

Pantheon Report

Generated at 2017-11-17 11:24:41 (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.

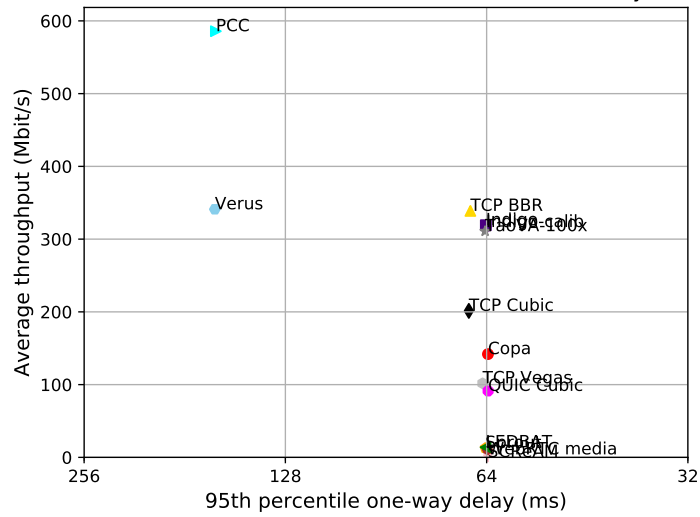
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

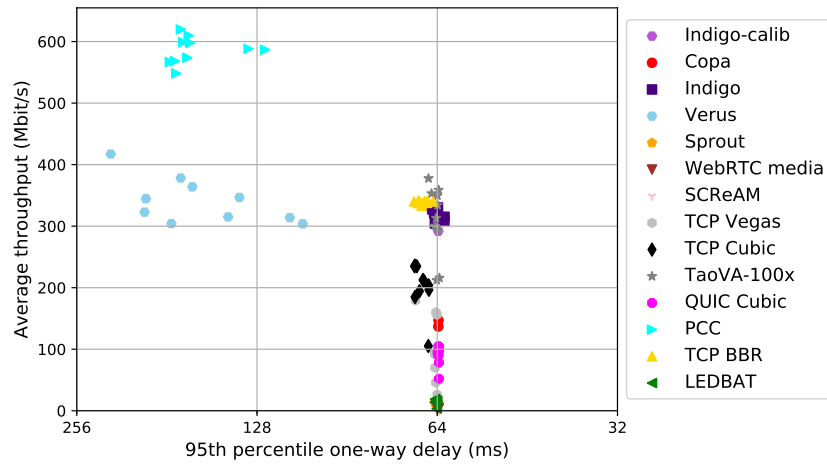
Git summary:

```
branch: indigos @ f54f2953f2a9765c9ffa988d13de5a9471790eb0
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
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	172.71	170.05	161.57	66.63	67.65	69.80	0.40	0.70	1.45
TCP Cubic	10	101.31	112.94	76.88	332.25	67.81	68.30	0.39	0.77	2.46
LEDBAT	10	7.36	7.25	5.08	112.13	64.23	64.17	0.71	0.94	2.07
PCC	10	546.05	40.31	39.97	162.60	162.27	130.91	1.35	1.32	2.13
QUIC Cubic	10	53.37	42.77	28.20	63.64	63.42	63.32	0.49	0.79	1.76
SCReAM	10	0.22	0.22	0.22	63.71	63.31	62.98	0.38	0.63	1.14
WebRTC media	10	2.21	1.38	0.55	63.54	63.69	63.80	0.54	0.68	1.83
Sprout	10	6.56	6.39	6.13	64.31	64.14	64.08	0.36	0.67	1.37
TaoVA-100x	10	157.97	163.93	171.45	64.18	64.44	65.21	0.37	0.82	2.15
TCP Vegas	9	53.58	47.73	50.26	64.99	64.15	64.19	0.39	0.62	1.34
Verus	10	221.21	141.00	84.07	148.12	164.70	173.69	0.66	1.84	3.40
Copa	2	73.81	70.97	81.02	63.72	63.69	63.63	0.32	0.83	1.83
Indigo	10	172.00	159.12	126.75	63.85	64.46	64.76	0.38	0.63	1.45
Indigo-calib	10	175.78	149.81	128.43	64.03	64.00	64.29	0.31	0.47	1.35

Run 1: Statistics of TCP BBR

Start at: 2017-11-17 06:14:38

End at: 2017-11-17 06:15:08

Below is generated by plot.py at 2017-11-17 10:26:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.06 Mbit/s

95th percentile per-packet one-way delay: 65.056 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 171.12 Mbit/s

95th percentile per-packet one-way delay: 64.464 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 172.25 Mbit/s

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

Loss rate: 0.67%

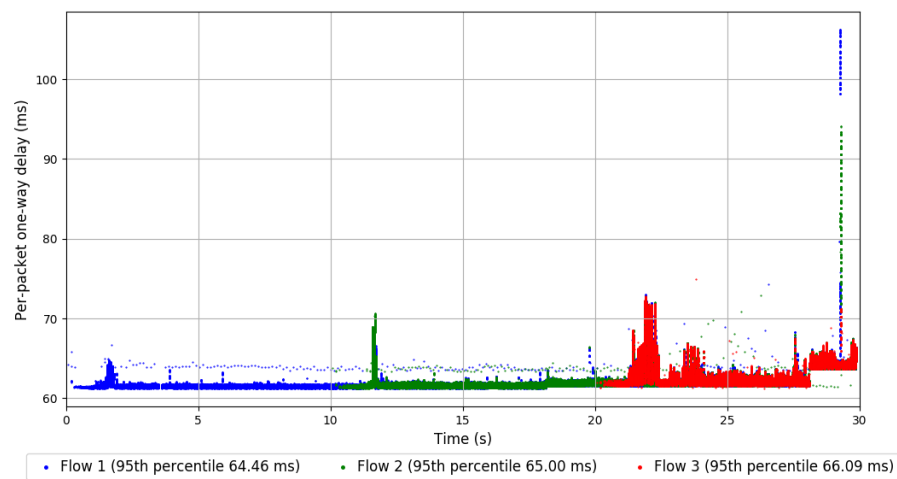
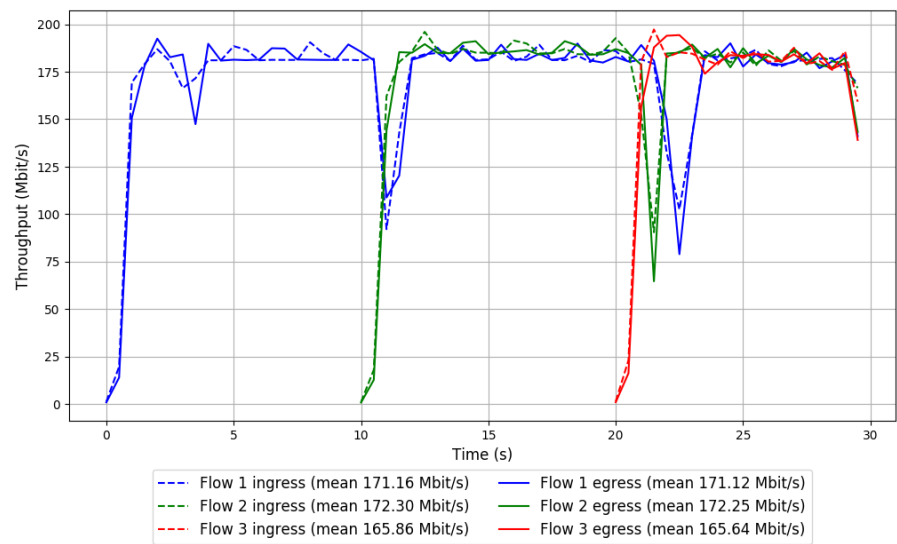
-- Flow 3:

Average throughput: 165.64 Mbit/s

95th percentile per-packet one-way delay: 66.089 ms

Loss rate: 1.40%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-17 06:27:16

End at: 2017-11-17 06:27:46

Below is generated by plot.py at 2017-11-17 10:26:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.00 Mbit/s

95th percentile per-packet one-way delay: 69.970 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 172.13 Mbit/s

95th percentile per-packet one-way delay: 68.269 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 171.34 Mbit/s

95th percentile per-packet one-way delay: 69.252 ms

Loss rate: 0.68%

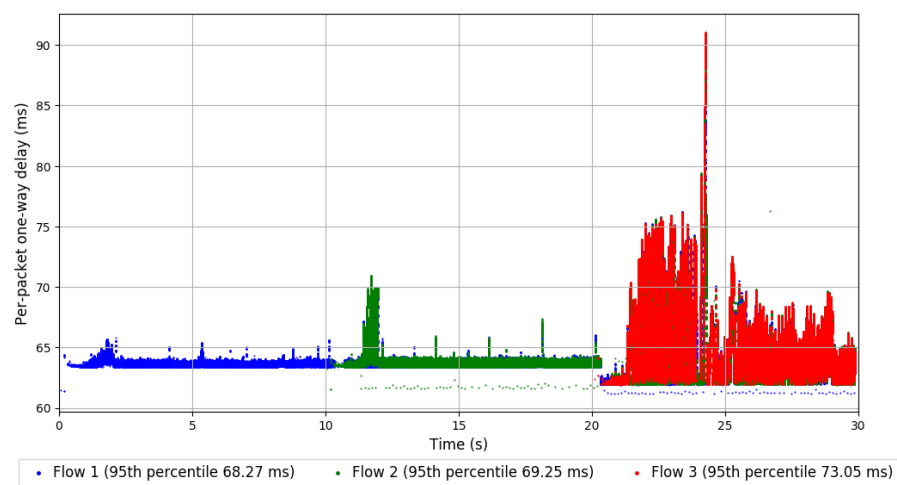
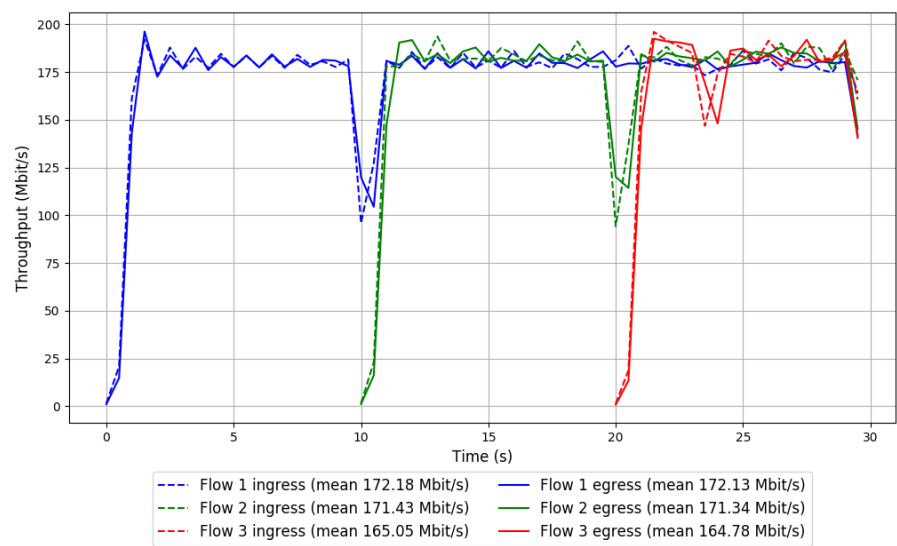
-- Flow 3:

Average throughput: 164.78 Mbit/s

95th percentile per-packet one-way delay: 73.048 ms

Loss rate: 1.42%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-17 06:39:36

End at: 2017-11-17 06:40:06

Below is generated by plot.py at 2017-11-17 10:26:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.43 Mbit/s

95th percentile per-packet one-way delay: 67.737 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 171.63 Mbit/s

95th percentile per-packet one-way delay: 66.777 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 172.85 Mbit/s

95th percentile per-packet one-way delay: 68.092 ms

Loss rate: 0.74%

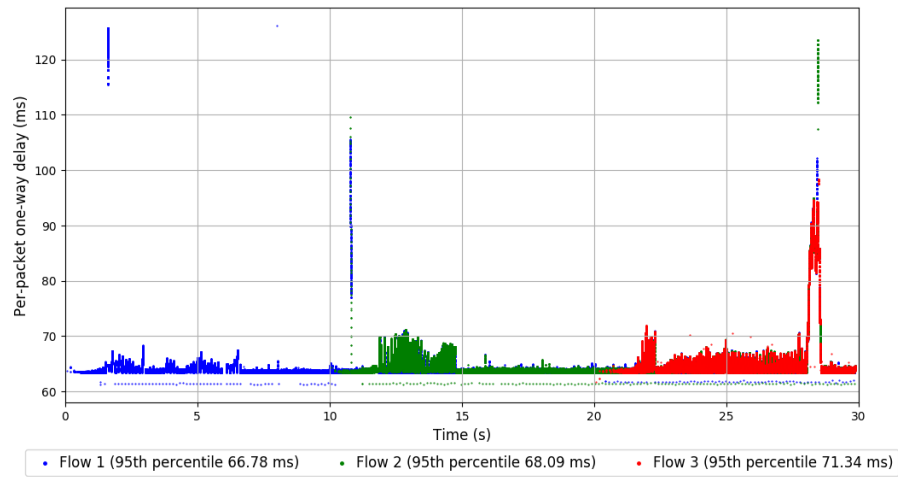
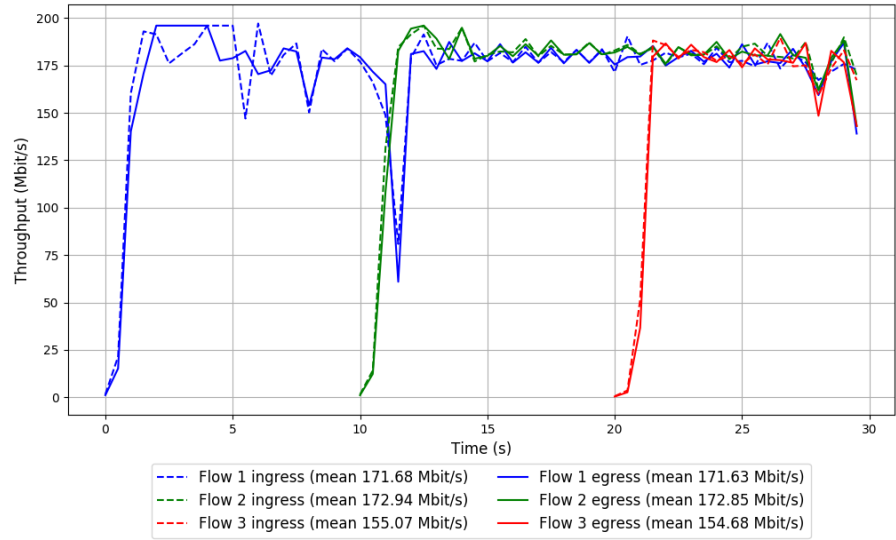
-- Flow 3:

Average throughput: 154.68 Mbit/s

95th percentile per-packet one-way delay: 71.340 ms

Loss rate: 1.56%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-17 06:52:13

End at: 2017-11-17 06:52:43

Below is generated by plot.py at 2017-11-17 10:26:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.86 Mbit/s

95th percentile per-packet one-way delay: 66.549 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 174.52 Mbit/s

95th percentile per-packet one-way delay: 65.612 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 168.16 Mbit/s

95th percentile per-packet one-way delay: 67.280 ms

Loss rate: 0.71%

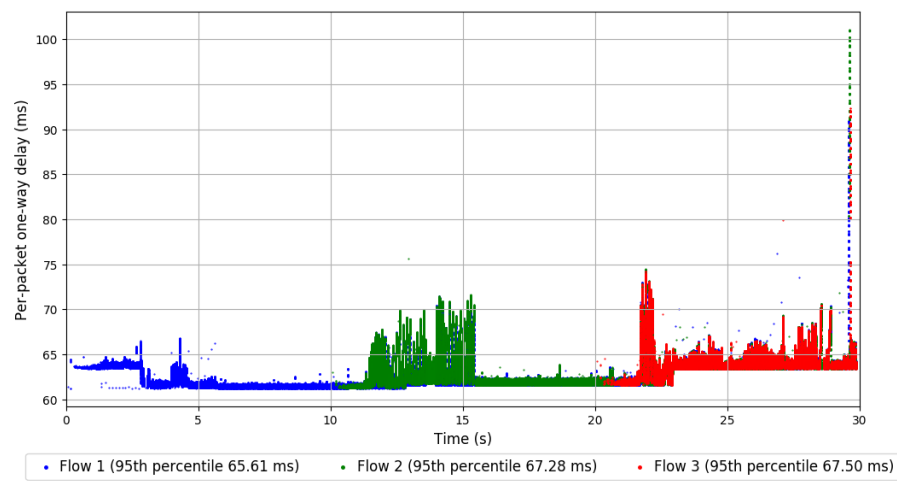
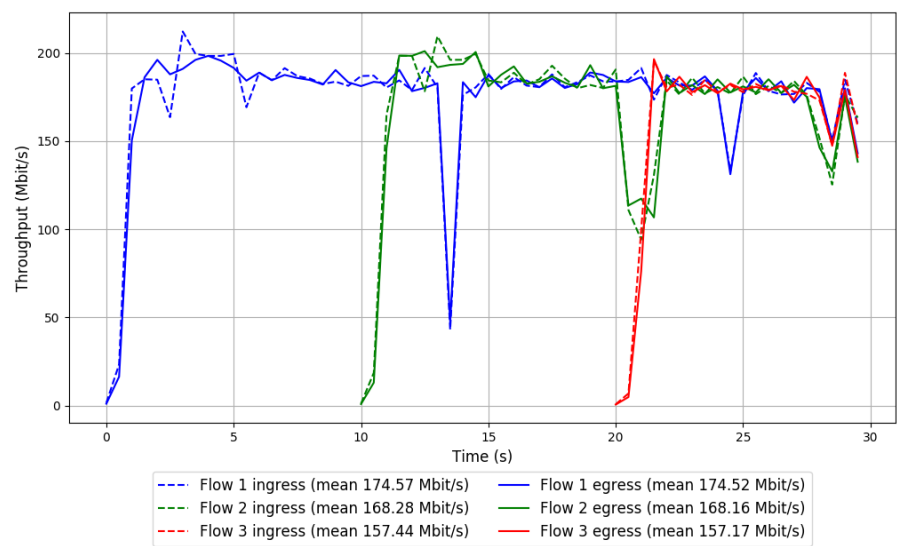
-- Flow 3:

Average throughput: 157.17 Mbit/s

95th percentile per-packet one-way delay: 67.504 ms

Loss rate: 1.45%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-17 07:04:33

End at: 2017-11-17 07:05:03

Below is generated by plot.py at 2017-11-17 10:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 341.57 Mbit/s

95th percentile per-packet one-way delay: 66.438 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 176.30 Mbit/s

95th percentile per-packet one-way delay: 65.795 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 168.88 Mbit/s

95th percentile per-packet one-way delay: 66.475 ms

Loss rate: 0.74%

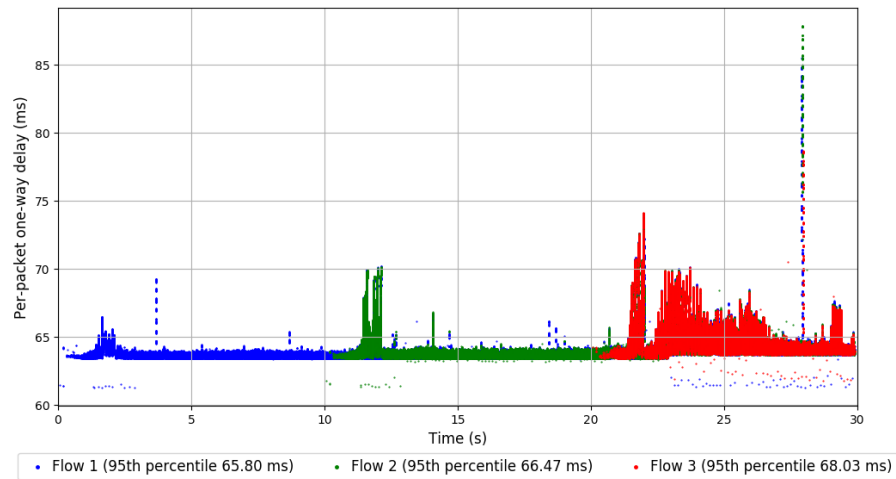
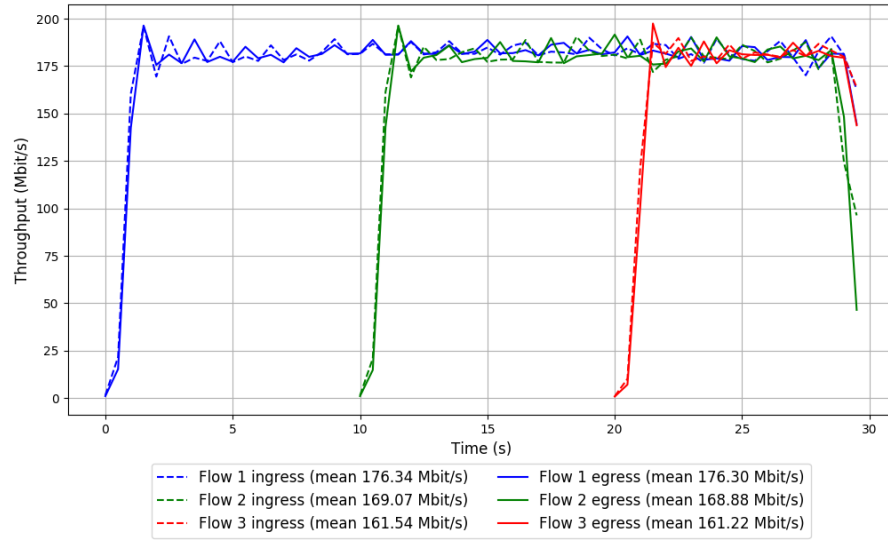
-- Flow 3:

Average throughput: 161.22 Mbit/s

95th percentile per-packet one-way delay: 68.026 ms

Loss rate: 1.49%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-17 07:17:10

End at: 2017-11-17 07:17:40

Below is generated by plot.py at 2017-11-17 10:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.39 Mbit/s

95th percentile per-packet one-way delay: 68.880 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 170.22 Mbit/s

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

Loss rate: 0.45%

-- Flow 2:

Average throughput: 172.40 Mbit/s

95th percentile per-packet one-way delay: 68.888 ms

Loss rate: 0.69%

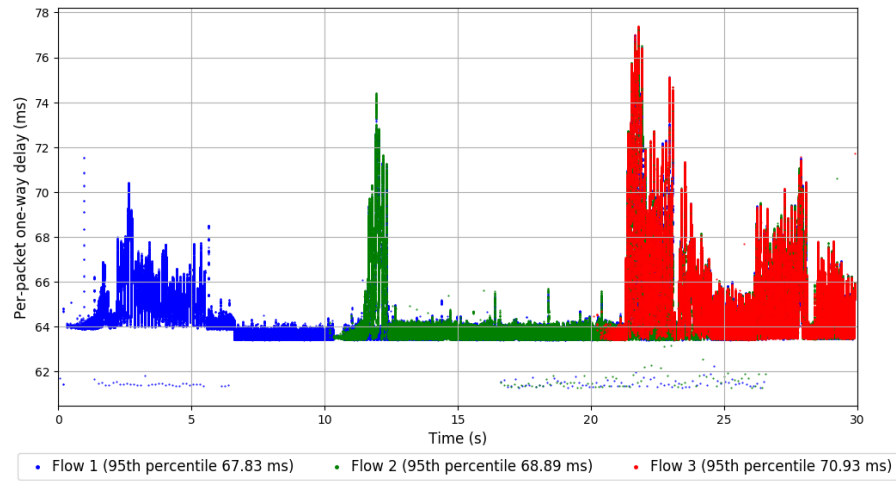
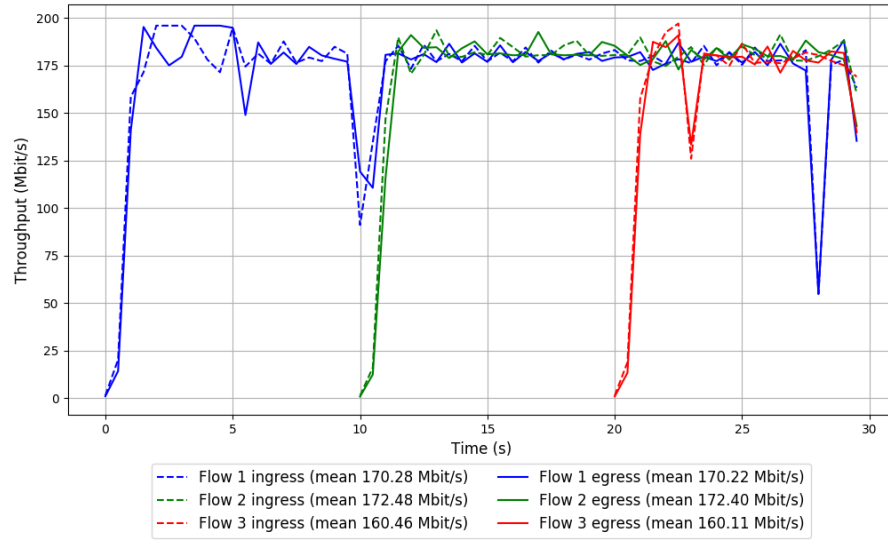
-- Flow 3:

Average throughput: 160.11 Mbit/s

95th percentile per-packet one-way delay: 70.928 ms

Loss rate: 1.45%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-17 07:29:38

End at: 2017-11-17 07:30:08

Below is generated by plot.py at 2017-11-17 10:26:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 333.37 Mbit/s

95th percentile per-packet one-way delay: 67.978 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 169.97 Mbit/s

95th percentile per-packet one-way delay: 65.991 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 167.28 Mbit/s

95th percentile per-packet one-way delay: 67.348 ms

Loss rate: 0.68%

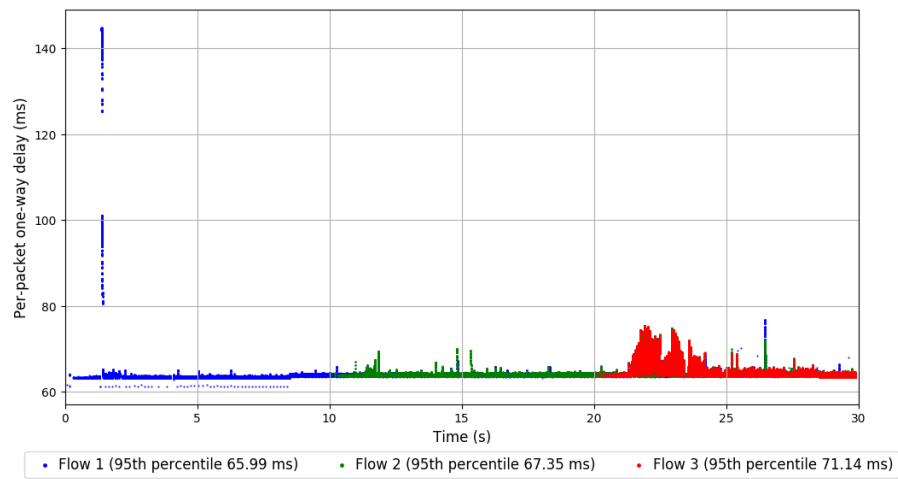
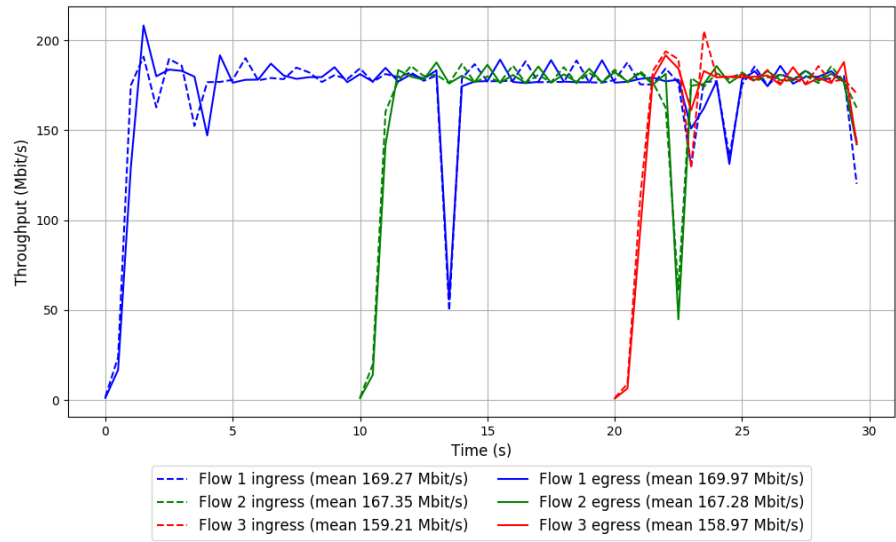
-- Flow 3:

Average throughput: 158.97 Mbit/s

95th percentile per-packet one-way delay: 71.142 ms

Loss rate: 1.44%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-17 07:42:06

End at: 2017-11-17 07:42:36

Below is generated by plot.py at 2017-11-17 10:26:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 342.07 Mbit/s

95th percentile per-packet one-way delay: 68.744 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 176.09 Mbit/s

95th percentile per-packet one-way delay: 67.799 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 167.84 Mbit/s

95th percentile per-packet one-way delay: 68.468 ms

Loss rate: 0.72%

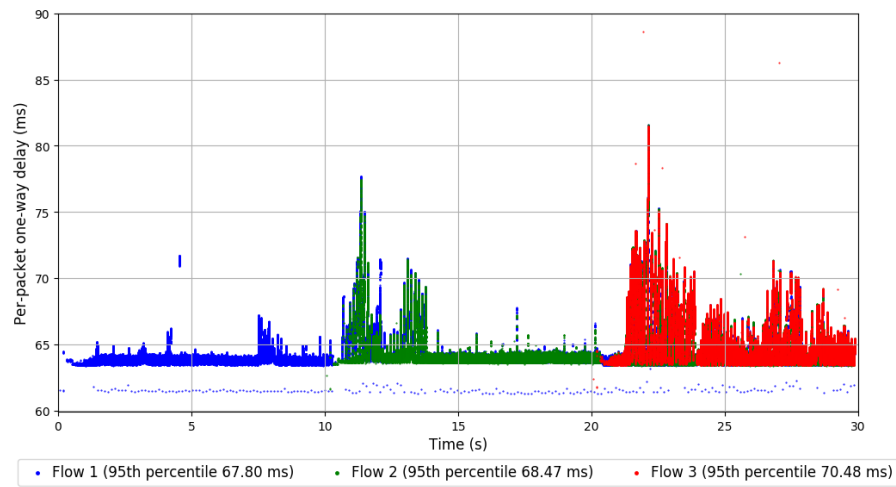
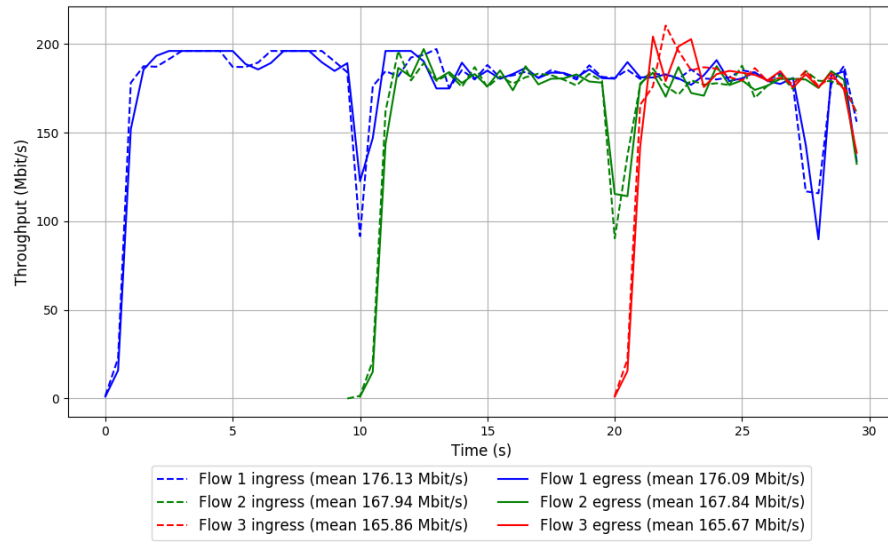
-- Flow 3:

Average throughput: 165.67 Mbit/s

95th percentile per-packet one-way delay: 70.480 ms

Loss rate: 1.39%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-17 07:54:33

End at: 2017-11-17 07:55:03

Below is generated by plot.py at 2017-11-17 10:32:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 338.16 Mbit/s

95th percentile per-packet one-way delay: 68.302 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 171.97 Mbit/s

95th percentile per-packet one-way delay: 67.471 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 168.96 Mbit/s

95th percentile per-packet one-way delay: 67.796 ms

Loss rate: 0.67%

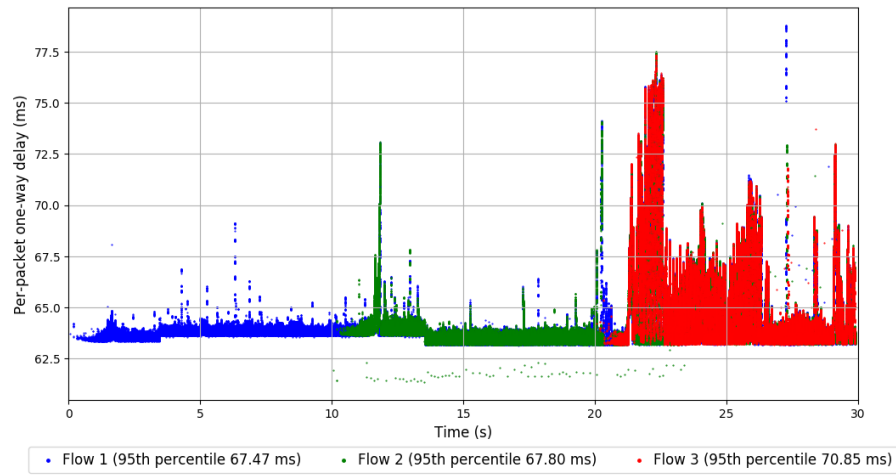
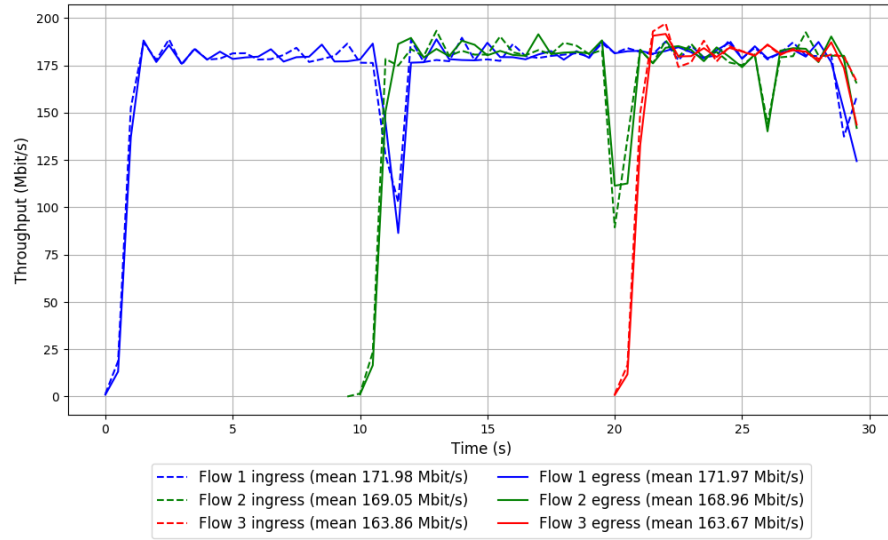
-- Flow 3:

Average throughput: 163.67 Mbit/s

95th percentile per-packet one-way delay: 70.848 ms

Loss rate: 1.45%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-17 08:06:54

End at: 2017-11-17 08:07:24

Below is generated by plot.py at 2017-11-17 10:32:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.33 Mbit/s

95th percentile per-packet one-way delay: 67.191 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 173.17 Mbit/s

95th percentile per-packet one-way delay: 66.249 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 170.51 Mbit/s

95th percentile per-packet one-way delay: 67.886 ms

Loss rate: 0.67%

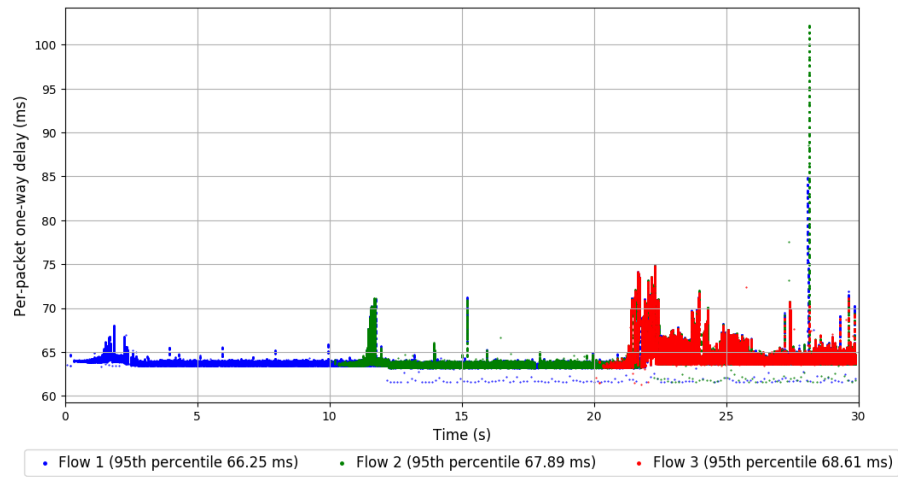
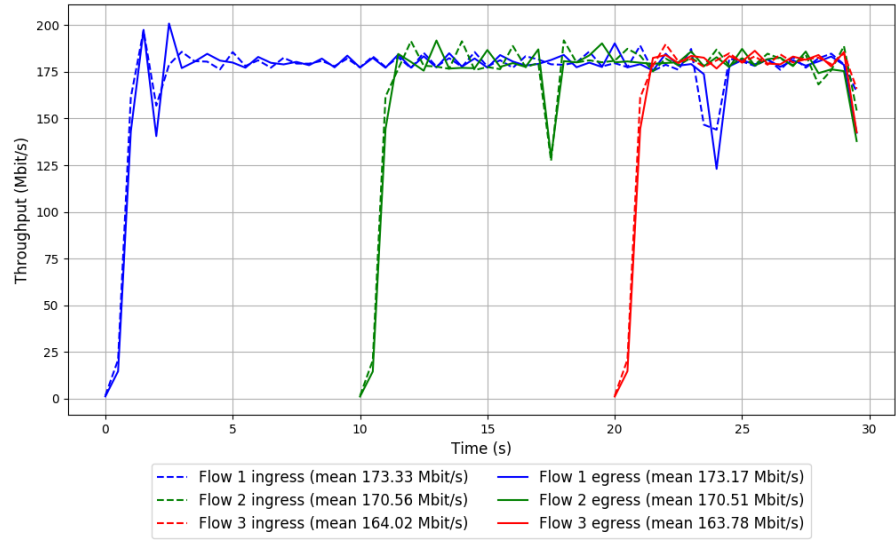
-- Flow 3:

Average throughput: 163.78 Mbit/s

95th percentile per-packet one-way delay: 68.611 ms

Loss rate: 1.42%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-17 06:12:40

End at: 2017-11-17 06:13:10

Below is generated by plot.py at 2017-11-17 10:32:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.24 Mbit/s

95th percentile per-packet one-way delay: 66.227 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 11.13 Mbit/s

95th percentile per-packet one-way delay: 2712.867 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 101.95 Mbit/s

95th percentile per-packet one-way delay: 66.013 ms

Loss rate: 0.84%

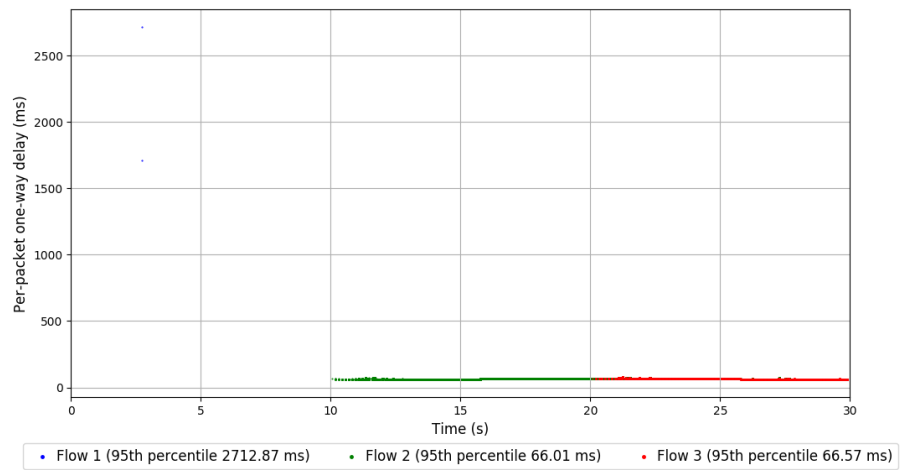
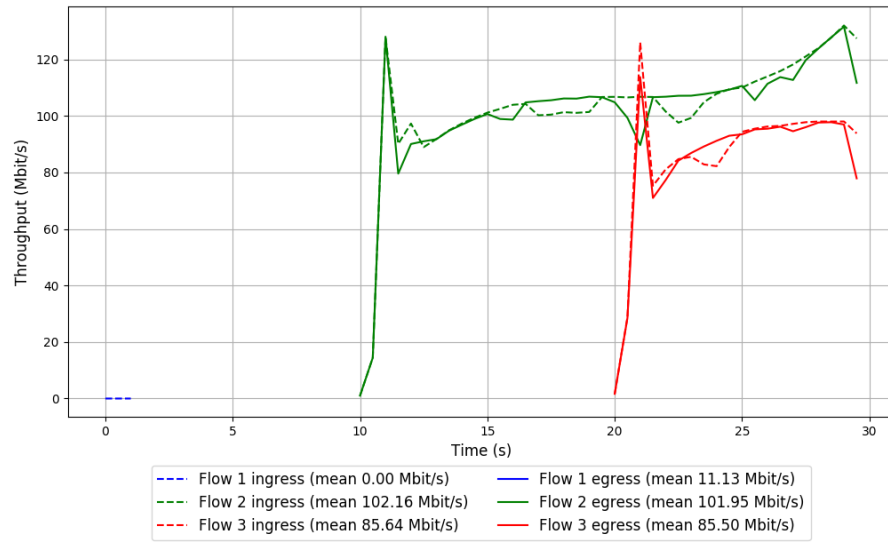
-- Flow 3:

Average throughput: 85.50 Mbit/s

95th percentile per-packet one-way delay: 66.571 ms

Loss rate: 1.45%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-17 06:25:14

End at: 2017-11-17 06:25:44

Below is generated by plot.py at 2017-11-17 10:32:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.77 Mbit/s

95th percentile per-packet one-way delay: 69.840 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 131.14 Mbit/s

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

Loss rate: 0.24%

-- Flow 2:

Average throughput: 106.31 Mbit/s

95th percentile per-packet one-way delay: 71.301 ms

Loss rate: 0.81%

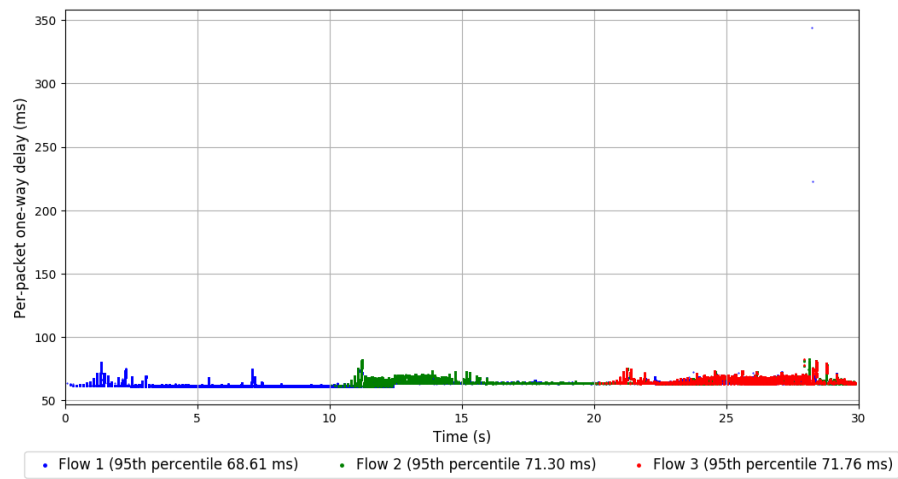
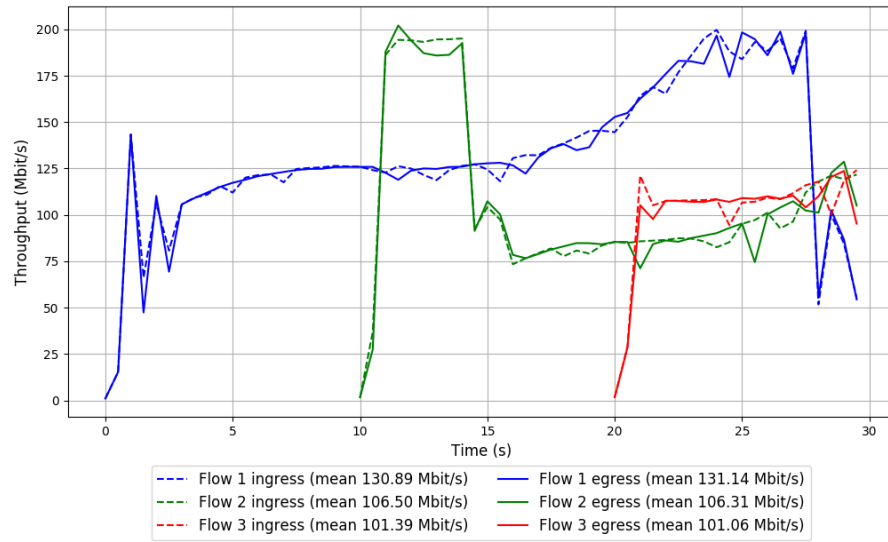
-- Flow 3:

Average throughput: 101.06 Mbit/s

95th percentile per-packet one-way delay: 71.762 ms

Loss rate: 1.61%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-17 06:37:35

End at: 2017-11-17 06:38:05

Below is generated by plot.py at 2017-11-17 10:32:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 212.59 Mbit/s

95th percentile per-packet one-way delay: 67.607 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 105.57 Mbit/s

95th percentile per-packet one-way delay: 68.621 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 159.36 Mbit/s

95th percentile per-packet one-way delay: 65.785 ms

Loss rate: 0.74%

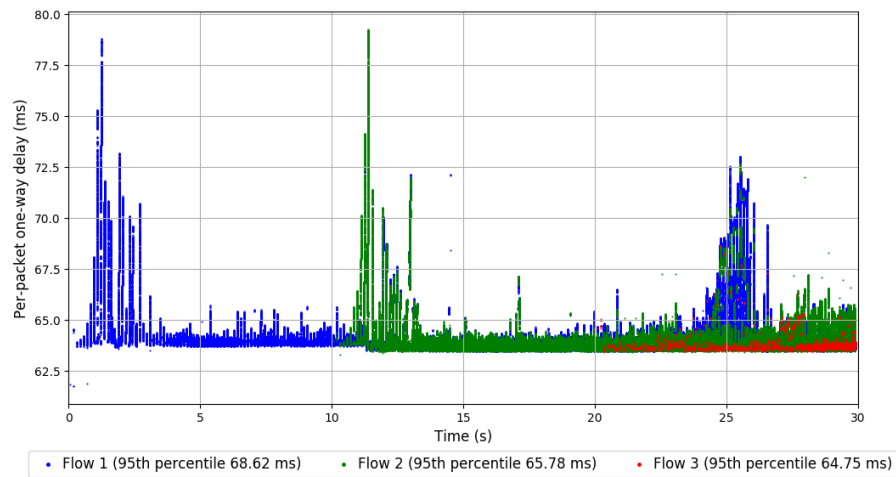
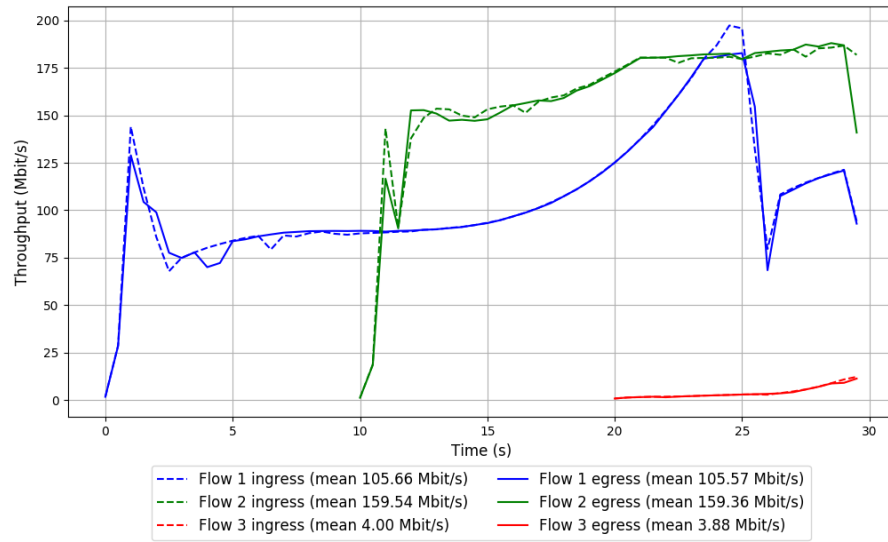
-- Flow 3:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 64.750 ms

Loss rate: 4.49%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-17 06:50:05

End at: 2017-11-17 06:50:35

Below is generated by plot.py at 2017-11-17 10:32:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.81 Mbit/s

95th percentile per-packet one-way delay: 69.244 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 98.69 Mbit/s

95th percentile per-packet one-way delay: 66.105 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 120.20 Mbit/s

95th percentile per-packet one-way delay: 69.973 ms

Loss rate: 0.48%

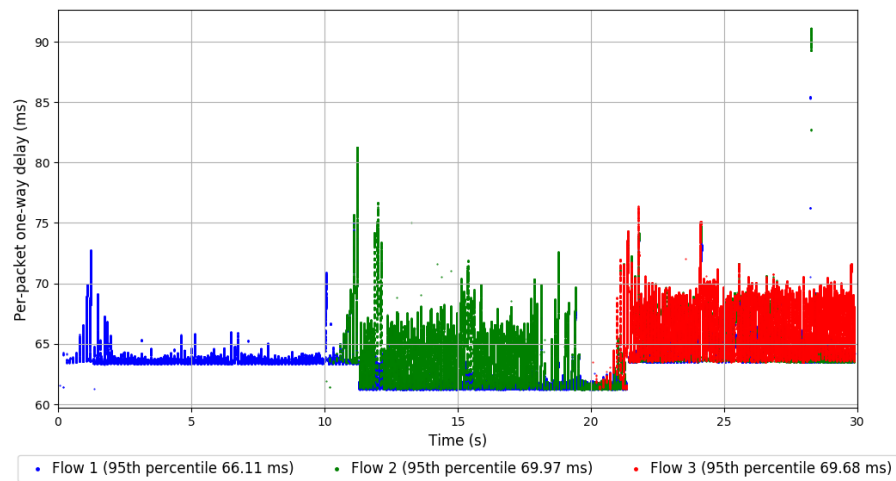
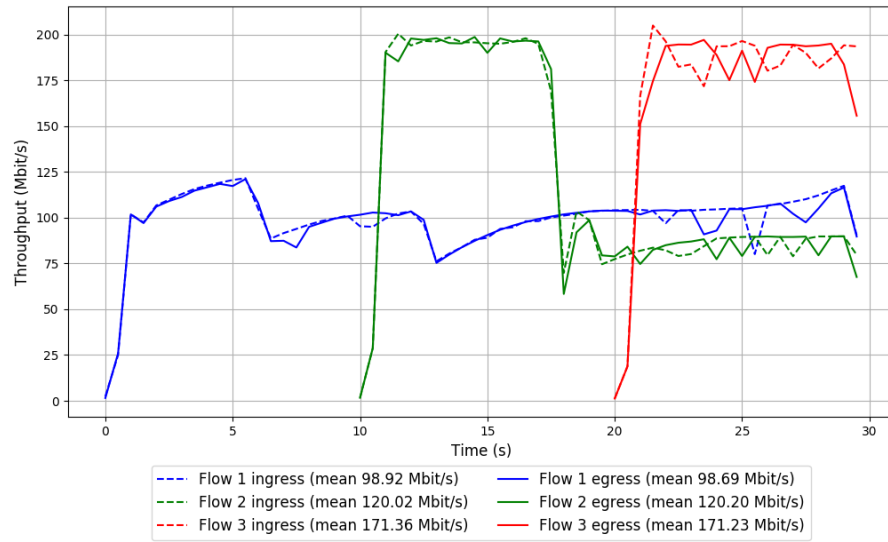
-- Flow 3:

Average throughput: 171.23 Mbit/s

95th percentile per-packet one-way delay: 69.677 ms

Loss rate: 1.42%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-17 07:02:25

End at: 2017-11-17 07:02:55

Below is generated by plot.py at 2017-11-17 10:32:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 210.59 Mbit/s

95th percentile per-packet one-way delay: 67.317 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 103.61 Mbit/s

95th percentile per-packet one-way delay: 66.540 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 93.16 Mbit/s

95th percentile per-packet one-way delay: 66.666 ms

Loss rate: 0.75%

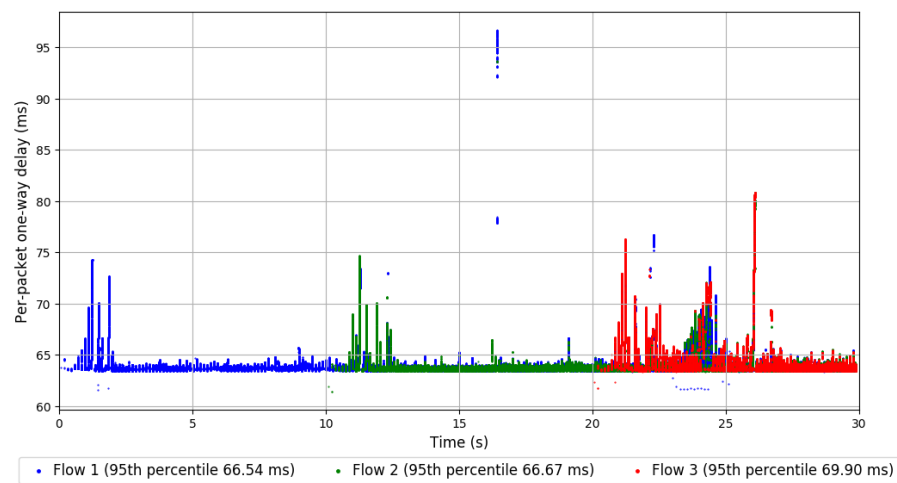
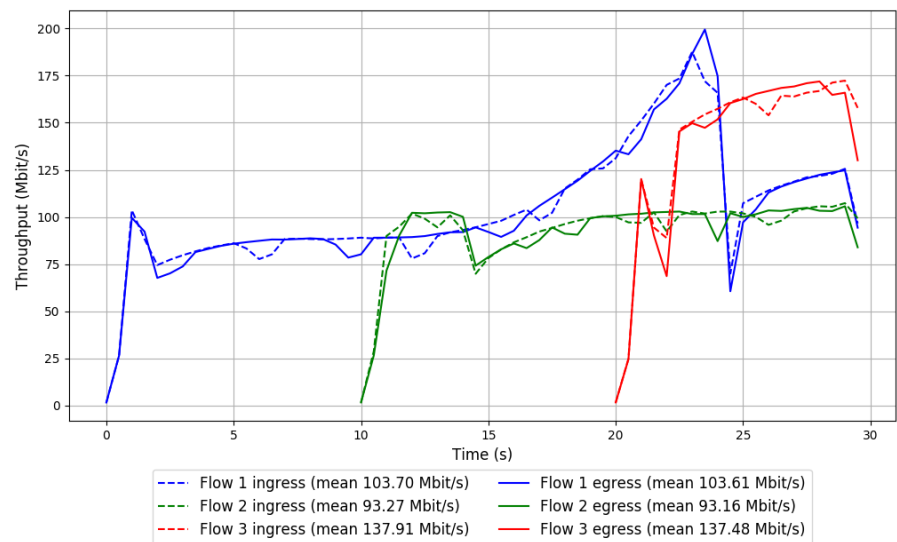
-- Flow 3:

Average throughput: 137.48 Mbit/s

95th percentile per-packet one-way delay: 69.903 ms

Loss rate: 1.57%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-17 07:15:06

End at: 2017-11-17 07:15:36

Below is generated by plot.py at 2017-11-17 10:32:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.92 Mbit/s

95th percentile per-packet one-way delay: 69.710 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 126.59 Mbit/s

95th percentile per-packet one-way delay: 69.362 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 85.88 Mbit/s

95th percentile per-packet one-way delay: 70.515 ms

Loss rate: 0.88%

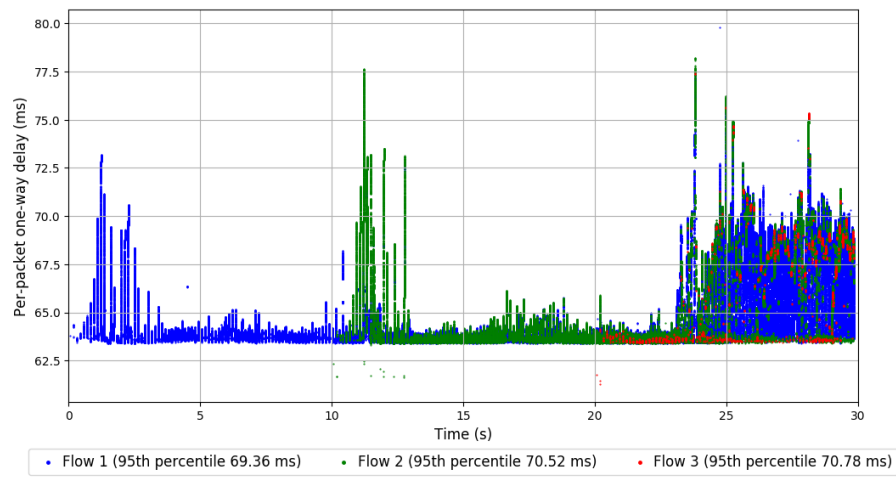
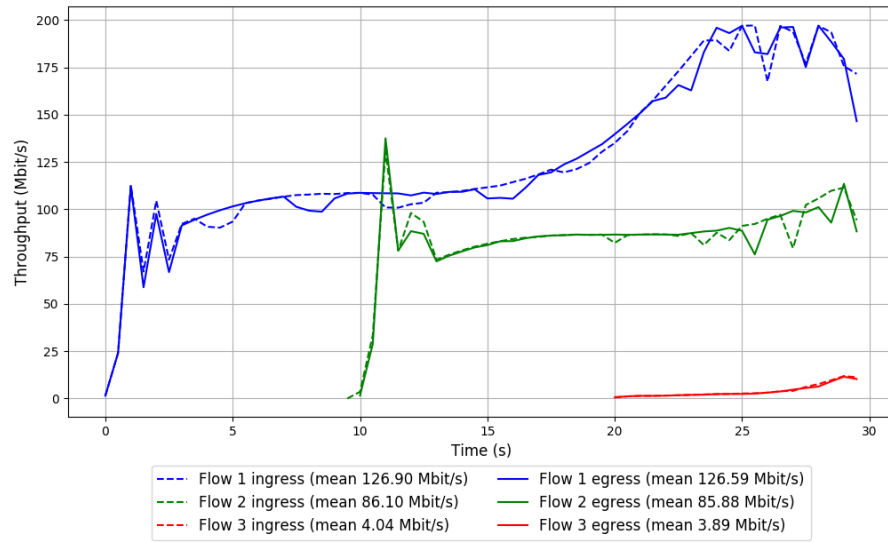
-- Flow 3:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 70.783 ms

Loss rate: 4.92%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-17 07:27:33

End at: 2017-11-17 07:28:03

Below is generated by plot.py at 2017-11-17 10:32:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 194.33 Mbit/s

95th percentile per-packet one-way delay: 68.531 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 128.74 Mbit/s

95th percentile per-packet one-way delay: 69.145 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 96.93 Mbit/s

95th percentile per-packet one-way delay: 65.455 ms

Loss rate: 0.86%

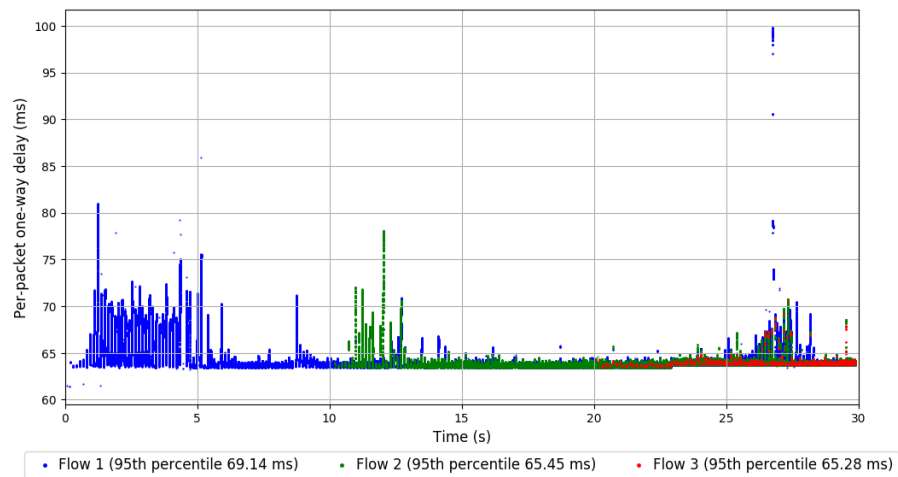
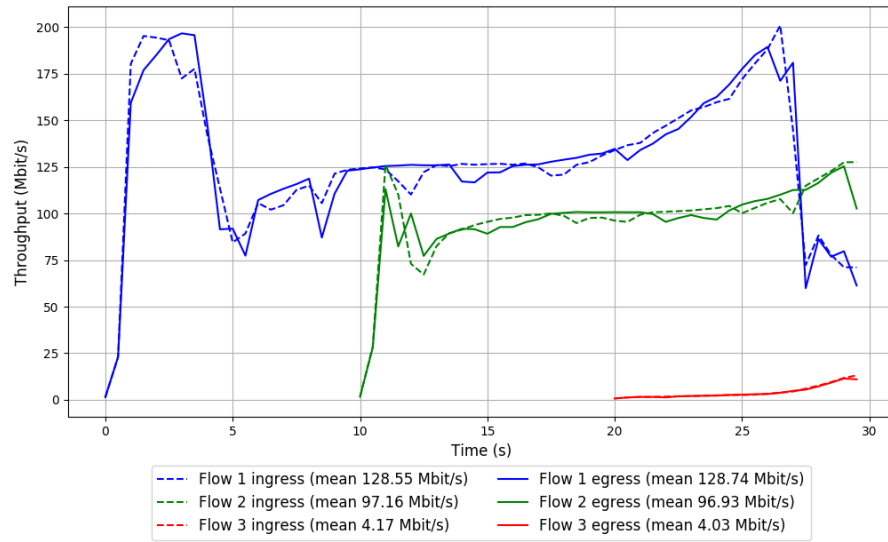
-- Flow 3:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 65.285 ms

Loss rate: 4.70%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-17 07:40:01

End at: 2017-11-17 07:40:31

Below is generated by plot.py at 2017-11-17 10:33:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 235.96 Mbit/s

95th percentile per-packet one-way delay: 69.723 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 104.37 Mbit/s

95th percentile per-packet one-way delay: 69.723 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 156.17 Mbit/s

95th percentile per-packet one-way delay: 69.572 ms

Loss rate: 0.77%

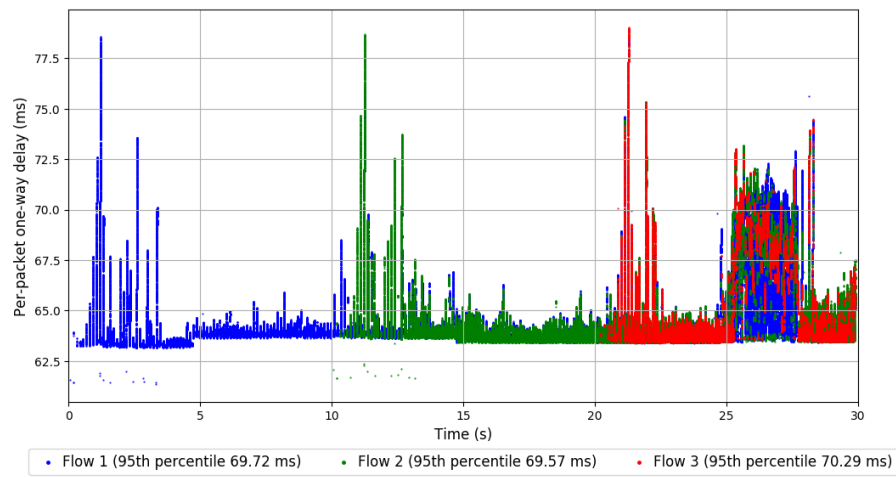
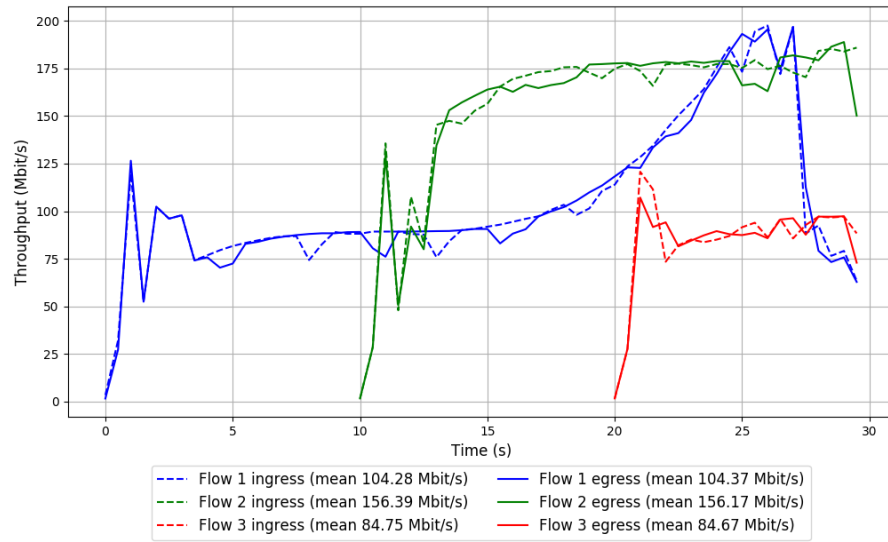
-- Flow 3:

Average throughput: 84.67 Mbit/s

95th percentile per-packet one-way delay: 70.290 ms

Loss rate: 1.44%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-17 07:52:39

End at: 2017-11-17 07:53:09

Below is generated by plot.py at 2017-11-17 10:33:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 203.79 Mbit/s

95th percentile per-packet one-way delay: 66.154 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 98.88 Mbit/s

95th percentile per-packet one-way delay: 65.788 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 110.13 Mbit/s

95th percentile per-packet one-way delay: 66.736 ms

Loss rate: 0.83%

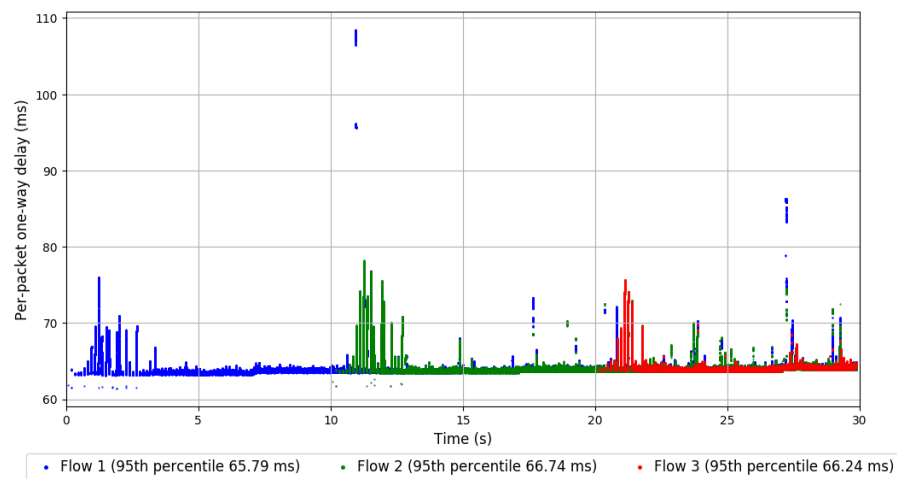
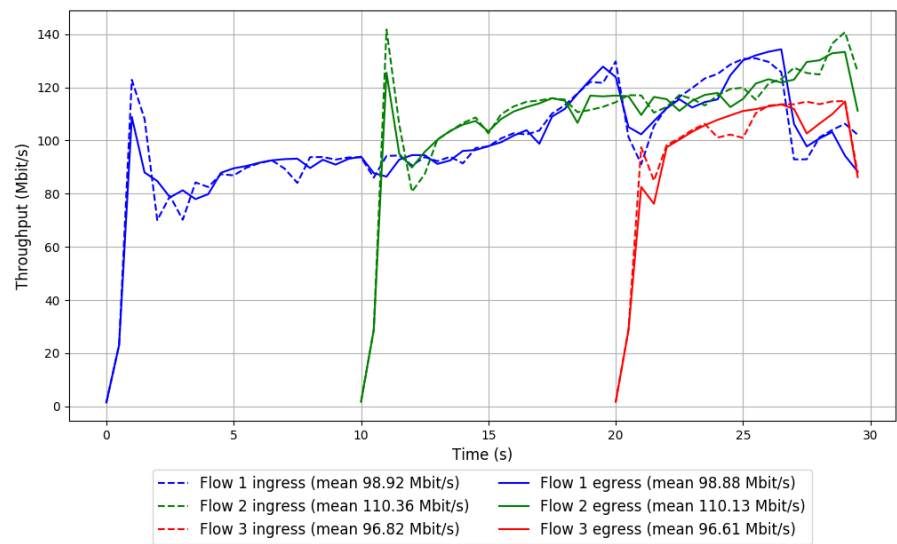
-- Flow 3:

Average throughput: 96.61 Mbit/s

95th percentile per-packet one-way delay: 66.237 ms

Loss rate: 1.50%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-17 08:05:00

End at: 2017-11-17 08:05:30

Below is generated by plot.py at 2017-11-17 10:33:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 196.50 Mbit/s

95th percentile per-packet one-way delay: 66.091 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 104.37 Mbit/s

95th percentile per-packet one-way delay: 65.754 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 99.31 Mbit/s

95th percentile per-packet one-way delay: 66.060 ms

Loss rate: 0.71%

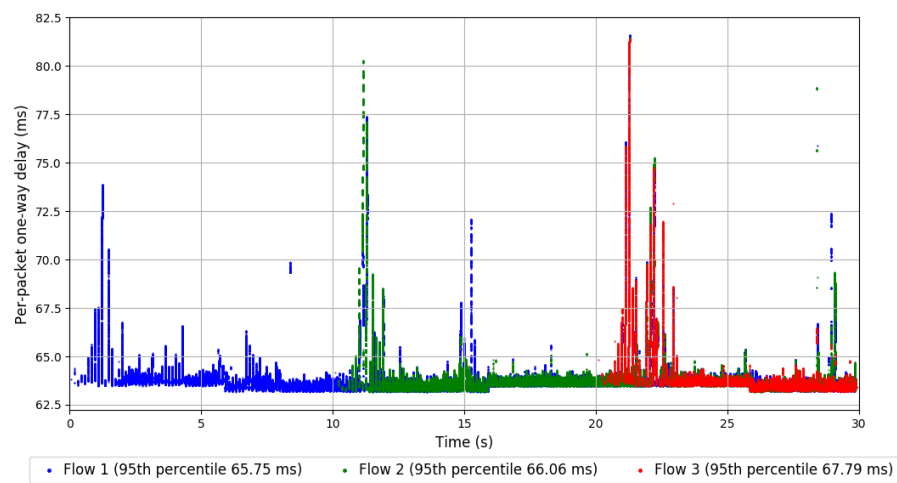
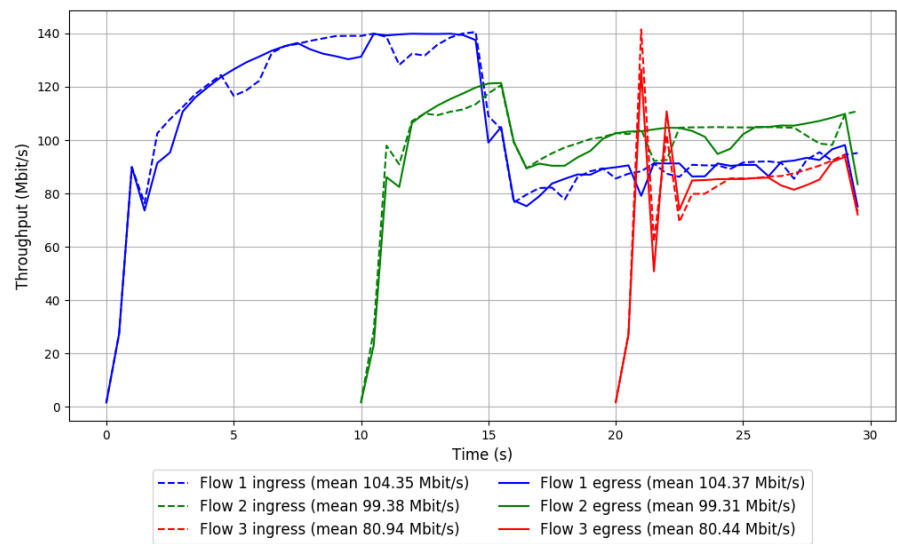
-- Flow 3:

Average throughput: 80.44 Mbit/s

95th percentile per-packet one-way delay: 67.786 ms

Loss rate: 1.51%

Run 10: Report of TCP Cubic — Data Link

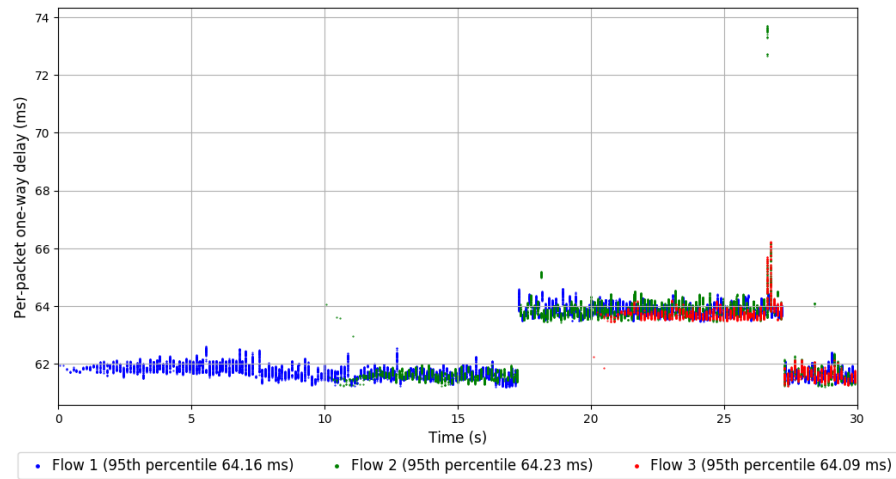
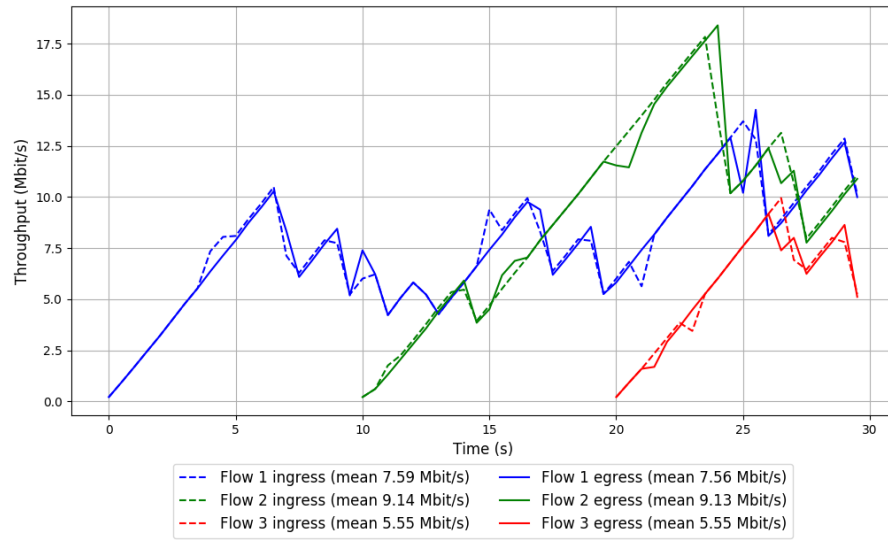


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-17 06:16:19
End at: 2017-11-17 06:16:49

# Below is generated by plot.py at 2017-11-17 10:33:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.42 Mbit/s
95th percentile per-packet one-way delay: 64.193 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 7.56 Mbit/s
95th percentile per-packet one-way delay: 64.159 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 9.13 Mbit/s
95th percentile per-packet one-way delay: 64.232 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 5.55 Mbit/s
95th percentile per-packet one-way delay: 64.091 ms
Loss rate: 1.26%
```


