

Pantheon Report

Generated at 2017-08-21 16:42:05 (UTC).

Data path: GCE Sydney Ethernet (*local*) → GCE London Ethernet (*remote*).

Repeated the test of 15 congestion control schemes 10 times.

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

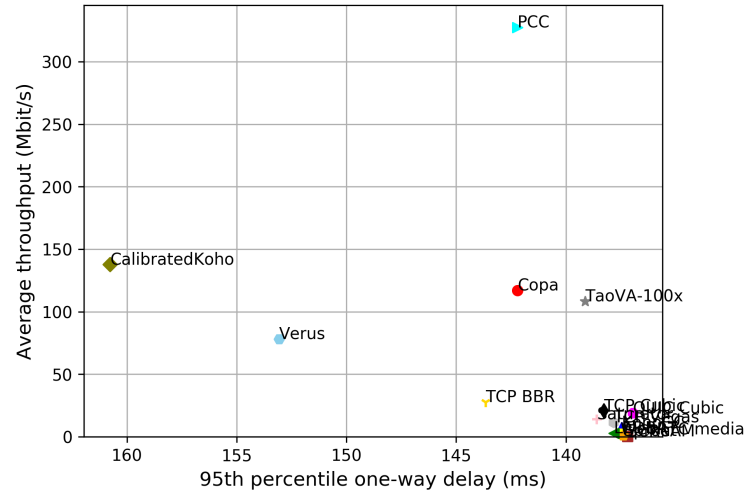
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

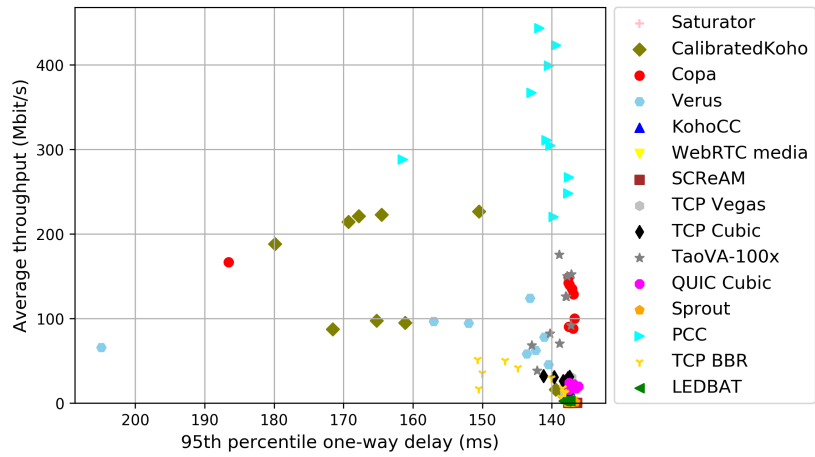
Git summary:

```
branch: master @ e43be7582298d552838afcf6382342bf187fbbd6
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ dae96123232f1bcb37725348fa2378691ce26725
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-stimuli @ fc73a85ca16c34366d1888dc8a0d0d88d4ebf2a7
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-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE Sydney Ethernet to GCE London 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	13.57	12.65	17.43	140.67	141.49	142.66	29.71	25.89	17.68
CalibratedKoho	10	84.83	75.43	8.52	153.35	154.46	138.68	32.81	17.09	12.94
Copa	10	68.37	55.49	35.59	142.23	137.11	137.32	0.54	0.83	0.07
TCP Cubic	10	9.68	13.67	6.00	137.78	138.27	138.18	1.24	2.04	4.65
KohoCC	10	4.03	3.63	3.38	137.43	137.41	137.47	4.28	11.88	12.53
LEDBAT	8	1.42	1.50	1.13	137.70	137.72	137.78	1.12	1.52	0.65
PCC	10	239.83	93.45	78.38	145.03	139.30	137.96	10.42	6.40	14.21
QUIC Cubic	9	0.04	22.32	13.33	137.38	136.76	136.42	0.00	0.01	0.01
Saturator	2	8.53	8.18	8.13	138.52	138.55	139.10	0.52	0.48	0.16
SCReAM	10	0.22	0.21	0.21	136.41	136.72	136.48	0.00	0.02	0.04
Sprout	10	0.40	0.44	0.51	137.30	137.16	137.25	0.01	0.00	0.00
TaoVA-100x	10	118.23	59.59	57.41	138.42	138.27	138.07	1.79	0.21	1.07
TCP Vegas	10	7.34	3.52	5.55	137.75	137.61	137.82	1.62	3.33	3.85
Verus	8	49.61	38.21	20.74	154.54	147.24	143.89	23.36	9.83	20.35
WebRTC media	10	0.92	1.15	0.15	137.45	137.31	138.03	0.11	0.44	1.17

Run 1: Statistics of TCP BBR

Start at: 2017-08-21 13:20:20

End at: 2017-08-21 13:20:50

Below is generated by plot.py at 2017-08-21 16:23:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.40 Mbit/s

95th percentile per-packet one-way delay: 146.726 ms

Loss rate: 13.99%

-- Flow 1:

Average throughput: 13.82 Mbit/s

95th percentile per-packet one-way delay: 143.778 ms

Loss rate: 30.80%

-- Flow 2:

Average throughput: 37.59 Mbit/s

95th percentile per-packet one-way delay: 145.664 ms

Loss rate: 4.87%

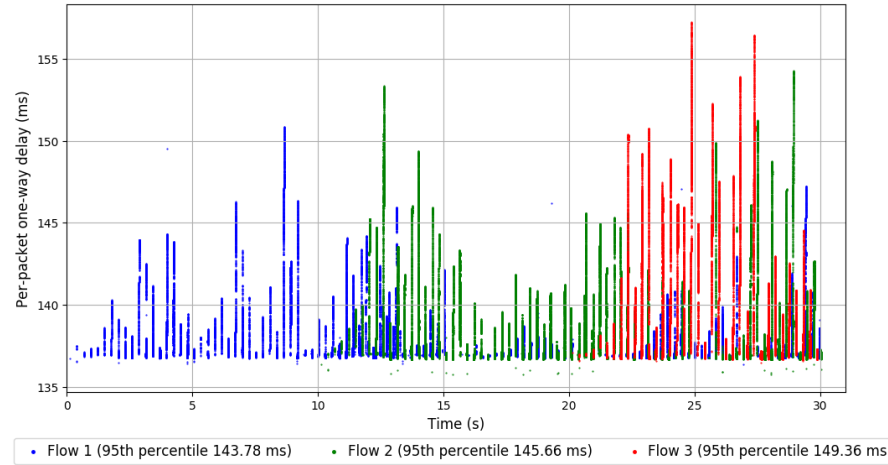
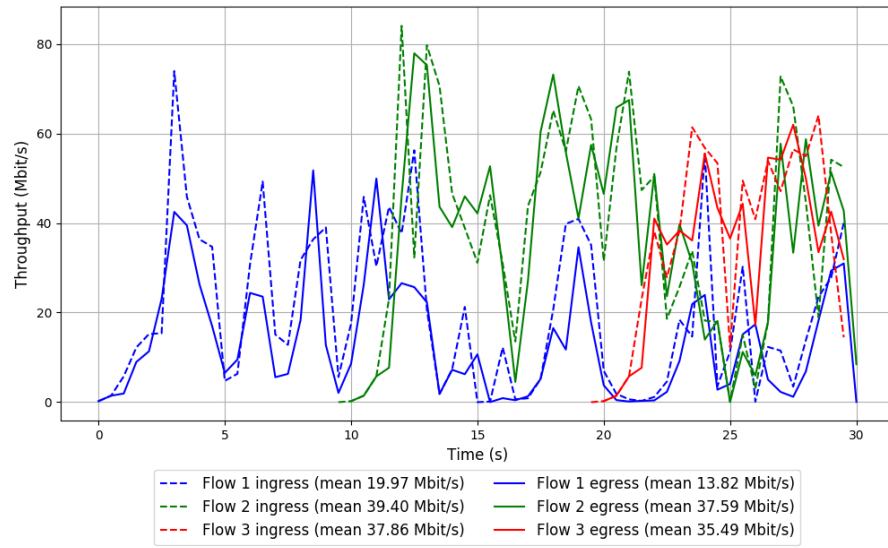
-- Flow 3:

Average throughput: 35.49 Mbit/s

95th percentile per-packet one-way delay: 149.357 ms

Loss rate: 6.26%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-08-21 13:33:56

End at: 2017-08-21 13:34:26

Below is generated by plot.py at 2017-08-21 16:23:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.55 Mbit/s

95th percentile per-packet one-way delay: 150.726 ms

Loss rate: 5.91%

-- Flow 1:

Average throughput: 37.77 Mbit/s

95th percentile per-packet one-way delay: 152.166 ms

Loss rate: 4.44%

-- Flow 2:

Average throughput: 9.89 Mbit/s

95th percentile per-packet one-way delay: 139.860 ms

Loss rate: 15.95%

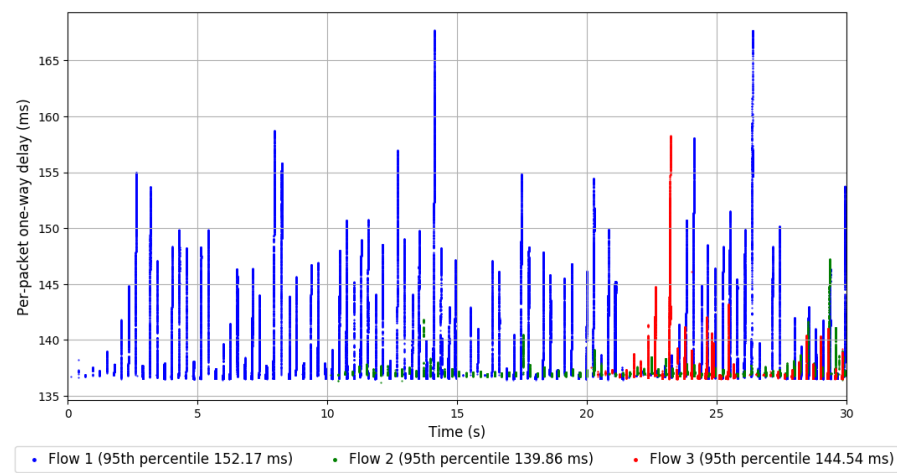
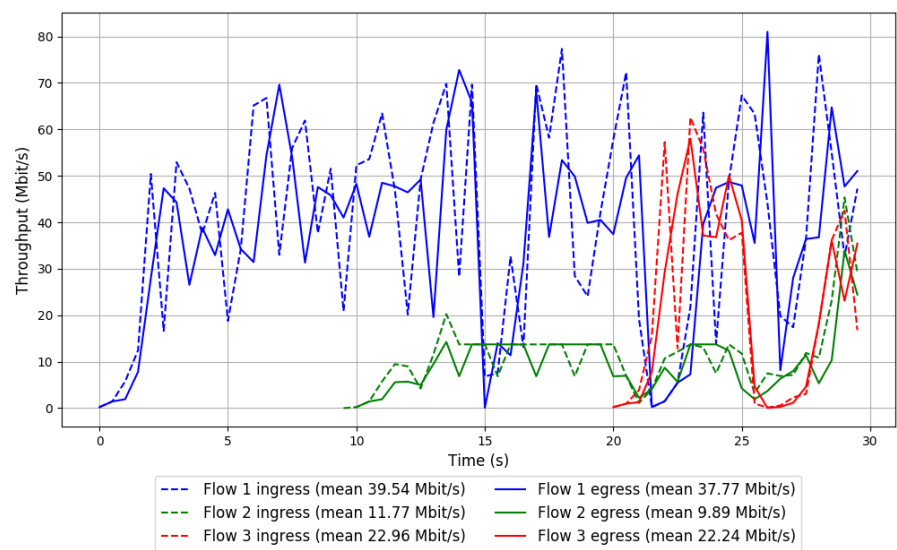
-- Flow 3:

Average throughput: 22.24 Mbit/s

95th percentile per-packet one-way delay: 144.540 ms

Loss rate: 3.13%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-08-21 13:47:31

End at: 2017-08-21 13:48:01

Below is generated by plot.py at 2017-08-21 16:23:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 35.63 Mbit/s

95th percentile per-packet one-way delay: 150.050 ms

Loss rate: 8.78%

-- Flow 1:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 138.097 ms

Loss rate: 47.98%

-- Flow 2:

Average throughput: 38.47 Mbit/s

95th percentile per-packet one-way delay: 150.898 ms

Loss rate: 5.95%

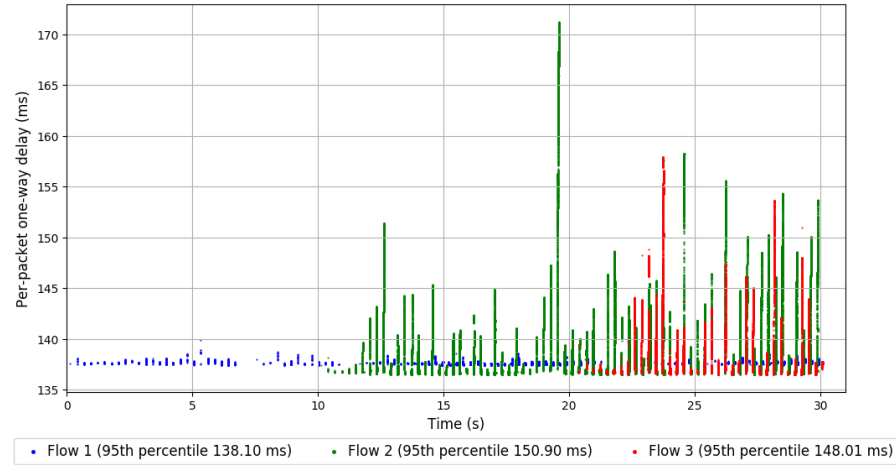
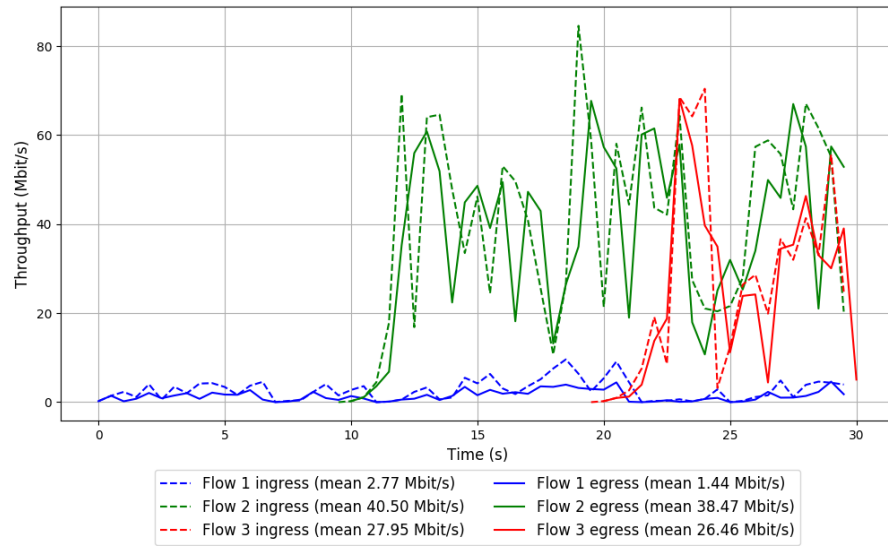
-- Flow 3:

Average throughput: 26.46 Mbit/s

95th percentile per-packet one-way delay: 148.013 ms

Loss rate: 5.35%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-08-21 14:01:03

End at: 2017-08-21 14:01:33

Below is generated by plot.py at 2017-08-21 16:23:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.78 Mbit/s

95th percentile per-packet one-way delay: 138.434 ms

Loss rate: 36.70%

-- Flow 1:

Average throughput: 6.14 Mbit/s

95th percentile per-packet one-way delay: 137.444 ms

Loss rate: 42.98%

-- Flow 2:

Average throughput: 12.92 Mbit/s

95th percentile per-packet one-way delay: 139.079 ms

Loss rate: 38.65%

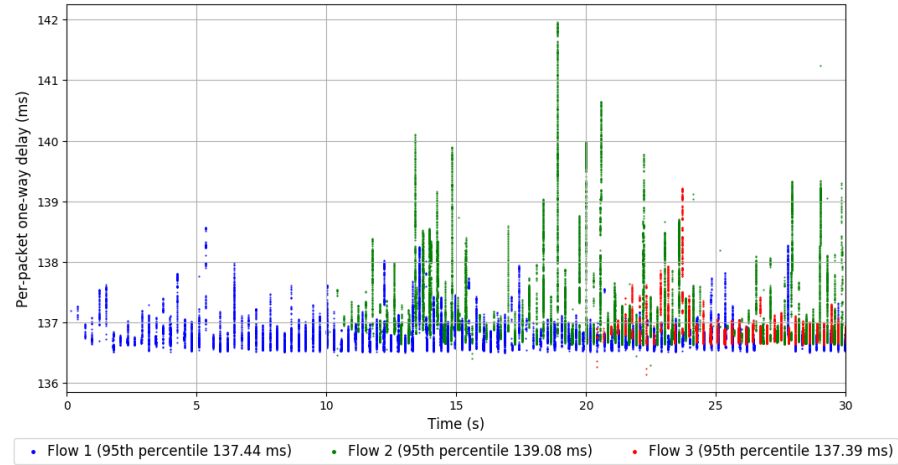
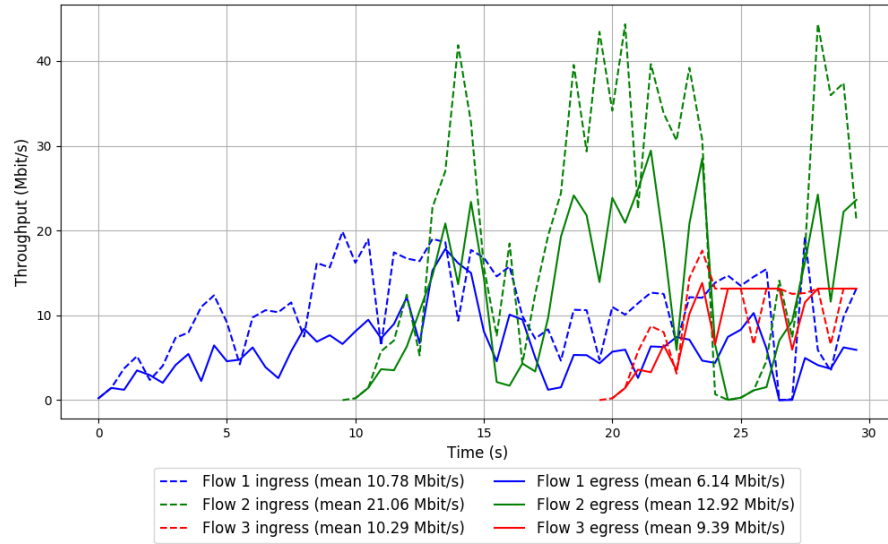
-- Flow 3:

Average throughput: 9.39 Mbit/s

95th percentile per-packet one-way delay: 137.388 ms

Loss rate: 8.80%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-08-21 14:14:30

End at: 2017-08-21 14:15:00

Below is generated by plot.py at 2017-08-21 16:23:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.28 Mbit/s

95th percentile per-packet one-way delay: 138.080 ms

Loss rate: 31.52%

-- Flow 1:

Average throughput: 10.30 Mbit/s

95th percentile per-packet one-way delay: 138.133 ms

Loss rate: 30.91%

-- Flow 2:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 137.863 ms

Loss rate: 28.94%

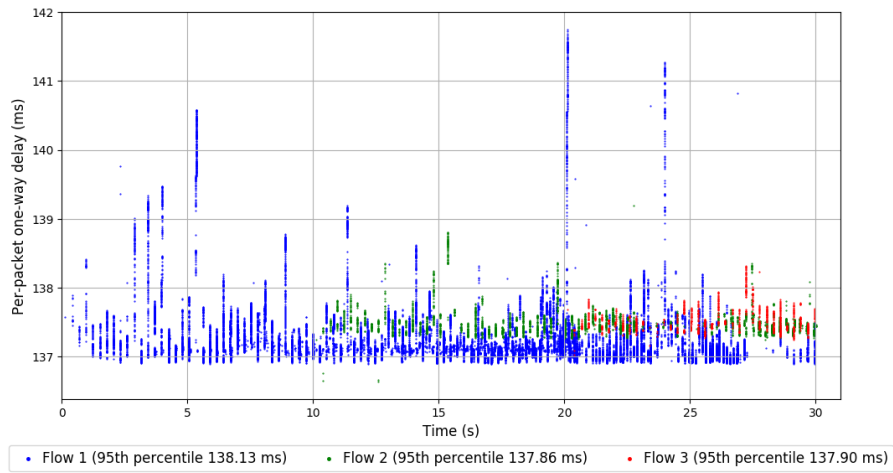
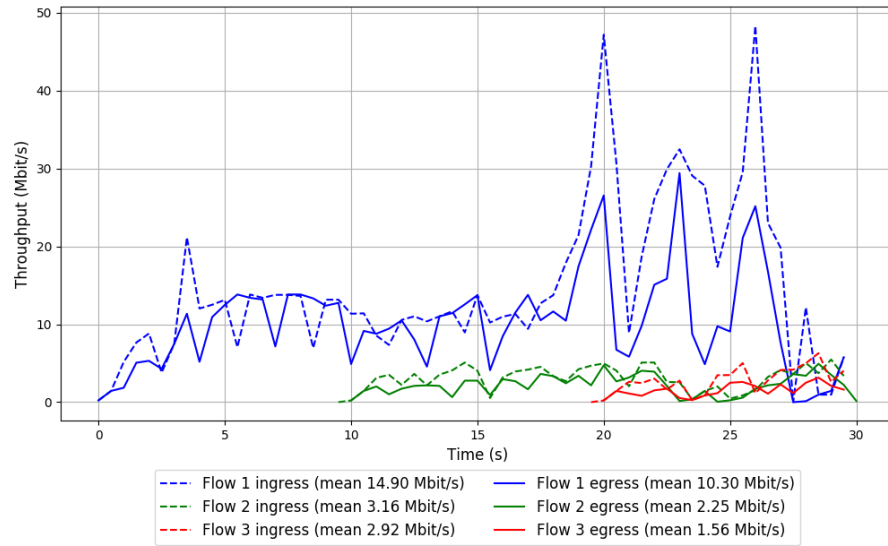
-- Flow 3:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 137.897 ms

Loss rate: 46.61%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-08-21 14:27:48

End at: 2017-08-21 14:28:18

Below is generated by plot.py at 2017-08-21 16:23:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.90 Mbit/s

95th percentile per-packet one-way delay: 150.565 ms

Loss rate: 19.00%

-- Flow 1:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 137.195 ms

Loss rate: 37.97%

-- Flow 2:

Average throughput: 4.10 Mbit/s

95th percentile per-packet one-way delay: 148.334 ms

Loss rate: 31.77%

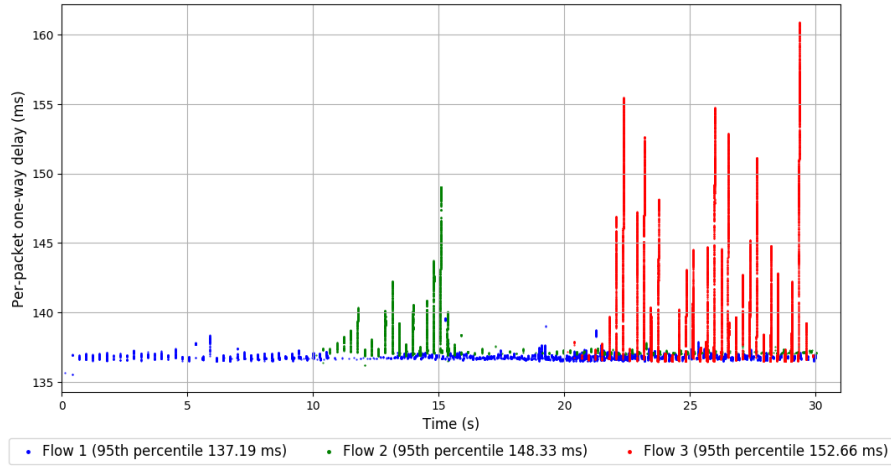
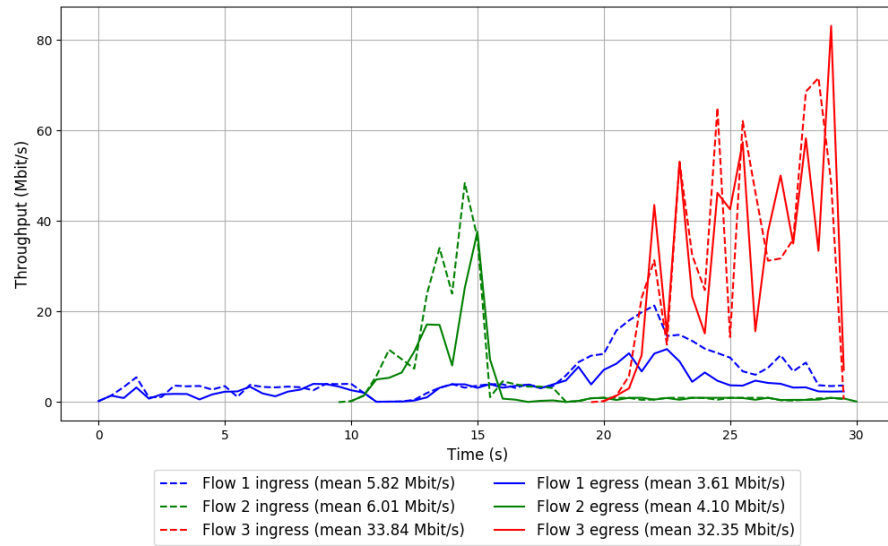
-- Flow 3:

Average throughput: 32.35 Mbit/s

95th percentile per-packet one-way delay: 152.658 ms

Loss rate: 4.42%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-08-21 14:41:10

End at: 2017-08-21 14:41:40

Below is generated by plot.py at 2017-08-21 16:23:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.74 Mbit/s

95th percentile per-packet one-way delay: 138.665 ms

Loss rate: 37.01%

-- Flow 1:

Average throughput: 5.61 Mbit/s

95th percentile per-packet one-way delay: 138.767 ms

Loss rate: 39.49%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 137.995 ms

Loss rate: 15.13%

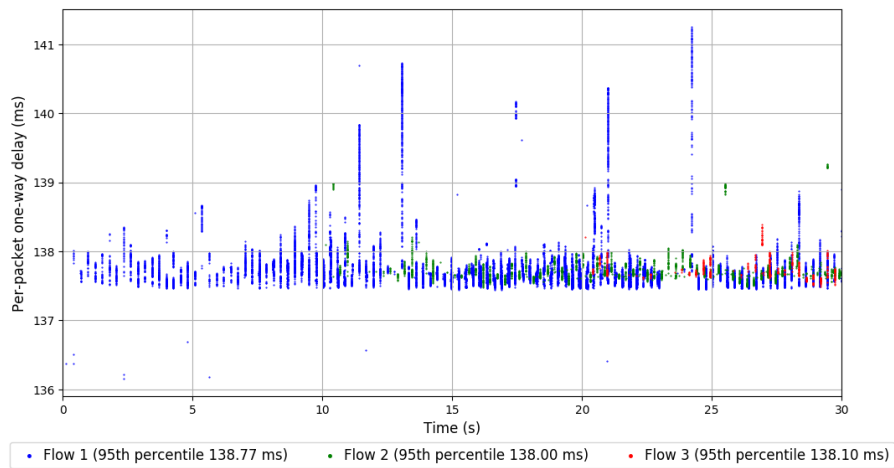
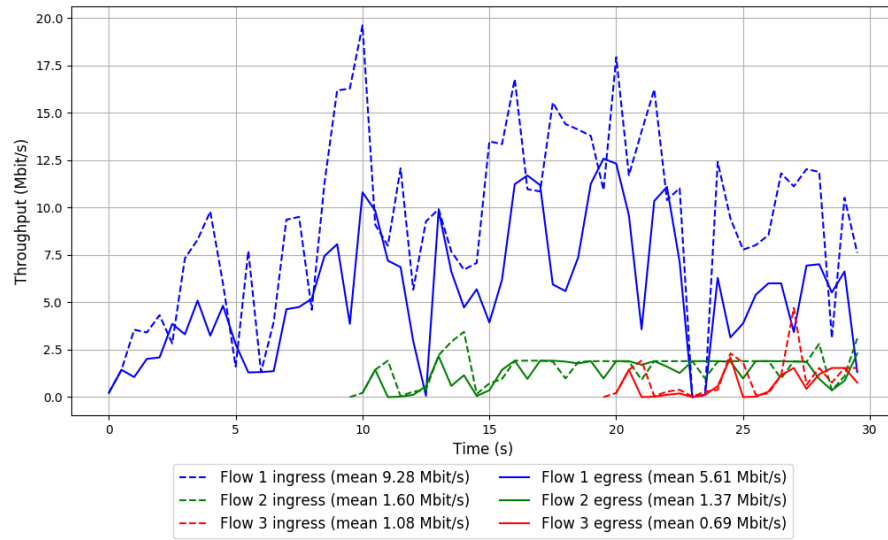
-- Flow 3:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 138.102 ms

Loss rate: 37.83%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-08-21 14:54:26

End at: 2017-08-21 14:54:56

Below is generated by plot.py at 2017-08-21 16:23:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.97 Mbit/s

95th percentile per-packet one-way delay: 144.906 ms

Loss rate: 8.83%

-- Flow 1:

Average throughput: 39.17 Mbit/s

95th percentile per-packet one-way delay: 145.122 ms

Loss rate: 4.67%

-- Flow 2:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 138.878 ms

Loss rate: 43.74%

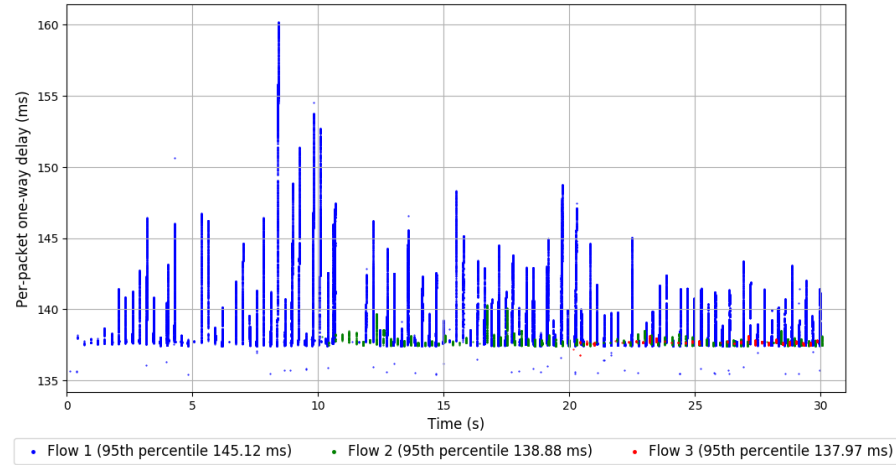
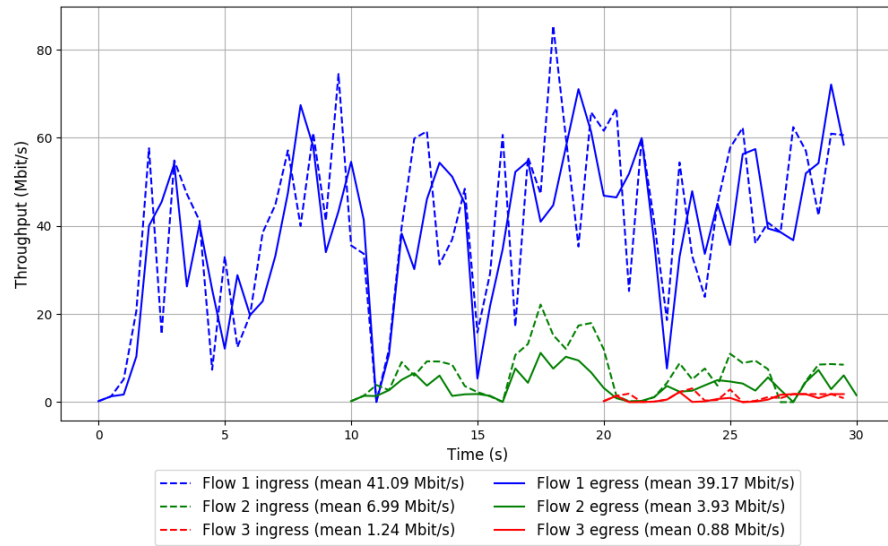
-- Flow 3:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 137.965 ms

Loss rate: 28.57%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-08-21 15:08:05

End at: 2017-08-21 15:08:35

Below is generated by plot.py at 2017-08-21 16:23:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.56 Mbit/s

95th percentile per-packet one-way delay: 138.316 ms

Loss rate: 35.76%

-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 137.420 ms

Loss rate: 42.27%

-- Flow 2:

Average throughput: 11.39 Mbit/s

95th percentile per-packet one-way delay: 138.719 ms

Loss rate: 35.63%

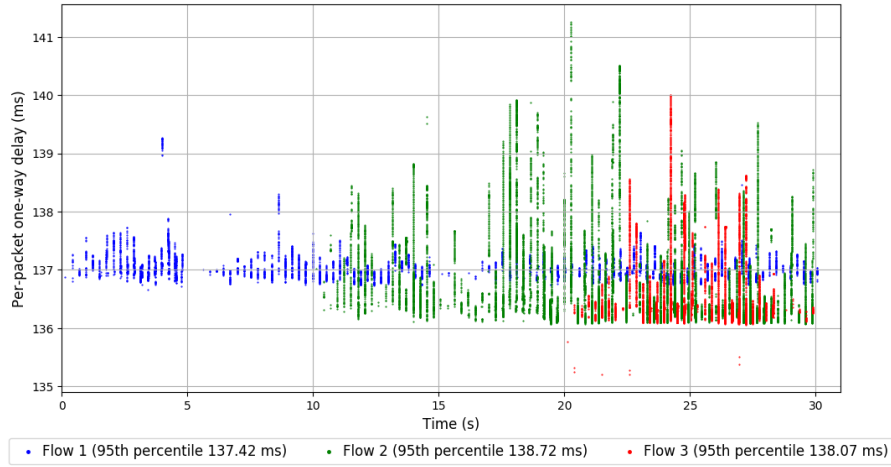
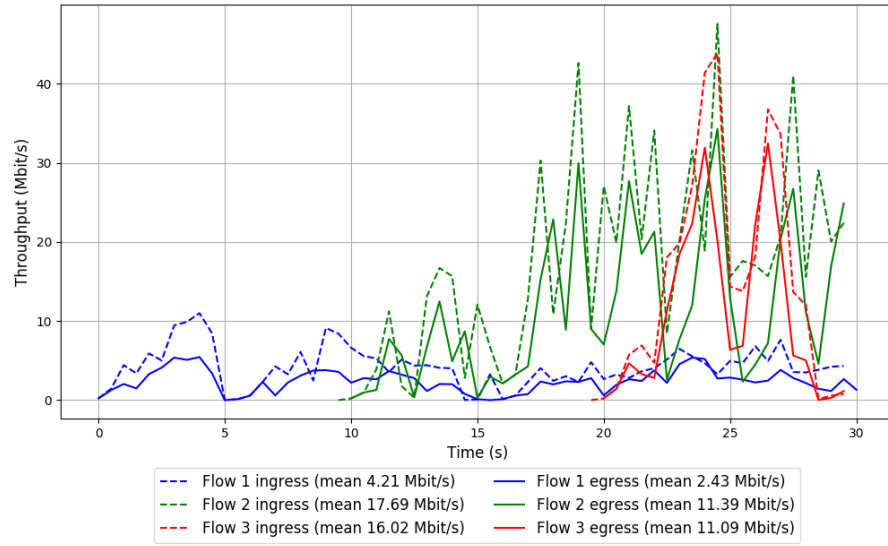
-- Flow 3:

Average throughput: 11.09 Mbit/s

95th percentile per-packet one-way delay: 138.066 ms

Loss rate: 30.80%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-08-21 15:21:56

End at: 2017-08-21 15:22:26

Below is generated by plot.py at 2017-08-21 16:23:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.63 Mbit/s

95th percentile per-packet one-way delay: 140.084 ms

Loss rate: 15.26%

-- Flow 1:

Average throughput: 15.40 Mbit/s

95th percentile per-packet one-way delay: 138.571 ms

Loss rate: 15.59%

-- Flow 2:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 137.619 ms

Loss rate: 38.23%

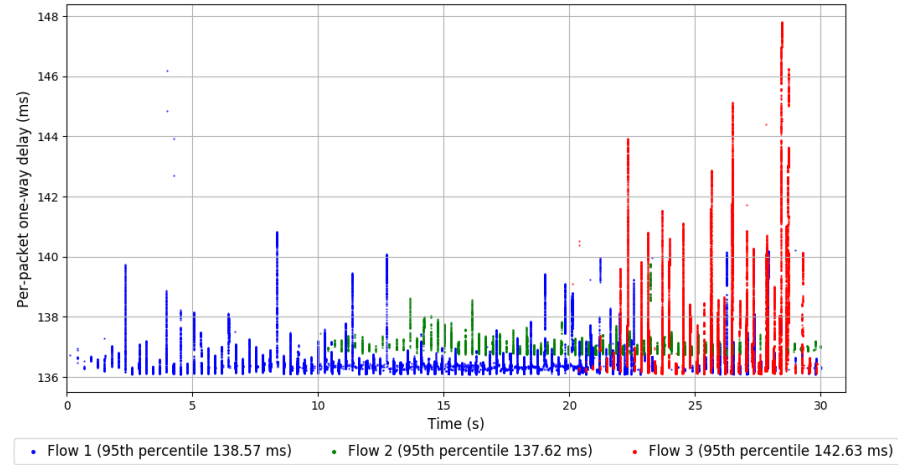
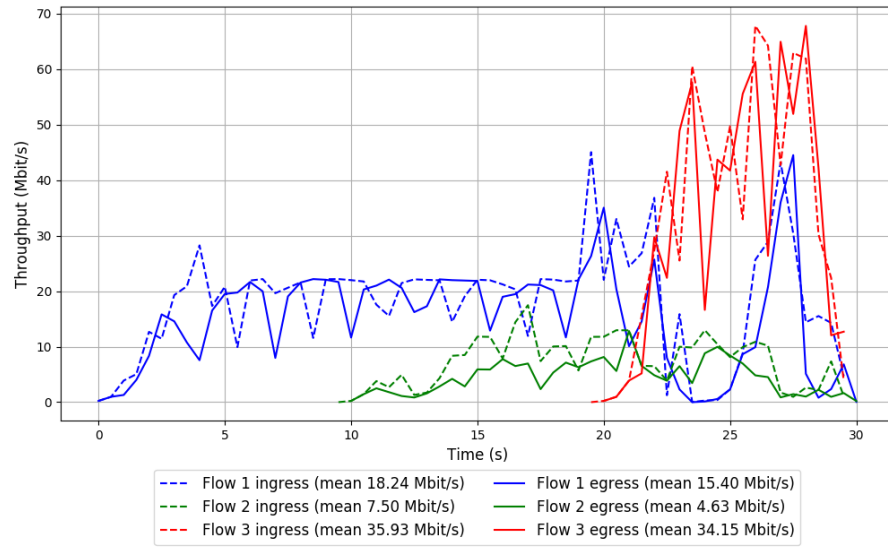
-- Flow 3:

Average throughput: 34.15 Mbit/s

95th percentile per-packet one-way delay: 142.626 ms

Loss rate: 4.98%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of CalibratedKoho

Start at: 2017-08-21 13:18:20

End at: 2017-08-21 13:18:50

Below is generated by plot.py at 2017-08-21 16:24:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.90 Mbit/s

95th percentile per-packet one-way delay: 164.502 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 163.61 Mbit/s

95th percentile per-packet one-way delay: 163.893 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.32 Mbit/s

95th percentile per-packet one-way delay: 167.652 ms

Loss rate: 0.09%

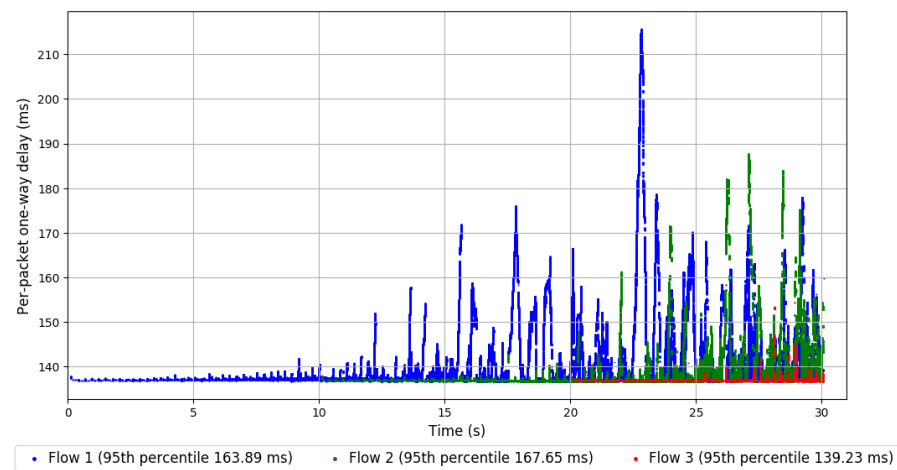
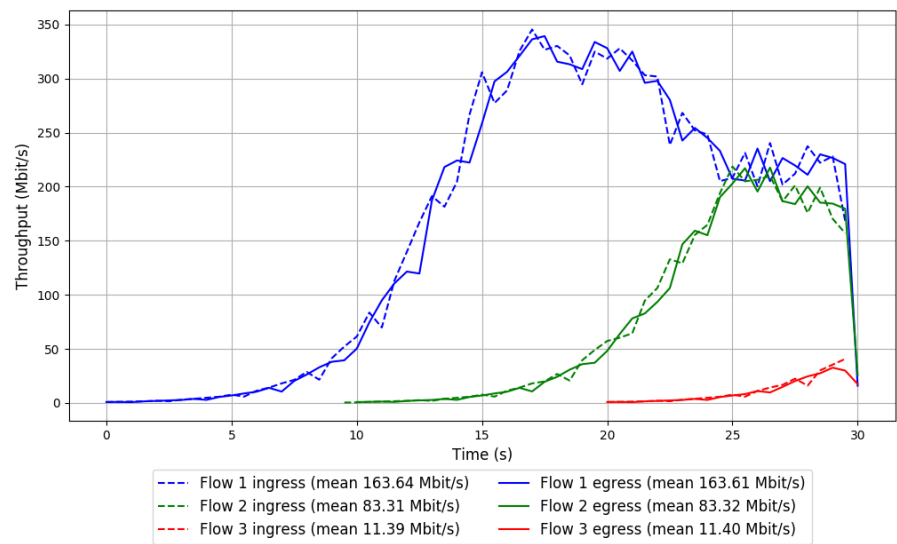
-- Flow 3:

Average throughput: 11.40 Mbit/s

95th percentile per-packet one-way delay: 139.230 ms

Loss rate: 0.01%

Run 1: Report of CalibratedKoho — Data Link



Run 2: Statistics of CalibratedKoho

Start at: 2017-08-21 13:31:57

End at: 2017-08-21 13:32:27

Below is generated by plot.py at 2017-08-21 16:24:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 226.85 Mbit/s

95th percentile per-packet one-way delay: 150.521 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 168.09 Mbit/s

95th percentile per-packet one-way delay: 151.885 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 82.87 Mbit/s

95th percentile per-packet one-way delay: 145.717 ms

Loss rate: 0.10%

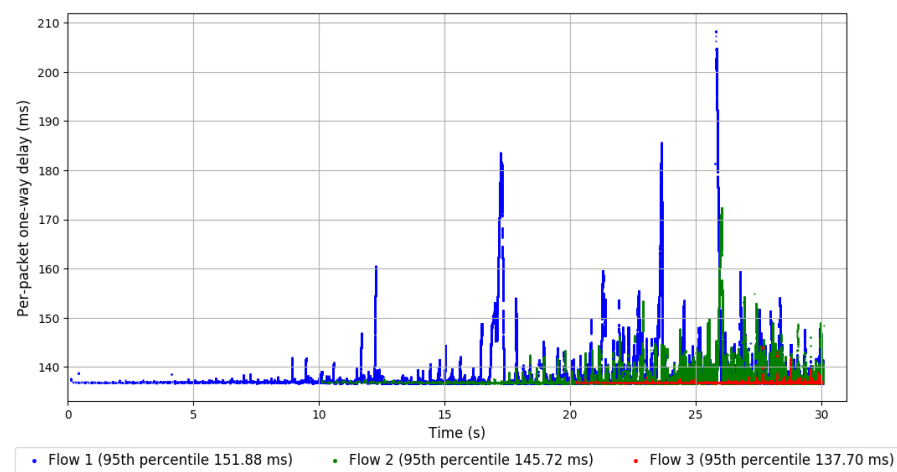
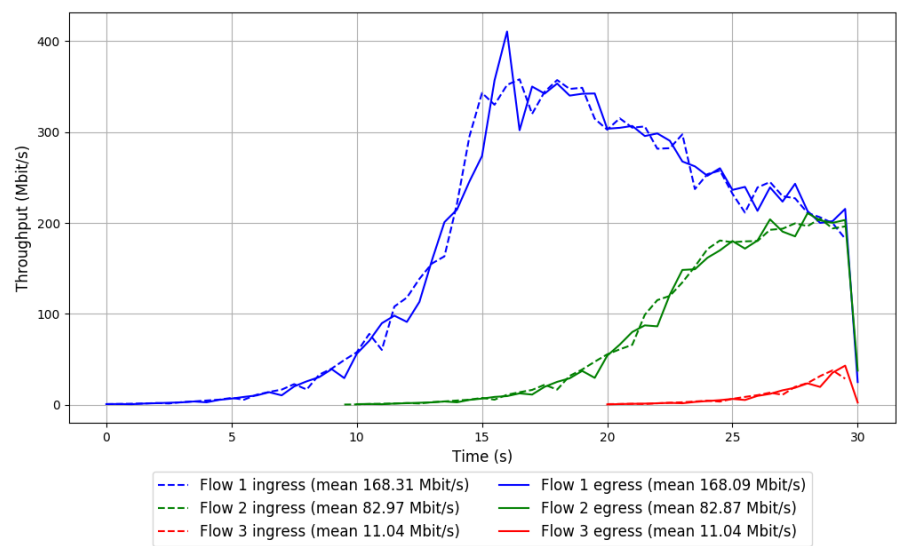
-- Flow 3:

Average throughput: 11.04 Mbit/s

95th percentile per-packet one-way delay: 137.699 ms

Loss rate: 0.01%

Run 2: Report of CalibratedKoho — Data Link



Run 3: Statistics of CalibratedKoho

Start at: 2017-08-21 13:45:33

End at: 2017-08-21 13:46:03

Below is generated by plot.py at 2017-08-21 16:25:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 214.58 Mbit/s

95th percentile per-packet one-way delay: 169.297 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 150.72 Mbit/s

95th percentile per-packet one-way delay: 174.909 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 90.61 Mbit/s

95th percentile per-packet one-way delay: 152.674 ms

Loss rate: 0.10%

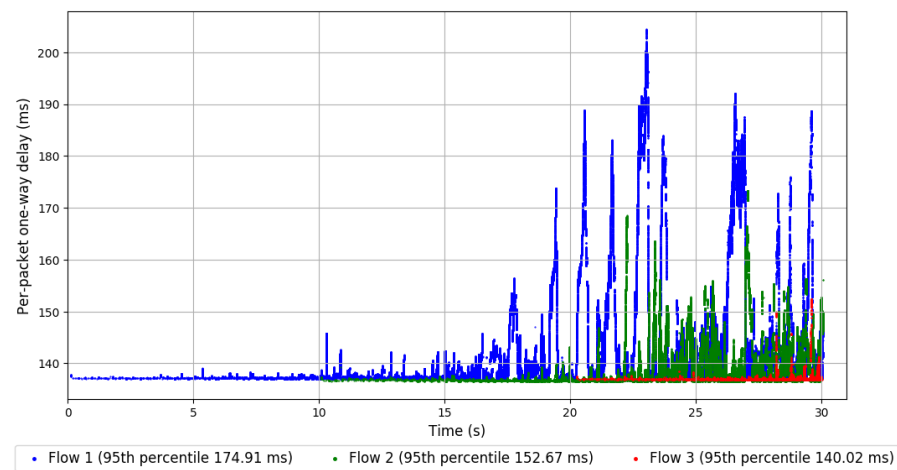
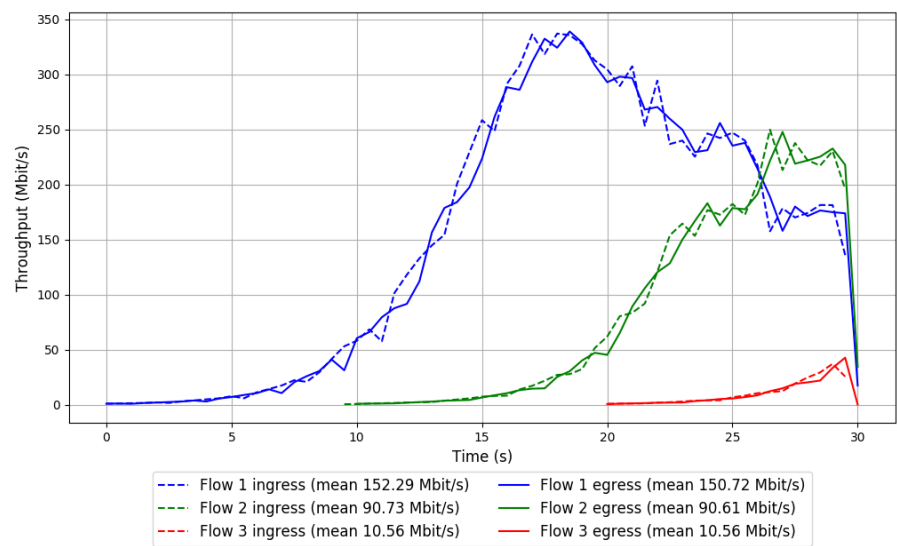
-- Flow 3:

Average throughput: 10.56 Mbit/s

95th percentile per-packet one-way delay: 140.023 ms

Loss rate: 0.05%

Run 3: Report of CalibratedKoho — Data Link



Run 4: Statistics of CalibratedKoho

Start at: 2017-08-21 13:59:09

End at: 2017-08-21 13:59:39

Below is generated by plot.py at 2017-08-21 16:25:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.26 Mbit/s

95th percentile per-packet one-way delay: 179.884 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 185.29 Mbit/s

95th percentile per-packet one-way delay: 180.168 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 0.85 Mbit/s

95th percentile per-packet one-way delay: 138.014 ms

Loss rate: 66.90%

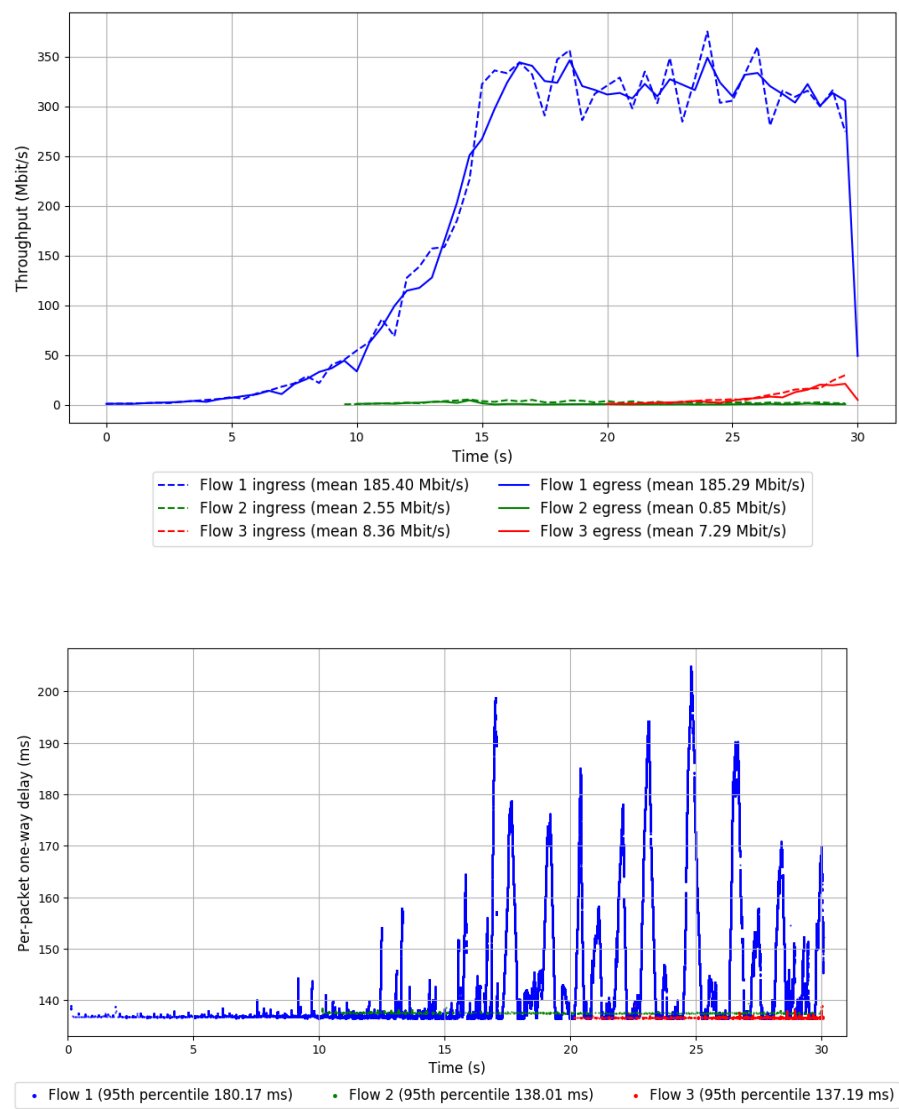
-- Flow 3:

Average throughput: 7.29 Mbit/s

95th percentile per-packet one-way delay: 137.187 ms

Loss rate: 12.78%

Run 4: Report of CalibratedKoho — Data Link



Run 5: Statistics of CalibratedKoho

Start at: 2017-08-21 14:12:42

End at: 2017-08-21 14:13:12

Below is generated by plot.py at 2017-08-21 16:25:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.43 Mbit/s

95th percentile per-packet one-way delay: 165.231 ms

Loss rate: 20.96%

-- Flow 1:

Average throughput: 14.36 Mbit/s

95th percentile per-packet one-way delay: 138.596 ms

Loss rate: 64.32%

-- Flow 2:

Average throughput: 118.70 Mbit/s

95th percentile per-packet one-way delay: 169.104 ms

Loss rate: 0.00%

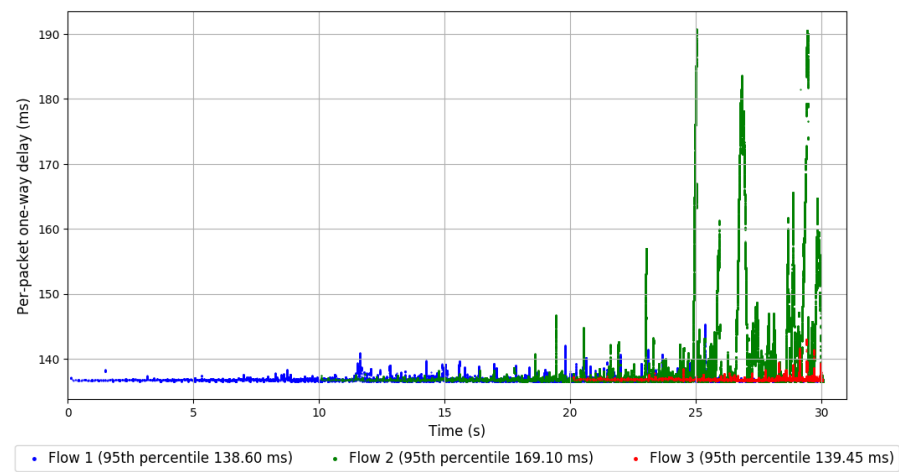
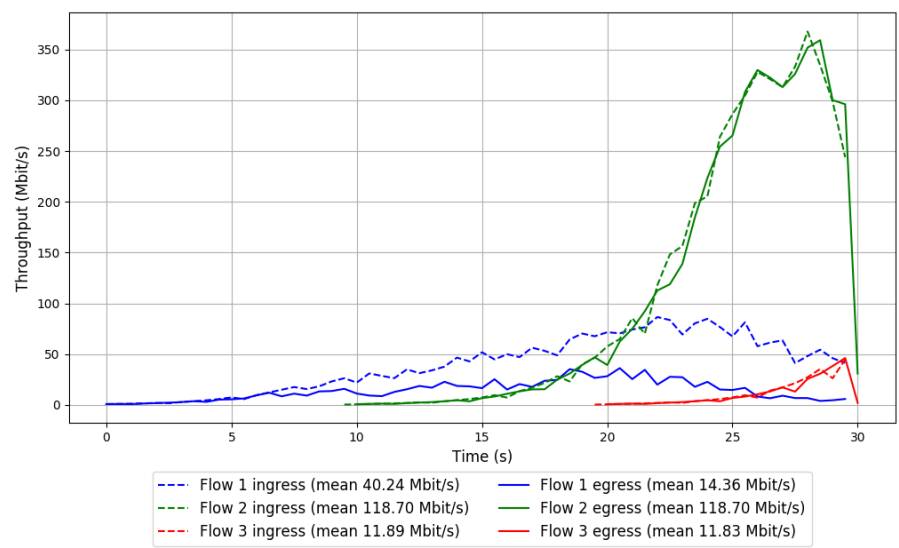
-- Flow 3:

Average throughput: 11.83 Mbit/s

95th percentile per-packet one-way delay: 139.452 ms

Loss rate: 0.50%

Run 5: Report of CalibratedKoho — Data Link



Run 6: Statistics of CalibratedKoho

Start at: 2017-08-21 14:26:09

End at: 2017-08-21 14:26:39

Below is generated by plot.py at 2017-08-21 16:25:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.07 Mbit/s

95th percentile per-packet one-way delay: 138.287 ms

Loss rate: 52.31%

-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 137.990 ms

Loss rate: 59.22%

-- Flow 2:

Average throughput: 10.41 Mbit/s

95th percentile per-packet one-way delay: 138.457 ms

Loss rate: 50.08%

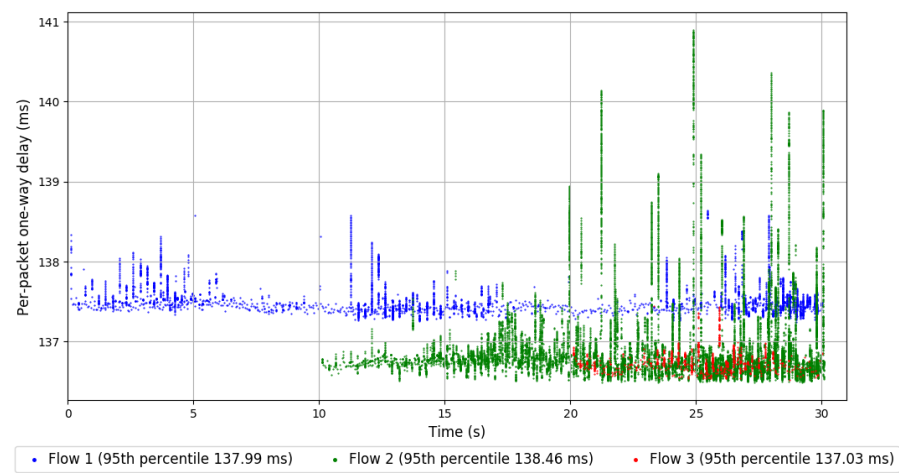
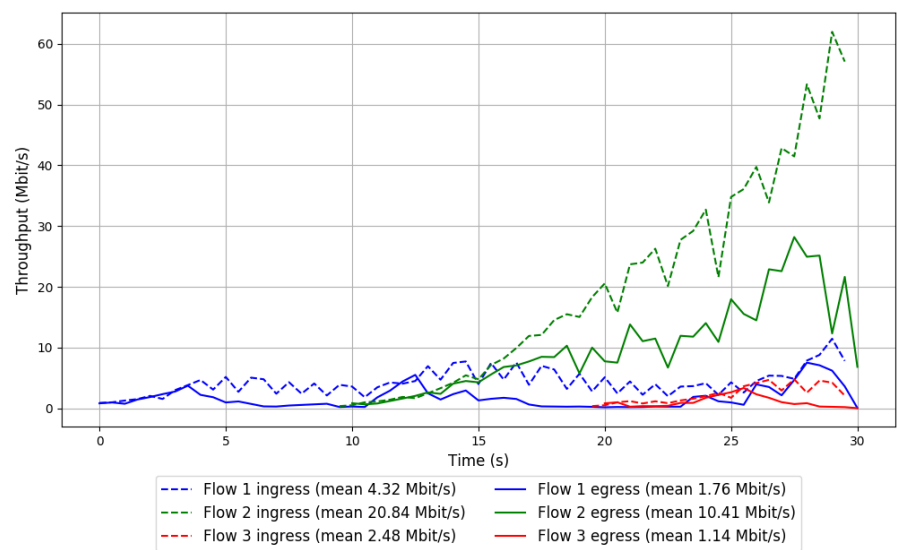
-- Flow 3:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 137.033 ms

Loss rate: 53.77%

Run 6: Report of CalibratedKoho — Data Link



Run 7: Statistics of CalibratedKoho

Start at: 2017-08-21 14:39:29

End at: 2017-08-21 14:40:00

Below is generated by plot.py at 2017-08-21 16:25:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.25 Mbit/s

95th percentile per-packet one-way delay: 139.439 ms

Loss rate: 47.99%

-- Flow 1:

Average throughput: 1.03 Mbit/s

95th percentile per-packet one-way delay: 138.310 ms

Loss rate: 67.06%

-- Flow 2:

Average throughput: 16.87 Mbit/s

95th percentile per-packet one-way delay: 138.658 ms

Loss rate: 53.50%

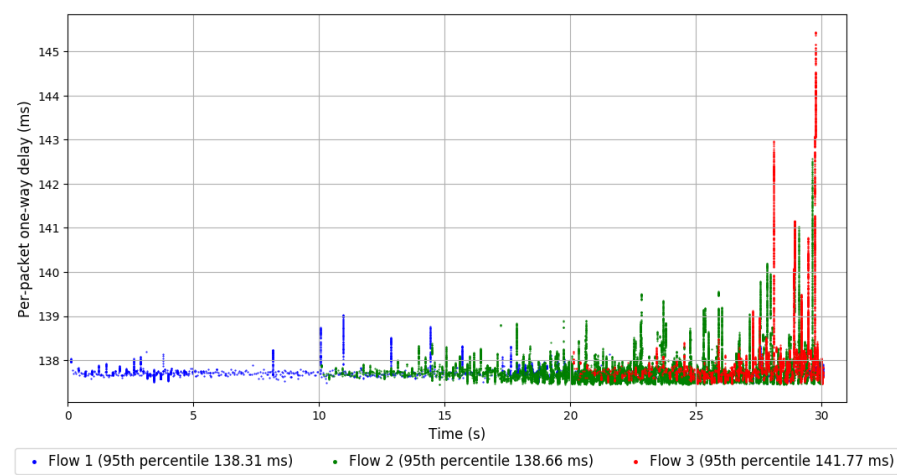
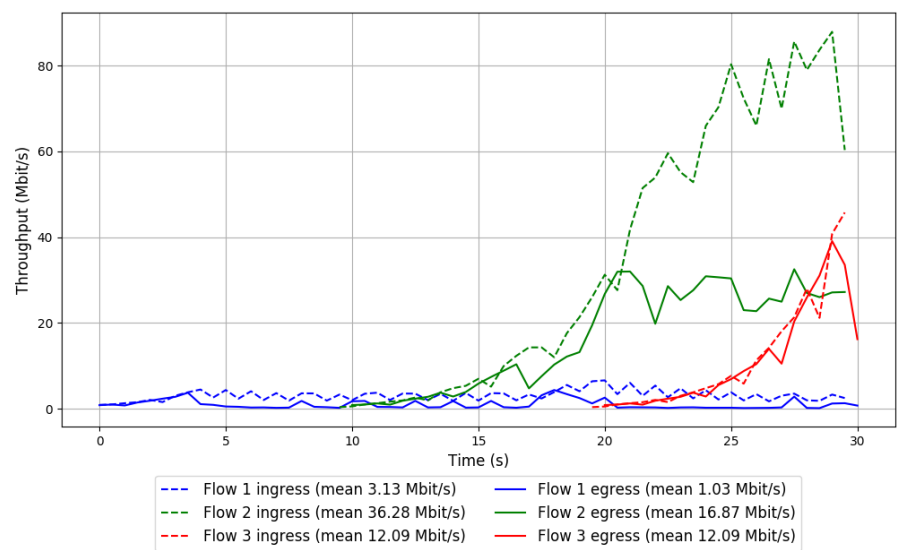
-- Flow 3:

Average throughput: 12.09 Mbit/s

95th percentile per-packet one-way delay: 141.773 ms

Loss rate: 0.00%

Run 7: Report of CalibratedKoho — Data Link



Run 8: Statistics of CalibratedKoho

Start at: 2017-08-21 14:52:40

End at: 2017-08-21 14:53:10

Below is generated by plot.py at 2017-08-21 16:25:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.23 Mbit/s

95th percentile per-packet one-way delay: 171.565 ms

Loss rate: 2.77%

-- Flow 1:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 138.226 ms

Loss rate: 67.86%

-- Flow 2:

Average throughput: 129.03 Mbit/s

95th percentile per-packet one-way delay: 171.807 ms

Loss rate: 0.12%

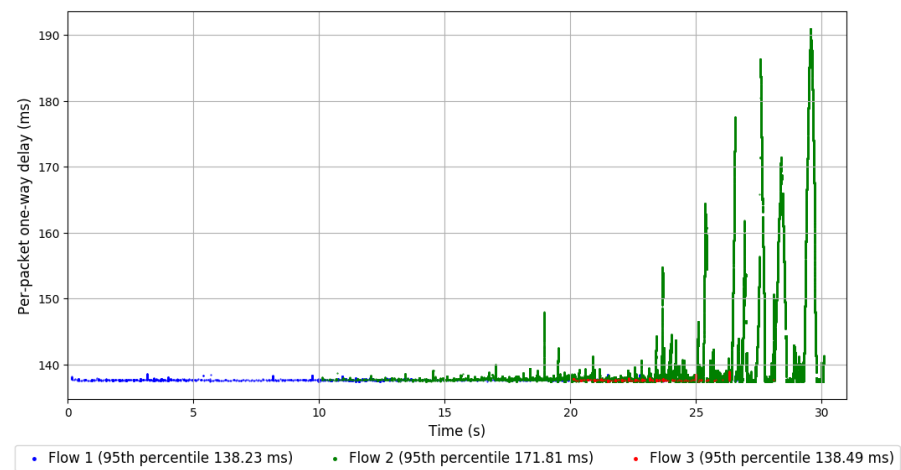
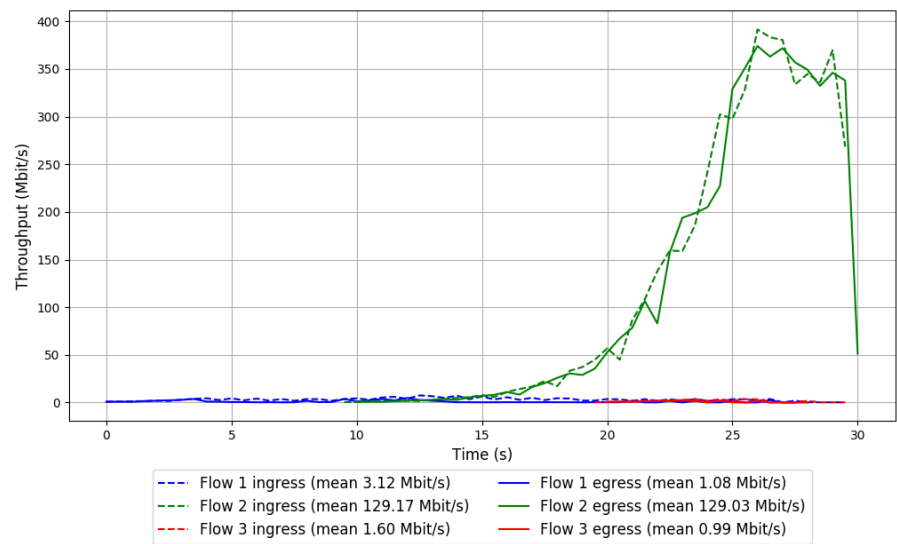
-- Flow 3:

Average throughput: 0.99 Mbit/s

95th percentile per-packet one-way delay: 138.490 ms

Loss rate: 50.23%

Run 8: Report of CalibratedKoho — Data Link



Run 9: Statistics of CalibratedKoho

Start at: 2017-08-21 15:06:19

End at: 2017-08-21 15:06:49

Below is generated by plot.py at 2017-08-21 16:25:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.21 Mbit/s

95th percentile per-packet one-way delay: 161.105 ms

Loss rate: 4.21%

-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 137.643 ms

Loss rate: 68.41%

-- Flow 2:

Average throughput: 133.84 Mbit/s

95th percentile per-packet one-way delay: 161.522 ms

Loss rate: 0.00%

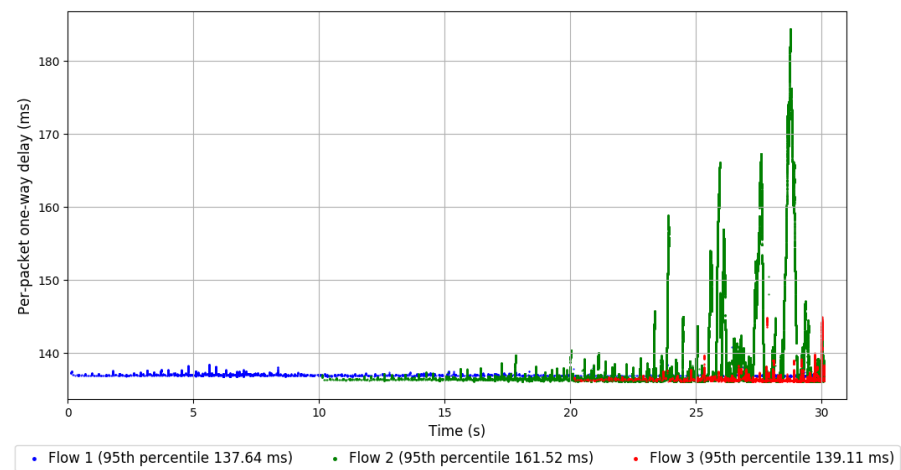
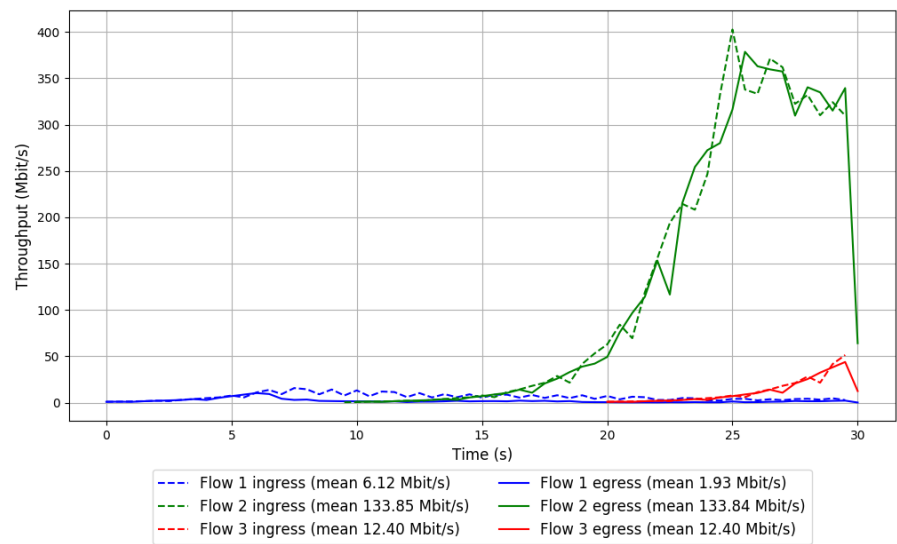
-- Flow 3:

Average throughput: 12.40 Mbit/s

95th percentile per-packet one-way delay: 139.112 ms

Loss rate: 0.00%

Run 9: Report of CalibratedKoho — Data Link



Run 10: Statistics of CalibratedKoho

Start at: 2017-08-21 15:19:58

End at: 2017-08-21 15:20:28

Below is generated by plot.py at 2017-08-21 16:26:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 221.06 Mbit/s

95th percentile per-packet one-way delay: 167.813 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 160.45 Mbit/s

95th percentile per-packet one-way delay: 171.904 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 87.78 Mbit/s

95th percentile per-packet one-way delay: 161.021 ms

Loss rate: 0.00%

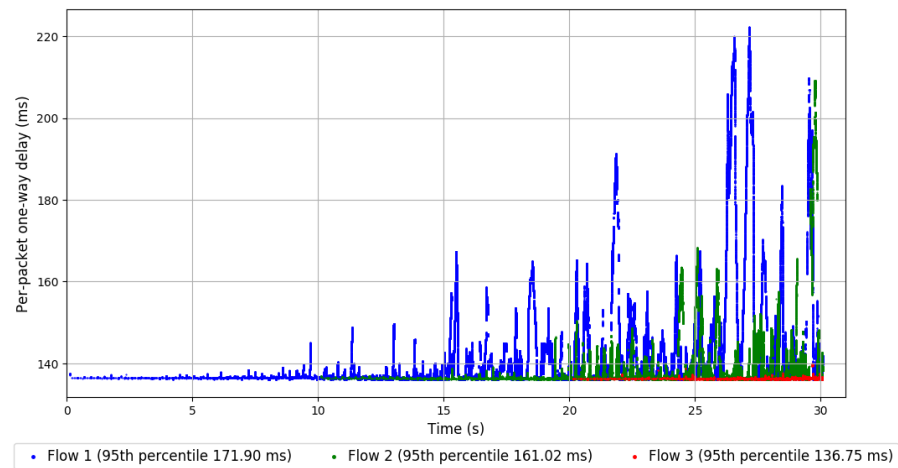
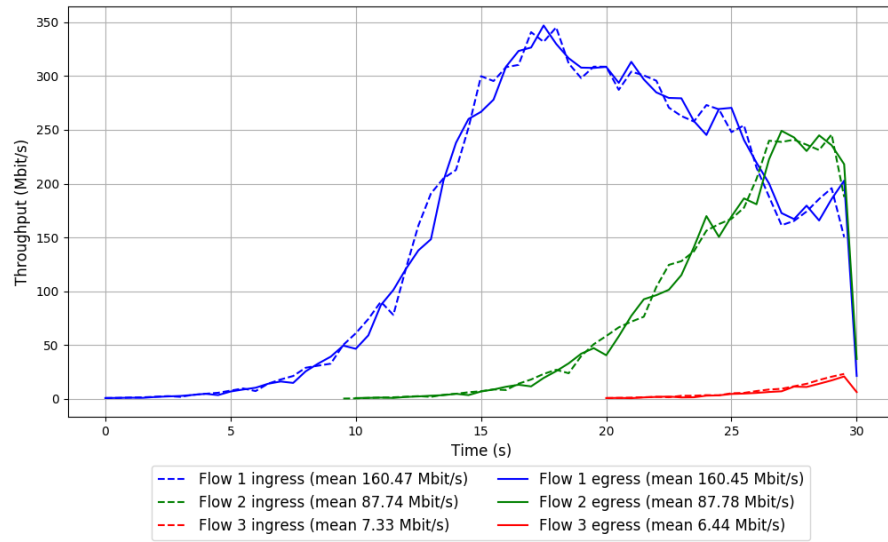
-- Flow 3:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 136.754 ms

Loss rate: 12.03%

Run 10: Report of CalibratedKoho — Data Link

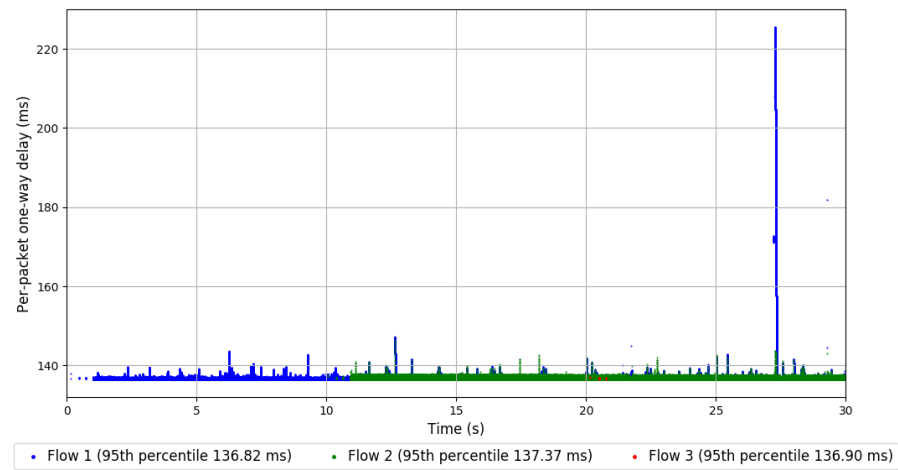
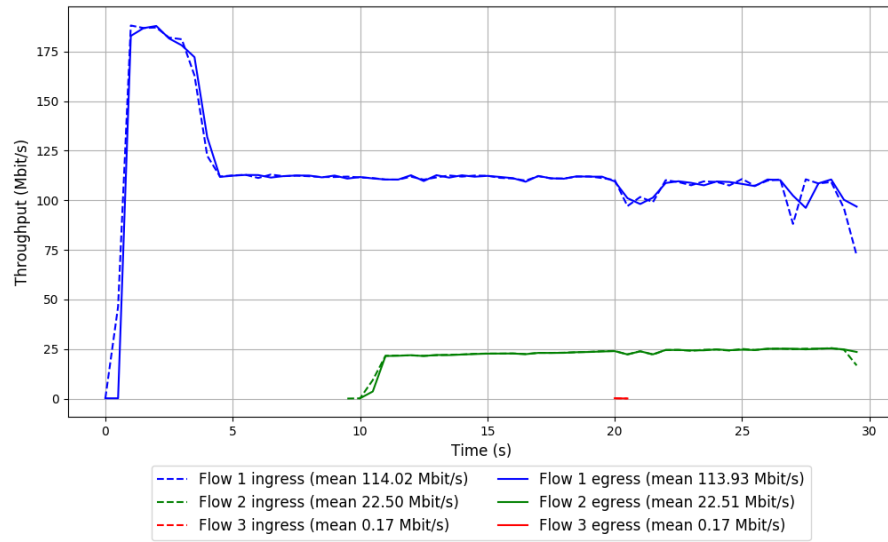


