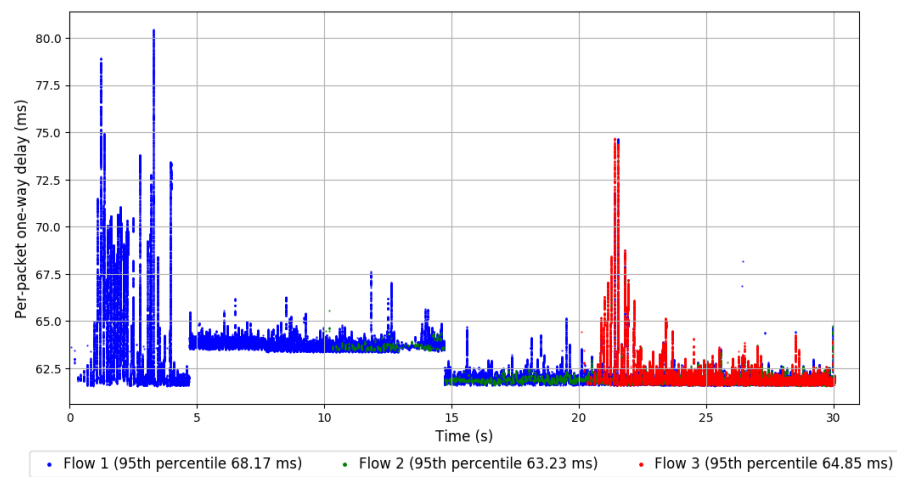
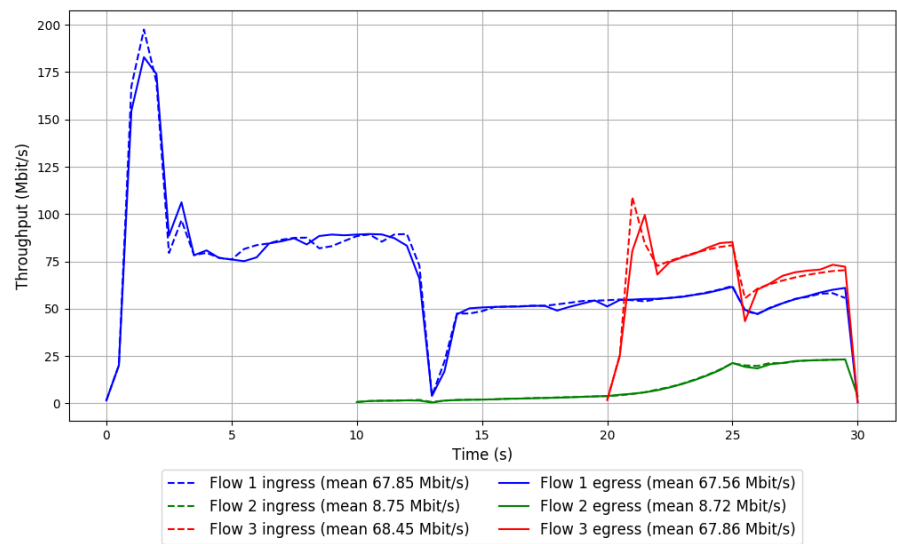
-- Flow 3:

Average throughput: 67.86 Mbit/s

95th percentile per-packet one-way delay: 64.853 ms

Loss rate: 0.89%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-01 04:50:54

End at: 2018-02-01 04:51:24

Below is generated by plot.py at 2018-02-01 08:50:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.85 Mbit/s

95th percentile per-packet one-way delay: 63.722 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 71.76 Mbit/s

95th percentile per-packet one-way delay: 64.082 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 74.83 Mbit/s

95th percentile per-packet one-way delay: 63.585 ms

Loss rate: 0.05%

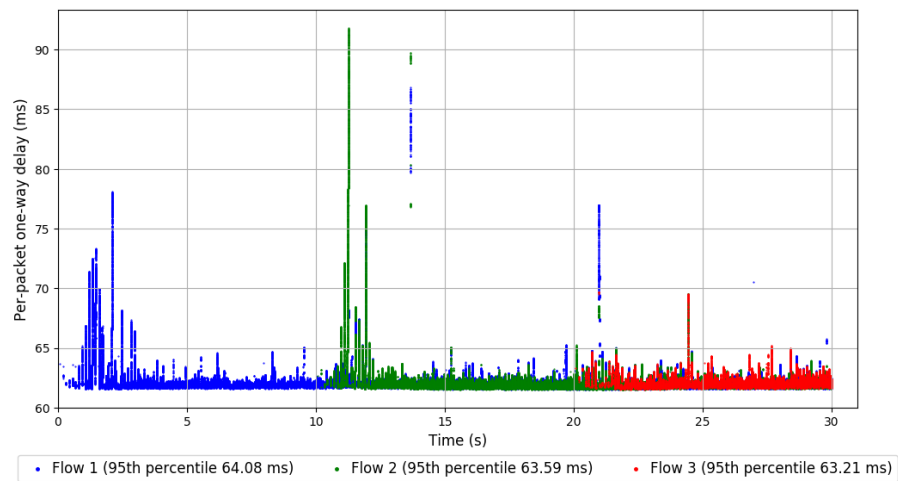
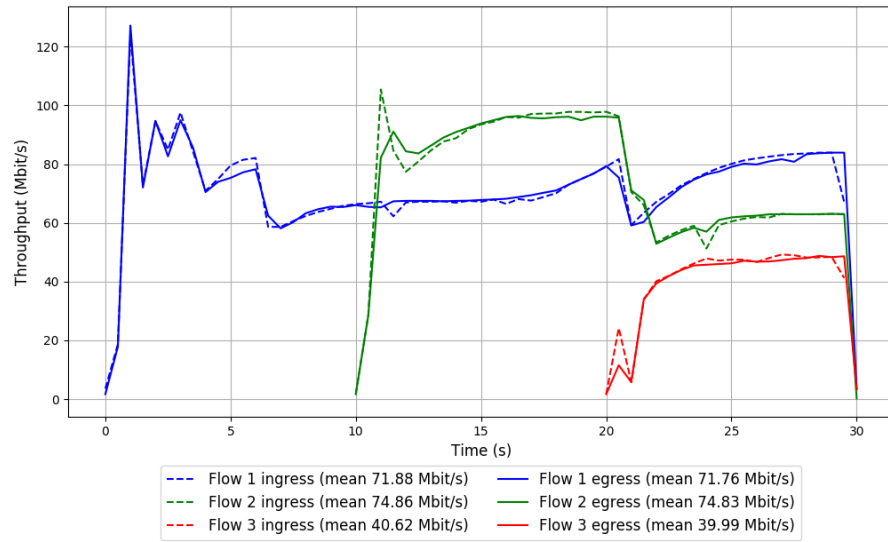
-- Flow 3:

Average throughput: 39.99 Mbit/s

95th percentile per-packet one-way delay: 63.207 ms

Loss rate: 1.57%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-01 05:07:06

End at: 2018-02-01 05:07:36

Below is generated by plot.py at 2018-02-01 08:50:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 192.50 Mbit/s

95th percentile per-packet one-way delay: 70.058 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 81.02 Mbit/s

95th percentile per-packet one-way delay: 67.139 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 117.70 Mbit/s

95th percentile per-packet one-way delay: 71.426 ms

Loss rate: 0.01%

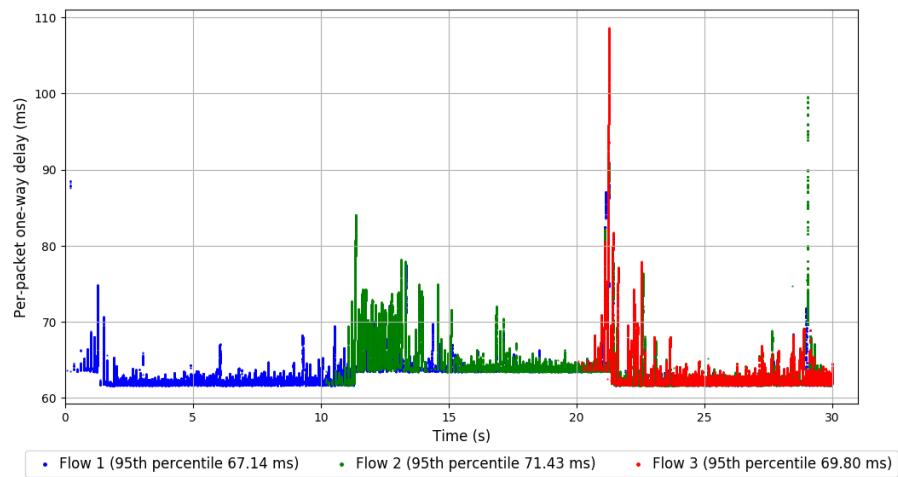
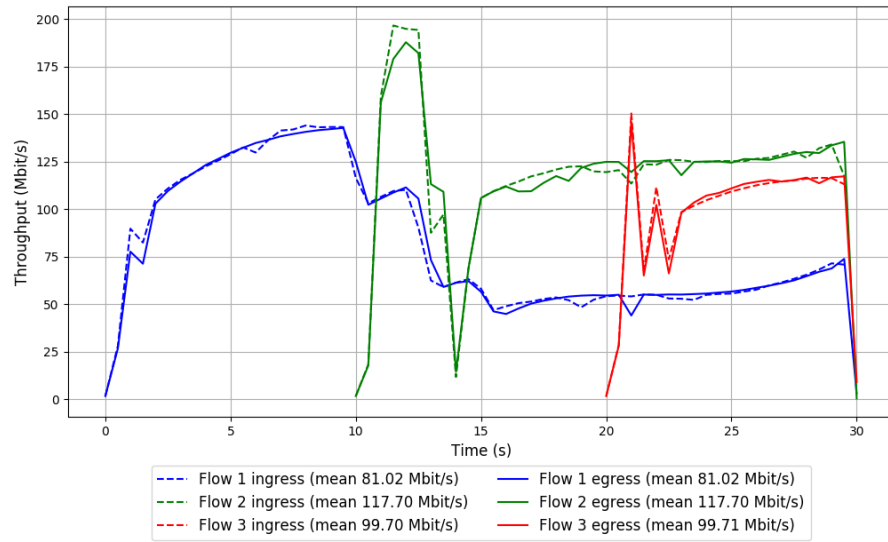
-- Flow 3:

Average throughput: 99.71 Mbit/s

95th percentile per-packet one-way delay: 69.802 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-01 05:23:33

End at: 2018-02-01 05:24:03

Below is generated by plot.py at 2018-02-01 08:50:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.50 Mbit/s

95th percentile per-packet one-way delay: 67.605 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 36.51 Mbit/s

95th percentile per-packet one-way delay: 66.791 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 55.36 Mbit/s

95th percentile per-packet one-way delay: 69.038 ms

Loss rate: 0.02%

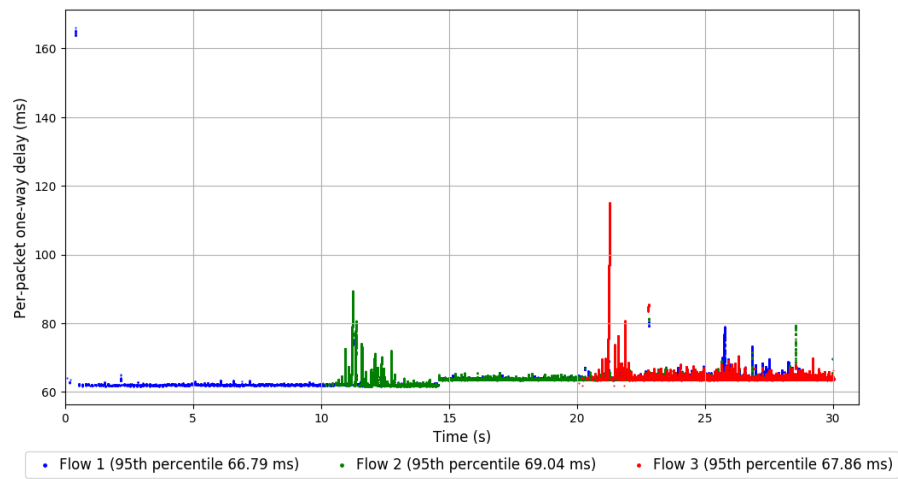
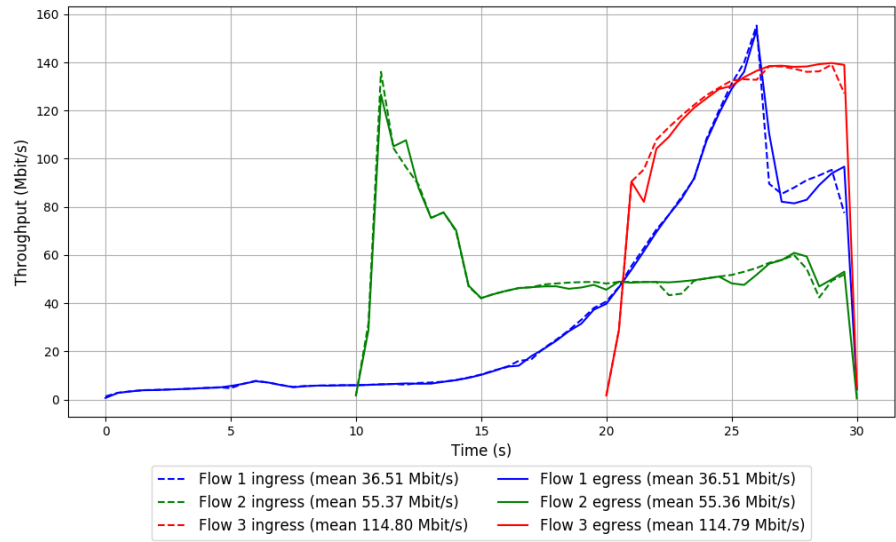
-- Flow 3:

Average throughput: 114.79 Mbit/s

95th percentile per-packet one-way delay: 67.860 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-01 05:40:05

End at: 2018-02-01 05:40:35

Below is generated by plot.py at 2018-02-01 08:51:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 210.97 Mbit/s

95th percentile per-packet one-way delay: 67.120 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 111.98 Mbit/s

95th percentile per-packet one-way delay: 67.146 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 95.80 Mbit/s

95th percentile per-packet one-way delay: 67.931 ms

Loss rate: 0.00%

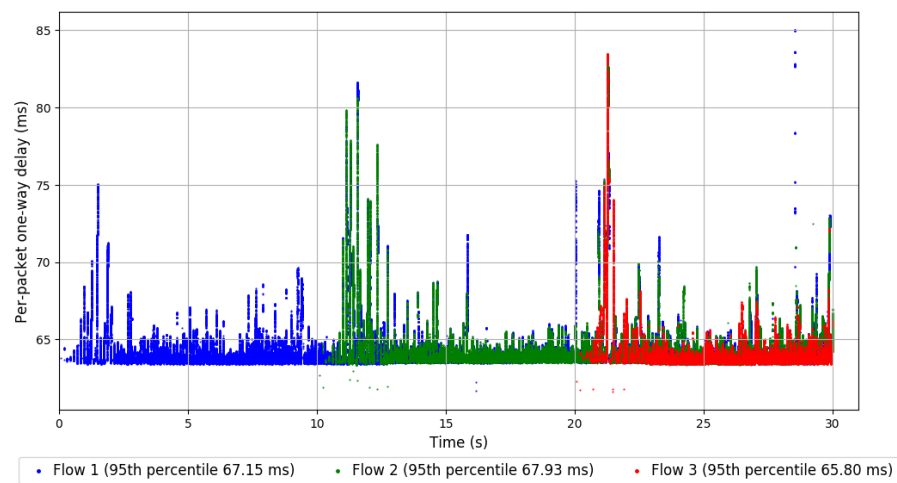
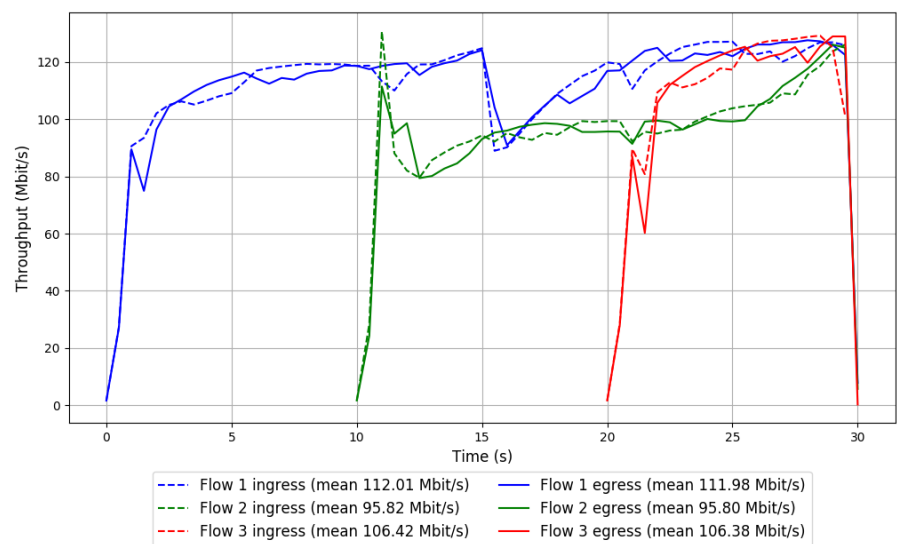
-- Flow 3:

Average throughput: 106.38 Mbit/s

95th percentile per-packet one-way delay: 65.797 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-01 05:56:55

End at: 2018-02-01 05:57:25

Below is generated by plot.py at 2018-02-01 08:52:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.65 Mbit/s

95th percentile per-packet one-way delay: 66.924 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 120.29 Mbit/s

95th percentile per-packet one-way delay: 66.811 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 94.83 Mbit/s

95th percentile per-packet one-way delay: 67.287 ms

Loss rate: 0.00%

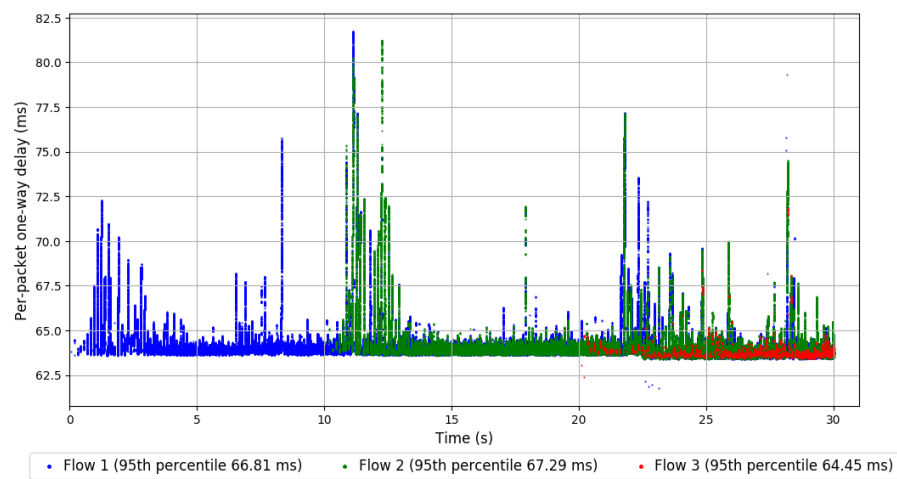
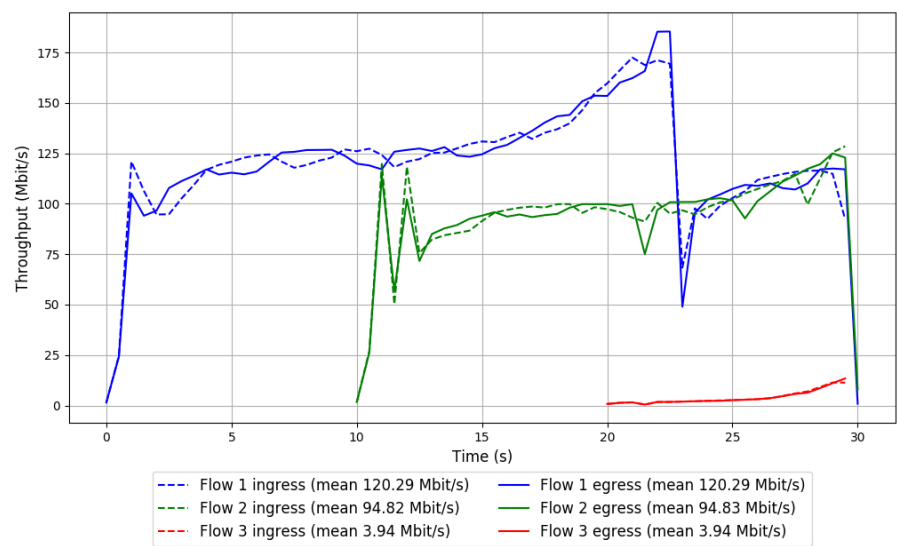
-- Flow 3:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 64.452 ms

Loss rate: 0.09%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-01 06:13:51

End at: 2018-02-01 06:14:21

Below is generated by plot.py at 2018-02-01 08:52:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 168.13 Mbit/s

95th percentile per-packet one-way delay: 69.475 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 110.48 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 39.15 Mbit/s

95th percentile per-packet one-way delay: 68.260 ms

Loss rate: 0.05%

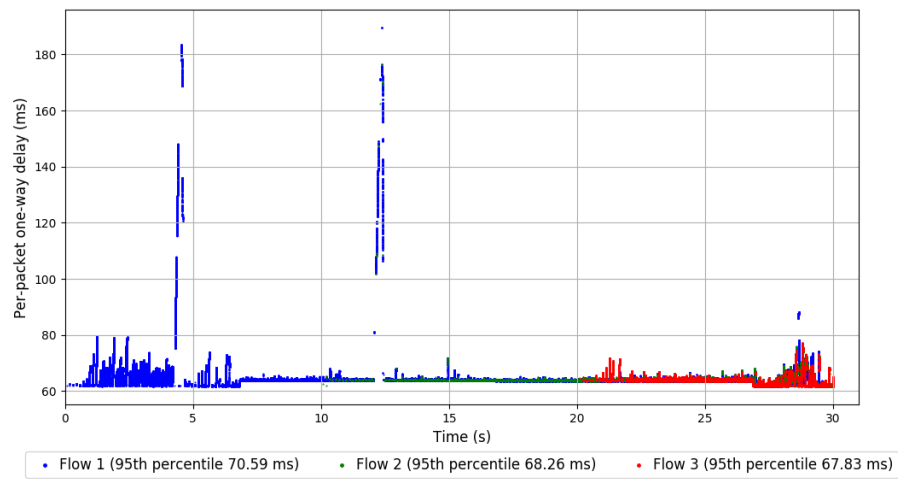
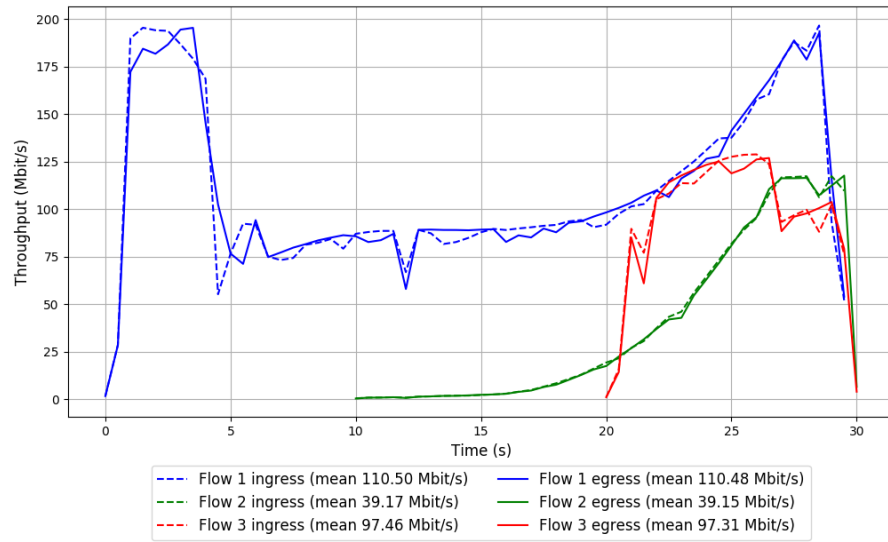
-- Flow 3:

Average throughput: 97.31 Mbit/s

95th percentile per-packet one-way delay: 67.834 ms

Loss rate: 0.17%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-01 06:30:30

End at: 2018-02-01 06:31:00

Below is generated by plot.py at 2018-02-01 08:53:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 203.86 Mbit/s

95th percentile per-packet one-way delay: 77.405 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 92.12 Mbit/s

95th percentile per-packet one-way delay: 76.778 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 101.05 Mbit/s

95th percentile per-packet one-way delay: 75.558 ms

Loss rate: 0.00%

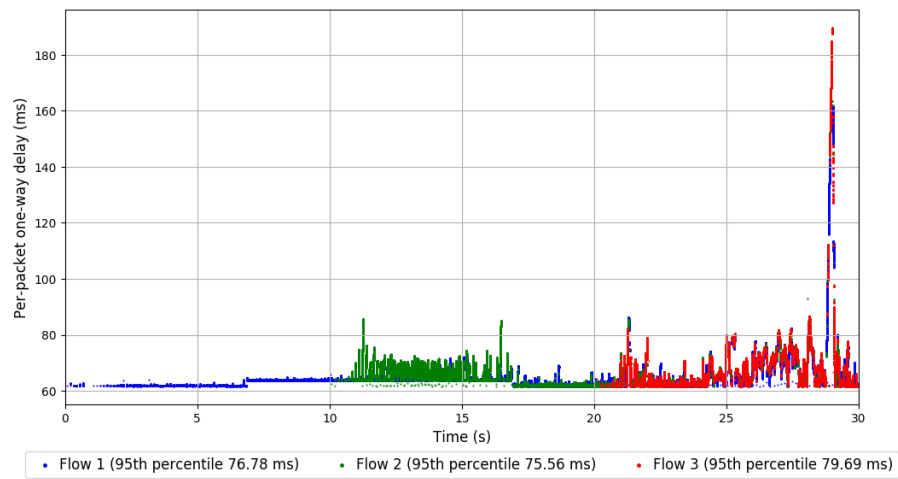
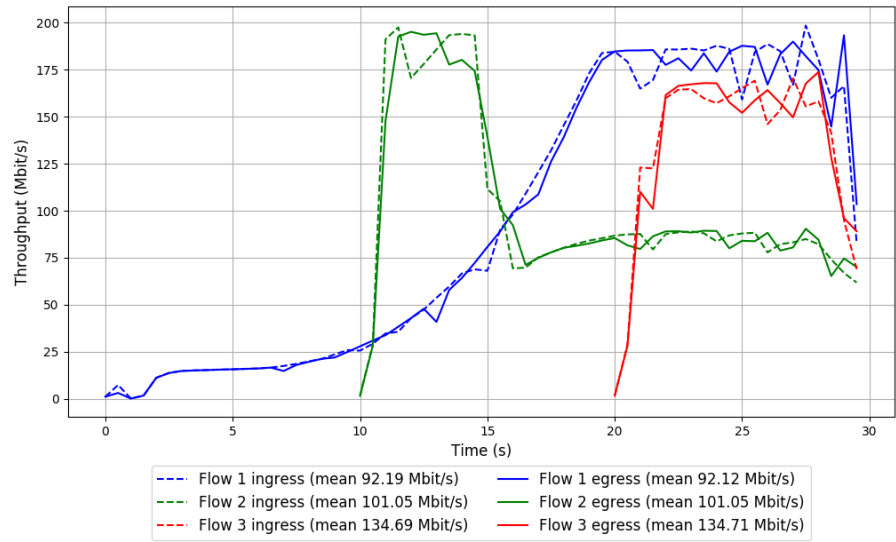
-- Flow 3:

Average throughput: 134.71 Mbit/s

95th percentile per-packet one-way delay: 79.688 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-01 06:47:02

End at: 2018-02-01 06:47:32

Below is generated by plot.py at 2018-02-01 08:53:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 200.75 Mbit/s

95th percentile per-packet one-way delay: 69.701 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 102.21 Mbit/s

95th percentile per-packet one-way delay: 69.940 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 110.56 Mbit/s

95th percentile per-packet one-way delay: 68.793 ms

Loss rate: 0.01%

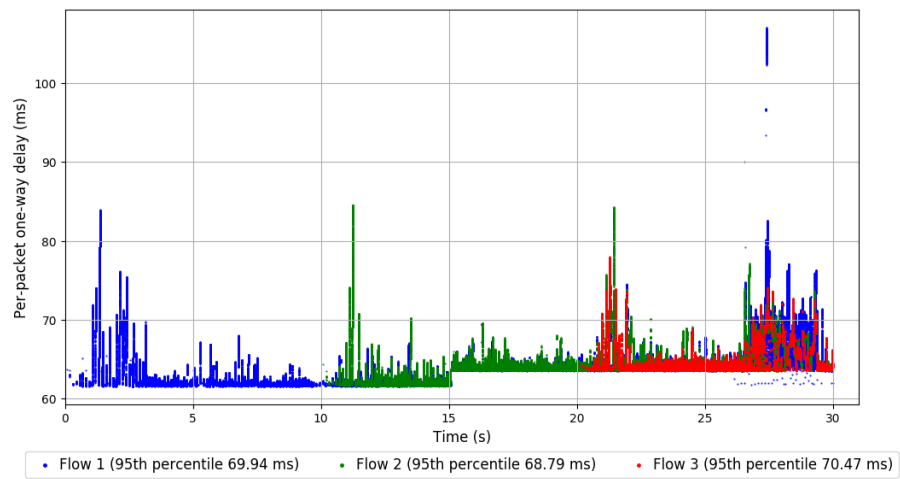
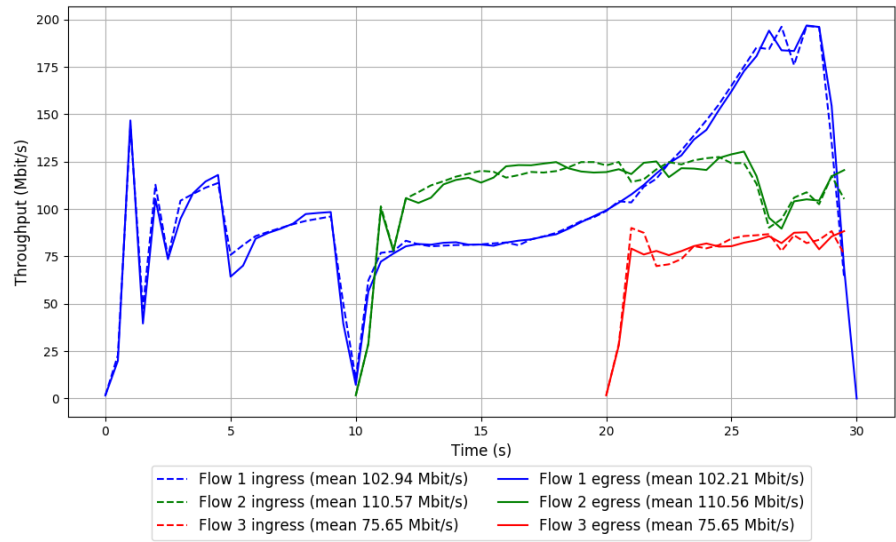
-- Flow 3:

Average throughput: 75.65 Mbit/s

95th percentile per-packet one-way delay: 70.467 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

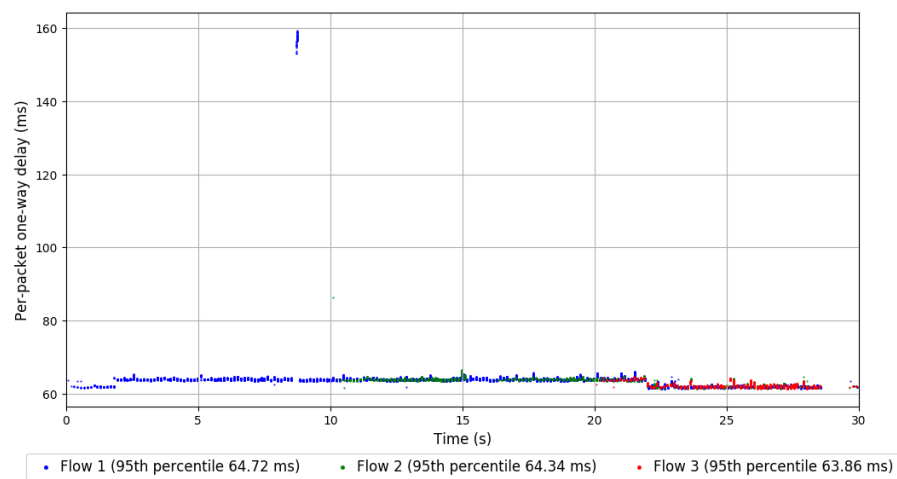
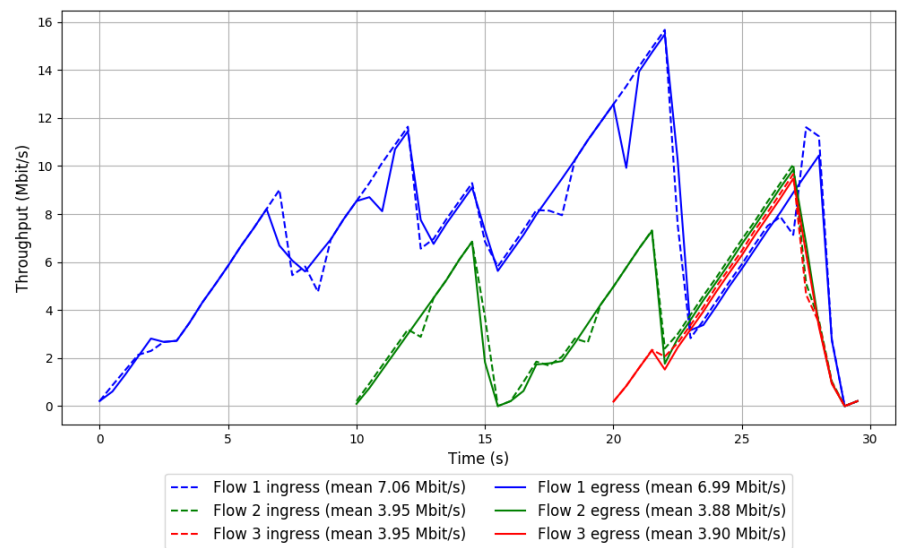


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-01 04:19:16
End at: 2018-02-01 04:19:46

# Below is generated by plot.py at 2018-02-01 08:53:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.84 Mbit/s
95th percentile per-packet one-way delay: 64.552 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 64.723 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 64.336 ms
Loss rate: 1.98%
-- Flow 3:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 63.861 ms
Loss rate: 1.33%
```


Run 1: Report of LEDBAT — Data Link

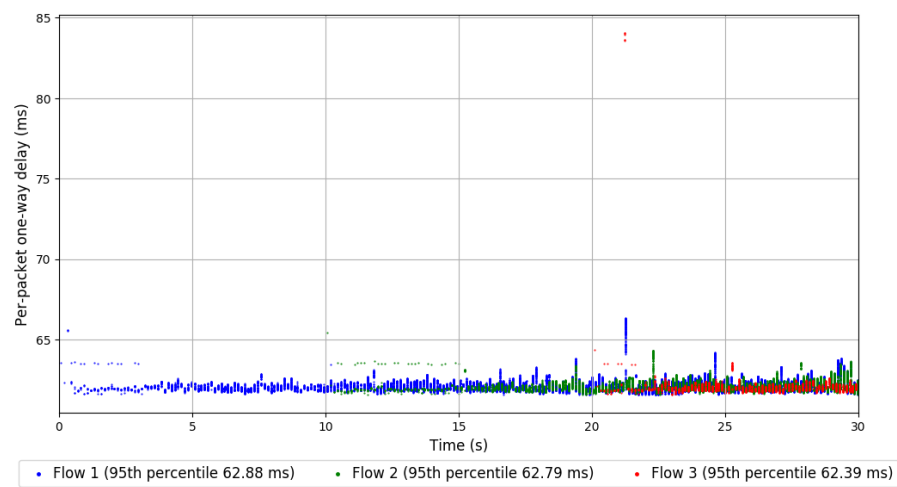
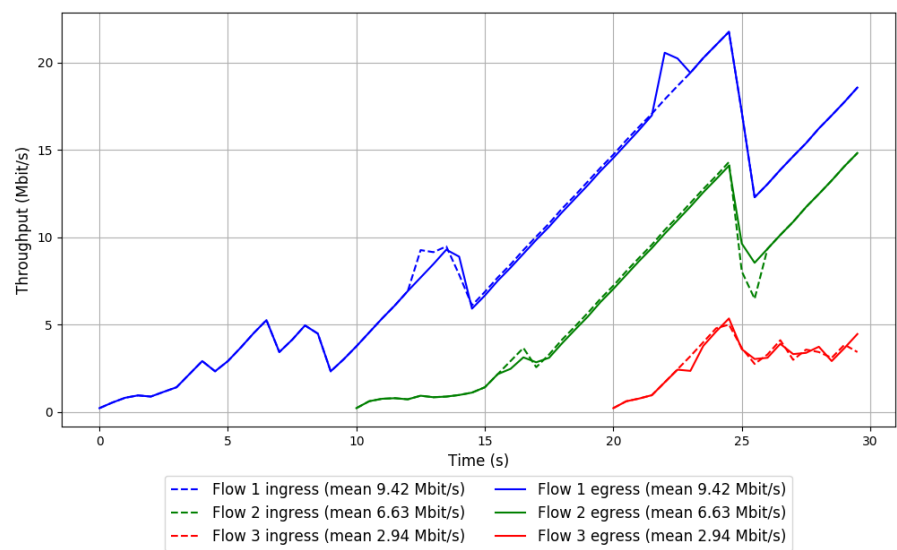


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-01 04:35:29
End at: 2018-02-01 04:35:59

# Below is generated by plot.py at 2018-02-01 08:53:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.80 Mbit/s
95th percentile per-packet one-way delay: 62.825 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.42 Mbit/s
95th percentile per-packet one-way delay: 62.882 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.63 Mbit/s
95th percentile per-packet one-way delay: 62.787 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 62.393 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link

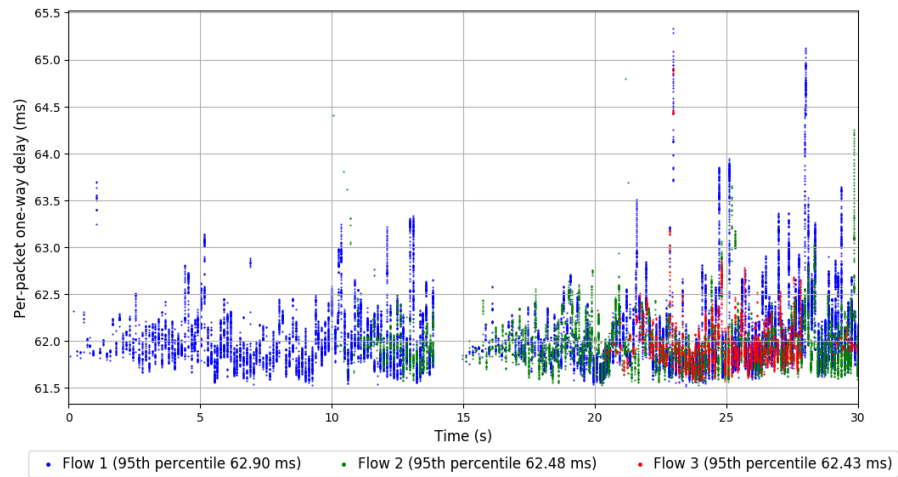
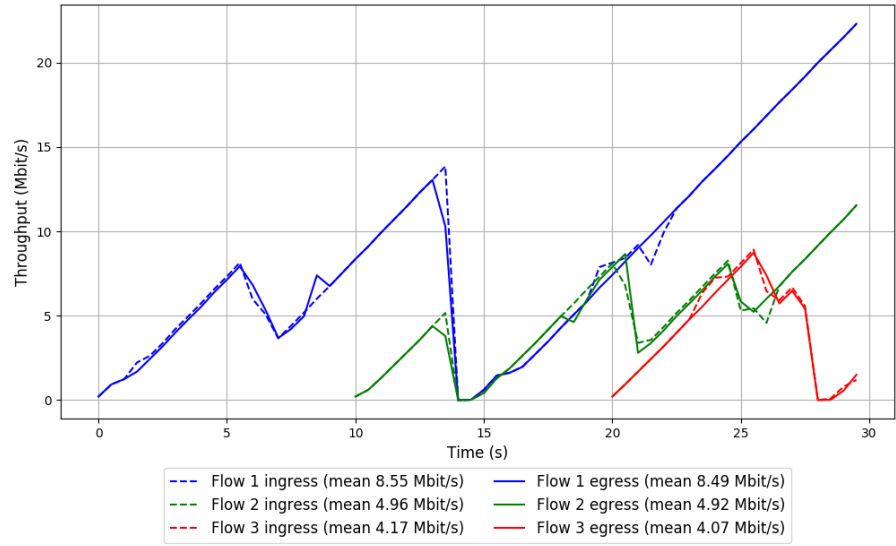


```
Run 3: Statistics of LEDBAT

Start at: 2018-02-01 04:51:42
End at: 2018-02-01 04:52:12

# Below is generated by plot.py at 2018-02-01 08:53:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.10 Mbit/s
95th percentile per-packet one-way delay: 62.754 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 8.49 Mbit/s
95th percentile per-packet one-way delay: 62.900 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 4.92 Mbit/s
95th percentile per-packet one-way delay: 62.476 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 4.07 Mbit/s
95th percentile per-packet one-way delay: 62.426 ms
Loss rate: 2.32%
```

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-01 05:07:58

End at: 2018-02-01 05:08:28

Below is generated by plot.py at 2018-02-01 08:53:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.82 Mbit/s

95th percentile per-packet one-way delay: 64.152 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 6.75 Mbit/s

95th percentile per-packet one-way delay: 64.104 ms

Loss rate: 1.23%

-- Flow 2:

Average throughput: 8.26 Mbit/s

95th percentile per-packet one-way delay: 64.259 ms

Loss rate: 0.06%

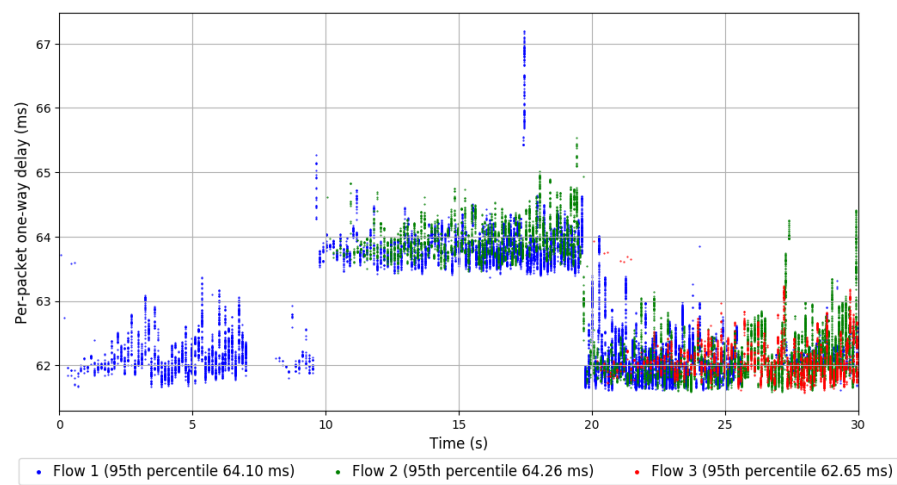
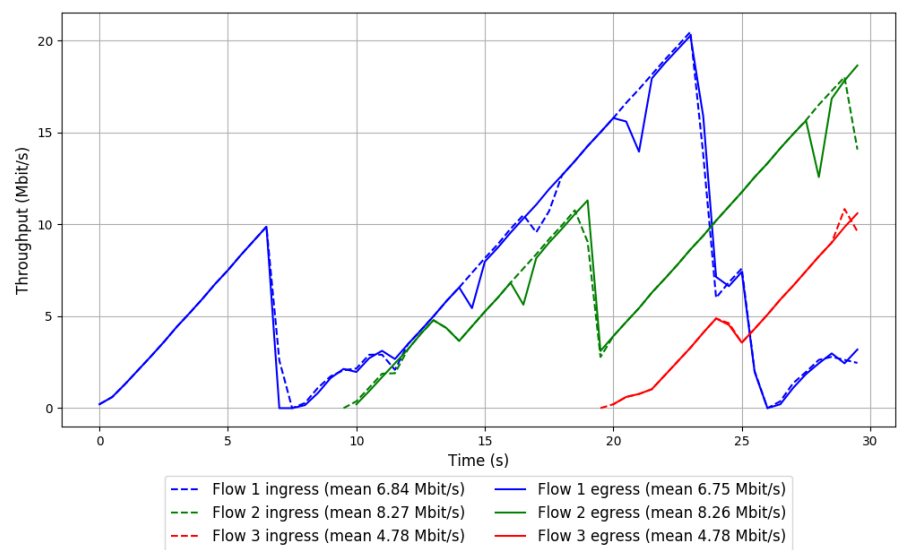
-- Flow 3:

Average throughput: 4.78 Mbit/s

95th percentile per-packet one-way delay: 62.646 ms

Loss rate: 0.10%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-01 05:24:20

End at: 2018-02-01 05:24:50

Below is generated by plot.py at 2018-02-01 08:53:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.32 Mbit/s

95th percentile per-packet one-way delay: 64.745 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 6.97 Mbit/s

95th percentile per-packet one-way delay: 64.797 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 9.00 Mbit/s

95th percentile per-packet one-way delay: 64.761 ms

Loss rate: 0.01%

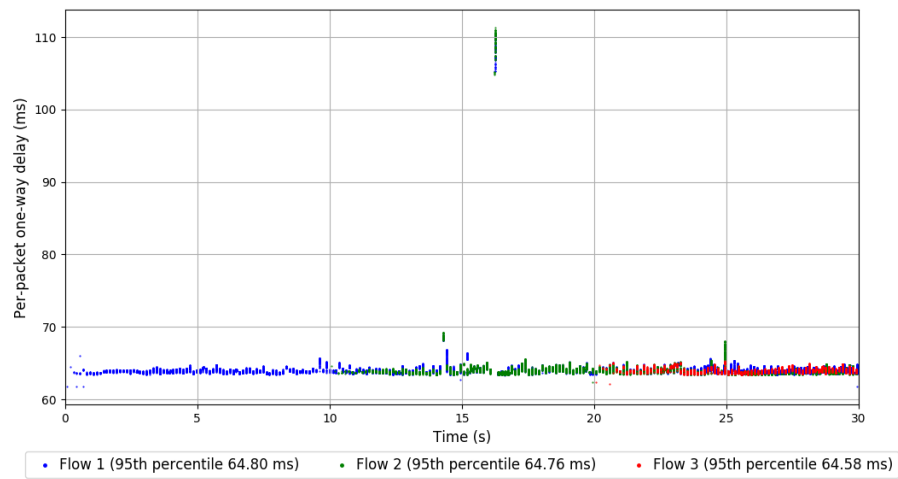
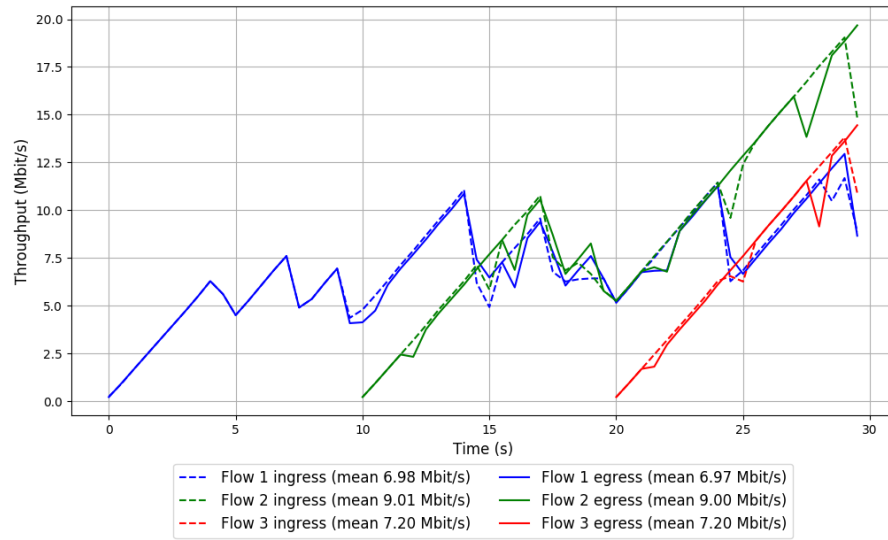
-- Flow 3:

Average throughput: 7.20 Mbit/s

95th percentile per-packet one-way delay: 64.584 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-01 05:40:57

End at: 2018-02-01 05:41:27

Below is generated by plot.py at 2018-02-01 08:53:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.97 Mbit/s

95th percentile per-packet one-way delay: 64.500 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 64.547 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 8.81 Mbit/s

95th percentile per-packet one-way delay: 64.489 ms

Loss rate: 0.01%

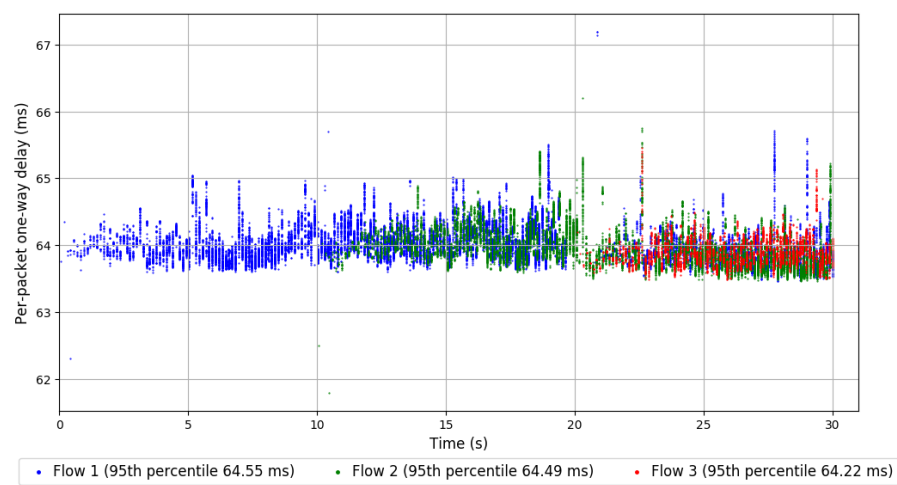
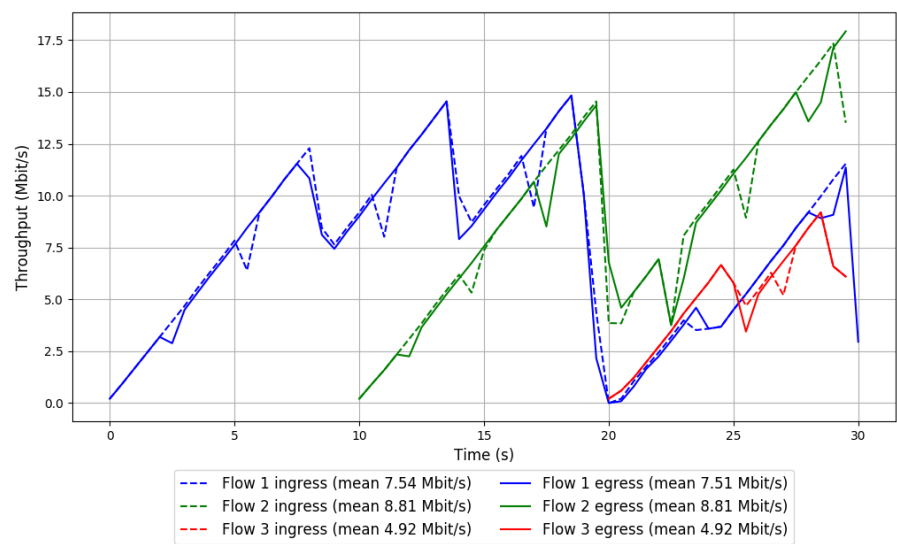
-- Flow 3:

Average throughput: 4.92 Mbit/s

95th percentile per-packet one-way delay: 64.223 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-01 05:57:46

End at: 2018-02-01 05:58:16

Below is generated by plot.py at 2018-02-01 08:53:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 24.02 Mbit/s

95th percentile per-packet one-way delay: 64.809 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 15.87 Mbit/s

95th percentile per-packet one-way delay: 64.898 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.68 Mbit/s

95th percentile per-packet one-way delay: 64.602 ms

Loss rate: 0.00%

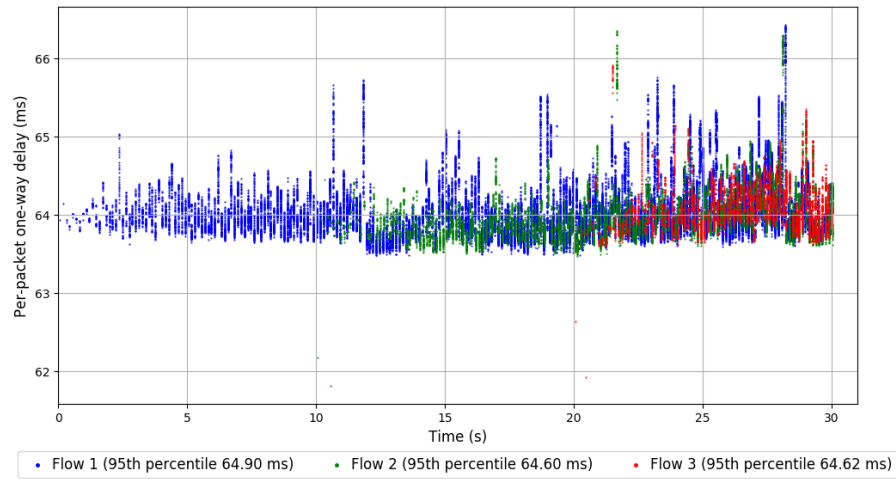
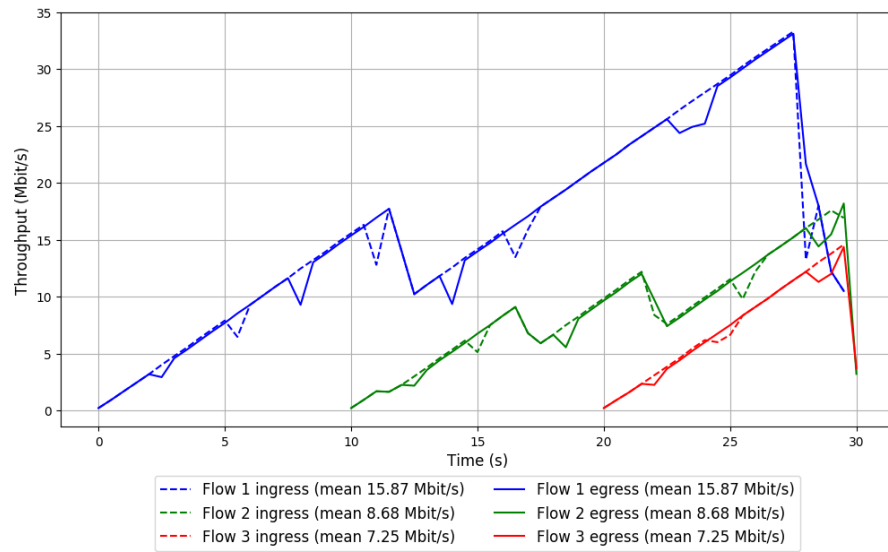
-- Flow 3:

Average throughput: 7.25 Mbit/s

95th percentile per-packet one-way delay: 64.617 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-01 06:14:43

End at: 2018-02-01 06:15:13

Below is generated by plot.py at 2018-02-01 08:53:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 22.56 Mbit/s

95th percentile per-packet one-way delay: 62.874 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.94 Mbit/s

95th percentile per-packet one-way delay: 63.054 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.27 Mbit/s

95th percentile per-packet one-way delay: 62.422 ms

Loss rate: 0.00%

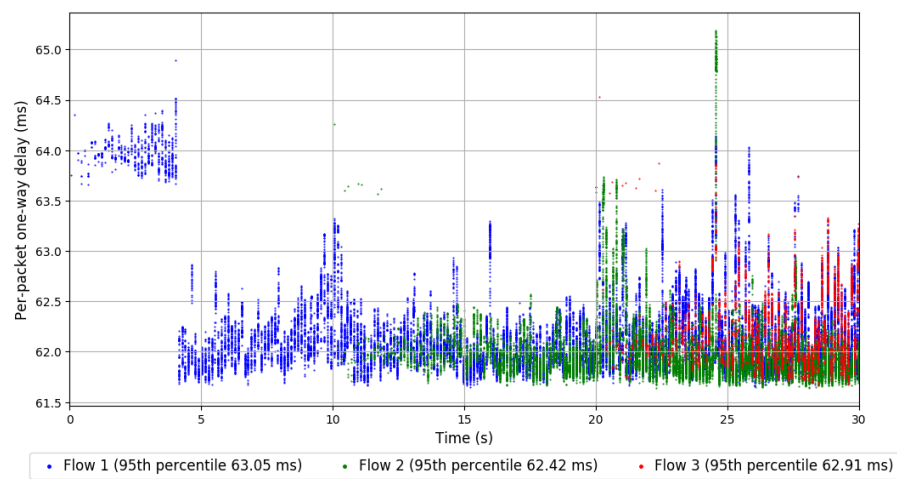
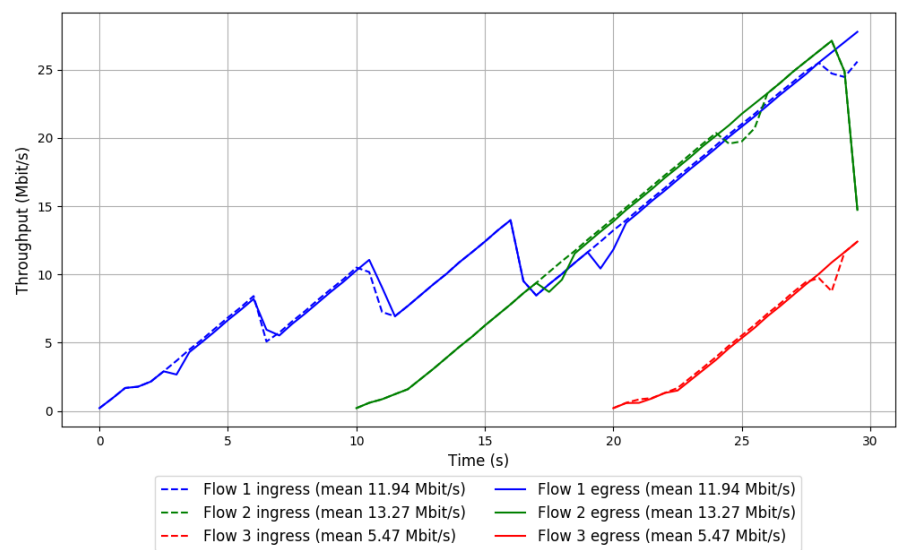
-- Flow 3:

Average throughput: 5.47 Mbit/s

95th percentile per-packet one-way delay: 62.908 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-01 06:31:25

End at: 2018-02-01 06:31:55

Below is generated by plot.py at 2018-02-01 08:53:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.40 Mbit/s

95th percentile per-packet one-way delay: 64.350 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 64.287 ms

Loss rate: 1.45%

-- Flow 2:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 64.324 ms

Loss rate: 2.90%

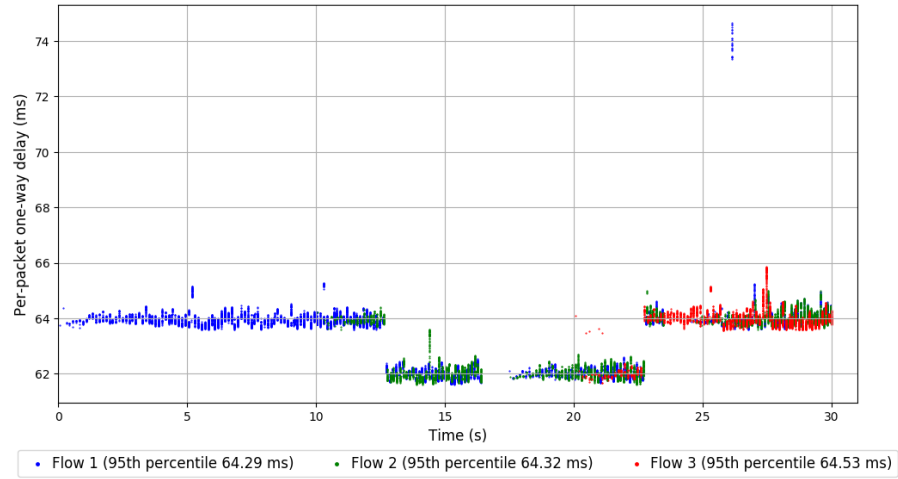
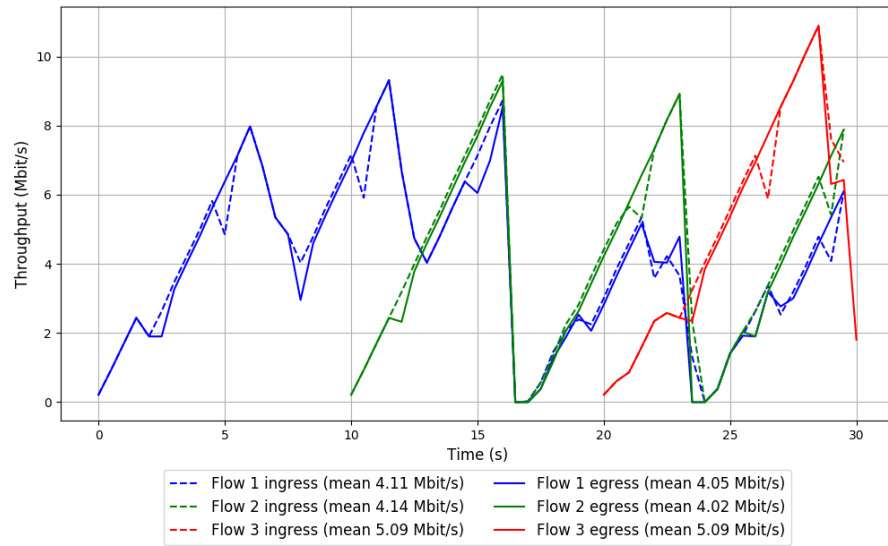
-- Flow 3:

Average throughput: 5.09 Mbit/s

95th percentile per-packet one-way delay: 64.527 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

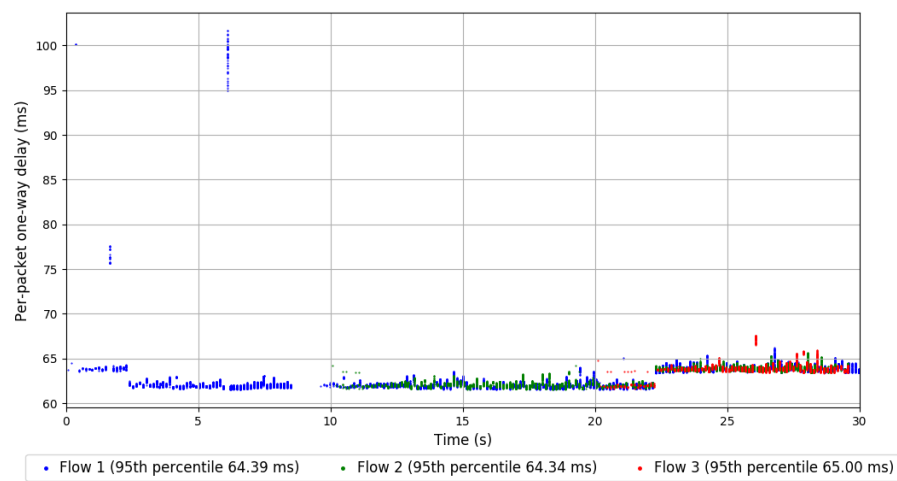
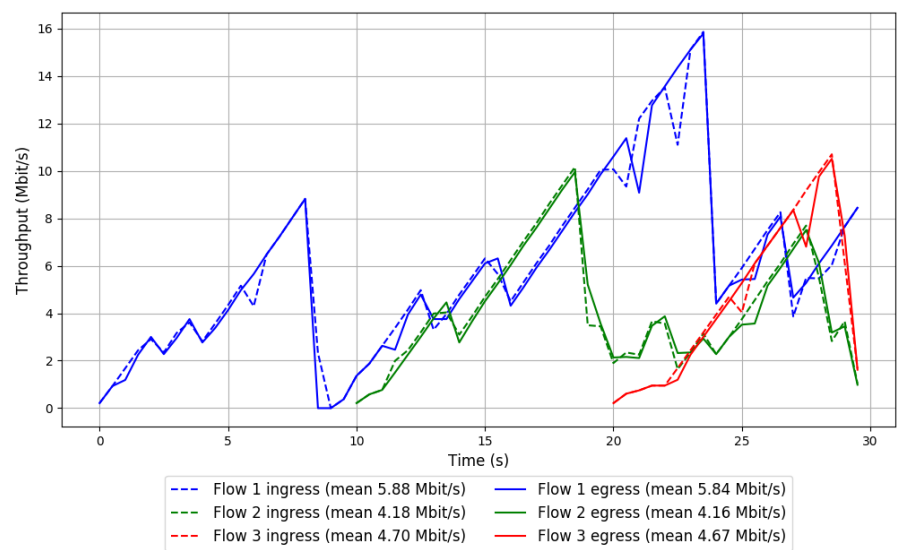


```
Run 10: Statistics of LEDBAT

Start at: 2018-02-01 06:47:55
End at: 2018-02-01 06:48:25

# Below is generated by plot.py at 2018-02-01 08:53:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.03 Mbit/s
95th percentile per-packet one-way delay: 64.444 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 5.84 Mbit/s
95th percentile per-packet one-way delay: 64.388 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 64.341 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 4.67 Mbit/s
95th percentile per-packet one-way delay: 65.004 ms
Loss rate: 1.85%
```

Run 10: Report of LEDBAT — Data Link

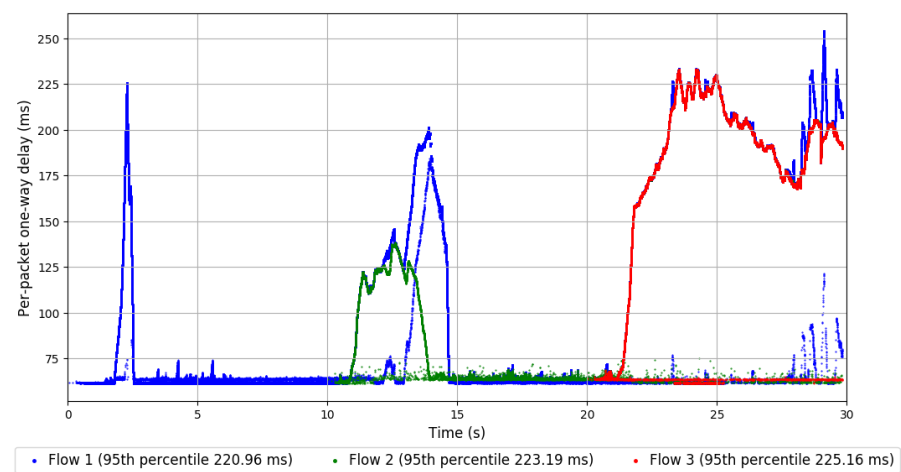
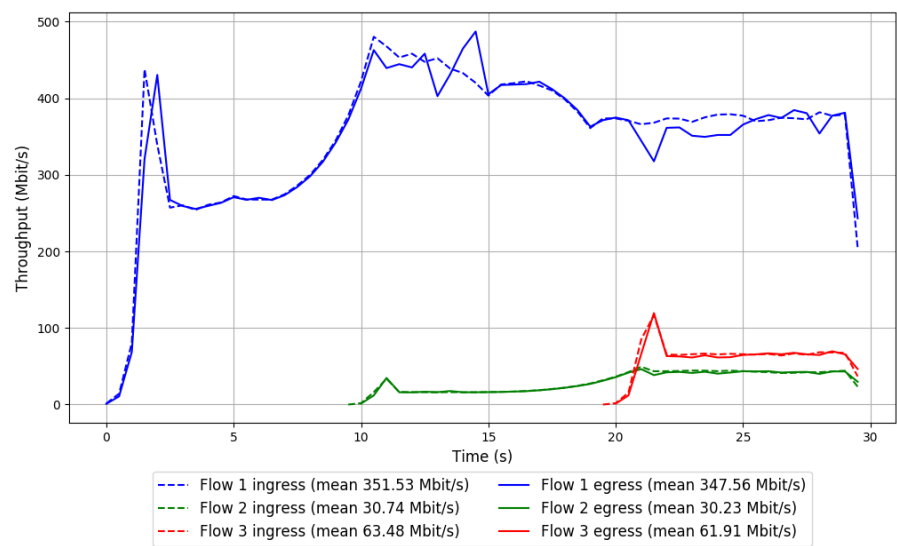