Run 1: Report of LEDBAT — Data Link

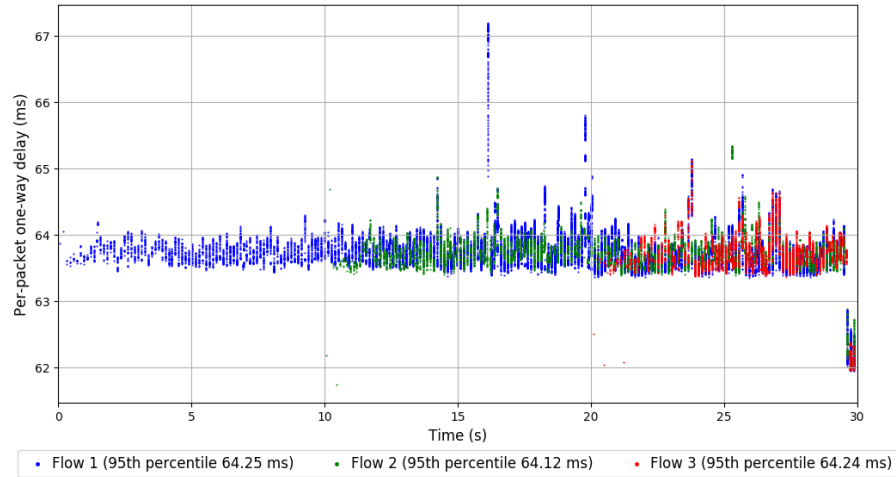
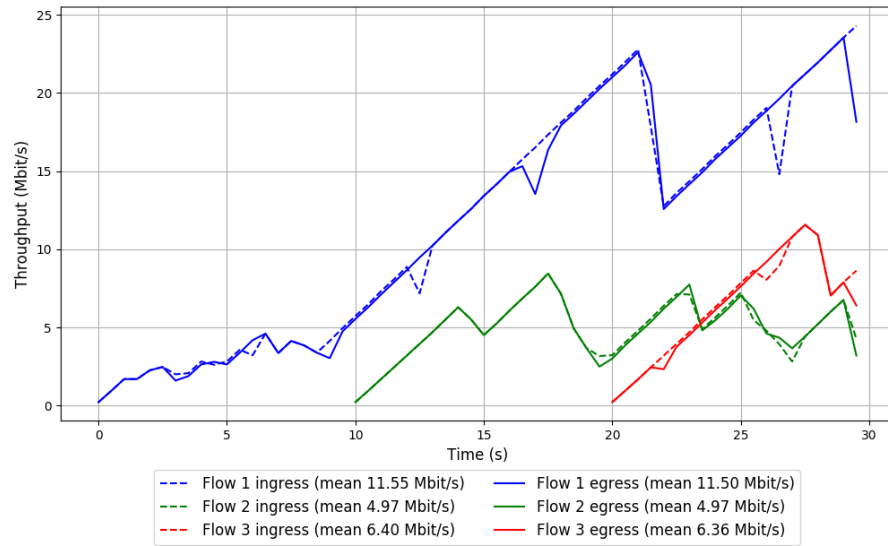


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-17 06:28:57
End at: 2017-11-17 06:29:27

# Below is generated by plot.py at 2017-11-17 10:33:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.88 Mbit/s
95th percentile per-packet one-way delay: 64.232 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 11.50 Mbit/s
95th percentile per-packet one-way delay: 64.252 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 64.125 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 6.36 Mbit/s
95th percentile per-packet one-way delay: 64.240 ms
Loss rate: 1.77%
```

Run 2: Report of LEDBAT — Data Link

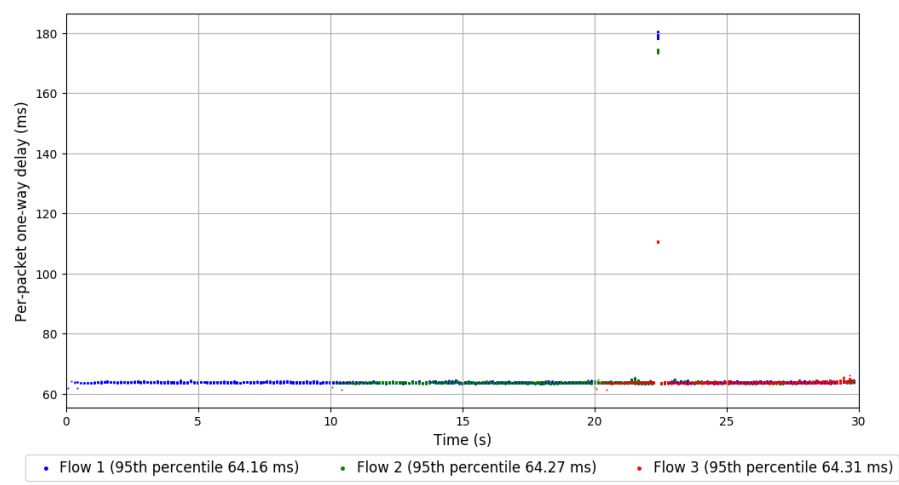
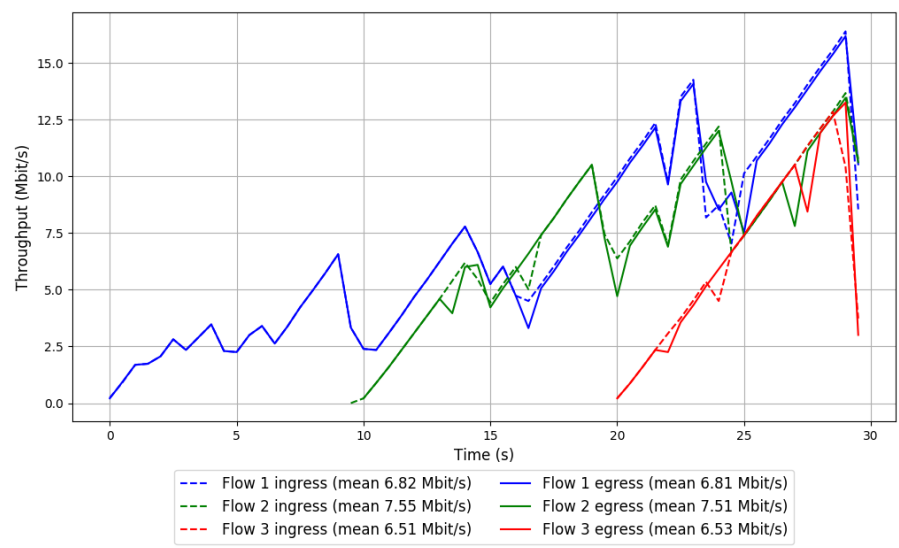


```
Run 3: Statistics of LEDBAT

Start at: 2017-11-17 06:41:17
End at: 2017-11-17 06:41:47

# Below is generated by plot.py at 2017-11-17 10:33:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.93 Mbit/s
95th percentile per-packet one-way delay: 64.230 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 64.161 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 64.270 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 64.305 ms
Loss rate: 0.91%
```

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-17 06:53:54

End at: 2017-11-17 06:54:24

Below is generated by plot.py at 2017-11-17 10:33:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.85 Mbit/s

95th percentile per-packet one-way delay: 64.220 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 6.86 Mbit/s

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

Loss rate: 0.83%

-- Flow 2:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 64.320 ms

Loss rate: 0.51%

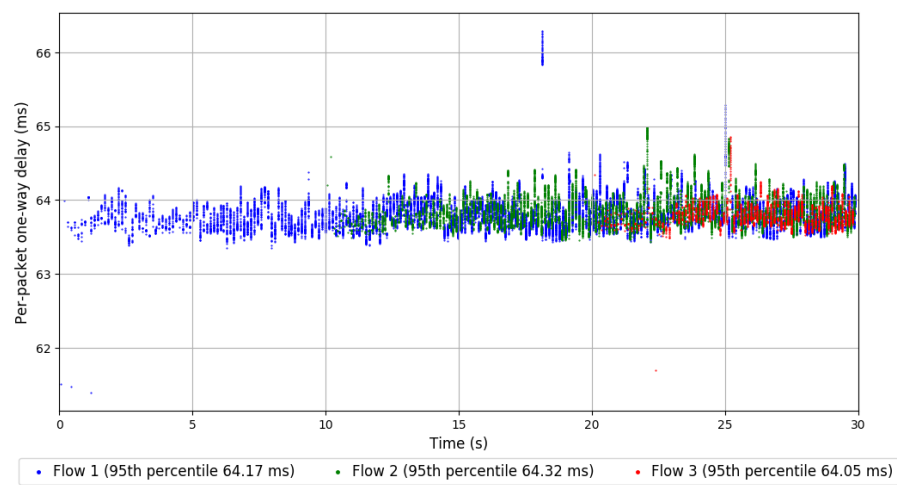
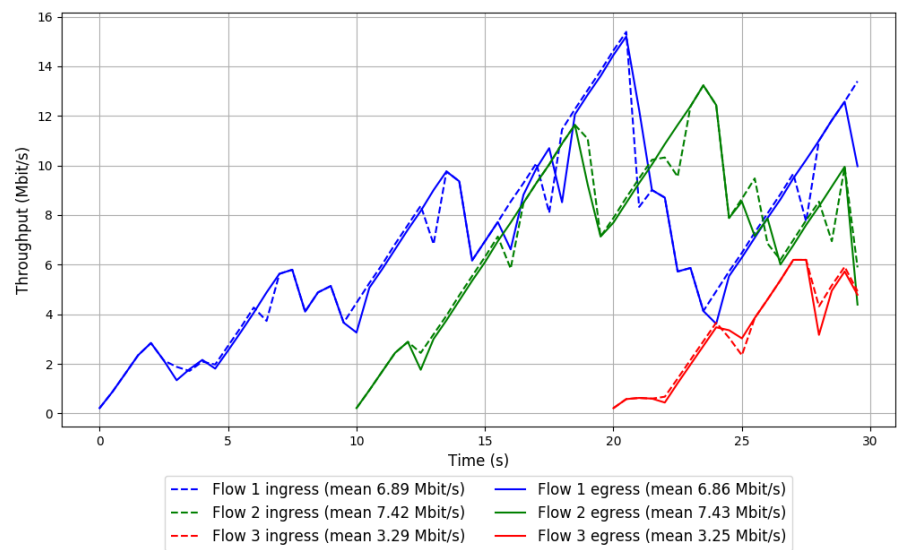
-- Flow 3:

Average throughput: 3.25 Mbit/s

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

Loss rate: 2.61%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-17 07:06:14

End at: 2017-11-17 07:06:44

Below is generated by plot.py at 2017-11-17 10:33:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.53 Mbit/s

95th percentile per-packet one-way delay: 64.157 ms

Loss rate: 2.00%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 543.019 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.50 Mbit/s

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

Loss rate: 1.42%

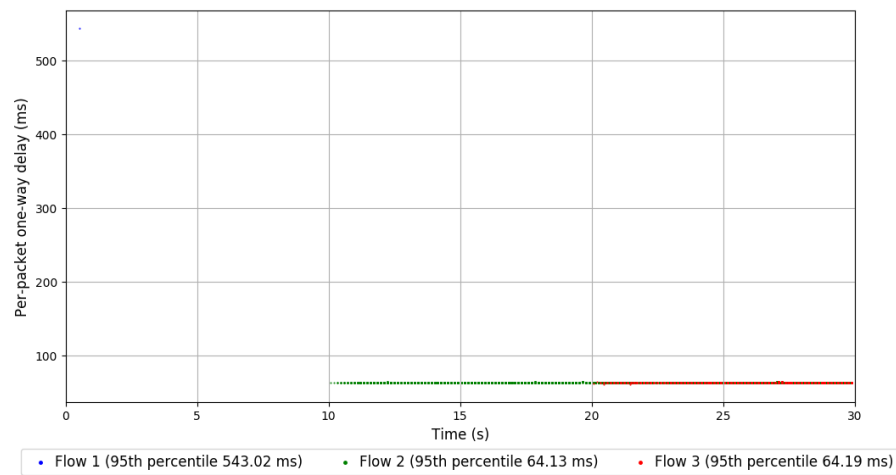
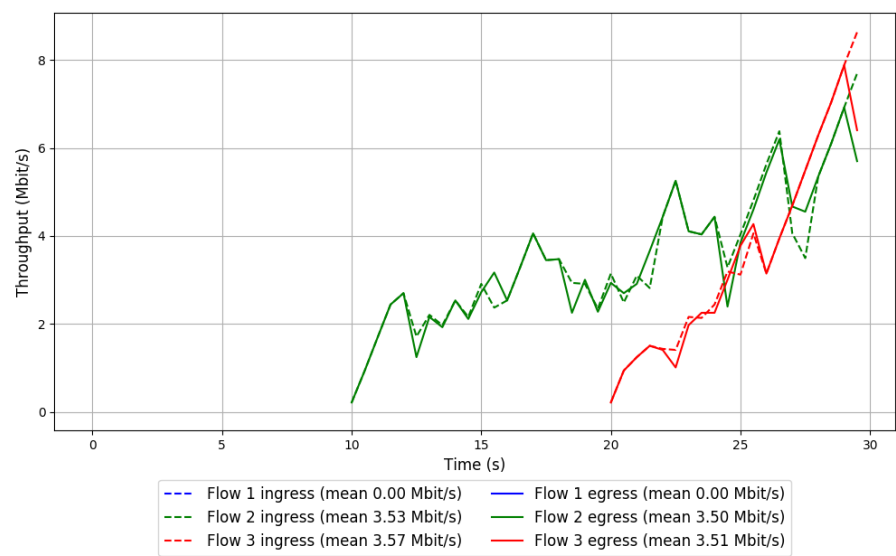
-- Flow 3:

Average throughput: 3.51 Mbit/s

95th percentile per-packet one-way delay: 64.185 ms

Loss rate: 3.14%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-17 07:18:50

End at: 2017-11-17 07:19:20

Below is generated by plot.py at 2017-11-17 10:33:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.21 Mbit/s

95th percentile per-packet one-way delay: 64.667 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 7.67 Mbit/s

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

Loss rate: 0.97%

-- Flow 2:

Average throughput: 7.06 Mbit/s

95th percentile per-packet one-way delay: 64.642 ms

Loss rate: 0.78%

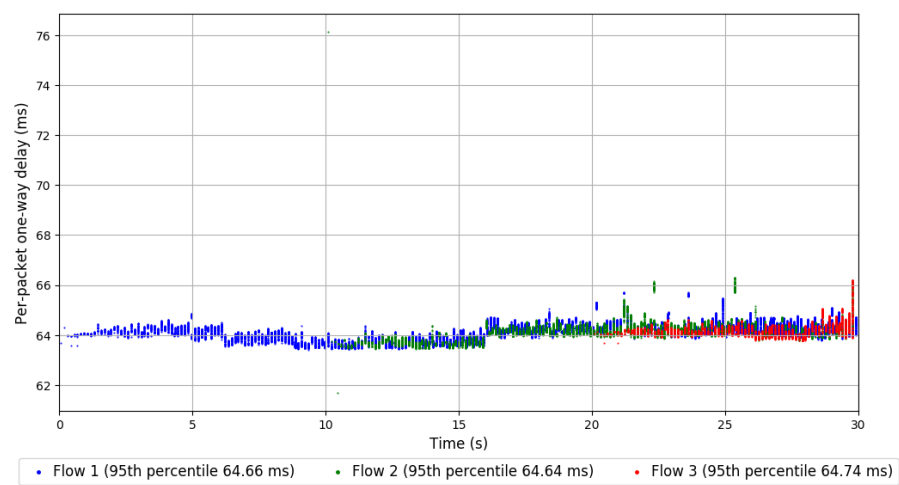
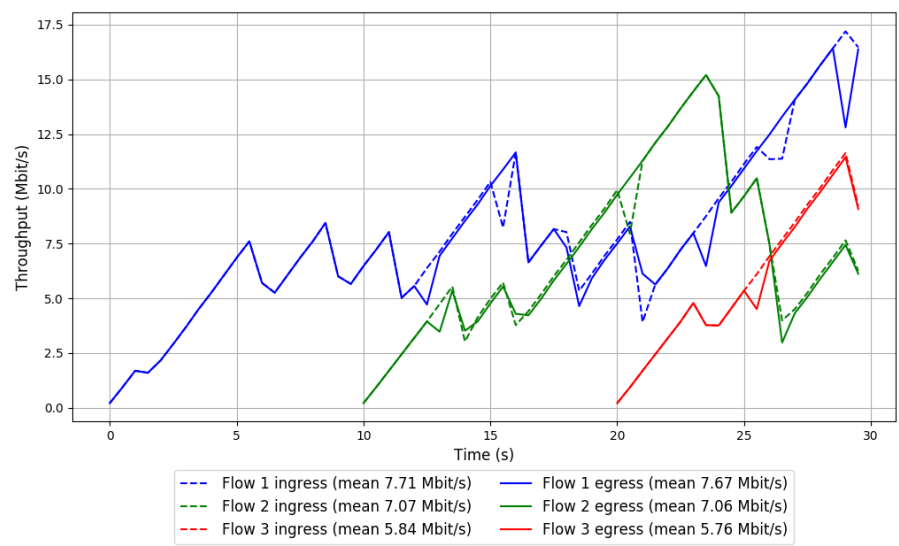
-- Flow 3:

Average throughput: 5.76 Mbit/s

95th percentile per-packet one-way delay: 64.742 ms

Loss rate: 2.72%

Run 6: Report of LEDBAT — Data Link

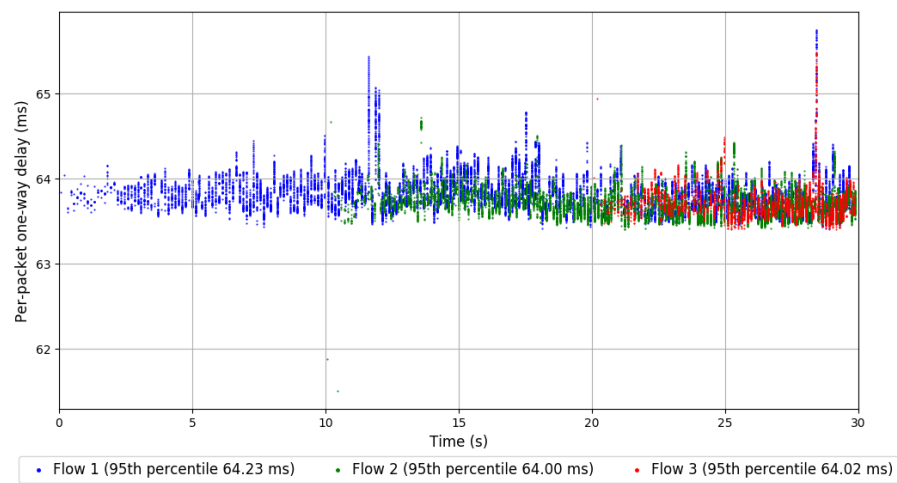
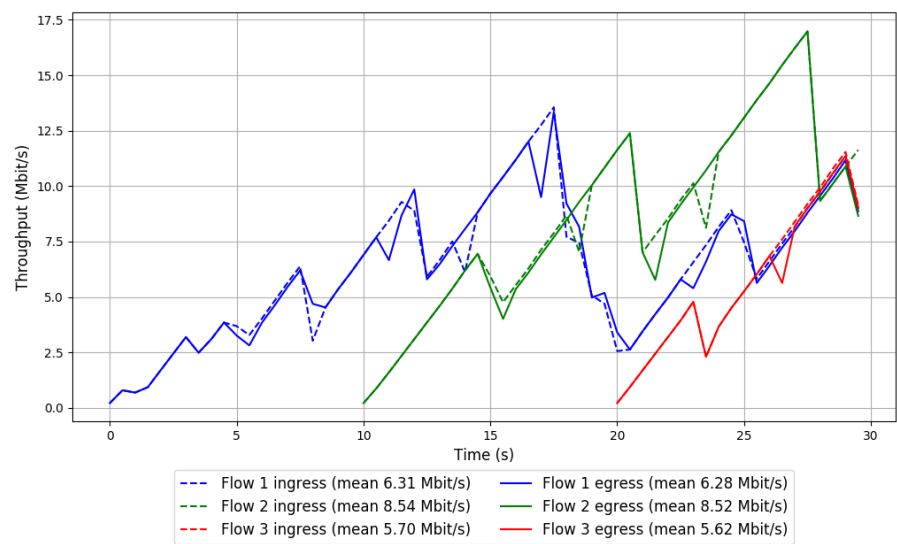


```
Run 7: Statistics of LEDBAT

Start at: 2017-11-17 07:31:18
End at: 2017-11-17 07:31:48

# Below is generated by plot.py at 2017-11-17 10:33:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.76 Mbit/s
95th percentile per-packet one-way delay: 64.133 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 6.28 Mbit/s
95th percentile per-packet one-way delay: 64.227 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 8.52 Mbit/s
95th percentile per-packet one-way delay: 63.998 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 64.016 ms
Loss rate: 2.75%
```

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-17 07:43:48

End at: 2017-11-17 07:44:18

Below is generated by plot.py at 2017-11-17 10:33:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.62 Mbit/s

95th percentile per-packet one-way delay: 64.121 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 5.38 Mbit/s

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

Loss rate: 0.68%

-- Flow 2:

Average throughput: 8.49 Mbit/s

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

Loss rate: 0.68%

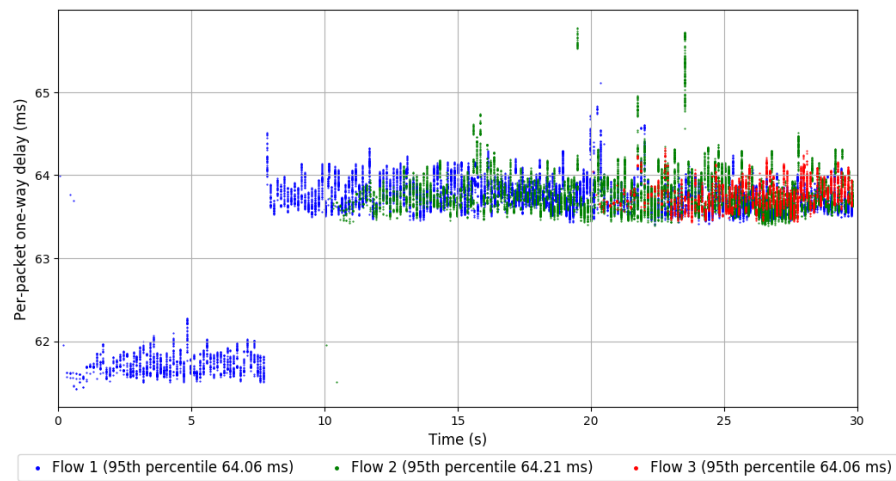
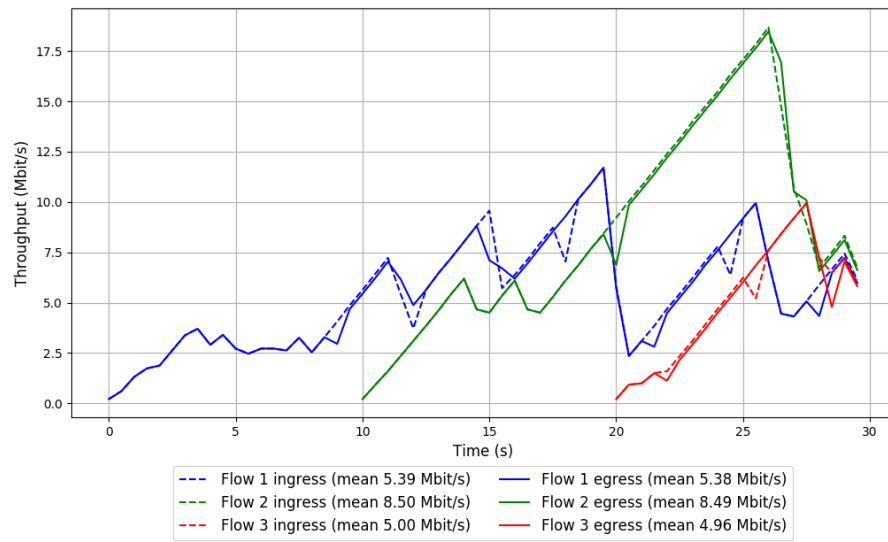
-- Flow 3:

Average throughput: 4.96 Mbit/s

95th percentile per-packet one-way delay: 64.057 ms

Loss rate: 2.08%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-17 07:56:14

End at: 2017-11-17 07:56:44

Below is generated by plot.py at 2017-11-17 10:33:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.12 Mbit/s

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

Loss rate: 0.67%

-- Flow 1:

Average throughput: 11.08 Mbit/s

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

Loss rate: 0.39%

-- Flow 2:

Average throughput: 4.54 Mbit/s

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

Loss rate: 1.13%

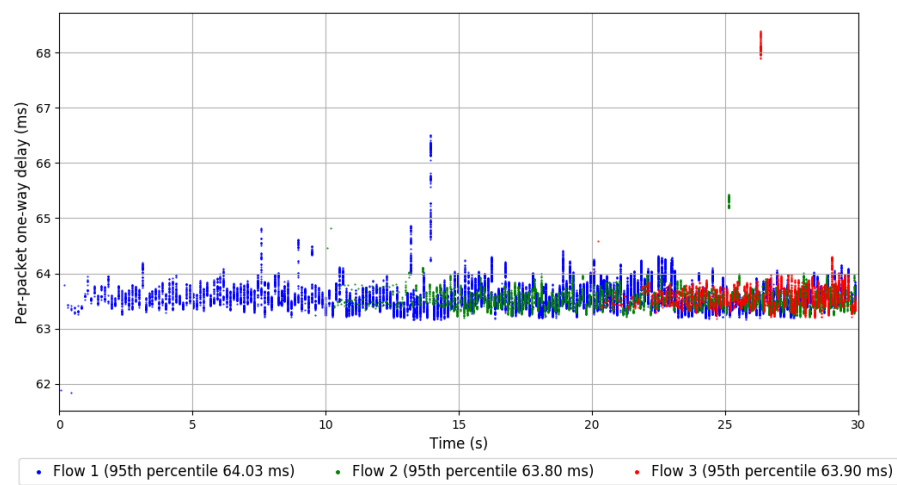
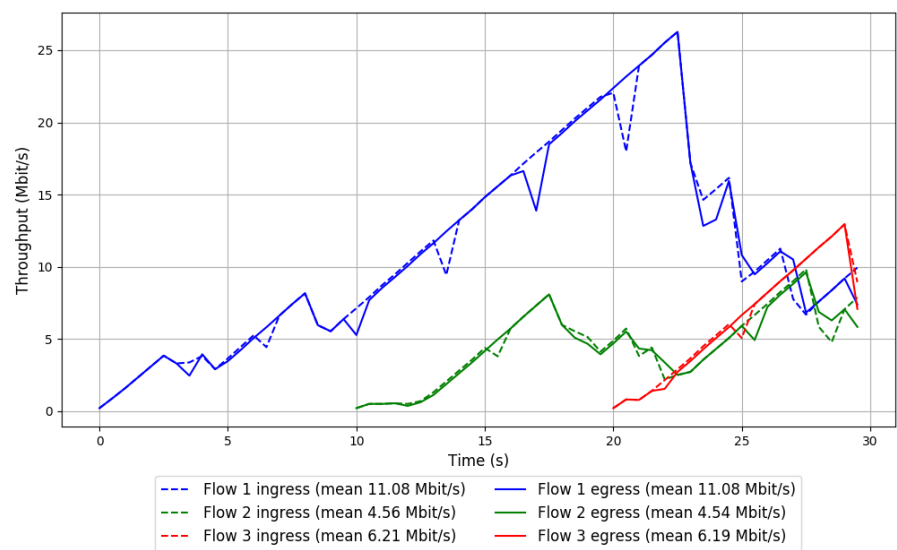
-- Flow 3:

Average throughput: 6.19 Mbit/s

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

Loss rate: 1.51%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-17 08:08:35

End at: 2017-11-17 08:09:05

Below is generated by plot.py at 2017-11-17 10:33:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.97 Mbit/s

95th percentile per-packet one-way delay: 64.550 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 10.43 Mbit/s

95th percentile per-packet one-way delay: 64.592 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 11.34 Mbit/s

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

Loss rate: 1.40%

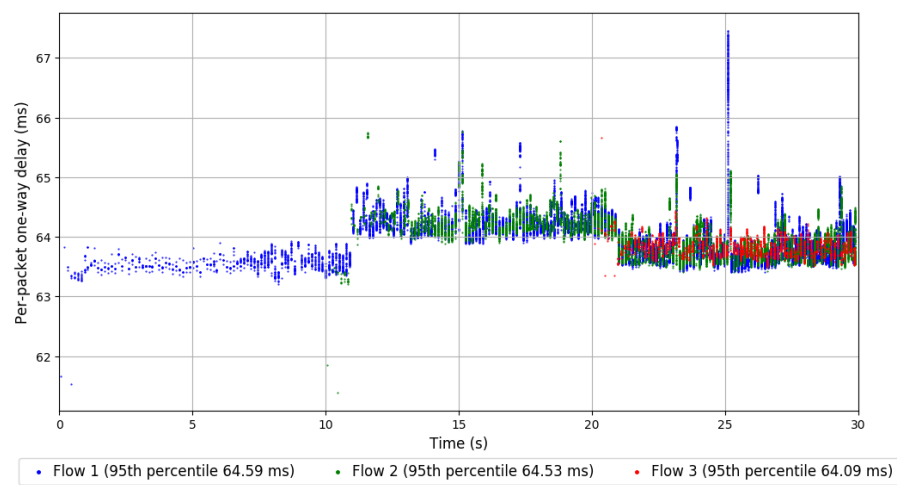
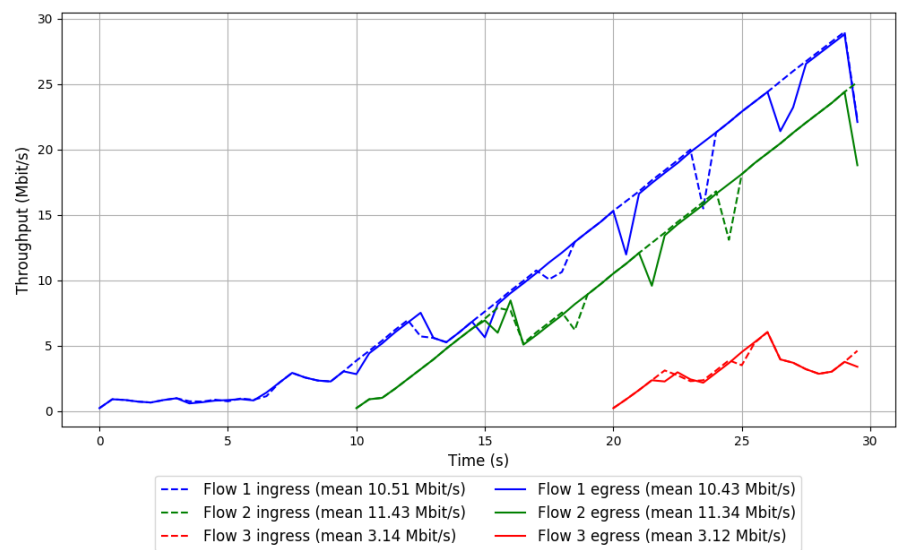
-- Flow 3:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 64.088 ms

Loss rate: 1.96%

Run 10: Report of LEDBAT — Data Link

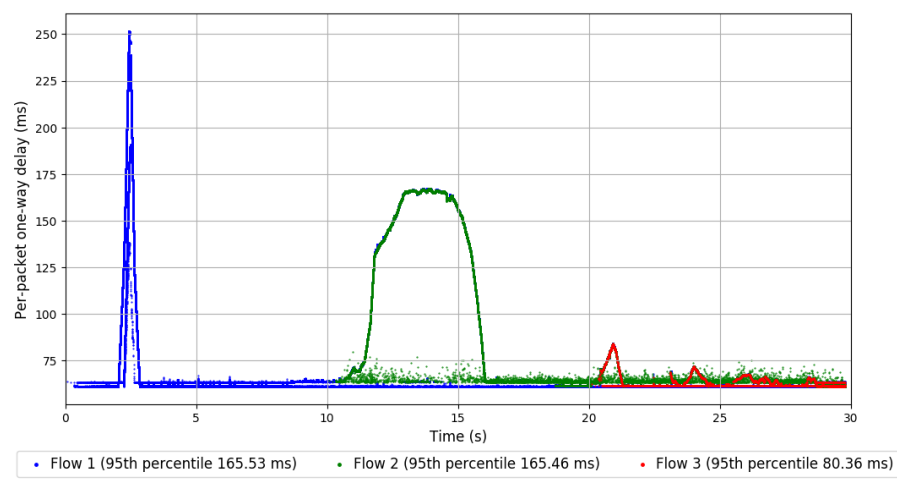
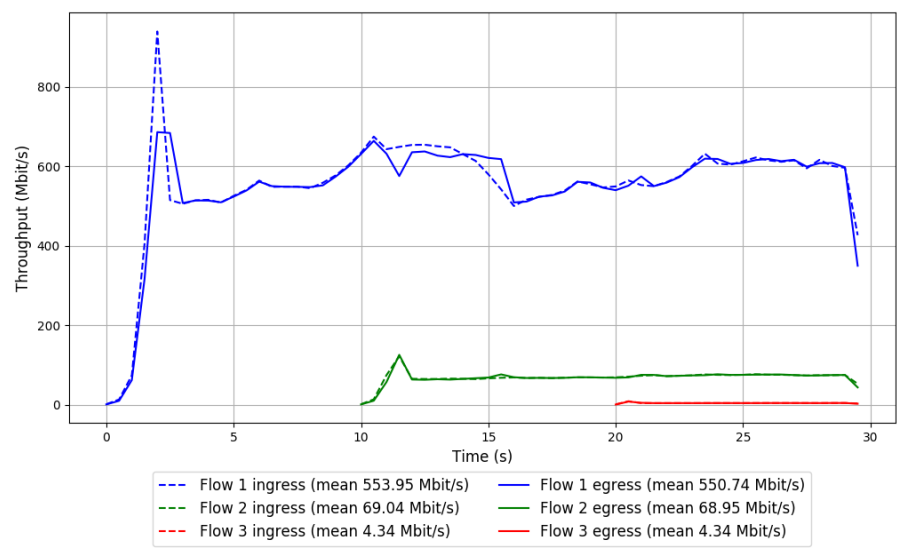


```
Run 1: Statistics of PCC

Start at: 2017-11-17 06:17:47
End at: 2017-11-17 06:18:17

# Below is generated by plot.py at 2017-11-17 10:42:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 597.89 Mbit/s
95th percentile per-packet one-way delay: 165.514 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 550.74 Mbit/s
95th percentile per-packet one-way delay: 165.525 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 68.95 Mbit/s
95th percentile per-packet one-way delay: 165.457 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 80.364 ms
Loss rate: 1.35%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-17 06:30:25

End at: 2017-11-17 06:30:55

Below is generated by plot.py at 2017-11-17 10:42:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 586.72 Mbit/s

95th percentile per-packet one-way delay: 124.027 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 570.27 Mbit/s

95th percentile per-packet one-way delay: 123.997 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 17.42 Mbit/s

95th percentile per-packet one-way delay: 121.693 ms

Loss rate: 0.75%

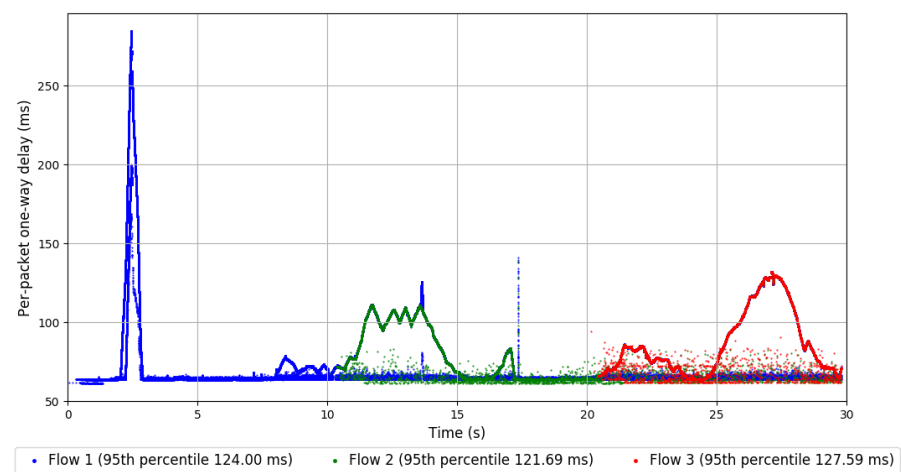
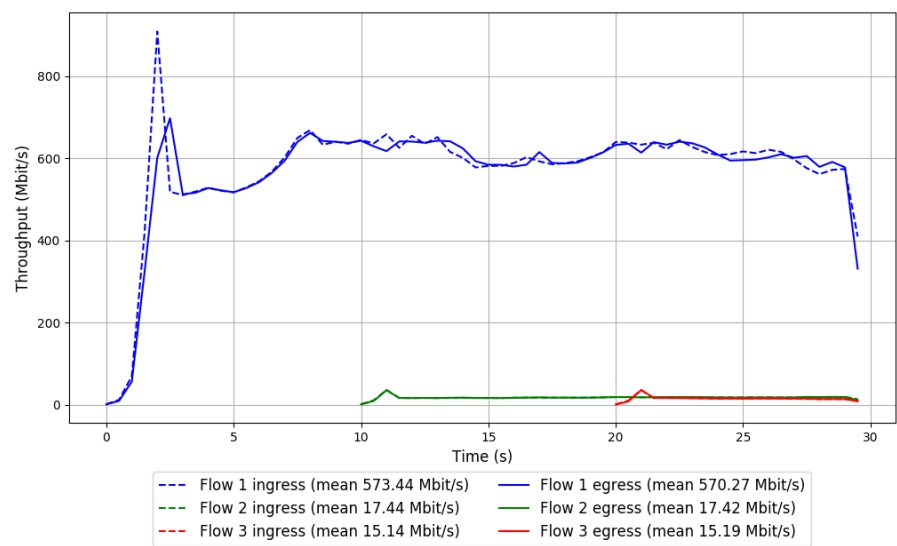
-- Flow 3:

Average throughput: 15.19 Mbit/s

95th percentile per-packet one-way delay: 127.588 ms

Loss rate: 1.27%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-17 06:42:45

End at: 2017-11-17 06:43:15

Below is generated by plot.py at 2017-11-17 10:42:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 609.72 Mbit/s

95th percentile per-packet one-way delay: 166.449 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 568.62 Mbit/s

95th percentile per-packet one-way delay: 166.320 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 31.32 Mbit/s

95th percentile per-packet one-way delay: 166.649 ms

Loss rate: 0.87%

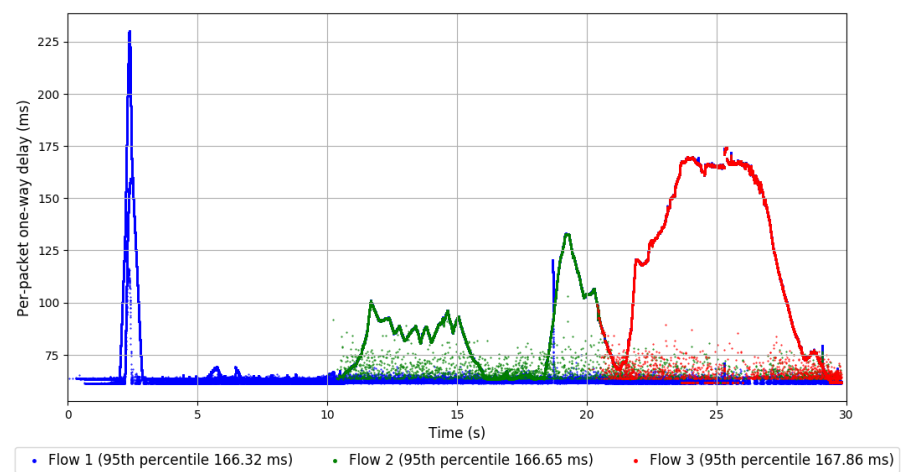
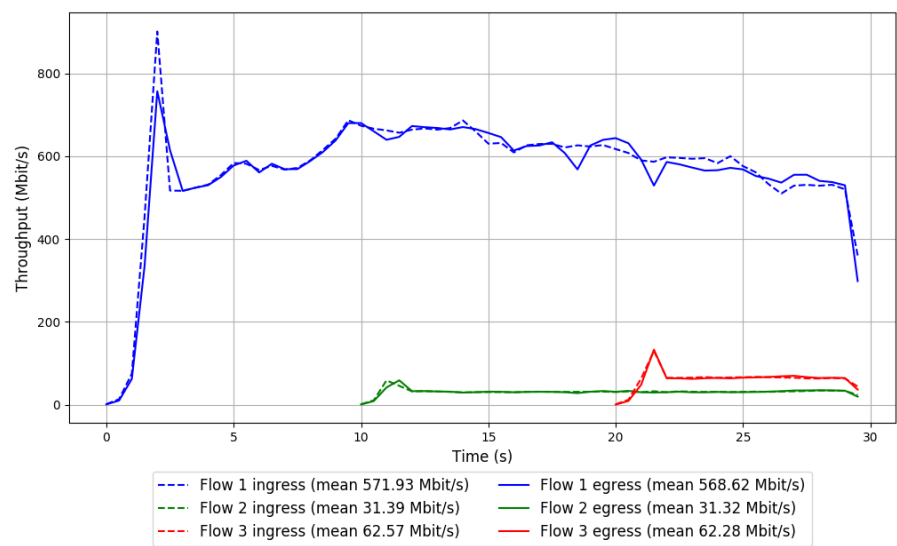
-- Flow 3:

Average throughput: 62.28 Mbit/s

95th percentile per-packet one-way delay: 167.857 ms

Loss rate: 1.78%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-17 06:55:20

End at: 2017-11-17 06:55:50

Below is generated by plot.py at 2017-11-17 10:42:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 568.21 Mbit/s

95th percentile per-packet one-way delay: 175.486 ms

Loss rate: 1.86%

-- Flow 1:

Average throughput: 503.88 Mbit/s

95th percentile per-packet one-way delay: 175.418 ms

Loss rate: 1.80%

-- Flow 2:

Average throughput: 68.77 Mbit/s

95th percentile per-packet one-way delay: 175.631 ms

Loss rate: 1.86%

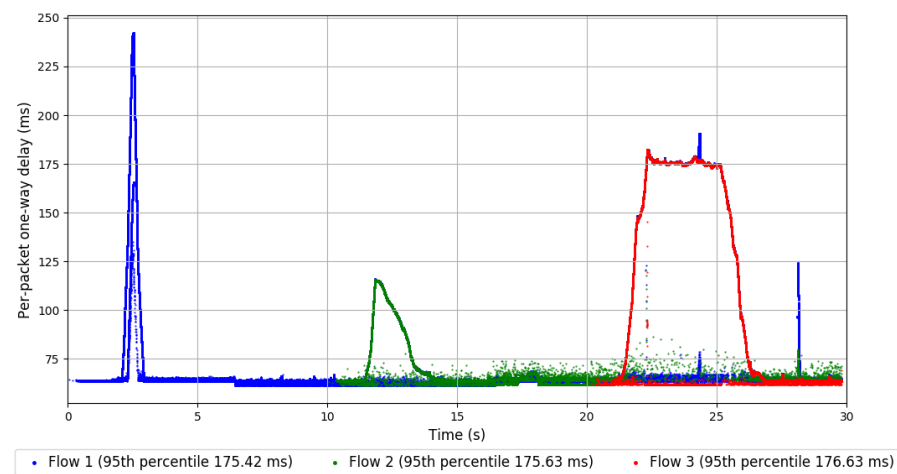
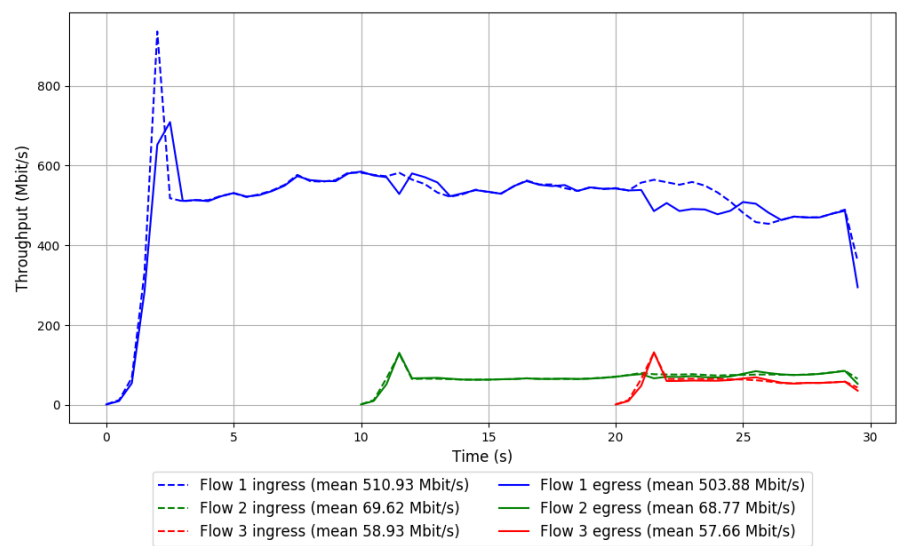
-- Flow 3:

Average throughput: 57.66 Mbit/s

95th percentile per-packet one-way delay: 176.635 ms

Loss rate: 3.35%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-17 07:07:42

End at: 2017-11-17 07:08:12

Below is generated by plot.py at 2017-11-17 10:42:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 588.22 Mbit/s

95th percentile per-packet one-way delay: 132.216 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 561.74 Mbit/s

95th percentile per-packet one-way delay: 132.311 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 131.802 ms

Loss rate: 0.61%

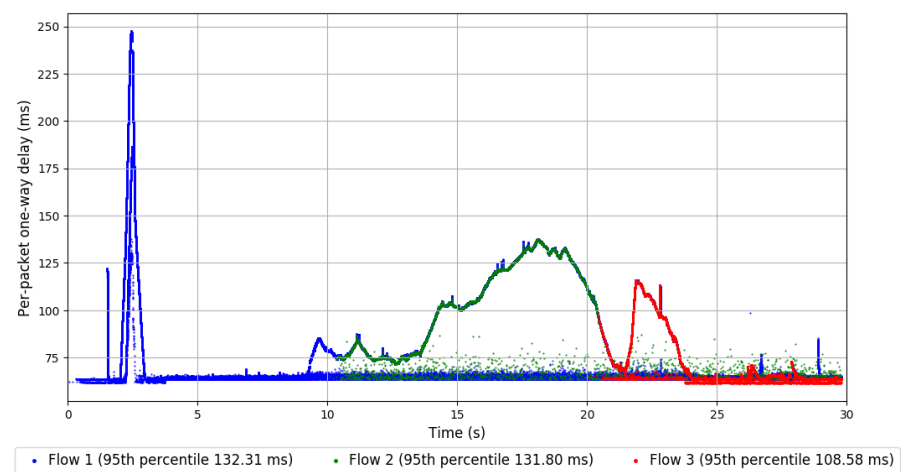
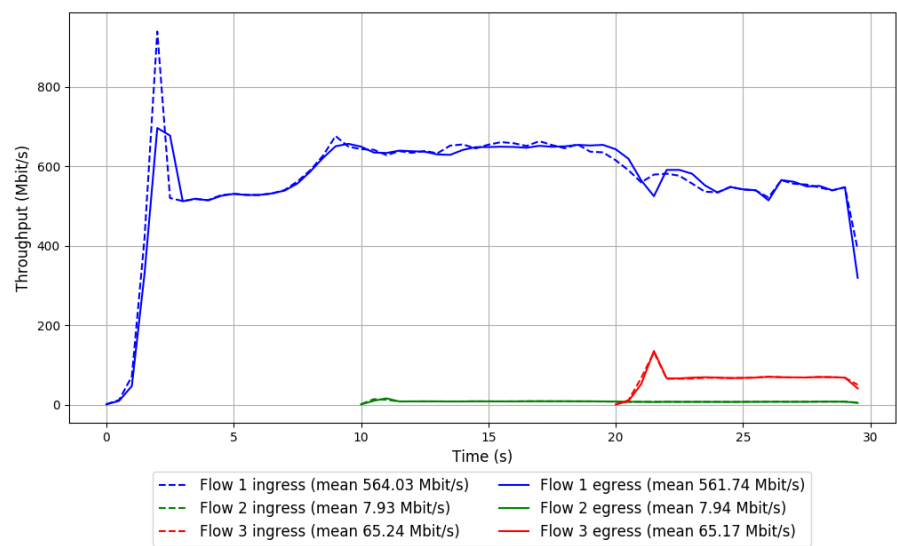
-- Flow 3:

Average throughput: 65.17 Mbit/s

95th percentile per-packet one-way delay: 108.584 ms

Loss rate: 1.41%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-17 07:20:18

End at: 2017-11-17 07:20:48

Below is generated by plot.py at 2017-11-17 10:42:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 548.16 Mbit/s

95th percentile per-packet one-way delay: 174.570 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 505.44 Mbit/s

95th percentile per-packet one-way delay: 174.566 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 62.27 Mbit/s

95th percentile per-packet one-way delay: 174.630 ms

Loss rate: 0.92%

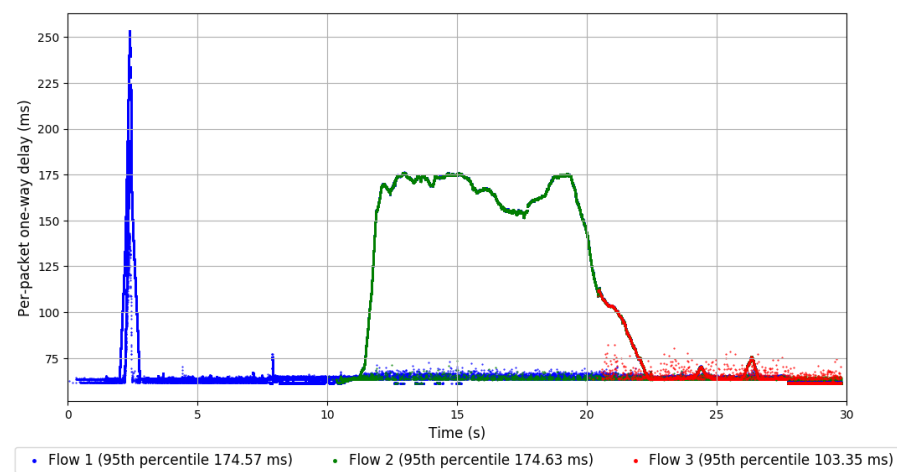
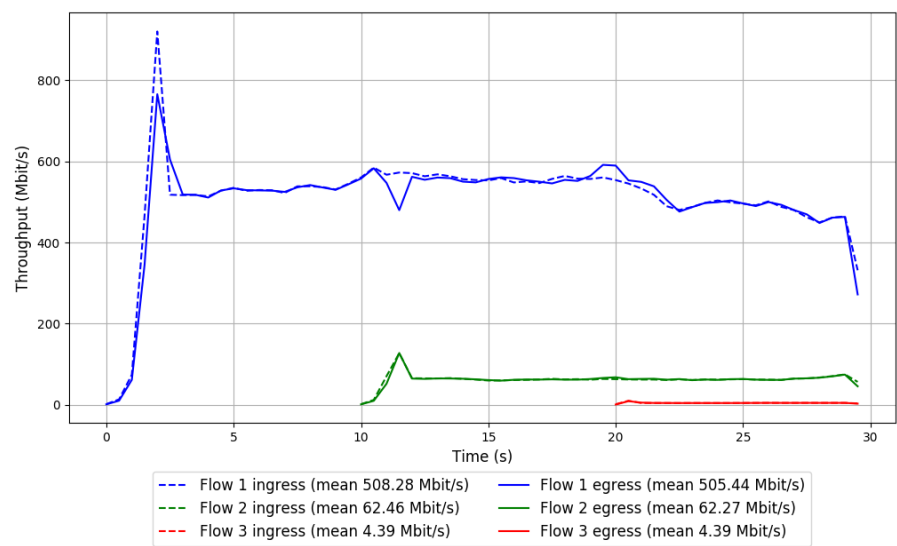
-- Flow 3:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 103.347 ms

Loss rate: 1.31%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-17 07:32:47

End at: 2017-11-17 07:33:17

Below is generated by plot.py at 2017-11-17 10:43:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 573.76 Mbit/s

95th percentile per-packet one-way delay: 167.324 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 569.24 Mbit/s

95th percentile per-packet one-way delay: 167.363 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 4.60 Mbit/s

95th percentile per-packet one-way delay: 166.272 ms

Loss rate: 0.98%

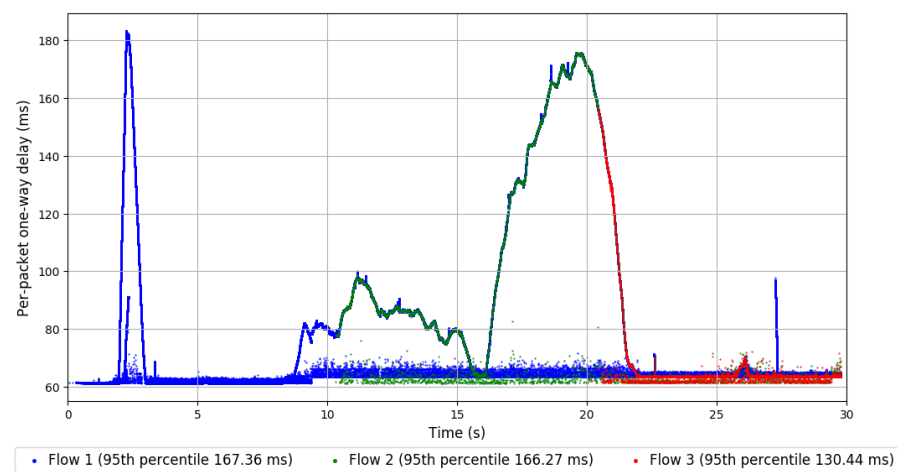
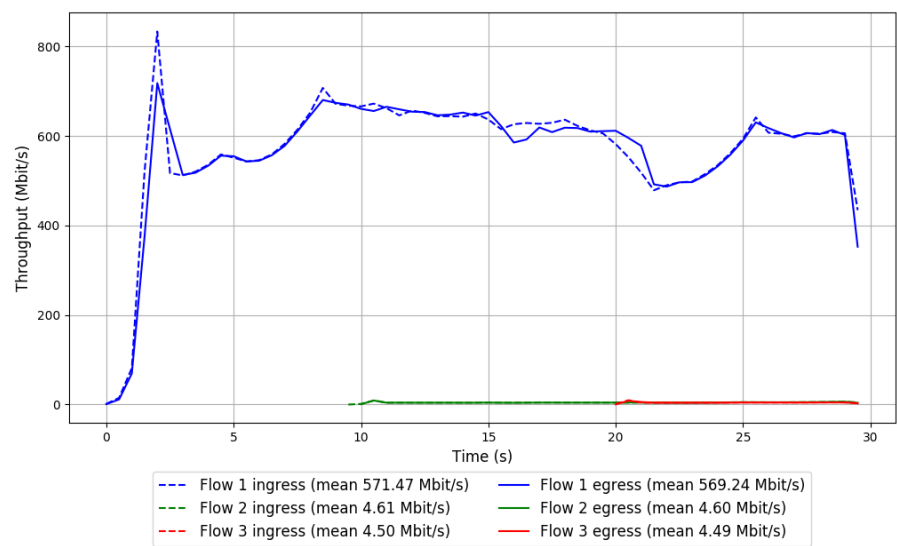
-- Flow 3:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 130.444 ms

Loss rate: 1.35%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-17 07:45:16

End at: 2017-11-17 07:45:46

Below is generated by plot.py at 2017-11-17 10:44:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 619.66 Mbit/s

95th percentile per-packet one-way delay: 171.544 ms

Loss rate: 3.39%

-- Flow 1:

Average throughput: 556.88 Mbit/s

95th percentile per-packet one-way delay: 171.418 ms

Loss rate: 3.29%

-- Flow 2:

Average throughput: 66.60 Mbit/s

95th percentile per-packet one-way delay: 171.844 ms

Loss rate: 3.65%

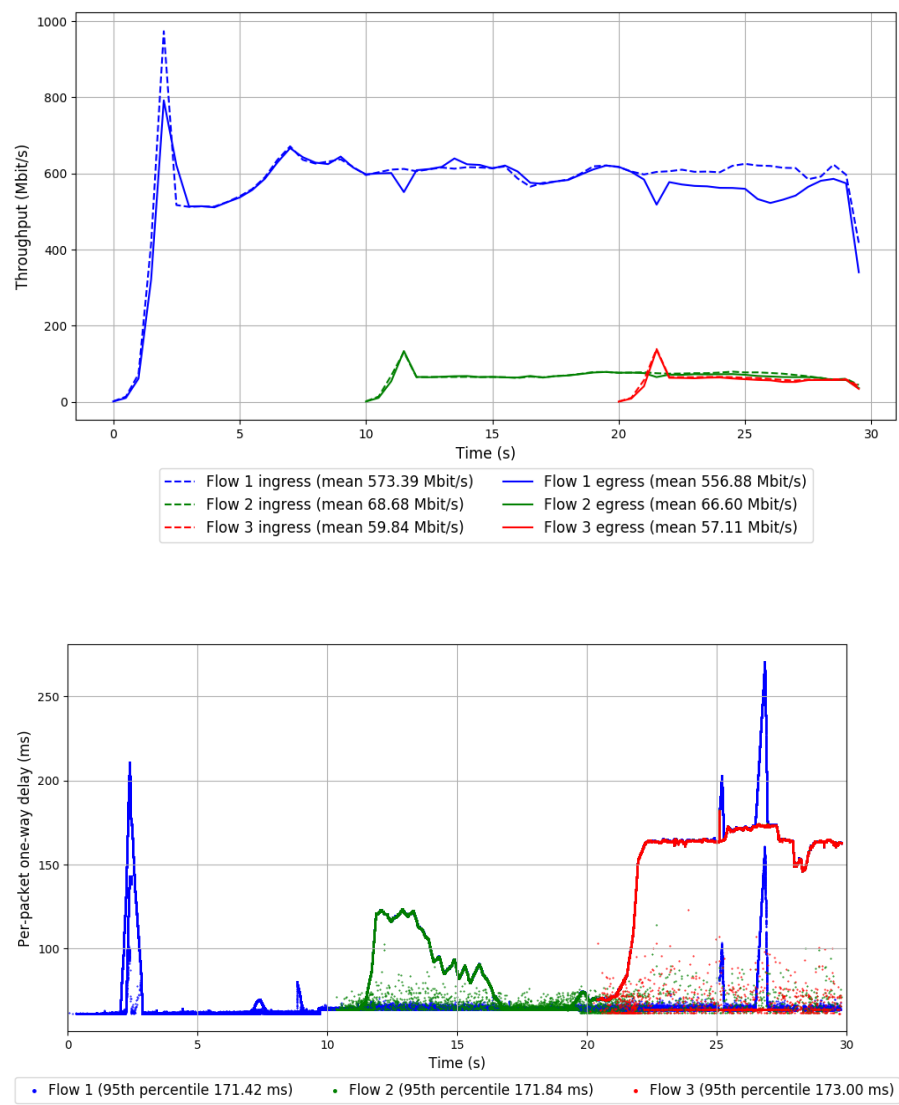
-- Flow 3:

Average throughput: 57.11 Mbit/s

95th percentile per-packet one-way delay: 173.000 ms

Loss rate: 5.79%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-17 07:57:42

End at: 2017-11-17 07:58:12

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 598.90 Mbit/s

95th percentile per-packet one-way delay: 169.981 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 574.44 Mbit/s

95th percentile per-packet one-way delay: 170.112 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 169.687 ms

Loss rate: 0.94%

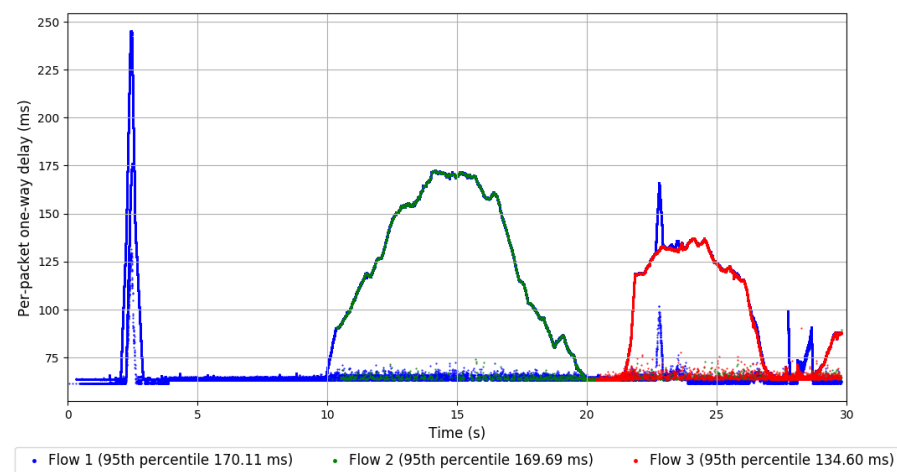
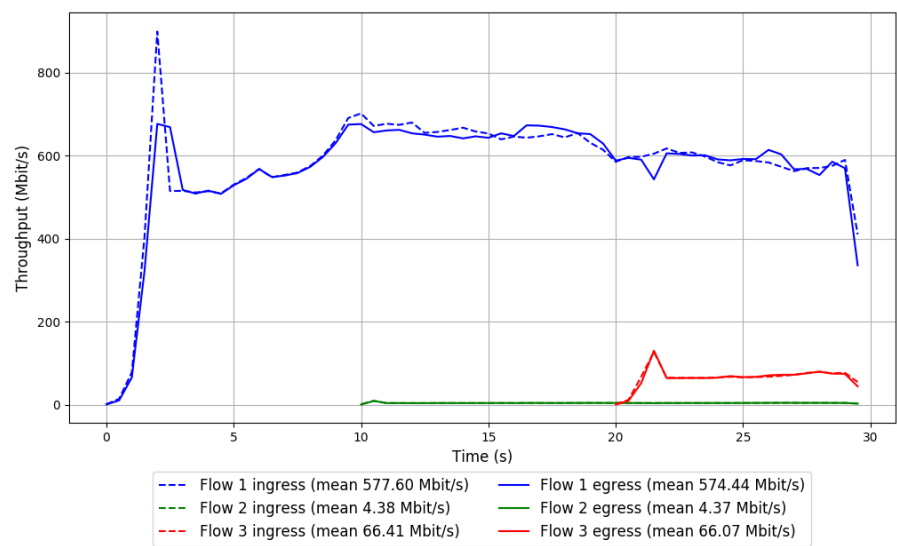
-- Flow 3:

Average throughput: 66.07 Mbit/s

95th percentile per-packet one-way delay: 134.600 ms

Loss rate: 1.79%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-11-17 08:10:05

End at: 2017-11-17 08:10:35

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 566.74 Mbit/s

95th percentile per-packet one-way delay: 178.964 ms

Loss rate: 1.90%

-- Flow 1:

Average throughput: 499.26 Mbit/s

95th percentile per-packet one-way delay: 178.989 ms

Loss rate: 1.90%

-- Flow 2:

Average throughput: 70.89 Mbit/s

95th percentile per-packet one-way delay: 179.004 ms

Loss rate: 1.89%

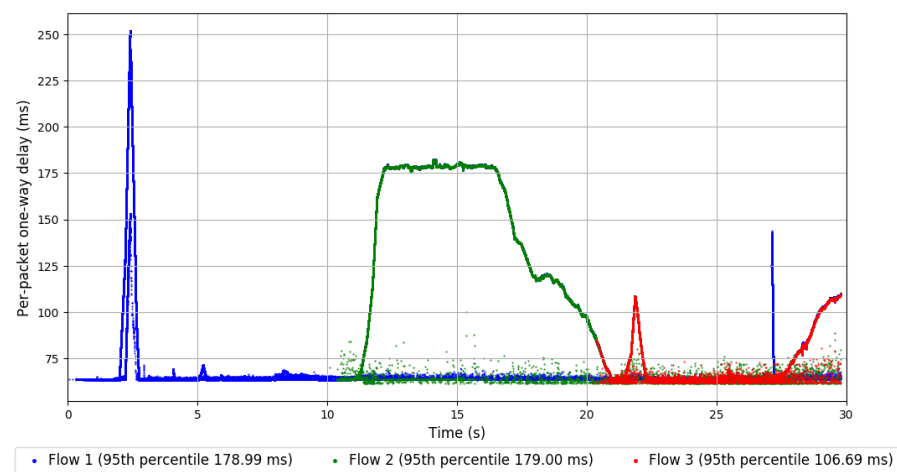
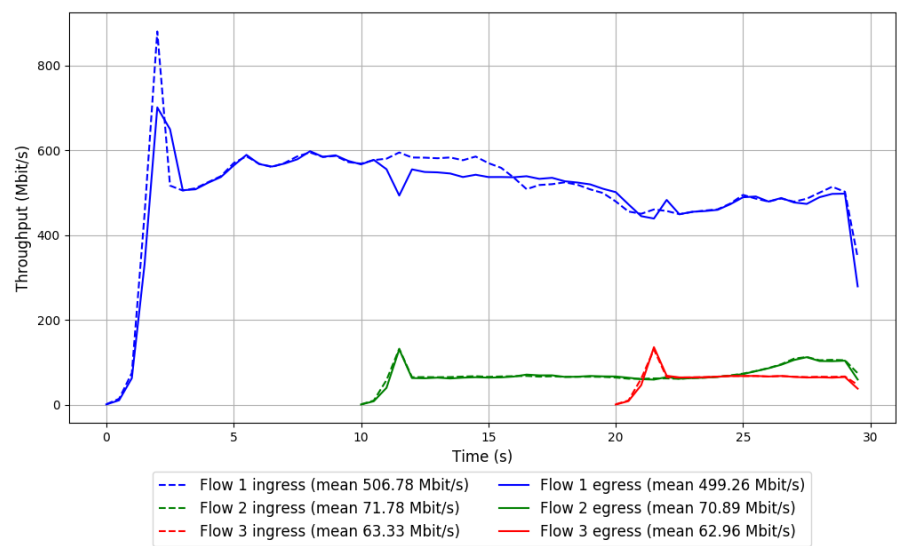
-- Flow 3:

Average throughput: 62.96 Mbit/s

95th percentile per-packet one-way delay: 106.691 ms

Loss rate: 1.88%

Run 10: Report of PCC — Data Link

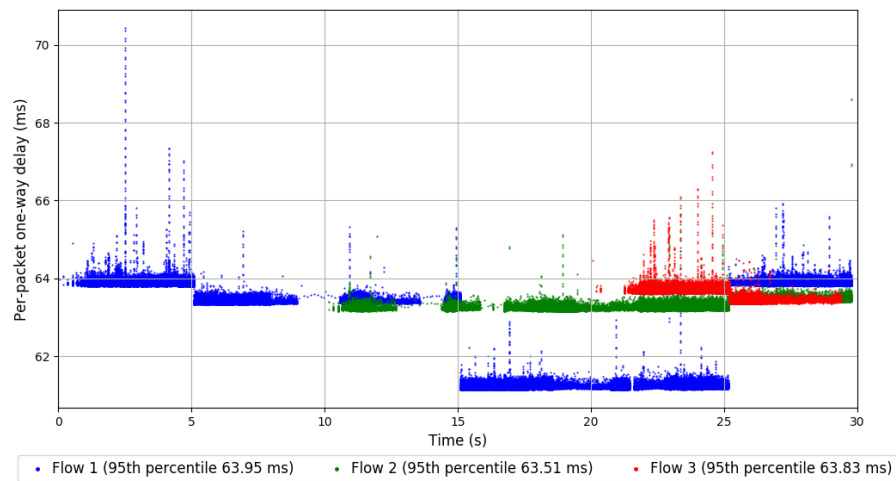
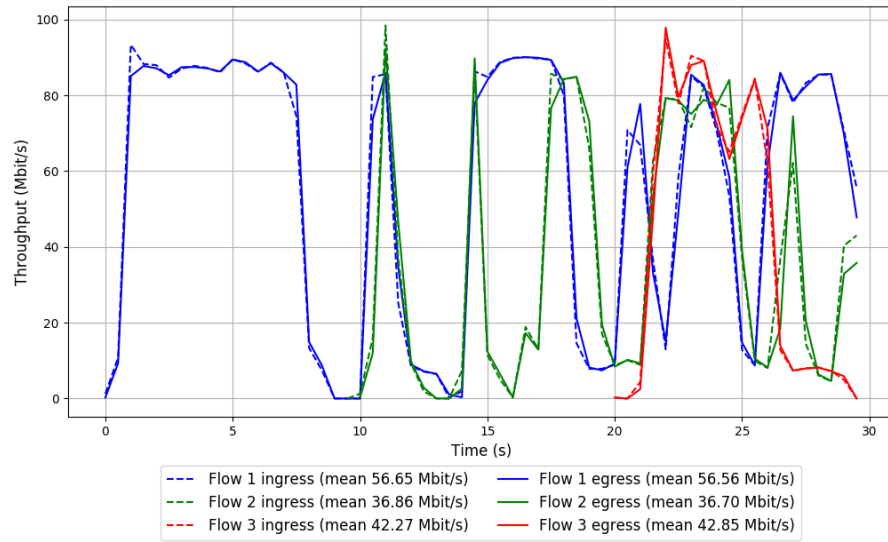


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-17 06:17:01
End at: 2017-11-17 06:17:31

# Below is generated by plot.py at 2017-11-17 10:51:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.79 Mbit/s
95th percentile per-packet one-way delay: 63.911 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 56.56 Mbit/s
95th percentile per-packet one-way delay: 63.945 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 36.70 Mbit/s
95th percentile per-packet one-way delay: 63.505 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 42.85 Mbit/s
95th percentile per-packet one-way delay: 63.828 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-17 06:29:39

End at: 2017-11-17 06:30:09

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.84 Mbit/s

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

Loss rate: 1.05%

-- Flow 1:

Average throughput: 49.22 Mbit/s

95th percentile per-packet one-way delay: 63.547 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 51.29 Mbit/s

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

Loss rate: 1.02%

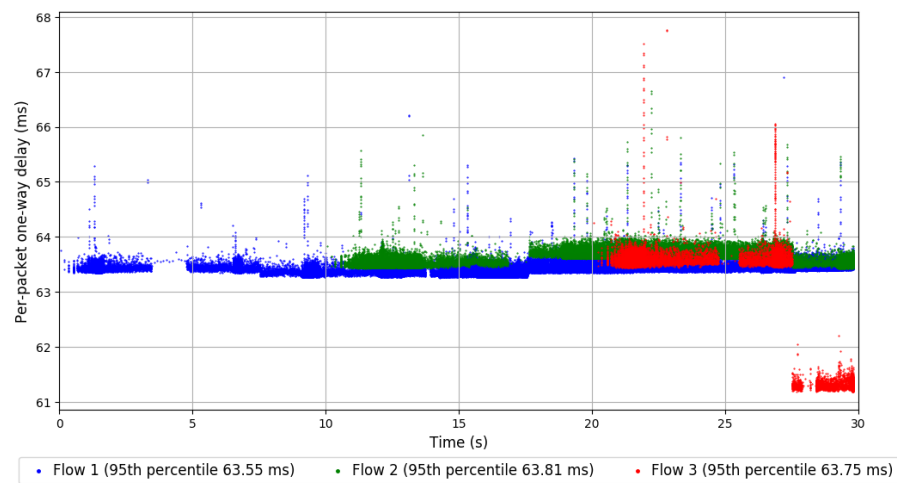
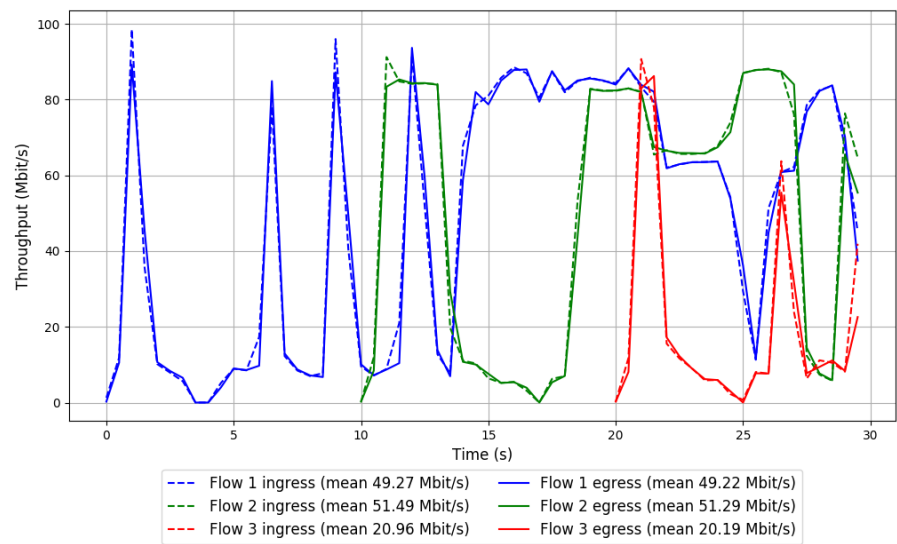
-- Flow 3:

Average throughput: 20.19 Mbit/s

95th percentile per-packet one-way delay: 63.750 ms

Loss rate: 4.91%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-17 06:41:59

End at: 2017-11-17 06:42:29

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.03 Mbit/s

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

Loss rate: 0.80%

-- Flow 1:

Average throughput: 46.02 Mbit/s

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

Loss rate: 0.55%

-- Flow 2:

Average throughput: 63.10 Mbit/s

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

Loss rate: 0.66%

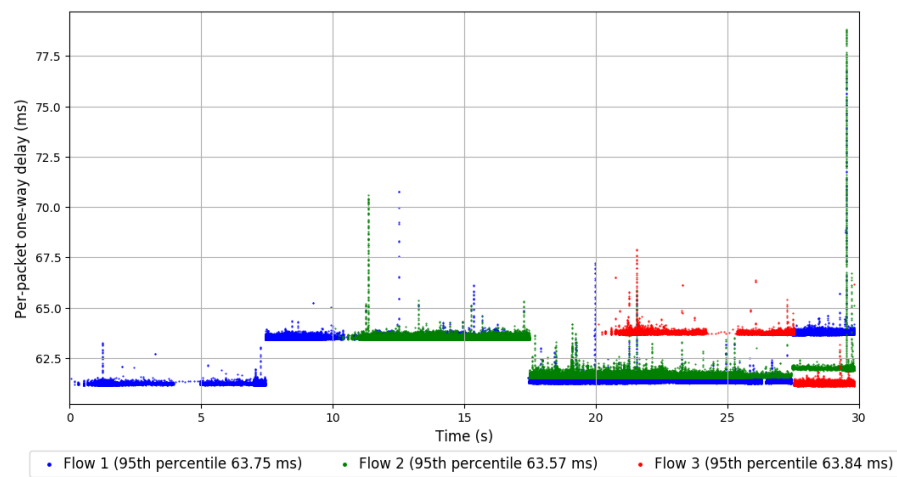
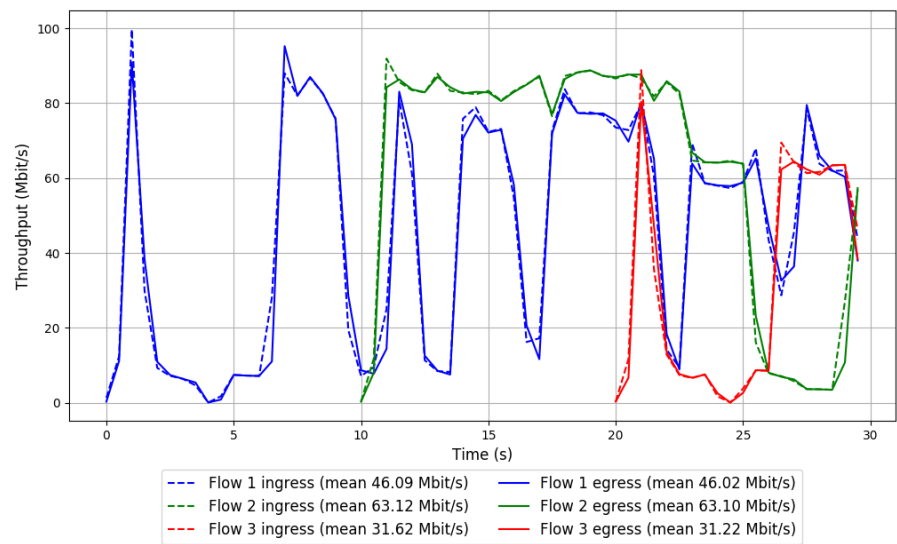
-- Flow 3:

Average throughput: 31.22 Mbit/s

95th percentile per-packet one-way delay: 63.838 ms

Loss rate: 2.51%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-17 06:54:36

End at: 2017-11-17 06:55:06

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.07 Mbit/s

95th percentile per-packet one-way delay: 63.590 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 14.86 Mbit/s

95th percentile per-packet one-way delay: 63.584 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 53.00 Mbit/s

95th percentile per-packet one-way delay: 63.582 ms

Loss rate: 0.75%

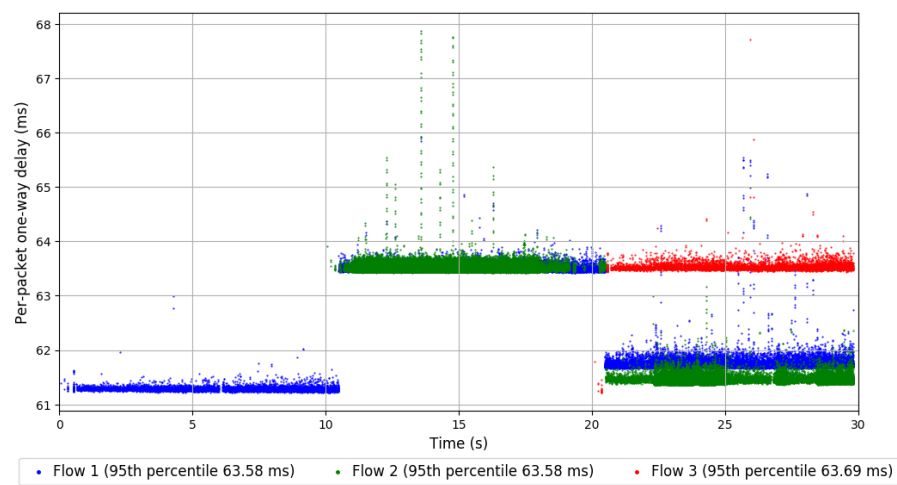
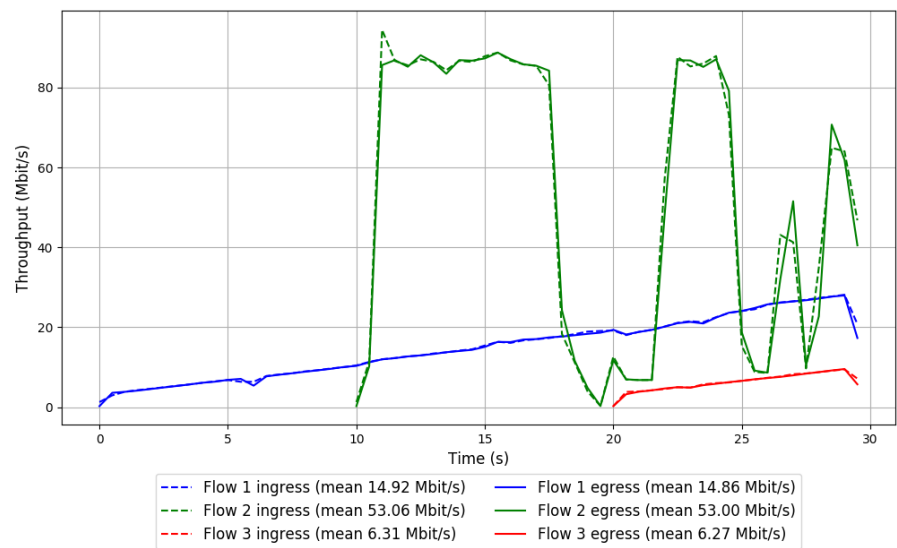
-- Flow 3:

Average throughput: 6.27 Mbit/s

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

Loss rate: 2.04%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-17 07:06:55

End at: 2017-11-17 07:07:25

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.02 Mbit/s

95th percentile per-packet one-way delay: 63.539 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 55.09 Mbit/s

95th percentile per-packet one-way delay: 63.587 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 61.13 Mbit/s

95th percentile per-packet one-way delay: 63.349 ms

Loss rate: 0.06%

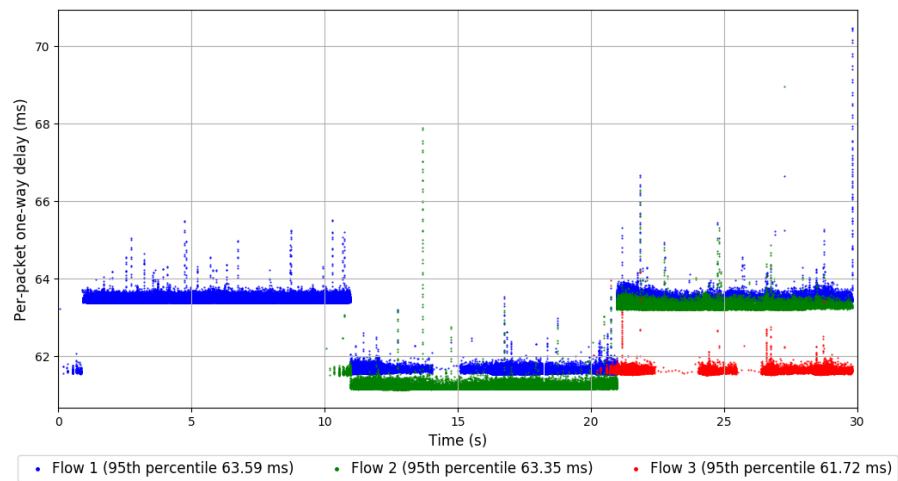
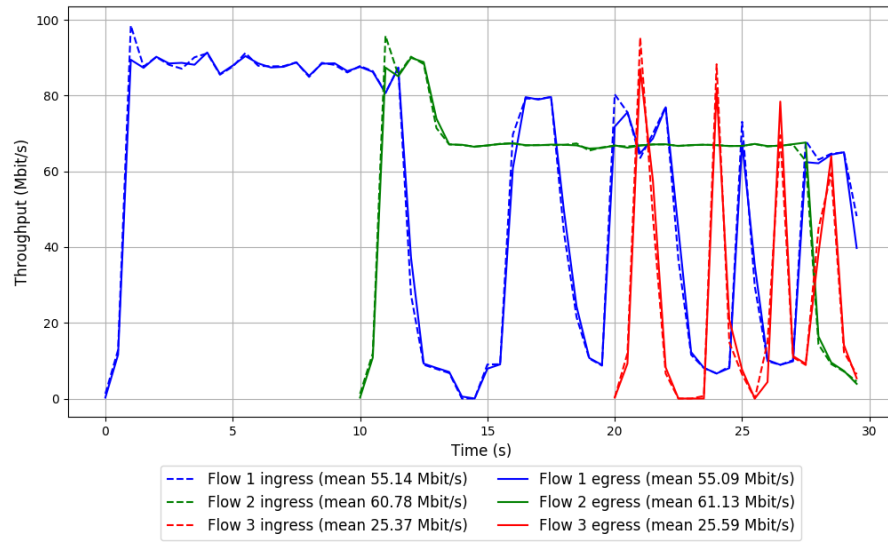
-- Flow 3:

Average throughput: 25.59 Mbit/s

95th percentile per-packet one-way delay: 61.719 ms

Loss rate: 0.44%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-17 07:19:32

End at: 2017-11-17 07:20:02

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.95 Mbit/s

95th percentile per-packet one-way delay: 63.740 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 63.62 Mbit/s

95th percentile per-packet one-way delay: 63.608 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 47.38 Mbit/s

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

Loss rate: 0.85%

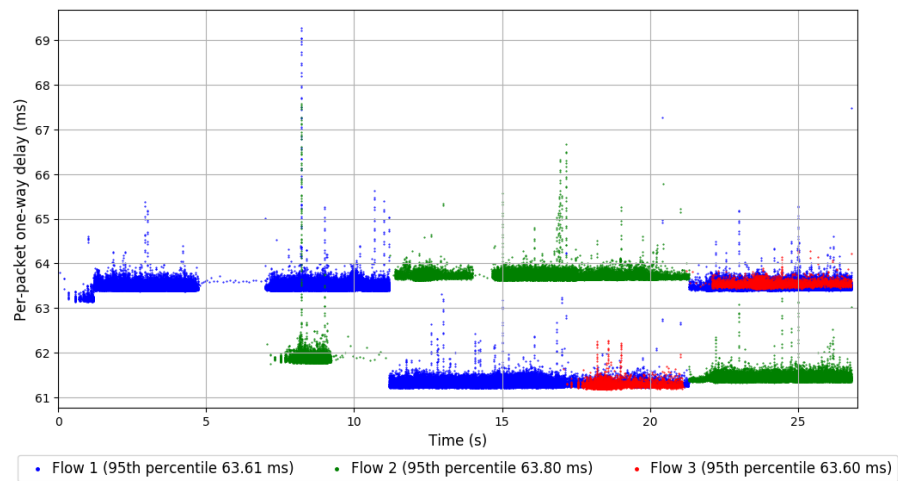
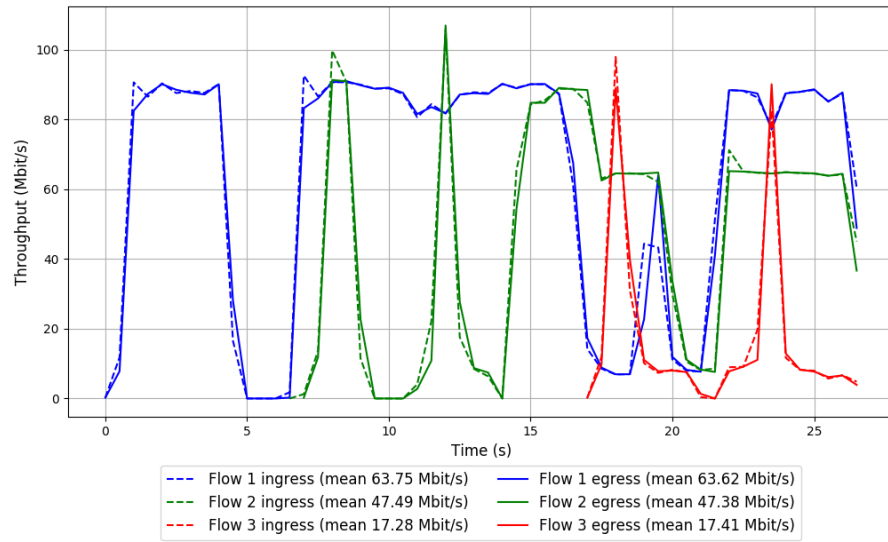
-- Flow 3:

Average throughput: 17.41 Mbit/s

95th percentile per-packet one-way delay: 63.603 ms

Loss rate: 0.53%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-17 07:32:00

End at: 2017-11-17 07:32:30

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.27 Mbit/s

95th percentile per-packet one-way delay: 63.670 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 57.35 Mbit/s

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

Loss rate: 0.05%

-- Flow 2:

Average throughput: 41.72 Mbit/s

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

Loss rate: 1.34%

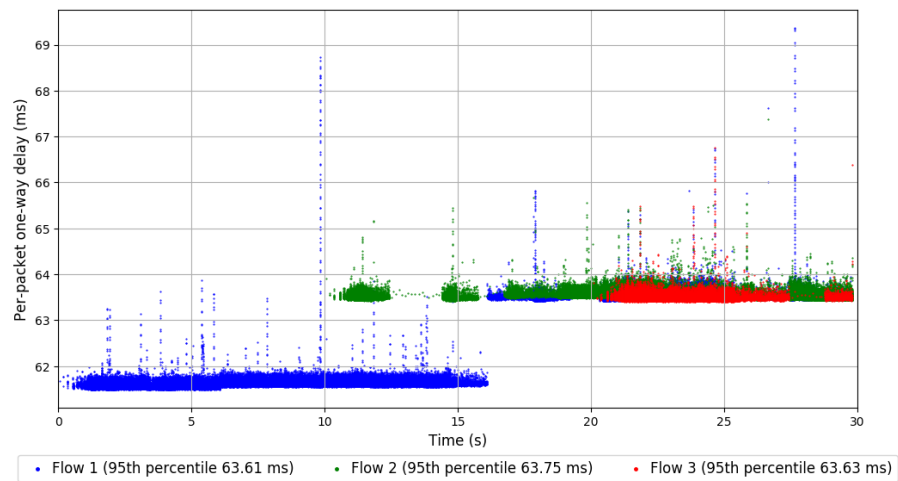
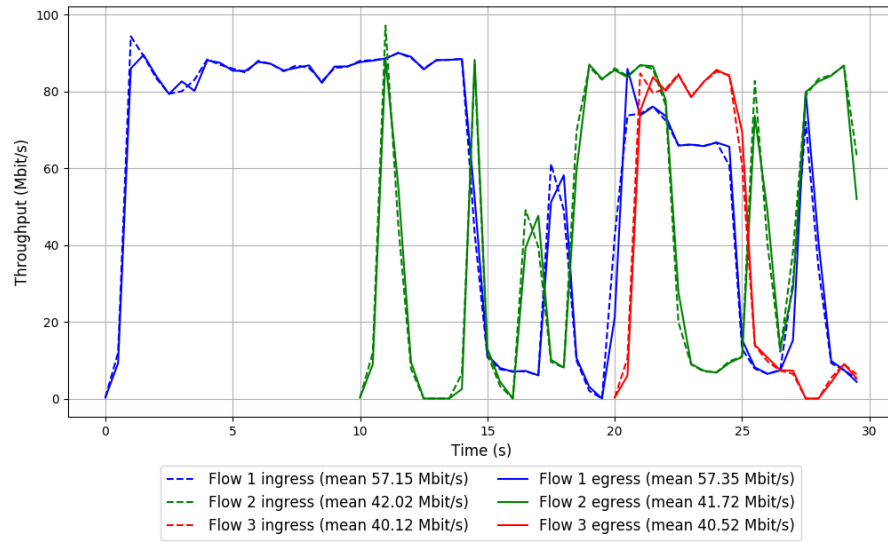
-- Flow 3:

Average throughput: 40.52 Mbit/s

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

Loss rate: 0.27%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-17 07:44:30

End at: 2017-11-17 07:45:00

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.30 Mbit/s

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

Loss rate: 0.57%

-- Flow 1:

Average throughput: 63.35 Mbit/s

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

Loss rate: 0.04%

-- Flow 2:

Average throughput: 20.05 Mbit/s

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

Loss rate: 0.92%

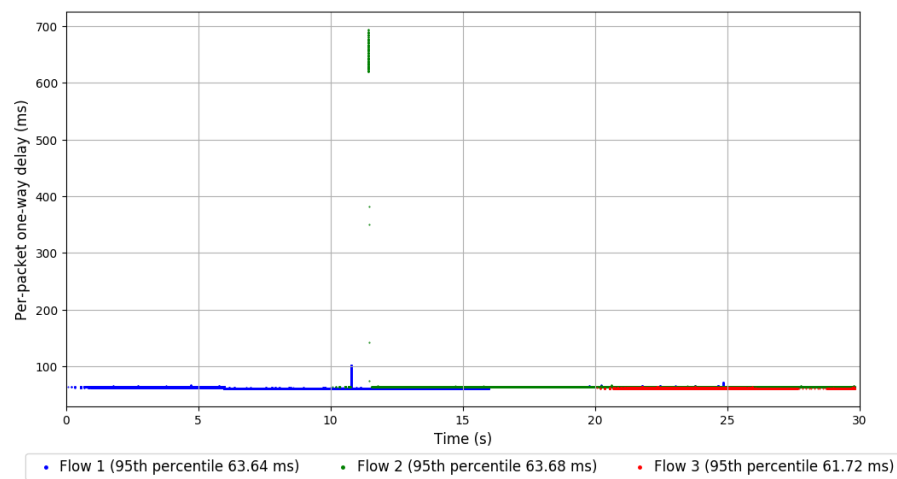
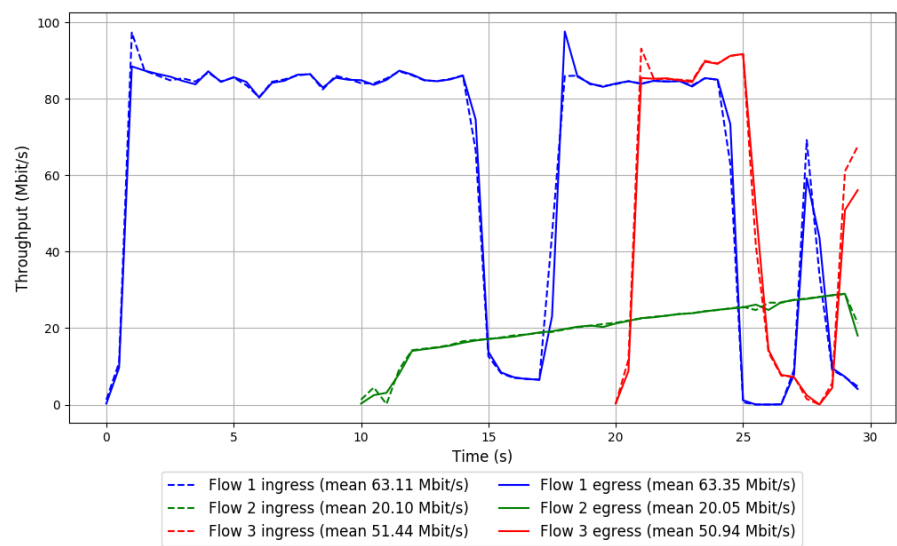
-- Flow 3:

Average throughput: 50.94 Mbit/s

95th percentile per-packet one-way delay: 61.717 ms

Loss rate: 2.25%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-17 07:56:56

End at: 2017-11-17 07:57:26

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.37 Mbit/s

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

Loss rate: 0.72%

-- Flow 1:

Average throughput: 64.02 Mbit/s

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

Loss rate: 0.54%

-- Flow 2:

Average throughput: 11.47 Mbit/s

95th percentile per-packet one-way delay: 63.664 ms

Loss rate: 1.21%

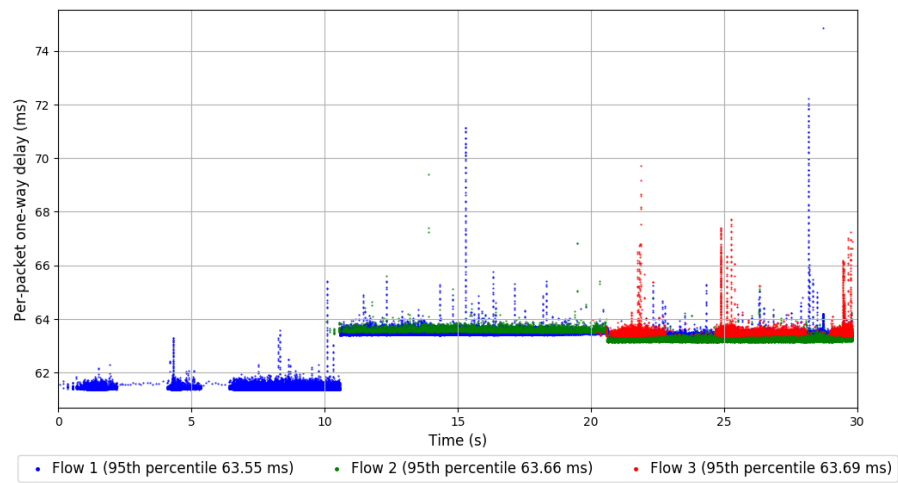
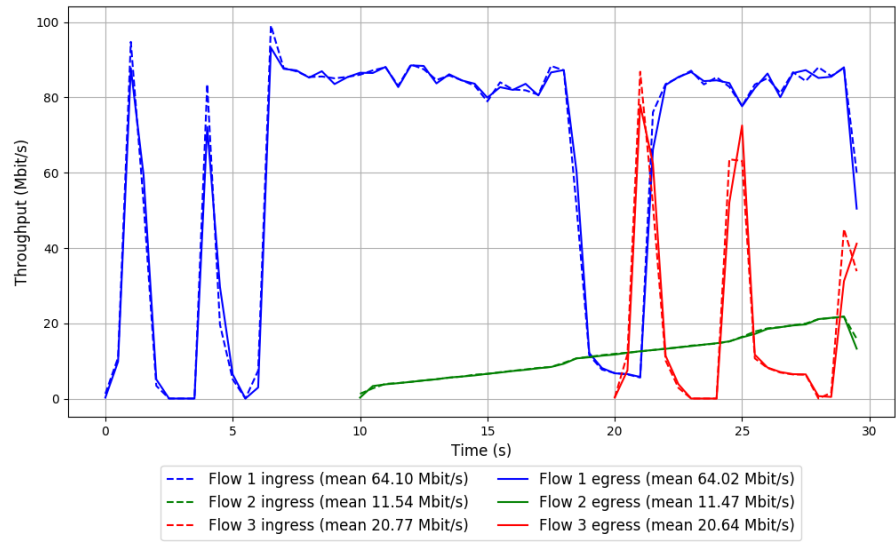
-- Flow 3:

Average throughput: 20.64 Mbit/s

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

Loss rate: 1.87%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-11-17 08:09:18

End at: 2017-11-17 08:09:48

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.90 Mbit/s

95th percentile per-packet one-way delay: 63.576 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 63.59 Mbit/s

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

Loss rate: 0.60%

-- Flow 2:

Average throughput: 41.82 Mbit/s

95th percentile per-packet one-way delay: 61.470 ms

Loss rate: 0.08%

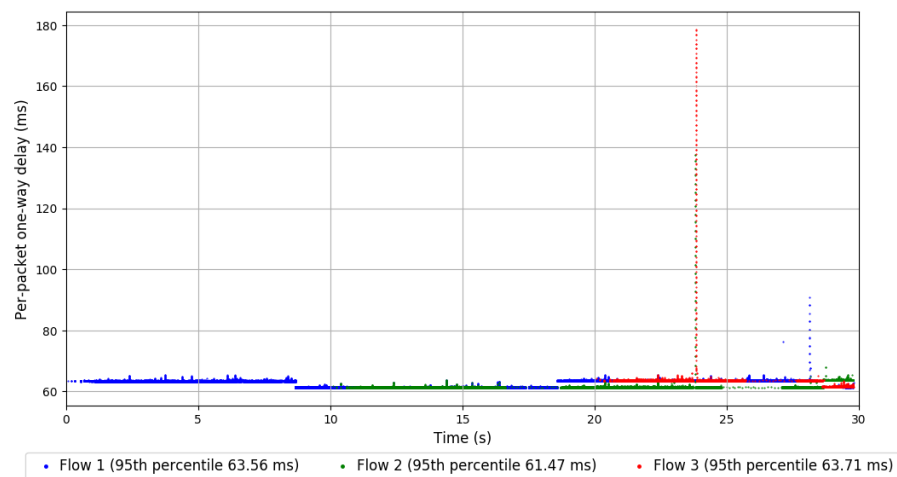
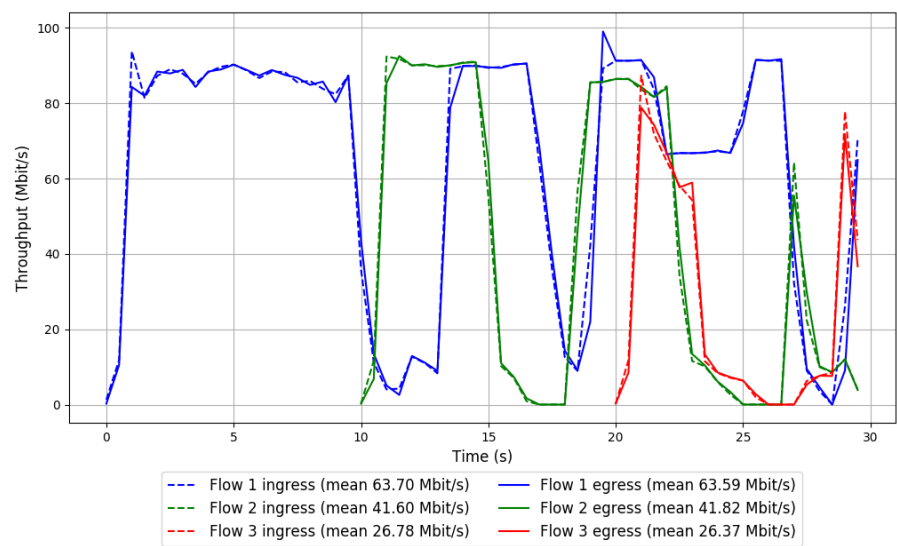
-- Flow 3:

Average throughput: 26.37 Mbit/s

95th percentile per-packet one-way delay: 63.710 ms

Loss rate: 2.82%

Run 10: Report of QUIC Cubic — Data Link

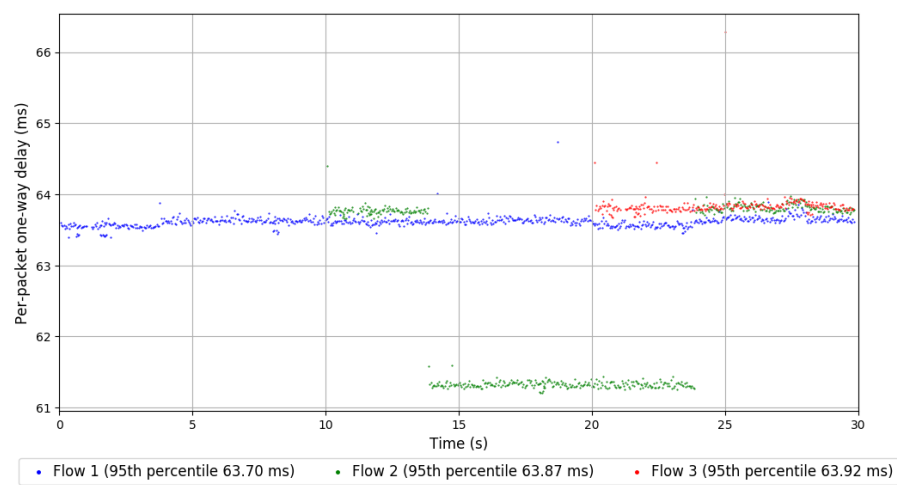
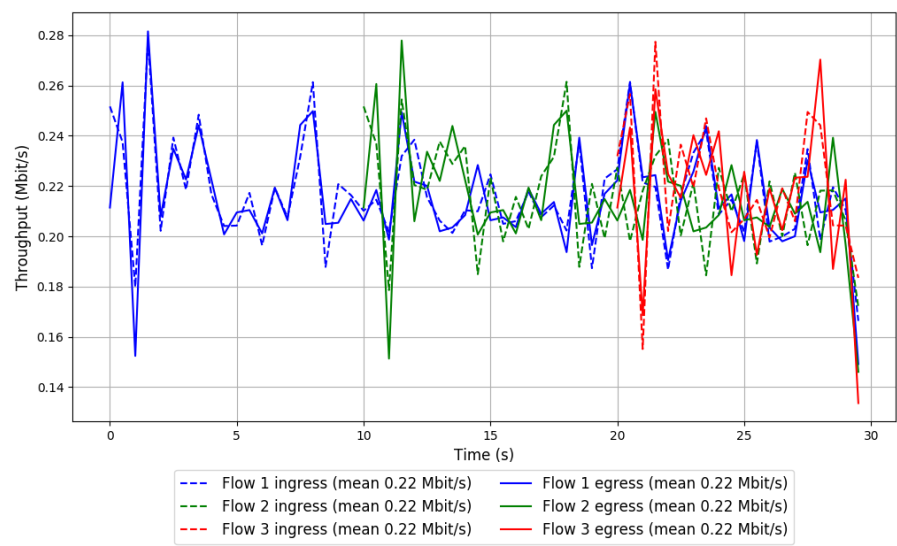


```
Run 1: Statistics of SCReAM

Start at: 2017-11-17 06:07:32
End at: 2017-11-17 06:08:02

# Below is generated by plot.py at 2017-11-17 10:51:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.865 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.698 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.866 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.922 ms
Loss rate: 1.50%
```

