

Pantheon Report

Generated at 2018-02-22 01:23:51 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

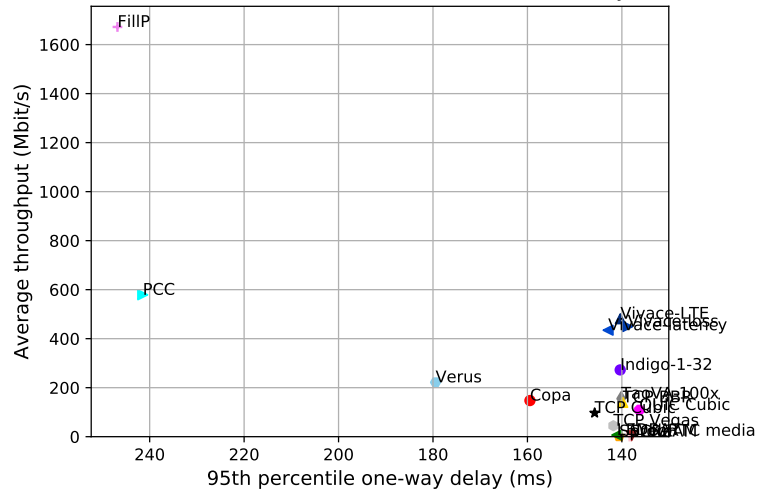
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

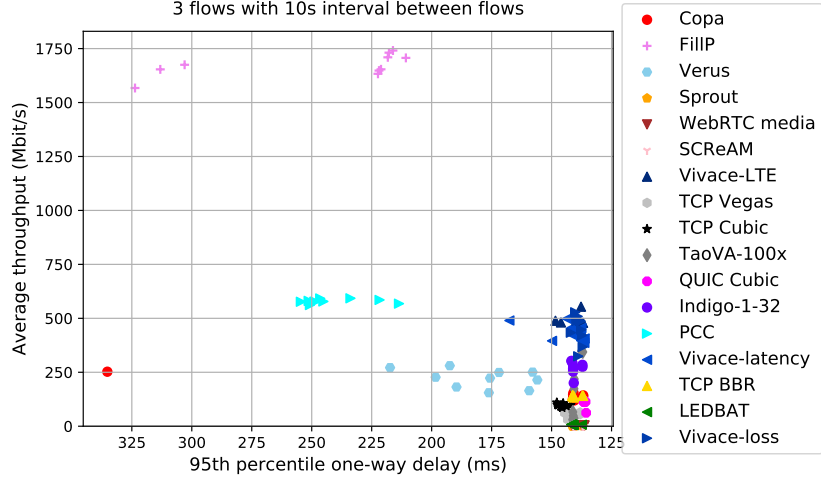
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
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/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
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	71.92	70.44	64.37	139.79	139.80	139.85	0.01	0.01	0.02
TCP Cubic	10	53.38	46.77	37.46	145.84	145.03	145.64	0.01	0.05	0.07
LEDBAT	10	4.46	2.69	1.41	141.14	140.69	140.92	0.00	0.00	0.00
PCC	10	483.51	120.17	47.41	241.48	241.38	238.02	1.96	1.95	2.76
QUIC Cubic	10	53.83	60.57	46.87	135.77	135.86	136.12	0.00	0.00	0.00
SCReAM	10	0.21	0.21	0.22	136.65	136.70	137.21	0.01	0.00	0.00
WebRTC media	10	2.02	1.24	0.42	136.20	137.37	140.00	0.00	0.01	0.02
Sprout	10	0.49	0.39	0.38	140.59	140.24	140.24	0.00	0.00	0.00
TaoVA-100x	10	95.44	76.29	55.22	140.22	140.20	140.33	0.01	0.01	0.00
TCP Vegas	10	23.36	23.40	17.63	141.28	142.03	142.15	0.03	0.09	0.14
Verus	10	151.57	74.03	67.00	166.97	183.52	204.60	0.06	0.03	0.01
Copa	10	77.69	80.69	48.72	153.08	159.81	153.22	0.56	2.85	0.95
FillP	10	881.73	834.50	708.62	225.82	241.59	268.61	2.46	4.14	7.17
Indigo-1-32	10	144.92	137.37	114.63	140.18	140.55	141.41	0.01	0.02	0.04
Vivace-latency	10	273.97	182.37	119.53	141.73	150.95	139.70	0.00	0.11	0.00
Vivace-loss	10	264.21	214.49	129.44	138.13	141.10	153.27	0.00	0.00	0.01
Vivace-LTE	10	301.82	206.45	128.66	138.45	148.46	141.73	0.00	0.07	0.01

Run 1: Statistics of TCP BBR

Start at: 2018-02-21 18:14:24

End at: 2018-02-21 18:14:54

Below is generated by plot.py at 2018-02-21 23:31:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.76 Mbit/s

95th percentile per-packet one-way delay: 140.817 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 70.63 Mbit/s

95th percentile per-packet one-way delay: 140.756 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 68.90 Mbit/s

95th percentile per-packet one-way delay: 140.796 ms

Loss rate: 0.00%

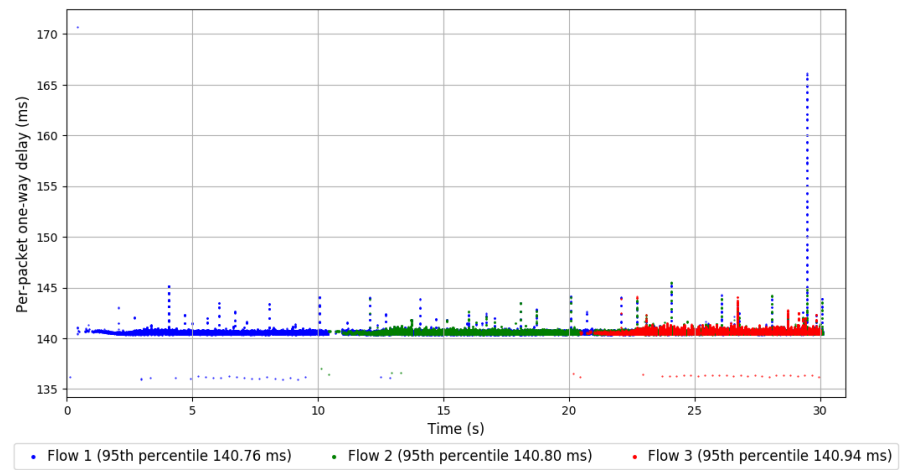
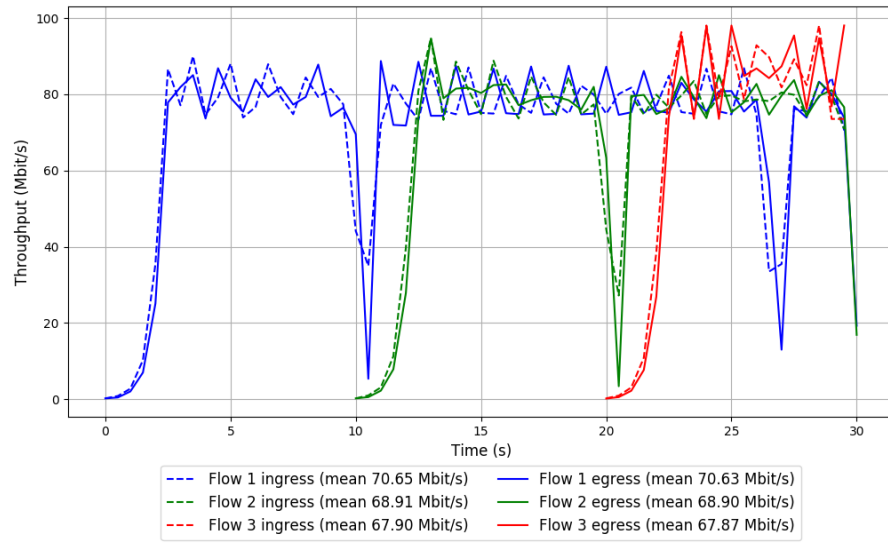
-- Flow 3:

Average throughput: 67.87 Mbit/s

95th percentile per-packet one-way delay: 140.942 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-21 18:34:21

End at: 2018-02-21 18:34:51

Below is generated by plot.py at 2018-02-21 23:31:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.26 Mbit/s

95th percentile per-packet one-way delay: 141.169 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 70.70 Mbit/s

95th percentile per-packet one-way delay: 141.091 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 77.16 Mbit/s

95th percentile per-packet one-way delay: 141.231 ms

Loss rate: 0.00%

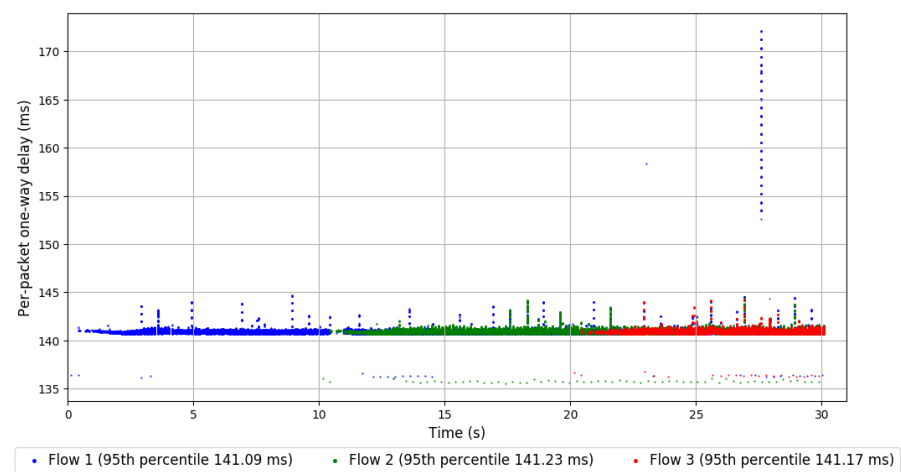
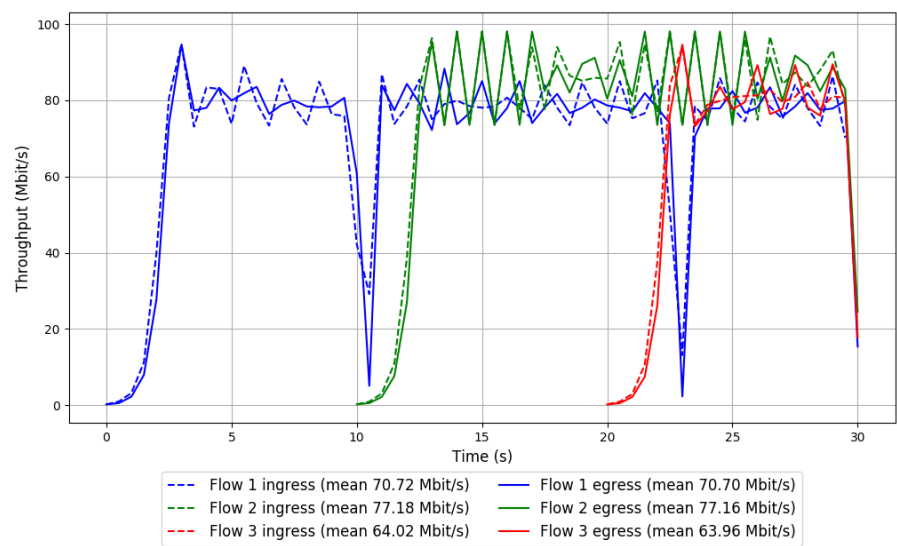
-- Flow 3:

Average throughput: 63.96 Mbit/s

95th percentile per-packet one-way delay: 141.166 ms

Loss rate: 0.08%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-21 18:55:06

End at: 2018-02-21 18:55:36

Below is generated by plot.py at 2018-02-21 23:31:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 141.86 Mbit/s

95th percentile per-packet one-way delay: 137.114 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.01 Mbit/s

95th percentile per-packet one-way delay: 137.097 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.01 Mbit/s

95th percentile per-packet one-way delay: 137.122 ms

Loss rate: 0.00%

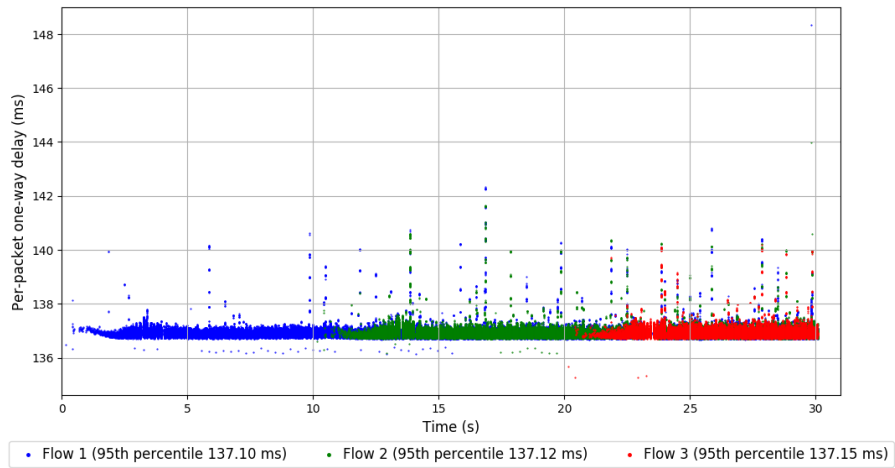
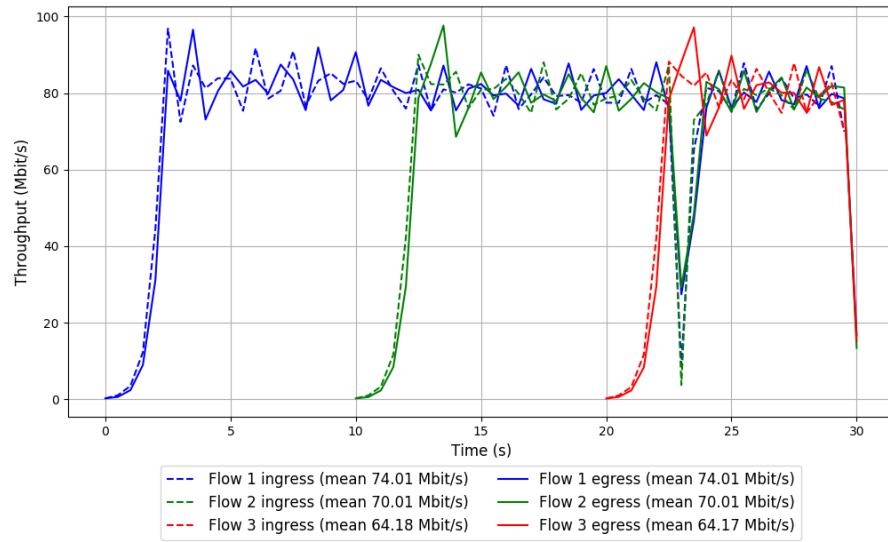
-- Flow 3:

Average throughput: 64.17 Mbit/s

95th percentile per-packet one-way delay: 137.151 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-21 19:15:48

End at: 2018-02-21 19:16:18

Below is generated by plot.py at 2018-02-21 23:31:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 141.90 Mbit/s

95th percentile per-packet one-way delay: 137.019 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.16 Mbit/s

95th percentile per-packet one-way delay: 136.997 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.80 Mbit/s

95th percentile per-packet one-way delay: 137.025 ms

Loss rate: 0.00%

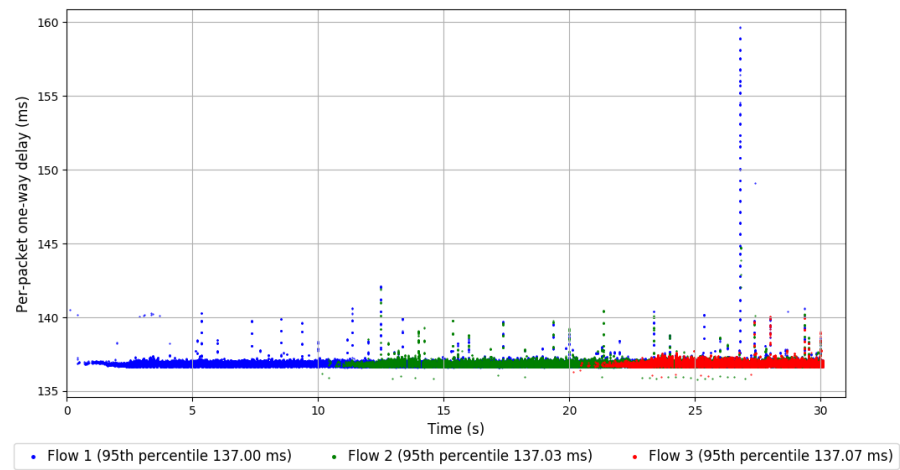
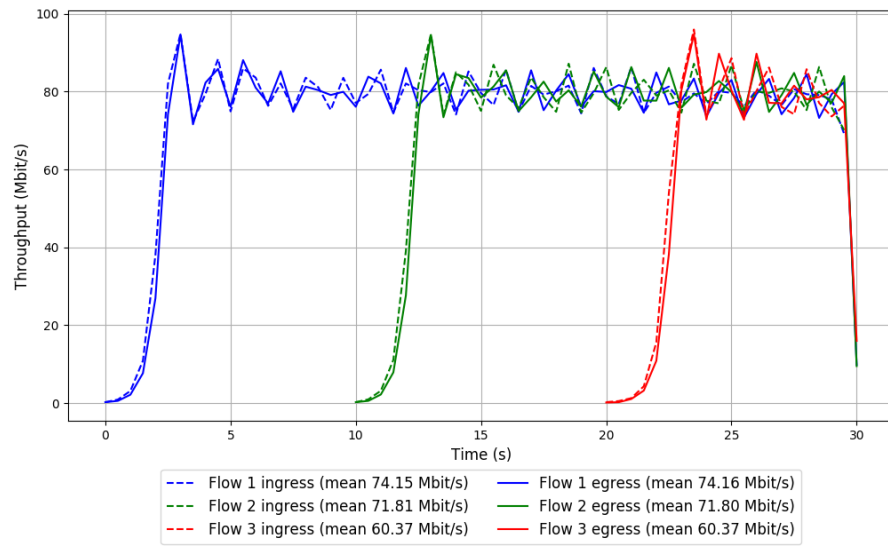
-- Flow 3:

Average throughput: 60.37 Mbit/s

95th percentile per-packet one-way delay: 137.072 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-21 19:36:15

End at: 2018-02-21 19:36:45

Below is generated by plot.py at 2018-02-21 23:31:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.82 Mbit/s

95th percentile per-packet one-way delay: 140.724 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 70.96 Mbit/s

95th percentile per-packet one-way delay: 140.709 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 69.92 Mbit/s

95th percentile per-packet one-way delay: 140.720 ms

Loss rate: 0.03%

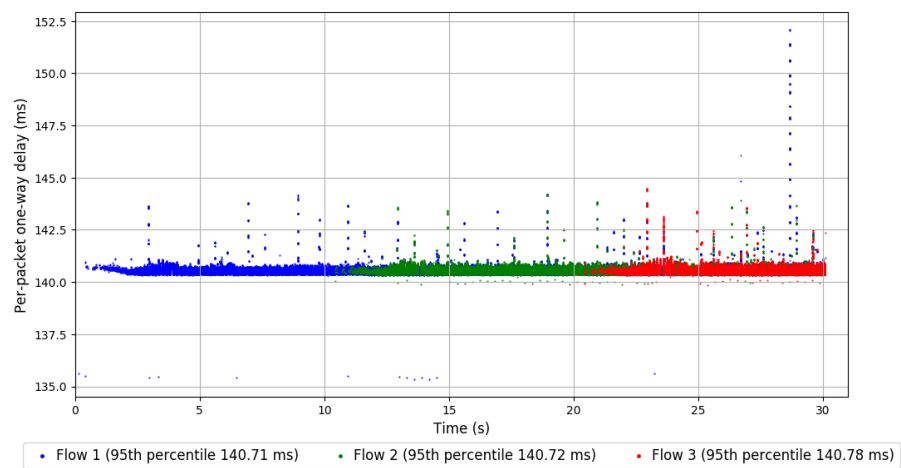
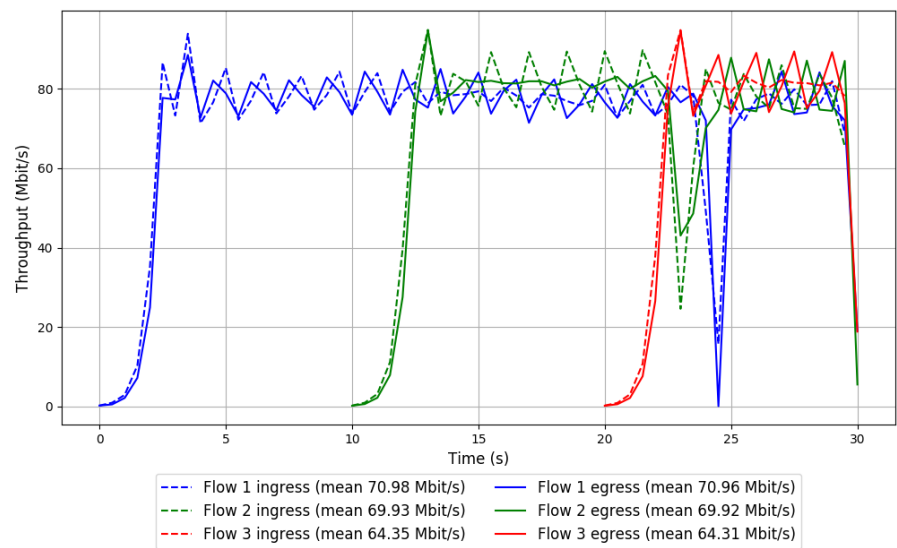
-- Flow 3:

Average throughput: 64.31 Mbit/s

95th percentile per-packet one-way delay: 140.777 ms

Loss rate: 0.08%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-21 19:56:43

End at: 2018-02-21 19:57:13

Below is generated by plot.py at 2018-02-21 23:31:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.97 Mbit/s

95th percentile per-packet one-way delay: 140.709 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.45 Mbit/s

95th percentile per-packet one-way delay: 140.721 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.51 Mbit/s

95th percentile per-packet one-way delay: 140.675 ms

Loss rate: 0.00%

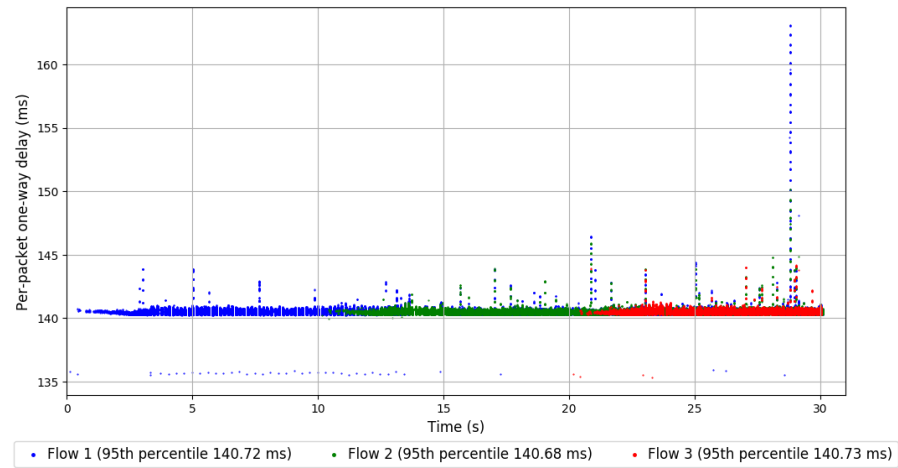
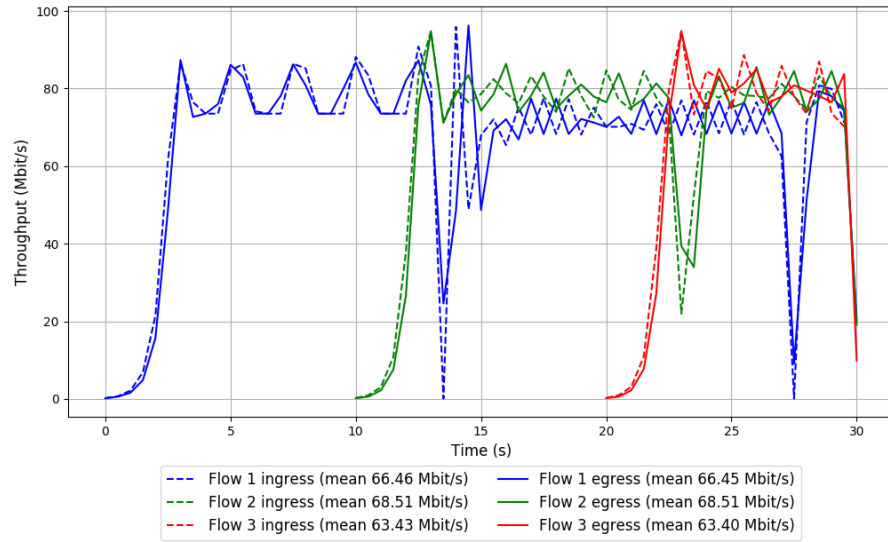
-- Flow 3:

Average throughput: 63.40 Mbit/s

95th percentile per-packet one-way delay: 140.730 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-21 20:17:19

End at: 2018-02-21 20:17:49

Below is generated by plot.py at 2018-02-21 23:31:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 141.59 Mbit/s

95th percentile per-packet one-way delay: 141.098 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 73.44 Mbit/s

95th percentile per-packet one-way delay: 141.082 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 68.87 Mbit/s

95th percentile per-packet one-way delay: 141.042 ms

Loss rate: 0.03%

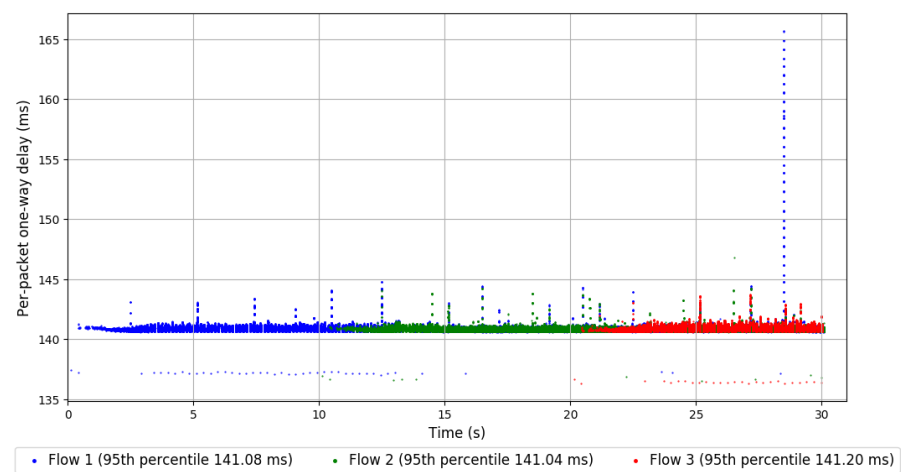
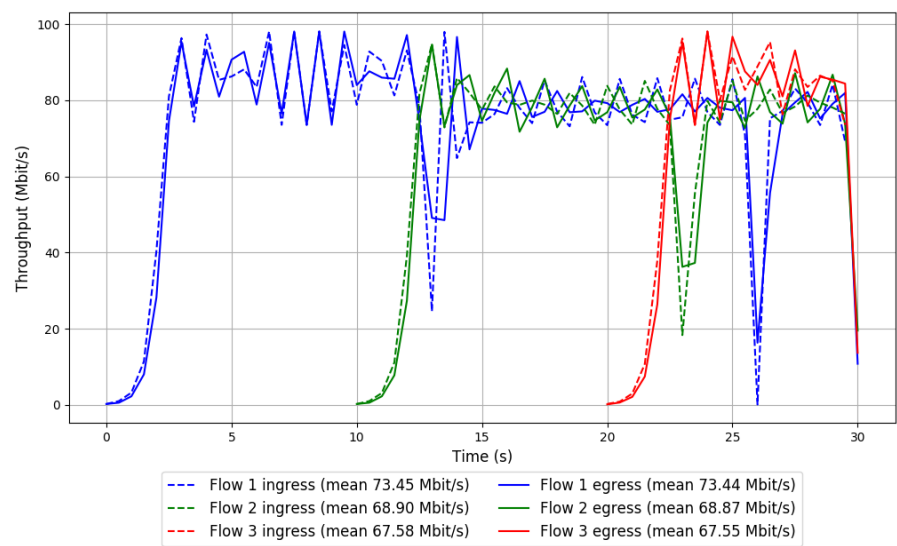
-- Flow 3:

Average throughput: 67.55 Mbit/s

95th percentile per-packet one-way delay: 141.201 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-21 20:37:17

End at: 2018-02-21 20:37:47

Below is generated by plot.py at 2018-02-21 23:31:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.43 Mbit/s

95th percentile per-packet one-way delay: 141.245 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 73.44 Mbit/s

95th percentile per-packet one-way delay: 141.236 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 71.35 Mbit/s

95th percentile per-packet one-way delay: 141.231 ms

Loss rate: 0.03%

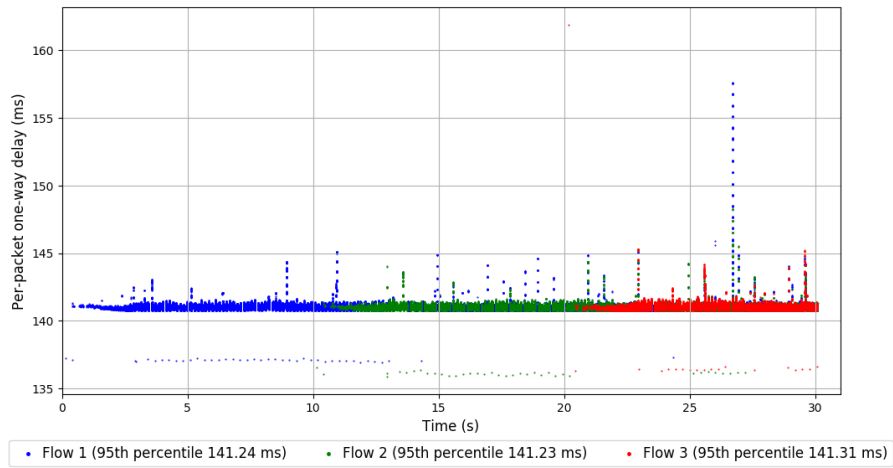
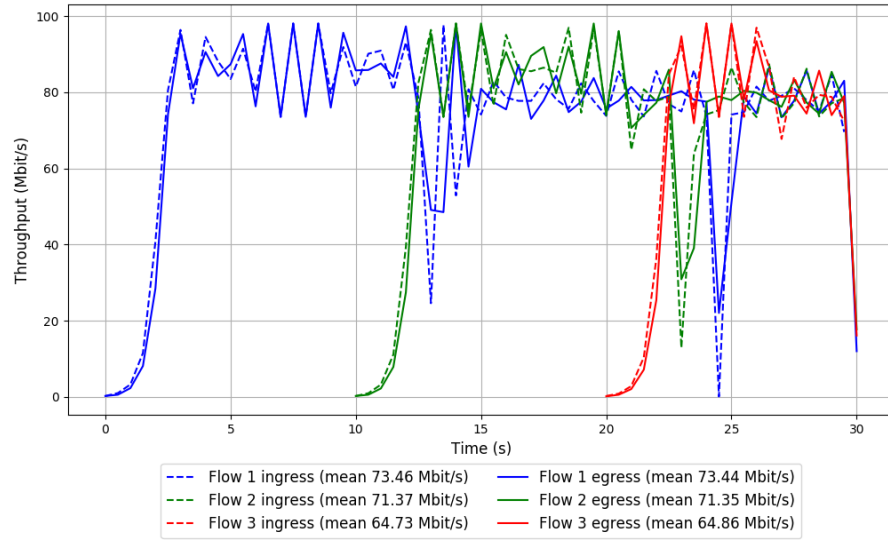
-- Flow 3:

Average throughput: 64.86 Mbit/s

95th percentile per-packet one-way delay: 141.307 ms

Loss rate: 0.05%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-21 20:57:21

End at: 2018-02-21 20:57:51

Below is generated by plot.py at 2018-02-21 23:33:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.81 Mbit/s

95th percentile per-packet one-way delay: 141.352 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 72.76 Mbit/s

95th percentile per-packet one-way delay: 141.376 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 67.90 Mbit/s

95th percentile per-packet one-way delay: 141.311 ms

Loss rate: 0.03%

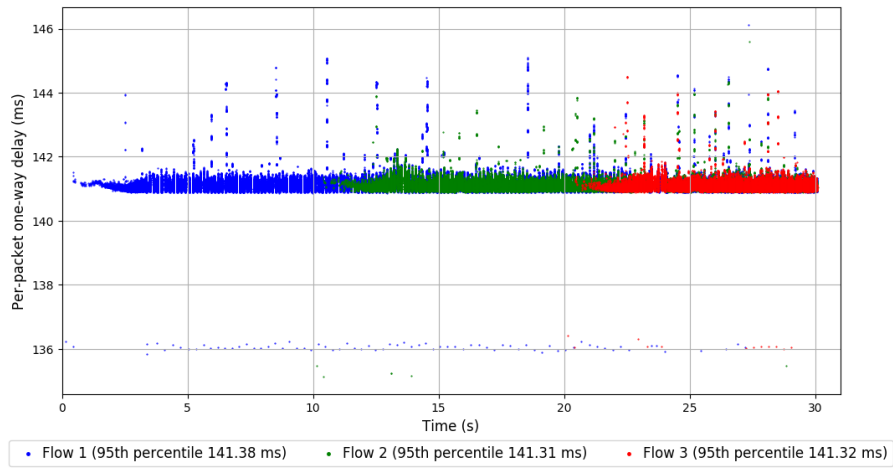
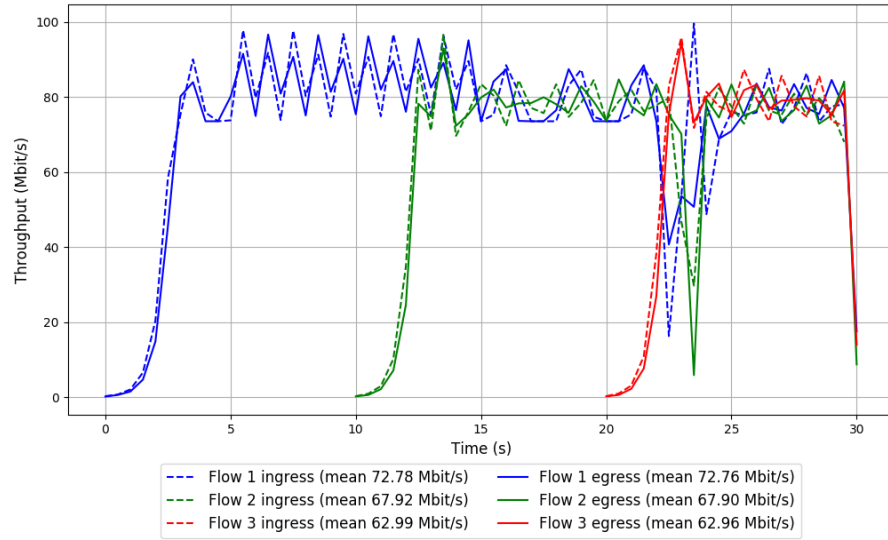
-- Flow 3:

Average throughput: 62.96 Mbit/s

95th percentile per-packet one-way delay: 141.318 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-21 21:17:29

End at: 2018-02-21 21:17:59

Below is generated by plot.py at 2018-02-21 23:33:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.54 Mbit/s

95th percentile per-packet one-way delay: 136.833 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.66 Mbit/s

95th percentile per-packet one-way delay: 136.812 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.00 Mbit/s

95th percentile per-packet one-way delay: 136.838 ms

Loss rate: 0.01%

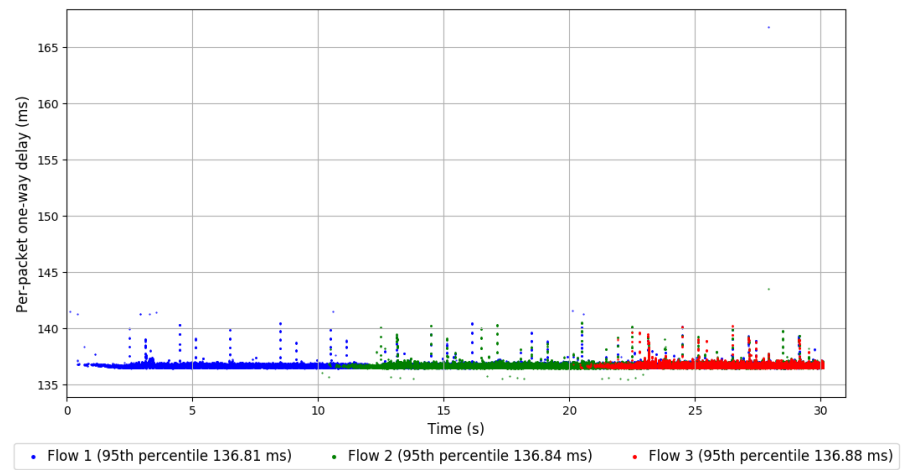
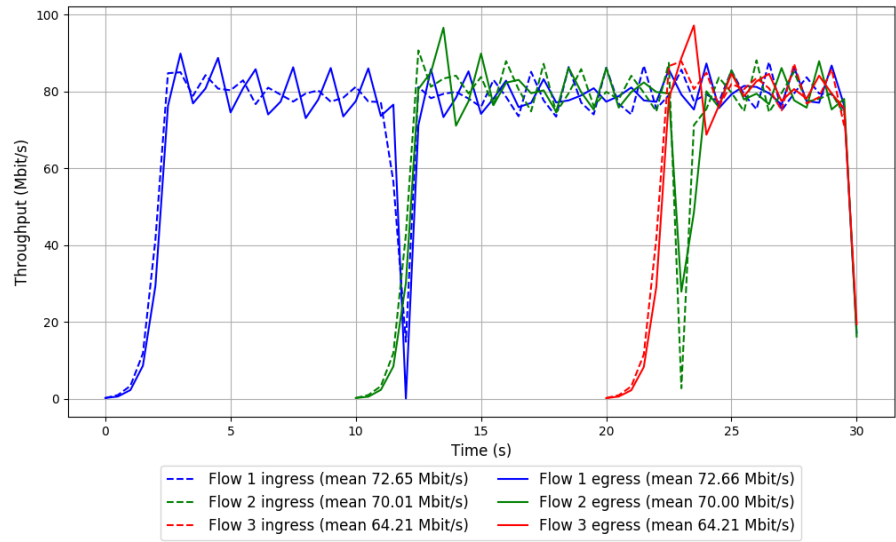
-- Flow 3:

Average throughput: 64.21 Mbit/s

95th percentile per-packet one-way delay: 136.885 ms

Loss rate: 0.01%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-21 18:02:24

End at: 2018-02-21 18:02:54

Below is generated by plot.py at 2018-02-21 23:33:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.45 Mbit/s

95th percentile per-packet one-way delay: 145.904 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.50 Mbit/s

95th percentile per-packet one-way delay: 146.749 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.19 Mbit/s

95th percentile per-packet one-way delay: 143.519 ms

Loss rate: 0.00%

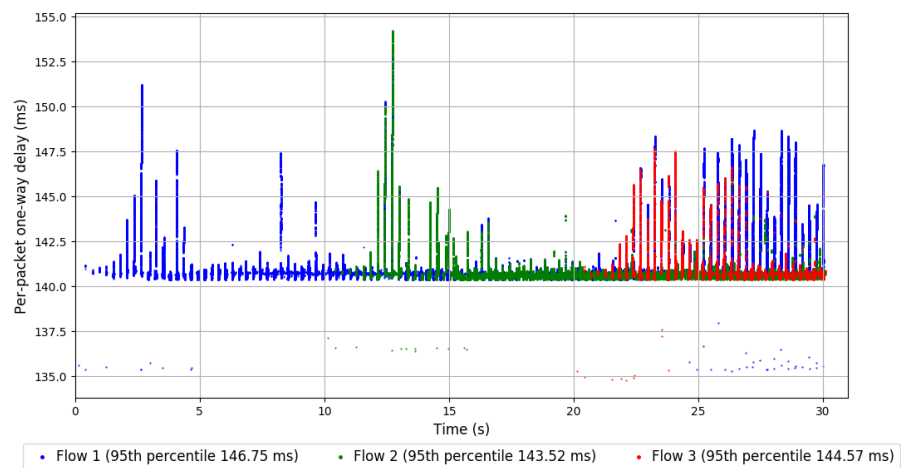
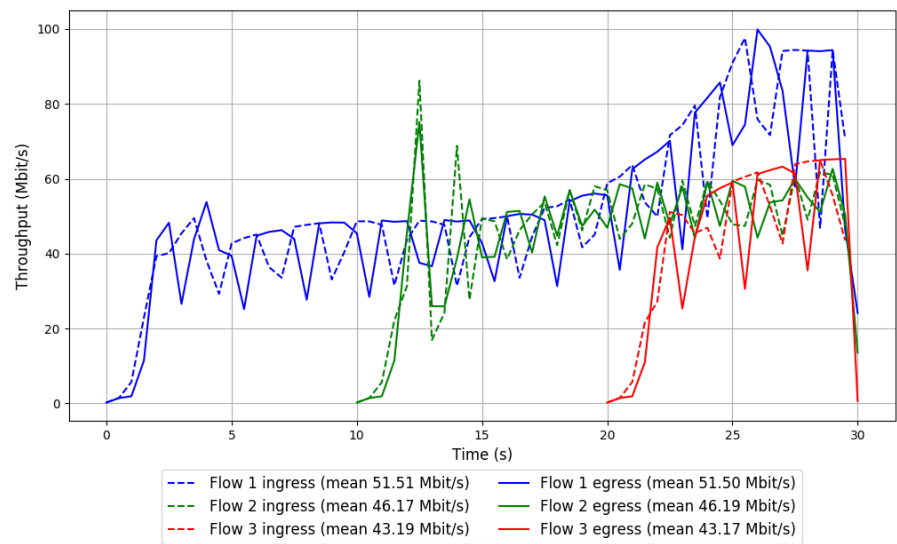
-- Flow 3:

Average throughput: 43.17 Mbit/s

95th percentile per-packet one-way delay: 144.566 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-21 18:22:34

End at: 2018-02-21 18:23:04

Below is generated by plot.py at 2018-02-21 23:33:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.57 Mbit/s

95th percentile per-packet one-way delay: 147.828 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 45.55 Mbit/s

95th percentile per-packet one-way delay: 145.448 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.25 Mbit/s

95th percentile per-packet one-way delay: 148.656 ms

Loss rate: 0.24%

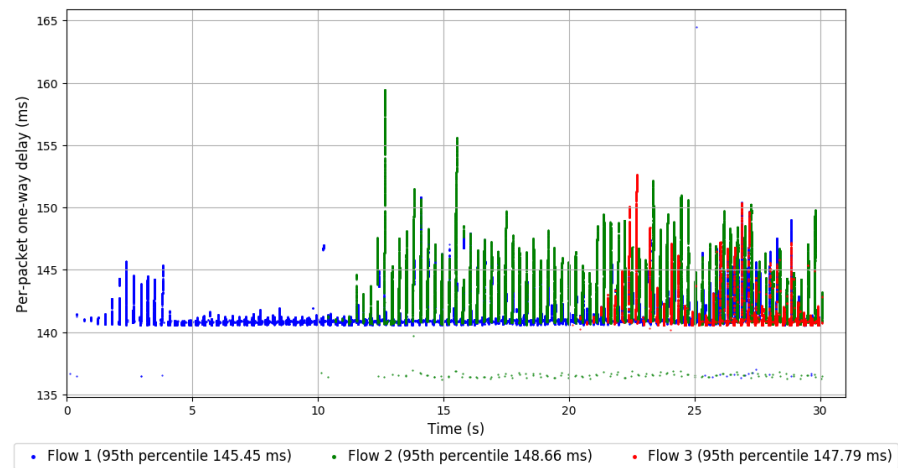
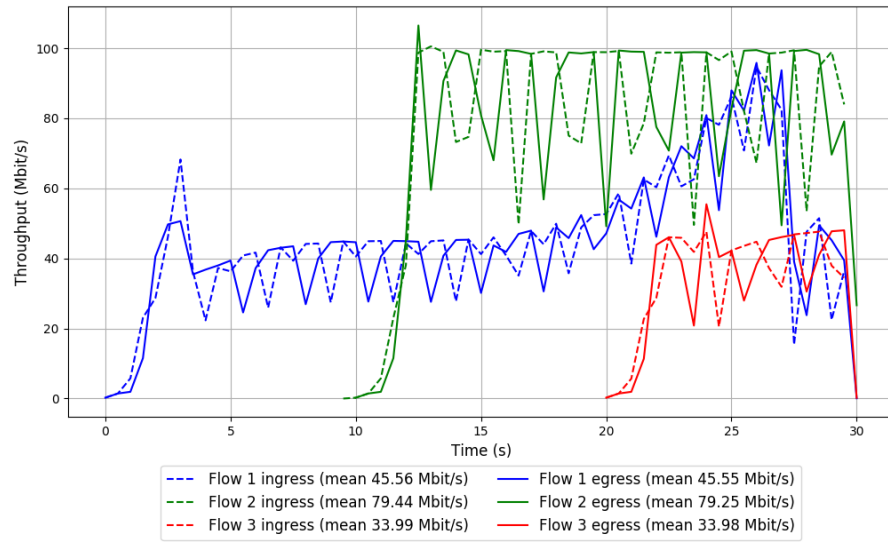
-- Flow 3:

Average throughput: 33.98 Mbit/s

95th percentile per-packet one-way delay: 147.792 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-21 18:42:30

End at: 2018-02-21 18:43:01

Below is generated by plot.py at 2018-02-21 23:33:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.65 Mbit/s

95th percentile per-packet one-way delay: 145.183 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 53.63 Mbit/s

95th percentile per-packet one-way delay: 145.933 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 62.98 Mbit/s

95th percentile per-packet one-way delay: 143.819 ms

Loss rate: 0.00%

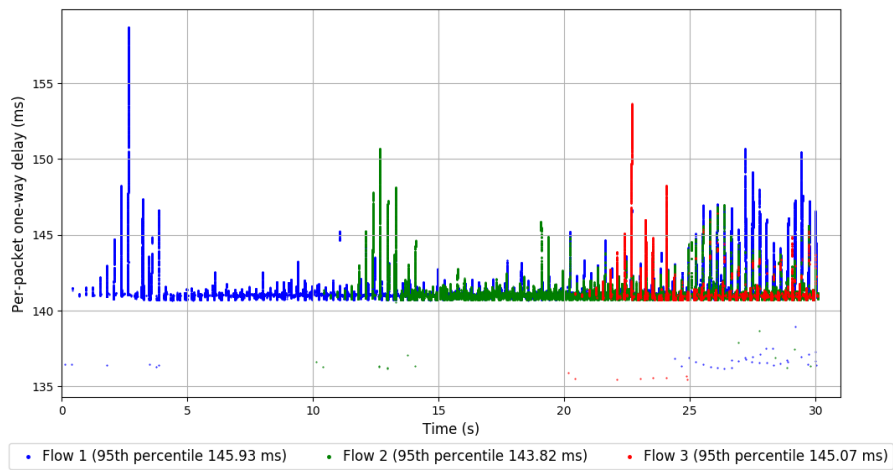
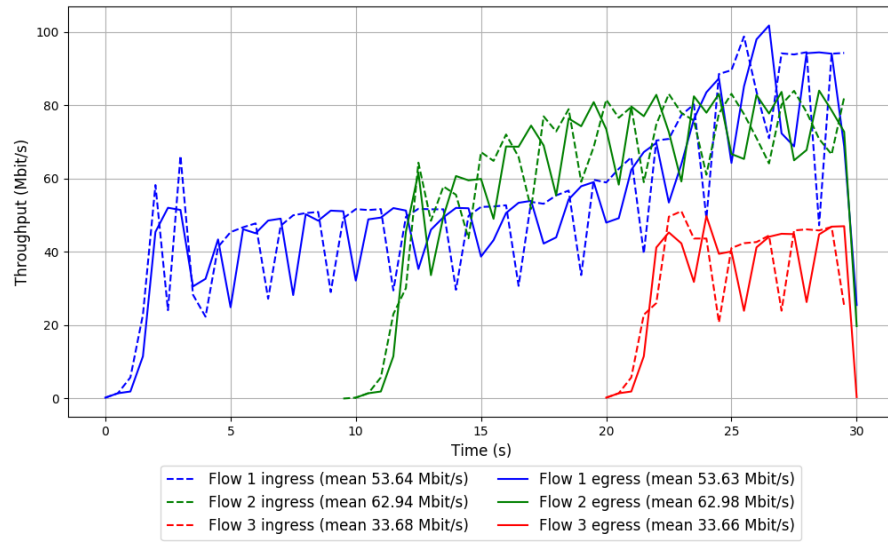
-- Flow 3:

Average throughput: 33.66 Mbit/s

95th percentile per-packet one-way delay: 145.067 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-21 19:03:24

End at: 2018-02-21 19:03:54

Below is generated by plot.py at 2018-02-21 23:33:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.06 Mbit/s

95th percentile per-packet one-way delay: 142.097 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.84 Mbit/s

95th percentile per-packet one-way delay: 142.331 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.41 Mbit/s

95th percentile per-packet one-way delay: 139.448 ms

Loss rate: 0.00%

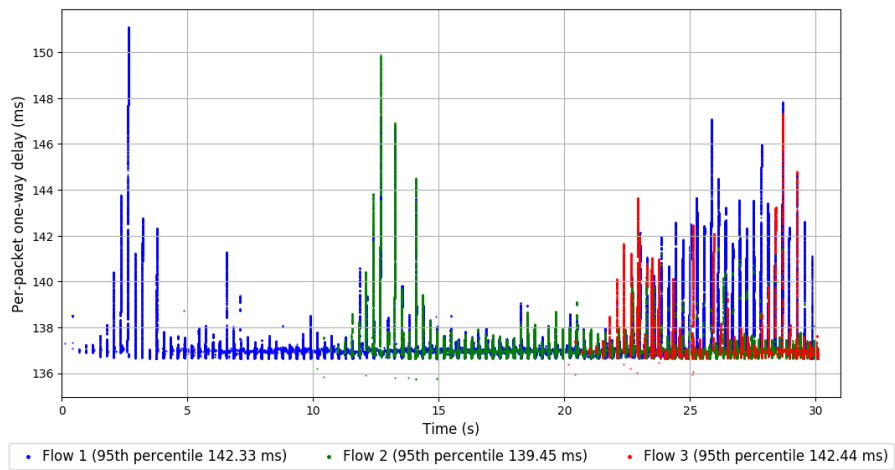
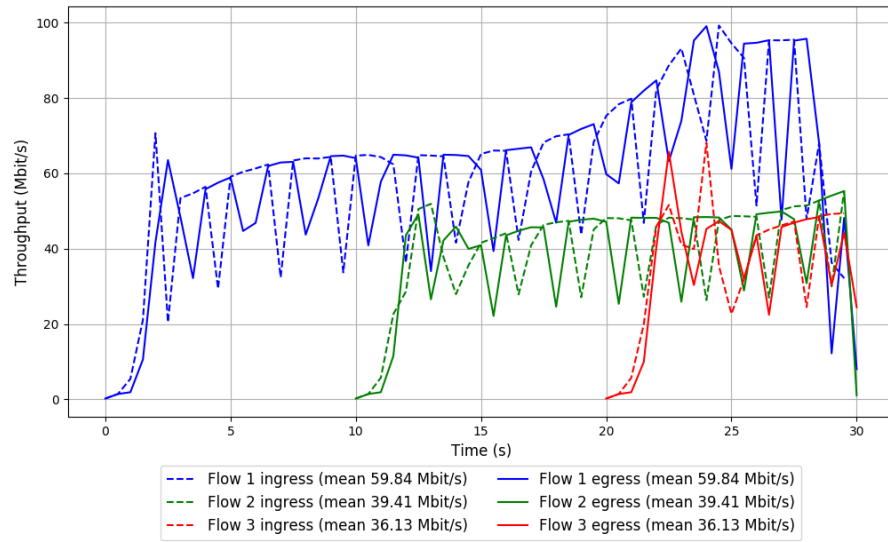
-- Flow 3:

Average throughput: 36.13 Mbit/s

95th percentile per-packet one-way delay: 142.445 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-21 19:24:05

End at: 2018-02-21 19:24:35

Below is generated by plot.py at 2018-02-21 23:33:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.20 Mbit/s

95th percentile per-packet one-way delay: 143.700 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 53.98 Mbit/s

95th percentile per-packet one-way delay: 144.549 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.99 Mbit/s

95th percentile per-packet one-way delay: 142.505 ms

Loss rate: 0.00%

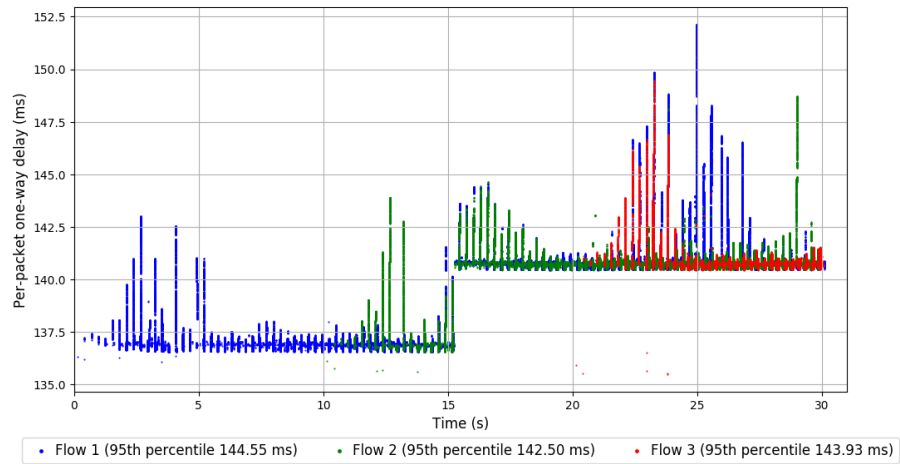
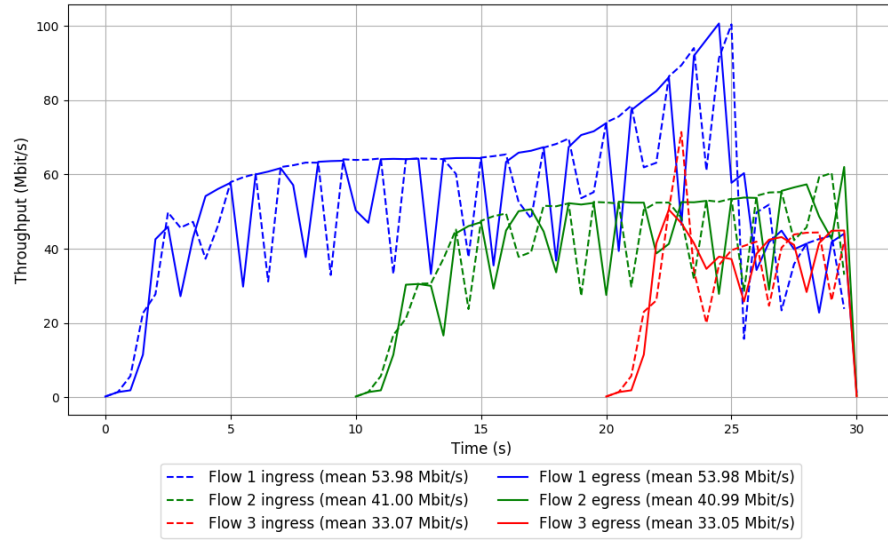
-- Flow 3:

Average throughput: 33.05 Mbit/s

95th percentile per-packet one-way delay: 143.934 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-21 19:44:18

End at: 2018-02-21 19:44:48

Below is generated by plot.py at 2018-02-21 23:33:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.07 Mbit/s

95th percentile per-packet one-way delay: 146.064 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 51.42 Mbit/s

95th percentile per-packet one-way delay: 146.249 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.92 Mbit/s

95th percentile per-packet one-way delay: 146.204 ms

Loss rate: 0.26%

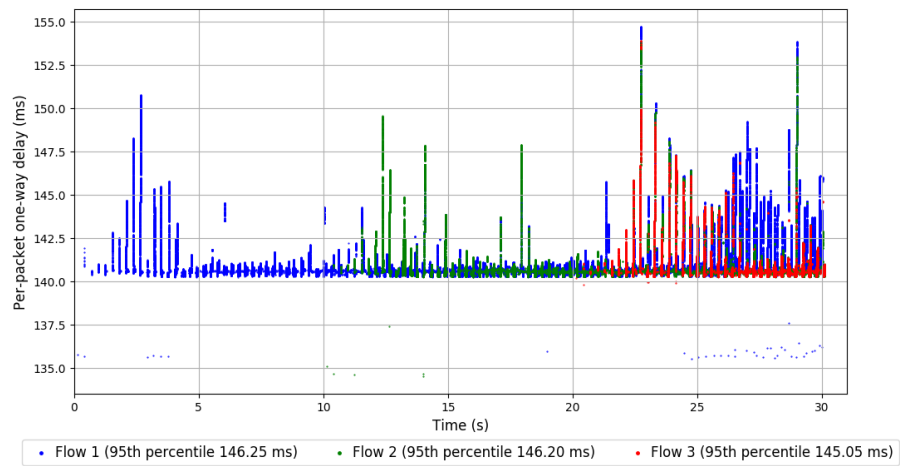
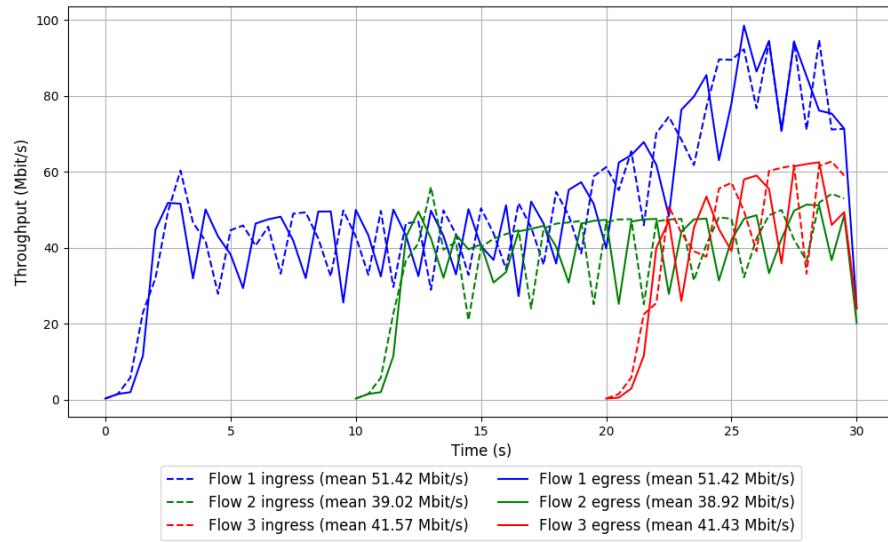
-- Flow 3:

Average throughput: 41.43 Mbit/s

95th percentile per-packet one-way delay: 145.052 ms

Loss rate: 0.37%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-21 20:05:00

End at: 2018-02-21 20:05:30

Below is generated by plot.py at 2018-02-21 23:34:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.32 Mbit/s

95th percentile per-packet one-way delay: 147.361 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 57.71 Mbit/s

95th percentile per-packet one-way delay: 146.864 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.94 Mbit/s

95th percentile per-packet one-way delay: 147.236 ms

Loss rate: 0.00%

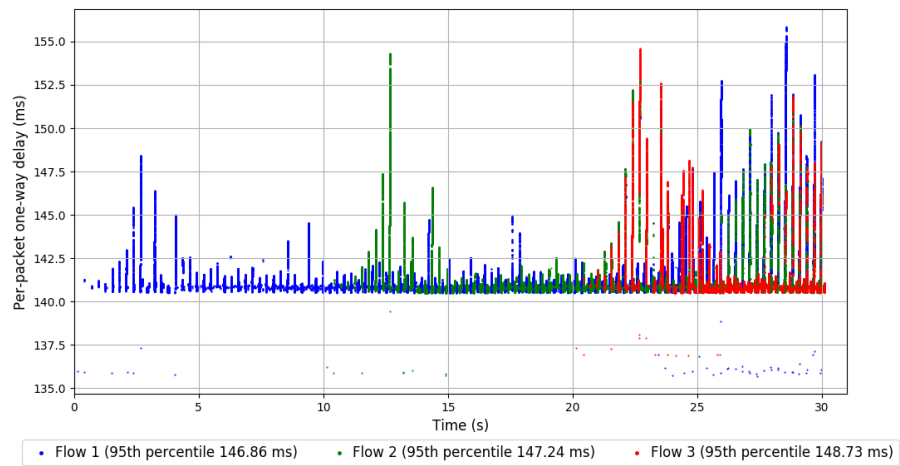
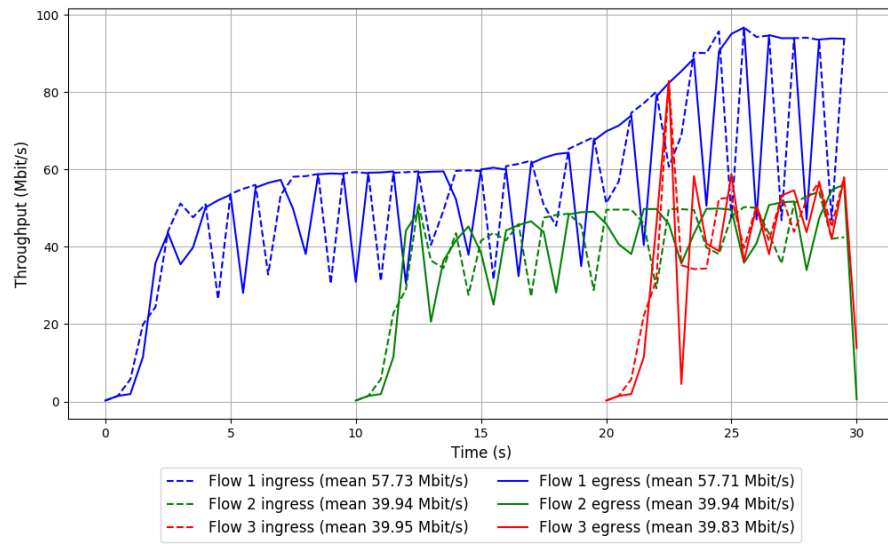
-- Flow 3:

Average throughput: 39.83 Mbit/s

95th percentile per-packet one-way delay: 148.731 ms

Loss rate: 0.29%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-21 20:25:30

End at: 2018-02-21 20:26:00

Below is generated by plot.py at 2018-02-21 23:34:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.13 Mbit/s

95th percentile per-packet one-way delay: 146.331 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 54.53 Mbit/s

95th percentile per-packet one-way delay: 146.466 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 36.63 Mbit/s

95th percentile per-packet one-way delay: 146.445 ms

Loss rate: 0.00%

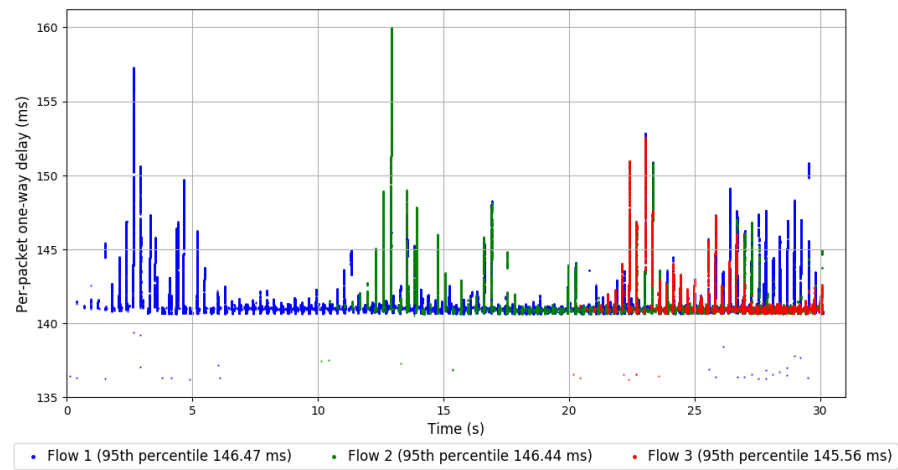
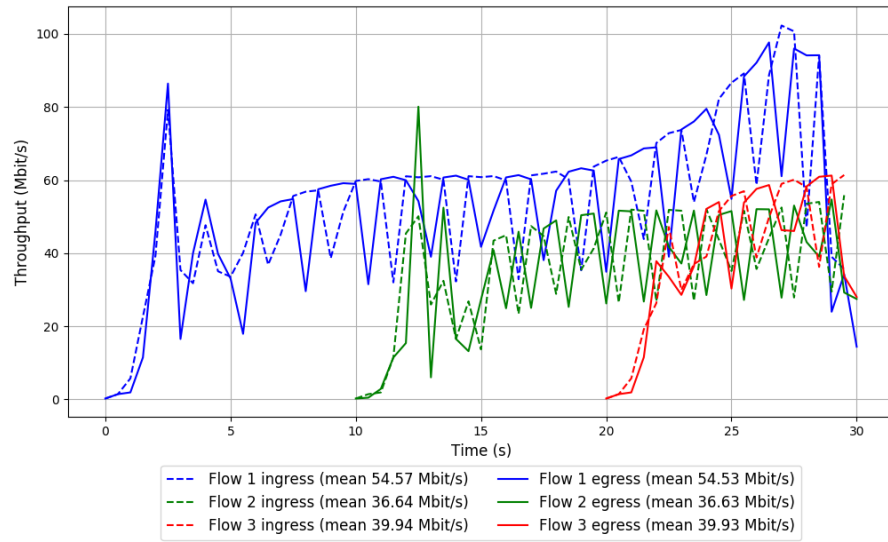
-- Flow 3:

Average throughput: 39.93 Mbit/s

95th percentile per-packet one-way delay: 145.564 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-21 20:45:25

End at: 2018-02-21 20:45:55

Below is generated by plot.py at 2018-02-21 23:34:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.81 Mbit/s

95th percentile per-packet one-way delay: 147.627 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.03 Mbit/s

95th percentile per-packet one-way delay: 147.607 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.71 Mbit/s

95th percentile per-packet one-way delay: 147.860 ms

Loss rate: 0.00%

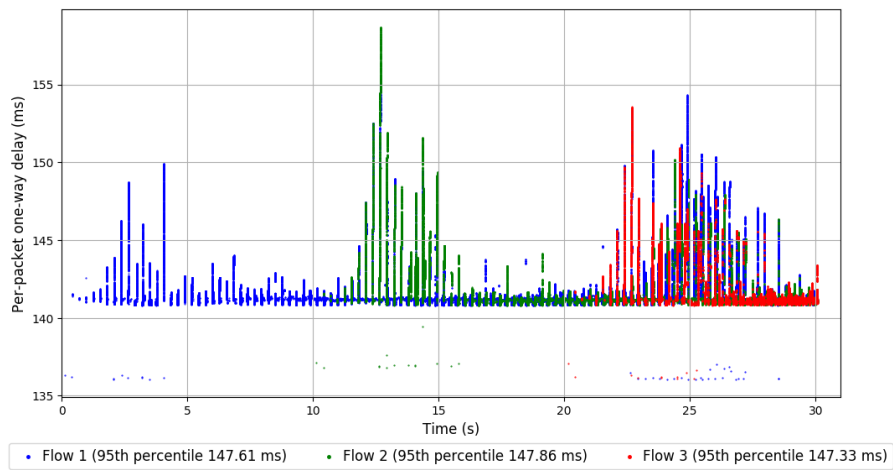
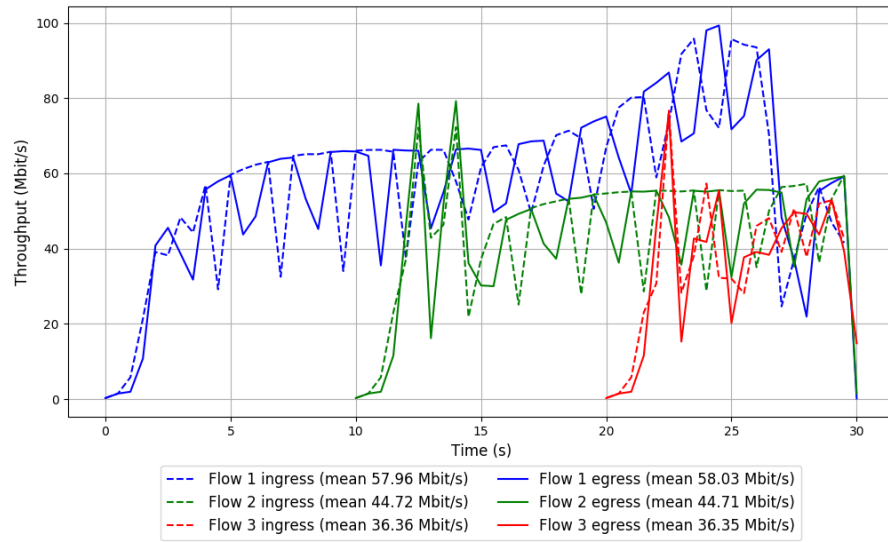
-- Flow 3:

