

Pantheon Report

Generated at 2017-12-01 14:08:30 (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.

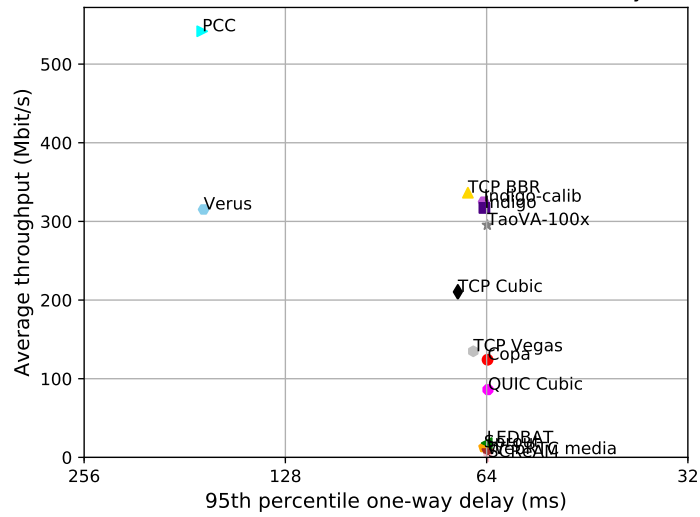
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

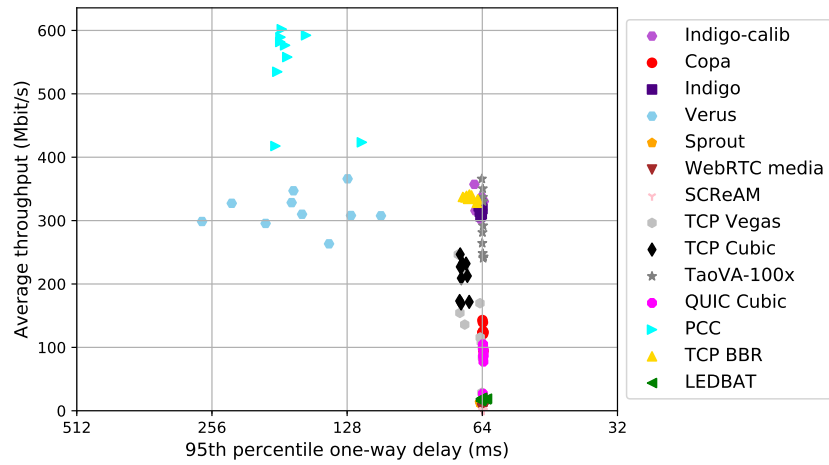
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eae30b267cde681
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	172.55	168.73	157.75	67.18	68.62	69.94	0.45	0.68	1.46
TCP Cubic	10	108.50	96.36	115.35	70.61	70.35	70.71	0.55	0.92	1.36
LEDBAT	10	10.27	8.87	6.16	63.98	63.97	63.83	0.80	1.24	2.28
PCC	9	417.36	160.91	46.26	1105.59	168.54	164.18	1.96	1.67	2.41
QUIC Cubic	10	47.10	44.43	27.49	63.62	63.45	63.09	0.58	1.01	1.41
SCReAM	10	0.22	0.22	0.22	63.69	63.72	63.13	0.42	0.63	1.11
WebRTC media	10	2.21	1.39	0.57	63.79	63.74	63.76	0.54	0.71	1.74
Sprout	10	6.51	6.40	6.15	64.64	64.49	64.33	0.42	0.69	1.42
TaoVA-100x	10	159.42	147.80	141.44	63.85	63.86	64.03	0.38	0.60	1.58
TCP Vegas	10	57.52	92.13	49.32	66.13	67.67	64.91	0.44	0.72	1.76
Verus	10	188.87	144.65	87.22	158.52	170.32	144.62	1.97	1.84	1.36
Copa	10	71.95	58.06	53.49	63.79	65.82	63.82	0.32	5.28	2.38
Indigo	9	170.48	156.69	131.76	64.28	64.76	64.68	0.38	0.64	1.38
Indigo-calib	10	178.20	160.13	126.19	64.33	64.83	65.25	0.34	0.58	1.46

Run 1: Statistics of TCP BBR

Start at: 2017-12-01 08:52:59

End at: 2017-12-01 08:53:29

Below is generated by plot.py at 2017-12-01 13:10:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 334.26 Mbit/s

95th percentile per-packet one-way delay: 68.864 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 171.34 Mbit/s

95th percentile per-packet one-way delay: 67.610 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 167.08 Mbit/s

95th percentile per-packet one-way delay: 69.575 ms

Loss rate: 0.68%

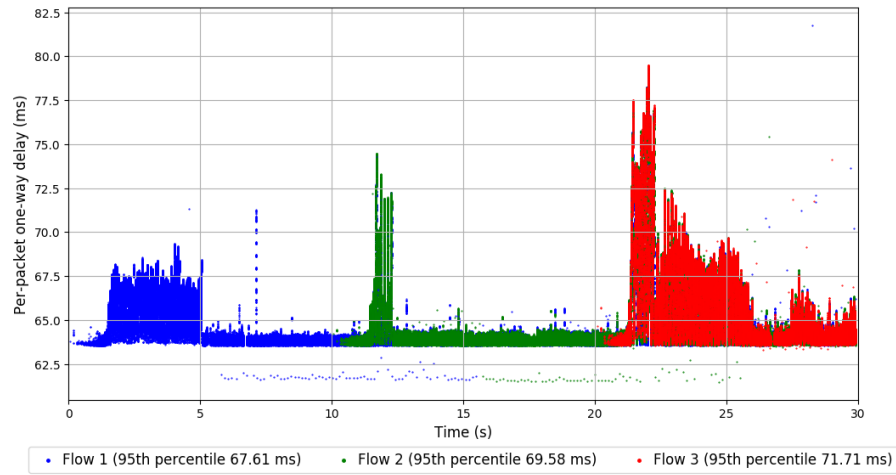
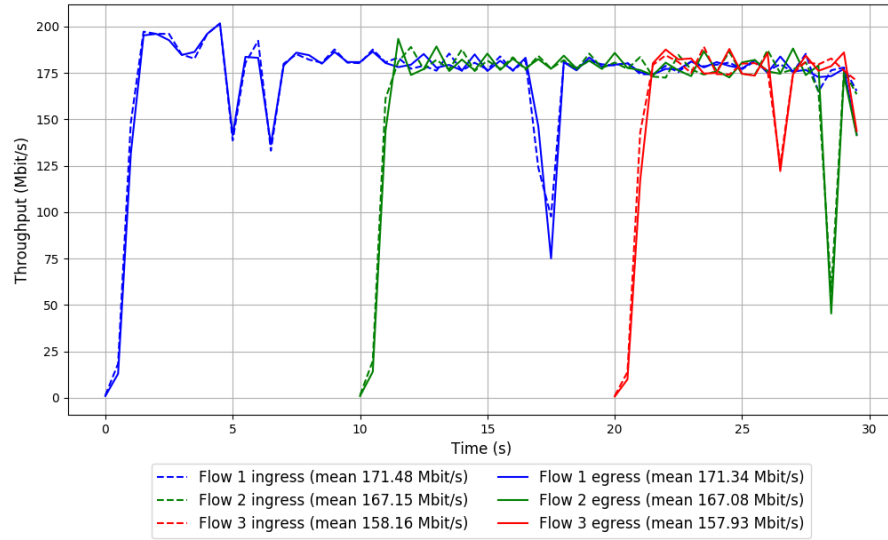
-- Flow 3:

Average throughput: 157.93 Mbit/s

95th percentile per-packet one-way delay: 71.713 ms

Loss rate: 1.43%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-01 09:05:35

End at: 2017-12-01 09:06:05

Below is generated by plot.py at 2017-12-01 13:10:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.18 Mbit/s

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

Loss rate: 0.69%

-- Flow 1:

Average throughput: 167.67 Mbit/s

95th percentile per-packet one-way delay: 65.525 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 167.58 Mbit/s

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

Loss rate: 0.68%

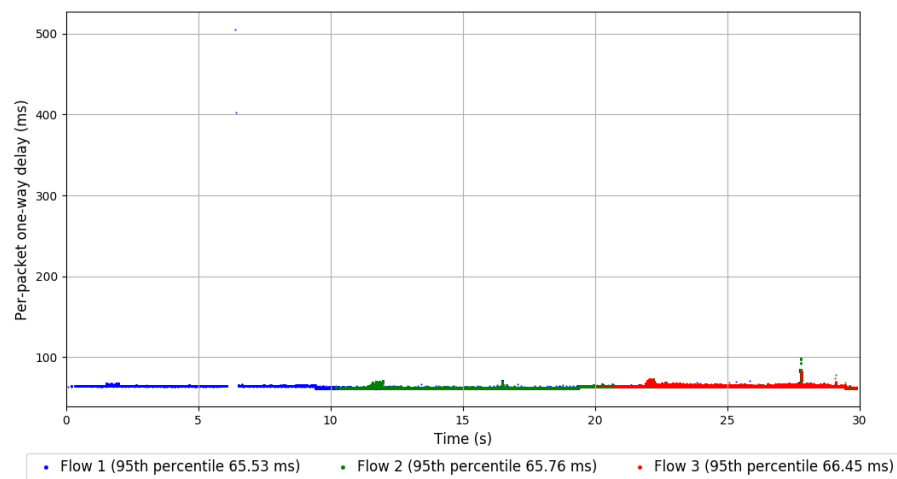
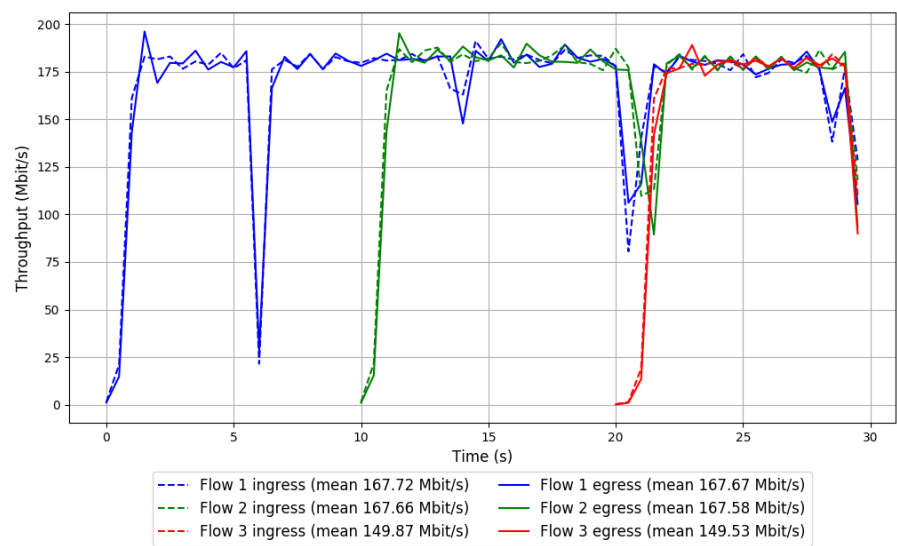
-- Flow 3:

Average throughput: 149.53 Mbit/s

95th percentile per-packet one-way delay: 66.447 ms

Loss rate: 1.49%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-01 09:18:01

End at: 2017-12-01 09:18:31

Below is generated by plot.py at 2017-12-01 13:10:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 339.10 Mbit/s

95th percentile per-packet one-way delay: 69.396 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 174.78 Mbit/s

95th percentile per-packet one-way delay: 68.186 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 167.98 Mbit/s

95th percentile per-packet one-way delay: 69.514 ms

Loss rate: 0.68%

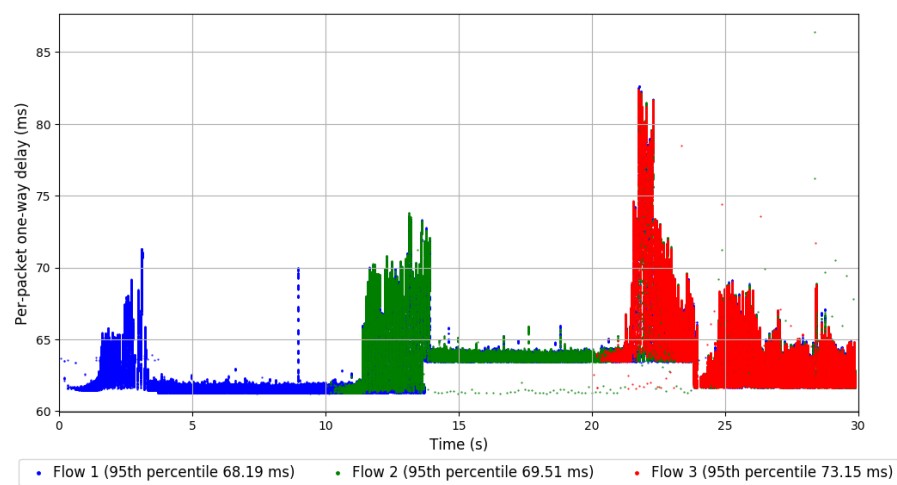
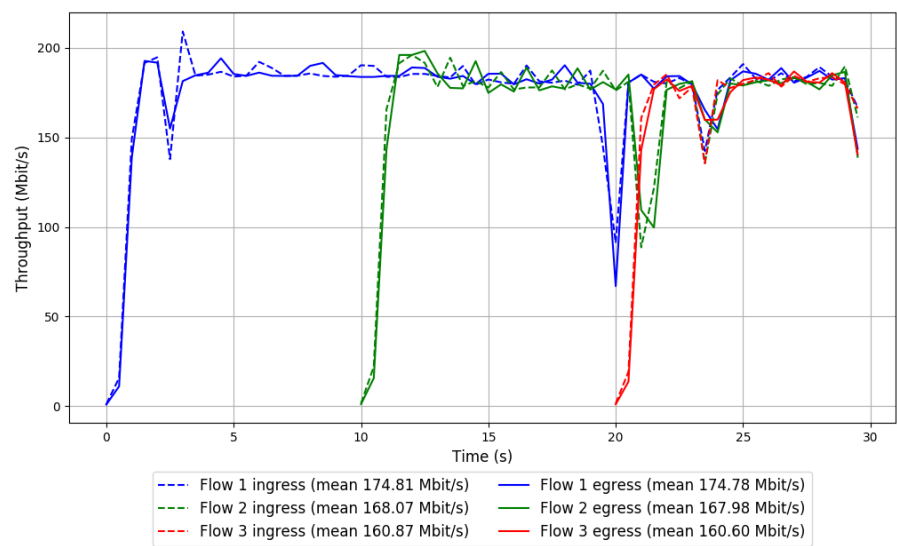
-- Flow 3:

Average throughput: 160.60 Mbit/s

95th percentile per-packet one-way delay: 73.150 ms

Loss rate: 1.45%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-01 09:30:32

End at: 2017-12-01 09:31:02

Below is generated by plot.py at 2017-12-01 13:10:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.56 Mbit/s

95th percentile per-packet one-way delay: 69.793 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 170.40 Mbit/s

95th percentile per-packet one-way delay: 67.373 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 169.59 Mbit/s

95th percentile per-packet one-way delay: 69.183 ms

Loss rate: 0.66%

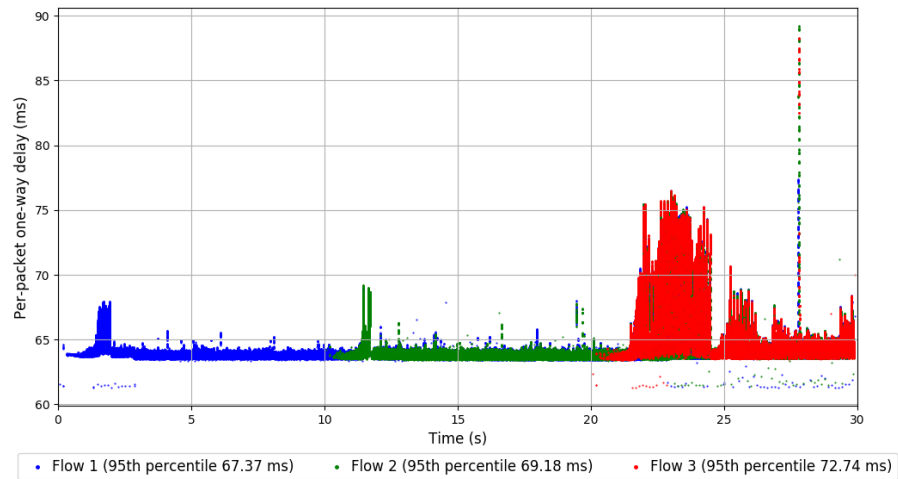
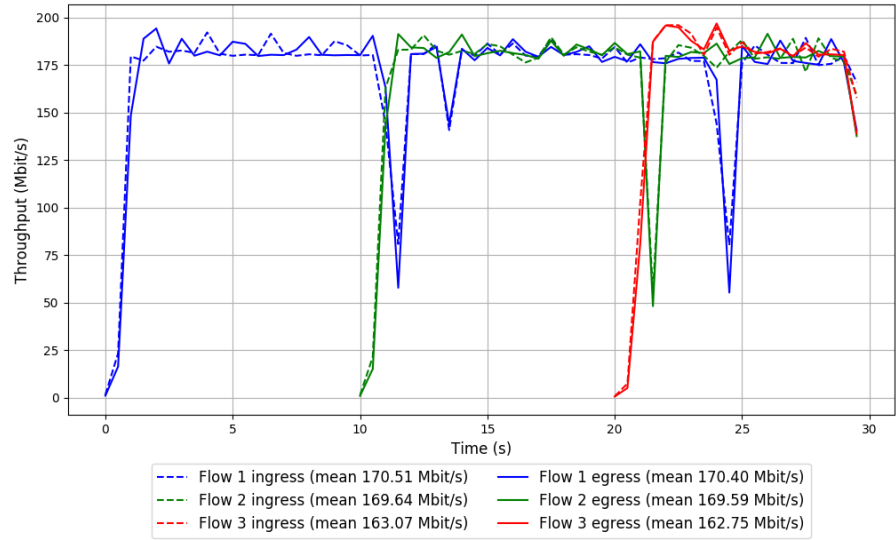
-- Flow 3:

Average throughput: 162.75 Mbit/s

95th percentile per-packet one-way delay: 72.744 ms

Loss rate: 1.39%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-01 09:42:54

End at: 2017-12-01 09:43:24

Below is generated by plot.py at 2017-12-01 13:10:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 339.75 Mbit/s

95th percentile per-packet one-way delay: 67.654 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 173.77 Mbit/s

95th percentile per-packet one-way delay: 66.585 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 173.63 Mbit/s

95th percentile per-packet one-way delay: 68.965 ms

Loss rate: 0.66%

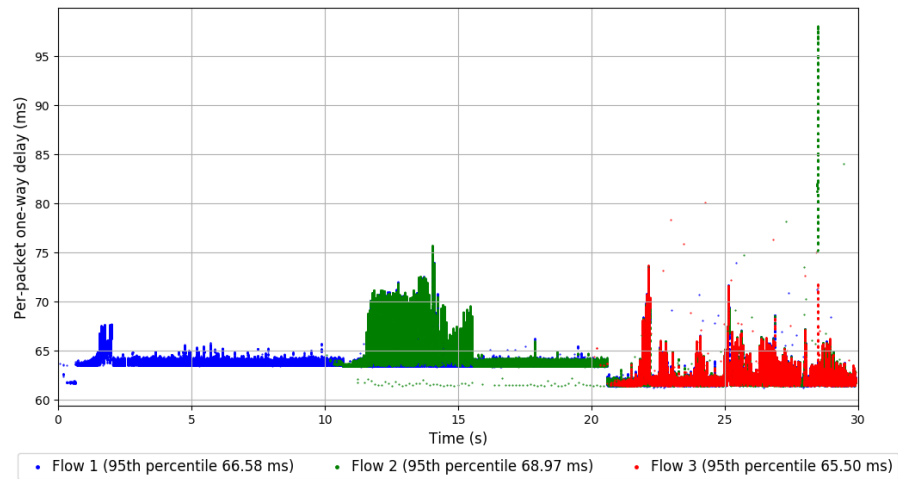
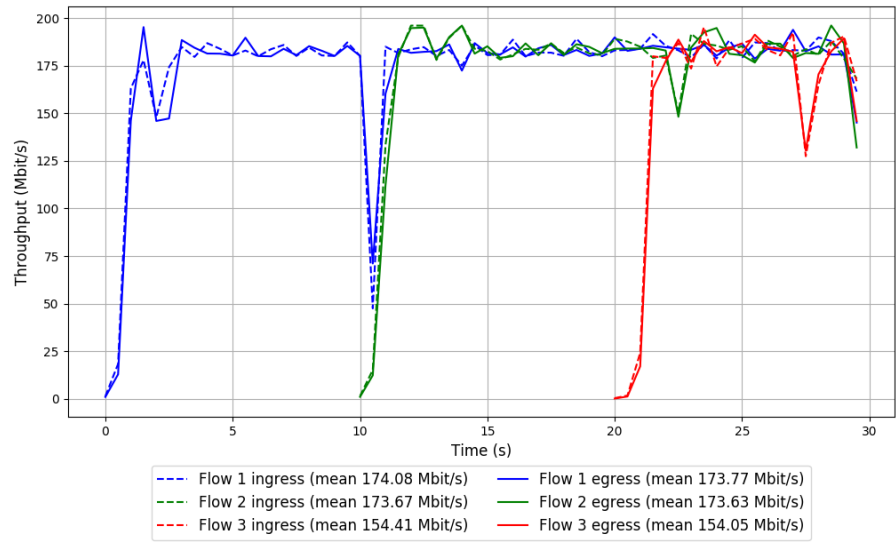
-- Flow 3:

Average throughput: 154.05 Mbit/s

95th percentile per-packet one-way delay: 65.505 ms

Loss rate: 1.50%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-01 09:55:29

End at: 2017-12-01 09:55:59

Below is generated by plot.py at 2017-12-01 13:10:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.37 Mbit/s

95th percentile per-packet one-way delay: 70.715 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 173.24 Mbit/s

95th percentile per-packet one-way delay: 69.295 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 166.31 Mbit/s

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

Loss rate: 0.70%

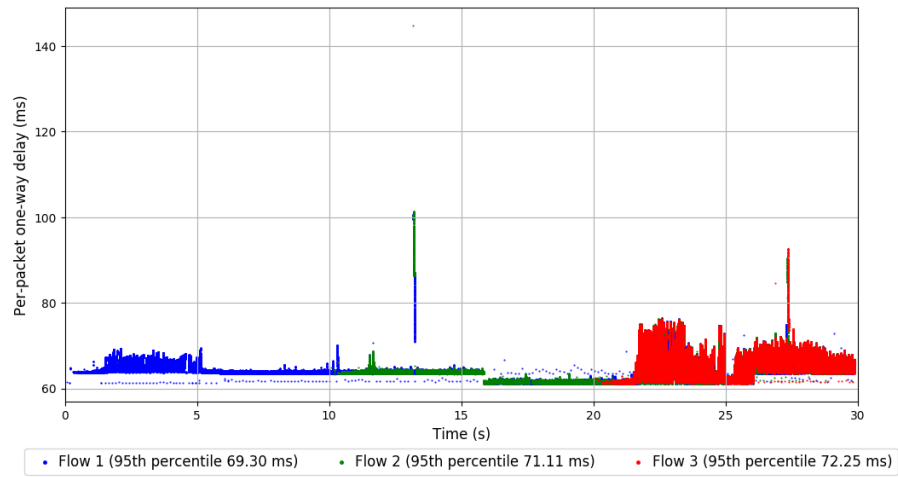
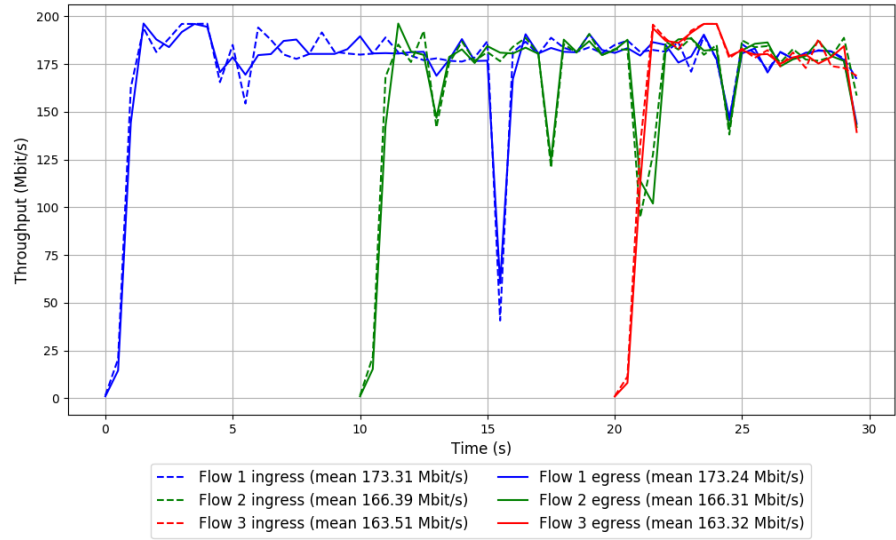
-- Flow 3:

Average throughput: 163.32 Mbit/s

95th percentile per-packet one-way delay: 72.251 ms

Loss rate: 1.39%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-01 10:08:06

End at: 2017-12-01 10:08:36

Below is generated by plot.py at 2017-12-01 13:10:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 333.45 Mbit/s

95th percentile per-packet one-way delay: 65.515 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 169.73 Mbit/s

95th percentile per-packet one-way delay: 65.197 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 170.37 Mbit/s

95th percentile per-packet one-way delay: 65.405 ms

Loss rate: 0.67%

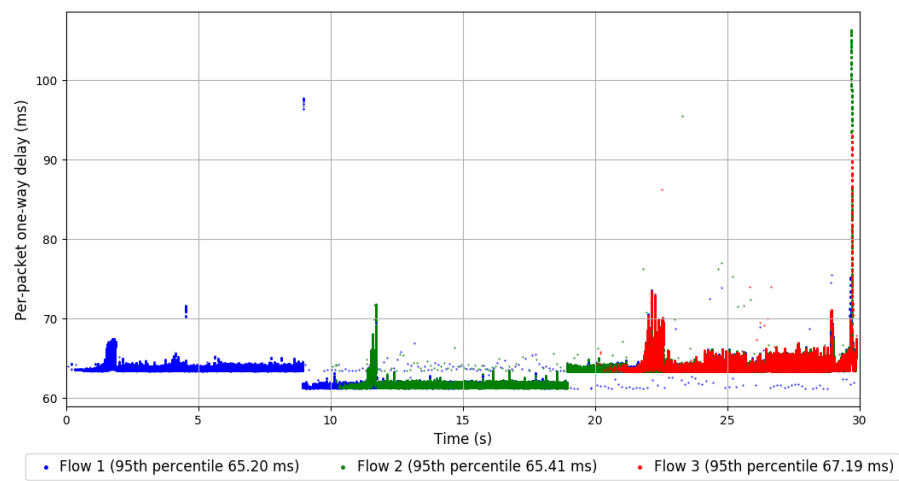
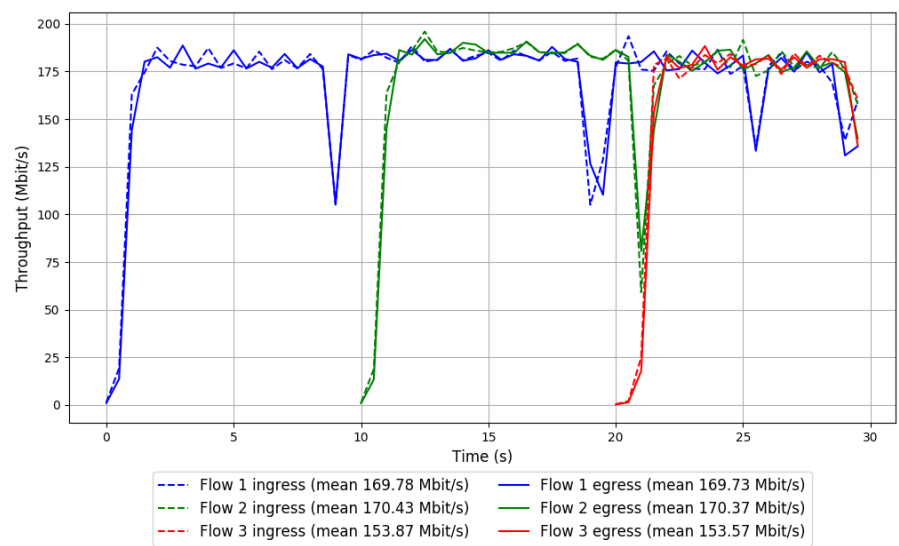
-- Flow 3:

Average throughput: 153.57 Mbit/s

95th percentile per-packet one-way delay: 67.188 ms

Loss rate: 1.46%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-01 10:20:27

End at: 2017-12-01 10:20:57

Below is generated by plot.py at 2017-12-01 13:10:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.74 Mbit/s

95th percentile per-packet one-way delay: 68.161 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 174.63 Mbit/s

95th percentile per-packet one-way delay: 66.994 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 167.05 Mbit/s

95th percentile per-packet one-way delay: 68.690 ms

Loss rate: 0.66%

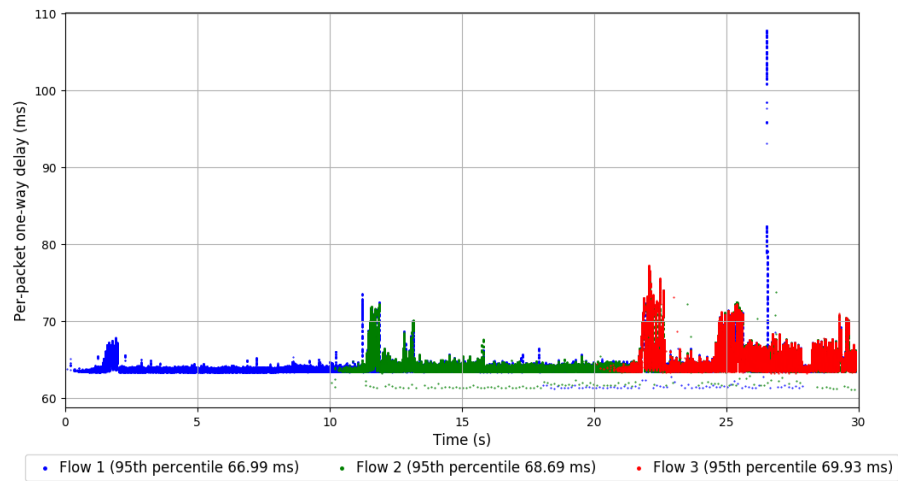
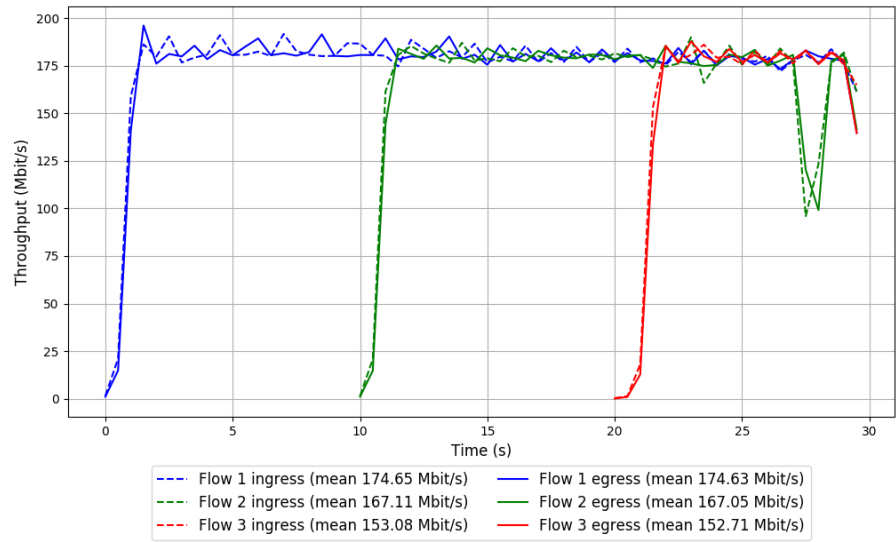
-- Flow 3:

Average throughput: 152.71 Mbit/s

95th percentile per-packet one-way delay: 69.927 ms

Loss rate: 1.58%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-01 10:32:51

End at: 2017-12-01 10:33:21

Below is generated by plot.py at 2017-12-01 13:16:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 341.16 Mbit/s

95th percentile per-packet one-way delay: 68.369 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 174.22 Mbit/s

95th percentile per-packet one-way delay: 67.677 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 170.55 Mbit/s

95th percentile per-packet one-way delay: 68.667 ms

Loss rate: 0.68%

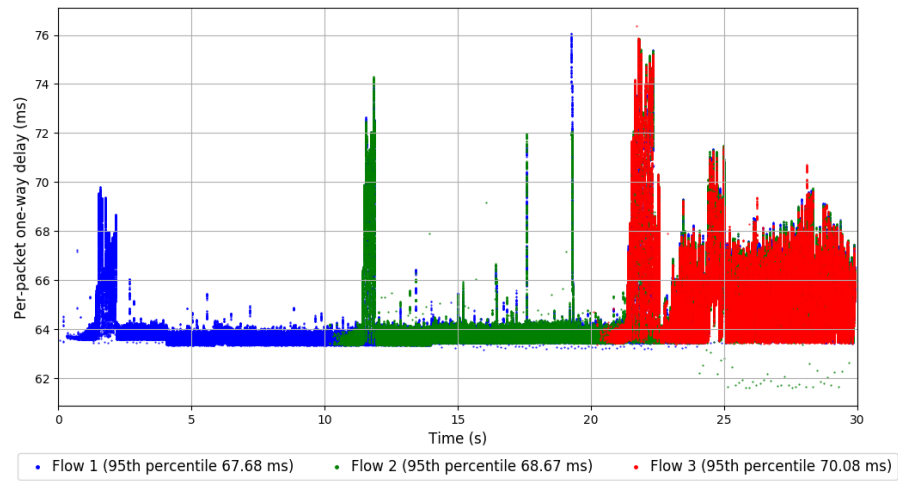
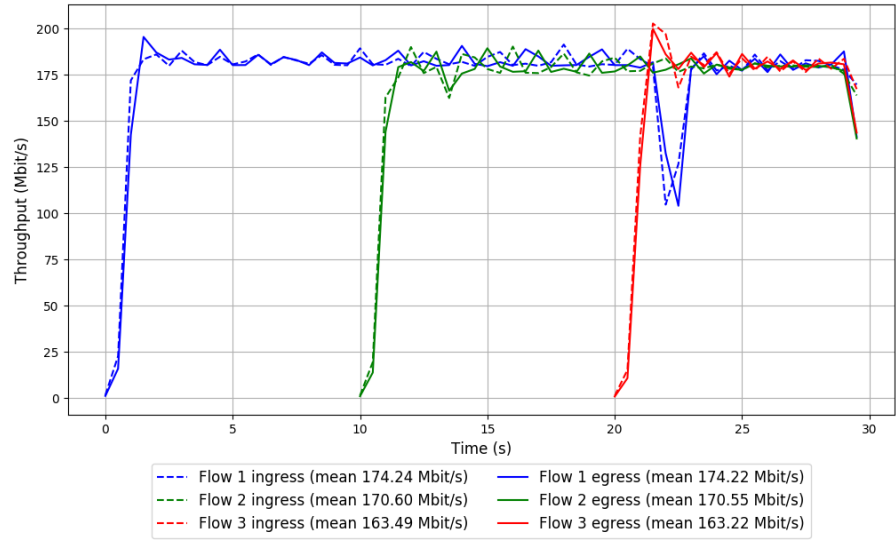
-- Flow 3:

Average throughput: 163.22 Mbit/s

95th percentile per-packet one-way delay: 70.079 ms

Loss rate: 1.47%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-01 10:45:15

End at: 2017-12-01 10:45:45

Below is generated by plot.py at 2017-12-01 13:16:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 339.29 Mbit/s

95th percentile per-packet one-way delay: 68.394 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 175.68 Mbit/s

95th percentile per-packet one-way delay: 67.347 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 167.20 Mbit/s

95th percentile per-packet one-way delay: 69.330 ms

Loss rate: 0.70%

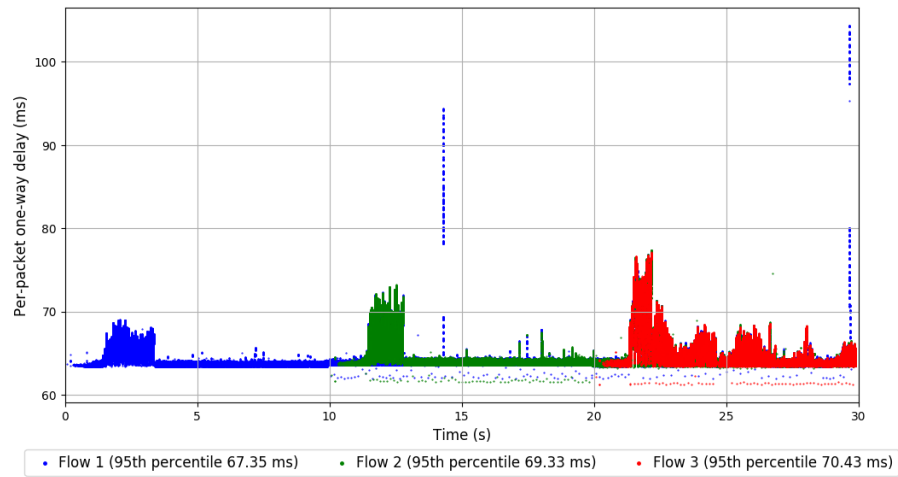
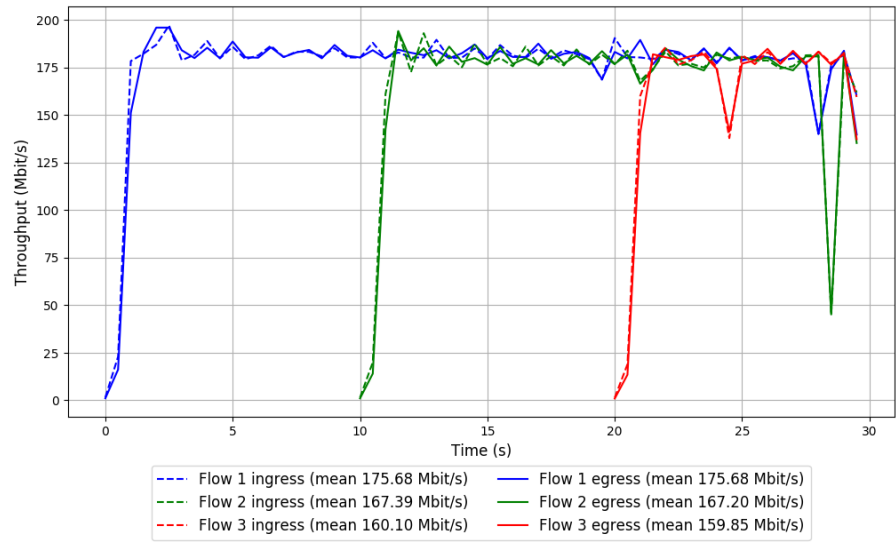
-- Flow 3:

Average throughput: 159.85 Mbit/s

95th percentile per-packet one-way delay: 70.428 ms

Loss rate: 1.41%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-01 08:54:40

End at: 2017-12-01 08:55:10

Below is generated by plot.py at 2017-12-01 13:16:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.10 Mbit/s

95th percentile per-packet one-way delay: 71.658 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 113.85 Mbit/s

95th percentile per-packet one-way delay: 71.893 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 130.60 Mbit/s

95th percentile per-packet one-way delay: 71.620 ms

Loss rate: 0.61%

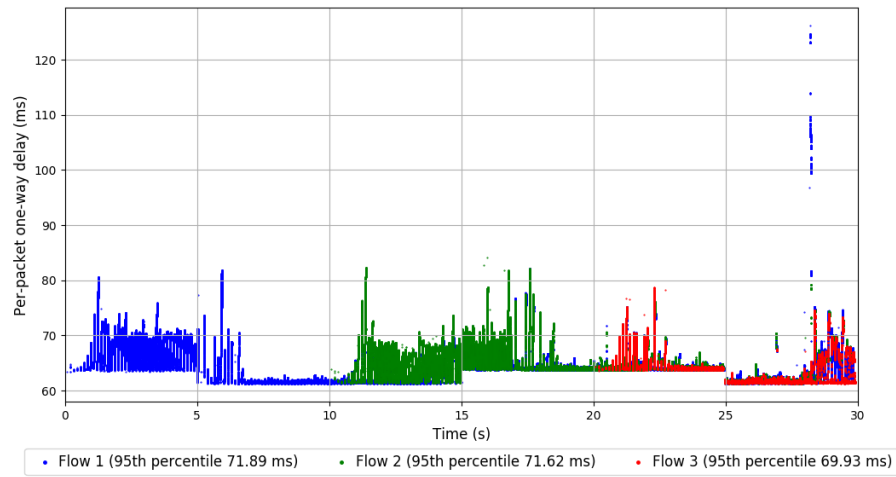
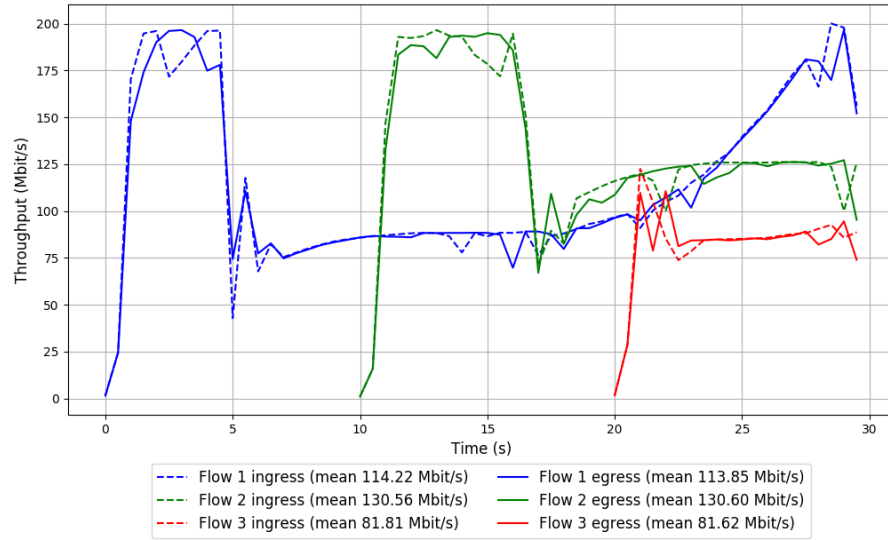
-- Flow 3:

Average throughput: 81.62 Mbit/s

95th percentile per-packet one-way delay: 69.927 ms

Loss rate: 1.49%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-01 09:07:16

End at: 2017-12-01 09:07:46

Below is generated by plot.py at 2017-12-01 13:16:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 173.15 Mbit/s

95th percentile per-packet one-way delay: 71.883 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 81.11 Mbit/s

95th percentile per-packet one-way delay: 72.034 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 94.08 Mbit/s

95th percentile per-packet one-way delay: 72.099 ms

Loss rate: 0.61%

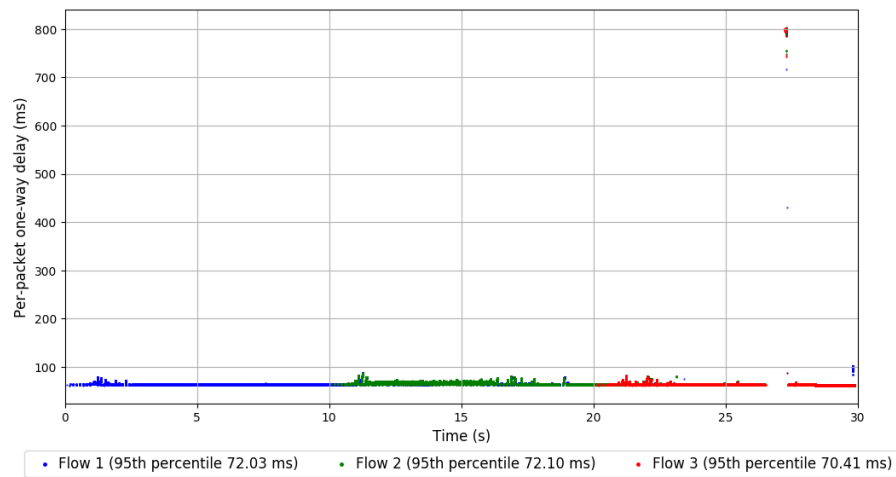
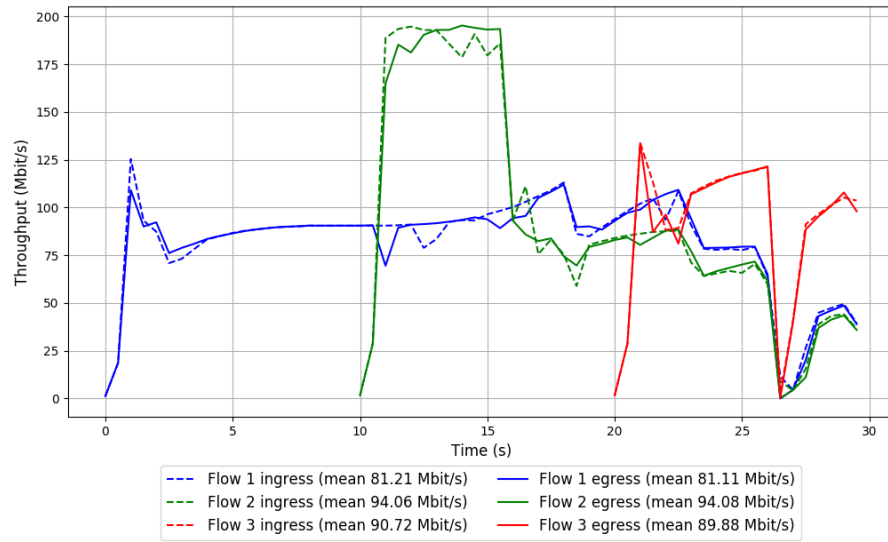
-- Flow 3:

Average throughput: 89.88 Mbit/s

95th percentile per-packet one-way delay: 70.414 ms

Loss rate: 2.14%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-01 09:19:41

End at: 2017-12-01 09:20:11

Below is generated by plot.py at 2017-12-01 13:16:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 169.29 Mbit/s

95th percentile per-packet one-way delay: 71.353 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 116.84 Mbit/s

95th percentile per-packet one-way delay: 71.270 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 38.95 Mbit/s

95th percentile per-packet one-way delay: 67.086 ms

Loss rate: 2.88%

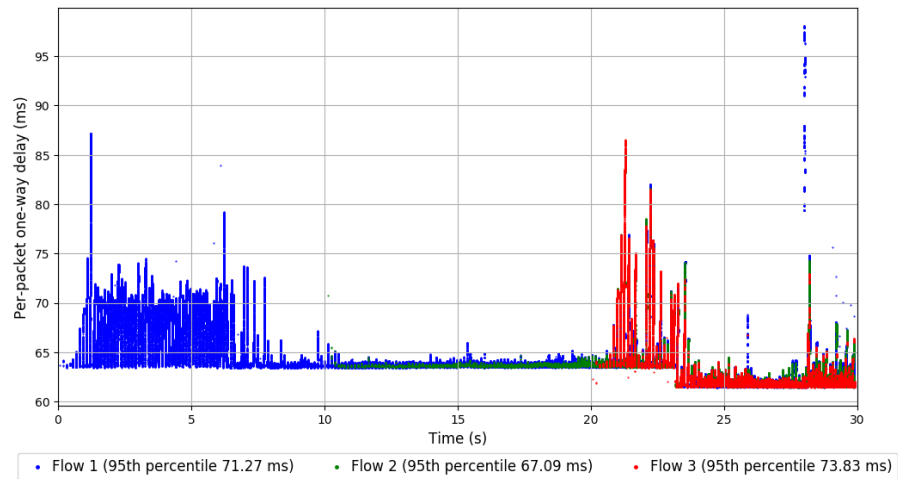
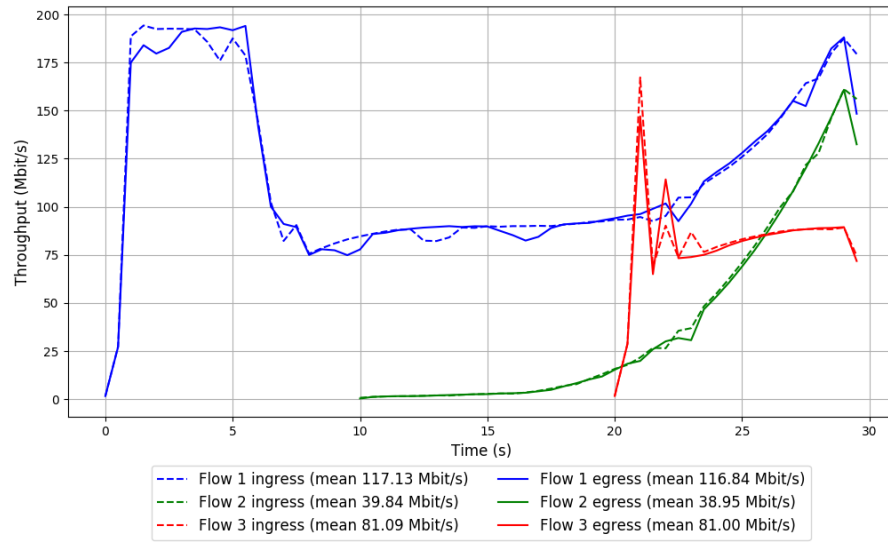
-- Flow 3:

Average throughput: 81.00 Mbit/s

95th percentile per-packet one-way delay: 73.832 ms

Loss rate: 1.38%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-01 09:32:13

End at: 2017-12-01 09:32:43

Below is generated by plot.py at 2017-12-01 13:16:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 212.68 Mbit/s

95th percentile per-packet one-way delay: 69.097 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 103.01 Mbit/s

95th percentile per-packet one-way delay: 69.245 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 94.32 Mbit/s

95th percentile per-packet one-way delay: 69.220 ms

Loss rate: 0.71%

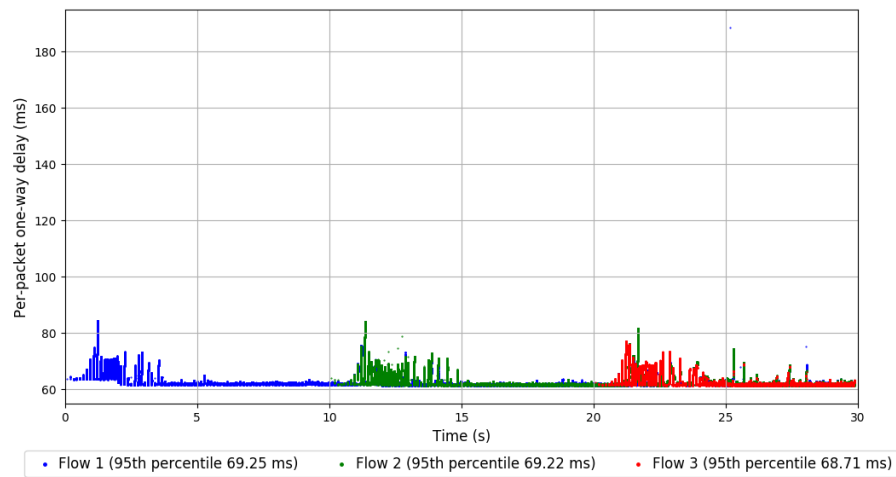
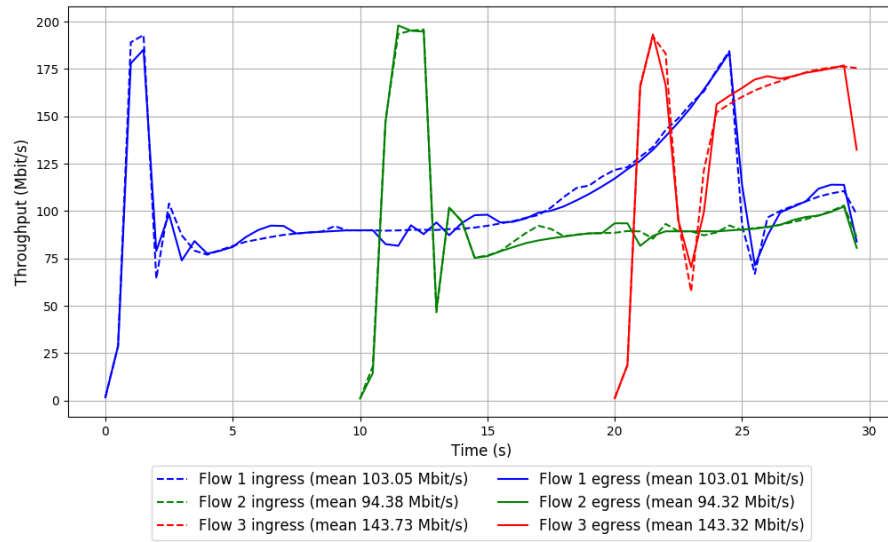
-- Flow 3:

Average throughput: 143.32 Mbit/s

95th percentile per-packet one-way delay: 68.706 ms

Loss rate: 1.55%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-01 09:44:35

End at: 2017-12-01 09:45:05

Below is generated by plot.py at 2017-12-01 13:16:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 228.87 Mbit/s

95th percentile per-packet one-way delay: 70.884 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 116.82 Mbit/s

95th percentile per-packet one-way delay: 70.438 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 86.78 Mbit/s

95th percentile per-packet one-way delay: 70.475 ms

Loss rate: 0.92%

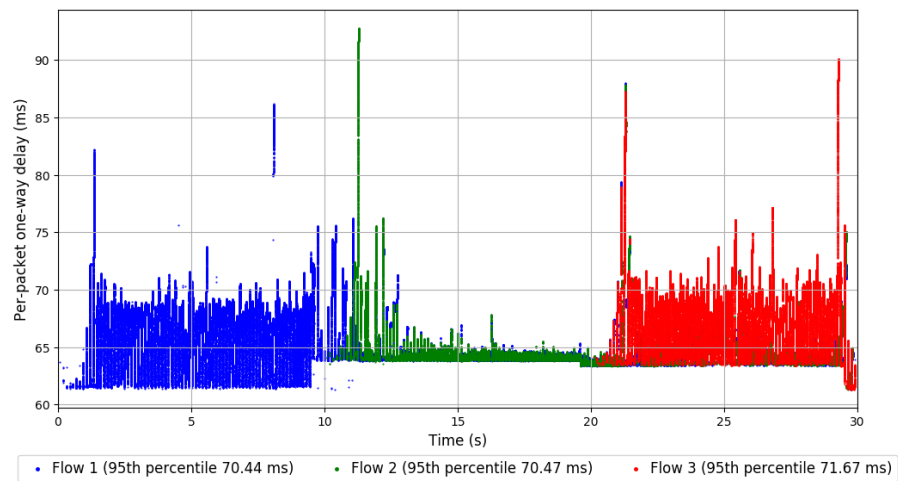
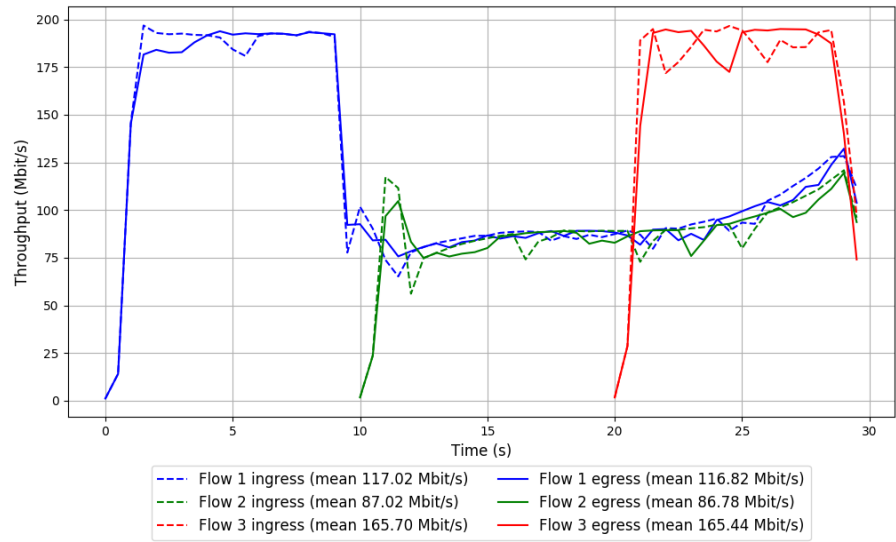
-- Flow 3:

Average throughput: 165.44 Mbit/s

95th percentile per-packet one-way delay: 71.669 ms

Loss rate: 1.45%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-01 09:57:10

End at: 2017-12-01 09:57:40

Below is generated by plot.py at 2017-12-01 13:16:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.75 Mbit/s

95th percentile per-packet one-way delay: 70.884 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 95.54 Mbit/s

95th percentile per-packet one-way delay: 71.404 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 137.38 Mbit/s

95th percentile per-packet one-way delay: 70.448 ms

Loss rate: 0.41%

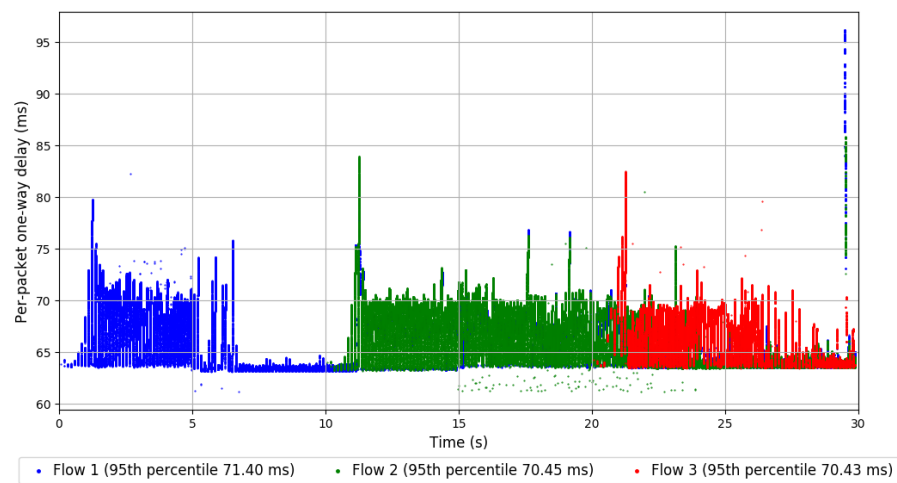
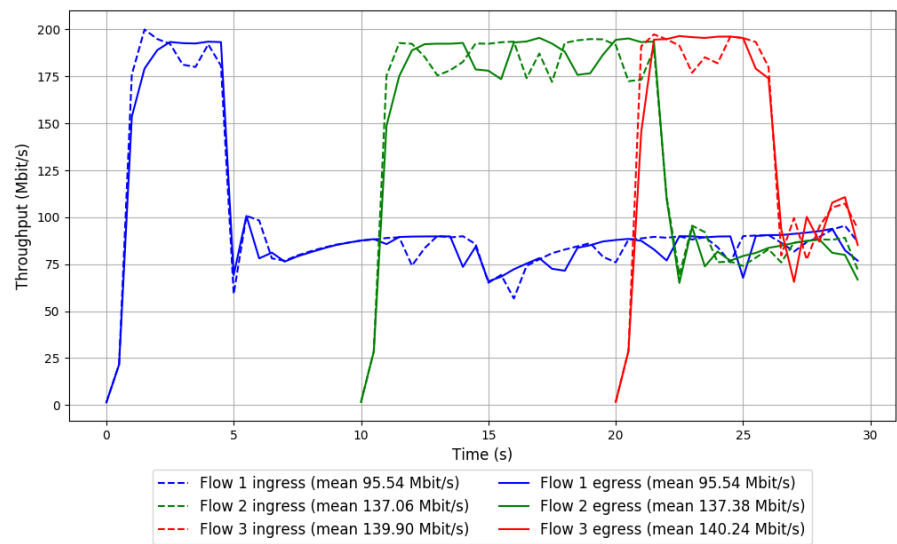
-- Flow 3:

Average throughput: 140.24 Mbit/s

95th percentile per-packet one-way delay: 70.433 ms

Loss rate: 1.03%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-01 10:09:46

End at: 2017-12-01 10:10:16

Below is generated by plot.py at 2017-12-01 13:17:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.14 Mbit/s

95th percentile per-packet one-way delay: 69.552 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 134.50 Mbit/s

95th percentile per-packet one-way delay: 68.967 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 78.01 Mbit/s