```
Run 1: Statistics of PCC

Start at: 2018-02-01 04:17:25
End at: 2018-02-01 04:17:55

# Below is generated by plot.py at 2018-02-01 08:58:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 388.09 Mbit/s
95th percentile per-packet one-way delay: 221.561 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 347.56 Mbit/s
95th percentile per-packet one-way delay: 220.963 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 30.23 Mbit/s
95th percentile per-packet one-way delay: 223.191 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 61.91 Mbit/s
95th percentile per-packet one-way delay: 225.157 ms
Loss rate: 2.46%
```

Run 1: Report of PCC — Data Link

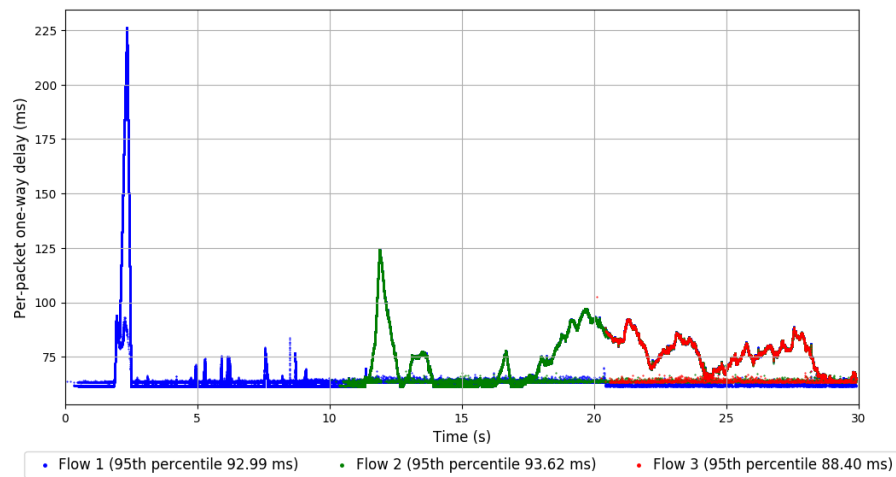
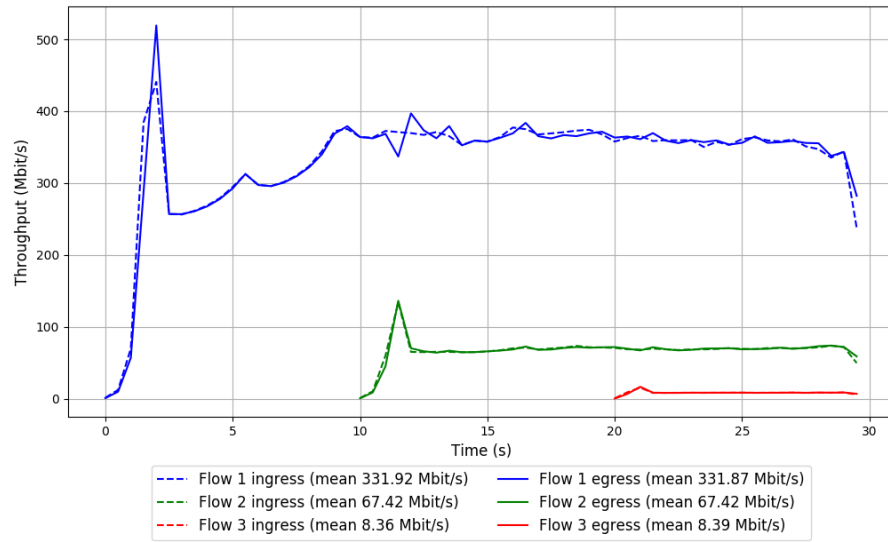


```
Run 2: Statistics of PCC

Start at: 2018-02-01 04:33:47
End at: 2018-02-01 04:34:17

# Below is generated by plot.py at 2018-02-01 08:58:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.42 Mbit/s
95th percentile per-packet one-way delay: 92.983 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 331.87 Mbit/s
95th percentile per-packet one-way delay: 92.993 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 67.42 Mbit/s
95th percentile per-packet one-way delay: 93.625 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.39 Mbit/s
95th percentile per-packet one-way delay: 88.403 ms
Loss rate: 0.00%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-01 04:49:56

End at: 2018-02-01 04:50:26

Below is generated by plot.py at 2018-02-01 08:59:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 426.53 Mbit/s

95th percentile per-packet one-way delay: 213.829 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 403.23 Mbit/s

95th percentile per-packet one-way delay: 214.178 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 33.04 Mbit/s

95th percentile per-packet one-way delay: 210.996 ms

Loss rate: 0.44%

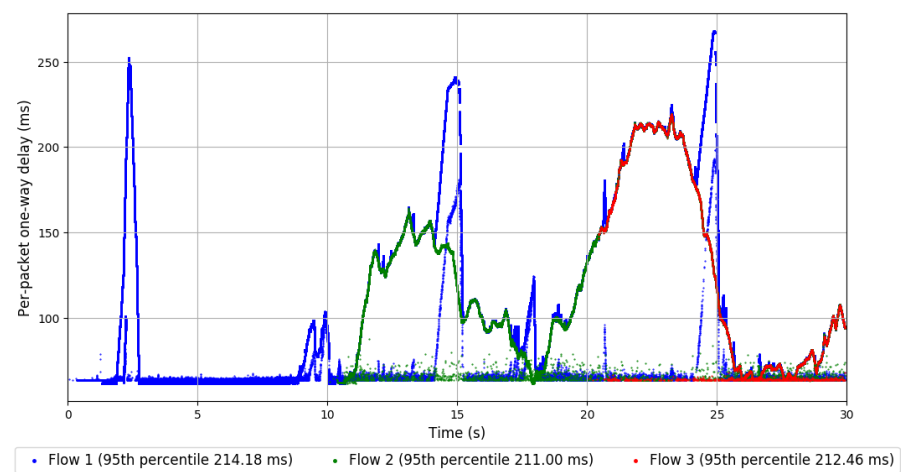
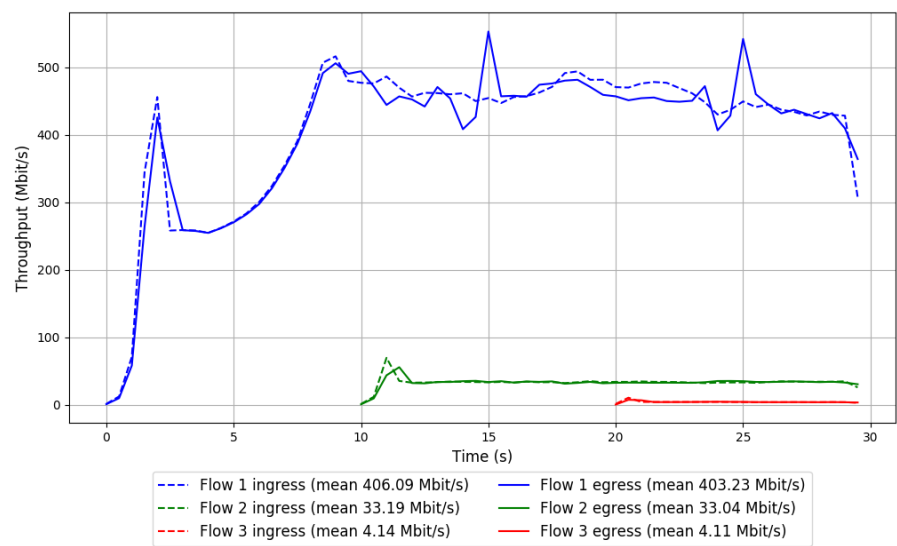
-- Flow 3:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 212.459 ms

Loss rate: 0.82%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-01 05:06:10

End at: 2018-02-01 05:06:40

Below is generated by plot.py at 2018-02-01 08:59:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 373.08 Mbit/s

95th percentile per-packet one-way delay: 191.448 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 346.24 Mbit/s

95th percentile per-packet one-way delay: 191.698 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 8.81 Mbit/s

95th percentile per-packet one-way delay: 191.983 ms

Loss rate: 0.03%

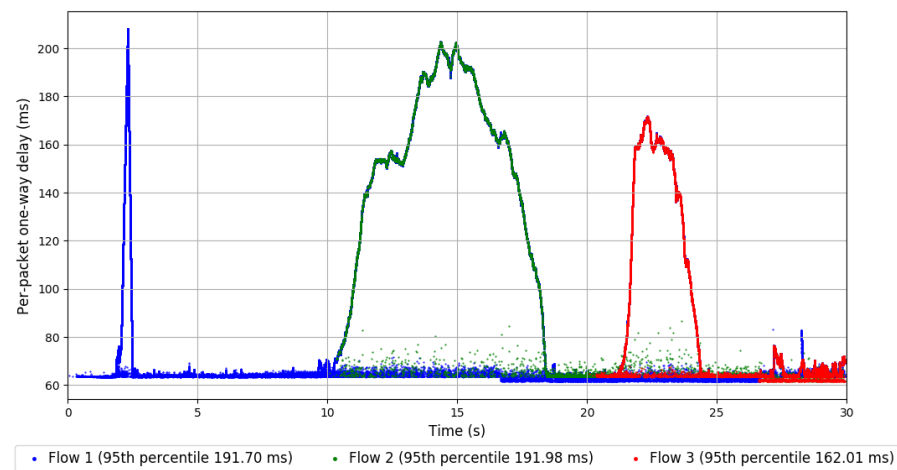
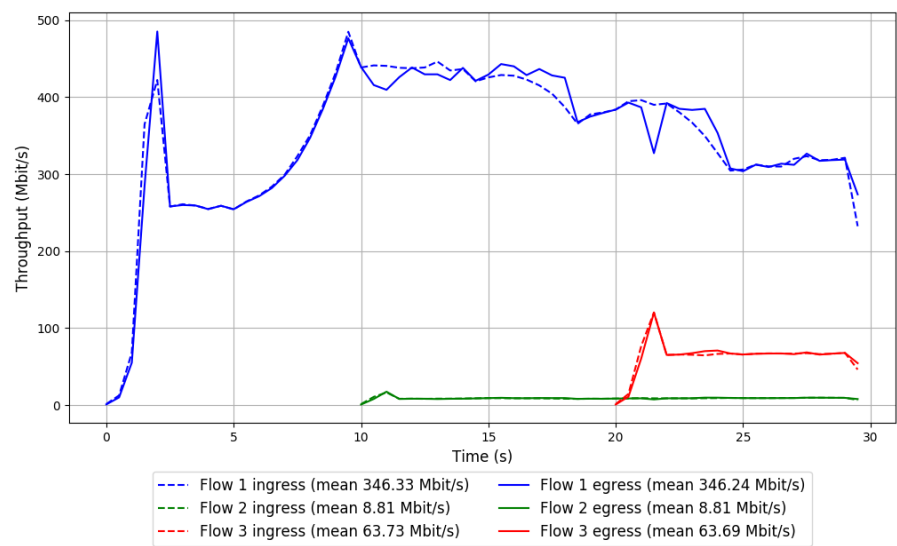
-- Flow 3:

Average throughput: 63.69 Mbit/s

95th percentile per-packet one-way delay: 162.011 ms

Loss rate: 0.05%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-01 05:22:34

End at: 2018-02-01 05:23:04

Below is generated by plot.py at 2018-02-01 09:00:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 451.54 Mbit/s

95th percentile per-packet one-way delay: 211.233 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 388.03 Mbit/s

95th percentile per-packet one-way delay: 211.439 ms

Loss rate: 1.59%

-- Flow 2:

Average throughput: 63.89 Mbit/s

95th percentile per-packet one-way delay: 210.909 ms

Loss rate: 1.10%

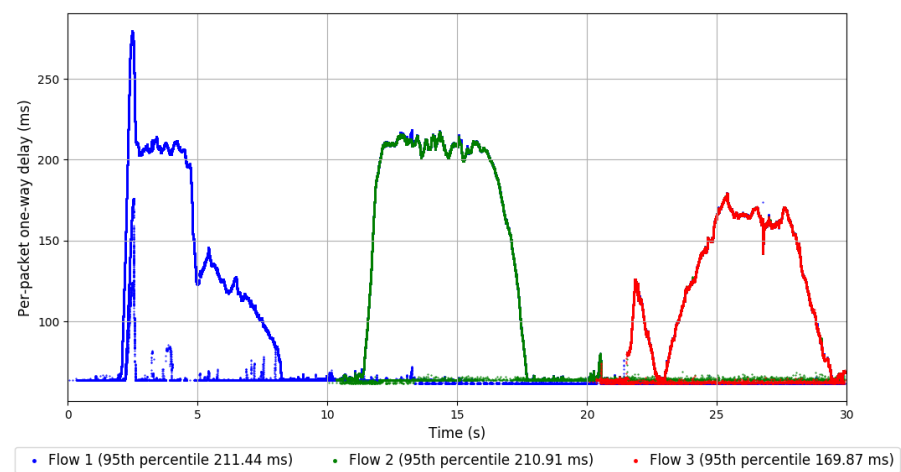
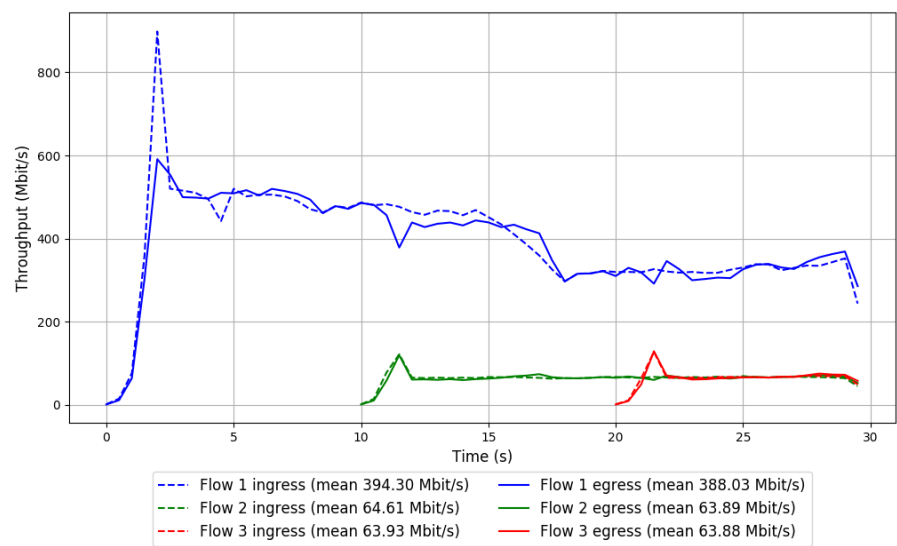
-- Flow 3:

Average throughput: 63.88 Mbit/s

95th percentile per-packet one-way delay: 169.866 ms

Loss rate: 0.03%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-01 05:39:07

End at: 2018-02-01 05:39:37

Below is generated by plot.py at 2018-02-01 09:01:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 461.40 Mbit/s

95th percentile per-packet one-way delay: 211.060 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 458.75 Mbit/s

95th percentile per-packet one-way delay: 211.075 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 206.095 ms

Loss rate: 0.21%

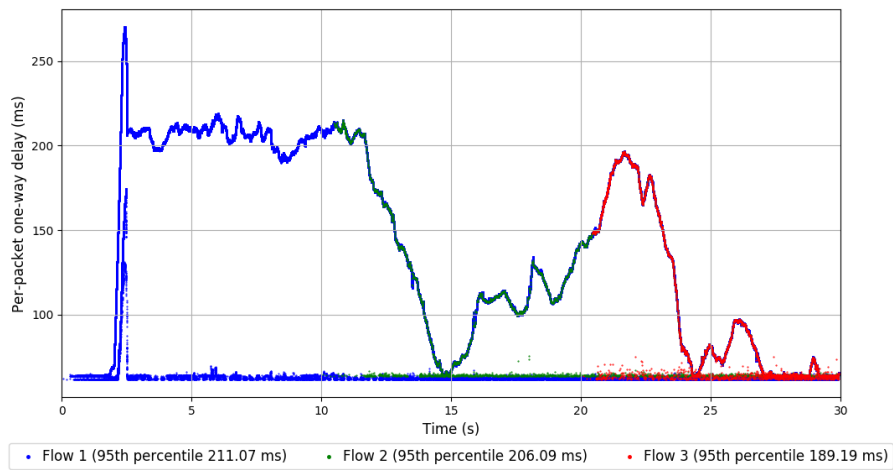
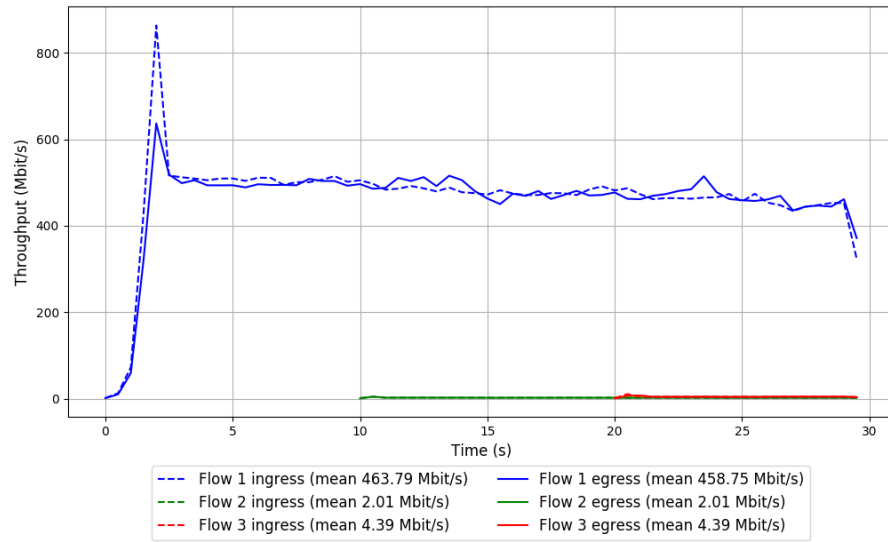
-- Flow 3:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 189.193 ms

Loss rate: 0.00%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-01 05:55:56

End at: 2018-02-01 05:56:26

Below is generated by plot.py at 2018-02-01 09:02:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 458.97 Mbit/s

95th percentile per-packet one-way delay: 220.869 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 416.75 Mbit/s

95th percentile per-packet one-way delay: 220.265 ms

Loss rate: 1.59%

-- Flow 2:

Average throughput: 32.59 Mbit/s

95th percentile per-packet one-way delay: 221.990 ms

Loss rate: 0.98%

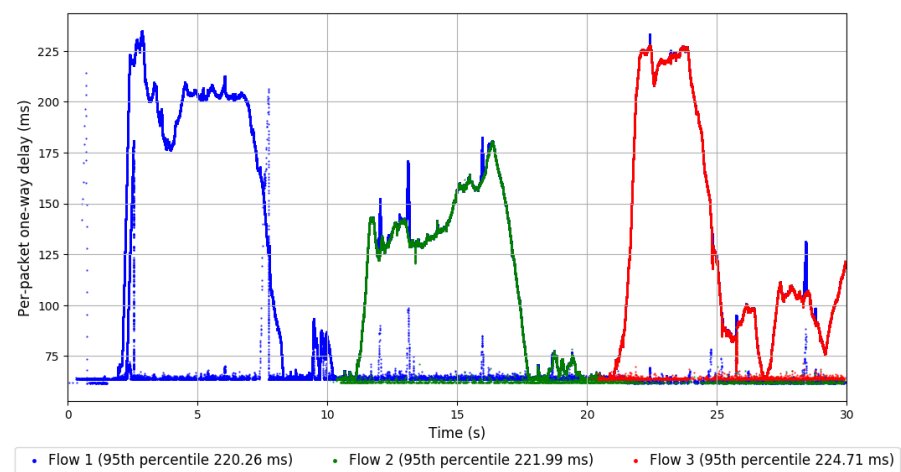
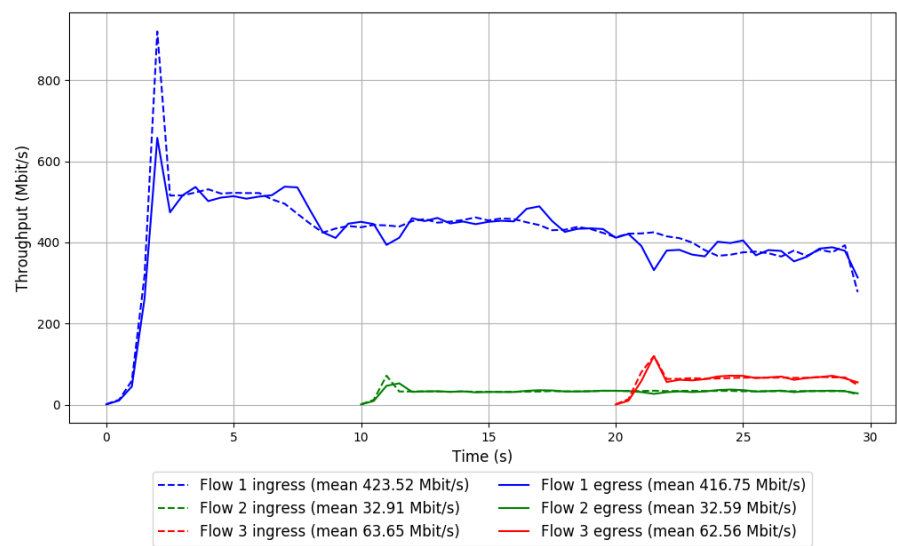
-- Flow 3:

Average throughput: 62.56 Mbit/s

95th percentile per-packet one-way delay: 224.713 ms

Loss rate: 1.81%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-01 06:12:51

End at: 2018-02-01 06:13:21

Below is generated by plot.py at 2018-02-01 09:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 484.90 Mbit/s

95th percentile per-packet one-way delay: 215.514 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 473.77 Mbit/s

95th percentile per-packet one-way delay: 215.573 ms

Loss rate: 1.52%

-- Flow 2:

Average throughput: 15.59 Mbit/s

95th percentile per-packet one-way delay: 211.164 ms

Loss rate: 0.78%

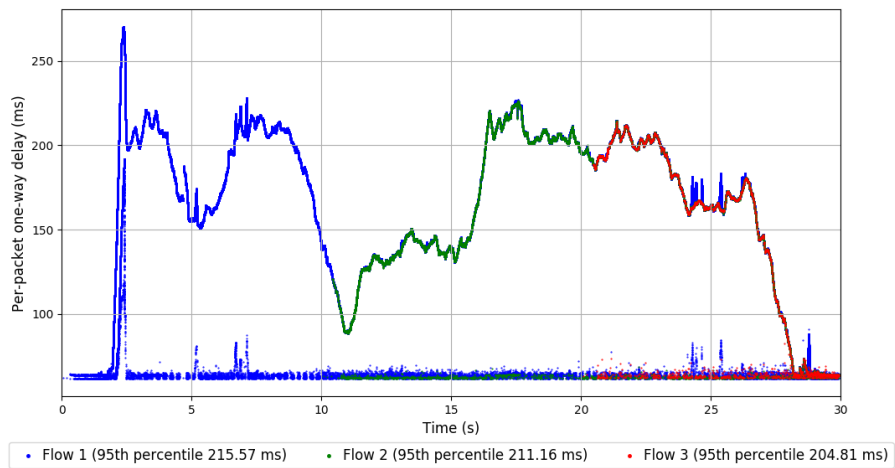
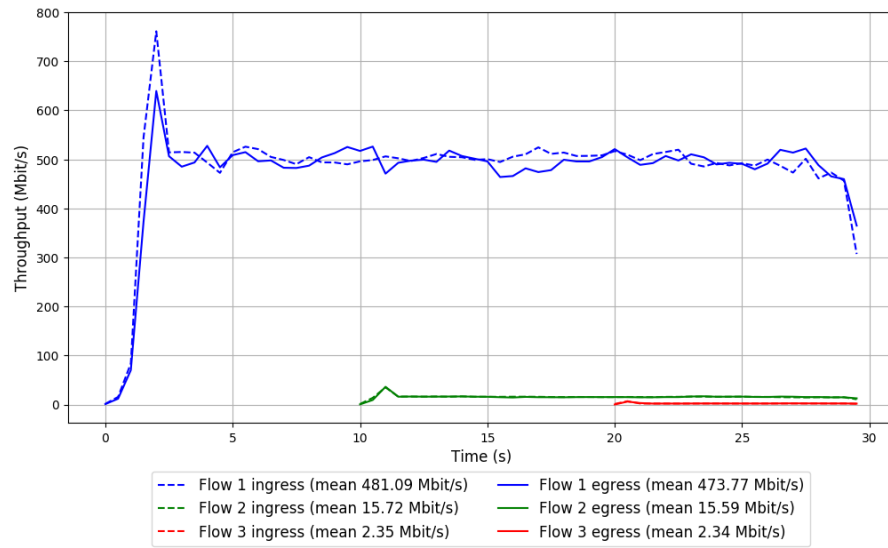
-- Flow 3:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 204.806 ms

Loss rate: 0.47%

Run 8: Report of PCC — Data Link

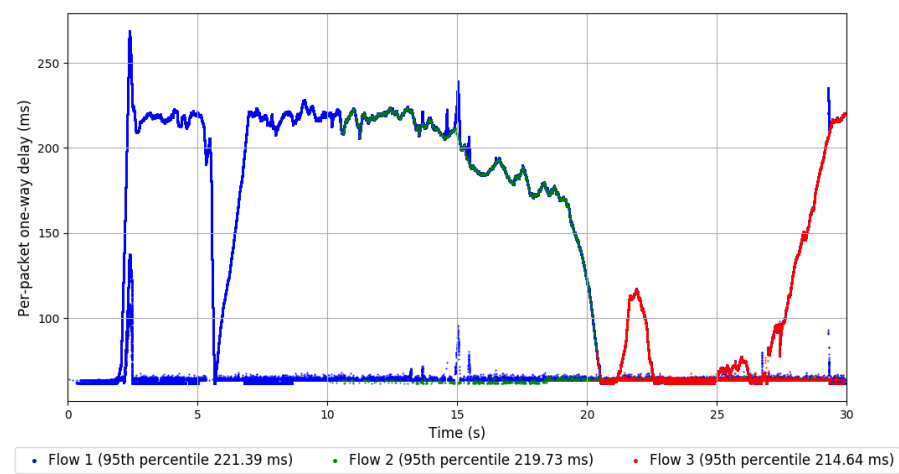
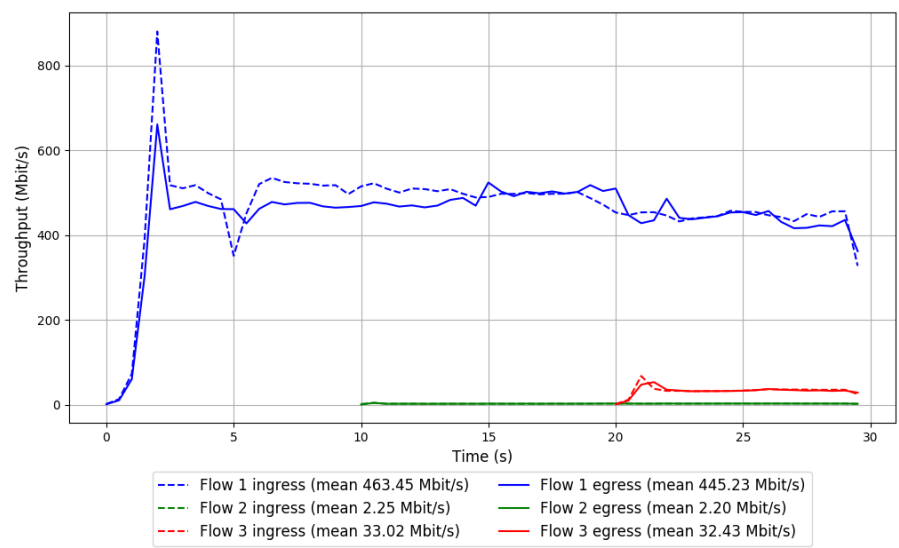


```
Run 9: Statistics of PCC

Start at: 2018-02-01 06:29:29
End at: 2018-02-01 06:29:59

# Below is generated by plot.py at 2018-02-01 09:07:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 457.35 Mbit/s
95th percentile per-packet one-way delay: 221.345 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 445.23 Mbit/s
95th percentile per-packet one-way delay: 221.394 ms
Loss rate: 3.93%
-- Flow 2:
Average throughput: 2.20 Mbit/s
95th percentile per-packet one-way delay: 219.734 ms
Loss rate: 2.28%
-- Flow 3:
Average throughput: 32.43 Mbit/s
95th percentile per-packet one-way delay: 214.636 ms
Loss rate: 1.79%
```

Run 9: Report of PCC — Data Link

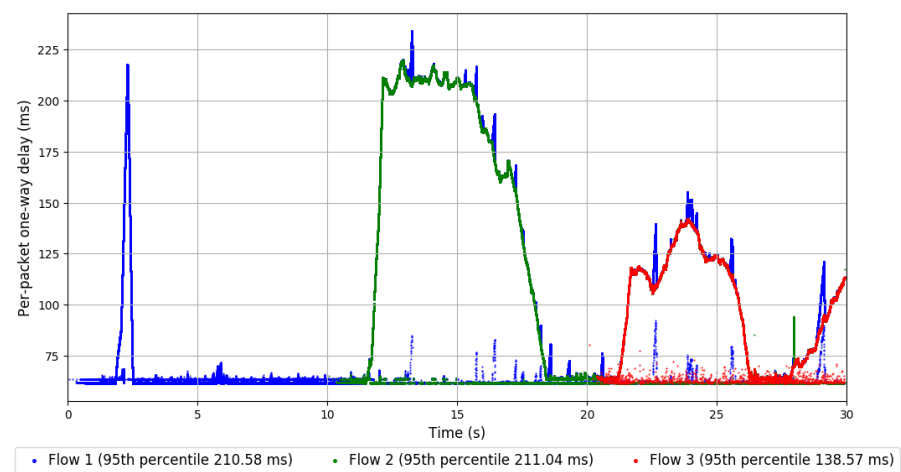
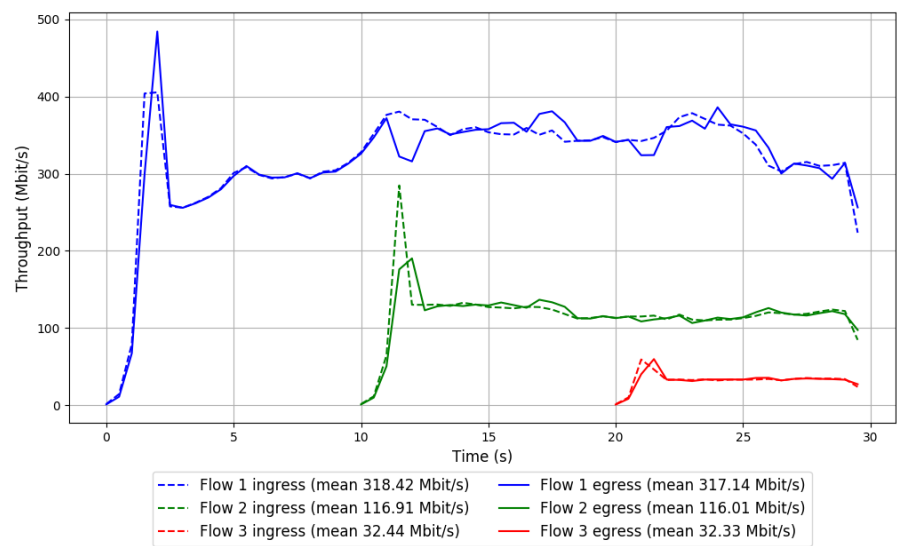


```
Run 10: Statistics of PCC

Start at: 2018-02-01 06:46:06
End at: 2018-02-01 06:46:36

# Below is generated by plot.py at 2018-02-01 09:07:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 404.85 Mbit/s
95th percentile per-packet one-way delay: 210.629 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 317.14 Mbit/s
95th percentile per-packet one-way delay: 210.580 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 116.01 Mbit/s
95th percentile per-packet one-way delay: 211.042 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 32.33 Mbit/s
95th percentile per-packet one-way delay: 138.569 ms
Loss rate: 0.53%
```

Run 10: Report of PCC — Data Link

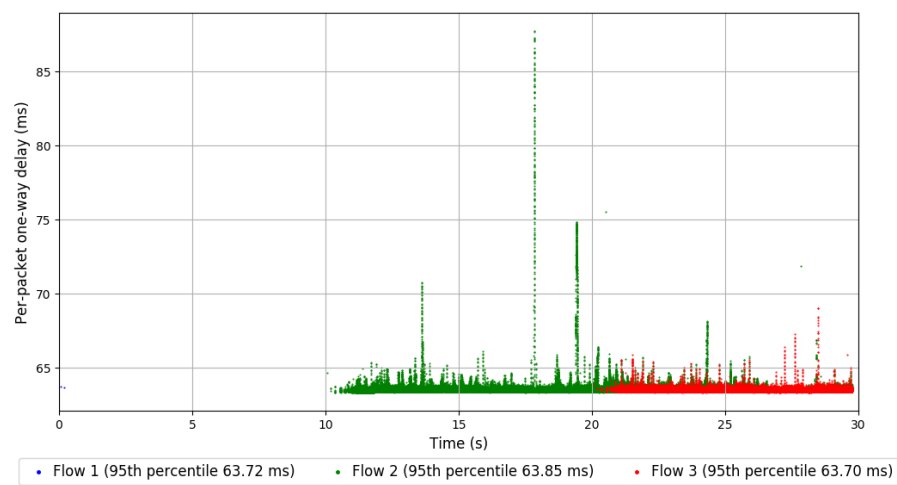
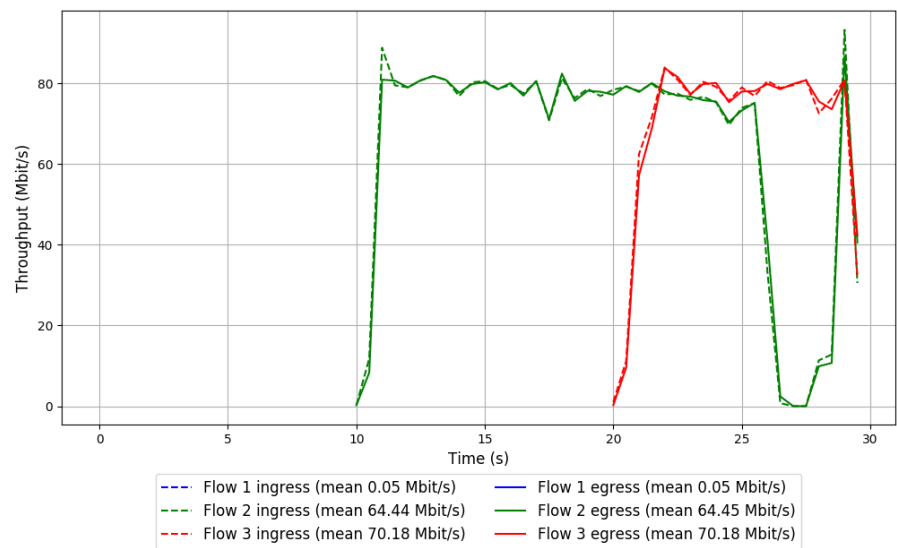


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-01 04:04:05
End at: 2018-02-01 04:04:35

# Below is generated by plot.py at 2018-02-01 09:07:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.65 Mbit/s
95th percentile per-packet one-way delay: 63.789 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.720 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 64.45 Mbit/s
95th percentile per-packet one-way delay: 63.851 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.18 Mbit/s
95th percentile per-packet one-way delay: 63.695 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-01 04:20:39

End at: 2018-02-01 04:21:09

Below is generated by plot.py at 2018-02-01 09:07:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.30 Mbit/s

95th percentile per-packet one-way delay: 63.751 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.51 Mbit/s

95th percentile per-packet one-way delay: 63.714 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.19 Mbit/s

95th percentile per-packet one-way delay: 63.788 ms

Loss rate: 0.00%

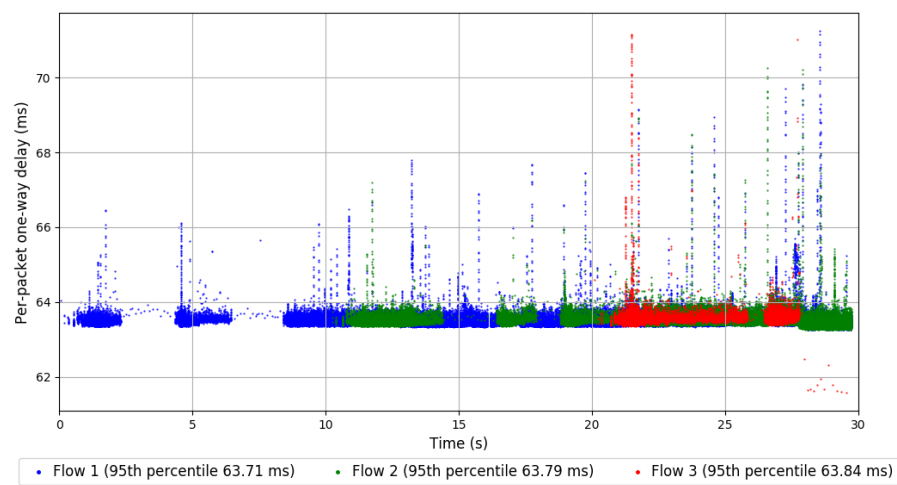
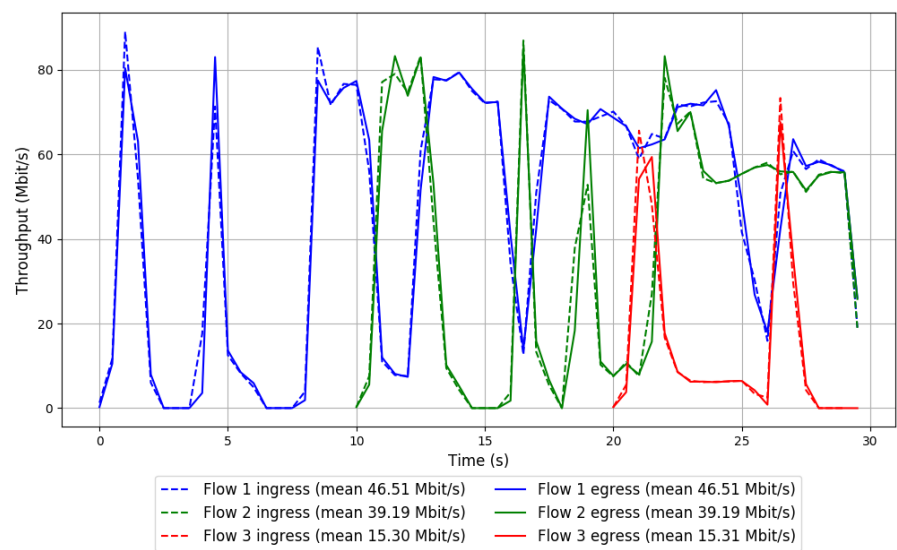
-- Flow 3:

Average throughput: 15.31 Mbit/s

95th percentile per-packet one-way delay: 63.839 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-01 04:36:53

End at: 2018-02-01 04:37:23

Below is generated by plot.py at 2018-02-01 09:07:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.06 Mbit/s

95th percentile per-packet one-way delay: 63.599 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.53 Mbit/s

95th percentile per-packet one-way delay: 63.658 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.75 Mbit/s

95th percentile per-packet one-way delay: 61.879 ms

Loss rate: 0.00%

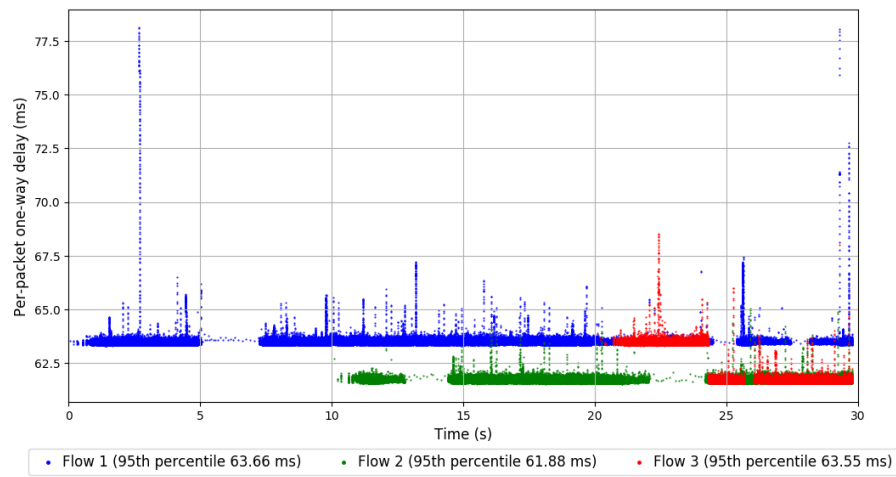
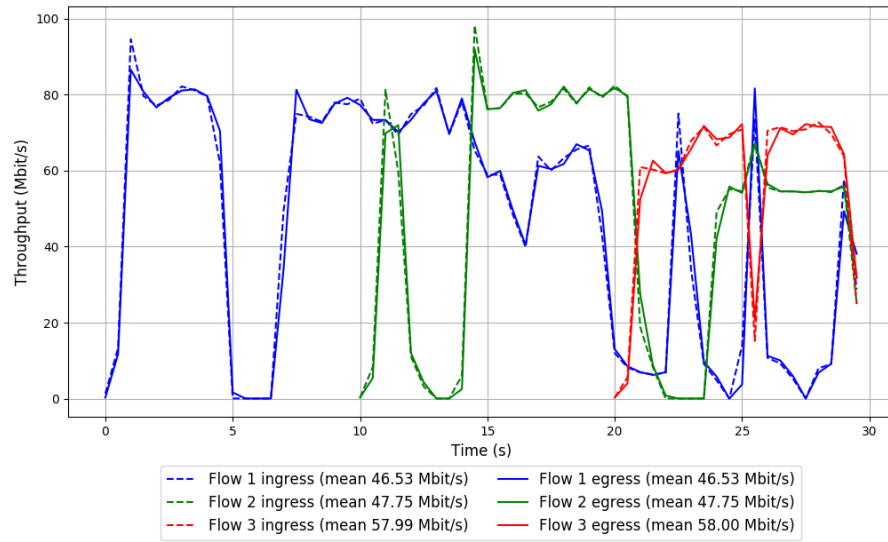
-- Flow 3:

Average throughput: 58.00 Mbit/s

95th percentile per-packet one-way delay: 63.545 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link

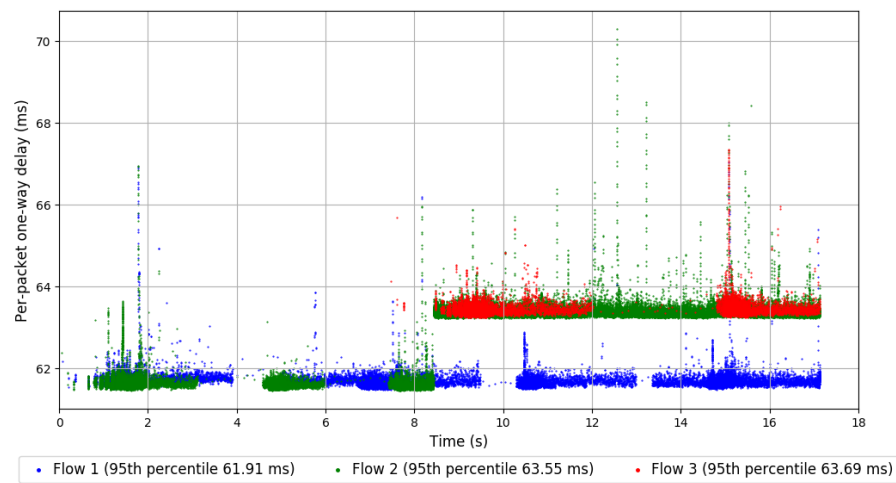
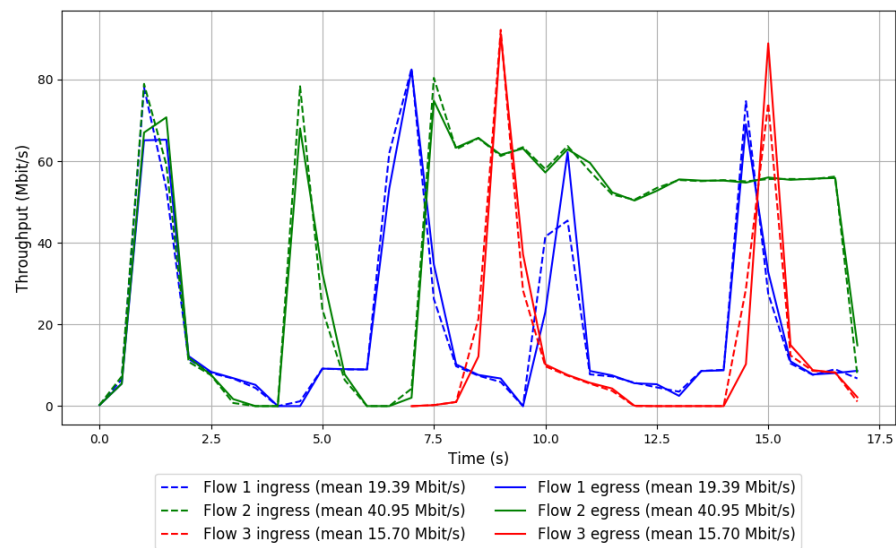


Run 4: Statistics of QUIC Cubic

Start at: 2018-02-01 04:53:06

End at: 2018-02-01 04:53:36

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-01 05:09:22

End at: 2018-02-01 05:09:52

Below is generated by plot.py at 2018-02-01 09:07:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.13 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 34.25 Mbit/s

95th percentile per-packet one-way delay: 63.730 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 41.28 Mbit/s

95th percentile per-packet one-way delay: 63.797 ms

Loss rate: 0.02%

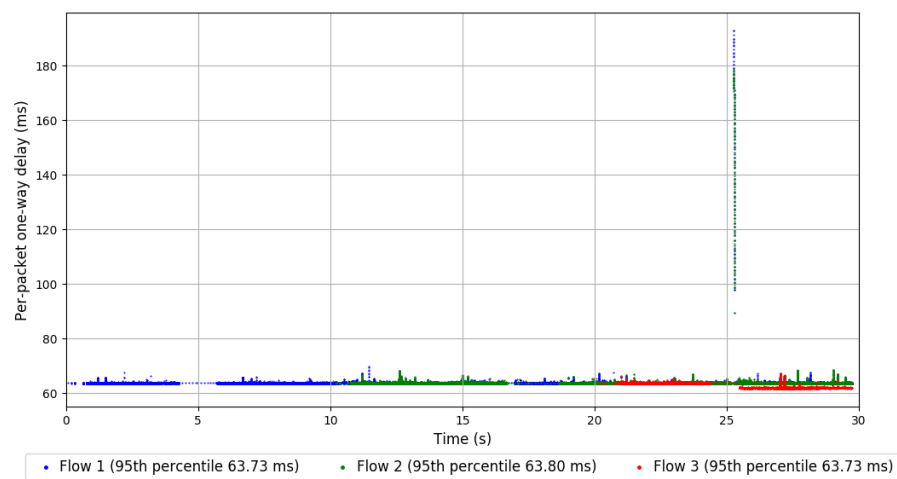
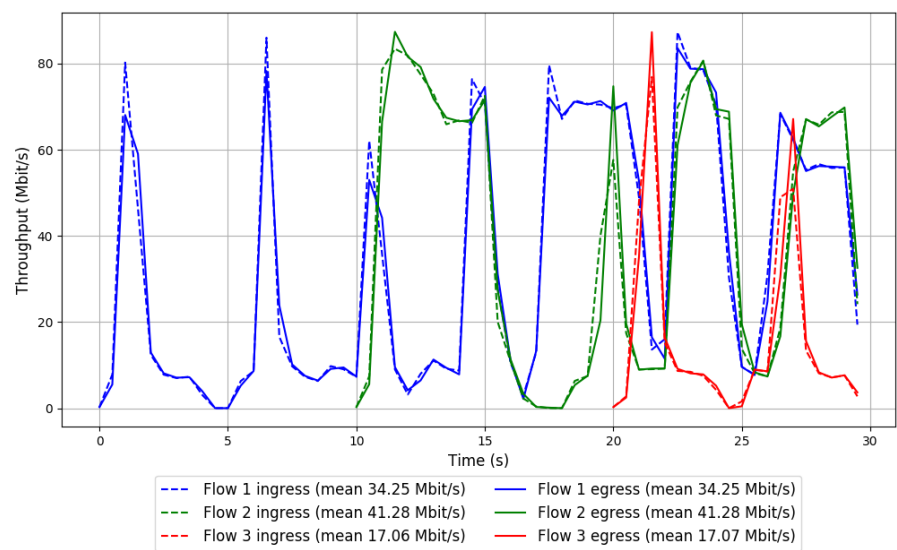
-- Flow 3:

Average throughput: 17.07 Mbit/s

95th percentile per-packet one-way delay: 63.732 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-01 05:25:44

End at: 2018-02-01 05:26:14

Below is generated by plot.py at 2018-02-01 09:07:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.27 Mbit/s

95th percentile per-packet one-way delay: 63.753 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.08 Mbit/s

95th percentile per-packet one-way delay: 63.721 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.10 Mbit/s

95th percentile per-packet one-way delay: 63.903 ms

Loss rate: 0.00%

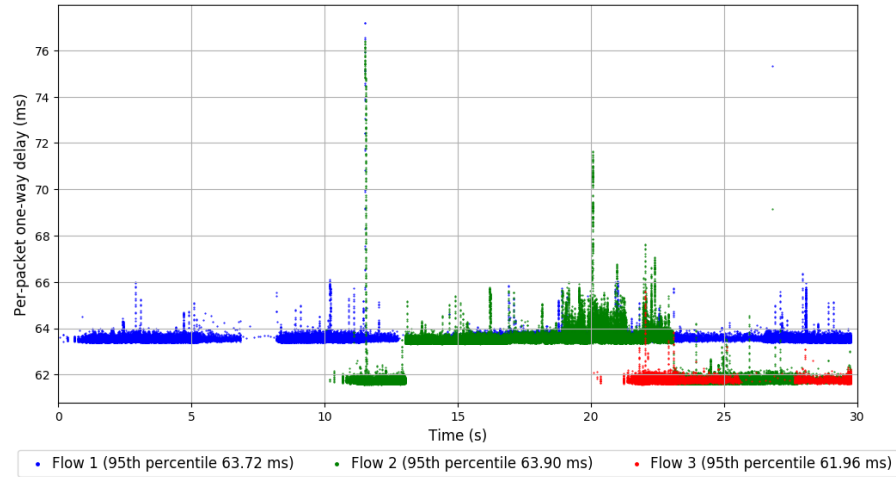
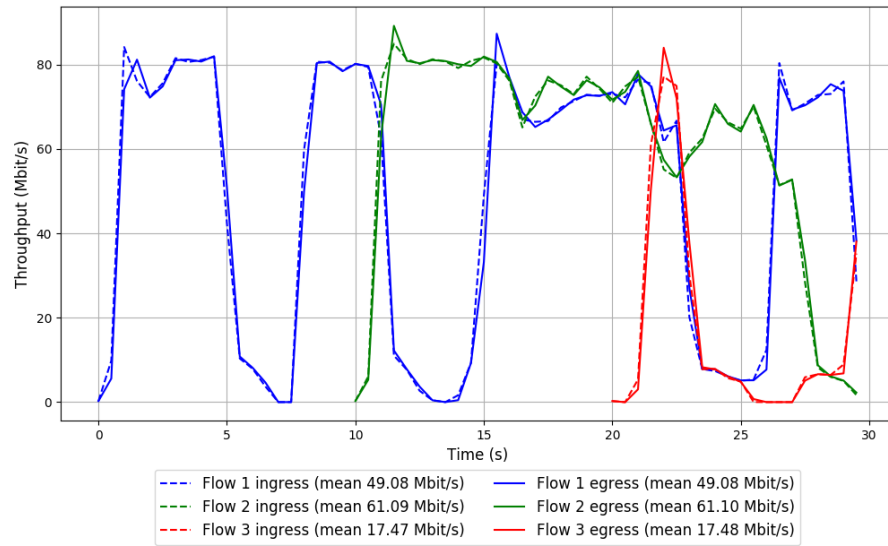
-- Flow 3:

Average throughput: 17.48 Mbit/s

95th percentile per-packet one-way delay: 61.960 ms

Loss rate: 0.01%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-01 05:42:21

End at: 2018-02-01 05:42:51

Below is generated by plot.py at 2018-02-01 09:07:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.58 Mbit/s

95th percentile per-packet one-way delay: 63.672 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.08 Mbit/s

95th percentile per-packet one-way delay: 62.023 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.03 Mbit/s

95th percentile per-packet one-way delay: 63.708 ms

Loss rate: 0.00%

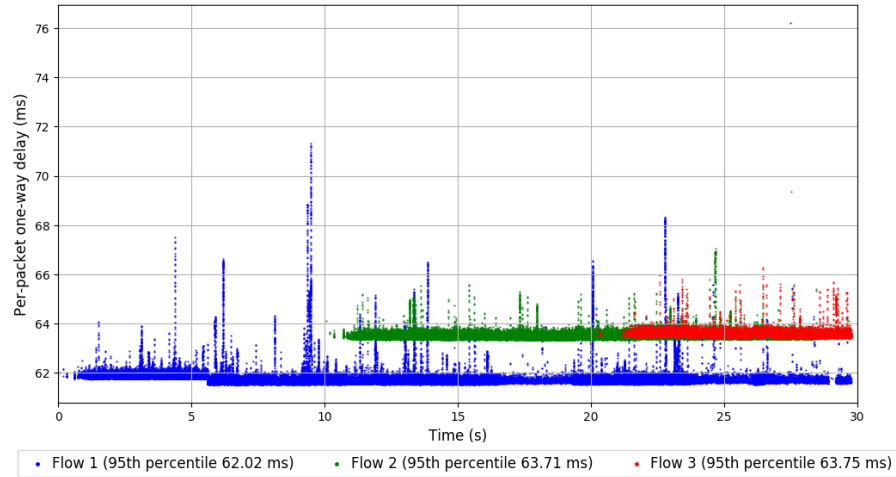
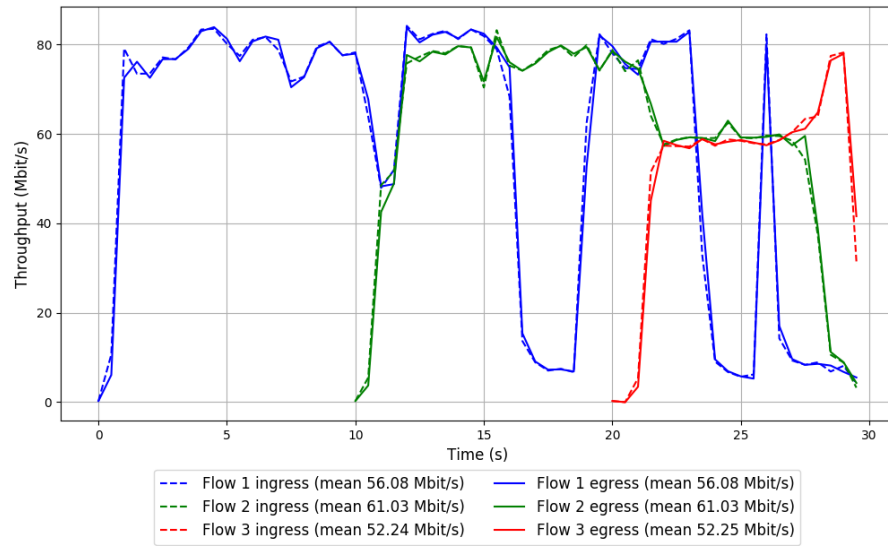
-- Flow 3:

Average throughput: 52.25 Mbit/s

95th percentile per-packet one-way delay: 63.748 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-01 05:59:10

End at: 2018-02-01 05:59:40

Below is generated by plot.py at 2018-02-01 09:07:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.40 Mbit/s

95th percentile per-packet one-way delay: 63.938 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.71 Mbit/s

95th percentile per-packet one-way delay: 63.872 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.97 Mbit/s

95th percentile per-packet one-way delay: 63.561 ms

Loss rate: 0.00%

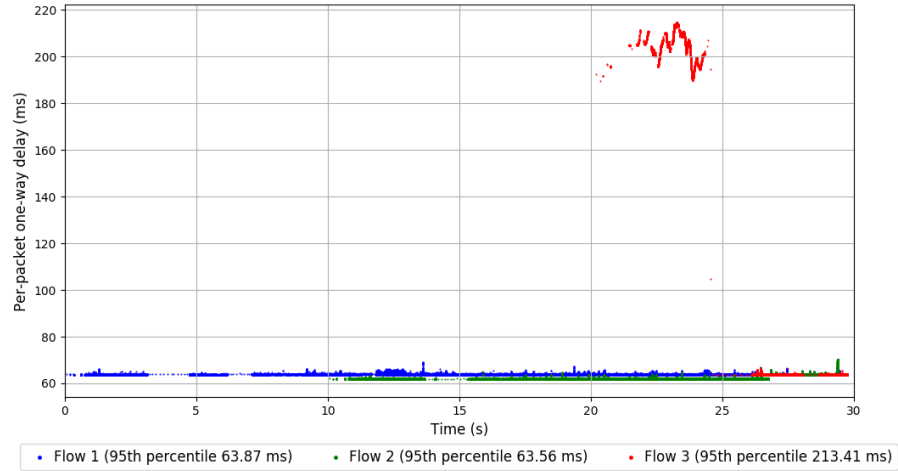
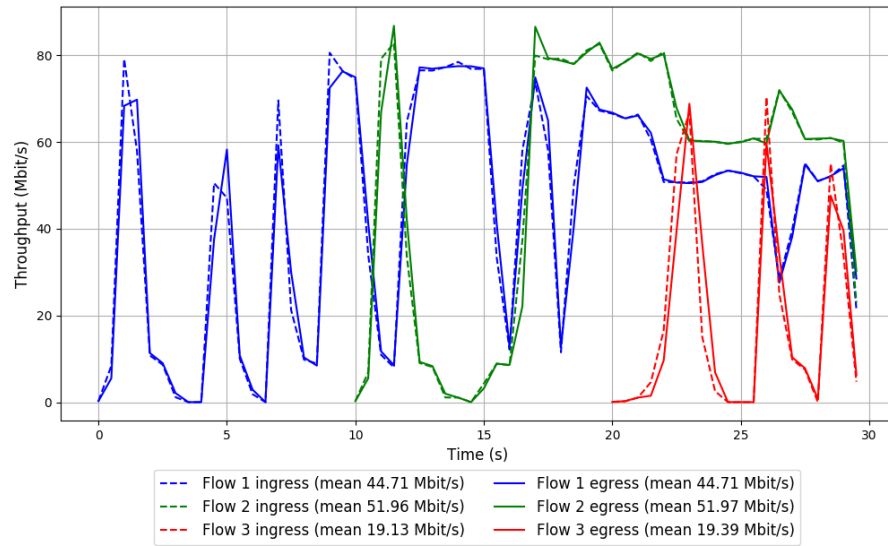
-- Flow 3:

Average throughput: 19.39 Mbit/s

95th percentile per-packet one-way delay: 213.406 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-01 06:16:08

End at: 2018-02-01 06:16:38

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.73 Mbit/s

95th percentile per-packet one-way delay: 63.770 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.83 Mbit/s

95th percentile per-packet one-way delay: 63.778 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.35 Mbit/s

95th percentile per-packet one-way delay: 63.781 ms

Loss rate: 0.00%

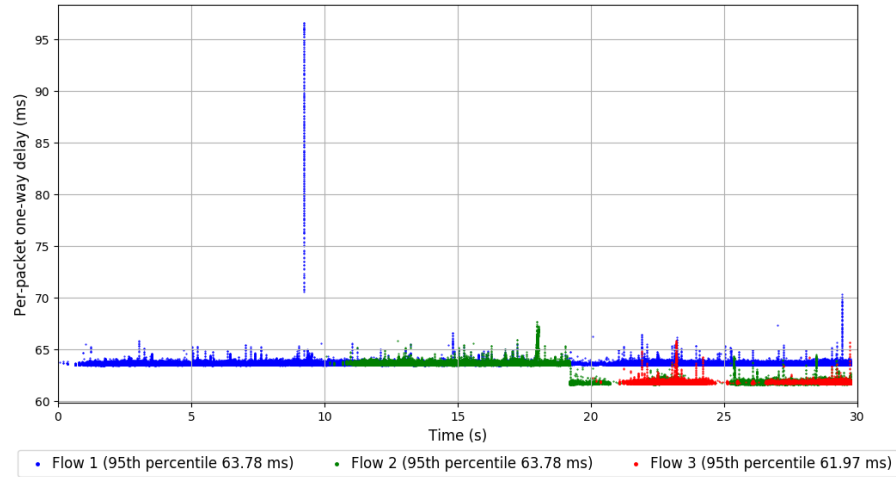
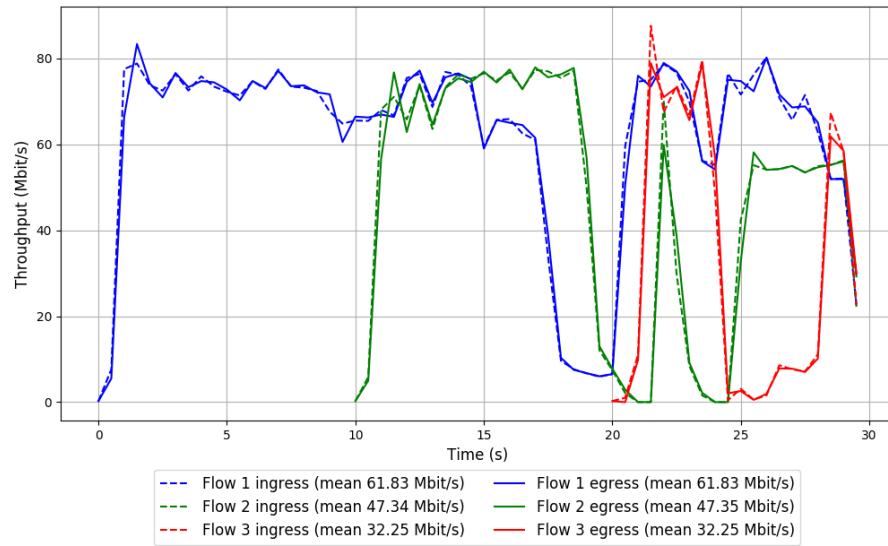
-- Flow 3:

Average throughput: 32.25 Mbit/s

95th percentile per-packet one-way delay: 61.974 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

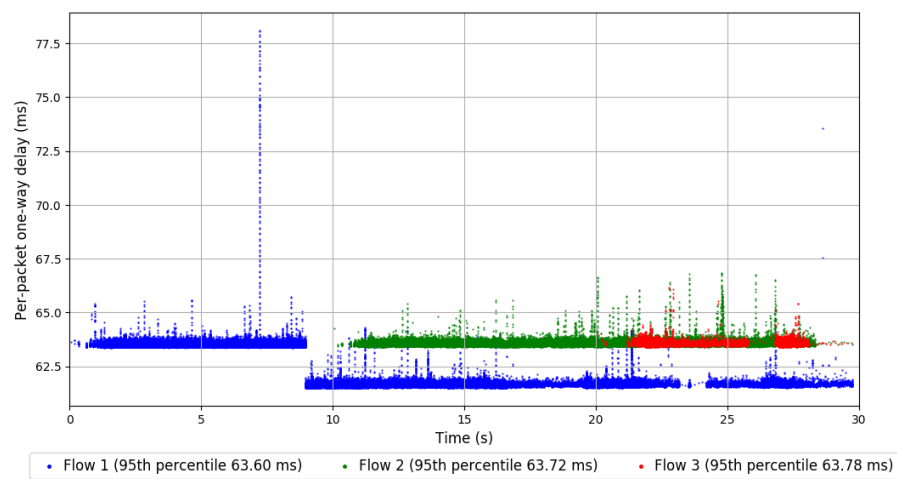
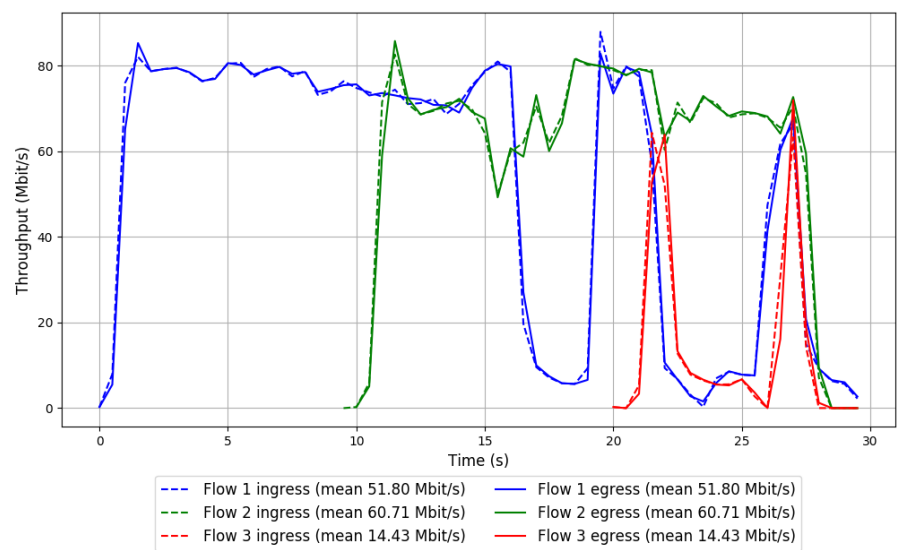


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-01 06:32:48
End at: 2018-02-01 06:33:18

# Below is generated by plot.py at 2018-02-01 09:07:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.72 Mbit/s
95th percentile per-packet one-way delay: 63.687 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.80 Mbit/s
95th percentile per-packet one-way delay: 63.605 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.71 Mbit/s
95th percentile per-packet one-way delay: 63.724 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.43 Mbit/s
95th percentile per-packet one-way delay: 63.781 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