Average throughput: 36.35 Mbit/s

95th percentile per-packet one-way delay: 147.333 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-21 21:05:27

End at: 2018-02-21 21:05:57

Below is generated by plot.py at 2018-02-21 23:34:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.64 Mbit/s

95th percentile per-packet one-way delay: 145.580 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.60 Mbit/s

95th percentile per-packet one-way delay: 146.172 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 38.72 Mbit/s

95th percentile per-packet one-way delay: 144.587 ms

Loss rate: 0.00%

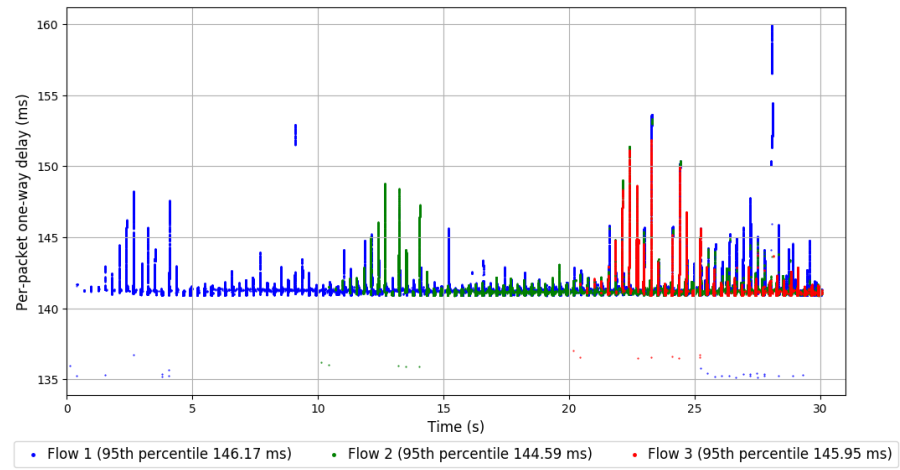
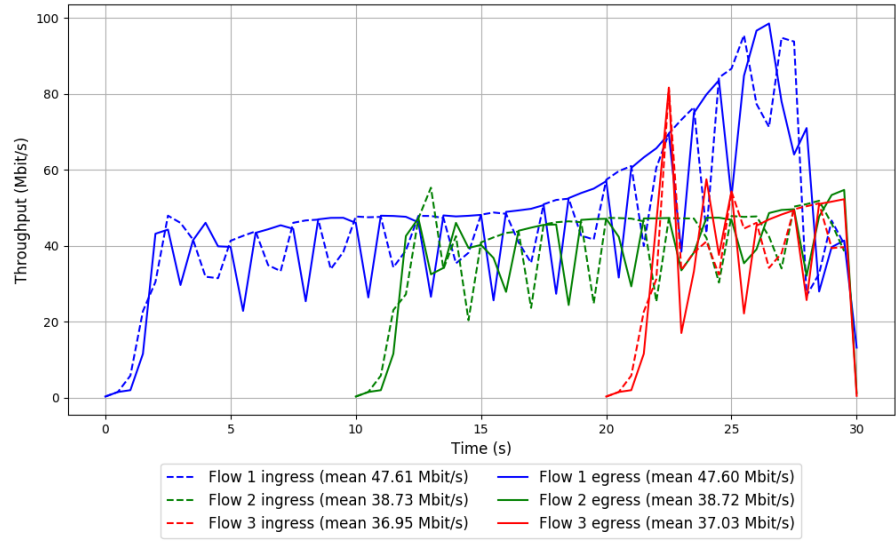
-- Flow 3:

Average throughput: 37.03 Mbit/s

95th percentile per-packet one-way delay: 145.950 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

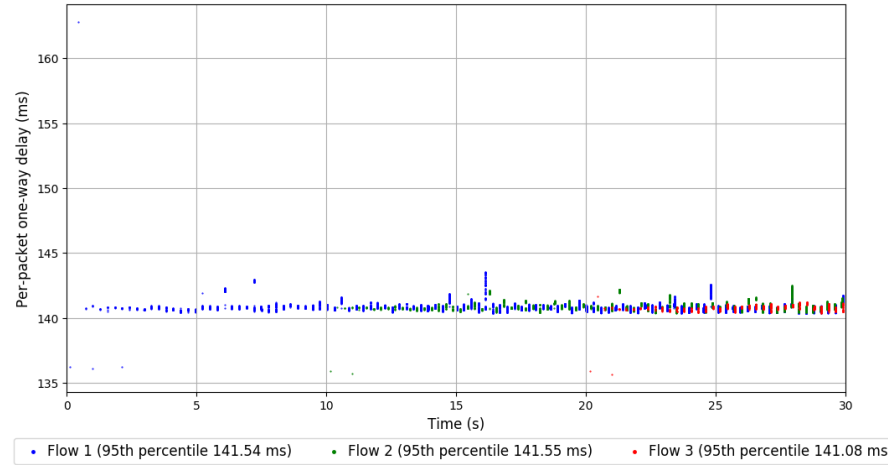
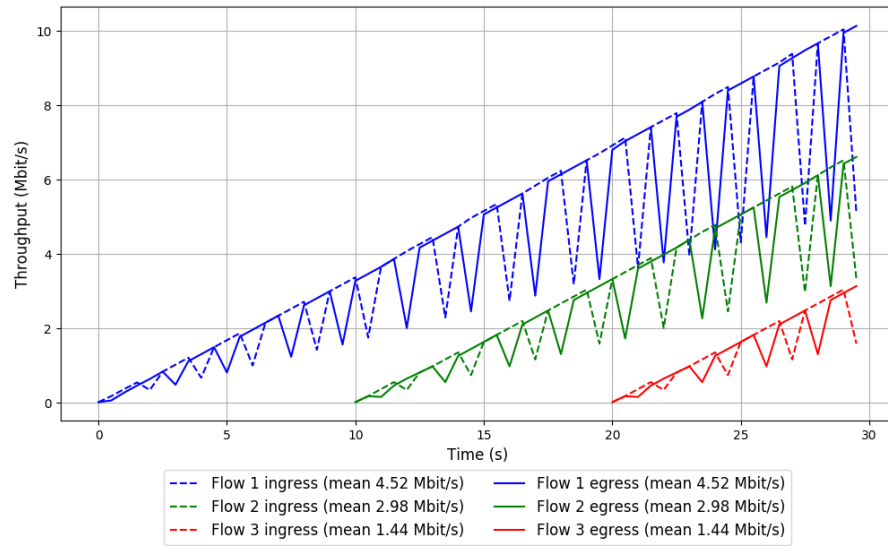


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-21 18:04:46
End at: 2018-02-21 18:05:16

# Below is generated by plot.py at 2018-02-21 23:34:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 141.488 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 141.539 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 141.551 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 141.078 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

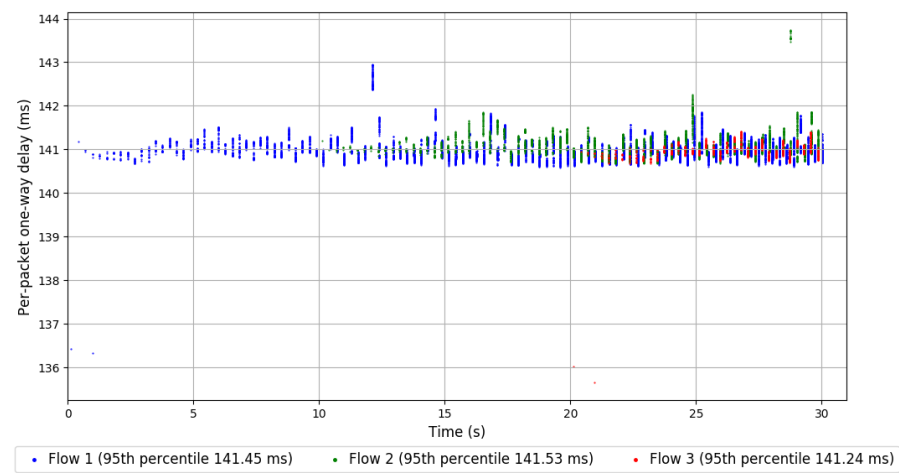
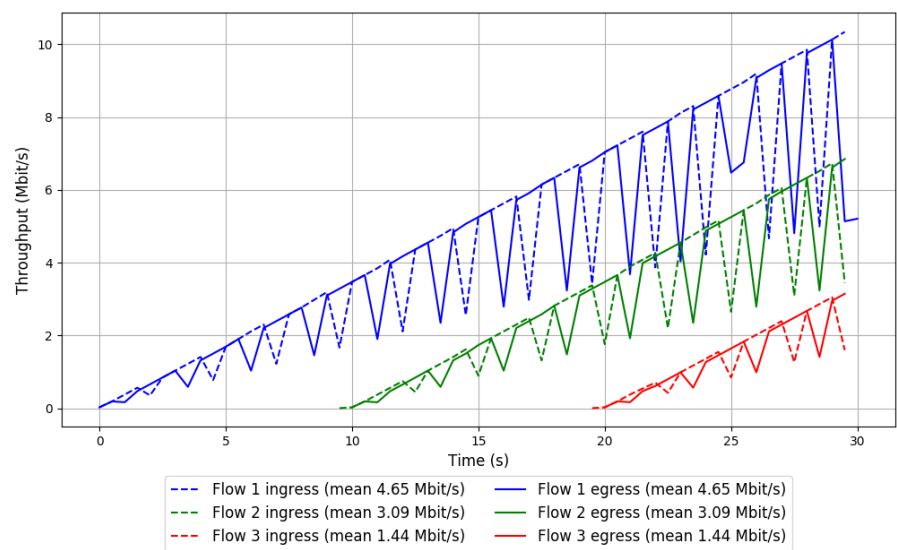


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-21 18:24:59
End at: 2018-02-21 18:25:29

# Below is generated by plot.py at 2018-02-21 23:34:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.17 Mbit/s
95th percentile per-packet one-way delay: 141.453 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.65 Mbit/s
95th percentile per-packet one-way delay: 141.453 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 141.530 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 141.235 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-21 18:44:55

End at: 2018-02-21 18:45:25

Below is generated by plot.py at 2018-02-21 23:34:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.87 Mbit/s

95th percentile per-packet one-way delay: 141.564 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 141.551 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.93 Mbit/s

95th percentile per-packet one-way delay: 141.569 ms

Loss rate: 0.00%

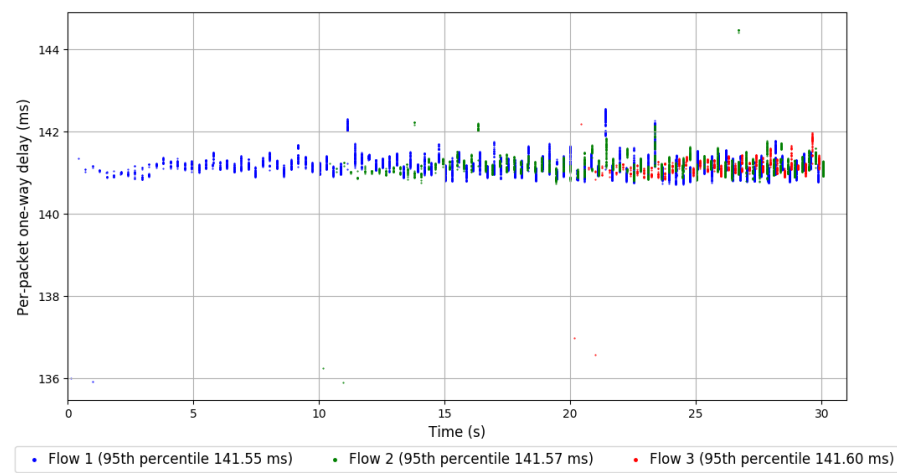
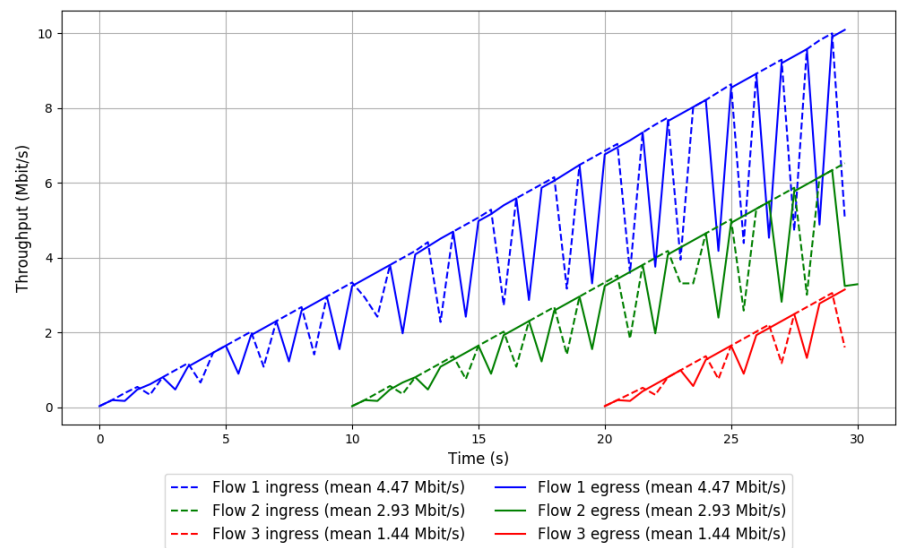
-- Flow 3:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 141.596 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-21 19:05:45

End at: 2018-02-21 19:06:15

Below is generated by plot.py at 2018-02-21 23:34:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.02 Mbit/s

95th percentile per-packet one-way delay: 137.391 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.41 Mbit/s

95th percentile per-packet one-way delay: 137.371 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.17 Mbit/s

95th percentile per-packet one-way delay: 137.396 ms

Loss rate: 0.00%

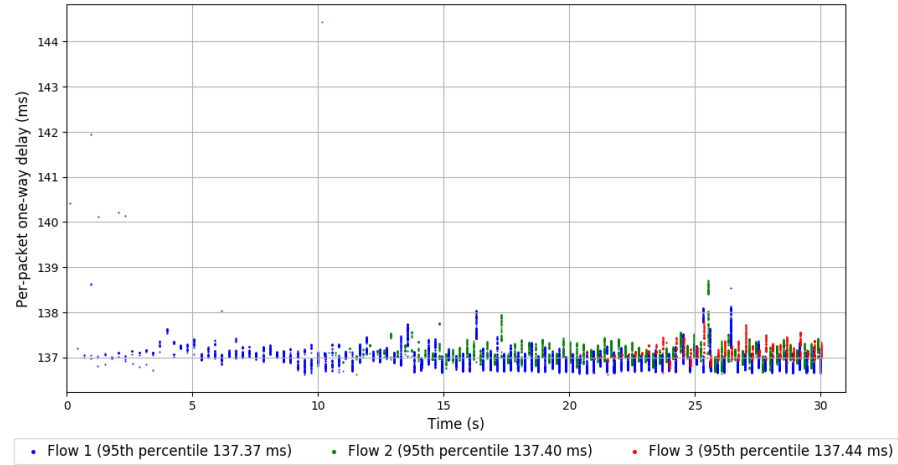
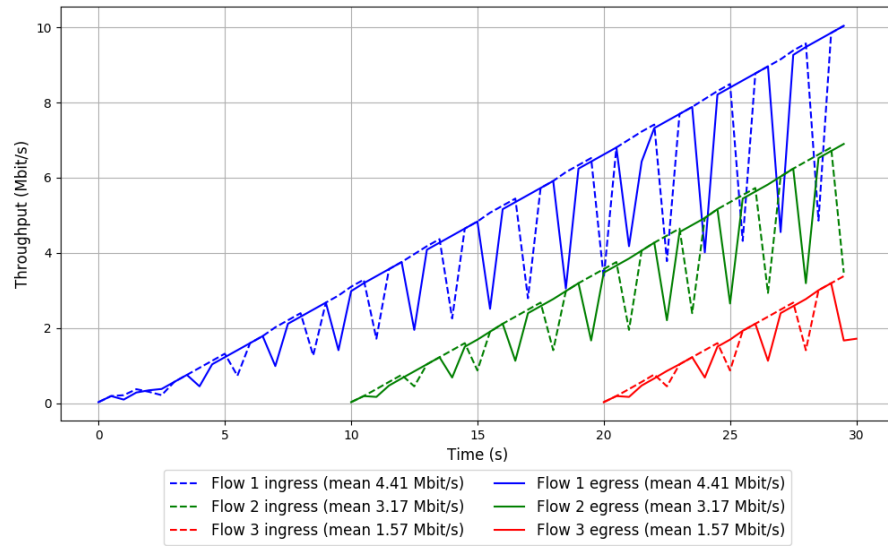
-- Flow 3:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 137.439 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-21 19:26:28

End at: 2018-02-21 19:26:58

Below is generated by plot.py at 2018-02-21 23:34:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.01 Mbit/s

95th percentile per-packet one-way delay: 140.766 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.41 Mbit/s

95th percentile per-packet one-way delay: 140.757 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 140.788 ms

Loss rate: 0.00%

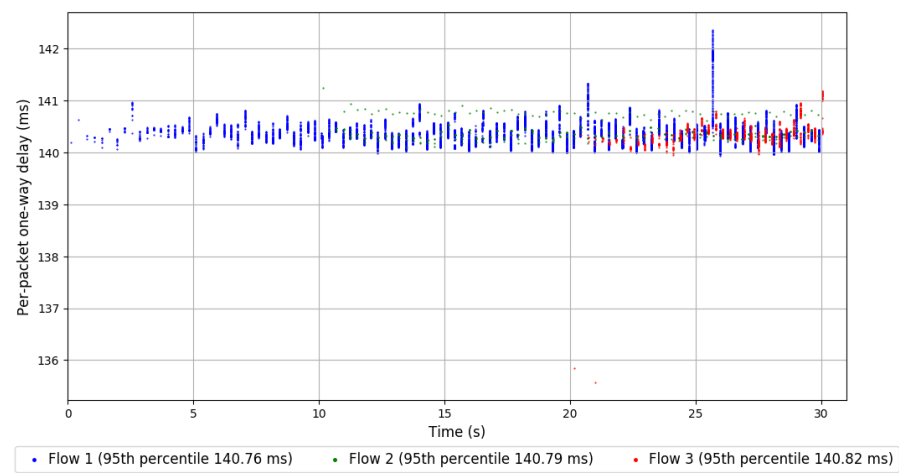
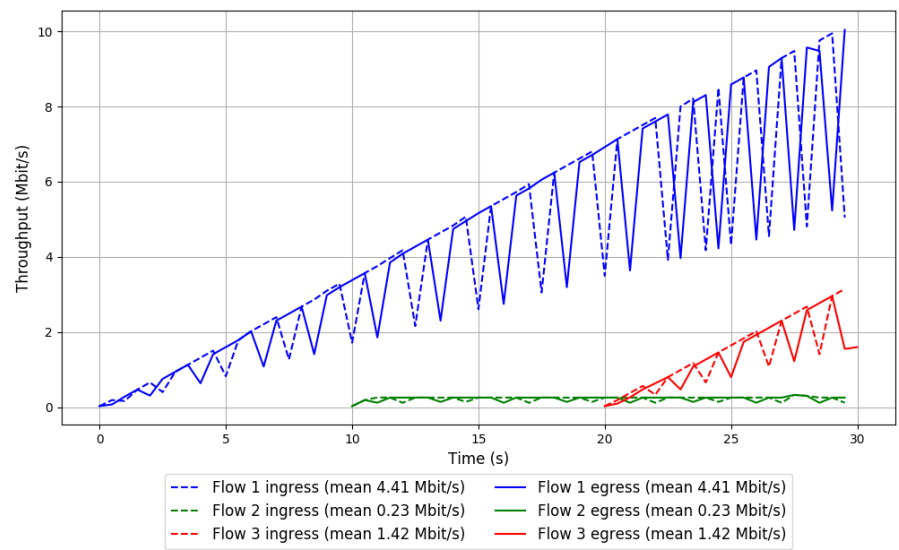
-- Flow 3:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 140.824 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-21 19:46:44

End at: 2018-02-21 19:47:14

Below is generated by plot.py at 2018-02-21 23:34:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 141.332 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 141.389 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 141.101 ms

Loss rate: 0.00%

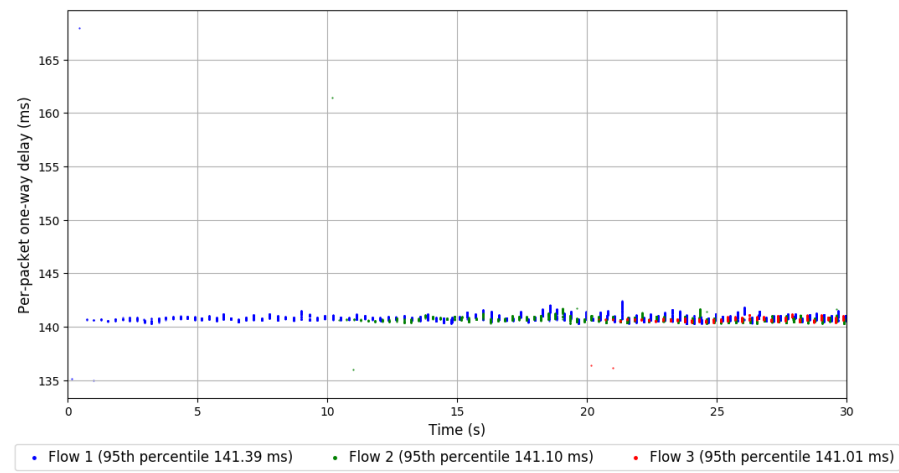
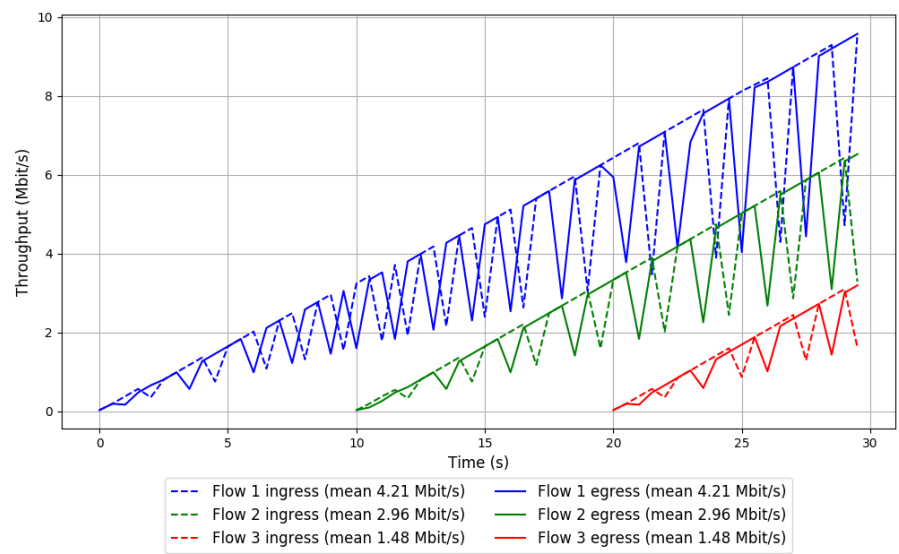
-- Flow 3:

Average throughput: 1.48 Mbit/s

95th percentile per-packet one-way delay: 141.013 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-21 20:07:24

End at: 2018-02-21 20:07:54

Below is generated by plot.py at 2018-02-21 23:34:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.91 Mbit/s

95th percentile per-packet one-way delay: 141.800 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 142.183 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.95 Mbit/s

95th percentile per-packet one-way delay: 141.507 ms

Loss rate: 0.00%

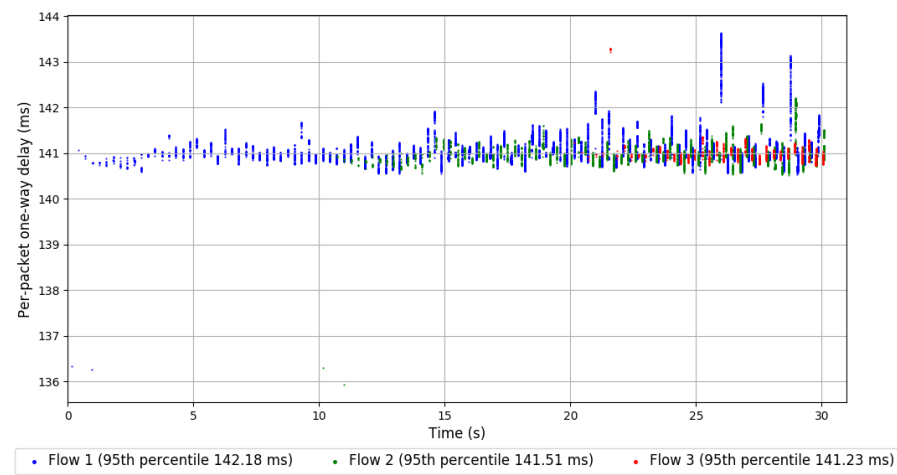
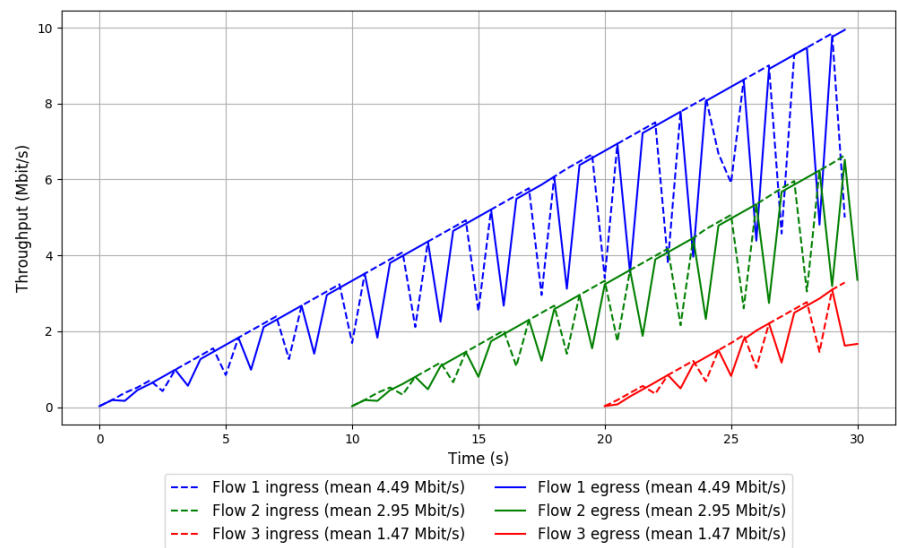
-- Flow 3:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 141.227 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-21 20:27:54

End at: 2018-02-21 20:28:24

Below is generated by plot.py at 2018-02-21 23:34:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.71 Mbit/s

95th percentile per-packet one-way delay: 141.647 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.46 Mbit/s

95th percentile per-packet one-way delay: 141.643 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.71 Mbit/s

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

Loss rate: 0.00%

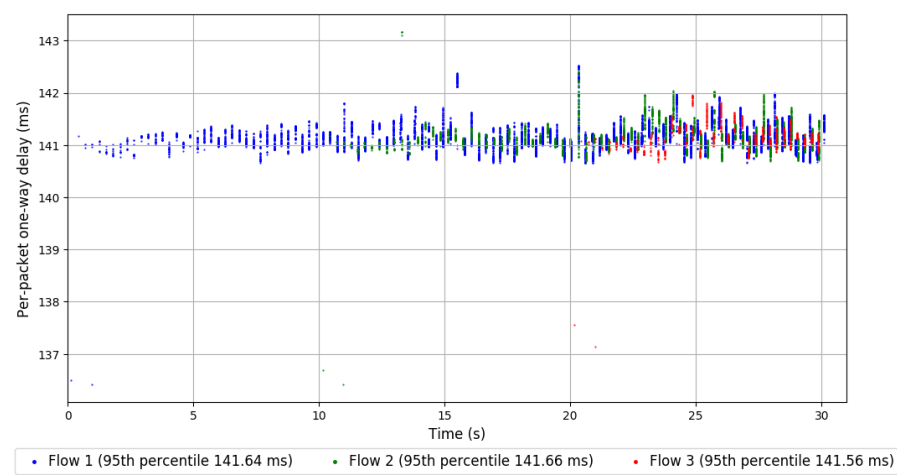
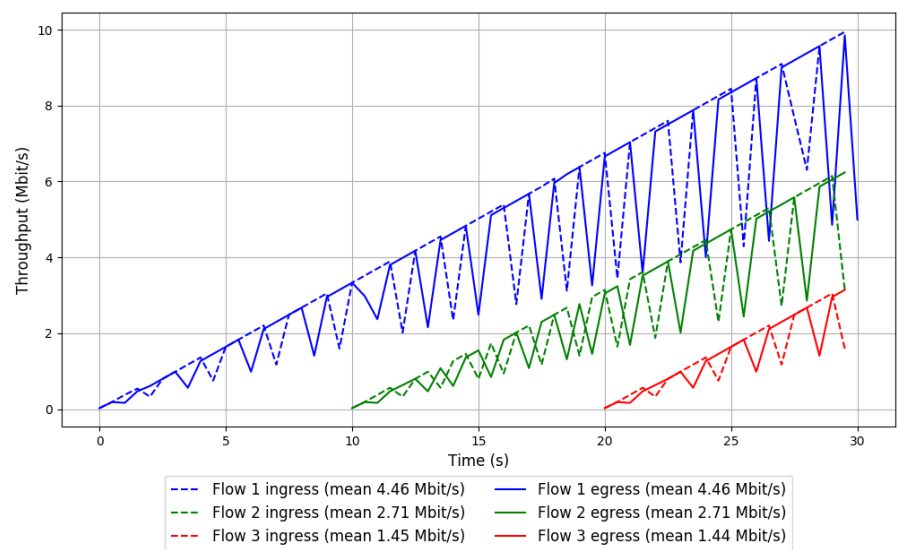
-- Flow 3:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 141.560 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-21 20:47:49

End at: 2018-02-21 20:48:19

Below is generated by plot.py at 2018-02-21 23:34:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.79 Mbit/s

95th percentile per-packet one-way delay: 141.674 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 141.774 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.90 Mbit/s

95th percentile per-packet one-way delay: 138.081 ms

Loss rate: 0.02%

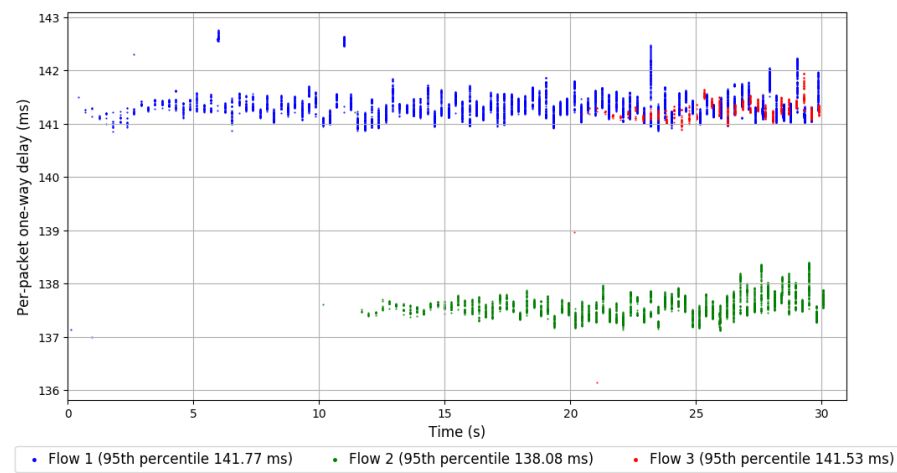
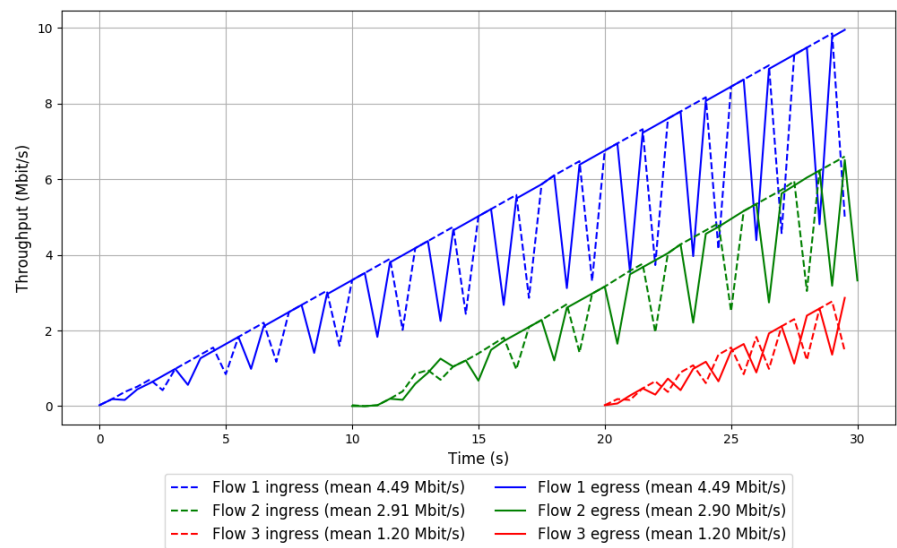
-- Flow 3:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 141.526 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-21 21:07:56

End at: 2018-02-21 21:08:26

Below is generated by plot.py at 2018-02-21 23:34:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.80 Mbit/s

95th percentile per-packet one-way delay: 141.712 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 141.738 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 141.670 ms

Loss rate: 0.00%

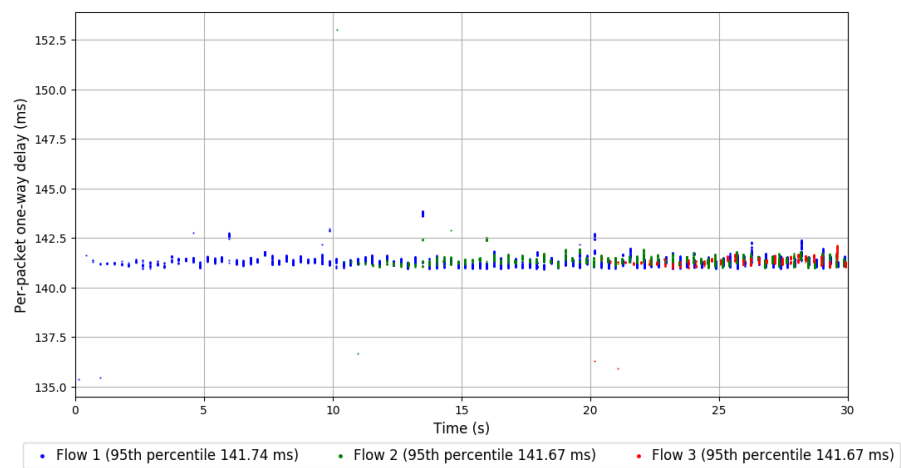
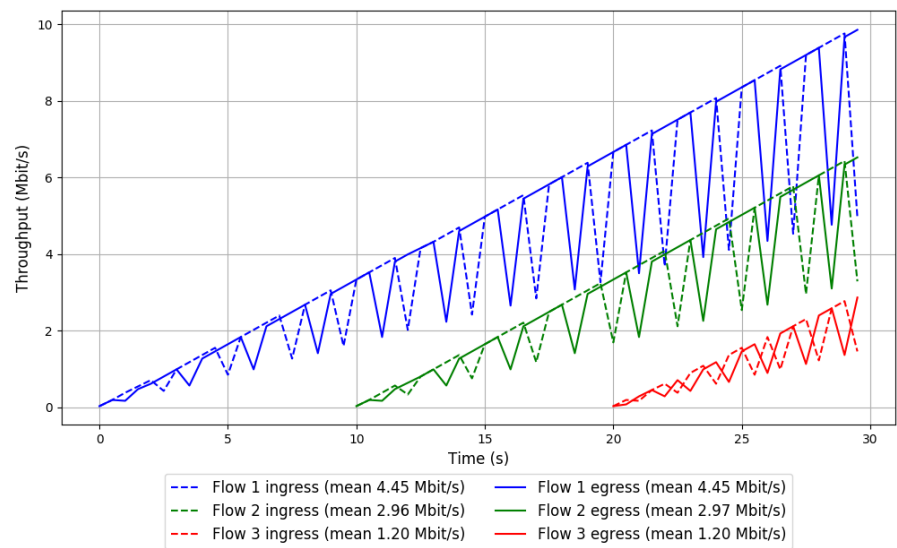
-- Flow 3:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 141.668 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

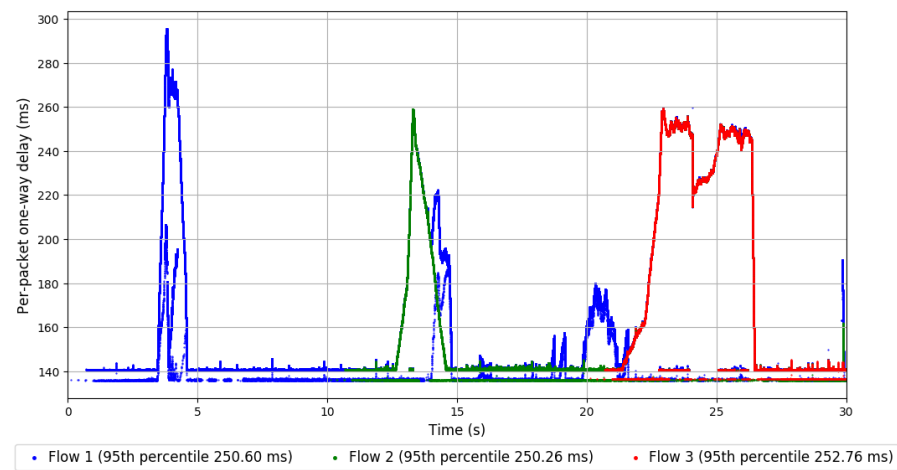
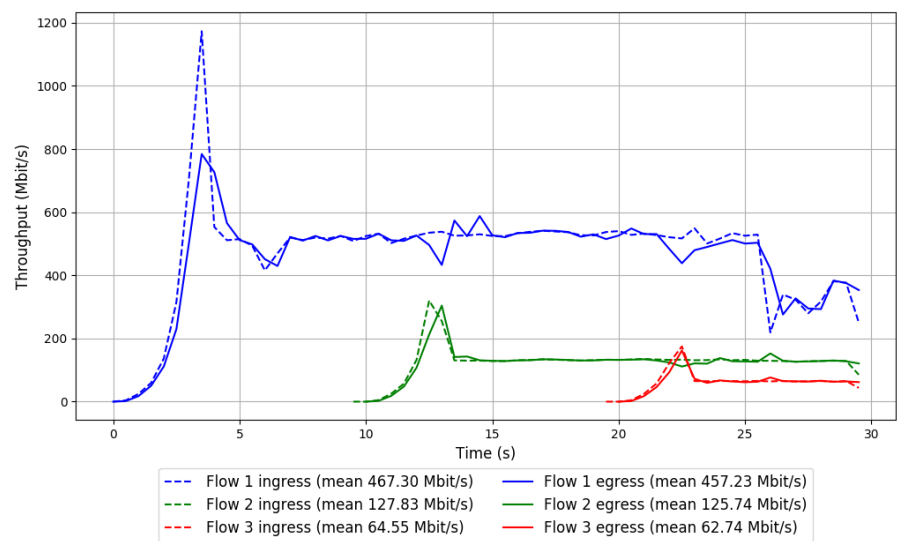


```
Run 1: Statistics of PCC

Start at: 2018-02-21 17:57:18
End at: 2018-02-21 17:57:48

# Below is generated by plot.py at 2018-02-21 23:43:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 561.60 Mbit/s
95th percentile per-packet one-way delay: 250.745 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 457.23 Mbit/s
95th percentile per-packet one-way delay: 250.601 ms
Loss rate: 2.16%
-- Flow 2:
Average throughput: 125.74 Mbit/s
95th percentile per-packet one-way delay: 250.264 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 62.74 Mbit/s
95th percentile per-packet one-way delay: 252.757 ms
Loss rate: 2.82%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-21 18:17:25

End at: 2018-02-21 18:17:55

Below is generated by plot.py at 2018-02-21 23:43:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 592.77 Mbit/s

95th percentile per-packet one-way delay: 233.840 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 548.32 Mbit/s

95th percentile per-packet one-way delay: 234.099 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 64.67 Mbit/s

95th percentile per-packet one-way delay: 233.614 ms

Loss rate: 0.78%

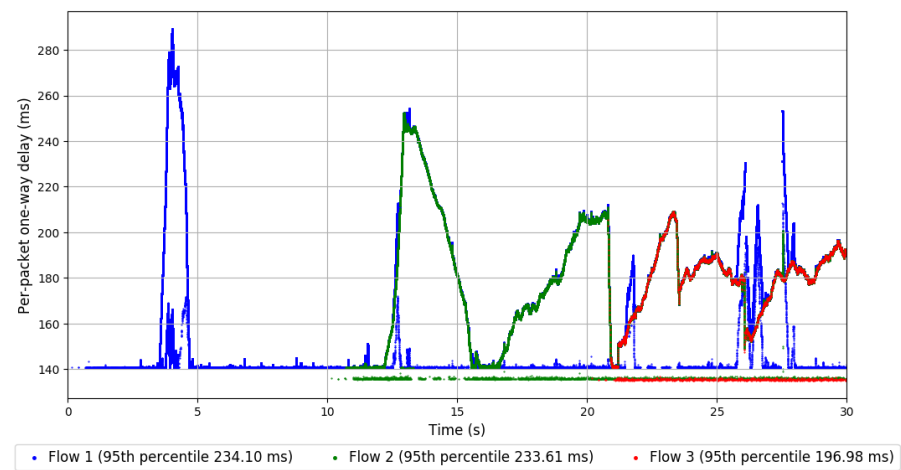
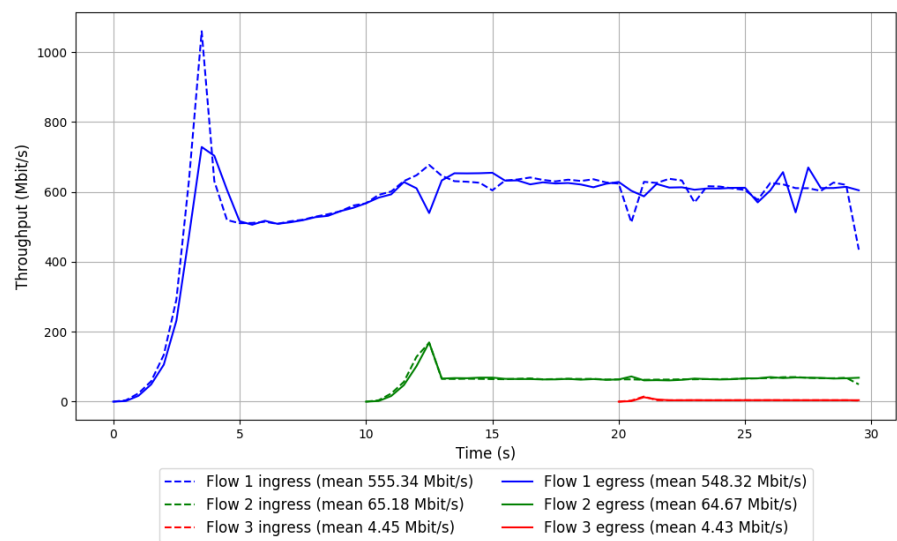
-- Flow 3:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 196.978 ms

Loss rate: 0.49%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-21 18:37:19

End at: 2018-02-21 18:37:49

Below is generated by plot.py at 2018-02-21 23:43:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 585.23 Mbit/s

95th percentile per-packet one-way delay: 221.696 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 491.34 Mbit/s

95th percentile per-packet one-way delay: 221.730 ms

Loss rate: 1.50%

-- Flow 2:

Average throughput: 125.04 Mbit/s

95th percentile per-packet one-way delay: 227.764 ms

Loss rate: 1.53%

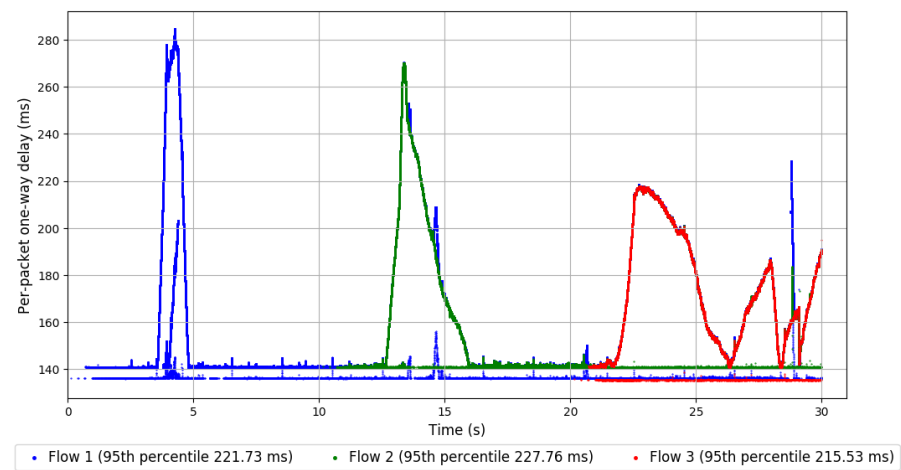
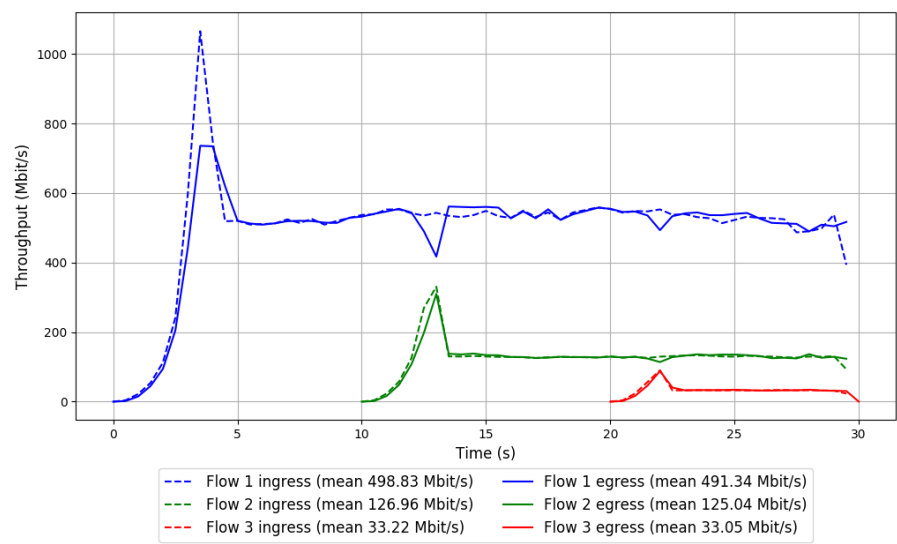
-- Flow 3:

Average throughput: 33.05 Mbit/s

95th percentile per-packet one-way delay: 215.534 ms

Loss rate: 0.52%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-21 18:58:08

End at: 2018-02-21 18:58:38

Below is generated by plot.py at 2018-02-21 23:43:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 576.74 Mbit/s

95th percentile per-packet one-way delay: 248.888 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 492.36 Mbit/s

95th percentile per-packet one-way delay: 248.888 ms

Loss rate: 1.67%

-- Flow 2:

Average throughput: 124.77 Mbit/s

95th percentile per-packet one-way delay: 248.883 ms

Loss rate: 1.57%

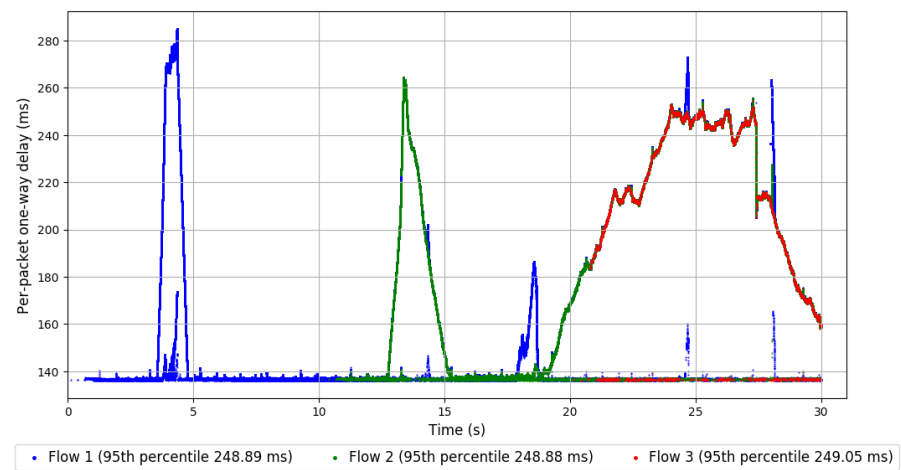
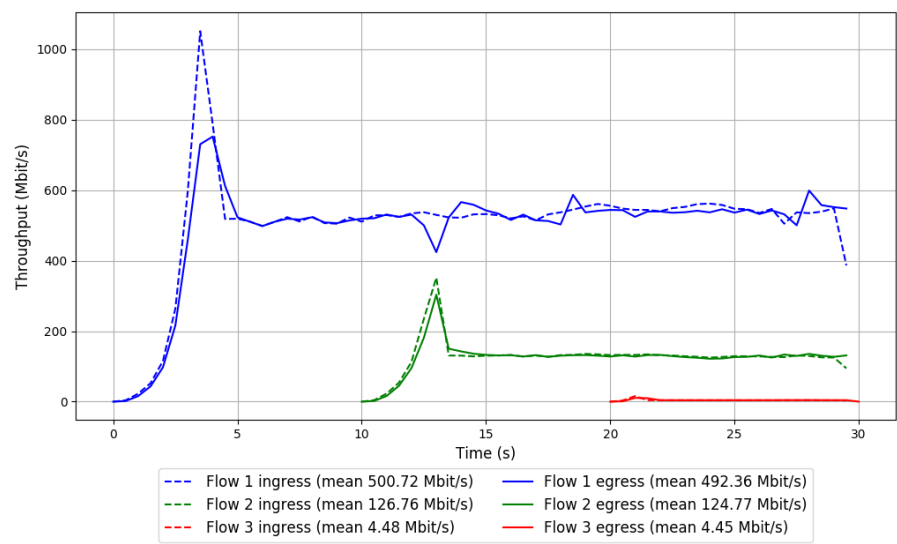
-- Flow 3:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 249.047 ms

Loss rate: 0.52%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-21 19:18:49

End at: 2018-02-21 19:19:19

Below is generated by plot.py at 2018-02-21 23:44:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 578.13 Mbit/s

95th percentile per-packet one-way delay: 245.122 ms

Loss rate: 1.92%

-- Flow 1:

Average throughput: 477.20 Mbit/s

95th percentile per-packet one-way delay: 245.168 ms

Loss rate: 1.83%

-- Flow 2:

Average throughput: 120.78 Mbit/s

95th percentile per-packet one-way delay: 244.658 ms

Loss rate: 2.16%

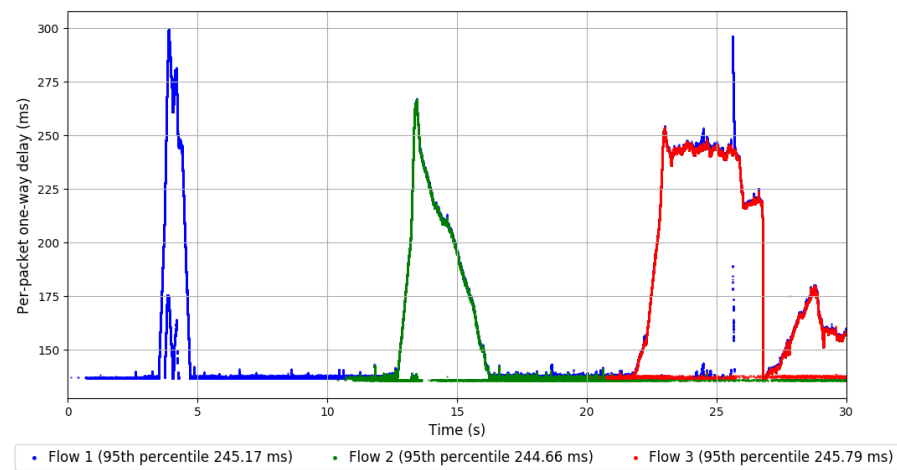
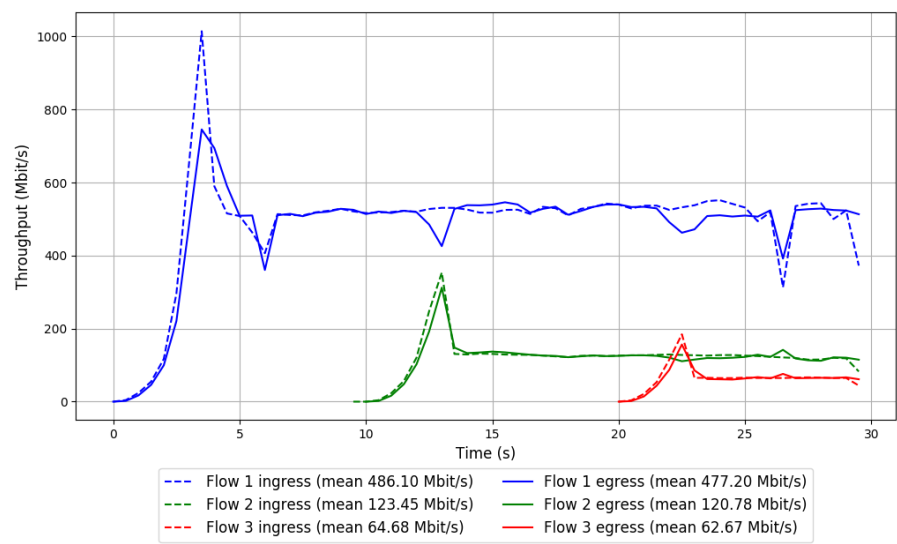
-- Flow 3:

Average throughput: 62.67 Mbit/s

95th percentile per-packet one-way delay: 245.792 ms

Loss rate: 3.12%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-21 19:39:12

End at: 2018-02-21 19:39:42

Below is generated by plot.py at 2018-02-21 23:44:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 592.09 Mbit/s

95th percentile per-packet one-way delay: 246.443 ms

Loss rate: 1.99%

-- Flow 1:

Average throughput: 485.27 Mbit/s

95th percentile per-packet one-way delay: 246.260 ms

Loss rate: 1.95%

-- Flow 2:

Average throughput: 129.96 Mbit/s

95th percentile per-packet one-way delay: 246.923 ms

Loss rate: 2.12%

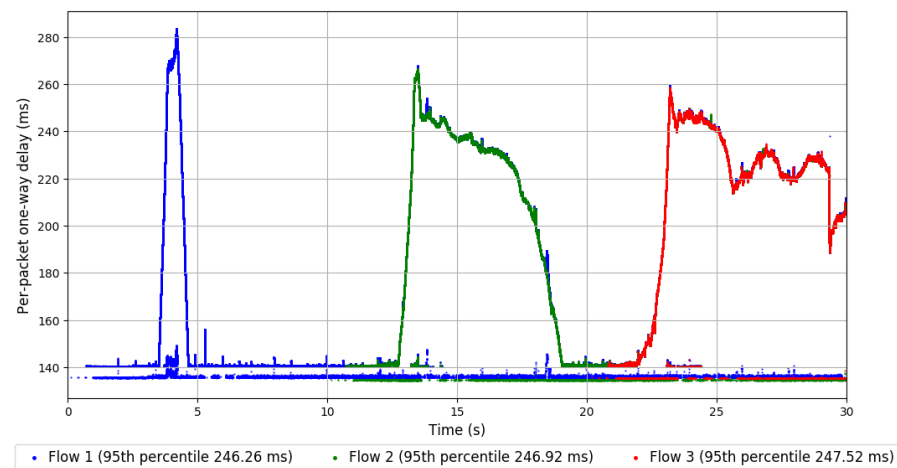
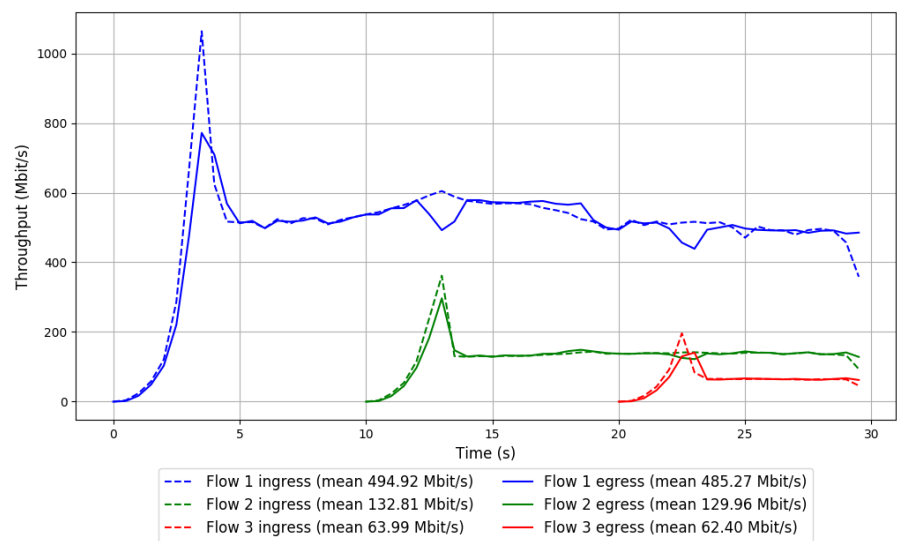
-- Flow 3:

Average throughput: 62.40 Mbit/s

95th percentile per-packet one-way delay: 247.522 ms

Loss rate: 2.43%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-21 19:59:41

End at: 2018-02-21 20:00:11

Below is generated by plot.py at 2018-02-21 23:44:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 580.94 Mbit/s

95th percentile per-packet one-way delay: 251.269 ms

Loss rate: 3.66%

-- Flow 1:

Average throughput: 461.63 Mbit/s

95th percentile per-packet one-way delay: 250.742 ms

Loss rate: 3.32%

-- Flow 2:

Average throughput: 123.54 Mbit/s

95th percentile per-packet one-way delay: 247.859 ms

Loss rate: 3.74%

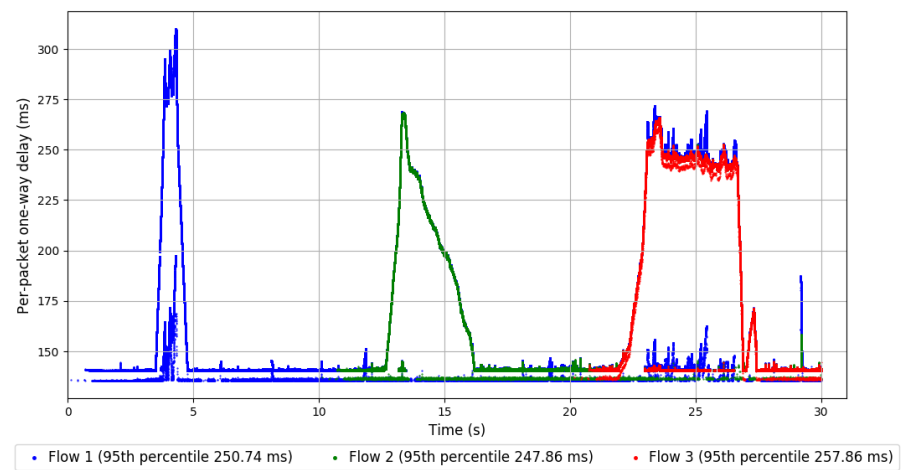
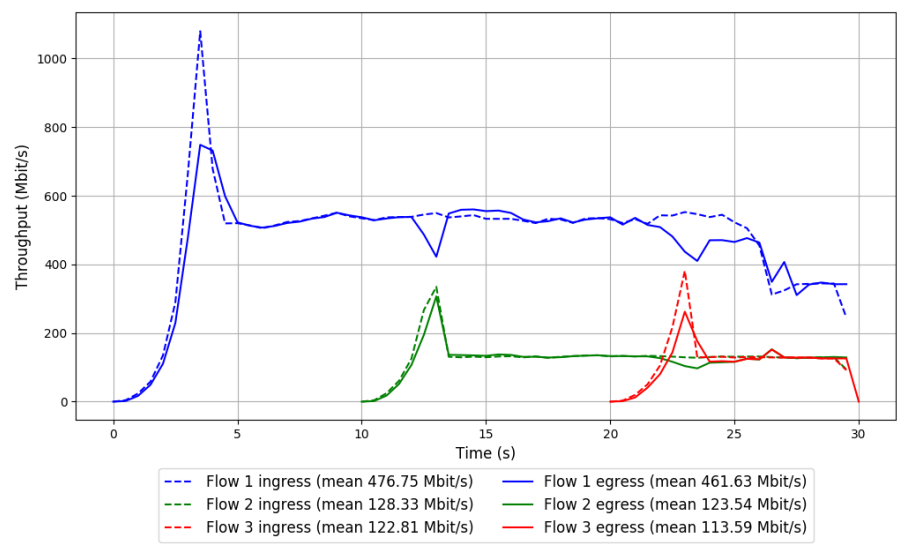
-- Flow 3:

Average throughput: 113.59 Mbit/s

95th percentile per-packet one-way delay: 257.858 ms

Loss rate: 7.49%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-21 20:20:20

End at: 2018-02-21 20:20:50

Below is generated by plot.py at 2018-02-21 23:44:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 576.79 Mbit/s

95th percentile per-packet one-way delay: 254.519 ms

Loss rate: 3.14%

-- Flow 1:

Average throughput: 475.53 Mbit/s

95th percentile per-packet one-way delay: 255.222 ms

Loss rate: 2.93%

-- Flow 2:

Average throughput: 122.37 Mbit/s

95th percentile per-packet one-way delay: 251.864 ms

Loss rate: 3.32%

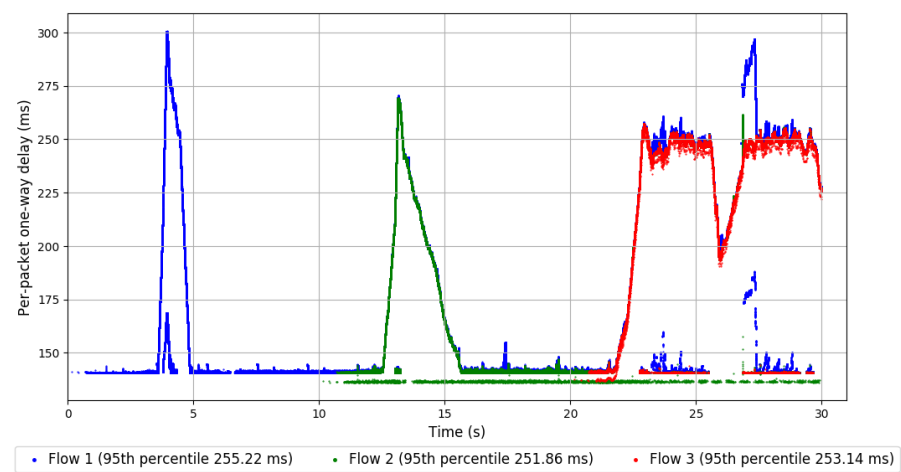
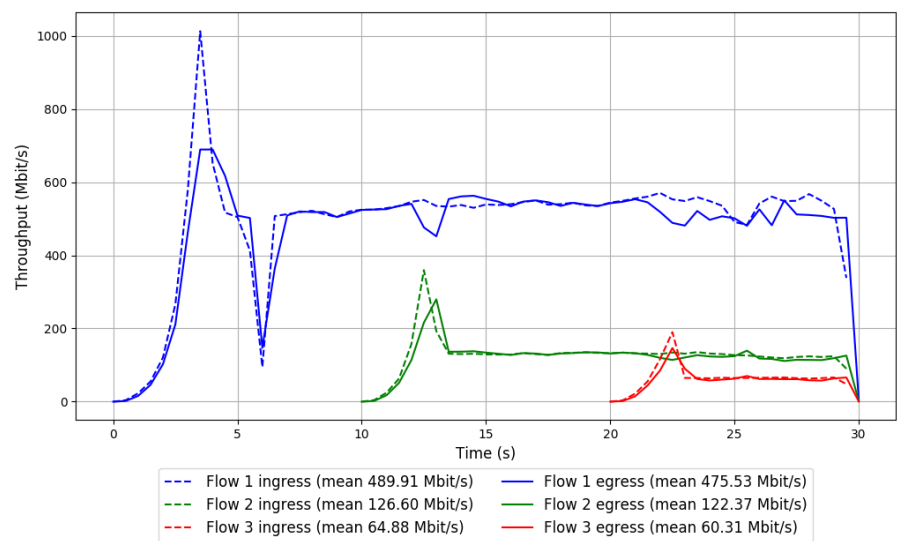
-- Flow 3:

Average throughput: 60.31 Mbit/s

95th percentile per-packet one-way delay: 253.139 ms

Loss rate: 7.01%

Run 8: Report of PCC — Data Link

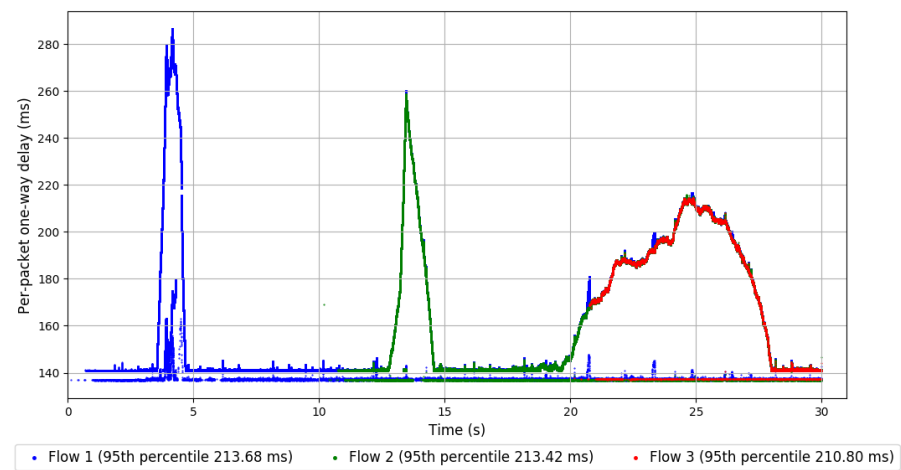
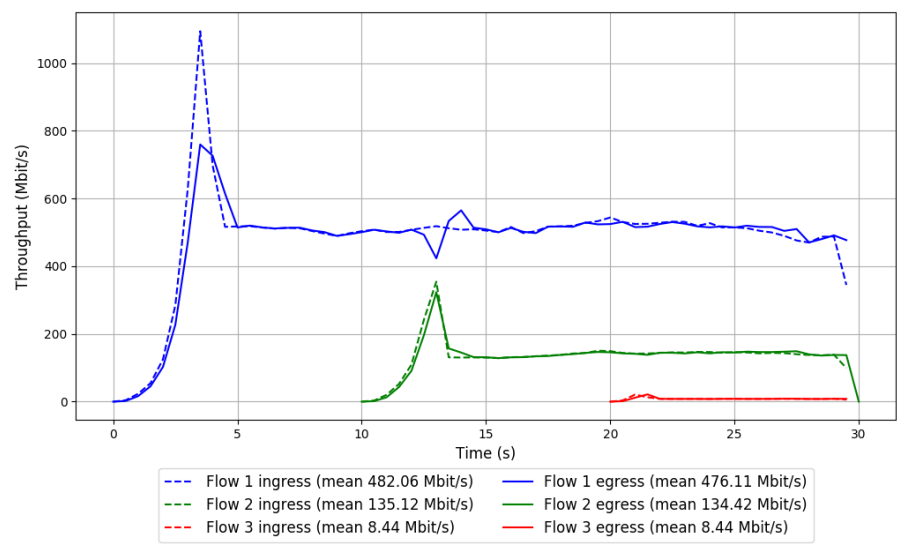