95th percentile per-packet one-way delay: 70.634 ms

Loss rate: 0.59%

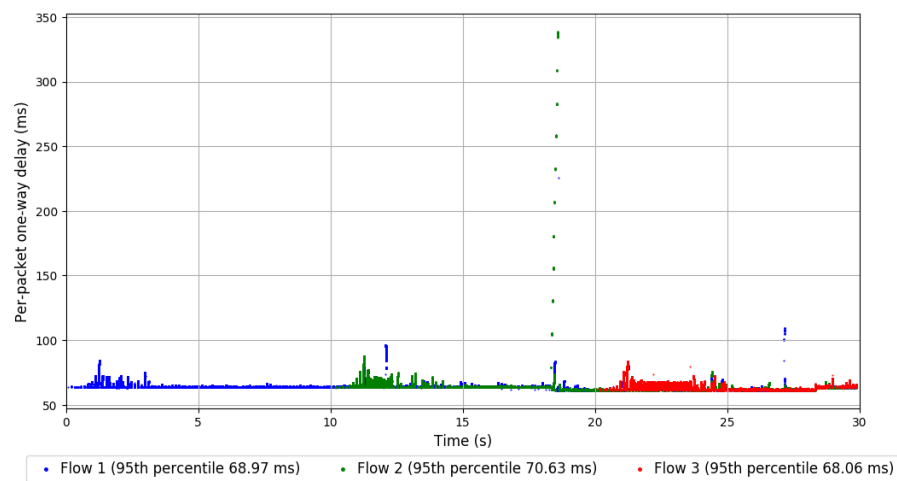
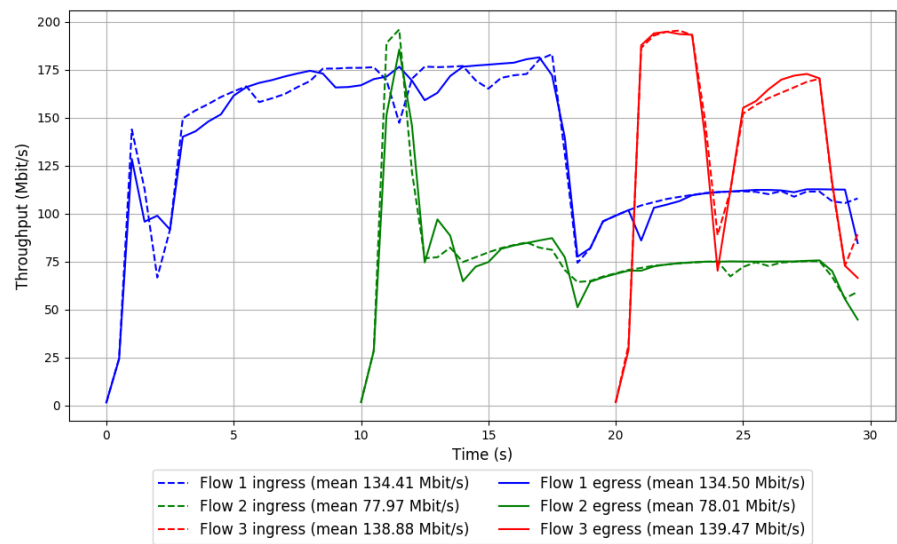
-- Flow 3:

Average throughput: 139.47 Mbit/s

95th percentile per-packet one-way delay: 68.062 ms

Loss rate: 0.83%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-01 10:22:08

End at: 2017-12-01 10:22:38

Below is generated by plot.py at 2017-12-01 13:17:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 209.15 Mbit/s

95th percentile per-packet one-way delay: 71.275 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 94.77 Mbit/s

95th percentile per-packet one-way delay: 71.007 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 121.19 Mbit/s

95th percentile per-packet one-way delay: 71.305 ms

Loss rate: 0.47%

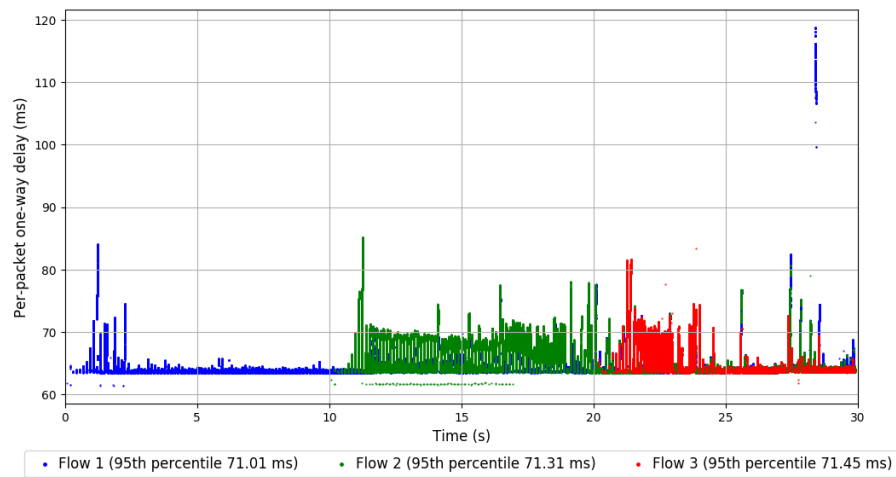
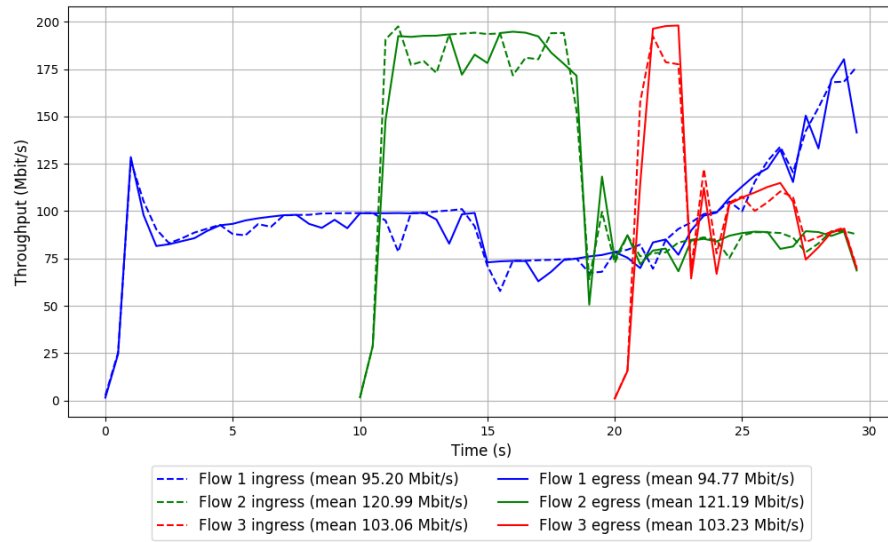
-- Flow 3:

Average throughput: 103.23 Mbit/s

95th percentile per-packet one-way delay: 71.453 ms

Loss rate: 1.15%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-01 10:34:31

End at: 2017-12-01 10:35:01

Below is generated by plot.py at 2017-12-01 13:17:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 171.76 Mbit/s

95th percentile per-packet one-way delay: 68.449 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 85.05 Mbit/s

95th percentile per-packet one-way delay: 68.609 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 80.44 Mbit/s

95th percentile per-packet one-way delay: 67.665 ms

Loss rate: 1.16%

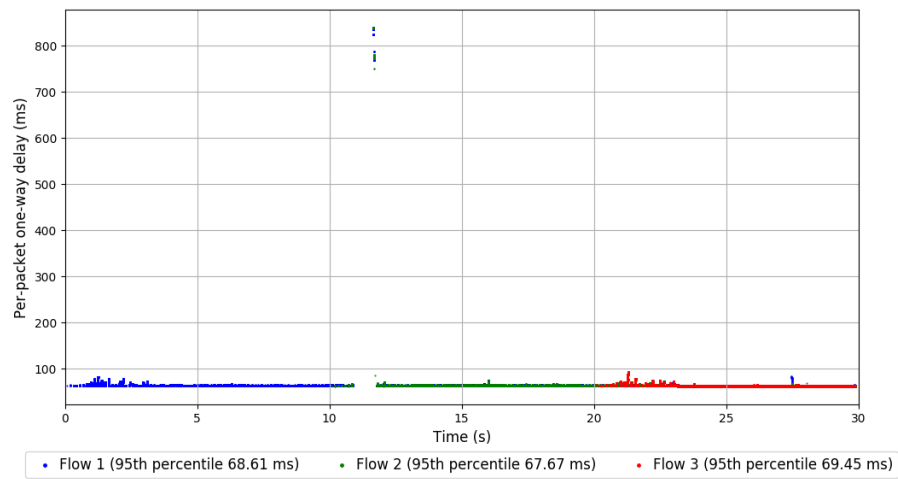
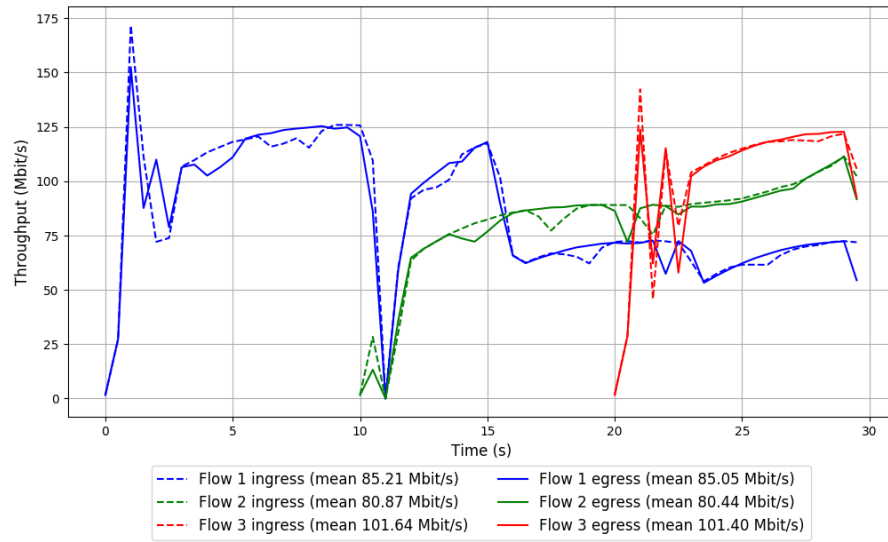
-- Flow 3:

Average throughput: 101.40 Mbit/s

95th percentile per-packet one-way delay: 69.453 ms

Loss rate: 1.53%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-01 10:46:55

End at: 2017-12-01 10:47:25

Below is generated by plot.py at 2017-12-01 13:18:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 246.68 Mbit/s

95th percentile per-packet one-way delay: 71.677 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 143.55 Mbit/s

95th percentile per-packet one-way delay: 71.268 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 101.83 Mbit/s

95th percentile per-packet one-way delay: 72.996 ms

Loss rate: 0.87%

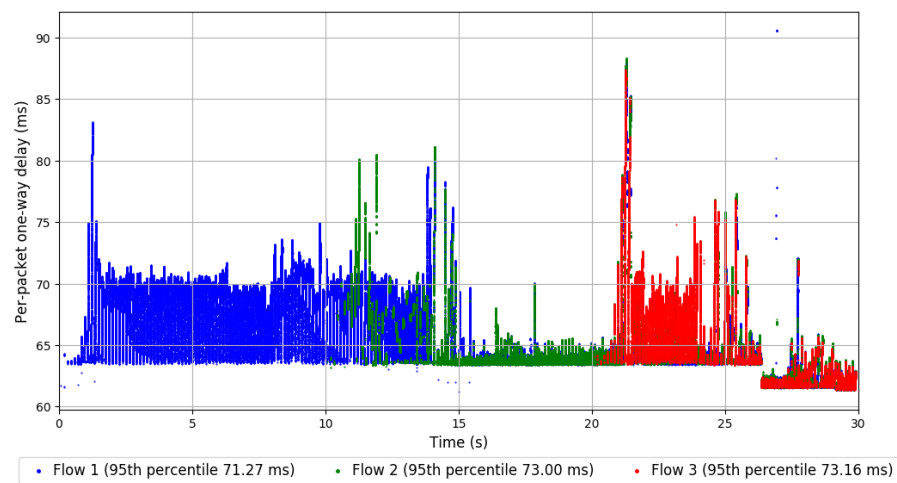
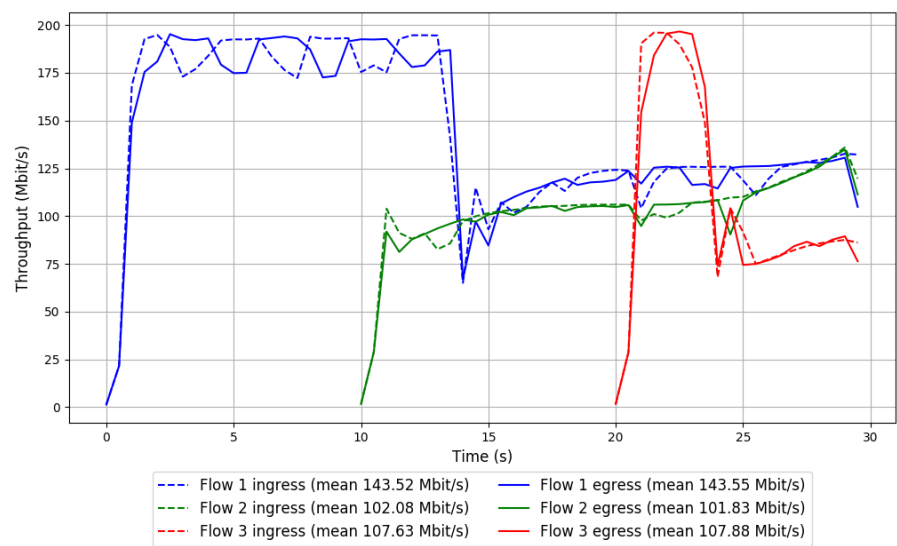
-- Flow 3:

Average throughput: 107.88 Mbit/s

95th percentile per-packet one-way delay: 73.155 ms

Loss rate: 1.03%

Run 10: Report of TCP Cubic — Data Link

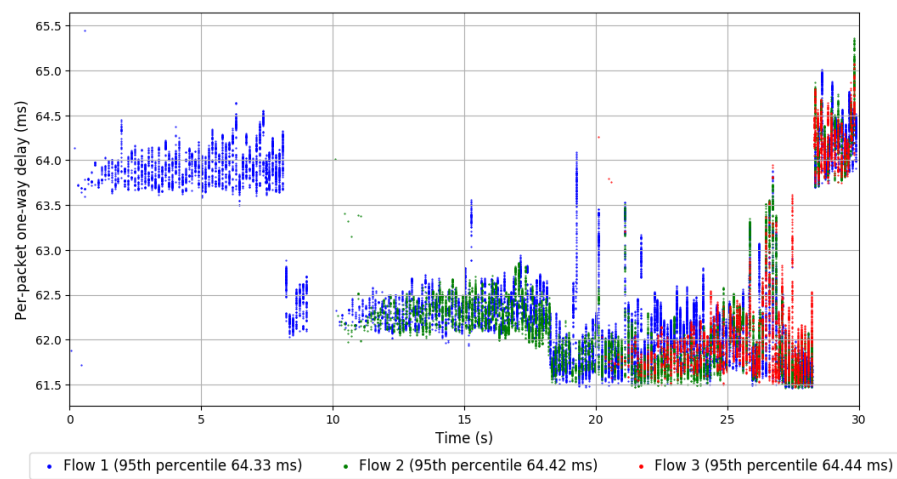
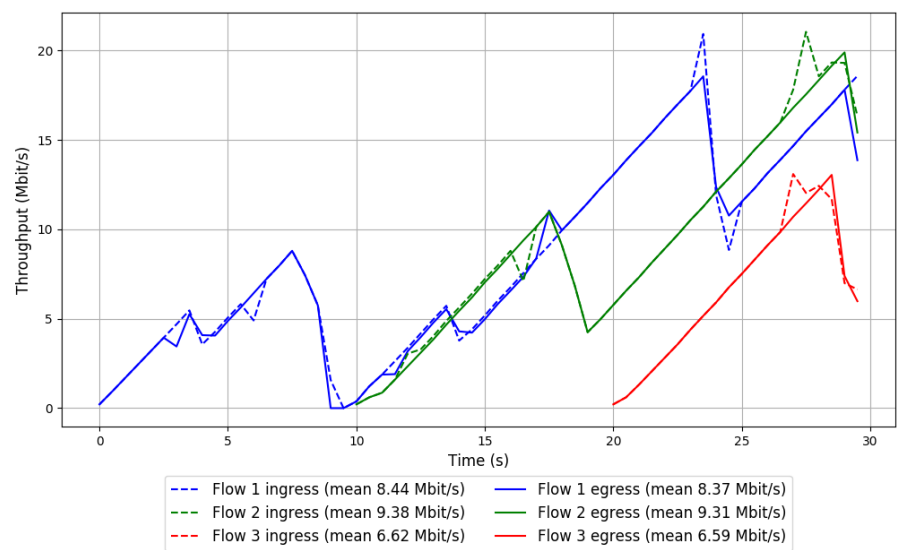


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-01 08:52:16
End at: 2017-12-01 08:52:46

# Below is generated by plot.py at 2017-12-01 13:18:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.68 Mbit/s
95th percentile per-packet one-way delay: 64.380 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 8.37 Mbit/s
95th percentile per-packet one-way delay: 64.331 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 9.31 Mbit/s
95th percentile per-packet one-way delay: 64.423 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 6.59 Mbit/s
95th percentile per-packet one-way delay: 64.437 ms
Loss rate: 1.60%
```


Run 1: Report of LEDBAT — Data Link

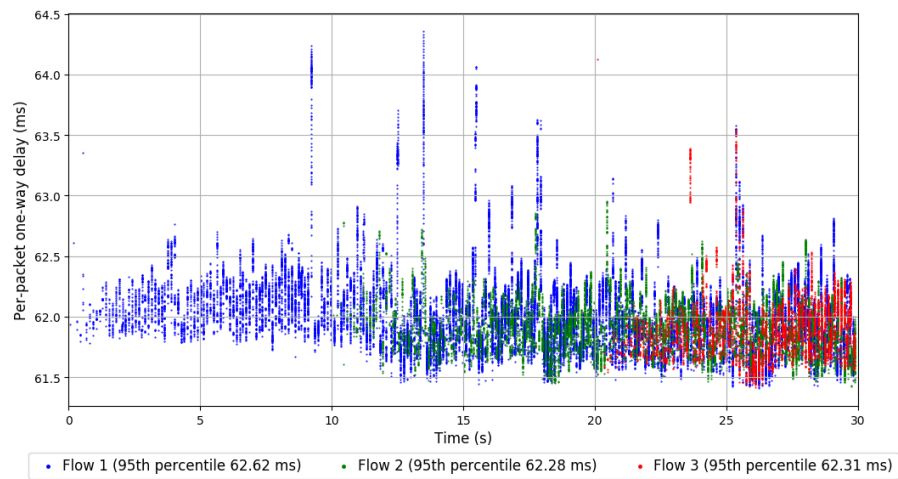
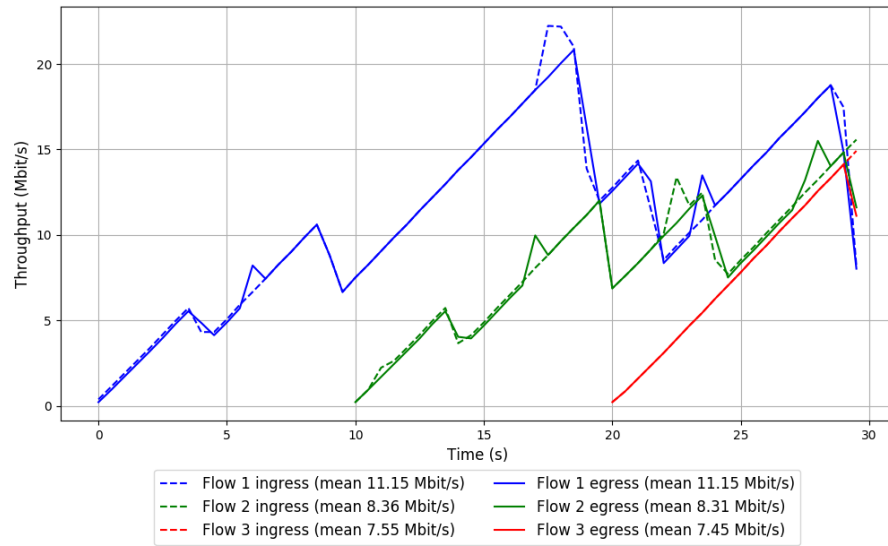


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-01 09:04:53
End at: 2017-12-01 09:05:23

# Below is generated by plot.py at 2017-12-01 13:18:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.09 Mbit/s
95th percentile per-packet one-way delay: 62.474 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 11.15 Mbit/s
95th percentile per-packet one-way delay: 62.619 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 8.31 Mbit/s
95th percentile per-packet one-way delay: 62.280 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 7.45 Mbit/s
95th percentile per-packet one-way delay: 62.313 ms
Loss rate: 2.55%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-01 09:17:19

End at: 2017-12-01 09:17:49

Below is generated by plot.py at 2017-12-01 13:18:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.37 Mbit/s

95th percentile per-packet one-way delay: 64.516 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 9.34 Mbit/s

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

Loss rate: 0.85%

-- Flow 2:

Average throughput: 5.56 Mbit/s

95th percentile per-packet one-way delay: 64.564 ms

Loss rate: 0.56%

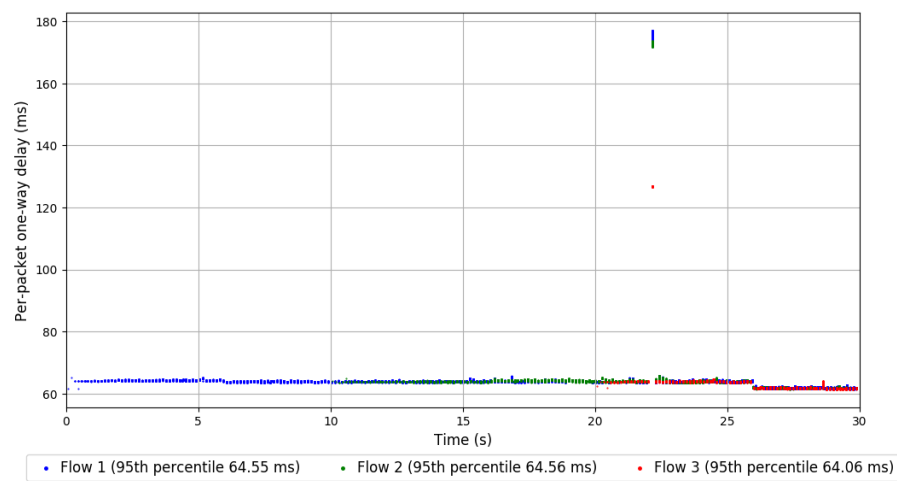
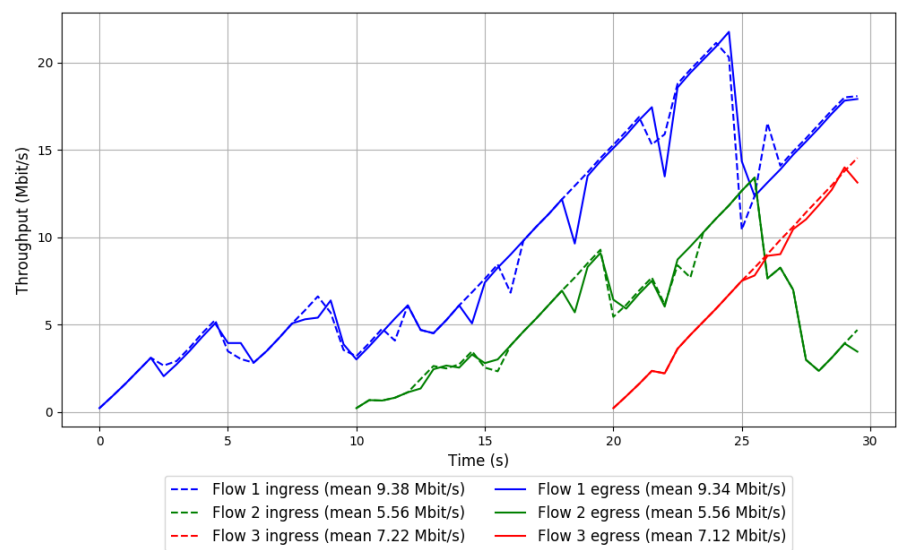
-- Flow 3:

Average throughput: 7.12 Mbit/s

95th percentile per-packet one-way delay: 64.055 ms

Loss rate: 2.59%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-01 09:29:49

End at: 2017-12-01 09:30:19

Below is generated by plot.py at 2017-12-01 13:18:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.51 Mbit/s

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

Loss rate: 1.22%

-- Flow 1:

Average throughput: 8.32 Mbit/s

95th percentile per-packet one-way delay: 63.968 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 14.92 Mbit/s

95th percentile per-packet one-way delay: 64.056 ms

Loss rate: 1.27%

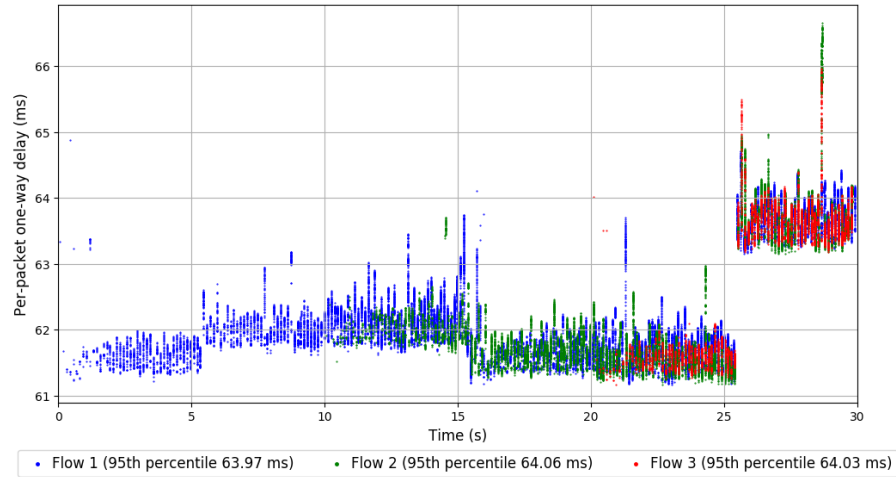
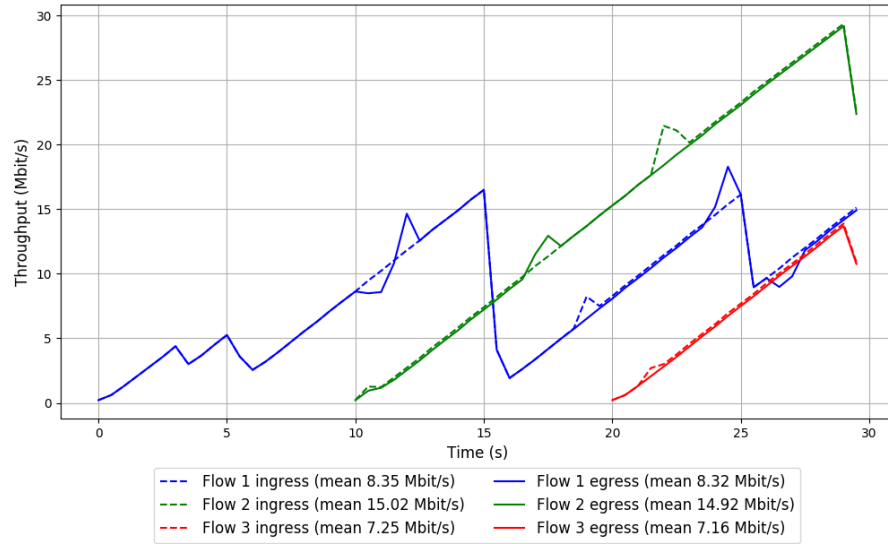
-- Flow 3:

Average throughput: 7.16 Mbit/s

95th percentile per-packet one-way delay: 64.032 ms

Loss rate: 2.58%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-01 09:42:11

End at: 2017-12-01 09:42:41

Below is generated by plot.py at 2017-12-01 13:18:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.92 Mbit/s

95th percentile per-packet one-way delay: 62.733 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 8.65 Mbit/s

95th percentile per-packet one-way delay: 62.576 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 11.33 Mbit/s

95th percentile per-packet one-way delay: 62.840 ms

Loss rate: 1.40%

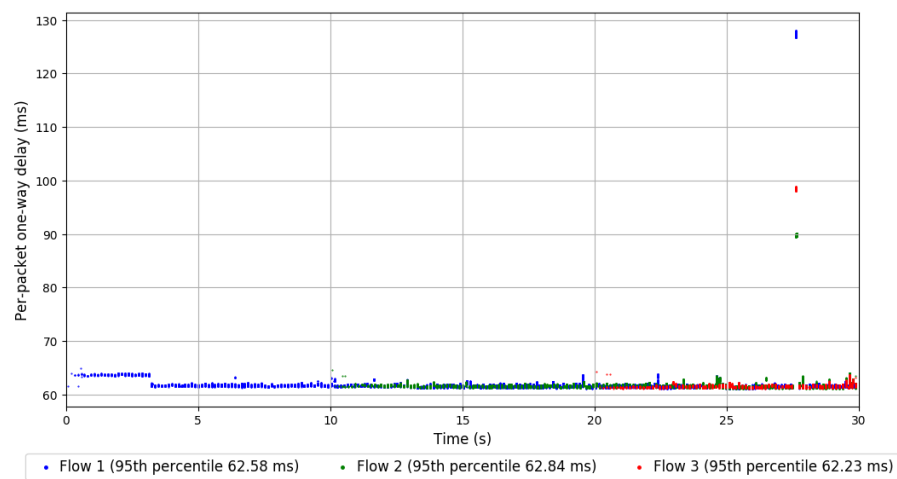
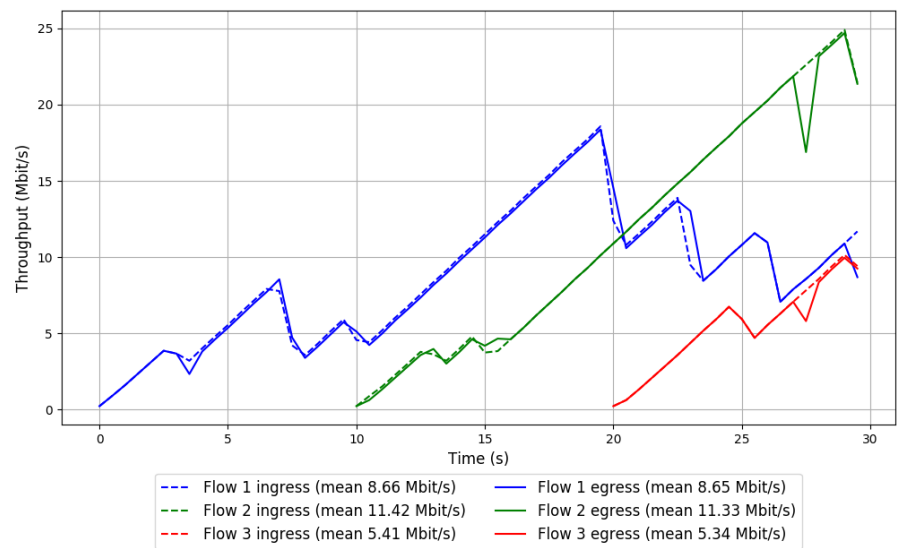
-- Flow 3:

Average throughput: 5.34 Mbit/s

95th percentile per-packet one-way delay: 62.225 ms

Loss rate: 2.57%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-01 09:54:46

End at: 2017-12-01 09:55:16

Below is generated by plot.py at 2017-12-01 13:18:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.48 Mbit/s

95th percentile per-packet one-way delay: 64.093 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 14.13 Mbit/s

95th percentile per-packet one-way delay: 64.116 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 63.982 ms

Loss rate: 1.06%

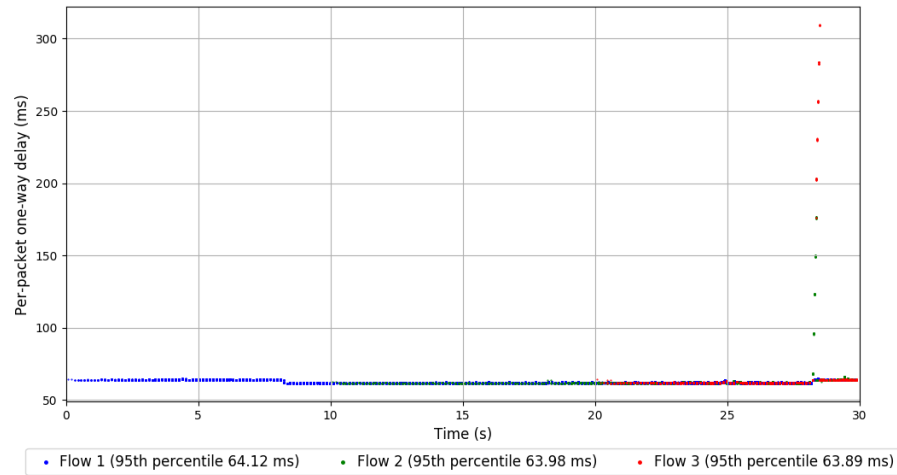
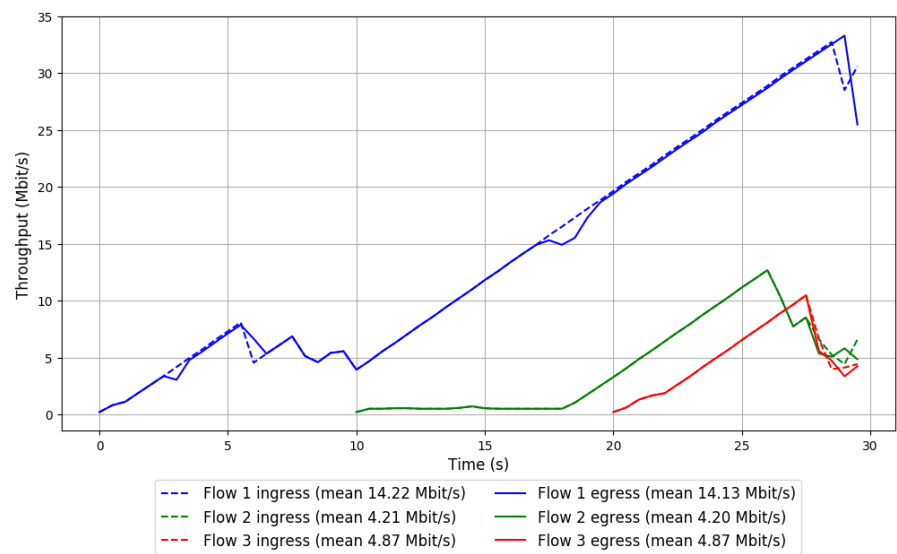
-- Flow 3:

Average throughput: 4.87 Mbit/s

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

Loss rate: 1.33%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-01 10:07:23

End at: 2017-12-01 10:07:53

Below is generated by plot.py at 2017-12-01 13:18:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.56 Mbit/s

95th percentile per-packet one-way delay: 64.513 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 11.57 Mbit/s

95th percentile per-packet one-way delay: 64.537 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 7.34 Mbit/s

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

Loss rate: 1.61%

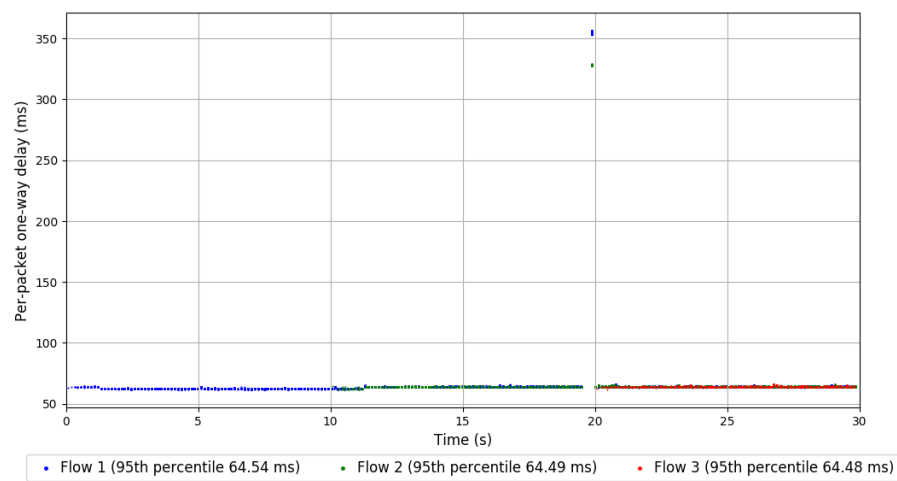
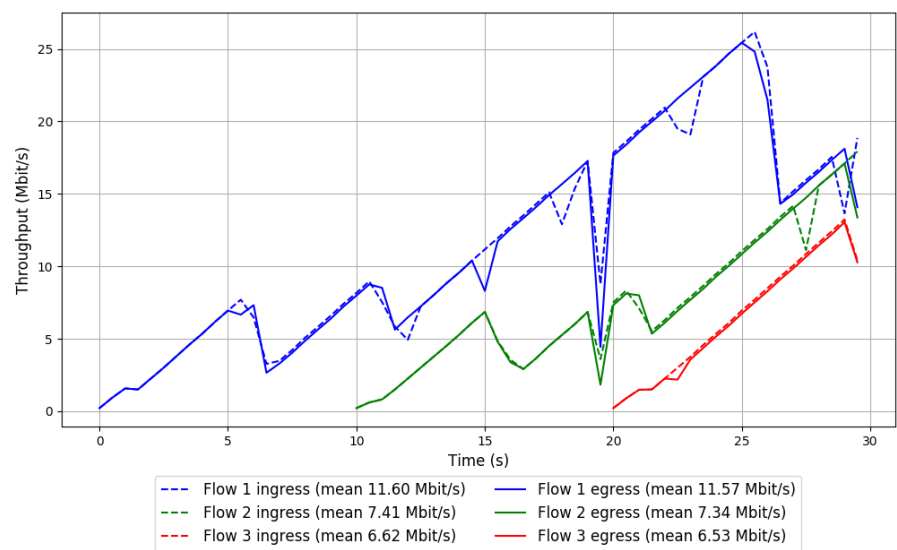
-- Flow 3:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 64.481 ms

Loss rate: 2.70%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-01 10:19:44

End at: 2017-12-01 10:20:14

Below is generated by plot.py at 2017-12-01 13:18:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.66 Mbit/s

95th percentile per-packet one-way delay: 64.328 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 11.93 Mbit/s

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

Loss rate: 0.89%

-- Flow 2:

Average throughput: 9.94 Mbit/s

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

Loss rate: 1.47%

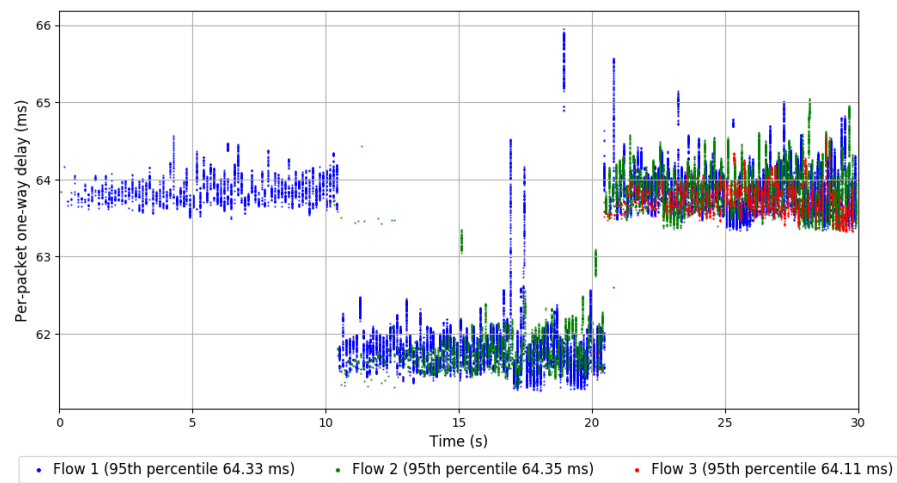
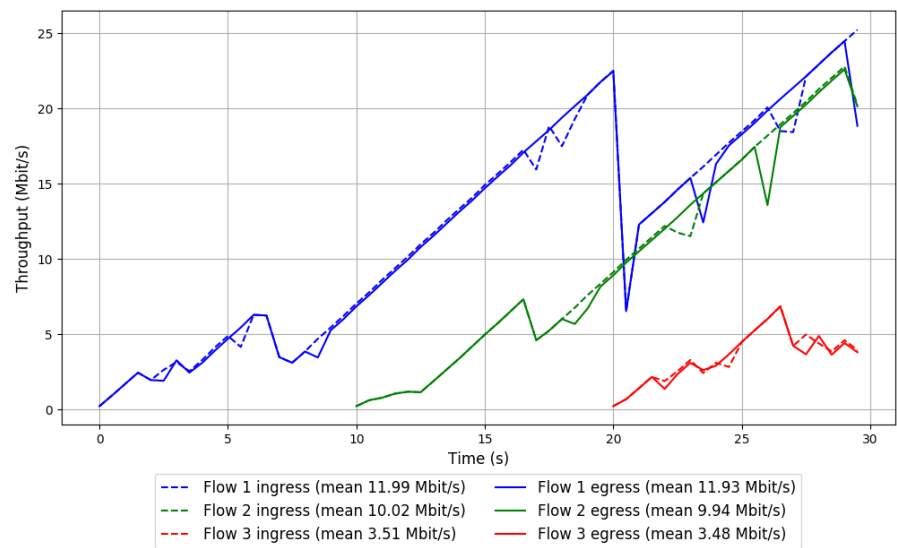
-- Flow 3:

Average throughput: 3.48 Mbit/s

95th percentile per-packet one-way delay: 64.115 ms

Loss rate: 2.04%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-01 10:32:08

End at: 2017-12-01 10:32:38

Below is generated by plot.py at 2017-12-01 13:18:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.49 Mbit/s

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

Loss rate: 0.98%

-- Flow 1:

Average throughput: 11.63 Mbit/s

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

Loss rate: 0.55%

-- Flow 2:

Average throughput: 6.76 Mbit/s

95th percentile per-packet one-way delay: 64.284 ms

Loss rate: 1.21%

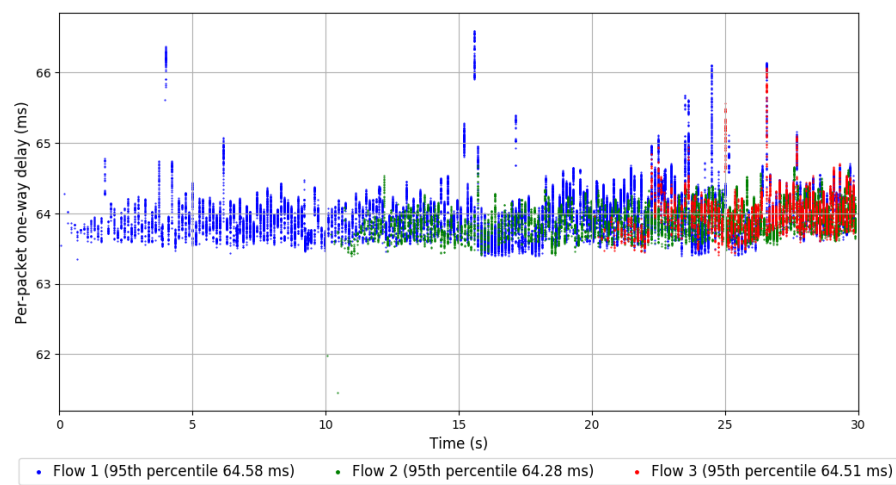
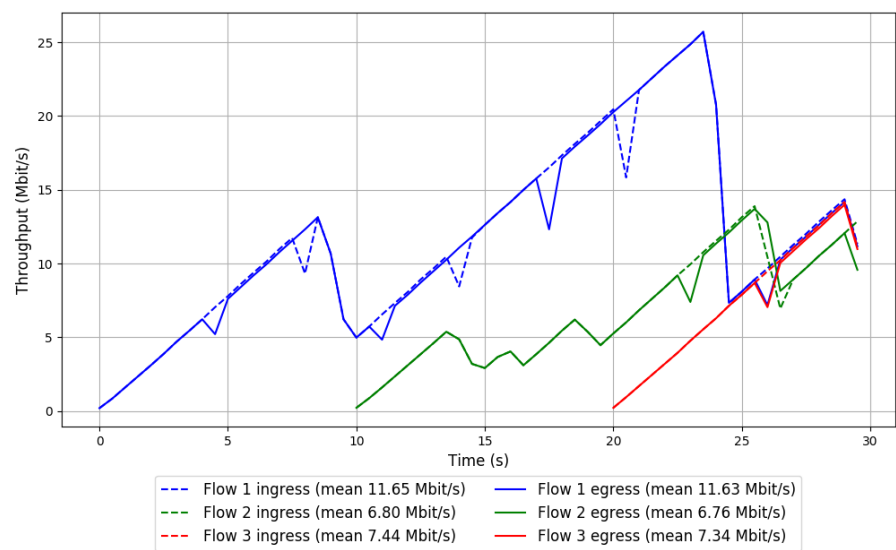
-- Flow 3:

Average throughput: 7.34 Mbit/s

95th percentile per-packet one-way delay: 64.513 ms

Loss rate: 2.56%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-01 10:44:32

End at: 2017-12-01 10:45:02

Below is generated by plot.py at 2017-12-01 13:18:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.73 Mbit/s

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

Loss rate: 1.23%

-- Flow 1:

Average throughput: 7.56 Mbit/s

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

Loss rate: 1.00%

-- Flow 2:

Average throughput: 11.01 Mbit/s

95th percentile per-packet one-way delay: 64.438 ms

Loss rate: 1.20%

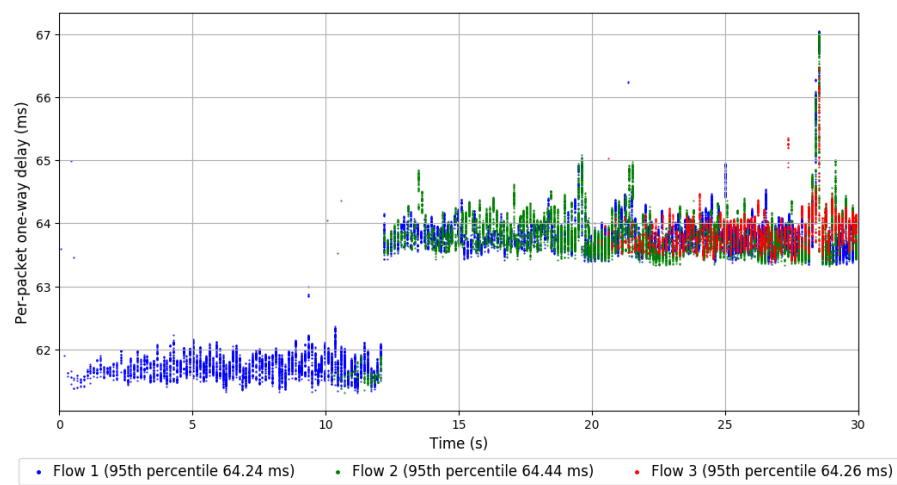
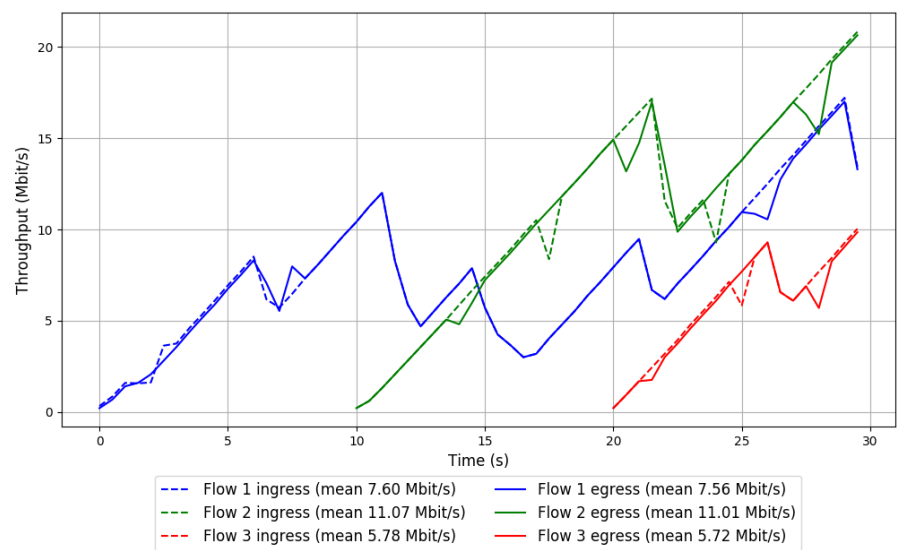
-- Flow 3:

Average throughput: 5.72 Mbit/s

95th percentile per-packet one-way delay: 64.262 ms

Loss rate: 2.25%

Run 10: Report of LEDBAT — Data Link

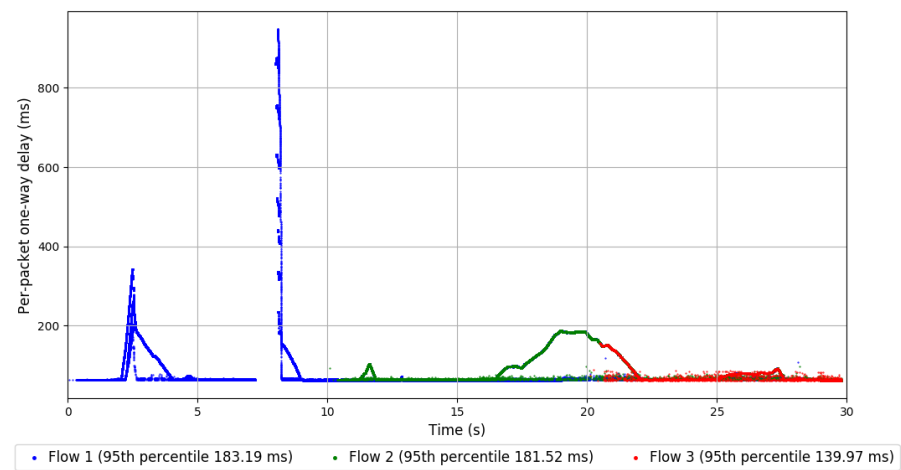
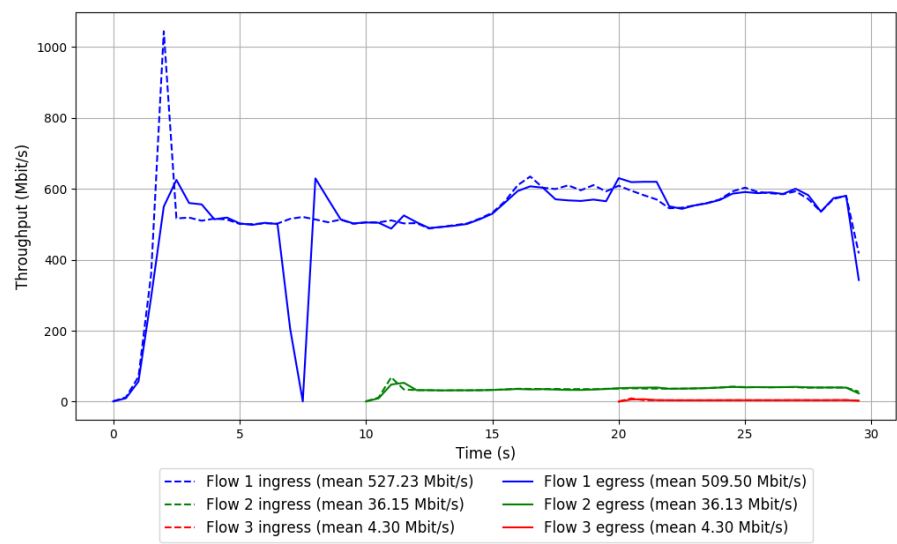


```
Run 1: Statistics of PCC

Start at: 2017-12-01 08:58:35
End at: 2017-12-01 08:59:05

# Below is generated by plot.py at 2017-12-01 13:25:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 534.80 Mbit/s
95th percentile per-packet one-way delay: 183.133 ms
Loss rate: 3.64%
-- Flow 1:
Average throughput: 509.50 Mbit/s
95th percentile per-packet one-way delay: 183.190 ms
Loss rate: 3.77%
-- Flow 2:
Average throughput: 36.13 Mbit/s
95th percentile per-packet one-way delay: 181.517 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 139.966 ms
Loss rate: 1.40%
```

Run 1: Report of PCC — Data Link

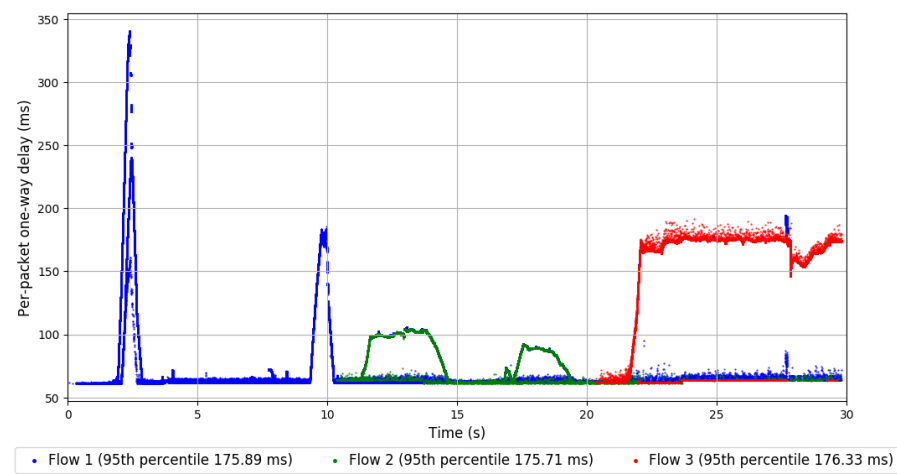
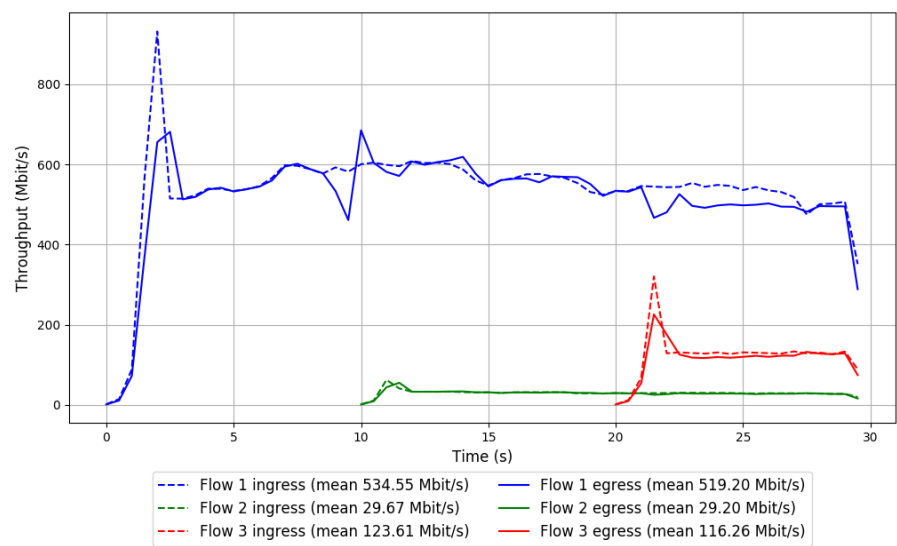


