

Pantheon Report

Generated at 2018-01-03 12:41:34 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

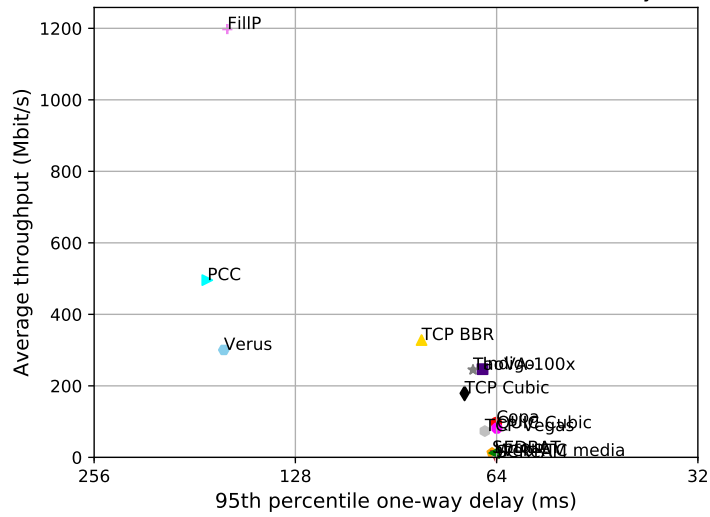
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

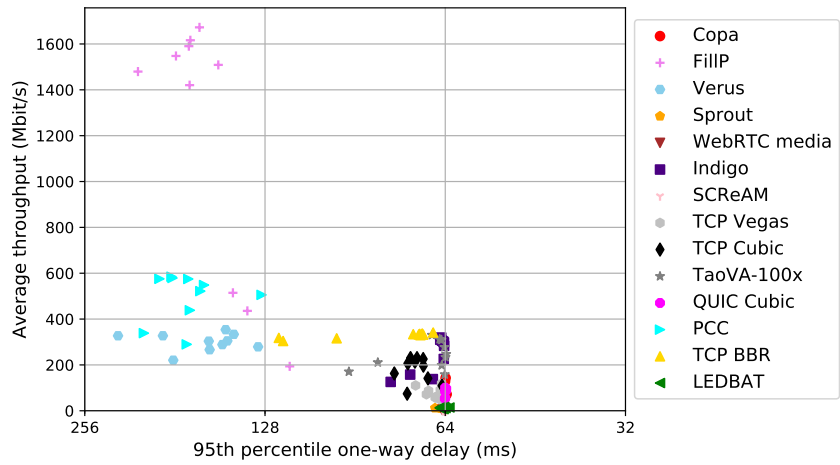
Git summary:

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

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



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



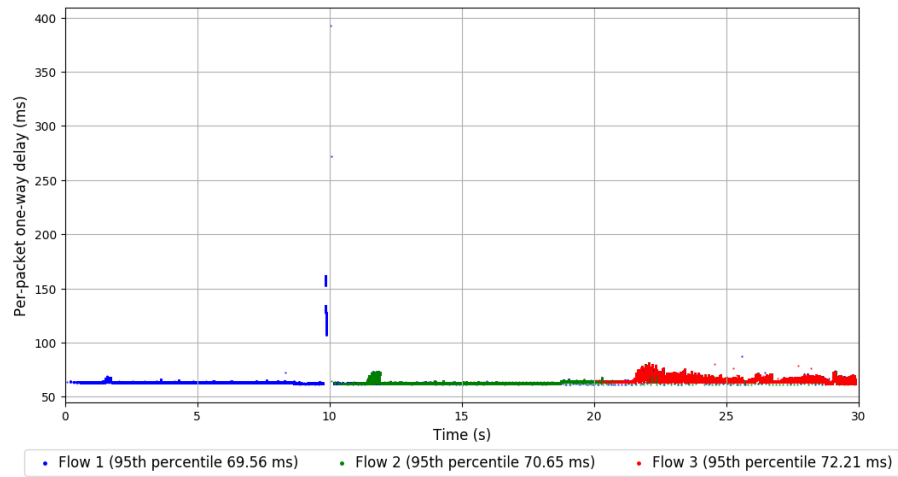
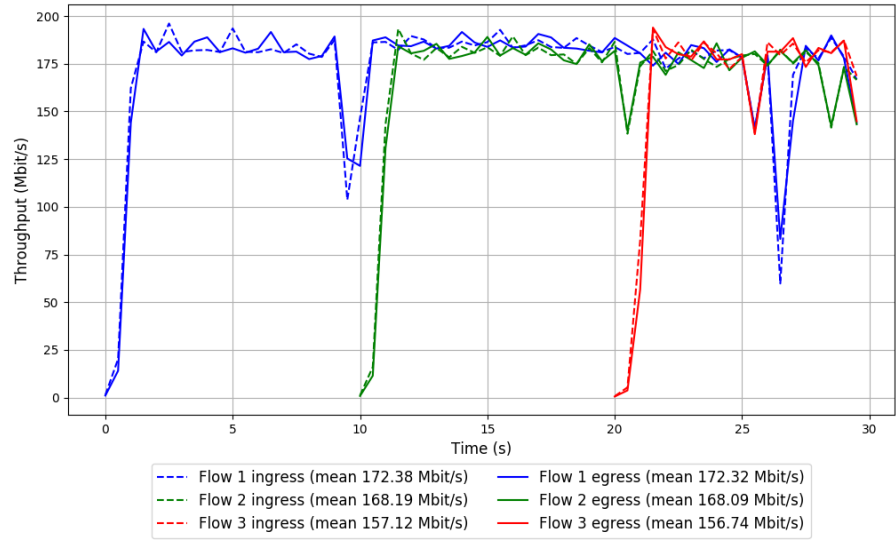
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	169.03	165.93	149.12	78.80	83.82	88.29	0.52	0.72	1.63
TCP Cubic	10	90.19	104.64	60.89	251.35	71.58	72.54	0.61	0.83	2.82
LEDBAT	10	6.04	6.74	4.98	64.58	64.38	64.37	1.46	1.67	2.83
PCC	10	426.06	80.12	51.02	170.97	173.78	171.11	1.71	1.84	3.25
QUIC Cubic	8	39.73	43.90	37.75	64.04	63.67	80.14	0.40	0.59	1.08
SCReAM	10	0.22	0.22	0.22	64.03	63.89	63.59	0.39	0.65	1.15
WebRTC media	10	2.07	1.34	0.52	64.18	63.61	64.16	0.63	0.58	2.03
Sprout	10	6.40	6.19	5.81	64.96	64.98	65.04	0.96	1.44	1.92
TaoVA-100x	10	126.42	128.10	130.11	67.15	70.41	75.19	0.42	0.72	1.88
TCP Vegas	10	34.88	35.18	46.31	65.63	65.88	66.84	0.96	1.01	1.60
Verus	10	174.27	149.36	89.39	153.79	174.92	154.06	0.85	1.23	2.25
Copa	7	43.93	59.22	46.52	918.79	64.08	64.05	0.32	0.54	2.10
FillP	10	636.40	534.13	631.96	153.91	160.70	164.77	4.36	6.21	9.82
Indigo	10	130.27	123.05	107.38	66.00	66.81	73.98	0.43	0.62	1.33

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-03 06:43:57
End at: 2018-01-03 06:44:27

# Below is generated by plot.py at 2018-01-03 11:29:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 335.57 Mbit/s
95th percentile per-packet one-way delay: 70.612 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 172.32 Mbit/s
95th percentile per-packet one-way delay: 69.562 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 168.09 Mbit/s
95th percentile per-packet one-way delay: 70.654 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 156.74 Mbit/s
95th percentile per-packet one-way delay: 72.212 ms
Loss rate: 1.52%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-03 06:58:02

End at: 2018-01-03 06:58:32

Below is generated by plot.py at 2018-01-03 11:29:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 341.37 Mbit/s

95th percentile per-packet one-way delay: 67.041 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 173.82 Mbit/s

95th percentile per-packet one-way delay: 66.762 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 172.22 Mbit/s

95th percentile per-packet one-way delay: 66.940 ms

Loss rate: 0.78%

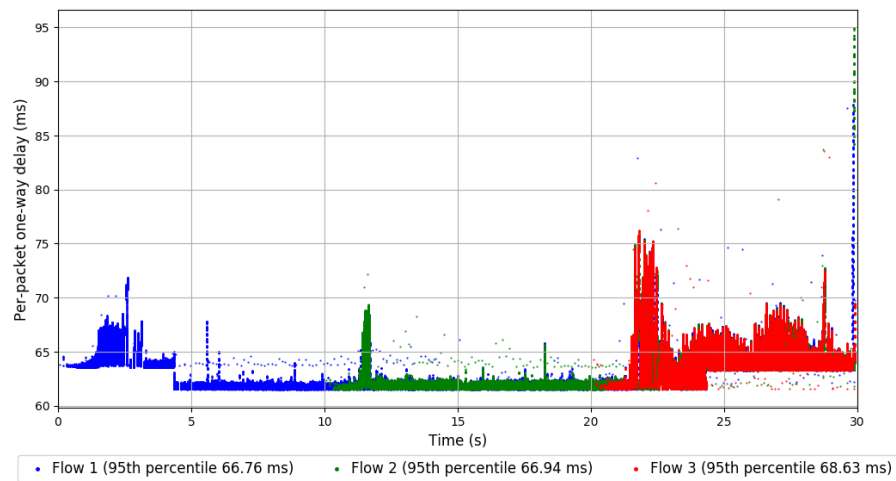
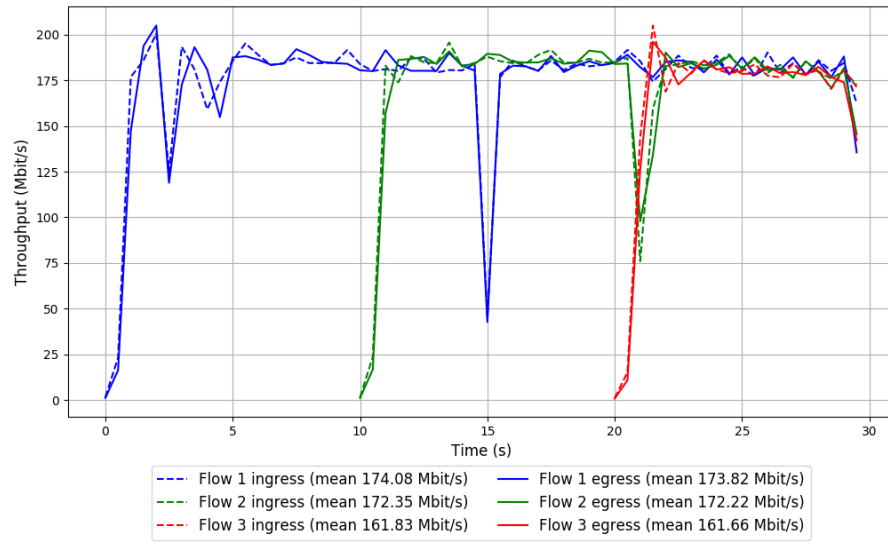
-- Flow 3:

Average throughput: 161.66 Mbit/s

95th percentile per-packet one-way delay: 68.630 ms

Loss rate: 1.66%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-03 07:11:54

End at: 2018-01-03 07:12:24

Below is generated by plot.py at 2018-01-03 11:29:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 332.33 Mbit/s

95th percentile per-packet one-way delay: 69.653 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 169.71 Mbit/s

95th percentile per-packet one-way delay: 68.412 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 165.48 Mbit/s

95th percentile per-packet one-way delay: 70.090 ms

Loss rate: 0.68%

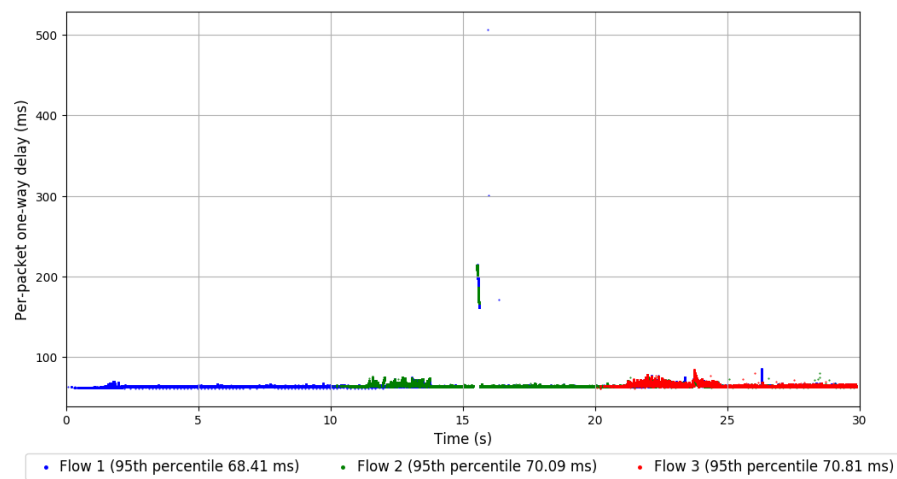
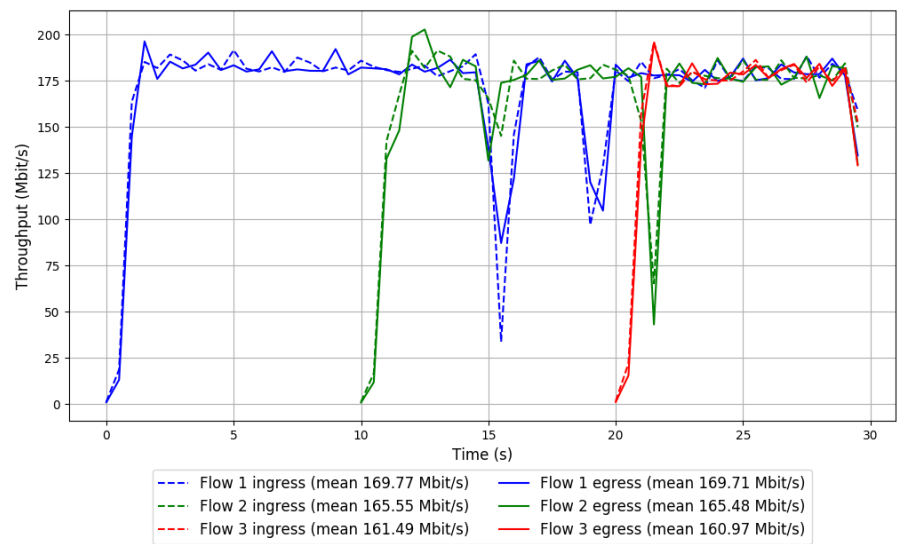
-- Flow 3:

Average throughput: 160.97 Mbit/s

95th percentile per-packet one-way delay: 70.807 ms

Loss rate: 1.48%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-03 07:24:38

End at: 2018-01-03 07:25:08

Below is generated by plot.py at 2018-01-03 11:29:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.32 Mbit/s

95th percentile per-packet one-way delay: 119.391 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 164.13 Mbit/s

95th percentile per-packet one-way delay: 107.183 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 150.56 Mbit/s

95th percentile per-packet one-way delay: 124.830 ms

Loss rate: 0.88%

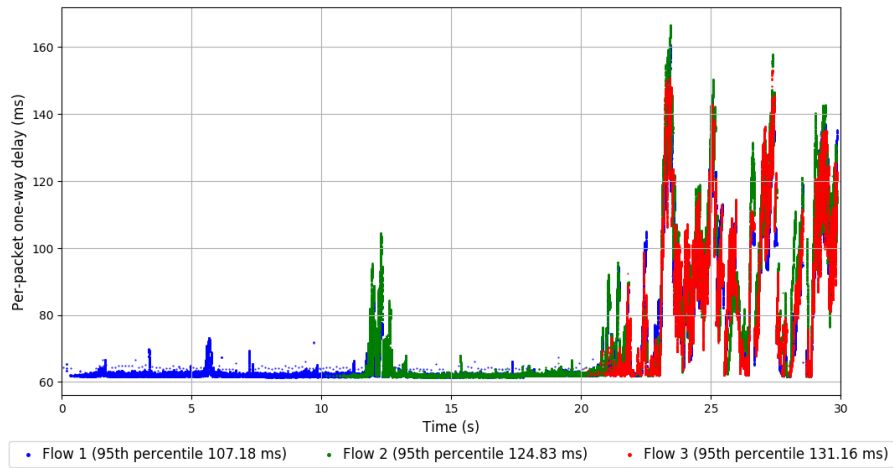
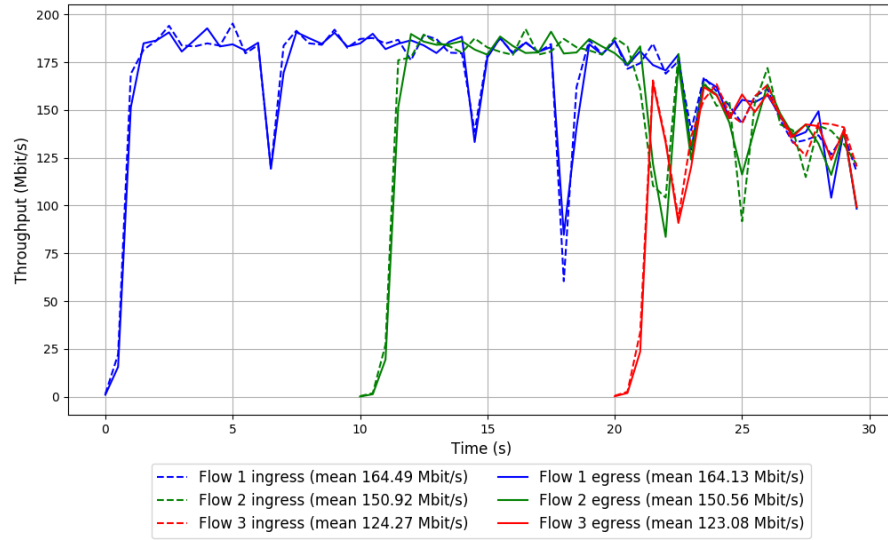
-- Flow 3:

Average throughput: 123.08 Mbit/s

95th percentile per-packet one-way delay: 131.160 ms

Loss rate: 2.22%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-03 07:36:52

End at: 2018-01-03 07:37:22

Below is generated by plot.py at 2018-01-03 11:29:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.12 Mbit/s

95th percentile per-packet one-way delay: 97.174 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 165.22 Mbit/s

95th percentile per-packet one-way delay: 94.211 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 160.13 Mbit/s

95th percentile per-packet one-way delay: 97.991 ms

Loss rate: 0.74%

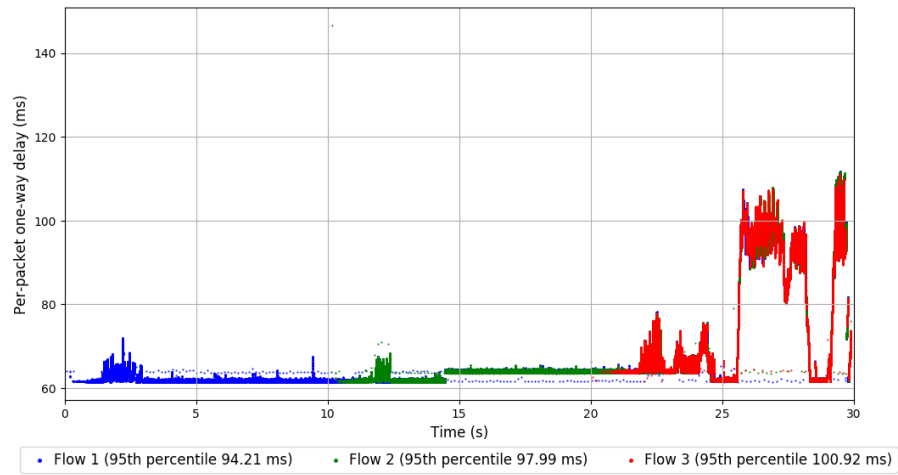
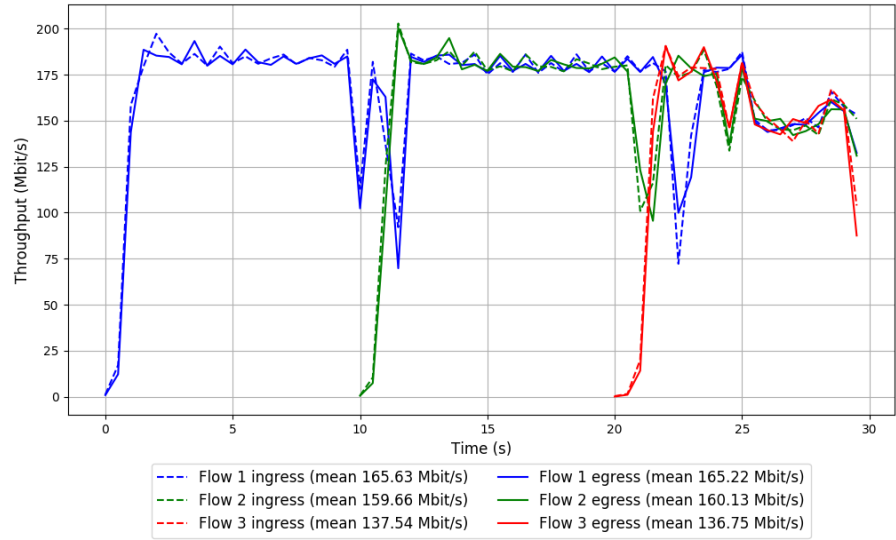
-- Flow 3:

Average throughput: 136.75 Mbit/s

95th percentile per-packet one-way delay: 100.916 ms

Loss rate: 1.66%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-03 07:50:41

End at: 2018-01-03 07:51:11

Below is generated by plot.py at 2018-01-03 11:29:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 329.66 Mbit/s

95th percentile per-packet one-way delay: 70.405 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 171.37 Mbit/s

95th percentile per-packet one-way delay: 68.976 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 166.63 Mbit/s

95th percentile per-packet one-way delay: 70.664 ms

Loss rate: 0.67%

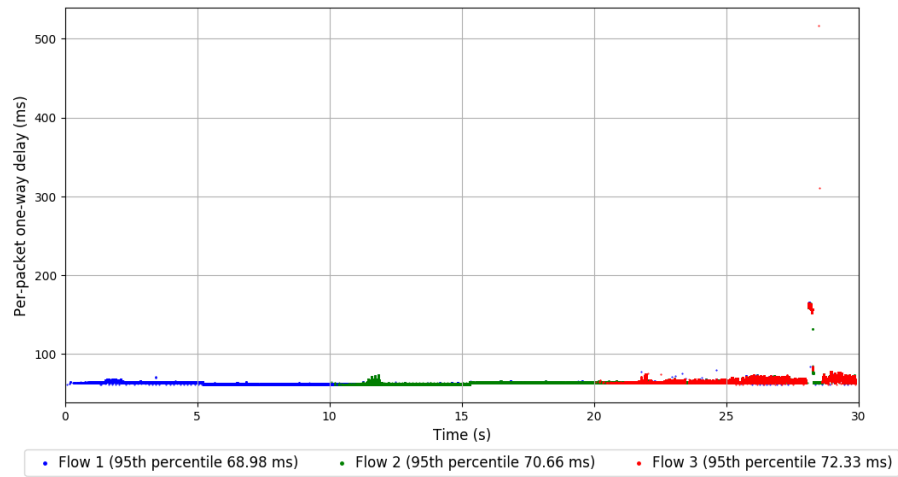
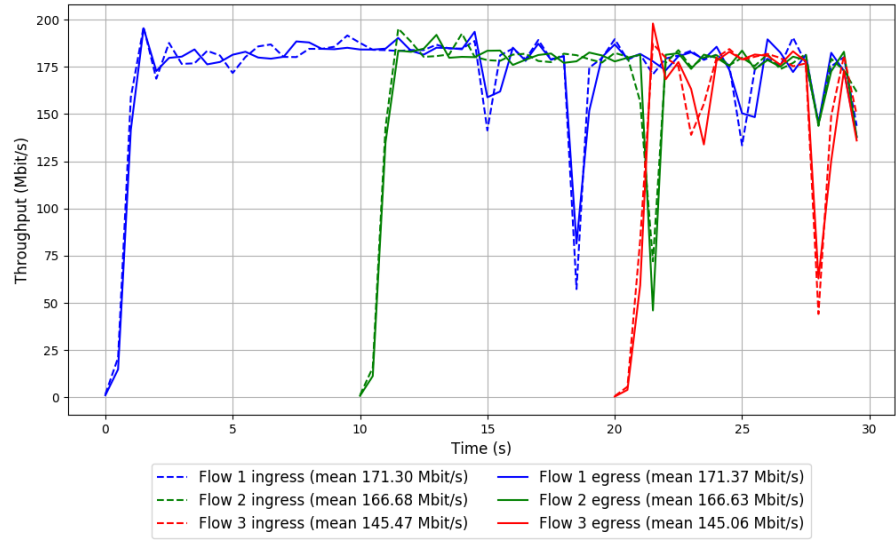
-- Flow 3:

Average throughput: 145.06 Mbit/s

95th percentile per-packet one-way delay: 72.326 ms

Loss rate: 1.57%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-03 08:04:29

End at: 2018-01-03 08:04:59

Below is generated by plot.py at 2018-01-03 11:29:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 334.10 Mbit/s

95th percentile per-packet one-way delay: 72.382 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 169.75 Mbit/s

95th percentile per-packet one-way delay: 71.153 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 170.57 Mbit/s

95th percentile per-packet one-way delay: 72.779 ms

Loss rate: 0.70%

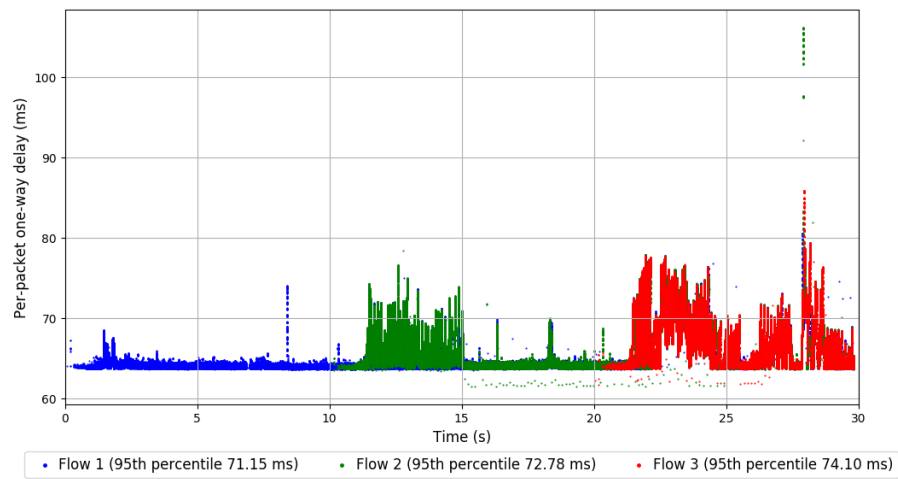
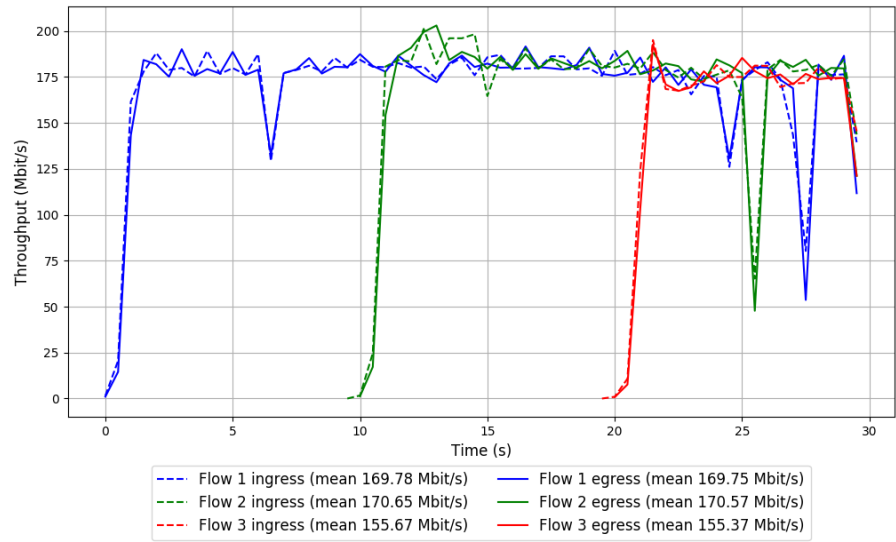
-- Flow 3:

Average throughput: 155.37 Mbit/s

95th percentile per-packet one-way delay: 74.097 ms

Loss rate: 1.52%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-03 08:18:47

End at: 2018-01-03 08:19:17

Below is generated by plot.py at 2018-01-03 11:29:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 333.03 Mbit/s

95th percentile per-packet one-way delay: 70.862 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 169.19 Mbit/s

95th percentile per-packet one-way delay: 69.776 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 170.24 Mbit/s

95th percentile per-packet one-way delay: 71.105 ms

Loss rate: 0.69%

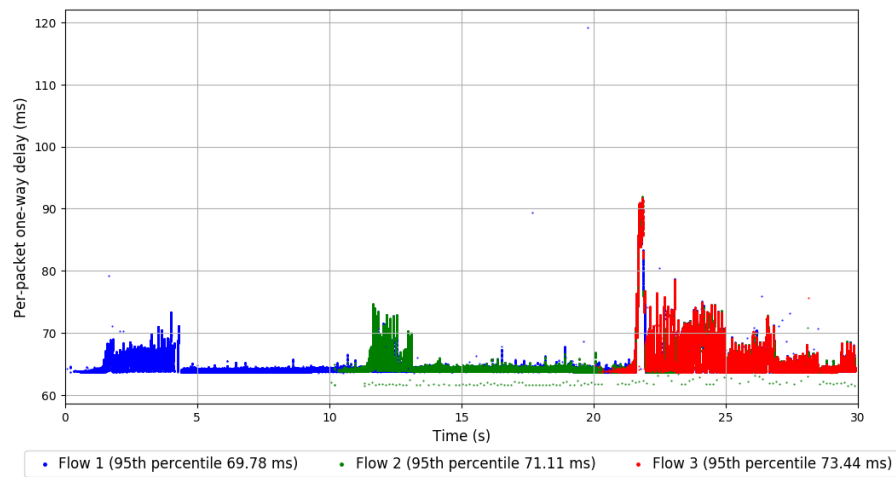
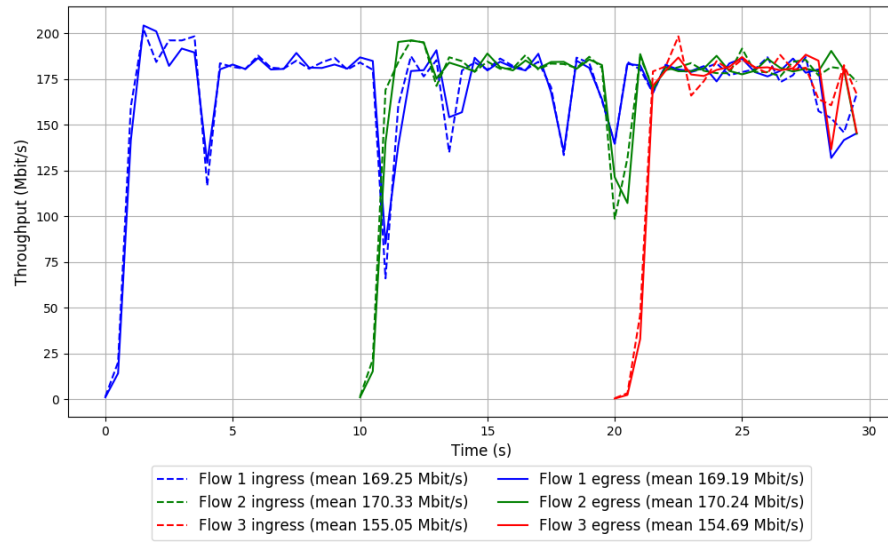
-- Flow 3:

Average throughput: 154.69 Mbit/s

95th percentile per-packet one-way delay: 73.435 ms

Loss rate: 1.52%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-03 08:33:15

End at: 2018-01-03 08:33:45

Below is generated by plot.py at 2018-01-03 11:34:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.11 Mbit/s

95th percentile per-packet one-way delay: 69.935 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 168.02 Mbit/s

95th percentile per-packet one-way delay: 68.731 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 174.20 Mbit/s

95th percentile per-packet one-way delay: 71.073 ms

Loss rate: 0.66%

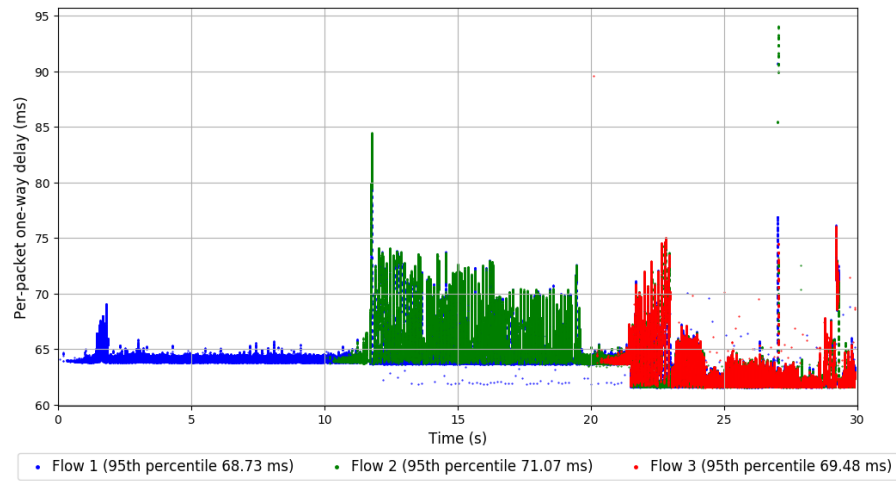
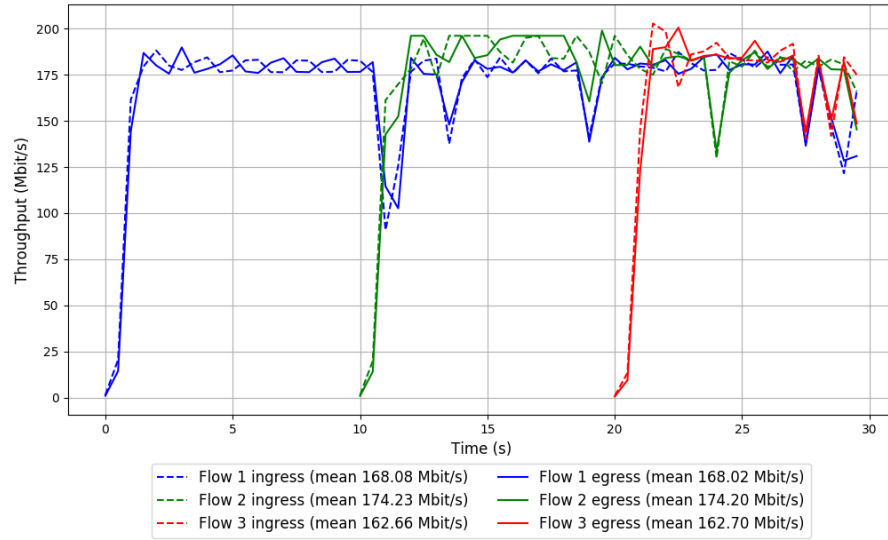
-- Flow 3:

Average throughput: 162.70 Mbit/s

95th percentile per-packet one-way delay: 69.480 ms

Loss rate: 1.46%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-03 08:47:28

End at: 2018-01-03 08:47:58

Below is generated by plot.py at 2018-01-03 11:34:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.94 Mbit/s

95th percentile per-packet one-way delay: 121.392 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 166.74 Mbit/s

95th percentile per-packet one-way delay: 103.207 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 161.22 Mbit/s

95th percentile per-packet one-way delay: 122.032 ms

Loss rate: 0.72%

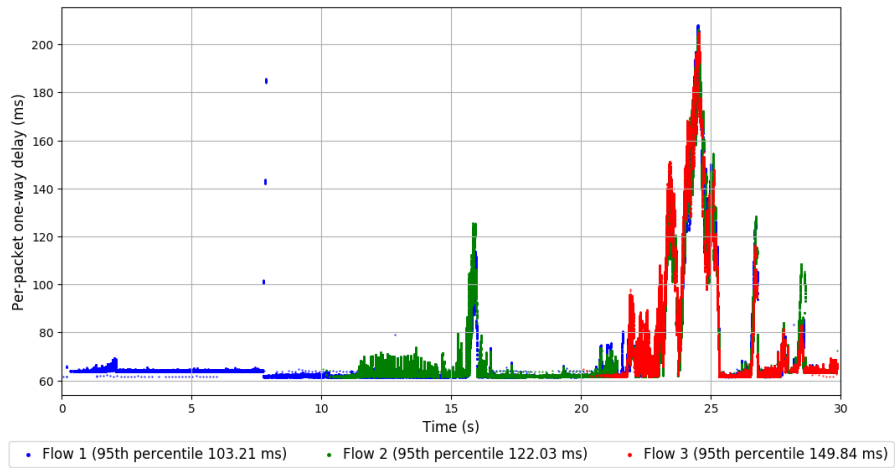
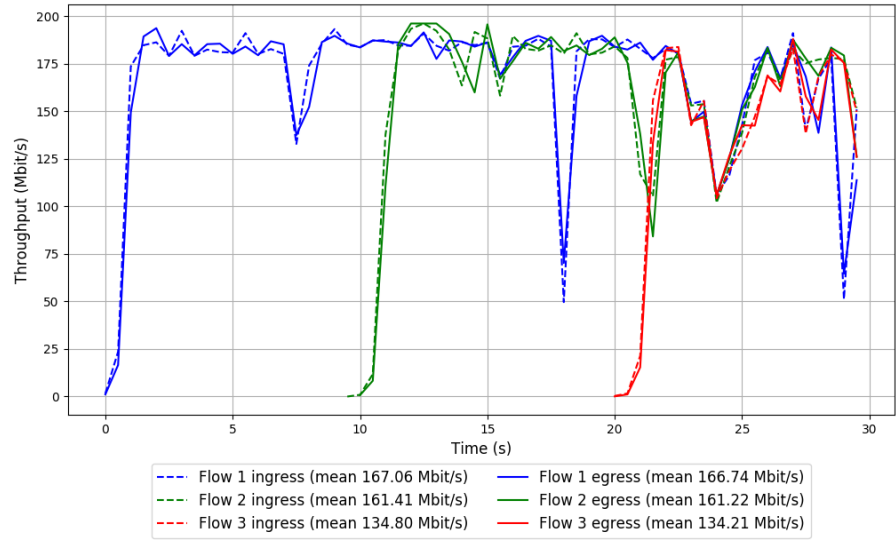
-- Flow 3:

Average throughput: 134.21 Mbit/s

95th percentile per-packet one-way delay: 149.835 ms

Loss rate: 1.72%

Run 10: Report of TCP BBR — Data Link

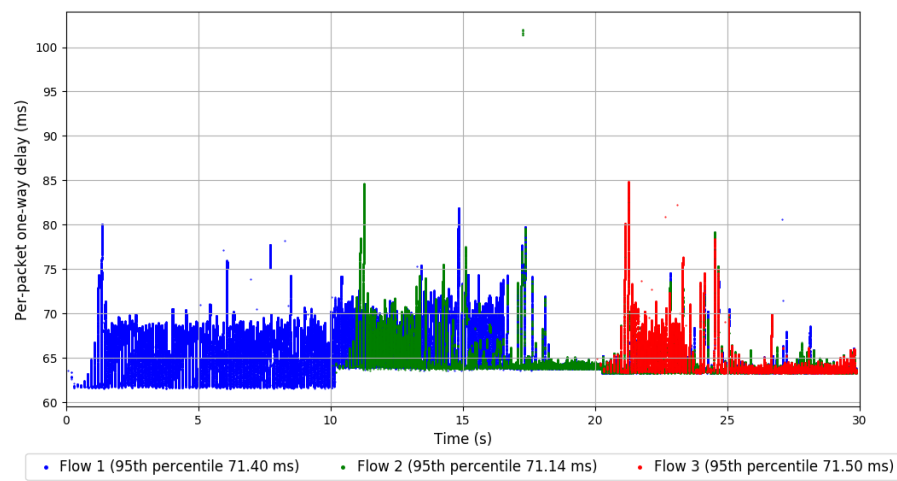
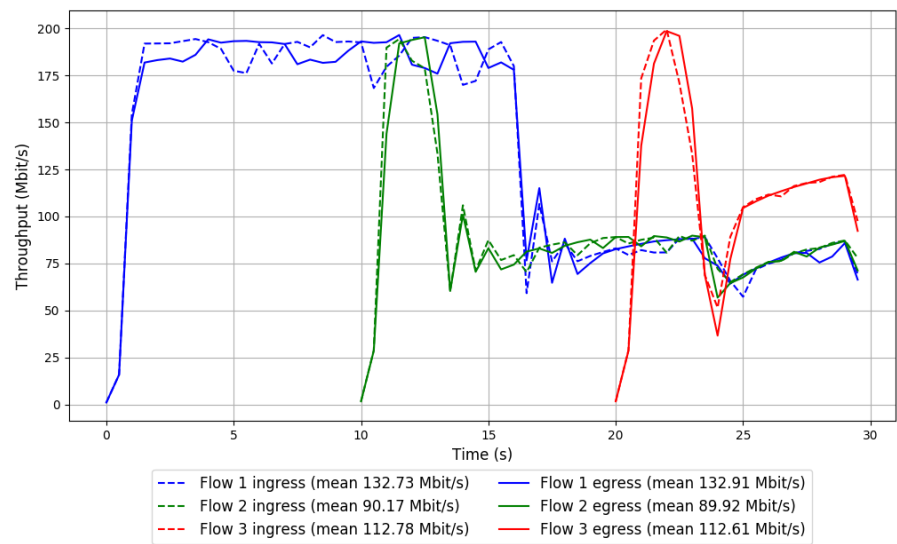


```
Run 1: Statistics of TCP Cubic

Start at: 2018-01-03 06:49:36
End at: 2018-01-03 06:50:06

# Below is generated by plot.py at 2018-01-03 11:34:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 229.66 Mbit/s
95th percentile per-packet one-way delay: 71.341 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 132.91 Mbit/s
95th percentile per-packet one-way delay: 71.399 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 89.92 Mbit/s
95th percentile per-packet one-way delay: 71.144 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 112.61 Mbit/s
95th percentile per-packet one-way delay: 71.500 ms
Loss rate: 1.42%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-03 07:03:36

End at: 2018-01-03 07:04:06

Below is generated by plot.py at 2018-01-03 11:34:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 225.73 Mbit/s

95th percentile per-packet one-way delay: 69.662 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 122.11 Mbit/s

95th percentile per-packet one-way delay: 70.195 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 119.33 Mbit/s

95th percentile per-packet one-way delay: 68.141 ms

Loss rate: 0.76%

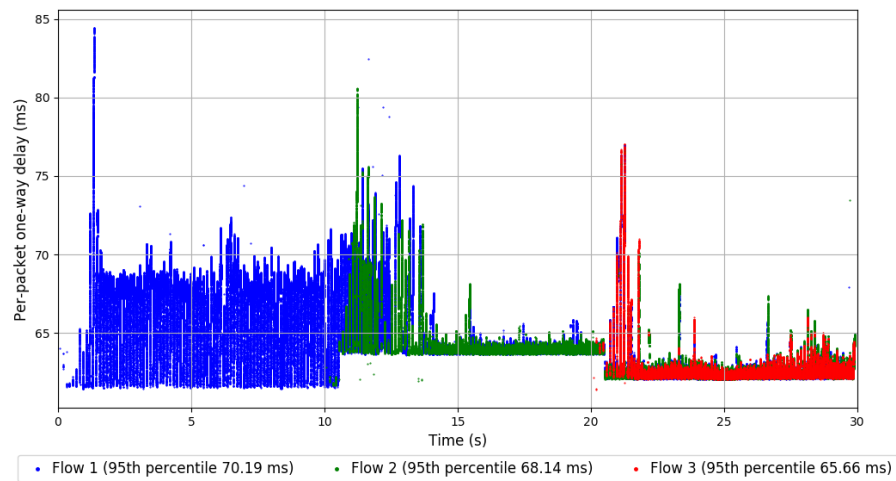
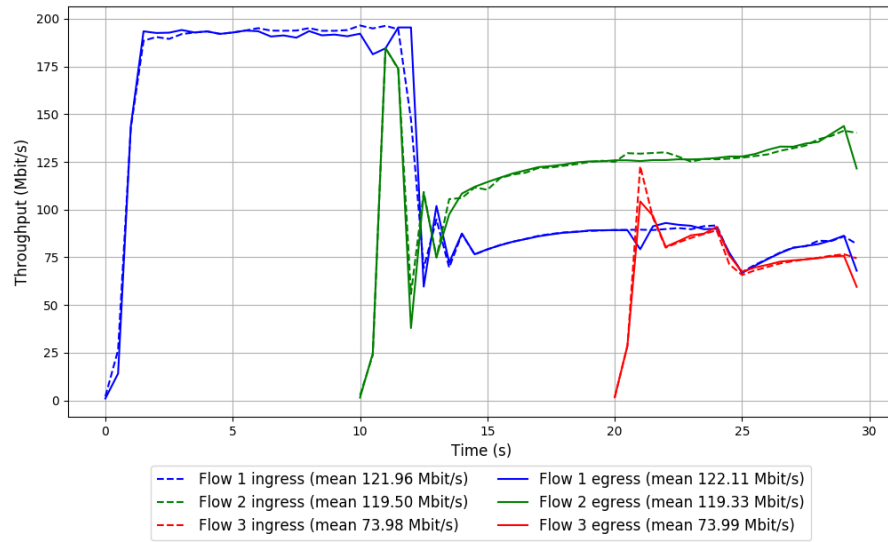
-- Flow 3:

Average throughput: 73.99 Mbit/s

95th percentile per-packet one-way delay: 65.659 ms

Loss rate: 1.31%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-03 07:16:40

End at: 2018-01-03 07:17:10

Below is generated by plot.py at 2018-01-03 11:34:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 162.70 Mbit/s

95th percentile per-packet one-way delay: 77.843 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 99.43 Mbit/s

95th percentile per-packet one-way delay: 70.940 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 93.84 Mbit/s

95th percentile per-packet one-way delay: 81.625 ms

Loss rate: 0.68%

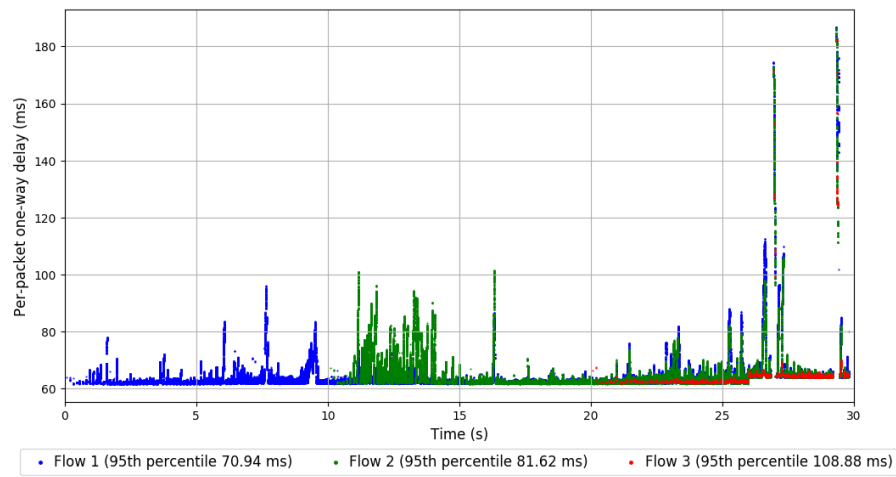
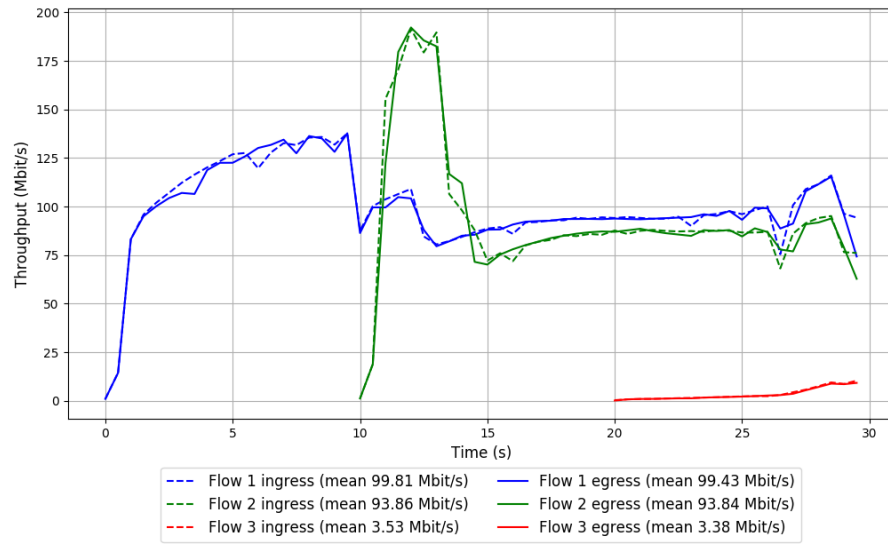
-- Flow 3:

Average throughput: 3.38 Mbit/s

95th percentile per-packet one-way delay: 108.882 ms

Loss rate: 5.52%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-03 07:29:07

End at: 2018-01-03 07:29:37

Below is generated by plot.py at 2018-01-03 11:34:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.40 Mbit/s

95th percentile per-packet one-way delay: 74.088 ms

Loss rate: 1.32%

-- Flow 1:

Average throughput: 10.82 Mbit/s

95th percentile per-packet one-way delay: 1877.688 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 103.35 Mbit/s

95th percentile per-packet one-way delay: 74.167 ms

Loss rate: 1.26%

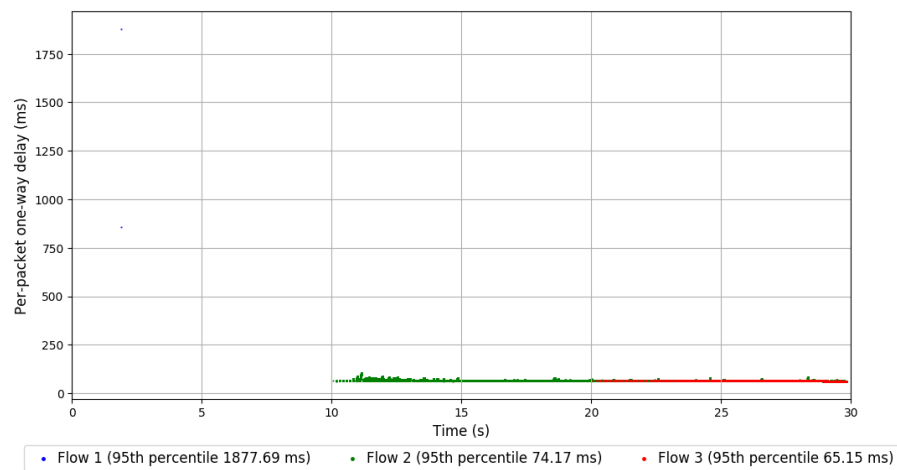
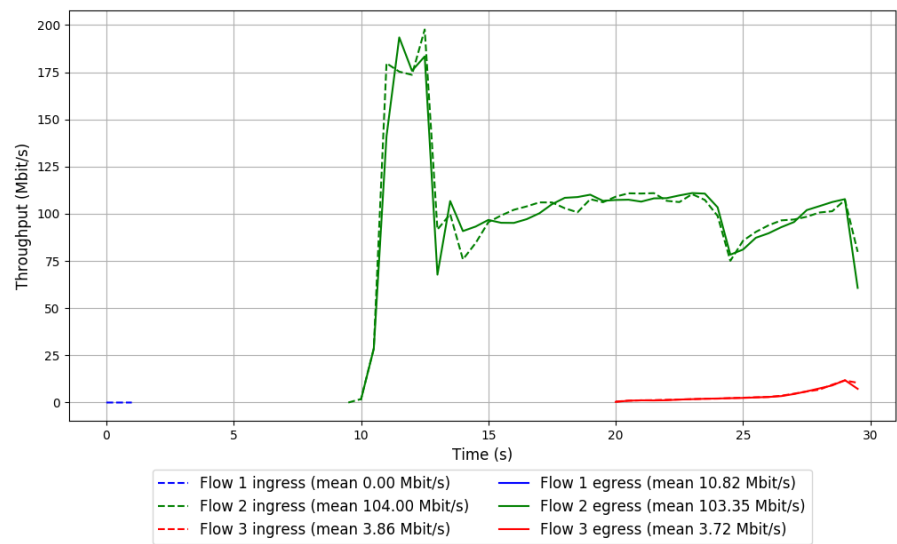
-- Flow 3:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 65.151 ms

Loss rate: 5.02%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-03 07:42:31

End at: 2018-01-03 07:43:01

Below is generated by plot.py at 2018-01-03 11:34:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 196.72 Mbit/s

95th percentile per-packet one-way delay: 69.616 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 97.13 Mbit/s

95th percentile per-packet one-way delay: 70.399 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 112.44 Mbit/s

95th percentile per-packet one-way delay: 67.970 ms

Loss rate: 0.83%

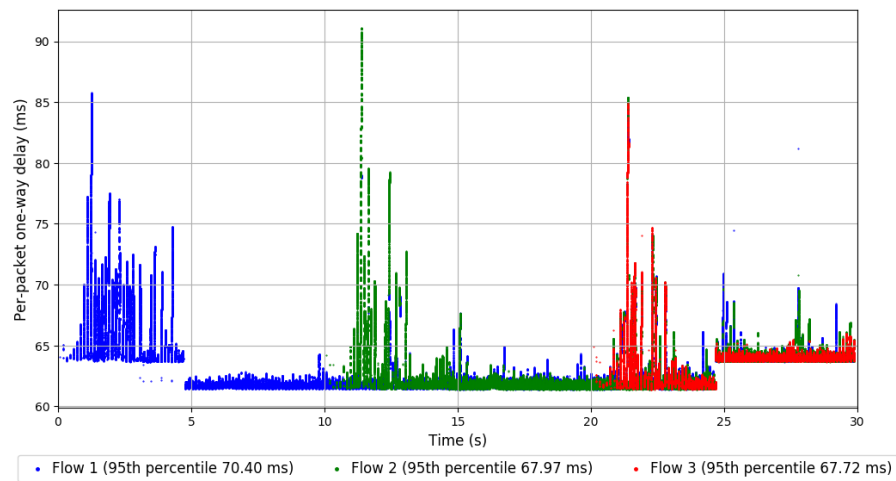
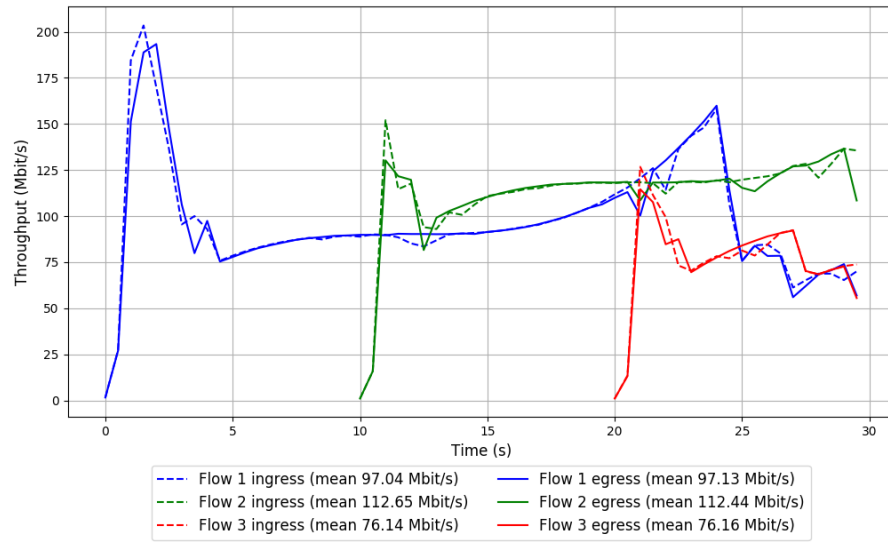
-- Flow 3:

Average throughput: 76.16 Mbit/s

95th percentile per-packet one-way delay: 67.721 ms

Loss rate: 1.25%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-03 07:56:19

End at: 2018-01-03 07:56:49

Below is generated by plot.py at 2018-01-03 11:34:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.38 Mbit/s

95th percentile per-packet one-way delay: 64.802 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 46.32 Mbit/s

95th percentile per-packet one-way delay: 64.694 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 93.16 Mbit/s

95th percentile per-packet one-way delay: 64.902 ms

Loss rate: 1.04%

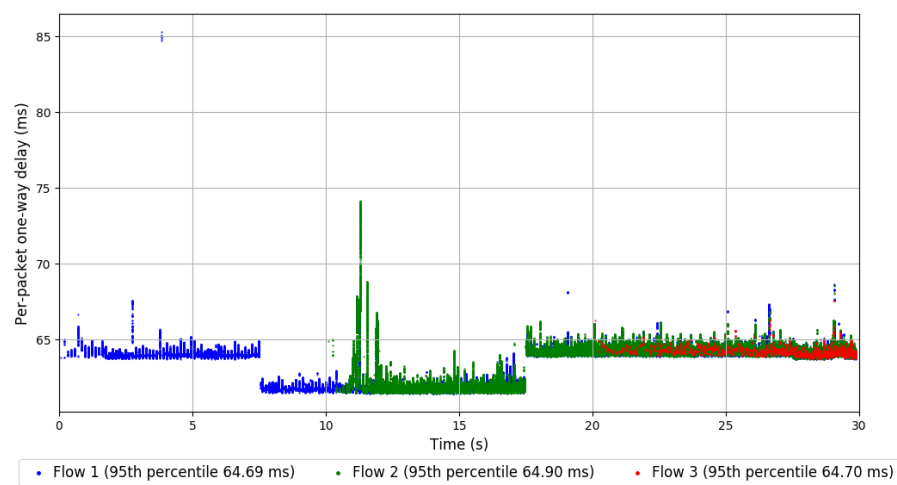
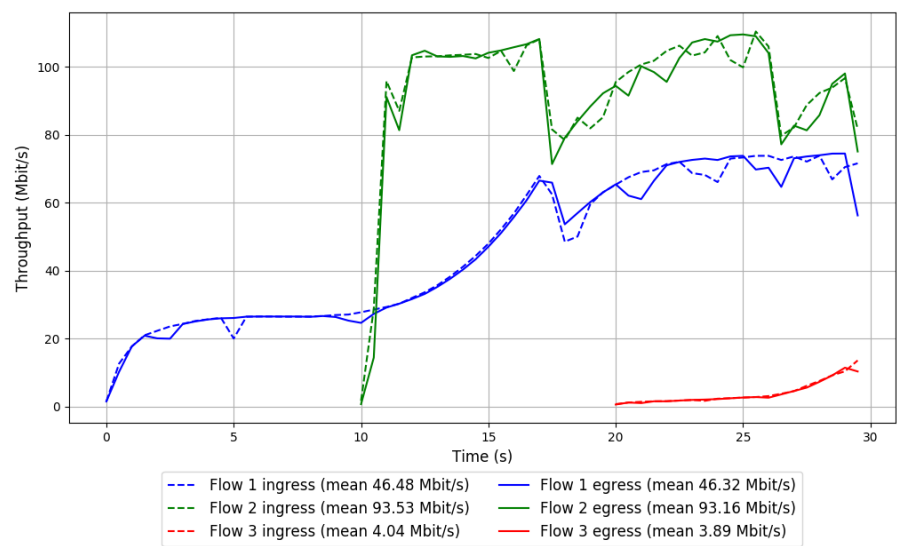
-- Flow 3:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 64.698 ms

Loss rate: 4.92%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-03 08:10:08

End at: 2018-01-03 08:10:38

Below is generated by plot.py at 2018-01-03 11:34:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 214.22 Mbit/s

95th percentile per-packet one-way delay: 71.912 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 87.37 Mbit/s

95th percentile per-packet one-way delay: 72.642 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 138.09 Mbit/s

95th percentile per-packet one-way delay: 71.871 ms

Loss rate: 0.36%

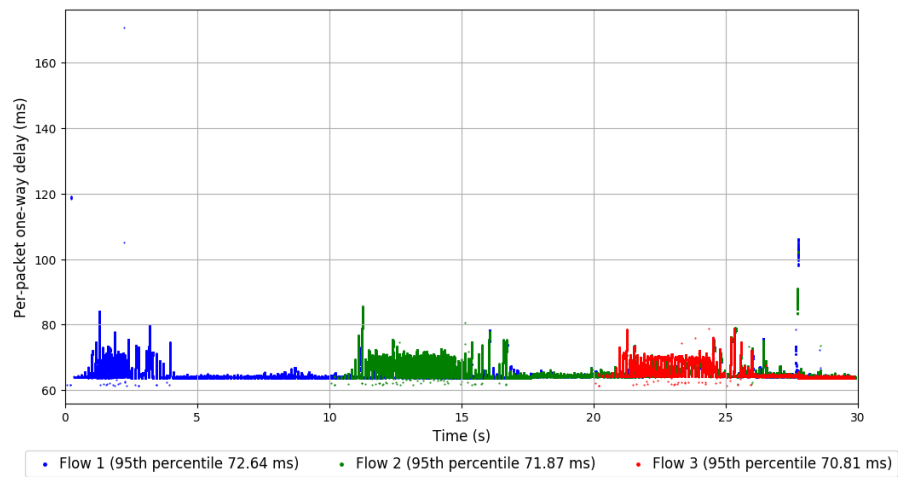
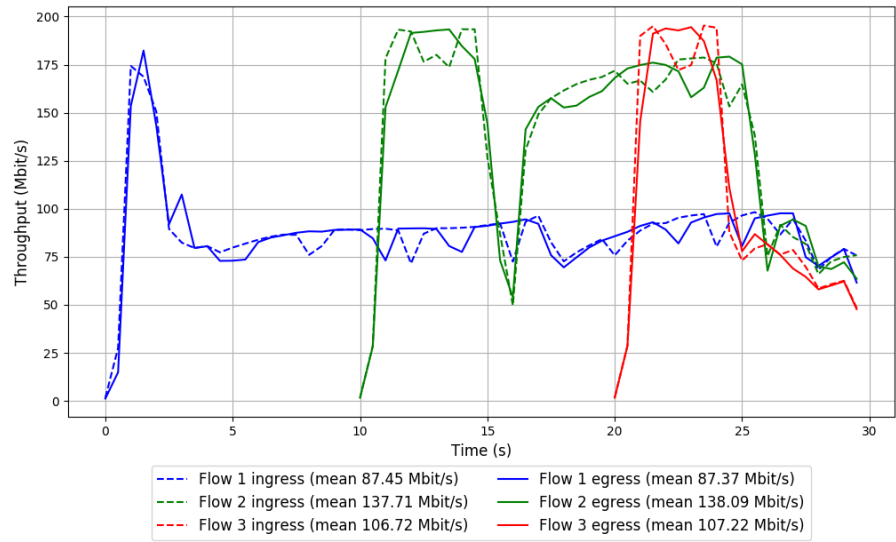
-- Flow 3:

Average throughput: 107.22 Mbit/s

95th percentile per-packet one-way delay: 70.807 ms

Loss rate: 0.82%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-03 08:24:34

End at: 2018-01-03 08:25:04

Below is generated by plot.py at 2018-01-03 11:35:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 229.84 Mbit/s

95th percentile per-packet one-way delay: 73.144 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 128.39 Mbit/s

95th percentile per-packet one-way delay: 73.343 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 85.88 Mbit/s

95th percentile per-packet one-way delay: 73.626 ms

Loss rate: 0.65%

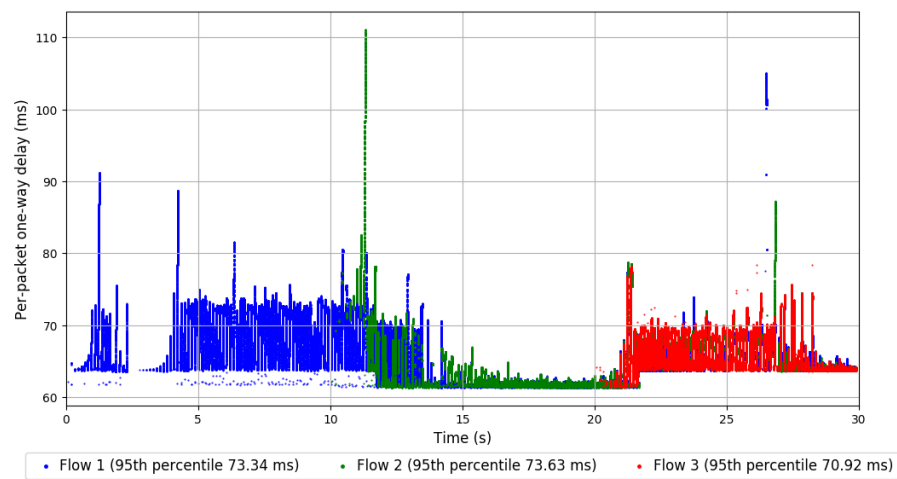
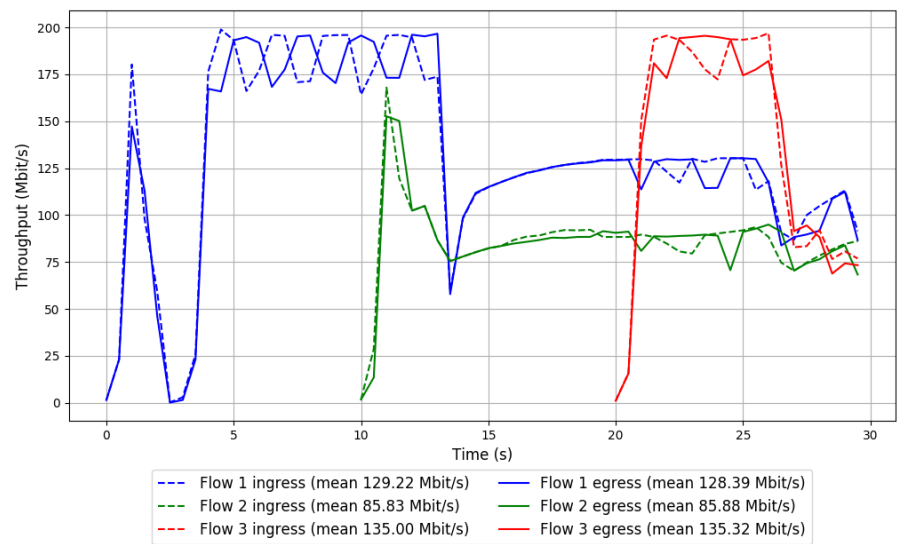
-- Flow 3:

Average throughput: 135.32 Mbit/s

95th percentile per-packet one-way delay: 70.917 ms

Loss rate: 1.05%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-03 08:39:00

End at: 2018-01-03 08:39:30

Below is generated by plot.py at 2018-01-03 11:35:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 206.30 Mbit/s

95th percentile per-packet one-way delay: 73.906 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 116.64 Mbit/s

95th percentile per-packet one-way delay: 73.530 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 90.85 Mbit/s

95th percentile per-packet one-way delay: 74.047 ms

Loss rate: 1.04%

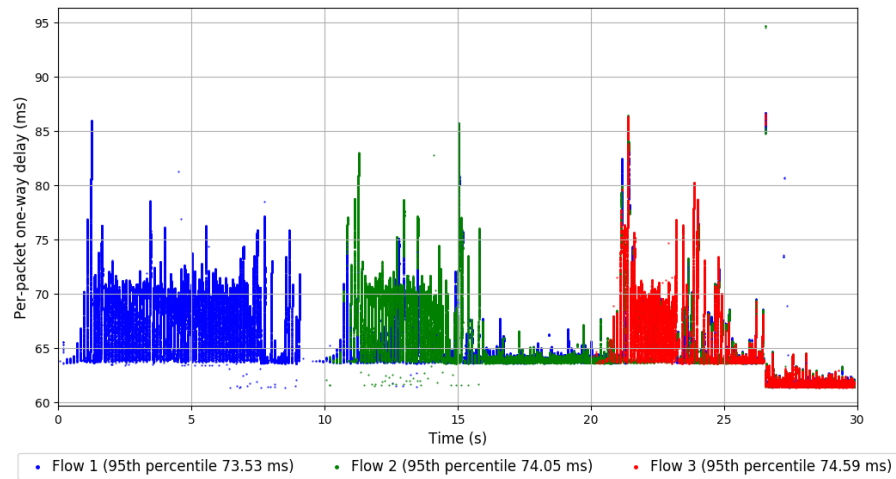
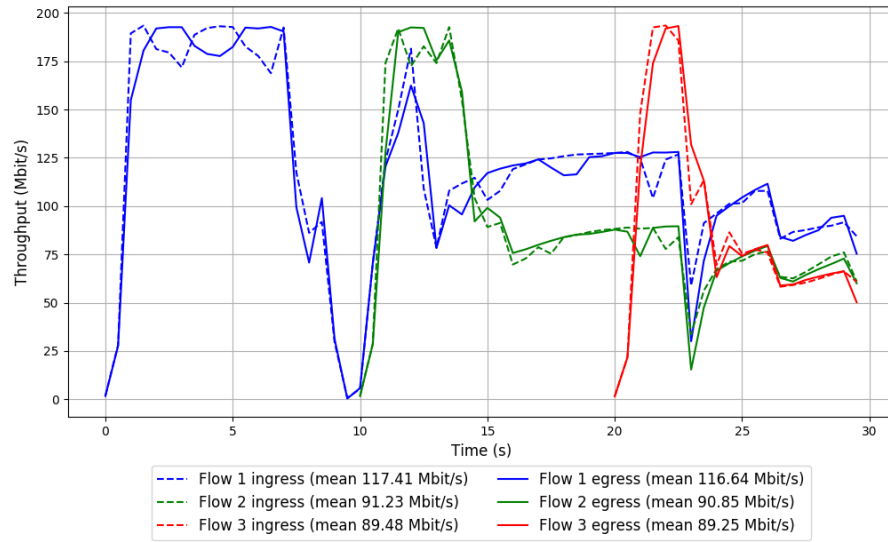
-- Flow 3:

Average throughput: 89.25 Mbit/s

95th percentile per-packet one-way delay: 74.593 ms

Loss rate: 1.54%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-03 08:52:24

End at: 2018-01-03 08:52:54

Below is generated by plot.py at 2018-01-03 11:35:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 141.38 Mbit/s

95th percentile per-packet one-way delay: 68.417 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 60.80 Mbit/s

95th percentile per-packet one-way delay: 68.663 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 119.58 Mbit/s

95th percentile per-packet one-way delay: 68.335 ms

Loss rate: 0.77%

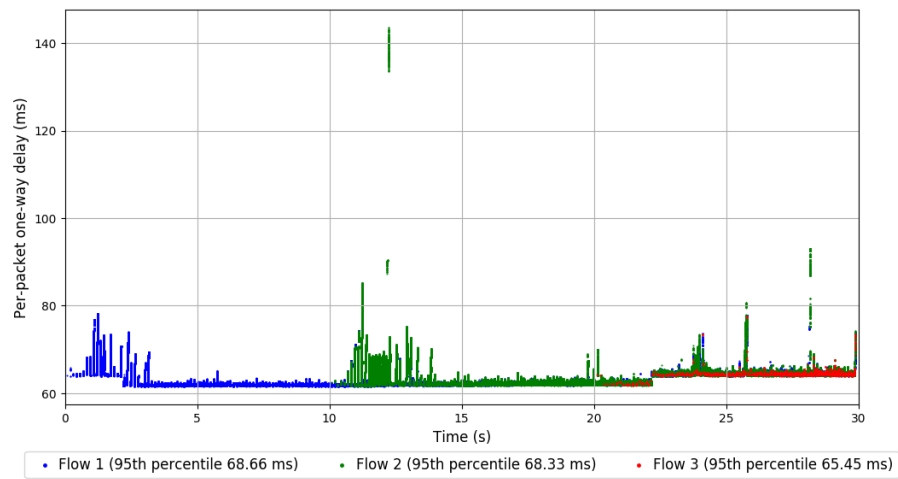
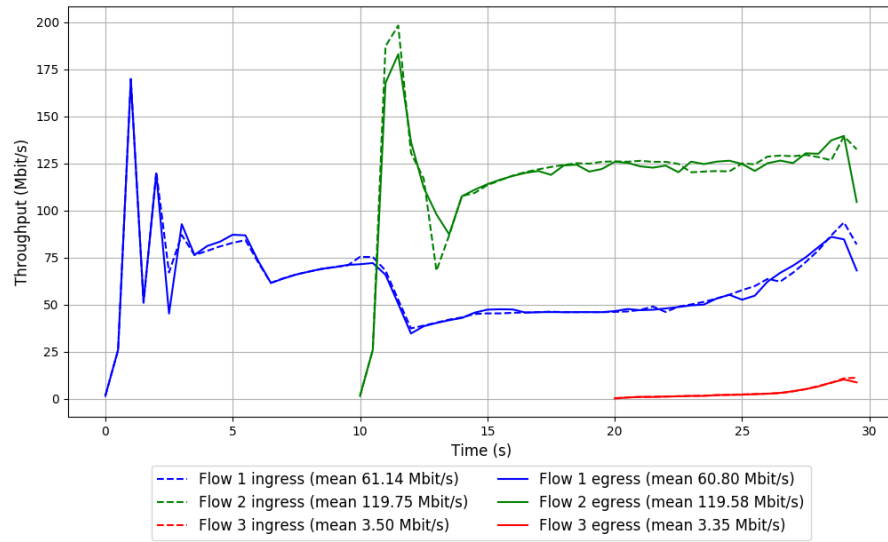
-- Flow 3:

Average throughput: 3.35 Mbit/s

95th percentile per-packet one-way delay: 65.453 ms

Loss rate: 5.34%

Run 10: Report of TCP Cubic — Data Link

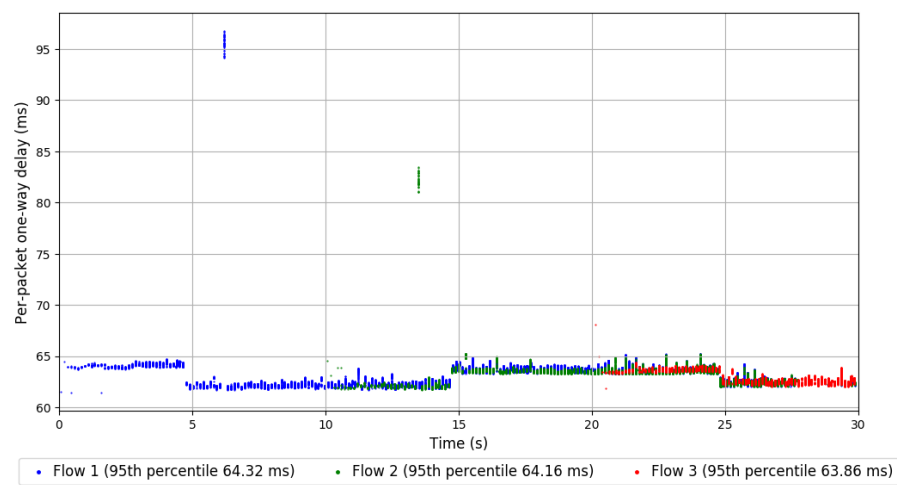
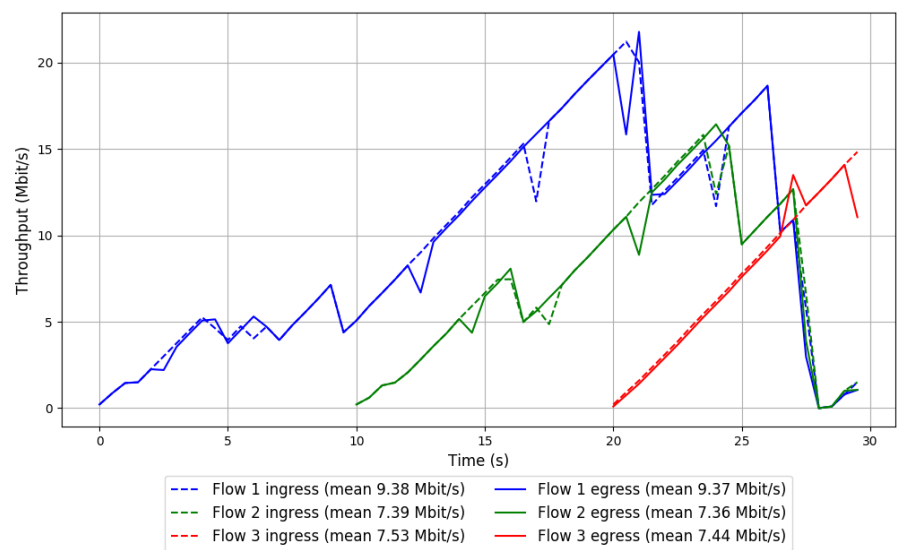


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-03 06:42:11
End at: 2018-01-03 06:42:41

# Below is generated by plot.py at 2018-01-03 11:35:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.68 Mbit/s
95th percentile per-packet one-way delay: 64.239 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 9.37 Mbit/s
95th percentile per-packet one-way delay: 64.321 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 7.36 Mbit/s
95th percentile per-packet one-way delay: 64.164 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: 63.857 ms
Loss rate: 2.55%
```