```
Run 1: Statistics of Copa

Start at: 2017-08-21 13:16:17
End at: 2017-08-21 13:16:47

# Below is generated by plot.py at 2017-08-21 16:26:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.96 Mbit/s
95th percentile per-packet one-way delay: 136.878 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 113.93 Mbit/s
95th percentile per-packet one-way delay: 136.819 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 22.51 Mbit/s
95th percentile per-packet one-way delay: 137.368 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 136.899 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-08-21 13:30:03

End at: 2017-08-21 13:30:33

Below is generated by plot.py at 2017-08-21 16:26:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.13 Mbit/s

95th percentile per-packet one-way delay: 136.931 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 137.316 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 131.81 Mbit/s

95th percentile per-packet one-way delay: 136.931 ms

Loss rate: 0.00%

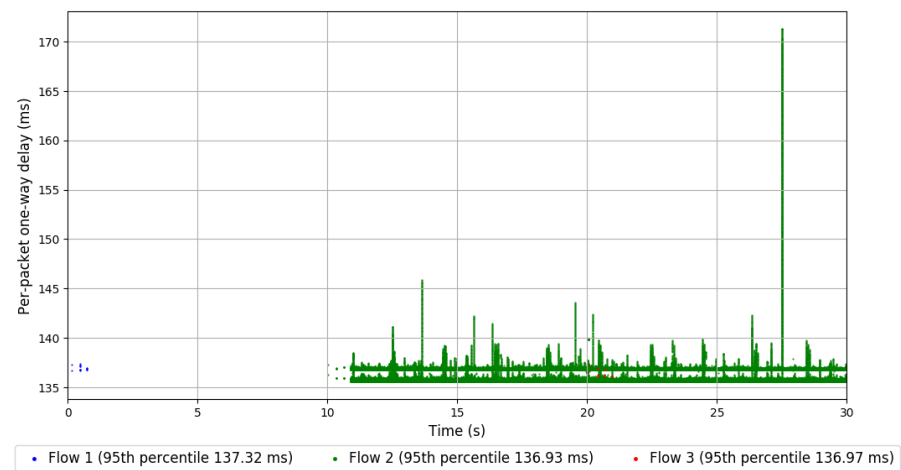
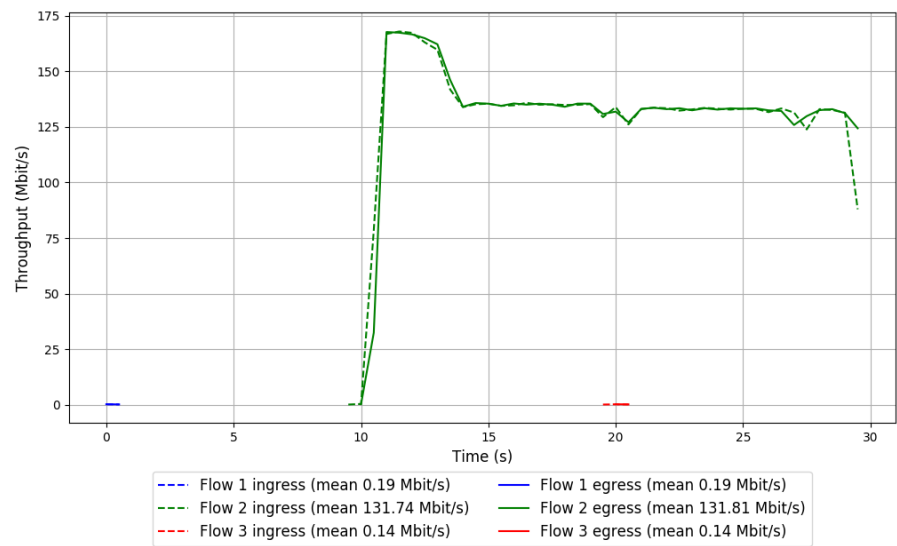
-- Flow 3:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 136.973 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-08-21 13:43:41

End at: 2017-08-21 13:44:12

Below is generated by plot.py at 2017-08-21 16:26:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.80 Mbit/s

95th percentile per-packet one-way delay: 137.602 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 137.686 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 137.302 ms

Loss rate: 0.00%

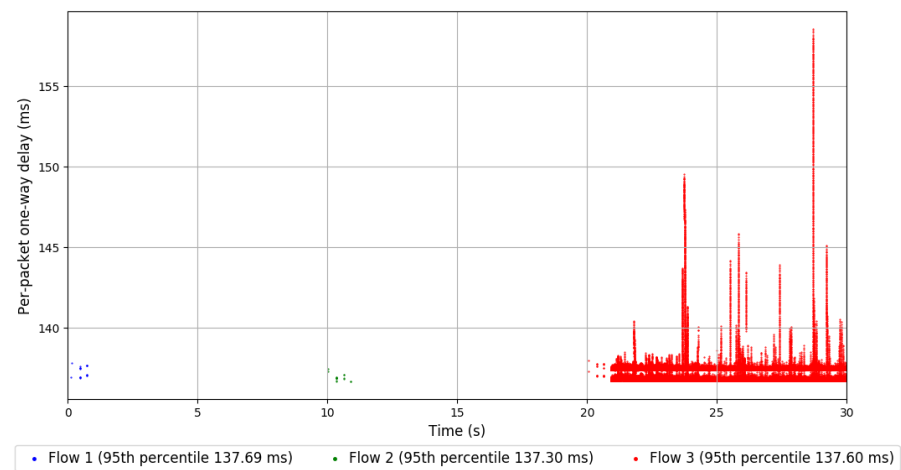
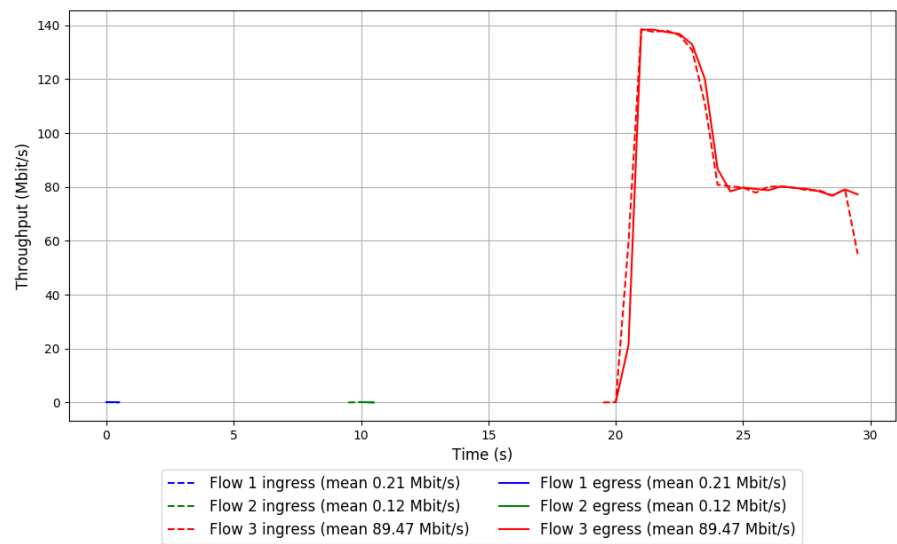
-- Flow 3:

Average throughput: 89.47 Mbit/s

95th percentile per-packet one-way delay: 137.602 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-08-21 13:57:09

End at: 2017-08-21 13:57:39

Below is generated by plot.py at 2017-08-21 16:27:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.68 Mbit/s

95th percentile per-packet one-way delay: 137.454 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 77.42 Mbit/s

95th percentile per-packet one-way delay: 136.847 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.19 Mbit/s

95th percentile per-packet one-way delay: 136.777 ms

Loss rate: 0.00%

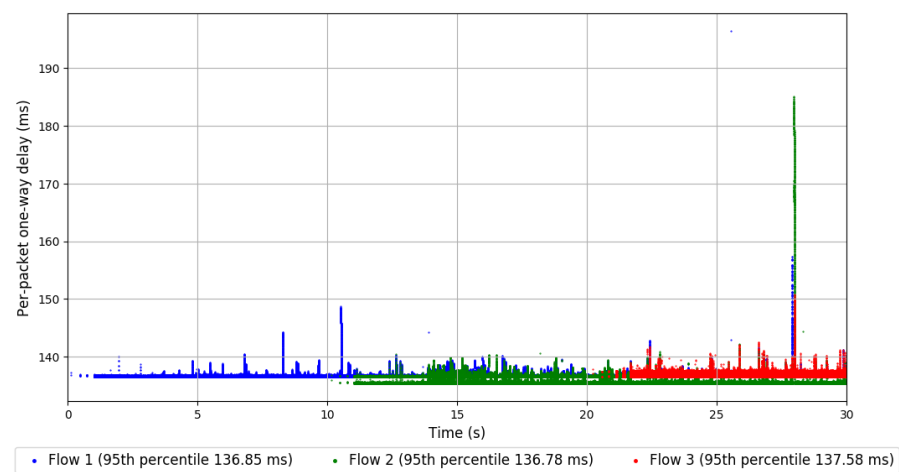
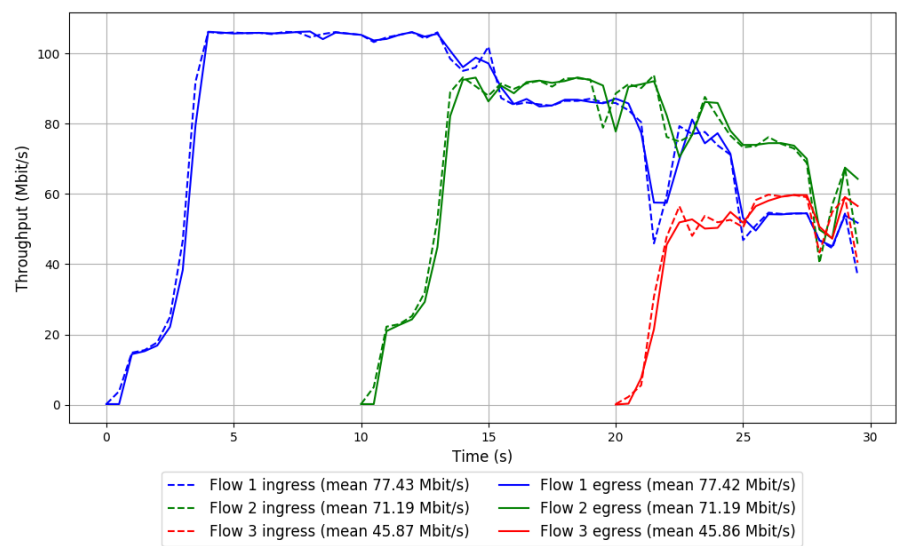
-- Flow 3:

Average throughput: 45.86 Mbit/s

95th percentile per-packet one-way delay: 137.579 ms

Loss rate: 0.01%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-08-21 14:10:46

End at: 2017-08-21 14:11:16

Below is generated by plot.py at 2017-08-21 16:27:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.03 Mbit/s

95th percentile per-packet one-way delay: 136.736 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 100.02 Mbit/s

95th percentile per-packet one-way delay: 136.736 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 136.799 ms

Loss rate: 0.00%

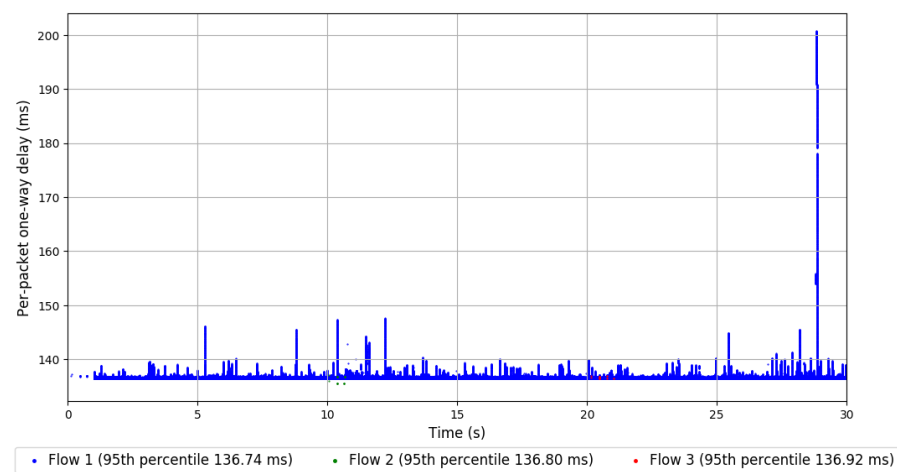
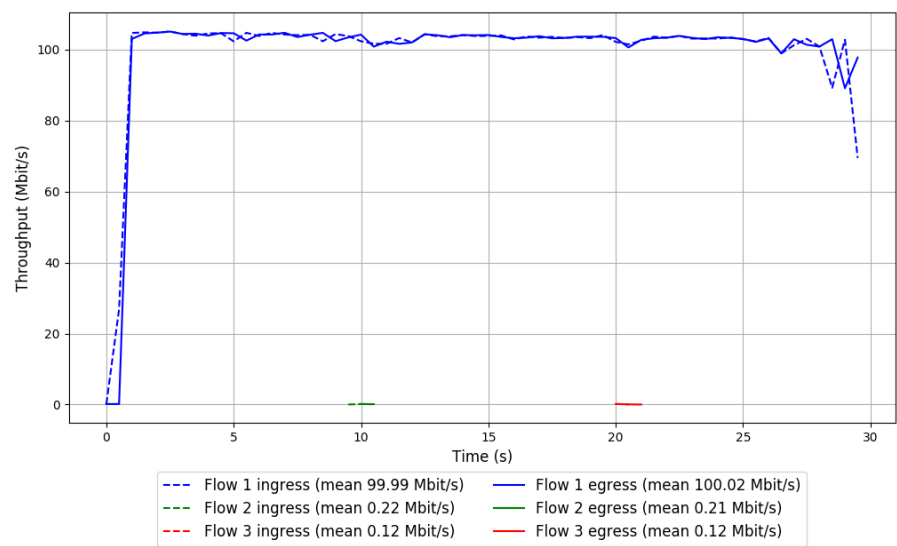
-- Flow 3:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 136.918 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-08-21 14:24:10

End at: 2017-08-21 14:24:40

Below is generated by plot.py at 2017-08-21 16:28:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.34 Mbit/s

95th percentile per-packet one-way delay: 137.549 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 136.859 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 89.76 Mbit/s

95th percentile per-packet one-way delay: 136.897 ms

Loss rate: 0.00%

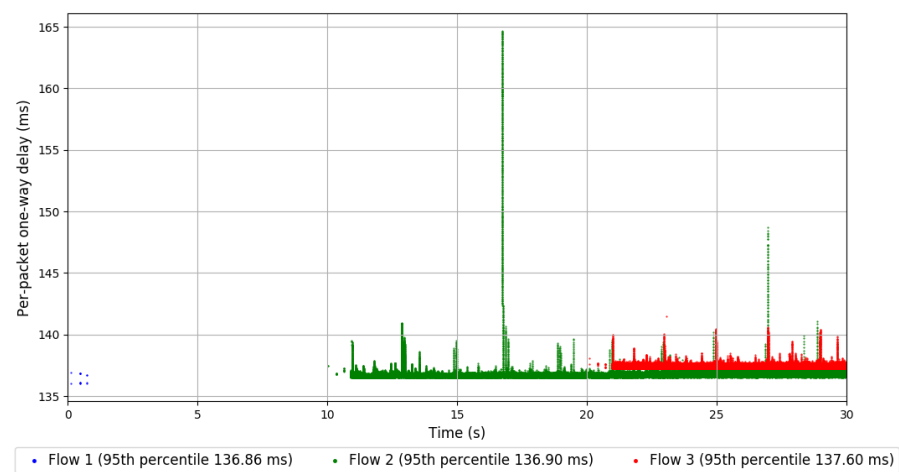
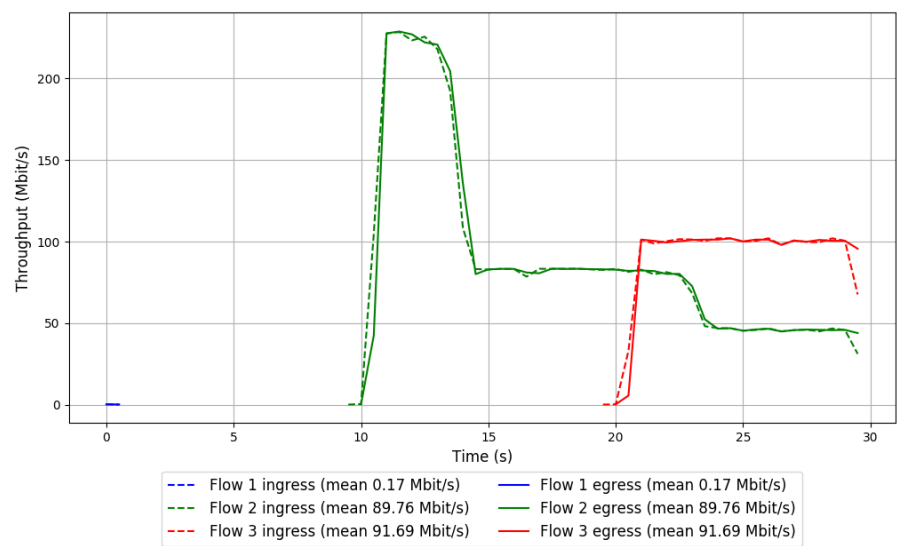
-- Flow 3:

Average throughput: 91.69 Mbit/s

95th percentile per-packet one-way delay: 137.597 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-08-21 14:37:28

End at: 2017-08-21 14:37:58

Below is generated by plot.py at 2017-08-21 16:28:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.44 Mbit/s

95th percentile per-packet one-way delay: 137.604 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 101.66 Mbit/s

95th percentile per-packet one-way delay: 137.605 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 52.86 Mbit/s

95th percentile per-packet one-way delay: 137.603 ms

Loss rate: 0.36%

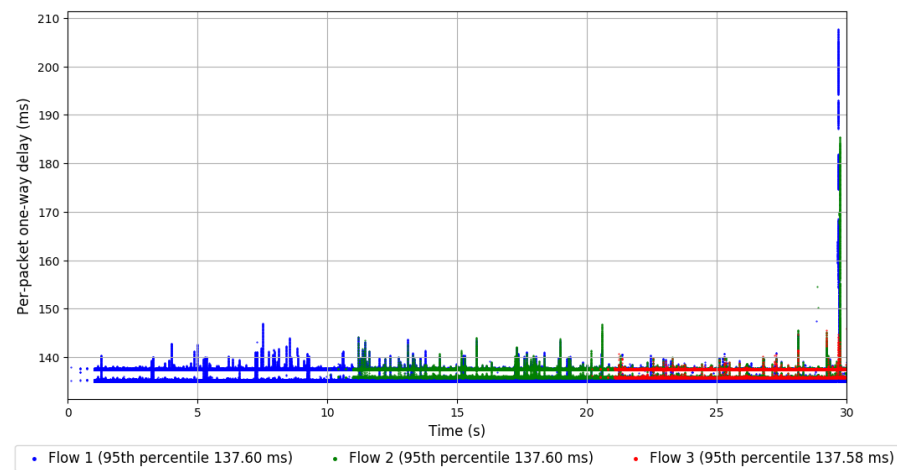
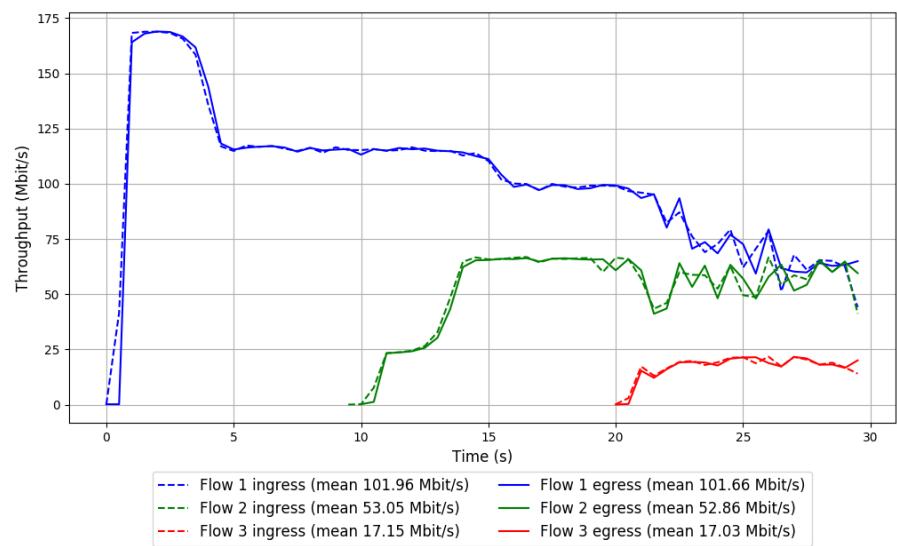
-- Flow 3:

Average throughput: 17.03 Mbit/s

95th percentile per-packet one-way delay: 137.578 ms

Loss rate: 0.64%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-08-21 14:50:41

End at: 2017-08-21 14:51:11

Below is generated by plot.py at 2017-08-21 16:29:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.04 Mbit/s

95th percentile per-packet one-way delay: 137.617 ms

Loss rate: 5.12%

-- Flow 1:

Average throughput: 82.83 Mbit/s

95th percentile per-packet one-way delay: 137.580 ms

Loss rate: 4.65%

-- Flow 2:

Average throughput: 69.59 Mbit/s

95th percentile per-packet one-way delay: 137.621 ms

Loss rate: 7.95%

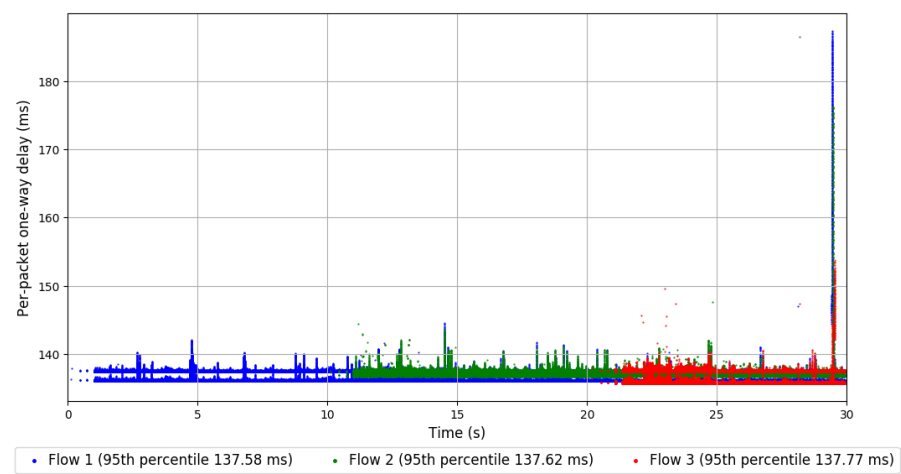
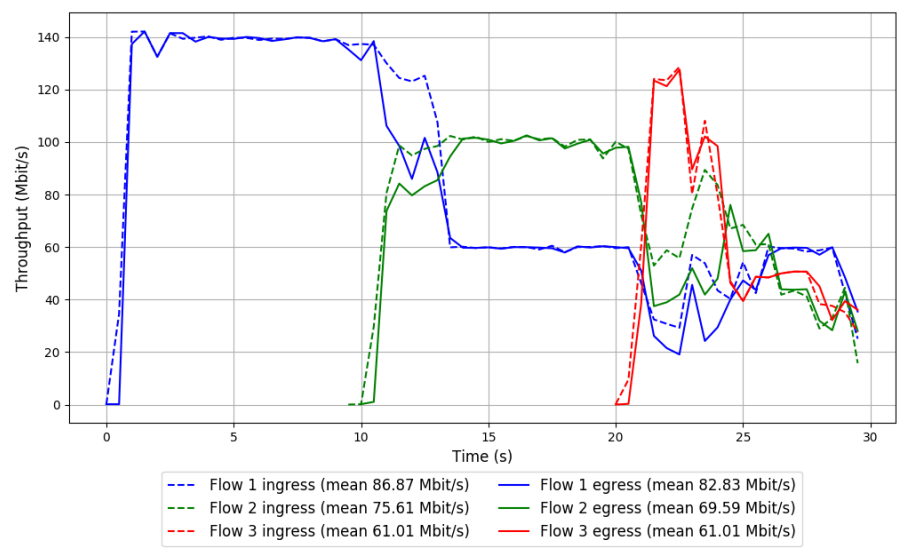
-- Flow 3:

Average throughput: 61.01 Mbit/s

95th percentile per-packet one-way delay: 137.774 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-08-21 15:04:08

End at: 2017-08-21 15:04:38

Below is generated by plot.py at 2017-08-21 16:29:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 166.70 Mbit/s

95th percentile per-packet one-way delay: 186.577 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 119.34 Mbit/s

95th percentile per-packet one-way delay: 188.276 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 63.24 Mbit/s

95th percentile per-packet one-way delay: 136.607 ms

Loss rate: 0.01%

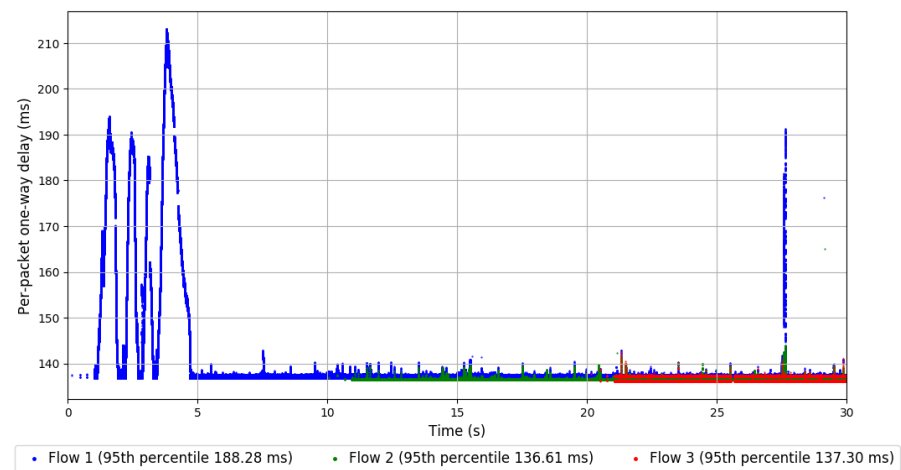
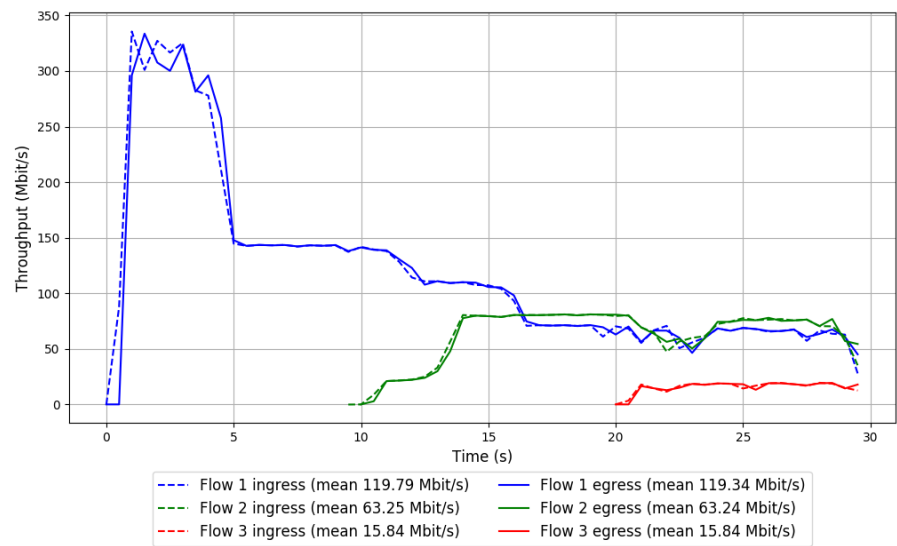
-- Flow 3:

Average throughput: 15.84 Mbit/s

95th percentile per-packet one-way delay: 137.296 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-08-21 15:17:57

End at: 2017-08-21 15:18:27

Below is generated by plot.py at 2017-08-21 16:29:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.96 Mbit/s

95th percentile per-packet one-way delay: 137.069 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 87.94 Mbit/s

95th percentile per-packet one-way delay: 136.593 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.62 Mbit/s

95th percentile per-packet one-way delay: 137.197 ms

Loss rate: 0.00%

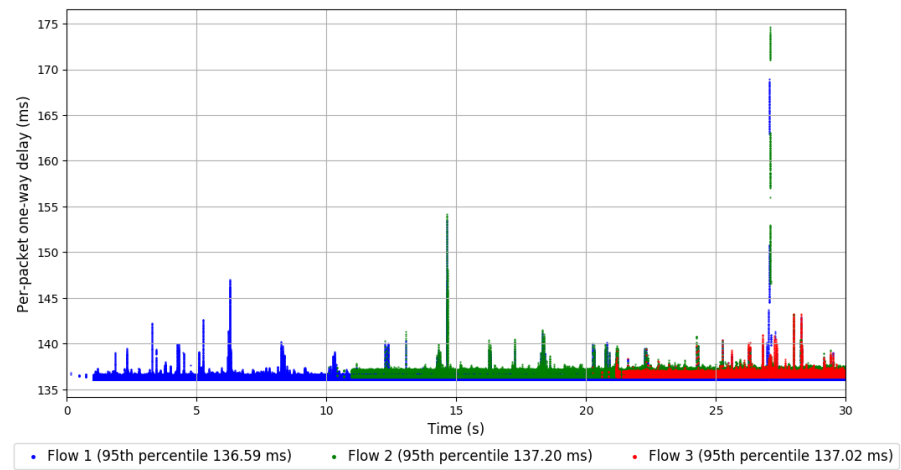
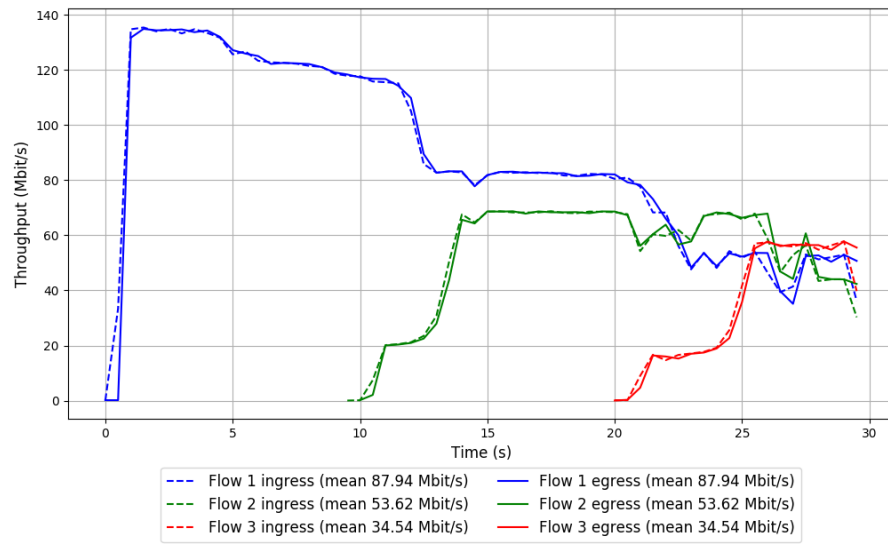
-- Flow 3:

Average throughput: 34.54 Mbit/s

95th percentile per-packet one-way delay: 137.016 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

