

Pantheon Report

Generated at 2018-01-10 10:05:51 (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.

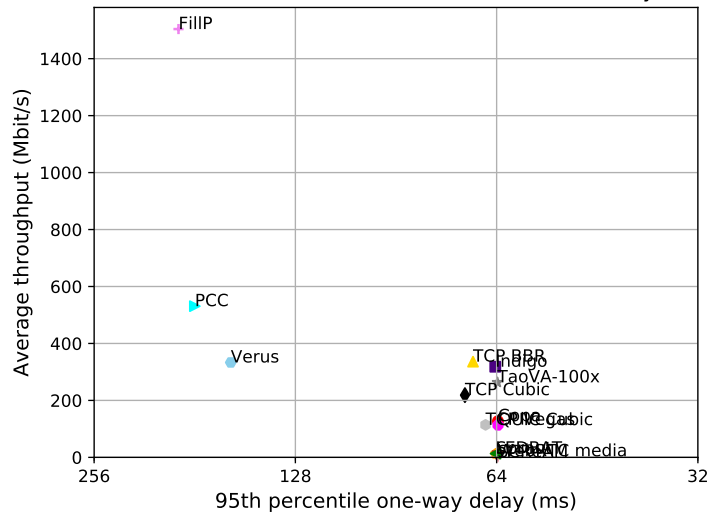
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

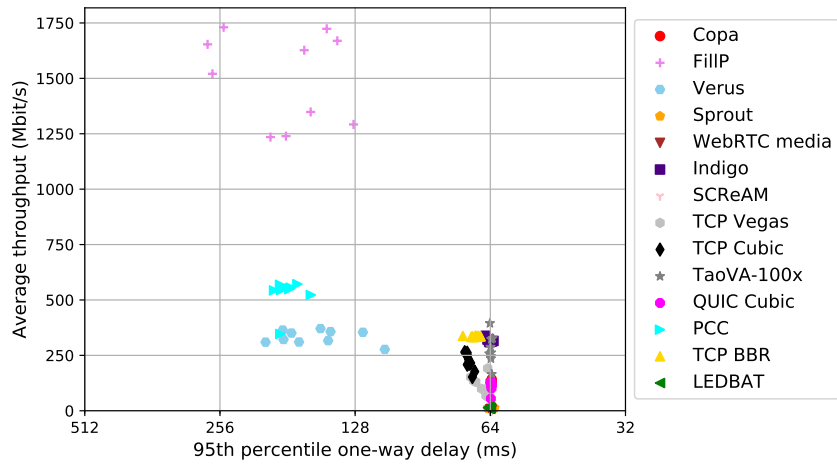
Git summary:

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



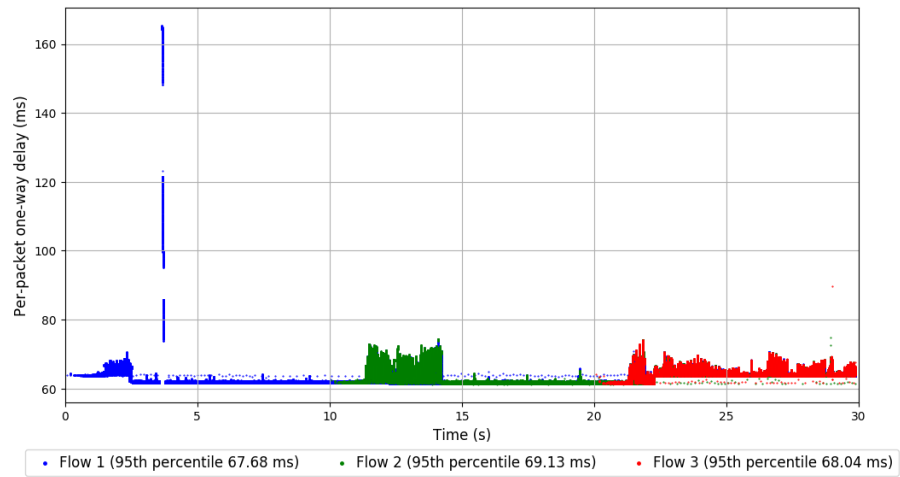
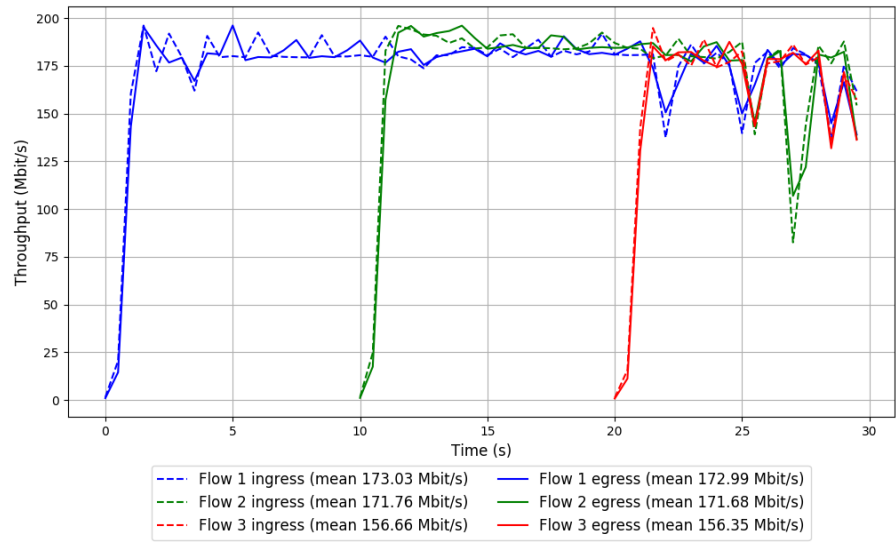
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	171.74	169.08	158.58	68.51	69.43	71.03	0.43	0.66	1.46
TCP Cubic	10	118.31	96.31	110.54	71.23	70.84	70.14	0.51	0.88	1.98
LEDBAT	10	6.78	7.10	5.06	64.24	64.13	63.78	0.92	1.25	2.49
PCC	10	459.11	84.15	49.13	180.79	181.04	172.52	2.05	2.11	3.83
QUIC Cubic	10	56.17	59.62	52.25	63.65	63.22	63.03	0.52	0.43	0.90
SCReAM	10	0.22	0.22	0.21	63.59	63.72	63.04	0.38	0.63	1.10
WebRTC media	10	2.09	1.35	0.55	63.76	63.73	63.73	0.55	0.70	1.74
Sprout	10	6.42	6.49	6.13	64.15	64.13	64.26	0.50	0.76	1.56
TaoVA-100x	10	127.35	148.51	157.85	63.75	63.86	64.15	0.61	0.84	1.90
TCP Vegas	10	42.51	74.02	68.56	65.83	66.25	65.26	0.45	0.66	1.22
Verus	10	201.81	139.57	122.97	152.09	160.61	179.49	0.80	1.28	3.37
Copa	10	69.40	65.10	57.13	63.70	63.73	63.24	0.44	0.49	2.31
FillP	10	797.87	684.46	769.32	167.62	175.68	192.91	2.41	5.26	6.98
Indigo	8	162.60	158.04	133.68	64.02	64.47	64.80	0.41	0.58	1.47

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-10 03:53:07
End at: 2018-01-10 03:53:37

# Below is generated by plot.py at 2018-01-10 08:49:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.48 Mbit/s
95th percentile per-packet one-way delay: 68.267 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 172.99 Mbit/s
95th percentile per-packet one-way delay: 67.678 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 171.68 Mbit/s
95th percentile per-packet one-way delay: 69.134 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 156.35 Mbit/s
95th percentile per-packet one-way delay: 68.040 ms
Loss rate: 1.47%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-10 04:07:41

End at: 2018-01-10 04:08:11

Below is generated by plot.py at 2018-01-10 08:49:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.28 Mbit/s

95th percentile per-packet one-way delay: 67.316 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 173.64 Mbit/s

95th percentile per-packet one-way delay: 66.538 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 168.75 Mbit/s

95th percentile per-packet one-way delay: 67.212 ms

Loss rate: 0.68%

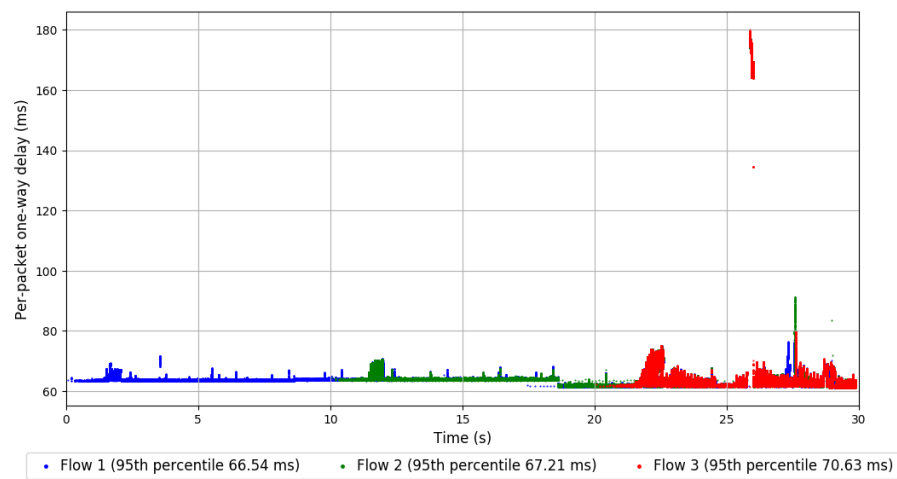
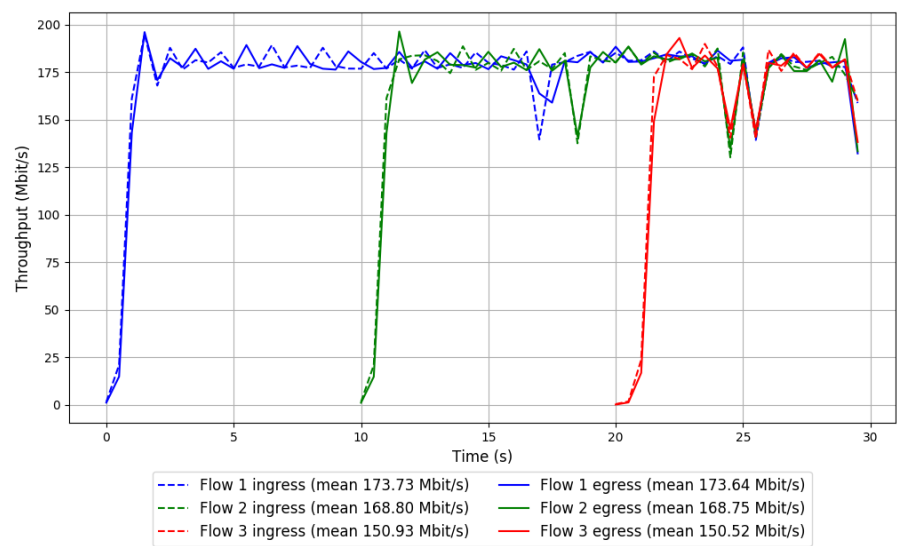
-- Flow 3:

Average throughput: 150.52 Mbit/s

95th percentile per-packet one-way delay: 70.629 ms

Loss rate: 1.54%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-10 04:21:54

End at: 2018-01-10 04:22:24

Below is generated by plot.py at 2018-01-10 08:49:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.58 Mbit/s

95th percentile per-packet one-way delay: 67.910 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 170.92 Mbit/s

95th percentile per-packet one-way delay: 67.166 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 166.36 Mbit/s

95th percentile per-packet one-way delay: 67.890 ms

Loss rate: 0.68%

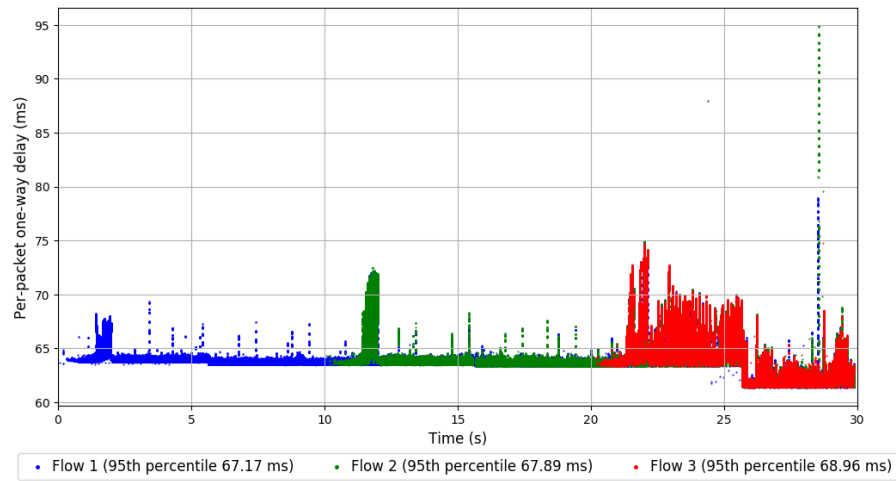
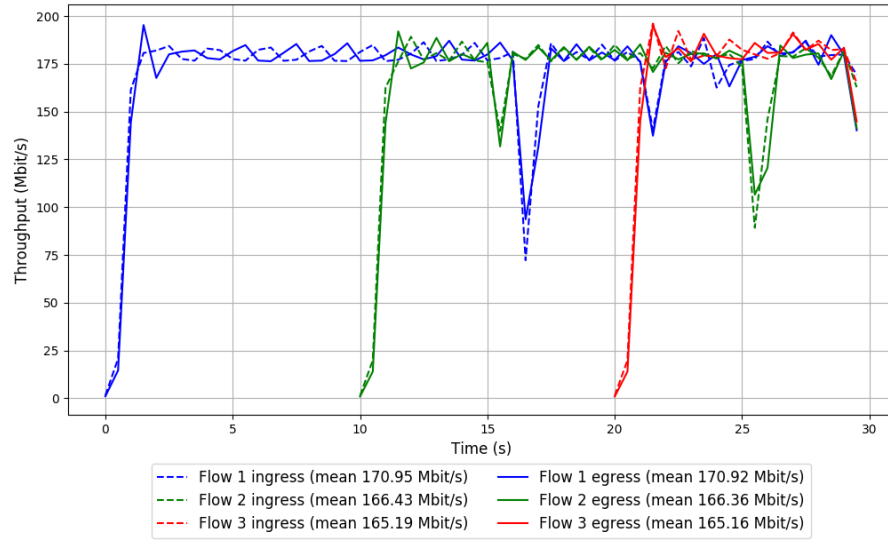
-- Flow 3:

Average throughput: 165.16 Mbit/s

95th percentile per-packet one-way delay: 68.962 ms

Loss rate: 1.50%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-10 04:36:07

End at: 2018-01-10 04:36:37

Below is generated by plot.py at 2018-01-10 08:49:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.52 Mbit/s

95th percentile per-packet one-way delay: 69.051 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 173.04 Mbit/s

95th percentile per-packet one-way delay: 68.244 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 170.48 Mbit/s

95th percentile per-packet one-way delay: 70.212 ms

Loss rate: 0.70%

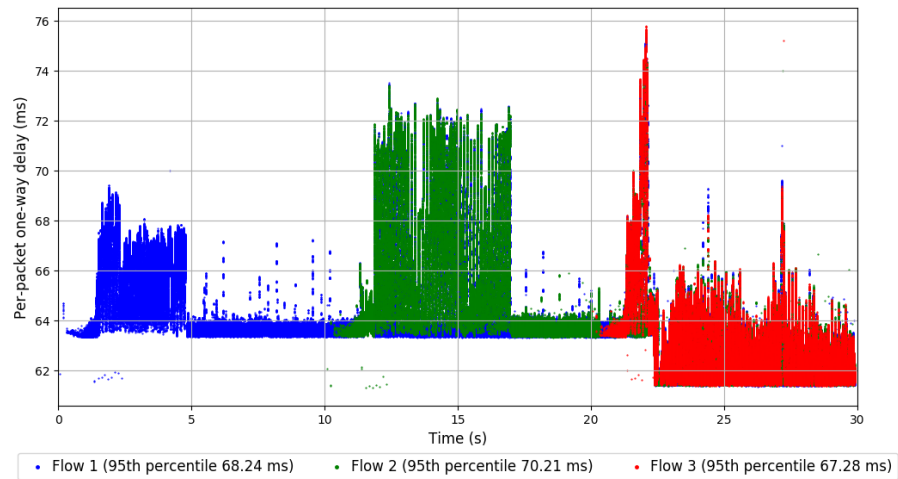
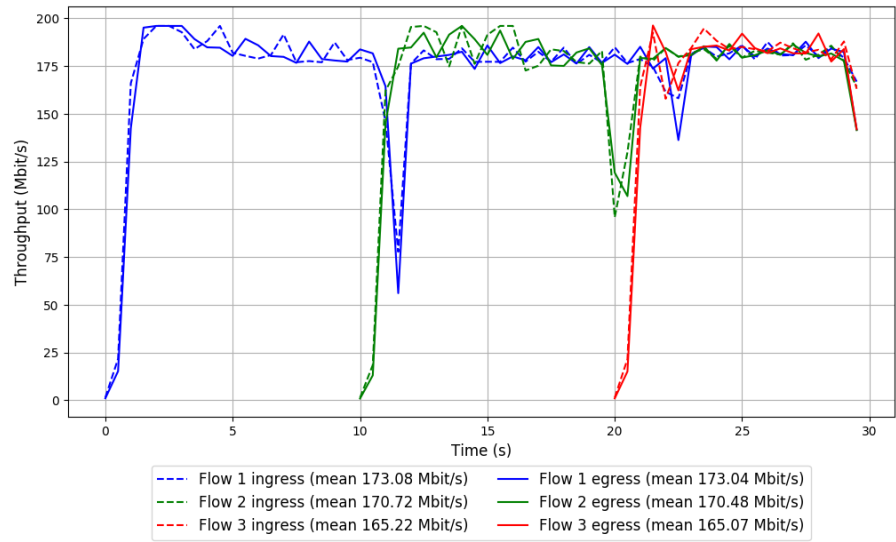
-- Flow 3:

Average throughput: 165.07 Mbit/s

95th percentile per-packet one-way delay: 67.281 ms

Loss rate: 1.38%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-10 04:50:12

End at: 2018-01-10 04:50:42

Below is generated by plot.py at 2018-01-10 08:49:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.57 Mbit/s

95th percentile per-packet one-way delay: 73.665 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 168.89 Mbit/s

95th percentile per-packet one-way delay: 72.473 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 175.75 Mbit/s

95th percentile per-packet one-way delay: 73.105 ms

Loss rate: 0.76%

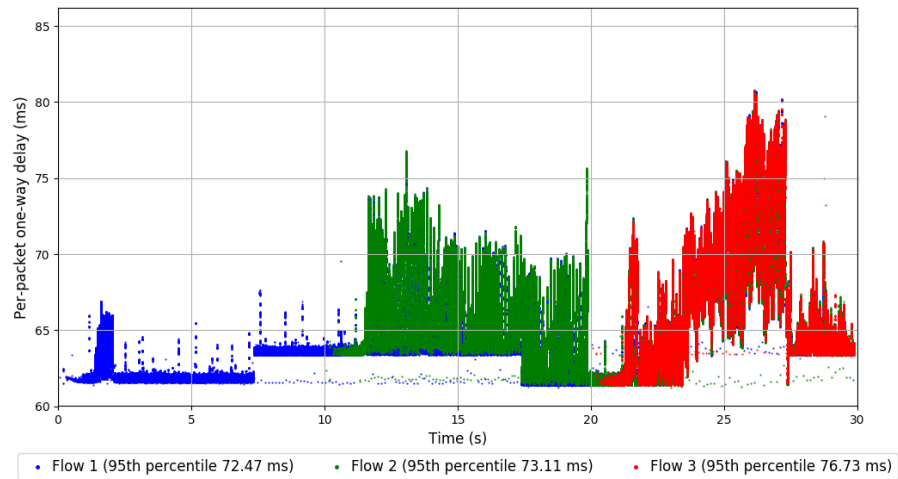
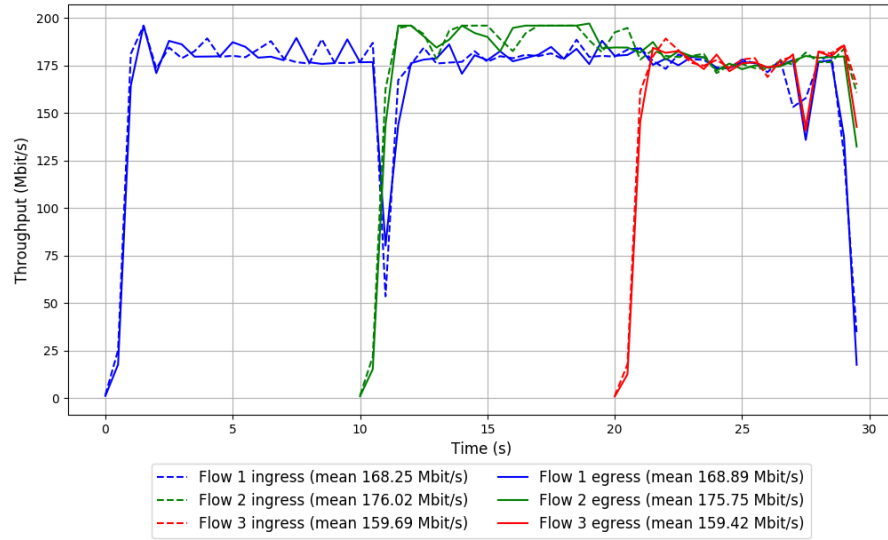
-- Flow 3:

Average throughput: 159.42 Mbit/s

95th percentile per-packet one-way delay: 76.730 ms

Loss rate: 1.45%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-10 05:04:28

End at: 2018-01-10 05:04:58

Below is generated by plot.py at 2018-01-10 08:49:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.31 Mbit/s

95th percentile per-packet one-way delay: 70.187 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 173.08 Mbit/s

95th percentile per-packet one-way delay: 69.185 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 168.06 Mbit/s

95th percentile per-packet one-way delay: 69.858 ms

Loss rate: 0.26%

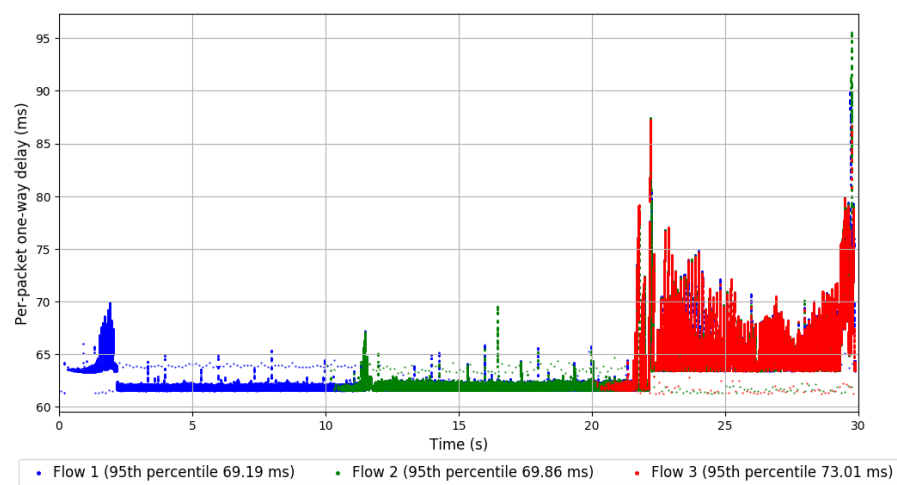
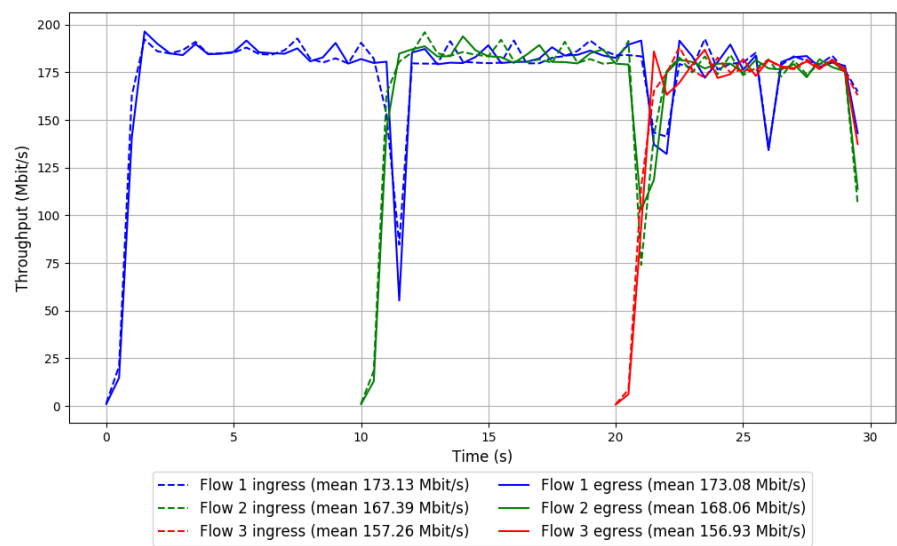
-- Flow 3:

Average throughput: 156.93 Mbit/s

95th percentile per-packet one-way delay: 73.012 ms

Loss rate: 1.55%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-10 05:18:25

End at: 2018-01-10 05:18:55

Below is generated by plot.py at 2018-01-10 08:49:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.10 Mbit/s

95th percentile per-packet one-way delay: 70.356 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 170.21 Mbit/s

95th percentile per-packet one-way delay: 69.696 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 170.02 Mbit/s

95th percentile per-packet one-way delay: 70.685 ms

Loss rate: 0.69%

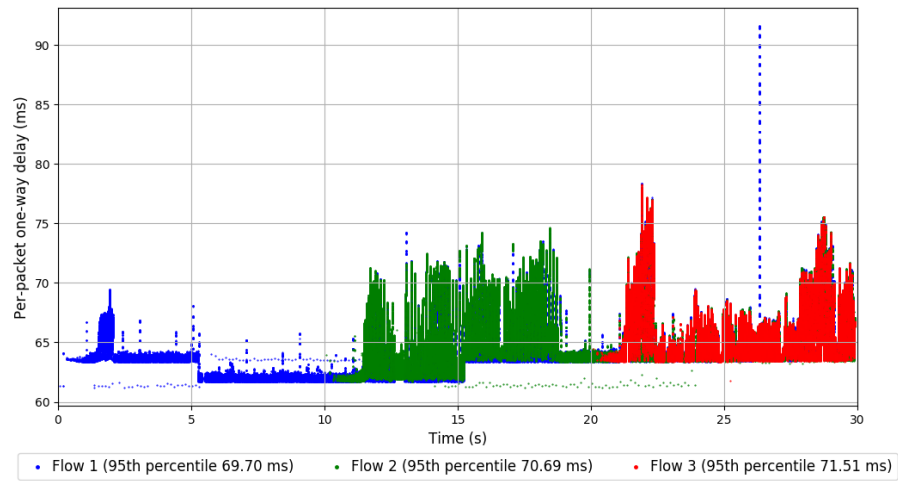
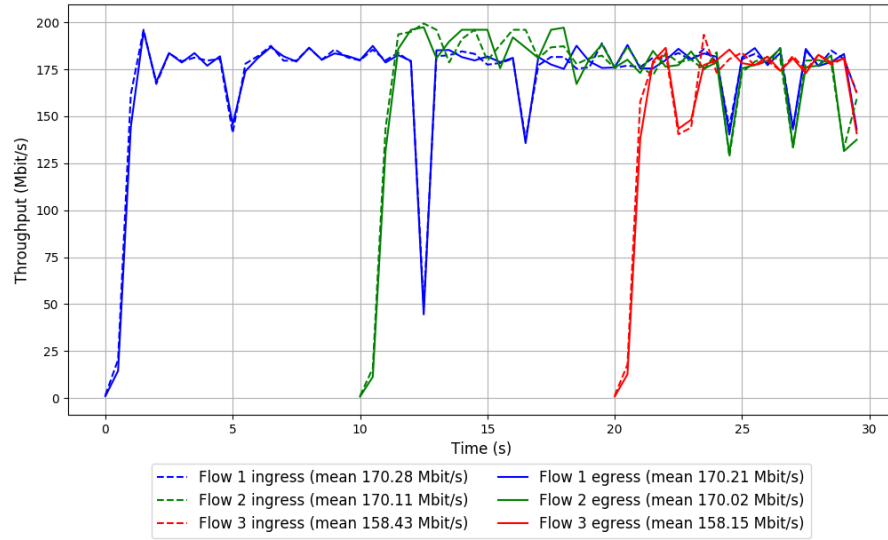
-- Flow 3:

Average throughput: 158.15 Mbit/s

95th percentile per-packet one-way delay: 71.513 ms

Loss rate: 1.45%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-10 05:32:39

End at: 2018-01-10 05:33:09

Below is generated by plot.py at 2018-01-10 08:49:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 331.99 Mbit/s

95th percentile per-packet one-way delay: 69.604 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 171.54 Mbit/s

95th percentile per-packet one-way delay: 68.137 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 169.43 Mbit/s

95th percentile per-packet one-way delay: 68.897 ms

Loss rate: 0.62%

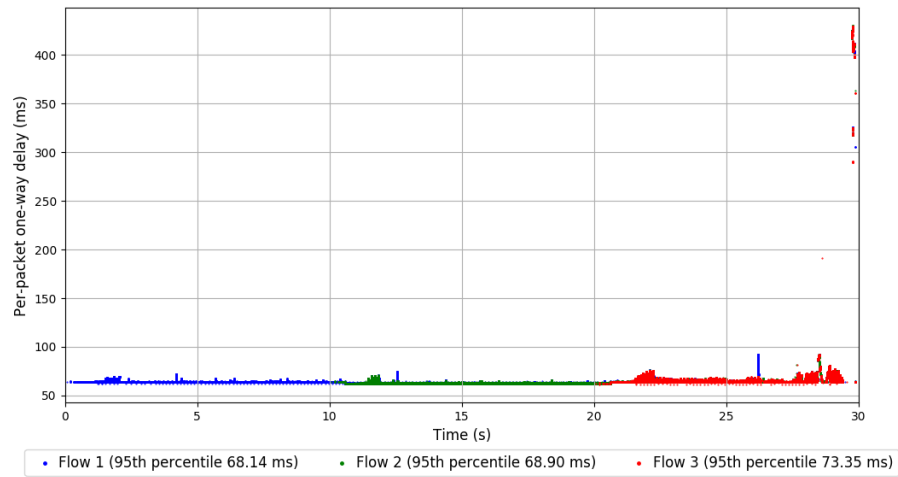
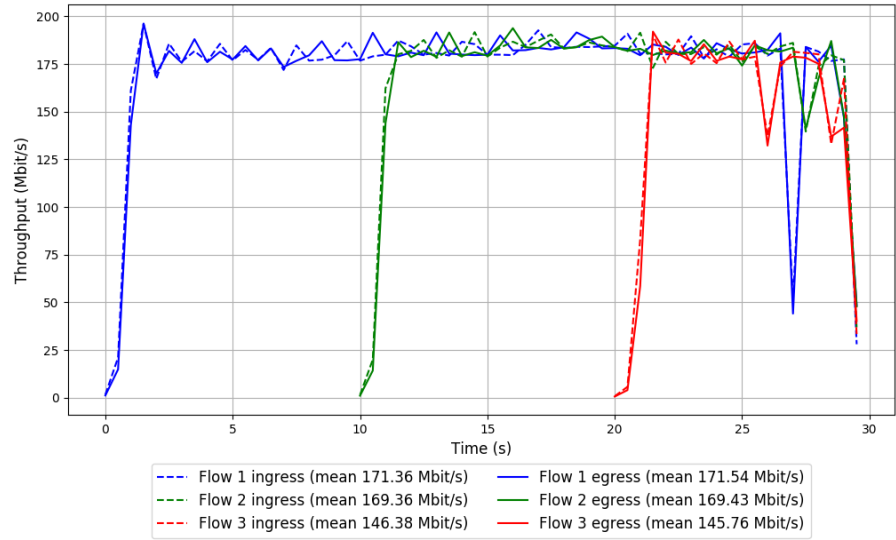
-- Flow 3:

Average throughput: 145.76 Mbit/s

95th percentile per-packet one-way delay: 73.353 ms

Loss rate: 1.58%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-10 05:46:56

End at: 2018-01-10 05:47:26

Below is generated by plot.py at 2018-01-10 08:54:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.42 Mbit/s

95th percentile per-packet one-way delay: 67.324 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 174.74 Mbit/s

95th percentile per-packet one-way delay: 66.804 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 164.60 Mbit/s

95th percentile per-packet one-way delay: 67.505 ms

Loss rate: 0.80%

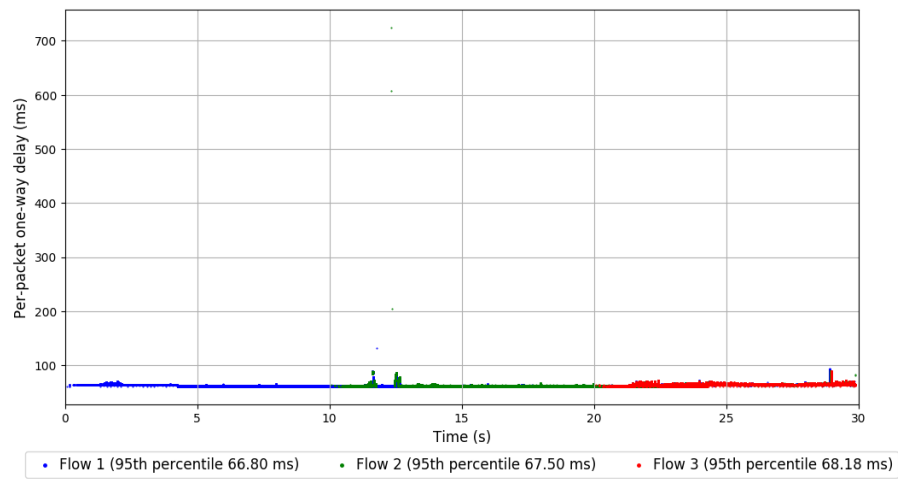
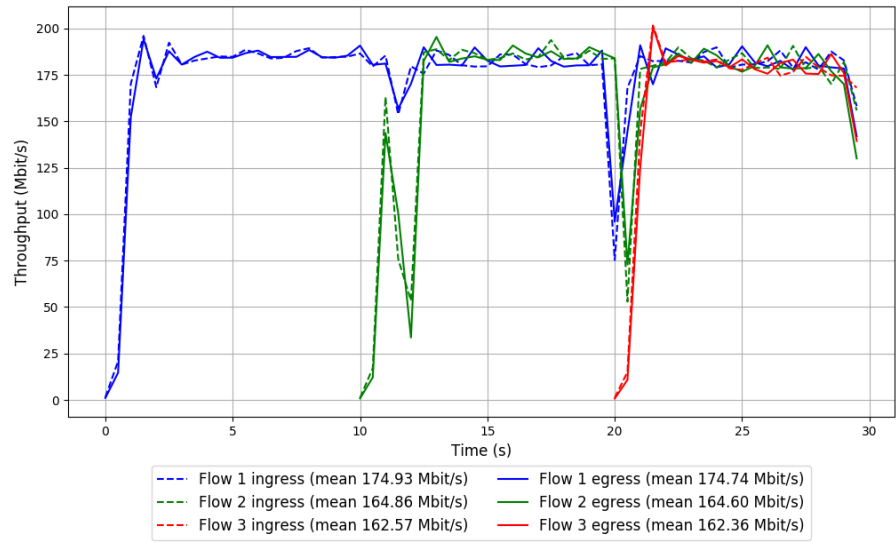
-- Flow 3:

Average throughput: 162.36 Mbit/s

95th percentile per-packet one-way delay: 68.184 ms

Loss rate: 1.41%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

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

End at: 2018-01-10 06:01:32

Below is generated by plot.py at 2018-01-10 08:54:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 332.95 Mbit/s

95th percentile per-packet one-way delay: 70.551 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 168.34 Mbit/s

95th percentile per-packet one-way delay: 69.219 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 165.71 Mbit/s

95th percentile per-packet one-way delay: 69.801 ms

Loss rate: 0.68%

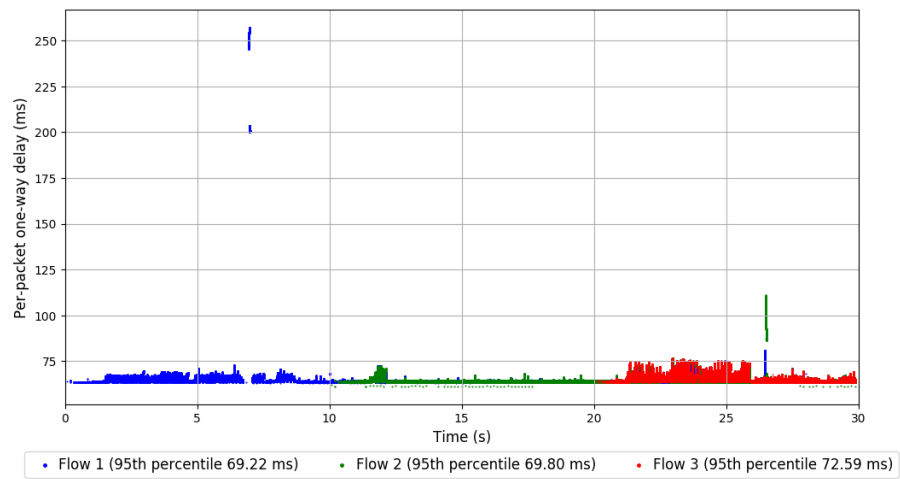
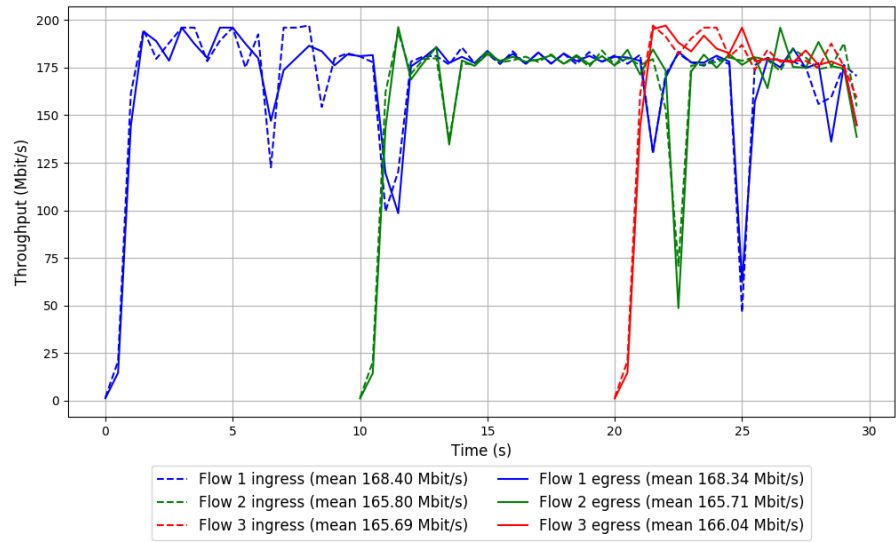
-- Flow 3:

Average throughput: 166.04 Mbit/s

95th percentile per-packet one-way delay: 72.588 ms

Loss rate: 1.27%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-10 03:57:46

End at: 2018-01-10 03:58:16

Below is generated by plot.py at 2018-01-10 08:54:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 212.09 Mbit/s

95th percentile per-packet one-way delay: 71.198 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 102.04 Mbit/s

95th percentile per-packet one-way delay: 70.687 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 95.90 Mbit/s

95th percentile per-packet one-way delay: 72.165 ms

Loss rate: 0.57%

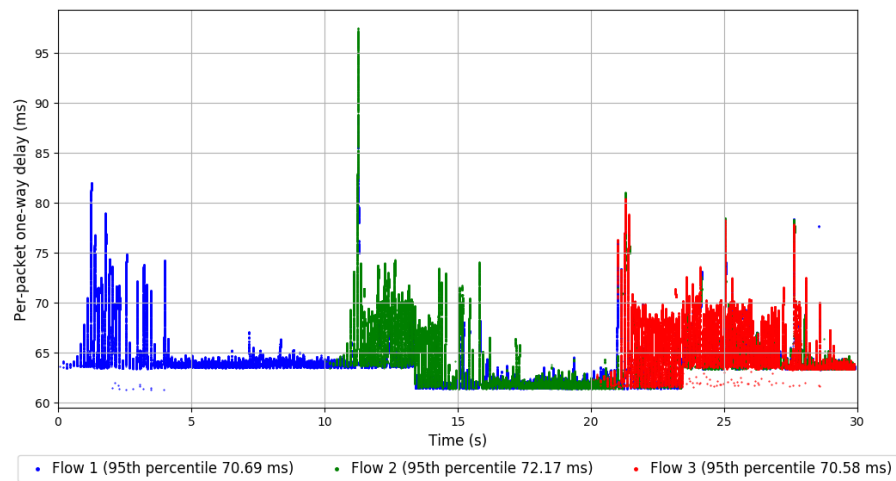
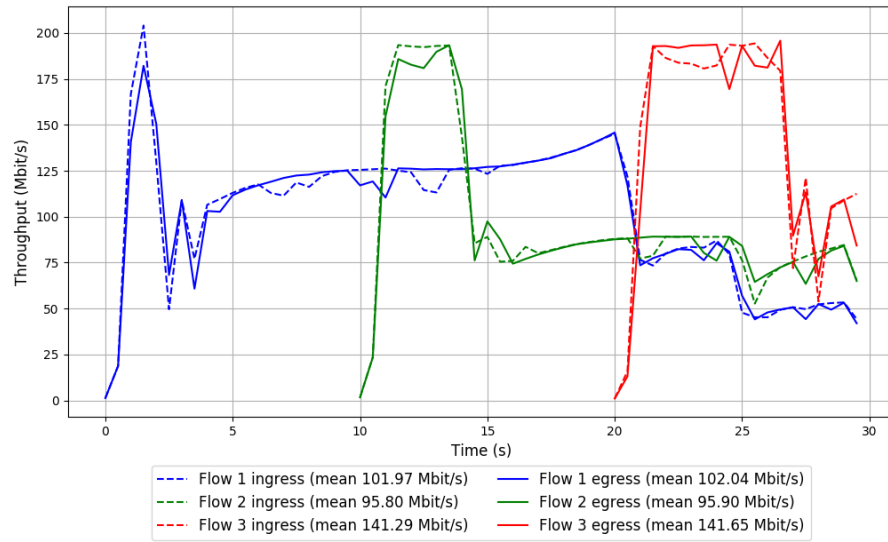
-- Flow 3:

Average throughput: 141.65 Mbit/s

95th percentile per-packet one-way delay: 70.578 ms

Loss rate: 1.02%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-10 04:12:04

End at: 2018-01-10 04:12:34

Below is generated by plot.py at 2018-01-10 08:54:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 177.01 Mbit/s

95th percentile per-packet one-way delay: 69.316 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 94.51 Mbit/s

95th percentile per-packet one-way delay: 69.499 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 80.92 Mbit/s

95th percentile per-packet one-way delay: 67.342 ms

Loss rate: 0.74%

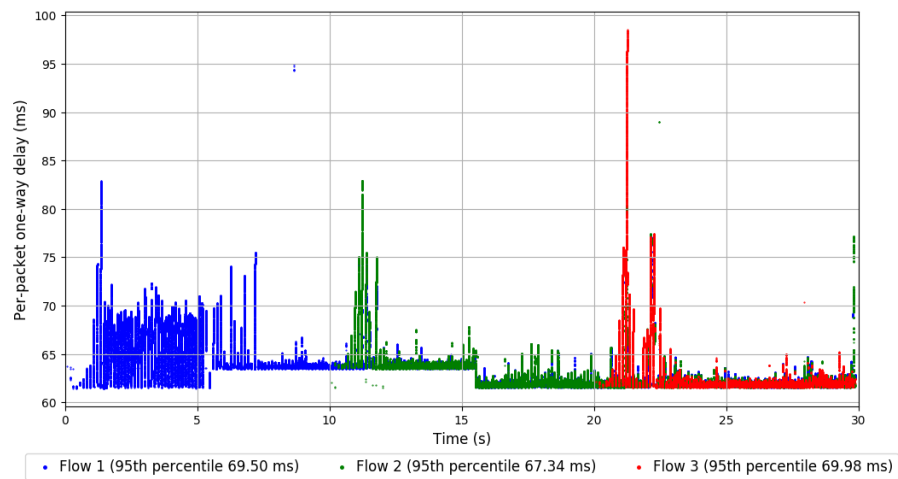
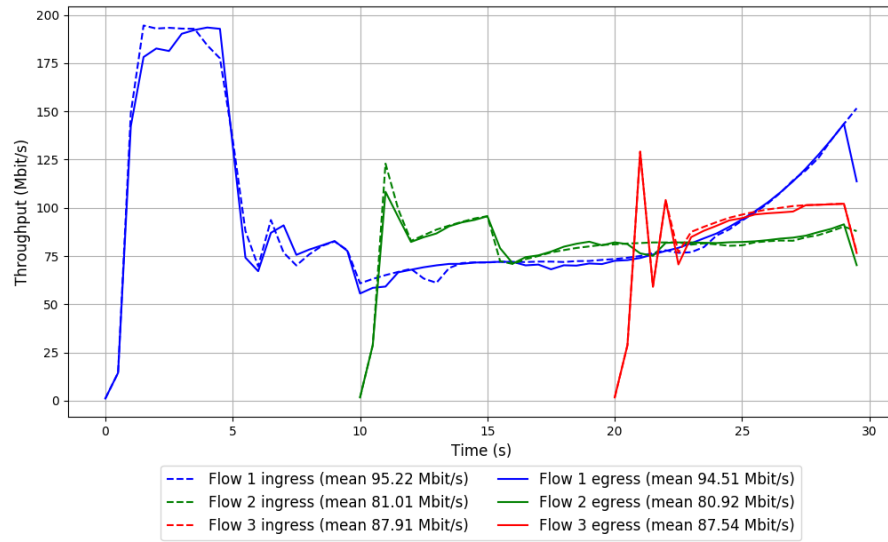
-- Flow 3:

Average throughput: 87.54 Mbit/s

95th percentile per-packet one-way delay: 69.981 ms

Loss rate: 1.47%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-10 04:26:16

End at: 2018-01-10 04:26:46

Below is generated by plot.py at 2018-01-10 08:54:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.35 Mbit/s

95th percentile per-packet one-way delay: 70.161 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 89.16 Mbit/s

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

Loss rate: 0.84%

-- Flow 2:

Average throughput: 9.72 Mbit/s

95th percentile per-packet one-way delay: 66.400 ms

Loss rate: 3.33%

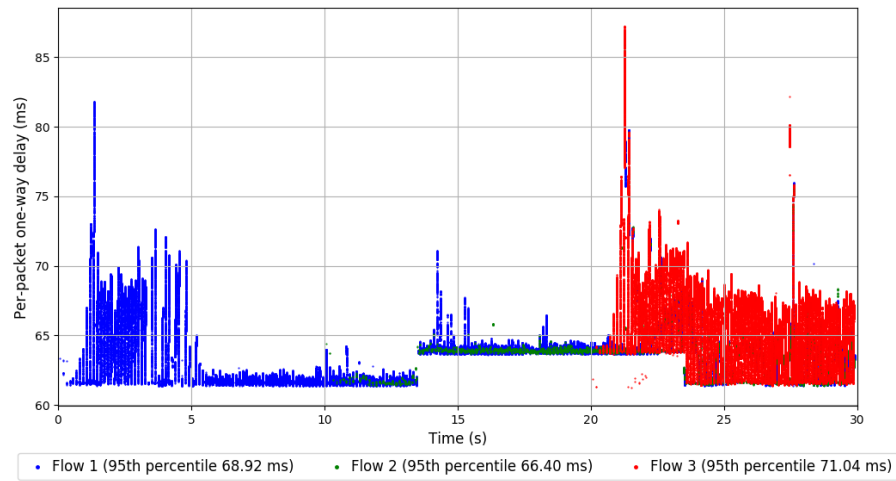
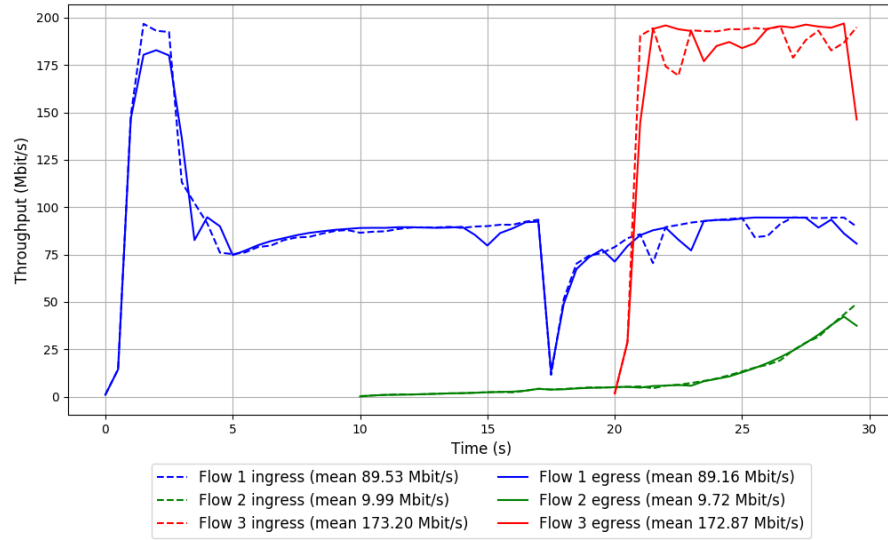
-- Flow 3:

Average throughput: 172.87 Mbit/s

95th percentile per-packet one-way delay: 71.044 ms

Loss rate: 1.42%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-10 04:40:24

End at: 2018-01-10 04:40:54

Below is generated by plot.py at 2018-01-10 08:54:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 250.66 Mbit/s

95th percentile per-packet one-way delay: 71.946 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 129.55 Mbit/s

95th percentile per-packet one-way delay: 71.190 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 127.51 Mbit/s

95th percentile per-packet one-way delay: 73.401 ms

Loss rate: 0.56%

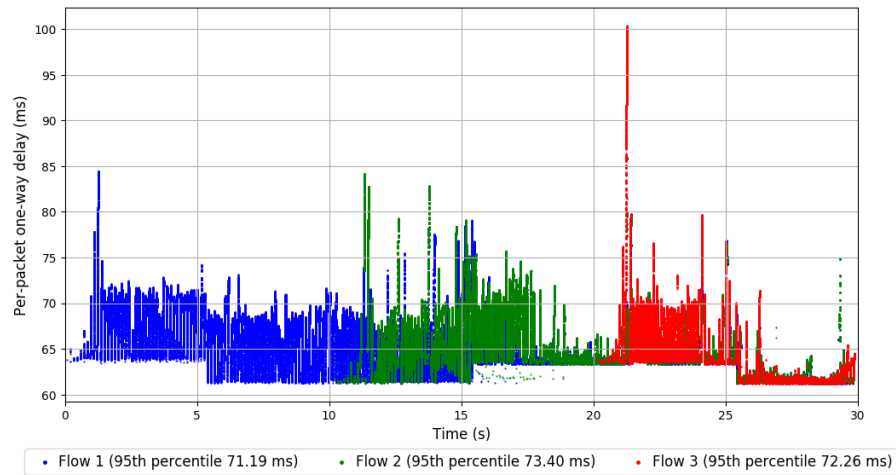
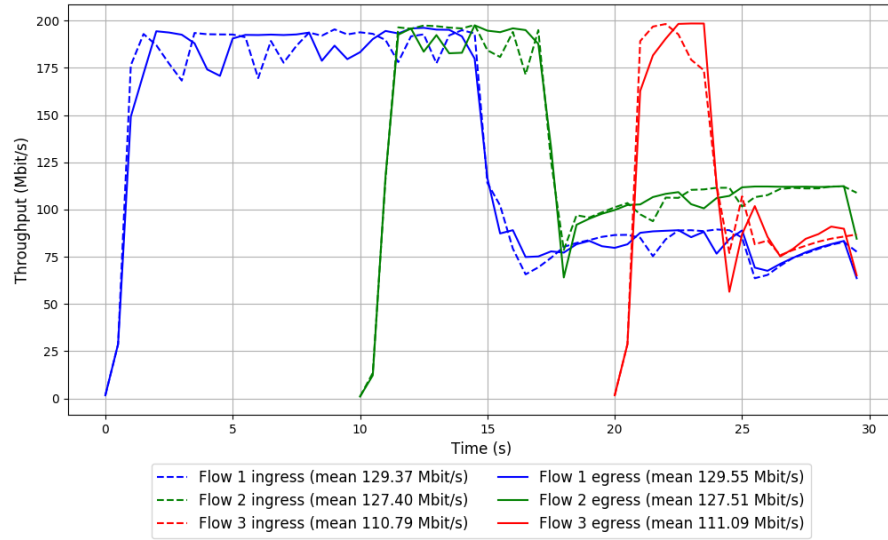
-- Flow 3:

Average throughput: 111.09 Mbit/s

95th percentile per-packet one-way delay: 72.259 ms

Loss rate: 1.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-10 04:54:47

End at: 2018-01-10 04:55:17

Below is generated by plot.py at 2018-01-10 08:54:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 215.44 Mbit/s

95th percentile per-packet one-way delay: 70.775 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 105.55 Mbit/s

95th percentile per-packet one-way delay: 71.065 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 81.15 Mbit/s

95th percentile per-packet one-way delay: 70.934 ms

Loss rate: 0.46%

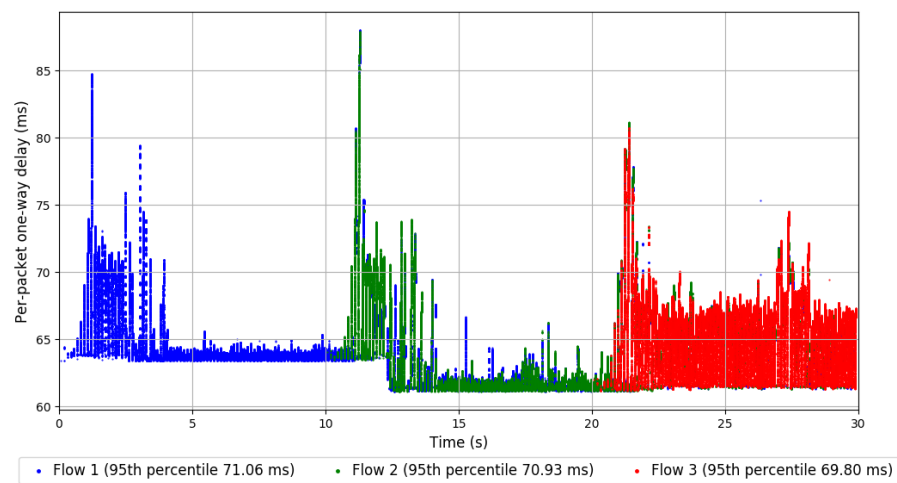
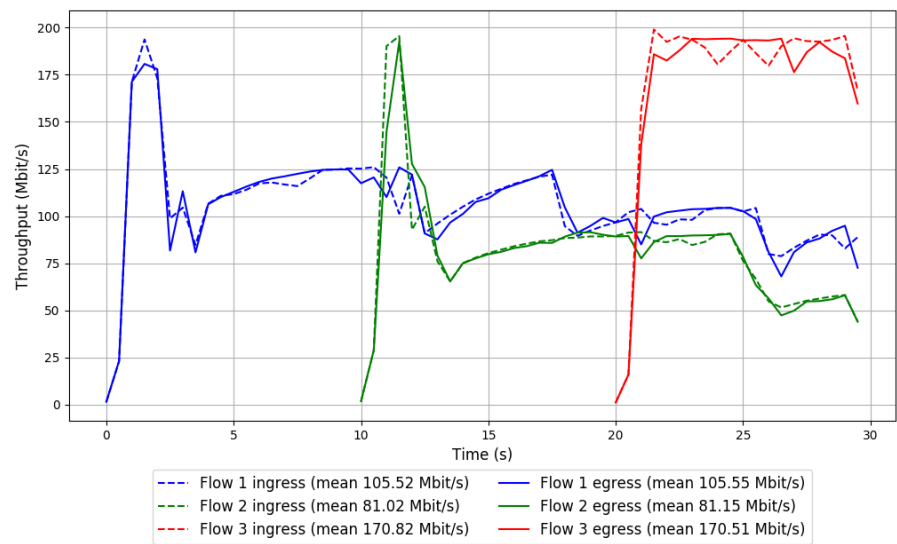
-- Flow 3:

Average throughput: 170.51 Mbit/s

95th percentile per-packet one-way delay: 69.804 ms

Loss rate: 1.45%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-10 05:08:51

End at: 2018-01-10 05:09:21

Below is generated by plot.py at 2018-01-10 08:54:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 207.79 Mbit/s

95th percentile per-packet one-way delay: 72.033 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 116.38 Mbit/s

95th percentile per-packet one-way delay: 71.899 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 135.67 Mbit/s

95th percentile per-packet one-way delay: 72.318 ms

Loss rate: 0.48%

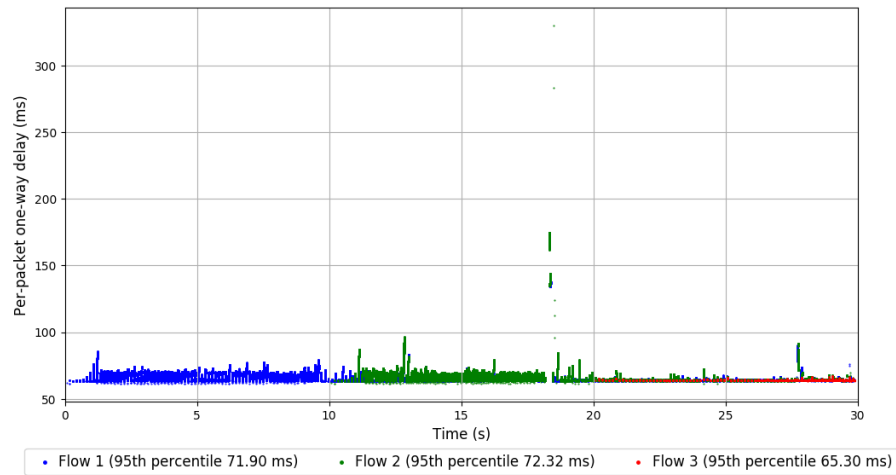
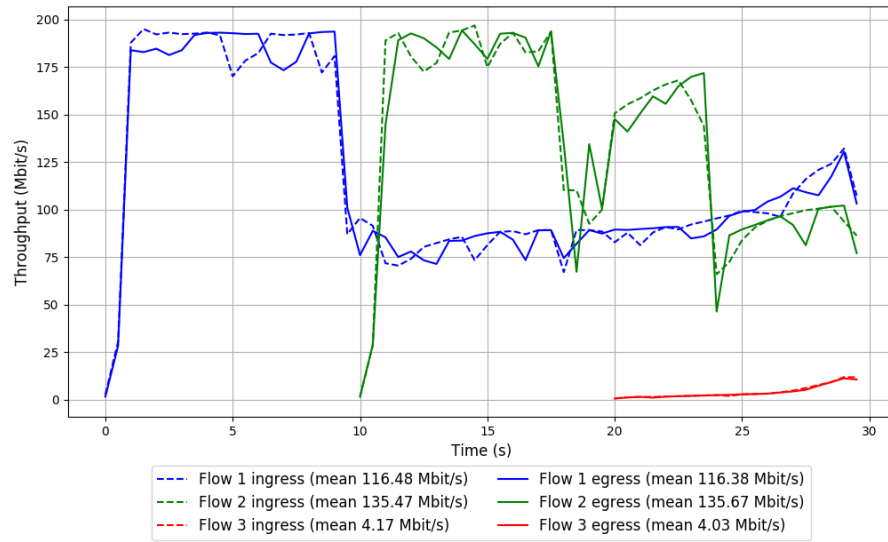
-- Flow 3:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 65.298 ms

Loss rate: 4.69%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-10 05:22:44

End at: 2018-01-10 05:23:14

Below is generated by plot.py at 2018-01-10 08:55:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 261.93 Mbit/s

95th percentile per-packet one-way delay: 72.033 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 134.84 Mbit/s

95th percentile per-packet one-way delay: 71.306 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 107.48 Mbit/s