```
Run 9: Statistics of PCC

Start at: 2018-02-21 20:40:17
End at: 2018-02-21 20:40:47

# Below is generated by plot.py at 2018-02-21 23:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 568.05 Mbit/s
95th percentile per-packet one-way delay: 213.607 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 476.11 Mbit/s
95th percentile per-packet one-way delay: 213.676 ms
Loss rate: 1.23%
-- Flow 2:
Average throughput: 134.42 Mbit/s
95th percentile per-packet one-way delay: 213.420 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 8.44 Mbit/s
95th percentile per-packet one-way delay: 210.799 ms
Loss rate: 0.01%
```

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-21 21:00:24

End at: 2018-02-21 21:00:54

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 577.19 Mbit/s

95th percentile per-packet one-way delay: 248.495 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 470.09 Mbit/s

95th percentile per-packet one-way delay: 248.396 ms

Loss rate: 1.75%

-- Flow 2:

Average throughput: 130.37 Mbit/s

95th percentile per-packet one-way delay: 248.568 ms

Loss rate: 2.01%

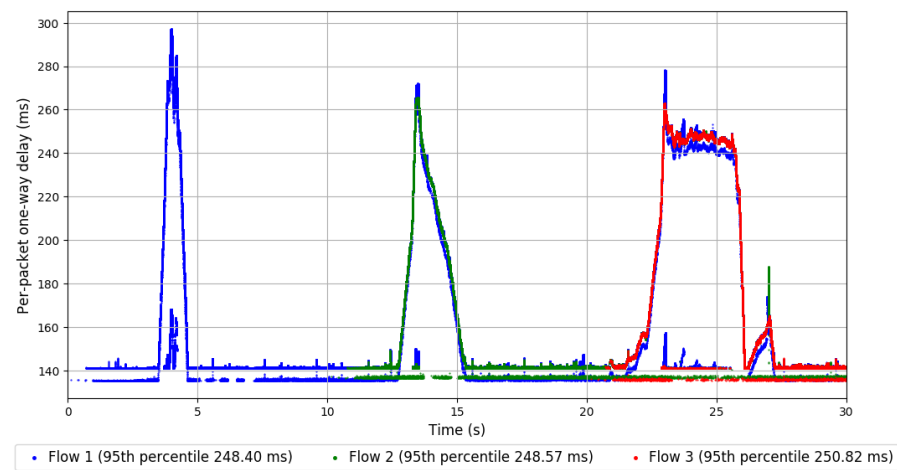
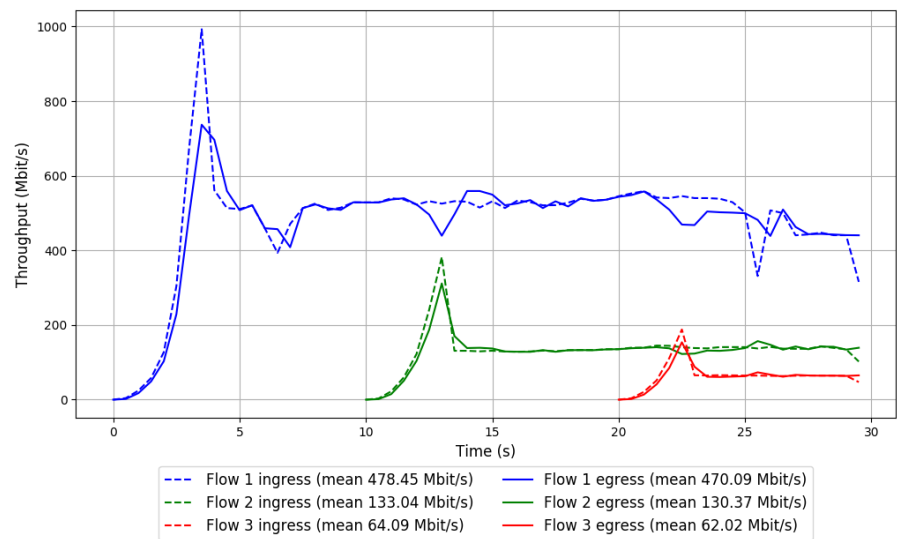
-- Flow 3:

Average throughput: 62.02 Mbit/s

95th percentile per-packet one-way delay: 250.823 ms

Loss rate: 3.20%

Run 10: Report of PCC — Data Link

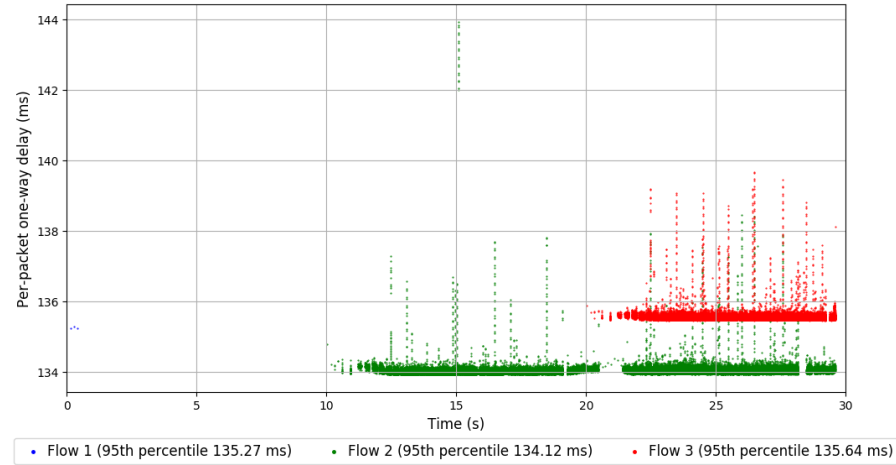
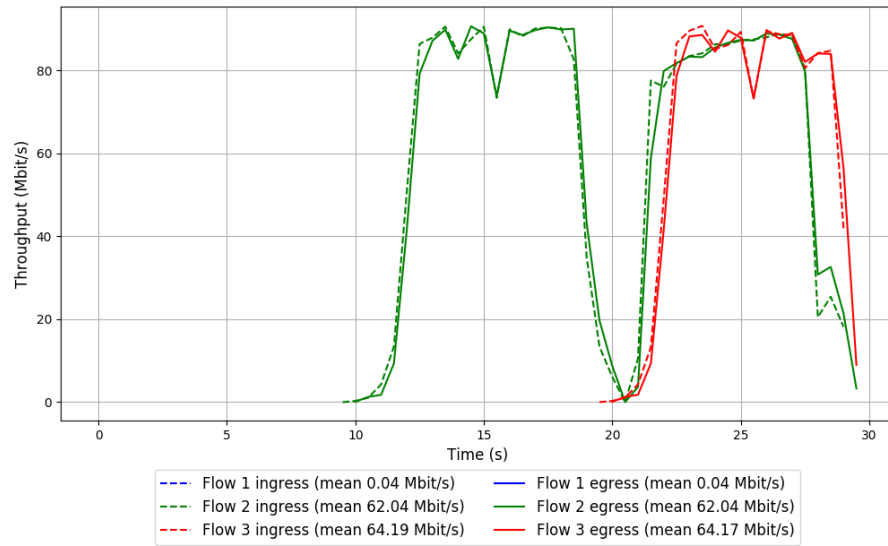


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-21 18:00:31
End at: 2018-02-21 18:01:01

# Below is generated by plot.py at 2018-02-21 23:53:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.03 Mbit/s
95th percentile per-packet one-way delay: 135.585 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 135.273 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.04 Mbit/s
95th percentile per-packet one-way delay: 134.117 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 64.17 Mbit/s
95th percentile per-packet one-way delay: 135.636 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-21 18:20:36

End at: 2018-02-21 18:21:06

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.41 Mbit/s

95th percentile per-packet one-way delay: 136.092 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.19 Mbit/s

95th percentile per-packet one-way delay: 135.521 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.33 Mbit/s

95th percentile per-packet one-way delay: 135.880 ms

Loss rate: 0.00%

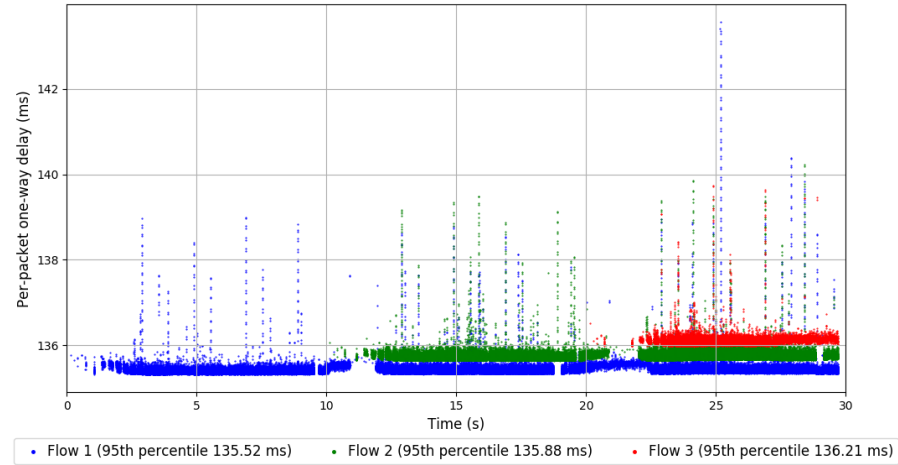
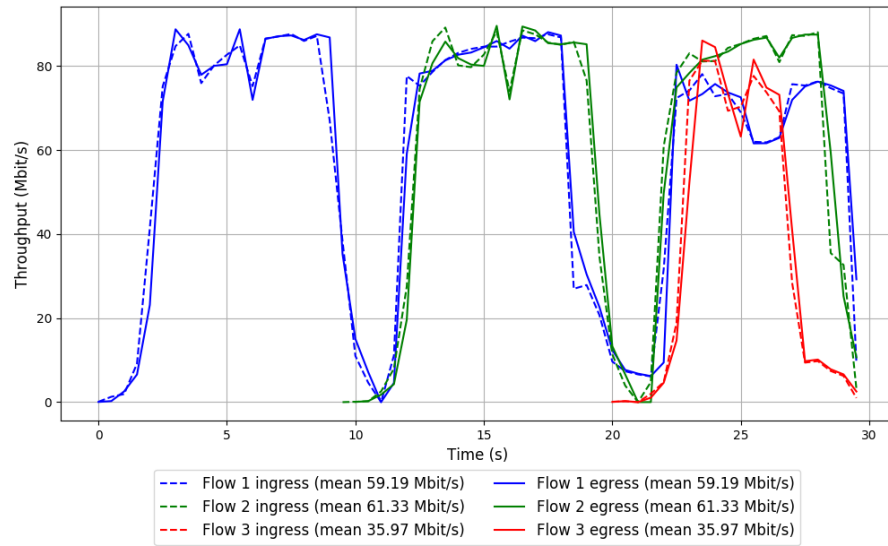
-- Flow 3:

Average throughput: 35.97 Mbit/s

95th percentile per-packet one-way delay: 136.207 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-21 18:40:34

End at: 2018-02-21 18:41:04

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.15 Mbit/s

95th percentile per-packet one-way delay: 136.504 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 60.88 Mbit/s

95th percentile per-packet one-way delay: 135.495 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.97 Mbit/s

95th percentile per-packet one-way delay: 135.691 ms

Loss rate: 0.00%

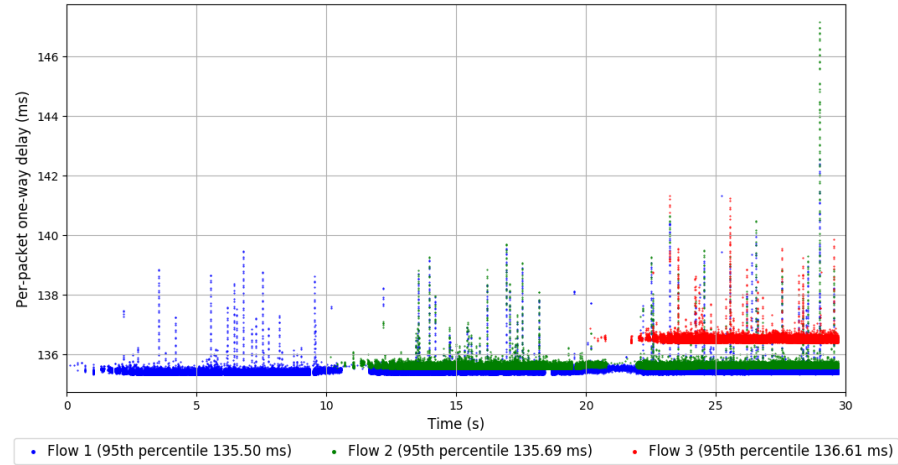
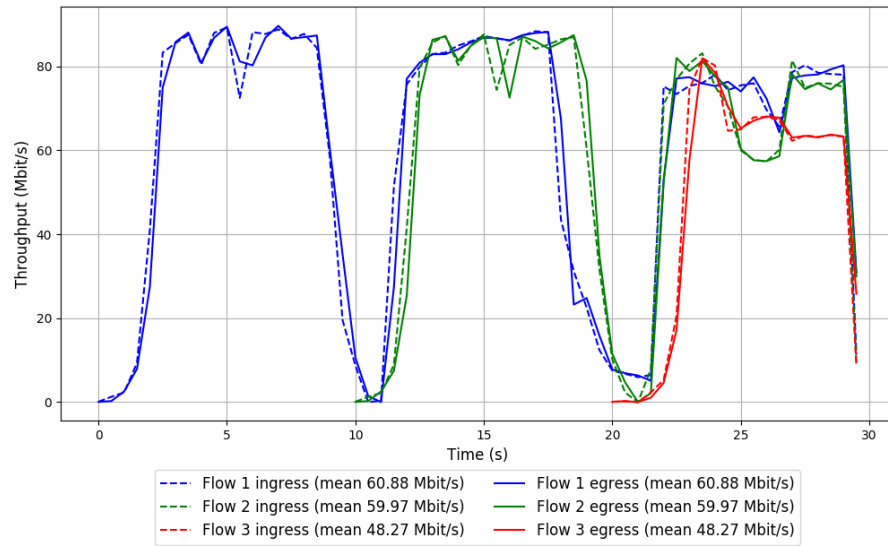
-- Flow 3:

Average throughput: 48.27 Mbit/s

95th percentile per-packet one-way delay: 136.610 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-21 19:01:21

End at: 2018-02-21 19:01:51

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.57 Mbit/s

95th percentile per-packet one-way delay: 136.521 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.53 Mbit/s

95th percentile per-packet one-way delay: 135.607 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.36 Mbit/s

95th percentile per-packet one-way delay: 136.635 ms

Loss rate: 0.00%

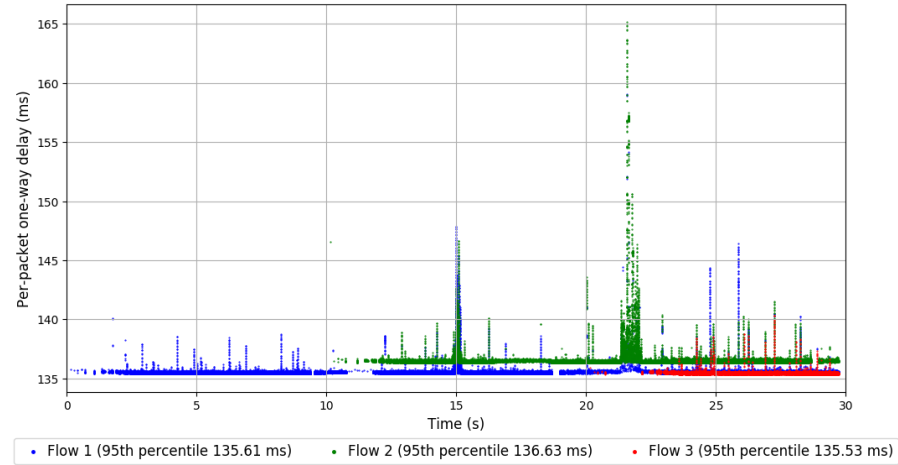
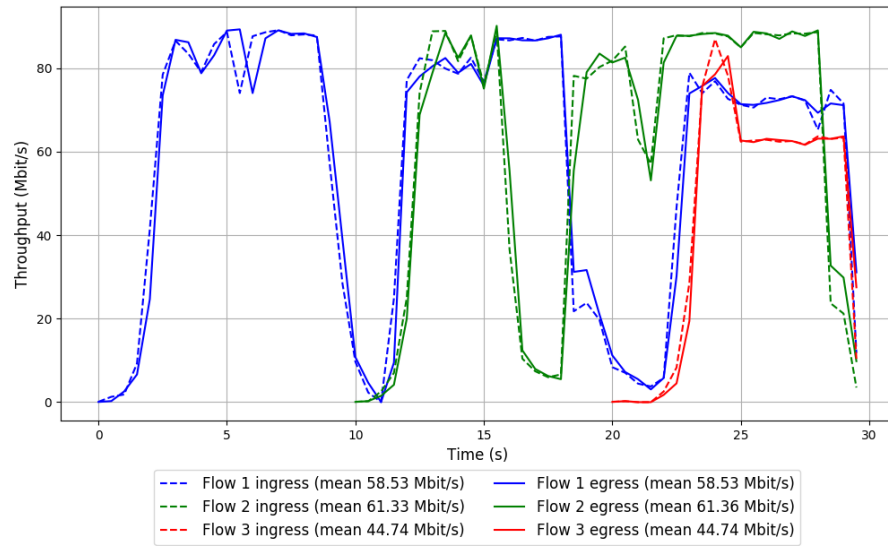
-- Flow 3:

Average throughput: 44.74 Mbit/s

95th percentile per-packet one-way delay: 135.529 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-21 19:22:02

End at: 2018-02-21 19:22:32

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.59 Mbit/s

95th percentile per-packet one-way delay: 136.716 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 60.73 Mbit/s

95th percentile per-packet one-way delay: 135.837 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.12 Mbit/s

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

Loss rate: 0.00%

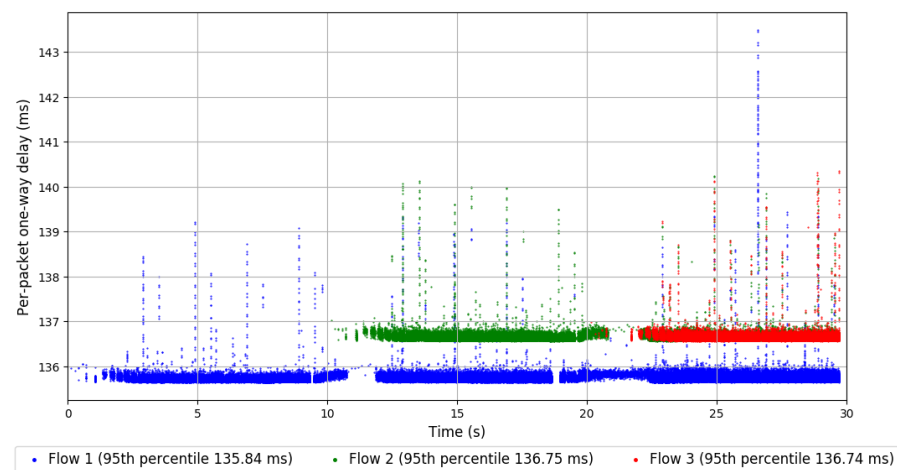
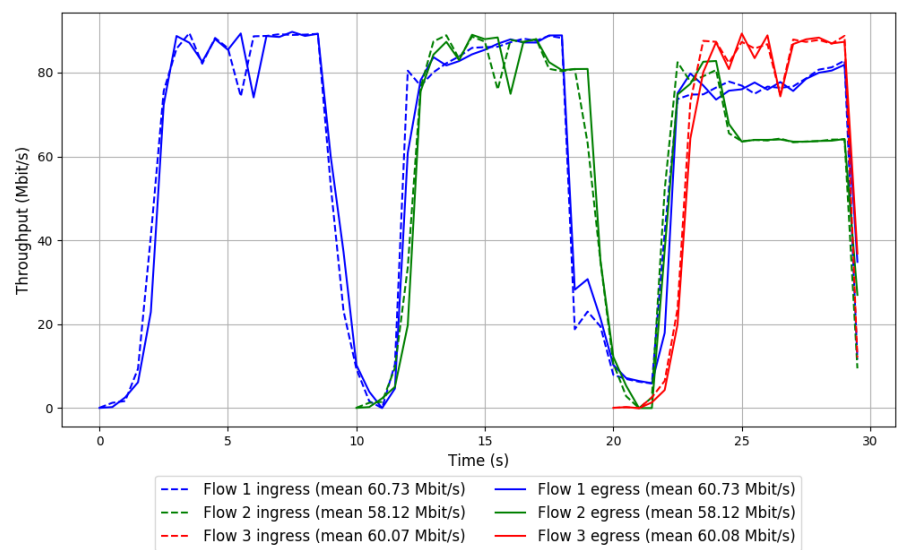
-- Flow 3:

Average throughput: 60.08 Mbit/s

95th percentile per-packet one-way delay: 136.735 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-21 19:42:19

End at: 2018-02-21 19:42:49

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.47 Mbit/s

95th percentile per-packet one-way delay: 135.828 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.79 Mbit/s

95th percentile per-packet one-way delay: 134.550 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.48 Mbit/s

95th percentile per-packet one-way delay: 135.847 ms

Loss rate: 0.00%

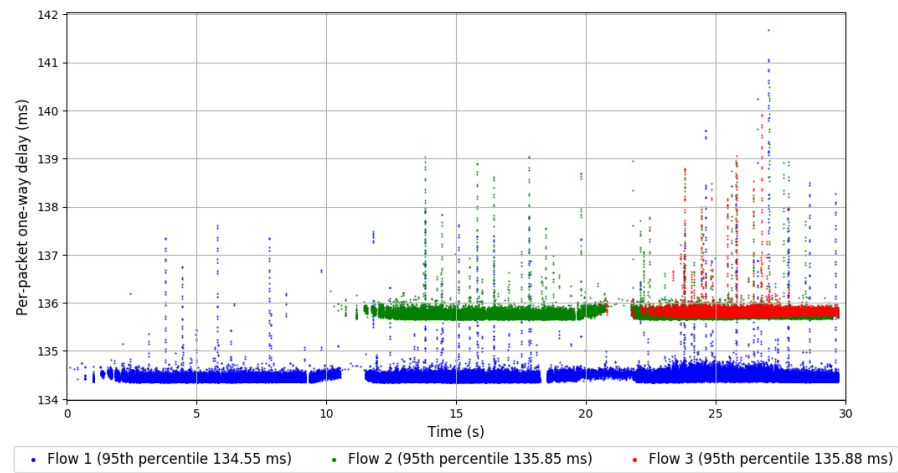
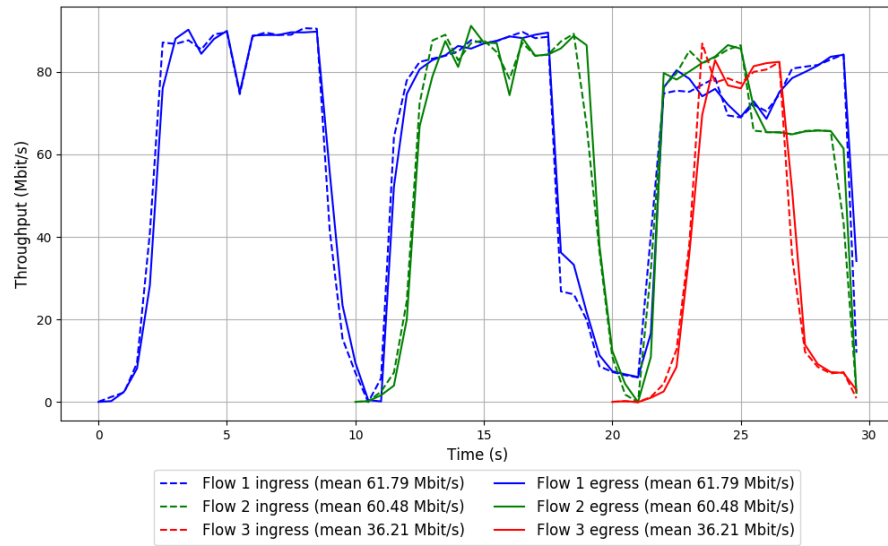
-- Flow 3:

Average throughput: 36.21 Mbit/s

95th percentile per-packet one-way delay: 135.882 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-21 20:02:49

End at: 2018-02-21 20:03:19

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.75 Mbit/s

95th percentile per-packet one-way delay: 136.156 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 60.54 Mbit/s

95th percentile per-packet one-way delay: 136.190 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.09 Mbit/s

95th percentile per-packet one-way delay: 135.688 ms

Loss rate: 0.00%

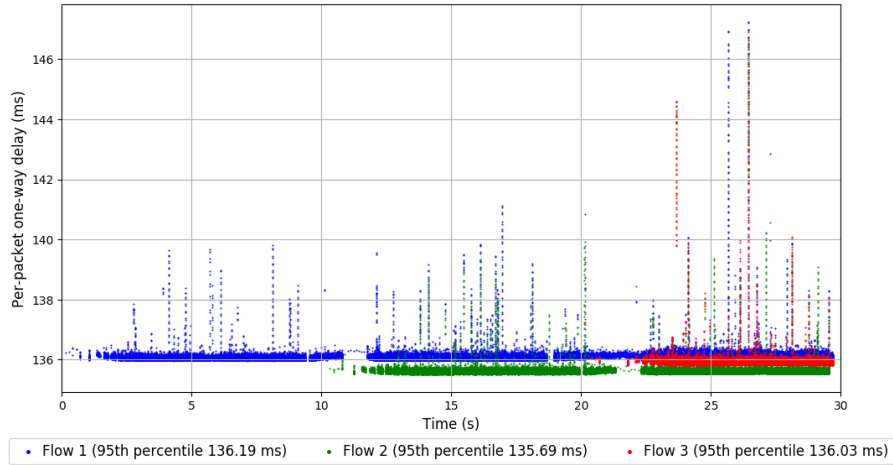
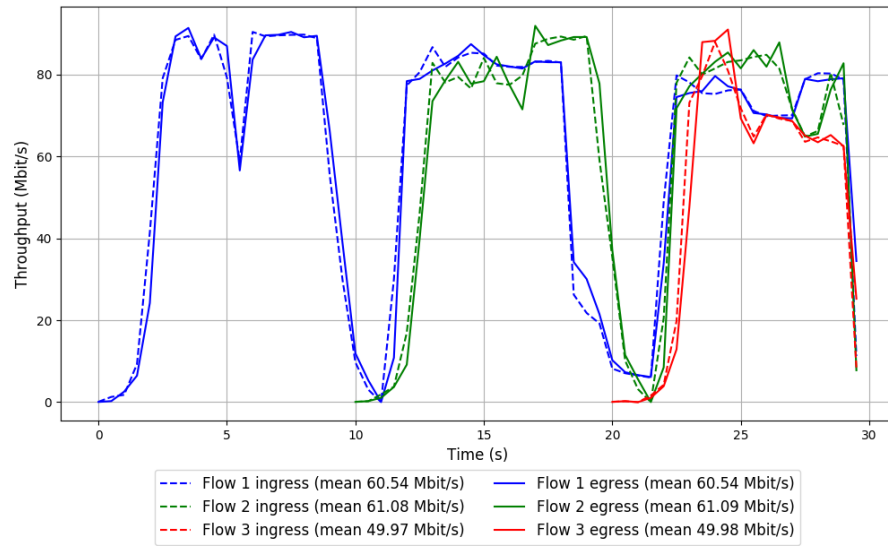
-- Flow 3:

Average throughput: 49.98 Mbit/s

95th percentile per-packet one-way delay: 136.029 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-21 20:23:31

End at: 2018-02-21 20:24:01

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.95 Mbit/s

95th percentile per-packet one-way delay: 136.671 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.79 Mbit/s

95th percentile per-packet one-way delay: 136.221 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.76 Mbit/s

95th percentile per-packet one-way delay: 136.232 ms

Loss rate: 0.00%

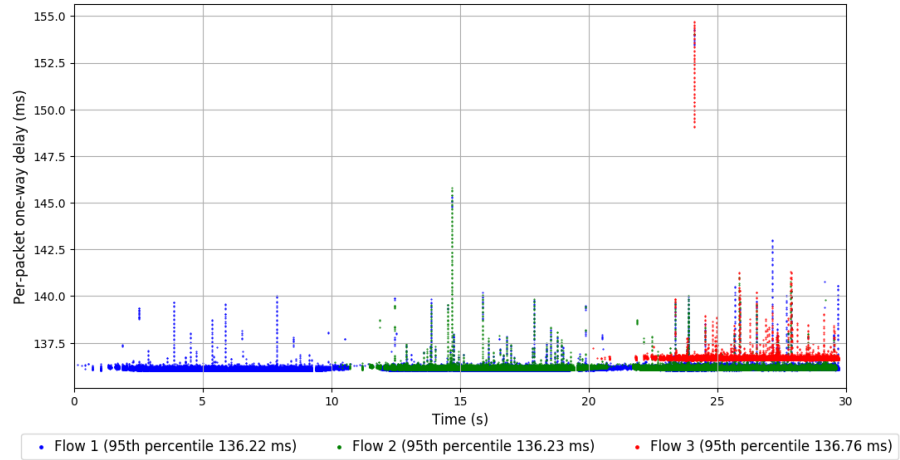
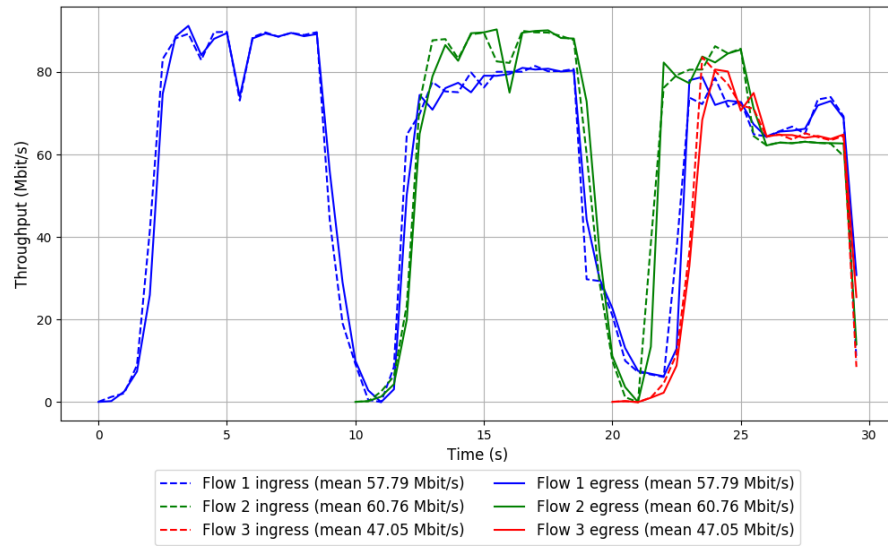
-- Flow 3:

Average throughput: 47.05 Mbit/s

95th percentile per-packet one-way delay: 136.757 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-21 20:43:28

End at: 2018-02-21 20:43:58

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.38 Mbit/s

95th percentile per-packet one-way delay: 136.409 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.69 Mbit/s

95th percentile per-packet one-way delay: 136.430 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.67 Mbit/s

95th percentile per-packet one-way delay: 136.369 ms

Loss rate: 0.00%

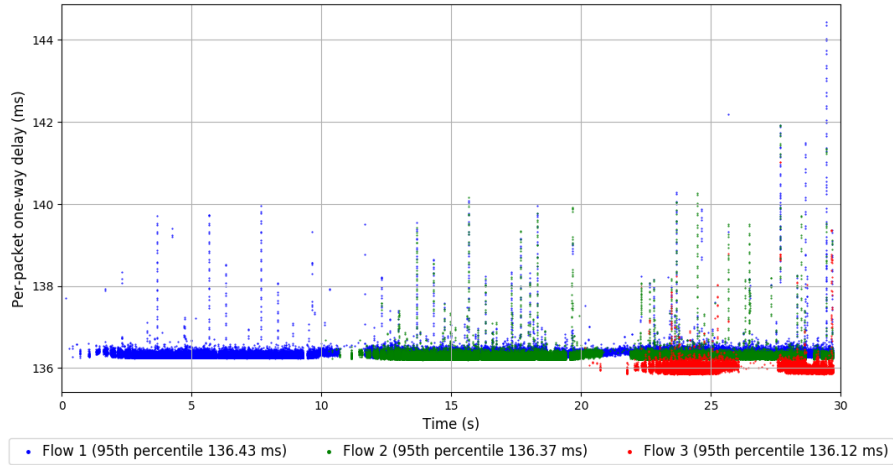
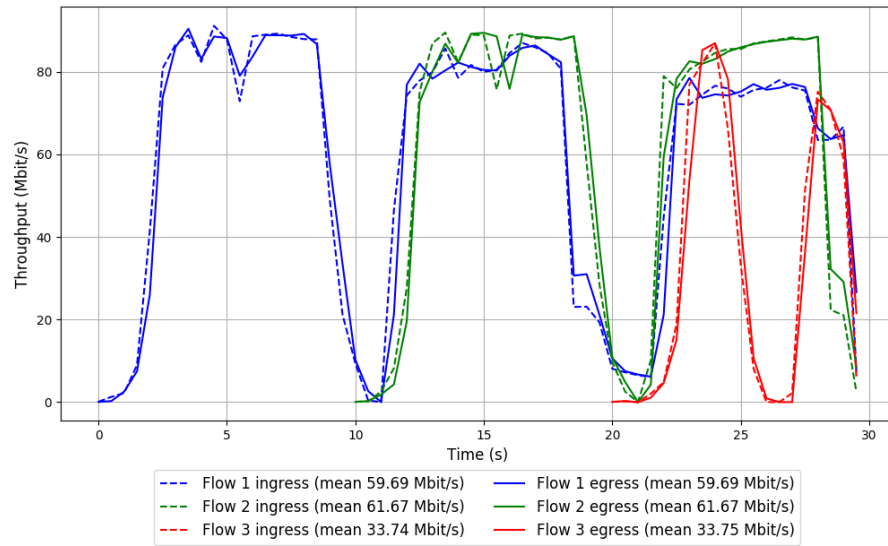
-- Flow 3:

Average throughput: 33.75 Mbit/s

95th percentile per-packet one-way delay: 136.122 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-21 21:03:29

End at: 2018-02-21 21:03:59

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.69 Mbit/s

95th percentile per-packet one-way delay: 136.521 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.11 Mbit/s

95th percentile per-packet one-way delay: 136.557 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.87 Mbit/s

95th percentile per-packet one-way delay: 135.380 ms

Loss rate: 0.00%

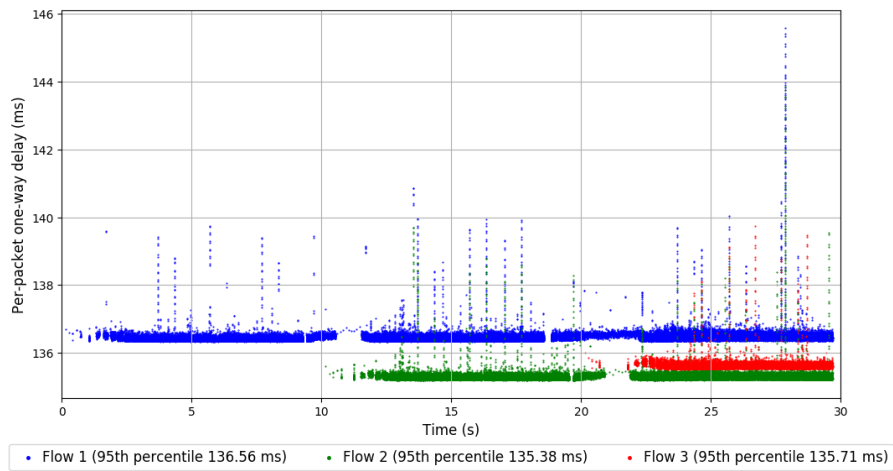
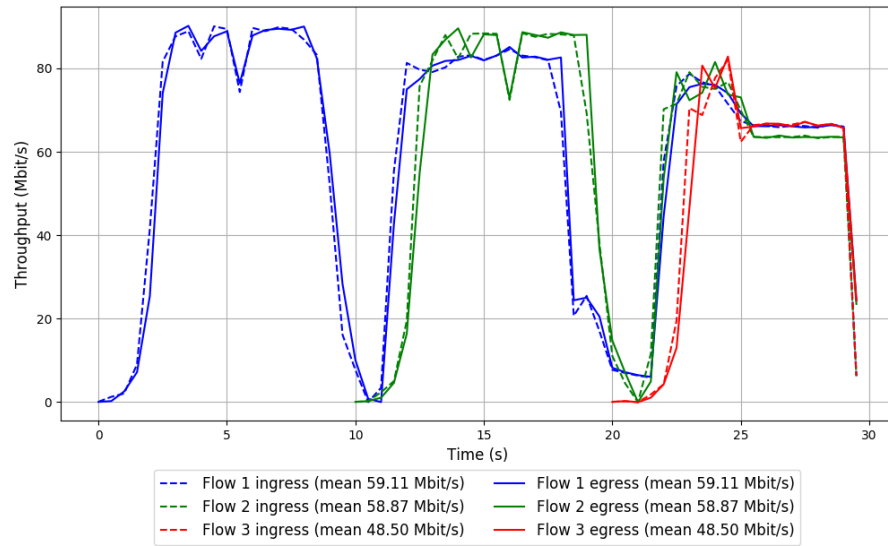
-- Flow 3:

Average throughput: 48.50 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

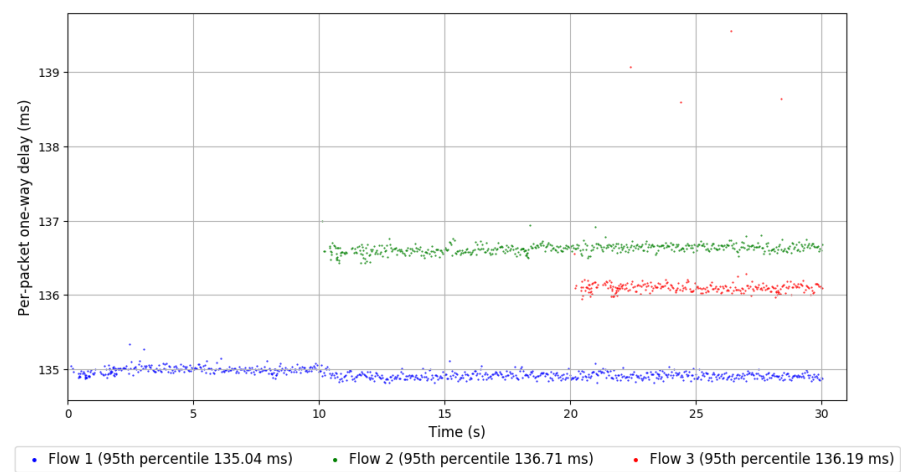
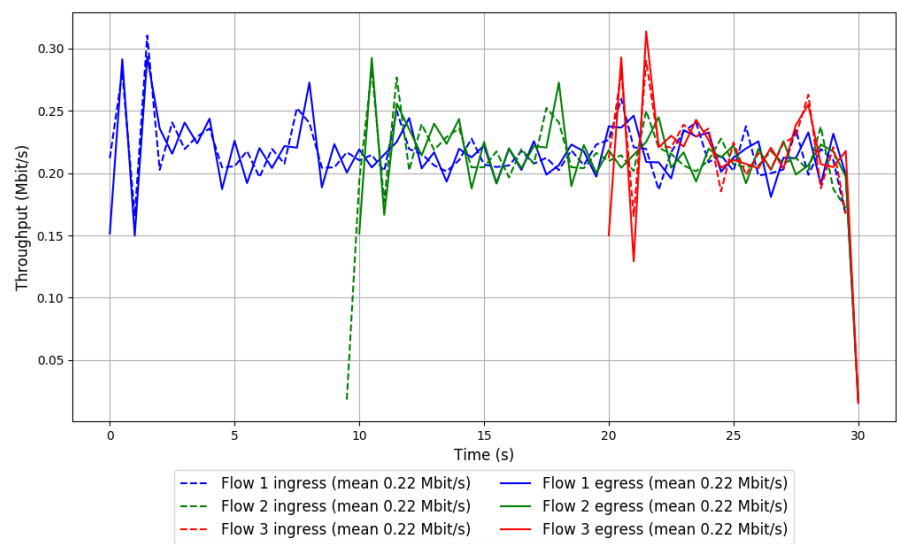


```
Run 1: Statistics of SCReAM

Start at: 2018-02-21 17:58:31
End at: 2018-02-21 17:59:01

# Below is generated by plot.py at 2018-02-21 23:53:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.680 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.042 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.707 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.193 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

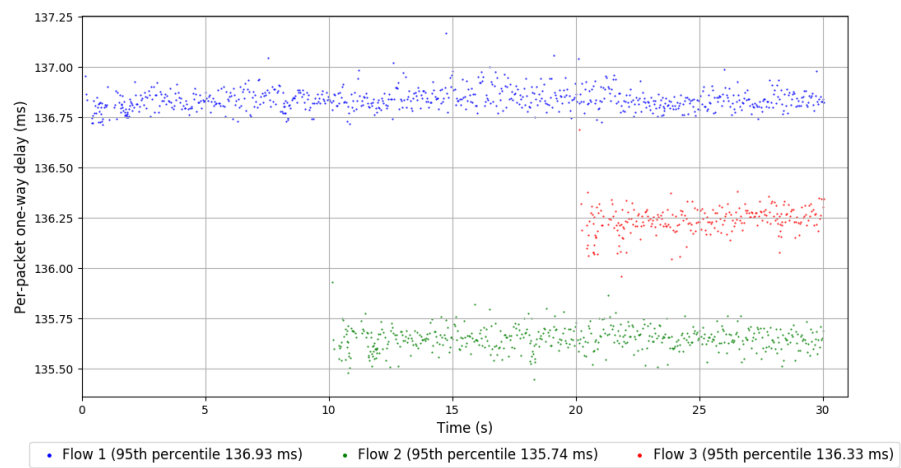
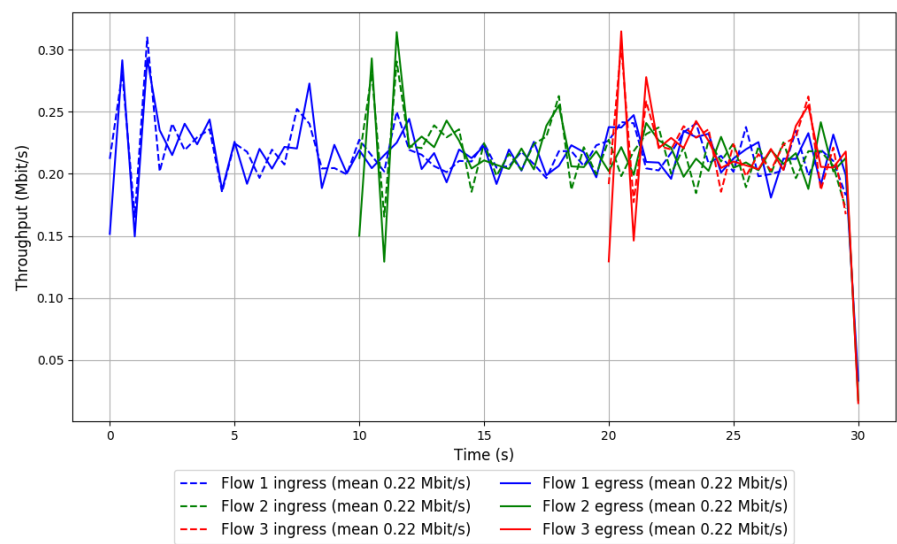


```
Run 2: Statistics of SCReAM

Start at: 2018-02-21 18:18:40
End at: 2018-02-21 18:19:10

# Below is generated by plot.py at 2018-02-21 23:53:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.901 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.933 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.743 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.332 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-02-21 18:38:34

End at: 2018-02-21 18:39:04

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 140.482 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.883 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 136.910 ms

Loss rate: 0.00%

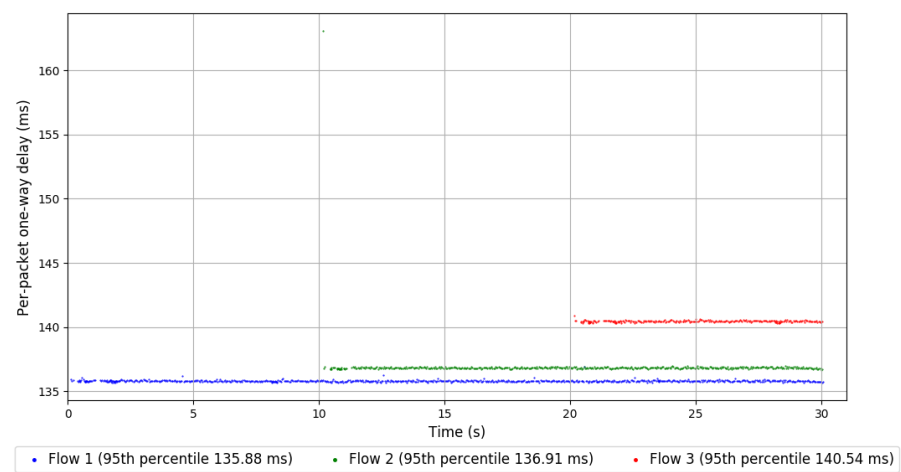
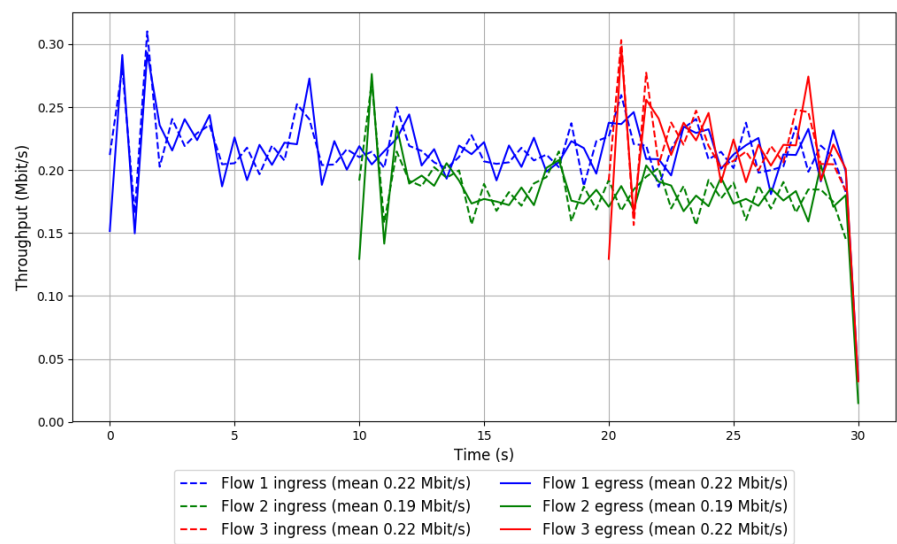
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 140.540 ms

Loss rate: 0.00%

Run 3: Report of SCReAM — Data Link



Run 4: Statistics of SReAM

Start at: 2018-02-21 18:59:23

End at: 2018-02-21 18:59:53

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 137.020 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.129 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.965 ms

Loss rate: 0.00%

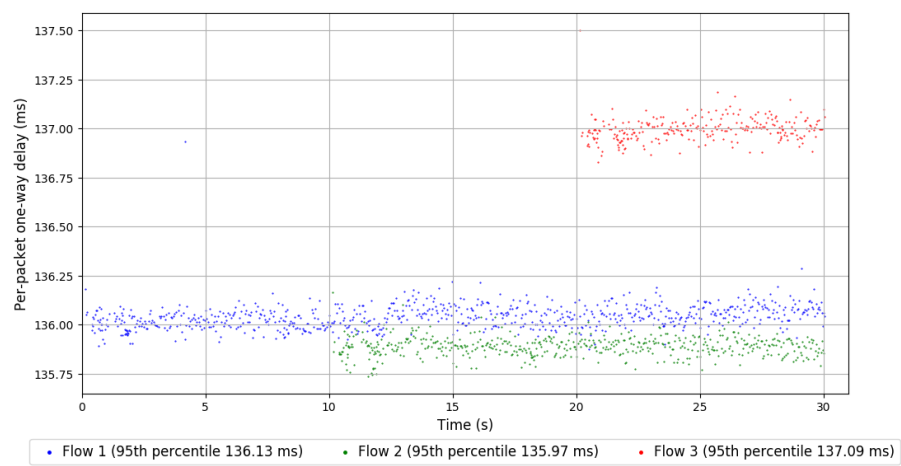
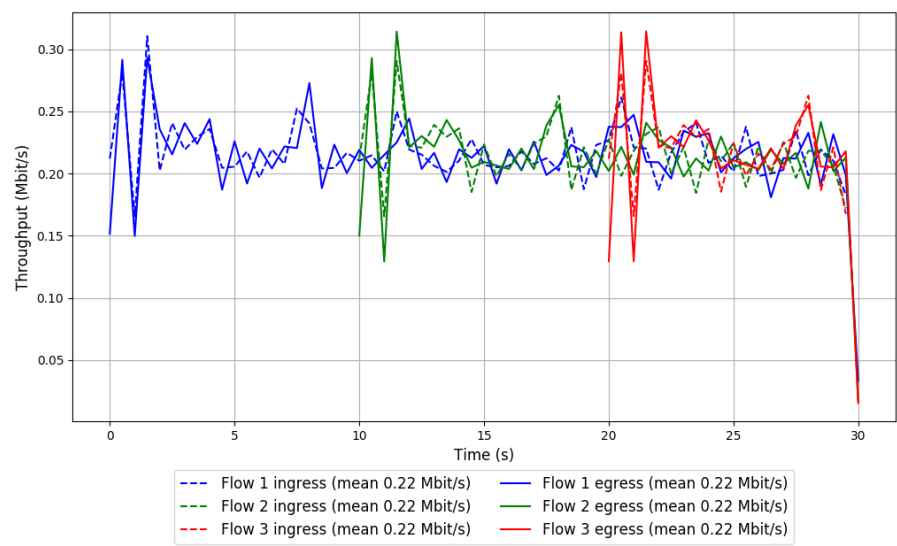
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.088 ms

Loss rate: 0.00%

Run 4: Report of SCReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-02-21 19:20:04

End at: 2018-02-21 19:20:34

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 136.723 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.213 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.880 ms

Loss rate: 0.00%

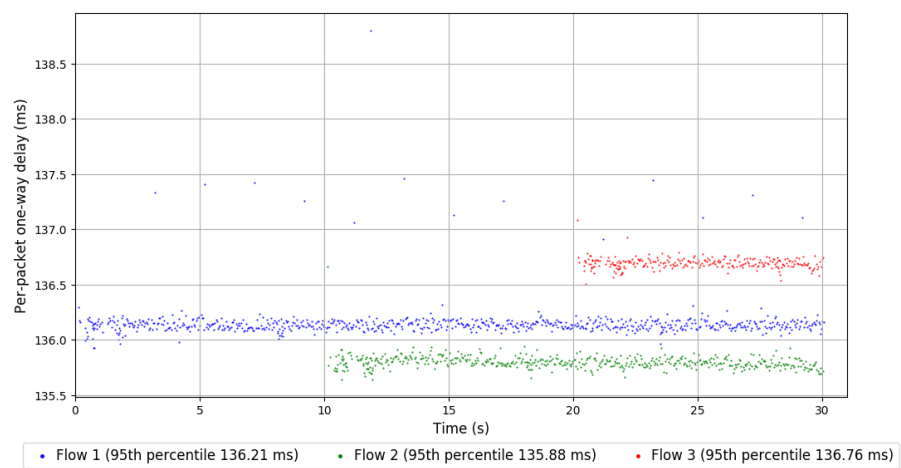
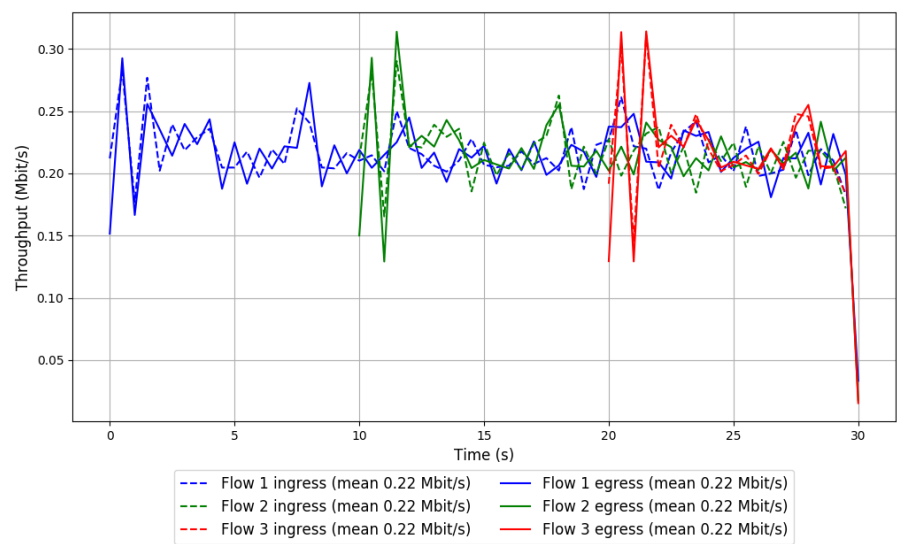
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.760 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-02-21 19:40:27

End at: 2018-02-21 19:40:57

Below is generated by plot.py at 2018-02-21 23:53:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 140.202 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 140.224 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 135.792 ms

Loss rate: 0.00%

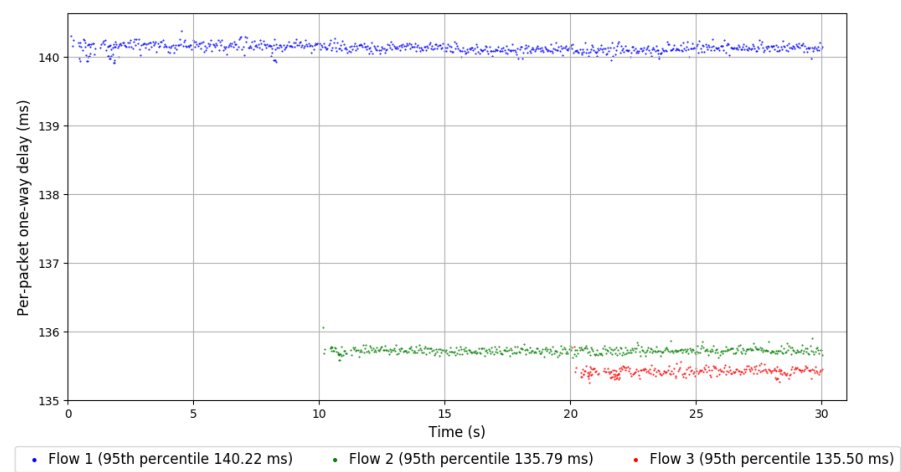
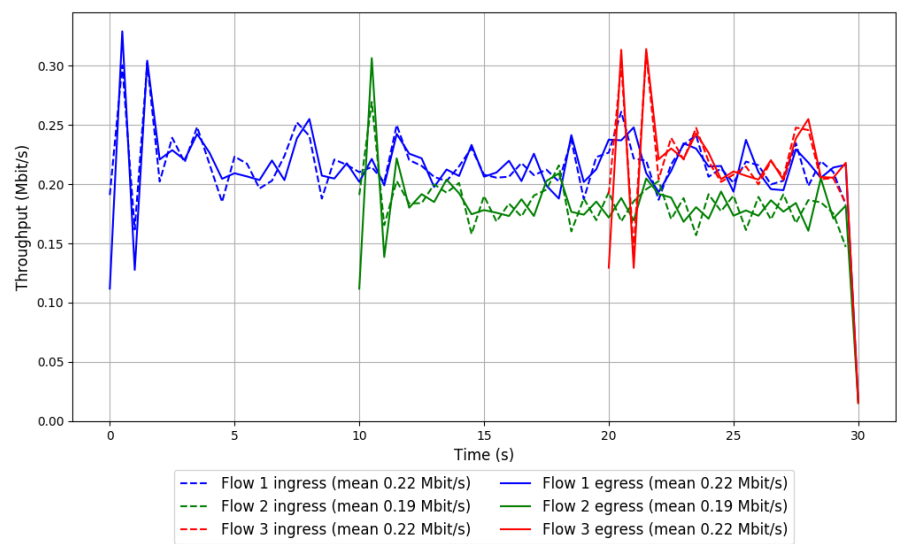
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.505 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2018-02-21 20:00:56

End at: 2018-02-21 20:01:26

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 140.706 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 135.949 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.246 ms

Loss rate: 0.00%

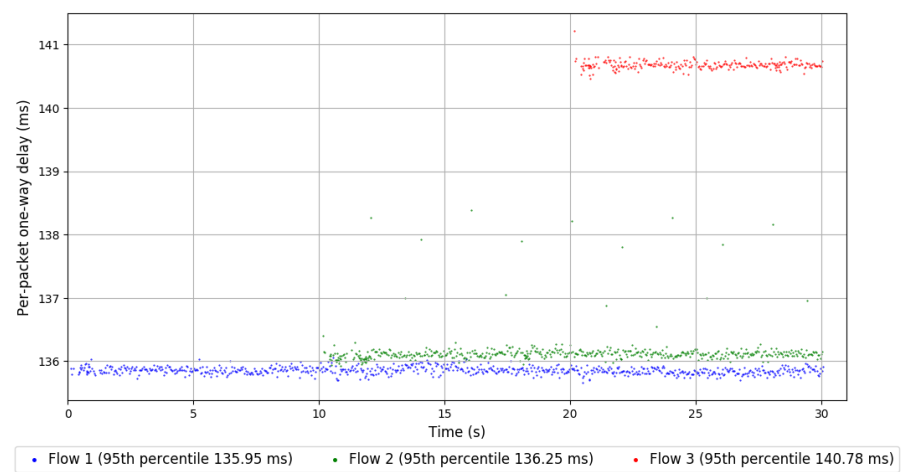
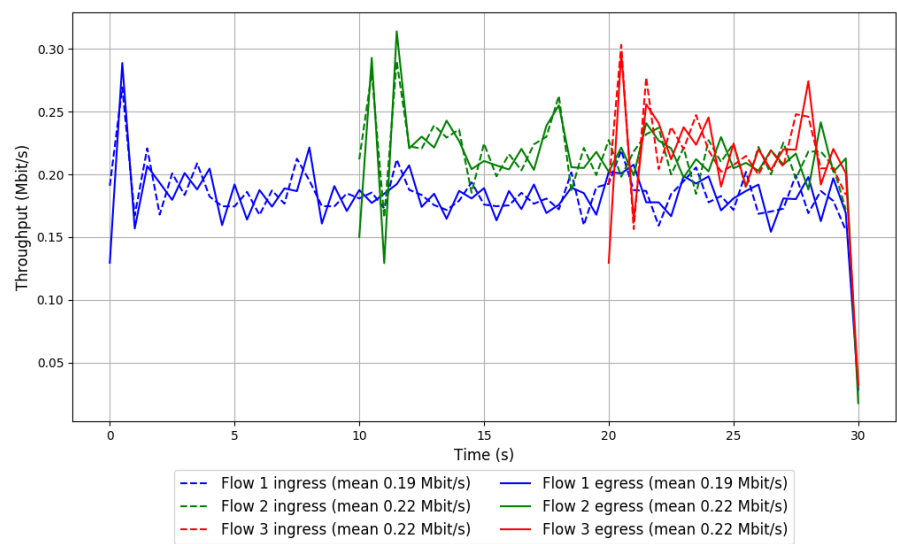
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 140.779 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-21 20:21:35

End at: 2018-02-21 20:22:05

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 141.134 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 136.392 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 141.176 ms

Loss rate: 0.00%

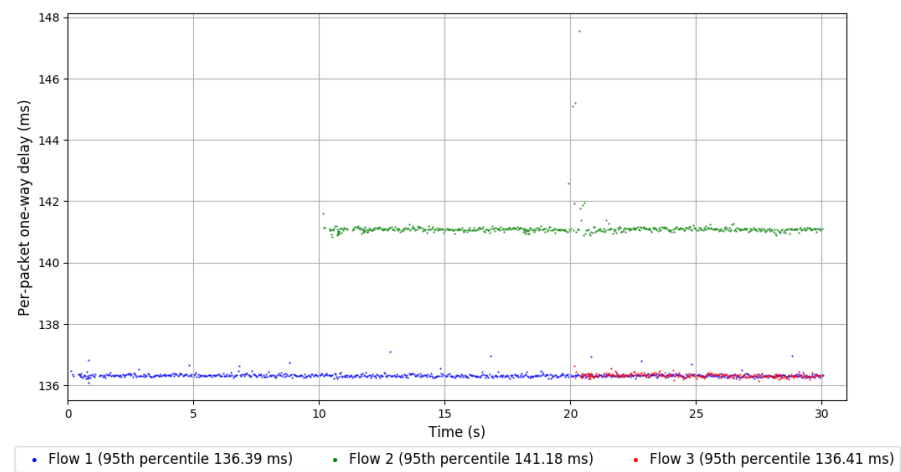
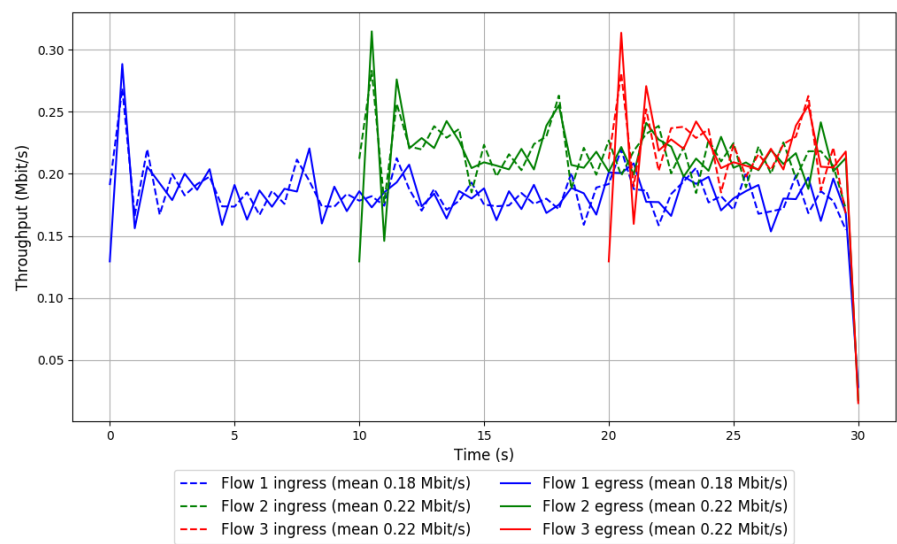
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.411 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-02-21 20:41:32

End at: 2018-02-21 20:42:02

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 137.019 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.034 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.654 ms

Loss rate: 0.00%

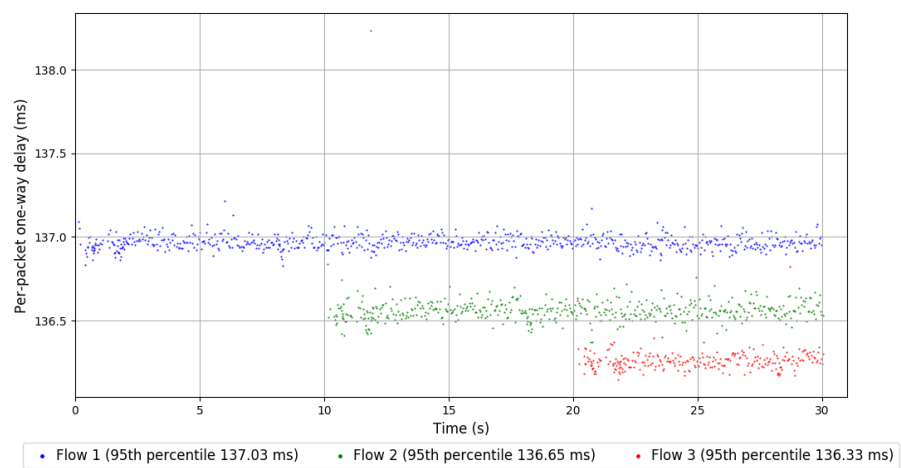
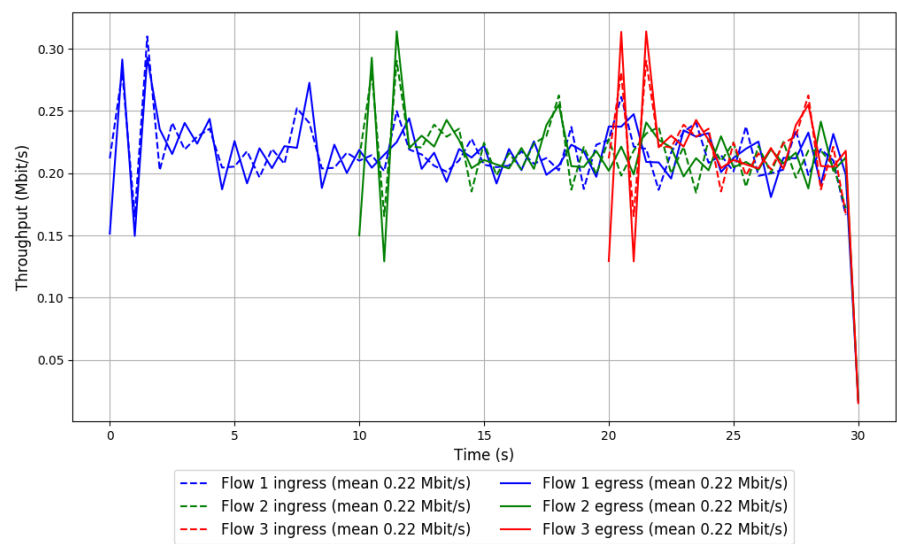
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.332 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

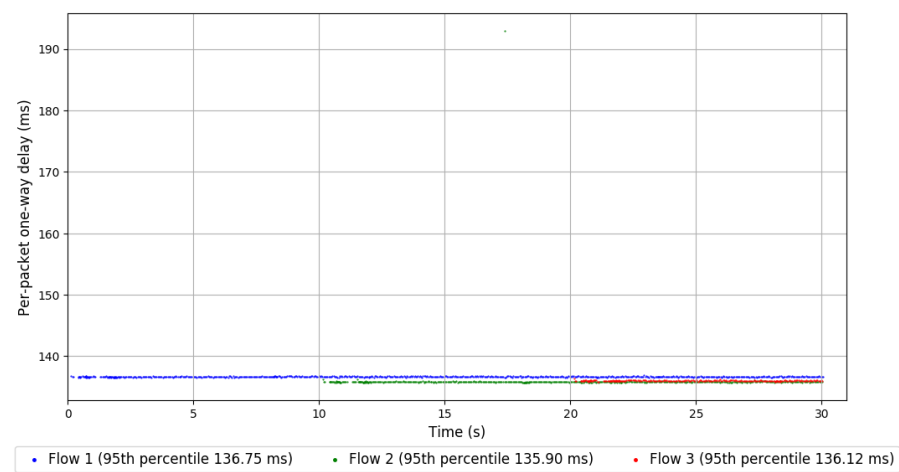
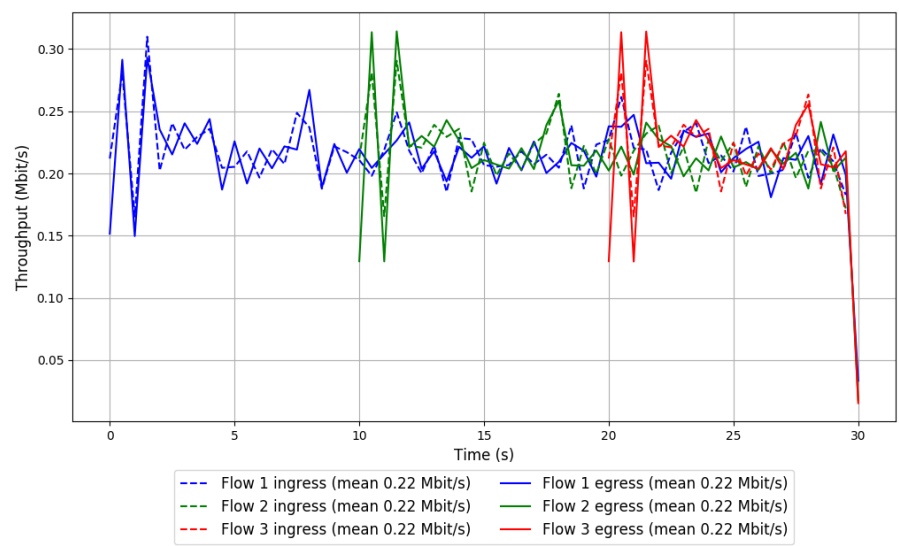


```
Run 10: Statistics of SReAM

Start at: 2018-02-21 21:01:39
End at: 2018-02-21 21:02:09

# Below is generated by plot.py at 2018-02-21 23:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.730 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.750 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.902 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.117 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-02-21 18:05:36

End at: 2018-02-21 18:06:06

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.61 Mbit/s

95th percentile per-packet one-way delay: 136.634 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 135.687 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 136.207 ms