Run 1: Report of SReAM — Data Link

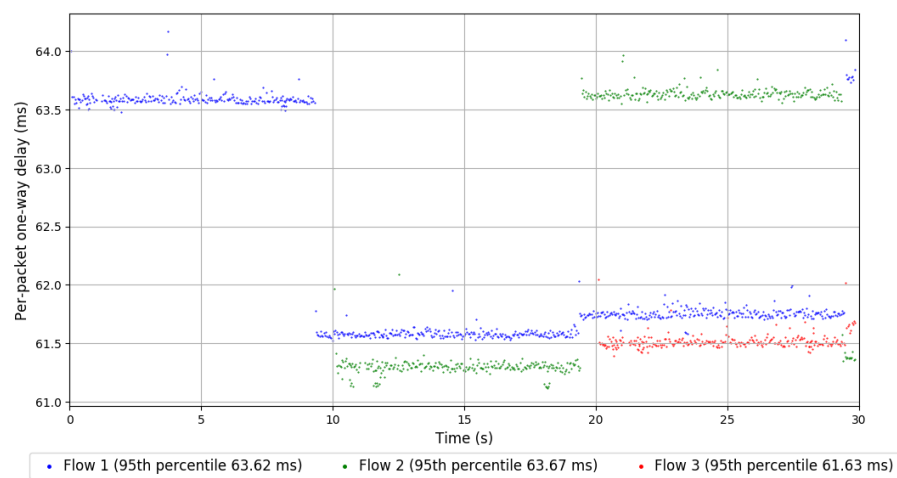
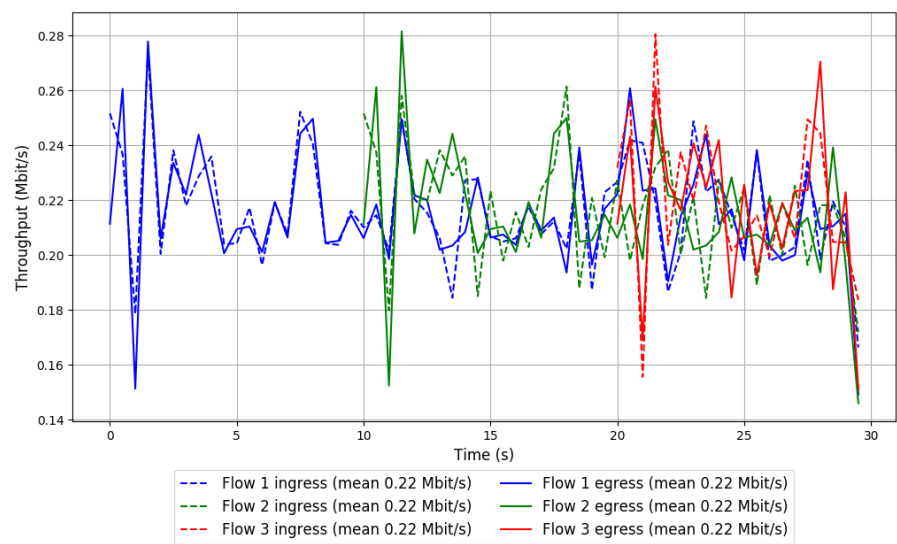


```
Run 2: Statistics of SReAM

Start at: 2017-11-17 06:19:57
End at: 2017-11-17 06:20:27

# Below is generated by plot.py at 2017-11-17 10:51:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.655 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.620 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.674 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.634 ms
Loss rate: 1.10%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-11-17 06:32:34

End at: 2017-11-17 06:33:04

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.58%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.63%

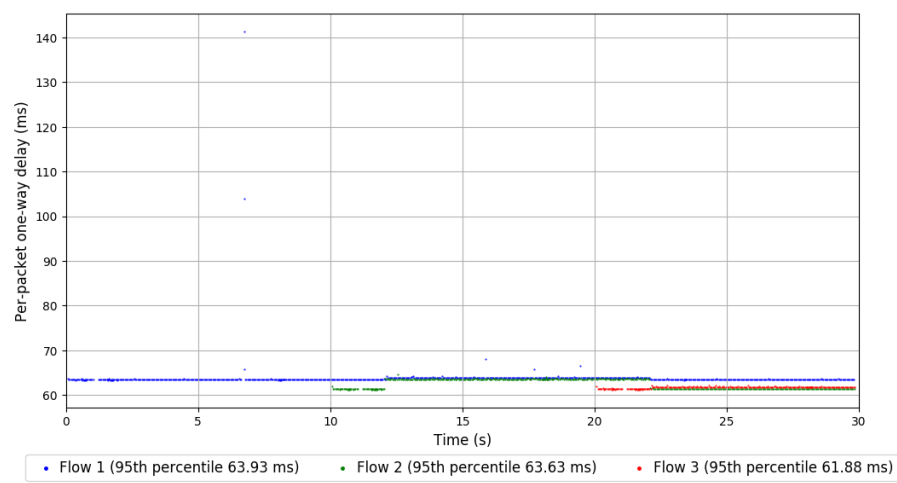
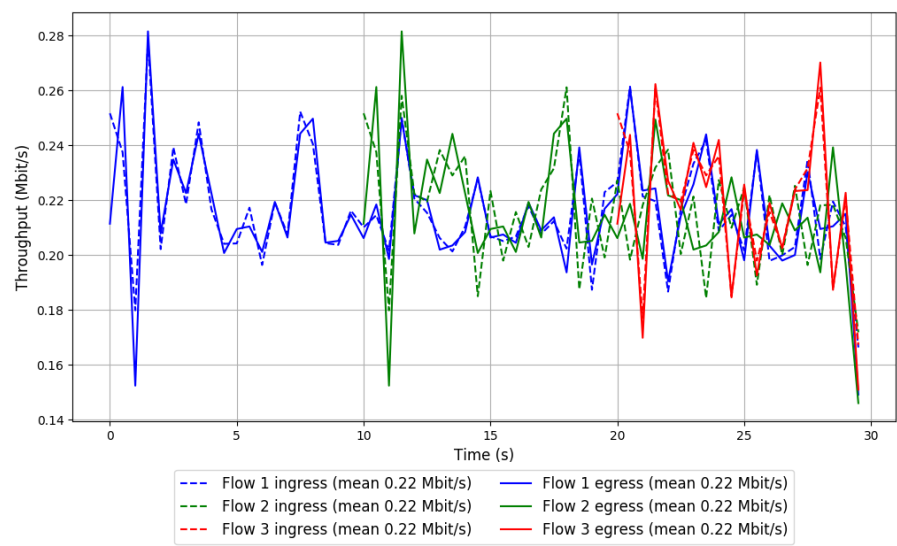
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.882 ms

Loss rate: 1.10%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2017-11-17 06:44:53

End at: 2017-11-17 06:45:23

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 63.684 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.63%

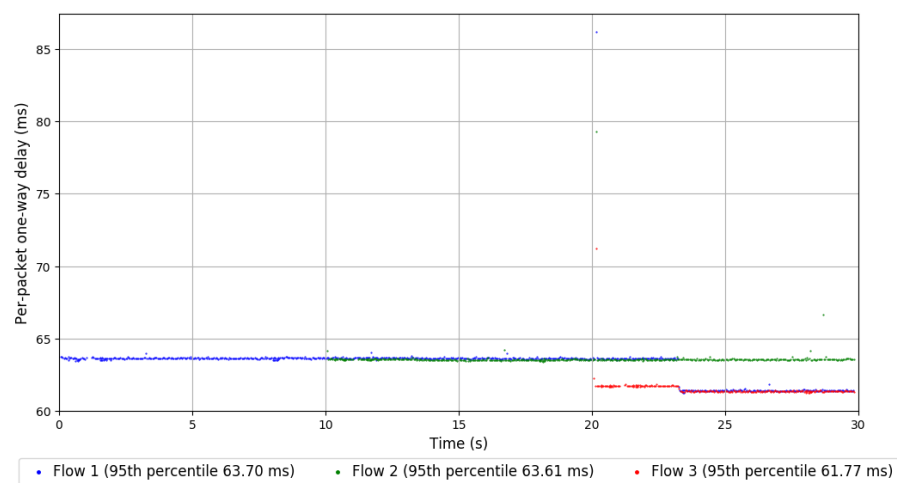
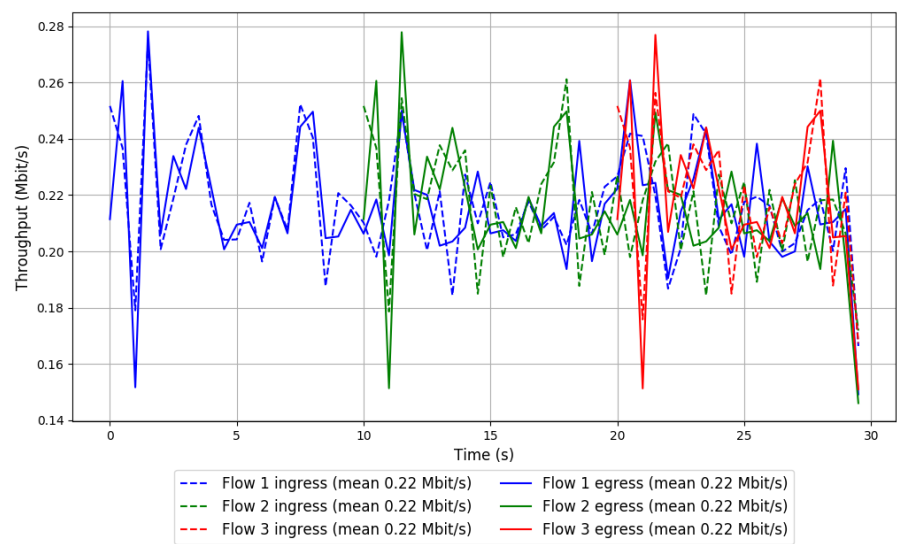
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.767 ms

Loss rate: 1.10%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-11-17 06:57:28

End at: 2017-11-17 06:57:58

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.691 ms

Loss rate: 0.63%

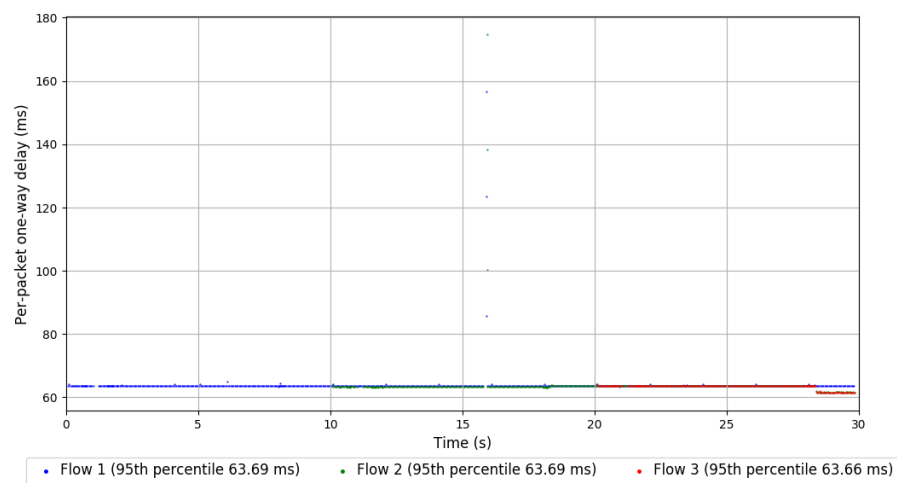
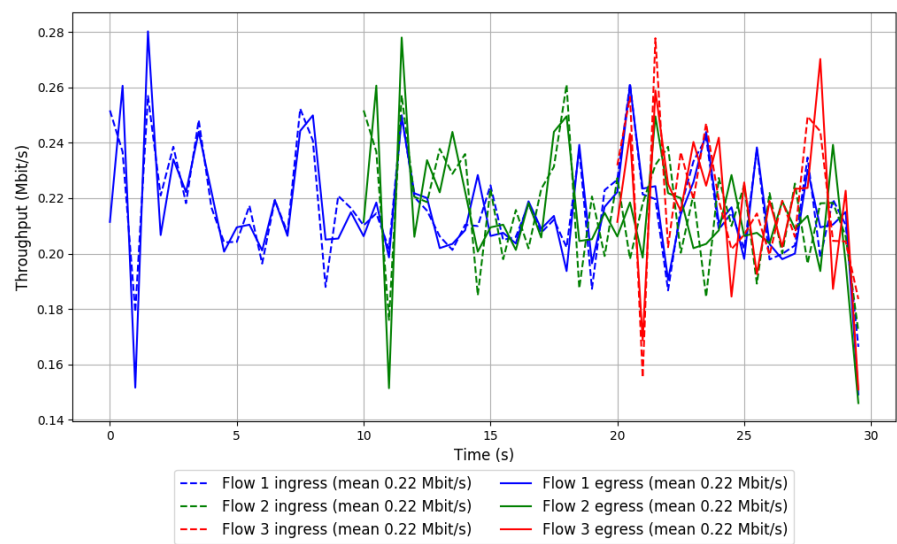
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.655 ms

Loss rate: 1.10%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2017-11-17 07:09:52

End at: 2017-11-17 07:10:22

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.945 ms

Loss rate: 0.63%

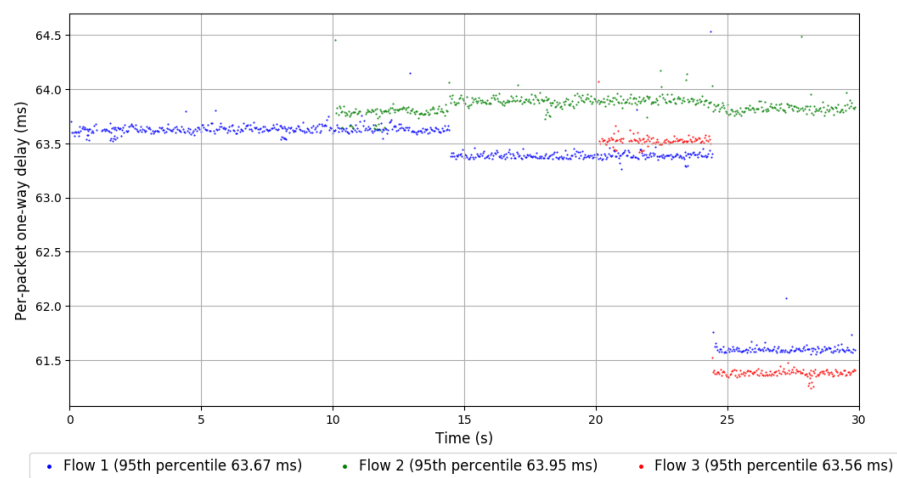
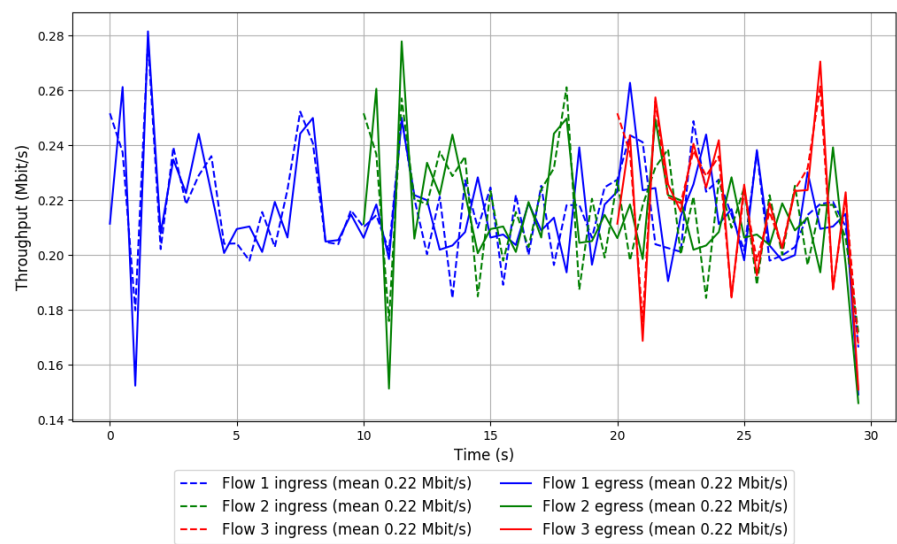
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 1.10%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2017-11-17 07:22:26

End at: 2017-11-17 07:22:56

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.58%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.477 ms

Loss rate: 0.63%

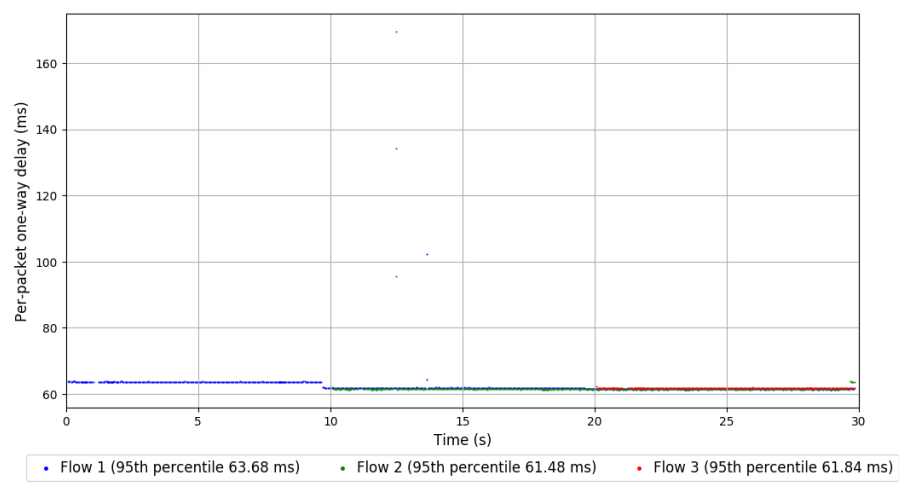
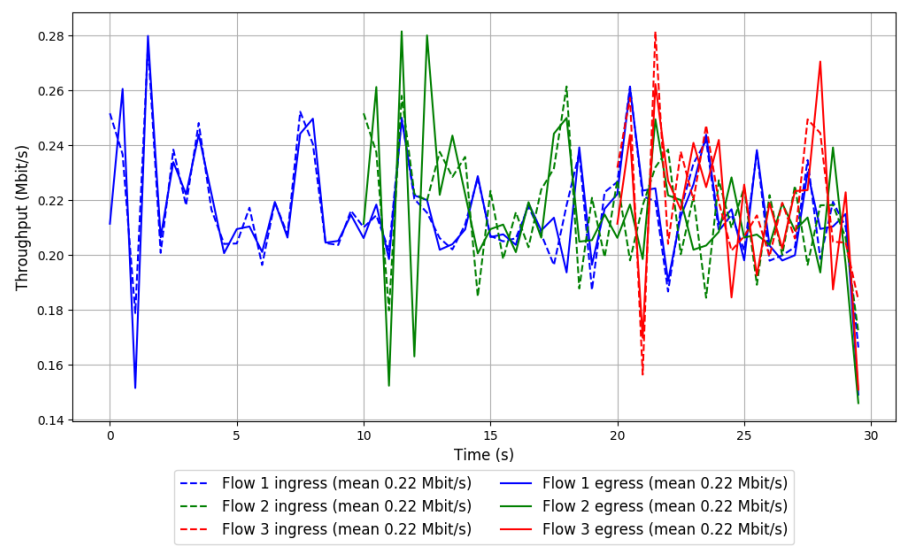
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.839 ms

Loss rate: 1.10%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-11-17 07:34:54

End at: 2017-11-17 07:35:24

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.63%

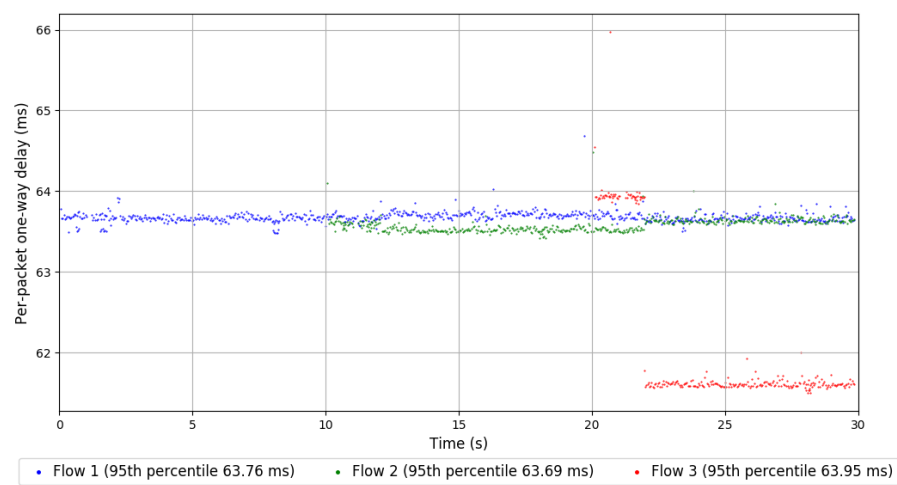
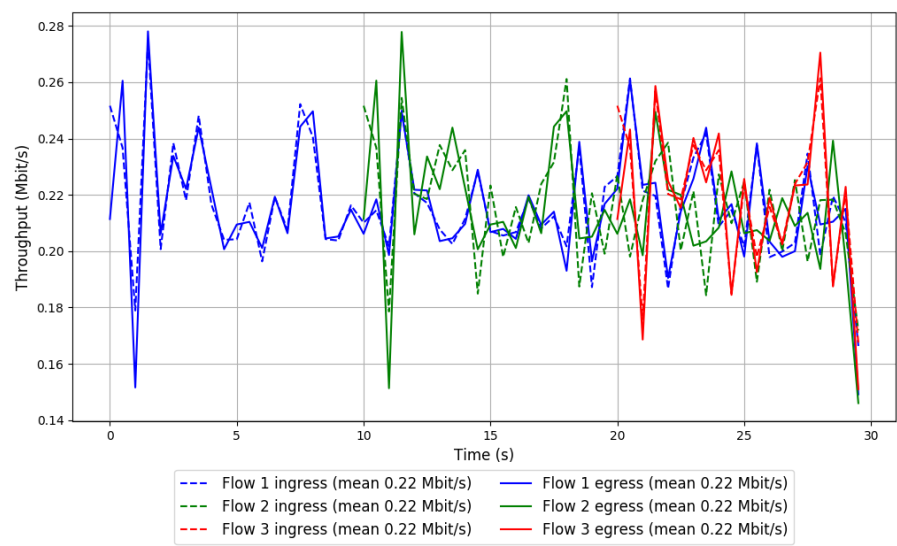
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 1.10%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-11-17 07:47:26

End at: 2017-11-17 07:47:56

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 63.881 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.812 ms

Loss rate: 0.63%

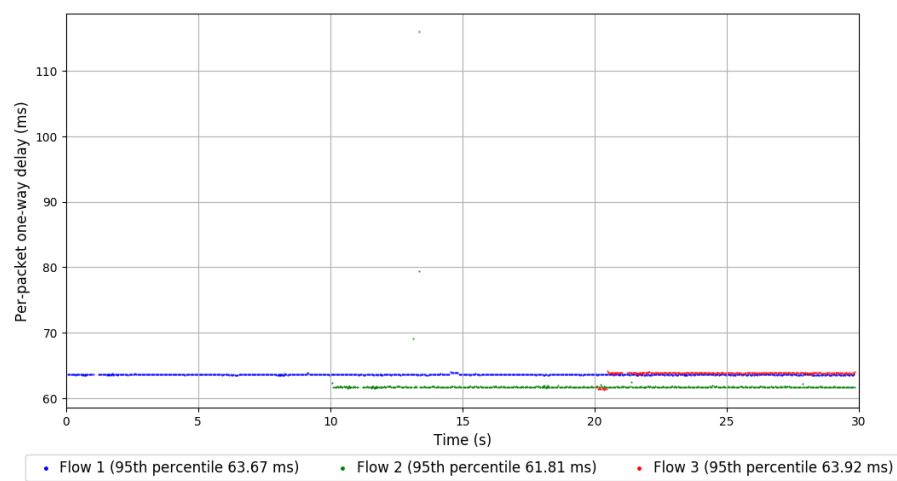
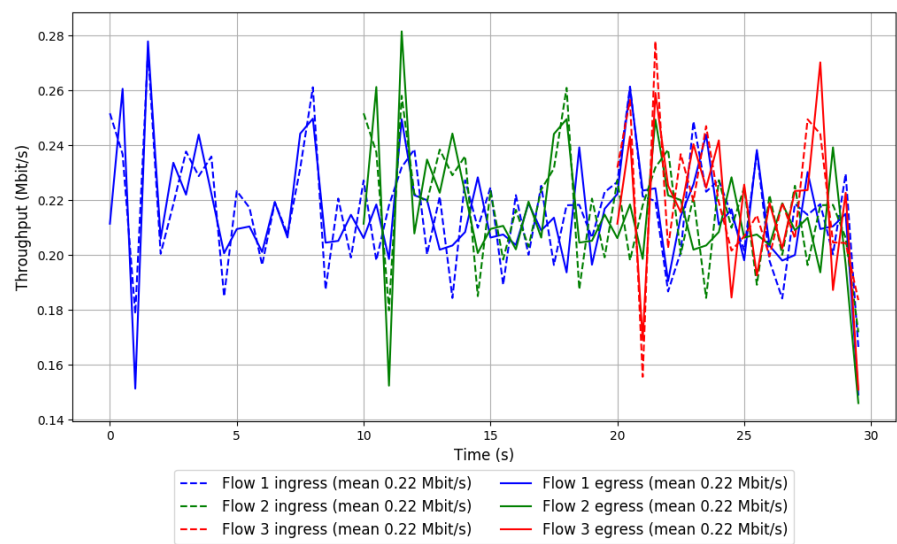
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.923 ms

Loss rate: 1.10%

Run 9: Report of SReAM — Data Link

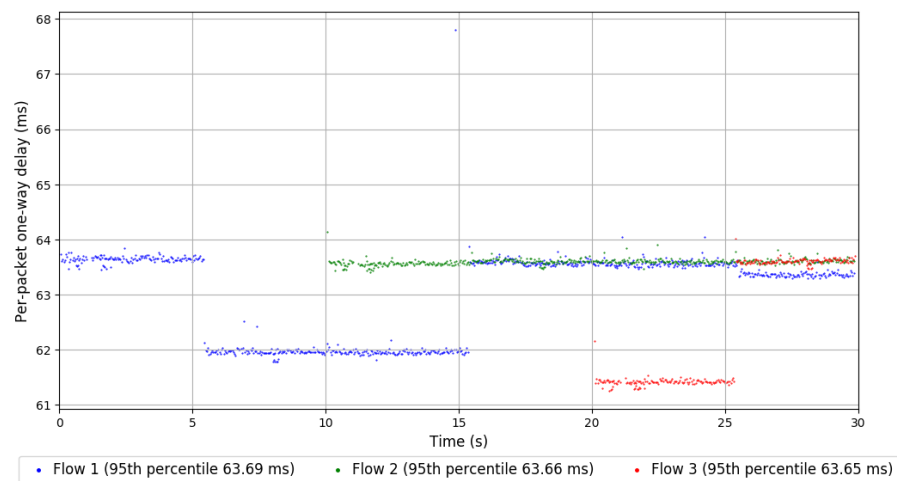
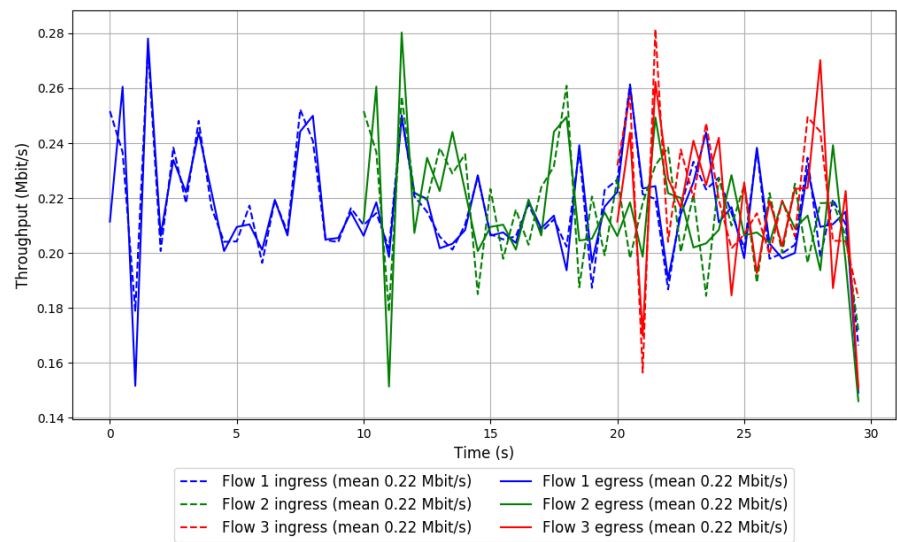