95th percentile per-packet one-way delay: 71.925 ms

Loss rate: 0.54%

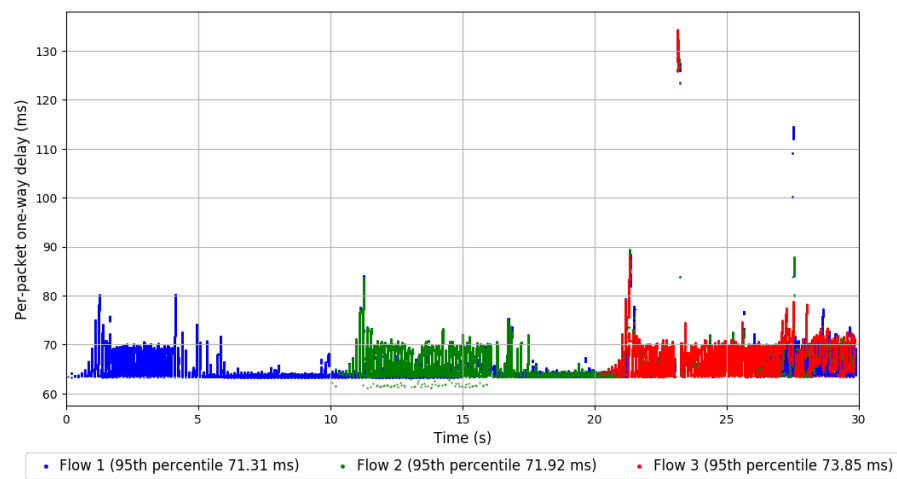
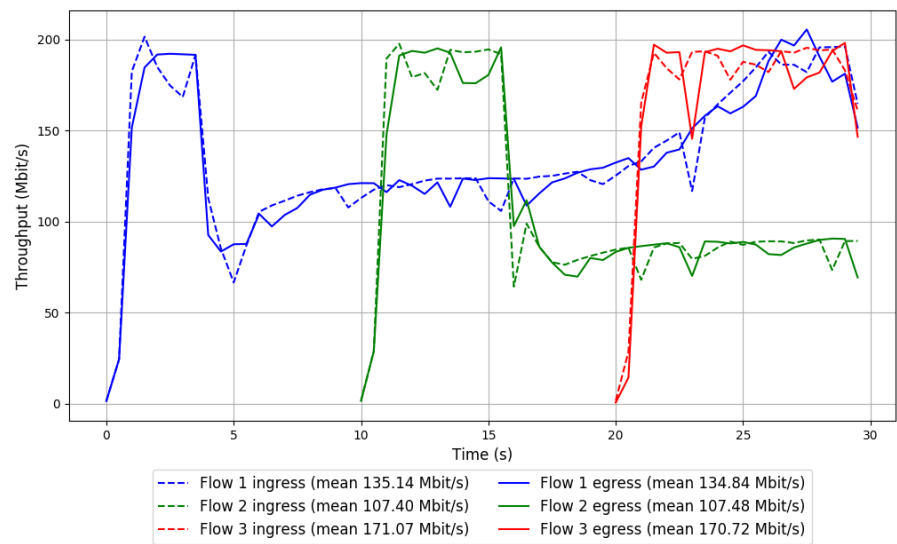
-- Flow 3:

Average throughput: 170.72 Mbit/s

95th percentile per-packet one-way delay: 73.854 ms

Loss rate: 1.43%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-10 05:37:19

End at: 2018-01-10 05:37:49

Below is generated by plot.py at 2018-01-10 08:55:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 231.76 Mbit/s

95th percentile per-packet one-way delay: 71.581 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 110.86 Mbit/s

95th percentile per-packet one-way delay: 72.367 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 111.32 Mbit/s

95th percentile per-packet one-way delay: 69.522 ms

Loss rate: 0.52%

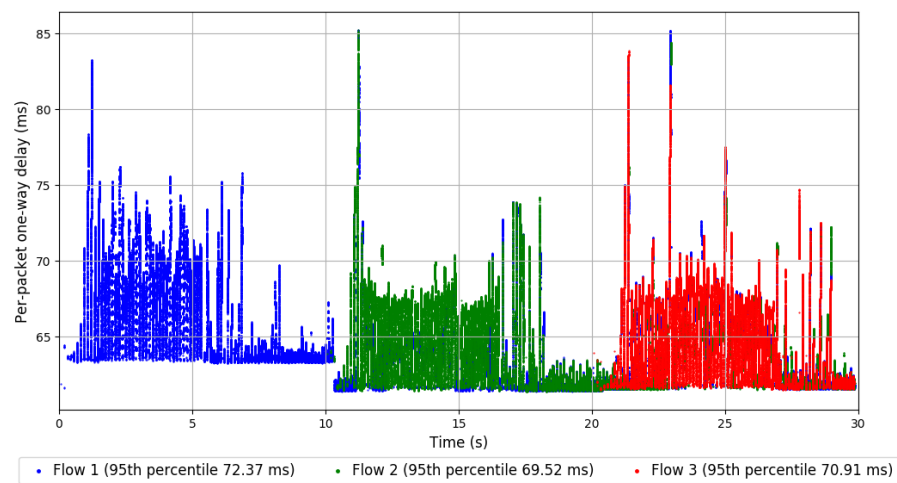
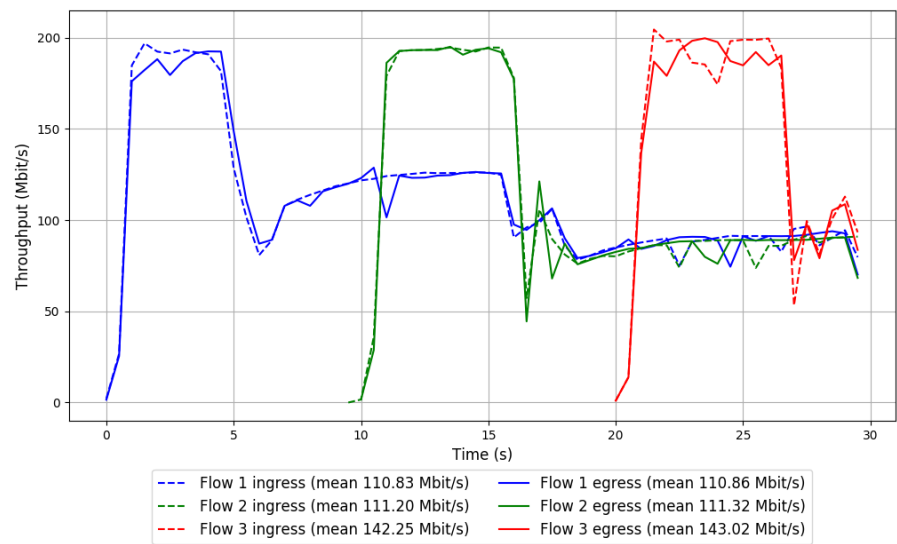
-- Flow 3:

Average throughput: 143.02 Mbit/s

95th percentile per-packet one-way delay: 70.912 ms

Loss rate: 1.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-10 05:51:19

End at: 2018-01-10 05:51:49

Below is generated by plot.py at 2018-01-10 08:56:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 264.48 Mbit/s

95th percentile per-packet one-way delay: 72.979 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 162.12 Mbit/s

95th percentile per-packet one-way delay: 73.593 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 104.95 Mbit/s

95th percentile per-packet one-way delay: 72.586 ms

Loss rate: 1.05%

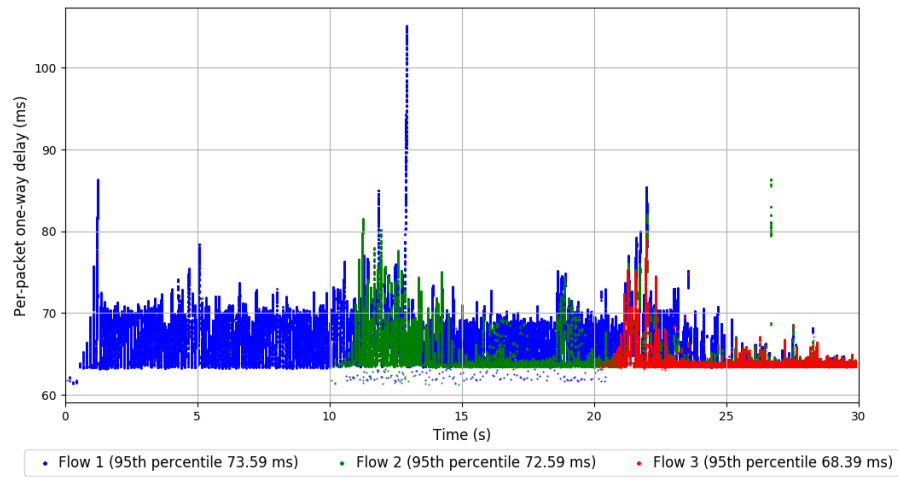
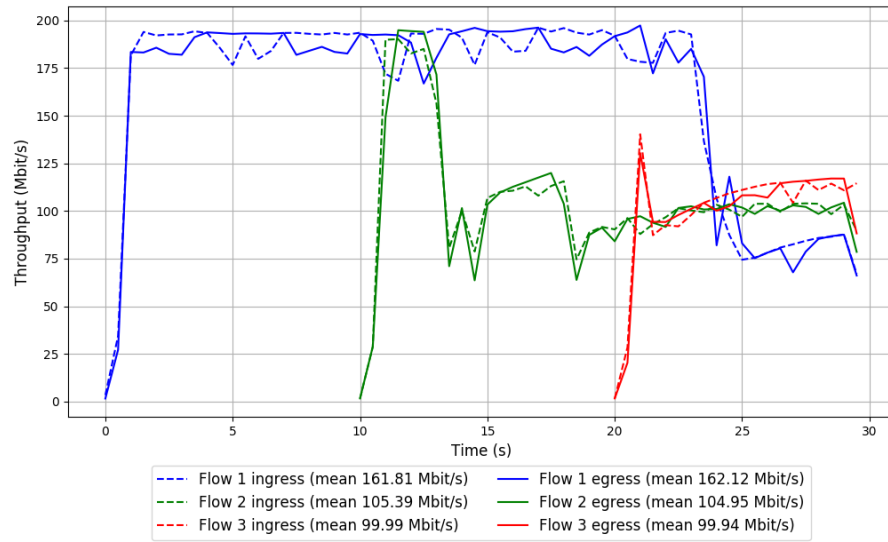
-- Flow 3:

Average throughput: 99.94 Mbit/s

95th percentile per-packet one-way delay: 68.390 ms

Loss rate: 1.48%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-10 06:05:40

End at: 2018-01-10 06:06:10

Below is generated by plot.py at 2018-01-10 08:56:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 211.44 Mbit/s

95th percentile per-packet one-way delay: 71.808 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 138.09 Mbit/s

95th percentile per-packet one-way delay: 71.789 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 108.44 Mbit/s

95th percentile per-packet one-way delay: 71.856 ms

Loss rate: 0.54%

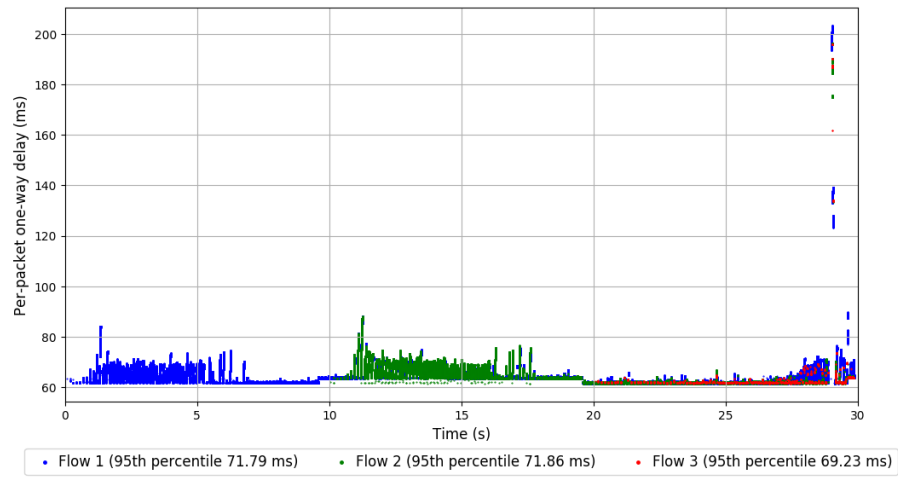
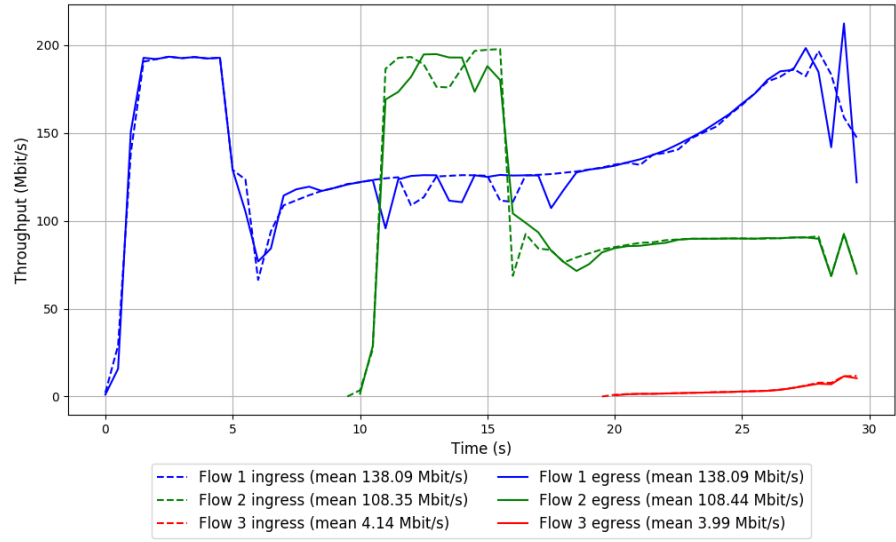
-- Flow 3:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 69.232 ms

Loss rate: 4.79%

Run 10: Report of TCP Cubic — Data Link

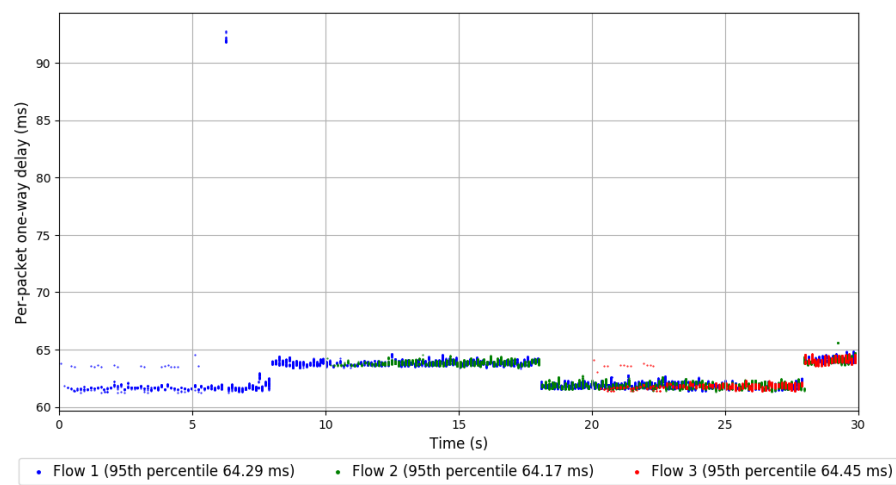
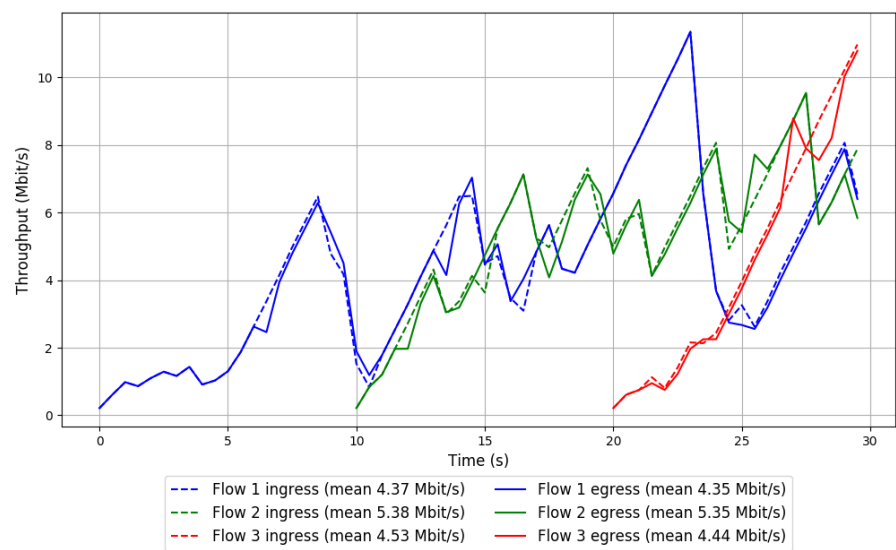


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-10 04:02:12
End at: 2018-01-10 04:02:42

# Below is generated by plot.py at 2018-01-10 08:56:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.35 Mbit/s
95th percentile per-packet one-way delay: 64.301 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 64.287 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 5.35 Mbit/s
95th percentile per-packet one-way delay: 64.165 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 64.452 ms
Loss rate: 3.13%
```


Run 1: Report of LEDBAT — Data Link

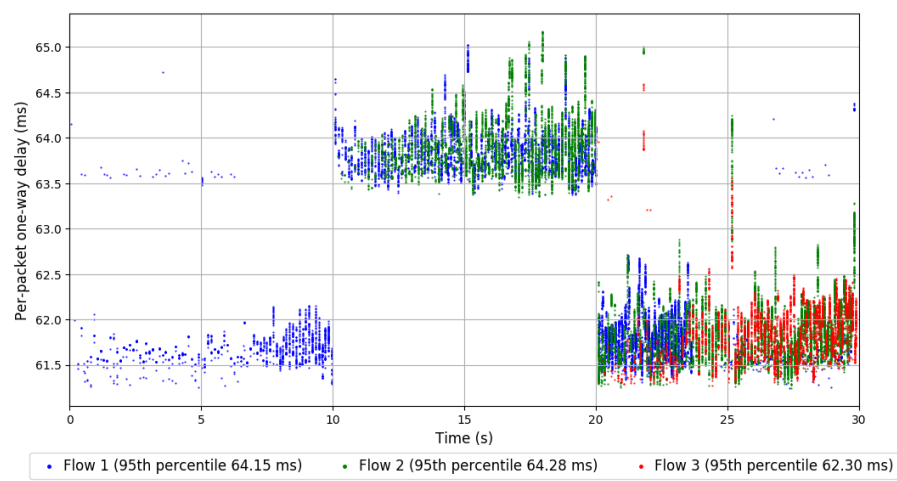
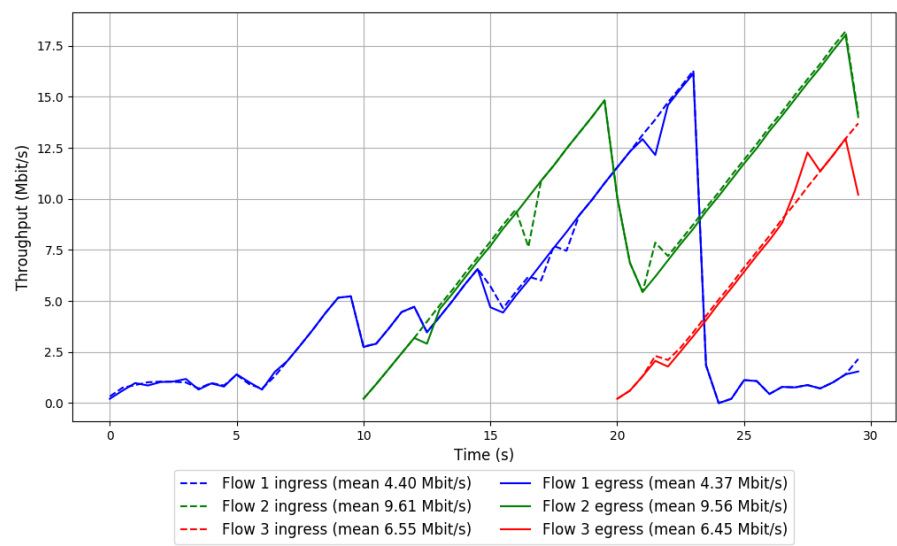


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-10 04:16:30
End at: 2018-01-10 04:17:00

# Below is generated by plot.py at 2018-01-10 08:56:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.81 Mbit/s
95th percentile per-packet one-way delay: 64.186 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 64.153 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 9.56 Mbit/s
95th percentile per-packet one-way delay: 64.277 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 6.45 Mbit/s
95th percentile per-packet one-way delay: 62.302 ms
Loss rate: 2.70%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-10 04:30:32

End at: 2018-01-10 04:31:02

Below is generated by plot.py at 2018-01-10 08:56:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.65 Mbit/s

95th percentile per-packet one-way delay: 64.406 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 9.02 Mbit/s

95th percentile per-packet one-way delay: 64.477 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.332 ms

Loss rate: 0.62%

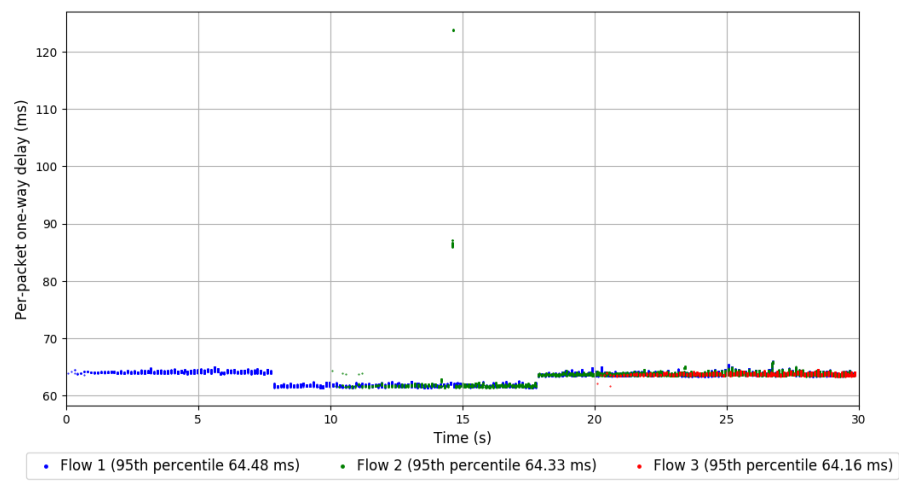
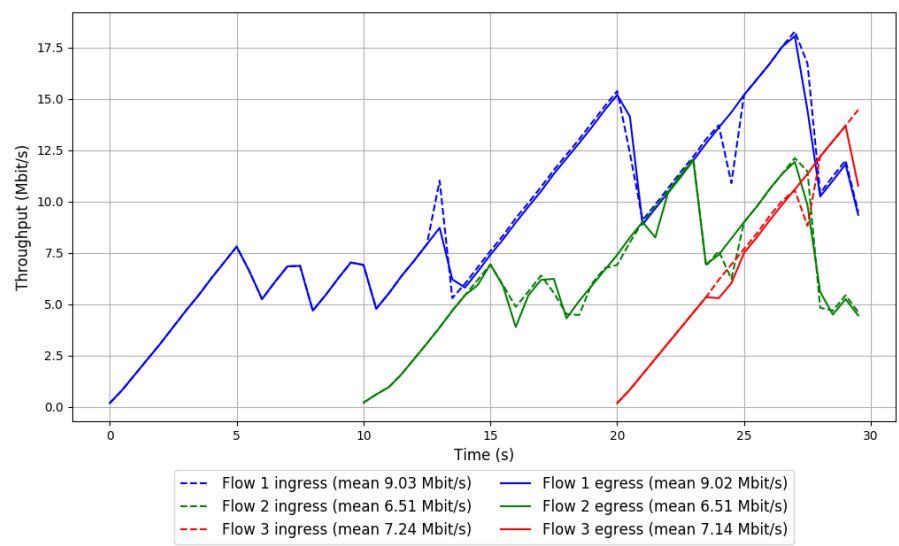
-- Flow 3:

Average throughput: 7.14 Mbit/s

95th percentile per-packet one-way delay: 64.158 ms

Loss rate: 2.59%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-10 04:44:48

End at: 2018-01-10 04:45:18

Below is generated by plot.py at 2018-01-10 08:56:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.21 Mbit/s

95th percentile per-packet one-way delay: 64.086 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 64.108 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 9.42 Mbit/s

95th percentile per-packet one-way delay: 64.136 ms

Loss rate: 0.88%

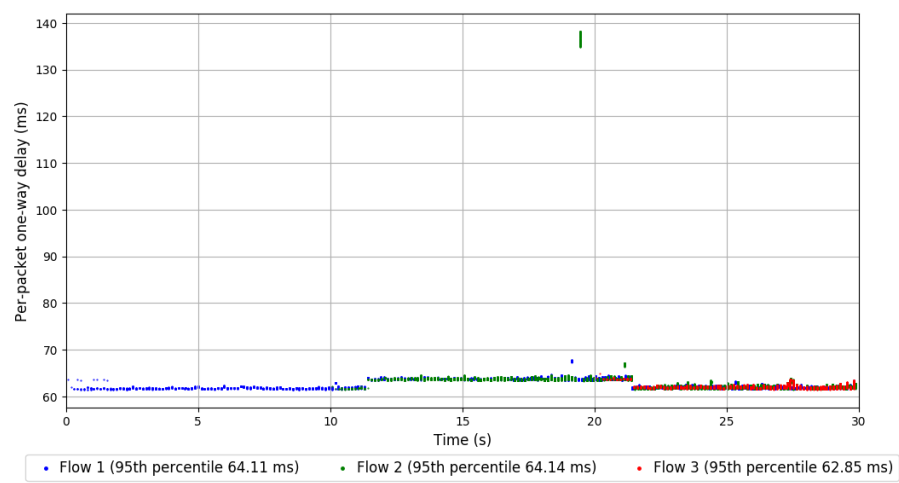
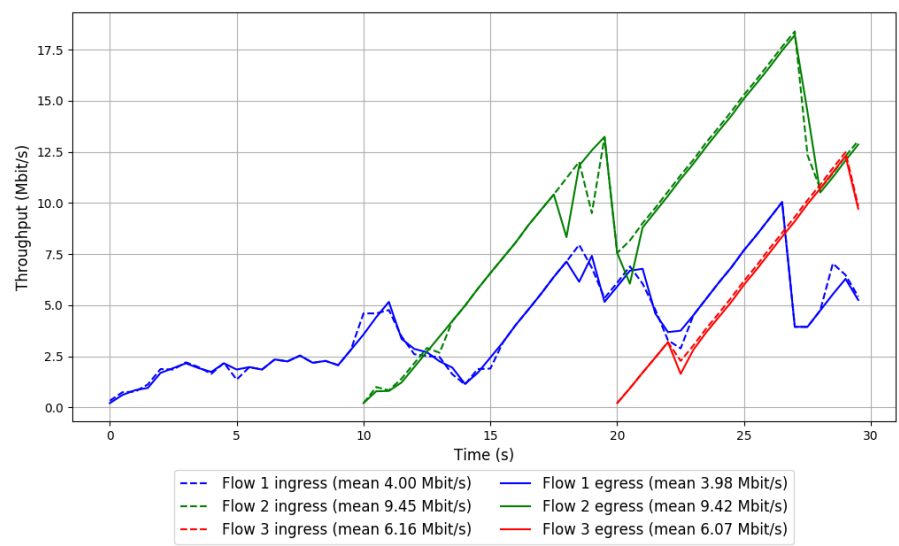
-- Flow 3:

Average throughput: 6.07 Mbit/s

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

Loss rate: 2.74%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-10 04:59:06

End at: 2018-01-10 04:59:36

Below is generated by plot.py at 2018-01-10 08:56:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.13 Mbit/s

95th percentile per-packet one-way delay: 64.378 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 7.50 Mbit/s

95th percentile per-packet one-way delay: 64.360 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 8.82 Mbit/s

95th percentile per-packet one-way delay: 64.404 ms

Loss rate: 1.13%

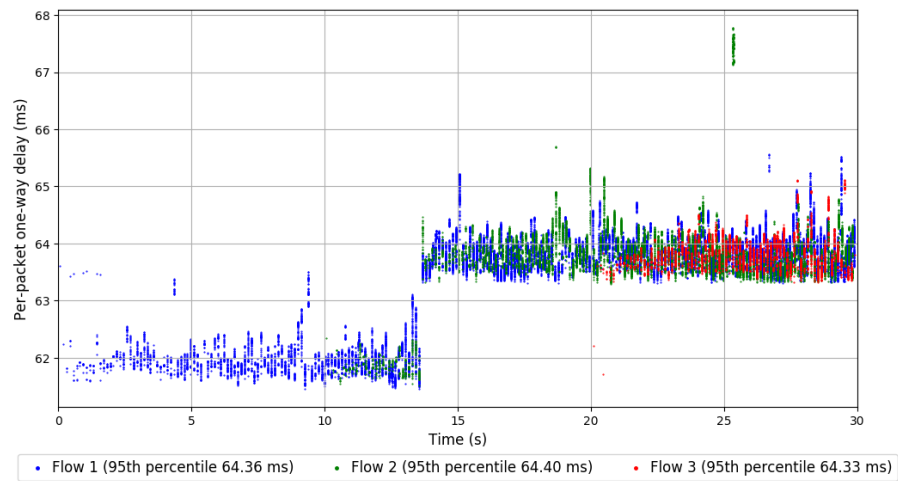
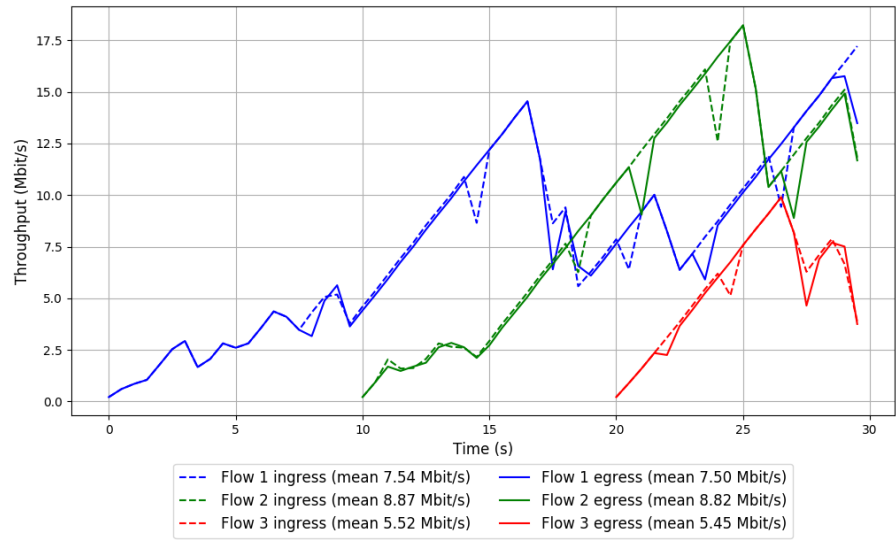
-- Flow 3:

Average throughput: 5.45 Mbit/s

95th percentile per-packet one-way delay: 64.331 ms

Loss rate: 1.21%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-10 05:13:08

End at: 2018-01-10 05:13:38

Below is generated by plot.py at 2018-01-10 08:56:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.70 Mbit/s

95th percentile per-packet one-way delay: 64.347 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 6.58 Mbit/s

95th percentile per-packet one-way delay: 64.373 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 4.91 Mbit/s

95th percentile per-packet one-way delay: 64.251 ms

Loss rate: 1.24%

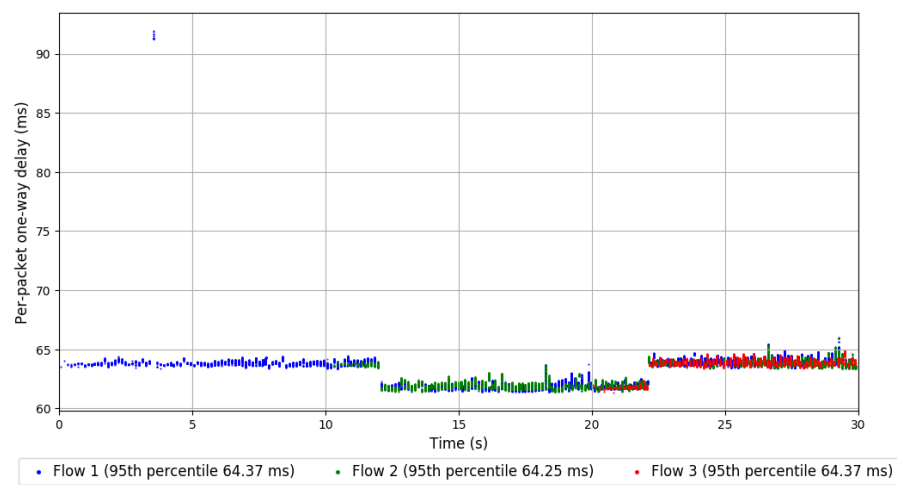
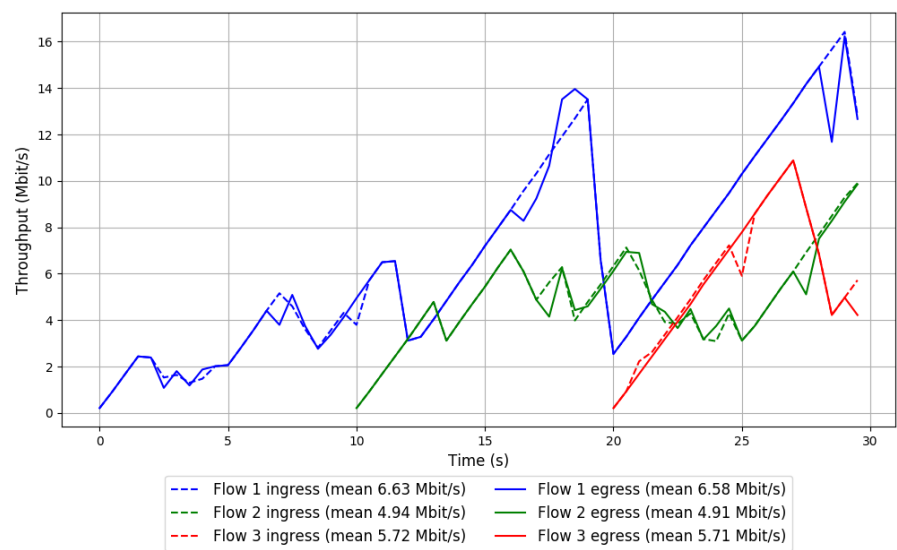
-- Flow 3:

Average throughput: 5.71 Mbit/s

95th percentile per-packet one-way delay: 64.369 ms

Loss rate: 1.32%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-10 05:27:08

End at: 2018-01-10 05:27:38

Below is generated by plot.py at 2018-01-10 08:56:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.34 Mbit/s

95th percentile per-packet one-way delay: 64.302 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 14.20 Mbit/s

95th percentile per-packet one-way delay: 64.305 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 4.74 Mbit/s

95th percentile per-packet one-way delay: 64.334 ms

Loss rate: 1.41%

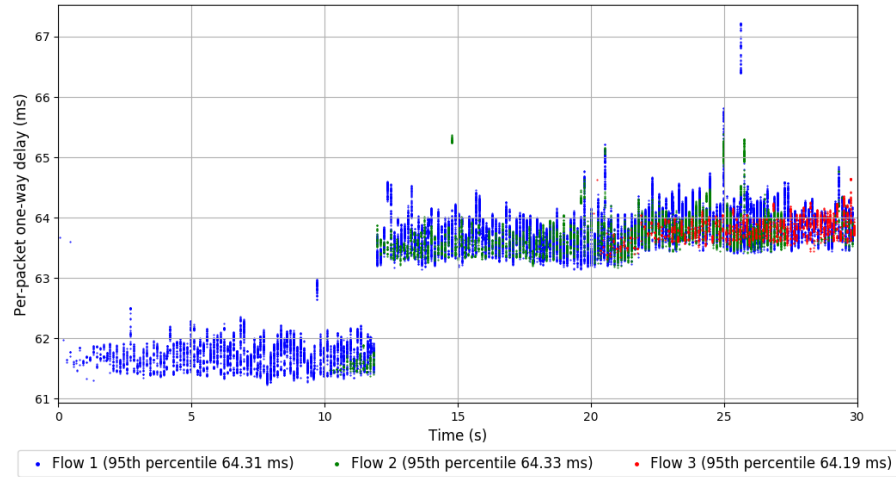
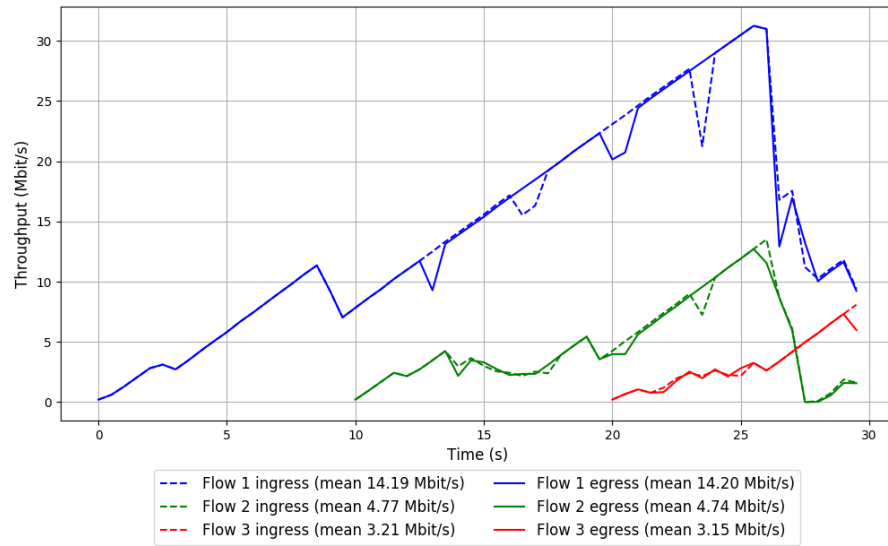
-- Flow 3:

Average throughput: 3.15 Mbit/s

95th percentile per-packet one-way delay: 64.186 ms

Loss rate: 3.32%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-10 05:41:45

End at: 2018-01-10 05:42:15

Below is generated by plot.py at 2018-01-10 08:56:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.37 Mbit/s

95th percentile per-packet one-way delay: 63.969 ms

Loss rate: 1.60%

-- Flow 1:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 63.926 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 64.034 ms

Loss rate: 2.45%

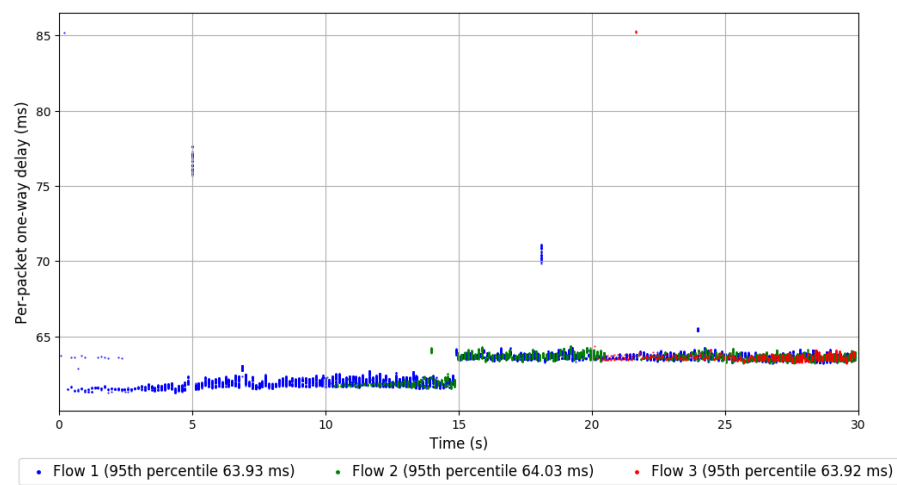
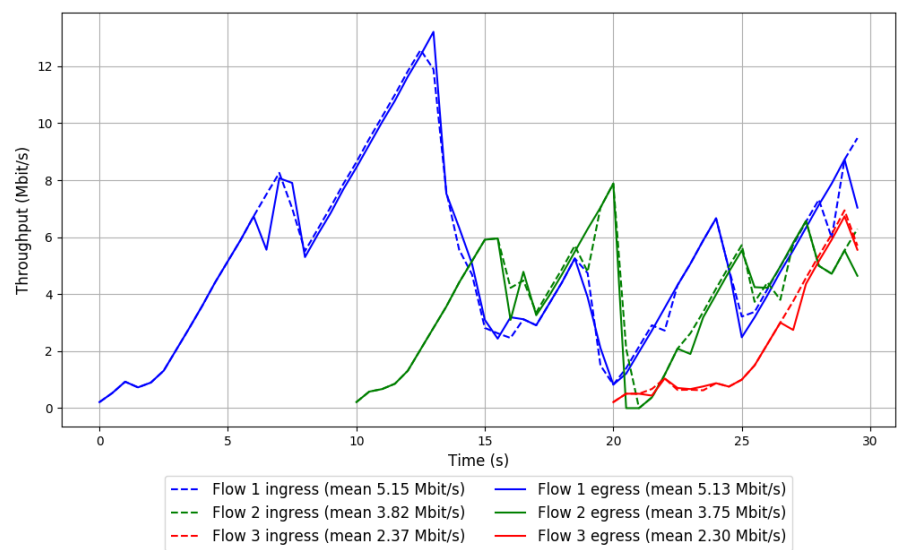
-- Flow 3:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 63.922 ms

Loss rate: 4.17%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-10 05:55:48

End at: 2018-01-10 05:56:18

Below is generated by plot.py at 2018-01-10 08:56:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.94 Mbit/s

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

Loss rate: 1.29%

-- Flow 1:

Average throughput: 4.80 Mbit/s

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

Loss rate: 1.96%

-- Flow 2:

Average throughput: 10.60 Mbit/s

95th percentile per-packet one-way delay: 64.904 ms

Loss rate: 0.71%

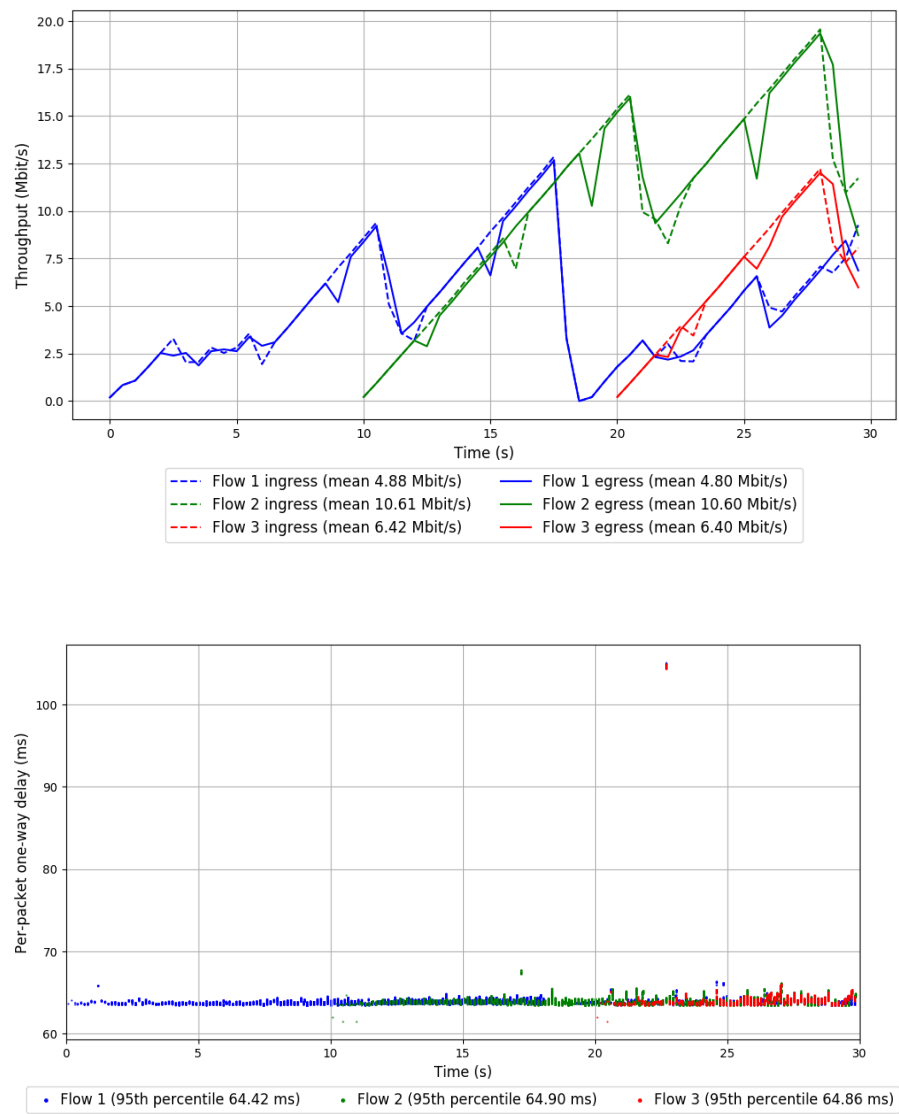
-- Flow 3:

Average throughput: 6.40 Mbit/s

95th percentile per-packet one-way delay: 64.862 ms

Loss rate: 1.64%

Run 9: Report of LEDBAT — Data Link

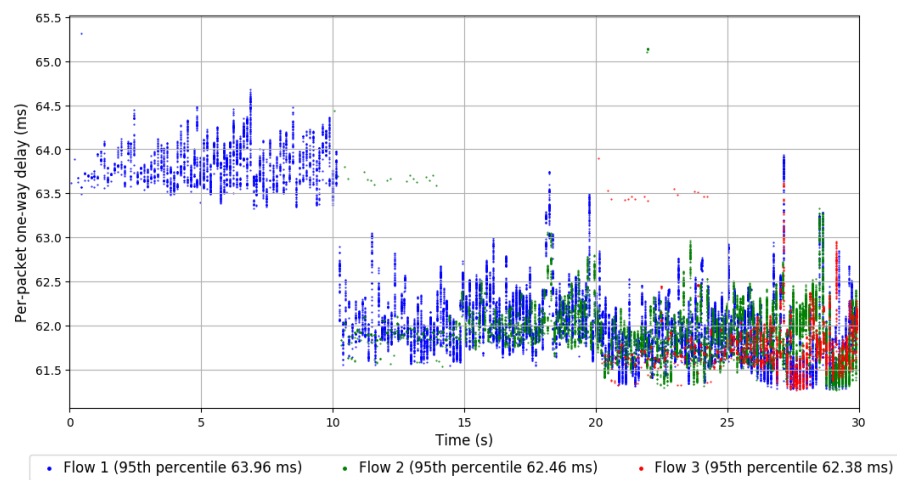
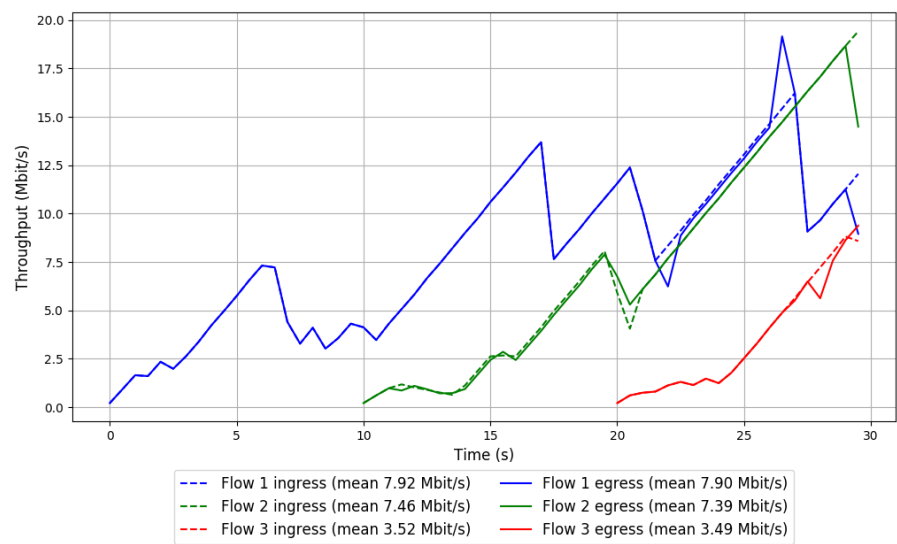


```
Run 10: Statistics of LEDBAT

Start at: 2018-01-10 06:10:00
End at: 2018-01-10 06:10:30

# Below is generated by plot.py at 2018-01-10 08:56:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.94 Mbit/s
95th percentile per-packet one-way delay: 63.806 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 7.90 Mbit/s
95th percentile per-packet one-way delay: 63.956 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 7.39 Mbit/s
95th percentile per-packet one-way delay: 62.461 ms
Loss rate: 1.66%
-- Flow 3:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 62.378 ms
Loss rate: 2.11%
```

Run 10: Report of LEDBAT — Data Link

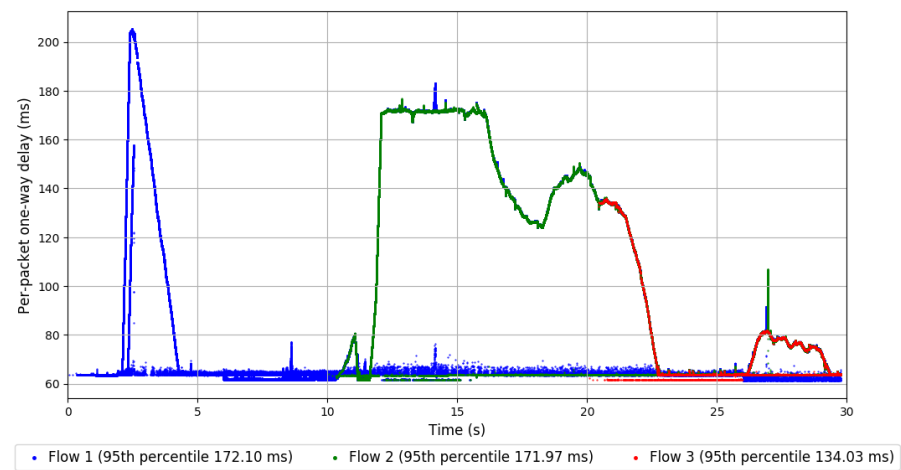
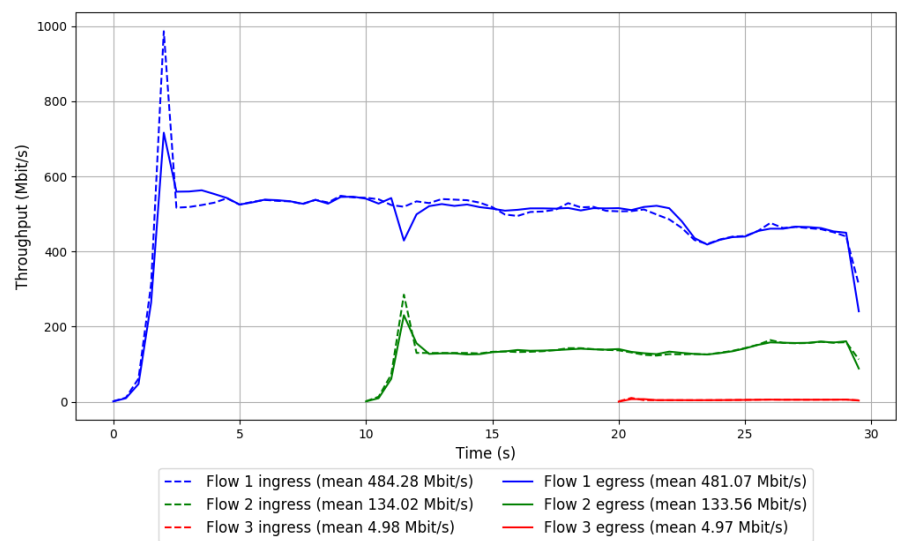


```
Run 1: Statistics of PCC

Start at: 2018-01-10 03:52:04
End at: 2018-01-10 03:52:34

# Below is generated by plot.py at 2018-01-10 09:02:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 571.29 Mbit/s
95th percentile per-packet one-way delay: 172.069 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 481.07 Mbit/s
95th percentile per-packet one-way delay: 172.103 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 133.56 Mbit/s
95th percentile per-packet one-way delay: 171.965 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 134.033 ms
Loss rate: 1.60%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-10 04:06:38

End at: 2018-01-10 04:07:08

Below is generated by plot.py at 2018-01-10 09:02:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 545.35 Mbit/s

95th percentile per-packet one-way delay: 186.996 ms

Loss rate: 2.75%

-- Flow 1:

Average throughput: 514.36 Mbit/s

95th percentile per-packet one-way delay: 186.964 ms

Loss rate: 2.67%

-- Flow 2:

Average throughput: 16.92 Mbit/s

95th percentile per-packet one-way delay: 186.878 ms

Loss rate: 2.47%

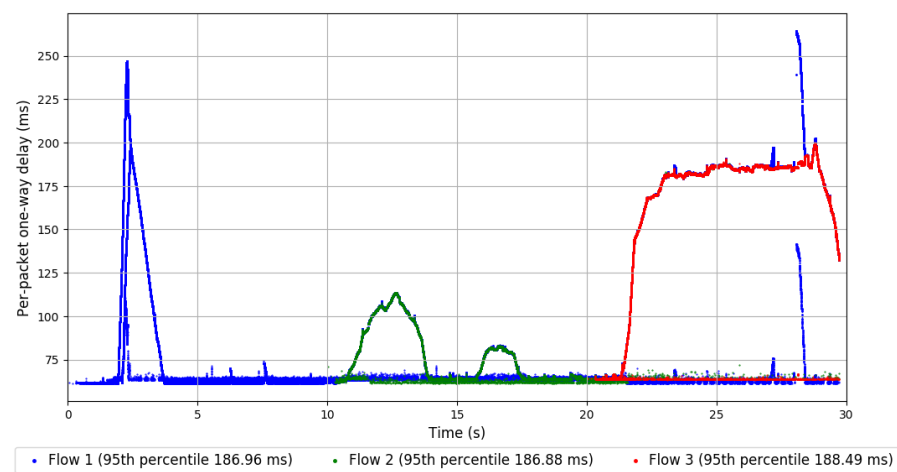
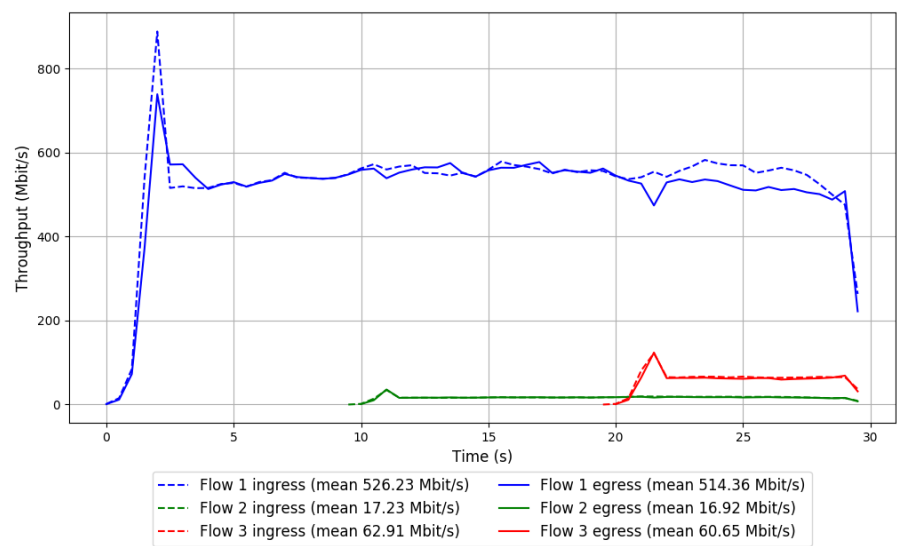
-- Flow 3:

Average throughput: 60.65 Mbit/s

95th percentile per-packet one-way delay: 188.486 ms

Loss rate: 4.86%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-10 04:20:51

End at: 2018-01-10 04:21:21

Below is generated by plot.py at 2018-01-10 09:02:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 555.46 Mbit/s

95th percentile per-packet one-way delay: 183.288 ms

Loss rate: 2.21%

-- Flow 1:

Average throughput: 515.04 Mbit/s

95th percentile per-packet one-way delay: 183.275 ms

Loss rate: 2.13%

-- Flow 2:

Average throughput: 31.07 Mbit/s

95th percentile per-packet one-way delay: 182.876 ms

Loss rate: 2.11%

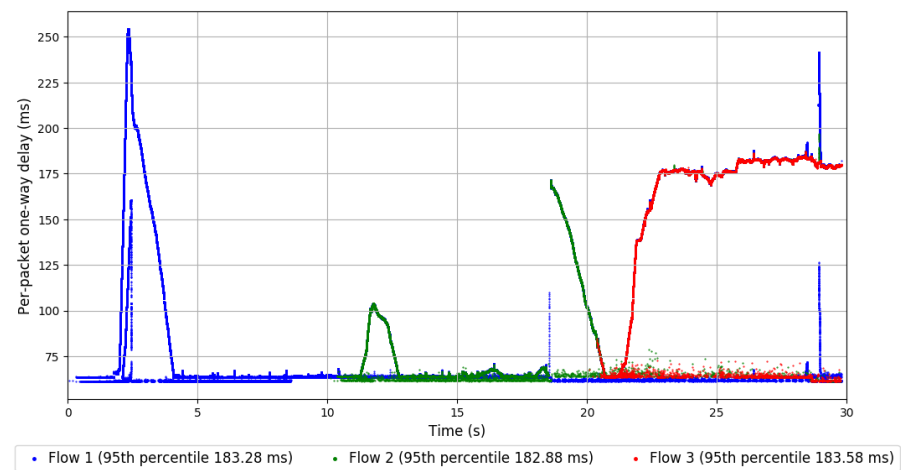
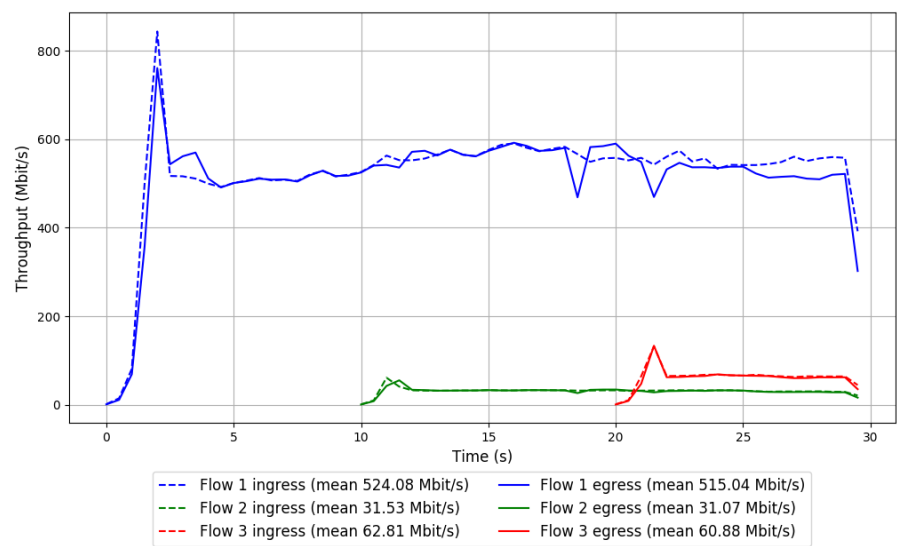
-- Flow 3:

Average throughput: 60.88 Mbit/s

95th percentile per-packet one-way delay: 183.579 ms

Loss rate: 4.37%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-10 04:35:05

End at: 2018-01-10 04:35:36

Below is generated by plot.py at 2018-01-10 09:02:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 522.55 Mbit/s

95th percentile per-packet one-way delay: 160.625 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 477.33 Mbit/s

95th percentile per-packet one-way delay: 160.672 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 64.82 Mbit/s

95th percentile per-packet one-way delay: 160.733 ms

Loss rate: 0.84%

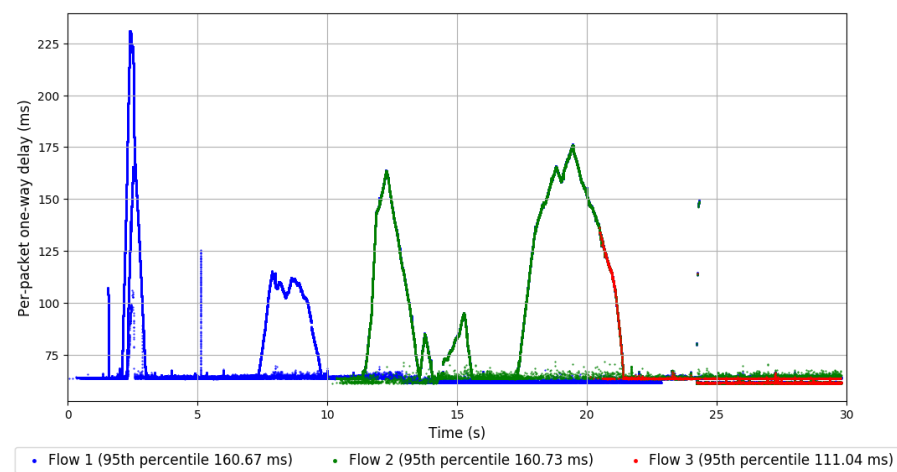
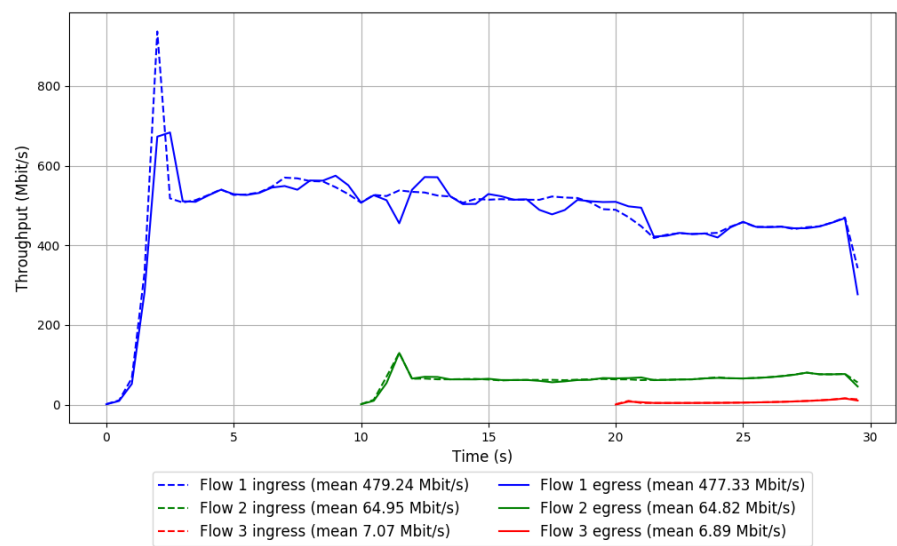
-- Flow 3:

Average throughput: 6.89 Mbit/s

95th percentile per-packet one-way delay: 111.042 ms

Loss rate: 3.80%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-10 04:49:08

End at: 2018-01-10 04:49:39

Below is generated by plot.py at 2018-01-10 09:03:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 549.04 Mbit/s

95th percentile per-packet one-way delay: 179.306 ms

Loss rate: 2.94%

-- Flow 1:

Average throughput: 502.60 Mbit/s

95th percentile per-packet one-way delay: 179.118 ms

Loss rate: 2.69%

-- Flow 2:

Average throughput: 15.35 Mbit/s

95th percentile per-packet one-way delay: 179.518 ms

Loss rate: 3.74%

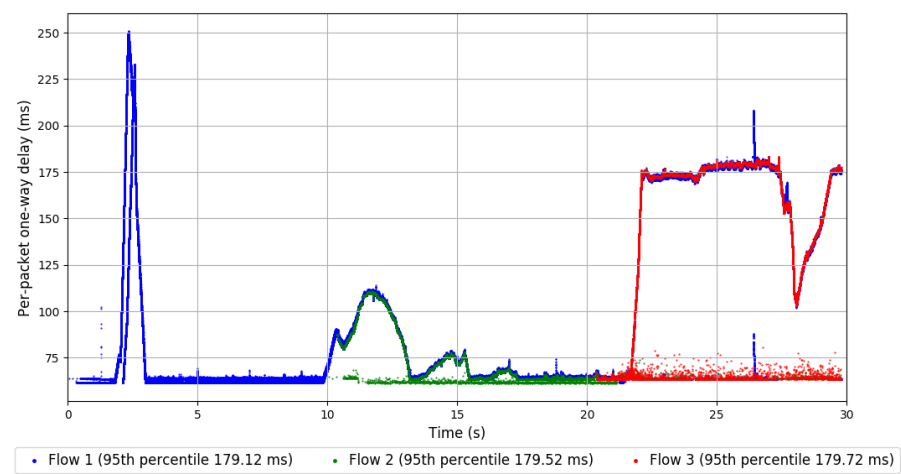
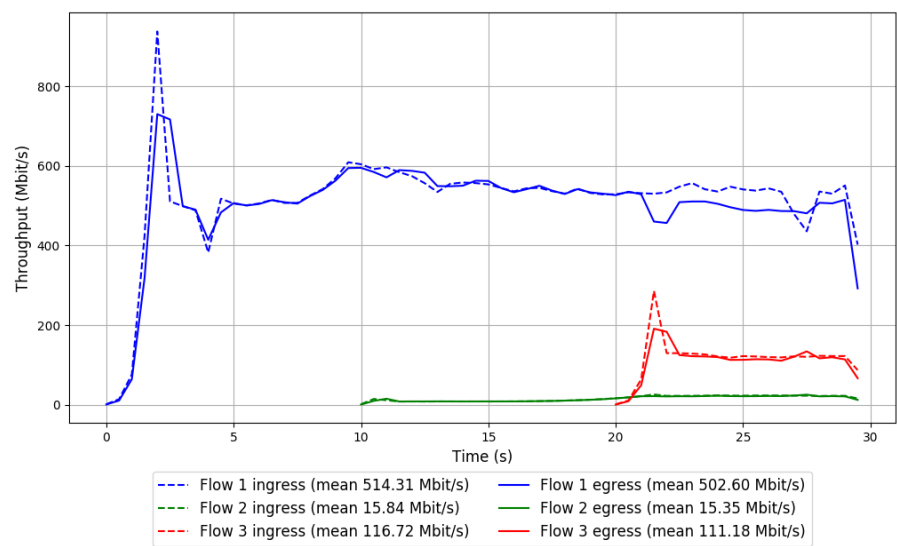
-- Flow 3:

Average throughput: 111.18 Mbit/s

95th percentile per-packet one-way delay: 179.724 ms

Loss rate: 5.98%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-10 05:03:24

End at: 2018-01-10 05:03:54

Below is generated by plot.py at 2018-01-10 09:03:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 551.72 Mbit/s

95th percentile per-packet one-way delay: 179.189 ms

Loss rate: 1.77%

-- Flow 1:

Average throughput: 503.22 Mbit/s

95th percentile per-packet one-way delay: 179.078 ms

Loss rate: 1.62%

-- Flow 2:

Average throughput: 15.77 Mbit/s

95th percentile per-packet one-way delay: 179.132 ms

Loss rate: 1.43%

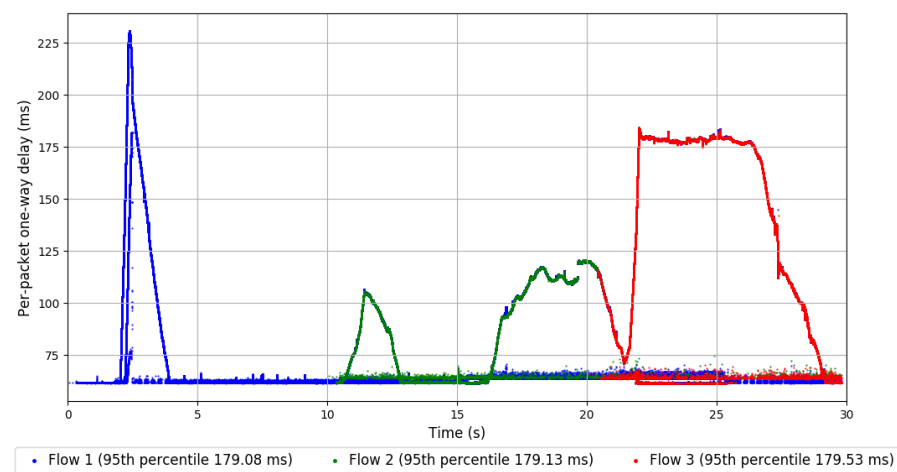
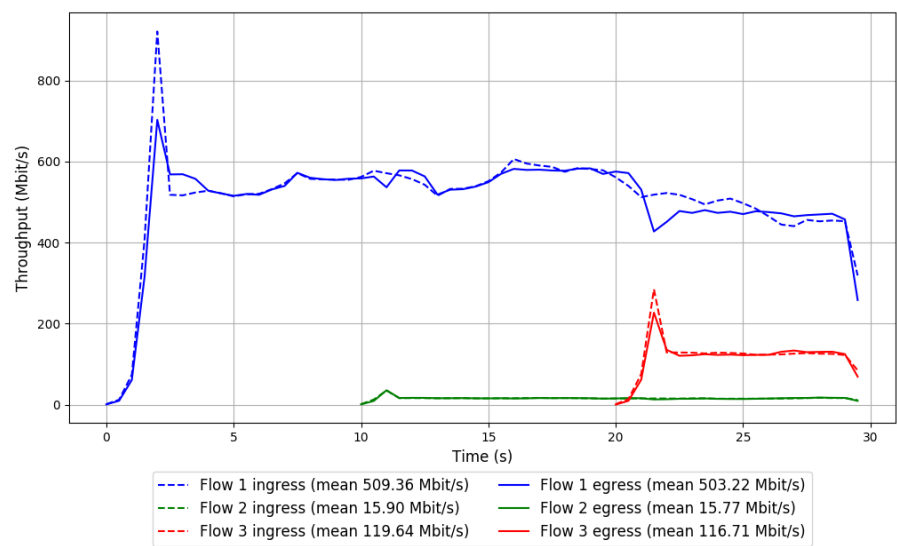
-- Flow 3:

Average throughput: 116.71 Mbit/s

95th percentile per-packet one-way delay: 179.531 ms

Loss rate: 3.73%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-10 05:17:21

End at: 2018-01-10 05:17:51

Below is generated by plot.py at 2018-01-10 09:04:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 568.69 Mbit/s

95th percentile per-packet one-way delay: 188.102 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 545.74 Mbit/s

95th percentile per-packet one-way delay: 188.017 ms

Loss rate: 1.85%

-- Flow 2:

Average throughput: 33.52 Mbit/s

95th percentile per-packet one-way delay: 189.230 ms

Loss rate: 1.53%

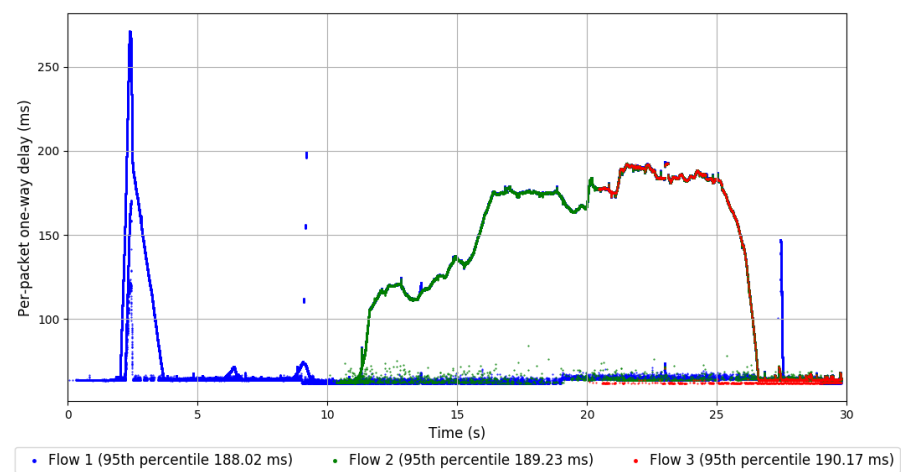
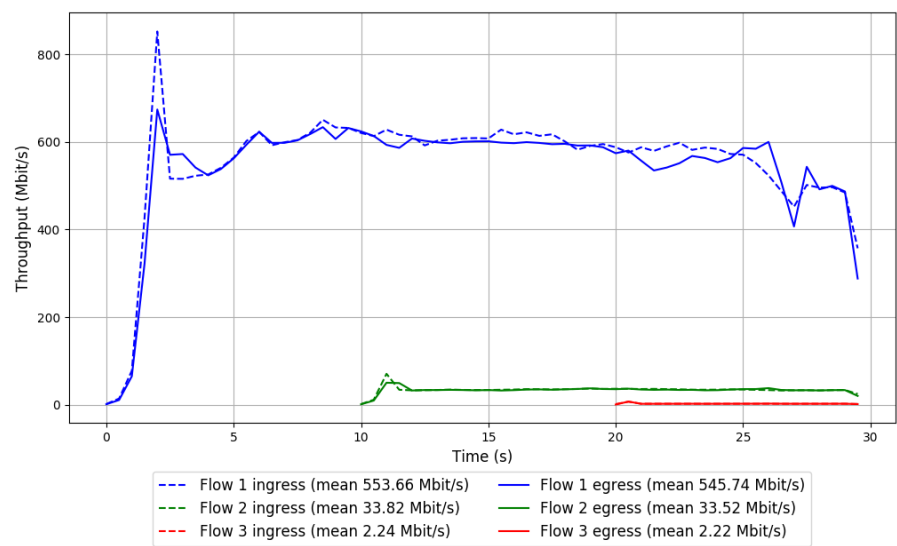
-- Flow 3:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 190.172 ms

Loss rate: 2.32%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-10 05:31:36

End at: 2018-01-10 05:32:06

Below is generated by plot.py at 2018-01-10 09:05:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 543.17 Mbit/s

95th percentile per-packet one-way delay: 193.980 ms

Loss rate: 2.92%

-- Flow 1:

Average throughput: 461.40 Mbit/s

95th percentile per-packet one-way delay: 193.775 ms

Loss rate: 2.82%

-- Flow 2:

Average throughput: 121.14 Mbit/s

95th percentile per-packet one-way delay: 195.115 ms

Loss rate: 3.45%

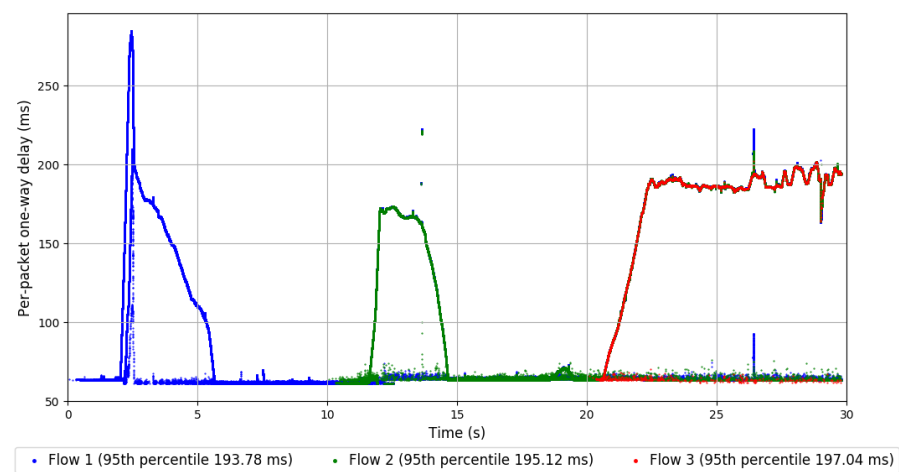
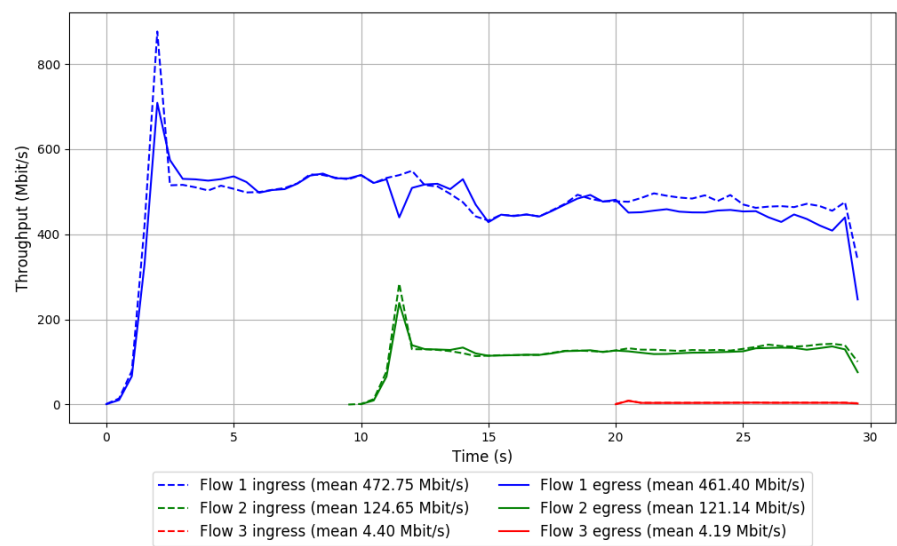
-- Flow 3:

Average throughput: 4.19 Mbit/s

95th percentile per-packet one-way delay: 197.038 ms

Loss rate: 6.22%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-10 05:45:52

End at: 2018-01-10 05:46:22

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 555.70 Mbit/s

95th percentile per-packet one-way delay: 178.041 ms

Loss rate: 2.68%

-- Flow 1:

Average throughput: 492.51 Mbit/s

95th percentile per-packet one-way delay: 178.113 ms

Loss rate: 2.78%

-- Flow 2:

Average throughput: 64.60 Mbit/s

95th percentile per-packet one-way delay: 177.826 ms

Loss rate: 1.97%

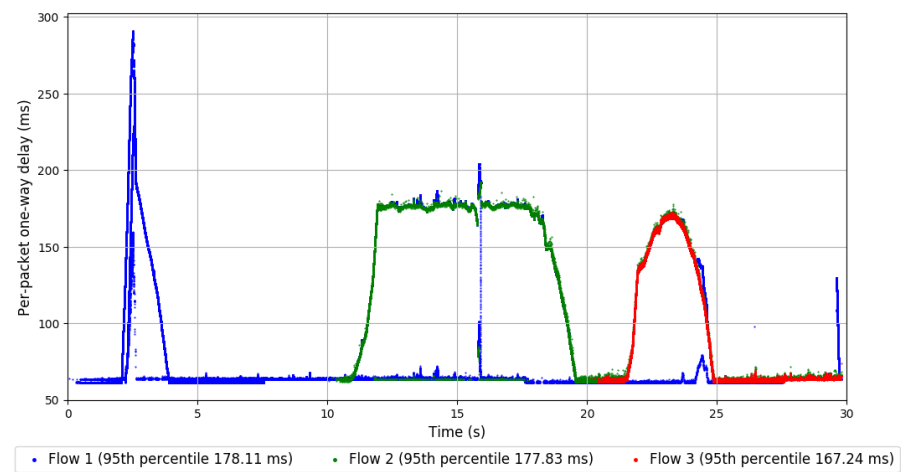
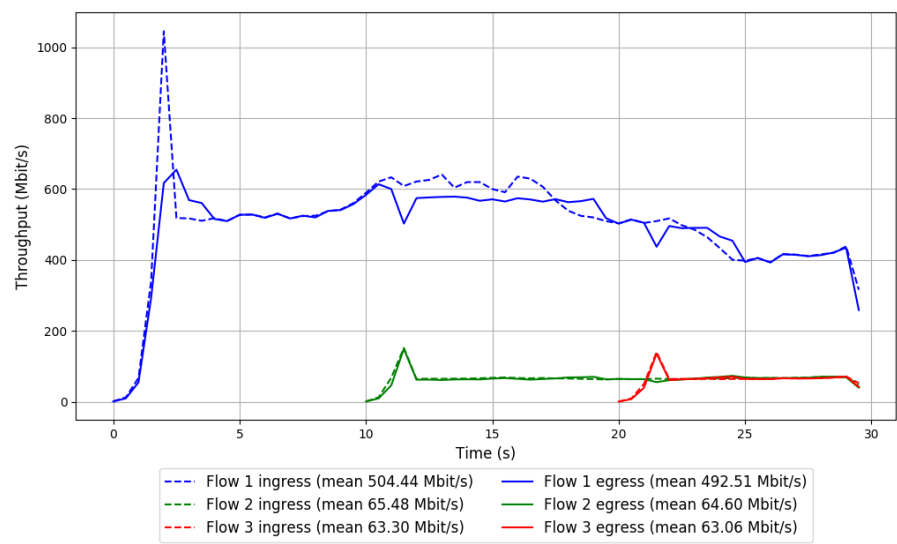
-- Flow 3:

Average throughput: 63.06 Mbit/s

95th percentile per-packet one-way delay: 167.239 ms

Loss rate: 1.61%

Run 9: Report of PCC — Data Link

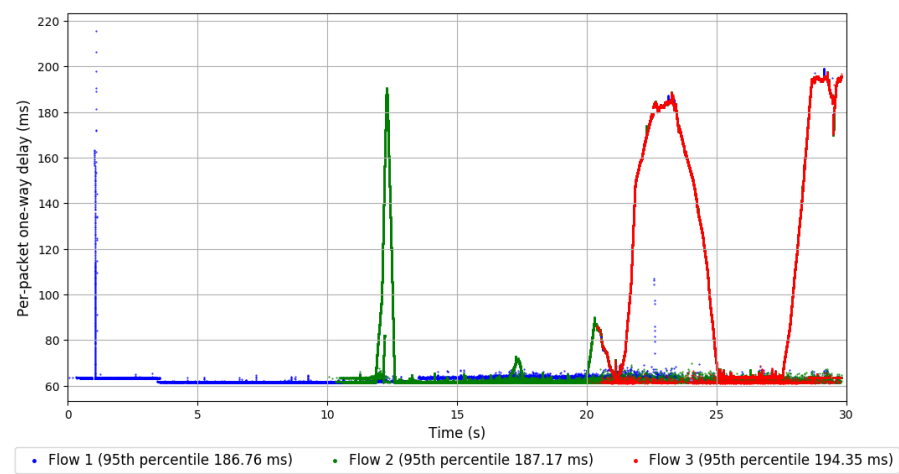
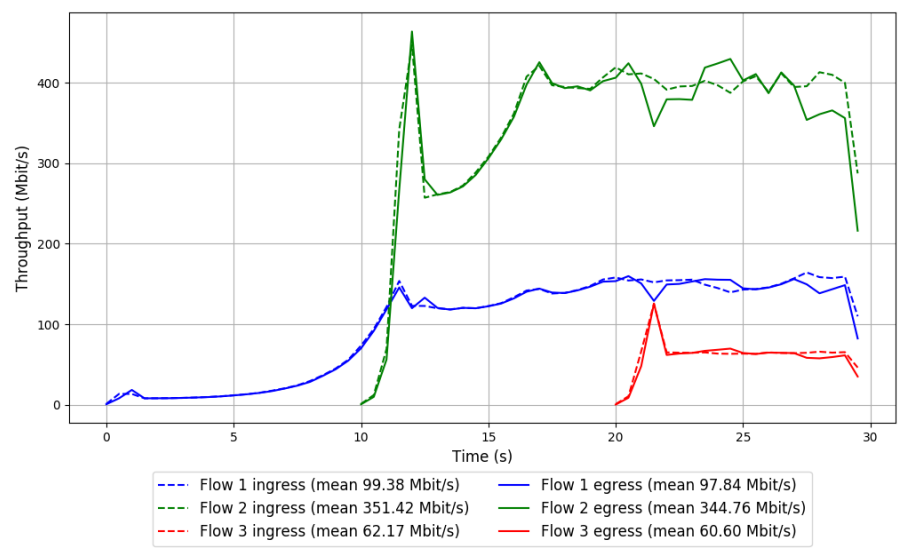


```
Run 10: Statistics of PCC

Start at: 2018-01-10 06:00:06
End at: 2018-01-10 06:00:36

# Below is generated by plot.py at 2018-01-10 09:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 346.32 Mbit/s
95th percentile per-packet one-way delay: 187.837 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 97.84 Mbit/s
95th percentile per-packet one-way delay: 186.762 ms
Loss rate: 1.96%
-- Flow 2:
Average throughput: 344.76 Mbit/s
95th percentile per-packet one-way delay: 187.173 ms
Loss rate: 2.52%
-- Flow 3:
Average throughput: 60.60 Mbit/s
95th percentile per-packet one-way delay: 194.351 ms
Loss rate: 3.78%
```

Run 10: Report of PCC — Data Link

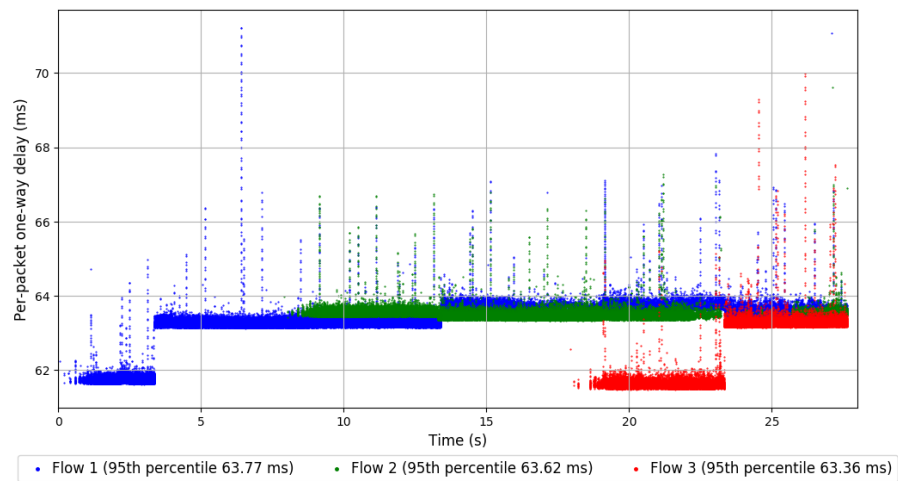
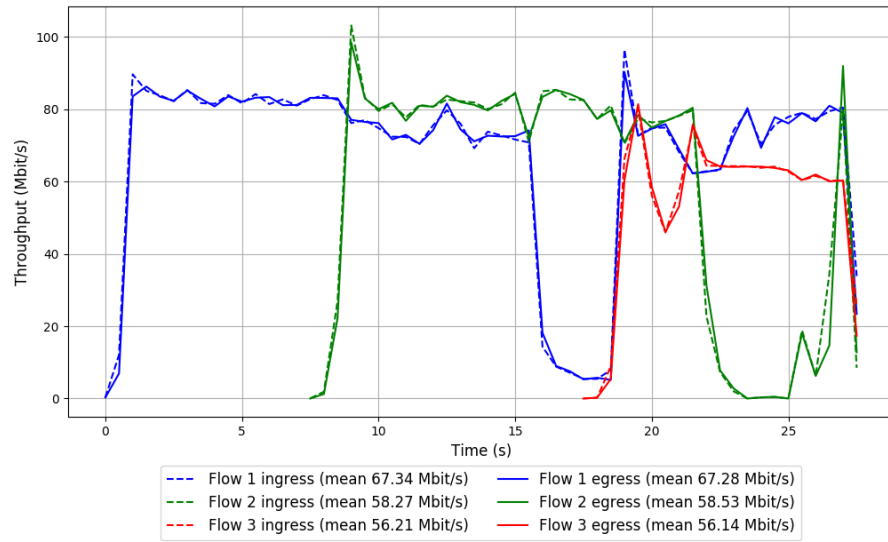


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-10 04:03:34
End at: 2018-01-10 04:04:04

# Below is generated by plot.py at 2018-01-10 09:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.90 Mbit/s
95th percentile per-packet one-way delay: 63.737 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 67.28 Mbit/s
95th percentile per-packet one-way delay: 63.769 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 58.53 Mbit/s
95th percentile per-packet one-way delay: 63.625 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 56.14 Mbit/s
95th percentile per-packet one-way delay: 63.360 ms
Loss rate: 1.41%
```


Run 1: Report of QUIC Cubic — Data Link

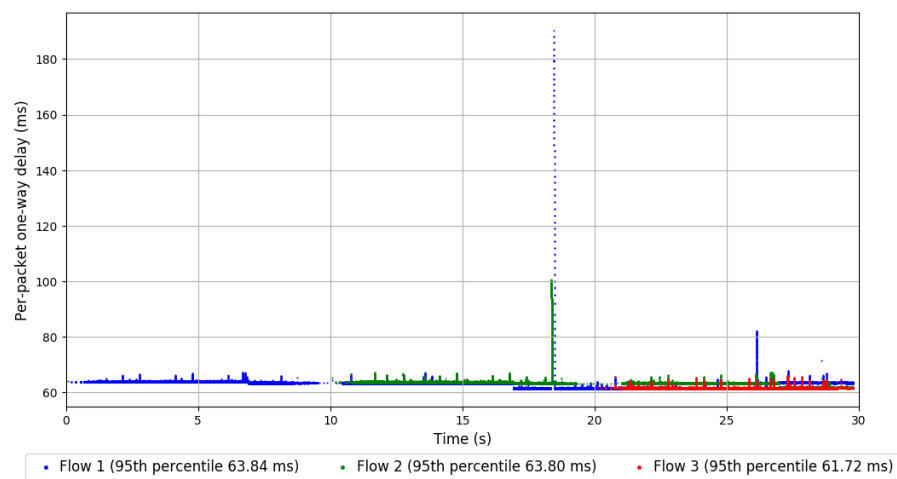
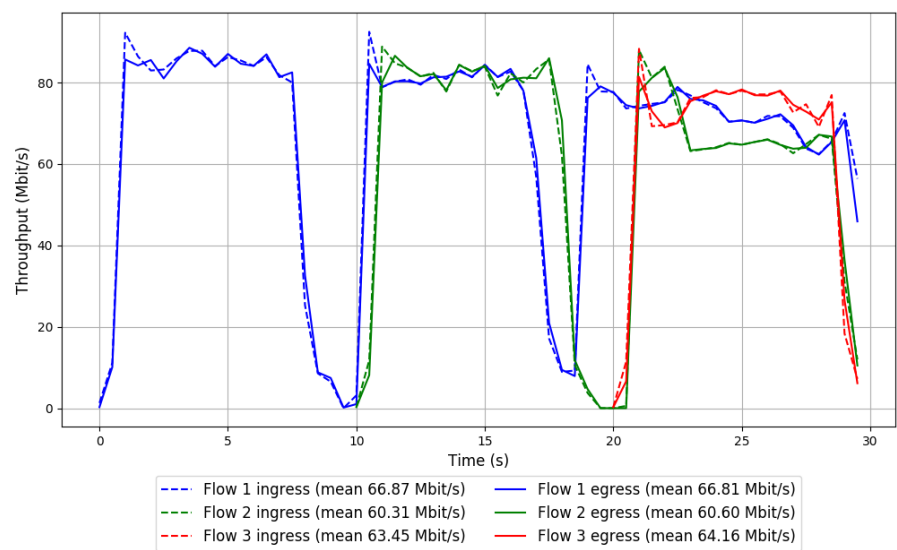


```
Run 2: Statistics of QUIC Cubic

Start at: 2018-01-10 04:17:53
End at: 2018-01-10 04:18:23

# Below is generated by plot.py at 2018-01-10 09:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.92 Mbit/s
95th percentile per-packet one-way delay: 63.812 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 66.81 Mbit/s
95th percentile per-packet one-way delay: 63.840 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 60.60 Mbit/s
95th percentile per-packet one-way delay: 63.802 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 64.16 Mbit/s
95th percentile per-packet one-way delay: 61.716 ms
Loss rate: 0.19%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-10 04:31:55

End at: 2018-01-10 04:32:25

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.17 Mbit/s

95th percentile per-packet one-way delay: 63.899 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 67.63 Mbit/s

95th percentile per-packet one-way delay: 63.562 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 61.22 Mbit/s

95th percentile per-packet one-way delay: 63.643 ms

Loss rate: 0.63%

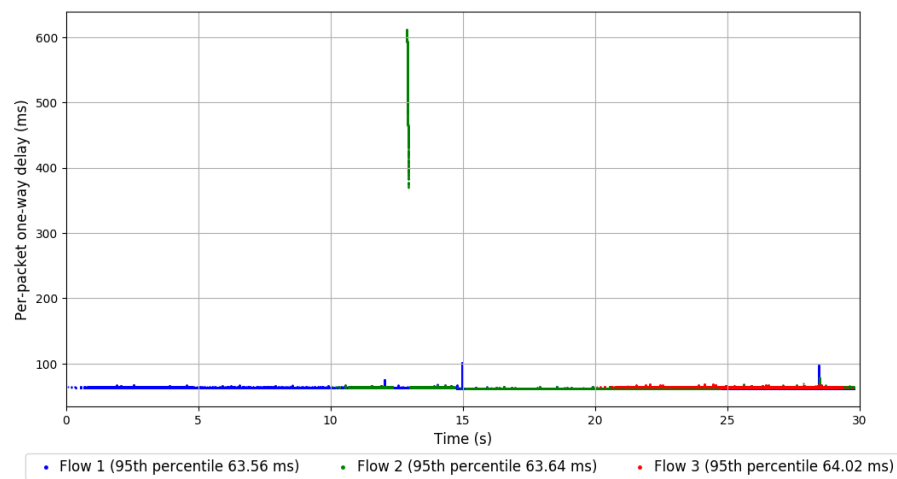
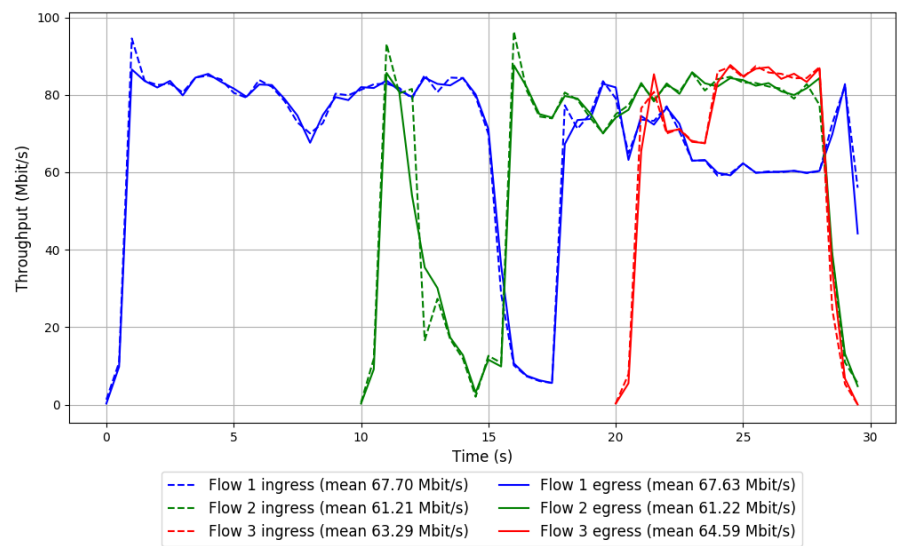
-- Flow 3:

Average throughput: 64.59 Mbit/s

95th percentile per-packet one-way delay: 64.017 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-10 04:46:11

End at: 2018-01-10 04:46:41

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.04 Mbit/s

95th percentile per-packet one-way delay: 63.562 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 61.13 Mbit/s

95th percentile per-packet one-way delay: 63.441 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 58.06 Mbit/s

95th percentile per-packet one-way delay: 63.642 ms

Loss rate: 0.74%

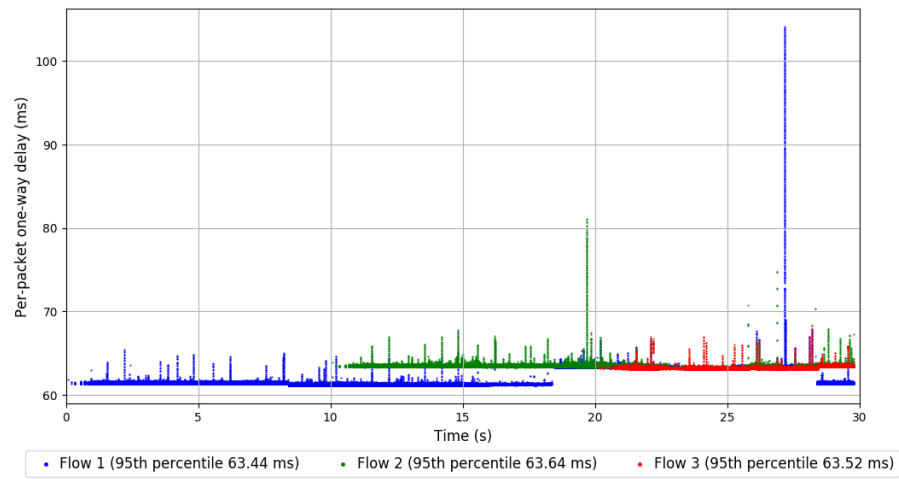
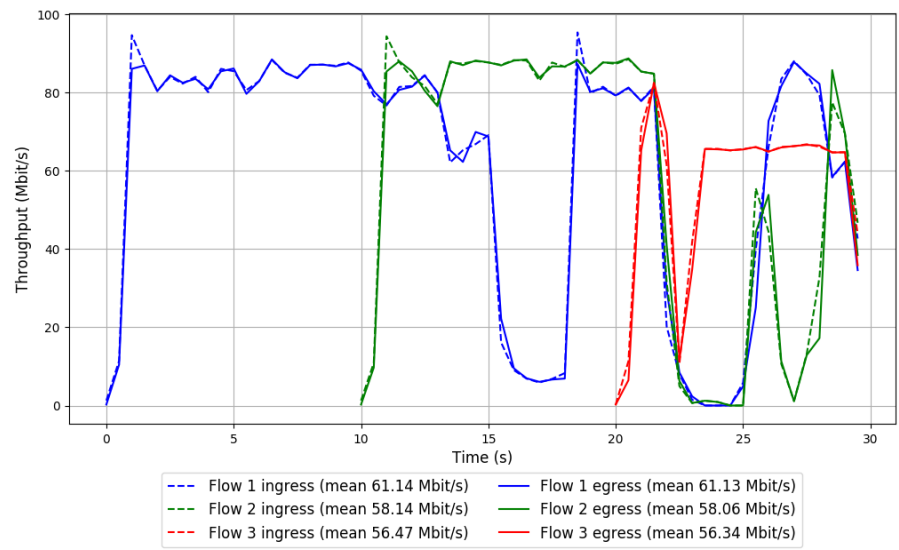
-- Flow 3:

Average throughput: 56.34 Mbit/s

95th percentile per-packet one-way delay: 63.516 ms

Loss rate: 1.50%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-10 05:00:29

End at: 2018-01-10 05:00:59

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.67 Mbit/s

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

Loss rate: 0.85%

-- Flow 1:

Average throughput: 14.96 Mbit/s

95th percentile per-packet one-way delay: 63.598 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 56.67 Mbit/s

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

Loss rate: 0.81%

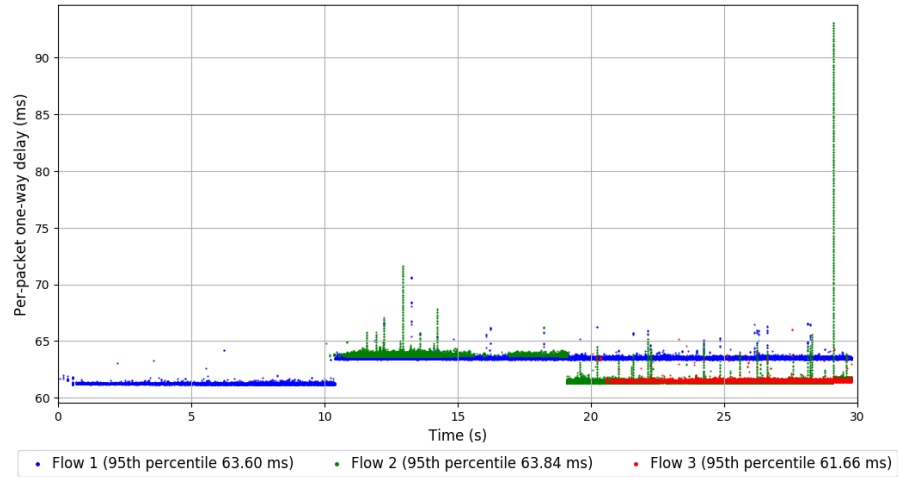
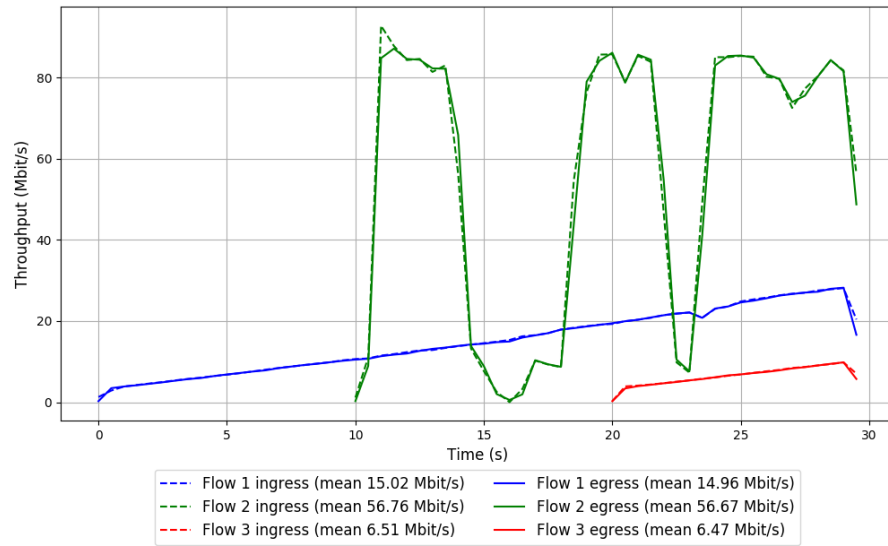
-- Flow 3:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 61.658 ms

Loss rate: 1.92%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-10 05:14:30

End at: 2018-01-10 05:15:00

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.97 Mbit/s

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

Loss rate: 0.35%

-- Flow 1:

Average throughput: 57.18 Mbit/s

95th percentile per-packet one-way delay: 63.560 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 64.96 Mbit/s

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

Loss rate: 0.06%

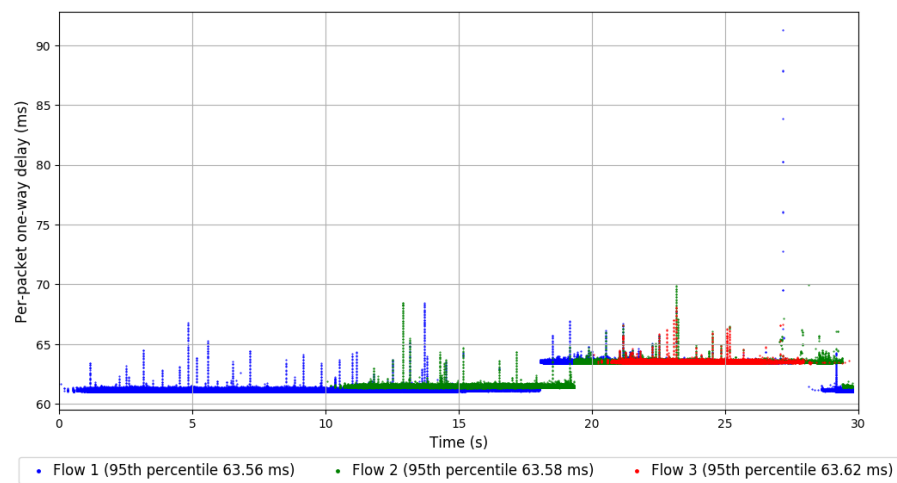
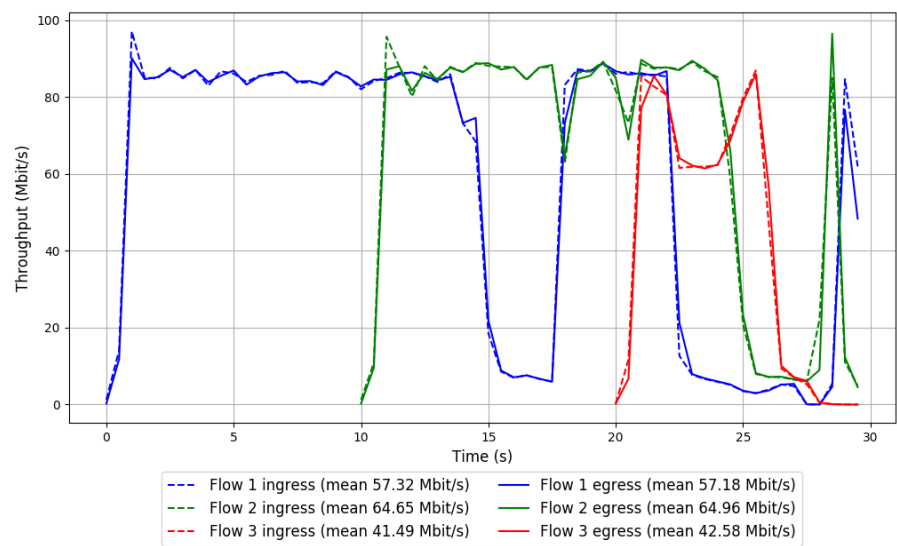
-- Flow 3:

Average throughput: 42.58 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-10 05:28:31

End at: 2018-01-10 05:29:01

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.53 Mbit/s

95th percentile per-packet one-way delay: 63.720 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 52.33 Mbit/s

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

Loss rate: 0.11%

-- Flow 2:

Average throughput: 56.13 Mbit/s

95th percentile per-packet one-way delay: 63.518 ms

Loss rate: 0.76%

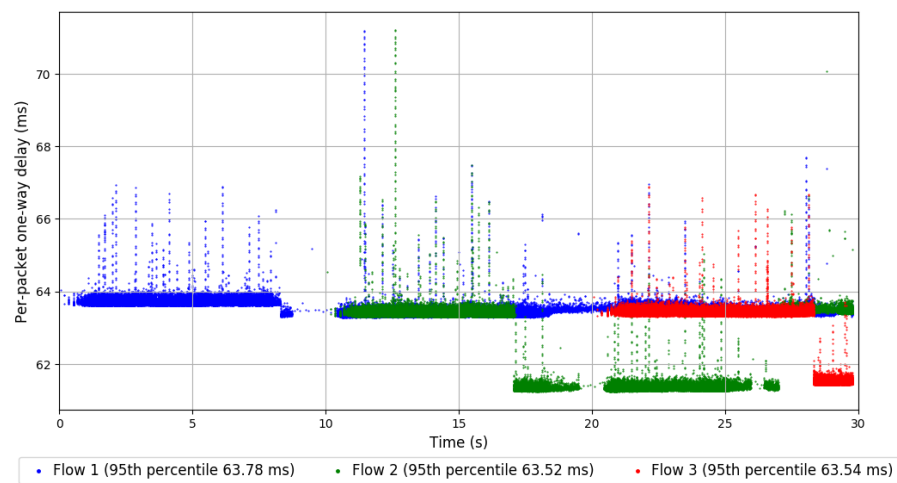
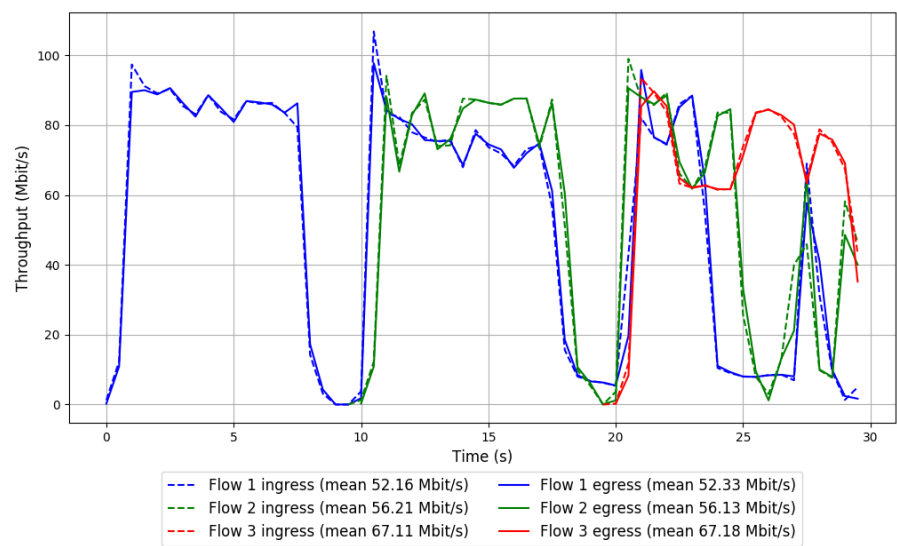
-- Flow 3:

Average throughput: 67.18 Mbit/s

95th percentile per-packet one-way delay: 63.542 ms

Loss rate: 1.18%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-10 05:43:07

End at: 2018-01-10 05:43:37

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.85 Mbit/s

95th percentile per-packet one-way delay: 63.601 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 46.74 Mbit/s

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

Loss rate: 0.59%

-- Flow 2:

Average throughput: 61.13 Mbit/s

95th percentile per-packet one-way delay: 61.494 ms

Loss rate: 0.09%

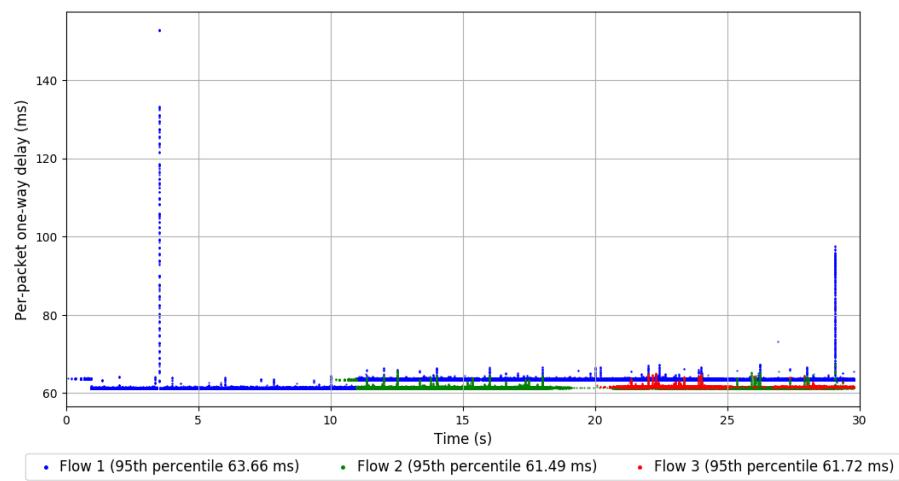
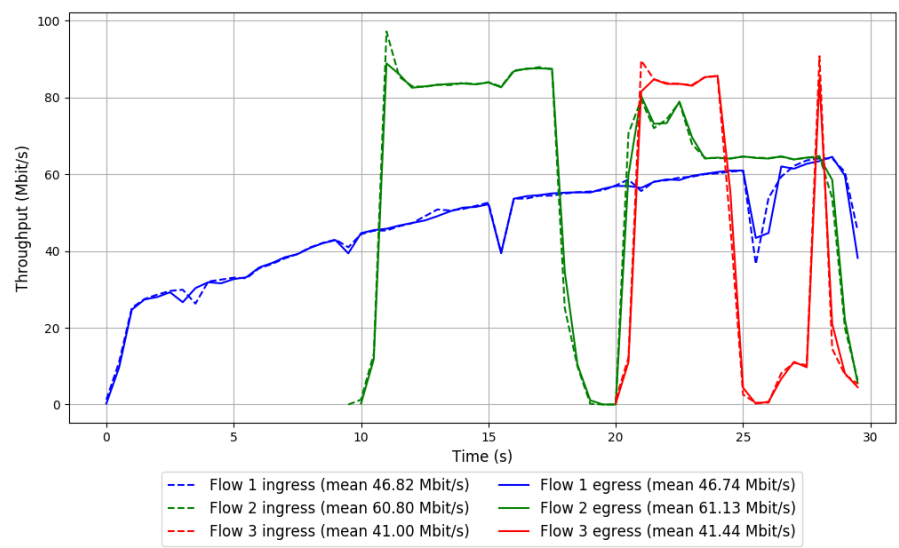
-- Flow 3:

Average throughput: 41.44 Mbit/s

95th percentile per-packet one-way delay: 61.722 ms

Loss rate: 0.22%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-10 05:57:11

End at: 2018-01-10 05:57:41

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.79 Mbit/s

95th percentile per-packet one-way delay: 63.634 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 59.98 Mbit/s

95th percentile per-packet one-way delay: 63.675 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 58.21 Mbit/s

95th percentile per-packet one-way delay: 61.821 ms

Loss rate: 0.72%

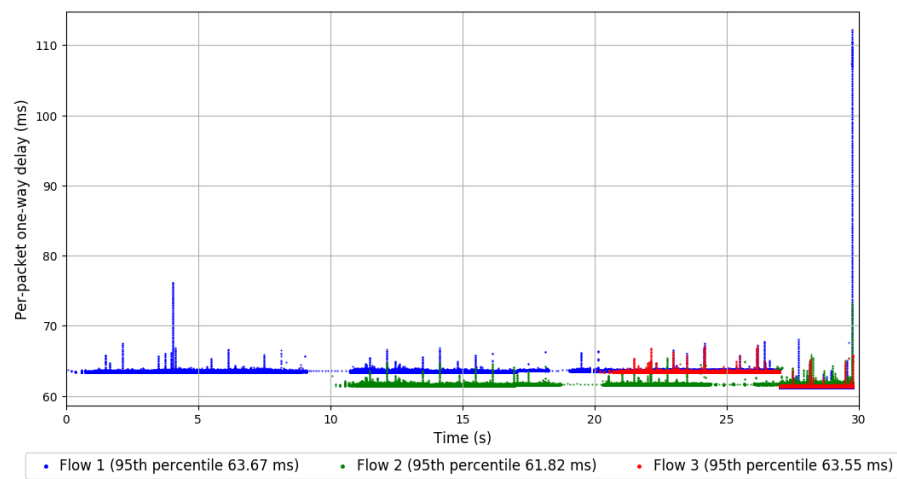
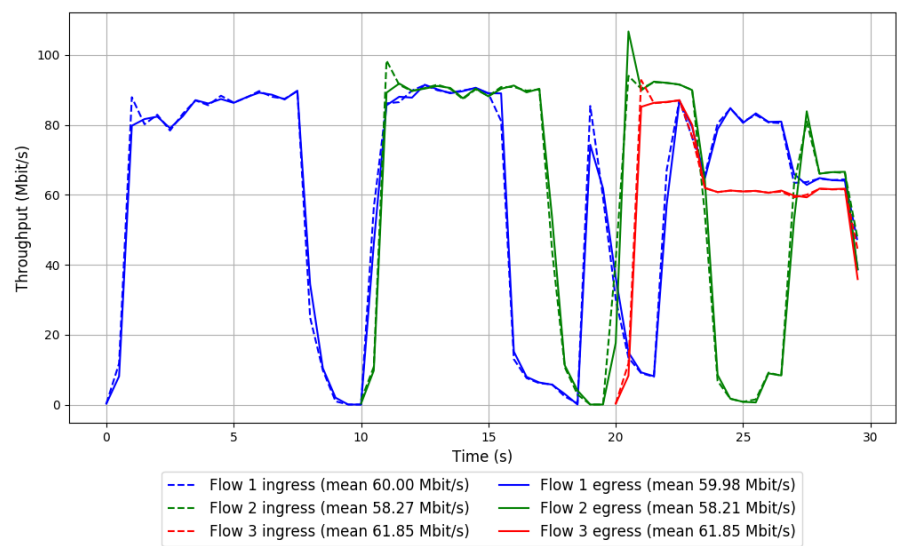
-- Flow 3:

Average throughput: 61.85 Mbit/s

95th percentile per-packet one-way delay: 63.553 ms

Loss rate: 1.30%

Run 9: Report of QUIC Cubic — Data Link

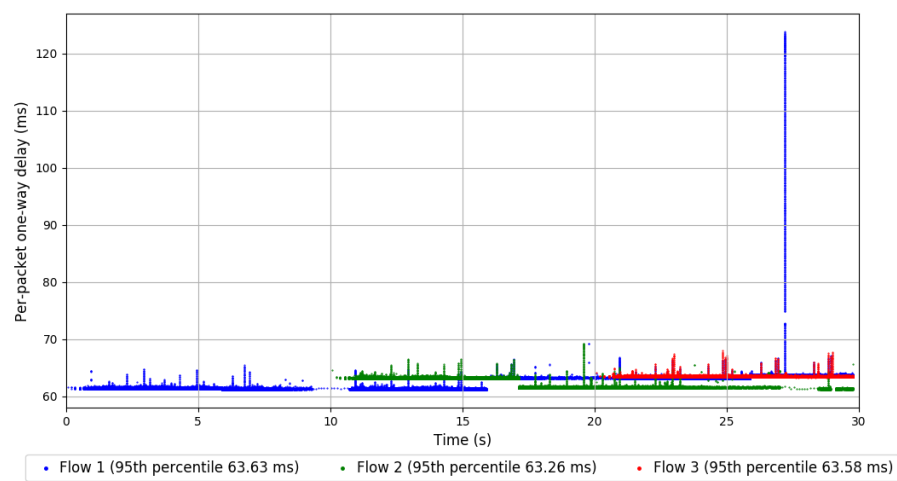
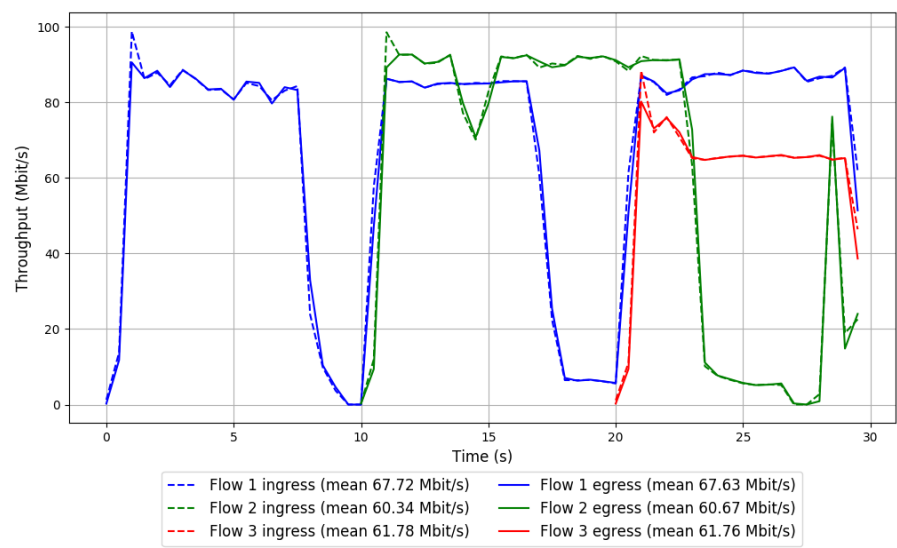


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-10 06:11:23
End at: 2018-01-10 06:11:53

# Below is generated by plot.py at 2018-01-10 09:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.02 Mbit/s
95th percentile per-packet one-way delay: 63.600 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 67.63 Mbit/s
95th percentile per-packet one-way delay: 63.630 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 60.67 Mbit/s
95th percentile per-packet one-way delay: 63.255 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 61.76 Mbit/s
95th percentile per-packet one-way delay: 63.579 ms
Loss rate: 1.32%
```

Run 10: Report of QUIC Cubic — Data Link

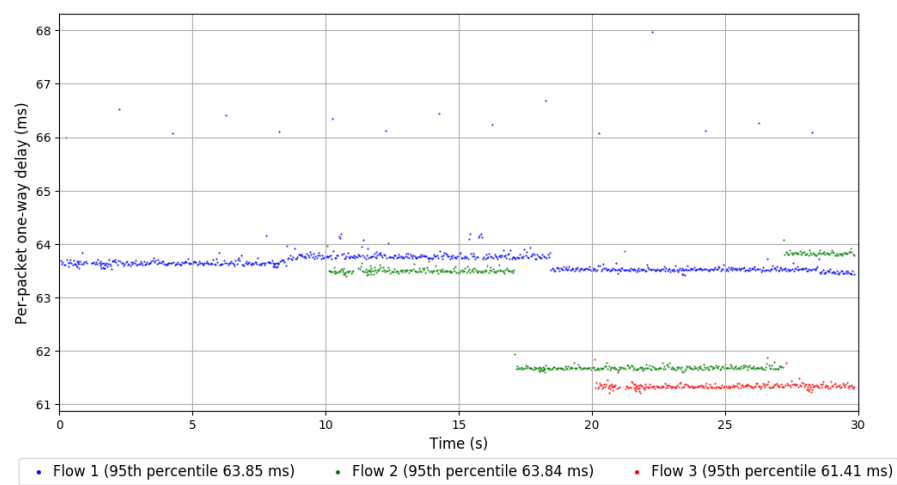
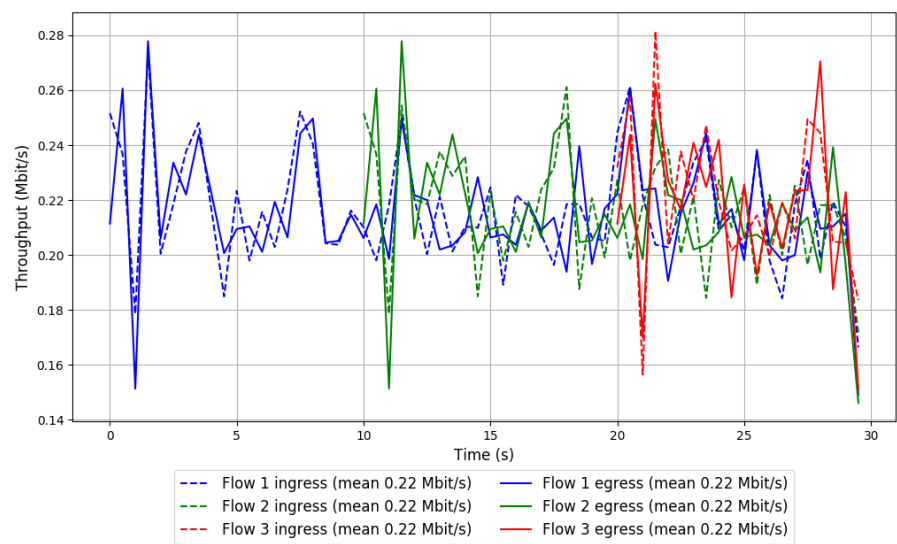