Run 1: Report of LEDBAT — Data Link

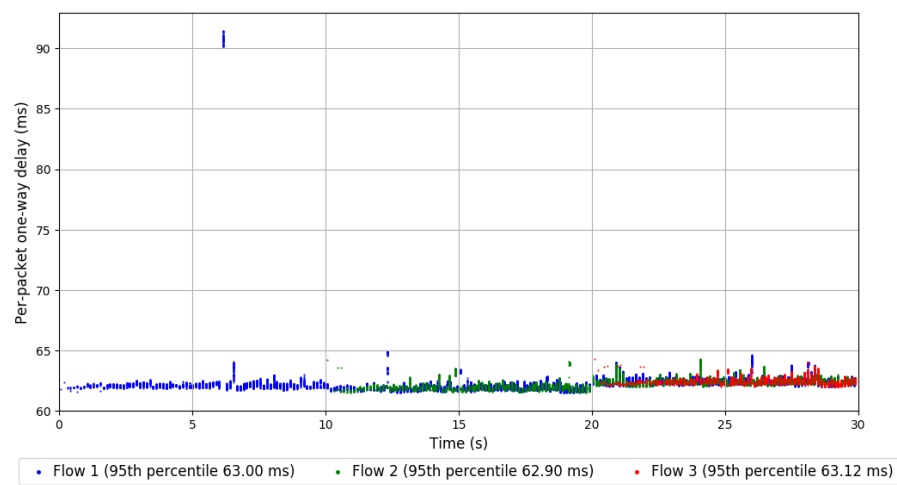
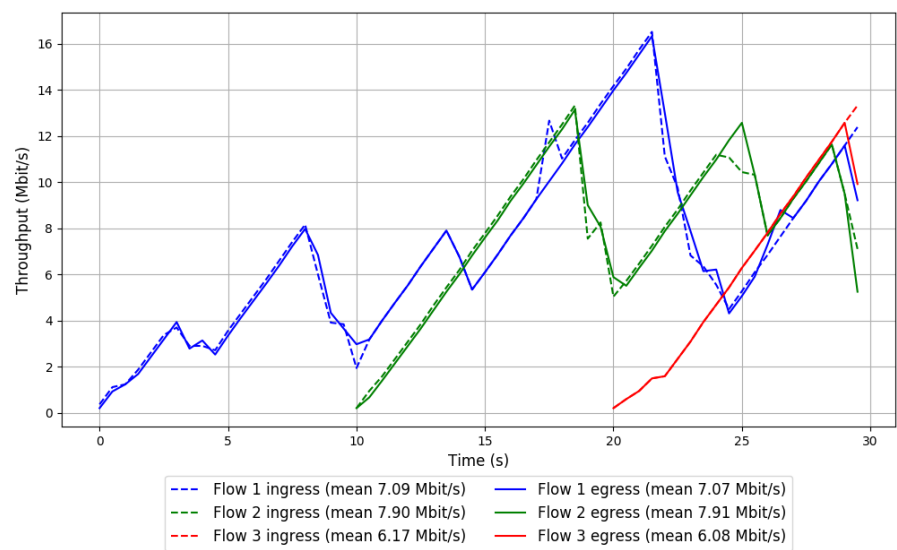


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-03 06:56:16
End at: 2018-01-03 06:56:46

# Below is generated by plot.py at 2018-01-03 11:35:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.30 Mbit/s
95th percentile per-packet one-way delay: 62.980 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 7.07 Mbit/s
95th percentile per-packet one-way delay: 63.004 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 7.91 Mbit/s
95th percentile per-packet one-way delay: 62.899 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 63.117 ms
Loss rate: 2.78%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-03 07:10:08

End at: 2018-01-03 07:10:38

Below is generated by plot.py at 2018-01-03 11:35:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.01 Mbit/s

95th percentile per-packet one-way delay: 64.514 ms

Loss rate: 1.99%

-- Flow 1:

Average throughput: 4.79 Mbit/s

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

Loss rate: 1.21%

-- Flow 2:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 64.430 ms

Loss rate: 2.20%

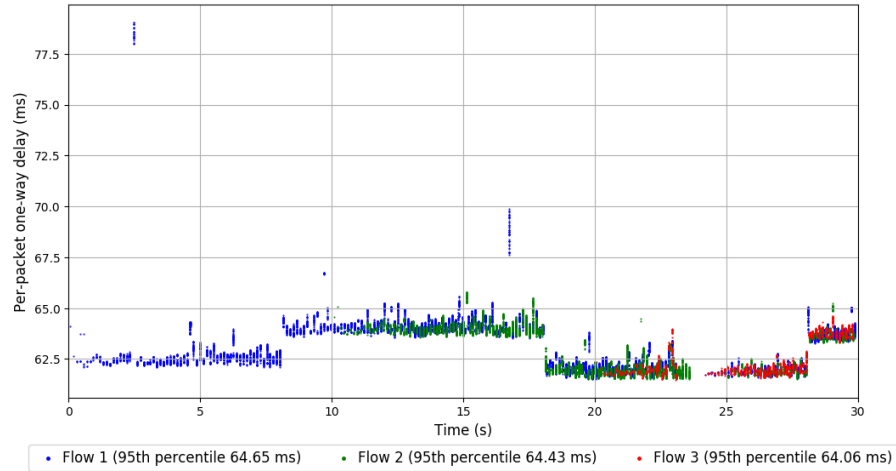
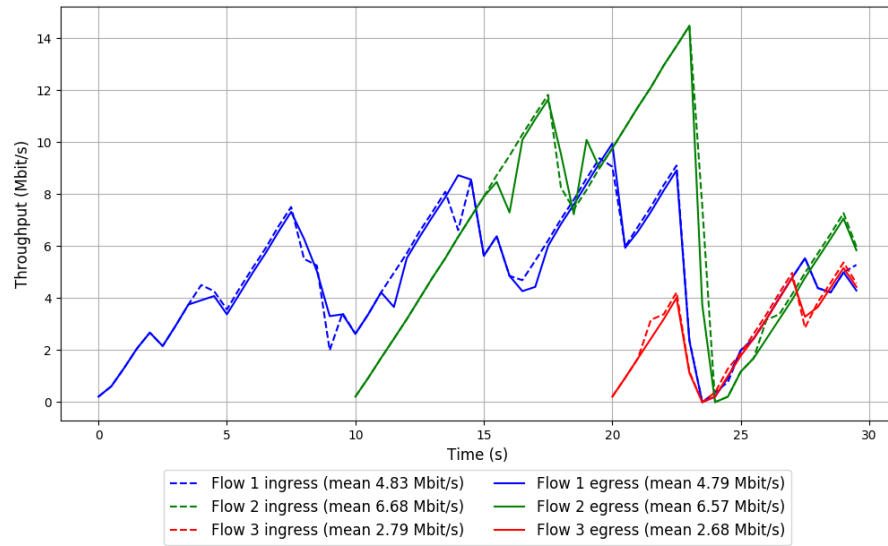
-- Flow 3:

Average throughput: 2.68 Mbit/s

95th percentile per-packet one-way delay: 64.060 ms

Loss rate: 5.10%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-03 07:23:01

End at: 2018-01-03 07:23:31

Below is generated by plot.py at 2018-01-03 11:35:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.13 Mbit/s

95th percentile per-packet one-way delay: 65.338 ms

Loss rate: 2.24%

-- Flow 1:

Average throughput: 6.15 Mbit/s

95th percentile per-packet one-way delay: 65.389 ms

Loss rate: 1.89%

-- Flow 2:

Average throughput: 5.16 Mbit/s

95th percentile per-packet one-way delay: 65.090 ms

Loss rate: 2.40%

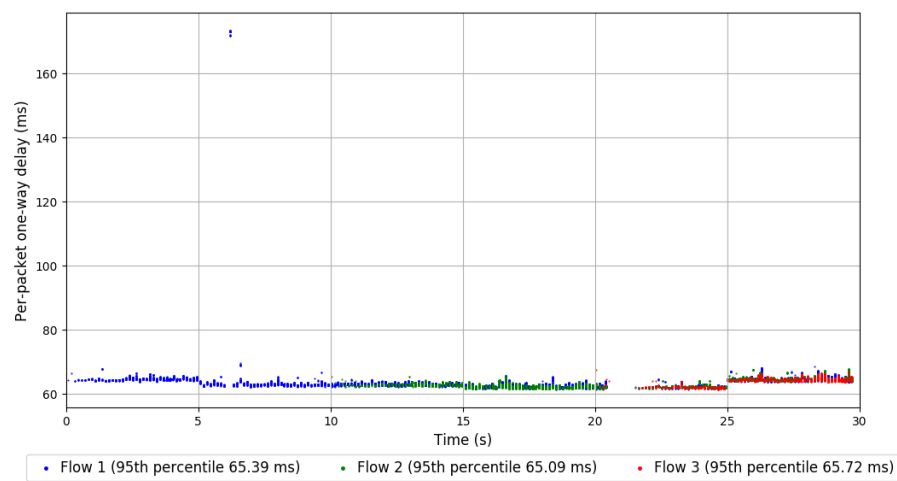
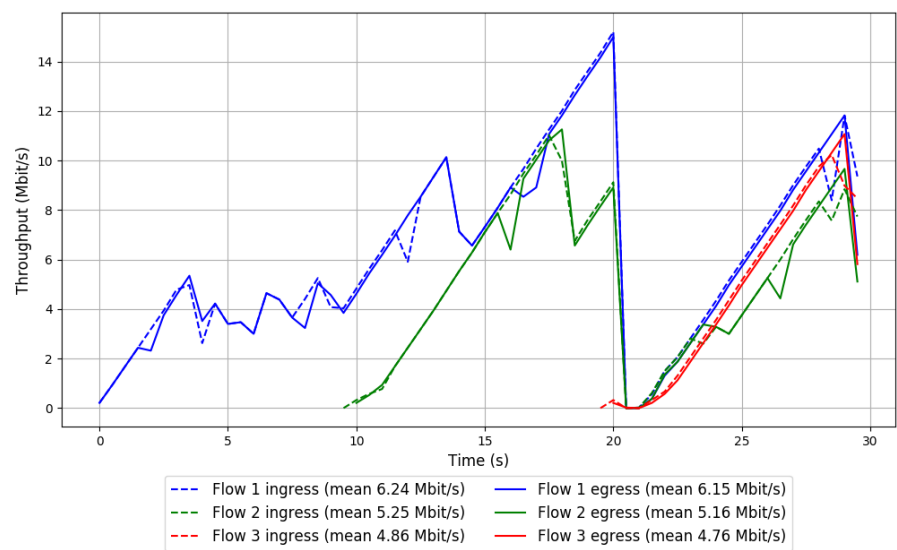
-- Flow 3:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 65.722 ms

Loss rate: 3.23%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-03 07:35:11

End at: 2018-01-03 07:35:41

Below is generated by plot.py at 2018-01-03 11:35:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.20 Mbit/s

95th percentile per-packet one-way delay: 65.102 ms

Loss rate: 1.58%

-- Flow 1:

Average throughput: 5.98 Mbit/s

95th percentile per-packet one-way delay: 65.029 ms

Loss rate: 1.49%

-- Flow 2:

Average throughput: 10.75 Mbit/s

95th percentile per-packet one-way delay: 65.167 ms

Loss rate: 1.48%

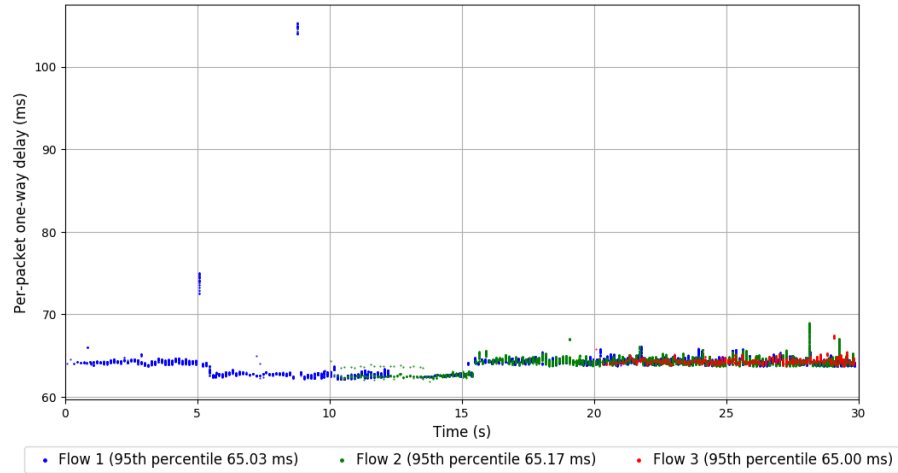
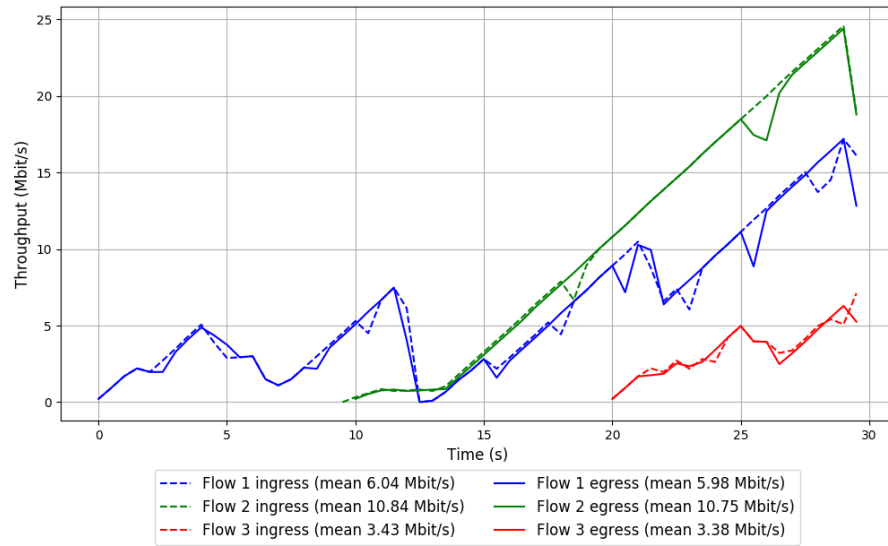
-- Flow 3:

Average throughput: 3.38 Mbit/s

95th percentile per-packet one-way delay: 65.002 ms

Loss rate: 2.73%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-03 07:48:58

End at: 2018-01-03 07:49:28

Below is generated by plot.py at 2018-01-03 11:35:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.68 Mbit/s

95th percentile per-packet one-way delay: 64.779 ms

Loss rate: 1.60%

-- Flow 1:

Average throughput: 5.40 Mbit/s

95th percentile per-packet one-way delay: 64.804 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 5.73 Mbit/s

95th percentile per-packet one-way delay: 64.769 ms

Loss rate: 1.77%

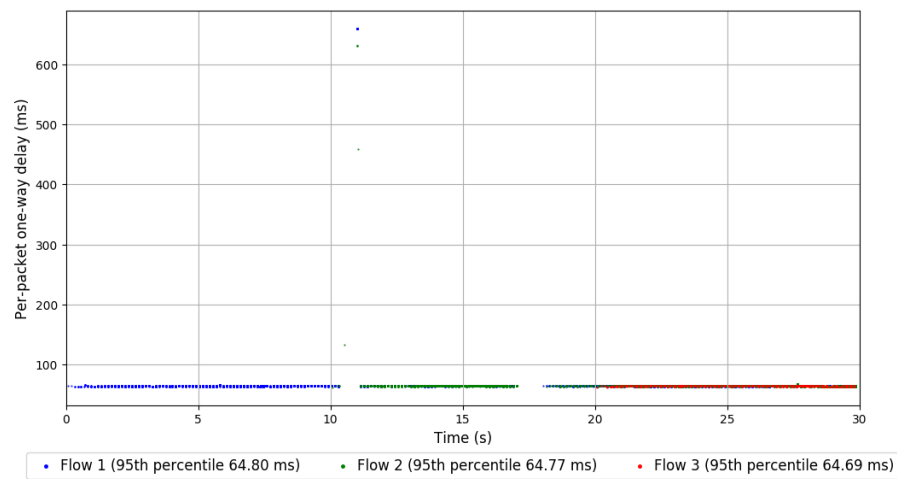
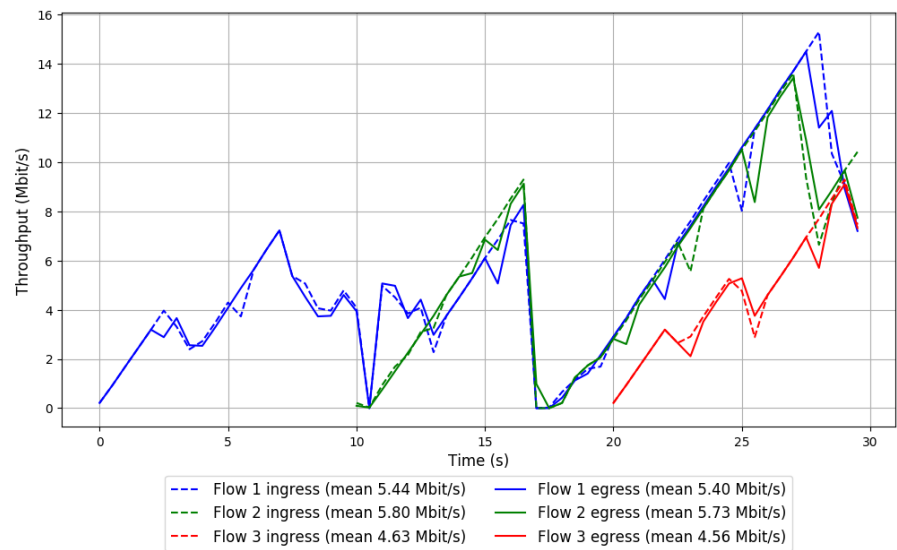
-- Flow 3:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 64.685 ms

Loss rate: 2.78%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-03 08:02:54

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

Below is generated by plot.py at 2018-01-03 11:35:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.48 Mbit/s

95th percentile per-packet one-way delay: 65.388 ms

Loss rate: 1.97%

-- Flow 1:

Average throughput: 4.76 Mbit/s

95th percentile per-packet one-way delay: 65.296 ms

Loss rate: 2.42%

-- Flow 2:

Average throughput: 10.19 Mbit/s

95th percentile per-packet one-way delay: 65.561 ms

Loss rate: 1.39%

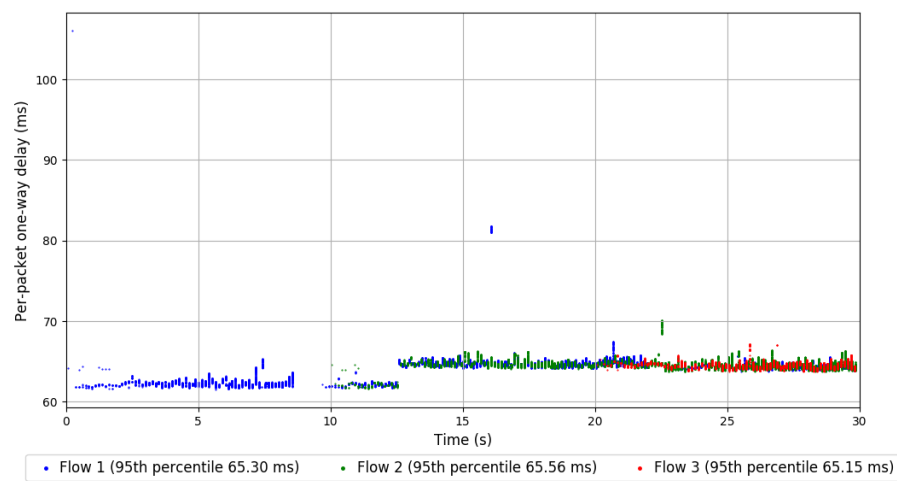
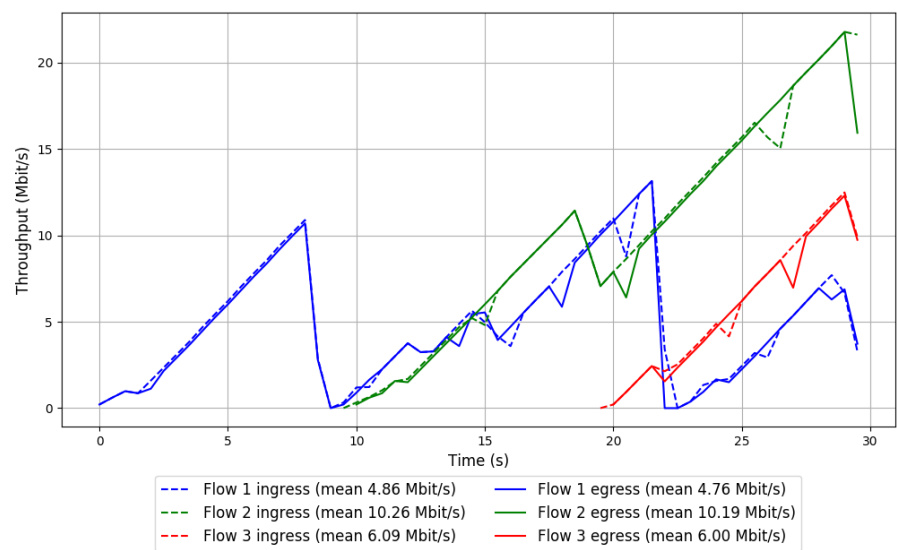
-- Flow 3:

Average throughput: 6.00 Mbit/s

95th percentile per-packet one-way delay: 65.152 ms

Loss rate: 2.84%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-03 08:17:01

End at: 2018-01-03 08:17:31

Below is generated by plot.py at 2018-01-03 11:35:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.11 Mbit/s

95th percentile per-packet one-way delay: 64.422 ms

Loss rate: 3.15%

-- Flow 1:

Average throughput: 3.82 Mbit/s

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

Loss rate: 3.26%

-- Flow 2:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 64.440 ms

Loss rate: 3.83%

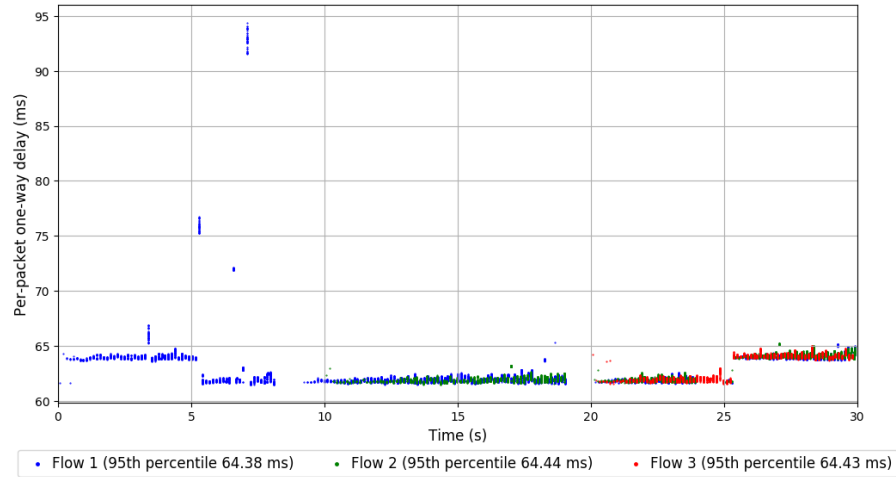
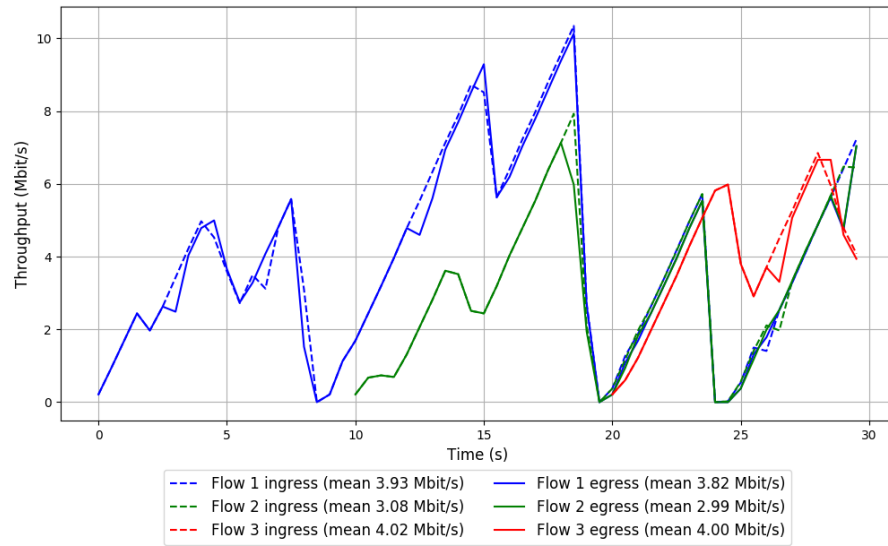
-- Flow 3:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 64.430 ms

Loss rate: 1.78%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-03 08:31:30

End at: 2018-01-03 08:32:00

Below is generated by plot.py at 2018-01-03 11:35:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.52 Mbit/s

95th percentile per-packet one-way delay: 63.935 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 5.44 Mbit/s

95th percentile per-packet one-way delay: 64.143 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 6.91 Mbit/s

95th percentile per-packet one-way delay: 62.561 ms

Loss rate: 0.66%

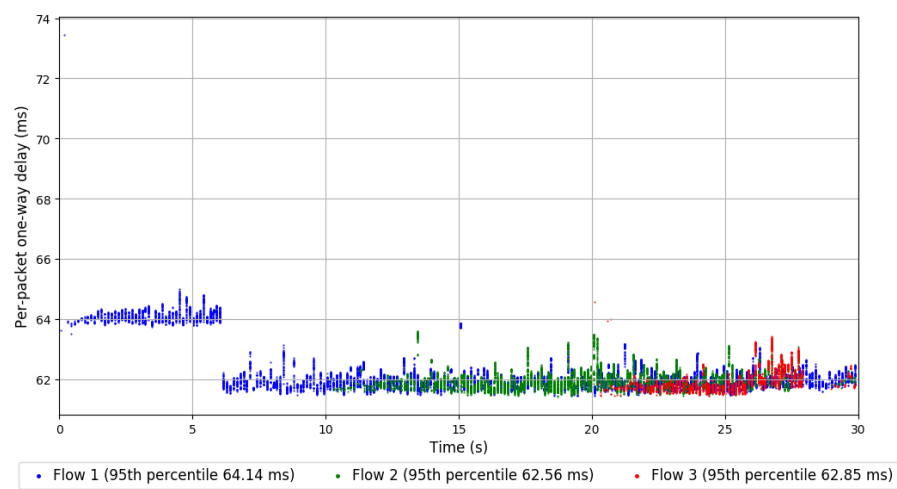
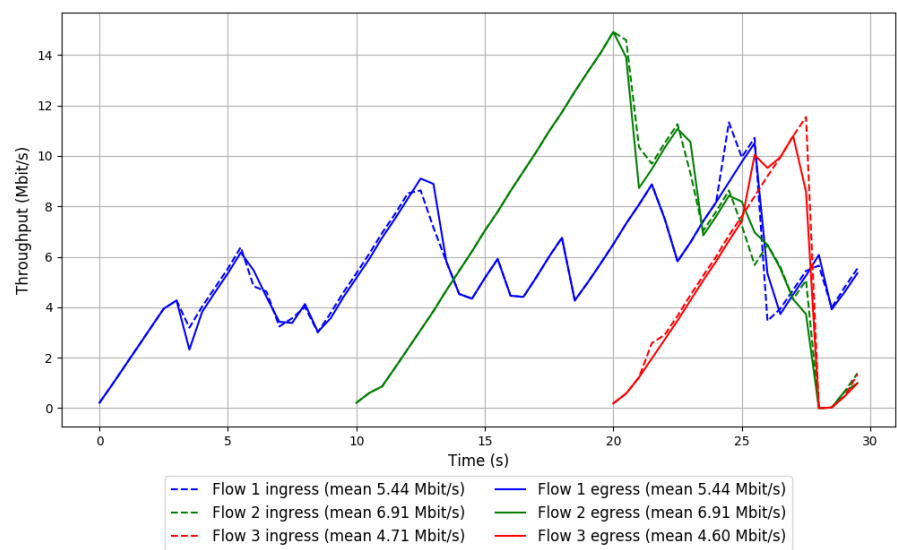
-- Flow 3:

Average throughput: 4.60 Mbit/s

95th percentile per-packet one-way delay: 62.850 ms

Loss rate: 3.56%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-03 08:45:42

End at: 2018-01-03 08:46:12

Below is generated by plot.py at 2018-01-03 11:35:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.28 Mbit/s

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

Loss rate: 1.25%

-- Flow 1:

Average throughput: 7.65 Mbit/s

95th percentile per-packet one-way delay: 64.789 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 64.735 ms

Loss rate: 1.35%

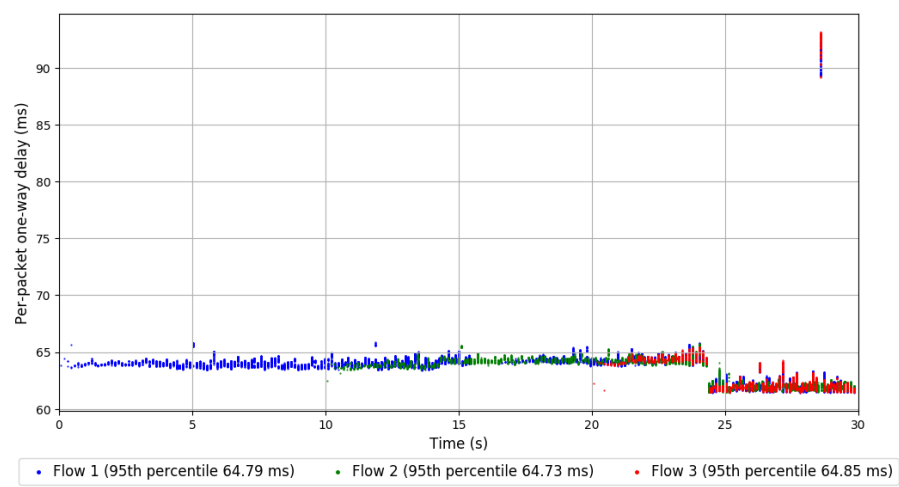
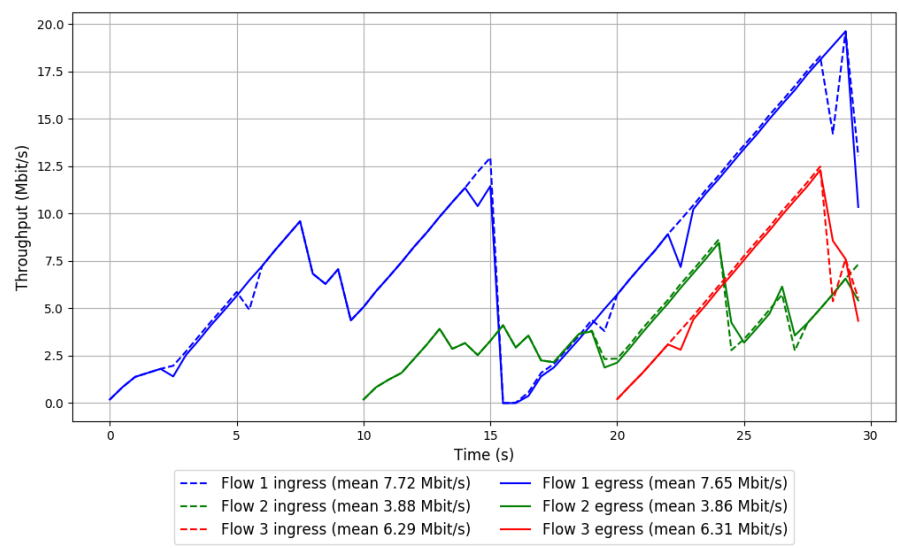
-- Flow 3:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 64.852 ms

Loss rate: 0.96%

Run 10: Report of LEDBAT — Data Link

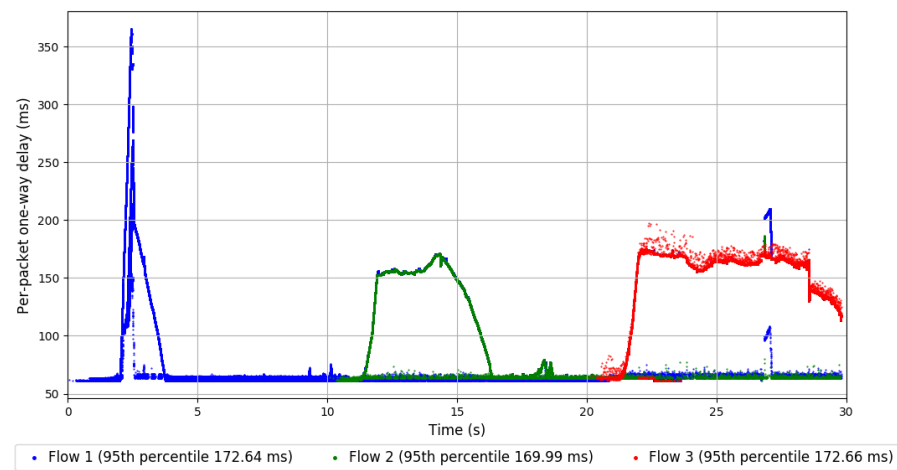
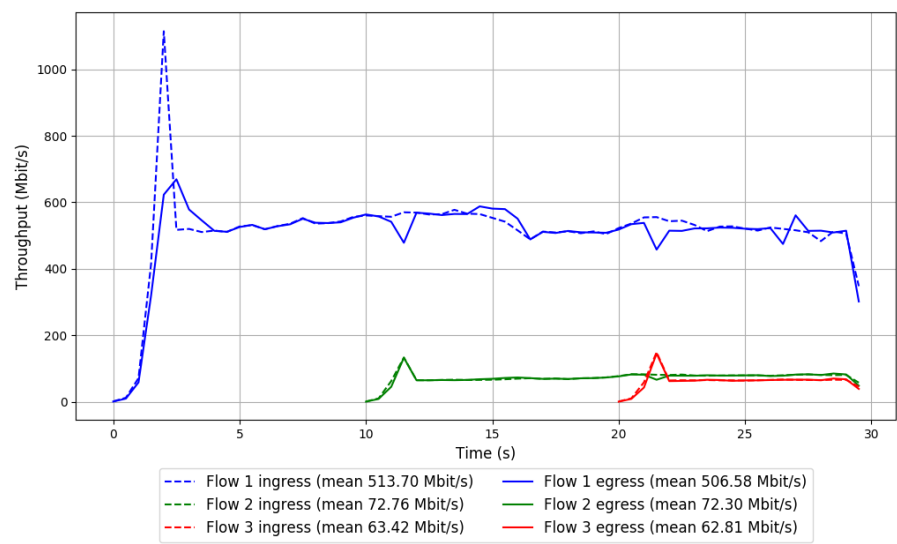


```
Run 1: Statistics of PCC

Start at: 2018-01-03 06:42:53
End at: 2018-01-03 06:43:23

# Below is generated by plot.py at 2018-01-03 11:44:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 574.94 Mbit/s
95th percentile per-packet one-way delay: 171.932 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 506.58 Mbit/s
95th percentile per-packet one-way delay: 172.637 ms
Loss rate: 1.79%
-- Flow 2:
Average throughput: 72.30 Mbit/s
95th percentile per-packet one-way delay: 169.985 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 62.81 Mbit/s
95th percentile per-packet one-way delay: 172.664 ms
Loss rate: 2.27%
```