Loss rate: 0.00%

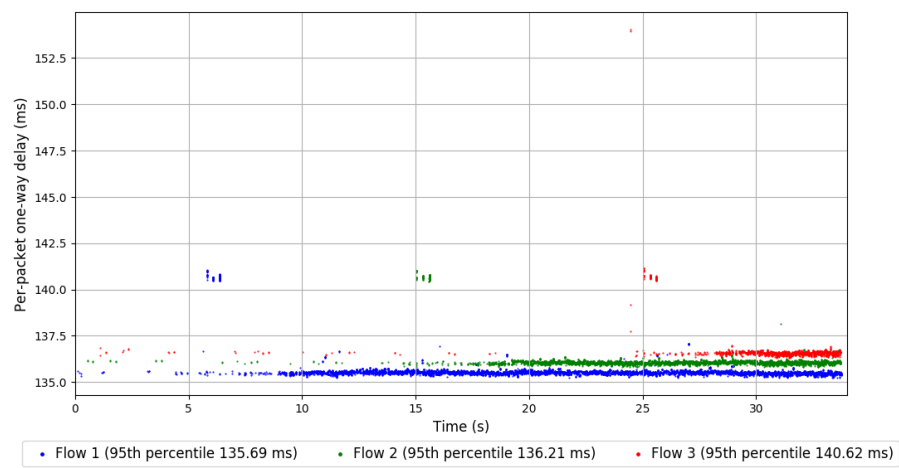
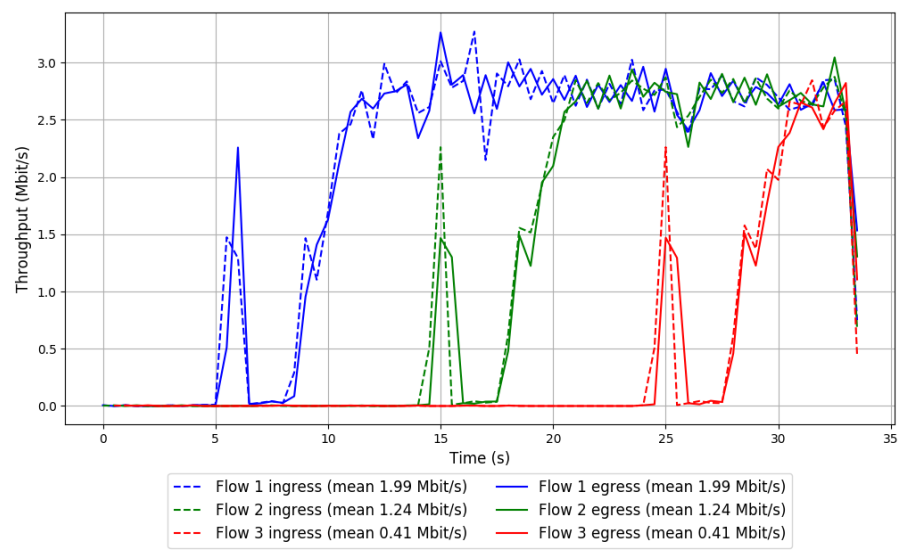
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 140.620 ms

Loss rate: 0.01%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-21 18:25:49

End at: 2018-02-21 18:26:19

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 136.417 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 134.897 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 136.464 ms

Loss rate: 0.02%

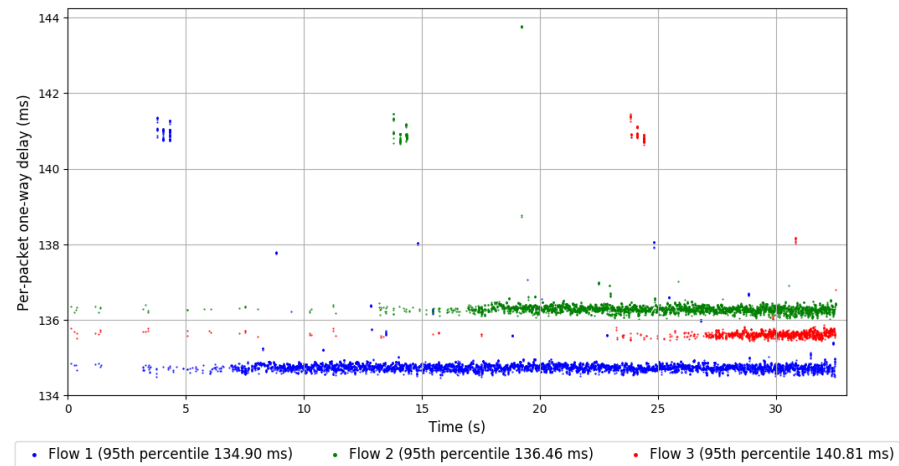
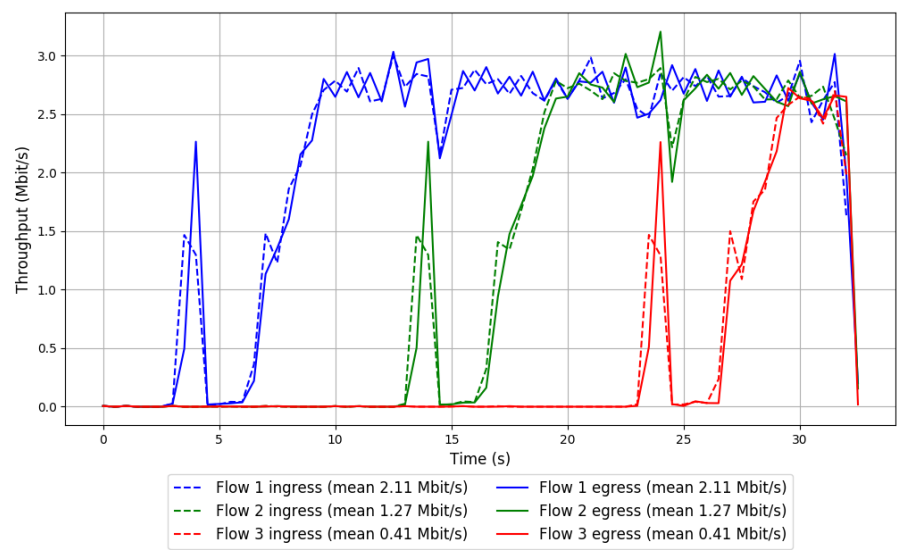
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 140.806 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-21 18:45:45

End at: 2018-02-21 18:46:15

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 136.917 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 136.870 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.23 Mbit/s

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

Loss rate: 0.00%

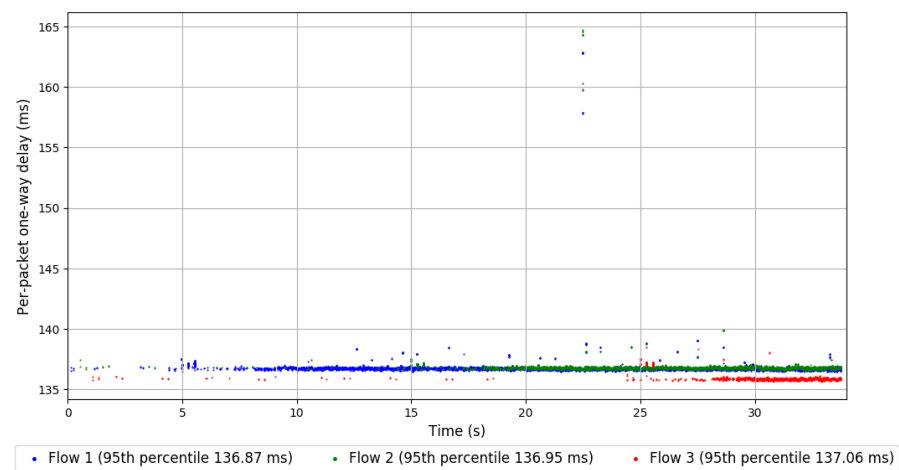
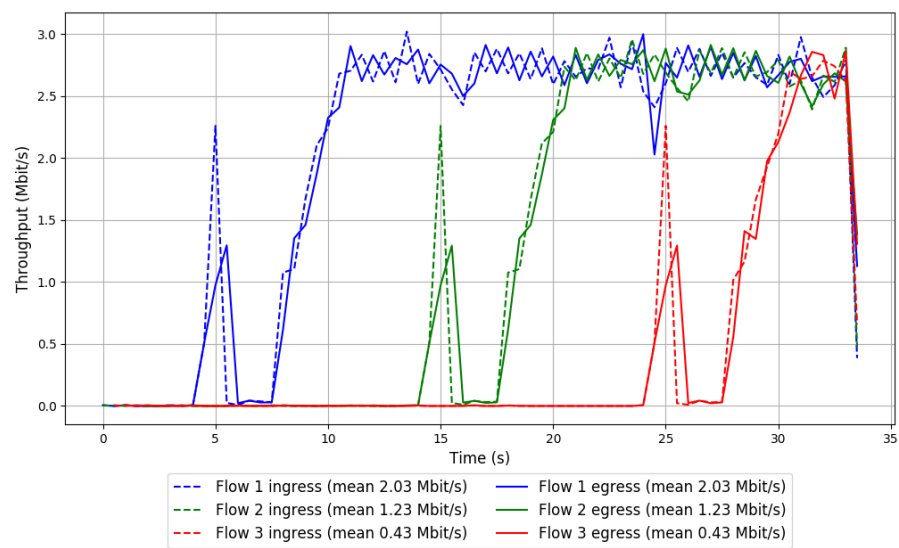
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 137.059 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-21 19:06:35

End at: 2018-02-21 19:07:05

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 137.020 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 137.216 ms

Loss rate: 0.00%

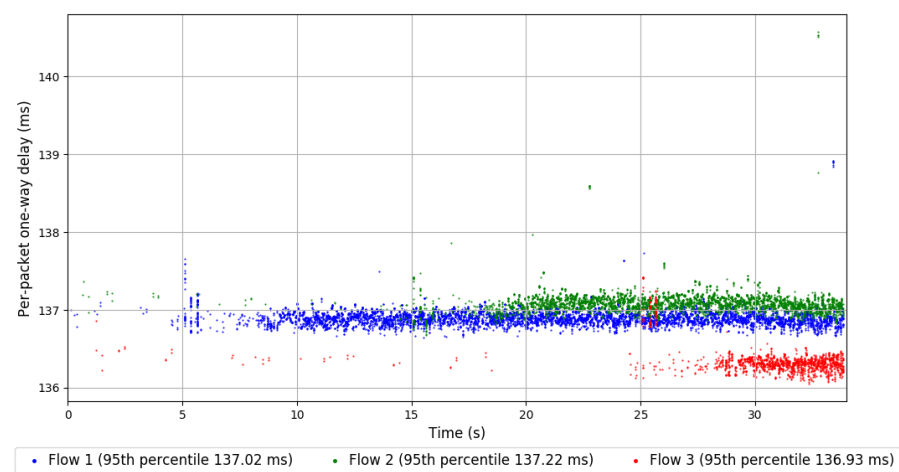
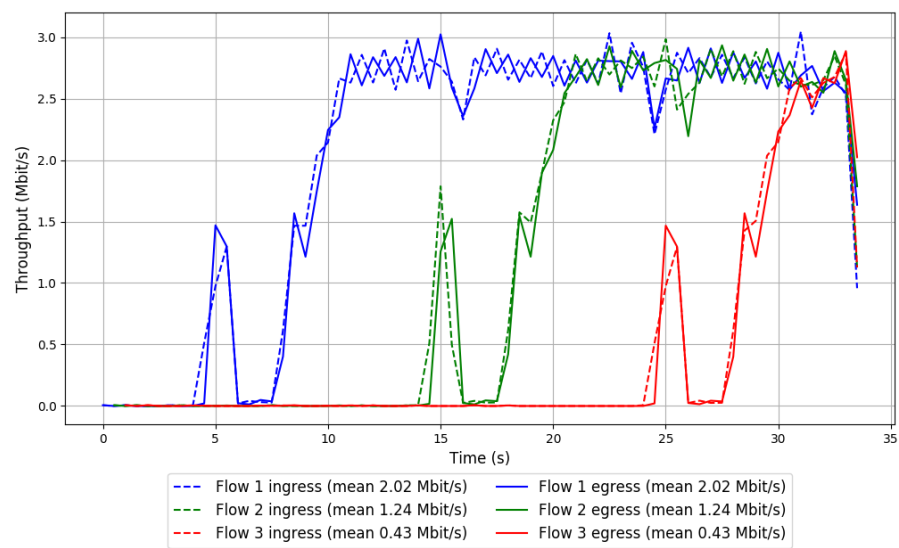
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 136.926 ms

Loss rate: 0.01%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-21 19:27:18

End at: 2018-02-21 19:27:48

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 136.298 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 136.301 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 136.207 ms

Loss rate: 0.00%

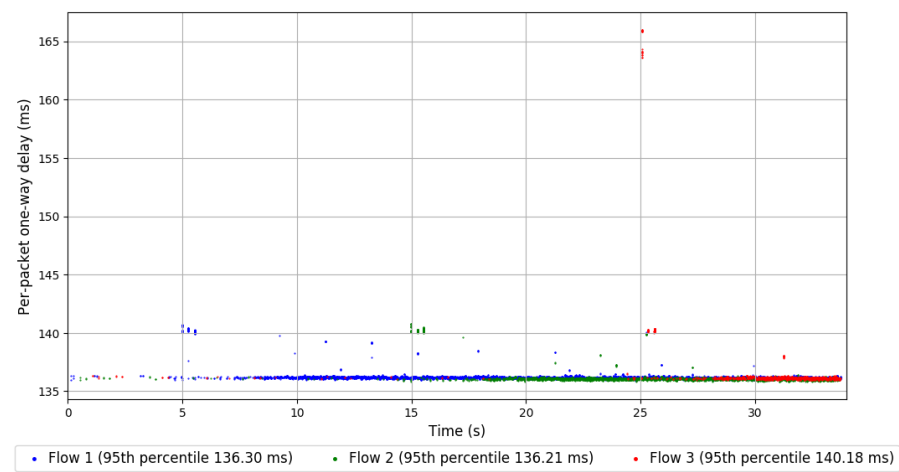
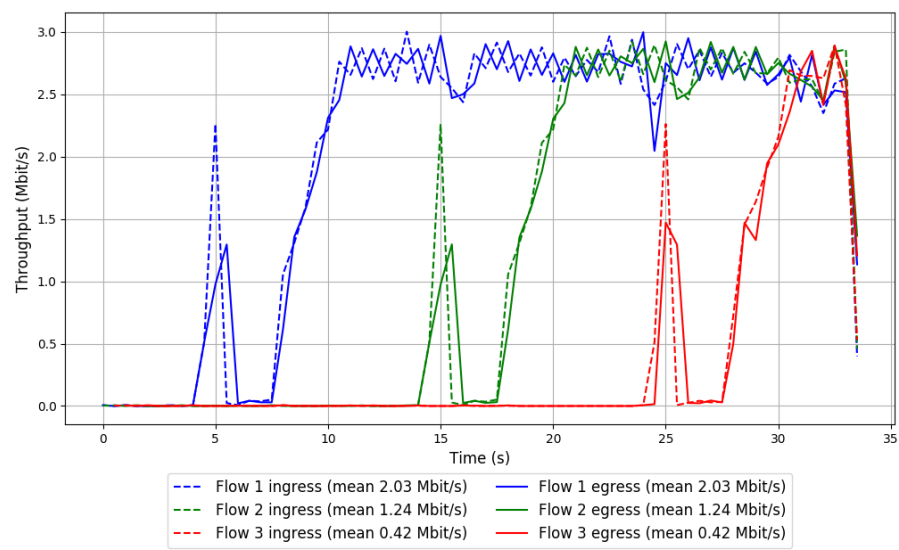
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 140.177 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-21 19:47:34

End at: 2018-02-21 19:48:04

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.60 Mbit/s

95th percentile per-packet one-way delay: 140.766 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 135.890 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 140.813 ms

Loss rate: 0.00%

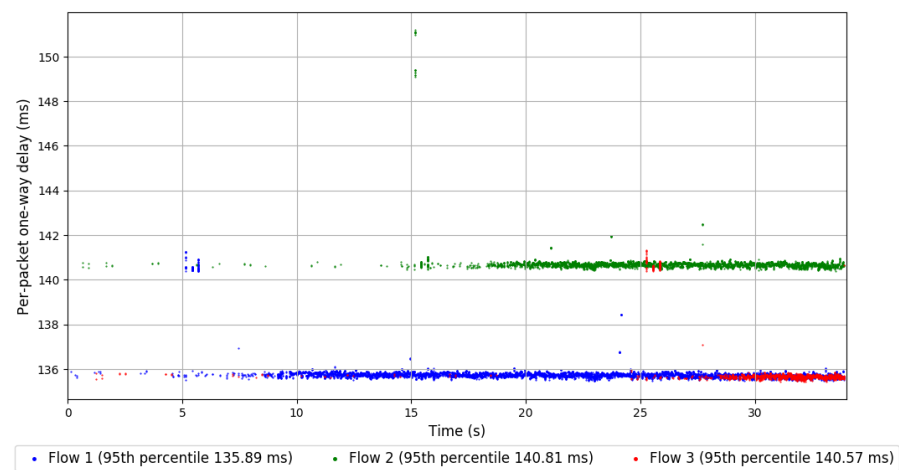
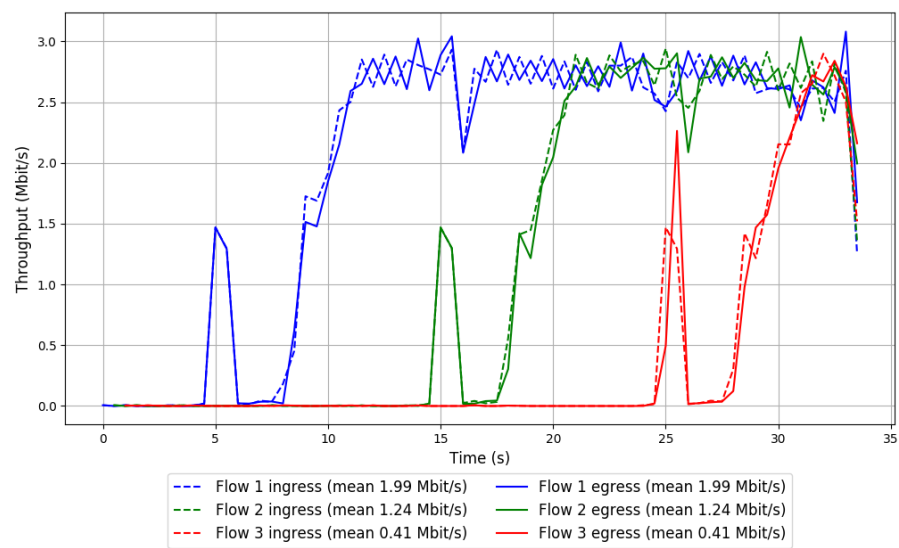
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 140.567 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-21 20:08:14

End at: 2018-02-21 20:08:44

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 140.300 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 136.314 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 135.991 ms

Loss rate: 0.00%

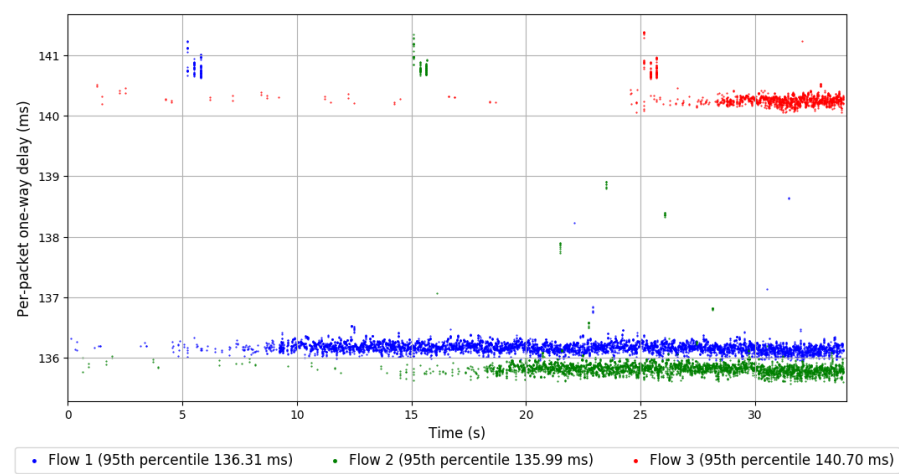
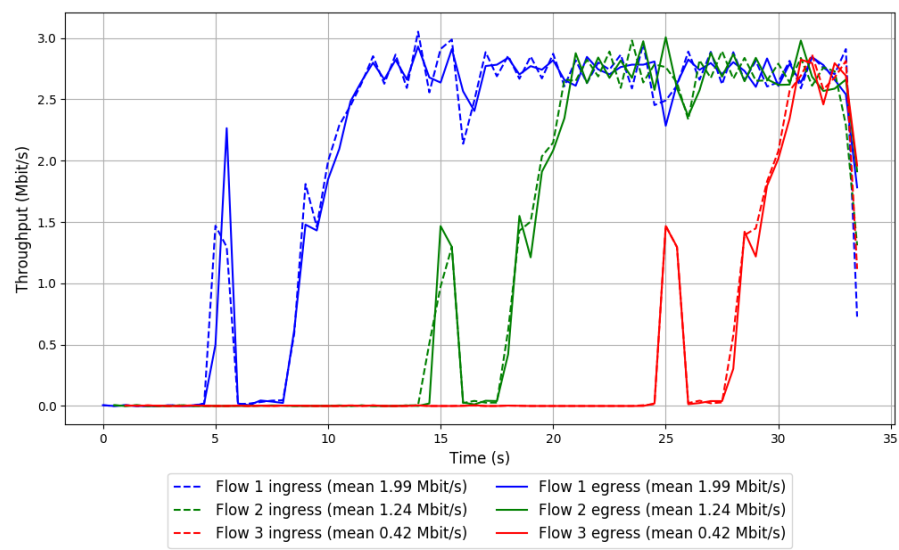
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 140.696 ms

Loss rate: 0.07%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-21 20:28:44

End at: 2018-02-21 20:29:14

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 136.433 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 136.389 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 136.149 ms

Loss rate: 0.00%

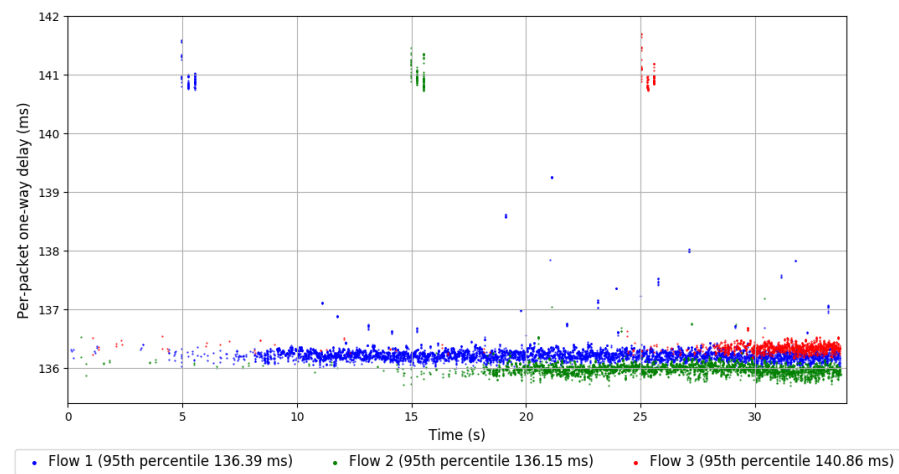
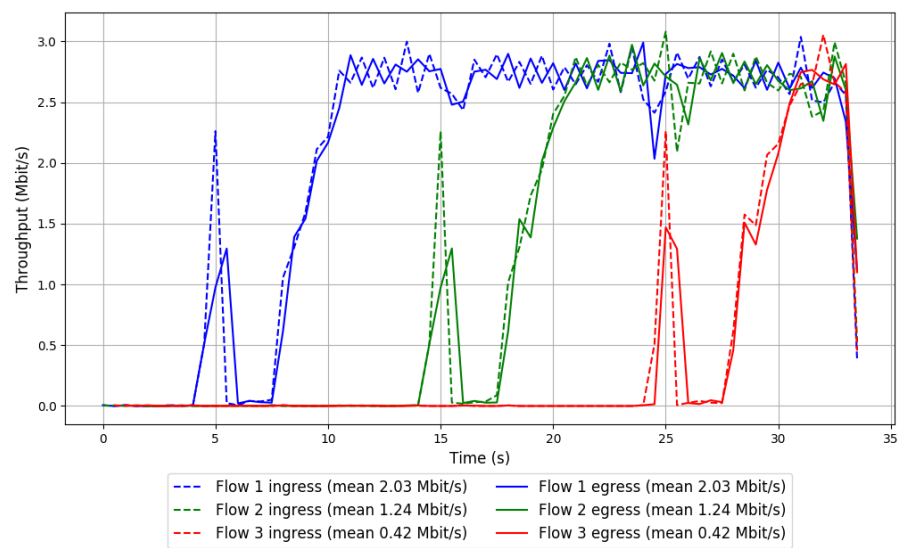
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 140.861 ms

Loss rate: 0.07%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-21 20:48:39

End at: 2018-02-21 20:49:09

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 137.204 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 137.218 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 136.273 ms

Loss rate: 0.02%

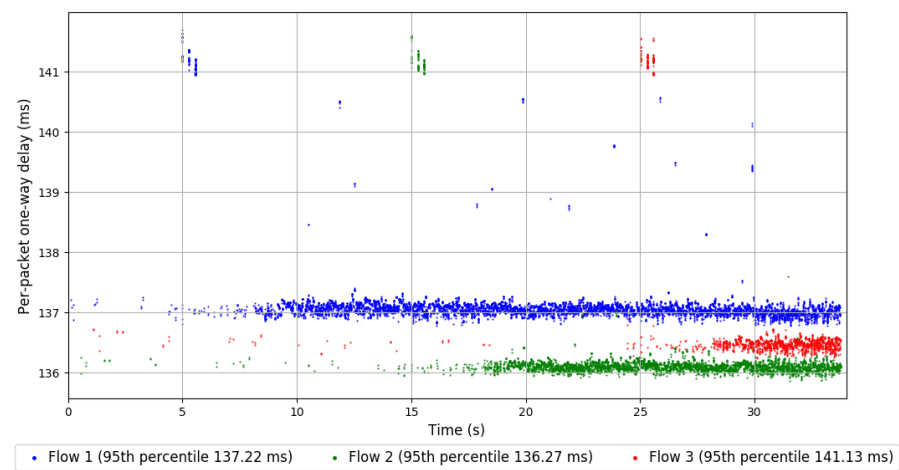
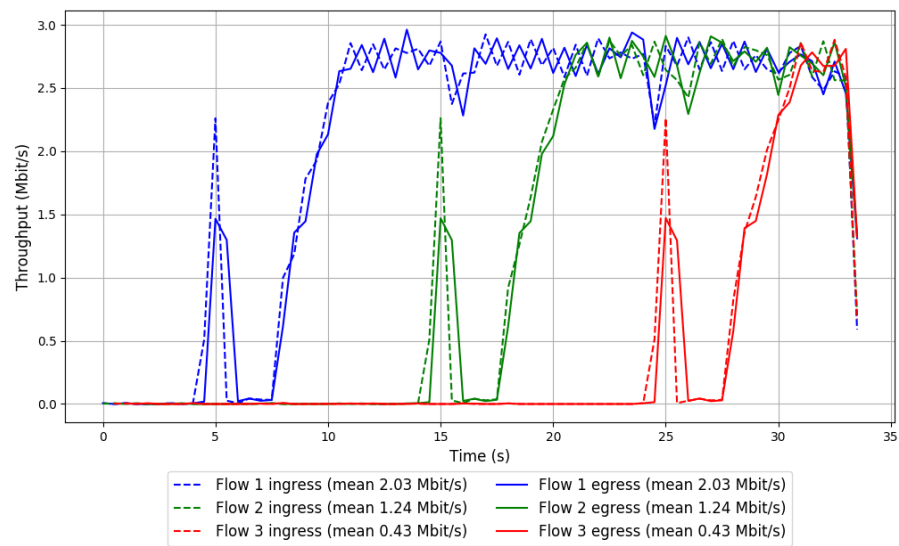
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 141.135 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-21 21:08:46

End at: 2018-02-21 21:09:16

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.63 Mbit/s

95th percentile per-packet one-way delay: 141.390 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 135.429 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 141.441 ms

Loss rate: 0.02%

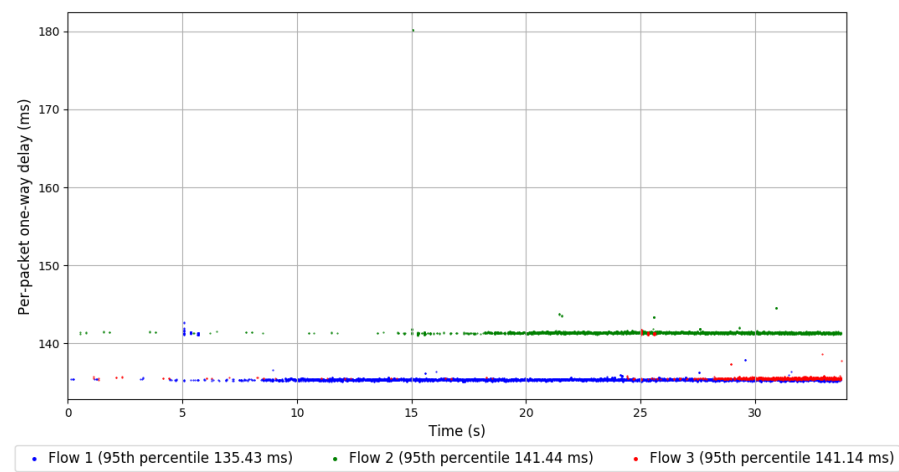
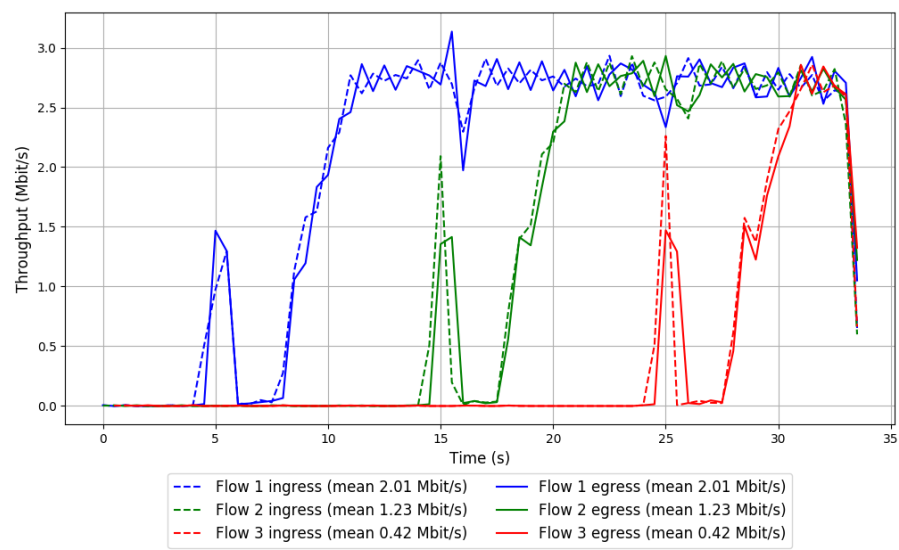
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 141.139 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-21 17:56:29

End at: 2018-02-21 17:56:59

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 140.850 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 140.860 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 140.796 ms

Loss rate: 0.00%

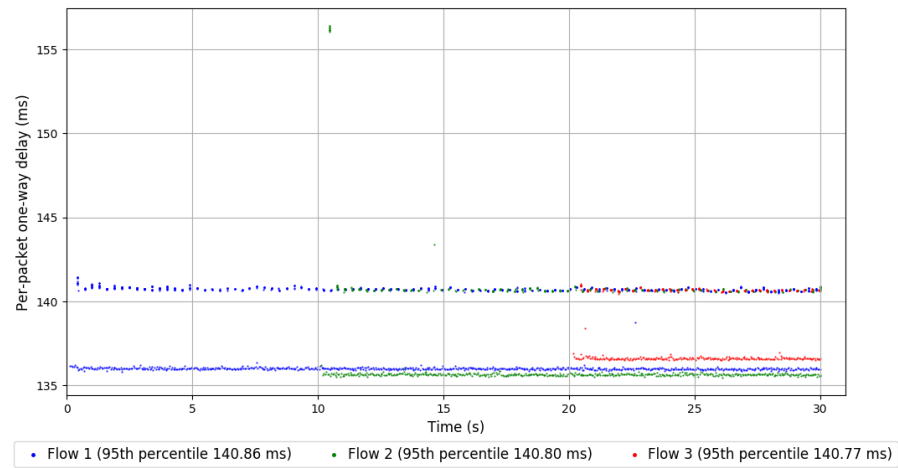
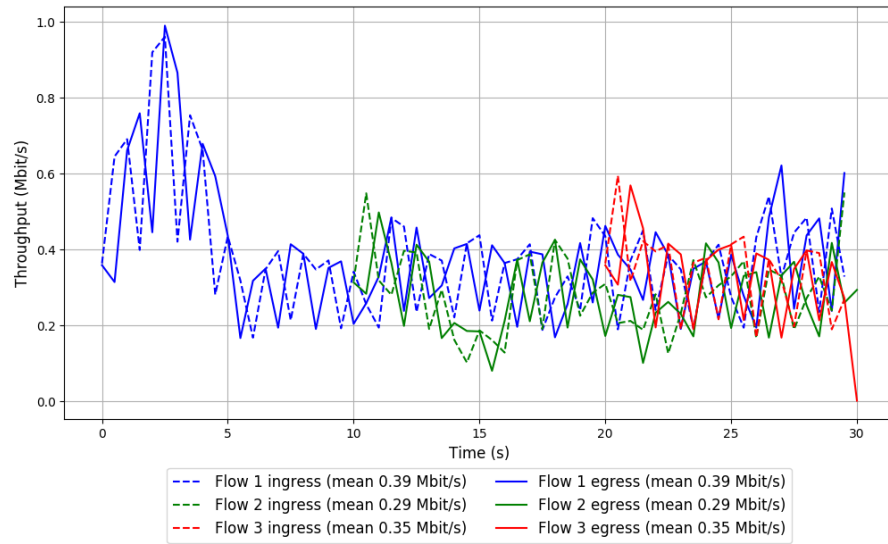
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 140.769 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-21 18:16:36

End at: 2018-02-21 18:17:06

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 140.893 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 140.896 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 140.861 ms

Loss rate: 0.00%

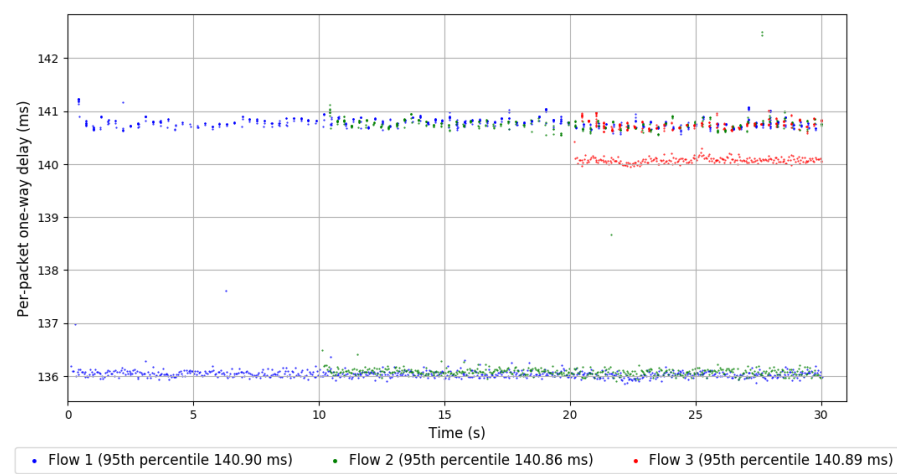
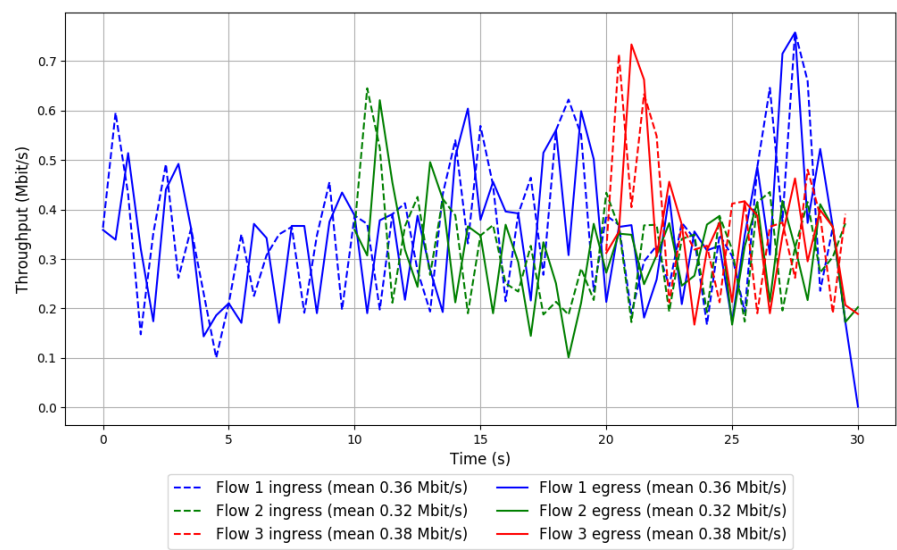
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 140.889 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-21 18:36:30

End at: 2018-02-21 18:37:00

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 141.171 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 141.209 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 141.110 ms

Loss rate: 0.00%

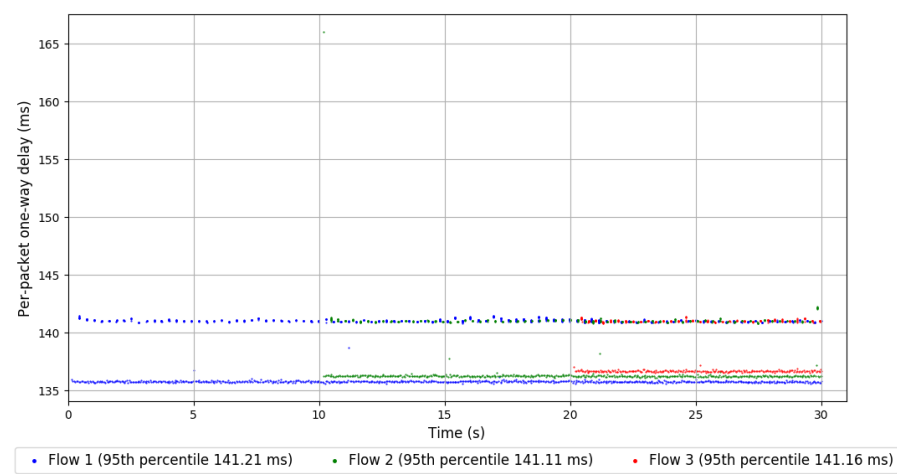
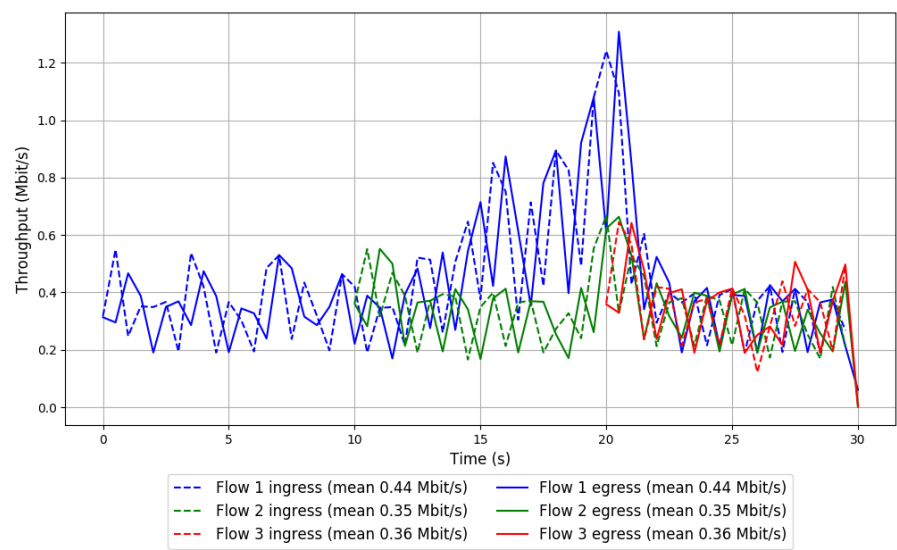
-- Flow 3:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 141.156 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-21 18:57:19

End at: 2018-02-21 18:57:49

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 140.305 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 140.341 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 137.147 ms

Loss rate: 0.00%

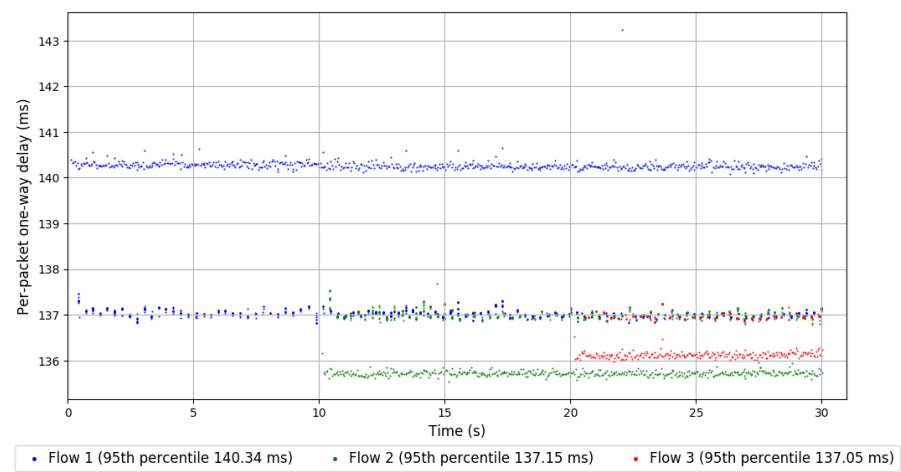
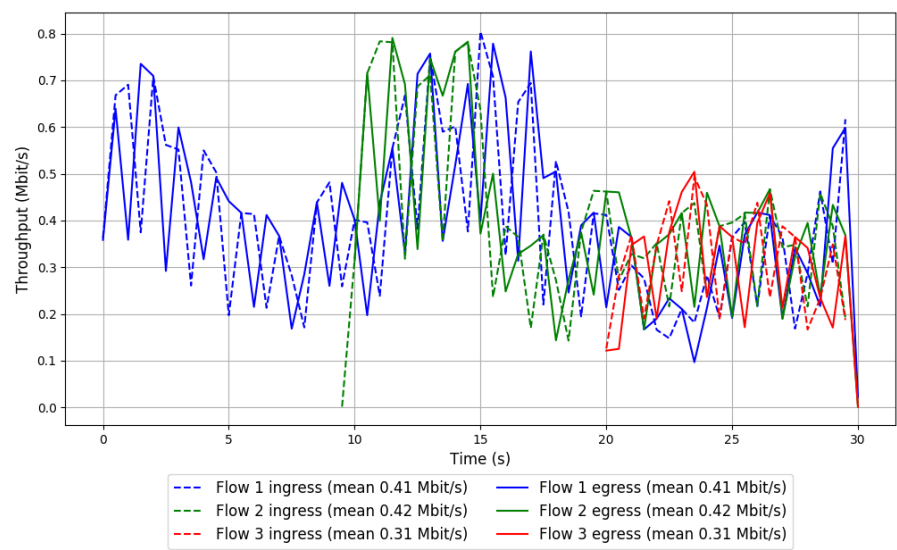
-- Flow 3:

Average throughput: 0.31 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-21 19:18:00

End at: 2018-02-21 19:18:30

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.91 Mbit/s

95th percentile per-packet one-way delay: 137.055 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 137.021 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 137.061 ms

Loss rate: 0.00%

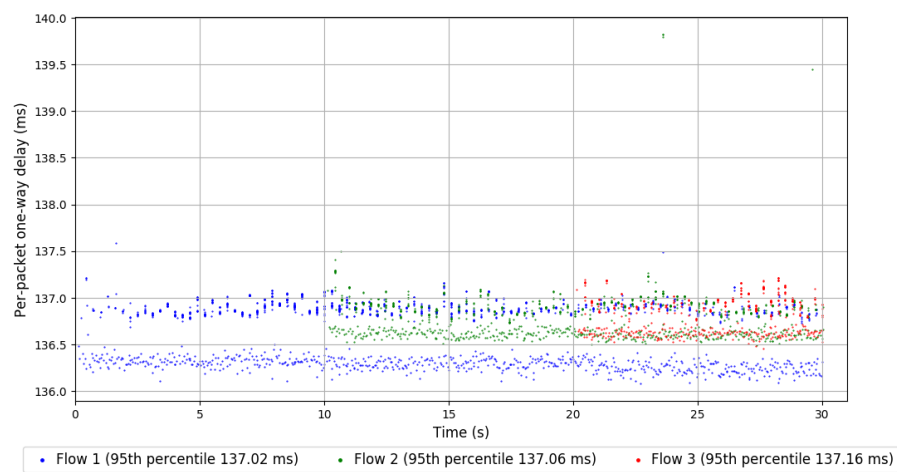
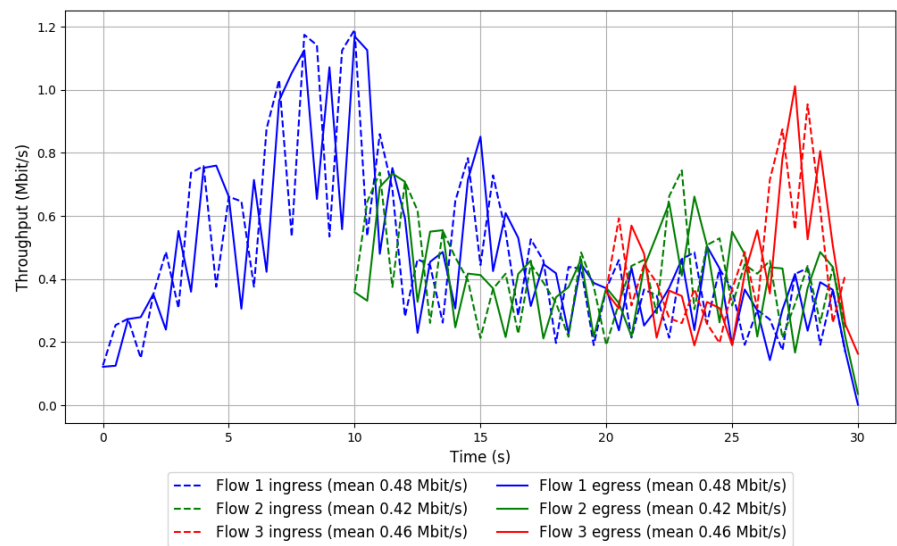
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 137.158 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-21 19:38:23

End at: 2018-02-21 19:38:53

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.77 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 140.834 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 140.799 ms

Loss rate: 0.00%

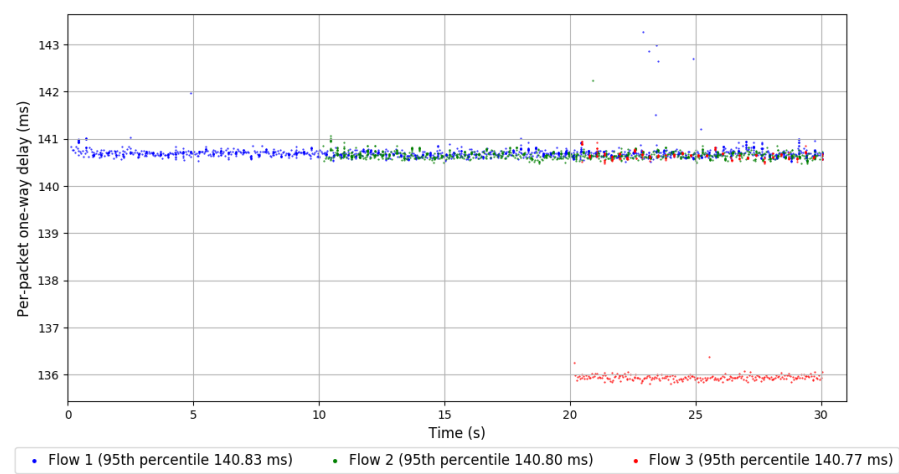
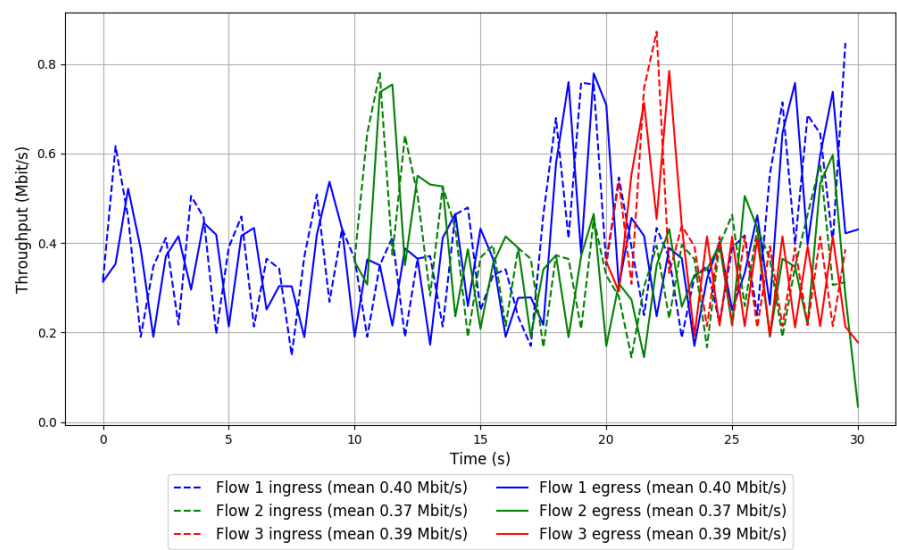
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 140.770 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-21 19:58:52

End at: 2018-02-21 19:59:22

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 140.990 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 140.965 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.71 Mbit/s

95th percentile per-packet one-way delay: 141.020 ms

Loss rate: 0.00%

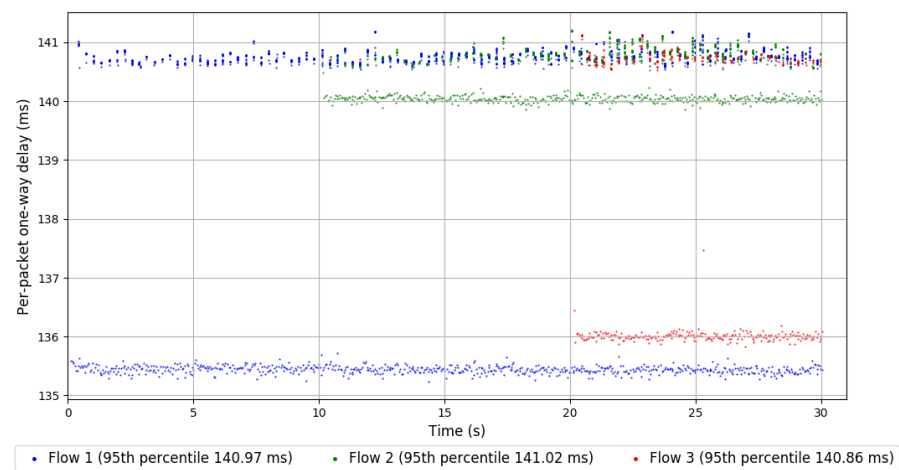
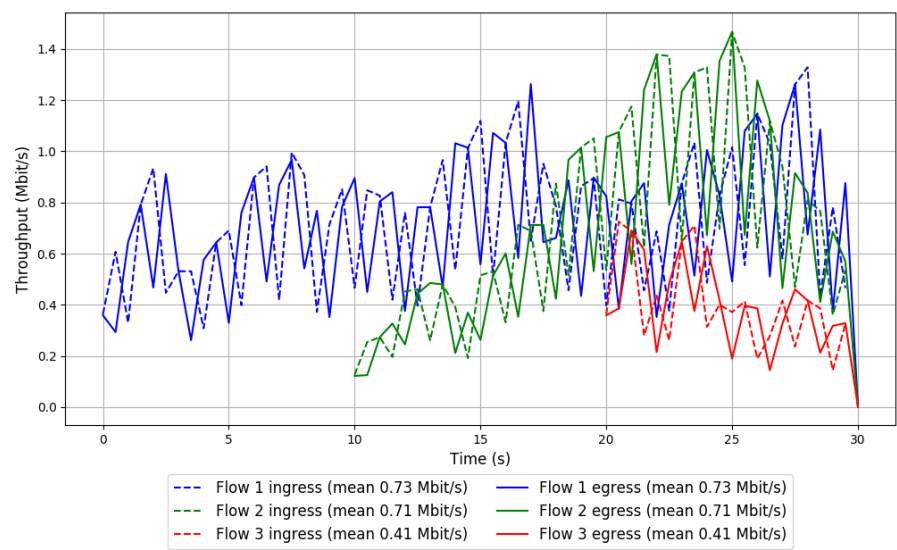
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 140.863 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-21 20:19:31

End at: 2018-02-21 20:20:01

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 141.037 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 141.043 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 141.017 ms

Loss rate: 0.00%

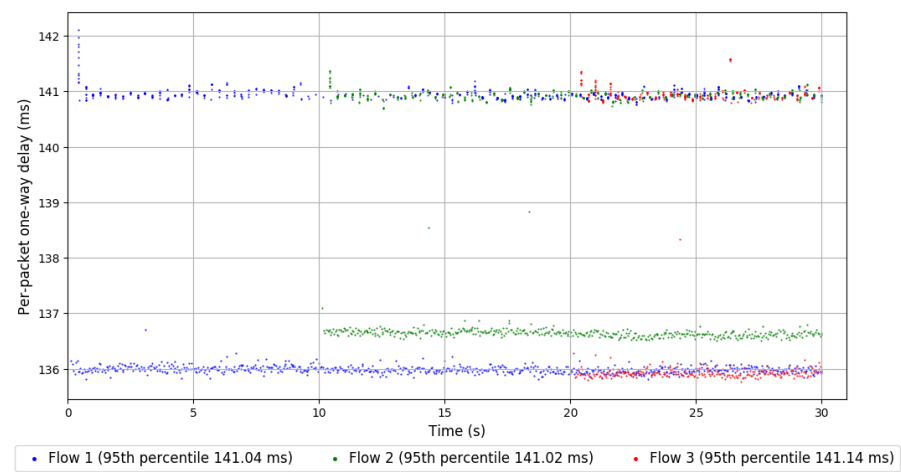
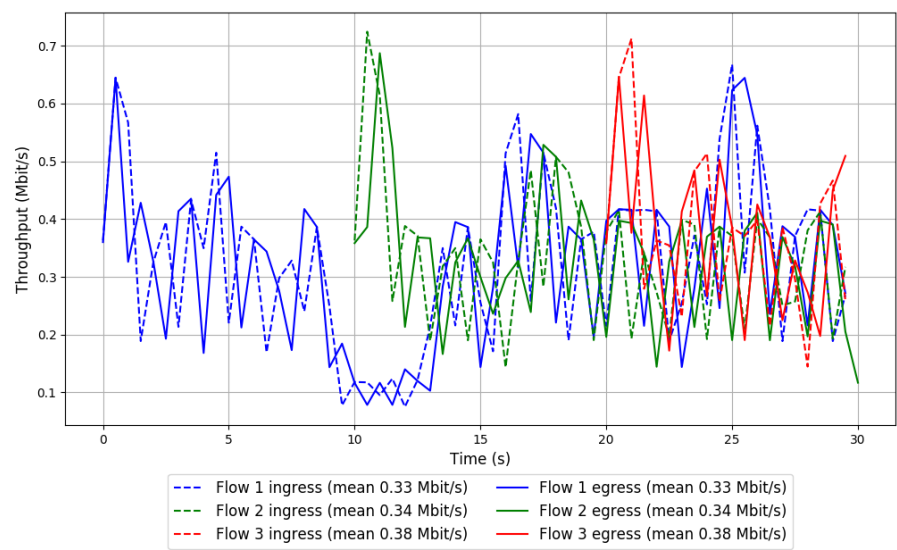
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 141.139 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-21 20:39:28

End at: 2018-02-21 20:39:59

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.02 Mbit/s

95th percentile per-packet one-way delay: 141.288 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 141.311 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 141.263 ms

Loss rate: 0.00%

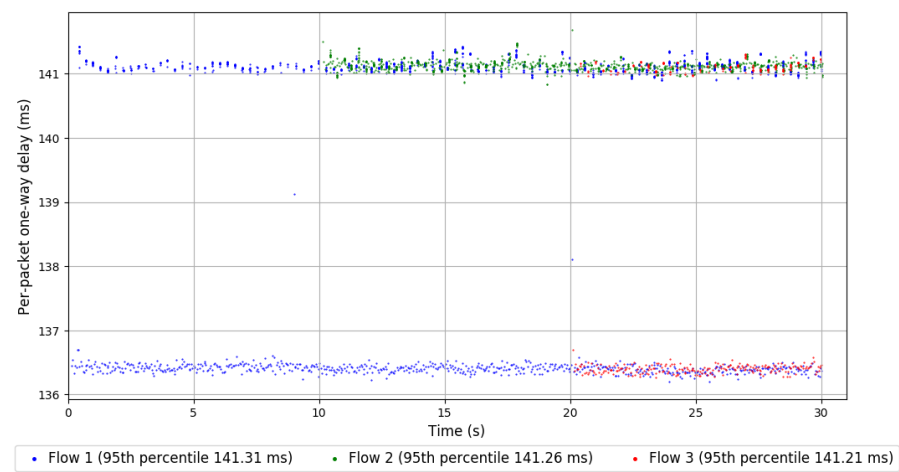
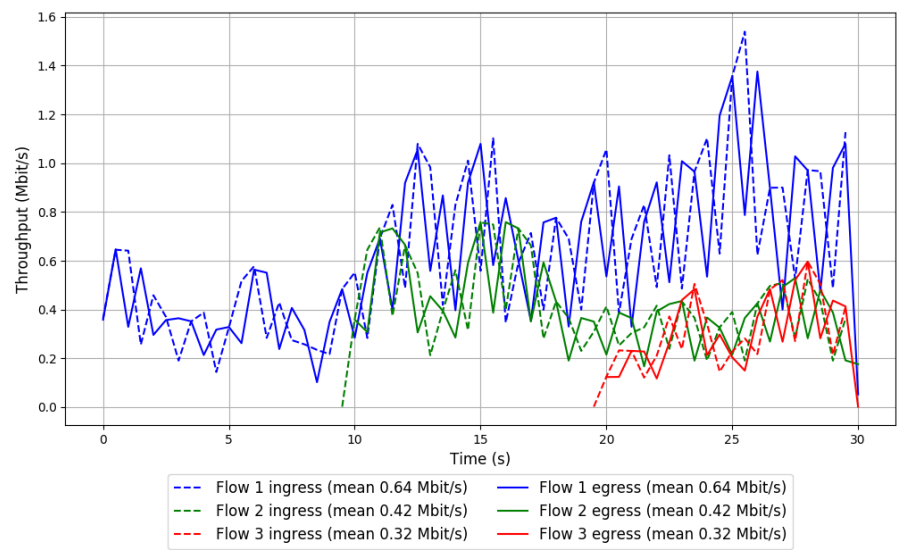
-- Flow 3:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 141.212 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-21 20:59:35

End at: 2018-02-21 21:00:05

Below is generated by plot.py at 2018-02-21 23:53:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 141.389 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.75 Mbit/s

95th percentile per-packet one-way delay: 141.405 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 141.317 ms

Loss rate: 0.00%

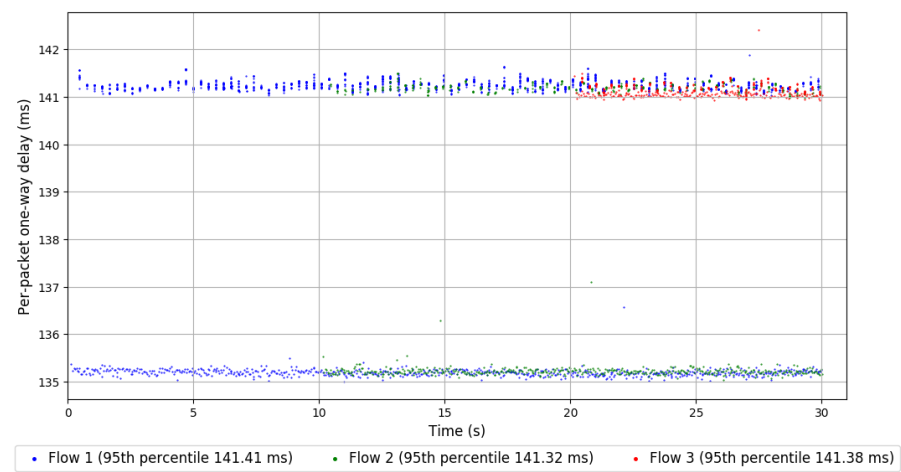
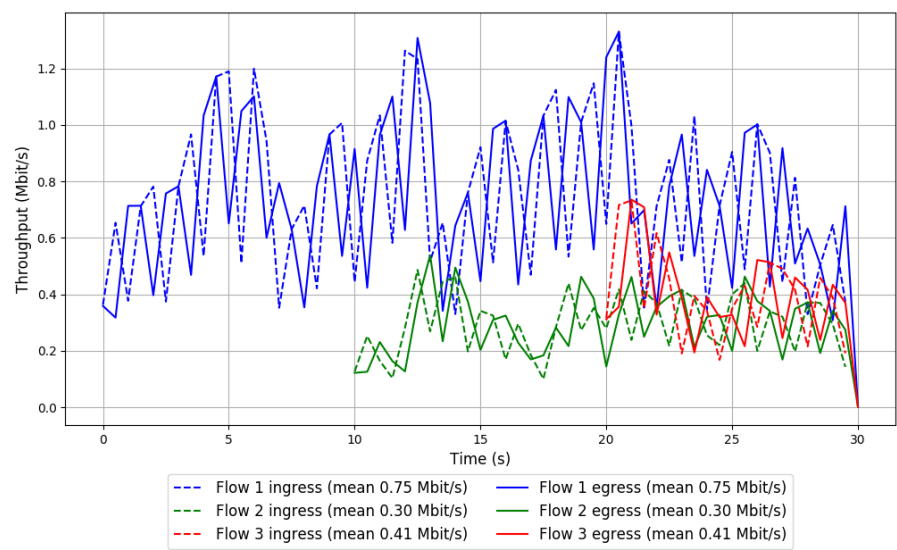
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 141.381 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

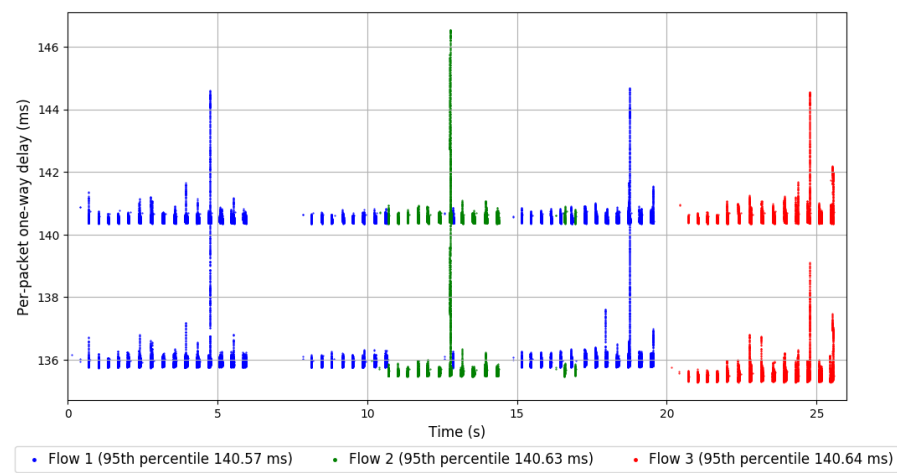
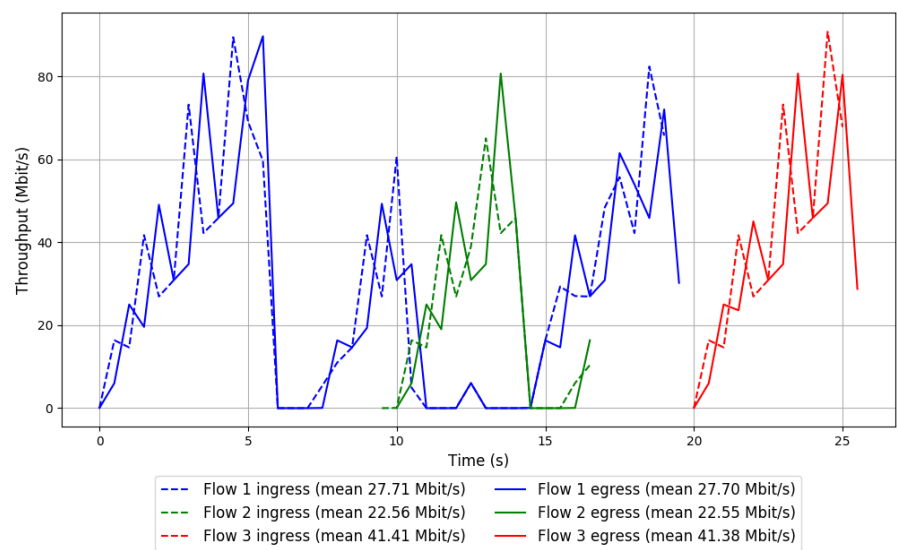


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-21 18:10:17
End at: 2018-02-21 18:10:47