```
Run 10: Statistics of SReAM

Start at: 2017-11-17 07:59:51
End at: 2017-11-17 08:00:21

# Below is generated by plot.py at 2017-11-17 10:51:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.674 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.685 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.660 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.652 ms
Loss rate: 1.10%
```

Run 10: Report of SReAM — Data Link

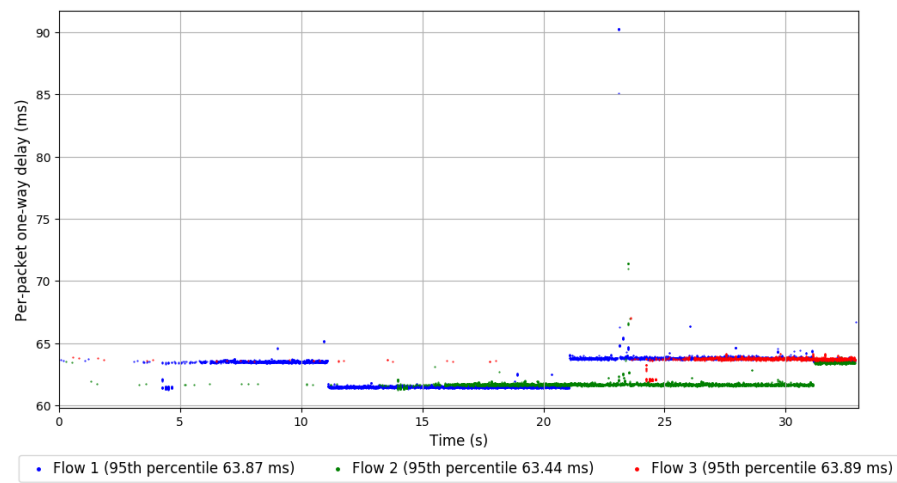
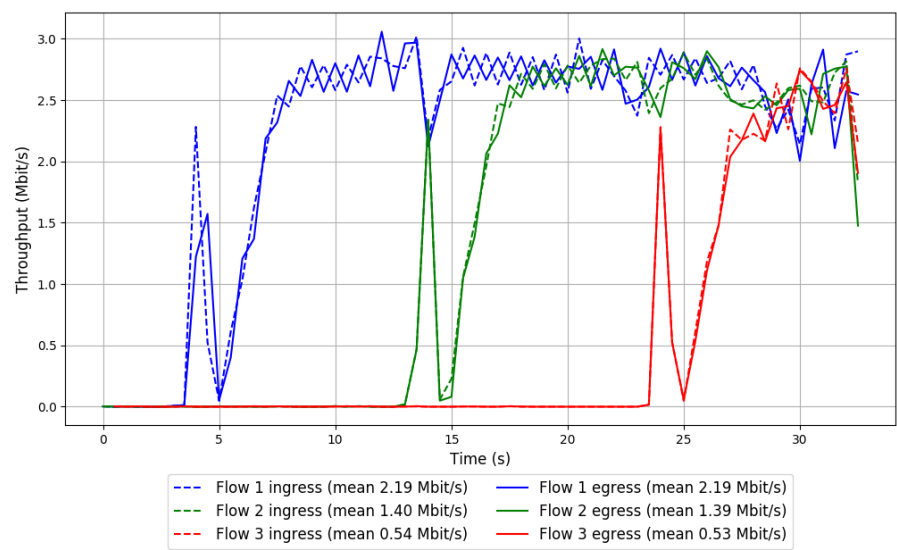


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-17 06:15:38
End at: 2017-11-17 06:16:08

# Below is generated by plot.py at 2017-11-17 10:51:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.10 Mbit/s
95th percentile per-packet one-way delay: 63.850 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 63.872 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 63.441 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 63.886 ms
Loss rate: 1.72%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-17 06:28:16

End at: 2017-11-17 06:28:46

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.15 Mbit/s

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

Loss rate: 0.91%

-- Flow 1:

Average throughput: 2.23 Mbit/s

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

Loss rate: 0.52%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 63.665 ms

Loss rate: 0.99%

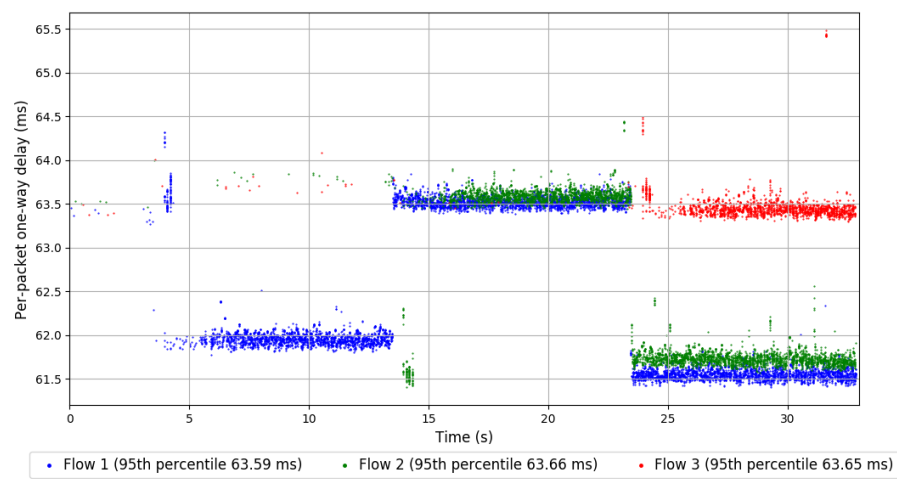
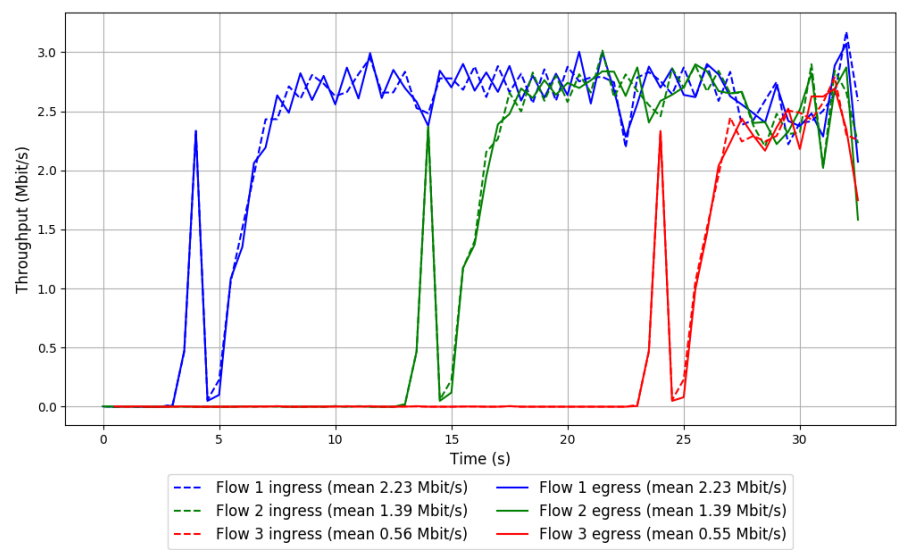
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.646 ms

Loss rate: 2.23%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-17 06:40:36

End at: 2017-11-17 06:41:06

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.13 Mbit/s

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

Loss rate: 0.80%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 63.646 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 1.39 Mbit/s

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

Loss rate: 0.74%

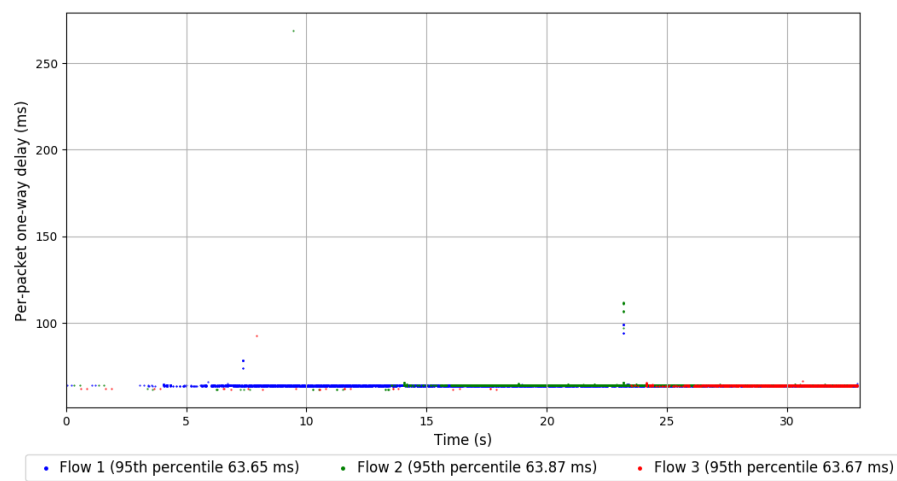
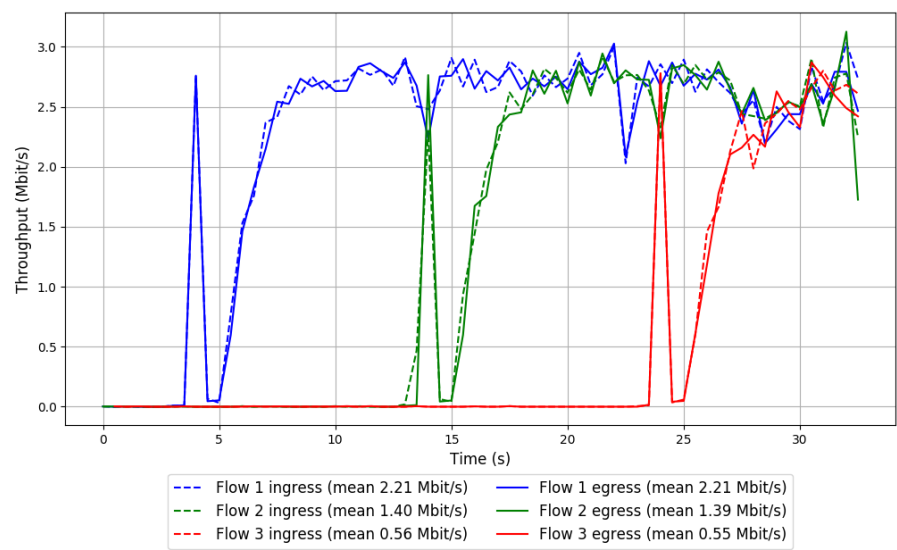
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.666 ms

Loss rate: 2.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-17 06:53:13

End at: 2017-11-17 06:53:43

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 63.883 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 2.22 Mbit/s

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

Loss rate: 0.56%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 63.487 ms

Loss rate: 0.70%

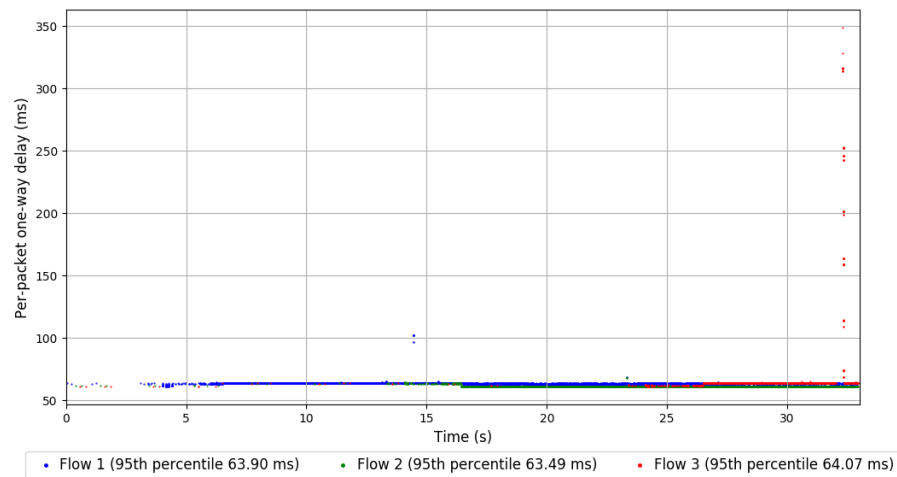
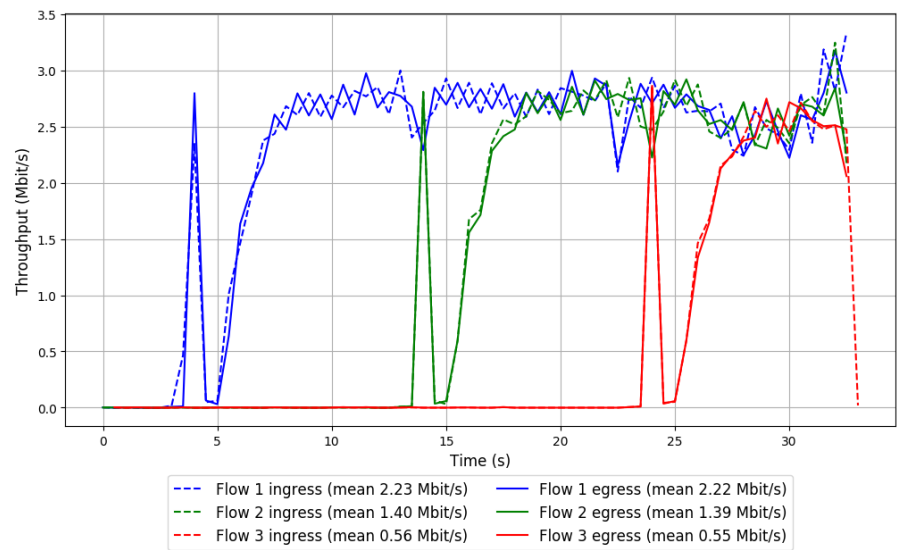
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 64.066 ms

Loss rate: 1.74%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-17 07:05:33

End at: 2017-11-17 07:06:03

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.11 Mbit/s

95th percentile per-packet one-way delay: 63.655 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 2.20 Mbit/s

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

Loss rate: 0.30%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 63.503 ms

Loss rate: 0.67%

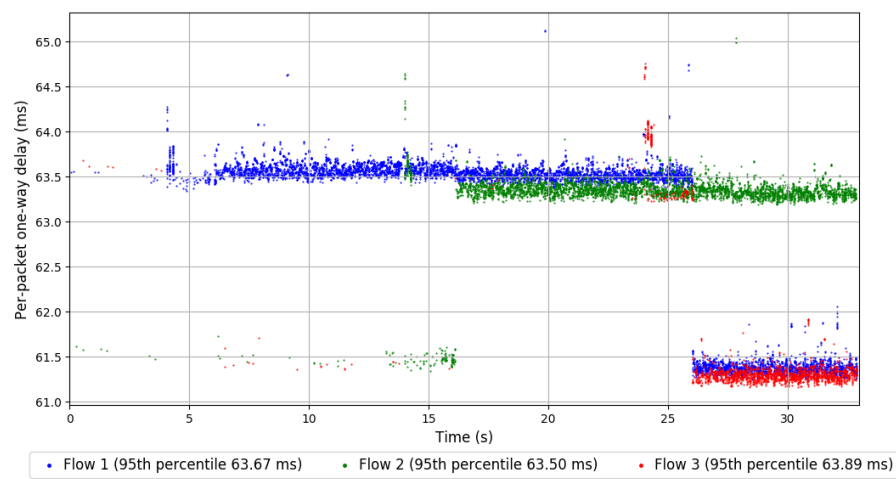
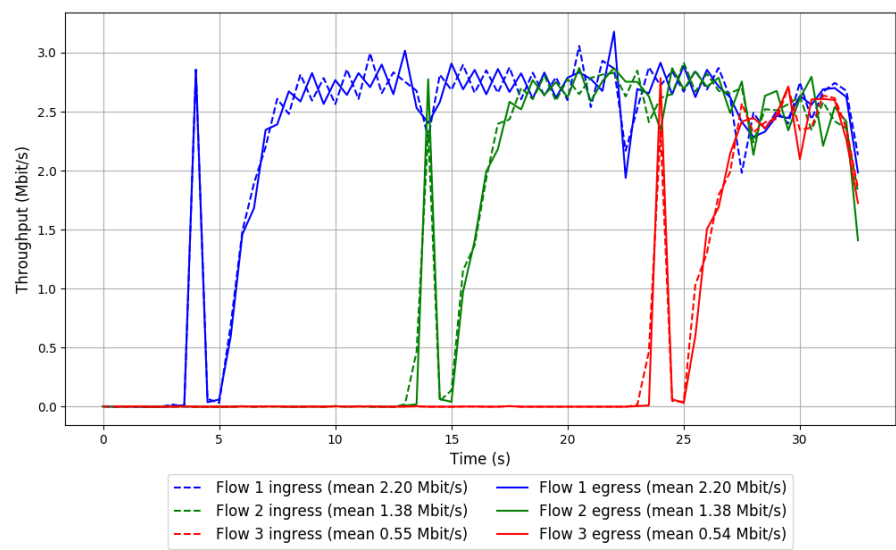
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 63.894 ms

Loss rate: 1.38%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-17 07:18:09

End at: 2017-11-17 07:18:39

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 63.713 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 2.20 Mbit/s

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

Loss rate: 0.56%

-- Flow 2:

Average throughput: 1.38 Mbit/s

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

Loss rate: 0.47%

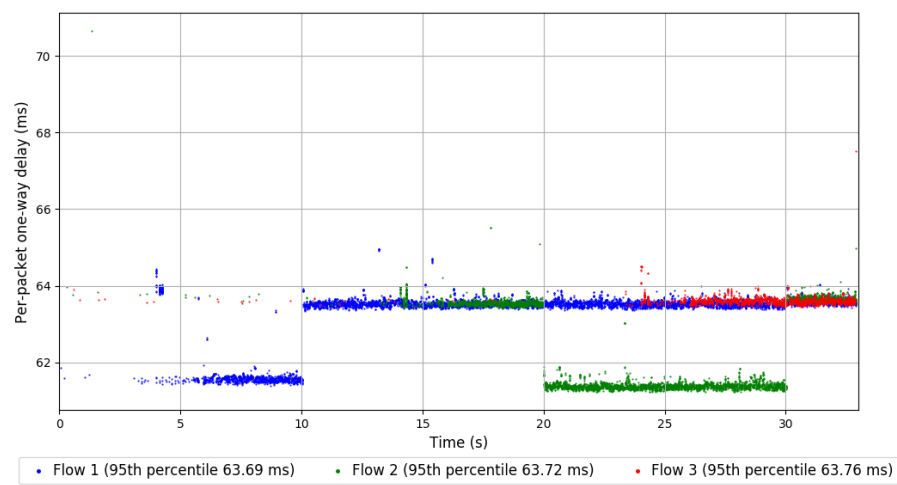
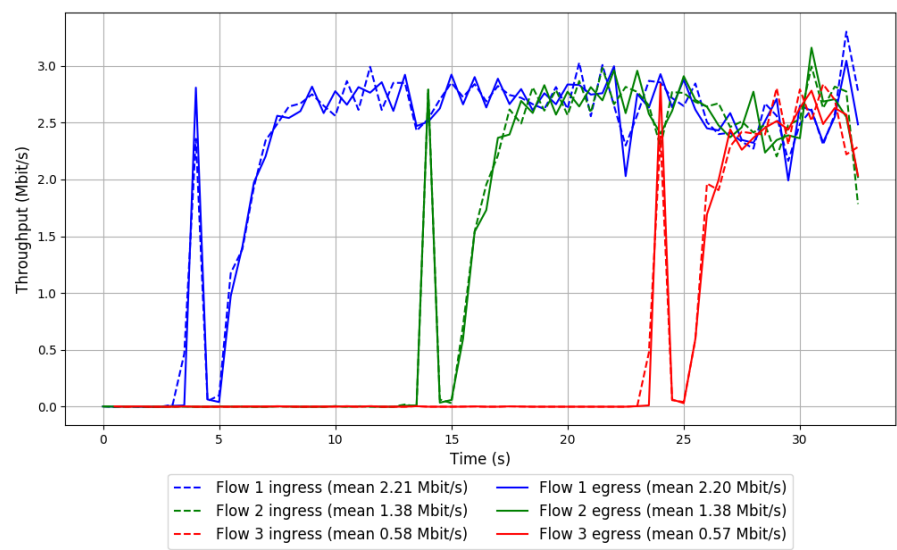
-- Flow 3:

Average throughput: 0.57 Mbit/s

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

Loss rate: 1.49%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-17 07:30:37

End at: 2017-11-17 07:31:07

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.14 Mbit/s

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

Loss rate: 0.66%

-- Flow 1:

Average throughput: 2.23 Mbit/s

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

Loss rate: 0.44%

-- Flow 2:

Average throughput: 1.38 Mbit/s

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

Loss rate: 0.73%

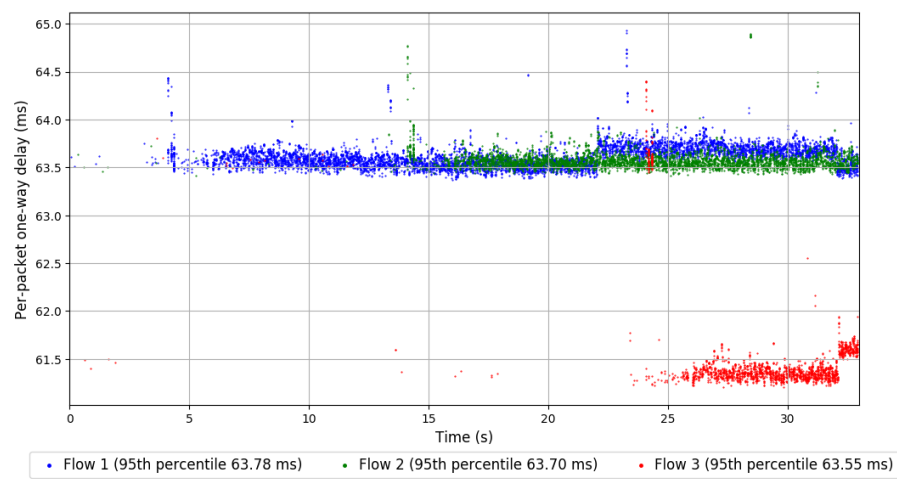
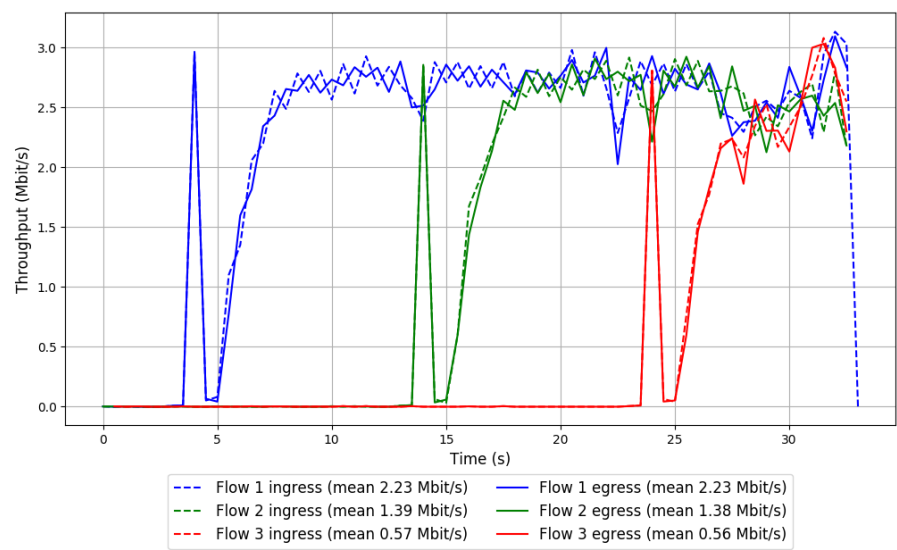
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.548 ms

Loss rate: 1.37%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-17 07:43:07

End at: 2017-11-17 07:43:37

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.13 Mbit/s

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

Loss rate: 0.74%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.482 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 1.39 Mbit/s

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

Loss rate: 0.55%

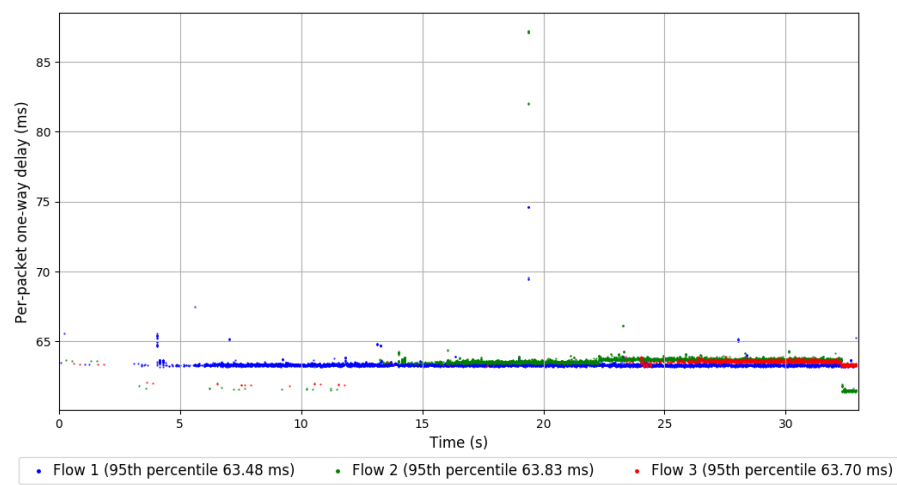
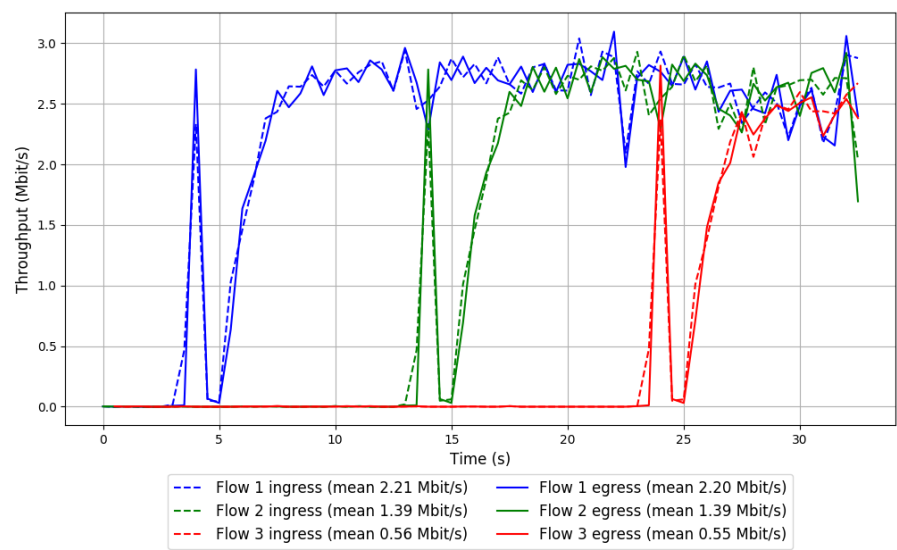
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 63.696 ms

Loss rate: 2.04%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-17 07:55:33

End at: 2017-11-17 07:56:03

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 64.088 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 62.004 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 64.165 ms

Loss rate: 0.53%

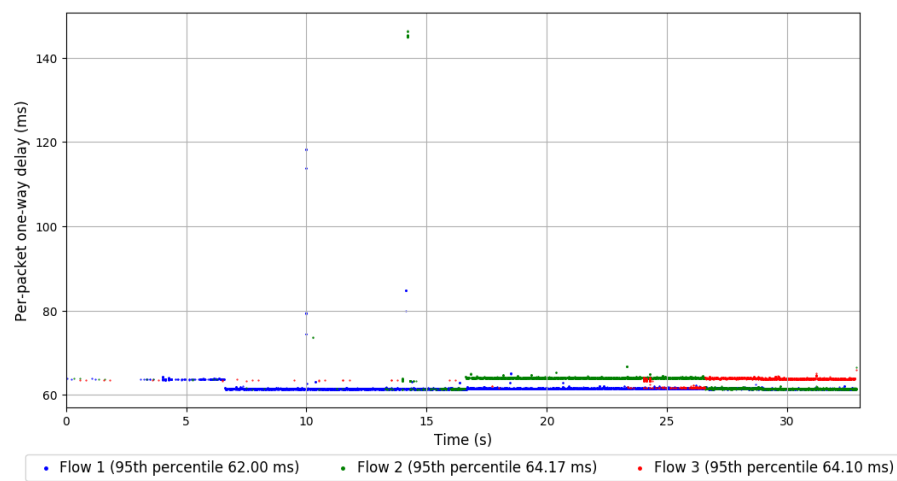
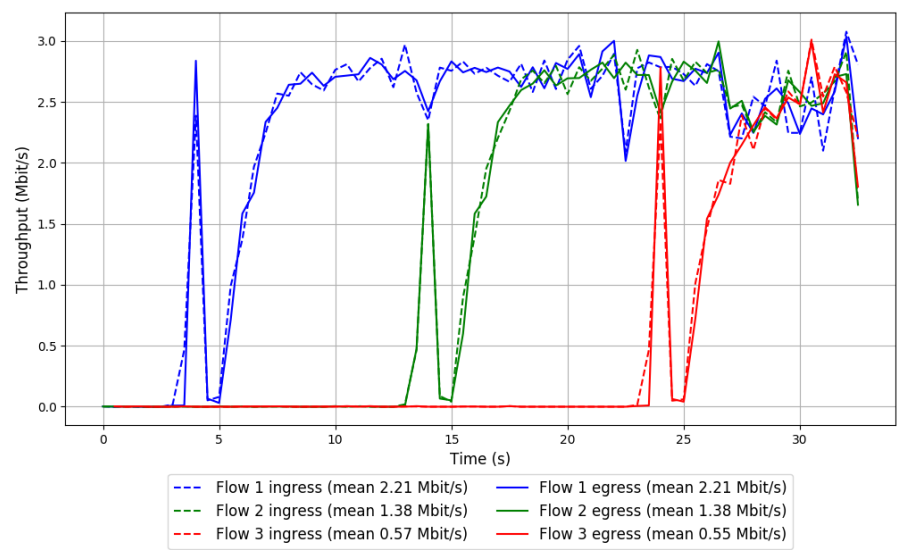
-- Flow 3:

Average throughput: 0.55 Mbit/s

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

Loss rate: 2.13%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-17 08:07:54

End at: 2017-11-17 08:08:24

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.12 Mbit/s

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

Loss rate: 0.90%

-- Flow 1:

Average throughput: 2.21 Mbit/s

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

Loss rate: 0.71%

-- Flow 2:

Average throughput: 1.37 Mbit/s

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

Loss rate: 0.68%

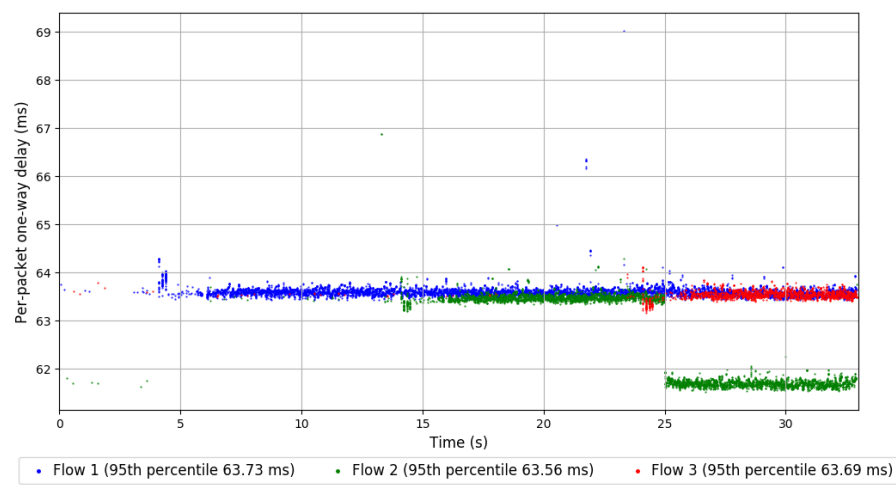
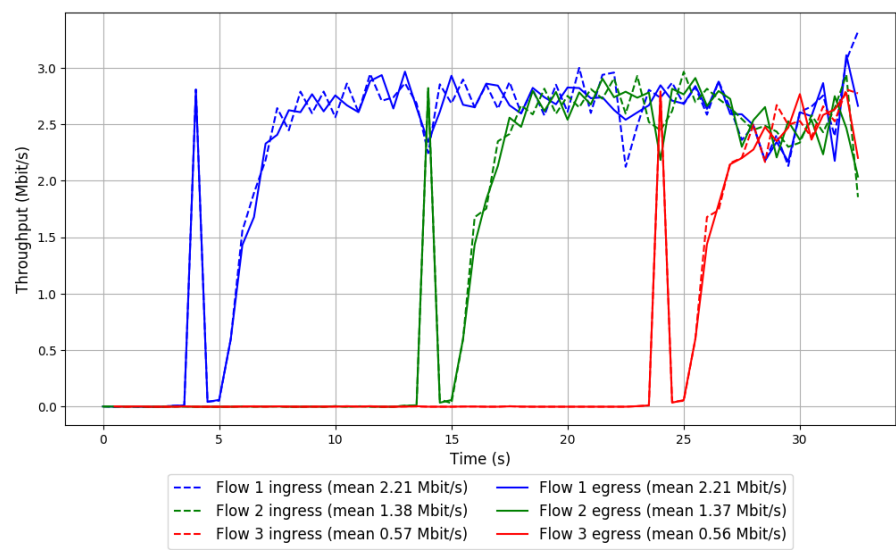
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.688 ms

Loss rate: 2.21%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-11-17 06:10:03

End at: 2017-11-17 06:10:33

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.79 Mbit/s

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

Loss rate: 0.63%

-- Flow 1:

Average throughput: 6.61 Mbit/s

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

Loss rate: 0.51%

-- Flow 2:

Average throughput: 6.36 Mbit/s

95th percentile per-packet one-way delay: 62.339 ms

Loss rate: 0.77%

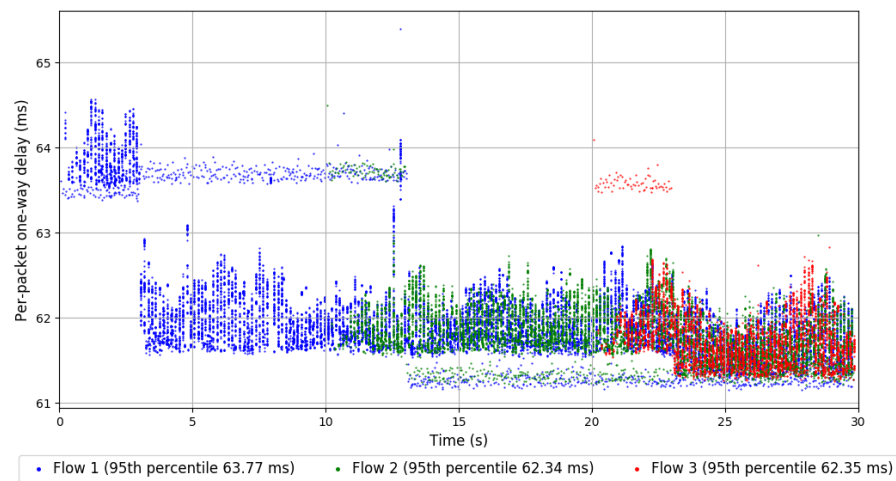
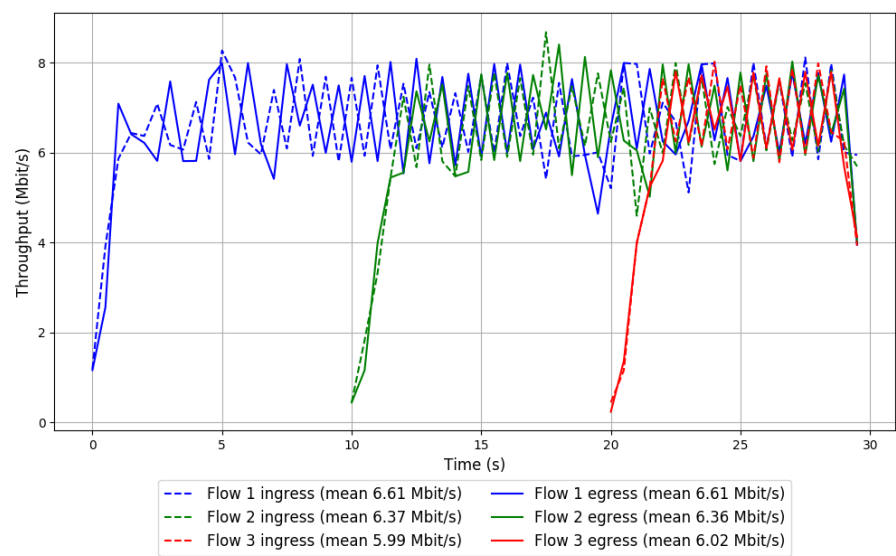
-- Flow 3:

Average throughput: 6.02 Mbit/s

95th percentile per-packet one-way delay: 62.347 ms

Loss rate: 0.74%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-17 06:22:32

End at: 2017-11-17 06:23:02

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.85 Mbit/s

95th percentile per-packet one-way delay: 64.088 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 6.66 Mbit/s

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

Loss rate: 0.55%

-- Flow 2:

Average throughput: 6.37 Mbit/s

95th percentile per-packet one-way delay: 64.063 ms

Loss rate: 0.90%

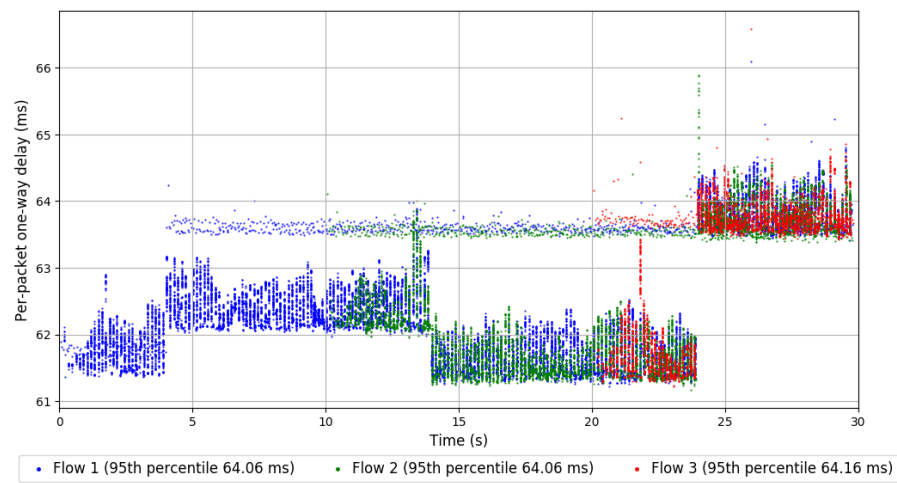
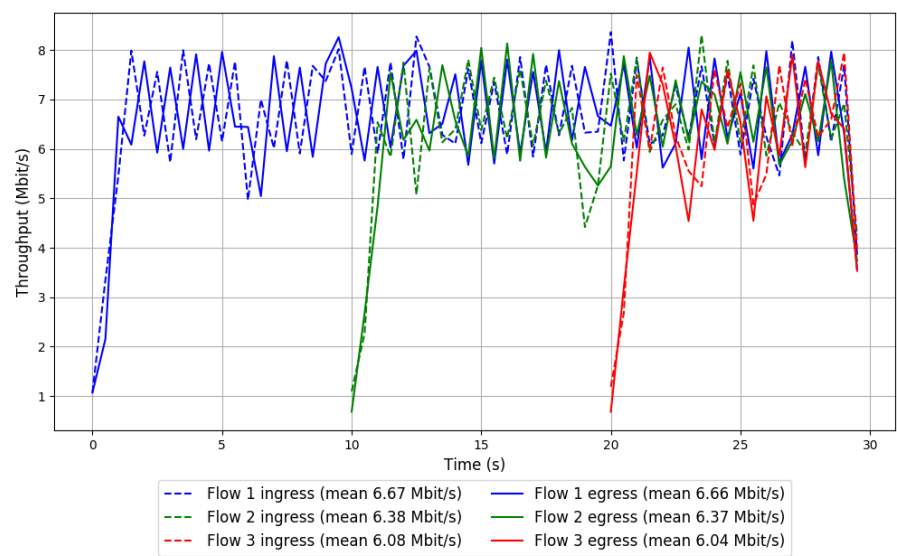
-- Flow 3:

Average throughput: 6.04 Mbit/s

95th percentile per-packet one-way delay: 64.161 ms

Loss rate: 1.77%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-17 06:35:02

End at: 2017-11-17 06:35:32

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.88 Mbit/s

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

Loss rate: 0.41%

-- Flow 1:

Average throughput: 6.54 Mbit/s

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

Loss rate: 0.48%

-- Flow 2:

Average throughput: 6.51 Mbit/s

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

Loss rate: 0.48%

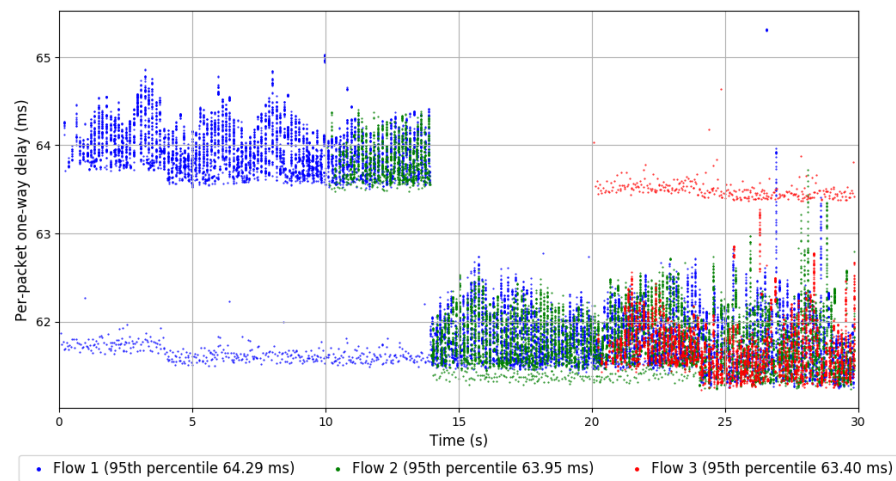
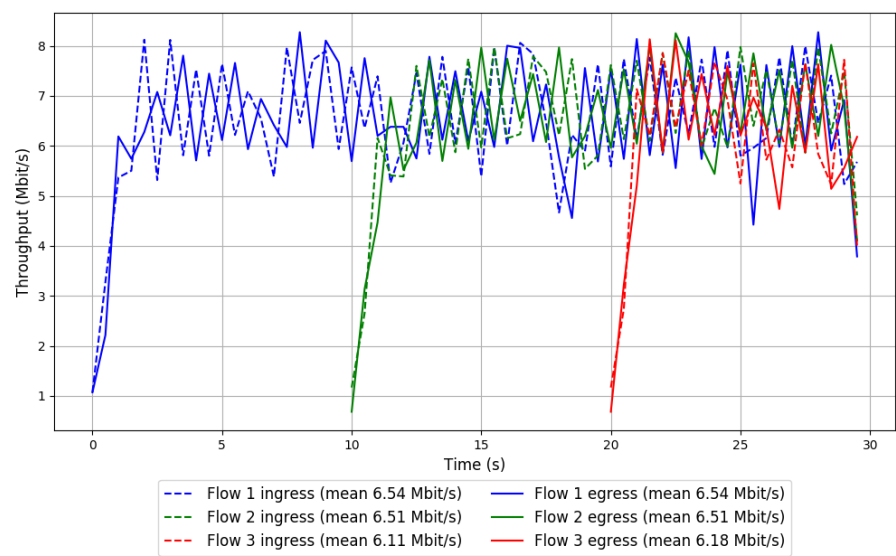
-- Flow 3:

Average throughput: 6.18 Mbit/s

95th percentile per-packet one-way delay: 63.404 ms

Loss rate: 0.05%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-17 06:47:21

End at: 2017-11-17 06:47:51

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.80 Mbit/s

95th percentile per-packet one-way delay: 64.329 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 64.293 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 6.27 Mbit/s

95th percentile per-packet one-way delay: 64.421 ms

Loss rate: 0.36%

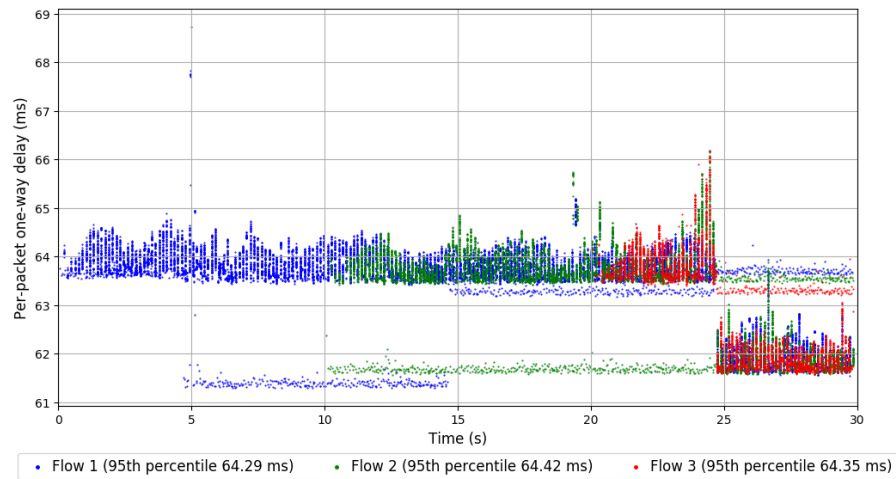
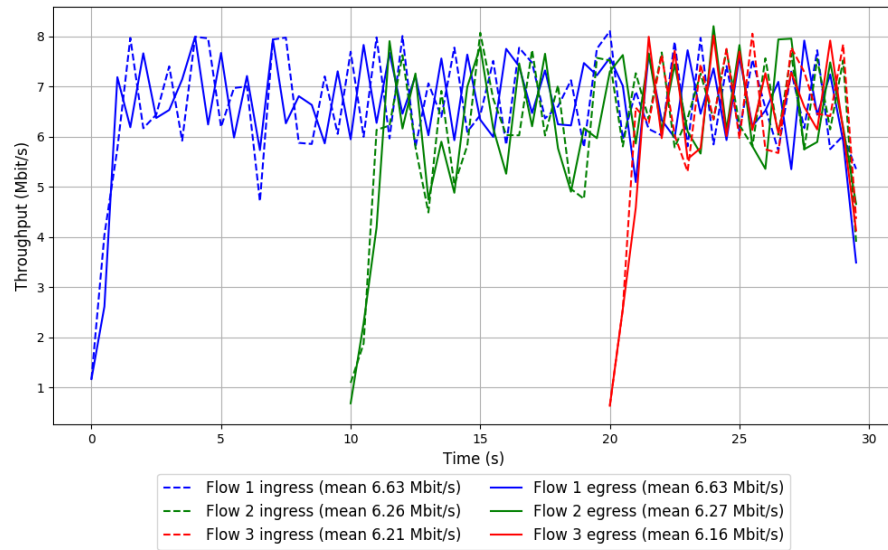
-- Flow 3:

Average throughput: 6.16 Mbit/s

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

Loss rate: 1.59%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-17 06:59:54

End at: 2017-11-17 07:00:24

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.91 Mbit/s

95th percentile per-packet one-way delay: 64.578 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 64.622 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 64.526 ms

Loss rate: 0.75%

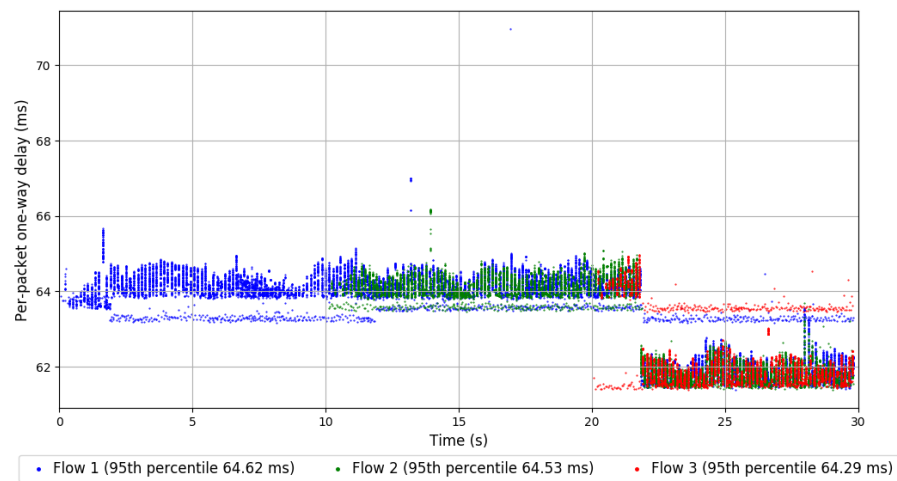
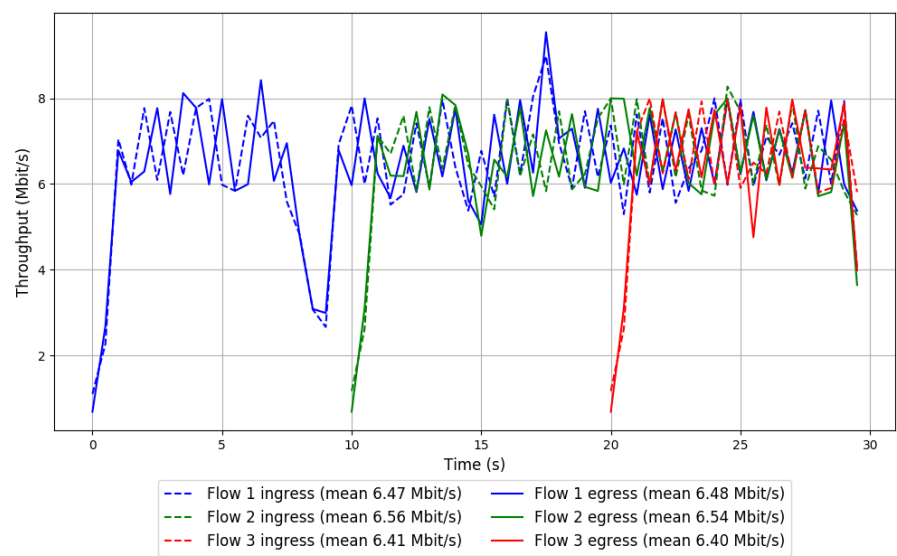
-- Flow 3:

Average throughput: 6.40 Mbit/s

95th percentile per-packet one-way delay: 64.292 ms

Loss rate: 1.58%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-17 07:12:22

End at: 2017-11-17 07:12:52

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.96 Mbit/s

95th percentile per-packet one-way delay: 64.455 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 64.451 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 64.459 ms

Loss rate: 0.78%

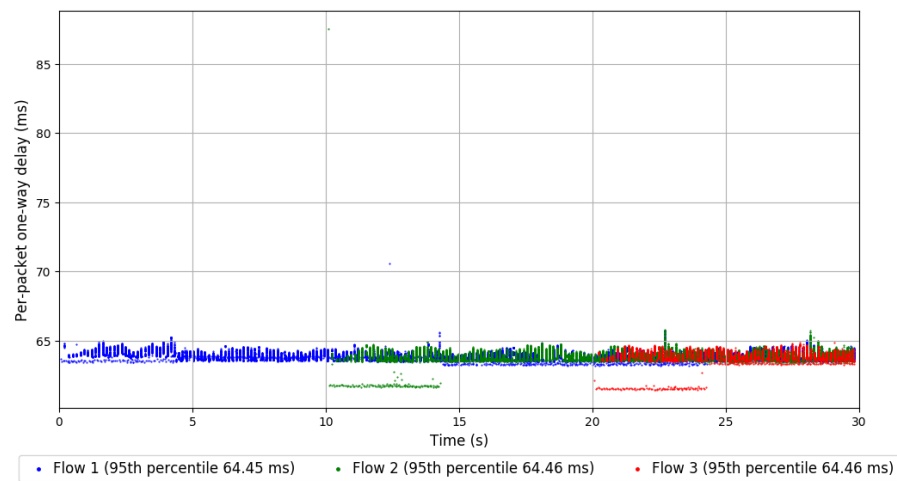
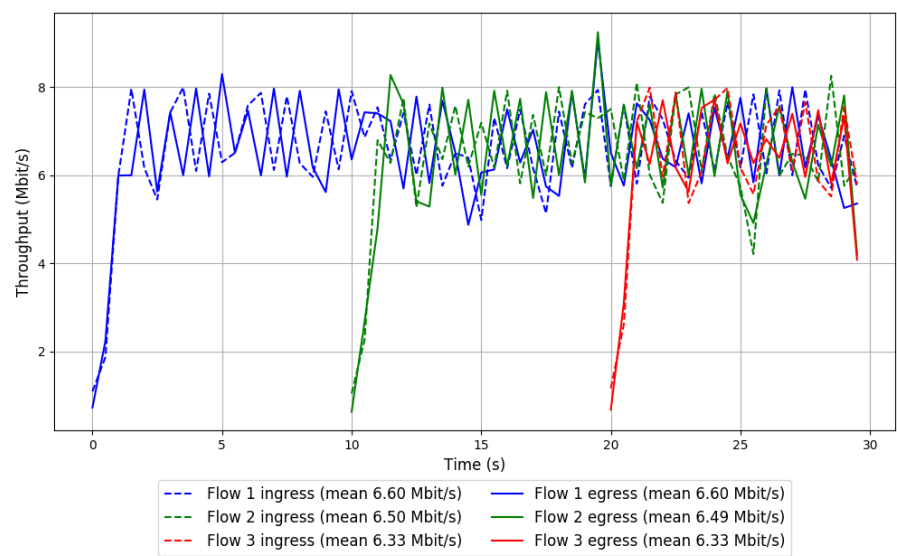
-- Flow 3:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 64.457 ms

Loss rate: 1.54%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-17 07:24:57

End at: 2017-11-17 07:25:27

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.74 Mbit/s

95th percentile per-packet one-way delay: 64.616 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 64.590 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 64.609 ms

Loss rate: 0.75%

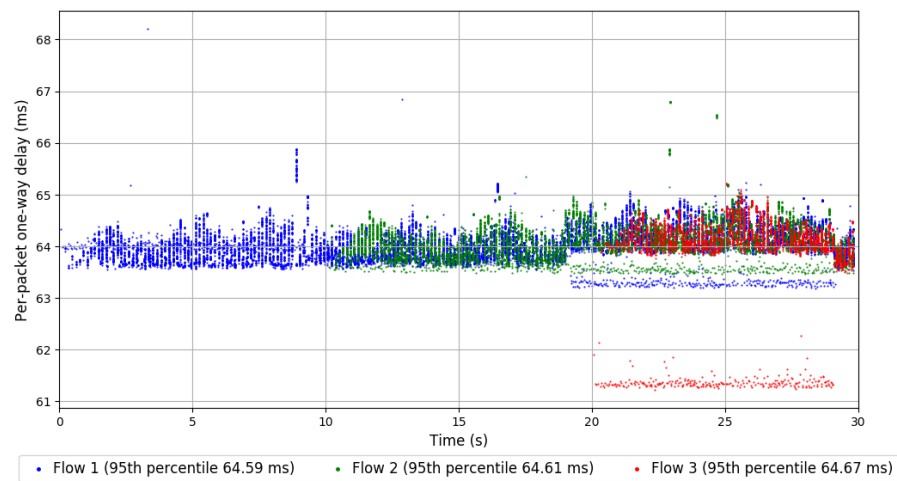
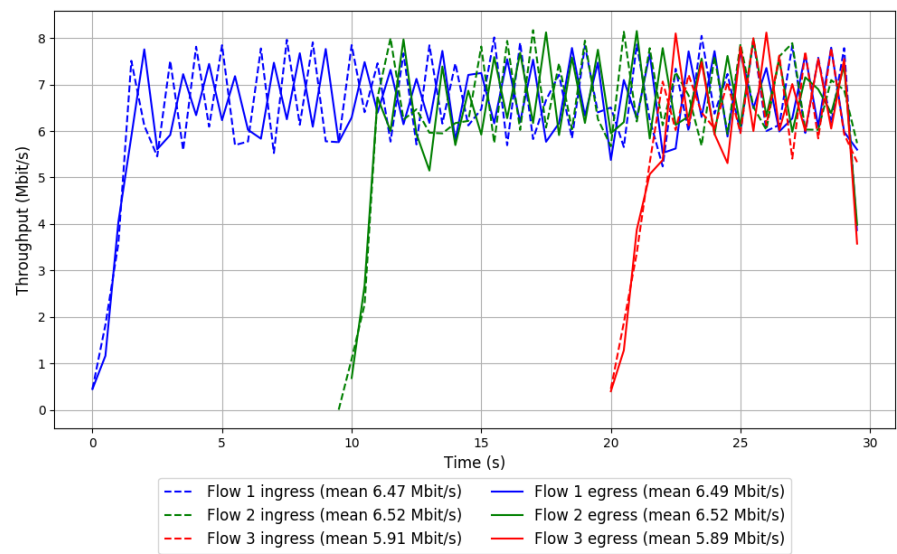
-- Flow 3:

Average throughput: 5.89 Mbit/s

95th percentile per-packet one-way delay: 64.674 ms

Loss rate: 1.61%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-17 07:37:31

End at: 2017-11-17 07:38:01

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.61 Mbit/s

95th percentile per-packet one-way delay: 64.418 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 64.450 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 6.16 Mbit/s

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

Loss rate: 0.63%

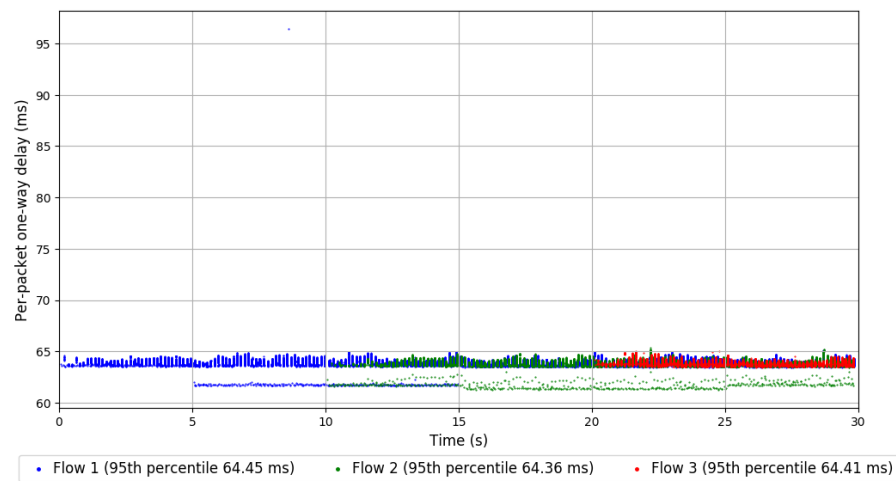
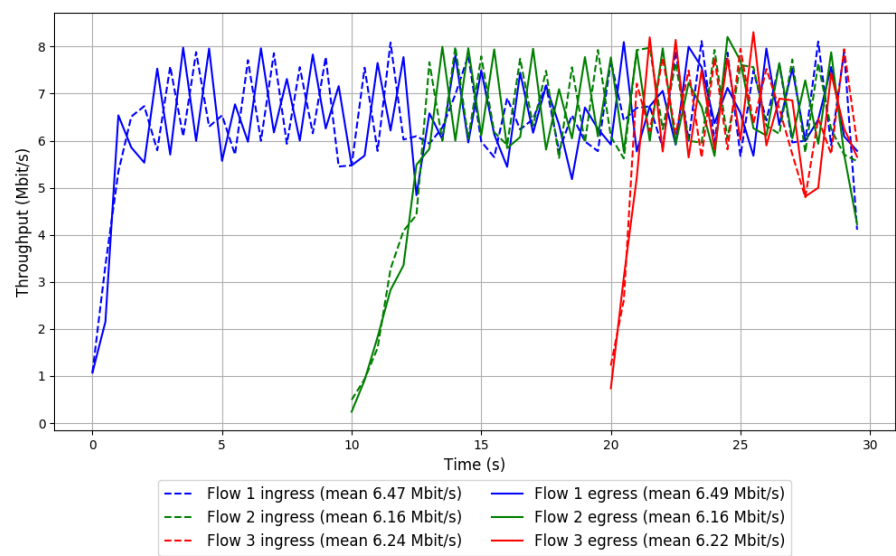
-- Flow 3:

Average throughput: 6.22 Mbit/s

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

Loss rate: 1.61%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-17 07:50:00

End at: 2017-11-17 07:50:30

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.57 Mbit/s

95th percentile per-packet one-way delay: 64.297 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 6.47 Mbit/s

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

Loss rate: 0.48%

-- Flow 2:

Average throughput: 6.26 Mbit/s

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

Loss rate: 0.43%

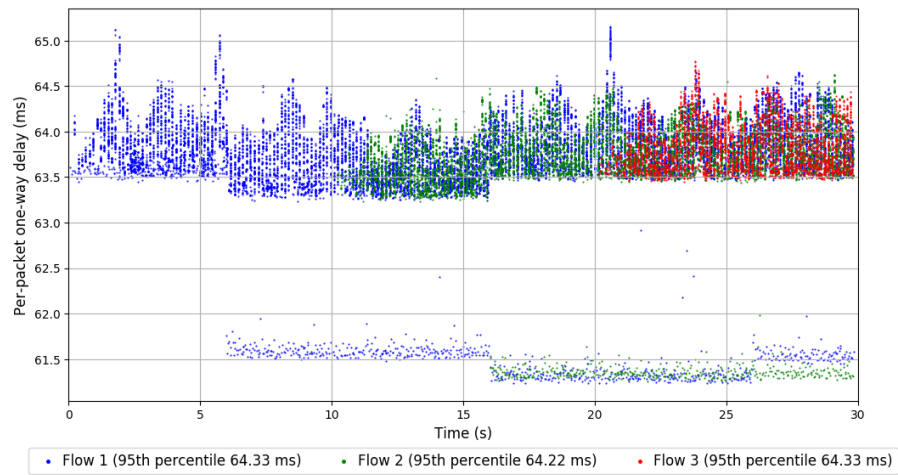
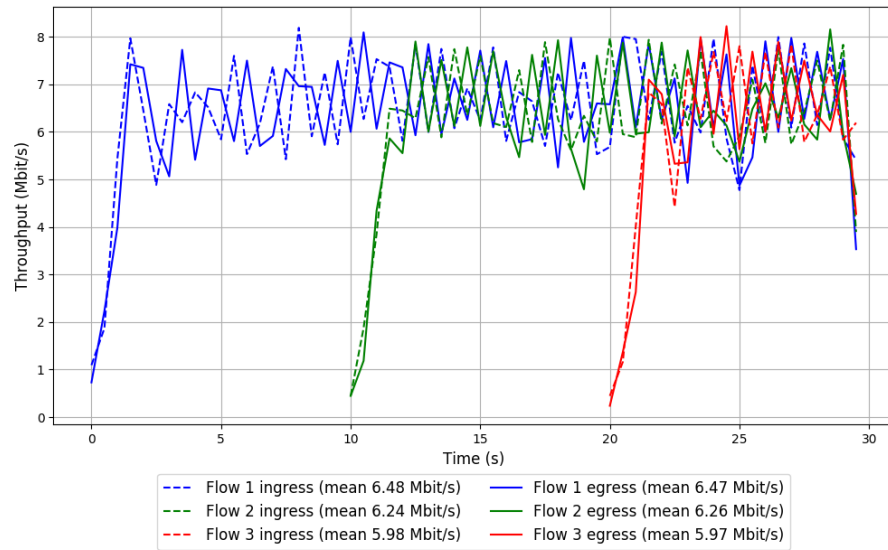
-- Flow 3:

Average throughput: 5.97 Mbit/s

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

Loss rate: 1.63%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-17 08:02:17

End at: 2017-11-17 08:02:47

Below is generated by plot.py at 2017-11-17 10:51:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.88 Mbit/s

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

Loss rate: 0.72%

-- Flow 1:

Average throughput: 6.62 Mbit/s

95th percentile per-packet one-way delay: 64.266 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 64.415 ms

Loss rate: 0.81%

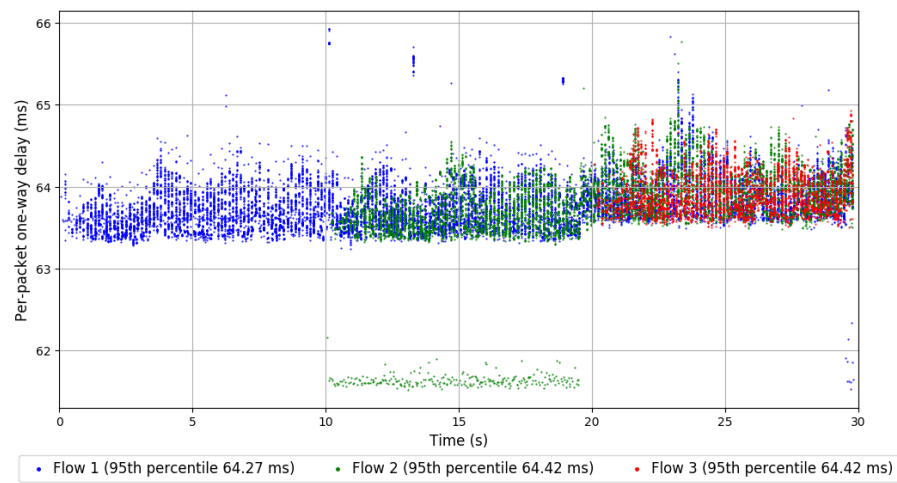
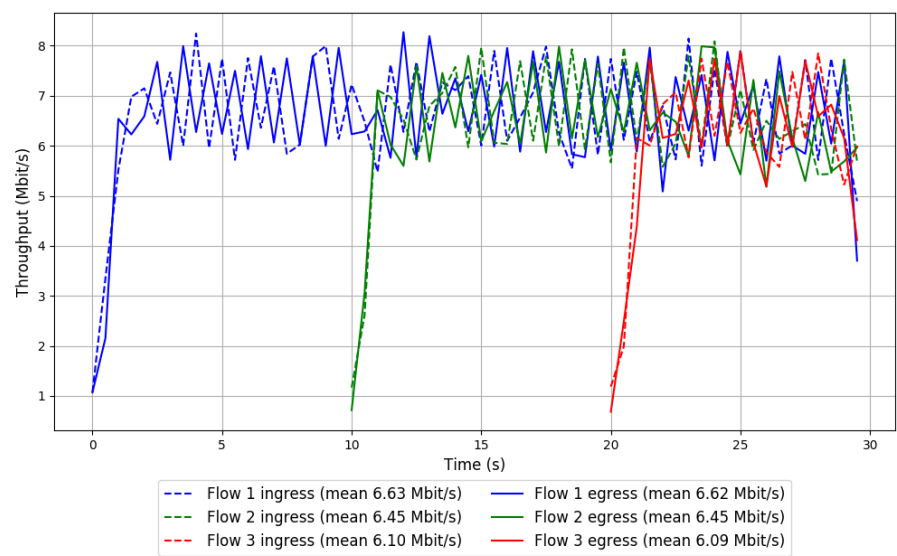
-- Flow 3:

Average throughput: 6.09 Mbit/s

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

Loss rate: 1.58%

Run 10: Report of Sprout — Data Link

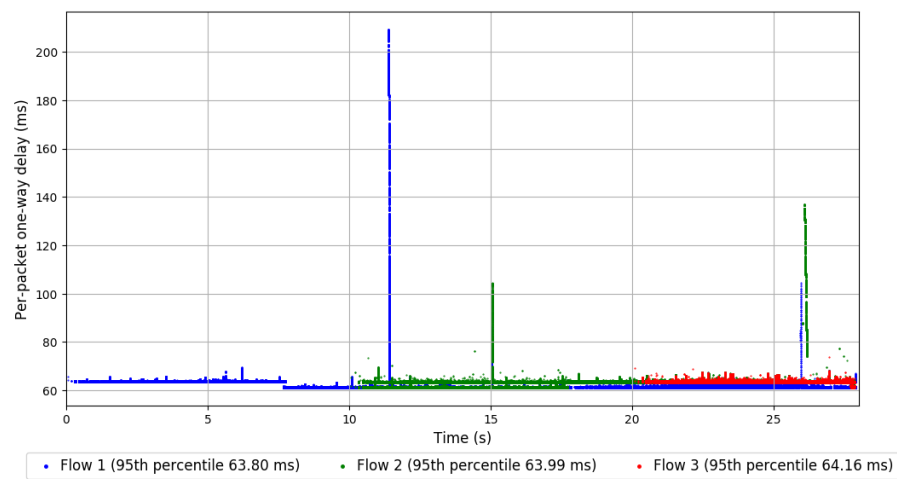
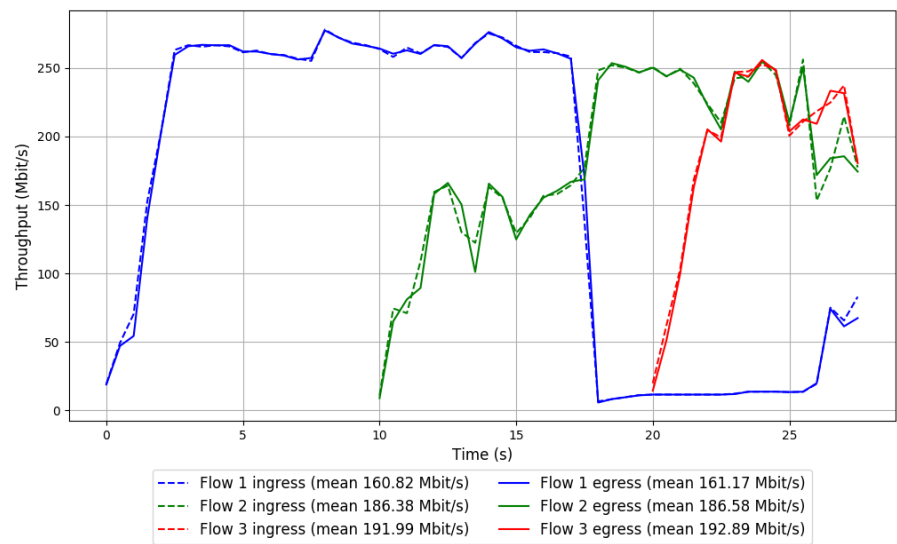


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-17 06:13:26
End at: 2017-11-17 06:13:56

# Below is generated by plot.py at 2017-11-17 10:55:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.18 Mbit/s
95th percentile per-packet one-way delay: 63.912 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 161.17 Mbit/s
95th percentile per-packet one-way delay: 63.798 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 186.58 Mbit/s
95th percentile per-packet one-way delay: 63.994 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 192.89 Mbit/s
95th percentile per-packet one-way delay: 64.158 ms
Loss rate: 1.01%
```


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

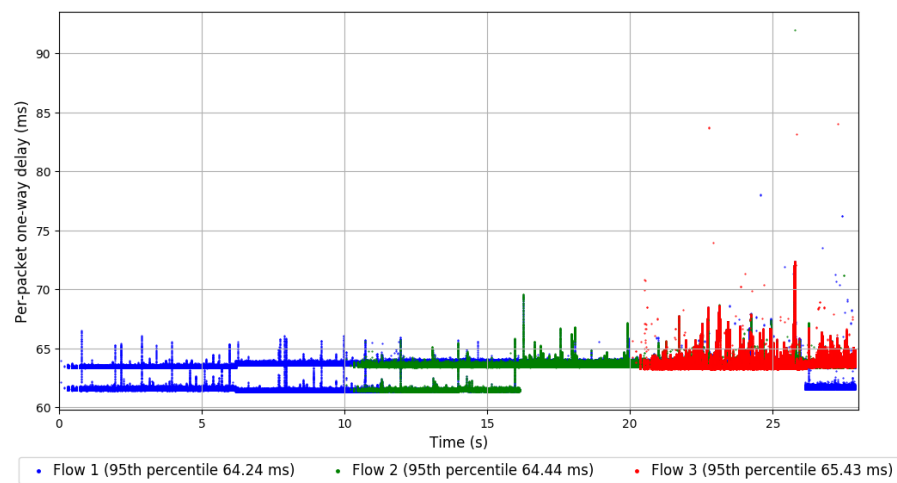
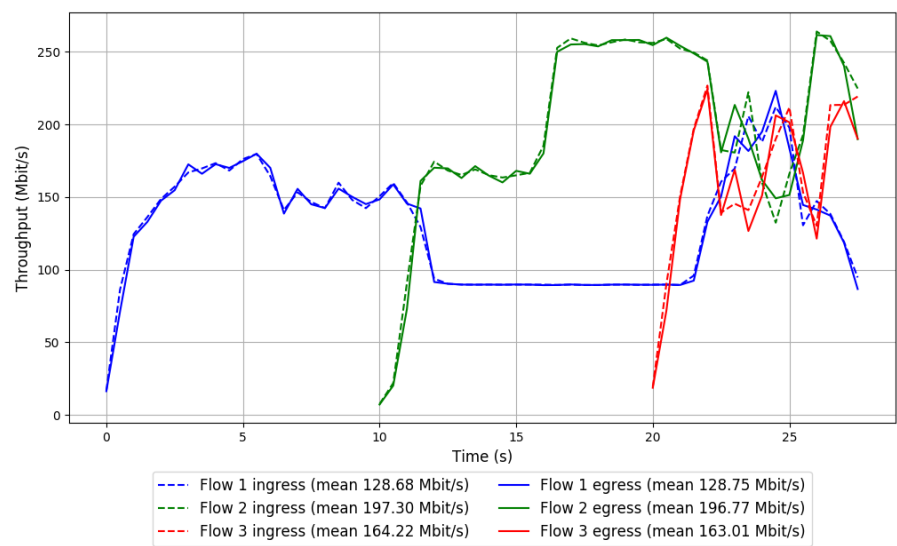


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-17 06:26:08
End at: 2017-11-17 06:26:38

# Below is generated by plot.py at 2017-11-17 10:55:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 300.47 Mbit/s
95th percentile per-packet one-way delay: 64.560 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 128.75 Mbit/s
95th percentile per-packet one-way delay: 64.244 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 196.77 Mbit/s
95th percentile per-packet one-way delay: 64.435 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 163.01 Mbit/s
95th percentile per-packet one-way delay: 65.430 ms
Loss rate: 2.34%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-17 06:38:28

End at: 2017-11-17 06:38:58

Below is generated by plot.py at 2017-11-17 10:55:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.95 Mbit/s

95th percentile per-packet one-way delay: 63.832 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 153.24 Mbit/s

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

Loss rate: 0.27%

-- Flow 2:

Average throughput: 190.03 Mbit/s

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

Loss rate: 1.01%

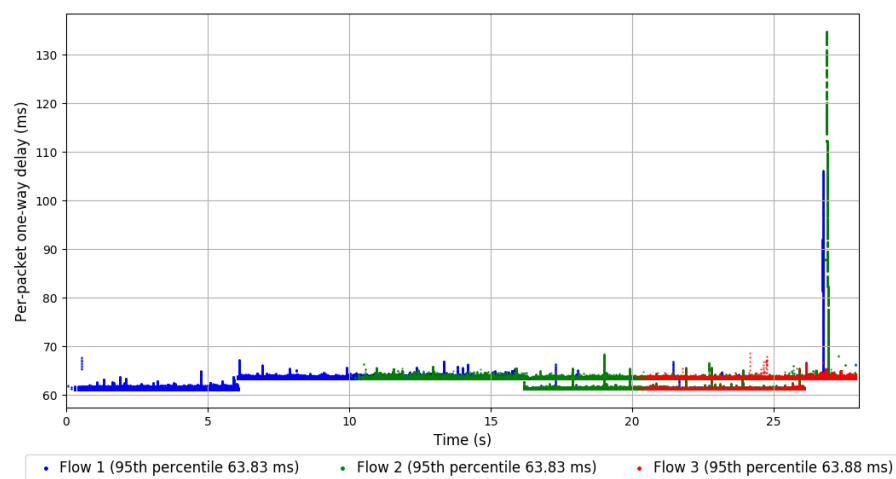
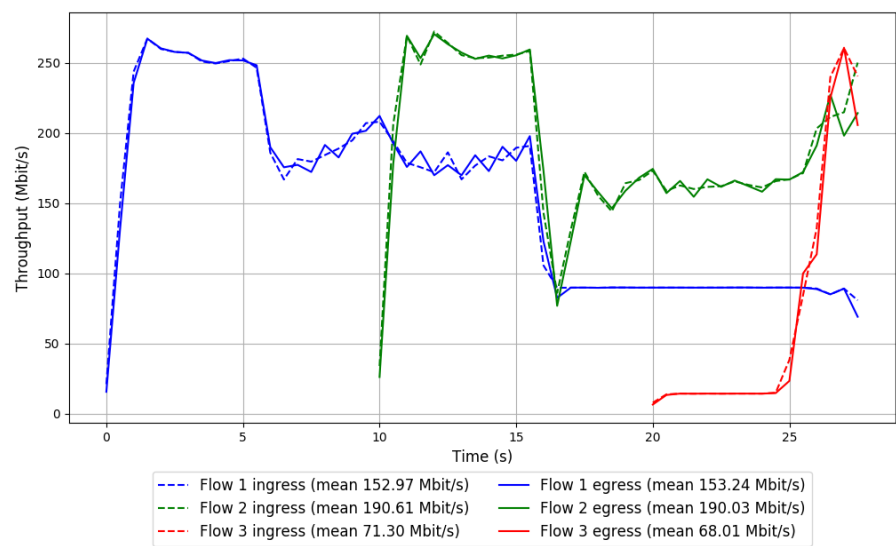
-- Flow 3:

Average throughput: 68.01 Mbit/s

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

Loss rate: 6.13%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-17 06:50:59

End at: 2017-11-17 06:51:29

Below is generated by plot.py at 2017-11-17 10:56:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 358.81 Mbit/s

95th percentile per-packet one-way delay: 63.664 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 226.50 Mbit/s

95th percentile per-packet one-way delay: 63.638 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 200.81 Mbit/s

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

Loss rate: 0.57%

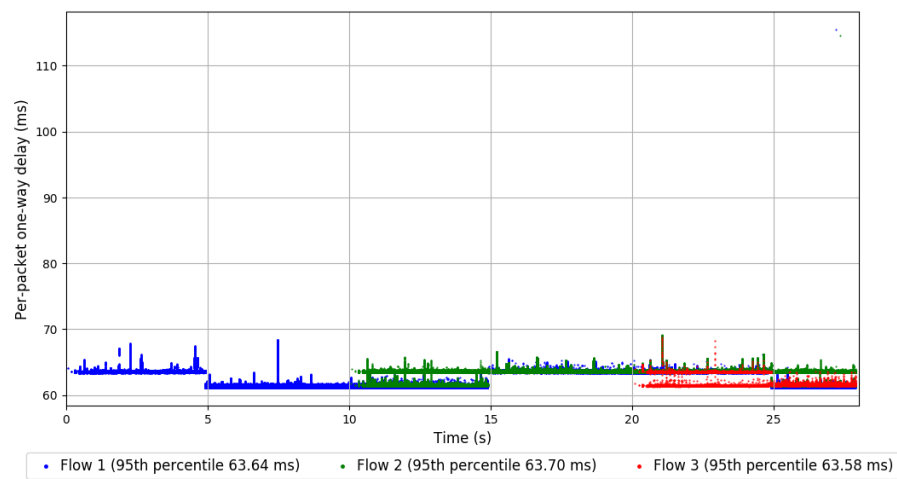
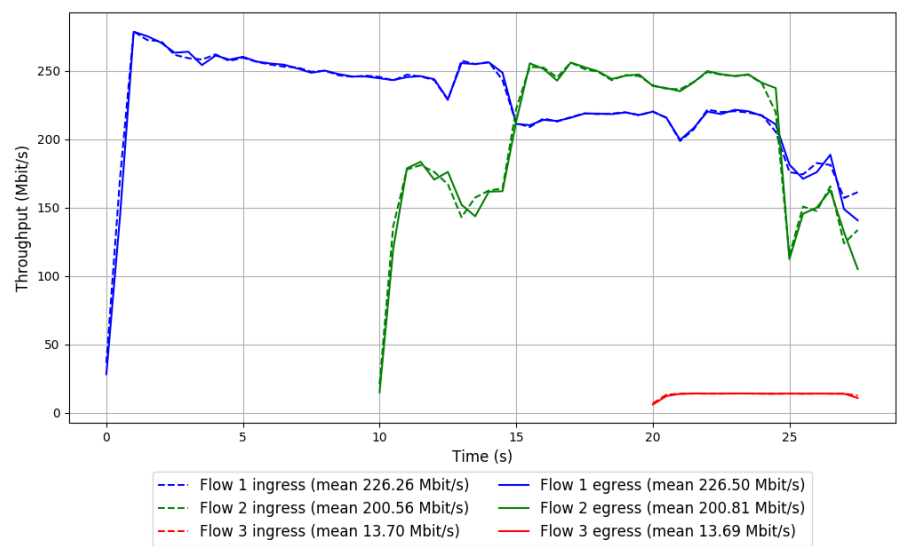
-- Flow 3:

Average throughput: 13.69 Mbit/s

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

Loss rate: 1.60%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-17 07:03:18

End at: 2017-11-17 07:03:48

Below is generated by plot.py at 2017-11-17 10:56:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 377.62 Mbit/s

95th percentile per-packet one-way delay: 66.183 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 226.24 Mbit/s

95th percentile per-packet one-way delay: 65.089 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 147.19 Mbit/s

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

Loss rate: 0.81%

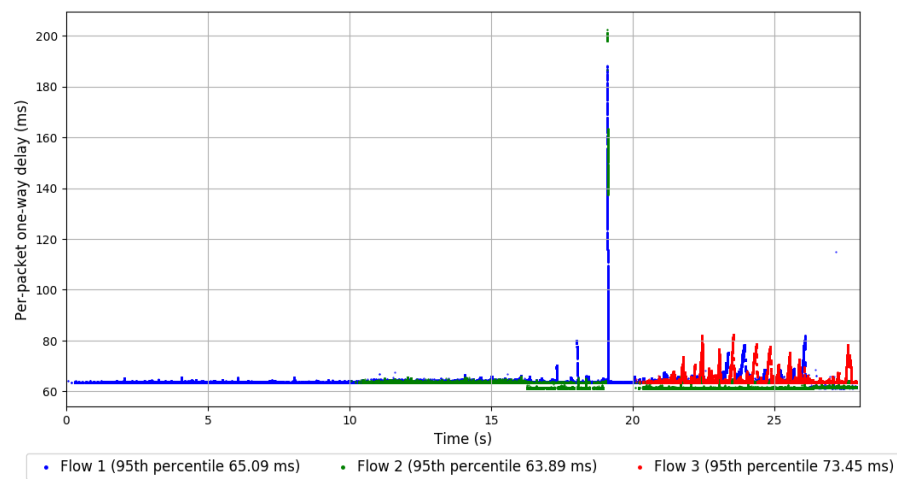
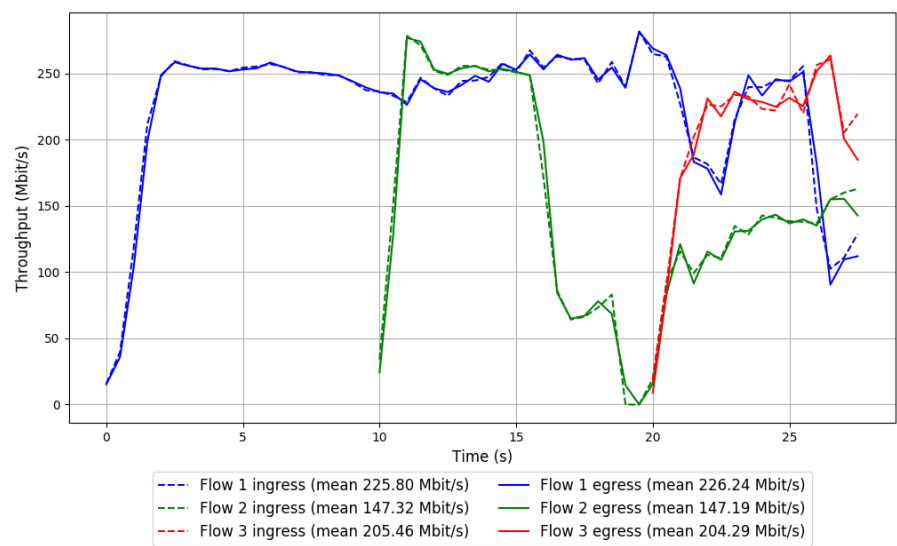
-- Flow 3:

Average throughput: 204.29 Mbit/s

95th percentile per-packet one-way delay: 73.451 ms

Loss rate: 2.18%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-17 07:15:57

End at: 2017-11-17 07:16:27

Below is generated by plot.py at 2017-11-17 10:57:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 353.07 Mbit/s

95th percentile per-packet one-way delay: 65.429 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 148.02 Mbit/s

95th percentile per-packet one-way delay: 63.733 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 224.03 Mbit/s

95th percentile per-packet one-way delay: 69.819 ms

Loss rate: 0.50%

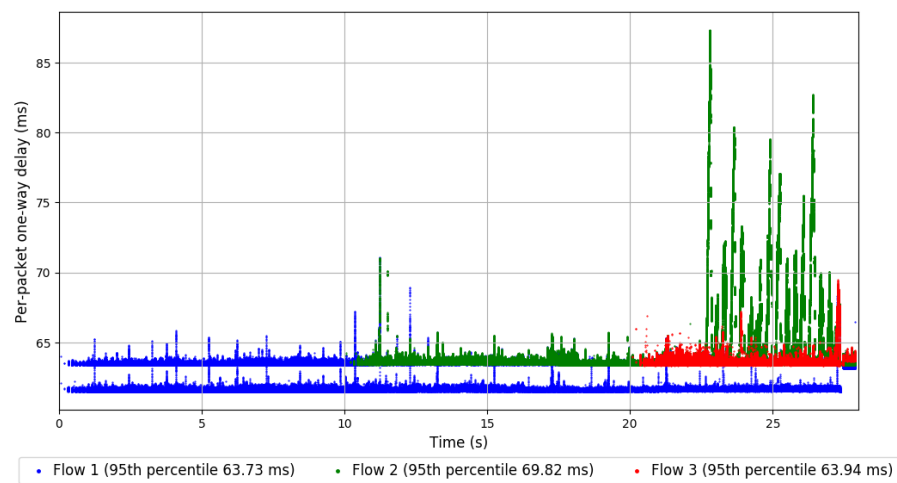
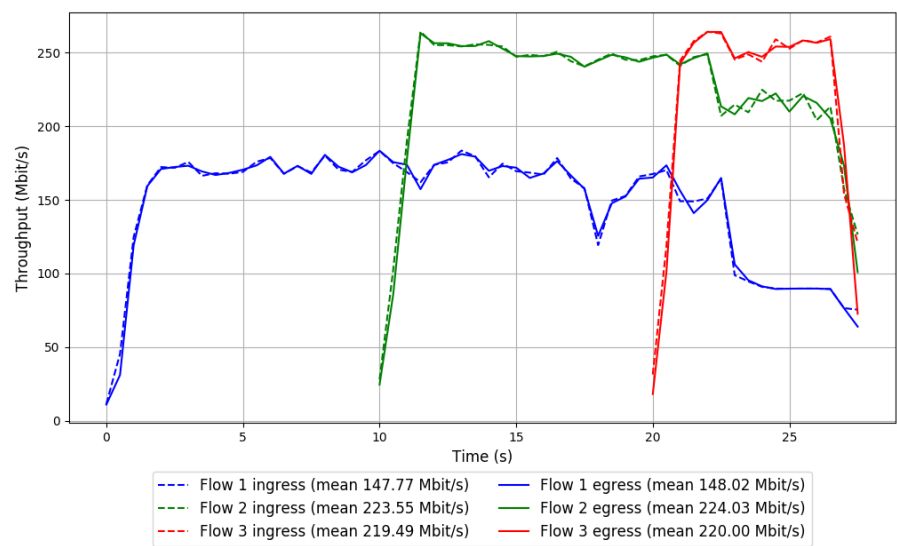
-- Flow 3:

Average throughput: 220.00 Mbit/s

95th percentile per-packet one-way delay: 63.939 ms

Loss rate: 1.39%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-17 07:28:25

End at: 2017-11-17 07:28:55

Below is generated by plot.py at 2017-11-17 11:02:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 349.53 Mbit/s

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

Loss rate: 0.69%

-- Flow 1:

Average throughput: 206.47 Mbit/s

95th percentile per-packet one-way delay: 63.962 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 121.95 Mbit/s

95th percentile per-packet one-way delay: 63.943 ms

Loss rate: 0.73%

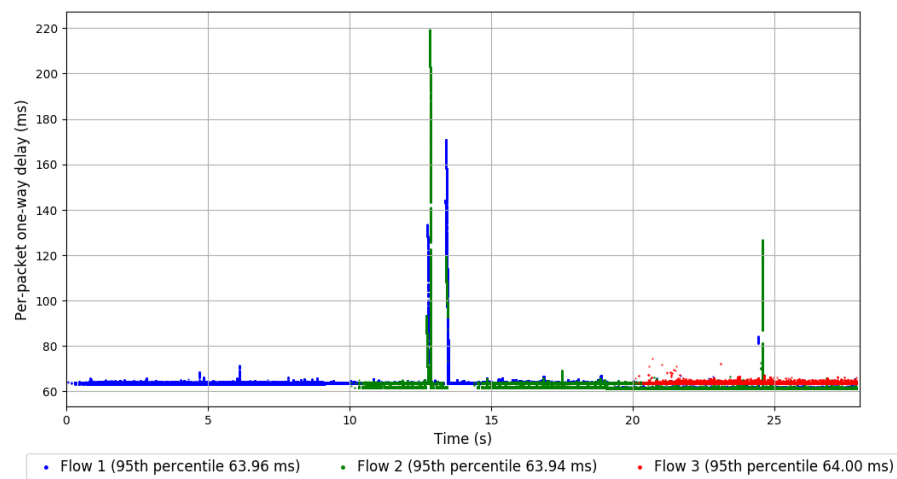
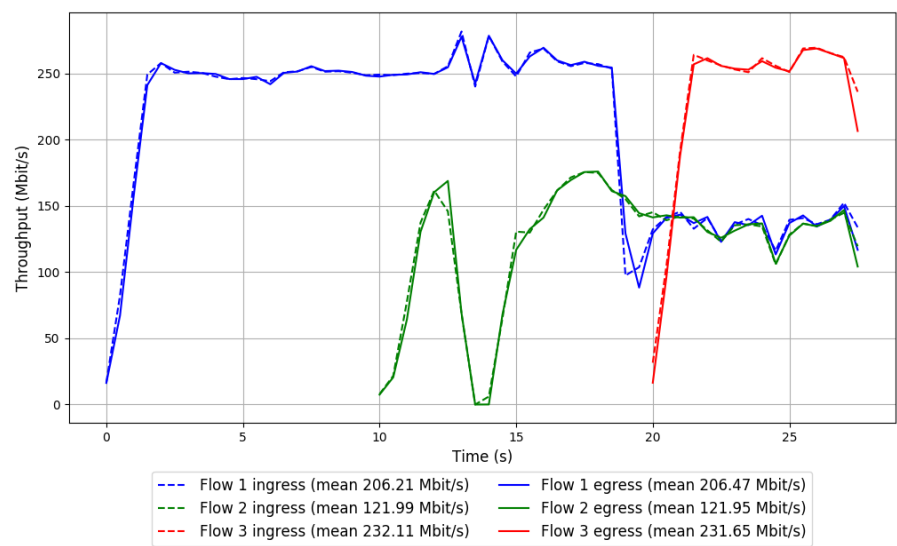
-- Flow 3:

Average throughput: 231.65 Mbit/s

95th percentile per-packet one-way delay: 63.998 ms

Loss rate: 1.78%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-17 07:40:56

End at: 2017-11-17 07:41:26

Below is generated by plot.py at 2017-11-17 11:02:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 313.22 Mbit/s