Run 1: Report of PCC — Data Link

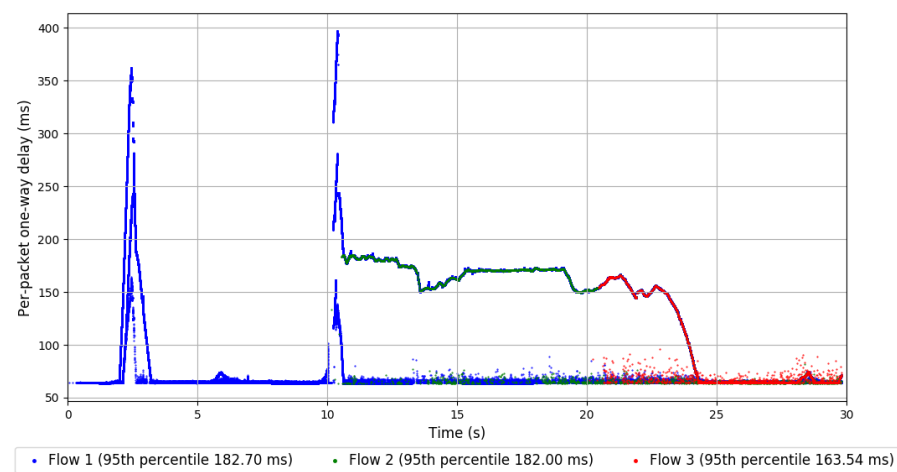
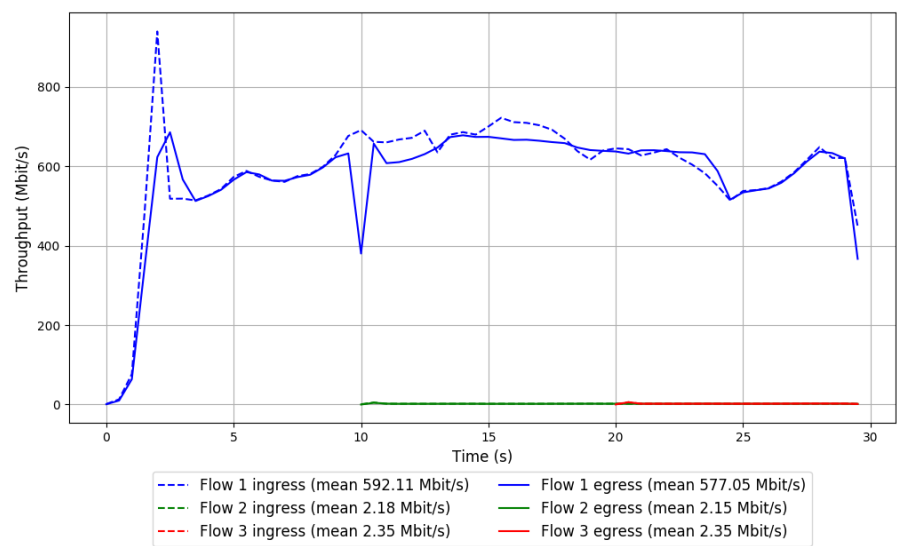


```
Run 2: Statistics of PCC

Start at: 2018-01-03 06:56:58
End at: 2018-01-03 06:57:28

# Below is generated by plot.py at 2018-01-03 11:44:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 579.21 Mbit/s
95th percentile per-packet one-way delay: 182.678 ms
Loss rate: 2.95%
-- Flow 1:
Average throughput: 577.05 Mbit/s
95th percentile per-packet one-way delay: 182.696 ms
Loss rate: 2.95%
-- Flow 2:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 182.003 ms
Loss rate: 2.21%
-- Flow 3:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 163.545 ms
Loss rate: 1.39%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-03 07:10:50

End at: 2018-01-03 07:11:20

Below is generated by plot.py at 2018-01-03 11:44:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 548.43 Mbit/s

95th percentile per-packet one-way delay: 161.823 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 486.56 Mbit/s

95th percentile per-packet one-way delay: 163.092 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 63.09 Mbit/s

95th percentile per-packet one-way delay: 148.068 ms

Loss rate: 0.70%

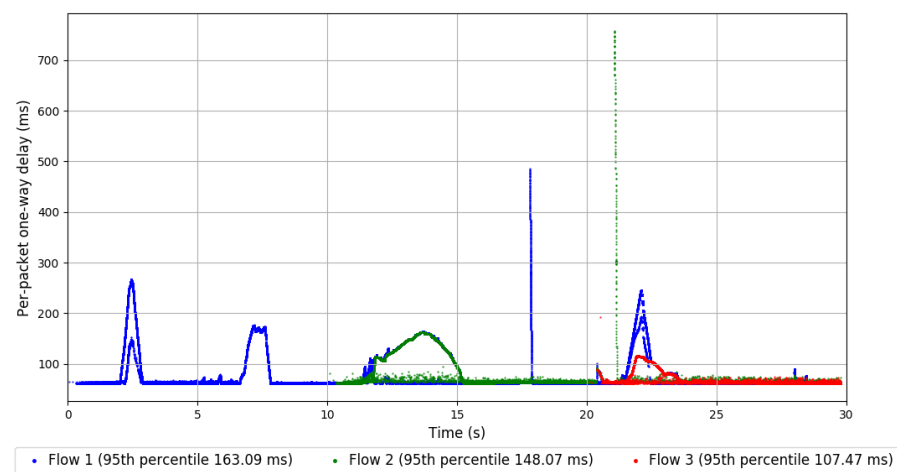
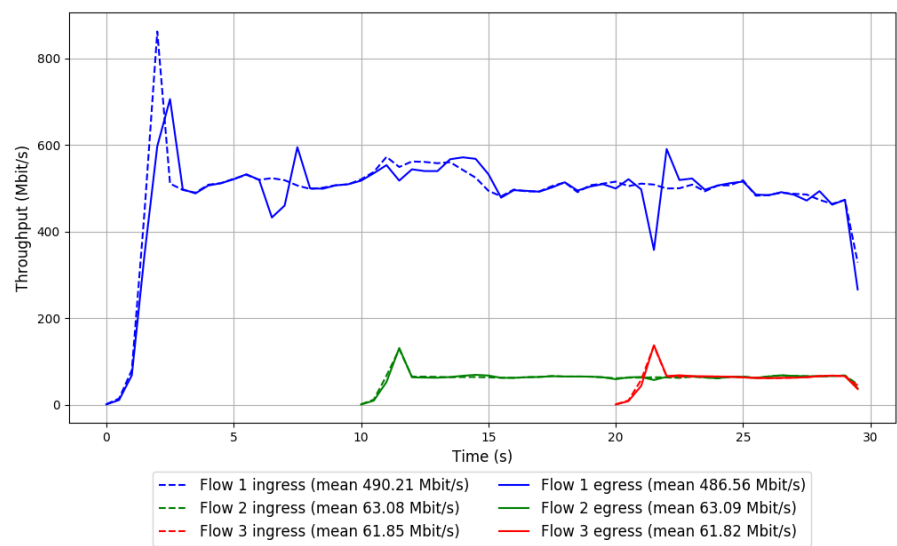
-- Flow 3:

Average throughput: 61.82 Mbit/s

95th percentile per-packet one-way delay: 107.465 ms

Loss rate: 1.34%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-03 07:23:43

End at: 2018-01-03 07:24:13

Below is generated by plot.py at 2018-01-03 11:44:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 338.64 Mbit/s

95th percentile per-packet one-way delay: 203.946 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 226.06 Mbit/s

95th percentile per-packet one-way delay: 184.305 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 119.12 Mbit/s

95th percentile per-packet one-way delay: 216.650 ms

Loss rate: 1.19%

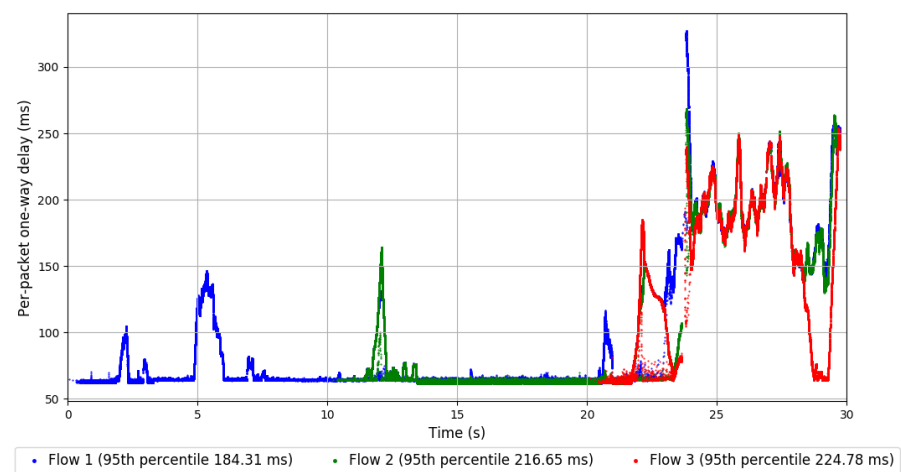
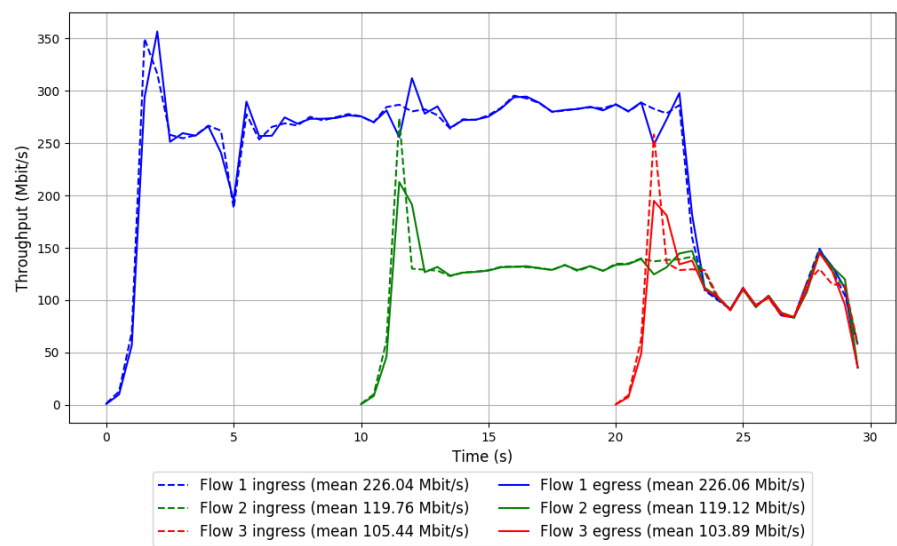
-- Flow 3:

Average throughput: 103.89 Mbit/s

95th percentile per-packet one-way delay: 224.775 ms

Loss rate: 2.78%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-03 07:35:53

End at: 2018-01-03 07:36:23

Below is generated by plot.py at 2018-01-03 11:44:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 438.43 Mbit/s

95th percentile per-packet one-way delay: 170.892 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 298.68 Mbit/s

95th percentile per-packet one-way delay: 172.081 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 203.05 Mbit/s

95th percentile per-packet one-way delay: 168.986 ms

Loss rate: 0.96%

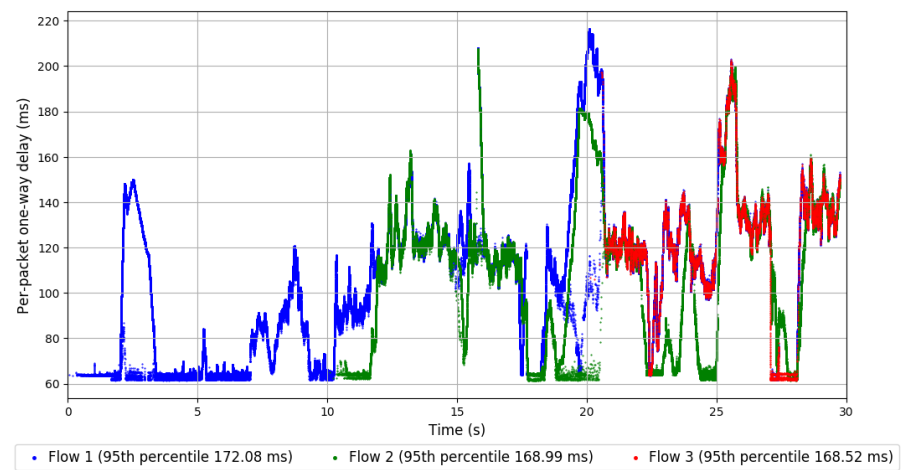
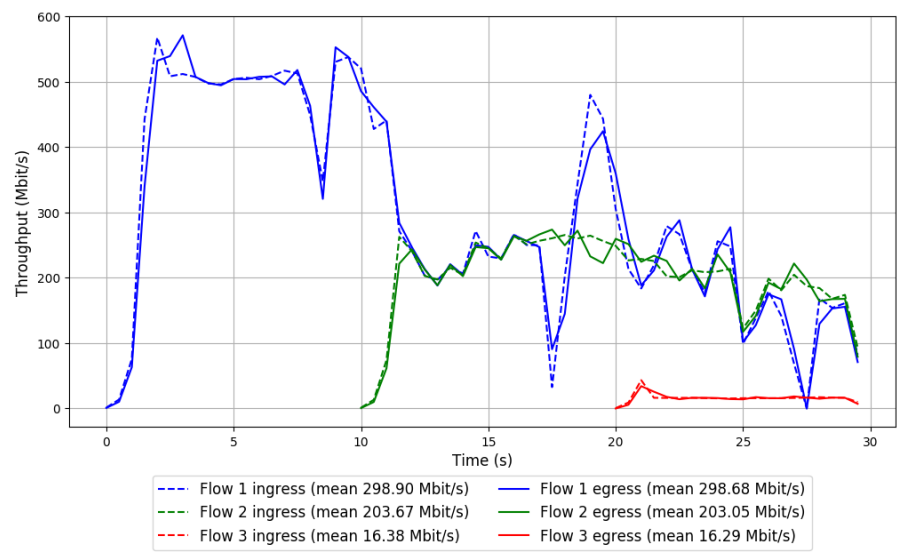
-- Flow 3:

Average throughput: 16.29 Mbit/s

95th percentile per-packet one-way delay: 168.523 ms

Loss rate: 2.24%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-03 07:49:39

End at: 2018-01-03 07:50:09

Below is generated by plot.py at 2018-01-03 11:44:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 505.57 Mbit/s

95th percentile per-packet one-way delay: 129.710 ms

Loss rate: 2.42%

-- Flow 1:

Average throughput: 458.76 Mbit/s

95th percentile per-packet one-way delay: 128.997 ms

Loss rate: 2.27%

-- Flow 2:

Average throughput: 68.57 Mbit/s

95th percentile per-packet one-way delay: 136.230 ms

Loss rate: 3.84%

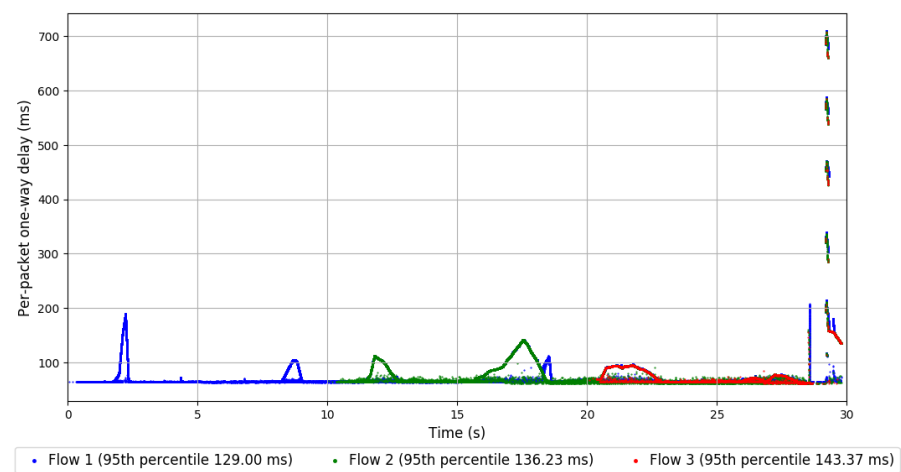
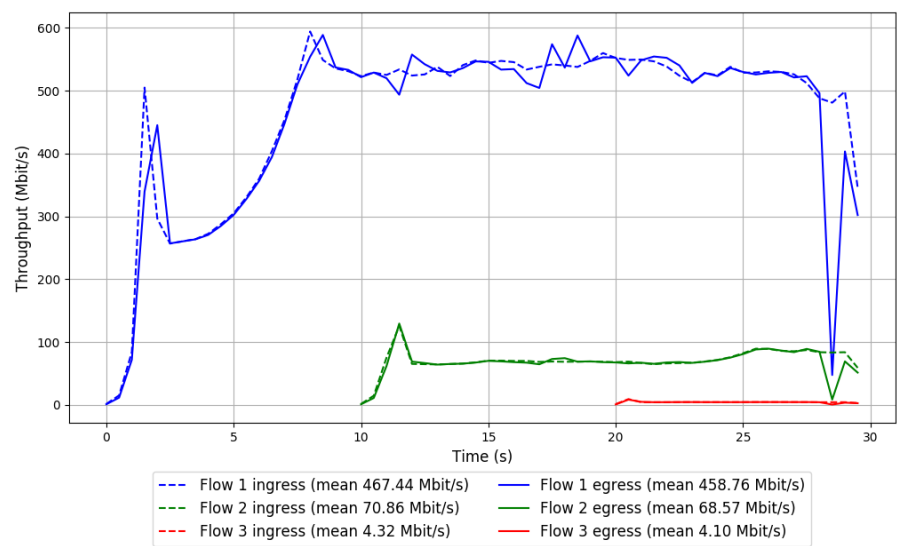
-- Flow 3:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 143.365 ms

Loss rate: 6.28%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-03 08:03:36

End at: 2018-01-03 08:04:06

Below is generated by plot.py at 2018-01-03 11:44:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.68 Mbit/s

95th percentile per-packet one-way delay: 172.965 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 192.28 Mbit/s

95th percentile per-packet one-way delay: 167.804 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 131.25 Mbit/s

95th percentile per-packet one-way delay: 180.964 ms

Loss rate: 1.24%

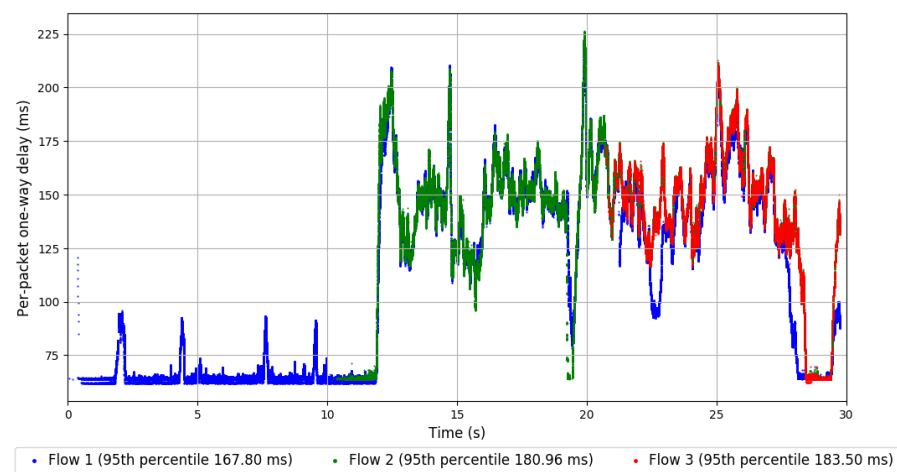
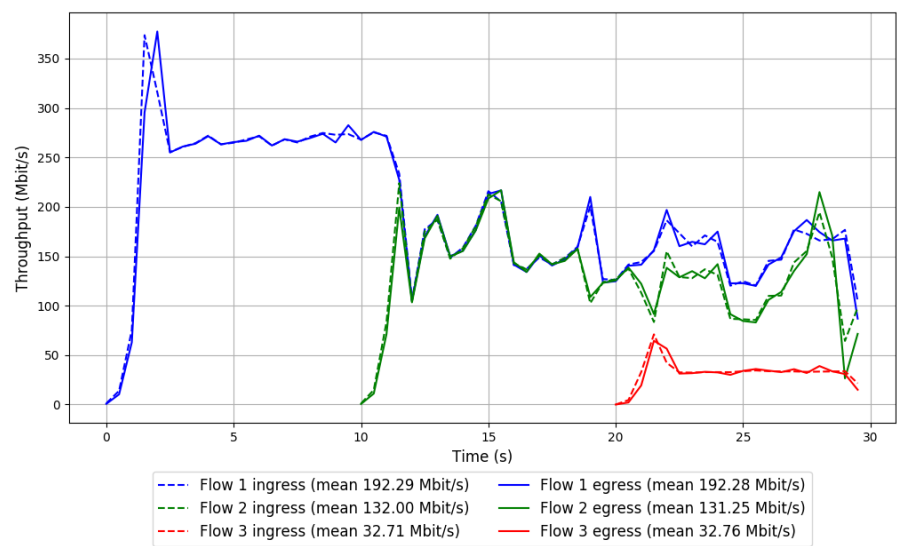
-- Flow 3:

Average throughput: 32.76 Mbit/s

95th percentile per-packet one-way delay: 183.499 ms

Loss rate: 2.13%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-03 08:17:42

End at: 2018-01-03 08:18:12

Below is generated by plot.py at 2018-01-03 11:45:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 584.89 Mbit/s

95th percentile per-packet one-way delay: 183.388 ms

Loss rate: 2.90%

-- Flow 1:

Average throughput: 508.52 Mbit/s

95th percentile per-packet one-way delay: 182.938 ms

Loss rate: 2.74%

-- Flow 2:

Average throughput: 58.35 Mbit/s

95th percentile per-packet one-way delay: 177.931 ms

Loss rate: 2.63%

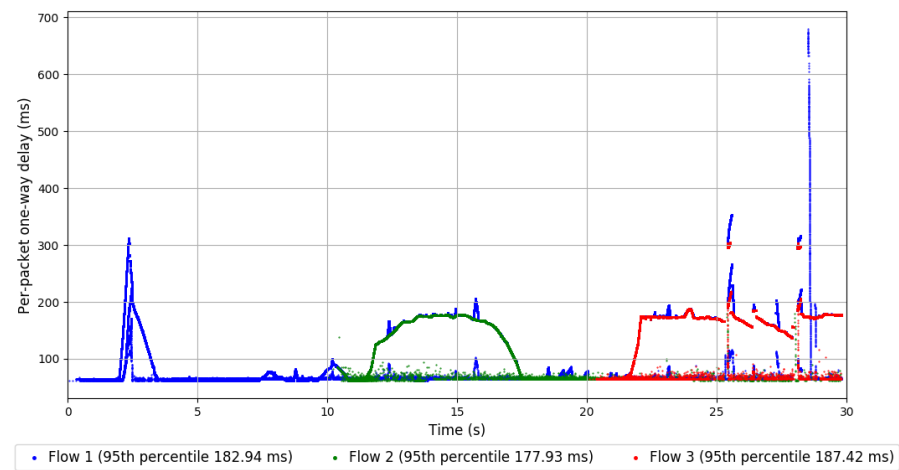
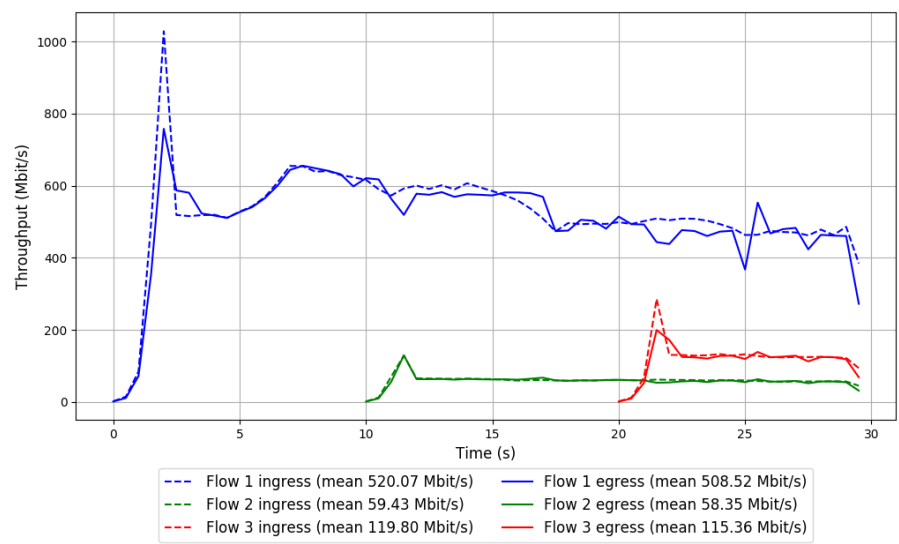
-- Flow 3:

Average throughput: 115.36 Mbit/s

95th percentile per-packet one-way delay: 187.420 ms

Loss rate: 5.28%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-03 08:32:12

End at: 2018-01-03 08:32:42

Below is generated by plot.py at 2018-01-03 11:50:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 521.82 Mbit/s

95th percentile per-packet one-way delay: 164.154 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 506.23 Mbit/s

95th percentile per-packet one-way delay: 164.156 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 21.38 Mbit/s

95th percentile per-packet one-way delay: 163.806 ms

Loss rate: 0.75%

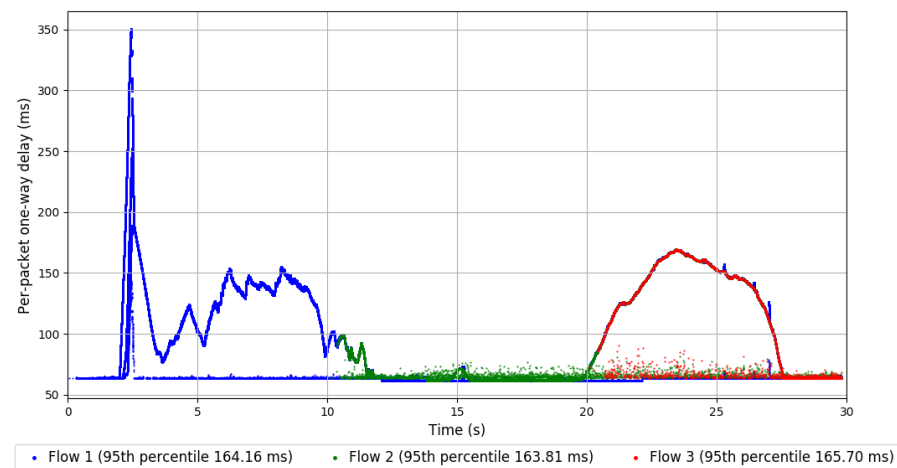
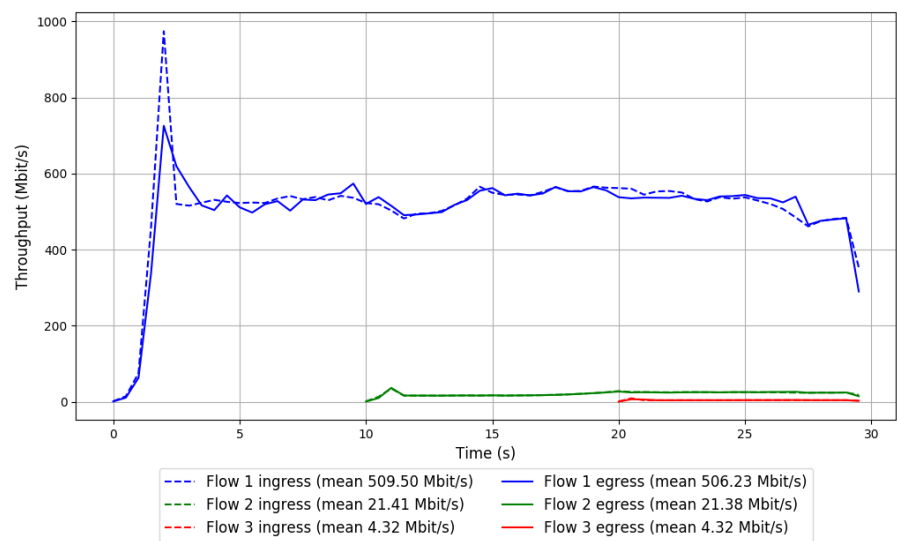
-- Flow 3:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 165.701 ms

Loss rate: 1.29%

Run 9: Report of PCC — Data Link

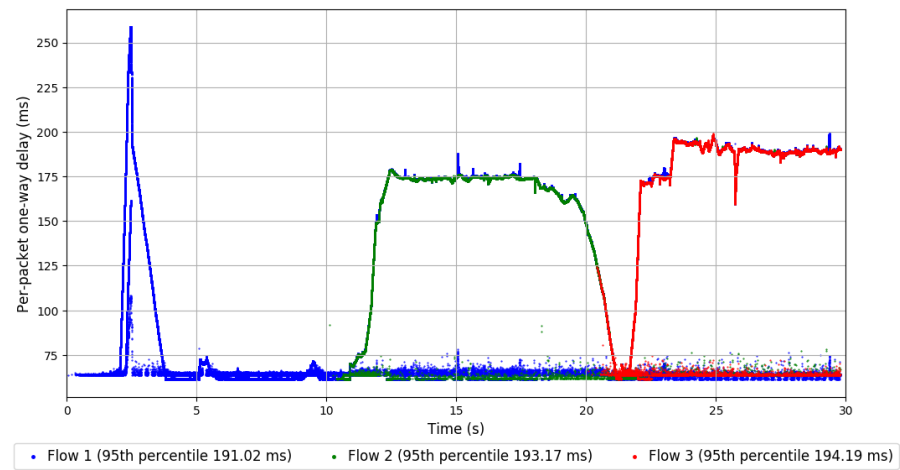
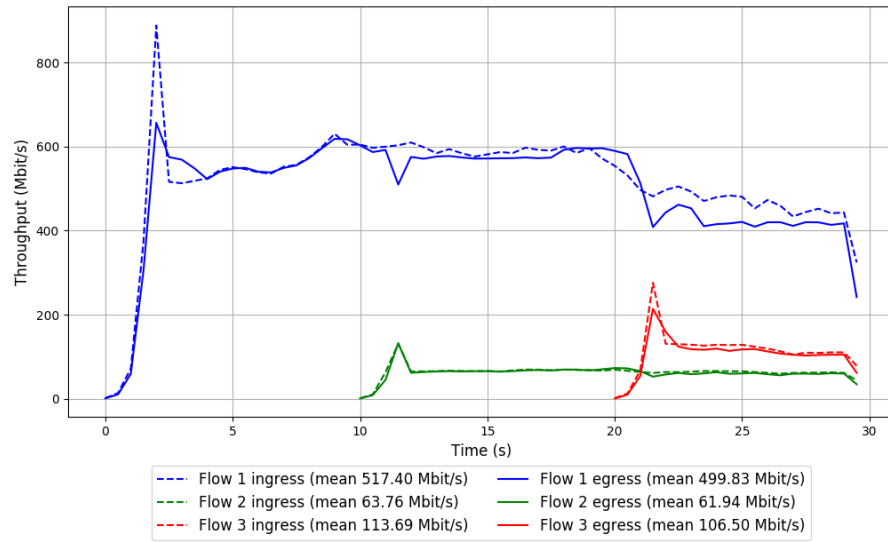


```
Run 10: Statistics of PCC

Start at: 2018-01-03 08:46:24
End at: 2018-01-03 08:46:54

# Below is generated by plot.py at 2018-01-03 11:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 575.57 Mbit/s
95th percentile per-packet one-way delay: 192.109 ms
Loss rate: 4.02%
-- Flow 1:
Average throughput: 499.83 Mbit/s
95th percentile per-packet one-way delay: 191.022 ms
Loss rate: 3.80%
-- Flow 2:
Average throughput: 61.94 Mbit/s
95th percentile per-packet one-way delay: 193.168 ms
Loss rate: 3.60%
-- Flow 3:
Average throughput: 106.50 Mbit/s
95th percentile per-packet one-way delay: 194.190 ms
Loss rate: 7.54%
```

Run 10: Report of PCC — Data Link

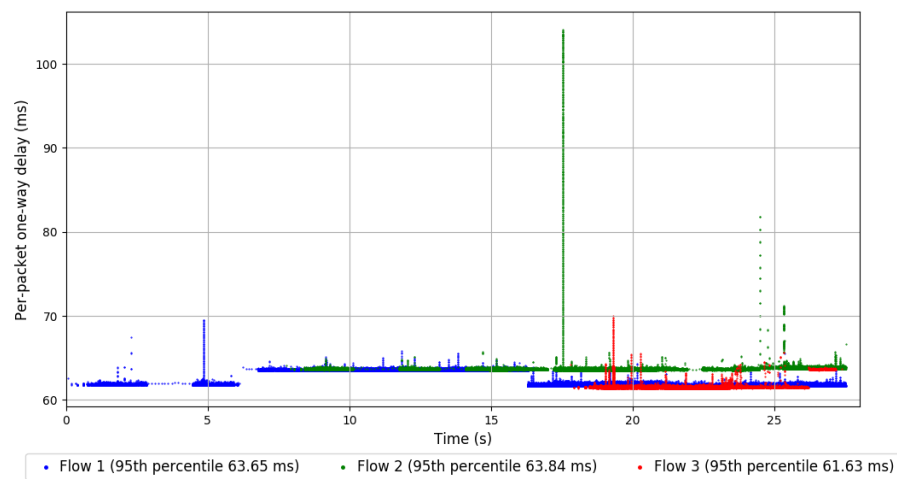
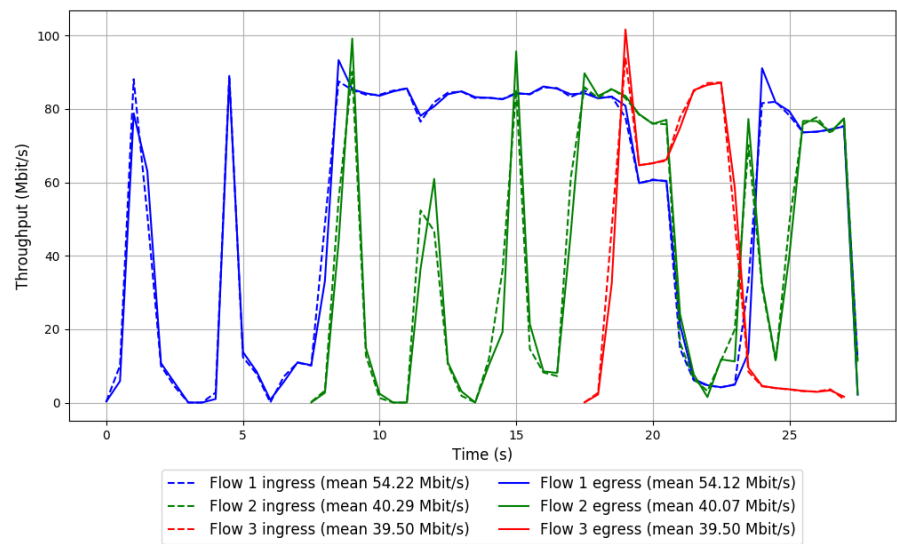


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-03 06:47:47
End at: 2018-01-03 06:48:18

# Below is generated by plot.py at 2018-01-03 11:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.71 Mbit/s
95th percentile per-packet one-way delay: 63.759 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 54.12 Mbit/s
95th percentile per-packet one-way delay: 63.649 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 40.07 Mbit/s
95th percentile per-packet one-way delay: 63.843 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 39.50 Mbit/s
95th percentile per-packet one-way delay: 61.626 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-03 07:01:53

End at: 2018-01-03 07:02:23

Run 2: Report of QUIC Cubic — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of QUIC Cubic

Start at: 2018-01-03 07:15:01

End at: 2018-01-03 07:15:31

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.72 Mbit/s

95th percentile per-packet one-way delay: 64.002 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 64.591 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.29 Mbit/s

95th percentile per-packet one-way delay: 64.052 ms

Loss rate: 0.67%

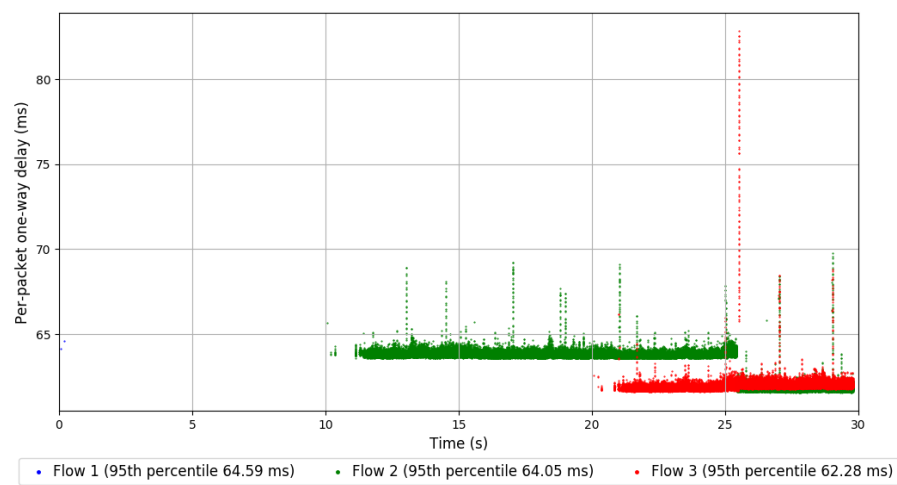
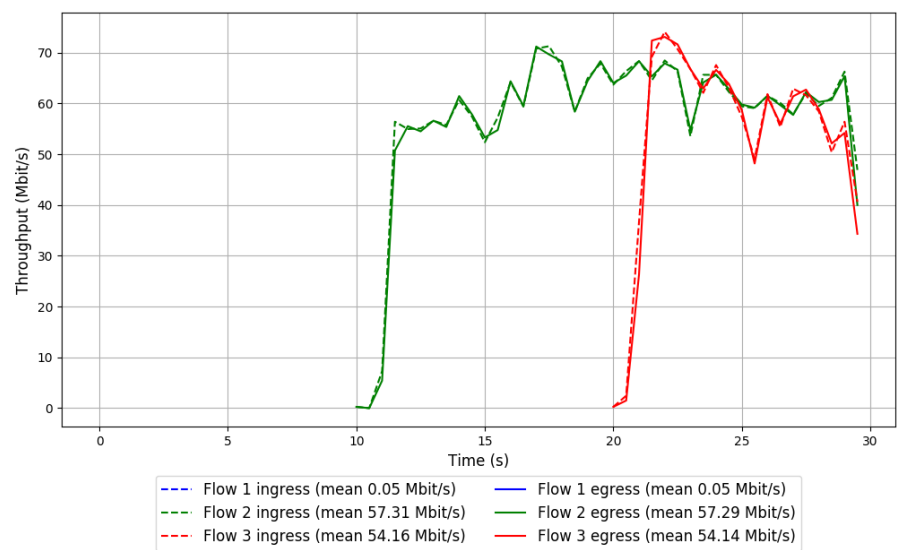
-- Flow 3:

Average throughput: 54.14 Mbit/s

95th percentile per-packet one-way delay: 62.283 ms

Loss rate: 1.30%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-03 07:27:27

End at: 2018-01-03 07:27:57

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.32 Mbit/s

95th percentile per-packet one-way delay: 64.102 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 64.503 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.98 Mbit/s

95th percentile per-packet one-way delay: 62.071 ms

Loss rate: 0.75%

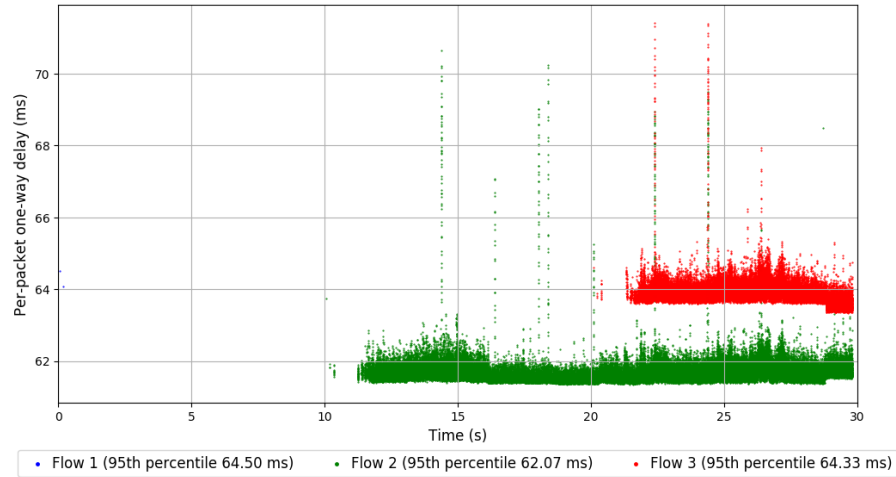
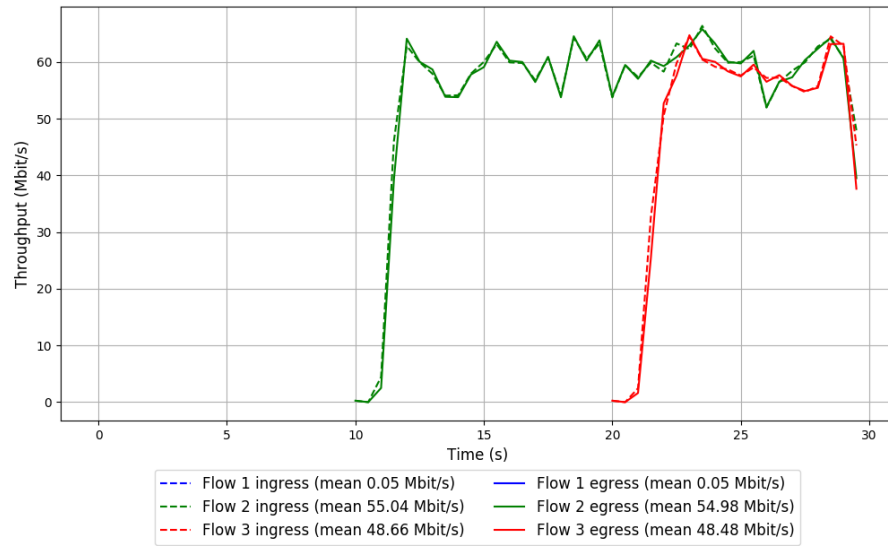
-- Flow 3:

Average throughput: 48.48 Mbit/s

95th percentile per-packet one-way delay: 64.330 ms

Loss rate: 1.66%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-03 07:40:41

End at: 2018-01-03 07:41:11

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.08 Mbit/s

95th percentile per-packet one-way delay: 63.887 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 55.20 Mbit/s

95th percentile per-packet one-way delay: 63.833 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 31.06 Mbit/s

95th percentile per-packet one-way delay: 64.075 ms

Loss rate: 0.13%

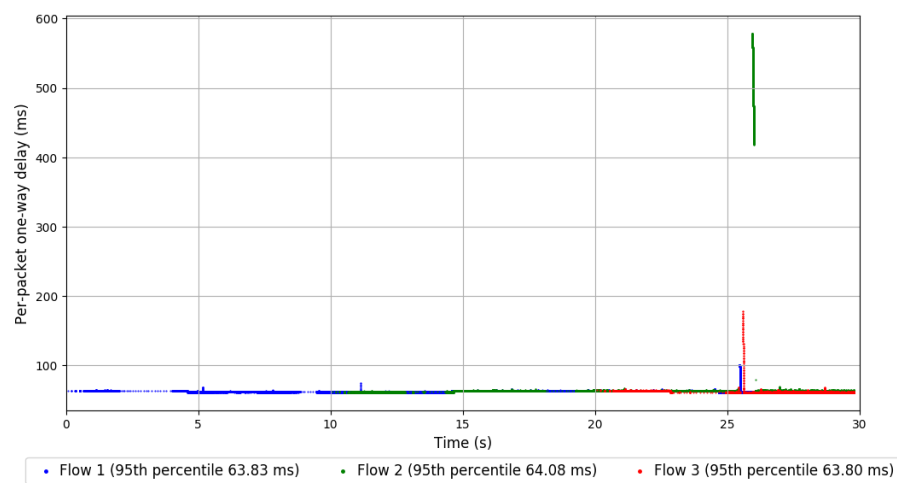
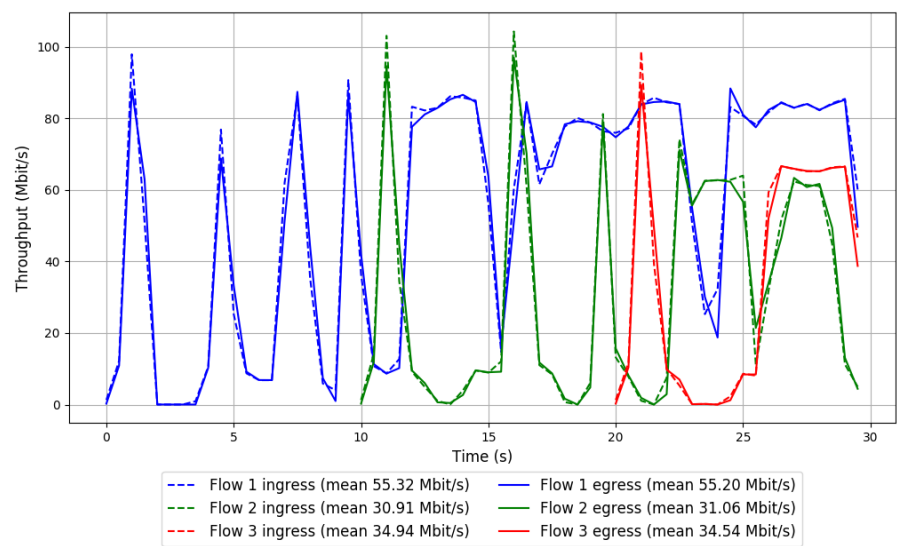
-- Flow 3:

Average throughput: 34.54 Mbit/s

95th percentile per-packet one-way delay: 63.798 ms

Loss rate: 2.36%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-03 07:54:29

End at: 2018-01-03 07:54:59

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.53 Mbit/s

95th percentile per-packet one-way delay: 64.037 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 58.08 Mbit/s

95th percentile per-packet one-way delay: 64.053 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 56.44 Mbit/s

95th percentile per-packet one-way delay: 63.625 ms

Loss rate: 0.81%

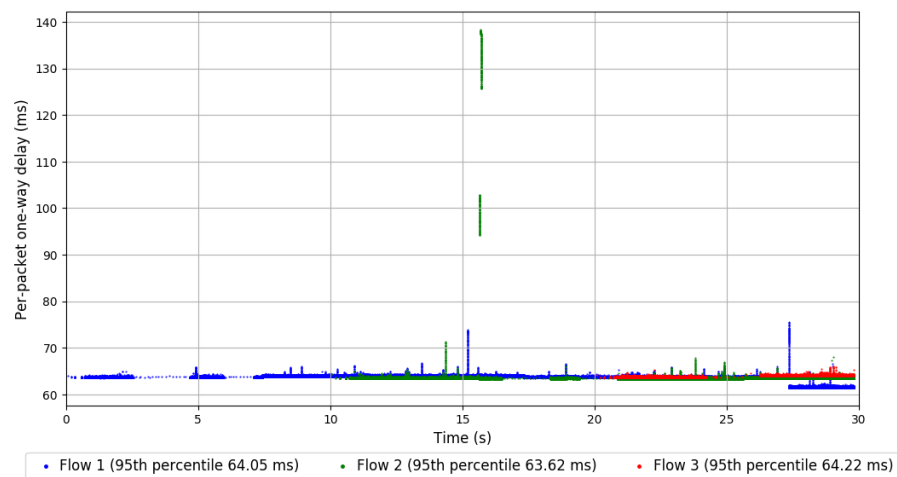
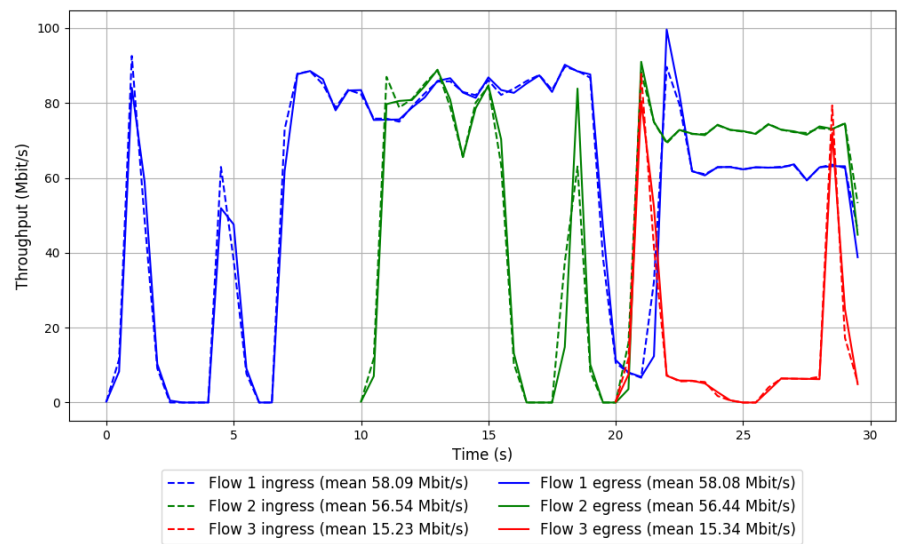
-- Flow 3:

Average throughput: 15.34 Mbit/s

95th percentile per-packet one-way delay: 64.217 ms

Loss rate: 0.55%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-03 08:08:16

End at: 2018-01-03 08:08:46

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.23 Mbit/s

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

Loss rate: 0.87%

-- Flow 1:

Average throughput: 46.74 Mbit/s

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

Loss rate: 0.52%

-- Flow 2:

Average throughput: 50.12 Mbit/s

95th percentile per-packet one-way delay: 63.808 ms

Loss rate: 0.83%

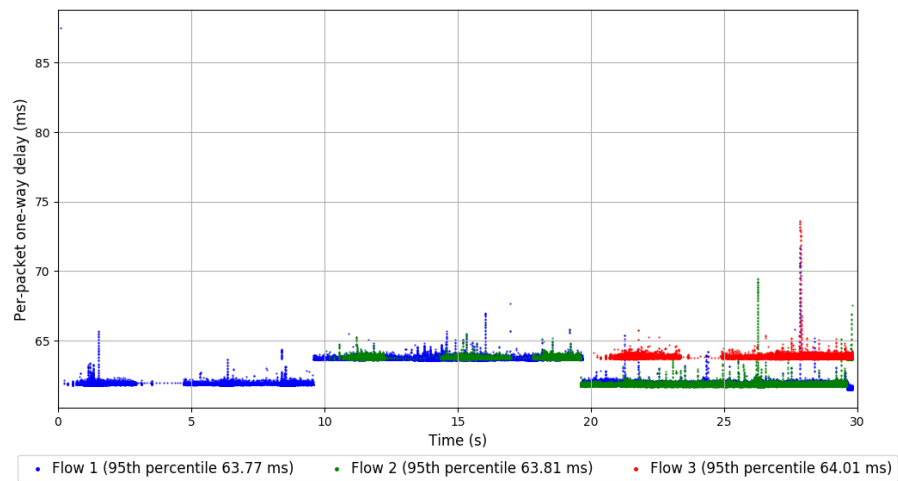
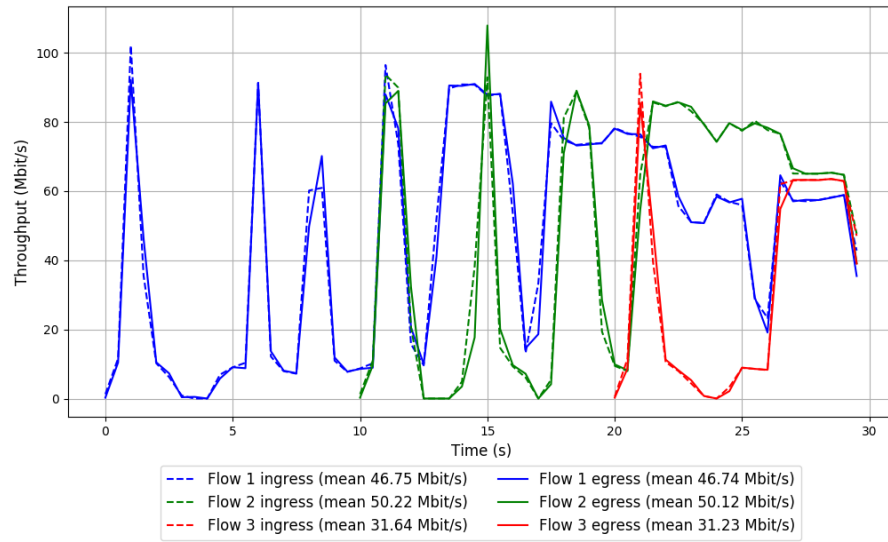
-- Flow 3:

Average throughput: 31.23 Mbit/s

95th percentile per-packet one-way delay: 64.010 ms

Loss rate: 2.58%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-03 08:22:44

End at: 2018-01-03 08:23:14

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.81 Mbit/s

95th percentile per-packet one-way delay: 63.961 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 52.35 Mbit/s

95th percentile per-packet one-way delay: 63.886 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 31.31 Mbit/s

95th percentile per-packet one-way delay: 64.022 ms

Loss rate: 0.23%

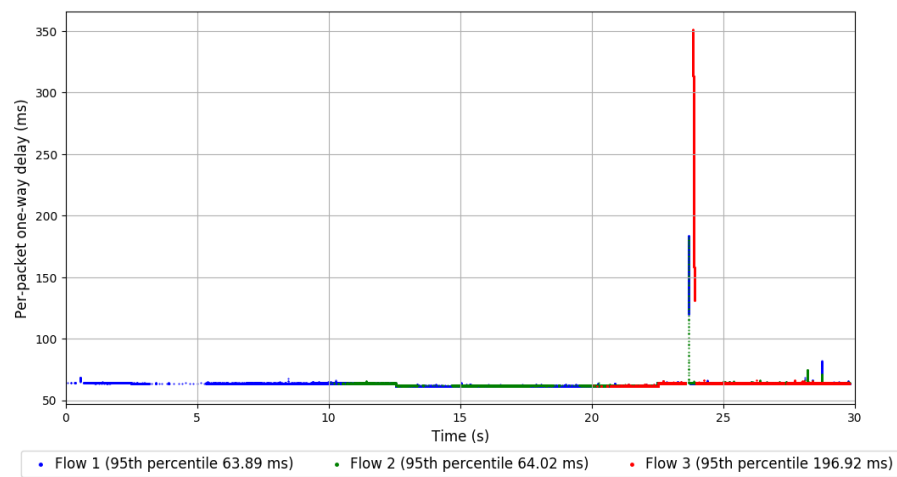
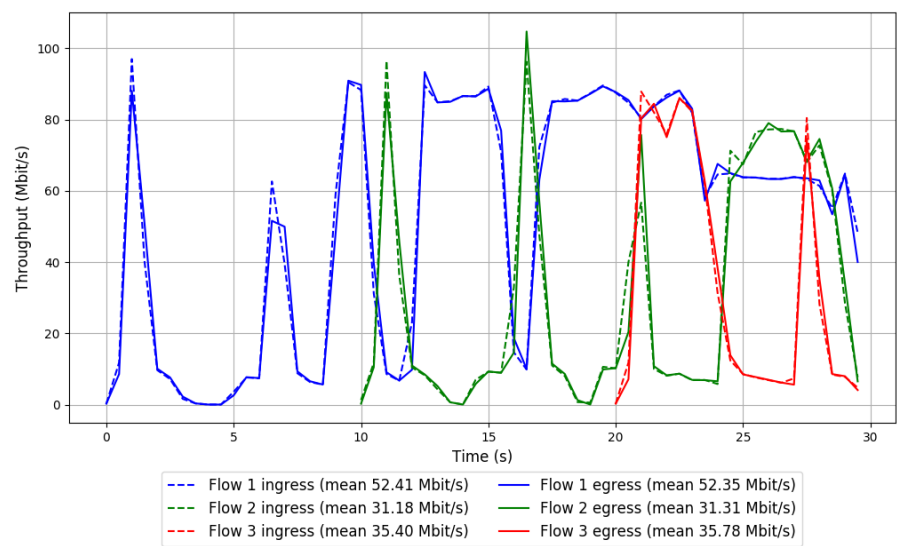
-- Flow 3:

Average throughput: 35.78 Mbit/s

95th percentile per-packet one-way delay: 196.923 ms

Loss rate: 0.23%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-03 08:37:14

End at: 2018-01-03 08:37:44

Run 9: Report of QUIC Cubic — Data Link

Figure is missing

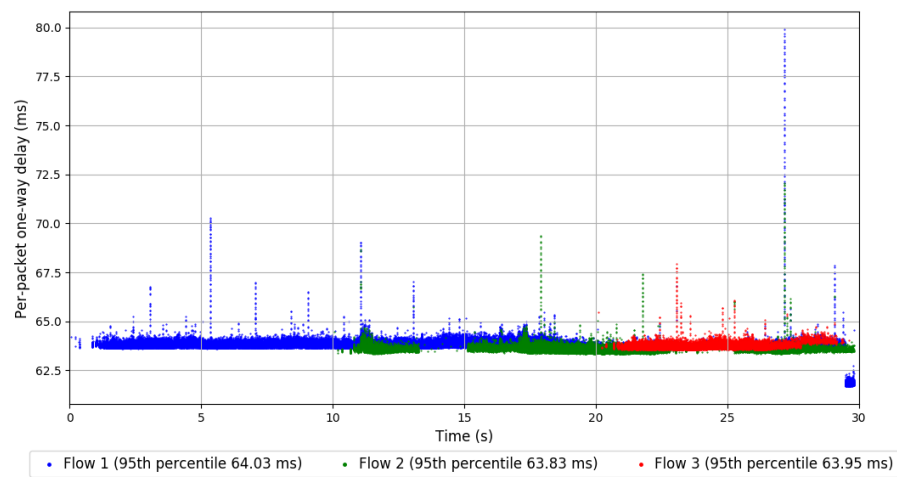
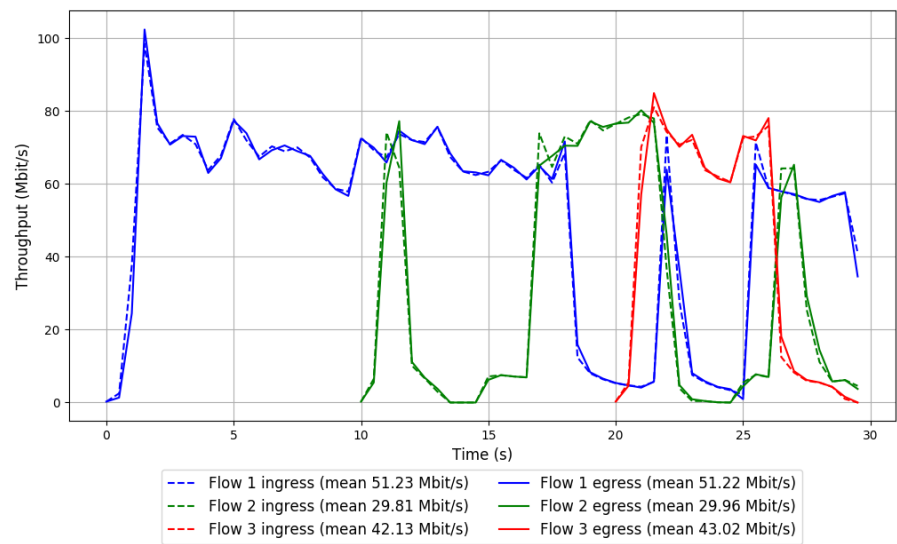
Figure is missing

```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-03 08:50:37
End at: 2018-01-03 08:51:07

# Below is generated by plot.py at 2018-01-03 11:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 63.997 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 51.22 Mbit/s
95th percentile per-packet one-way delay: 64.034 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 29.96 Mbit/s
95th percentile per-packet one-way delay: 63.832 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 43.02 Mbit/s
95th percentile per-packet one-way delay: 63.952 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

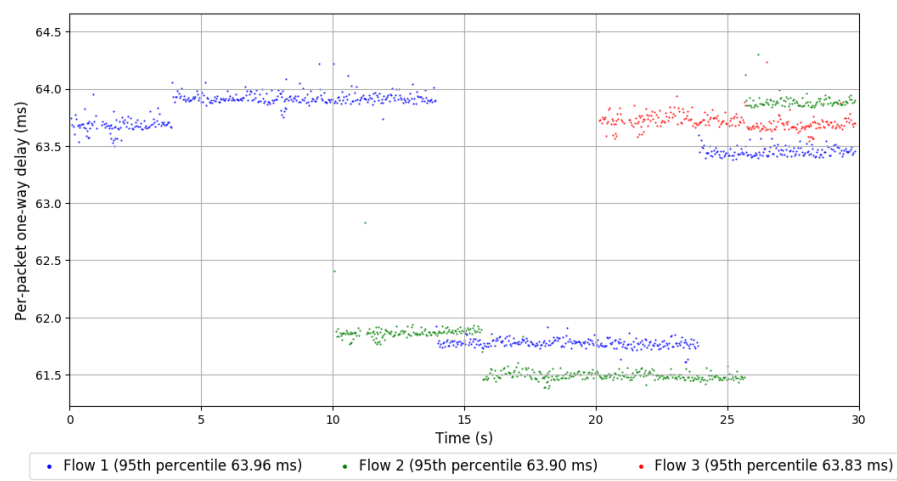
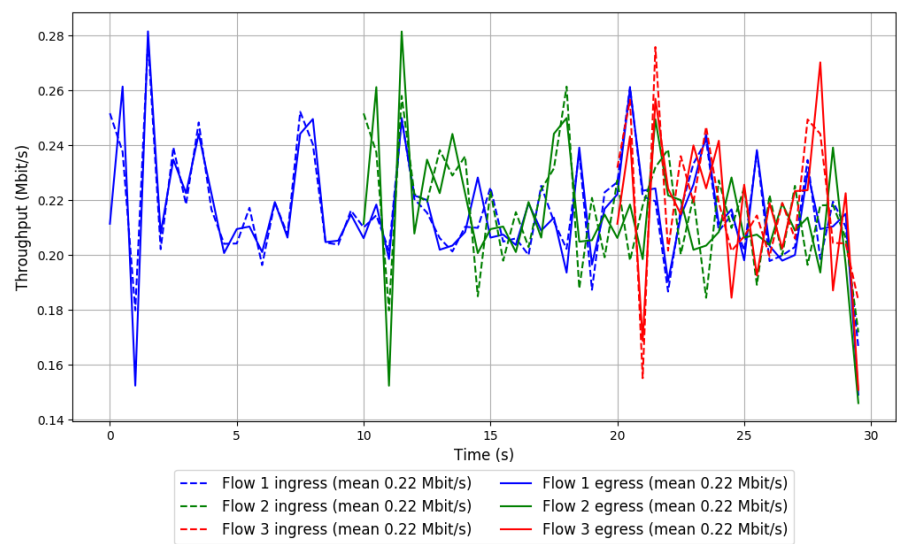


```
Run 1: Statistics of SCReAM

Start at: 2018-01-03 06:50:30
End at: 2018-01-03 06:51:00

# Below is generated by plot.py at 2018-01-03 11:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.938 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.960 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.903 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.828 ms
Loss rate: 1.10%
```