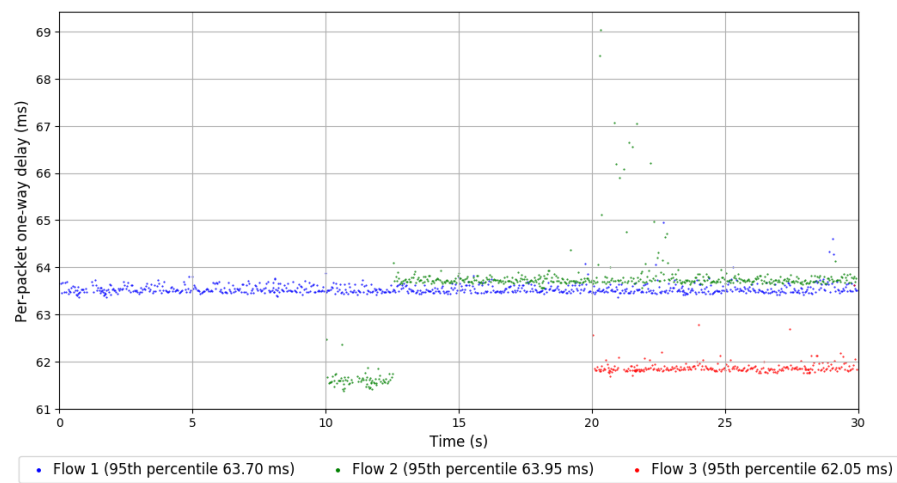
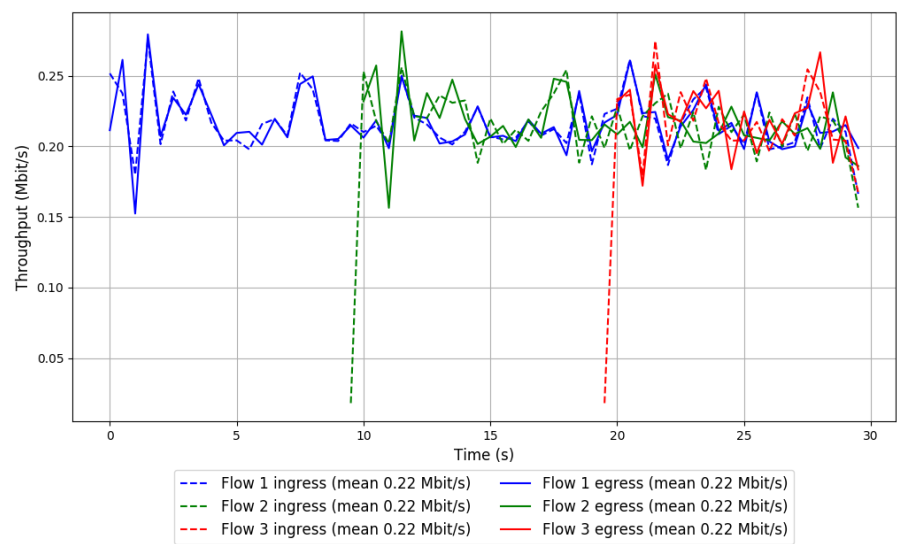


```
Run 1: Statistics of SCReAM

Start at: 2018-02-01 04:10:25
End at: 2018-02-01 04:10:55

# Below is generated by plot.py at 2018-02-01 09:07:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.818 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.696 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.952 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.049 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

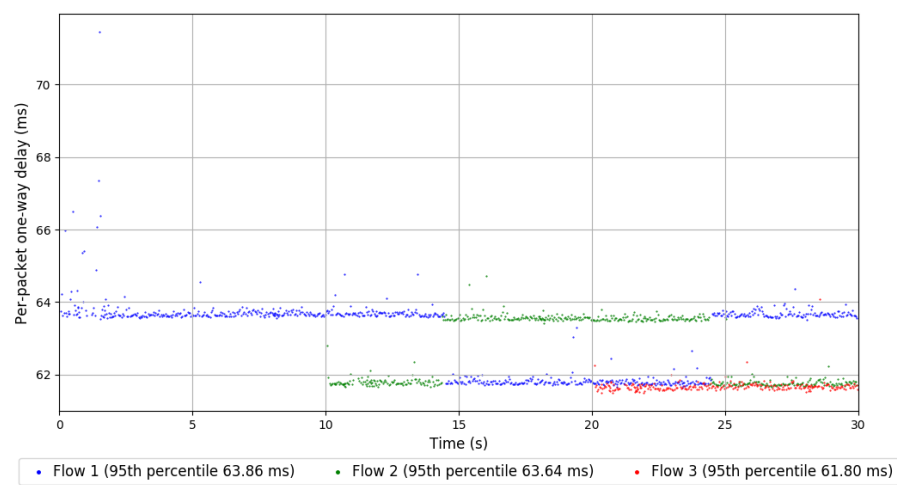
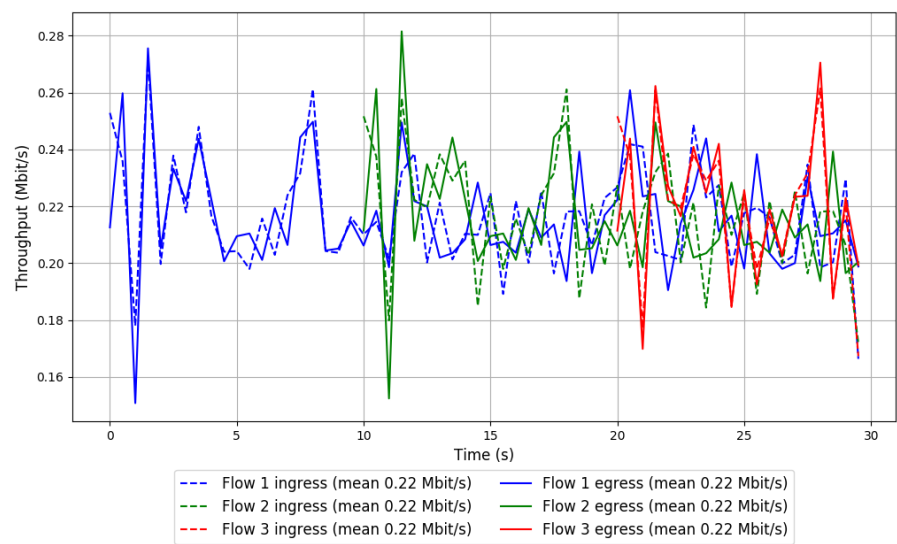


```
Run 2: Statistics of SReAM

Start at: 2018-02-01 04:26:53
End at: 2018-02-01 04:27:23

# Below is generated by plot.py at 2018-02-01 09:07:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.779 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.861 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.641 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.799 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

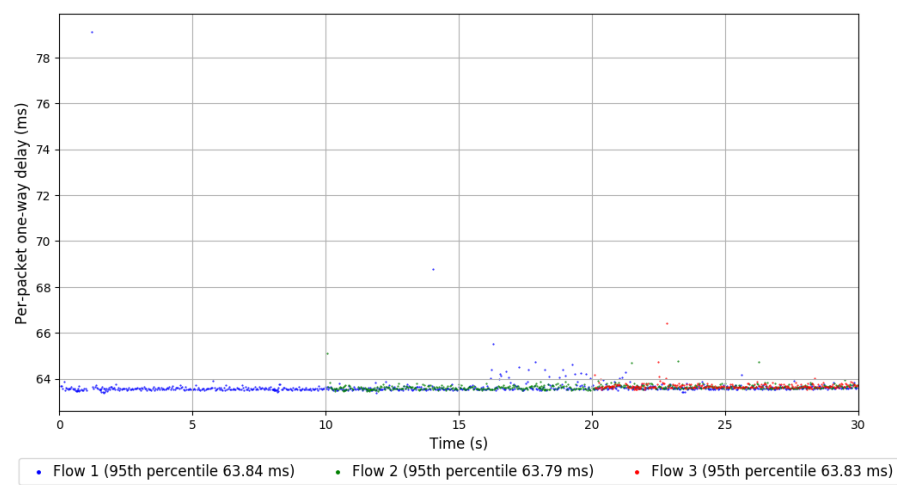
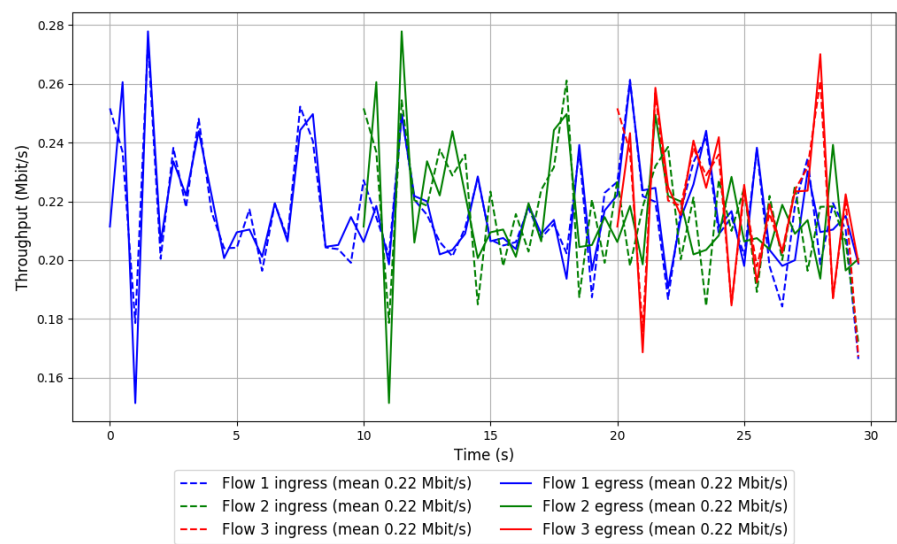


```
Run 3: Statistics of SCReAM

Start at: 2018-02-01 04:43:07
End at: 2018-02-01 04:43:37

# Below is generated by plot.py at 2018-02-01 09:07:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.808 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.841 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.786 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.827 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

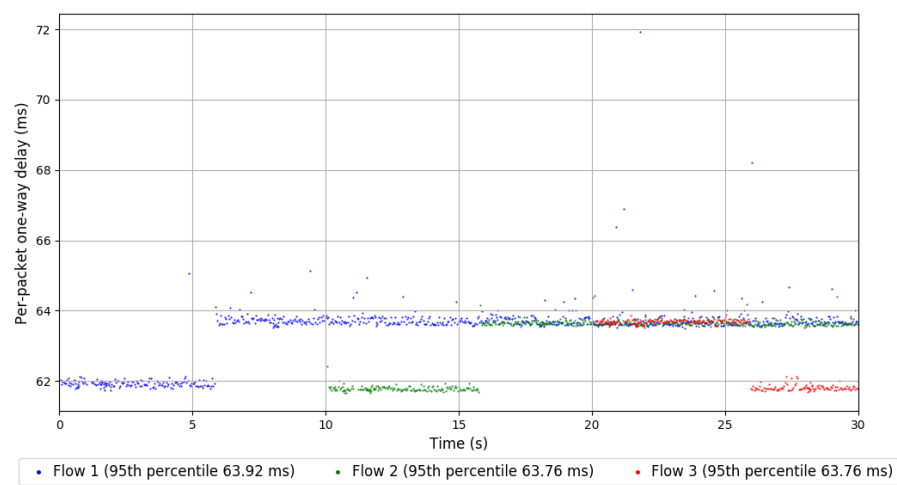
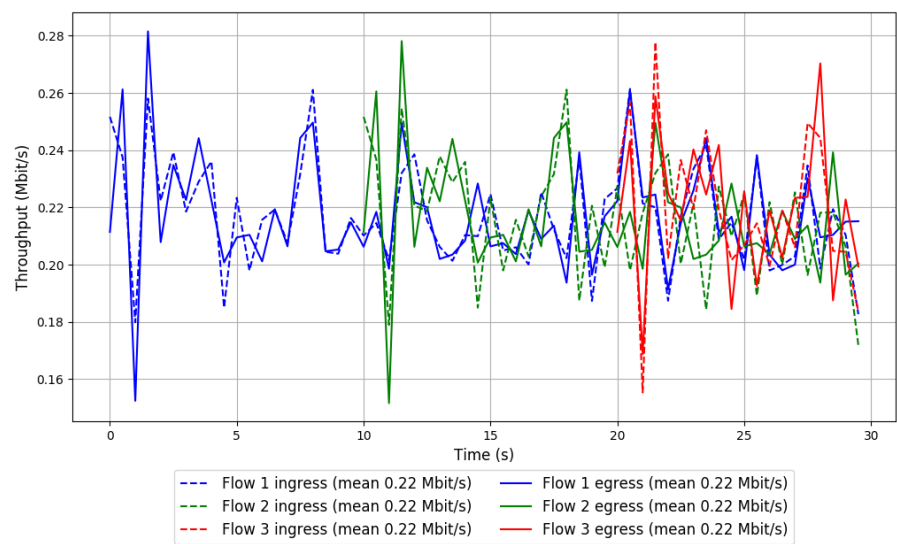


```
Run 4: Statistics of SReAM

Start at: 2018-02-01 04:59:21
End at: 2018-02-01 04:59:51

# Below is generated by plot.py at 2018-02-01 09:07:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.847 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.924 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.761 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.761 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-02-01 05:15:45

End at: 2018-02-01 05:16:15

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.816 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.839 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.754 ms

Loss rate: 0.00%

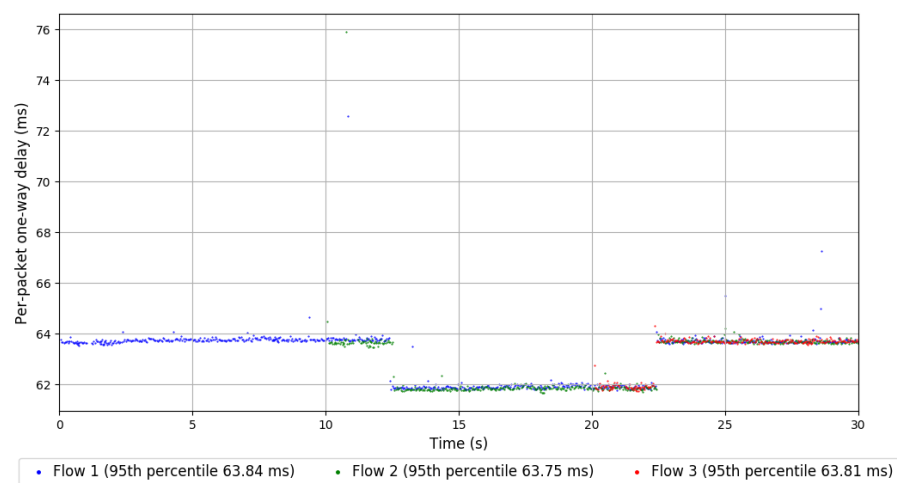
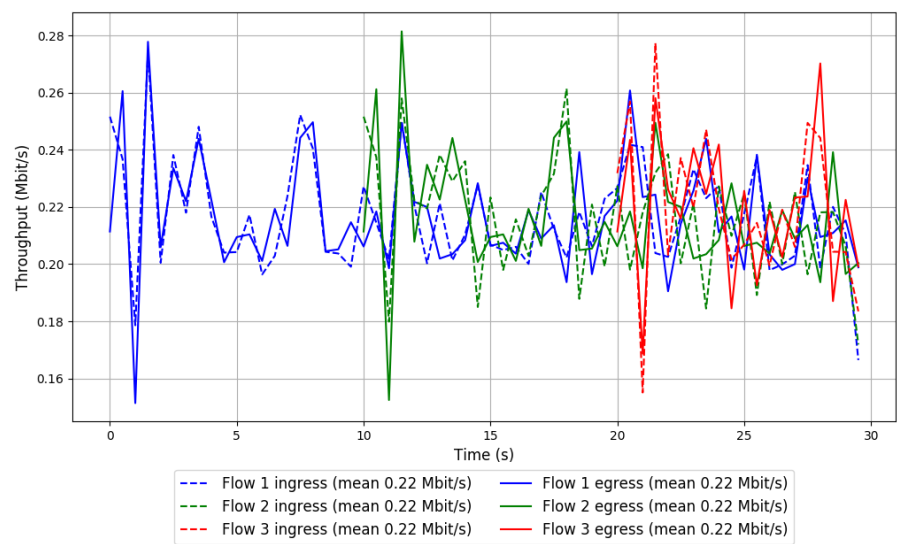
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.815 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-02-01 05:32:09

End at: 2018-02-01 05:32:39

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.686 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 62.007 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.580 ms

Loss rate: 0.00%

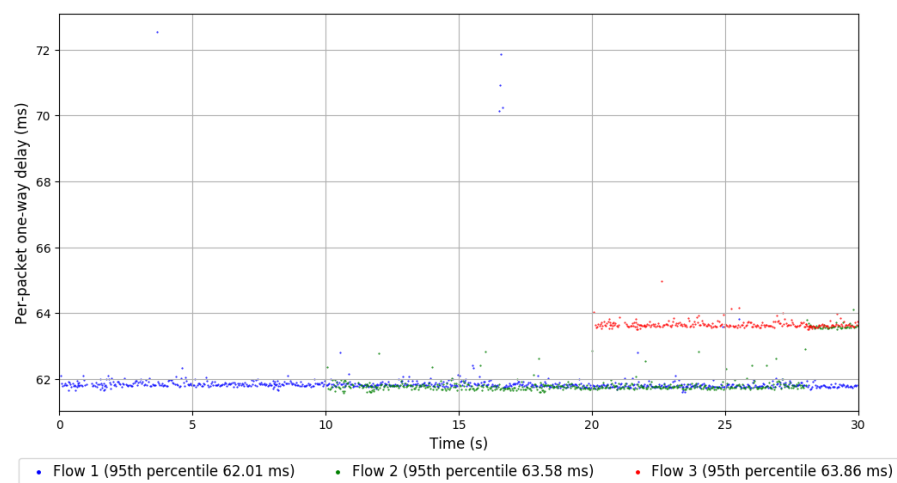
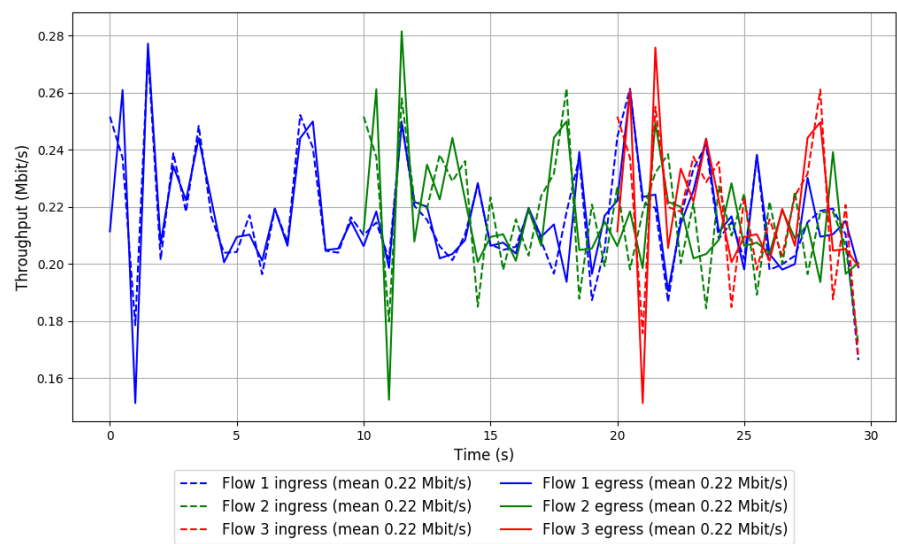
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.857 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

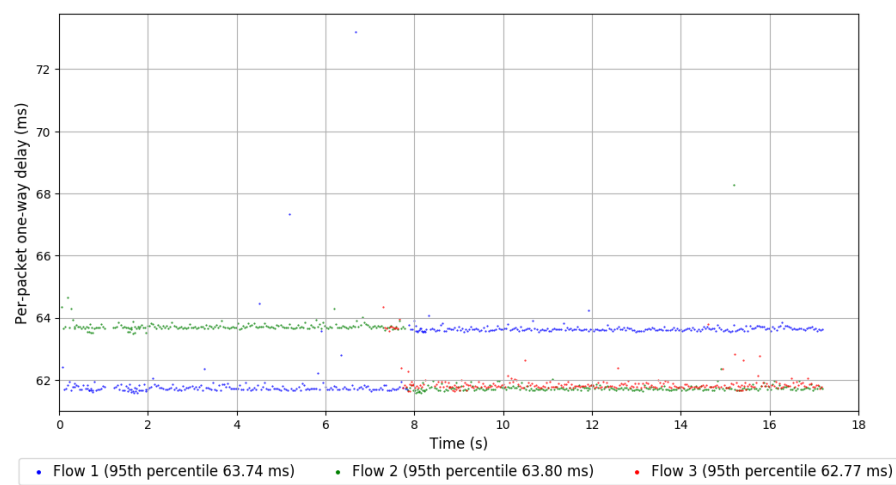
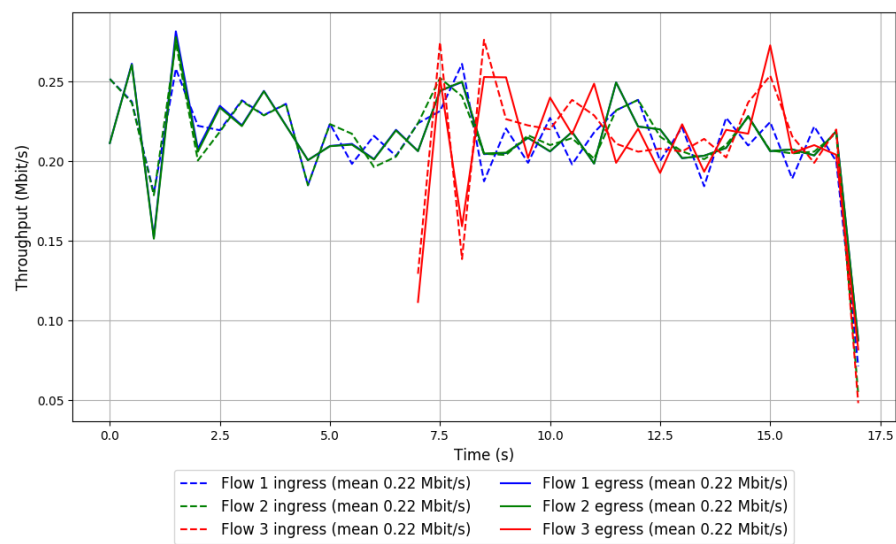


Run 7: Statistics of SReAM

Start at: 2018-02-01 05:48:57

End at: 2018-02-01 05:49:27

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-01 06:05:46

End at: 2018-02-01 06:06:16

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.851 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.871 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.857 ms

Loss rate: 0.00%

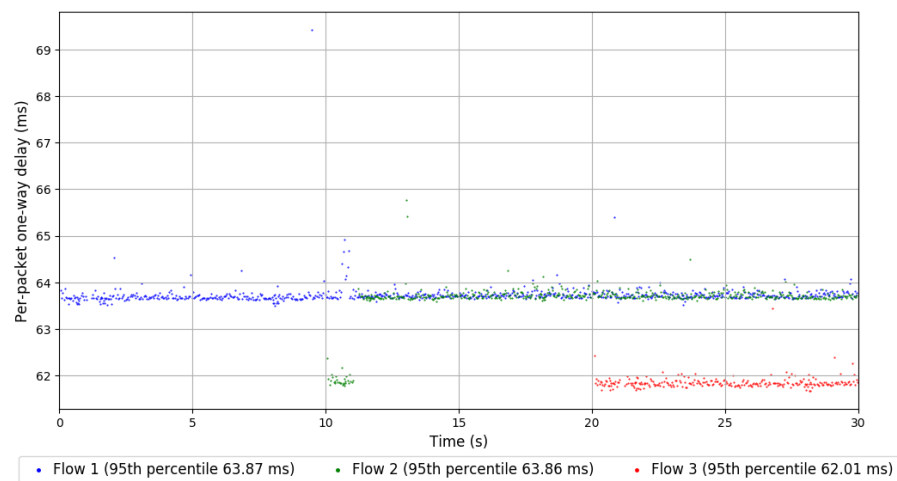
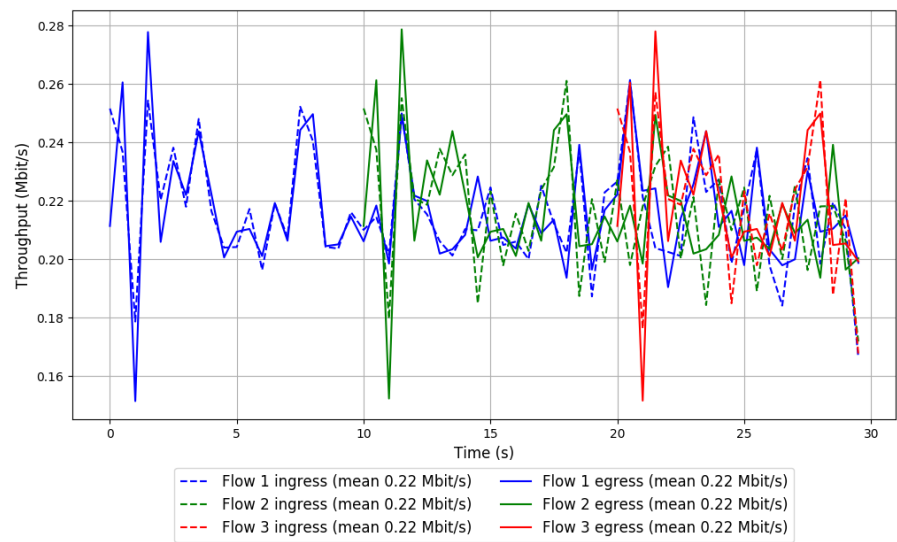
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 62.007 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-02-01 06:22:32

End at: 2018-02-01 06:23:02

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.770 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.747 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.771 ms

Loss rate: 0.00%

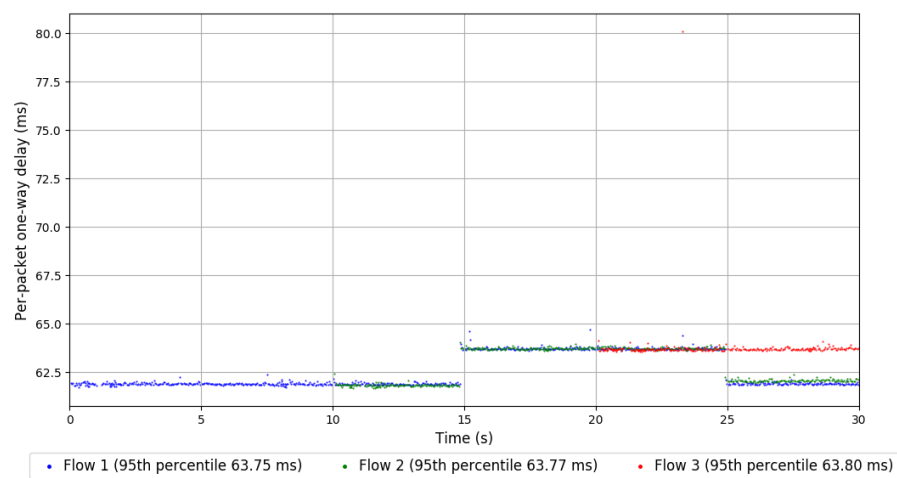
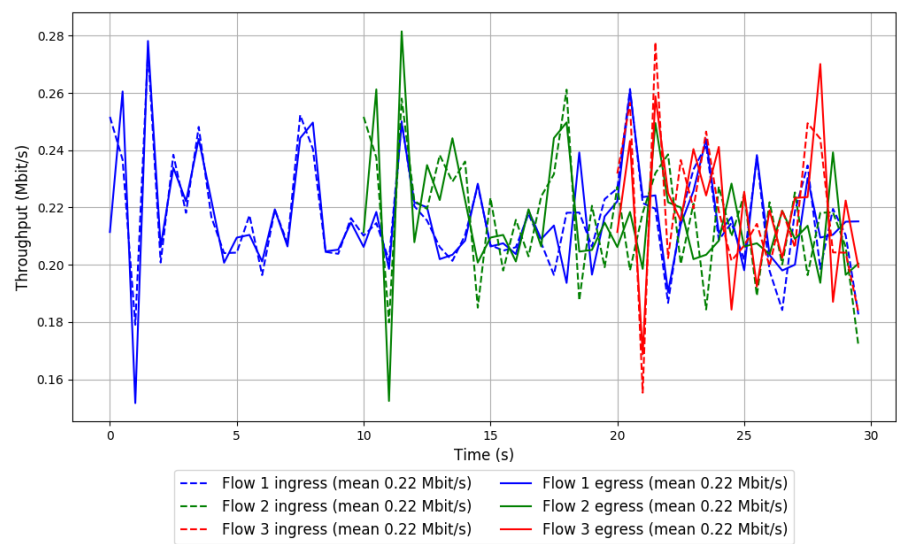
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.804 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

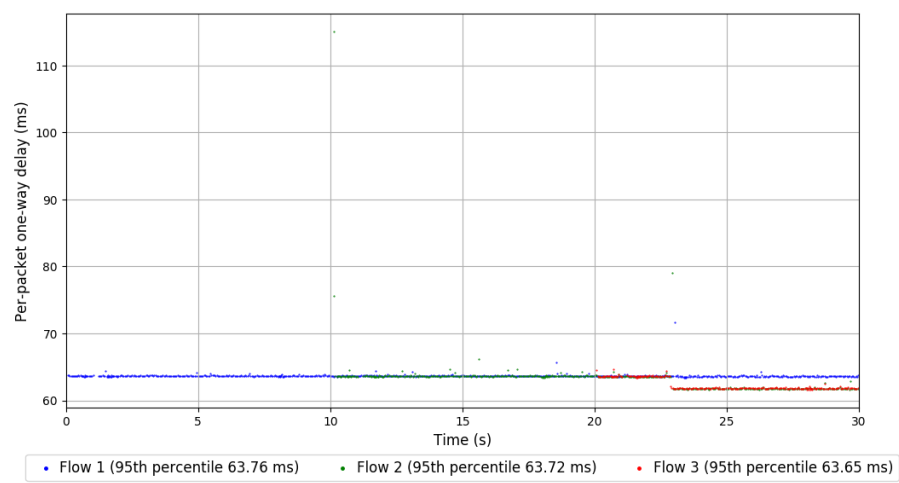
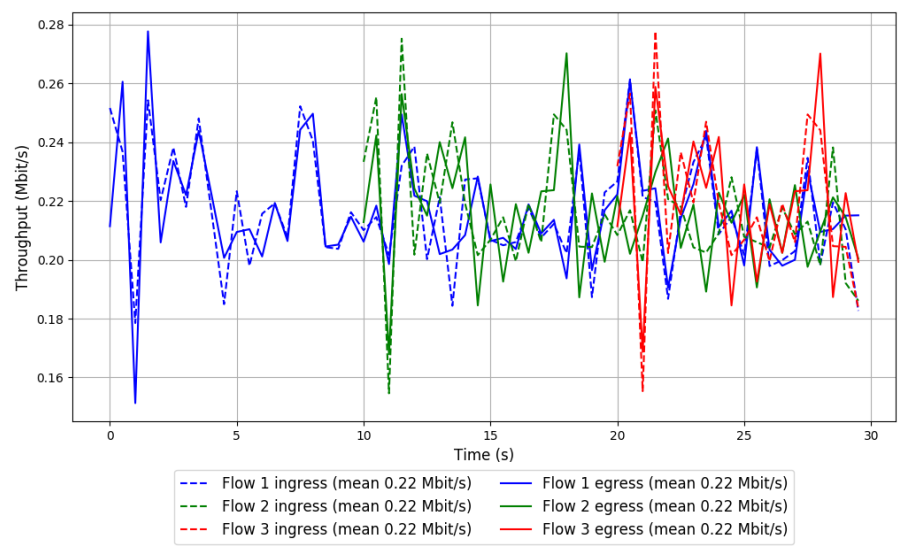


```
Run 10: Statistics of SReAM

Start at: 2018-02-01 06:39:14
End at: 2018-02-01 06:39:44

# Below is generated by plot.py at 2018-02-01 09:07:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.741 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.760 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.721 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.649 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link

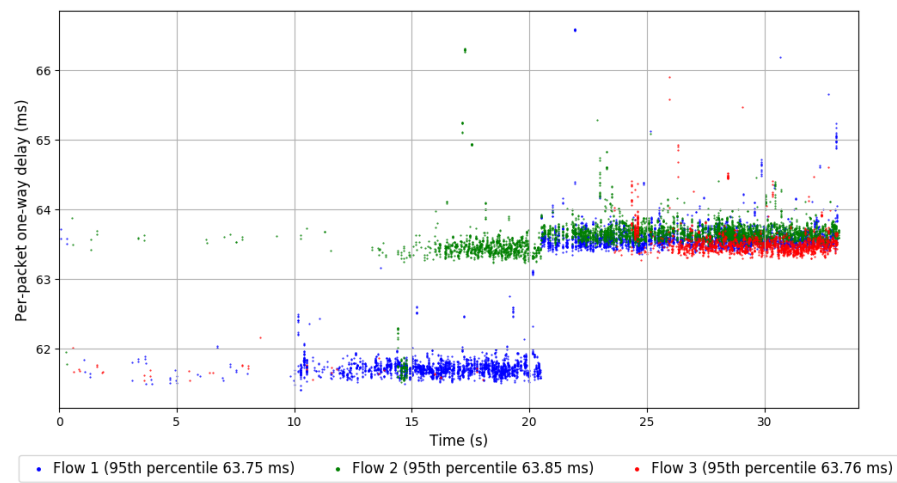
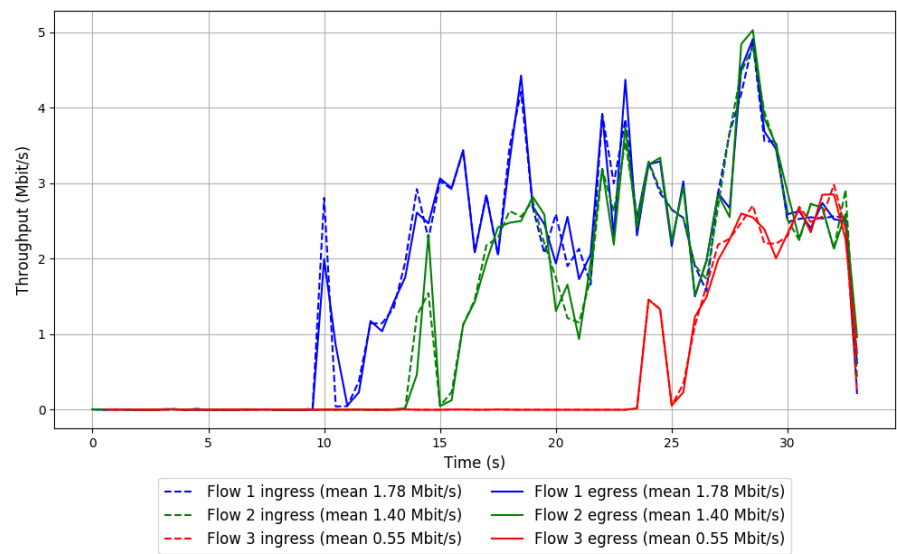


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-01 04:04:50
End at: 2018-02-01 04:05:20

# Below is generated by plot.py at 2018-02-01 09:07:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 63.804 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 63.751 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 63.855 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 63.763 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-01 04:21:25

End at: 2018-02-01 04:21:55

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.04 Mbit/s

95th percentile per-packet one-way delay: 63.843 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 63.805 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.758 ms

Loss rate: 0.00%

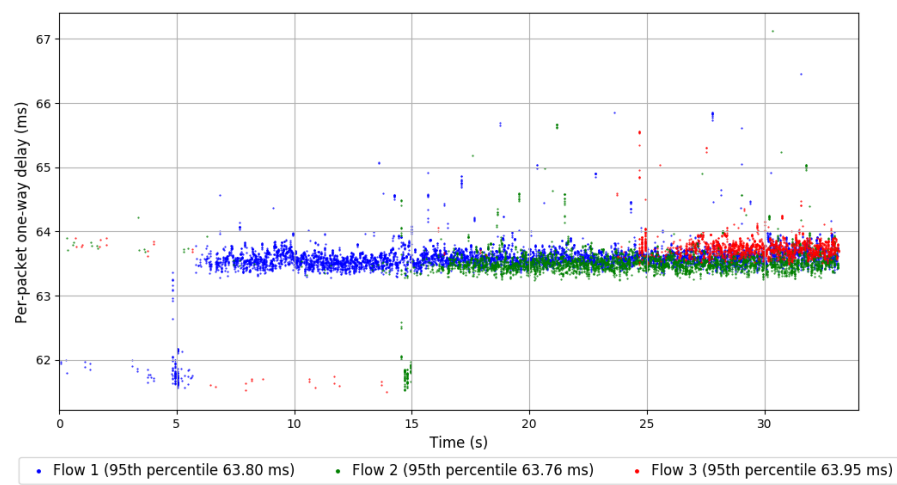
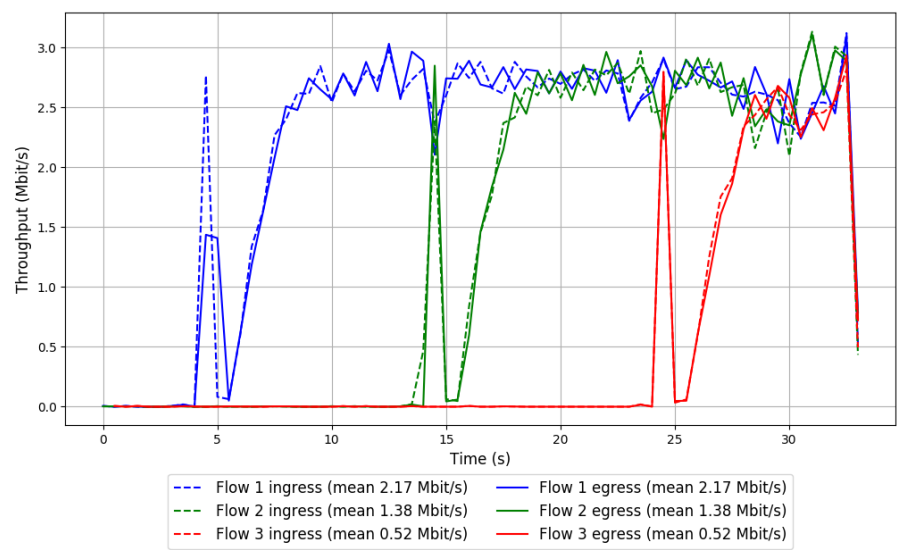
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 63.950 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-01 04:37:39

End at: 2018-02-01 04:38:09

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.07 Mbit/s

95th percentile per-packet one-way delay: 63.734 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 61.929 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.780 ms

Loss rate: 0.00%

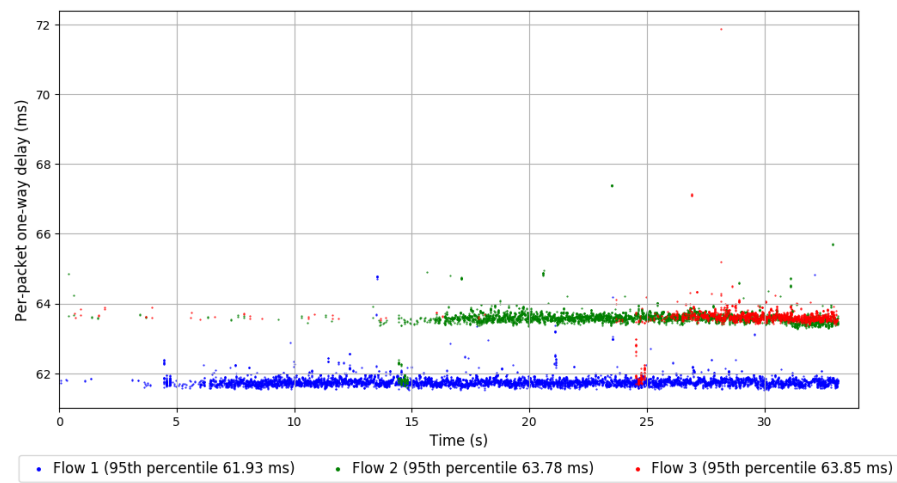
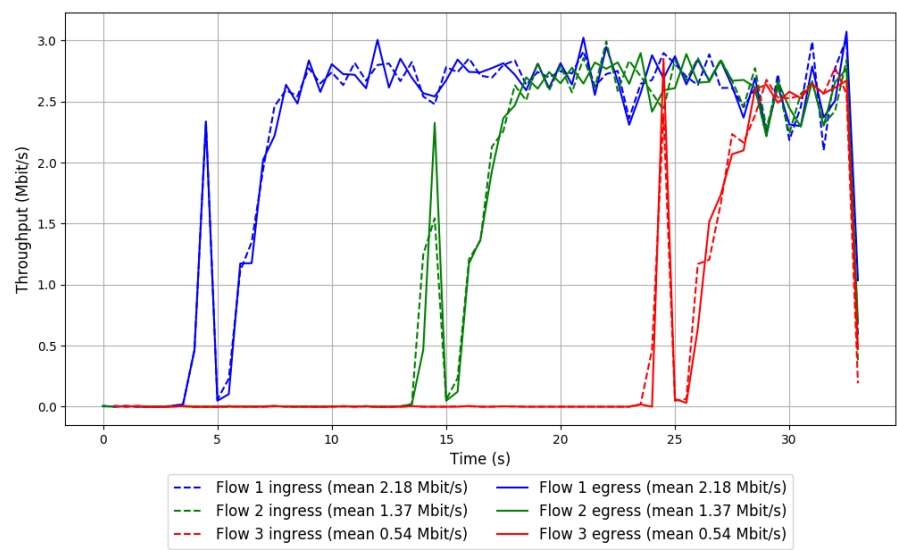
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 63.854 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-01 04:53:49

End at: 2018-02-01 04:54:19

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 63.841 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 63.870 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 62.107 ms

Loss rate: 0.00%

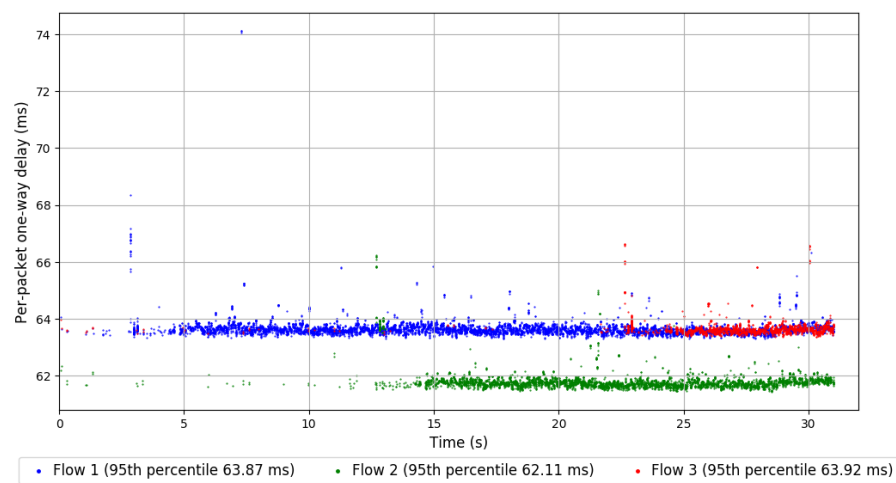
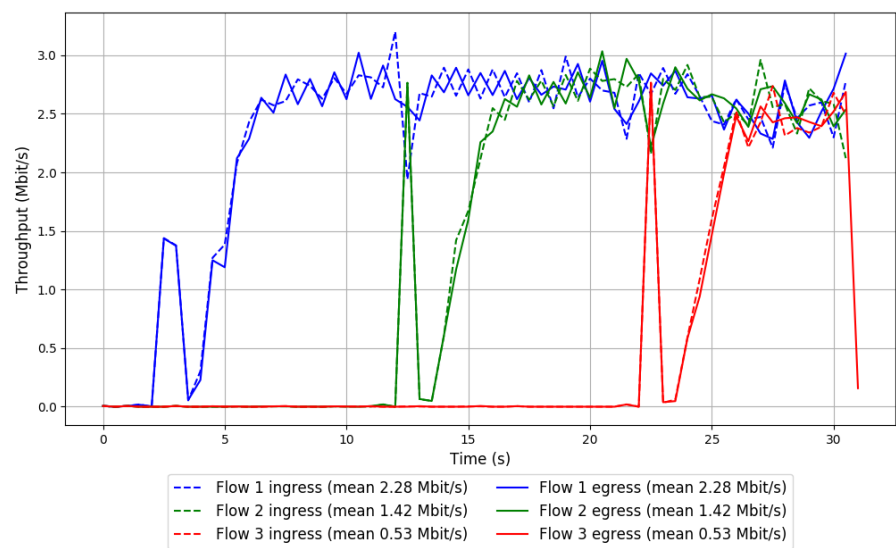
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 63.920 ms

Loss rate: 0.01%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-01 05:10:07

End at: 2018-02-01 05:10:37

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 63.860 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 63.876 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 62.159 ms

Loss rate: 0.00%

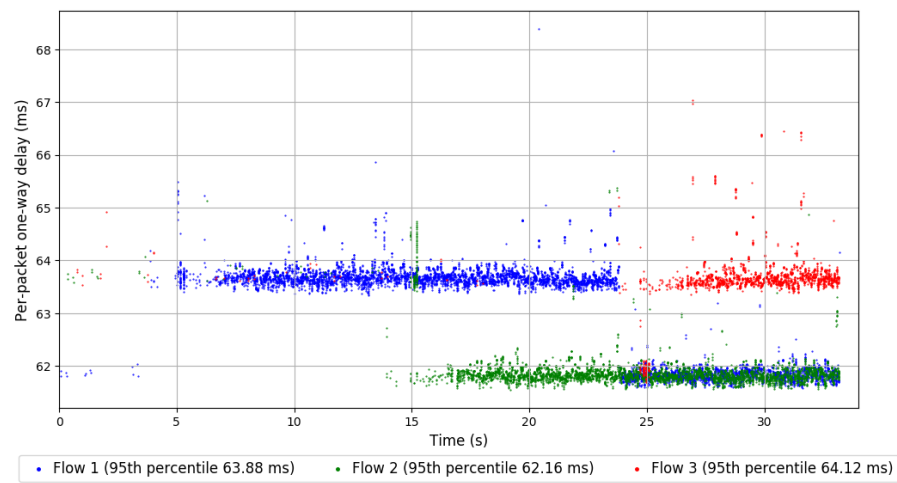
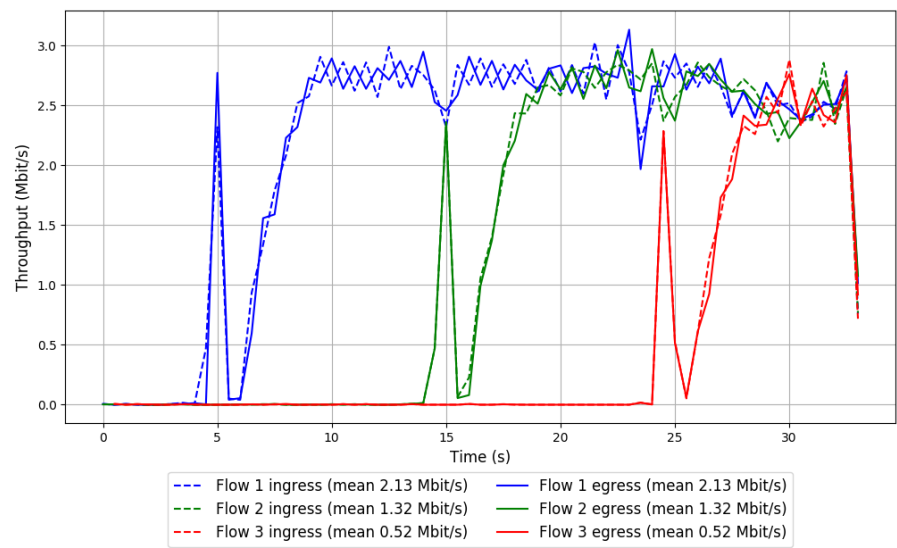
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 64.120 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-01 05:26:31

End at: 2018-02-01 05:27:01

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 63.897 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 64.039 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.847 ms

Loss rate: 0.00%

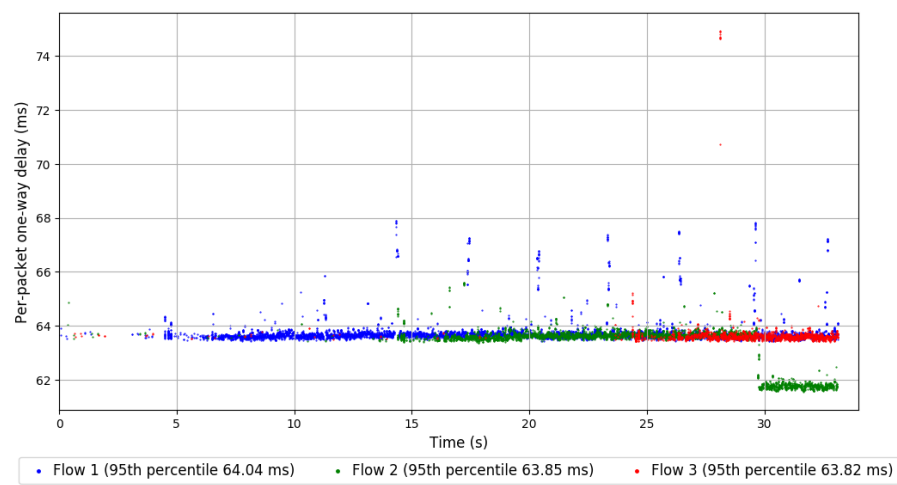
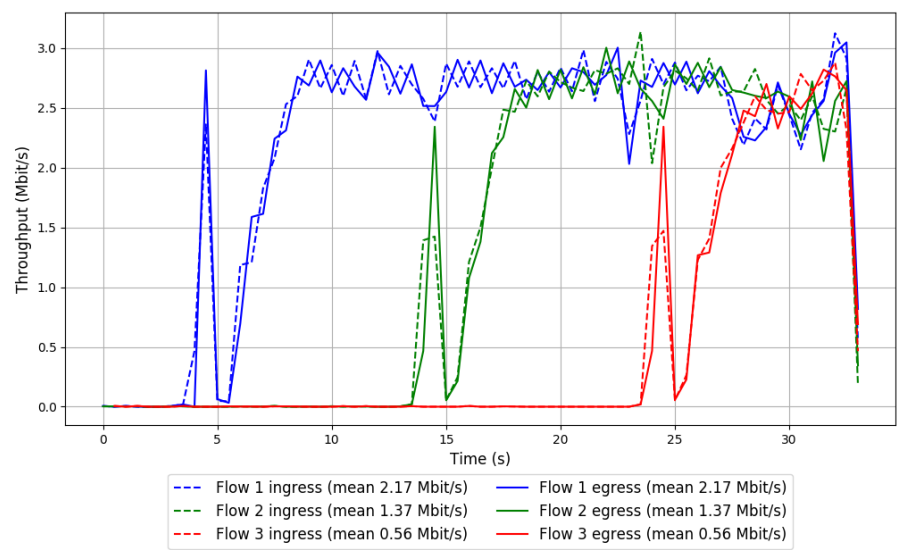
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.821 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-01 05:43:09

End at: 2018-02-01 05:43:39

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 63.869 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.880 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.869 ms

Loss rate: 0.00%

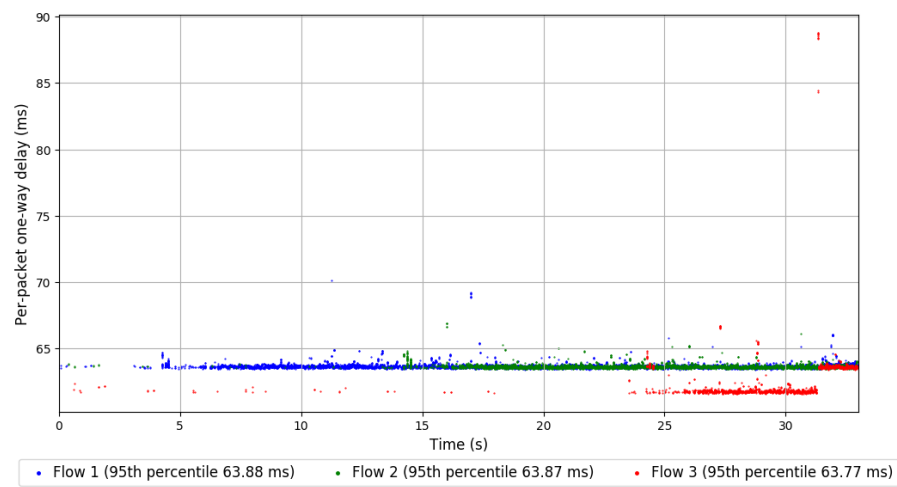
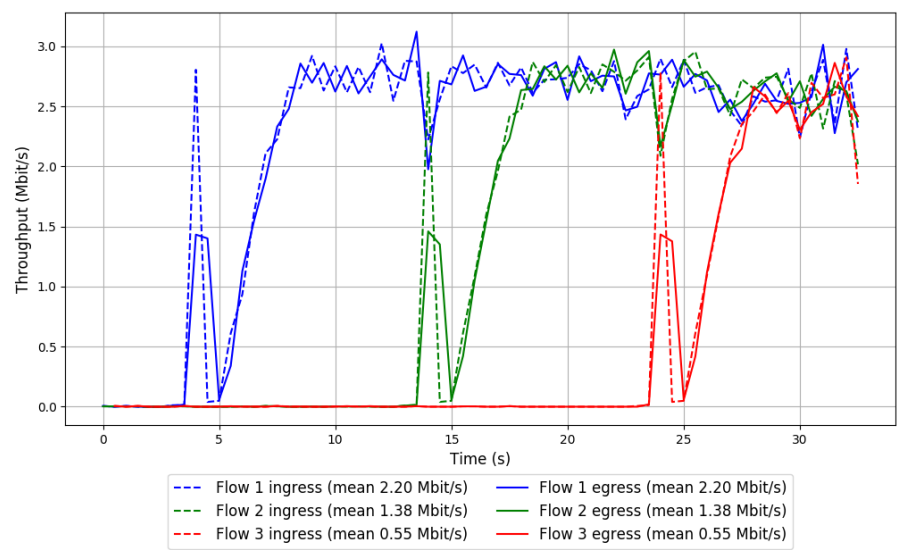
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.773 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-01 05:59:56

End at: 2018-02-01 06:00:26

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.92 Mbit/s

95th percentile per-packet one-way delay: 64.013 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.885 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 65.163 ms

Loss rate: 0.00%

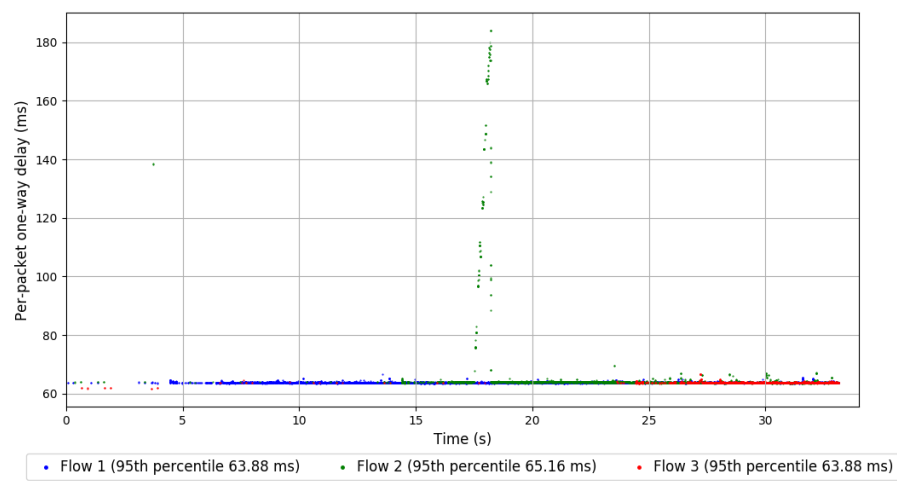
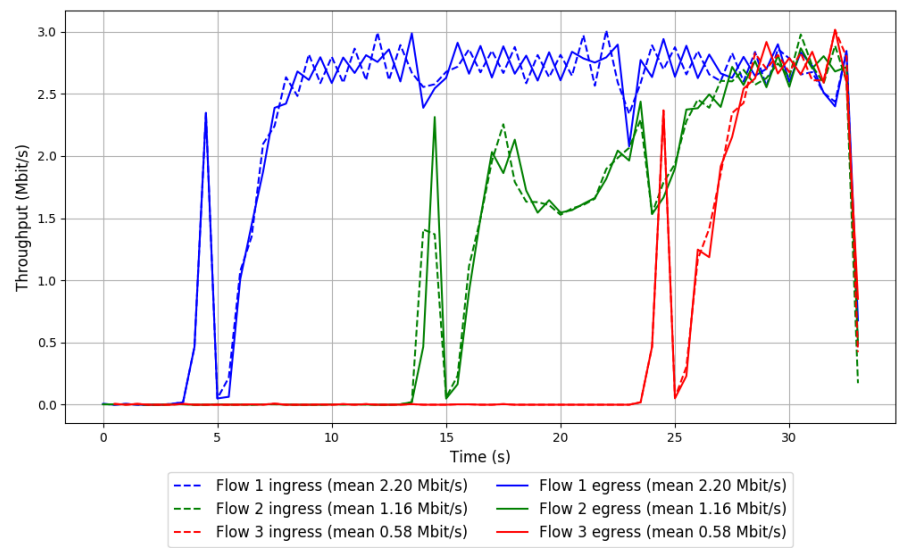
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 63.876 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-01 06:16:56

End at: 2018-02-01 06:17:26

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 63.817 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 63.814 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.826 ms

Loss rate: 0.00%

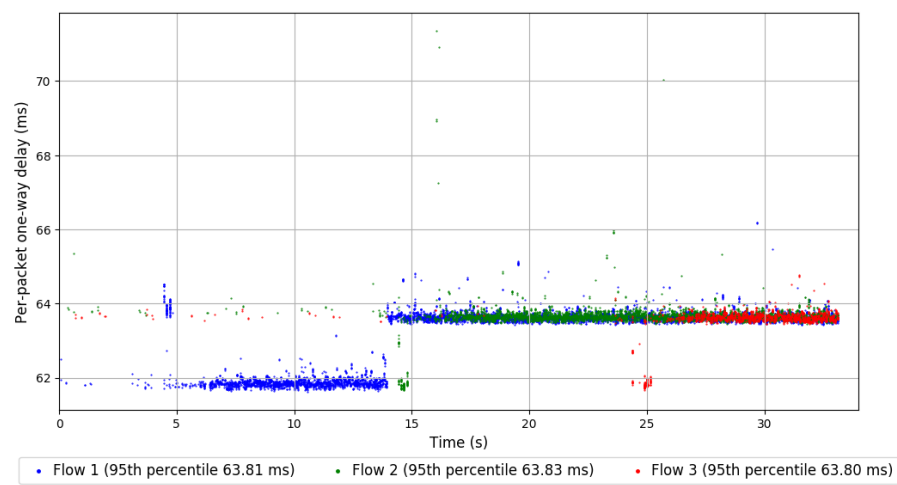
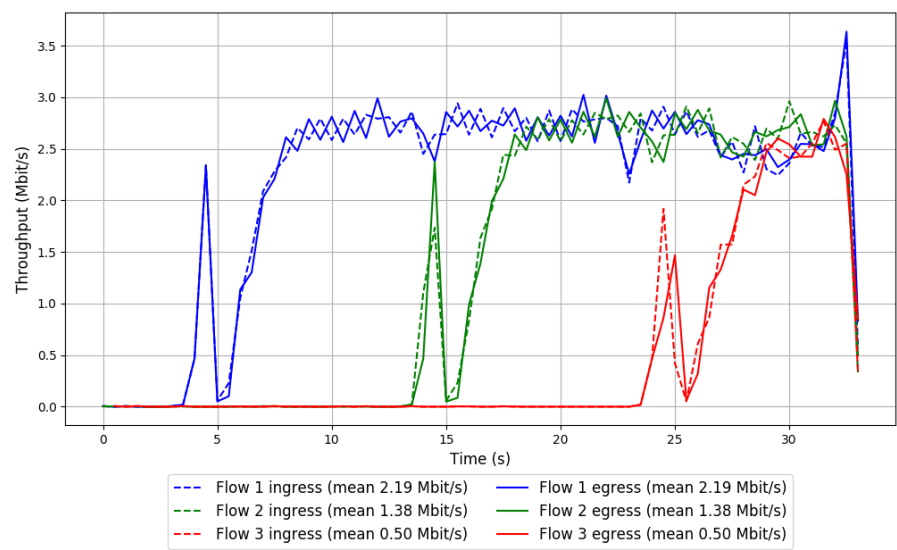
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 63.797 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-01 06:33:35

End at: 2018-02-01 06:34:05

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 63.860 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 63.851 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 63.892 ms

Loss rate: 0.00%

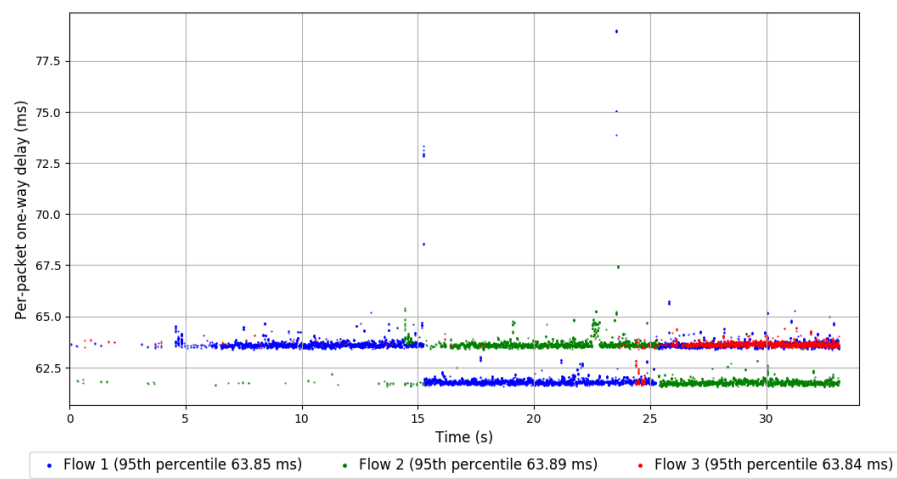
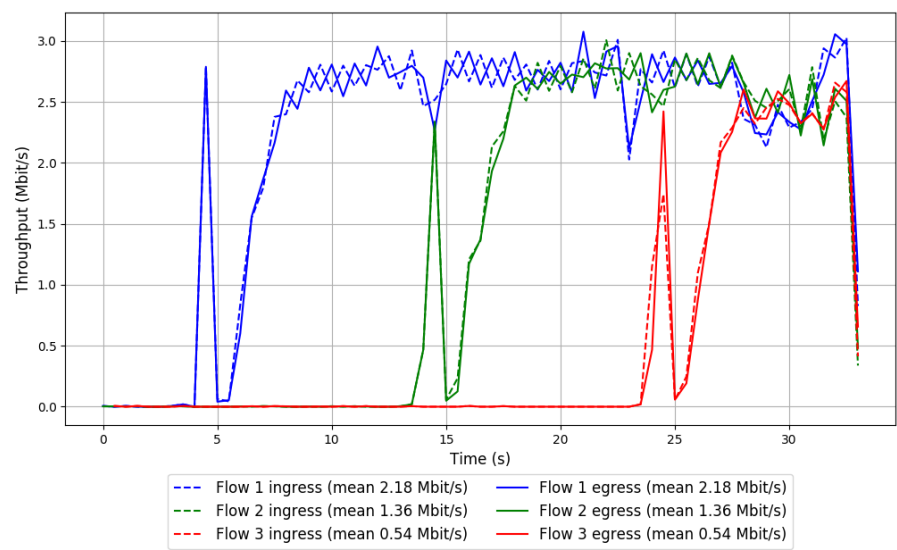
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 63.837 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

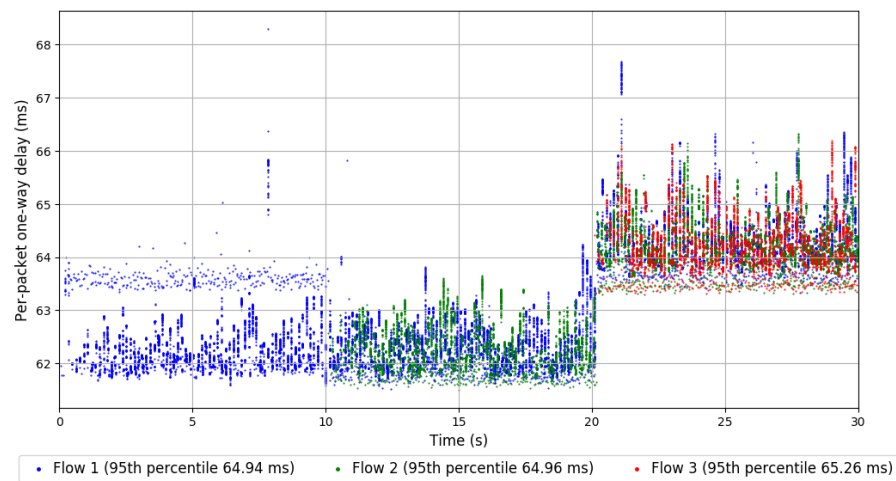
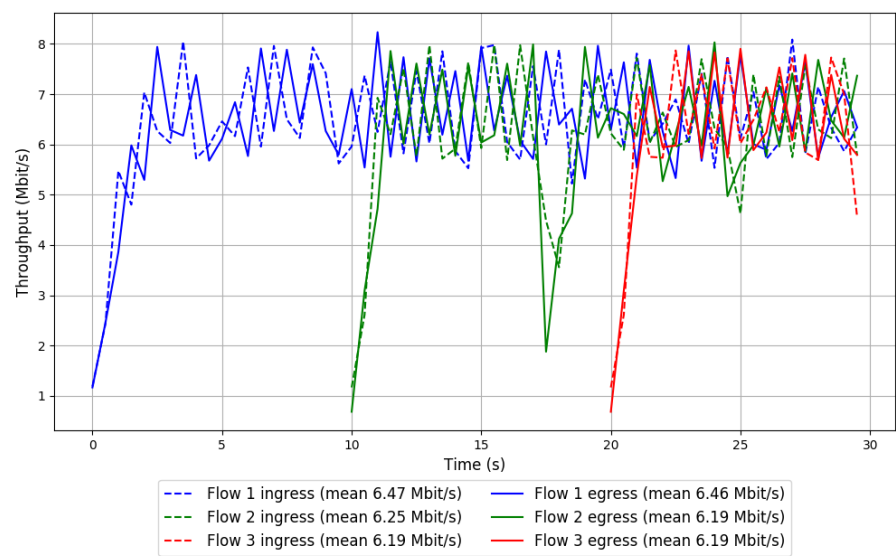


```
Run 1: Statistics of Sprout

Start at: 2018-02-01 04:19:57
End at: 2018-02-01 04:20:27

# Below is generated by plot.py at 2018-02-01 09:07:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.60 Mbit/s
95th percentile per-packet one-way delay: 65.057 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 6.46 Mbit/s
95th percentile per-packet one-way delay: 64.940 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: 64.957 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: 65.259 ms
Loss rate: 0.02%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-01 04:36:11

End at: 2018-02-01 04:36:41

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.01 Mbit/s

95th percentile per-packet one-way delay: 64.178 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.59 Mbit/s

95th percentile per-packet one-way delay: 63.897 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 64.253 ms

Loss rate: 0.00%

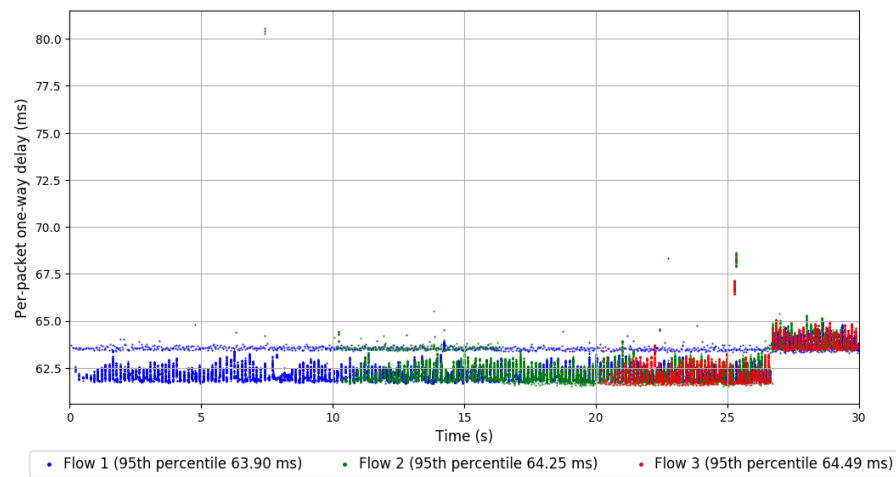
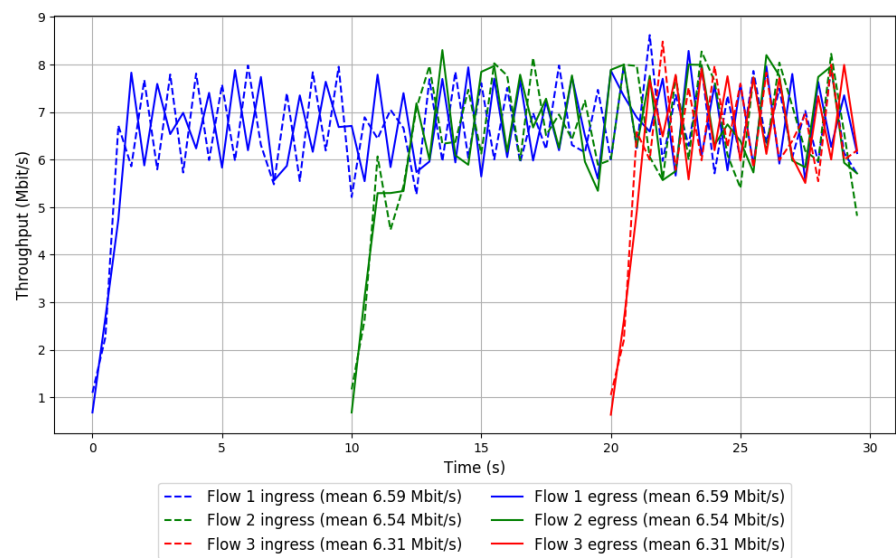
-- Flow 3:

Average throughput: 6.31 Mbit/s

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

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-01 04:52:24

End at: 2018-02-01 04:52:54

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.72 Mbit/s

95th percentile per-packet one-way delay: 64.462 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 64.417 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 64.374 ms

Loss rate: 0.29%

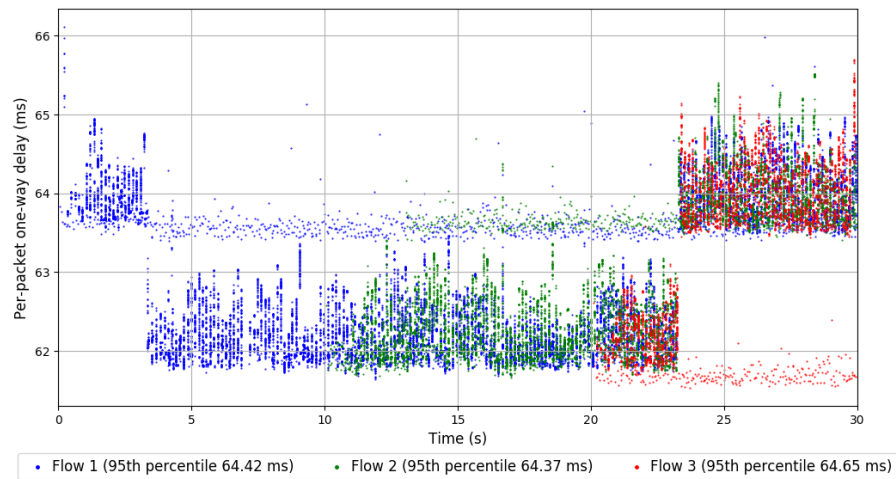
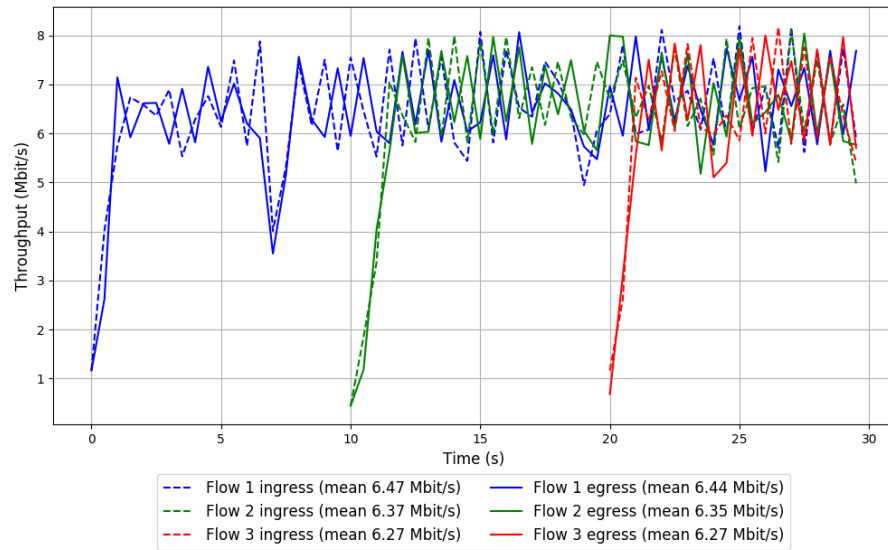
-- Flow 3:

Average throughput: 6.27 Mbit/s

95th percentile per-packet one-way delay: 64.649 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-01 05:08:40

End at: 2018-02-01 05:09:10

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.33 Mbit/s

95th percentile per-packet one-way delay: 64.839 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 64.827 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 6.22 Mbit/s

95th percentile per-packet one-way delay: 64.901 ms

Loss rate: 0.79%

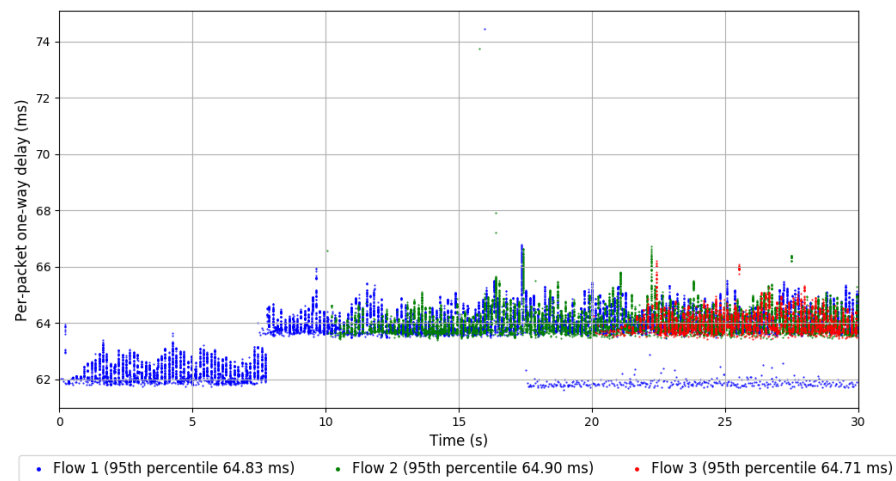
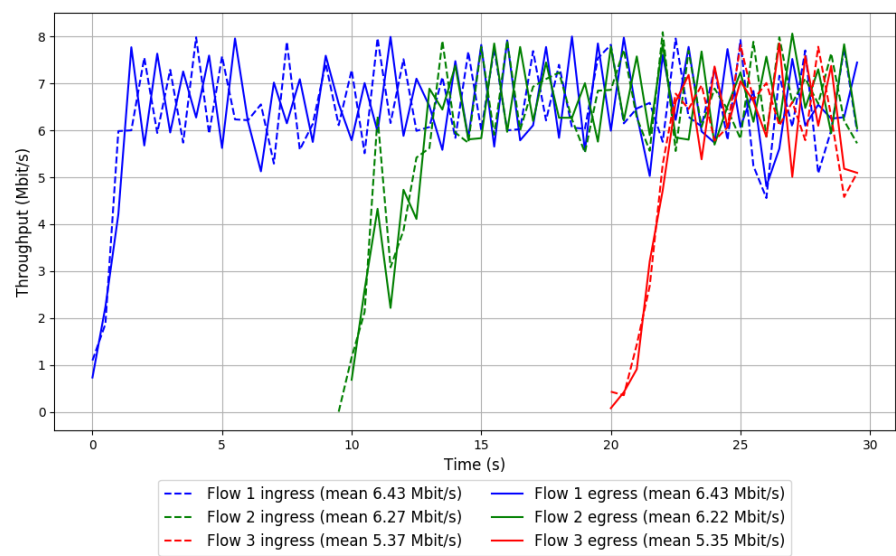
-- Flow 3:

Average throughput: 5.35 Mbit/s

95th percentile per-packet one-way delay: 64.707 ms

Loss rate: 0.27%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-01 05:25:02

End at: 2018-02-01 05:25:32

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.90 Mbit/s

95th percentile per-packet one-way delay: 64.765 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 64.764 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 64.678 ms

Loss rate: 0.00%

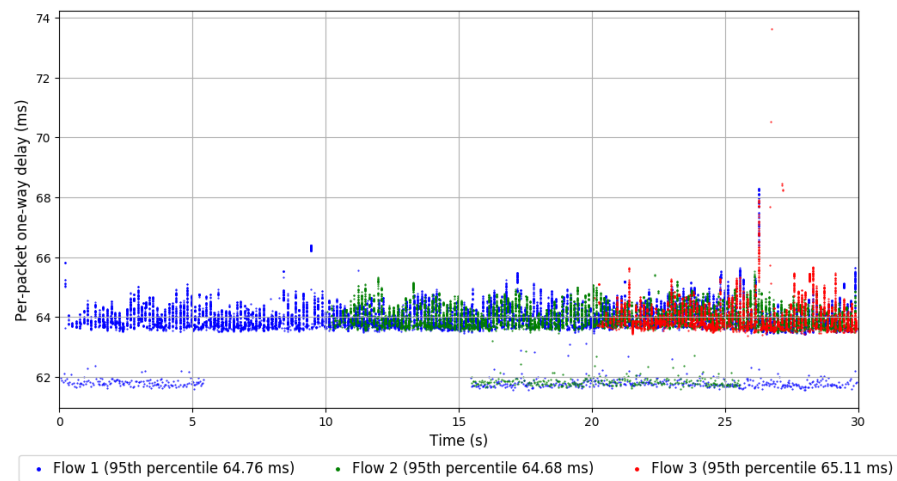
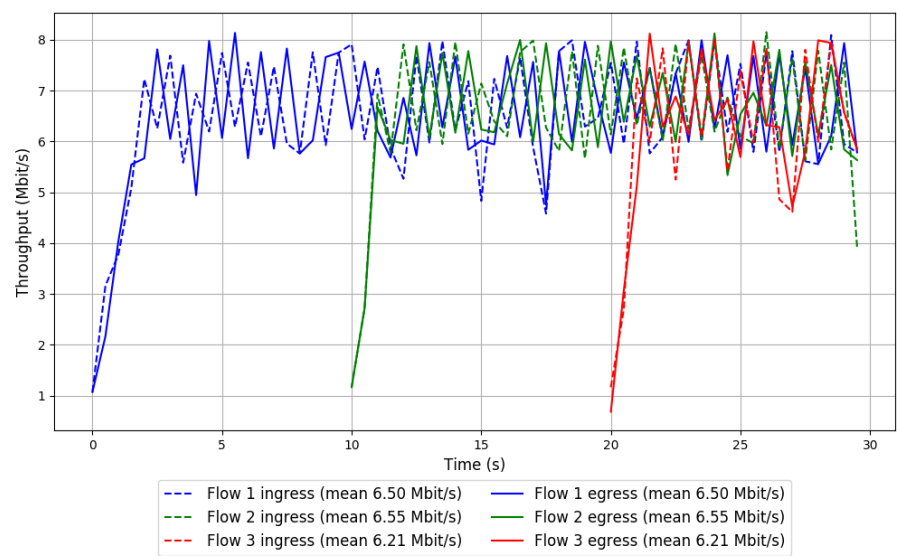
-- Flow 3:

Average throughput: 6.21 Mbit/s

95th percentile per-packet one-way delay: 65.115 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-01 05:41:39

End at: 2018-02-01 05:42:09

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.45 Mbit/s

95th percentile per-packet one-way delay: 64.982 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 6.07 Mbit/s

95th percentile per-packet one-way delay: 64.774 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 65.196 ms

Loss rate: 0.10%

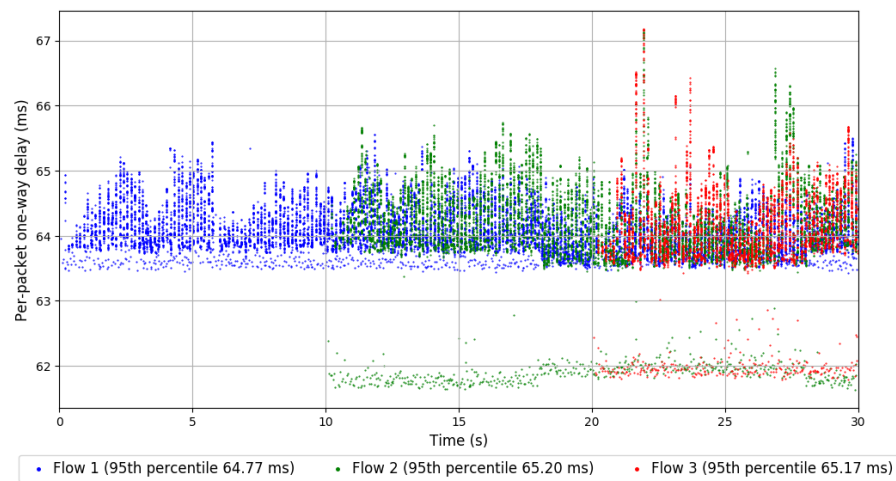
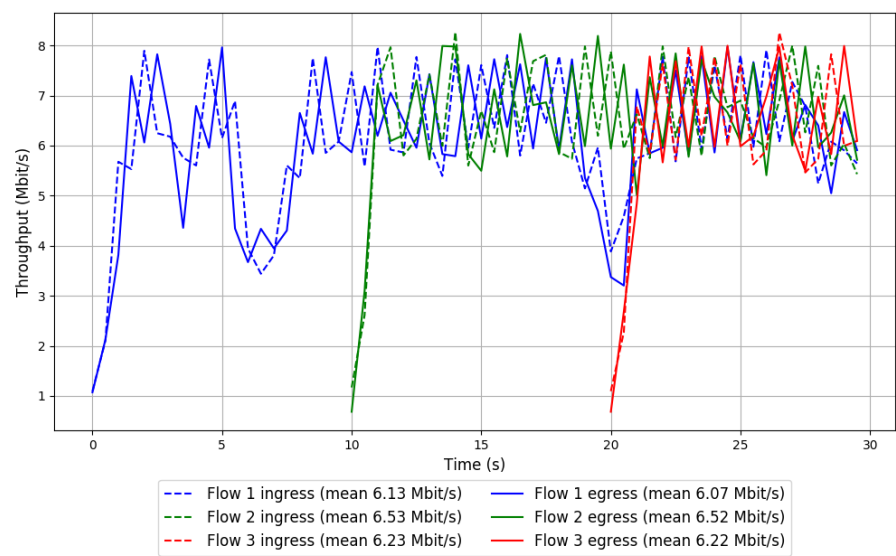
-- Flow 3:

Average throughput: 6.22 Mbit/s

95th percentile per-packet one-way delay: 65.166 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-01 05:58:28

End at: 2018-02-01 05:58:58

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.94 Mbit/s

95th percentile per-packet one-way delay: 64.834 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 64.772 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 64.847 ms

Loss rate: 0.00%

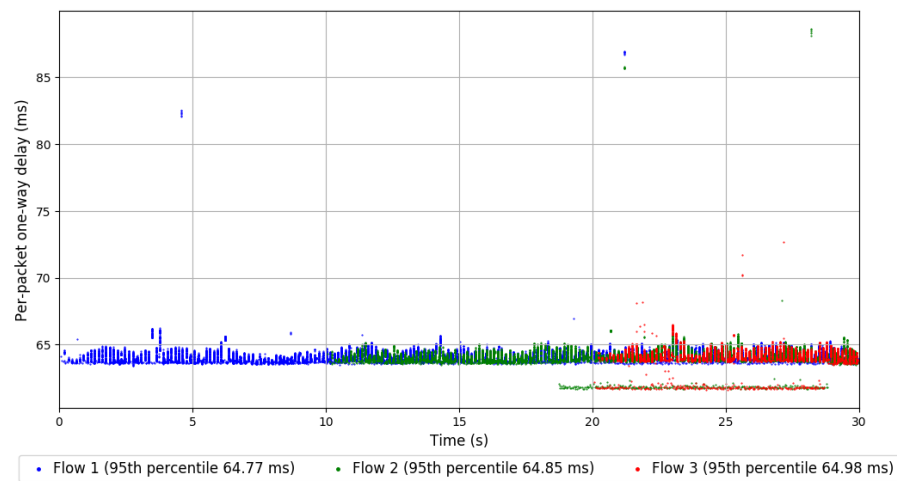
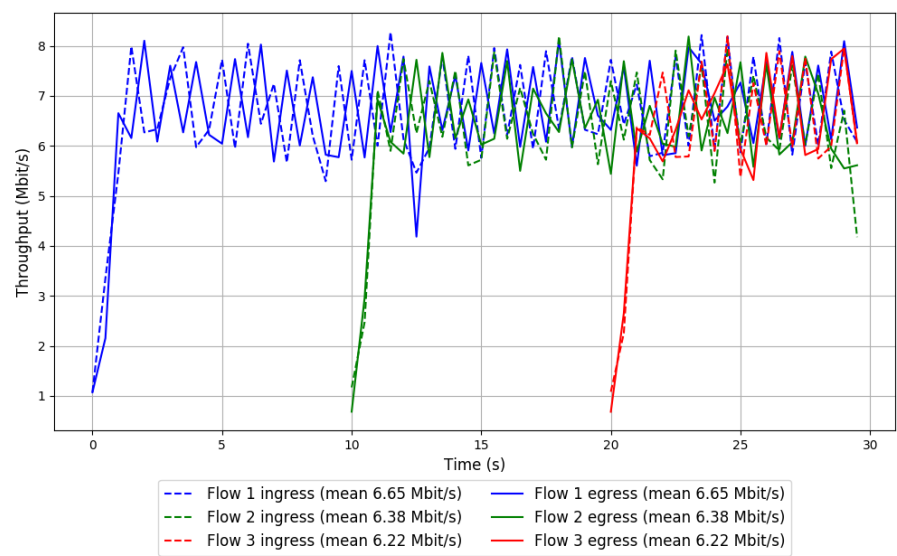
-- Flow 3:

Average throughput: 6.22 Mbit/s

95th percentile per-packet one-way delay: 64.977 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-01 06:15:26

End at: 2018-02-01 06:15:56

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.05 Mbit/s

95th percentile per-packet one-way delay: 64.752 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 64.821 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 64.679 ms

Loss rate: 0.00%

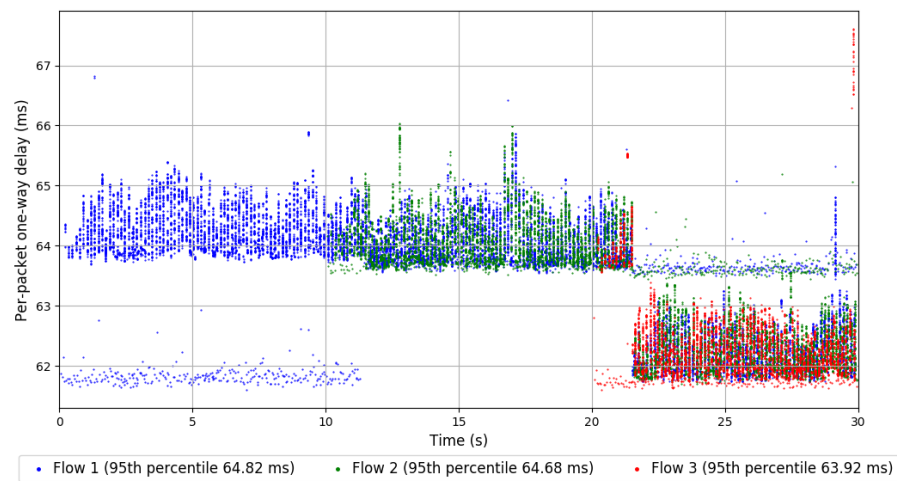
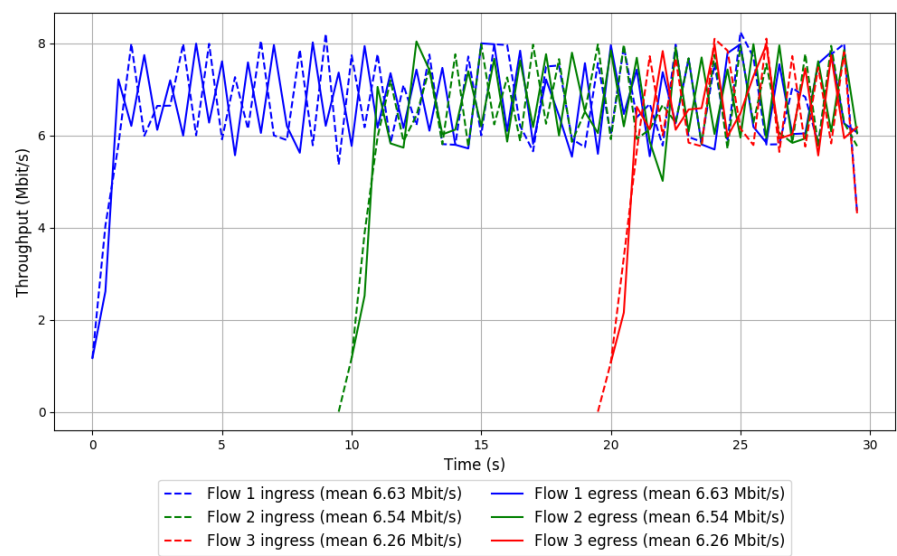
-- Flow 3:

Average throughput: 6.26 Mbit/s

95th percentile per-packet one-way delay: 63.917 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-01 06:32:06

End at: 2018-02-01 06:32:36

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.16 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 64.620 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 64.620 ms

Loss rate: 0.00%

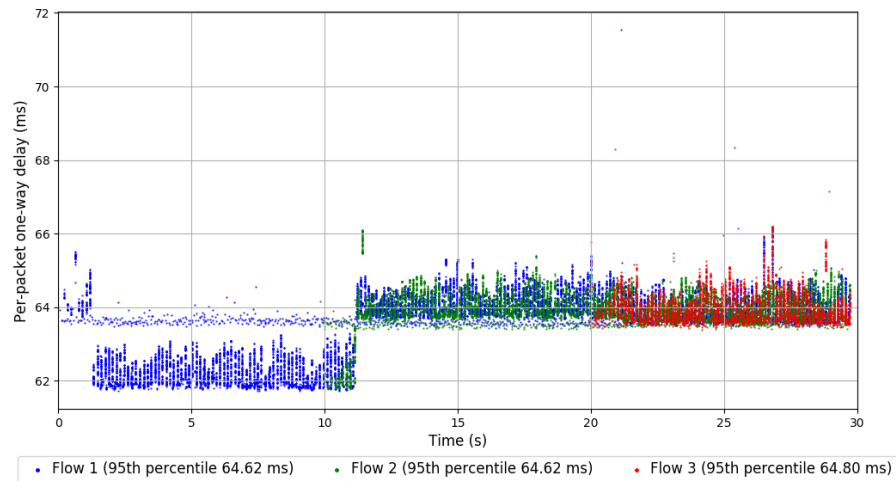
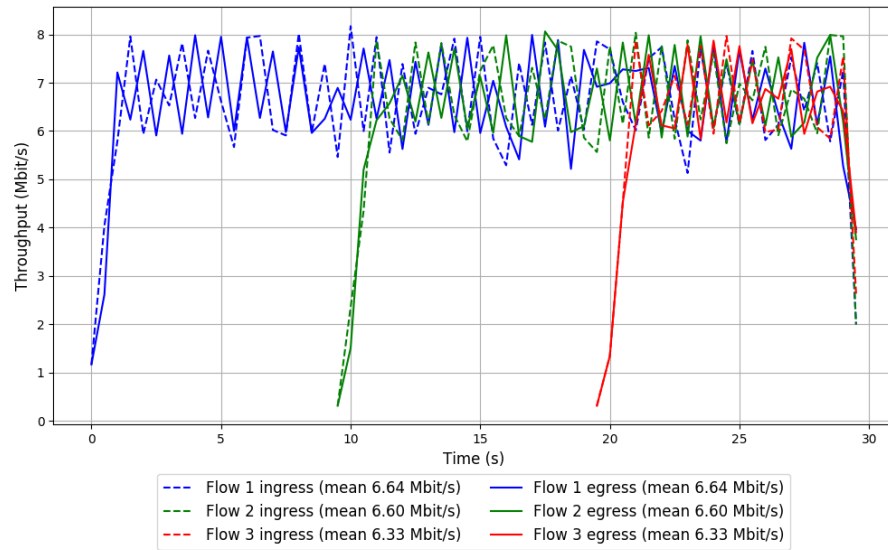
-- Flow 3:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 64.798 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-01 06:48:37

End at: 2018-02-01 06:49:07

Below is generated by plot.py at 2018-02-01 09:07:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.73 Mbit/s

95th percentile per-packet one-way delay: 64.715 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 64.716 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 64.728 ms

Loss rate: 0.05%

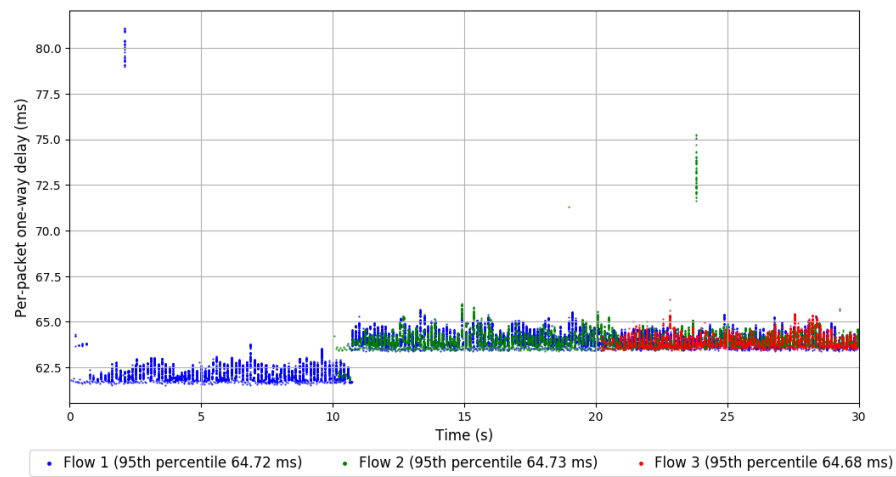
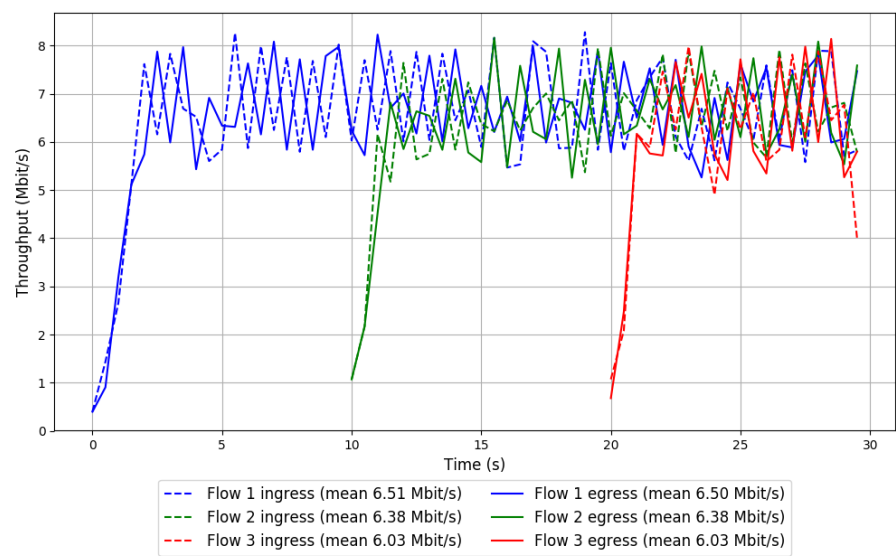
-- Flow 3:

Average throughput: 6.03 Mbit/s

95th percentile per-packet one-way delay: 64.677 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

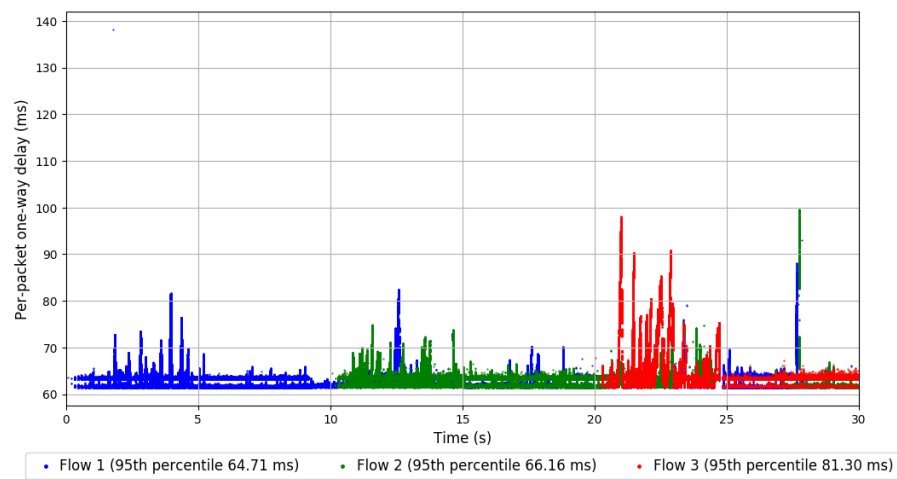
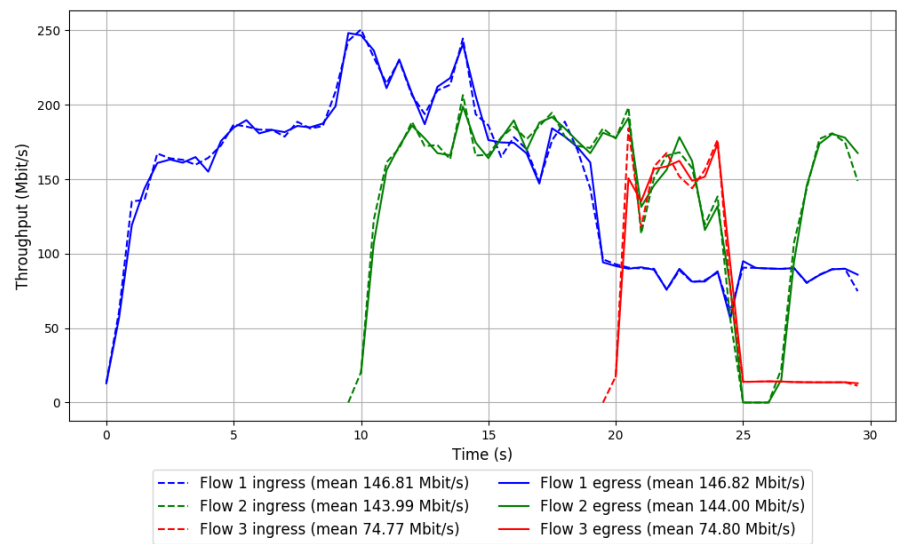


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-01 04:09:18
End at: 2018-02-01 04:09:48

# Below is generated by plot.py at 2018-02-01 09:13:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 267.53 Mbit/s
95th percentile per-packet one-way delay: 67.462 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 146.82 Mbit/s
95th percentile per-packet one-way delay: 64.711 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 144.00 Mbit/s
95th percentile per-packet one-way delay: 66.164 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 74.80 Mbit/s
95th percentile per-packet one-way delay: 81.299 ms
Loss rate: 0.00%
```


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

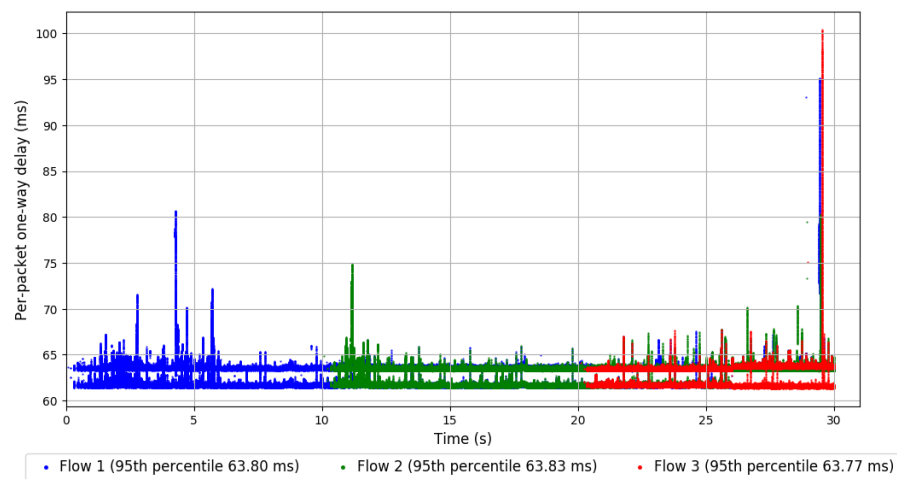
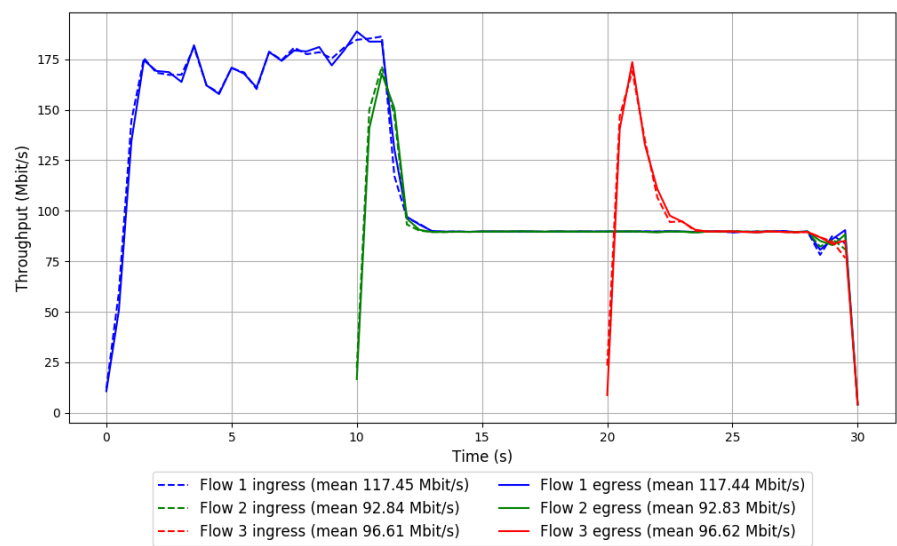


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-01 04:25:51
End at: 2018-02-01 04:26:21

# Below is generated by plot.py at 2018-02-01 09:13:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.21 Mbit/s
95th percentile per-packet one-way delay: 63.799 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 117.44 Mbit/s
95th percentile per-packet one-way delay: 63.799 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 92.83 Mbit/s
95th percentile per-packet one-way delay: 63.825 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 96.62 Mbit/s
95th percentile per-packet one-way delay: 63.766 ms
Loss rate: 0.00%
```

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

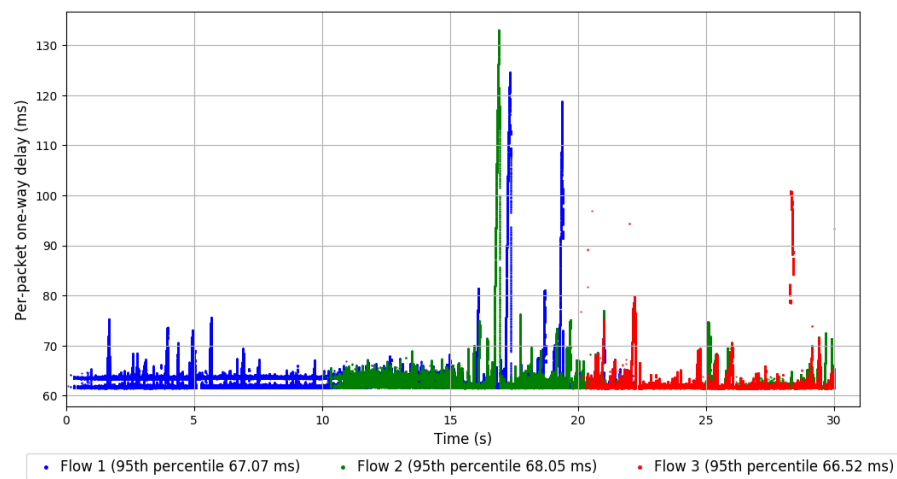
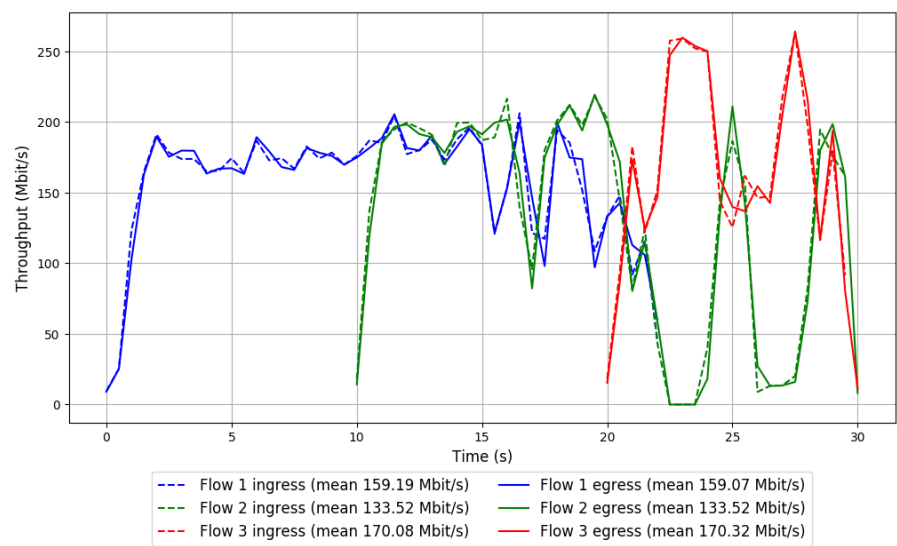


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-01 04:42:02
End at: 2018-02-01 04:42:32

# Below is generated by plot.py at 2018-02-01 09:13:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 262.89 Mbit/s
95th percentile per-packet one-way delay: 67.477 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 159.07 Mbit/s
95th percentile per-packet one-way delay: 67.066 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 133.52 Mbit/s
95th percentile per-packet one-way delay: 68.053 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 170.32 Mbit/s
95th percentile per-packet one-way delay: 66.519 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-01 04:58:15

End at: 2018-02-01 04:58:45

Below is generated by plot.py at 2018-02-01 09:13:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.04 Mbit/s

95th percentile per-packet one-way delay: 70.208 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 148.08 Mbit/s

95th percentile per-packet one-way delay: 68.842 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 142.70 Mbit/s

95th percentile per-packet one-way delay: 71.708 ms

Loss rate: 0.00%

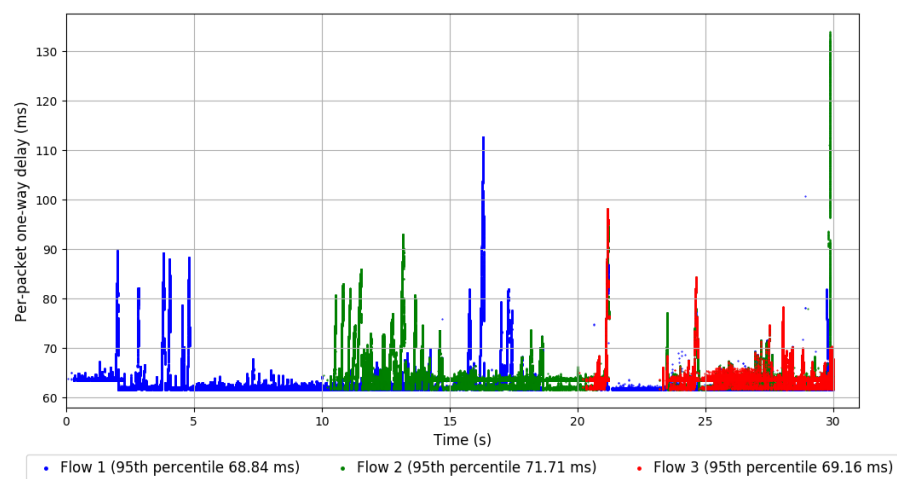
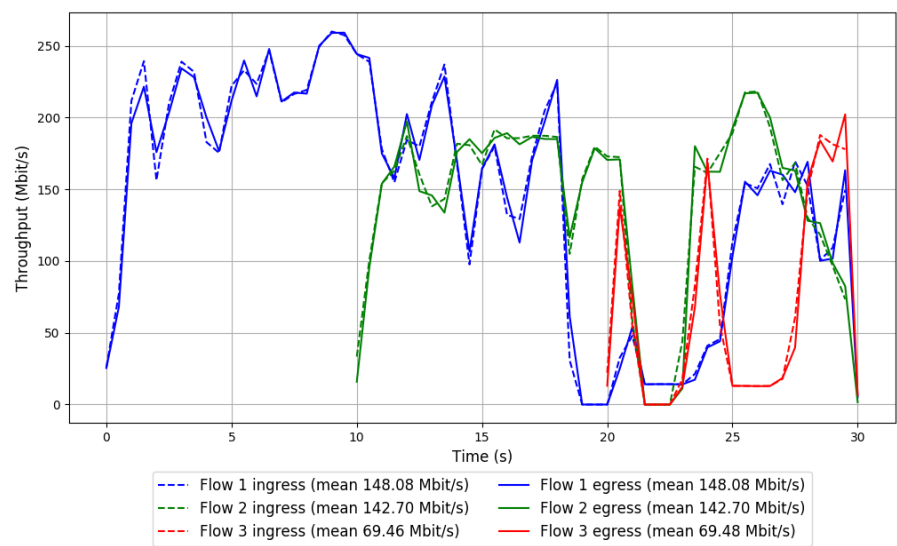
-- Flow 3:

Average throughput: 69.48 Mbit/s

95th percentile per-packet one-way delay: 69.155 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-01 05:14:37

End at: 2018-02-01 05:15:07

Below is generated by plot.py at 2018-02-01 09:14:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.84 Mbit/s

95th percentile per-packet one-way delay: 71.217 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 142.66 Mbit/s

95th percentile per-packet one-way delay: 65.398 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 155.92 Mbit/s

95th percentile per-packet one-way delay: 76.852 ms

Loss rate: 0.00%

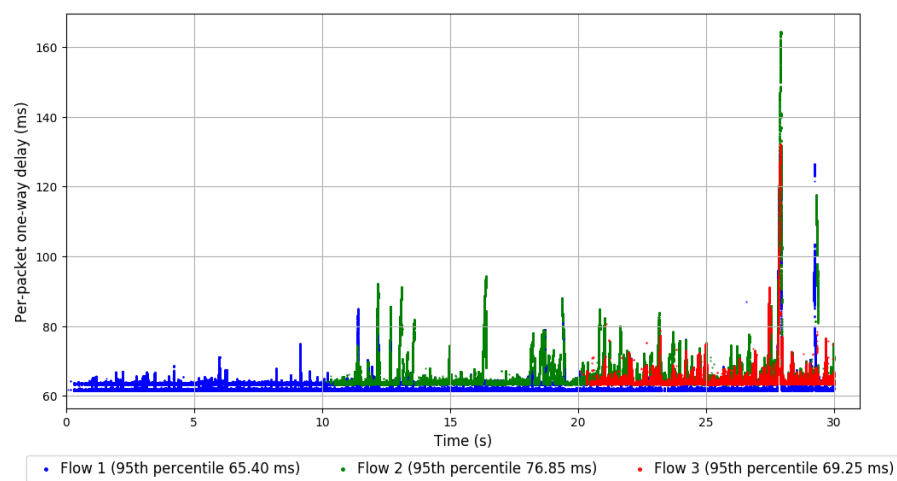
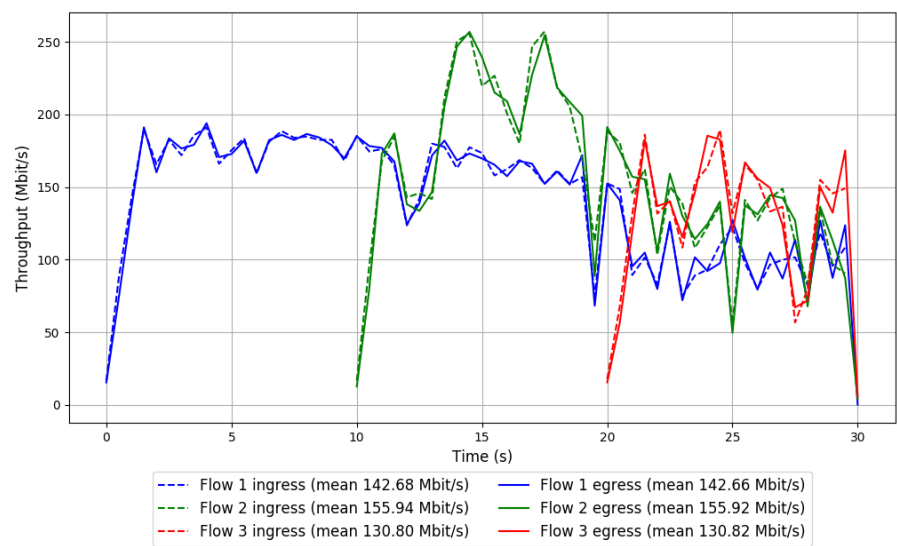
-- Flow 3:

Average throughput: 130.82 Mbit/s

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

Loss rate: 0.00%

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

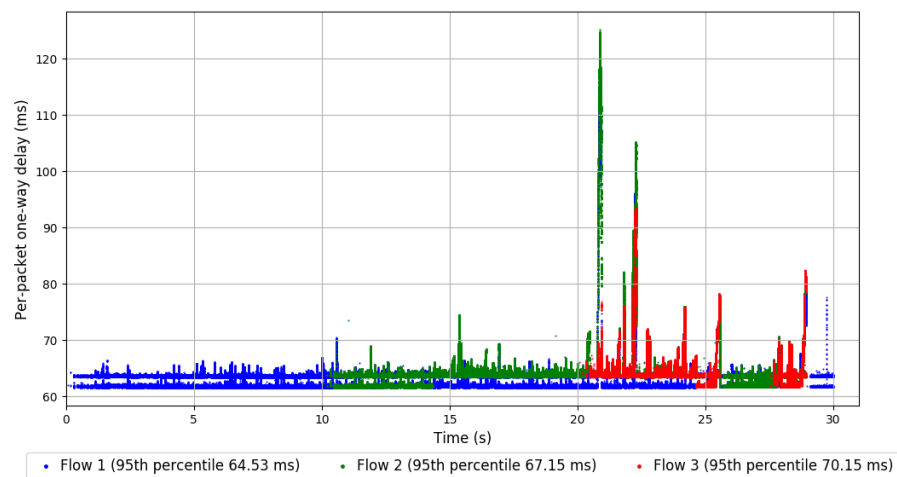
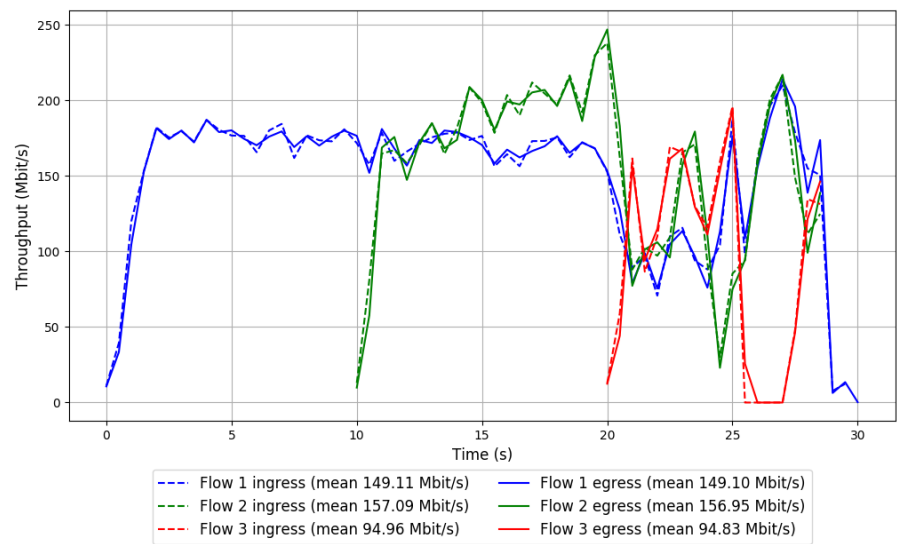


```
Run 6: Statistics of TaoVA-100x

Start at: 2018-02-01 05:31:03
End at: 2018-02-01 05:31:33

# Below is generated by plot.py at 2018-02-01 09:14:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 275.96 Mbit/s
95th percentile per-packet one-way delay: 66.005 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 149.10 Mbit/s
95th percentile per-packet one-way delay: 64.526 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 156.95 Mbit/s
95th percentile per-packet one-way delay: 67.148 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 94.83 Mbit/s
95th percentile per-packet one-way delay: 70.147 ms
Loss rate: 0.00%
```

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

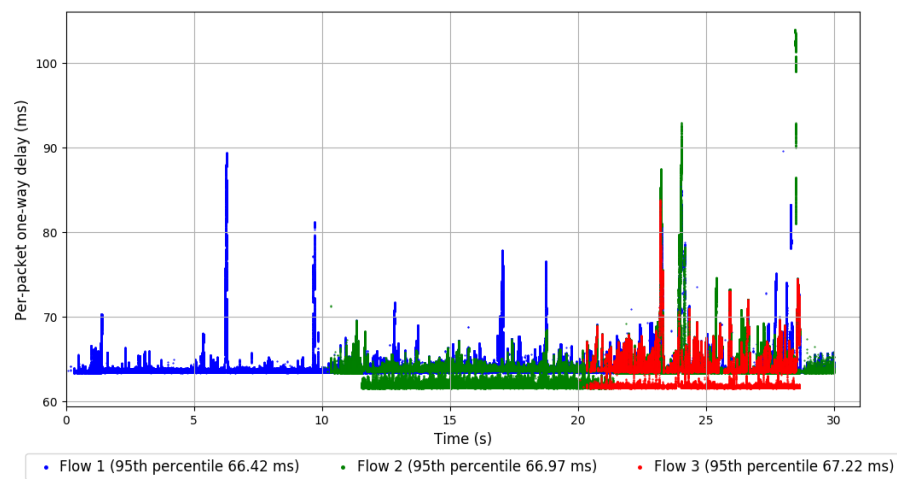
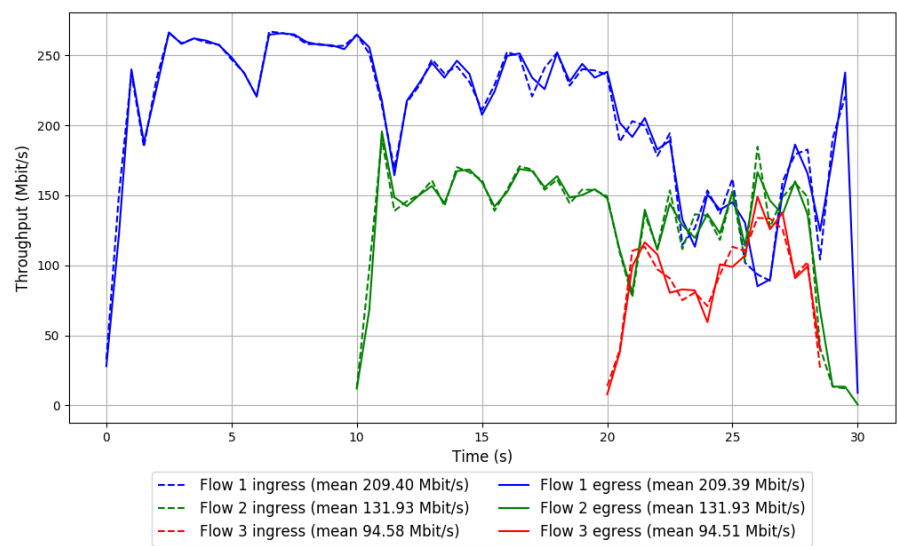


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-01 05:47:46
End at: 2018-02-01 05:48:16

# Below is generated by plot.py at 2018-02-01 09:18:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 324.30 Mbit/s
95th percentile per-packet one-way delay: 66.700 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 209.39 Mbit/s
95th percentile per-packet one-way delay: 66.418 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 131.93 Mbit/s
95th percentile per-packet one-way delay: 66.975 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 94.51 Mbit/s
95th percentile per-packet one-way delay: 67.223 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-01 06:04:27

End at: 2018-02-01 06:04:57

Below is generated by plot.py at 2018-02-01 09:19:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.58 Mbit/s

95th percentile per-packet one-way delay: 66.166 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 178.76 Mbit/s

95th percentile per-packet one-way delay: 66.078 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 145.02 Mbit/s

95th percentile per-packet one-way delay: 66.386 ms

Loss rate: 0.00%

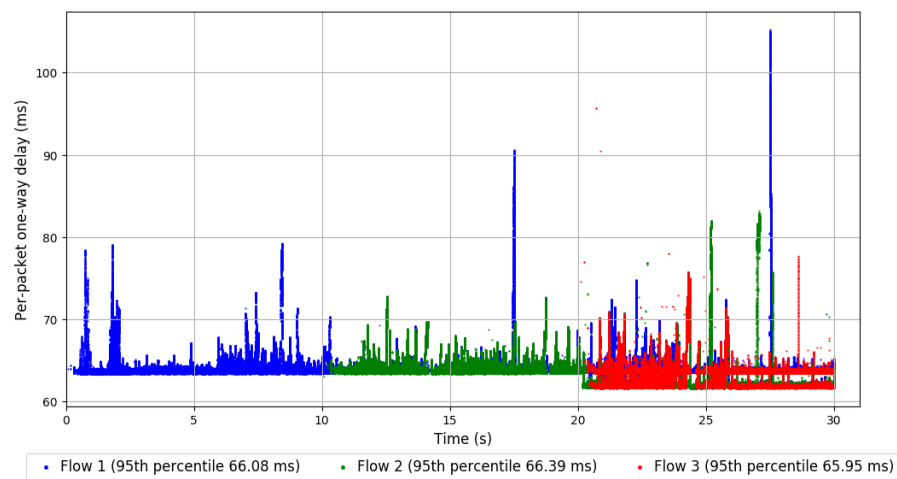
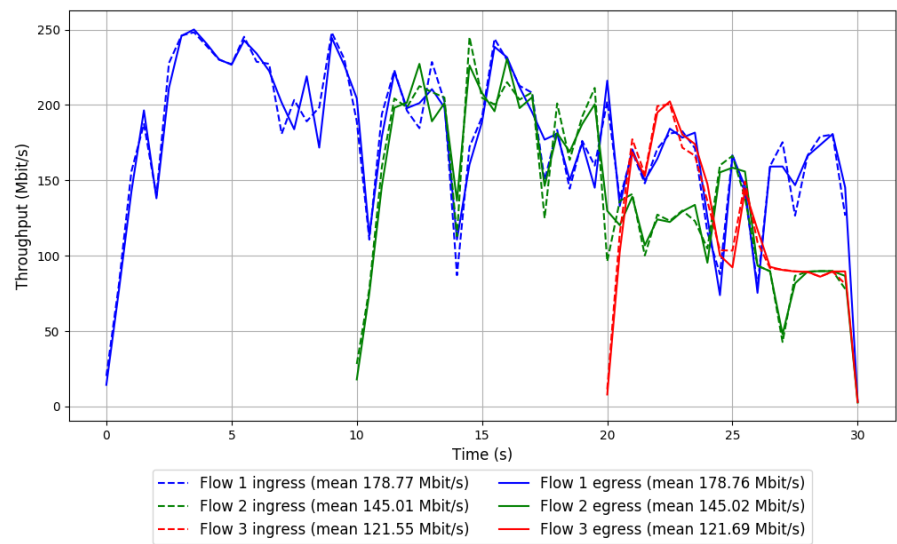
-- Flow 3:

Average throughput: 121.69 Mbit/s

95th percentile per-packet one-way delay: 65.949 ms

Loss rate: 0.00%

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

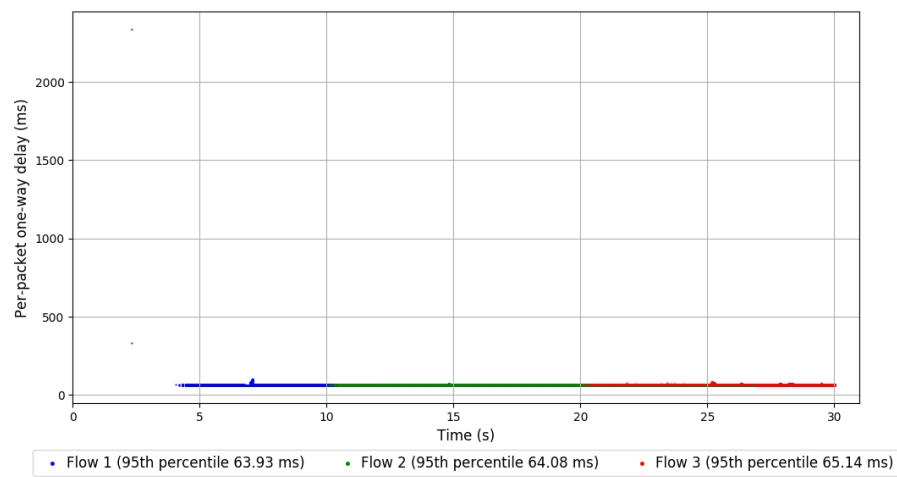
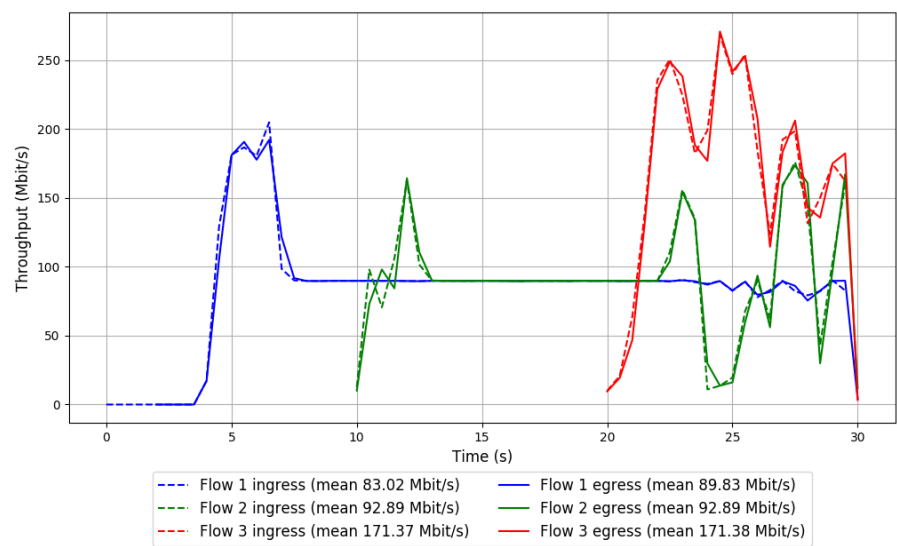


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-01 06:21:30
End at: 2018-02-01 06:22:00