```
Run 2: Statistics of PCC

Start at: 2017-12-01 09:11:01
End at: 2017-12-01 09:11:31

# Below is generated by plot.py at 2017-12-01 13:25:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 576.48 Mbit/s
95th percentile per-packet one-way delay: 175.933 ms
Loss rate: 3.51%
-- Flow 1:
Average throughput: 519.20 Mbit/s
95th percentile per-packet one-way delay: 175.888 ms
Loss rate: 3.27%
-- Flow 2:
Average throughput: 29.20 Mbit/s
95th percentile per-packet one-way delay: 175.709 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 116.26 Mbit/s
95th percentile per-packet one-way delay: 176.329 ms
Loss rate: 7.17%
```

Run 2: Report of PCC — Data Link

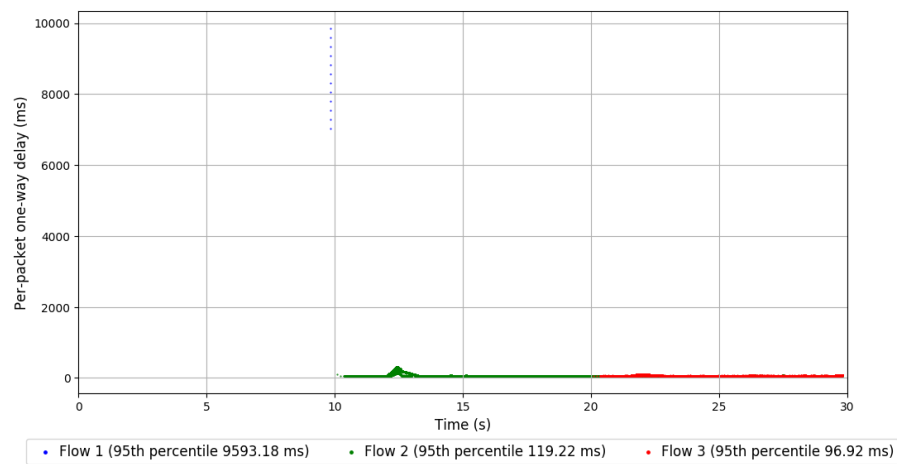
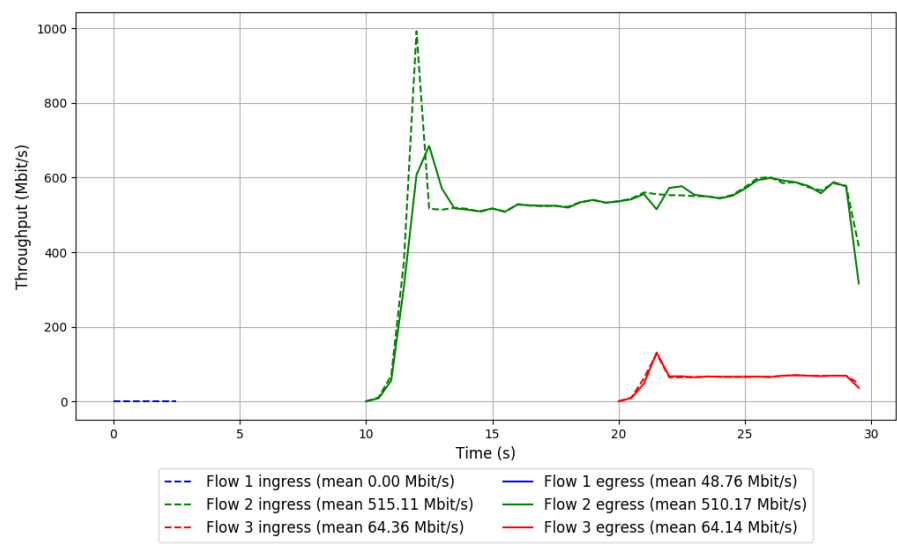


Run 3: Statistics of PCC

Start at: 2017-12-01 09:23:34

End at: 2017-12-01 09:24:04

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-01 09:36:00

End at: 2017-12-01 09:36:30

Below is generated by plot.py at 2017-12-01 13:26:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 592.30 Mbit/s

95th percentile per-packet one-way delay: 158.029 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 570.71 Mbit/s

95th percentile per-packet one-way delay: 158.237 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 16.92 Mbit/s

95th percentile per-packet one-way delay: 151.423 ms

Loss rate: 0.68%

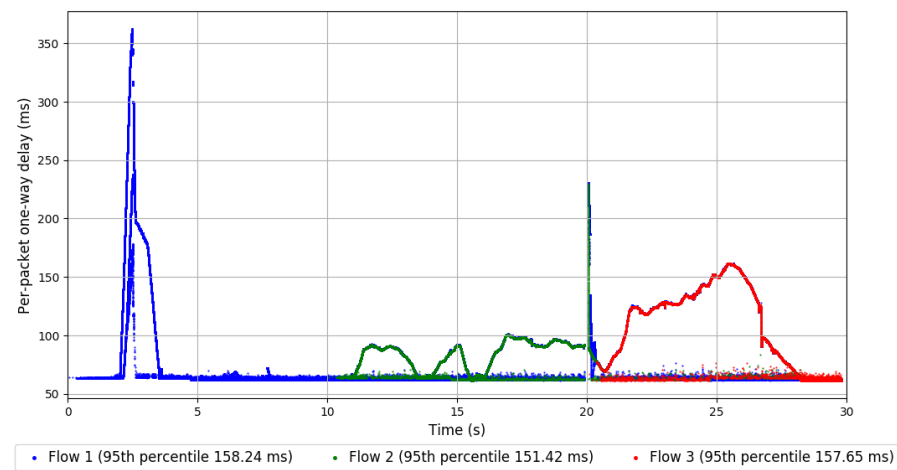
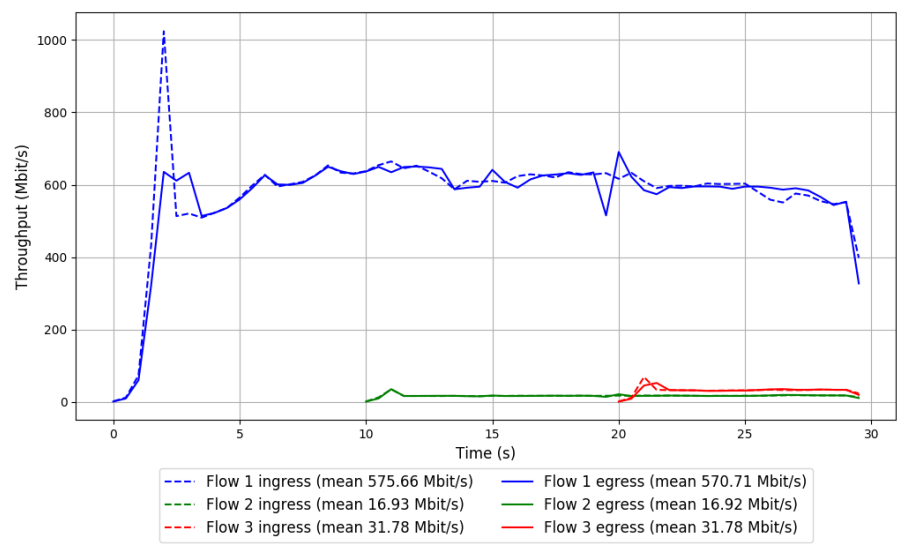
-- Flow 3:

Average throughput: 31.78 Mbit/s

95th percentile per-packet one-way delay: 157.650 ms

Loss rate: 1.31%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-01 09:48:28

End at: 2017-12-01 09:48:58

Below is generated by plot.py at 2017-12-01 13:26:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 557.95 Mbit/s

95th percentile per-packet one-way delay: 173.981 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 507.79 Mbit/s

95th percentile per-packet one-way delay: 173.670 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 45.18 Mbit/s

95th percentile per-packet one-way delay: 174.422 ms

Loss rate: 0.84%

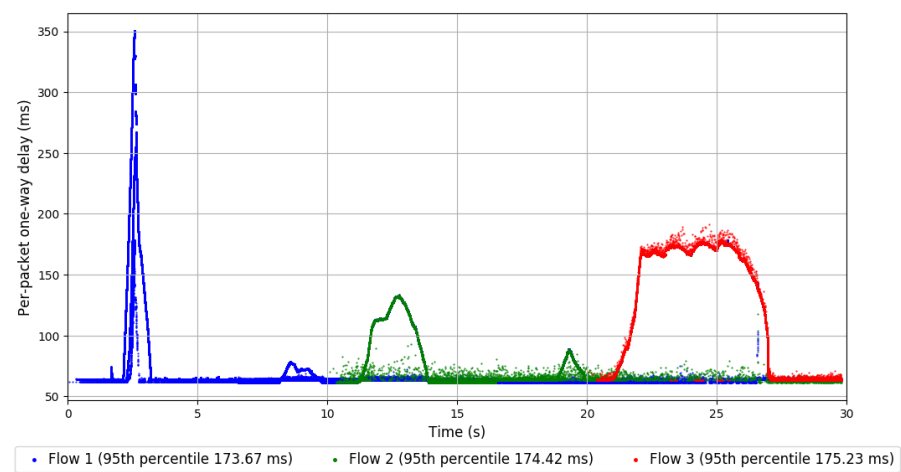
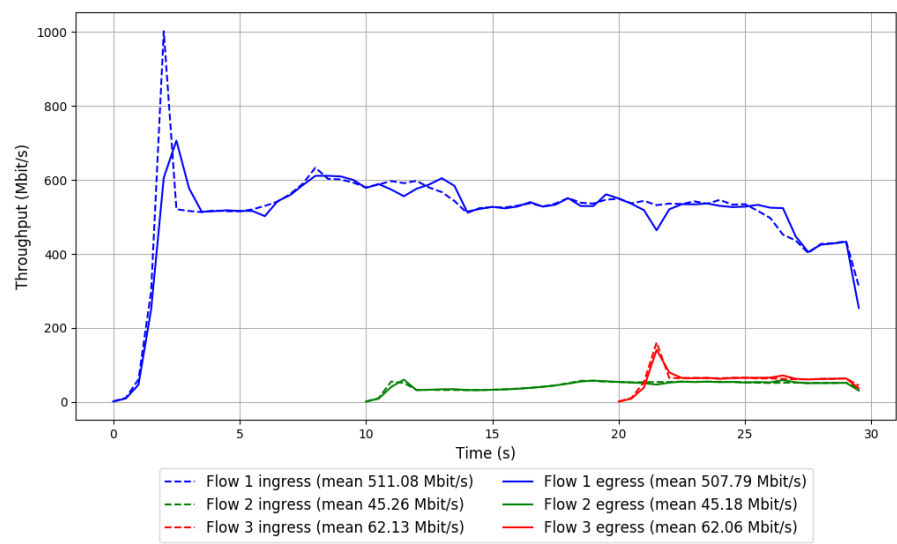
-- Flow 3:

Average throughput: 62.06 Mbit/s

95th percentile per-packet one-way delay: 175.233 ms

Loss rate: 1.48%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-01 10:01:00

End at: 2017-12-01 10:01:30

Below is generated by plot.py at 2017-12-01 13:27:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 601.89 Mbit/s

95th percentile per-packet one-way delay: 178.930 ms

Loss rate: 1.79%

-- Flow 1:

Average throughput: 499.20 Mbit/s

95th percentile per-packet one-way delay: 185.050 ms

Loss rate: 1.87%

-- Flow 2:

Average throughput: 125.39 Mbit/s

95th percentile per-packet one-way delay: 169.823 ms

Loss rate: 1.32%

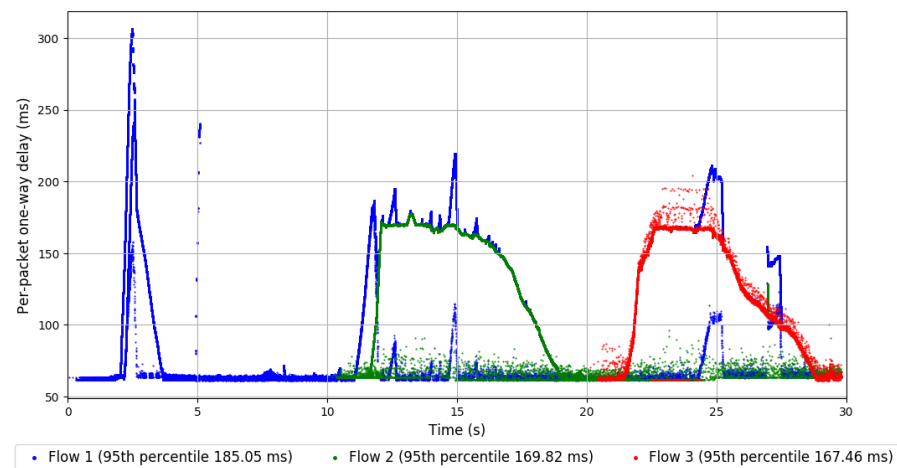
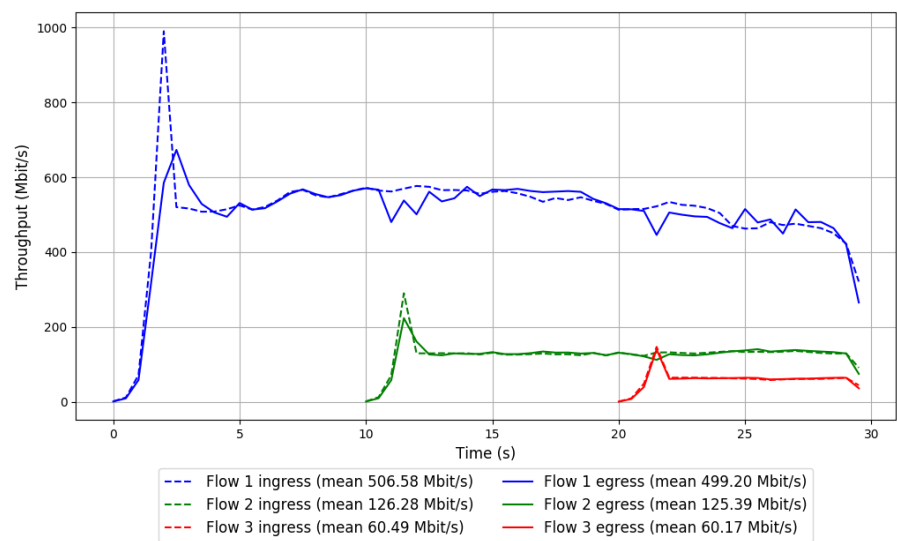
-- Flow 3:

Average throughput: 60.17 Mbit/s

95th percentile per-packet one-way delay: 167.456 ms

Loss rate: 1.84%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-01 10:13:37

End at: 2017-12-01 10:14:07

Below is generated by plot.py at 2017-12-01 13:27:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 417.66 Mbit/s

95th percentile per-packet one-way delay: 184.859 ms

Loss rate: 2.40%

-- Flow 1:

Average throughput: 48.19 Mbit/s

95th percentile per-packet one-way delay: 5268.997 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 479.67 Mbit/s

95th percentile per-packet one-way delay: 184.766 ms

Loss rate: 2.40%

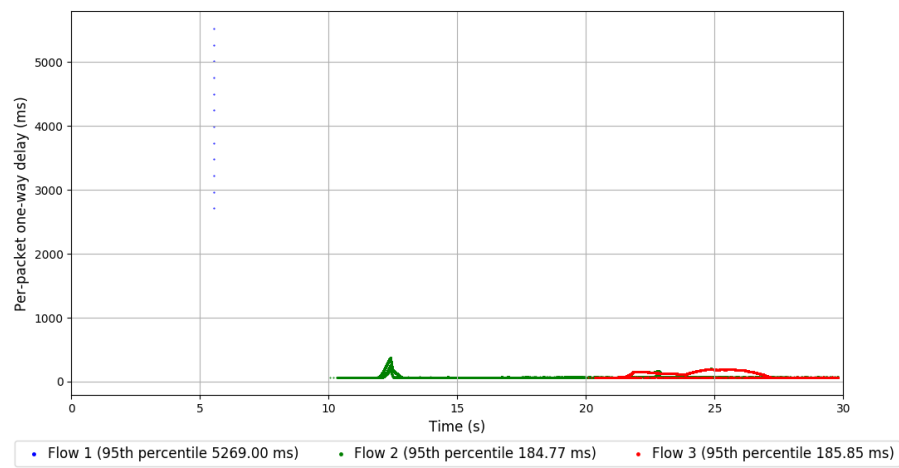
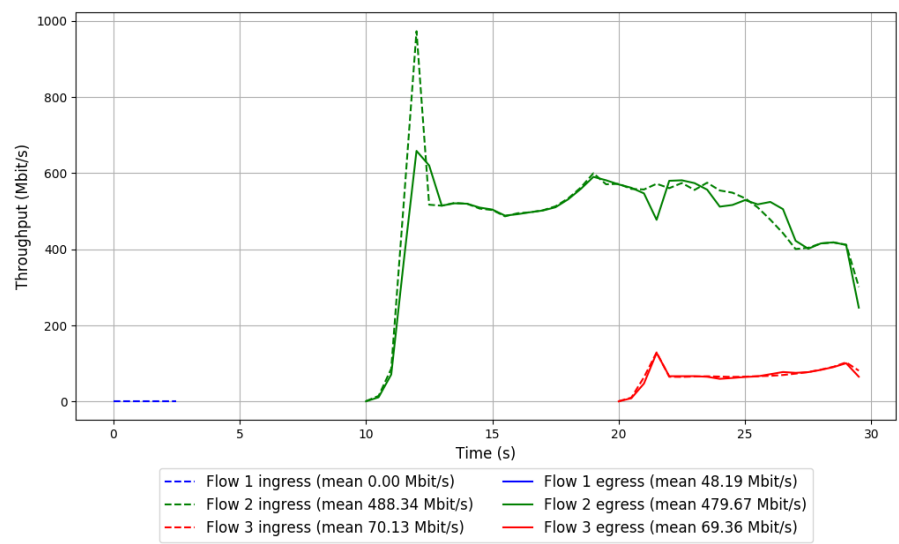
-- Flow 3:

Average throughput: 69.36 Mbit/s

95th percentile per-packet one-way delay: 185.854 ms

Loss rate: 2.37%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-01 10:26:00

End at: 2017-12-01 10:26:30

Below is generated by plot.py at 2017-12-01 13:27:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 423.48 Mbit/s

95th percentile per-packet one-way delay: 118.686 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 57.15 Mbit/s

95th percentile per-packet one-way delay: 3444.726 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 528.97 Mbit/s

95th percentile per-packet one-way delay: 118.731 ms

Loss rate: 1.52%

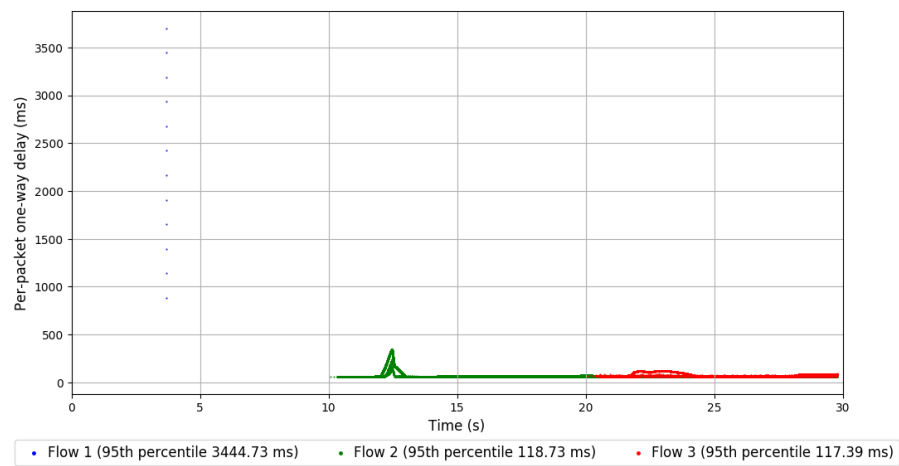
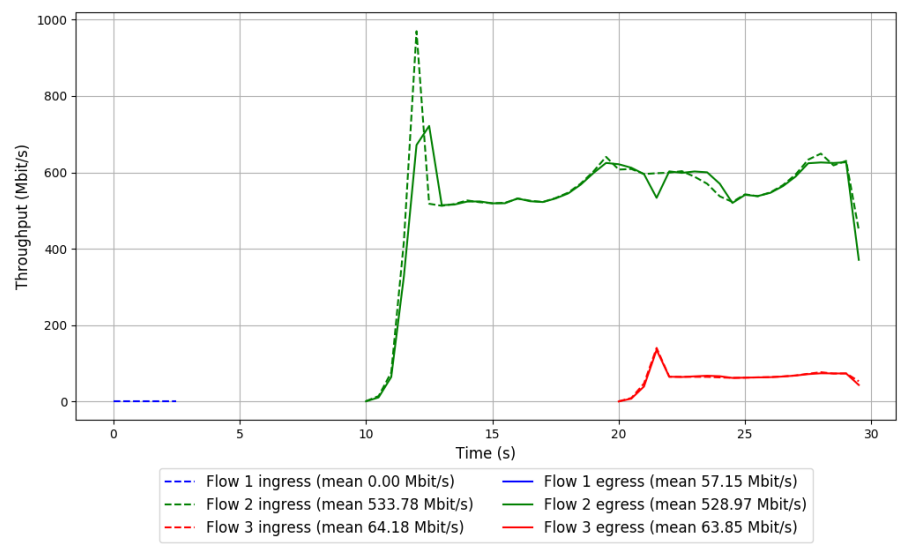
-- Flow 3:

Average throughput: 63.85 Mbit/s

95th percentile per-packet one-way delay: 117.387 ms

Loss rate: 1.77%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-01 10:38:21

End at: 2017-12-01 10:38:51

Below is generated by plot.py at 2017-12-01 13:32:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 581.77 Mbit/s

95th percentile per-packet one-way delay: 180.354 ms

Loss rate: 2.67%

-- Flow 1:

Average throughput: 497.03 Mbit/s

95th percentile per-packet one-way delay: 180.388 ms

Loss rate: 2.72%

-- Flow 2:

Average throughput: 125.64 Mbit/s

95th percentile per-packet one-way delay: 180.207 ms

Loss rate: 2.35%

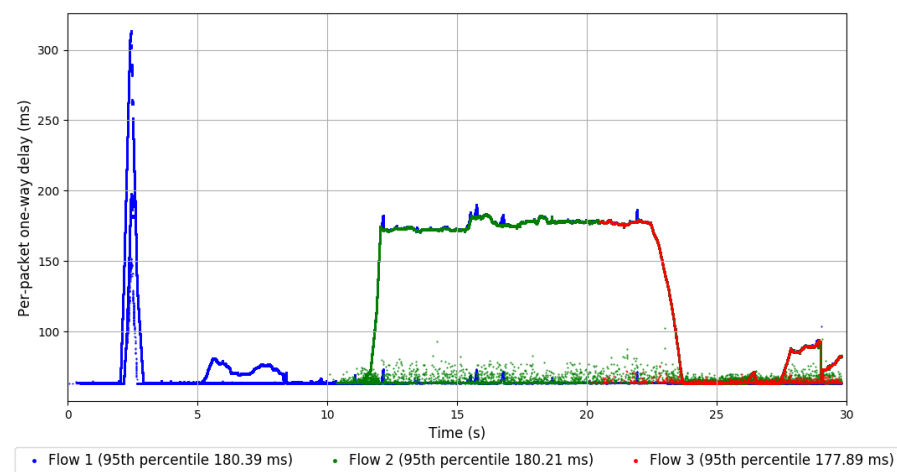
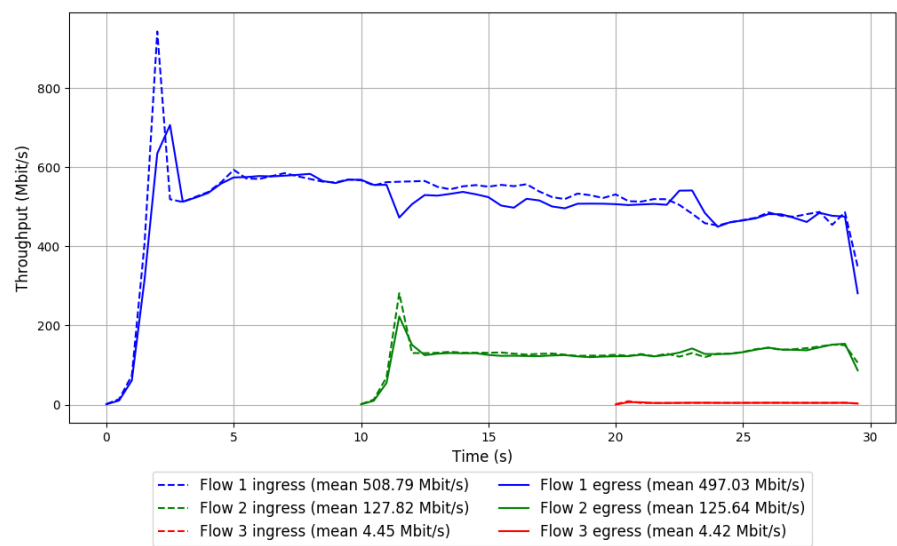
-- Flow 3:

Average throughput: 4.42 Mbit/s

95th percentile per-packet one-way delay: 177.892 ms

Loss rate: 1.95%

Run 9: Report of PCC — Data Link

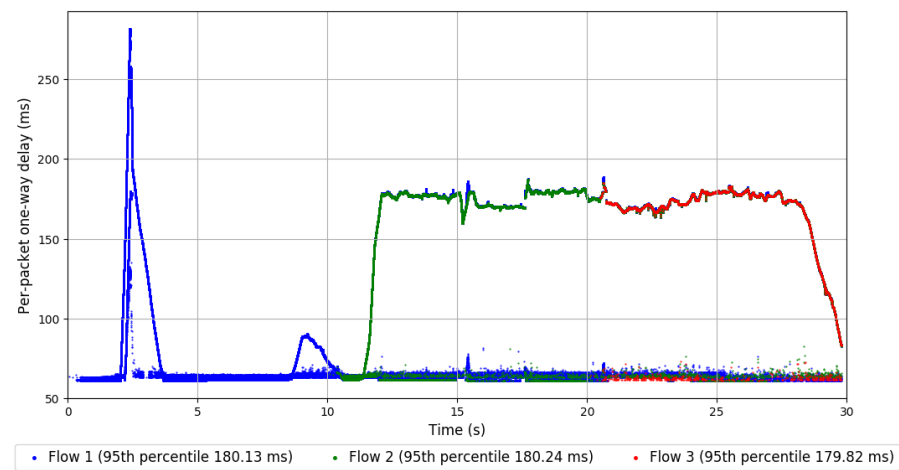
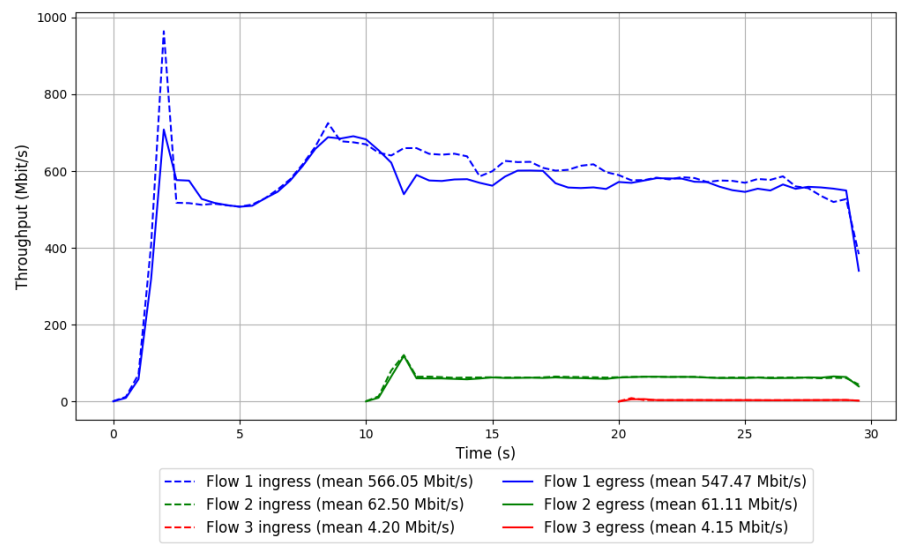


```
Run 10: Statistics of PCC

Start at: 2017-12-01 10:50:49
End at: 2017-12-01 10:51:19

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 589.31 Mbit/s
95th percentile per-packet one-way delay: 180.140 ms
Loss rate: 3.63%
-- Flow 1:
Average throughput: 547.47 Mbit/s
95th percentile per-packet one-way delay: 180.130 ms
Loss rate: 3.69%
-- Flow 2:
Average throughput: 61.11 Mbit/s
95th percentile per-packet one-way delay: 180.237 ms
Loss rate: 2.84%
-- Flow 3:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 179.820 ms
Loss rate: 2.42%
```

Run 10: Report of PCC — Data Link

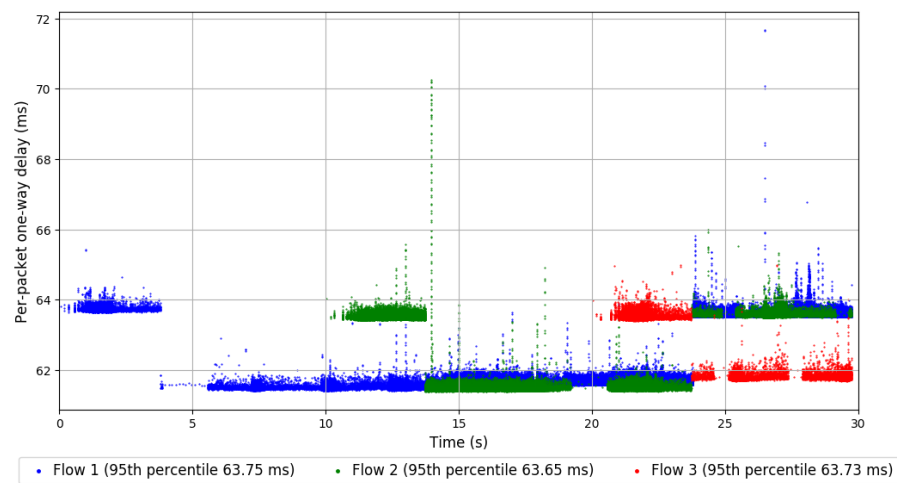
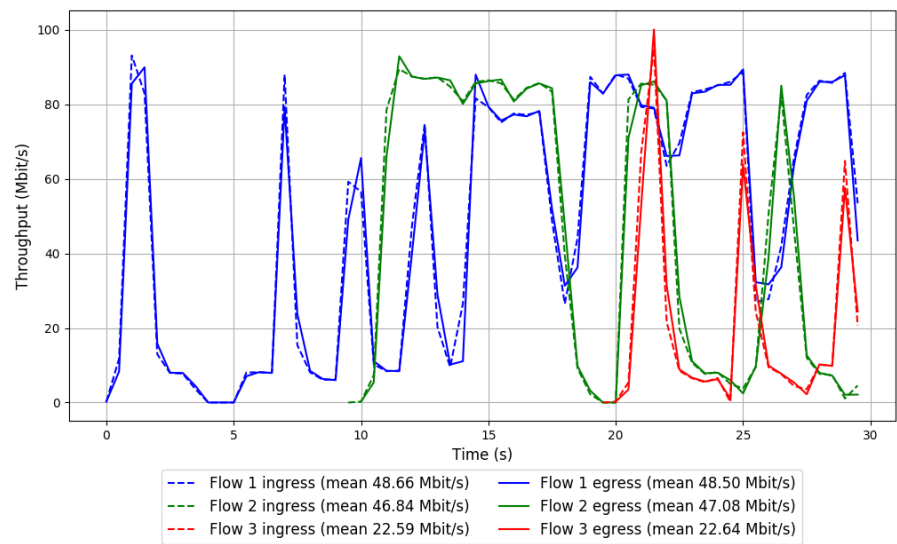


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-01 09:01:51
End at: 2017-12-01 09:02:21

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.15 Mbit/s
95th percentile per-packet one-way delay: 63.729 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 48.50 Mbit/s
95th percentile per-packet one-way delay: 63.754 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 47.08 Mbit/s
95th percentile per-packet one-way delay: 63.649 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 22.64 Mbit/s
95th percentile per-packet one-way delay: 63.732 ms
Loss rate: 1.06%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-01 09:14:16

End at: 2017-12-01 09:14:46

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.88 Mbit/s

95th percentile per-packet one-way delay: 63.850 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 56.57 Mbit/s

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

Loss rate: 0.61%

-- Flow 2:

Average throughput: 42.16 Mbit/s

95th percentile per-packet one-way delay: 63.976 ms

Loss rate: 1.33%

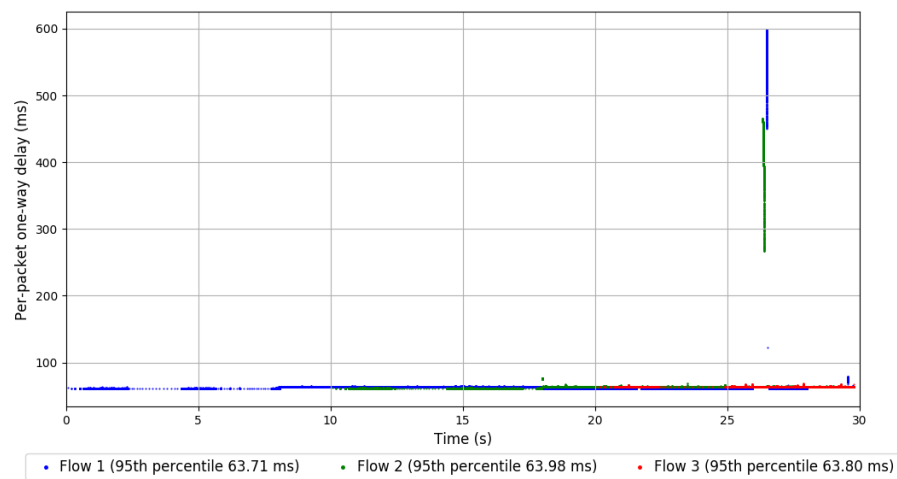
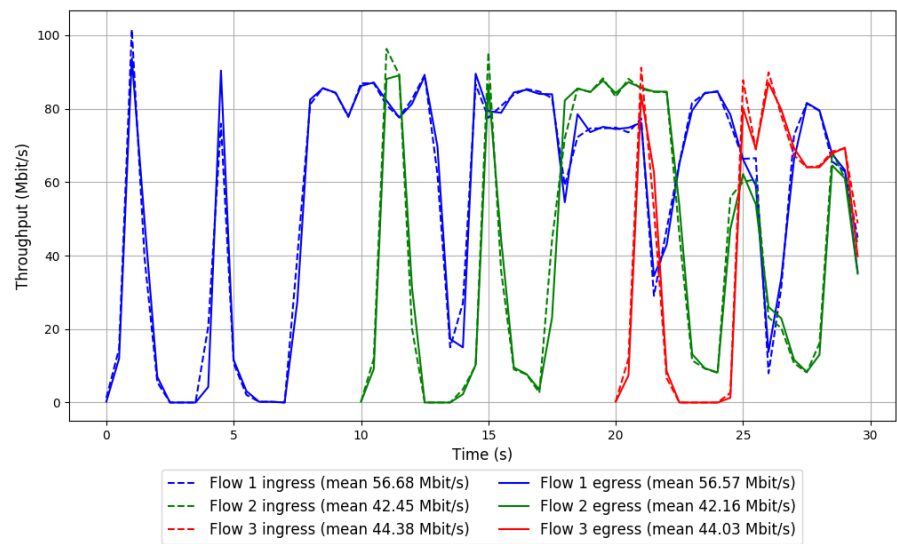
-- Flow 3:

Average throughput: 44.03 Mbit/s

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

Loss rate: 2.04%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-01 09:26:50

End at: 2017-12-01 09:27:20

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.92 Mbit/s

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

Loss rate: 0.95%

-- Flow 1:

Average throughput: 60.25 Mbit/s

95th percentile per-packet one-way delay: 63.319 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 38.27 Mbit/s

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

Loss rate: 0.99%

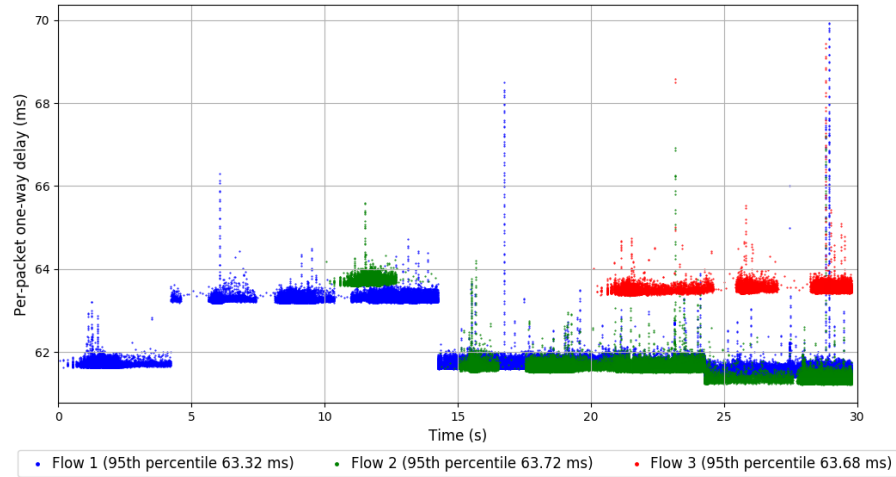
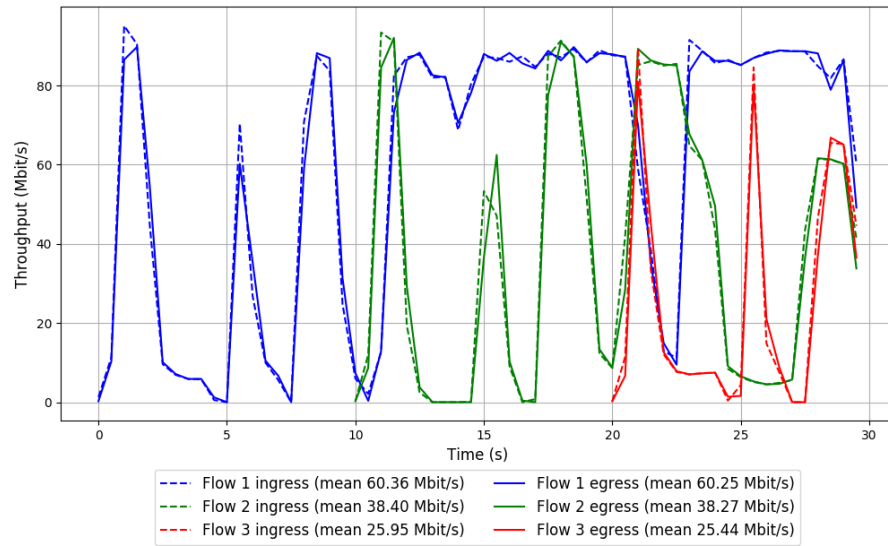
-- Flow 3:

Average throughput: 25.44 Mbit/s

95th percentile per-packet one-way delay: 63.681 ms

Loss rate: 3.22%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-01 09:39:09

End at: 2017-12-01 09:39:39

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.43 Mbit/s

95th percentile per-packet one-way delay: 63.592 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 51.31 Mbit/s

95th percentile per-packet one-way delay: 63.491 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 55.83 Mbit/s

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

Loss rate: 0.89%

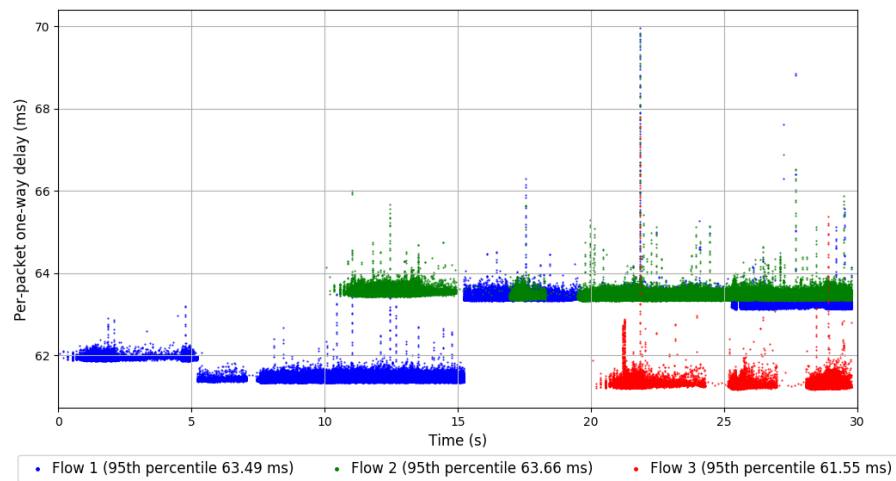
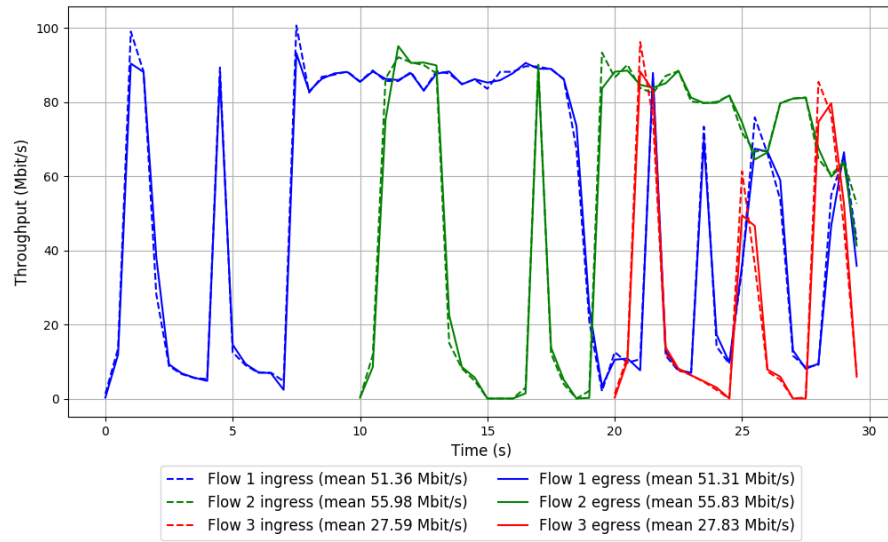
-- Flow 3:

Average throughput: 27.83 Mbit/s

95th percentile per-packet one-way delay: 61.553 ms

Loss rate: 0.38%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-01 09:51:43

End at: 2017-12-01 09:52:13

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.83 Mbit/s

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

Loss rate: 0.41%

-- Flow 1:

Average throughput: 59.91 Mbit/s

95th percentile per-packet one-way delay: 63.564 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 48.65 Mbit/s

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

Loss rate: 1.12%

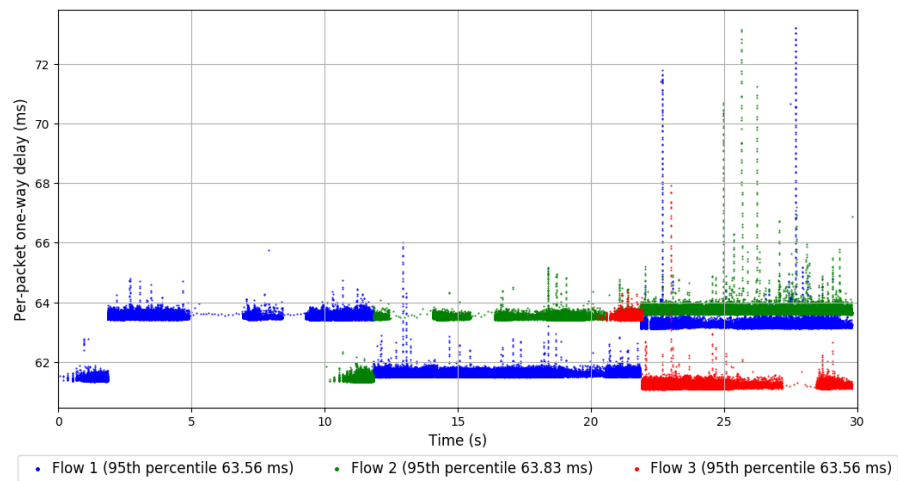
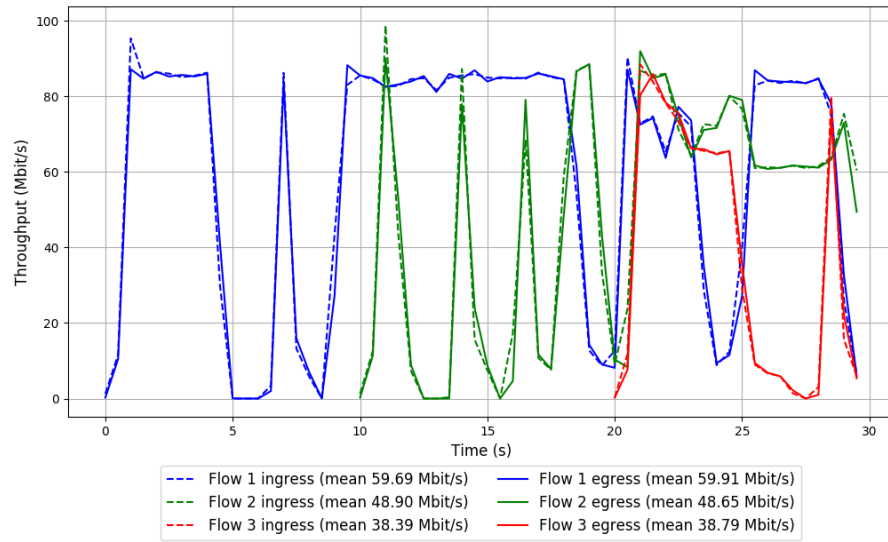
-- Flow 3:

Average throughput: 38.79 Mbit/s

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

Loss rate: 0.25%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-01 10:04:22

End at: 2017-12-01 10:04:52

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.45 Mbit/s

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

Loss rate: 1.19%

-- Flow 1:

Average throughput: 36.84 Mbit/s

95th percentile per-packet one-way delay: 63.677 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 53.20 Mbit/s

95th percentile per-packet one-way delay: 63.591 ms

Loss rate: 1.23%

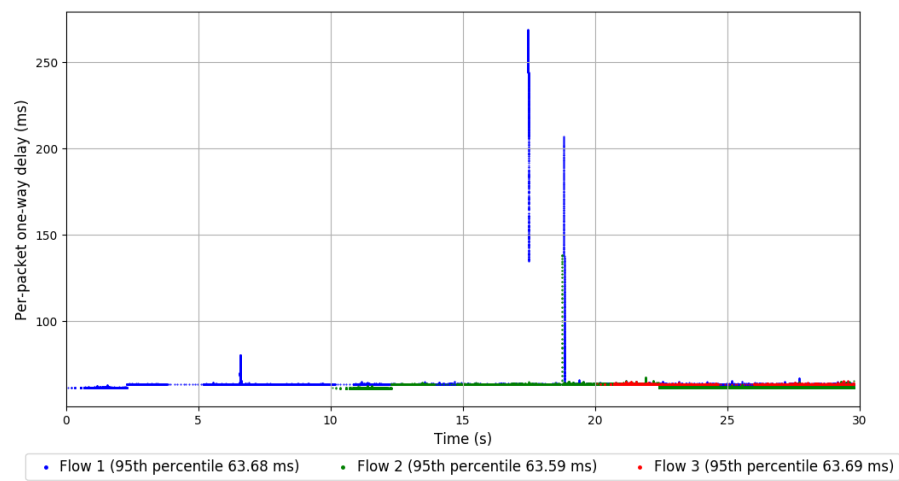
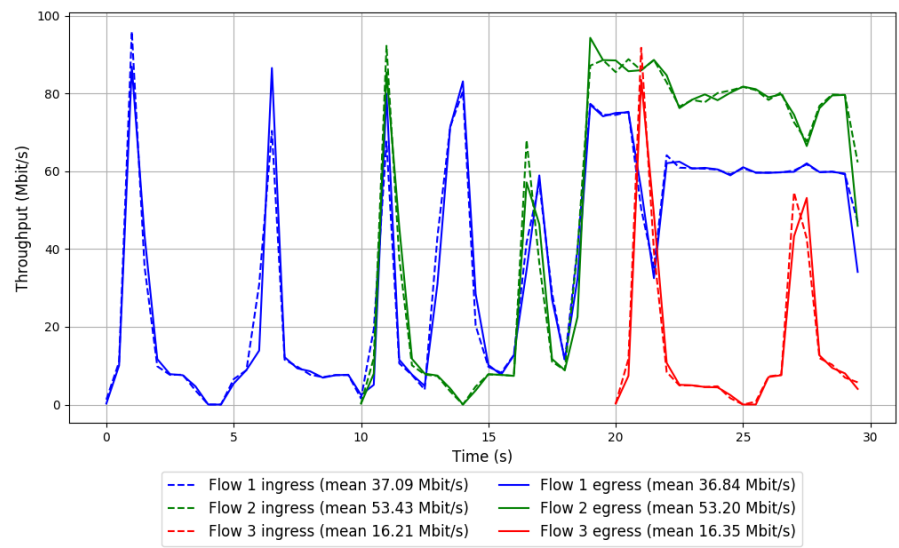
-- Flow 3:

Average throughput: 16.35 Mbit/s

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

Loss rate: 0.80%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-01 10:16:43

End at: 2017-12-01 10:17:13

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.67 Mbit/s

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

Loss rate: 0.88%

-- Flow 1:

Average throughput: 41.25 Mbit/s

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

Loss rate: 0.70%

-- Flow 2:

Average throughput: 50.37 Mbit/s

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

Loss rate: 1.08%

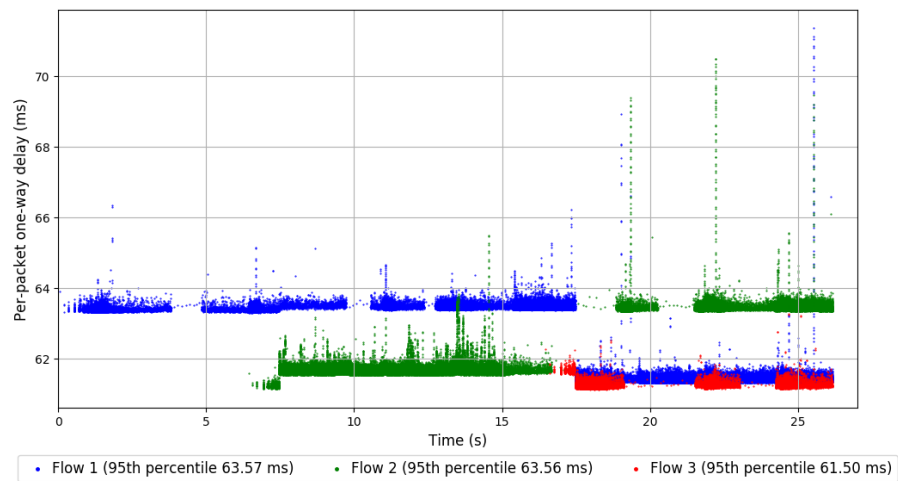
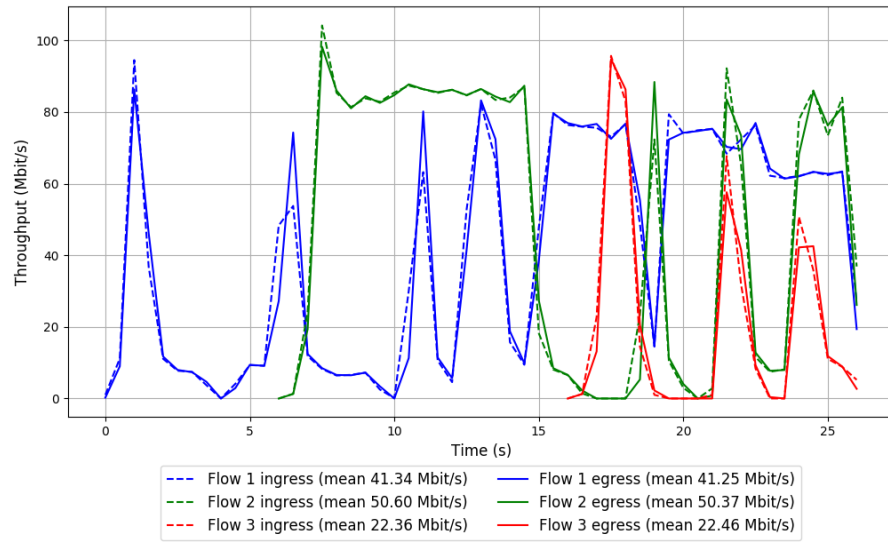
-- Flow 3:

Average throughput: 22.46 Mbit/s

95th percentile per-packet one-way delay: 61.499 ms

Loss rate: 0.80%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-01 10:29:07

End at: 2017-12-01 10:29:37

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.48 Mbit/s

95th percentile per-packet one-way delay: 63.705 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 40.39 Mbit/s

95th percentile per-packet one-way delay: 63.761 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 40.32 Mbit/s

95th percentile per-packet one-way delay: 63.588 ms

Loss rate: 1.41%

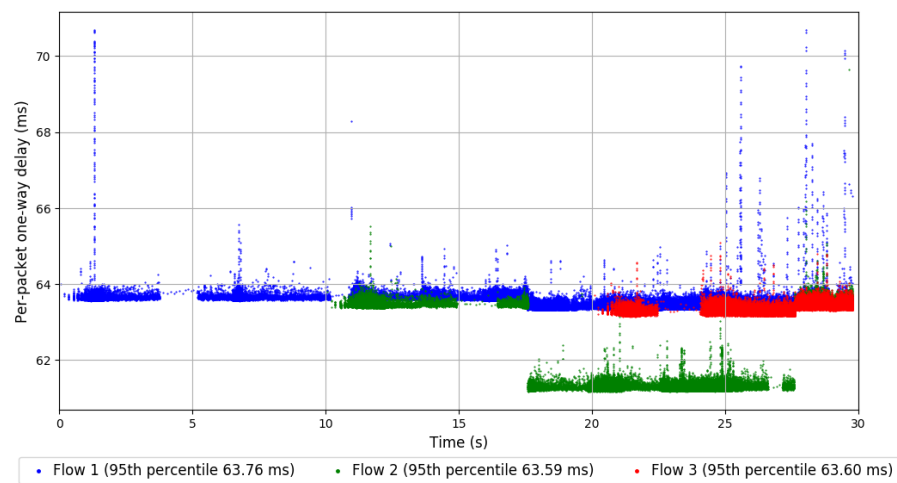
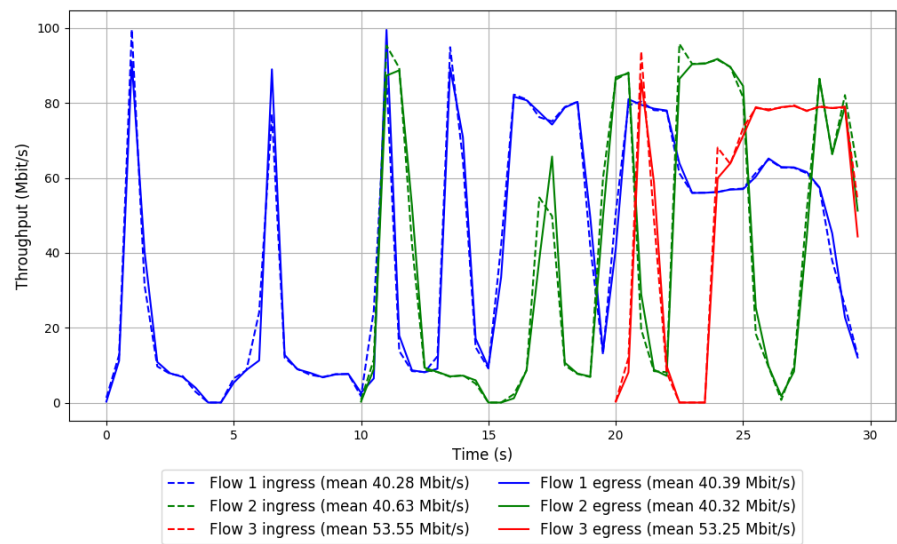
-- Flow 3:

Average throughput: 53.25 Mbit/s

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

Loss rate: 1.86%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-01 10:41:34

End at: 2017-12-01 10:42:04

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 27.04 Mbit/s

95th percentile per-packet one-way delay: 63.819 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 16.96 Mbit/s

95th percentile per-packet one-way delay: 63.449 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 11.98 Mbit/s

95th percentile per-packet one-way delay: 61.321 ms

Loss rate: 1.06%

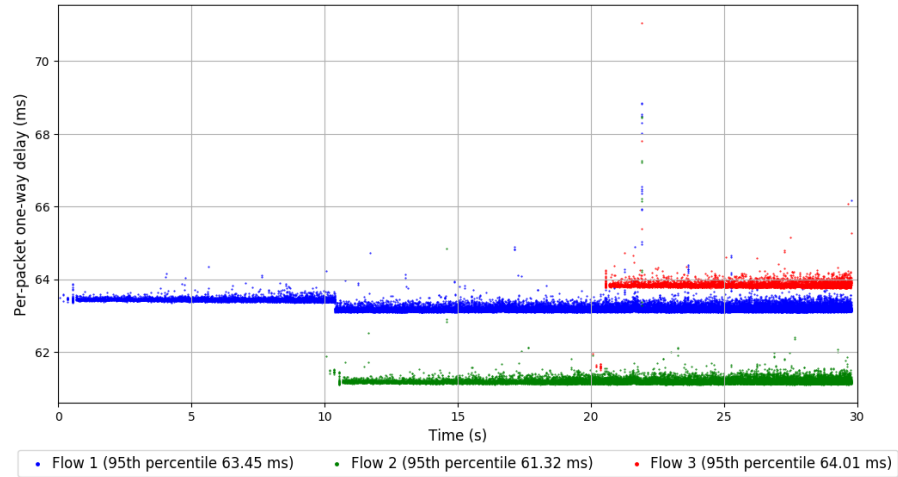
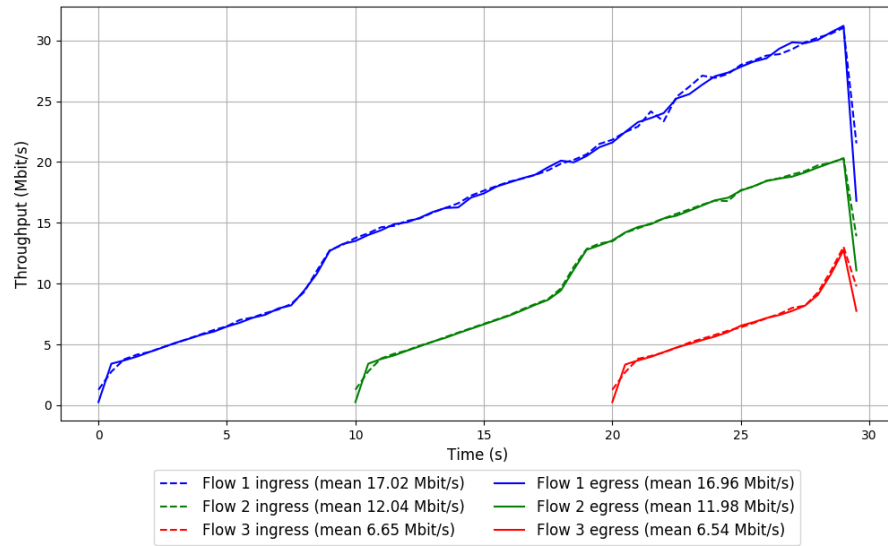
-- Flow 3:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 64.009 ms

Loss rate: 2.98%

Run 9: Report of QUIC Cubic — Data Link

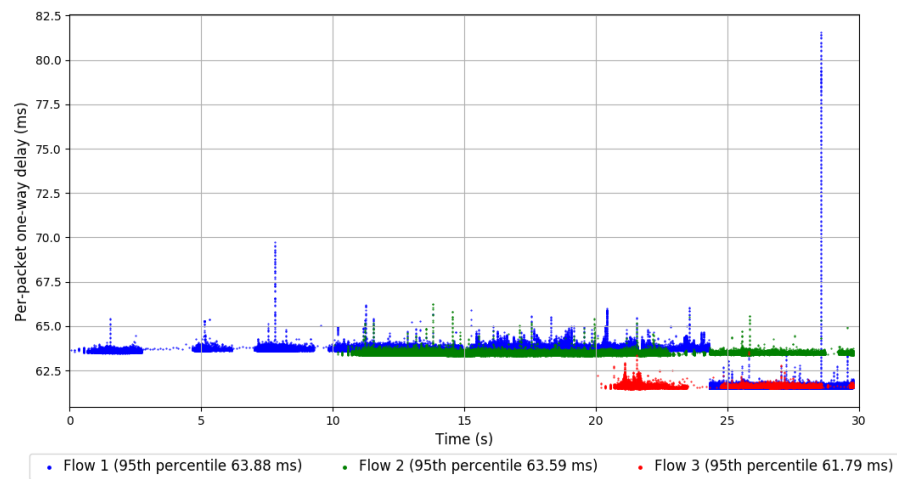
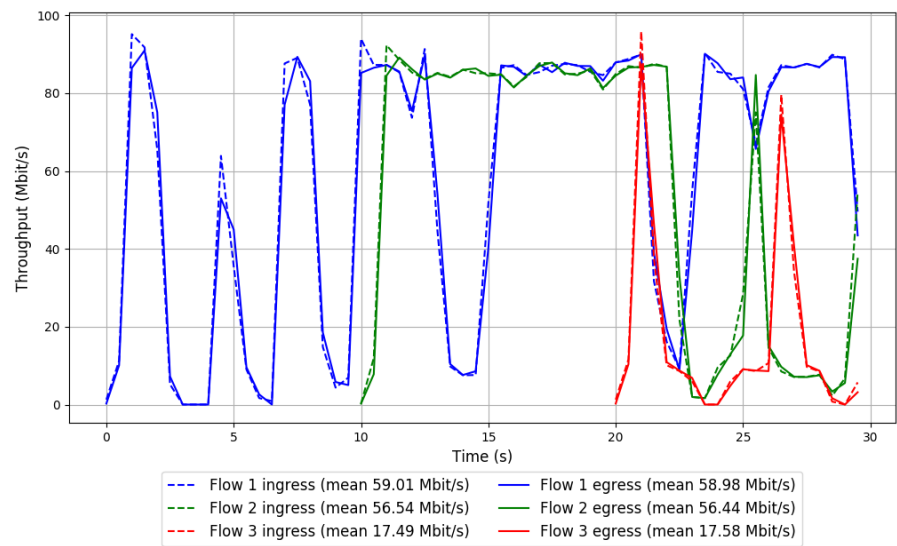


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-01 10:54:00
End at: 2017-12-01 10:54:30

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 102.16 Mbit/s
95th percentile per-packet one-way delay: 63.827 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 58.98 Mbit/s
95th percentile per-packet one-way delay: 63.876 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 56.44 Mbit/s
95th percentile per-packet one-way delay: 63.594 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 17.58 Mbit/s
95th percentile per-packet one-way delay: 61.786 ms
Loss rate: 0.74%
```

Run 10: Report of QUIC Cubic — Data Link

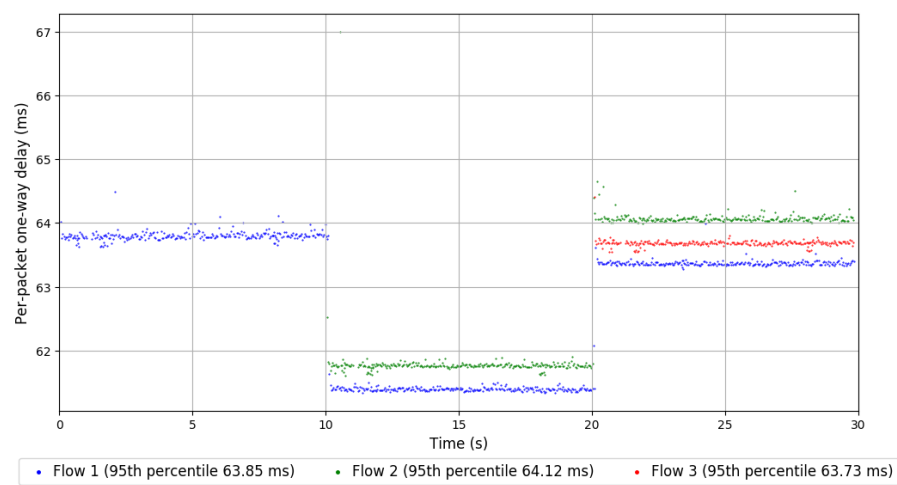
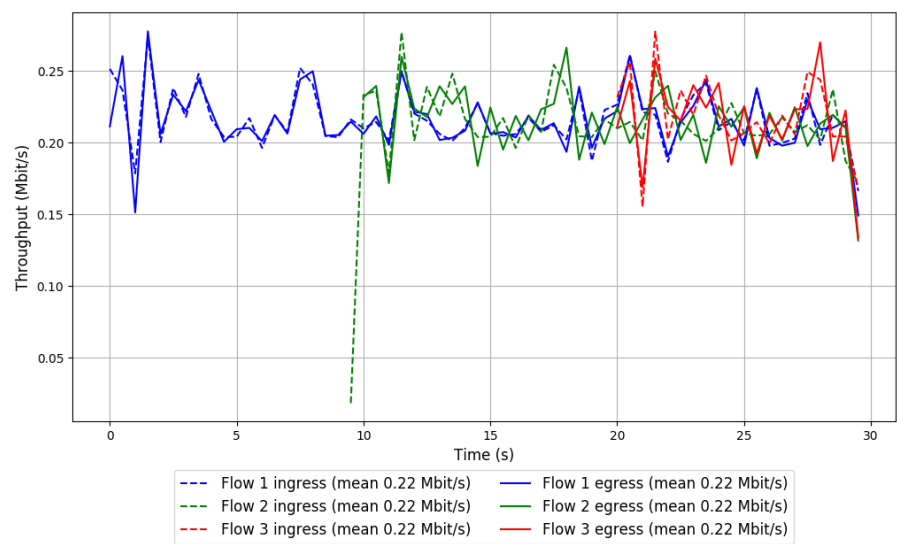


```
Run 1: Statistics of SCReAM

Start at: 2017-12-01 08:50:54
End at: 2017-12-01 08:51:24

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 64.076 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: 64.118 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.733 ms
Loss rate: 1.15%
```