Run 1: Report of SReAM — Data Link

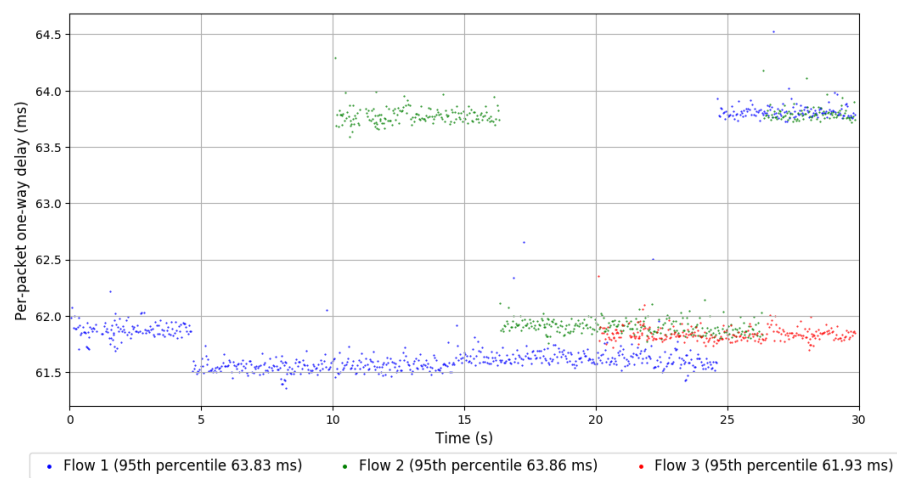
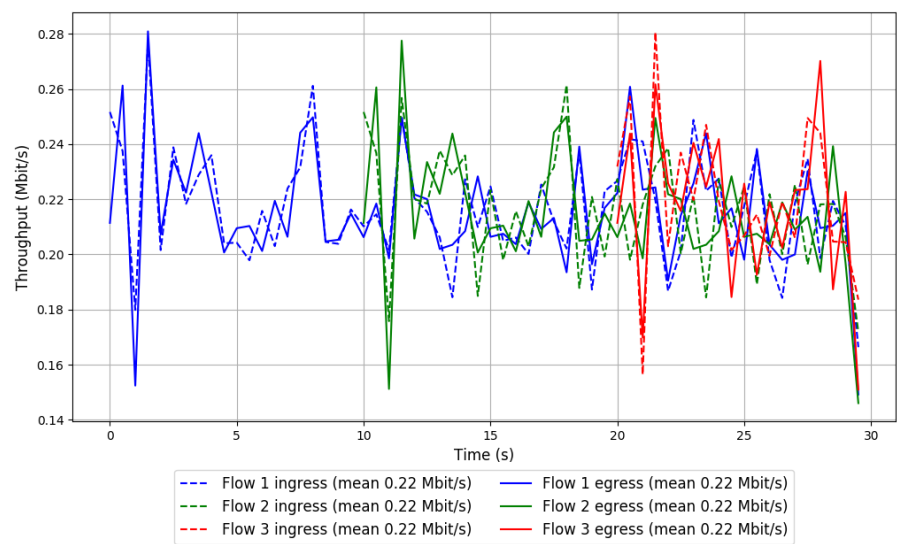


```
Run 2: Statistics of SCReAM

Start at: 2018-01-03 07:04:30
End at: 2018-01-03 07:05:00

# Below is generated by plot.py at 2018-01-03 11:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.832 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.831 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.862 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.932 ms
Loss rate: 1.10%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-03 07:17:31

End at: 2018-01-03 07:18:01

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 64.515 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 64.368 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 64.646 ms

Loss rate: 0.85%

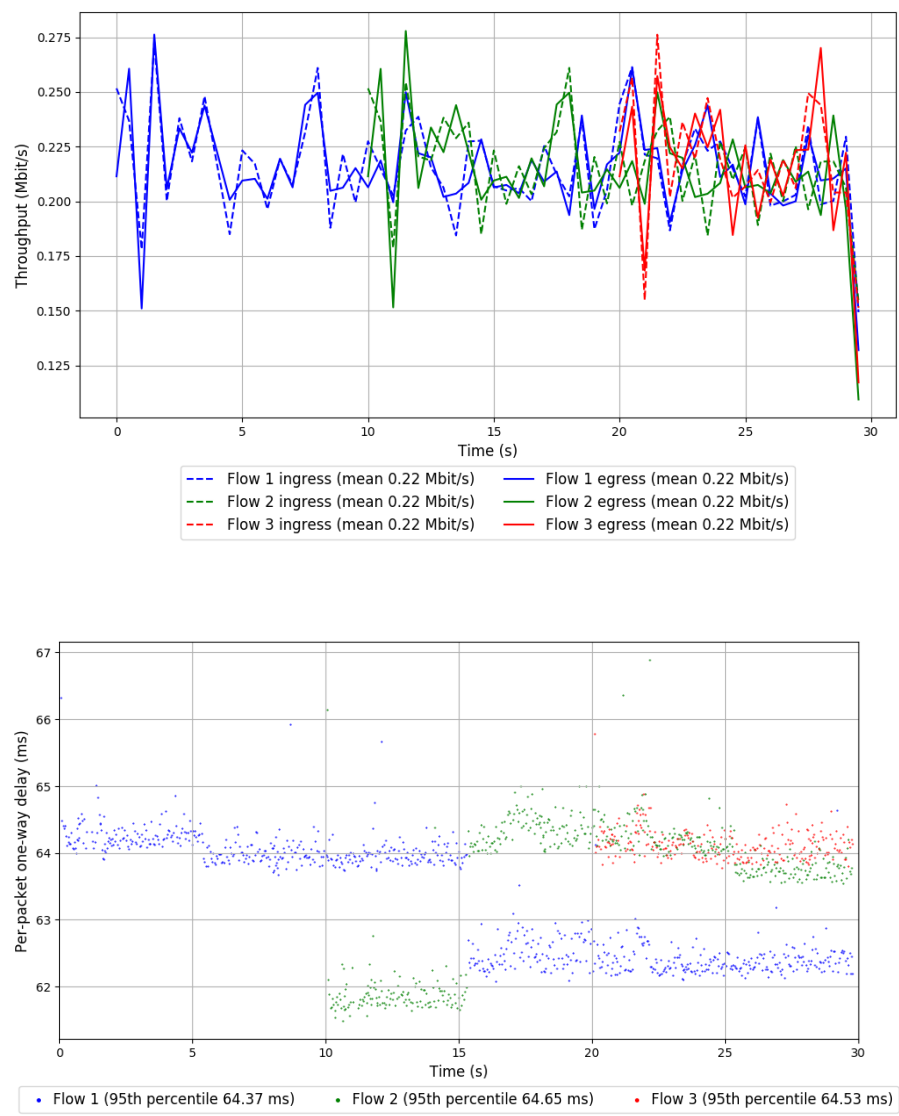
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 1.15%

Run 3: Report of SReAM — Data Link

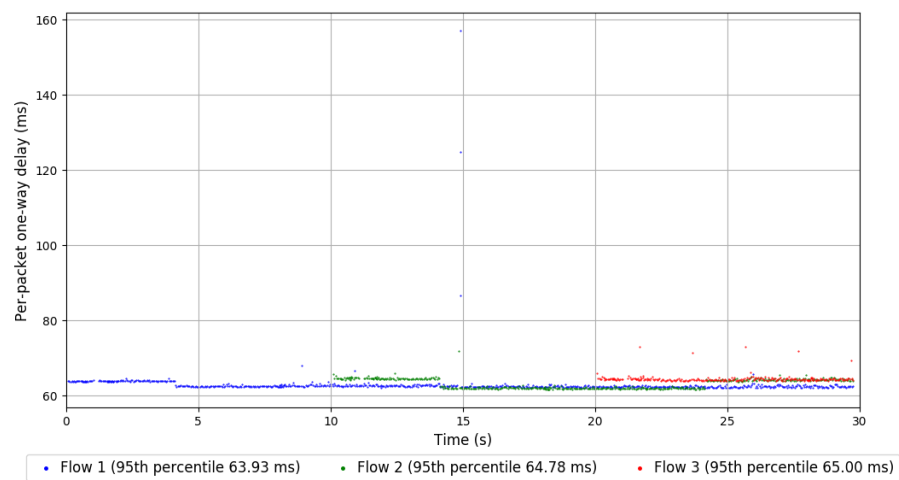
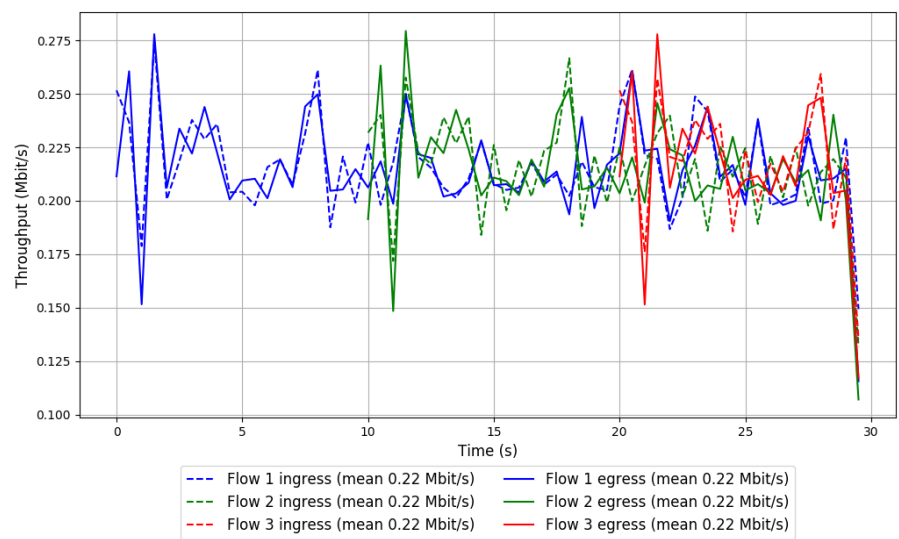


```
Run 4: Statistics of SCReAM

Start at: 2018-01-03 07:29:52
End at: 2018-01-03 07:30:22

# Below is generated by plot.py at 2018-01-03 11:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 64.675 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.929 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.778 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.998 ms
Loss rate: 1.15%
```

Run 4: Report of SReAM — Data Link

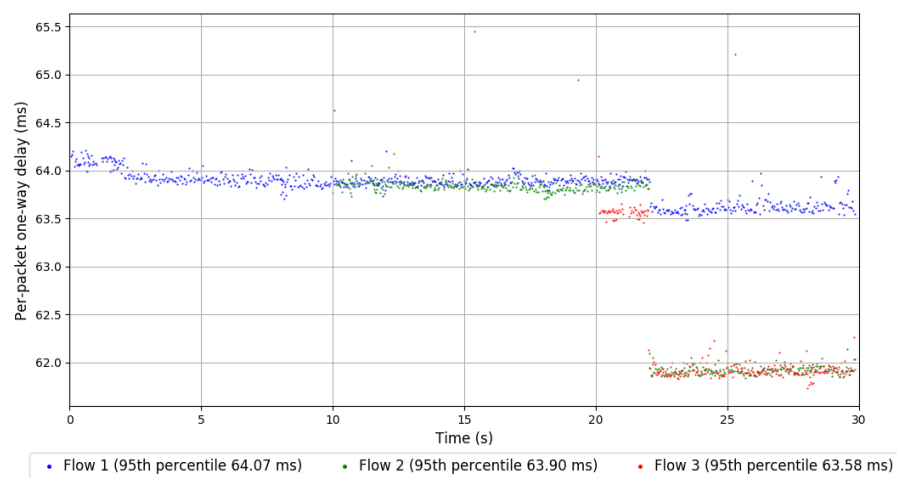
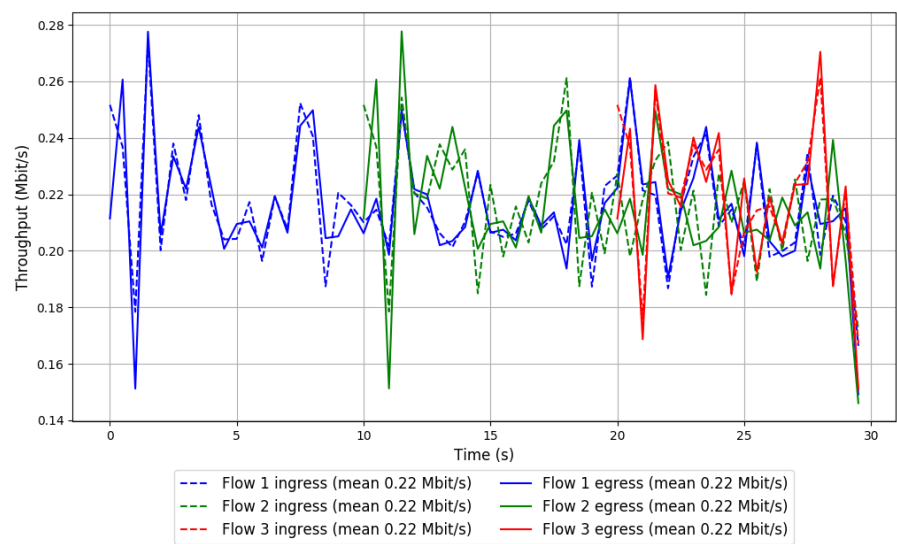


```
Run 5: Statistics of SReAM

Start at: 2018-01-03 07:43:24
End at: 2018-01-03 07:43:54

# Below is generated by plot.py at 2018-01-03 11:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.996 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.071 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.901 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.583 ms
Loss rate: 1.10%
```

Run 5: Report of SReAM — Data Link

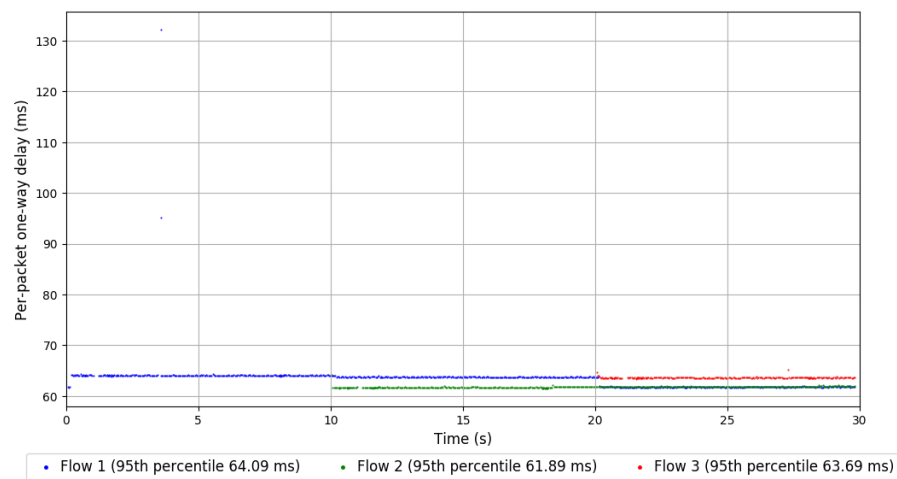
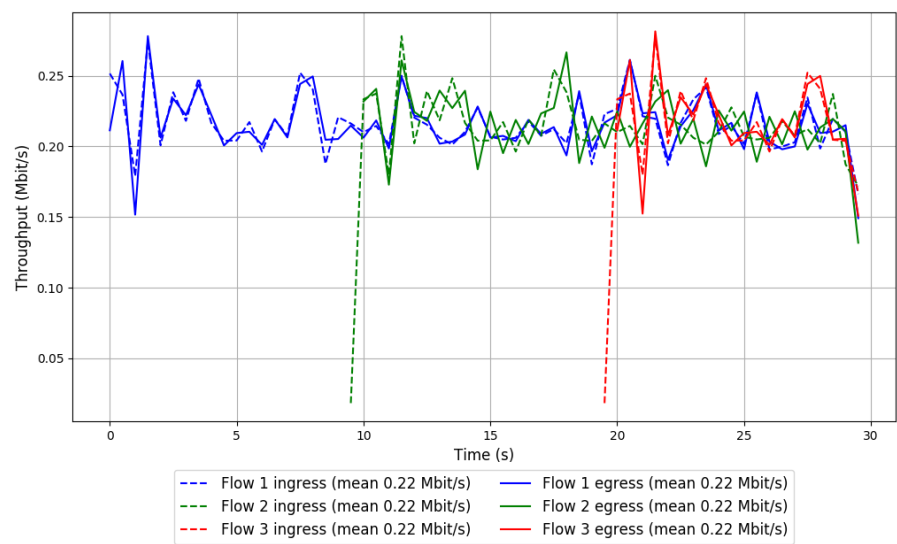


```
Run 6: Statistics of SReAM

Start at: 2018-01-03 07:57:06
End at: 2018-01-03 07:57:36

# Below is generated by plot.py at 2018-01-03 11:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 64.071 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.095 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.888 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.685 ms
Loss rate: 1.10%
```

Run 6: Report of SReAM — Data Link

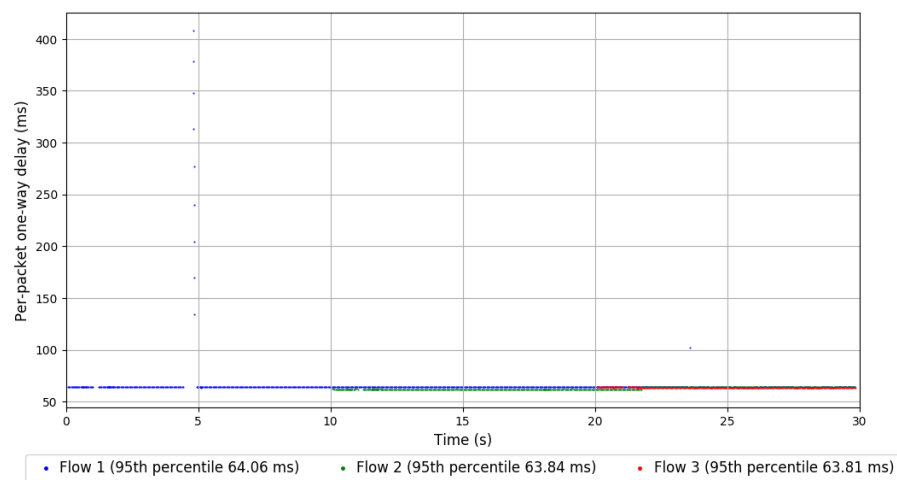
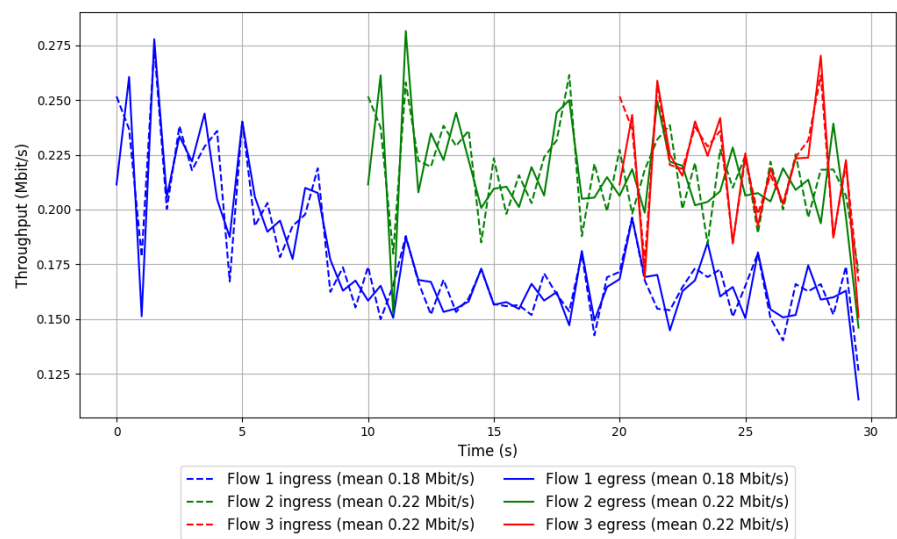


```
Run 7: Statistics of SReAM

Start at: 2018-01-03 08:11:03
End at: 2018-01-03 08:11:33

# Below is generated by plot.py at 2018-01-03 11:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 64.043 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 64.063 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.841 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.808 ms
Loss rate: 1.10%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-03 08:25:29

End at: 2018-01-03 08:25:59

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 64.041 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 64.060 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.994 ms

Loss rate: 0.63%

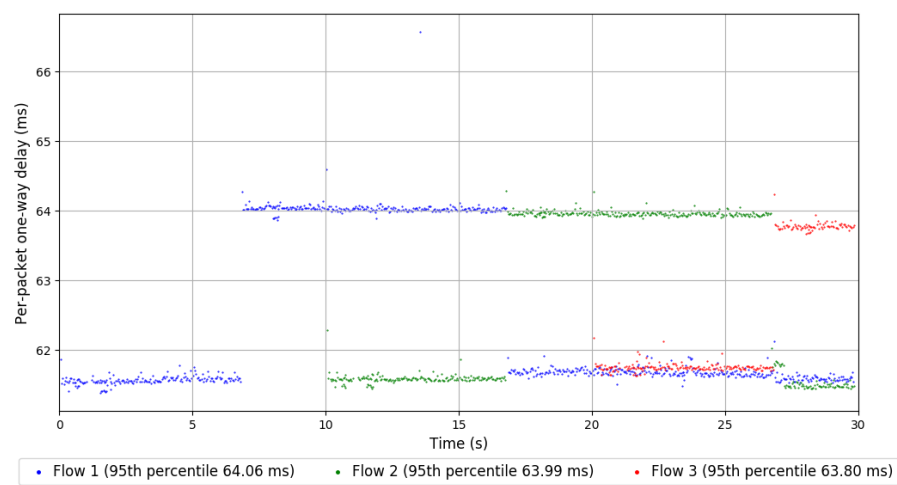
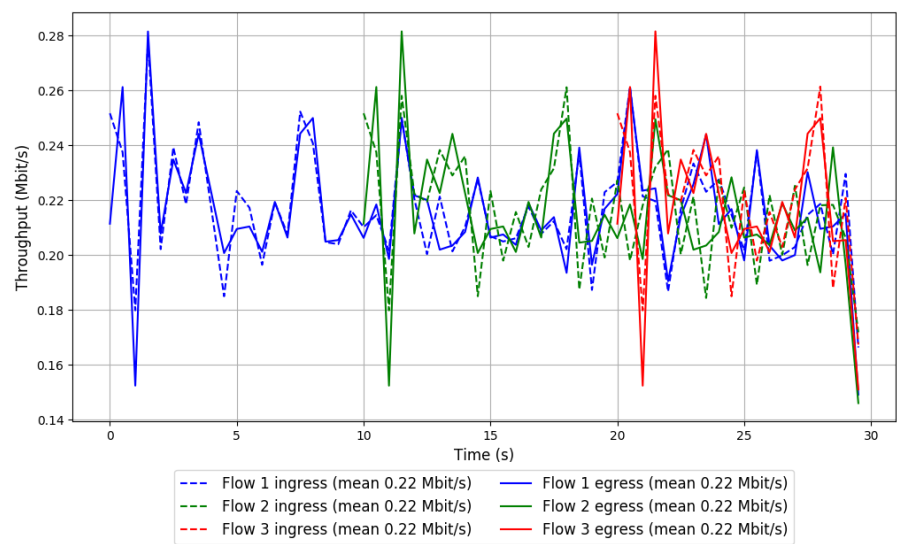
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.803 ms

Loss rate: 1.10%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-03 08:39:53

End at: 2018-01-03 08:40:23

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 63.845 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.858 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.830 ms

Loss rate: 0.63%

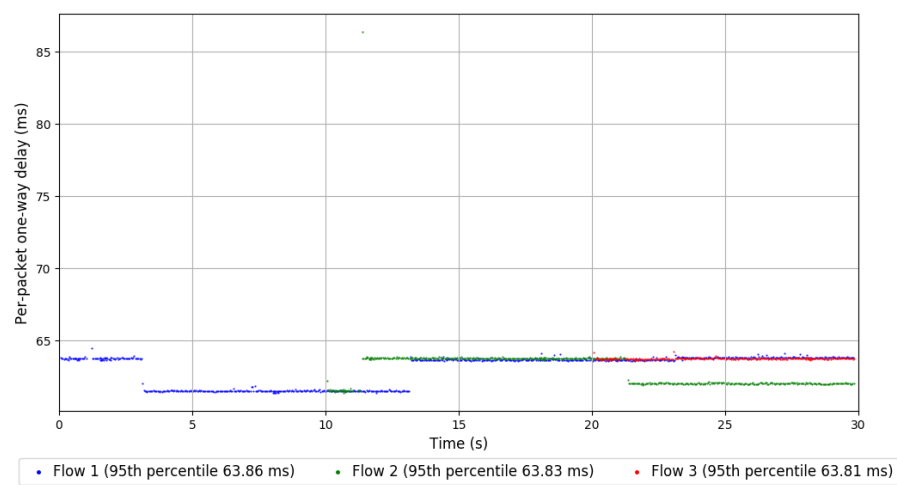
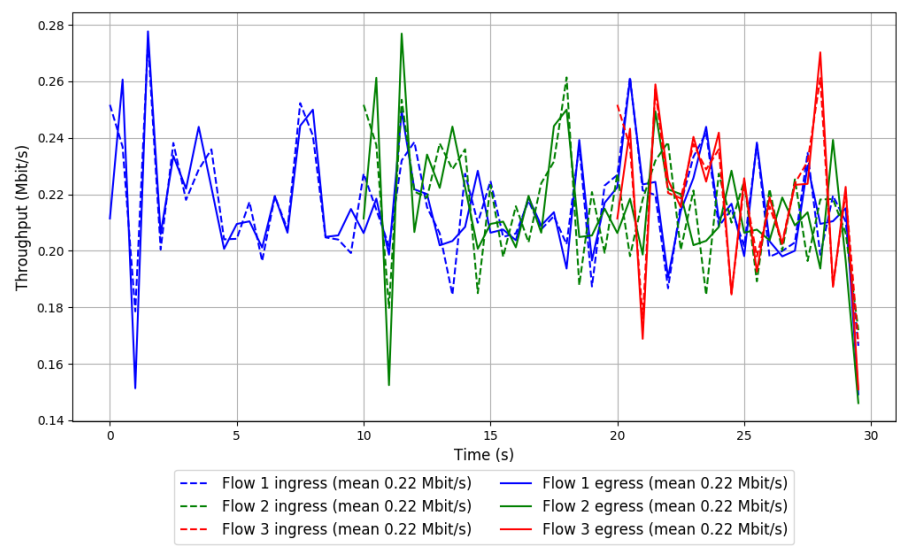
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.808 ms

Loss rate: 1.10%

Run 9: Report of SReAM — Data Link

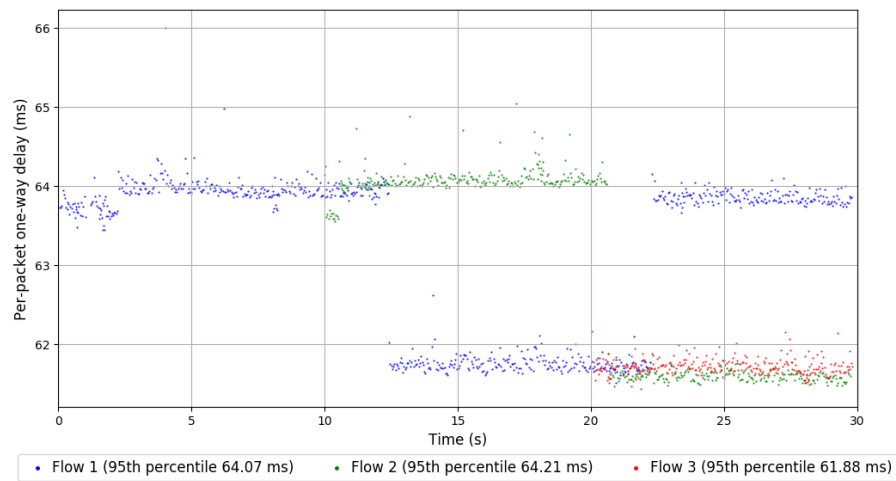
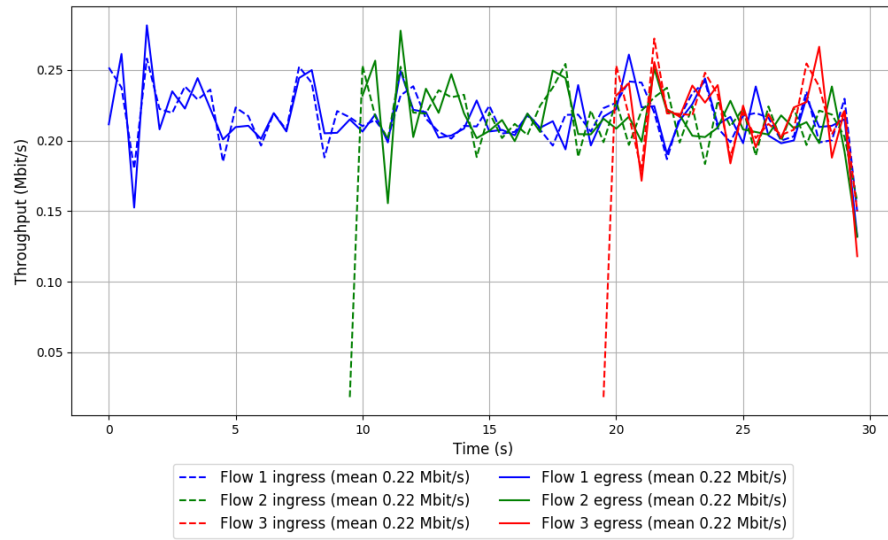


```
Run 10: Statistics of SReAM

Start at: 2018-01-03 08:53:14
End at: 2018-01-03 08:53:44

# Below is generated by plot.py at 2018-01-03 11:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 64.126 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.069 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 64.213 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.880 ms
Loss rate: 1.50%
```

Run 10: Report of SCReAM — Data Link

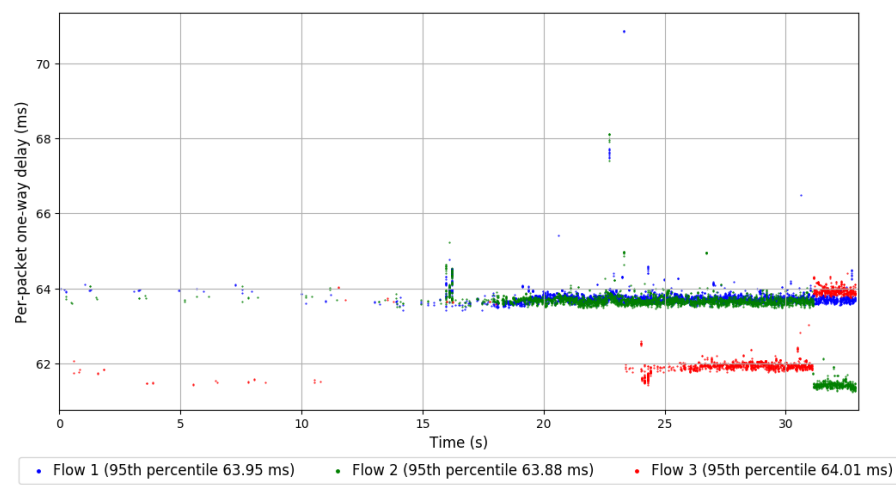
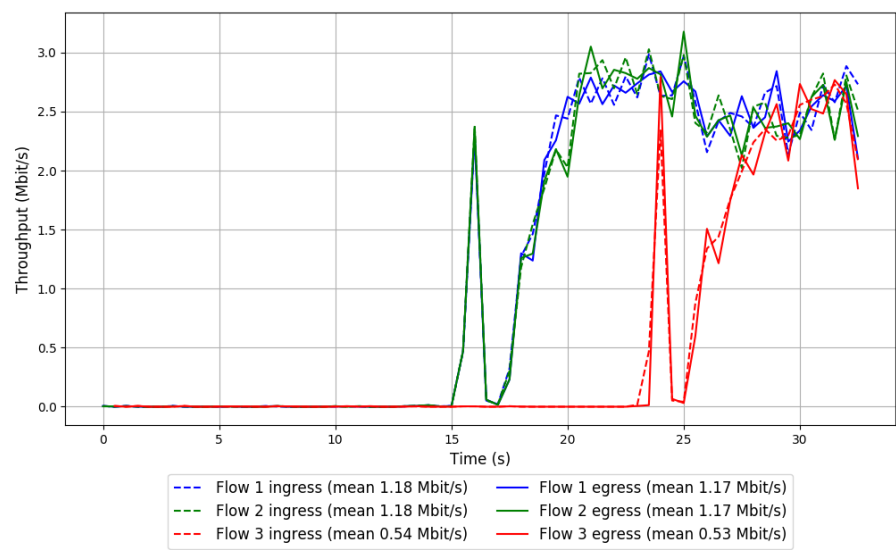


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-03 06:51:58
End at: 2018-01-03 06:52:28

# Below is generated by plot.py at 2018-01-03 11:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 63.958 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 63.950 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 63.877 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 64.009 ms
Loss rate: 1.74%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-03 07:05:56

End at: 2018-01-03 07:06:26

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 63.991 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 63.904 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 63.719 ms

Loss rate: 1.32%

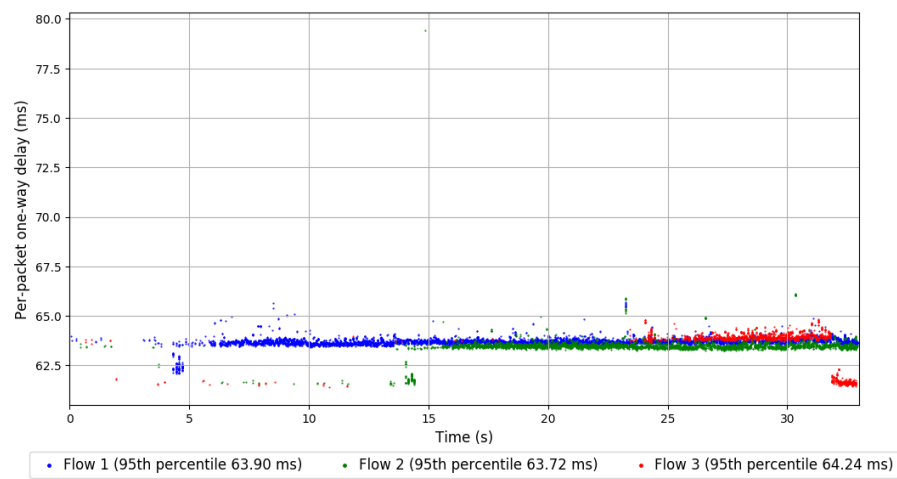
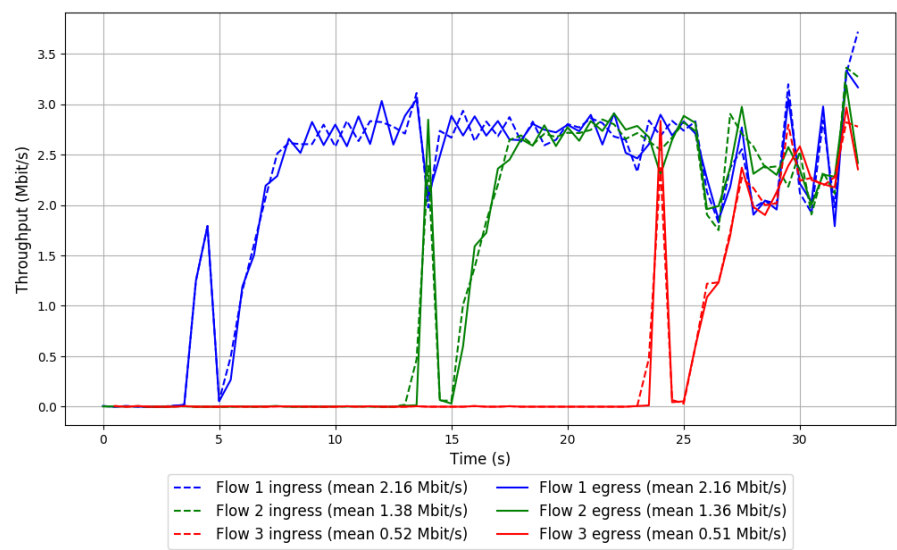
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 64.242 ms

Loss rate: 2.08%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-03 07:18:56

End at: 2018-01-03 07:19:26

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 64.308 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 64.397 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 62.596 ms

Loss rate: 0.08%

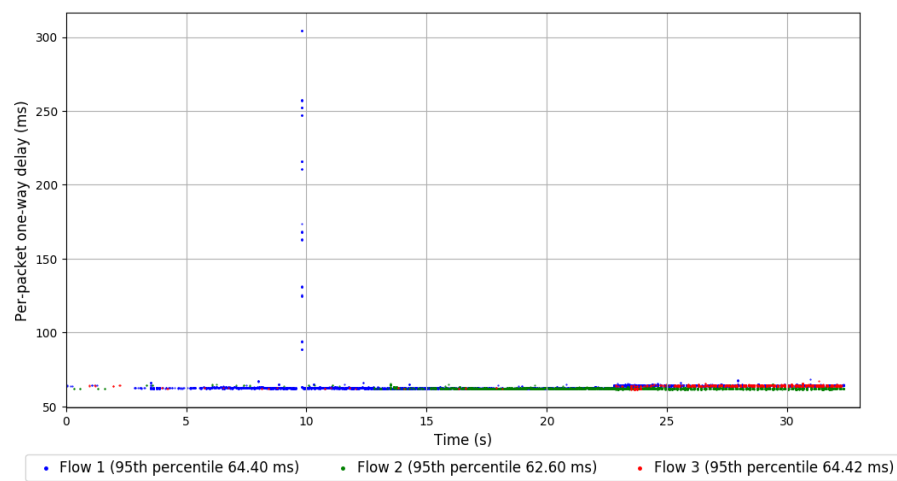
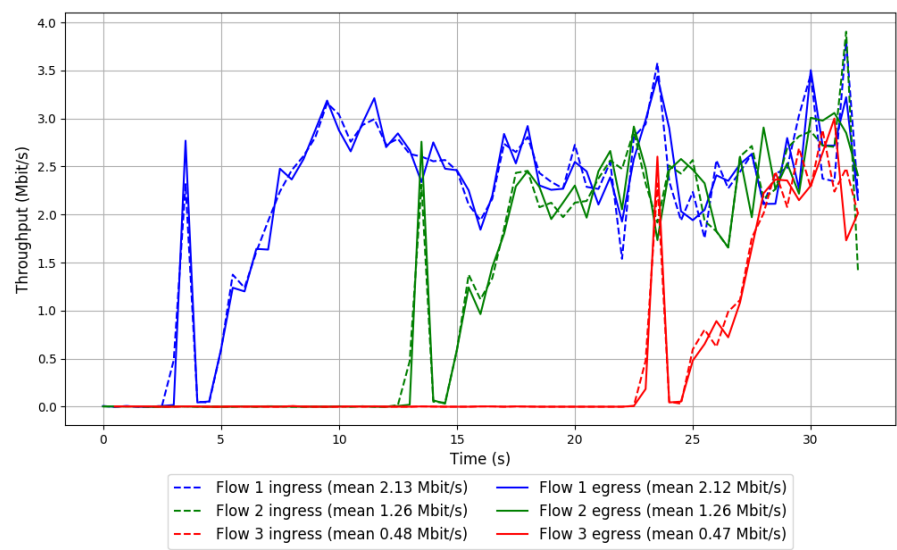
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 64.422 ms

Loss rate: 2.48%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-03 07:31:16

End at: 2018-01-03 07:31:46

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 64.652 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 64.638 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 64.379 ms

Loss rate: 0.00%

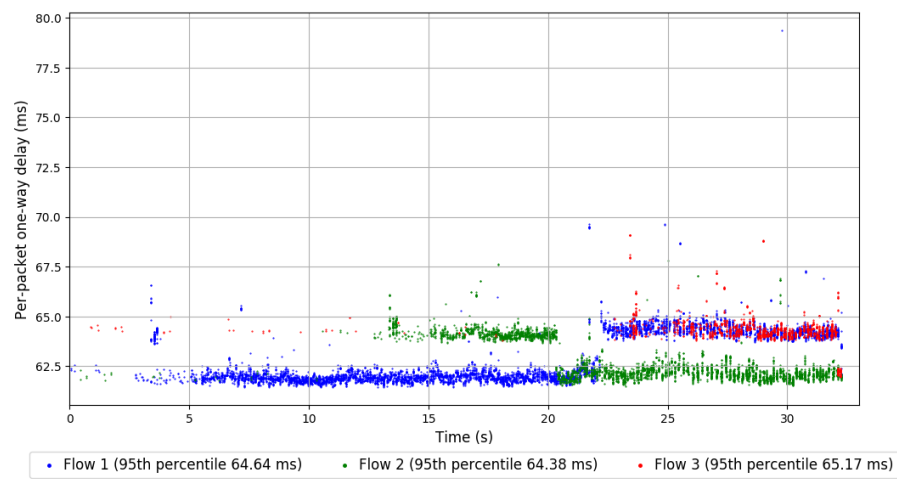
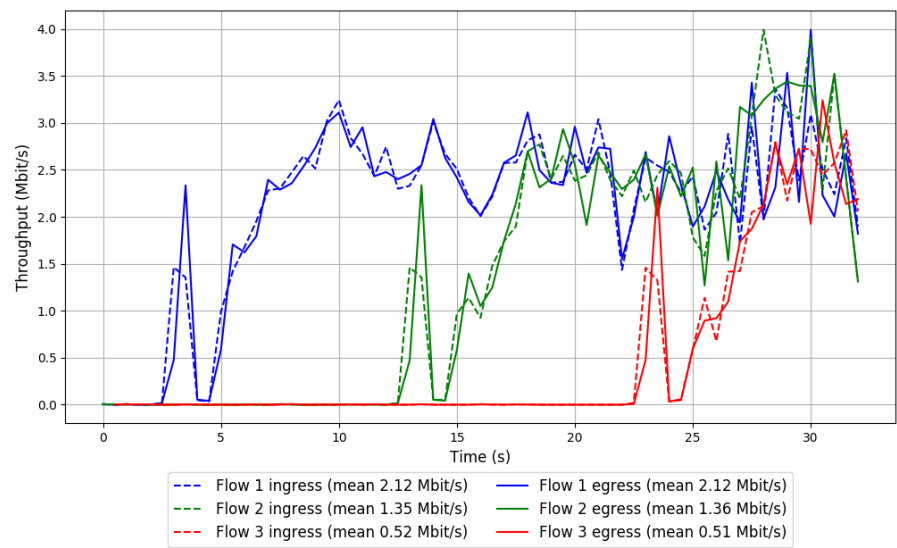
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 65.167 ms

Loss rate: 2.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-03 07:44:48

End at: 2018-01-03 07:45:18

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 64.182 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 64.206 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 64.129 ms

Loss rate: 0.61%

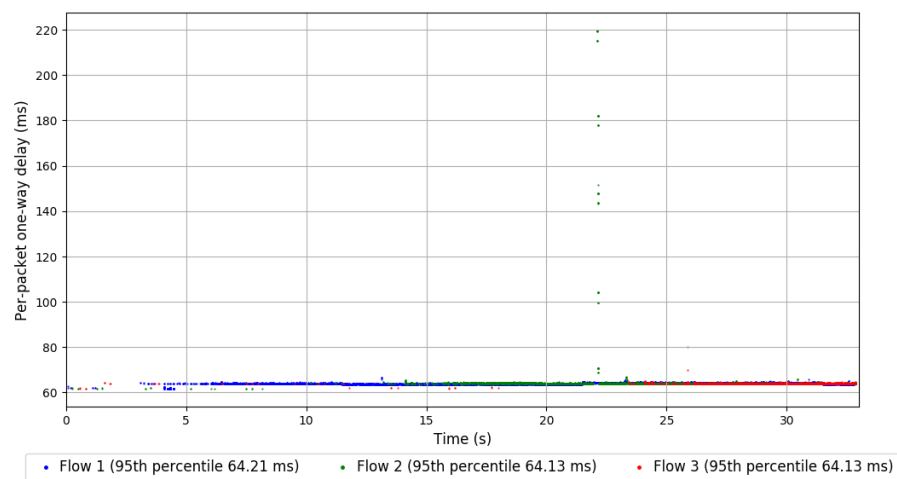
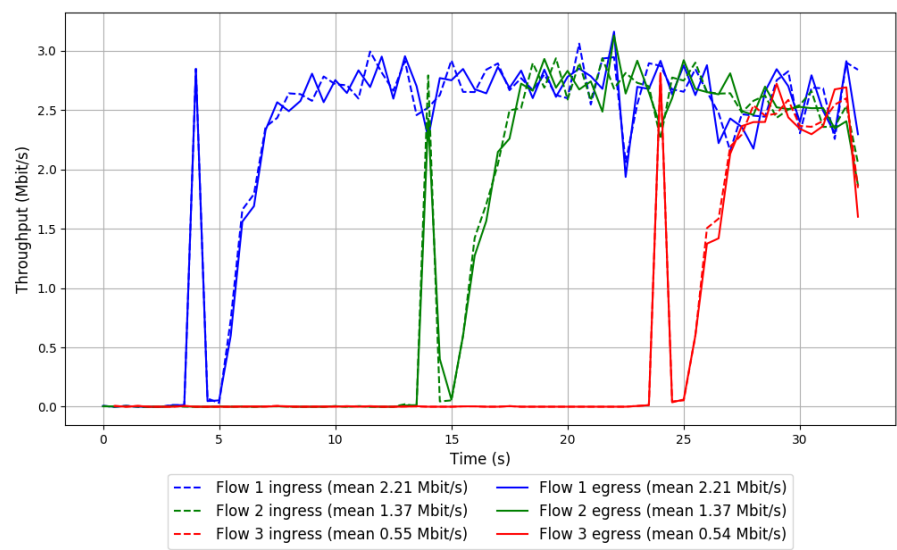
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 64.127 ms

Loss rate: 1.49%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-03 07:58:33

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

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 64.248 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 64.073 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 62.482 ms

Loss rate: 0.57%

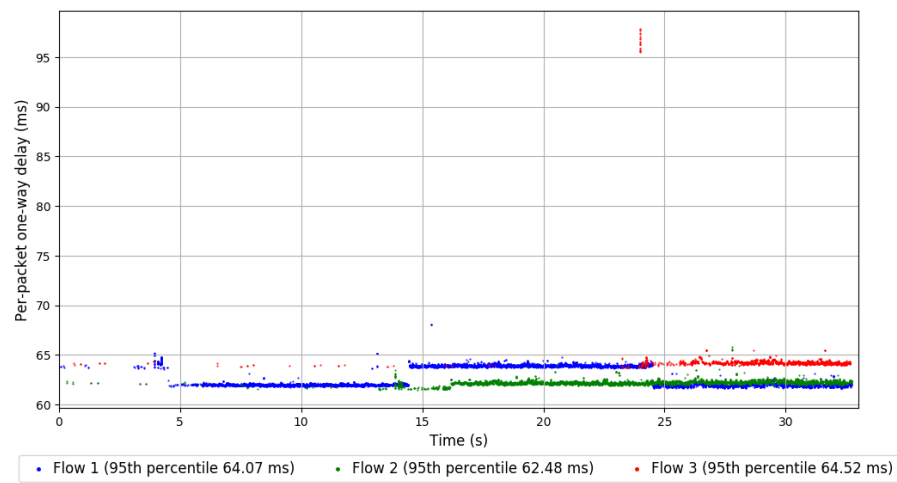
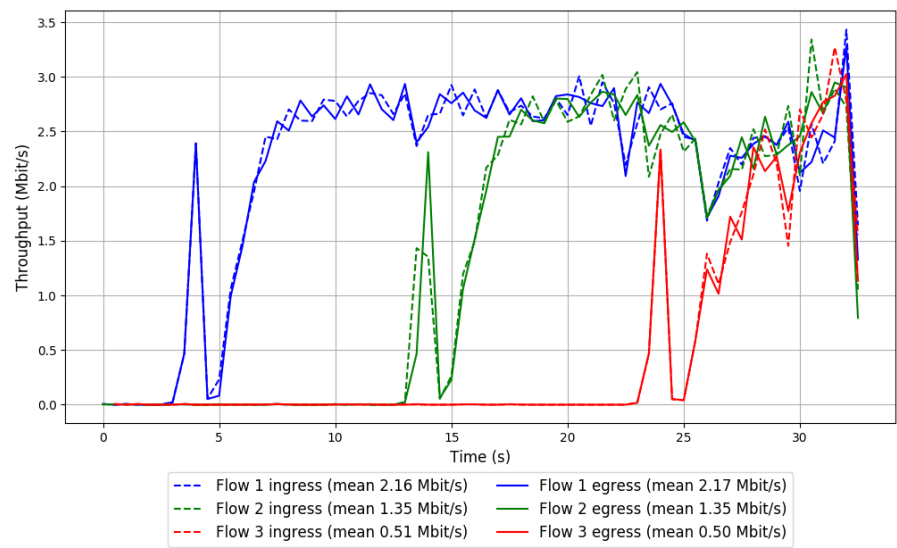
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 64.520 ms

Loss rate: 2.34%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-03 08:12:27

End at: 2018-01-03 08:12:57

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 63.895 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.916 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 61.849 ms

Loss rate: 0.68%

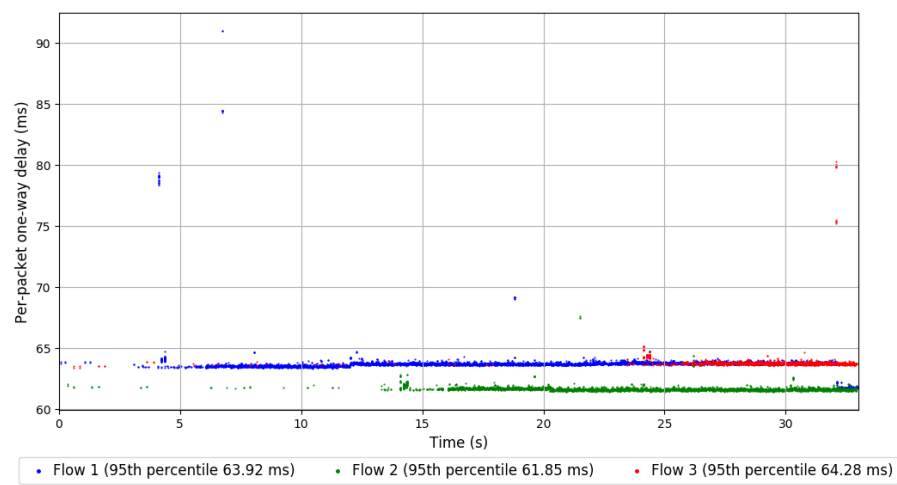
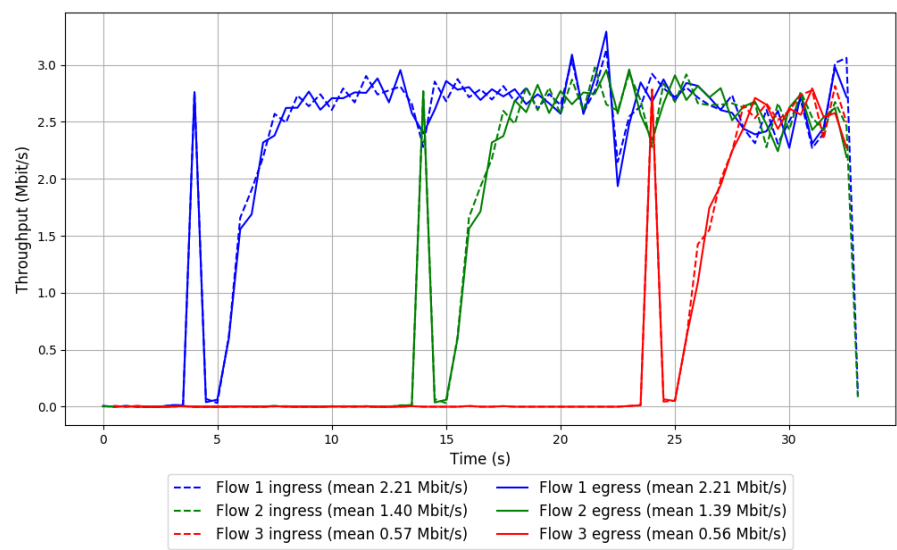
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 64.283 ms

Loss rate: 1.91%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-03 08:26:58

End at: 2018-01-03 08:27:28

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 64.094 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.900 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 1.40 Mbit/s

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

Loss rate: 0.67%

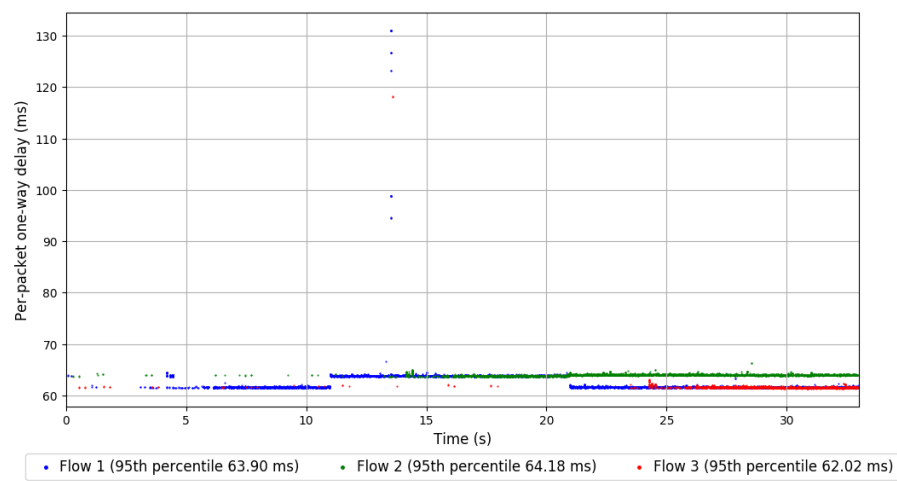
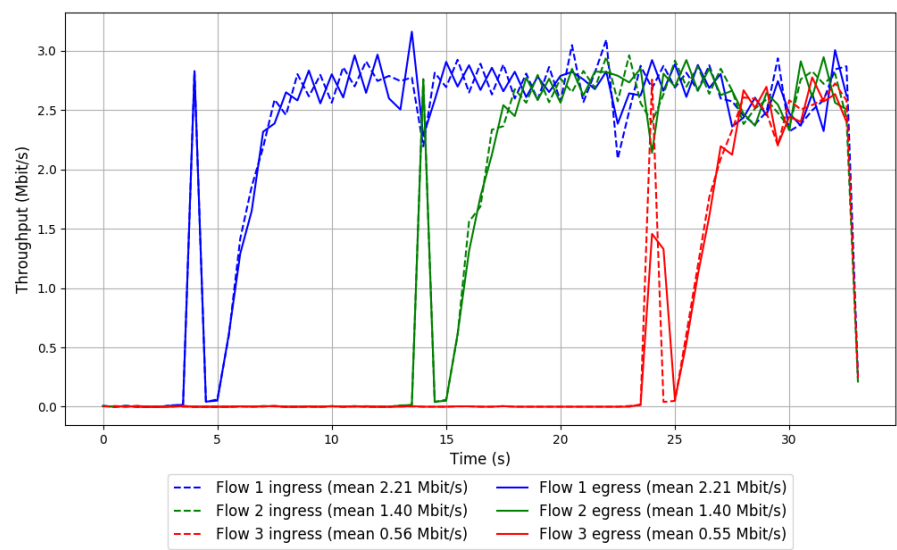
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 62.022 ms

Loss rate: 2.06%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-03 08:41:19

End at: 2018-01-03 08:41:49

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 64.128 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 64.081 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 64.183 ms

Loss rate: 0.70%

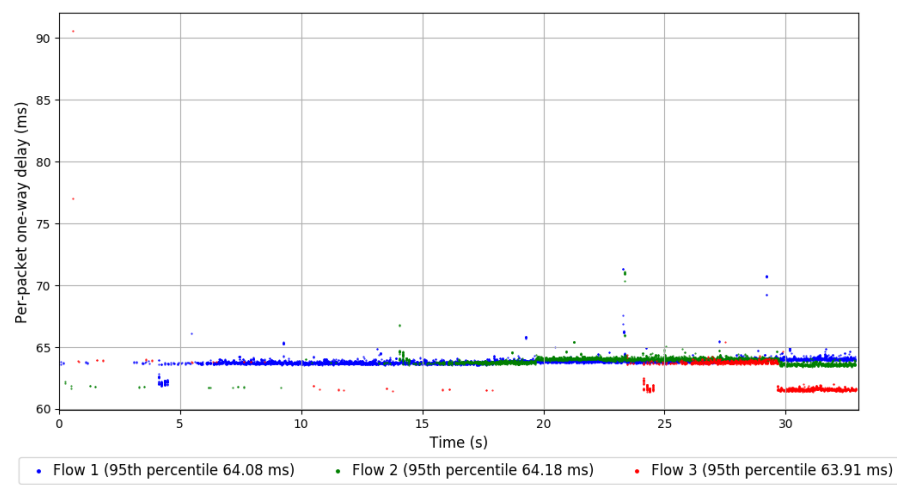
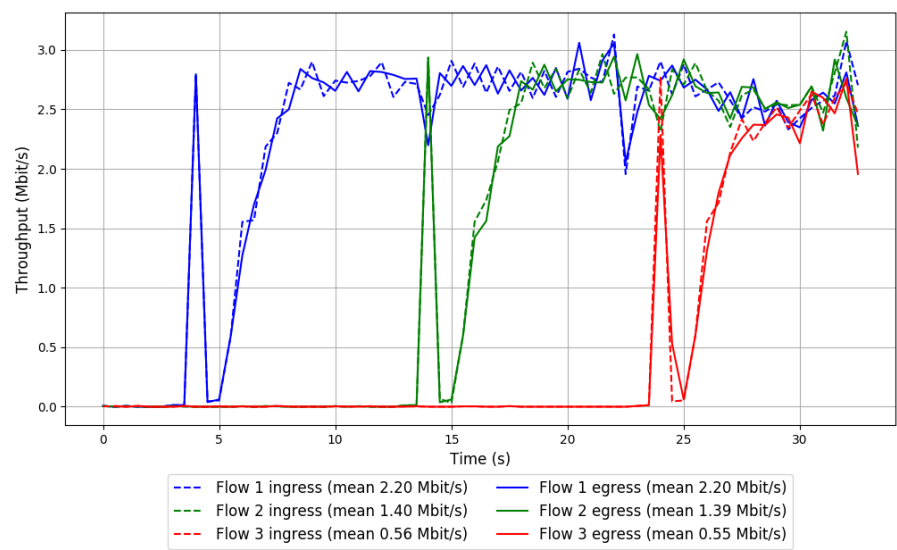
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.909 ms

Loss rate: 2.30%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-03 08:54:39

End at: 2018-01-03 08:55:09

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 64.771 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 2.17 Mbit/s

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

Loss rate: 0.64%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 64.685 ms

Loss rate: 0.37%

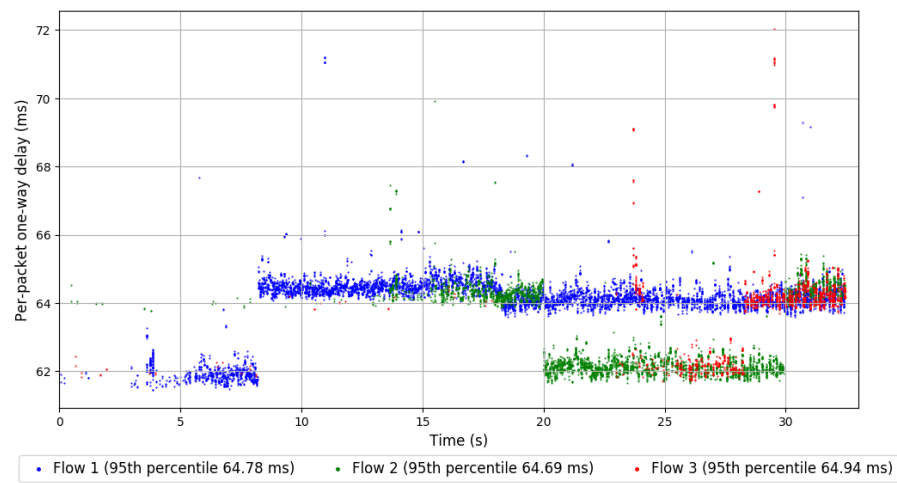
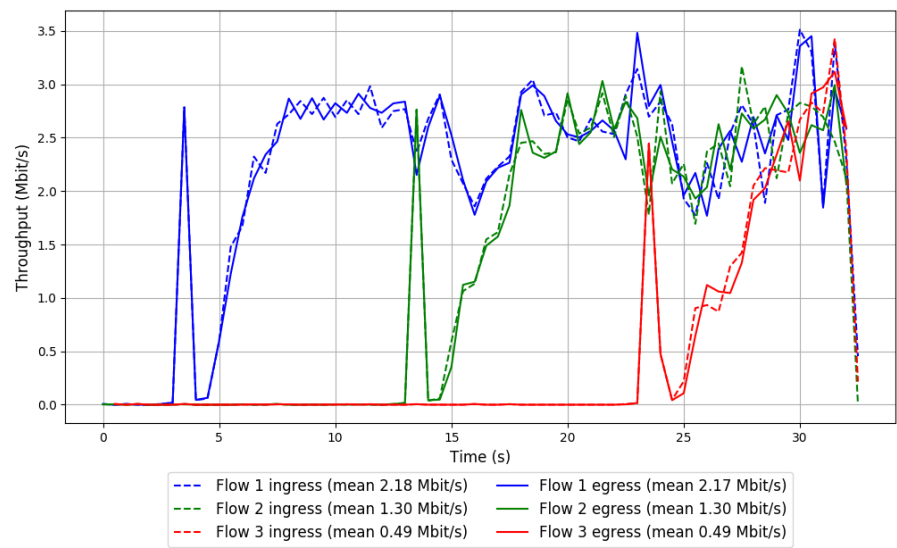
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 64.936 ms