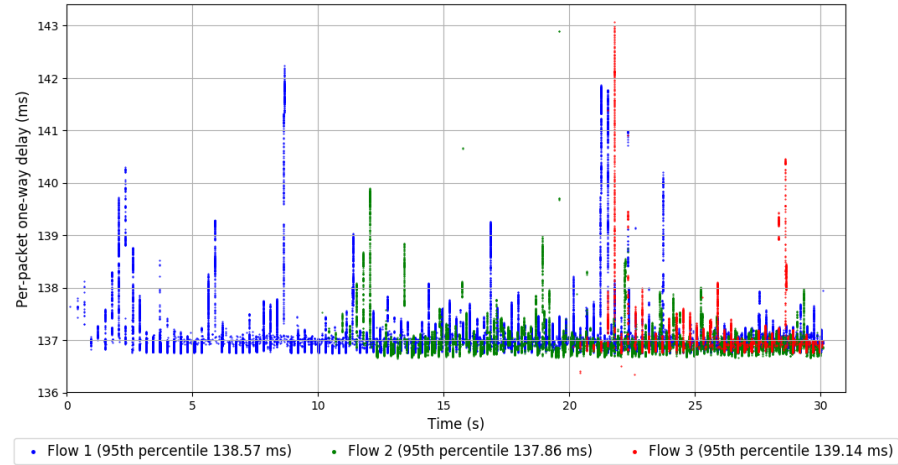
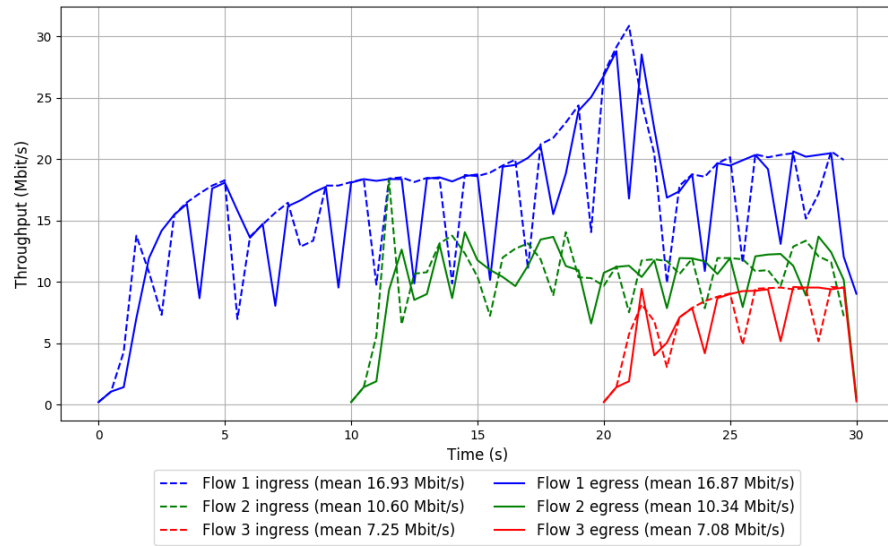


```
Run 1: Statistics of TCP Cubic

Start at: 2017-08-21 13:24:55
End at: 2017-08-21 13:25:25

# Below is generated by plot.py at 2017-08-21 16:29:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.09 Mbit/s
95th percentile per-packet one-way delay: 138.370 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 16.87 Mbit/s
95th percentile per-packet one-way delay: 138.573 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 10.34 Mbit/s
95th percentile per-packet one-way delay: 137.859 ms
Loss rate: 2.44%
-- Flow 3:
Average throughput: 7.08 Mbit/s
95th percentile per-packet one-way delay: 139.144 ms
Loss rate: 2.33%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-08-21 13:38:27

End at: 2017-08-21 13:38:57

Below is generated by plot.py at 2017-08-21 16:29:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.45 Mbit/s

95th percentile per-packet one-way delay: 137.704 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 22.20 Mbit/s

95th percentile per-packet one-way delay: 137.796 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 9.92 Mbit/s

95th percentile per-packet one-way delay: 137.348 ms

Loss rate: 0.75%

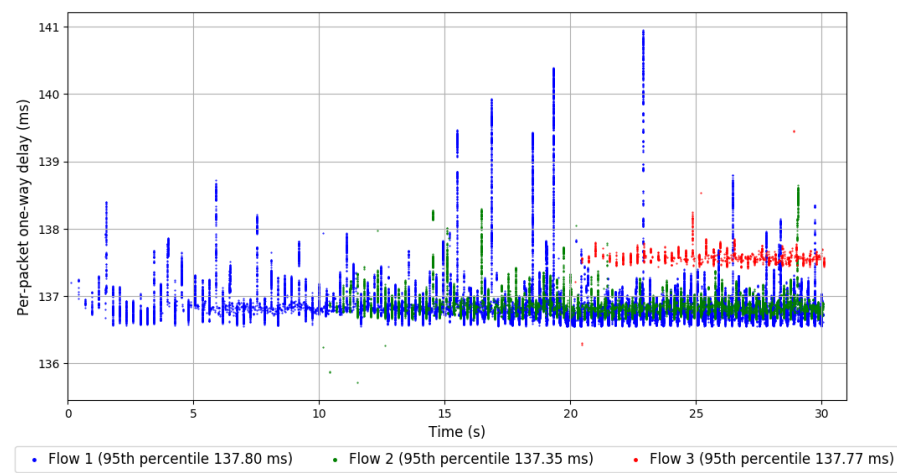
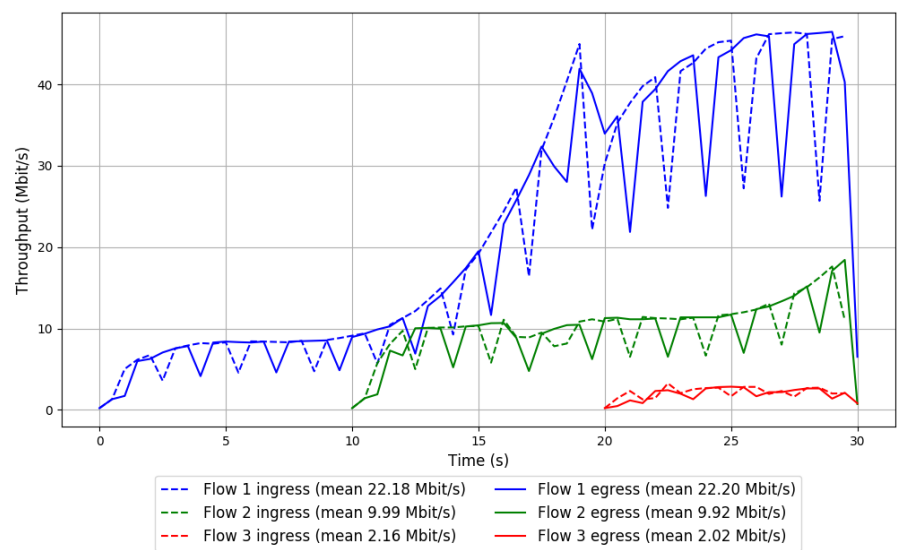
-- Flow 3:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 137.768 ms

Loss rate: 6.62%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-08-21 13:52:00

End at: 2017-08-21 13:52:30

Below is generated by plot.py at 2017-08-21 16:29:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.66 Mbit/s

95th percentile per-packet one-way delay: 137.714 ms

Loss rate: 2.32%

-- Flow 1:

Average throughput: 5.67 Mbit/s

95th percentile per-packet one-way delay: 137.830 ms

Loss rate: 1.79%

-- Flow 2:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 137.526 ms

Loss rate: 4.38%

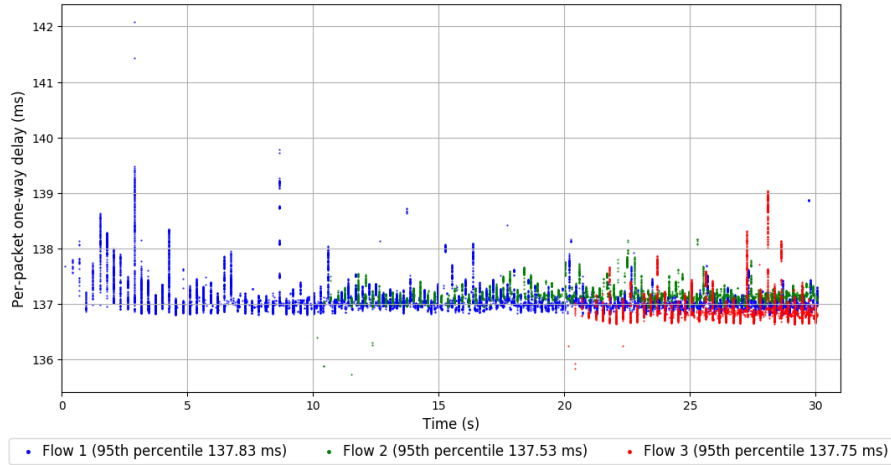
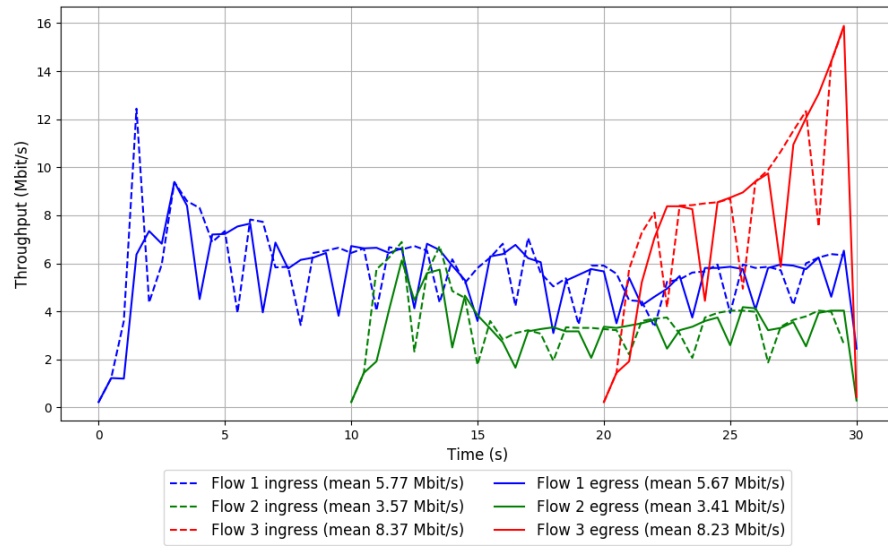
-- Flow 3:

Average throughput: 8.23 Mbit/s

95th percentile per-packet one-way delay: 137.754 ms

Loss rate: 1.66%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-08-21 14:05:24

End at: 2017-08-21 14:05:54

Below is generated by plot.py at 2017-08-21 16:29:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.40 Mbit/s

95th percentile per-packet one-way delay: 137.606 ms

Loss rate: 2.01%

-- Flow 1:

Average throughput: 17.54 Mbit/s

95th percentile per-packet one-way delay: 137.637 ms

Loss rate: 1.89%

-- Flow 2:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 137.175 ms

Loss rate: 1.74%

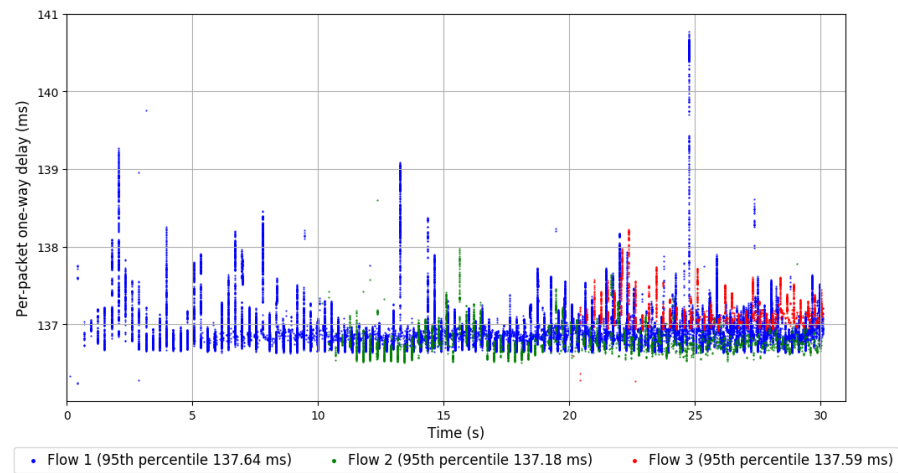
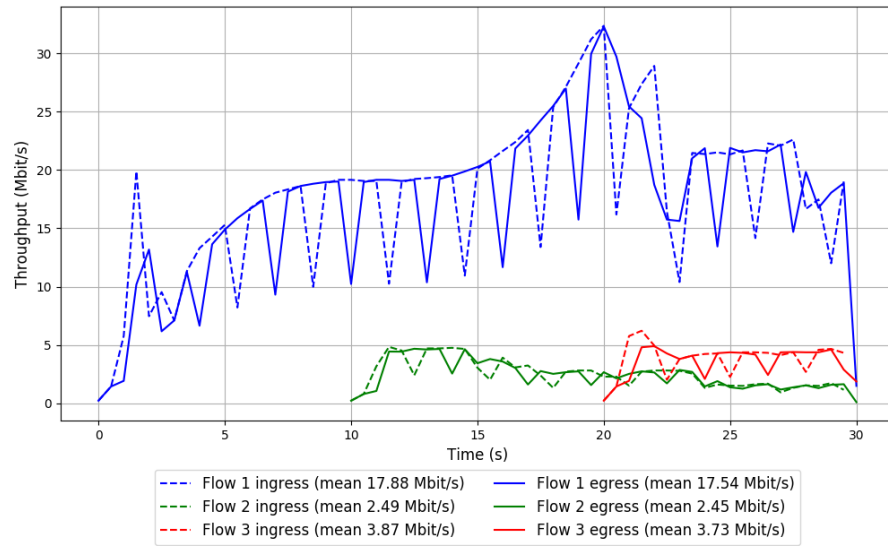
-- Flow 3:

Average throughput: 3.73 Mbit/s

95th percentile per-packet one-way delay: 137.594 ms

Loss rate: 3.99%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-08-21 14:18:51

End at: 2017-08-21 14:19:21

Below is generated by plot.py at 2017-08-21 16:30:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.98 Mbit/s

95th percentile per-packet one-way delay: 139.653 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 4.34 Mbit/s

95th percentile per-packet one-way delay: 137.683 ms

Loss rate: 1.67%

-- Flow 2:

Average throughput: 33.37 Mbit/s

95th percentile per-packet one-way delay: 140.641 ms

Loss rate: 0.38%

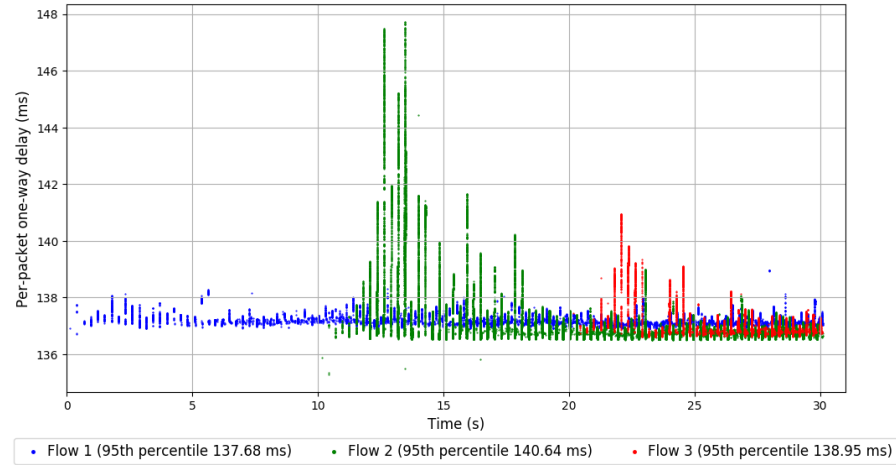
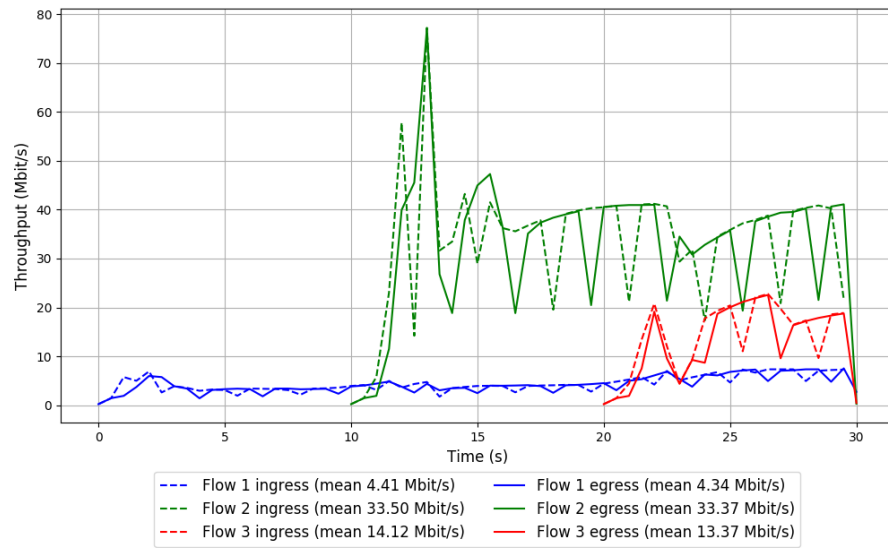
-- Flow 3:

Average throughput: 13.37 Mbit/s

95th percentile per-packet one-way delay: 138.948 ms

Loss rate: 5.36%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-08-21 14:32:10

End at: 2017-08-21 14:32:40

Below is generated by plot.py at 2017-08-21 16:30:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 137.614 ms

Loss rate: 3.26%

-- Flow 1:

Average throughput: 3.51 Mbit/s

95th percentile per-packet one-way delay: 137.475 ms

Loss rate: 2.02%

-- Flow 2:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 137.301 ms

Loss rate: 3.58%

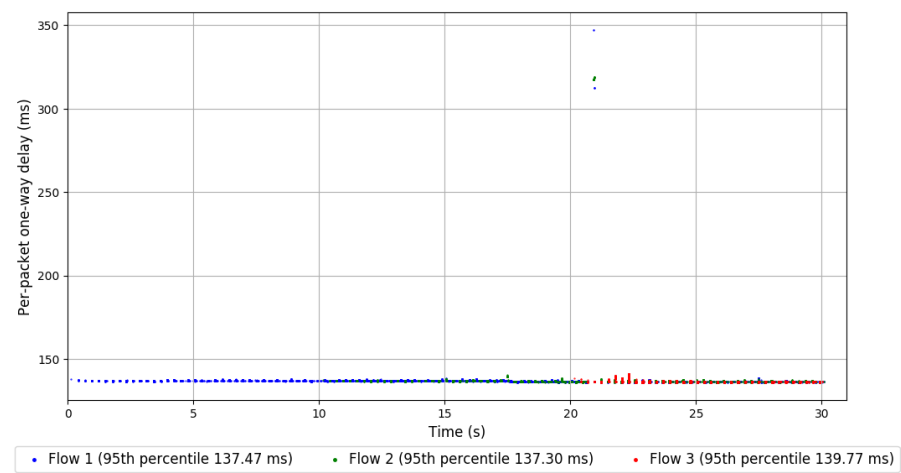
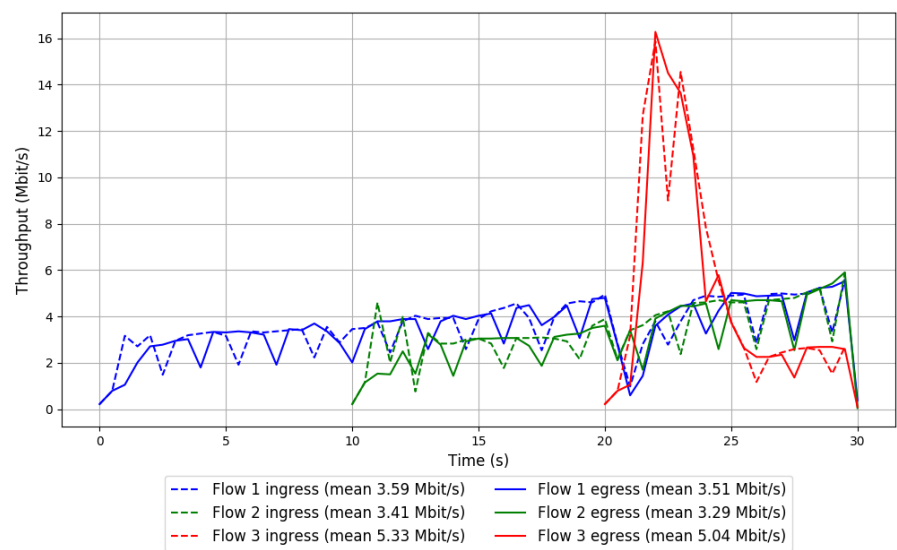
-- Flow 3:

Average throughput: 5.04 Mbit/s

95th percentile per-packet one-way delay: 139.769 ms

Loss rate: 5.36%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-08-21 14:45:31

End at: 2017-08-21 14:46:01

Below is generated by plot.py at 2017-08-21 16:30:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.68 Mbit/s

95th percentile per-packet one-way delay: 138.050 ms

Loss rate: 4.27%

-- Flow 1:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 138.007 ms

Loss rate: 3.32%

-- Flow 2:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 138.044 ms

Loss rate: 3.61%

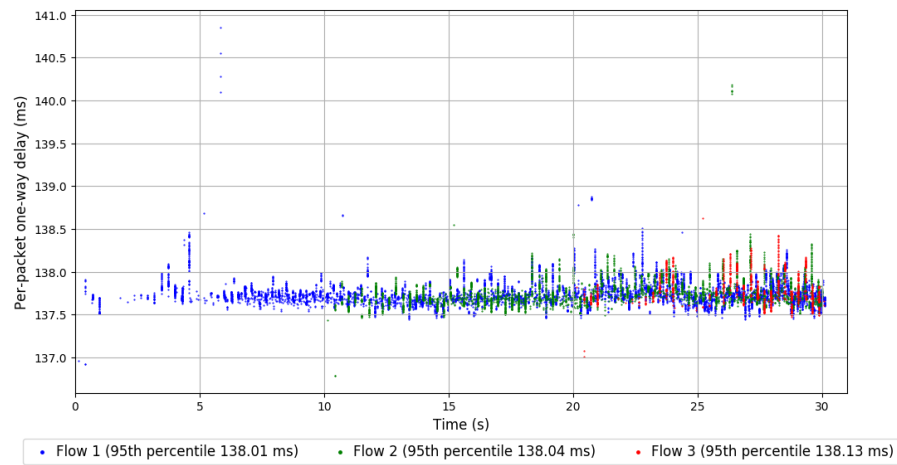
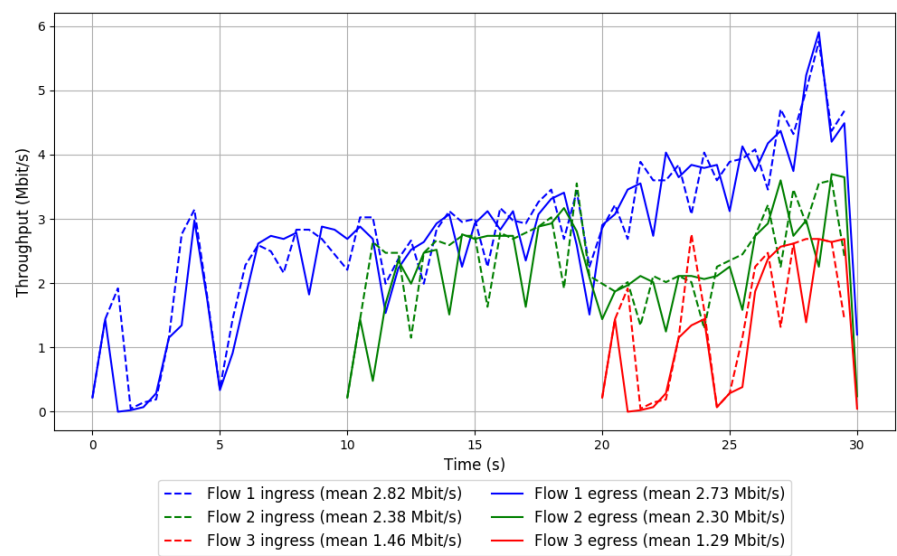
-- Flow 3:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 138.130 ms

Loss rate: 11.96%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-08-21 14:58:57

End at: 2017-08-21 14:59:27

Below is generated by plot.py at 2017-08-21 16:30:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 32.14 Mbit/s

95th percentile per-packet one-way delay: 141.189 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 3.21 Mbit/s

95th percentile per-packet one-way delay: 138.170 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 42.11 Mbit/s

95th percentile per-packet one-way delay: 141.905 ms

Loss rate: 0.76%

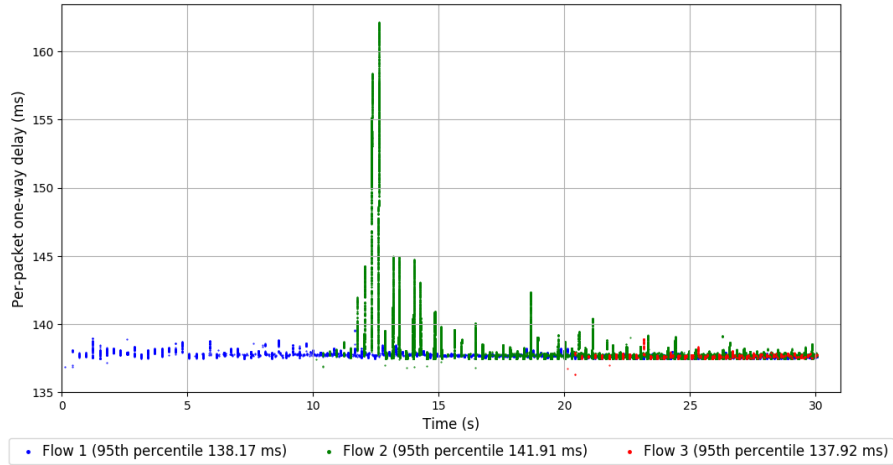
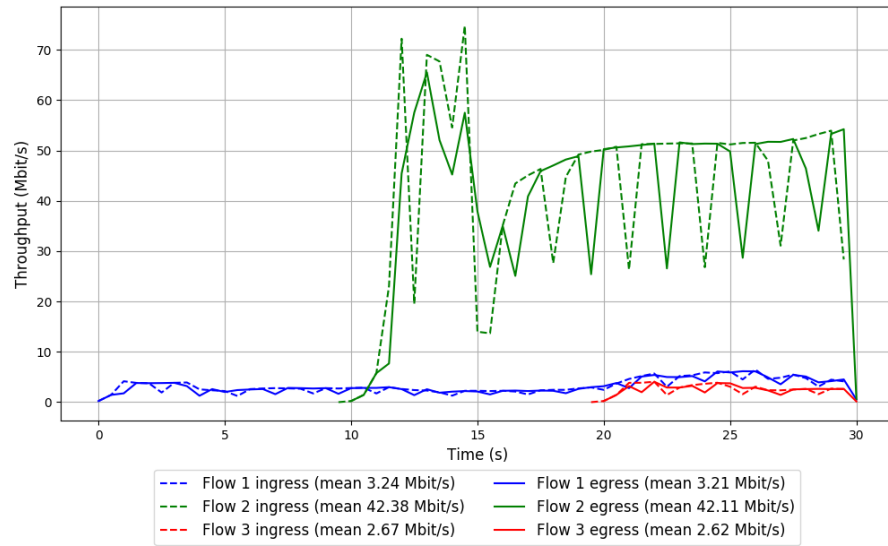
-- Flow 3:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 137.924 ms

Loss rate: 2.08%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-08-21 15:12:34

End at: 2017-08-21 15:13:04

Below is generated by plot.py at 2017-08-21 16:30:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.36 Mbit/s

95th percentile per-packet one-way delay: 137.350 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 11.56 Mbit/s

95th percentile per-packet one-way delay: 137.379 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 137.351 ms

Loss rate: 2.01%

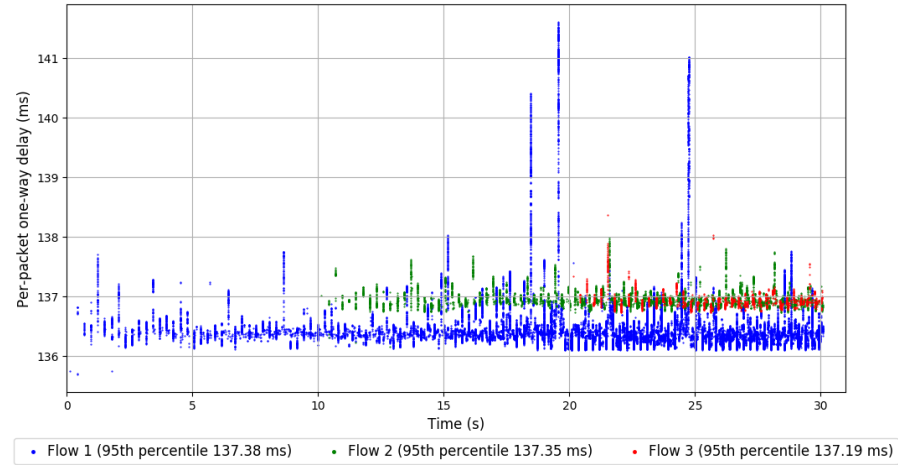
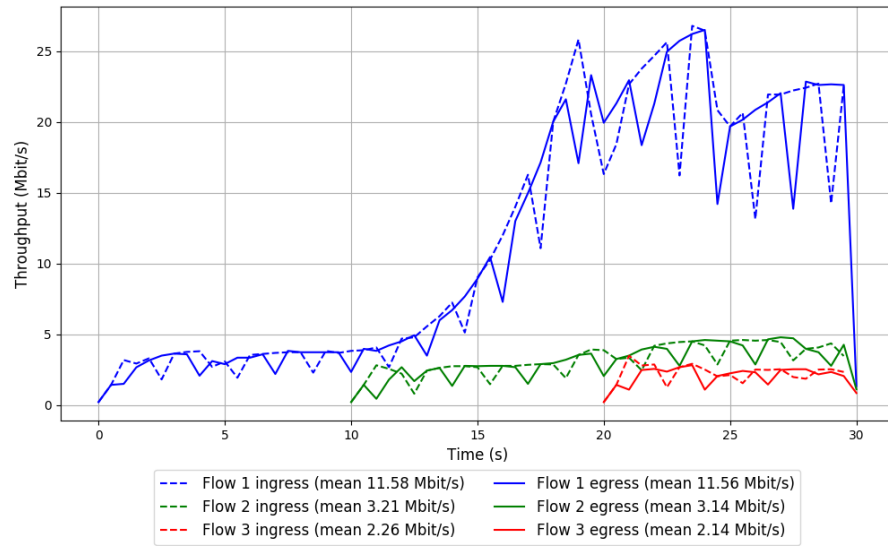
-- Flow 3:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 137.188 ms

Loss rate: 5.41%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-08-21 15:26:20

End at: 2017-08-21 15:26:50

Below is generated by plot.py at 2017-08-21 16:30:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.46 Mbit/s

95th percentile per-packet one-way delay: 137.433 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 9.13 Mbit/s

95th percentile per-packet one-way delay: 137.279 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 26.33 Mbit/s

95th percentile per-packet one-way delay: 137.539 ms

Loss rate: 0.77%

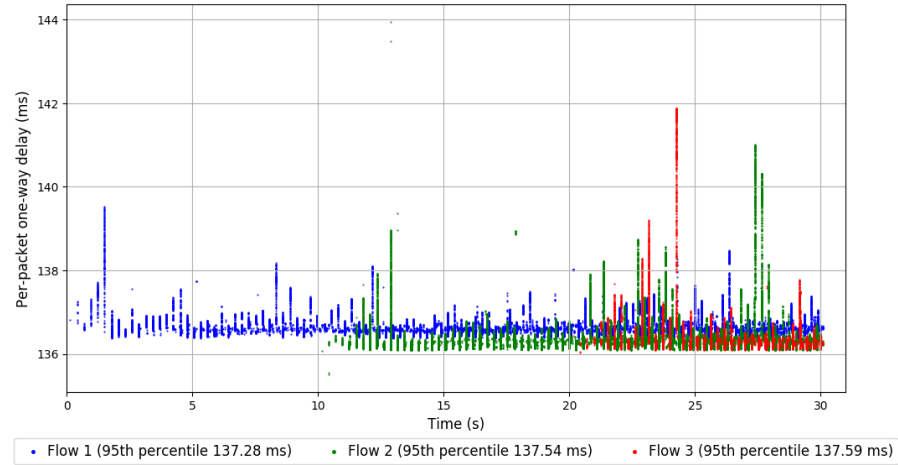
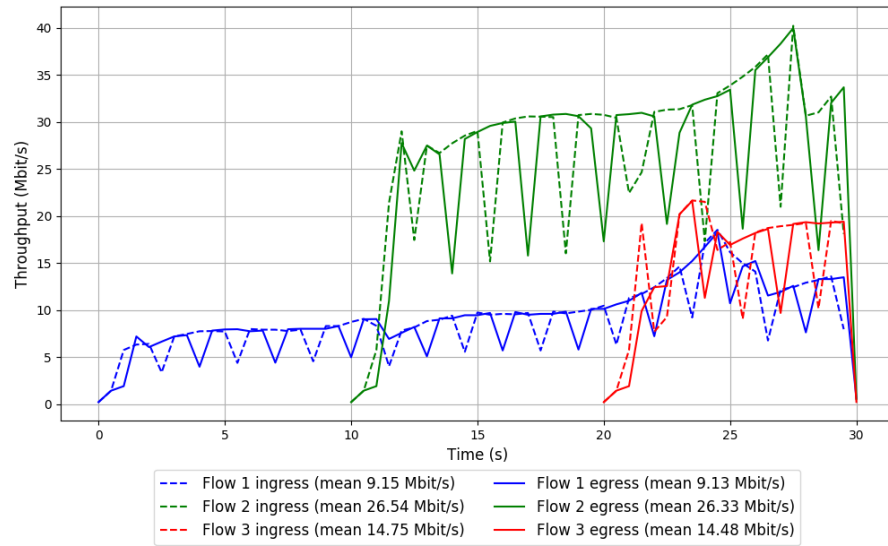
-- Flow 3:

Average throughput: 14.48 Mbit/s

95th percentile per-packet one-way delay: 137.591 ms

Loss rate: 1.77%

Run 10: Report of TCP Cubic — Data Link

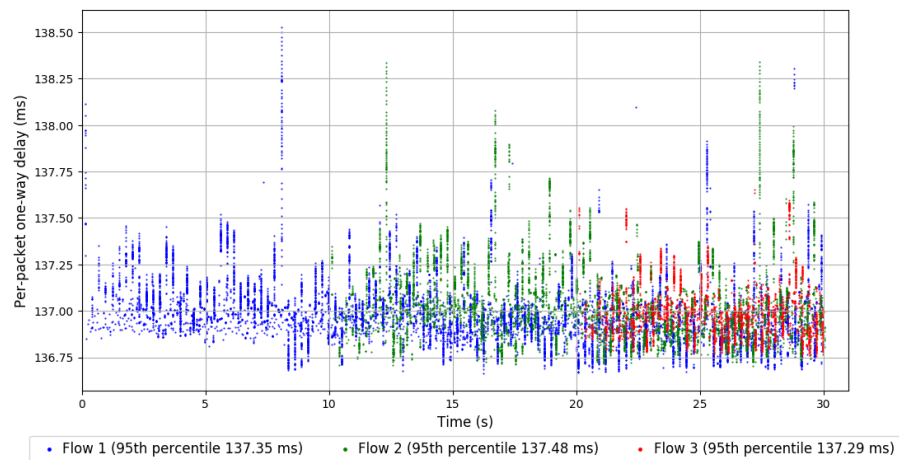
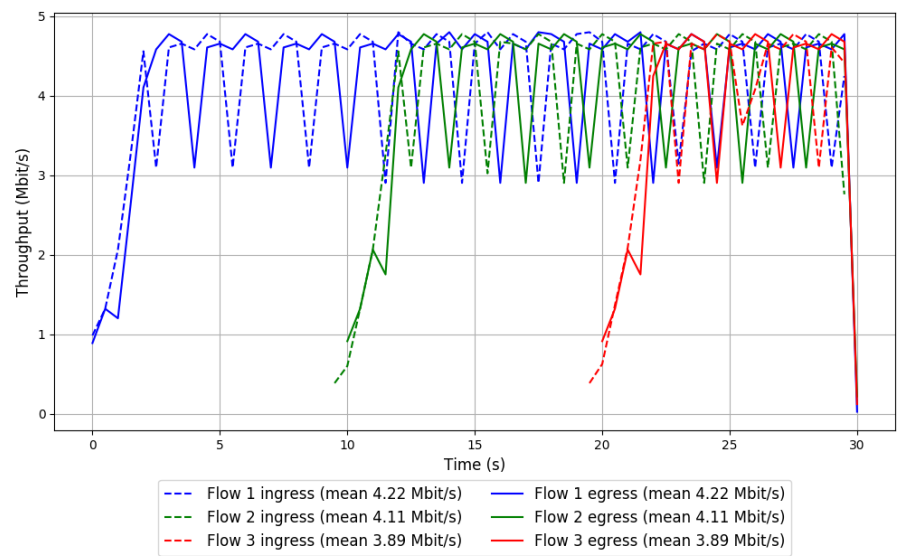


```
Run 1: Statistics of KohoCC

Start at: 2017-08-21 13:15:27
End at: 2017-08-21 13:15:57

# Below is generated by plot.py at 2017-08-21 16:30:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 137.401 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 137.351 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 137.480 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.89 Mbit/s
95th percentile per-packet one-way delay: 137.292 ms
Loss rate: 0.00%
```

Run 1: Report of KohoCC — Data Link

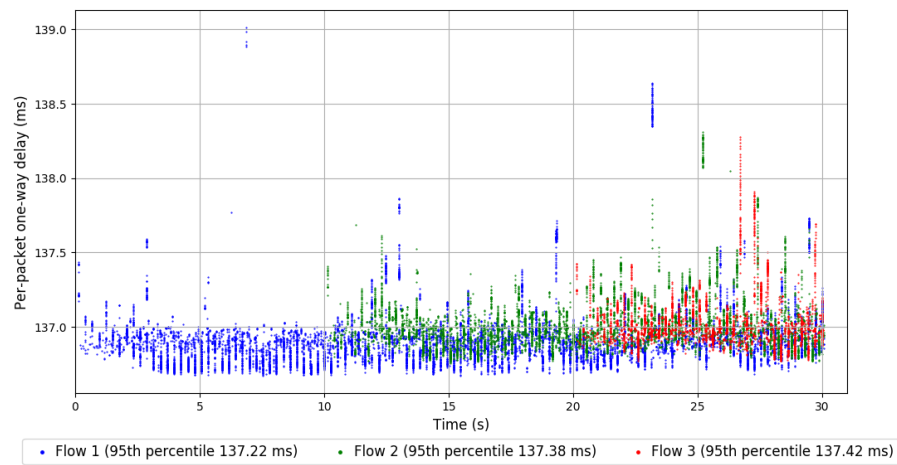
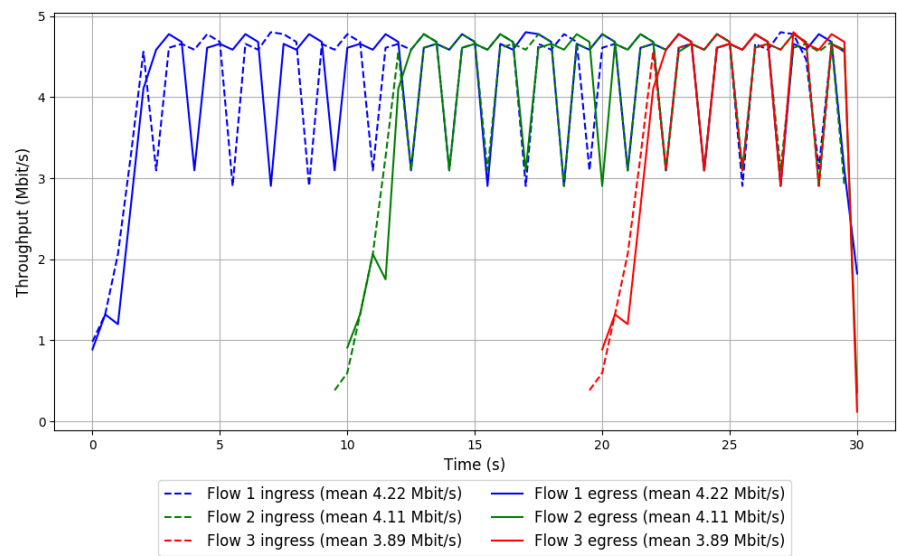


```
Run 2: Statistics of KohoCC

Start at: 2017-08-21 13:29:13
End at: 2017-08-21 13:29:43

# Below is generated by plot.py at 2017-08-21 16:30:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.24 Mbit/s
95th percentile per-packet one-way delay: 137.334 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 137.222 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.11 Mbit/s
95th percentile per-packet one-way delay: 137.375 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 3.89 Mbit/s
95th percentile per-packet one-way delay: 137.423 ms
Loss rate: 0.00%
```

Run 2: Report of KohoCC — Data Link



Run 3: Statistics of KohoCC

Start at: 2017-08-21 13:42:52

End at: 2017-08-21 13:43:22

Below is generated by plot.py at 2017-08-21 16:30:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 137.690 ms

Loss rate: 5.03%

-- Flow 1:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 137.425 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 137.486 ms

Loss rate: 0.25%

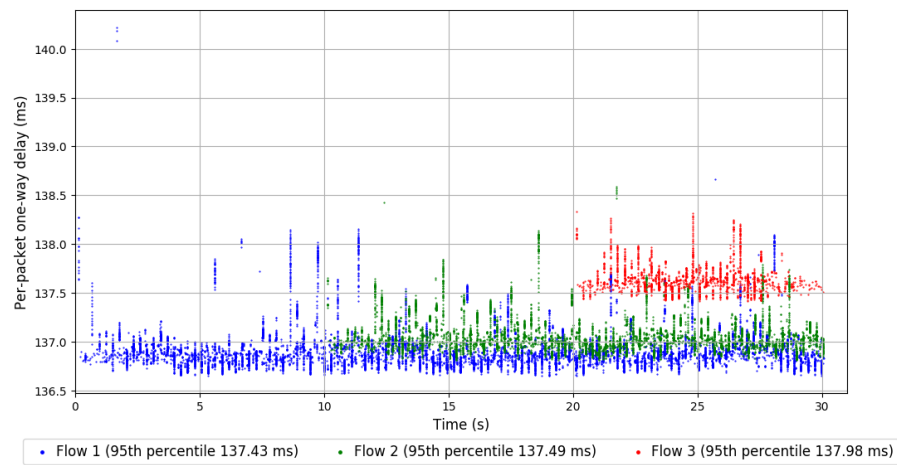
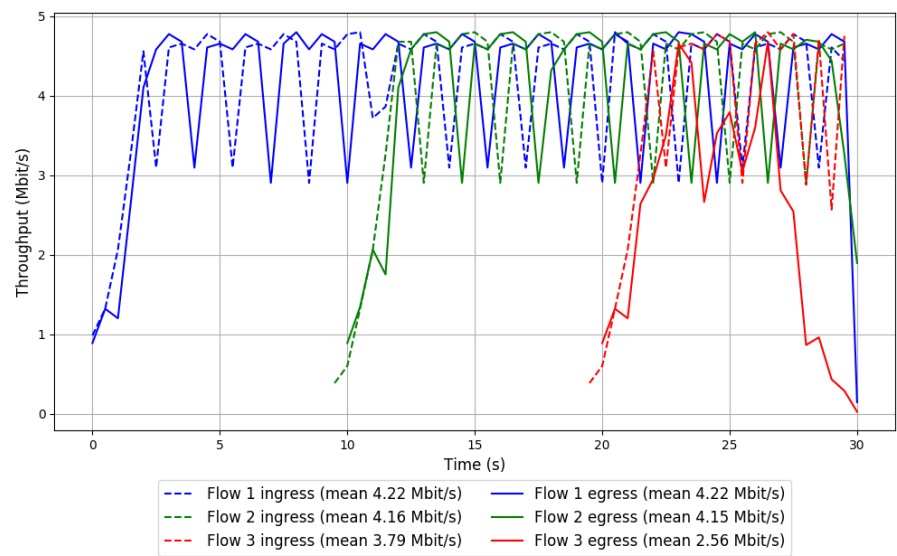
-- Flow 3:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 137.984 ms

Loss rate: 32.45%

Run 3: Report of KohoCC — Data Link



Run 4: Statistics of KohoCC

Start at: 2017-08-21 13:56:18

End at: 2017-08-21 13:56:48

Below is generated by plot.py at 2017-08-21 16:30:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 137.286 ms

Loss rate: 5.89%

-- Flow 1:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 137.345 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 3.39 Mbit/s

95th percentile per-packet one-way delay: 137.050 ms

Loss rate: 17.54%

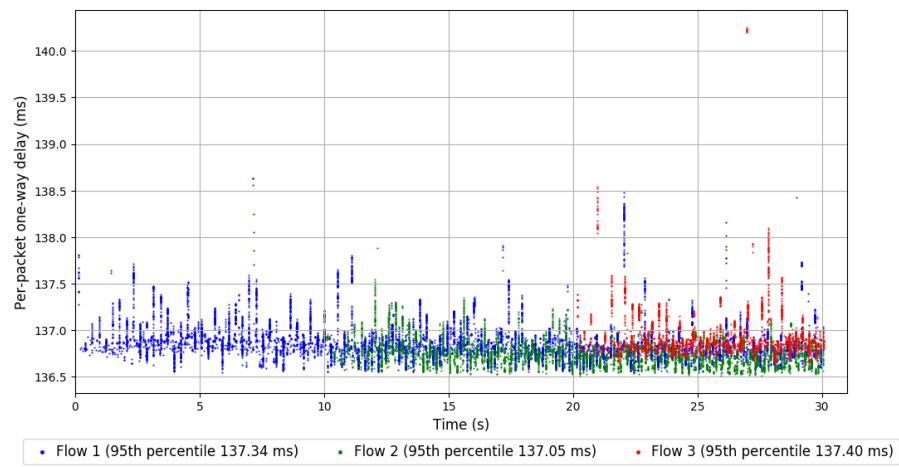
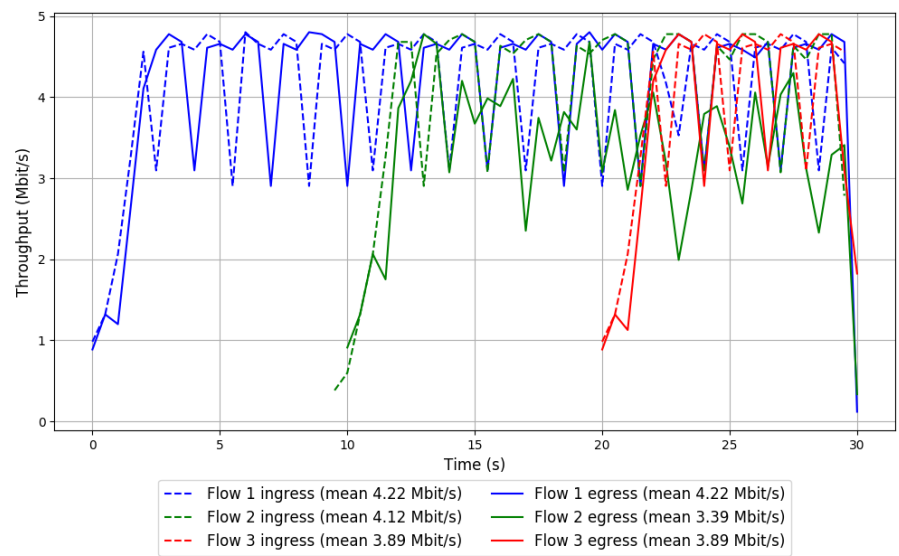
-- Flow 3:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 137.397 ms

Loss rate: 0.00%

Run 4: Report of KohoCC — Data Link



Run 5: Statistics of KohoCC

Start at: 2017-08-21 14:09:56

End at: 2017-08-21 14:10:26

Below is generated by plot.py at 2017-08-21 16:30:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.49 Mbit/s

95th percentile per-packet one-way delay: 137.359 ms

Loss rate: 8.93%

-- Flow 1:

Average throughput: 3.43 Mbit/s

95th percentile per-packet one-way delay: 137.299 ms

Loss rate: 17.60%

-- Flow 2:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 137.432 ms

Loss rate: 0.07%

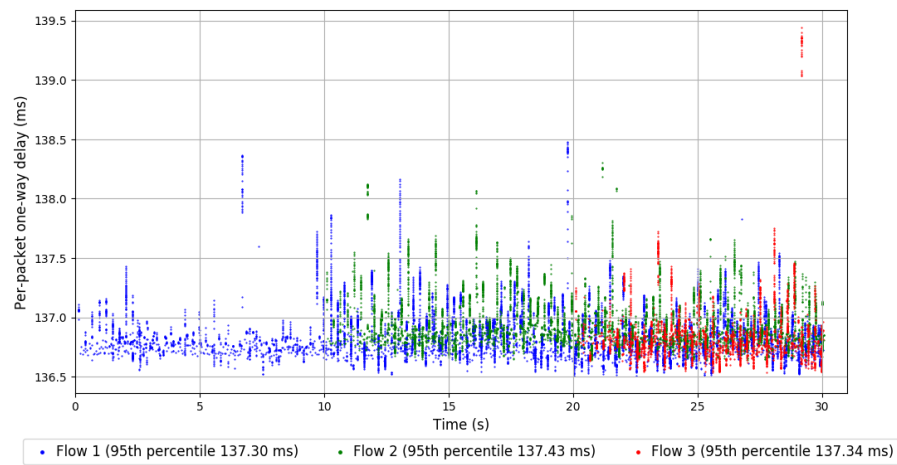
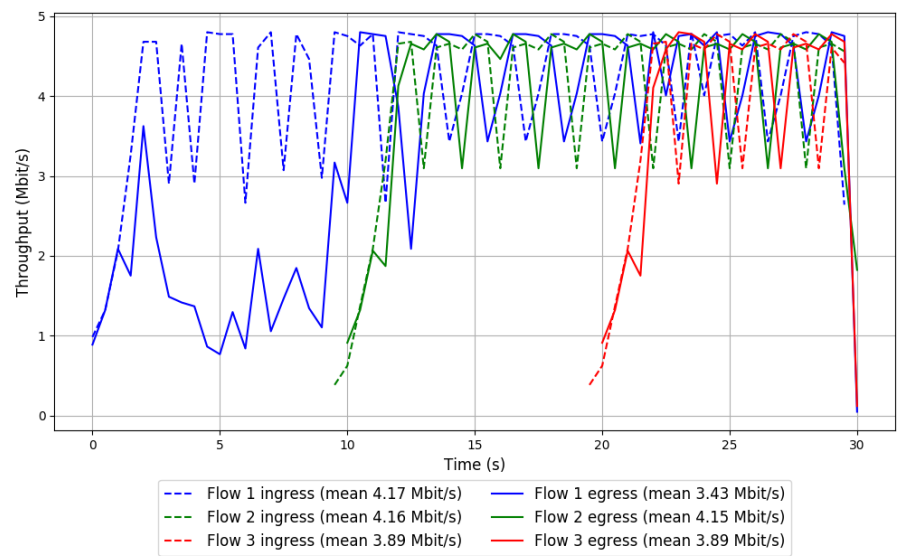
-- Flow 3:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 137.344 ms

Loss rate: 0.00%

Run 5: Report of KohoCC — Data Link



Run 6: Statistics of KohoCC

Start at: 2017-08-21 14:23:20

End at: 2017-08-21 14:23:50

Below is generated by plot.py at 2017-08-21 16:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 137.012 ms

Loss rate: 5.86%

-- Flow 1:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 137.011 ms

Loss rate: 6.66%

-- Flow 2:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 136.919 ms

Loss rate: 7.39%

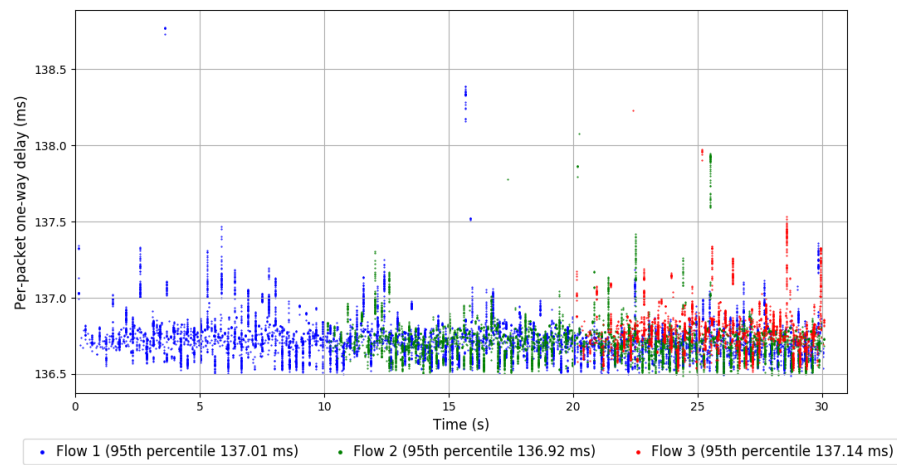
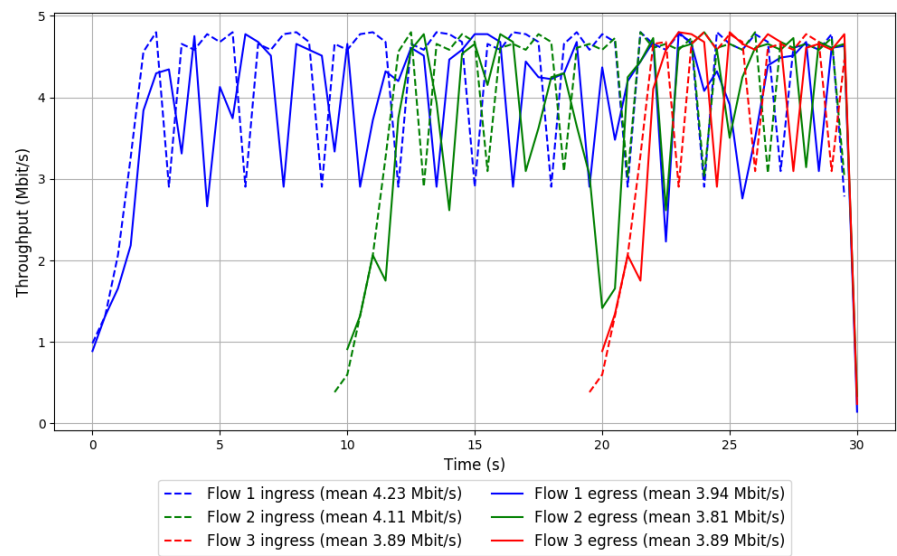
-- Flow 3:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 137.142 ms

Loss rate: 0.00%

Run 6: Report of KohoCC — Data Link



Run 7: Statistics of KohoCC

Start at: 2017-08-21 14:36:38

End at: 2017-08-21 14:37:08

Below is generated by plot.py at 2017-08-21 16:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.09 Mbit/s

95th percentile per-packet one-way delay: 138.196 ms

Loss rate: 11.96%

-- Flow 1:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 138.319 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 138.021 ms

Loss rate: 2.87%

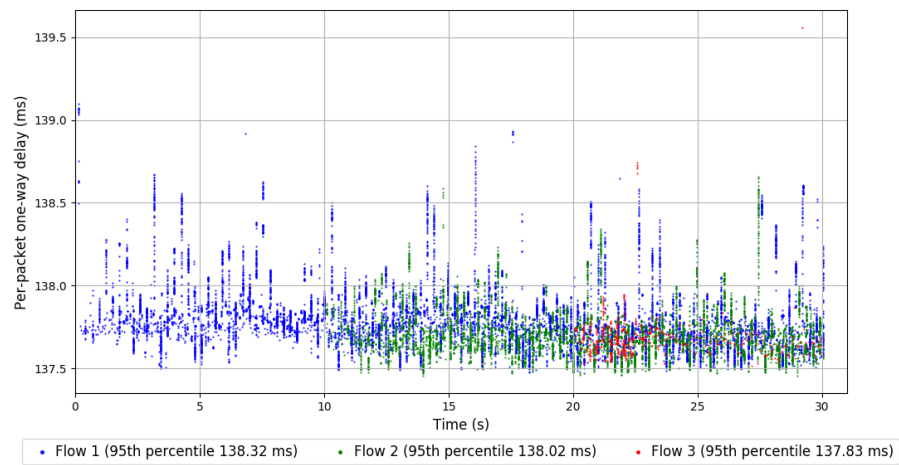
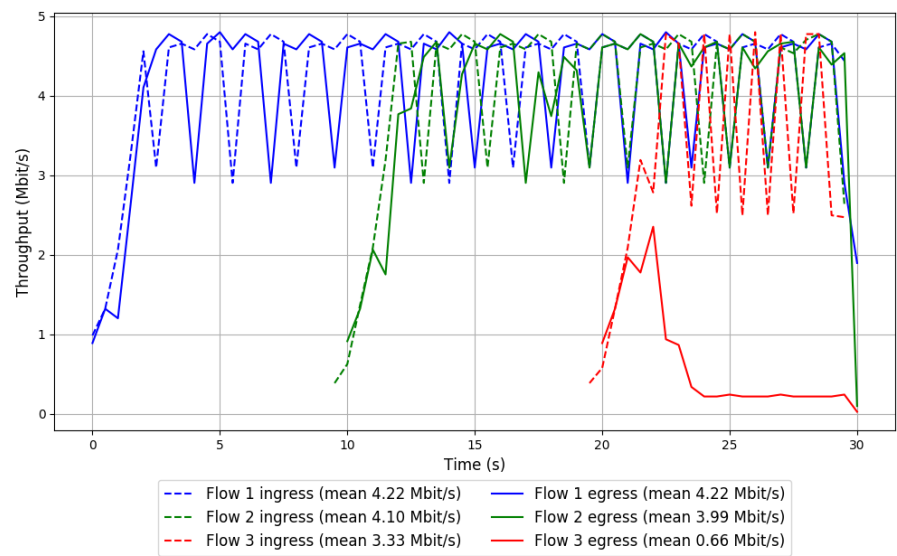
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 137.834 ms

Loss rate: 80.13%

Run 7: Report of KohoCC — Data Link



Run 8: Statistics of KohoCC

Start at: 2017-08-21 14:49:51

End at: 2017-08-21 14:50:21

Below is generated by plot.py at 2017-08-21 16:30:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 137.911 ms

Loss rate: 33.54%

-- Flow 1:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 137.907 ms

Loss rate: 9.83%

-- Flow 2:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 137.869 ms

Loss rate: 87.30%

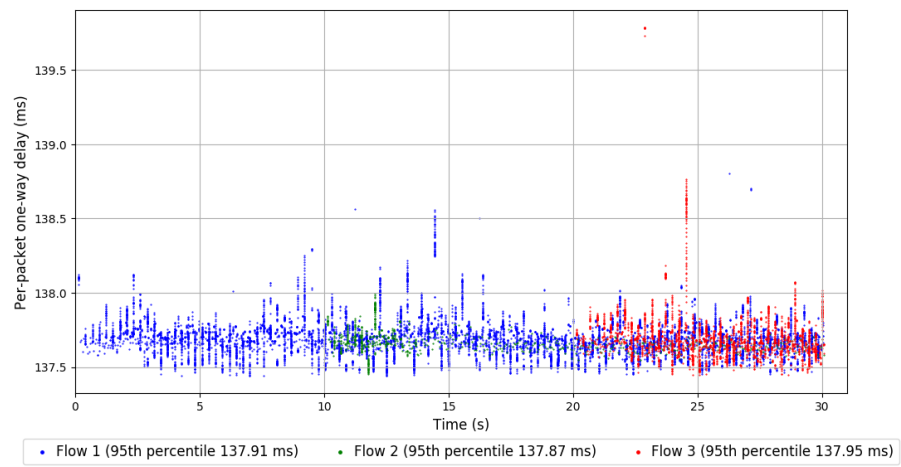
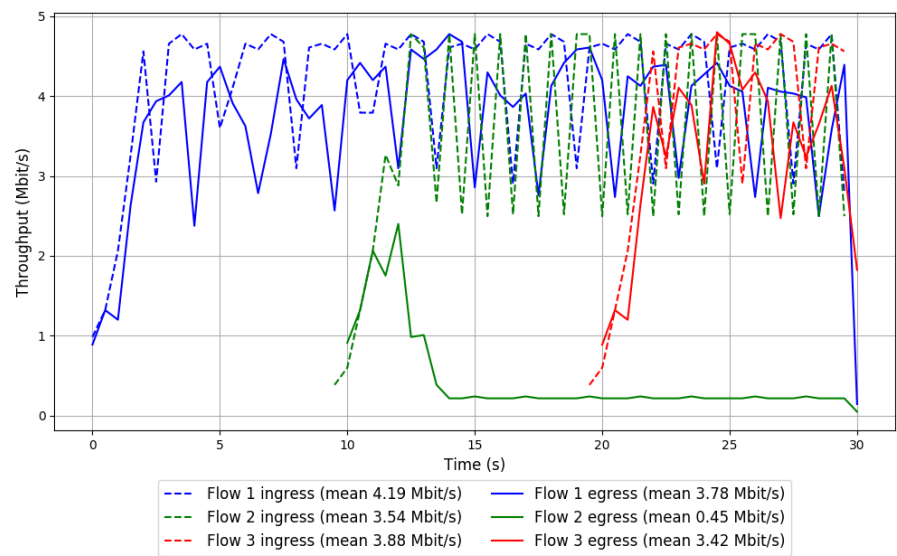
-- Flow 3:

Average throughput: 3.42 Mbit/s

95th percentile per-packet one-way delay: 137.946 ms

Loss rate: 11.95%

Run 8: Report of KohoCC — Data Link



Run 9: Statistics of KohoCC

Start at: 2017-08-21 15:03:18

End at: 2017-08-21 15:03:48

Below is generated by plot.py at 2017-08-21 16:30:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 137.394 ms

Loss rate: 5.44%

-- Flow 1:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 137.393 ms

Loss rate: 8.56%

-- Flow 2:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 137.496 ms

Loss rate: 3.20%

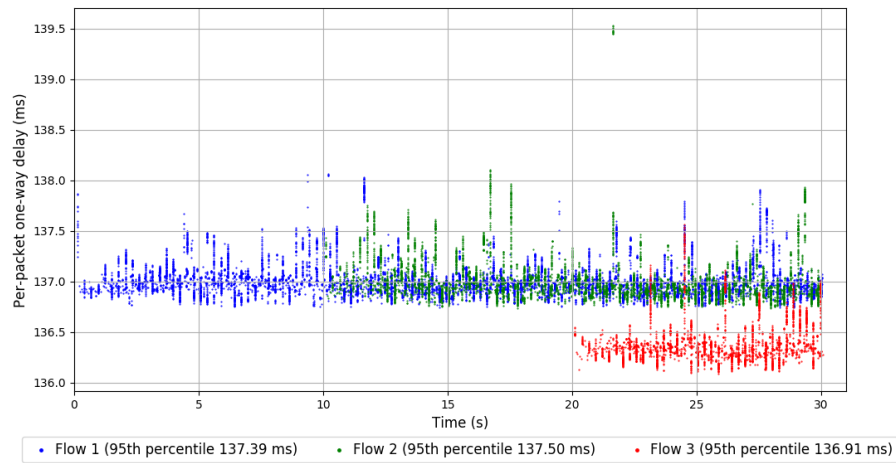
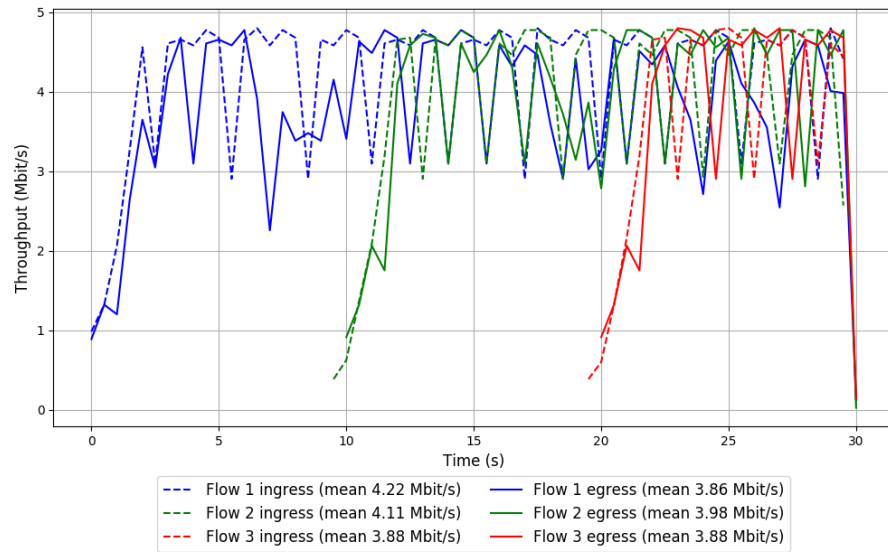
-- Flow 3:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 136.905 ms

Loss rate: 0.00%

Run 9: Report of KohoCC — Data Link

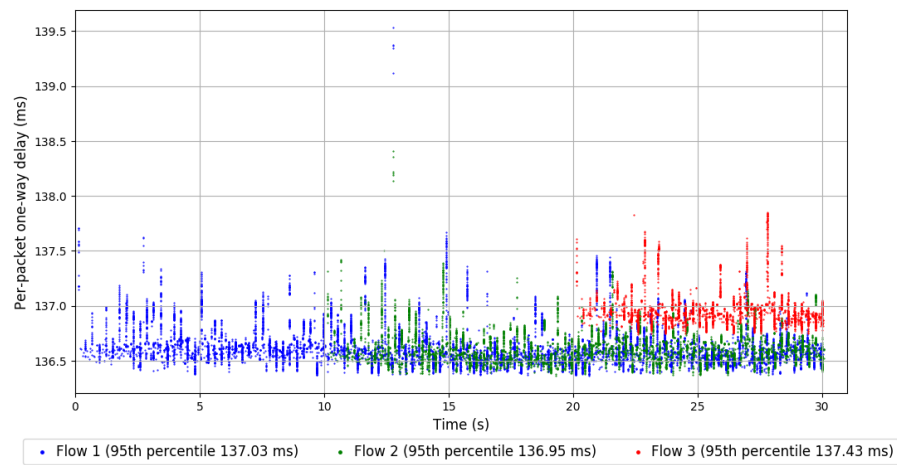
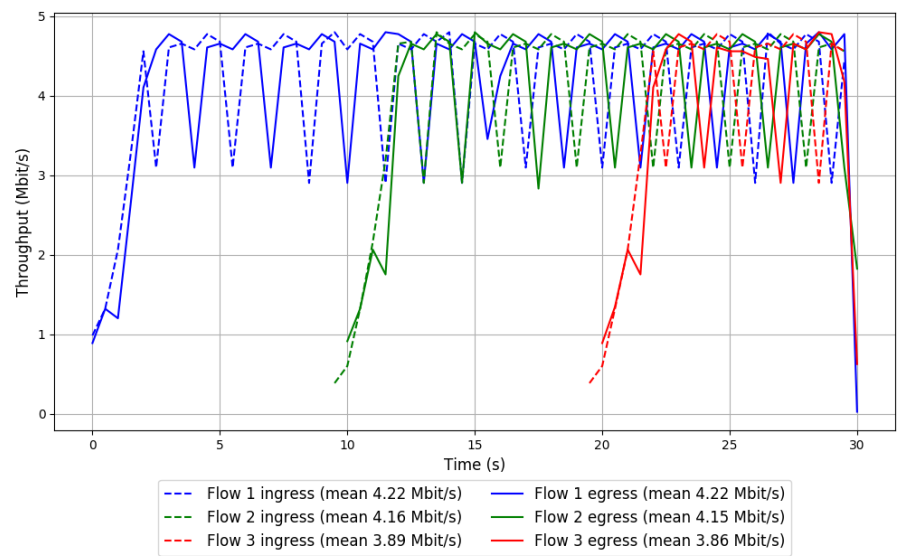


```
Run 10: Statistics of KohoCC

Start at: 2017-08-21 15:17:07
End at: 2017-08-21 15:17:37

# Below is generated by plot.py at 2017-08-21 16:30:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 137.088 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 137.034 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 136.947 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 137.428 ms
Loss rate: 0.81%
```

Run 10: Report of KohoCC — Data Link

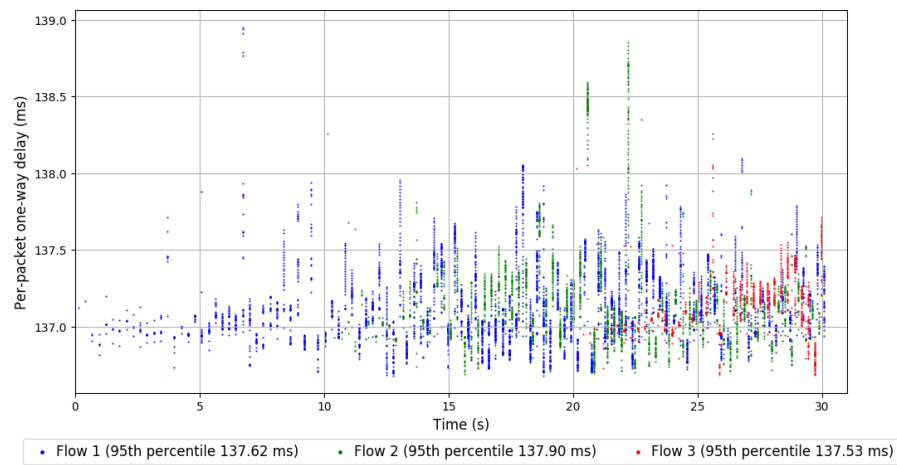
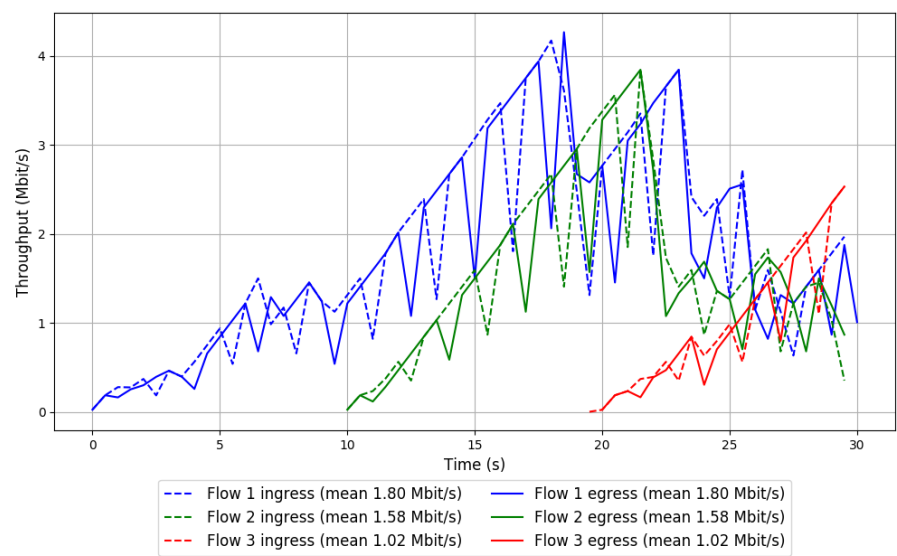


```
Run 1: Statistics of LEDBAT

Start at: 2017-08-21 13:23:17
End at: 2017-08-21 13:23:47

# Below is generated by plot.py at 2017-08-21 16:30:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.17 Mbit/s
95th percentile per-packet one-way delay: 137.652 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 137.615 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 137.902 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 137.532 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

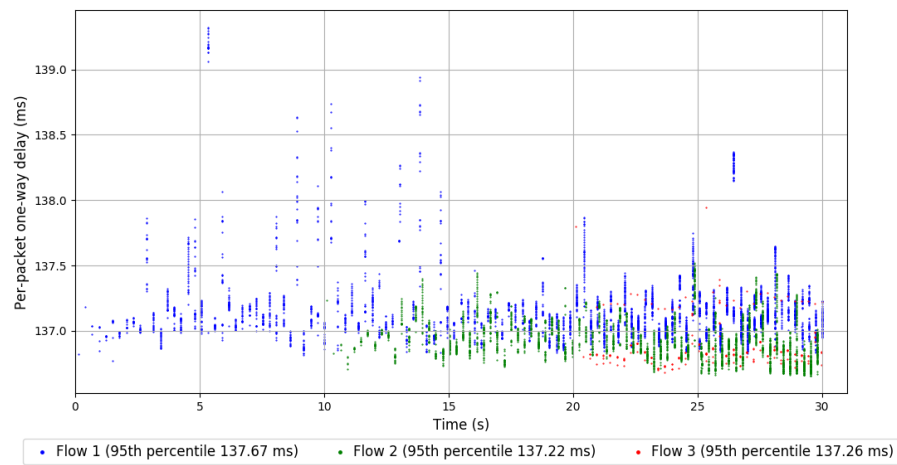
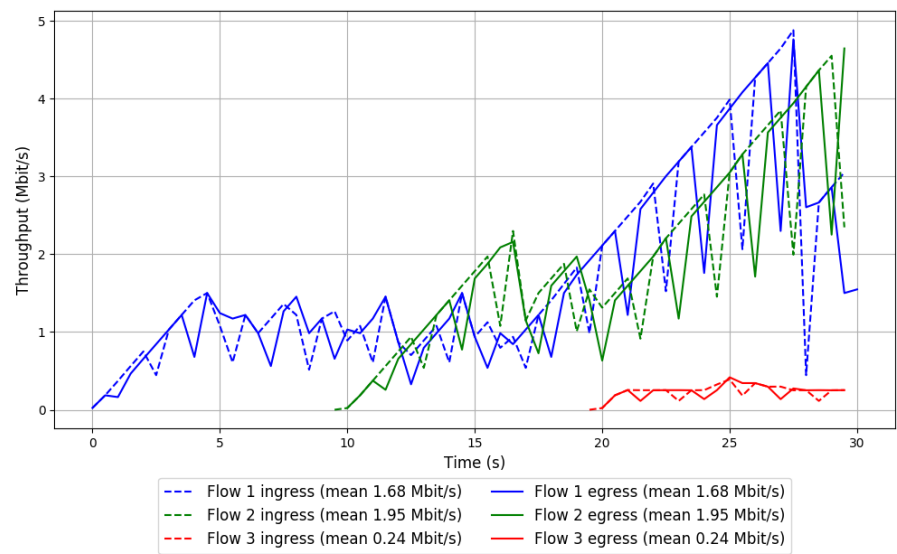


```
Run 2: Statistics of LEDBAT

Start at: 2017-08-21 13:36:48
End at: 2017-08-21 13:37:18

# Below is generated by plot.py at 2017-08-21 16:30:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 137.437 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 137.671 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 137.216 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 137.262 ms
Loss rate: 0.00%
```


Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-08-21 13:50:22

End at: 2017-08-21 13:50:52

Below is generated by plot.py at 2017-08-21 16:30:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 137.879 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 137.795 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 137.469 ms

Loss rate: 1.42%

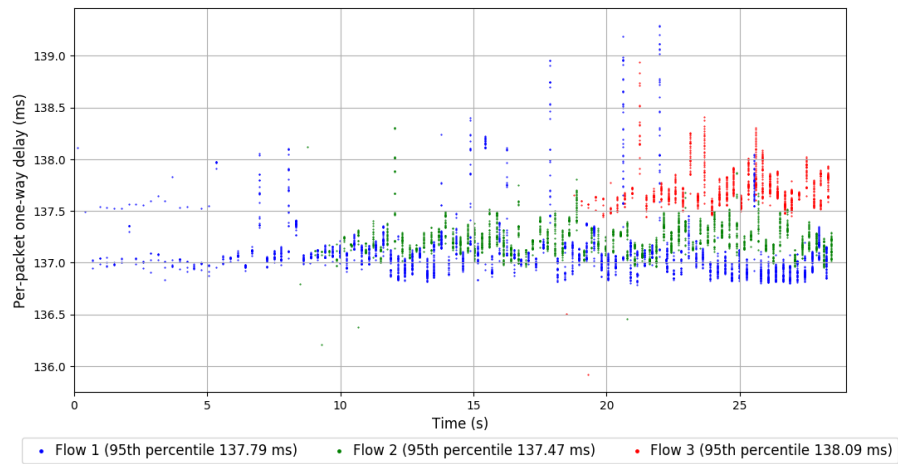
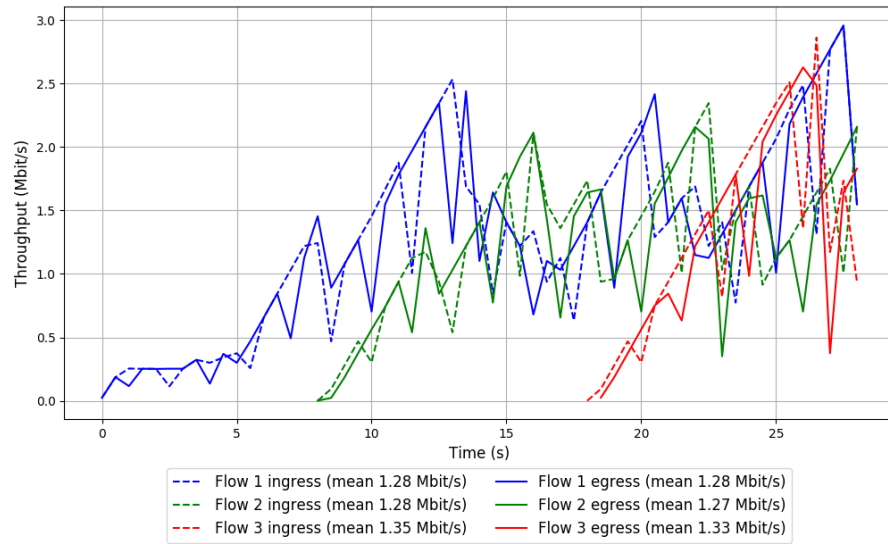
-- Flow 3:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 138.094 ms

Loss rate: 1.42%

Run 3: Report of LEDBAT — Data Link

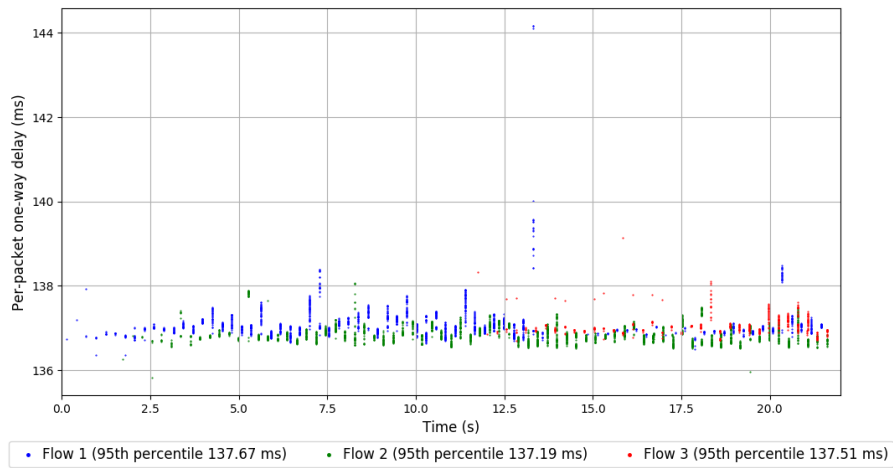
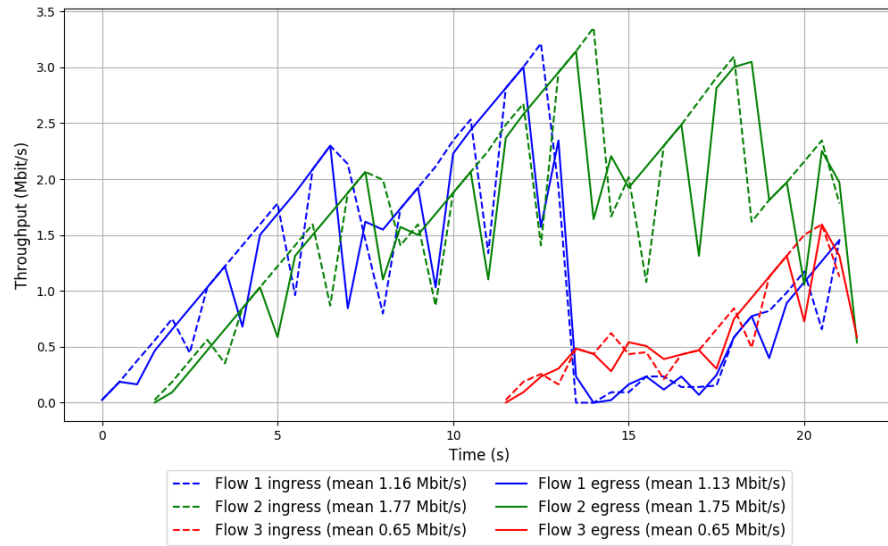