95th percentile per-packet one-way delay: 64.296 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 180.94 Mbit/s

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

Loss rate: 0.22%

-- Flow 2:

Average throughput: 103.86 Mbit/s

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

Loss rate: 0.79%

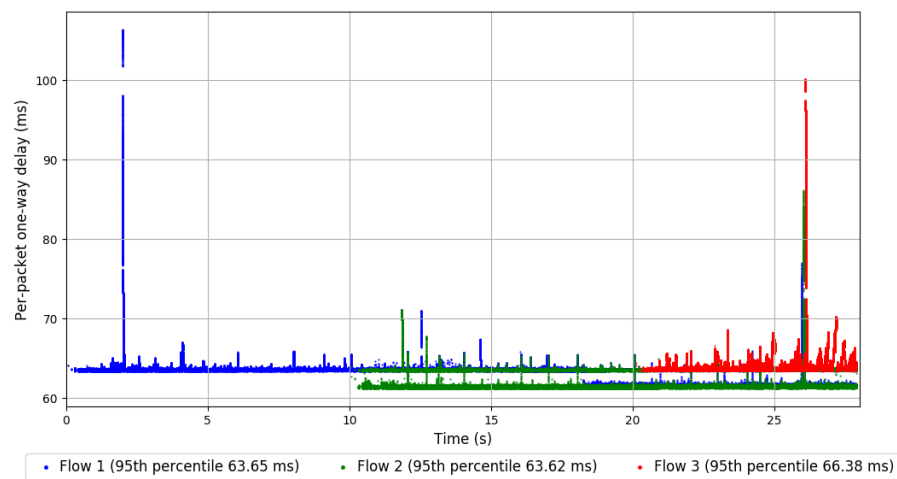
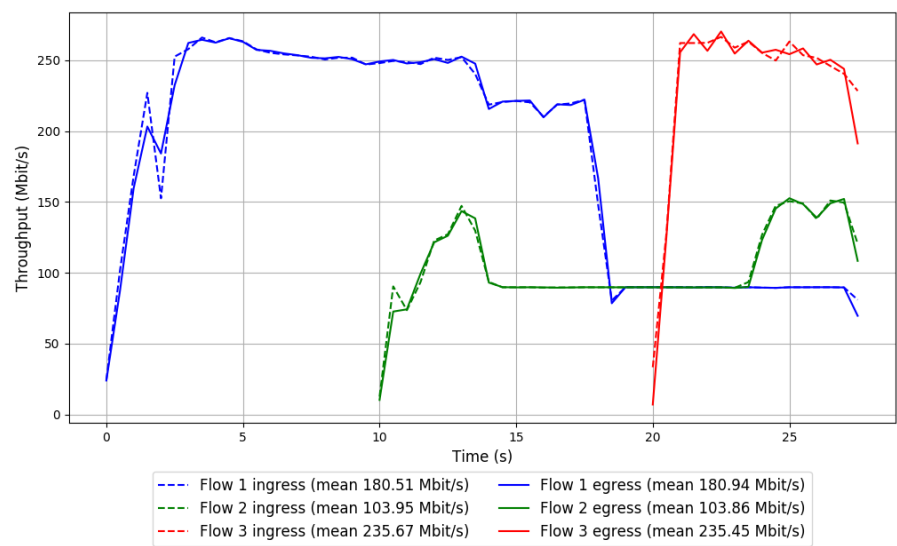
-- Flow 3:

Average throughput: 235.45 Mbit/s

95th percentile per-packet one-way delay: 66.380 ms

Loss rate: 1.73%

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

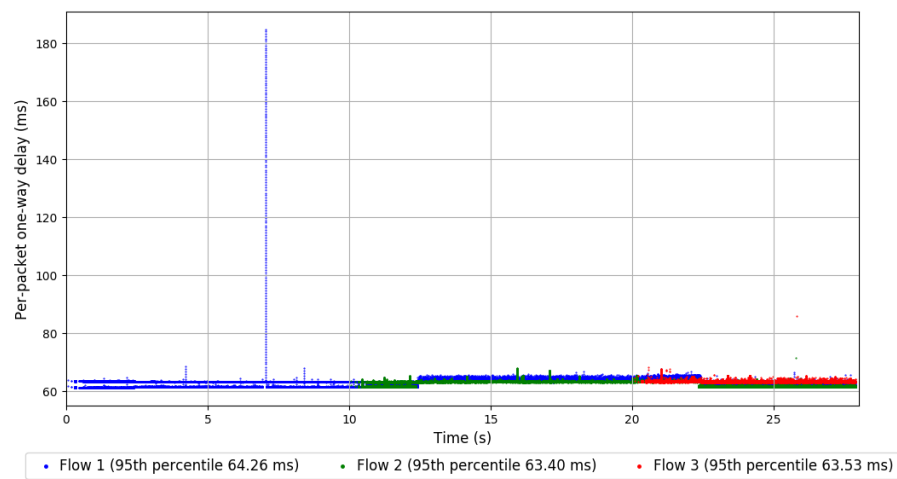
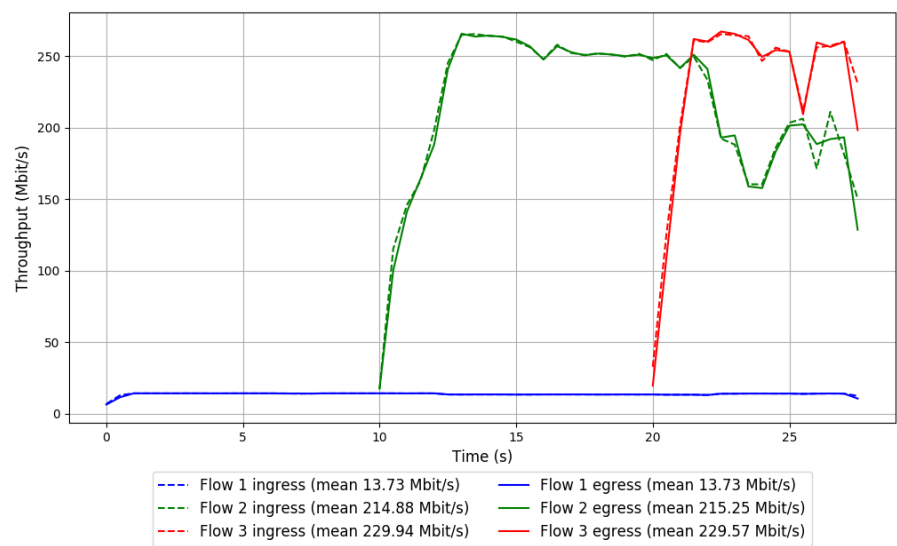


```
Run 9: Statistics of TaoVA-100x

Start at: 2017-11-17 07:53:32
End at: 2017-11-17 07:54:02

# Below is generated by plot.py at 2017-11-17 11:02:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 215.87 Mbit/s
95th percentile per-packet one-way delay: 63.474 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 13.73 Mbit/s
95th percentile per-packet one-way delay: 64.259 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 215.25 Mbit/s
95th percentile per-packet one-way delay: 63.396 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 229.57 Mbit/s
95th percentile per-packet one-way delay: 63.534 ms
Loss rate: 1.77%
```


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

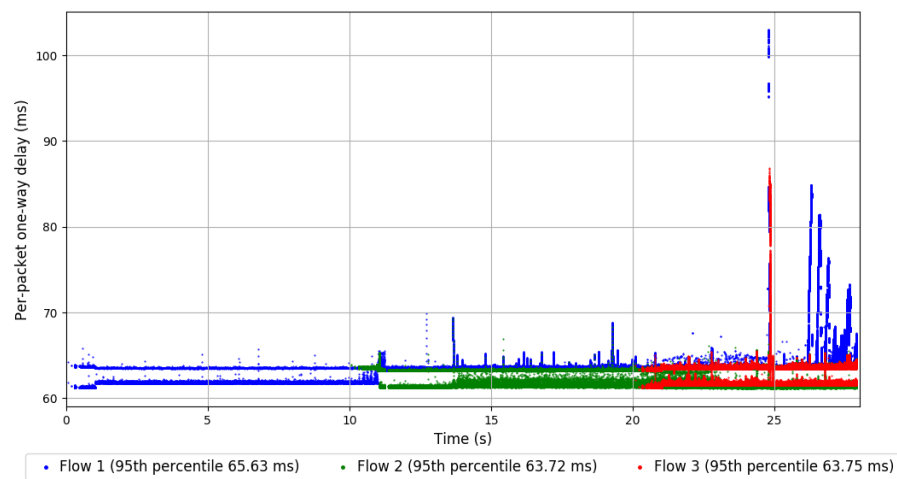
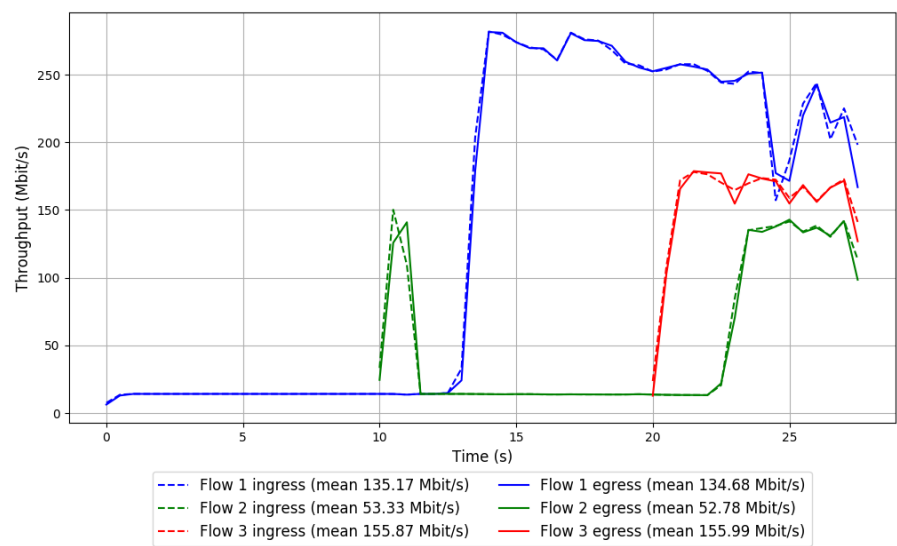


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-17 08:05:53
End at: 2017-11-17 08:06:23

# Below is generated by plot.py at 2017-11-17 11:02:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 212.22 Mbit/s
95th percentile per-packet one-way delay: 64.133 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 134.68 Mbit/s
95th percentile per-packet one-way delay: 65.629 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 52.78 Mbit/s
95th percentile per-packet one-way delay: 63.722 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 155.99 Mbit/s
95th percentile per-packet one-way delay: 63.753 ms
Loss rate: 1.52%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-17 06:08:13

End at: 2017-11-17 06:08:43

Below is generated by plot.py at 2017-11-17 11:02:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.56 Mbit/s

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

Loss rate: 0.52%

-- Flow 1:

Average throughput: 67.83 Mbit/s

95th percentile per-packet one-way delay: 64.099 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 6.54 Mbit/s

95th percentile per-packet one-way delay: 62.539 ms

Loss rate: 1.00%

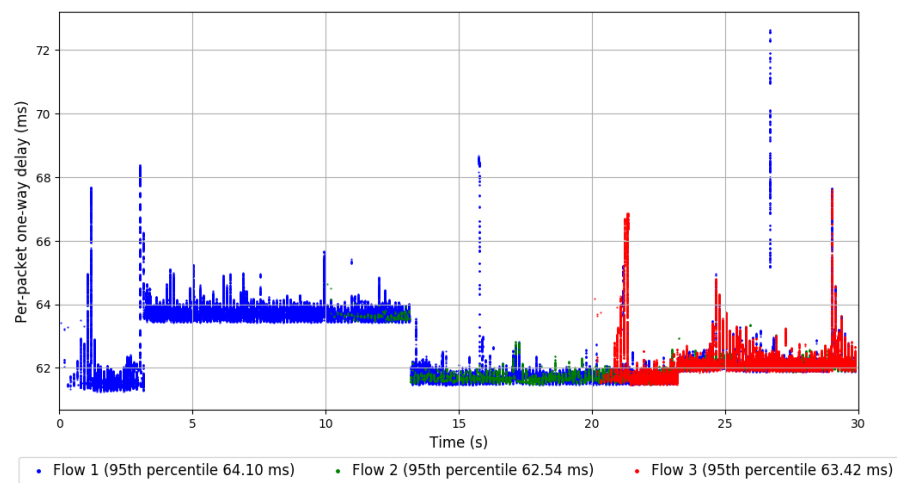
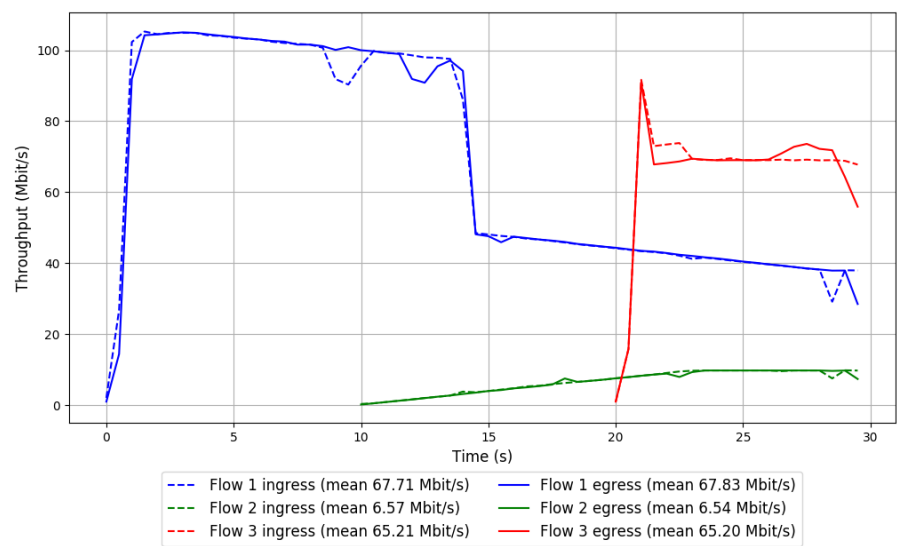
-- Flow 3:

Average throughput: 65.20 Mbit/s

95th percentile per-packet one-way delay: 63.418 ms

Loss rate: 1.31%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-17 06:20:37

End at: 2017-11-17 06:21:07

Below is generated by plot.py at 2017-11-17 11:02:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.96 Mbit/s

95th percentile per-packet one-way delay: 64.322 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 32.25 Mbit/s

95th percentile per-packet one-way delay: 64.386 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 133.69 Mbit/s

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

Loss rate: 0.23%

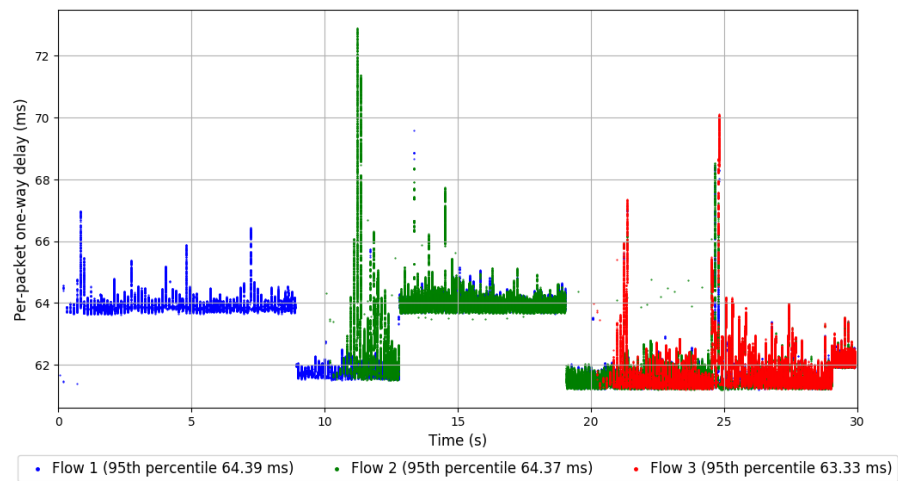
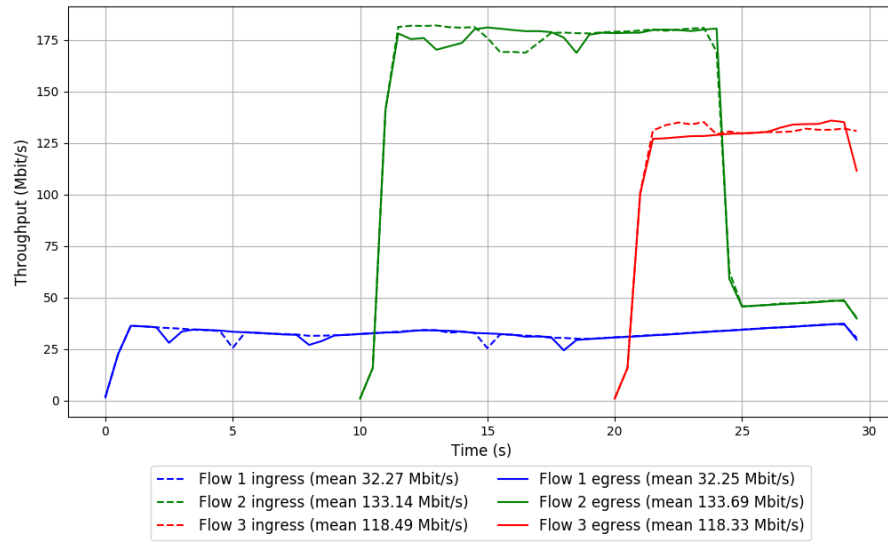
-- Flow 3:

Average throughput: 118.33 Mbit/s

95th percentile per-packet one-way delay: 63.332 ms

Loss rate: 1.39%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-17 06:33:15

End at: 2017-11-17 06:33:45

Below is generated by plot.py at 2017-11-17 11:02:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.96 Mbit/s

95th percentile per-packet one-way delay: 64.344 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 24.27 Mbit/s

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

Loss rate: 0.53%

-- Flow 2:

Average throughput: 14.93 Mbit/s

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

Loss rate: 0.48%

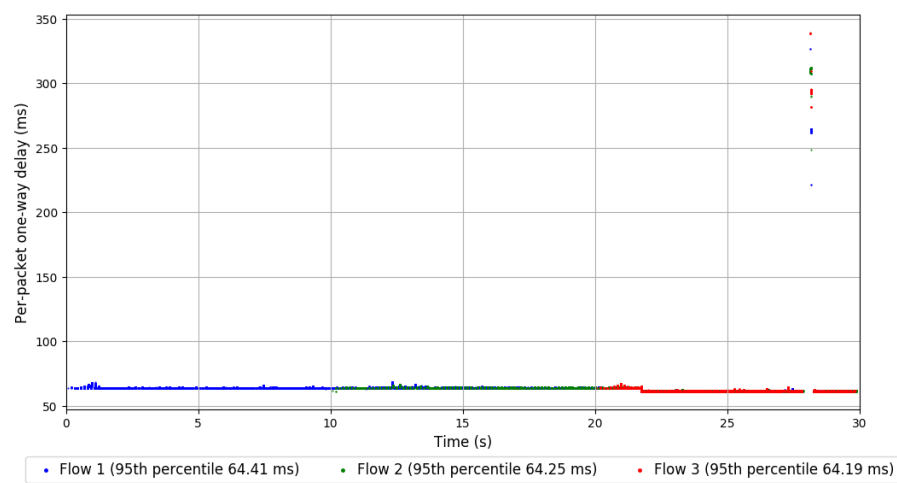
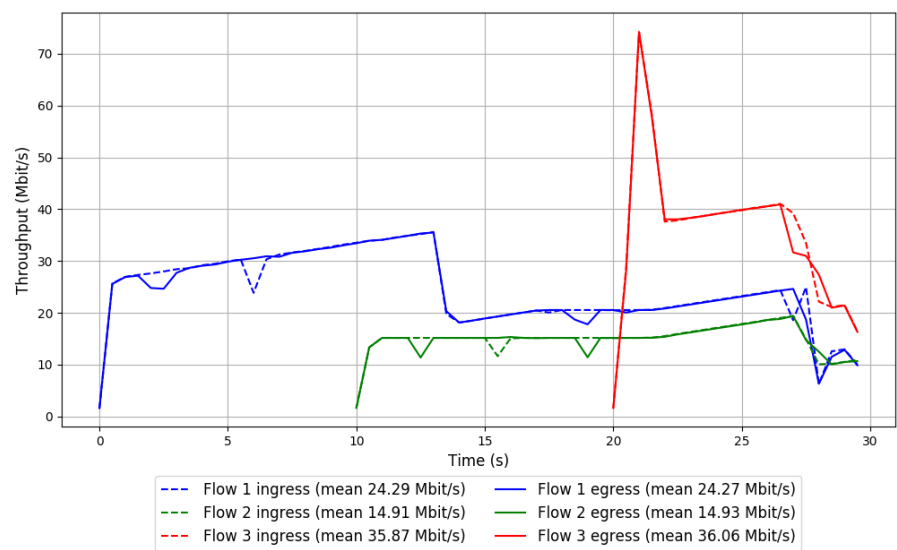
-- Flow 3:

Average throughput: 36.06 Mbit/s

95th percentile per-packet one-way delay: 64.195 ms

Loss rate: 0.78%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-17 06:45:34

End at: 2017-11-17 06:46:04

Below is generated by plot.py at 2017-11-17 11:02:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.01 Mbit/s

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

Loss rate: 0.65%

-- Flow 1:

Average throughput: 41.26 Mbit/s

95th percentile per-packet one-way delay: 64.688 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 14.58 Mbit/s

95th percentile per-packet one-way delay: 64.198 ms

Loss rate: 0.65%

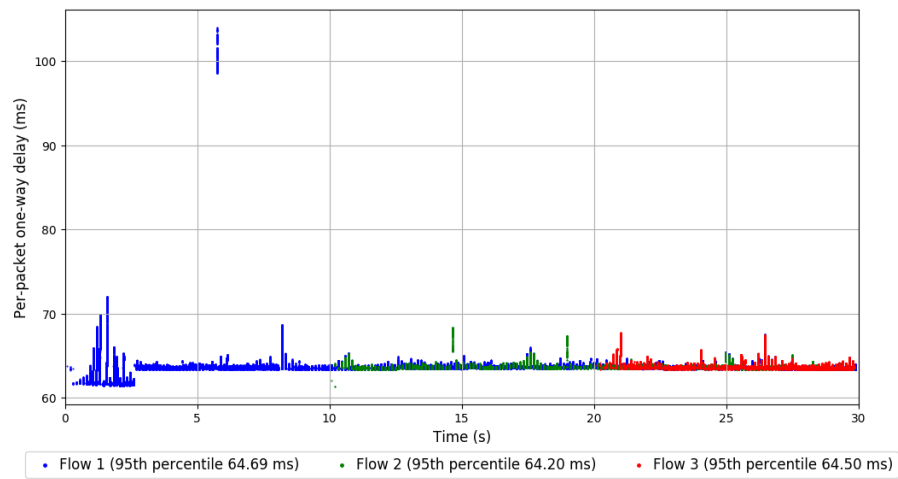
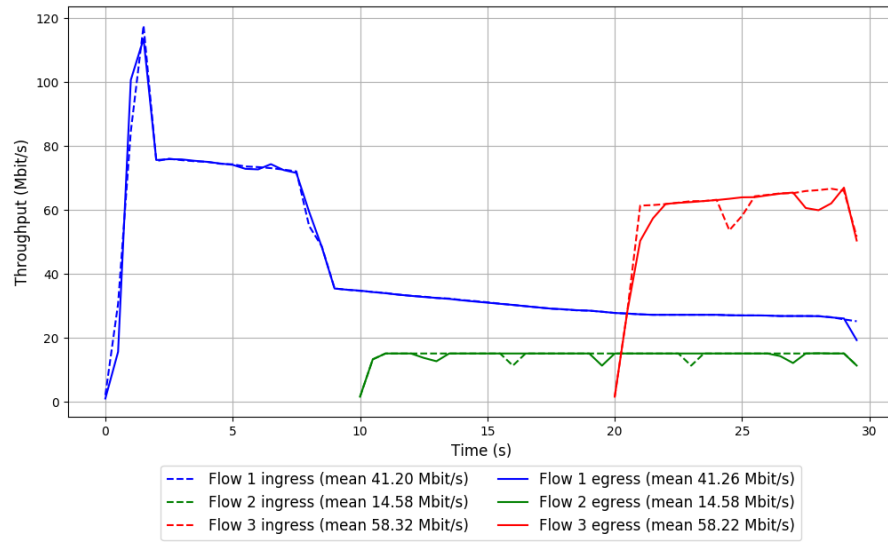
-- Flow 3:

Average throughput: 58.22 Mbit/s

95th percentile per-packet one-way delay: 64.498 ms

Loss rate: 1.46%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-17 06:58:08

End at: 2017-11-17 06:58:38

Below is generated by plot.py at 2017-11-17 11:02:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.20 Mbit/s

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

Loss rate: 0.73%

-- Flow 1:

Average throughput: 12.26 Mbit/s

95th percentile per-packet one-way delay: 64.070 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 13.12 Mbit/s

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

Loss rate: 0.62%

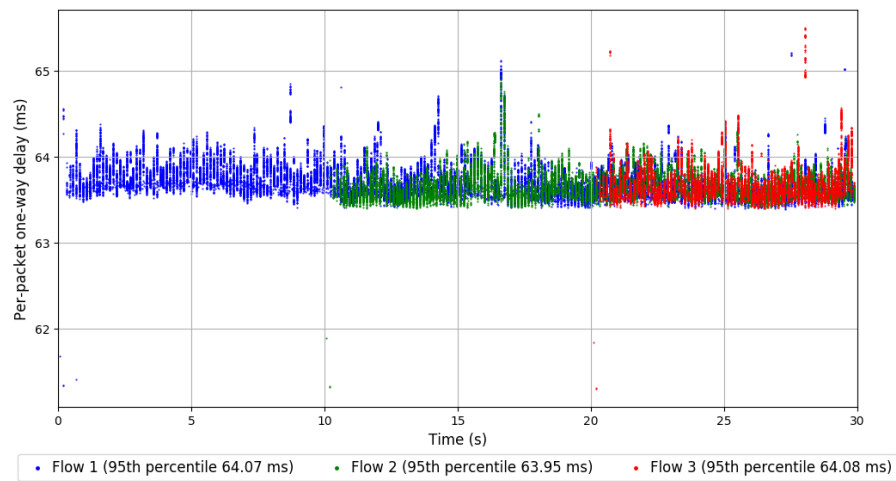
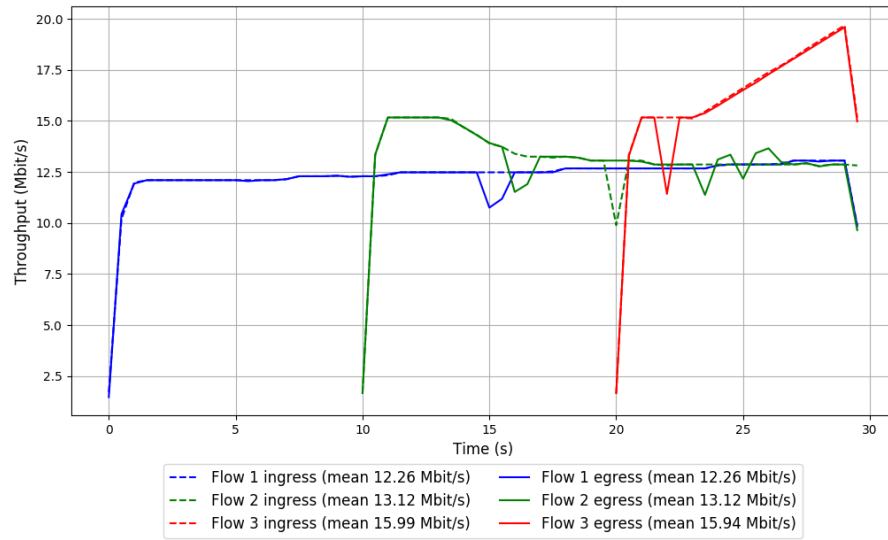
-- Flow 3:

Average throughput: 15.94 Mbit/s

95th percentile per-packet one-way delay: 64.079 ms

Loss rate: 1.58%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-17 07:10:32

End at: 2017-11-17 07:11:02

Below is generated by plot.py at 2017-11-17 11:02:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.88 Mbit/s

95th percentile per-packet one-way delay: 64.629 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 54.16 Mbit/s

95th percentile per-packet one-way delay: 64.768 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 31.58 Mbit/s

95th percentile per-packet one-way delay: 64.497 ms

Loss rate: 0.57%

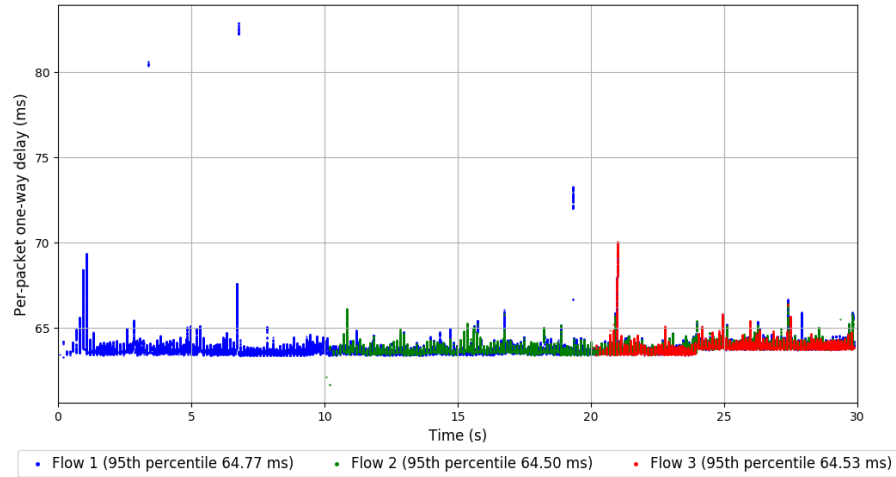
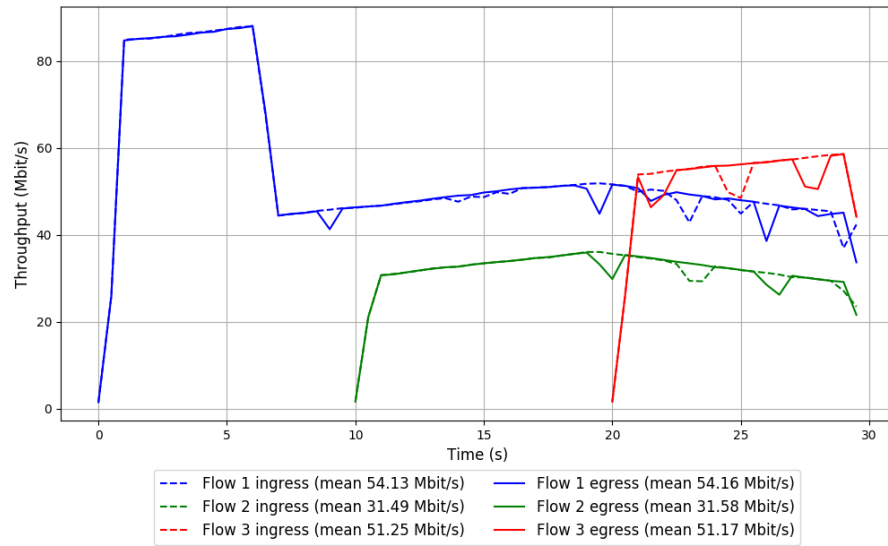
-- Flow 3:

Average throughput: 51.17 Mbit/s

95th percentile per-packet one-way delay: 64.531 ms

Loss rate: 1.45%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-17 07:23:07

End at: 2017-11-17 07:23:37

Below is generated by plot.py at 2017-11-17 11:02:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.98 Mbit/s

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

Loss rate: 0.81%

-- Flow 1:

Average throughput: 22.87 Mbit/s

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

Loss rate: 0.50%

-- Flow 2:

Average throughput: 75.70 Mbit/s

95th percentile per-packet one-way delay: 64.635 ms

Loss rate: 0.72%

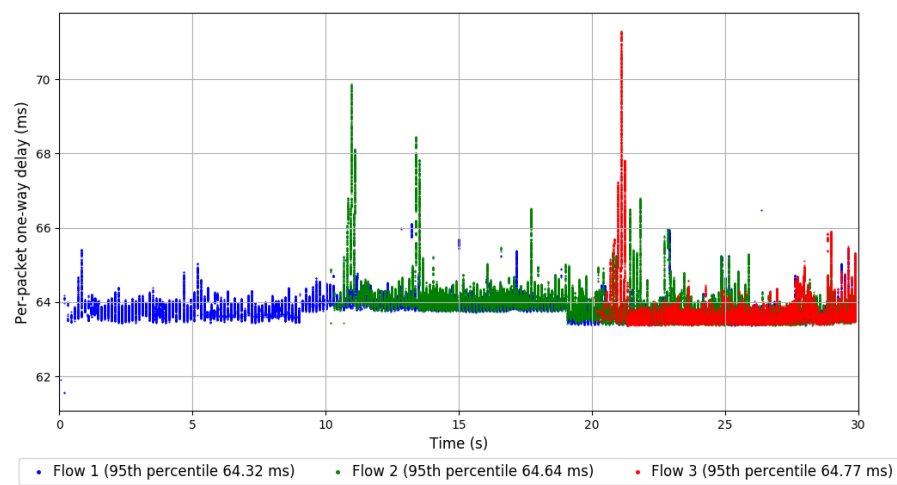
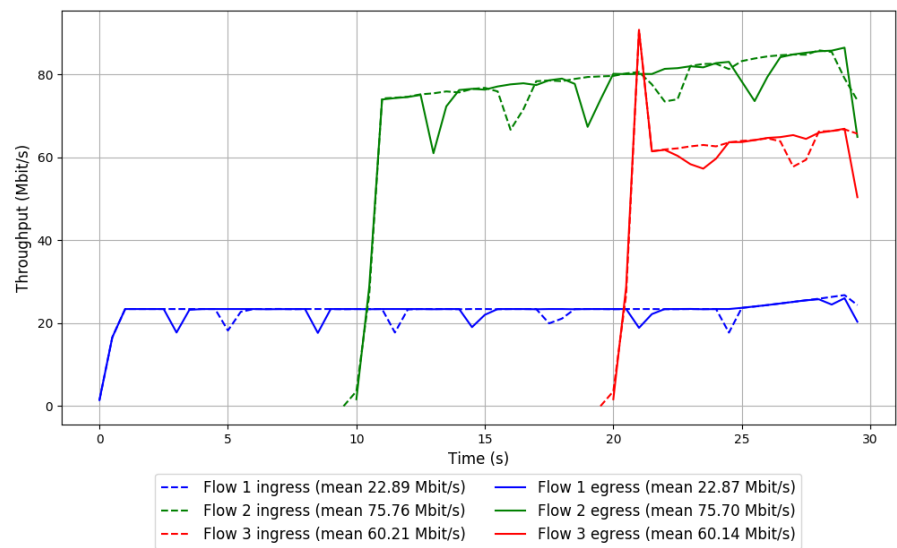
-- Flow 3:

Average throughput: 60.14 Mbit/s

95th percentile per-packet one-way delay: 64.773 ms

Loss rate: 1.41%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-17 07:35:35

End at: 2017-11-17 07:36:05

Below is generated by plot.py at 2017-11-17 11:02:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.35 Mbit/s

95th percentile per-packet one-way delay: 69.570 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 95.27 Mbit/s

95th percentile per-packet one-way delay: 70.135 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 110.55 Mbit/s

95th percentile per-packet one-way delay: 64.780 ms

Loss rate: 0.69%

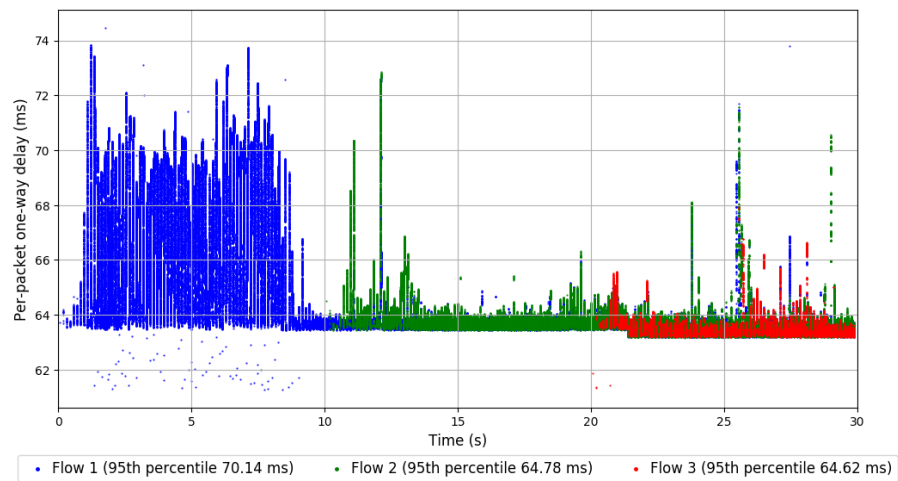
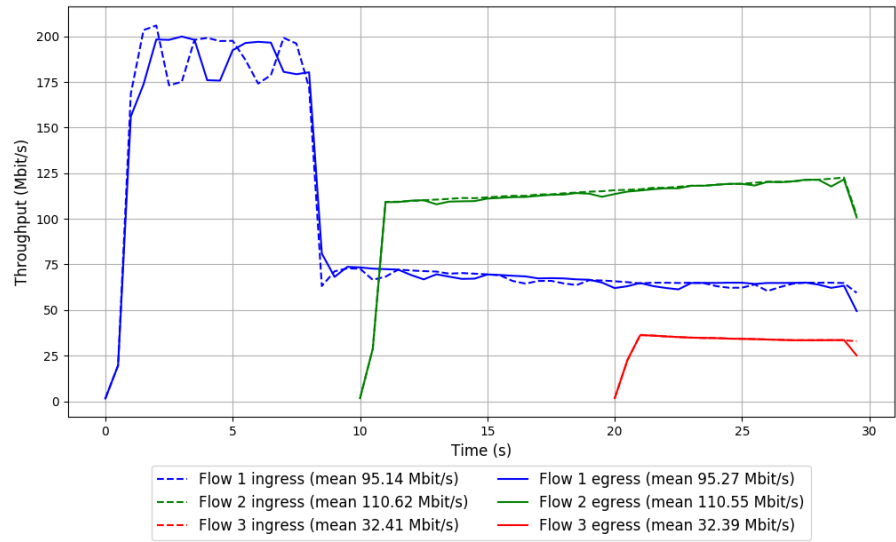
-- Flow 3:

Average throughput: 32.39 Mbit/s

95th percentile per-packet one-way delay: 64.616 ms

Loss rate: 1.31%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-17 07:48:06

End at: 2017-11-17 07:48:36

Below is generated by plot.py at 2017-11-17 11:02:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 156.04 Mbit/s

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

Loss rate: 0.47%

-- Flow 1:

Average throughput: 132.05 Mbit/s

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

Loss rate: 0.41%

-- Flow 2:

Average throughput: 28.90 Mbit/s

95th percentile per-packet one-way delay: 64.107 ms

Loss rate: 0.66%

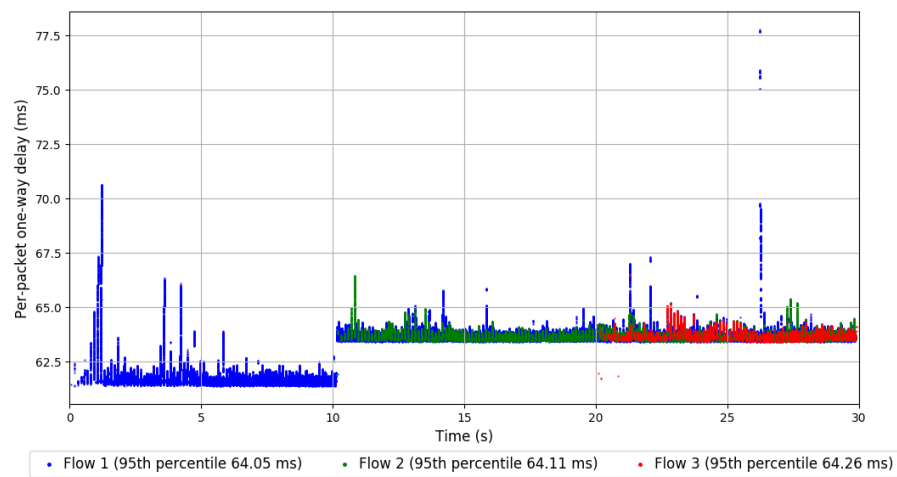
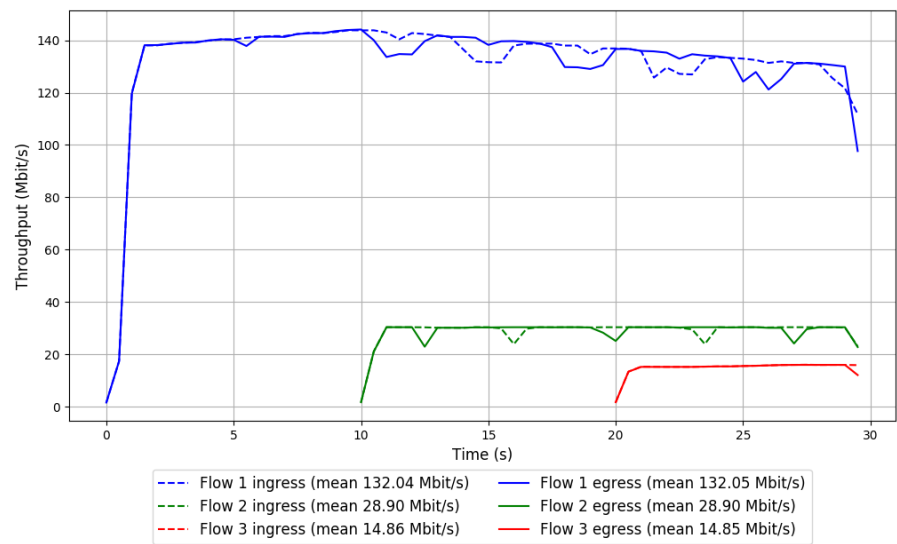
-- Flow 3:

Average throughput: 14.85 Mbit/s

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

Loss rate: 1.35%

Run 9: Report of TCP Vegas — Data Link

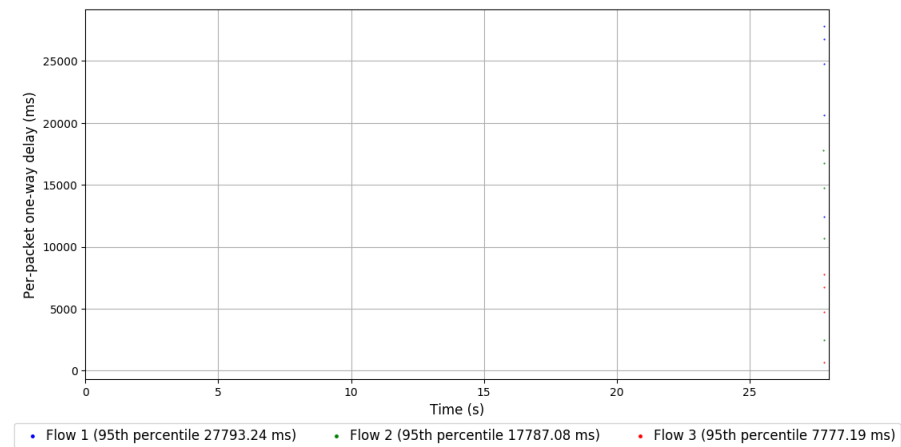
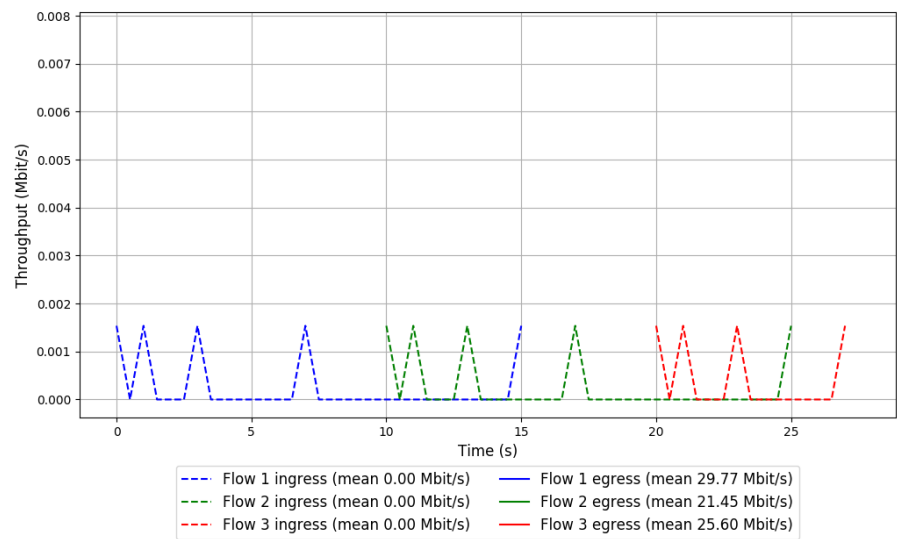


Run 10: Statistics of TCP Vegas

Start at: 2017-11-17 08:00:31

End at: 2017-11-17 08:01:01

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-11-17 06:10:44

End at: 2017-11-17 06:11:14

Below is generated by plot.py at 2017-11-17 11:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 303.77 Mbit/s

95th percentile per-packet one-way delay: 107.360 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 207.68 Mbit/s

95th percentile per-packet one-way delay: 98.320 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.49 Mbit/s

95th percentile per-packet one-way delay: 117.497 ms

Loss rate: 4.62%

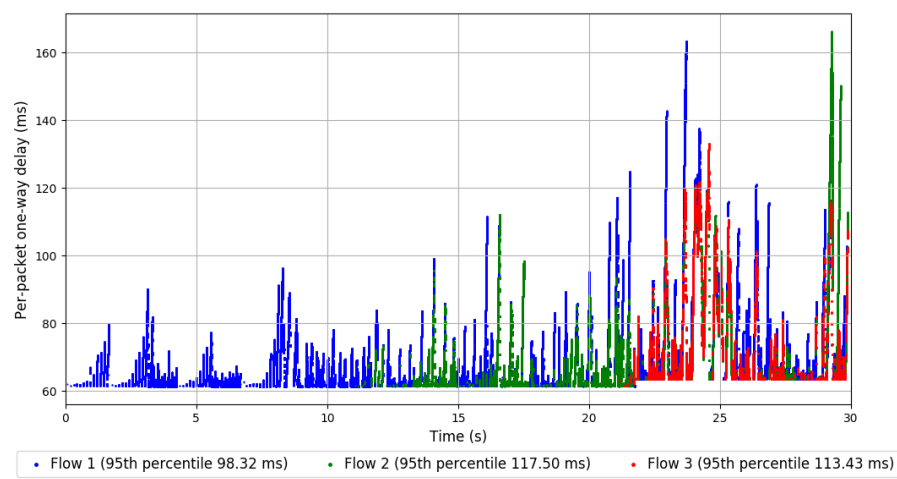
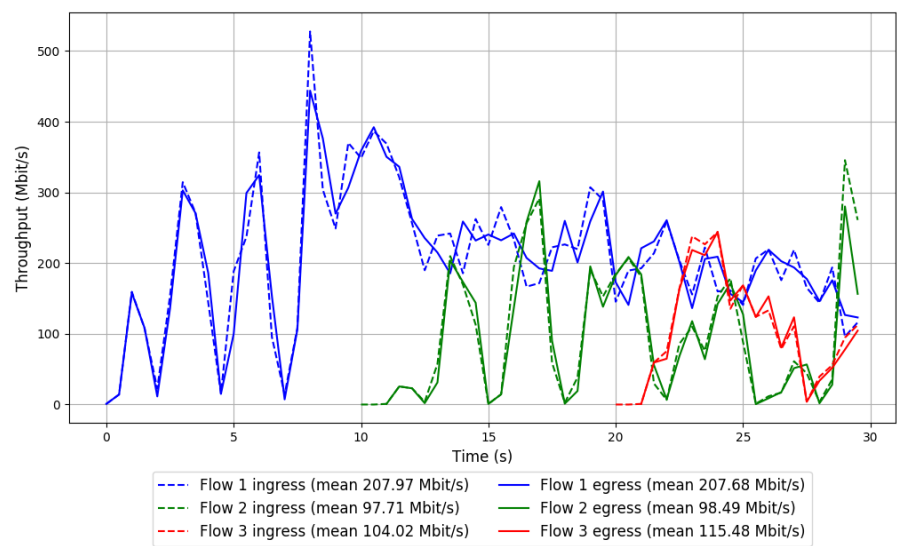
-- Flow 3:

Average throughput: 115.48 Mbit/s

95th percentile per-packet one-way delay: 113.434 ms

Loss rate: 1.68%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-17 06:23:14

End at: 2017-11-17 06:23:44

Below is generated by plot.py at 2017-11-17 11:06:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 417.34 Mbit/s

95th percentile per-packet one-way delay: 224.696 ms

Loss rate: 3.72%

-- Flow 1:

Average throughput: 261.94 Mbit/s

95th percentile per-packet one-way delay: 236.452 ms

Loss rate: 3.13%

-- Flow 2:

Average throughput: 218.81 Mbit/s

95th percentile per-packet one-way delay: 212.230 ms

Loss rate: 4.20%

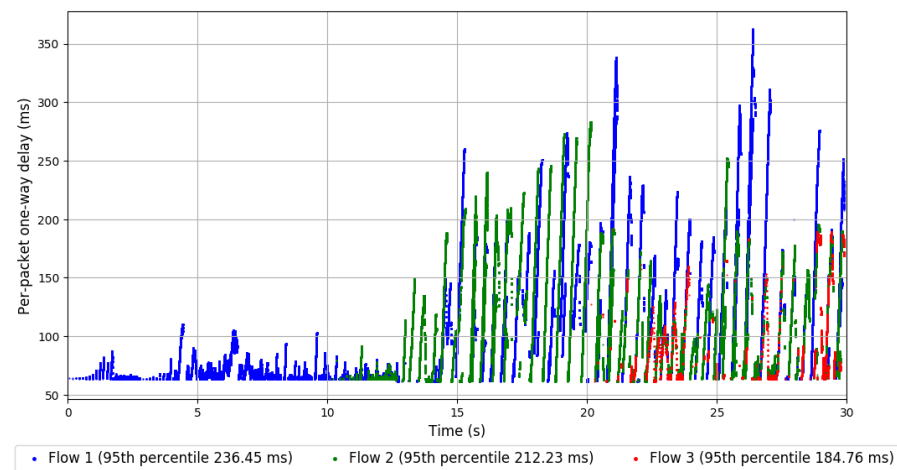
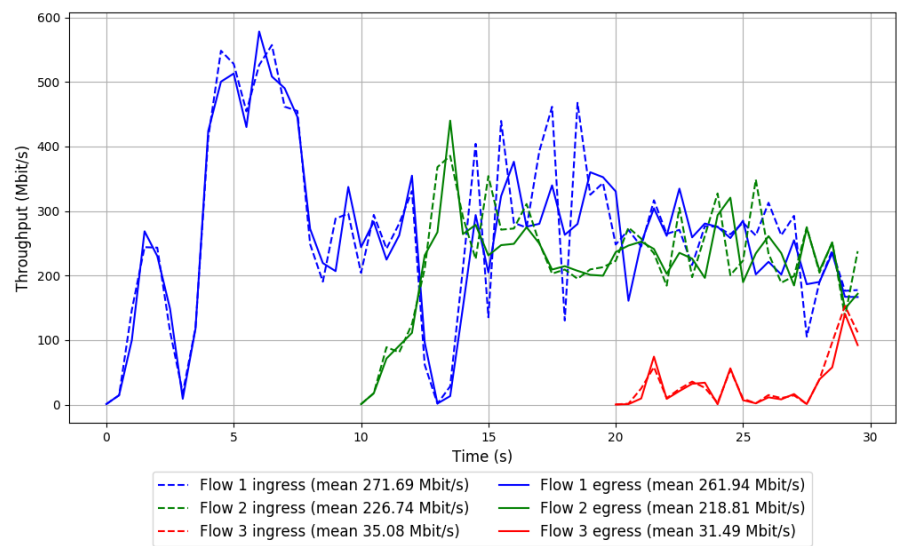
-- Flow 3:

Average throughput: 31.49 Mbit/s

95th percentile per-packet one-way delay: 184.760 ms

Loss rate: 11.16%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-17 06:35:44

End at: 2017-11-17 06:36:14

Below is generated by plot.py at 2017-11-17 11:06:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.66 Mbit/s

95th percentile per-packet one-way delay: 196.266 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 195.29 Mbit/s

95th percentile per-packet one-way delay: 107.640 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 186.07 Mbit/s

95th percentile per-packet one-way delay: 235.255 ms

Loss rate: 2.86%

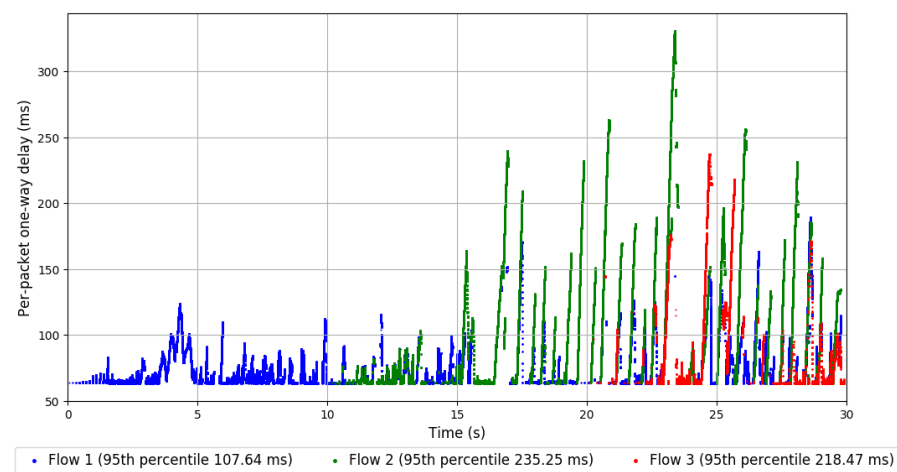
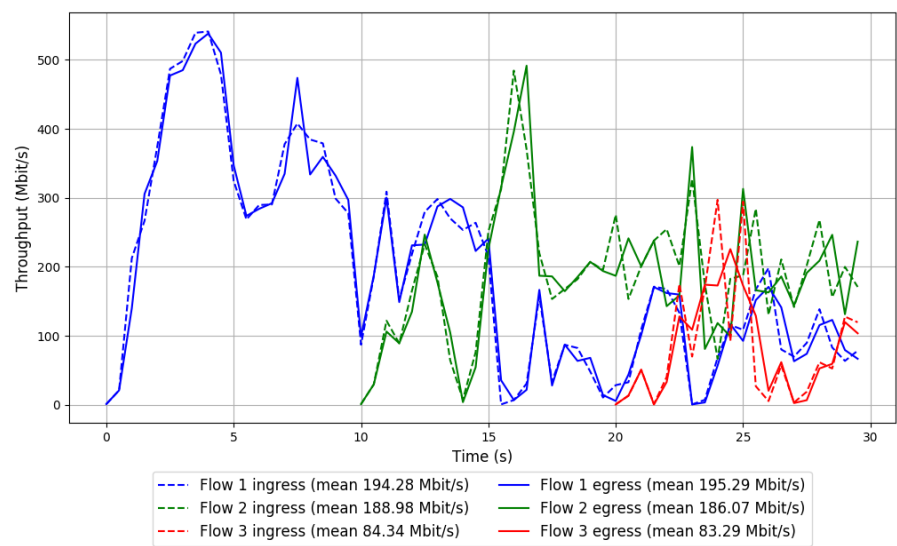
-- Flow 3:

Average throughput: 83.29 Mbit/s

95th percentile per-packet one-way delay: 218.465 ms

Loss rate: 2.52%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-17 06:48:03

End at: 2017-11-17 06:48:33

Below is generated by plot.py at 2017-11-17 11:06:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 346.70 Mbit/s

95th percentile per-packet one-way delay: 136.939 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 217.30 Mbit/s

95th percentile per-packet one-way delay: 137.446 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 149.29 Mbit/s

95th percentile per-packet one-way delay: 140.174 ms

Loss rate: 0.00%

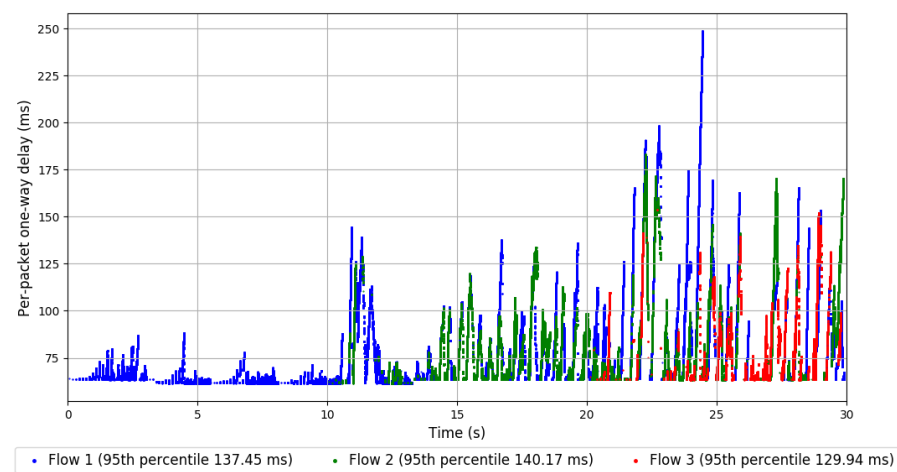
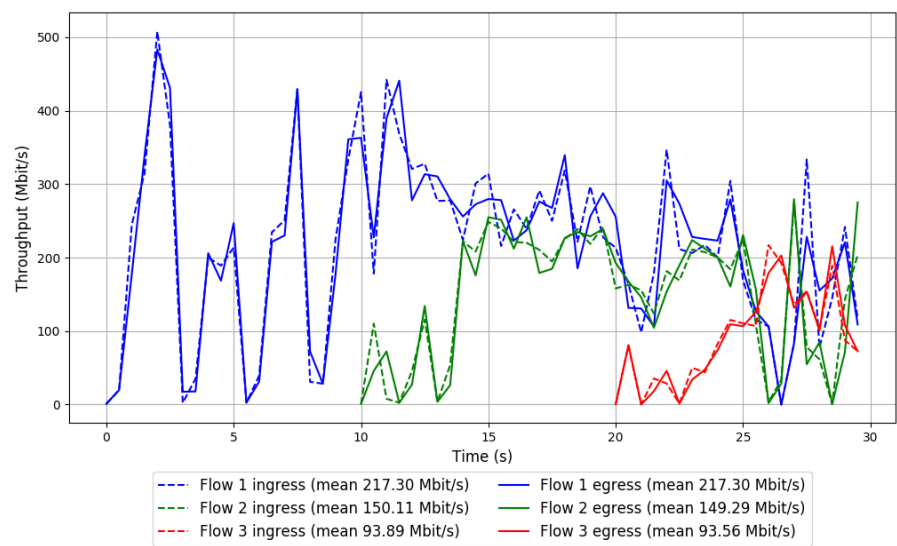
-- Flow 3:

Average throughput: 93.56 Mbit/s

95th percentile per-packet one-way delay: 129.939 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-17 07:00:36

End at: 2017-11-17 07:01:06

Below is generated by plot.py at 2017-11-17 11:06:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.79 Mbit/s

95th percentile per-packet one-way delay: 197.263 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 219.47 Mbit/s

95th percentile per-packet one-way delay: 208.415 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 91.94 Mbit/s