# Below is generated by plot.py at 2018-02-21 23:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.04 Mbit/s
95th percentile per-packet one-way delay: 140.599 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 27.70 Mbit/s
95th percentile per-packet one-way delay: 140.571 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.55 Mbit/s
95th percentile per-packet one-way delay: 140.635 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 41.38 Mbit/s
95th percentile per-packet one-way delay: 140.642 ms
Loss rate: 0.00%
```


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

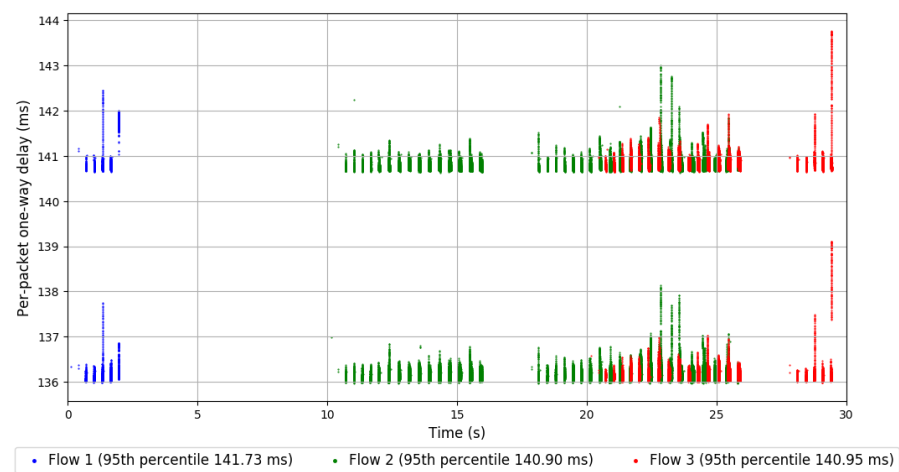
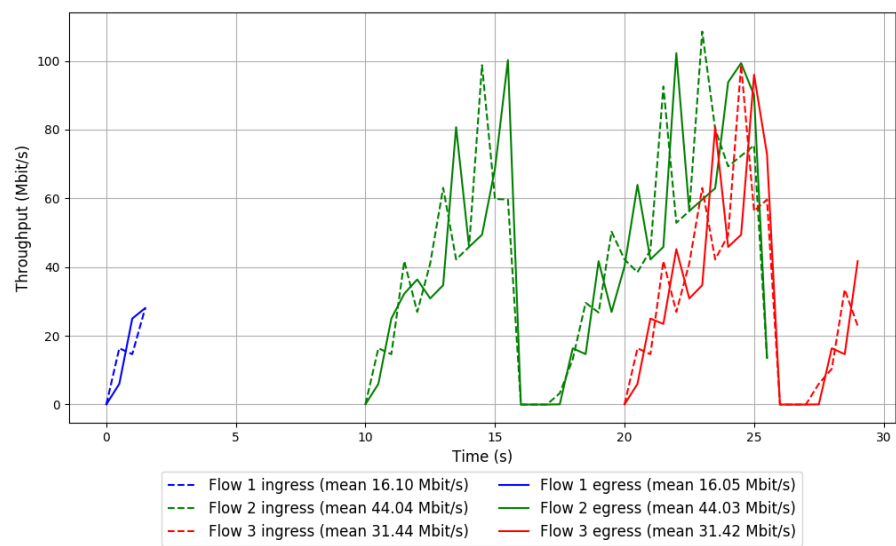


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-21 18:30:17
End at: 2018-02-21 18:30:47

# Below is generated by plot.py at 2018-02-21 23:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.51 Mbit/s
95th percentile per-packet one-way delay: 140.921 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 16.05 Mbit/s
95th percentile per-packet one-way delay: 141.734 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.03 Mbit/s
95th percentile per-packet one-way delay: 140.895 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.42 Mbit/s
95th percentile per-packet one-way delay: 140.949 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-02-21 18:50:23

End at: 2018-02-21 18:50:53

Below is generated by plot.py at 2018-02-21 23:59:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 347.73 Mbit/s

95th percentile per-packet one-way delay: 137.527 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 183.92 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 177.16 Mbit/s

95th percentile per-packet one-way delay: 137.274 ms

Loss rate: 0.01%

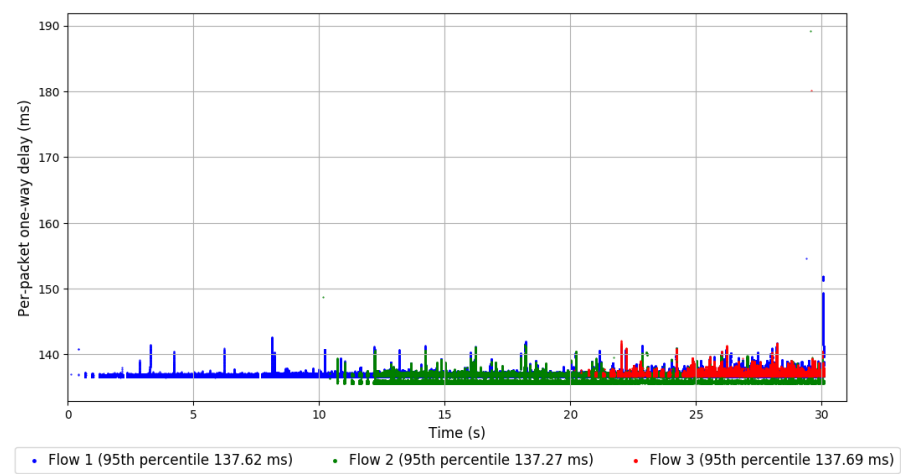
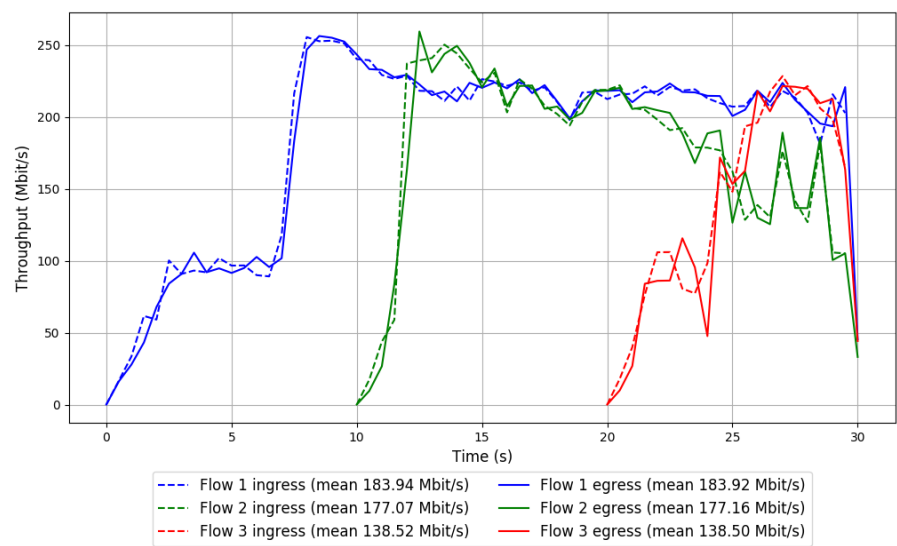
-- Flow 3:

Average throughput: 138.50 Mbit/s

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

Loss rate: 0.02%

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

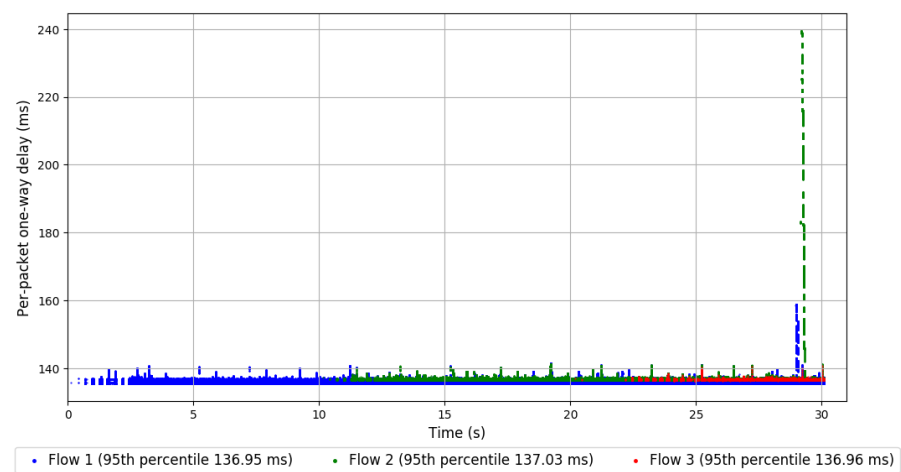
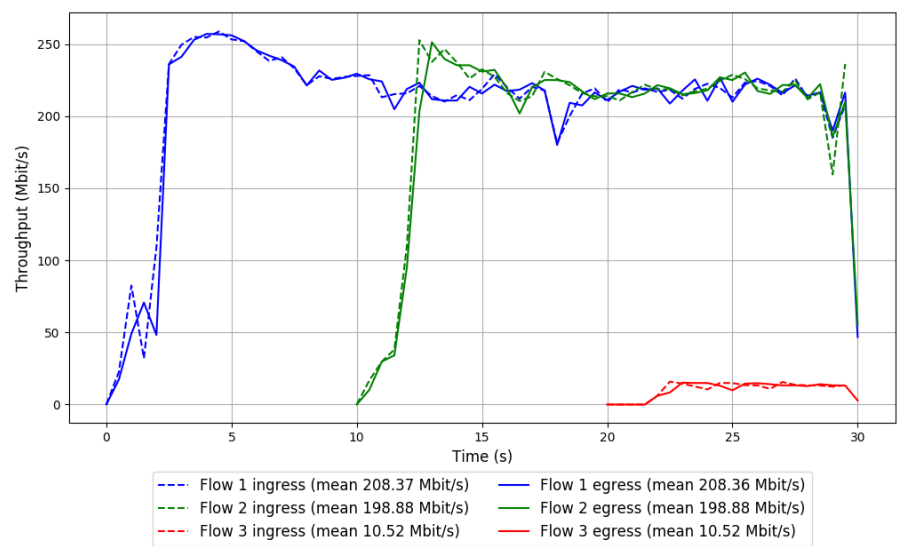


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-21 19:11:08
End at: 2018-02-21 19:11:38

# Below is generated by plot.py at 2018-02-22 00:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 344.26 Mbit/s
95th percentile per-packet one-way delay: 136.982 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.36 Mbit/s
95th percentile per-packet one-way delay: 136.948 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 198.88 Mbit/s
95th percentile per-packet one-way delay: 137.027 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.52 Mbit/s
95th percentile per-packet one-way delay: 136.960 ms
Loss rate: 0.02%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-21 19:31:50

End at: 2018-02-21 19:32:20

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 173.59 Mbit/s

95th percentile per-packet one-way delay: 140.649 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 18.37 Mbit/s

95th percentile per-packet one-way delay: 140.566 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 203.40 Mbit/s

95th percentile per-packet one-way delay: 140.655 ms

Loss rate: 0.03%

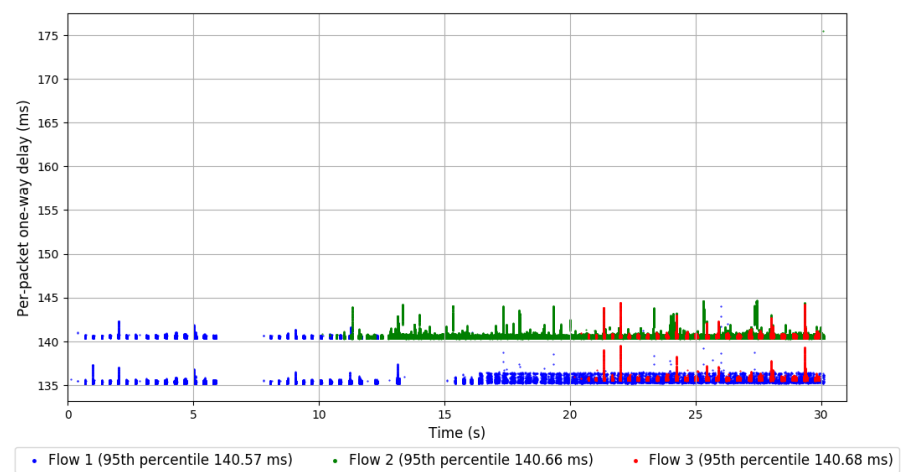
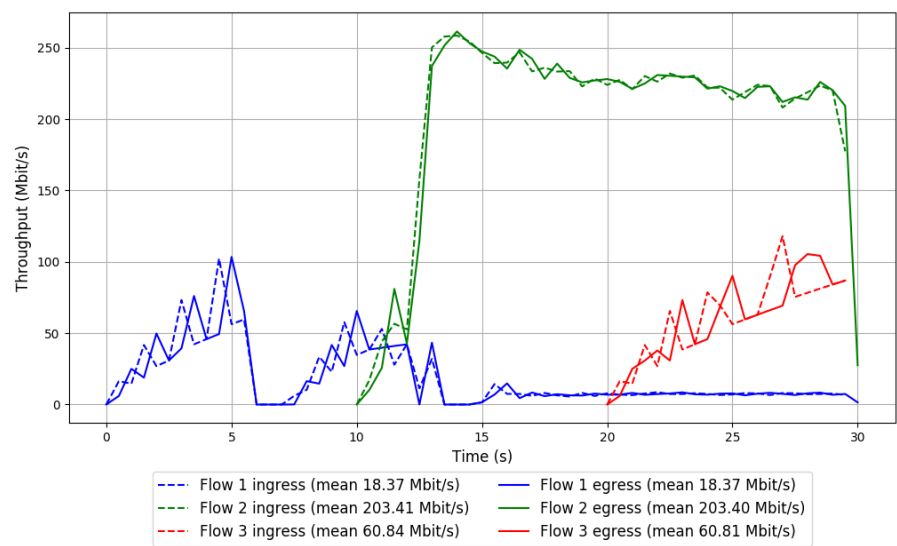
-- Flow 3:

Average throughput: 60.81 Mbit/s

95th percentile per-packet one-way delay: 140.677 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-21 19:52:11

End at: 2018-02-21 19:52:41

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.79 Mbit/s

95th percentile per-packet one-way delay: 140.542 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 206.79 Mbit/s

95th percentile per-packet one-way delay: 140.517 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 12.84 Mbit/s

95th percentile per-packet one-way delay: 140.878 ms

Loss rate: 0.02%

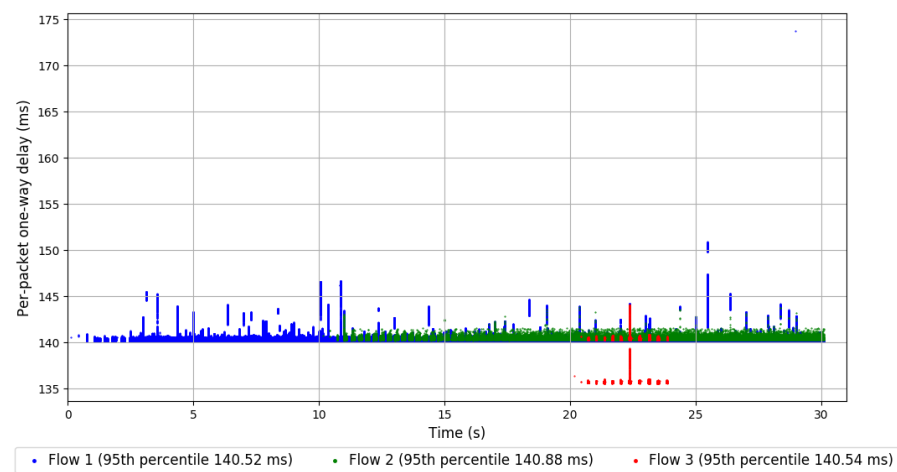
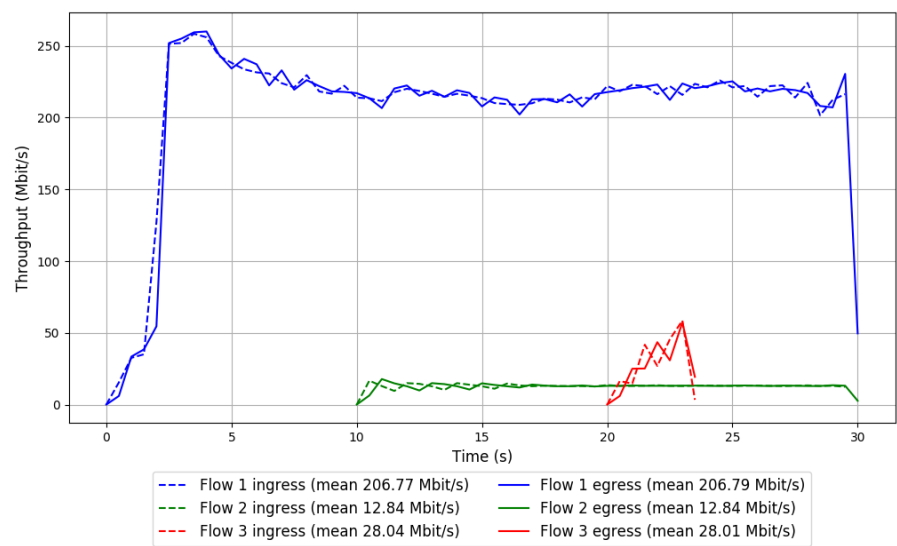
-- Flow 3:

Average throughput: 28.01 Mbit/s

95th percentile per-packet one-way delay: 140.545 ms

Loss rate: 0.00%

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

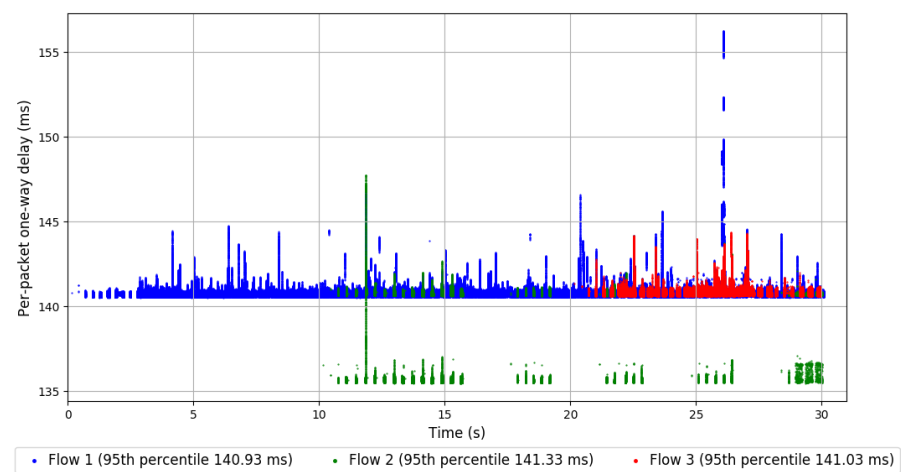
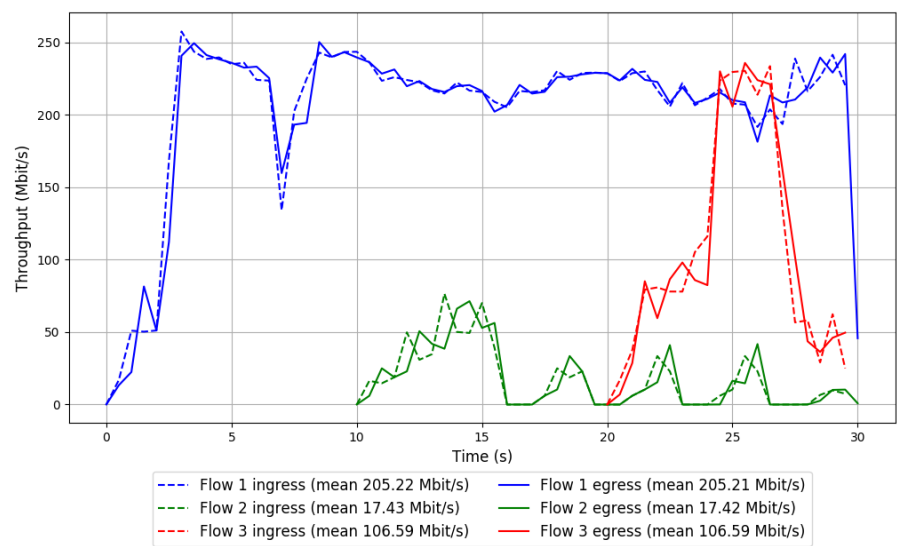


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-21 20:12:49
End at: 2018-02-21 20:13:19

# Below is generated by plot.py at 2018-02-22 00:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 251.64 Mbit/s
95th percentile per-packet one-way delay: 140.968 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 205.21 Mbit/s
95th percentile per-packet one-way delay: 140.931 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 17.42 Mbit/s
95th percentile per-packet one-way delay: 141.332 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 106.59 Mbit/s
95th percentile per-packet one-way delay: 141.027 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-21 20:33:09

End at: 2018-02-21 20:33:39

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 48.81 Mbit/s

95th percentile per-packet one-way delay: 140.977 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 28.97 Mbit/s

95th percentile per-packet one-way delay: 140.988 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.71 Mbit/s

95th percentile per-packet one-way delay: 140.953 ms

Loss rate: 0.00%

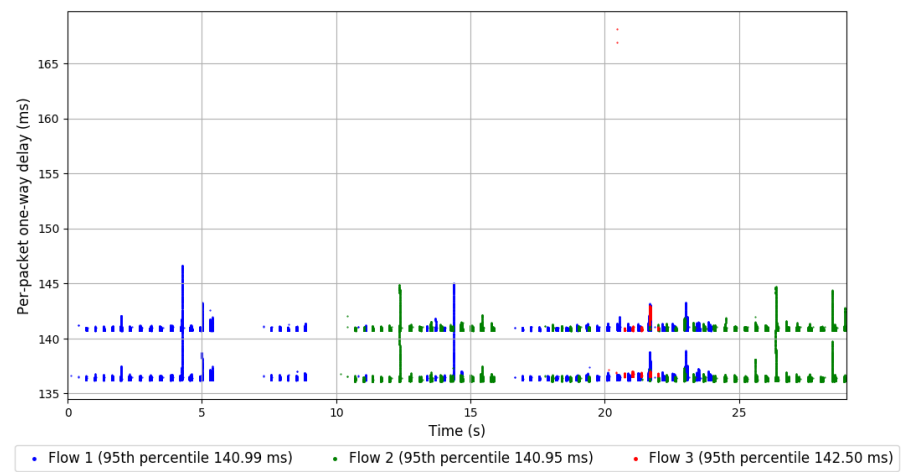
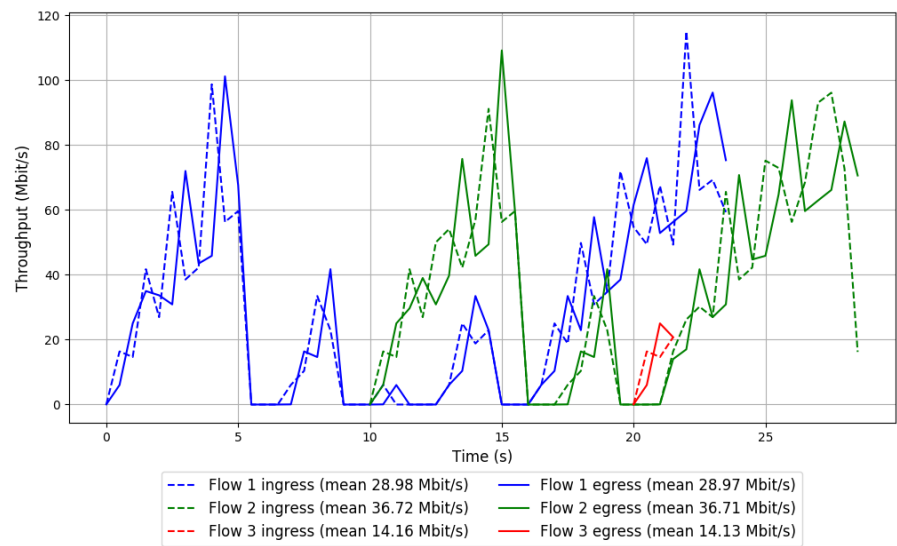
-- Flow 3:

Average throughput: 14.13 Mbit/s

95th percentile per-packet one-way delay: 142.499 ms

Loss rate: 0.00%

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

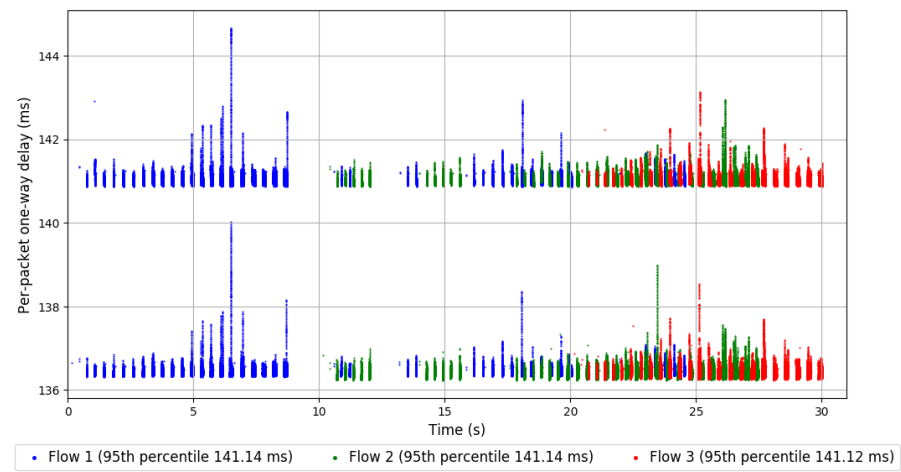
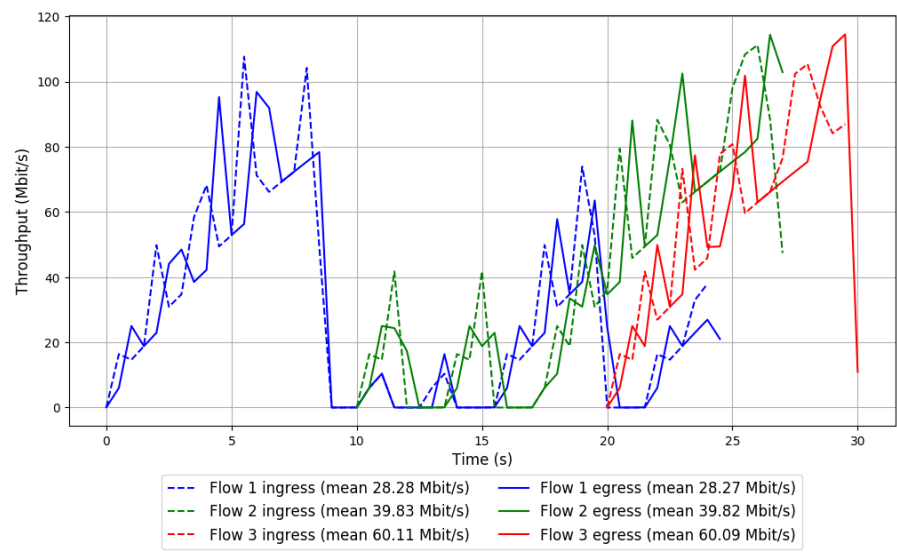


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-21 20:53:13
End at: 2018-02-21 20:53:43

# Below is generated by plot.py at 2018-02-22 00:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.01 Mbit/s
95th percentile per-packet one-way delay: 141.136 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 28.27 Mbit/s
95th percentile per-packet one-way delay: 141.142 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.82 Mbit/s
95th percentile per-packet one-way delay: 141.142 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 60.09 Mbit/s
95th percentile per-packet one-way delay: 141.117 ms
Loss rate: 0.00%
```


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

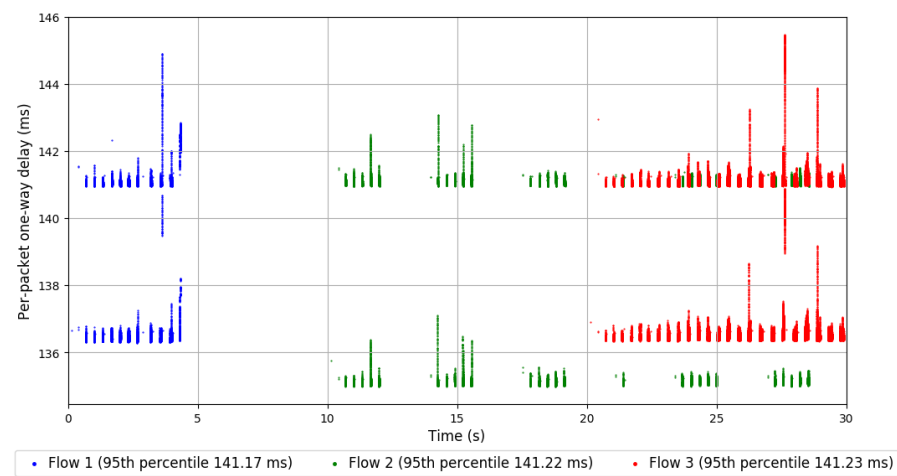
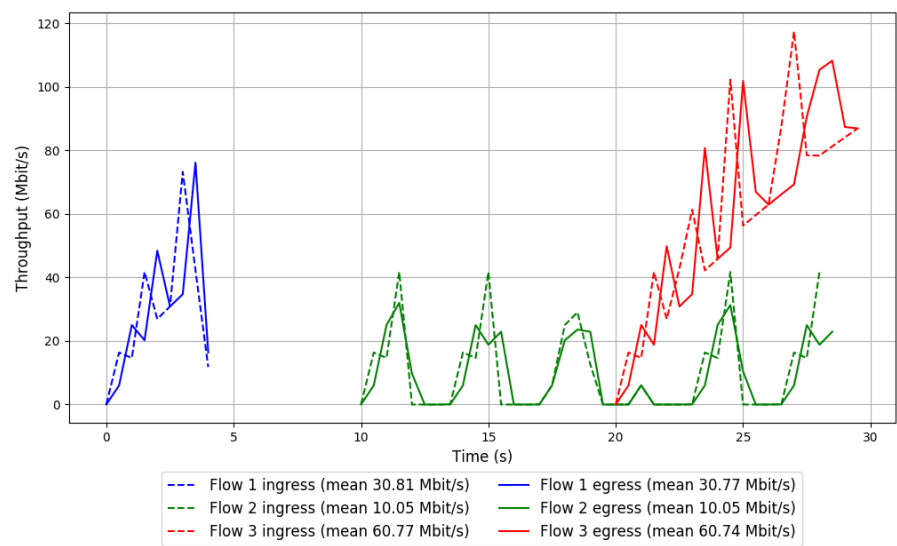


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-21 21:13:22
End at: 2018-02-21 21:13:52

# Below is generated by plot.py at 2018-02-22 00:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.46 Mbit/s
95th percentile per-packet one-way delay: 141.224 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 30.77 Mbit/s
95th percentile per-packet one-way delay: 141.168 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.05 Mbit/s
95th percentile per-packet one-way delay: 141.221 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 60.74 Mbit/s
95th percentile per-packet one-way delay: 141.232 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-21 18:09:25

End at: 2018-02-21 18:09:55

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 38.76 Mbit/s

95th percentile per-packet one-way delay: 142.550 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 21.58 Mbit/s

95th percentile per-packet one-way delay: 141.912 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.43 Mbit/s

95th percentile per-packet one-way delay: 141.649 ms

Loss rate: 0.87%

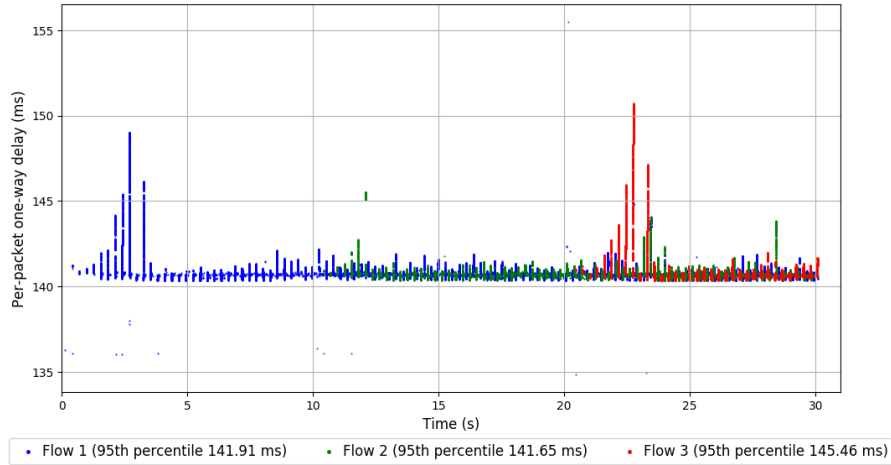
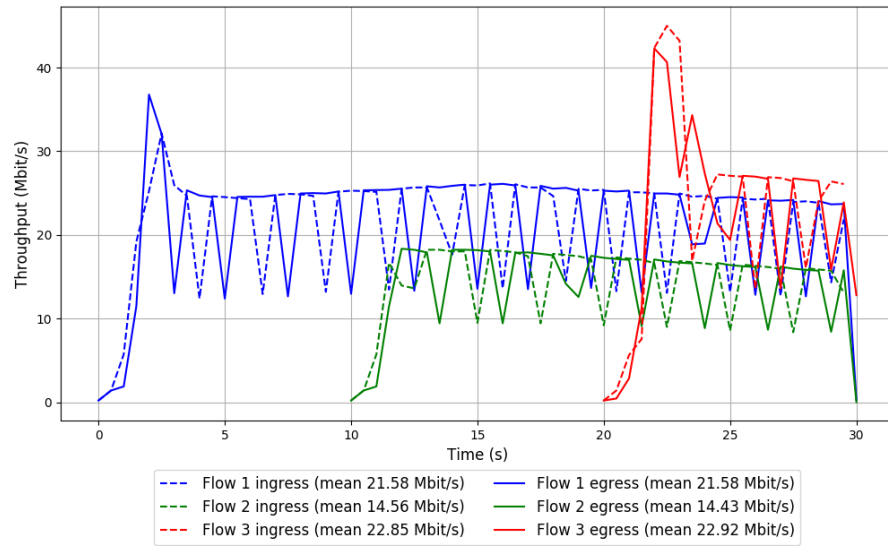
-- Flow 3:

Average throughput: 22.92 Mbit/s

95th percentile per-packet one-way delay: 145.461 ms

Loss rate: 0.01%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-21 18:29:25

End at: 2018-02-21 18:29:55

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 48.87 Mbit/s

95th percentile per-packet one-way delay: 141.880 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 28.47 Mbit/s

95th percentile per-packet one-way delay: 141.688 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 20.65 Mbit/s

95th percentile per-packet one-way delay: 142.881 ms

Loss rate: 0.00%

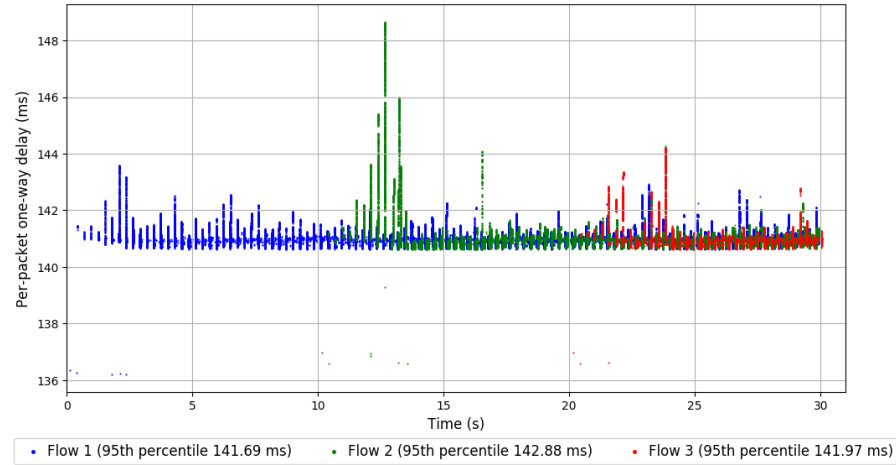
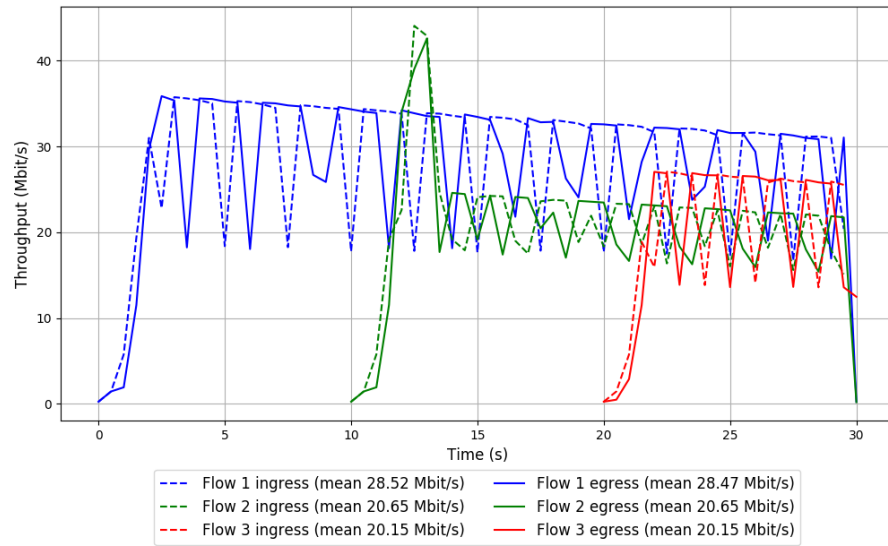
-- Flow 3:

Average throughput: 20.15 Mbit/s

95th percentile per-packet one-way delay: 141.974 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-21 18:49:31

End at: 2018-02-21 18:50:01

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.60 Mbit/s

95th percentile per-packet one-way delay: 138.112 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 26.39 Mbit/s

95th percentile per-packet one-way delay: 138.295 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.42 Mbit/s

95th percentile per-packet one-way delay: 137.988 ms

Loss rate: 0.00%

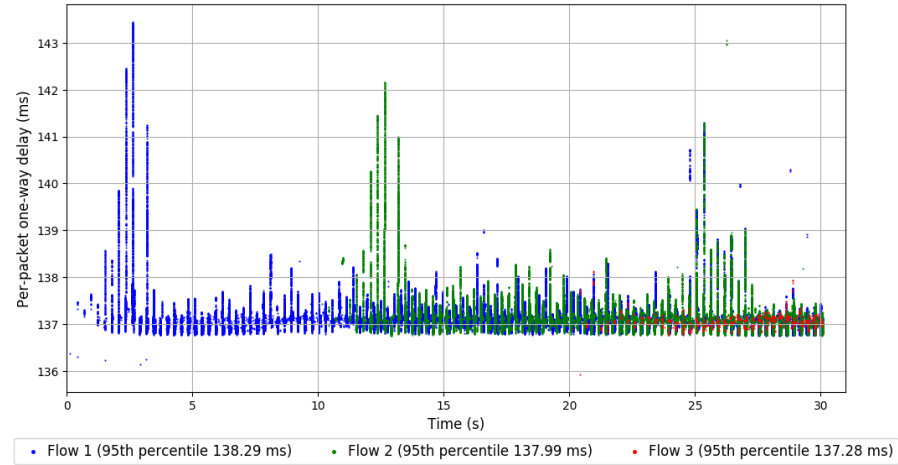
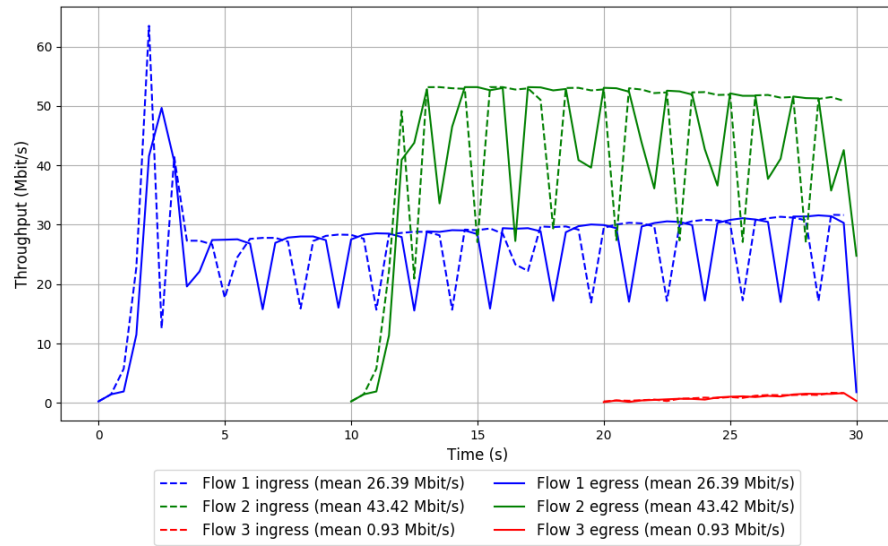
-- Flow 3:

Average throughput: 0.93 Mbit/s

95th percentile per-packet one-way delay: 137.277 ms

Loss rate: 0.65%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-21 19:10:15

End at: 2018-02-21 19:10:45

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.03 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.15 Mbit/s

95th percentile per-packet one-way delay: 138.046 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.91 Mbit/s

95th percentile per-packet one-way delay: 138.468 ms

Loss rate: 0.00%

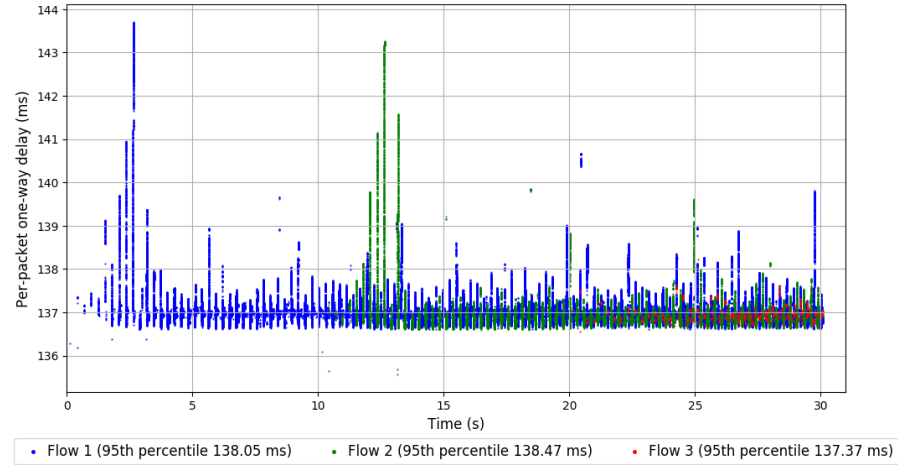
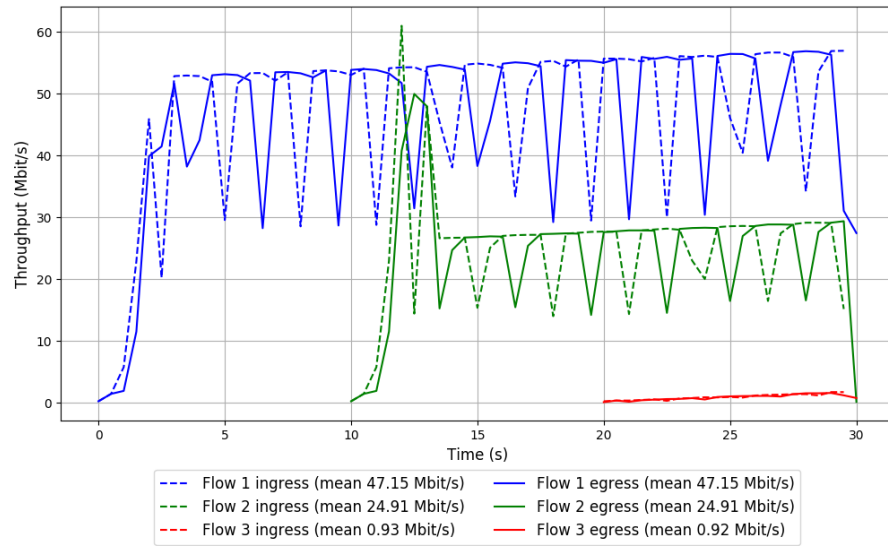
-- Flow 3:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 137.368 ms

Loss rate: 0.78%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-21 19:30:58

End at: 2018-02-21 19:31:28

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.63 Mbit/s

95th percentile per-packet one-way delay: 142.952 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.55 Mbit/s

95th percentile per-packet one-way delay: 142.063 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.70 Mbit/s

95th percentile per-packet one-way delay: 143.751 ms

Loss rate: 0.00%

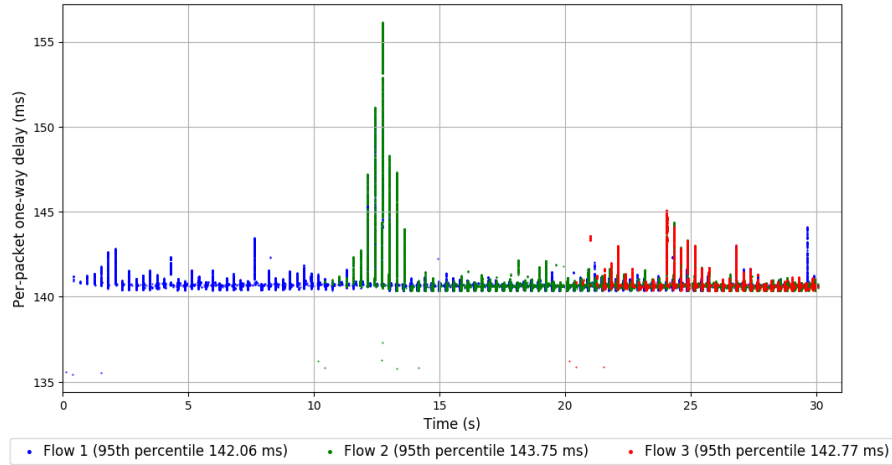
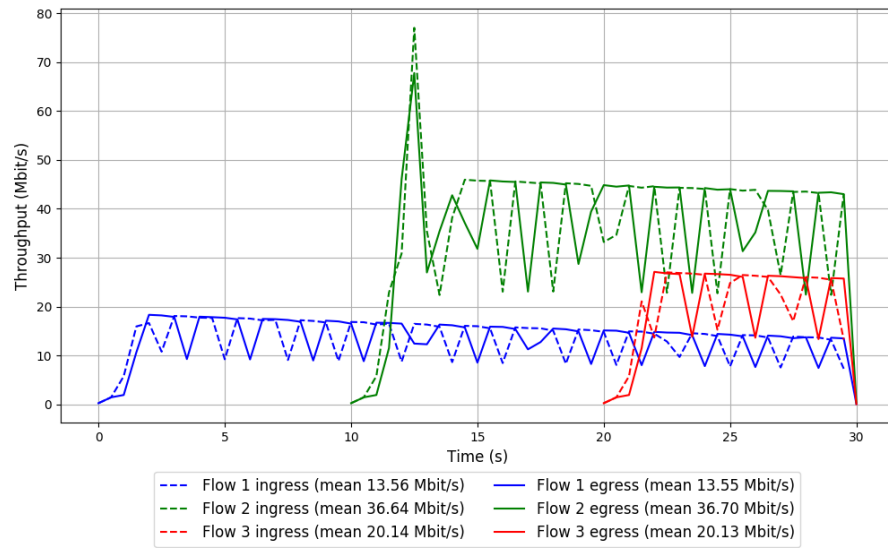
-- Flow 3:

Average throughput: 20.13 Mbit/s

95th percentile per-packet one-way delay: 142.771 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-21 19:51:19

End at: 2018-02-21 19:51:49

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.58 Mbit/s

95th percentile per-packet one-way delay: 142.359 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 27.34 Mbit/s

95th percentile per-packet one-way delay: 142.418 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 20.64 Mbit/s

95th percentile per-packet one-way delay: 143.117 ms

Loss rate: 0.00%

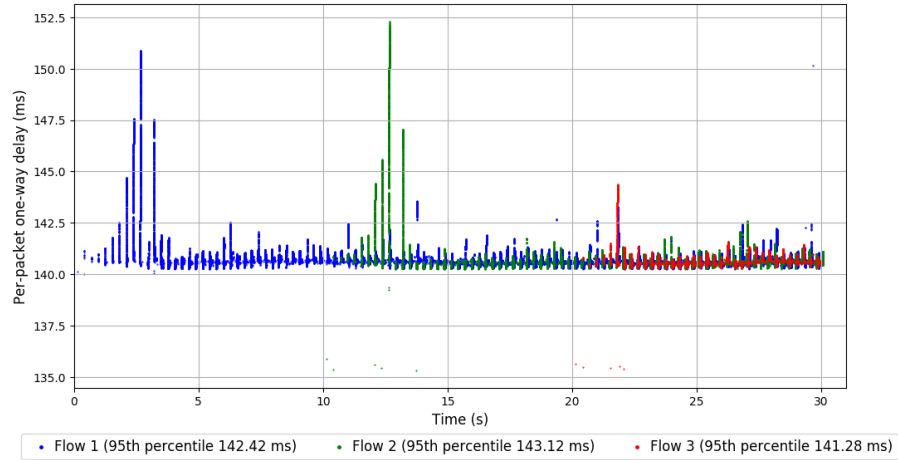
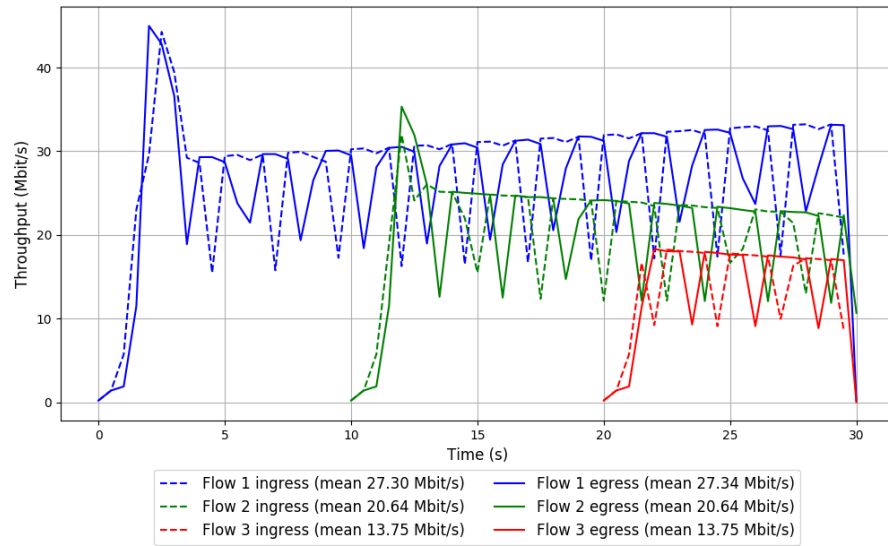
-- Flow 3:

Average throughput: 13.75 Mbit/s

95th percentile per-packet one-way delay: 141.279 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-21 20:11:56

End at: 2018-02-21 20:12:26

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.30 Mbit/s

95th percentile per-packet one-way delay: 144.553 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 33.48 Mbit/s

95th percentile per-packet one-way delay: 142.716 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 23.15 Mbit/s

95th percentile per-packet one-way delay: 144.734 ms

Loss rate: 0.00%

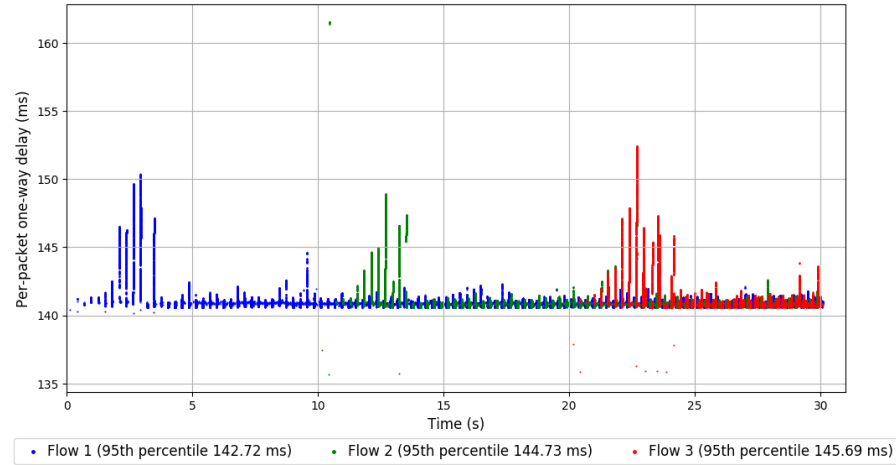
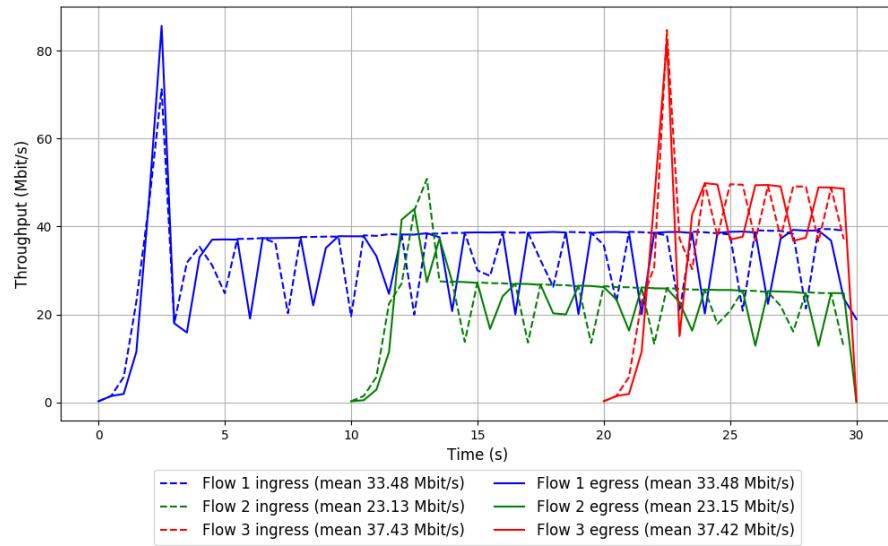
-- Flow 3:

Average throughput: 37.42 Mbit/s

95th percentile per-packet one-way delay: 145.689 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-21 20:32:18

End at: 2018-02-21 20:32:48

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.61 Mbit/s

95th percentile per-packet one-way delay: 141.825 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 15.95 Mbit/s

95th percentile per-packet one-way delay: 141.799 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.52 Mbit/s

95th percentile per-packet one-way delay: 142.063 ms

Loss rate: 0.00%

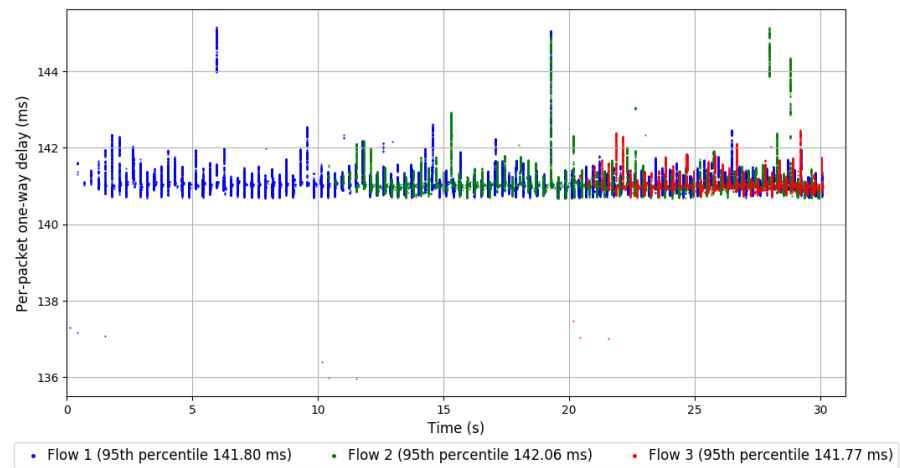
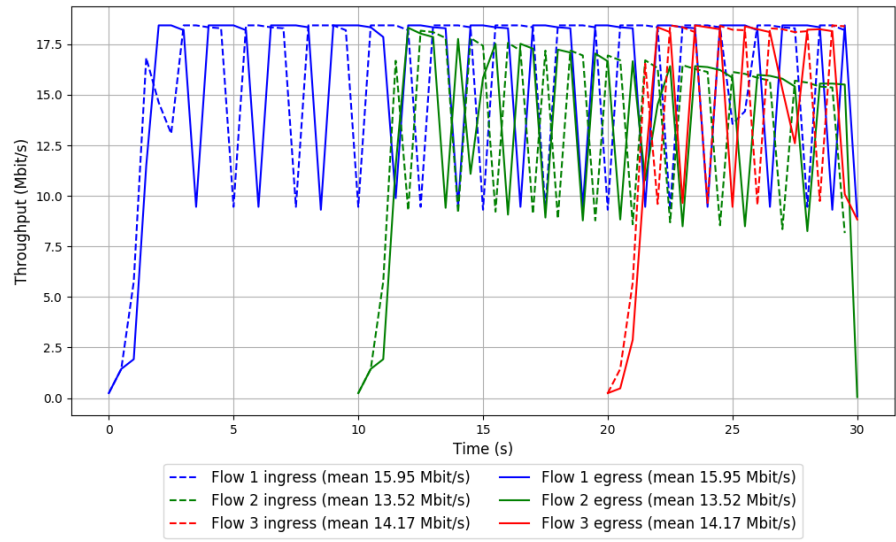
-- Flow 3:

Average throughput: 14.17 Mbit/s

95th percentile per-packet one-way delay: 141.774 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-21 20:52:22

End at: 2018-02-21 20:52:52

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.87 Mbit/s

95th percentile per-packet one-way delay: 143.328 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 8.44 Mbit/s

95th percentile per-packet one-way delay: 141.841 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.44 Mbit/s

95th percentile per-packet one-way delay: 143.482 ms

Loss rate: 0.00%

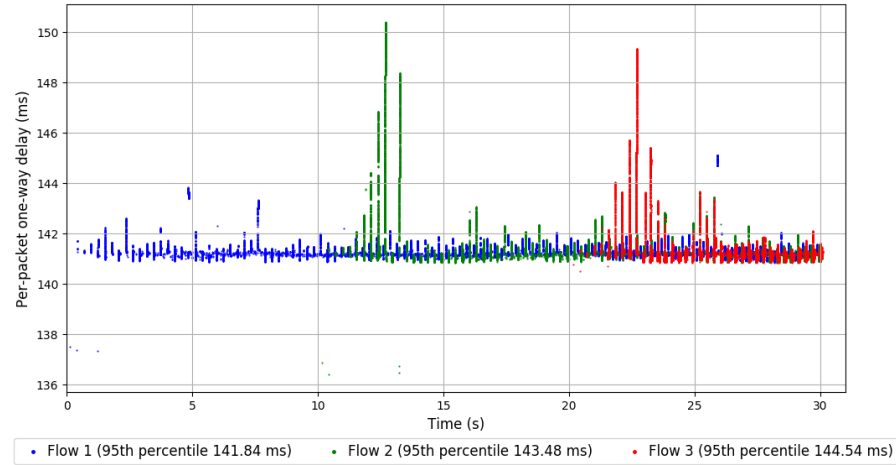
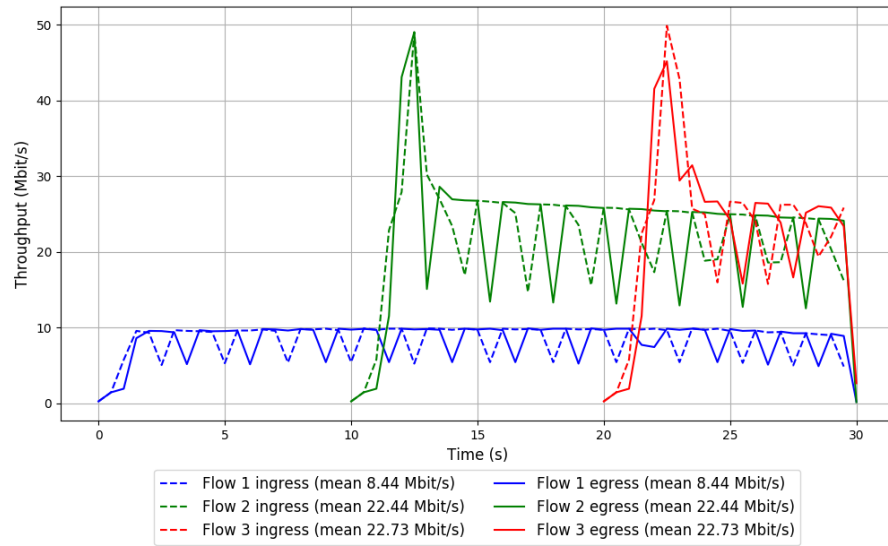
-- Flow 3:

Average throughput: 22.73 Mbit/s

95th percentile per-packet one-way delay: 144.542 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-21 21:12:31

End at: 2018-02-21 21:13:01

Below is generated by plot.py at 2018-02-22 00:00:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.29 Mbit/s

95th percentile per-packet one-way delay: 142.389 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.25 Mbit/s

95th percentile per-packet one-way delay: 142.028 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.10 Mbit/s

95th percentile per-packet one-way delay: 142.213 ms

Loss rate: 0.00%

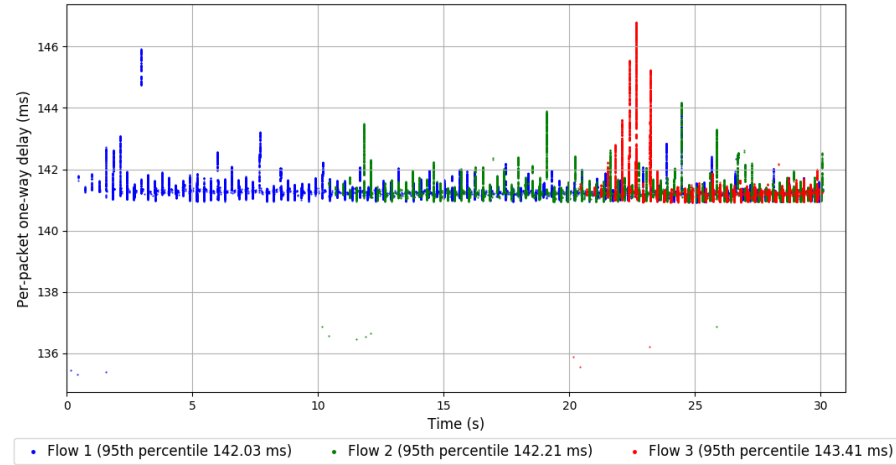
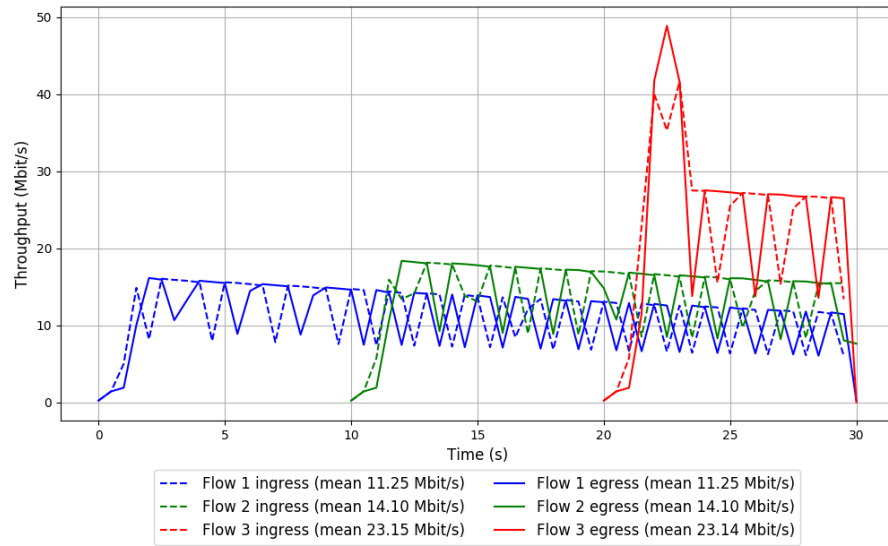
-- Flow 3:

Average throughput: 23.14 Mbit/s

95th percentile per-packet one-way delay: 143.415 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