Run 1: Report of SReAM — Data Link

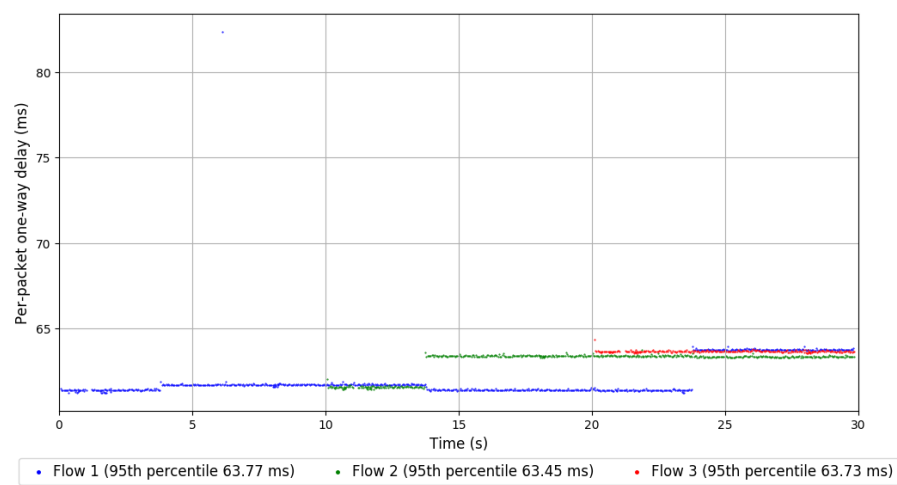
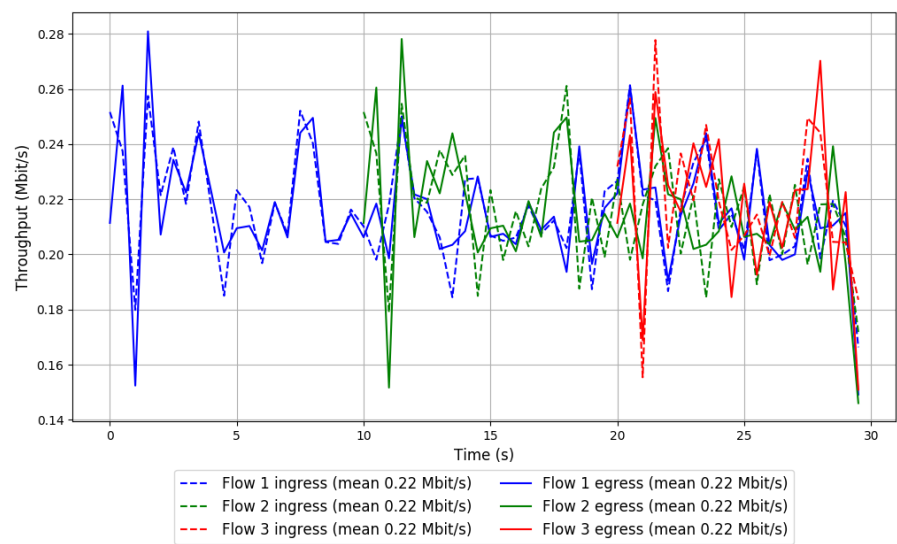


```
Run 2: Statistics of SCReAM

Start at: 2017-12-01 09:03:31
End at: 2017-12-01 09:04:01

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.756 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.772 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.448 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.728 ms
Loss rate: 1.10%
```

Run 2: Report of SReAM — Data Link

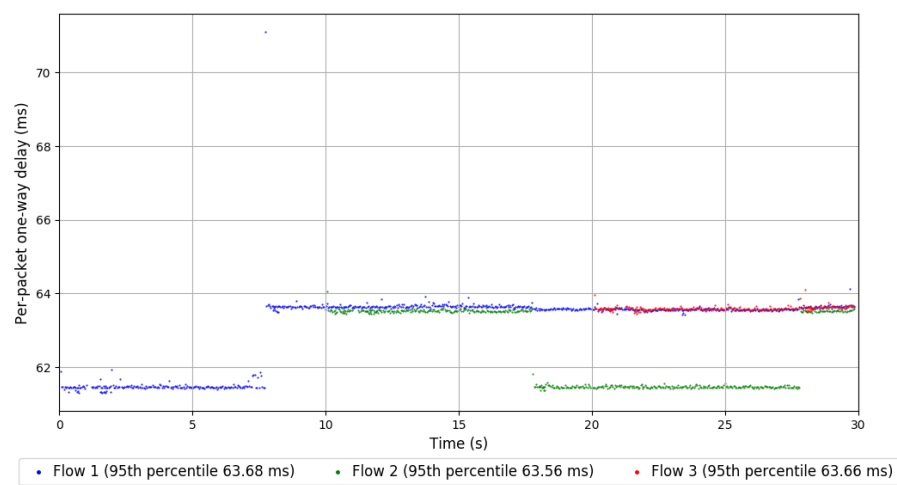
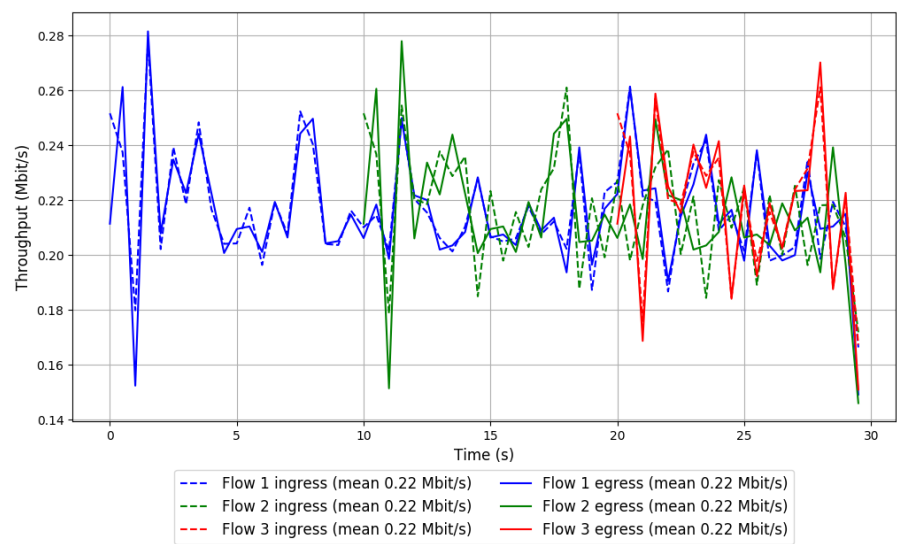


```
Run 3: Statistics of SReAM

Start at: 2017-12-01 09:15:57
End at: 2017-12-01 09:16:27

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.665 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.680 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.563 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.664 ms
Loss rate: 1.10%
```


Run 3: Report of SReAM — Data Link

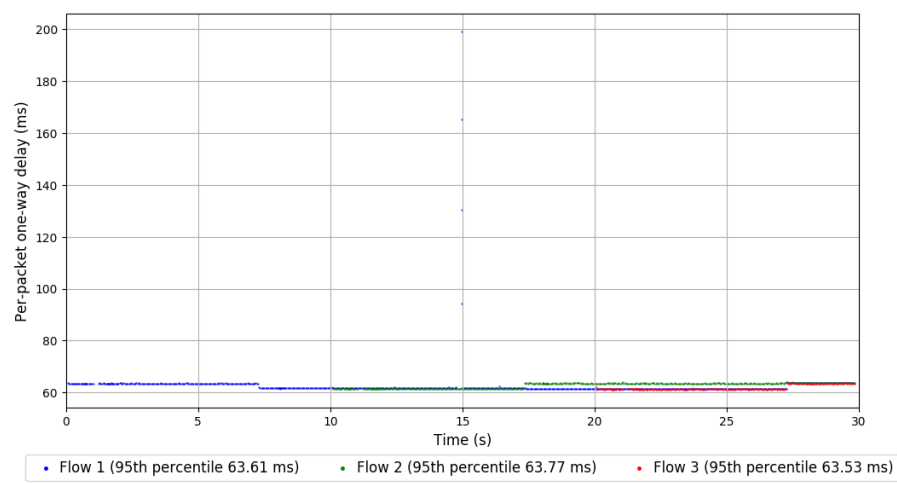
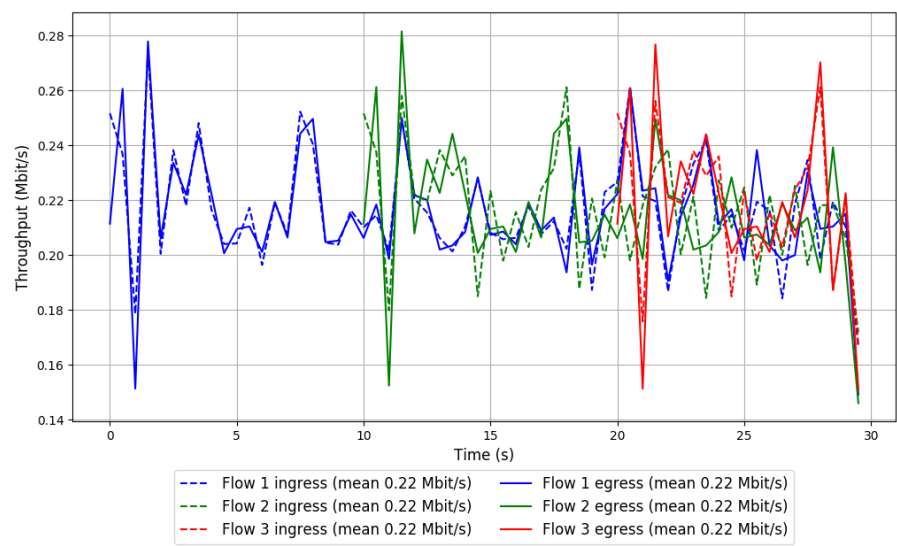


```
Run 4: Statistics of SReAM

Start at: 2017-12-01 09:28:27
End at: 2017-12-01 09:28:57

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.709 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.609 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.768 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.535 ms
Loss rate: 1.10%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-01 09:40:50

End at: 2017-12-01 09:41:20

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.554 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%

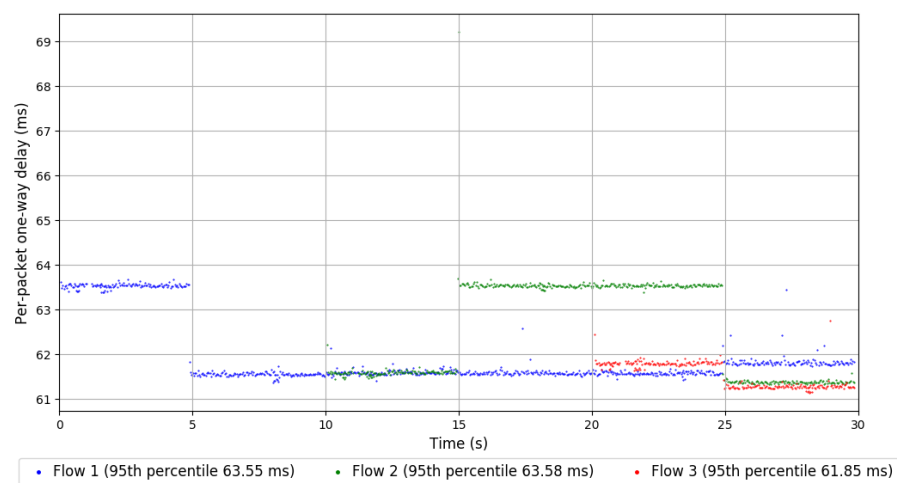
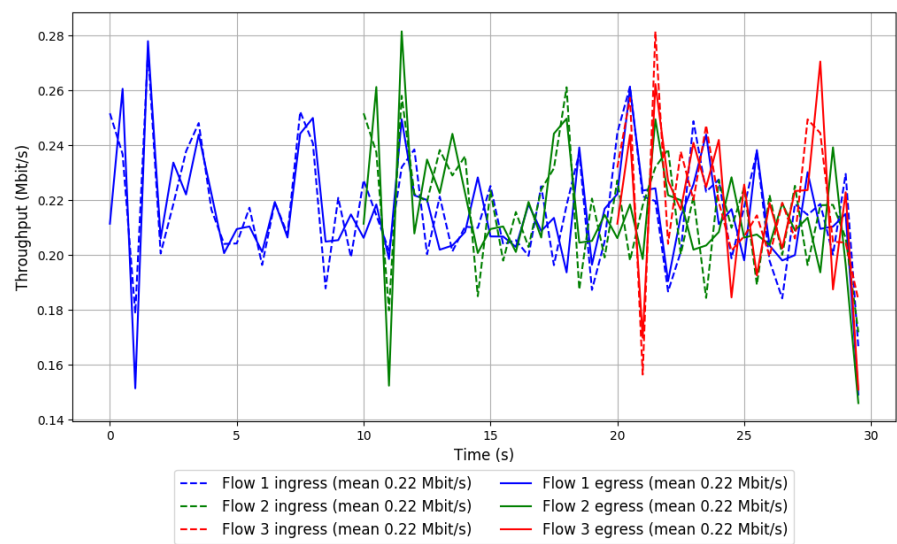
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.855 ms

Loss rate: 1.10%

Run 5: Report of SReAM — Data Link

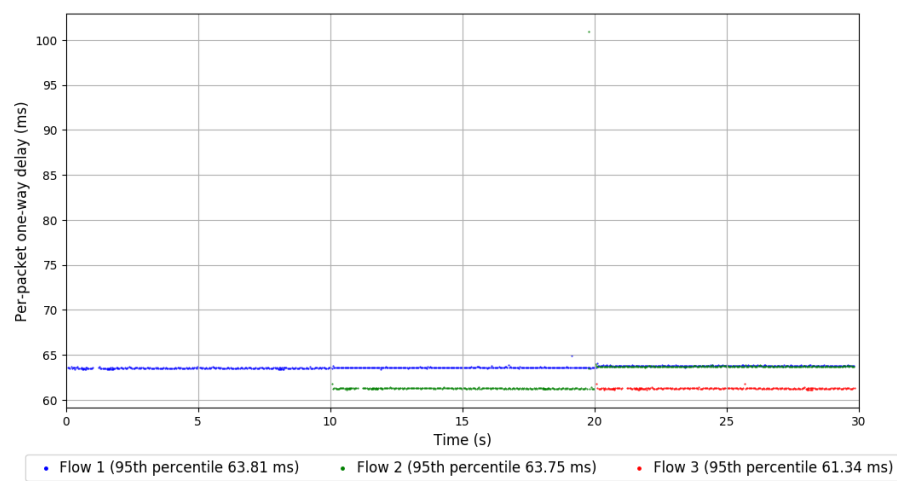
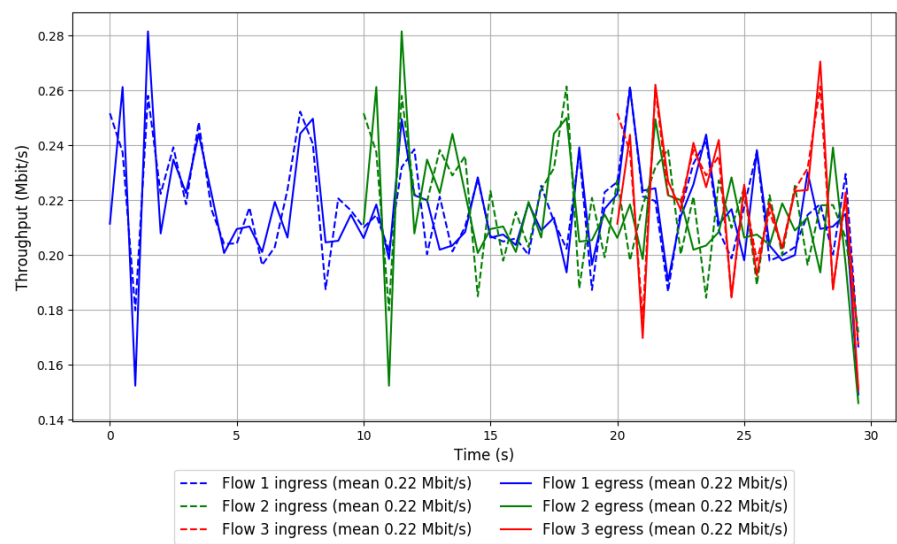


```
Run 6: Statistics of SCReAM

Start at: 2017-12-01 09:53:24
End at: 2017-12-01 09:53:54

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.794 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.813 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.752 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.342 ms
Loss rate: 1.10%
```

Run 6: Report of SReAM — Data Link

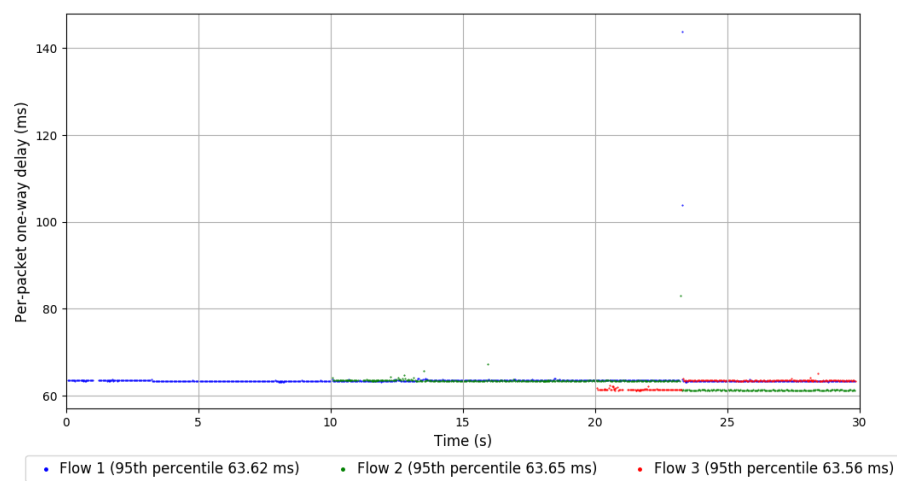
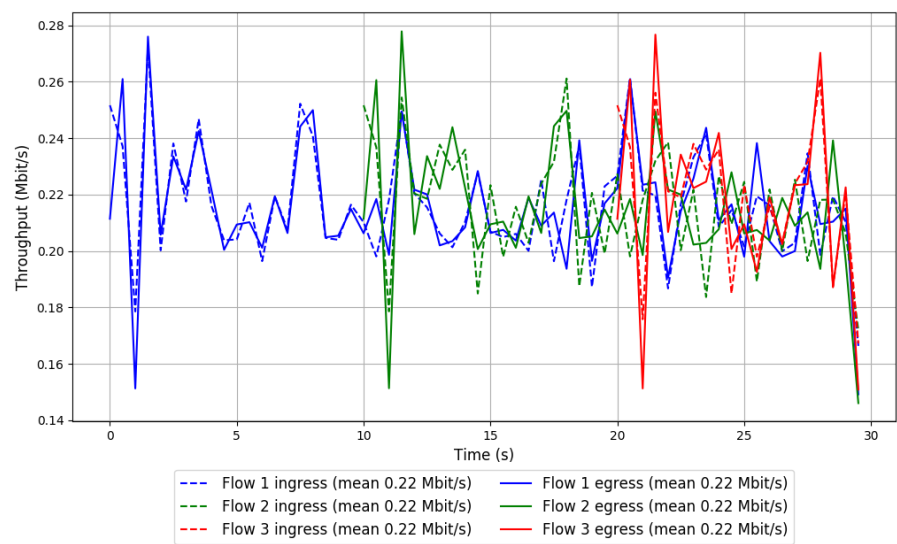


```
Run 7: Statistics of SReAM

Start at: 2017-12-01 10:06:01
End at: 2017-12-01 10:06:31

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.614 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.622 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.653 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.557 ms
Loss rate: 1.10%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-01 10:18:22

End at: 2017-12-01 10:18:52

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 63.974 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.790 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 64.030 ms

Loss rate: 0.63%

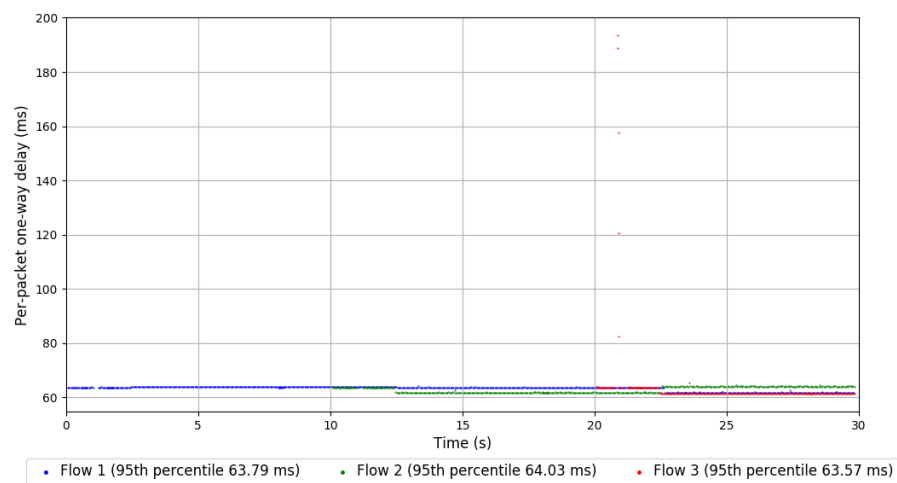
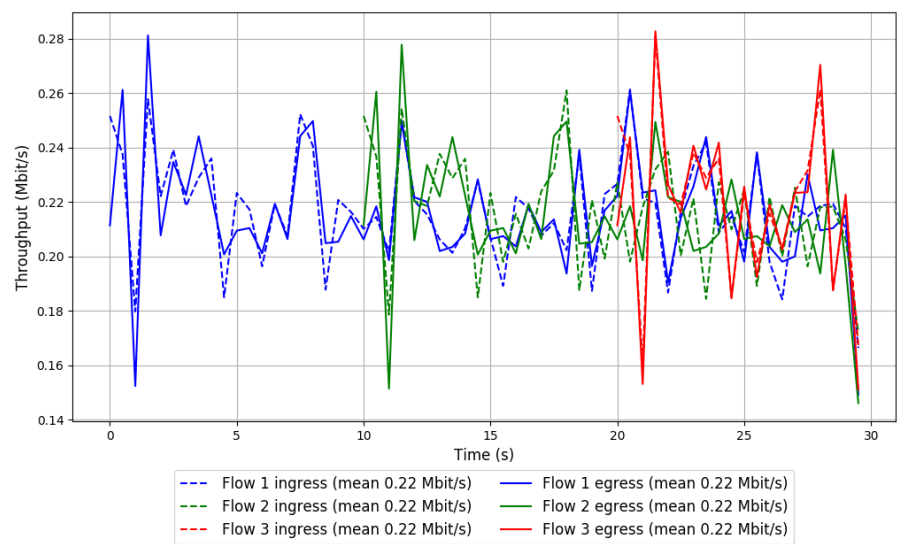
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 1.10%

Run 8: Report of SReAM — Data Link

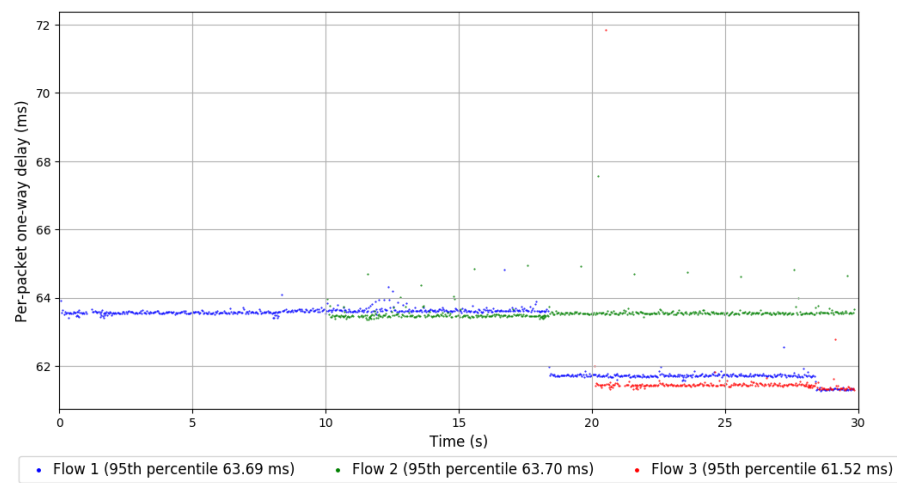
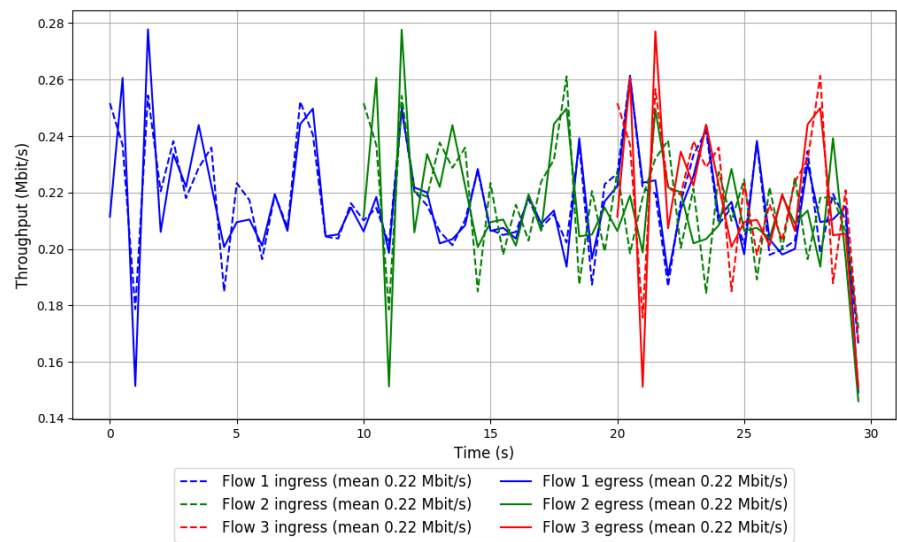


```
Run 9: Statistics of SCReAM

Start at: 2017-12-01 10:30:46
End at: 2017-12-01 10:31:16

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.669 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.686 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.702 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.524 ms
Loss rate: 1.10%
```

Run 9: Report of SReAM — Data Link

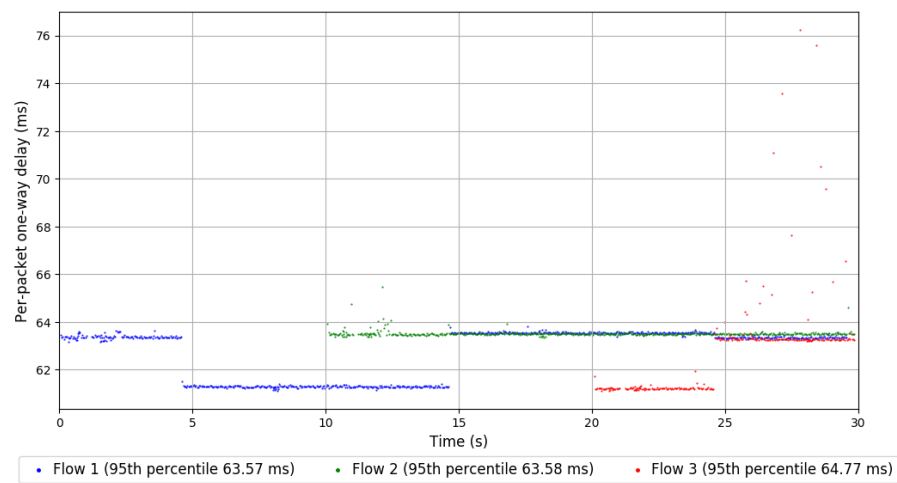
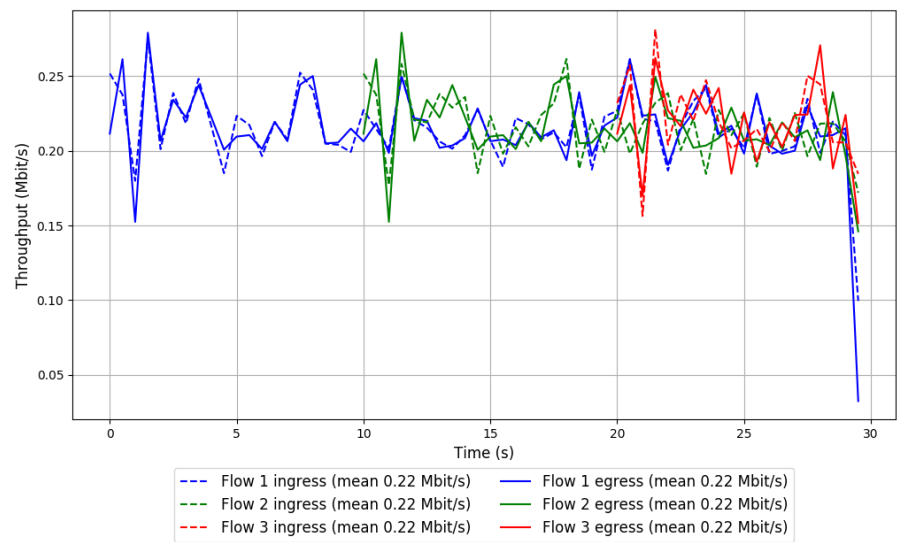


```
Run 10: Statistics of SReAM

Start at: 2017-12-01 10:43:10
End at: 2017-12-01 10:43:40

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.578 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.573 ms
Loss rate: 0.77%
-- 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: 64.767 ms
Loss rate: 1.11%
```

Run 10: Report of SReAM — Data Link

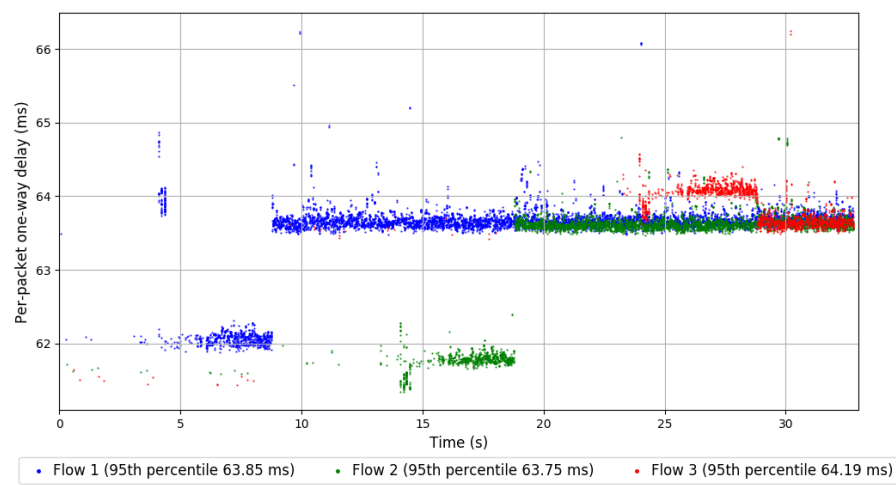
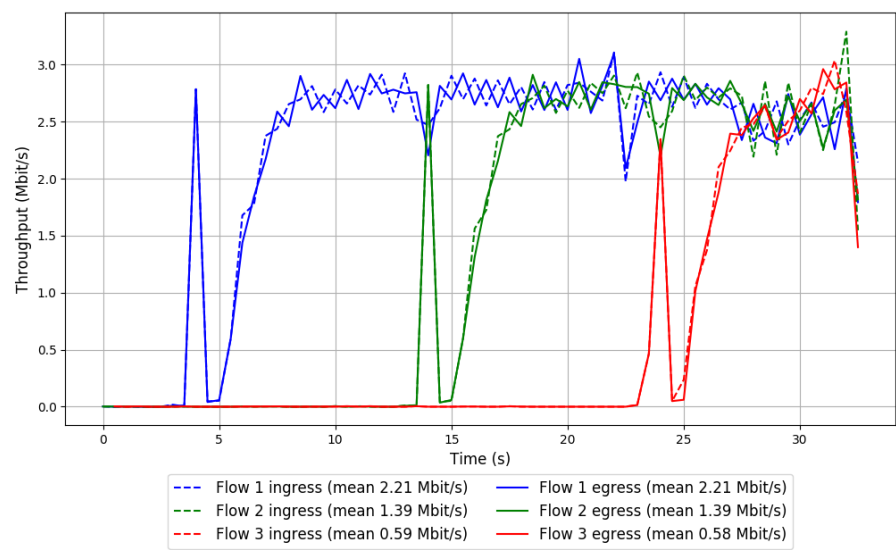


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-01 08:53:59
End at: 2017-12-01 08:54:29

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 64.052 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 63.853 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 63.750 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 64.187 ms
Loss rate: 1.82%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-01 09:06:35

End at: 2017-12-01 09:07:05

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.15 Mbit/s

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

Loss rate: 0.73%

-- Flow 1:

Average throughput: 2.21 Mbit/s

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

Loss rate: 0.59%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.463 ms

Loss rate: 0.71%

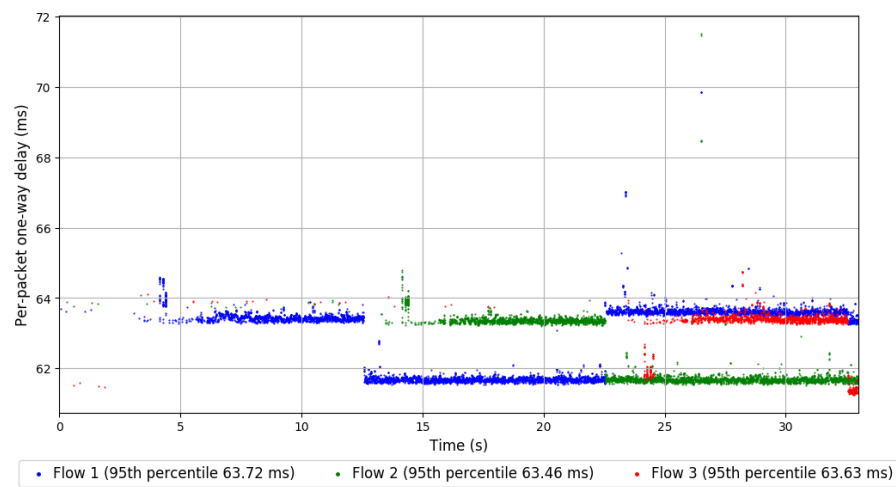
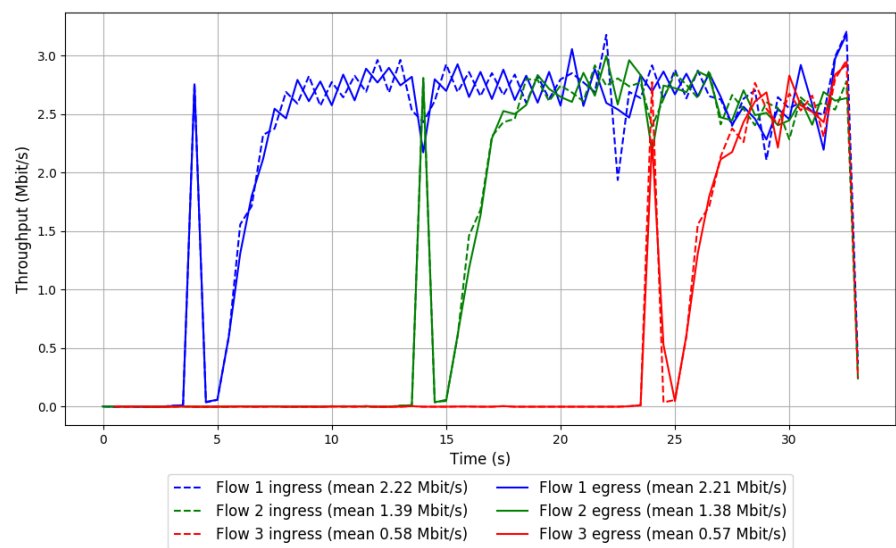
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 63.629 ms

Loss rate: 1.30%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-01 09:19:01

End at: 2017-12-01 09:19:31

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.16 Mbit/s

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

Loss rate: 0.79%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.764 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 63.510 ms

Loss rate: 0.79%

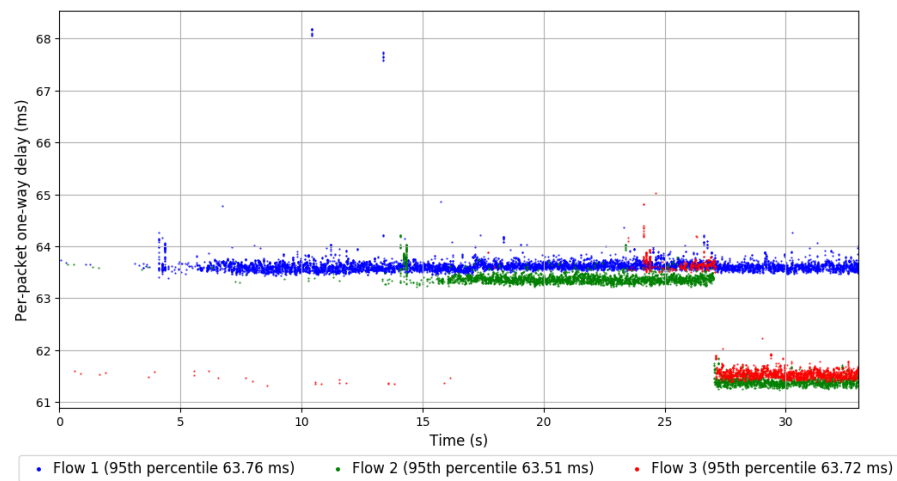
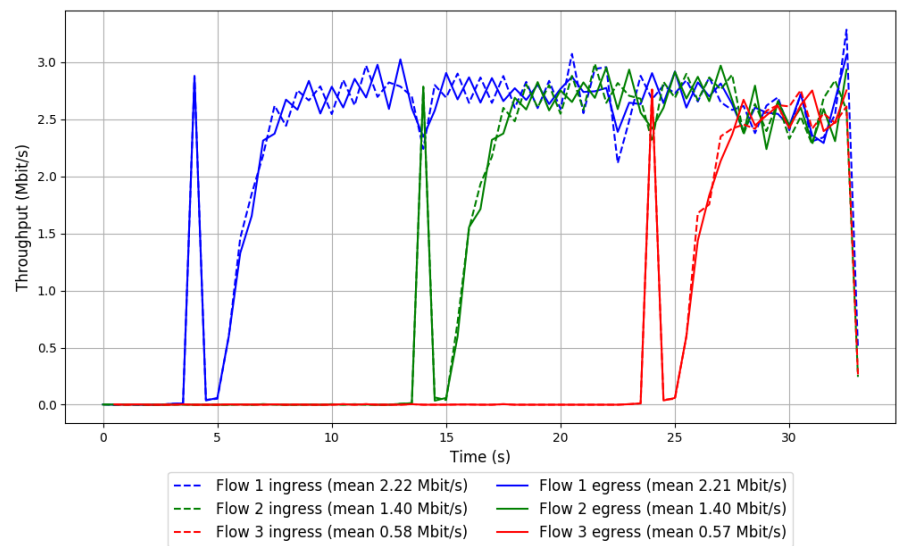
-- Flow 3:

Average throughput: 0.57 Mbit/s

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

Loss rate: 1.30%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-01 09:31:31

End at: 2017-12-01 09:32:01

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 63.844 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 2.22 Mbit/s

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

Loss rate: 0.54%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 63.795 ms

Loss rate: 0.67%

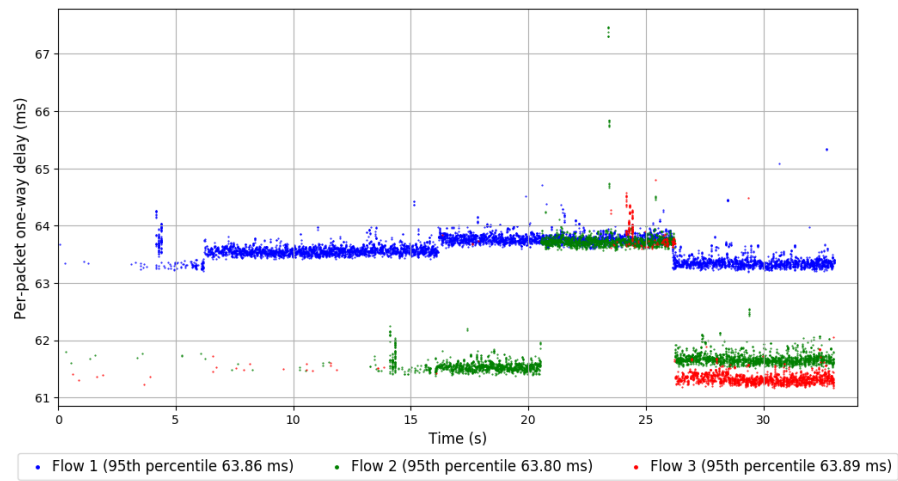
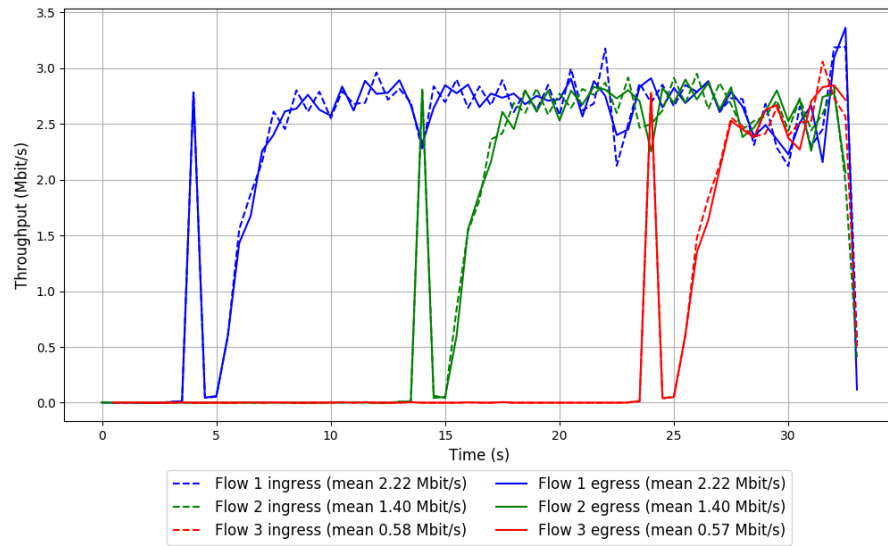
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 63.893 ms

Loss rate: 1.98%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-01 09:43:54

End at: 2017-12-01 09:44:24

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 63.982 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 63.704 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 64.062 ms

Loss rate: 0.66%

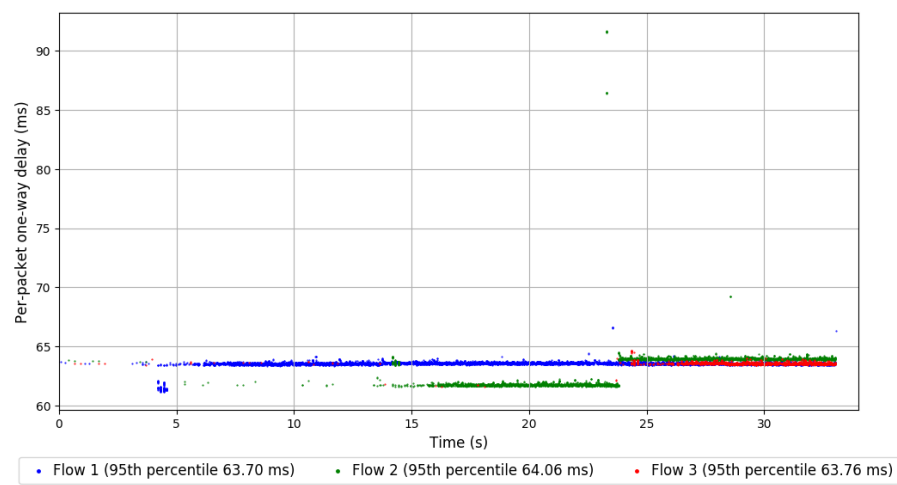
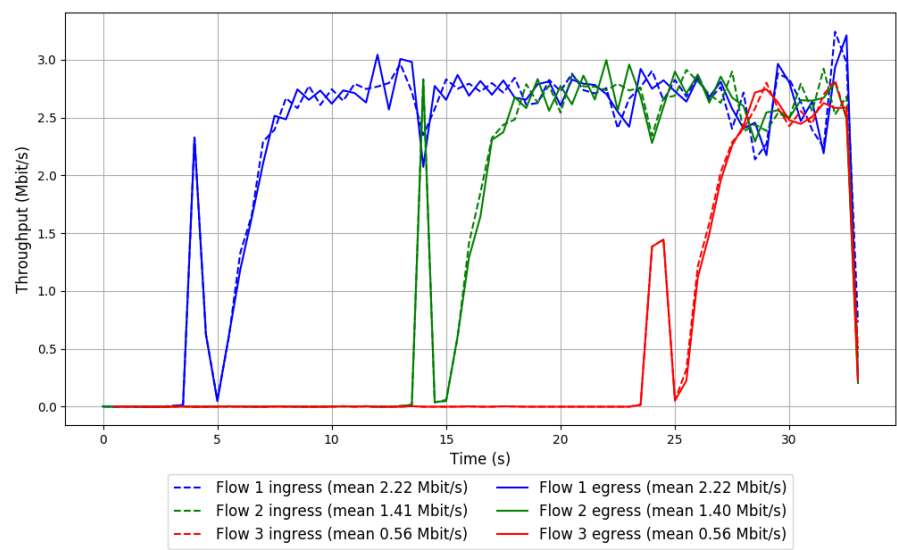
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.759 ms

Loss rate: 1.99%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-01 09:56:29

End at: 2017-12-01 09:56:59

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 63.640 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 2.21 Mbit/s

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

Loss rate: 0.59%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 63.622 ms

Loss rate: 0.70%

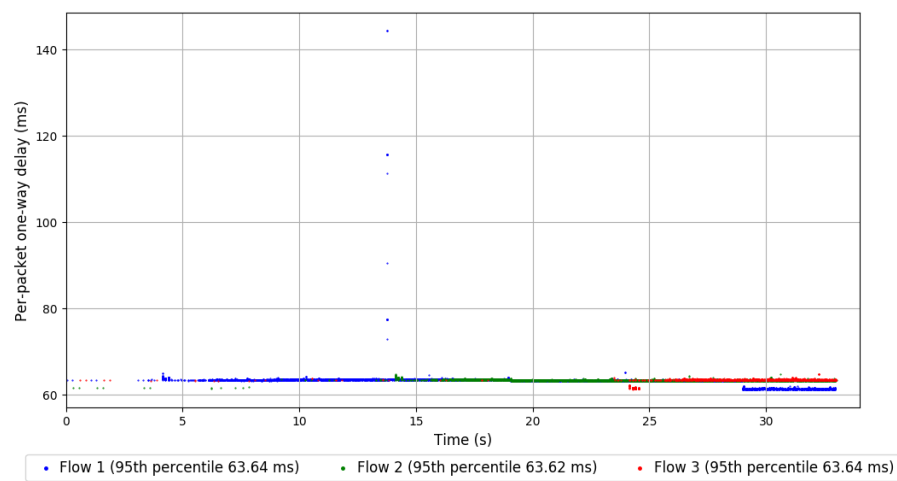
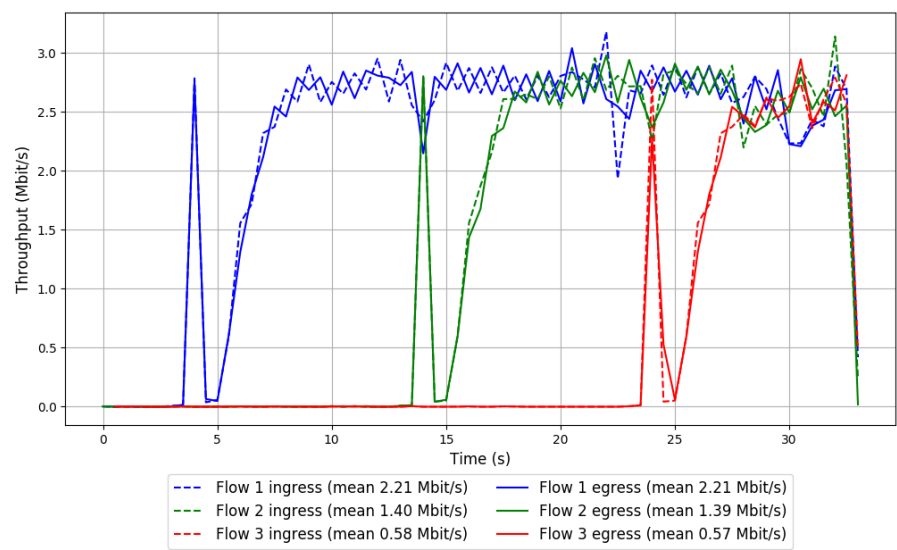
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 63.637 ms

Loss rate: 1.95%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-01 10:09:05

End at: 2017-12-01 10:09:35

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 63.855 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 2.22 Mbit/s

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

Loss rate: 0.33%

-- Flow 2:

Average throughput: 1.39 Mbit/s

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

Loss rate: 0.64%

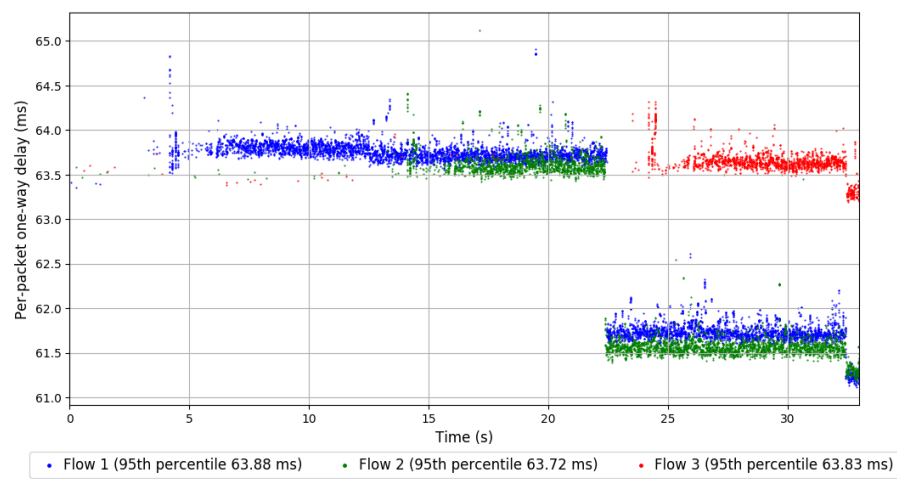
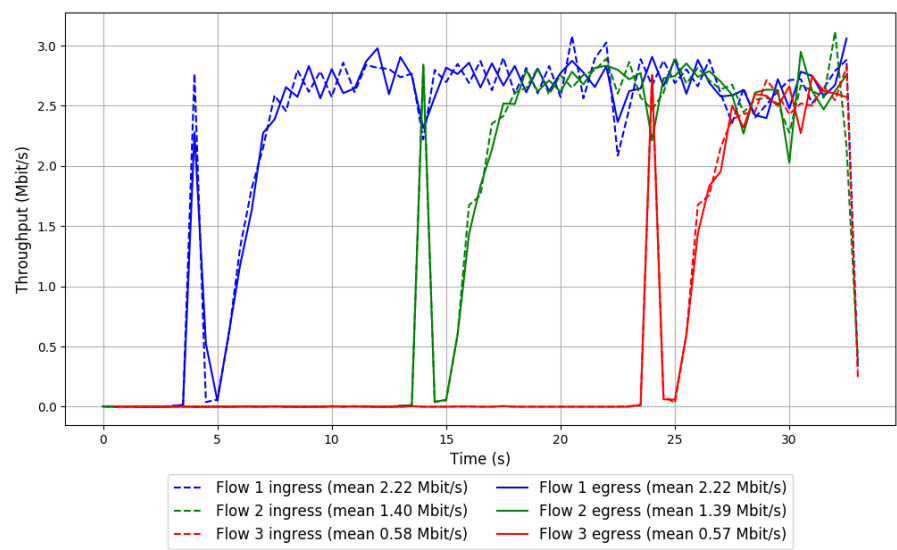
-- Flow 3:

Average throughput: 0.57 Mbit/s

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

Loss rate: 1.82%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-01 10:21:27

End at: 2017-12-01 10:21:57

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 63.663 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 63.667 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 63.636 ms

Loss rate: 0.49%

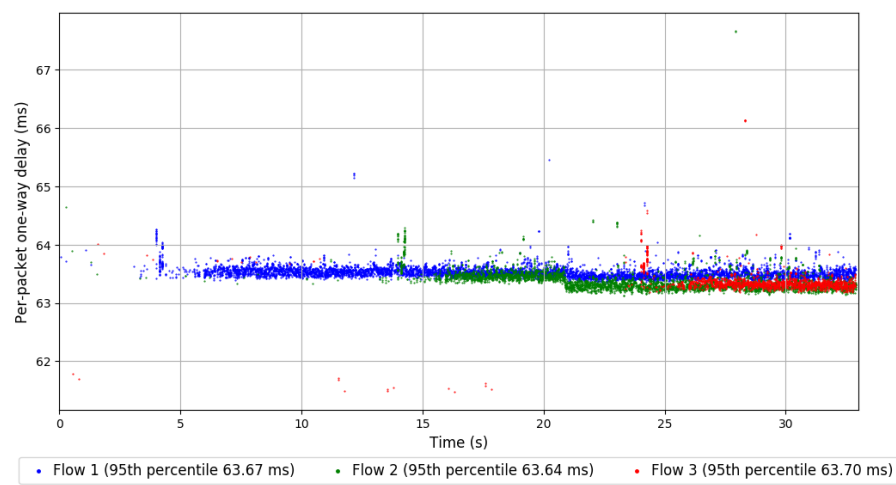
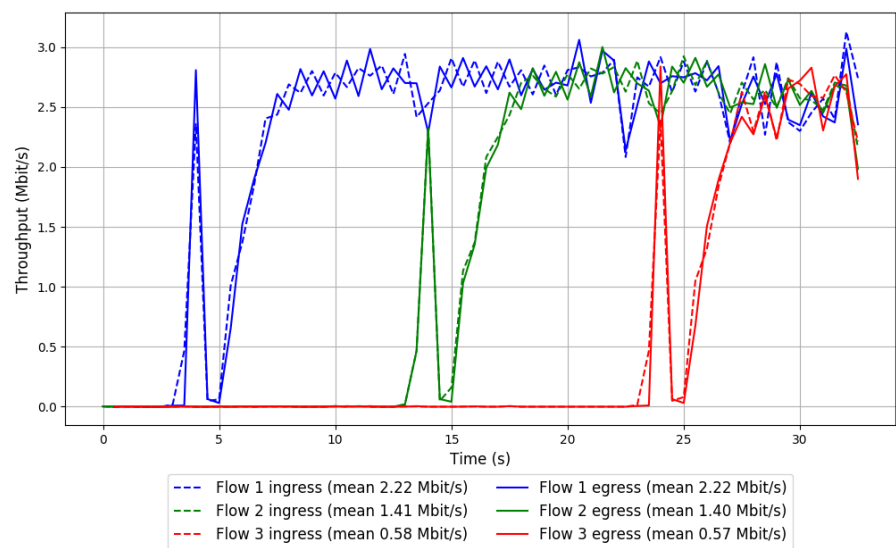
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 63.698 ms

Loss rate: 2.04%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-01 10:33:50

End at: 2017-12-01 10:34:20

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 64.071 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 2.21 Mbit/s

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

Loss rate: 0.56%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 63.779 ms

Loss rate: 0.85%

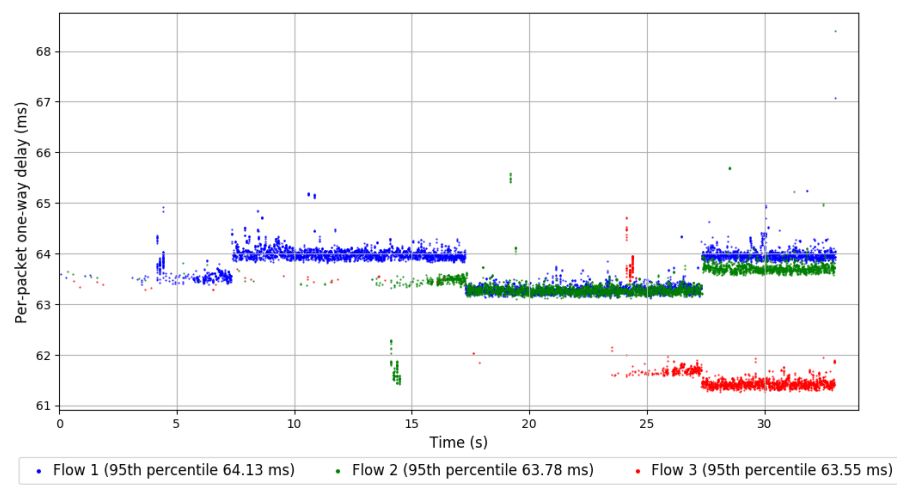
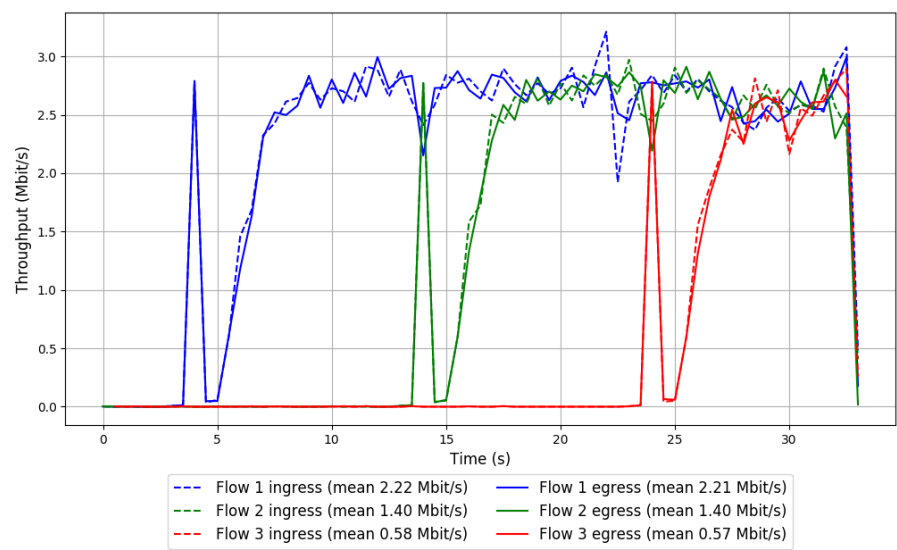
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 63.554 ms

Loss rate: 1.95%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-01 10:46:14

End at: 2017-12-01 10:46:44

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 63.965 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 63.648 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 1.39 Mbit/s

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

Loss rate: 0.92%

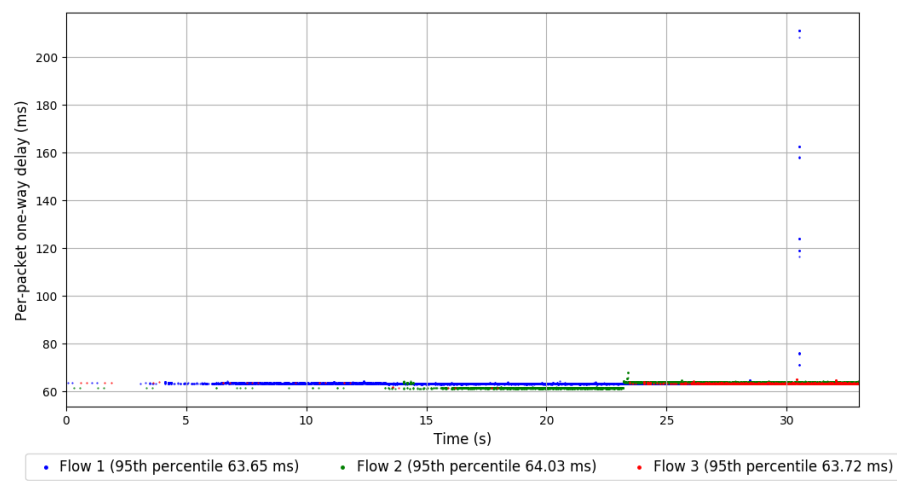
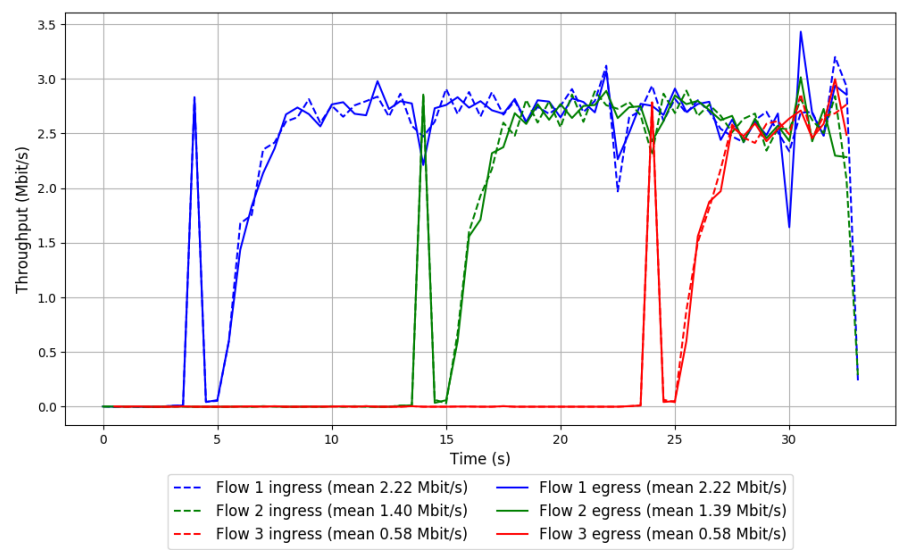
-- Flow 3:

Average throughput: 0.58 Mbit/s

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

Loss rate: 1.26%

Run 10: Report of WebRTC media — Data Link

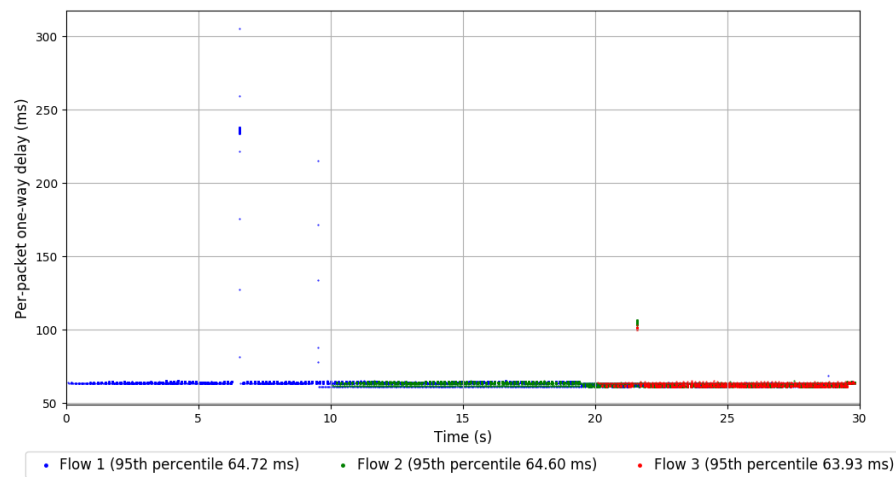
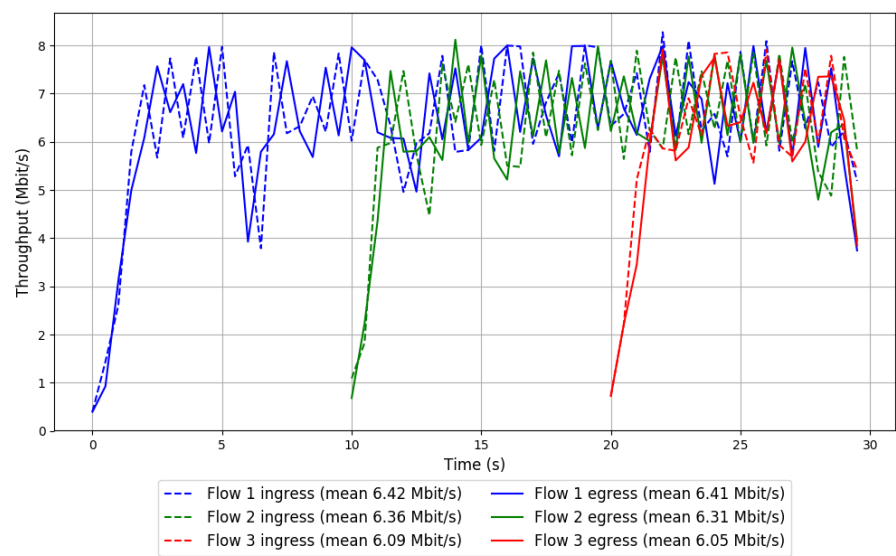


```
Run 1: Statistics of Sprout

Start at: 2017-12-01 08:51:35
End at: 2017-12-01 08:52:05

# Below is generated by plot.py at 2017-12-01 13:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.57 Mbit/s
95th percentile per-packet one-way delay: 64.657 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 64.719 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 6.31 Mbit/s
95th percentile per-packet one-way delay: 64.603 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 6.05 Mbit/s
95th percentile per-packet one-way delay: 63.929 ms
Loss rate: 1.58%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-01 09:04:11

End at: 2017-12-01 09:04:41

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.81 Mbit/s

95th percentile per-packet one-way delay: 64.760 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 6.53 Mbit/s

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

Loss rate: 0.54%

-- Flow 2:

Average throughput: 6.37 Mbit/s

95th percentile per-packet one-way delay: 64.608 ms

Loss rate: 0.68%

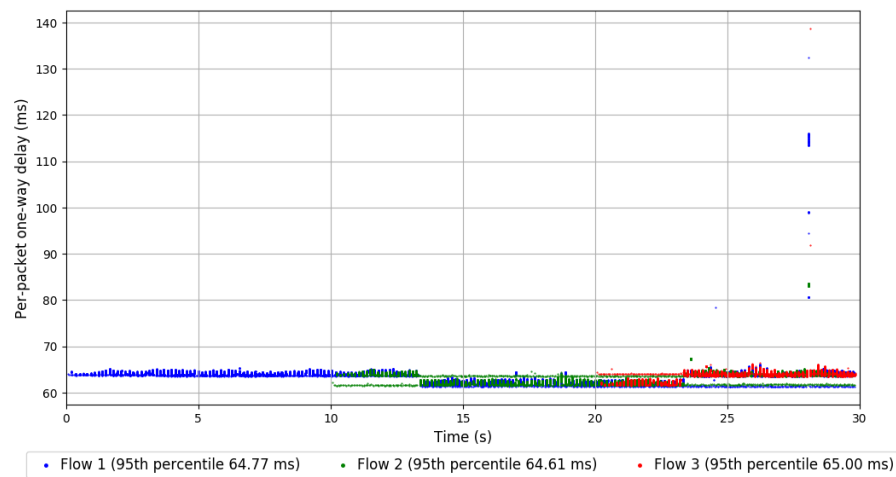
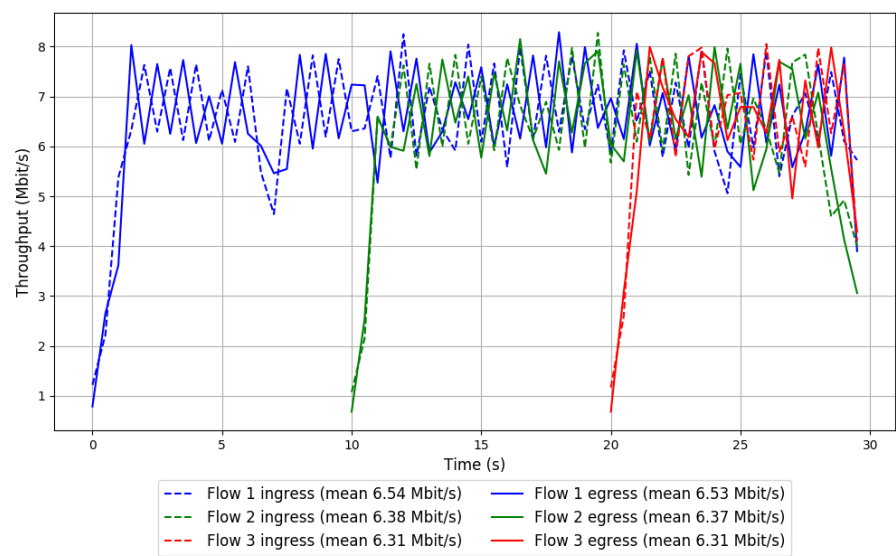
-- Flow 3:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 65.001 ms

Loss rate: 1.16%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-01 09:16:37

End at: 2017-12-01 09:17:07

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.82 Mbit/s

95th percentile per-packet one-way delay: 64.047 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 6.47 Mbit/s

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

Loss rate: 0.51%

-- Flow 2:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 63.325 ms

Loss rate: 0.72%

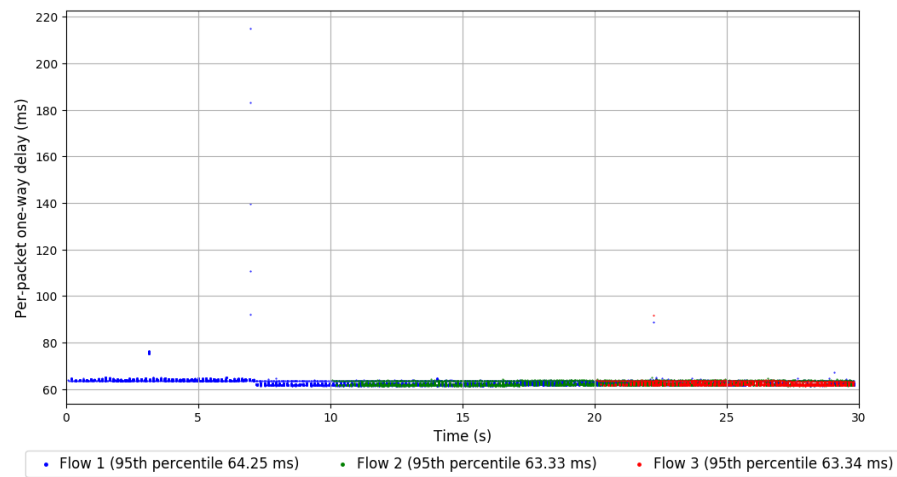
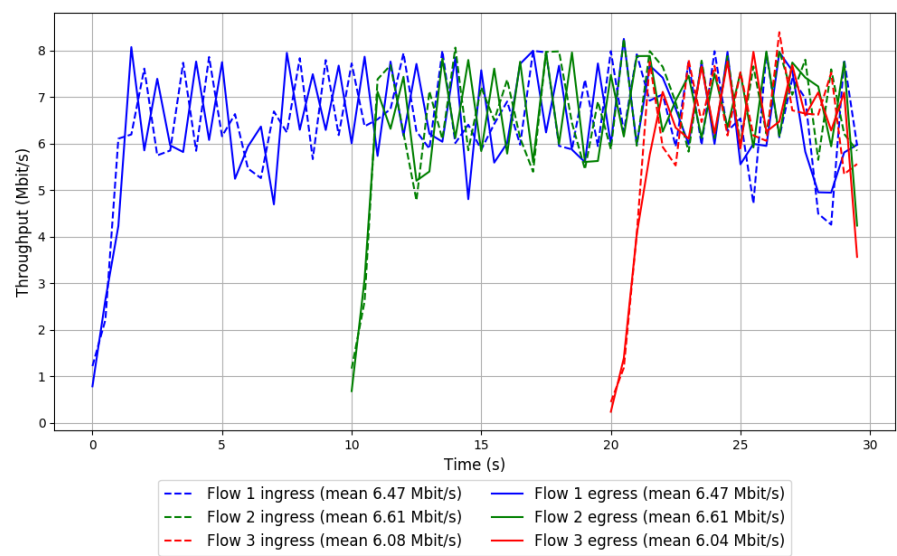
-- Flow 3:

Average throughput: 6.04 Mbit/s

95th percentile per-packet one-way delay: 63.339 ms

Loss rate: 1.67%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-01 09:29:08

End at: 2017-12-01 09:29:38

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.92 Mbit/s

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

Loss rate: 0.50%

-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.469 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 64.349 ms

Loss rate: 0.52%

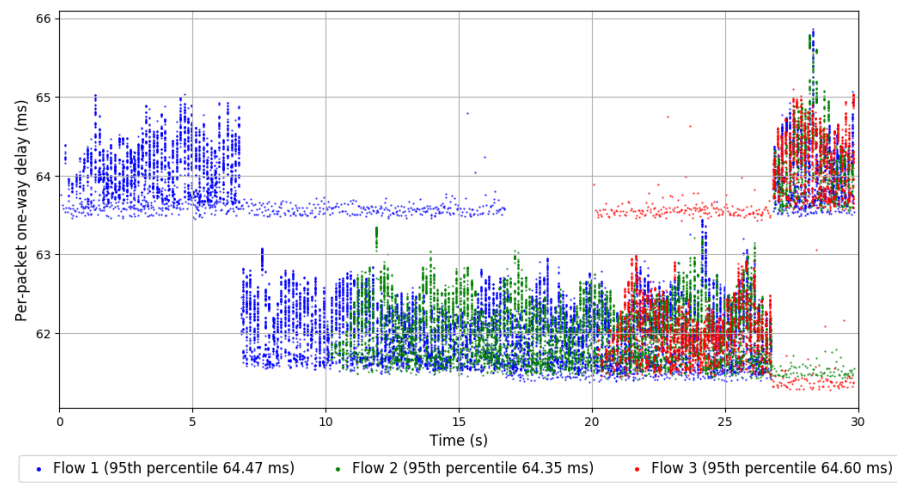
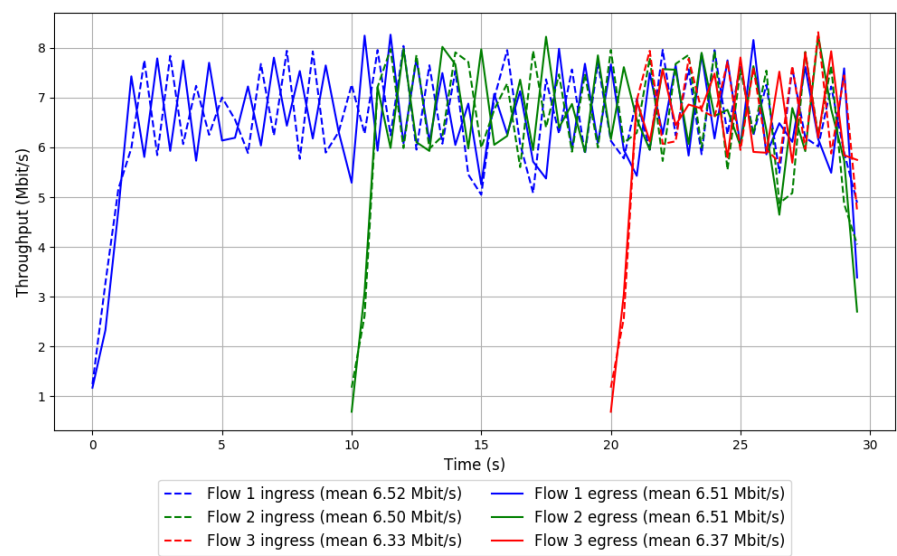
-- Flow 3:

Average throughput: 6.37 Mbit/s

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

Loss rate: 0.52%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-01 09:41:30

End at: 2017-12-01 09:42:00

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.89 Mbit/s

95th percentile per-packet one-way delay: 64.588 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 6.66 Mbit/s

95th percentile per-packet one-way delay: 64.655 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 64.495 ms

Loss rate: 0.26%

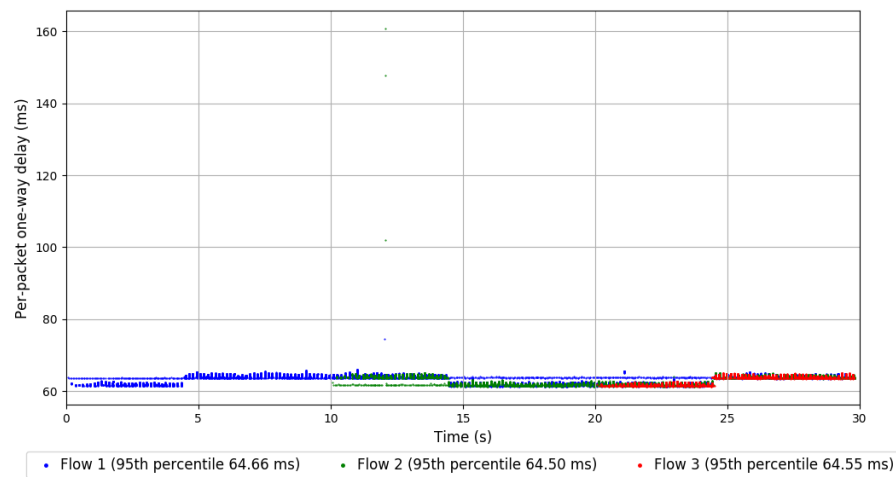
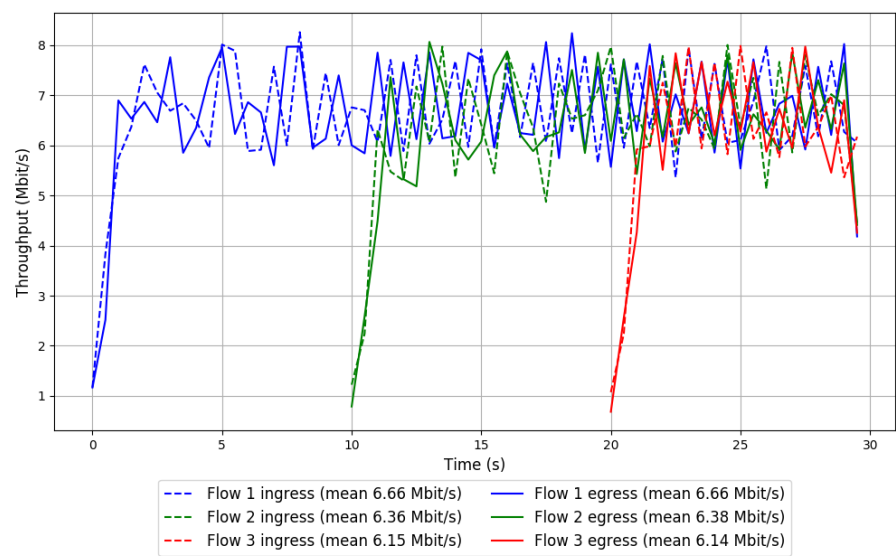
-- Flow 3:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 64.552 ms

Loss rate: 1.58%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-01 09:54:05

End at: 2017-12-01 09:54:35

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.74 Mbit/s

95th percentile per-packet one-way delay: 64.867 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 64.831 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 65.006 ms

Loss rate: 0.76%

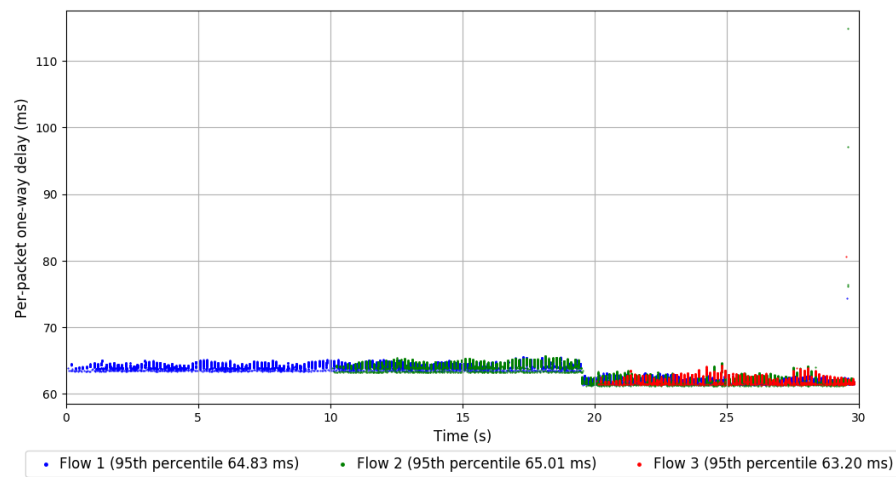
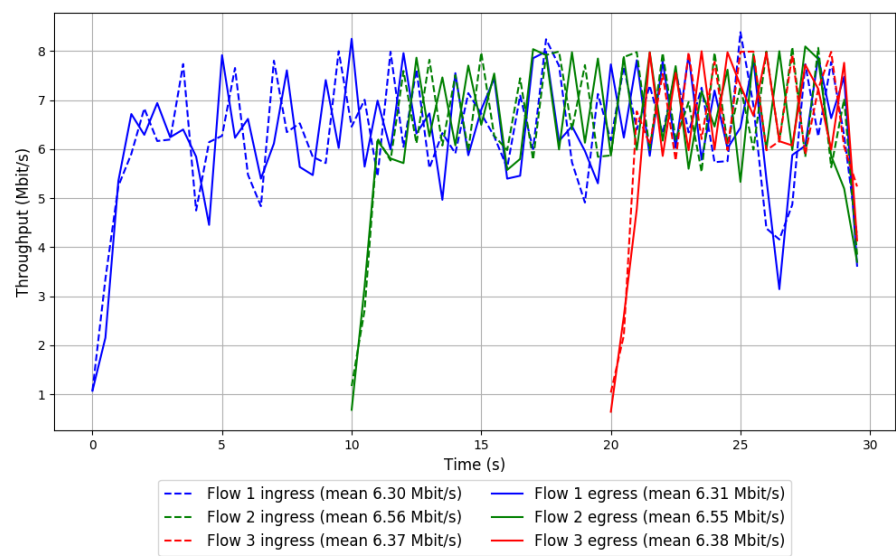
-- Flow 3:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 63.201 ms

Loss rate: 1.12%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-01 10:06:42

End at: 2017-12-01 10:07:12

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.70 Mbit/s

95th percentile per-packet one-way delay: 64.717 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 64.763 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 6.26 Mbit/s

95th percentile per-packet one-way delay: 64.545 ms

Loss rate: 1.51%

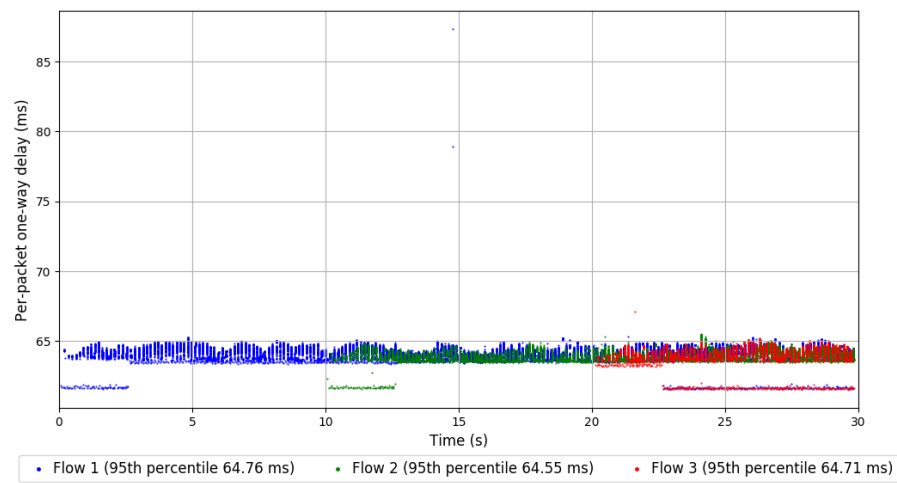
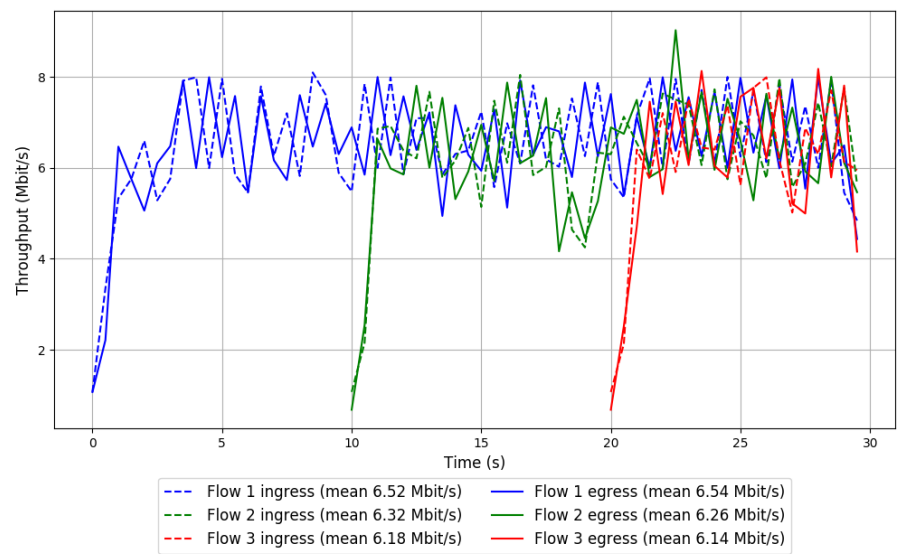
-- Flow 3:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 64.714 ms

Loss rate: 1.67%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-01 10:19:03

End at: 2017-12-01 10:19:33

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.83 Mbit/s

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

Loss rate: 0.50%

-- Flow 1:

Average throughput: 6.56 Mbit/s

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

Loss rate: 0.49%

-- Flow 2:

Average throughput: 6.45 Mbit/s

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

Loss rate: 0.00%

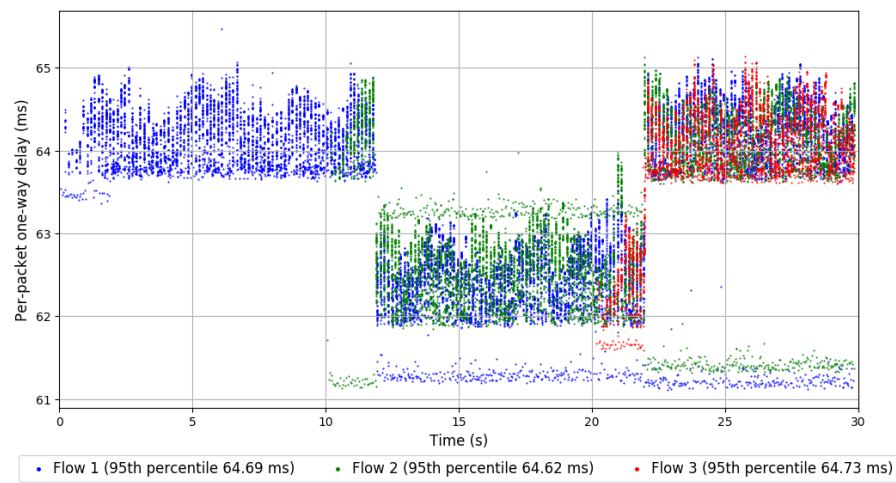
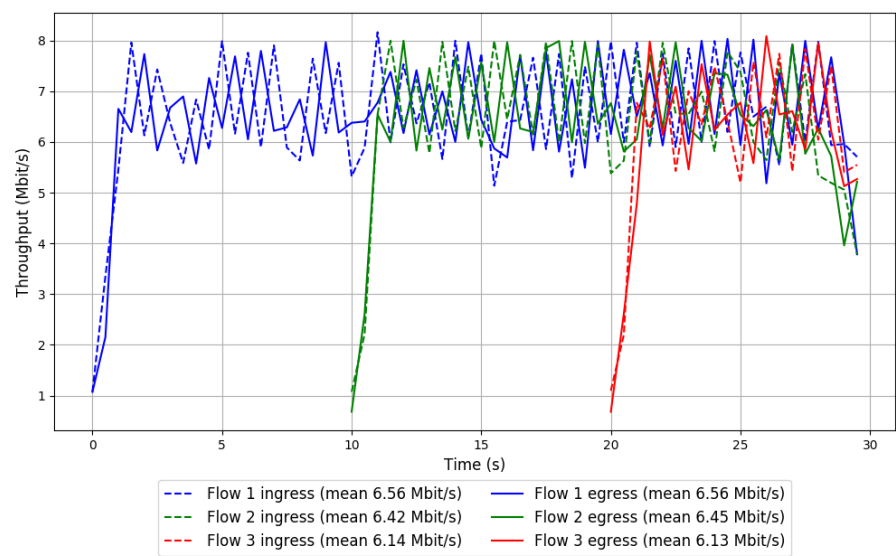
-- Flow 3:

Average throughput: 6.13 Mbit/s

95th percentile per-packet one-way delay: 64.726 ms

Loss rate: 1.59%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-01 10:31:27

End at: 2017-12-01 10:31:57

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.48 Mbit/s

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

Loss rate: 0.49%

-- Flow 1:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 64.607 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 6.10 Mbit/s

95th percentile per-packet one-way delay: 64.799 ms

Loss rate: 0.38%

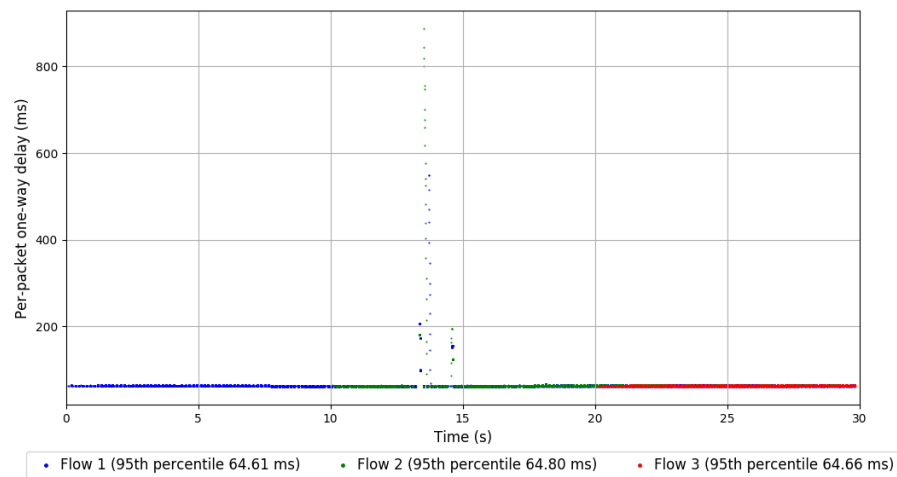
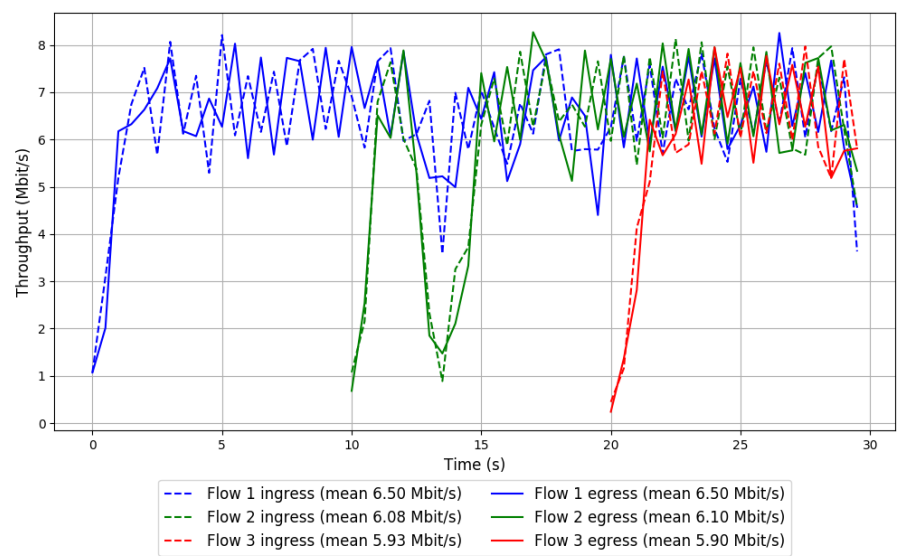
-- Flow 3:

Average throughput: 5.90 Mbit/s

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

Loss rate: 1.66%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-01 10:43:51

End at: 2017-12-01 10:44:21

Below is generated by plot.py at 2017-12-01 13:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.82 Mbit/s

95th percentile per-packet one-way delay: 64.637 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 64.686 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 64.561 ms

Loss rate: 0.70%

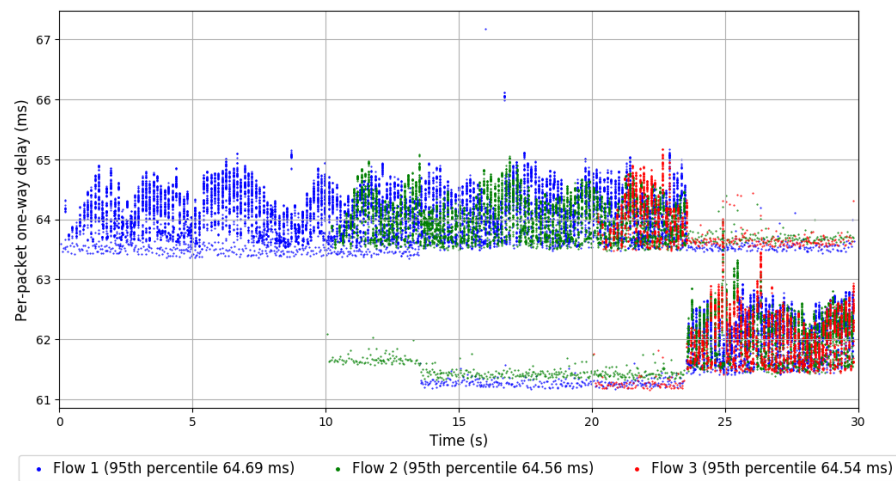
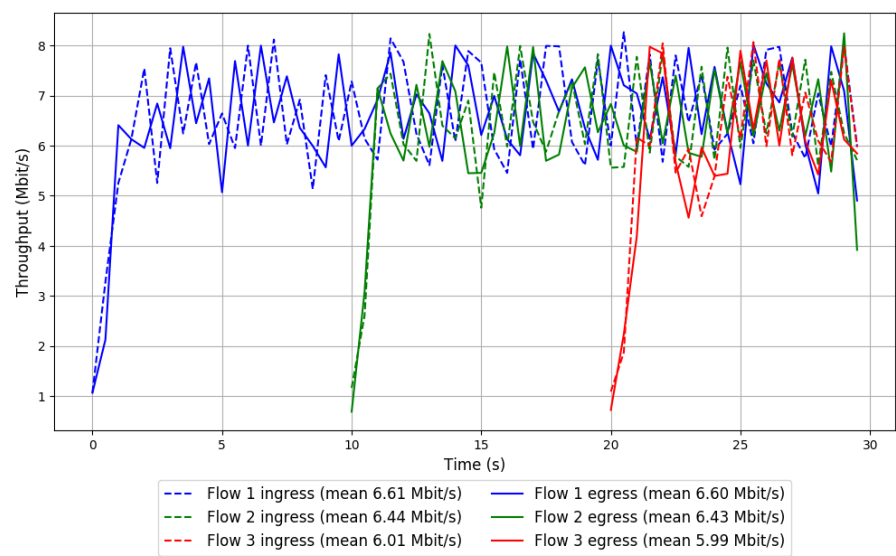
-- Flow 3:

Average throughput: 5.99 Mbit/s

95th percentile per-packet one-way delay: 64.539 ms

Loss rate: 1.67%

Run 10: Report of Sprout — Data Link

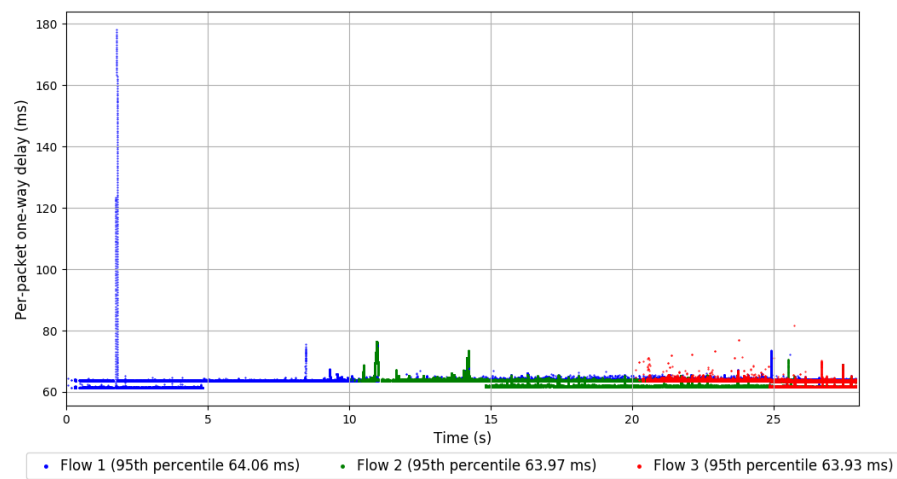
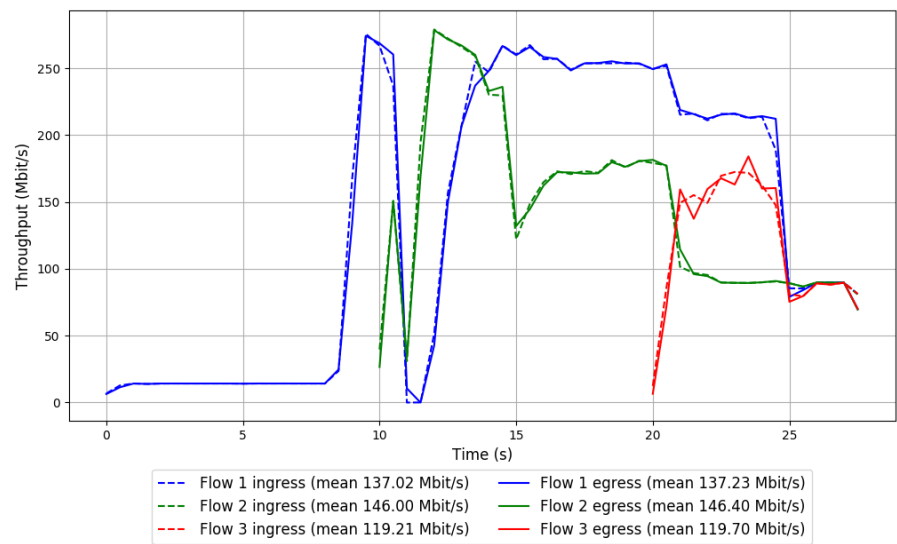


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-01 08:59:38
End at: 2017-12-01 09:00:08

# Below is generated by plot.py at 2017-12-01 13:36:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 264.43 Mbit/s
95th percentile per-packet one-way delay: 64.030 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 137.23 Mbit/s
95th percentile per-packet one-way delay: 64.057 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 146.40 Mbit/s
95th percentile per-packet one-way delay: 63.968 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 119.70 Mbit/s
95th percentile per-packet one-way delay: 63.929 ms
Loss rate: 1.18%
```


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

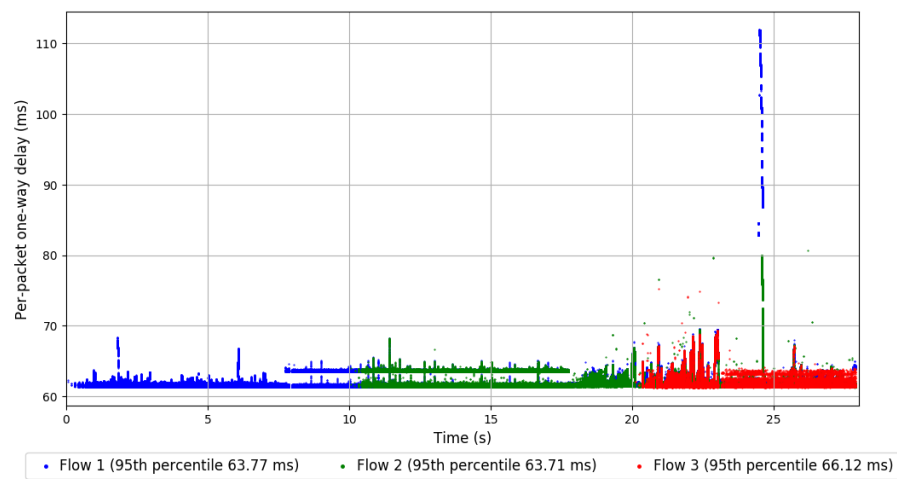
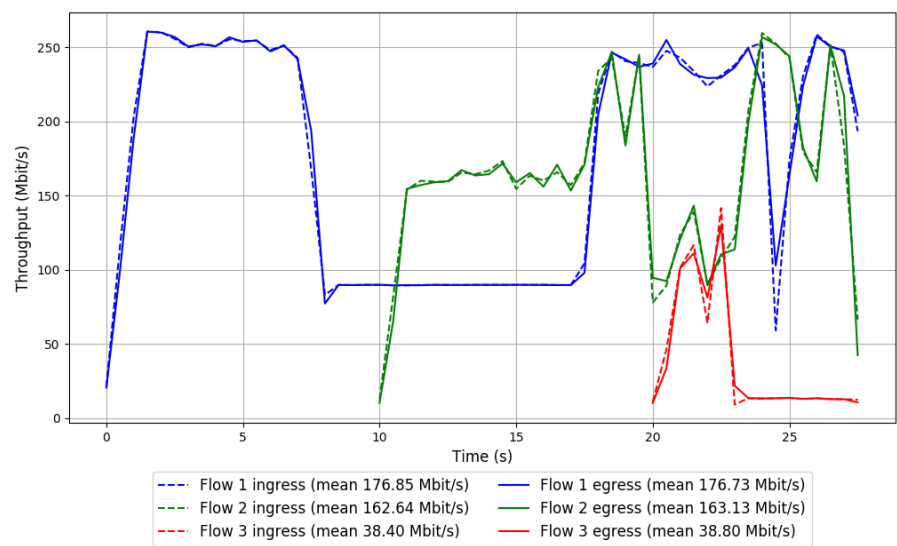


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-01 09:12:05
End at: 2017-12-01 09:12:35

# Below is generated by plot.py at 2017-12-01 13:37:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.04 Mbit/s
95th percentile per-packet one-way delay: 63.737 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 176.73 Mbit/s
95th percentile per-packet one-way delay: 63.765 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 163.13 Mbit/s
95th percentile per-packet one-way delay: 63.709 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 38.80 Mbit/s
95th percentile per-packet one-way delay: 66.122 ms
Loss rate: 0.56%
```

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

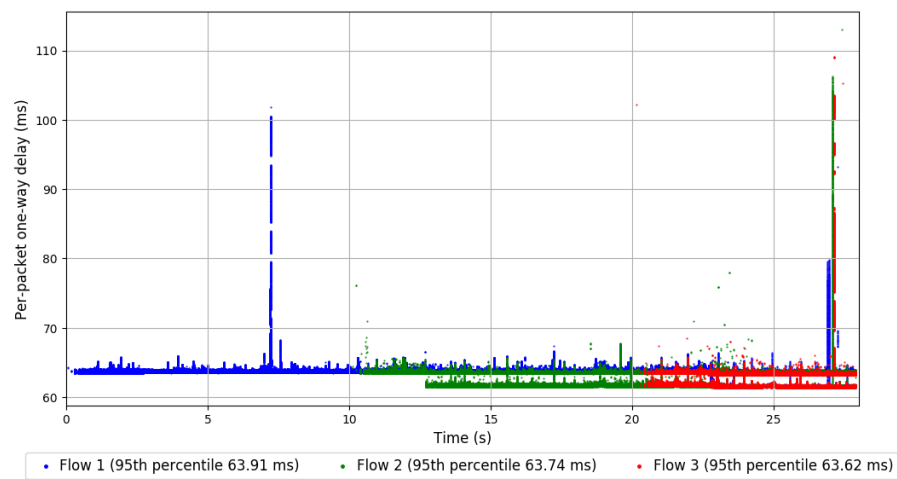
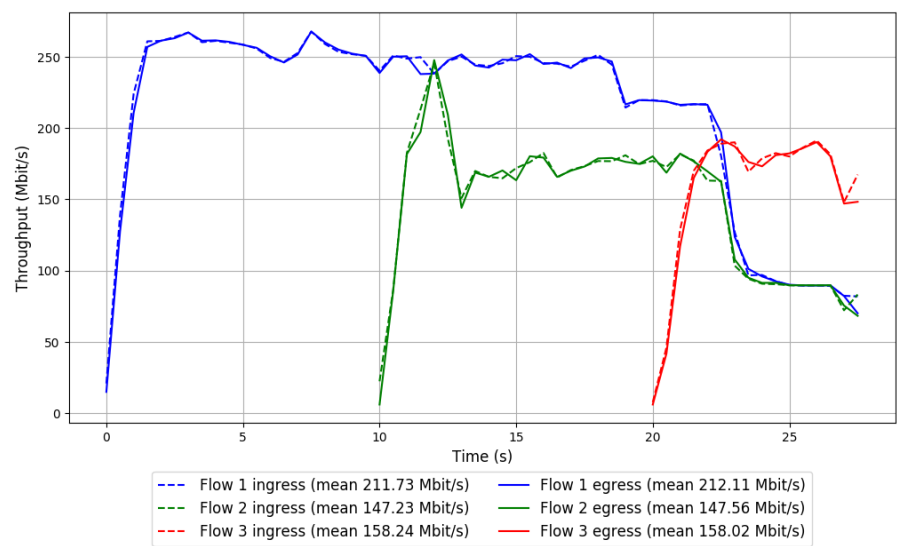


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-01 09:24:30
End at: 2017-12-01 09:25:00

# Below is generated by plot.py at 2017-12-01 13:39:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.51 Mbit/s
95th percentile per-packet one-way delay: 63.864 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 212.11 Mbit/s
95th percentile per-packet one-way delay: 63.907 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 147.56 Mbit/s
95th percentile per-packet one-way delay: 63.741 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 158.02 Mbit/s
95th percentile per-packet one-way delay: 63.621 ms
Loss rate: 1.77%
```

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

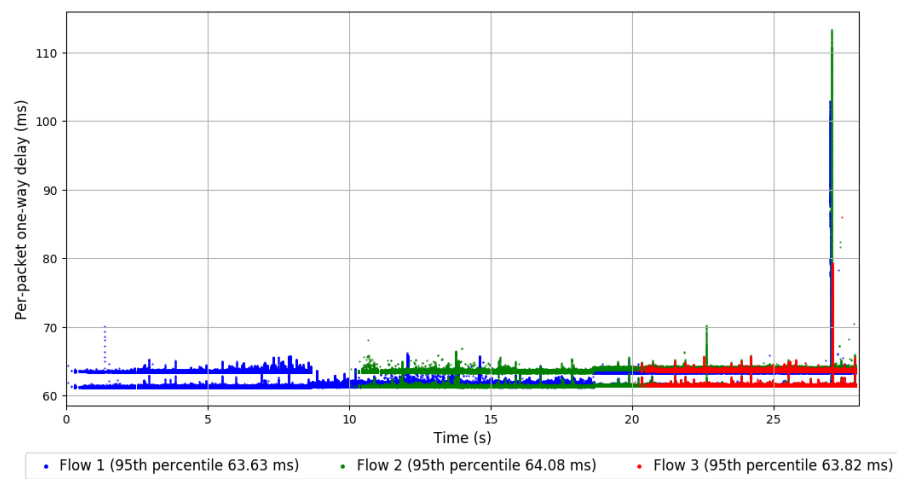
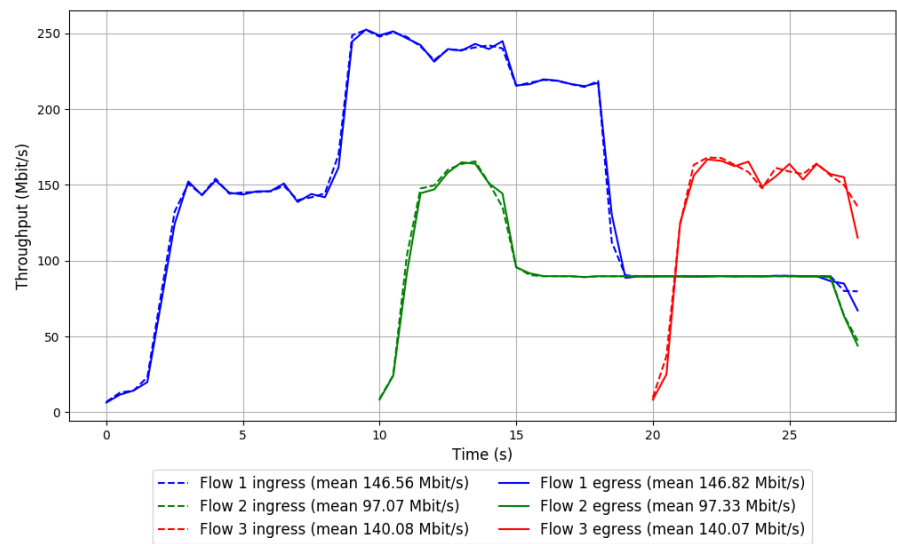


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-12-01 09:37:04
End at: 2017-12-01 09:37:34

# Below is generated by plot.py at 2017-12-01 13:39:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 248.41 Mbit/s
95th percentile per-packet one-way delay: 63.869 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 146.82 Mbit/s
95th percentile per-packet one-way delay: 63.628 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 97.33 Mbit/s
95th percentile per-packet one-way delay: 64.079 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 140.07 Mbit/s
95th percentile per-packet one-way delay: 63.816 ms
Loss rate: 1.57%
```

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

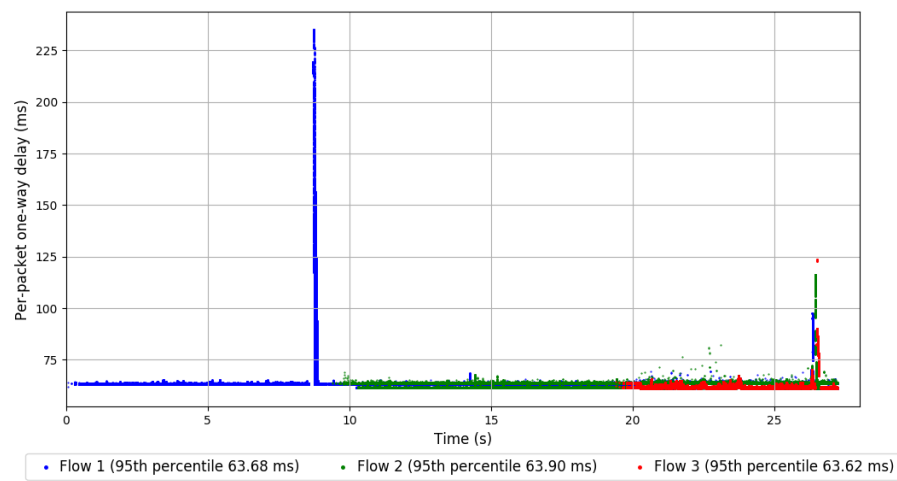
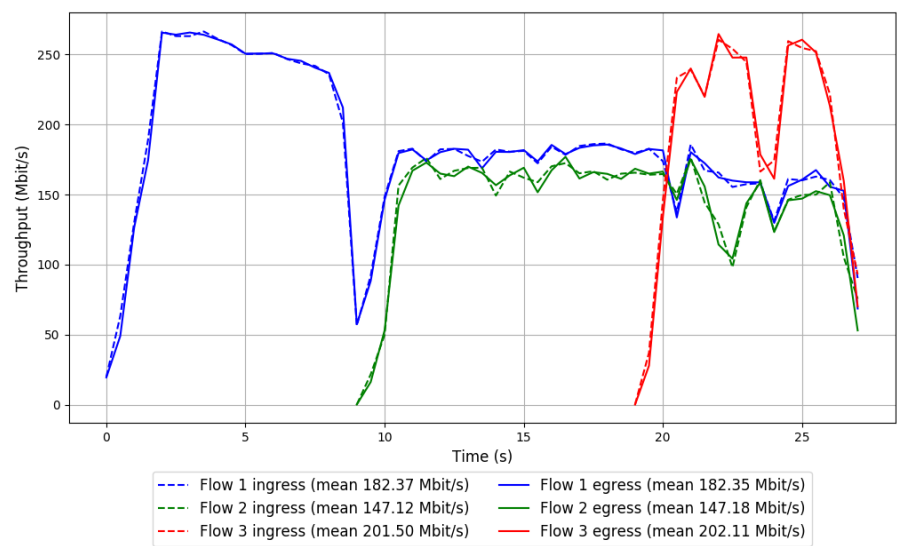