Run 4: Statistics of LEDBAT

Start at: 2017-08-21 14:03:46

End at: 2017-08-21 14:04:16

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-08-21 14:17:13

End at: 2017-08-21 14:17:43

Below is generated by plot.py at 2017-08-21 16:30:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 137.955 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 137.102 ms

Loss rate: 2.57%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 137.981 ms

Loss rate: 0.41%

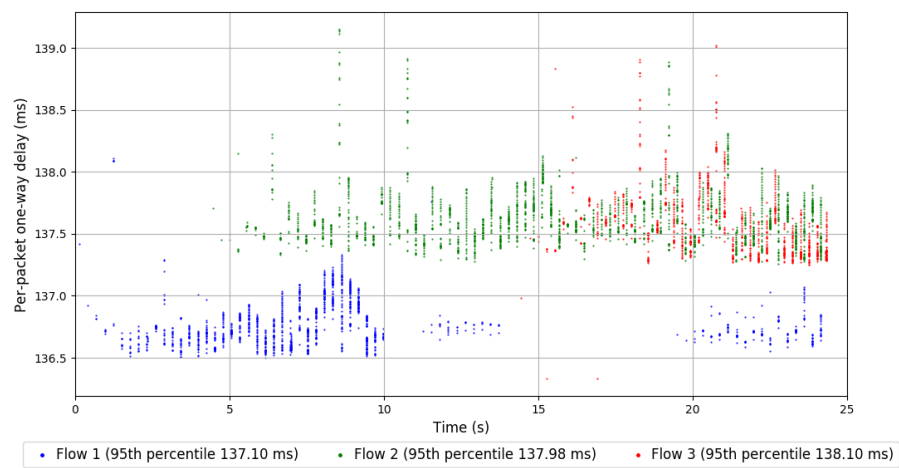
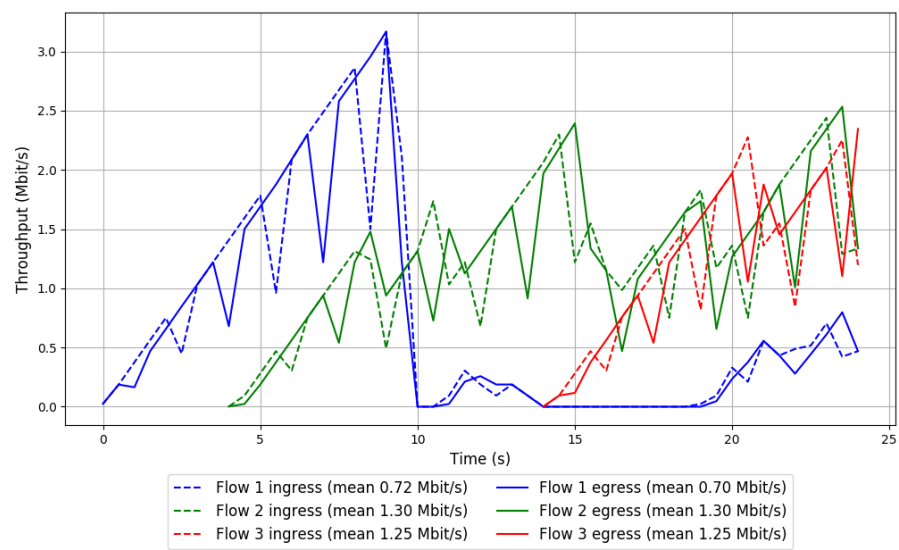
-- Flow 3:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 138.104 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-08-21 14:30:32

End at: 2017-08-21 14:31:02

Below is generated by plot.py at 2017-08-21 16:30:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.76 Mbit/s

95th percentile per-packet one-way delay: 137.707 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 137.379 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 137.675 ms

Loss rate: 0.86%

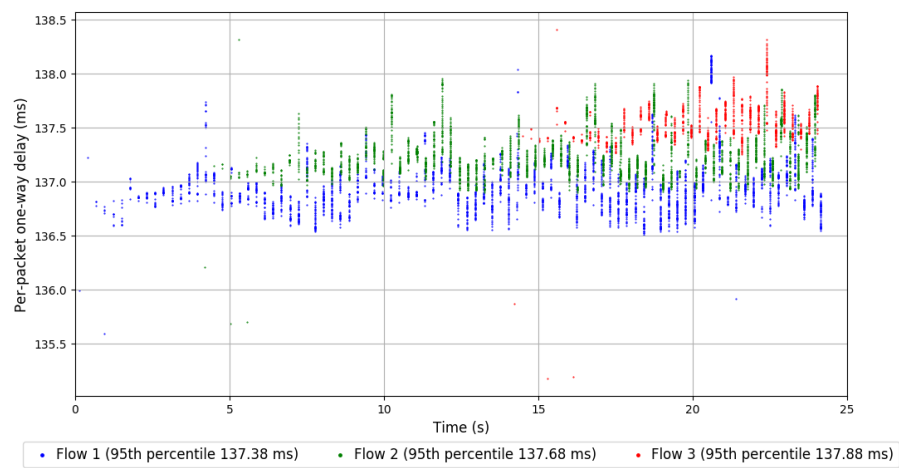
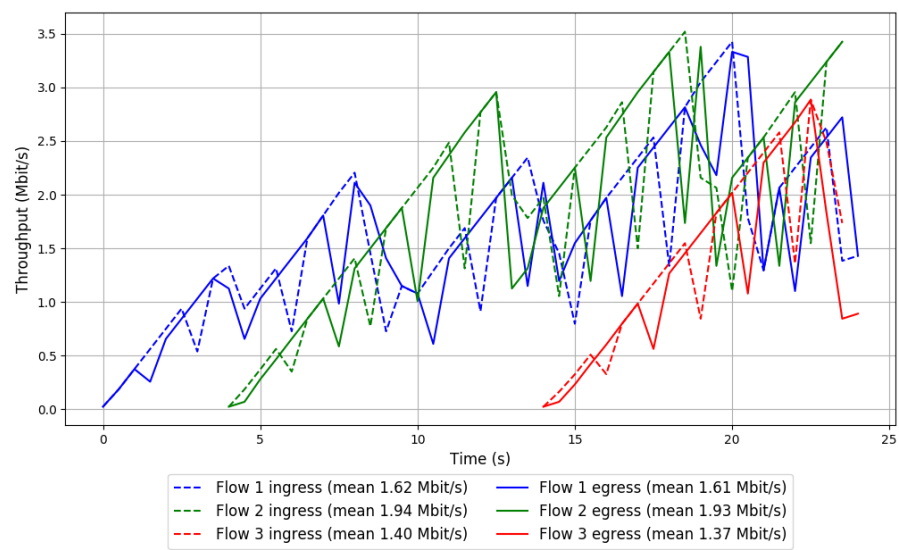
-- Flow 3:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 137.877 ms

Loss rate: 2.38%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-08-21 14:43:53

End at: 2017-08-21 14:44:23

Below is generated by plot.py at 2017-08-21 16:30:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 138.308 ms

Loss rate: 2.60%

-- Flow 1:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 138.196 ms

Loss rate: 3.47%

-- Flow 2:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 138.330 ms

Loss rate: 2.63%

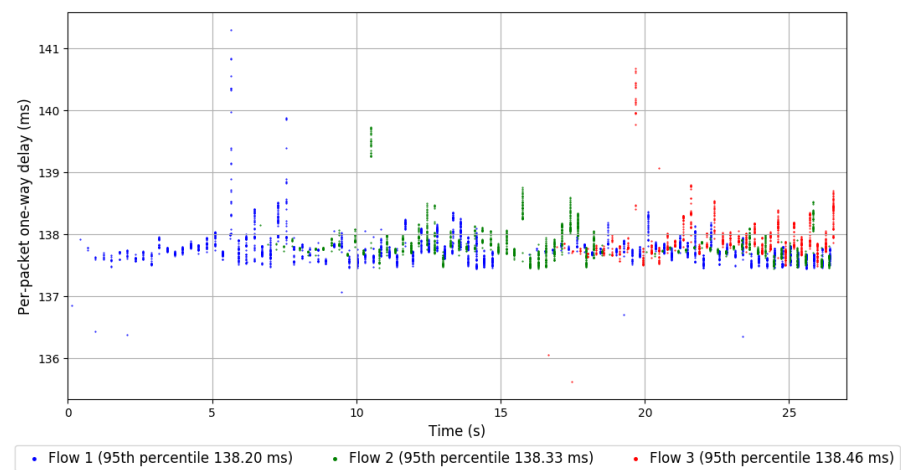
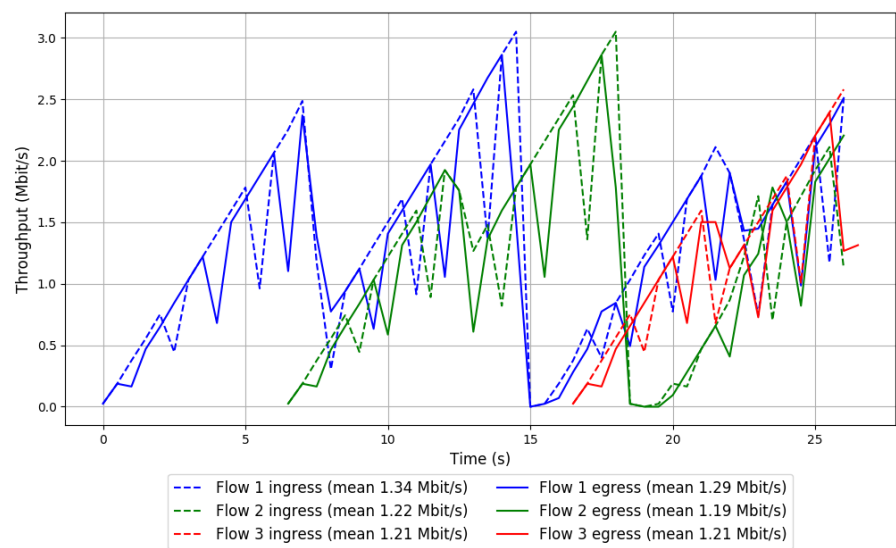
-- Flow 3:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 138.461 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-08-21 14:57:19

End at: 2017-08-21 14:57:49

Below is generated by plot.py at 2017-08-21 16:30:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 138.271 ms

Loss rate: 2.30%

-- Flow 1:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 138.342 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 138.220 ms

Loss rate: 5.97%

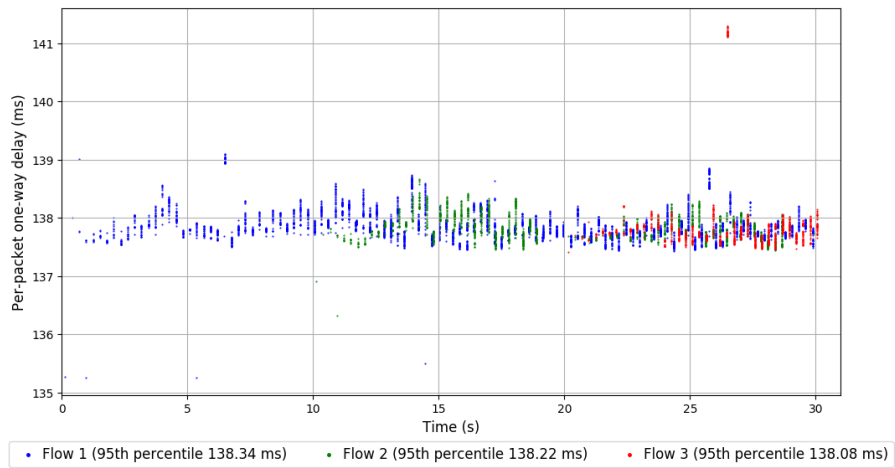
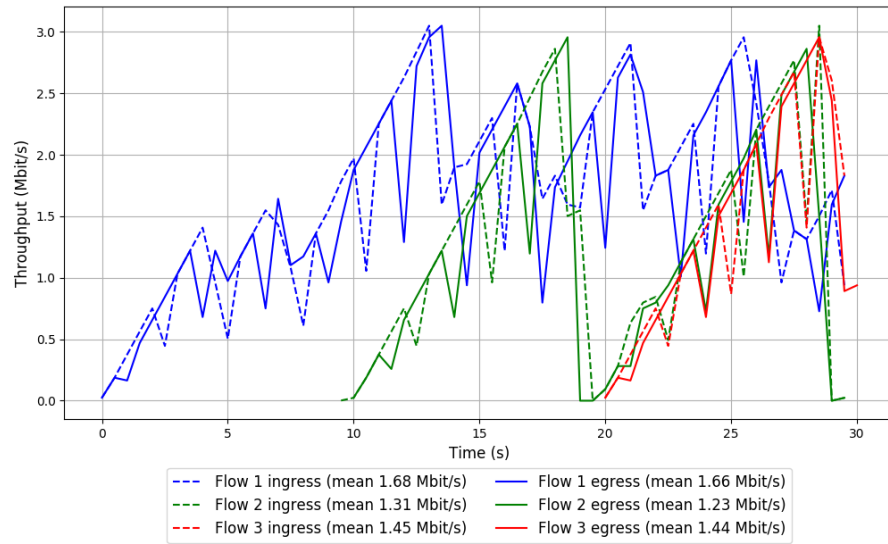
-- Flow 3:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 138.080 ms

Loss rate: 0.57%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-08-21 15:10:56

End at: 2017-08-21 15:11:26

Below is generated by plot.py at 2017-08-21 16:30:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.76 Mbit/s

95th percentile per-packet one-way delay: 137.352 ms

Loss rate: 0.40%

-- Flow 1:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 137.506 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 136.999 ms

Loss rate: 0.23%

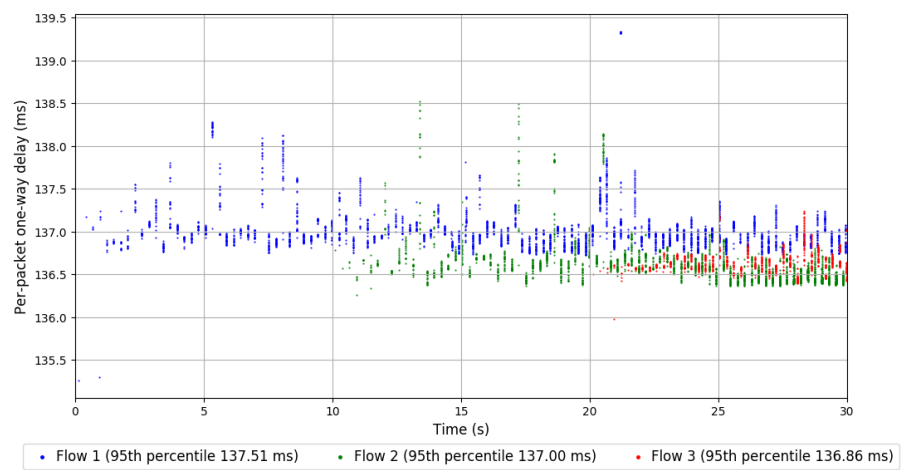
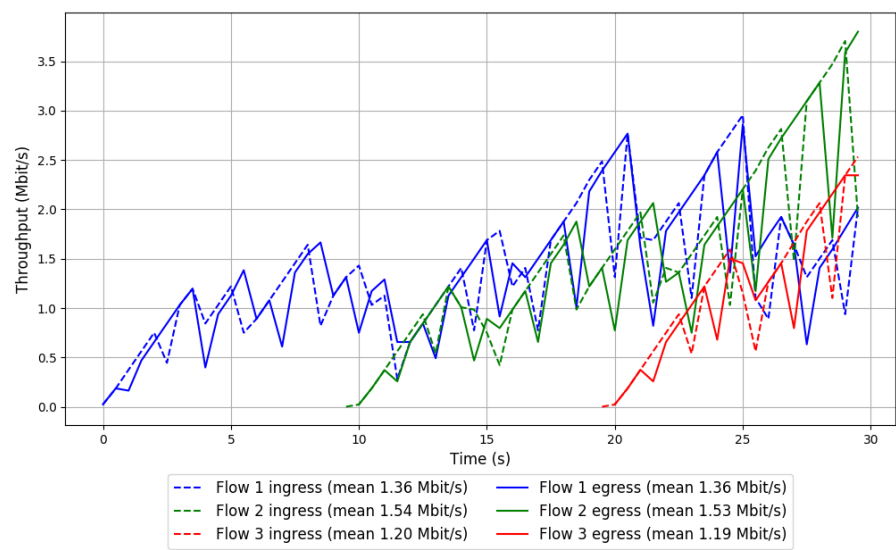
-- Flow 3:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 136.858 ms

Loss rate: 0.79%

Run 9: Report of LEDBAT — Data Link

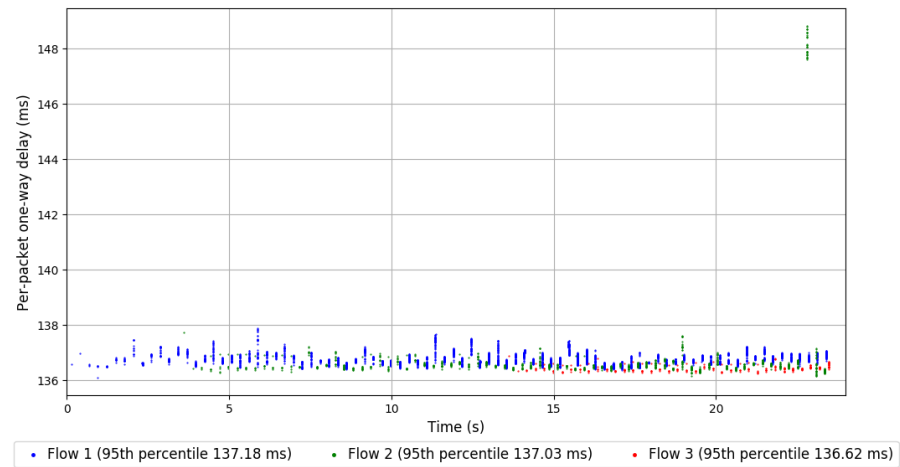
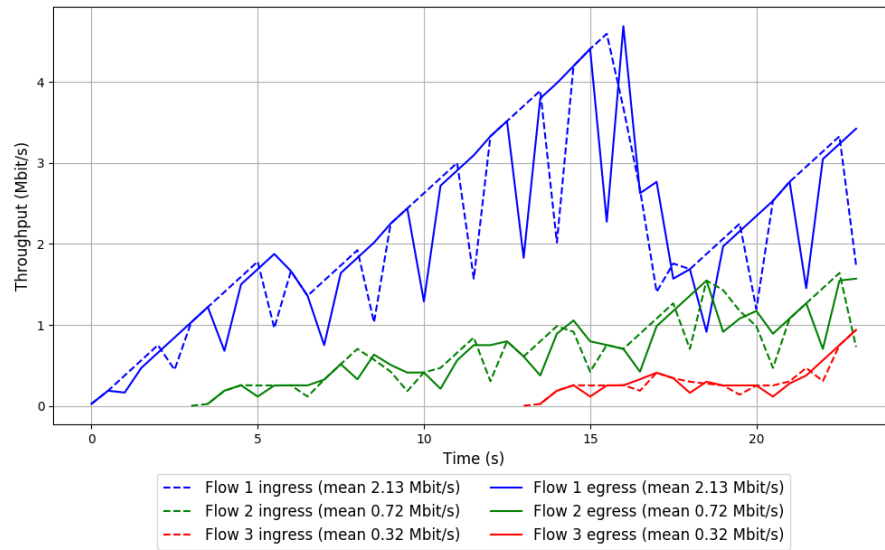


Run 10: Statistics of LEDBAT

Start at: 2017-08-21 15:24:41

End at: 2017-08-21 15:25:11

Run 10: Report of LEDBAT — Data Link

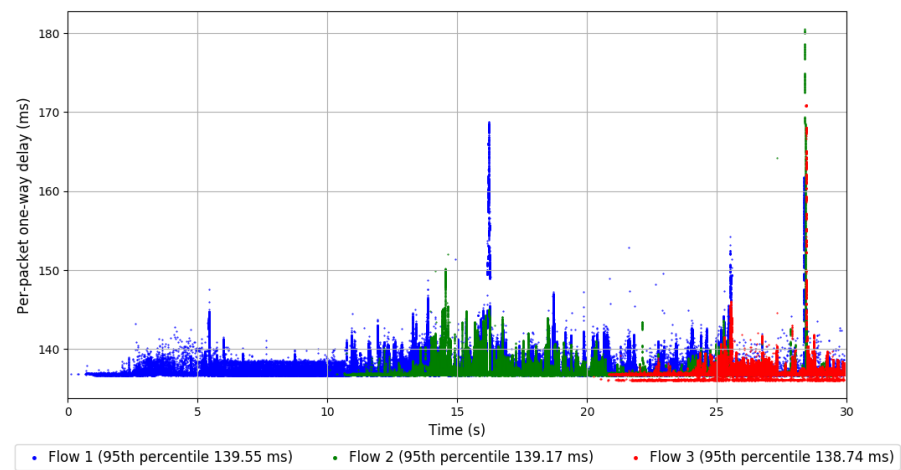
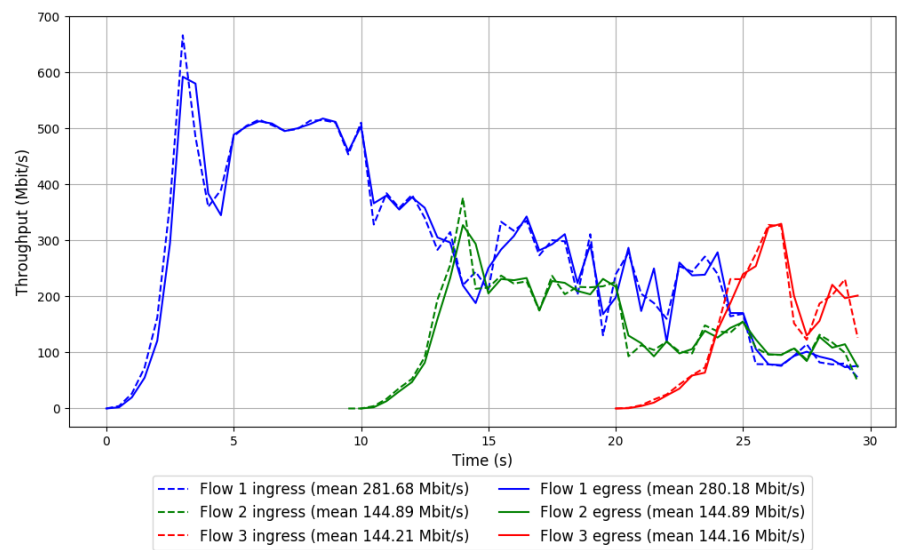


```
Run 1: Statistics of PCC

Start at: 2017-08-21 13:22:05
End at: 2017-08-21 13:22:35

# Below is generated by plot.py at 2017-08-21 16:32:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 423.21 Mbit/s
95th percentile per-packet one-way delay: 139.380 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 280.18 Mbit/s
95th percentile per-packet one-way delay: 139.551 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 144.89 Mbit/s
95th percentile per-packet one-way delay: 139.169 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 144.16 Mbit/s
95th percentile per-packet one-way delay: 138.739 ms
Loss rate: 0.03%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-08-21 13:35:40

End at: 2017-08-21 13:36:10

Below is generated by plot.py at 2017-08-21 16:32:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 367.17 Mbit/s

95th percentile per-packet one-way delay: 142.957 ms

Loss rate: 8.92%

-- Flow 1:

Average throughput: 233.87 Mbit/s

95th percentile per-packet one-way delay: 170.140 ms

Loss rate: 11.41%

-- Flow 2:

Average throughput: 151.51 Mbit/s

95th percentile per-packet one-way delay: 138.470 ms

Loss rate: 0.60%

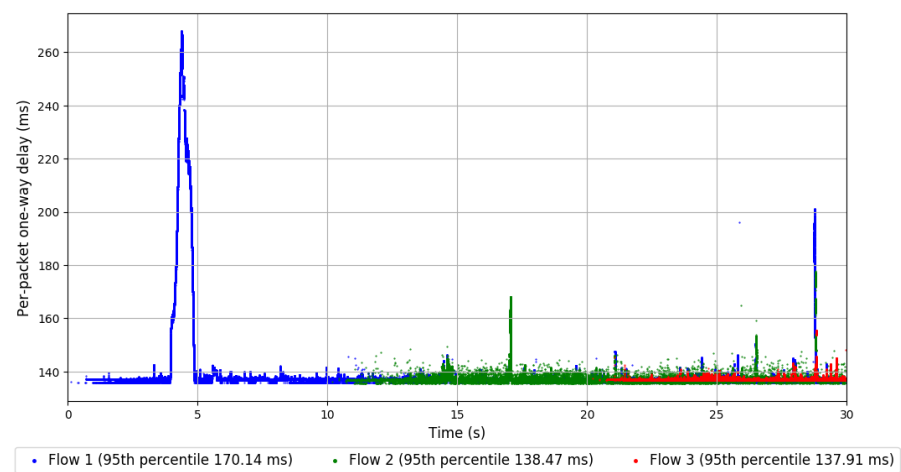
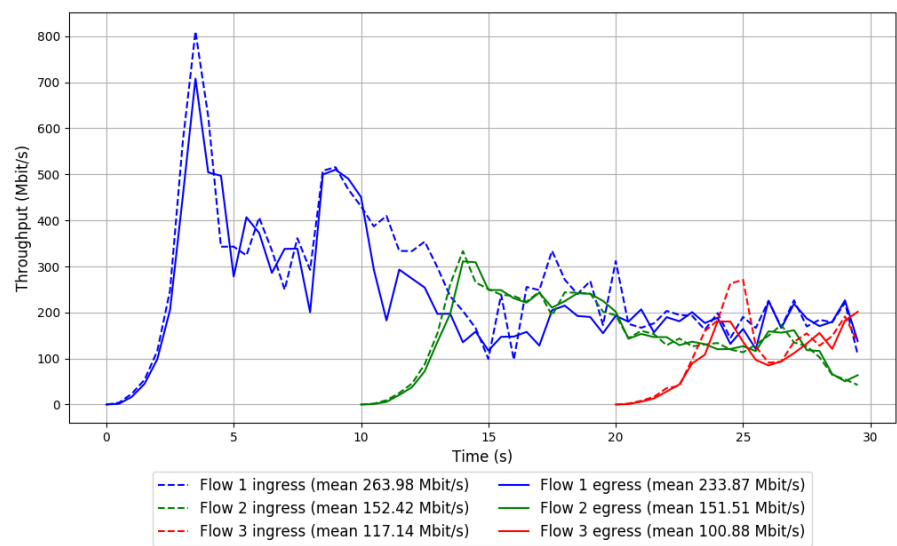
-- Flow 3:

Average throughput: 100.88 Mbit/s

95th percentile per-packet one-way delay: 137.915 ms

Loss rate: 13.80%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-08-21 13:49:15

End at: 2017-08-21 13:49:45

Below is generated by plot.py at 2017-08-21 16:32:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.77 Mbit/s

95th percentile per-packet one-way delay: 140.212 ms

Loss rate: 14.95%

-- Flow 1:

Average throughput: 134.08 Mbit/s

95th percentile per-packet one-way delay: 137.648 ms

Loss rate: 26.85%

-- Flow 2:

Average throughput: 178.46 Mbit/s

95th percentile per-packet one-way delay: 146.299 ms

Loss rate: 3.56%

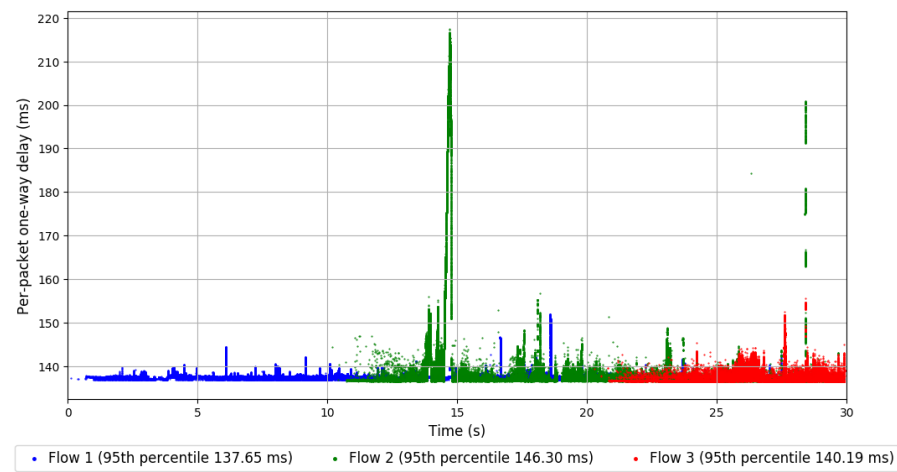
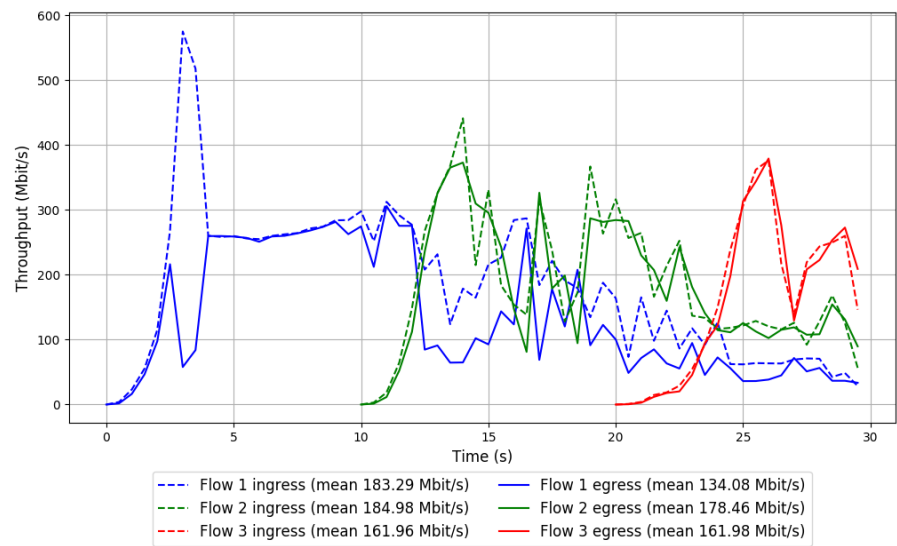
-- Flow 3:

Average throughput: 161.98 Mbit/s

95th percentile per-packet one-way delay: 140.187 ms

Loss rate: 0.00%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-08-21 14:02:44

End at: 2017-08-21 14:03:14

Below is generated by plot.py at 2017-08-21 16:32:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 220.48 Mbit/s

95th percentile per-packet one-way delay: 139.761 ms

Loss rate: 25.25%

-- Flow 1:

Average throughput: 181.49 Mbit/s

95th percentile per-packet one-way delay: 140.272 ms

Loss rate: 27.03%

-- Flow 2:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 137.156 ms

Loss rate: 3.08%

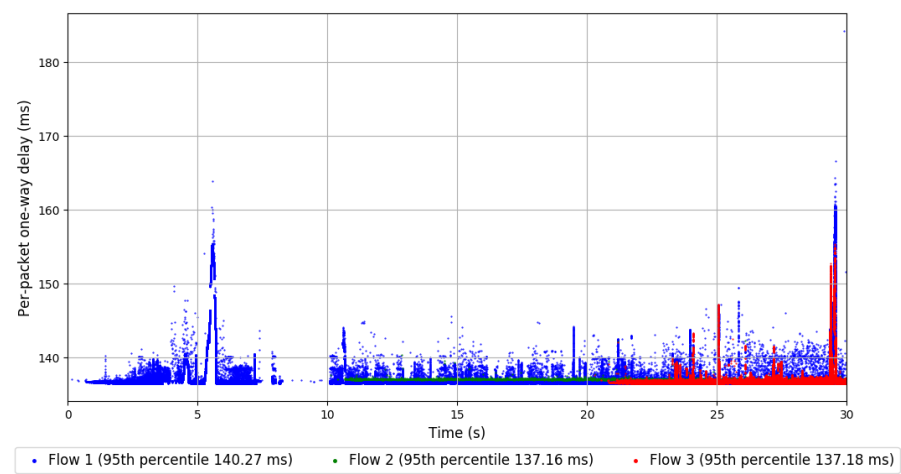
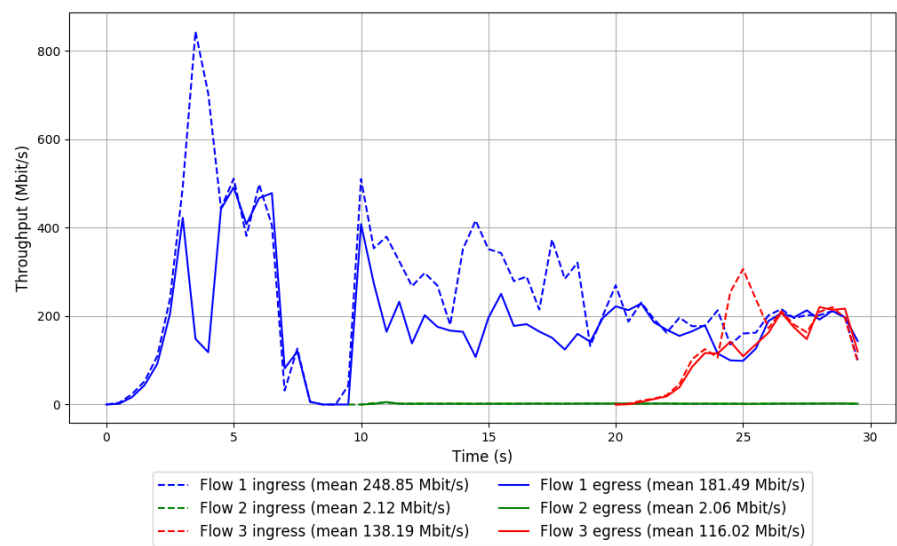
-- Flow 3:

Average throughput: 116.02 Mbit/s

95th percentile per-packet one-way delay: 137.177 ms

Loss rate: 16.05%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-08-21 14:16:10

End at: 2017-08-21 14:16:40

Below is generated by plot.py at 2017-08-21 16:33:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.33 Mbit/s

95th percentile per-packet one-way delay: 161.484 ms

Loss rate: 5.33%

-- Flow 1:

Average throughput: 286.04 Mbit/s

95th percentile per-packet one-way delay: 164.593 ms

Loss rate: 5.32%

-- Flow 2:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 138.353 ms

Loss rate: 9.08%

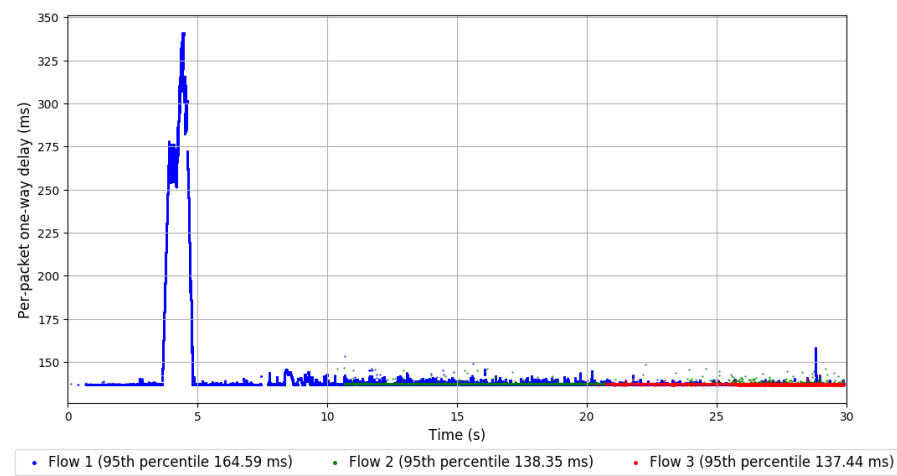
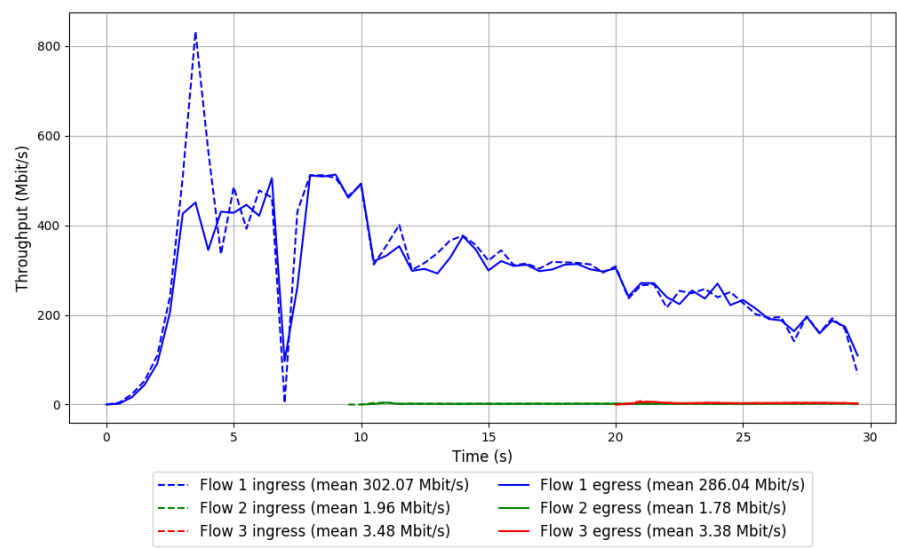
-- Flow 3:

Average throughput: 3.38 Mbit/s

95th percentile per-packet one-way delay: 137.441 ms

Loss rate: 2.70%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-08-21 14:29:29

End at: 2017-08-21 14:29:59

Below is generated by plot.py at 2017-08-21 16:33:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 248.35 Mbit/s

95th percentile per-packet one-way delay: 137.630 ms

Loss rate: 11.95%

-- Flow 1:

Average throughput: 186.88 Mbit/s

95th percentile per-packet one-way delay: 137.699 ms

Loss rate: 7.28%

-- Flow 2:

Average throughput: 71.20 Mbit/s

95th percentile per-packet one-way delay: 137.106 ms

Loss rate: 26.86%

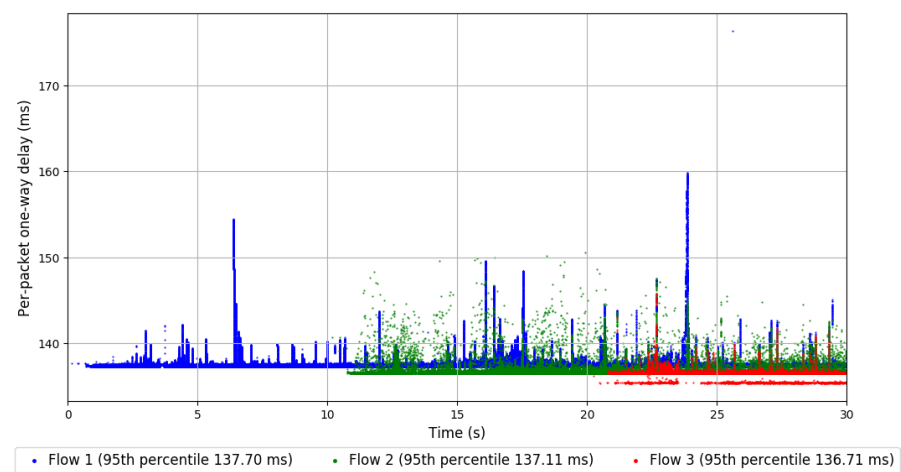
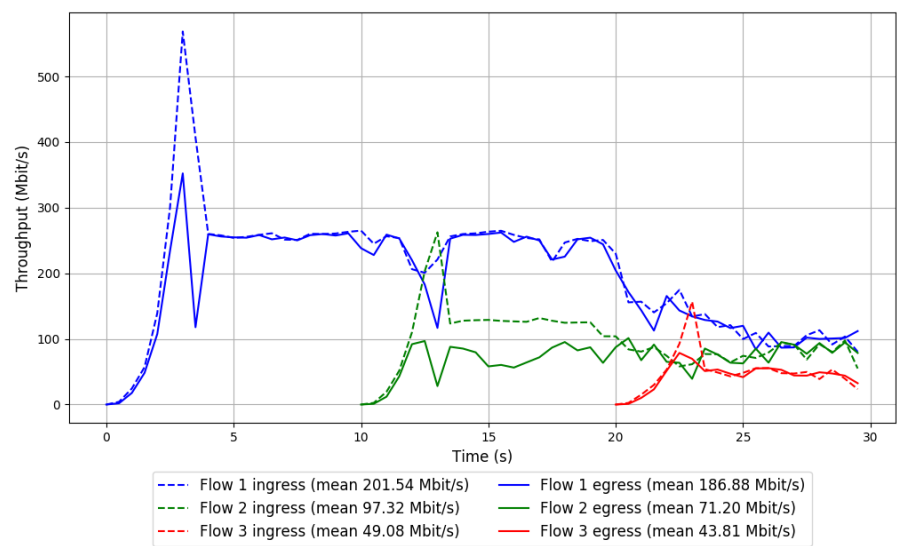
-- Flow 3:

Average throughput: 43.81 Mbit/s

95th percentile per-packet one-way delay: 136.708 ms

Loss rate: 10.75%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-08-21 14:42:50

End at: 2017-08-21 14:43:20

Below is generated by plot.py at 2017-08-21 16:34:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 310.88 Mbit/s

95th percentile per-packet one-way delay: 140.803 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 309.04 Mbit/s

95th percentile per-packet one-way delay: 140.811 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 137.702 ms

Loss rate: 12.86%

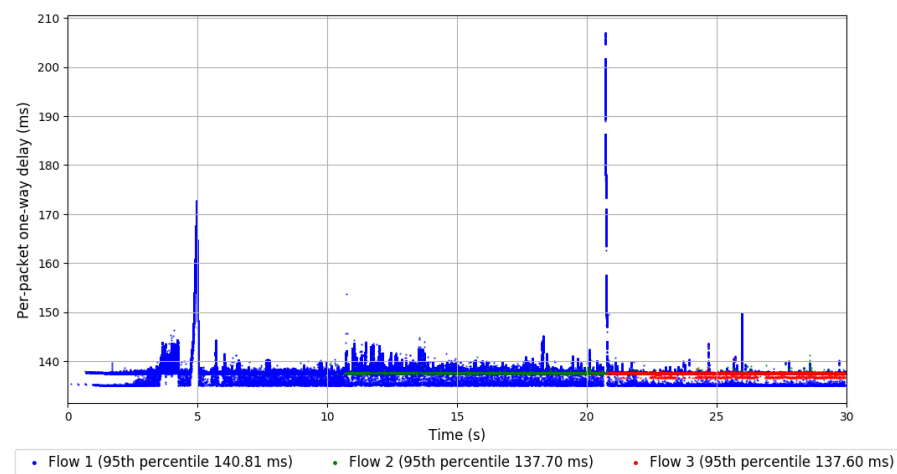
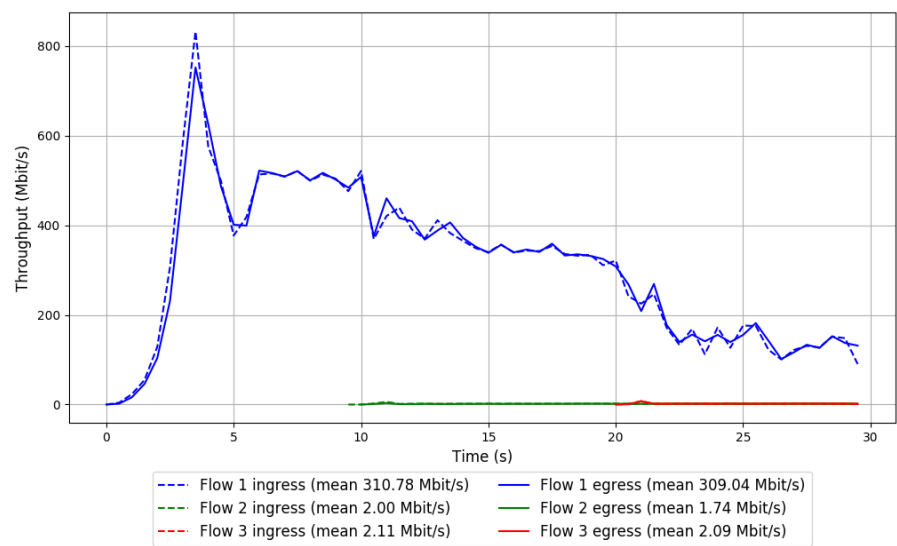
-- Flow 3:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 137.603 ms

Loss rate: 1.28%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-08-21 14:56:09

End at: 2017-08-21 14:56:39

Below is generated by plot.py at 2017-08-21 16:35:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 443.49 Mbit/s

95th percentile per-packet one-way delay: 141.795 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 297.87 Mbit/s

95th percentile per-packet one-way delay: 141.181 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 219.72 Mbit/s

95th percentile per-packet one-way delay: 143.209 ms

Loss rate: 0.41%

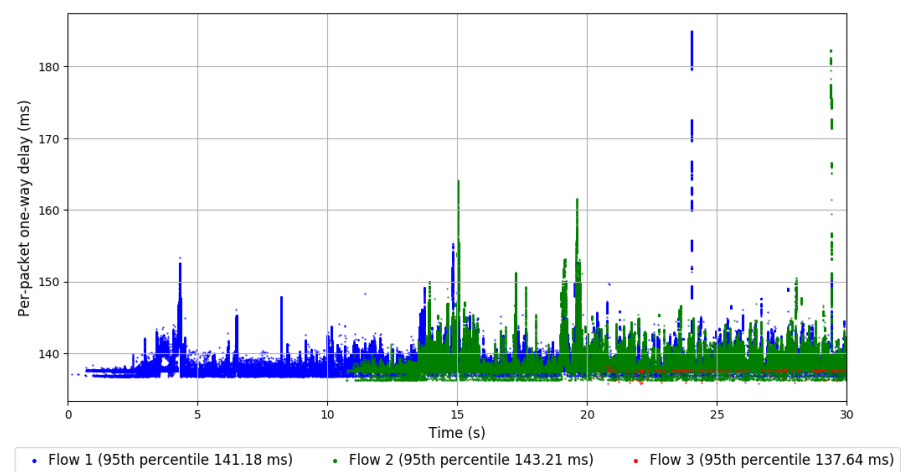
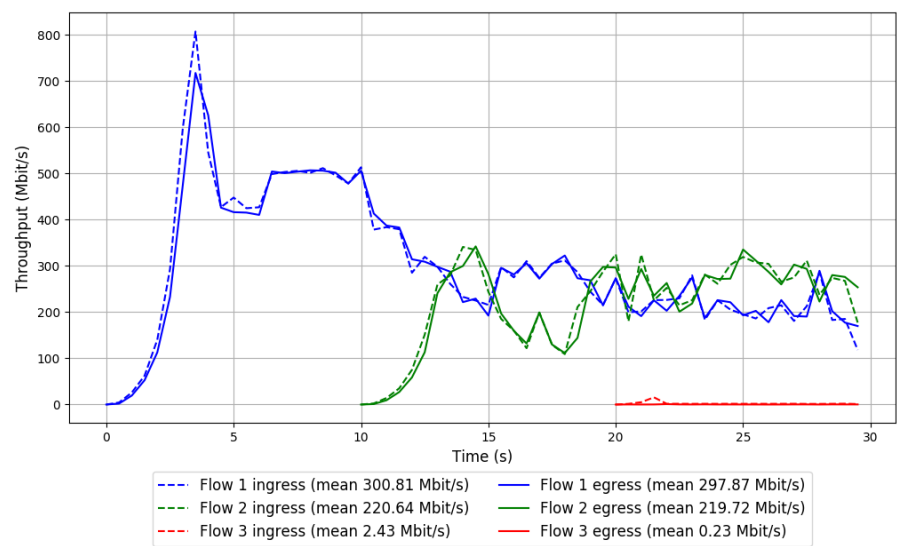
-- Flow 3:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 137.640 ms

Loss rate: 90.53%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-08-21 15:09:47

End at: 2017-08-21 15:10:17

Below is generated by plot.py at 2017-08-21 16:36:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 399.25 Mbit/s

95th percentile per-packet one-way delay: 140.431 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 268.05 Mbit/s

95th percentile per-packet one-way delay: 141.232 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 161.38 Mbit/s

95th percentile per-packet one-way delay: 139.200 ms

Loss rate: 0.00%

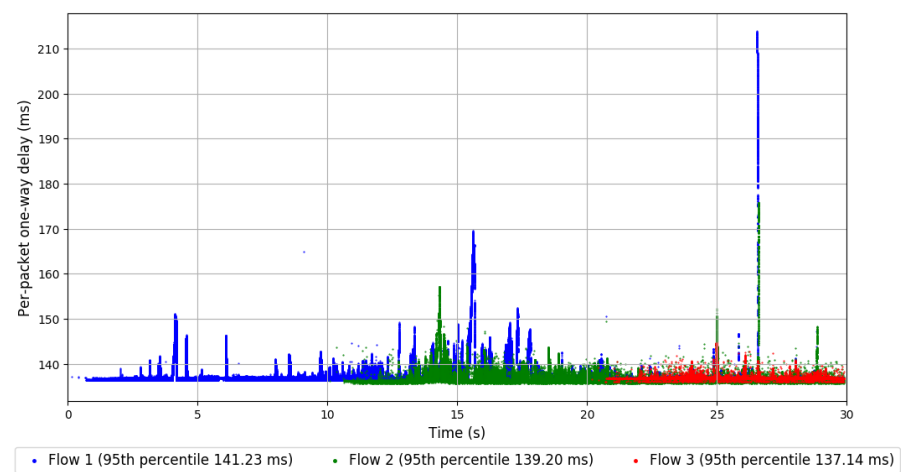
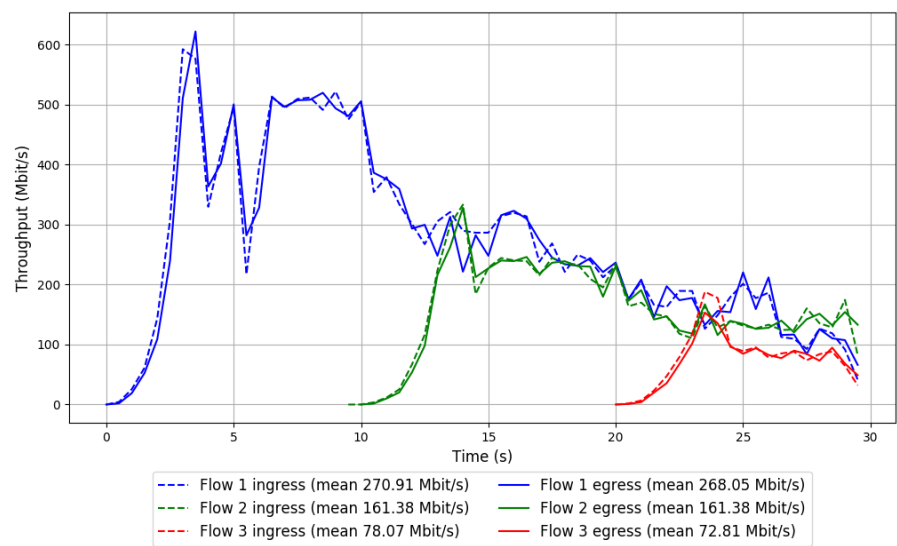
-- Flow 3:

Average throughput: 72.81 Mbit/s

95th percentile per-packet one-way delay: 137.139 ms

Loss rate: 6.75%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-08-21 15:23:38

End at: 2017-08-21 15:24:08

Below is generated by plot.py at 2017-08-21 16:36:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.98 Mbit/s

95th percentile per-packet one-way delay: 137.576 ms

Loss rate: 20.03%

-- Flow 1:

Average throughput: 220.78 Mbit/s

95th percentile per-packet one-way delay: 137.211 ms

Loss rate: 23.20%

-- Flow 2:

Average throughput: 1.74 Mbit/s

95th percentile per-packet one-way delay: 136.300 ms

Loss rate: 7.55%

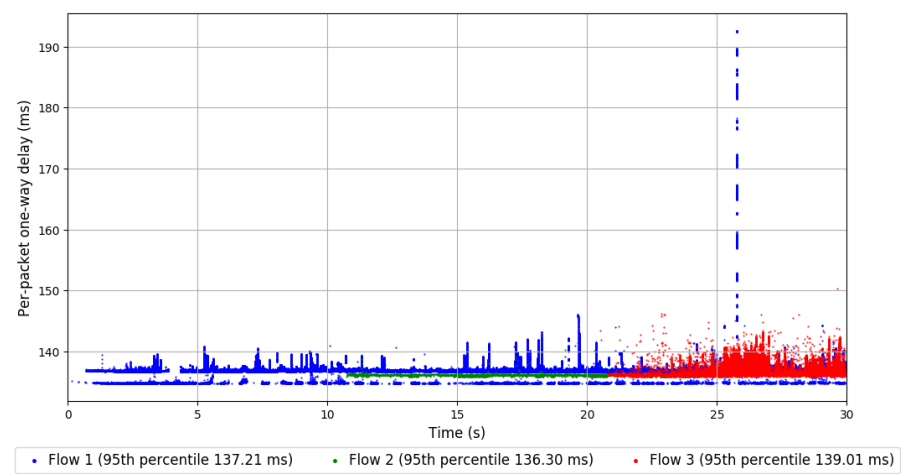
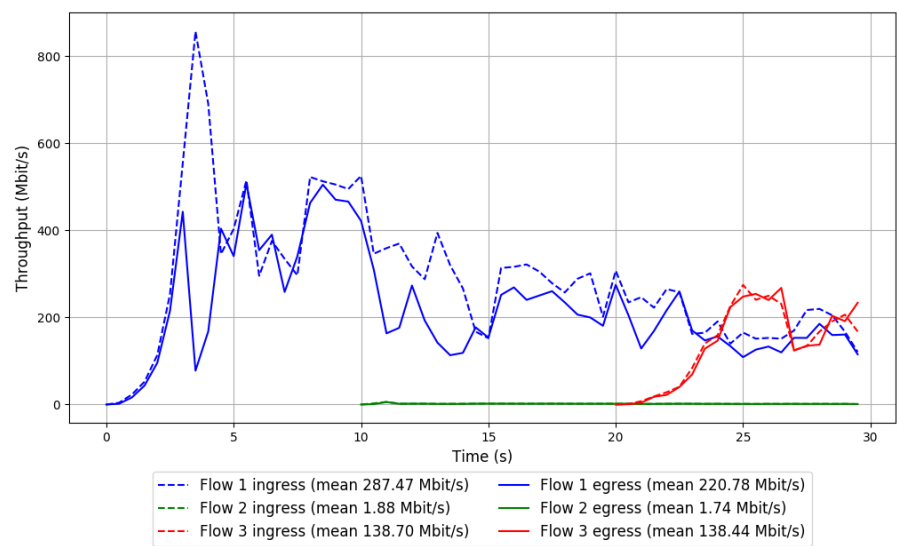
-- Flow 3:

Average throughput: 138.44 Mbit/s

95th percentile per-packet one-way delay: 139.010 ms

Loss rate: 0.19%

Run 10: Report of PCC — Data Link

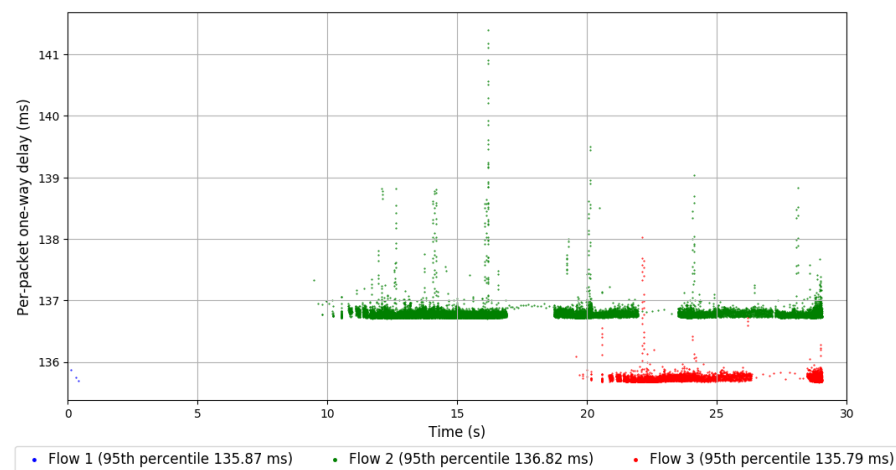
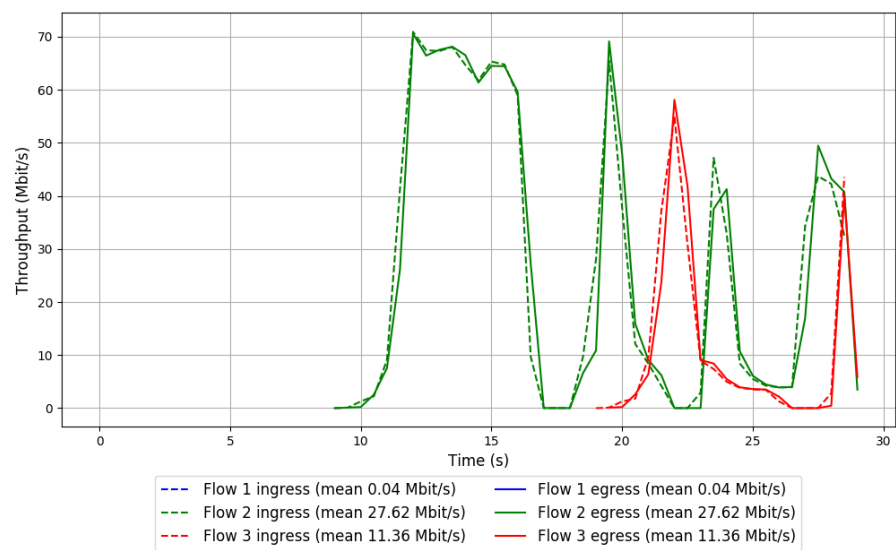


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-08-21 13:12:54
End at: 2017-08-21 13:13:24

# Below is generated by plot.py at 2017-08-21 16:36:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.41 Mbit/s
95th percentile per-packet one-way delay: 136.817 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 135.871 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.62 Mbit/s
95th percentile per-packet one-way delay: 136.824 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.36 Mbit/s
95th percentile per-packet one-way delay: 135.793 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-08-21 13:26:41

End at: 2017-08-21 13:27:11

Below is generated by plot.py at 2017-08-21 16:36:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.79 Mbit/s

95th percentile per-packet one-way delay: 136.677 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 136.270 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.10 Mbit/s

95th percentile per-packet one-way delay: 136.166 ms

Loss rate: 0.05%

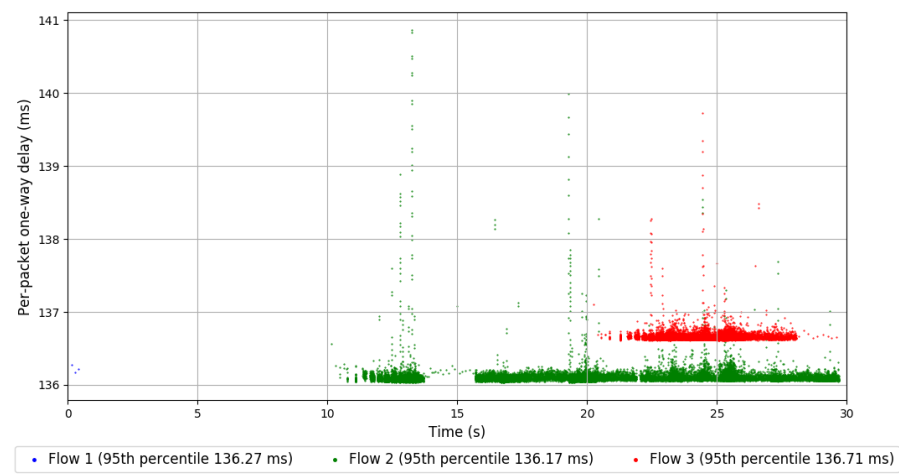
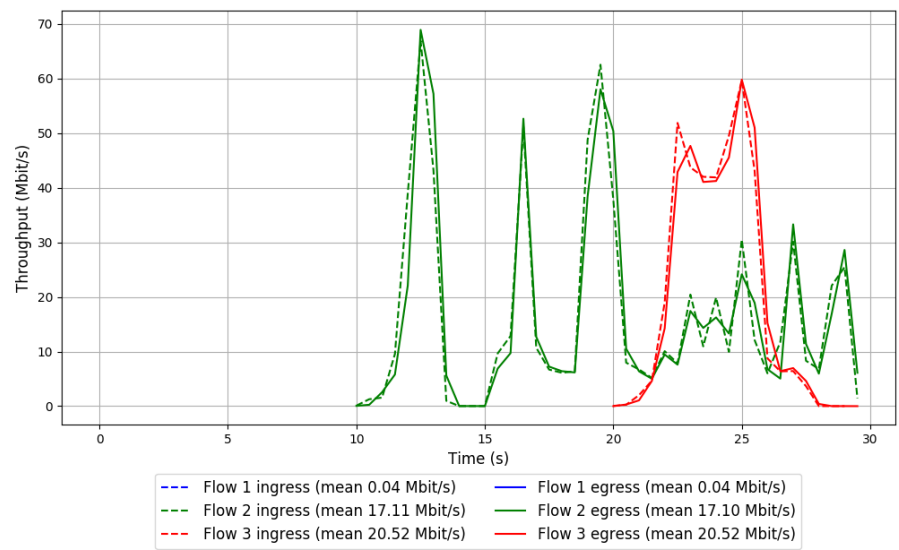
-- Flow 3:

Average throughput: 20.52 Mbit/s

95th percentile per-packet one-way delay: 136.711 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-08-21 13:40:20

End at: 2017-08-21 13:40:50

Below is generated by plot.py at 2017-08-21 16:36:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.62 Mbit/s

95th percentile per-packet one-way delay: 137.545 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 137.196 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 23.86 Mbit/s

95th percentile per-packet one-way delay: 137.550 ms

Loss rate: 0.00%

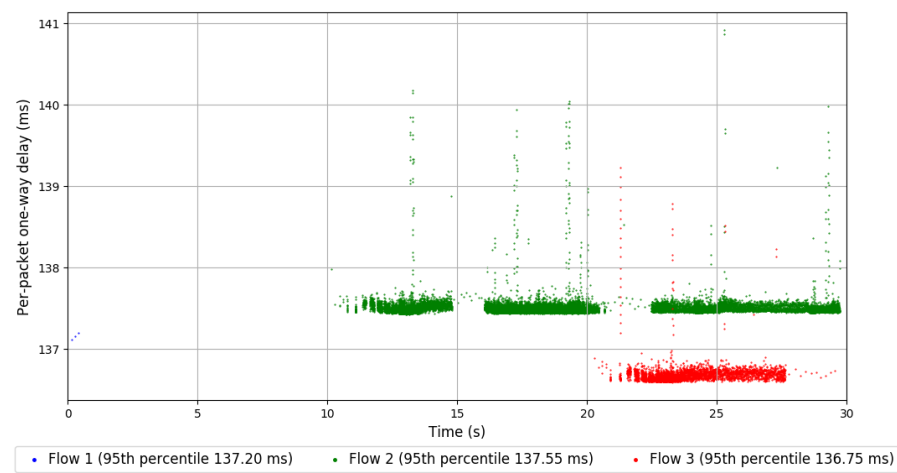
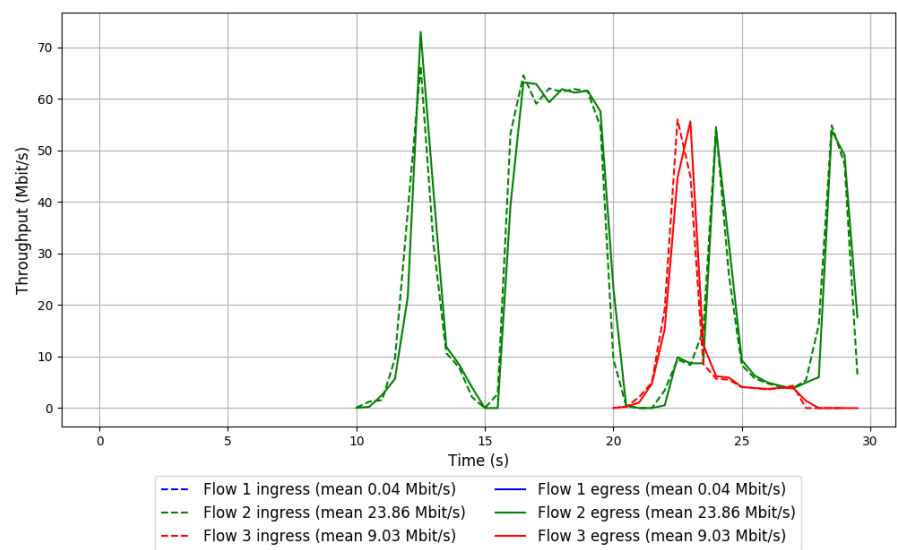
-- Flow 3:

Average throughput: 9.03 Mbit/s

95th percentile per-packet one-way delay: 136.747 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-08-21 13:53:48

End at: 2017-08-21 13:54:18

Below is generated by plot.py at 2017-08-21 16:36:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.80 Mbit/s

95th percentile per-packet one-way delay: 137.503 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 137.565 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.50 Mbit/s

95th percentile per-packet one-way delay: 137.520 ms

Loss rate: 0.02%

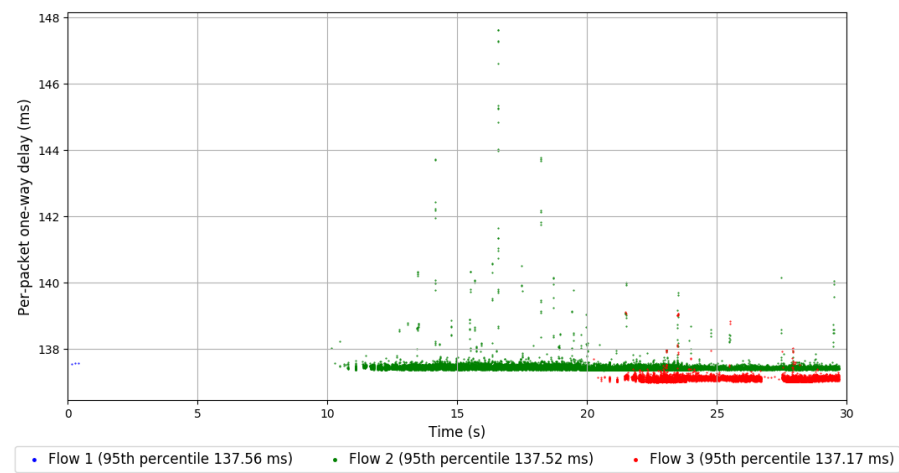
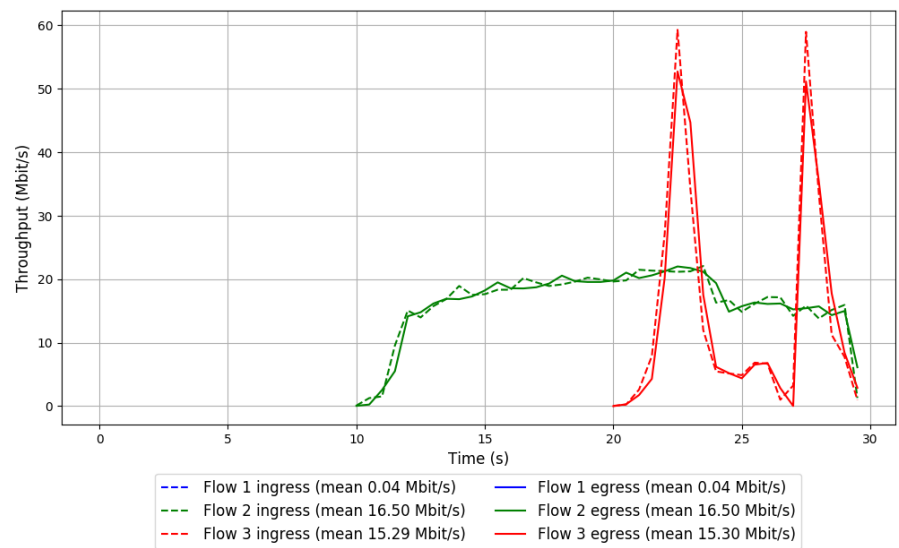
-- Flow 3:

Average throughput: 15.30 Mbit/s

95th percentile per-packet one-way delay: 137.172 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-08-21 14:07:23

End at: 2017-08-21 14:07:53

Below is generated by plot.py at 2017-08-21 16:36:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 24.03 Mbit/s

95th percentile per-packet one-way delay: 137.506 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 137.297 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 23.93 Mbit/s

95th percentile per-packet one-way delay: 137.523 ms

Loss rate: 0.00%

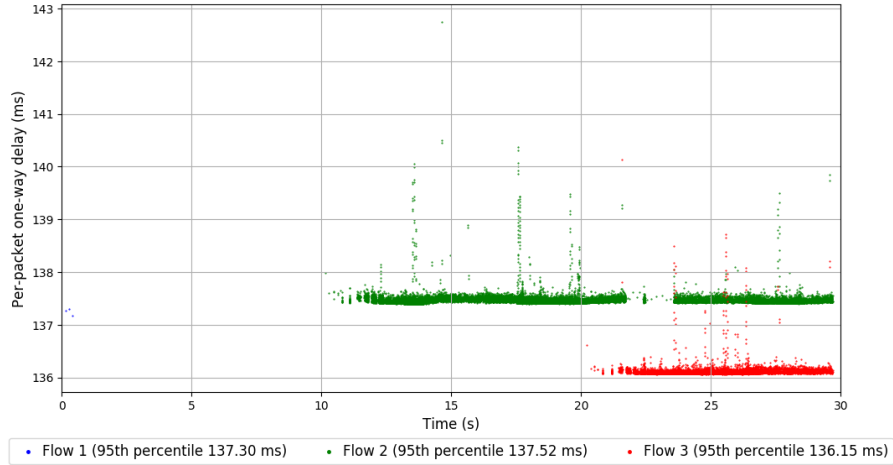
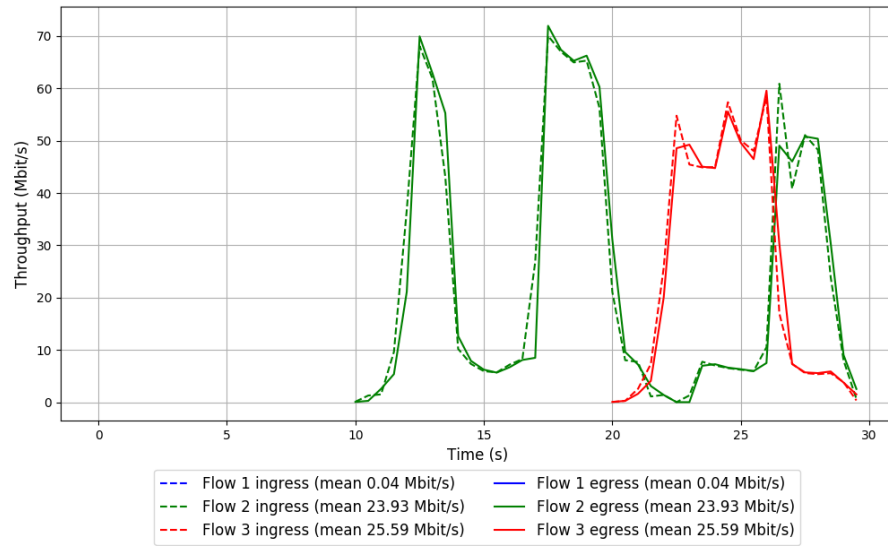
-- Flow 3:

Average throughput: 25.59 Mbit/s

95th percentile per-packet one-way delay: 136.146 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-08-21 14:20:48

End at: 2017-08-21 14:21:18

Below is generated by plot.py at 2017-08-21 16:36:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.04 Mbit/s

95th percentile per-packet one-way delay: 136.862 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 136.370 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.42 Mbit/s

95th percentile per-packet one-way delay: 136.707 ms

Loss rate: 0.00%

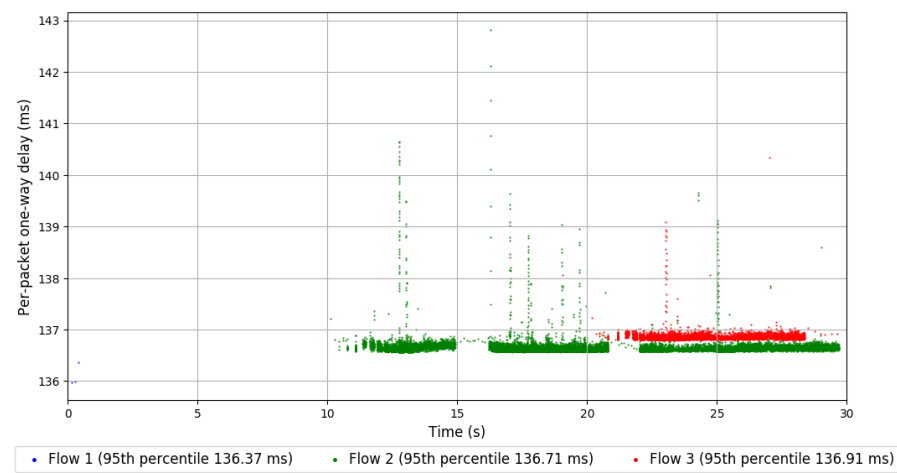
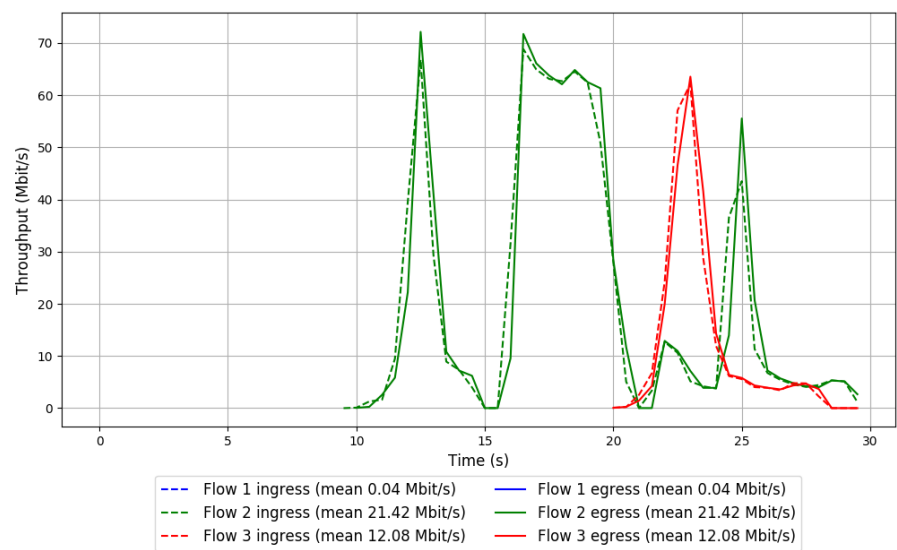
-- Flow 3:

Average throughput: 12.08 Mbit/s

95th percentile per-packet one-way delay: 136.915 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-08-21 14:34:07

End at: 2017-08-21 14:34:37

Below is generated by plot.py at 2017-08-21 16:36:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.02 Mbit/s

95th percentile per-packet one-way delay: 136.176 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 141.991 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.92 Mbit/s

95th percentile per-packet one-way delay: 136.181 ms

Loss rate: 0.00%

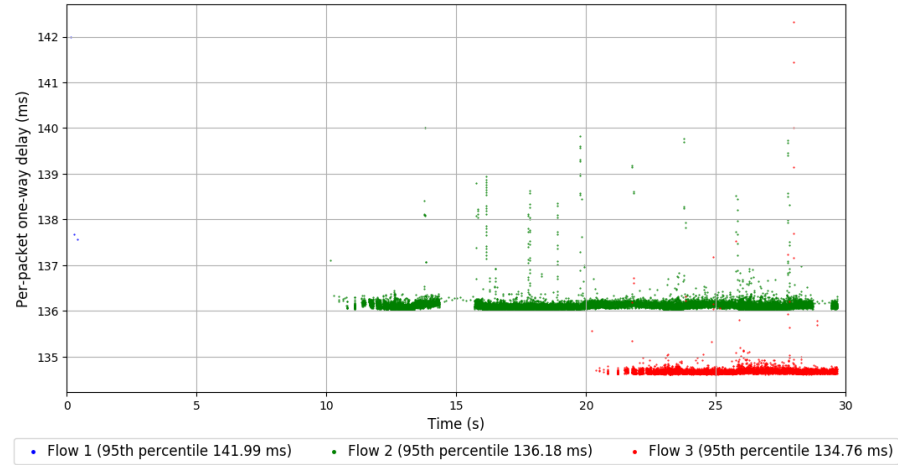
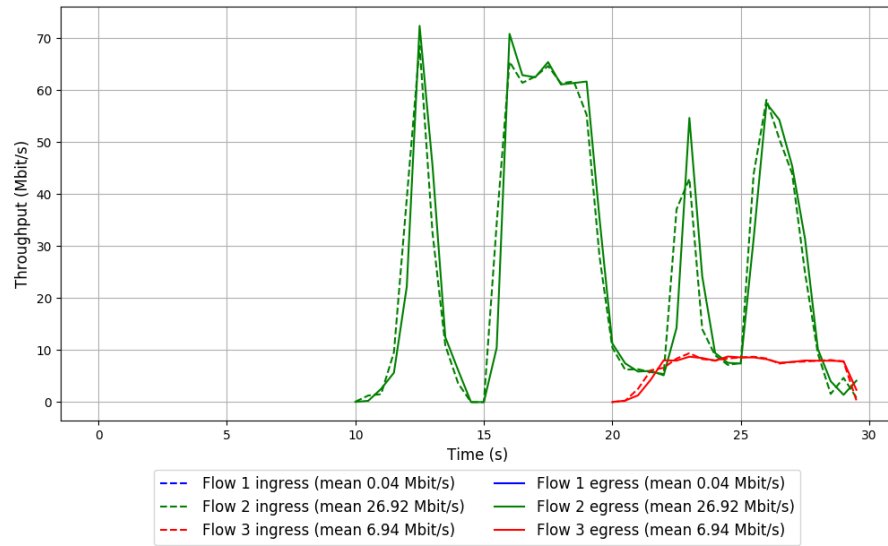
-- Flow 3:

Average throughput: 6.94 Mbit/s

95th percentile per-packet one-way delay: 134.759 ms

Loss rate: 0.07%

Run 7: Report of QUIC Cubic — Data Link

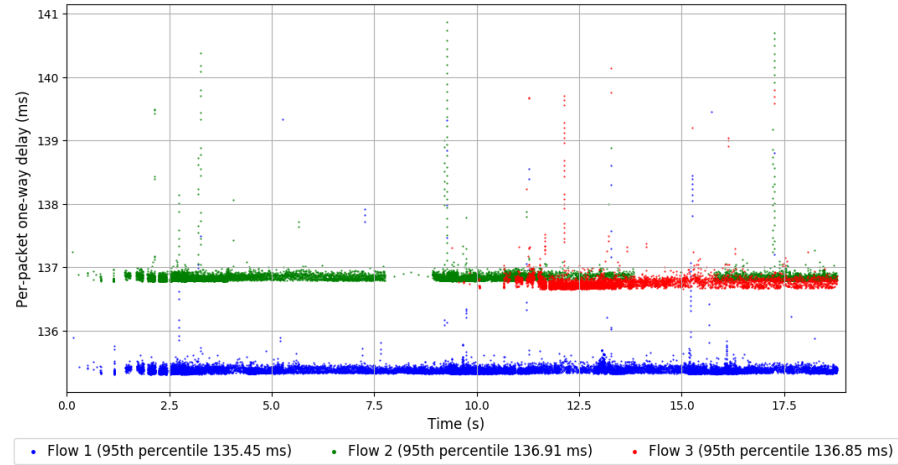
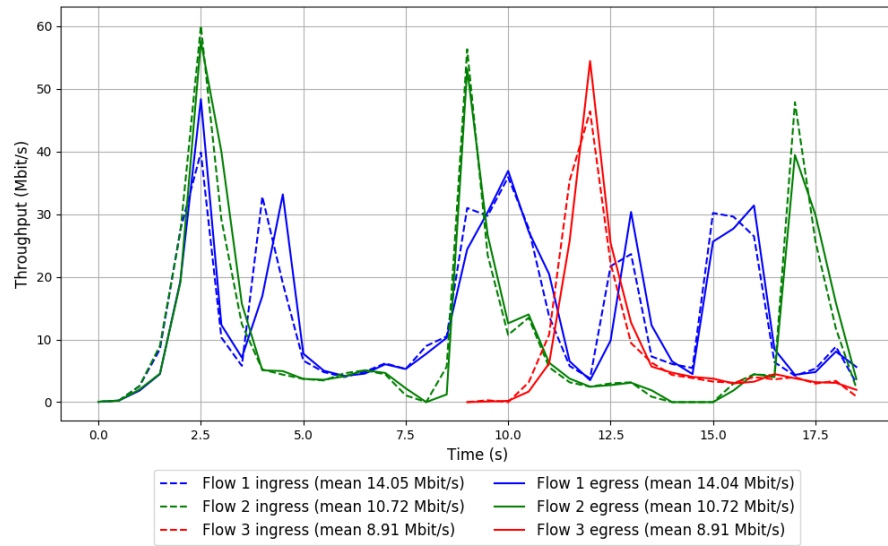


Run 8: Statistics of QUIC Cubic

Start at: 2017-08-21 14:47:19

End at: 2017-08-21 14:47:49

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-08-21 15:00:47

End at: 2017-08-21 15:01:17

Below is generated by plot.py at 2017-08-21 16:36:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.19 Mbit/s

95th percentile per-packet one-way delay: 136.508 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 137.299 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.42 Mbit/s

95th percentile per-packet one-way delay: 135.431 ms

Loss rate: 0.04%

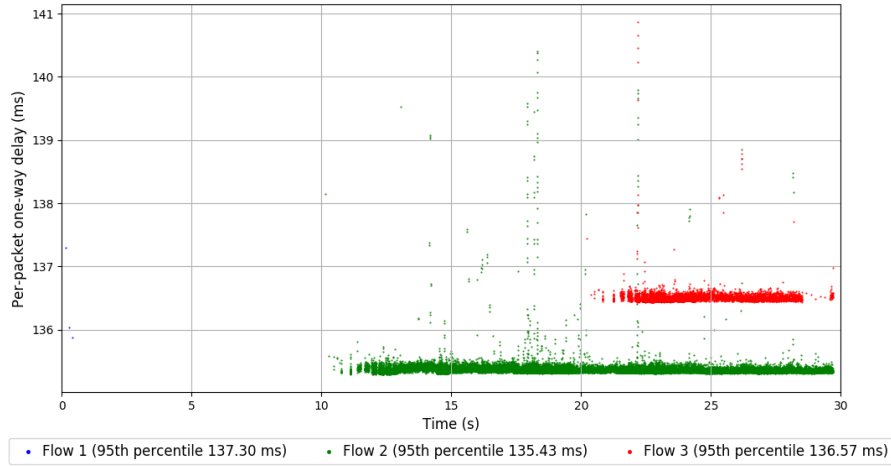
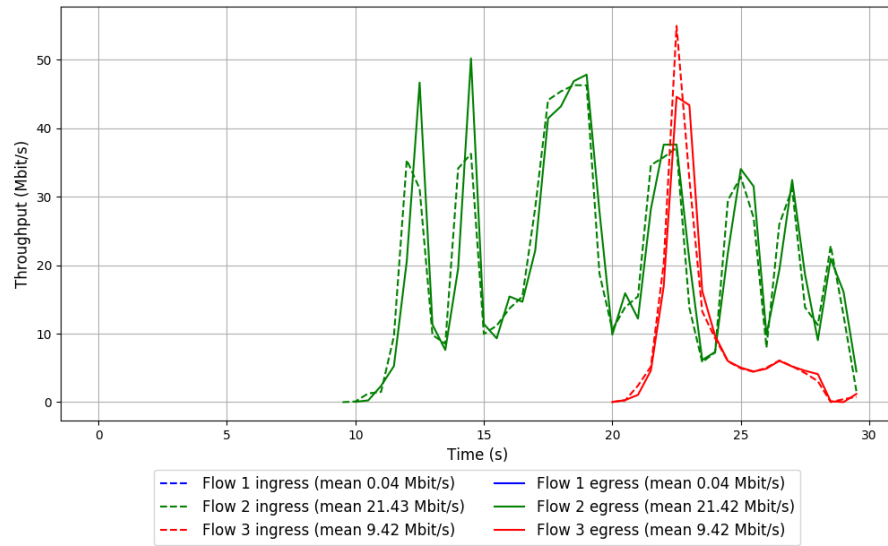
-- Flow 3:

Average throughput: 9.42 Mbit/s

95th percentile per-packet one-way delay: 136.575 ms

Loss rate: 0.01%

Run 9: Report of QUIC Cubic — Data Link

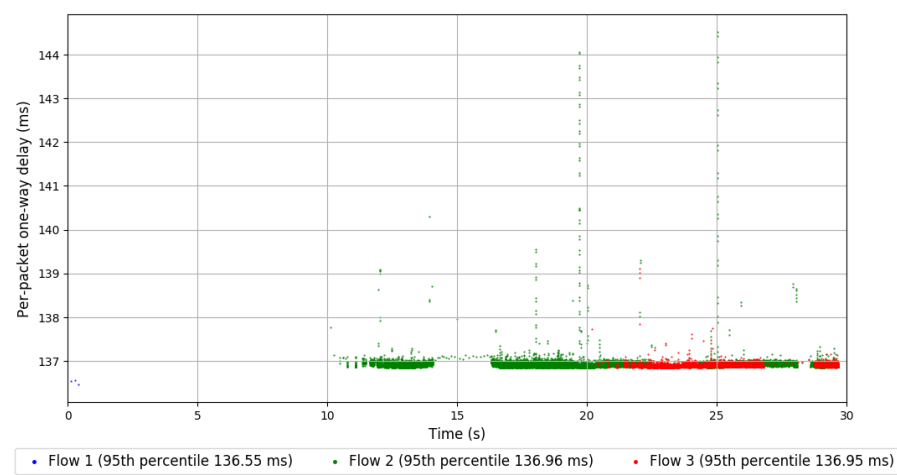
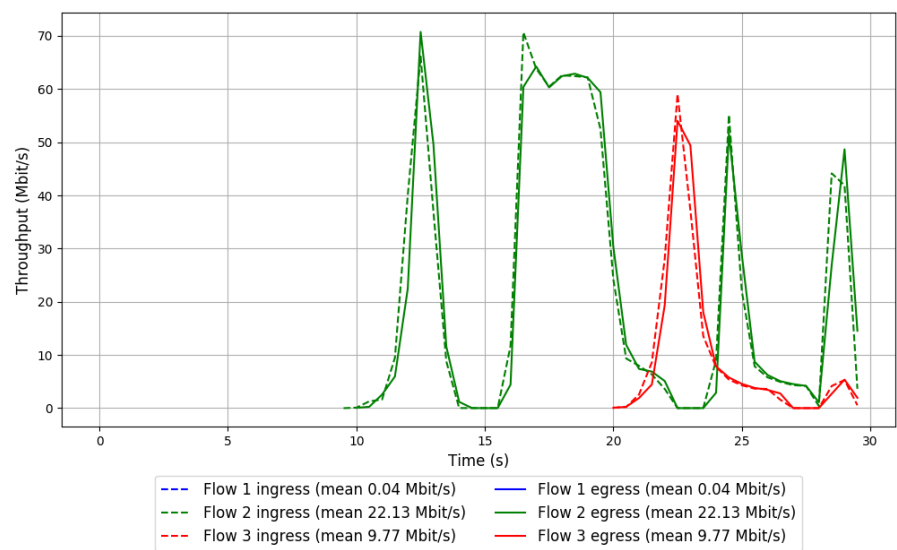


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-08-21 15:14:35
End at: 2017-08-21 15:15:05

# Below is generated by plot.py at 2017-08-21 16:36:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.79 Mbit/s
95th percentile per-packet one-way delay: 136.961 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 136.547 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.13 Mbit/s
95th percentile per-packet one-way delay: 136.963 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.77 Mbit/s
95th percentile per-packet one-way delay: 136.947 ms
Loss rate: 0.00%
```