```
Run 1: Statistics of SReAM

Start at: 2018-01-10 04:00:21
End at: 2018-01-10 04:00:51

# Below is generated by plot.py at 2018-01-10 09:11:20
# 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: 63.851 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.838 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.411 ms
Loss rate: 1.10%
```

Run 1: Report of SReAM — Data Link

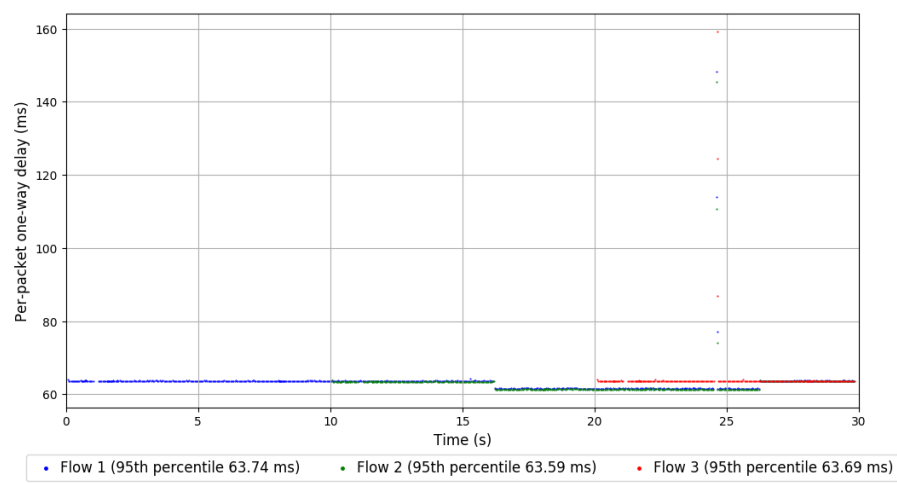
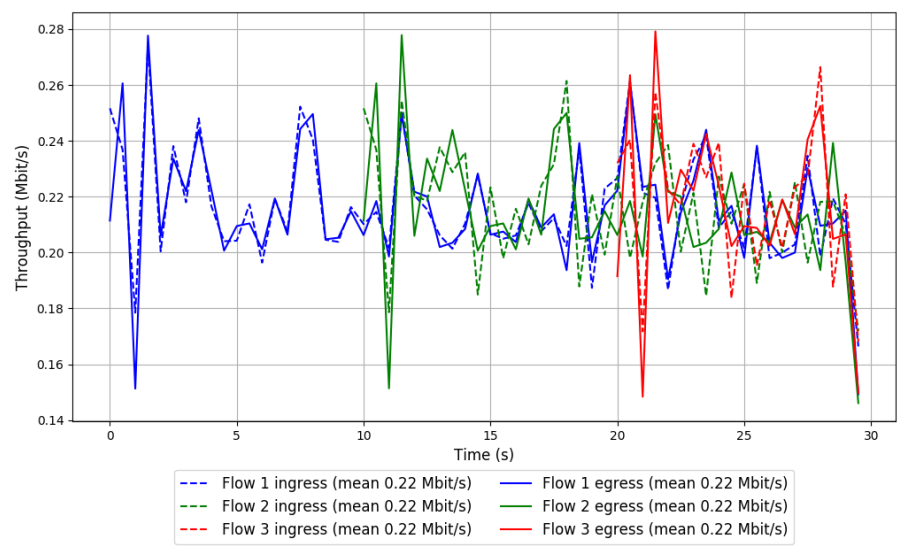


```
Run 2: Statistics of SCReAM

Start at: 2018-01-10 04:14:42
End at: 2018-01-10 04:15:12

# Below is generated by plot.py at 2018-01-10 09:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.722 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.743 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.594 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.688 ms
Loss rate: 1.15%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2018-01-10 04:28:44

End at: 2018-01-10 04:29:14

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.41 Mbit/s

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

Loss rate: 0.50%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.717 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.63%

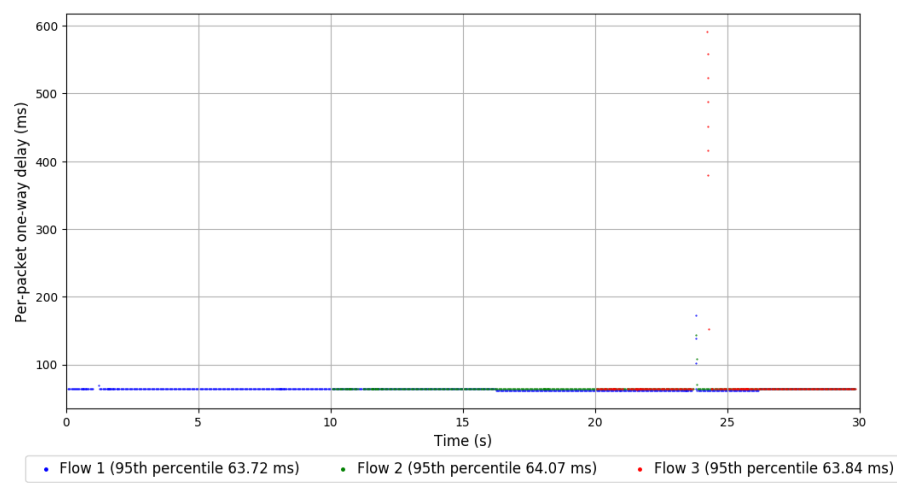
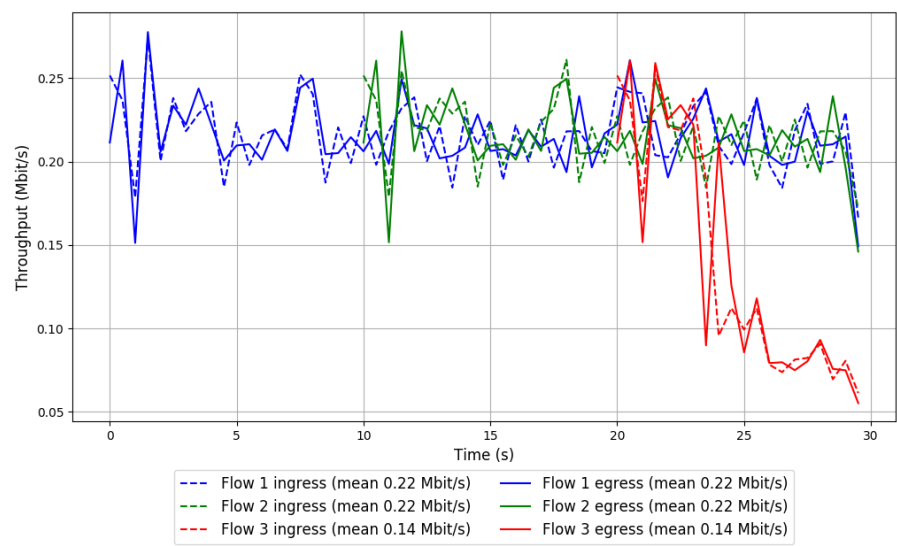
-- Flow 3:

Average throughput: 0.14 Mbit/s

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

Loss rate: 0.63%

Run 3: Report of SReAM — Data Link

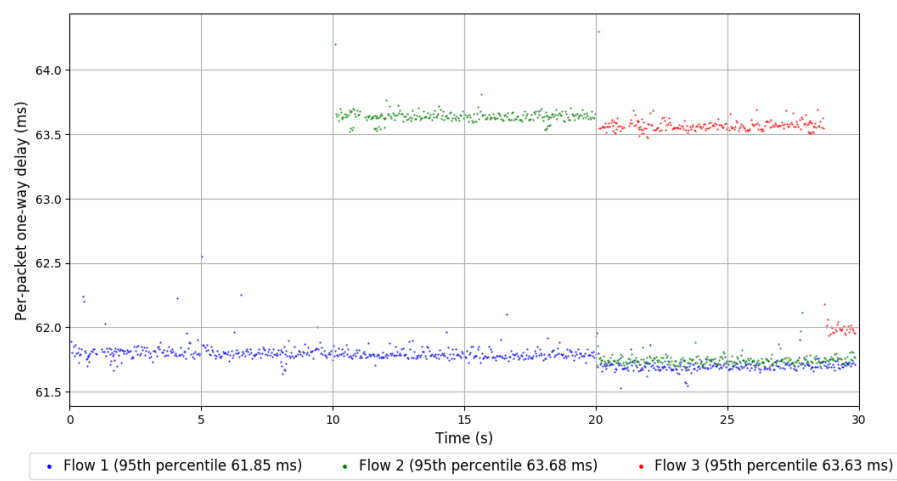
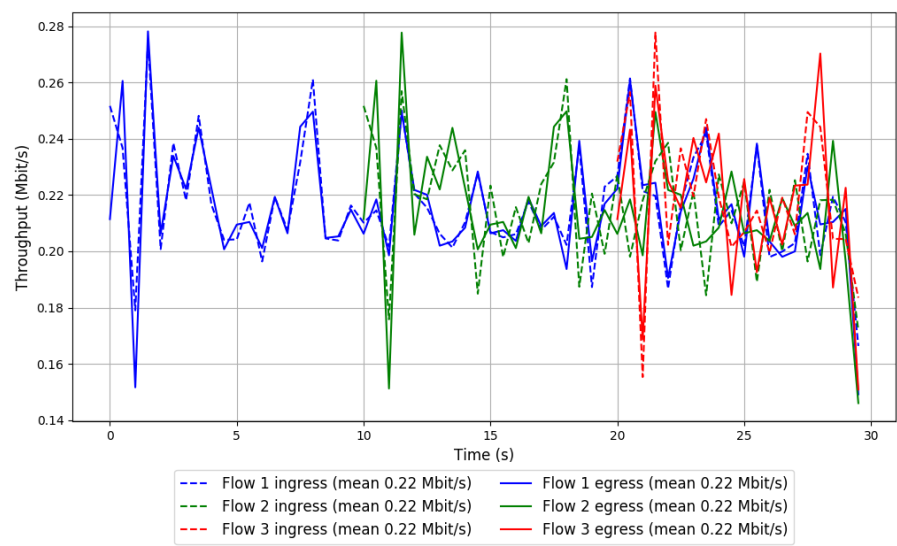


```
Run 4: Statistics of SReAM

Start at: 2018-01-10 04:43:00
End at: 2018-01-10 04:43:30

# Below is generated by plot.py at 2018-01-10 09:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.656 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.853 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.679 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.628 ms
Loss rate: 1.10%
```

Run 4: Report of SReAM — Data Link

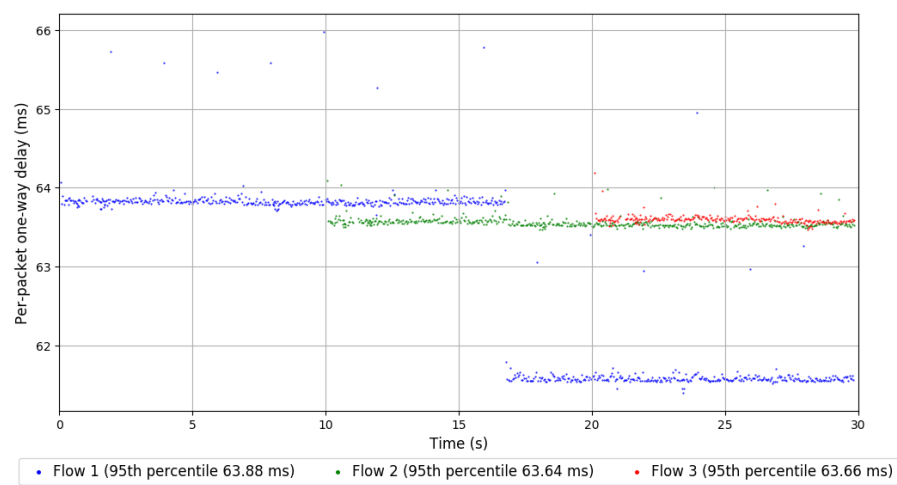
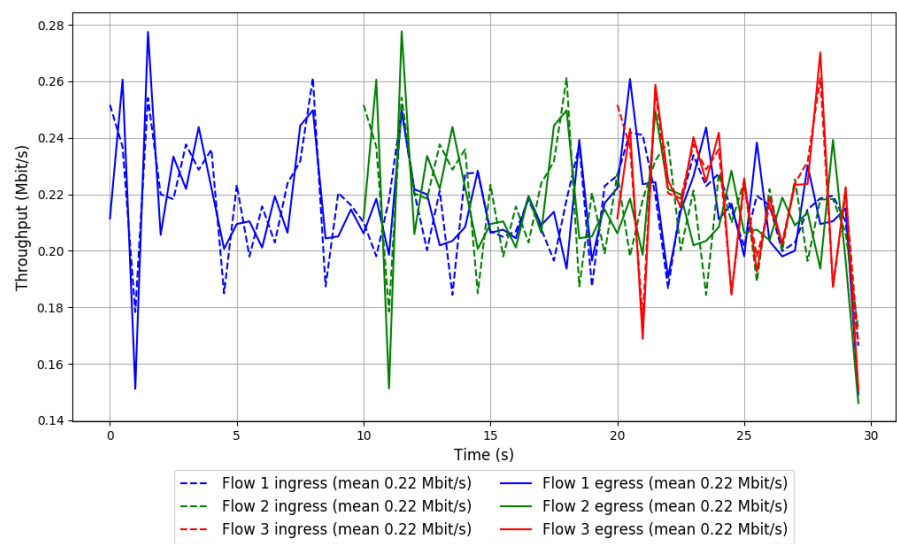


```
Run 5: Statistics of SReAM

Start at: 2018-01-10 04:57:23
End at: 2018-01-10 04:57:53

# Below is generated by plot.py at 2018-01-10 09:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.862 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.878 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.641 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.660 ms
Loss rate: 1.10%
```

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-10 05:11:24

End at: 2018-01-10 05:11:54

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.63%

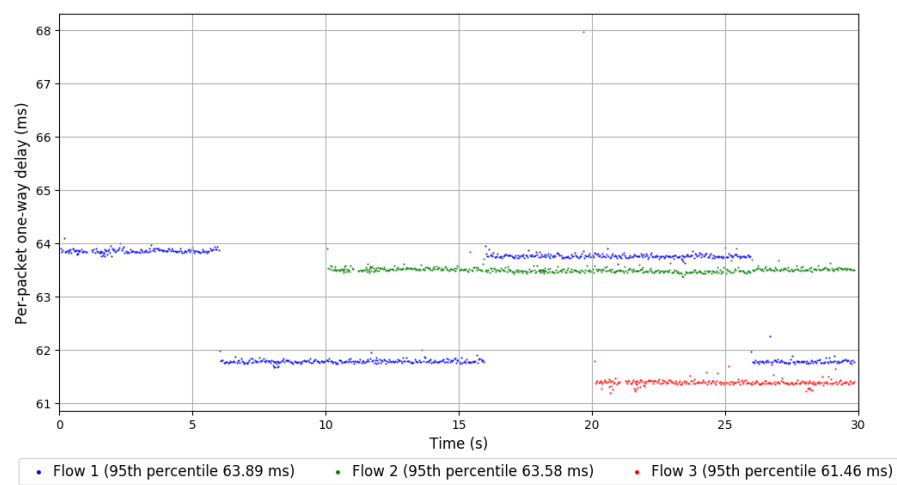
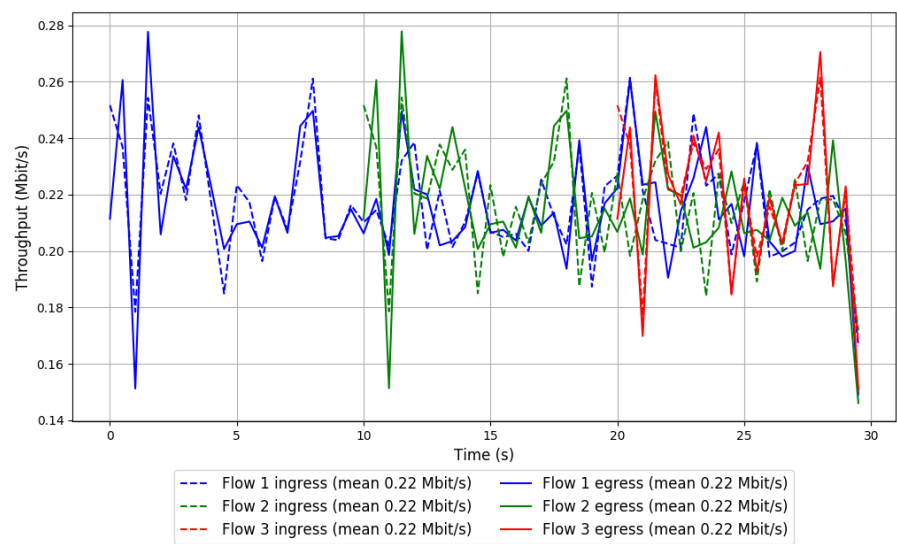
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.460 ms

Loss rate: 1.10%

Run 6: Report of SReAM — Data Link

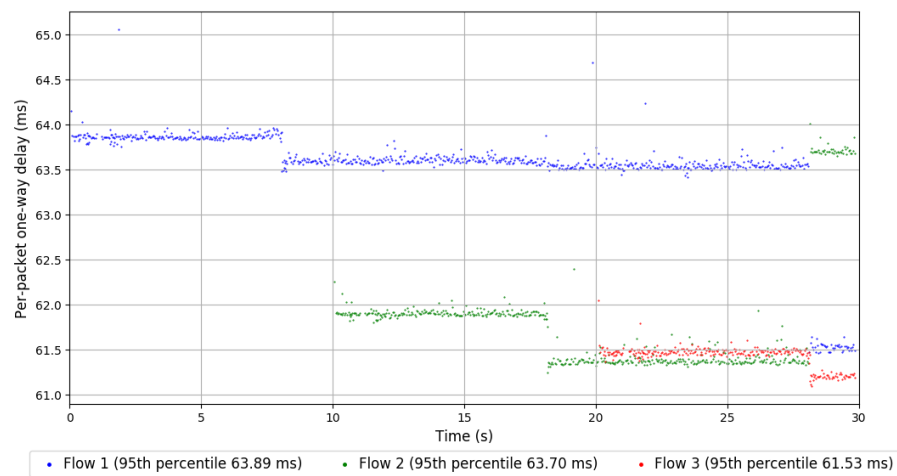
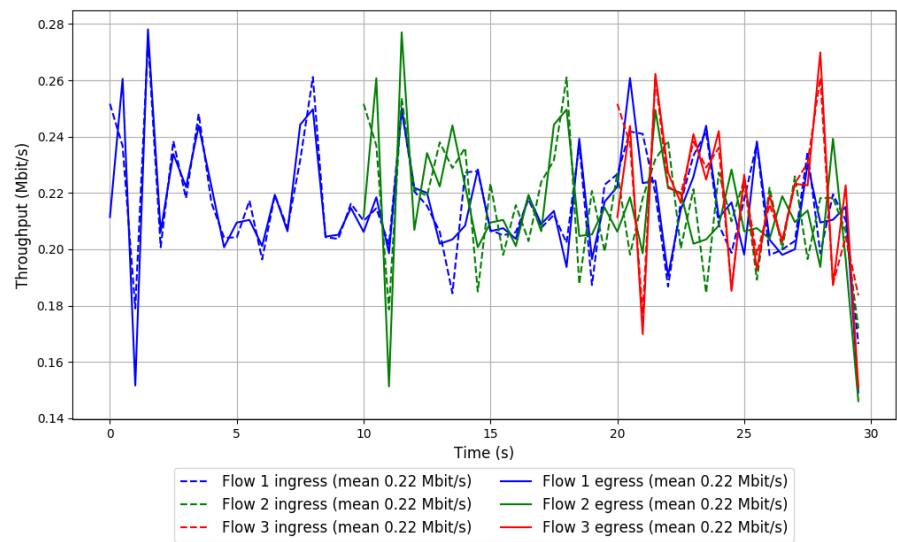


```
Run 7: Statistics of SReAM

Start at: 2018-01-10 05:25:22
End at: 2018-01-10 05:25:52

# Below is generated by plot.py at 2018-01-10 09:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.871 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.891 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.699 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.528 ms
Loss rate: 1.10%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-01-10 05:39:58

End at: 2018-01-10 05:40:28

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 63.813 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.624 ms

Loss rate: 0.63%

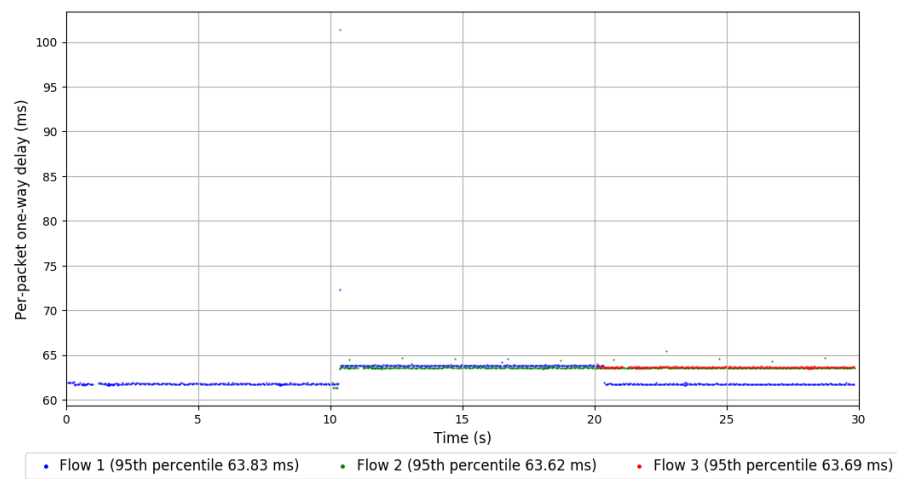
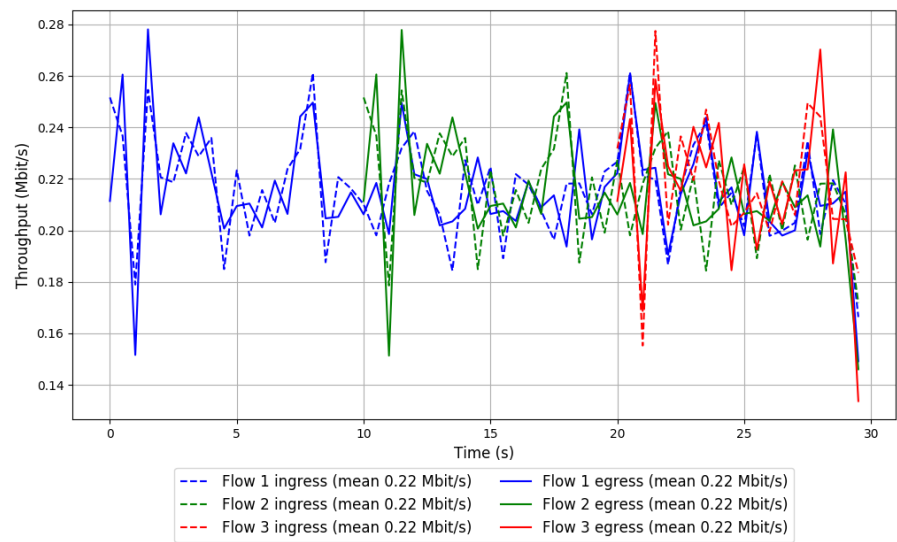
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.692 ms

Loss rate: 1.50%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-01-10 05:53:59

End at: 2018-01-10 05:54:29

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 63.652 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 63.594 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.574 ms

Loss rate: 0.63%

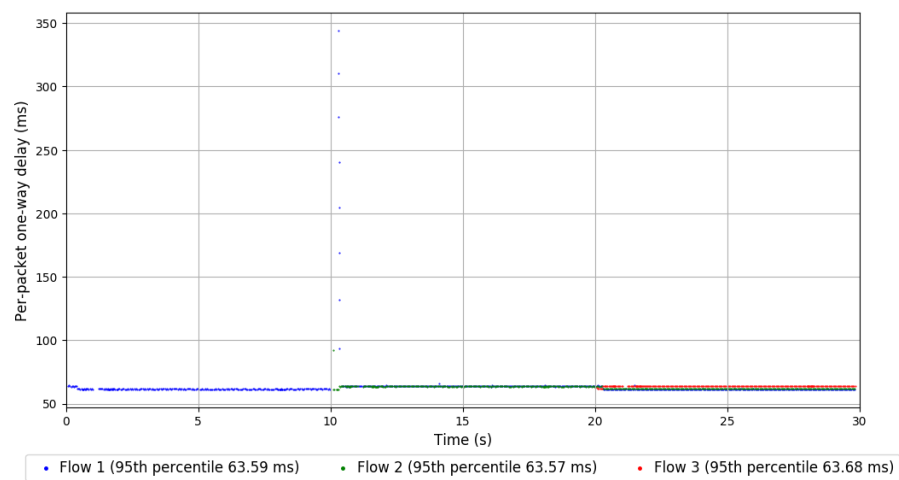
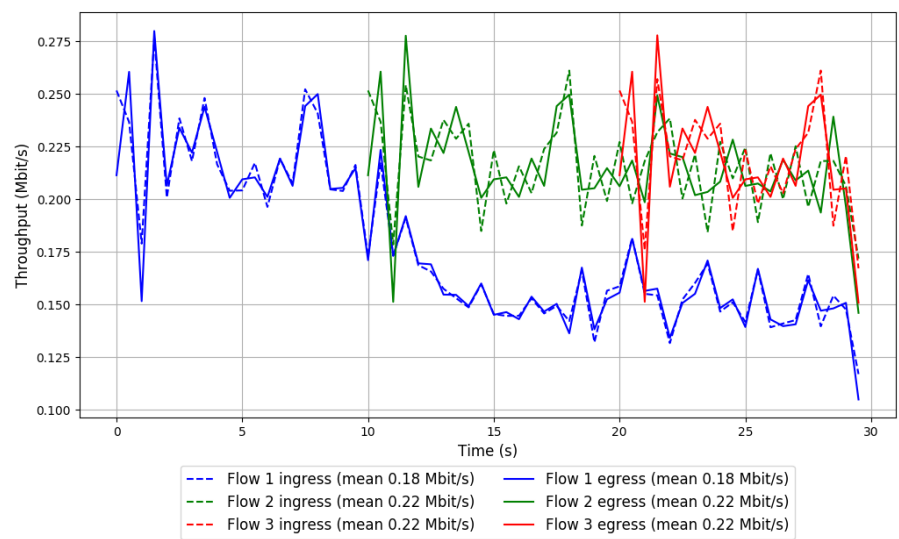
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.679 ms

Loss rate: 1.10%

Run 9: Report of SReAM — Data Link

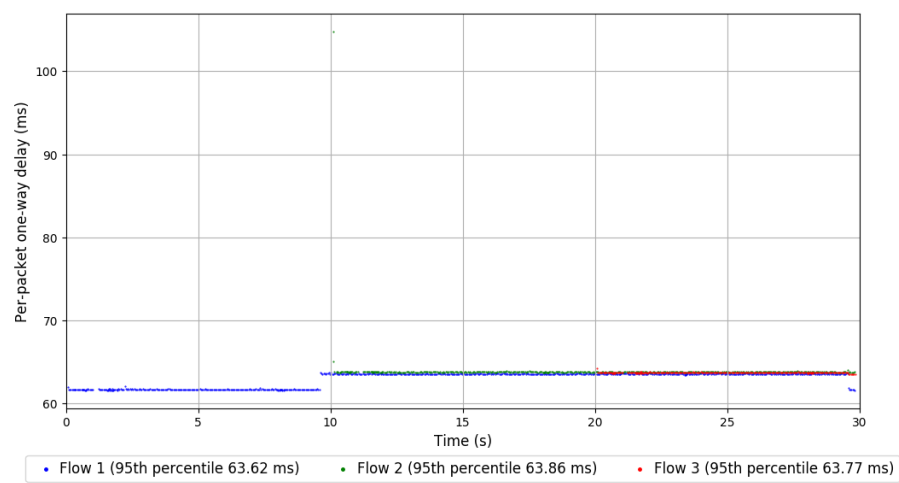
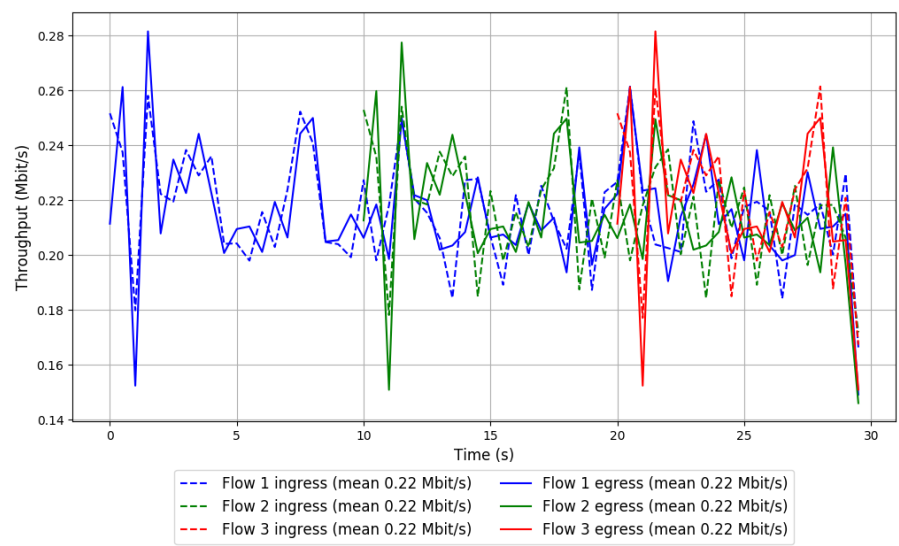


```
Run 10: Statistics of SReAM

Start at: 2018-01-10 06:08:10
End at: 2018-01-10 06:08:40

# Below is generated by plot.py at 2018-01-10 09:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.834 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.621 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.859 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.773 ms
Loss rate: 1.10%
```

Run 10: Report of SReAM — Data Link

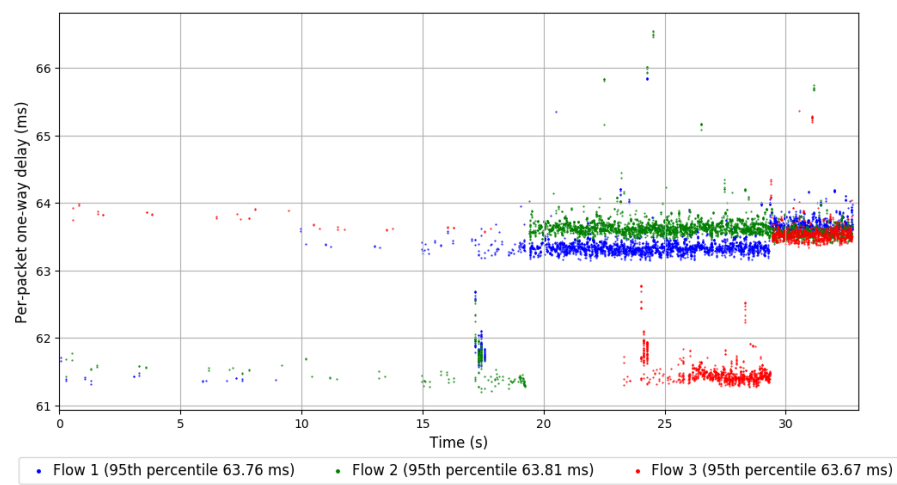
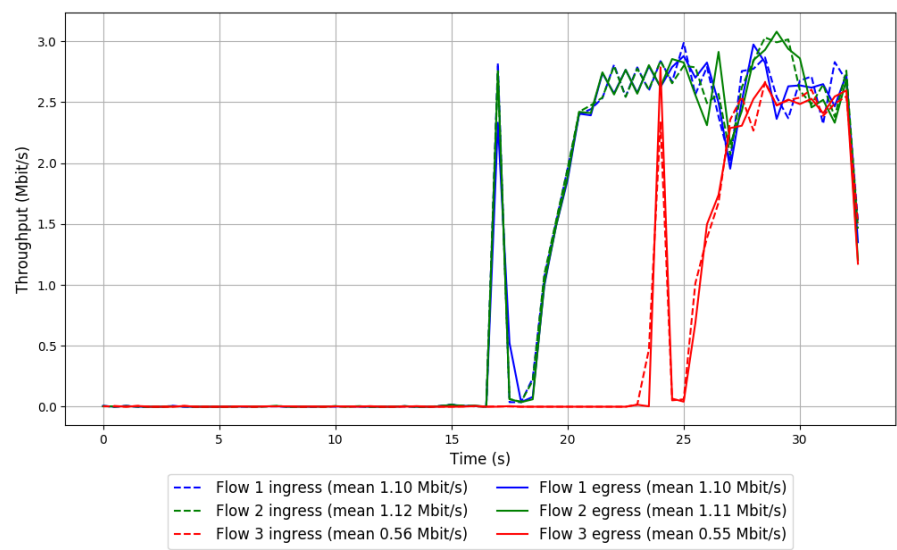


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-10 04:02:53
End at: 2018-01-10 04:03:23

# Below is generated by plot.py at 2018-01-10 09:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.74 Mbit/s
95th percentile per-packet one-way delay: 63.777 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 1.10 Mbit/s
95th percentile per-packet one-way delay: 63.762 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 63.810 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 63.669 ms
Loss rate: 1.53%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-10 04:17:12

End at: 2018-01-10 04:17:42

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.07 Mbit/s

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

Loss rate: 0.69%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 63.774 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.649 ms

Loss rate: 0.86%

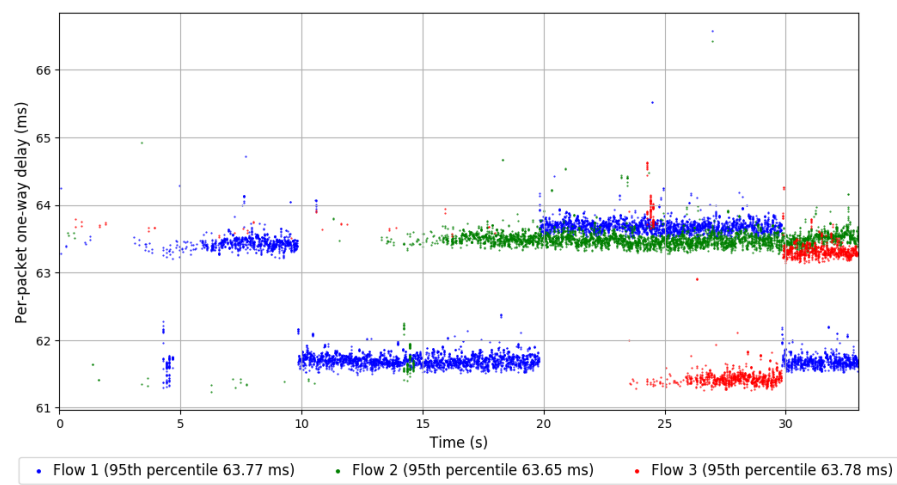
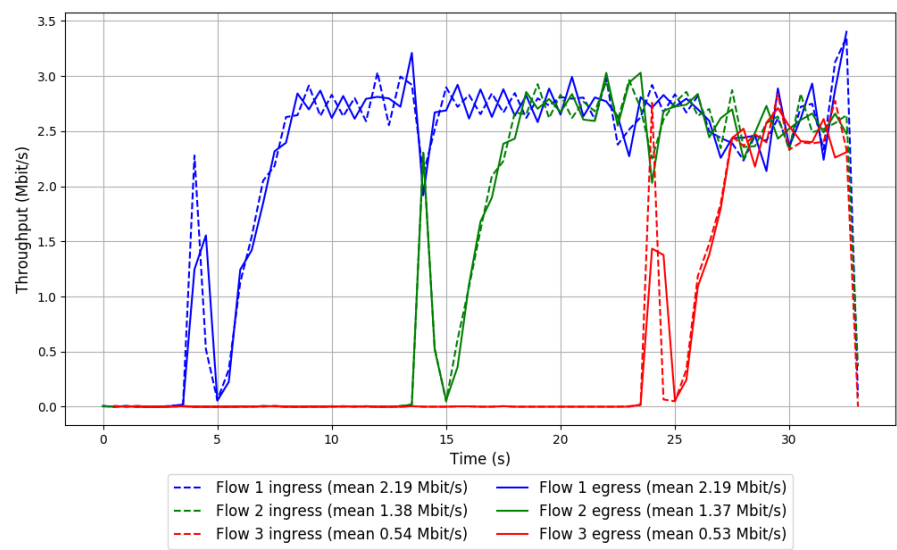
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 63.776 ms

Loss rate: 1.55%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-10 04:31:14

End at: 2018-01-10 04:31:44

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 63.736 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.243 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.801 ms

Loss rate: 0.59%

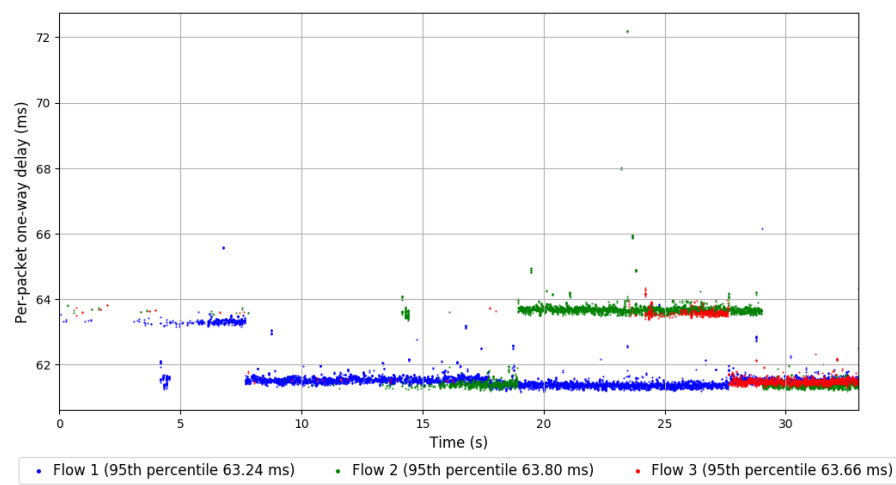
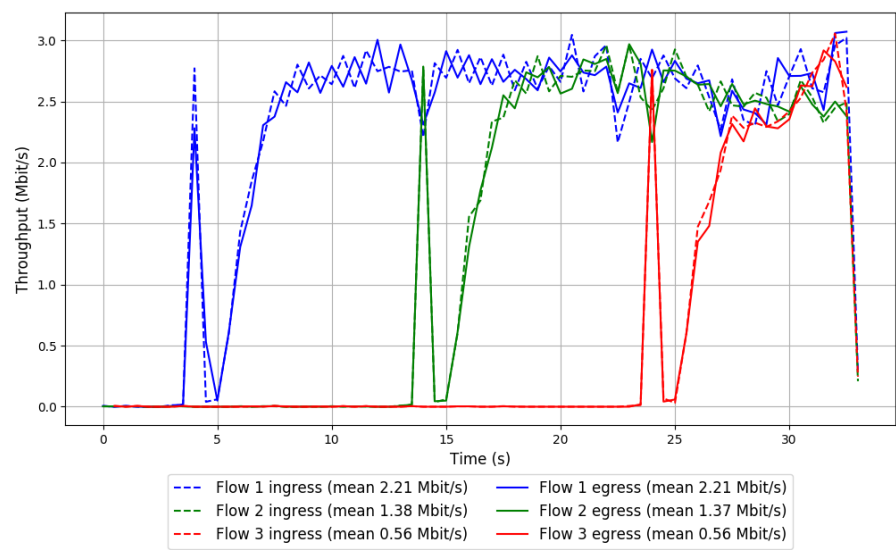
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.661 ms

Loss rate: 1.58%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-10 04:45:30

End at: 2018-01-10 04:46:00

Below is generated by plot.py at 2018-01-10 09:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 63.972 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.899 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.746 ms

Loss rate: 0.53%

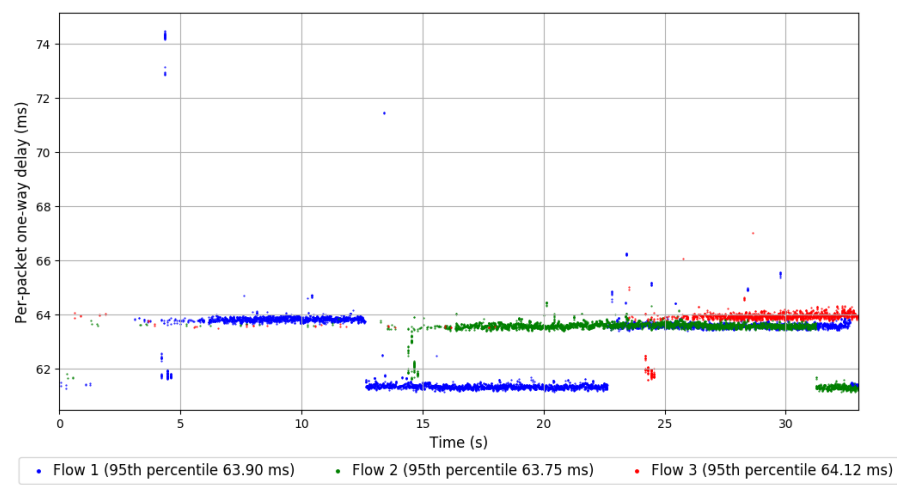
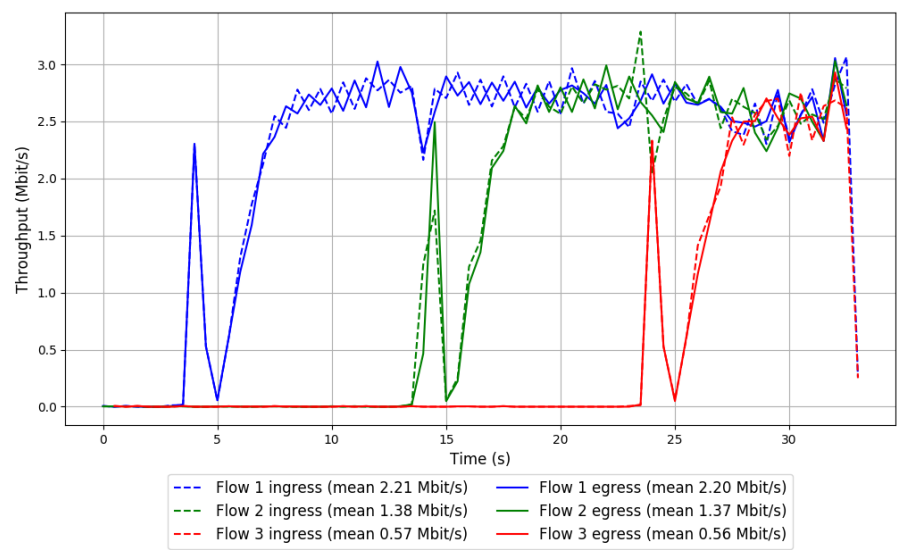
-- Flow 3:

Average throughput: 0.56 Mbit/s

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

Loss rate: 1.95%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-10 04:59:48

End at: 2018-01-10 05:00:18

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.09 Mbit/s

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

Loss rate: 0.93%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.768 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.785 ms

Loss rate: 0.97%

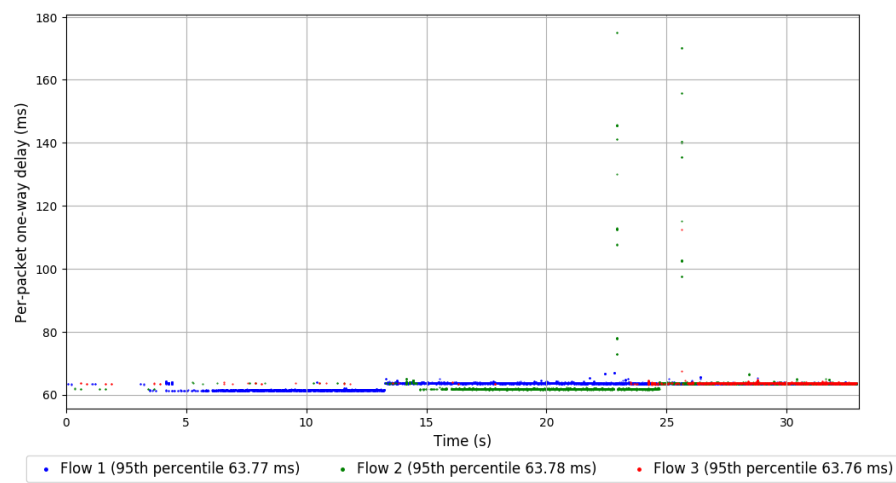
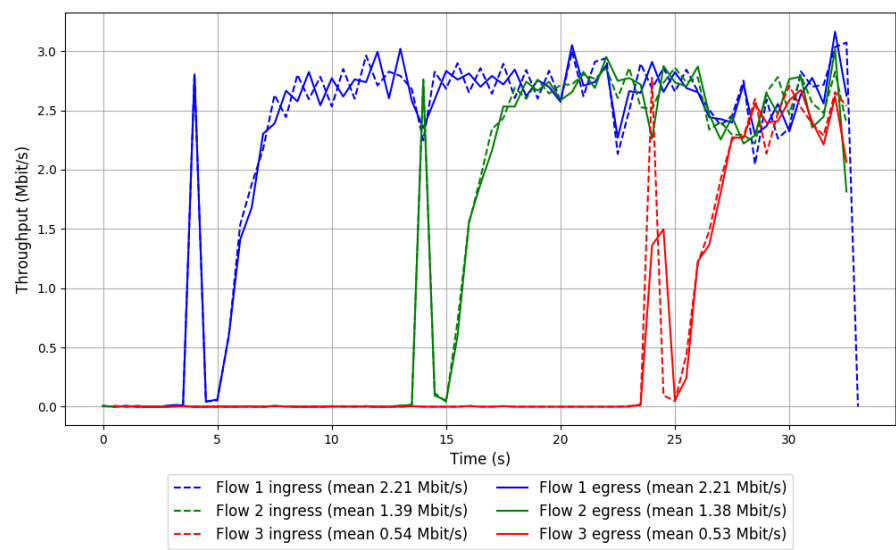
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 63.757 ms

Loss rate: 2.30%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-10 05:13:49

End at: 2018-01-10 05:14:19

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 63.984 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 2.20 Mbit/s

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

Loss rate: 0.53%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 64.026 ms

Loss rate: 0.68%

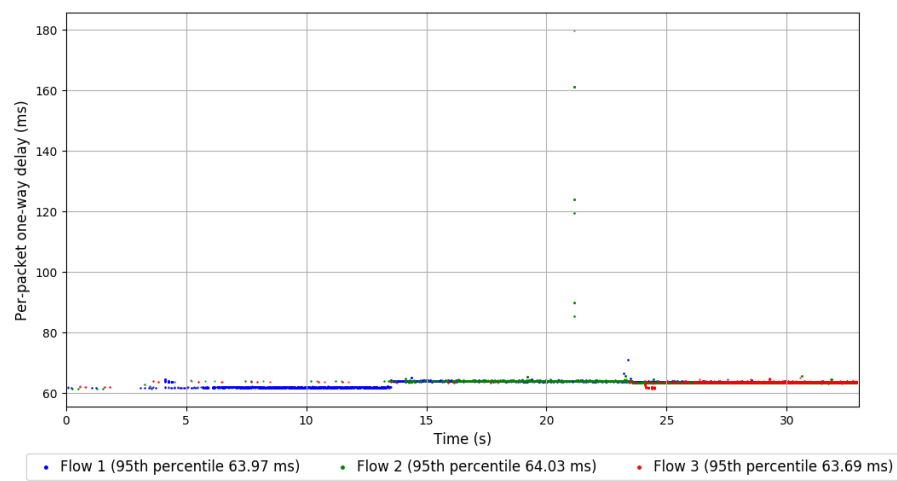
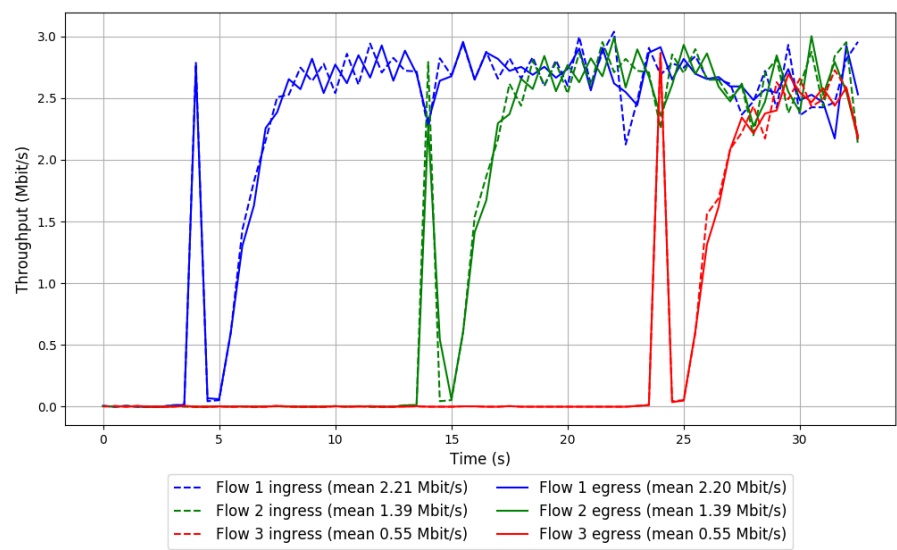
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.690 ms

Loss rate: 1.33%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-10 05:27:50

End at: 2018-01-10 05:28:20

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.13 Mbit/s

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

Loss rate: 0.70%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.915 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.726 ms

Loss rate: 0.60%

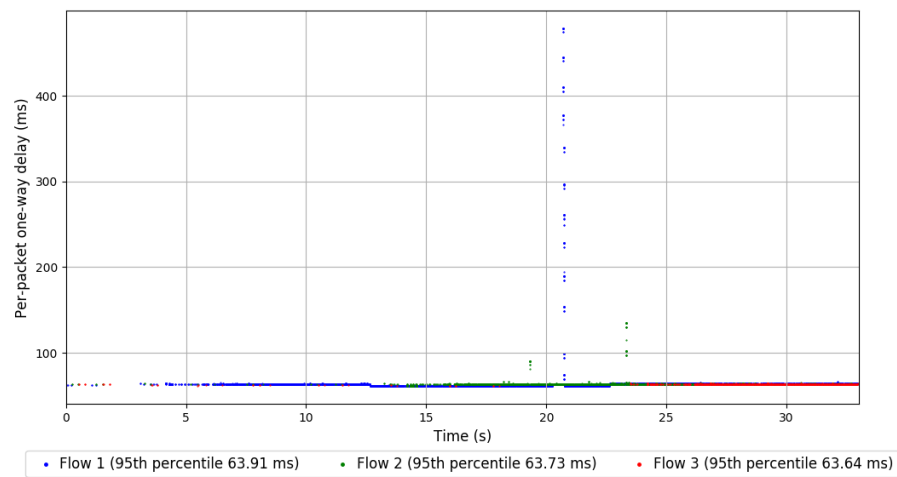
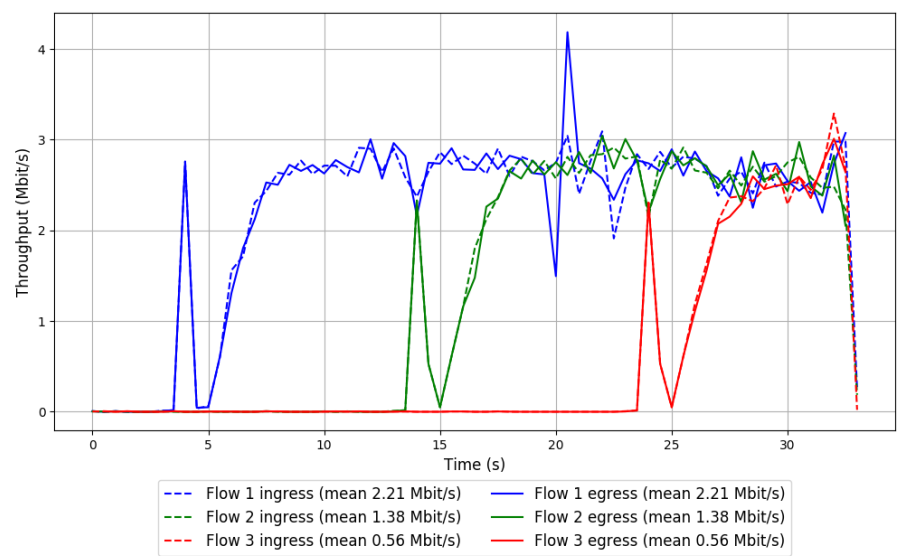
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.643 ms

Loss rate: 1.65%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-10 05:42:26

End at: 2018-01-10 05:42:56

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 63.569 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.571 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.427 ms

Loss rate: 0.65%

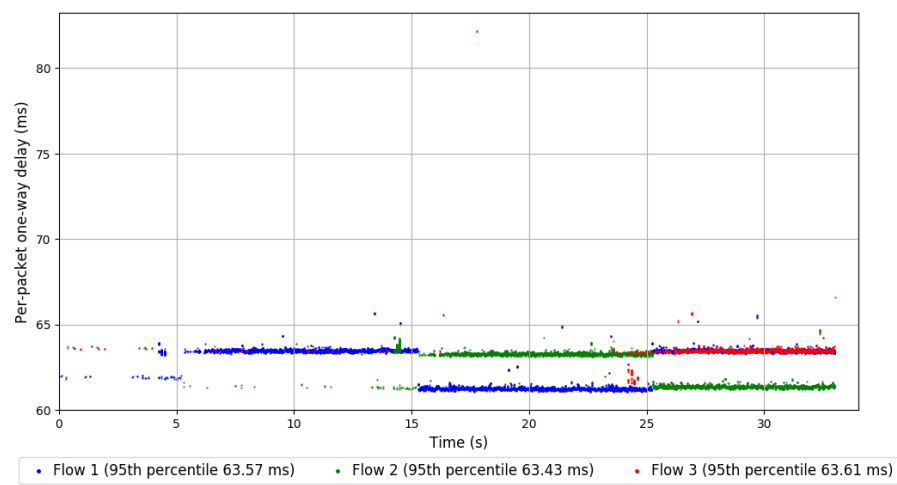
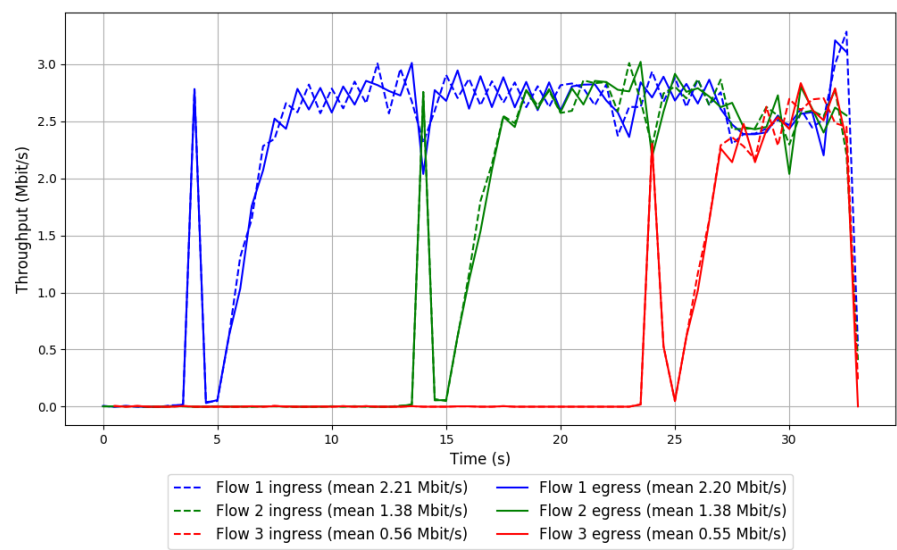
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.614 ms

Loss rate: 1.51%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-10 05:56:30

End at: 2018-01-10 05:57:00

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 63.616 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 2.20 Mbit/s

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

Loss rate: 0.52%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 63.609 ms

Loss rate: 0.45%

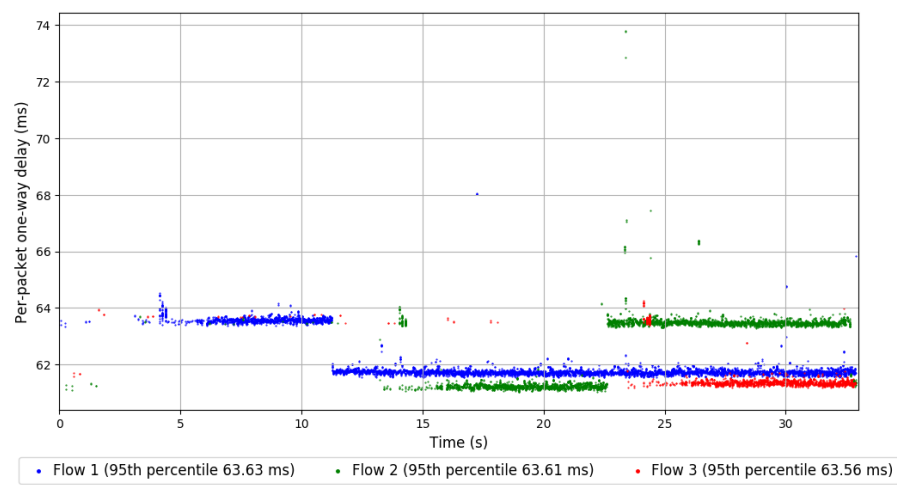
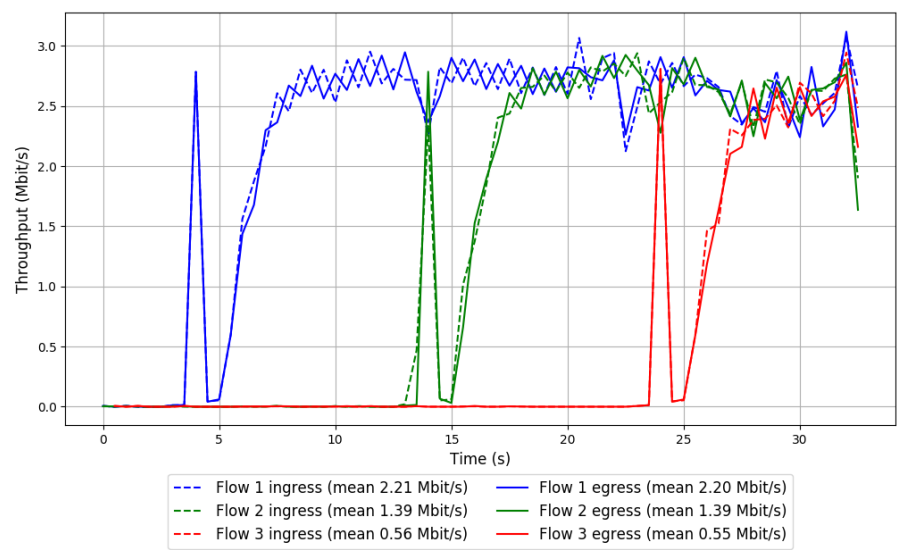
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.556 ms

Loss rate: 2.10%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-10 06:10:41

End at: 2018-01-10 06:11:11

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.09 Mbit/s

95th percentile per-packet one-way delay: 64.026 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 64.069 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.689 ms

Loss rate: 0.63%

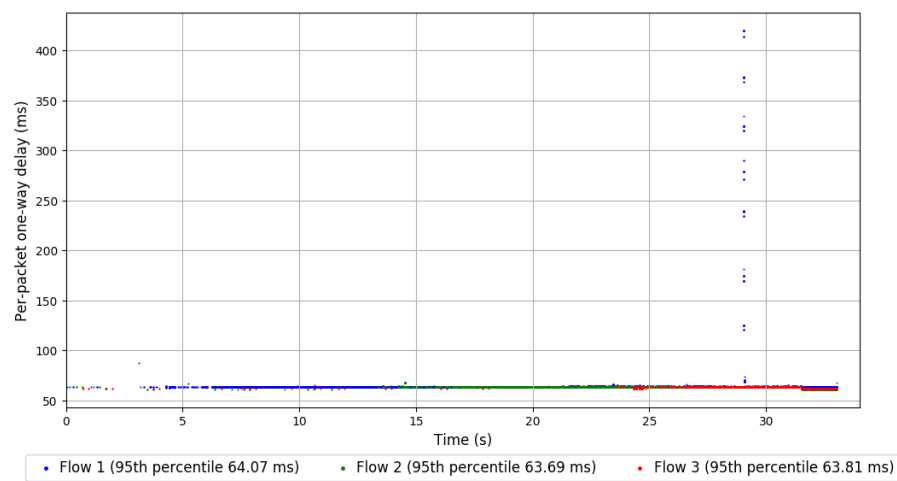
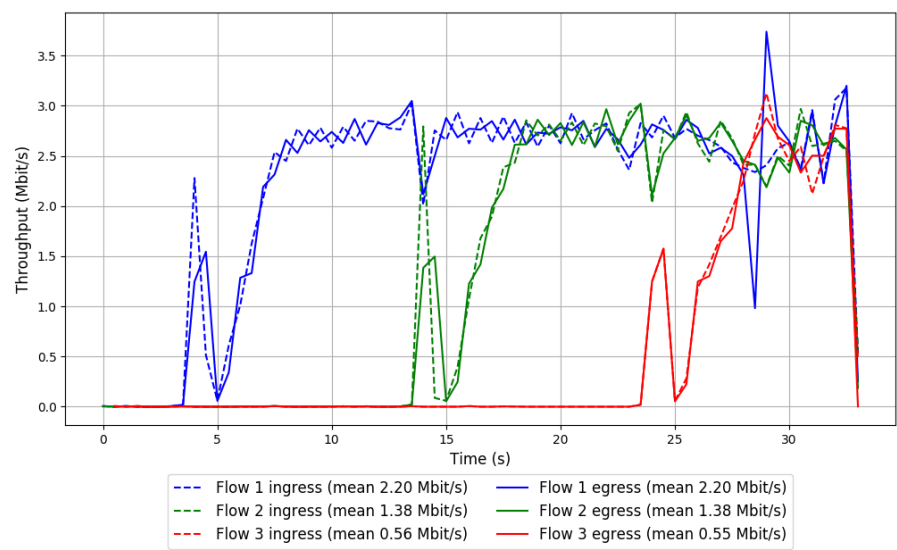
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.811 ms

Loss rate: 1.94%

Run 10: Report of WebRTC media — Data Link

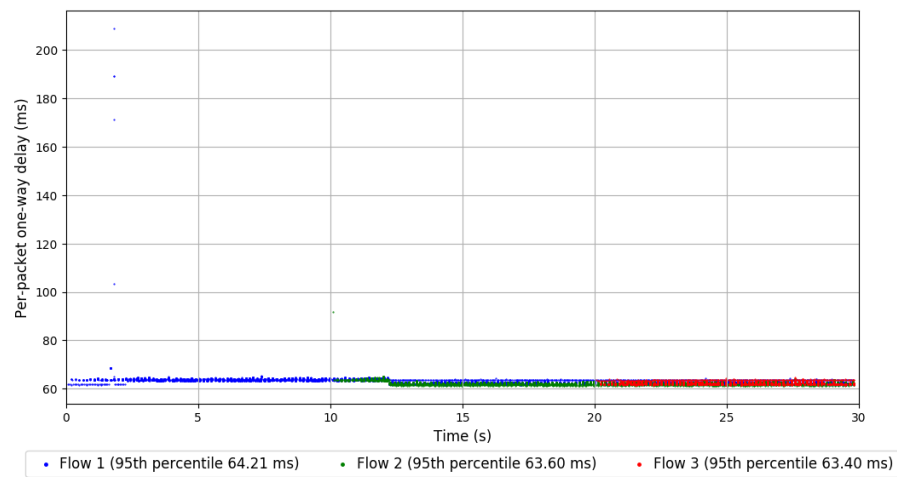
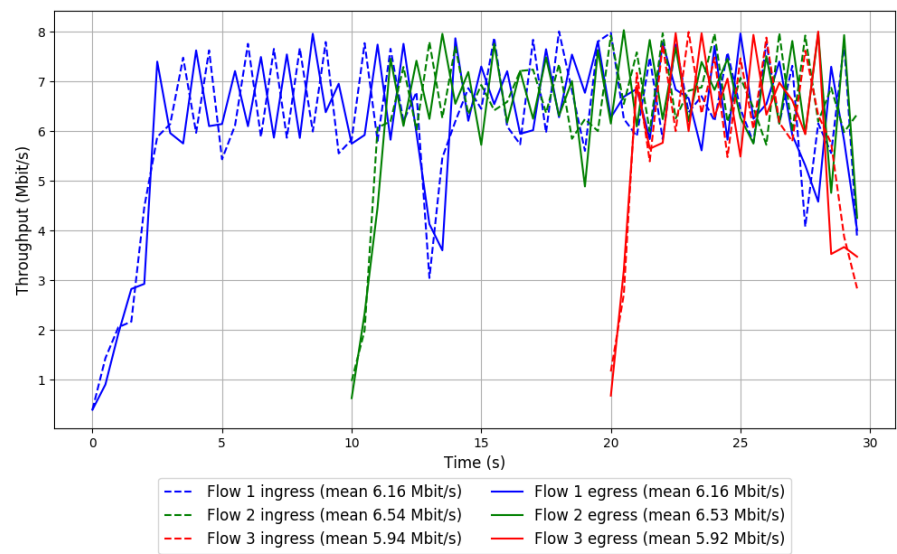