```
Run 5: Statistics of TaoVA-100x

Start at: 2017-12-01 09:49:32
End at: 2017-12-01 09:50:02

# Below is generated by plot.py at 2017-12-01 13:39:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 337.08 Mbit/s
95th percentile per-packet one-way delay: 63.811 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 182.35 Mbit/s
95th percentile per-packet one-way delay: 63.676 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 147.18 Mbit/s
95th percentile per-packet one-way delay: 63.901 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 202.11 Mbit/s
95th percentile per-packet one-way delay: 63.623 ms
Loss rate: 1.26%
```


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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-01 10:02:04

End at: 2017-12-01 10:02:34

Below is generated by plot.py at 2017-12-01 13:40:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 365.91 Mbit/s

95th percentile per-packet one-way delay: 64.151 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 201.85 Mbit/s

95th percentile per-packet one-way delay: 64.621 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 187.22 Mbit/s

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

Loss rate: 0.72%

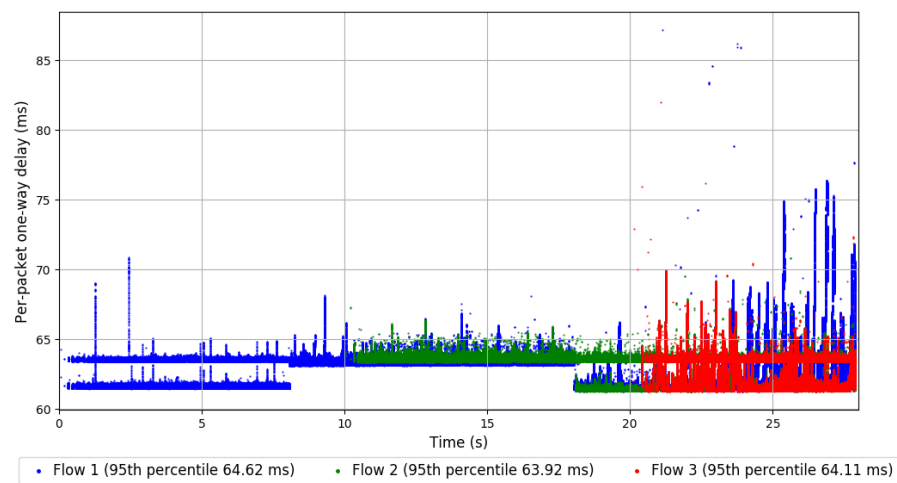
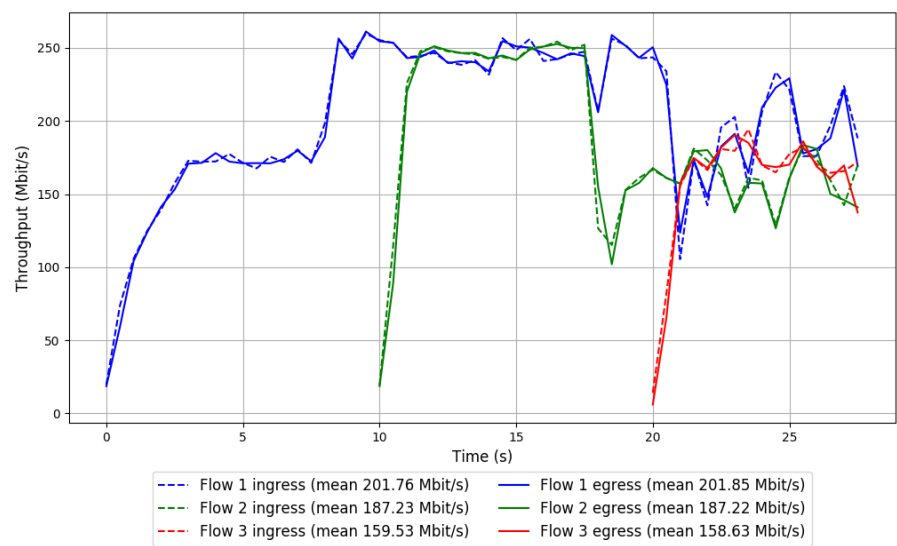
-- Flow 3:

Average throughput: 158.63 Mbit/s

95th percentile per-packet one-way delay: 64.115 ms

Loss rate: 2.16%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-01 10:14:31

End at: 2017-12-01 10:15:01

Below is generated by plot.py at 2017-12-01 13:41:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 281.31 Mbit/s

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

Loss rate: 1.11%

-- Flow 1:

Average throughput: 123.06 Mbit/s

95th percentile per-packet one-way delay: 63.913 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 151.32 Mbit/s

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

Loss rate: 1.28%

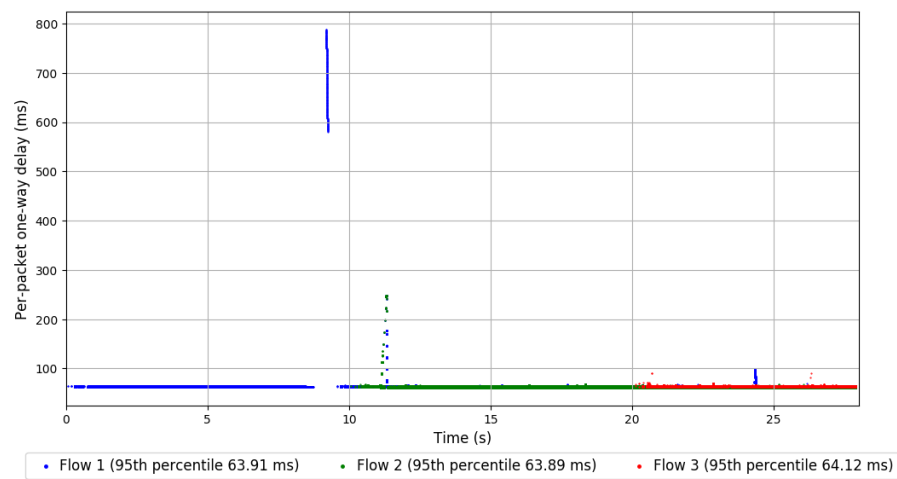
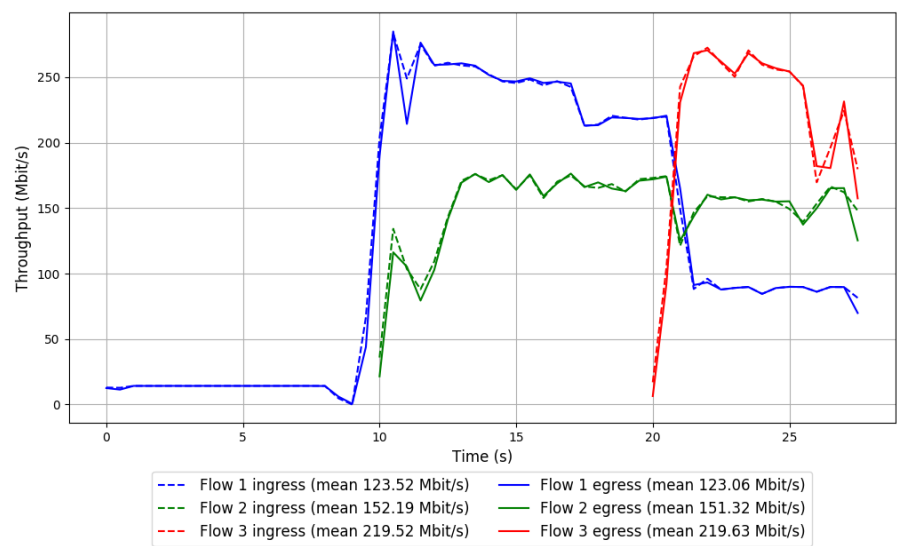
-- Flow 3:

Average throughput: 219.63 Mbit/s

95th percentile per-packet one-way delay: 64.116 ms

Loss rate: 1.43%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-01 10:26:56

End at: 2017-12-01 10:27:26

Below is generated by plot.py at 2017-12-01 13:43:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 330.26 Mbit/s

95th percentile per-packet one-way delay: 63.737 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 159.98 Mbit/s

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

Loss rate: 0.28%

-- Flow 2:

Average throughput: 170.06 Mbit/s

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

Loss rate: 0.38%

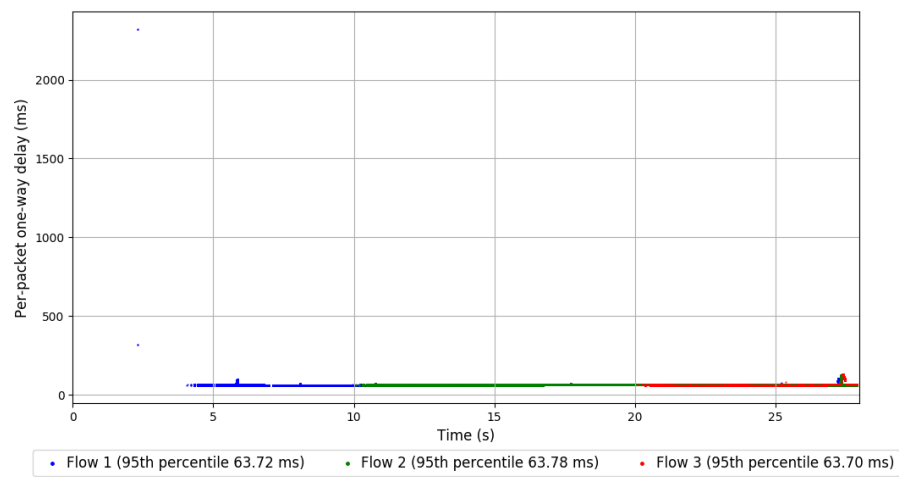
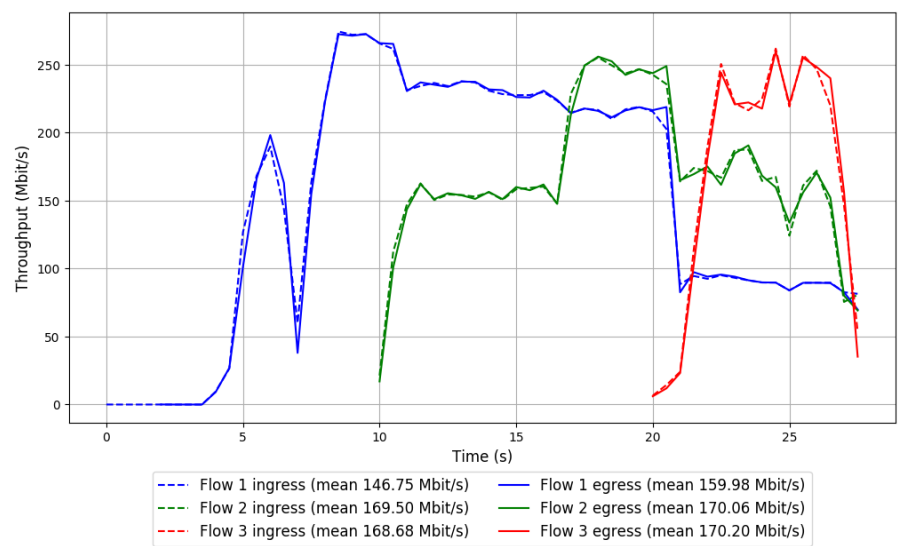
-- Flow 3:

Average throughput: 170.20 Mbit/s

95th percentile per-packet one-way delay: 63.705 ms

Loss rate: 0.77%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-01 10:39:25

End at: 2017-12-01 10:39:55

Below is generated by plot.py at 2017-12-01 13:43:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 240.63 Mbit/s

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

Loss rate: 0.76%

-- Flow 1:

Average throughput: 120.88 Mbit/s

95th percentile per-packet one-way delay: 63.579 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 123.52 Mbit/s

95th percentile per-packet one-way delay: 64.096 ms

Loss rate: 0.85%

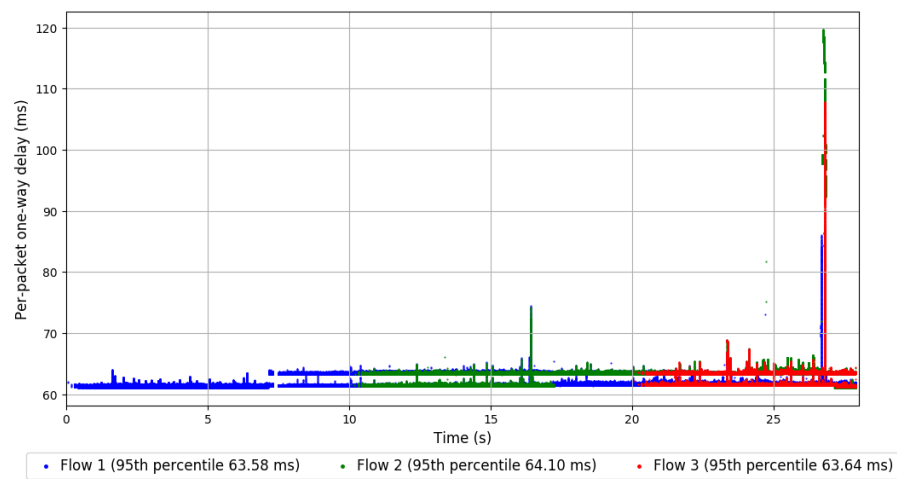
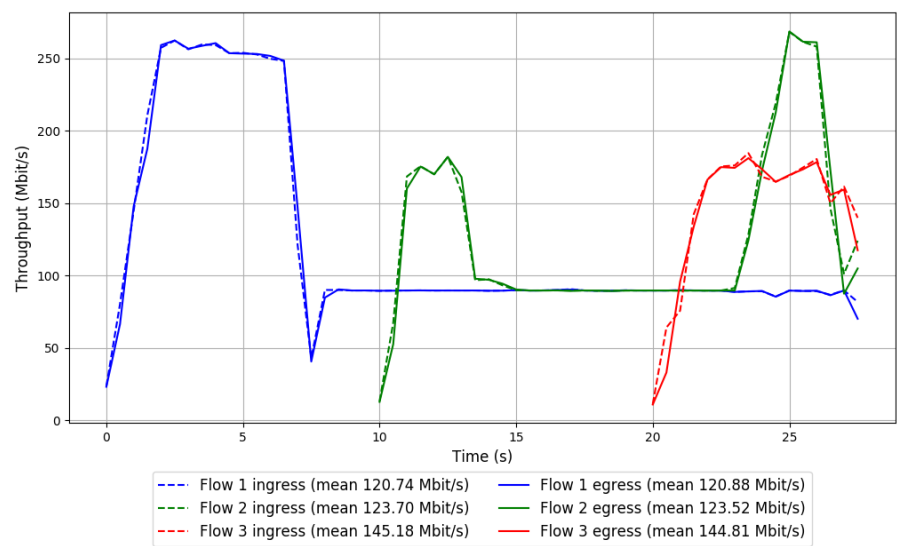
-- Flow 3:

Average throughput: 144.81 Mbit/s

95th percentile per-packet one-way delay: 63.639 ms

Loss rate: 1.84%

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

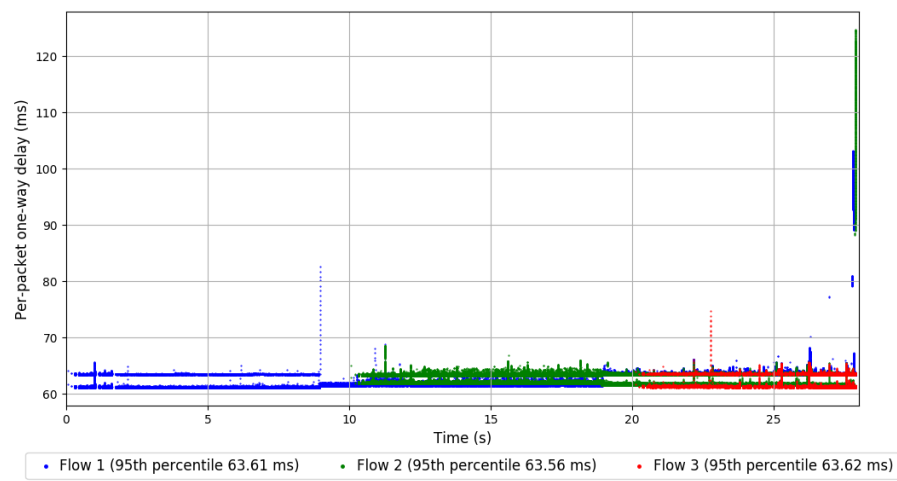
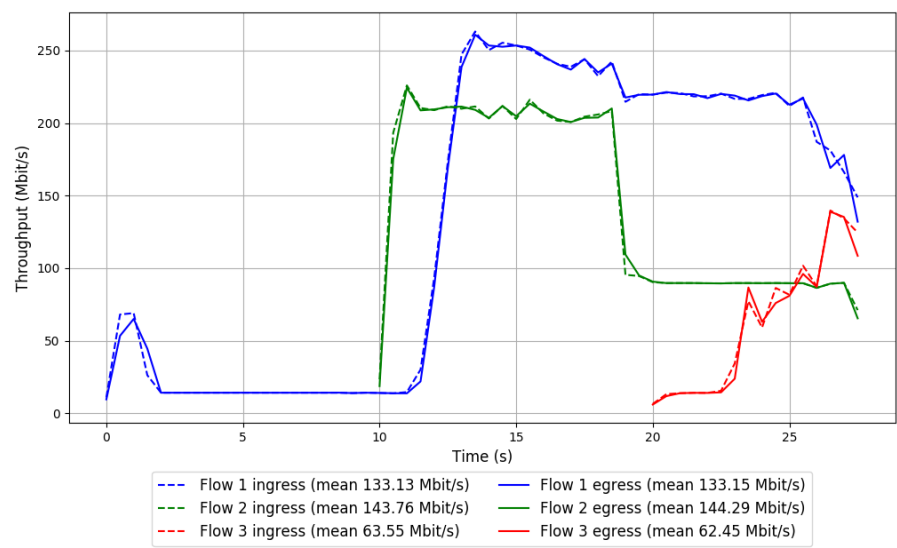


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-01 10:51:54
End at: 2017-12-01 10:52:24

# Below is generated by plot.py at 2017-12-01 13:44:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 242.96 Mbit/s
95th percentile per-packet one-way delay: 63.597 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 133.15 Mbit/s
95th percentile per-packet one-way delay: 63.611 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 144.29 Mbit/s
95th percentile per-packet one-way delay: 63.565 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 62.45 Mbit/s
95th percentile per-packet one-way delay: 63.622 ms
Loss rate: 3.29%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-01 08:55:34

End at: 2017-12-01 08:56:04

Below is generated by plot.py at 2017-12-01 13:44:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.61 Mbit/s

95th percentile per-packet one-way delay: 64.696 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 30.47 Mbit/s

95th percentile per-packet one-way delay: 64.939 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 121.17 Mbit/s

95th percentile per-packet one-way delay: 64.587 ms

Loss rate: 0.70%

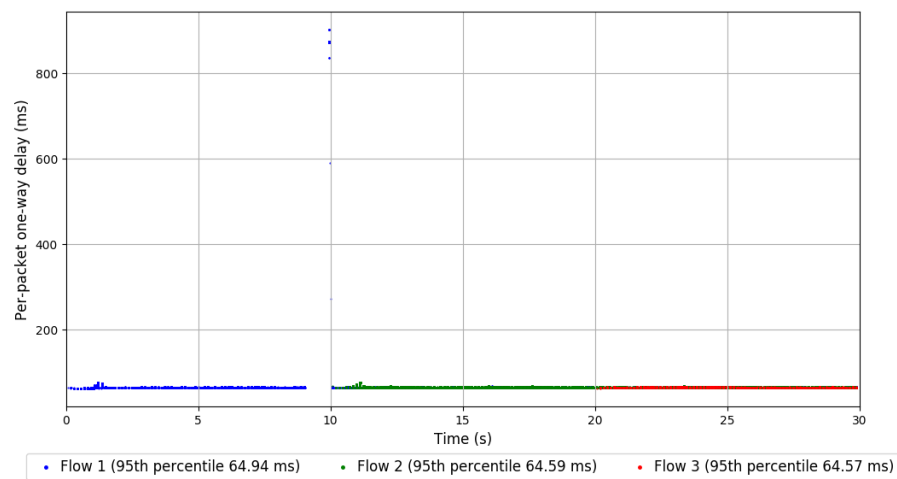
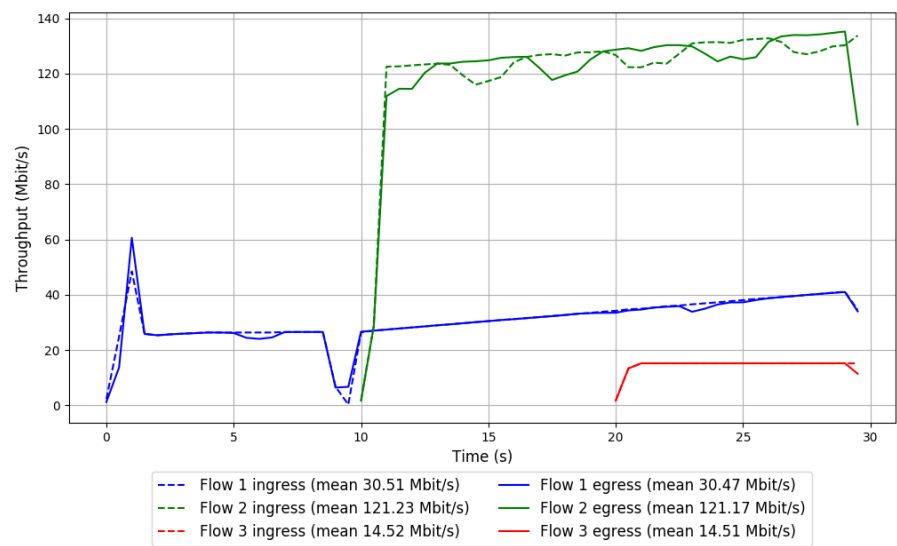
-- Flow 3:

Average throughput: 14.51 Mbit/s

95th percentile per-packet one-way delay: 64.571 ms

Loss rate: 1.32%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-01 09:08:07

End at: 2017-12-01 09:08:37

Below is generated by plot.py at 2017-12-01 13:44:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.51 Mbit/s

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

Loss rate: 1.33%

-- Flow 1:

Average throughput: 13.36 Mbit/s

95th percentile per-packet one-way delay: 64.144 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 20.88 Mbit/s

95th percentile per-packet one-way delay: 64.114 ms

Loss rate: 1.54%

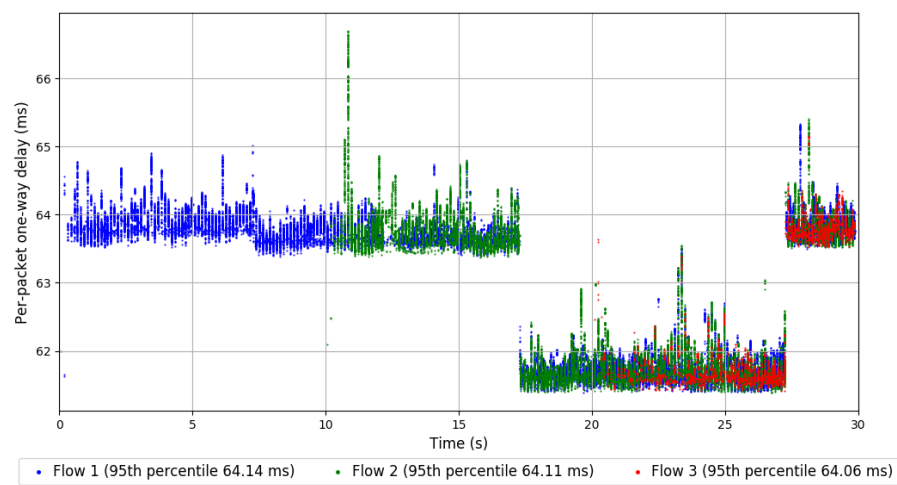
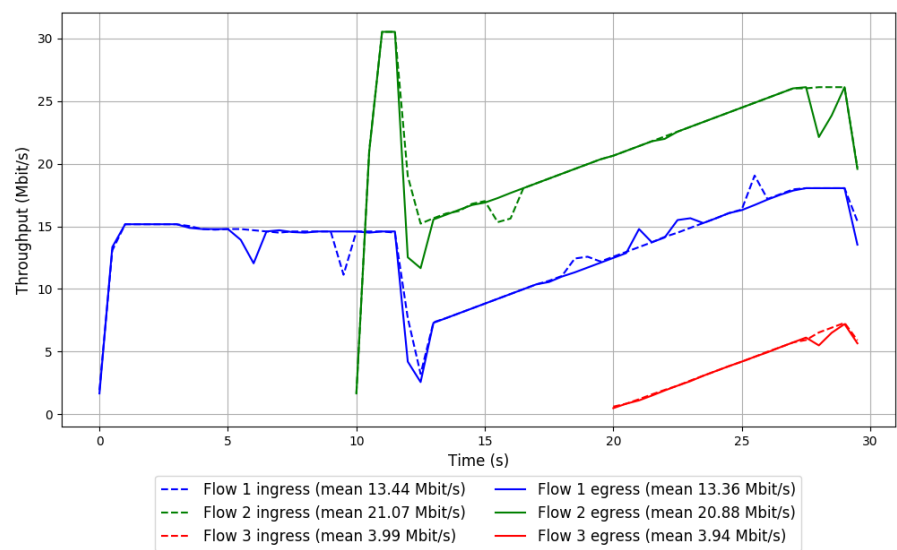
-- Flow 3:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 64.064 ms

Loss rate: 2.58%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-01 09:20:32

End at: 2017-12-01 09:21:02

Below is generated by plot.py at 2017-12-01 13:44:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 221.75 Mbit/s

95th percentile per-packet one-way delay: 70.095 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 72.05 Mbit/s

95th percentile per-packet one-way delay: 67.929 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 180.97 Mbit/s

95th percentile per-packet one-way delay: 70.232 ms

Loss rate: 0.67%

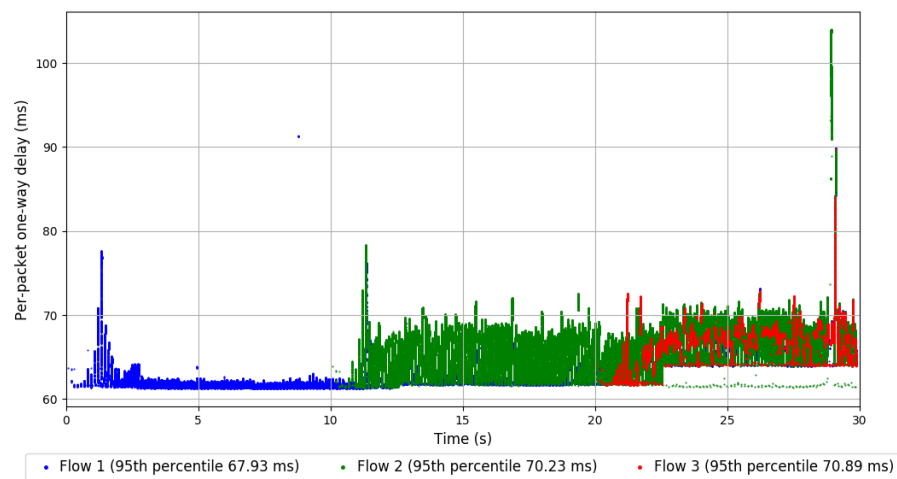
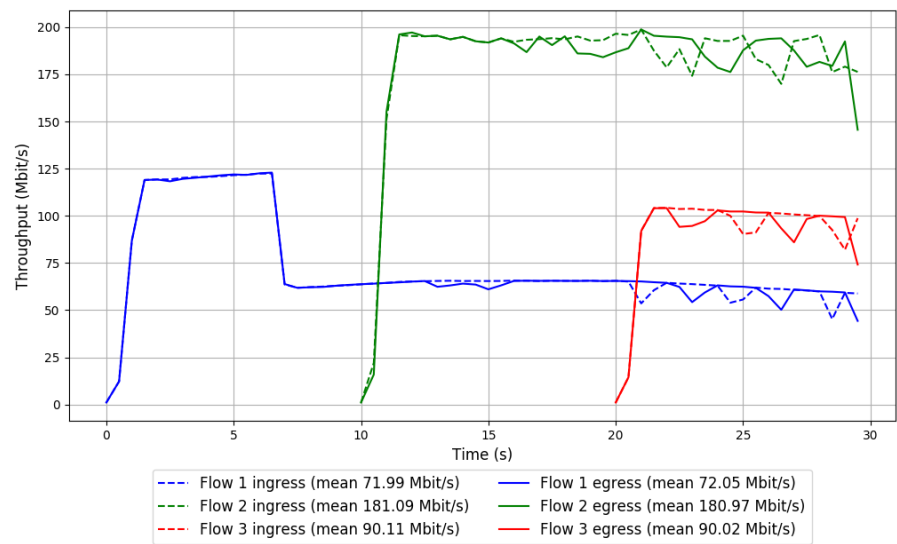
-- Flow 3:

Average throughput: 90.02 Mbit/s

95th percentile per-packet one-way delay: 70.885 ms

Loss rate: 1.39%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-01 09:33:06

End at: 2017-12-01 09:33:36

Below is generated by plot.py at 2017-12-01 13:44:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.51 Mbit/s

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

Loss rate: 0.68%

-- Flow 1:

Average throughput: 20.38 Mbit/s

95th percentile per-packet one-way delay: 64.018 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 93.02 Mbit/s

95th percentile per-packet one-way delay: 63.702 ms

Loss rate: 0.66%

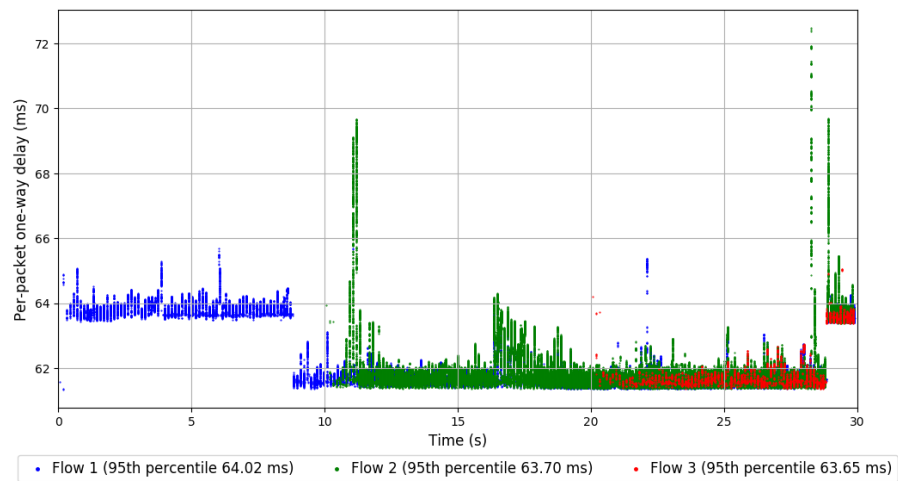
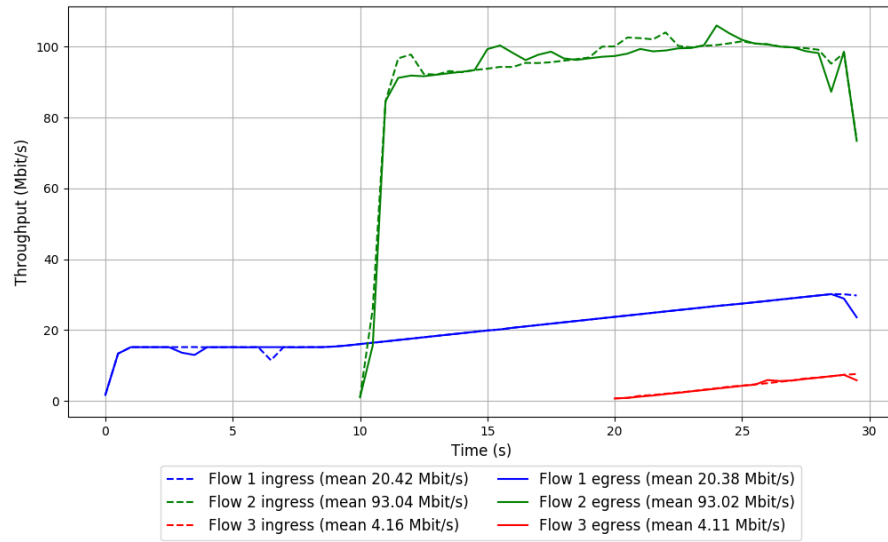
-- Flow 3:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 63.645 ms

Loss rate: 2.48%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-01 09:45:29

End at: 2017-12-01 09:45:59

Below is generated by plot.py at 2017-12-01 13:44:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 154.42 Mbit/s

95th percentile per-packet one-way delay: 71.801 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 94.46 Mbit/s

95th percentile per-packet one-way delay: 69.461 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 88.55 Mbit/s

95th percentile per-packet one-way delay: 73.141 ms

Loss rate: 0.51%

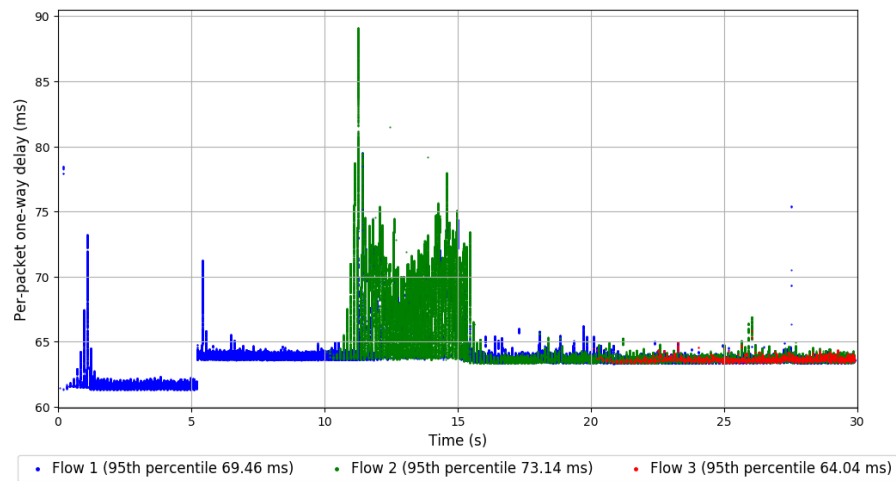
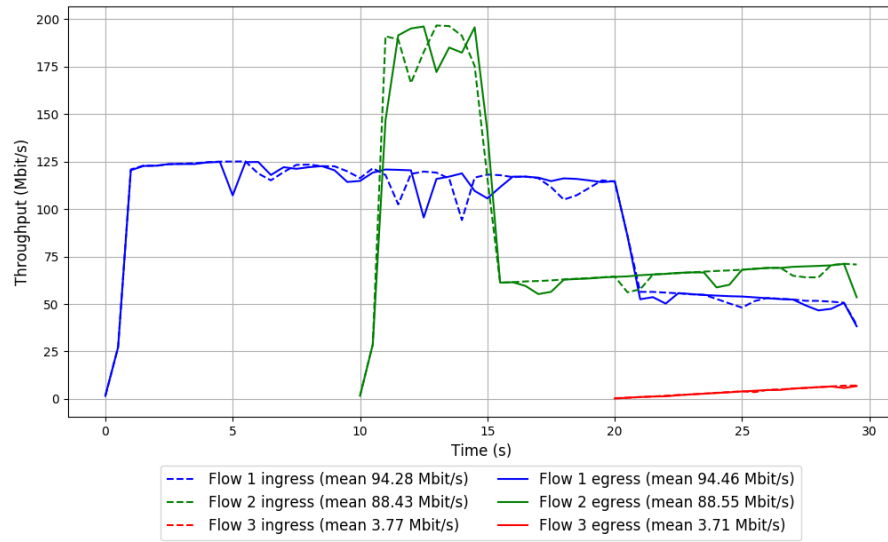
-- Flow 3:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 64.044 ms

Loss rate: 2.76%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-01 09:58:04

End at: 2017-12-01 09:58:34

Below is generated by plot.py at 2017-12-01 13:44:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.18 Mbit/s

95th percentile per-packet one-way delay: 63.966 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 53.33 Mbit/s

95th percentile per-packet one-way delay: 63.974 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 16.47 Mbit/s

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

Loss rate: 0.85%

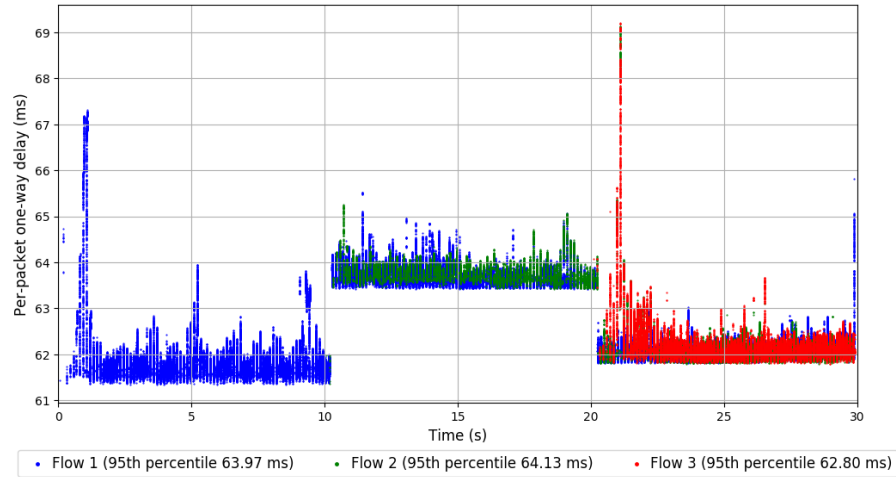
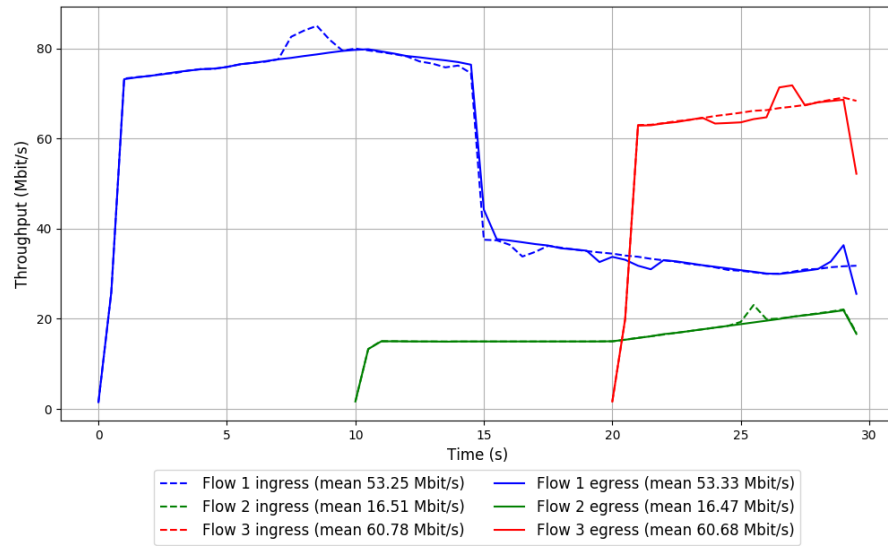
-- Flow 3:

Average throughput: 60.68 Mbit/s

95th percentile per-packet one-way delay: 62.797 ms

Loss rate: 1.43%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-01 10:10:40

End at: 2017-12-01 10:11:10

Below is generated by plot.py at 2017-12-01 13:44:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.52 Mbit/s

95th percentile per-packet one-way delay: 64.353 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 56.83 Mbit/s

95th percentile per-packet one-way delay: 64.294 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 70.80 Mbit/s

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

Loss rate: 0.31%

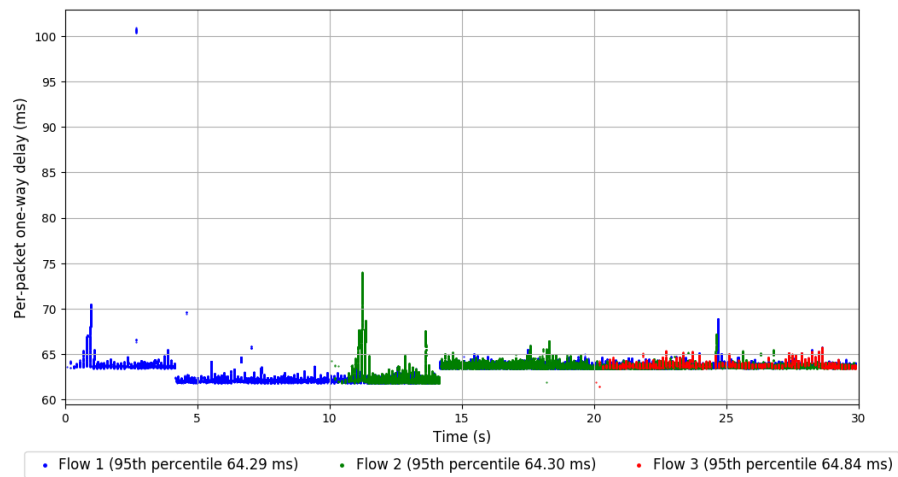
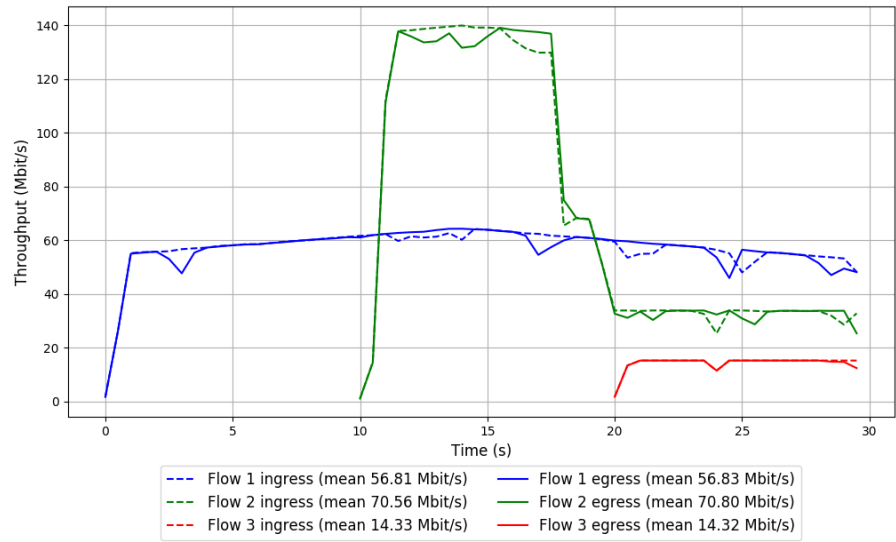
-- Flow 3:

Average throughput: 14.32 Mbit/s

95th percentile per-packet one-way delay: 64.845 ms

Loss rate: 1.33%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-01 10:23:01

End at: 2017-12-01 10:23:31

Below is generated by plot.py at 2017-12-01 13:44:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 169.69 Mbit/s

95th percentile per-packet one-way delay: 64.777 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 86.37 Mbit/s

95th percentile per-packet one-way delay: 64.390 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 76.12 Mbit/s

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

Loss rate: 0.72%

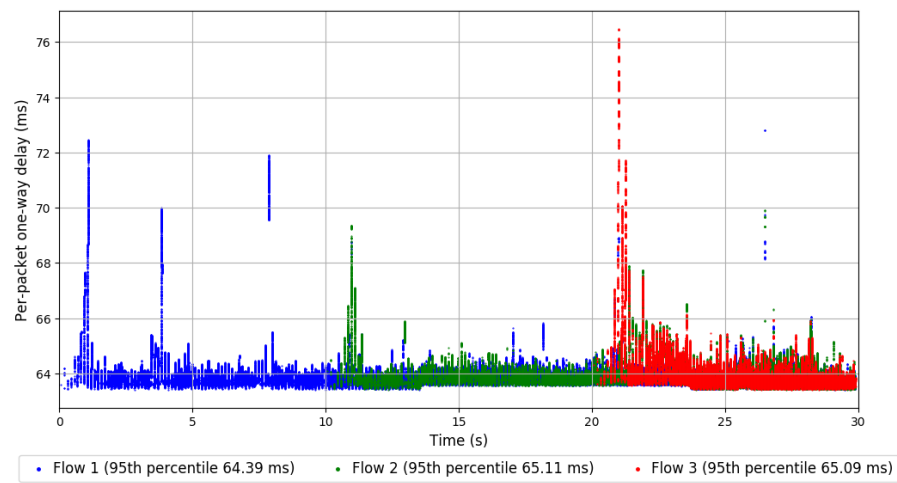
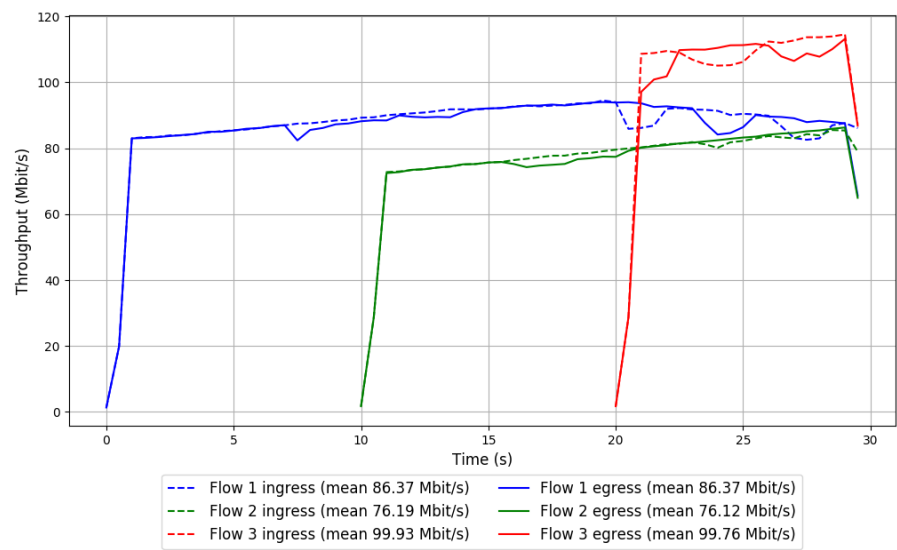
-- Flow 3:

Average throughput: 99.76 Mbit/s

95th percentile per-packet one-way delay: 65.088 ms

Loss rate: 1.45%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-01 10:35:22

End at: 2017-12-01 10:35:52

Below is generated by plot.py at 2017-12-01 13:46:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 246.61 Mbit/s

95th percentile per-packet one-way delay: 72.379 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 108.77 Mbit/s

95th percentile per-packet one-way delay: 71.405 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 142.55 Mbit/s

95th percentile per-packet one-way delay: 76.381 ms

Loss rate: 0.59%

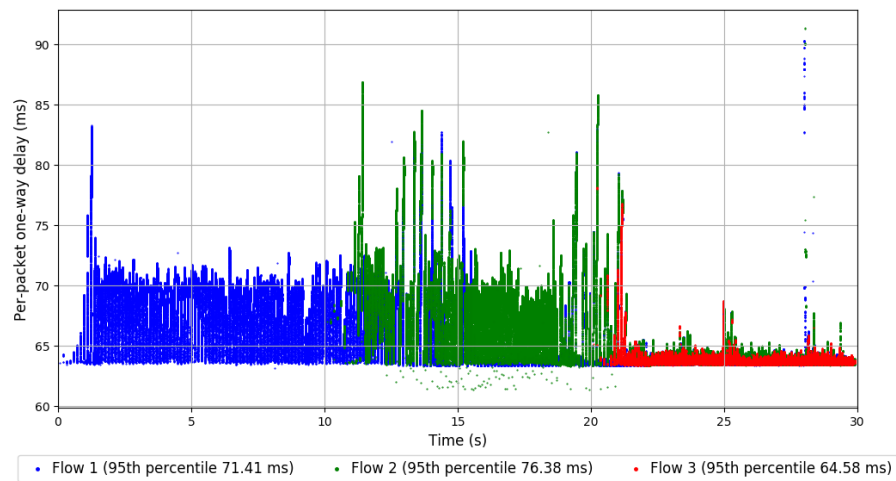
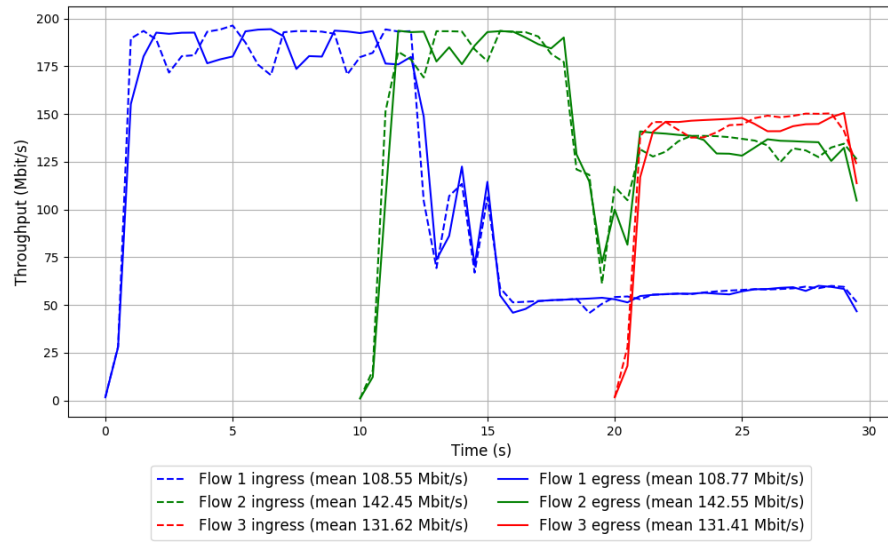
-- Flow 3:

Average throughput: 131.41 Mbit/s

95th percentile per-packet one-way delay: 64.583 ms

Loss rate: 1.45%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-01 10:47:51

End at: 2017-12-01 10:48:21

Below is generated by plot.py at 2017-12-01 13:46:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.96 Mbit/s

95th percentile per-packet one-way delay: 70.038 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 39.14 Mbit/s

95th percentile per-packet one-way delay: 66.701 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 110.73 Mbit/s

95th percentile per-packet one-way delay: 70.995 ms

Loss rate: 0.64%

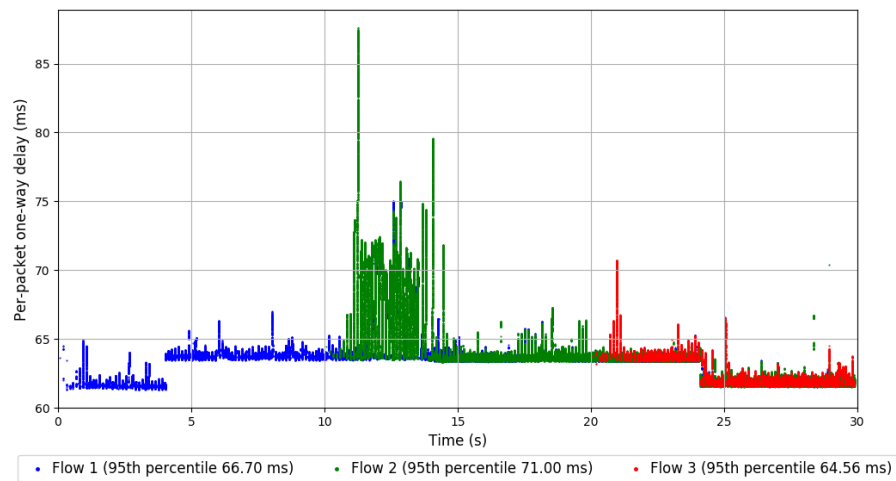
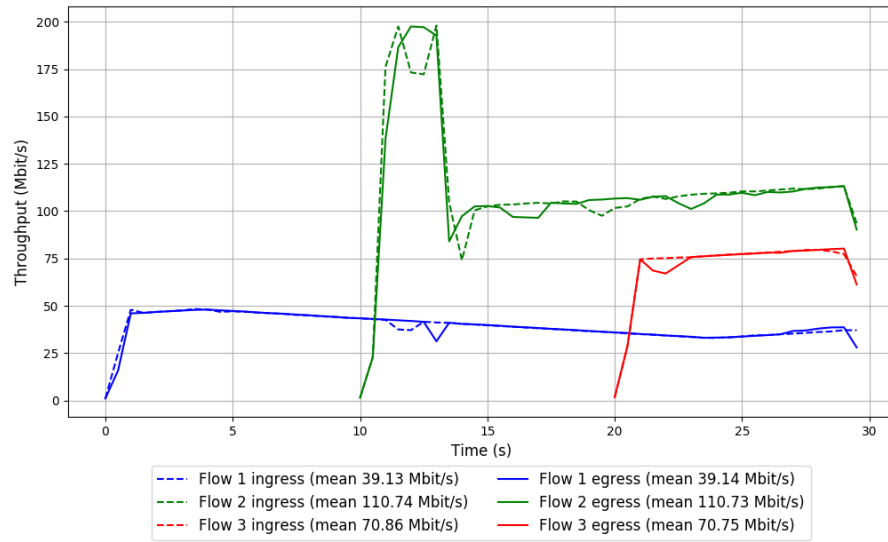
-- Flow 3:

Average throughput: 70.75 Mbit/s

95th percentile per-packet one-way delay: 64.562 ms

Loss rate: 1.43%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-01 09:00:44

End at: 2017-12-01 09:01:14

Below is generated by plot.py at 2017-12-01 13:48:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 347.05 Mbit/s

95th percentile per-packet one-way delay: 168.552 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 202.62 Mbit/s

95th percentile per-packet one-way delay: 132.228 ms

Loss rate: 1.65%

-- Flow 2:

Average throughput: 157.20 Mbit/s

95th percentile per-packet one-way delay: 131.978 ms

Loss rate: 0.47%

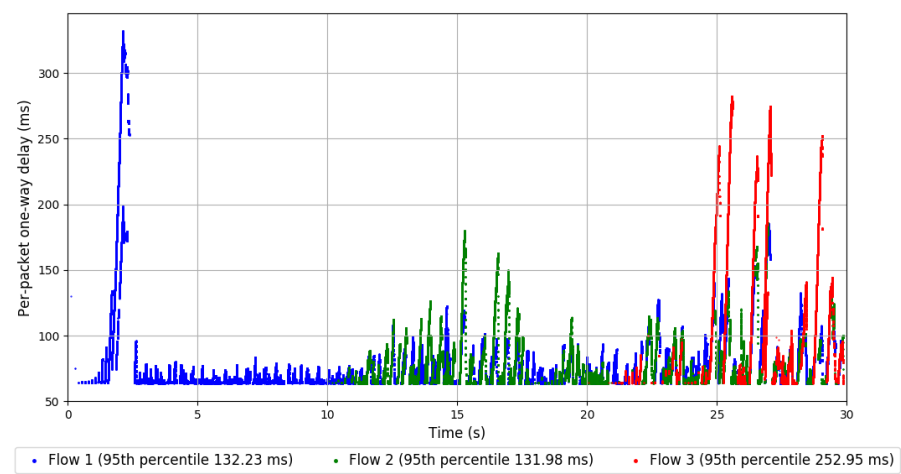
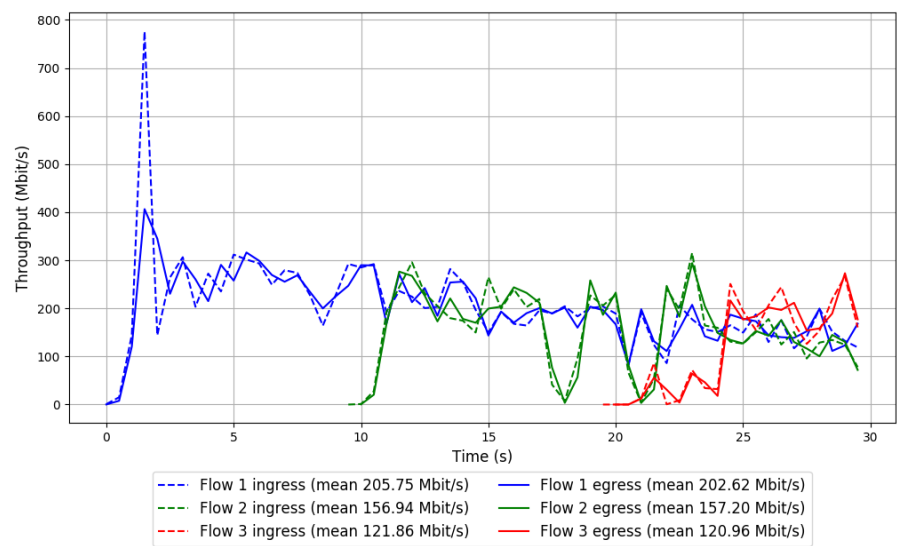
-- Flow 3:

Average throughput: 120.96 Mbit/s

95th percentile per-packet one-way delay: 252.949 ms

Loss rate: 0.89%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-01 09:13:12

End at: 2017-12-01 09:13:42

Below is generated by plot.py at 2017-12-01 13:48:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 298.59 Mbit/s

95th percentile per-packet one-way delay: 269.364 ms

Loss rate: 8.22%

-- Flow 1:

Average throughput: 231.62 Mbit/s

95th percentile per-packet one-way delay: 267.640 ms

Loss rate: 8.74%

-- Flow 2:

Average throughput: 72.64 Mbit/s

95th percentile per-packet one-way delay: 285.390 ms

Loss rate: 7.85%

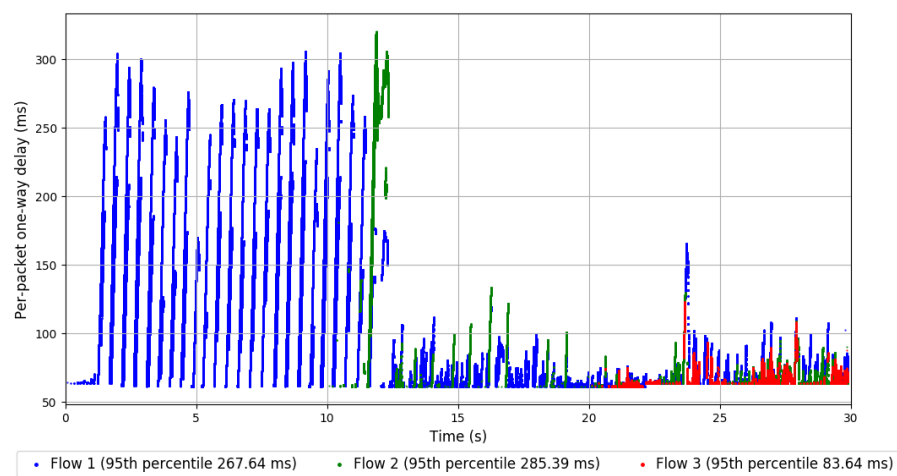
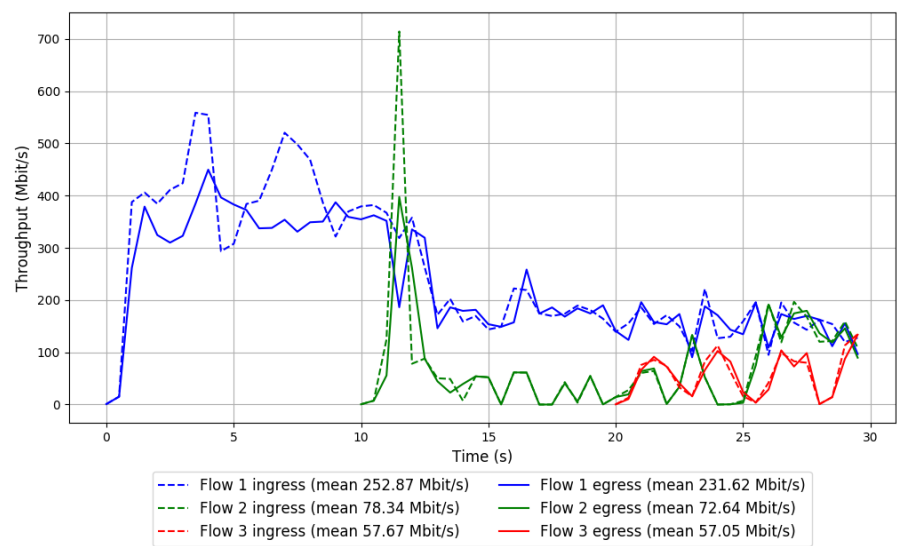
-- Flow 3:

Average throughput: 57.05 Mbit/s

95th percentile per-packet one-way delay: 83.635 ms

Loss rate: 2.36%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-01 09:25:42

End at: 2017-12-01 09:26:12

Below is generated by plot.py at 2017-12-01 13:49:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 365.93 Mbit/s

95th percentile per-packet one-way delay: 127.695 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 225.63 Mbit/s

95th percentile per-packet one-way delay: 138.744 ms

Loss rate: 2.25%

-- Flow 2:

Average throughput: 174.61 Mbit/s

95th percentile per-packet one-way delay: 116.745 ms

Loss rate: 0.83%

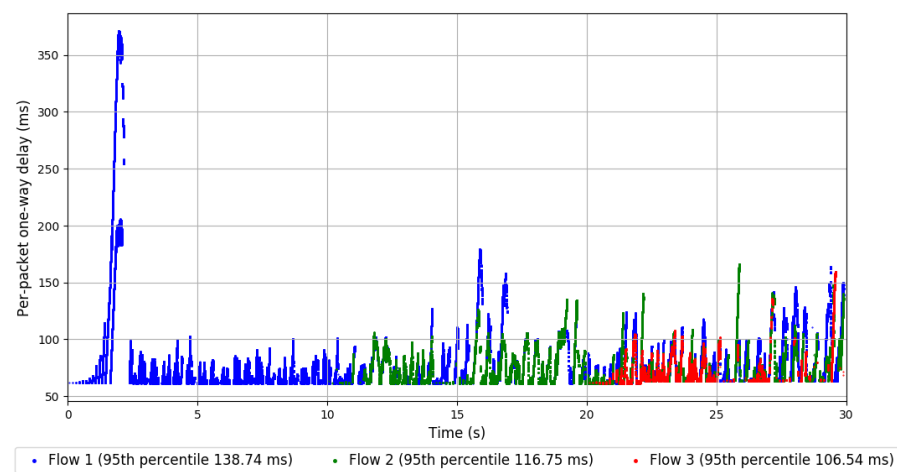
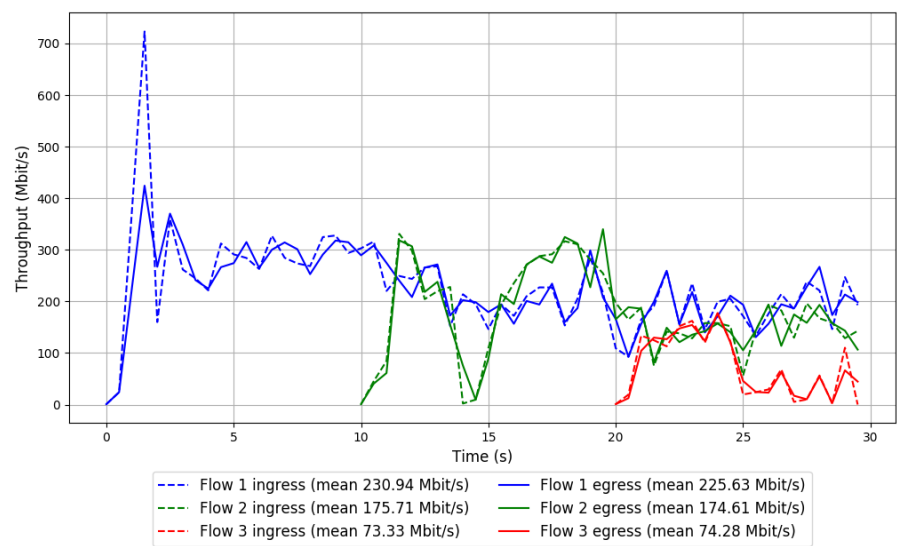
-- Flow 3:

Average throughput: 74.28 Mbit/s

95th percentile per-packet one-way delay: 106.539 ms

Loss rate: 0.01%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-01 09:38:08

End at: 2017-12-01 09:38:38

Below is generated by plot.py at 2017-12-01 13:49:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 310.02 Mbit/s

95th percentile per-packet one-way delay: 161.291 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 140.25 Mbit/s

95th percentile per-packet one-way delay: 147.753 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 156.68 Mbit/s

95th percentile per-packet one-way delay: 176.683 ms

Loss rate: 0.70%

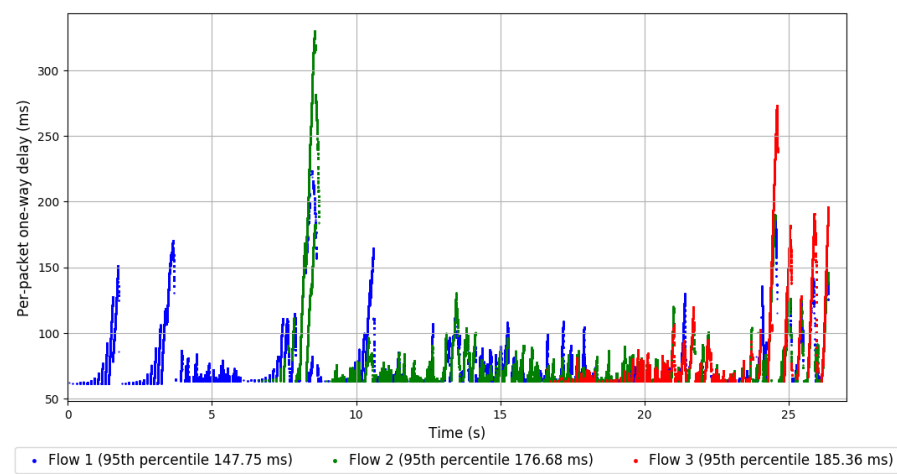
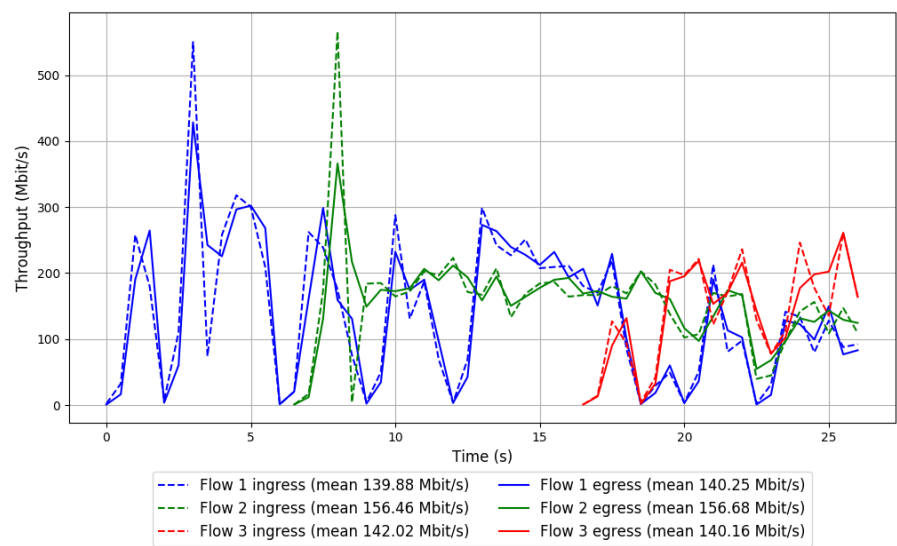
-- Flow 3:

Average throughput: 140.16 Mbit/s

95th percentile per-packet one-way delay: 185.360 ms

Loss rate: 0.04%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-01 09:50:42

End at: 2017-12-01 09:51:12

Below is generated by plot.py at 2017-12-01 13:49:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 263.37 Mbit/s

95th percentile per-packet one-way delay: 140.444 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 130.02 Mbit/s

95th percentile per-packet one-way delay: 126.336 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 156.09 Mbit/s

95th percentile per-packet one-way delay: 148.184 ms

Loss rate: 1.15%

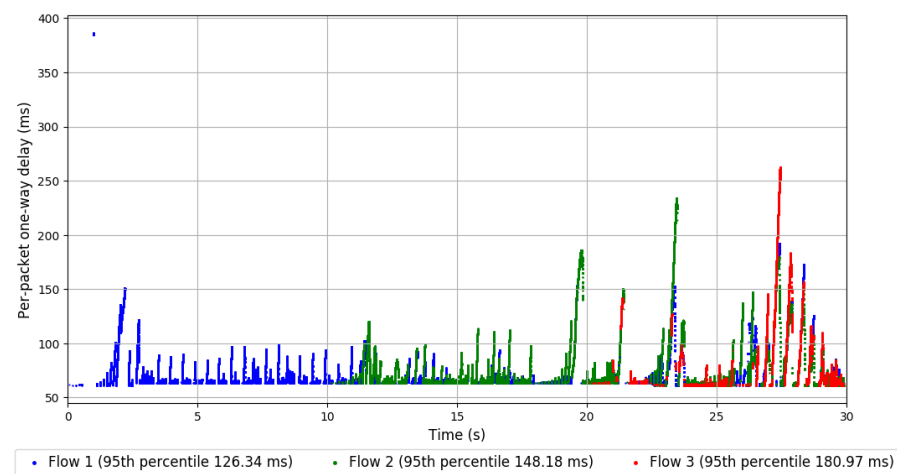
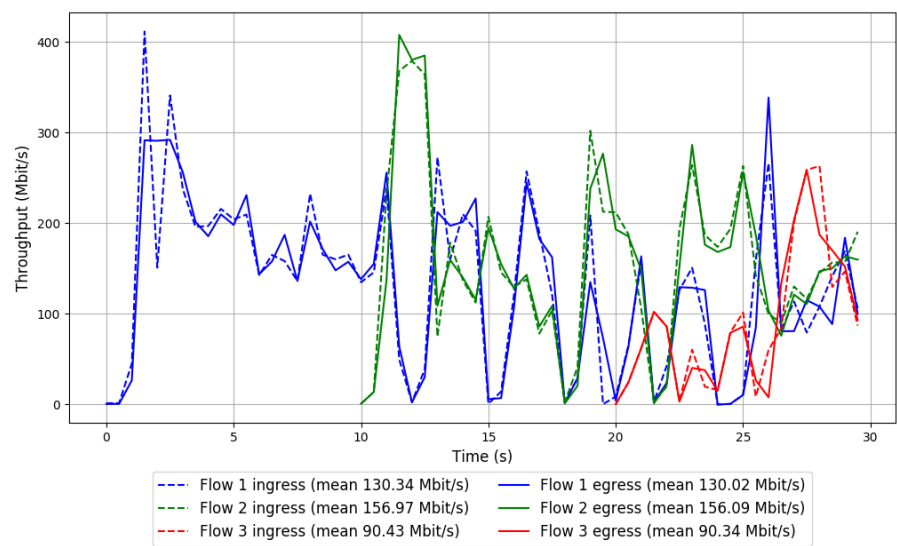
-- Flow 3:

Average throughput: 90.34 Mbit/s

95th percentile per-packet one-way delay: 180.970 ms

Loss rate: 1.37%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-01 10:03:18

End at: 2017-12-01 10:03:48

Below is generated by plot.py at 2017-12-01 13:49:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.07 Mbit/s

95th percentile per-packet one-way delay: 125.507 ms

Loss rate: 2.90%

-- Flow 1:

Average throughput: 202.41 Mbit/s

95th percentile per-packet one-way delay: 142.282 ms

Loss rate: 3.10%

-- Flow 2:

Average throughput: 134.81 Mbit/s

95th percentile per-packet one-way delay: 102.056 ms

Loss rate: 2.29%

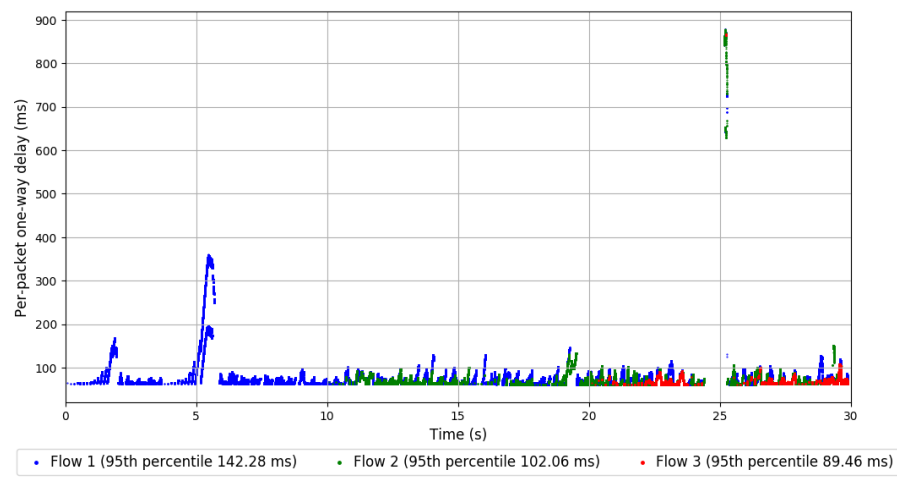
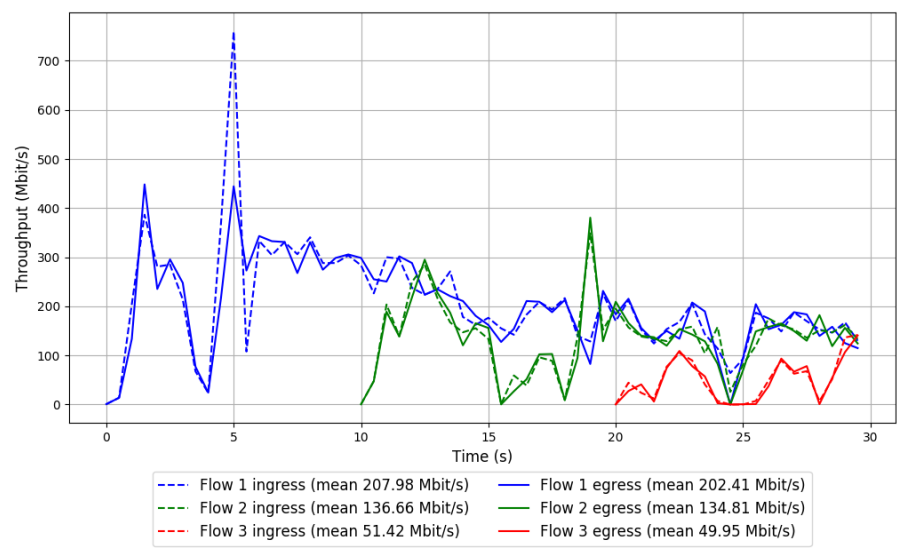
-- Flow 3:

Average throughput: 49.95 Mbit/s

95th percentile per-packet one-way delay: 89.464 ms

Loss rate: 3.76%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-01 10:15:38

End at: 2017-12-01 10:16:08

Below is generated by plot.py at 2017-12-01 13:50:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.37 Mbit/s

95th percentile per-packet one-way delay: 170.119 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 192.69 Mbit/s

95th percentile per-packet one-way delay: 154.090 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 158.02 Mbit/s

95th percentile per-packet one-way delay: 181.785 ms

Loss rate: 1.45%

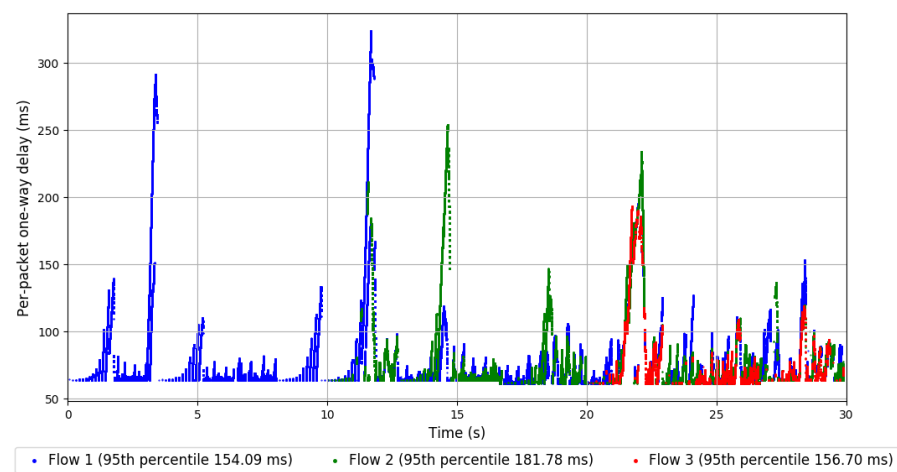
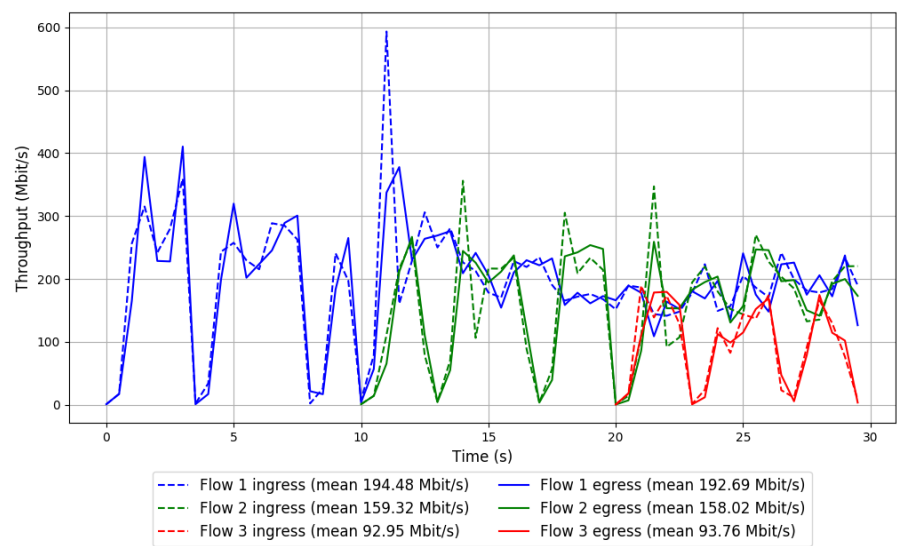
-- Flow 3:

Average throughput: 93.76 Mbit/s

95th percentile per-packet one-way delay: 156.704 ms

Loss rate: 0.38%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-01 10:28:04

End at: 2017-12-01 10:28:34

Below is generated by plot.py at 2017-12-01 13:51:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 307.62 Mbit/s

95th percentile per-packet one-way delay: 107.617 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 194.01 Mbit/s

95th percentile per-packet one-way delay: 113.357 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 125.17 Mbit/s

95th percentile per-packet one-way delay: 101.796 ms

Loss rate: 0.01%

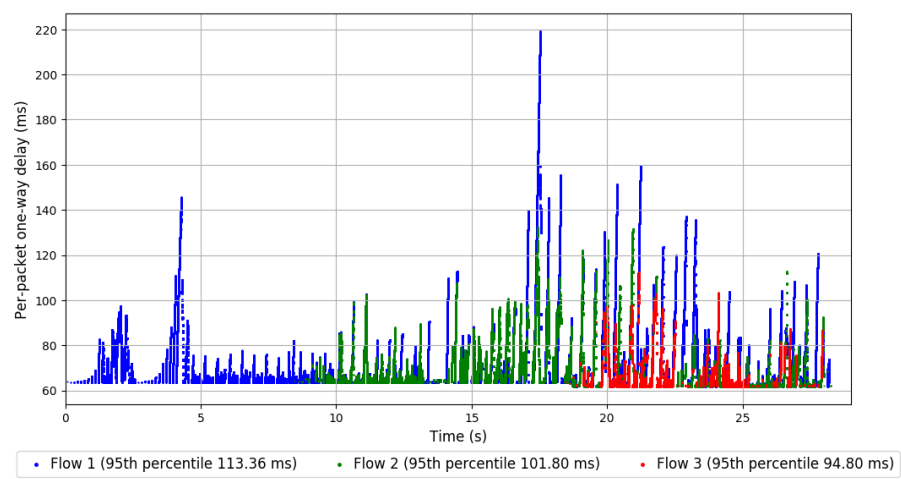
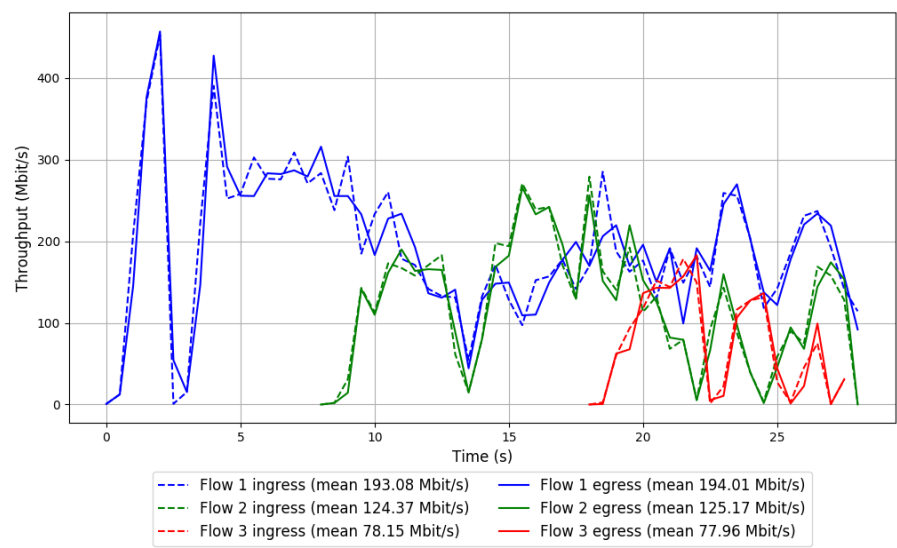
-- Flow 3:

Average throughput: 77.96 Mbit/s

95th percentile per-packet one-way delay: 94.797 ms

Loss rate: 0.01%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-01 10:40:29

End at: 2017-12-01 10:40:59

Below is generated by plot.py at 2017-12-01 13:53:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.30 Mbit/s

95th percentile per-packet one-way delay: 231.288 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 186.94 Mbit/s

95th percentile per-packet one-way delay: 165.192 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 197.70 Mbit/s

95th percentile per-packet one-way delay: 263.451 ms

Loss rate: 2.95%

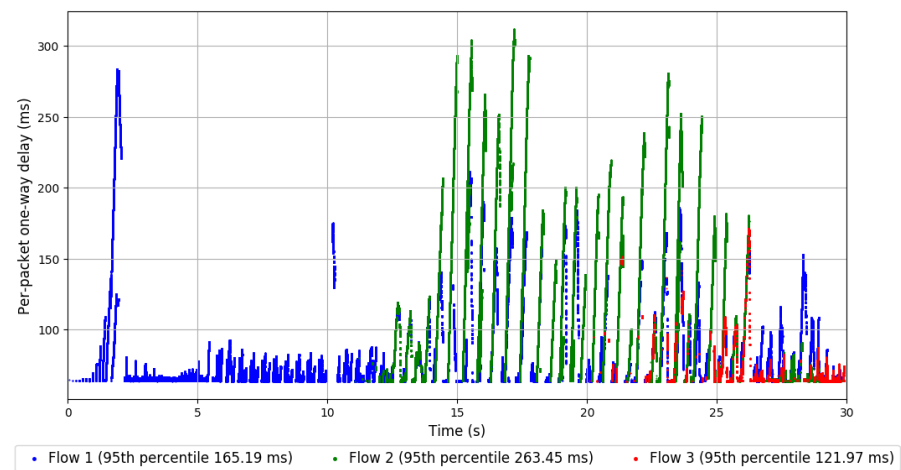
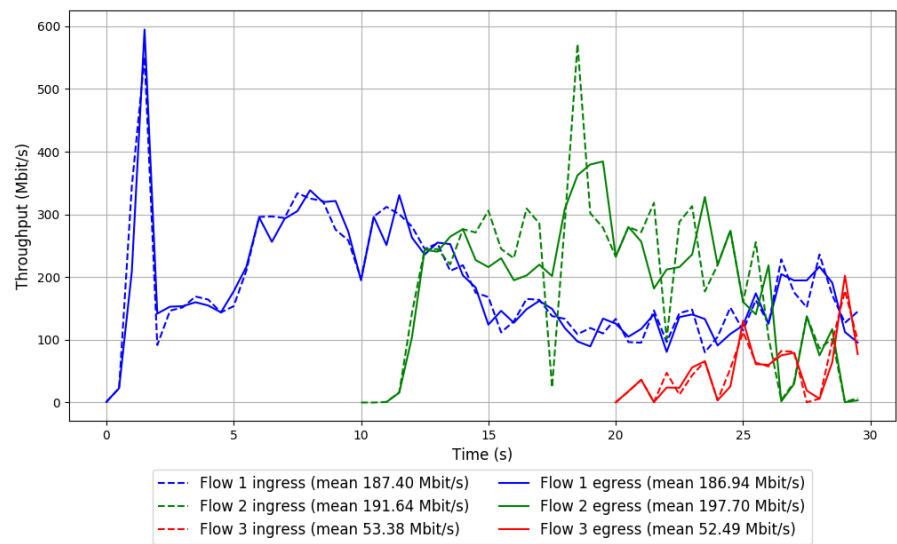
-- Flow 3:

Average throughput: 52.49 Mbit/s

95th percentile per-packet one-way delay: 121.972 ms

Loss rate: 2.93%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-01 10:52:57

End at: 2017-12-01 10:53:27

Below is generated by plot.py at 2017-12-01 13:53:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 295.55 Mbit/s

95th percentile per-packet one-way delay: 194.418 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 182.51 Mbit/s

95th percentile per-packet one-way delay: 197.623 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 113.57 Mbit/s

95th percentile per-packet one-way delay: 195.163 ms

Loss rate: 0.70%

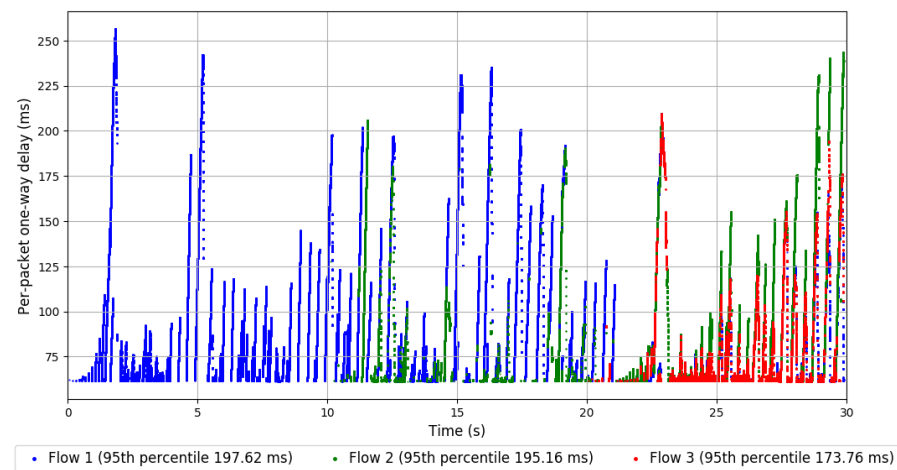
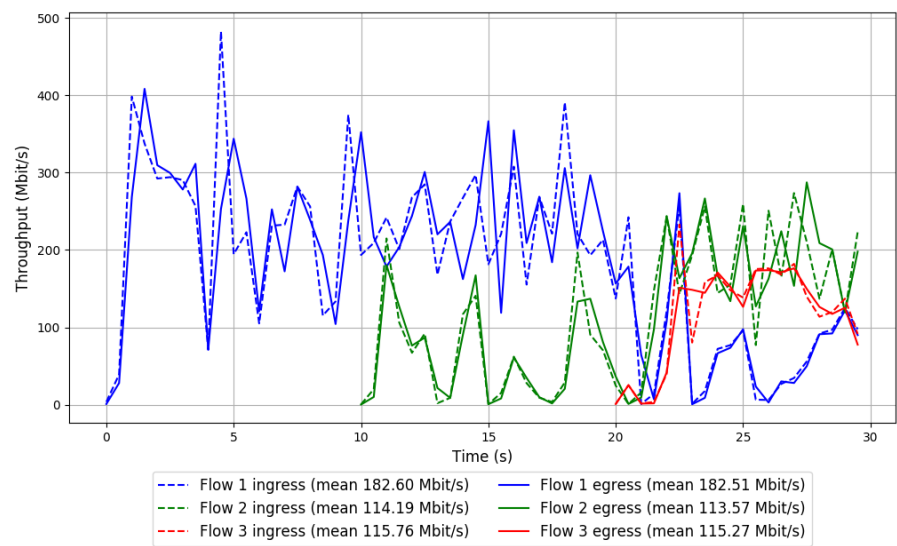
-- Flow 3:

Average throughput: 115.27 Mbit/s

95th percentile per-packet one-way delay: 173.764 ms

Loss rate: 1.89%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-01 09:02:37

End at: 2017-12-01 09:03:07

Below is generated by plot.py at 2017-12-01 13:53:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.32 Mbit/s

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

Loss rate: 0.58%

-- Flow 1:

Average throughput: 71.29 Mbit/s

95th percentile per-packet one-way delay: 63.695 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 68.22 Mbit/s

95th percentile per-packet one-way delay: 63.711 ms

Loss rate: 0.85%

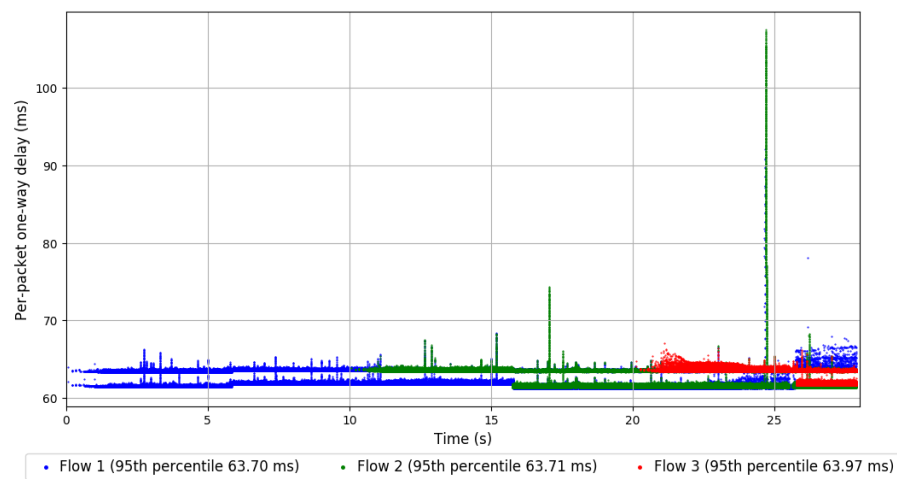
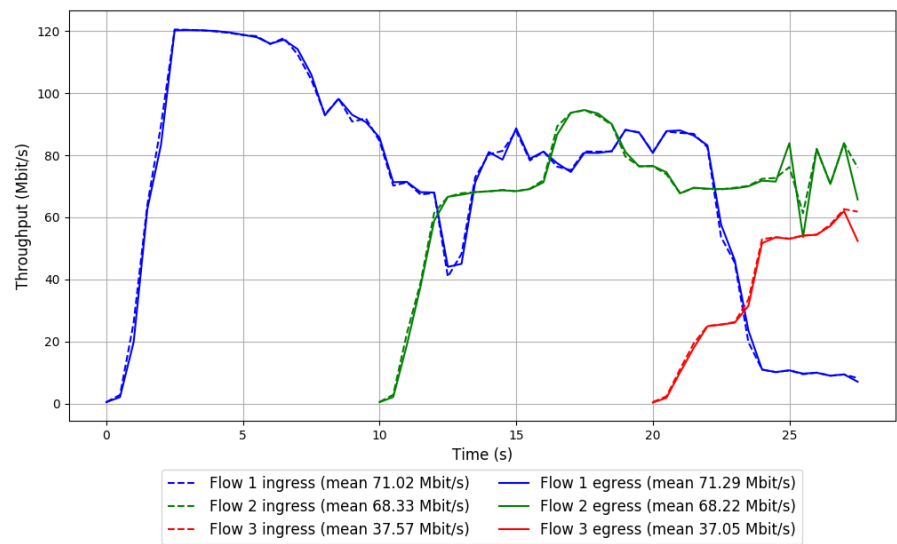
-- Flow 3:

Average throughput: 37.05 Mbit/s

95th percentile per-packet one-way delay: 63.966 ms

Loss rate: 2.96%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-01 09:15:03

End at: 2017-12-01 09:15:33

Below is generated by plot.py at 2017-12-01 13:53:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.70 Mbit/s

95th percentile per-packet one-way delay: 63.925 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 70.21 Mbit/s

95th percentile per-packet one-way delay: 63.983 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 70.22 Mbit/s

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

Loss rate: 0.80%

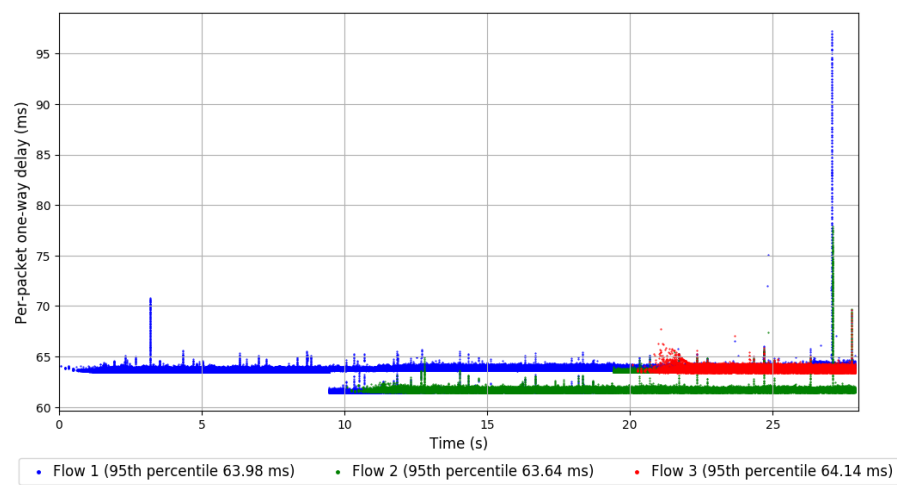
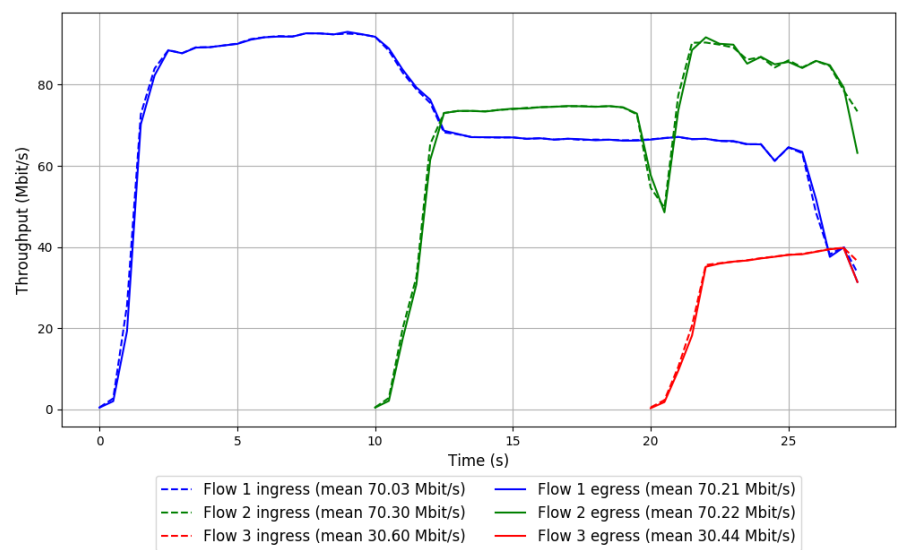
-- Flow 3:

Average throughput: 30.44 Mbit/s

95th percentile per-packet one-way delay: 64.139 ms

Loss rate: 2.12%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-01 09:27:37

End at: 2017-12-01 09:28:07

Below is generated by plot.py at 2017-12-01 13:53:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.54 Mbit/s

95th percentile per-packet one-way delay: 63.622 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 81.10 Mbit/s

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

Loss rate: 0.31%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 84.212 ms

Loss rate: 46.17%

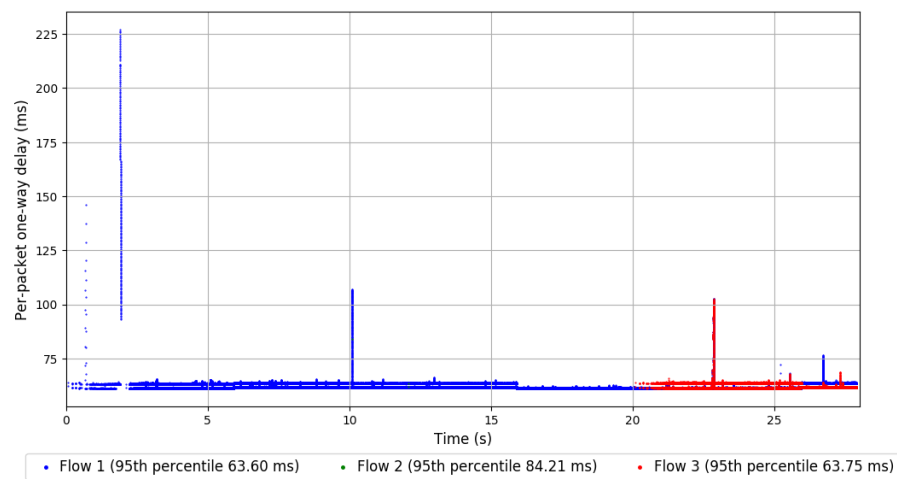
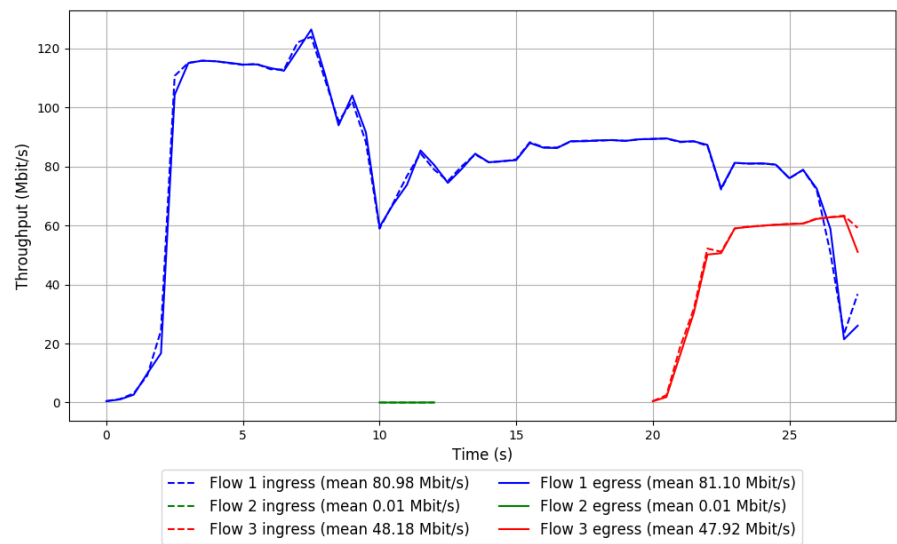
-- Flow 3:

Average throughput: 47.92 Mbit/s

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

Loss rate: 2.12%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-01 09:39:56

End at: 2017-12-01 09:40:26

Below is generated by plot.py at 2017-12-01 13:53:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.45 Mbit/s

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

Loss rate: 0.67%

-- Flow 1:

Average throughput: 60.12 Mbit/s

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

Loss rate: 0.22%

-- Flow 2:

Average throughput: 69.55 Mbit/s

95th percentile per-packet one-way delay: 63.836 ms

Loss rate: 0.69%

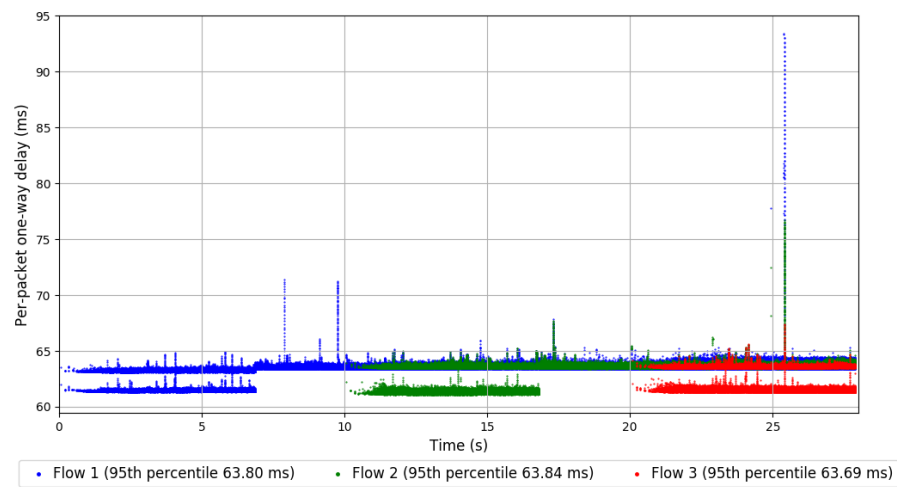
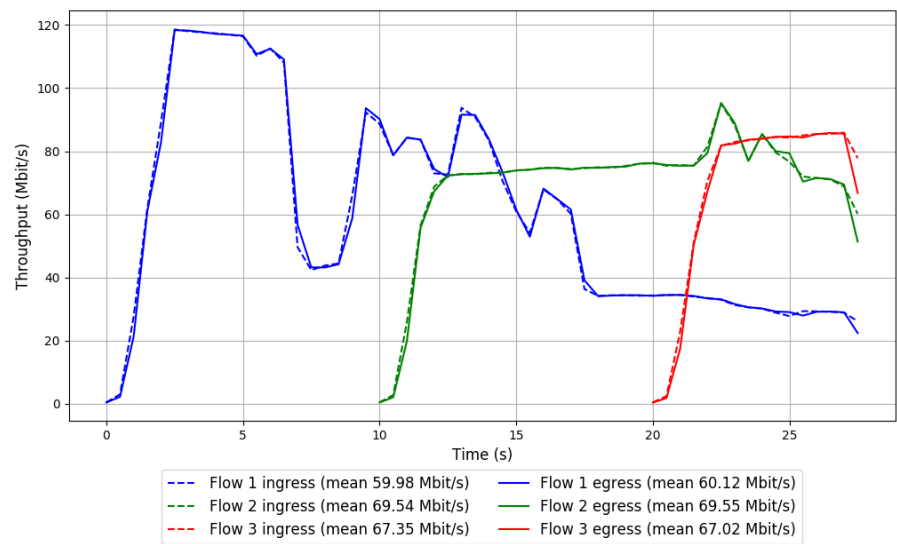
-- Flow 3:

Average throughput: 67.02 Mbit/s

95th percentile per-packet one-way delay: 63.687 ms

Loss rate: 2.05%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-01 09:52:30

End at: 2017-12-01 09:53:00

Below is generated by plot.py at 2017-12-01 13:54:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.36 Mbit/s

95th percentile per-packet one-way delay: 63.810 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 80.51 Mbit/s

95th percentile per-packet one-way delay: 63.765 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 56.15 Mbit/s

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

Loss rate: 0.71%

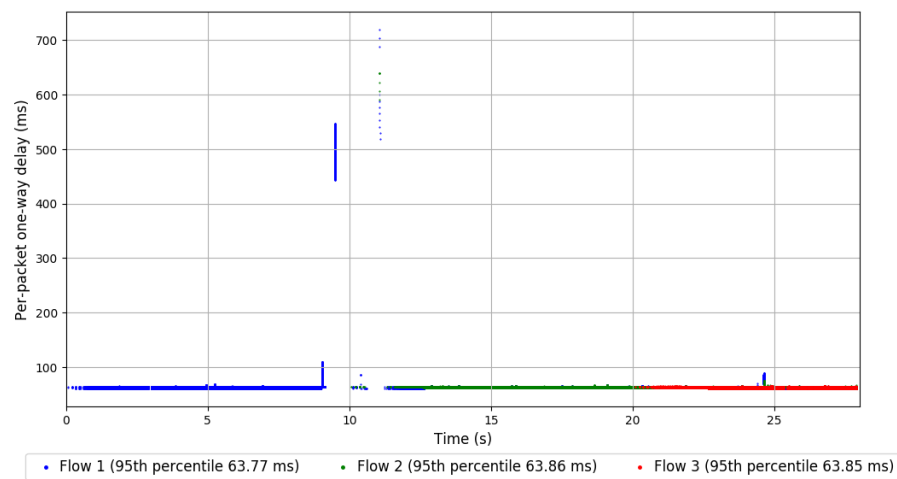
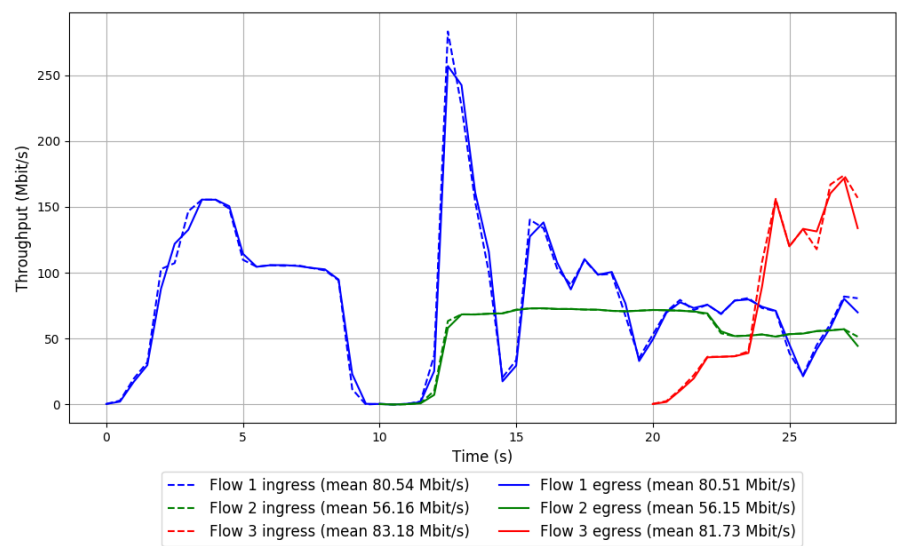
-- Flow 3:

Average throughput: 81.73 Mbit/s

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

Loss rate: 3.33%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-01 10:05:08

End at: 2017-12-01 10:05:38

Below is generated by plot.py at 2017-12-01 13:55:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.63 Mbit/s

95th percentile per-packet one-way delay: 63.863 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 68.01 Mbit/s

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

Loss rate: 0.45%

-- Flow 2:

Average throughput: 63.61 Mbit/s

95th percentile per-packet one-way delay: 63.695 ms

Loss rate: 0.59%

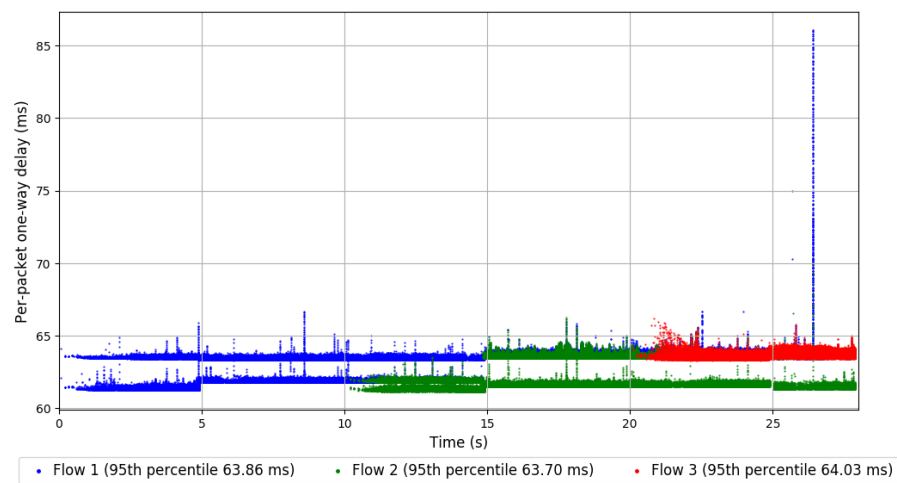
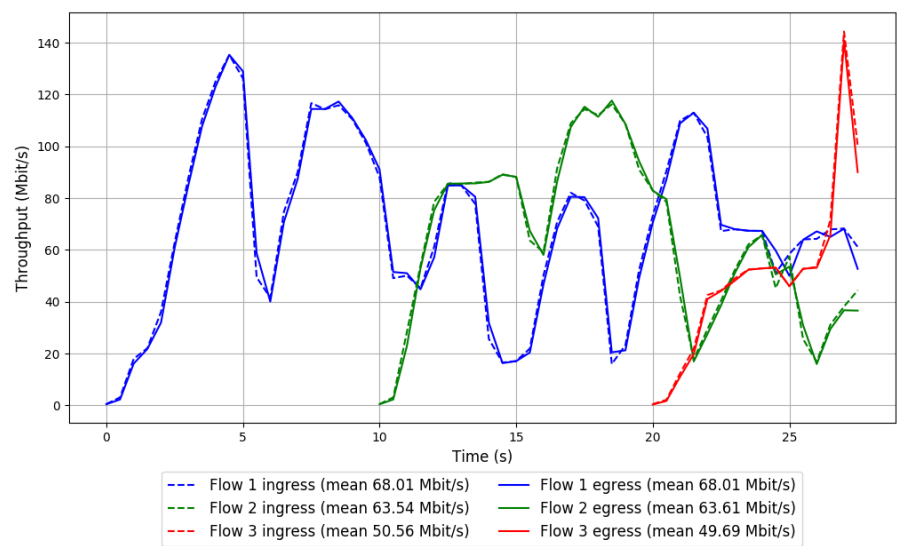
-- Flow 3:

Average throughput: 49.69 Mbit/s

95th percentile per-packet one-way delay: 64.030 ms

Loss rate: 3.33%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-01 10:17:29

End at: 2017-12-01 10:17:59

Below is generated by plot.py at 2017-12-01 13:55:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.08 Mbit/s

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

Loss rate: 1.07%

-- Flow 1:

Average throughput: 63.64 Mbit/s

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

Loss rate: 0.70%

-- Flow 2:

Average throughput: 61.79 Mbit/s

95th percentile per-packet one-way delay: 63.724 ms

Loss rate: 1.25%

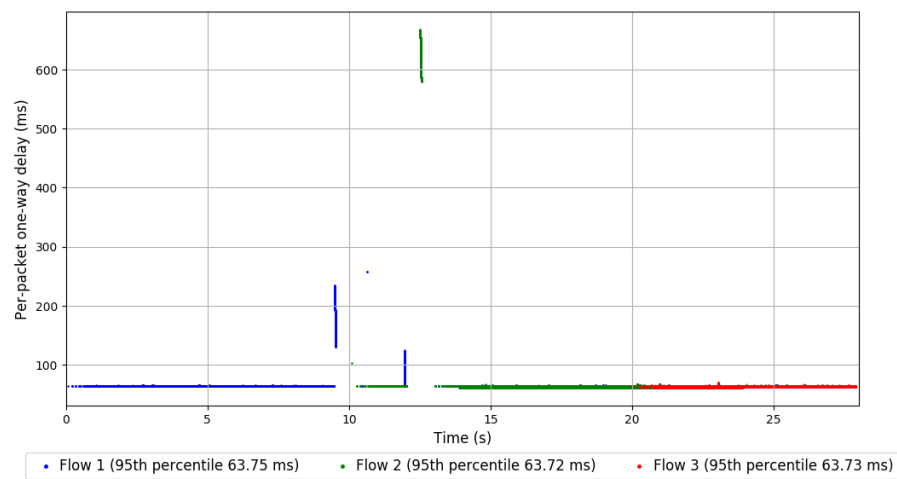
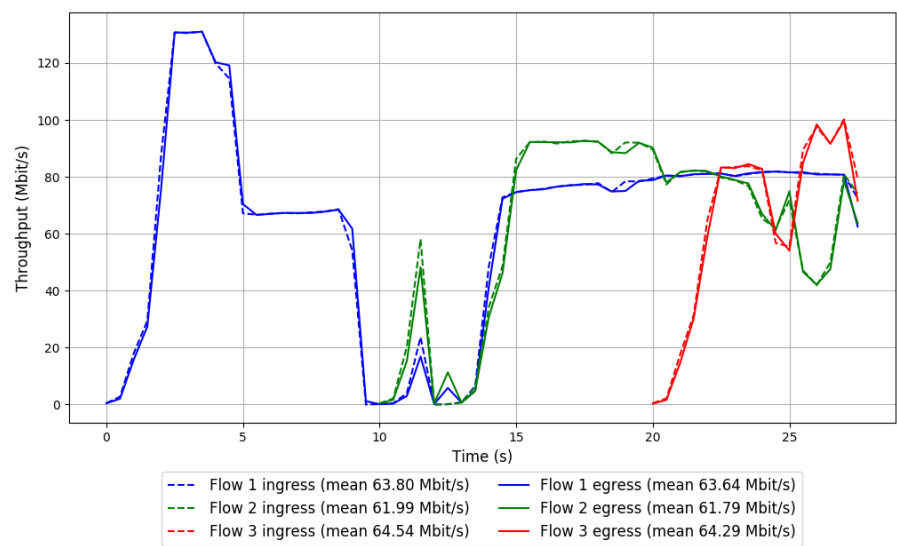
-- Flow 3:

Average throughput: 64.29 Mbit/s

95th percentile per-packet one-way delay: 63.725 ms

Loss rate: 1.94%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-01 10:29:53

End at: 2017-12-01 10:30:23

Below is generated by plot.py at 2017-12-01 13:55:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.77 Mbit/s

95th percentile per-packet one-way delay: 63.647 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 73.08 Mbit/s

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

Loss rate: 0.29%

-- Flow 2:

Average throughput: 65.04 Mbit/s

95th percentile per-packet one-way delay: 63.563 ms

Loss rate: 0.93%

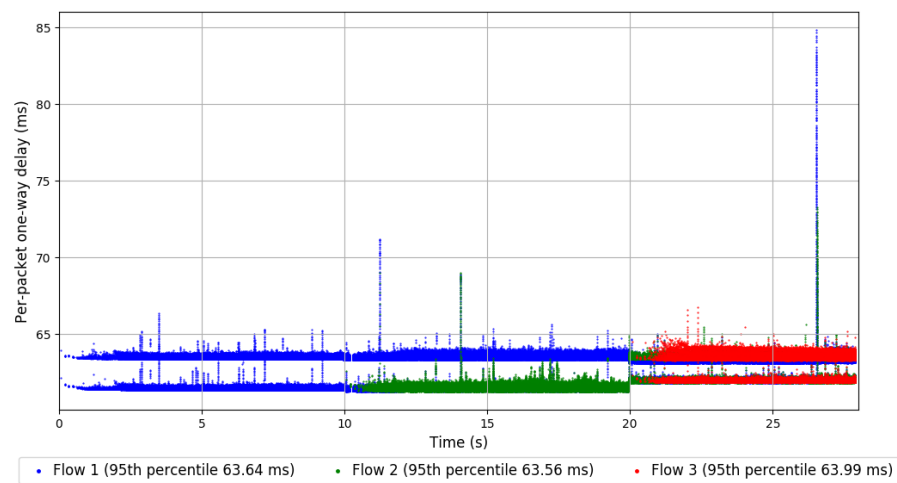
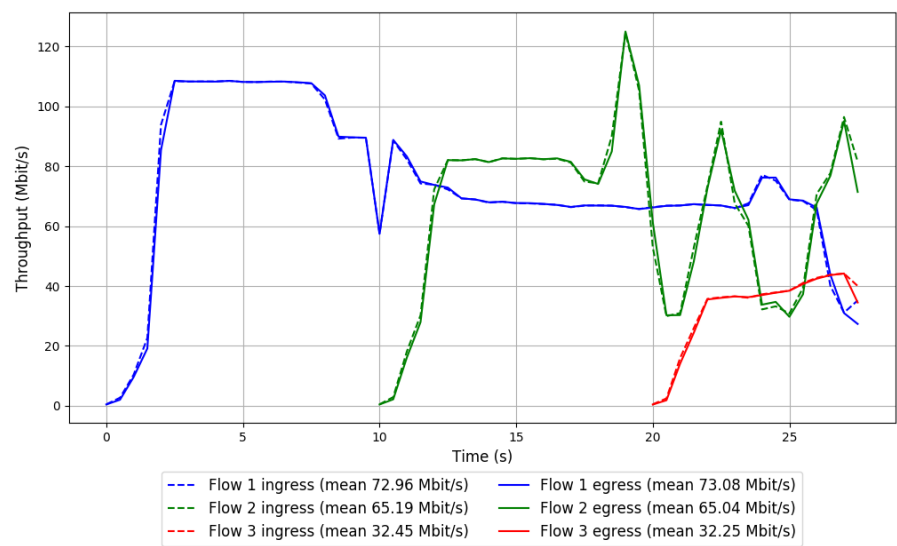
-- Flow 3:

Average throughput: 32.25 Mbit/s

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

Loss rate: 2.14%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-01 10:42:16

End at: 2017-12-01 10:42:46

Below is generated by plot.py at 2017-12-01 13:55:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.19 Mbit/s

95th percentile per-packet one-way delay: 63.891 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 70.54 Mbit/s

95th percentile per-packet one-way delay: 63.828 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 58.28 Mbit/s

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

Loss rate: 0.16%

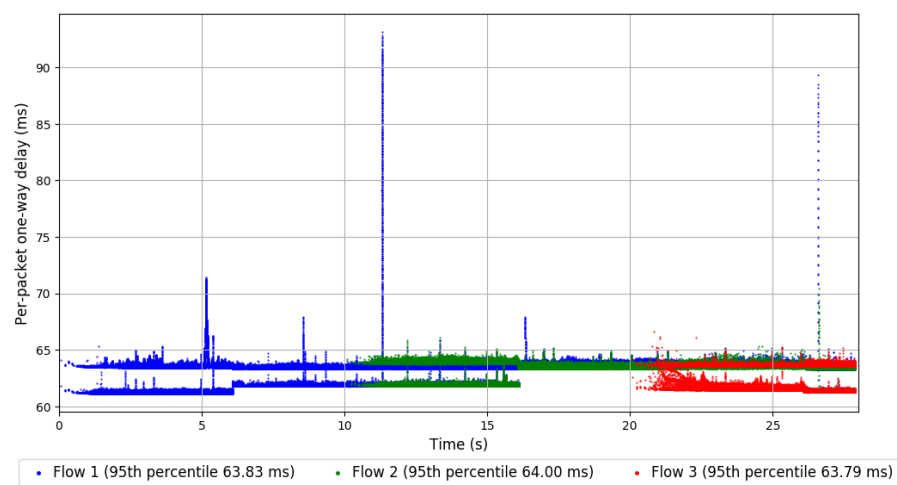
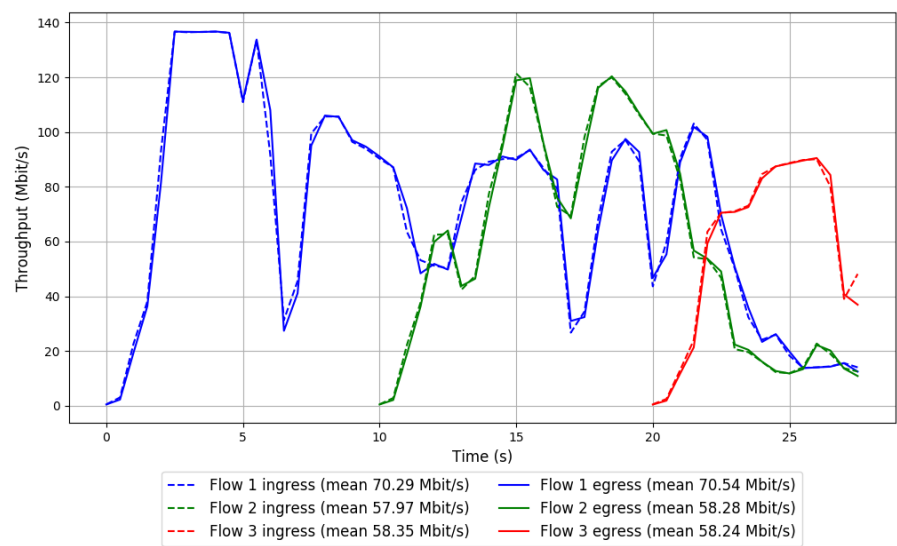
-- Flow 3:

Average throughput: 58.24 Mbit/s

95th percentile per-packet one-way delay: 63.787 ms

Loss rate: 1.77%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-01 10:54:47

End at: 2017-12-01 10:55:17

Below is generated by plot.py at 2017-12-01 13:57:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.01 Mbit/s

95th percentile per-packet one-way delay: 63.958 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 81.04 Mbit/s

95th percentile per-packet one-way delay: 63.976 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 67.73 Mbit/s

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

Loss rate: 0.69%

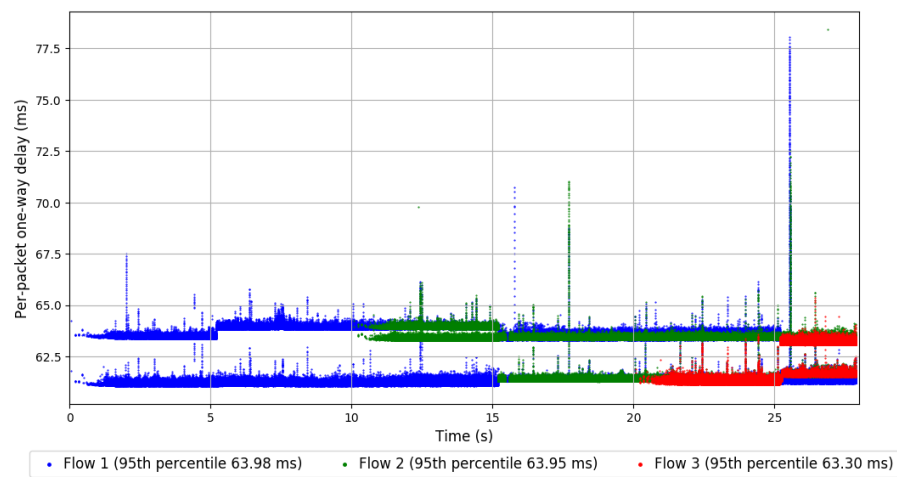
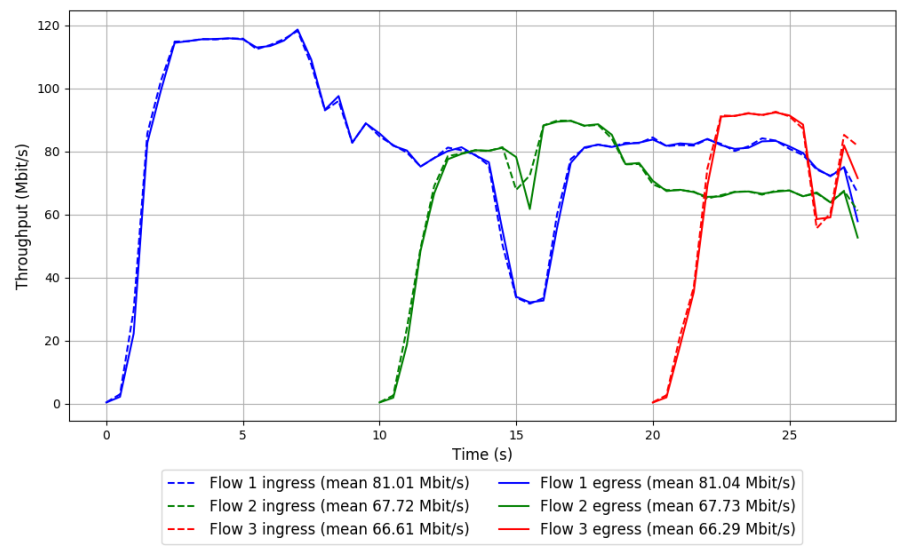
-- Flow 3:

Average throughput: 66.29 Mbit/s

95th percentile per-packet one-way delay: 63.297 ms

Loss rate: 2.05%

Run 10: Report of Copa — Data Link

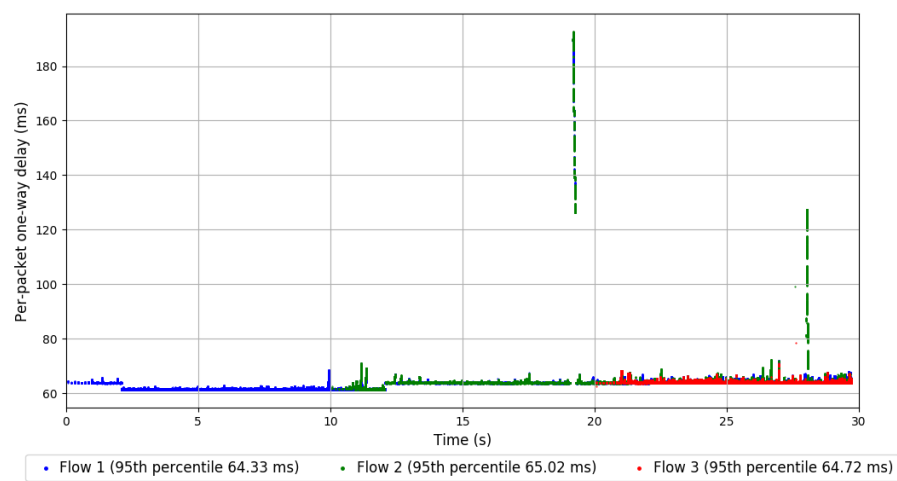
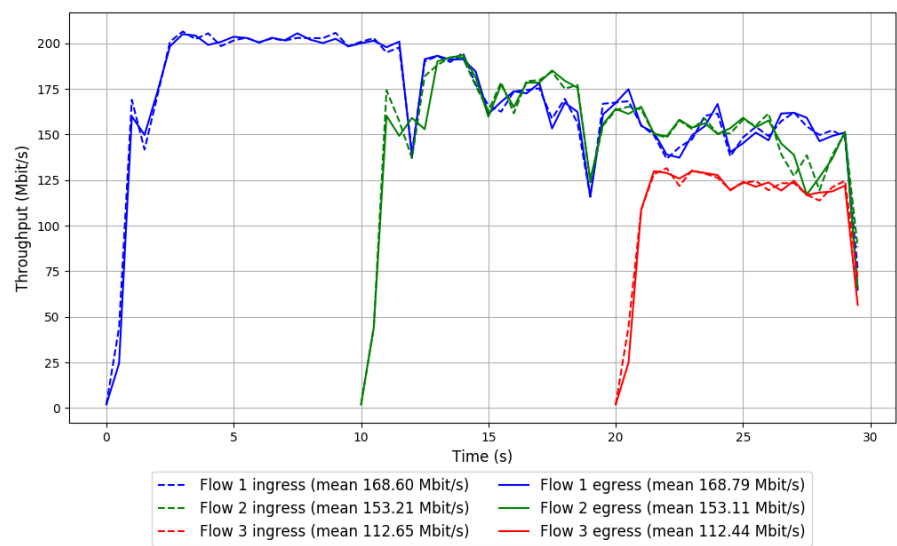