Run 10: Report of QUIC Cubic — Data Link



Run 1: Statistics of Saturator

Start at: 2017-08-21 13:13:47

End at: 2017-08-21 13:14:17

Below is generated by plot.py at 2017-08-21 16:36:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.97 Mbit/s

95th percentile per-packet one-way delay: 138.233 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 8.58 Mbit/s

95th percentile per-packet one-way delay: 138.156 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 8.52 Mbit/s

95th percentile per-packet one-way delay: 138.106 ms

Loss rate: 0.31%

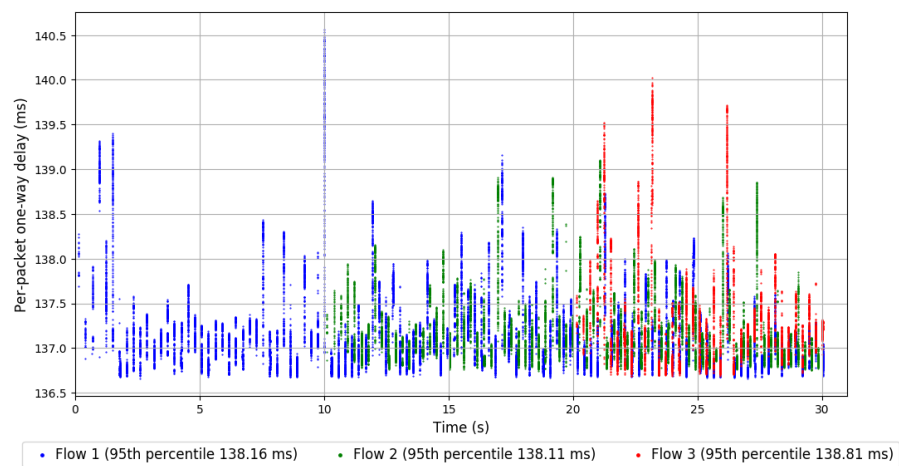
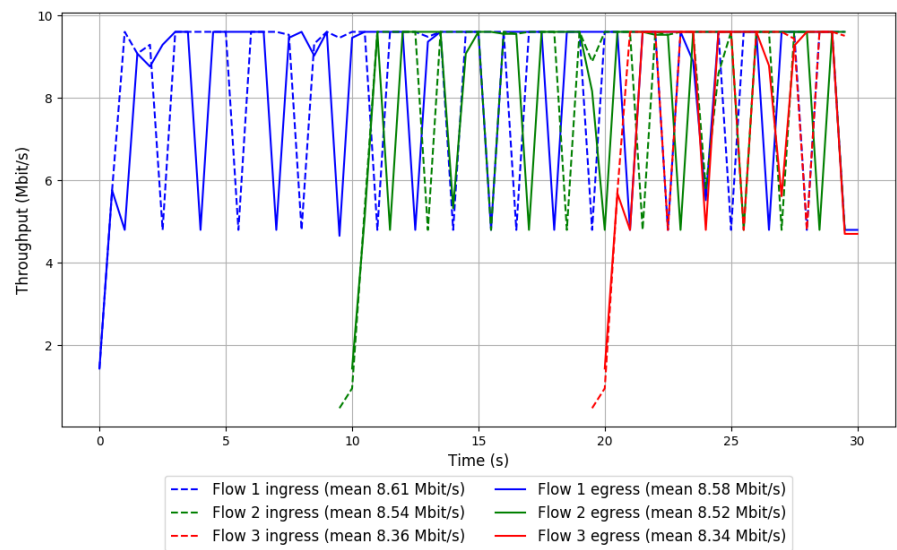
-- Flow 3:

Average throughput: 8.34 Mbit/s

95th percentile per-packet one-way delay: 138.814 ms

Loss rate: 0.17%

Run 1: Report of Saturator — Data Link



Run 2: Statistics of Saturator

Start at: 2017-08-21 13:27:33

End at: 2017-08-21 13:28:03

Below is generated by plot.py at 2017-08-21 16:36:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.07 Mbit/s

95th percentile per-packet one-way delay: 138.943 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 8.48 Mbit/s

95th percentile per-packet one-way delay: 138.887 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 138.984 ms

Loss rate: 0.65%

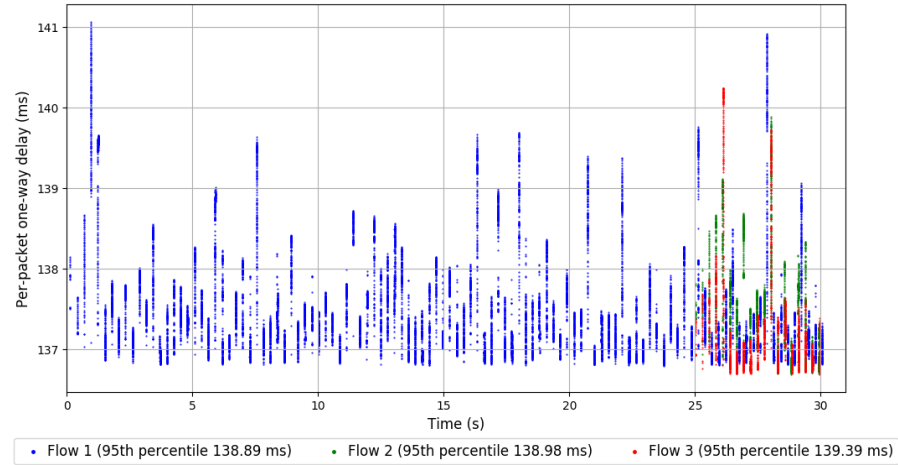
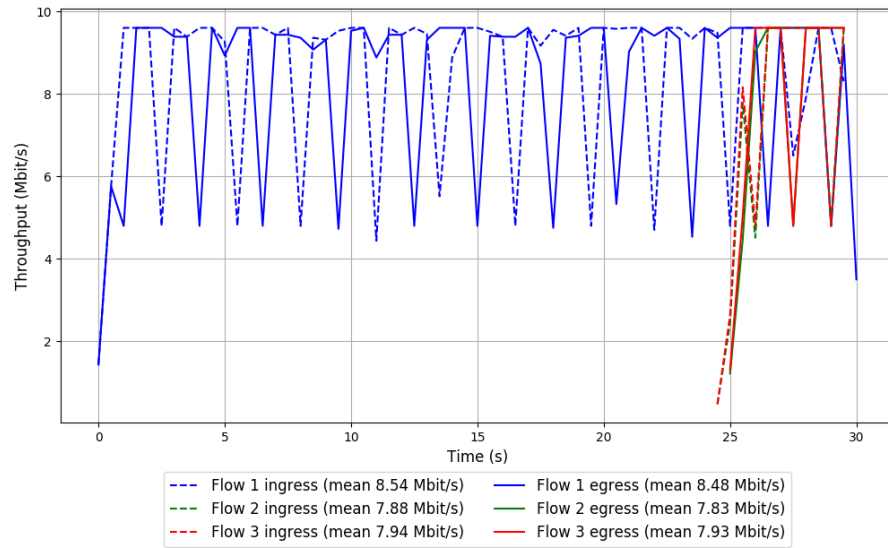
-- Flow 3:

Average throughput: 7.93 Mbit/s

95th percentile per-packet one-way delay: 139.392 ms

Loss rate: 0.15%

Run 2: Report of Saturator — Data Link

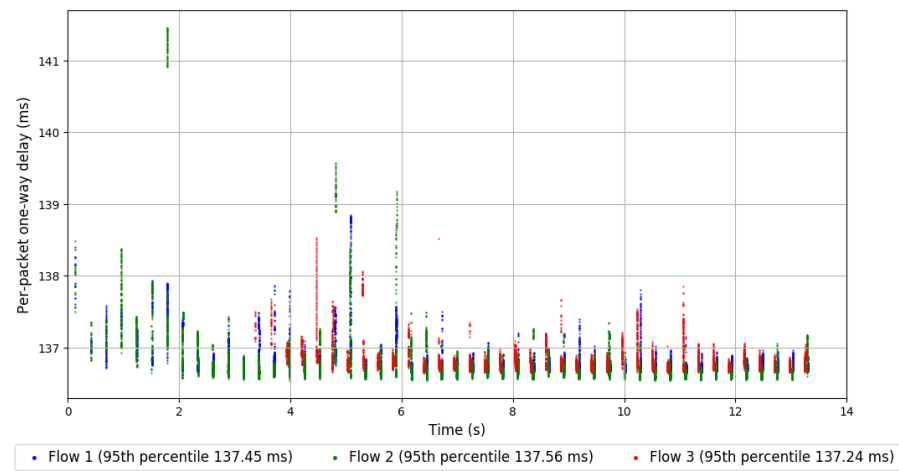
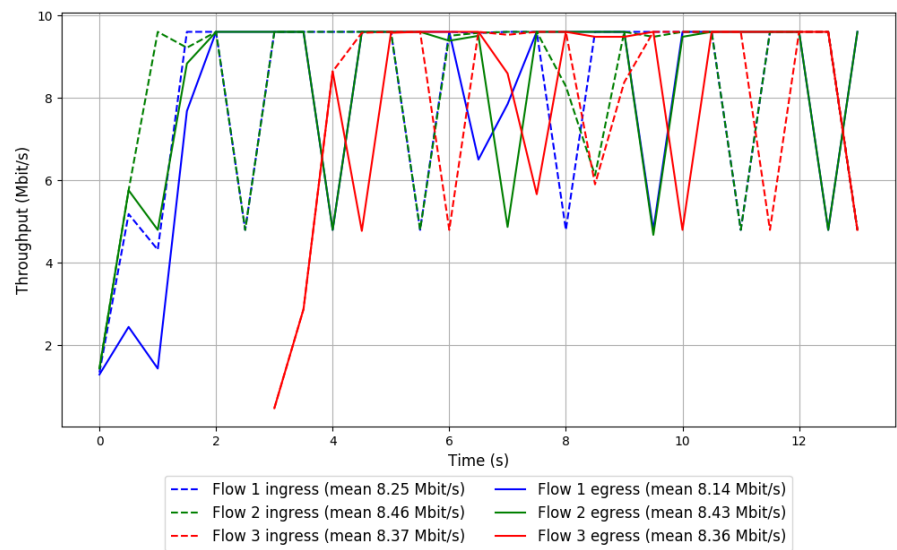


Run 3: Statistics of Saturator

Start at: 2017-08-21 13:41:12

End at: 2017-08-21 13:41:42

Run 3: Report of Saturator — Data Link

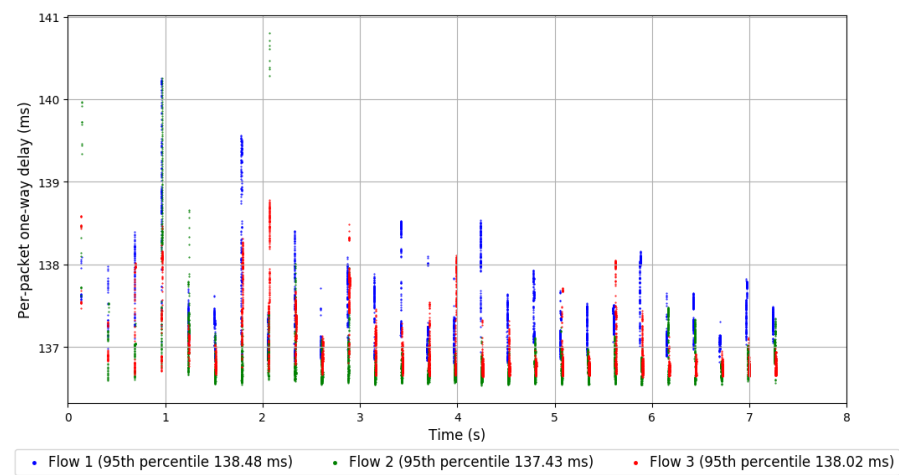
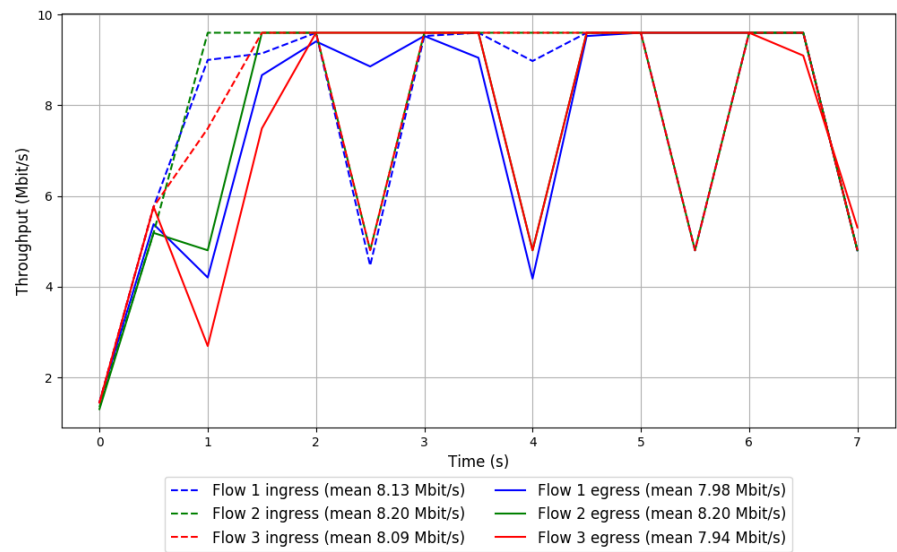


Run 4: Statistics of Saturator

Start at: 2017-08-21 13:54:39

End at: 2017-08-21 13:55:09

Run 4: Report of Saturator — Data Link

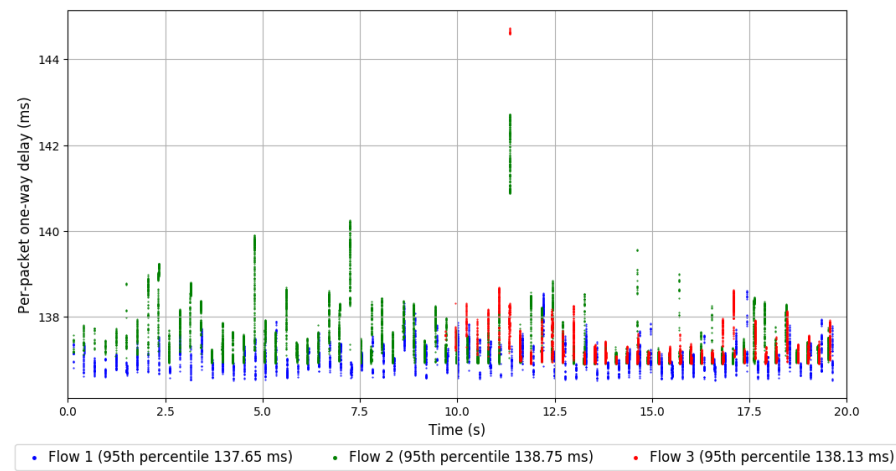
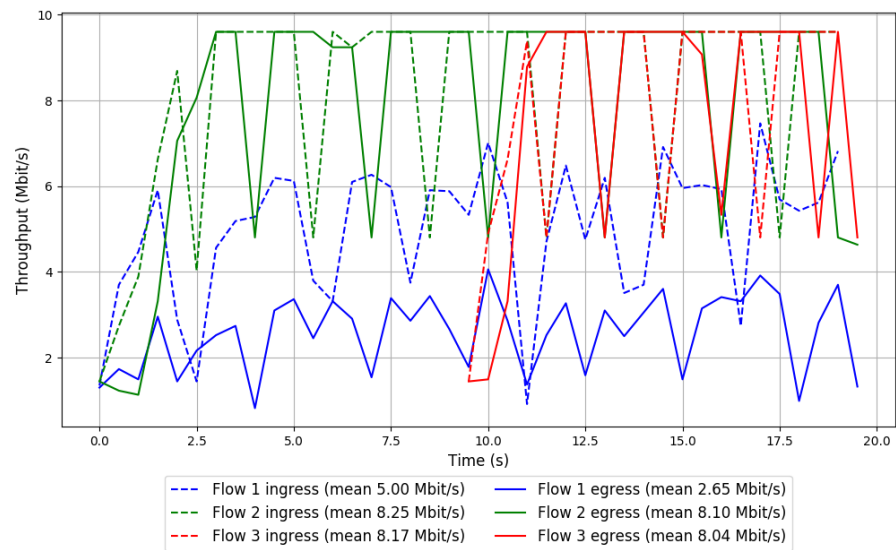


Run 5: Statistics of Saturator

Start at: 2017-08-21 14:08:16

End at: 2017-08-21 14:08:46

Run 5: Report of Saturator — Data Link

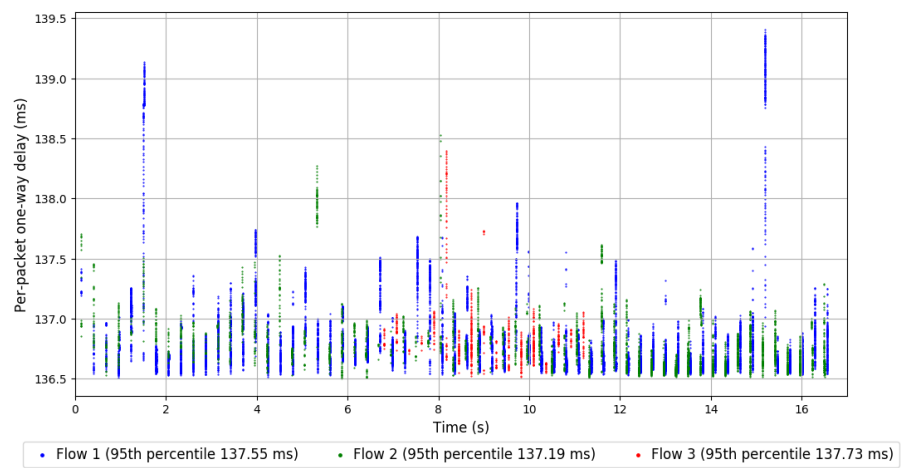
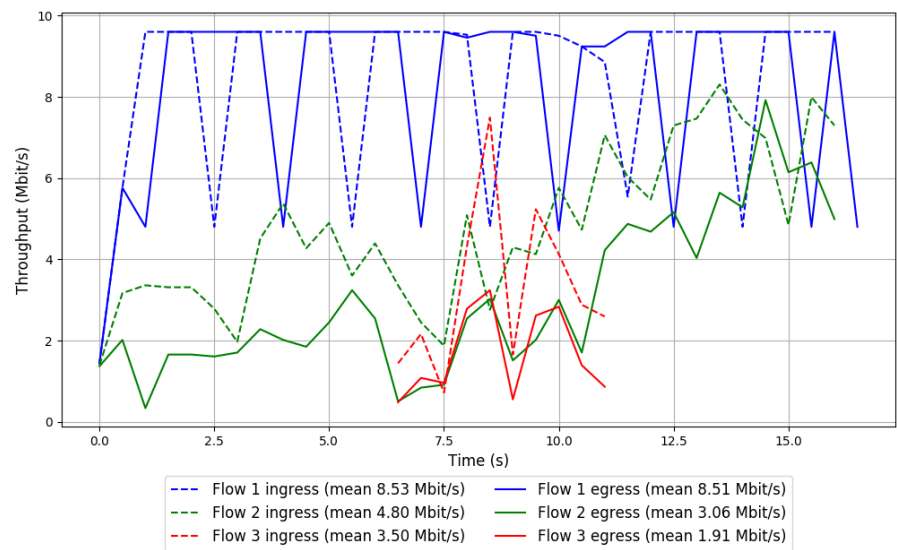


Run 6: Statistics of Saturator

Start at: 2017-08-21 14:21:40

End at: 2017-08-21 14:22:10

Run 6: Report of Saturator — Data Link

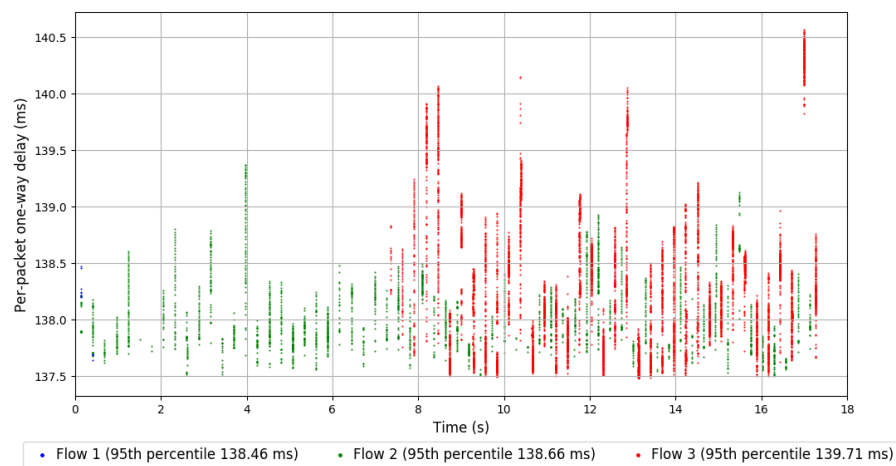
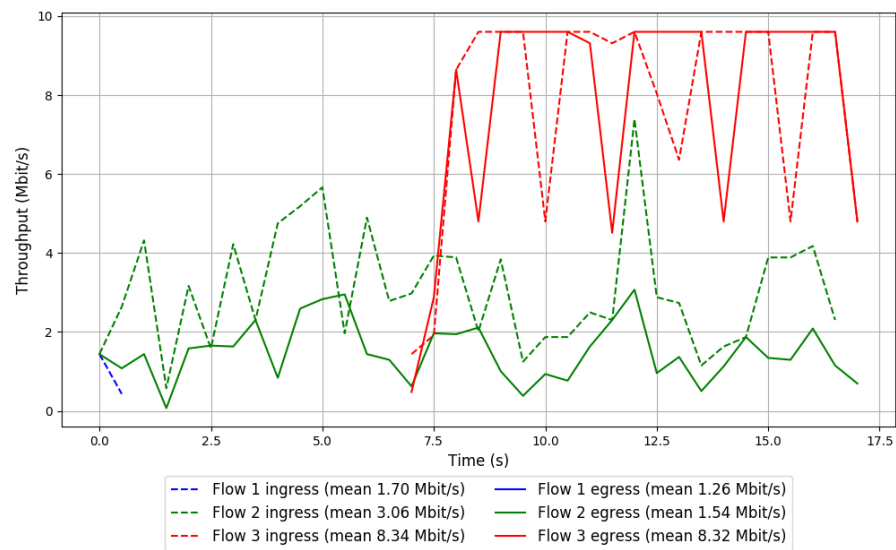


Run 7: Statistics of Saturator

Start at: 2017-08-21 14:35:00

End at: 2017-08-21 14:35:30

Run 7: Report of Saturator — Data Link

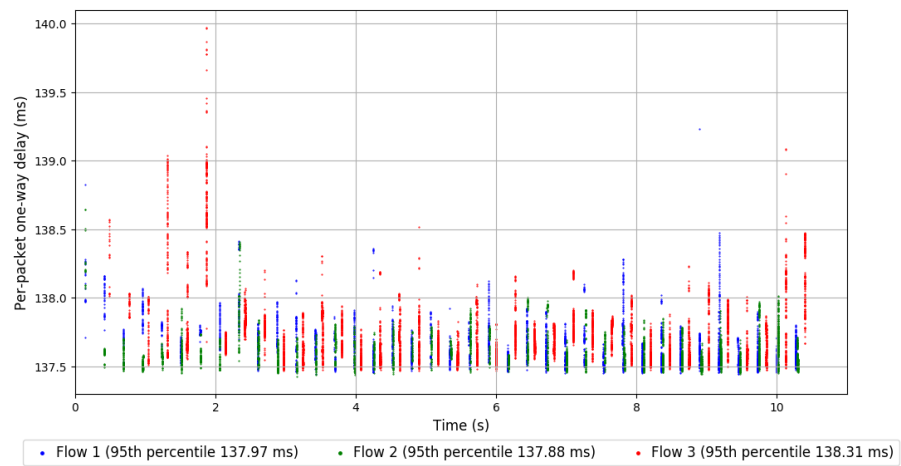
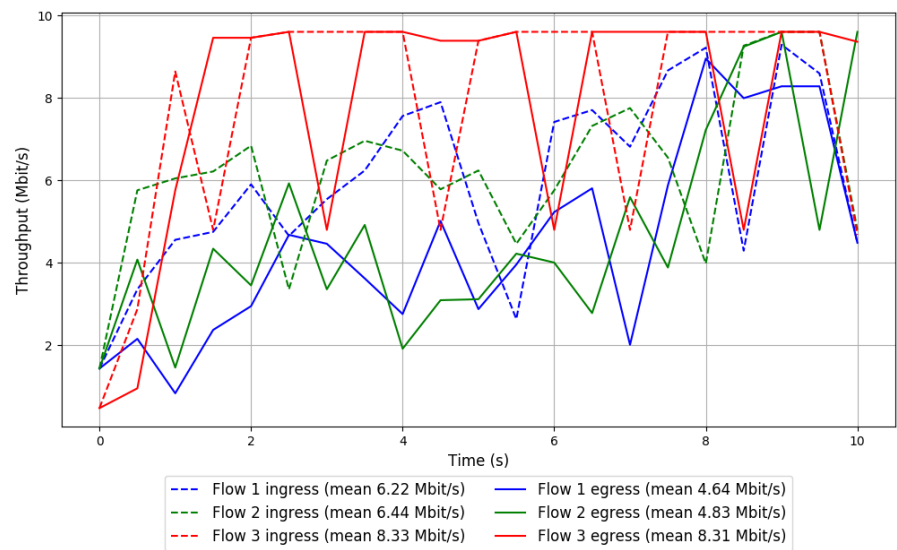


Run 8: Statistics of Saturator

Start at: 2017-08-21 14:48:11

End at: 2017-08-21 14:48:42

Run 8: Report of Saturator — Data Link

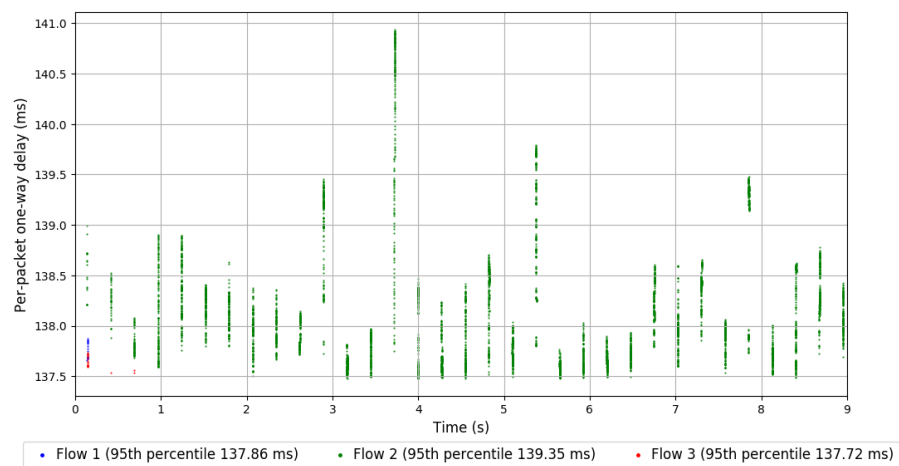
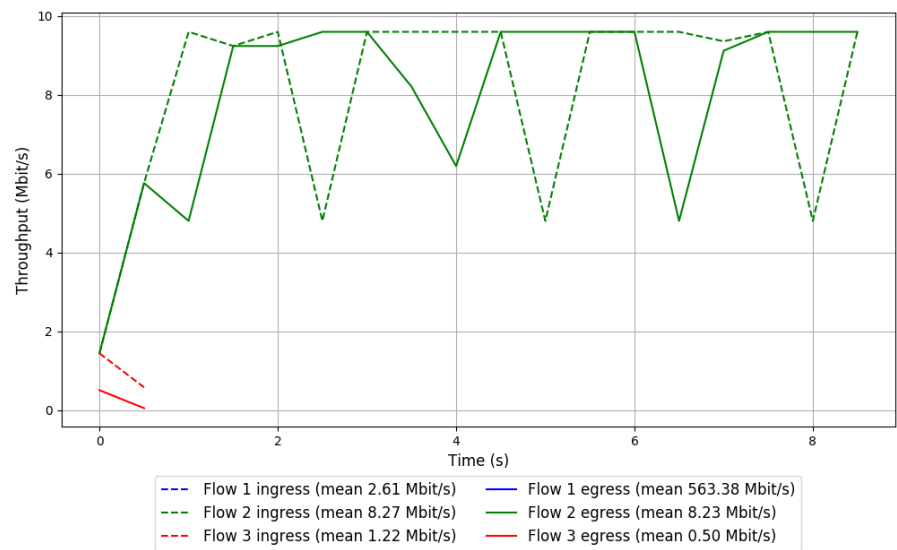


Run 9: Statistics of Saturator

Start at: 2017-08-21 15:01:39

End at: 2017-08-21 15:02:09

Run 9: Report of Saturator — Data Link

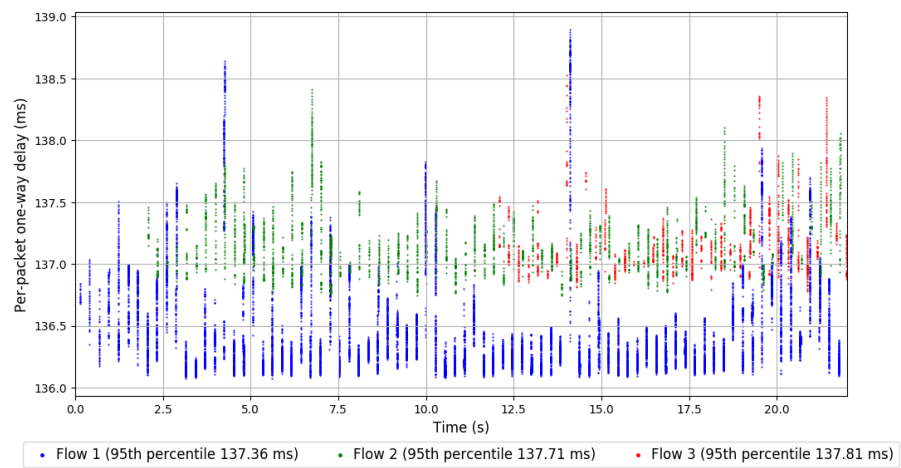
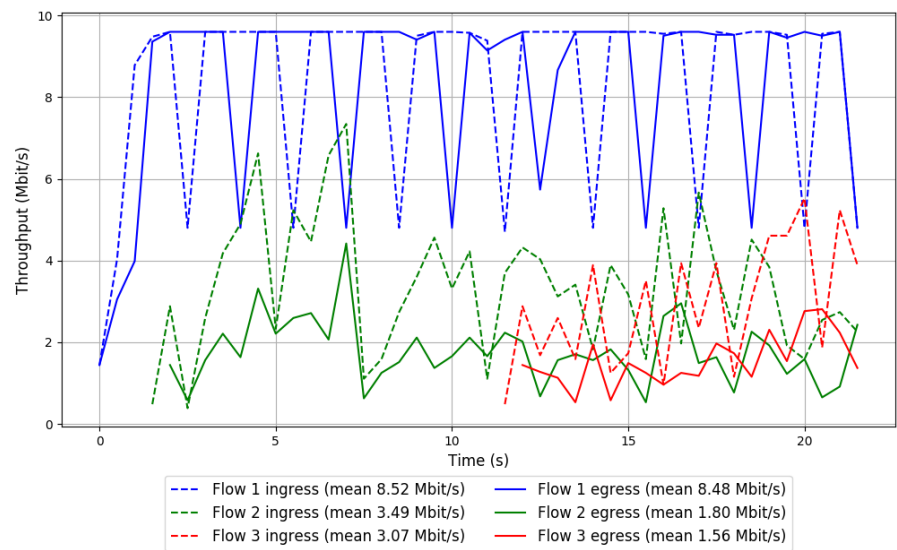


Run 10: Statistics of Saturator

Start at: 2017-08-21 15:15:27

End at: 2017-08-21 15:15:57

Run 10: Report of Saturator — Data Link

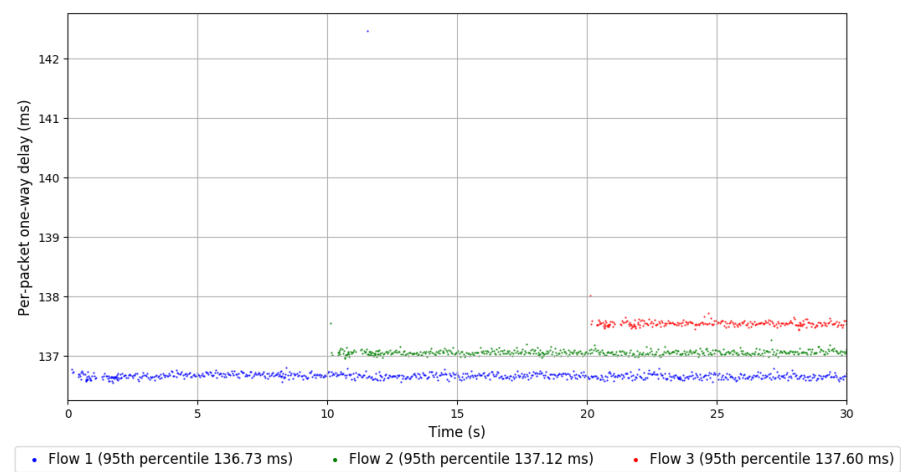
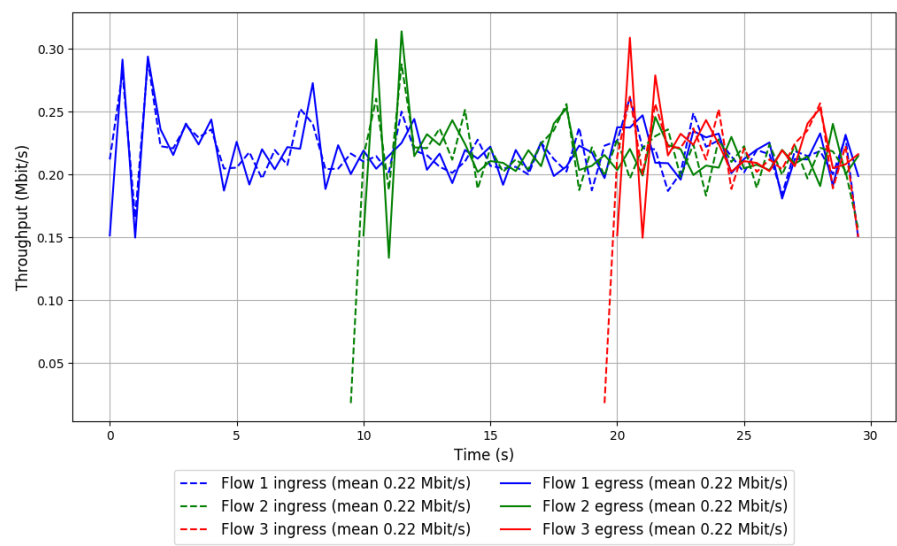


```
Run 1: Statistics of SCReAM

Start at: 2017-08-21 13:19:31
End at: 2017-08-21 13:20:01

# Below is generated by plot.py at 2017-08-21 16:36:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 137.557 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.727 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.118 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.604 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

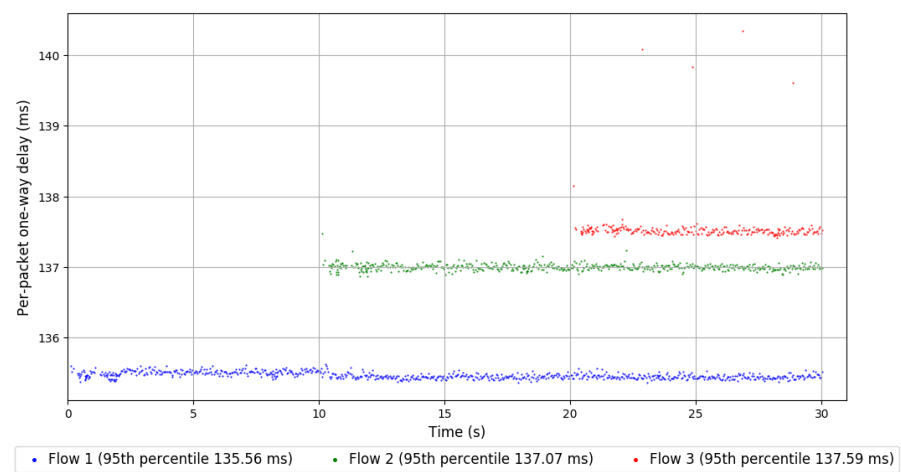
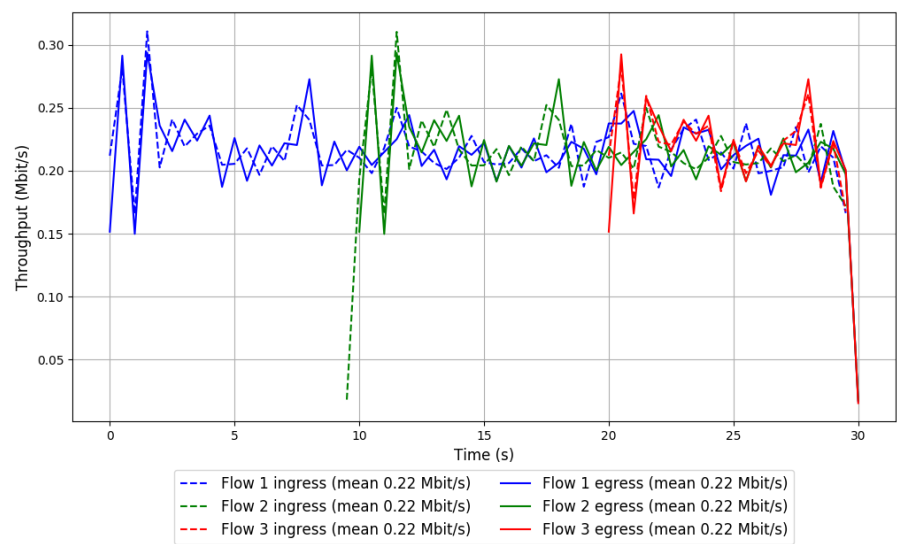