```
Run 1: Statistics of Sprout

Start at: 2018-01-10 03:54:07
End at: 2018-01-10 03:54:37

# Below is generated by plot.py at 2018-01-10 09:11:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.41 Mbit/s
95th percentile per-packet one-way delay: 64.090 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 64.210 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 63.605 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 63.396 ms
Loss rate: 1.53%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-10 04:08:41

End at: 2018-01-10 04:09:11

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.12 Mbit/s

95th percentile per-packet one-way delay: 62.809 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 62.691 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 63.053 ms

Loss rate: 0.66%

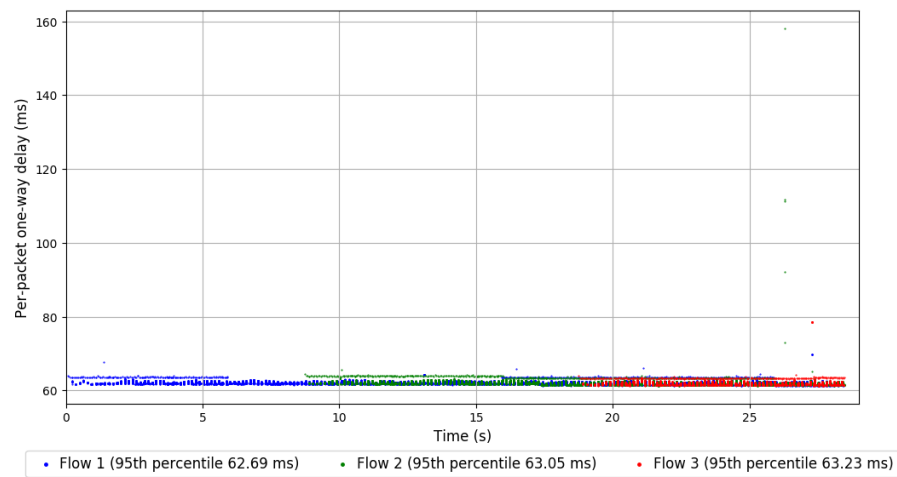
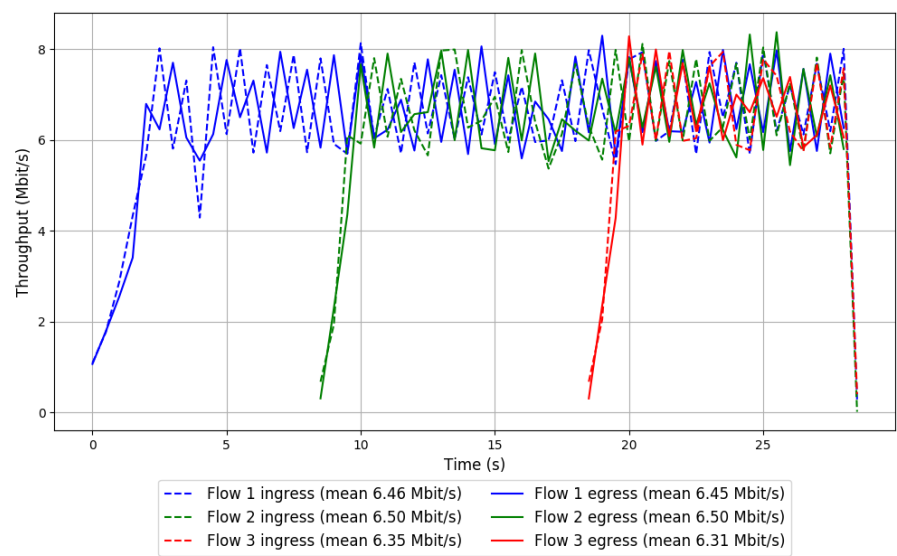
-- Flow 3:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 63.228 ms

Loss rate: 1.74%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-10 04:22:54

End at: 2018-01-10 04:23:24

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.07 Mbit/s

95th percentile per-packet one-way delay: 62.624 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 62.605 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 62.549 ms

Loss rate: 0.10%

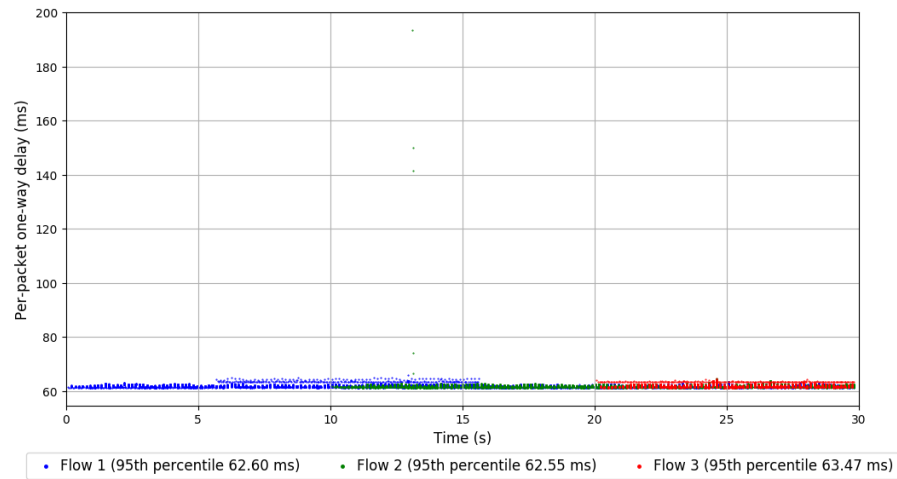
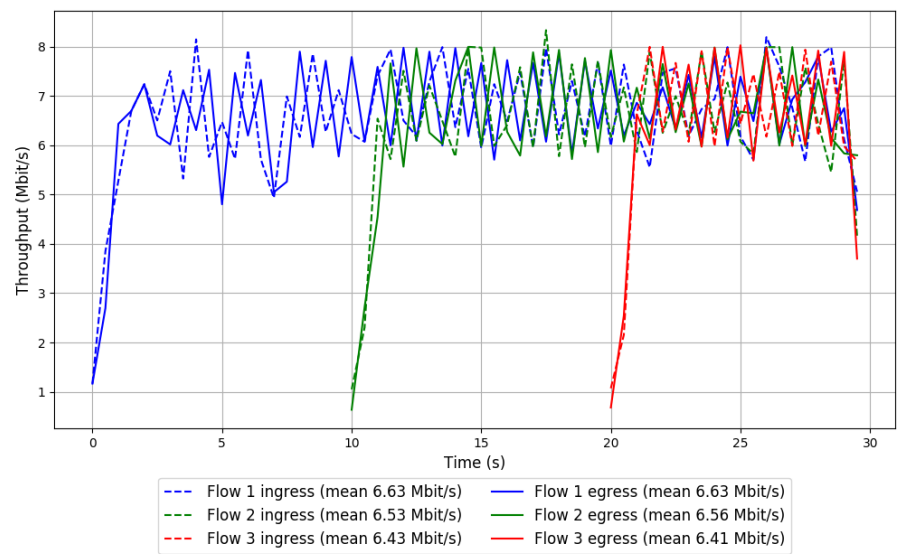
-- Flow 3:

Average throughput: 6.41 Mbit/s

95th percentile per-packet one-way delay: 63.470 ms

Loss rate: 1.56%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-10 04:37:07

End at: 2018-01-10 04:37:37

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.91 Mbit/s

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

Loss rate: 0.52%

-- Flow 1:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 64.806 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.54 Mbit/s

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

Loss rate: 0.77%

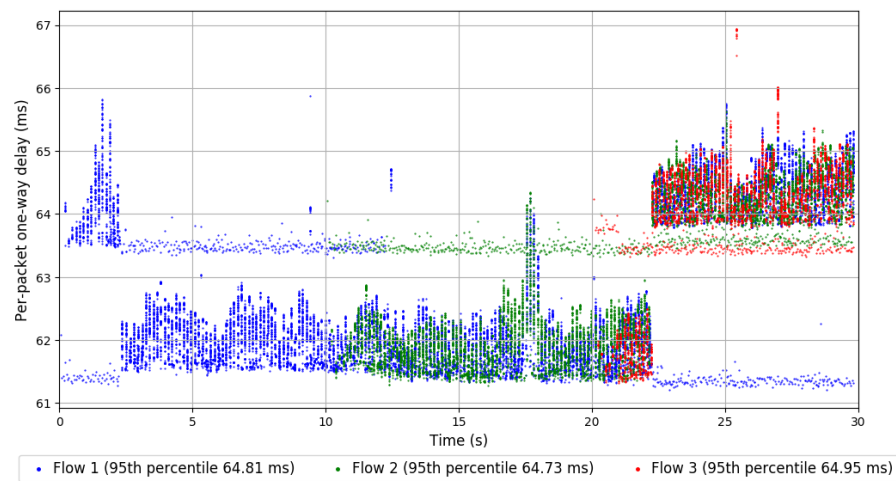
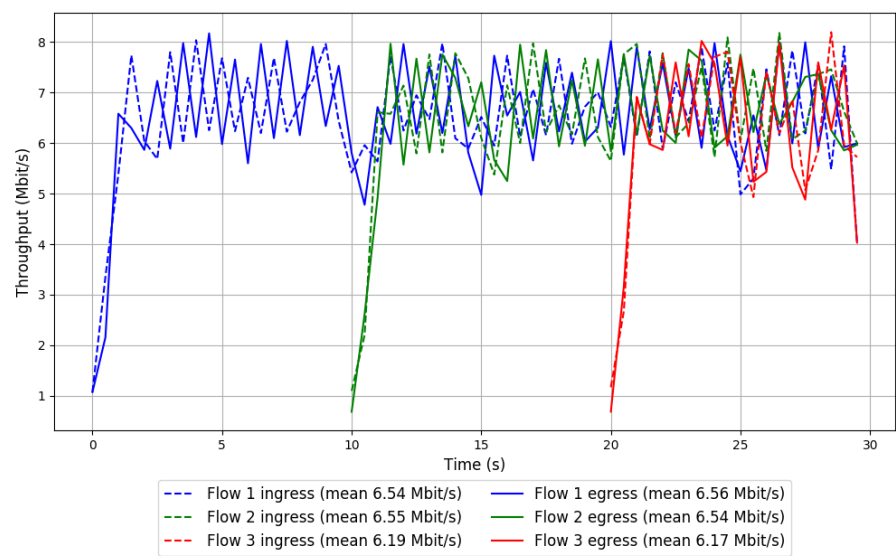
-- Flow 3:

Average throughput: 6.17 Mbit/s

95th percentile per-packet one-way delay: 64.954 ms

Loss rate: 1.67%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-10 04:51:13

End at: 2018-01-10 04:51:43

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.61 Mbit/s

95th percentile per-packet one-way delay: 64.623 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 64.666 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 64.596 ms

Loss rate: 0.70%

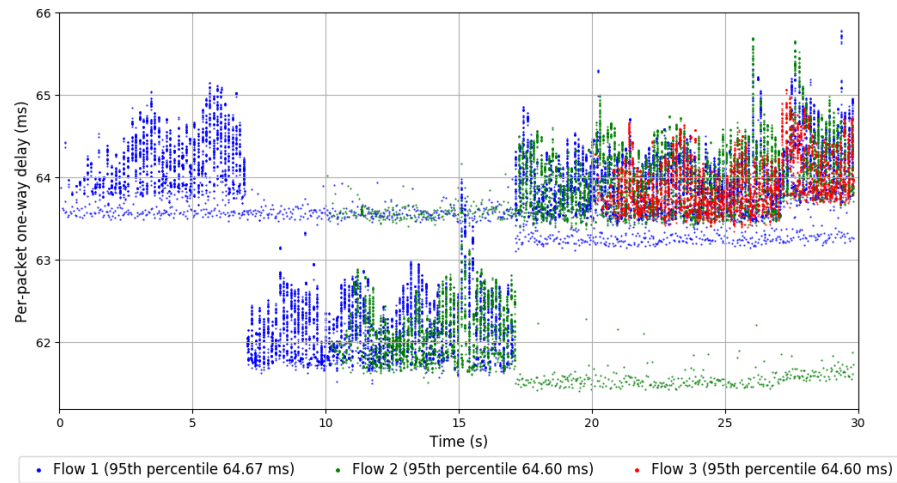
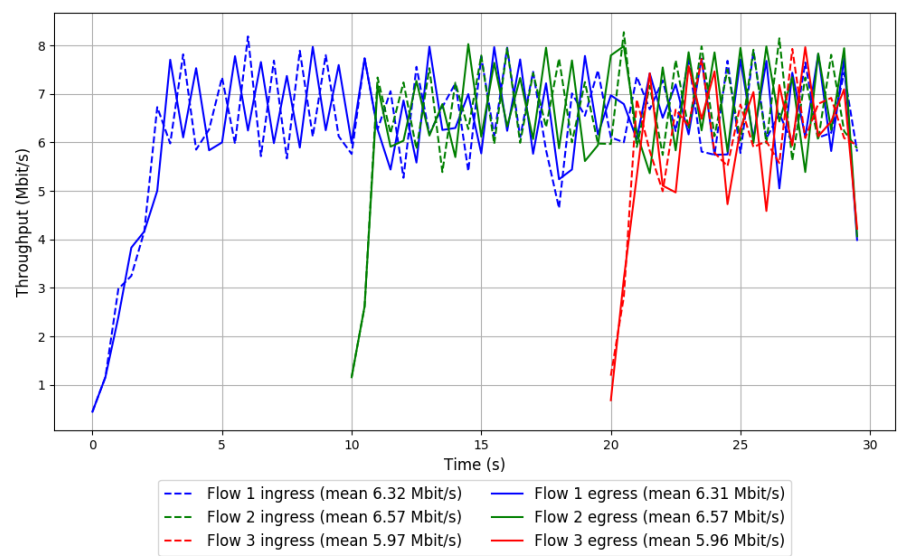
-- Flow 3:

Average throughput: 5.96 Mbit/s

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

Loss rate: 1.69%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-10 05:05:27

End at: 2018-01-10 05:05:57

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.71 Mbit/s

95th percentile per-packet one-way delay: 64.482 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.409 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 6.59 Mbit/s

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

Loss rate: 0.78%

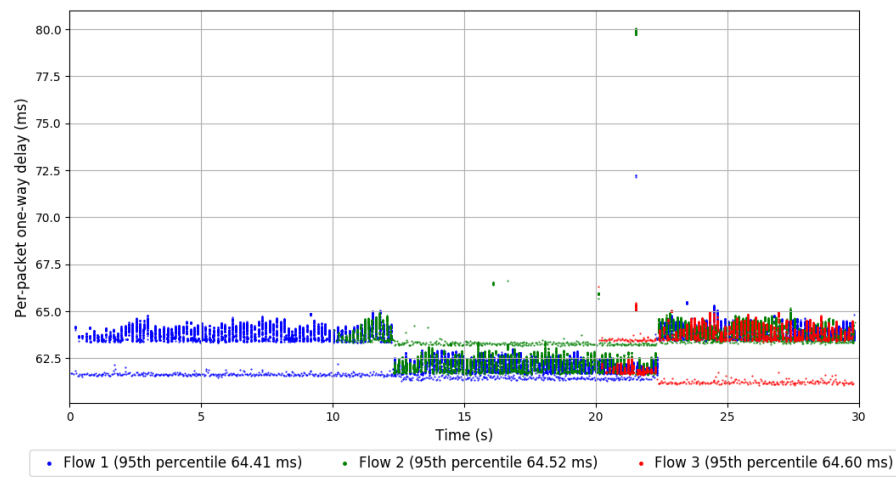
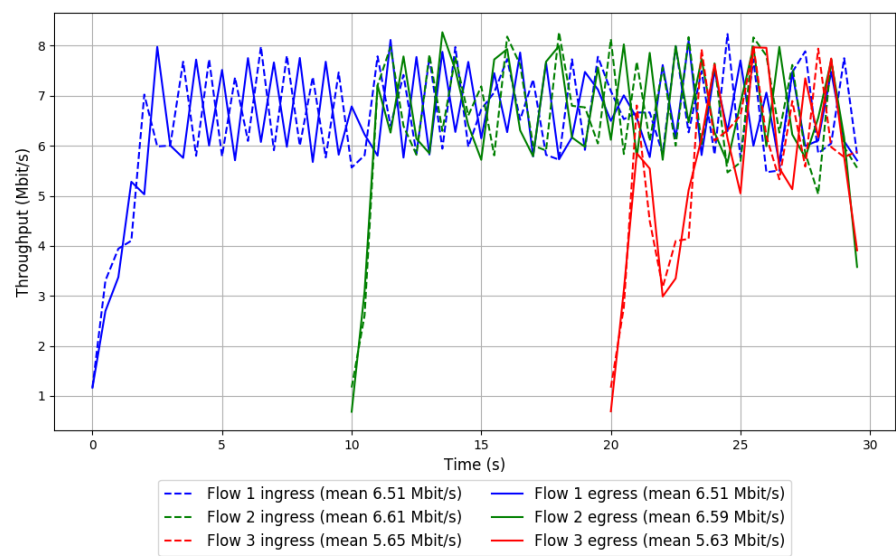
-- Flow 3:

Average throughput: 5.63 Mbit/s

95th percentile per-packet one-way delay: 64.600 ms

Loss rate: 1.78%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-10 05:19:24

End at: 2018-01-10 05:19:54

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.64 Mbit/s

95th percentile per-packet one-way delay: 64.574 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 64.576 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 64.530 ms

Loss rate: 0.79%

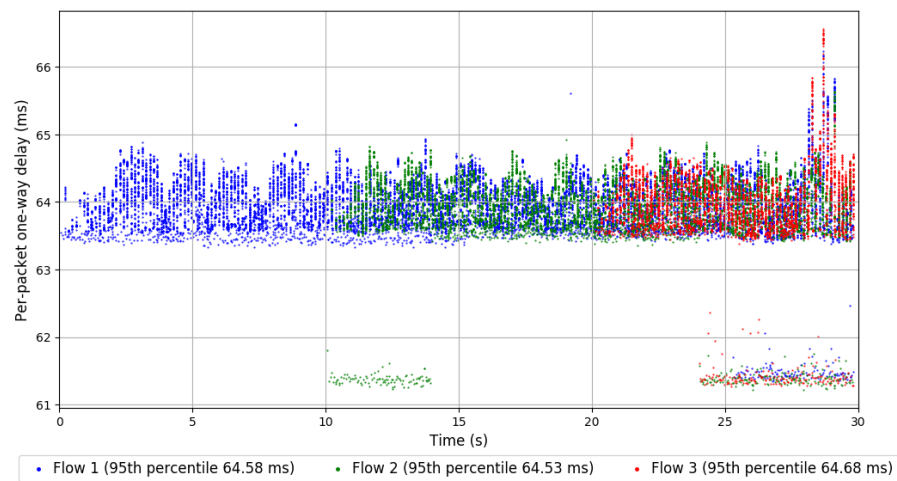
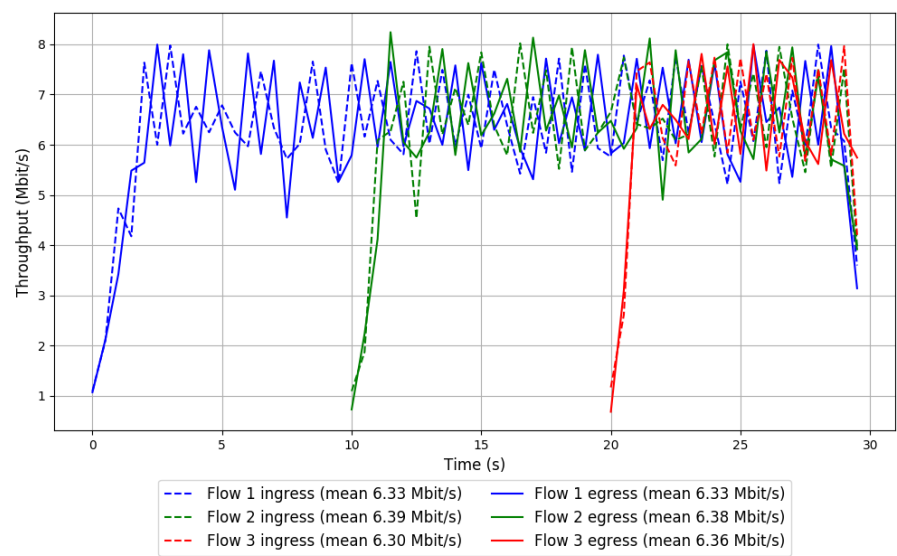
-- Flow 3:

Average throughput: 6.36 Mbit/s

95th percentile per-packet one-way delay: 64.681 ms

Loss rate: 0.17%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-10 05:33:39

End at: 2018-01-10 05:34:09

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.61 Mbit/s

95th percentile per-packet one-way delay: 64.507 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 6.40 Mbit/s

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

Loss rate: 0.88%

-- Flow 2:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 64.432 ms

Loss rate: 1.26%

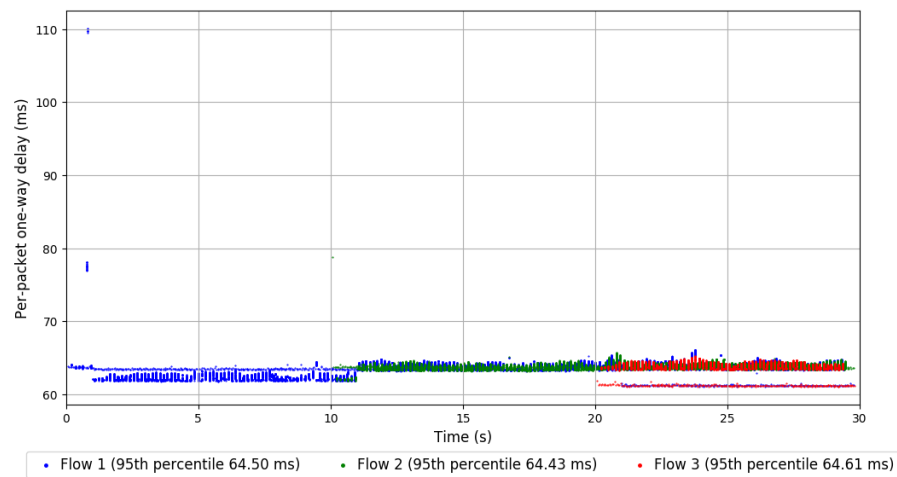
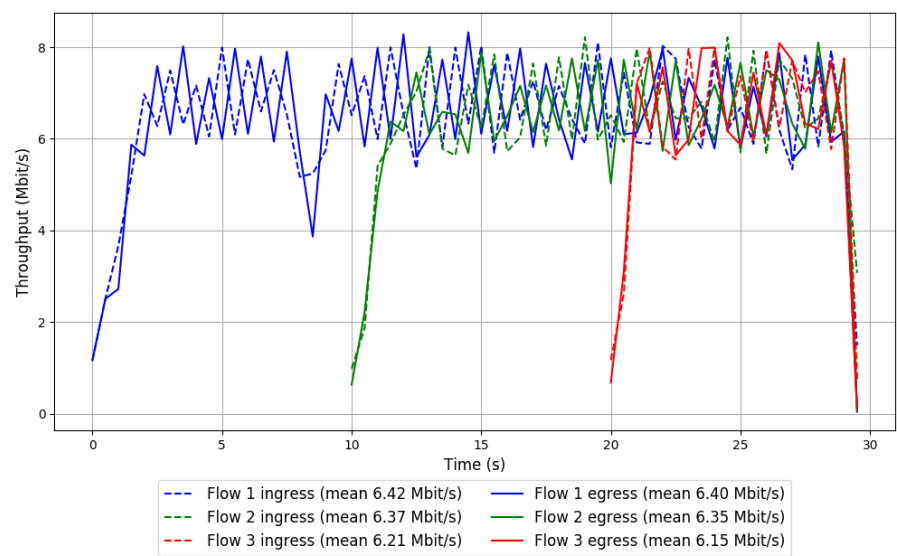
-- Flow 3:

Average throughput: 6.15 Mbit/s

95th percentile per-packet one-way delay: 64.611 ms

Loss rate: 2.09%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-10 05:47:55

End at: 2018-01-10 05:48:25

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.72 Mbit/s

95th percentile per-packet one-way delay: 64.448 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 6.39 Mbit/s

95th percentile per-packet one-way delay: 64.373 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 64.593 ms

Loss rate: 0.77%

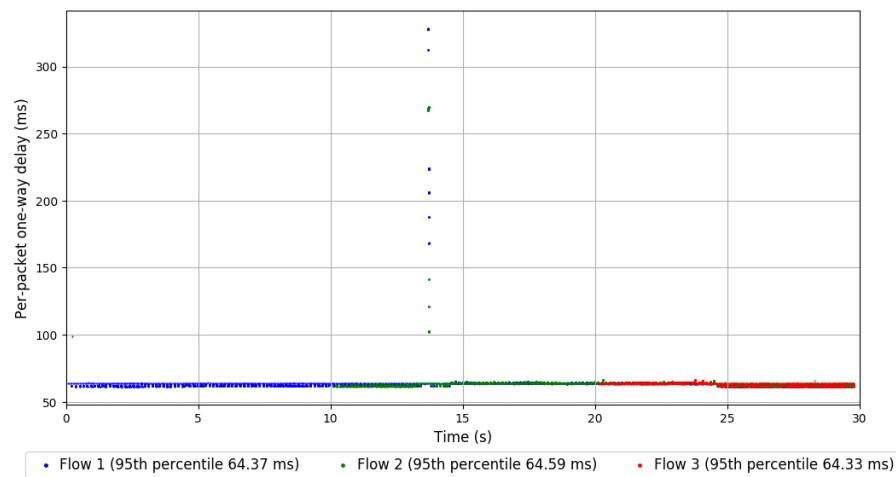
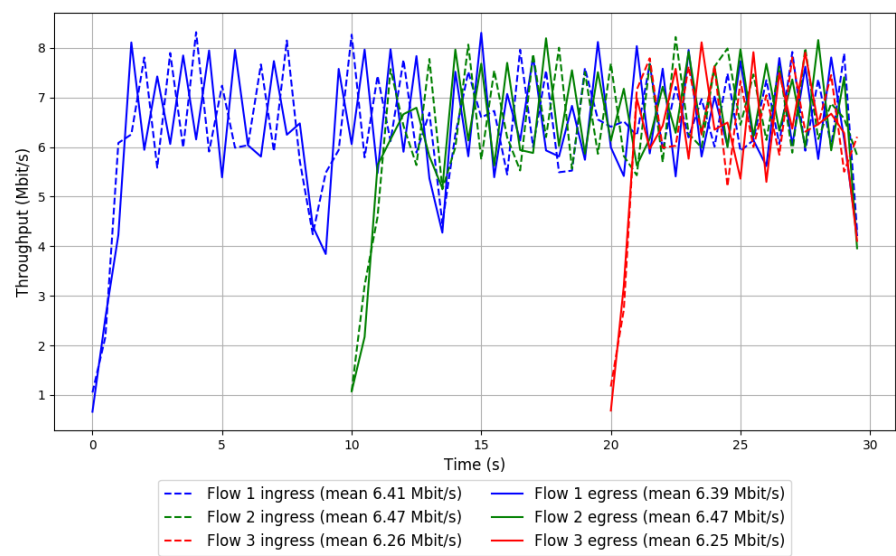
-- Flow 3:

Average throughput: 6.25 Mbit/s

95th percentile per-packet one-way delay: 64.335 ms

Loss rate: 1.70%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

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

End at: 2018-01-10 06:02:32

Below is generated by plot.py at 2018-01-10 09:11:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.73 Mbit/s

95th percentile per-packet one-way delay: 64.671 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 64.647 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 64.702 ms

Loss rate: 0.78%

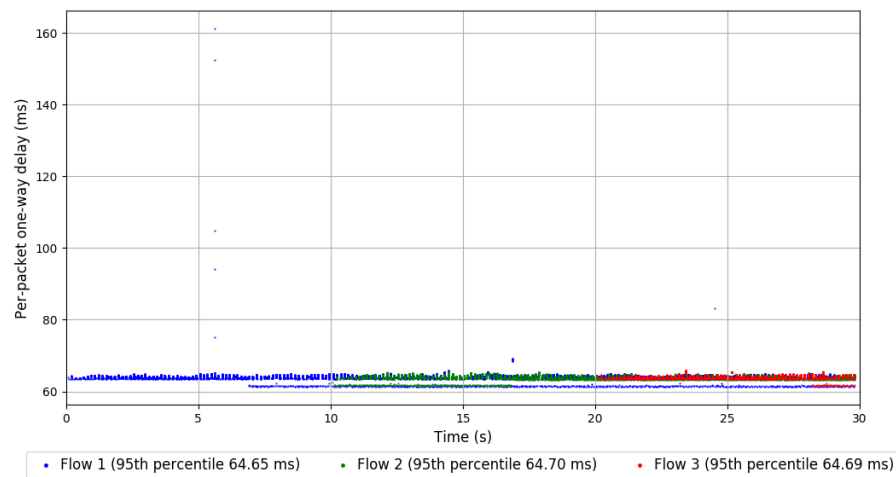
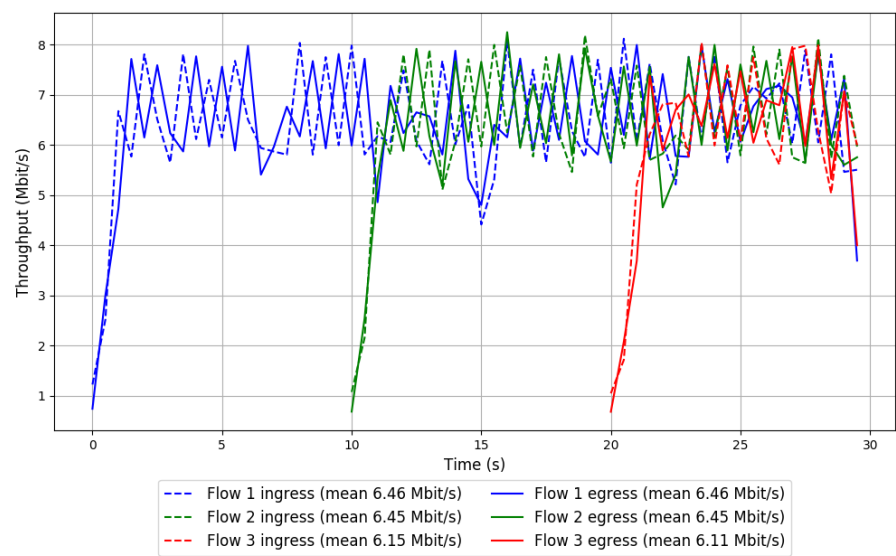
-- Flow 3:

Average throughput: 6.11 Mbit/s

95th percentile per-packet one-way delay: 64.691 ms

Loss rate: 1.65%

Run 10: Report of Sprout — Data Link

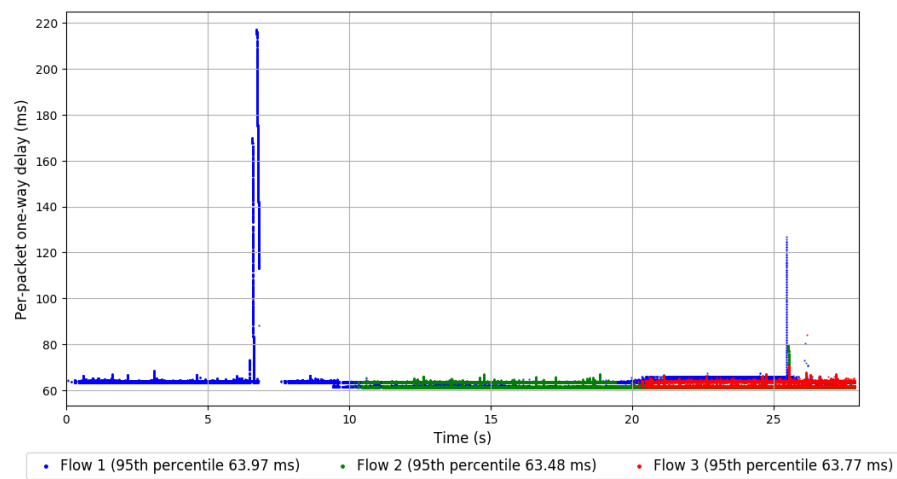
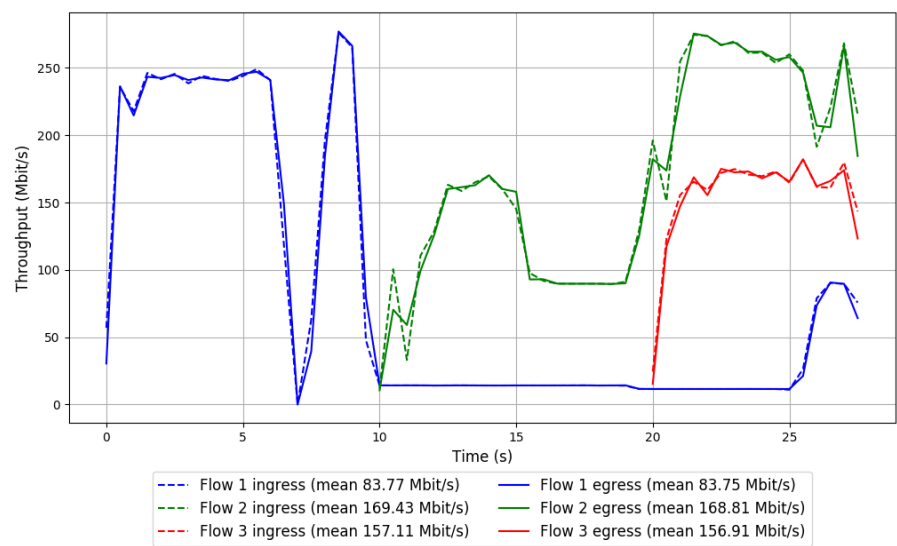


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-10 03:49:58
End at: 2018-01-10 03:50:28

# Below is generated by plot.py at 2018-01-10 09:13:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 235.69 Mbit/s
95th percentile per-packet one-way delay: 63.796 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 83.75 Mbit/s
95th percentile per-packet one-way delay: 63.972 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 168.81 Mbit/s
95th percentile per-packet one-way delay: 63.479 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 156.91 Mbit/s
95th percentile per-packet one-way delay: 63.765 ms
Loss rate: 1.72%
```


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

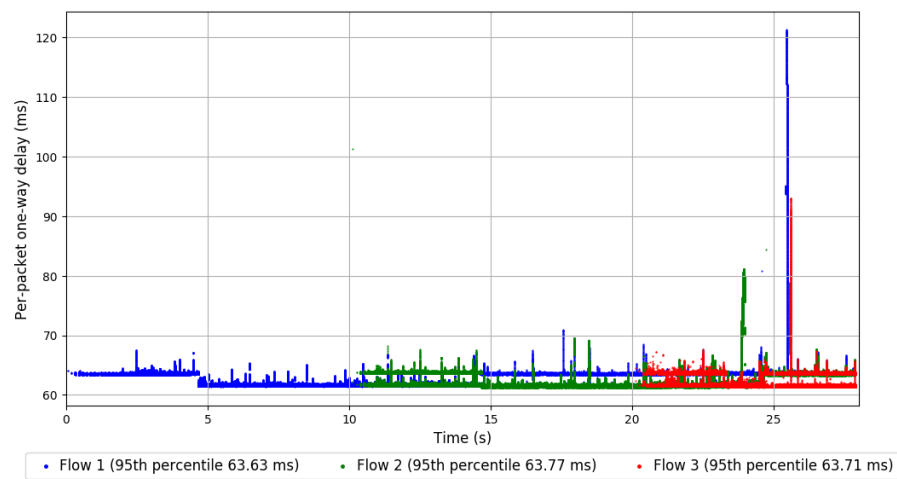
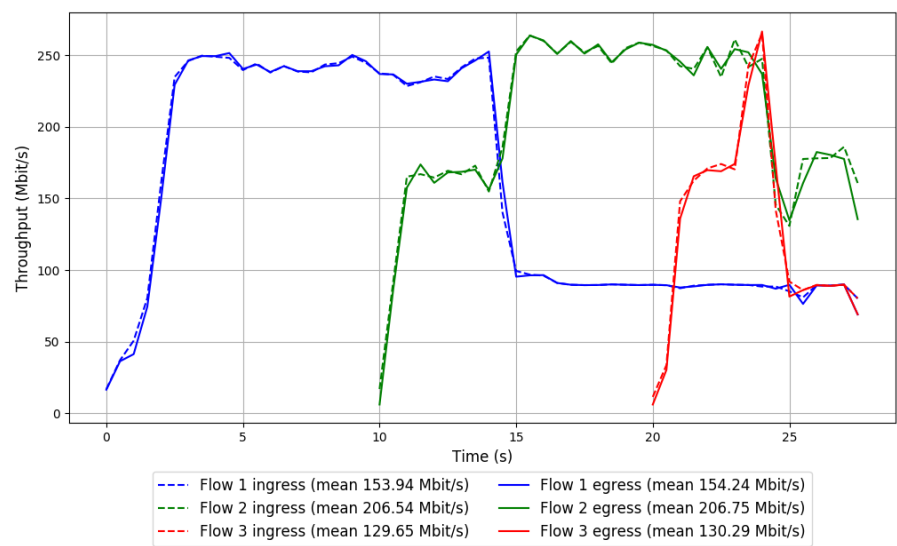


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-10 04:04:23
End at: 2018-01-10 04:04:53

# Below is generated by plot.py at 2018-01-10 09:15:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 322.66 Mbit/s
95th percentile per-packet one-way delay: 63.708 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 154.24 Mbit/s
95th percentile per-packet one-way delay: 63.626 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 206.75 Mbit/s
95th percentile per-packet one-way delay: 63.772 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 130.29 Mbit/s
95th percentile per-packet one-way delay: 63.708 ms
Loss rate: 1.13%
```

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

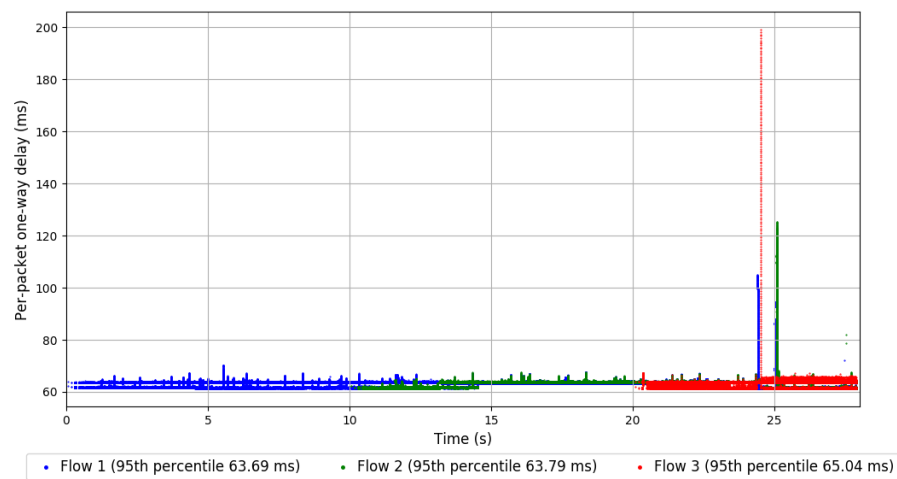
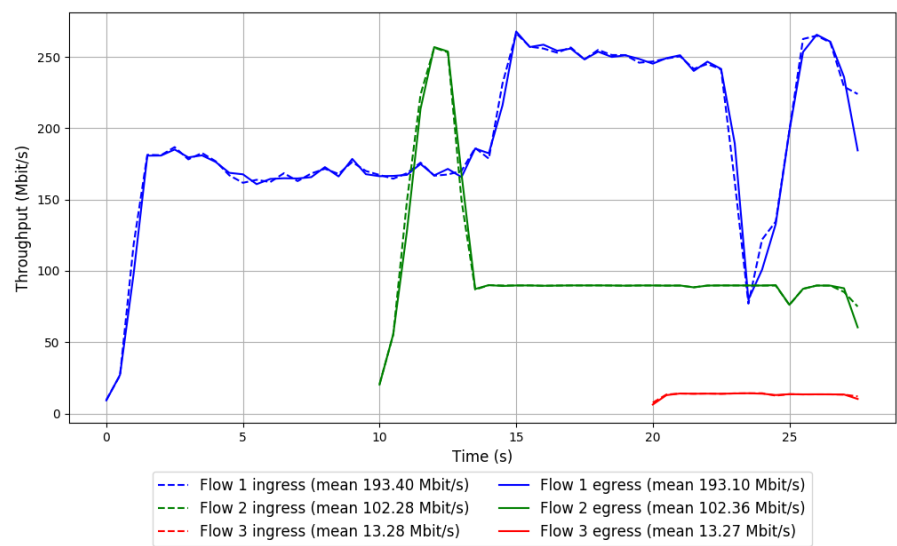


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-10 04:18:43
End at: 2018-01-10 04:19:13

# Below is generated by plot.py at 2018-01-10 09:15:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 262.35 Mbit/s
95th percentile per-packet one-way delay: 63.733 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 193.10 Mbit/s
95th percentile per-packet one-way delay: 63.686 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 102.36 Mbit/s
95th percentile per-packet one-way delay: 63.792 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 13.27 Mbit/s
95th percentile per-packet one-way delay: 65.042 ms
Loss rate: 1.59%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-10 04:32:45

End at: 2018-01-10 04:33:15

Below is generated by plot.py at 2018-01-10 09:18:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 394.88 Mbit/s

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

Loss rate: 0.65%

-- Flow 1:

Average throughput: 188.21 Mbit/s

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

Loss rate: 0.22%

-- Flow 2:

Average throughput: 227.76 Mbit/s

95th percentile per-packet one-way delay: 64.225 ms

Loss rate: 0.69%

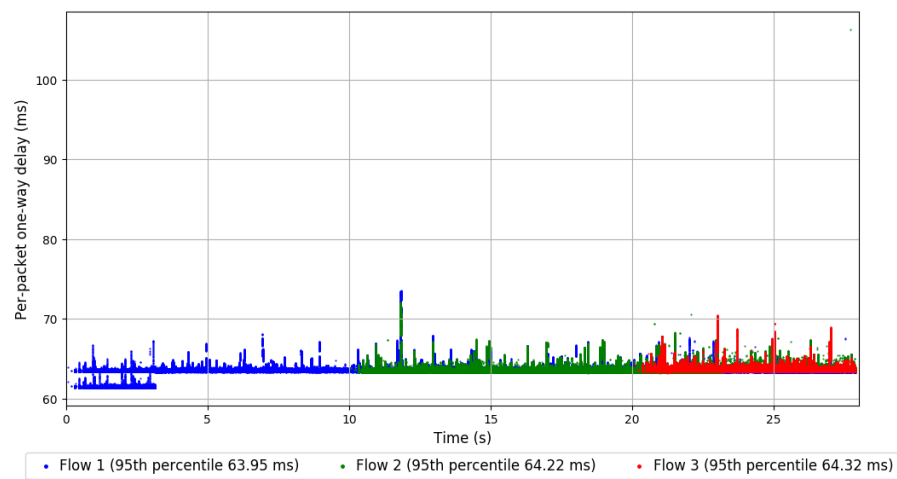
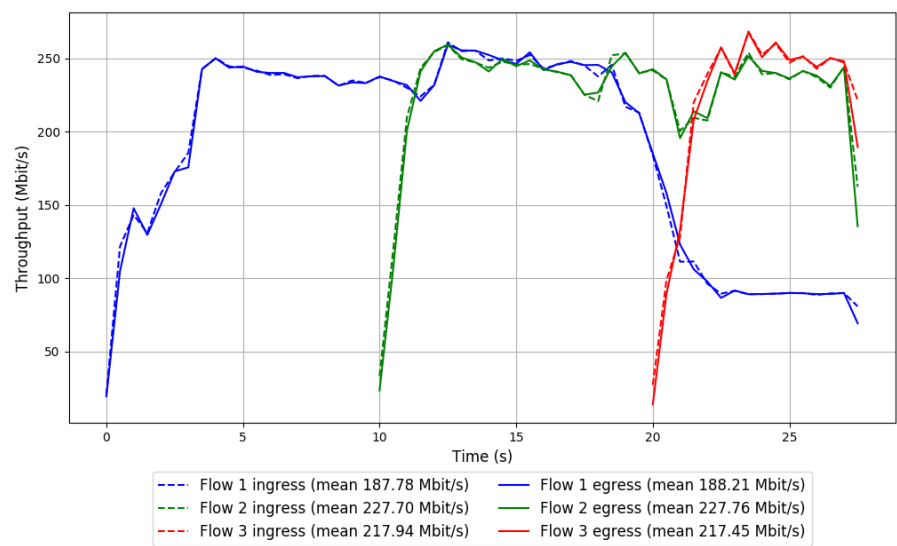
-- Flow 3:

Average throughput: 217.45 Mbit/s

95th percentile per-packet one-way delay: 64.321 ms

Loss rate: 1.82%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-10 04:47:00

End at: 2018-01-10 04:47:30

Below is generated by plot.py at 2018-01-10 09:18:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 257.91 Mbit/s

95th percentile per-packet one-way delay: 64.336 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 198.33 Mbit/s

95th percentile per-packet one-way delay: 64.208 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 51.02 Mbit/s

95th percentile per-packet one-way delay: 66.027 ms

Loss rate: 2.63%

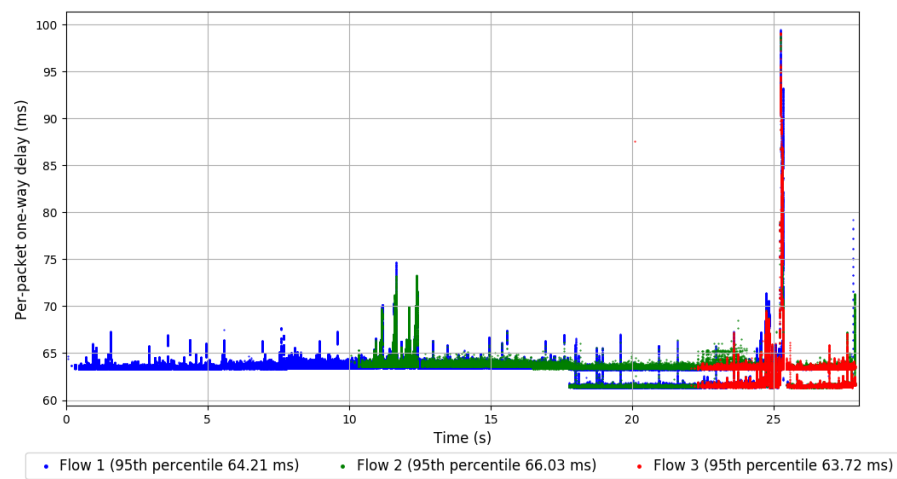
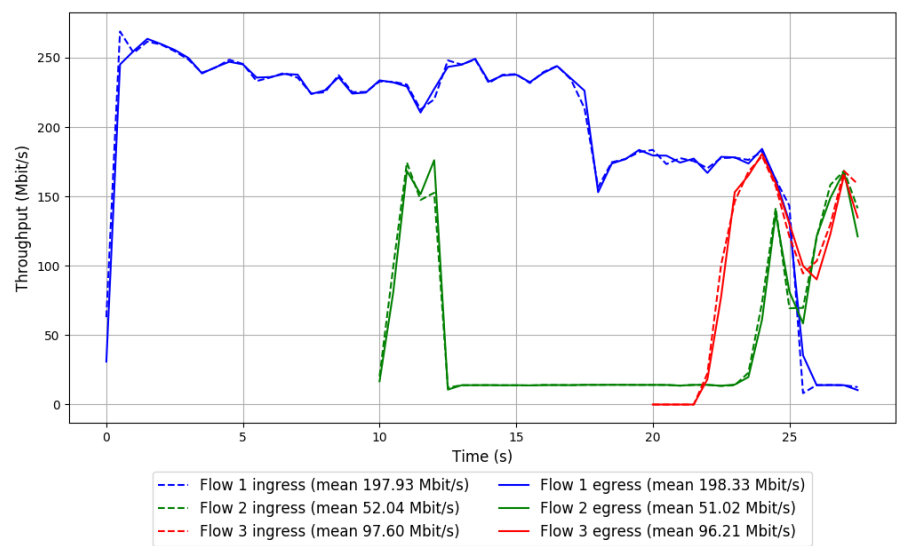
-- Flow 3:

Average throughput: 96.21 Mbit/s

95th percentile per-packet one-way delay: 63.715 ms

Loss rate: 3.34%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-10 05:01:14

End at: 2018-01-10 05:01:44

Below is generated by plot.py at 2018-01-10 09:18:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.10 Mbit/s

95th percentile per-packet one-way delay: 63.927 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 106.99 Mbit/s

95th percentile per-packet one-way delay: 63.602 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 190.01 Mbit/s

95th percentile per-packet one-way delay: 63.954 ms

Loss rate: 0.79%

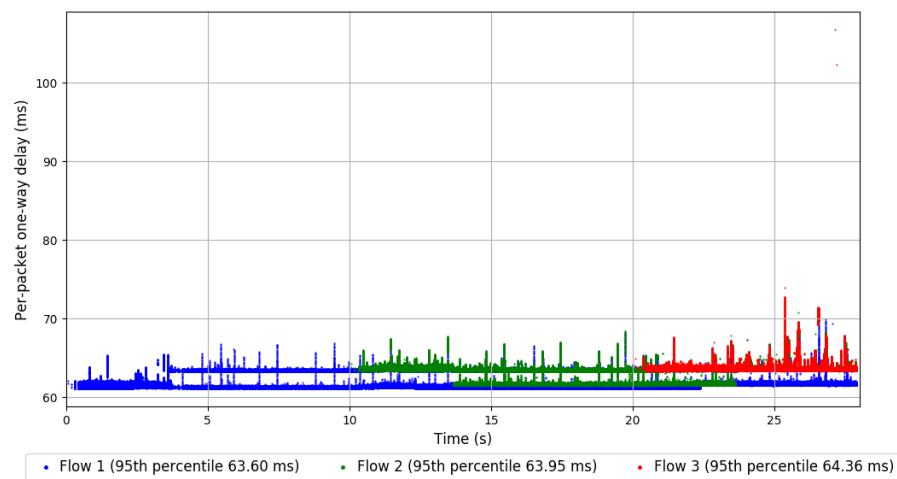
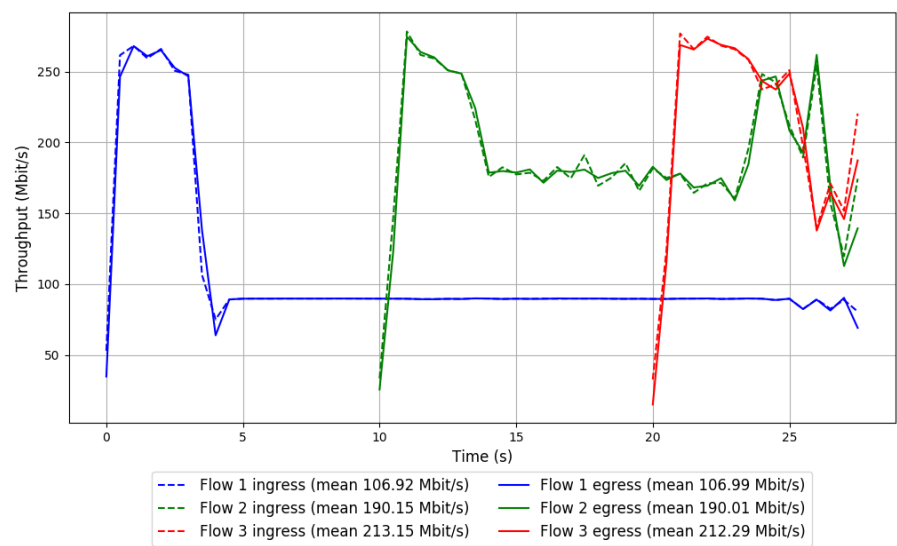
-- Flow 3:

Average throughput: 212.29 Mbit/s

95th percentile per-packet one-way delay: 64.362 ms

Loss rate: 2.03%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-10 05:15:19

End at: 2018-01-10 05:15:49

Below is generated by plot.py at 2018-01-10 09:18:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 165.13 Mbit/s

95th percentile per-packet one-way delay: 63.536 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 28.68 Mbit/s

95th percentile per-packet one-way delay: 63.542 ms

Loss rate: 1.41%

-- Flow 2:

Average throughput: 146.94 Mbit/s

95th percentile per-packet one-way delay: 63.522 ms

Loss rate: 0.67%

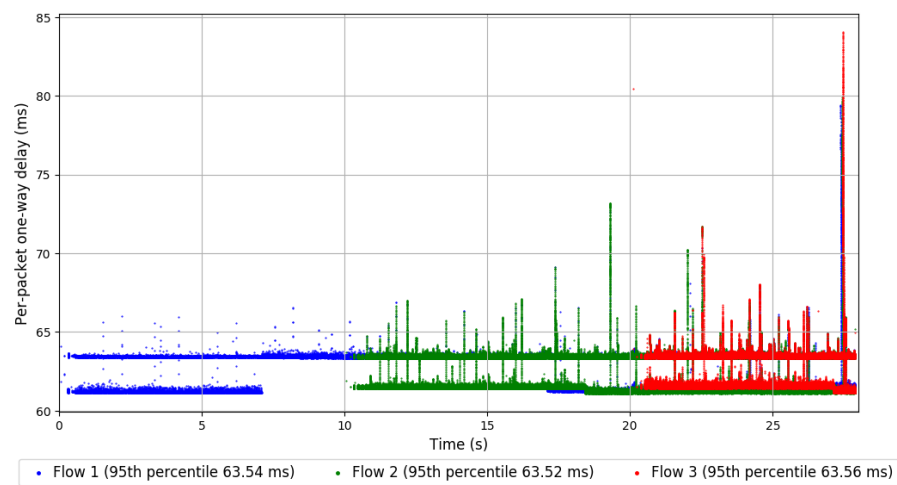
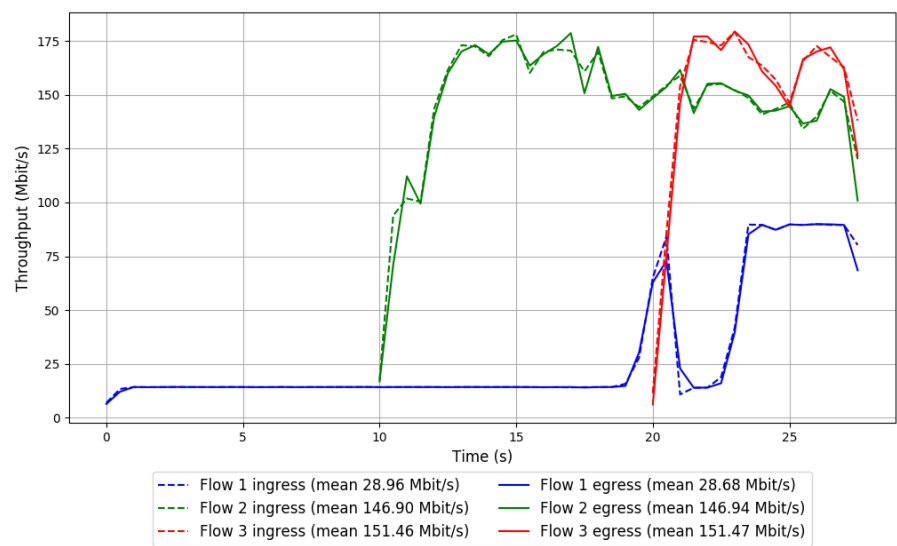
-- Flow 3:

Average throughput: 151.47 Mbit/s

95th percentile per-packet one-way delay: 63.557 ms

Loss rate: 1.59%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-10 05:29:20

End at: 2018-01-10 05:29:50

Below is generated by plot.py at 2018-01-10 09:20:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.76 Mbit/s

95th percentile per-packet one-way delay: 63.255 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 165.92 Mbit/s

95th percentile per-packet one-way delay: 63.295 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 223.27 Mbit/s