```
Run 1: Statistics of Indigo

Start at: 2017-12-01 08:56:22
End at: 2017-12-01 08:56:52

# Below is generated by plot.py at 2017-12-01 13:58:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 306.84 Mbit/s
95th percentile per-packet one-way delay: 64.597 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 168.79 Mbit/s
95th percentile per-packet one-way delay: 64.325 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 153.11 Mbit/s
95th percentile per-packet one-way delay: 65.023 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 112.44 Mbit/s
95th percentile per-packet one-way delay: 64.722 ms
Loss rate: 1.44%
```


Run 1: Report of Indigo — Data Link

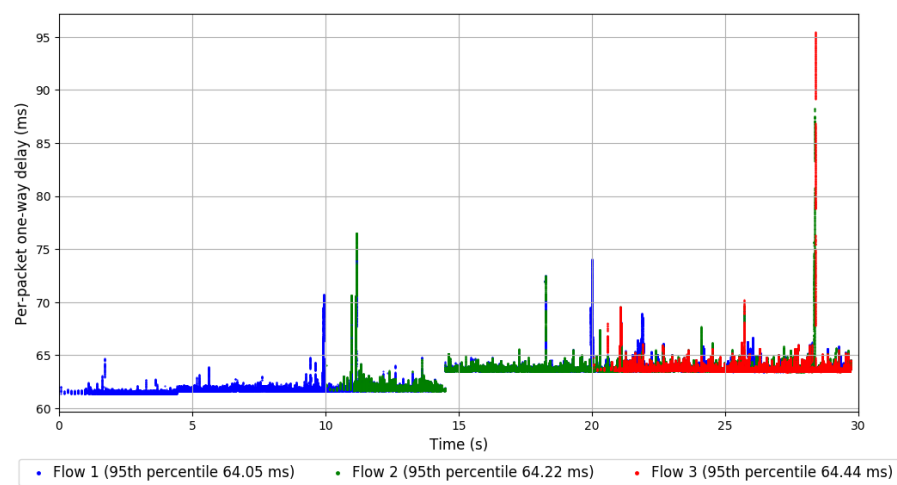
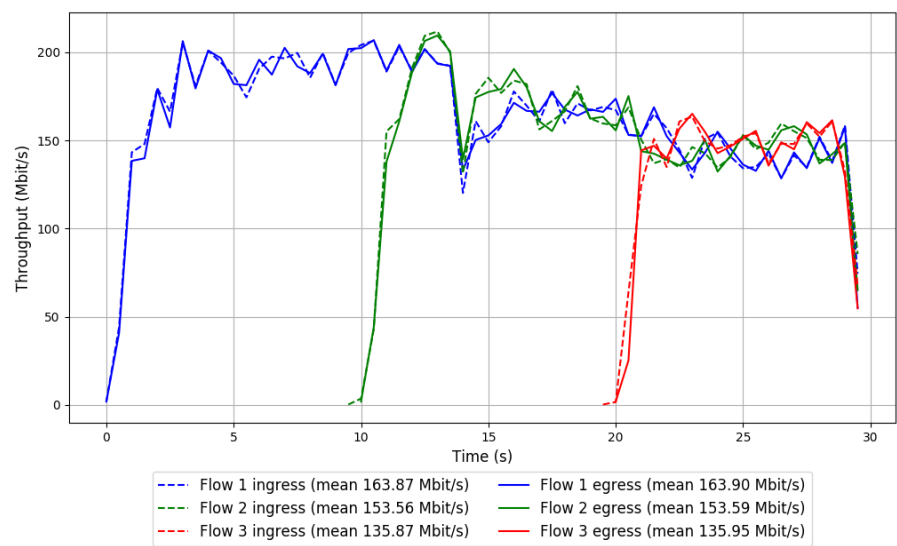


```
Run 2: Statistics of Indigo

Start at: 2017-12-01 09:08:50
End at: 2017-12-01 09:09:20

# Below is generated by plot.py at 2017-12-01 13:59:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.99 Mbit/s
95th percentile per-packet one-way delay: 64.180 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 163.90 Mbit/s
95th percentile per-packet one-way delay: 64.050 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 153.59 Mbit/s
95th percentile per-packet one-way delay: 64.221 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 135.95 Mbit/s
95th percentile per-packet one-way delay: 64.444 ms
Loss rate: 1.27%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-01 09:21:26