Loss rate: 1.92%

Run 10: Report of WebRTC media — Data Link

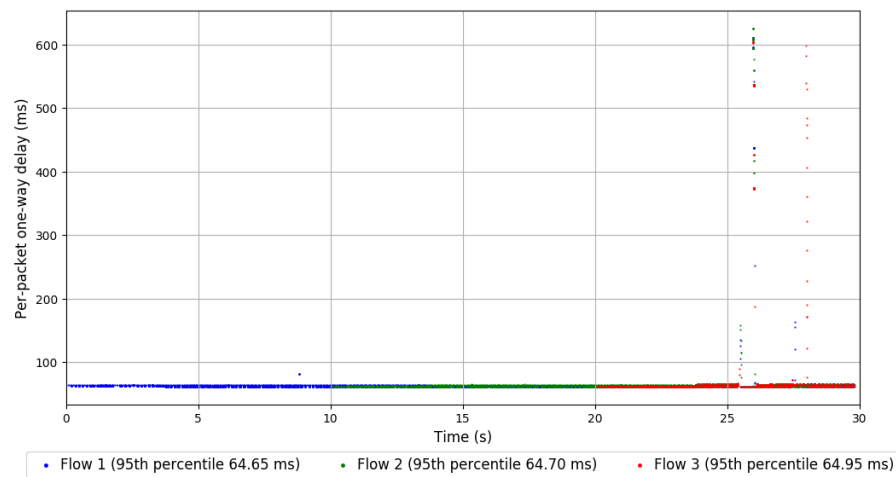
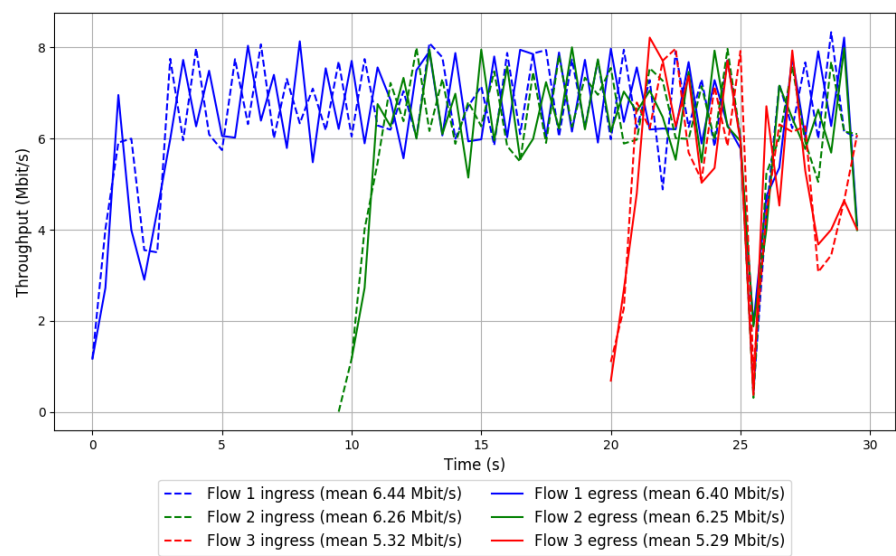


```
Run 1: Statistics of Sprout

Start at: 2018-01-03 06:53:42
End at: 2018-01-03 06:54:12

# Below is generated by plot.py at 2018-01-03 11:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.27 Mbit/s
95th percentile per-packet one-way delay: 64.716 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 6.40 Mbit/s
95th percentile per-packet one-way delay: 64.646 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 6.25 Mbit/s
95th percentile per-packet one-way delay: 64.705 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 64.946 ms
Loss rate: 1.98%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-03 07:07:39

End at: 2018-01-03 07:08:09

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.73 Mbit/s

95th percentile per-packet one-way delay: 65.110 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 6.10 Mbit/s

95th percentile per-packet one-way delay: 65.065 ms

Loss rate: 1.38%

-- Flow 2:

Average throughput: 5.72 Mbit/s

95th percentile per-packet one-way delay: 64.924 ms

Loss rate: 1.44%

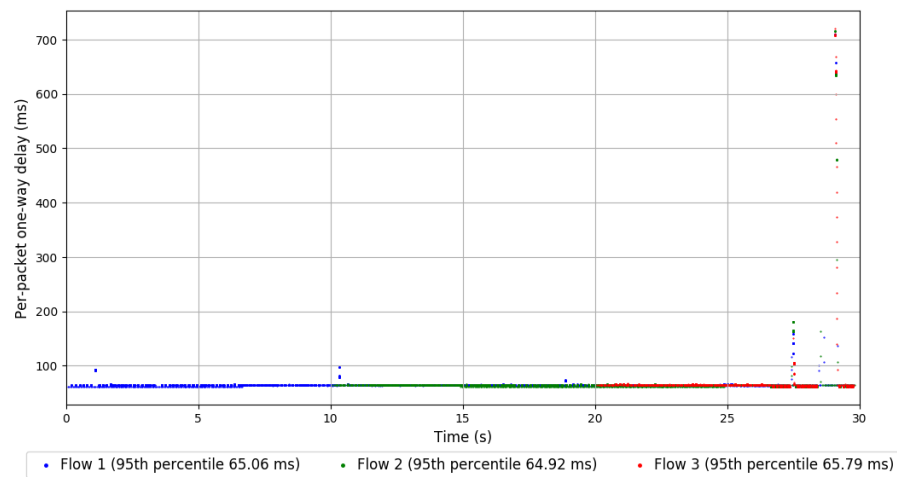
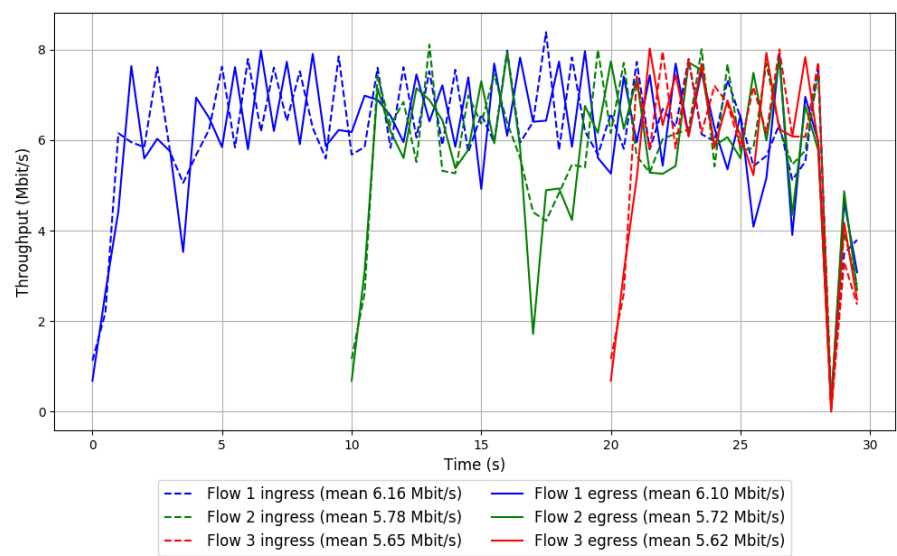
-- Flow 3:

Average throughput: 5.62 Mbit/s

95th percentile per-packet one-way delay: 65.786 ms

Loss rate: 2.05%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-03 07:20:29

End at: 2018-01-03 07:20:59

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.33 Mbit/s

95th percentile per-packet one-way delay: 63.994 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 63.808 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 64.072 ms

Loss rate: 1.47%

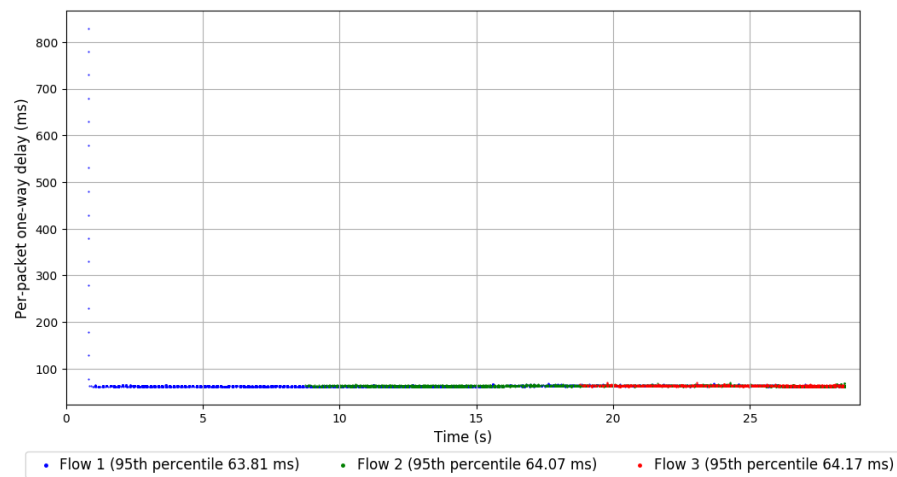
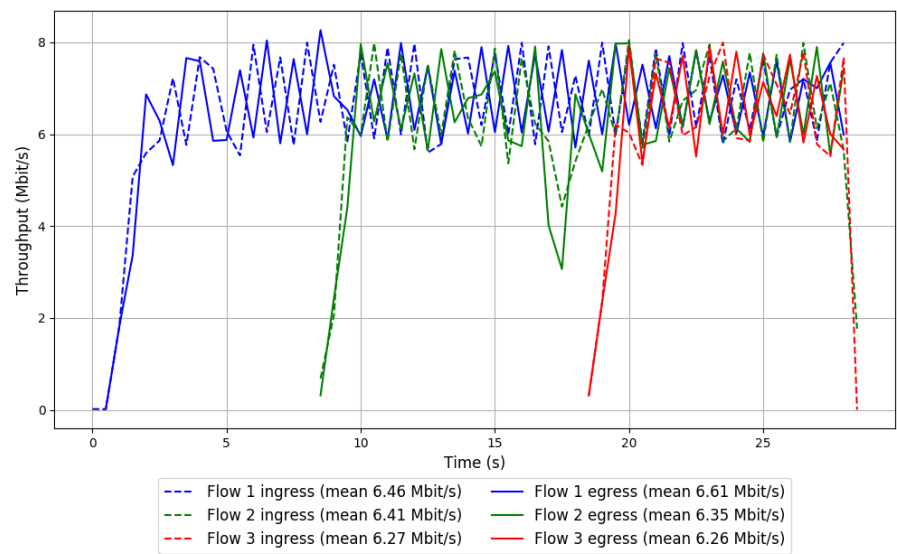
-- Flow 3:

Average throughput: 6.26 Mbit/s

95th percentile per-packet one-way delay: 64.174 ms

Loss rate: 1.63%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-03 07:32:48

End at: 2018-01-03 07:33:18

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.88 Mbit/s

95th percentile per-packet one-way delay: 66.569 ms

Loss rate: 1.71%

-- Flow 1:

Average throughput: 6.30 Mbit/s

95th percentile per-packet one-way delay: 66.477 ms

Loss rate: 1.52%

-- Flow 2:

Average throughput: 6.05 Mbit/s

95th percentile per-packet one-way delay: 66.454 ms

Loss rate: 1.64%

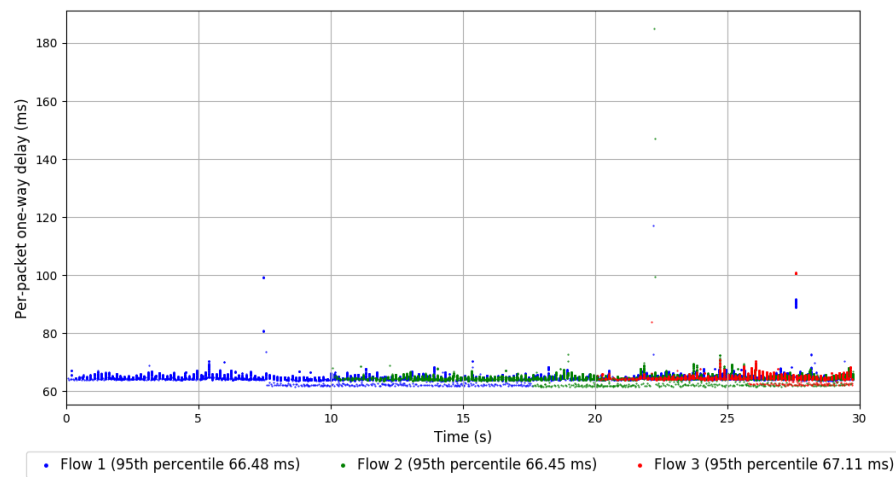
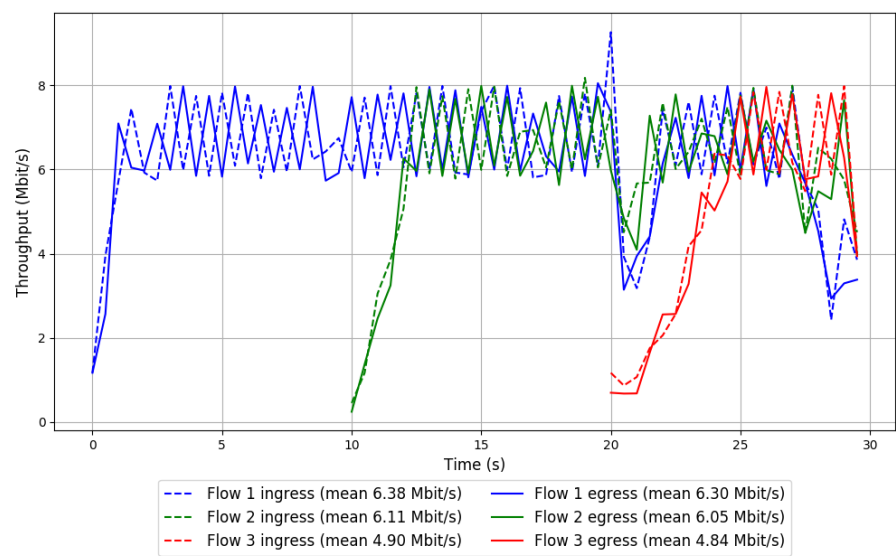
-- Flow 3:

Average throughput: 4.84 Mbit/s

95th percentile per-packet one-way delay: 67.109 ms

Loss rate: 2.58%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-03 07:46:32

End at: 2018-01-03 07:47:02

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.74 Mbit/s

95th percentile per-packet one-way delay: 64.582 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 6.56 Mbit/s

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

Loss rate: 0.55%

-- Flow 2:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 64.423 ms

Loss rate: 1.38%

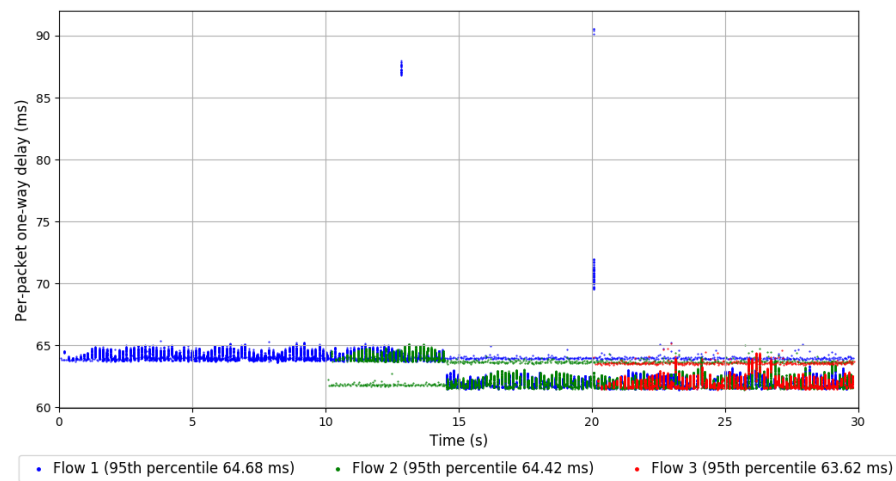
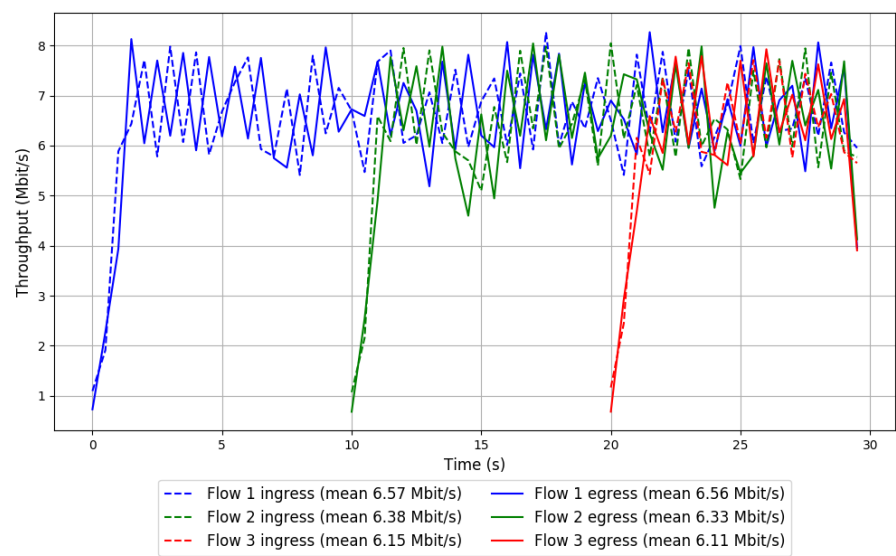
-- Flow 3:

Average throughput: 6.11 Mbit/s

95th percentile per-packet one-way delay: 63.619 ms

Loss rate: 1.64%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-03 08:00:13

End at: 2018-01-03 08:00:43

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.38 Mbit/s

95th percentile per-packet one-way delay: 65.149 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 65.169 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 6.03 Mbit/s

95th percentile per-packet one-way delay: 65.143 ms

Loss rate: 1.37%

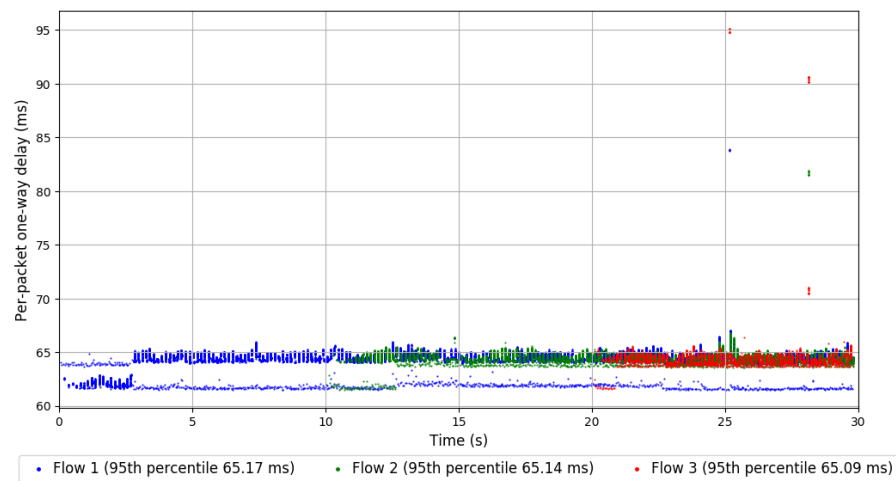
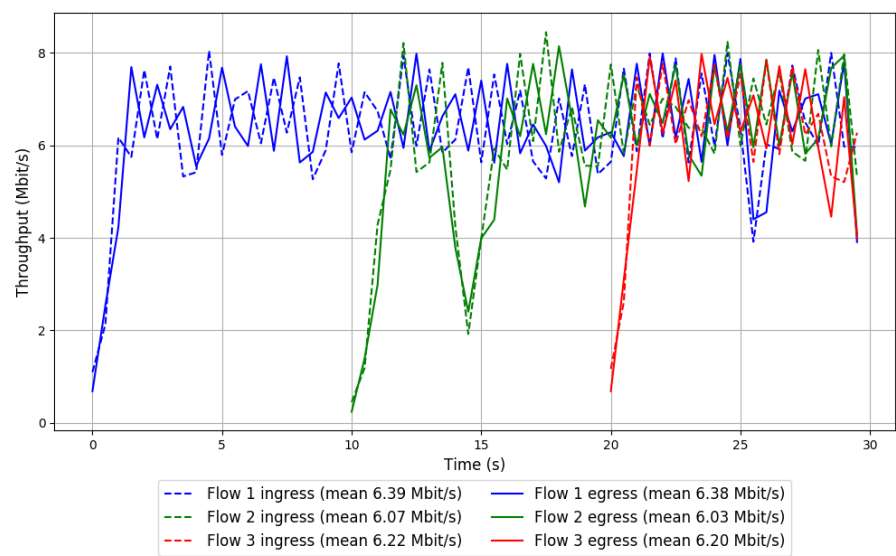
-- Flow 3:

Average throughput: 6.20 Mbit/s

95th percentile per-packet one-way delay: 65.087 ms

Loss rate: 1.88%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-03 08:14:13

End at: 2018-01-03 08:14:43

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.56 Mbit/s

95th percentile per-packet one-way delay: 65.157 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 64.983 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 6.28 Mbit/s

95th percentile per-packet one-way delay: 65.251 ms

Loss rate: 1.63%

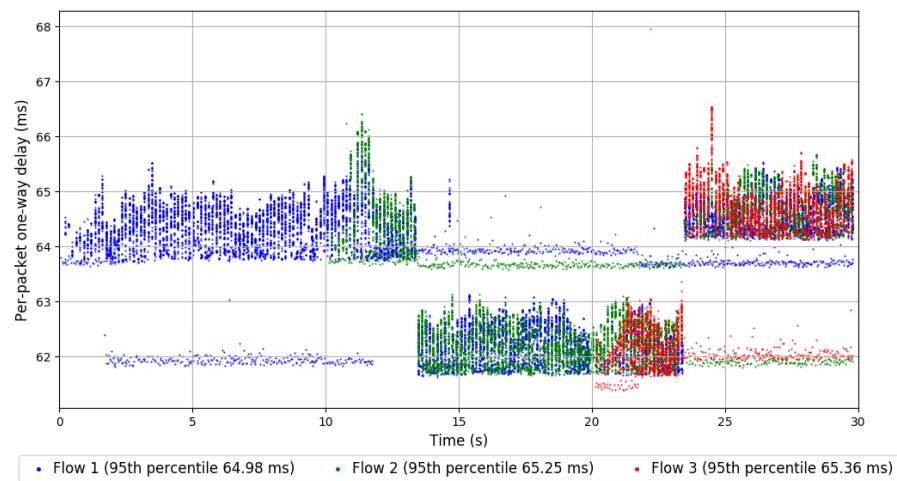
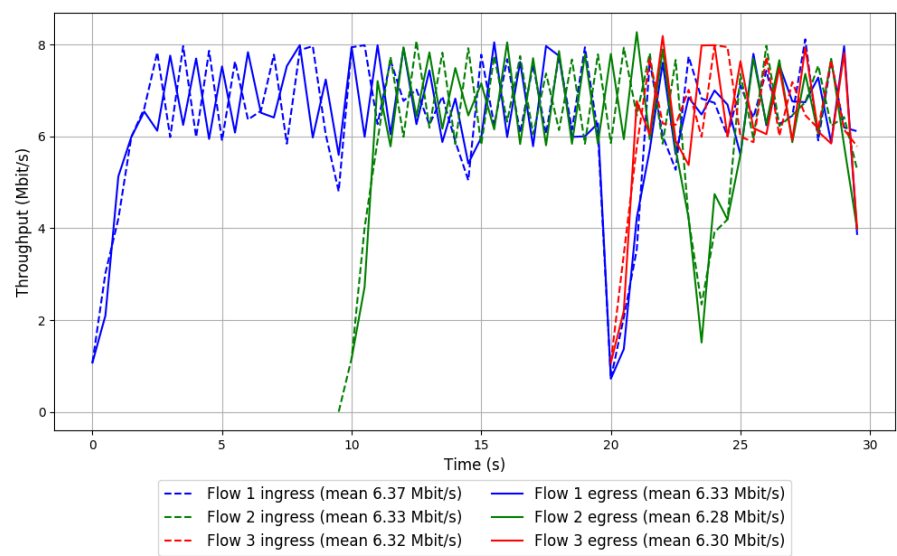
-- Flow 3:

Average throughput: 6.30 Mbit/s

95th percentile per-packet one-way delay: 65.364 ms

Loss rate: 1.61%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-03 08:28:43

End at: 2018-01-03 08:29:13

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.17 Mbit/s

95th percentile per-packet one-way delay: 64.915 ms

Loss rate: 1.87%

-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.923 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 5.98 Mbit/s

95th percentile per-packet one-way delay: 64.945 ms

Loss rate: 2.81%

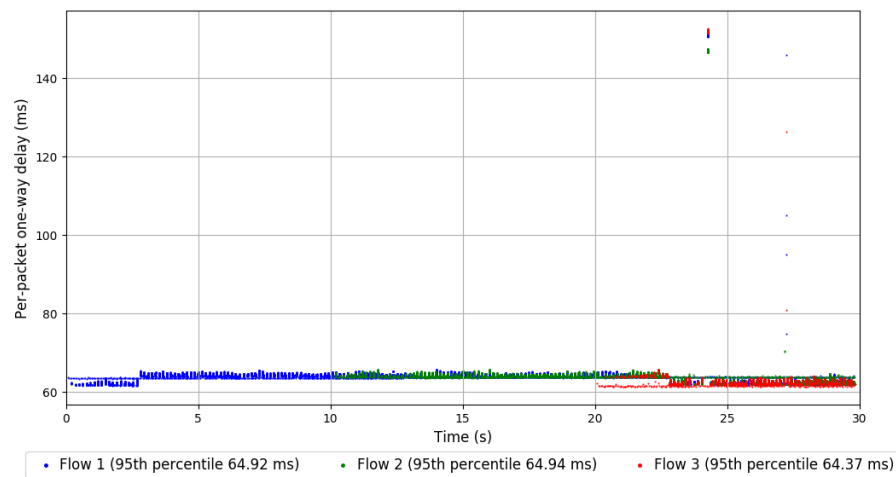
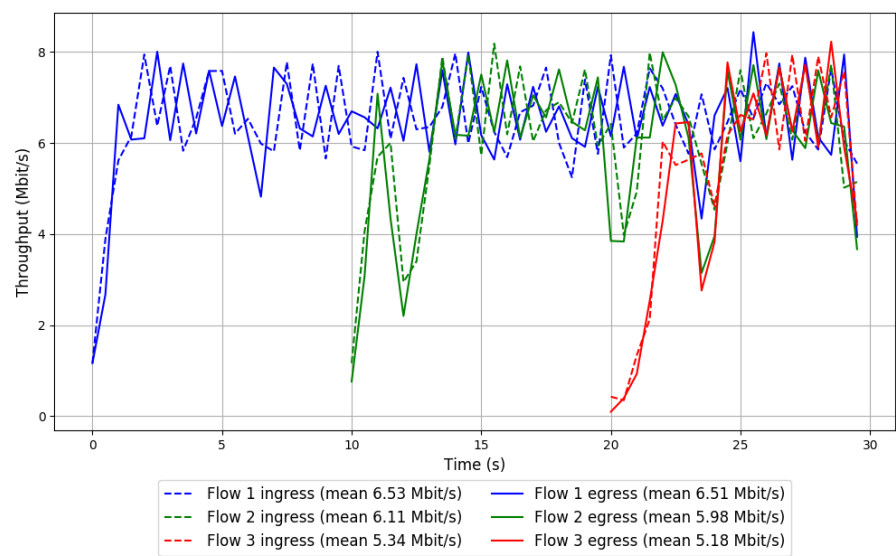
-- Flow 3:

Average throughput: 5.18 Mbit/s

95th percentile per-packet one-way delay: 64.367 ms

Loss rate: 3.97%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-03 08:43:02

End at: 2018-01-03 08:43:33

Below is generated by plot.py at 2018-01-03 11:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.63 Mbit/s

95th percentile per-packet one-way delay: 64.826 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 6.39 Mbit/s

95th percentile per-packet one-way delay: 64.755 ms

Loss rate: 1.51%

-- Flow 2:

Average throughput: 6.39 Mbit/s

95th percentile per-packet one-way delay: 64.877 ms

Loss rate: 0.96%

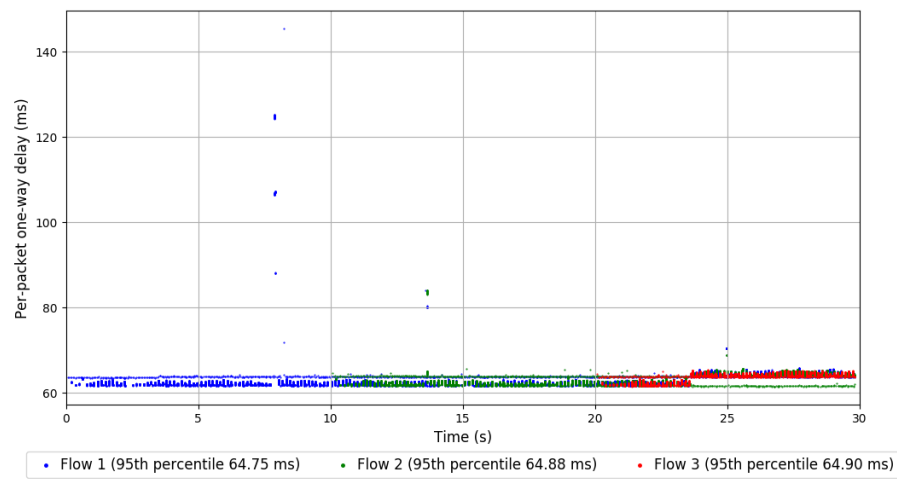
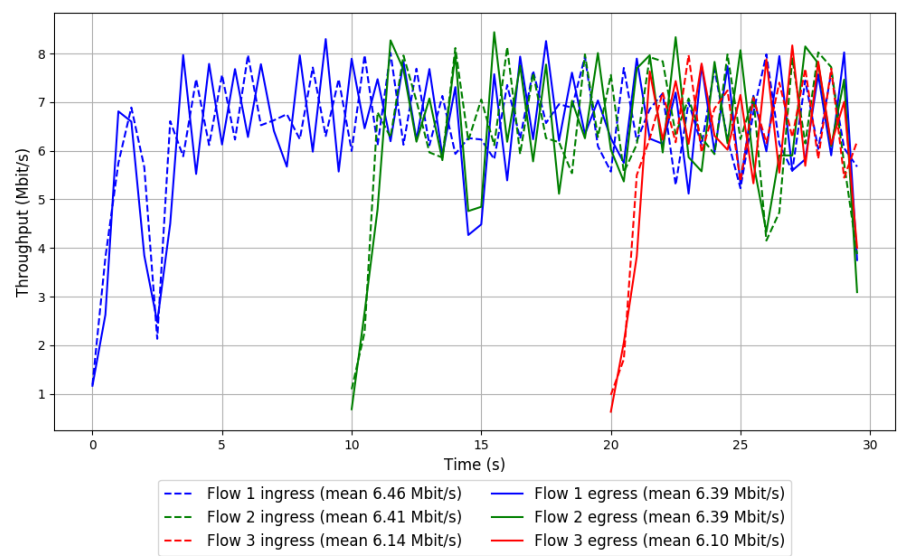
-- Flow 3:

Average throughput: 6.10 Mbit/s

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

Loss rate: 1.81%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-03 08:56:13

End at: 2018-01-03 08:56:43

Below is generated by plot.py at 2018-01-03 11:51:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.78 Mbit/s

95th percentile per-packet one-way delay: 65.067 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 65.113 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 64.959 ms

Loss rate: 0.75%

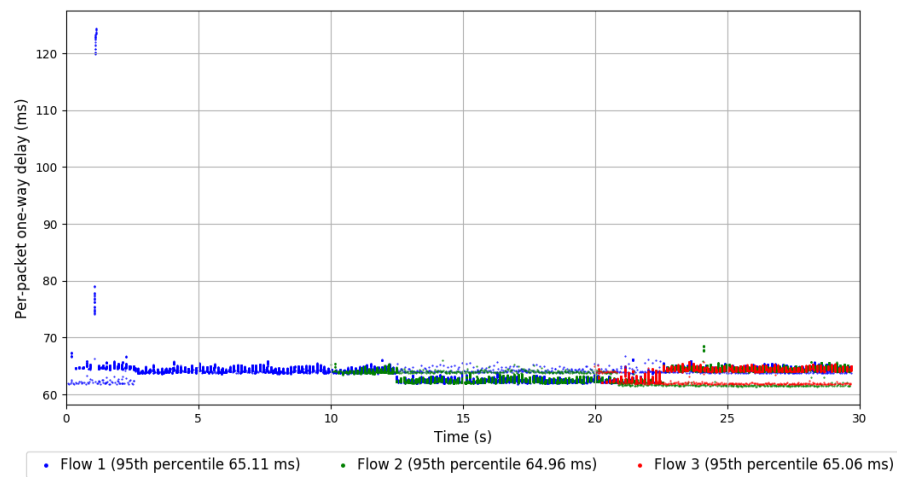
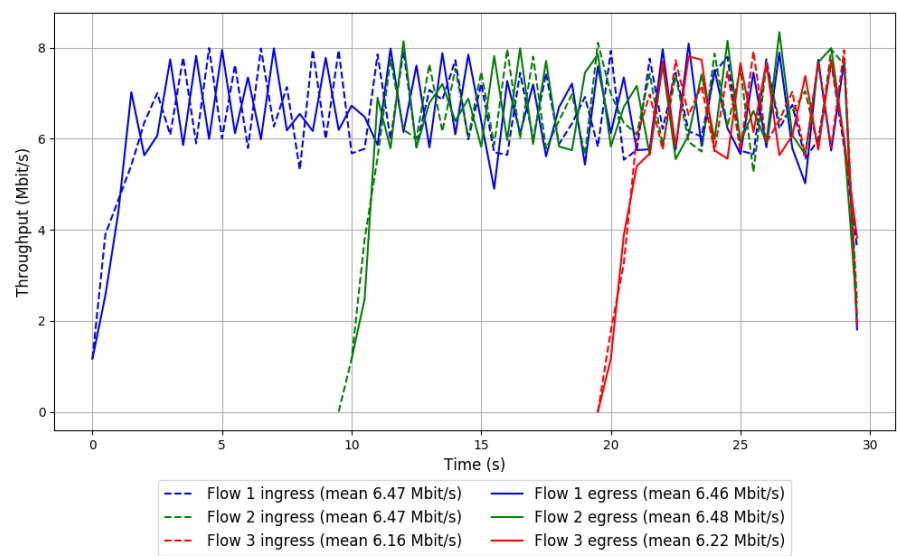
-- Flow 3:

Average throughput: 6.22 Mbit/s

95th percentile per-packet one-way delay: 65.057 ms

Loss rate: 0.02%

Run 10: Report of Sprout — Data Link

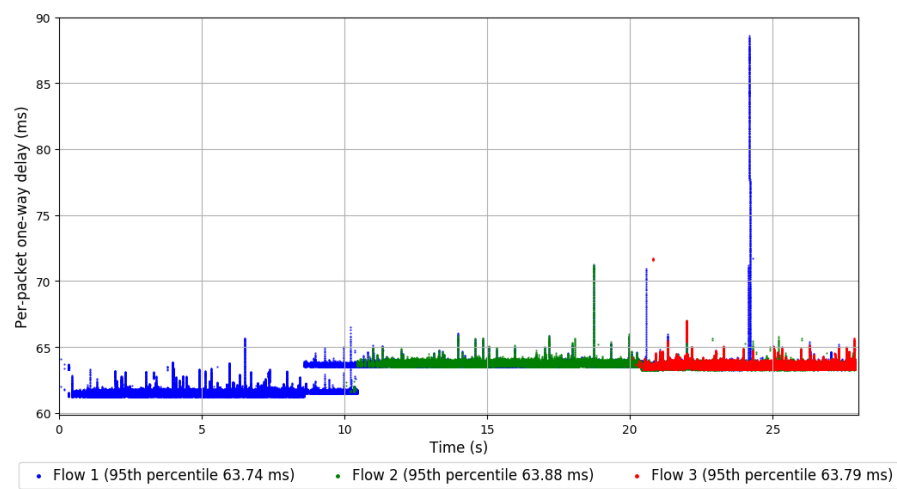
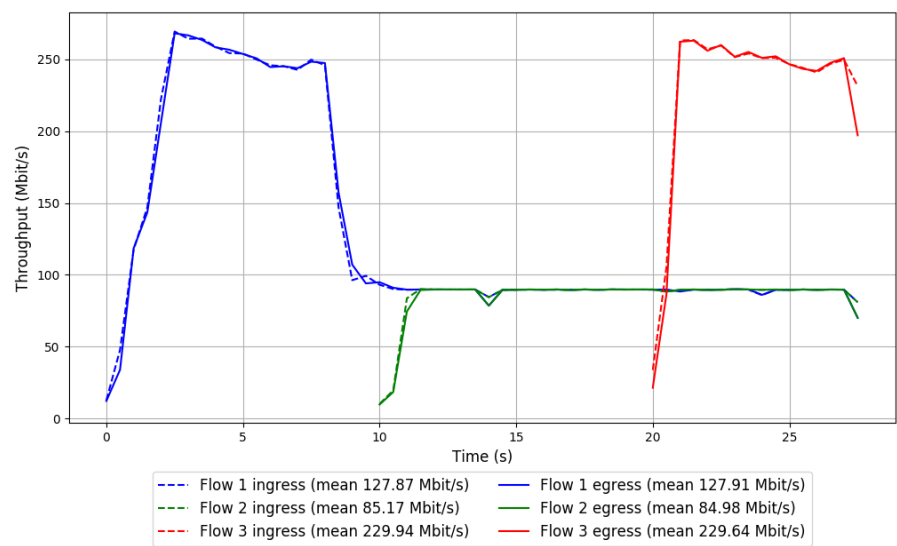


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-03 06:54:24
End at: 2018-01-03 06:54:54

# Below is generated by plot.py at 2018-01-03 11:53:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 246.78 Mbit/s
95th percentile per-packet one-way delay: 63.795 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 127.91 Mbit/s
95th percentile per-packet one-way delay: 63.740 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 84.98 Mbit/s
95th percentile per-packet one-way delay: 63.882 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 229.64 Mbit/s
95th percentile per-packet one-way delay: 63.787 ms
Loss rate: 1.73%
```


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

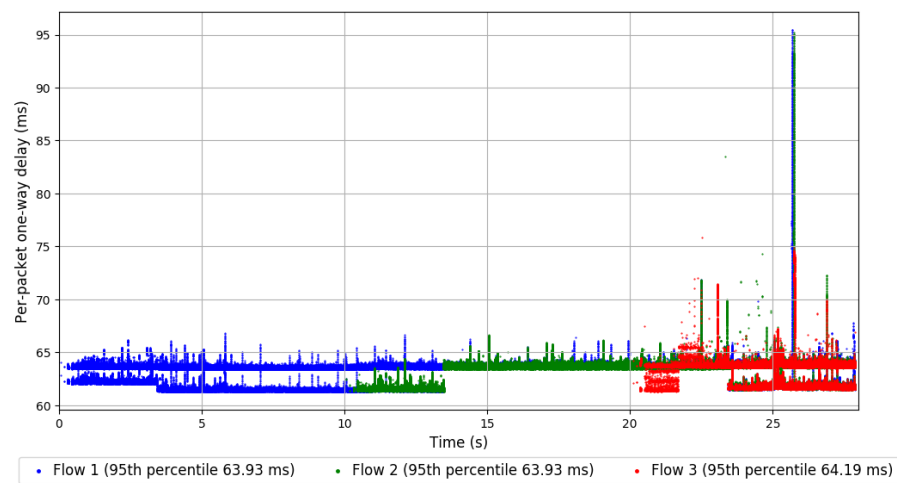
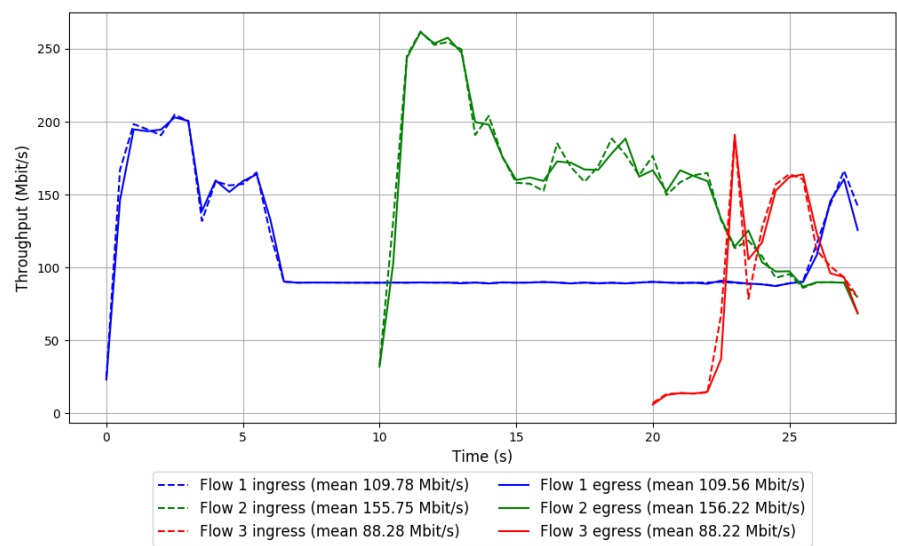


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-03 07:08:21
End at: 2018-01-03 07:08:51