# Below is generated by plot.py at 2018-02-01 09:19:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 218.22 Mbit/s
95th percentile per-packet one-way delay: 64.213 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 89.83 Mbit/s
95th percentile per-packet one-way delay: 63.927 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 64.081 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 171.38 Mbit/s
95th percentile per-packet one-way delay: 65.139 ms
Loss rate: 0.00%
```


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

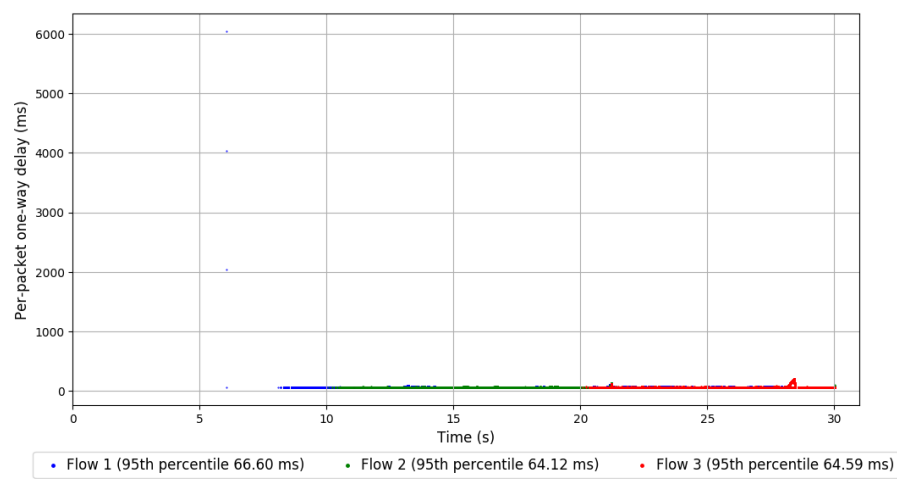
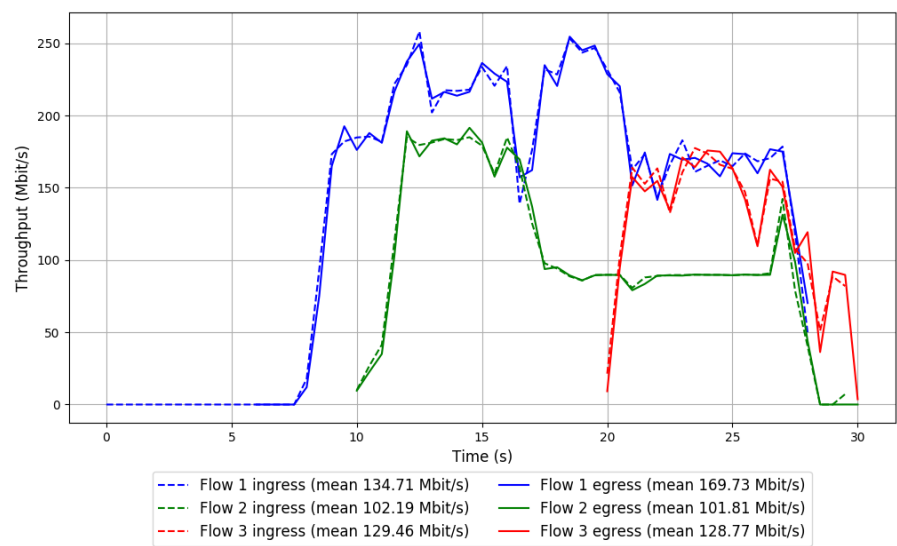


Run 10: Statistics of TaoVA-100x

Start at: 2018-02-01 06:38:06

End at: 2018-02-01 06:38:36

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-01 04:05:31

End at: 2018-02-01 04:06:01

Below is generated by plot.py at 2018-02-01 09:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.43 Mbit/s

95th percentile per-packet one-way delay: 64.525 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 79.50 Mbit/s

95th percentile per-packet one-way delay: 64.385 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.99 Mbit/s

95th percentile per-packet one-way delay: 64.788 ms

Loss rate: 0.00%

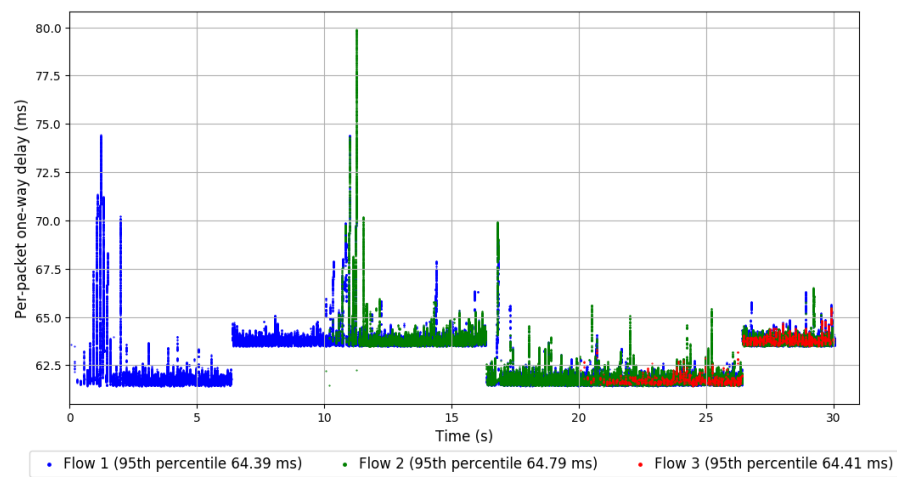
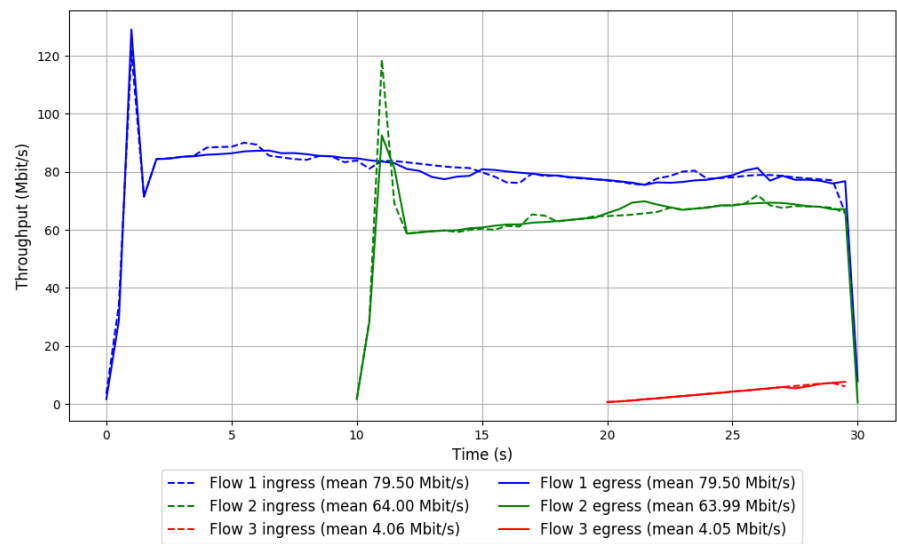
-- Flow 3:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 64.405 ms

Loss rate: 0.12%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-01 04:22:06

End at: 2018-02-01 04:22:36

Below is generated by plot.py at 2018-02-01 09:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.20 Mbit/s

95th percentile per-packet one-way delay: 65.351 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 31.59 Mbit/s

95th percentile per-packet one-way delay: 65.971 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 30.82 Mbit/s

95th percentile per-packet one-way delay: 65.144 ms

Loss rate: 0.02%

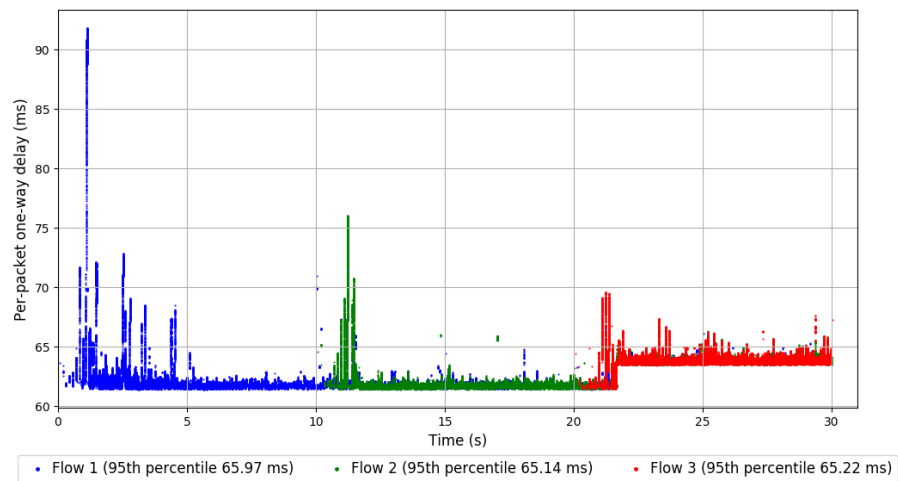
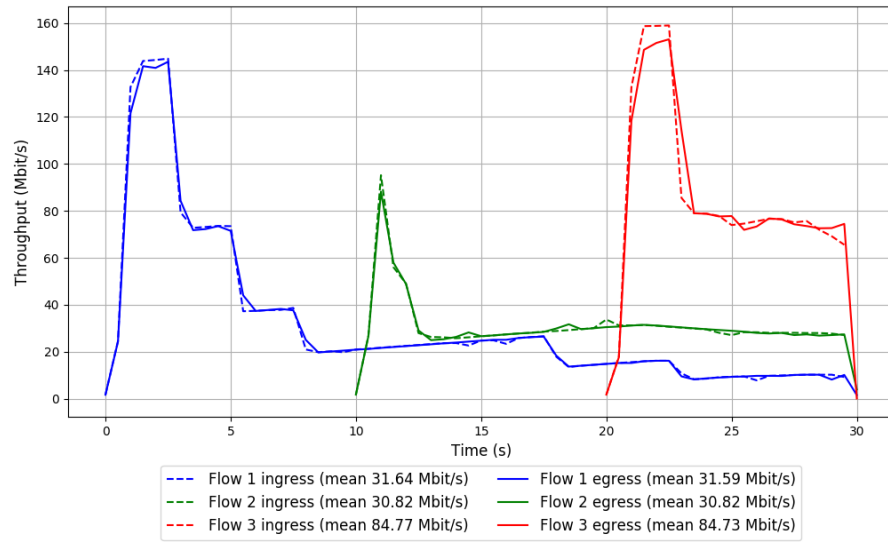
-- Flow 3:

Average throughput: 84.73 Mbit/s

95th percentile per-packet one-way delay: 65.224 ms

Loss rate: 0.02%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-01 04:38:20

End at: 2018-02-01 04:38:50

Below is generated by plot.py at 2018-02-01 09:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.07 Mbit/s

95th percentile per-packet one-way delay: 64.240 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.61 Mbit/s

95th percentile per-packet one-way delay: 63.948 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 80.76 Mbit/s

95th percentile per-packet one-way delay: 64.215 ms

Loss rate: 0.00%

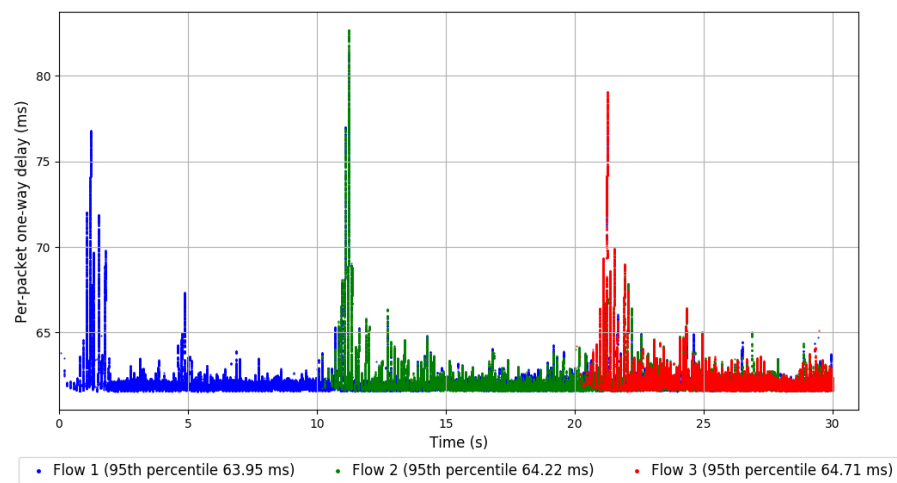
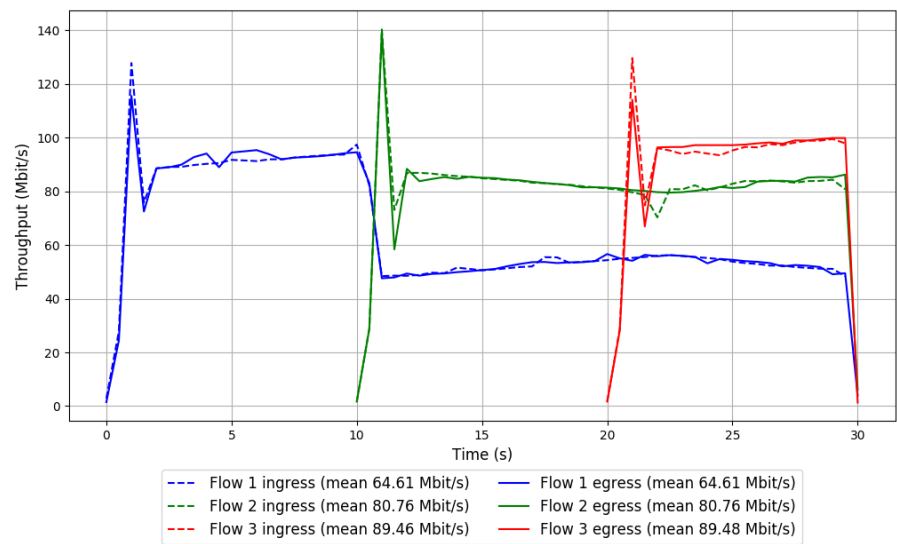
-- Flow 3:

Average throughput: 89.48 Mbit/s

95th percentile per-packet one-way delay: 64.707 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-01 04:54:31

End at: 2018-02-01 04:55:01

Below is generated by plot.py at 2018-02-01 09:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.73 Mbit/s

95th percentile per-packet one-way delay: 73.047 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 88.24 Mbit/s

95th percentile per-packet one-way delay: 74.578 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 7.41 Mbit/s

95th percentile per-packet one-way delay: 64.227 ms

Loss rate: 0.05%

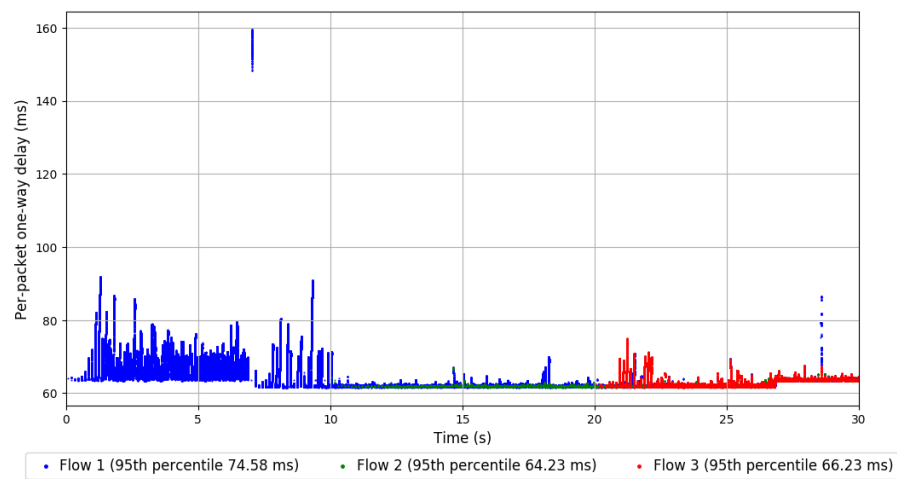
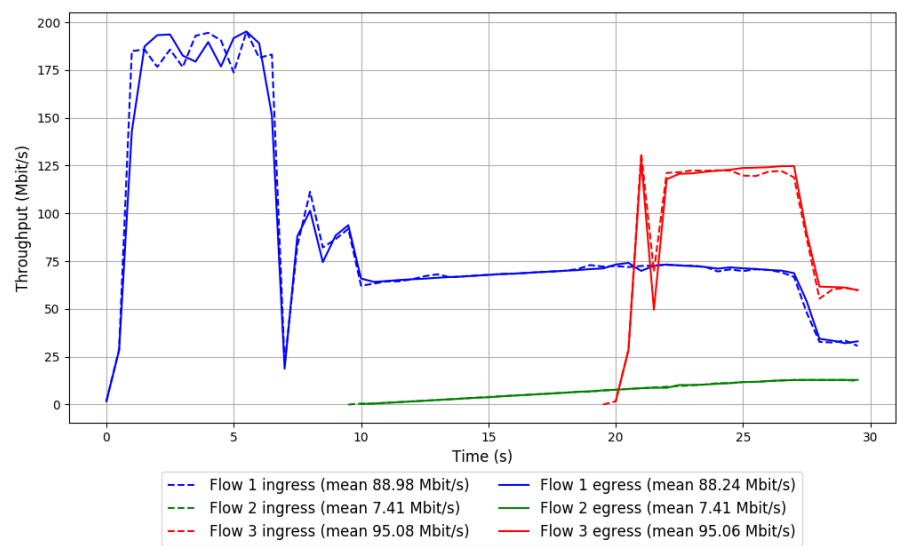
-- Flow 3:

Average throughput: 95.06 Mbit/s

95th percentile per-packet one-way delay: 66.234 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-01 05:10:47

End at: 2018-02-01 05:11:17

Below is generated by plot.py at 2018-02-01 09:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.40 Mbit/s

95th percentile per-packet one-way delay: 64.782 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 50.14 Mbit/s

95th percentile per-packet one-way delay: 65.699 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 46.63 Mbit/s

95th percentile per-packet one-way delay: 64.376 ms

Loss rate: 0.00%

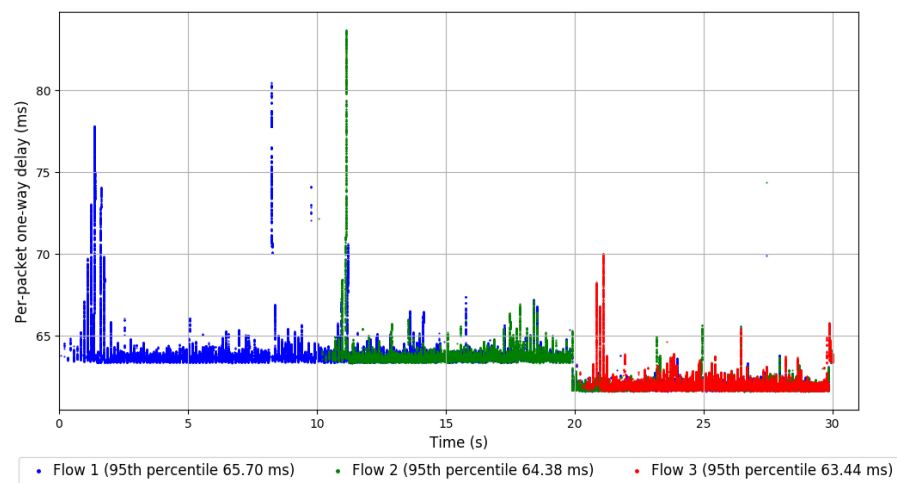
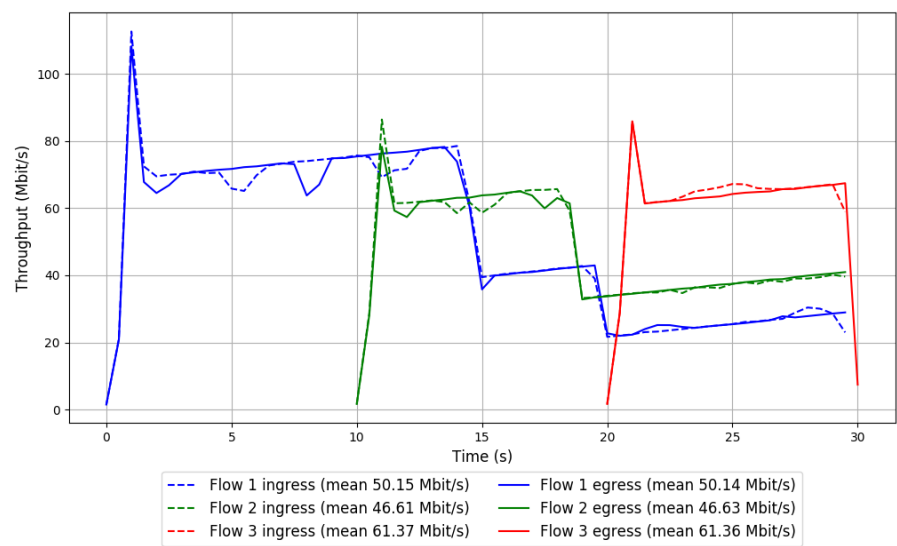
-- Flow 3:

Average throughput: 61.36 Mbit/s

95th percentile per-packet one-way delay: 63.440 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-01 05:27:12

End at: 2018-02-01 05:27:42

Below is generated by plot.py at 2018-02-01 09:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.79 Mbit/s

95th percentile per-packet one-way delay: 66.084 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 38.89 Mbit/s

95th percentile per-packet one-way delay: 65.146 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.65 Mbit/s

95th percentile per-packet one-way delay: 66.975 ms

Loss rate: 0.00%

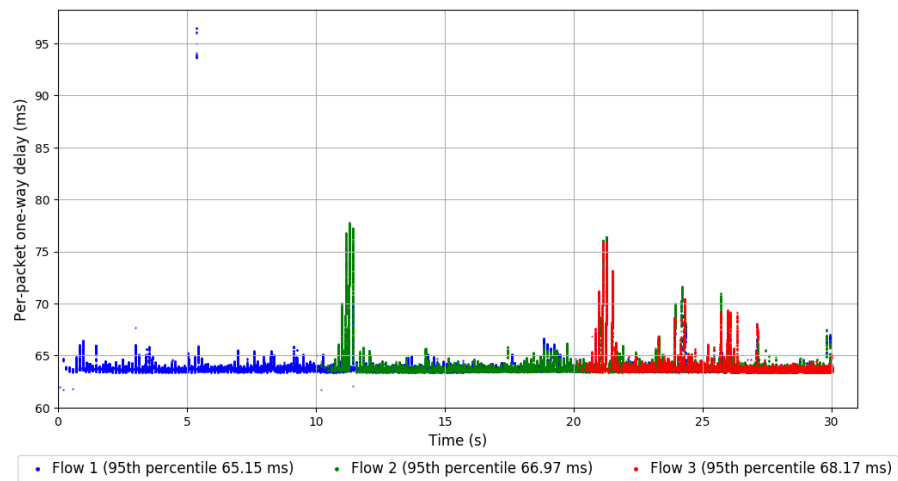
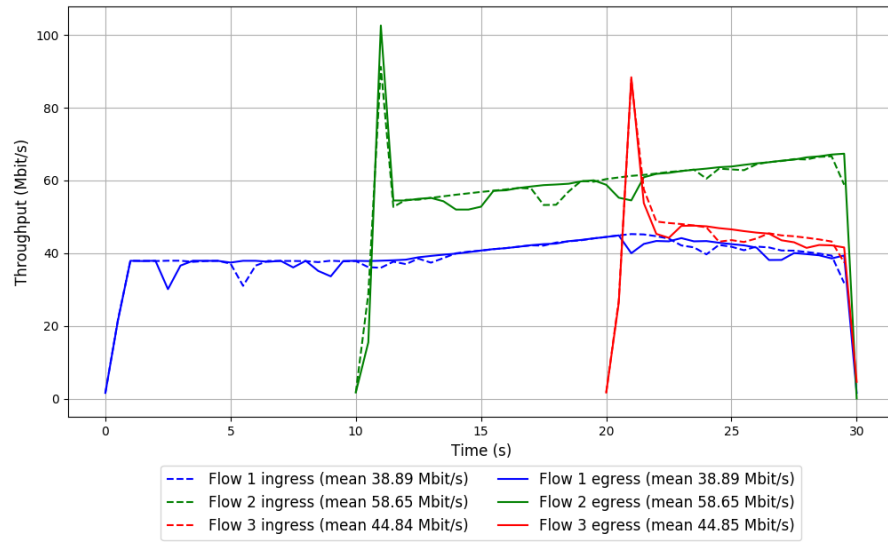
-- Flow 3:

Average throughput: 44.85 Mbit/s

95th percentile per-packet one-way delay: 68.175 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-01 05:43:50

End at: 2018-02-01 05:44:20

Below is generated by plot.py at 2018-02-01 09:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.15 Mbit/s

95th percentile per-packet one-way delay: 68.938 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 36.30 Mbit/s

95th percentile per-packet one-way delay: 65.893 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 103.11 Mbit/s

95th percentile per-packet one-way delay: 70.193 ms

Loss rate: 0.00%

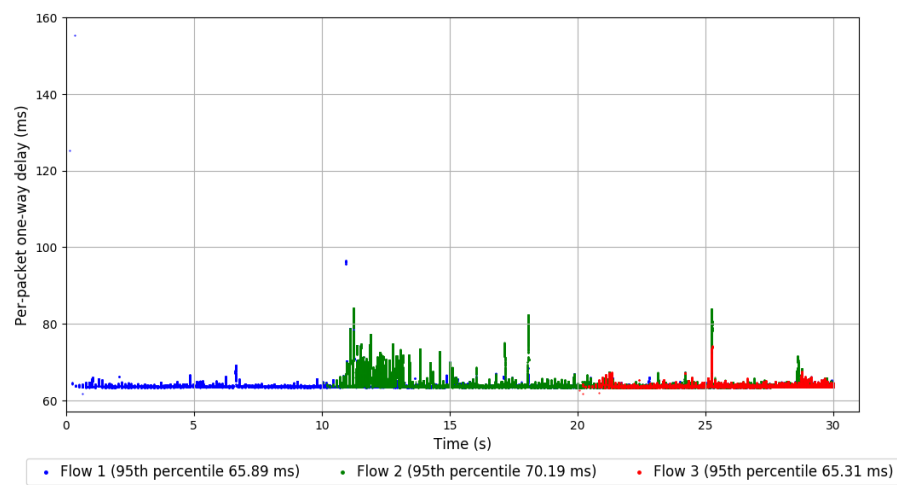
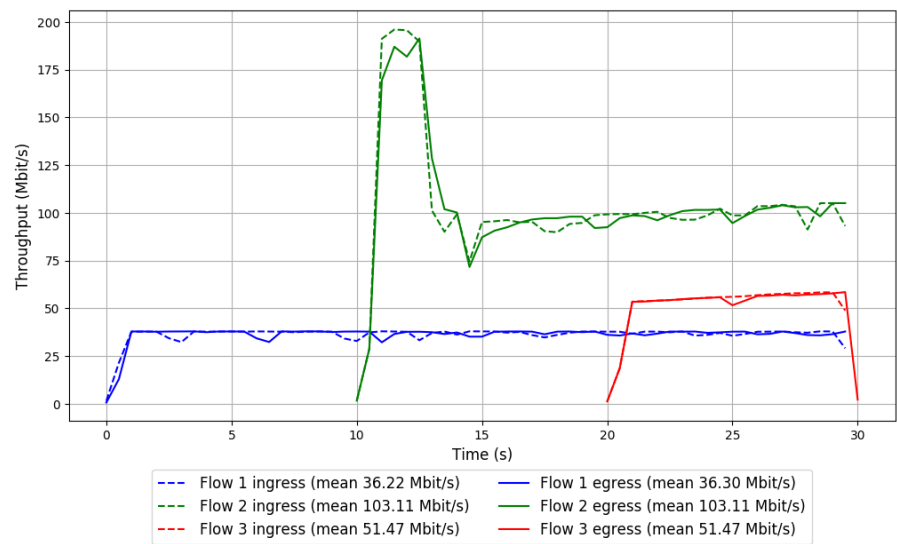
-- Flow 3:

Average throughput: 51.47 Mbit/s

95th percentile per-packet one-way delay: 65.312 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-01 06:00:37

End at: 2018-02-01 06:01:07

Below is generated by plot.py at 2018-02-01 09:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.85 Mbit/s

95th percentile per-packet one-way delay: 72.870 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 54.83 Mbit/s

95th percentile per-packet one-way delay: 70.150 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 95.47 Mbit/s

95th percentile per-packet one-way delay: 74.103 ms

Loss rate: 0.00%

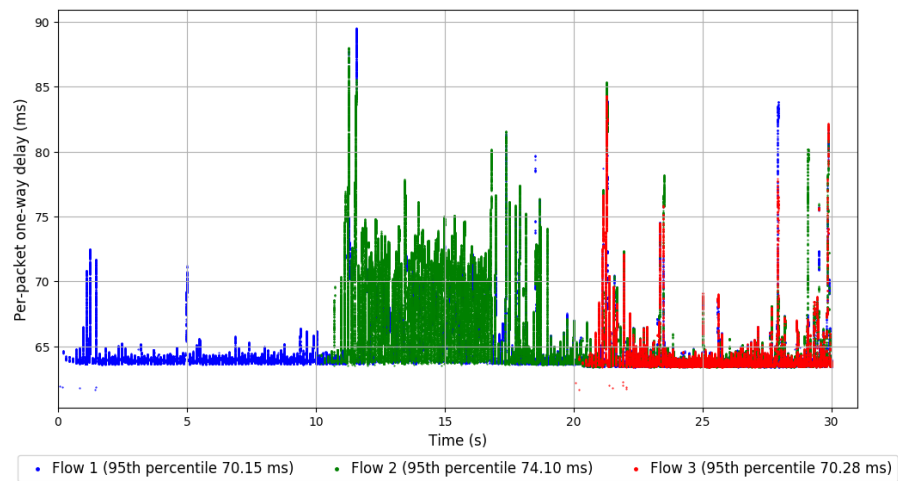
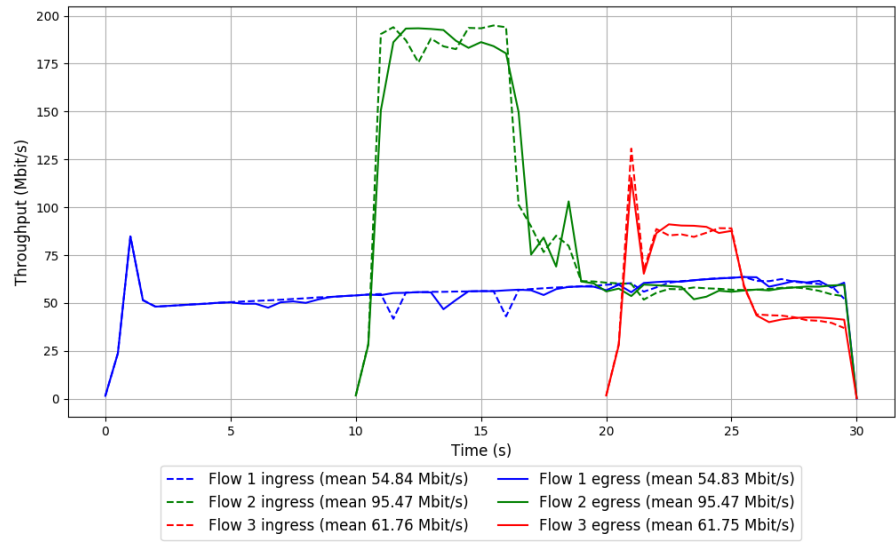
-- Flow 3:

Average throughput: 61.75 Mbit/s

95th percentile per-packet one-way delay: 70.280 ms

Loss rate: 0.01%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-01 06:17:37

End at: 2018-02-01 06:18:07

Below is generated by plot.py at 2018-02-01 09:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.96 Mbit/s

95th percentile per-packet one-way delay: 71.556 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 91.52 Mbit/s

95th percentile per-packet one-way delay: 71.843 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 64.683 ms

Loss rate: 0.04%

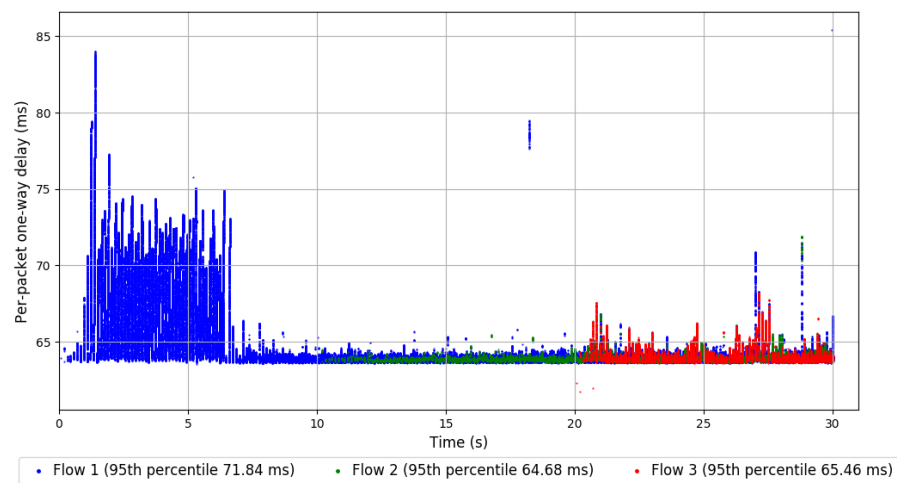
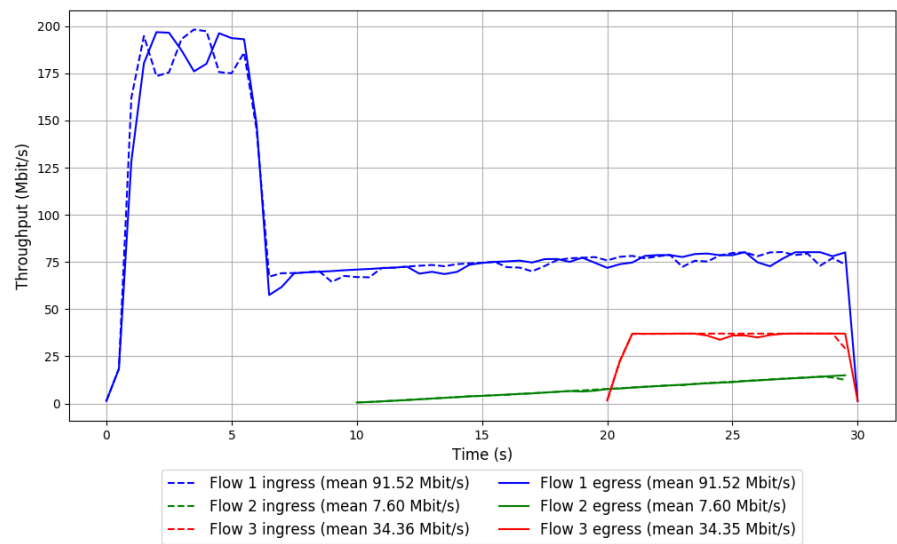
-- Flow 3:

Average throughput: 34.35 Mbit/s

95th percentile per-packet one-way delay: 65.457 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-01 06:34:16

End at: 2018-02-01 06:34:46

Below is generated by plot.py at 2018-02-01 09:22:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.69 Mbit/s

95th percentile per-packet one-way delay: 65.933 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 58.15 Mbit/s

95th percentile per-packet one-way delay: 65.199 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 39.72 Mbit/s

95th percentile per-packet one-way delay: 66.278 ms

Loss rate: 0.65%

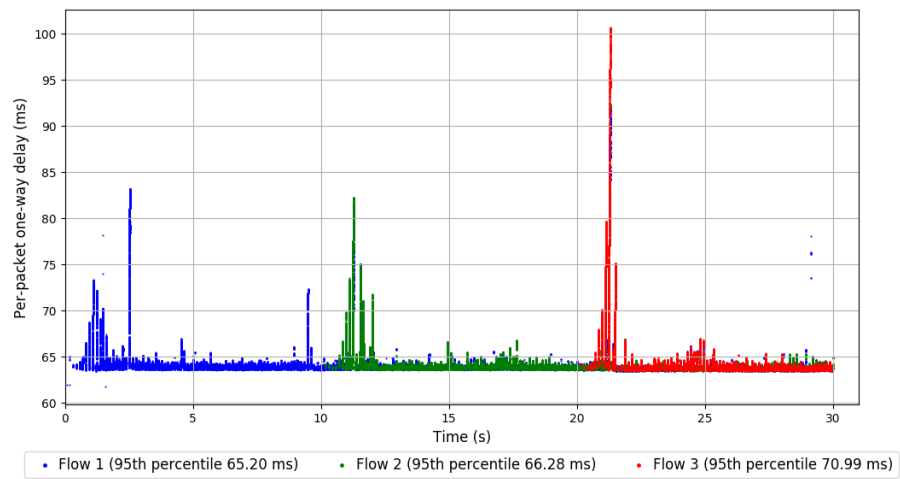
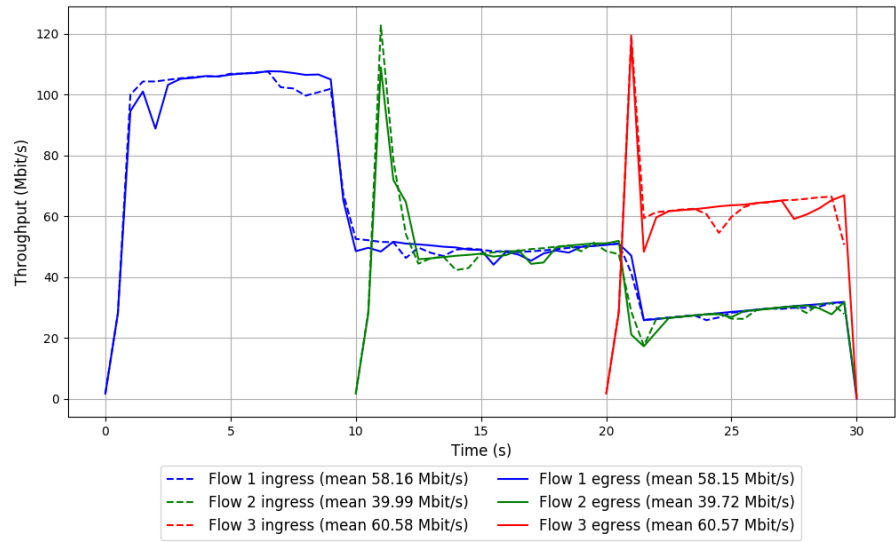
-- Flow 3:

Average throughput: 60.57 Mbit/s

95th percentile per-packet one-way delay: 70.992 ms

Loss rate: 0.01%

Run 10: Report of TCP Vegas — Data Link

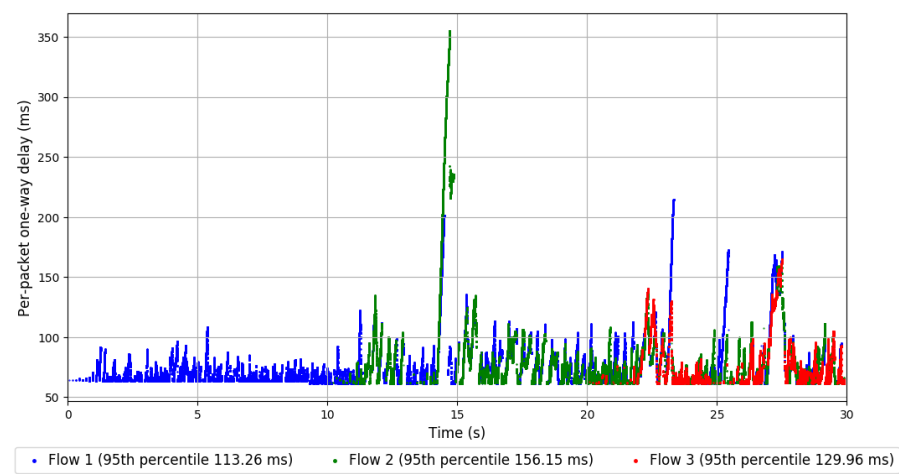
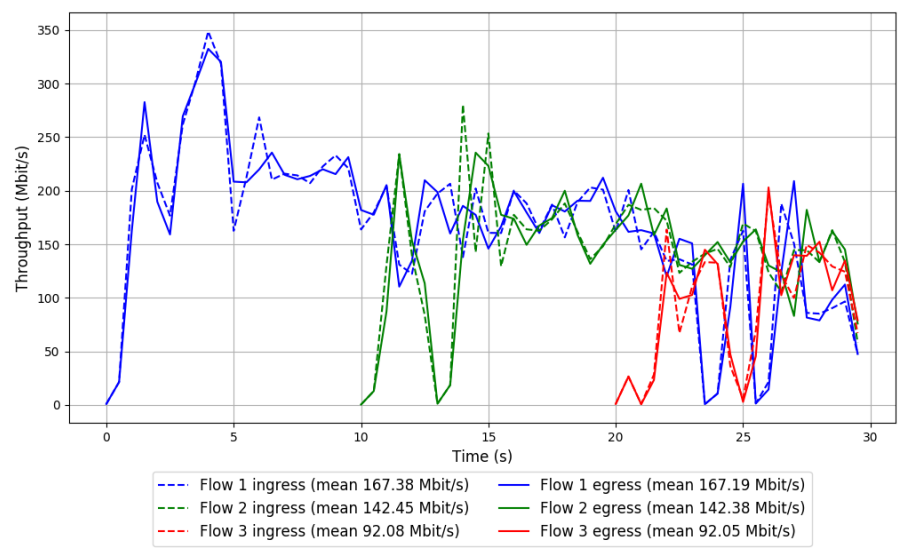


```
Run 1: Statistics of Verus

Start at: 2018-02-01 04:15:28
End at: 2018-02-01 04:15:58

# Below is generated by plot.py at 2018-02-01 09:23:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 291.41 Mbit/s
95th percentile per-packet one-way delay: 128.764 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 167.19 Mbit/s
95th percentile per-packet one-way delay: 113.257 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 142.38 Mbit/s
95th percentile per-packet one-way delay: 156.151 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 129.957 ms
Loss rate: 0.01%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-01 04:31:53

End at: 2018-02-01 04:32:23

Below is generated by plot.py at 2018-02-01 09:24:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 269.50 Mbit/s

95th percentile per-packet one-way delay: 109.688 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 137.13 Mbit/s

95th percentile per-packet one-way delay: 116.009 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 156.85 Mbit/s

95th percentile per-packet one-way delay: 109.482 ms

Loss rate: 0.00%

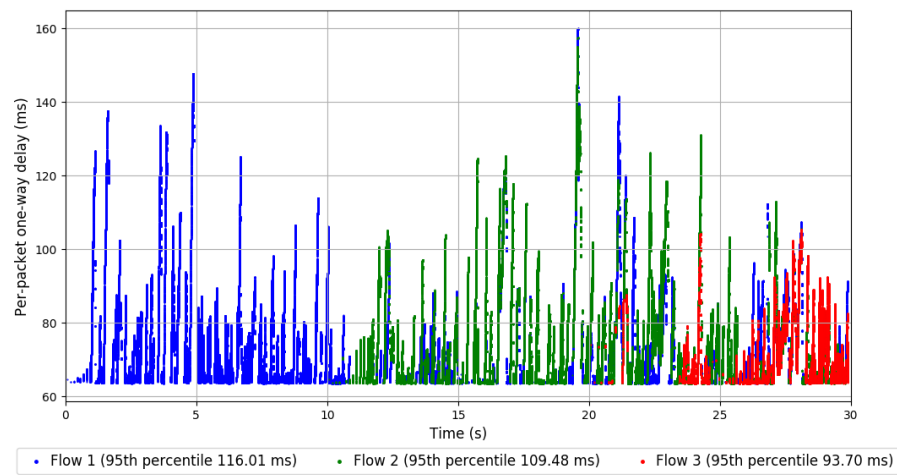
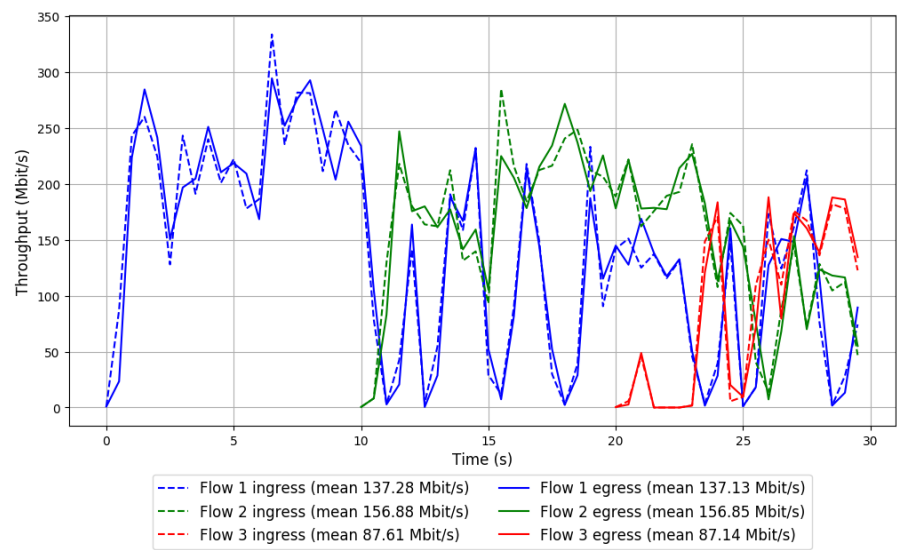
-- Flow 3:

Average throughput: 87.14 Mbit/s

95th percentile per-packet one-way delay: 93.702 ms

Loss rate: 0.60%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-01 04:48:03

End at: 2018-02-01 04:48:33

Below is generated by plot.py at 2018-02-01 09:24:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 255.50 Mbit/s

95th percentile per-packet one-way delay: 257.140 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 104.82 Mbit/s

95th percentile per-packet one-way delay: 197.621 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 193.06 Mbit/s

95th percentile per-packet one-way delay: 286.452 ms

Loss rate: 1.27%

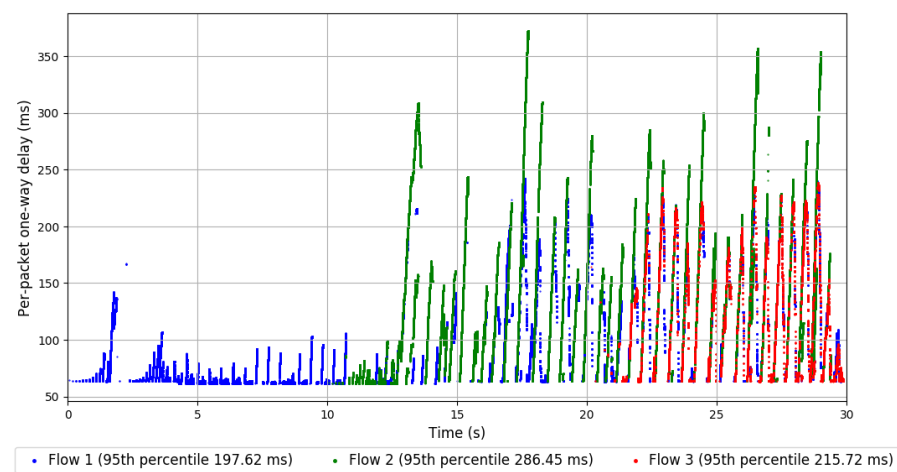
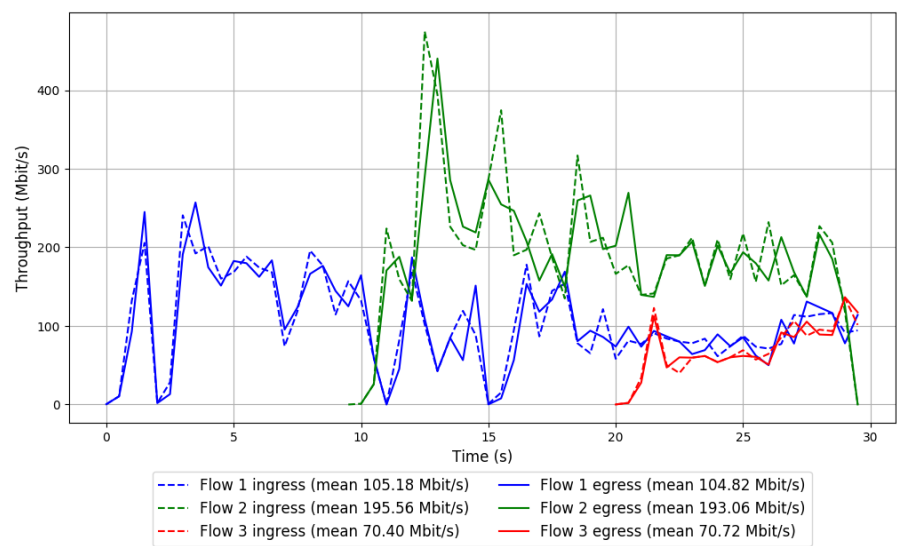
-- Flow 3:

Average throughput: 70.72 Mbit/s

95th percentile per-packet one-way delay: 215.715 ms

Loss rate: 0.58%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-01 05:04:16

End at: 2018-02-01 05:04:46

Below is generated by plot.py at 2018-02-01 09:24:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.44 Mbit/s

95th percentile per-packet one-way delay: 186.109 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 146.16 Mbit/s

95th percentile per-packet one-way delay: 165.113 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 86.89 Mbit/s

95th percentile per-packet one-way delay: 132.893 ms

Loss rate: 0.05%

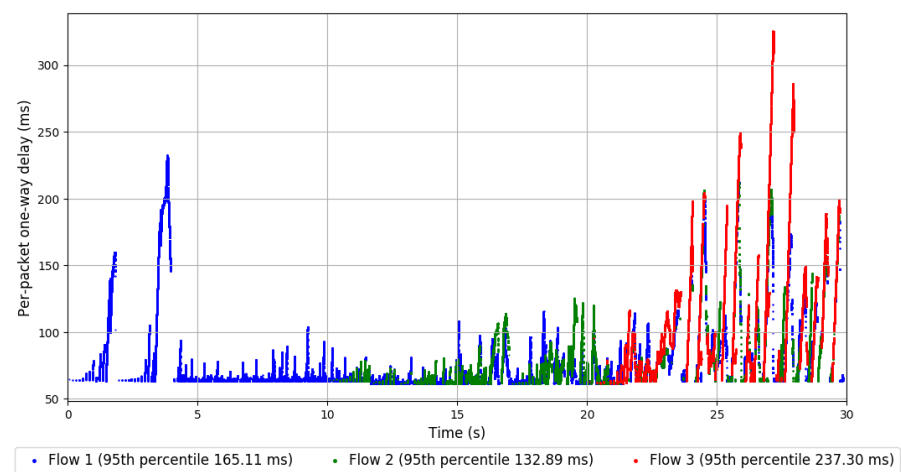
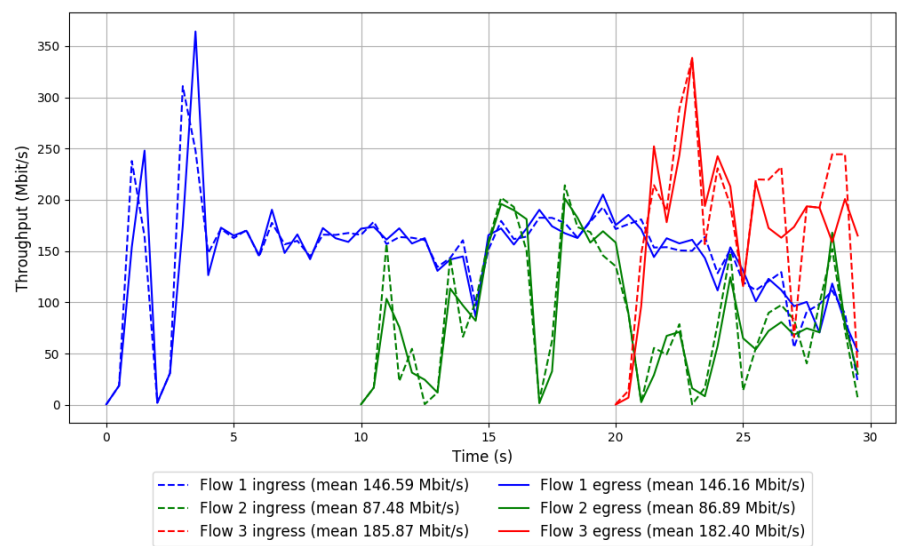
-- Flow 3:

Average throughput: 182.40 Mbit/s

95th percentile per-packet one-way delay: 237.299 ms

Loss rate: 0.55%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-01 05:20:38

End at: 2018-02-01 05:21:08

Below is generated by plot.py at 2018-02-01 09:25:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 307.08 Mbit/s

95th percentile per-packet one-way delay: 209.566 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 169.81 Mbit/s

95th percentile per-packet one-way delay: 175.460 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 190.52 Mbit/s

95th percentile per-packet one-way delay: 241.968 ms

Loss rate: 0.38%

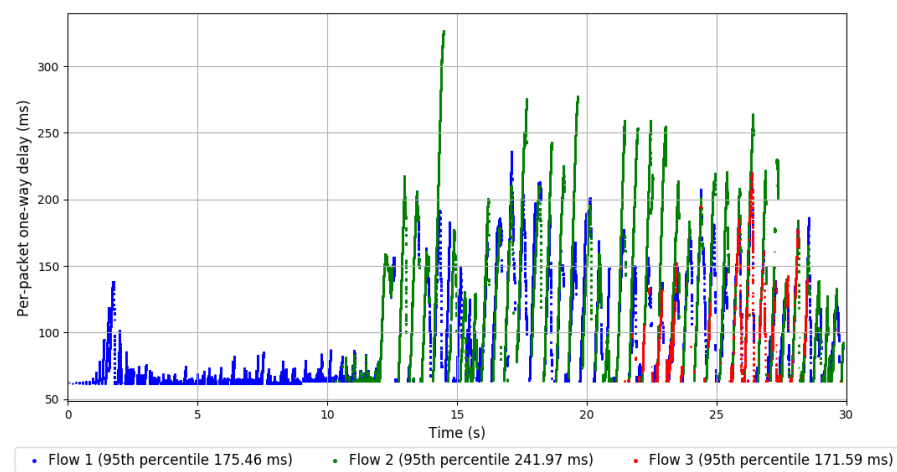
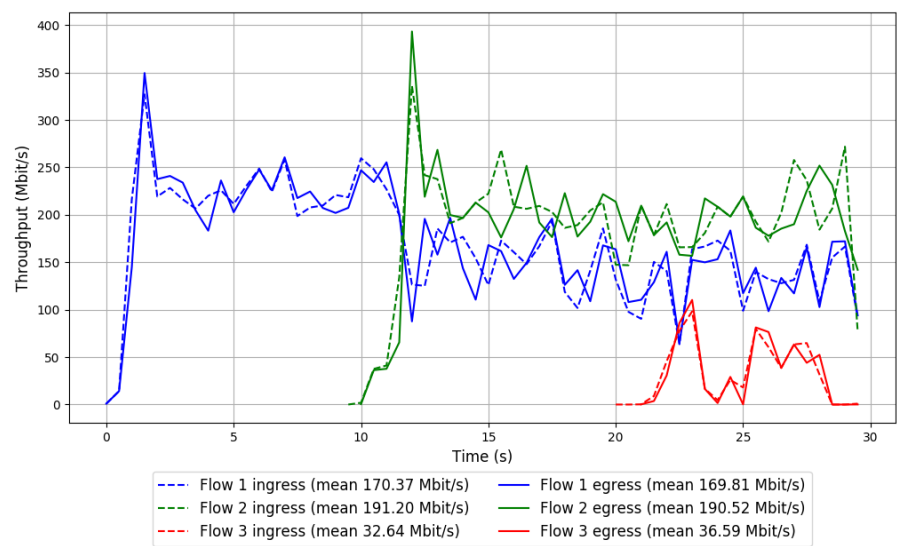
-- Flow 3:

Average throughput: 36.59 Mbit/s

95th percentile per-packet one-way delay: 171.589 ms

Loss rate: 0.17%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-01 05:37:13

End at: 2018-02-01 05:37:43

Below is generated by plot.py at 2018-02-01 09:25:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 258.83 Mbit/s

95th percentile per-packet one-way delay: 168.663 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 200.67 Mbit/s

95th percentile per-packet one-way delay: 166.098 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 70.52 Mbit/s

95th percentile per-packet one-way delay: 182.826 ms

Loss rate: 0.93%

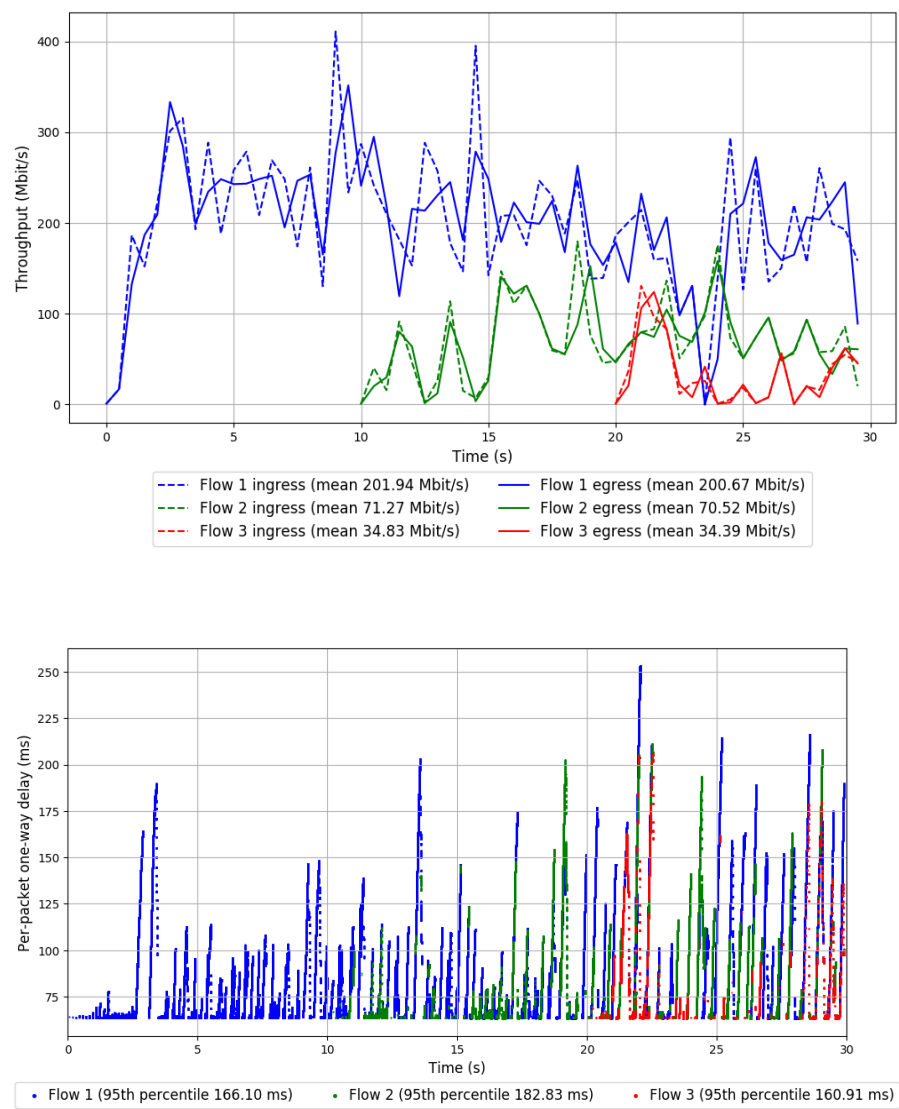
-- Flow 3:

Average throughput: 34.39 Mbit/s

95th percentile per-packet one-way delay: 160.905 ms

Loss rate: 1.26%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-01 05:54:02

End at: 2018-02-01 05:54:32

Below is generated by plot.py at 2018-02-01 09:25:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 276.82 Mbit/s

95th percentile per-packet one-way delay: 219.992 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 147.95 Mbit/s

95th percentile per-packet one-way delay: 159.408 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 179.44 Mbit/s

95th percentile per-packet one-way delay: 258.587 ms

Loss rate: 1.44%

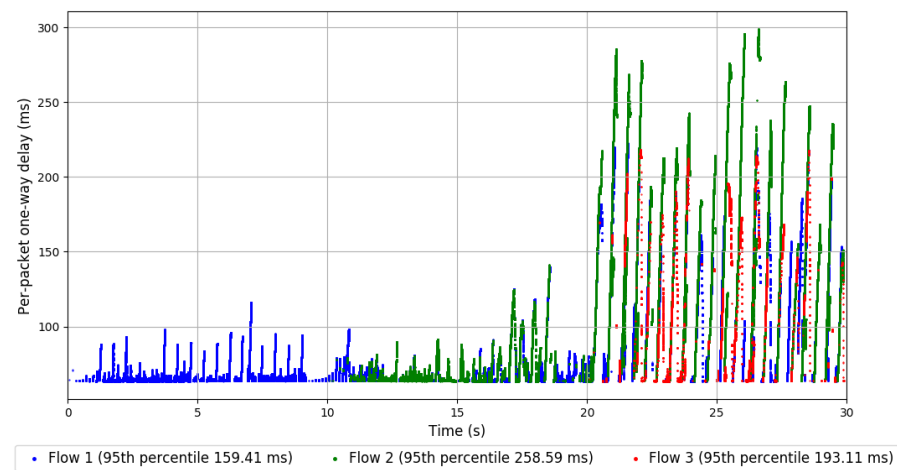
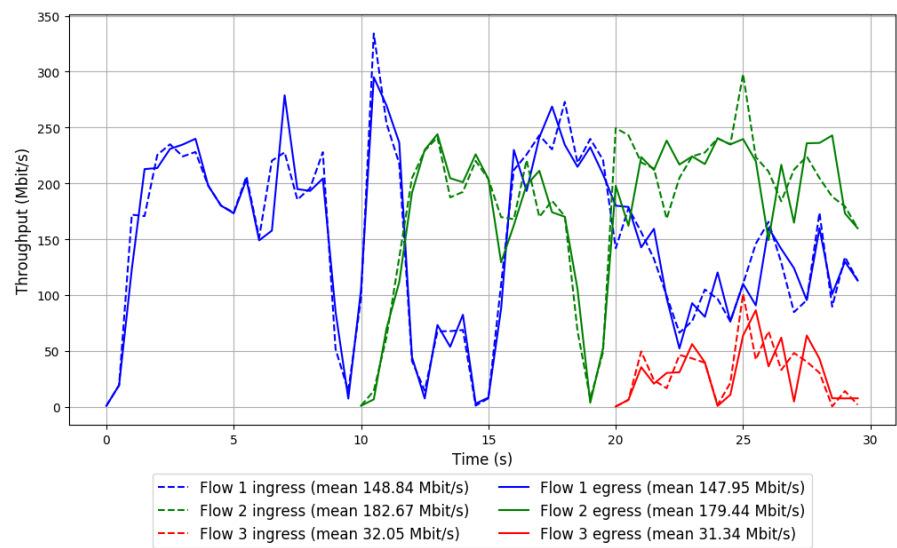
-- Flow 3:

Average throughput: 31.34 Mbit/s

95th percentile per-packet one-way delay: 193.114 ms

Loss rate: 2.25%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-01 06:10:53

End at: 2018-02-01 06:11:23

Below is generated by plot.py at 2018-02-01 09:28:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.52 Mbit/s

95th percentile per-packet one-way delay: 182.488 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 229.98 Mbit/s

95th percentile per-packet one-way delay: 186.472 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 85.65 Mbit/s

95th percentile per-packet one-way delay: 183.708 ms

Loss rate: 0.58%

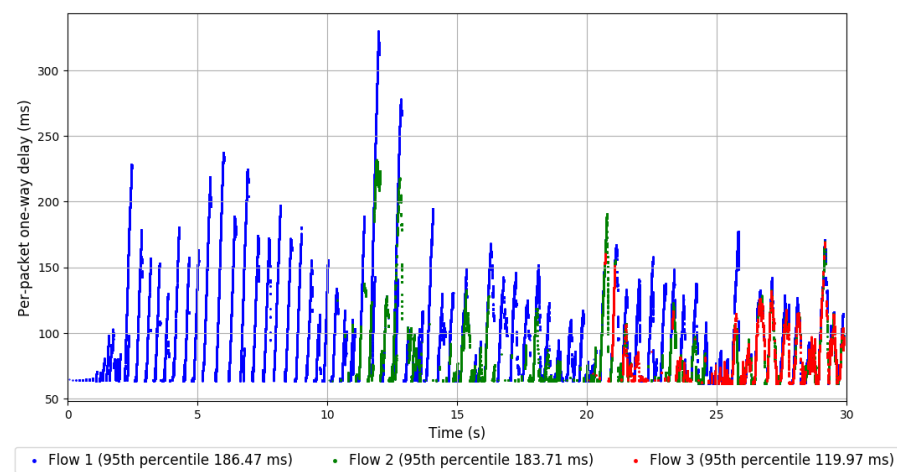
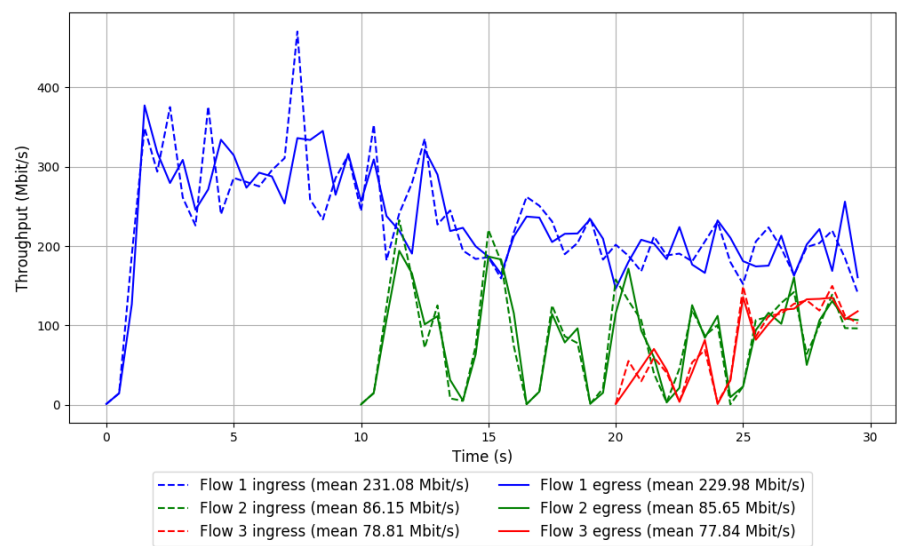
-- Flow 3:

Average throughput: 77.84 Mbit/s

95th percentile per-packet one-way delay: 119.966 ms

Loss rate: 1.24%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-01 06:27:31

End at: 2018-02-01 06:28:01

Below is generated by plot.py at 2018-02-01 09:29:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 260.72 Mbit/s

95th percentile per-packet one-way delay: 293.955 ms

Loss rate: 1.82%

-- Flow 1:

Average throughput: 133.72 Mbit/s

95th percentile per-packet one-way delay: 175.792 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 173.77 Mbit/s

95th percentile per-packet one-way delay: 316.944 ms

Loss rate: 2.86%

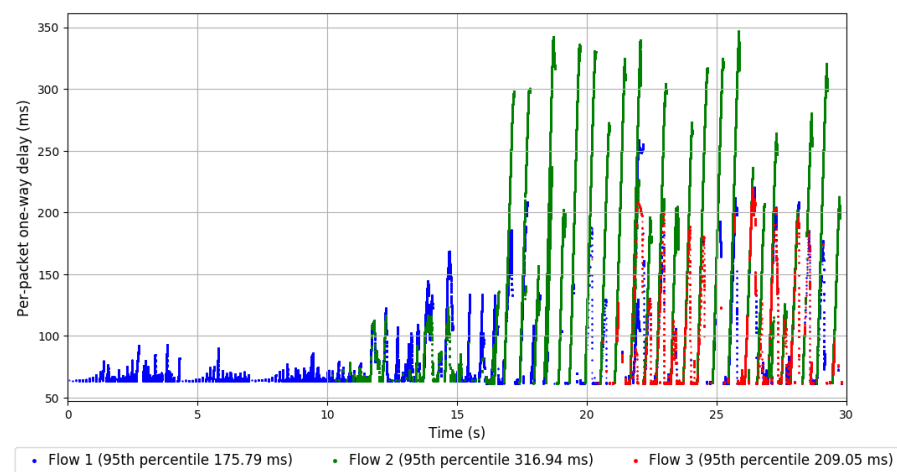
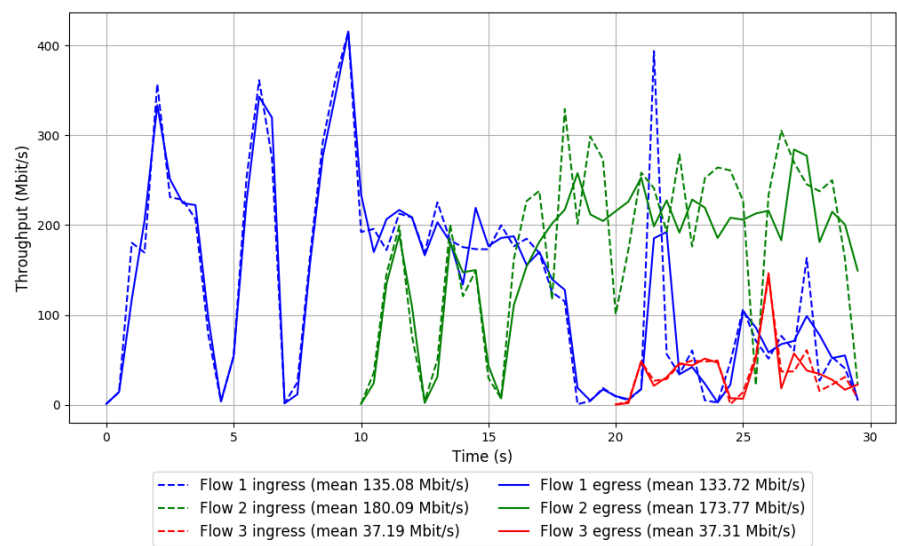
-- Flow 3:

Average throughput: 37.31 Mbit/s

95th percentile per-packet one-way delay: 209.047 ms

Loss rate: 0.70%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-01 06:44:13

End at: 2018-02-01 06:44:43

Below is generated by plot.py at 2018-02-01 09:29:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.19 Mbit/s

95th percentile per-packet one-way delay: 135.402 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 175.43 Mbit/s

95th percentile per-packet one-way delay: 141.437 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 76.33 Mbit/s

95th percentile per-packet one-way delay: 133.082 ms

Loss rate: 0.00%

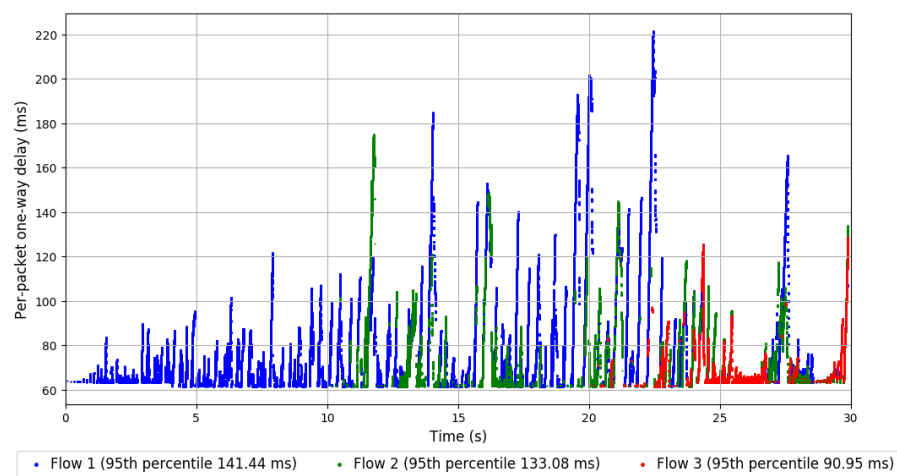
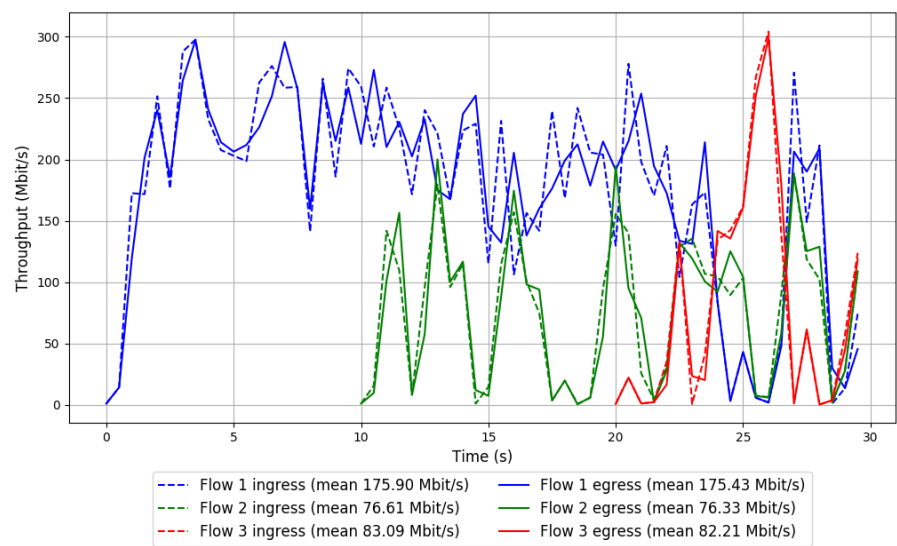
-- Flow 3:

Average throughput: 82.21 Mbit/s

95th percentile per-packet one-way delay: 90.947 ms

Loss rate: 1.06%

Run 10: Report of Verus — Data Link

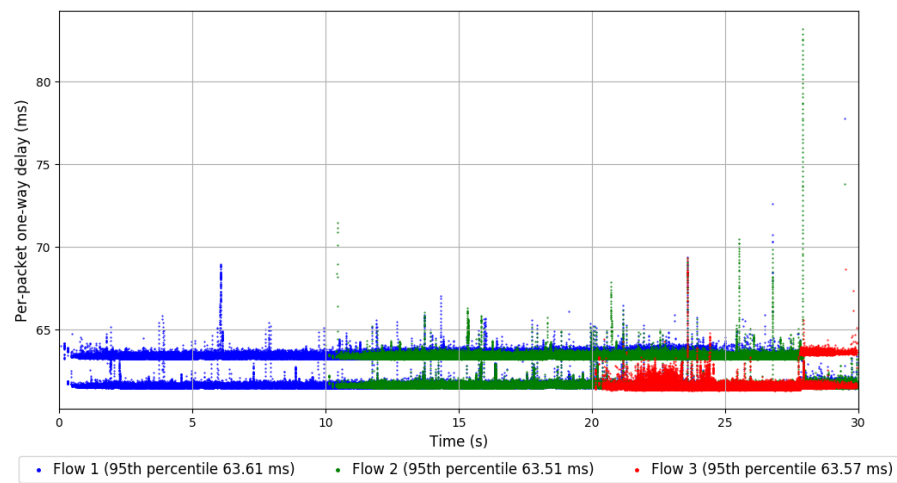
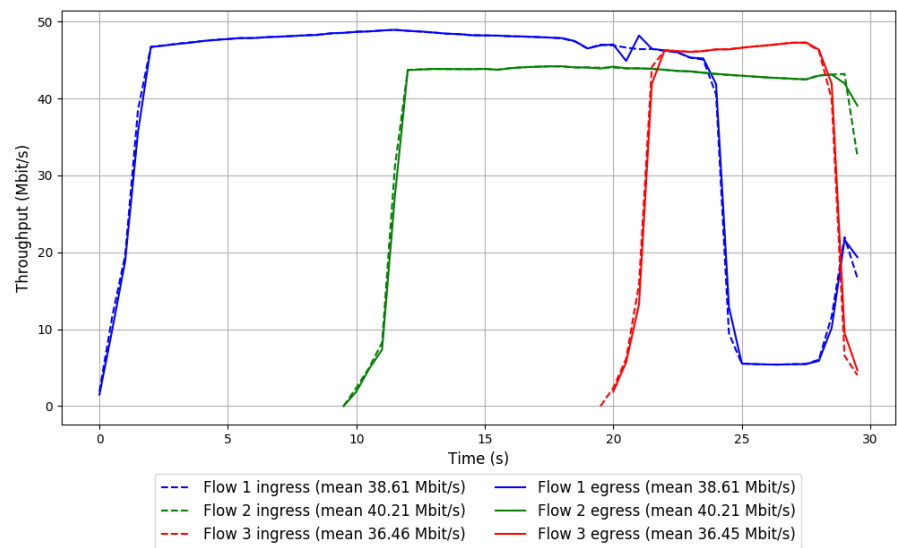


```
Run 1: Statistics of Copa

Start at: 2018-02-01 04:06:19
End at: 2018-02-01 04:06:49

# Below is generated by plot.py at 2018-02-01 09:29:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.57 Mbit/s
95th percentile per-packet one-way delay: 63.577 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 38.61 Mbit/s
95th percentile per-packet one-way delay: 63.610 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.21 Mbit/s
95th percentile per-packet one-way delay: 63.513 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.45 Mbit/s
95th percentile per-packet one-way delay: 63.571 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-01 04:22:51

End at: 2018-02-01 04:23:21

Below is generated by plot.py at 2018-02-01 09:29:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.39 Mbit/s

95th percentile per-packet one-way delay: 63.578 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.28 Mbit/s

95th percentile per-packet one-way delay: 63.595 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 27.39 Mbit/s

95th percentile per-packet one-way delay: 62.403 ms

Loss rate: 0.00%

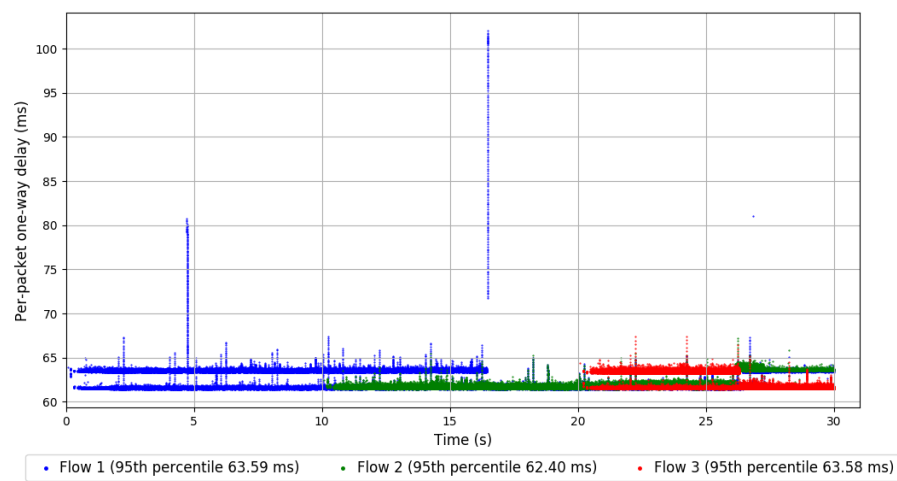
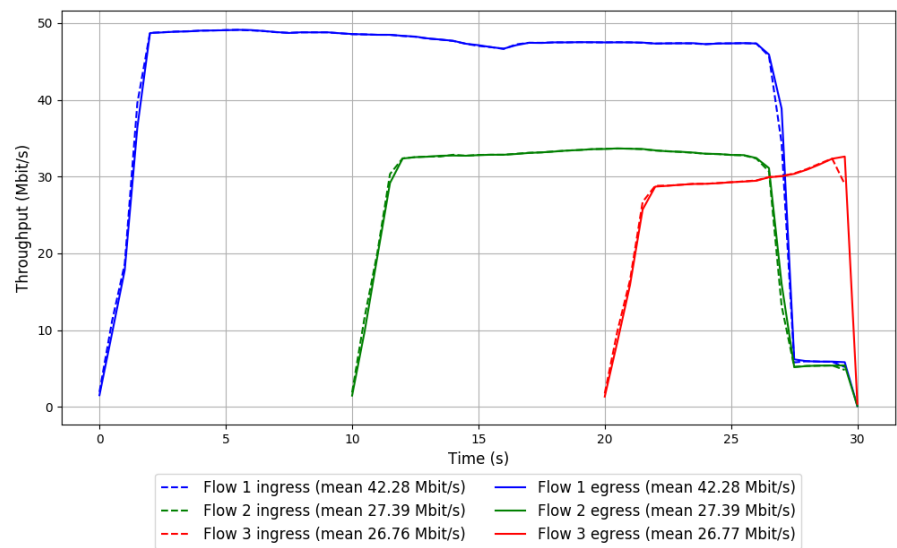
-- Flow 3:

Average throughput: 26.77 Mbit/s

95th percentile per-packet one-way delay: 63.577 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-01 04:39:09

End at: 2018-02-01 04:39:39

Below is generated by plot.py at 2018-02-01 09:29:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 38.89 Mbit/s

95th percentile per-packet one-way delay: 63.671 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 16.25 Mbit/s

95th percentile per-packet one-way delay: 63.633 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.42 Mbit/s

95th percentile per-packet one-way delay: 64.067 ms

Loss rate: 0.01%

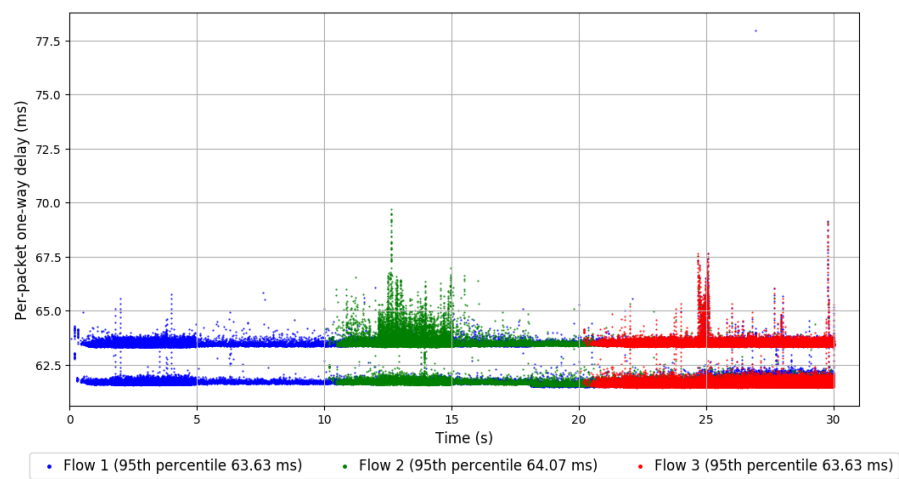
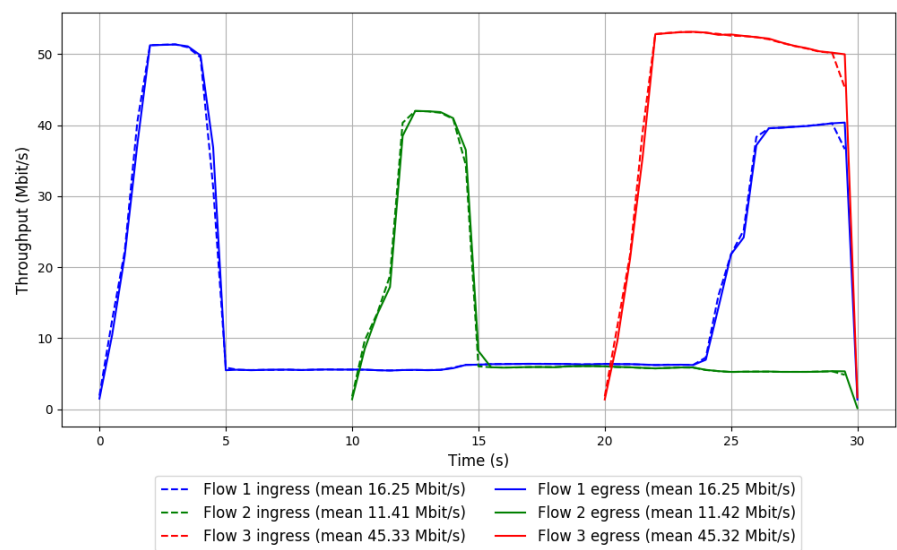
-- Flow 3:

Average throughput: 45.32 Mbit/s

95th percentile per-packet one-way delay: 63.630 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-01 04:55:19

End at: 2018-02-01 04:55:49

Below is generated by plot.py at 2018-02-01 09:29:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.68 Mbit/s

95th percentile per-packet one-way delay: 63.673 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 18.68 Mbit/s

95th percentile per-packet one-way delay: 63.660 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.32 Mbit/s

95th percentile per-packet one-way delay: 63.630 ms

Loss rate: 0.00%

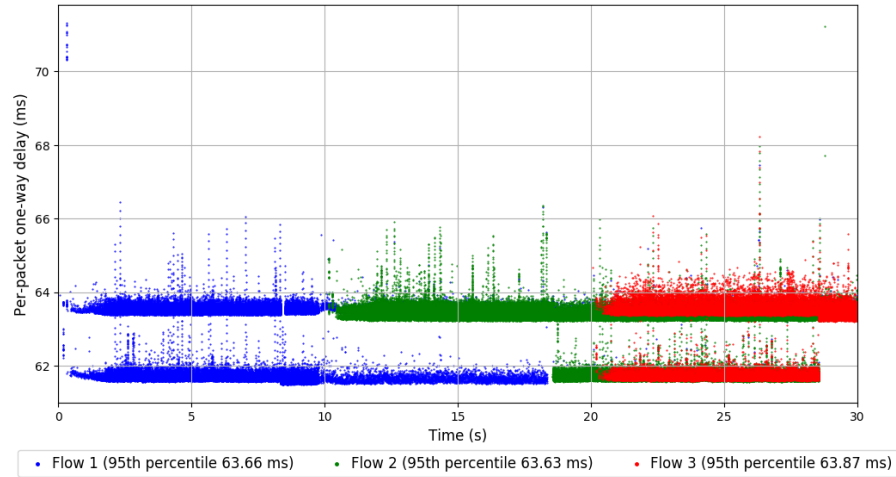
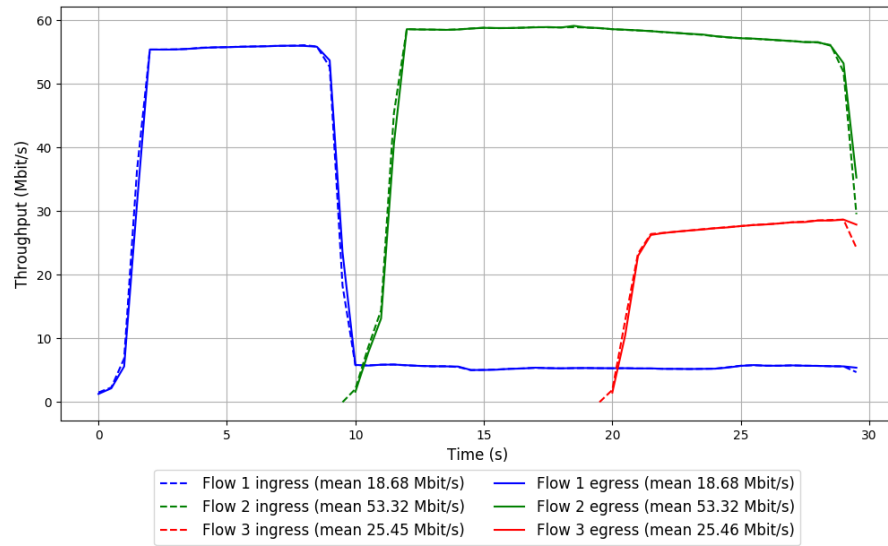
-- Flow 3:

Average throughput: 25.46 Mbit/s

95th percentile per-packet one-way delay: 63.866 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-01 05:11:34

End at: 2018-02-01 05:12:04

Below is generated by plot.py at 2018-02-01 09:29:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.36 Mbit/s

95th percentile per-packet one-way delay: 63.849 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.27 Mbit/s

95th percentile per-packet one-way delay: 63.841 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.30 Mbit/s

95th percentile per-packet one-way delay: 63.739 ms

Loss rate: 0.00%

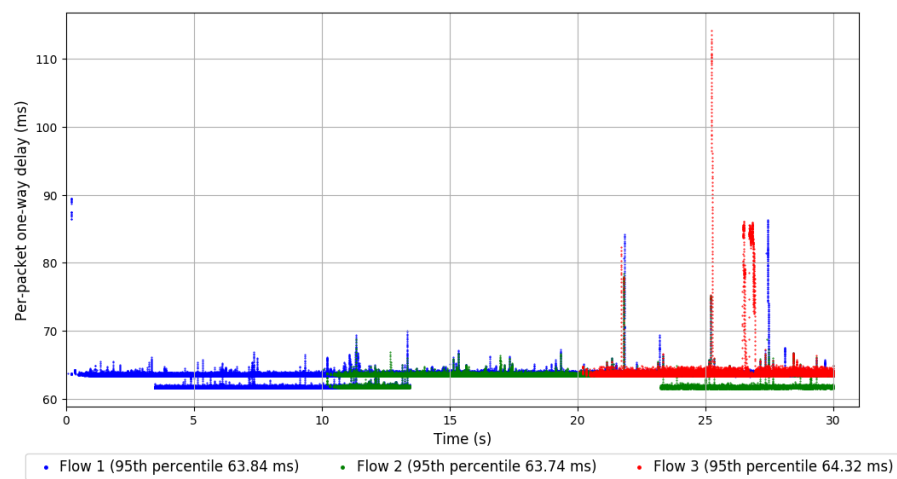
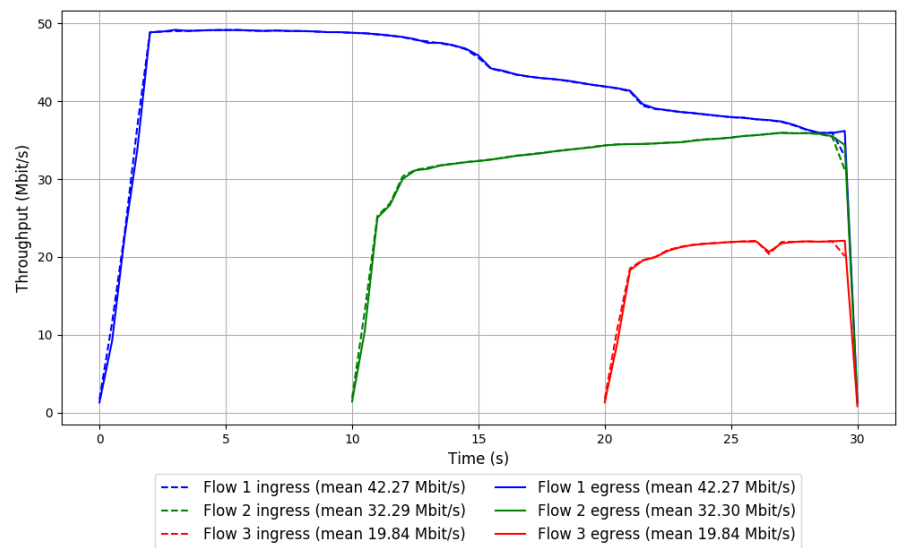
-- Flow 3:

Average throughput: 19.84 Mbit/s

95th percentile per-packet one-way delay: 64.319 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-01 05:27:58

End at: 2018-02-01 05:28:28

Below is generated by plot.py at 2018-02-01 09:29:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.23 Mbit/s

95th percentile per-packet one-way delay: 63.771 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.98 Mbit/s

95th percentile per-packet one-way delay: 63.751 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 33.47 Mbit/s

95th percentile per-packet one-way delay: 63.816 ms

Loss rate: 0.00%

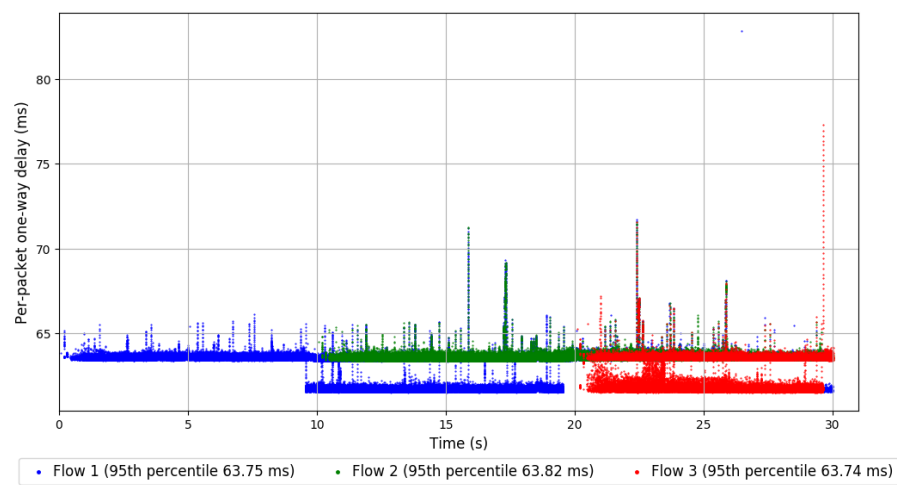
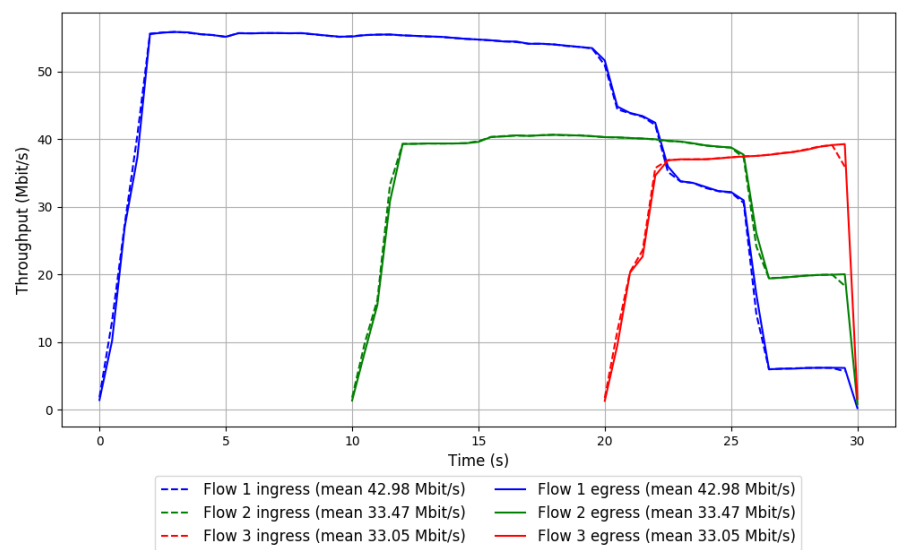
-- Flow 3:

Average throughput: 33.05 Mbit/s

95th percentile per-packet one-way delay: 63.738 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-01 05:44:38

End at: 2018-02-01 05:45:08

Below is generated by plot.py at 2018-02-01 09:29:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.11 Mbit/s

95th percentile per-packet one-way delay: 63.884 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 23.74 Mbit/s

95th percentile per-packet one-way delay: 63.856 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.55 Mbit/s

95th percentile per-packet one-way delay: 63.888 ms

Loss rate: 0.00%

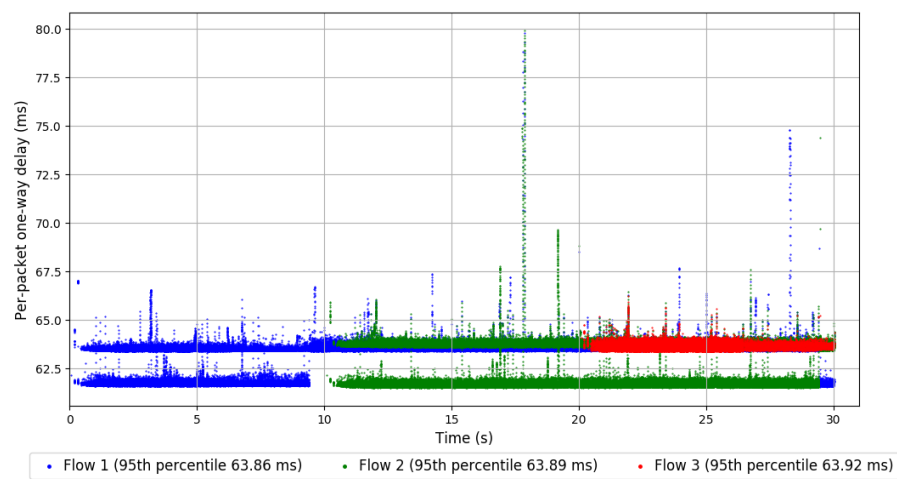
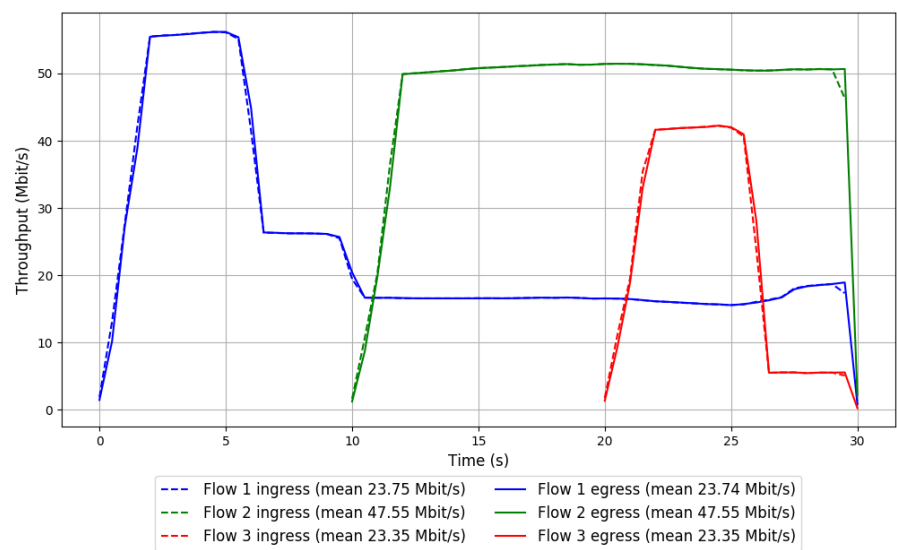
-- Flow 3:

Average throughput: 23.35 Mbit/s

95th percentile per-packet one-way delay: 63.919 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-01 06:01:26

End at: 2018-02-01 06:01:56

Below is generated by plot.py at 2018-02-01 09:29:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.59 Mbit/s

95th percentile per-packet one-way delay: 63.884 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 20.31 Mbit/s

95th percentile per-packet one-way delay: 63.834 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 28.75 Mbit/s

95th percentile per-packet one-way delay: 63.847 ms

Loss rate: 0.00%

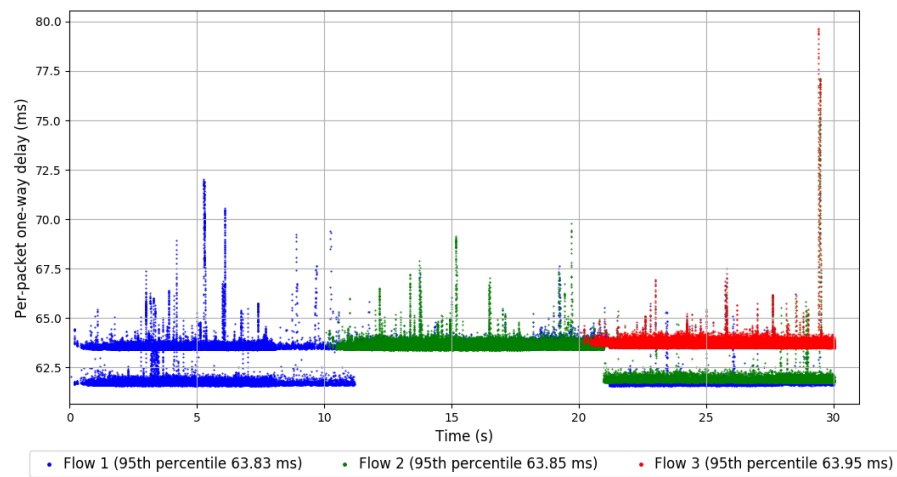
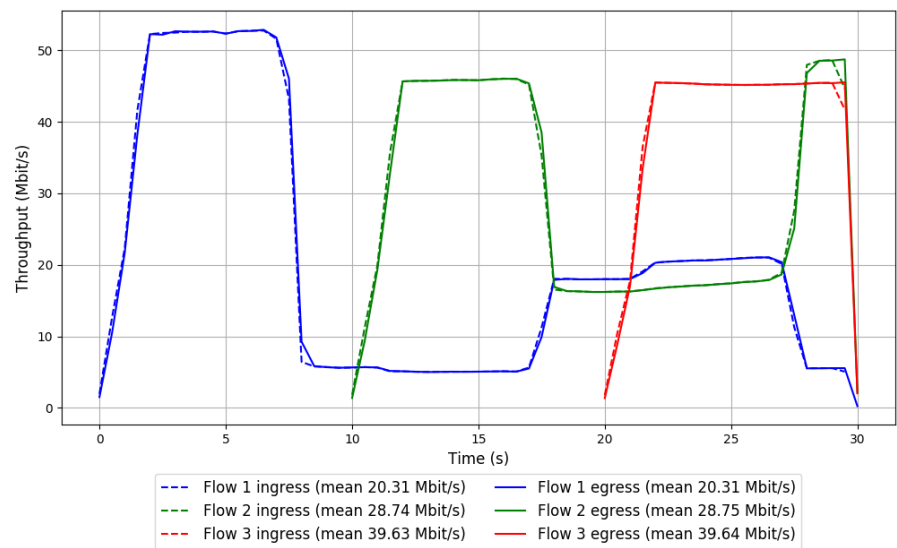
-- Flow 3:

Average throughput: 39.64 Mbit/s

95th percentile per-packet one-way delay: 63.949 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-01 06:18:26

End at: 2018-02-01 06:18:56

Below is generated by plot.py at 2018-02-01 09:30:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.20 Mbit/s

95th percentile per-packet one-way delay: 63.890 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.98 Mbit/s

95th percentile per-packet one-way delay: 63.872 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.15 Mbit/s

95th percentile per-packet one-way delay: 63.898 ms

Loss rate: 0.00%

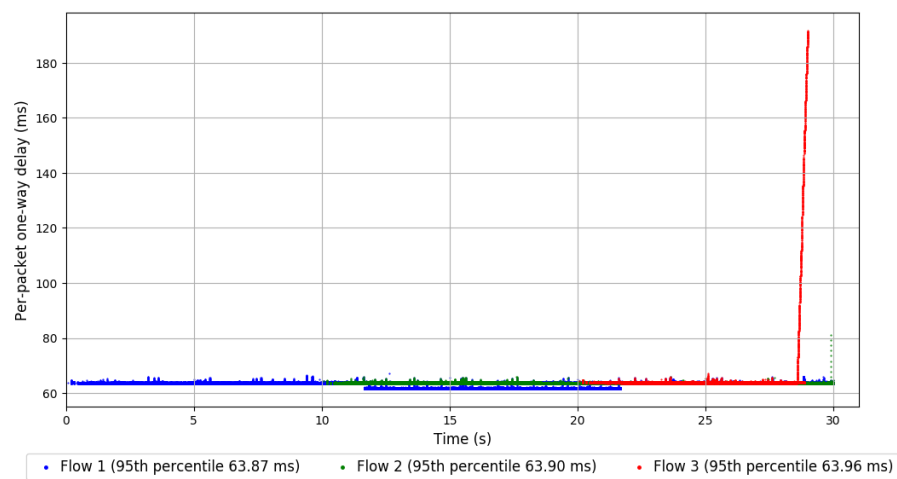
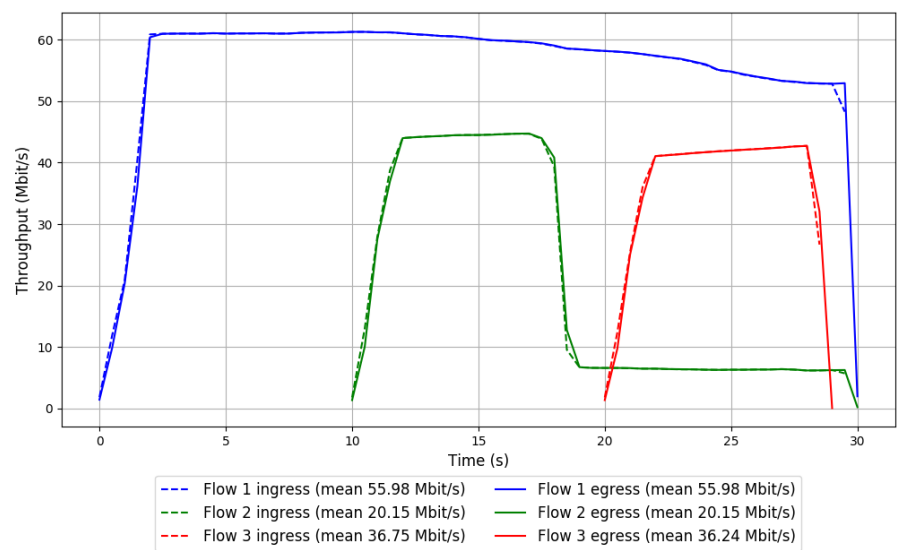
-- Flow 3:

Average throughput: 36.24 Mbit/s

95th percentile per-packet one-way delay: 63.957 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-01 06:35:03

End at: 2018-02-01 06:35:33

Below is generated by plot.py at 2018-02-01 09:30:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.00 Mbit/s

95th percentile per-packet one-way delay: 63.839 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 35.73 Mbit/s

95th percentile per-packet one-way delay: 63.817 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.17 Mbit/s

95th percentile per-packet one-way delay: 63.851 ms

Loss rate: 0.00%

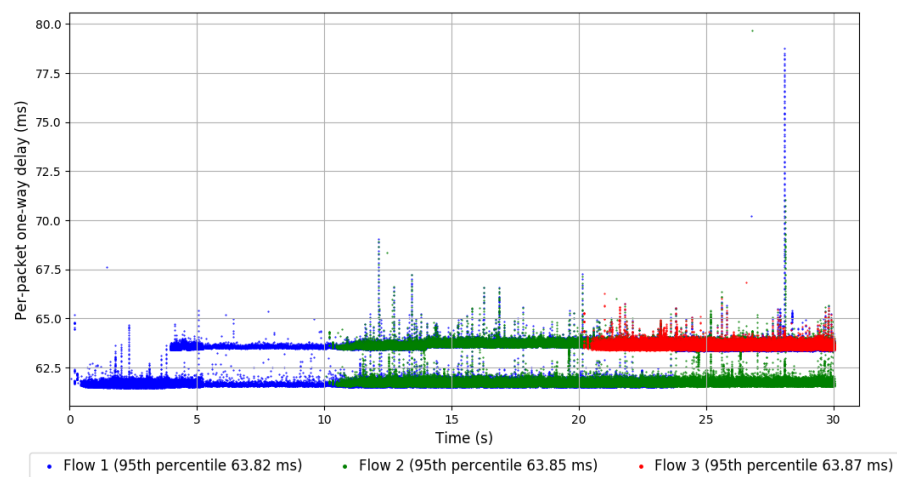
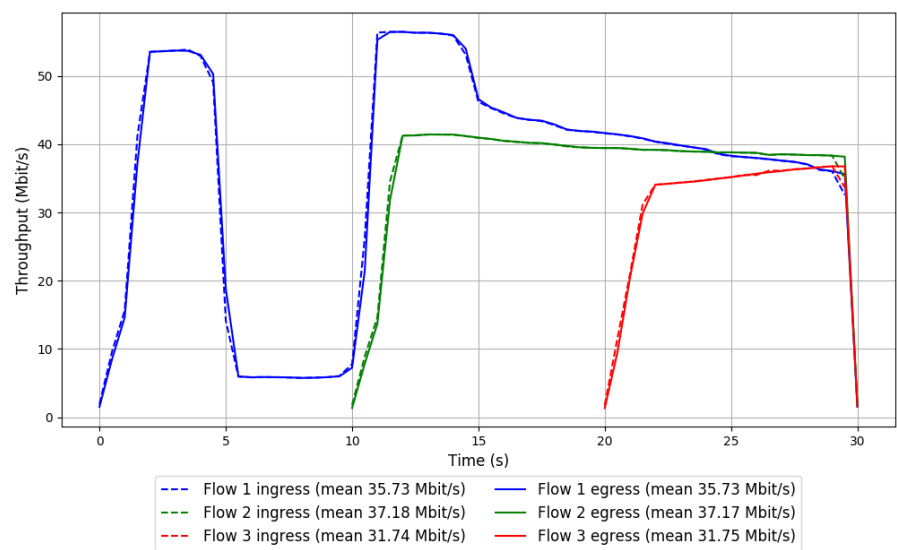
-- Flow 3:

Average throughput: 31.75 Mbit/s

95th percentile per-packet one-way delay: 63.868 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

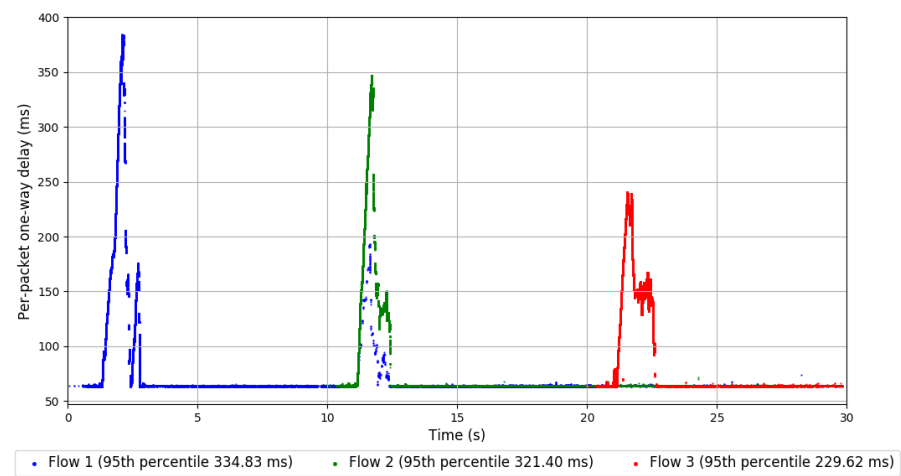
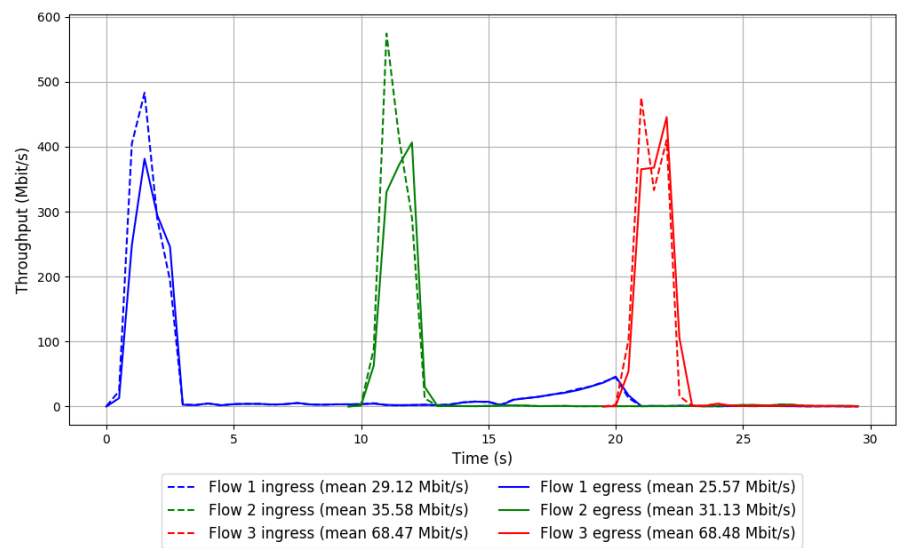


```
Run 1: Statistics of FillP

Start at: 2018-02-01 04:12:08
End at: 2018-02-01 04:12:38

# Below is generated by plot.py at 2018-02-01 09:31:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.17 Mbit/s
95th percentile per-packet one-way delay: 298.158 ms
Loss rate: 8.62%
-- Flow 1:
Average throughput: 25.57 Mbit/s
95th percentile per-packet one-way delay: 334.827 ms
Loss rate: 12.19%
-- Flow 2:
Average throughput: 31.13 Mbit/s
95th percentile per-packet one-way delay: 321.402 ms
Loss rate: 12.50%
-- Flow 3:
Average throughput: 68.48 Mbit/s
95th percentile per-packet one-way delay: 229.617 ms
Loss rate: 0.00%
```


Run 1: Report of FillP — Data Link

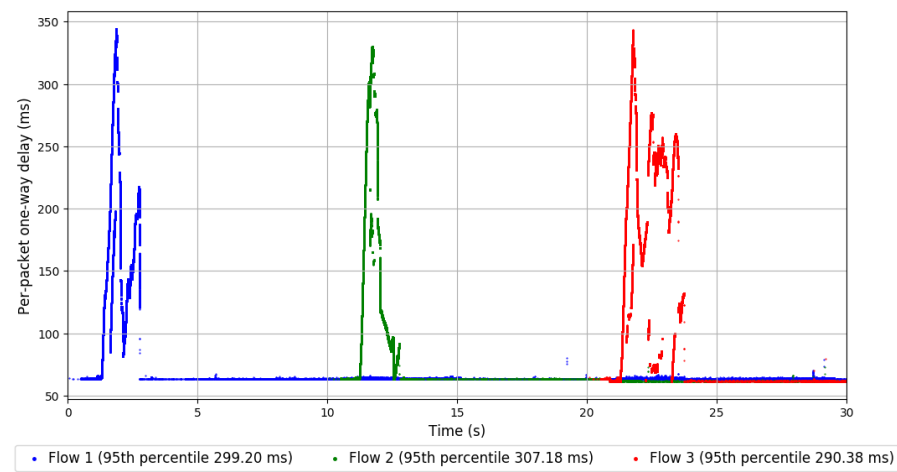
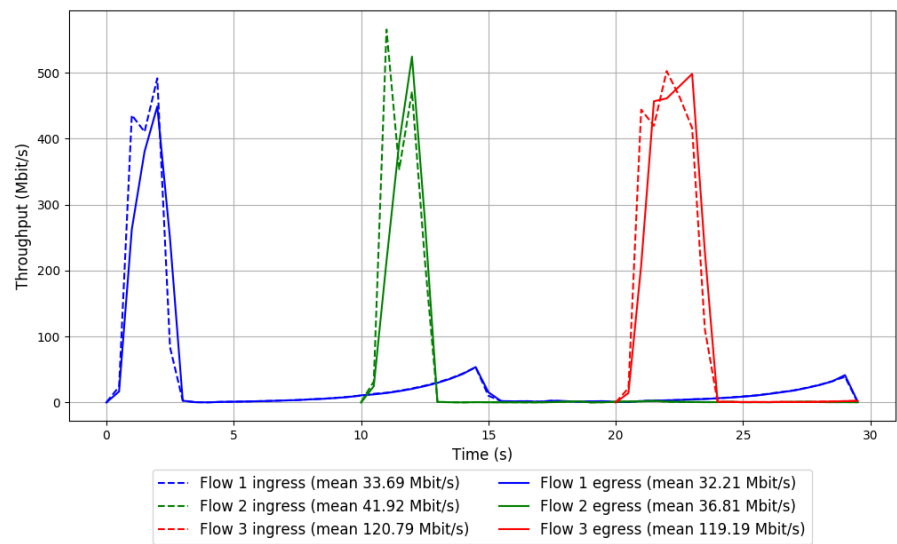


```
Run 2: Statistics of FillP

Start at: 2018-02-01 04:28:36
End at: 2018-02-01 04:29:06

# Below is generated by plot.py at 2018-02-01 09:32:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 298.621 ms
Loss rate: 5.34%
-- Flow 1:
Average throughput: 32.21 Mbit/s
95th percentile per-packet one-way delay: 299.204 ms
Loss rate: 4.39%
-- Flow 2:
Average throughput: 36.81 Mbit/s
95th percentile per-packet one-way delay: 307.178 ms
Loss rate: 12.20%
-- Flow 3:
Average throughput: 119.19 Mbit/s
95th percentile per-packet one-way delay: 290.378 ms
Loss rate: 1.36%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-01 04:44:51

End at: 2018-02-01 04:45:21

Below is generated by plot.py at 2018-02-01 09:32:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.02 Mbit/s

95th percentile per-packet one-way delay: 278.923 ms

Loss rate: 7.30%

-- Flow 1:

Average throughput: 27.09 Mbit/s

95th percentile per-packet one-way delay: 289.056 ms

Loss rate: 6.89%

-- Flow 2:

Average throughput: 31.54 Mbit/s

95th percentile per-packet one-way delay: 290.480 ms

Loss rate: 7.22%

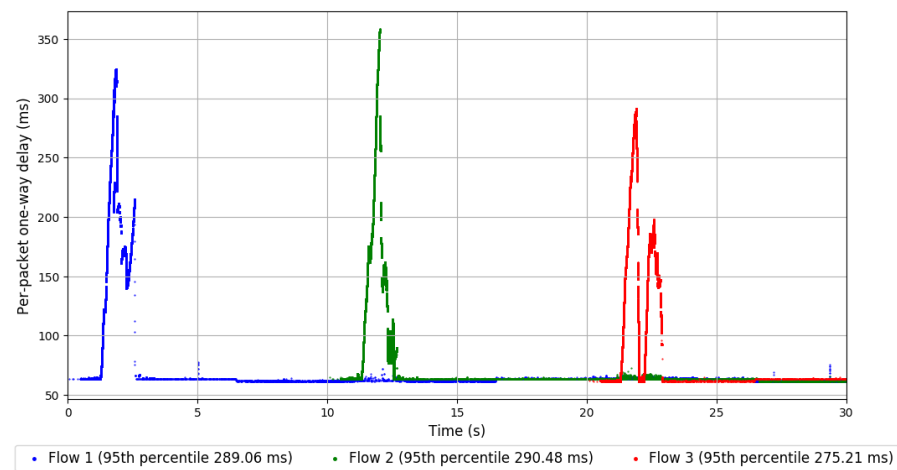
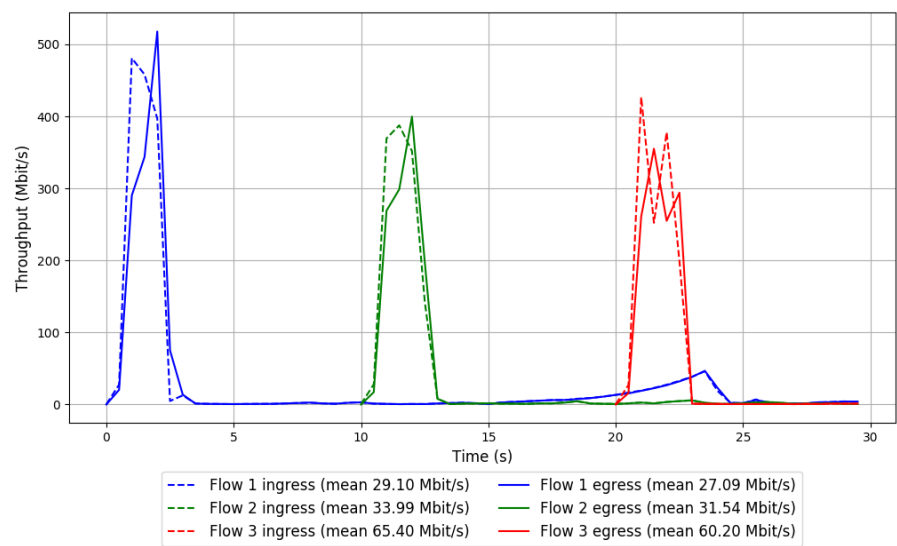
-- Flow 3:

Average throughput: 60.20 Mbit/s

95th percentile per-packet one-way delay: 275.206 ms

Loss rate: 7.94%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-01 05:01:04

End at: 2018-02-01 05:01:34

Below is generated by plot.py at 2018-02-01 09:32:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.52 Mbit/s

95th percentile per-packet one-way delay: 341.490 ms

Loss rate: 11.71%

-- Flow 1:

Average throughput: 20.75 Mbit/s

95th percentile per-packet one-way delay: 345.674 ms

Loss rate: 12.61%

-- Flow 2:

Average throughput: 28.83 Mbit/s

95th percentile per-packet one-way delay: 108.789 ms

Loss rate: 0.00%

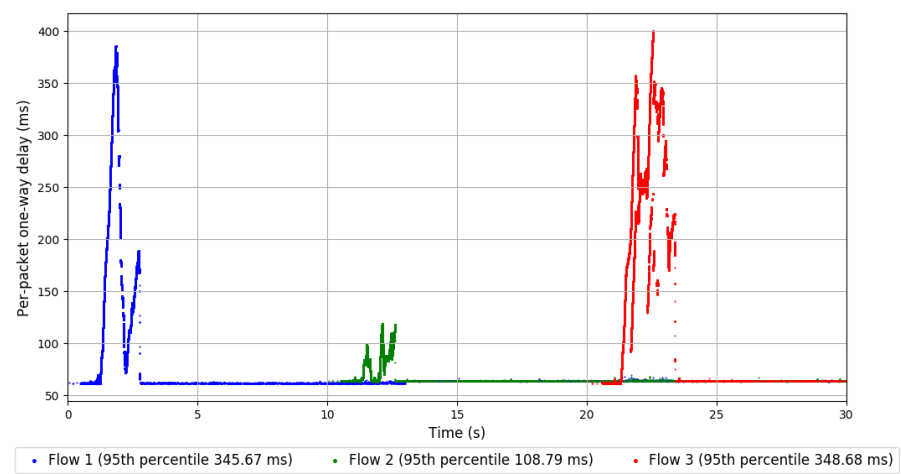
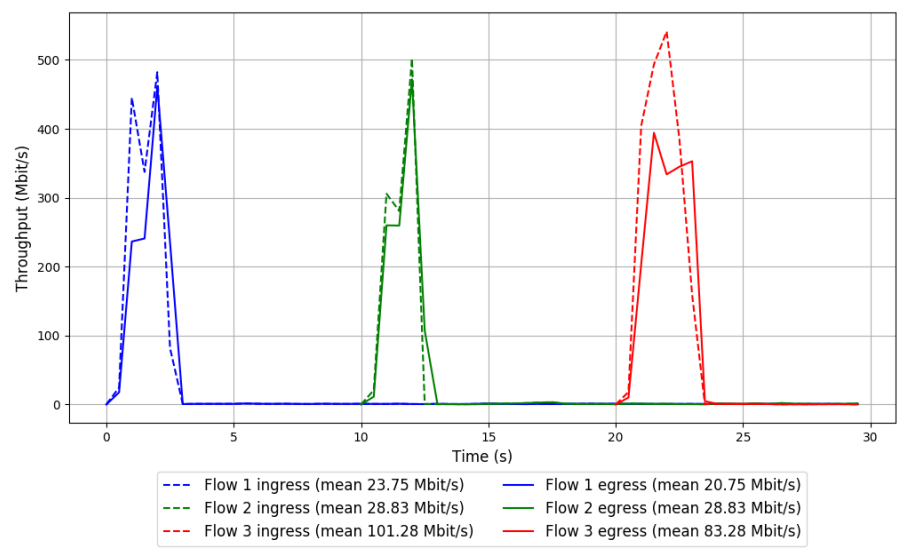
-- Flow 3:

Average throughput: 83.28 Mbit/s

95th percentile per-packet one-way delay: 348.676 ms

Loss rate: 17.78%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-01 05:17:29

End at: 2018-02-01 05:17:59

Below is generated by plot.py at 2018-02-01 09:32:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.04 Mbit/s

95th percentile per-packet one-way delay: 292.568 ms

Loss rate: 8.04%

-- Flow 1:

Average throughput: 20.74 Mbit/s

95th percentile per-packet one-way delay: 219.641 ms

Loss rate: 5.76%

-- Flow 2:

Average throughput: 30.80 Mbit/s

95th percentile per-packet one-way delay: 296.526 ms

Loss rate: 9.17%

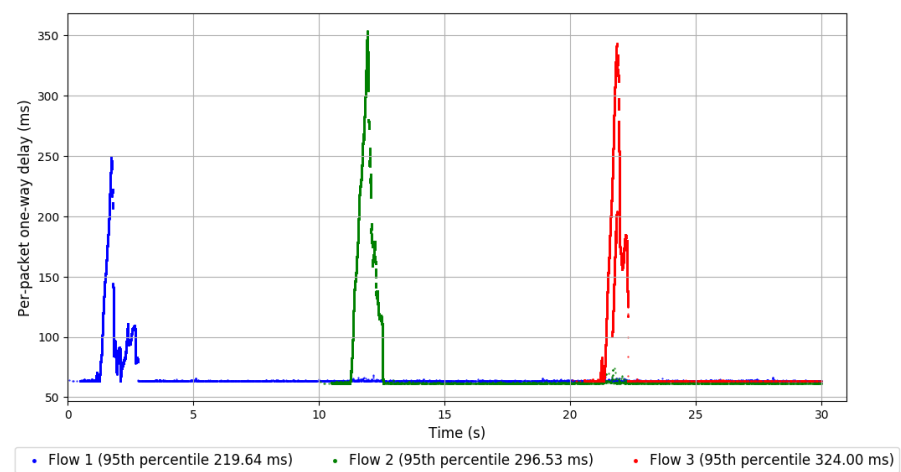
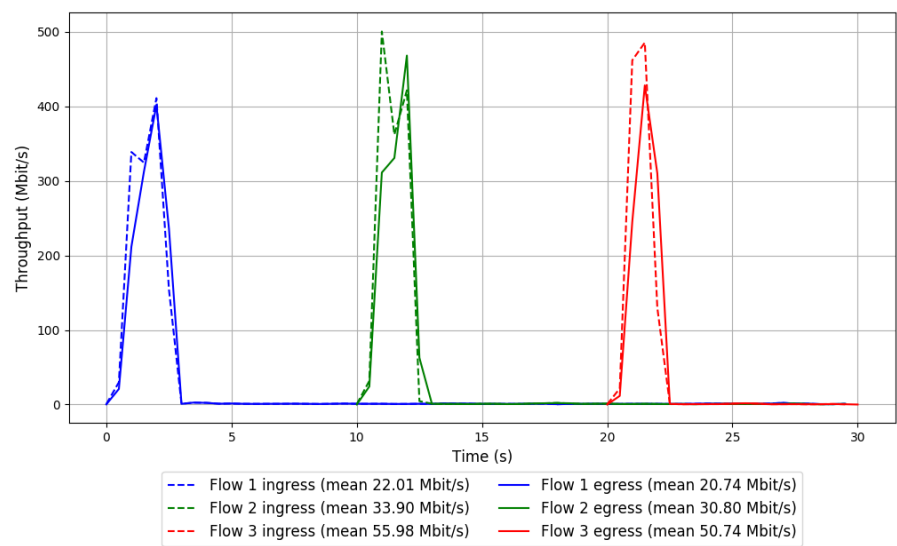
-- Flow 3:

Average throughput: 50.74 Mbit/s

95th percentile per-packet one-way delay: 323.996 ms

Loss rate: 9.36%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-01 05:33:52

End at: 2018-02-01 05:34:22

Below is generated by plot.py at 2018-02-01 09:32:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.70 Mbit/s

95th percentile per-packet one-way delay: 202.371 ms

Loss rate: 2.32%

-- Flow 1:

Average throughput: 23.83 Mbit/s

95th percentile per-packet one-way delay: 291.070 ms

Loss rate: 3.17%

-- Flow 2:

Average throughput: 37.31 Mbit/s

95th percentile per-packet one-way delay: 189.279 ms

Loss rate: 3.32%

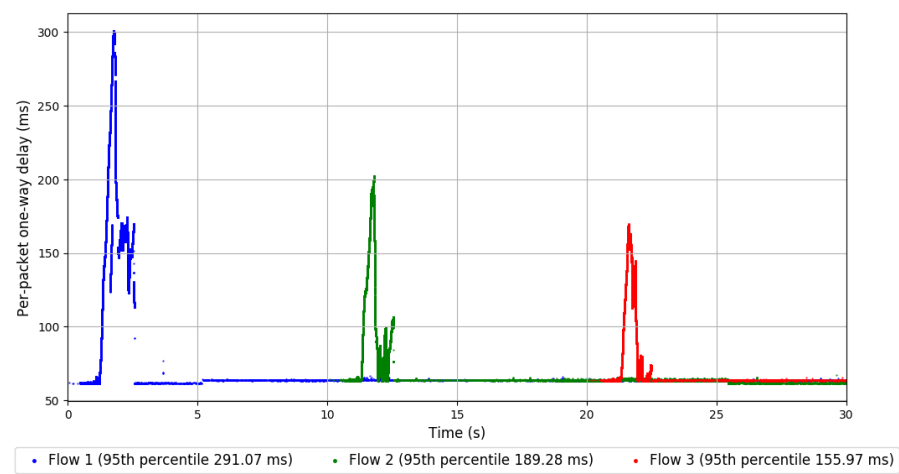
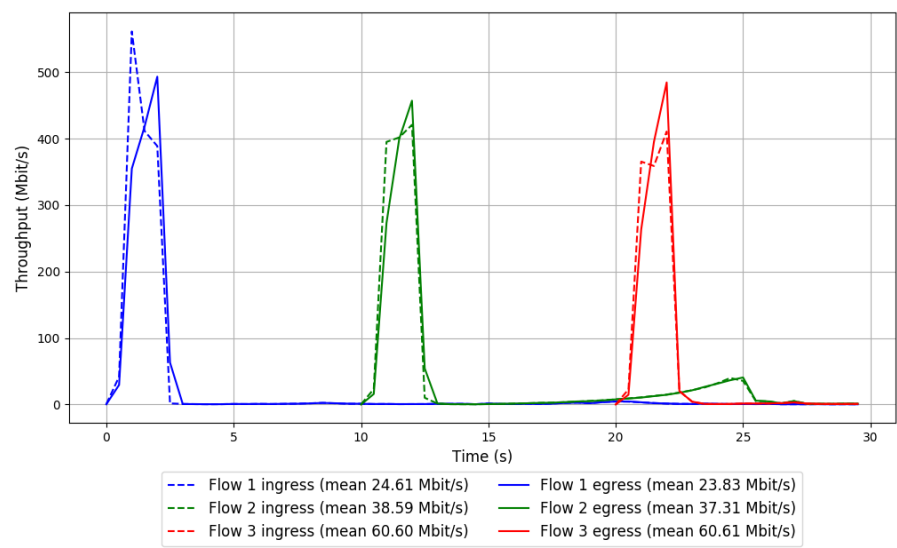
-- Flow 3:

Average throughput: 60.61 Mbit/s

95th percentile per-packet one-way delay: 155.967 ms

Loss rate: 0.00%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-01 05:50:41

End at: 2018-02-01 05:51:11

Below is generated by plot.py at 2018-02-01 09:36:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.87 Mbit/s

95th percentile per-packet one-way delay: 253.652 ms

Loss rate: 3.47%

-- Flow 1:

Average throughput: 28.40 Mbit/s

95th percentile per-packet one-way delay: 267.494 ms

Loss rate: 2.84%

-- Flow 2:

Average throughput: 146.56 Mbit/s

95th percentile per-packet one-way delay: 244.920 ms

Loss rate: 2.68%

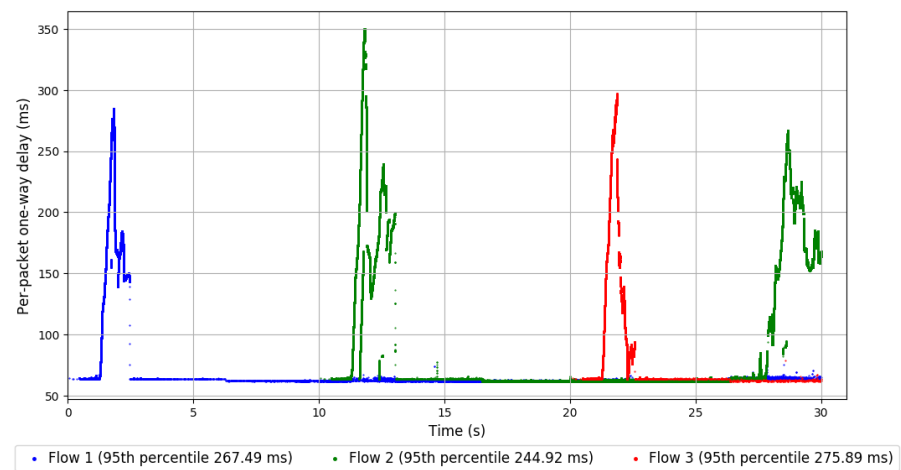
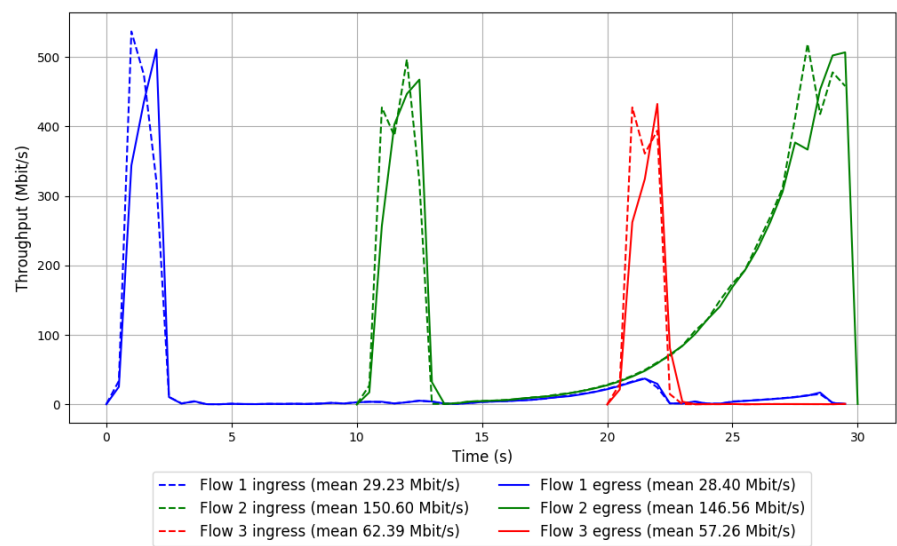
-- Flow 3:

Average throughput: 57.26 Mbit/s

95th percentile per-packet one-way delay: 275.892 ms

Loss rate: 8.23%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-01 06:07:34

End at: 2018-02-01 06:08:04

Below is generated by plot.py at 2018-02-01 09:36:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.14 Mbit/s

95th percentile per-packet one-way delay: 263.655 ms

Loss rate: 6.32%

-- Flow 1:

Average throughput: 23.50 Mbit/s

95th percentile per-packet one-way delay: 273.832 ms

Loss rate: 3.44%

-- Flow 2:

Average throughput: 32.05 Mbit/s

95th percentile per-packet one-way delay: 249.320 ms

Loss rate: 7.45%

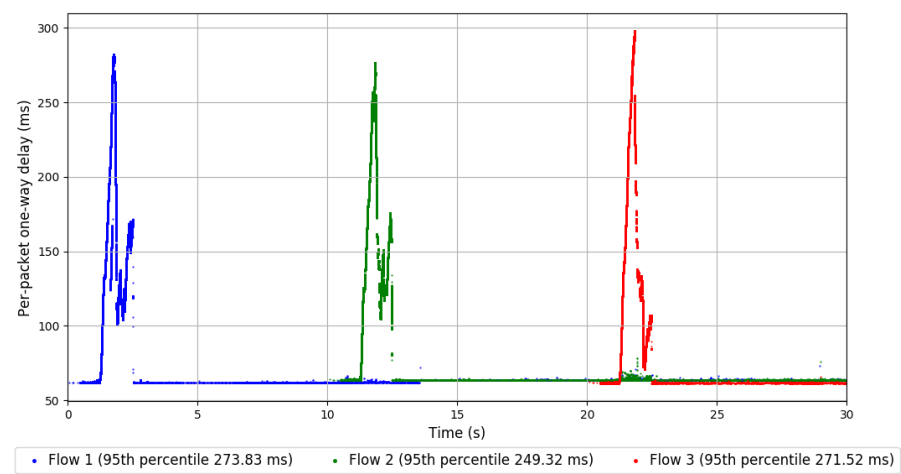
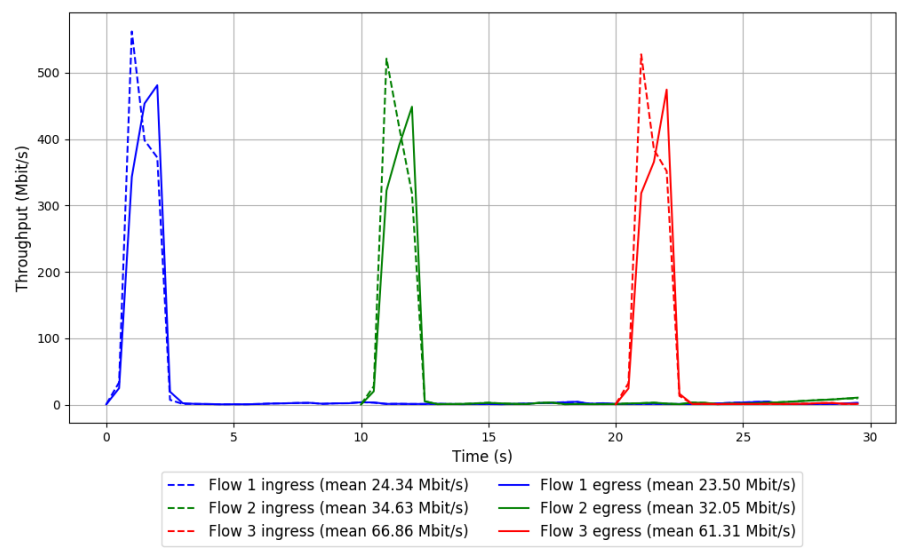
-- Flow 3:

Average throughput: 61.31 Mbit/s

95th percentile per-packet one-way delay: 271.520 ms

Loss rate: 8.30%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-01 06:24:16

End at: 2018-02-01 06:24:46

Below is generated by plot.py at 2018-02-01 09:36:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.02 Mbit/s

95th percentile per-packet one-way delay: 298.131 ms

Loss rate: 4.68%

-- Flow 1:

Average throughput: 25.71 Mbit/s

95th percentile per-packet one-way delay: 306.836 ms

Loss rate: 2.44%

-- Flow 2:

Average throughput: 44.14 Mbit/s

95th percentile per-packet one-way delay: 301.404 ms

Loss rate: 3.65%

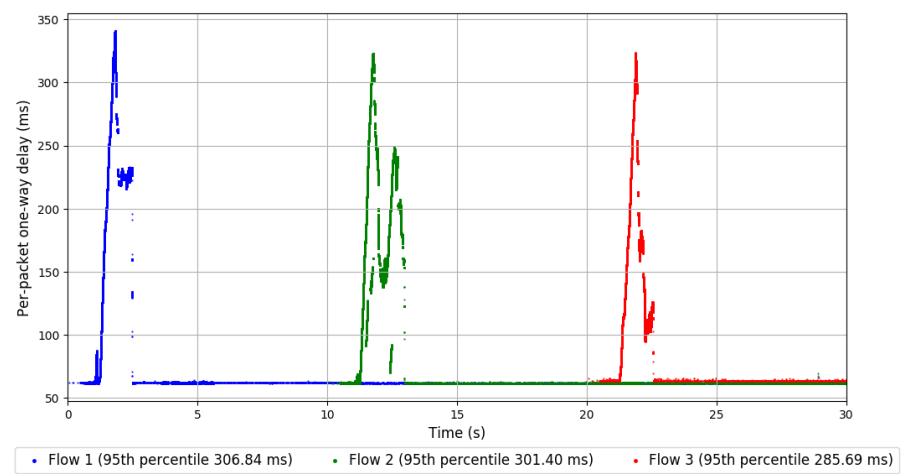
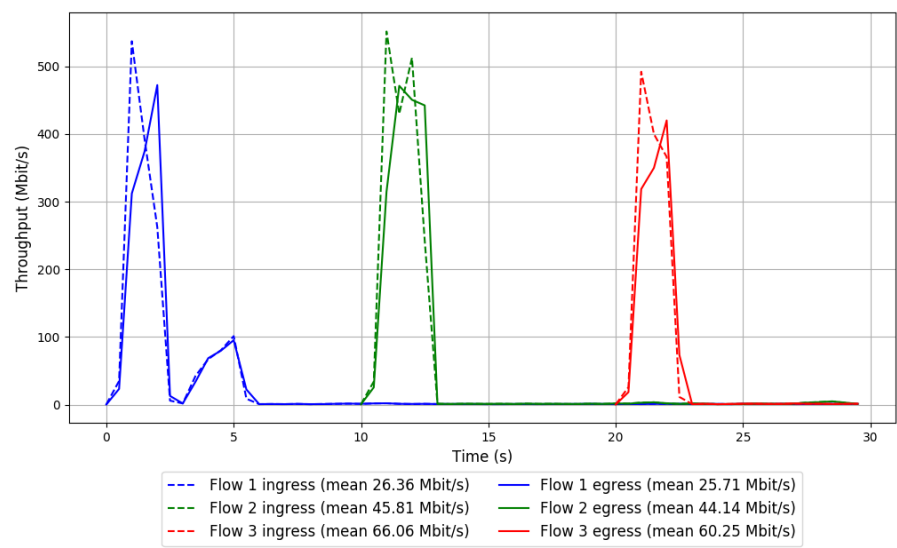
-- Flow 3:

Average throughput: 60.25 Mbit/s

95th percentile per-packet one-way delay: 285.689 ms

Loss rate: 8.80%

Run 9: Report of FillP — Data Link

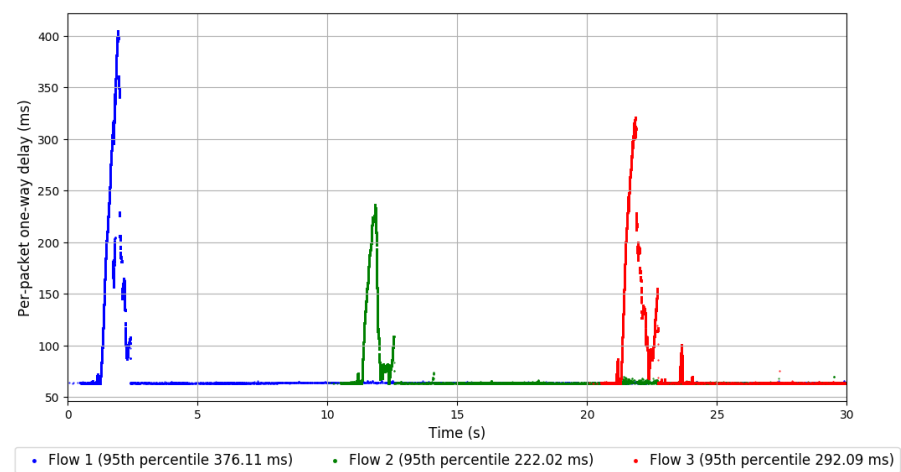
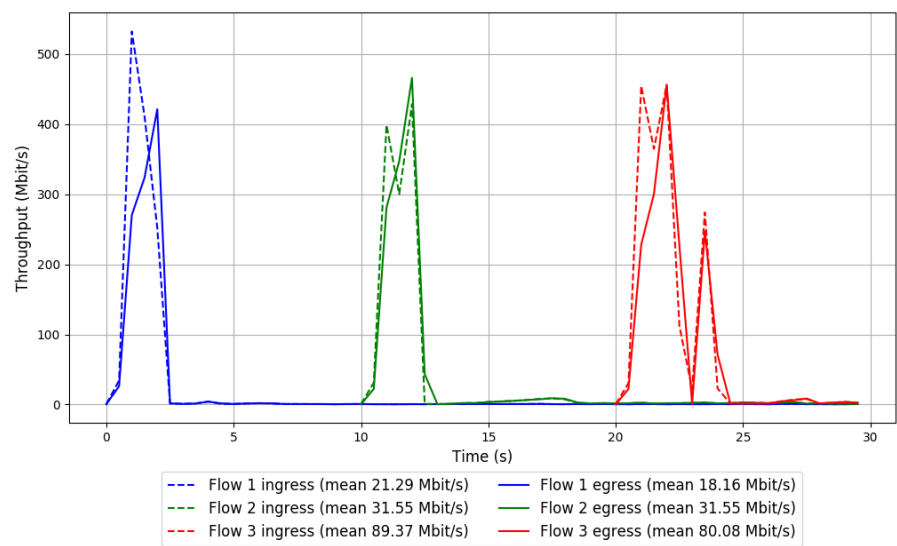


```
Run 10: Statistics of FillP

Start at: 2018-02-01 06:40:59
End at: 2018-02-01 06:41:29

# Below is generated by plot.py at 2018-02-01 09:36:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.67 Mbit/s
95th percentile per-packet one-way delay: 297.447 ms
Loss rate: 8.64%
-- Flow 1:
Average throughput: 18.16 Mbit/s
95th percentile per-packet one-way delay: 376.113 ms
Loss rate: 14.72%
-- Flow 2:
Average throughput: 31.55 Mbit/s
95th percentile per-packet one-way delay: 222.022 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 80.08 Mbit/s
95th percentile per-packet one-way delay: 292.088 ms
Loss rate: 10.40%
```

Run 10: Report of FillP — Data Link

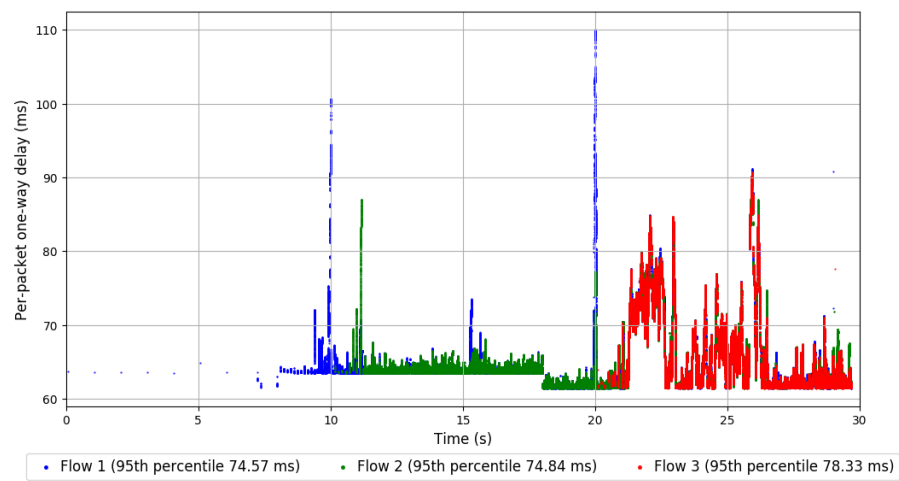
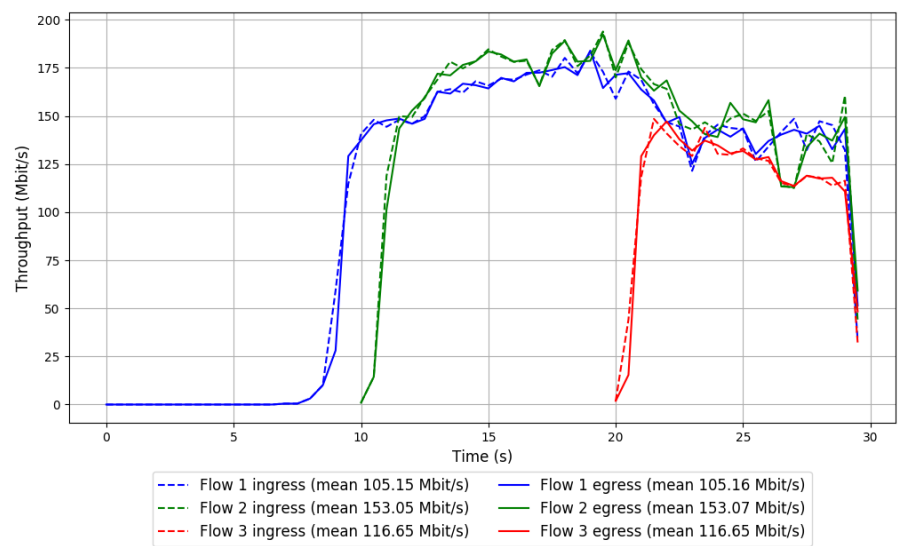