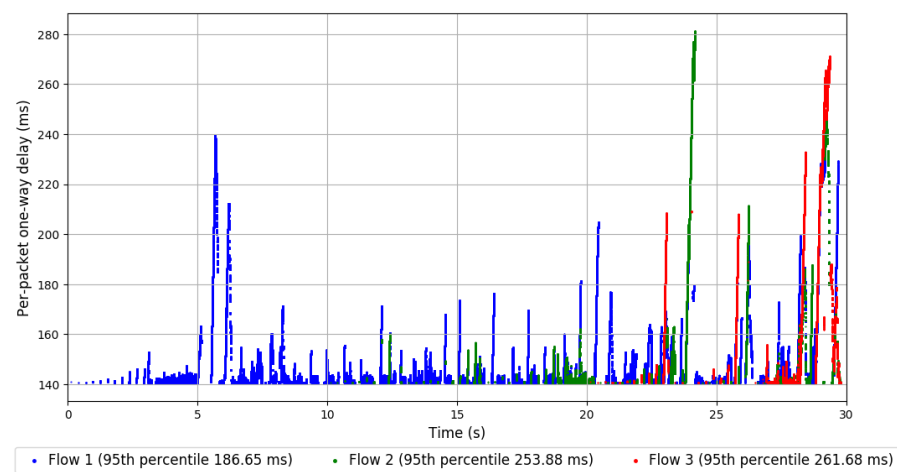
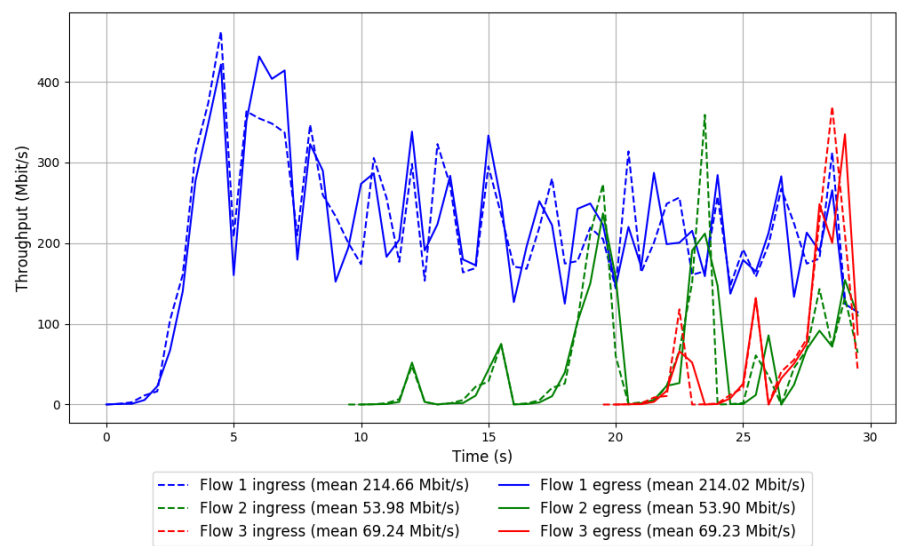


```
Run 1: Statistics of Verus

Start at: 2018-02-21 17:59:20
End at: 2018-02-21 17:59:50

# Below is generated by plot.py at 2018-02-22 00:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 271.51 Mbit/s
95th percentile per-packet one-way delay: 217.340 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 214.02 Mbit/s
95th percentile per-packet one-way delay: 186.646 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.90 Mbit/s
95th percentile per-packet one-way delay: 253.877 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 69.23 Mbit/s
95th percentile per-packet one-way delay: 261.677 ms
Loss rate: 0.12%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-21 18:19:28

End at: 2018-02-21 18:19:58

Below is generated by plot.py at 2018-02-22 00:00:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.95 Mbit/s

95th percentile per-packet one-way delay: 175.660 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 119.85 Mbit/s

95th percentile per-packet one-way delay: 168.430 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 140.66 Mbit/s

95th percentile per-packet one-way delay: 180.278 ms

Loss rate: 0.05%

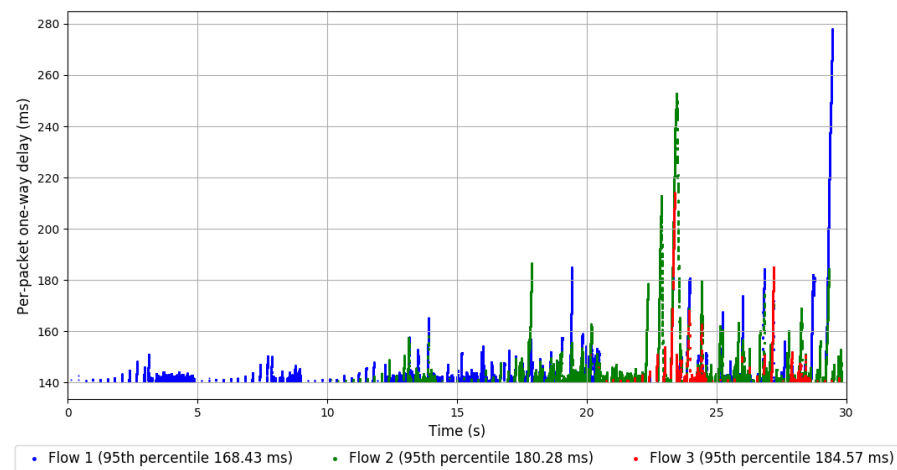
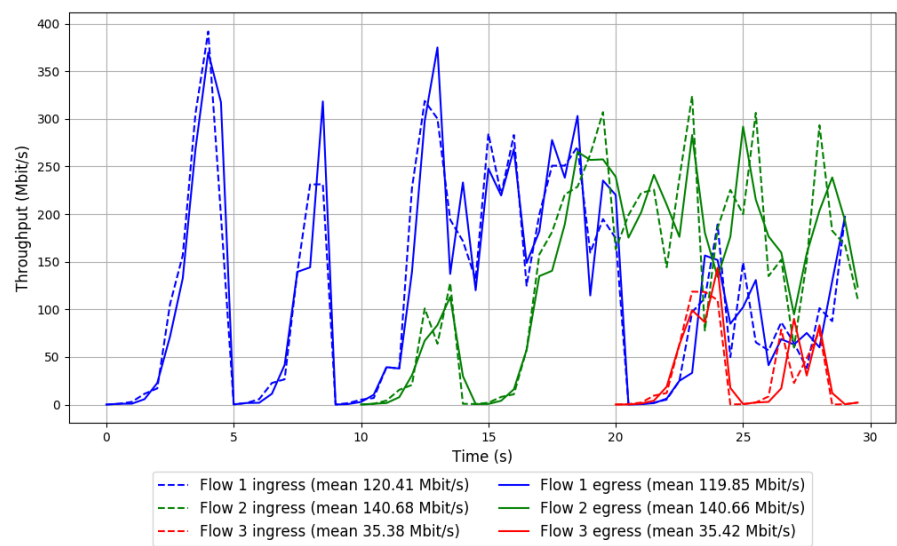
-- Flow 3:

Average throughput: 35.42 Mbit/s

95th percentile per-packet one-way delay: 184.573 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-21 18:39:22

End at: 2018-02-21 18:39:52

Below is generated by plot.py at 2018-02-22 00:00:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.58 Mbit/s

95th percentile per-packet one-way delay: 192.438 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 211.99 Mbit/s

95th percentile per-packet one-way delay: 175.595 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 78.23 Mbit/s

95th percentile per-packet one-way delay: 235.499 ms

Loss rate: 0.00%

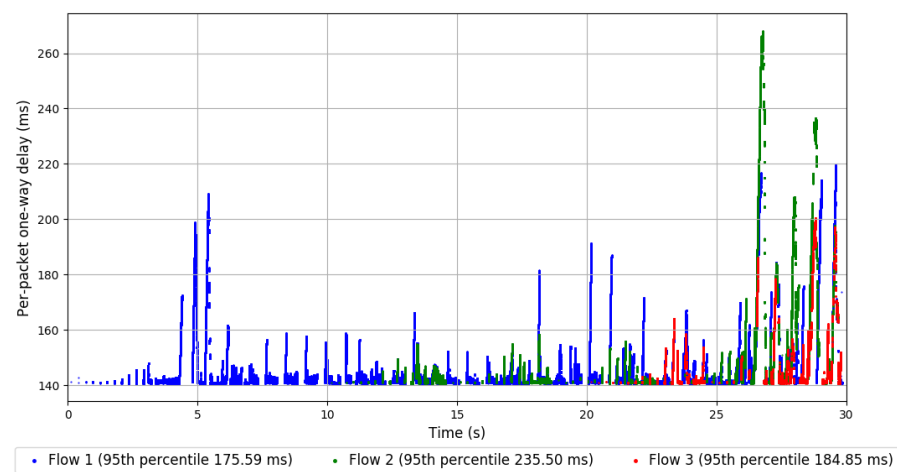
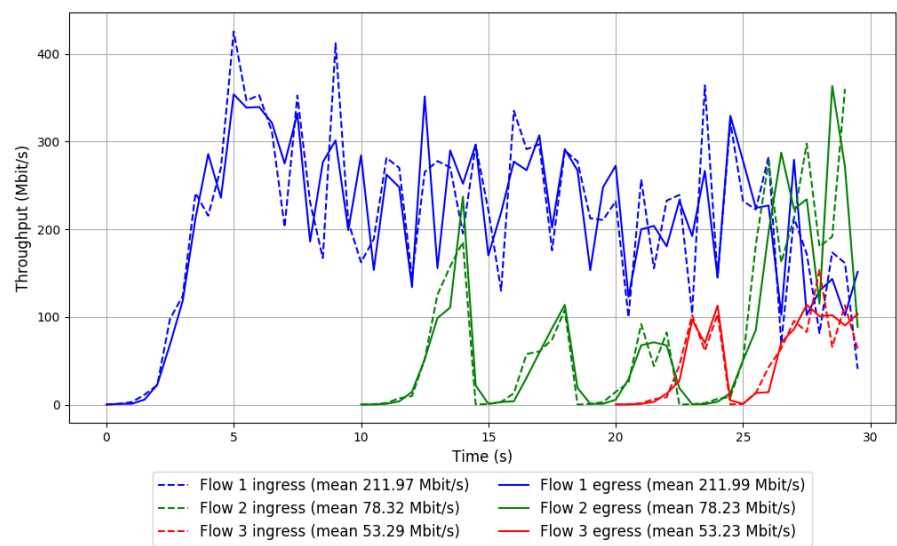
-- Flow 3:

Average throughput: 53.23 Mbit/s

95th percentile per-packet one-way delay: 184.852 ms

Loss rate: 0.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-21 19:00:12

End at: 2018-02-21 19:00:42

Below is generated by plot.py at 2018-02-22 00:01:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 249.14 Mbit/s

95th percentile per-packet one-way delay: 171.912 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 168.82 Mbit/s

95th percentile per-packet one-way delay: 161.408 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.94 Mbit/s

95th percentile per-packet one-way delay: 229.981 ms

Loss rate: 0.00%

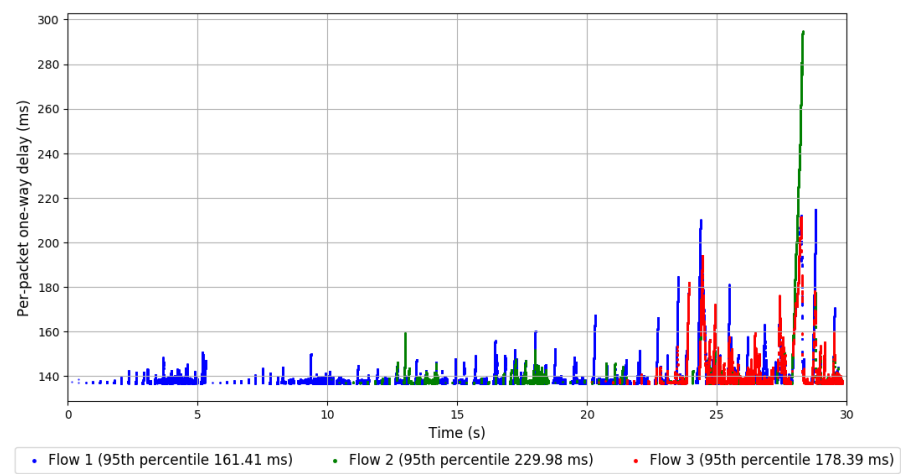
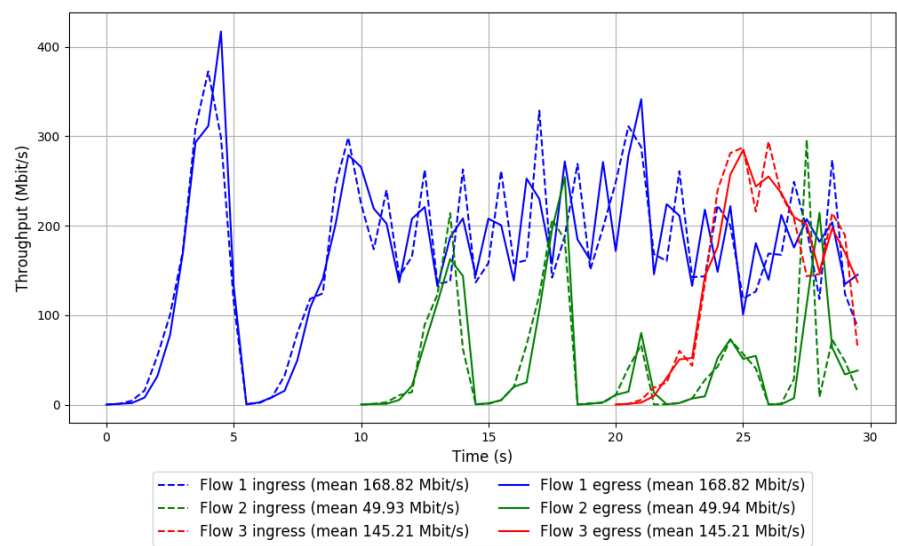
-- Flow 3:

Average throughput: 145.21 Mbit/s

95th percentile per-packet one-way delay: 178.390 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-21 19:20:53

End at: 2018-02-21 19:21:23

Below is generated by plot.py at 2018-02-22 00:01:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 250.70 Mbit/s

95th percentile per-packet one-way delay: 157.894 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 218.82 Mbit/s

95th percentile per-packet one-way delay: 158.721 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 38.40 Mbit/s

95th percentile per-packet one-way delay: 148.270 ms

Loss rate: 0.00%

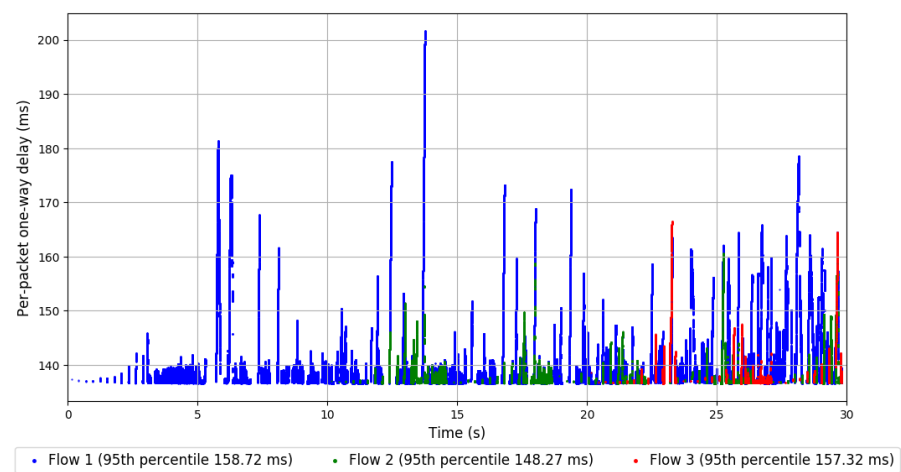
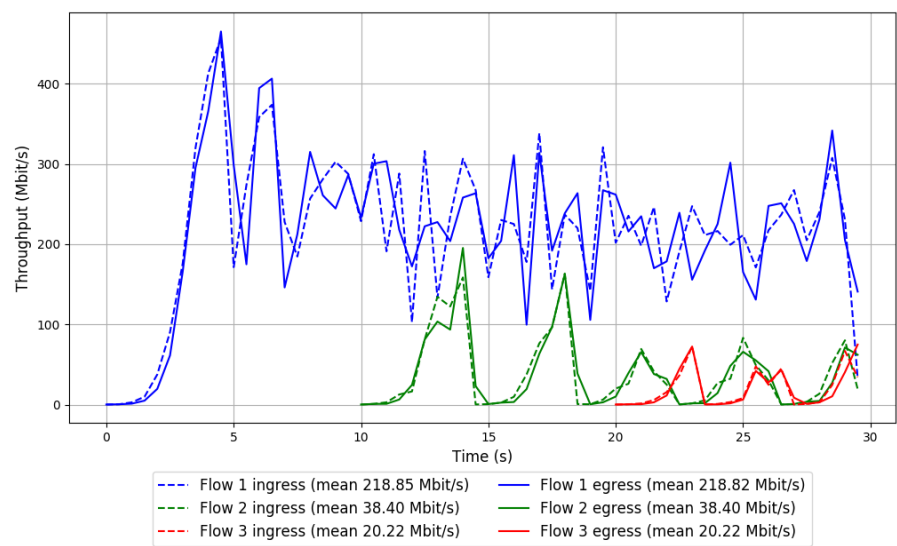
-- Flow 3:

Average throughput: 20.22 Mbit/s

95th percentile per-packet one-way delay: 157.324 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-21 19:41:16

End at: 2018-02-21 19:41:46

Below is generated by plot.py at 2018-02-22 00:01:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.64 Mbit/s

95th percentile per-packet one-way delay: 159.322 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 70.20 Mbit/s

95th percentile per-packet one-way delay: 154.962 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 132.91 Mbit/s

95th percentile per-packet one-way delay: 159.348 ms

Loss rate: 0.05%

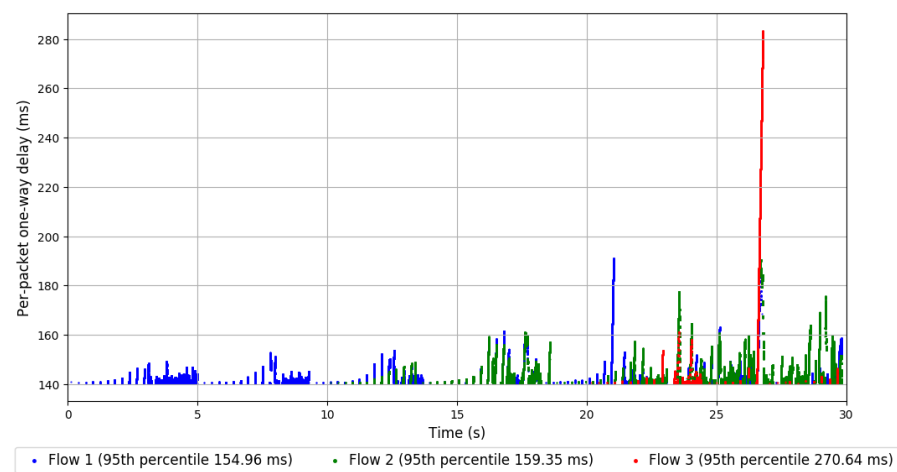
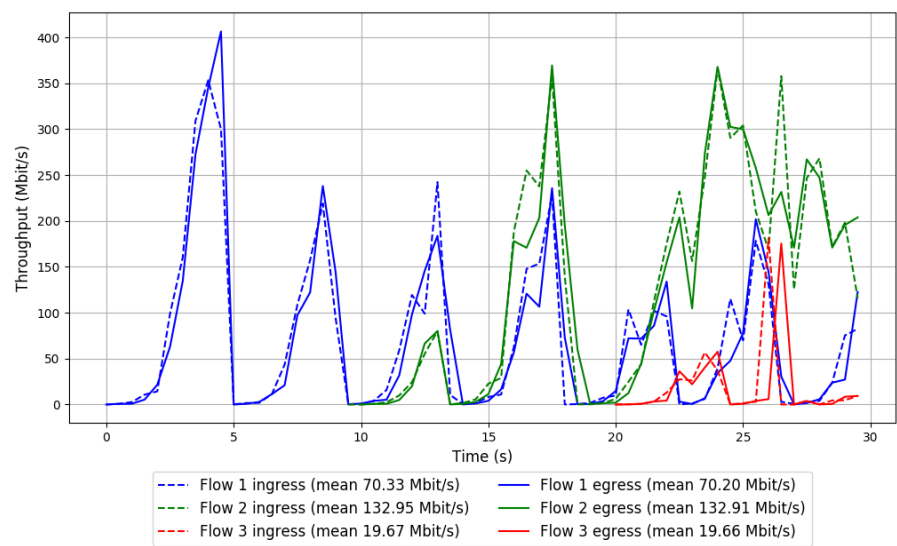
-- Flow 3:

Average throughput: 19.66 Mbit/s

95th percentile per-packet one-way delay: 270.639 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-21 20:01:45

End at: 2018-02-21 20:02:15

Below is generated by plot.py at 2018-02-22 00:02:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.68 Mbit/s

95th percentile per-packet one-way delay: 189.640 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 78.94 Mbit/s

95th percentile per-packet one-way delay: 157.139 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 79.09 Mbit/s

95th percentile per-packet one-way delay: 155.802 ms

Loss rate: 0.00%

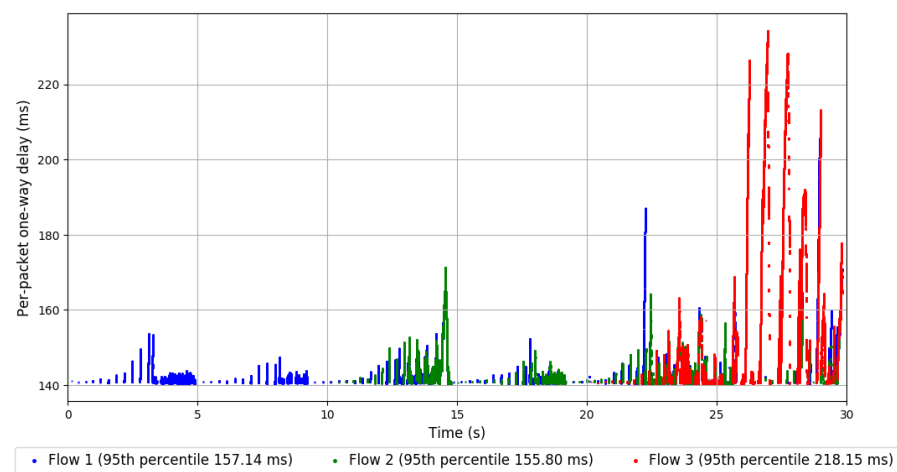
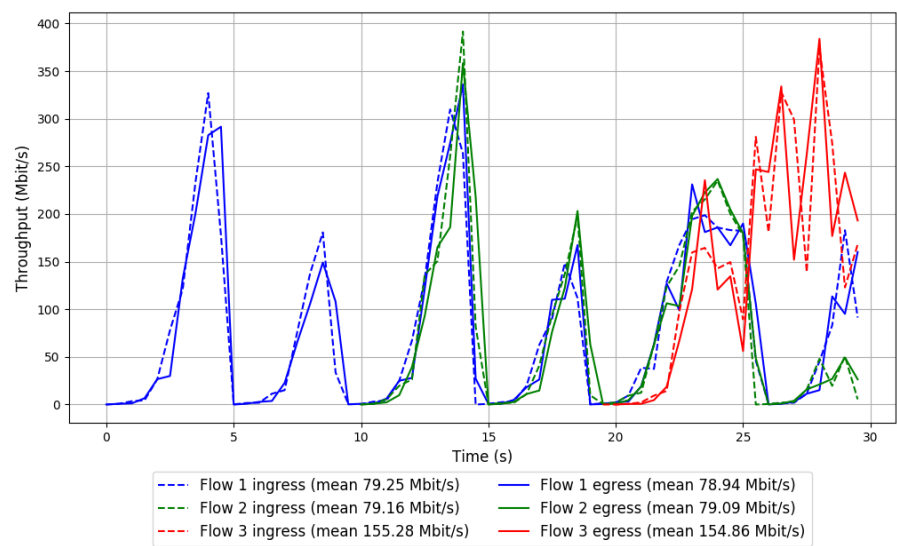
-- Flow 3:

Average throughput: 154.86 Mbit/s

95th percentile per-packet one-way delay: 218.150 ms

Loss rate: 0.03%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-21 20:22:24

End at: 2018-02-21 20:22:54

Below is generated by plot.py at 2018-02-22 00:03:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.12 Mbit/s

95th percentile per-packet one-way delay: 198.343 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 186.97 Mbit/s

95th percentile per-packet one-way delay: 202.493 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.34 Mbit/s

95th percentile per-packet one-way delay: 161.038 ms

Loss rate: 0.00%

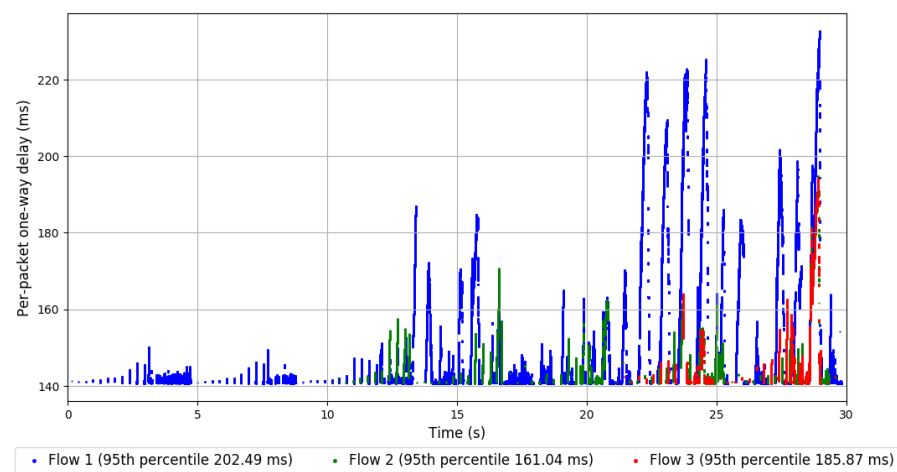
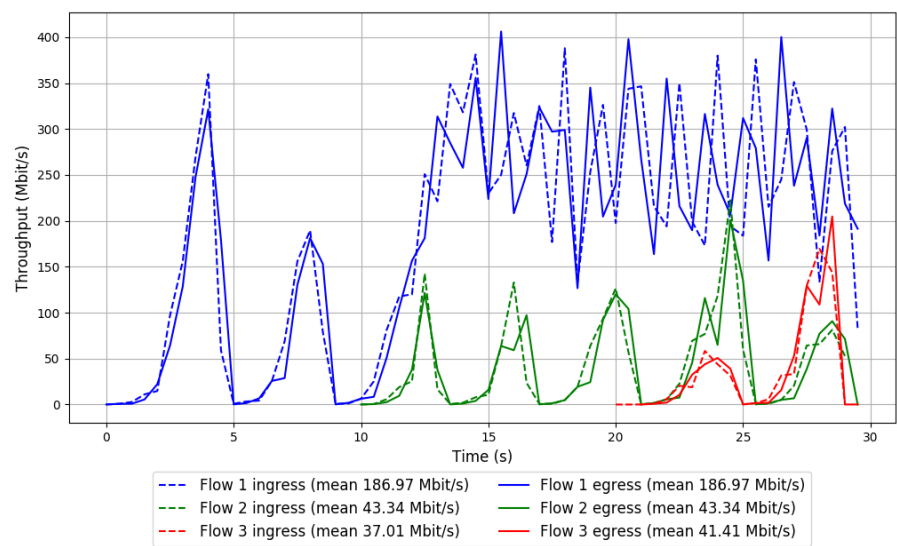
-- Flow 3:

Average throughput: 41.41 Mbit/s

95th percentile per-packet one-way delay: 185.868 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-21 20:42:20

End at: 2018-02-21 20:42:50

Below is generated by plot.py at 2018-02-22 00:03:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 214.44 Mbit/s

95th percentile per-packet one-way delay: 155.948 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 168.97 Mbit/s

95th percentile per-packet one-way delay: 157.027 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 44.77 Mbit/s

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

Loss rate: 0.00%

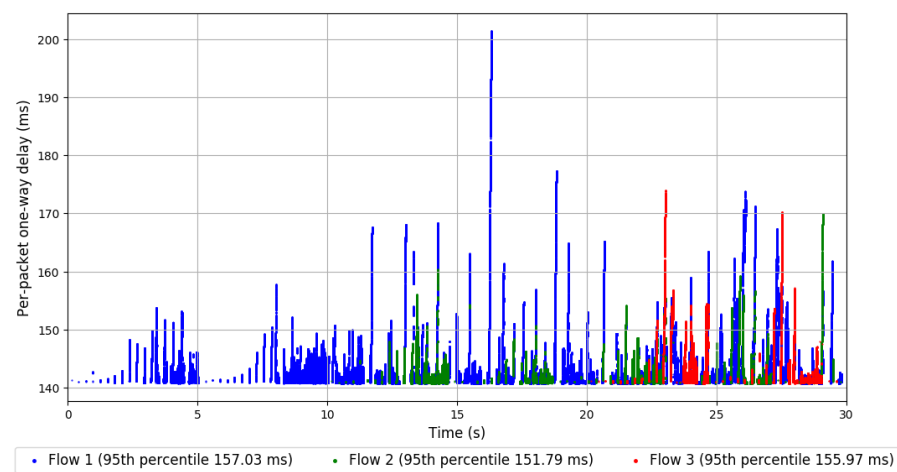
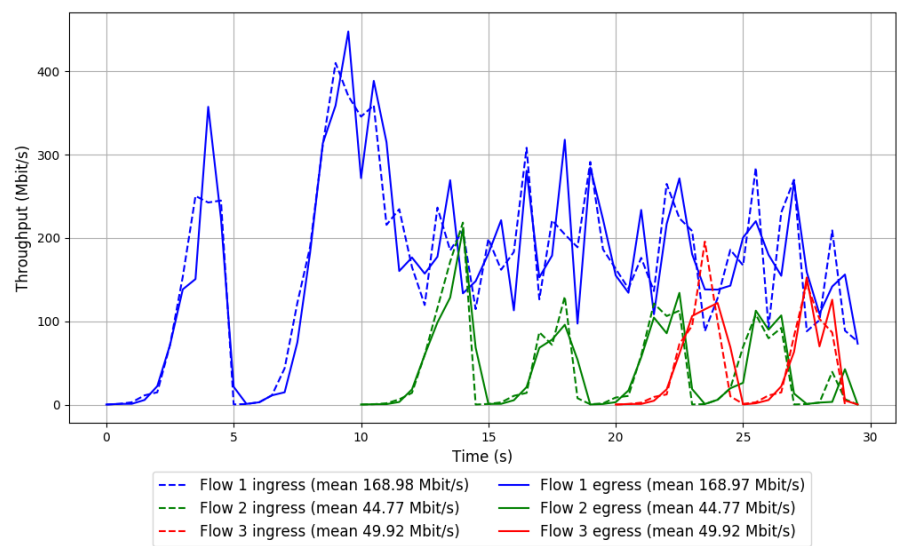
-- Flow 3:

Average throughput: 49.92 Mbit/s

95th percentile per-packet one-way delay: 155.974 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-21 21:02:27

End at: 2018-02-21 21:02:57

Below is generated by plot.py at 2018-02-22 00:03:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.24 Mbit/s

95th percentile per-packet one-way delay: 176.145 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 77.09 Mbit/s

95th percentile per-packet one-way delay: 147.324 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 79.09 Mbit/s

95th percentile per-packet one-way delay: 159.361 ms

Loss rate: 0.00%

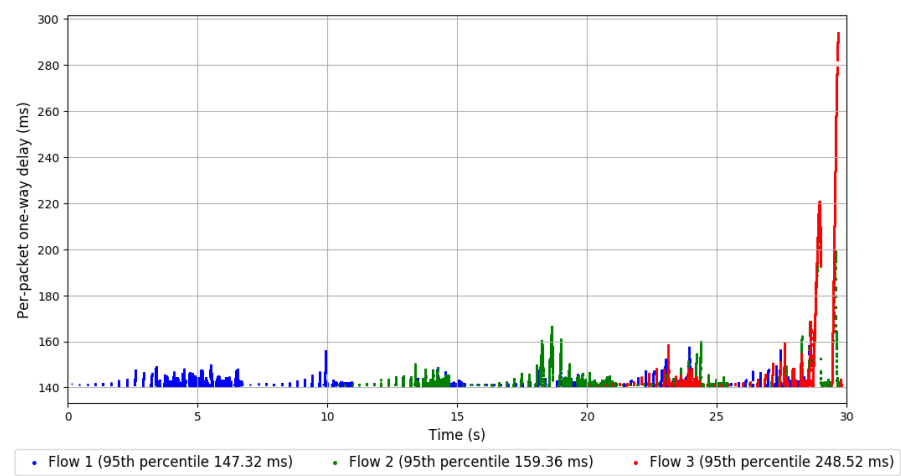
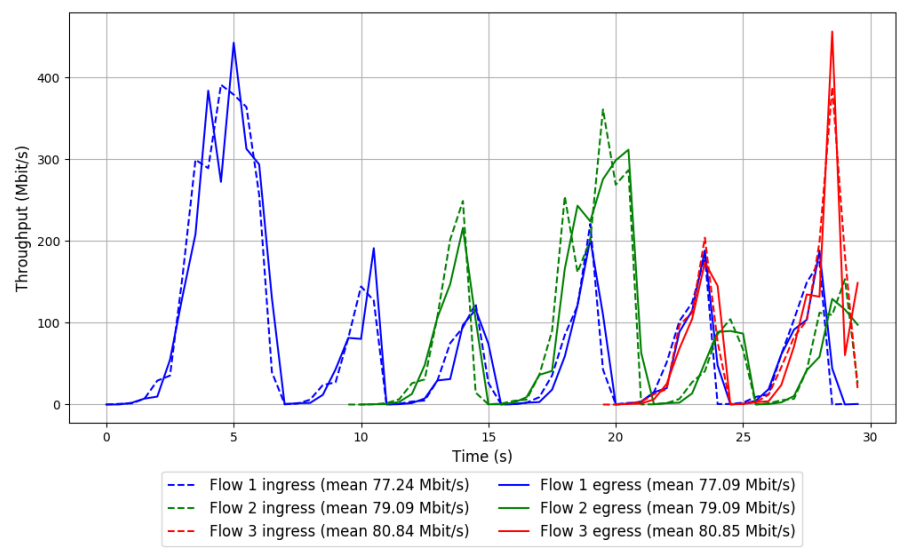
-- Flow 3:

Average throughput: 80.85 Mbit/s

95th percentile per-packet one-way delay: 248.518 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-21 18:01:24

End at: 2018-02-21 18:01:54

Below is generated by plot.py at 2018-02-22 00:04:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.82 Mbit/s

95th percentile per-packet one-way delay: 140.600 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 58.88 Mbit/s

95th percentile per-packet one-way delay: 140.578 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 68.95 Mbit/s

95th percentile per-packet one-way delay: 140.612 ms

Loss rate: 0.00%

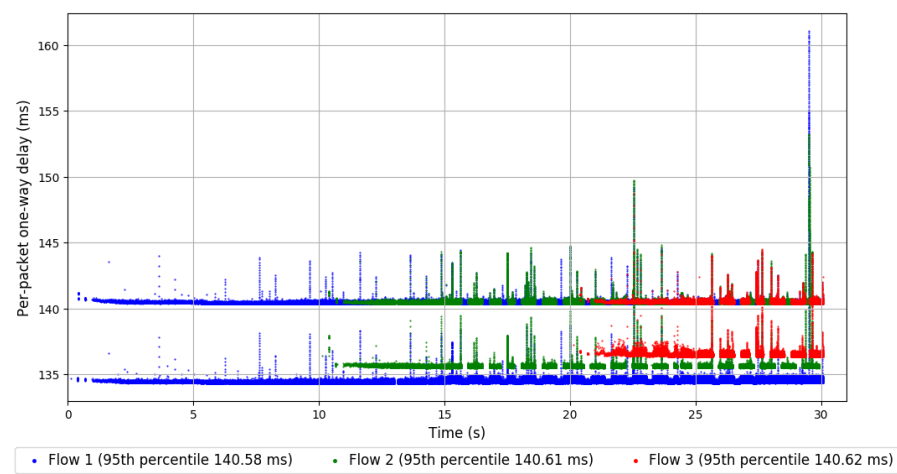
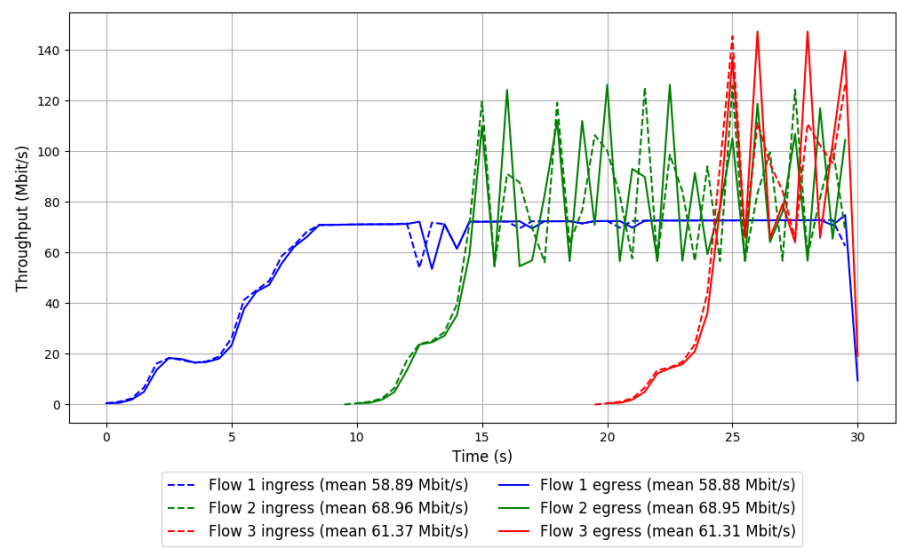
-- Flow 3:

Average throughput: 61.31 Mbit/s

95th percentile per-packet one-way delay: 140.623 ms

Loss rate: 0.10%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-21 18:21:33

End at: 2018-02-21 18:22:03

Below is generated by plot.py at 2018-02-22 00:04:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.74 Mbit/s

95th percentile per-packet one-way delay: 140.761 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 77.22 Mbit/s

95th percentile per-packet one-way delay: 140.751 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 63.37 Mbit/s

95th percentile per-packet one-way delay: 140.767 ms

Loss rate: 0.03%

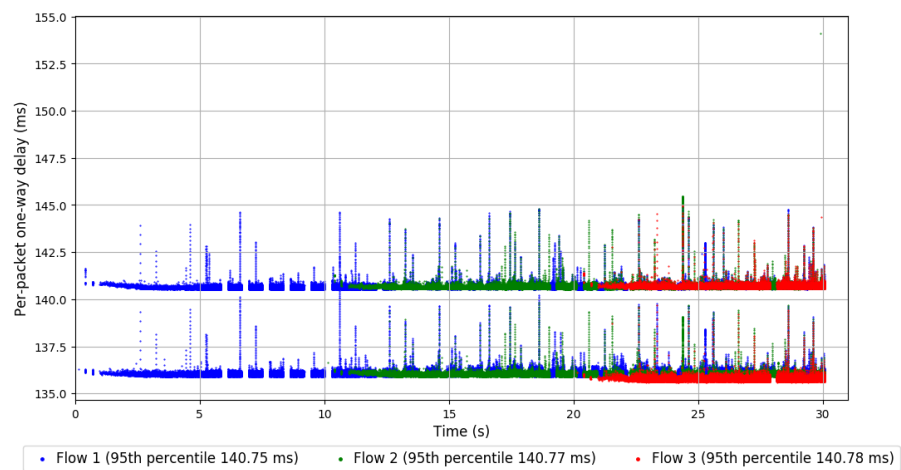
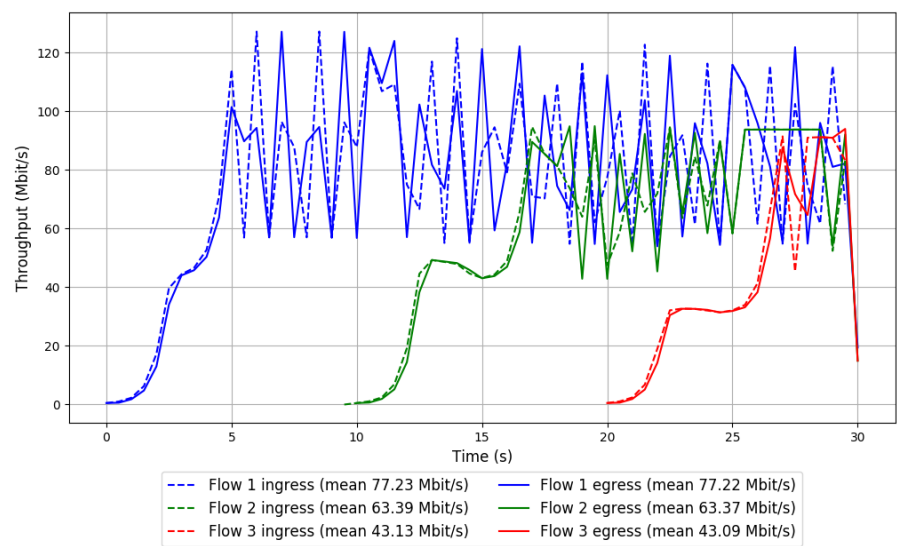
-- Flow 3:

Average throughput: 43.09 Mbit/s

95th percentile per-packet one-way delay: 140.785 ms

Loss rate: 0.09%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-21 18:41:30

End at: 2018-02-21 18:42:00

Below is generated by plot.py at 2018-02-22 00:04:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.01 Mbit/s

95th percentile per-packet one-way delay: 140.922 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 70.94 Mbit/s

95th percentile per-packet one-way delay: 140.874 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 72.31 Mbit/s

95th percentile per-packet one-way delay: 140.883 ms

Loss rate: 0.04%

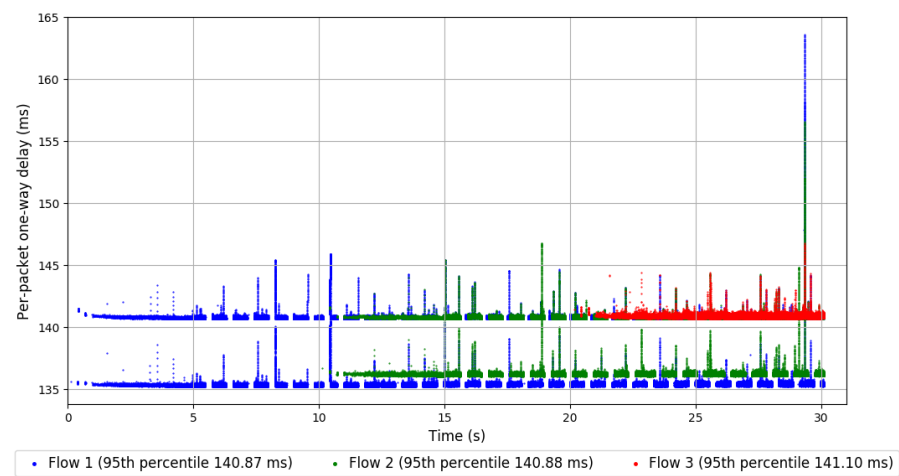
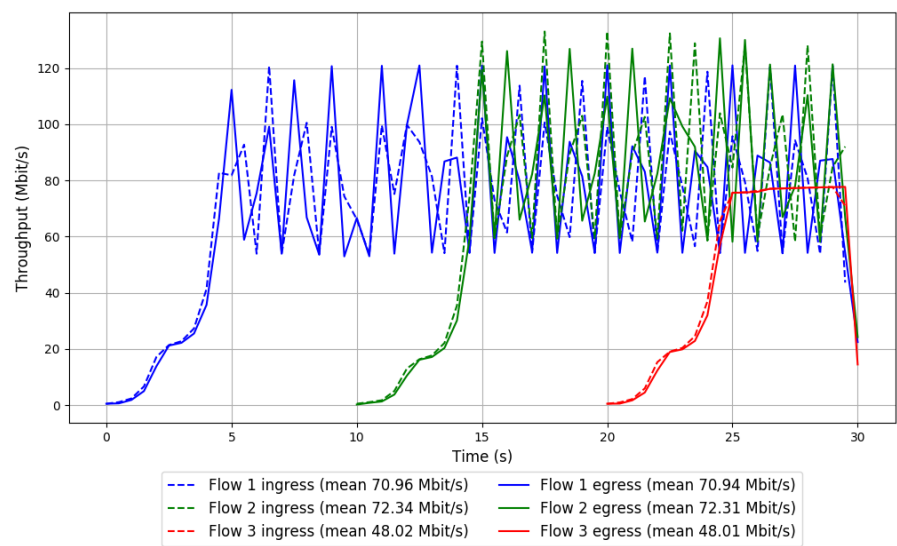
-- Flow 3:

Average throughput: 48.01 Mbit/s

95th percentile per-packet one-way delay: 141.097 ms

Loss rate: 0.07%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-21 19:02:17

End at: 2018-02-21 19:02:47

Below is generated by plot.py at 2018-02-22 00:05:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.85 Mbit/s

95th percentile per-packet one-way delay: 136.818 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.88 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.57 Mbit/s

95th percentile per-packet one-way delay: 136.811 ms

Loss rate: 0.00%

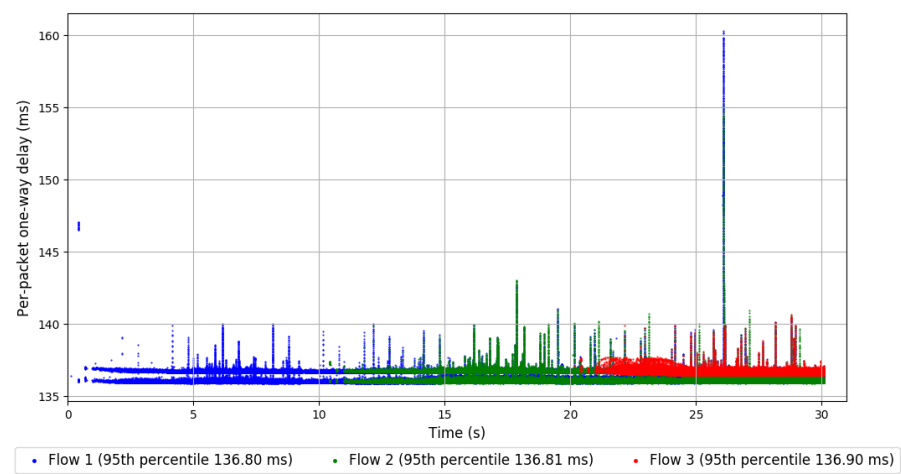
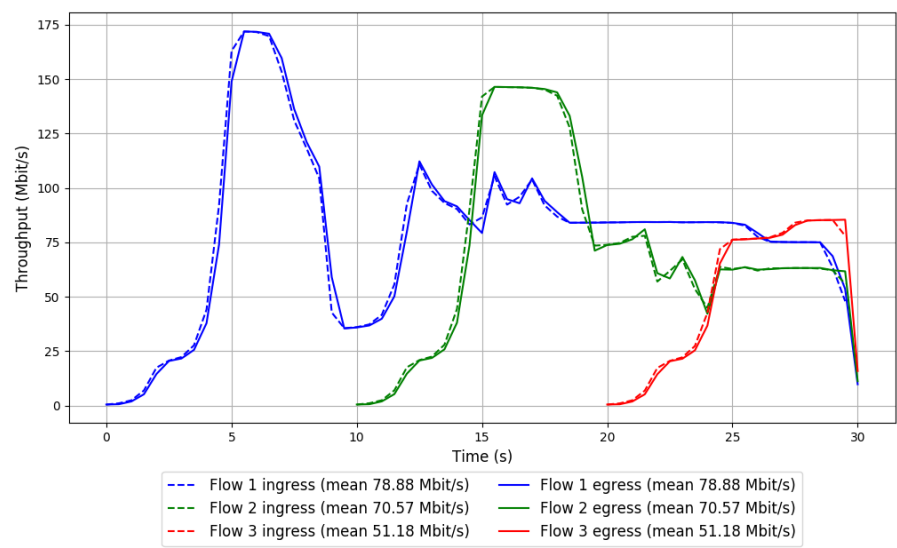
-- Flow 3:

Average throughput: 51.18 Mbit/s

95th percentile per-packet one-way delay: 136.899 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-21 19:22:59

End at: 2018-02-21 19:23:29

Below is generated by plot.py at 2018-02-22 00:07:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.14 Mbit/s

95th percentile per-packet one-way delay: 136.876 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.80 Mbit/s

95th percentile per-packet one-way delay: 136.767 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 80.20 Mbit/s

95th percentile per-packet one-way delay: 136.787 ms

Loss rate: 0.00%

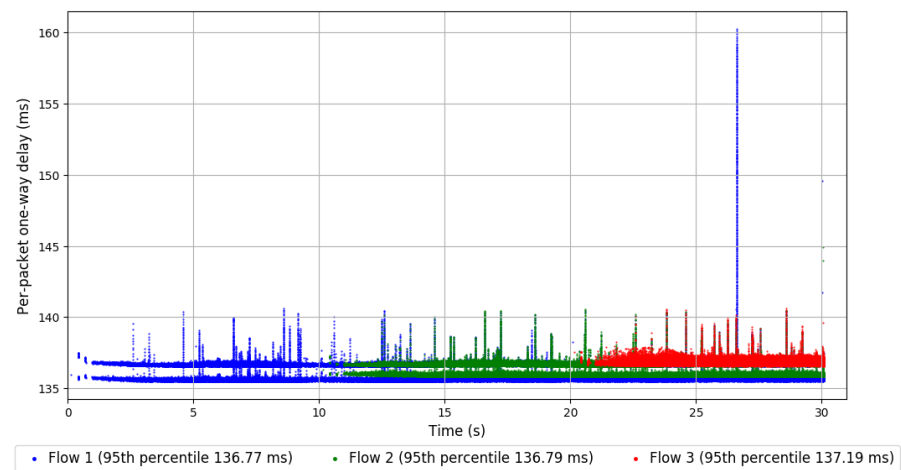
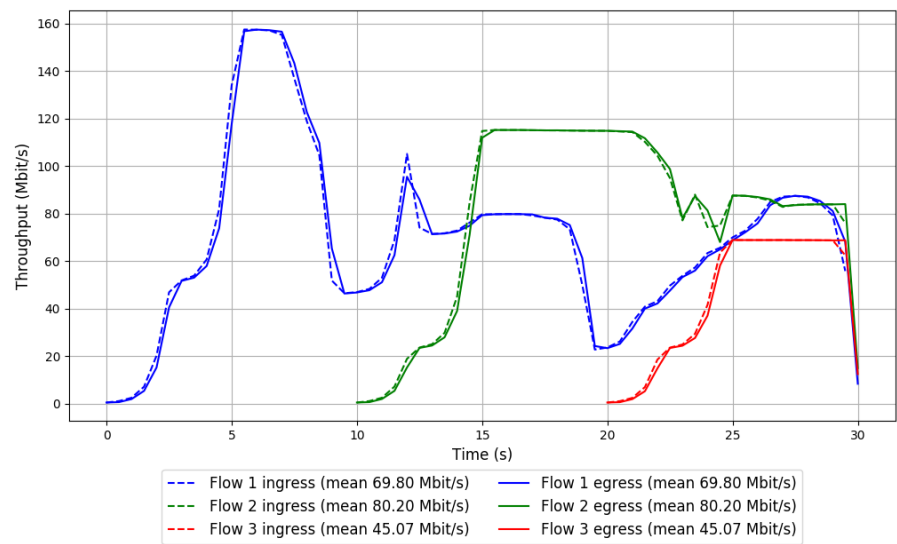
-- Flow 3:

Average throughput: 45.07 Mbit/s

95th percentile per-packet one-way delay: 137.193 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-21 19:43:16

End at: 2018-02-21 19:43:46

Below is generated by plot.py at 2018-02-22 00:07:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.56 Mbit/s

95th percentile per-packet one-way delay: 140.503 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 62.22 Mbit/s

95th percentile per-packet one-way delay: 140.521 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.39 Mbit/s

95th percentile per-packet one-way delay: 140.483 ms

Loss rate: 0.00%

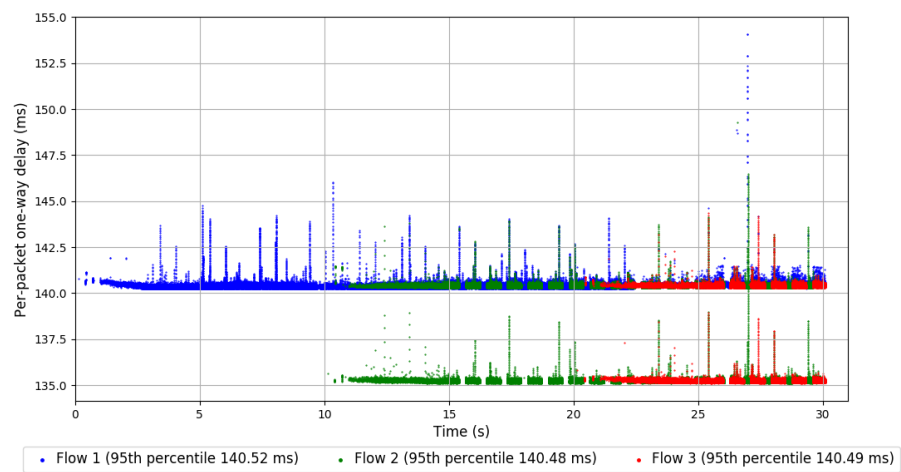
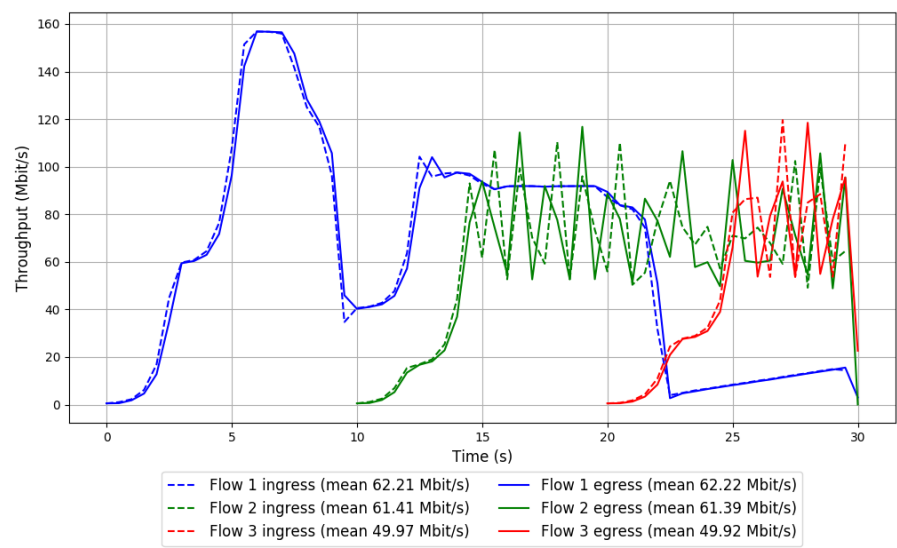
-- Flow 3:

Average throughput: 49.92 Mbit/s

95th percentile per-packet one-way delay: 140.491 ms

Loss rate: 0.10%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-21 20:03:46

End at: 2018-02-21 20:04:16

Below is generated by plot.py at 2018-02-22 00:11:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.58 Mbit/s

95th percentile per-packet one-way delay: 335.210 ms

Loss rate: 17.46%

-- Flow 1:

Average throughput: 129.39 Mbit/s

95th percentile per-packet one-way delay: 271.584 ms

Loss rate: 5.50%

-- Flow 2:

Average throughput: 170.57 Mbit/s

95th percentile per-packet one-way delay: 338.710 ms

Loss rate: 28.35%

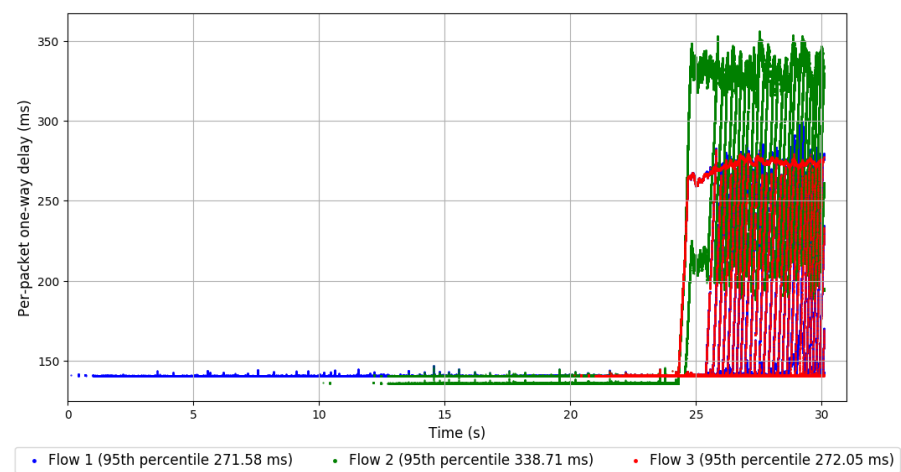
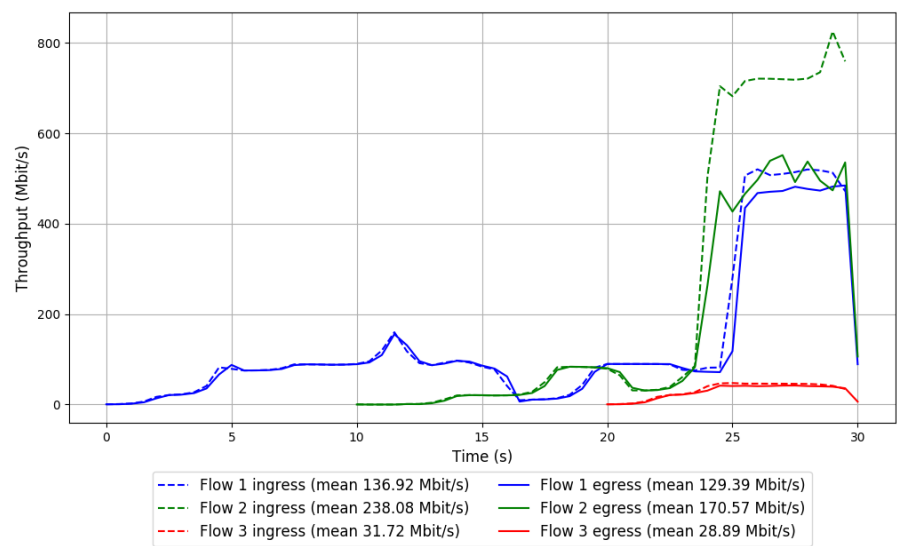
-- Flow 3:

Average throughput: 28.89 Mbit/s

95th percentile per-packet one-way delay: 272.053 ms

Loss rate: 8.94%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-21 20:24:28

End at: 2018-02-21 20:24:58

Below is generated by plot.py at 2018-02-22 00:11:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.03 Mbit/s

95th percentile per-packet one-way delay: 140.872 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 87.24 Mbit/s

95th percentile per-packet one-way delay: 140.866 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 77.37 Mbit/s

95th percentile per-packet one-way delay: 140.875 ms

Loss rate: 0.02%

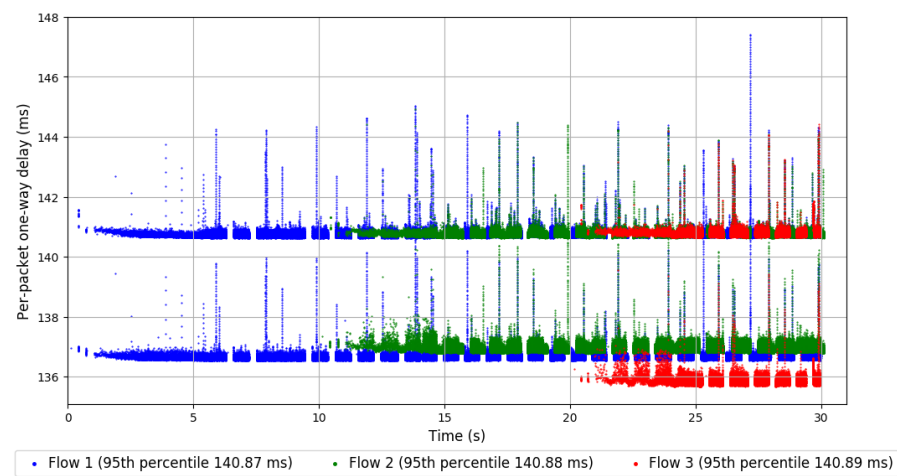
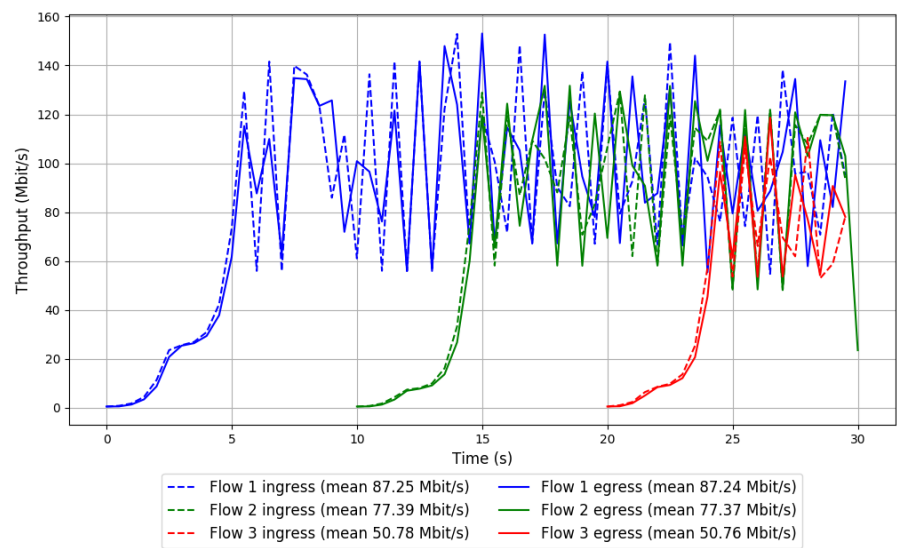
-- Flow 3:

Average throughput: 50.76 Mbit/s

95th percentile per-packet one-way delay: 140.893 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-21 20:44:24

End at: 2018-02-21 20:44:54

Below is generated by plot.py at 2018-02-22 00:11:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.50 Mbit/s

95th percentile per-packet one-way delay: 141.030 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 83.36 Mbit/s

95th percentile per-packet one-way delay: 141.019 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 67.07 Mbit/s

95th percentile per-packet one-way delay: 141.036 ms

Loss rate: 0.03%

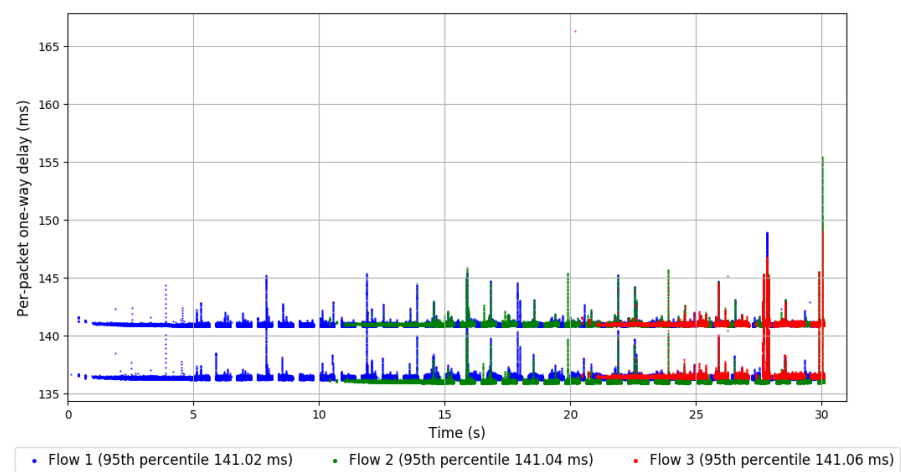
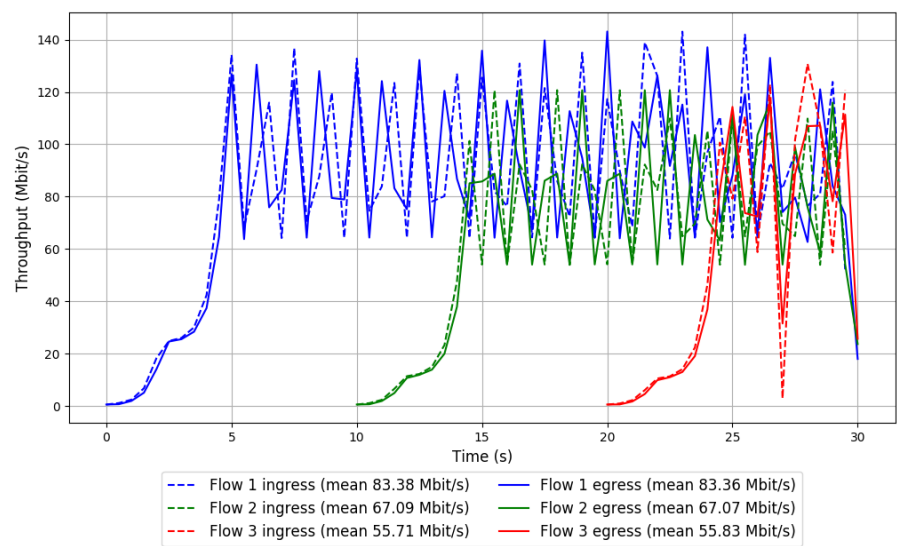
-- Flow 3:

Average throughput: 55.83 Mbit/s

95th percentile per-packet one-way delay: 141.057 ms

Loss rate: 0.08%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-21 21:04:26

End at: 2018-02-21 21:04:56

Below is generated by plot.py at 2018-02-22 00:11:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.57 Mbit/s

95th percentile per-packet one-way delay: 141.118 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 58.97 Mbit/s

95th percentile per-packet one-way delay: 141.077 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 75.06 Mbit/s

95th percentile per-packet one-way delay: 141.152 ms

Loss rate: 0.03%

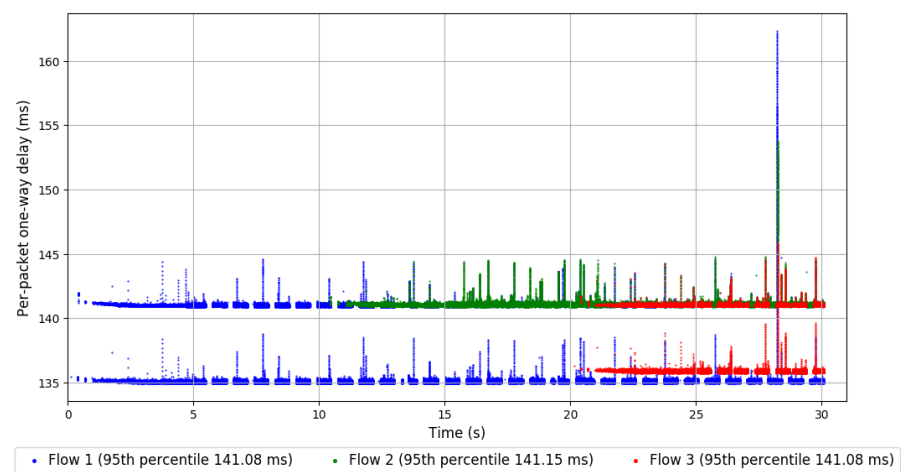
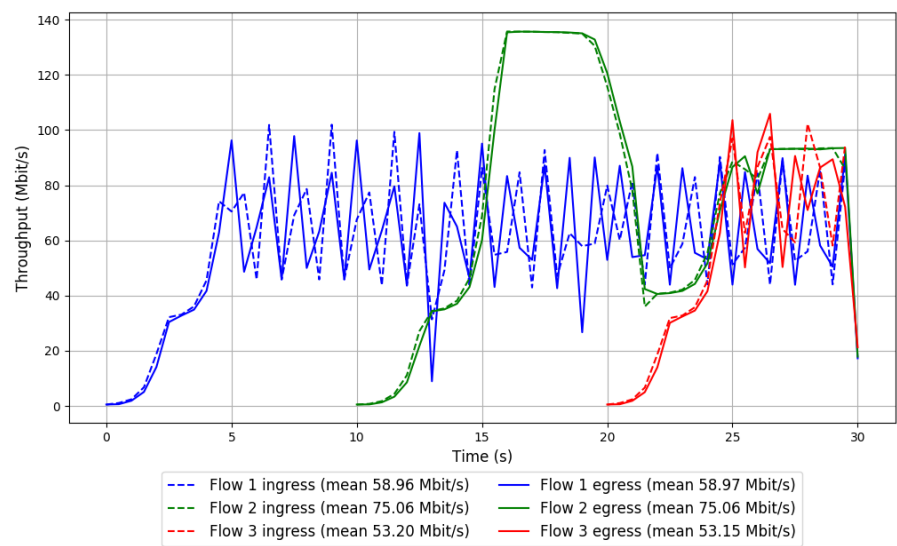
-- Flow 3:

Average throughput: 53.15 Mbit/s

95th percentile per-packet one-way delay: 141.078 ms

Loss rate: 0.10%

Run 10: Report of Copa — Data Link

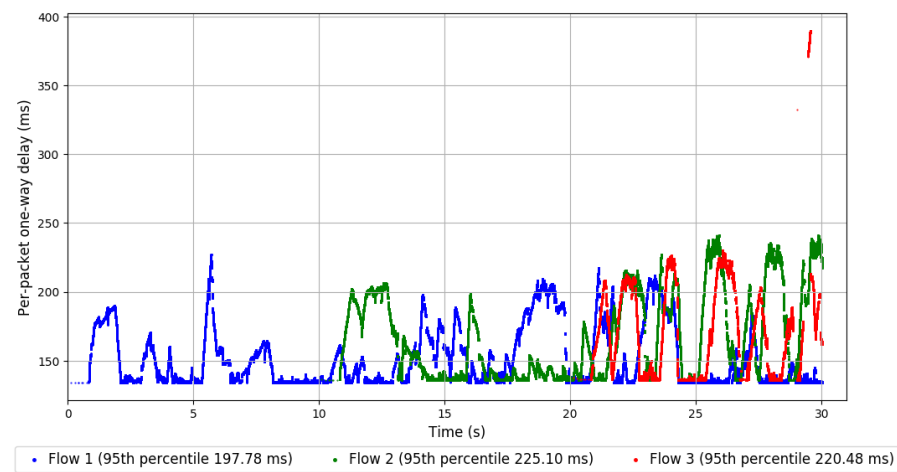
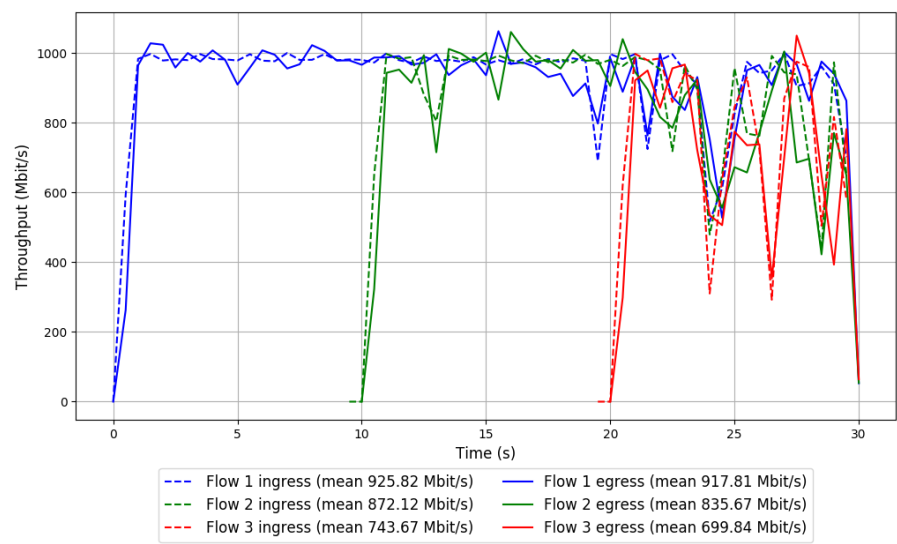


```
Run 1: Statistics of FillP

Start at: 2018-02-21 18:12:21
End at: 2018-02-21 18:12:51

# Below is generated by plot.py at 2018-02-22 00:36:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1706.83 Mbit/s
95th percentile per-packet one-way delay: 210.748 ms
Loss rate: 2.67%
-- Flow 1:
Average throughput: 917.81 Mbit/s
95th percentile per-packet one-way delay: 197.782 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 835.67 Mbit/s
95th percentile per-packet one-way delay: 225.104 ms
Loss rate: 4.18%
-- Flow 3:
Average throughput: 699.84 Mbit/s
95th percentile per-packet one-way delay: 220.480 ms
Loss rate: 5.91%
```


Run 1: Report of FillP — Data Link

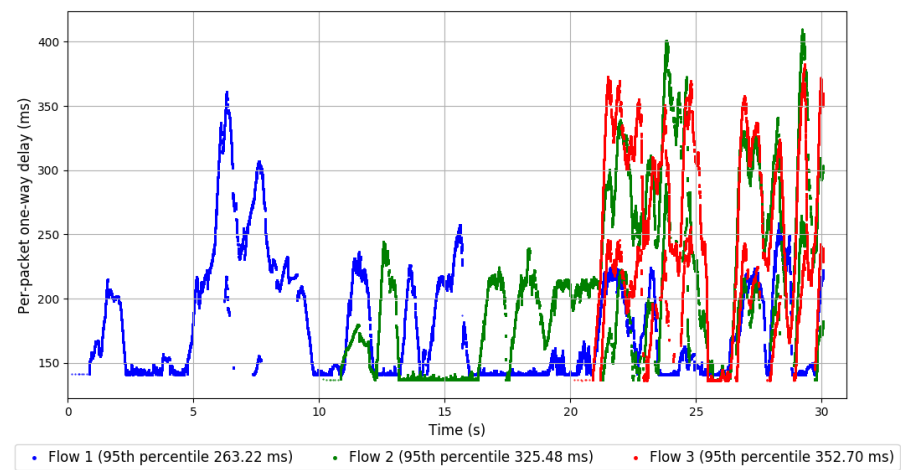
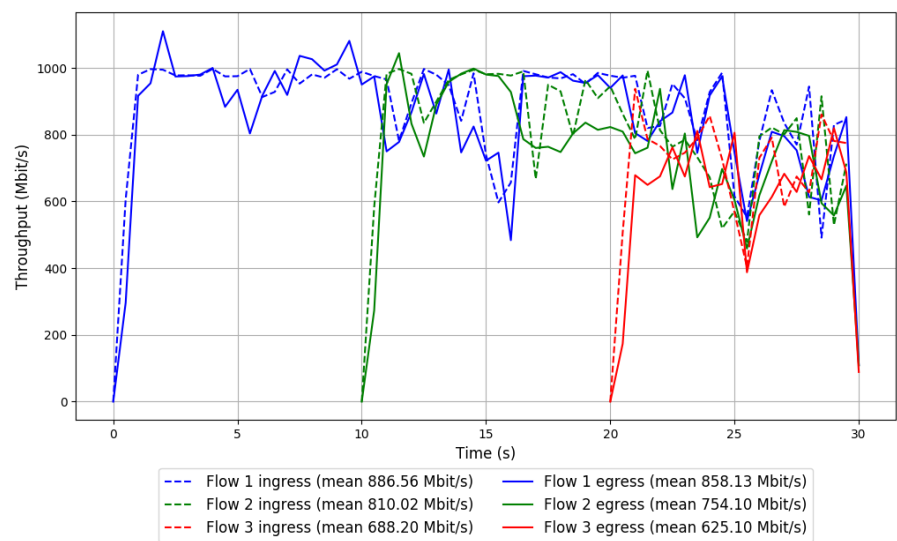