# Below is generated by plot.py at 2018-01-03 11:53:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 234.22 Mbit/s
95th percentile per-packet one-way delay: 63.954 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 109.56 Mbit/s
95th percentile per-packet one-way delay: 63.926 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 156.22 Mbit/s
95th percentile per-packet one-way delay: 63.929 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 88.22 Mbit/s
95th percentile per-packet one-way delay: 64.194 ms
Loss rate: 1.60%
```

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

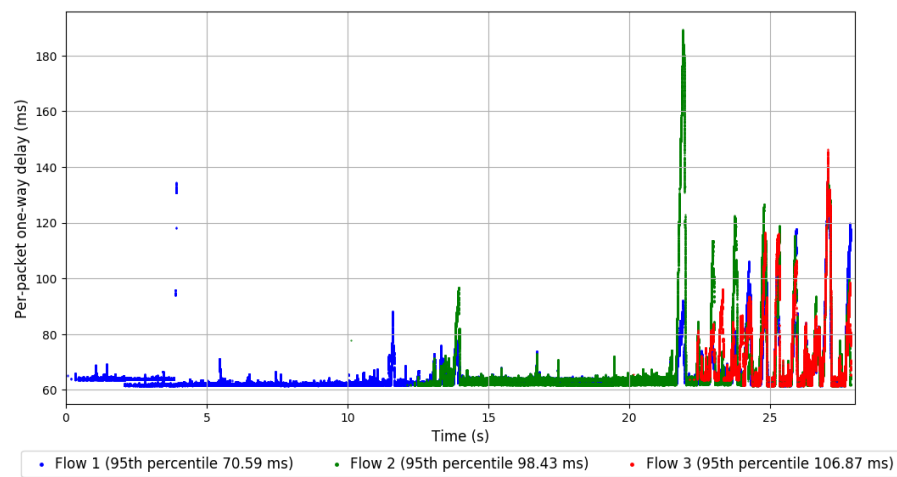
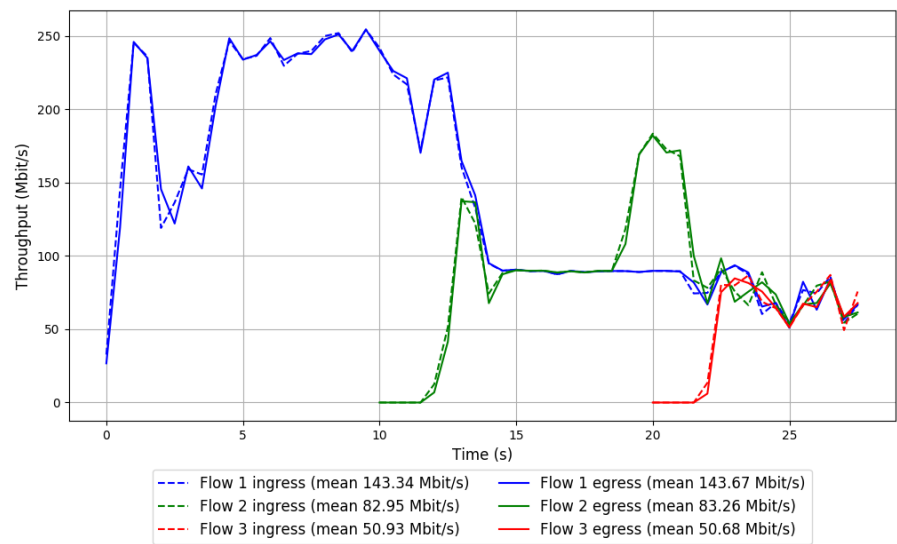


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-03 07:21:10
End at: 2018-01-03 07:21:40

# Below is generated by plot.py at 2018-01-03 11:53:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.83 Mbit/s
95th percentile per-packet one-way delay: 82.949 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 143.67 Mbit/s
95th percentile per-packet one-way delay: 70.588 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 83.26 Mbit/s
95th percentile per-packet one-way delay: 98.433 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 50.68 Mbit/s
95th percentile per-packet one-way delay: 106.869 ms
Loss rate: 2.16%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-03 07:33:30

End at: 2018-01-03 07:34:00

Below is generated by plot.py at 2018-01-03 11:53:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 170.54 Mbit/s

95th percentile per-packet one-way delay: 92.712 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 87.62 Mbit/s

95th percentile per-packet one-way delay: 85.929 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 110.70 Mbit/s

95th percentile per-packet one-way delay: 88.670 ms

Loss rate: 0.97%

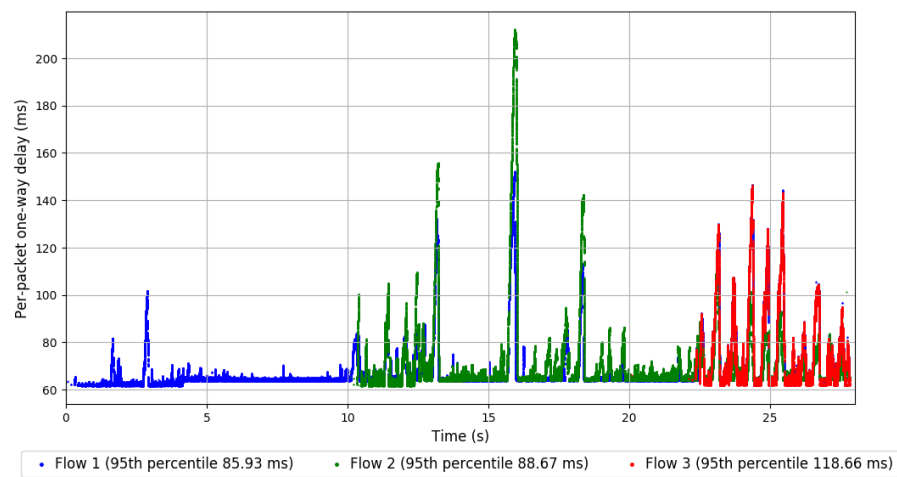
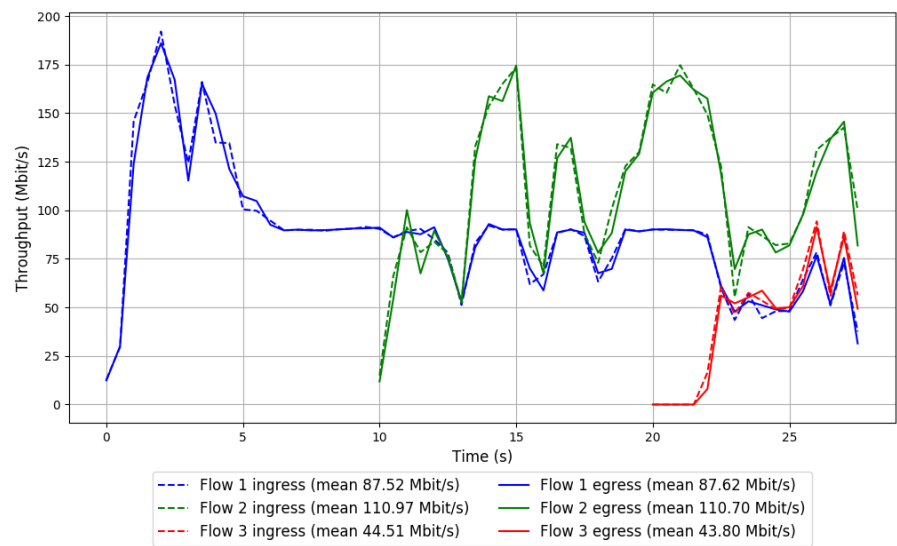
-- Flow 3:

Average throughput: 43.80 Mbit/s

95th percentile per-packet one-way delay: 118.661 ms

Loss rate: 3.24%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-03 07:47:13

End at: 2018-01-03 07:47:43

Below is generated by plot.py at 2018-01-03 11:53:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 158.37 Mbit/s

95th percentile per-packet one-way delay: 64.119 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 87.62 Mbit/s

95th percentile per-packet one-way delay: 64.010 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 13.47 Mbit/s

95th percentile per-packet one-way delay: 64.938 ms

Loss rate: 0.69%

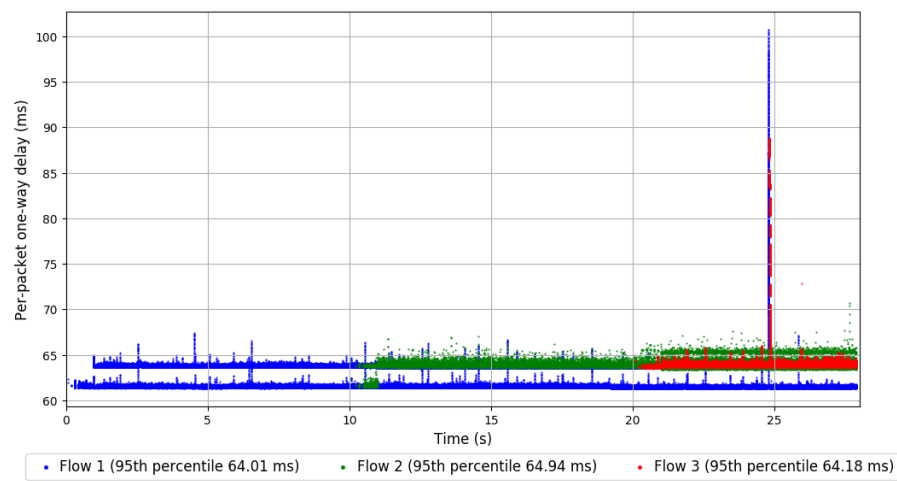
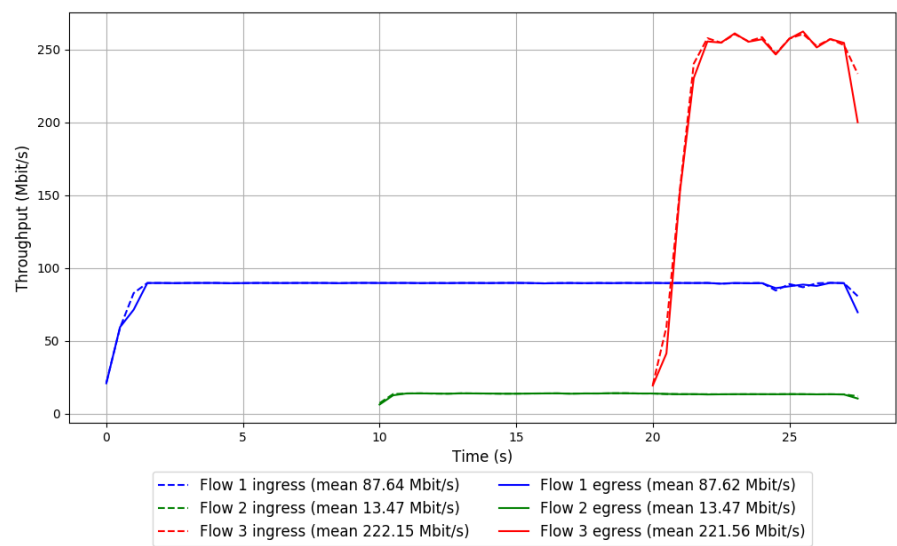
-- Flow 3:

Average throughput: 221.56 Mbit/s

95th percentile per-packet one-way delay: 64.183 ms

Loss rate: 1.85%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-03 08:00:55

End at: 2018-01-03 08:01:25

Below is generated by plot.py at 2018-01-03 11:55:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.50 Mbit/s

95th percentile per-packet one-way delay: 64.193 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 142.12 Mbit/s

95th percentile per-packet one-way delay: 64.124 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 151.16 Mbit/s

95th percentile per-packet one-way delay: 64.325 ms

Loss rate: 0.41%

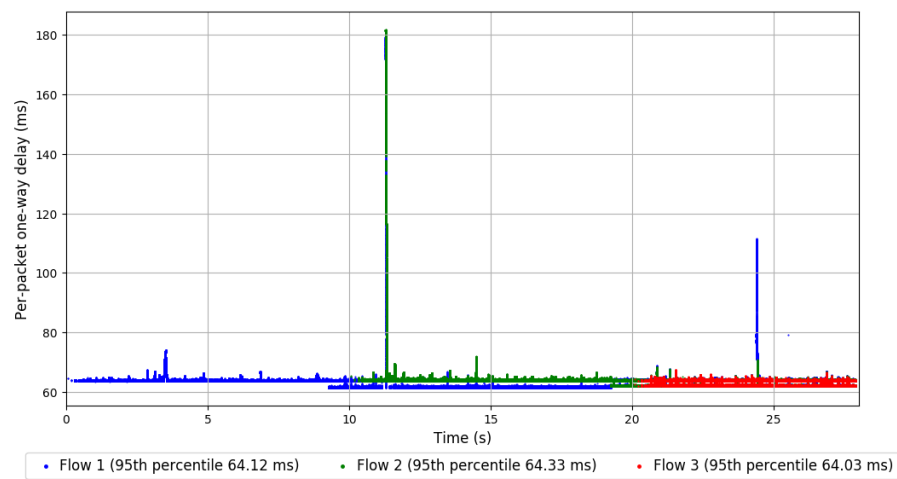
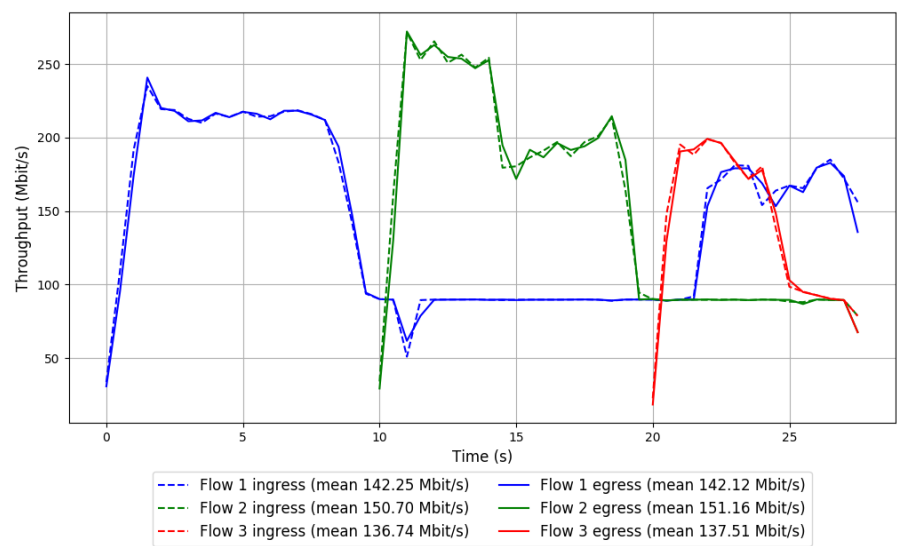
-- Flow 3:

Average throughput: 137.51 Mbit/s

95th percentile per-packet one-way delay: 64.033 ms

Loss rate: 1.03%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-03 08:14:54

End at: 2018-01-03 08:15:24

Below is generated by plot.py at 2018-01-03 12:00:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 330.49 Mbit/s

95th percentile per-packet one-way delay: 67.353 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 190.33 Mbit/s

95th percentile per-packet one-way delay: 64.249 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 128.91 Mbit/s

95th percentile per-packet one-way delay: 64.196 ms

Loss rate: 1.39%

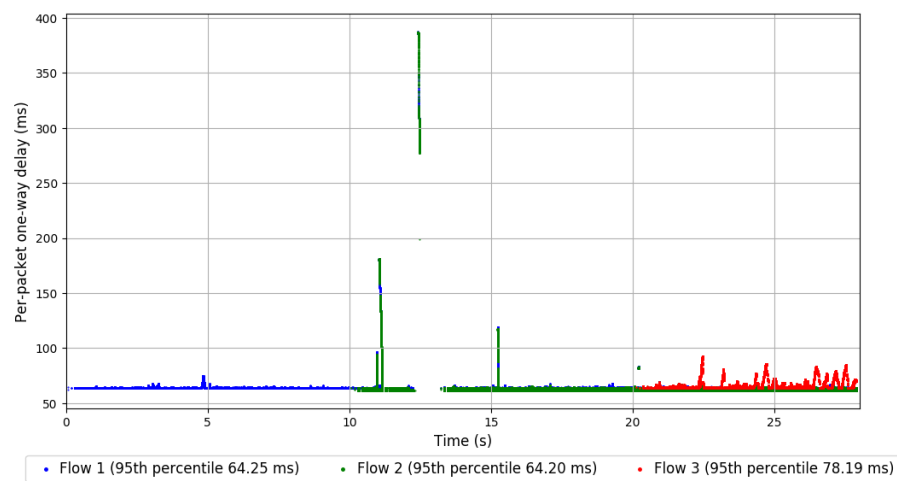
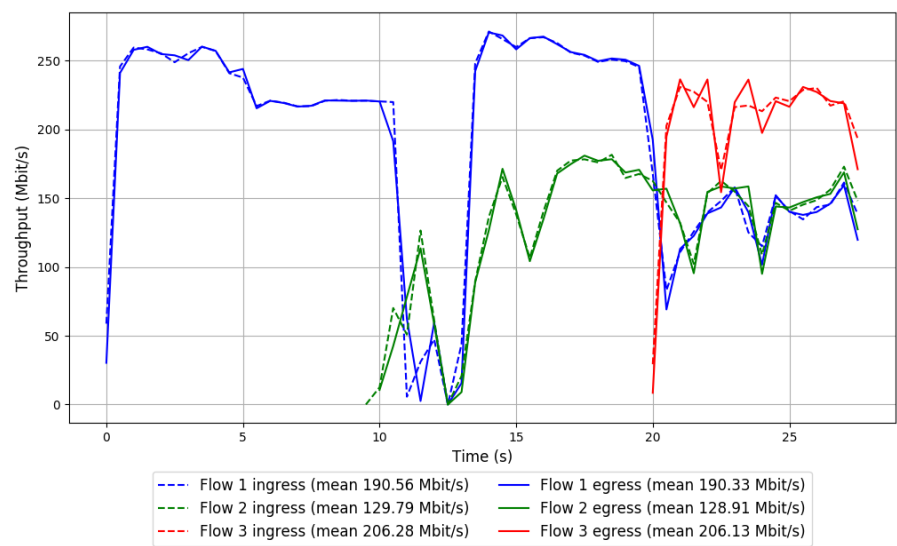
-- Flow 3:

Average throughput: 206.13 Mbit/s

95th percentile per-packet one-way delay: 78.192 ms

Loss rate: 1.69%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-03 08:29:25

End at: 2018-01-03 08:29:55

Below is generated by plot.py at 2018-01-03 12:00:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.26 Mbit/s

95th percentile per-packet one-way delay: 65.372 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 225.85 Mbit/s

95th percentile per-packet one-way delay: 65.962 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 129.00 Mbit/s

95th percentile per-packet one-way delay: 64.131 ms

Loss rate: 0.70%

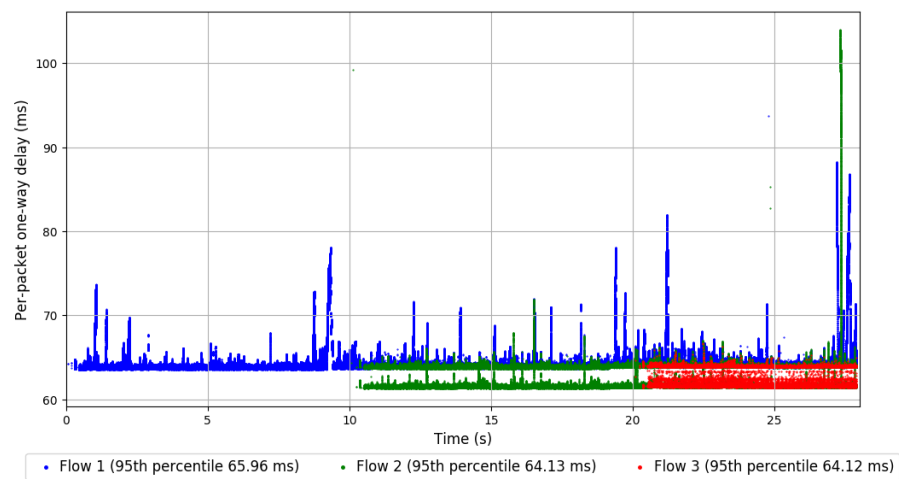
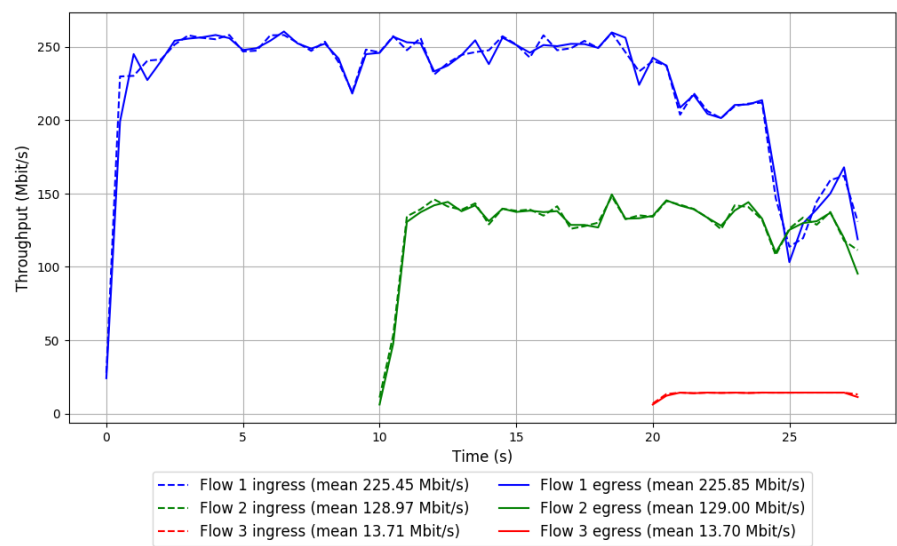
-- Flow 3:

Average throughput: 13.70 Mbit/s

95th percentile per-packet one-way delay: 64.118 ms

Loss rate: 1.67%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-03 08:43:44

End at: 2018-01-03 08:44:14

Below is generated by plot.py at 2018-01-03 12:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.96 Mbit/s

95th percentile per-packet one-way delay: 64.932 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 136.55 Mbit/s

95th percentile per-packet one-way delay: 63.970 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 230.81 Mbit/s

95th percentile per-packet one-way delay: 65.420 ms

Loss rate: 0.99%

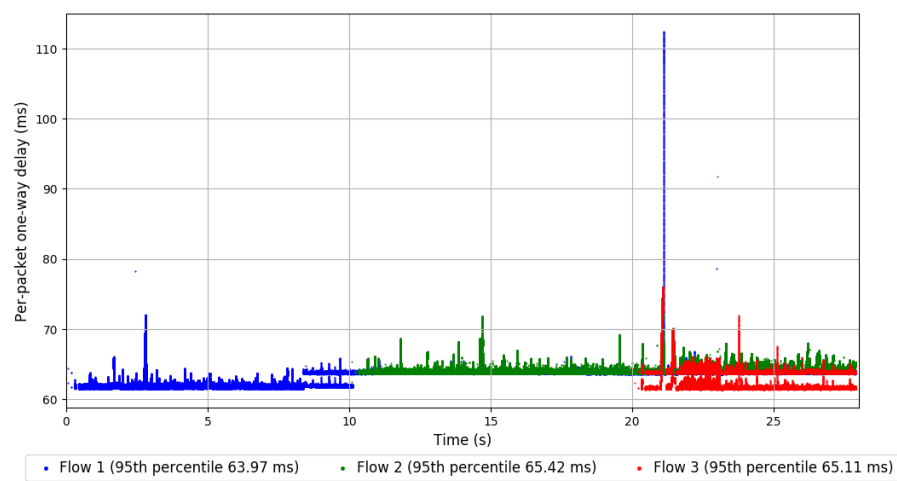
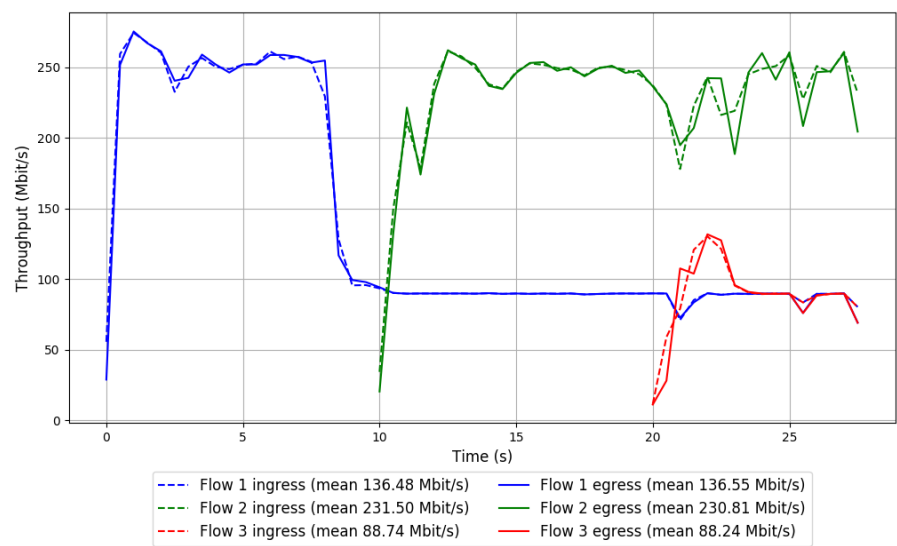
-- Flow 3:

Average throughput: 88.24 Mbit/s

95th percentile per-packet one-way delay: 65.107 ms

Loss rate: 2.11%

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

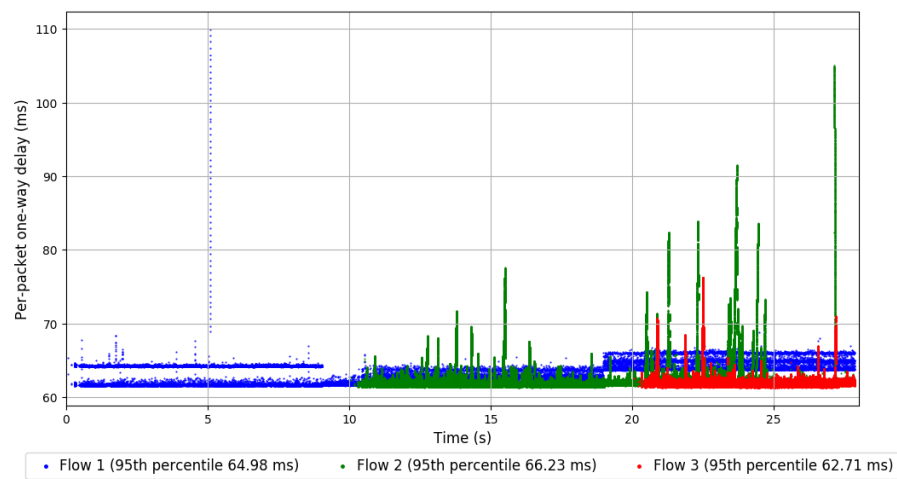
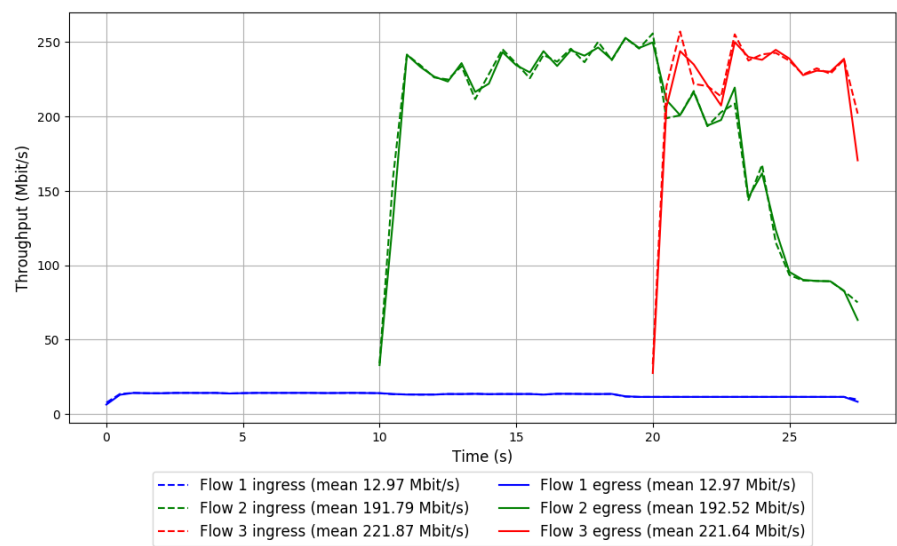


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-03 08:56:55
End at: 2018-01-03 08:57:25

# Below is generated by plot.py at 2018-01-03 12:00:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 198.31 Mbit/s
95th percentile per-packet one-way delay: 64.872 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 12.97 Mbit/s
95th percentile per-packet one-way delay: 64.978 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 192.52 Mbit/s
95th percentile per-packet one-way delay: 66.226 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 221.64 Mbit/s
95th percentile per-packet one-way delay: 62.708 ms
Loss rate: 1.71%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-03 06:51:11

End at: 2018-01-03 06:51:41

Below is generated by plot.py at 2018-01-03 12:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 110.50 Mbit/s

95th percentile per-packet one-way delay: 71.742 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 44.63 Mbit/s

95th percentile per-packet one-way delay: 66.336 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 39.75 Mbit/s

95th percentile per-packet one-way delay: 66.894 ms

Loss rate: 0.65%

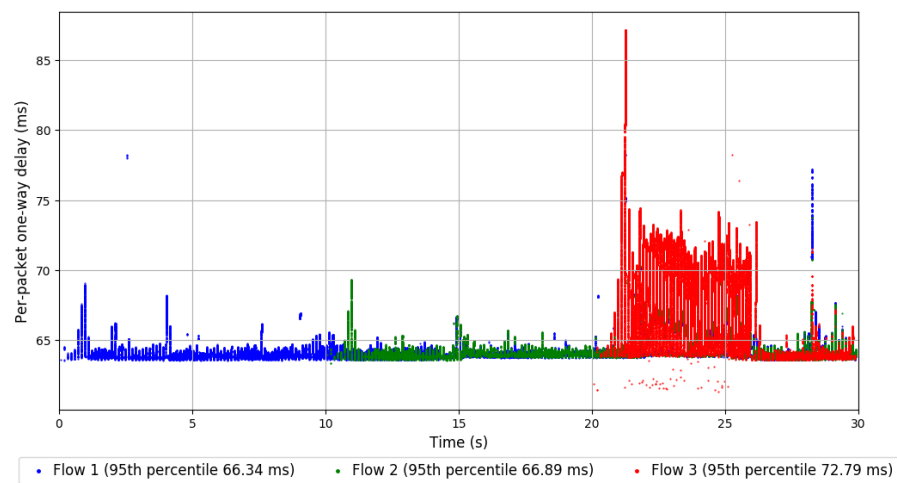
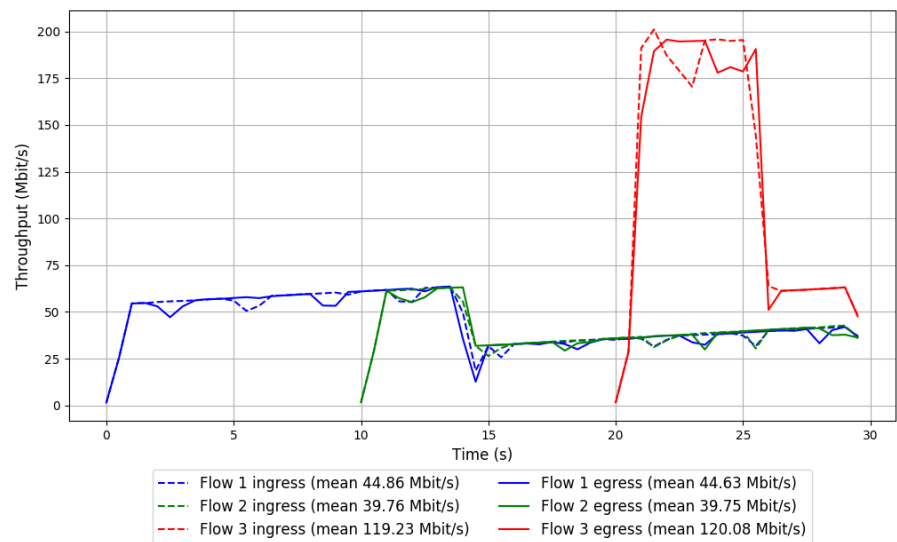
-- Flow 3:

Average throughput: 120.08 Mbit/s

95th percentile per-packet one-way delay: 72.793 ms

Loss rate: 0.67%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-03 07:05:11

End at: 2018-01-03 07:05:41

Below is generated by plot.py at 2018-01-03 12:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.76 Mbit/s

95th percentile per-packet one-way delay: 68.812 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 24.69 Mbit/s

95th percentile per-packet one-way delay: 67.206 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 47.21 Mbit/s

95th percentile per-packet one-way delay: 69.621 ms

Loss rate: 0.58%

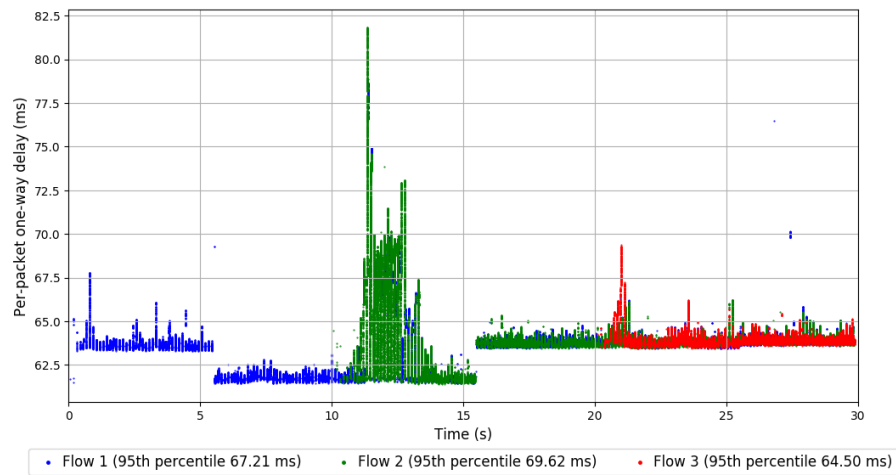
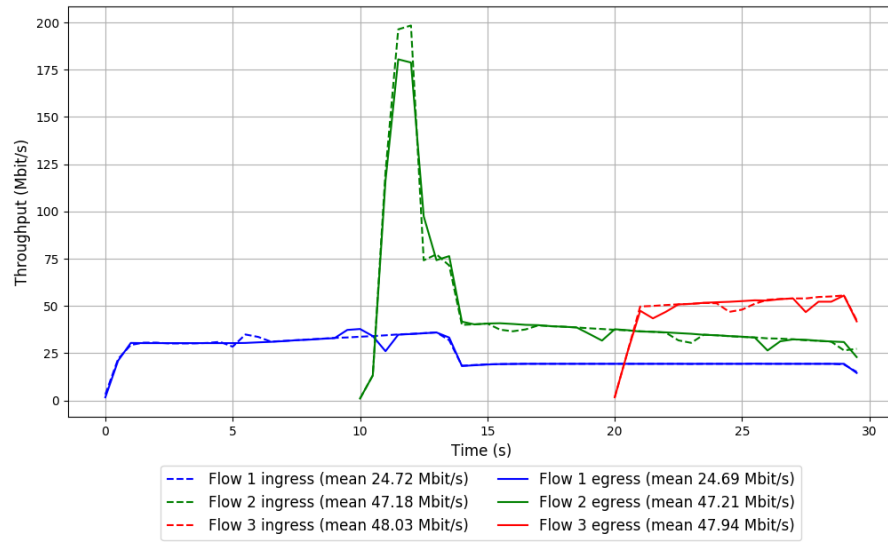
-- Flow 3:

Average throughput: 47.94 Mbit/s

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

Loss rate: 1.48%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-03 07:18:11

End at: 2018-01-03 07:18:41

Below is generated by plot.py at 2018-01-03 12:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.93 Mbit/s

95th percentile per-packet one-way delay: 66.490 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 15.20 Mbit/s

95th percentile per-packet one-way delay: 65.948 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 36.09 Mbit/s

95th percentile per-packet one-way delay: 66.245 ms

Loss rate: 0.69%

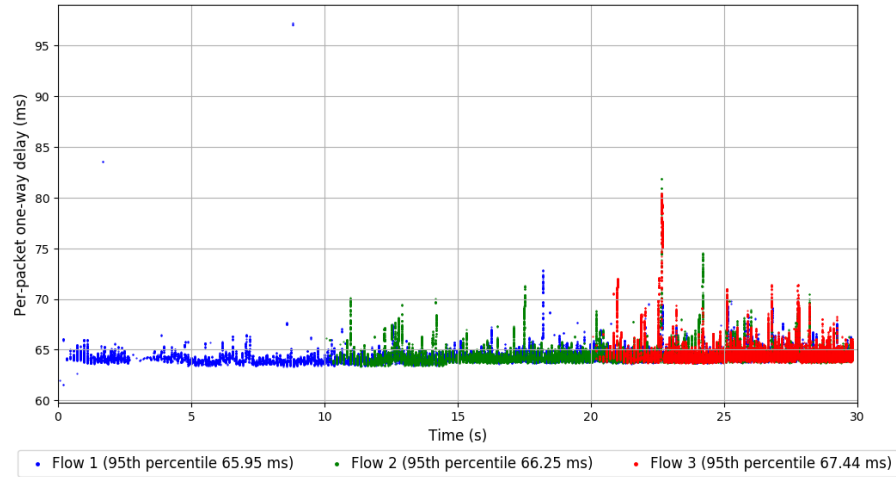
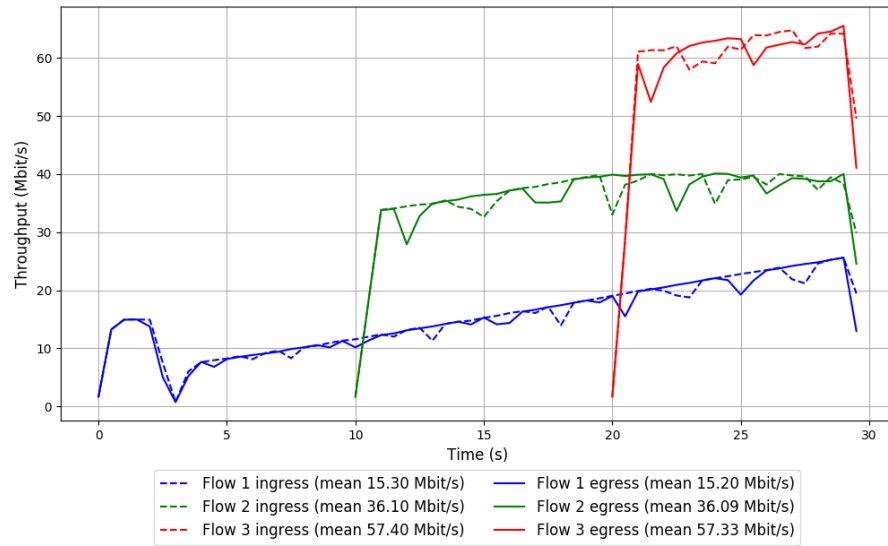
-- Flow 3:

Average throughput: 57.33 Mbit/s

95th percentile per-packet one-way delay: 67.436 ms

Loss rate: 1.42%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-03 07:30:33

End at: 2018-01-03 07:31:03

Below is generated by plot.py at 2018-01-03 12:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 47.05 Mbit/s

95th percentile per-packet one-way delay: 64.892 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 21.04 Mbit/s

95th percentile per-packet one-way delay: 64.597 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 37.41 Mbit/s

95th percentile per-packet one-way delay: 65.200 ms

Loss rate: 1.66%

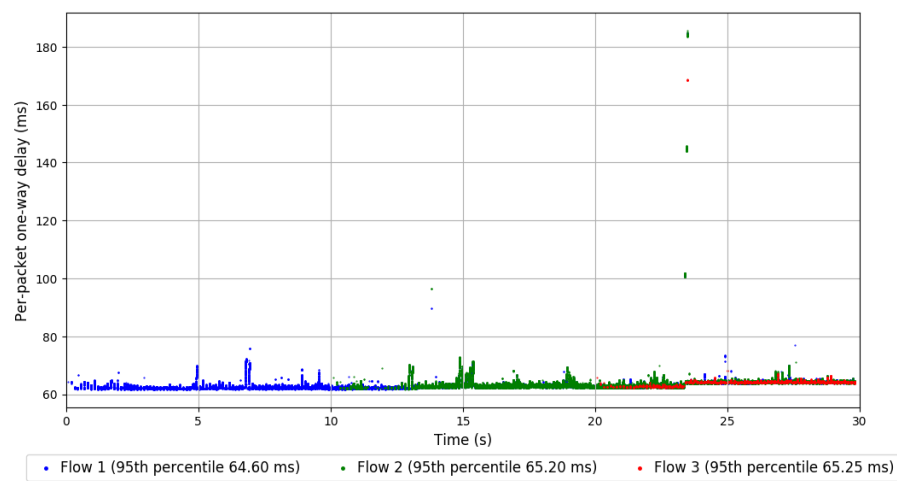
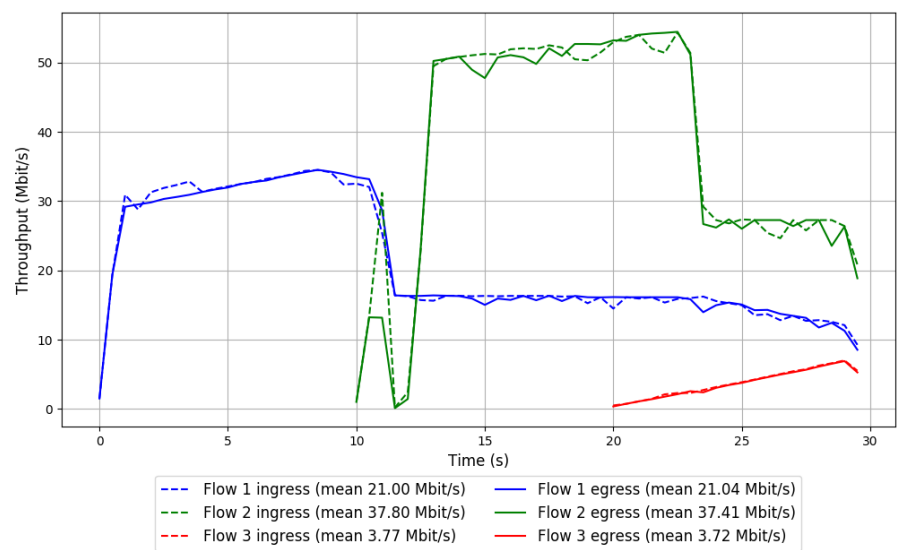
-- Flow 3:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 65.251 ms

Loss rate: 2.71%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-03 07:44:05

End at: 2018-01-03 07:44:35

Below is generated by plot.py at 2018-01-03 12:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.82 Mbit/s

95th percentile per-packet one-way delay: 64.338 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 33.31 Mbit/s

95th percentile per-packet one-way delay: 64.419 ms

Loss rate: 1.34%

-- Flow 2:

Average throughput: 4.97 Mbit/s

95th percentile per-packet one-way delay: 64.184 ms

Loss rate: 2.04%

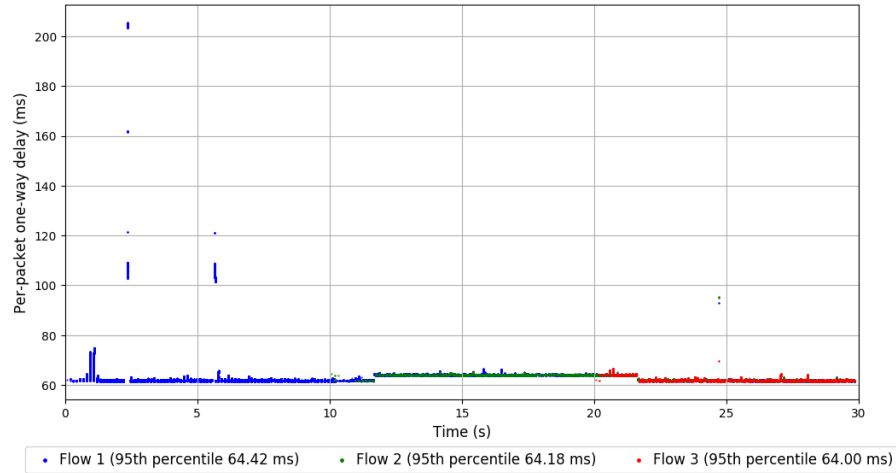
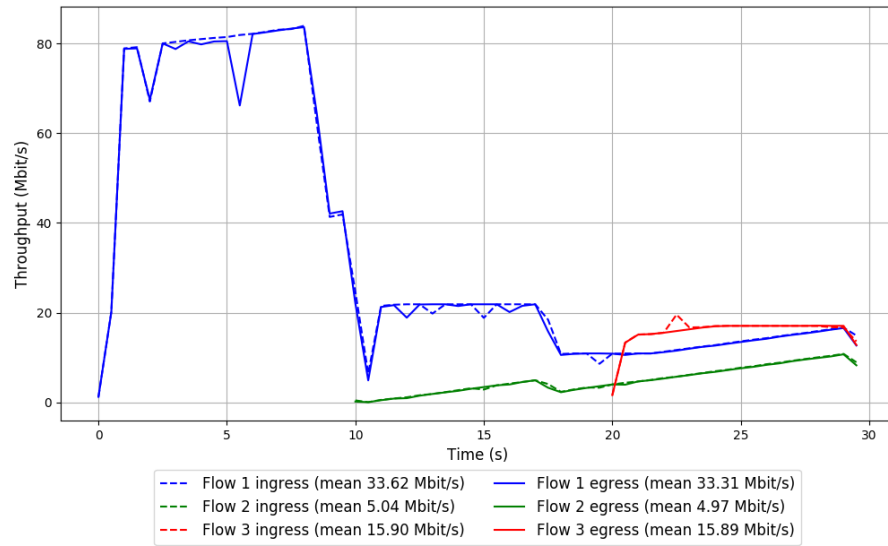
-- Flow 3:

Average throughput: 15.89 Mbit/s

95th percentile per-packet one-way delay: 64.003 ms

Loss rate: 1.36%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-03 07:57:47

End at: 2018-01-03 07:58:17

Below is generated by plot.py at 2018-01-03 12:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.14 Mbit/s

95th percentile per-packet one-way delay: 65.244 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 26.71 Mbit/s

95th percentile per-packet one-way delay: 64.943 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 78.92 Mbit/s

95th percentile per-packet one-way delay: 65.226 ms

Loss rate: 0.73%

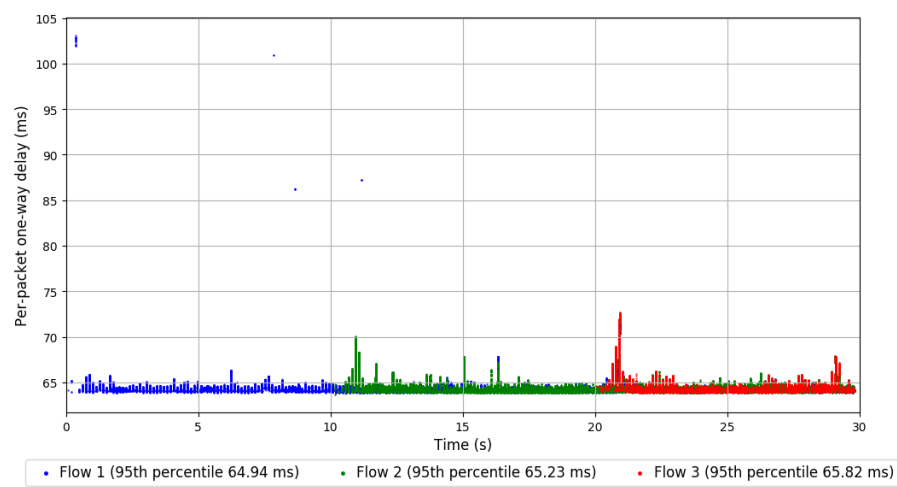
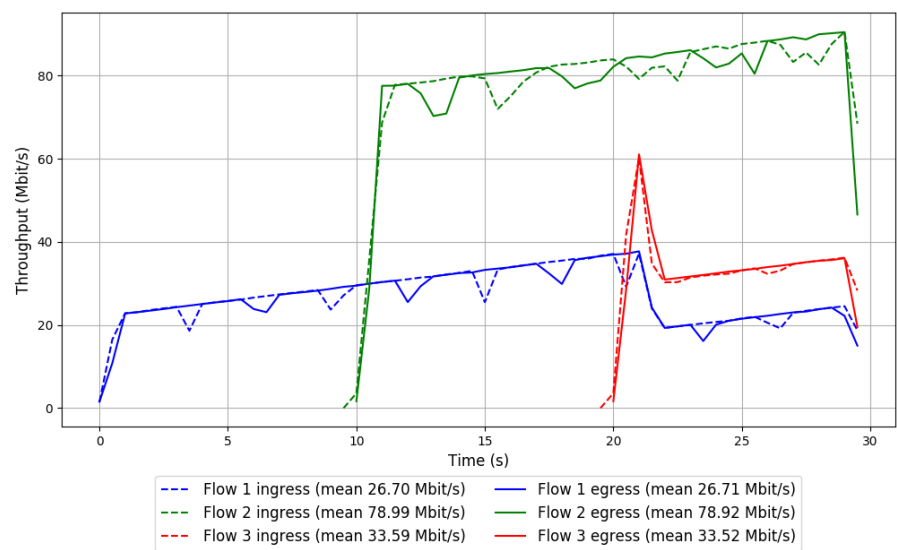
-- Flow 3:

Average throughput: 33.52 Mbit/s

95th percentile per-packet one-way delay: 65.817 ms

Loss rate: 1.48%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-03 08:11:43

End at: 2018-01-03 08:12:13

Below is generated by plot.py at 2018-01-03 12:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.19 Mbit/s

95th percentile per-packet one-way delay: 65.440 ms

Loss rate: 2.15%

-- Flow 1:

Average throughput: 26.52 Mbit/s

95th percentile per-packet one-way delay: 66.885 ms

Loss rate: 3.36%

-- Flow 2:

Average throughput: 31.84 Mbit/s

95th percentile per-packet one-way delay: 65.003 ms

Loss rate: 0.62%

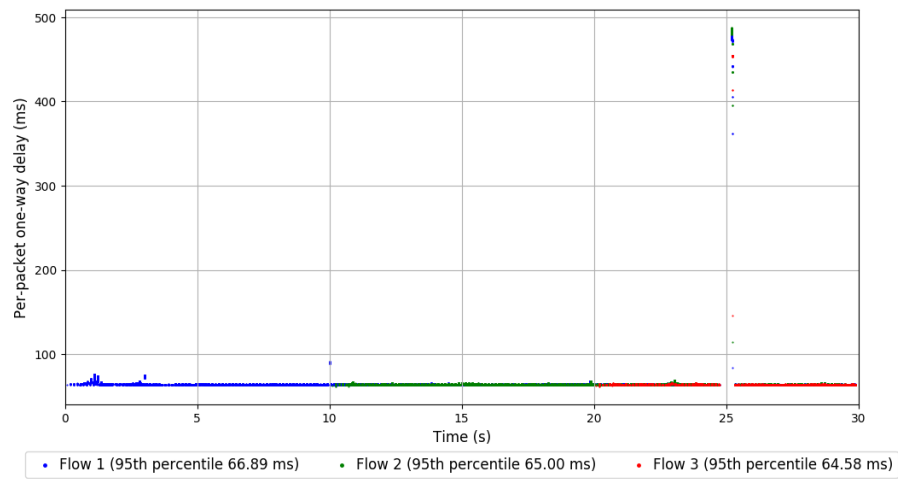
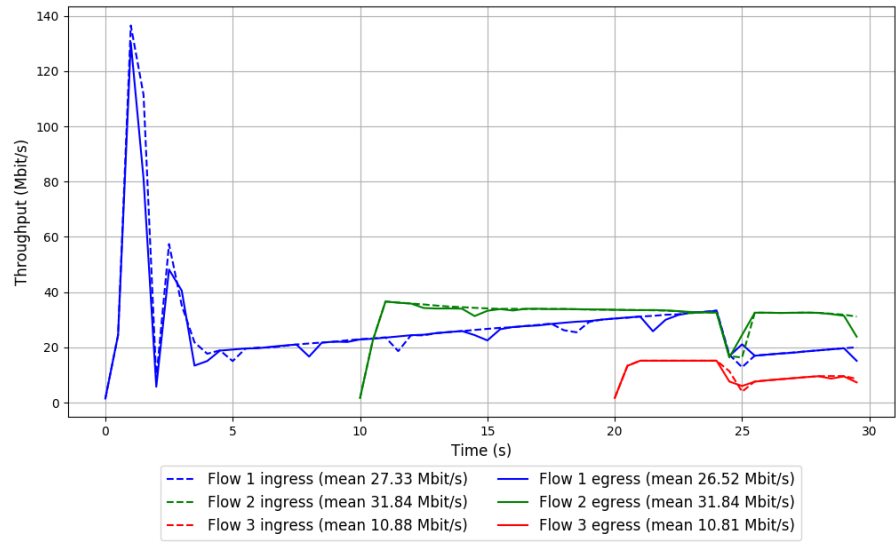
-- Flow 3:

Average throughput: 10.81 Mbit/s

95th percentile per-packet one-way delay: 64.575 ms

Loss rate: 1.92%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-03 08:26:10

End at: 2018-01-03 08:26:40

Below is generated by plot.py at 2018-01-03 12:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.03 Mbit/s

95th percentile per-packet one-way delay: 64.917 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 79.56 Mbit/s

95th percentile per-packet one-way delay: 64.920 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 30.61 Mbit/s

95th percentile per-packet one-way delay: 65.134 ms

Loss rate: 0.69%

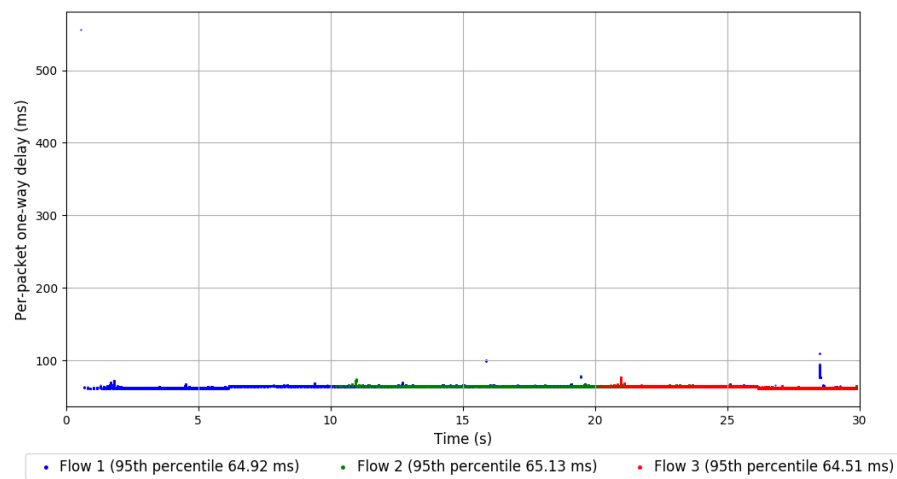
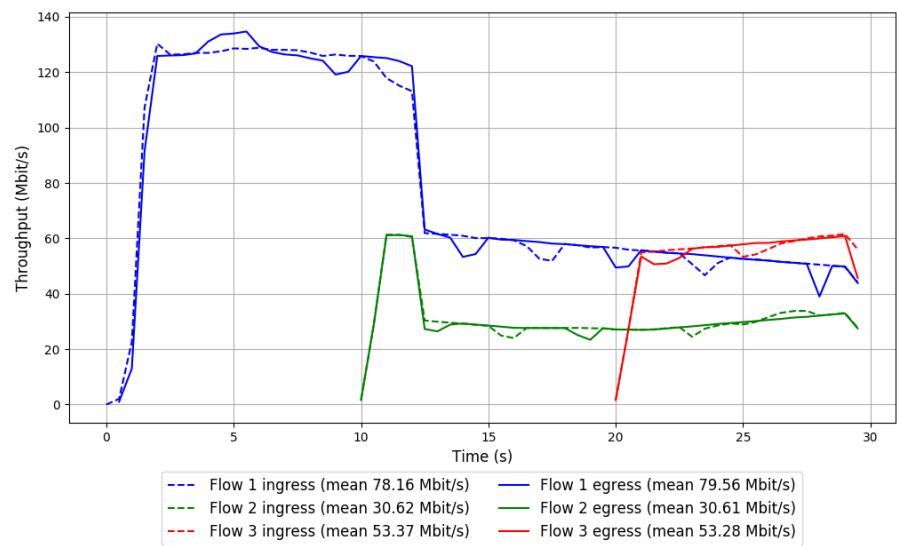
-- Flow 3:

Average throughput: 53.28 Mbit/s

95th percentile per-packet one-way delay: 64.508 ms

Loss rate: 1.45%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-03 08:40:33

End at: 2018-01-03 08:41:03

Below is generated by plot.py at 2018-01-03 12:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.28 Mbit/s

95th percentile per-packet one-way delay: 68.236 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 56.14 Mbit/s

95th percentile per-packet one-way delay: 65.290 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 13.36 Mbit/s

95th percentile per-packet one-way delay: 65.014 ms

Loss rate: 0.64%

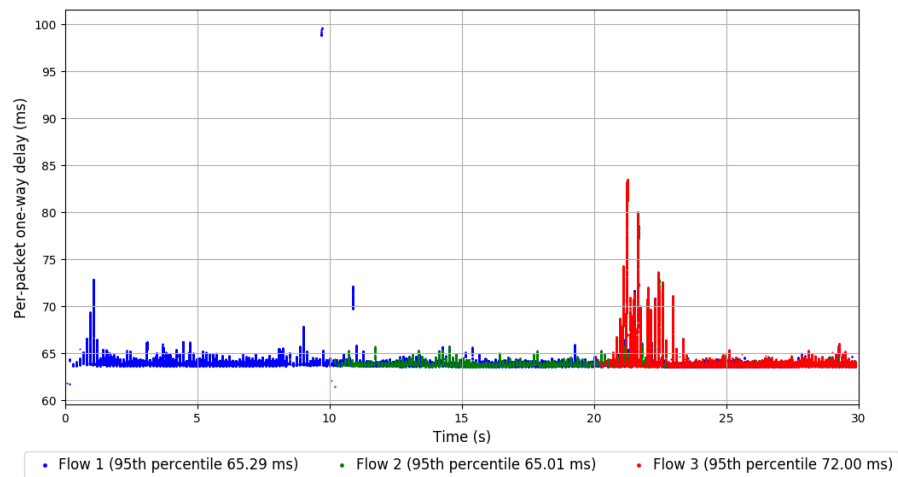
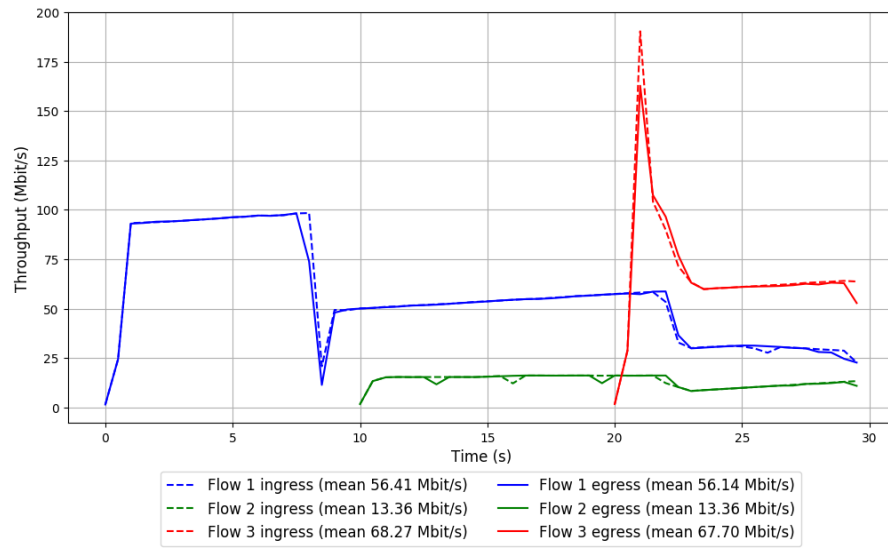
-- Flow 3:

Average throughput: 67.70 Mbit/s

95th percentile per-packet one-way delay: 72.005 ms

Loss rate: 2.09%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-03 08:53:54

End at: 2018-01-03 08:54:24

Below is generated by plot.py at 2018-01-03 12:00:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.25 Mbit/s

95th percentile per-packet one-way delay: 66.479 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 21.05 Mbit/s

95th percentile per-packet one-way delay: 65.758 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 31.68 Mbit/s

95th percentile per-packet one-way delay: 66.263 ms

Loss rate: 1.84%

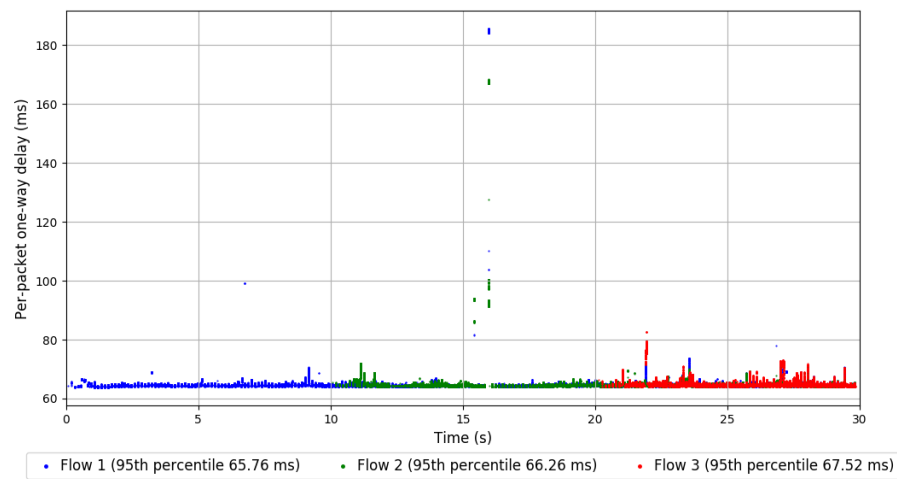
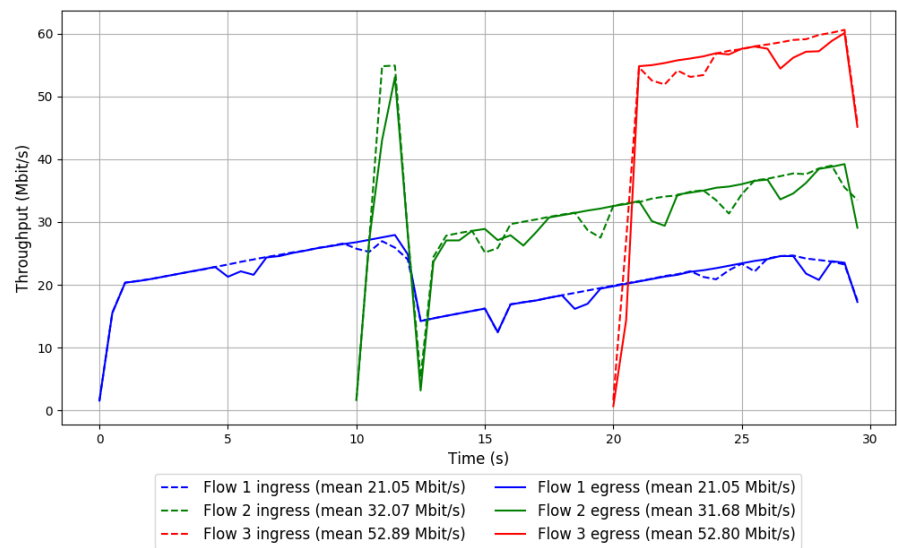
-- Flow 3:

Average throughput: 52.80 Mbit/s

95th percentile per-packet one-way delay: 67.521 ms

Loss rate: 1.47%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-03 06:46:44

End at: 2018-01-03 06:47:14

Below is generated by plot.py at 2018-01-03 12:01:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.94 Mbit/s

95th percentile per-packet one-way delay: 147.955 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 180.63 Mbit/s

95th percentile per-packet one-way delay: 127.627 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 152.82 Mbit/s

95th percentile per-packet one-way delay: 161.383 ms

Loss rate: 2.09%

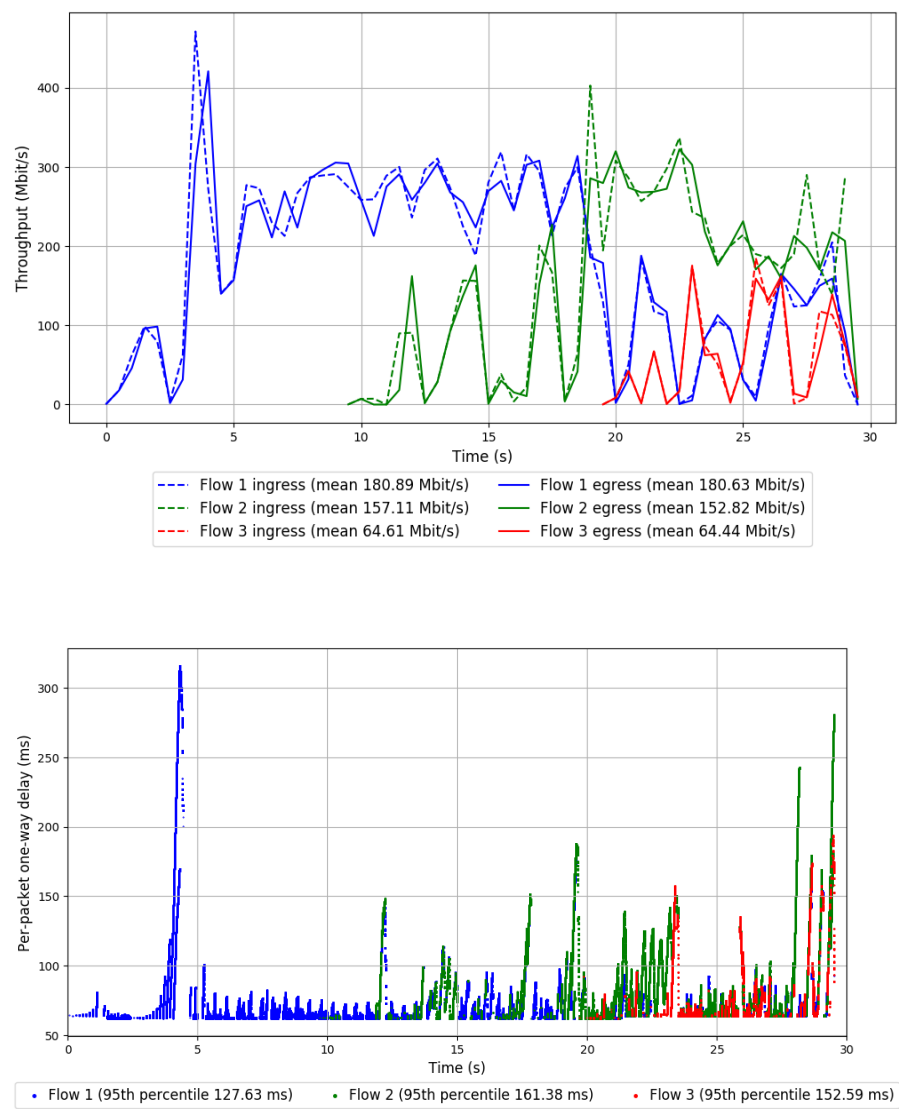
-- Flow 3:

Average throughput: 64.44 Mbit/s

95th percentile per-packet one-way delay: 152.586 ms

Loss rate: 1.53%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-03 07:00:51

End at: 2018-01-03 07:01:21

Below is generated by plot.py at 2018-01-03 12:02:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.67 Mbit/s

95th percentile per-packet one-way delay: 150.804 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 125.60 Mbit/s

95th percentile per-packet one-way delay: 130.498 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 173.95 Mbit/s

95th percentile per-packet one-way delay: 169.244 ms

Loss rate: 0.12%

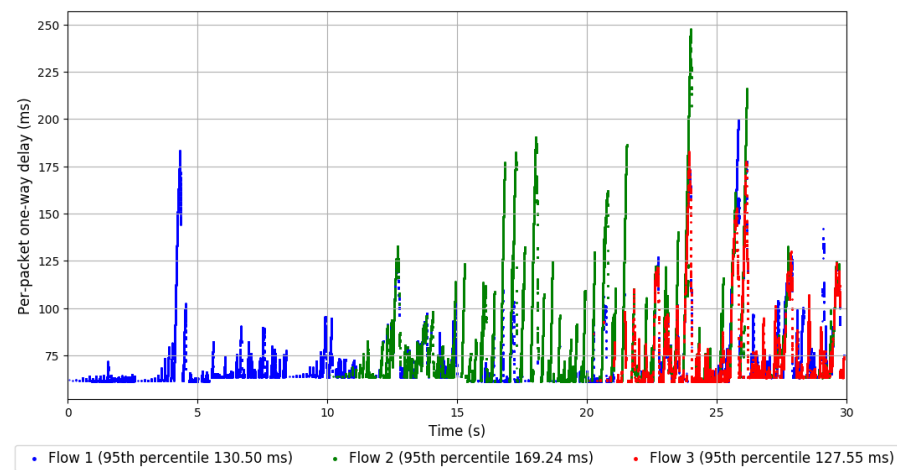
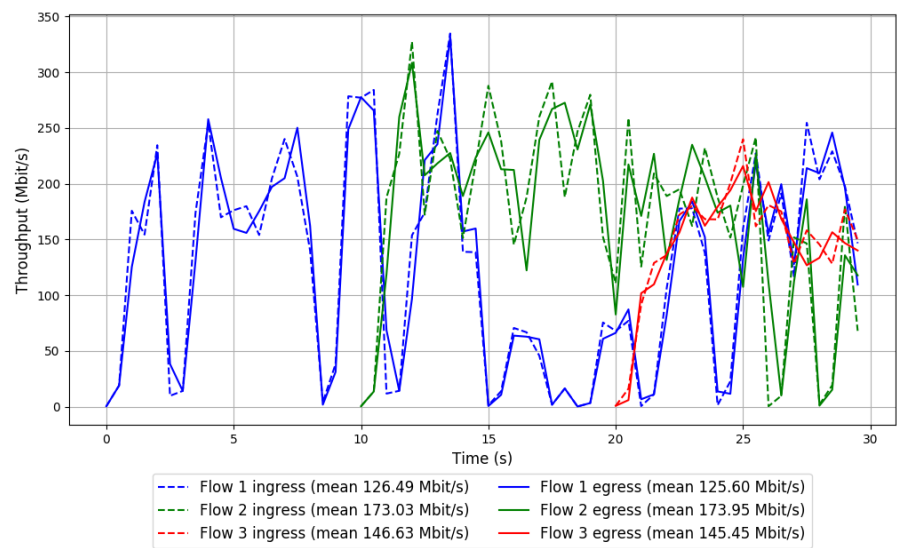
-- Flow 3:

Average throughput: 145.45 Mbit/s

95th percentile per-packet one-way delay: 127.549 ms

Loss rate: 2.04%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-03 07:13:59

End at: 2018-01-03 07:14:29

Below is generated by plot.py at 2018-01-03 12:02:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.93 Mbit/s

95th percentile per-packet one-way delay: 131.447 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 182.00 Mbit/s

95th percentile per-packet one-way delay: 141.111 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 113.12 Mbit/s

95th percentile per-packet one-way delay: 121.477 ms

Loss rate: 0.01%

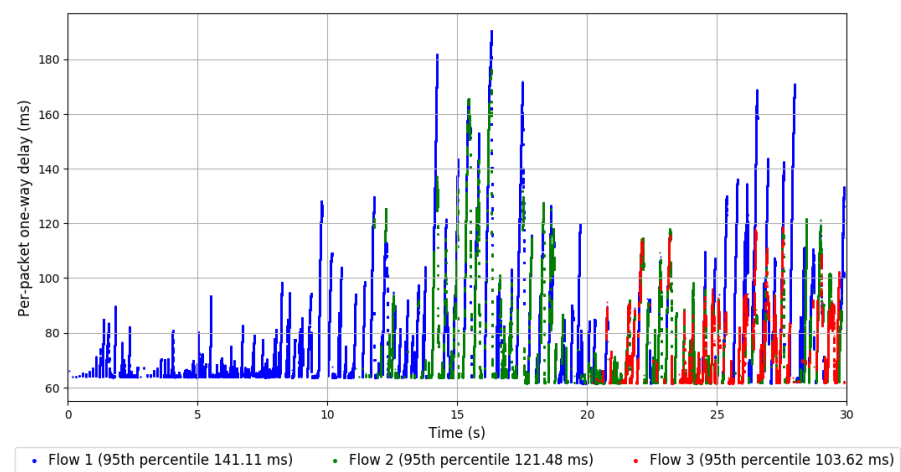
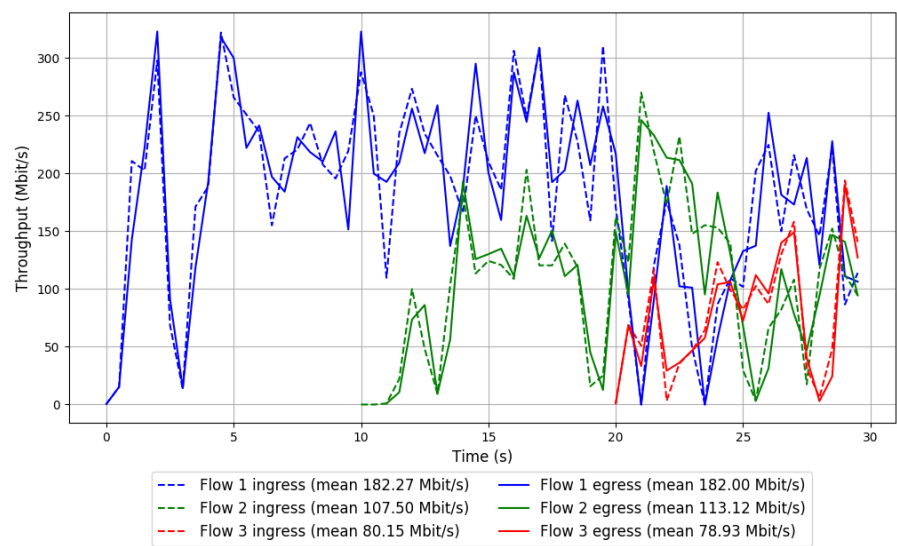
-- Flow 3:

Average throughput: 78.93 Mbit/s

95th percentile per-packet one-way delay: 103.623 ms

Loss rate: 2.79%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-03 07:26:30

End at: 2018-01-03 07:27:00

Below is generated by plot.py at 2018-01-03 12:02:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 220.59 Mbit/s

95th percentile per-packet one-way delay: 182.155 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 128.35 Mbit/s

95th percentile per-packet one-way delay: 175.458 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 91.13 Mbit/s

95th percentile per-packet one-way delay: 193.735 ms

Loss rate: 0.09%

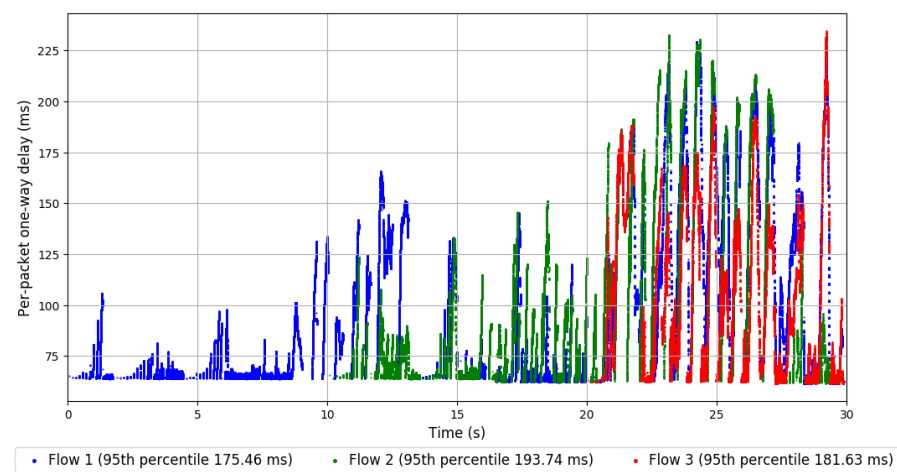
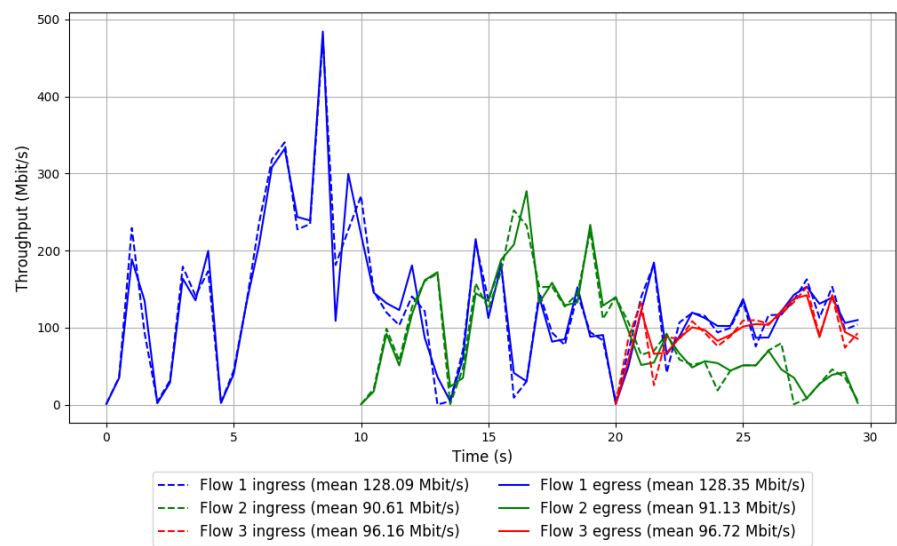
-- Flow 3:

Average throughput: 96.72 Mbit/s

95th percentile per-packet one-way delay: 181.627 ms

Loss rate: 1.02%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-03 07:39:36

End at: 2018-01-03 07:40:06

Below is generated by plot.py at 2018-01-03 12:03:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.17 Mbit/s

95th percentile per-packet one-way delay: 225.267 ms

Loss rate: 1.57%

-- Flow 1:

Average throughput: 226.60 Mbit/s

95th percentile per-packet one-way delay: 240.940 ms

Loss rate: 1.56%

-- Flow 2:

Average throughput: 123.75 Mbit/s

95th percentile per-packet one-way delay: 185.952 ms

Loss rate: 1.32%

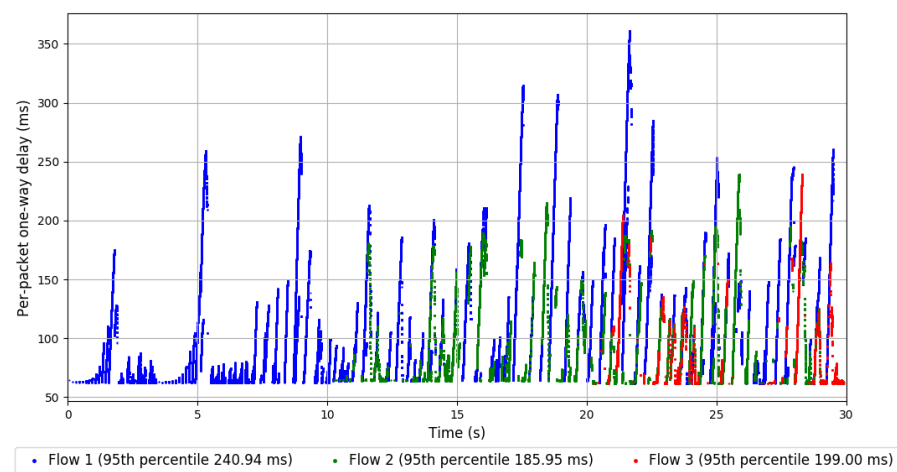
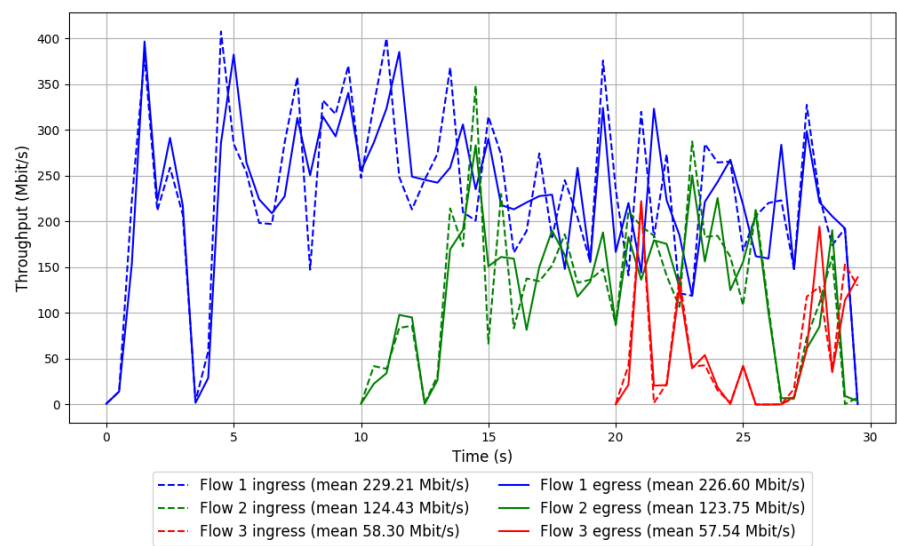
-- Flow 3:

Average throughput: 57.54 Mbit/s

95th percentile per-packet one-way delay: 199.004 ms

Loss rate: 2.70%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-03 07:53:25

End at: 2018-01-03 07:53:55

Below is generated by plot.py at 2018-01-03 12:05:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 303.69 Mbit/s

95th percentile per-packet one-way delay: 158.891 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 201.33 Mbit/s

95th percentile per-packet one-way delay: 164.433 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 100.49 Mbit/s

95th percentile per-packet one-way delay: 142.053 ms

Loss rate: 1.87%

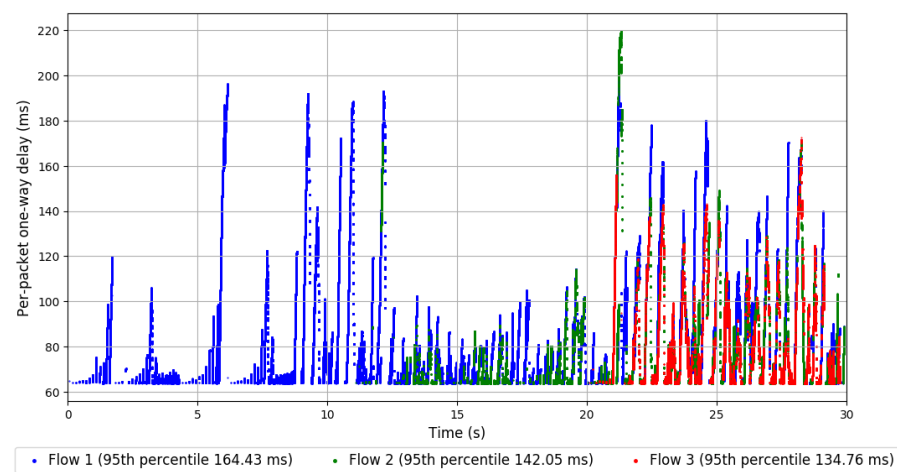
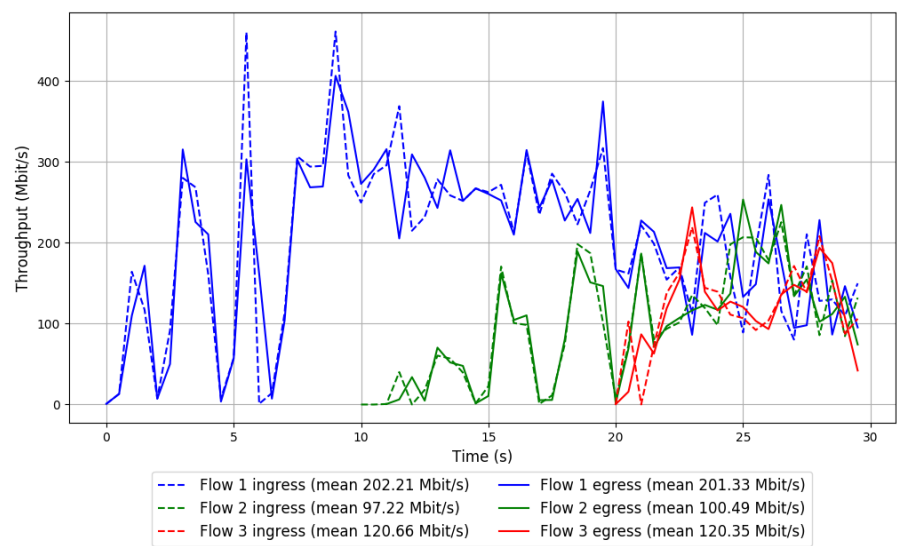
-- Flow 3:

Average throughput: 120.35 Mbit/s

95th percentile per-packet one-way delay: 134.764 ms

Loss rate: 2.82%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-03 08:07:15

End at: 2018-01-03 08:07:45

Below is generated by plot.py at 2018-01-03 12:05:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.30 Mbit/s

95th percentile per-packet one-way delay: 158.371 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 135.32 Mbit/s

95th percentile per-packet one-way delay: 179.657 ms

Loss rate: 1.33%

-- Flow 2:

Average throughput: 165.01 Mbit/s

95th percentile per-packet one-way delay: 141.661 ms

Loss rate: 0.17%

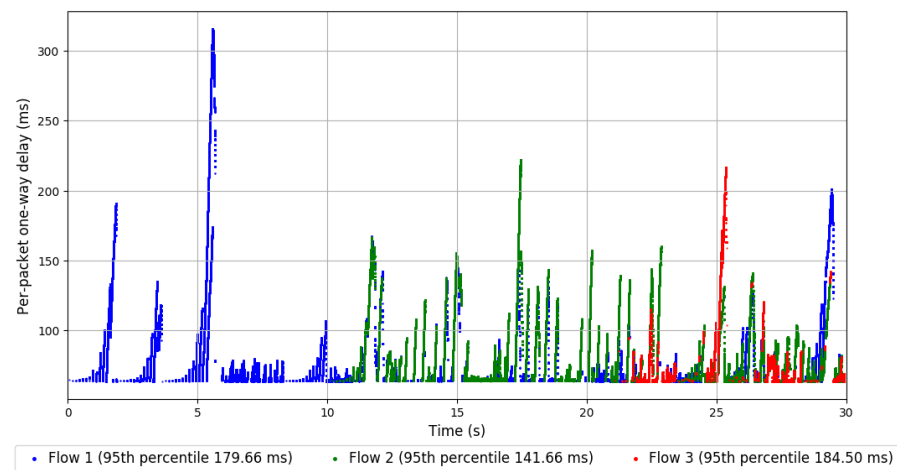
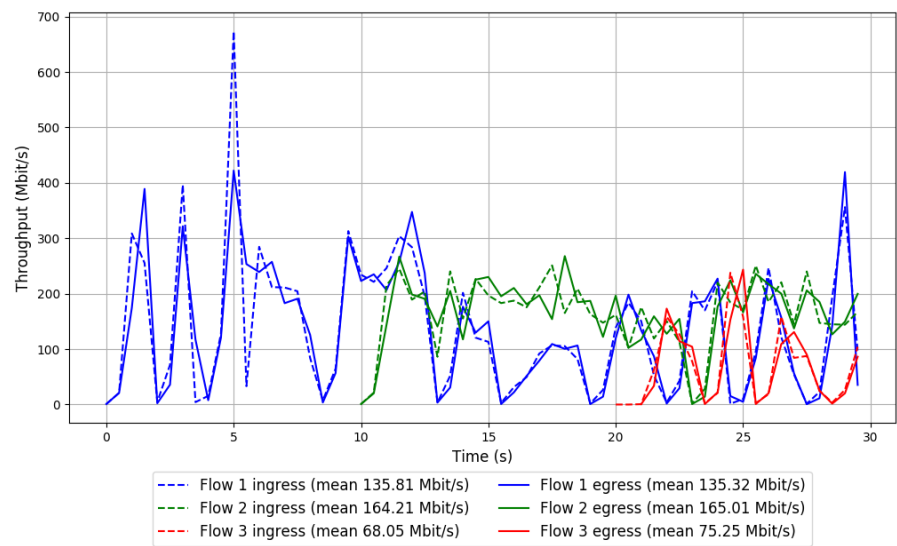
-- Flow 3:

Average throughput: 75.25 Mbit/s

95th percentile per-packet one-way delay: 184.495 ms

Loss rate: 1.93%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-03 08:21:38

End at: 2018-01-03 08:22:08

Below is generated by plot.py at 2018-01-03 12:06:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 333.44 Mbit/s

95th percentile per-packet one-way delay: 144.316 ms

Loss rate: 2.02%

-- Flow 1:

Average throughput: 185.97 Mbit/s

95th percentile per-packet one-way delay: 101.431 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 170.98 Mbit/s

95th percentile per-packet one-way delay: 276.757 ms

Loss rate: 4.26%

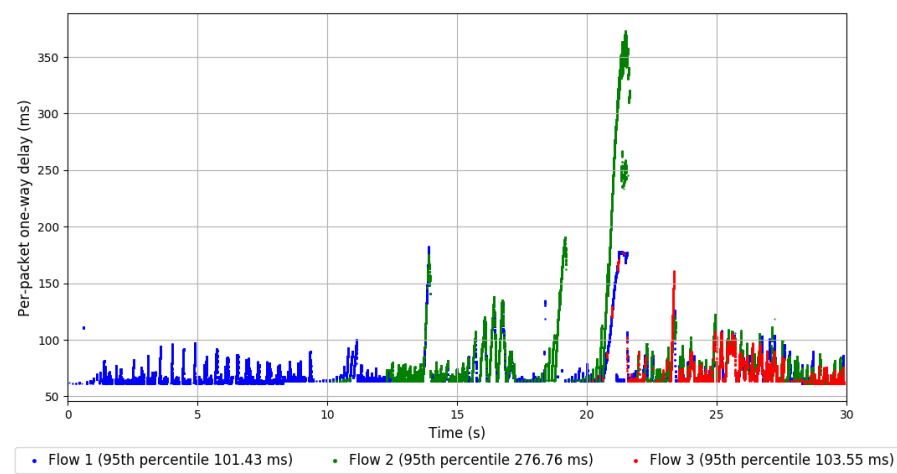
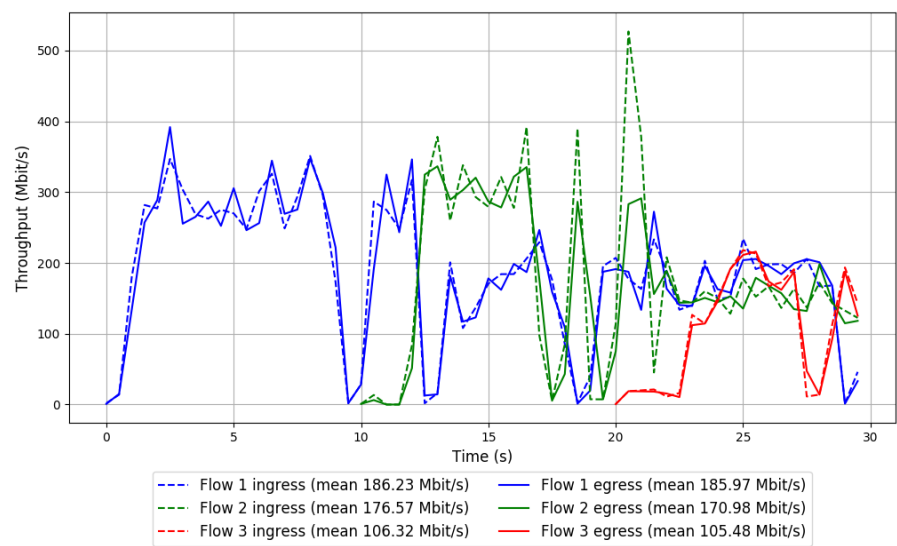
-- Flow 3:

Average throughput: 105.48 Mbit/s

95th percentile per-packet one-way delay: 103.551 ms

Loss rate: 2.07%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-03 08:36:07

End at: 2018-01-03 08:36:37

Below is generated by plot.py at 2018-01-03 12:07:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 353.75 Mbit/s

95th percentile per-packet one-way delay: 148.908 ms

Loss rate: 1.93%

-- Flow 1:

Average throughput: 221.08 Mbit/s

95th percentile per-packet one-way delay: 115.307 ms

Loss rate: 1.73%

-- Flow 2:

Average throughput: 145.49 Mbit/s

95th percentile per-packet one-way delay: 141.639 ms

Loss rate: 1.12%

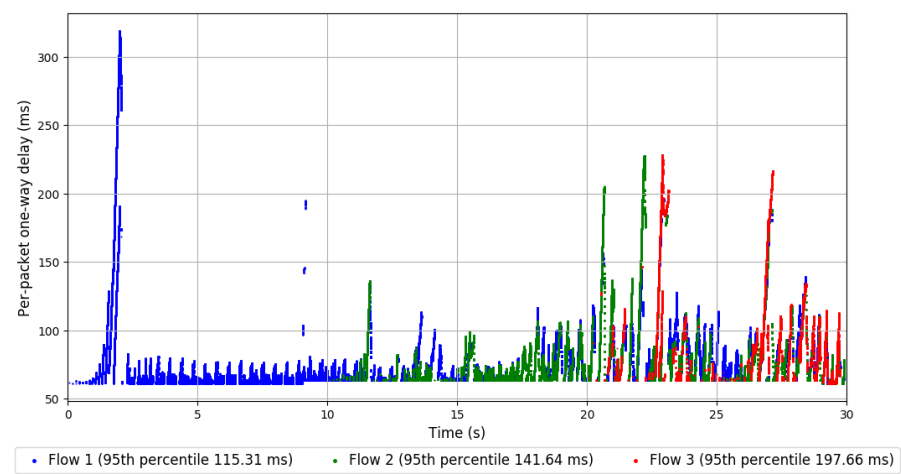
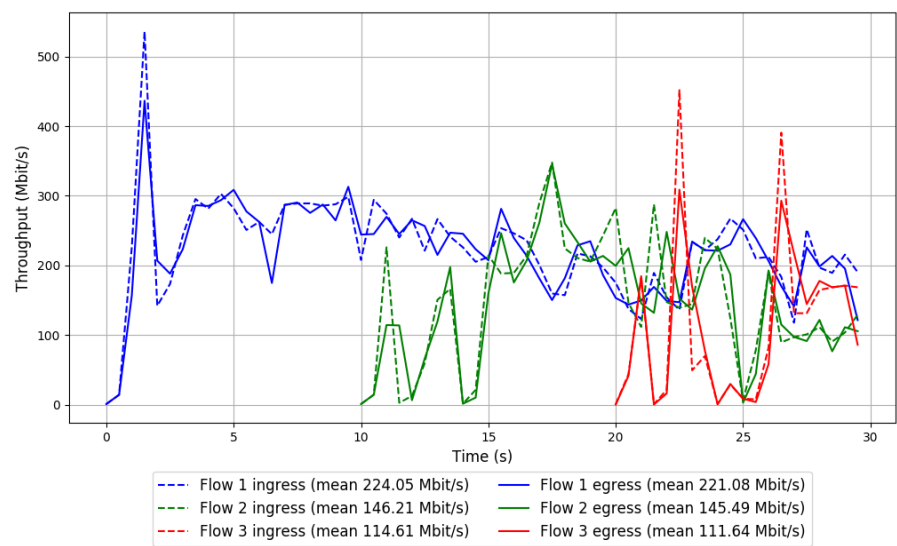
-- Flow 3:

Average throughput: 111.64 Mbit/s

95th percentile per-packet one-way delay: 197.656 ms

Loss rate: 5.14%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-03 08:49:31

End at: 2018-01-03 08:50:01

Below is generated by plot.py at 2018-01-03 12:07:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.25 Mbit/s

95th percentile per-packet one-way delay: 189.567 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 155.85 Mbit/s

95th percentile per-packet one-way delay: 161.389 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 256.83 Mbit/s

95th percentile per-packet one-way delay: 215.308 ms

Loss rate: 1.21%

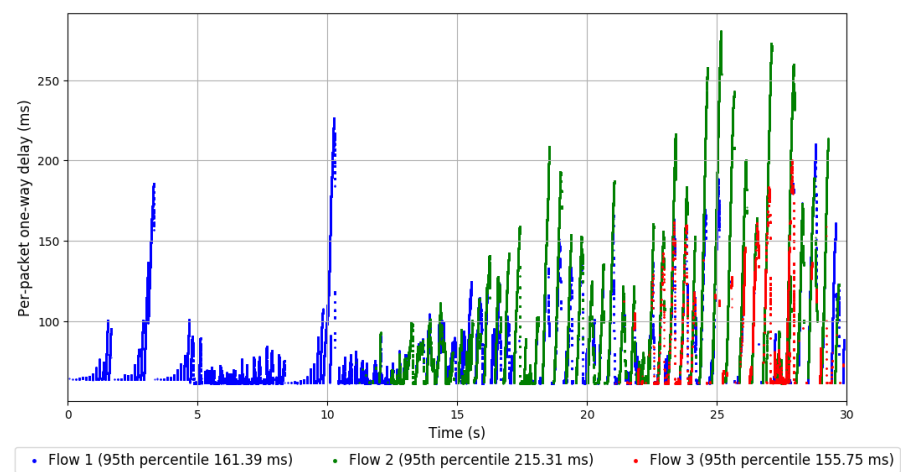
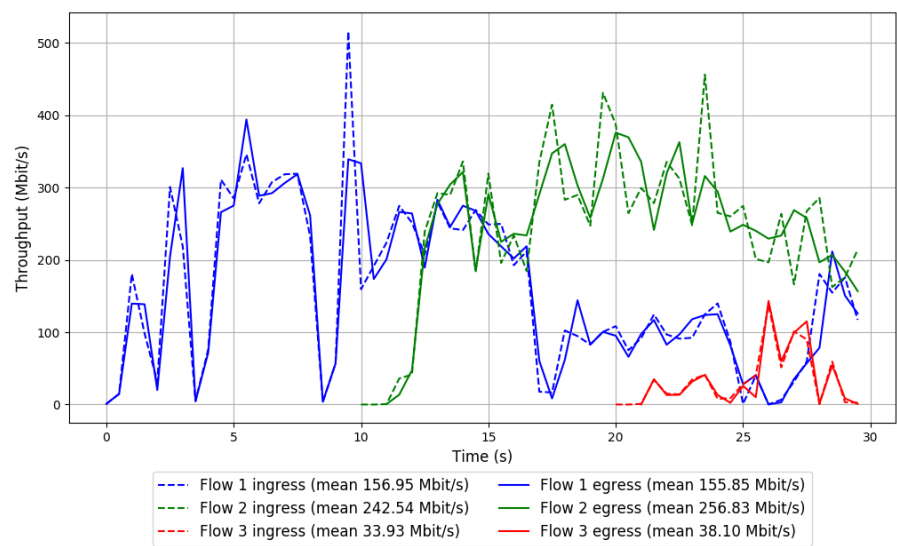
-- Flow 3:

Average throughput: 38.10 Mbit/s

95th percentile per-packet one-way delay: 155.750 ms

Loss rate: 0.43%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-01-03 06:55:28

End at: 2018-01-03 06:55:58

Below is generated by plot.py at 2018-01-03 12:07:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.09 Mbit/s

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

Loss rate: 0.97%

-- Flow 1:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 2833.215 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.64 Mbit/s

95th percentile per-packet one-way delay: 63.621 ms

Loss rate: 0.50%

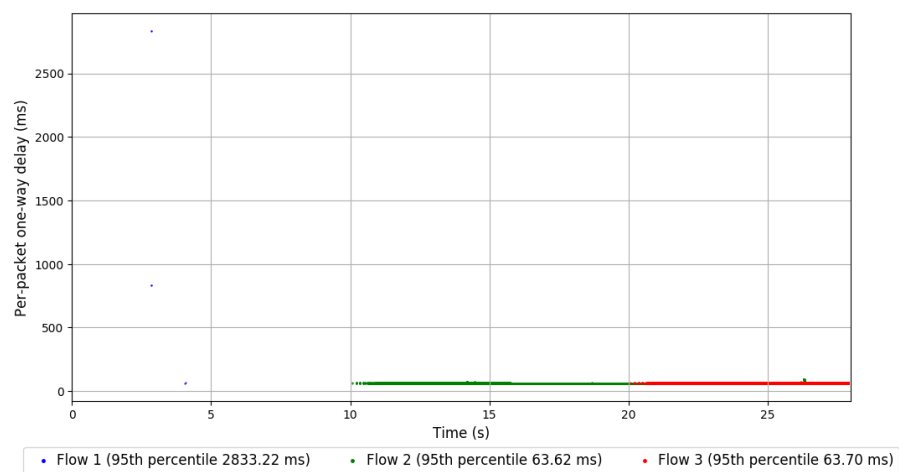
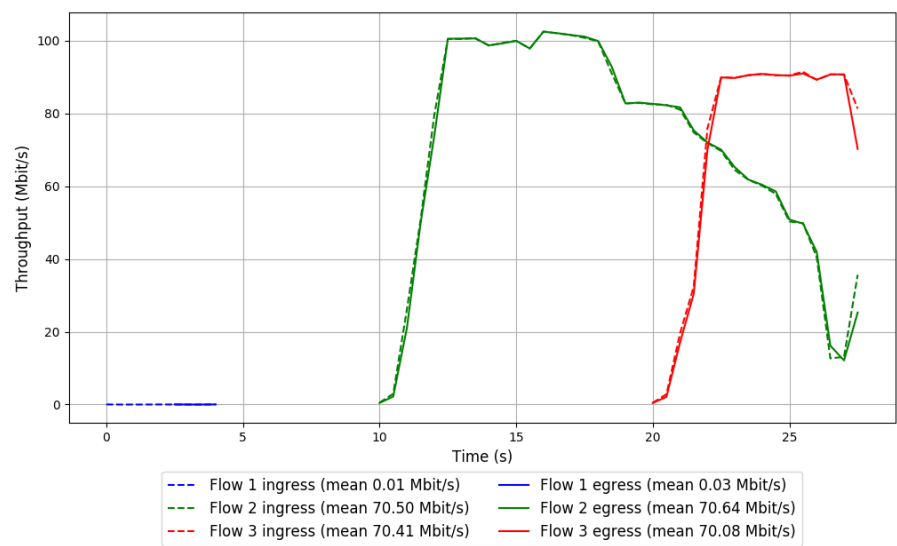
-- Flow 3:

Average throughput: 70.08 Mbit/s

95th percentile per-packet one-way delay: 63.699 ms

Loss rate: 2.02%

Run 1: Report of Copa — Data Link

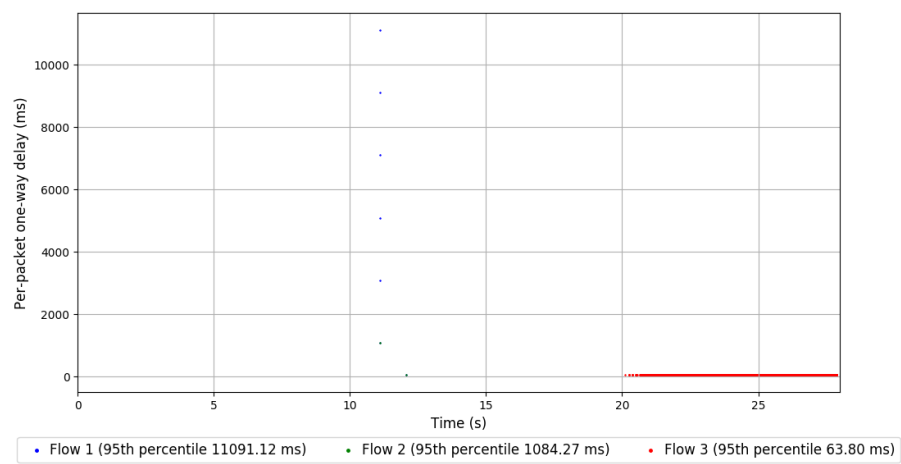
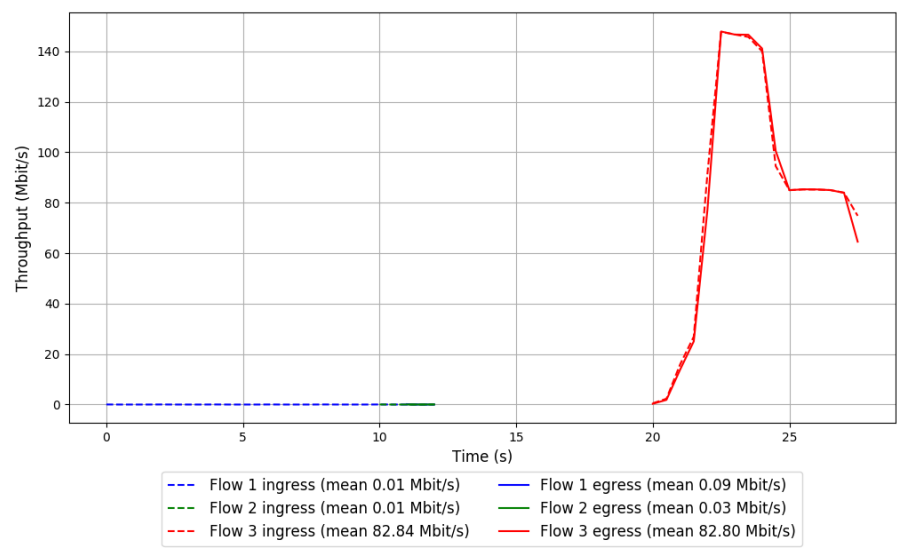


Run 2: Statistics of Copa

Start at: 2018-01-03 07:09:24

End at: 2018-01-03 07:09:54

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-03 07:22:12

End at: 2018-01-03 07:22:42

Below is generated by plot.py at 2018-01-03 12:07:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.65 Mbit/s

95th percentile per-packet one-way delay: 64.368 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 39.62 Mbit/s

95th percentile per-packet one-way delay: 64.364 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 46.27 Mbit/s

95th percentile per-packet one-way delay: 64.408 ms

Loss rate: 0.14%

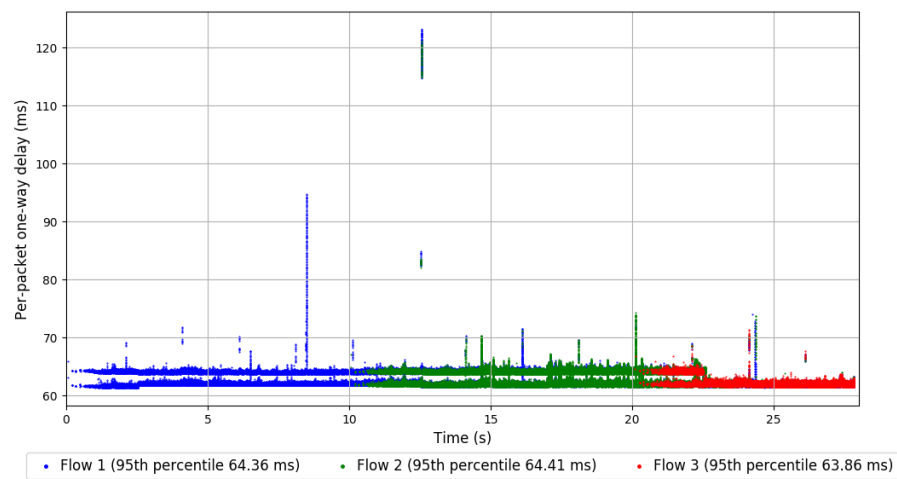
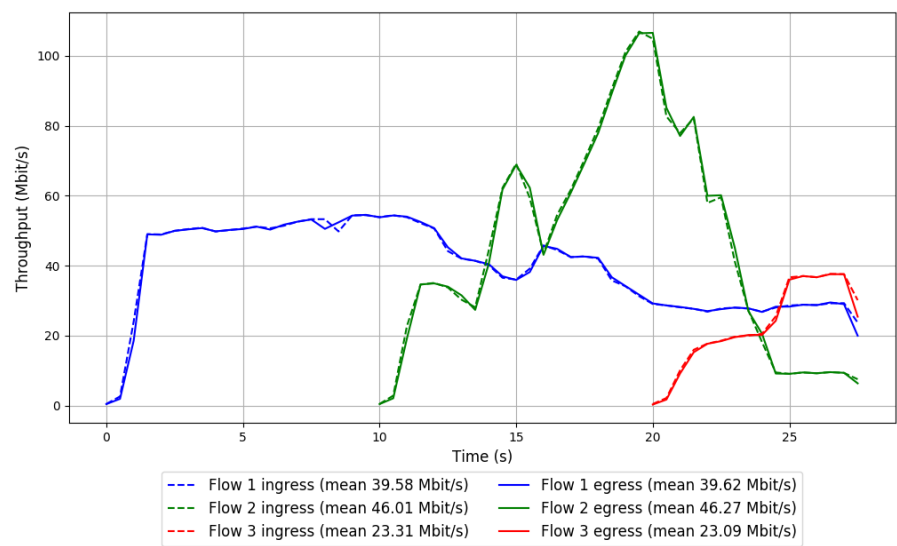
-- Flow 3:

Average throughput: 23.09 Mbit/s

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

Loss rate: 2.57%

Run 3: Report of Copa — Data Link

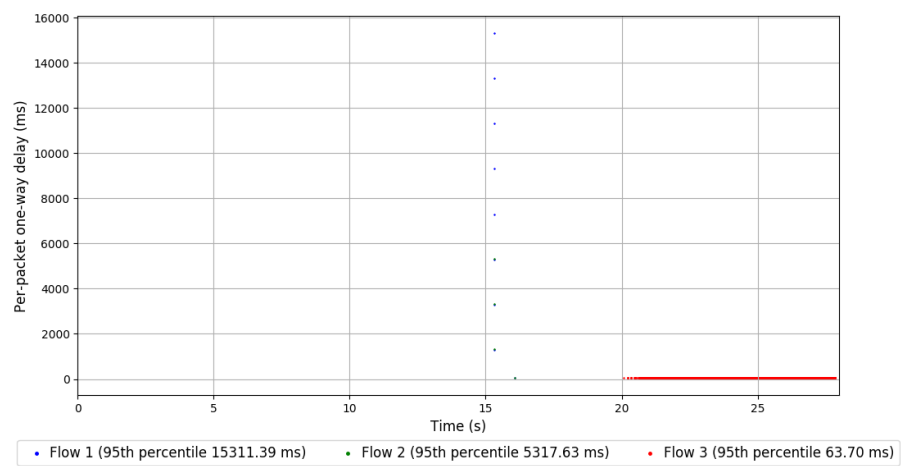
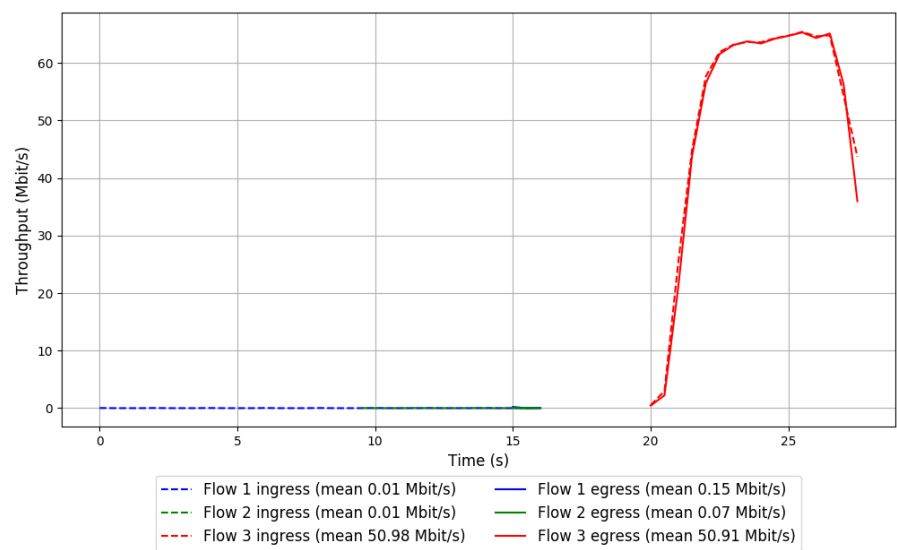


Run 4: Statistics of Copa

Start at: 2018-01-03 07:34:28

End at: 2018-01-03 07:34:58

Run 4: Report of Copa — Data Link

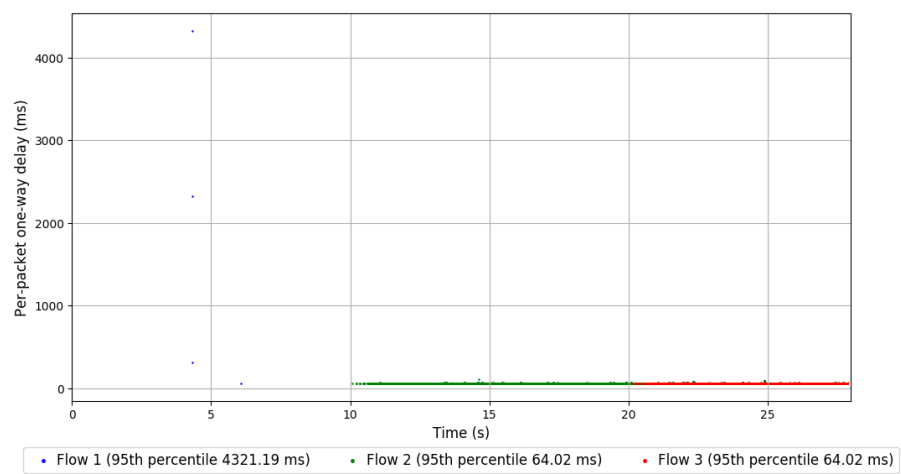
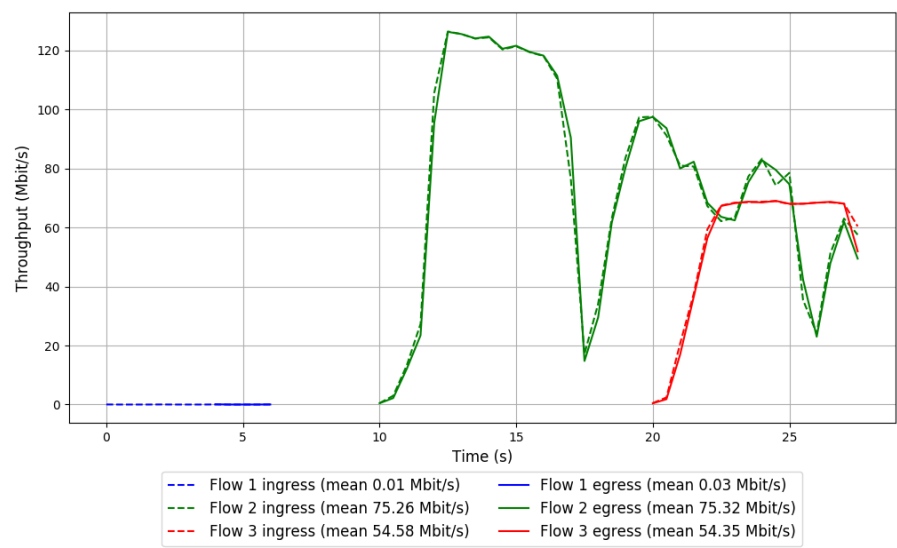


Run 5: Statistics of Copa

Start at: 2018-01-03 07:48:10

End at: 2018-01-03 07:48:40

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

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

End at: 2018-01-03 08:02:32

Below is generated by plot.py at 2018-01-03 12:07:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.60 Mbit/s

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

Loss rate: 0.80%

-- Flow 1:

Average throughput: 53.52 Mbit/s

95th percentile per-packet one-way delay: 64.388 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 48.65 Mbit/s

95th percentile per-packet one-way delay: 64.384 ms

Loss rate: 0.83%

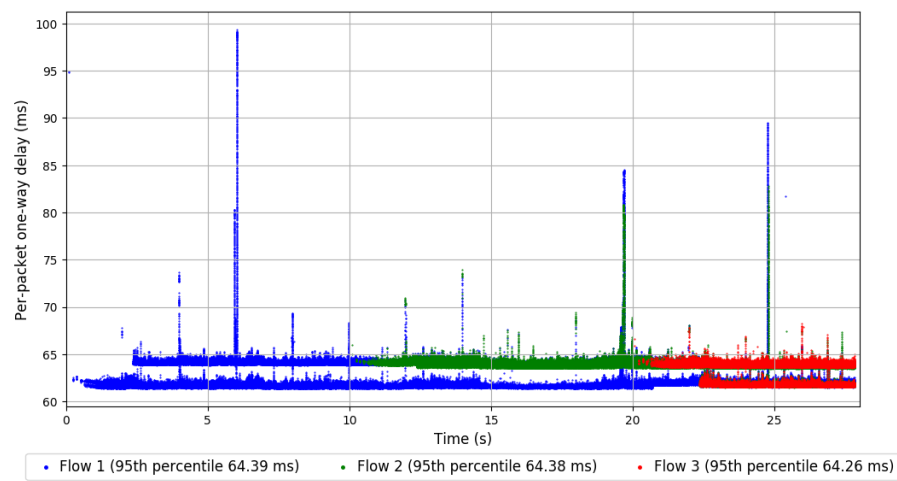
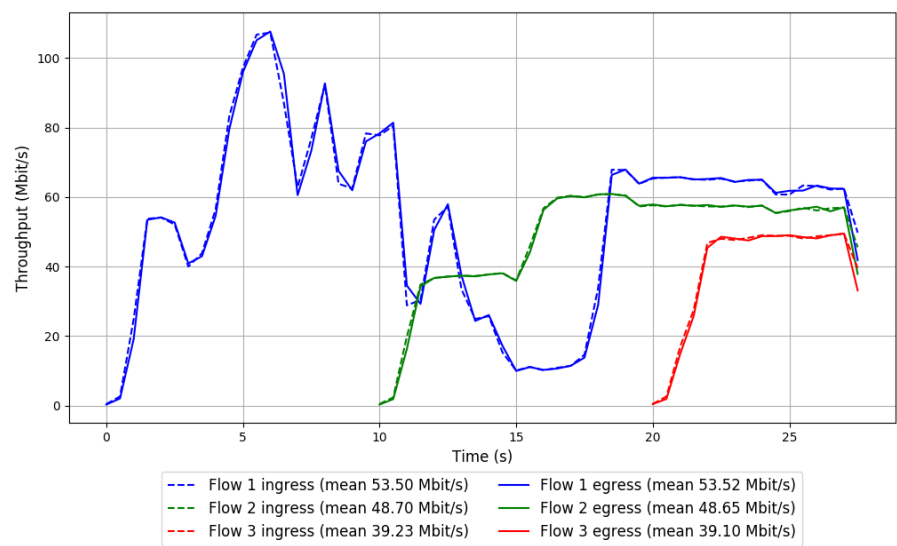
-- Flow 3:

Average throughput: 39.10 Mbit/s

95th percentile per-packet one-way delay: 64.264 ms

Loss rate: 2.02%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-03 08:16:05

End at: 2018-01-03 08:16:35

Below is generated by plot.py at 2018-01-03 12:09:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.22 Mbit/s

95th percentile per-packet one-way delay: 63.910 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 78.19 Mbit/s

95th percentile per-packet one-way delay: 63.906 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 74.58 Mbit/s

95th percentile per-packet one-way delay: 63.916 ms

Loss rate: 0.73%

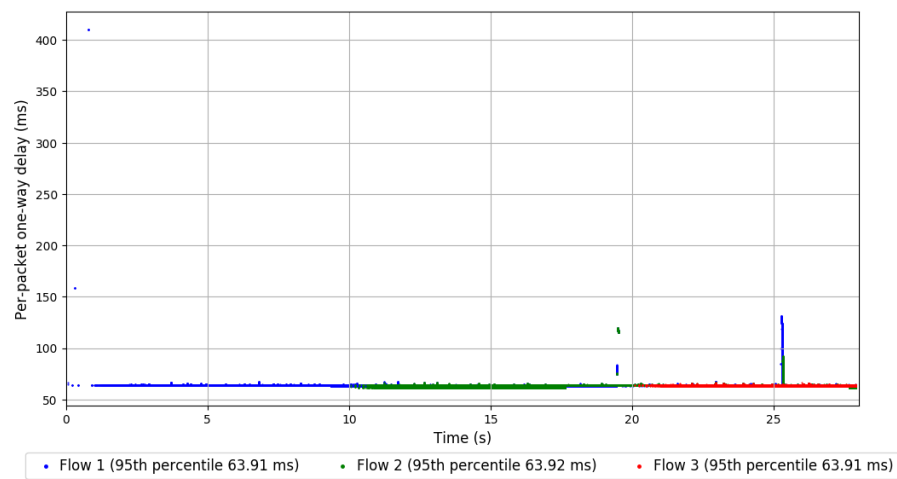
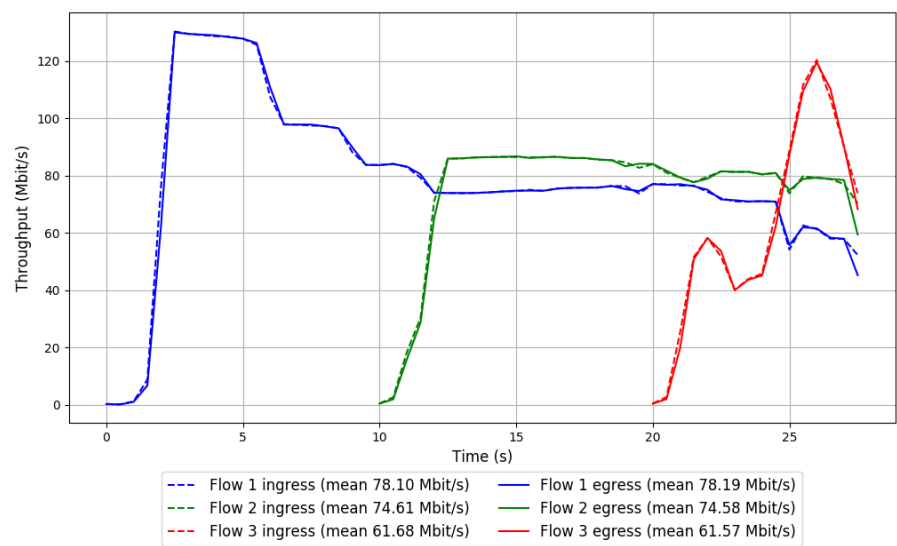
-- Flow 3:

Average throughput: 61.57 Mbit/s

95th percentile per-packet one-way delay: 63.909 ms

Loss rate: 1.77%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-03 08:30:36

End at: 2018-01-03 08:31:06

Below is generated by plot.py at 2018-01-03 12:09:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.93 Mbit/s

95th percentile per-packet one-way delay: 64.048 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 75.98 Mbit/s

95th percentile per-packet one-way delay: 64.038 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 66.84 Mbit/s

95th percentile per-packet one-way delay: 64.050 ms

Loss rate: 0.63%

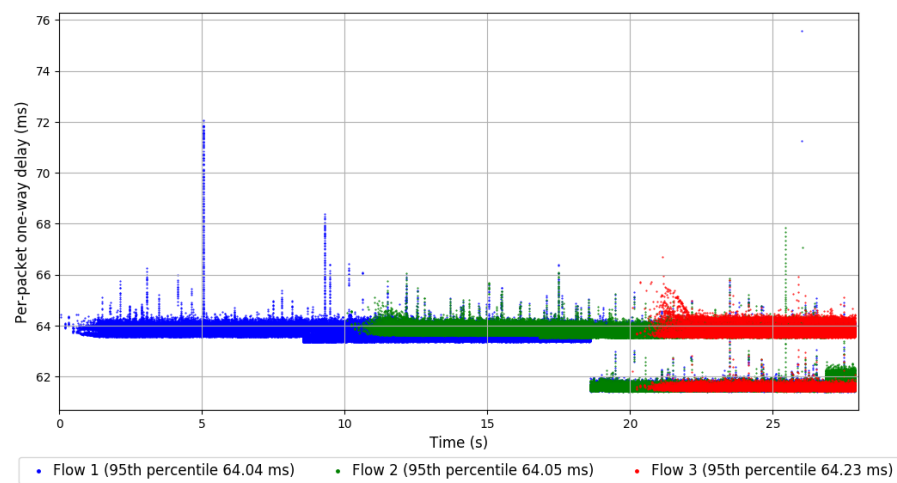
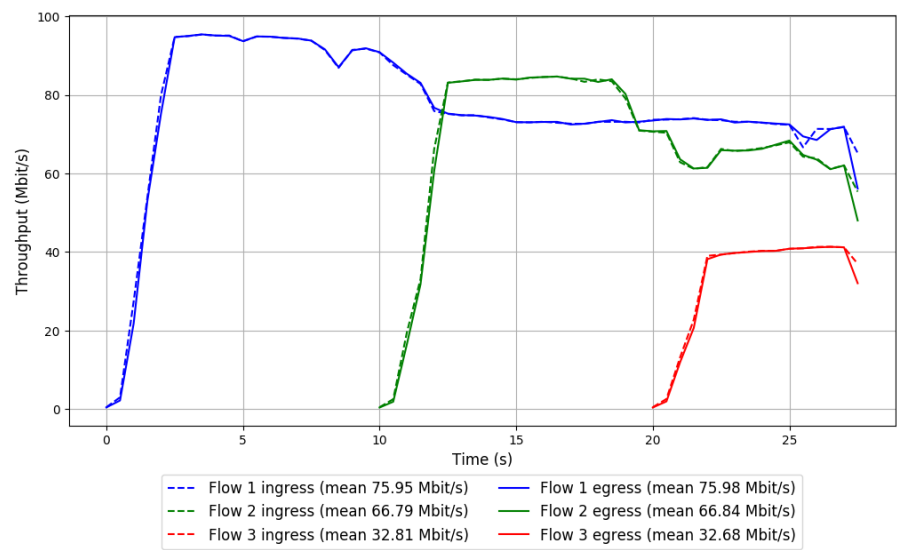
-- Flow 3:

Average throughput: 32.68 Mbit/s

95th percentile per-packet one-way delay: 64.226 ms

Loss rate: 1.94%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-03 08:44:55

End at: 2018-01-03 08:45:25

Below is generated by plot.py at 2018-01-03 12:09:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.32 Mbit/s

95th percentile per-packet one-way delay: 63.908 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 3277.443 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.74 Mbit/s

95th percentile per-packet one-way delay: 63.907 ms

Loss rate: 0.17%

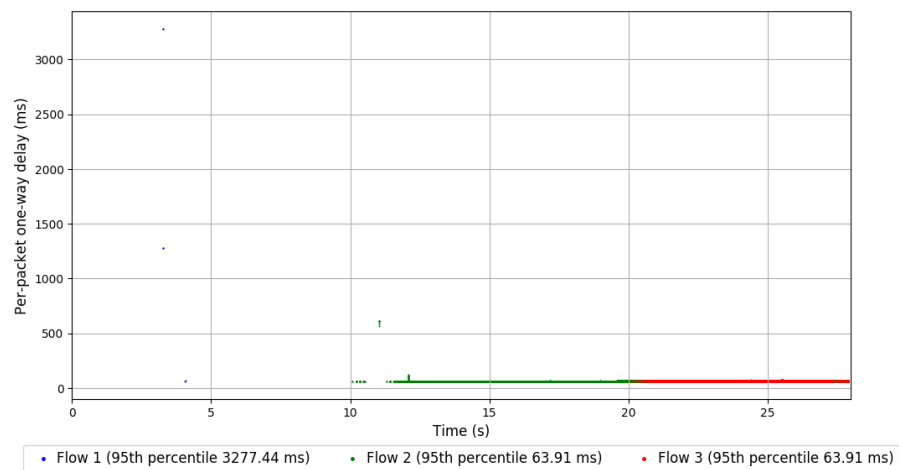
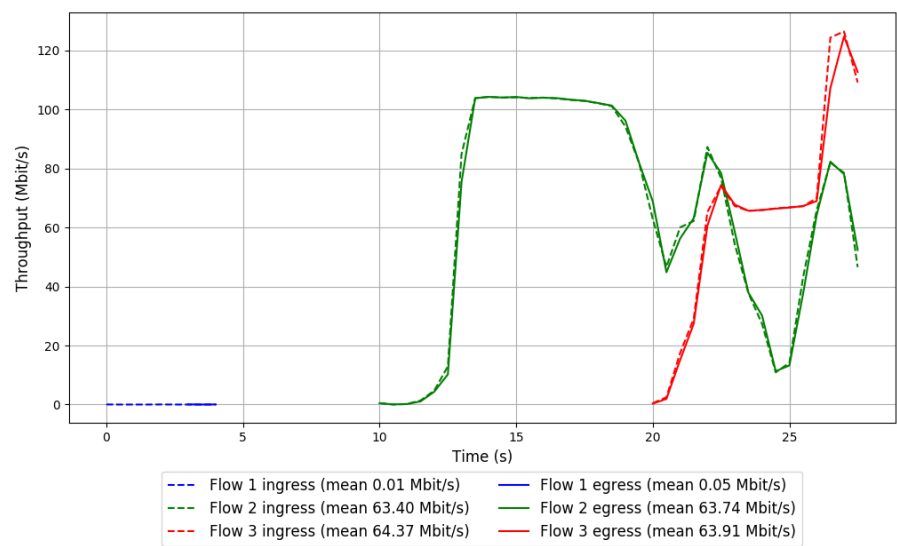
-- Flow 3:

Average throughput: 63.91 Mbit/s

95th percentile per-packet one-way delay: 63.911 ms

Loss rate: 2.44%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-03 08:57:55

End at: 2018-01-03 08:58:25

Below is generated by plot.py at 2018-01-03 12:09:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.99 Mbit/s

95th percentile per-packet one-way delay: 64.260 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 60.15 Mbit/s

95th percentile per-packet one-way delay: 64.197 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 43.82 Mbit/s

95th percentile per-packet one-way delay: 64.280 ms

Loss rate: 0.77%

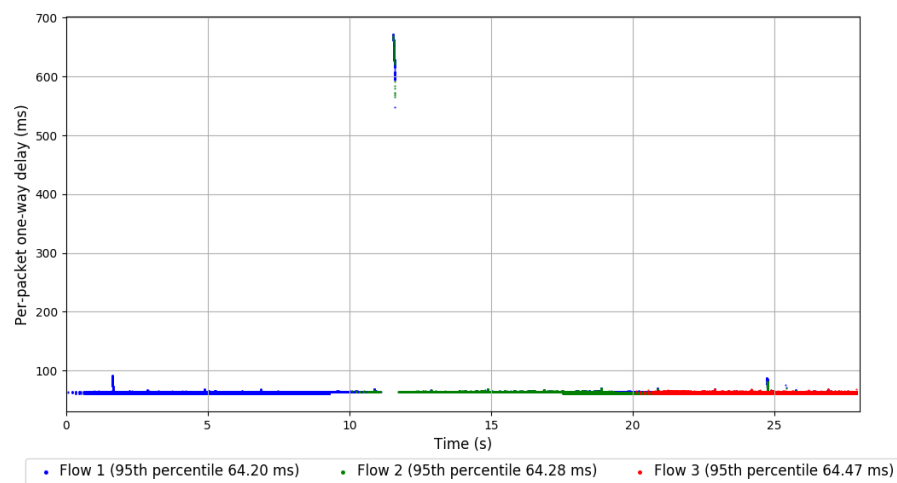
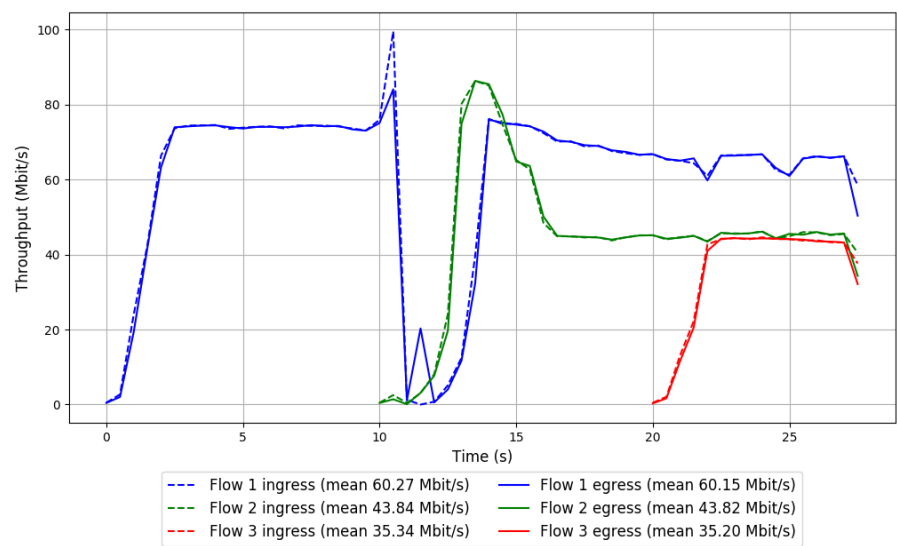
-- Flow 3:

Average throughput: 35.20 Mbit/s

95th percentile per-packet one-way delay: 64.466 ms

Loss rate: 1.94%

Run 10: Report of Copa — Data Link

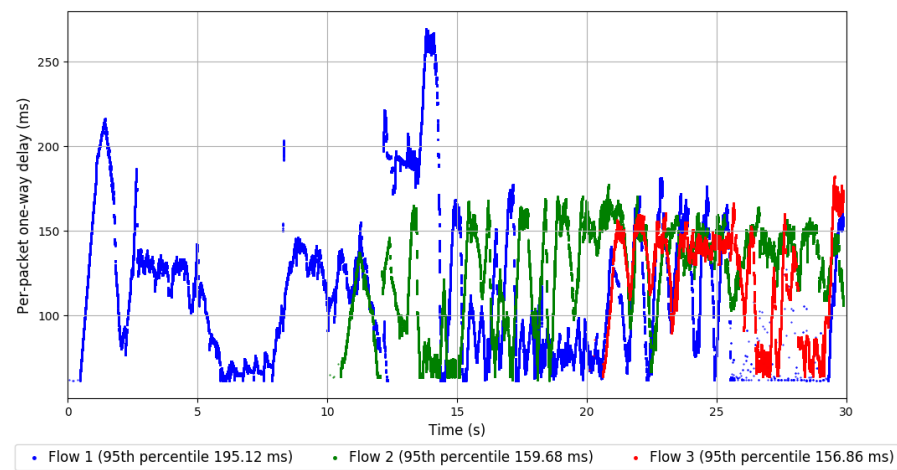
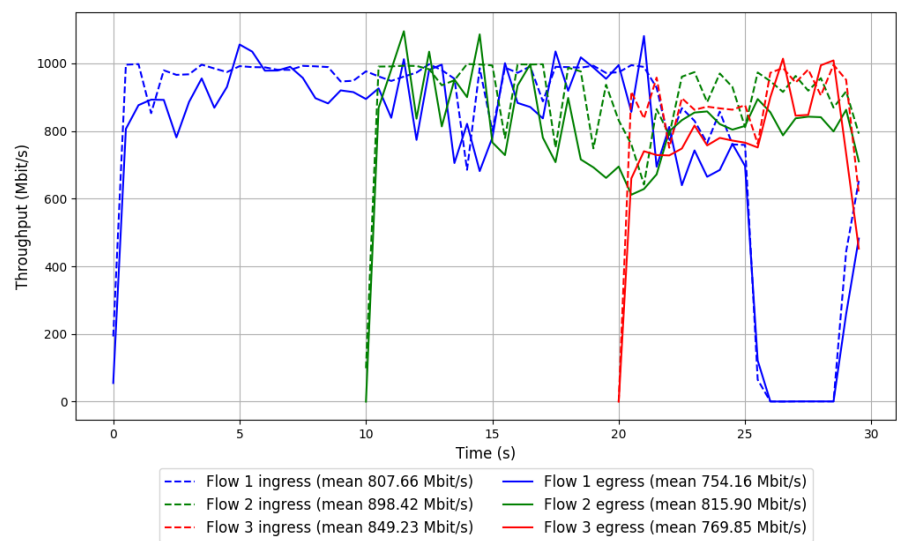