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-01 04:08:19
End at: 2018-02-01 04:08:49

# Below is generated by plot.py at 2018-02-01 09:36:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 243.81 Mbit/s
95th percentile per-packet one-way delay: 75.932 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 105.16 Mbit/s
95th percentile per-packet one-way delay: 74.570 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 153.07 Mbit/s
95th percentile per-packet one-way delay: 74.843 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 116.65 Mbit/s
95th percentile per-packet one-way delay: 78.332 ms
Loss rate: 0.00%
```

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

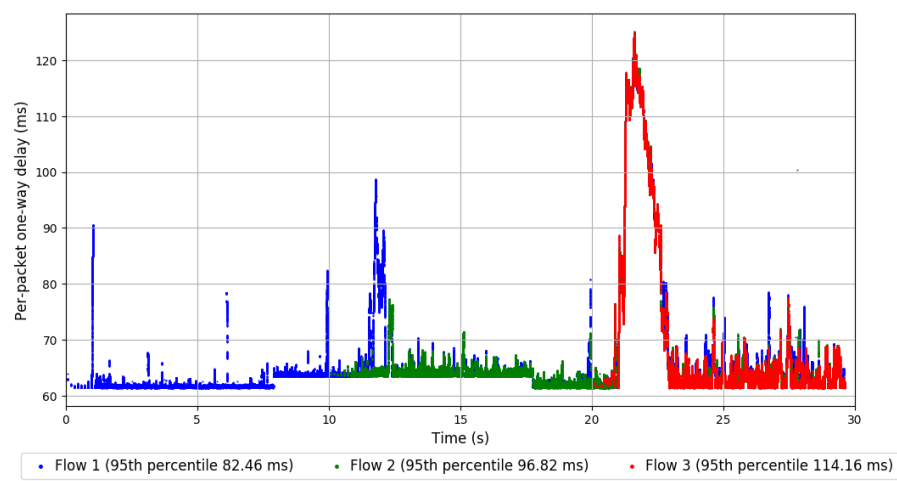
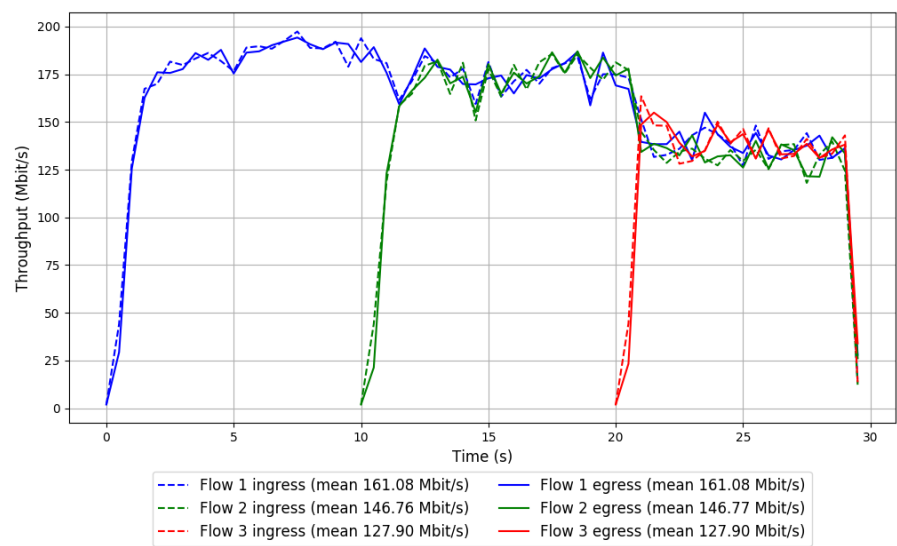


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-01 04:24:49
End at: 2018-02-01 04:25:19

# Below is generated by plot.py at 2018-02-01 09:37:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 299.34 Mbit/s
95th percentile per-packet one-way delay: 97.411 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 161.08 Mbit/s
95th percentile per-packet one-way delay: 82.462 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 146.77 Mbit/s
95th percentile per-packet one-way delay: 96.824 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 127.90 Mbit/s
95th percentile per-packet one-way delay: 114.155 ms
Loss rate: 0.01%
```

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



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-01 04:41:01

End at: 2018-02-01 04:41:31

Below is generated by plot.py at 2018-02-01 09:37:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.03 Mbit/s

95th percentile per-packet one-way delay: 70.834 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 157.15 Mbit/s

95th percentile per-packet one-way delay: 68.988 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 142.49 Mbit/s

95th percentile per-packet one-way delay: 71.778 ms

Loss rate: 0.00%

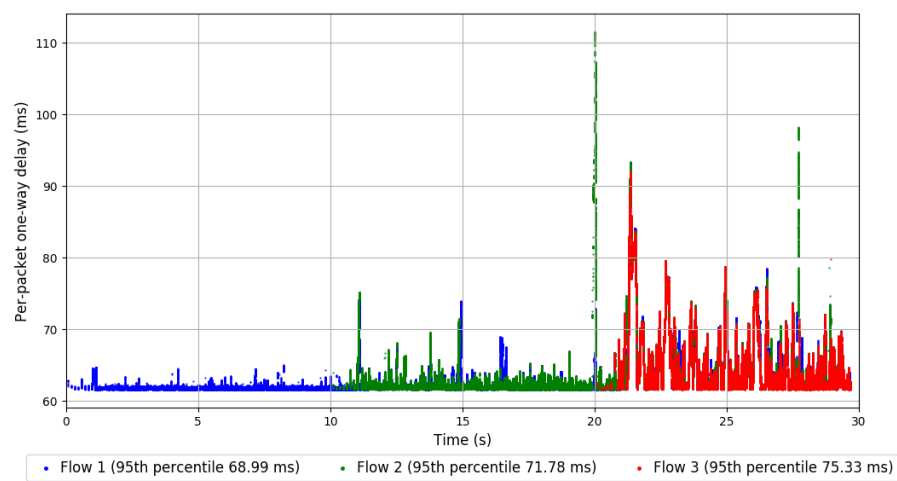
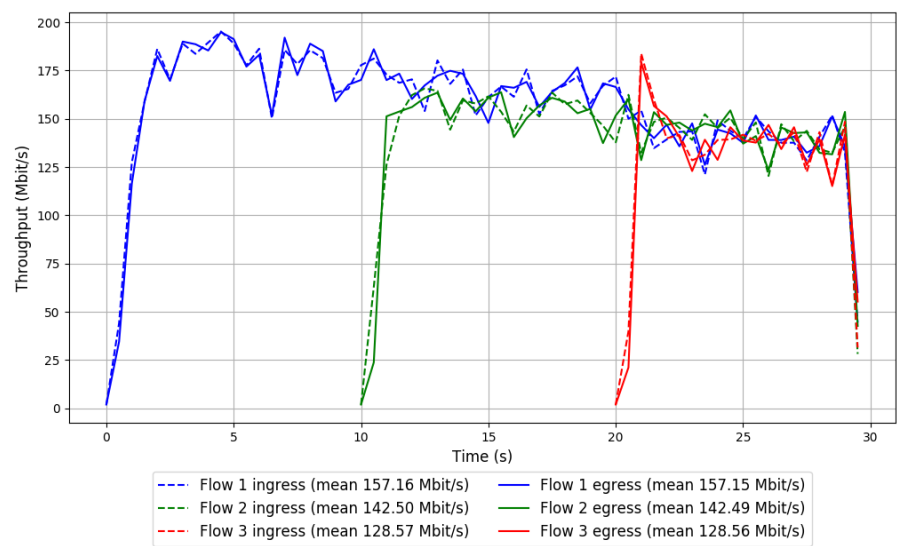
-- Flow 3:

Average throughput: 128.56 Mbit/s

95th percentile per-packet one-way delay: 75.326 ms

Loss rate: 0.00%

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



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-01 04:57:14

End at: 2018-02-01 04:57:44

Below is generated by plot.py at 2018-02-01 09:38:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.97 Mbit/s

95th percentile per-packet one-way delay: 75.130 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 153.27 Mbit/s

95th percentile per-packet one-way delay: 73.192 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 149.81 Mbit/s

95th percentile per-packet one-way delay: 76.393 ms

Loss rate: 0.00%

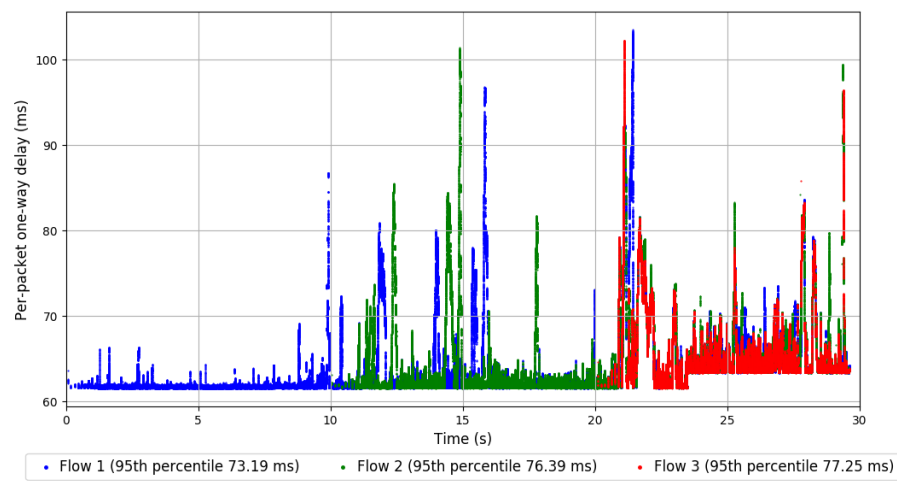
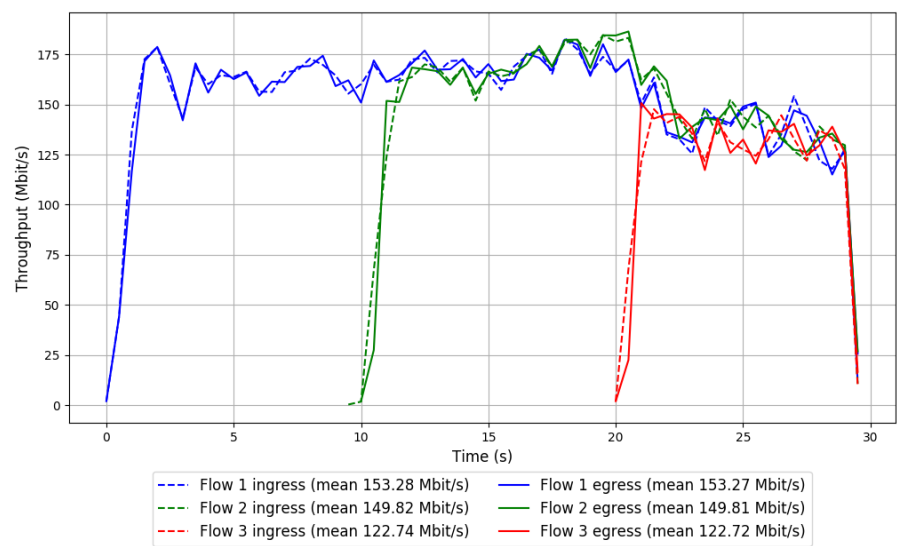
-- Flow 3:

Average throughput: 122.72 Mbit/s

95th percentile per-packet one-way delay: 77.248 ms

Loss rate: 0.00%

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



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-01 05:13:33

End at: 2018-02-01 05:14:03

Below is generated by plot.py at 2018-02-01 09:39:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.59 Mbit/s

95th percentile per-packet one-way delay: 78.665 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 176.03 Mbit/s

95th percentile per-packet one-way delay: 74.787 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 149.68 Mbit/s

95th percentile per-packet one-way delay: 80.480 ms

Loss rate: 0.03%

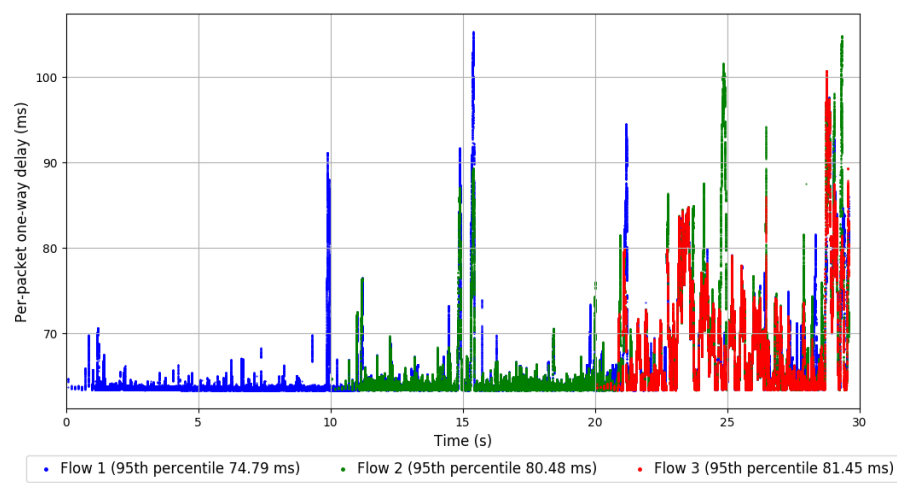
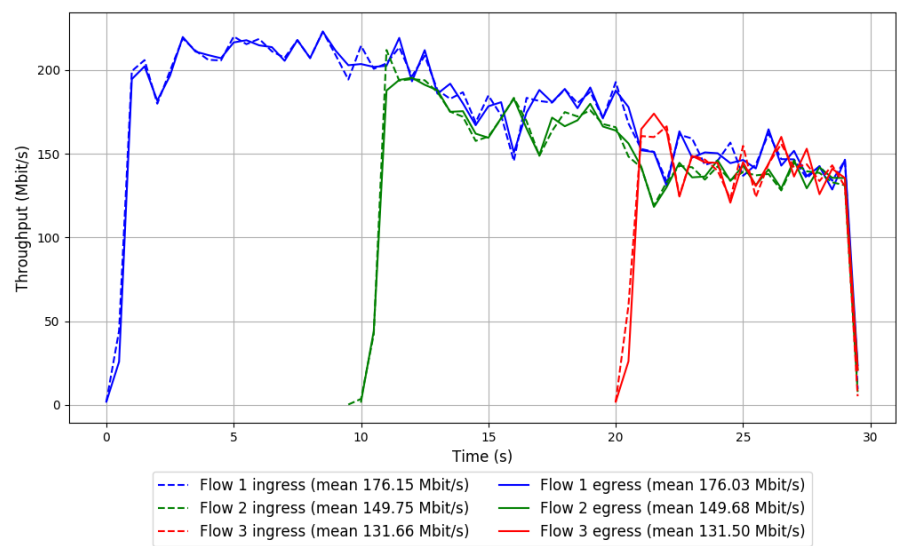
-- Flow 3:

Average throughput: 131.50 Mbit/s

95th percentile per-packet one-way delay: 81.455 ms

Loss rate: 0.08%

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



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-01 05:30:02

End at: 2018-02-01 05:30:32

Below is generated by plot.py at 2018-02-01 09:39:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 284.42 Mbit/s

95th percentile per-packet one-way delay: 80.827 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 151.54 Mbit/s

95th percentile per-packet one-way delay: 77.707 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 139.97 Mbit/s

95th percentile per-packet one-way delay: 81.022 ms

Loss rate: 0.01%

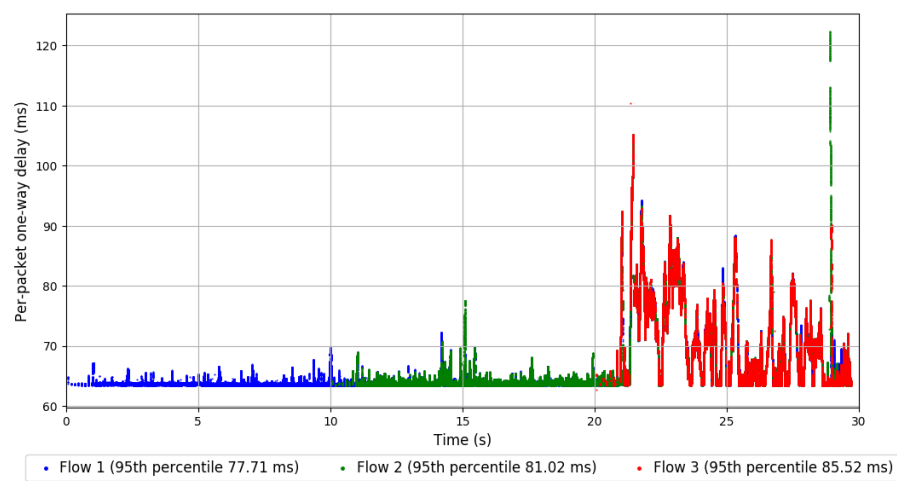
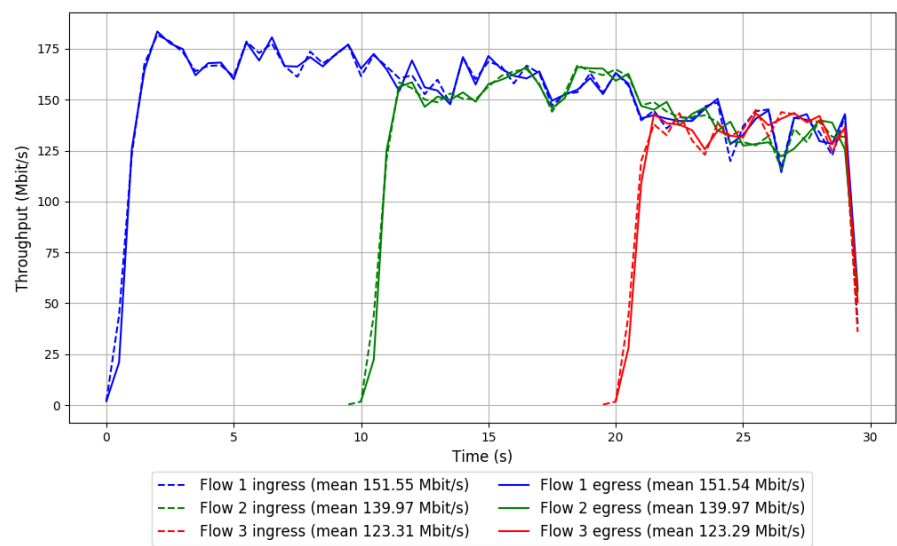
-- Flow 3:

Average throughput: 123.29 Mbit/s

95th percentile per-packet one-way delay: 85.520 ms

Loss rate: 0.00%

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



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-01 05:46:41

End at: 2018-02-01 05:47:11

Below is generated by plot.py at 2018-02-01 09:40:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 325.98 Mbit/s

95th percentile per-packet one-way delay: 77.878 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 179.35 Mbit/s

95th percentile per-packet one-way delay: 74.992 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 159.41 Mbit/s

95th percentile per-packet one-way delay: 78.962 ms

Loss rate: 0.00%

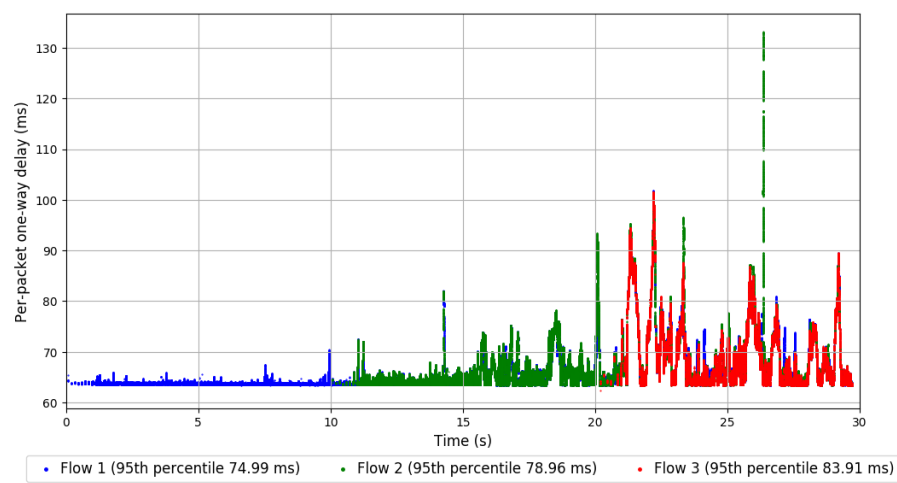
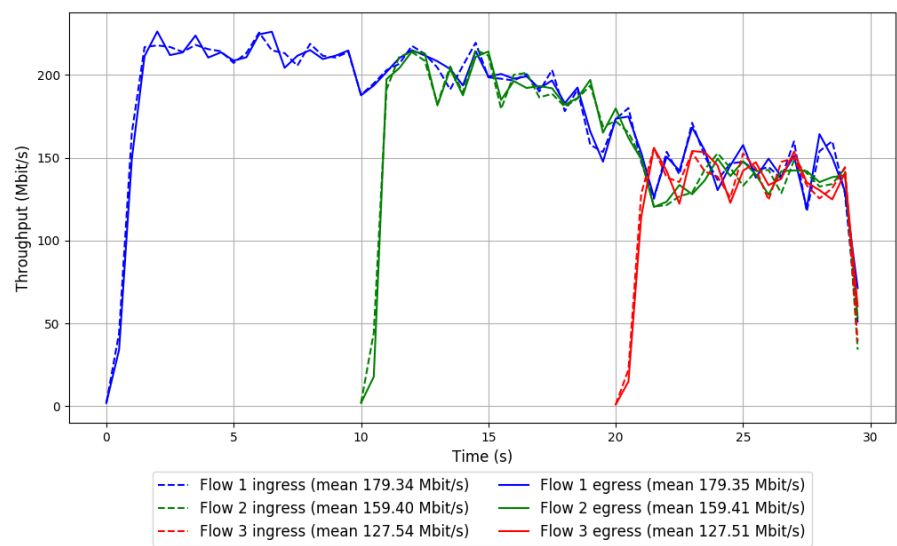
-- Flow 3:

Average throughput: 127.51 Mbit/s

95th percentile per-packet one-way delay: 83.907 ms

Loss rate: 0.00%

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



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-01 06:03:24

End at: 2018-02-01 06:03:54

Below is generated by plot.py at 2018-02-01 09:41:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.22 Mbit/s

95th percentile per-packet one-way delay: 69.098 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 164.72 Mbit/s

95th percentile per-packet one-way delay: 68.250 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 143.88 Mbit/s

95th percentile per-packet one-way delay: 69.345 ms

Loss rate: 0.00%

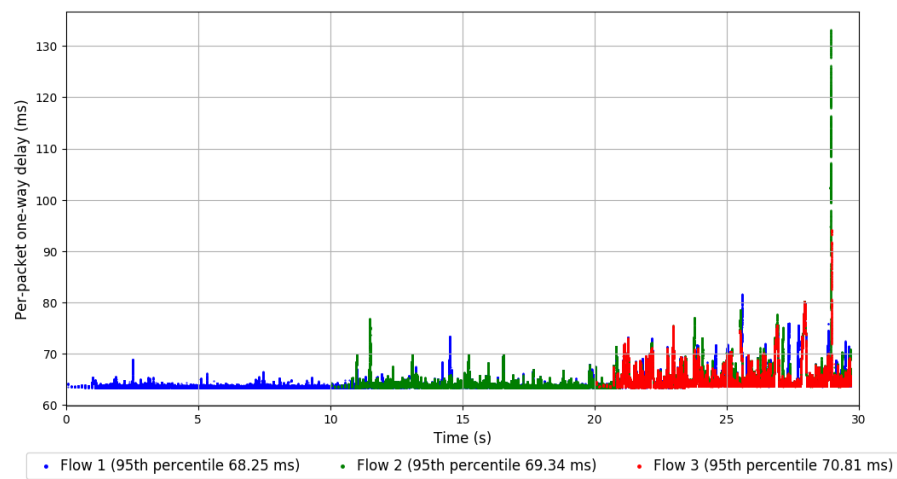
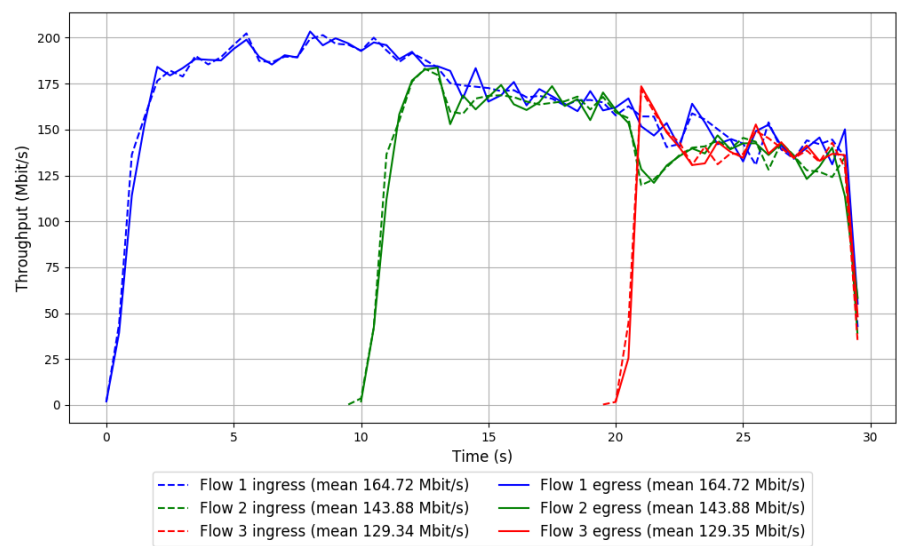
-- Flow 3:

Average throughput: 129.35 Mbit/s

95th percentile per-packet one-way delay: 70.807 ms

Loss rate: 0.00%

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



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-01 06:20:26

End at: 2018-02-01 06:20:56

Below is generated by plot.py at 2018-02-01 09:41:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 307.16 Mbit/s

95th percentile per-packet one-way delay: 78.859 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 163.02 Mbit/s

95th percentile per-packet one-way delay: 74.724 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 153.61 Mbit/s

95th percentile per-packet one-way delay: 79.490 ms

Loss rate: 0.00%

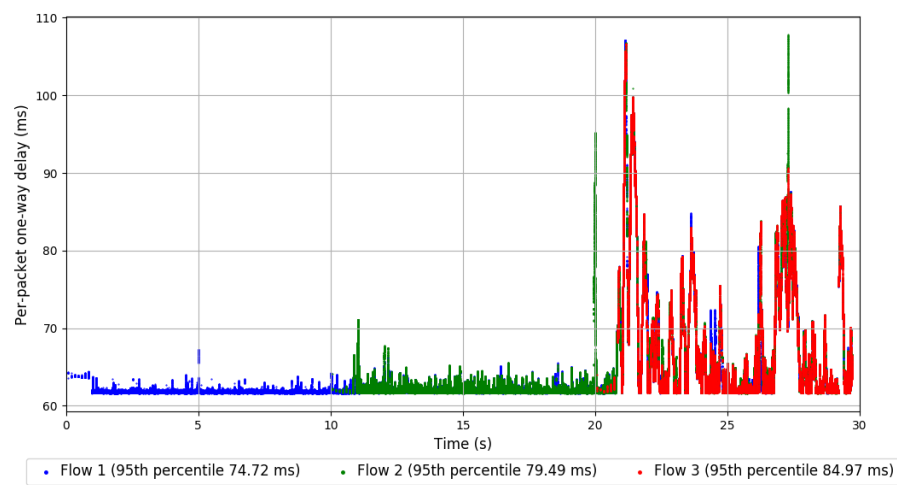
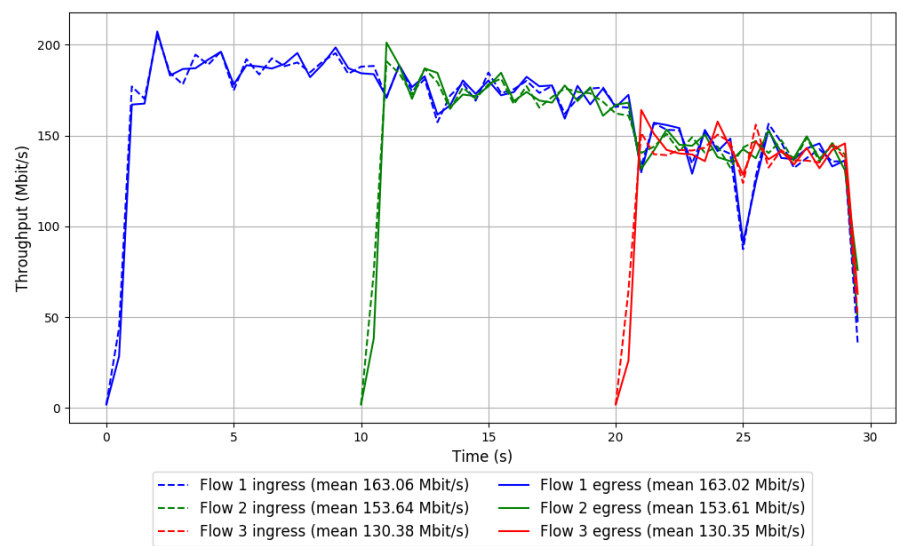
-- Flow 3:

Average throughput: 130.35 Mbit/s

95th percentile per-packet one-way delay: 84.967 ms

Loss rate: 0.04%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-01 06:37:03

End at: 2018-02-01 06:37:33

Below is generated by plot.py at 2018-02-01 09:42:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 284.11 Mbit/s

95th percentile per-packet one-way delay: 65.248 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 156.06 Mbit/s

95th percentile per-packet one-way delay: 64.783 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 144.14 Mbit/s

95th percentile per-packet one-way delay: 65.835 ms

Loss rate: 0.00%

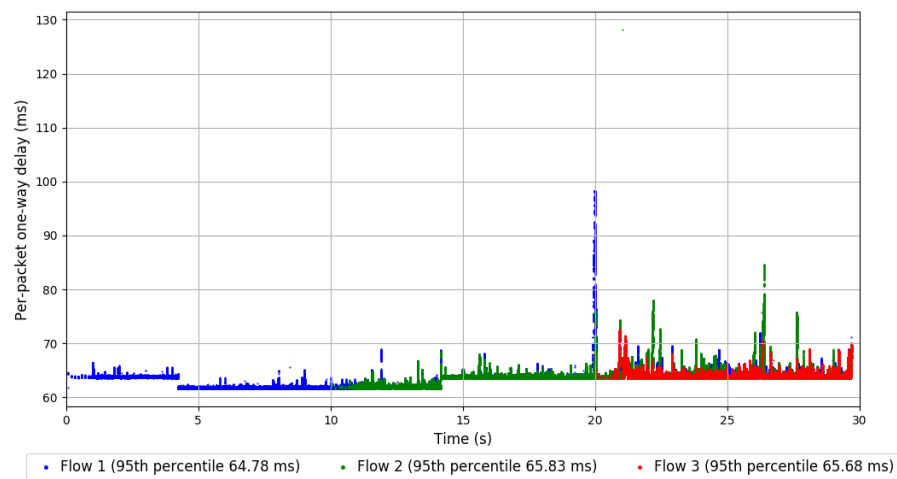
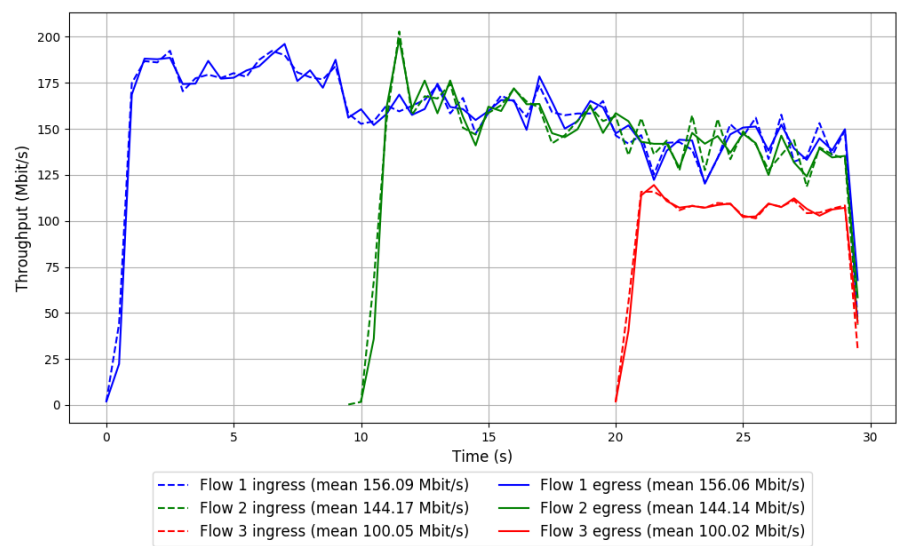
-- Flow 3:

Average throughput: 100.02 Mbit/s

95th percentile per-packet one-way delay: 65.684 ms

Loss rate: 0.00%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-02-01 04:07:08

End at: 2018-02-01 04:07:38

Below is generated by plot.py at 2018-02-01 09:45:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 396.66 Mbit/s

95th percentile per-packet one-way delay: 66.267 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 233.93 Mbit/s

95th percentile per-packet one-way delay: 65.515 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 202.14 Mbit/s

95th percentile per-packet one-way delay: 67.016 ms

Loss rate: 0.00%

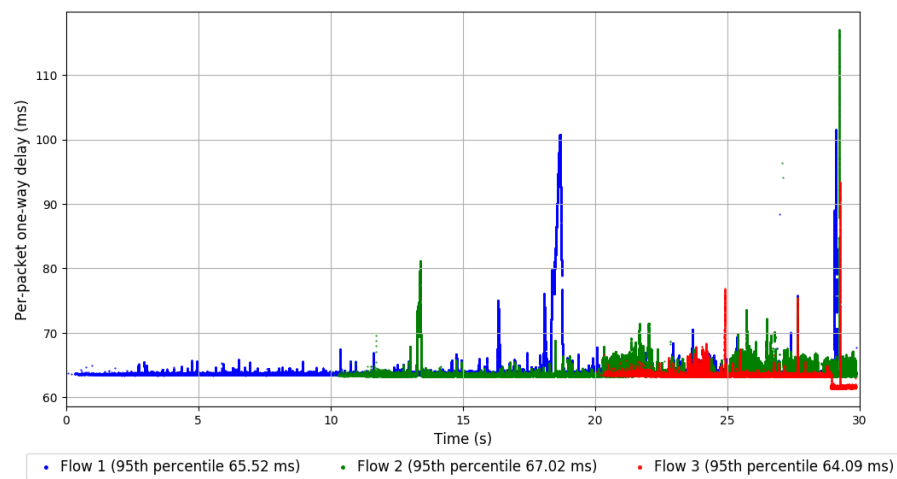
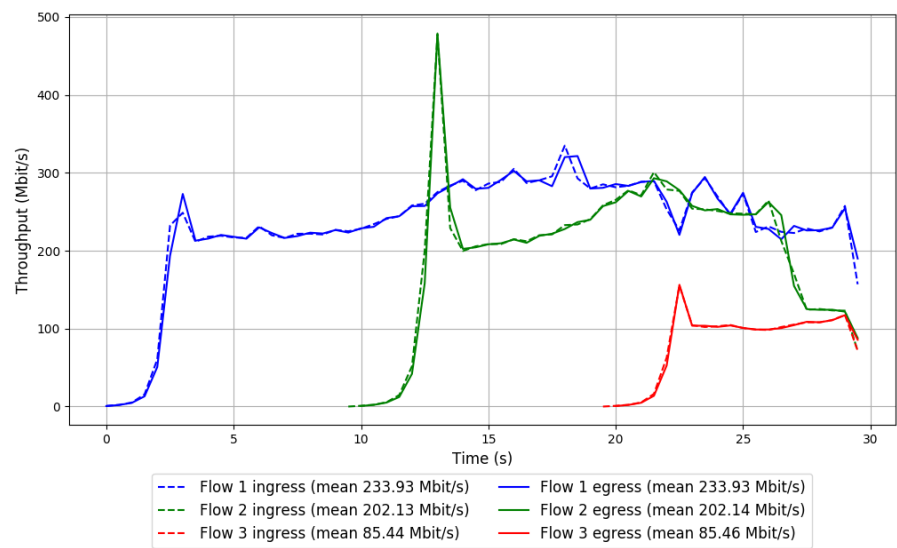
-- Flow 3:

Average throughput: 85.46 Mbit/s

95th percentile per-packet one-way delay: 64.093 ms

Loss rate: 0.00%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-01 04:23:41

End at: 2018-02-01 04:24:11

Below is generated by plot.py at 2018-02-01 09:45:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 368.01 Mbit/s

95th percentile per-packet one-way delay: 66.179 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 192.18 Mbit/s

95th percentile per-packet one-way delay: 62.087 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 186.77 Mbit/s

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

Loss rate: 0.00%

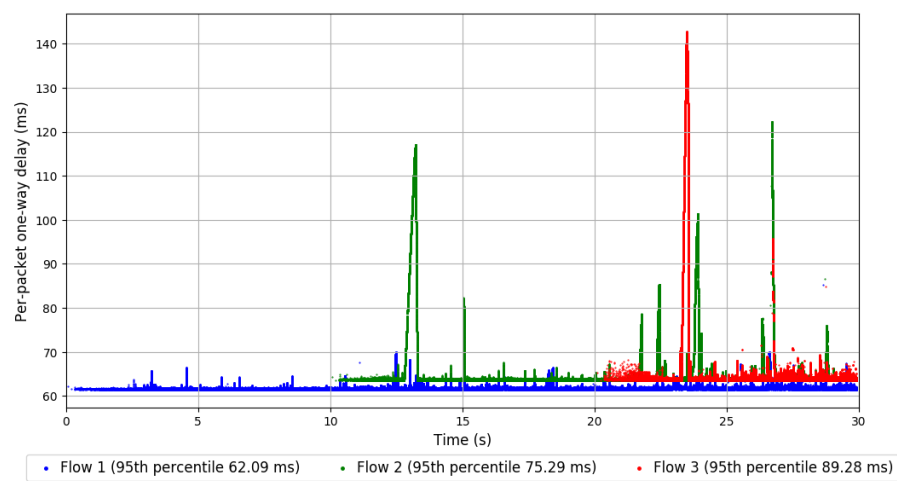
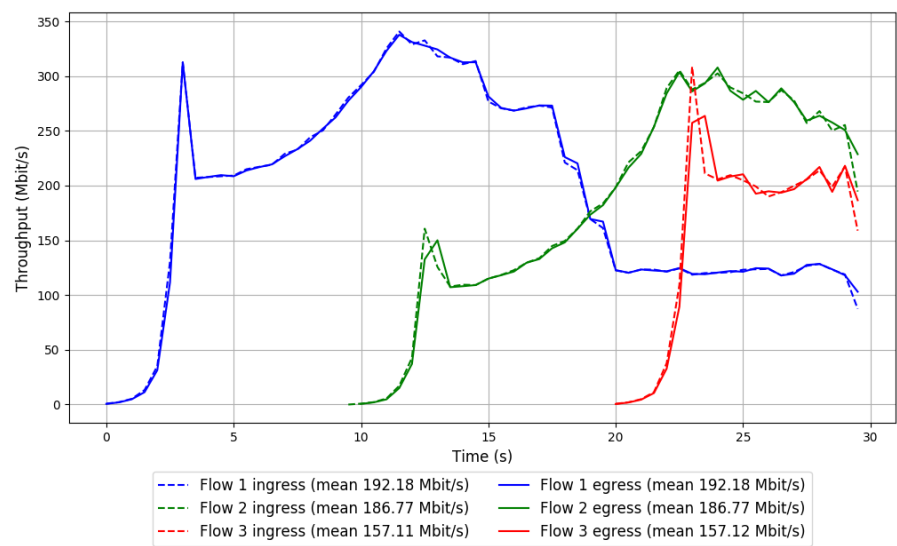
-- Flow 3:

Average throughput: 157.12 Mbit/s

95th percentile per-packet one-way delay: 89.283 ms

Loss rate: 0.01%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-01 04:39:54

End at: 2018-02-01 04:40:24

Below is generated by plot.py at 2018-02-01 09:46:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 349.92 Mbit/s

95th percentile per-packet one-way delay: 67.869 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 191.76 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 192.41 Mbit/s

95th percentile per-packet one-way delay: 87.084 ms

Loss rate: 0.00%

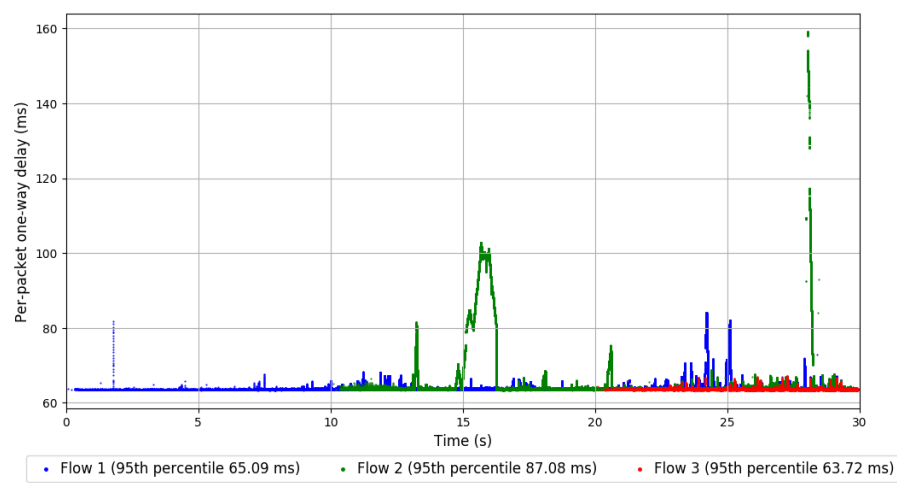
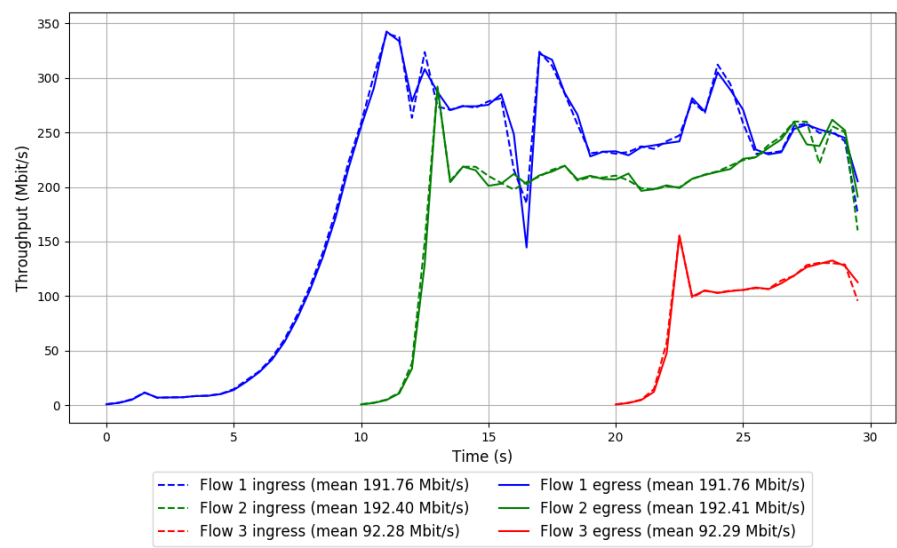
-- Flow 3:

Average throughput: 92.29 Mbit/s

95th percentile per-packet one-way delay: 63.718 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-01 04:56:06

End at: 2018-02-01 04:56:36

Below is generated by plot.py at 2018-02-01 09:46:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 359.71 Mbit/s

95th percentile per-packet one-way delay: 64.717 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 222.77 Mbit/s

95th percentile per-packet one-way delay: 64.802 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 189.25 Mbit/s

95th percentile per-packet one-way delay: 64.651 ms

Loss rate: 0.00%

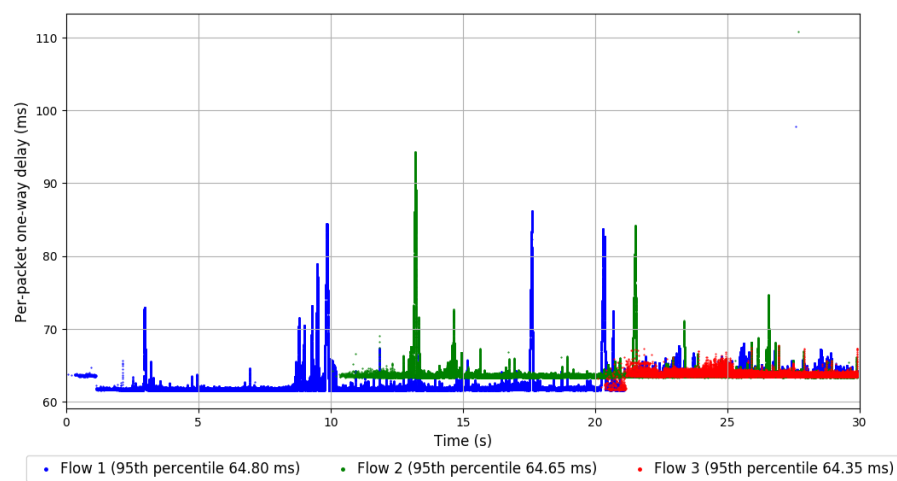
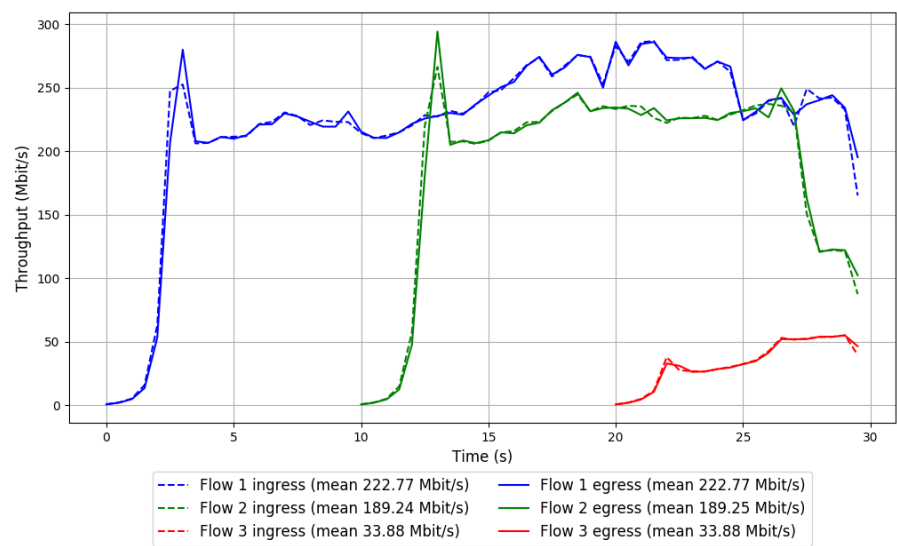
-- Flow 3:

Average throughput: 33.88 Mbit/s

95th percentile per-packet one-way delay: 64.349 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-01 05:12:23

End at: 2018-02-01 05:12:53

Below is generated by plot.py at 2018-02-01 09:47:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.84 Mbit/s

95th percentile per-packet one-way delay: 73.134 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 200.44 Mbit/s

95th percentile per-packet one-way delay: 121.739 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 194.85 Mbit/s

95th percentile per-packet one-way delay: 64.218 ms

Loss rate: 0.00%

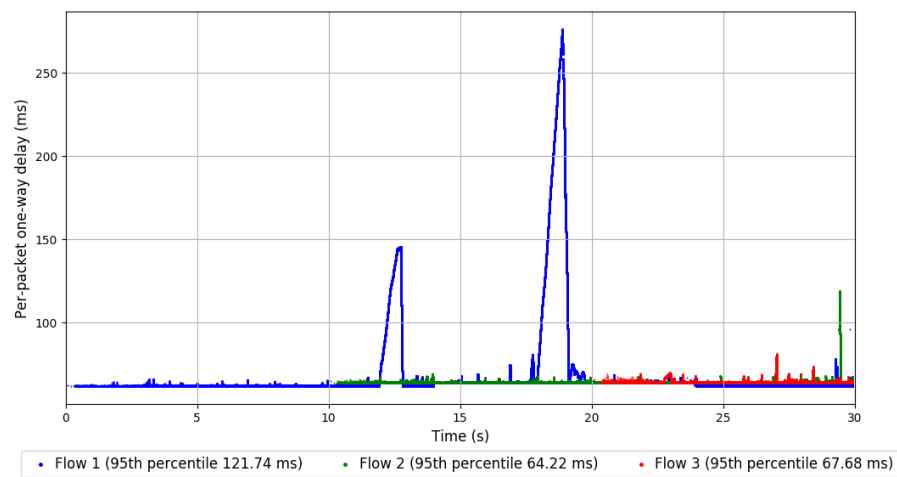
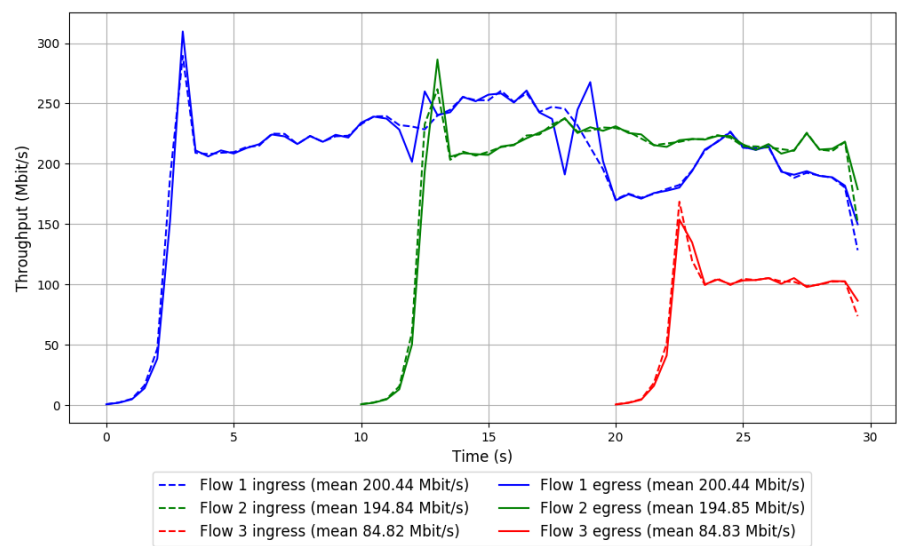
-- Flow 3:

Average throughput: 84.83 Mbit/s

95th percentile per-packet one-way delay: 67.676 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-01 05:28:47

End at: 2018-02-01 05:29:17

Below is generated by plot.py at 2018-02-01 09:50:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 459.24 Mbit/s

95th percentile per-packet one-way delay: 63.906 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 259.77 Mbit/s

95th percentile per-packet one-way delay: 62.947 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 223.89 Mbit/s

95th percentile per-packet one-way delay: 63.161 ms

Loss rate: 0.00%

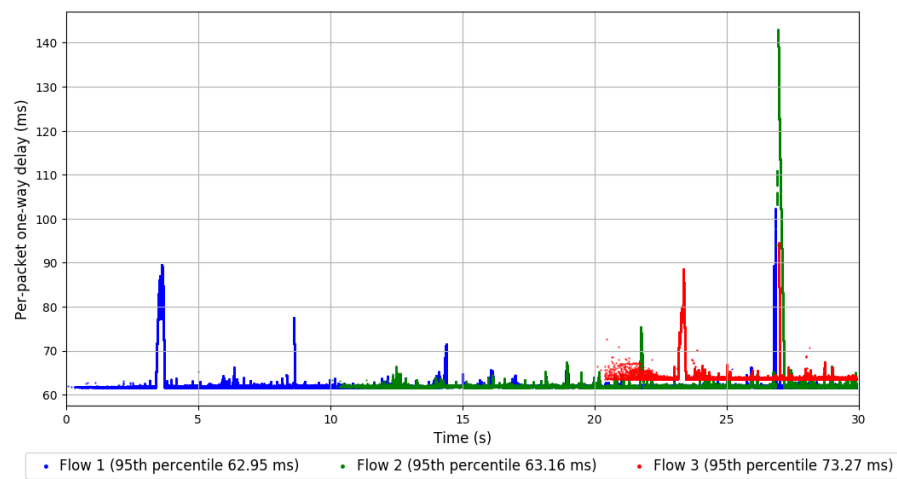
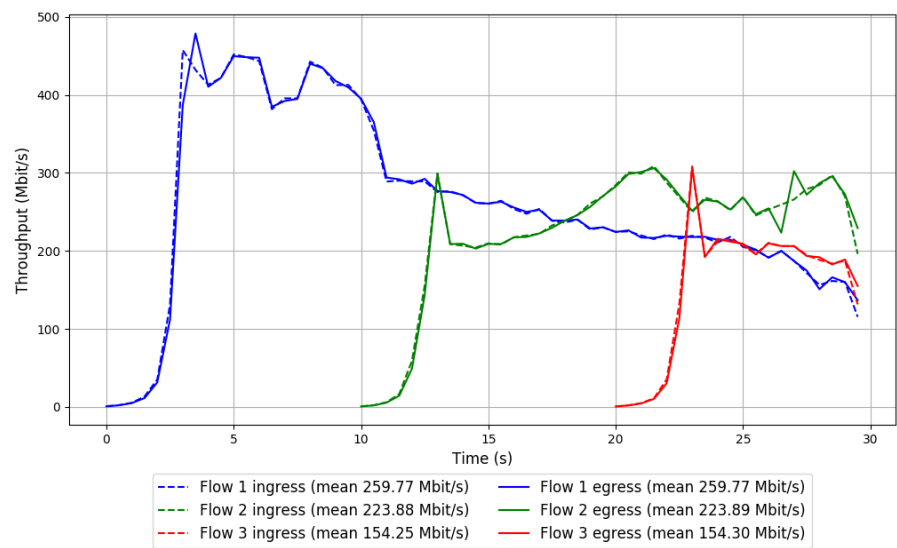
-- Flow 3:

Average throughput: 154.30 Mbit/s

95th percentile per-packet one-way delay: 73.269 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-01 05:45:26

End at: 2018-02-01 05:45:56

Below is generated by plot.py at 2018-02-01 09:50:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 446.72 Mbit/s

95th percentile per-packet one-way delay: 65.112 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 250.31 Mbit/s

95th percentile per-packet one-way delay: 65.132 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 206.17 Mbit/s

95th percentile per-packet one-way delay: 64.824 ms

Loss rate: 0.00%

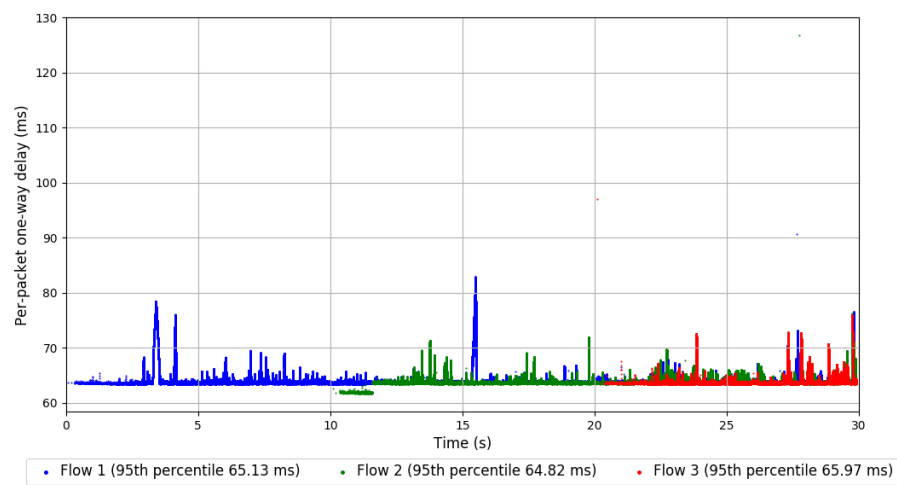
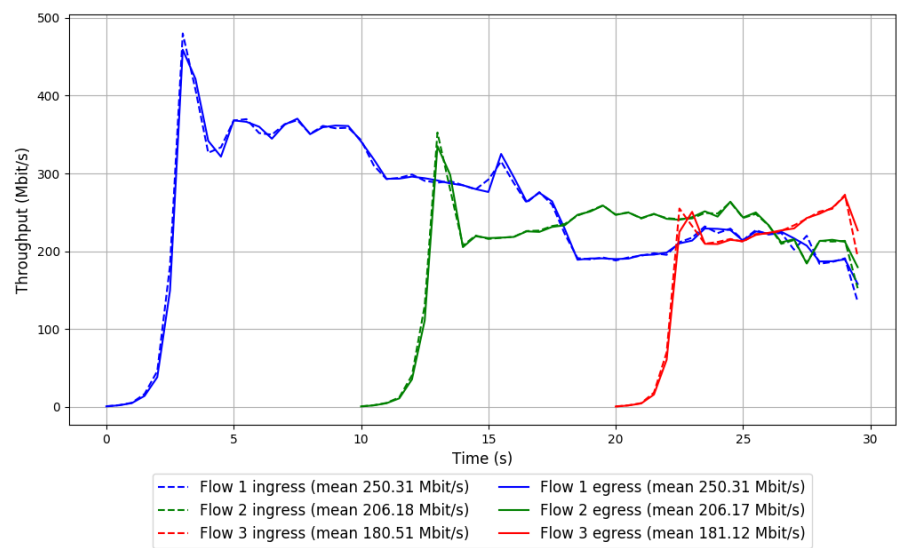
-- Flow 3:

Average throughput: 181.12 Mbit/s

95th percentile per-packet one-way delay: 65.973 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-01 06:02:13

End at: 2018-02-01 06:02:43

Below is generated by plot.py at 2018-02-01 09:50:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 404.45 Mbit/s

95th percentile per-packet one-way delay: 66.540 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 235.47 Mbit/s

95th percentile per-packet one-way delay: 74.314 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 174.85 Mbit/s

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

Loss rate: 0.00%

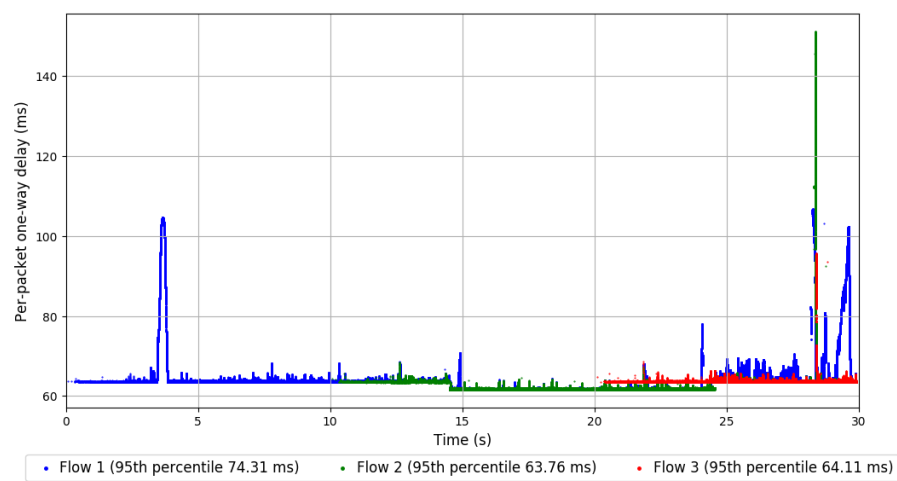
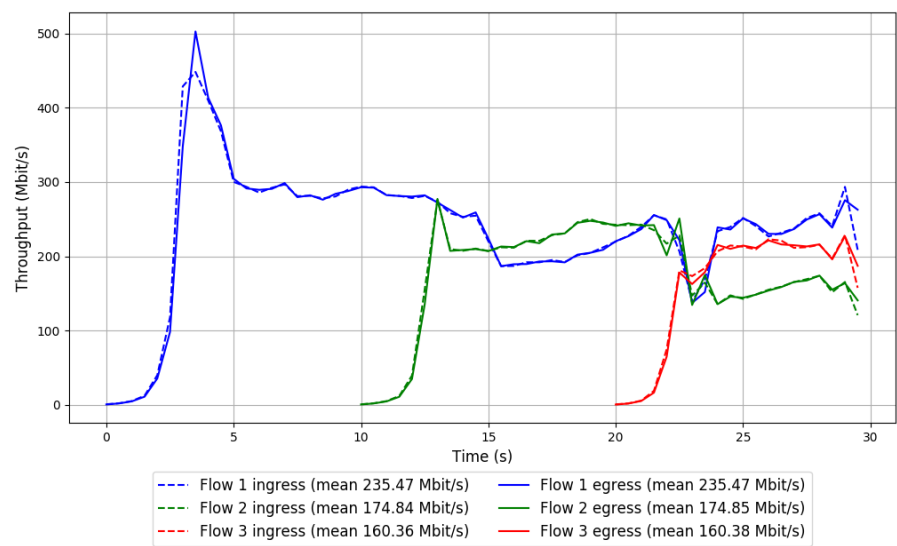
-- Flow 3:

Average throughput: 160.38 Mbit/s

95th percentile per-packet one-way delay: 64.106 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-01 06:19:16

End at: 2018-02-01 06:19:46

Below is generated by plot.py at 2018-02-01 09:53:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 369.88 Mbit/s

95th percentile per-packet one-way delay: 64.363 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 210.14 Mbit/s

95th percentile per-packet one-way delay: 64.552 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 197.67 Mbit/s

95th percentile per-packet one-way delay: 64.230 ms

Loss rate: 0.01%

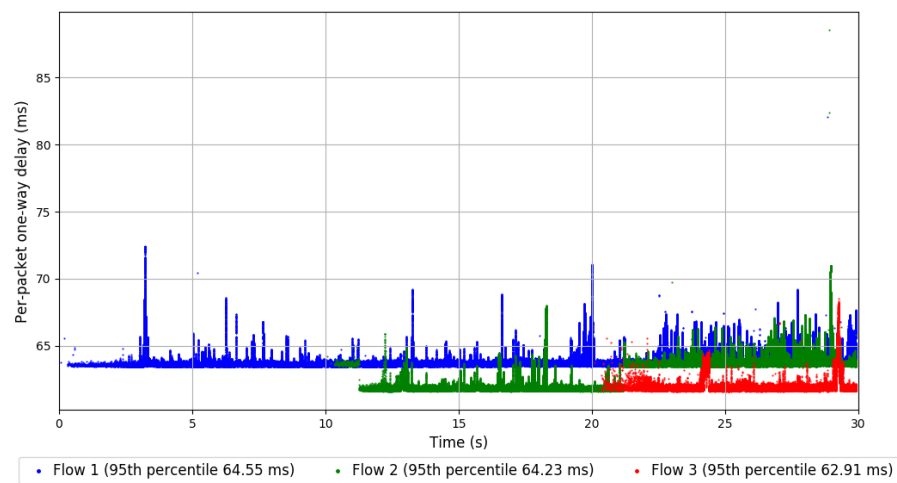
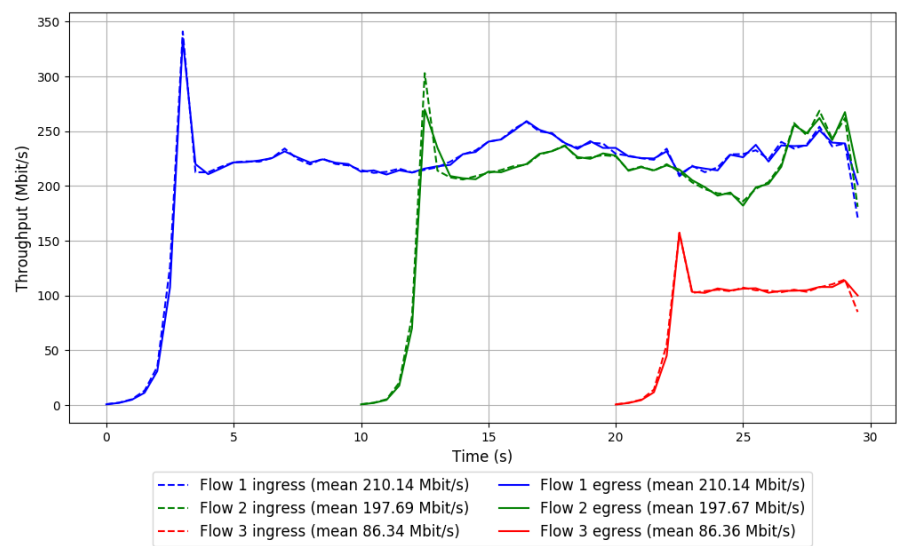
-- Flow 3:

Average throughput: 86.36 Mbit/s

95th percentile per-packet one-way delay: 62.909 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-01 06:35:52

End at: 2018-02-01 06:36:22

Below is generated by plot.py at 2018-02-01 09:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 416.18 Mbit/s

95th percentile per-packet one-way delay: 64.704 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 219.25 Mbit/s

95th percentile per-packet one-way delay: 63.953 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 224.24 Mbit/s

95th percentile per-packet one-way delay: 65.594 ms

Loss rate: 0.02%

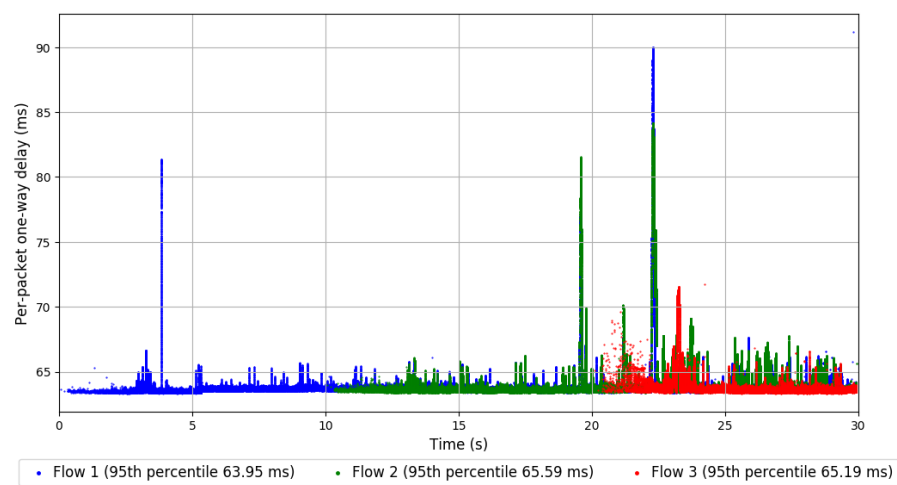
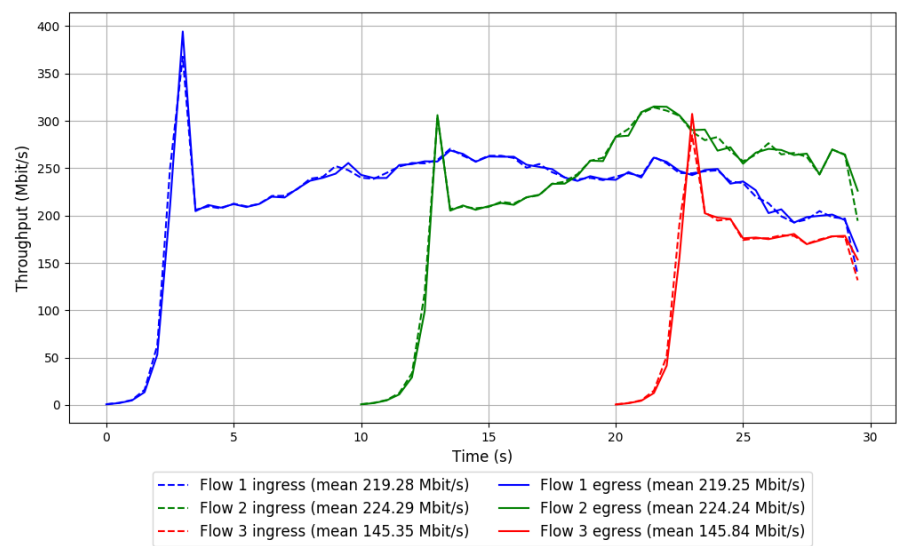
-- Flow 3:

Average throughput: 145.84 Mbit/s

95th percentile per-packet one-way delay: 65.190 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

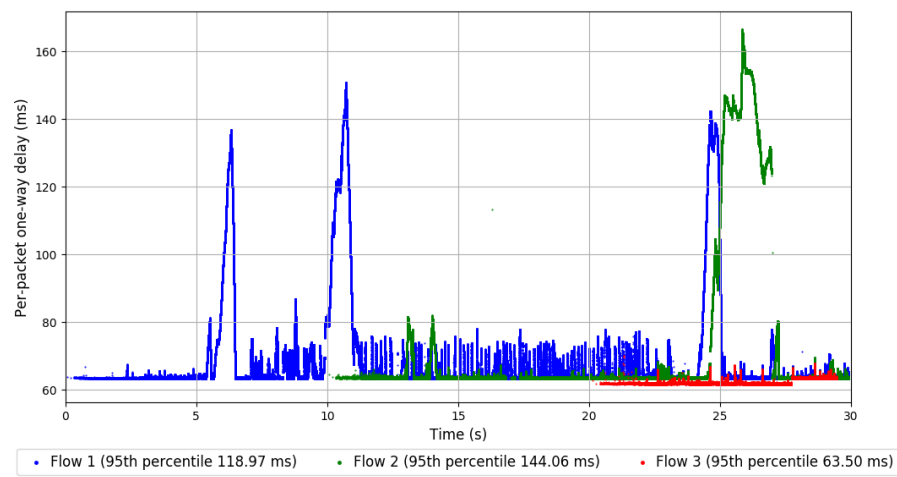
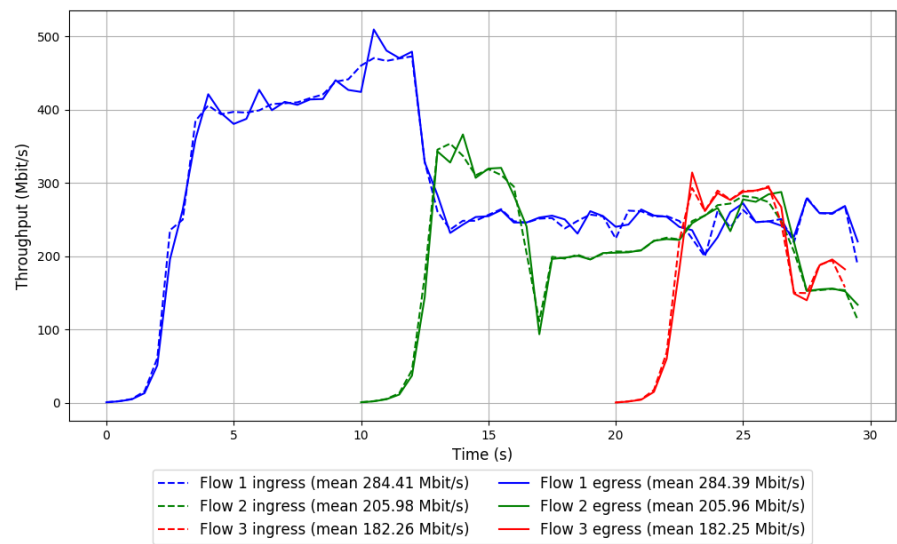


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-01 04:14:09
End at: 2018-02-01 04:14:39

# Below is generated by plot.py at 2018-02-01 09:55:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 478.22 Mbit/s
95th percentile per-packet one-way delay: 127.853 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 284.39 Mbit/s
95th percentile per-packet one-way delay: 118.975 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 205.96 Mbit/s
95th percentile per-packet one-way delay: 144.055 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 182.25 Mbit/s
95th percentile per-packet one-way delay: 63.502 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-01 04:30:41

End at: 2018-02-01 04:31:11

Below is generated by plot.py at 2018-02-01 09:55:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 418.19 Mbit/s

95th percentile per-packet one-way delay: 76.066 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 221.96 Mbit/s

95th percentile per-packet one-way delay: 147.468 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 214.05 Mbit/s

95th percentile per-packet one-way delay: 65.774 ms

Loss rate: 0.00%

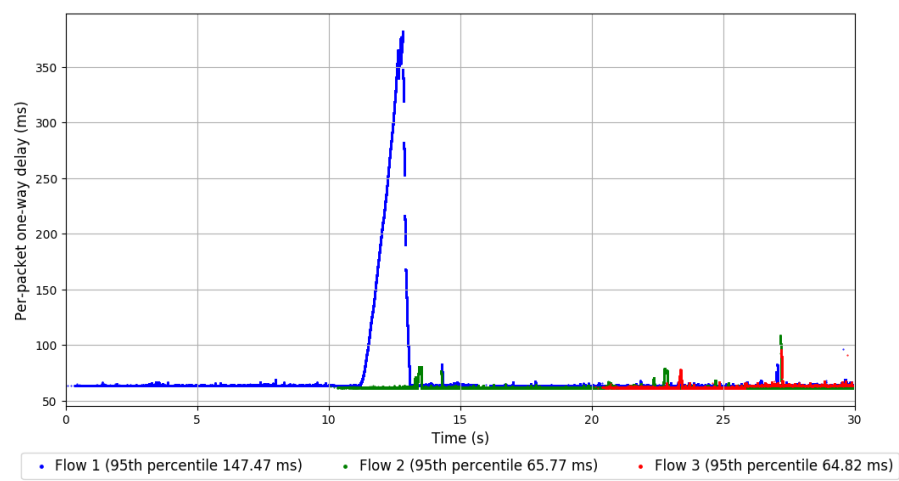
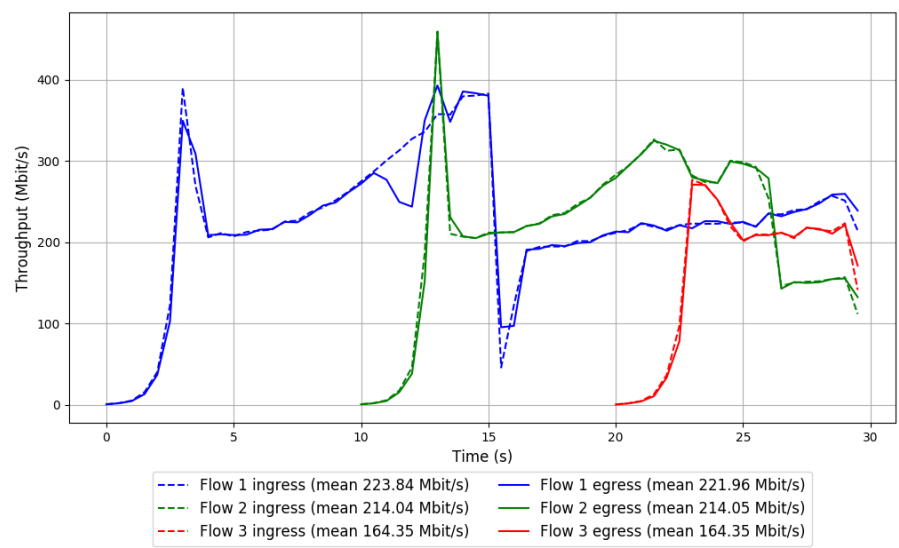
-- Flow 3:

Average throughput: 164.35 Mbit/s

95th percentile per-packet one-way delay: 64.823 ms

Loss rate: 0.00%

Run 2: Report of Vivace-loss — Data Link

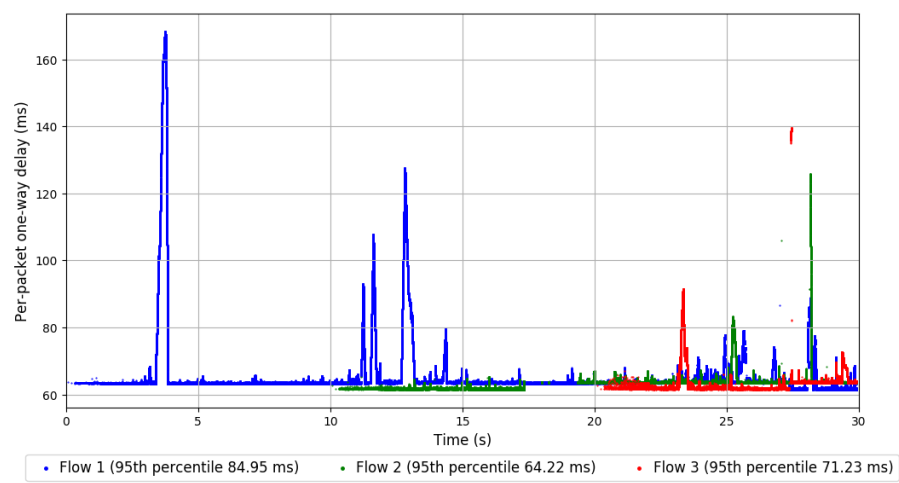
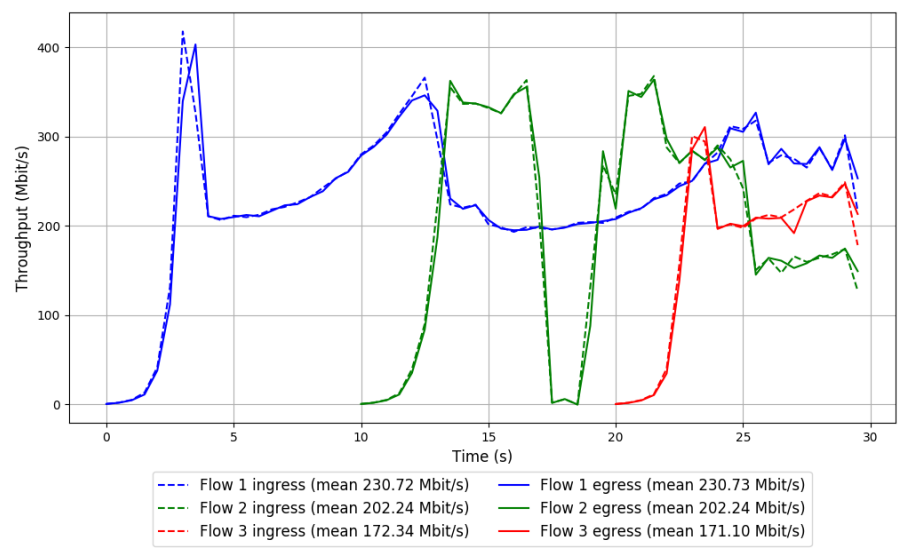


```
Run 3: Statistics of Vivace-loss

Start at: 2018-02-01 04:46:50
End at: 2018-02-01 04:47:20

# Below is generated by plot.py at 2018-02-01 09:56:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 421.45 Mbit/s
95th percentile per-packet one-way delay: 74.100 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 230.73 Mbit/s
95th percentile per-packet one-way delay: 84.955 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 202.24 Mbit/s
95th percentile per-packet one-way delay: 64.219 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 171.10 Mbit/s
95th percentile per-packet one-way delay: 71.228 ms
Loss rate: 0.71%
```


Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

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

End at: 2018-02-01 05:03:32

Below is generated by plot.py at 2018-02-01 09:59:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 422.74 Mbit/s

95th percentile per-packet one-way delay: 246.571 ms

Loss rate: 2.68%

-- Flow 1:

Average throughput: 220.76 Mbit/s

95th percentile per-packet one-way delay: 226.299 ms

Loss rate: 1.93%

-- Flow 2:

Average throughput: 230.42 Mbit/s

95th percentile per-packet one-way delay: 266.401 ms

Loss rate: 4.63%

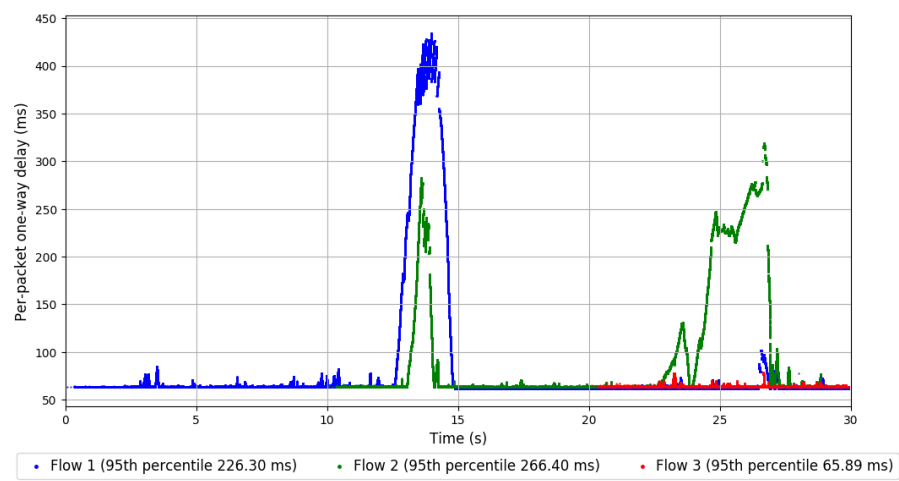
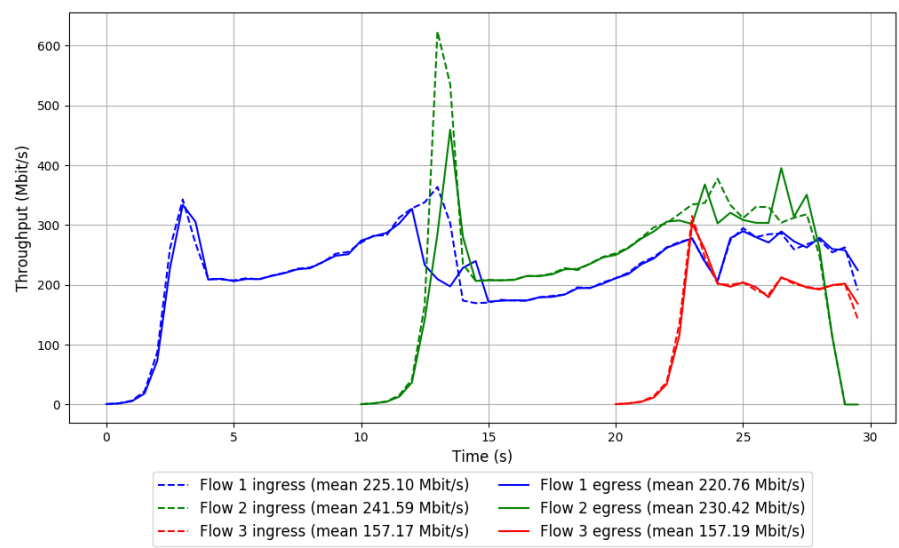
-- Flow 3:

Average throughput: 157.19 Mbit/s

95th percentile per-packet one-way delay: 65.888 ms

Loss rate: 0.00%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-01 05:19:26

End at: 2018-02-01 05:19:56

Below is generated by plot.py at 2018-02-01 09:59:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 409.73 Mbit/s

95th percentile per-packet one-way delay: 146.873 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 188.25 Mbit/s

95th percentile per-packet one-way delay: 107.020 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 250.36 Mbit/s

95th percentile per-packet one-way delay: 205.354 ms

Loss rate: 0.00%

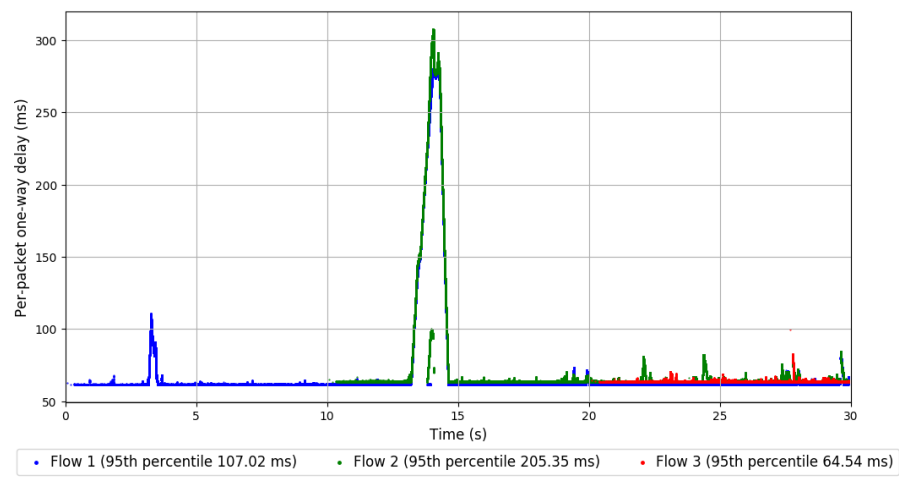
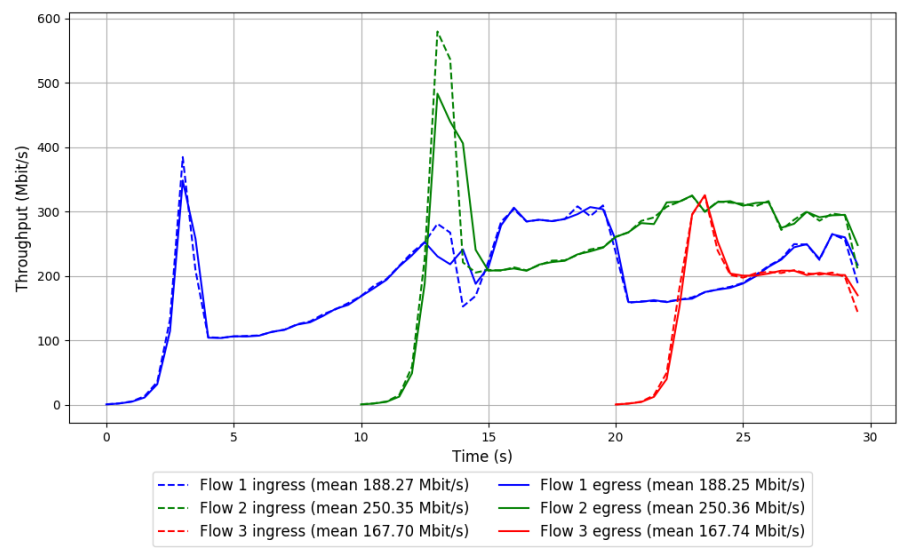
-- Flow 3:

Average throughput: 167.74 Mbit/s

95th percentile per-packet one-way delay: 64.539 ms

Loss rate: 0.00%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-01 05:35:56

End at: 2018-02-01 05:36:27

Below is generated by plot.py at 2018-02-01 09:59:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 448.40 Mbit/s

95th percentile per-packet one-way delay: 64.819 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 261.15 Mbit/s

95th percentile per-packet one-way delay: 66.194 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 203.01 Mbit/s

95th percentile per-packet one-way delay: 63.811 ms

Loss rate: 0.00%

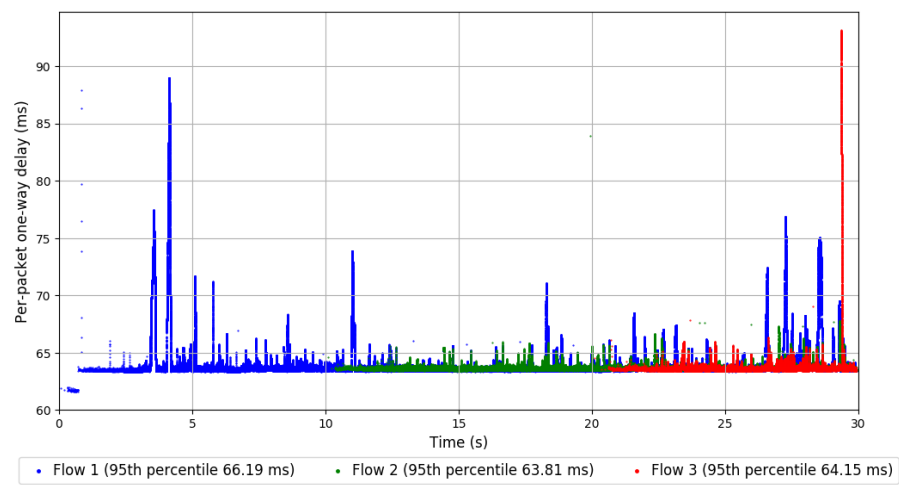
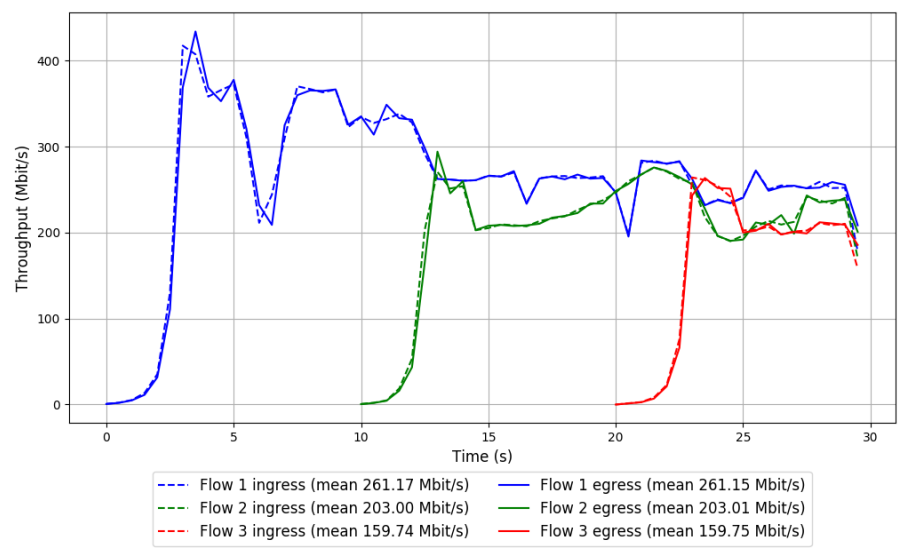
-- Flow 3:

Average throughput: 159.75 Mbit/s

95th percentile per-packet one-way delay: 64.149 ms

Loss rate: 0.00%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-01 05:52:47

End at: 2018-02-01 05:53:17

Below is generated by plot.py at 2018-02-01 10:02:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 468.28 Mbit/s

95th percentile per-packet one-way delay: 64.104 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 281.82 Mbit/s

95th percentile per-packet one-way delay: 64.827 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 202.28 Mbit/s

95th percentile per-packet one-way delay: 63.851 ms

Loss rate: 0.00%

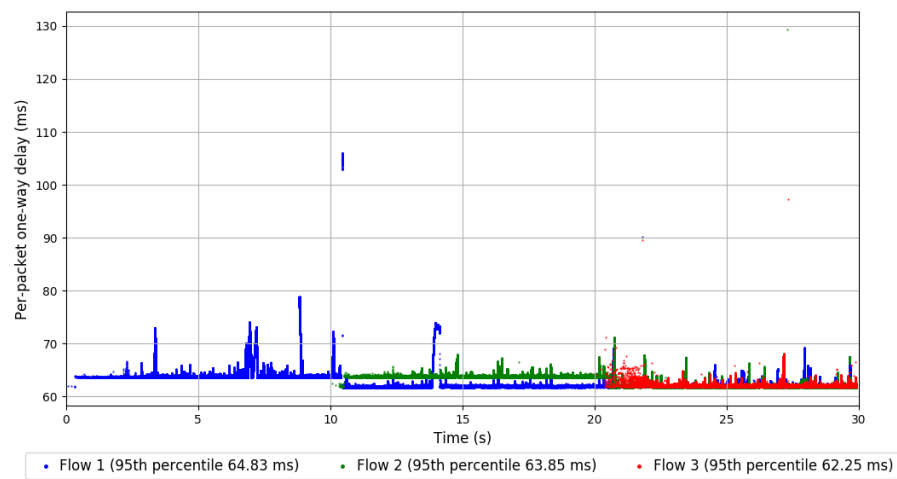
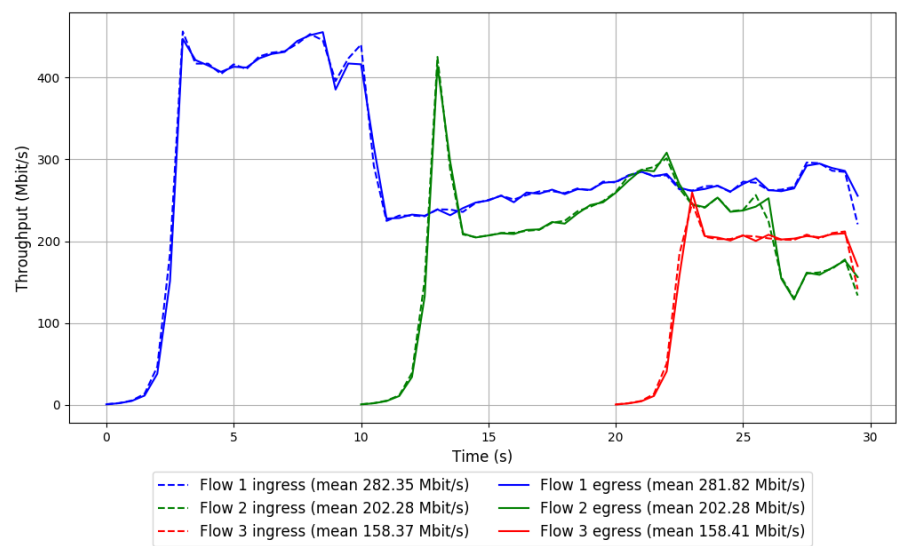
-- Flow 3:

Average throughput: 158.41 Mbit/s

95th percentile per-packet one-way delay: 62.250 ms

Loss rate: 0.00%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-01 06:09:35

End at: 2018-02-01 06:10:05

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 451.10 Mbit/s

95th percentile per-packet one-way delay: 64.674 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 219.45 Mbit/s

95th percentile per-packet one-way delay: 63.744 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 261.55 Mbit/s

95th percentile per-packet one-way delay: 65.310 ms

Loss rate: 0.00%

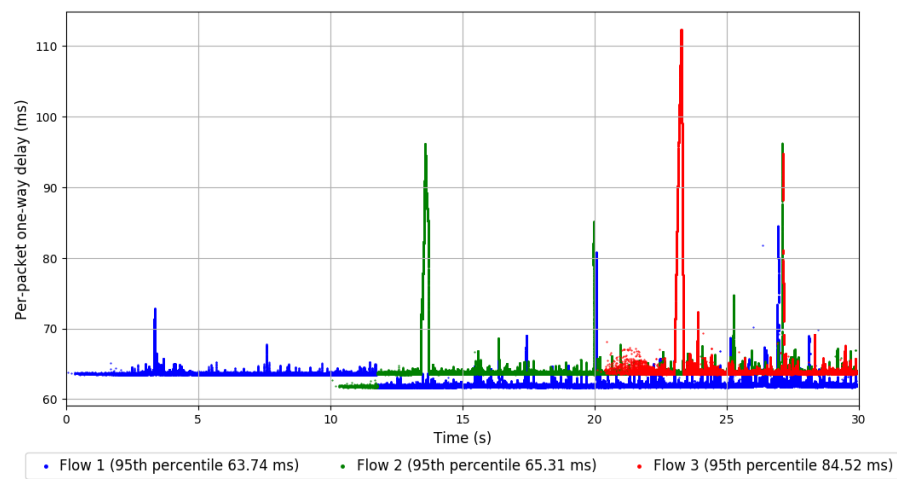
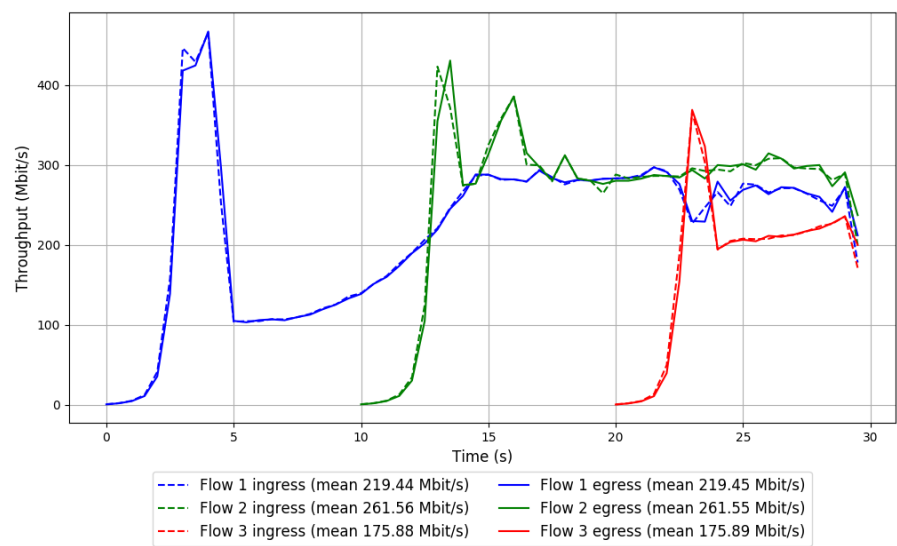
-- Flow 3:

Average throughput: 175.89 Mbit/s

95th percentile per-packet one-way delay: 84.523 ms

Loss rate: 0.00%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-01 06:26:17

End at: 2018-02-01 06:26:47

Below is generated by plot.py at 2018-02-01 10:03:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 438.50 Mbit/s

95th percentile per-packet one-way delay: 66.182 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 229.23 Mbit/s

95th percentile per-packet one-way delay: 64.711 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 211.82 Mbit/s

95th percentile per-packet one-way delay: 63.990 ms

Loss rate: 0.01%

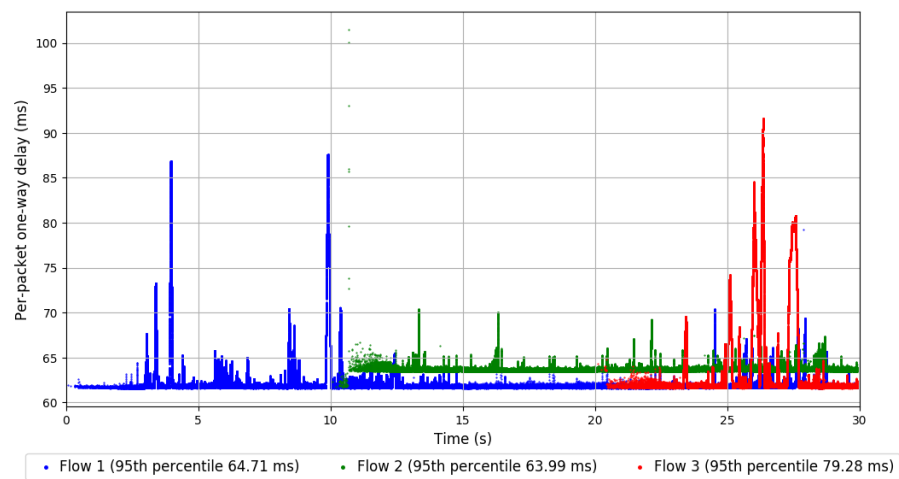
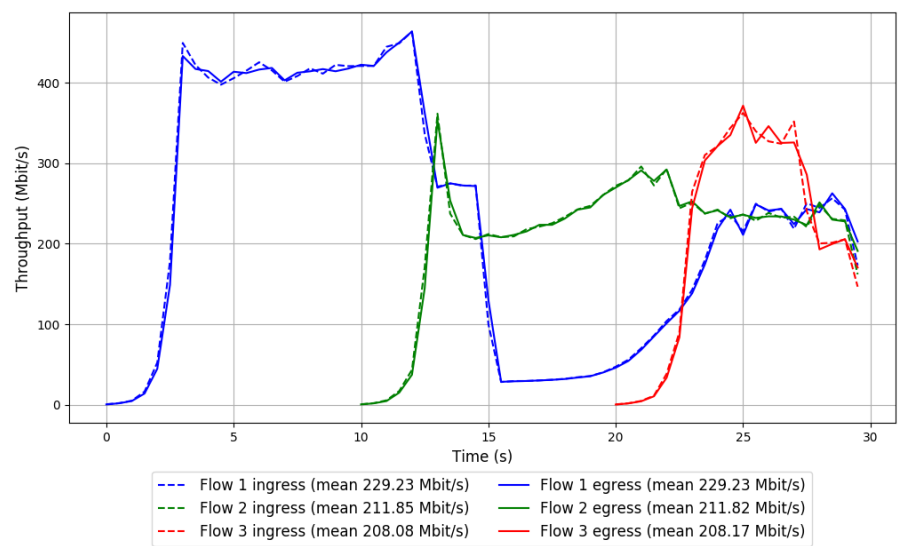
-- Flow 3:

Average throughput: 208.17 Mbit/s

95th percentile per-packet one-way delay: 79.284 ms

Loss rate: 0.00%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-01 06:43:01

End at: 2018-02-01 06:43:31

Below is generated by plot.py at 2018-02-01 10:04:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 415.20 Mbit/s

95th percentile per-packet one-way delay: 91.593 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 237.00 Mbit/s

95th percentile per-packet one-way delay: 115.271 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 187.14 Mbit/s

95th percentile per-packet one-way delay: 62.794 ms

Loss rate: 0.00%

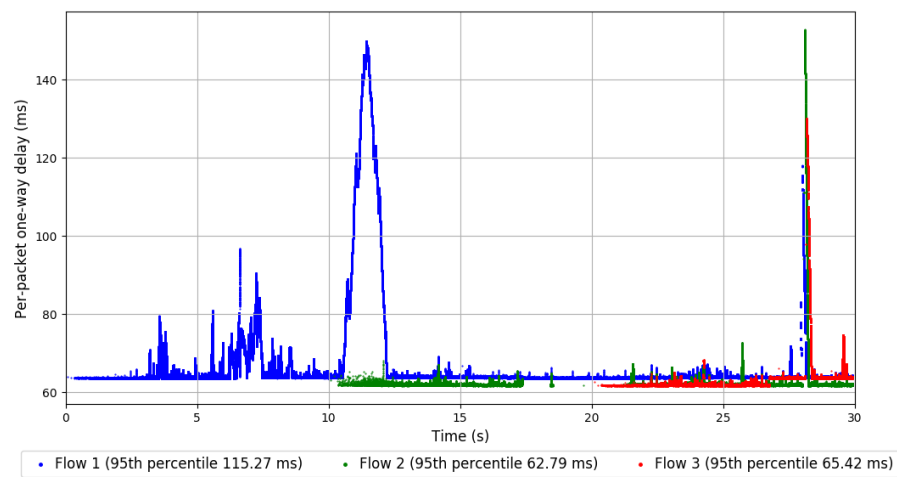
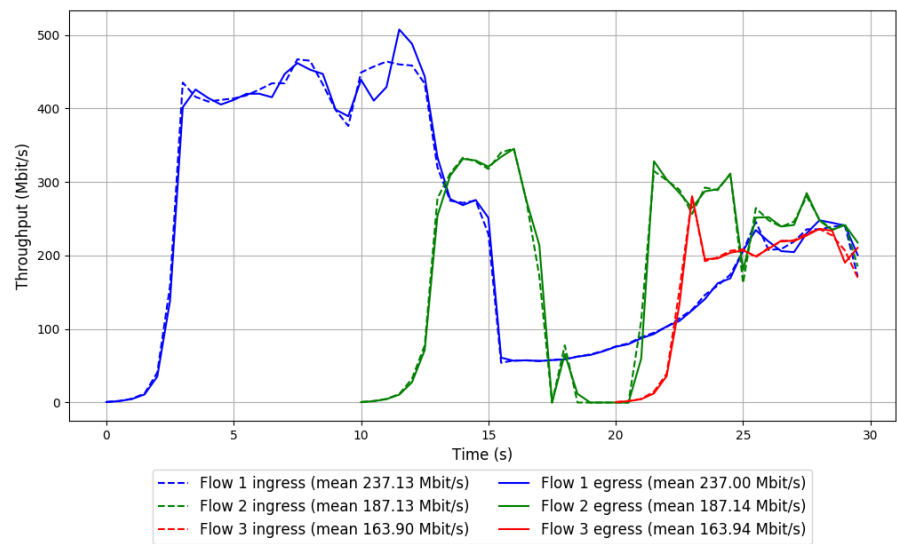
-- Flow 3:

Average throughput: 163.94 Mbit/s

95th percentile per-packet one-way delay: 65.415 ms

Loss rate: 0.00%

Run 10: Report of Vivace-loss — Data Link

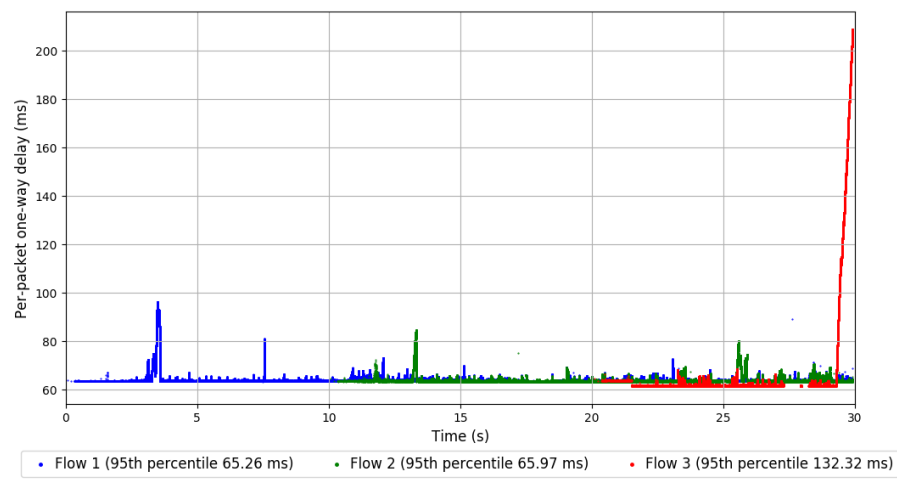
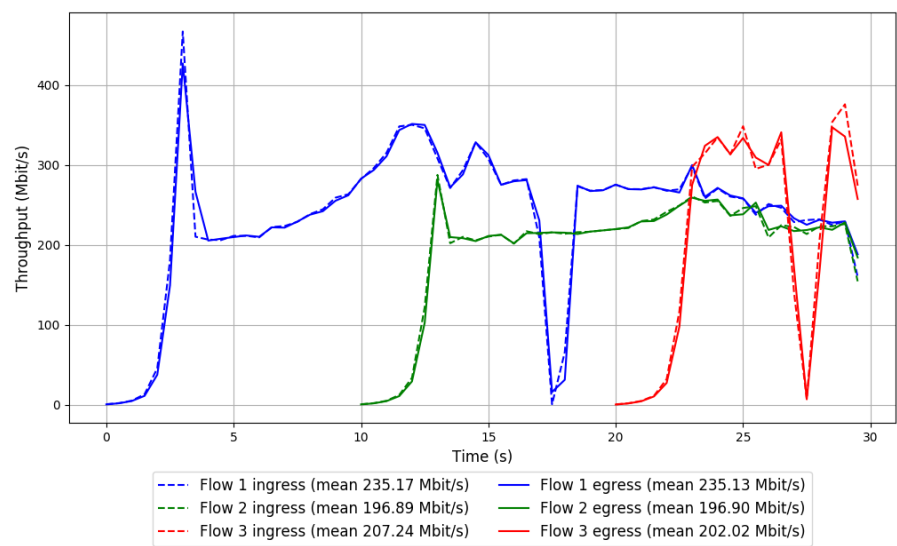


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-01 04:12:56
End at: 2018-02-01 04:13:26

# Below is generated by plot.py at 2018-02-01 10:05:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.30 Mbit/s
95th percentile per-packet one-way delay: 65.996 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 235.13 Mbit/s
95th percentile per-packet one-way delay: 65.258 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 196.90 Mbit/s
95th percentile per-packet one-way delay: 65.970 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 202.02 Mbit/s
95th percentile per-packet one-way delay: 132.321 ms
Loss rate: 2.52%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-01 04:29:25

End at: 2018-02-01 04:29:55

Below is generated by plot.py at 2018-02-01 10:08:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 459.52 Mbit/s

95th percentile per-packet one-way delay: 87.729 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 272.11 Mbit/s

95th percentile per-packet one-way delay: 94.897 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 202.34 Mbit/s

95th percentile per-packet one-way delay: 62.159 ms

Loss rate: 0.00%

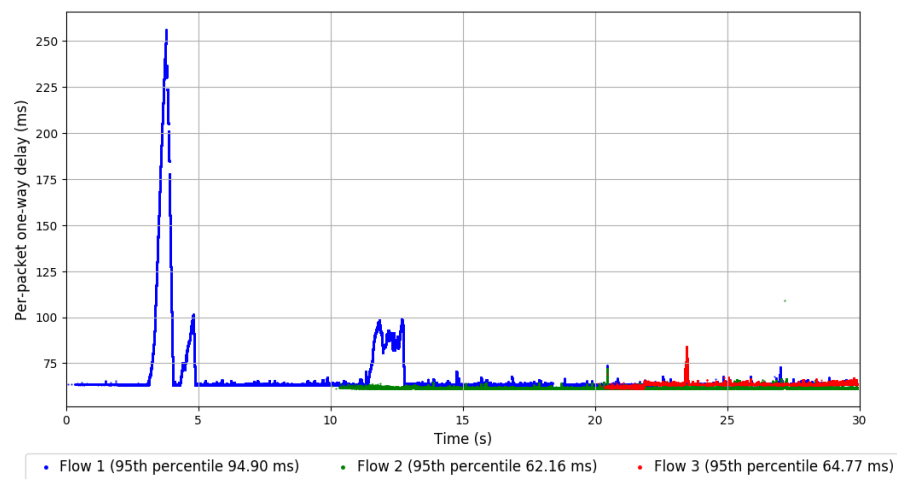
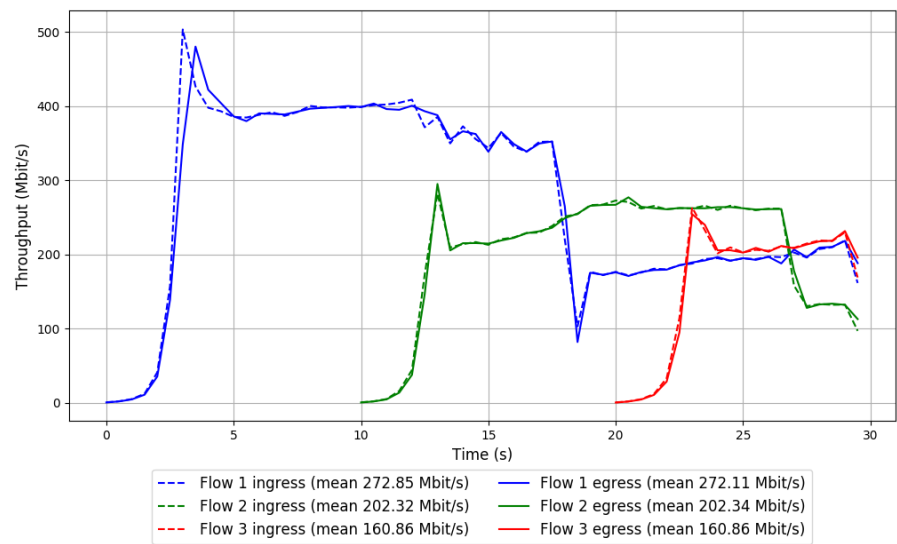
-- Flow 3:

Average throughput: 160.86 Mbit/s

95th percentile per-packet one-way delay: 64.774 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-01 04:45:38

End at: 2018-02-01 04:46:08

Below is generated by plot.py at 2018-02-01 10:08:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 420.71 Mbit/s

95th percentile per-packet one-way delay: 133.835 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 235.38 Mbit/s

95th percentile per-packet one-way delay: 109.921 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 200.21 Mbit/s

95th percentile per-packet one-way delay: 221.267 ms

Loss rate: 0.07%

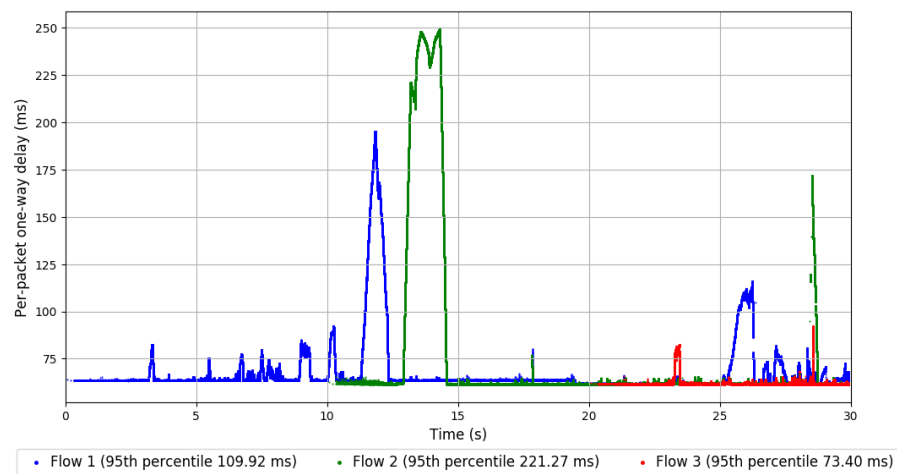
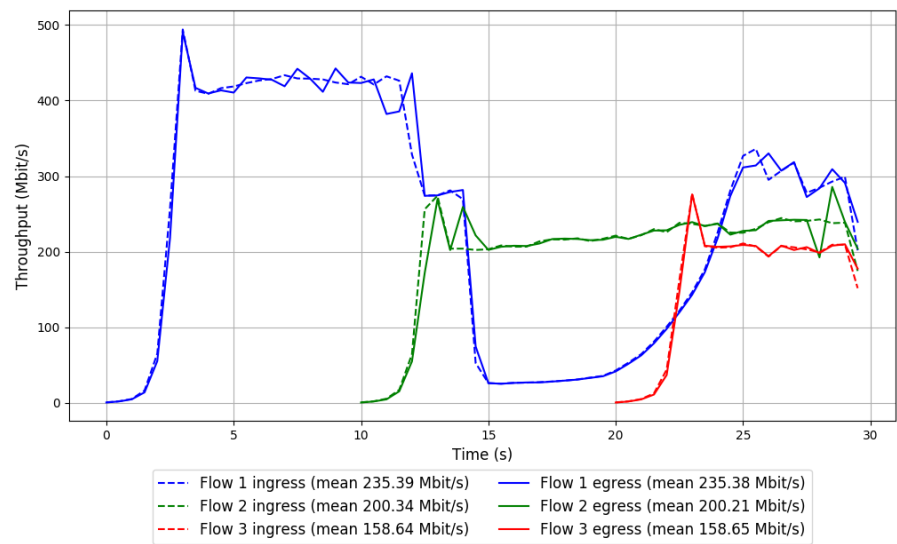
-- Flow 3:

Average throughput: 158.65 Mbit/s

95th percentile per-packet one-way delay: 73.403 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-01 05:01:51

End at: 2018-02-01 05:02:21

Below is generated by plot.py at 2018-02-01 10:08:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 402.70 Mbit/s

95th percentile per-packet one-way delay: 80.723 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 231.08 Mbit/s

95th percentile per-packet one-way delay: 97.241 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 191.95 Mbit/s

95th percentile per-packet one-way delay: 73.700 ms

Loss rate: 0.01%

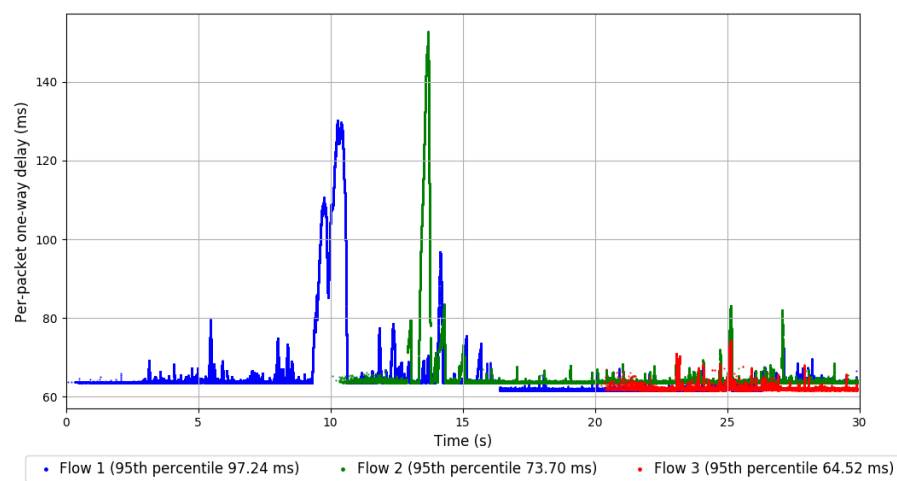
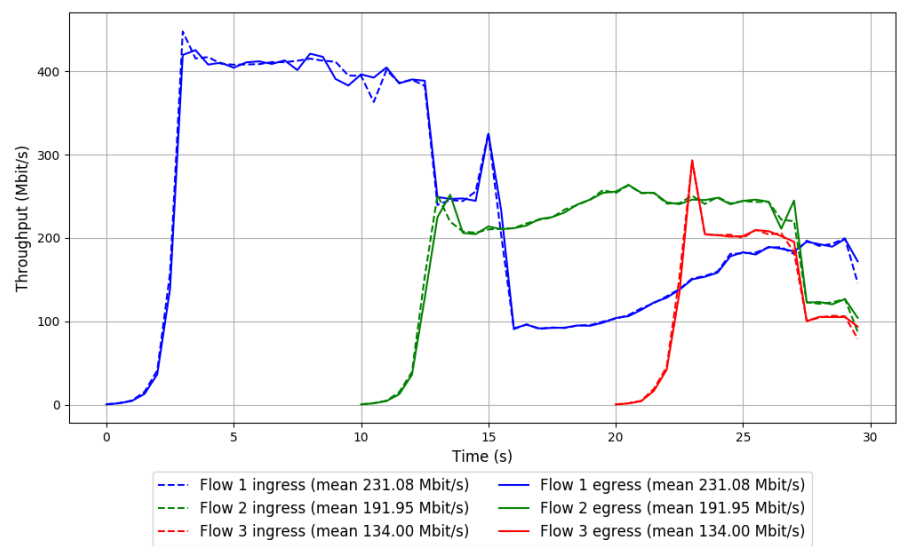
-- Flow 3:

Average throughput: 134.00 Mbit/s

95th percentile per-packet one-way delay: 64.522 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-01 05:18:15

End at: 2018-02-01 05:18:46

Below is generated by plot.py at 2018-02-01 10:09:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 387.04 Mbit/s

95th percentile per-packet one-way delay: 76.840 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 194.35 Mbit/s

95th percentile per-packet one-way delay: 74.733 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 205.64 Mbit/s

95th percentile per-packet one-way delay: 119.210 ms

Loss rate: 0.00%

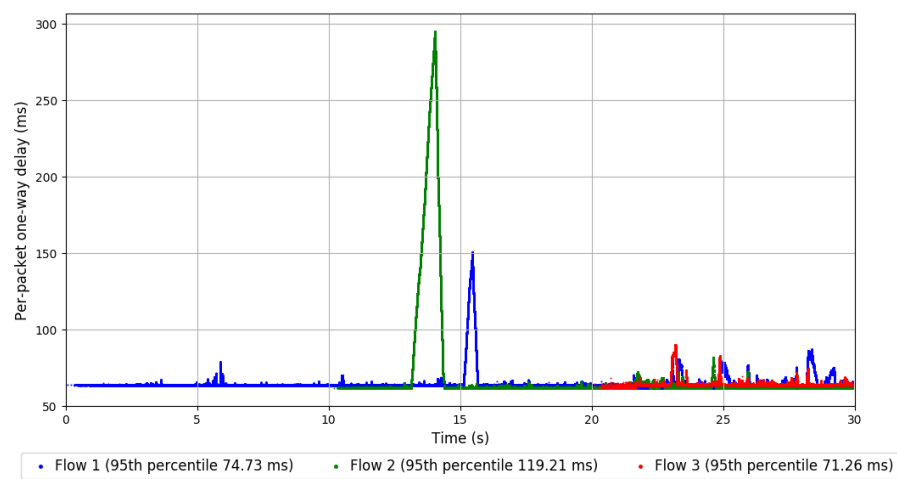
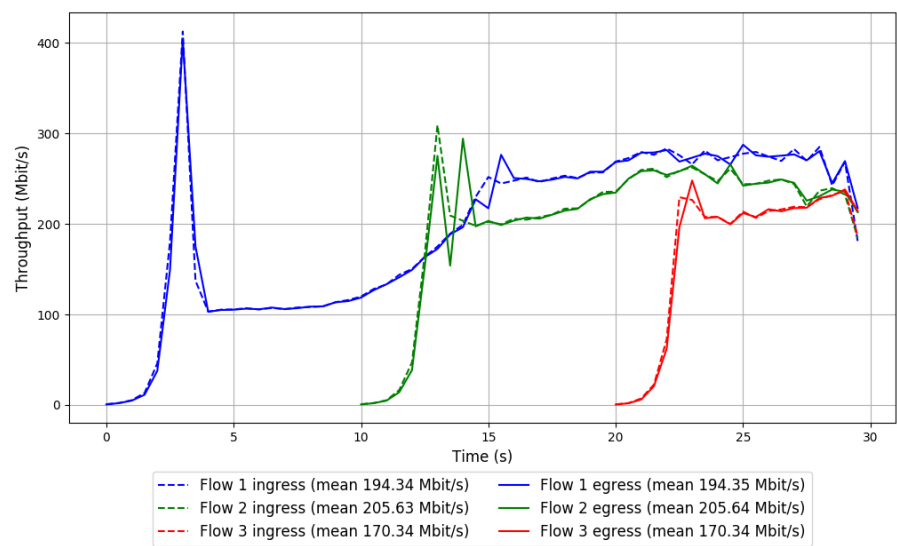
-- Flow 3:

Average throughput: 170.34 Mbit/s

95th percentile per-packet one-way delay: 71.257 ms

Loss rate: 0.00%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-01 05:34:39

End at: 2018-02-01 05:35:09

Below is generated by plot.py at 2018-02-01 10:11:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 481.93 Mbit/s

95th percentile per-packet one-way delay: 68.353 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 287.28 Mbit/s

95th percentile per-packet one-way delay: 70.185 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 206.83 Mbit/s

95th percentile per-packet one-way delay: 65.434 ms

Loss rate: 0.00%

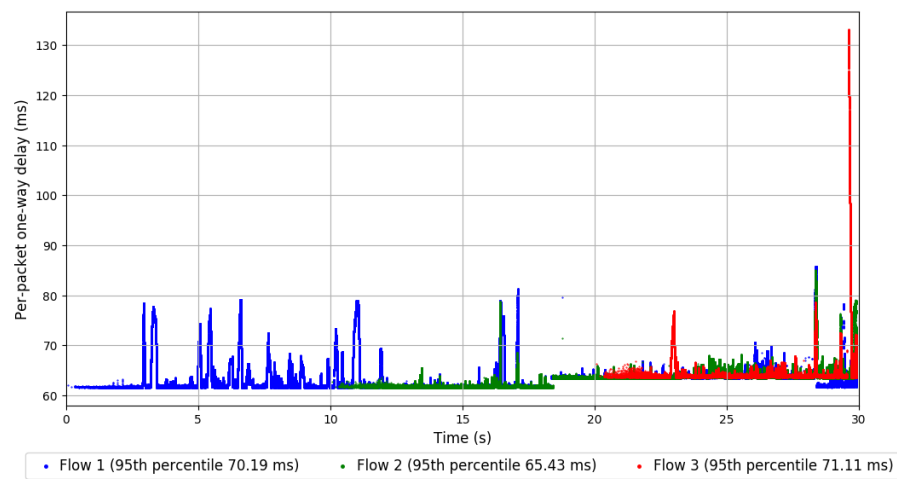
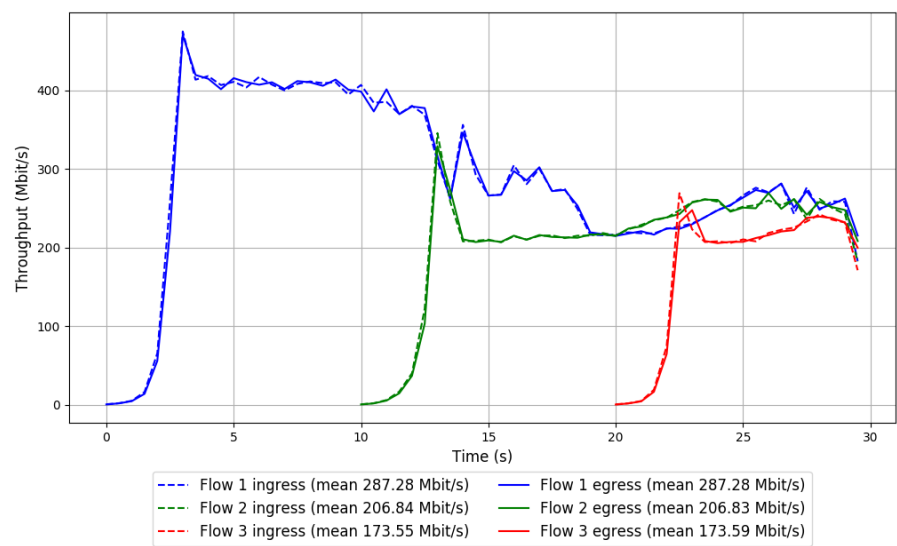
-- Flow 3:

Average throughput: 173.59 Mbit/s

95th percentile per-packet one-way delay: 71.113 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-01 05:51:33

End at: 2018-02-01 05:52:03

Below is generated by plot.py at 2018-02-01 10:11:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 419.86 Mbit/s

95th percentile per-packet one-way delay: 65.050 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 216.57 Mbit/s

95th percentile per-packet one-way delay: 64.073 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 225.68 Mbit/s

95th percentile per-packet one-way delay: 65.242 ms

Loss rate: 0.00%

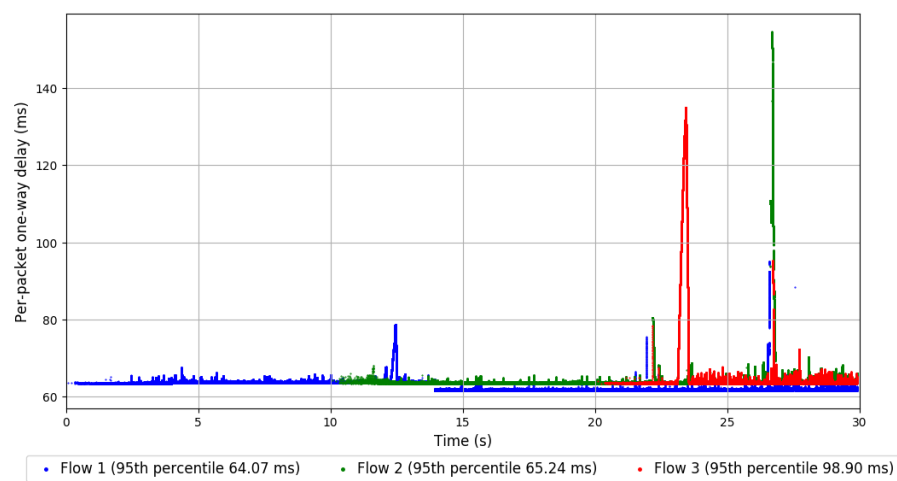
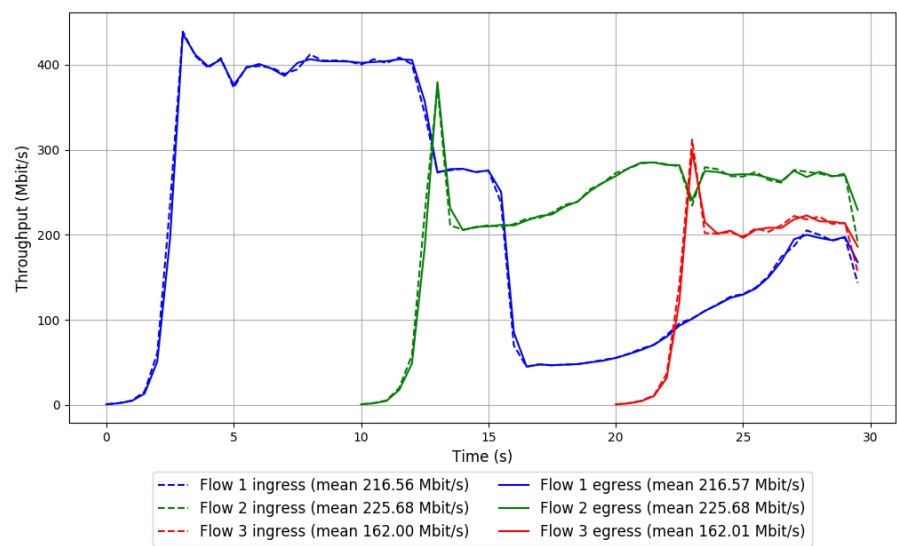
-- Flow 3:

Average throughput: 162.01 Mbit/s

95th percentile per-packet one-way delay: 98.896 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-01 06:08:21

End at: 2018-02-01 06:08:51

Below is generated by plot.py at 2018-02-01 10:11:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 442.29 Mbit/s

95th percentile per-packet one-way delay: 66.437 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 238.36 Mbit/s

95th percentile per-packet one-way delay: 65.646 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 222.50 Mbit/s

95th percentile per-packet one-way delay: 67.628 ms

Loss rate: 0.00%

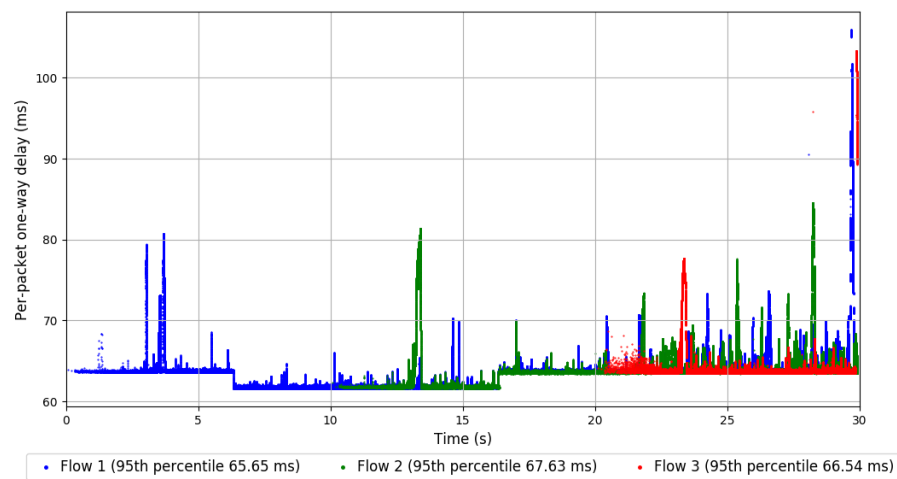
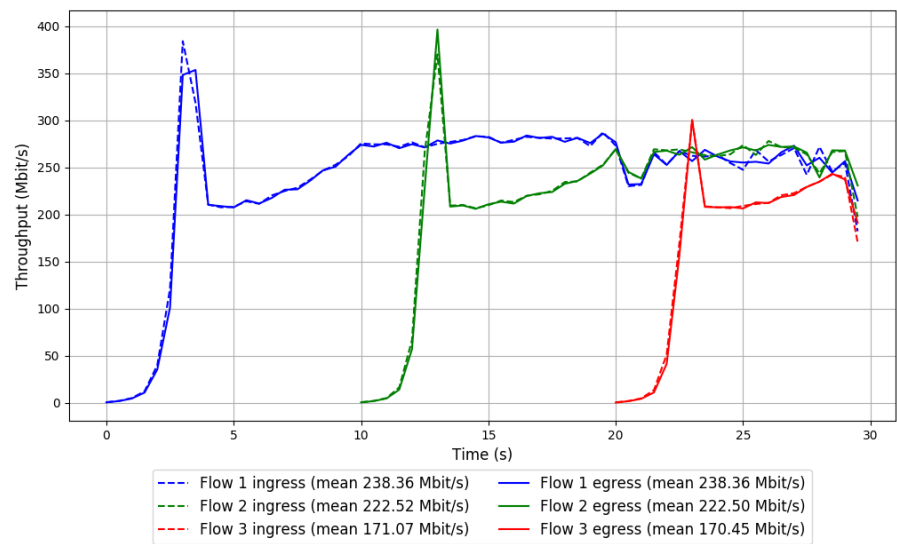
-- Flow 3:

Average throughput: 170.45 Mbit/s

95th percentile per-packet one-way delay: 66.539 ms

Loss rate: 0.34%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-01 06:25:03

End at: 2018-02-01 06:25:33

Below is generated by plot.py at 2018-02-01 10:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 429.05 Mbit/s

95th percentile per-packet one-way delay: 65.041 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 234.60 Mbit/s

95th percentile per-packet one-way delay: 65.174 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 214.71 Mbit/s

95th percentile per-packet one-way delay: 63.983 ms

Loss rate: 0.00%

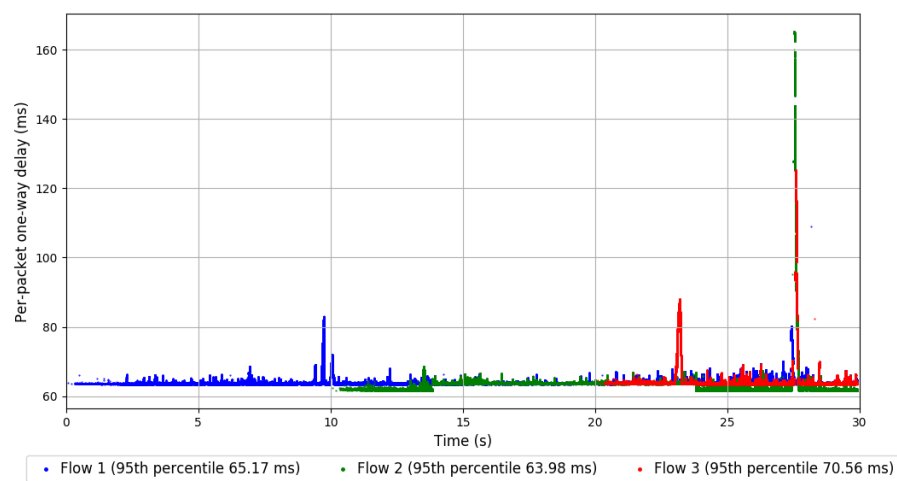
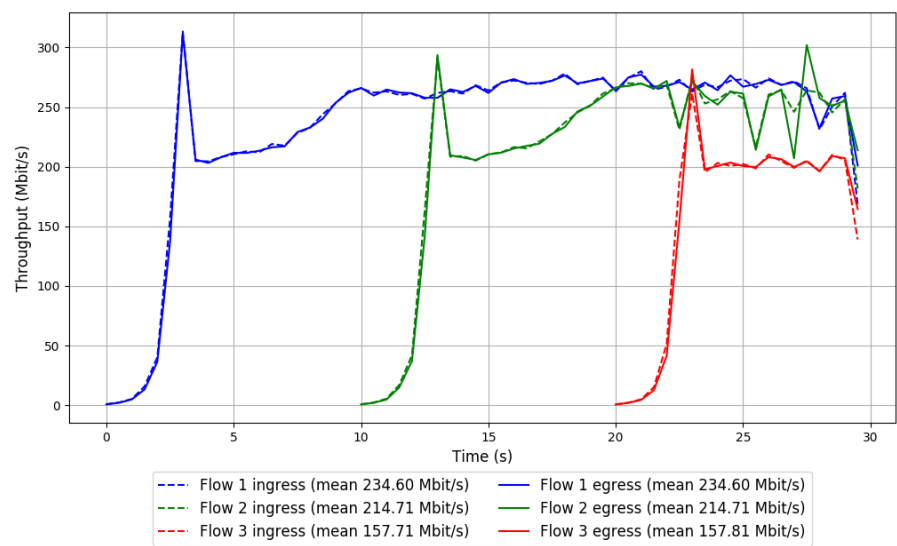
-- Flow 3:

Average throughput: 157.81 Mbit/s

95th percentile per-packet one-way delay: 70.556 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-01 06:41:46
End at: 2018-02-01 06:42:16

# Below is generated by plot.py at 2018-02-01 10:11:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 461.31 Mbit/s
95th percentile per-packet one-way delay: 76.996 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 280.55 Mbit/s
95th percentile per-packet one-way delay: 87.568 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 191.27 Mbit/s
95th percentile per-packet one-way delay: 64.002 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 163.11 Mbit/s
95th percentile per-packet one-way delay: 62.463 ms
Loss rate: 0.00%
```

Run 10: Report of Vivace-LTE — Data Link