```
Run 2: Statistics of FillP

Start at: 2018-02-21 18:32:21
End at: 2018-02-21 18:32:51

# Below is generated by plot.py at 2018-02-22 00:36:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1567.28 Mbit/s
95th percentile per-packet one-way delay: 323.674 ms
Loss rate: 5.23%
-- Flow 1:
Average throughput: 858.13 Mbit/s
95th percentile per-packet one-way delay: 263.216 ms
Loss rate: 3.22%
-- Flow 2:
Average throughput: 754.10 Mbit/s
95th percentile per-packet one-way delay: 325.475 ms
Loss rate: 6.90%
-- Flow 3:
Average throughput: 625.10 Mbit/s
95th percentile per-packet one-way delay: 352.696 ms
Loss rate: 9.10%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-21 18:53:03

End at: 2018-02-21 18:53:33

Below is generated by plot.py at 2018-02-22 00:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 1653.68 Mbit/s

95th percentile per-packet one-way delay: 313.136 ms

Loss rate: 3.43%

-- Flow 1:

Average throughput: 867.67 Mbit/s

95th percentile per-packet one-way delay: 298.568 ms

Loss rate: 1.92%

-- Flow 2:

Average throughput: 849.56 Mbit/s

95th percentile per-packet one-way delay: 215.695 ms

Loss rate: 3.38%

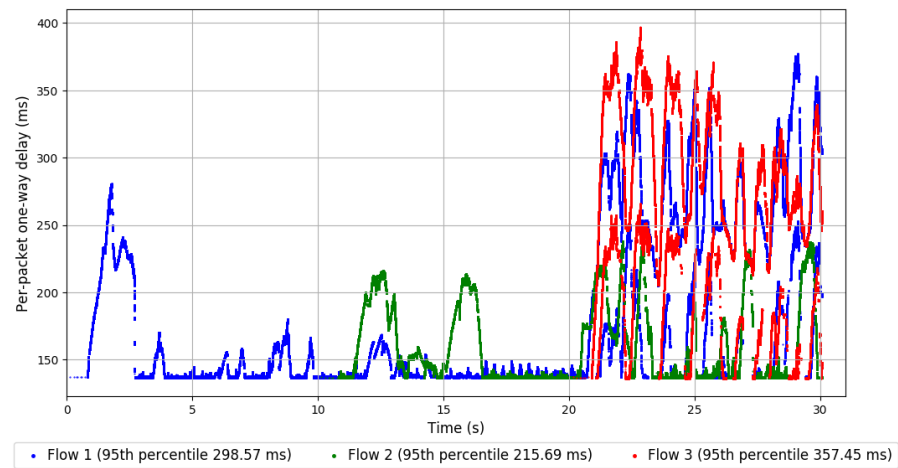
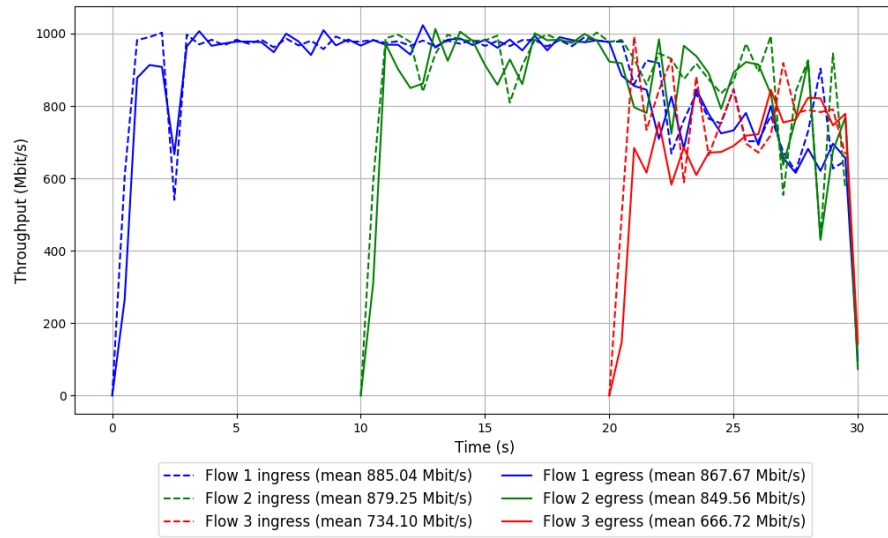
-- Flow 3:

Average throughput: 666.72 Mbit/s

95th percentile per-packet one-way delay: 357.452 ms

Loss rate: 9.06%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-21 19:13:47

End at: 2018-02-21 19:14:17

Below is generated by plot.py at 2018-02-22 00:37:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 1648.13 Mbit/s

95th percentile per-packet one-way delay: 221.954 ms

Loss rate: 4.72%

-- Flow 1:

Average throughput: 858.84 Mbit/s

95th percentile per-packet one-way delay: 215.923 ms

Loss rate: 3.38%

-- Flow 2:

Average throughput: 817.13 Mbit/s

95th percentile per-packet one-way delay: 223.480 ms

Loss rate: 5.54%

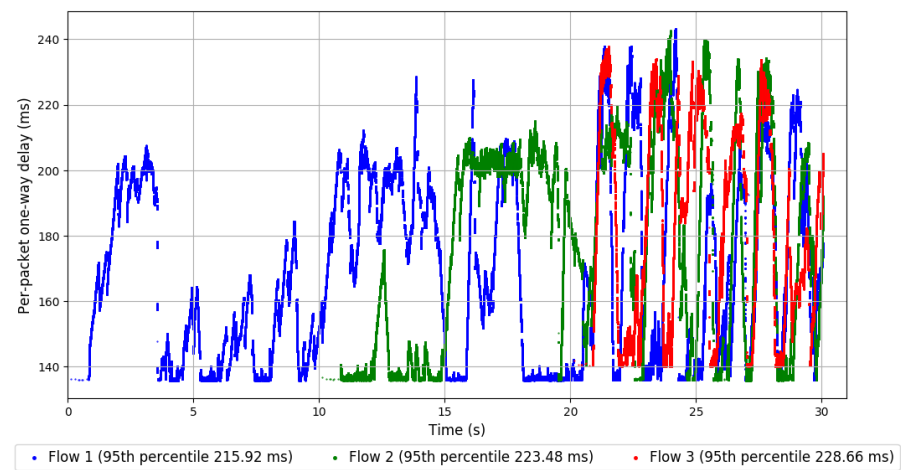
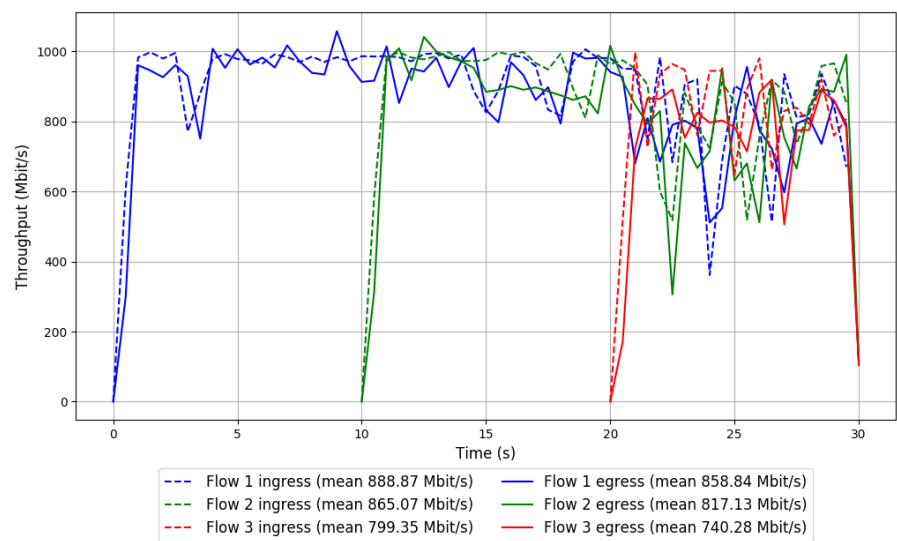
-- Flow 3:

Average throughput: 740.28 Mbit/s

95th percentile per-packet one-way delay: 228.660 ms

Loss rate: 7.43%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-21 19:34:10

End at: 2018-02-21 19:34:40

Below is generated by plot.py at 2018-02-22 00:40:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 1741.02 Mbit/s

95th percentile per-packet one-way delay: 216.137 ms

Loss rate: 1.70%

-- Flow 1:

Average throughput: 923.54 Mbit/s

95th percentile per-packet one-way delay: 211.536 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 853.51 Mbit/s

95th percentile per-packet one-way delay: 219.118 ms

Loss rate: 2.11%

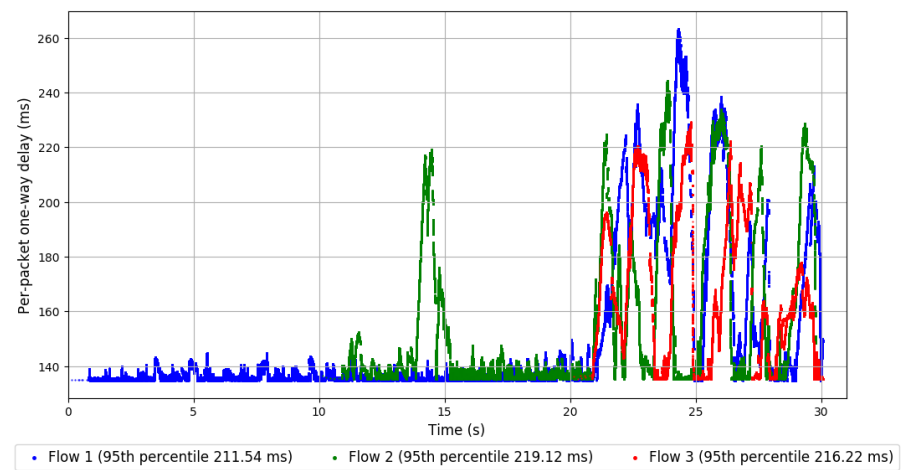
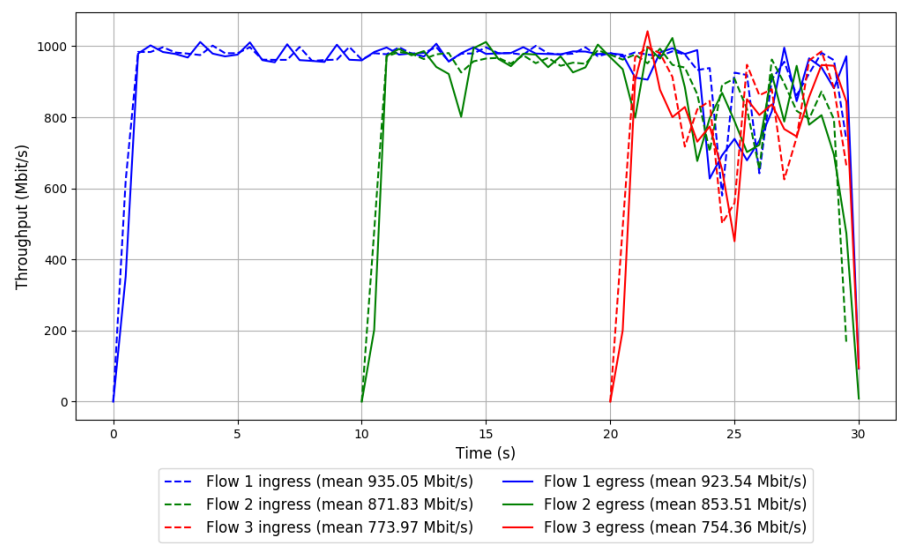
-- Flow 3:

Average throughput: 754.36 Mbit/s

95th percentile per-packet one-way delay: 216.217 ms

Loss rate: 2.54%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-21 19:54:36

End at: 2018-02-21 19:55:06

Below is generated by plot.py at 2018-02-22 00:40:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 1731.06 Mbit/s

95th percentile per-packet one-way delay: 217.800 ms

Loss rate: 3.73%

-- Flow 1:

Average throughput: 893.40 Mbit/s

95th percentile per-packet one-way delay: 213.305 ms

Loss rate: 2.88%

-- Flow 2:

Average throughput: 875.18 Mbit/s

95th percentile per-packet one-way delay: 220.796 ms

Loss rate: 3.35%

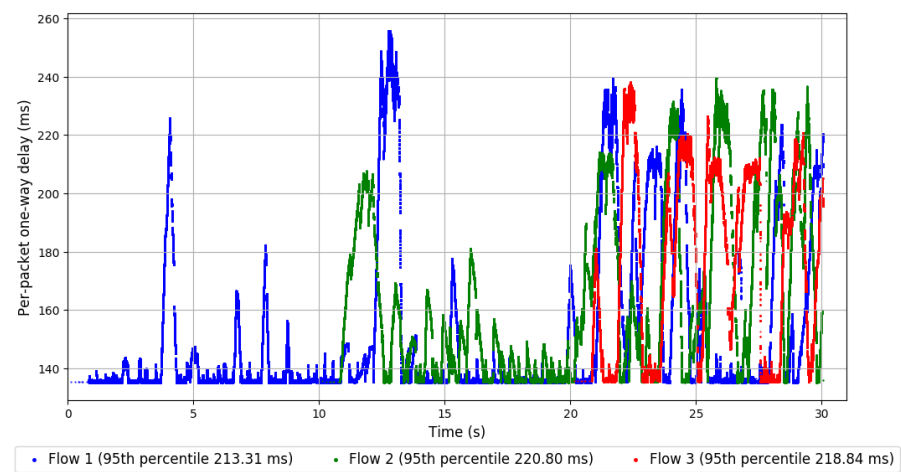
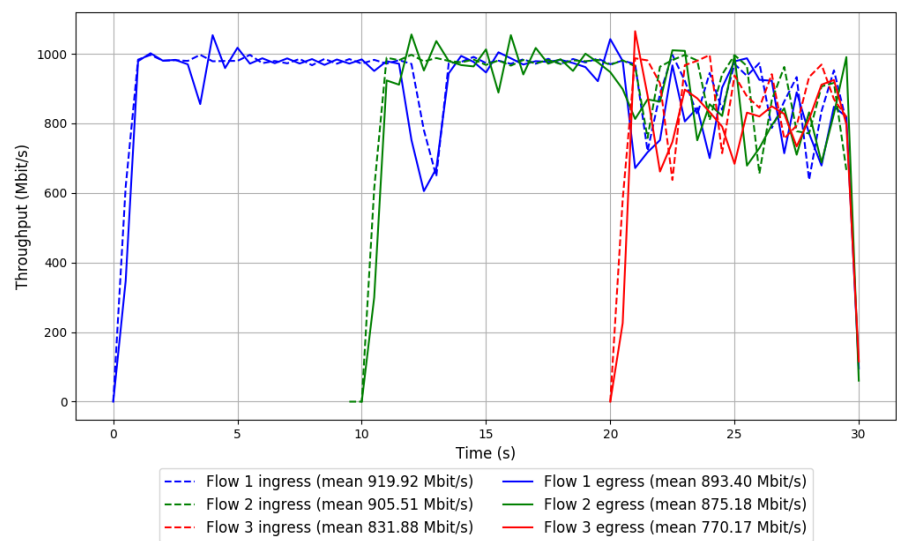
-- Flow 3:

Average throughput: 770.17 Mbit/s

95th percentile per-packet one-way delay: 218.836 ms

Loss rate: 7.42%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-21 20:15:16

End at: 2018-02-21 20:15:46

Below is generated by plot.py at 2018-02-22 00:40:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 1674.91 Mbit/s

95th percentile per-packet one-way delay: 302.993 ms

Loss rate: 3.51%

-- Flow 1:

Average throughput: 876.44 Mbit/s

95th percentile per-packet one-way delay: 215.420 ms

Loss rate: 2.62%

-- Flow 2:

Average throughput: 852.12 Mbit/s

95th percentile per-packet one-way delay: 325.038 ms

Loss rate: 3.41%

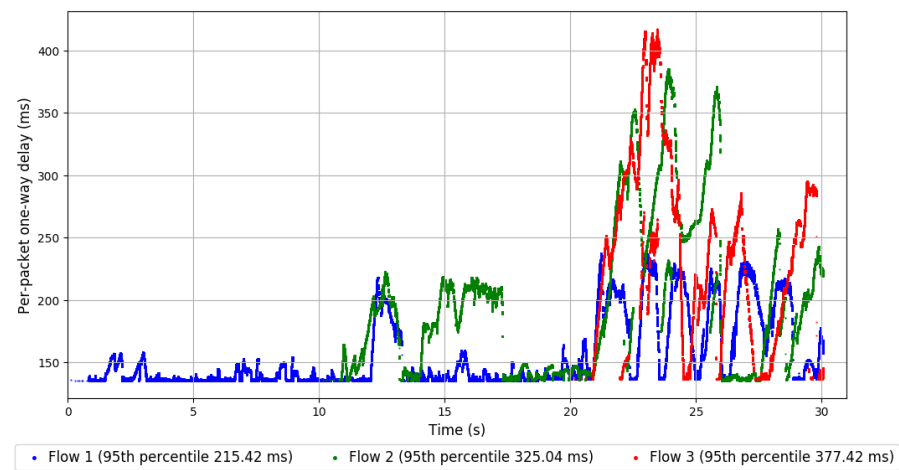
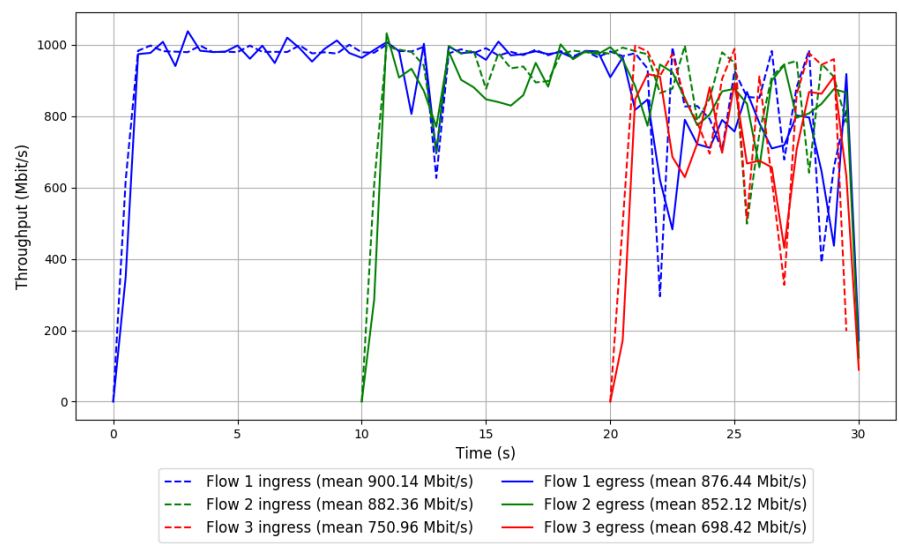
-- Flow 3:

Average throughput: 698.42 Mbit/s

95th percentile per-packet one-way delay: 377.418 ms

Loss rate: 6.97%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-21 20:35:15

End at: 2018-02-21 20:35:45

Below is generated by plot.py at 2018-02-22 00:43:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 1633.17 Mbit/s

95th percentile per-packet one-way delay: 222.382 ms

Loss rate: 5.04%

-- Flow 1:

Average throughput: 843.42 Mbit/s

95th percentile per-packet one-way delay: 220.984 ms

Loss rate: 3.85%

-- Flow 2:

Average throughput: 834.64 Mbit/s

95th percentile per-packet one-way delay: 219.777 ms

Loss rate: 5.23%

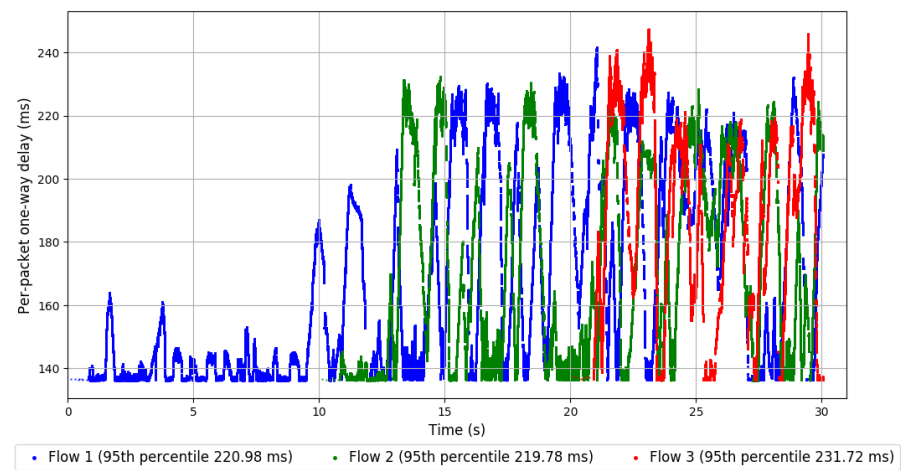
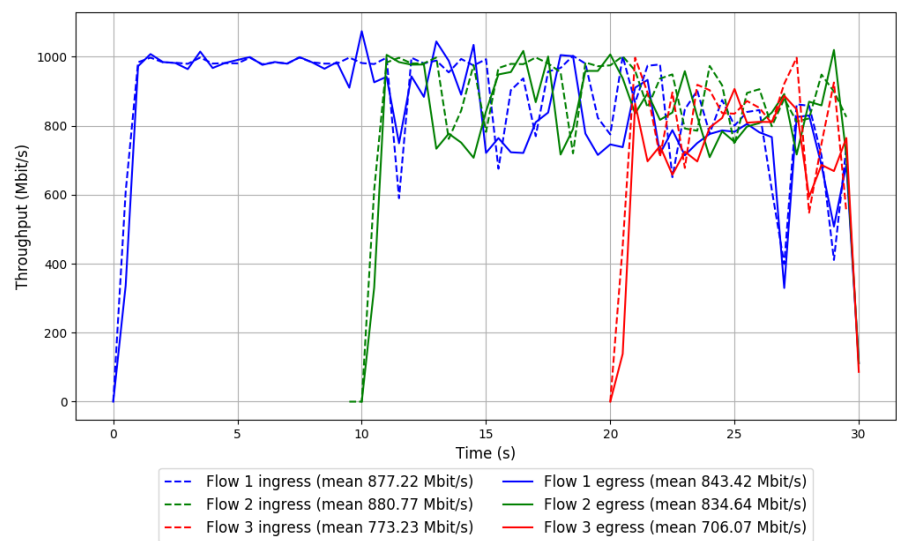
-- Flow 3:

Average throughput: 706.07 Mbit/s

95th percentile per-packet one-way delay: 231.721 ms

Loss rate: 8.70%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-21 20:55:20

End at: 2018-02-21 20:55:50

Below is generated by plot.py at 2018-02-22 01:06:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 1653.94 Mbit/s

95th percentile per-packet one-way delay: 221.111 ms

Loss rate: 3.86%

-- Flow 1:

Average throughput: 868.83 Mbit/s

95th percentile per-packet one-way delay: 217.249 ms

Loss rate: 3.50%

-- Flow 2:

Average throughput: 832.68 Mbit/s

95th percentile per-packet one-way delay: 225.083 ms

Loss rate: 3.24%

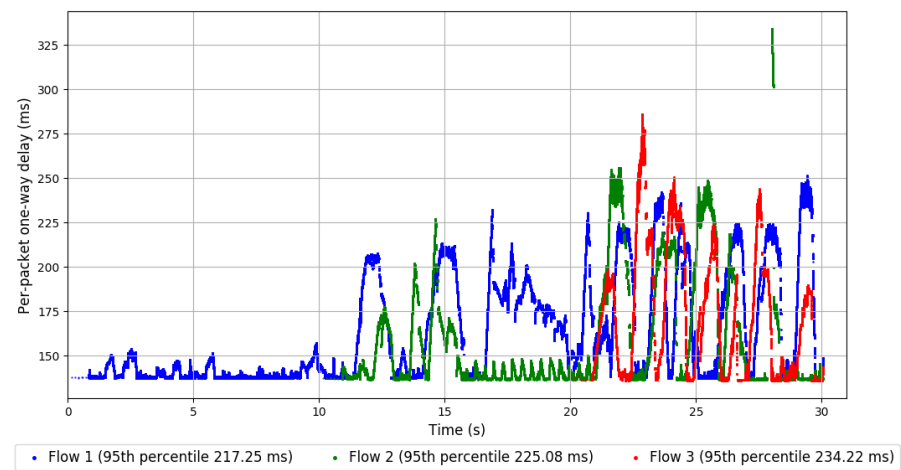
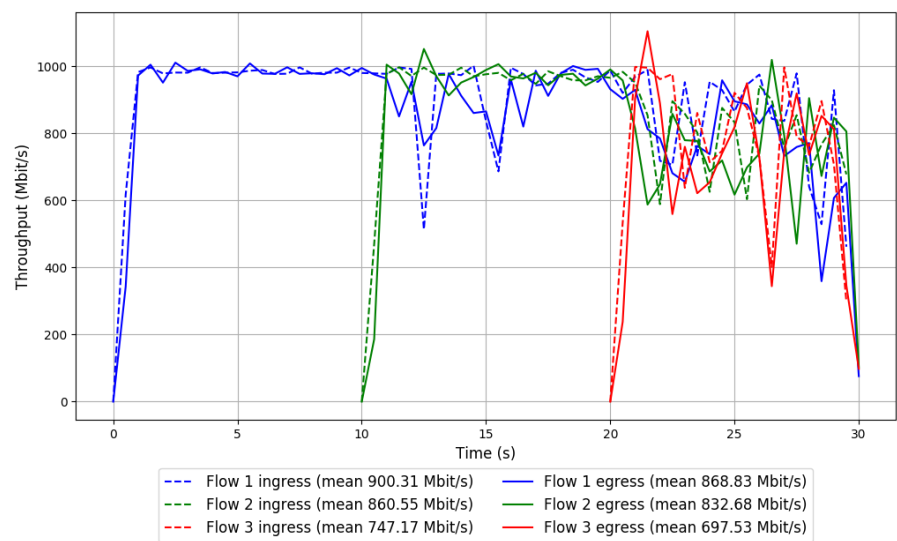
-- Flow 3:

Average throughput: 697.53 Mbit/s

95th percentile per-packet one-way delay: 234.219 ms

Loss rate: 6.64%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-21 21:15:26

End at: 2018-02-21 21:15:56

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 1709.55 Mbit/s

95th percentile per-packet one-way delay: 218.274 ms

Loss rate: 3.12%

-- Flow 1:

Average throughput: 909.19 Mbit/s

95th percentile per-packet one-way delay: 204.248 ms

Loss rate: 1.11%

-- Flow 2:

Average throughput: 840.42 Mbit/s

95th percentile per-packet one-way delay: 216.311 ms

Loss rate: 4.10%

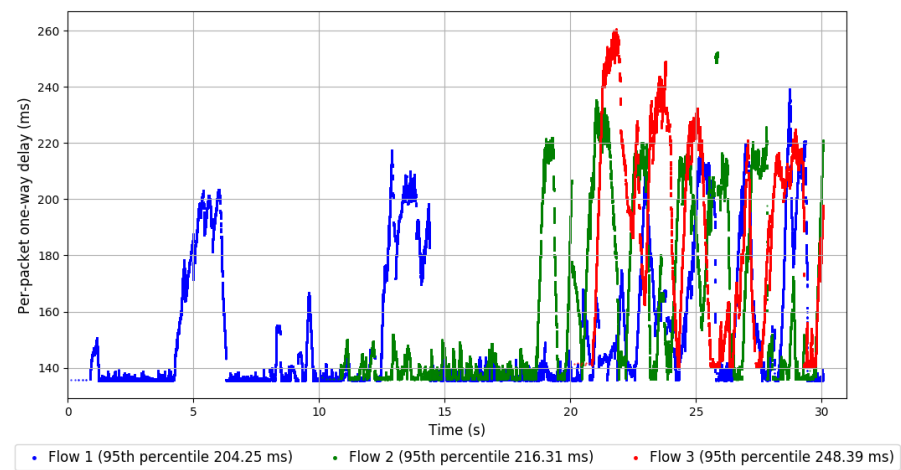
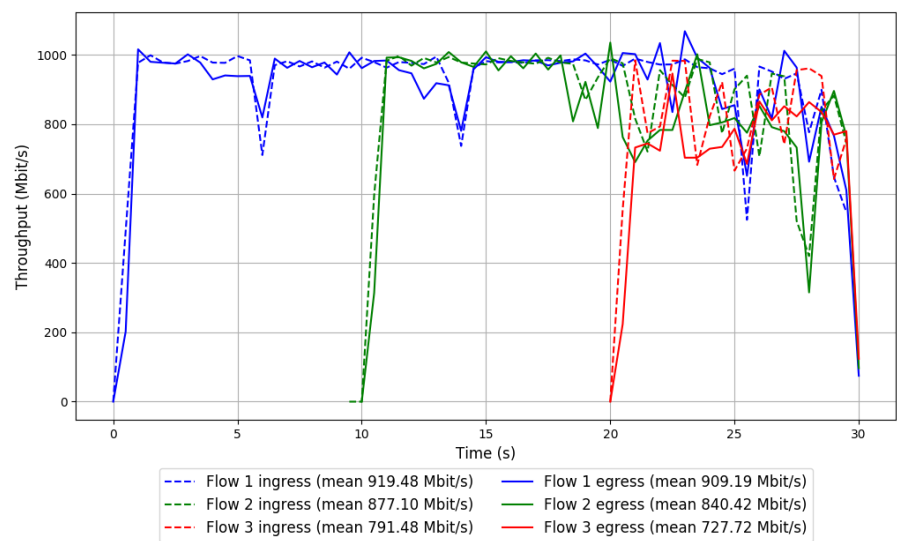
-- Flow 3:

Average throughput: 727.72 Mbit/s

95th percentile per-packet one-way delay: 248.387 ms

Loss rate: 7.94%

Run 10: Report of FillP — Data Link

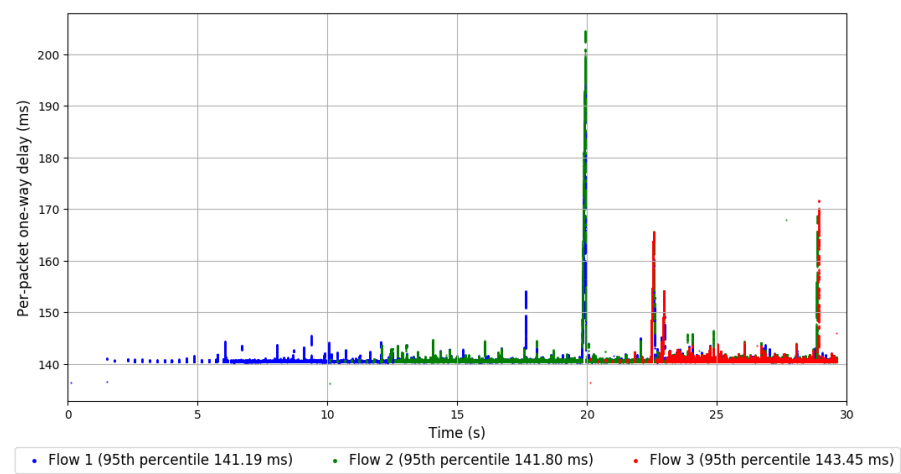
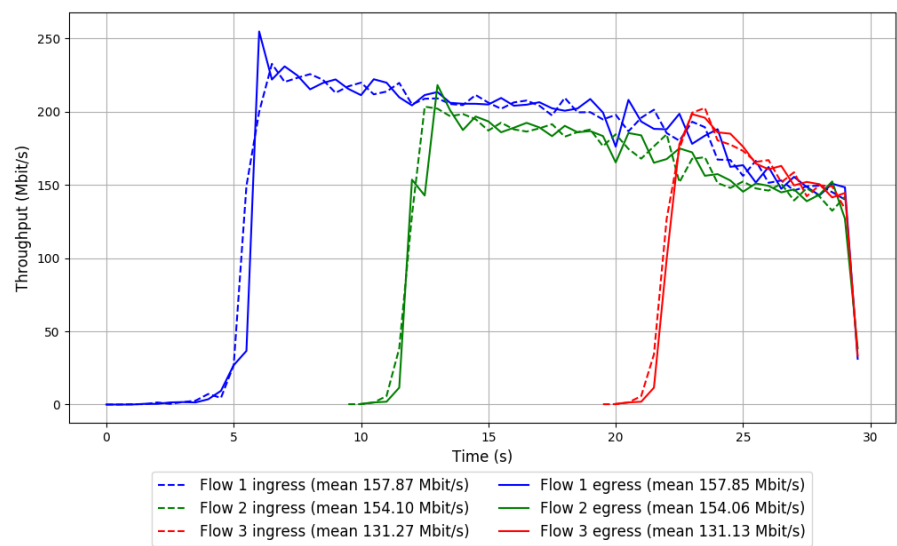


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-21 17:55:15
End at: 2018-02-21 17:55:45

# Below is generated by plot.py at 2018-02-22 01:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 302.09 Mbit/s
95th percentile per-packet one-way delay: 141.576 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 157.85 Mbit/s
95th percentile per-packet one-way delay: 141.186 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 154.06 Mbit/s
95th percentile per-packet one-way delay: 141.800 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 131.13 Mbit/s
95th percentile per-packet one-way delay: 143.446 ms
Loss rate: 0.03%
```

Run 1: Report of Indigo-1-32 — Data Link



Run 2: Statistics of Indigo-1-32

Start at: 2018-02-21 18:15:22

End at: 2018-02-21 18:15:52

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 292.74 Mbit/s

95th percentile per-packet one-way delay: 141.295 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 162.47 Mbit/s

95th percentile per-packet one-way delay: 140.978 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 140.74 Mbit/s

95th percentile per-packet one-way delay: 141.312 ms

Loss rate: 0.02%

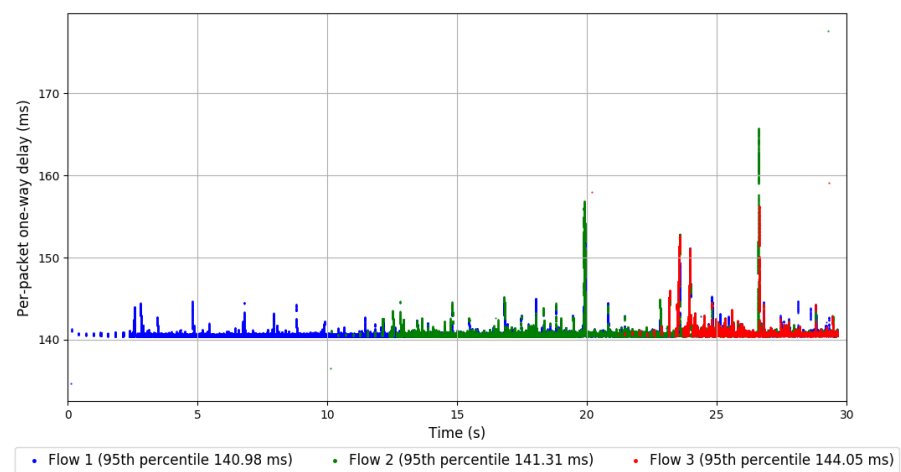
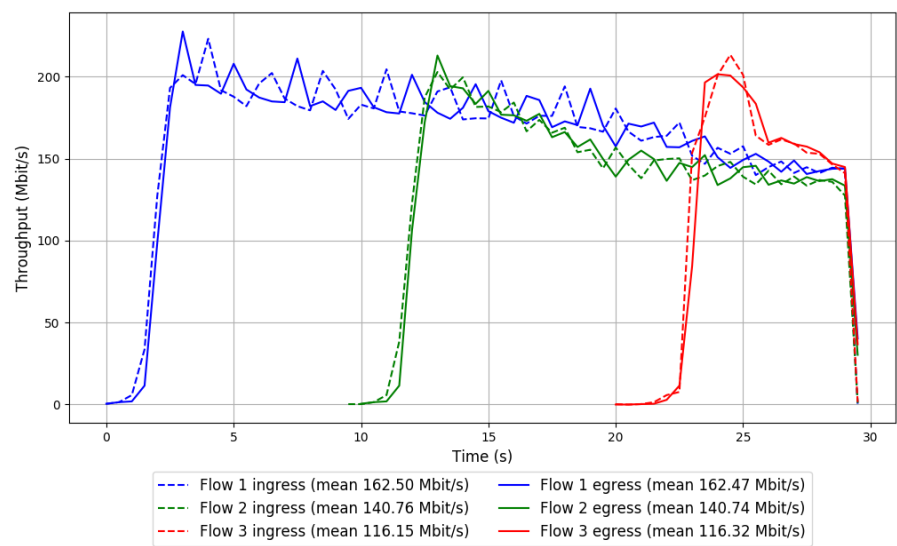
-- Flow 3:

Average throughput: 116.32 Mbit/s

95th percentile per-packet one-way delay: 144.046 ms

Loss rate: 0.09%

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-21 18:35:19

End at: 2018-02-21 18:35:49

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.53 Mbit/s

95th percentile per-packet one-way delay: 141.030 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 137.42 Mbit/s

95th percentile per-packet one-way delay: 140.956 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 141.50 Mbit/s

95th percentile per-packet one-way delay: 141.172 ms

Loss rate: 0.01%

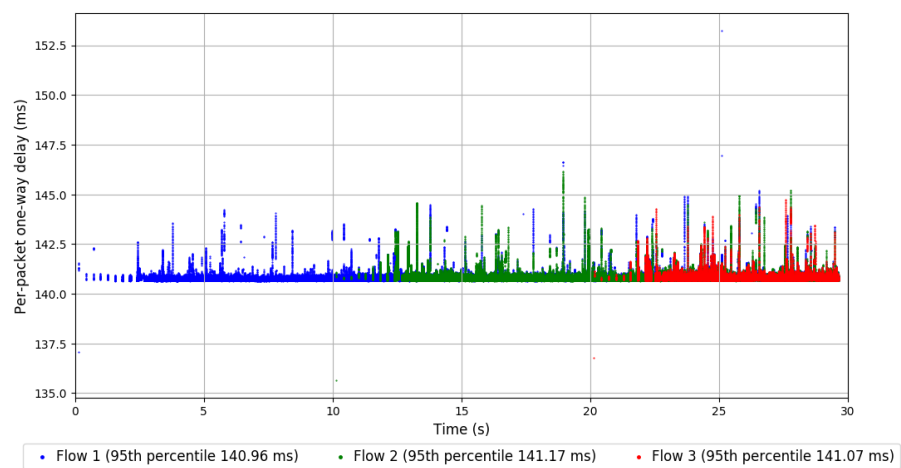
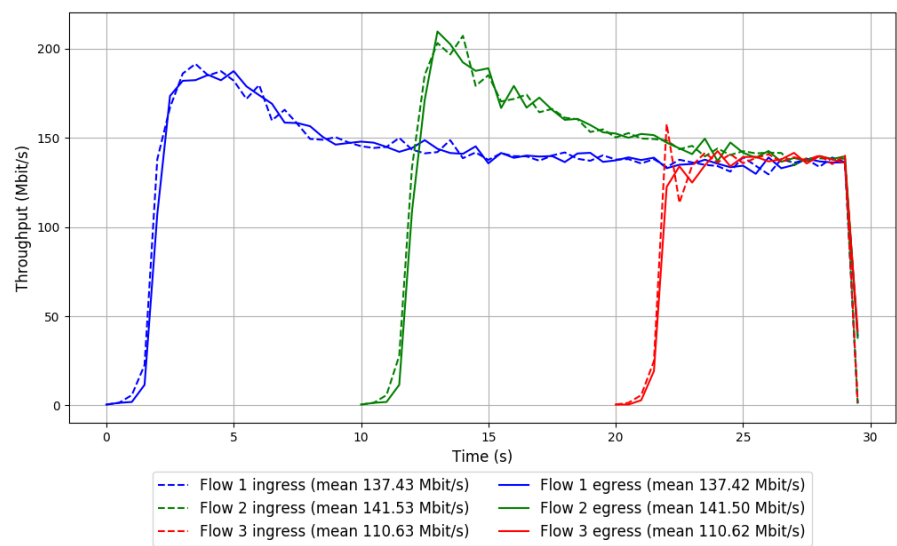
-- Flow 3:

Average throughput: 110.62 Mbit/s

95th percentile per-packet one-way delay: 141.072 ms

Loss rate: 0.06%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-21 18:56:05

End at: 2018-02-21 18:56:35

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 284.54 Mbit/s

95th percentile per-packet one-way delay: 137.146 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 153.63 Mbit/s

95th percentile per-packet one-way delay: 137.037 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 145.19 Mbit/s

95th percentile per-packet one-way delay: 137.434 ms

Loss rate: 0.00%

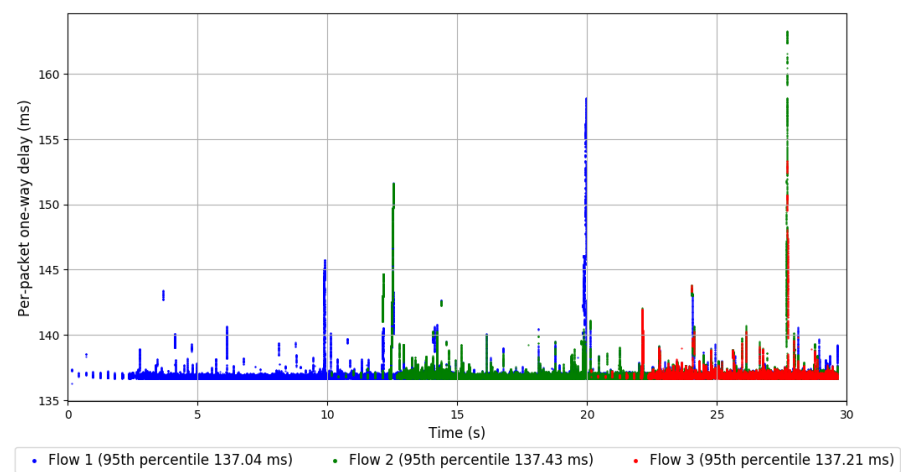
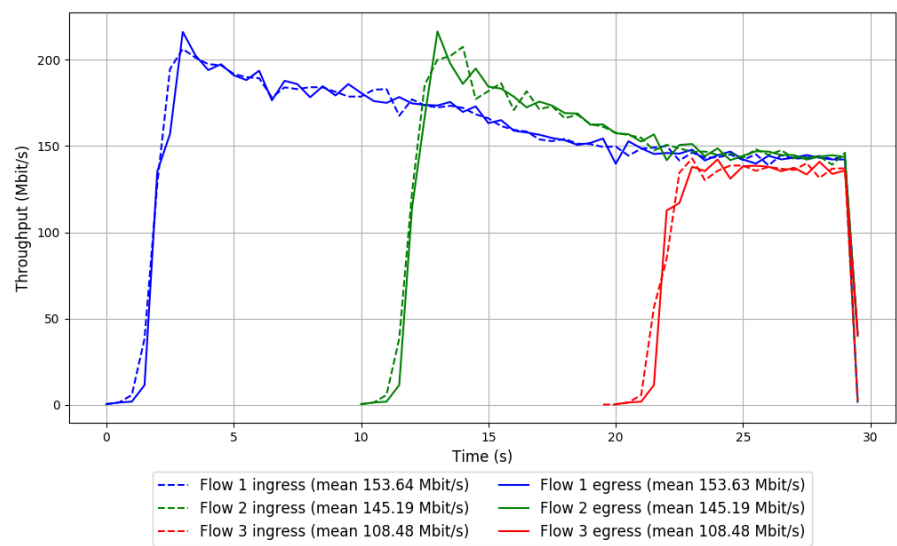
-- Flow 3:

Average throughput: 108.48 Mbit/s

95th percentile per-packet one-way delay: 137.213 ms

Loss rate: 0.01%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-21 19:16:47

End at: 2018-02-21 19:17:17

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.84 Mbit/s

95th percentile per-packet one-way delay: 137.123 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 144.00 Mbit/s

95th percentile per-packet one-way delay: 136.978 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 144.92 Mbit/s

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

Loss rate: 0.00%

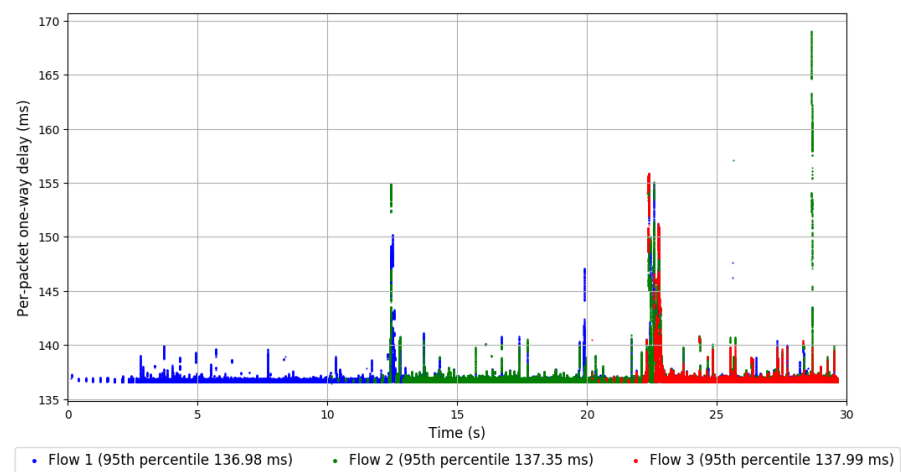
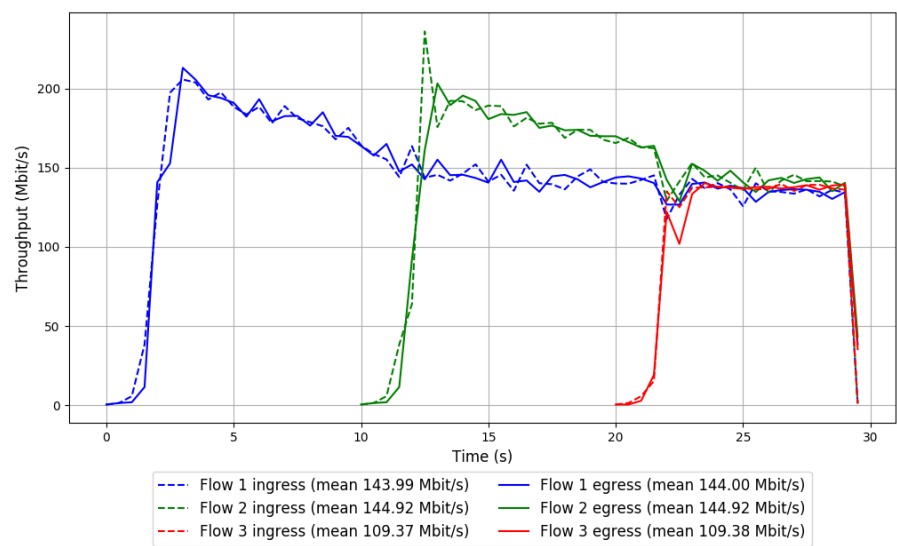
-- Flow 3:

Average throughput: 109.38 Mbit/s

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

Loss rate: 0.00%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-21 19:37:14

End at: 2018-02-21 19:37:44

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 200.55 Mbit/s

95th percentile per-packet one-way delay: 140.757 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 104.00 Mbit/s

95th percentile per-packet one-way delay: 140.683 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 96.36 Mbit/s

95th percentile per-packet one-way delay: 140.744 ms

Loss rate: 0.05%

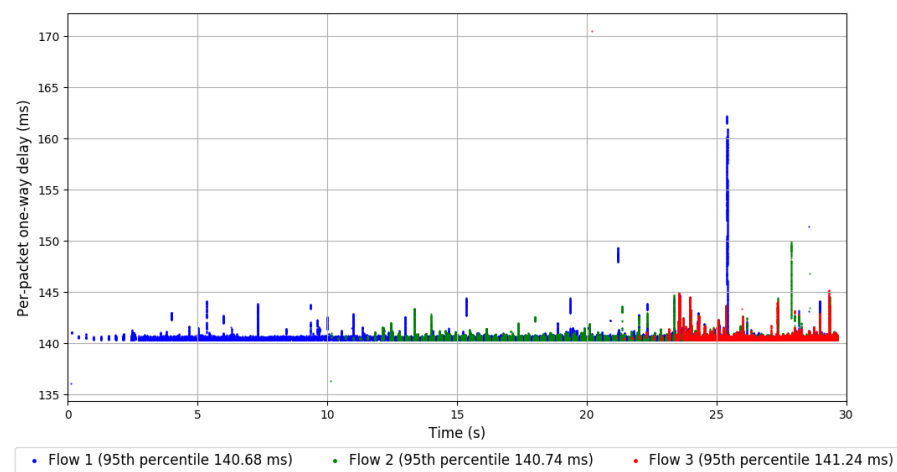
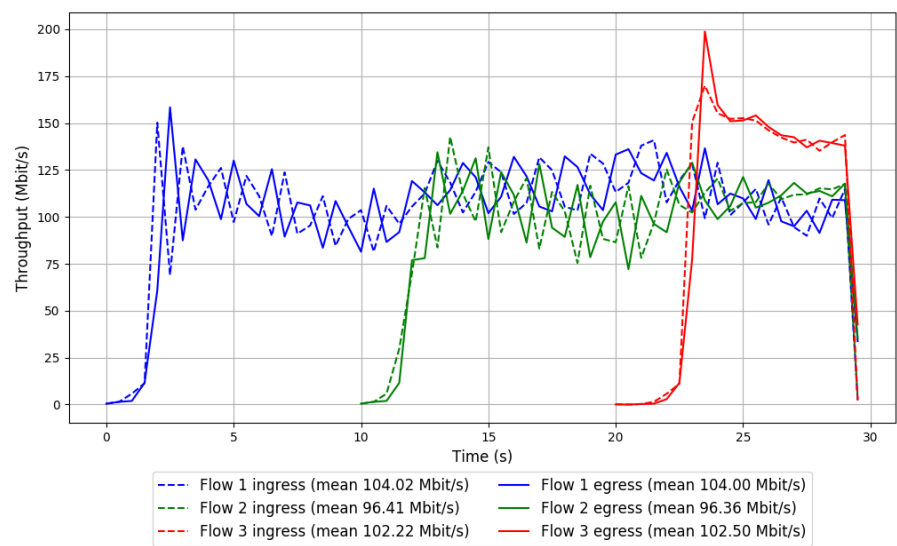
-- Flow 3:

Average throughput: 102.50 Mbit/s

95th percentile per-packet one-way delay: 141.242 ms

Loss rate: 0.09%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-21 19:57:41

End at: 2018-02-21 19:58:11

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 271.27 Mbit/s

95th percentile per-packet one-way delay: 140.862 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 147.01 Mbit/s

95th percentile per-packet one-way delay: 140.693 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 131.21 Mbit/s

95th percentile per-packet one-way delay: 141.101 ms

Loss rate: 0.05%

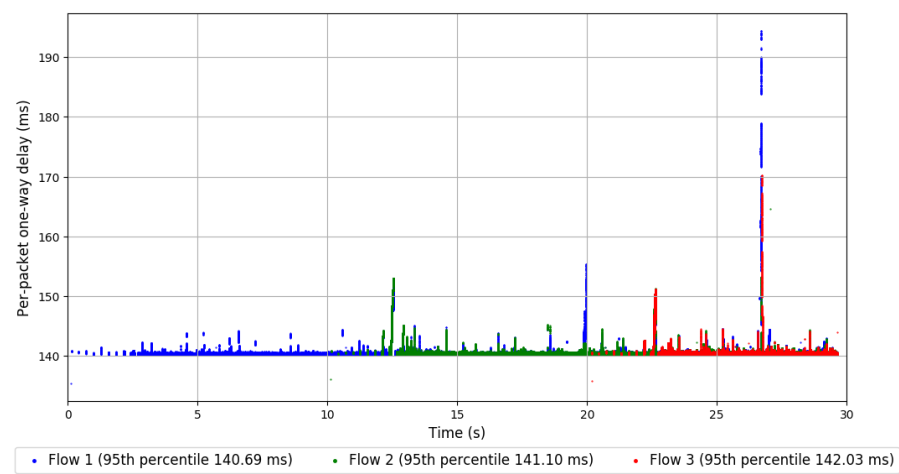
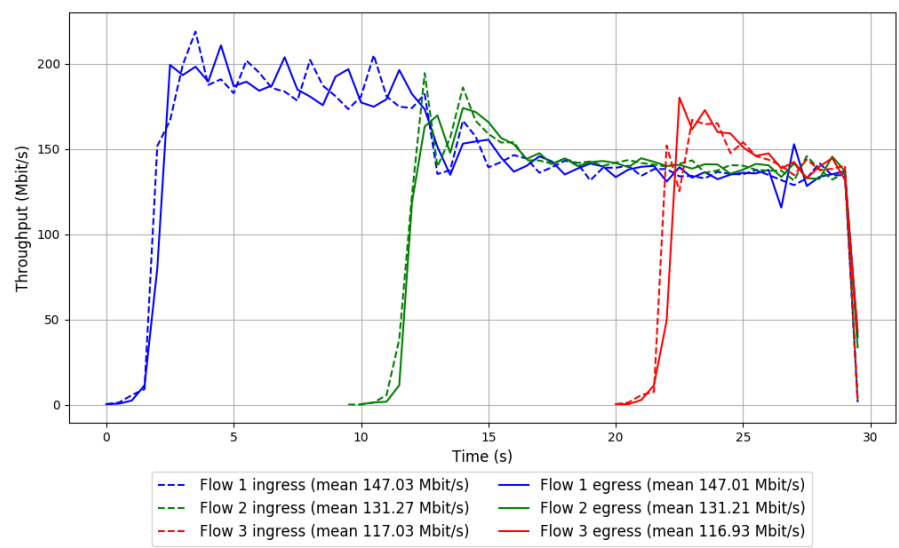
-- Flow 3:

Average throughput: 116.93 Mbit/s

95th percentile per-packet one-way delay: 142.032 ms

Loss rate: 0.05%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-21 20:18:18

End at: 2018-02-21 20:18:48

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 276.37 Mbit/s

95th percentile per-packet one-way delay: 140.992 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 143.11 Mbit/s

95th percentile per-packet one-way delay: 140.942 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 148.20 Mbit/s

95th percentile per-packet one-way delay: 141.037 ms

Loss rate: 0.02%

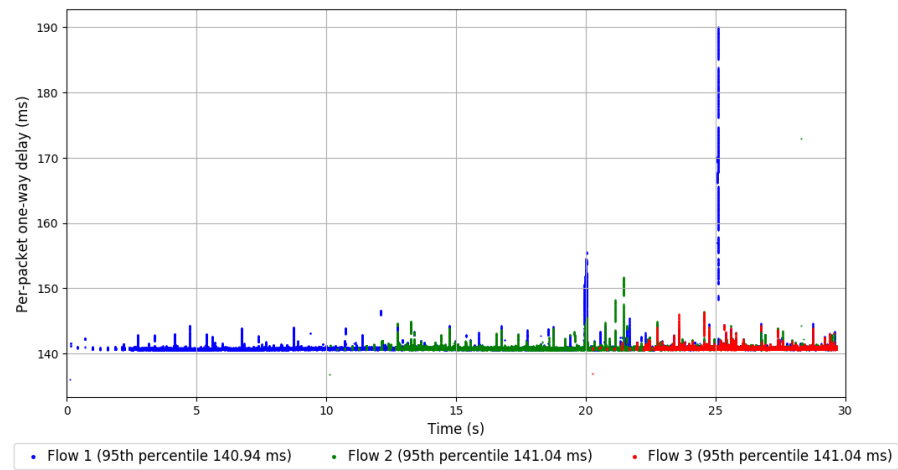
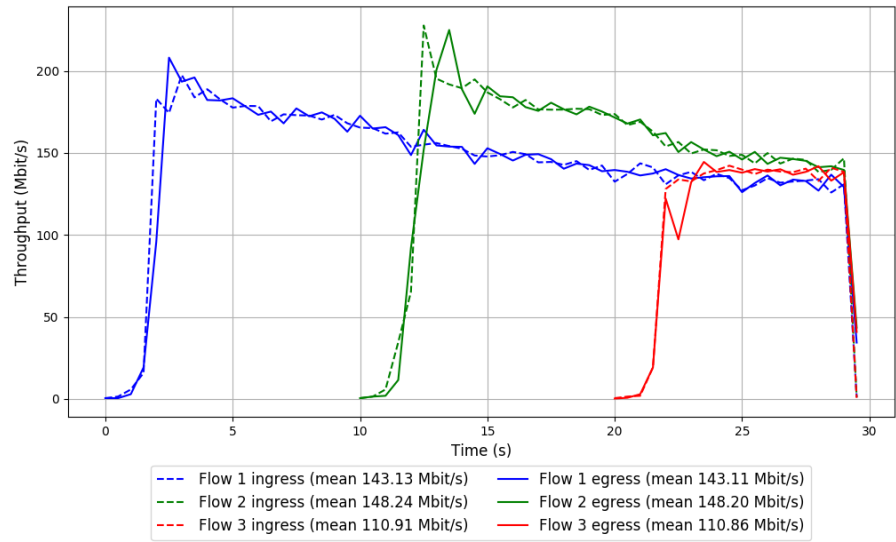
-- Flow 3:

Average throughput: 110.86 Mbit/s

95th percentile per-packet one-way delay: 141.045 ms

Loss rate: 0.03%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-21 20:38:16

End at: 2018-02-21 20:38:46

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.53 Mbit/s

95th percentile per-packet one-way delay: 141.042 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 139.57 Mbit/s

95th percentile per-packet one-way delay: 141.009 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 118.54 Mbit/s

95th percentile per-packet one-way delay: 141.057 ms

Loss rate: 0.01%

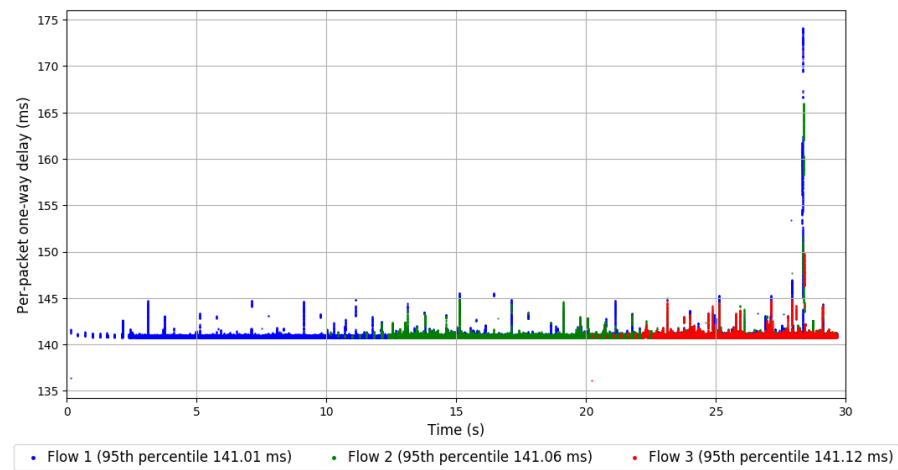
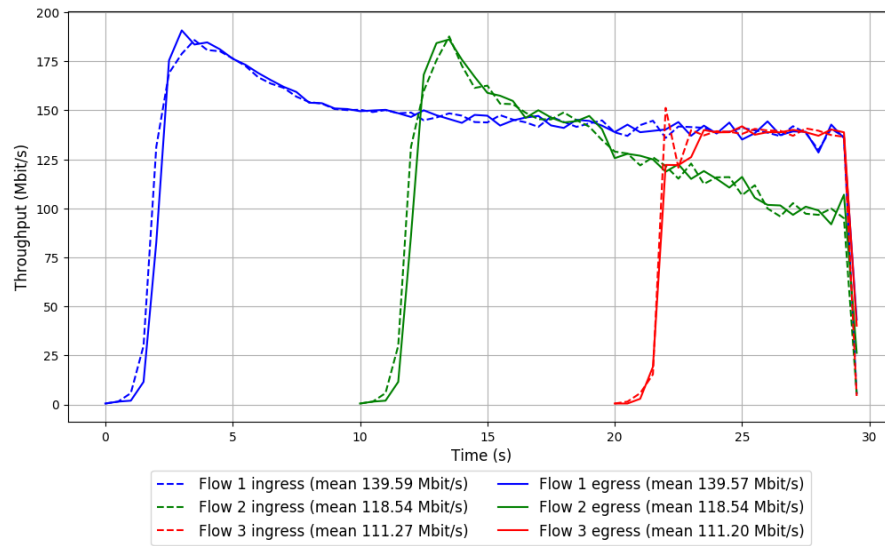
-- Flow 3:

Average throughput: 111.20 Mbit/s

95th percentile per-packet one-way delay: 141.120 ms

Loss rate: 0.04%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-21 20:58:20

End at: 2018-02-21 20:58:50

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.52 Mbit/s

95th percentile per-packet one-way delay: 141.758 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 160.13 Mbit/s

95th percentile per-packet one-way delay: 141.385 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 153.00 Mbit/s

95th percentile per-packet one-way delay: 142.482 ms

Loss rate: 0.02%

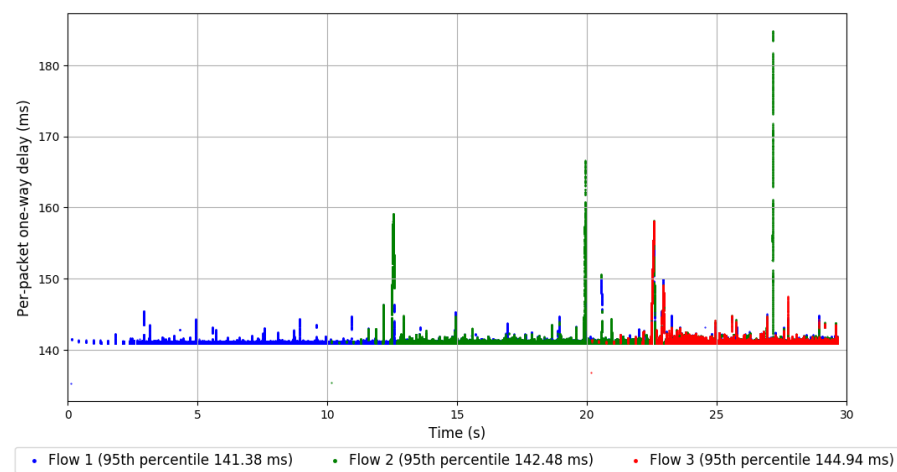
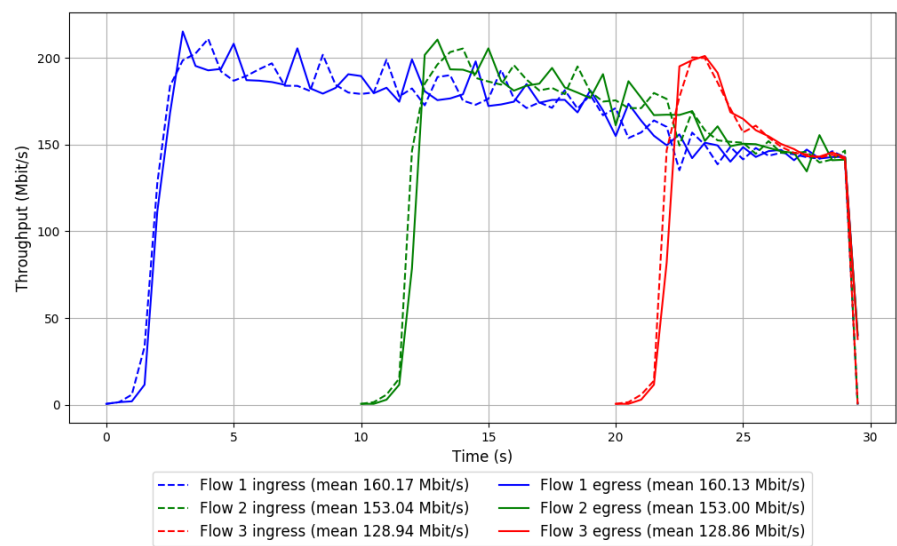
-- Flow 3:

Average throughput: 128.86 Mbit/s

95th percentile per-packet one-way delay: 144.937 ms

Loss rate: 0.05%

Run 10: Report of Indigo-1-32 — Data Link

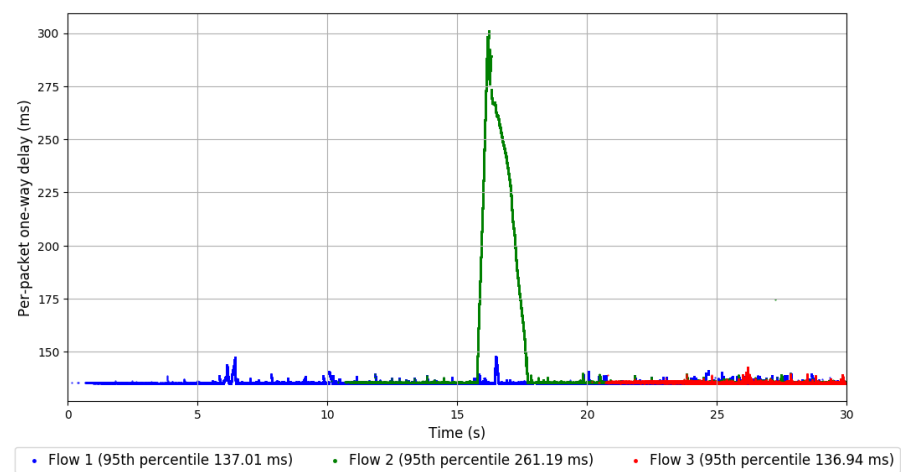
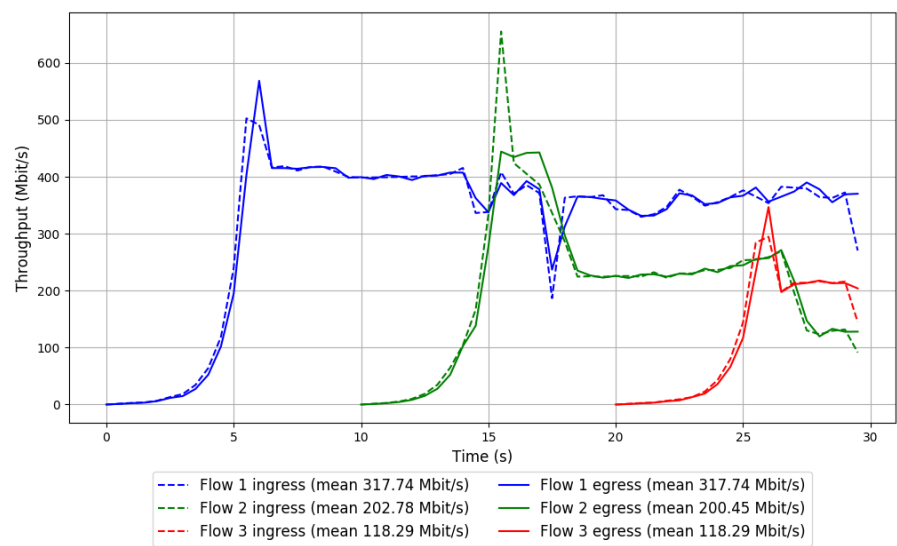


```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-21 18:06:26
End at: 2018-02-21 18:06:56

# Below is generated by plot.py at 2018-02-22 01:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 489.86 Mbit/s
95th percentile per-packet one-way delay: 167.604 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 317.74 Mbit/s
95th percentile per-packet one-way delay: 137.014 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 200.45 Mbit/s
95th percentile per-packet one-way delay: 261.185 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 118.29 Mbit/s
95th percentile per-packet one-way delay: 136.937 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-21 18:26:39

End at: 2018-02-21 18:27:09

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 396.95 Mbit/s

95th percentile per-packet one-way delay: 137.712 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 326.85 Mbit/s

95th percentile per-packet one-way delay: 138.400 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.22 Mbit/s