End at: 2017-12-01 09:21:56

Below is generated by plot.py at 2017-12-01 14:00:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.40 Mbit/s

95th percentile per-packet one-way delay: 65.193 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 169.35 Mbit/s

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

Loss rate: 0.43%

-- Flow 2:

Average throughput: 159.68 Mbit/s

95th percentile per-packet one-way delay: 65.526 ms

Loss rate: 0.61%

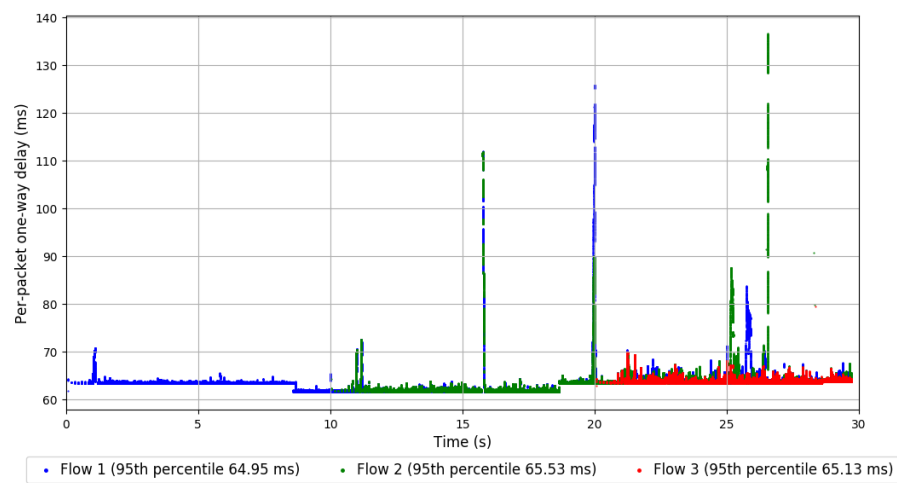
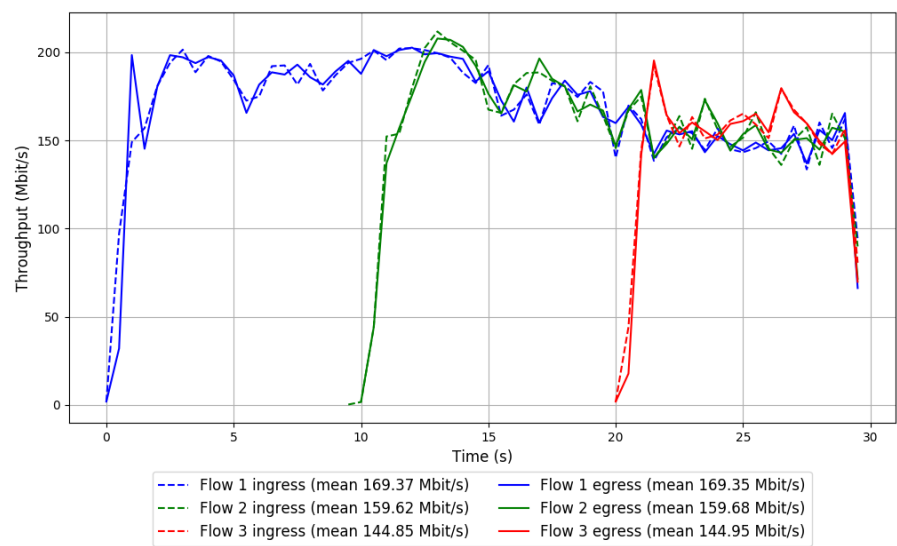
-- Flow 3:

Average throughput: 144.95 Mbit/s

95th percentile per-packet one-way delay: 65.129 ms

Loss rate: 1.22%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-01 09:33:51

End at: 2017-12-01 09:34:21

Below is generated by plot.py at 2017-12-01 14:00:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 318.86 Mbit/s

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

Loss rate: 0.58%

-- Flow 1:

Average throughput: 169.40 Mbit/s

95th percentile per-packet one-way delay: 63.997 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 156.00 Mbit/s

95th percentile per-packet one-way delay: 64.365 ms

Loss rate: 0.71%

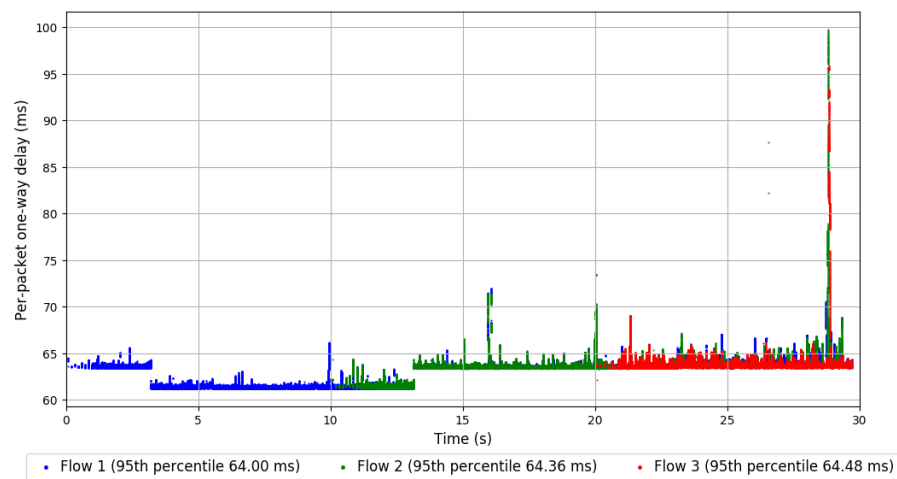
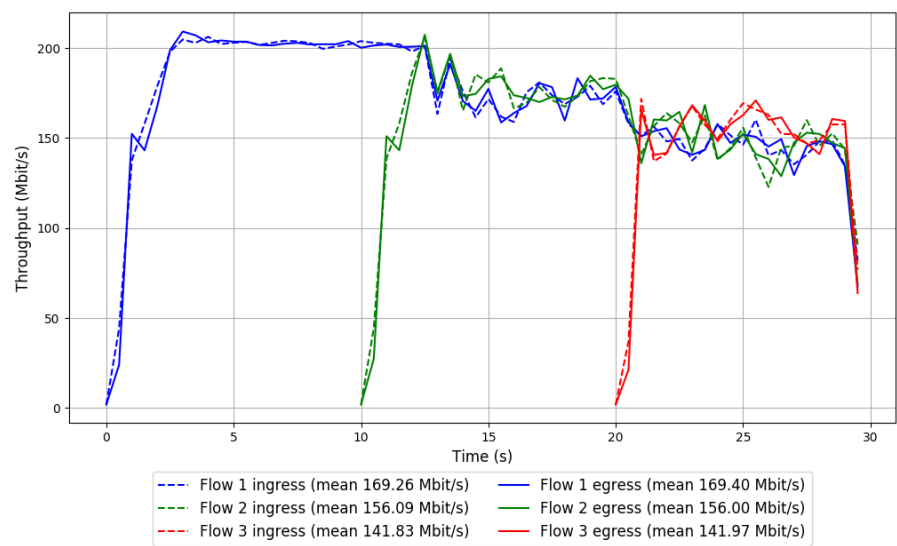
-- Flow 3:

Average throughput: 141.97 Mbit/s

95th percentile per-packet one-way delay: 64.483 ms

Loss rate: 1.16%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-01 09:46:20

End at: 2017-12-01 09:46:50

Below is generated by plot.py at 2017-12-01 14:00:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 313.88 Mbit/s

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

Loss rate: 0.61%

-- Flow 1:

Average throughput: 174.67 Mbit/s

95th percentile per-packet one-way delay: 64.534 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 158.92 Mbit/s

95th percentile per-packet one-way delay: 65.500 ms

Loss rate: 0.65%

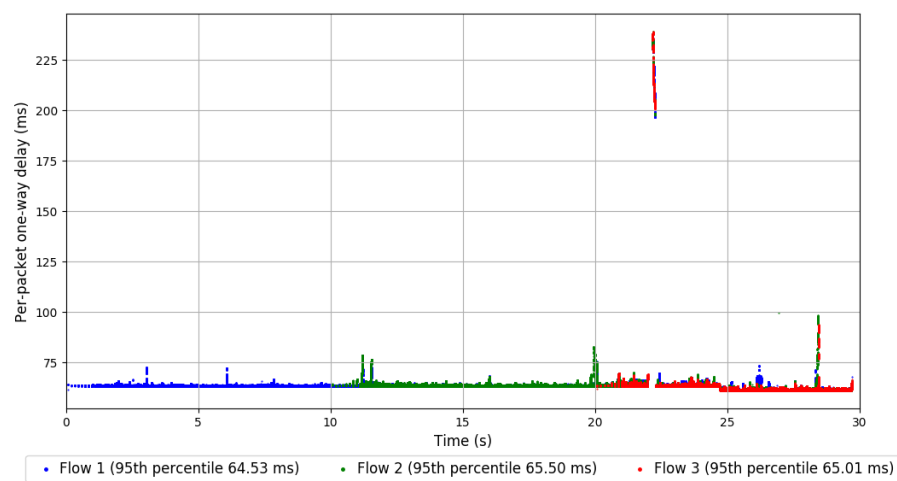
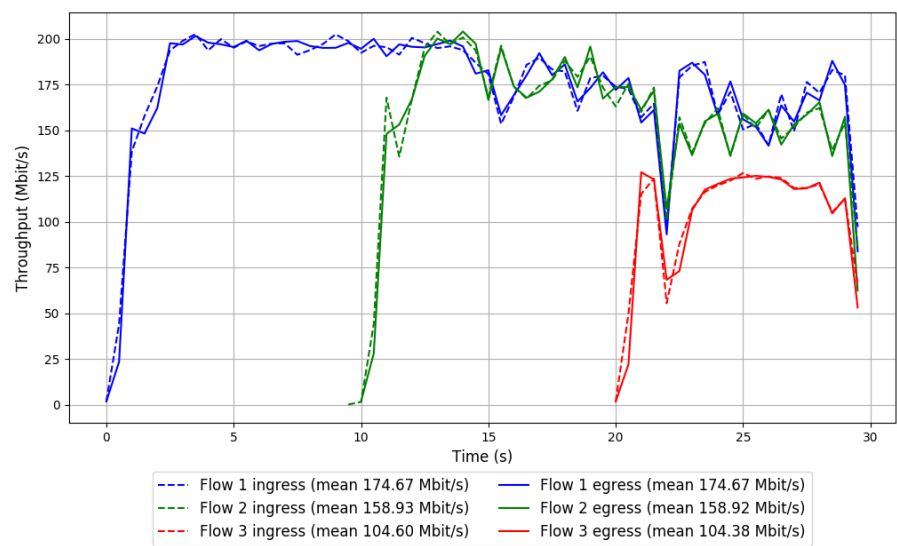
-- Flow 3:

Average throughput: 104.38 Mbit/s

95th percentile per-packet one-way delay: 65.008 ms

Loss rate: 1.50%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-01 09:58:50

End at: 2017-12-01 09:59:20

Below is generated by plot.py at 2017-12-01 14:01:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 318.17 Mbit/s

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

Loss rate: 0.62%

-- Flow 1:

Average throughput: 171.73 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 155.83 Mbit/s

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

Loss rate: 0.59%

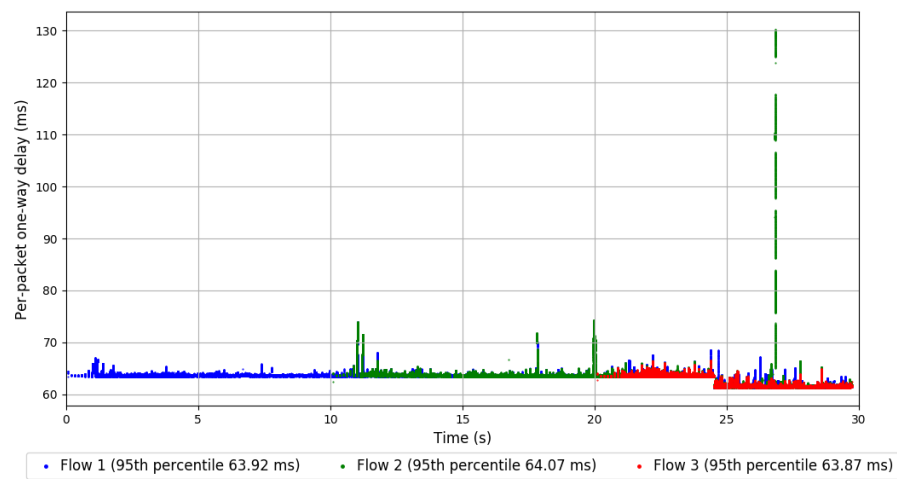
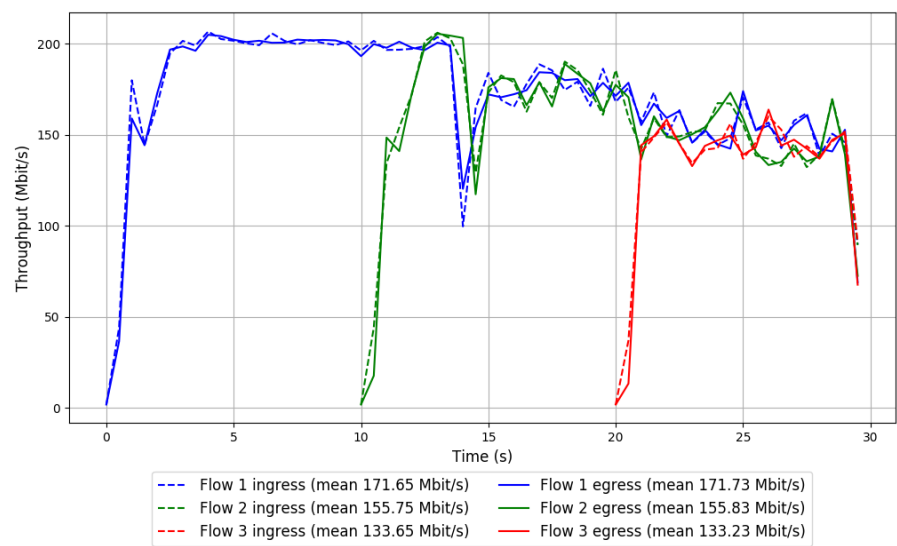
-- Flow 3:

Average throughput: 133.23 Mbit/s

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

Loss rate: 1.61%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-01 10:11:27

End at: 2017-12-01 10:11:57

Below is generated by plot.py at 2017-12-01 14:01:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.07 Mbit/s

95th percentile per-packet one-way delay: 64.382 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 174.91 Mbit/s

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

Loss rate: 0.41%

-- Flow 2:

Average throughput: 161.85 Mbit/s

95th percentile per-packet one-way delay: 64.437 ms

Loss rate: 0.71%

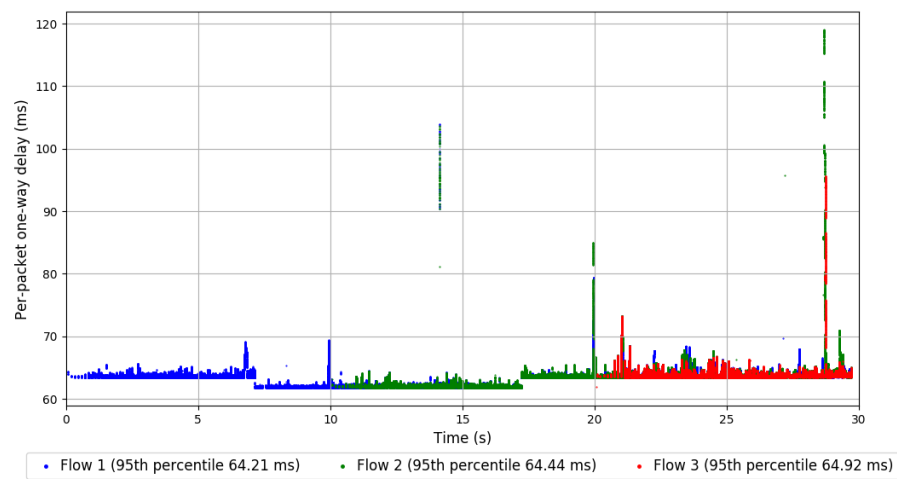
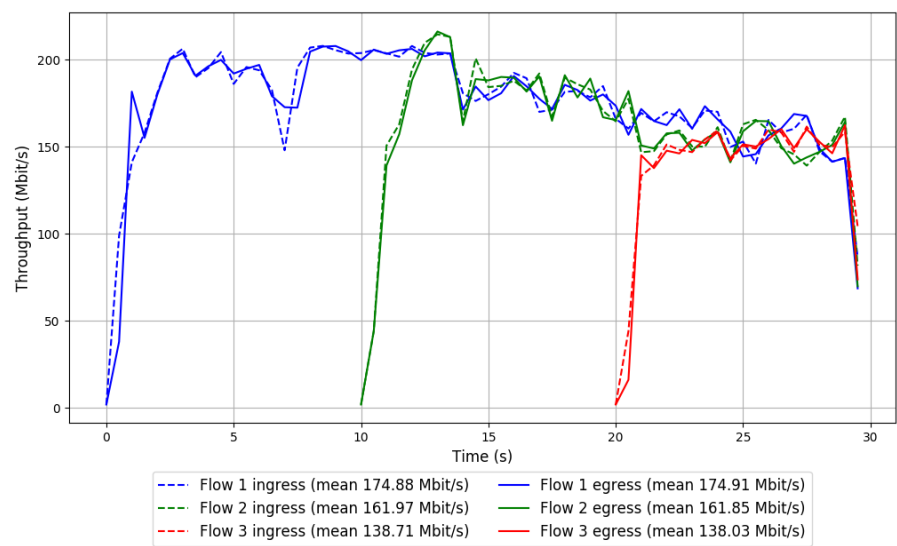
-- Flow 3:

Average throughput: 138.03 Mbit/s

95th percentile per-packet one-way delay: 64.918 ms

Loss rate: 1.75%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-01 10:23:52

End at: 2017-12-01 10:24:22

Below is generated by plot.py at 2017-12-01 14:03:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.28 Mbit/s

95th percentile per-packet one-way delay: 64.659 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 171.64 Mbit/s

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

Loss rate: 0.32%

-- Flow 2:

Average throughput: 154.27 Mbit/s

95th percentile per-packet one-way delay: 65.165 ms

Loss rate: 0.57%

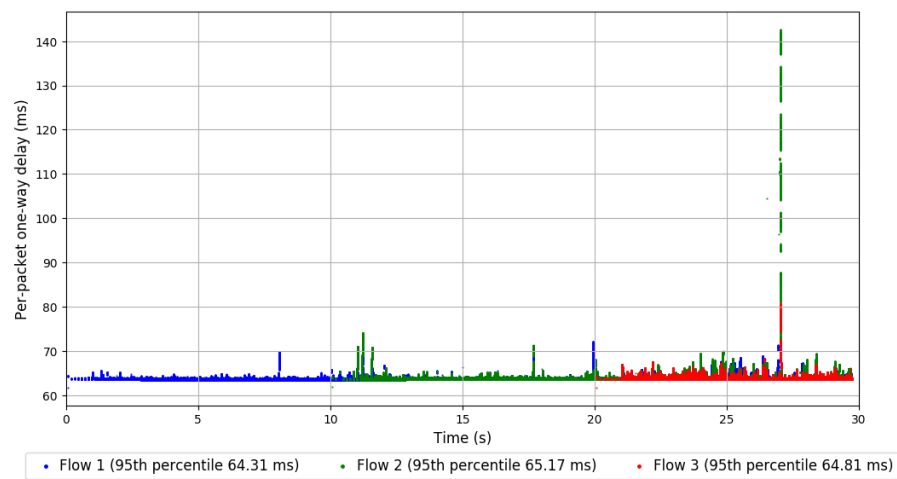
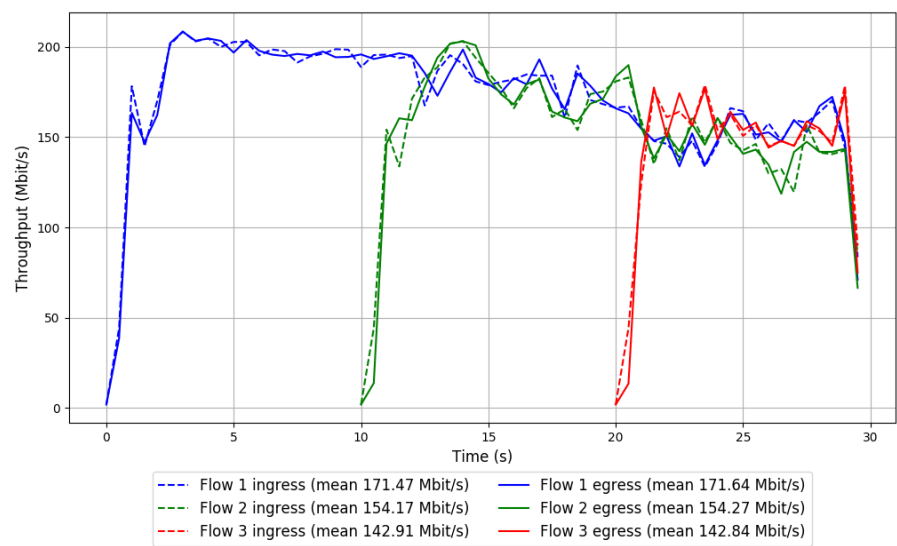
-- Flow 3:

Average throughput: 142.84 Mbit/s

95th percentile per-packet one-way delay: 64.814 ms

Loss rate: 1.31%

Run 8: Report of Indigo — Data Link

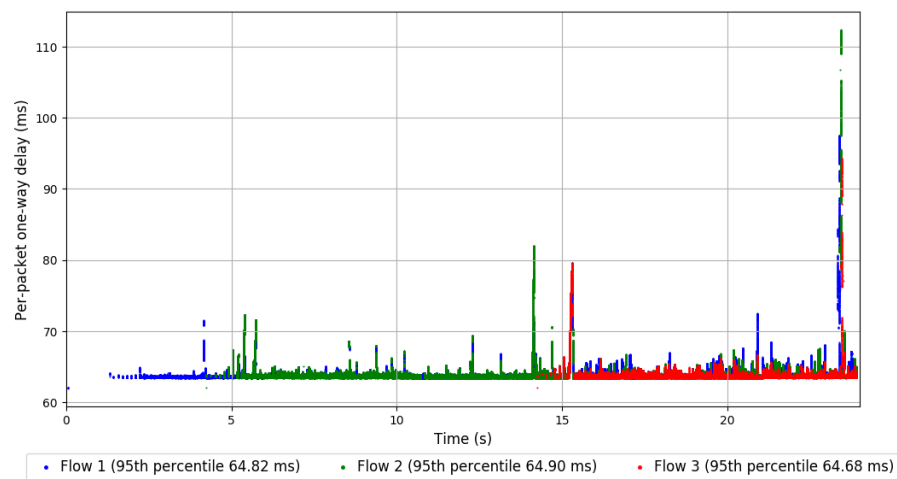
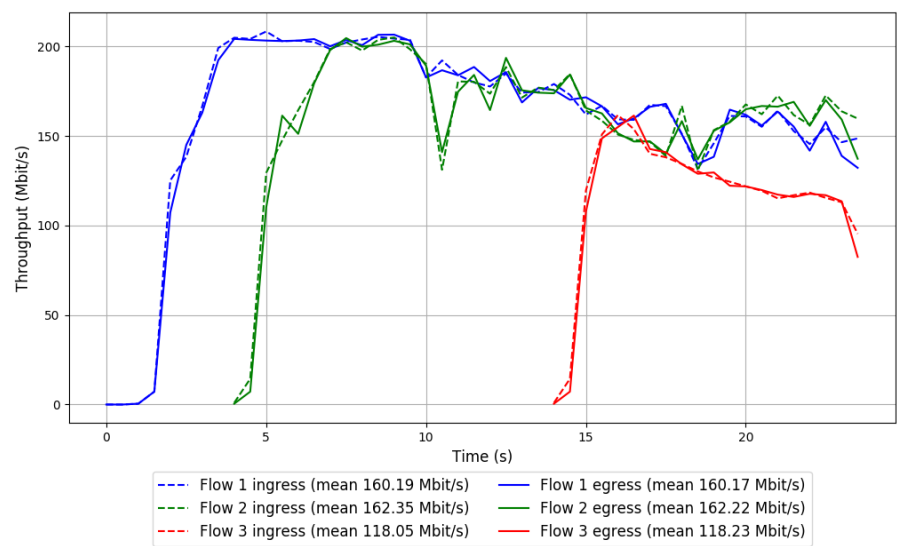


Run 9: Statistics of Indigo

Start at: 2017-12-01 10:36:18

End at: 2017-12-01 10:36:48

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-01 10:48:39

End at: 2017-12-01 10:49:10

Below is generated by plot.py at 2017-12-01 14:04:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.90 Mbit/s

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

Loss rate: 0.61%

-- Flow 1:

Average throughput: 169.97 Mbit/s

95th percentile per-packet one-way delay: 64.216 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 156.99 Mbit/s

95th percentile per-packet one-way delay: 64.513 ms

Loss rate: 0.60%

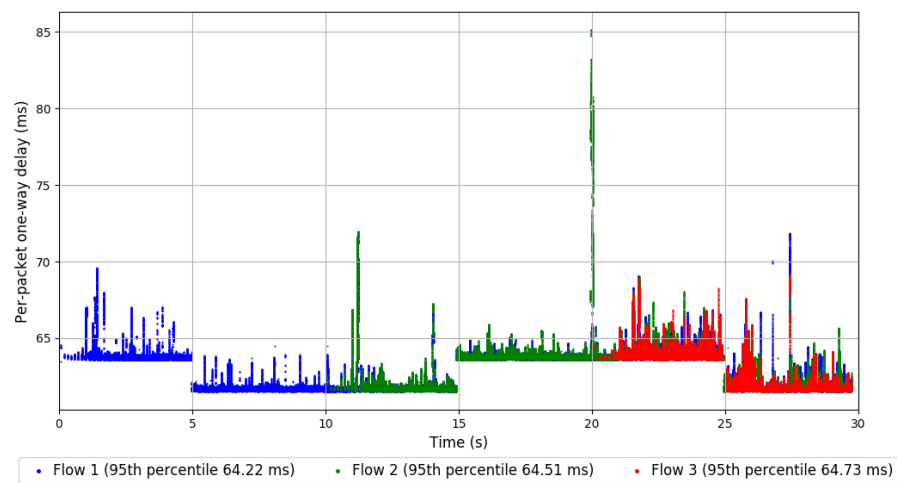
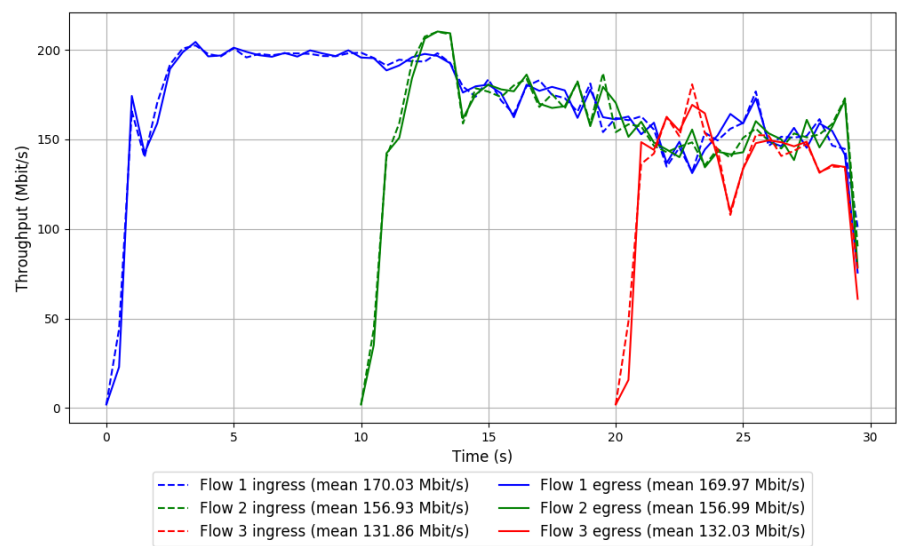
-- Flow 3:

Average throughput: 132.03 Mbit/s

95th percentile per-packet one-way delay: 64.729 ms

Loss rate: 1.20%

Run 10: Report of Indigo — Data Link

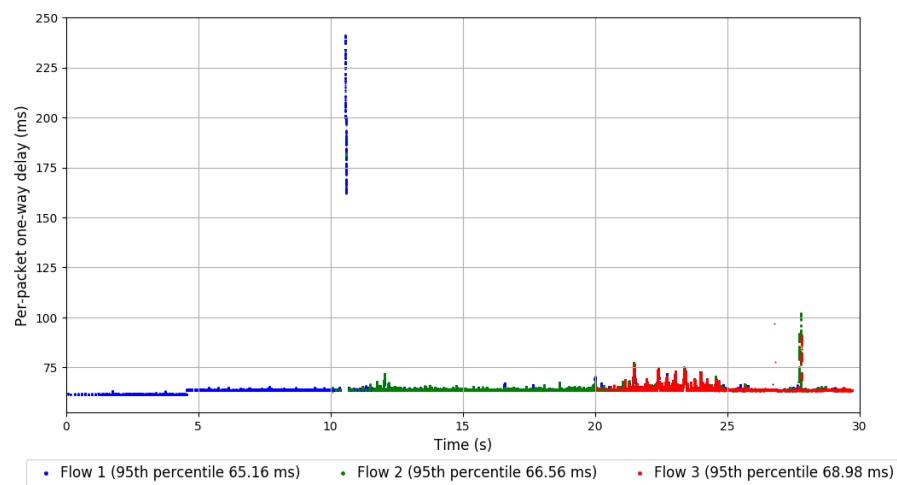
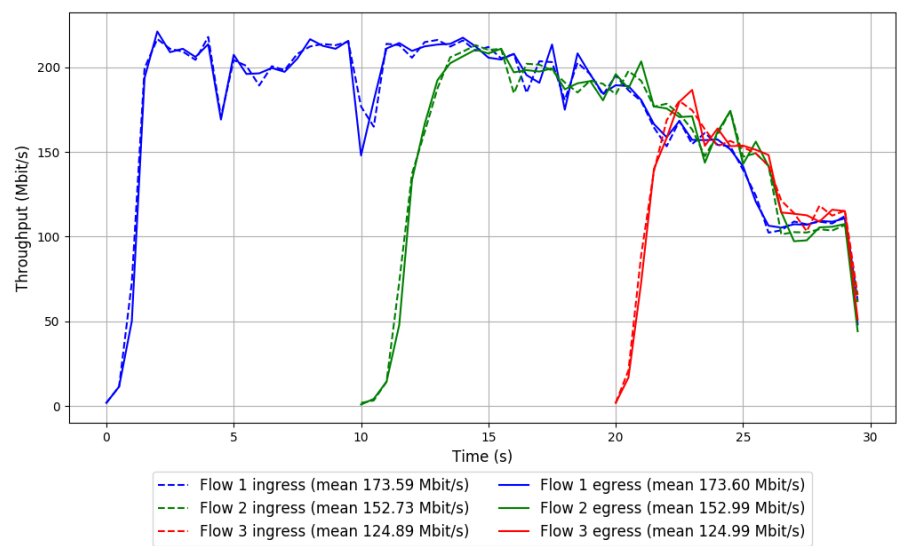


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-01 08:57:30
End at: 2017-12-01 08:58:00

# Below is generated by plot.py at 2017-12-01 14:05:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.64 Mbit/s
95th percentile per-packet one-way delay: 66.309 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 173.60 Mbit/s
95th percentile per-packet one-way delay: 65.160 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 152.99 Mbit/s
95th percentile per-packet one-way delay: 66.565 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 124.99 Mbit/s
95th percentile per-packet one-way delay: 68.983 ms
Loss rate: 1.22%
```

Run 1: Report of Indigo-calib — Data Link

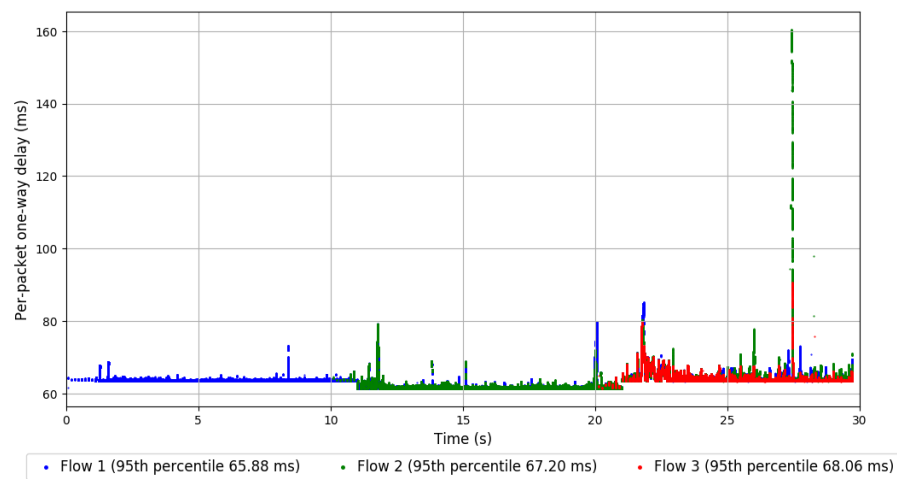
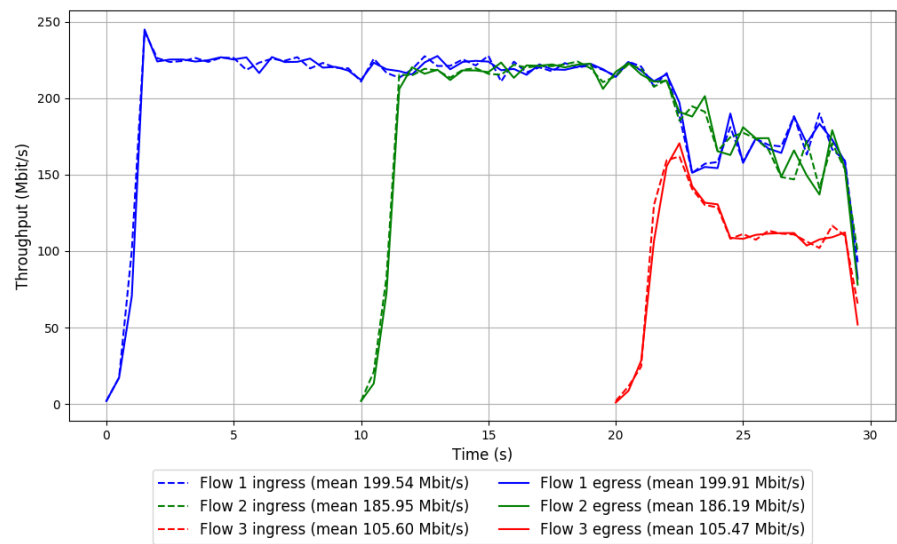


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-01 09:09:53
End at: 2017-12-01 09:10:23

# Below is generated by plot.py at 2017-12-01 14:06:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.22 Mbit/s
95th percentile per-packet one-way delay: 66.660 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 199.91 Mbit/s
95th percentile per-packet one-way delay: 65.876 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 186.19 Mbit/s
95th percentile per-packet one-way delay: 67.205 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 105.47 Mbit/s
95th percentile per-packet one-way delay: 68.059 ms
Loss rate: 1.44%
```

Run 2: Report of Indigo-calib — Data Link

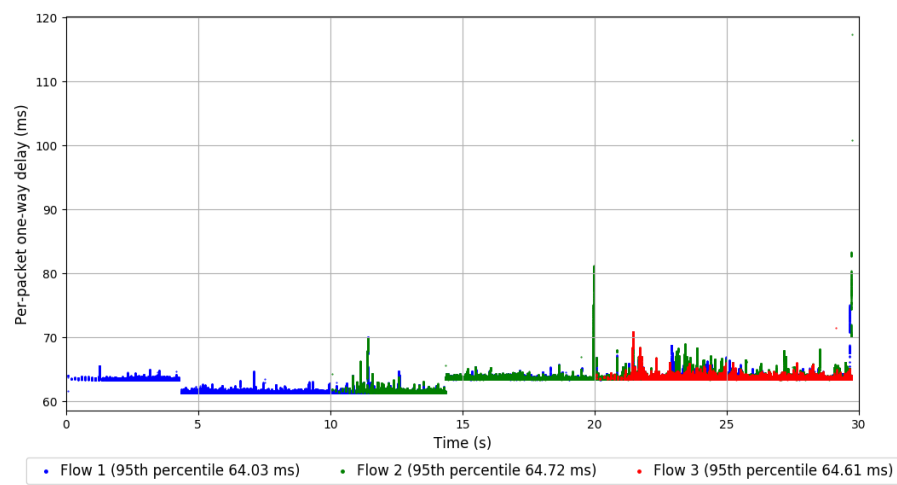
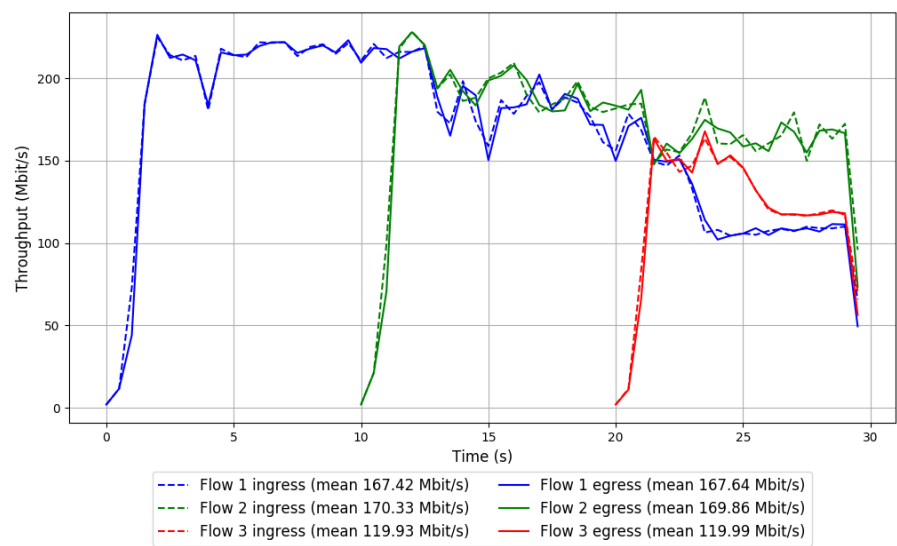


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-01 09:22:30
End at: 2017-12-01 09:23:00

# Below is generated by plot.py at 2017-12-01 14:06:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 319.02 Mbit/s
95th percentile per-packet one-way delay: 64.319 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 167.64 Mbit/s
95th percentile per-packet one-way delay: 64.028 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 169.86 Mbit/s
95th percentile per-packet one-way delay: 64.723 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 119.99 Mbit/s
95th percentile per-packet one-way delay: 64.607 ms
Loss rate: 1.24%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-12-01 09:34:56

End at: 2017-12-01 09:35:26

Below is generated by plot.py at 2017-12-01 14:06:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.13 Mbit/s

95th percentile per-packet one-way delay: 63.967 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 182.97 Mbit/s

95th percentile per-packet one-way delay: 63.951 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 144.76 Mbit/s

95th percentile per-packet one-way delay: 64.071 ms

Loss rate: 0.51%

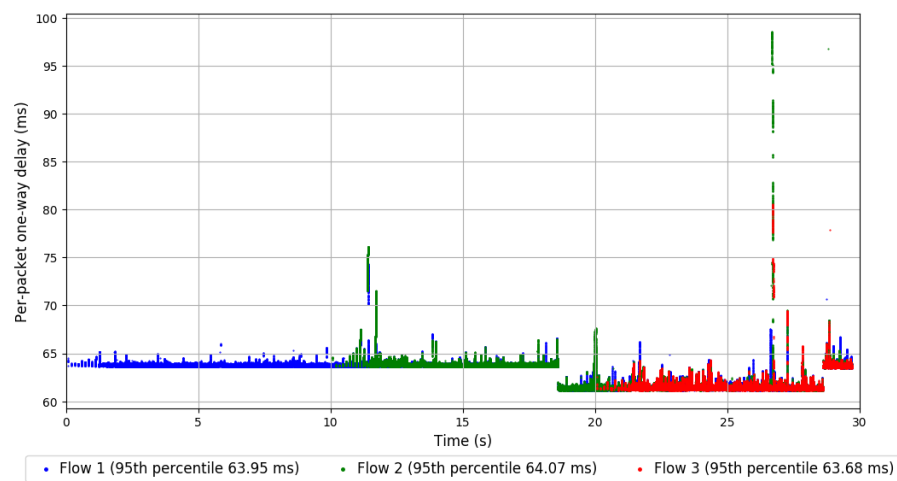
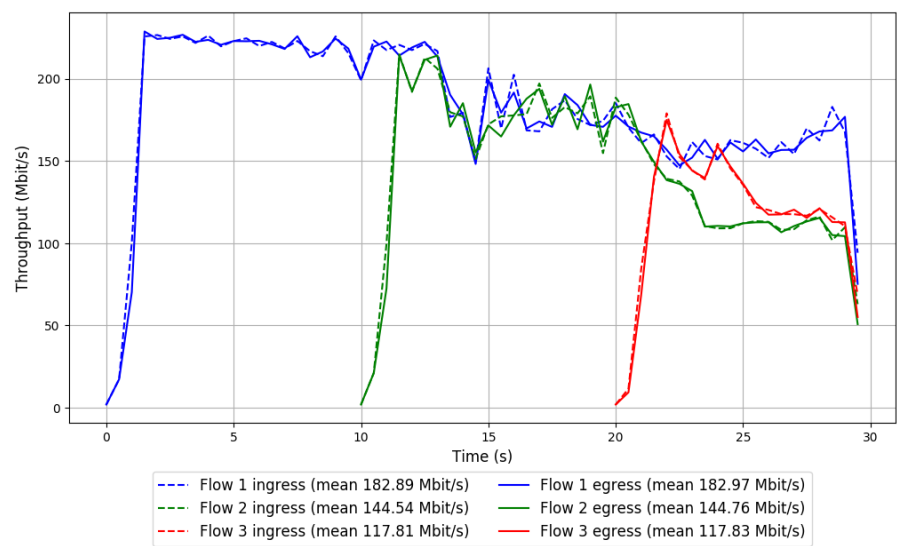
-- Flow 3:

Average throughput: 117.83 Mbit/s

95th percentile per-packet one-way delay: 63.680 ms

Loss rate: 1.27%

Run 4: Report of Indigo-calib — Data Link

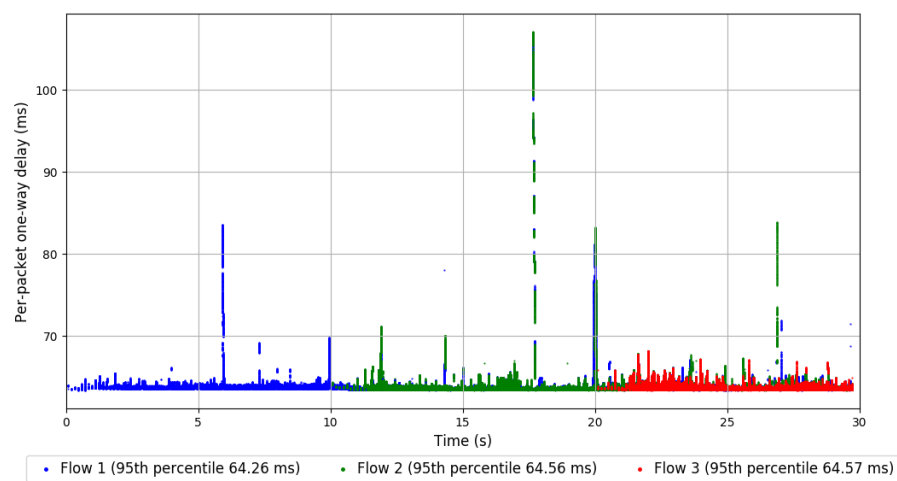
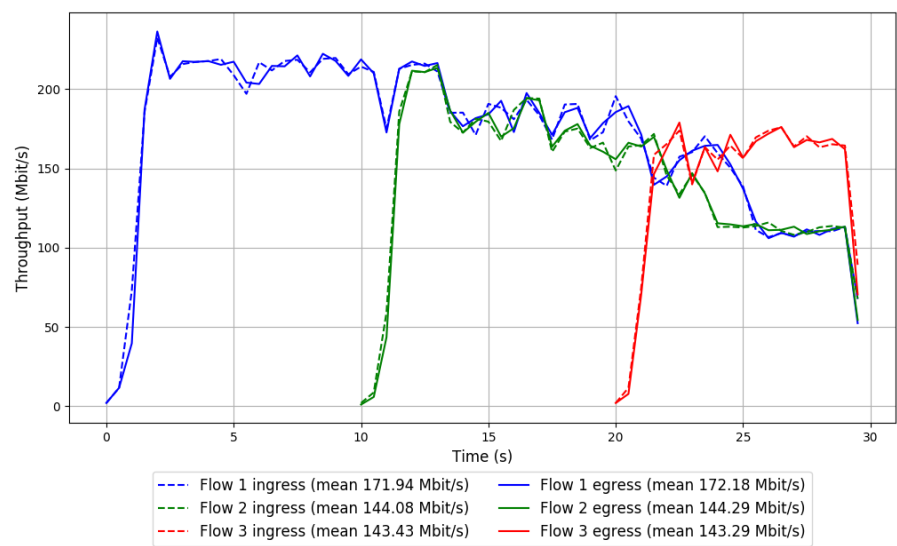


```
Run 5: Statistics of Indigo-calib

Start at: 2017-12-01 09:47:24
End at: 2017-12-01 09:47:54

# Below is generated by plot.py at 2017-12-01 14:06:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.27 Mbit/s
95th percentile per-packet one-way delay: 64.414 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 172.18 Mbit/s
95th percentile per-packet one-way delay: 64.261 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 144.29 Mbit/s
95th percentile per-packet one-way delay: 64.565 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 143.29 Mbit/s
95th percentile per-packet one-way delay: 64.566 ms
Loss rate: 1.39%
```

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-01 09:59:54

End at: 2017-12-01 10:00:24

Below is generated by plot.py at 2017-12-01 14:07:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.17 Mbit/s

95th percentile per-packet one-way delay: 64.170 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 189.80 Mbit/s

95th percentile per-packet one-way delay: 64.097 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 157.20 Mbit/s

95th percentile per-packet one-way delay: 64.095 ms

Loss rate: 0.45%

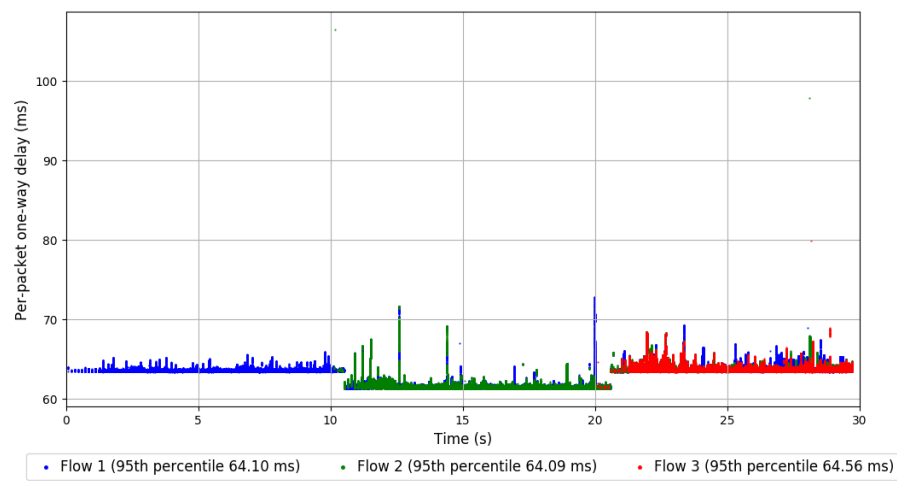
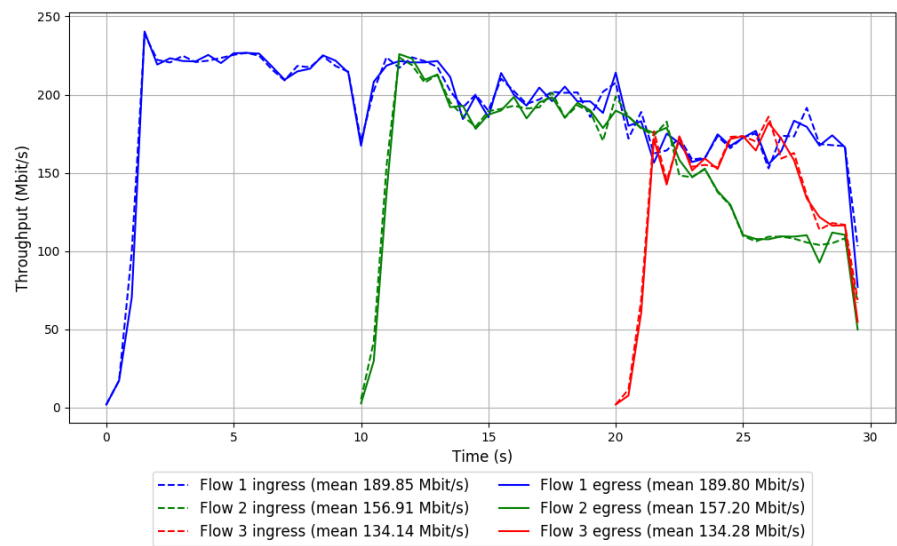
-- Flow 3:

Average throughput: 134.28 Mbit/s

95th percentile per-packet one-way delay: 64.563 ms

Loss rate: 1.15%

Run 6: Report of Indigo-calib — Data Link

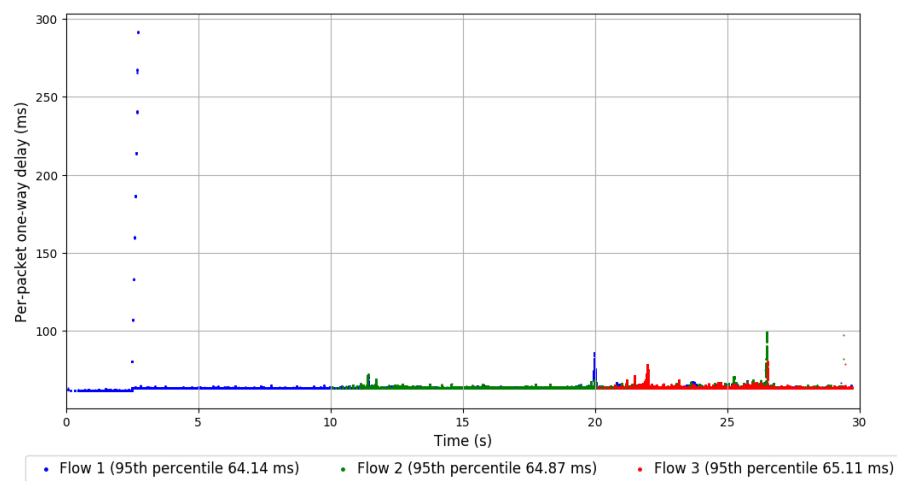
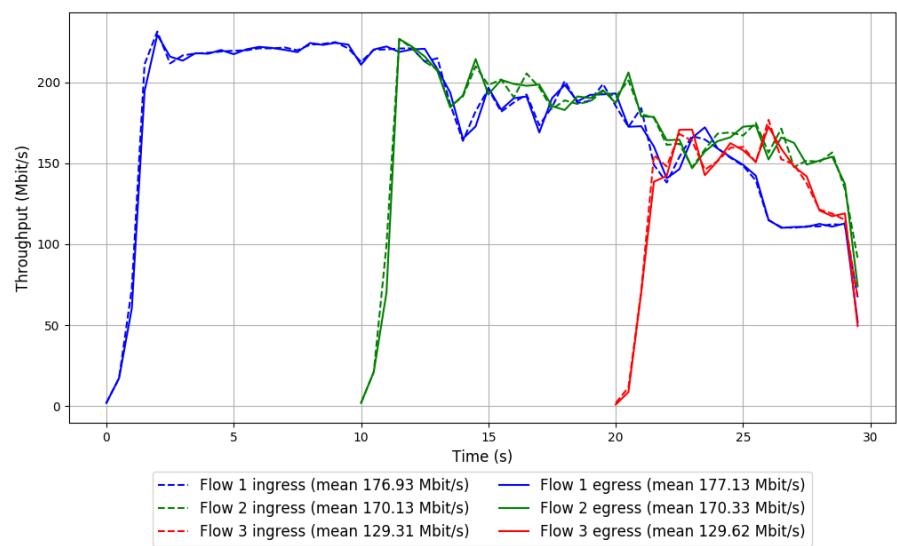


```
Run 7: Statistics of Indigo-calib

Start at: 2017-12-01 10:12:32
End at: 2017-12-01 10:13:02

# Below is generated by plot.py at 2017-12-01 14:07:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.03 Mbit/s
95th percentile per-packet one-way delay: 64.525 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 177.13 Mbit/s
95th percentile per-packet one-way delay: 64.144 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 170.33 Mbit/s
95th percentile per-packet one-way delay: 64.868 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 129.62 Mbit/s
95th percentile per-packet one-way delay: 65.115 ms
Loss rate: 1.17%
```


Run 7: Report of Indigo-calib — Data Link

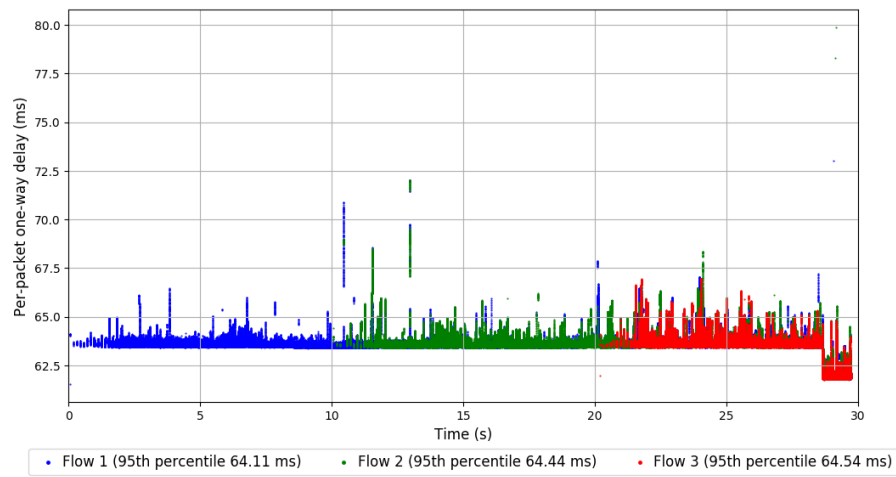
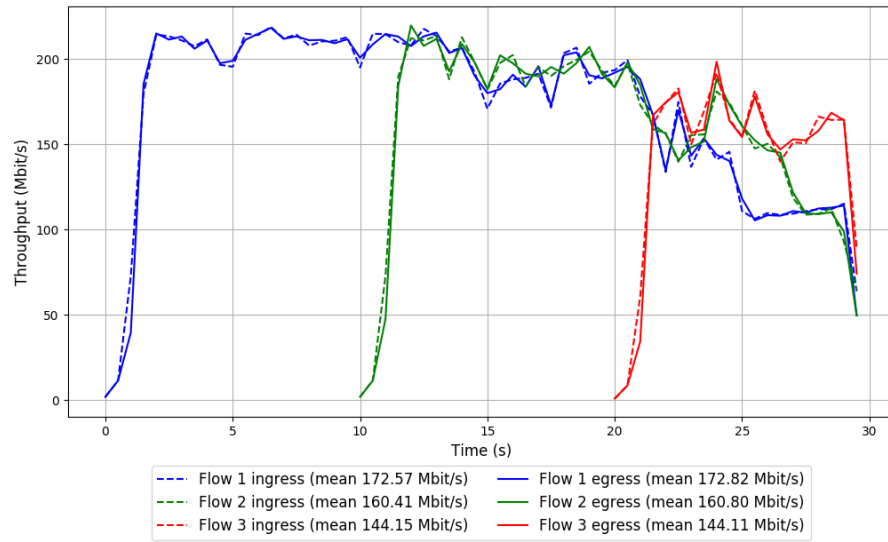


```
Run 8: Statistics of Indigo-calib

Start at: 2017-12-01 10:24:56
End at: 2017-12-01 10:25:26

# Below is generated by plot.py at 2017-12-01 14:08:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.72 Mbit/s
95th percentile per-packet one-way delay: 64.282 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 172.82 Mbit/s
95th percentile per-packet one-way delay: 64.107 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 160.80 Mbit/s
95th percentile per-packet one-way delay: 64.444 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 144.11 Mbit/s
95th percentile per-packet one-way delay: 64.540 ms
Loss rate: 1.30%
```

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-12-01 10:37:19

End at: 2017-12-01 10:37:49

Below is generated by plot.py at 2017-12-01 14:08:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.24 Mbit/s

95th percentile per-packet one-way delay: 64.543 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 166.00 Mbit/s

95th percentile per-packet one-way delay: 64.150 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 143.21 Mbit/s

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

Loss rate: 1.14%

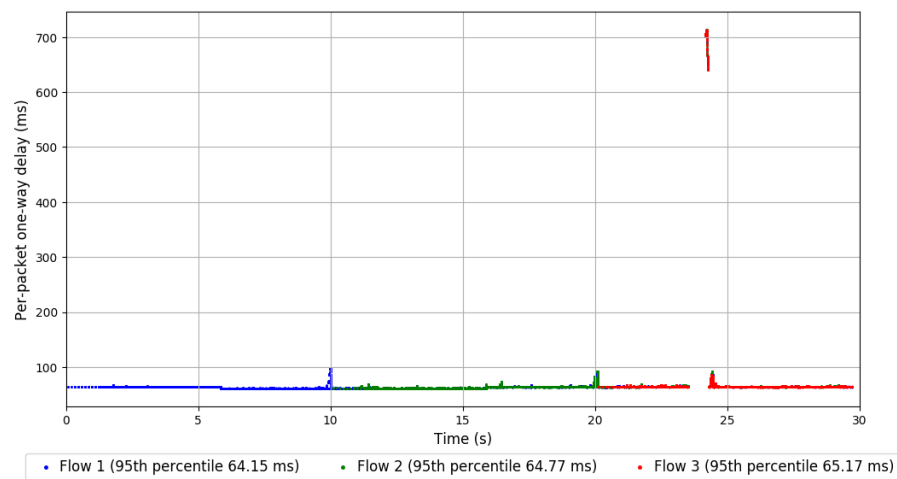
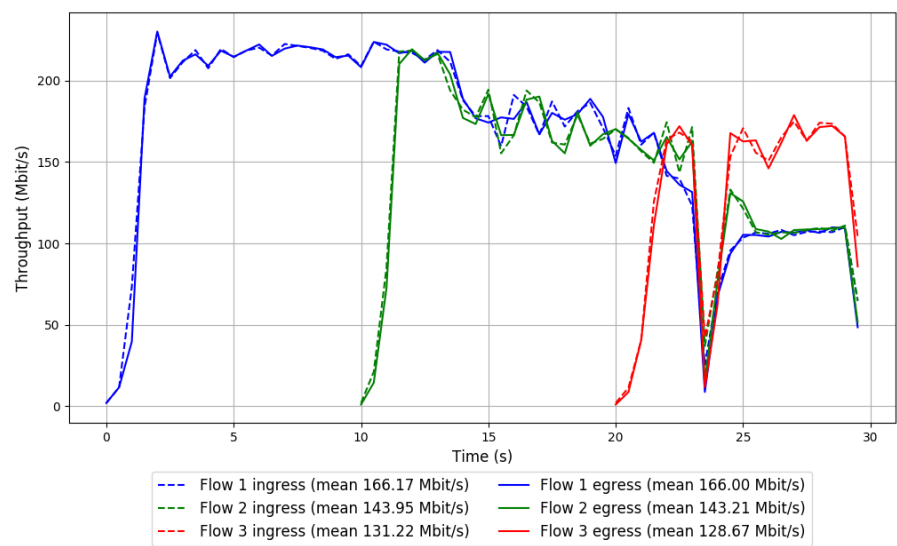
-- Flow 3:

Average throughput: 128.67 Mbit/s

95th percentile per-packet one-way delay: 65.171 ms

Loss rate: 3.20%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-01 10:49:43

End at: 2017-12-01 10:50:13

Below is generated by plot.py at 2017-12-01 14:08:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 330.39 Mbit/s

95th percentile per-packet one-way delay: 63.501 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 179.90 Mbit/s

95th percentile per-packet one-way delay: 63.513 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 171.70 Mbit/s

95th percentile per-packet one-way delay: 63.016 ms

Loss rate: 0.59%

-- Flow 3:

Average throughput: 113.69 Mbit/s

95th percentile per-packet one-way delay: 63.265 ms

Loss rate: 1.23%

Run 10: Report of Indigo-calib — Data Link