95th percentile per-packet one-way delay: 170.603 ms

Loss rate: 0.18%

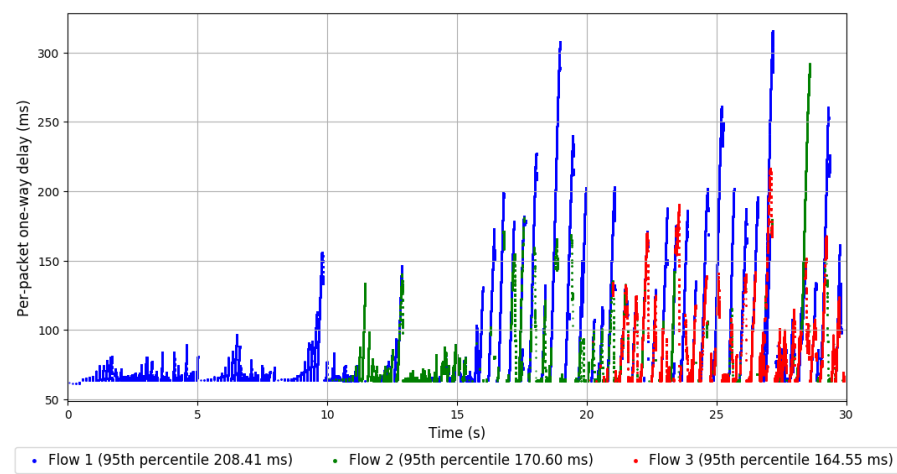
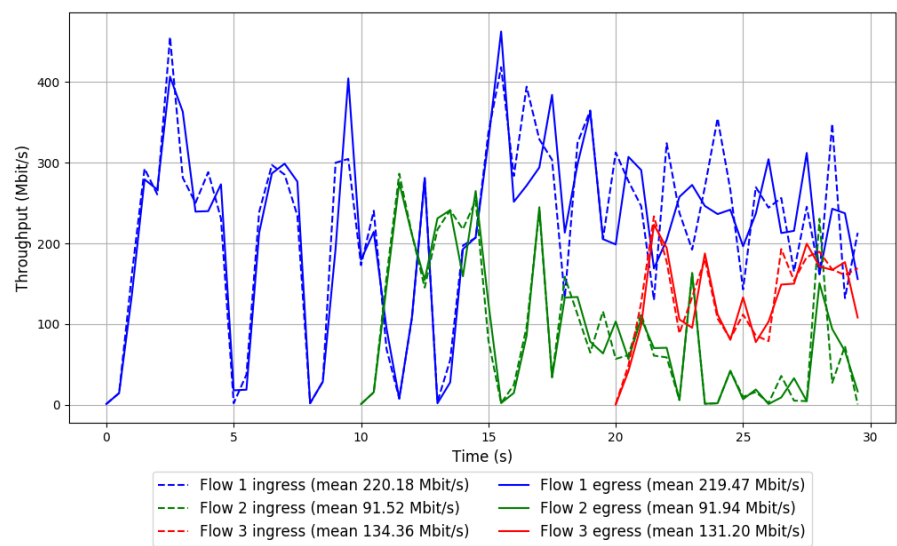
-- Flow 3:

Average throughput: 131.20 Mbit/s

95th percentile per-packet one-way delay: 164.551 ms

Loss rate: 3.63%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-17 07:13:03

End at: 2017-11-17 07:13:33

Below is generated by plot.py at 2017-11-17 11:07:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 378.26 Mbit/s

95th percentile per-packet one-way delay: 171.654 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 273.75 Mbit/s

95th percentile per-packet one-way delay: 178.765 ms

Loss rate: 1.53%

-- Flow 2:

Average throughput: 137.43 Mbit/s

95th percentile per-packet one-way delay: 155.477 ms

Loss rate: 1.19%

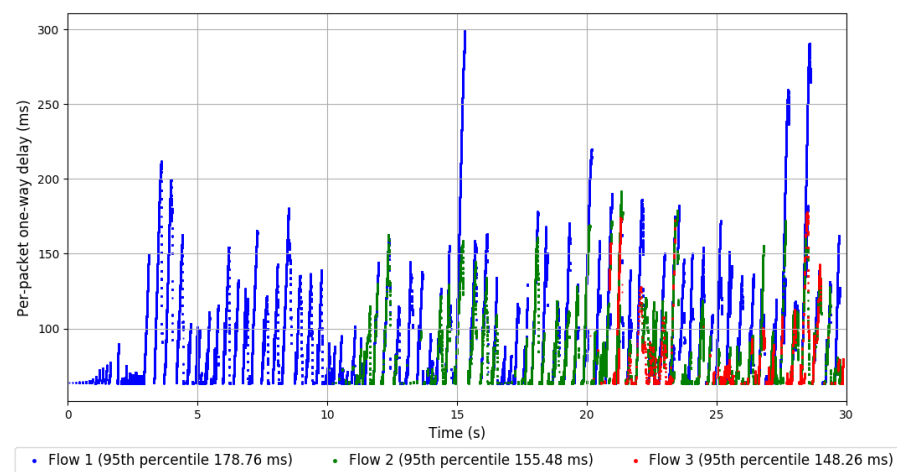
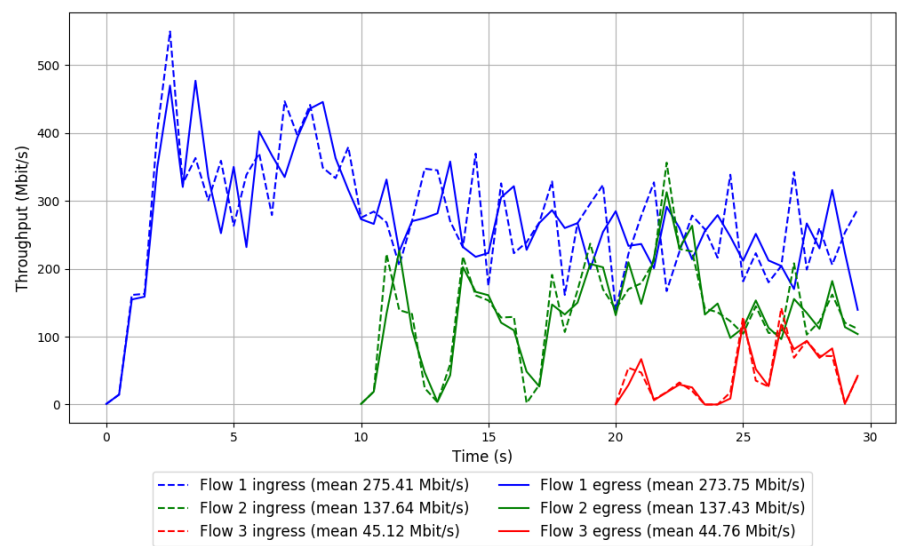
-- Flow 3:

Average throughput: 44.76 Mbit/s

95th percentile per-packet one-way delay: 148.265 ms

Loss rate: 0.96%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-17 07:25:38

End at: 2017-11-17 07:26:08

Below is generated by plot.py at 2017-11-17 11:07:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 313.86 Mbit/s

95th percentile per-packet one-way delay: 112.805 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 228.59 Mbit/s

95th percentile per-packet one-way delay: 119.274 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 78.93 Mbit/s

95th percentile per-packet one-way delay: 93.275 ms

Loss rate: 0.68%

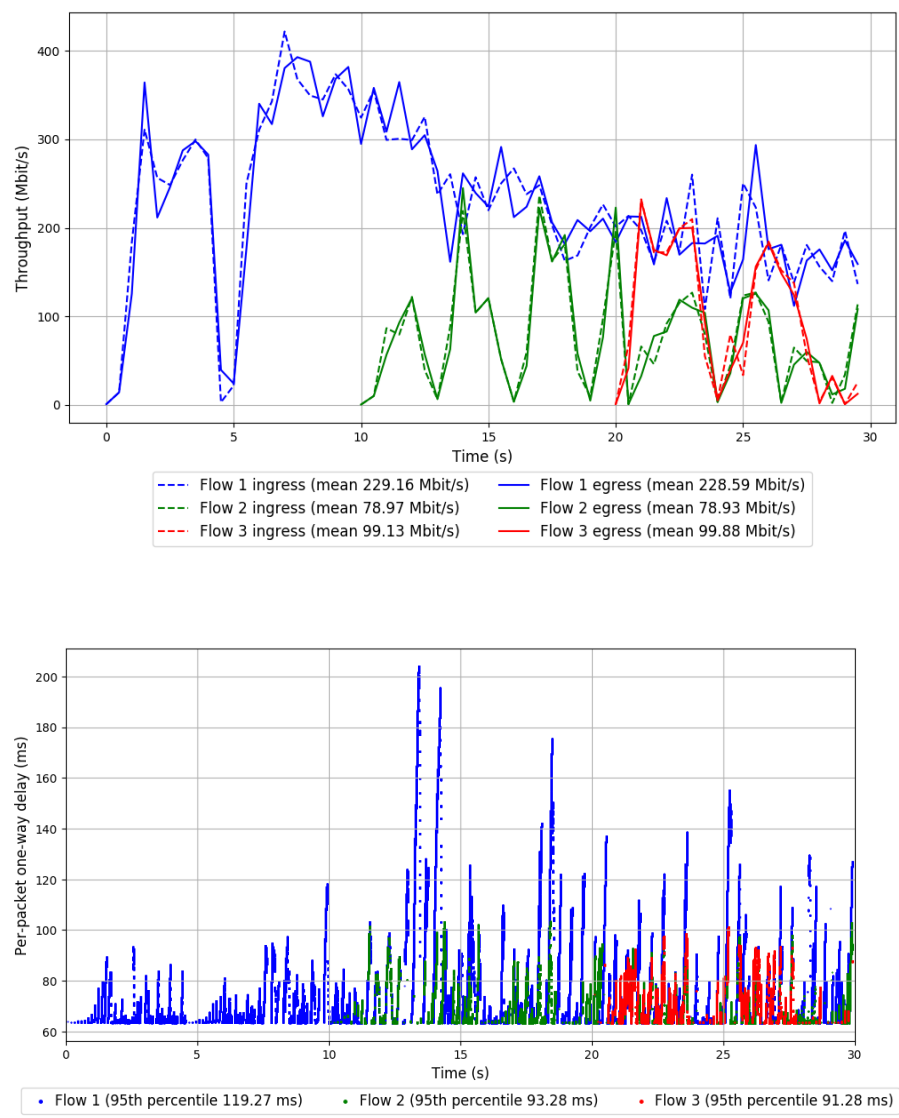
-- Flow 3:

Average throughput: 99.88 Mbit/s

95th percentile per-packet one-way delay: 91.277 ms

Loss rate: 0.65%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-17 07:38:12

End at: 2017-11-17 07:38:42

Below is generated by plot.py at 2017-11-17 11:07:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.07 Mbit/s

95th percentile per-packet one-way delay: 143.066 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 164.29 Mbit/s

95th percentile per-packet one-way delay: 109.461 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 194.59 Mbit/s

95th percentile per-packet one-way delay: 158.112 ms

Loss rate: 0.92%

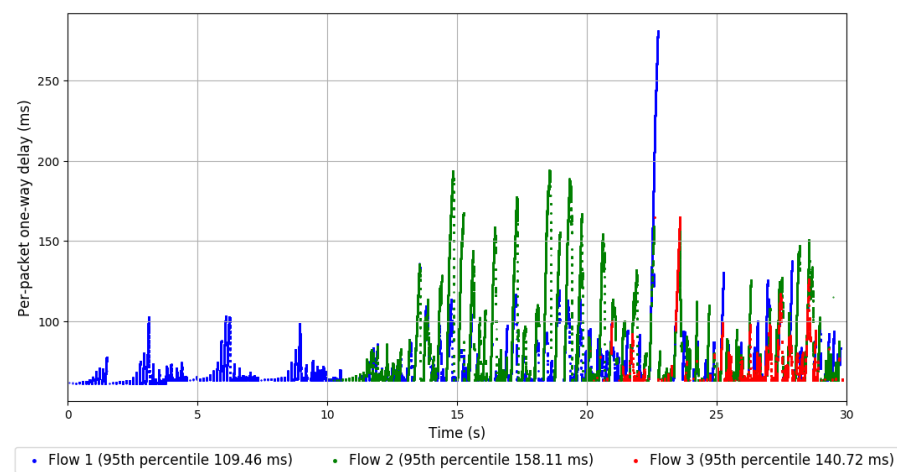
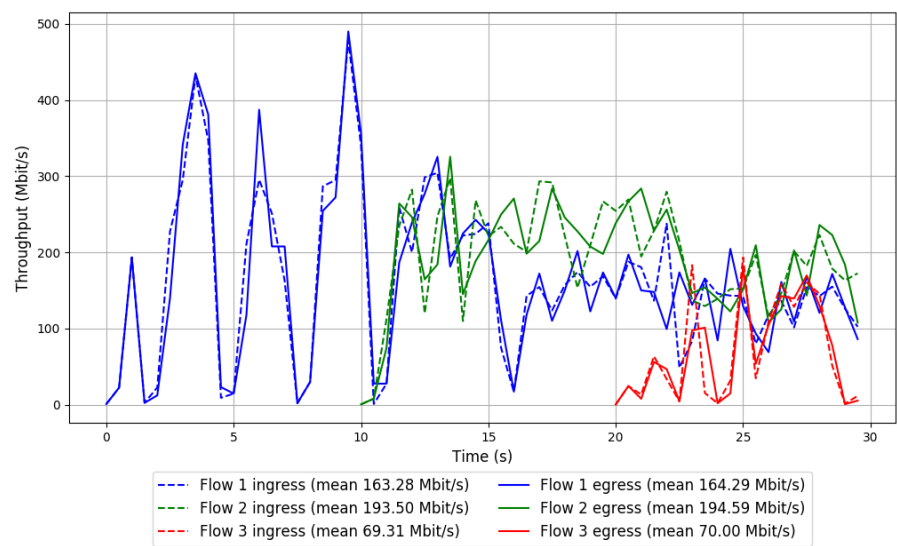
-- Flow 3:

Average throughput: 70.00 Mbit/s

95th percentile per-packet one-way delay: 140.718 ms

Loss rate: 0.51%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-17 07:50:41

End at: 2017-11-17 07:51:11

Below is generated by plot.py at 2017-11-17 11:10:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.07 Mbit/s

95th percentile per-packet one-way delay: 177.922 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 205.41 Mbit/s

95th percentile per-packet one-way delay: 133.675 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 122.38 Mbit/s

95th percentile per-packet one-way delay: 201.971 ms

Loss rate: 2.08%

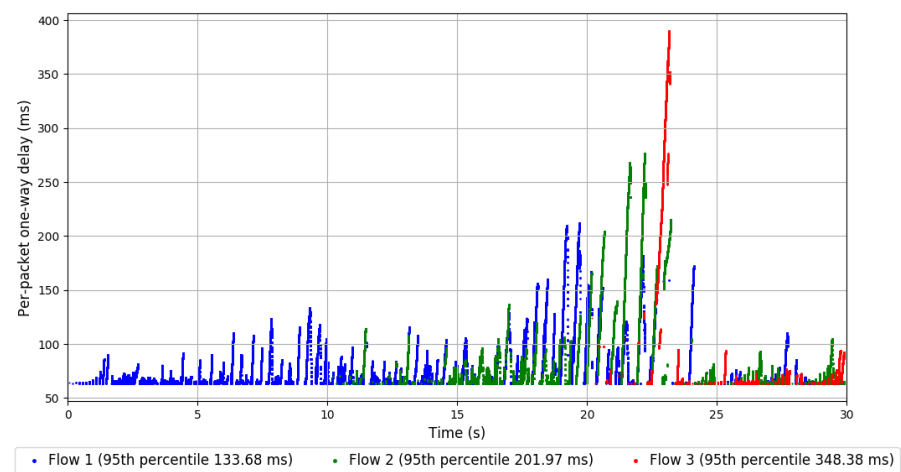
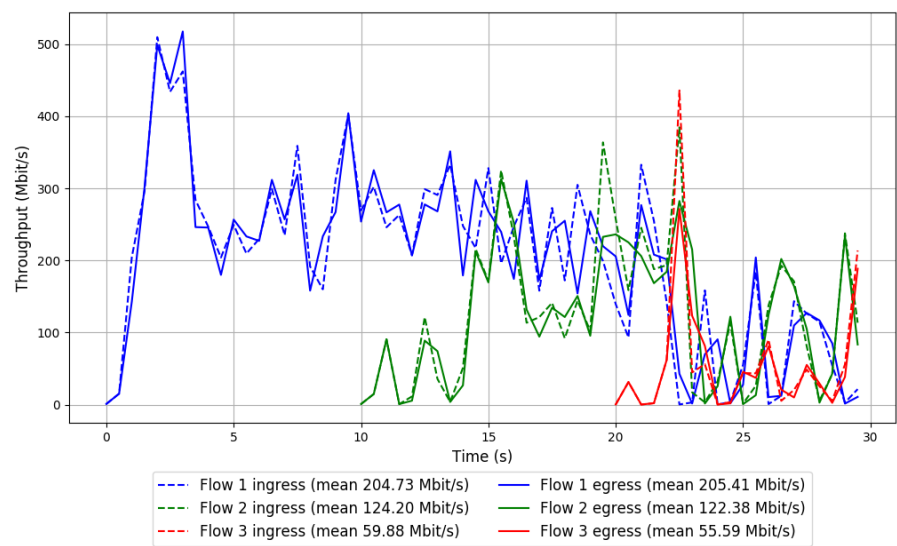
-- Flow 3:

Average throughput: 55.59 Mbit/s

95th percentile per-packet one-way delay: 348.383 ms

Loss rate: 8.90%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-17 08:02:58

End at: 2017-11-17 08:03:28

Below is generated by plot.py at 2017-11-17 11:12:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 363.86 Mbit/s

95th percentile per-packet one-way delay: 164.132 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 238.33 Mbit/s

95th percentile per-packet one-way delay: 151.795 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 132.11 Mbit/s

95th percentile per-packet one-way delay: 162.402 ms

Loss rate: 1.69%

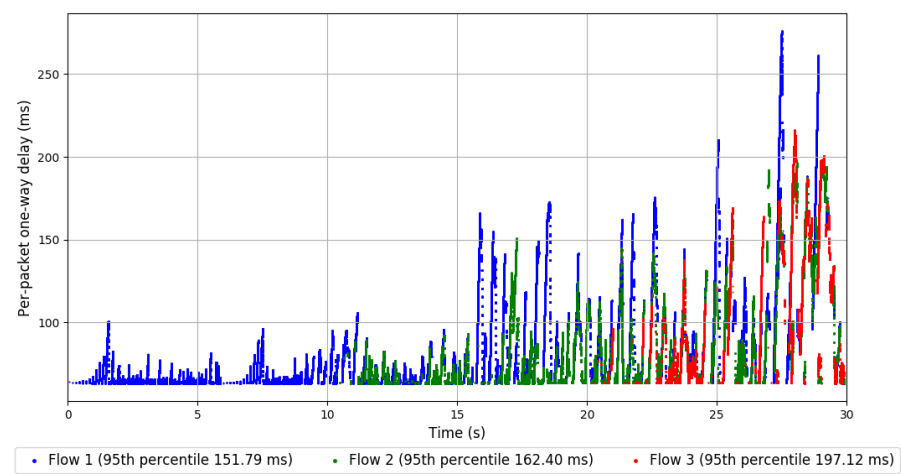
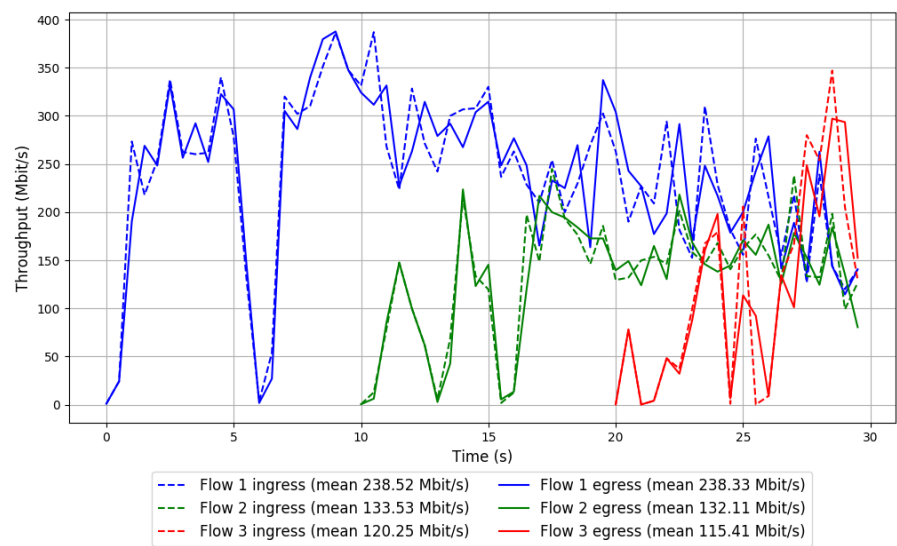
-- Flow 3:

Average throughput: 115.41 Mbit/s

95th percentile per-packet one-way delay: 197.119 ms

Loss rate: 4.01%

Run 10: Report of Verus — Data Link

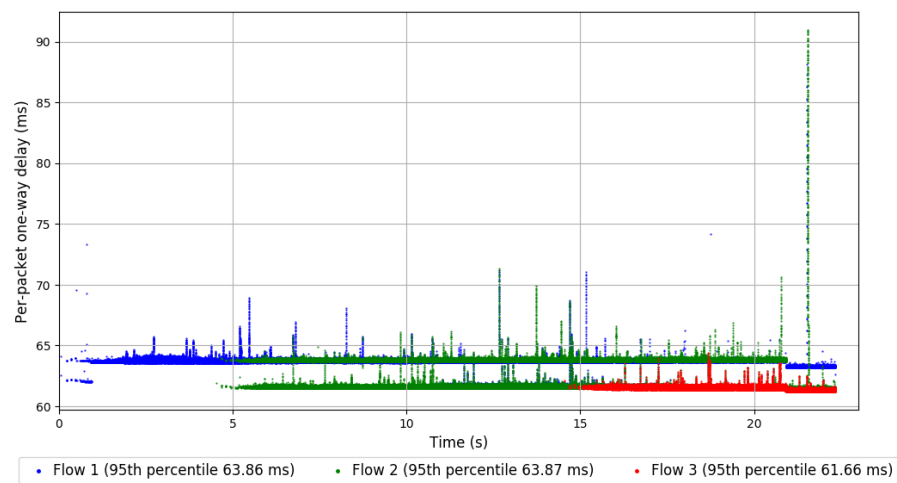
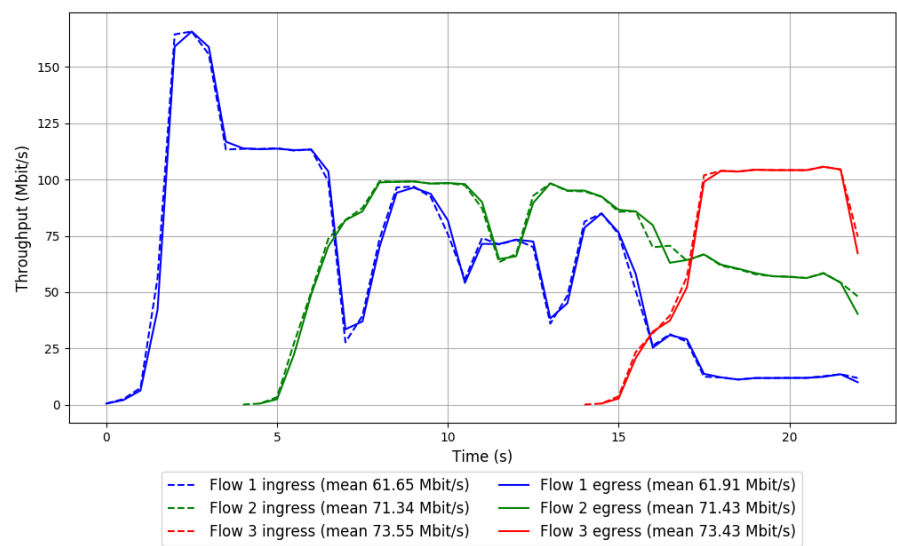


Run 1: Statistics of Copa

Start at: 2017-11-17 06:11:48

End at: 2017-11-17 06:12:18

Run 1: Report of Copa — Data Link

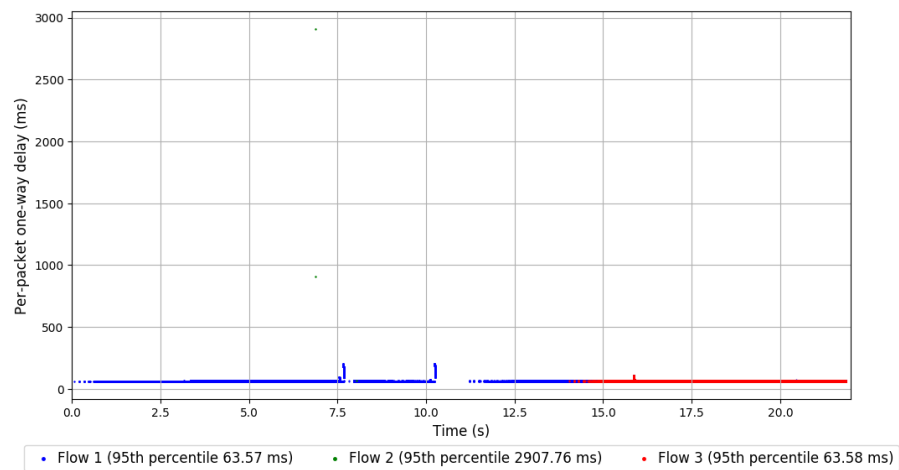
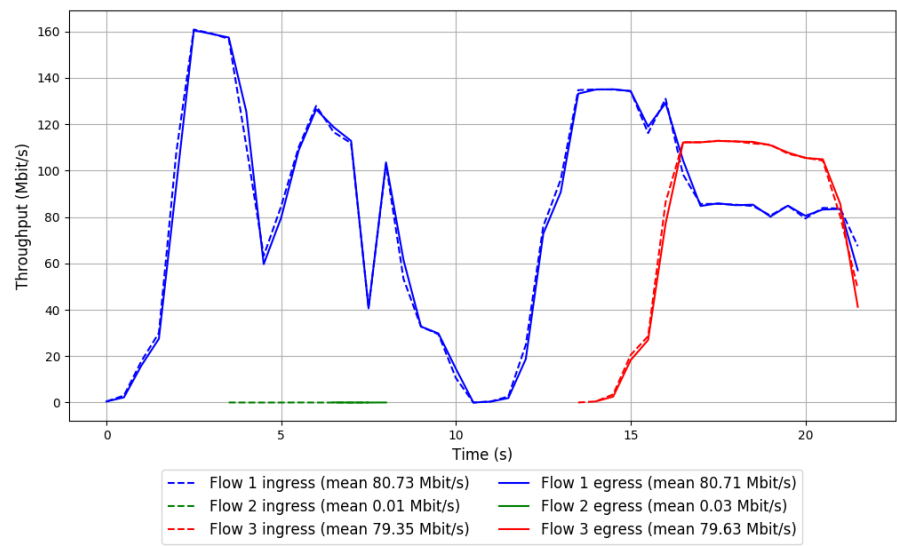


Run 2: Statistics of Copa

Start at: 2017-11-17 06:24:25

End at: 2017-11-17 06:24:55

Run 2: Report of Copa — Data Link

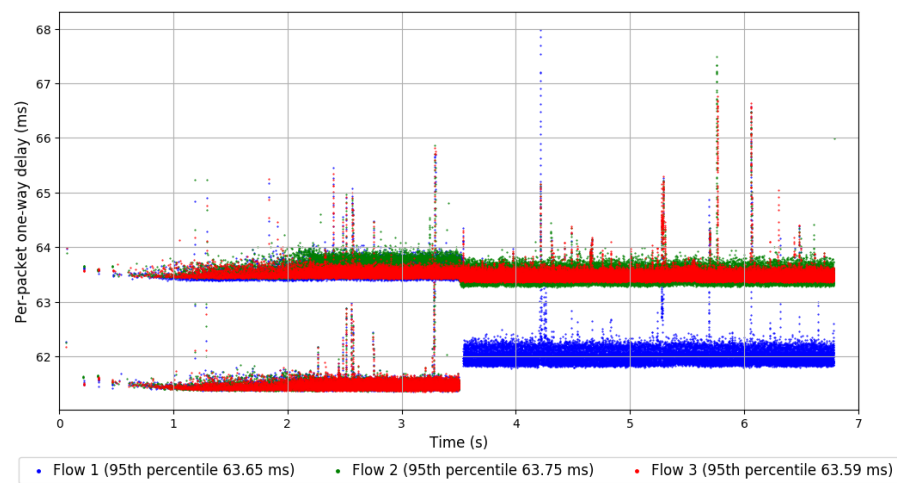
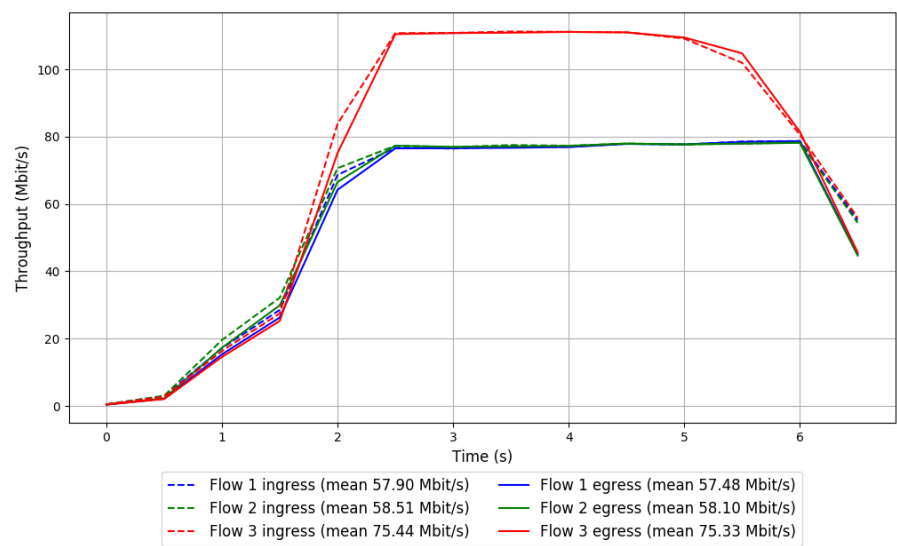


Run 3: Statistics of Copa

Start at: 2017-11-17 06:36:50

End at: 2017-11-17 06:37:20

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-17 06:49:10

End at: 2017-11-17 06:49:40

Below is generated by plot.py at 2017-11-17 11:12:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.99 Mbit/s

95th percentile per-packet one-way delay: 63.680 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 74.88 Mbit/s

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

Loss rate: 0.40%

-- Flow 2:

Average throughput: 70.45 Mbit/s

95th percentile per-packet one-way delay: 63.565 ms

Loss rate: 0.91%

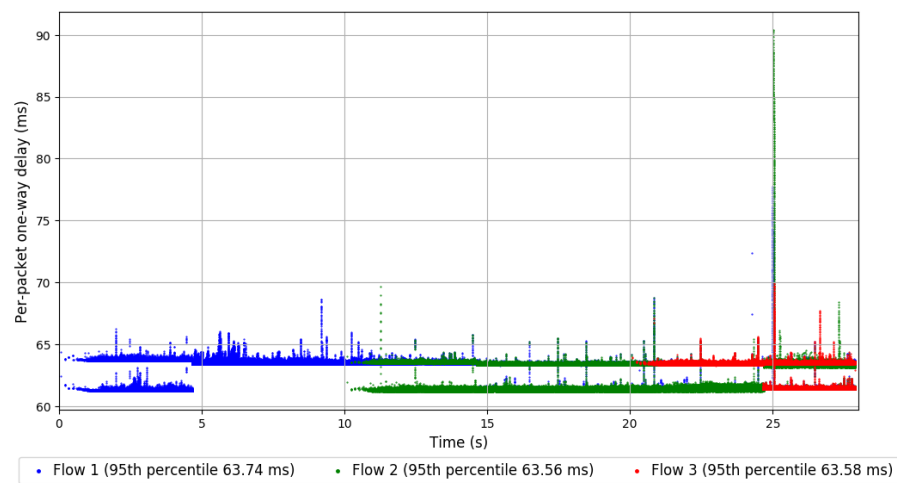
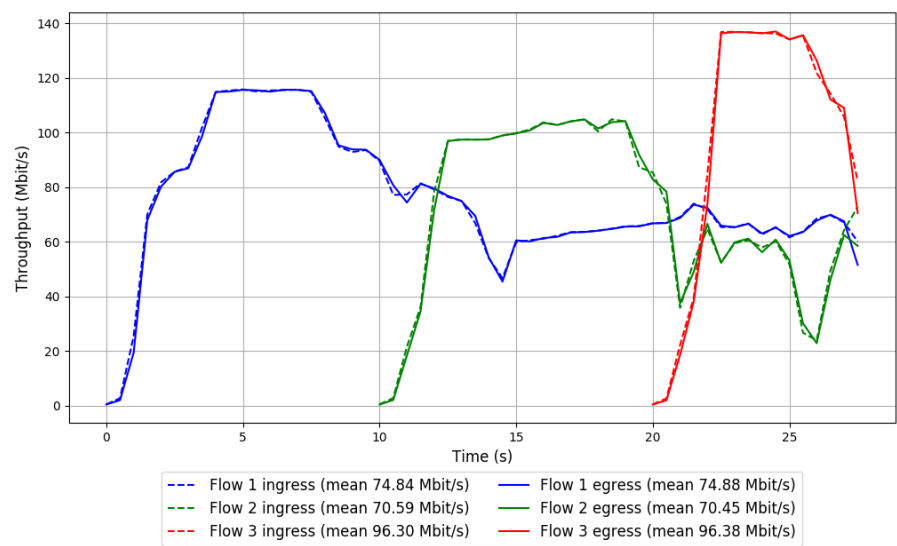
-- Flow 3:

Average throughput: 96.38 Mbit/s

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

Loss rate: 1.49%

Run 4: Report of Copa — Data Link

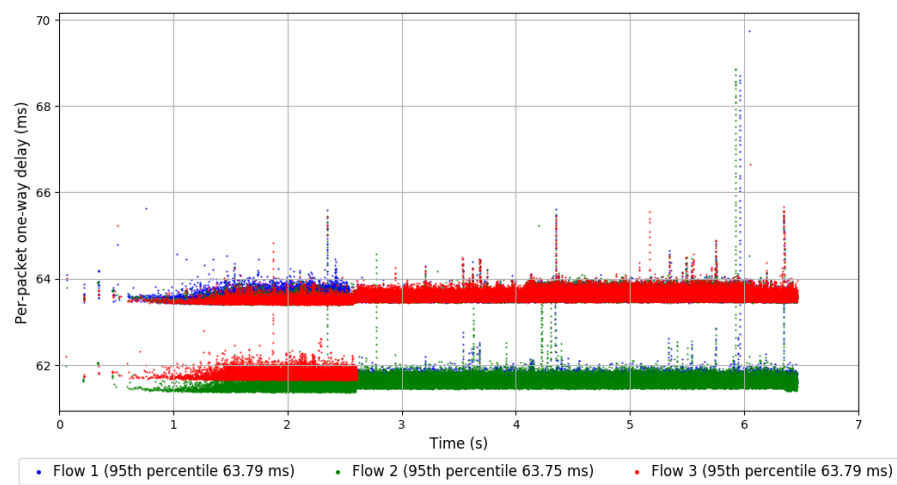
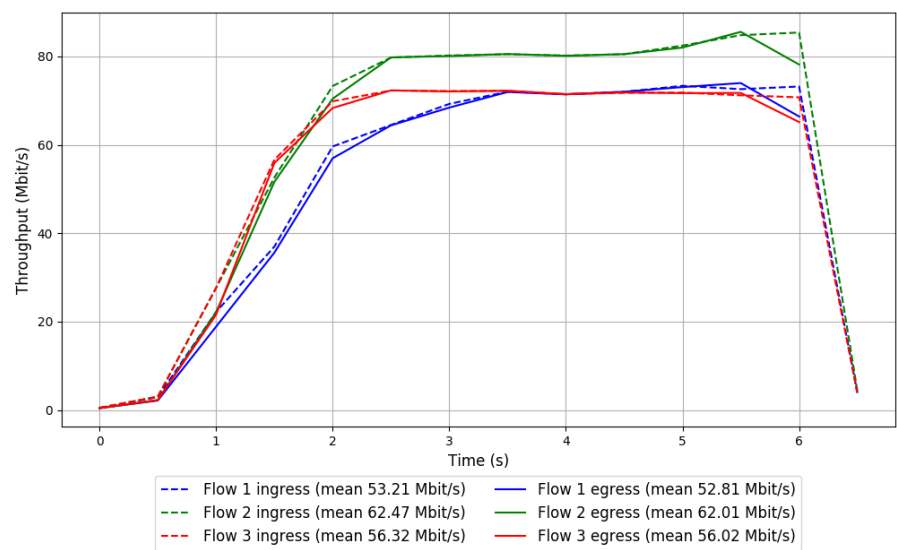


Run 5: Statistics of Copa

Start at: 2017-11-17 07:01:40

End at: 2017-11-17 07:02:10

Run 5: Report of Copa — Data Link

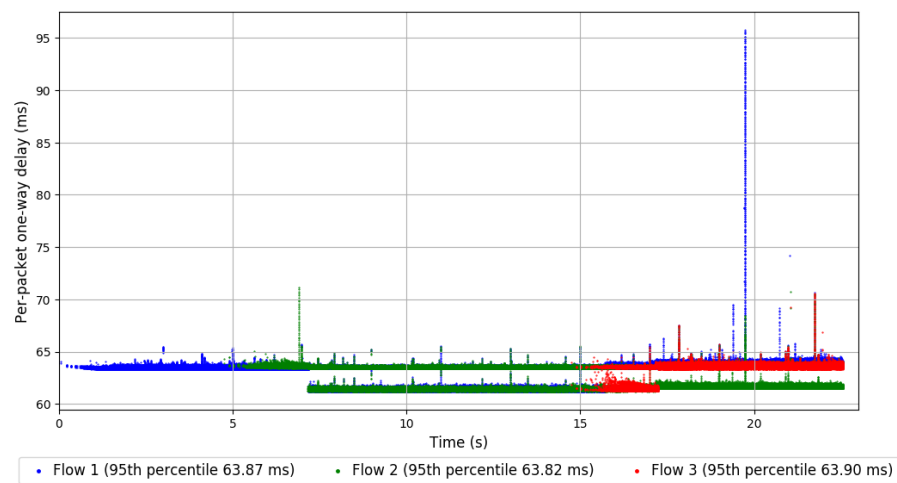
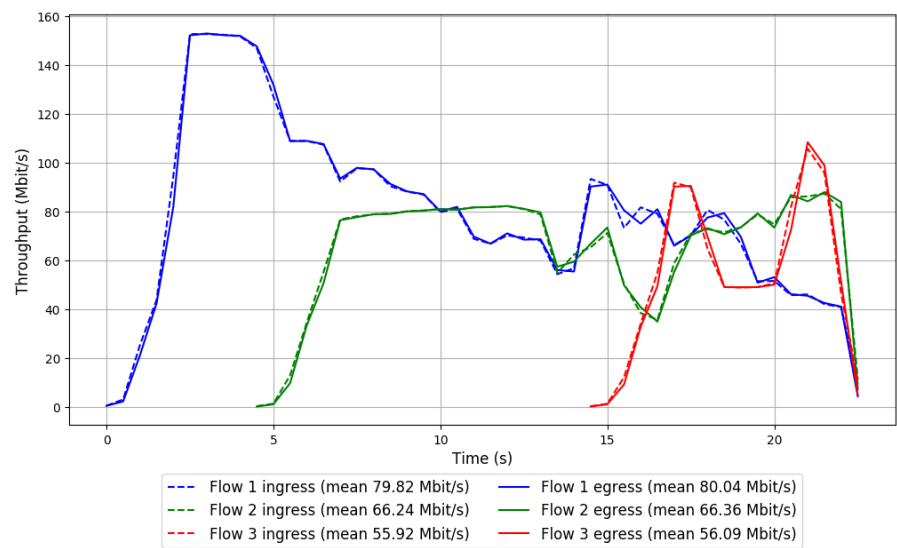


Run 6: Statistics of Copa

Start at: 2017-11-17 07:14:12

End at: 2017-11-17 07:14:42

Run 6: Report of Copa — Data Link

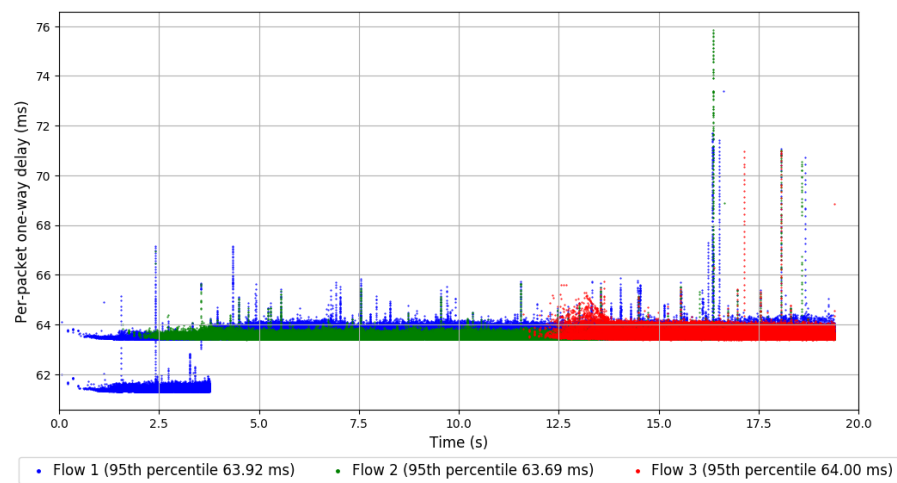
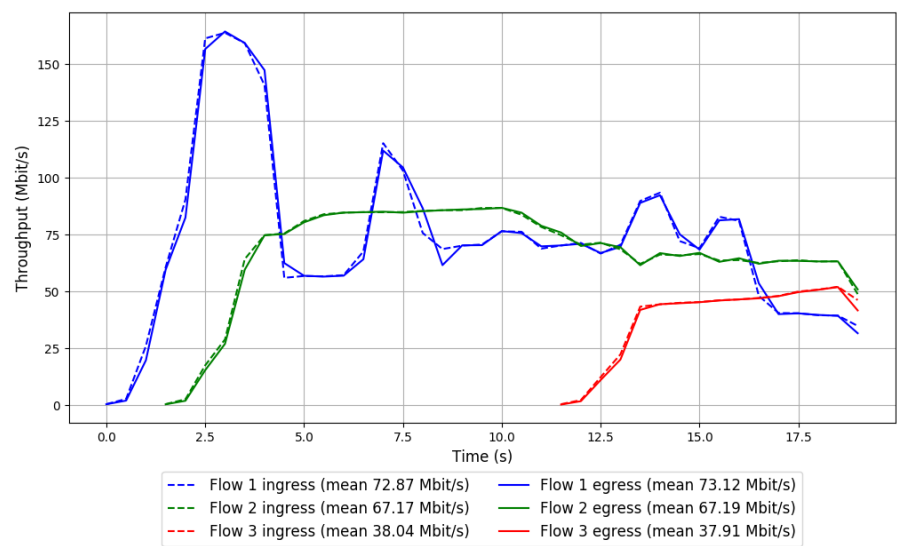


Run 7: Statistics of Copa

Start at: 2017-11-17 07:26:42

End at: 2017-11-17 07:27:12

Run 7: Report of Copa — Data Link

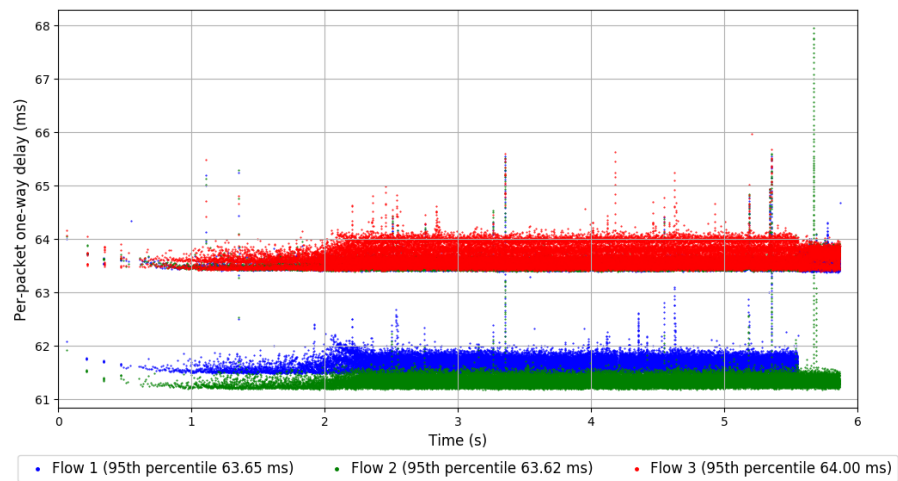
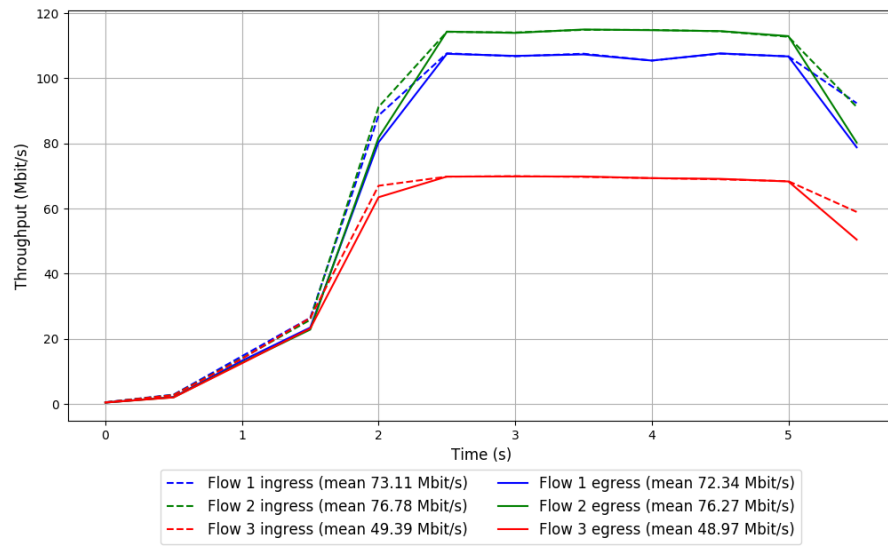


Run 8: Statistics of Copa

Start at: 2017-11-17 07:39:17

End at: 2017-11-17 07:39:47

Run 8: Report of Copa — Data Link

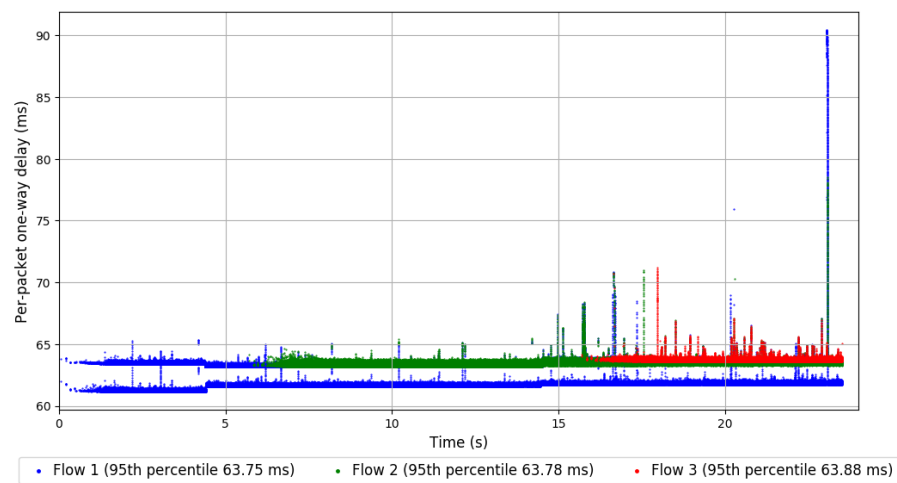
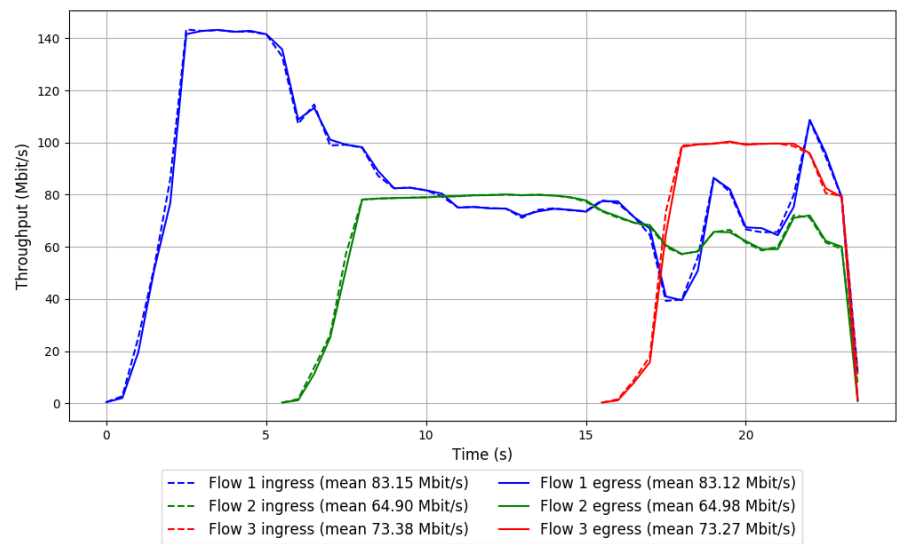


Run 9: Statistics of Copa

Start at: 2017-11-17 07:51:45

End at: 2017-11-17 07:52:15

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-17 08:04:06

End at: 2017-11-17 08:04:36

Below is generated by plot.py at 2017-11-17 11:13:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.90 Mbit/s

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

Loss rate: 0.68%

-- Flow 1:

Average throughput: 72.75 Mbit/s

95th percentile per-packet one-way delay: 63.701 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 71.50 Mbit/s

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

Loss rate: 0.76%

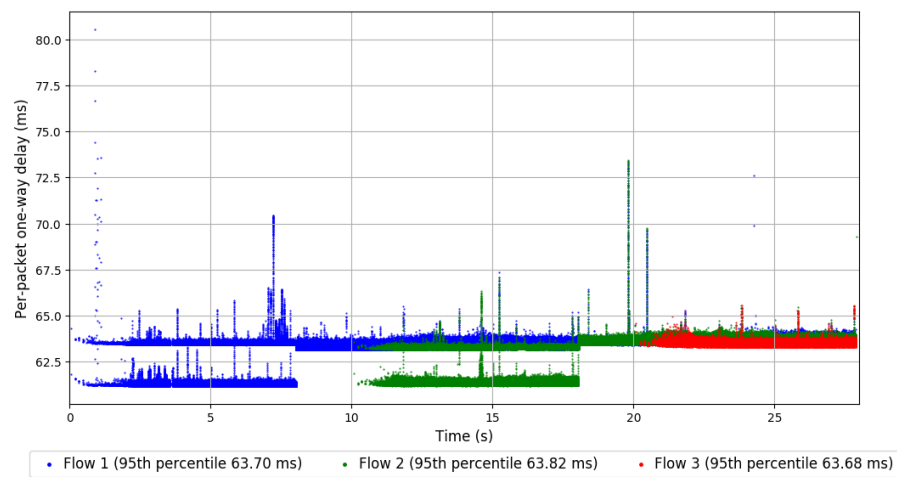
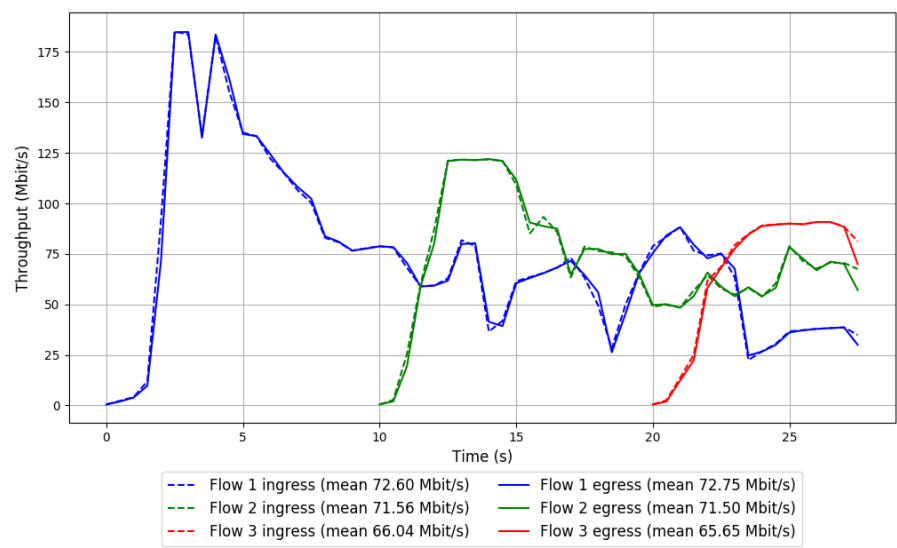
-- Flow 3:

Average throughput: 65.65 Mbit/s

95th percentile per-packet one-way delay: 63.683 ms

Loss rate: 2.18%

Run 10: Report of Copa — Data Link

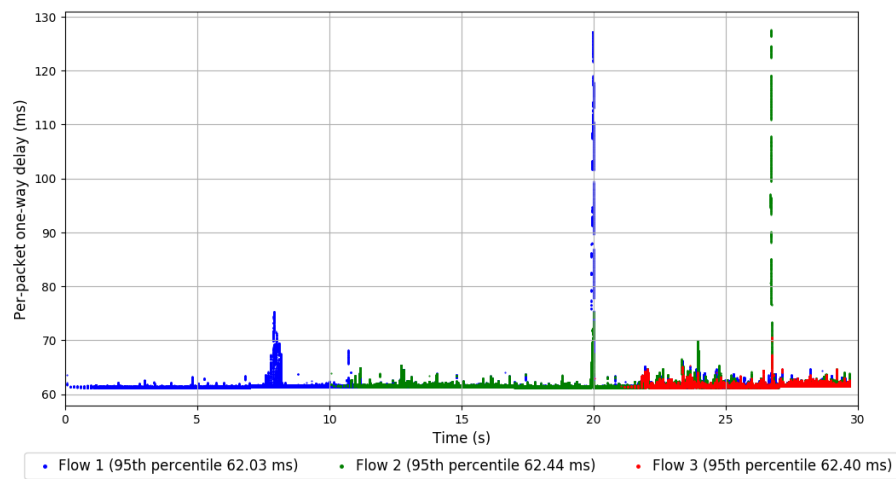
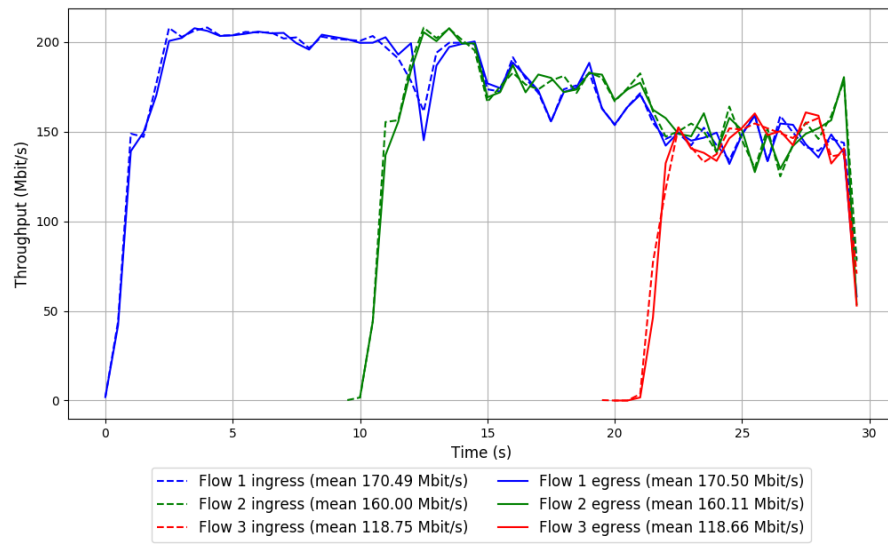


```
Run 1: Statistics of Indigo

Start at: 2017-11-17 06:08:59
End at: 2017-11-17 06:09:29

# Below is generated by plot.py at 2017-11-17 11:15:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.25 Mbit/s
95th percentile per-packet one-way delay: 62.242 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 170.50 Mbit/s
95th percentile per-packet one-way delay: 62.033 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 160.11 Mbit/s
95th percentile per-packet one-way delay: 62.441 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 118.66 Mbit/s
95th percentile per-packet one-way delay: 62.399 ms
Loss rate: 1.49%
```