```
Run 2: Statistics of SCReAM

Start at: 2017-08-21 13:33:07
End at: 2017-08-21 13:33:37

# Below is generated by plot.py at 2017-08-21 16:36:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 137.534 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.558 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.074 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.588 ms
Loss rate: 0.00%
```


Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2017-08-21 13:46:42

End at: 2017-08-21 13:47:12

Below is generated by plot.py at 2017-08-21 16:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 137.610 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.040 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 136.677 ms

Loss rate: 0.21%

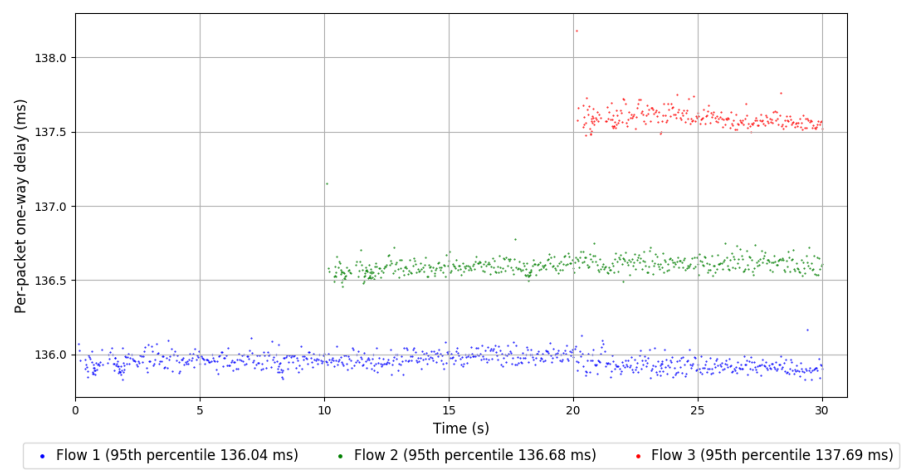
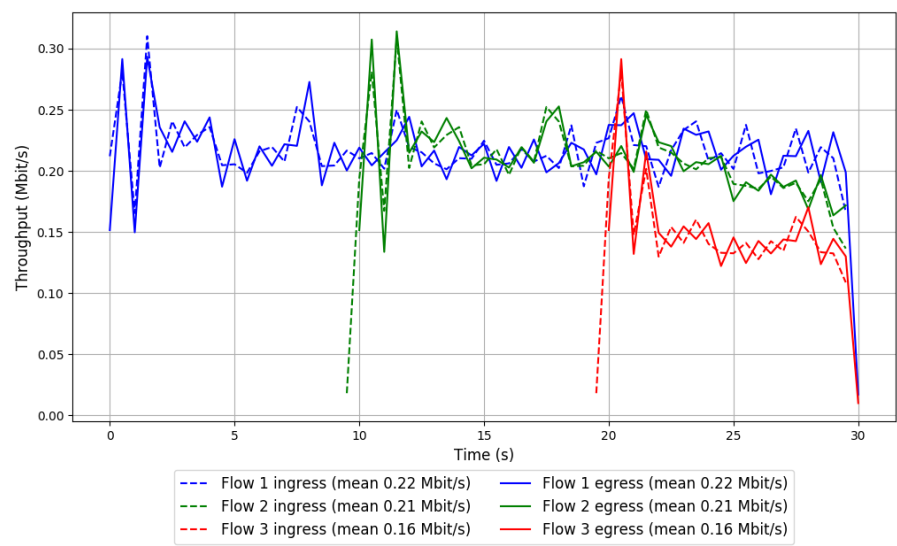
-- Flow 3:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 137.688 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-08-21 14:00:14

End at: 2017-08-21 14:00:44

Below is generated by plot.py at 2017-08-21 16:36:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 137.124 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.090 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.160 ms

Loss rate: 0.00%

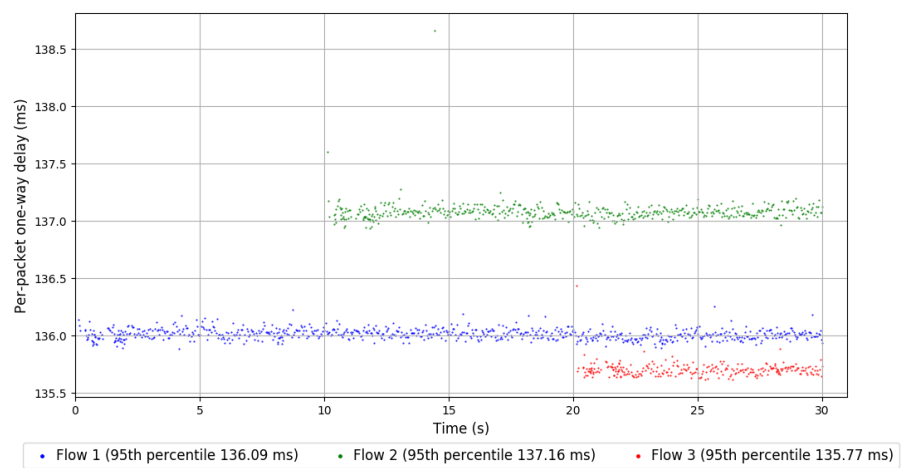
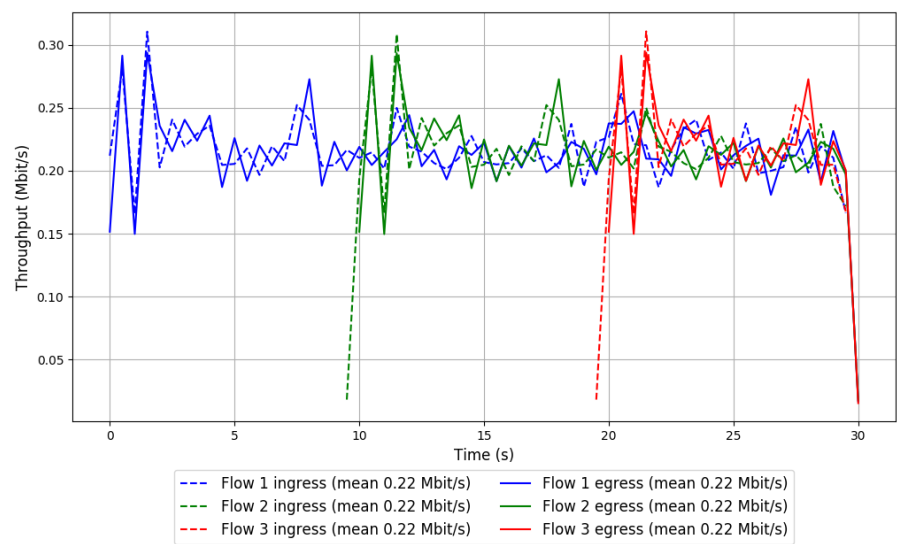
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.772 ms

Loss rate: 0.00%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-08-21 14:13:40

End at: 2017-08-21 14:14:10

Below is generated by plot.py at 2017-08-21 16:36:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 137.110 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.866 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.451 ms

Loss rate: 0.00%

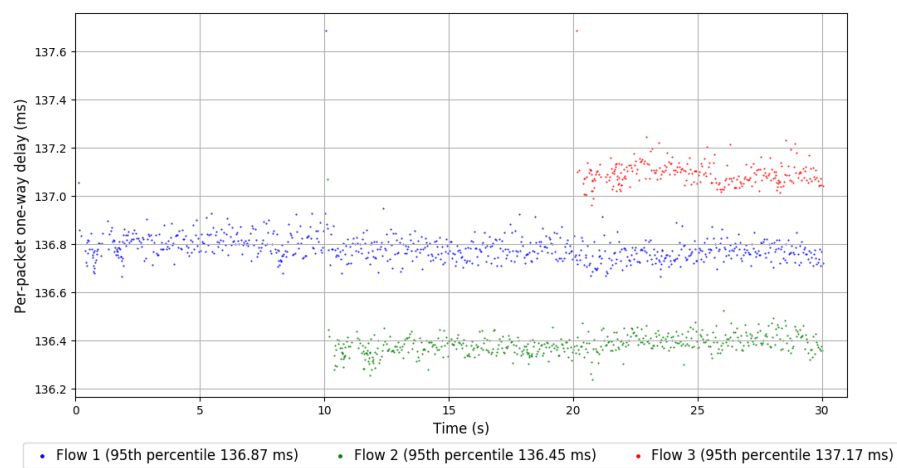
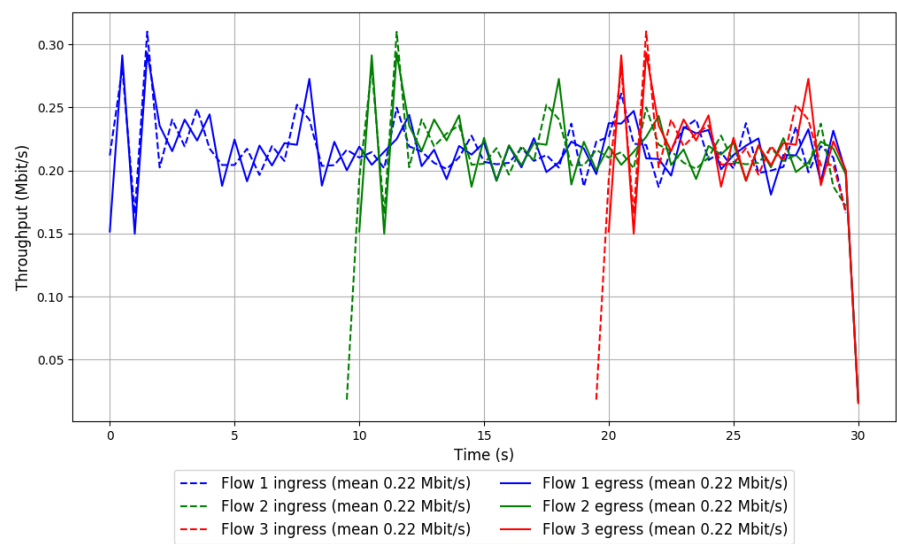
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.172 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2017-08-21 14:26:59

End at: 2017-08-21 14:27:29

Below is generated by plot.py at 2017-08-21 16:36:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.840 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.517 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.883 ms

Loss rate: 0.00%

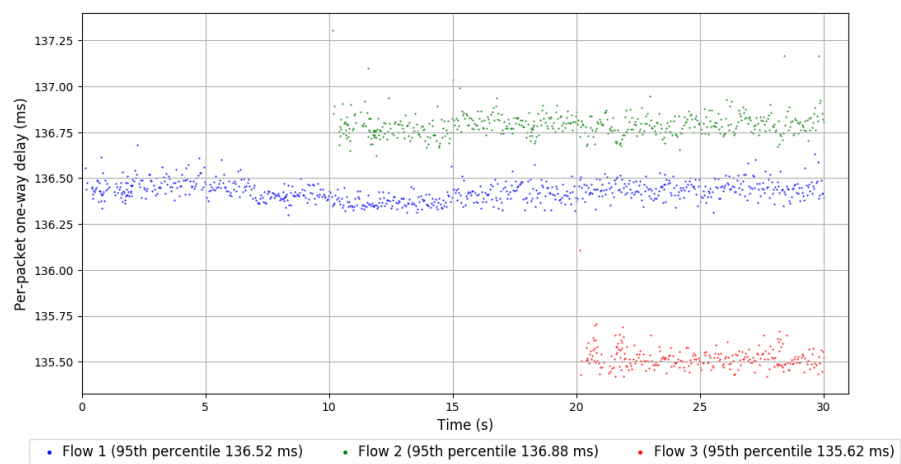
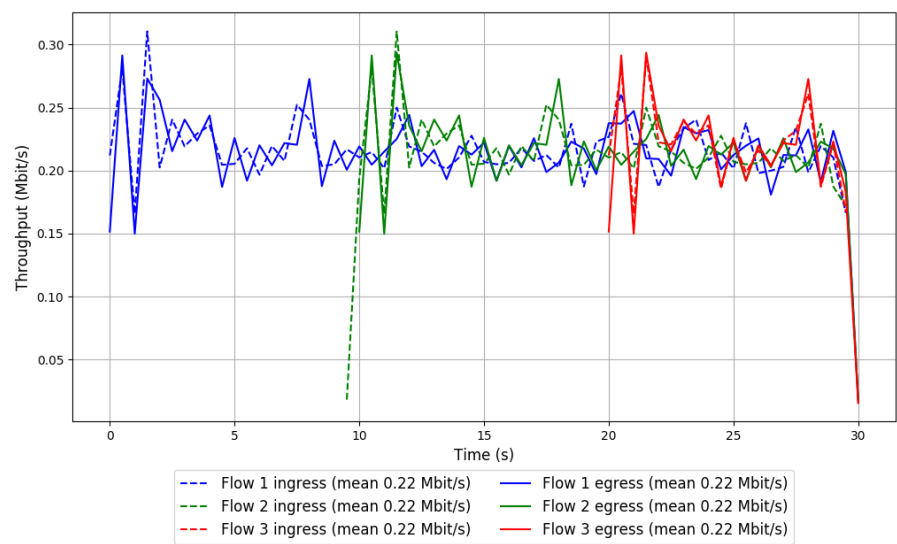
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.621 ms

Loss rate: 0.39%

Run 6: Report of SCSReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2017-08-21 14:40:21

End at: 2017-08-21 14:40:51

Below is generated by plot.py at 2017-08-21 16:36:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.976 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.713 ms

Loss rate: 0.00%

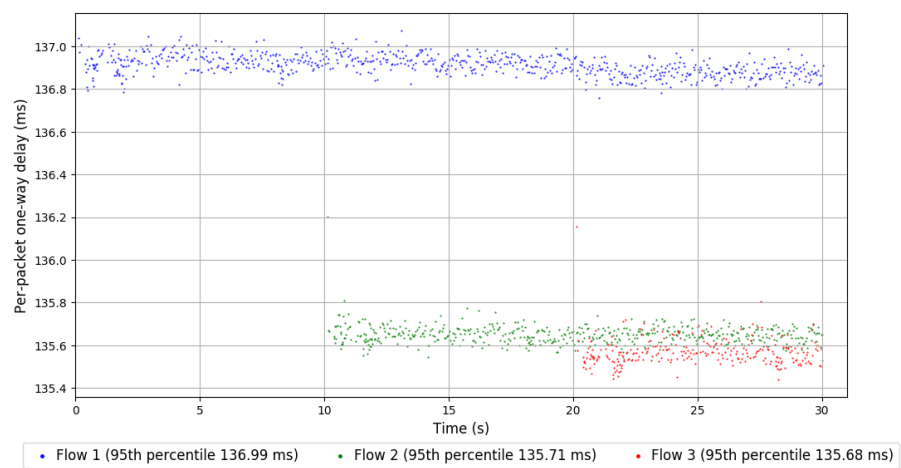
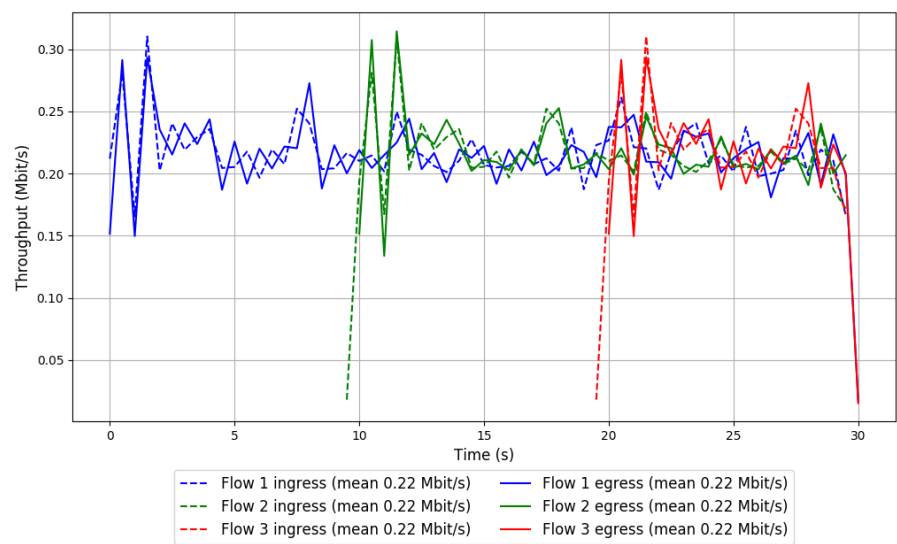
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.677 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-08-21 14:53:37

End at: 2017-08-21 14:54:07

Below is generated by plot.py at 2017-08-21 16:36:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.663 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.702 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 137.706 ms

Loss rate: 0.00%

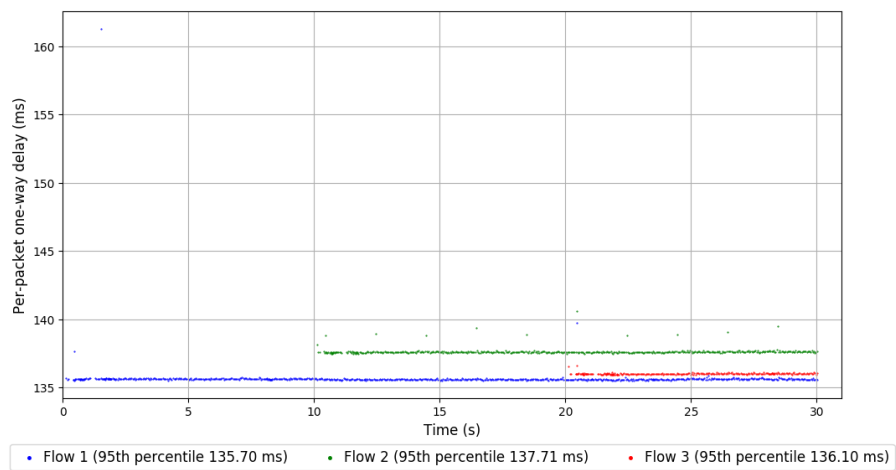
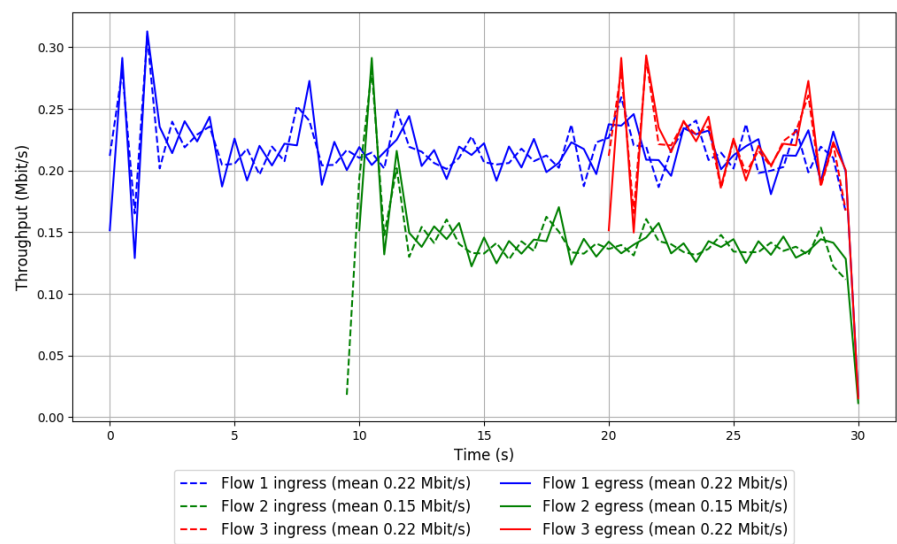
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.097 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-08-21 15:07:16

End at: 2017-08-21 15:07:46

Below is generated by plot.py at 2017-08-21 16:36:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.351 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.353 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.359 ms

Loss rate: 0.00%

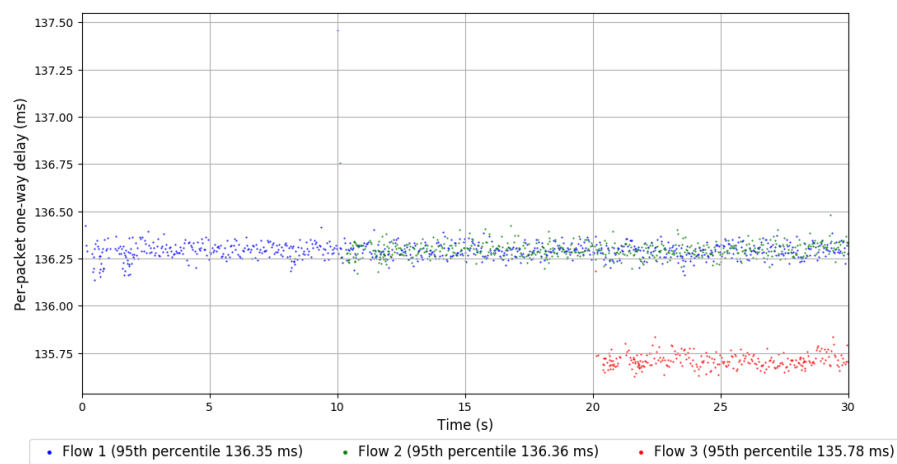
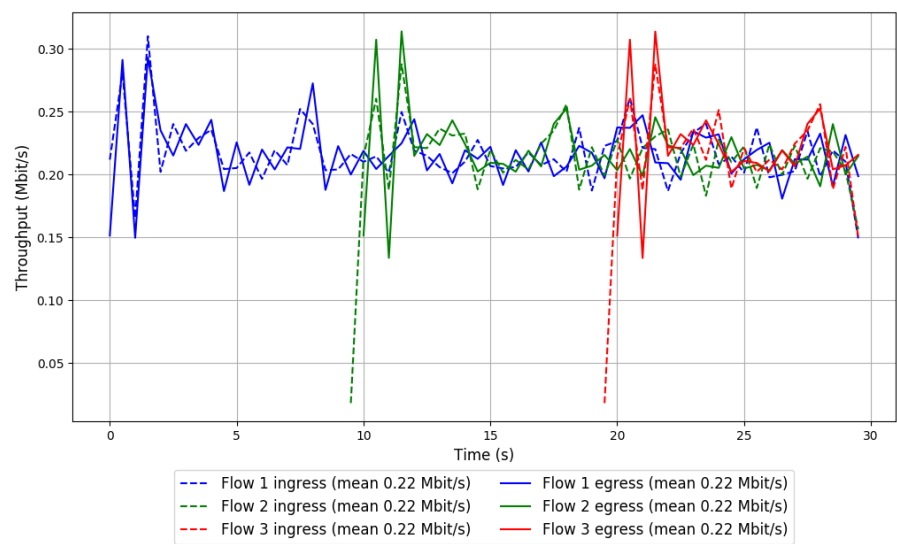
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.777 ms

Loss rate: 0.00%

Run 9: Report of SCRaM — Data Link

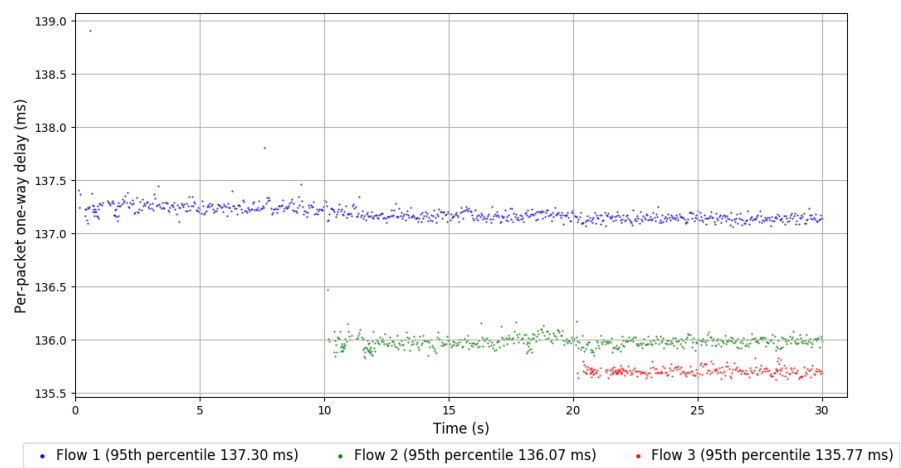
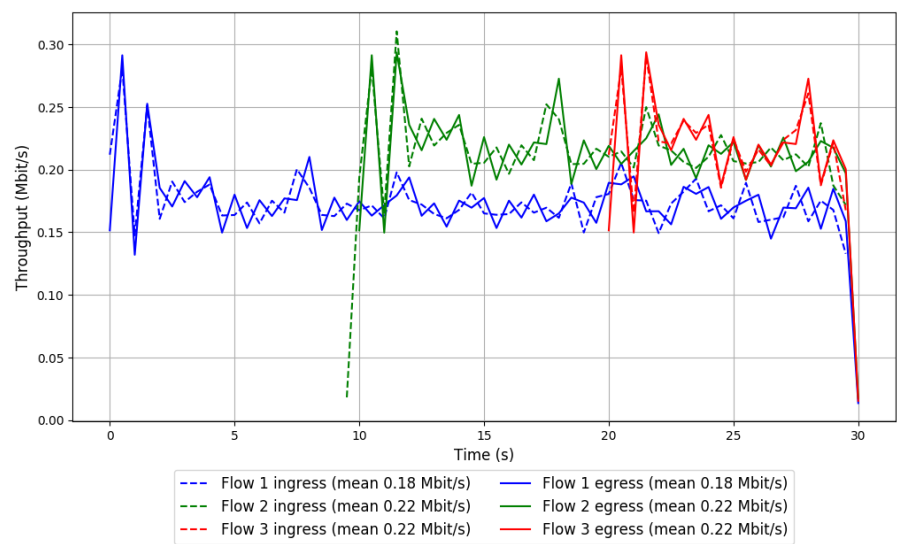


```
Run 10: Statistics of SCReAM

Start at: 2017-08-21 15:21:07
End at: 2017-08-21 15:21:37

# Below is generated by plot.py at 2017-08-21 16:36:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 137.275 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 137.298 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.067 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.774 ms
Loss rate: 0.00%
```


Run 10: Report of SReAM — Data Link

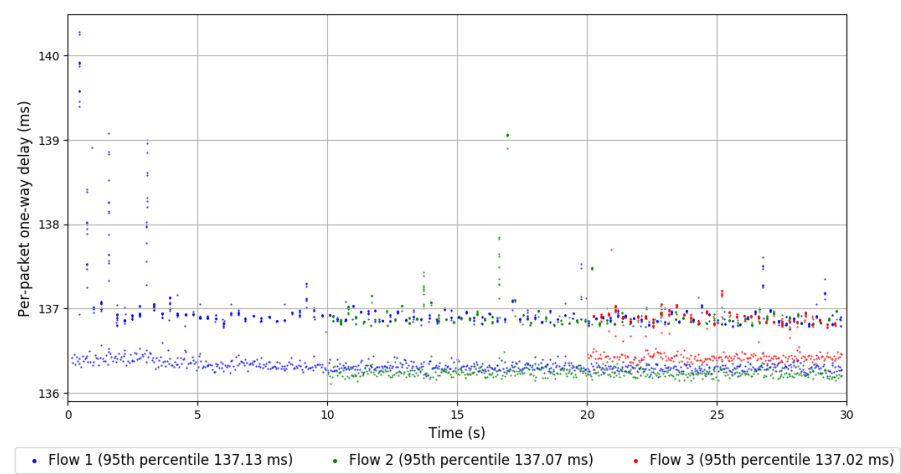
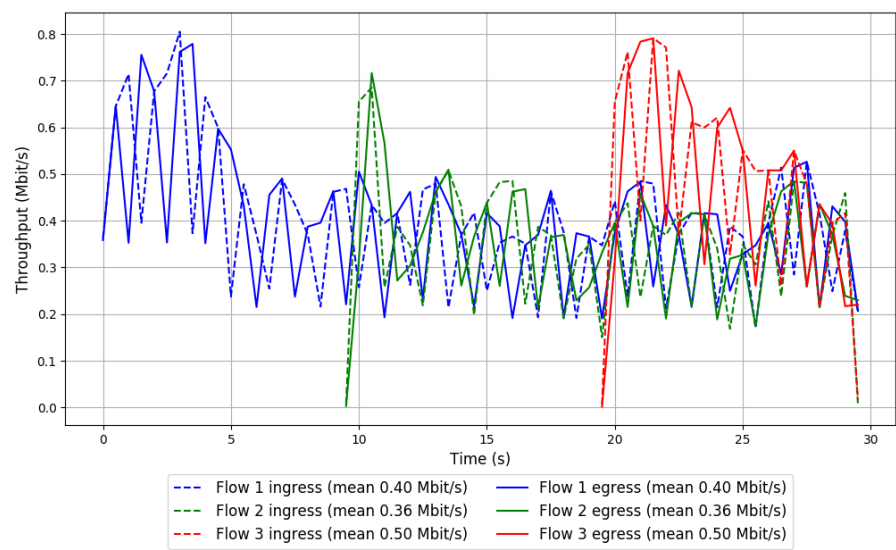


```
Run 1: Statistics of Sprout

Start at: 2017-08-21 13:24:06
End at: 2017-08-21 13:24:36

# Below is generated by plot.py at 2017-08-21 16:36:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 137.075 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 137.135 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 137.074 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 137.020 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-08-21 13:37:38

End at: 2017-08-21 13:38:08

Below is generated by plot.py at 2017-08-21 16:36:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 137.618 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 137.668 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.067 ms

Loss rate: 0.00%

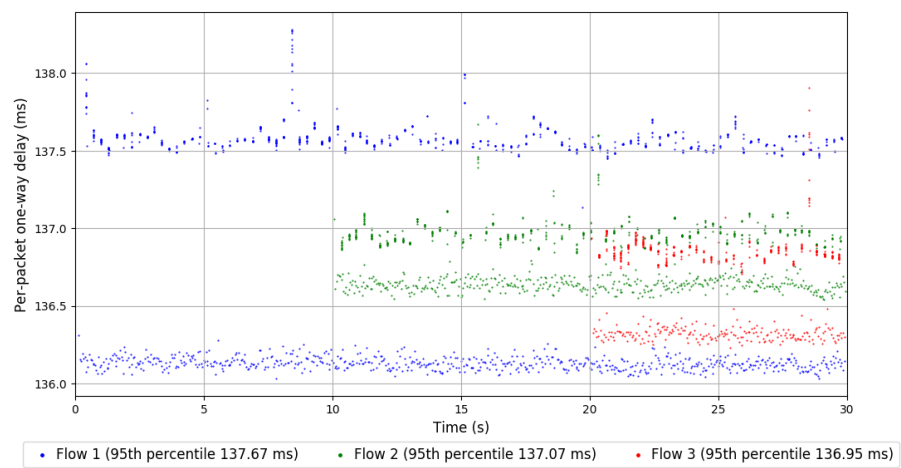
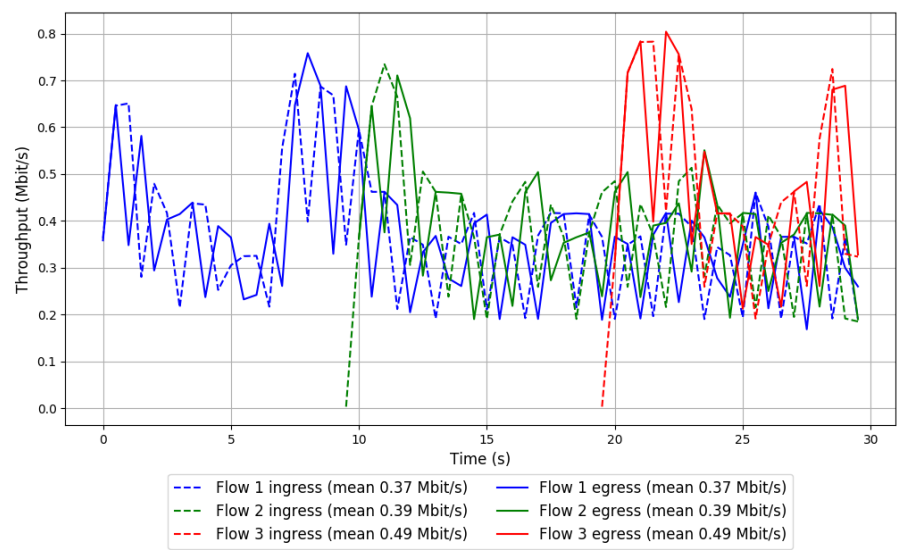
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 136.951 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-08-21 13:51:11

End at: 2017-08-21 13:51:41

Below is generated by plot.py at 2017-08-21 16:36:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 137.643 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 137.027 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 137.689 ms

Loss rate: 0.00%

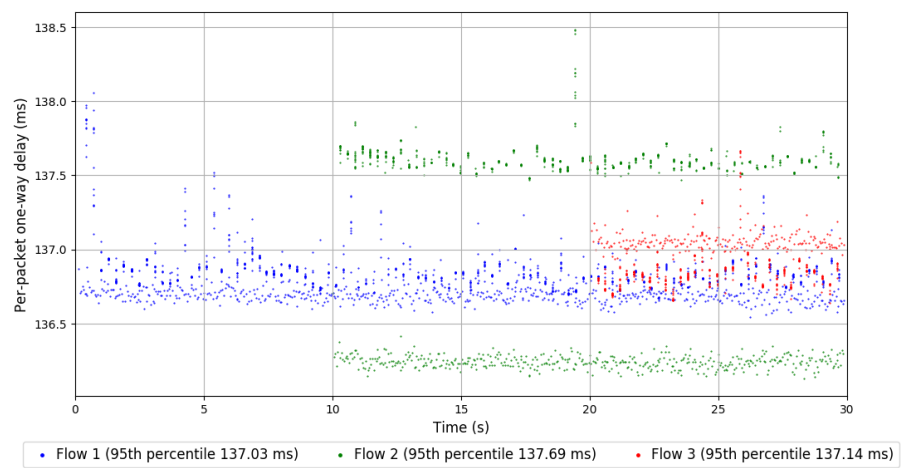
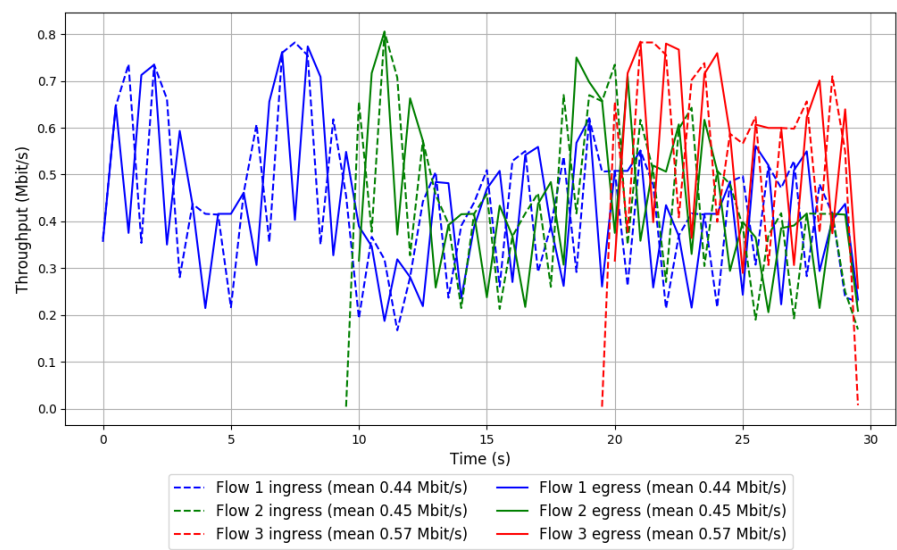
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 137.138 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-08-21 14:04:35

End at: 2017-08-21 14:05:05

Below is generated by plot.py at 2017-08-21 16:36:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.86 Mbit/s

95th percentile per-packet one-way delay: 137.486 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 137.002 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 137.165 ms

Loss rate: 0.00%

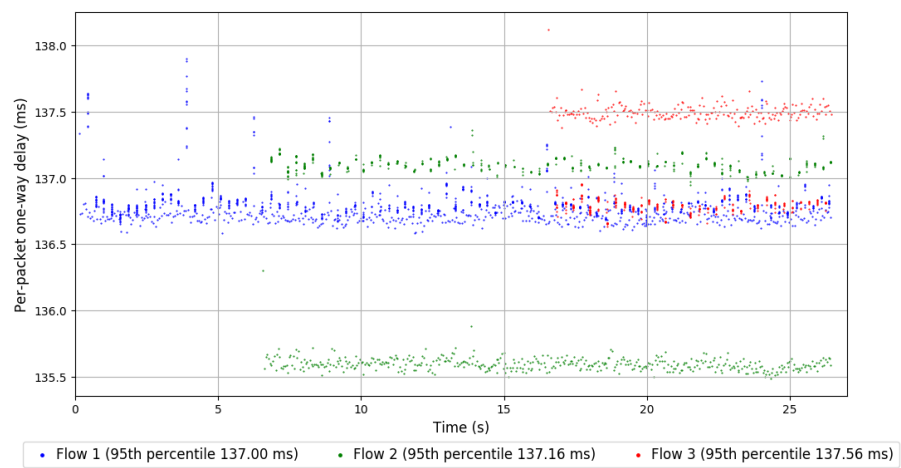
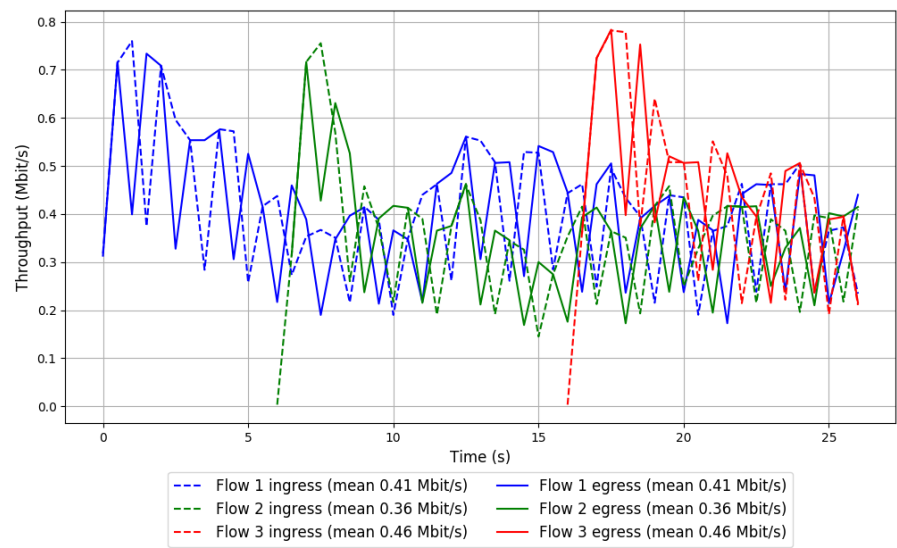
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 137.557 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-08-21 14:18:03

End at: 2017-08-21 14:18:33

Below is generated by plot.py at 2017-08-21 16:36:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 137.250 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.338 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 136.789 ms

Loss rate: 0.00%

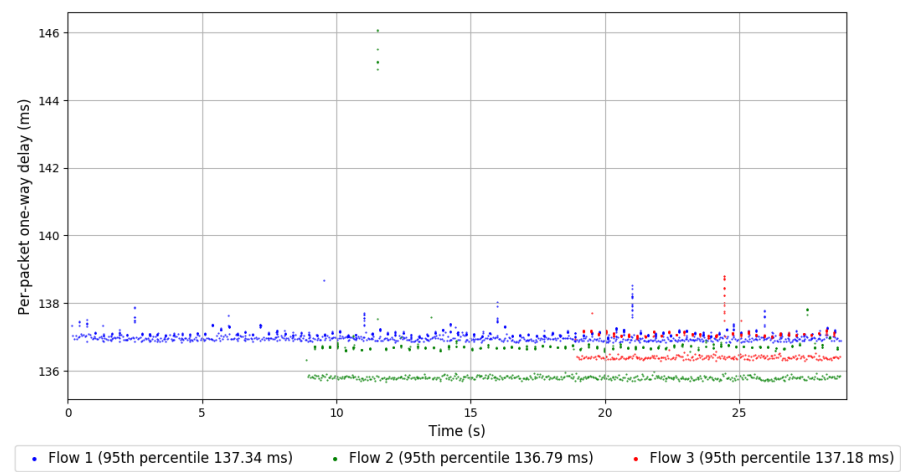
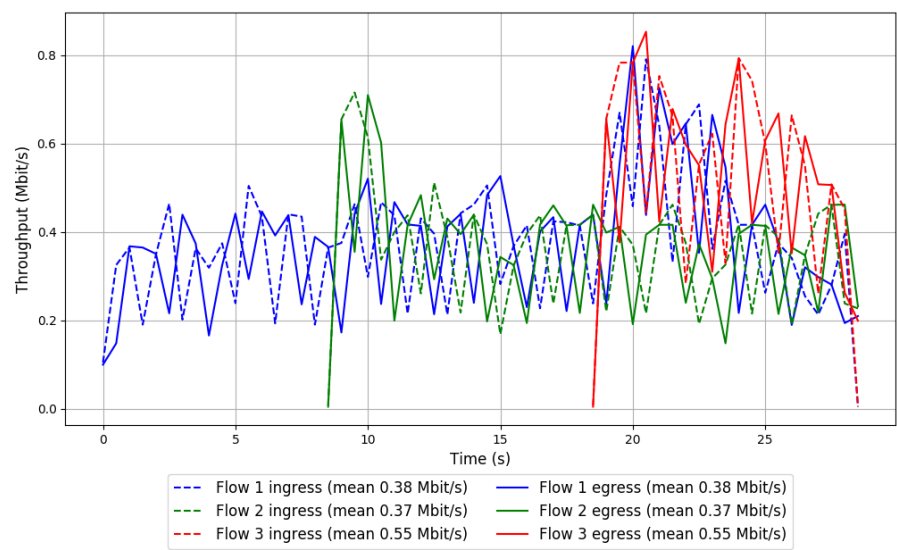
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 137.183 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-08-21 14:31:21

End at: 2017-08-21 14:31:51

Below is generated by plot.py at 2017-08-21 16:37:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.00 Mbit/s

95th percentile per-packet one-way delay: 137.580 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 137.615 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 136.781 ms

Loss rate: 0.00%

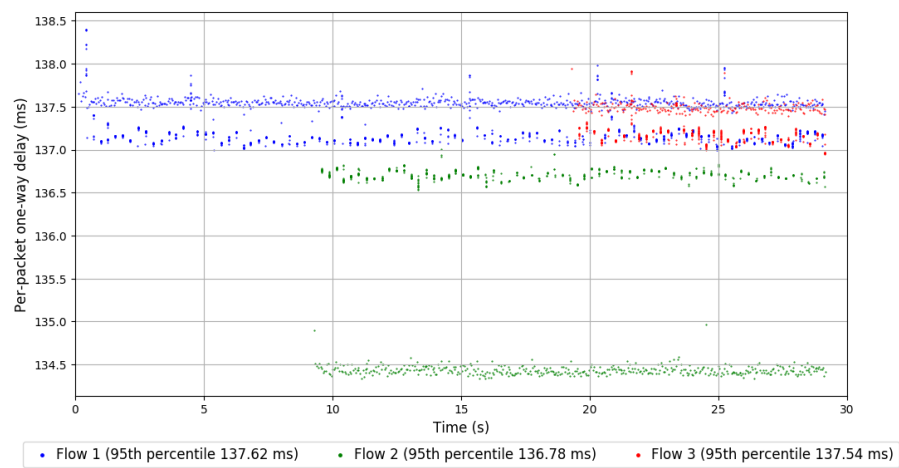
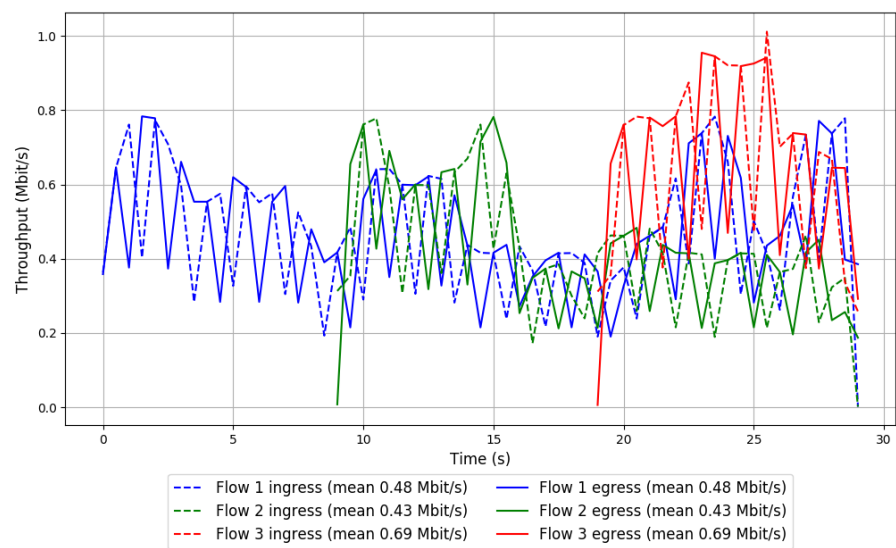
-- Flow 3:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 137.541 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-08-21 14:44:42

End at: 2017-08-21 14:45:12

Below is generated by plot.py at 2017-08-21 16:37:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 137.762 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 137.737 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.797 ms

Loss rate: 0.00%

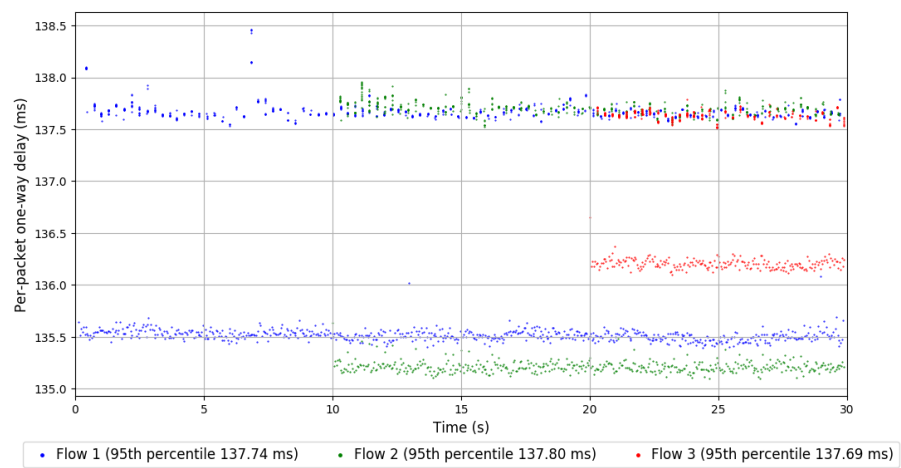
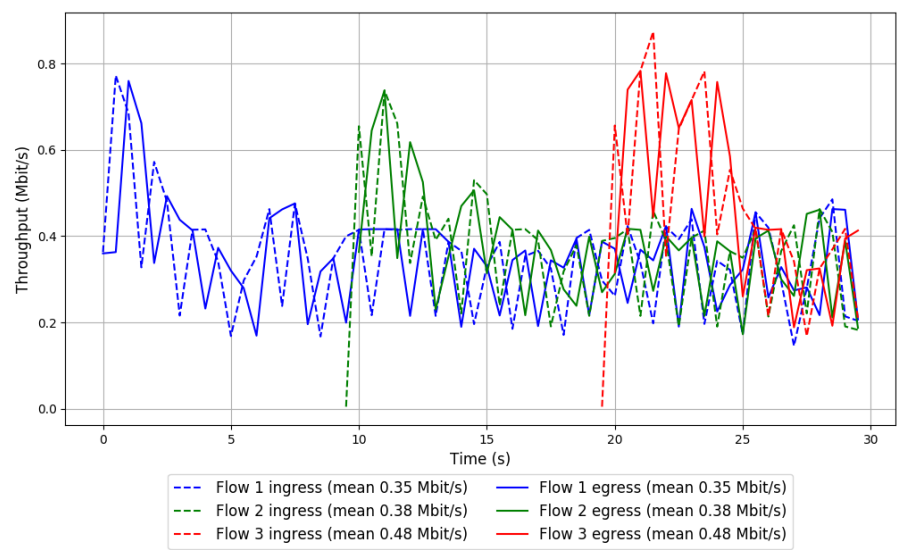
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 137.695 ms

Loss rate: 0.04%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-08-21 14:58:08

End at: 2017-08-21 14:58:38

Below is generated by plot.py at 2017-08-21 16:37:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 137.732 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 137.710 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.693 ms

Loss rate: 0.00%

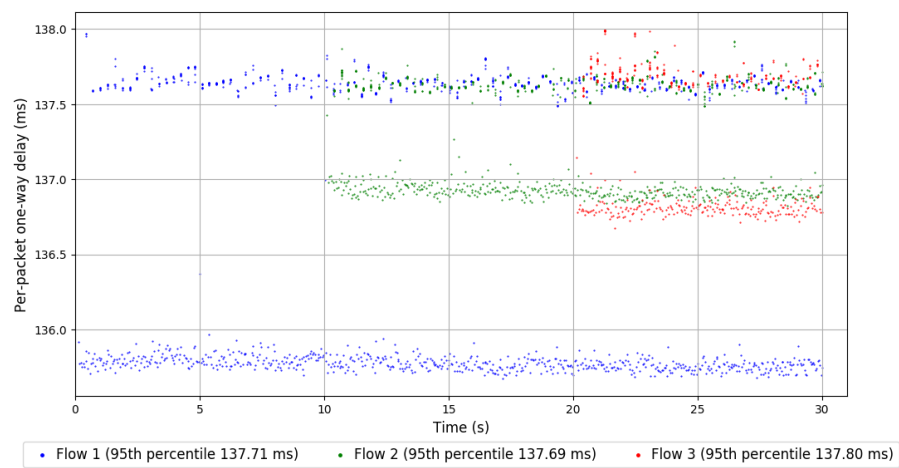
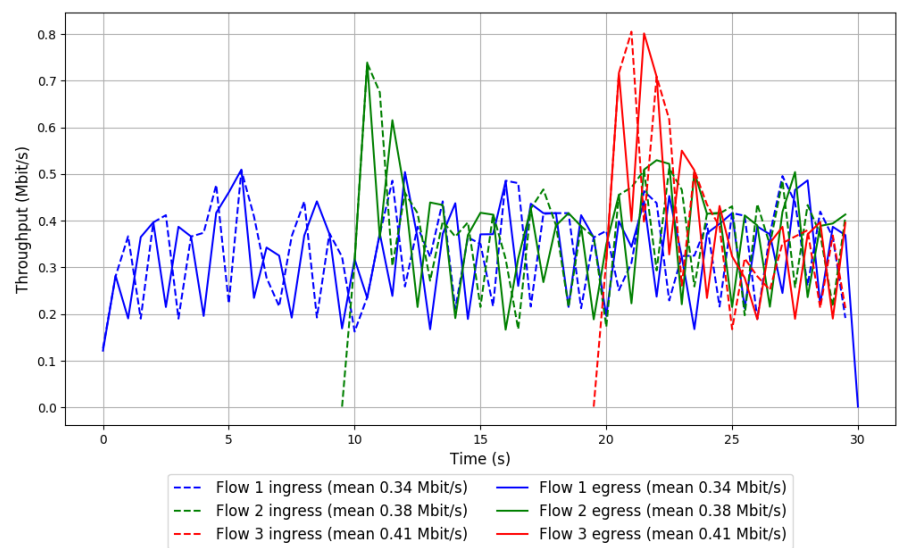
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 137.797 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-08-21 15:11:45

End at: 2017-08-21 15:12:15

Below is generated by plot.py at 2017-08-21 16:37:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.81 Mbit/s

95th percentile per-packet one-way delay: 137.071 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 137.253 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.878 ms

Loss rate: 0.00%

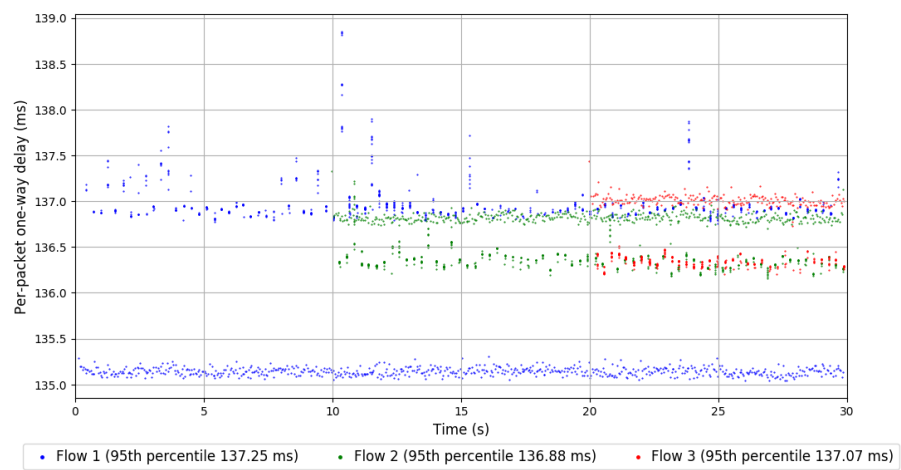
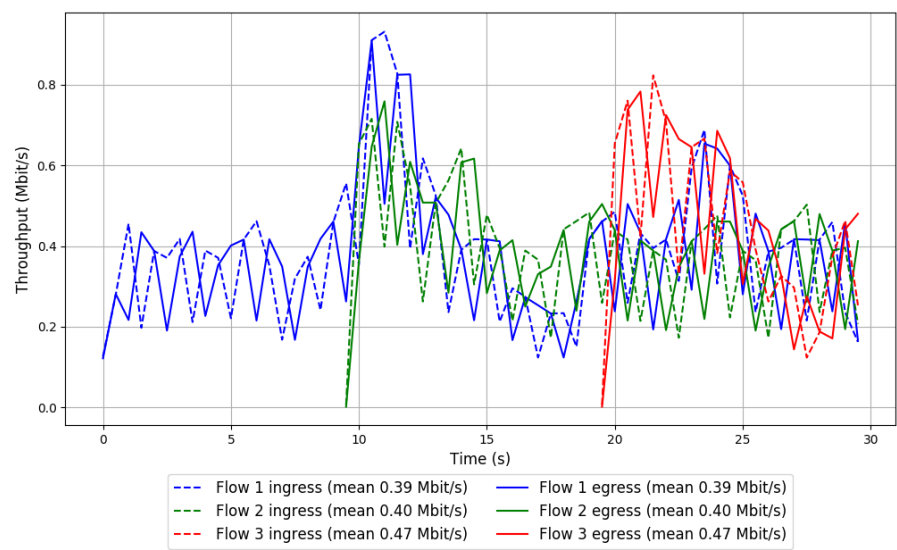
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 137.066 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-08-21 15:25:31

End at: 2017-08-21 15:26:01

Below is generated by plot.py at 2017-08-21 16:37:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 136.625 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.476 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.86 Mbit/s

95th percentile per-packet one-way delay: 136.703 ms

Loss rate: 0.00%

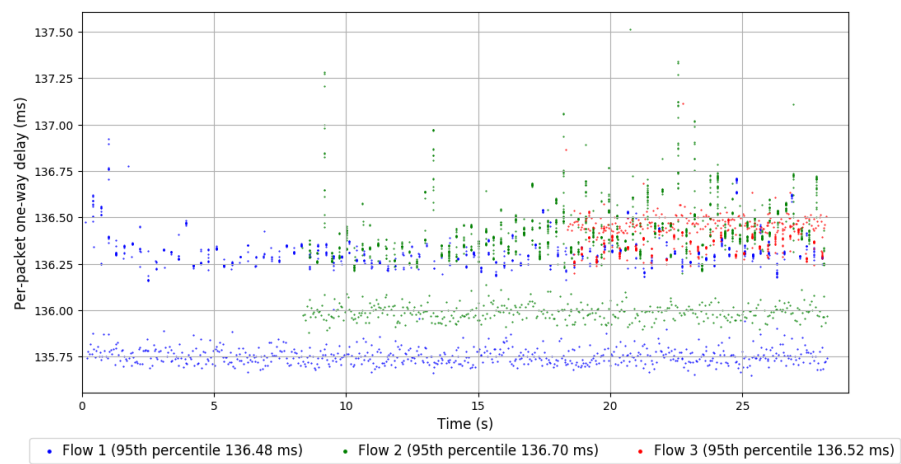
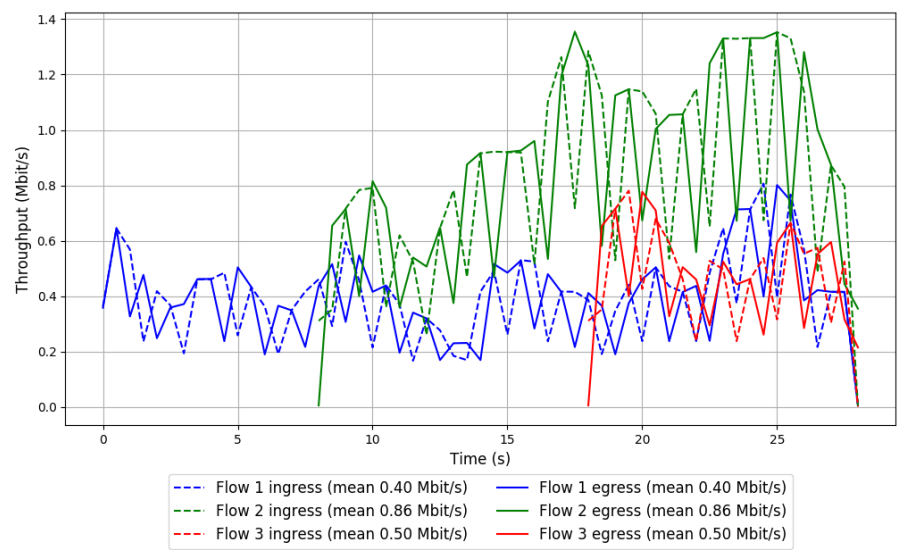
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 136.516 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

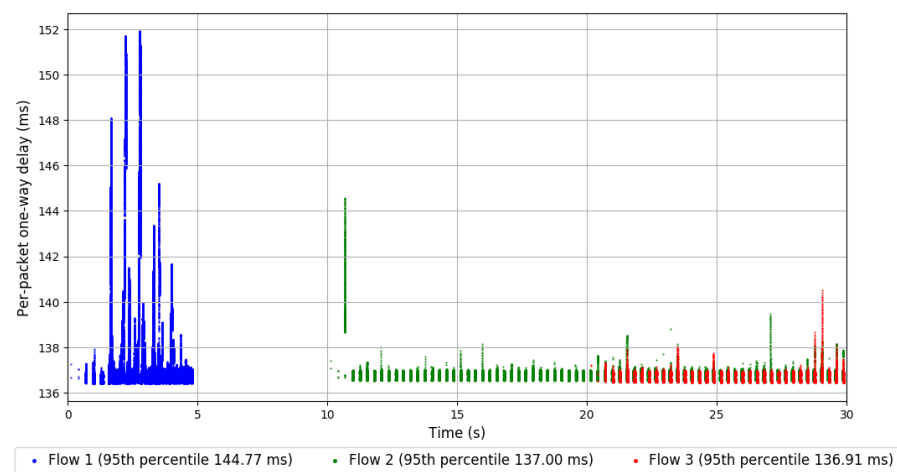
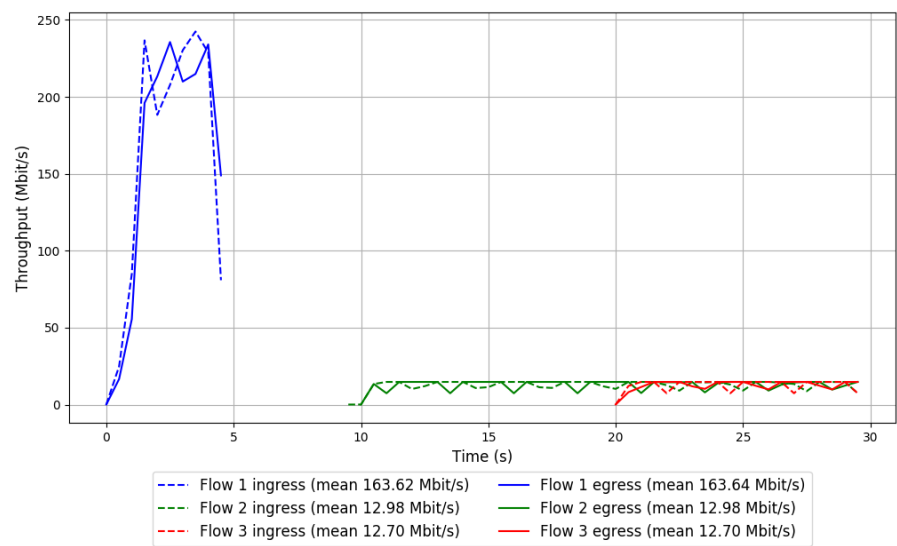


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-08-21 13:25:46
End at: 2017-08-21 13:26:16

# Below is generated by plot.py at 2017-08-21 16:37:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.39 Mbit/s
95th percentile per-packet one-way delay: 142.126 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 163.64 Mbit/s
95th percentile per-packet one-way delay: 144.770 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 12.98 Mbit/s
95th percentile per-packet one-way delay: 136.995 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 136.913 ms
Loss rate: 0.00%
```

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

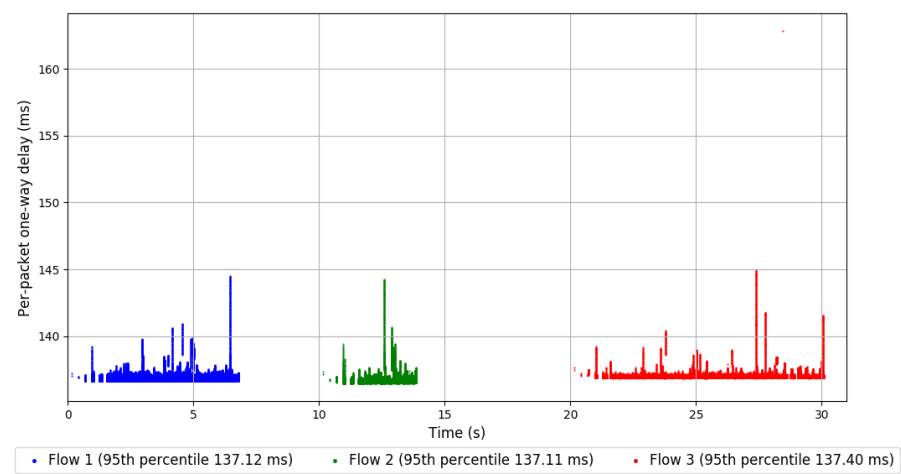
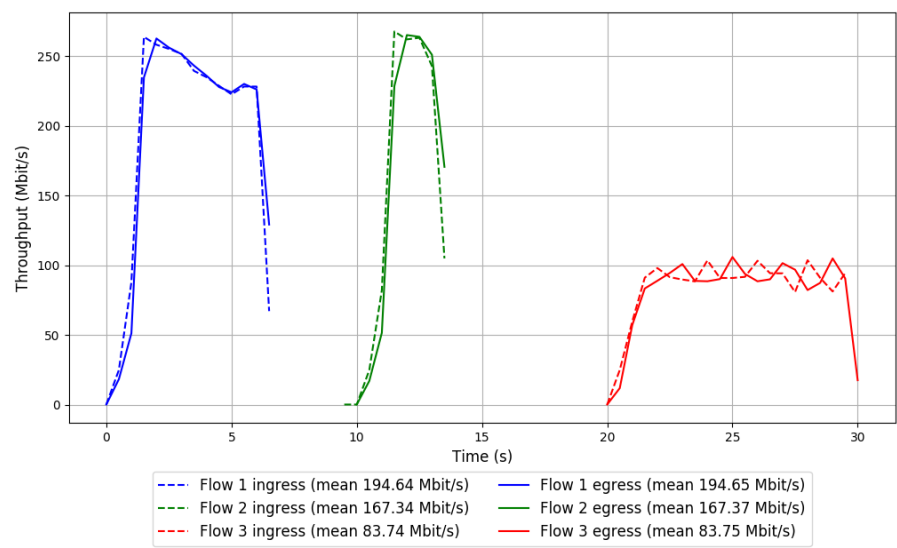


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-08-21 13:39:18
End at: 2017-08-21 13:39:48

# Below is generated by plot.py at 2017-08-21 16:37:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.85 Mbit/s
95th percentile per-packet one-way delay: 137.235 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 194.65 Mbit/s
95th percentile per-packet one-way delay: 137.121 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 167.37 Mbit/s
95th percentile per-packet one-way delay: 137.111 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 83.75 Mbit/s
95th percentile per-packet one-way delay: 137.400 ms
Loss rate: 0.00%
```