```
Run 1: Statistics of FillP

Start at: 2018-01-03 06:44:58
End at: 2018-01-03 06:45:28

# Below is generated by plot.py at 2018-01-03 12:35:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1547.67 Mbit/s
95th percentile per-packet one-way delay: 180.274 ms
Loss rate: 8.57%
-- Flow 1:
Average throughput: 754.16 Mbit/s
95th percentile per-packet one-way delay: 195.117 ms
Loss rate: 7.01%
-- Flow 2:
Average throughput: 815.90 Mbit/s
95th percentile per-packet one-way delay: 159.677 ms
Loss rate: 9.76%
-- Flow 3:
Average throughput: 769.85 Mbit/s
95th percentile per-packet one-way delay: 156.862 ms
Loss rate: 10.54%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-03 06:59:02

End at: 2018-01-03 06:59:32

Below is generated by plot.py at 2018-01-03 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 1616.26 Mbit/s

95th percentile per-packet one-way delay: 170.575 ms

Loss rate: 7.10%

-- Flow 1:

Average throughput: 883.08 Mbit/s

95th percentile per-packet one-way delay: 160.740 ms

Loss rate: 5.85%

-- Flow 2:

Average throughput: 722.45 Mbit/s

95th percentile per-packet one-way delay: 223.352 ms

Loss rate: 6.55%

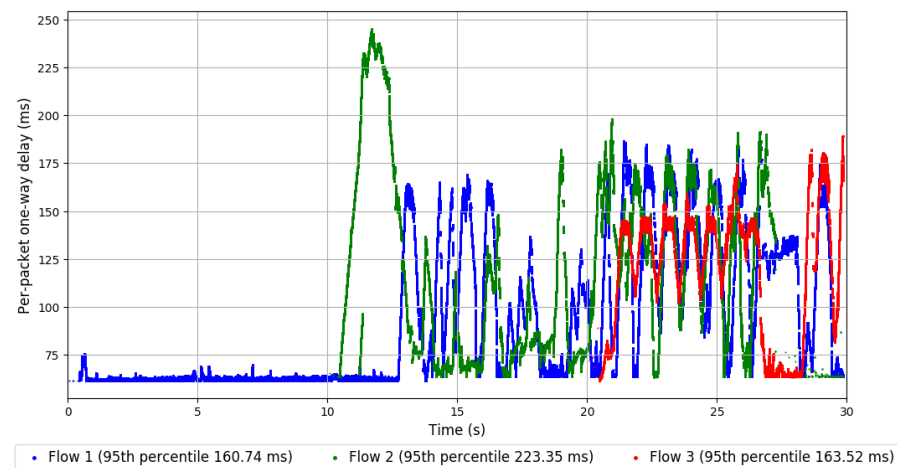
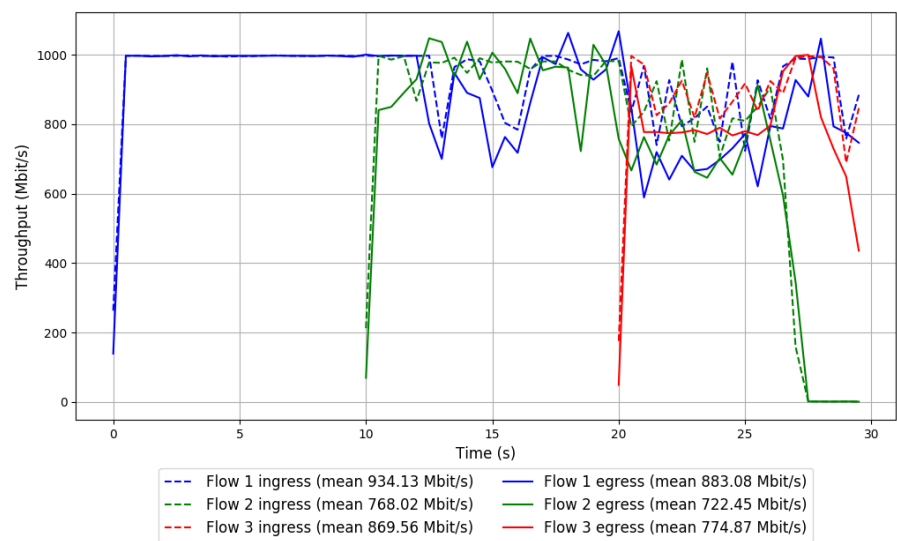
-- Flow 3:

Average throughput: 774.87 Mbit/s

95th percentile per-packet one-way delay: 163.524 ms

Loss rate: 12.11%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-03 07:12:54

End at: 2018-01-03 07:13:24

Below is generated by plot.py at 2018-01-03 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 514.55 Mbit/s

95th percentile per-packet one-way delay: 144.818 ms

Loss rate: 2.09%

-- Flow 1:

Average throughput: 84.75 Mbit/s

95th percentile per-packet one-way delay: 152.220 ms

Loss rate: 2.30%

-- Flow 2:

Average throughput: 213.43 Mbit/s

95th percentile per-packet one-way delay: 111.254 ms

Loss rate: 0.17%

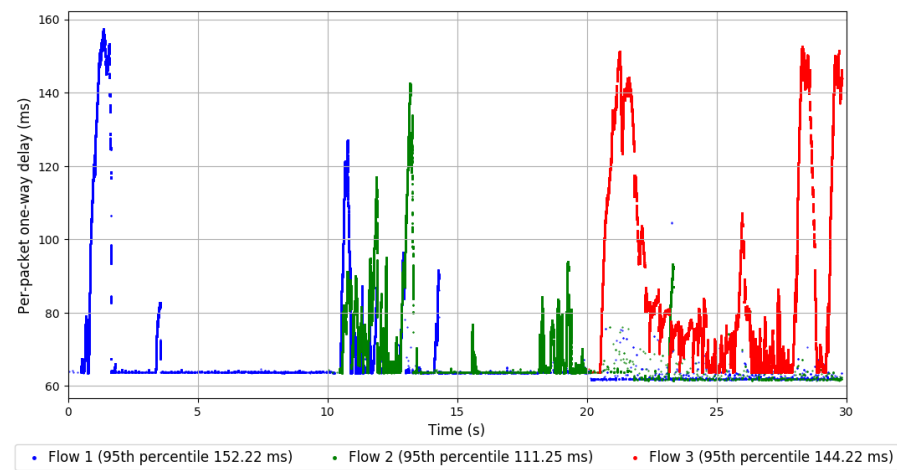
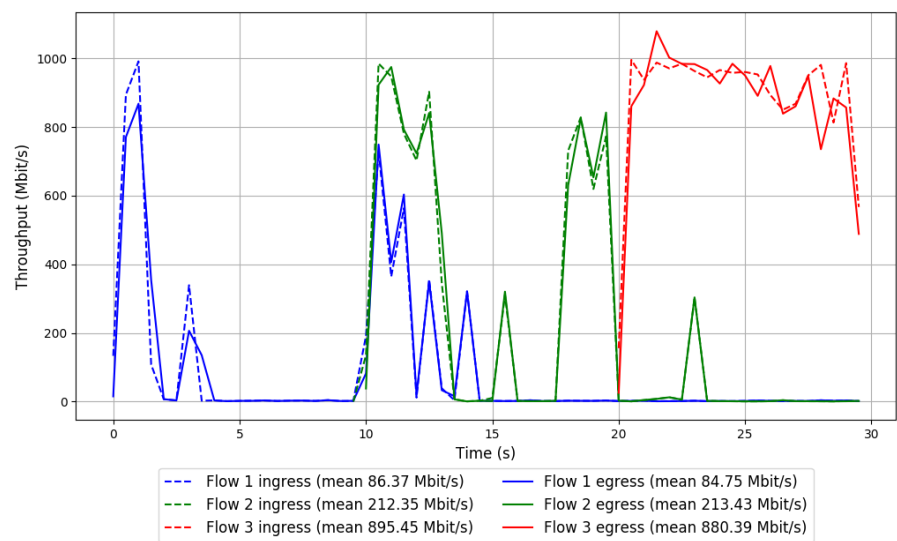
-- Flow 3:

Average throughput: 880.39 Mbit/s

95th percentile per-packet one-way delay: 144.215 ms

Loss rate: 2.95%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-03 07:25:38

End at: 2018-01-03 07:26:08

Below is generated by plot.py at 2018-01-03 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 193.78 Mbit/s

95th percentile per-packet one-way delay: 116.409 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 113.65 Mbit/s

95th percentile per-packet one-way delay: 115.050 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.32 Mbit/s

95th percentile per-packet one-way delay: 131.130 ms

Loss rate: 0.06%

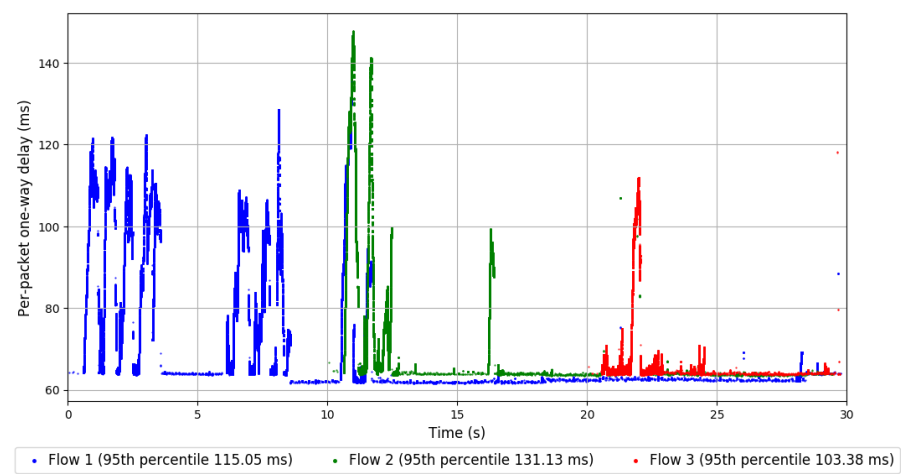
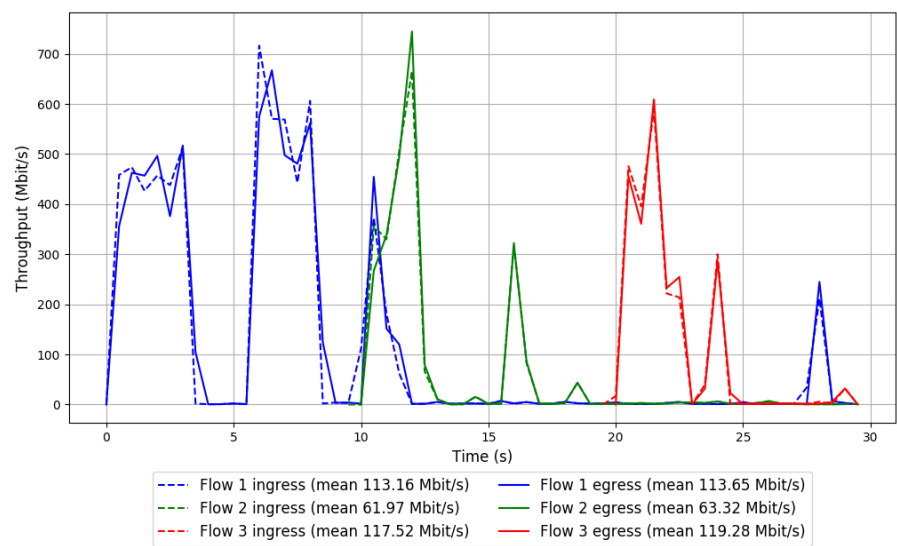
-- Flow 3:

Average throughput: 119.28 Mbit/s

95th percentile per-packet one-way delay: 103.380 ms

Loss rate: 0.02%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-03 07:37:51

End at: 2018-01-03 07:38:21

Below is generated by plot.py at 2018-01-03 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 1479.59 Mbit/s

95th percentile per-packet one-way delay: 208.645 ms

Loss rate: 5.23%

-- Flow 1:

Average throughput: 909.57 Mbit/s

95th percentile per-packet one-way delay: 208.977 ms

Loss rate: 5.02%

-- Flow 2:

Average throughput: 451.23 Mbit/s

95th percentile per-packet one-way delay: 151.786 ms

Loss rate: 2.49%

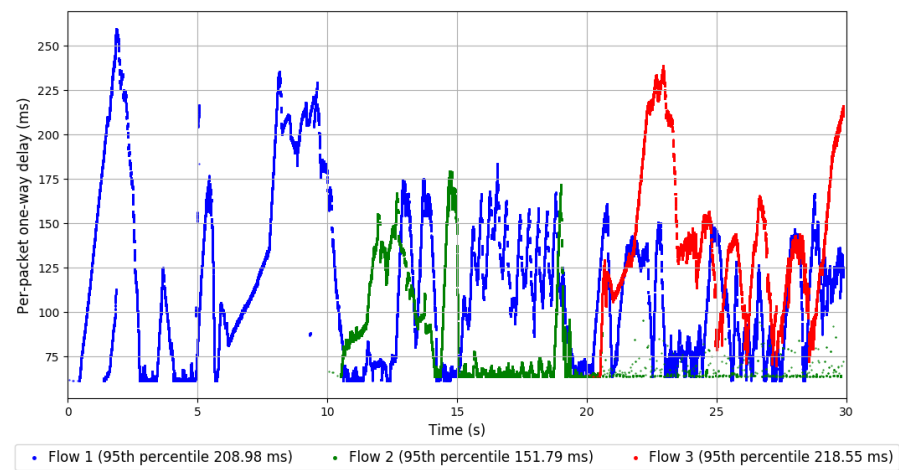
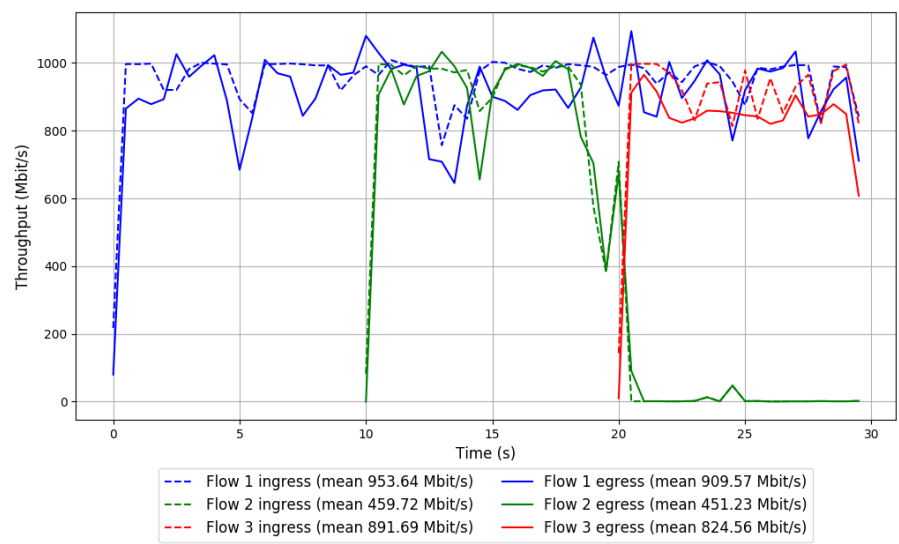
-- Flow 3:

Average throughput: 824.56 Mbit/s

95th percentile per-packet one-way delay: 218.550 ms

Loss rate: 8.72%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-03 07:51:41

End at: 2018-01-03 07:52:11

Below is generated by plot.py at 2018-01-03 12:36:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 1420.39 Mbit/s

95th percentile per-packet one-way delay: 171.064 ms

Loss rate: 9.28%

-- Flow 1:

Average throughput: 688.73 Mbit/s

95th percentile per-packet one-way delay: 141.690 ms

Loss rate: 6.55%

-- Flow 2:

Average throughput: 799.93 Mbit/s

95th percentile per-packet one-way delay: 170.183 ms

Loss rate: 9.12%

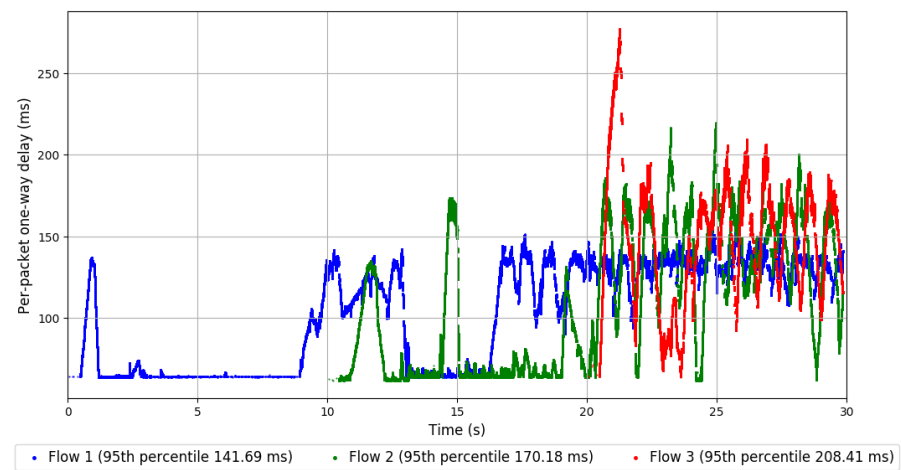
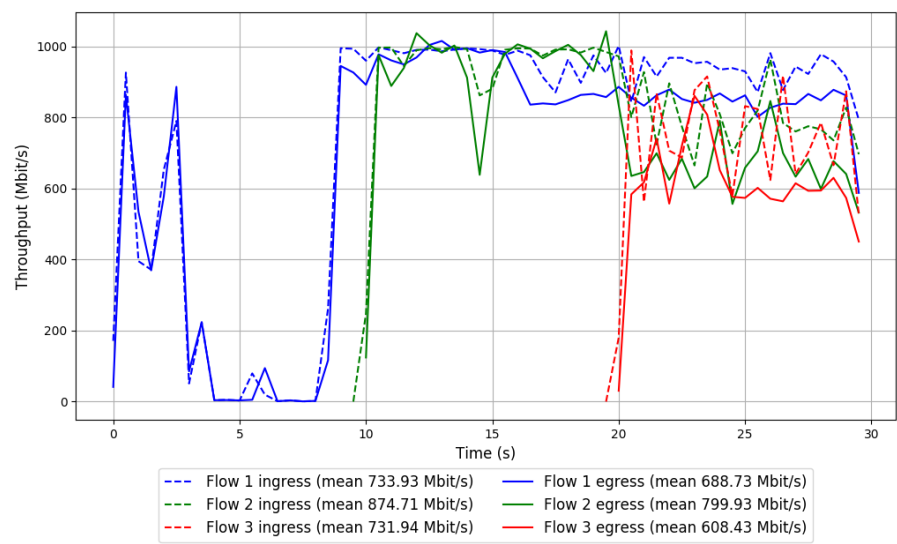
-- Flow 3:

Average throughput: 608.43 Mbit/s

95th percentile per-packet one-way delay: 208.407 ms

Loss rate: 17.92%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-03 08:05:29

End at: 2018-01-03 08:05:59

Below is generated by plot.py at 2018-01-03 12:37:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 1508.76 Mbit/s

95th percentile per-packet one-way delay: 153.192 ms

Loss rate: 7.59%

-- Flow 1:

Average throughput: 928.15 Mbit/s

95th percentile per-packet one-way delay: 140.547 ms

Loss rate: 4.39%

-- Flow 2:

Average throughput: 506.87 Mbit/s

95th percentile per-packet one-way delay: 173.542 ms

Loss rate: 11.87%

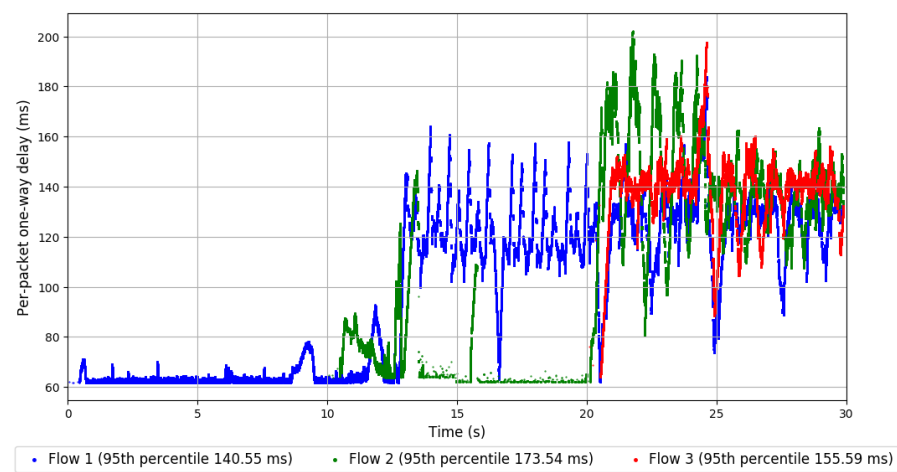
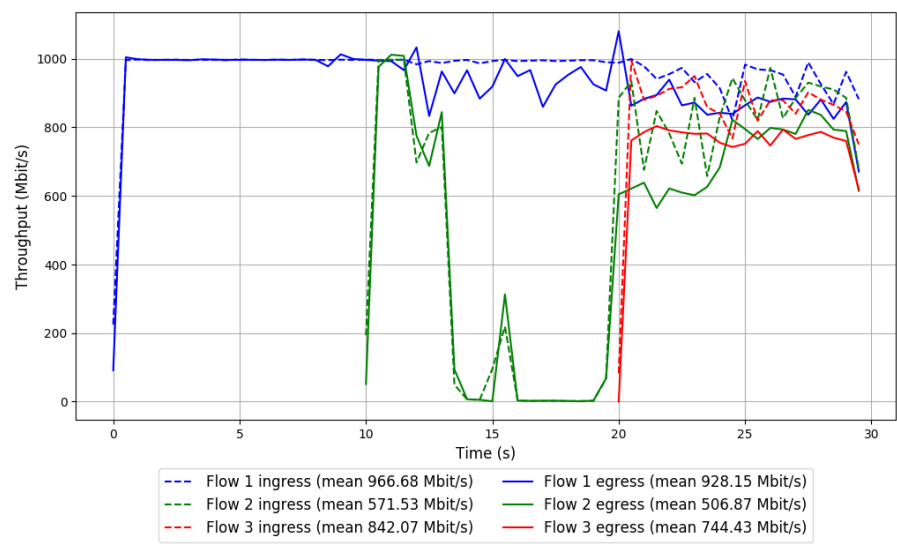
-- Flow 3:

Average throughput: 744.43 Mbit/s

95th percentile per-packet one-way delay: 155.586 ms

Loss rate: 12.83%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-03 08:19:47

End at: 2018-01-03 08:20:17

Below is generated by plot.py at 2018-01-03 12:39:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 1590.39 Mbit/s

95th percentile per-packet one-way delay: 171.574 ms

Loss rate: 10.46%

-- Flow 1:

Average throughput: 893.96 Mbit/s

95th percentile per-packet one-way delay: 140.607 ms

Loss rate: 6.04%

-- Flow 2:

Average throughput: 721.89 Mbit/s

95th percentile per-packet one-way delay: 178.842 ms

Loss rate: 13.97%

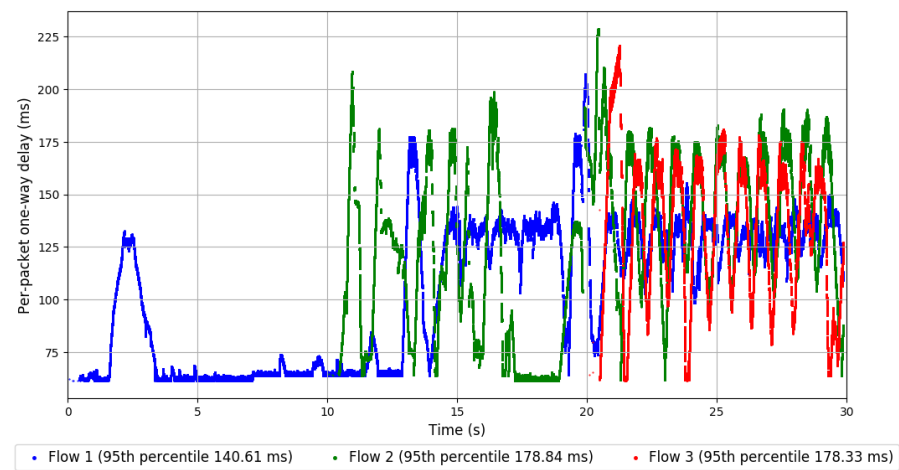
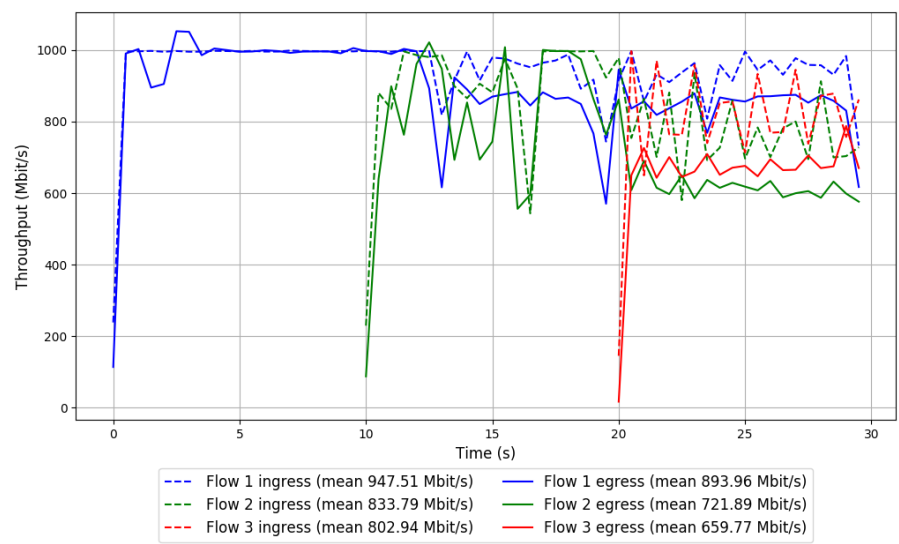
-- Flow 3:

Average throughput: 659.77 Mbit/s

95th percentile per-packet one-way delay: 178.330 ms

Loss rate: 18.87%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-03 08:34:15

End at: 2018-01-03 08:34:45

Below is generated by plot.py at 2018-01-03 12:41:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 1672.47 Mbit/s

95th percentile per-packet one-way delay: 164.699 ms

Loss rate: 7.09%

-- Flow 1:

Average throughput: 892.65 Mbit/s

95th percentile per-packet one-way delay: 157.022 ms

Loss rate: 4.40%

-- Flow 2:

Average throughput: 831.27 Mbit/s

95th percentile per-packet one-way delay: 167.646 ms

Loss rate: 8.07%

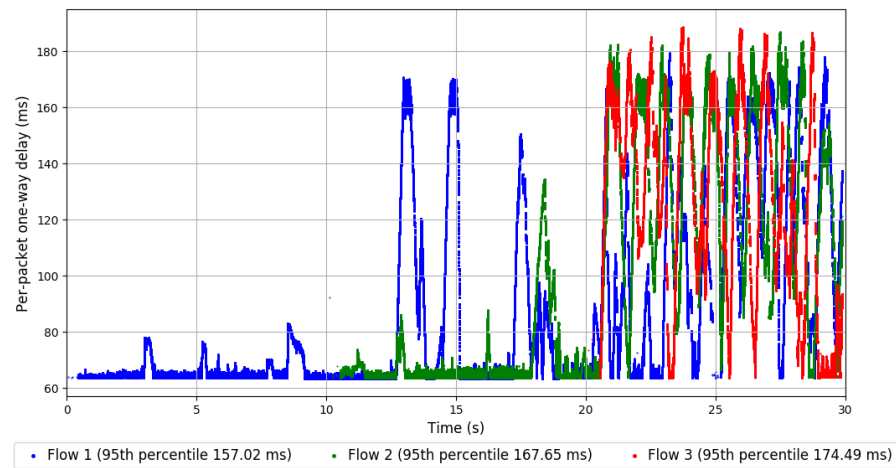
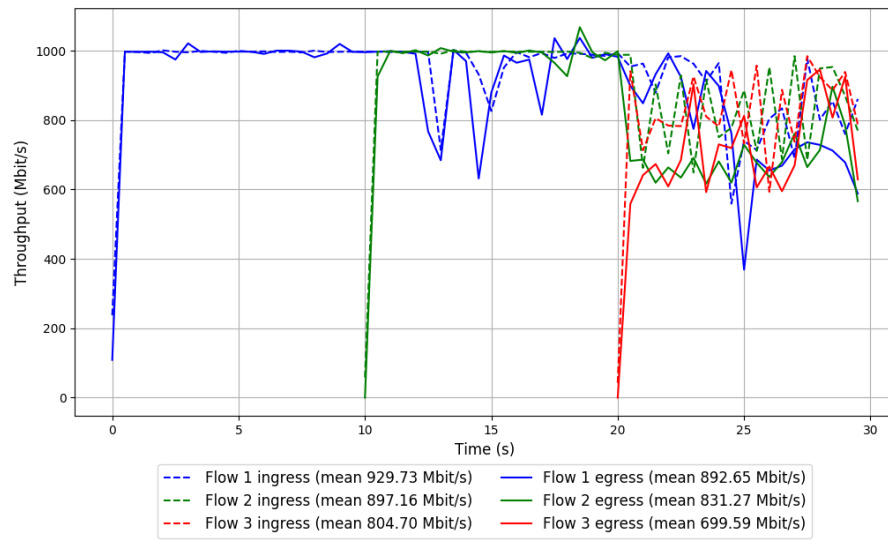
-- Flow 3:

Average throughput: 699.59 Mbit/s

95th percentile per-packet one-way delay: 174.488 ms

Loss rate: 14.26%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-01-03 08:48:28

End at: 2018-01-03 08:48:58

Below is generated by plot.py at 2018-01-03 12:41:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 435.67 Mbit/s

95th percentile per-packet one-way delay: 136.989 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 215.34 Mbit/s

95th percentile per-packet one-way delay: 127.111 ms

Loss rate: 2.00%

-- Flow 2:

Average throughput: 215.04 Mbit/s

95th percentile per-packet one-way delay: 139.597 ms

Loss rate: 0.02%

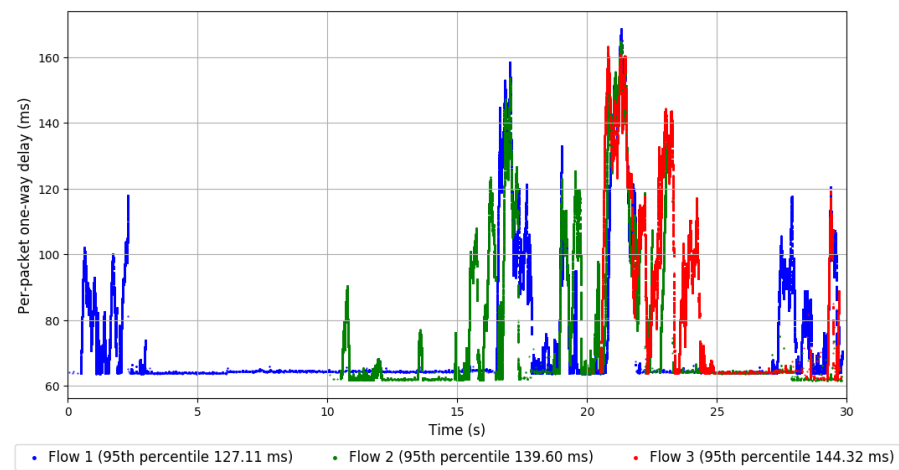
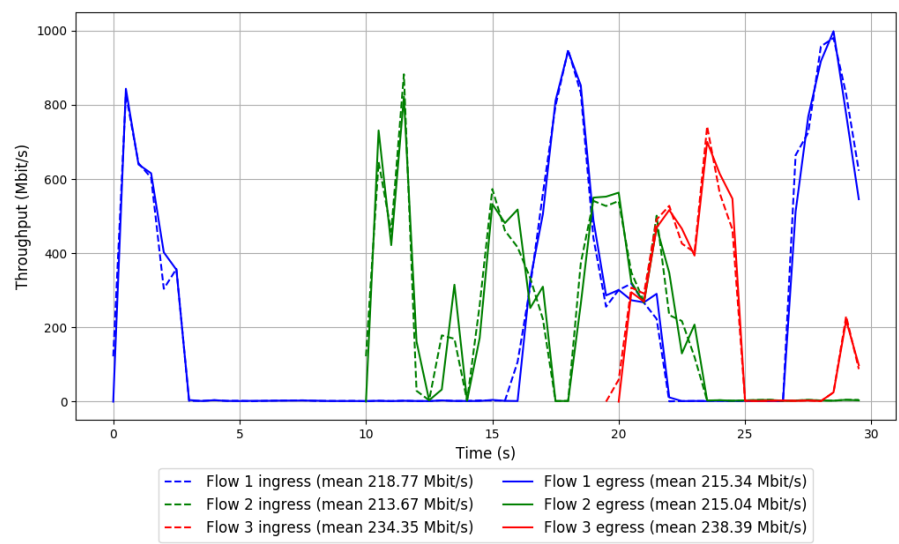
-- Flow 3:

Average throughput: 238.39 Mbit/s

95th percentile per-packet one-way delay: 144.316 ms

Loss rate: 0.01%

Run 10: Report of FillP — Data Link

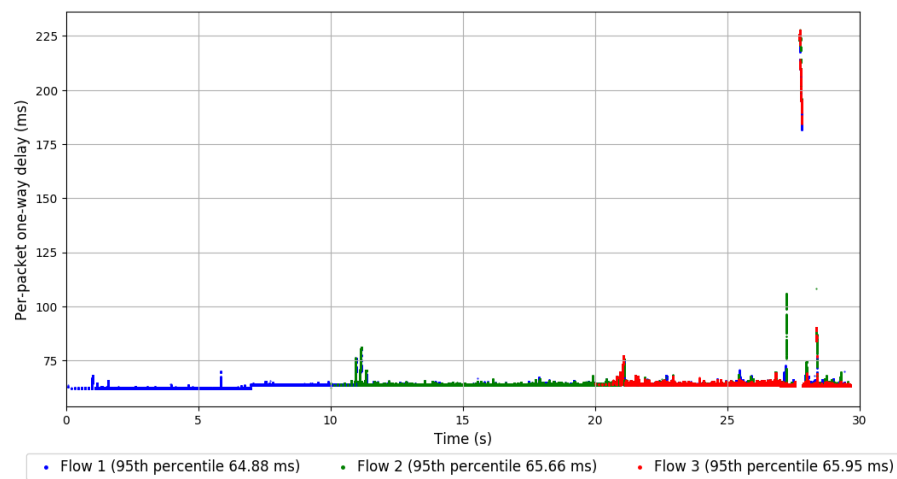
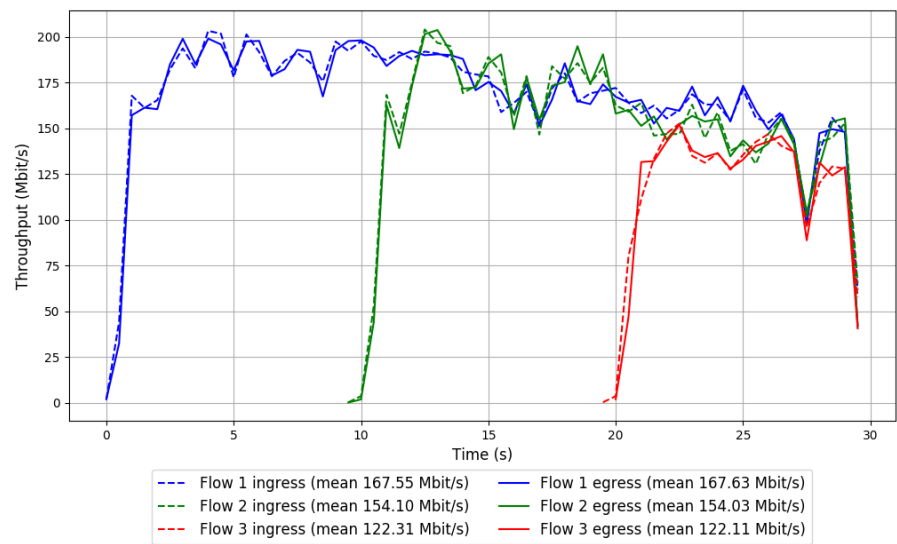


```
Run 1: Statistics of Indigo

Start at: 2018-01-03 06:52:39
End at: 2018-01-03 06:53:09

# Below is generated by plot.py at 2018-01-03 12:41:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.77 Mbit/s
95th percentile per-packet one-way delay: 65.245 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 167.63 Mbit/s
95th percentile per-packet one-way delay: 64.879 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 154.03 Mbit/s
95th percentile per-packet one-way delay: 65.660 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 122.11 Mbit/s
95th percentile per-packet one-way delay: 65.950 ms
Loss rate: 1.49%
```

Run 1: Report of Indigo — Data Link

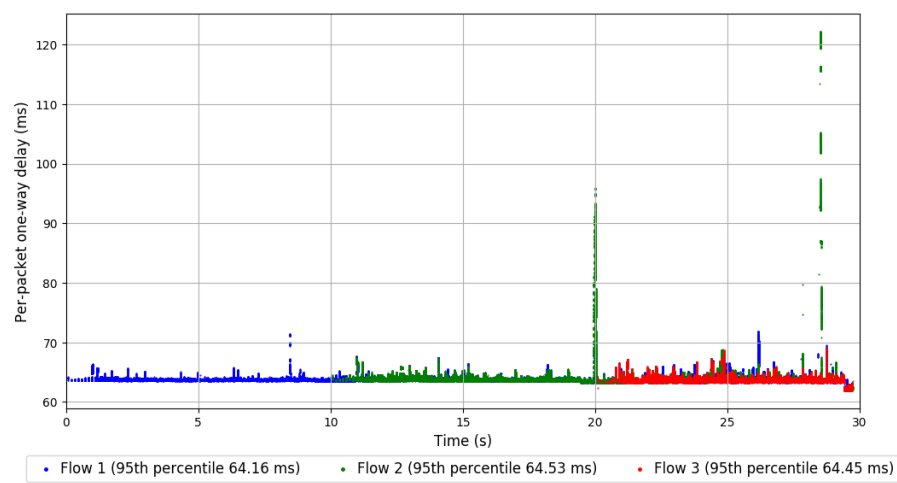
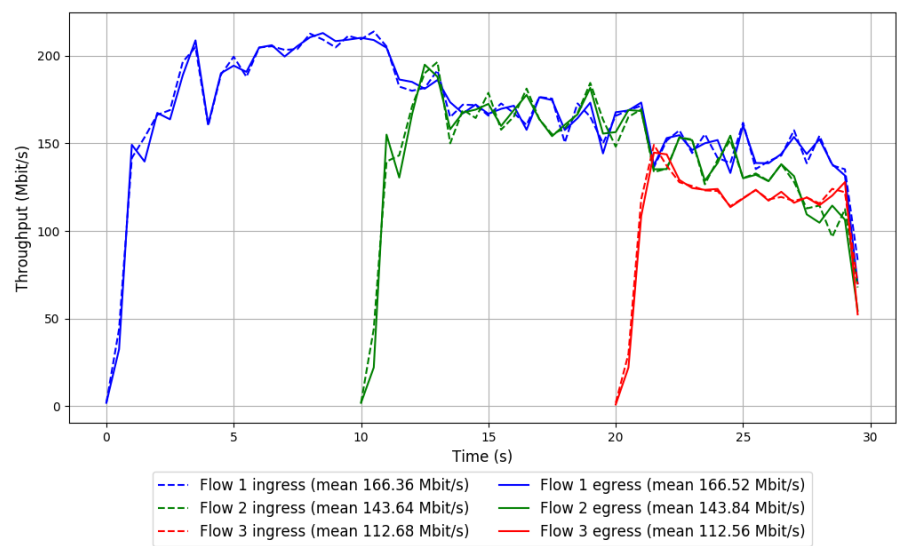


```
Run 2: Statistics of Indigo

Start at: 2018-01-03 07:06:37
End at: 2018-01-03 07:07:07

# Below is generated by plot.py at 2018-01-03 12:41:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 298.25 Mbit/s
95th percentile per-packet one-way delay: 64.318 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 166.52 Mbit/s
95th percentile per-packet one-way delay: 64.161 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 143.84 Mbit/s
95th percentile per-packet one-way delay: 64.525 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 112.56 Mbit/s
95th percentile per-packet one-way delay: 64.452 ms
Loss rate: 1.37%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-03 07:19:37

End at: 2018-01-03 07:20:07

Below is generated by plot.py at 2018-01-03 12:41:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.15 Mbit/s

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

Loss rate: 0.61%

-- Flow 1:

Average throughput: 67.60 Mbit/s

95th percentile per-packet one-way delay: 66.468 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 76.32 Mbit/s

95th percentile per-packet one-way delay: 67.415 ms

Loss rate: 0.61%

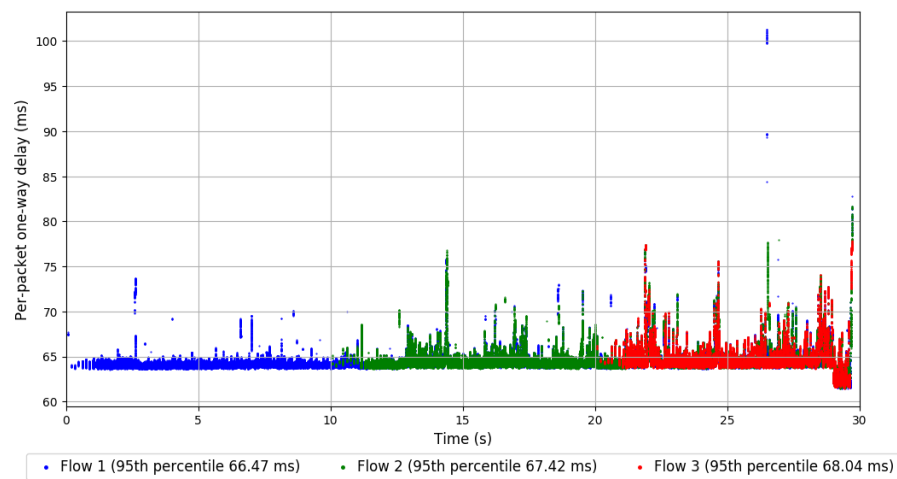
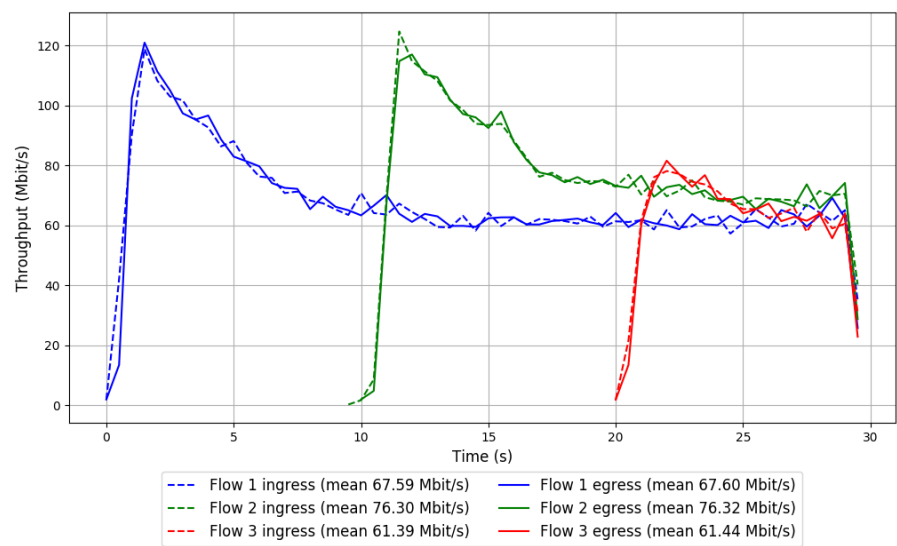
-- Flow 3:

Average throughput: 61.44 Mbit/s

95th percentile per-packet one-way delay: 68.040 ms

Loss rate: 1.28%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-03 07:31:58

End at: 2018-01-03 07:32:28

Below is generated by plot.py at 2018-01-03 12:41:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.92 Mbit/s

95th percentile per-packet one-way delay: 78.947 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 64.62 Mbit/s

95th percentile per-packet one-way delay: 74.288 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 57.10 Mbit/s

95th percentile per-packet one-way delay: 71.420 ms

Loss rate: 0.74%

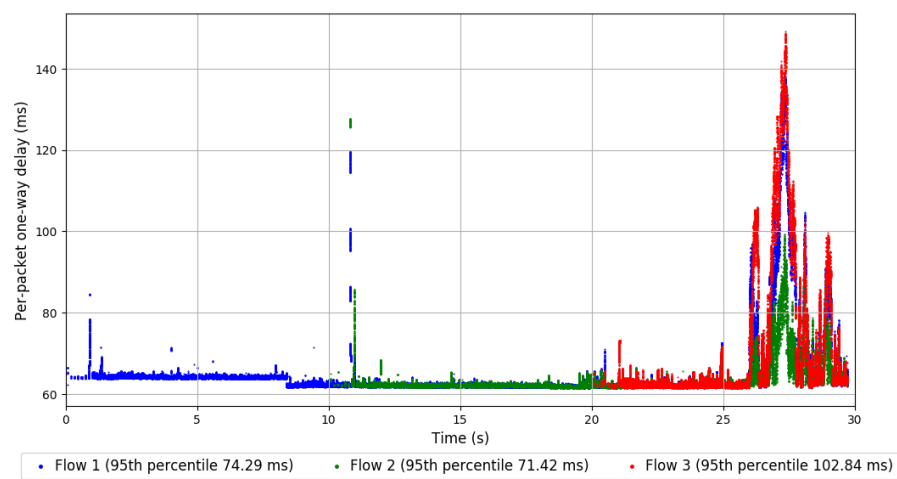
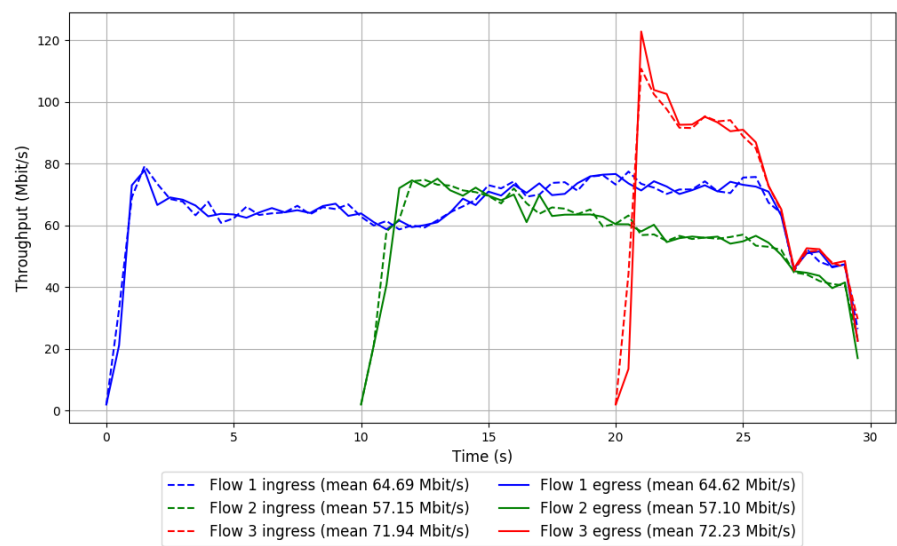
-- Flow 3:

Average throughput: 72.23 Mbit/s

95th percentile per-packet one-way delay: 102.845 ms

Loss rate: 0.92%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-03 07:45:29

End at: 2018-01-03 07:45:59

Below is generated by plot.py at 2018-01-03 12:41:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.41 Mbit/s

95th percentile per-packet one-way delay: 64.508 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 163.40 Mbit/s

95th percentile per-packet one-way delay: 64.411 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 151.16 Mbit/s

95th percentile per-packet one-way delay: 64.642 ms

Loss rate: 0.61%

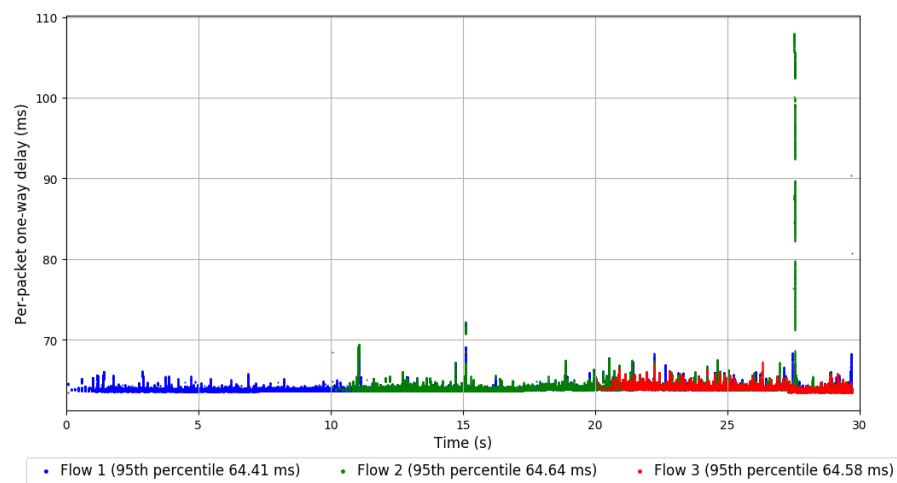
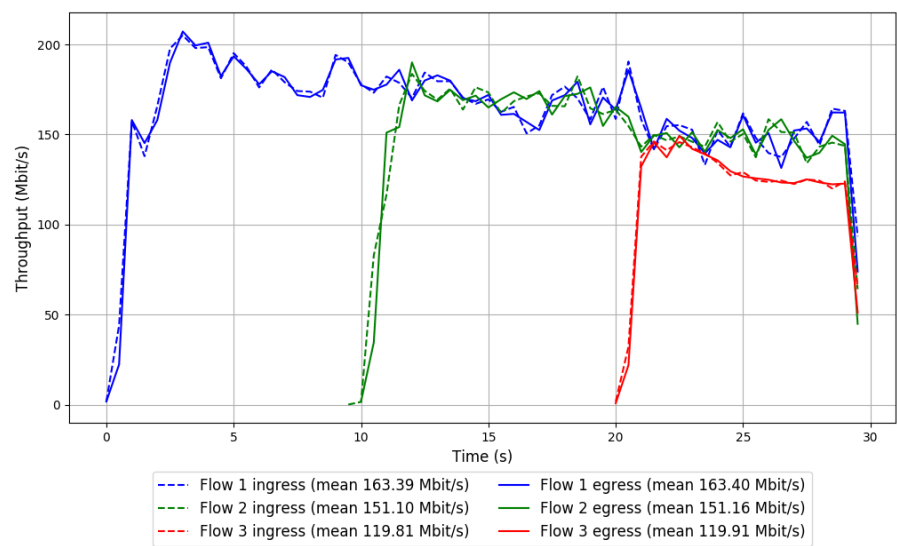
-- Flow 3:

Average throughput: 119.91 Mbit/s

95th percentile per-packet one-way delay: 64.575 ms

Loss rate: 1.27%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-03 07:59:14

End at: 2018-01-03 07:59:44

Below is generated by plot.py at 2018-01-03 12:41:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 226.03 Mbit/s

95th percentile per-packet one-way delay: 64.367 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 122.13 Mbit/s

95th percentile per-packet one-way delay: 64.395 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 105.71 Mbit/s

95th percentile per-packet one-way delay: 64.389 ms

Loss rate: 0.66%

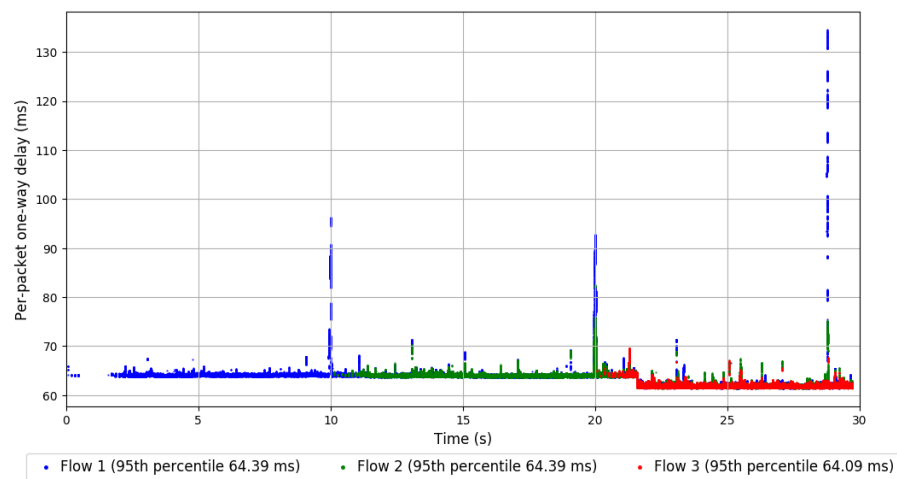
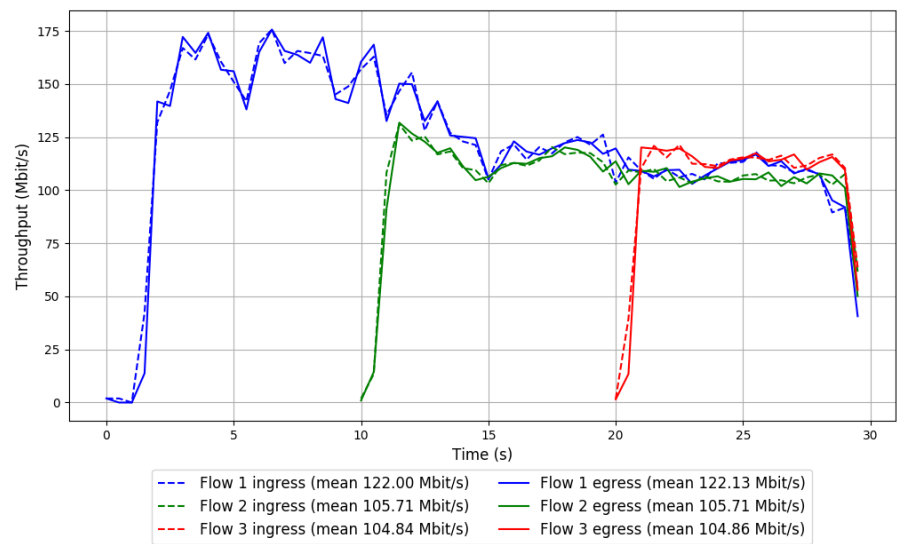
-- Flow 3:

Average throughput: 104.86 Mbit/s

95th percentile per-packet one-way delay: 64.091 ms

Loss rate: 1.32%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-03 08:13:08

End at: 2018-01-03 08:13:38

Below is generated by plot.py at 2018-01-03 12:41:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 319.54 Mbit/s

95th percentile per-packet one-way delay: 64.999 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 170.49 Mbit/s

95th percentile per-packet one-way delay: 64.735 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 157.38 Mbit/s

95th percentile per-packet one-way delay: 65.175 ms

Loss rate: 0.68%

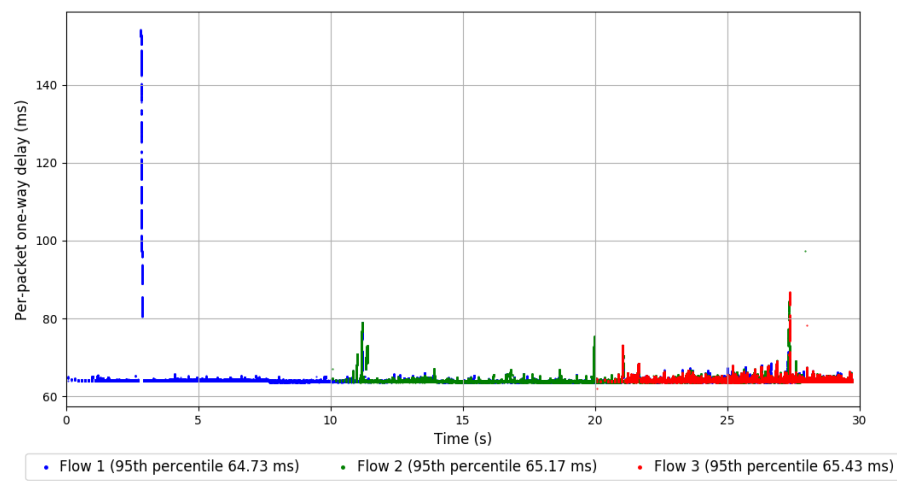
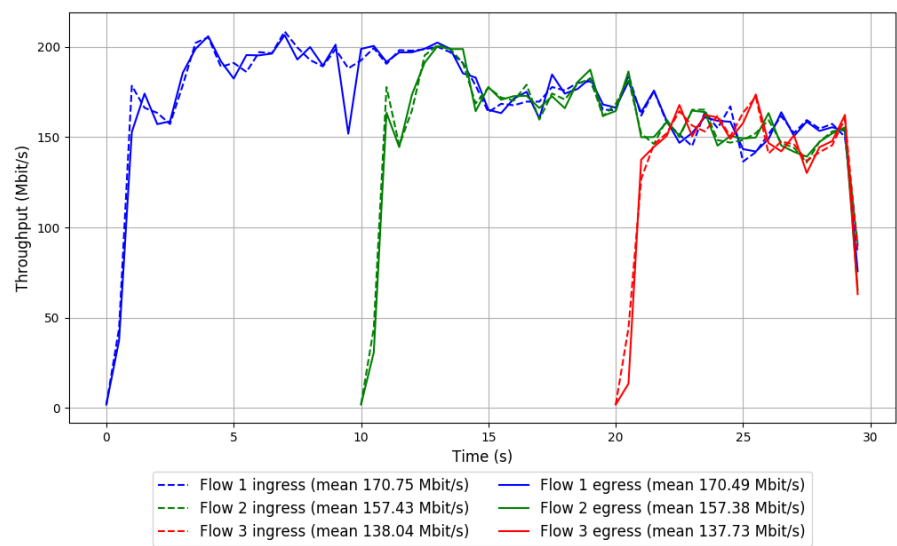
-- Flow 3:

Average throughput: 137.73 Mbit/s

95th percentile per-packet one-way delay: 65.430 ms

Loss rate: 1.49%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-03 08:27:39

End at: 2018-01-03 08:28:09

Below is generated by plot.py at 2018-01-03 12:41:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 305.46 Mbit/s

95th percentile per-packet one-way delay: 64.795 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 159.17 Mbit/s

95th percentile per-packet one-way delay: 64.563 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 154.59 Mbit/s

95th percentile per-packet one-way delay: 64.886 ms

Loss rate: 0.54%

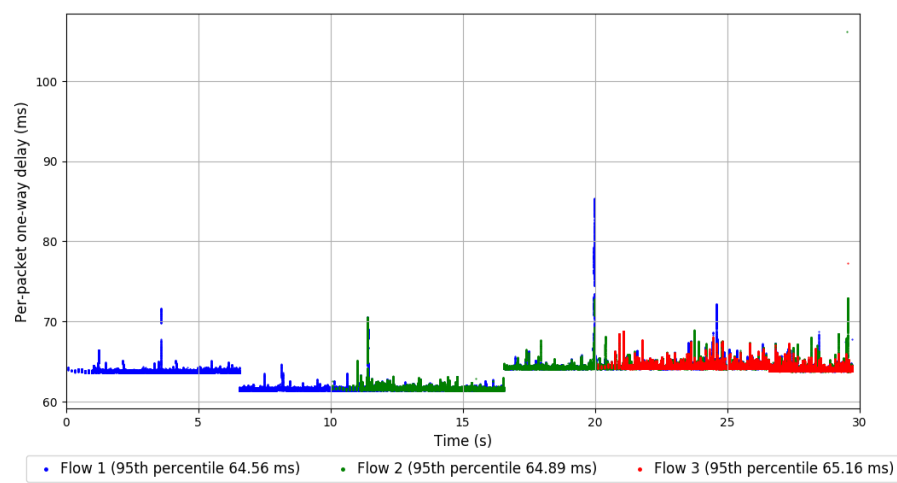
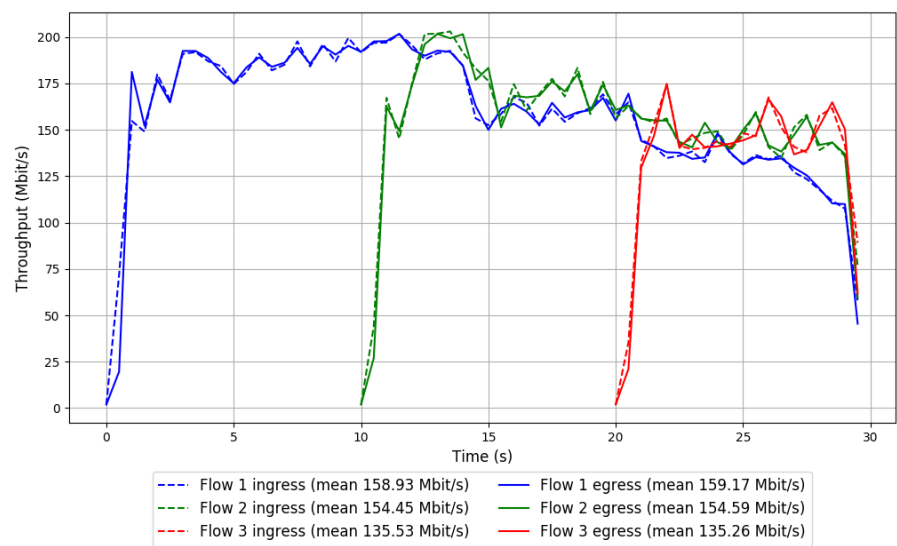
-- Flow 3:

Average throughput: 135.26 Mbit/s

95th percentile per-packet one-way delay: 65.158 ms

Loss rate: 1.51%

Run 8: Report of Indigo — Data Link

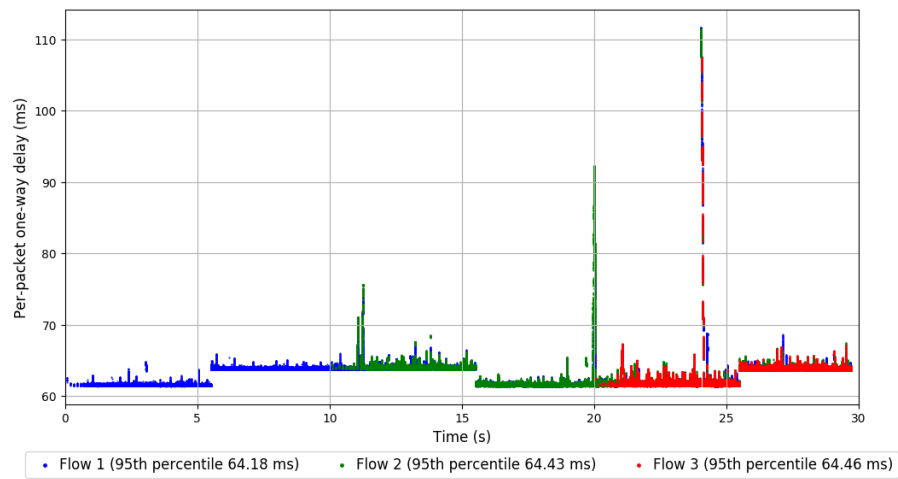
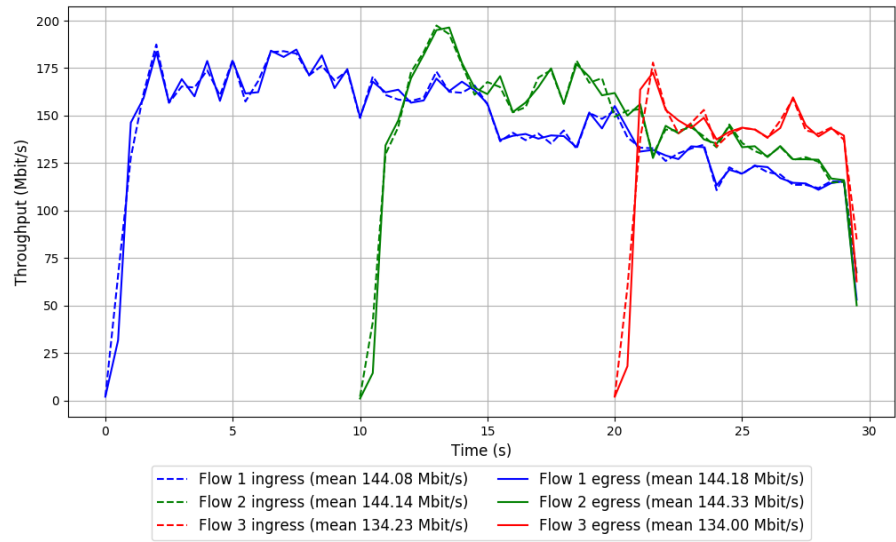


```
Run 9: Statistics of Indigo

Start at: 2018-01-03 08:42:00
End at: 2018-01-03 08:42:30

# Below is generated by plot.py at 2018-01-03 12:41:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 283.23 Mbit/s
95th percentile per-packet one-way delay: 64.289 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 144.18 Mbit/s
95th percentile per-packet one-way delay: 64.179 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 144.33 Mbit/s
95th percentile per-packet one-way delay: 64.434 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 134.00 Mbit/s
95th percentile per-packet one-way delay: 64.456 ms
Loss rate: 1.46%
```

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-03 08:55:20

End at: 2018-01-03 08:55:50

Below is generated by plot.py at 2018-01-03 12:41:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.91 Mbit/s

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

Loss rate: 0.74%

-- Flow 1:

Average throughput: 76.96 Mbit/s

95th percentile per-packet one-way delay: 67.871 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 86.01 Mbit/s

95th percentile per-packet one-way delay: 75.563 ms

Loss rate: 0.62%

-- Flow 3:

Average throughput: 73.68 Mbit/s

95th percentile per-packet one-way delay: 114.803 ms

Loss rate: 1.15%

Run 10: Report of Indigo — Data Link