Run 1: Report of Indigo — Data Link

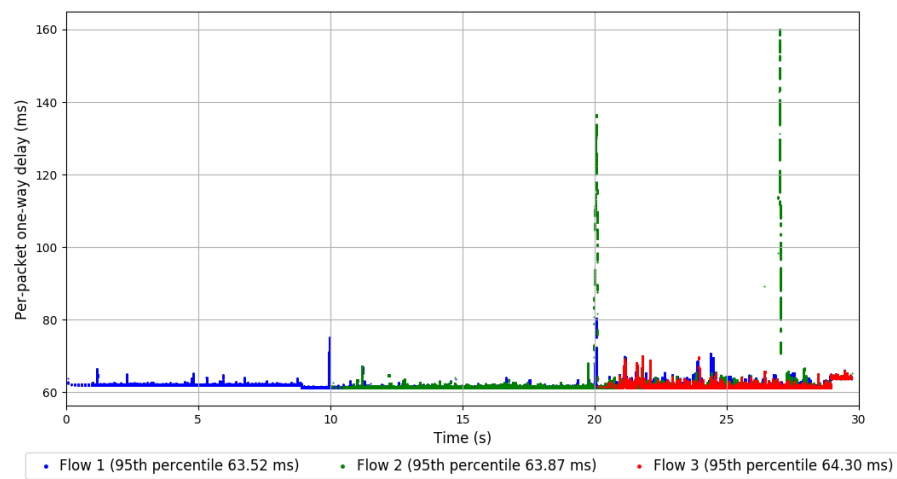
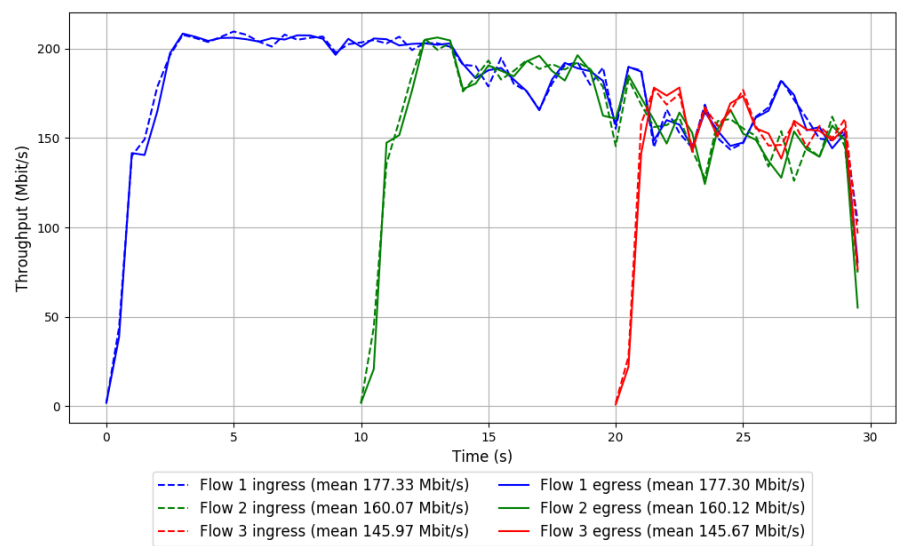


```
Run 2: Statistics of Indigo

Start at: 2017-11-17 06:21:27
End at: 2017-11-17 06:21:57

# Below is generated by plot.py at 2017-11-17 11:15:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.38 Mbit/s
95th percentile per-packet one-way delay: 63.827 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 177.30 Mbit/s
95th percentile per-packet one-way delay: 63.523 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 160.12 Mbit/s
95th percentile per-packet one-way delay: 63.871 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 145.67 Mbit/s
95th percentile per-packet one-way delay: 64.304 ms
Loss rate: 1.50%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-17 06:33:58

End at: 2017-11-17 06:34:28

Below is generated by plot.py at 2017-11-17 11:16:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.72 Mbit/s

95th percentile per-packet one-way delay: 64.770 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 175.83 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 150.93 Mbit/s

95th percentile per-packet one-way delay: 64.997 ms

Loss rate: 0.55%

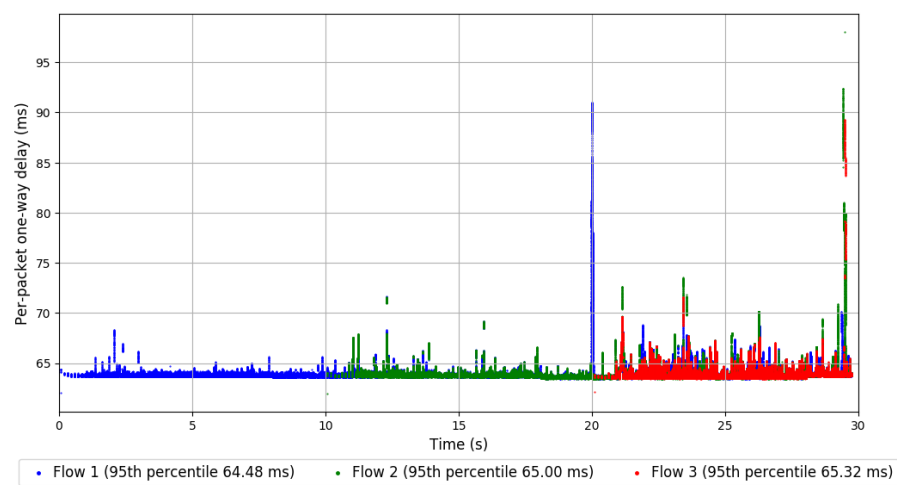
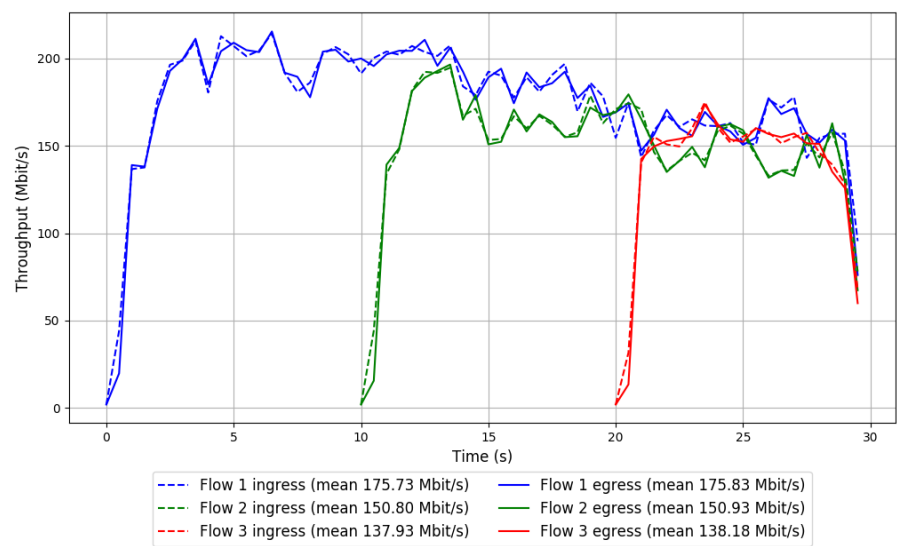
-- Flow 3:

Average throughput: 138.18 Mbit/s

95th percentile per-packet one-way delay: 65.323 ms

Loss rate: 1.13%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-17 06:46:18

End at: 2017-11-17 06:46:48

Below is generated by plot.py at 2017-11-17 11:16:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.33 Mbit/s

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

Loss rate: 0.59%

-- Flow 1:

Average throughput: 166.77 Mbit/s

95th percentile per-packet one-way delay: 64.345 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 153.26 Mbit/s

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

Loss rate: 0.71%

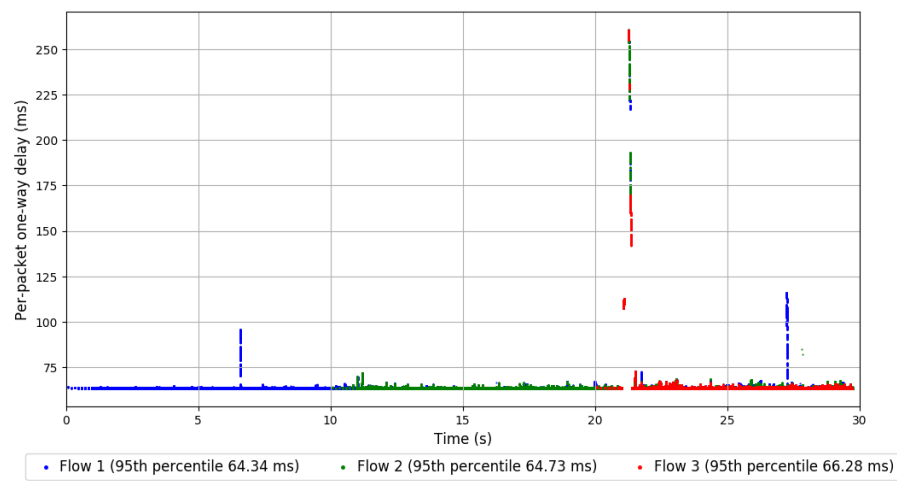
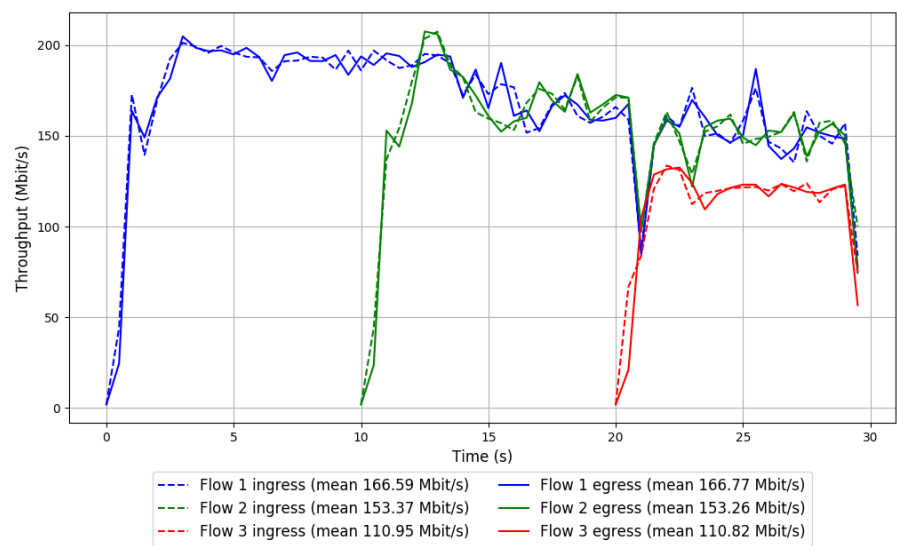
-- Flow 3:

Average throughput: 110.82 Mbit/s

95th percentile per-packet one-way delay: 66.284 ms

Loss rate: 1.45%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-17 06:58:51

End at: 2017-11-17 06:59:21

Below is generated by plot.py at 2017-11-17 11:16:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.77 Mbit/s

95th percentile per-packet one-way delay: 62.258 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 169.61 Mbit/s

95th percentile per-packet one-way delay: 62.049 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 158.27 Mbit/s

95th percentile per-packet one-way delay: 62.415 ms

Loss rate: 0.61%

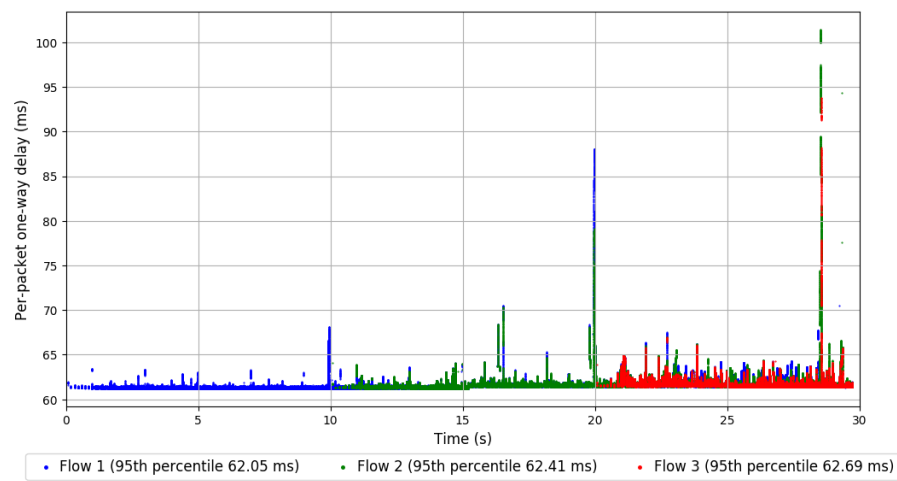
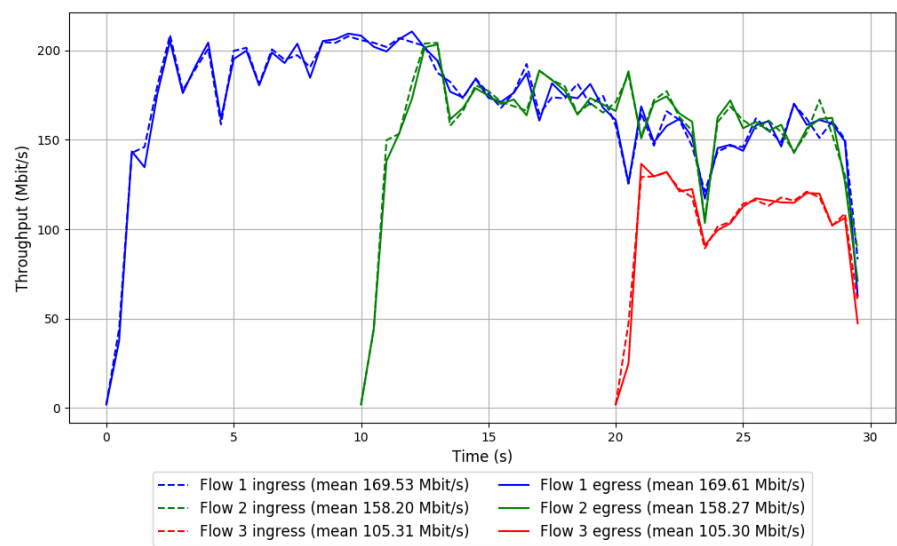
-- Flow 3:

Average throughput: 105.30 Mbit/s

95th percentile per-packet one-way delay: 62.689 ms

Loss rate: 1.30%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-17 07:11:18

End at: 2017-11-17 07:11:48

Below is generated by plot.py at 2017-11-17 11:17:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 314.29 Mbit/s

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

Loss rate: 0.59%

-- Flow 1:

Average throughput: 172.63 Mbit/s

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

Loss rate: 0.35%

-- Flow 2:

Average throughput: 162.12 Mbit/s

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

Loss rate: 0.70%

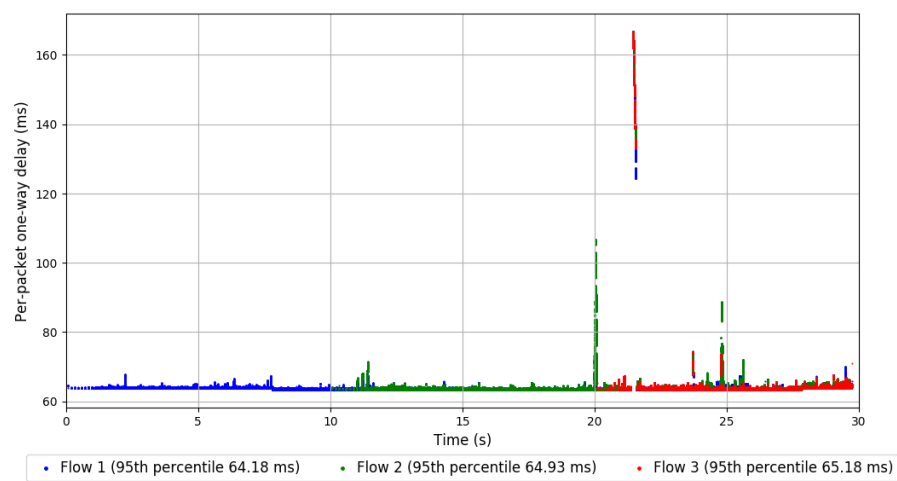
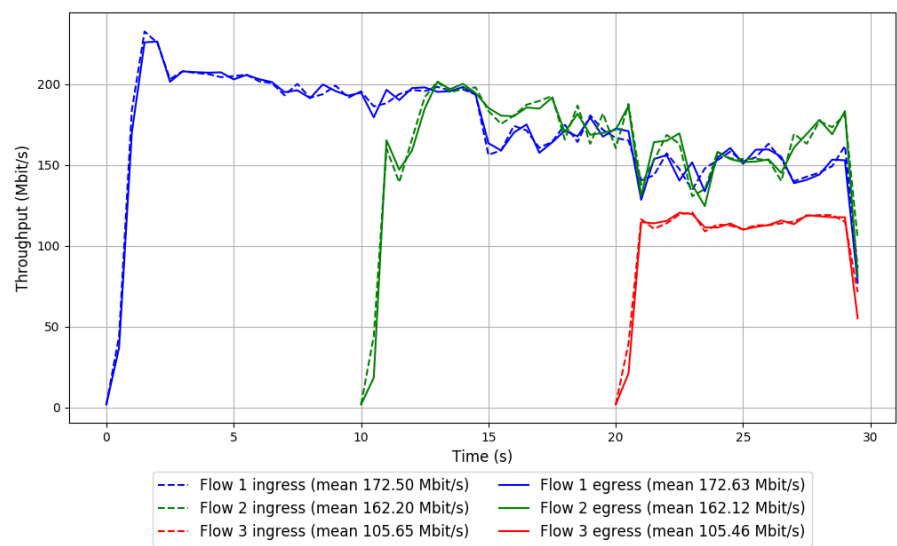
-- Flow 3:

Average throughput: 105.46 Mbit/s

95th percentile per-packet one-way delay: 65.176 ms

Loss rate: 1.44%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-17 07:23:53

End at: 2017-11-17 07:24:23

Below is generated by plot.py at 2017-11-17 11:18:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.30 Mbit/s

95th percentile per-packet one-way delay: 64.387 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 168.83 Mbit/s

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

Loss rate: 0.36%

-- Flow 2:

Average throughput: 163.74 Mbit/s

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

Loss rate: 0.66%

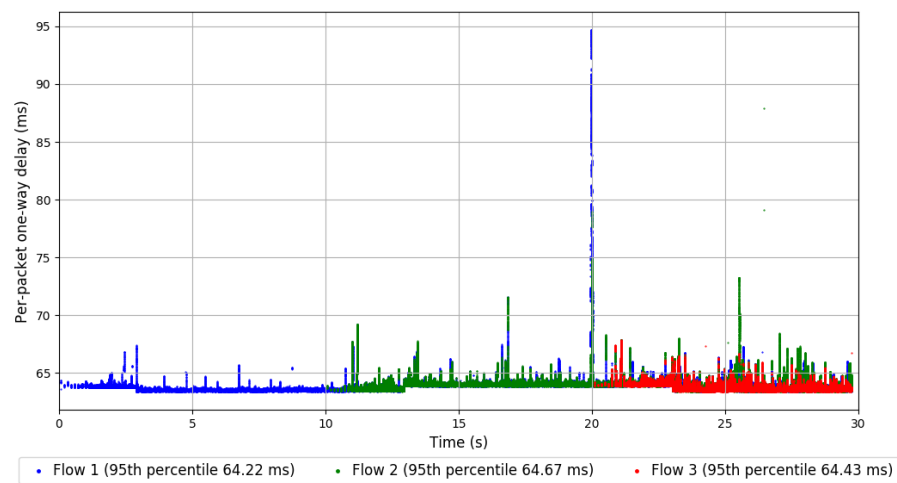
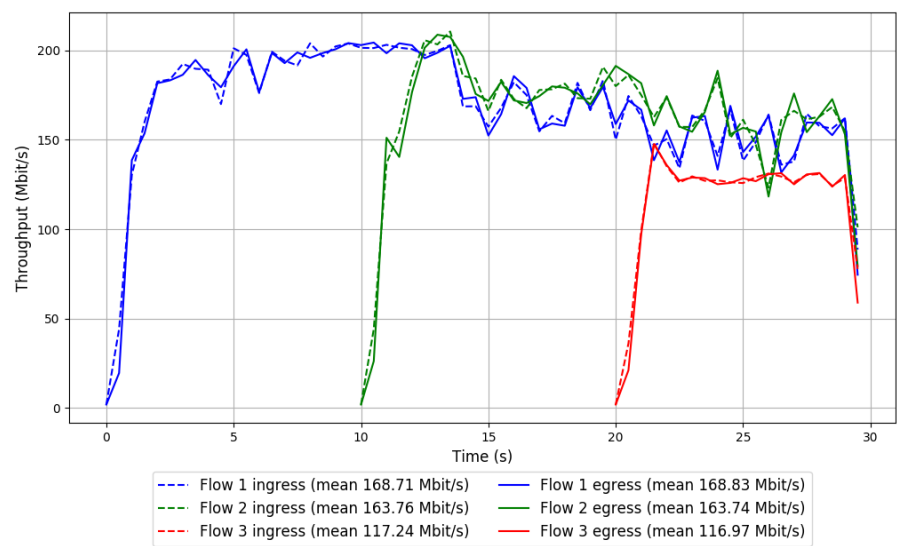
-- Flow 3:

Average throughput: 116.97 Mbit/s

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

Loss rate: 1.47%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-17 07:36:27

End at: 2017-11-17 07:36:57

Below is generated by plot.py at 2017-11-17 11:19:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 331.90 Mbit/s

95th percentile per-packet one-way delay: 65.360 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 171.08 Mbit/s

95th percentile per-packet one-way delay: 64.669 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 163.28 Mbit/s

95th percentile per-packet one-way delay: 65.850 ms

Loss rate: 0.52%

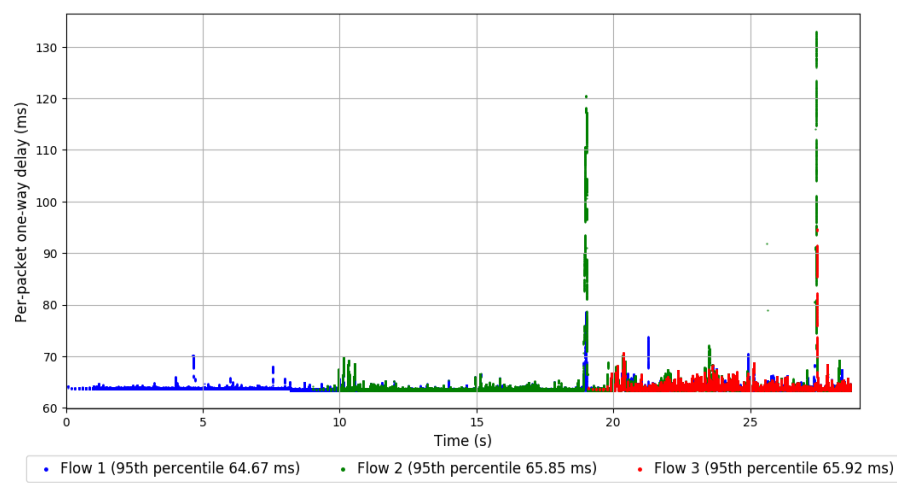
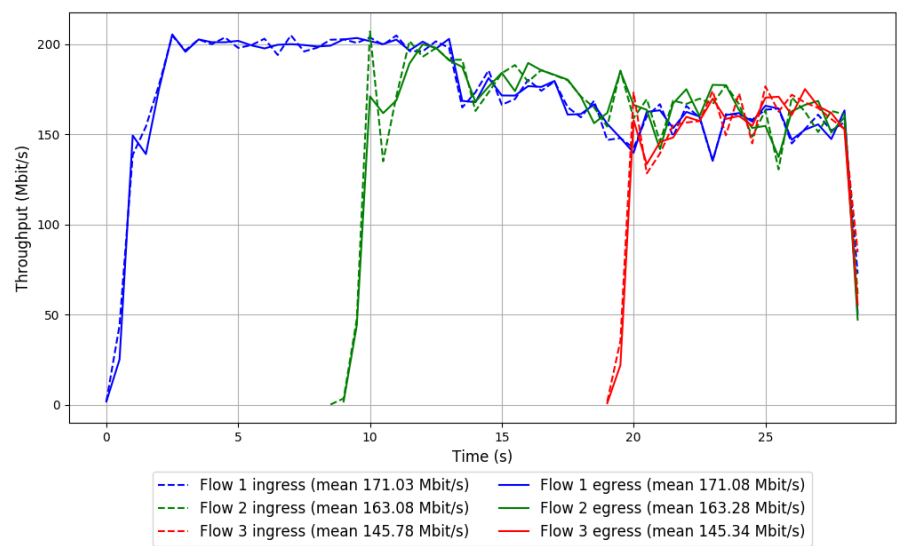
-- Flow 3:

Average throughput: 145.34 Mbit/s

95th percentile per-packet one-way delay: 65.925 ms

Loss rate: 1.66%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-17 07:48:56

End at: 2017-11-17 07:49:26

Below is generated by plot.py at 2017-11-17 11:20:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 323.22 Mbit/s

95th percentile per-packet one-way delay: 64.653 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 173.64 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 157.06 Mbit/s

95th percentile per-packet one-way delay: 65.147 ms

Loss rate: 0.63%

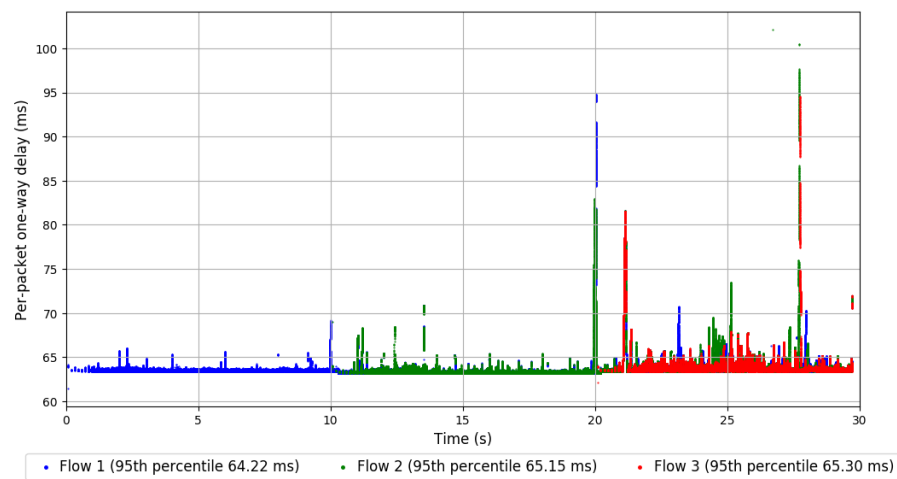
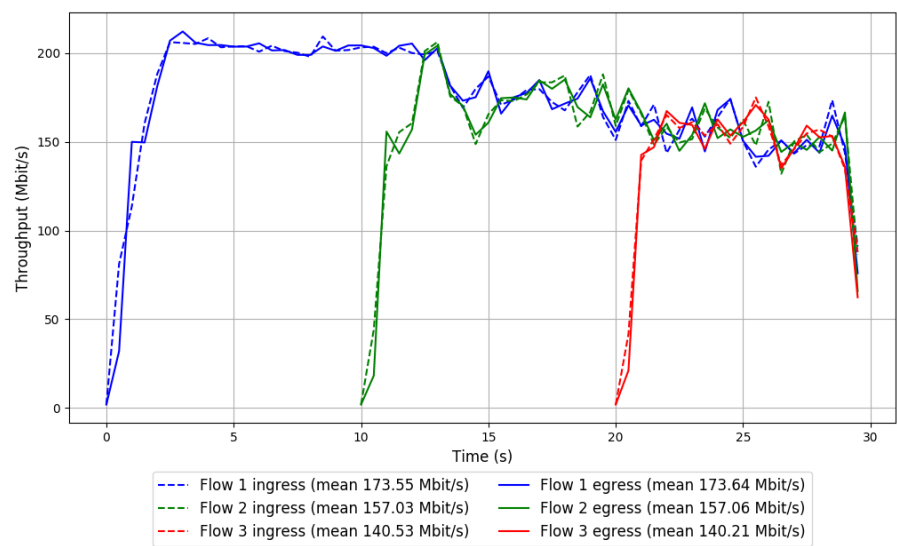
-- Flow 3:

Average throughput: 140.21 Mbit/s

95th percentile per-packet one-way delay: 65.302 ms

Loss rate: 1.52%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-17 08:01:12

End at: 2017-11-17 08:01:42

Below is generated by plot.py at 2017-11-17 11:21:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.04 Mbit/s

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

Loss rate: 0.64%

-- Flow 1:

Average throughput: 173.84 Mbit/s

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

Loss rate: 0.37%

-- Flow 2:

Average throughput: 162.34 Mbit/s

95th percentile per-packet one-way delay: 65.538 ms

Loss rate: 0.69%

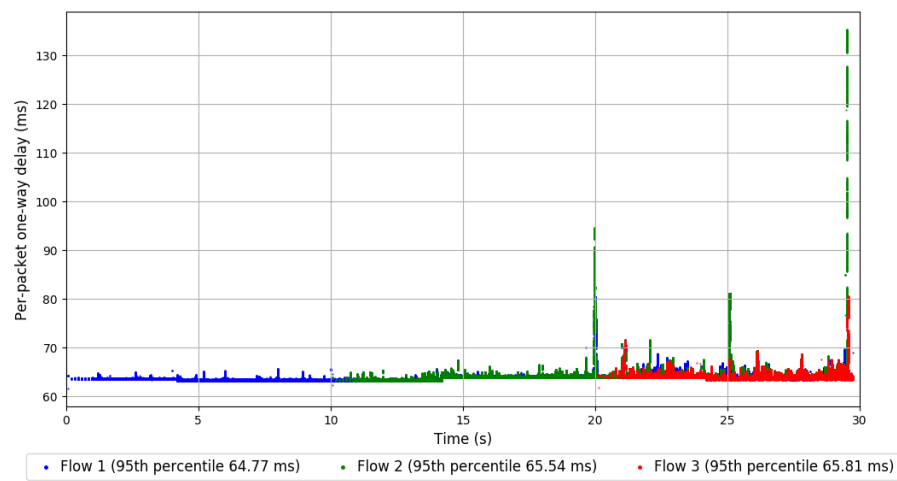
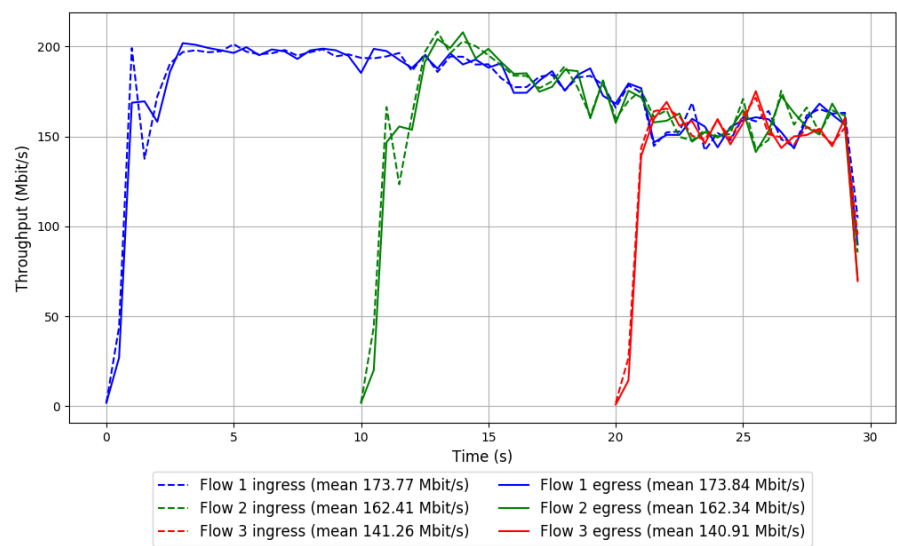
-- Flow 3:

Average throughput: 140.91 Mbit/s

95th percentile per-packet one-way delay: 65.815 ms

Loss rate: 1.55%

Run 10: Report of Indigo — Data Link

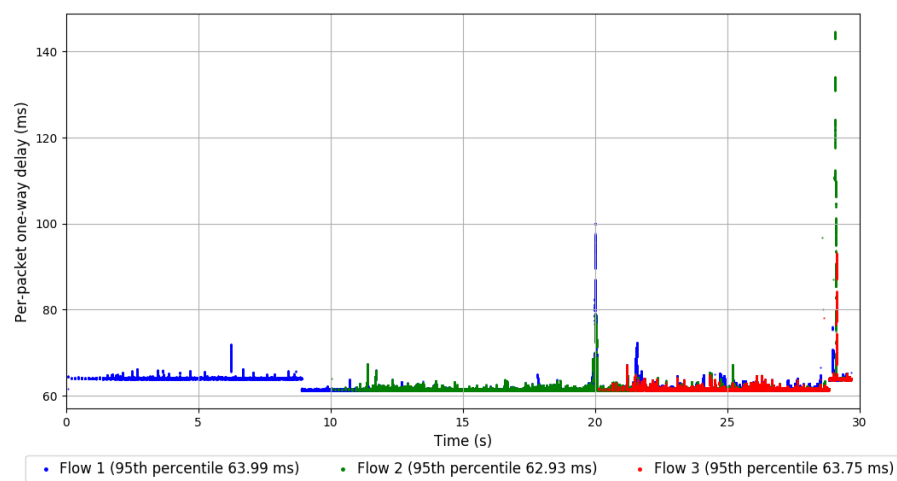
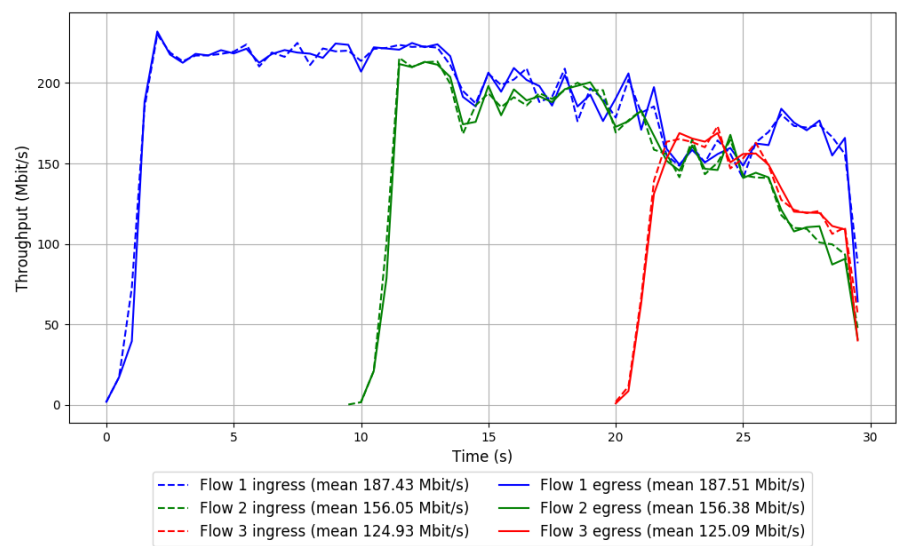


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-17 06:06:27
End at: 2017-11-17 06:06:57

# Below is generated by plot.py at 2017-11-17 11:21:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.49 Mbit/s
95th percentile per-packet one-way delay: 63.966 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 187.51 Mbit/s
95th percentile per-packet one-way delay: 63.991 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 156.38 Mbit/s
95th percentile per-packet one-way delay: 62.933 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 125.09 Mbit/s
95th percentile per-packet one-way delay: 63.754 ms
Loss rate: 1.17%
```

Run 1: Report of Indigo-calib — Data Link

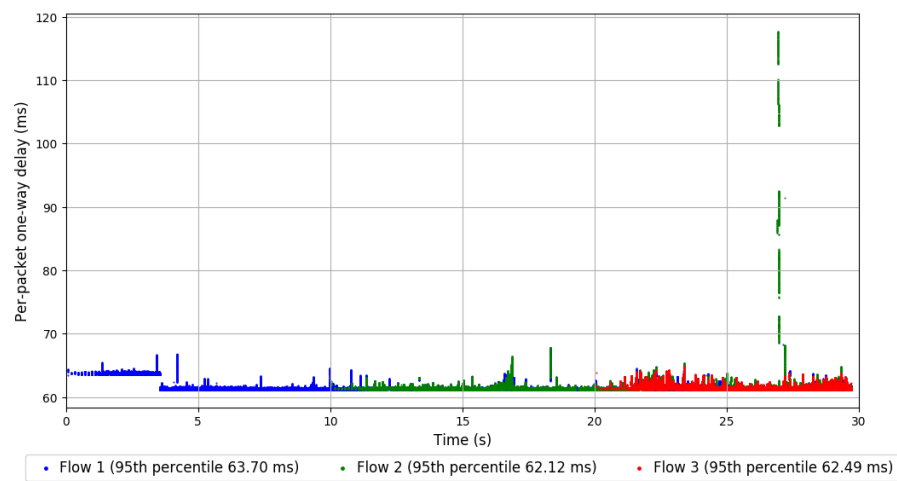
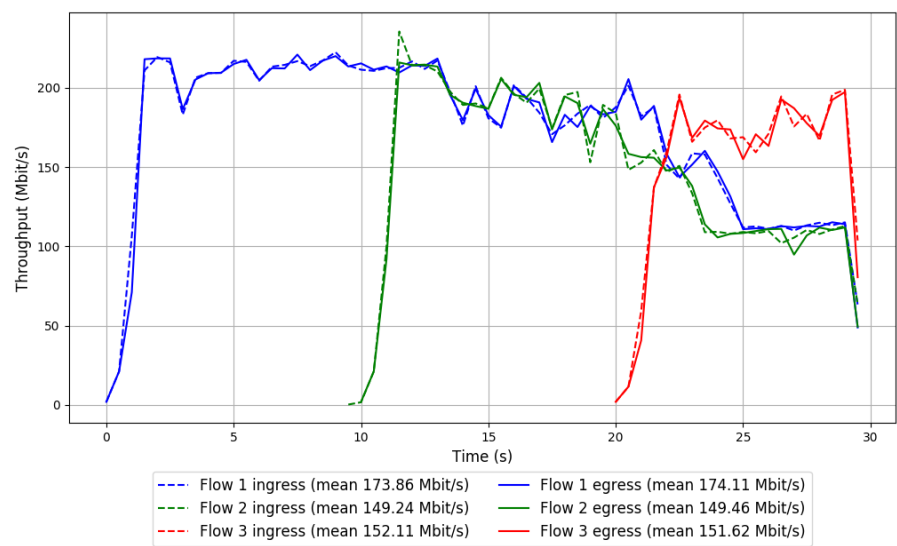


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-17 06:18:52
End at: 2017-11-17 06:19:22

# Below is generated by plot.py at 2017-11-17 11:21:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 322.49 Mbit/s
95th percentile per-packet one-way delay: 63.655 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 174.11 Mbit/s
95th percentile per-packet one-way delay: 63.702 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 149.46 Mbit/s
95th percentile per-packet one-way delay: 62.121 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 151.62 Mbit/s
95th percentile per-packet one-way delay: 62.489 ms
Loss rate: 1.60%
```

Run 2: Report of Indigo-calib — Data Link

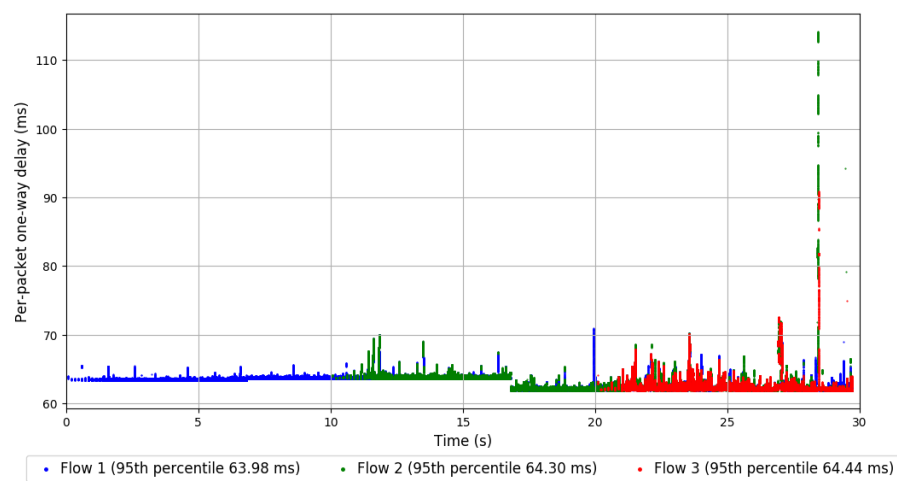
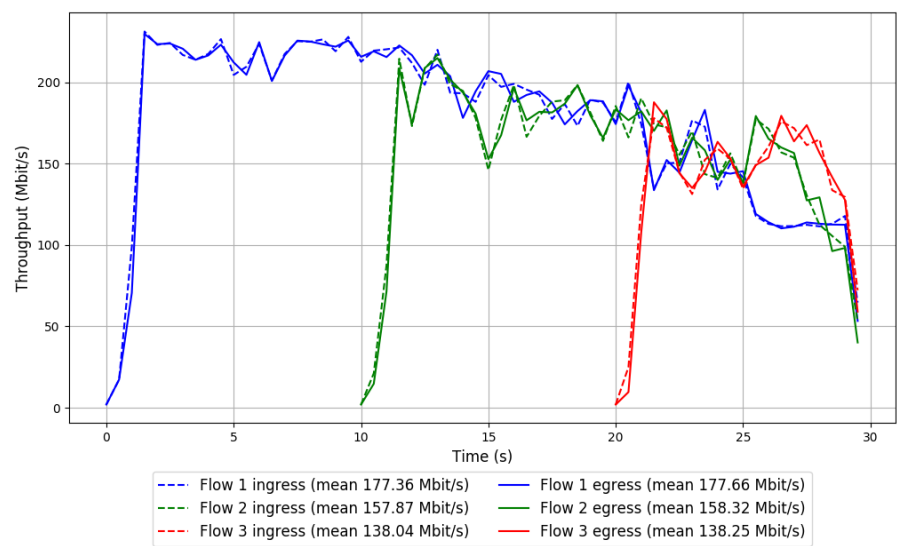


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-17 06:31:29
End at: 2017-11-17 06:31:59

# Below is generated by plot.py at 2017-11-17 11:21:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.22 Mbit/s
95th percentile per-packet one-way delay: 64.076 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 177.66 Mbit/s
95th percentile per-packet one-way delay: 63.983 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 158.32 Mbit/s
95th percentile per-packet one-way delay: 64.298 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 138.25 Mbit/s
95th percentile per-packet one-way delay: 64.439 ms
Loss rate: 1.13%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-17 06:43:51

End at: 2017-11-17 06:44:21

Below is generated by plot.py at 2017-11-17 11:22:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.72 Mbit/s

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

Loss rate: 0.49%

-- Flow 1:

Average throughput: 164.86 Mbit/s

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

Loss rate: 0.28%

-- Flow 2:

Average throughput: 140.13 Mbit/s

95th percentile per-packet one-way delay: 63.842 ms

Loss rate: 0.50%

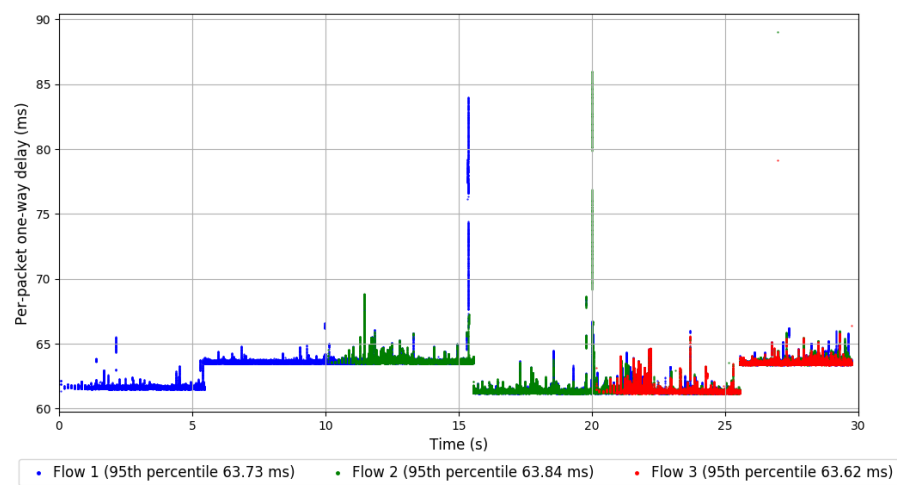
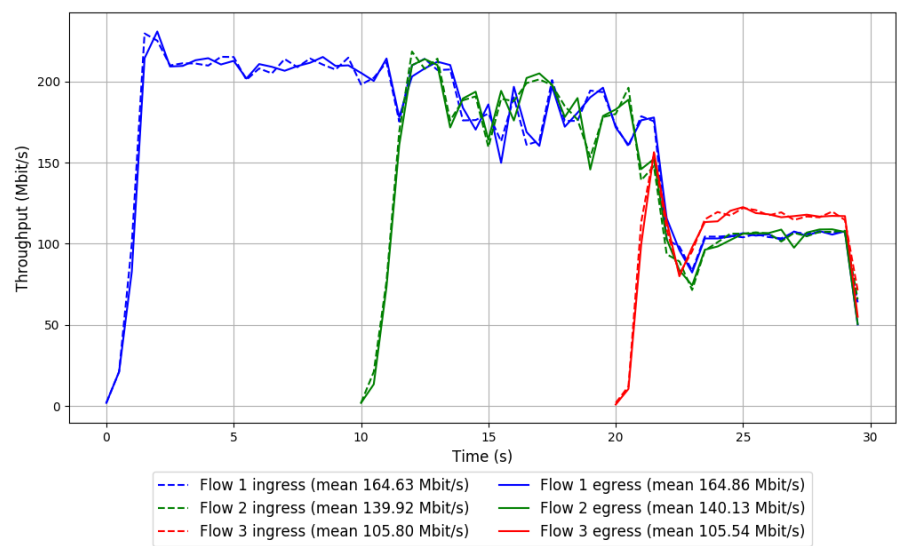
-- Flow 3:

Average throughput: 105.54 Mbit/s

95th percentile per-packet one-way delay: 63.617 ms

Loss rate: 1.48%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-17 06:56:24

End at: 2017-11-17 06:56:54

Below is generated by plot.py at 2017-11-17 11:23:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 309.59 Mbit/s

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

Loss rate: 0.52%

-- Flow 1:

Average throughput: 169.76 Mbit/s

95th percentile per-packet one-way delay: 64.137 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 141.18 Mbit/s

95th percentile per-packet one-way delay: 64.435 ms

Loss rate: 0.51%

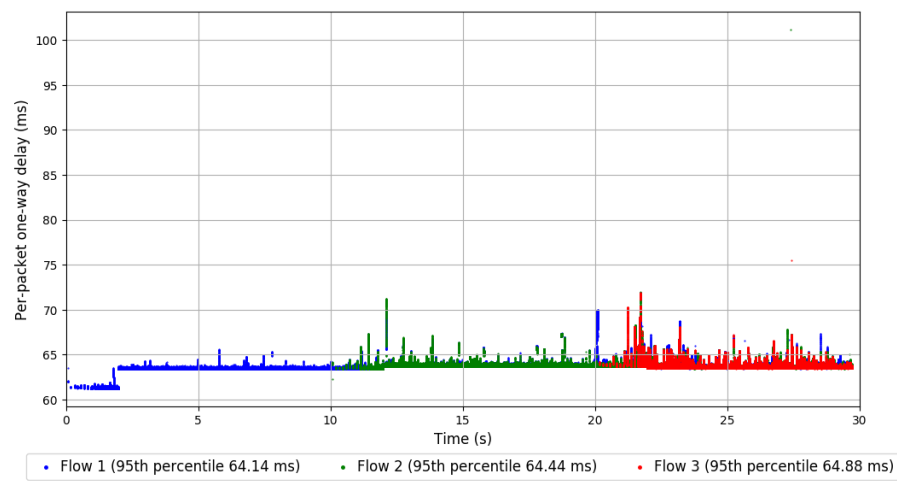
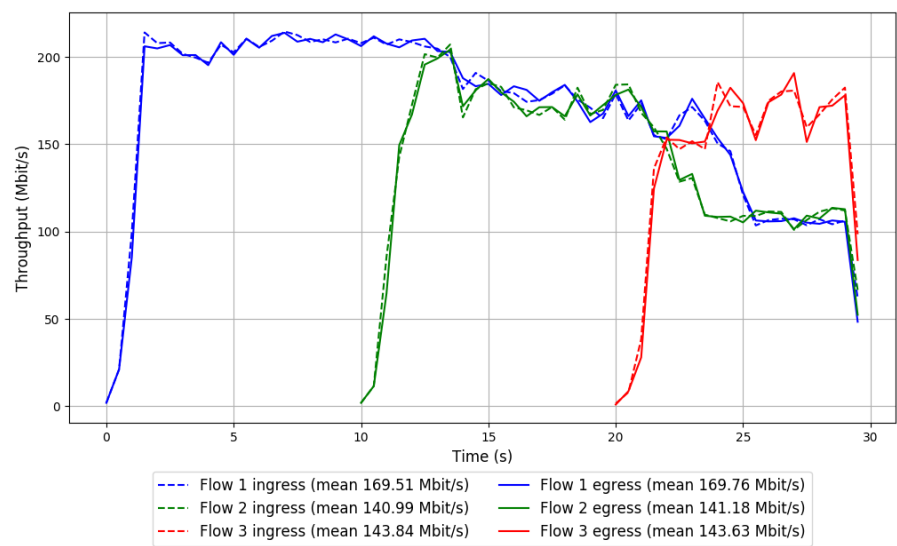
-- Flow 3:

Average throughput: 143.63 Mbit/s

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

Loss rate: 1.46%

Run 5: Report of Indigo-calib — Data Link

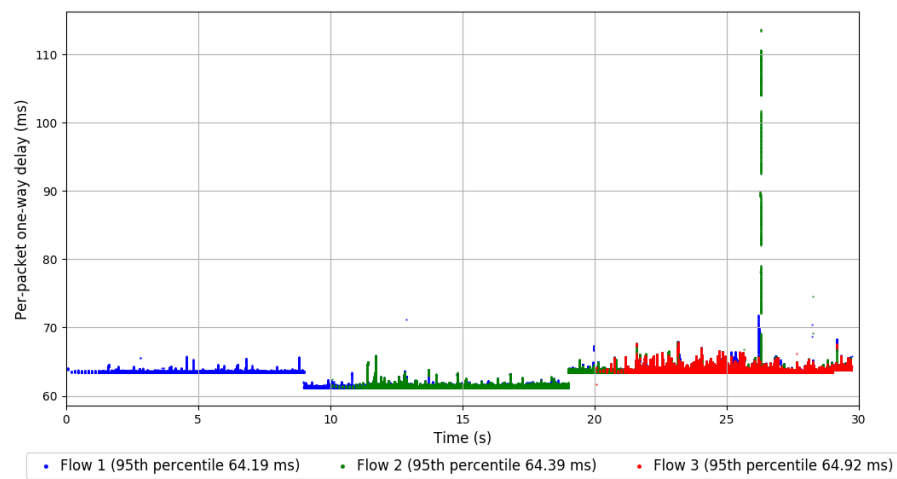
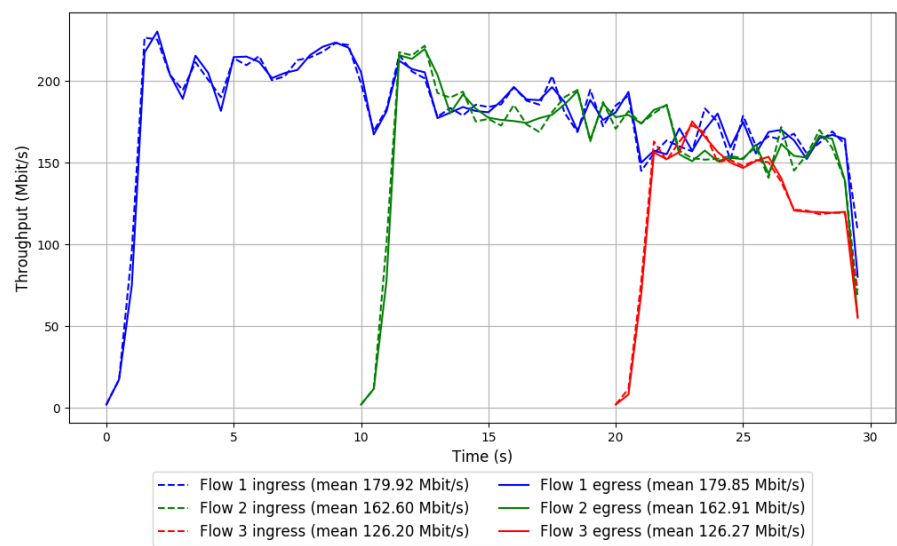


```
Run 6: Statistics of Indigo-calib

Start at: 2017-11-17 07:08:47
End at: 2017-11-17 07:09:17

# Below is generated by plot.py at 2017-11-17 11:23:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 328.91 Mbit/s
95th percentile per-packet one-way delay: 64.397 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 179.85 Mbit/s
95th percentile per-packet one-way delay: 64.185 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 162.91 Mbit/s
95th percentile per-packet one-way delay: 64.390 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 126.27 Mbit/s
95th percentile per-packet one-way delay: 64.918 ms
Loss rate: 1.24%
```

Run 6: Report of Indigo-calib — Data Link

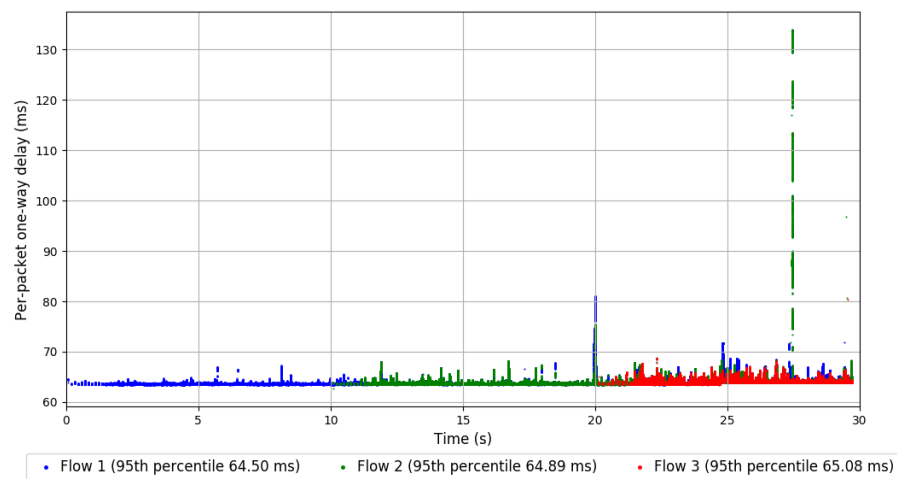
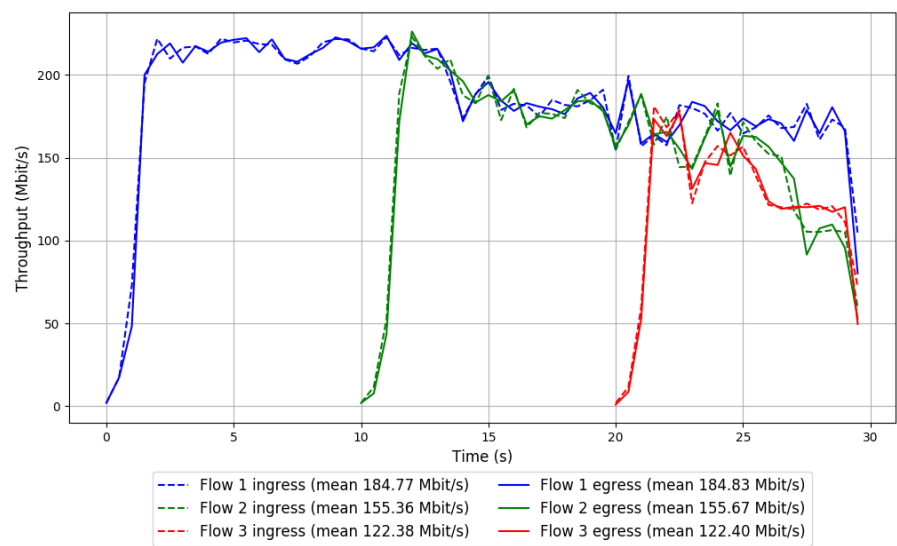


```
Run 7: Statistics of Indigo-calib

Start at: 2017-11-17 07:21:21
End at: 2017-11-17 07:21:51

# Below is generated by plot.py at 2017-11-17 11:24:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.44 Mbit/s
95th percentile per-packet one-way delay: 64.708 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 184.83 Mbit/s
95th percentile per-packet one-way delay: 64.505 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 155.67 Mbit/s
95th percentile per-packet one-way delay: 64.887 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 122.40 Mbit/s
95th percentile per-packet one-way delay: 65.084 ms
Loss rate: 1.29%
```


Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-17 07:33:50

End at: 2017-11-17 07:34:20

Below is generated by plot.py at 2017-11-17 11:24:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 309.77 Mbit/s

95th percentile per-packet one-way delay: 64.239 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 171.95 Mbit/s

95th percentile per-packet one-way delay: 64.079 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 137.89 Mbit/s

95th percentile per-packet one-way delay: 64.245 ms

Loss rate: 0.49%

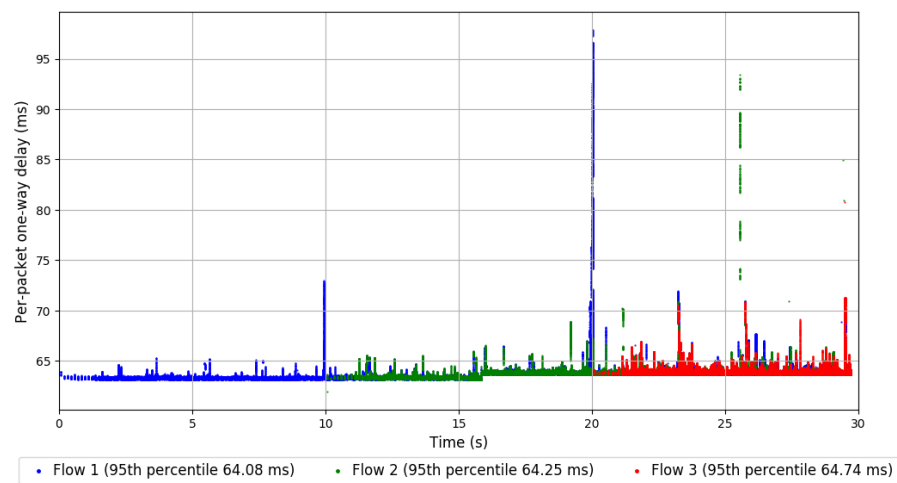
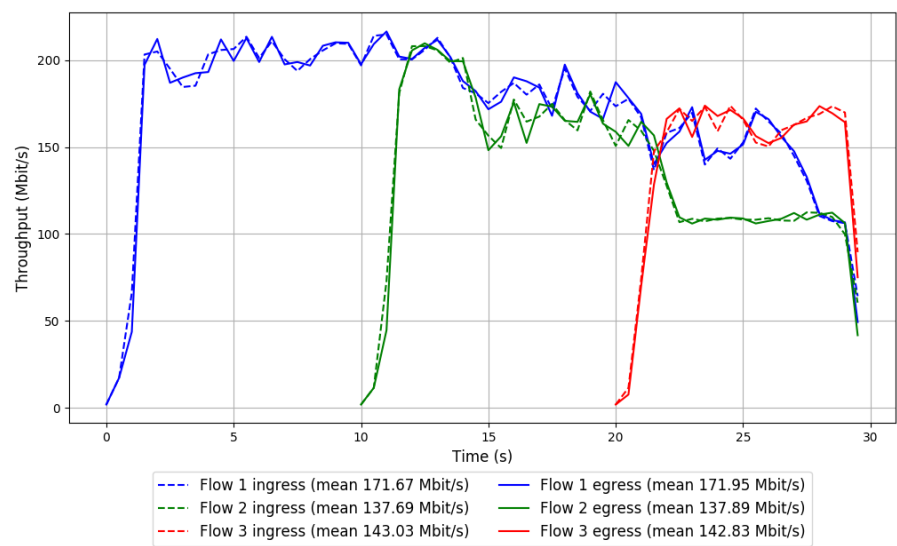
-- Flow 3:

Average throughput: 142.83 Mbit/s

95th percentile per-packet one-way delay: 64.743 ms

Loss rate: 1.45%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-17 07:46:23

End at: 2017-11-17 07:46:53

Below is generated by plot.py at 2017-11-17 11:24:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 305.73 Mbit/s

95th percentile per-packet one-way delay: 64.179 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 168.45 Mbit/s

95th percentile per-packet one-way delay: 63.985 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 148.27 Mbit/s

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

Loss rate: 0.49%

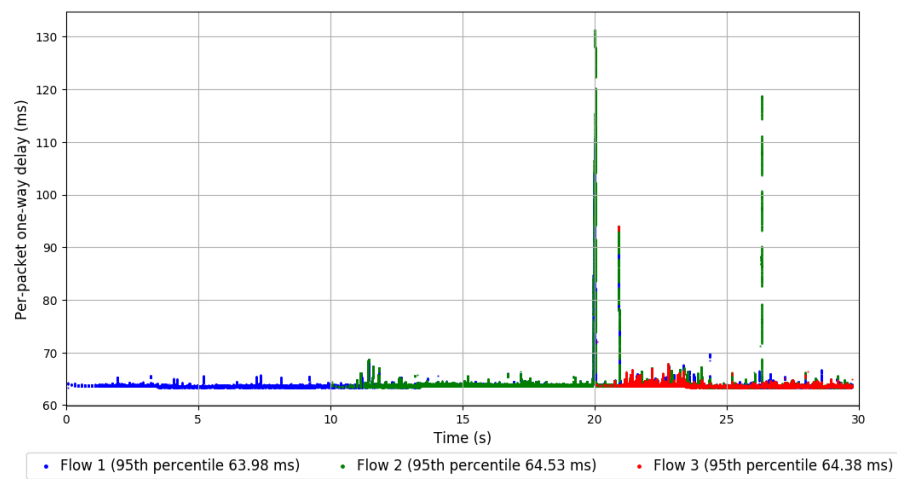
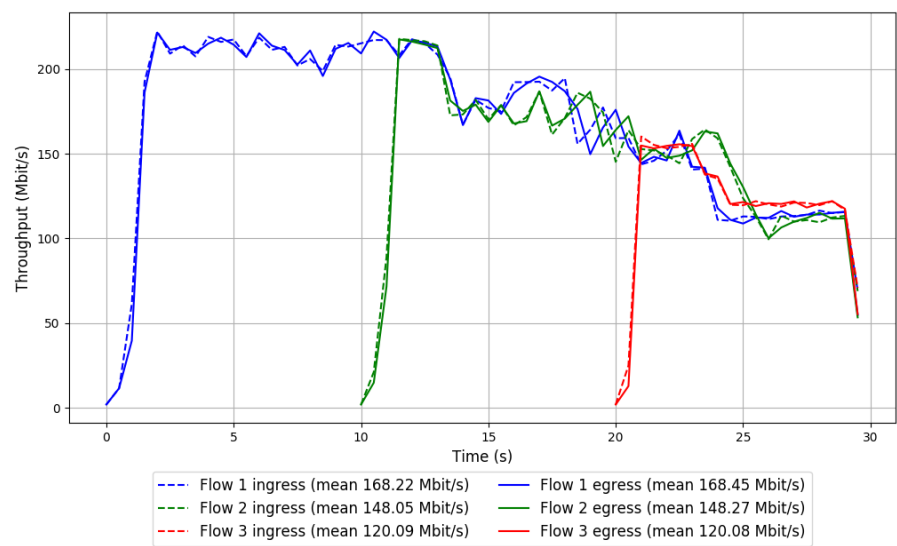
-- Flow 3:

Average throughput: 120.08 Mbit/s

95th percentile per-packet one-way delay: 64.377 ms

Loss rate: 1.29%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-17 07:58:47

End at: 2017-11-17 07:59:17

Below is generated by plot.py at 2017-11-17 11:24:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.91 Mbit/s

95th percentile per-packet one-way delay: 64.176 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 178.84 Mbit/s

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

Loss rate: 0.24%

-- Flow 2:

Average throughput: 147.85 Mbit/s

95th percentile per-packet one-way delay: 64.322 ms

Loss rate: 0.50%

-- Flow 3:

Average throughput: 108.63 Mbit/s

95th percentile per-packet one-way delay: 64.572 ms

Loss rate: 1.37%

Run 10: Report of Indigo-calib — Data Link