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



Run 3: Statistics of TaoVA-100x

Start at: 2017-08-21 13:52:50

End at: 2017-08-21 13:53:20

Below is generated by plot.py at 2017-08-21 16:37:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.24 Mbit/s

95th percentile per-packet one-way delay: 140.287 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.51 Mbit/s

95th percentile per-packet one-way delay: 136.837 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 151.76 Mbit/s

95th percentile per-packet one-way delay: 140.042 ms

Loss rate: 0.00%

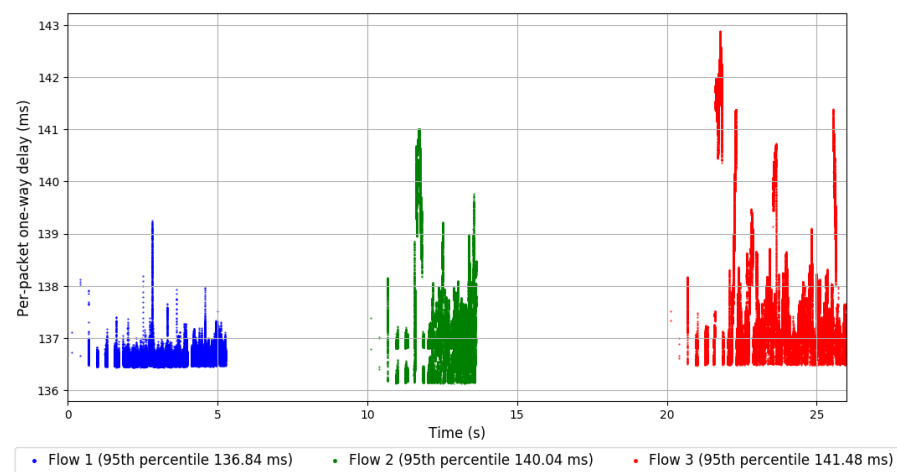
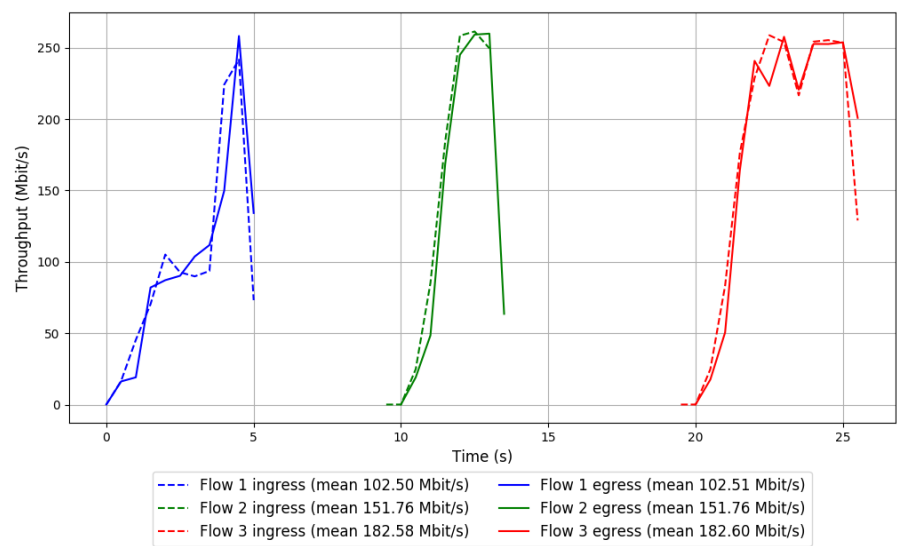
-- Flow 3:

Average throughput: 182.60 Mbit/s

95th percentile per-packet one-way delay: 141.478 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-08-21 14:06:15

End at: 2017-08-21 14:06:45

Below is generated by plot.py at 2017-08-21 16:38:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.44 Mbit/s

95th percentile per-packet one-way delay: 137.800 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 103.84 Mbit/s

95th percentile per-packet one-way delay: 137.746 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 40.41 Mbit/s

95th percentile per-packet one-way delay: 137.892 ms

Loss rate: 1.09%

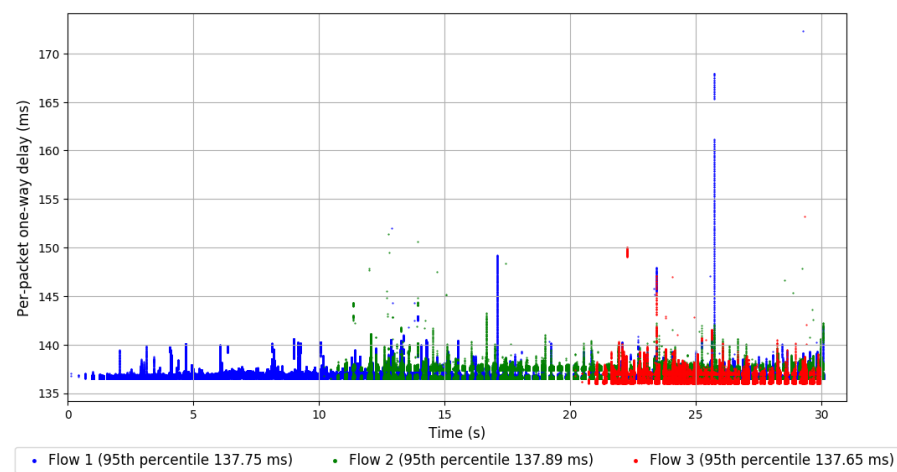
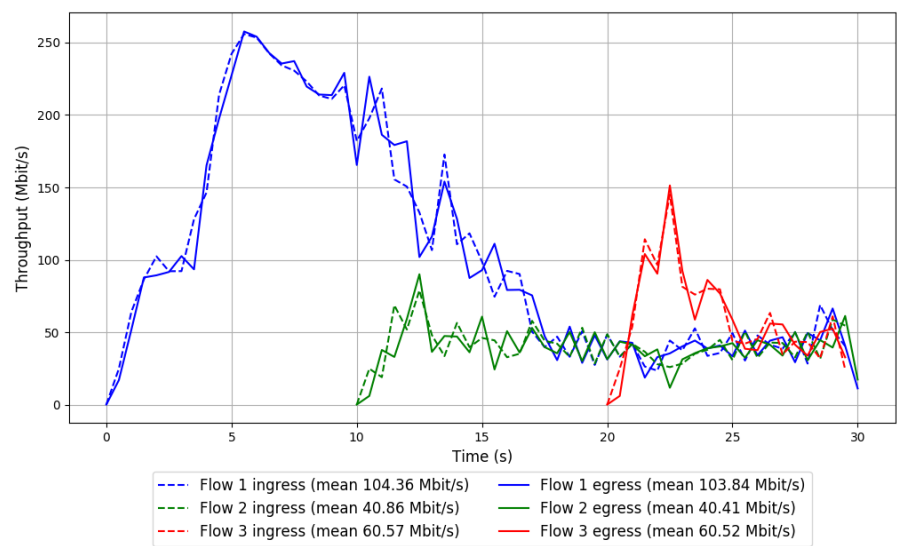
-- Flow 3:

Average throughput: 60.52 Mbit/s

95th percentile per-packet one-way delay: 137.654 ms

Loss rate: 0.08%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-08-21 14:19:43

End at: 2017-08-21 14:20:13

Below is generated by plot.py at 2017-08-21 16:38:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.80 Mbit/s

95th percentile per-packet one-way delay: 137.903 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 196.80 Mbit/s

95th percentile per-packet one-way delay: 138.062 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 12.97 Mbit/s

95th percentile per-packet one-way delay: 136.796 ms

Loss rate: 0.01%

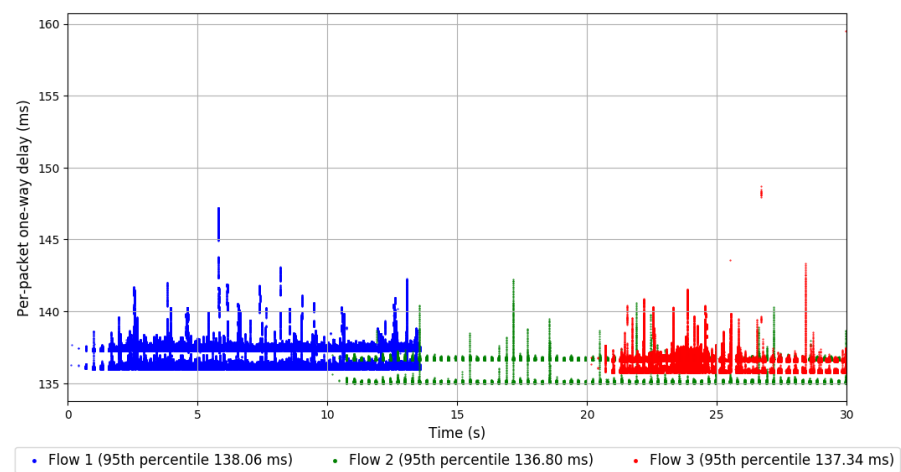
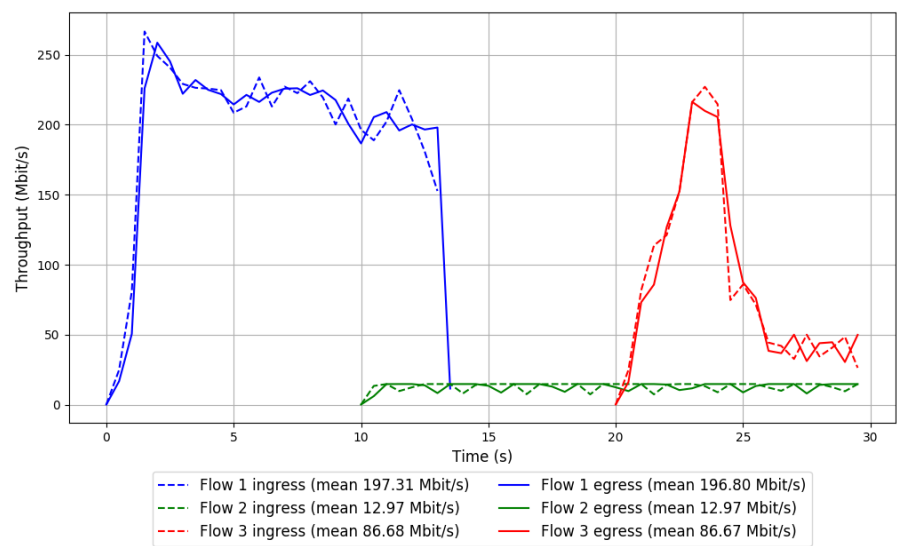
-- Flow 3:

Average throughput: 86.67 Mbit/s

95th percentile per-packet one-way delay: 137.341 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-08-21 14:33:00

End at: 2017-08-21 14:33:30

Below is generated by plot.py at 2017-08-21 16:39:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.51 Mbit/s

95th percentile per-packet one-way delay: 137.196 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 139.98 Mbit/s

95th percentile per-packet one-way delay: 137.249 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 12.80 Mbit/s

95th percentile per-packet one-way delay: 136.873 ms

Loss rate: 0.00%

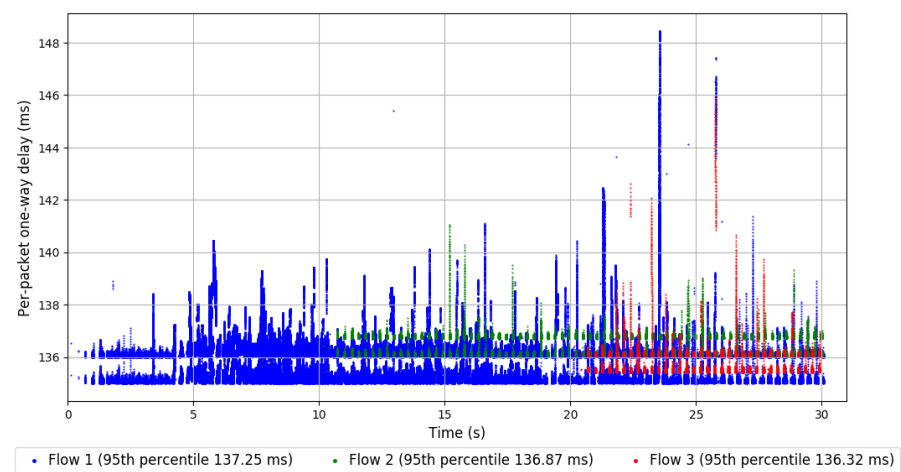
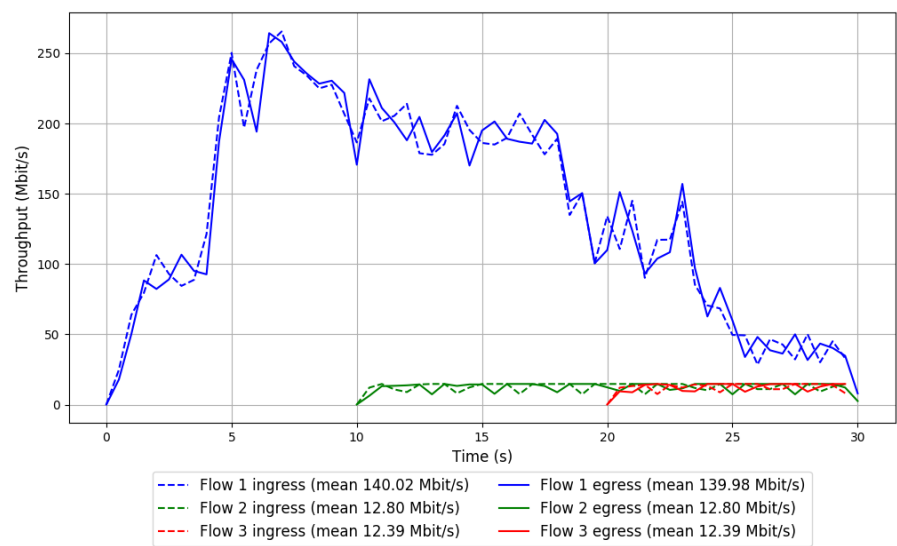
-- Flow 3:

Average throughput: 12.39 Mbit/s

95th percentile per-packet one-way delay: 136.324 ms

Loss rate: 0.00%

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

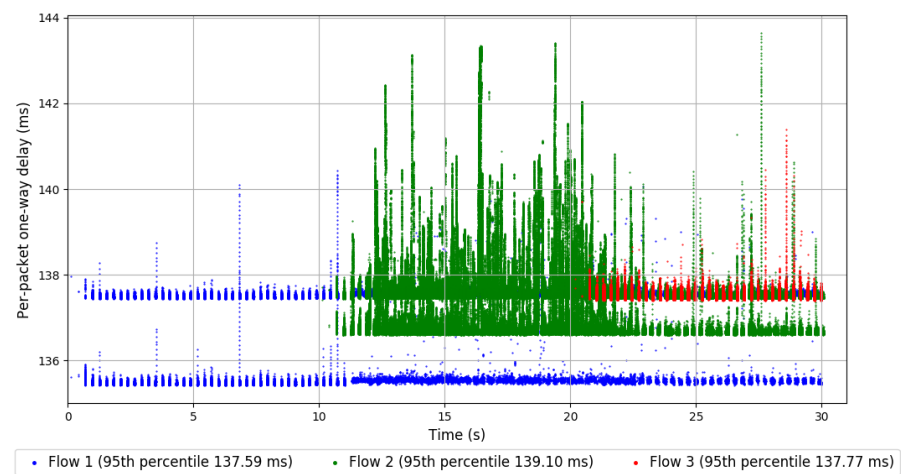
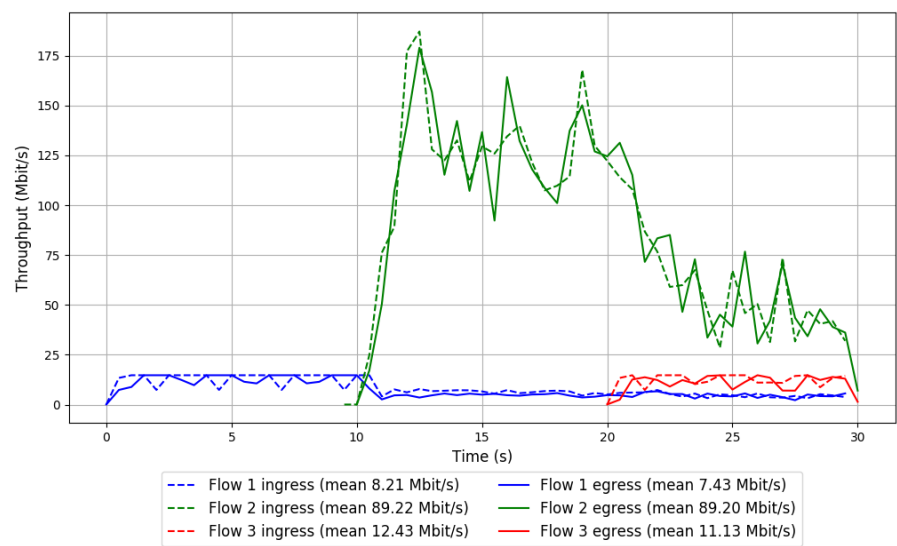


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-08-21 14:46:21
End at: 2017-08-21 14:46:51

# Below is generated by plot.py at 2017-08-21 16:39:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.47 Mbit/s
95th percentile per-packet one-way delay: 138.912 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 7.43 Mbit/s
95th percentile per-packet one-way delay: 137.588 ms
Loss rate: 9.50%
-- Flow 2:
Average throughput: 89.20 Mbit/s
95th percentile per-packet one-way delay: 139.105 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 11.13 Mbit/s
95th percentile per-packet one-way delay: 137.768 ms
Loss rate: 10.48%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-08-21 14:59:49

End at: 2017-08-21 15:00:19

Below is generated by plot.py at 2017-08-21 16:39:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.61 Mbit/s

95th percentile per-packet one-way delay: 142.889 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 6.86 Mbit/s

95th percentile per-packet one-way delay: 137.595 ms

Loss rate: 7.28%

-- Flow 2:

Average throughput: 82.69 Mbit/s

95th percentile per-packet one-way delay: 143.674 ms

Loss rate: 0.85%

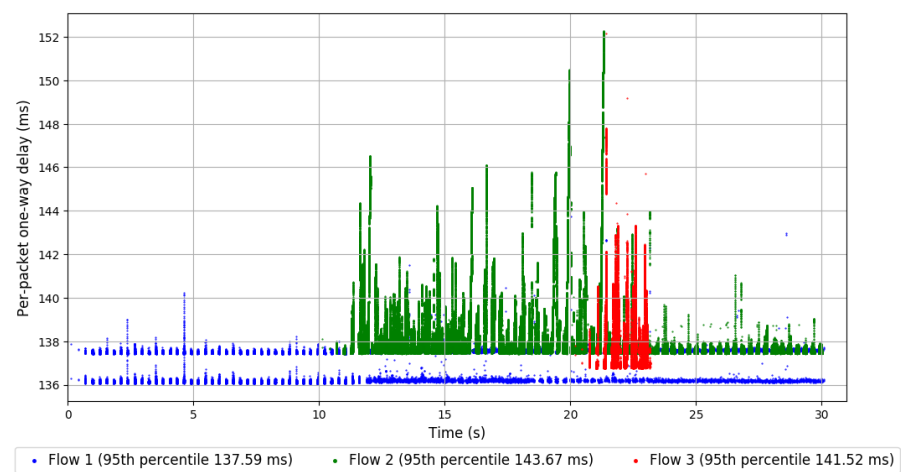
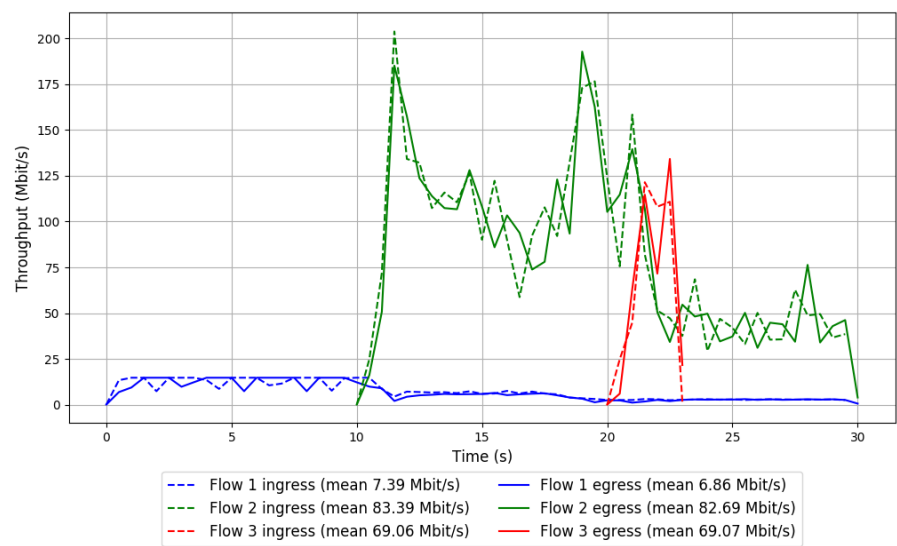
-- Flow 3:

Average throughput: 69.07 Mbit/s

95th percentile per-packet one-way delay: 141.521 ms

Loss rate: 0.00%

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

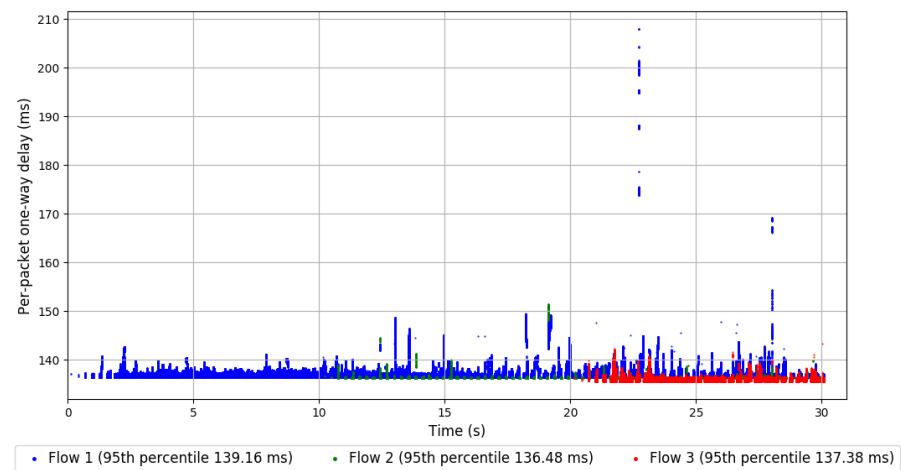
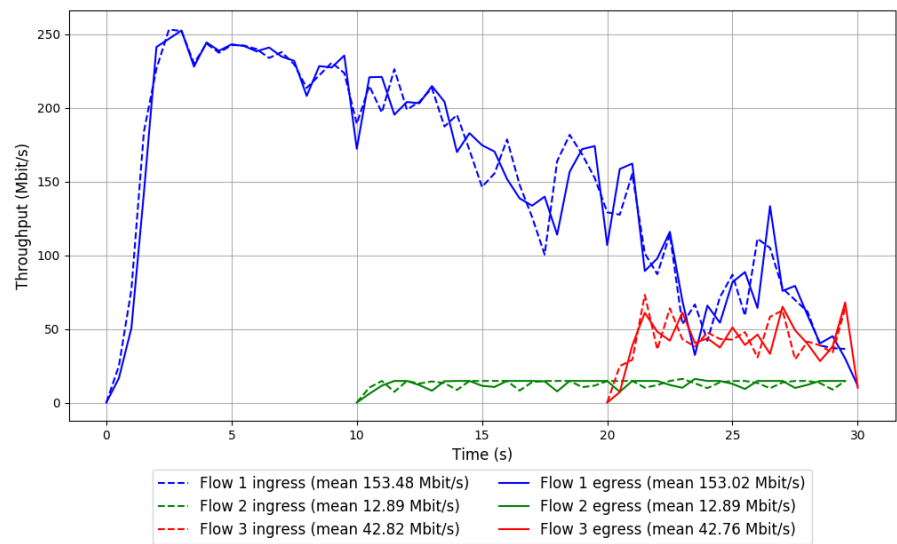


```
Run 9: Statistics of TaoVA-100x

Start at: 2017-08-21 15:13:25
End at: 2017-08-21 15:13:55

# Below is generated by plot.py at 2017-08-21 16:40:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 175.68 Mbit/s
95th percentile per-packet one-way delay: 138.949 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 153.02 Mbit/s
95th percentile per-packet one-way delay: 139.165 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 12.89 Mbit/s
95th percentile per-packet one-way delay: 136.483 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.76 Mbit/s
95th percentile per-packet one-way delay: 137.375 ms
Loss rate: 0.13%
```

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

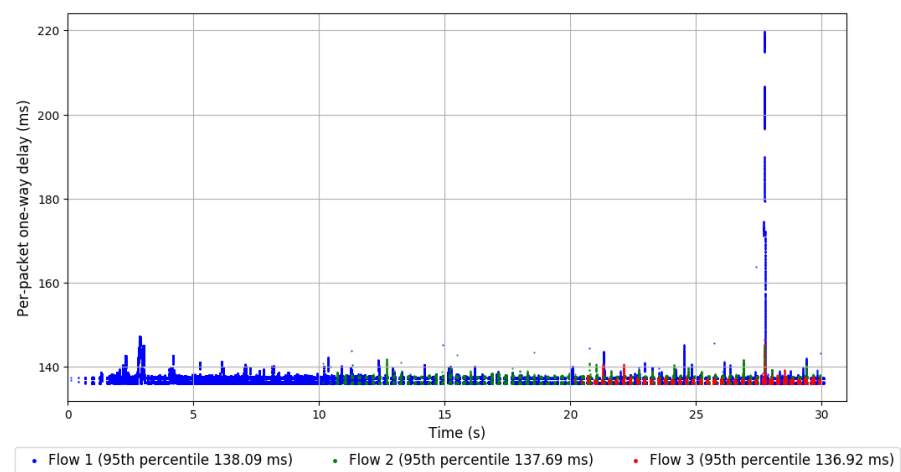
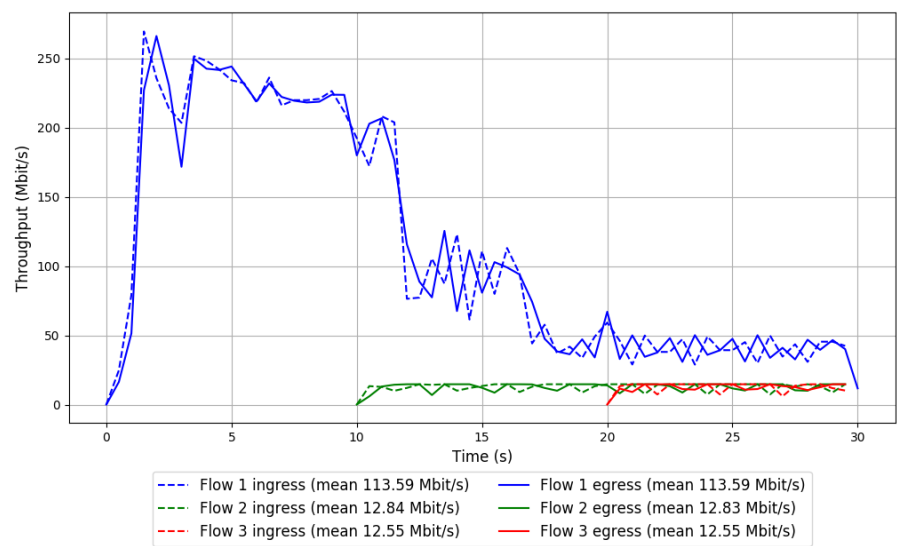


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-08-21 15:27:11
End at: 2017-08-21 15:27:41

# Below is generated by plot.py at 2017-08-21 16:40:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.19 Mbit/s
95th percentile per-packet one-way delay: 138.016 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 113.59 Mbit/s
95th percentile per-packet one-way delay: 138.095 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 12.83 Mbit/s
95th percentile per-packet one-way delay: 137.689 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 12.55 Mbit/s
95th percentile per-packet one-way delay: 136.924 ms
Loss rate: 0.02%
```


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



Run 1: Statistics of TCP Vegas

Start at: 2017-08-21 13:21:14

End at: 2017-08-21 13:21:44

Below is generated by plot.py at 2017-08-21 16:40:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.45 Mbit/s

95th percentile per-packet one-way delay: 138.135 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 137.456 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 138.074 ms

Loss rate: 3.09%

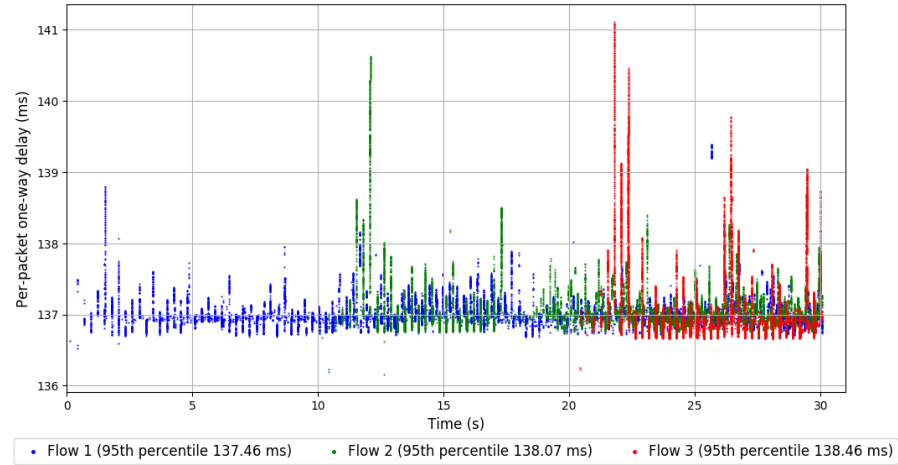
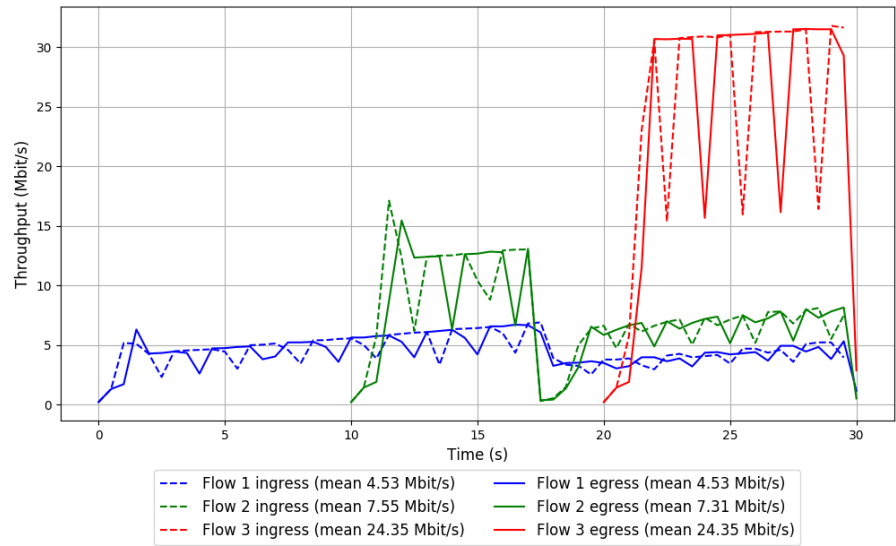
-- Flow 3:

Average throughput: 24.35 Mbit/s

95th percentile per-packet one-way delay: 138.455 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-08-21 13:34:50

End at: 2017-08-21 13:35:20

Below is generated by plot.py at 2017-08-21 16:40:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.05 Mbit/s

95th percentile per-packet one-way delay: 138.119 ms

Loss rate: 9.15%

-- Flow 1:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 137.958 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 138.206 ms

Loss rate: 17.36%

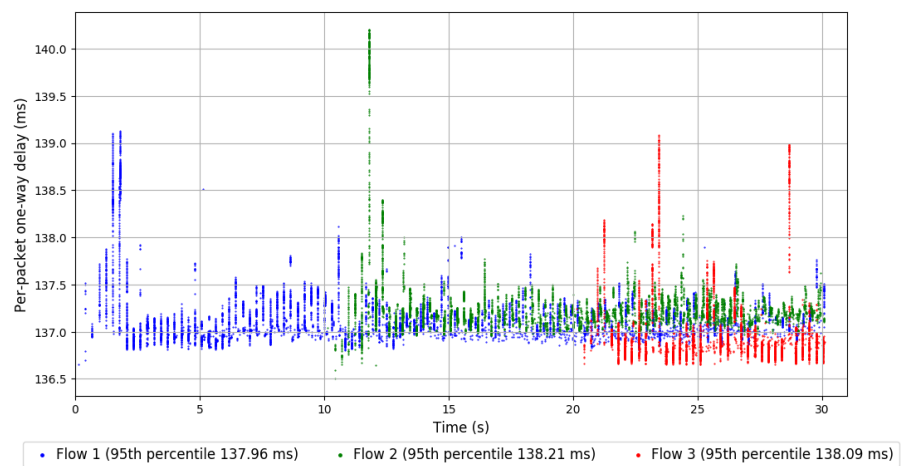
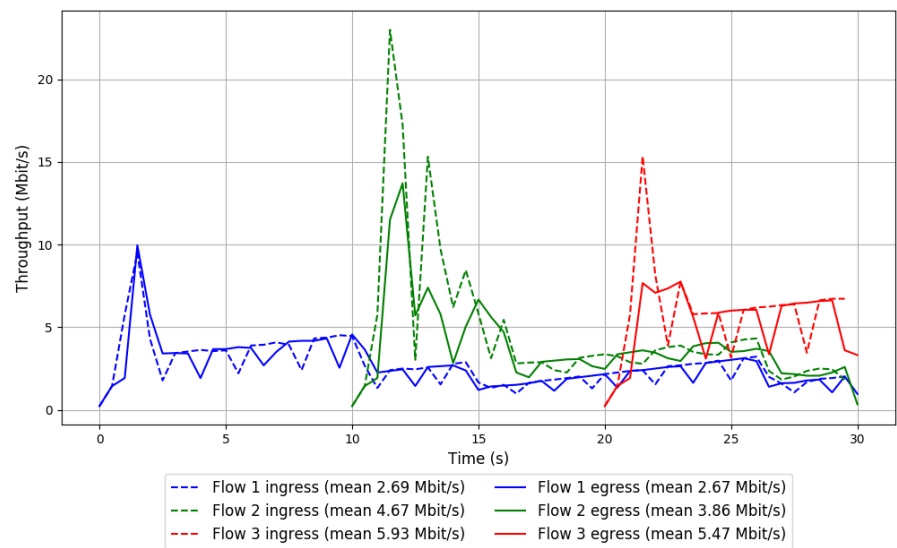
-- Flow 3:

Average throughput: 5.47 Mbit/s

95th percentile per-packet one-way delay: 138.088 ms

Loss rate: 7.75%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-08-21 13:48:24

End at: 2017-08-21 13:48:54

Below is generated by plot.py at 2017-08-21 16:40:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 21.35 Mbit/s

95th percentile per-packet one-way delay: 138.244 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 17.36 Mbit/s

95th percentile per-packet one-way delay: 138.462 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 137.925 ms

Loss rate: 0.61%

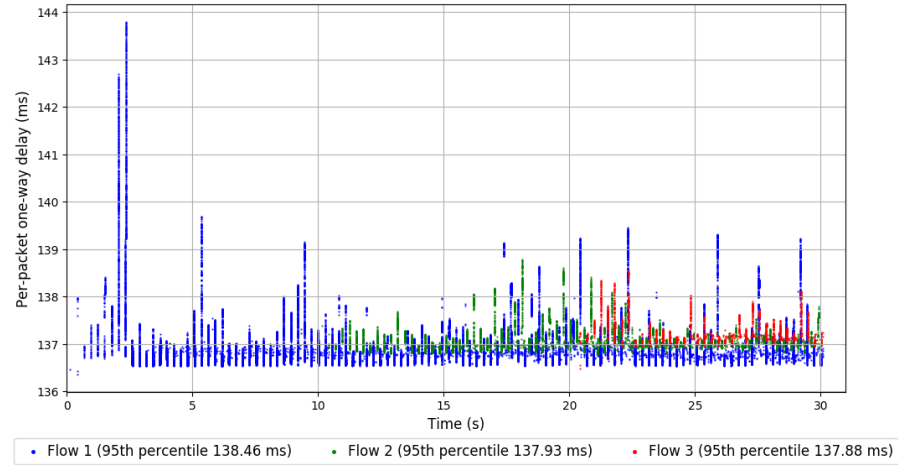
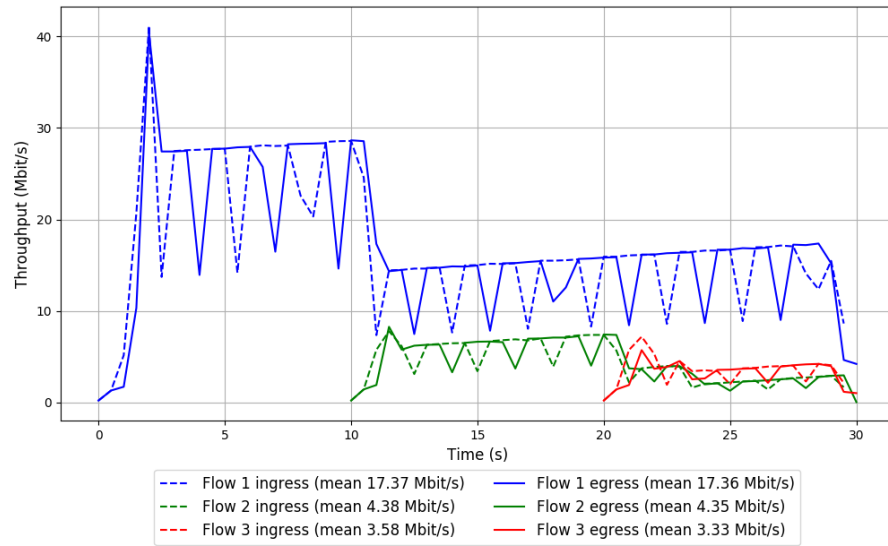
-- Flow 3:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 137.882 ms

Loss rate: 7.09%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-08-21 14:01:54

End at: 2017-08-21 14:02:24

Below is generated by plot.py at 2017-08-21 16:40:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.78 Mbit/s

95th percentile per-packet one-way delay: 137.677 ms

Loss rate: 2.04%

-- Flow 1:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 137.775 ms

Loss rate: 1.83%

-- Flow 2:

Average throughput: 2.51 Mbit/s

95th percentile per-packet one-way delay: 136.916 ms

Loss rate: 1.11%

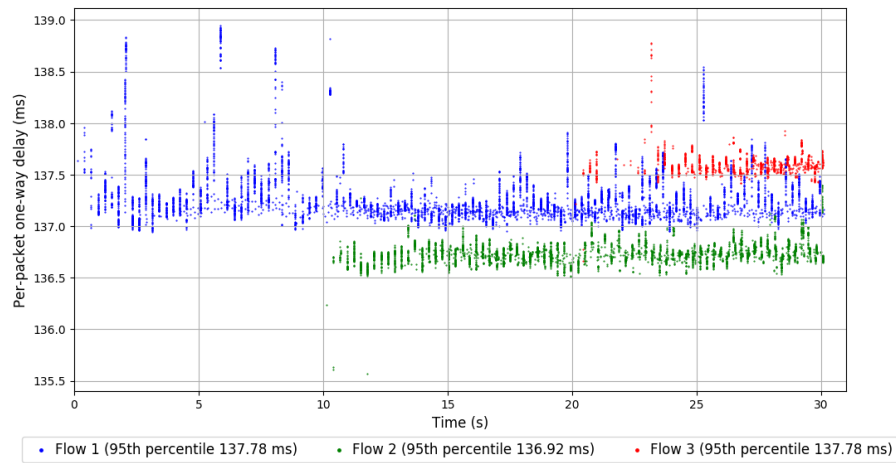
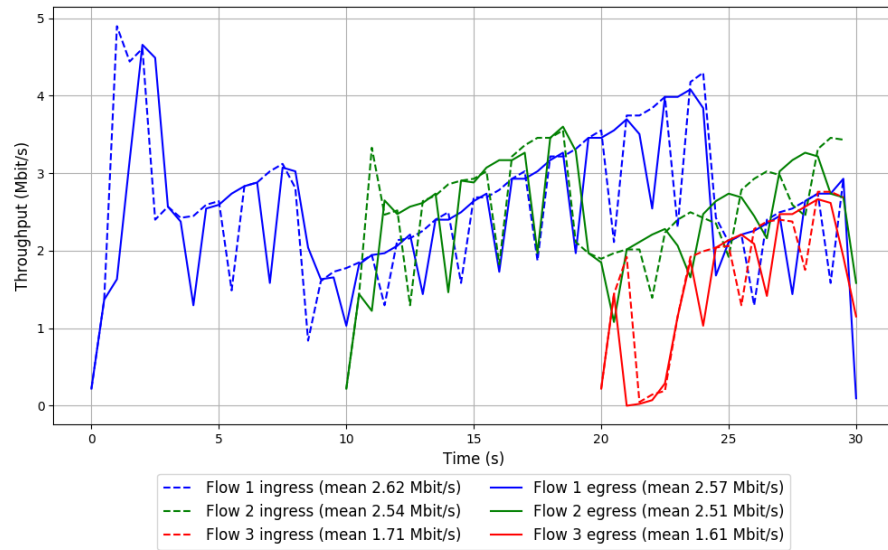
-- Flow 3:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 137.775 ms

Loss rate: 5.82%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-08-21 14:15:20

End at: 2017-08-21 14:15:50

Below is generated by plot.py at 2017-08-21 16:40:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.38 Mbit/s

95th percentile per-packet one-way delay: 137.669 ms

Loss rate: 1.91%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 137.140 ms

Loss rate: 2.40%

-- Flow 2:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 137.805 ms

Loss rate: 1.16%

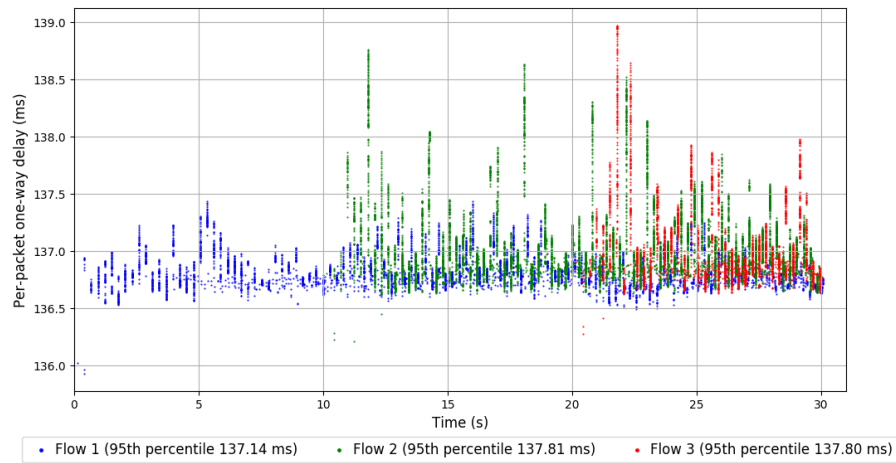
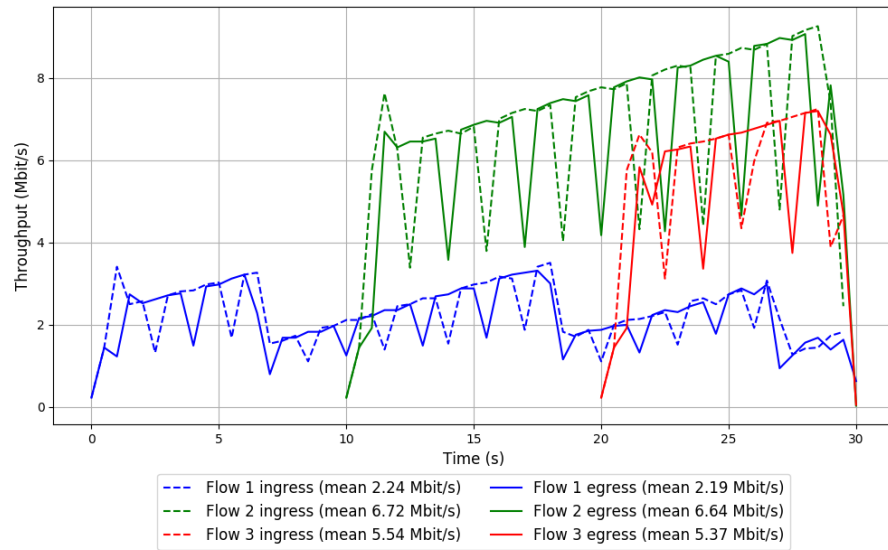
-- Flow 3:

Average throughput: 5.37 Mbit/s

95th percentile per-packet one-way delay: 137.799 ms

Loss rate: 3.17%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-08-21 14:28:39

End at: 2017-08-21 14:29:09

Below is generated by plot.py at 2017-08-21 16:40:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.97 Mbit/s

95th percentile per-packet one-way delay: 137.174 ms

Loss rate: 2.20%

-- Flow 1:

Average throughput: 2.69 Mbit/s

95th percentile per-packet one-way delay: 137.036 ms

Loss rate: 2.10%

-- Flow 2:

Average throughput: 2.48 Mbit/s

95th percentile per-packet one-way delay: 137.385 ms

Loss rate: 1.60%

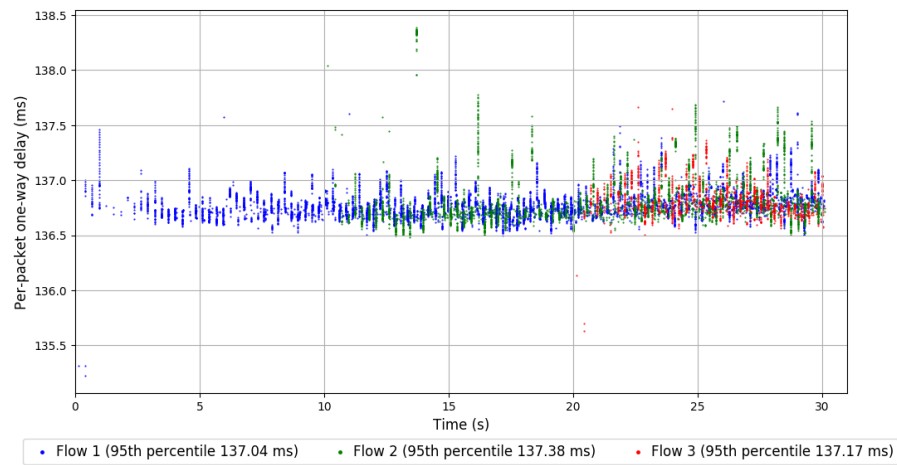
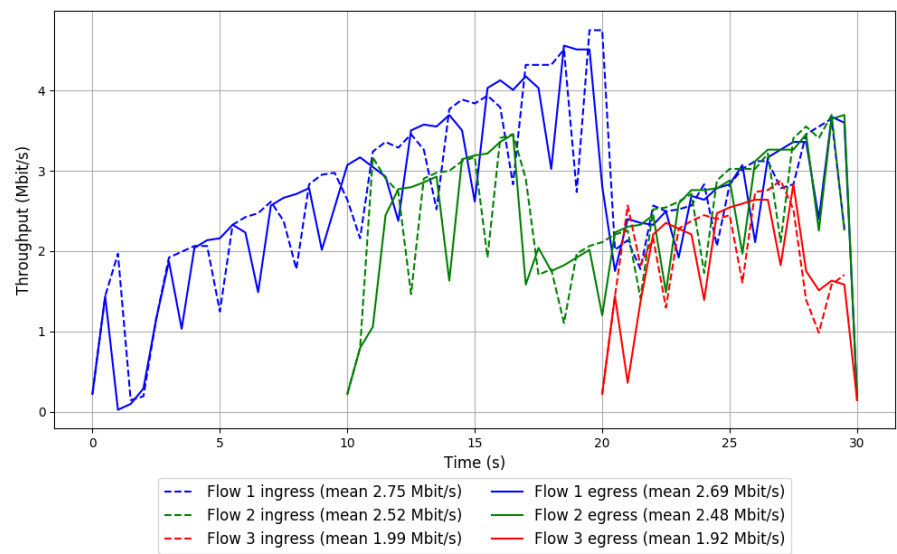
-- Flow 3:

Average throughput: 1.92 Mbit/s

95th percentile per-packet one-way delay: 137.169 ms

Loss rate: 4.12%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-08-21 14:42:00

End at: 2017-08-21 14:42:30

Below is generated by plot.py at 2017-08-21 16:40:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.16 Mbit/s

95th percentile per-packet one-way delay: 137.982 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 138.026 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 137.961 ms

Loss rate: 1.74%

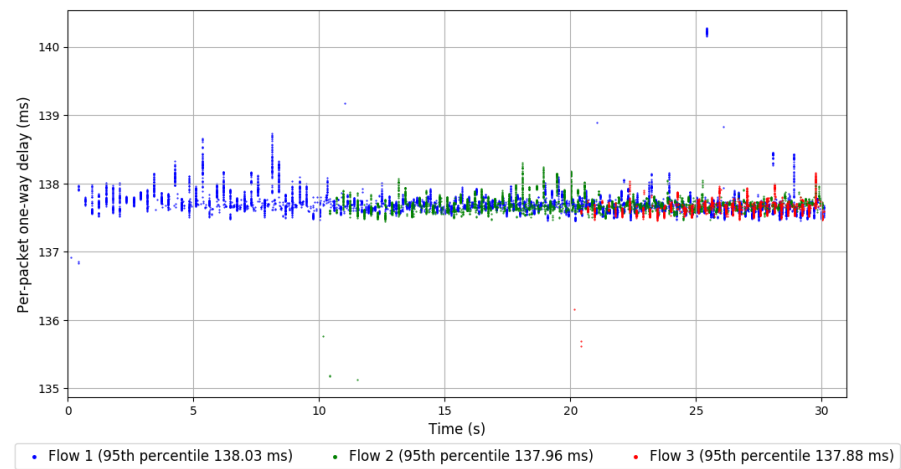
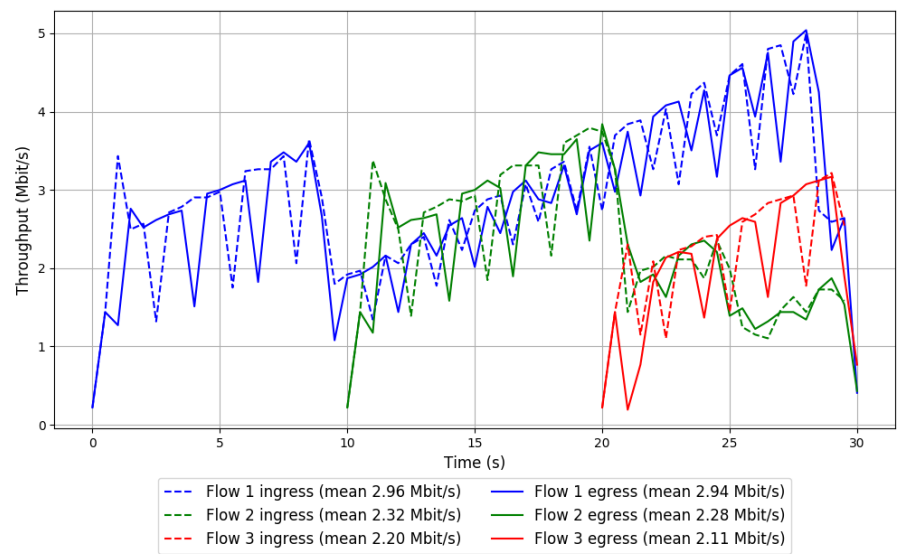
-- Flow 3:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 137.885 ms

Loss rate: 4.01%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-08-21 14:55:19

End at: 2017-08-21 14:55:49

Below is generated by plot.py at 2017-08-21 16:40:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 138.052 ms

Loss rate: 3.86%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 137.968 ms

Loss rate: 5.54%

-- Flow 2:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 137.990 ms

Loss rate: 2.56%

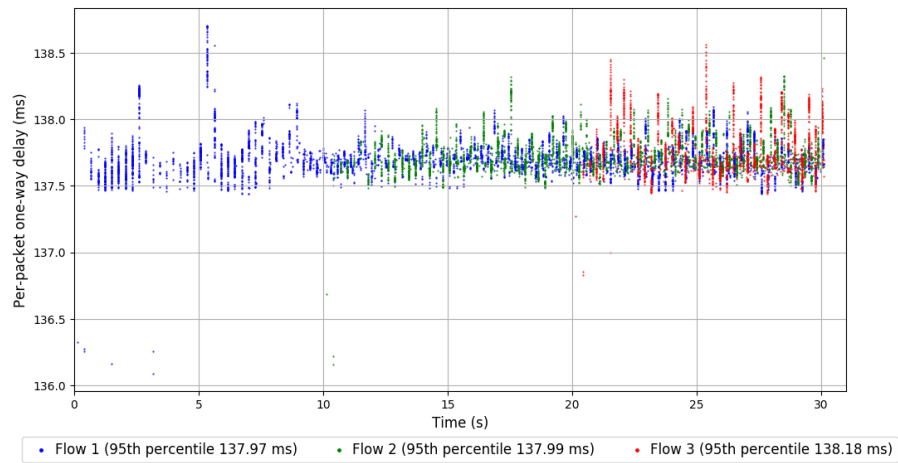
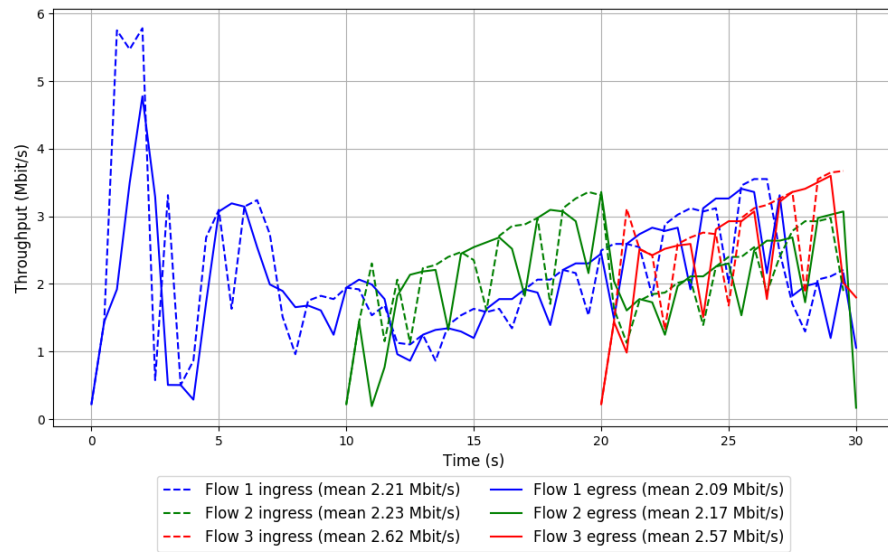
-- Flow 3:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 138.179 ms

Loss rate: 1.80%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-08-21 15:08:56

End at: 2017-08-21 15:09:26

Below is generated by plot.py at 2017-08-21 16:40:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.31 Mbit/s

95th percentile per-packet one-way delay: 137.165 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 28.00 Mbit/s

95th percentile per-packet one-way delay: 137.211 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 137.047 ms

Loss rate: 2.03%

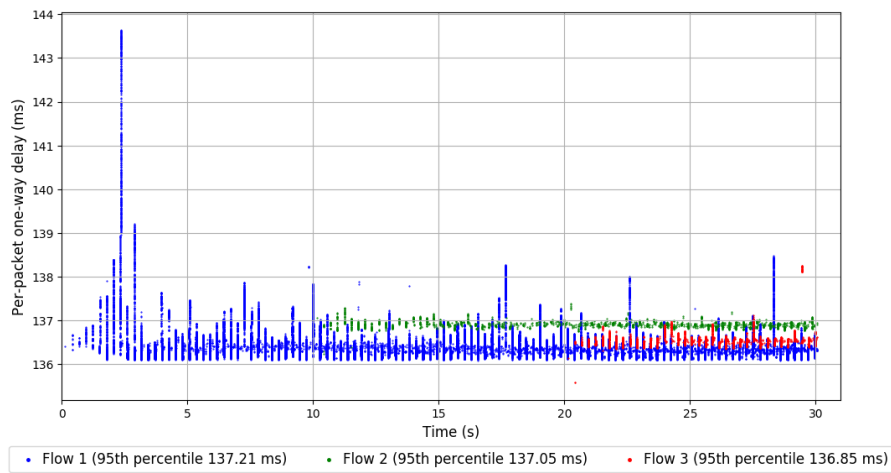
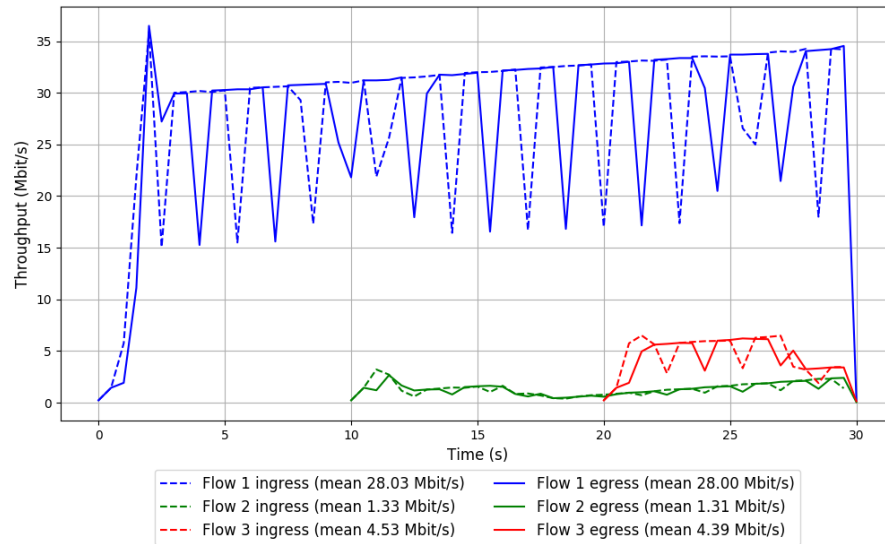
-- Flow 3:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 136.854 ms

Loss rate: 2.99%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-08-21 15:22:48

End at: 2017-08-21 15:23:18

Below is generated by plot.py at 2017-08-21 16:40:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.31 Mbit/s

95th percentile per-packet one-way delay: 138.161 ms

Loss rate: 2.47%

-- Flow 1:

Average throughput: 8.33 Mbit/s

95th percentile per-packet one-way delay: 138.434 ms

Loss rate: 2.67%

-- Flow 2:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 136.840 ms

Loss rate: 2.05%

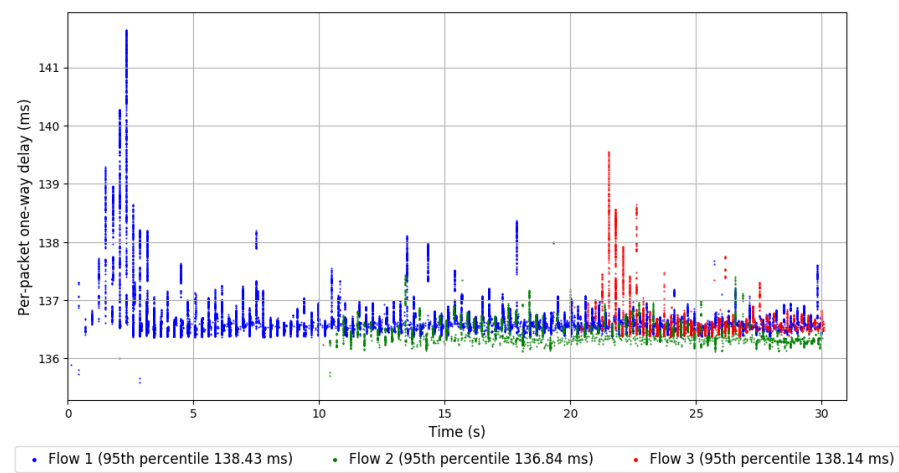
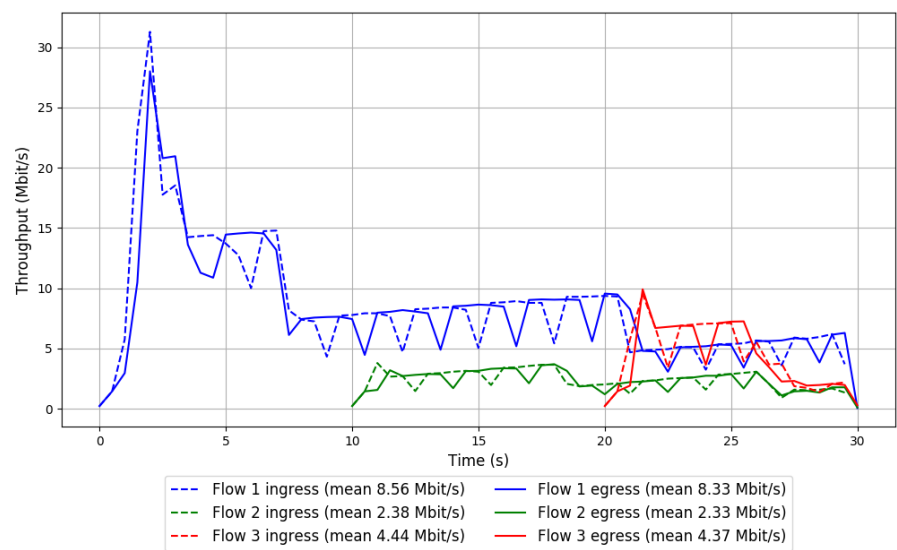
-- Flow 3:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 138.142 ms

Loss rate: 1.74%

Run 10: Report of TCP Vegas — Data Link

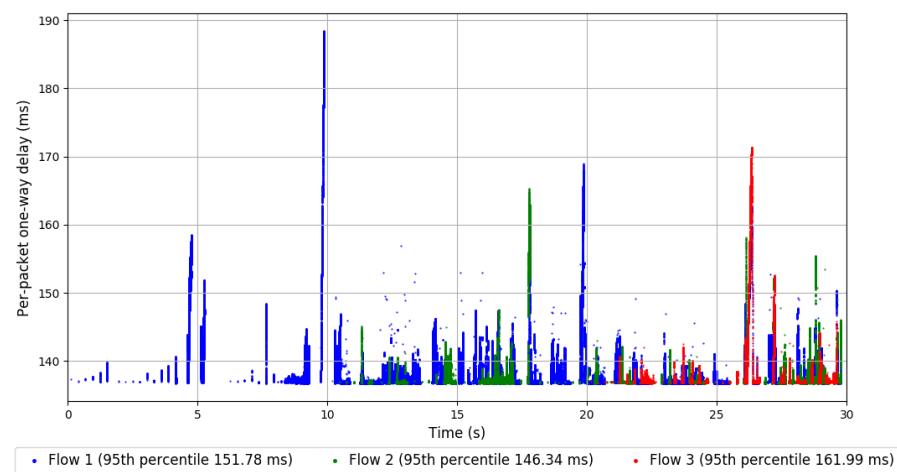
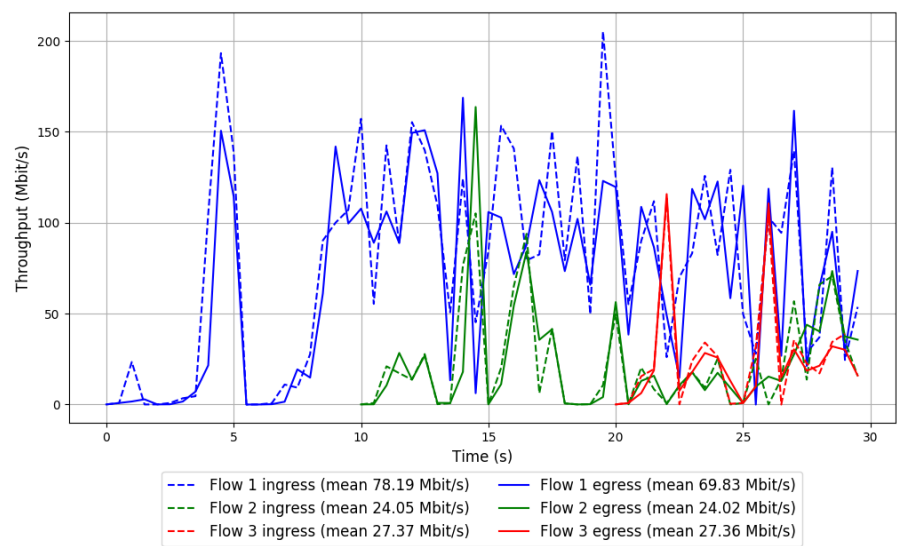