95th percentile per-packet one-way delay: 62.312 ms

Loss rate: 0.00%

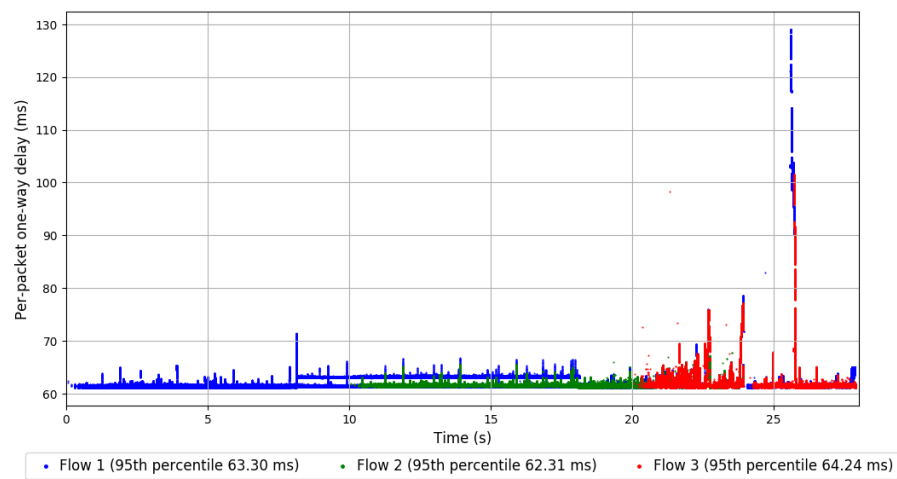
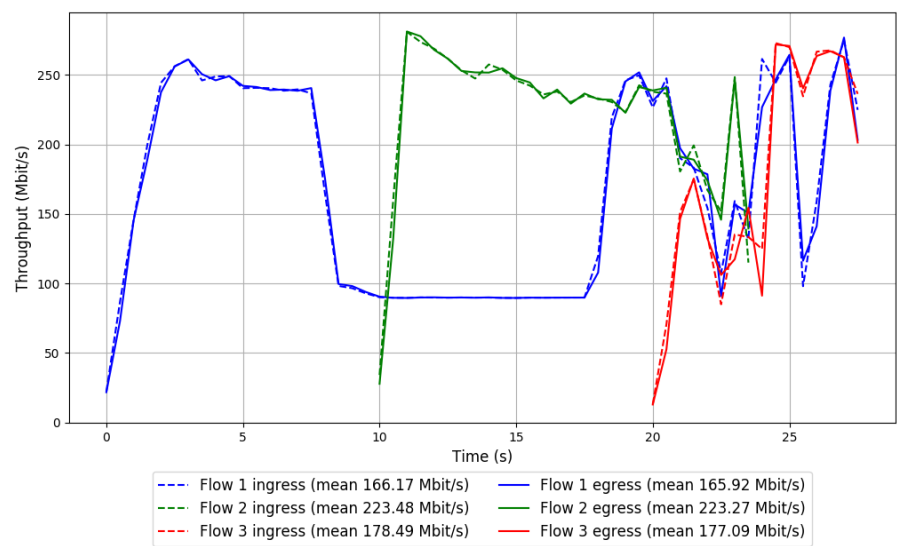
-- Flow 3:

Average throughput: 177.09 Mbit/s

95th percentile per-packet one-way delay: 64.238 ms

Loss rate: 2.36%

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

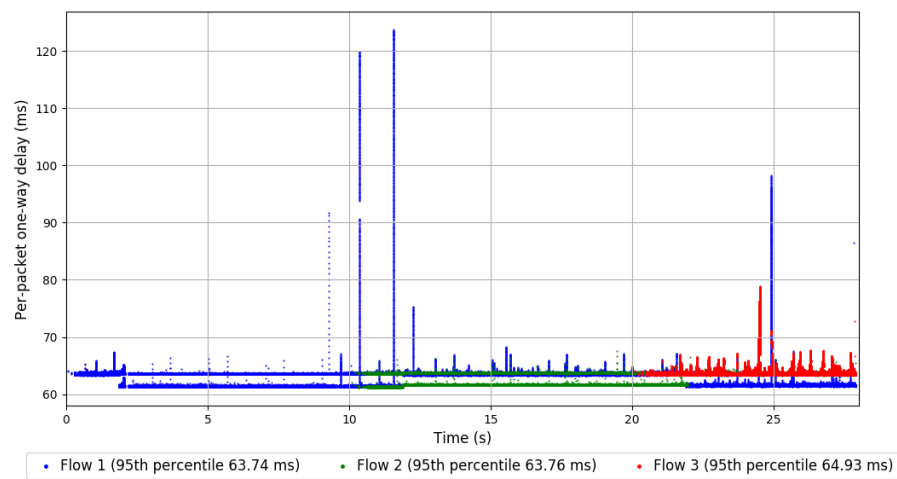
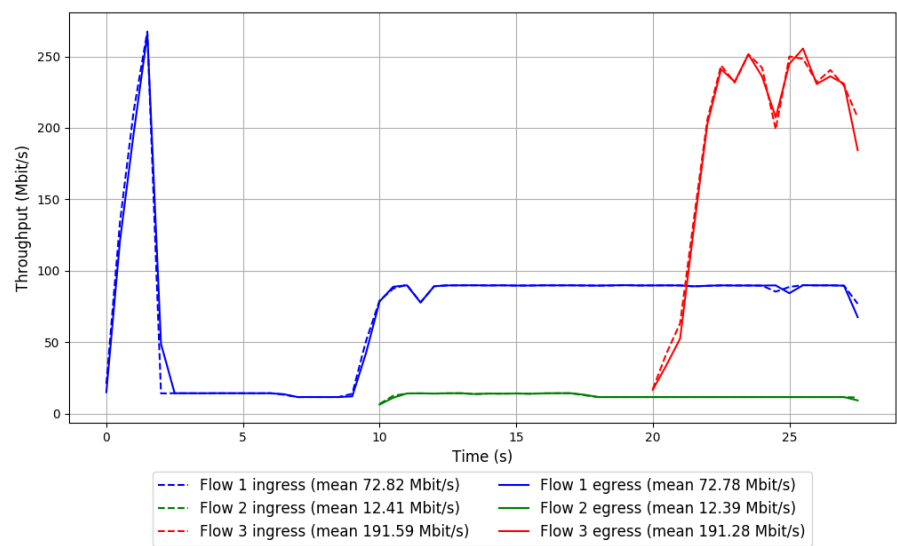


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-10 05:43:56
End at: 2018-01-10 05:44:26

# Below is generated by plot.py at 2018-01-10 09:20:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 134.35 Mbit/s
95th percentile per-packet one-way delay: 64.041 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 72.78 Mbit/s
95th percentile per-packet one-way delay: 63.743 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 12.39 Mbit/s
95th percentile per-packet one-way delay: 63.764 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 191.28 Mbit/s
95th percentile per-packet one-way delay: 64.926 ms
Loss rate: 1.77%
```


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

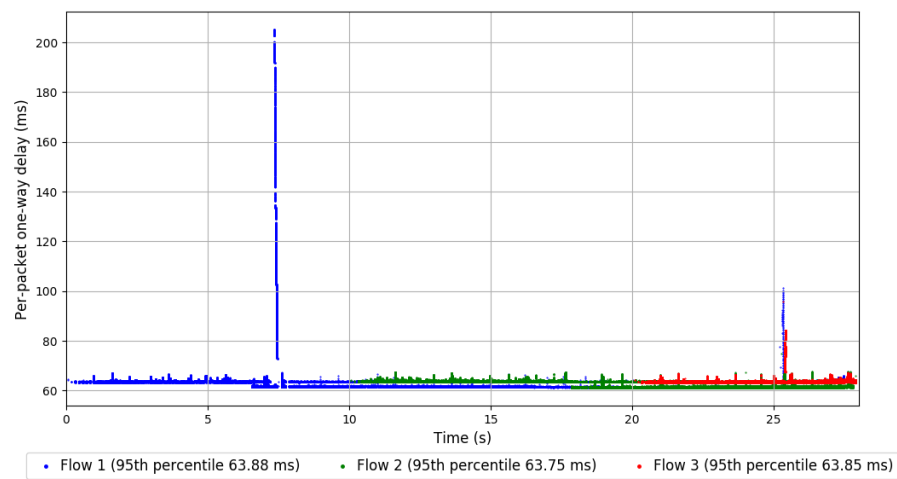
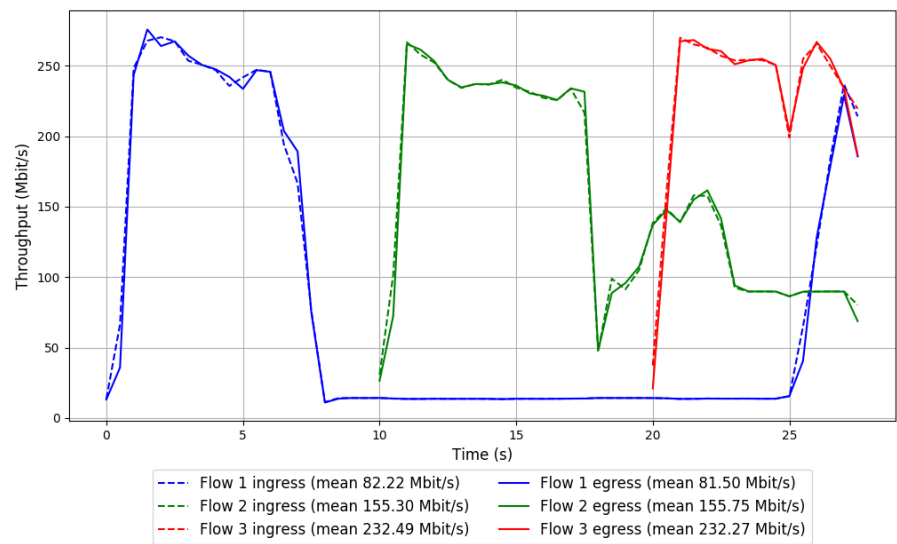


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-10 05:58:00
End at: 2018-01-10 05:58:30

# Below is generated by plot.py at 2018-01-10 09:20:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 246.39 Mbit/s
95th percentile per-packet one-way delay: 63.809 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 81.50 Mbit/s
95th percentile per-packet one-way delay: 63.879 ms
Loss rate: 1.33%
-- Flow 2:
Average throughput: 155.75 Mbit/s
95th percentile per-packet one-way delay: 63.750 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 232.27 Mbit/s
95th percentile per-packet one-way delay: 63.854 ms
Loss rate: 1.69%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-10 03:59:34

End at: 2018-01-10 04:00:04

Below is generated by plot.py at 2018-01-10 09:20:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.52 Mbit/s

95th percentile per-packet one-way delay: 64.080 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 31.91 Mbit/s

95th percentile per-packet one-way delay: 64.091 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 67.54 Mbit/s

95th percentile per-packet one-way delay: 63.875 ms

Loss rate: 1.23%

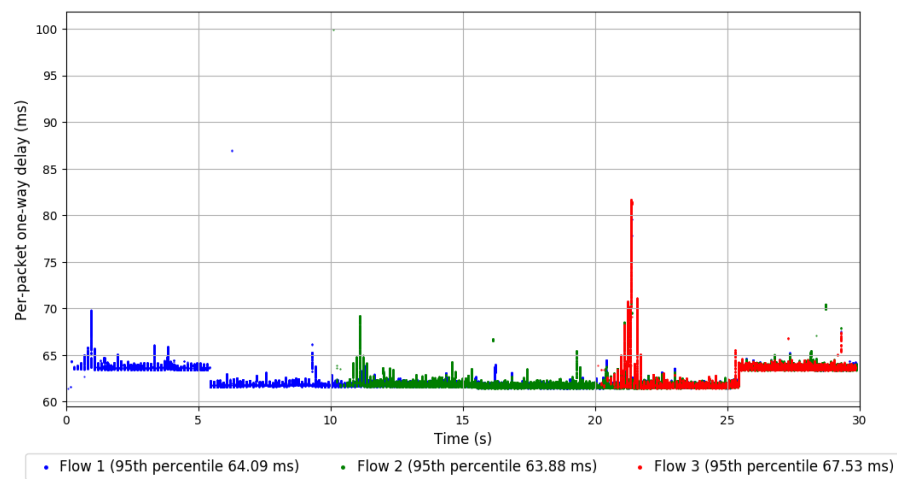
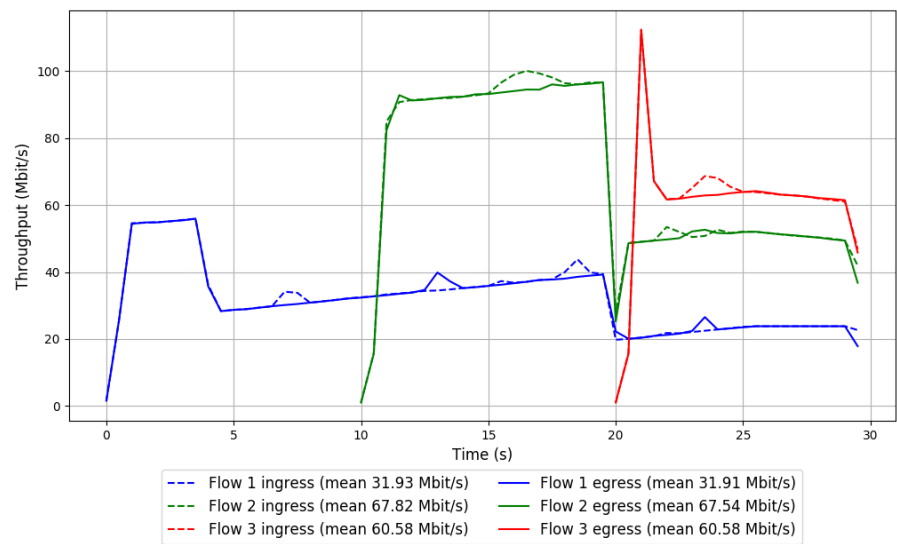
-- Flow 3:

Average throughput: 60.58 Mbit/s

95th percentile per-packet one-way delay: 67.531 ms

Loss rate: 1.27%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-10 04:13:50

End at: 2018-01-10 04:14:20

Below is generated by plot.py at 2018-01-10 09:20:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 191.25 Mbit/s

95th percentile per-packet one-way delay: 64.882 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 59.93 Mbit/s

95th percentile per-packet one-way delay: 64.956 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 144.96 Mbit/s

95th percentile per-packet one-way delay: 64.850 ms

Loss rate: 0.70%

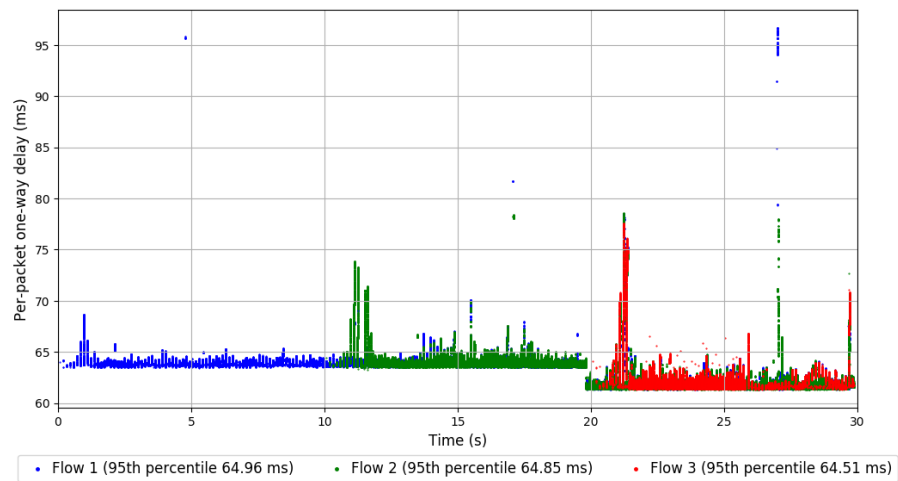
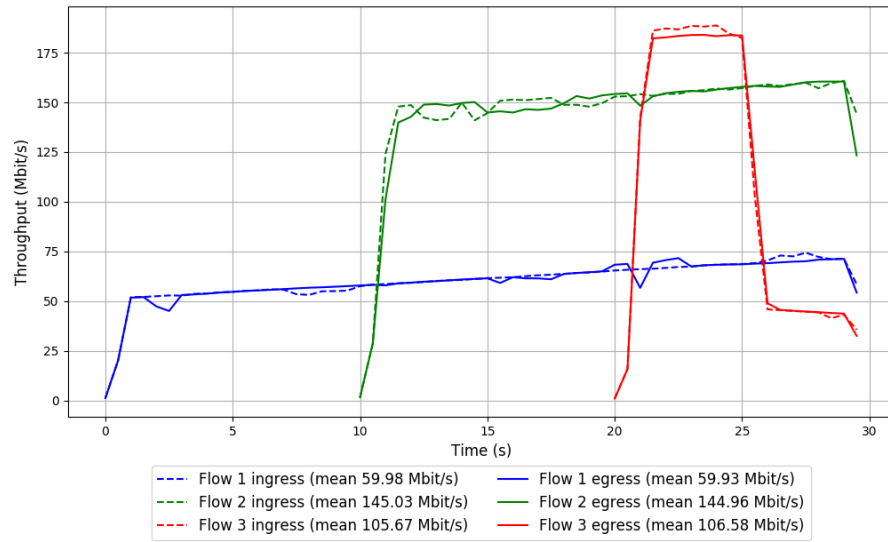
-- Flow 3:

Average throughput: 106.58 Mbit/s

95th percentile per-packet one-way delay: 64.510 ms

Loss rate: 0.52%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-10 04:27:59

End at: 2018-01-10 04:28:29

Below is generated by plot.py at 2018-01-10 09:20:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.55 Mbit/s

95th percentile per-packet one-way delay: 65.142 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 16.69 Mbit/s

95th percentile per-packet one-way delay: 64.316 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 18.31 Mbit/s

95th percentile per-packet one-way delay: 65.222 ms

Loss rate: 0.79%

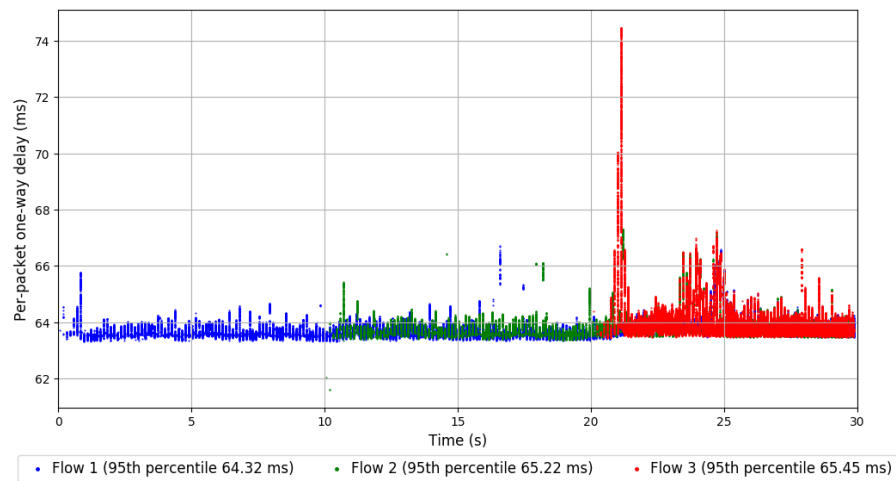
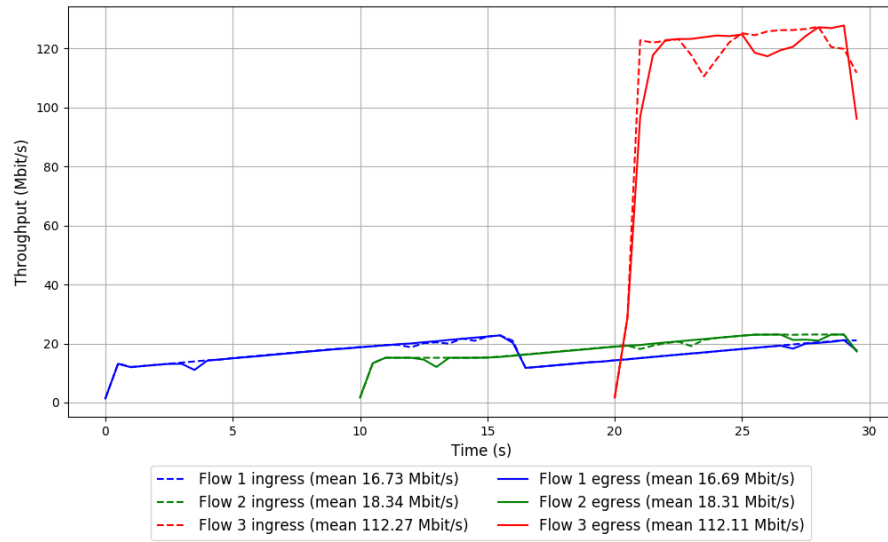
-- Flow 3:

Average throughput: 112.11 Mbit/s

95th percentile per-packet one-way delay: 65.454 ms

Loss rate: 1.44%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-10 04:42:14

End at: 2018-01-10 04:42:44

Below is generated by plot.py at 2018-01-10 09:20:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.05 Mbit/s

95th percentile per-packet one-way delay: 64.463 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 43.62 Mbit/s

95th percentile per-packet one-way delay: 64.371 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 75.39 Mbit/s

95th percentile per-packet one-way delay: 64.560 ms

Loss rate: 0.34%

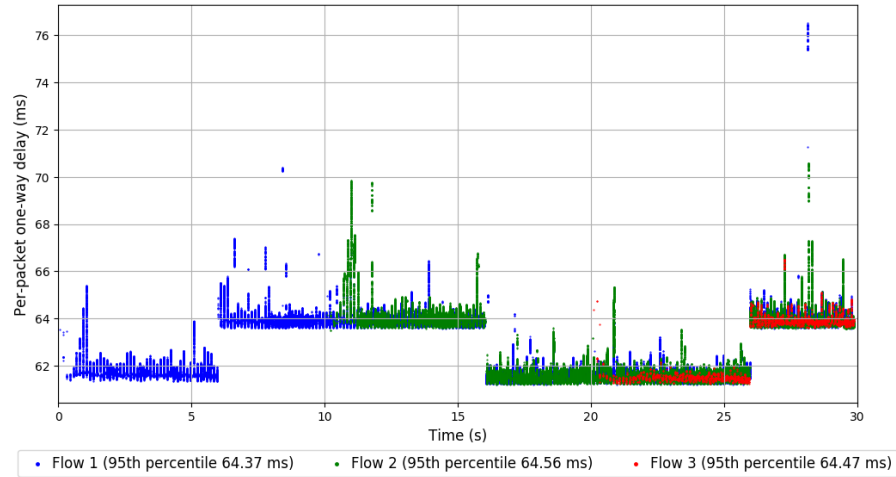
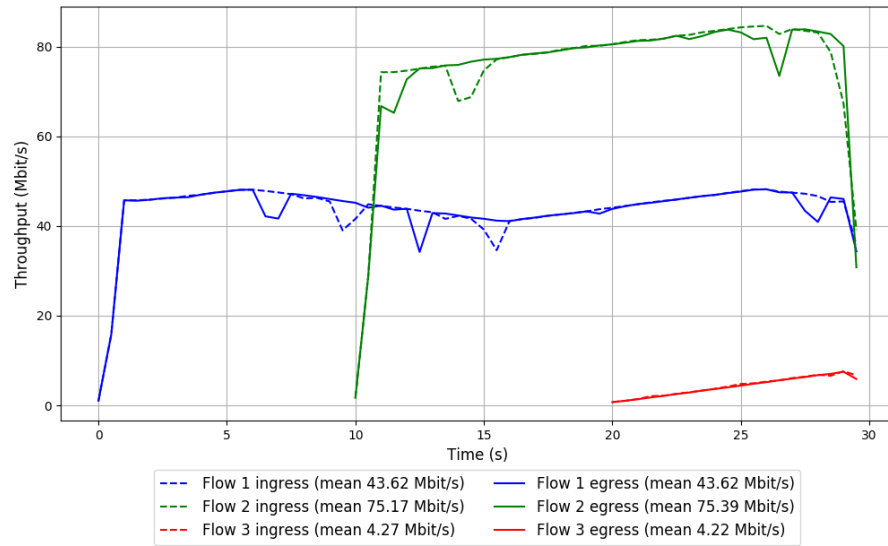
-- Flow 3:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 64.468 ms

Loss rate: 2.41%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-10 04:56:34

End at: 2018-01-10 04:57:04

Below is generated by plot.py at 2018-01-10 09:20:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.50 Mbit/s

95th percentile per-packet one-way delay: 68.964 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 91.21 Mbit/s

95th percentile per-packet one-way delay: 70.178 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 49.16 Mbit/s

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

Loss rate: 0.68%

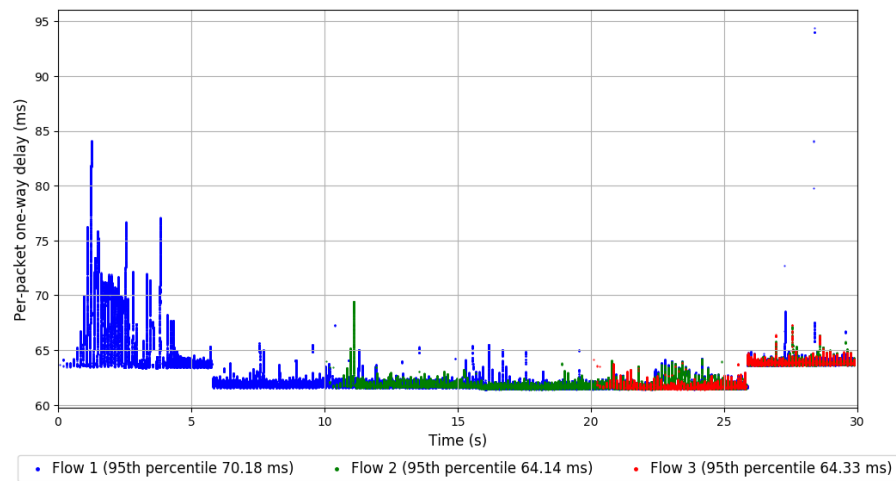
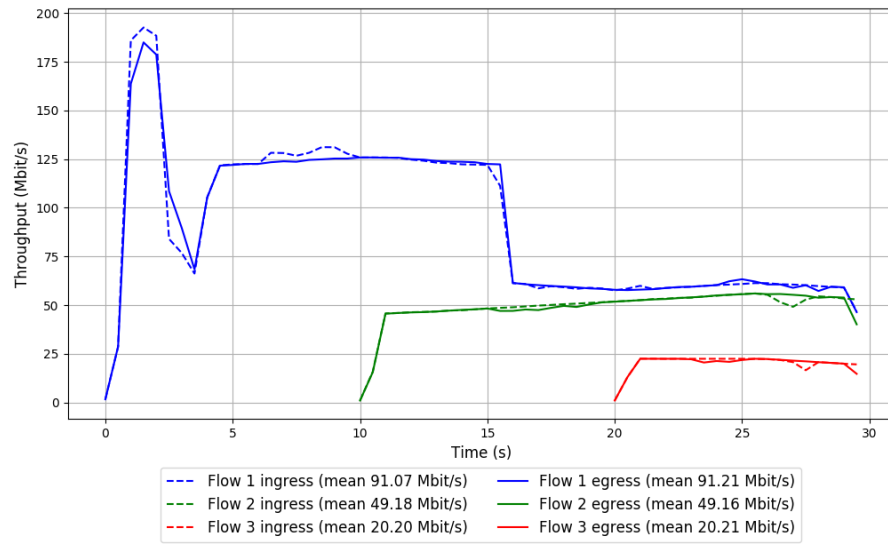
-- Flow 3:

Average throughput: 20.21 Mbit/s

95th percentile per-packet one-way delay: 64.326 ms

Loss rate: 1.22%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-10 05:10:37

End at: 2018-01-10 05:11:07

Below is generated by plot.py at 2018-01-10 09:20:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.15 Mbit/s

95th percentile per-packet one-way delay: 66.931 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 45.77 Mbit/s

95th percentile per-packet one-way delay: 68.926 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 40.88 Mbit/s

95th percentile per-packet one-way delay: 65.091 ms

Loss rate: 0.62%

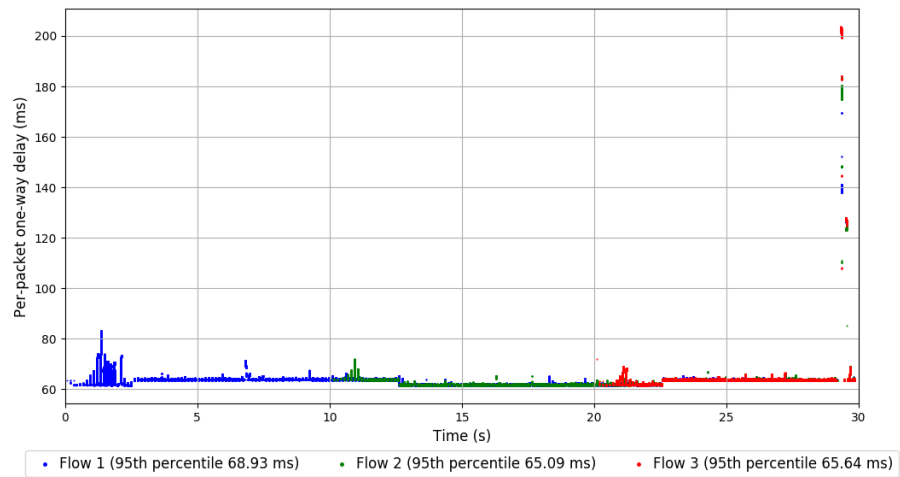
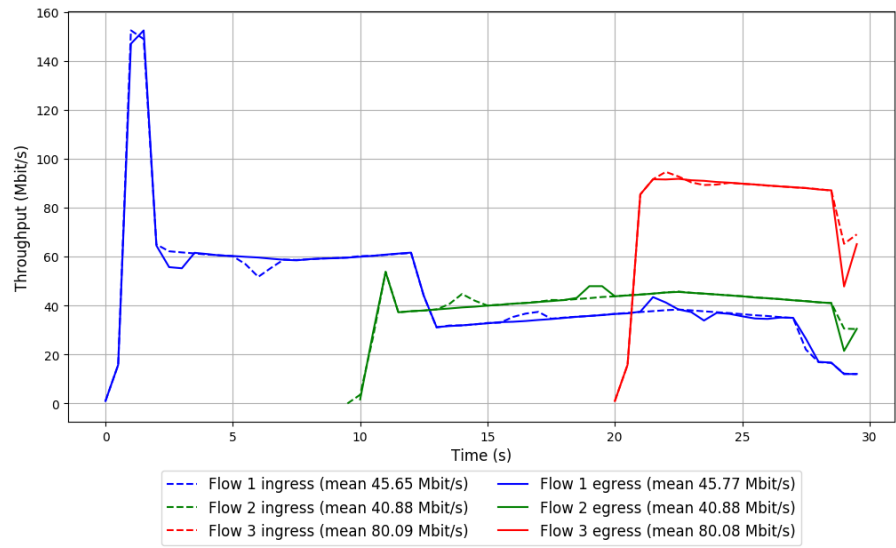
-- Flow 3:

Average throughput: 80.08 Mbit/s

95th percentile per-packet one-way delay: 65.644 ms

Loss rate: 1.36%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-10 05:24:33

End at: 2018-01-10 05:25:03

Below is generated by plot.py at 2018-01-10 09:20:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.34 Mbit/s

95th percentile per-packet one-way delay: 69.693 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 40.91 Mbit/s

95th percentile per-packet one-way delay: 66.586 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 92.69 Mbit/s

95th percentile per-packet one-way delay: 71.033 ms

Loss rate: 0.22%

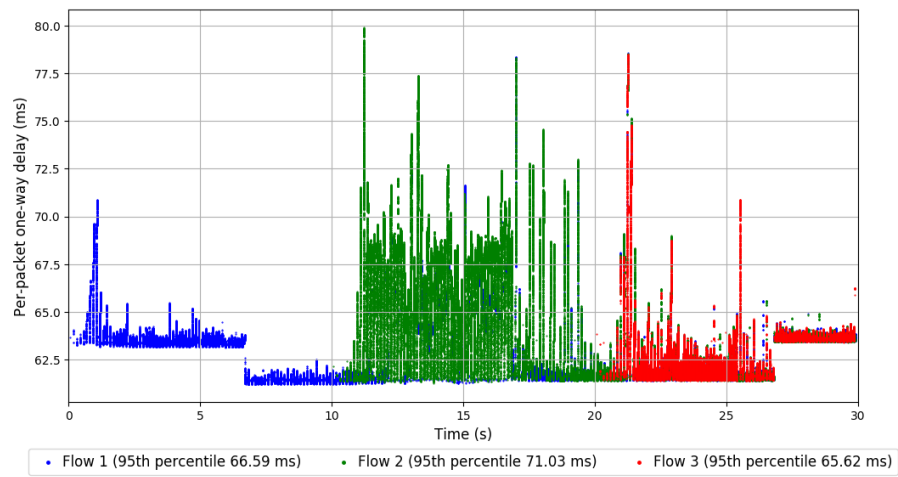
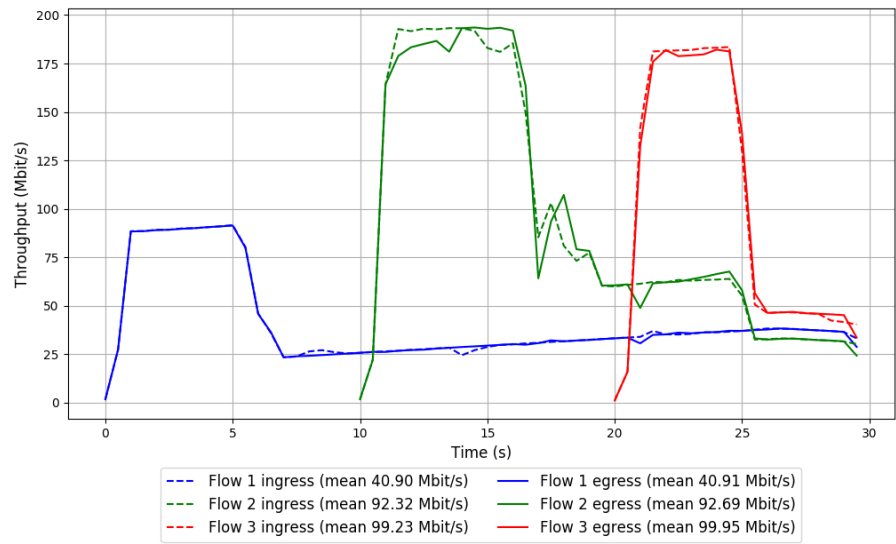
-- Flow 3:

Average throughput: 99.95 Mbit/s

95th percentile per-packet one-way delay: 65.623 ms

Loss rate: 0.57%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-10 05:39:11

End at: 2018-01-10 05:39:41

Below is generated by plot.py at 2018-01-10 09:20:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.72 Mbit/s

95th percentile per-packet one-way delay: 64.553 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 21.77 Mbit/s

95th percentile per-packet one-way delay: 64.439 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 99.13 Mbit/s

95th percentile per-packet one-way delay: 64.786 ms

Loss rate: 1.06%

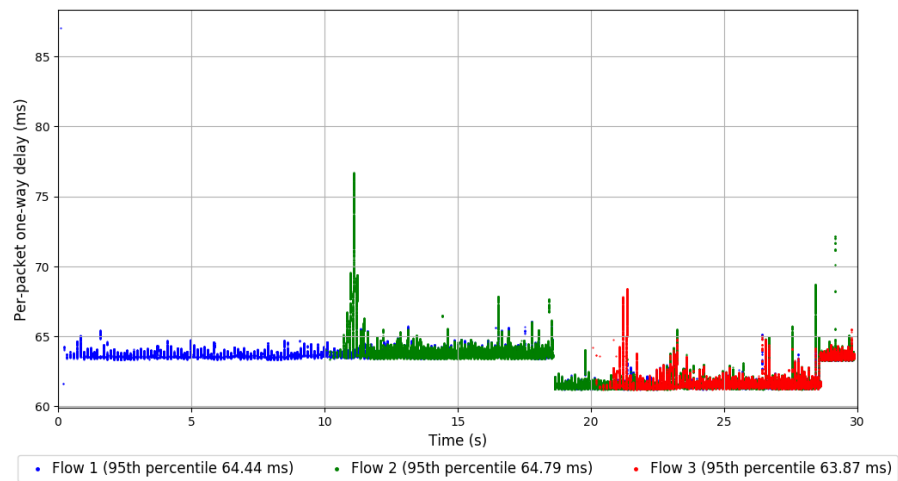
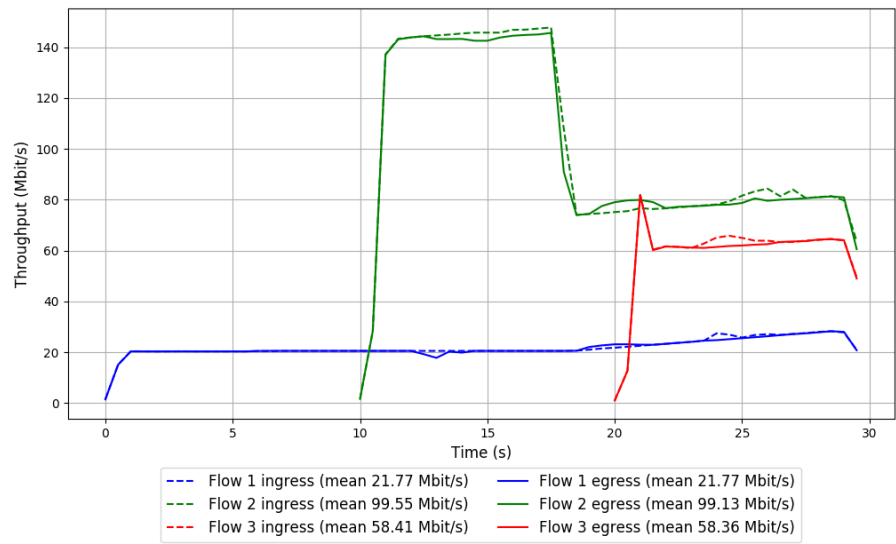
-- Flow 3:

Average throughput: 58.36 Mbit/s

95th percentile per-packet one-way delay: 63.867 ms

Loss rate: 1.36%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-10 05:53:10

End at: 2018-01-10 05:53:40

Below is generated by plot.py at 2018-01-10 09:20:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.26 Mbit/s

95th percentile per-packet one-way delay: 70.748 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 60.43 Mbit/s

95th percentile per-packet one-way delay: 66.122 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 100.69 Mbit/s

95th percentile per-packet one-way delay: 71.587 ms

Loss rate: 0.52%

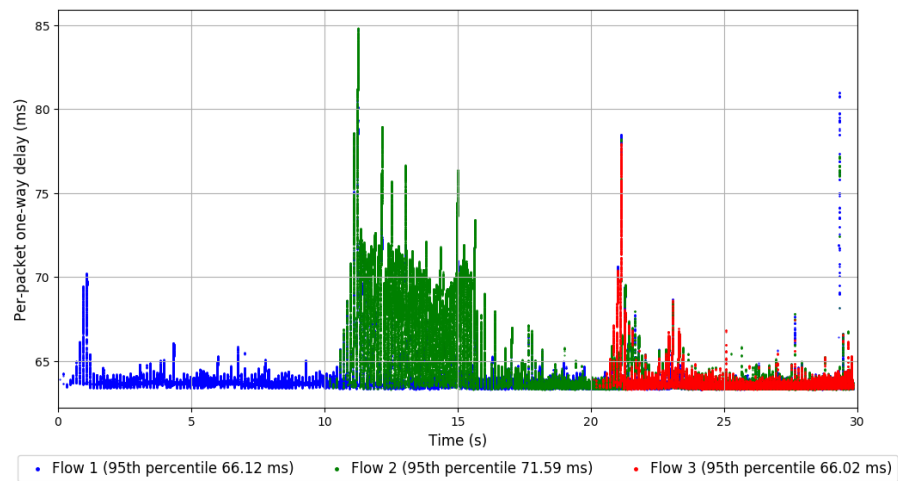
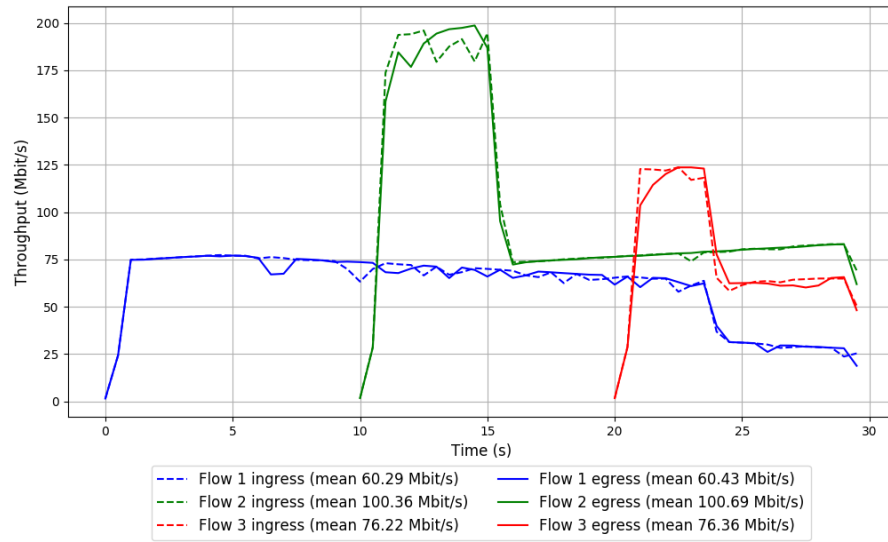
-- Flow 3:

Average throughput: 76.36 Mbit/s

95th percentile per-packet one-way delay: 66.023 ms

Loss rate: 1.10%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-10 06:07:25

End at: 2018-01-10 06:07:55

Below is generated by plot.py at 2018-01-10 09:20:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.04 Mbit/s

95th percentile per-packet one-way delay: 65.434 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 12.88 Mbit/s

95th percentile per-packet one-way delay: 64.306 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 51.40 Mbit/s

95th percentile per-packet one-way delay: 67.400 ms

Loss rate: 0.40%

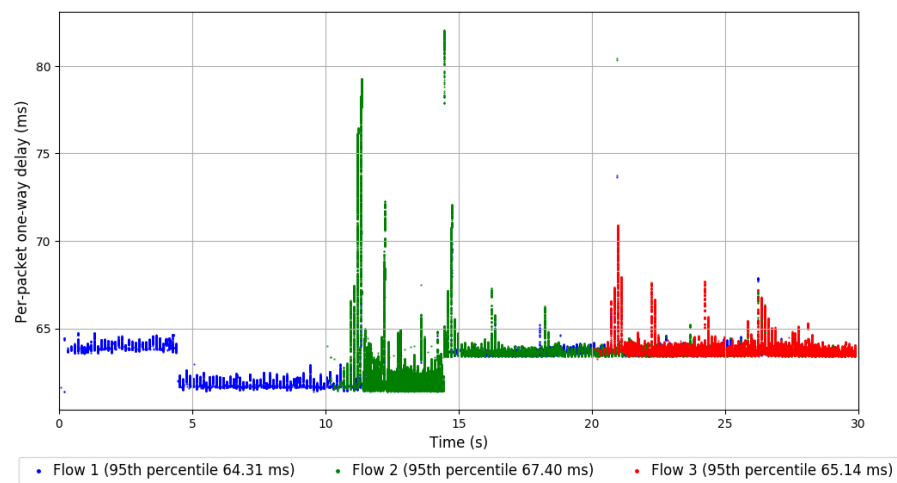
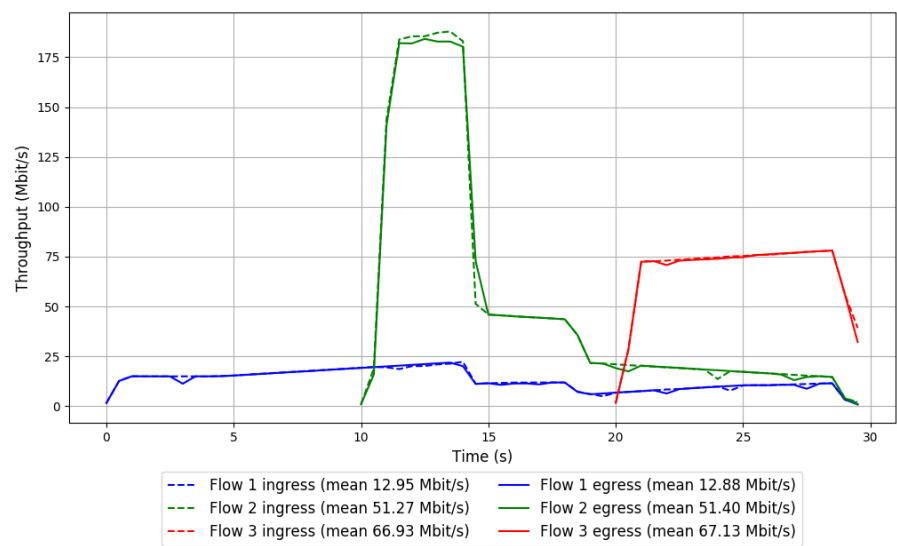
-- Flow 3:

Average throughput: 67.13 Mbit/s

95th percentile per-packet one-way delay: 65.145 ms

Loss rate: 0.96%

Run 10: Report of TCP Vegas — Data Link

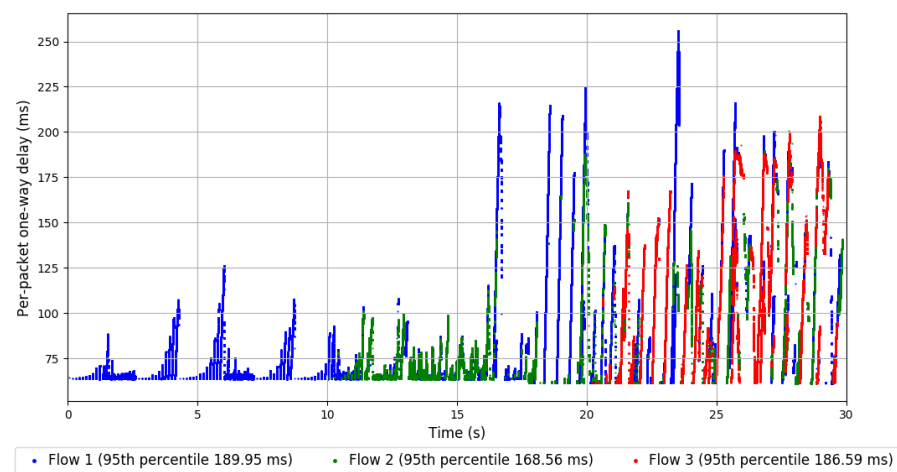
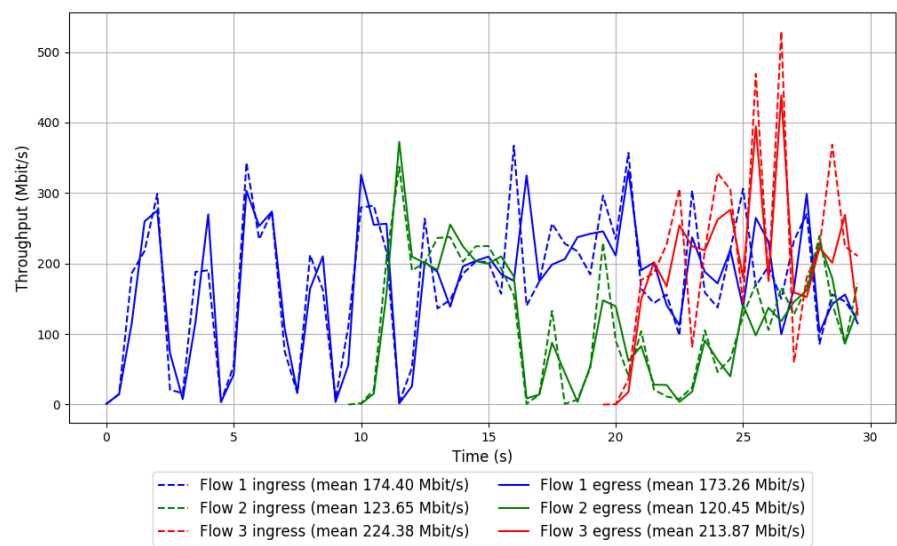


```
Run 1: Statistics of Verus

Start at: 2018-01-10 04:01:02
End at: 2018-01-10 04:01:32

# Below is generated by plot.py at 2018-01-10 09:23:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 321.59 Mbit/s
95th percentile per-packet one-way delay: 184.791 ms
Loss rate: 3.13%
-- Flow 1:
Average throughput: 173.26 Mbit/s
95th percentile per-packet one-way delay: 189.946 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 120.45 Mbit/s
95th percentile per-packet one-way delay: 168.564 ms
Loss rate: 2.33%
-- Flow 3:
Average throughput: 213.87 Mbit/s
95th percentile per-packet one-way delay: 186.589 ms
Loss rate: 7.99%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-10 04:15:23

End at: 2018-01-10 04:15:53

Below is generated by plot.py at 2018-01-10 09:23:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.13 Mbit/s

95th percentile per-packet one-way delay: 145.190 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 268.46 Mbit/s

95th percentile per-packet one-way delay: 138.360 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 88.93 Mbit/s

95th percentile per-packet one-way delay: 159.292 ms

Loss rate: 0.64%

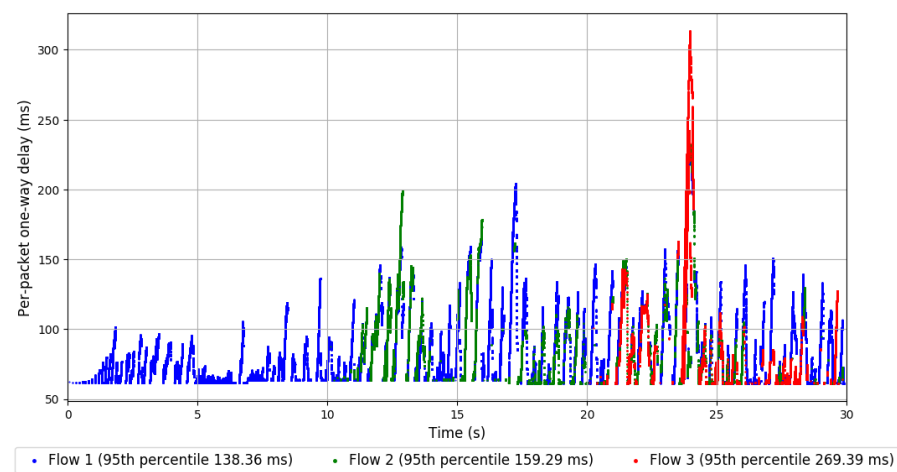
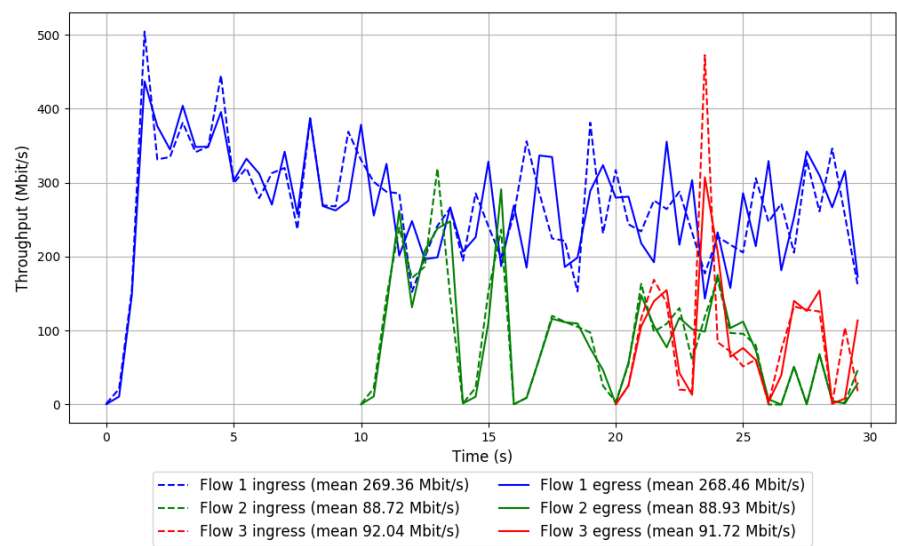
-- Flow 3:

Average throughput: 91.72 Mbit/s

95th percentile per-packet one-way delay: 269.393 ms

Loss rate: 1.60%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-10 04:29:24

End at: 2018-01-10 04:29:54

Below is generated by plot.py at 2018-01-10 09:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 364.26 Mbit/s

95th percentile per-packet one-way delay: 185.545 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 178.43 Mbit/s

95th percentile per-packet one-way delay: 173.812 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 254.22 Mbit/s

95th percentile per-packet one-way delay: 200.705 ms

Loss rate: 1.17%

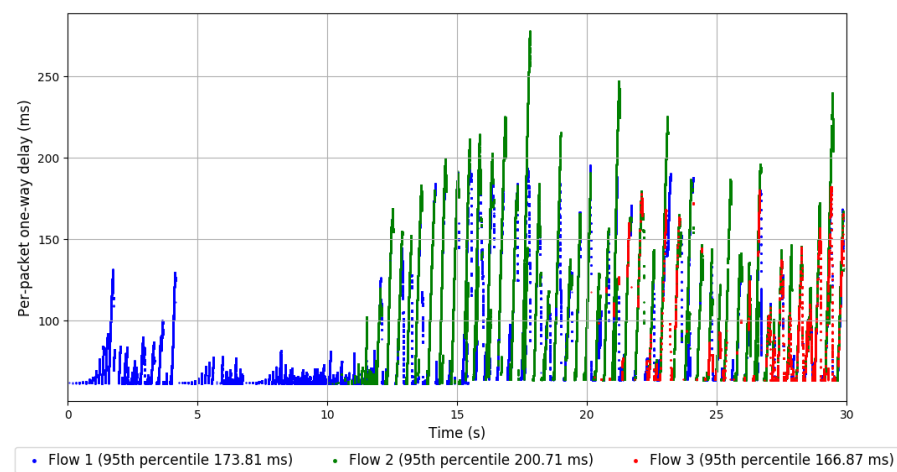
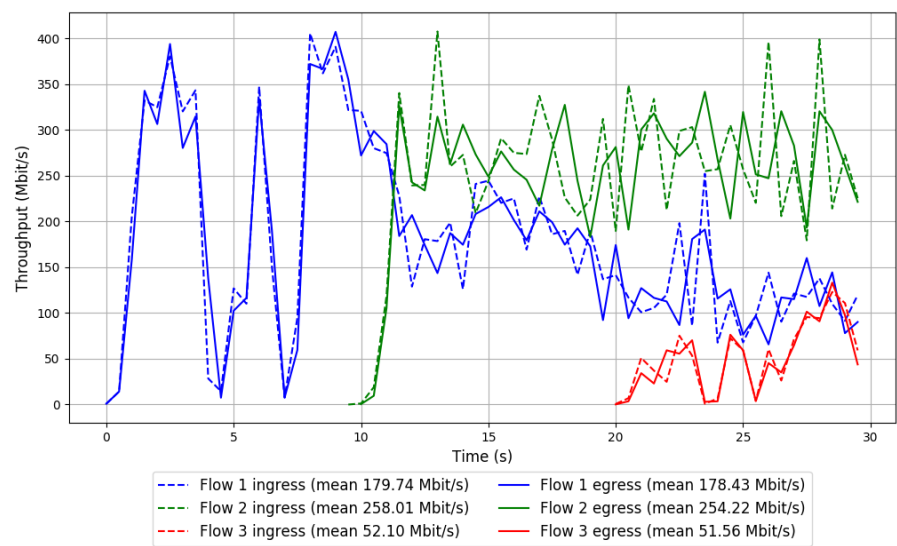
-- Flow 3:

Average throughput: 51.56 Mbit/s

95th percentile per-packet one-way delay: 166.869 ms

Loss rate: 2.79%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-10 04:43:40

End at: 2018-01-10 04:44:10

Below is generated by plot.py at 2018-01-10 09:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 354.19 Mbit/s

95th percentile per-packet one-way delay: 123.017 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 220.32 Mbit/s

95th percentile per-packet one-way delay: 117.370 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 152.41 Mbit/s

95th percentile per-packet one-way delay: 126.255 ms

Loss rate: 2.08%

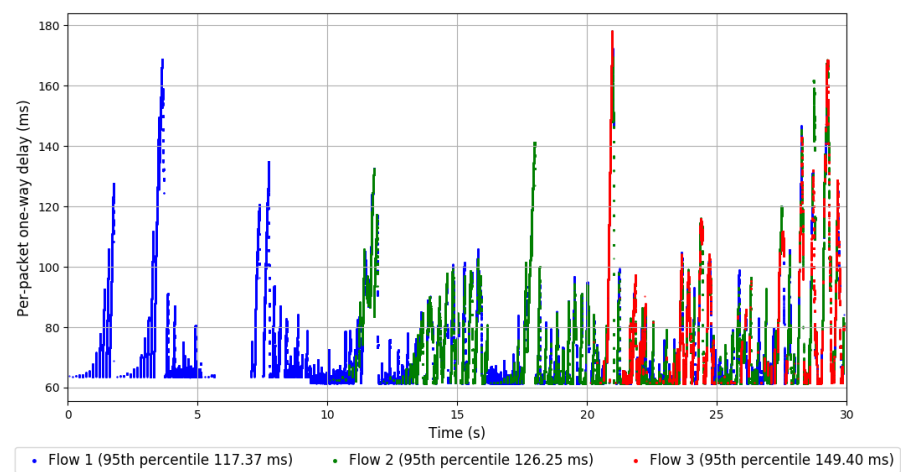
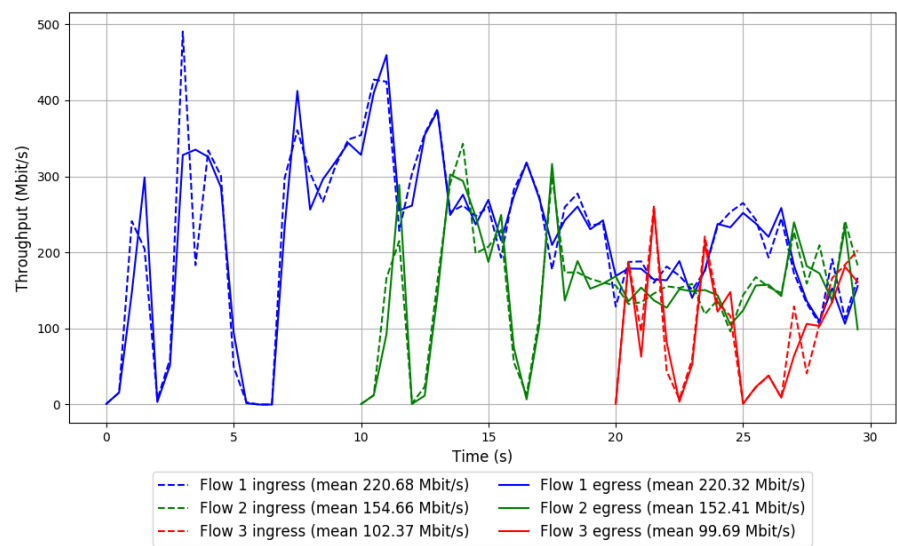
-- Flow 3:

Average throughput: 99.69 Mbit/s

95th percentile per-packet one-way delay: 149.397 ms

Loss rate: 3.86%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-10 04:58:03

End at: 2018-01-10 04:58:33

Below is generated by plot.py at 2018-01-10 09:24:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 276.92 Mbit/s

95th percentile per-packet one-way delay: 109.945 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 176.82 Mbit/s

95th percentile per-packet one-way delay: 109.421 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 108.29 Mbit/s

95th percentile per-packet one-way delay: 140.430 ms

Loss rate: 0.71%

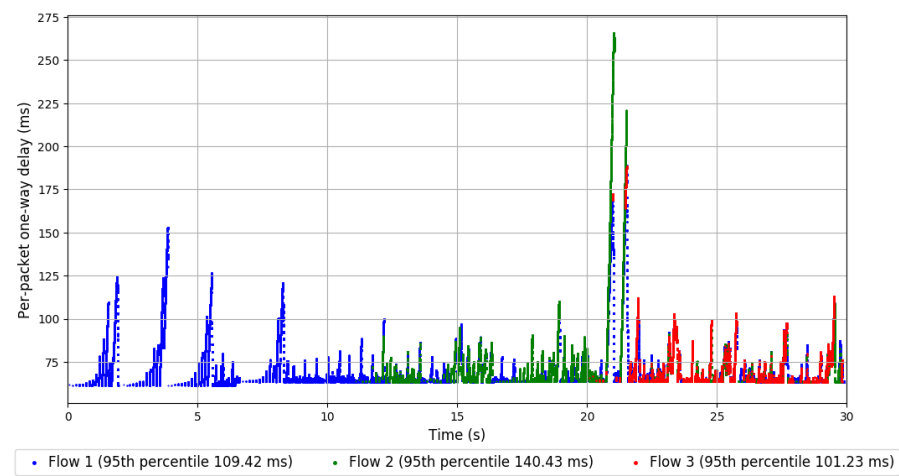
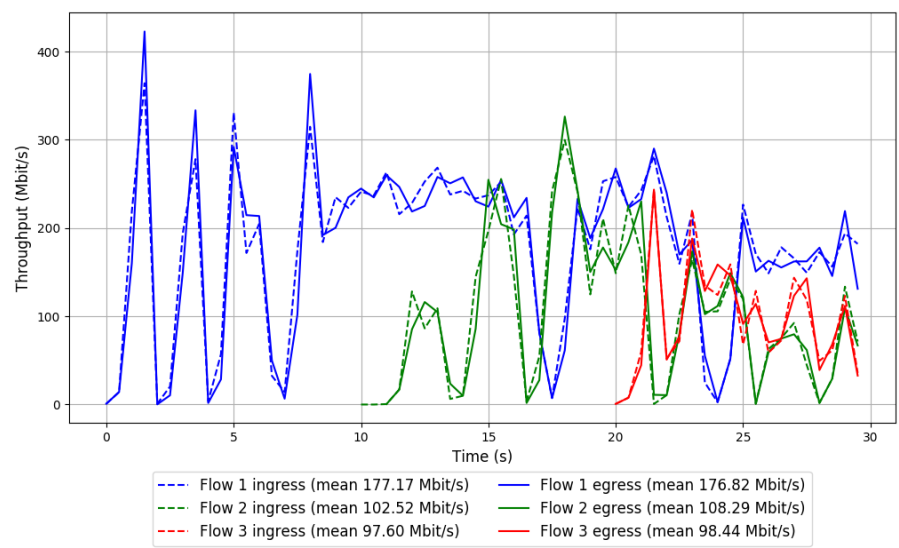
-- Flow 3:

Average throughput: 98.44 Mbit/s

95th percentile per-packet one-way delay: 101.229 ms

Loss rate: 1.04%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-10 05:12:04

End at: 2018-01-10 05:12:34

Below is generated by plot.py at 2018-01-10 09:24:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 310.34 Mbit/s

95th percentile per-packet one-way delay: 170.669 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 220.59 Mbit/s

95th percentile per-packet one-way delay: 176.669 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 103.06 Mbit/s

95th percentile per-packet one-way delay: 162.942 ms

Loss rate: 1.15%

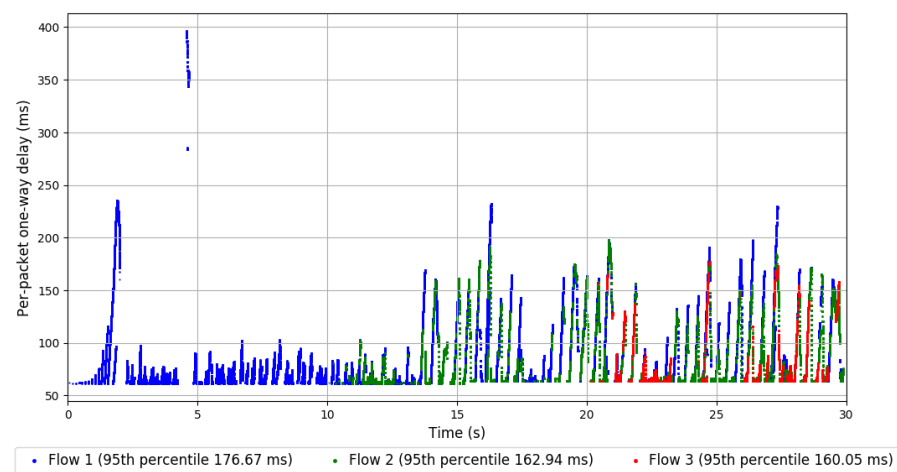
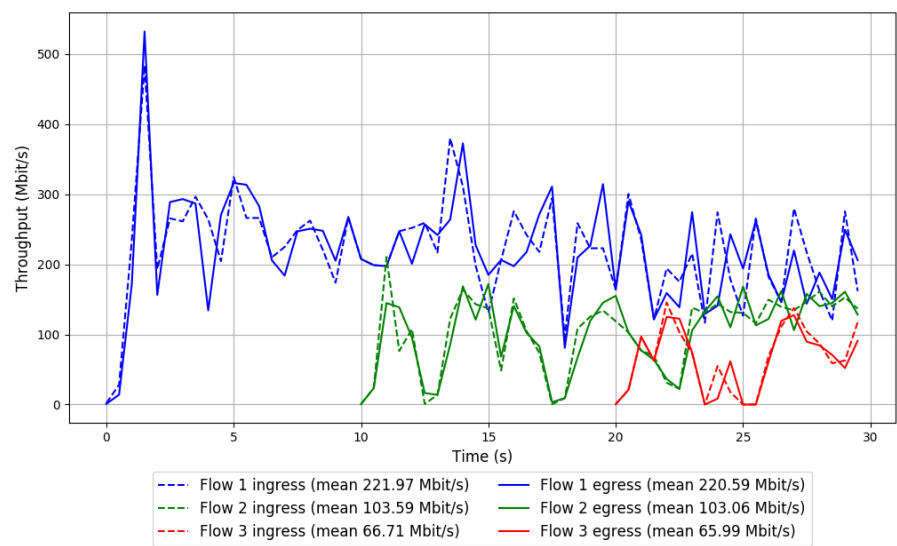
-- Flow 3:

Average throughput: 65.99 Mbit/s

95th percentile per-packet one-way delay: 160.051 ms

Loss rate: 4.19%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-10 05:26:02

End at: 2018-01-10 05:26:32

Below is generated by plot.py at 2018-01-10 09:25:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 309.65 Mbit/s

95th percentile per-packet one-way delay: 202.579 ms

Loss rate: 1.76%

-- Flow 1:

Average throughput: 161.92 Mbit/s

95th percentile per-packet one-way delay: 168.342 ms

Loss rate: 1.39%

-- Flow 2:

Average throughput: 112.52 Mbit/s

95th percentile per-packet one-way delay: 158.259 ms

Loss rate: 1.35%

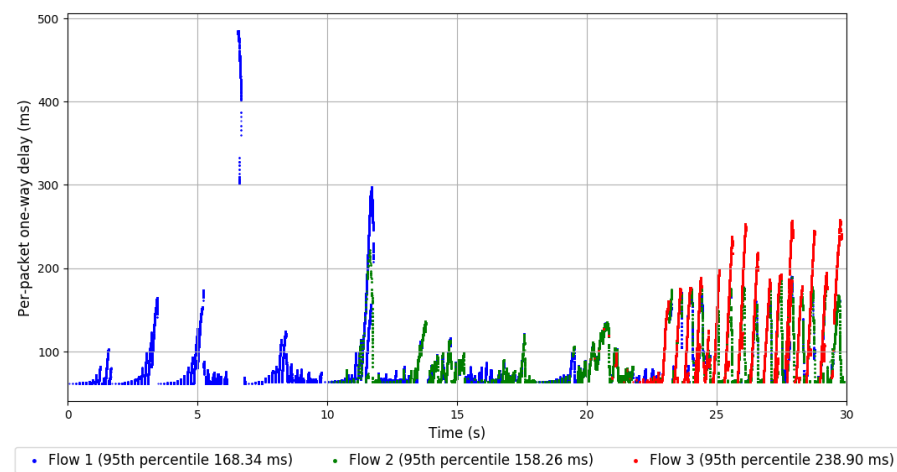
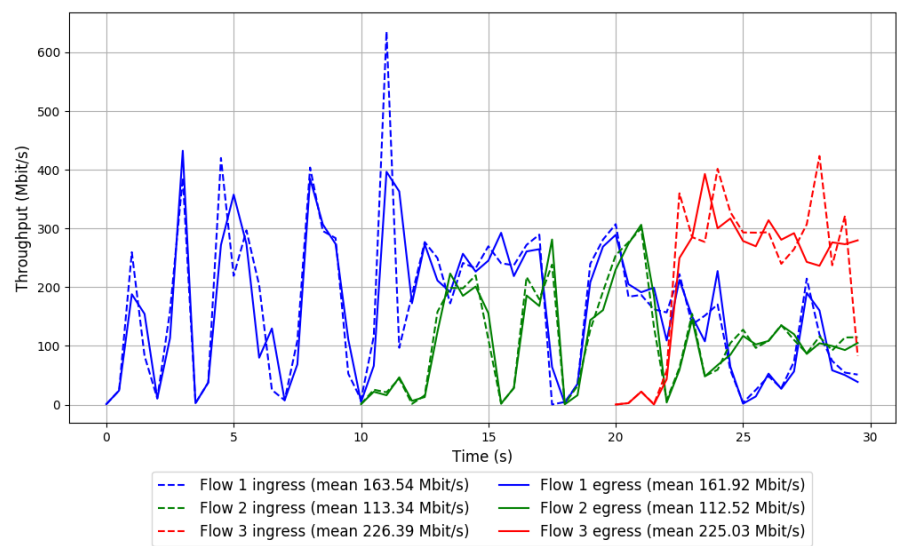
-- Flow 3:

Average throughput: 225.03 Mbit/s

95th percentile per-packet one-way delay: 238.904 ms

Loss rate: 2.99%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-10 05:40:39

End at: 2018-01-10 05:41:09

Below is generated by plot.py at 2018-01-10 09:25:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.42 Mbit/s

95th percentile per-packet one-way delay: 147.013 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 211.97 Mbit/s

95th percentile per-packet one-way delay: 139.038 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 122.49 Mbit/s

95th percentile per-packet one-way delay: 156.791 ms

Loss rate: 0.16%

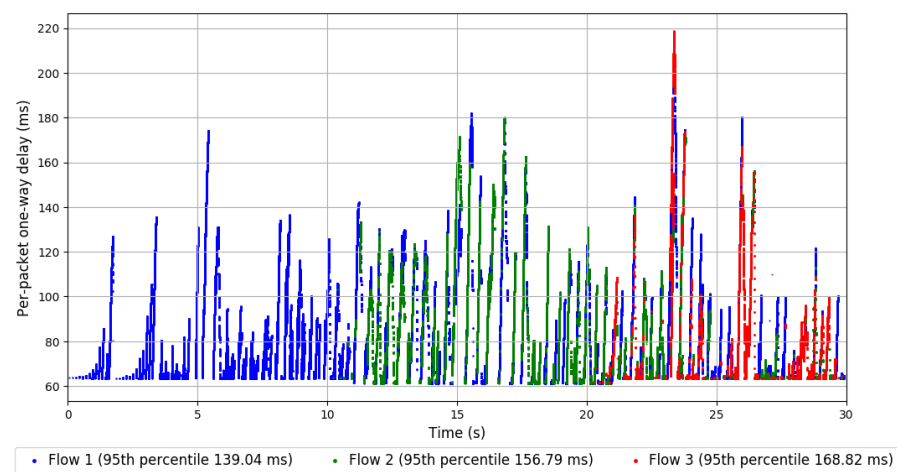
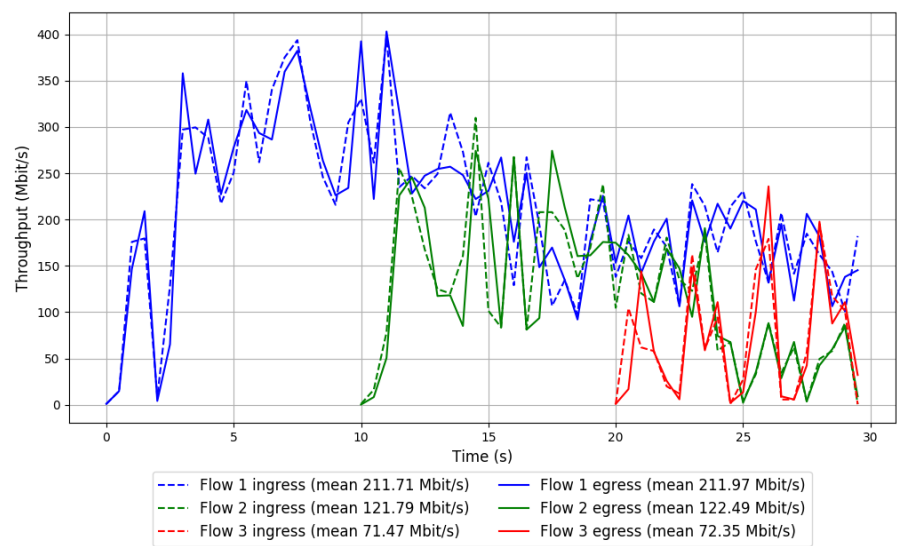
-- Flow 3:

Average throughput: 72.35 Mbit/s

95th percentile per-packet one-way delay: 168.824 ms

Loss rate: 0.27%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-10 05:54:40

End at: 2018-01-10 05:55:10

Below is generated by plot.py at 2018-01-10 09:29:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 370.92 Mbit/s

95th percentile per-packet one-way delay: 152.891 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 196.61 Mbit/s

95th percentile per-packet one-way delay: 156.147 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 207.13 Mbit/s

95th percentile per-packet one-way delay: 151.149 ms

Loss rate: 1.21%

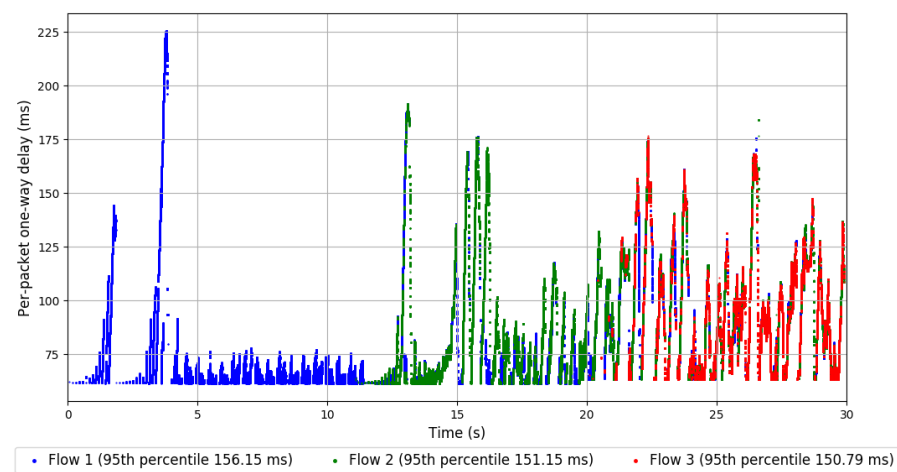
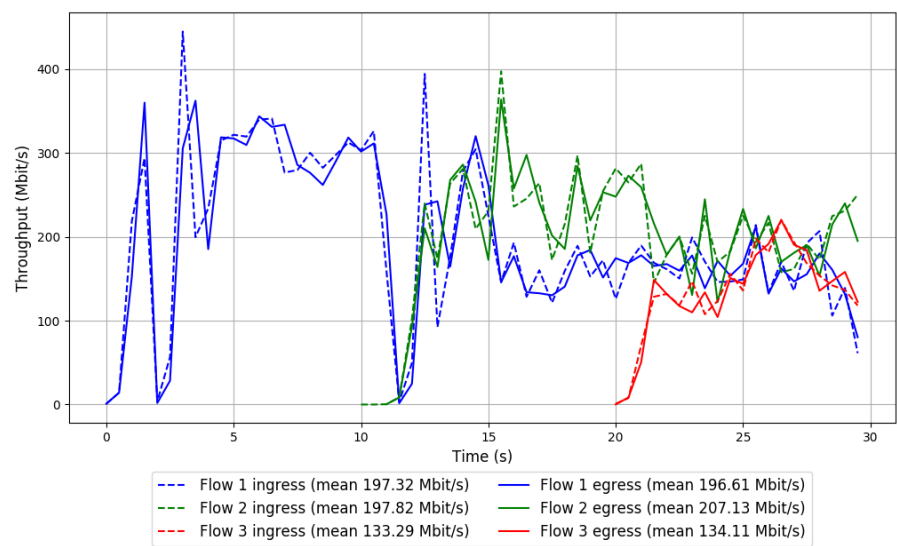
-- Flow 3:

Average throughput: 134.11 Mbit/s

95th percentile per-packet one-way delay: 150.792 ms

Loss rate: 0.50%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-10 06:08:51

End at: 2018-01-10 06:09:21

Below is generated by plot.py at 2018-01-10 09:29:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 350.66 Mbit/s

95th percentile per-packet one-way delay: 177.401 ms

Loss rate: 2.79%

-- Flow 1:

Average throughput: 209.71 Mbit/s

95th percentile per-packet one-way delay: 151.804 ms

Loss rate: 1.44%

-- Flow 2:

Average throughput: 126.23 Mbit/s

95th percentile per-packet one-way delay: 181.680 ms

Loss rate: 2.01%

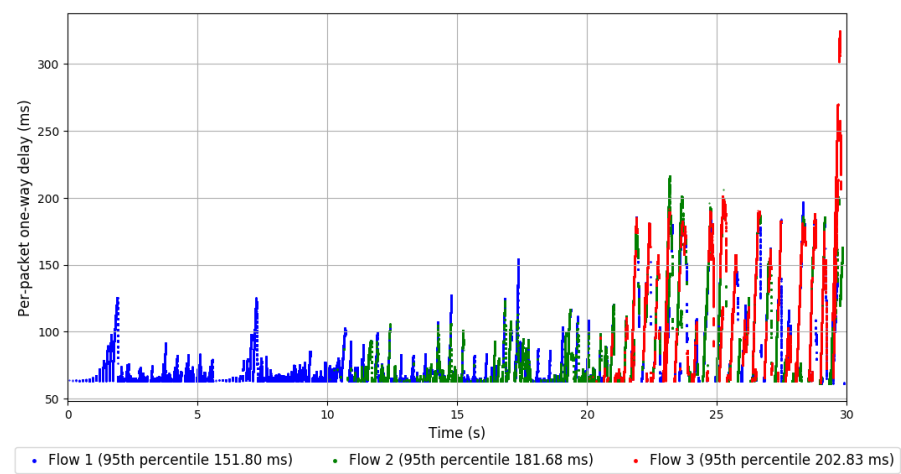
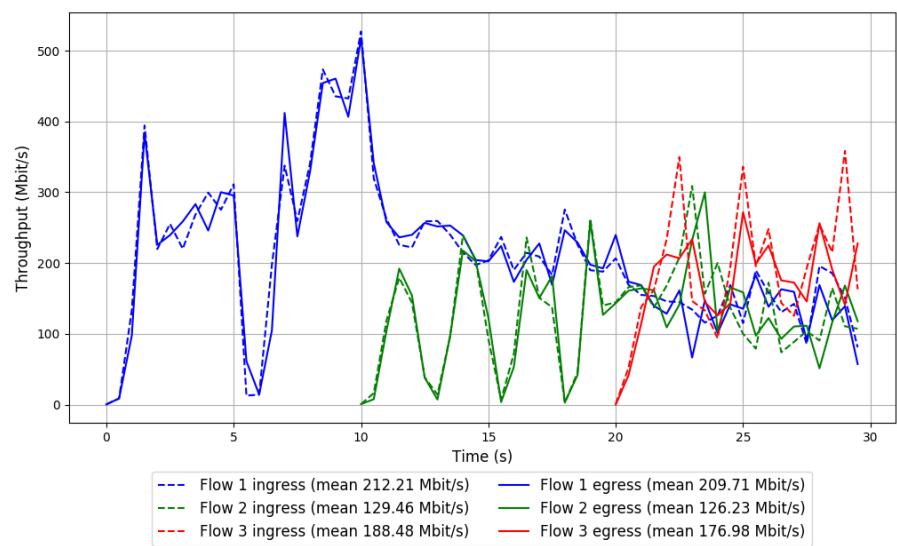
-- Flow 3:

Average throughput: 176.98 Mbit/s

95th percentile per-packet one-way delay: 202.832 ms

Loss rate: 8.45%

Run 10: Report of Verus — Data Link

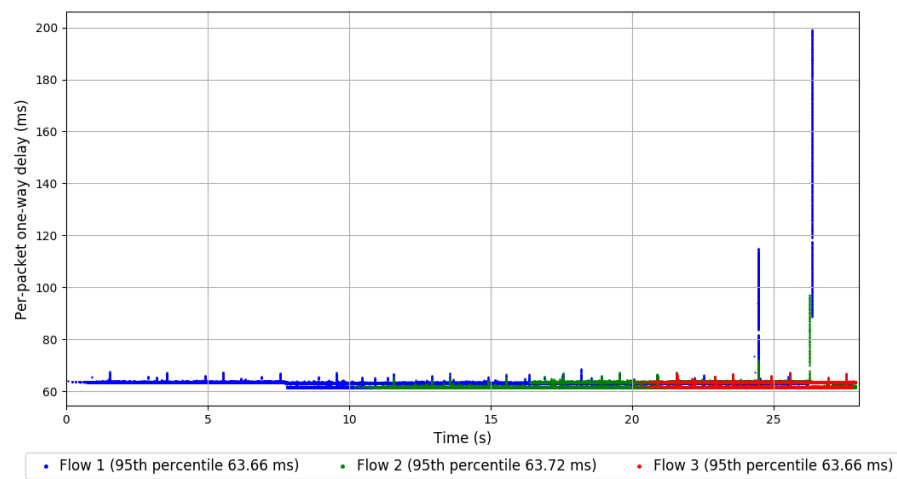
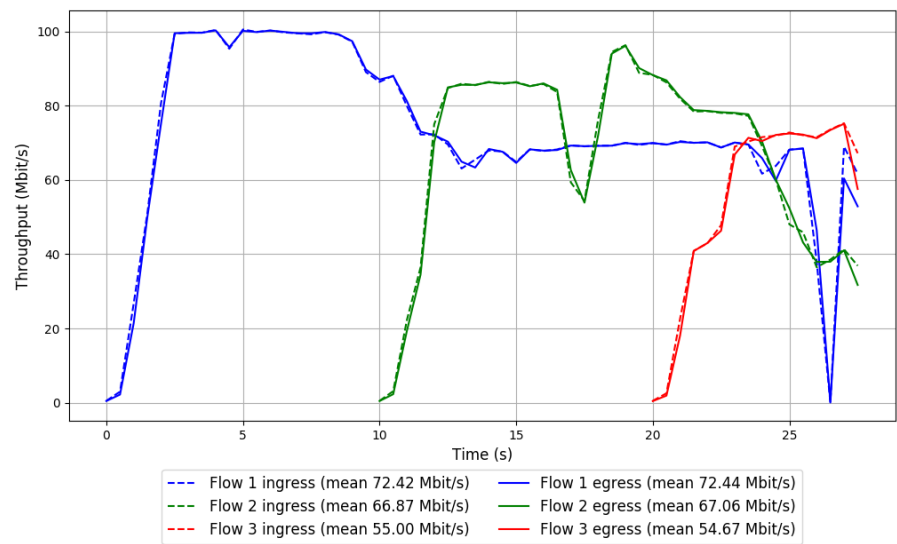


```
Run 1: Statistics of Copa

Start at: 2018-01-10 03:58:40
End at: 2018-01-10 03:59:10

# Below is generated by plot.py at 2018-01-10 09:29:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.72 Mbit/s
95th percentile per-packet one-way delay: 63.682 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 72.44 Mbit/s
95th percentile per-packet one-way delay: 63.665 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 67.06 Mbit/s
95th percentile per-packet one-way delay: 63.724 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 54.67 Mbit/s
95th percentile per-packet one-way delay: 63.659 ms
Loss rate: 2.18%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-10 04:12:55

End at: 2018-01-10 04:13:25

Below is generated by plot.py at 2018-01-10 09:29:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.40 Mbit/s

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

Loss rate: 0.76%

-- Flow 1:

Average throughput: 66.71 Mbit/s

95th percentile per-packet one-way delay: 63.618 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 70.38 Mbit/s

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

Loss rate: 0.75%

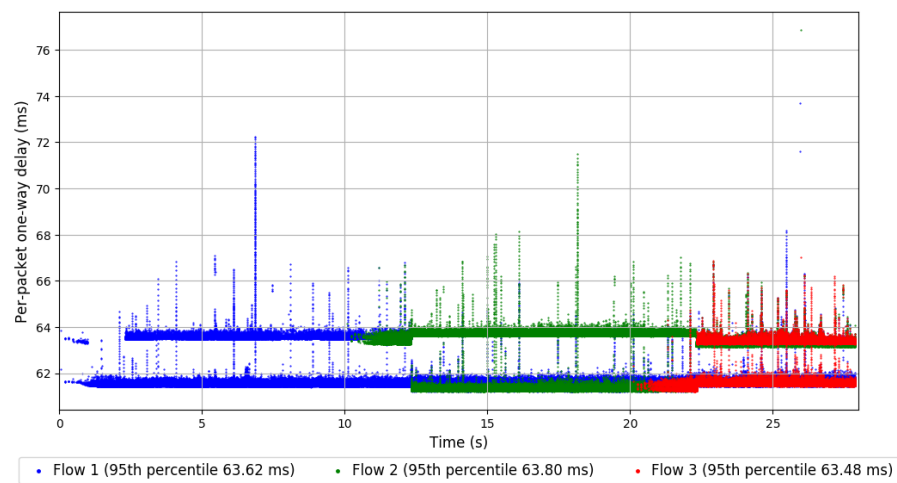
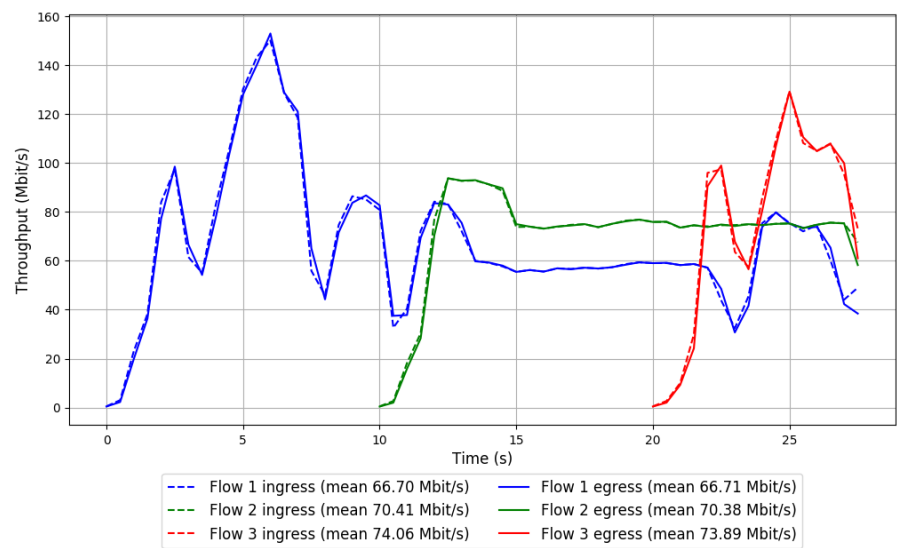
-- Flow 3:

Average throughput: 73.89 Mbit/s

95th percentile per-packet one-way delay: 63.476 ms

Loss rate: 1.81%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-10 04:27:06

End at: 2018-01-10 04:27:36

Below is generated by plot.py at 2018-01-10 09:29:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.41 Mbit/s

95th percentile per-packet one-way delay: 63.823 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 64.39 Mbit/s

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

Loss rate: 0.33%

-- Flow 2:

Average throughput: 60.58 Mbit/s

95th percentile per-packet one-way delay: 63.799 ms

Loss rate: 0.68%

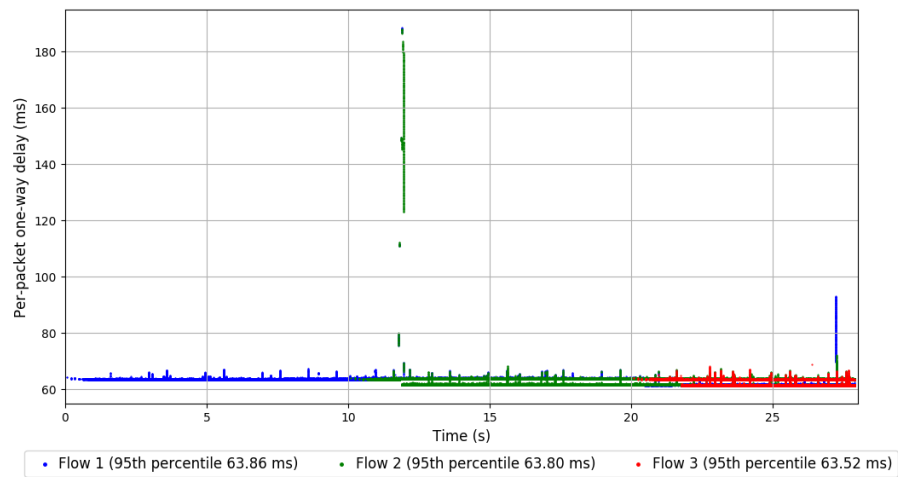
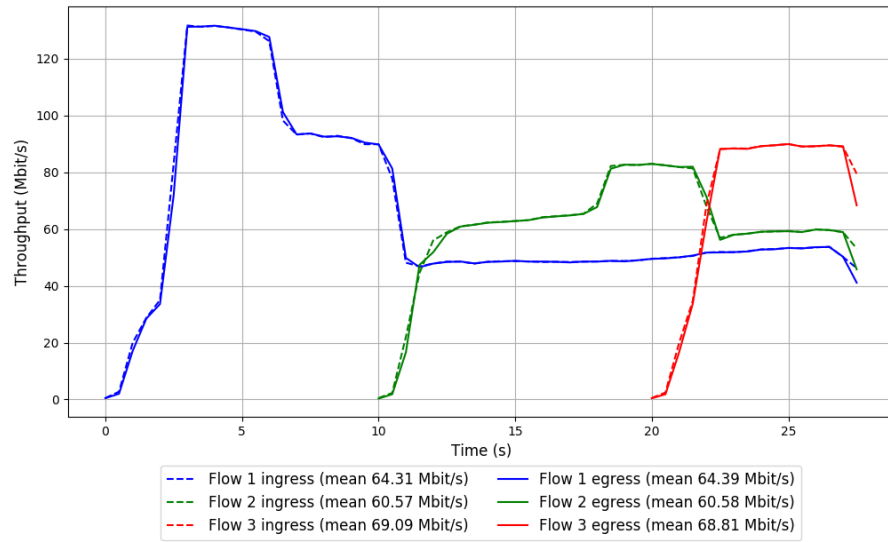
-- Flow 3:

Average throughput: 68.81 Mbit/s

95th percentile per-packet one-way delay: 63.517 ms

Loss rate: 2.01%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-10 04:41:20

End at: 2018-01-10 04:41:50

Below is generated by plot.py at 2018-01-10 09:29:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.80 Mbit/s

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

Loss rate: 0.63%

-- Flow 1:

Average throughput: 68.12 Mbit/s

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

Loss rate: 0.35%

-- Flow 2:

Average throughput: 68.75 Mbit/s

95th percentile per-packet one-way delay: 63.867 ms

Loss rate: 0.50%

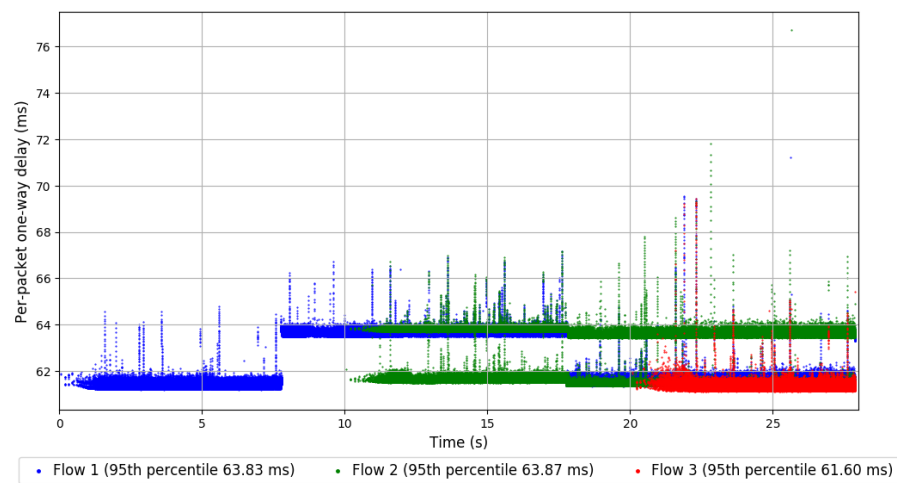
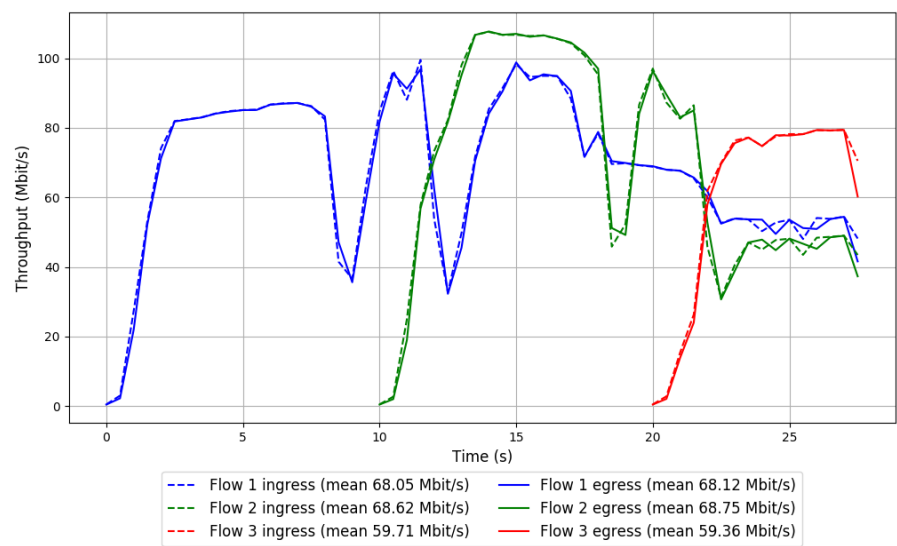
-- Flow 3:

Average throughput: 59.36 Mbit/s

95th percentile per-packet one-way delay: 61.599 ms

Loss rate: 2.11%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-10 04:55:41

End at: 2018-01-10 04:56:11

Below is generated by plot.py at 2018-01-10 09:29:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.90 Mbit/s

95th percentile per-packet one-way delay: 63.766 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 76.58 Mbit/s

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

Loss rate: 0.48%

-- Flow 2:

Average throughput: 58.35 Mbit/s

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

Loss rate: 0.13%

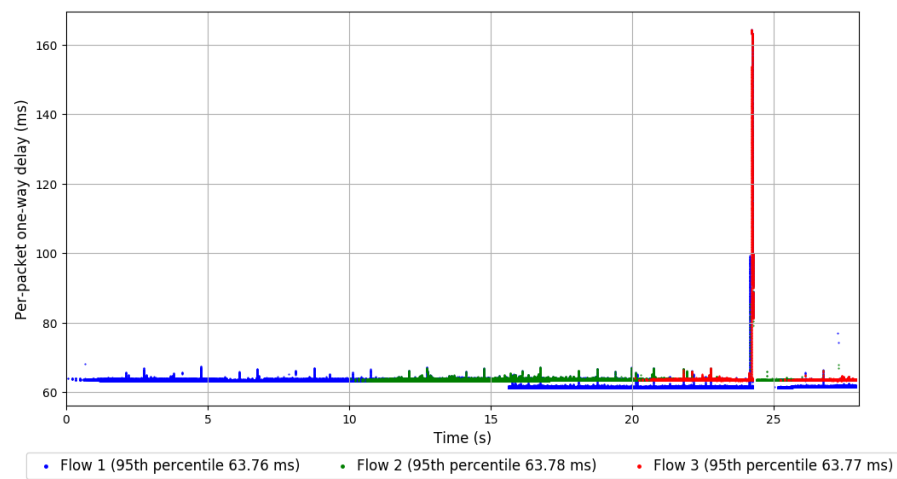
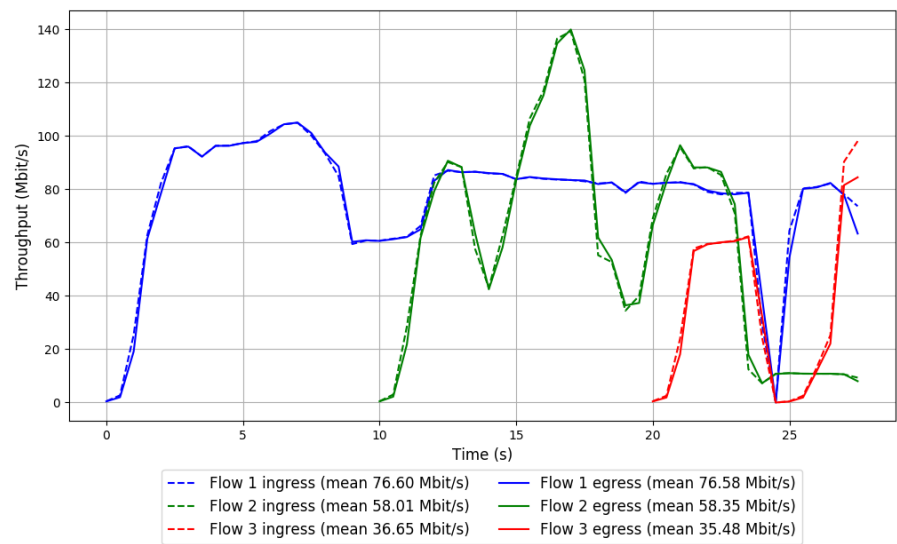
-- Flow 3:

Average throughput: 35.48 Mbit/s

95th percentile per-packet one-way delay: 63.766 ms

Loss rate: 4.74%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-10 05:09:44

End at: 2018-01-10 05:10:14

Below is generated by plot.py at 2018-01-10 09:29:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.75 Mbit/s

95th percentile per-packet one-way delay: 63.635 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 74.42 Mbit/s

95th percentile per-packet one-way delay: 63.573 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 63.09 Mbit/s

95th percentile per-packet one-way delay: 63.749 ms

Loss rate: 0.70%

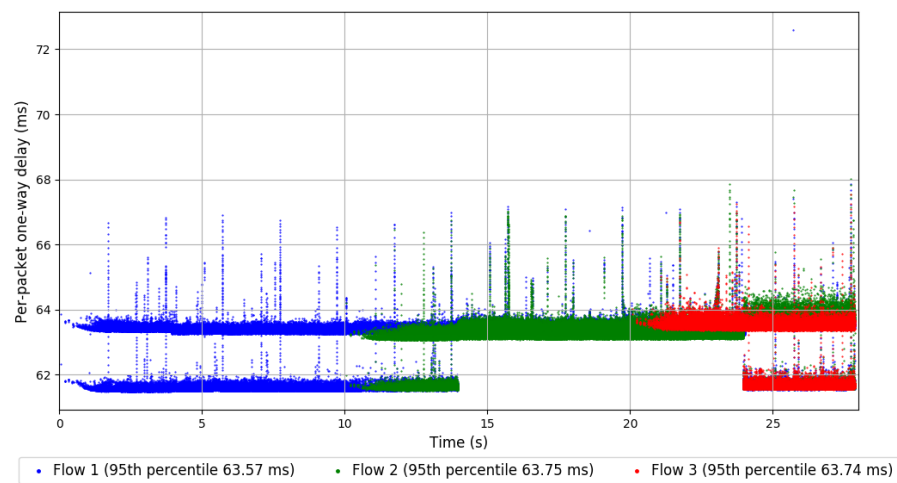
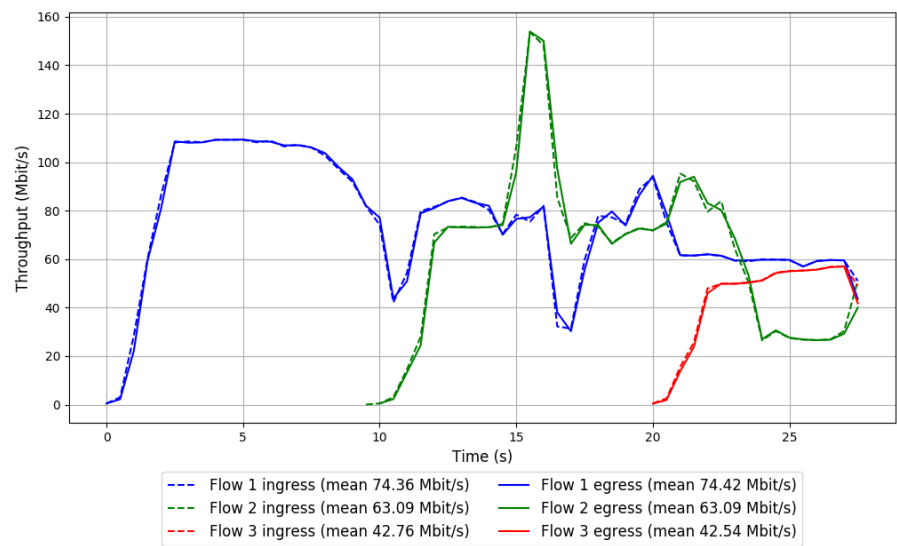
-- Flow 3:

Average throughput: 42.54 Mbit/s

95th percentile per-packet one-way delay: 63.745 ms

Loss rate: 2.12%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-10 05:23:40

End at: 2018-01-10 05:24:10

Below is generated by plot.py at 2018-01-10 09:30:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.12 Mbit/s

95th percentile per-packet one-way delay: 63.700 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 62.98 Mbit/s

95th percentile per-packet one-way delay: 63.736 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 57.40 Mbit/s

95th percentile per-packet one-way delay: 63.651 ms

Loss rate: 0.12%

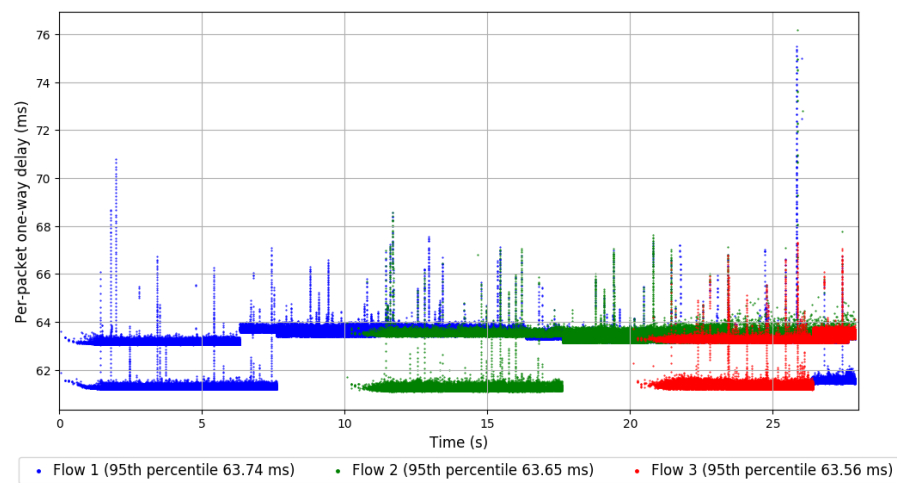
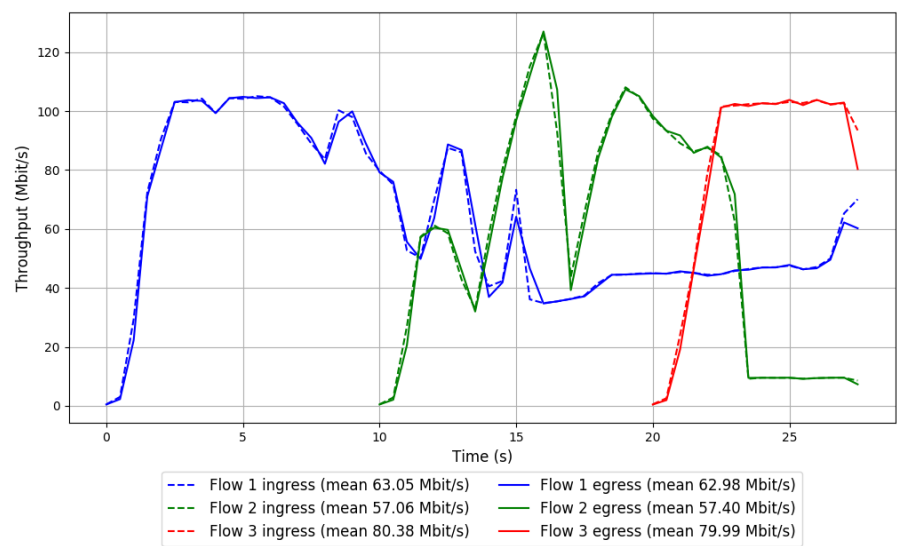
-- Flow 3:

Average throughput: 79.99 Mbit/s

95th percentile per-packet one-way delay: 63.559 ms

Loss rate: 2.04%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-10 05:38:15

End at: 2018-01-10 05:38:45

Below is generated by plot.py at 2018-01-10 09:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 141.85 Mbit/s

95th percentile per-packet one-way delay: 63.556 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 78.53 Mbit/s

95th percentile per-packet one-way delay: 63.459 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 73.36 Mbit/s

95th percentile per-packet one-way delay: 63.571 ms

Loss rate: 0.78%

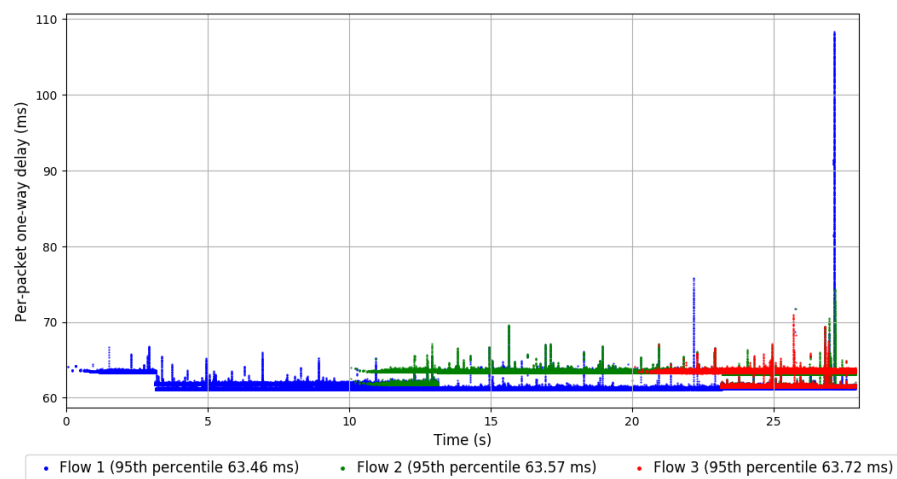
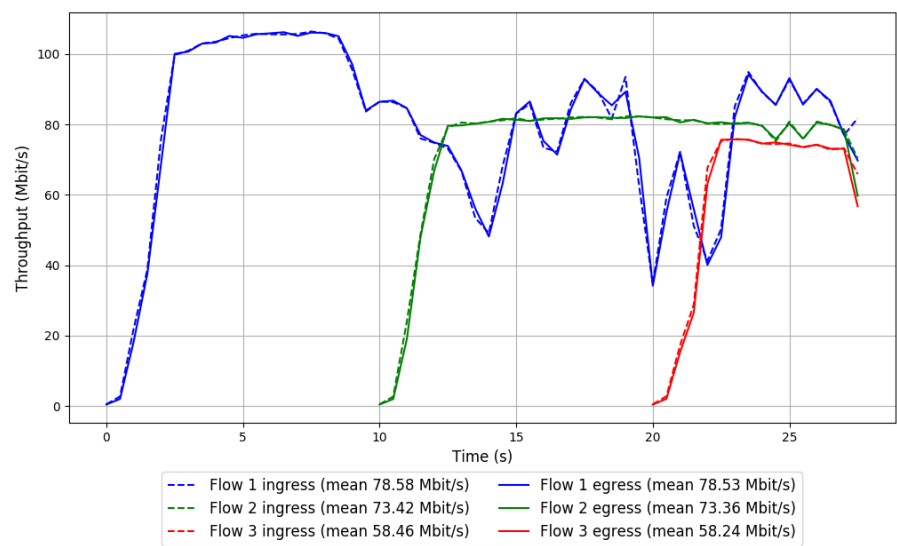
-- Flow 3:

Average throughput: 58.24 Mbit/s

95th percentile per-packet one-way delay: 63.723 ms

Loss rate: 1.96%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-10 05:52:15

End at: 2018-01-10 05:52:45

Below is generated by plot.py at 2018-01-10 09:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.79 Mbit/s

95th percentile per-packet one-way delay: 63.669 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 71.12 Mbit/s

95th percentile per-packet one-way delay: 63.689 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 67.02 Mbit/s

95th percentile per-packet one-way delay: 63.624 ms

Loss rate: 0.32%

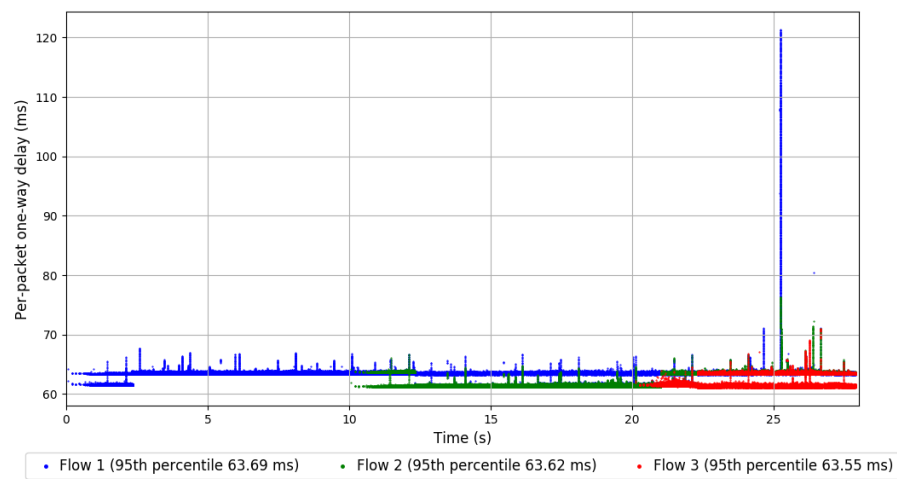
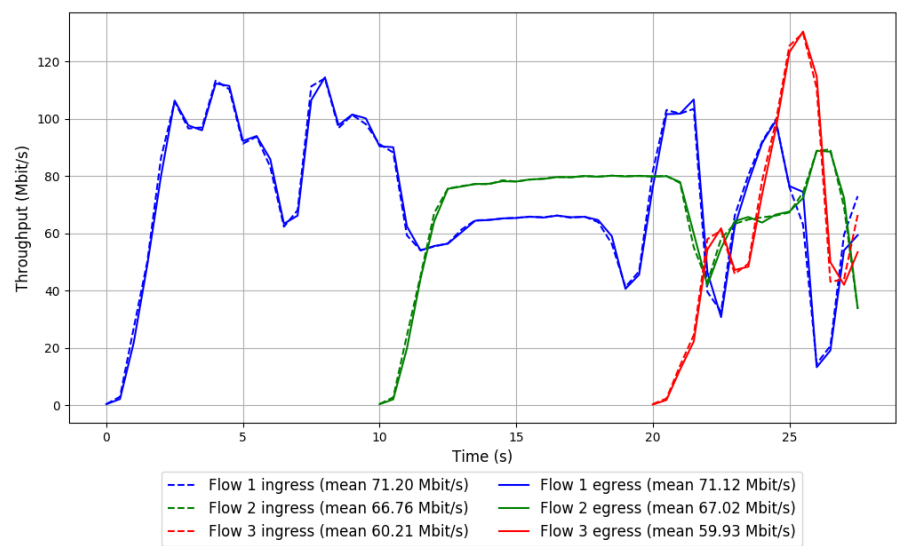
-- Flow 3:

Average throughput: 59.93 Mbit/s

95th percentile per-packet one-way delay: 63.551 ms

Loss rate: 2.08%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-10 06:06:33

End at: 2018-01-10 06:07:03

Below is generated by plot.py at 2018-01-10 09:31:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.07 Mbit/s

95th percentile per-packet one-way delay: 63.741 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 58.69 Mbit/s

95th percentile per-packet one-way delay: 63.775 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 65.02 Mbit/s

95th percentile per-packet one-way delay: 63.712 ms

Loss rate: 0.51%

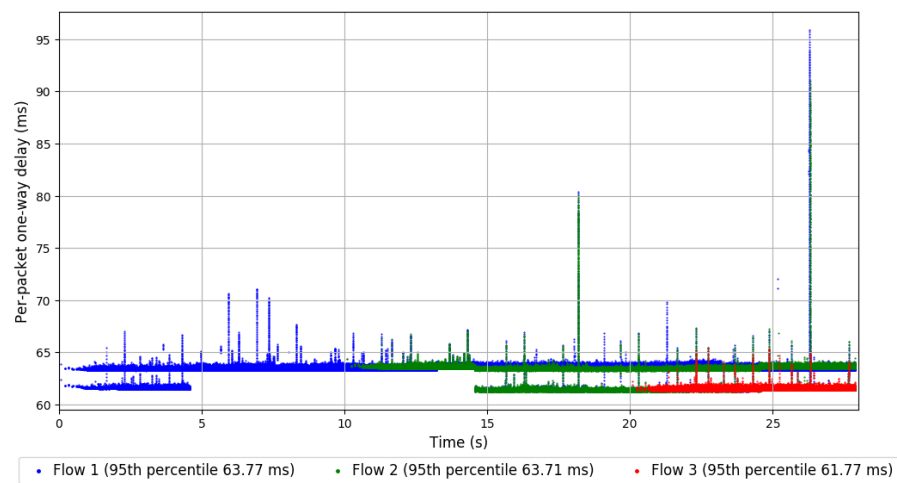
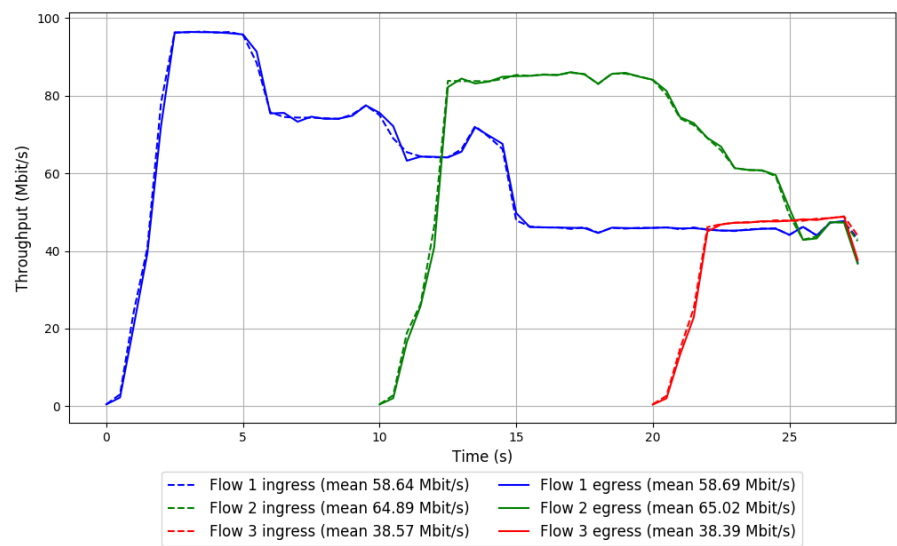
-- Flow 3:

Average throughput: 38.39 Mbit/s

95th percentile per-packet one-way delay: 61.774 ms

Loss rate: 2.01%

Run 10: Report of Copa — Data Link

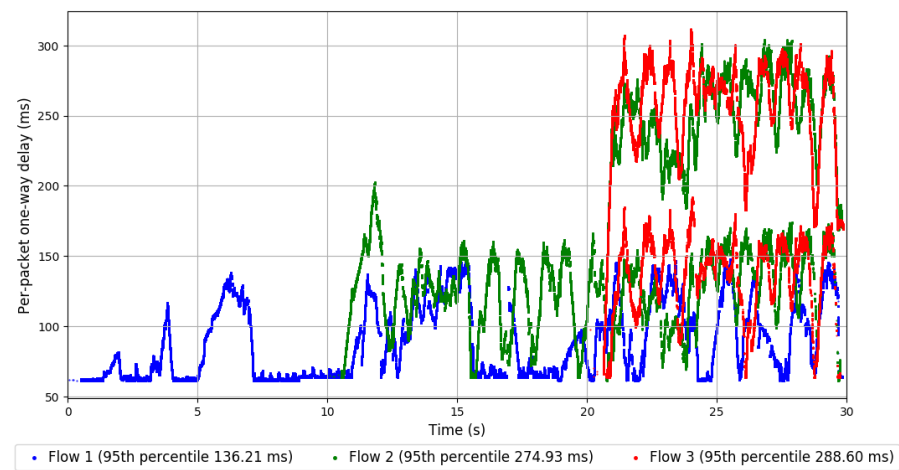
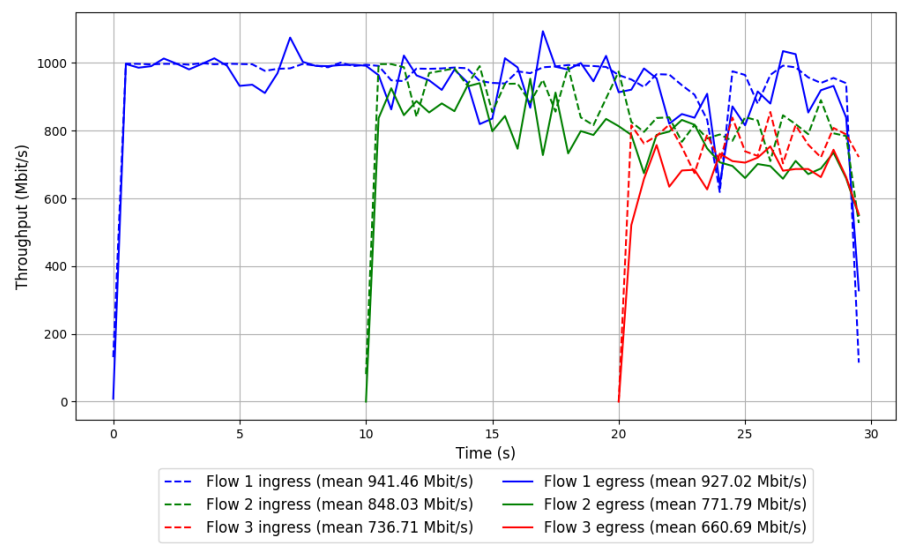


```
Run 1: Statistics of FillP

Start at: 2018-01-10 03:54:50
End at: 2018-01-10 03:55:20

# Below is generated by plot.py at 2018-01-10 09:56:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1653.46 Mbit/s
95th percentile per-packet one-way delay: 272.766 ms
Loss rate: 5.80%
-- Flow 1:
Average throughput: 927.02 Mbit/s
95th percentile per-packet one-way delay: 136.207 ms
Loss rate: 1.95%
-- Flow 2:
Average throughput: 771.79 Mbit/s
95th percentile per-packet one-way delay: 274.933 ms
Loss rate: 9.65%
-- Flow 3:
Average throughput: 660.69 Mbit/s
95th percentile per-packet one-way delay: 288.598 ms
Loss rate: 11.78%
```


Run 1: Report of FillP — Data Link

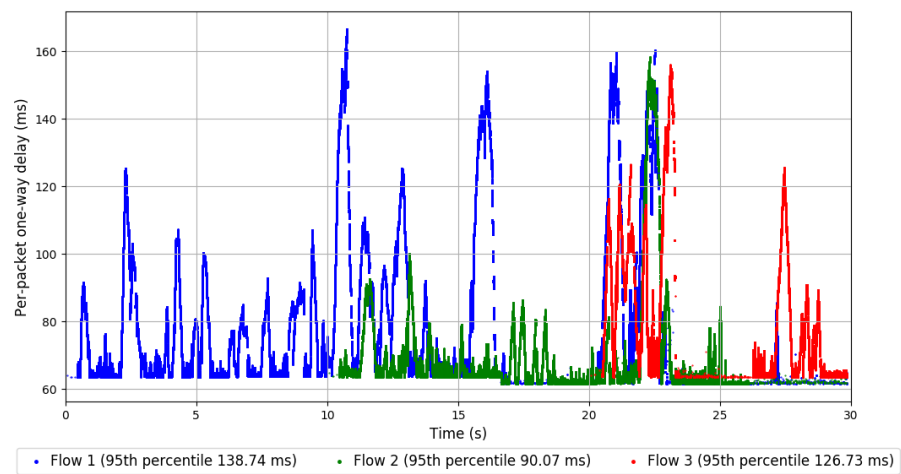
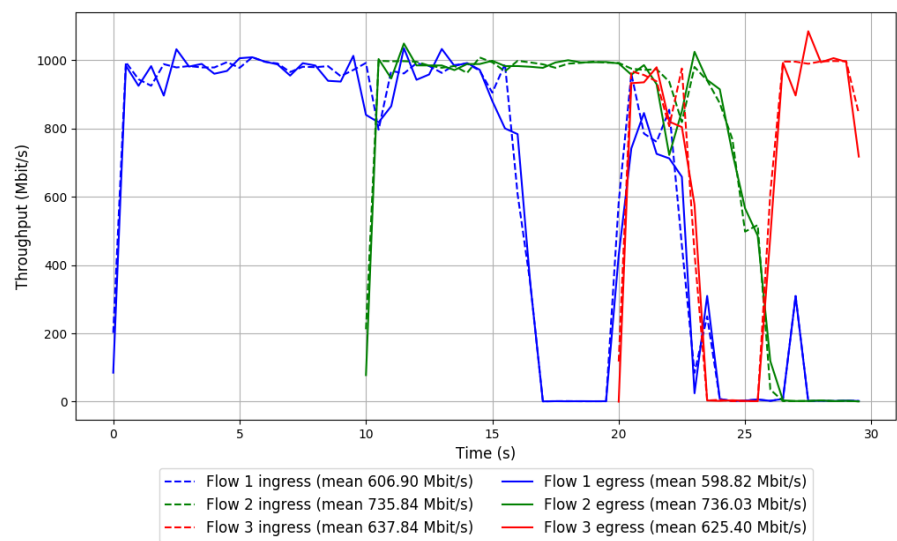