```
Run 1: Statistics of Verus

Start at: 2017-08-21 13:17:22
End at: 2017-08-21 13:17:52

# Below is generated by plot.py at 2017-08-21 16:40:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.45 Mbit/s
95th percentile per-packet one-way delay: 151.971 ms
Loss rate: 8.14%
-- Flow 1:
Average throughput: 69.83 Mbit/s
95th percentile per-packet one-way delay: 151.776 ms
Loss rate: 10.68%
-- Flow 2:
Average throughput: 24.02 Mbit/s
95th percentile per-packet one-way delay: 146.342 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 27.36 Mbit/s
95th percentile per-packet one-way delay: 161.993 ms
Loss rate: 0.02%
```

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-08-21 13:31:02

End at: 2017-08-21 13:31:32

Below is generated by plot.py at 2017-08-21 16:40:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.78 Mbit/s

95th percentile per-packet one-way delay: 204.895 ms

Loss rate: 1.98%

-- Flow 1:

Average throughput: 50.57 Mbit/s

95th percentile per-packet one-way delay: 221.640 ms

Loss rate: 2.30%

-- Flow 2:

Average throughput: 51.02 Mbit/s

95th percentile per-packet one-way delay: 143.677 ms

Loss rate: 1.07%

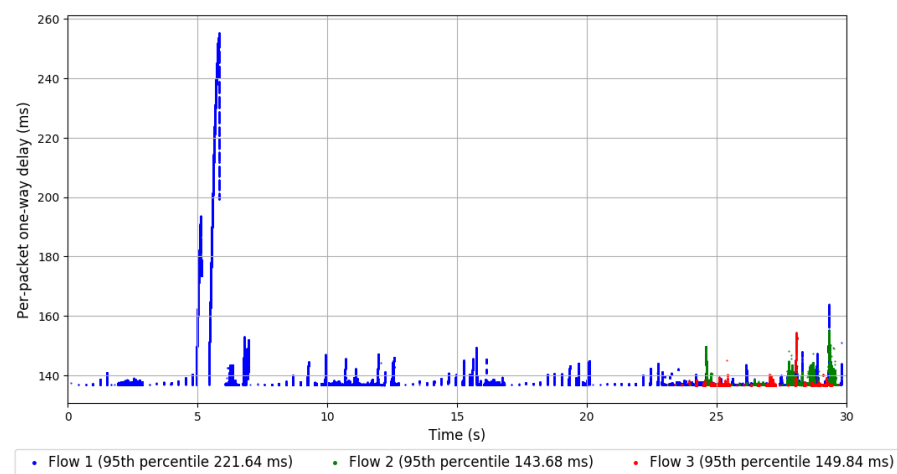
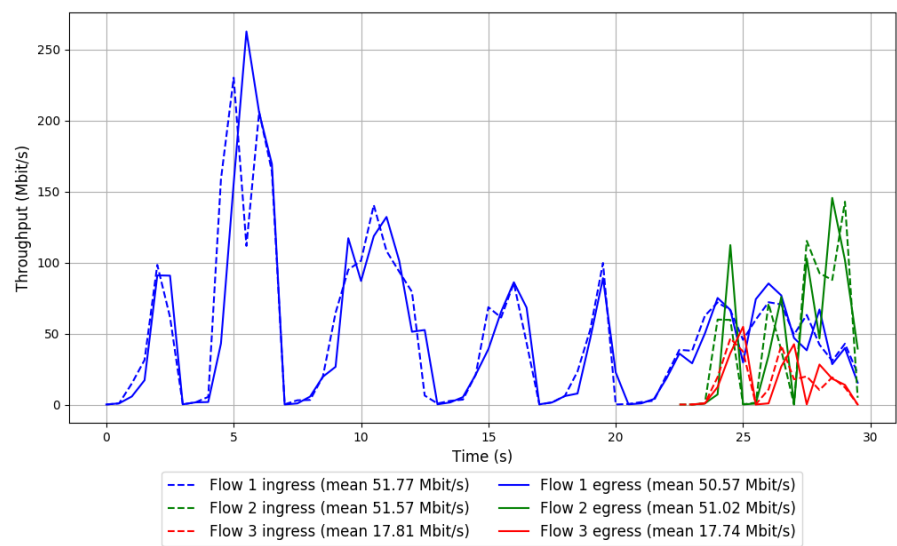
-- Flow 3:

Average throughput: 17.74 Mbit/s

95th percentile per-packet one-way delay: 149.836 ms

Loss rate: 0.38%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-08-21 13:44:34

End at: 2017-08-21 13:45:04

Below is generated by plot.py at 2017-08-21 16:41:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.78 Mbit/s

95th percentile per-packet one-way delay: 157.034 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 69.00 Mbit/s

95th percentile per-packet one-way delay: 154.526 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 34.75 Mbit/s

95th percentile per-packet one-way delay: 183.749 ms

Loss rate: 0.07%

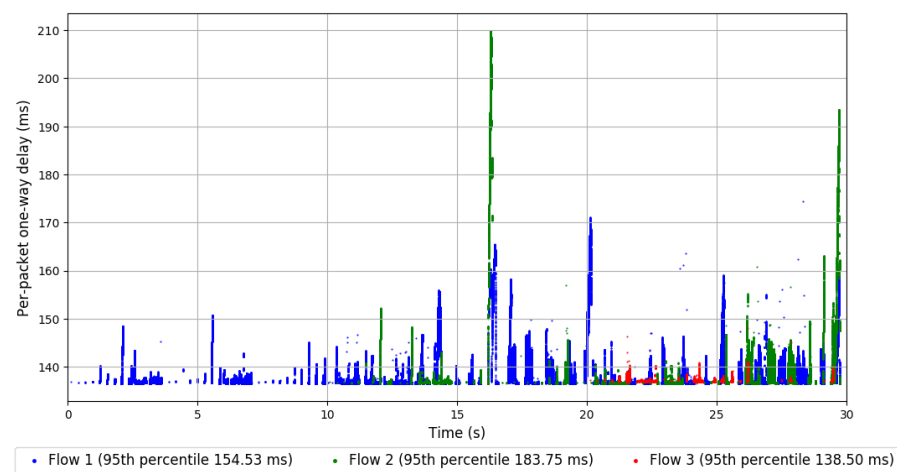
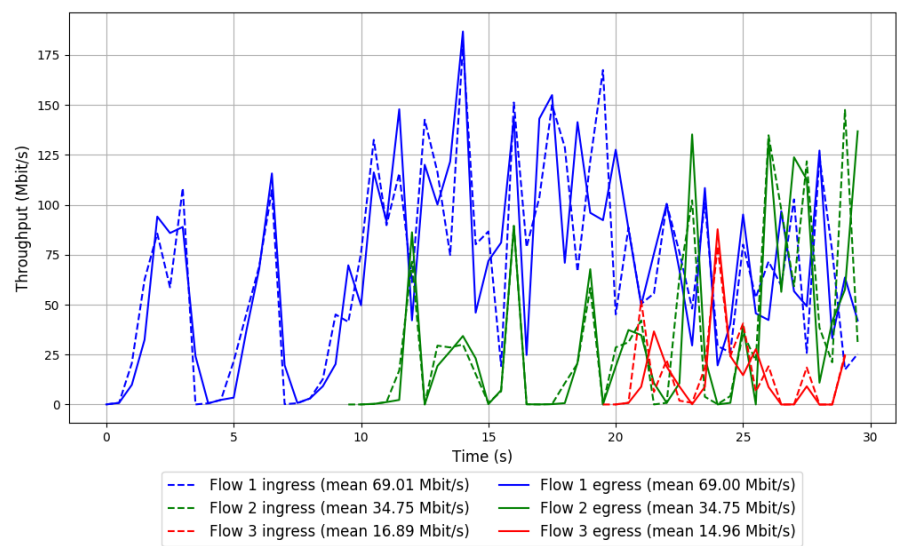
-- Flow 3:

Average throughput: 14.96 Mbit/s

95th percentile per-packet one-way delay: 138.499 ms

Loss rate: 11.42%

Run 3: Report of Verus — Data Link

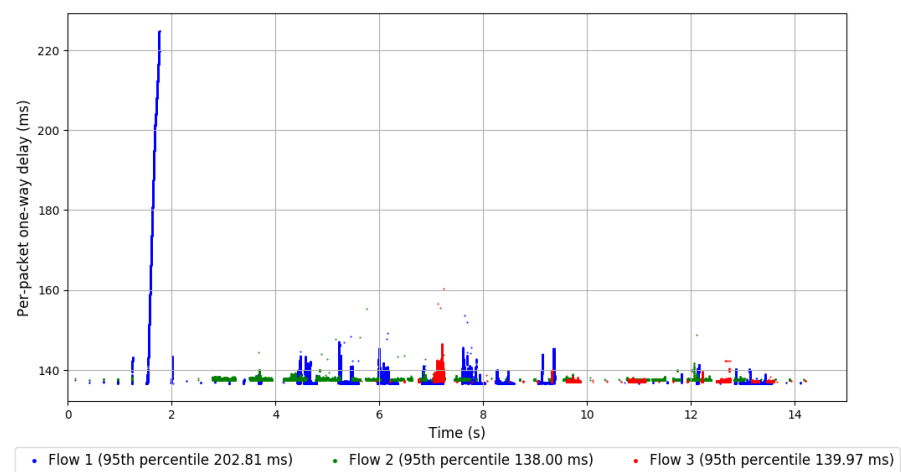
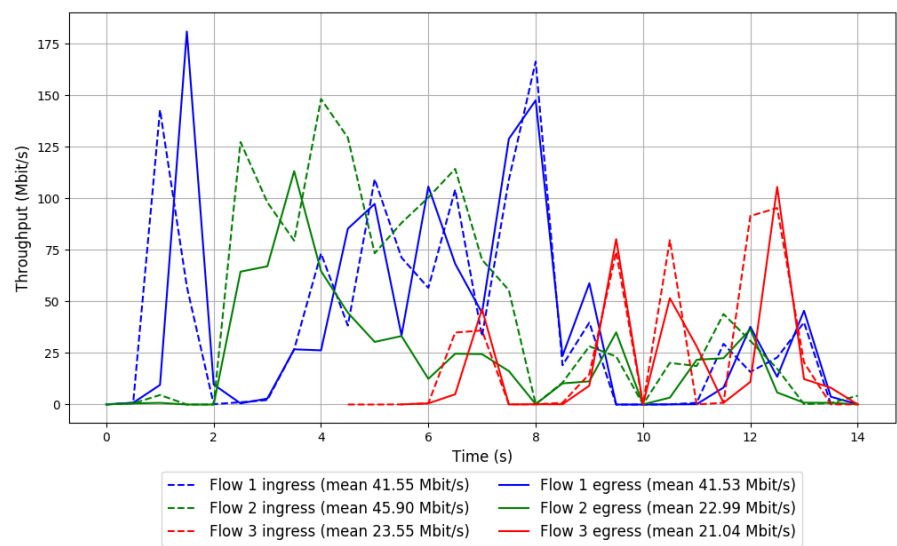


Run 4: Statistics of Verus

Start at: 2017-08-21 13:58:16

End at: 2017-08-21 13:58:46

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-08-21 14:11:46

End at: 2017-08-21 14:12:16

Below is generated by plot.py at 2017-08-21 16:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.64 Mbit/s

95th percentile per-packet one-way delay: 142.314 ms

Loss rate: 36.13%

-- Flow 1:

Average throughput: 18.99 Mbit/s

95th percentile per-packet one-way delay: 138.168 ms

Loss rate: 63.85%

-- Flow 2:

Average throughput: 60.29 Mbit/s

95th percentile per-packet one-way delay: 145.437 ms

Loss rate: 0.00%

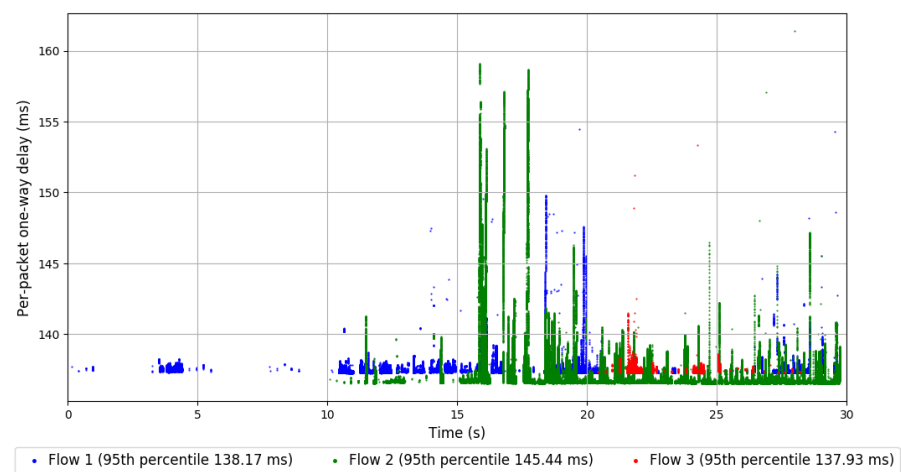
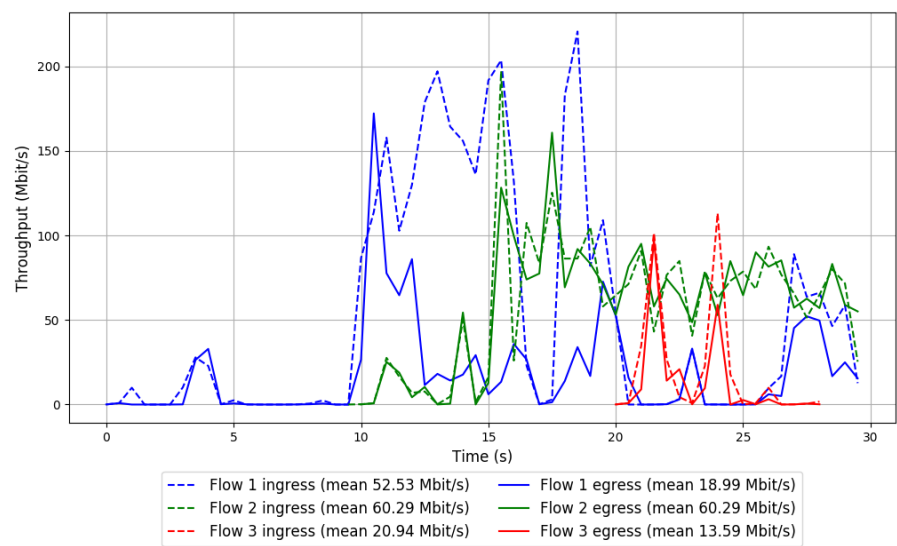
-- Flow 3:

Average throughput: 13.59 Mbit/s

95th percentile per-packet one-way delay: 137.927 ms

Loss rate: 35.13%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-08-21 14:25:11

End at: 2017-08-21 14:25:41

Below is generated by plot.py at 2017-08-21 16:41:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.17 Mbit/s

95th percentile per-packet one-way delay: 141.117 ms

Loss rate: 45.56%

-- Flow 1:

Average throughput: 54.50 Mbit/s

95th percentile per-packet one-way delay: 140.728 ms

Loss rate: 31.69%

-- Flow 2:

Average throughput: 19.83 Mbit/s

95th percentile per-packet one-way delay: 138.003 ms

Loss rate: 75.51%

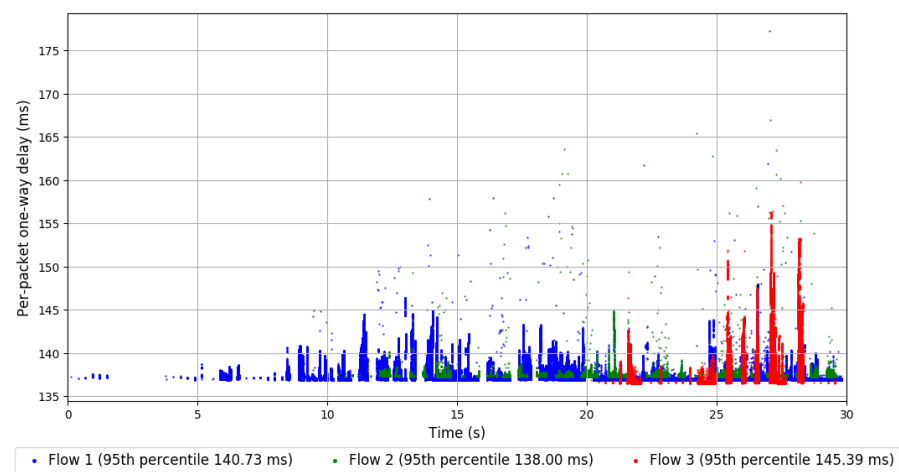
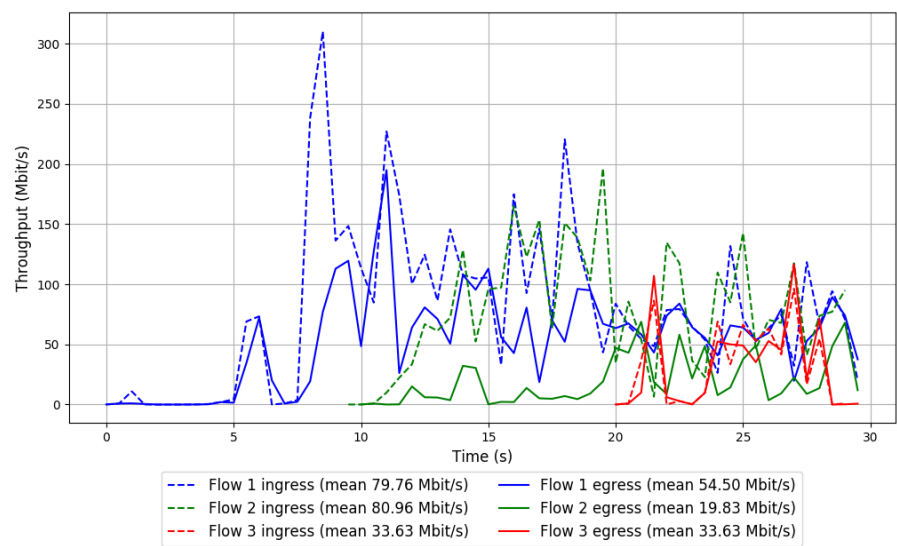
-- Flow 3:

Average throughput: 33.63 Mbit/s

95th percentile per-packet one-way delay: 145.389 ms

Loss rate: 0.01%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-08-21 14:38:35

End at: 2017-08-21 14:39:05

Below is generated by plot.py at 2017-08-21 16:41:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.71 Mbit/s

95th percentile per-packet one-way delay: 140.486 ms

Loss rate: 55.50%

-- Flow 1:

Average throughput: 22.81 Mbit/s

95th percentile per-packet one-way delay: 138.454 ms

Loss rate: 63.91%

-- Flow 2:

Average throughput: 31.84 Mbit/s

95th percentile per-packet one-way delay: 142.475 ms

Loss rate: 0.08%

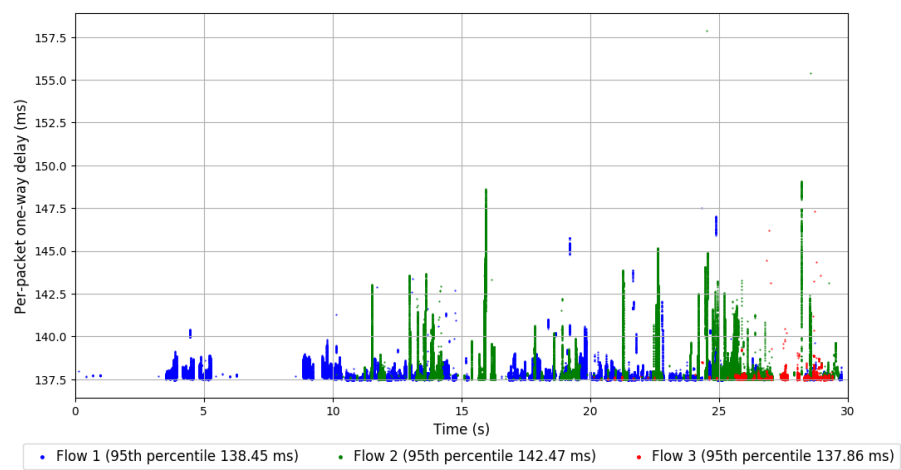
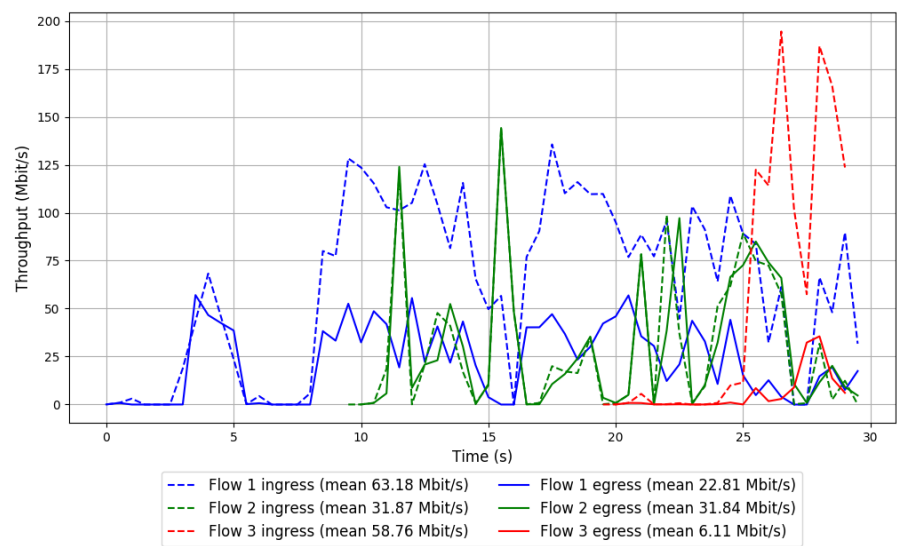
-- Flow 3:

Average throughput: 6.11 Mbit/s

95th percentile per-packet one-way delay: 137.862 ms

Loss rate: 89.69%

Run 7: Report of Verus — Data Link

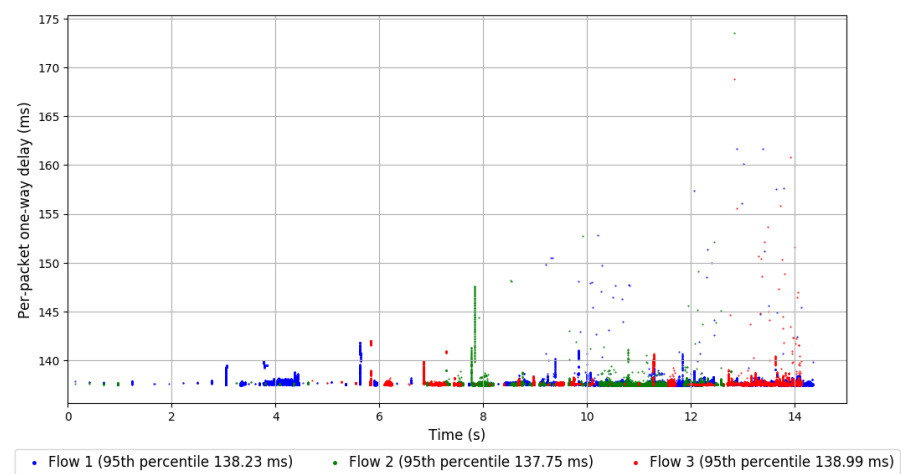
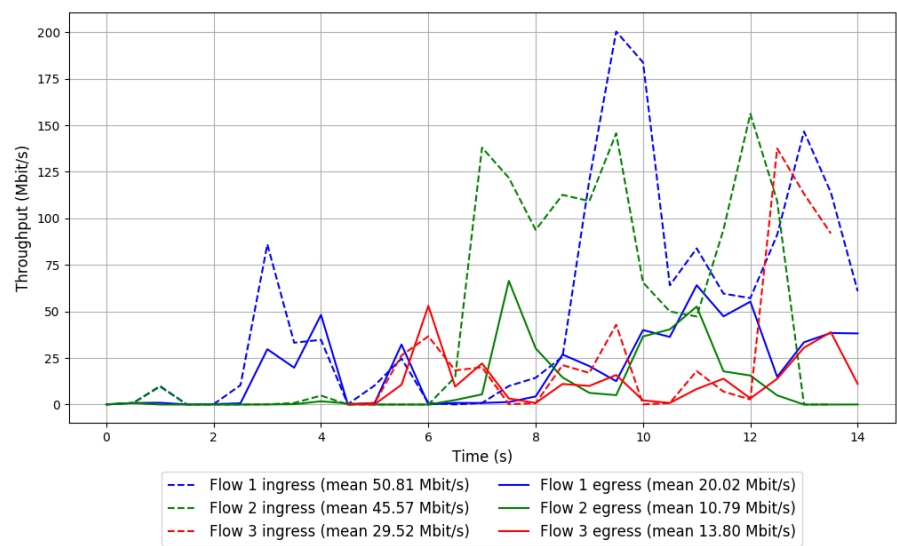


Run 8: Statistics of Verus

Start at: 2017-08-21 14:51:49

End at: 2017-08-21 14:52:19

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-08-21 15:05:17

End at: 2017-08-21 15:05:47

Below is generated by plot.py at 2017-08-21 16:41:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.22 Mbit/s

95th percentile per-packet one-way delay: 143.131 ms

Loss rate: 10.73%

-- Flow 1:

Average throughput: 76.04 Mbit/s

95th percentile per-packet one-way delay: 144.010 ms

Loss rate: 14.38%

-- Flow 2:

Average throughput: 64.29 Mbit/s

95th percentile per-packet one-way delay: 141.026 ms

Loss rate: 1.83%

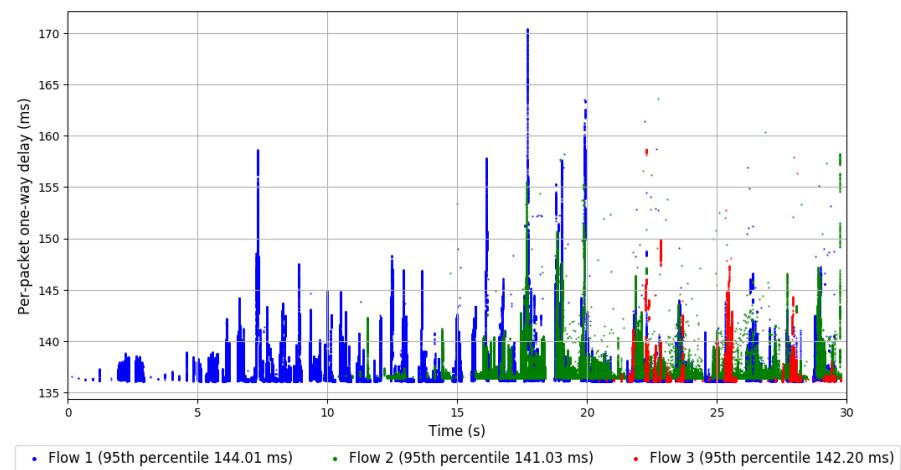
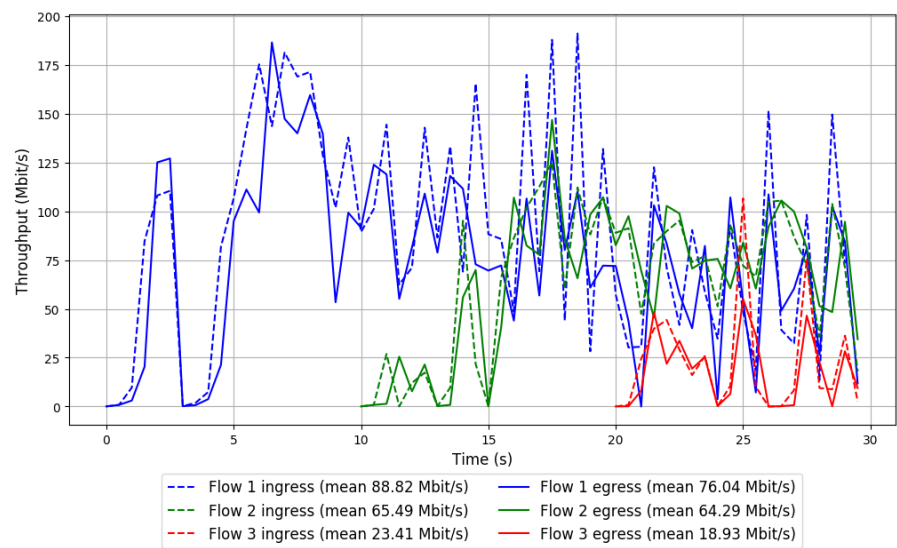
-- Flow 3:

Average throughput: 18.93 Mbit/s

95th percentile per-packet one-way delay: 142.204 ms

Loss rate: 19.14%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-08-21 15:19:04

End at: 2017-08-21 15:19:34

Below is generated by plot.py at 2017-08-21 16:41:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.46 Mbit/s

95th percentile per-packet one-way delay: 143.599 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 35.10 Mbit/s

95th percentile per-packet one-way delay: 146.986 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 19.65 Mbit/s

95th percentile per-packet one-way delay: 137.190 ms

Loss rate: 0.00%

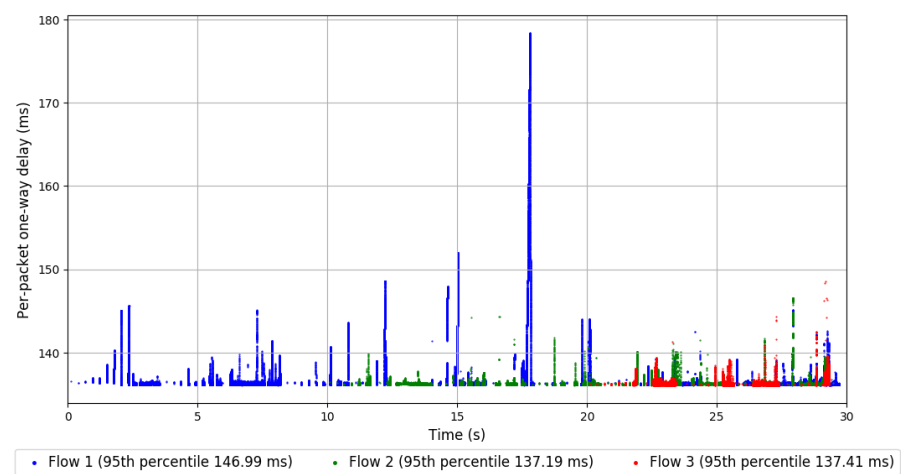
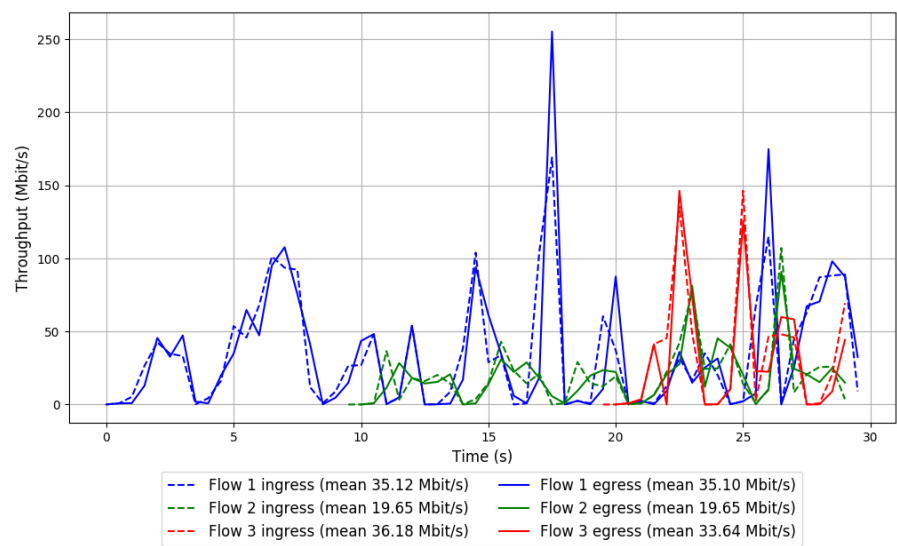
-- Flow 3:

Average throughput: 33.64 Mbit/s

95th percentile per-packet one-way delay: 137.409 ms

Loss rate: 7.01%

Run 10: Report of Verus — Data Link

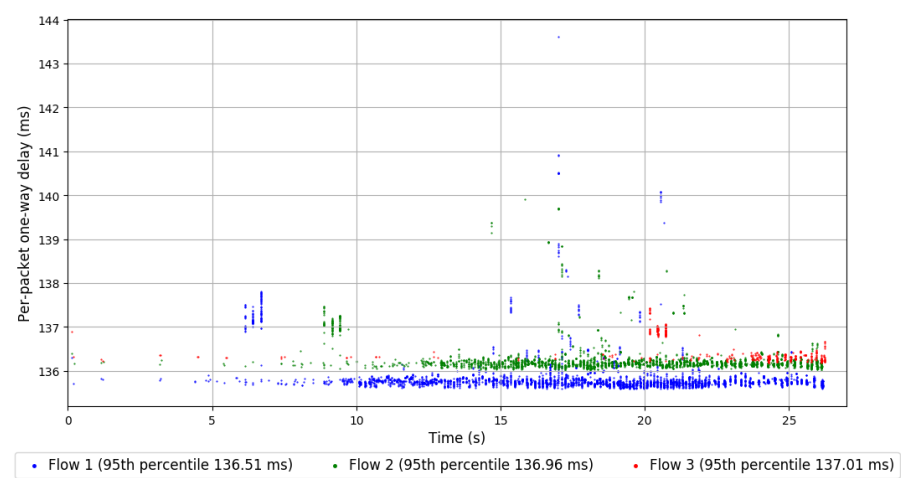
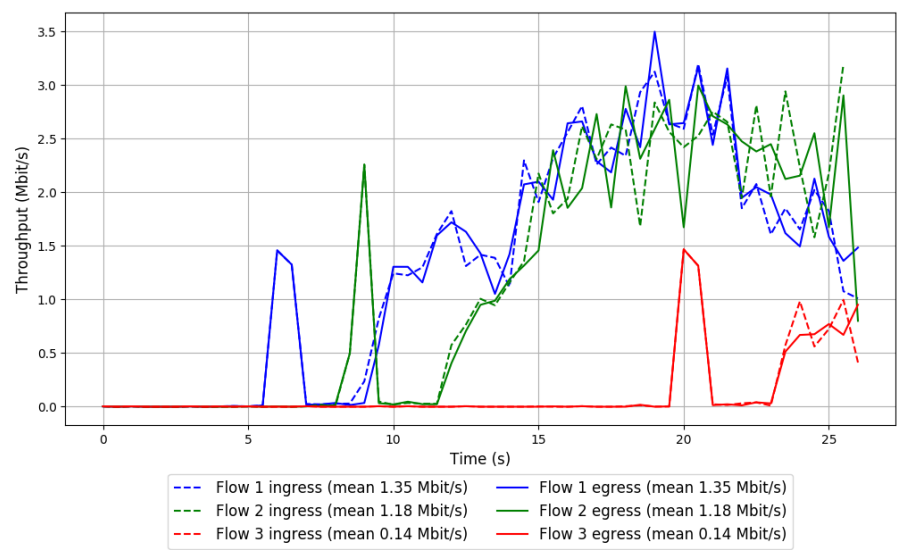


```
Run 1: Statistics of WebRTC media

Start at: 2017-08-21 13:14:38
End at: 2017-08-21 13:15:08

# Below is generated by plot.py at 2017-08-21 16:41:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.66 Mbit/s
95th percentile per-packet one-way delay: 136.968 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 136.507 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 136.956 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 137.013 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-08-21 13:28:23

End at: 2017-08-21 13:28:53

Below is generated by plot.py at 2017-08-21 16:41:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 137.135 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 137.358 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.16 Mbit/s

95th percentile per-packet one-way delay: 136.977 ms

Loss rate: 0.00%

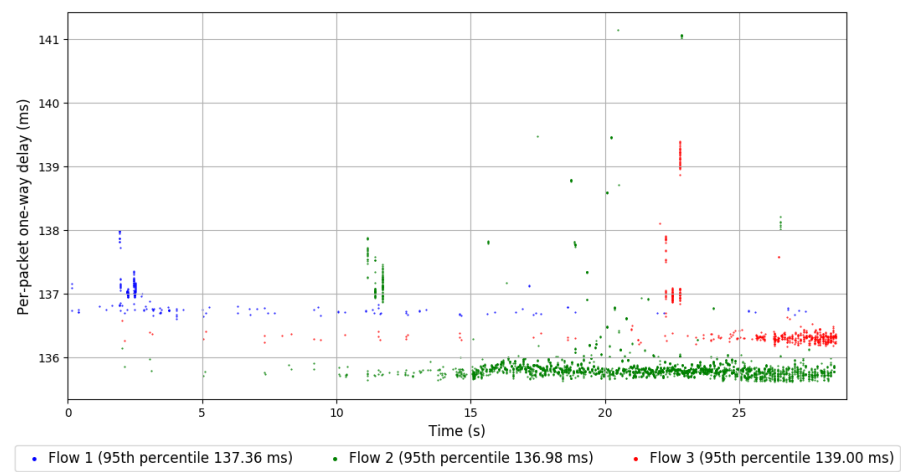
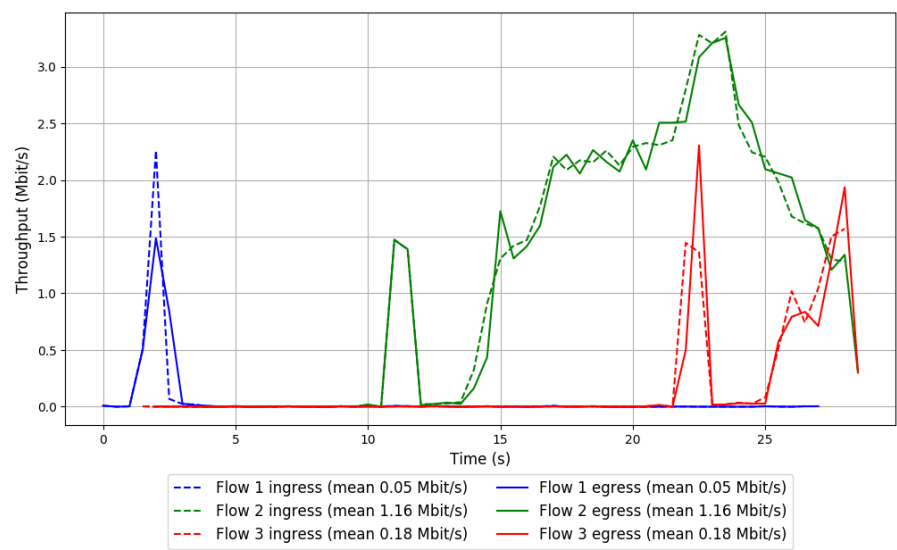
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 139.001 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-08-21 13:42:02

End at: 2017-08-21 13:42:32

Below is generated by plot.py at 2017-08-21 16:41:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 137.890 ms

Loss rate: 2.52%

-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 138.029 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 1.03 Mbit/s

95th percentile per-packet one-way delay: 136.858 ms

Loss rate: 4.41%

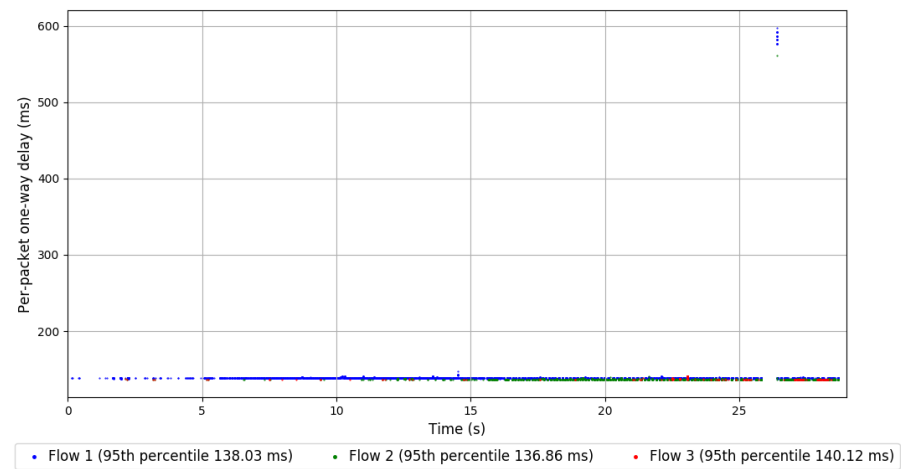
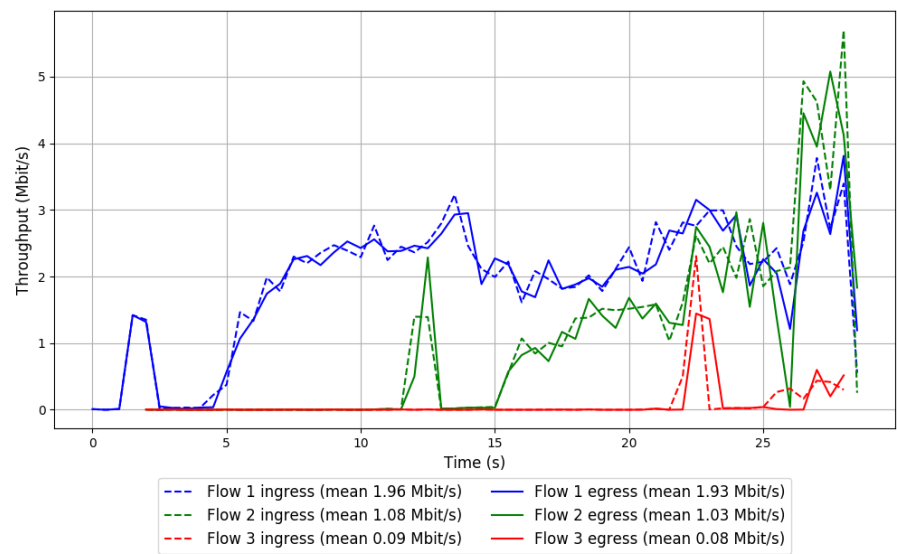
-- Flow 3:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 140.120 ms

Loss rate: 11.73%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-08-21 13:55:29

End at: 2017-08-21 13:55:59

Below is generated by plot.py at 2017-08-21 16:41:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 137.622 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 137.726 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 137.065 ms

Loss rate: 0.00%

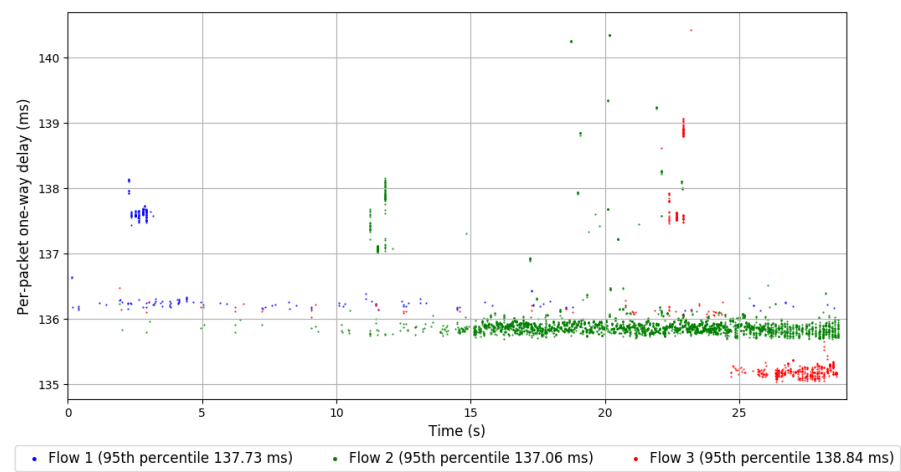
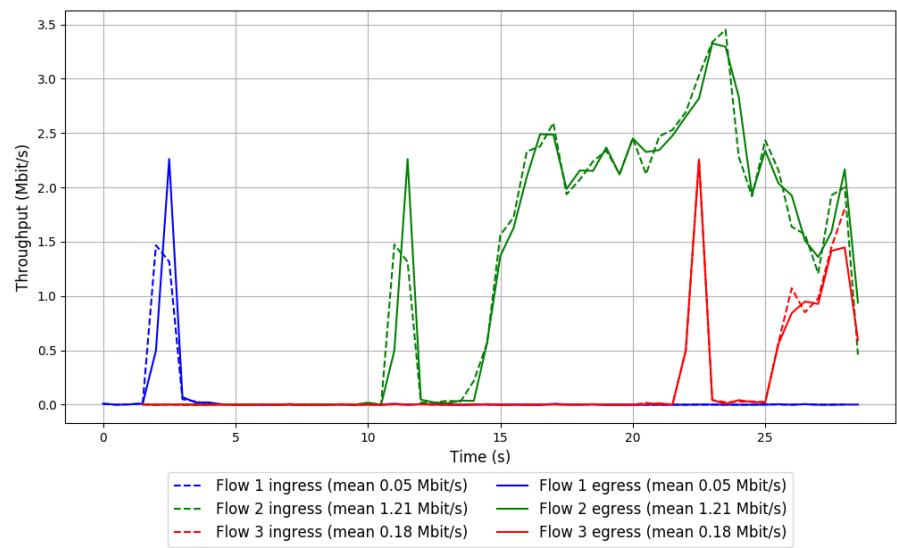
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 138.845 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-08-21 14:09:07

End at: 2017-08-21 14:09:37

Below is generated by plot.py at 2017-08-21 16:41:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 137.258 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.87 Mbit/s

95th percentile per-packet one-way delay: 137.243 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.10 Mbit/s

95th percentile per-packet one-way delay: 137.112 ms

Loss rate: 0.00%

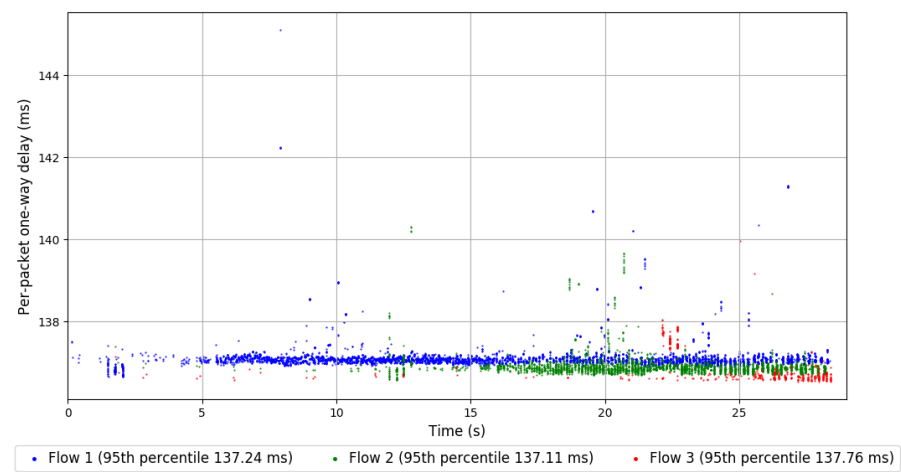
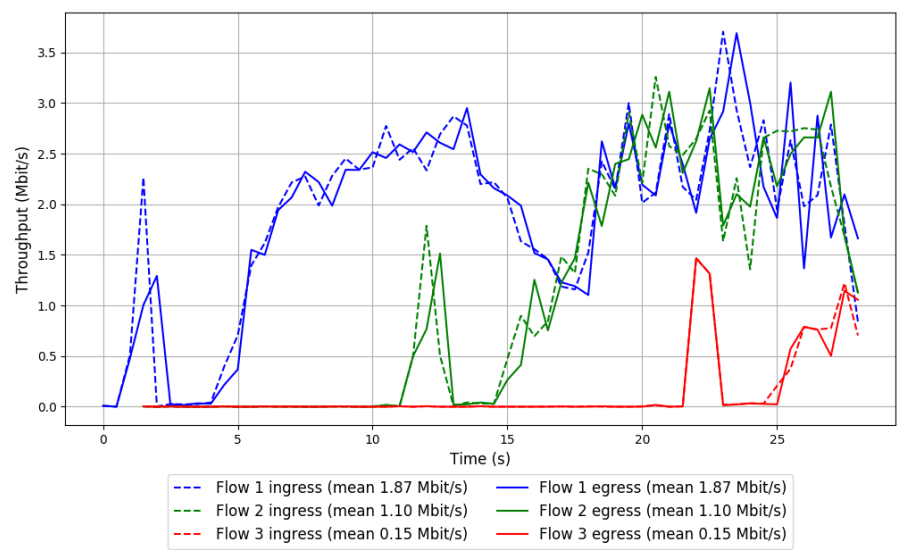
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 137.759 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-08-21 14:22:31

End at: 2017-08-21 14:23:01

Below is generated by plot.py at 2017-08-21 16:41:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 137.748 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 137.783 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 137.663 ms

Loss rate: 0.00%

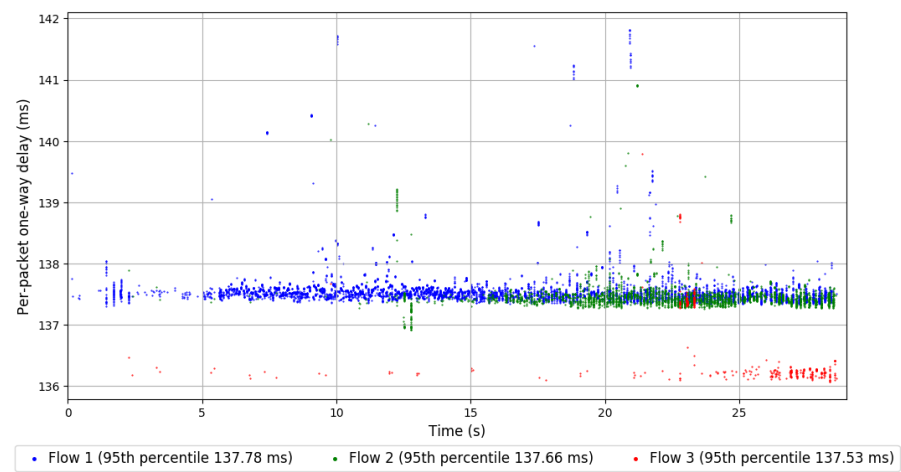
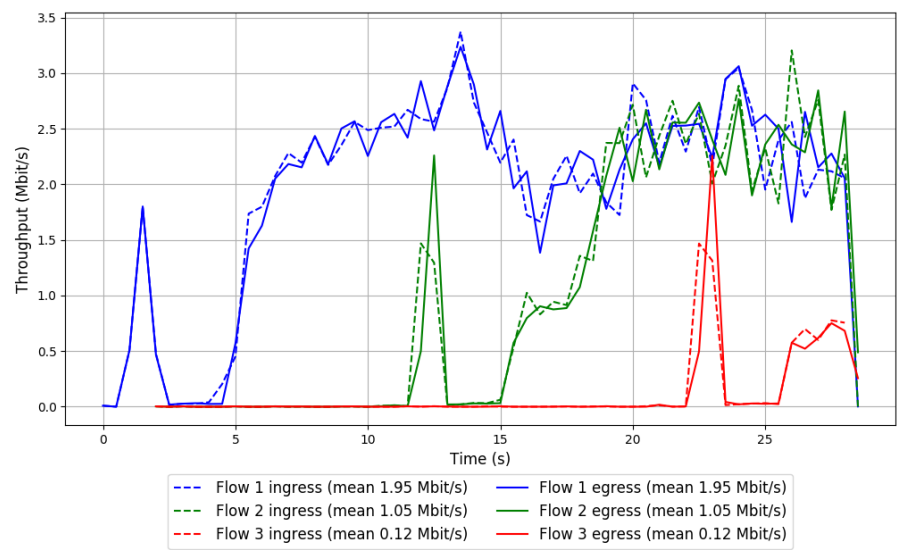
-- Flow 3:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 137.531 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-08-21 14:35:49

End at: 2017-08-21 14:36:19

Below is generated by plot.py at 2017-08-21 16:41:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 138.185 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 137.818 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 138.221 ms

Loss rate: 0.03%

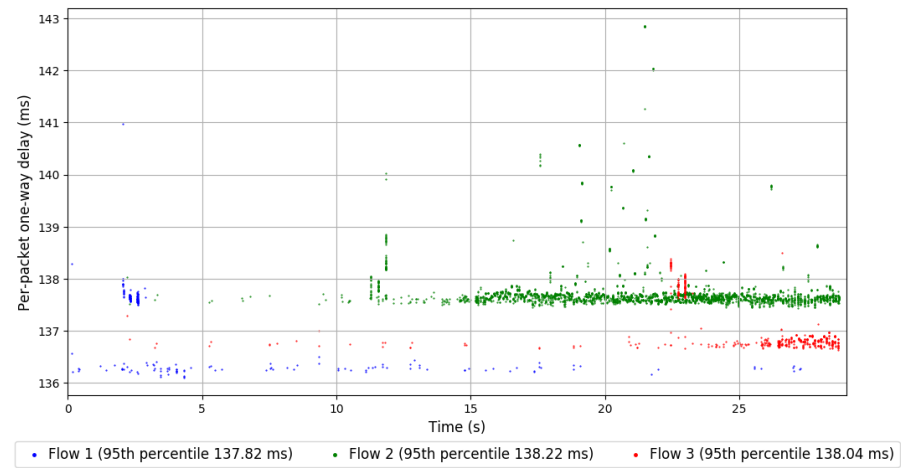
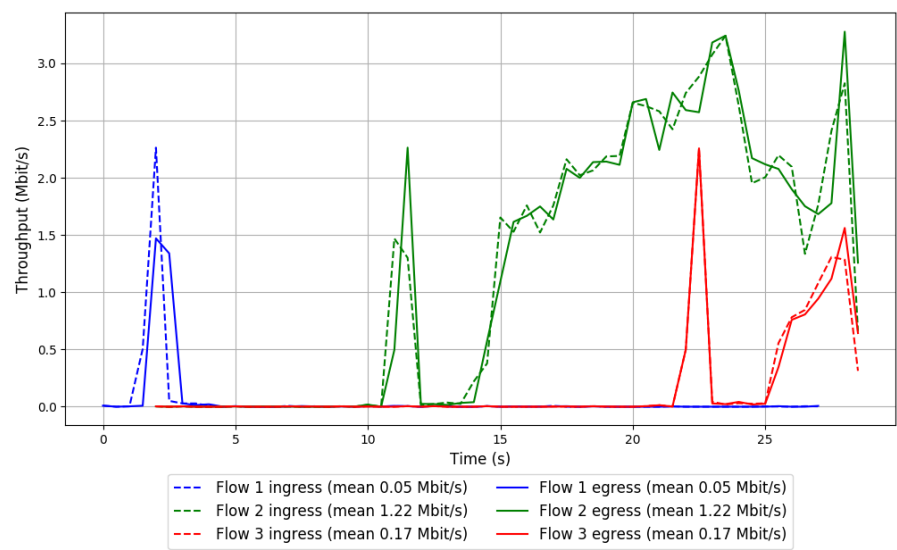
-- Flow 3:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 138.041 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-08-21 14:49:01

End at: 2017-08-21 14:49:31

Below is generated by plot.py at 2017-08-21 16:42:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 137.667 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 137.584 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 137.582 ms

Loss rate: 0.00%

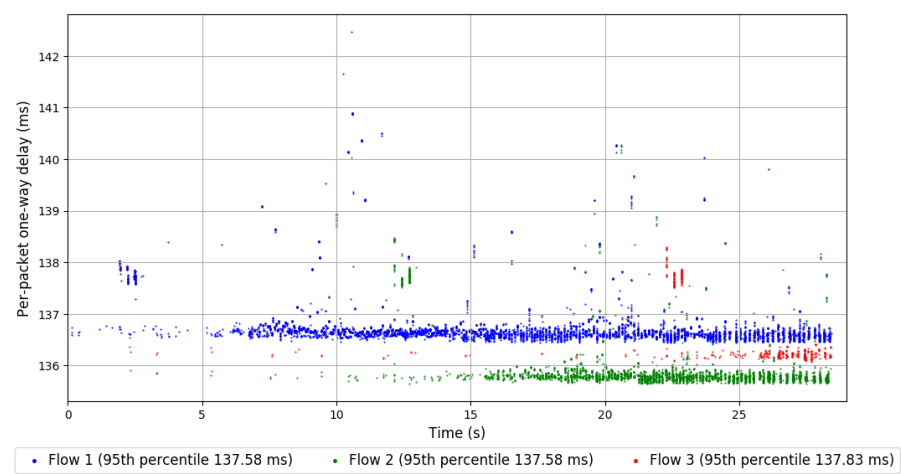
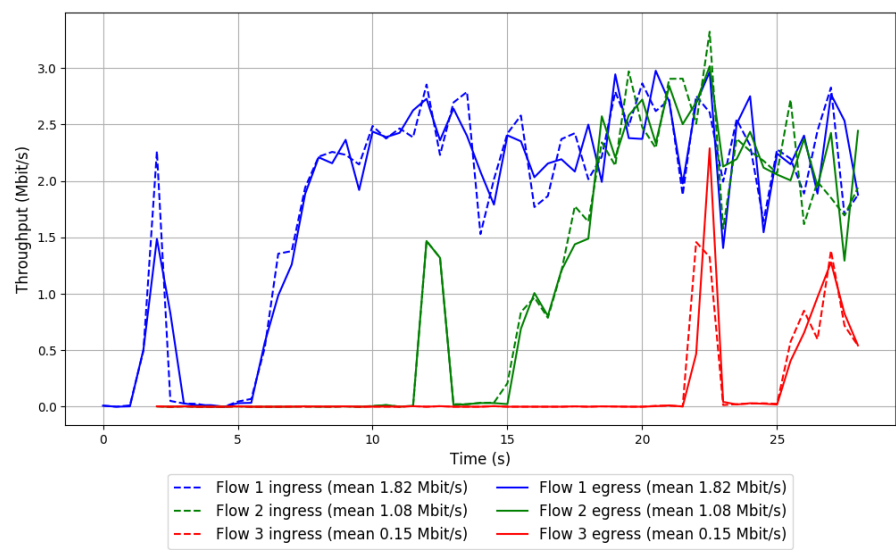
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 137.828 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-08-21 15:02:29

End at: 2017-08-21 15:02:59

Below is generated by plot.py at 2017-08-21 16:42:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 137.698 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 137.821 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 137.655 ms

Loss rate: 0.00%

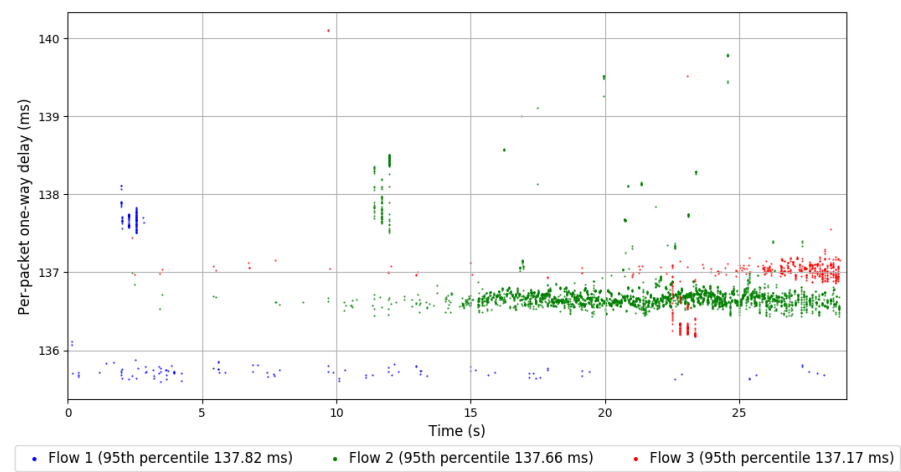
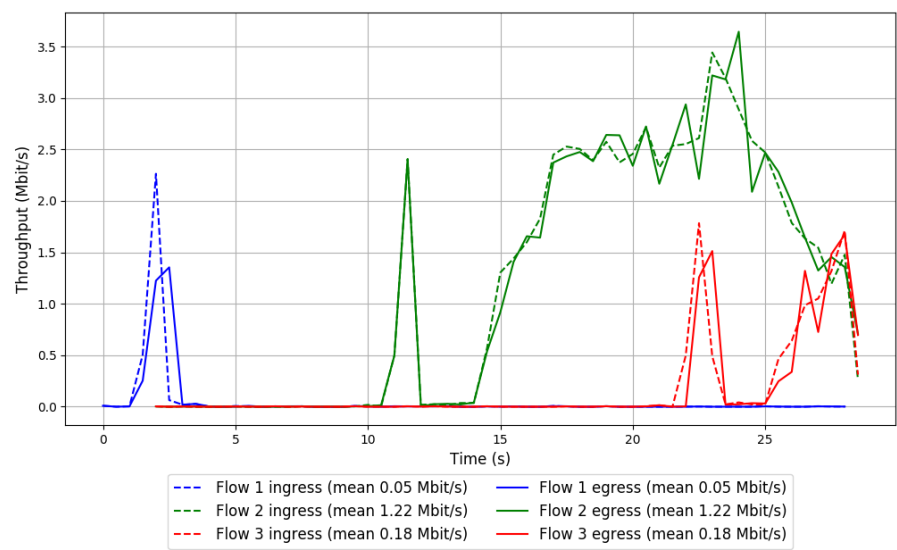
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 137.171 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-08-21 15:16:17

End at: 2017-08-21 15:16:47

Below is generated by plot.py at 2017-08-21 16:42:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 137.035 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 136.638 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 137.053 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 137.005 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