```
Run 2: Statistics of FillP

Start at: 2018-01-10 04:09:23
End at: 2018-01-10 04:09:53

# Below is generated by plot.py at 2018-01-10 09:56:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1292.11 Mbit/s
95th percentile per-packet one-way delay: 129.062 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 598.82 Mbit/s
95th percentile per-packet one-way delay: 138.741 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 736.03 Mbit/s
95th percentile per-packet one-way delay: 90.071 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 625.40 Mbit/s
95th percentile per-packet one-way delay: 126.733 ms
Loss rate: 3.22%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-10 04:23:36

End at: 2018-01-10 04:24:06

Below is generated by plot.py at 2018-01-10 09:56:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 1348.44 Mbit/s

95th percentile per-packet one-way delay: 160.801 ms

Loss rate: 2.71%

-- Flow 1:

Average throughput: 953.22 Mbit/s

95th percentile per-packet one-way delay: 141.249 ms

Loss rate: 1.31%

-- Flow 2:

Average throughput: 181.35 Mbit/s

95th percentile per-packet one-way delay: 128.593 ms

Loss rate: 1.99%

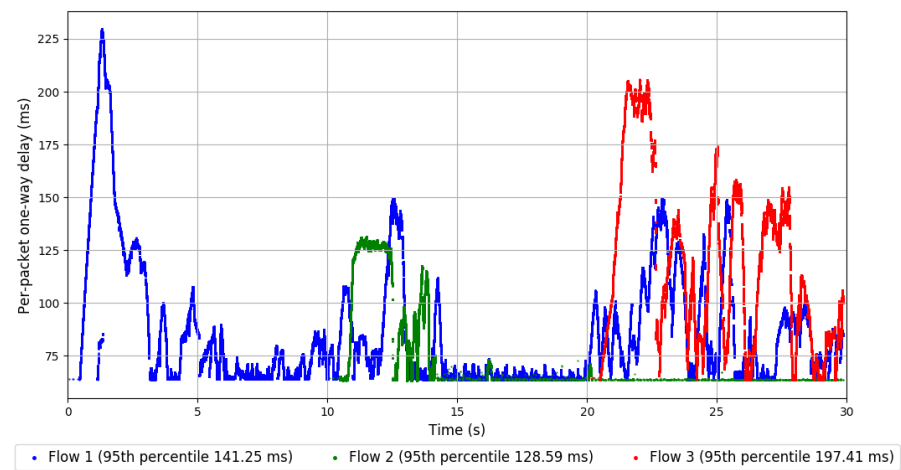
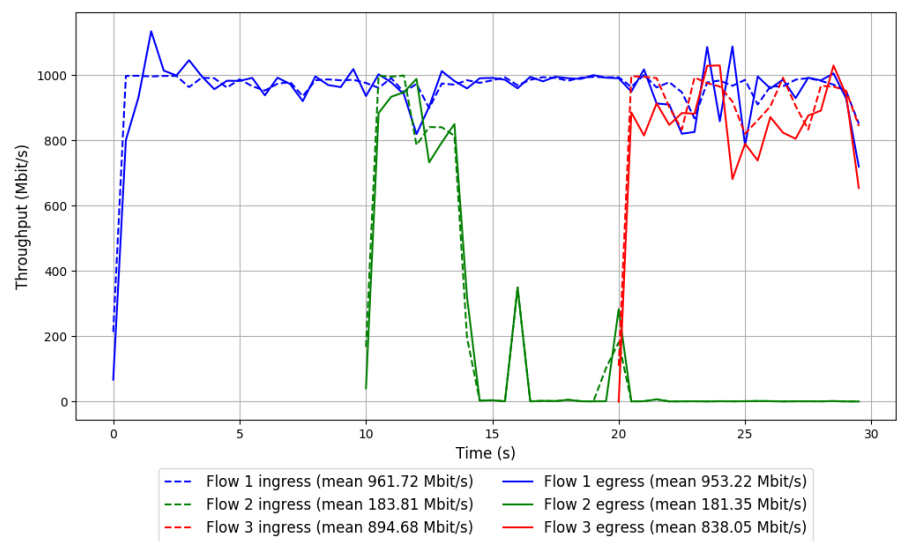
-- Flow 3:

Average throughput: 838.05 Mbit/s

95th percentile per-packet one-way delay: 197.409 ms

Loss rate: 7.54%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-10 04:37:49

End at: 2018-01-10 04:38:19

Below is generated by plot.py at 2018-01-10 09:56:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 1239.20 Mbit/s

95th percentile per-packet one-way delay: 182.480 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 658.74 Mbit/s

95th percentile per-packet one-way delay: 199.471 ms

Loss rate: 1.45%

-- Flow 2:

Average throughput: 402.77 Mbit/s

95th percentile per-packet one-way delay: 178.346 ms

Loss rate: 0.46%

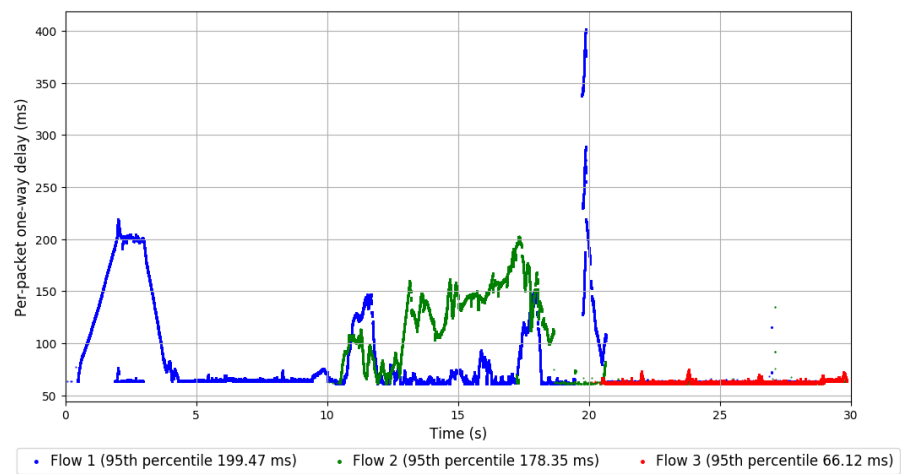
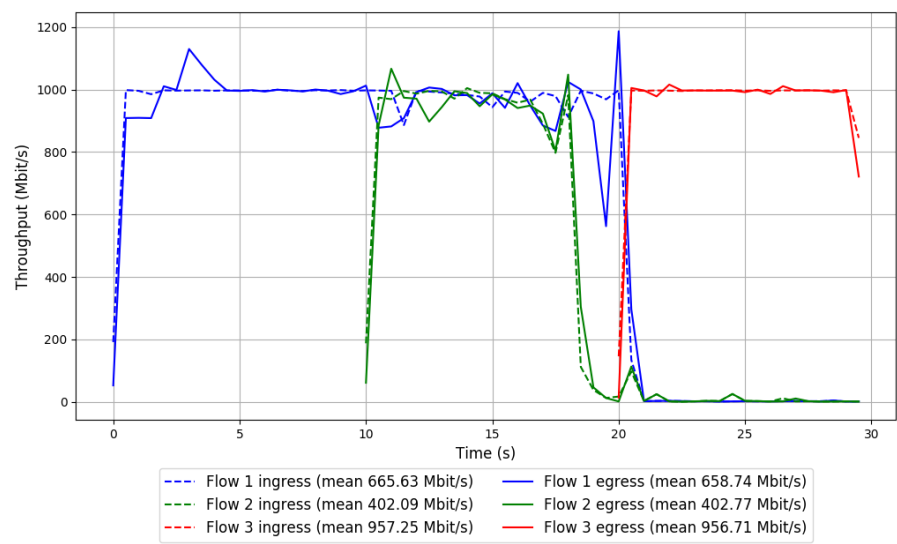
-- Flow 3:

Average throughput: 956.71 Mbit/s

95th percentile per-packet one-way delay: 66.123 ms

Loss rate: 1.33%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-10 04:51:54

End at: 2018-01-10 04:52:24

Below is generated by plot.py at 2018-01-10 09:59:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 1723.67 Mbit/s

95th percentile per-packet one-way delay: 148.061 ms

Loss rate: 4.63%

-- Flow 1:

Average throughput: 941.17 Mbit/s

95th percentile per-packet one-way delay: 128.105 ms

Loss rate: 1.73%

-- Flow 2:

Average throughput: 796.91 Mbit/s

95th percentile per-packet one-way delay: 164.749 ms

Loss rate: 6.60%

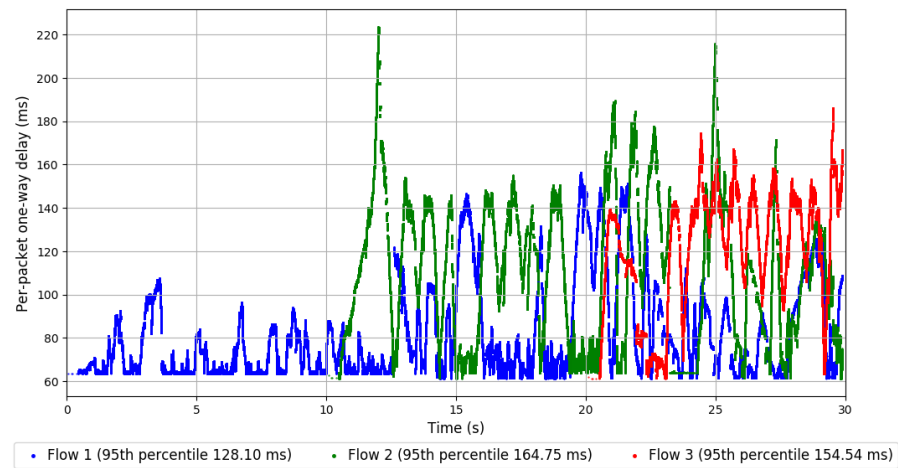
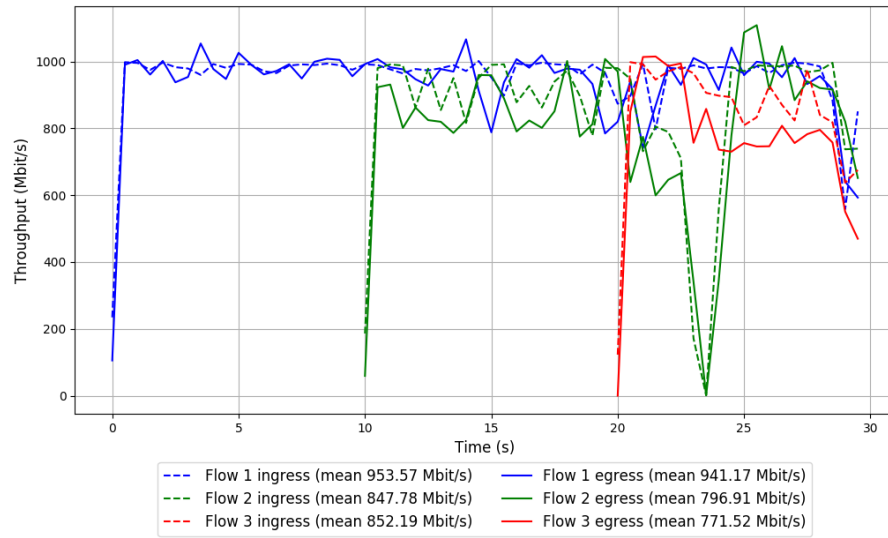
-- Flow 3:

Average throughput: 771.52 Mbit/s

95th percentile per-packet one-way delay: 154.541 ms

Loss rate: 10.52%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

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

End at: 2018-01-10 05:06:40

Below is generated by plot.py at 2018-01-10 09:59:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 1669.57 Mbit/s

95th percentile per-packet one-way delay: 140.242 ms

Loss rate: 4.06%

-- Flow 1:

Average throughput: 812.17 Mbit/s

95th percentile per-packet one-way delay: 133.485 ms

Loss rate: 1.53%

-- Flow 2:

Average throughput: 877.85 Mbit/s

95th percentile per-packet one-way delay: 142.021 ms

Loss rate: 5.81%

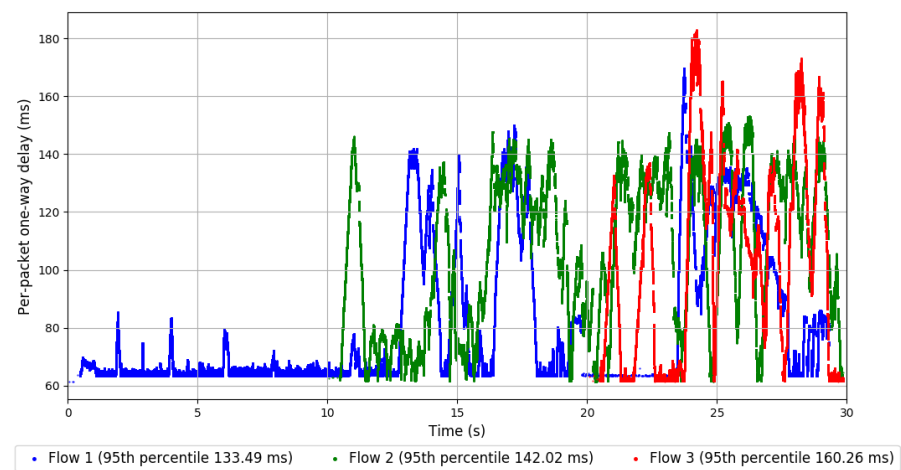
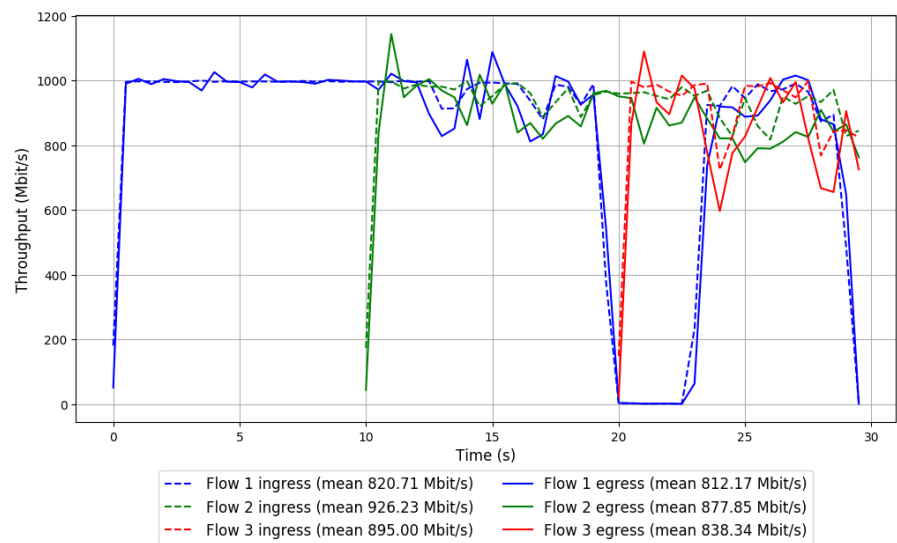
-- Flow 3:

Average throughput: 838.34 Mbit/s

95th percentile per-packet one-way delay: 160.260 ms

Loss rate: 7.41%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-10 05:20:06

End at: 2018-01-10 05:20:36

Below is generated by plot.py at 2018-01-10 09:59:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 1235.15 Mbit/s

95th percentile per-packet one-way delay: 197.567 ms

Loss rate: 1.98%

-- Flow 1:

Average throughput: 519.55 Mbit/s

95th percentile per-packet one-way delay: 127.206 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 629.51 Mbit/s

95th percentile per-packet one-way delay: 209.012 ms

Loss rate: 1.92%

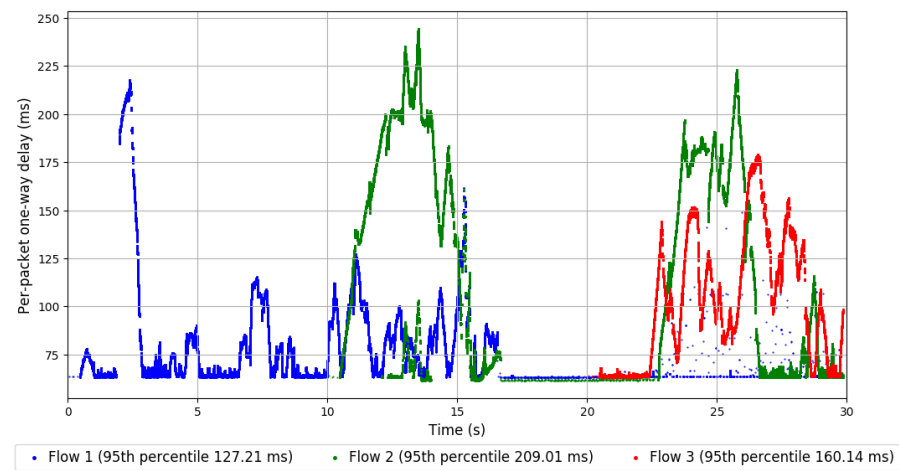
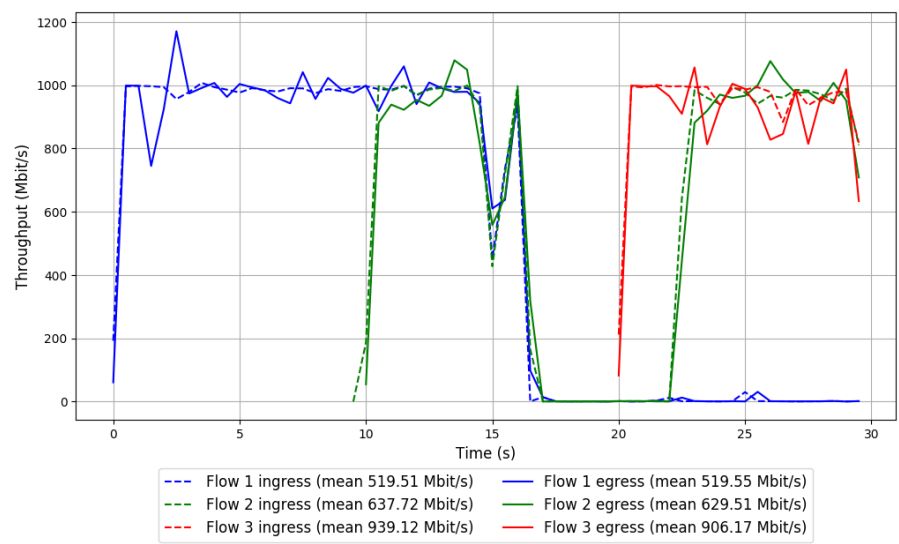
-- Flow 3:

Average throughput: 906.17 Mbit/s

95th percentile per-packet one-way delay: 160.140 ms

Loss rate: 4.75%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-10 05:34:21

End at: 2018-01-10 05:34:51

Below is generated by plot.py at 2018-01-10 09:59:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 1520.56 Mbit/s

95th percentile per-packet one-way delay: 266.042 ms

Loss rate: 7.56%

-- Flow 1:

Average throughput: 857.11 Mbit/s

95th percentile per-packet one-way delay: 262.251 ms

Loss rate: 7.21%

-- Flow 2:

Average throughput: 778.65 Mbit/s

95th percentile per-packet one-way delay: 268.811 ms

Loss rate: 8.53%

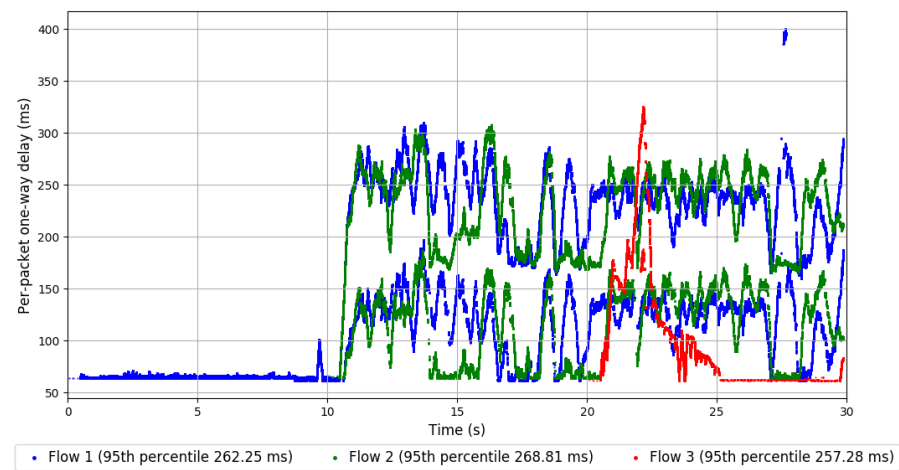
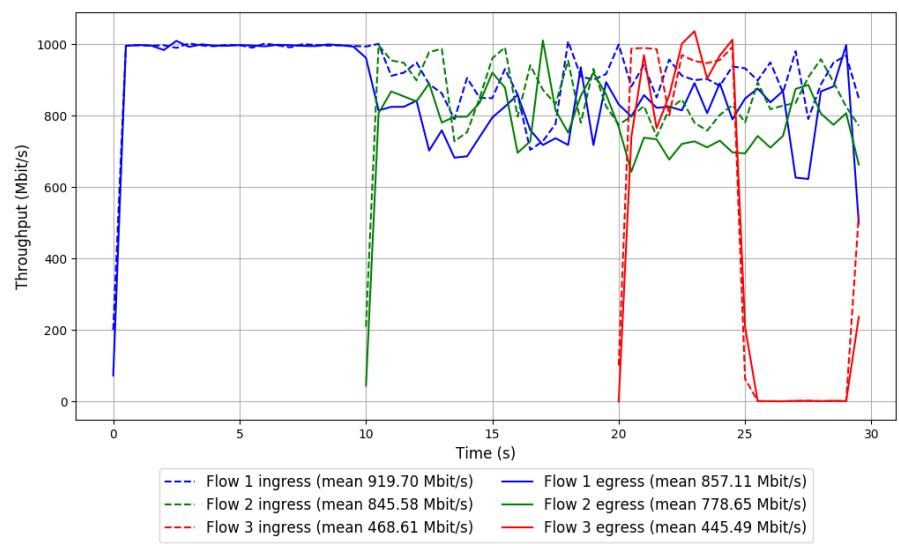
-- Flow 3:

Average throughput: 445.49 Mbit/s

95th percentile per-packet one-way delay: 257.282 ms

Loss rate: 6.16%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-10 05:48:37

End at: 2018-01-10 05:49:07

Below is generated by plot.py at 2018-01-10 10:05:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 1627.02 Mbit/s

95th percentile per-packet one-way delay: 166.171 ms

Loss rate: 5.70%

-- Flow 1:

Average throughput: 801.53 Mbit/s

95th percentile per-packet one-way delay: 158.649 ms

Loss rate: 2.89%

-- Flow 2:

Average throughput: 837.93 Mbit/s

95th percentile per-packet one-way delay: 148.790 ms

Loss rate: 8.51%

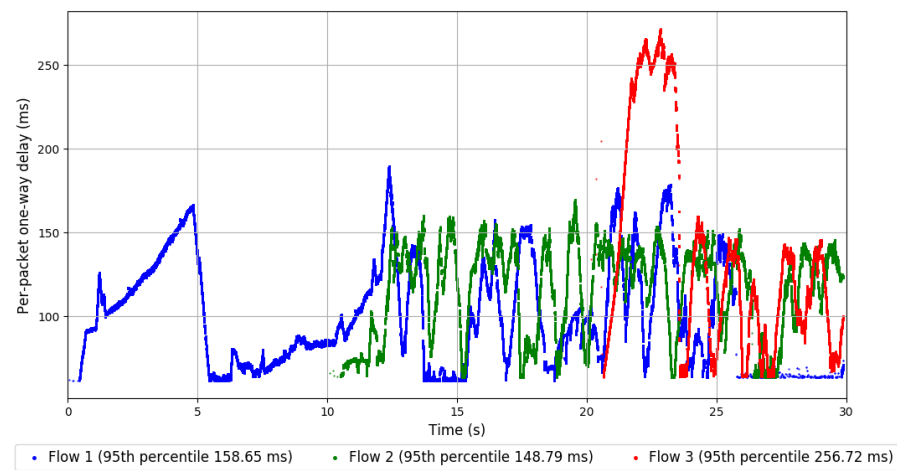
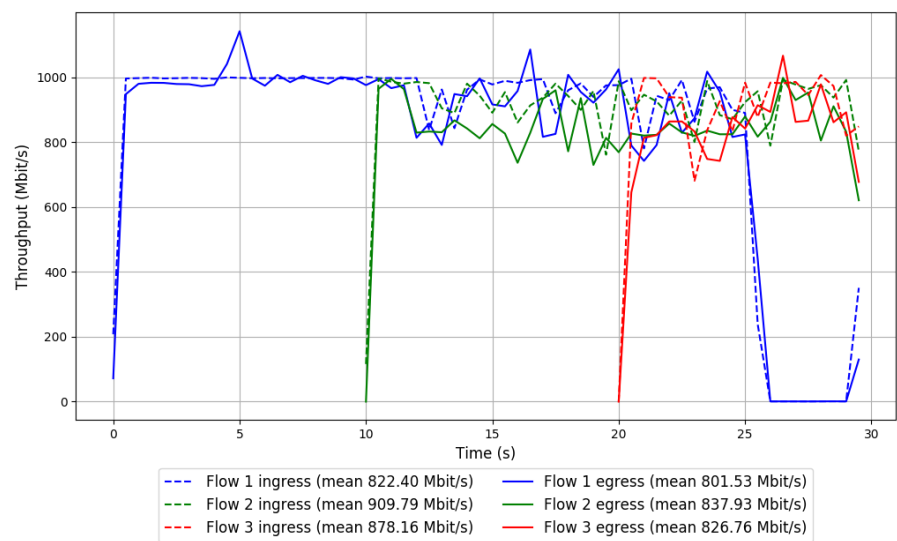
-- Flow 3:

Average throughput: 826.76 Mbit/s

95th percentile per-packet one-way delay: 256.720 ms

Loss rate: 7.75%

Run 9: Report of FillP — Data Link

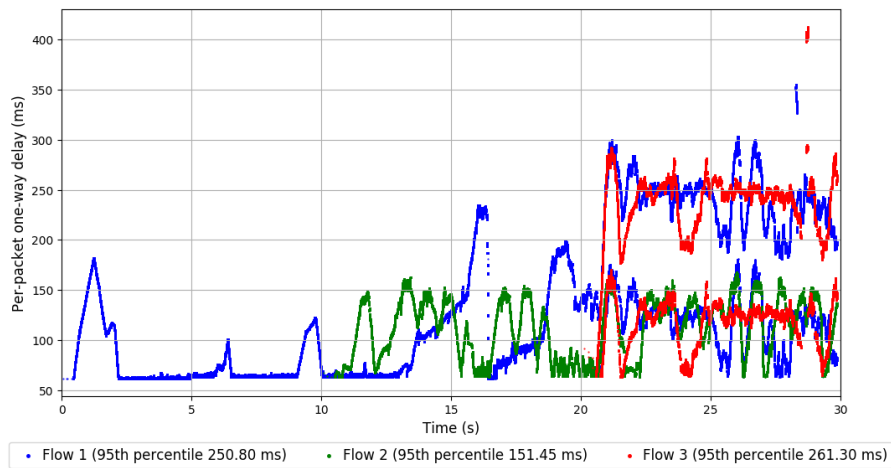
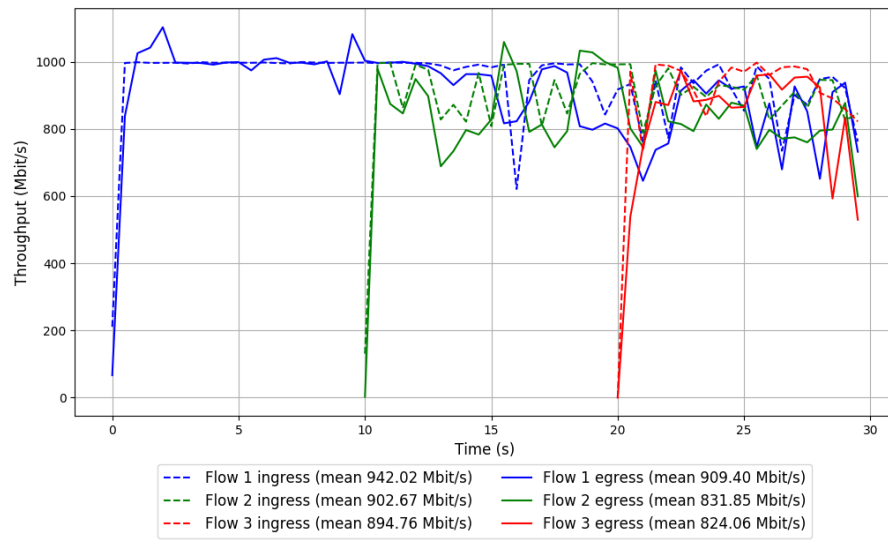


```
Run 10: Statistics of FillP

Start at: 2018-01-10 06:02:44
End at: 2018-01-10 06:03:14

# Below is generated by plot.py at 2018-01-10 10:05:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1730.57 Mbit/s
95th percentile per-packet one-way delay: 251.212 ms
Loss rate: 6.25%
-- Flow 1:
Average throughput: 909.40 Mbit/s
95th percentile per-packet one-way delay: 250.800 ms
Loss rate: 3.87%
-- Flow 2:
Average throughput: 831.85 Mbit/s
95th percentile per-packet one-way delay: 151.454 ms
Loss rate: 8.45%
-- Flow 3:
Average throughput: 824.06 Mbit/s
95th percentile per-packet one-way delay: 261.304 ms
Loss rate: 9.35%
```

Run 10: Report of FillP — Data Link

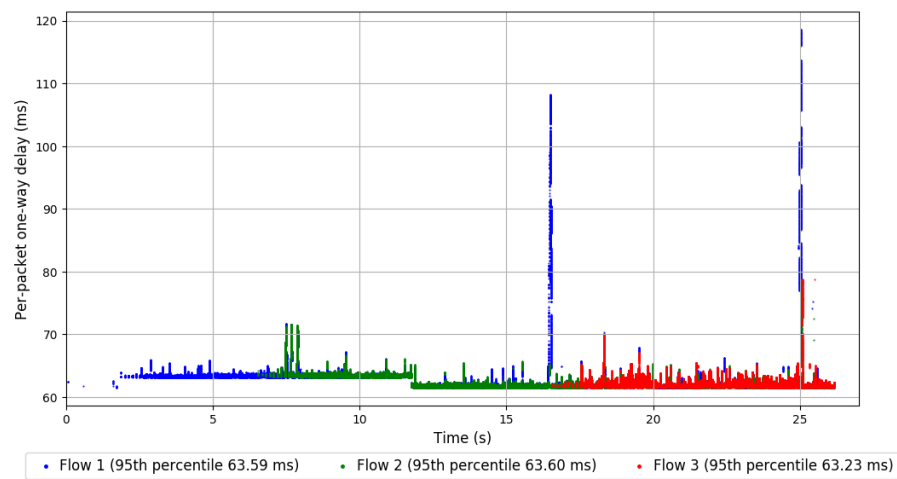
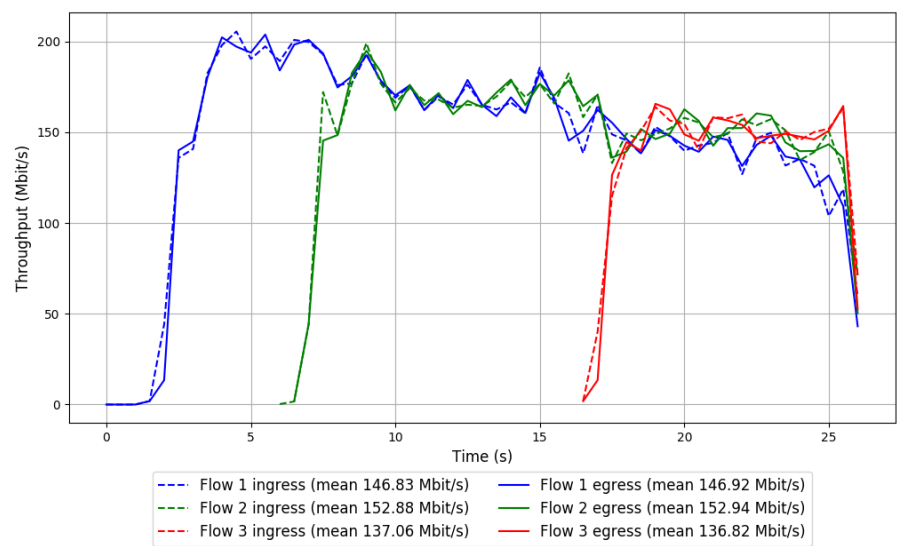


```
Run 1: Statistics of Indigo

Start at: 2018-01-10 03:56:44
End at: 2018-01-10 03:57:14

# Below is generated by plot.py at 2018-01-10 10:05:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.10 Mbit/s
95th percentile per-packet one-way delay: 63.574 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 146.92 Mbit/s
95th percentile per-packet one-way delay: 63.590 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 152.94 Mbit/s
95th percentile per-packet one-way delay: 63.596 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 136.82 Mbit/s
95th percentile per-packet one-way delay: 63.230 ms
Loss rate: 1.46%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-10 04:10:59

End at: 2018-01-10 04:11:29

Below is generated by plot.py at 2018-01-10 10:05:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 321.36 Mbit/s

95th percentile per-packet one-way delay: 64.927 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 171.29 Mbit/s

95th percentile per-packet one-way delay: 64.541 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 159.13 Mbit/s

95th percentile per-packet one-way delay: 65.116 ms

Loss rate: 0.54%

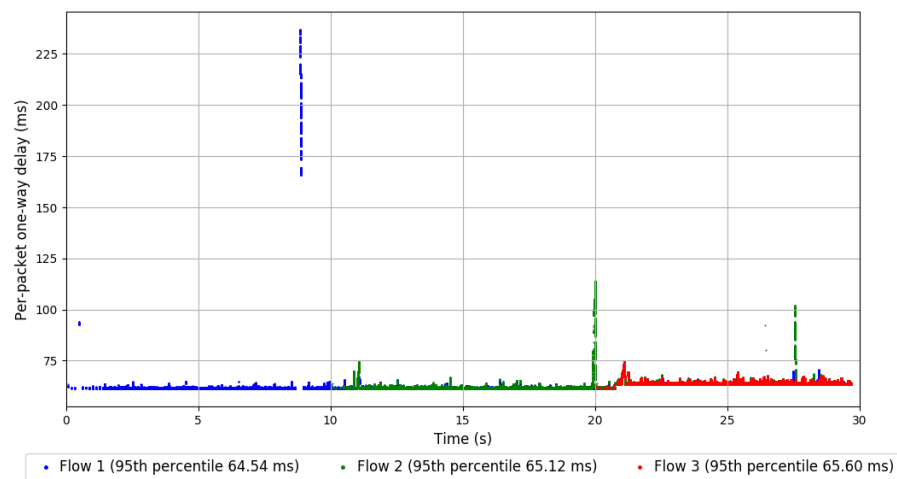
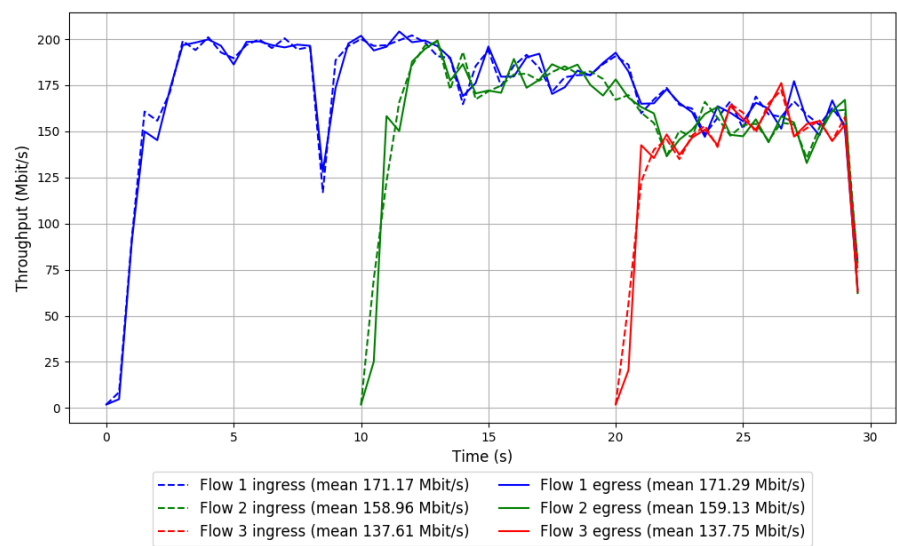
-- Flow 3:

Average throughput: 137.75 Mbit/s

95th percentile per-packet one-way delay: 65.603 ms

Loss rate: 1.19%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-10 04:25:13

End at: 2018-01-10 04:25:43

Below is generated by plot.py at 2018-01-10 10:05:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 314.38 Mbit/s

95th percentile per-packet one-way delay: 64.348 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 172.75 Mbit/s

95th percentile per-packet one-way delay: 64.156 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 146.04 Mbit/s

95th percentile per-packet one-way delay: 64.392 ms

Loss rate: 0.46%

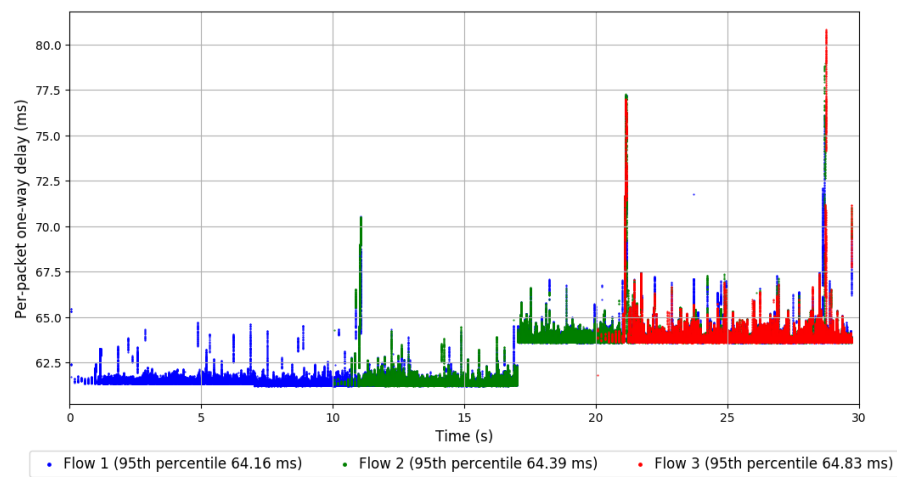
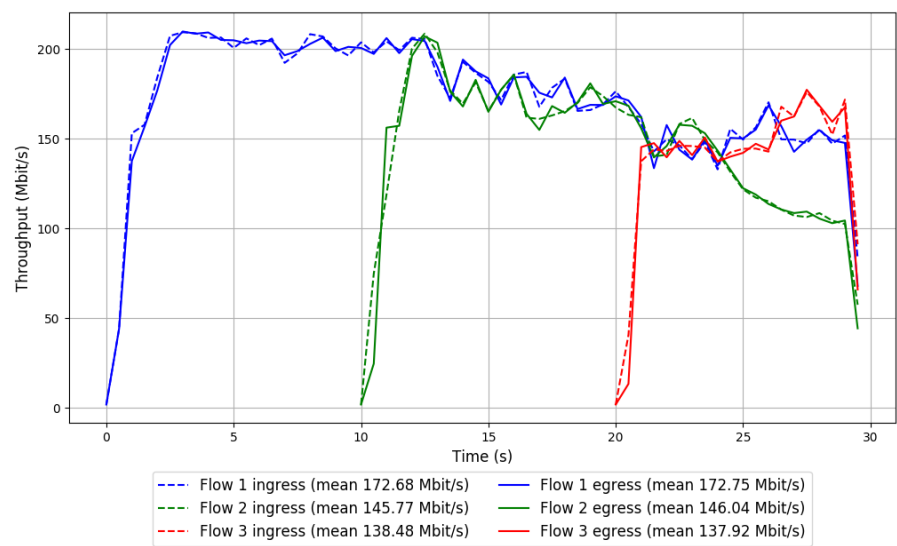
-- Flow 3:

Average throughput: 137.92 Mbit/s

95th percentile per-packet one-way delay: 64.830 ms

Loss rate: 1.67%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-10 04:39:20

End at: 2018-01-10 04:39:50

Below is generated by plot.py at 2018-01-10 10:05:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 309.43 Mbit/s

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

Loss rate: 0.58%

-- Flow 1:

Average throughput: 161.89 Mbit/s

95th percentile per-packet one-way delay: 63.998 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 158.19 Mbit/s

95th percentile per-packet one-way delay: 64.289 ms

Loss rate: 0.53%

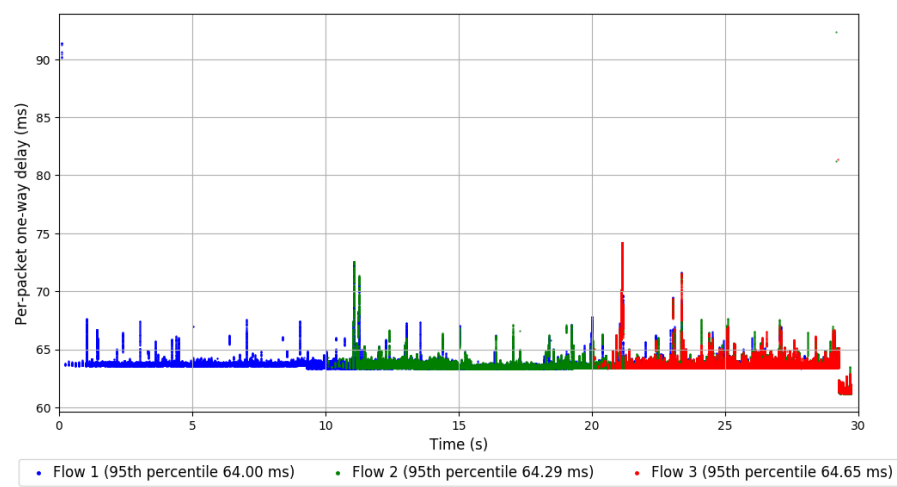
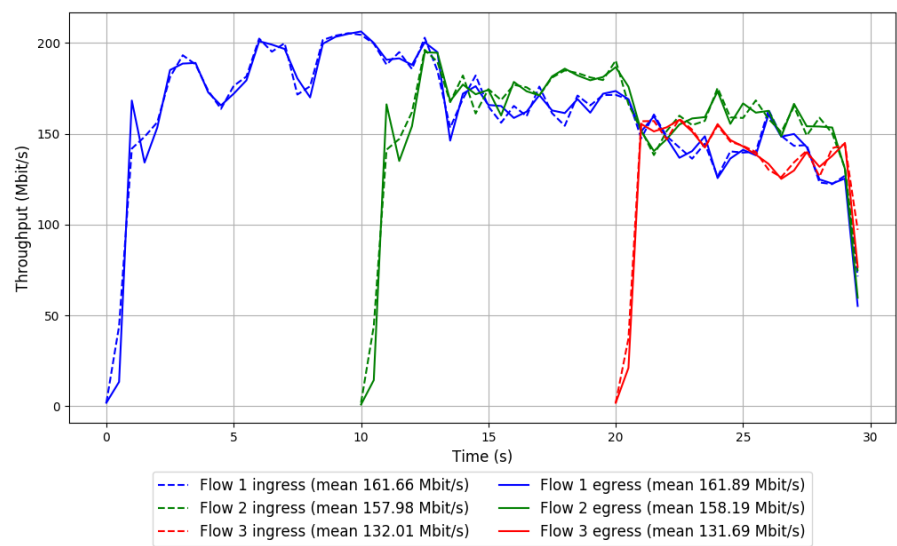
-- Flow 3:

Average throughput: 131.69 Mbit/s

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

Loss rate: 1.55%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-10 04:53:46

End at: 2018-01-10 04:54:16

Below is generated by plot.py at 2018-01-10 10:05:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.88 Mbit/s

95th percentile per-packet one-way delay: 64.457 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 148.01 Mbit/s

95th percentile per-packet one-way delay: 64.236 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 162.04 Mbit/s

95th percentile per-packet one-way delay: 64.681 ms

Loss rate: 0.72%

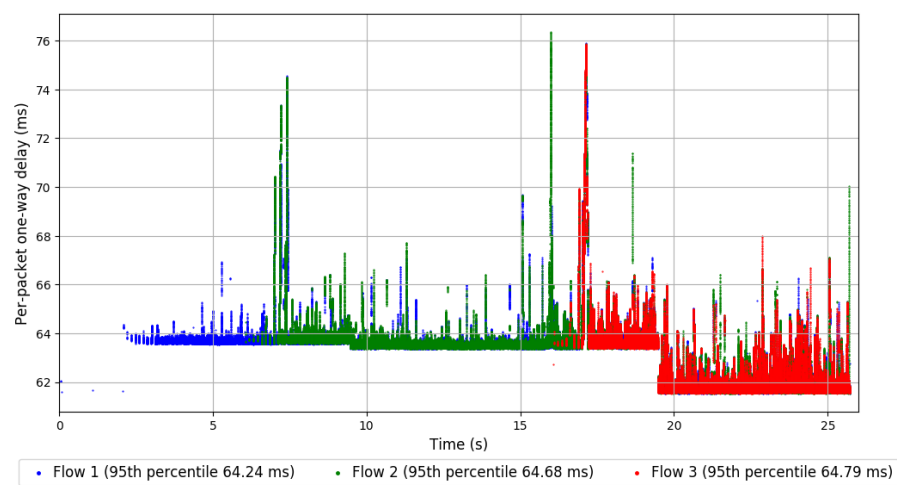
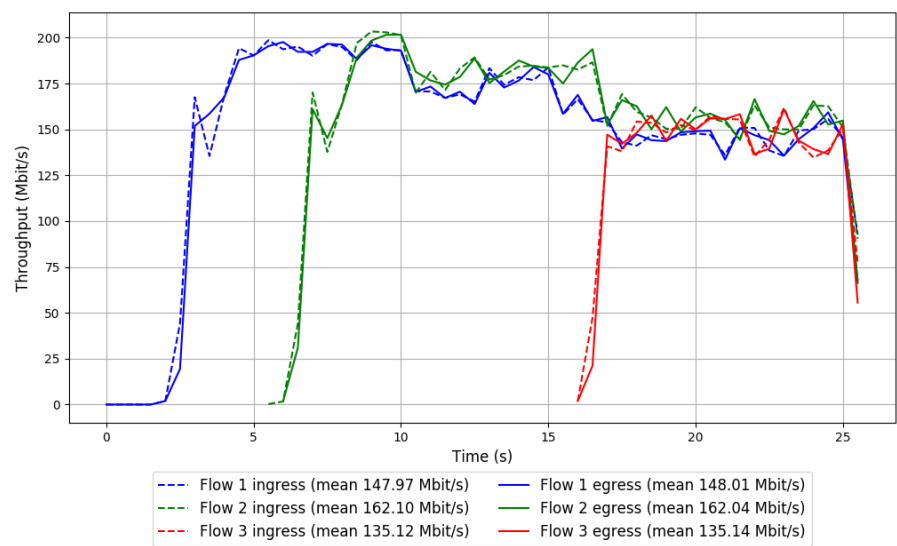
-- Flow 3:

Average throughput: 135.14 Mbit/s

95th percentile per-packet one-way delay: 64.794 ms

Loss rate: 1.41%

Run 5: Report of Indigo — Data Link

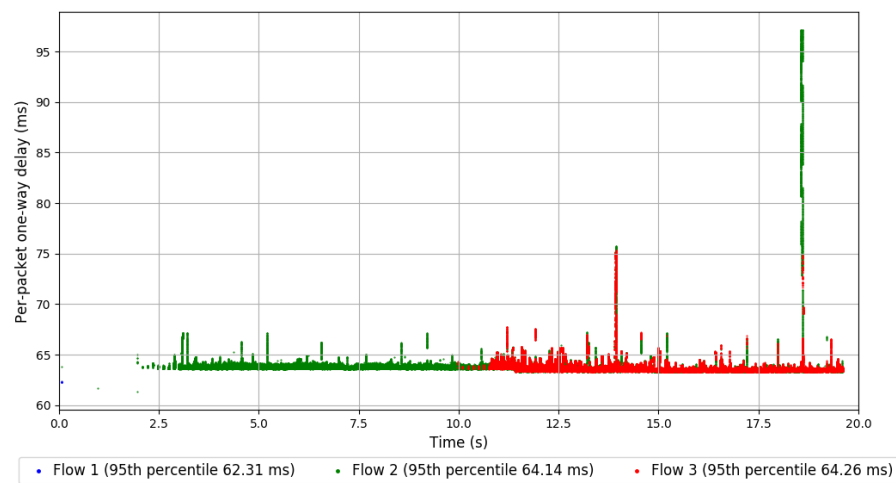
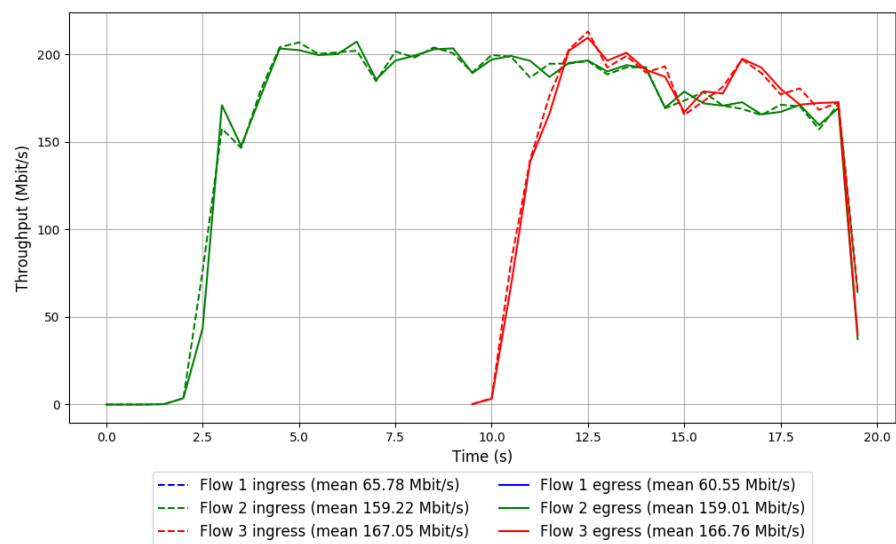


Run 6: Statistics of Indigo

Start at: 2018-01-10 05:07:58

End at: 2018-01-10 05:08:28

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-10 05:21:39

End at: 2018-01-10 05:22:09

Below is generated by plot.py at 2018-01-10 10:05:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 338.31 Mbit/s

95th percentile per-packet one-way delay: 65.562 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 181.89 Mbit/s

95th percentile per-packet one-way delay: 64.919 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 170.53 Mbit/s

95th percentile per-packet one-way delay: 65.945 ms

Loss rate: 0.74%

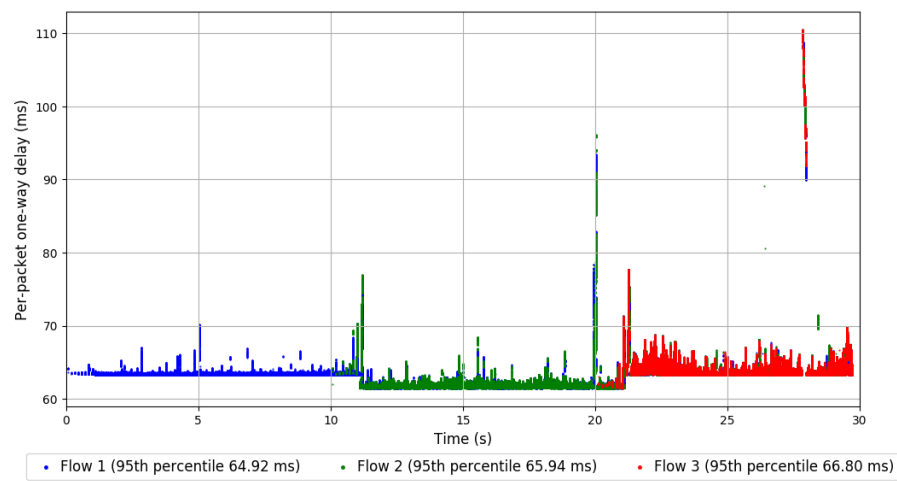
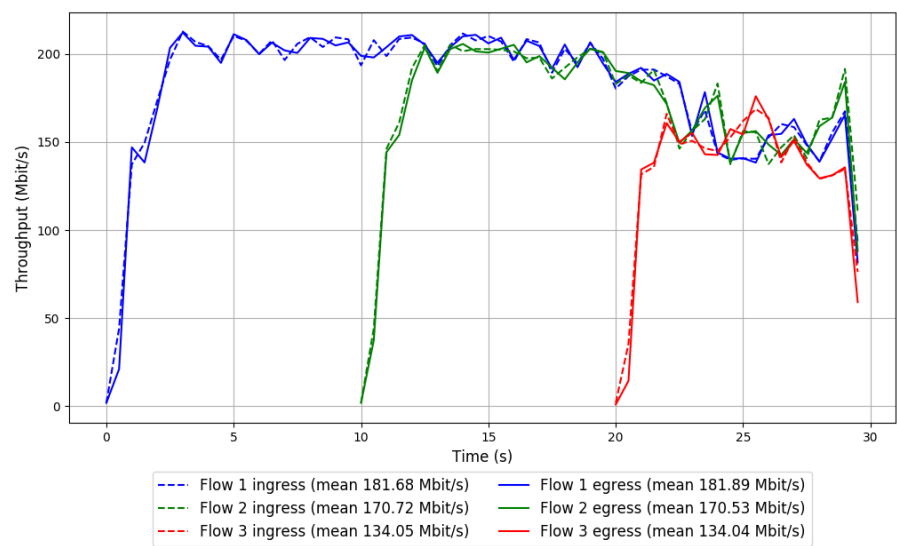
-- Flow 3:

Average throughput: 134.04 Mbit/s

95th percentile per-packet one-way delay: 66.795 ms

Loss rate: 1.32%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-10 05:36:15

End at: 2018-01-10 05:36:45

Below is generated by plot.py at 2018-01-10 10:05:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.62 Mbit/s

95th percentile per-packet one-way delay: 64.387 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 167.09 Mbit/s

95th percentile per-packet one-way delay: 64.097 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 159.64 Mbit/s

95th percentile per-packet one-way delay: 64.609 ms

Loss rate: 0.47%

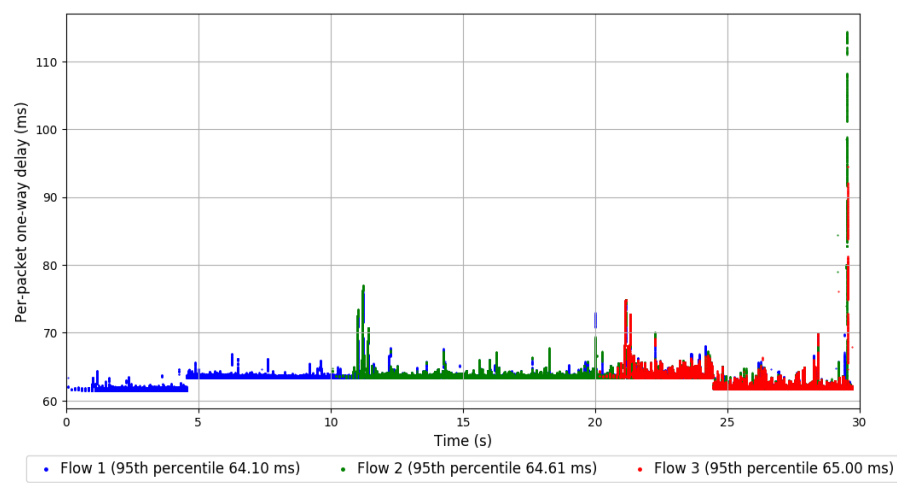
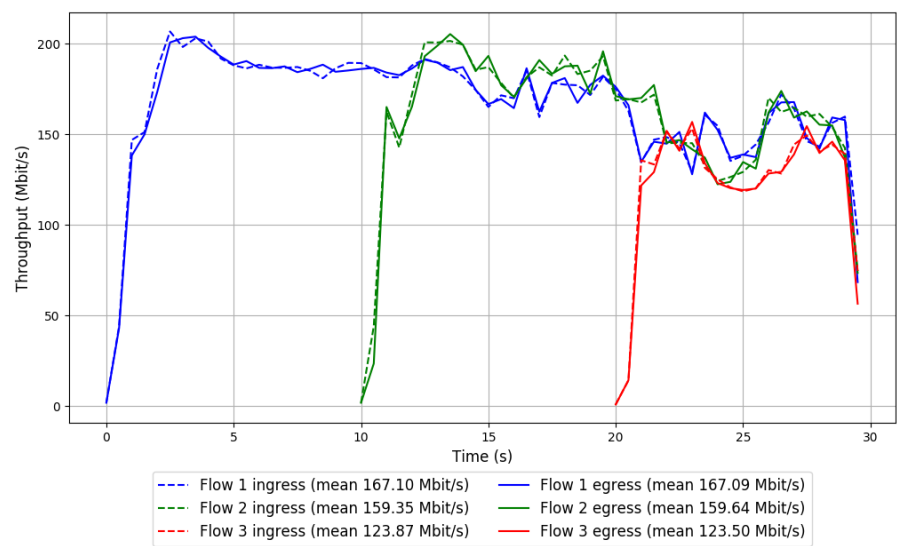
-- Flow 3:

Average throughput: 123.50 Mbit/s

95th percentile per-packet one-way delay: 64.998 ms

Loss rate: 1.56%

Run 8: Report of Indigo — Data Link

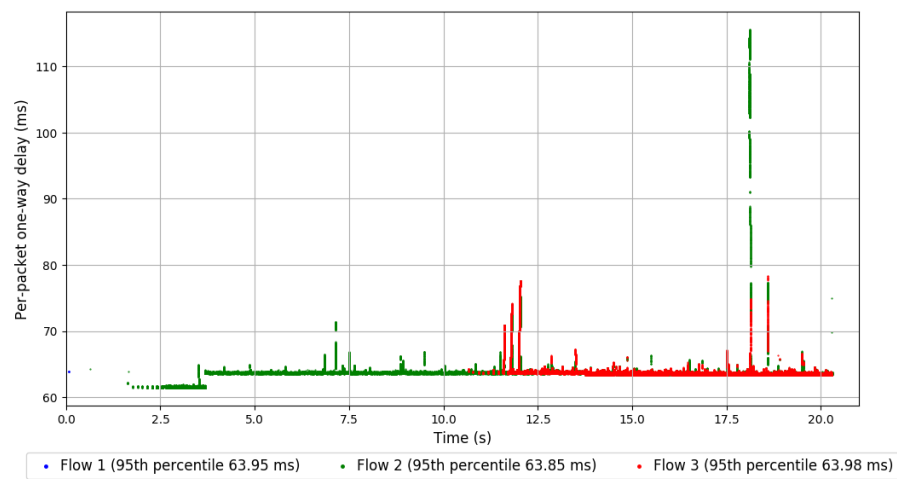
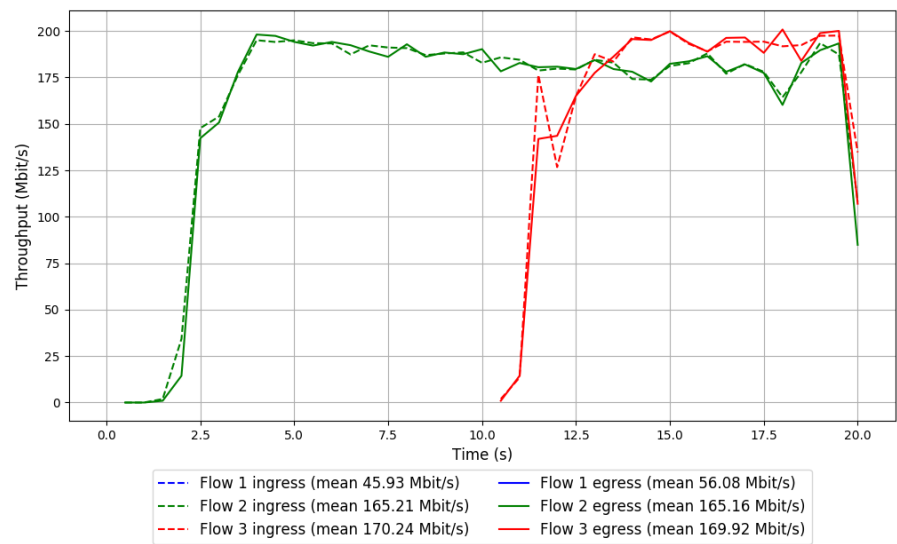


Run 9: Statistics of Indigo

Start at: 2018-01-10 05:50:26

End at: 2018-01-10 05:50:56

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-10 06:04:39

End at: 2018-01-10 06:05:09

Below is generated by plot.py at 2018-01-10 10:05:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.23 Mbit/s

95th percentile per-packet one-way delay: 62.972 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 150.97 Mbit/s

95th percentile per-packet one-way delay: 62.627 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 155.80 Mbit/s

95th percentile per-packet one-way delay: 63.119 ms

Loss rate: 0.60%

-- Flow 3:

Average throughput: 132.54 Mbit/s

95th percentile per-packet one-way delay: 63.468 ms

Loss rate: 1.63%

Run 10: Report of Indigo — Data Link