95th percentile per-packet one-way delay: 135.660 ms

Loss rate: 0.00%

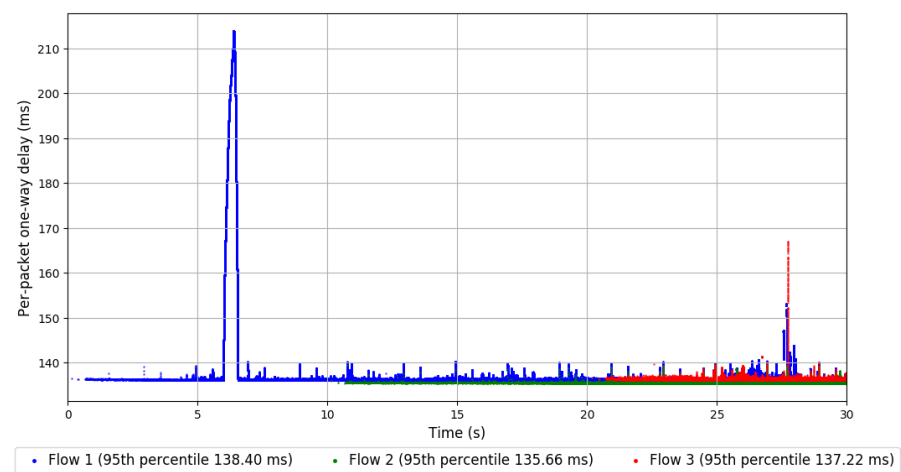
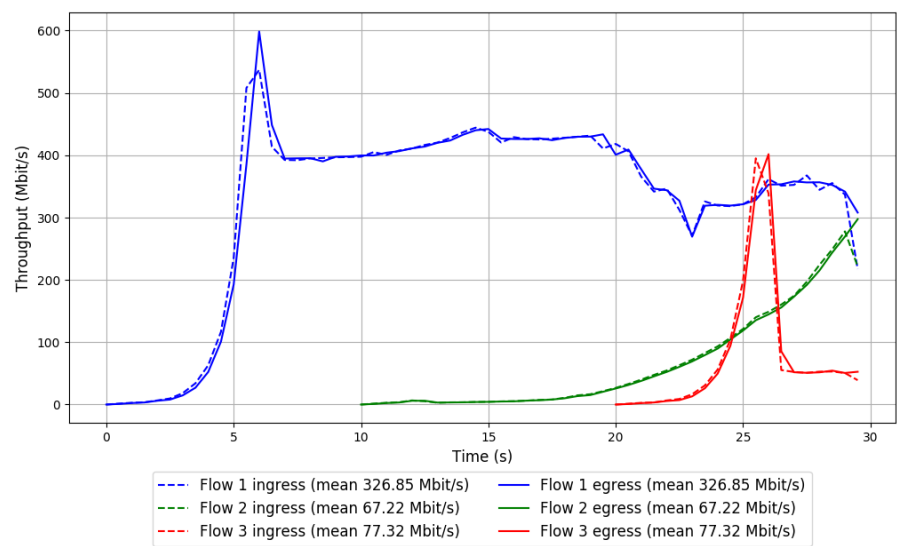
-- Flow 3:

Average throughput: 77.32 Mbit/s

95th percentile per-packet one-way delay: 137.220 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-21 18:46:34

End at: 2018-02-21 18:47:04

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 456.69 Mbit/s

95th percentile per-packet one-way delay: 141.575 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 239.75 Mbit/s

95th percentile per-packet one-way delay: 136.969 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 232.72 Mbit/s

95th percentile per-packet one-way delay: 149.675 ms

Loss rate: 0.00%

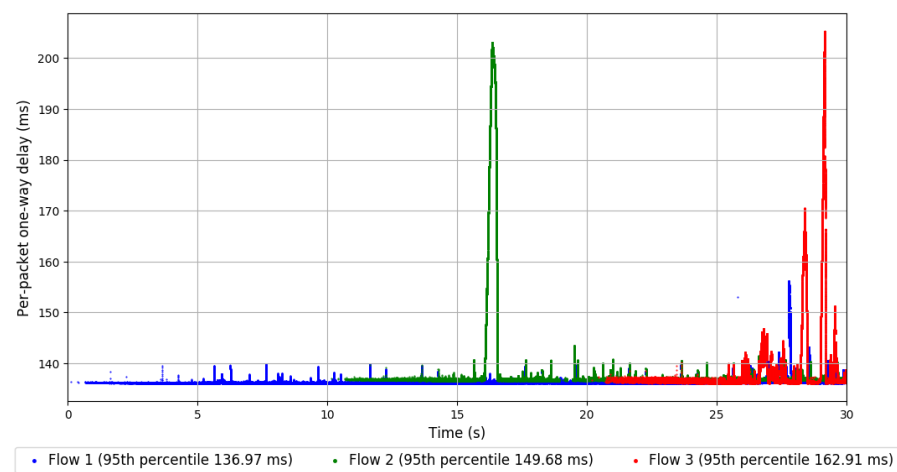
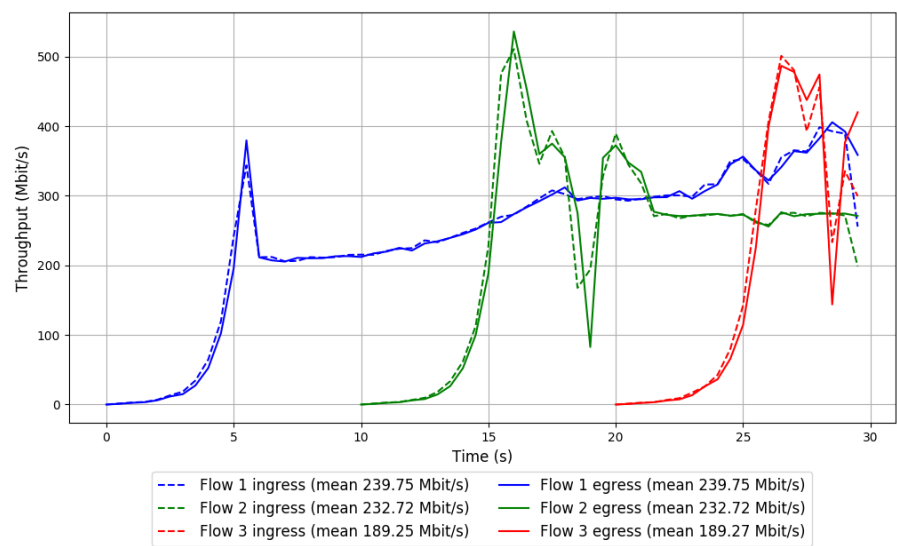
-- Flow 3:

Average throughput: 189.27 Mbit/s

95th percentile per-packet one-way delay: 162.906 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-21 19:07:24

End at: 2018-02-21 19:07:54

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 498.04 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 265.04 Mbit/s

95th percentile per-packet one-way delay: 152.468 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 289.56 Mbit/s

95th percentile per-packet one-way delay: 143.445 ms

Loss rate: 0.00%

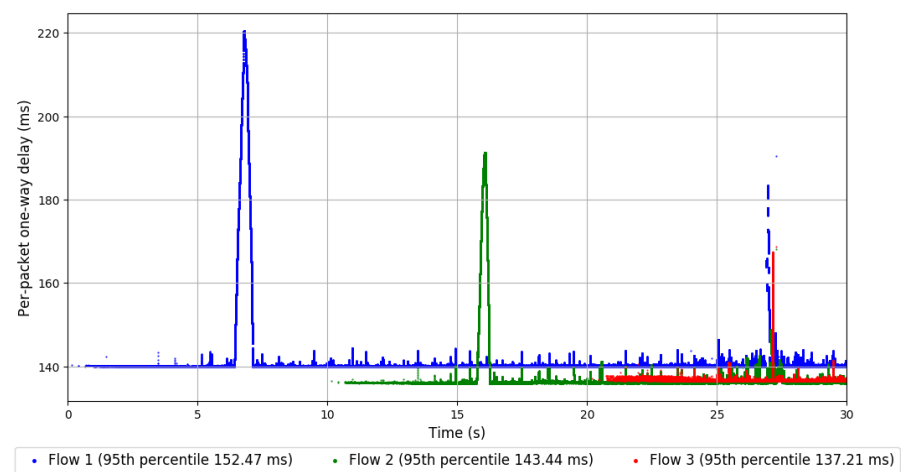
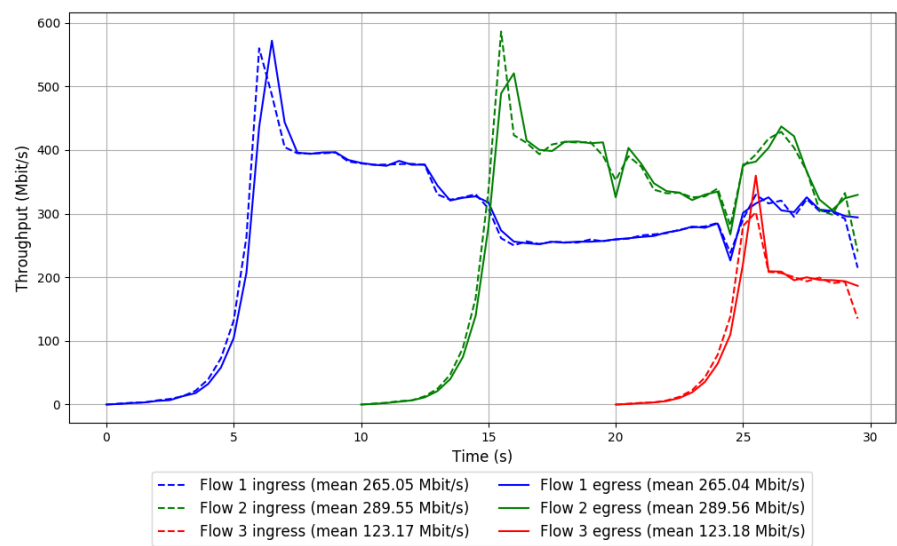
-- Flow 3:

Average throughput: 123.18 Mbit/s

95th percentile per-packet one-way delay: 137.206 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-21 19:28:07

End at: 2018-02-21 19:28:37

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 419.73 Mbit/s

95th percentile per-packet one-way delay: 140.843 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 255.49 Mbit/s

95th percentile per-packet one-way delay: 140.989 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 185.78 Mbit/s

95th percentile per-packet one-way delay: 136.690 ms

Loss rate: 0.00%

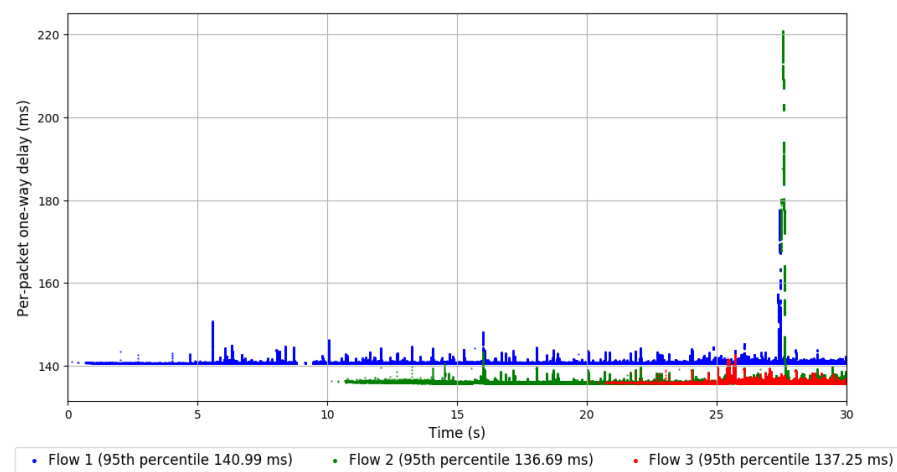
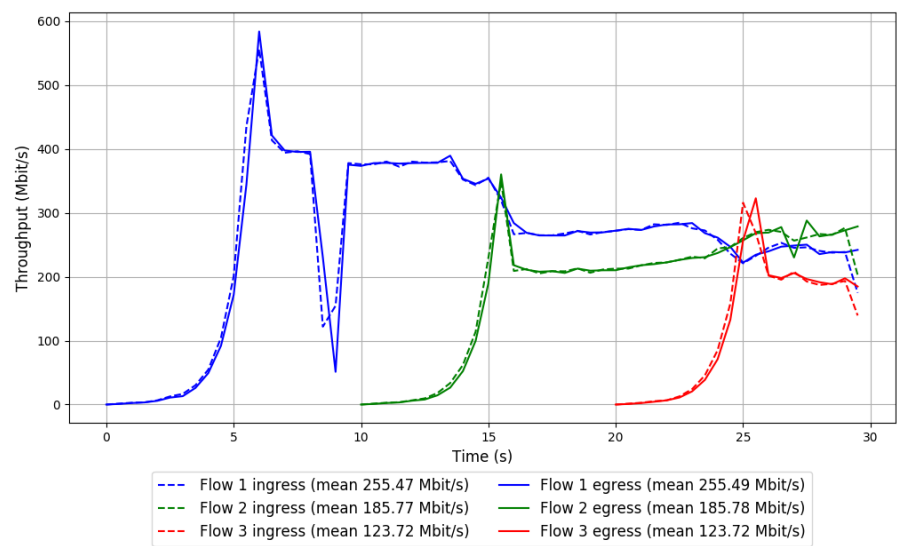
-- Flow 3:

Average throughput: 123.72 Mbit/s

95th percentile per-packet one-way delay: 137.247 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-21 19:48:24

End at: 2018-02-21 19:48:54

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 386.55 Mbit/s

95th percentile per-packet one-way delay: 136.349 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 251.54 Mbit/s

95th percentile per-packet one-way delay: 136.549 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 169.37 Mbit/s

95th percentile per-packet one-way delay: 136.214 ms

Loss rate: 0.00%

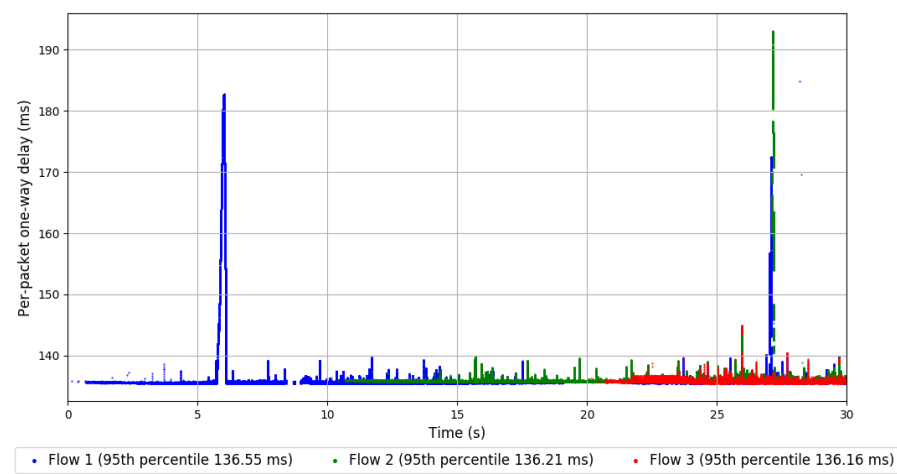
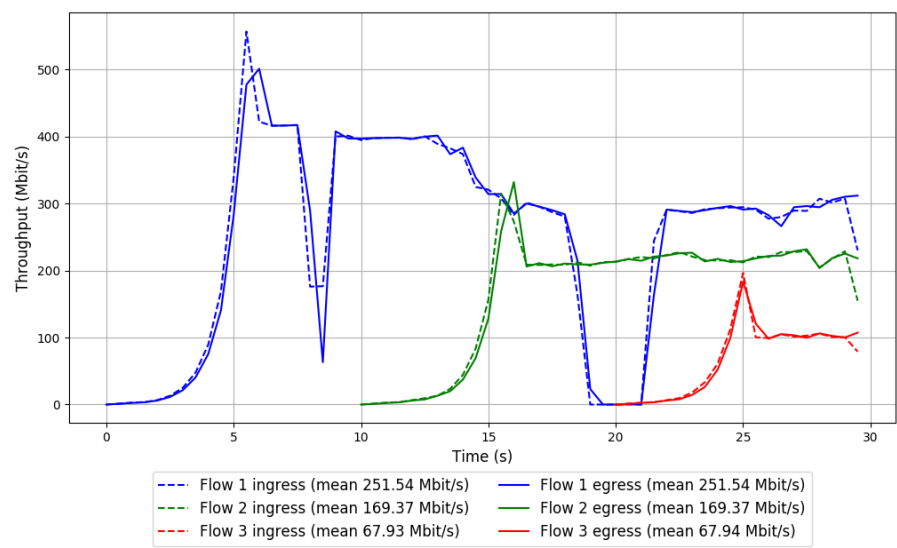
-- Flow 3:

Average throughput: 67.94 Mbit/s

95th percentile per-packet one-way delay: 136.164 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-21 20:09:03

End at: 2018-02-21 20:09:33

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.46 Mbit/s

95th percentile per-packet one-way delay: 149.806 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 244.52 Mbit/s

95th percentile per-packet one-way delay: 161.901 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 176.53 Mbit/s

95th percentile per-packet one-way delay: 137.062 ms

Loss rate: 0.00%

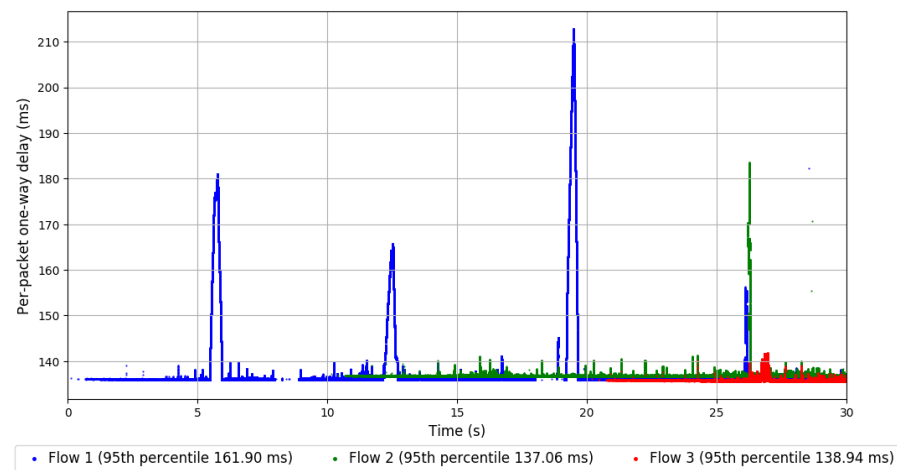
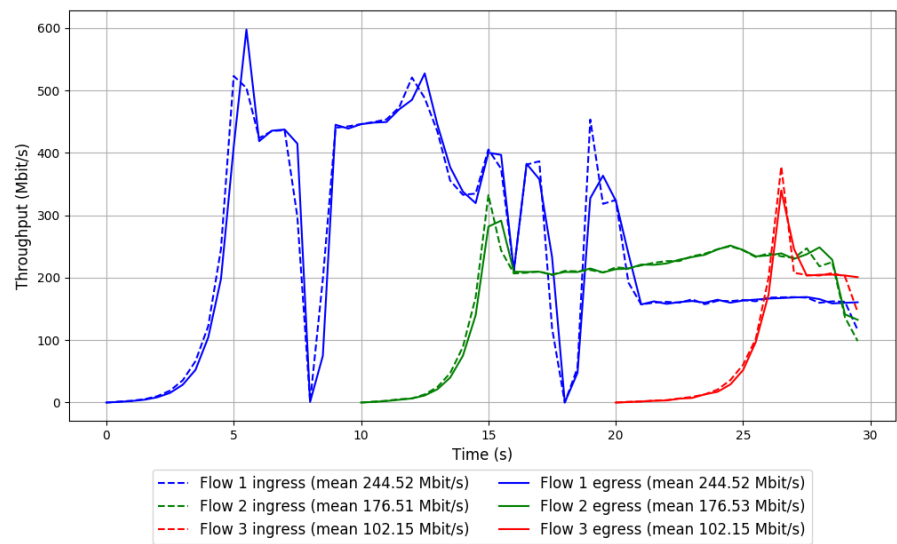
-- Flow 3:

Average throughput: 102.15 Mbit/s

95th percentile per-packet one-way delay: 138.944 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-21 20:29:34

End at: 2018-02-21 20:30:04

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 455.71 Mbit/s

95th percentile per-packet one-way delay: 137.593 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 291.00 Mbit/s

95th percentile per-packet one-way delay: 138.587 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 178.85 Mbit/s

95th percentile per-packet one-way delay: 136.561 ms

Loss rate: 0.00%

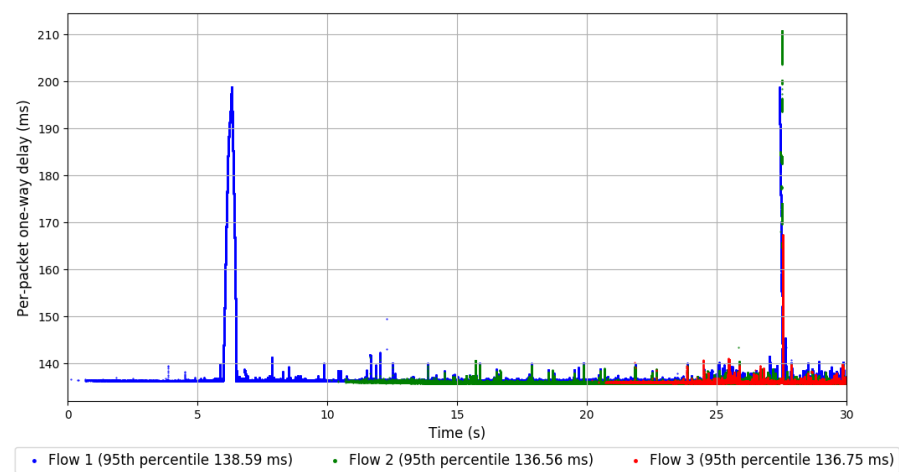
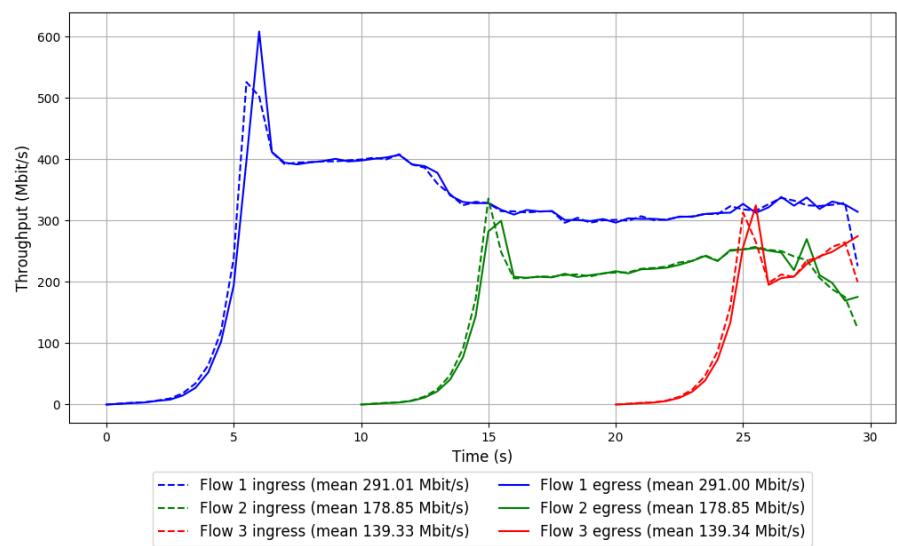
-- Flow 3:

Average throughput: 139.34 Mbit/s

95th percentile per-packet one-way delay: 136.752 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-21 20:49:29

End at: 2018-02-21 20:49:59

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 439.74 Mbit/s

95th percentile per-packet one-way delay: 137.841 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 286.79 Mbit/s

95th percentile per-packet one-way delay: 138.516 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 163.75 Mbit/s

95th percentile per-packet one-way delay: 136.706 ms

Loss rate: 0.00%

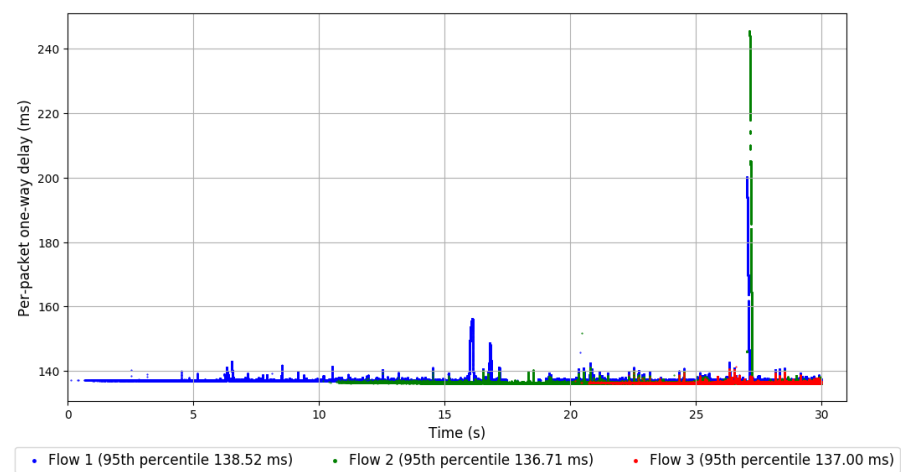
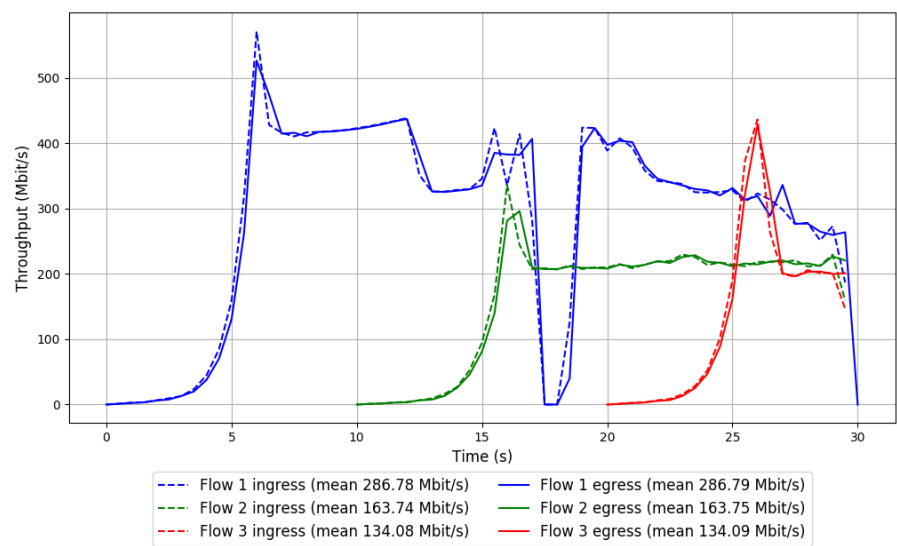
-- Flow 3:

Average throughput: 134.09 Mbit/s

95th percentile per-packet one-way delay: 137.004 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-21 21:09:36

End at: 2018-02-21 21:10:06

Below is generated by plot.py at 2018-02-22 01:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 406.42 Mbit/s

95th percentile per-packet one-way delay: 136.225 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 260.98 Mbit/s

95th percentile per-packet one-way delay: 135.864 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 159.42 Mbit/s

95th percentile per-packet one-way delay: 136.332 ms

Loss rate: 0.00%

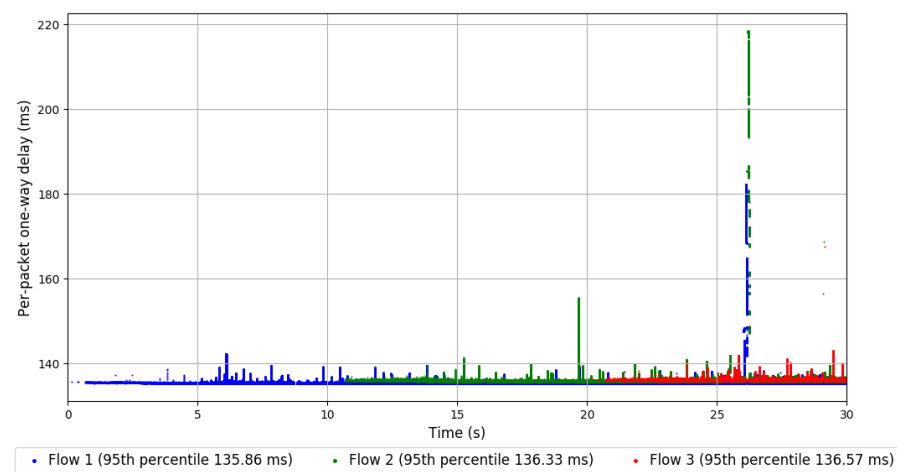
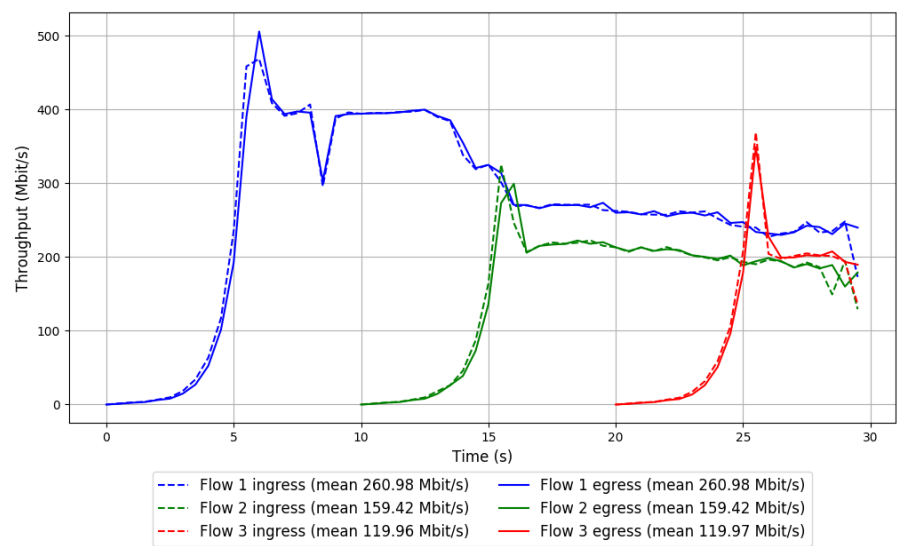
-- Flow 3:

Average throughput: 119.97 Mbit/s

95th percentile per-packet one-way delay: 136.572 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

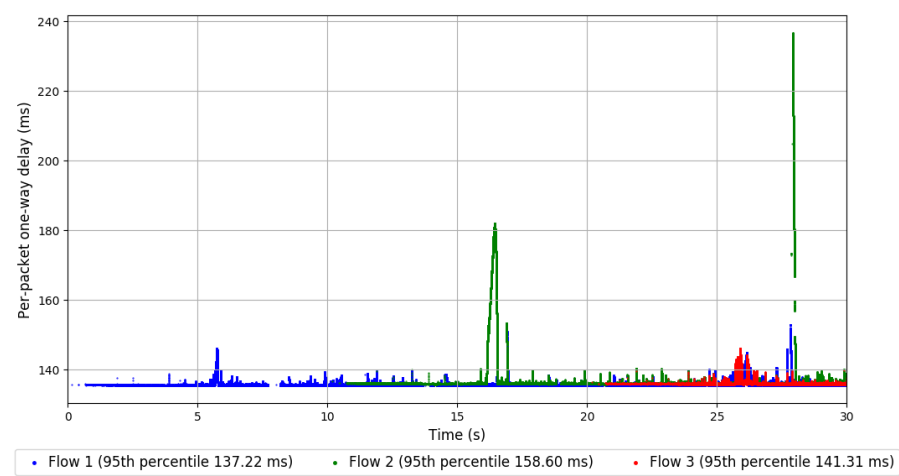
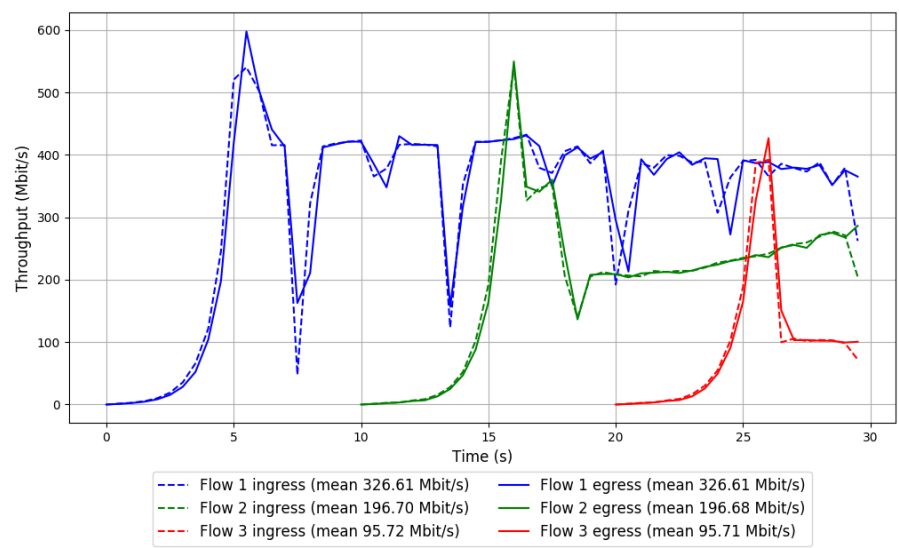


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-21 18:07:56
End at: 2018-02-21 18:08:26

# Below is generated by plot.py at 2018-02-22 01:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 488.56 Mbit/s
95th percentile per-packet one-way delay: 138.261 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 326.61 Mbit/s
95th percentile per-packet one-way delay: 137.215 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 196.68 Mbit/s
95th percentile per-packet one-way delay: 158.604 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 141.314 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-loss — Data Link

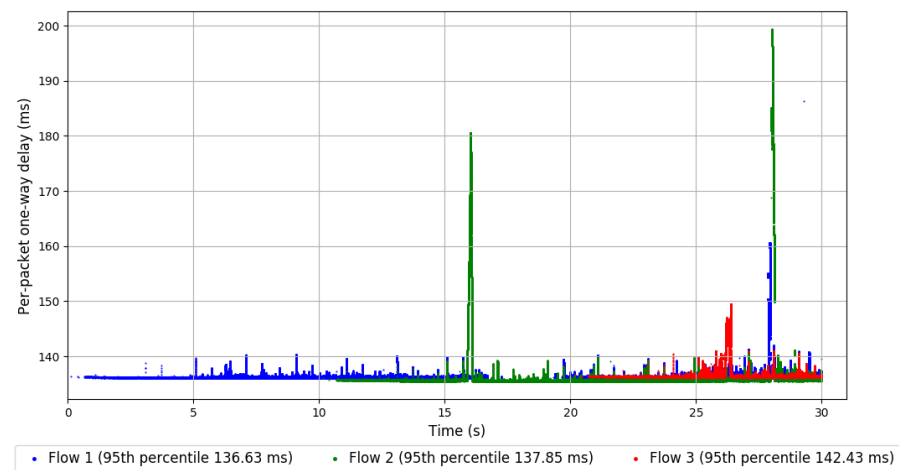
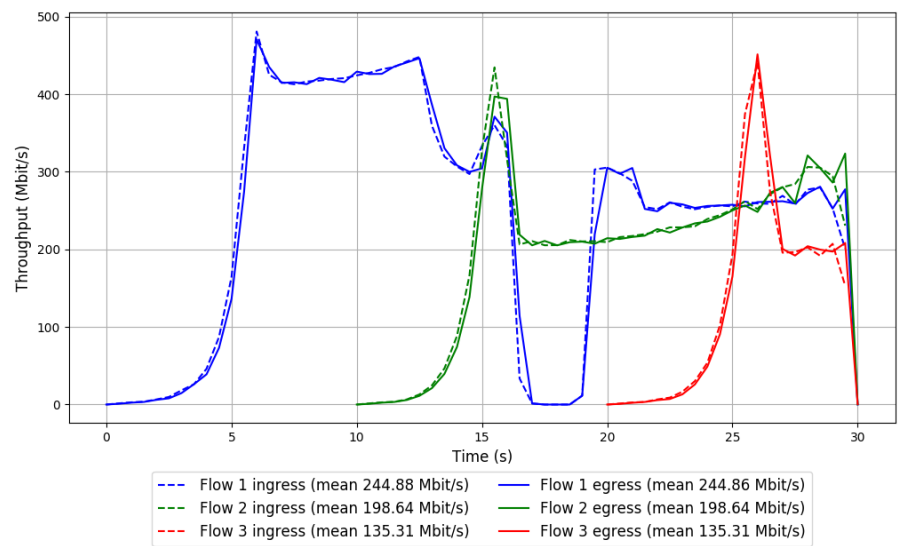


```
Run 2: Statistics of Vivace-loss

Start at: 2018-02-21 18:28:00
End at: 2018-02-21 18:28:30

# Below is generated by plot.py at 2018-02-22 01:08:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 421.38 Mbit/s
95th percentile per-packet one-way delay: 137.211 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 244.86 Mbit/s
95th percentile per-packet one-way delay: 136.635 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 198.64 Mbit/s
95th percentile per-packet one-way delay: 137.852 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 135.31 Mbit/s
95th percentile per-packet one-way delay: 142.430 ms
Loss rate: 0.00%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-21 18:48:01

End at: 2018-02-21 18:48:31

Below is generated by plot.py at 2018-02-22 01:09:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 486.67 Mbit/s

95th percentile per-packet one-way delay: 137.831 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 316.43 Mbit/s

95th percentile per-packet one-way delay: 137.665 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 193.22 Mbit/s

95th percentile per-packet one-way delay: 139.714 ms

Loss rate: 0.01%

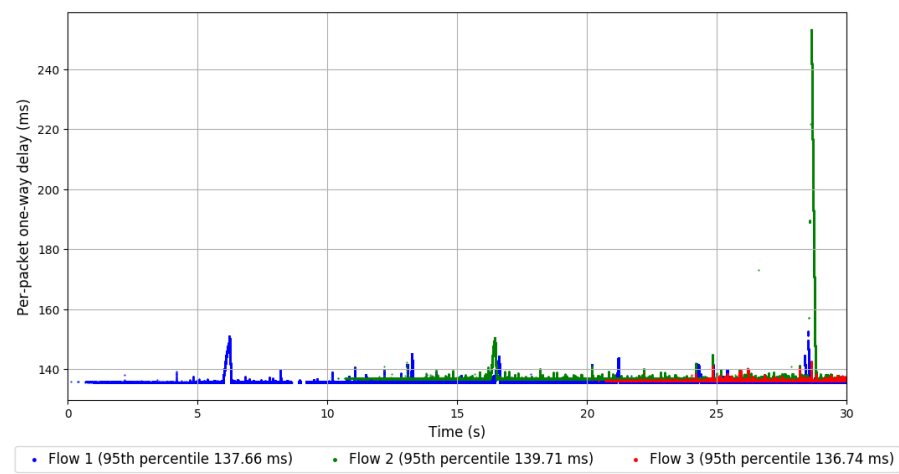
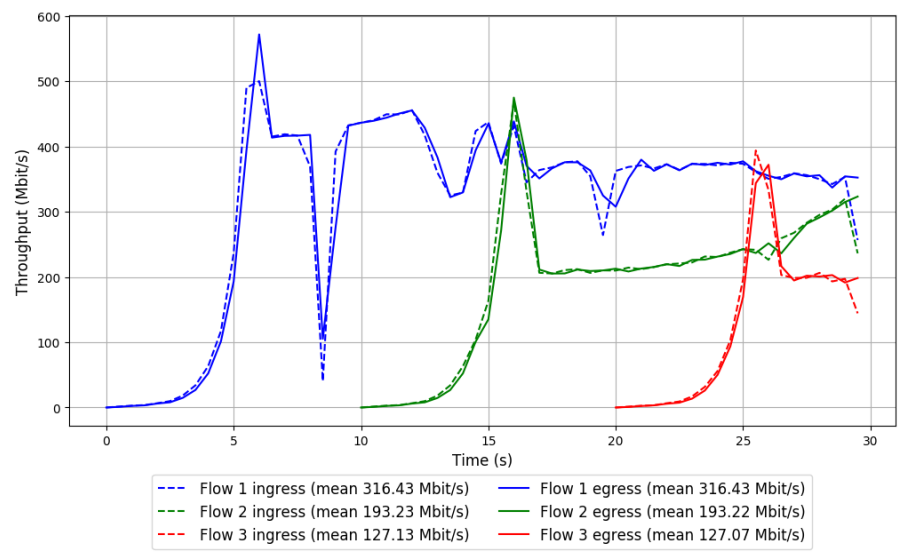
-- Flow 3:

Average throughput: 127.07 Mbit/s

95th percentile per-packet one-way delay: 136.743 ms

Loss rate: 0.06%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-21 19:08:55

End at: 2018-02-21 19:09:25

Below is generated by plot.py at 2018-02-22 01:09:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 367.32 Mbit/s

95th percentile per-packet one-way delay: 137.023 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 159.39 Mbit/s

95th percentile per-packet one-way delay: 136.679 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 248.18 Mbit/s

95th percentile per-packet one-way delay: 136.928 ms

Loss rate: 0.00%

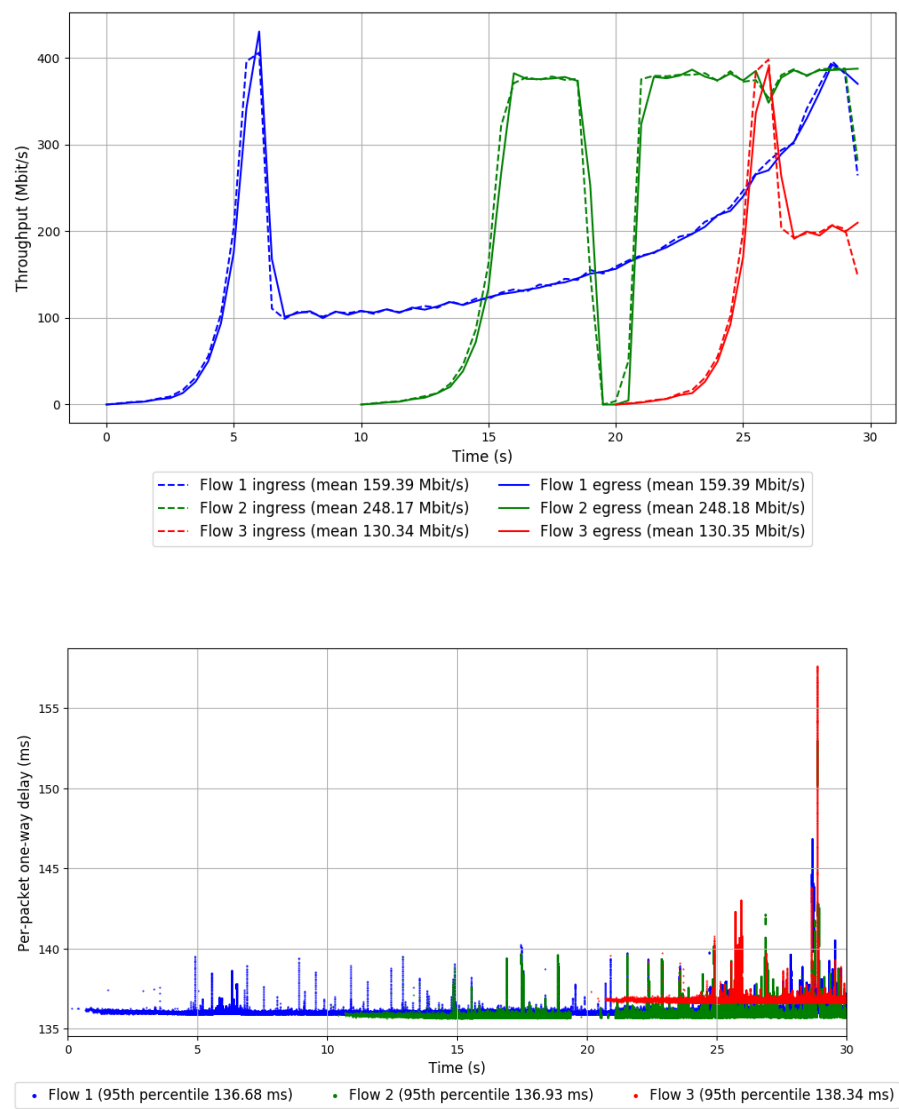
-- Flow 3:

Average throughput: 130.35 Mbit/s

95th percentile per-packet one-way delay: 138.336 ms

Loss rate: 0.00%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-21 19:29:32

End at: 2018-02-21 19:30:02

Below is generated by plot.py at 2018-02-22 01:11:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 433.47 Mbit/s

95th percentile per-packet one-way delay: 141.969 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 248.39 Mbit/s

95th percentile per-packet one-way delay: 141.398 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 192.88 Mbit/s

95th percentile per-packet one-way delay: 136.217 ms

Loss rate: 0.00%

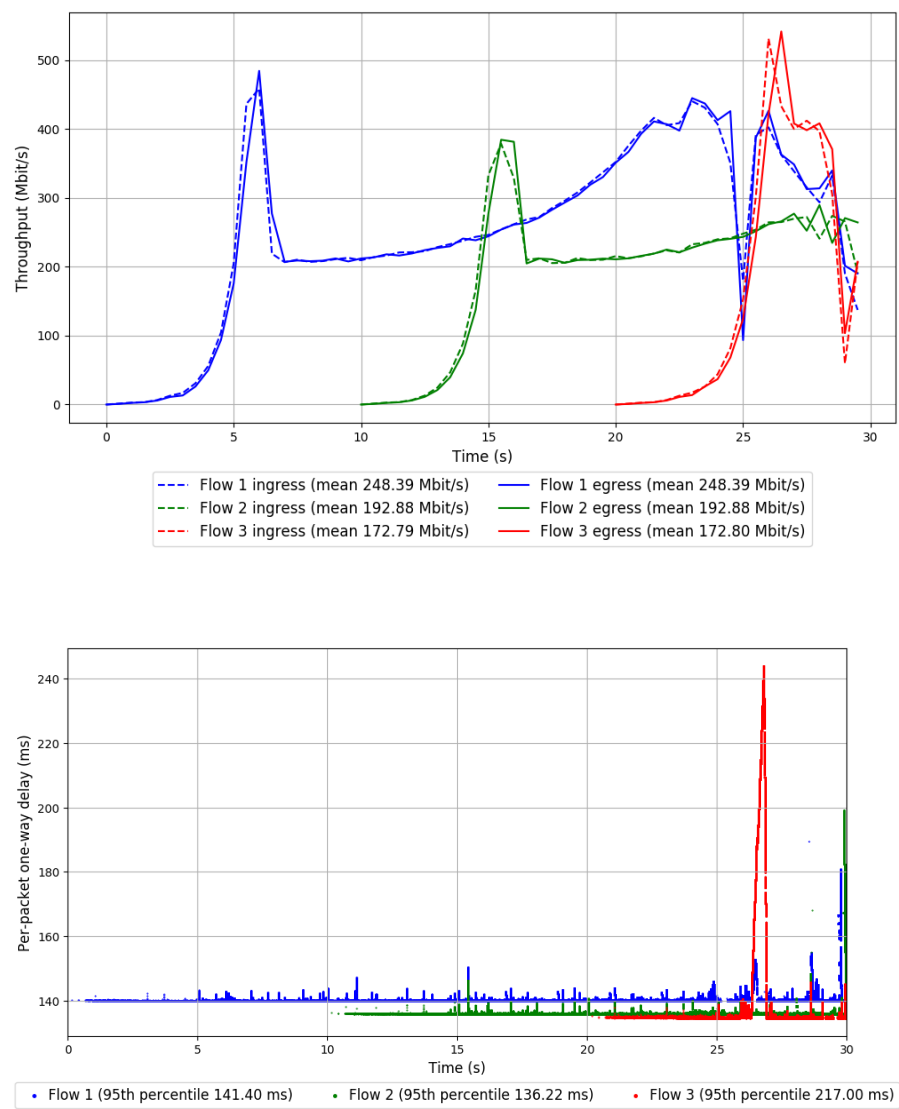
-- Flow 3:

Average throughput: 172.80 Mbit/s

95th percentile per-packet one-way delay: 217.003 ms

Loss rate: 0.00%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-21 19:49:46

End at: 2018-02-21 19:50:16

Below is generated by plot.py at 2018-02-22 01:13:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 527.95 Mbit/s

95th percentile per-packet one-way delay: 140.150 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 306.91 Mbit/s

95th percentile per-packet one-way delay: 136.577 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 284.25 Mbit/s

95th percentile per-packet one-way delay: 141.266 ms

Loss rate: 0.01%

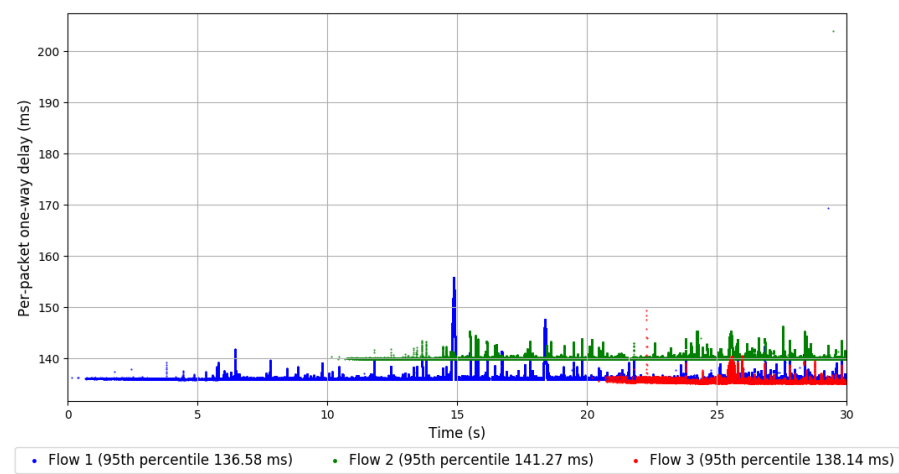
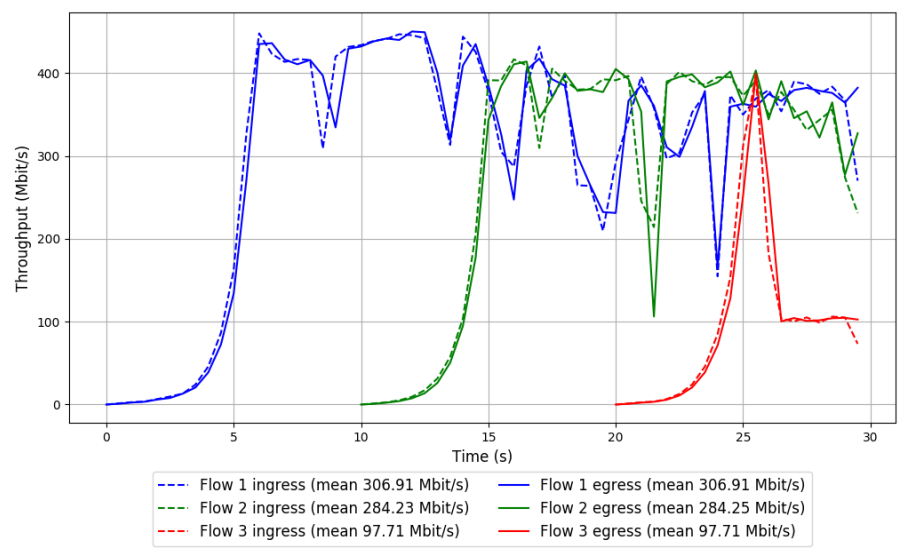
-- Flow 3:

Average throughput: 97.71 Mbit/s

95th percentile per-packet one-way delay: 138.137 ms

Loss rate: 0.00%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-21 20:10:26

End at: 2018-02-21 20:10:56

Below is generated by plot.py at 2018-02-22 01:14:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 488.13 Mbit/s

95th percentile per-packet one-way delay: 139.646 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 293.01 Mbit/s

95th percentile per-packet one-way delay: 137.413 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 195.98 Mbit/s

95th percentile per-packet one-way delay: 139.981 ms

Loss rate: 0.00%

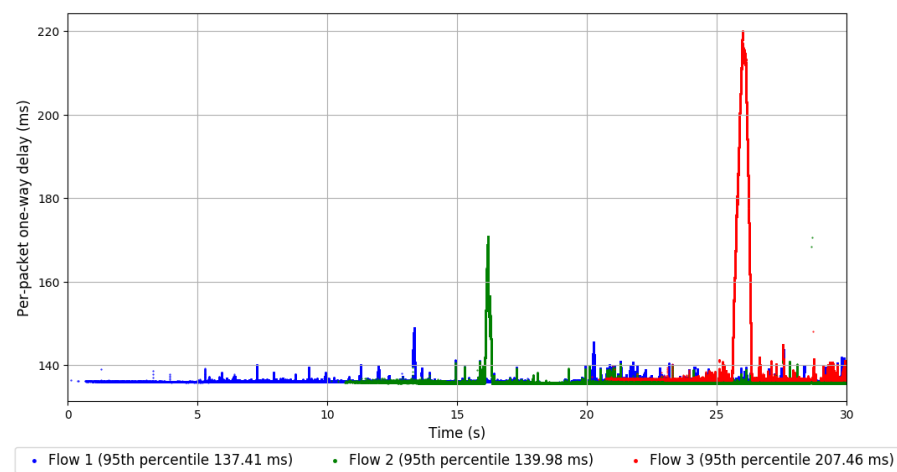
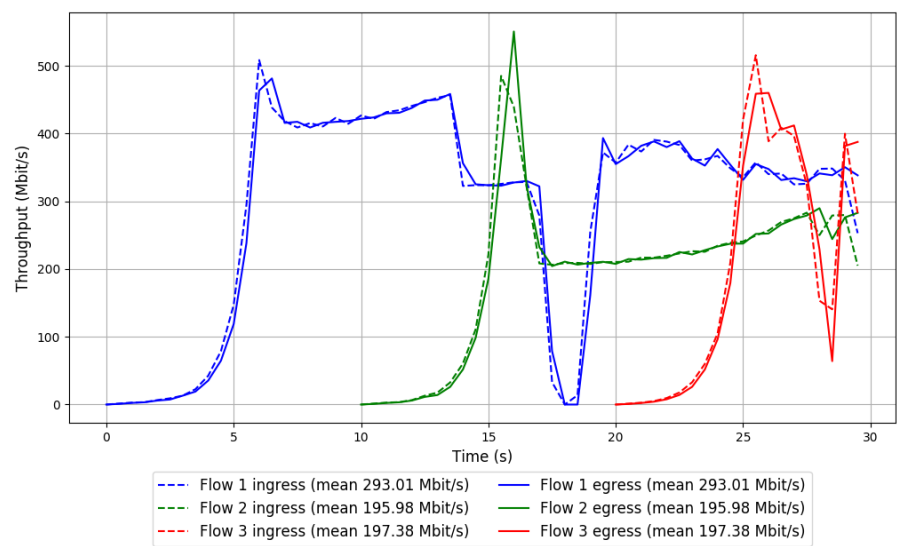
-- Flow 3:

Average throughput: 197.38 Mbit/s

95th percentile per-packet one-way delay: 207.456 ms

Loss rate: 0.00%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-21 20:31:01

End at: 2018-02-21 20:31:31

Below is generated by plot.py at 2018-02-22 01:14:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 324.06 Mbit/s

95th percentile per-packet one-way delay: 138.891 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 150.95 Mbit/s

95th percentile per-packet one-way delay: 141.179 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.97 Mbit/s

95th percentile per-packet one-way delay: 138.909 ms

Loss rate: 0.00%

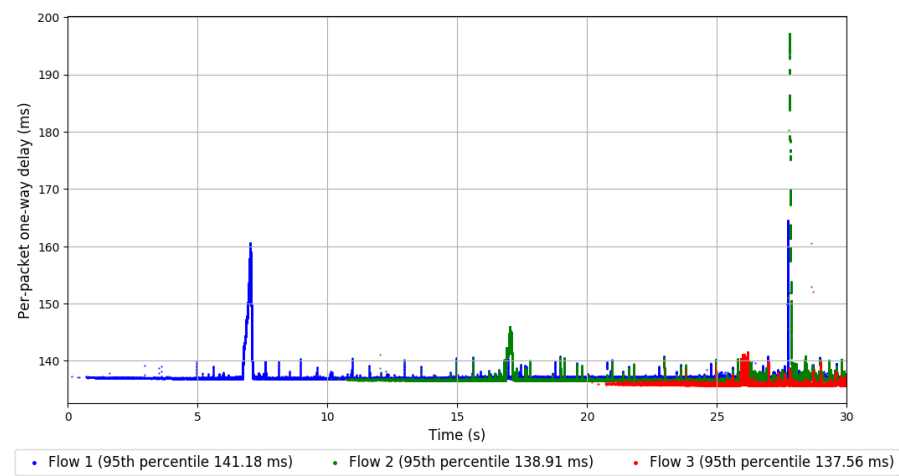
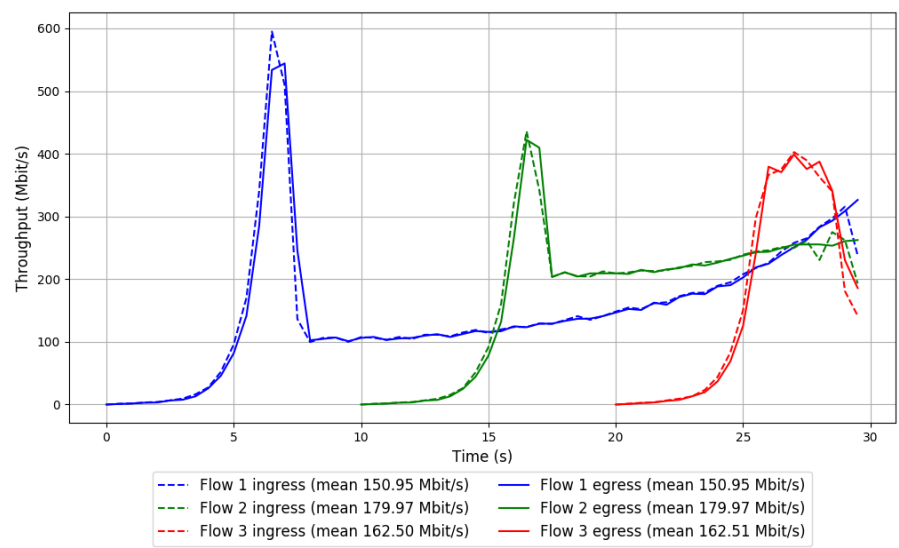
-- Flow 3:

Average throughput: 162.51 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-21 20:50:55

End at: 2018-02-21 20:51:25

Below is generated by plot.py at 2018-02-22 01:15:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 447.30 Mbit/s

95th percentile per-packet one-way delay: 137.627 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 314.98 Mbit/s

95th percentile per-packet one-way delay: 138.384 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 159.73 Mbit/s

95th percentile per-packet one-way delay: 136.599 ms

Loss rate: 0.00%

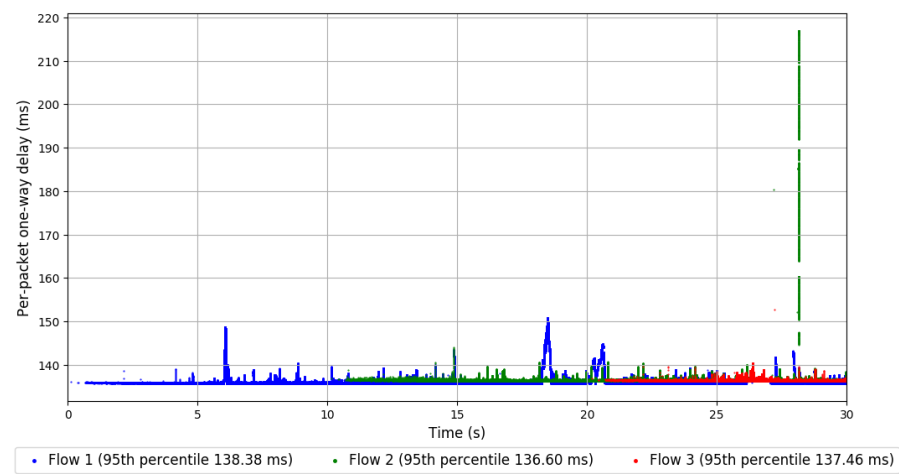
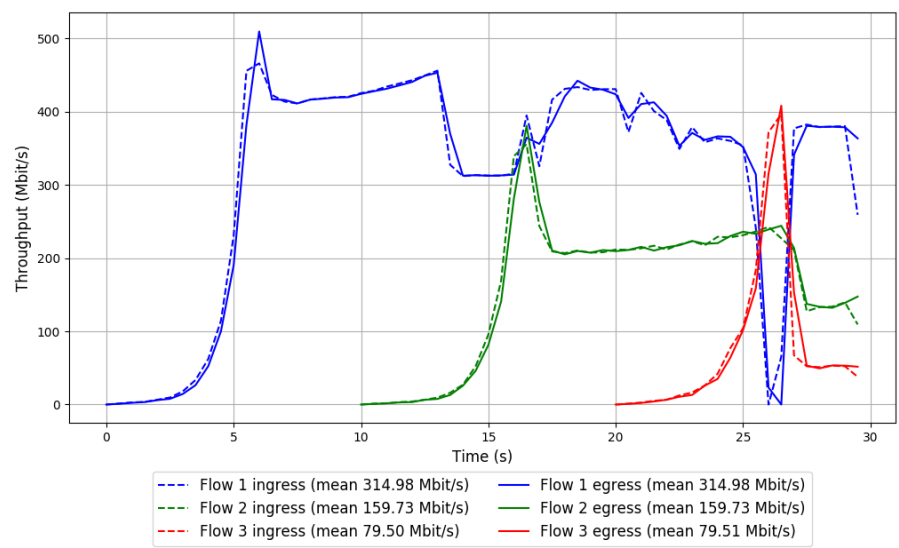
-- Flow 3:

Average throughput: 79.51 Mbit/s

95th percentile per-packet one-way delay: 137.461 ms

Loss rate: 0.00%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-21 21:10:59

End at: 2018-02-21 21:11:29

Below is generated by plot.py at 2018-02-22 01:18:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 508.61 Mbit/s

95th percentile per-packet one-way delay: 139.092 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 280.58 Mbit/s

95th percentile per-packet one-way delay: 138.180 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 295.41 Mbit/s

95th percentile per-packet one-way delay: 144.923 ms

Loss rate: 0.00%

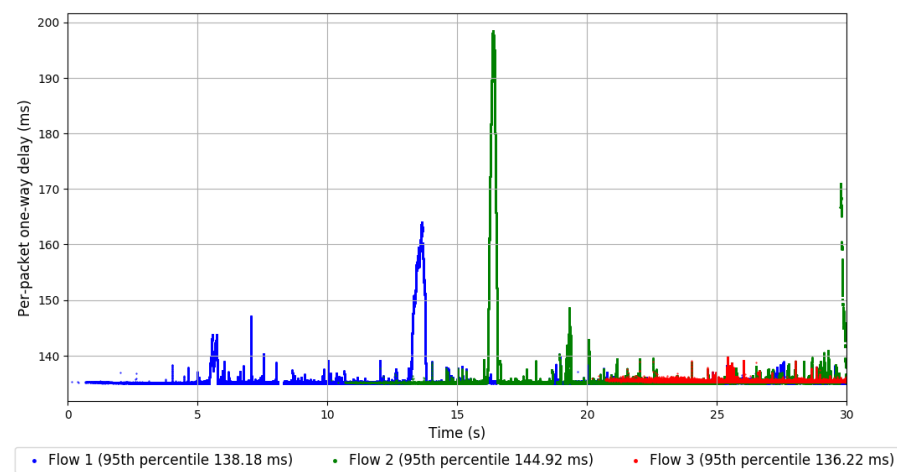
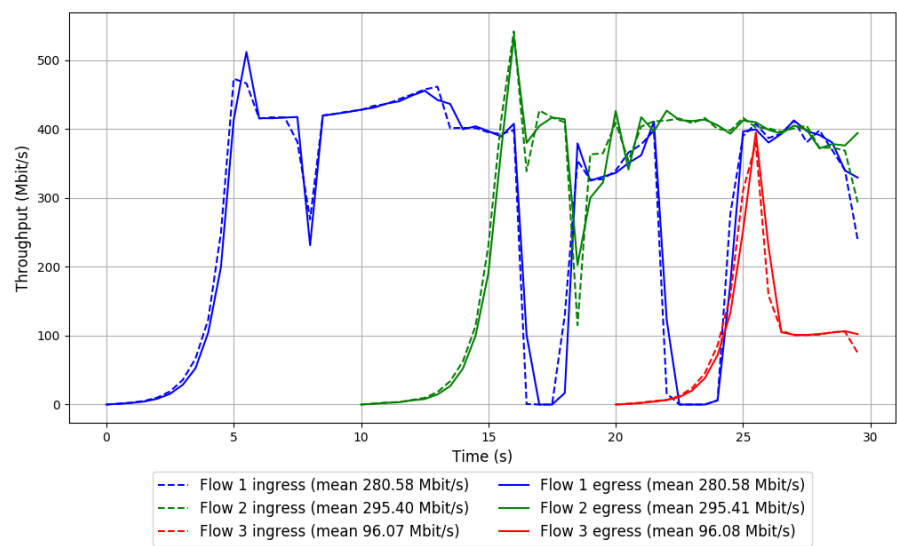
-- Flow 3:

Average throughput: 96.08 Mbit/s

95th percentile per-packet one-way delay: 136.222 ms

Loss rate: 0.00%

Run 10: Report of Vivace-loss — Data Link

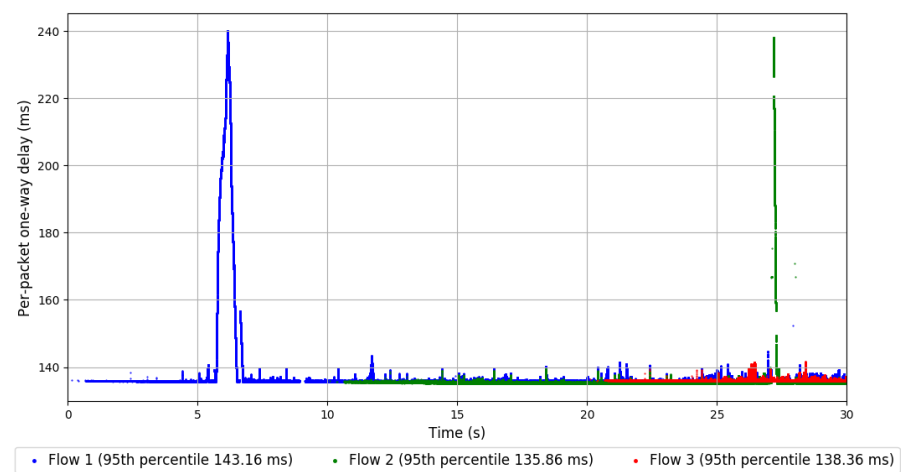
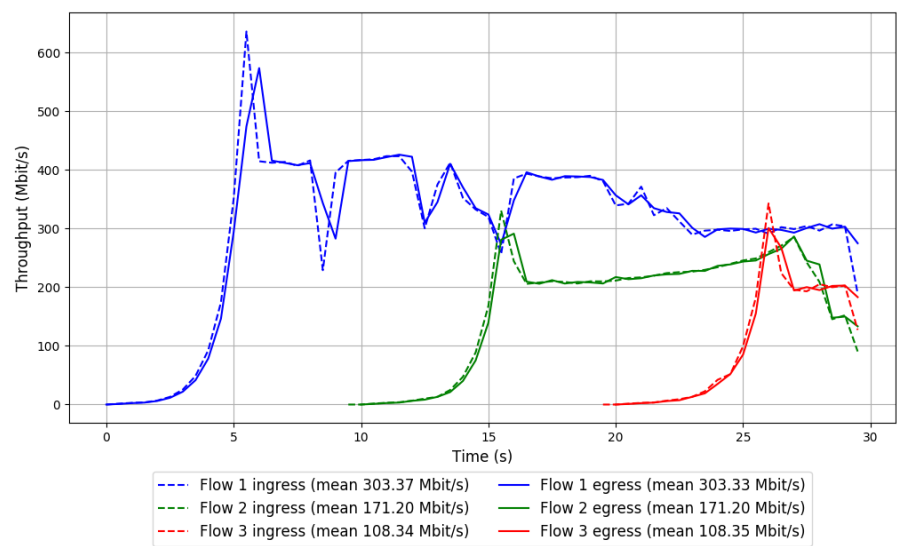


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-21 18:03:19
End at: 2018-02-21 18:03:49

# Below is generated by plot.py at 2018-02-22 01:18:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 453.01 Mbit/s
95th percentile per-packet one-way delay: 138.910 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 303.33 Mbit/s
95th percentile per-packet one-way delay: 143.155 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 171.20 Mbit/s
95th percentile per-packet one-way delay: 135.859 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 108.35 Mbit/s
95th percentile per-packet one-way delay: 138.360 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-21 18:23:30

End at: 2018-02-21 18:24:00

Below is generated by plot.py at 2018-02-22 01:18:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 488.66 Mbit/s

95th percentile per-packet one-way delay: 148.387 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 301.73 Mbit/s

95th percentile per-packet one-way delay: 138.516 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 188.58 Mbit/s

95th percentile per-packet one-way delay: 195.860 ms

Loss rate: 0.53%

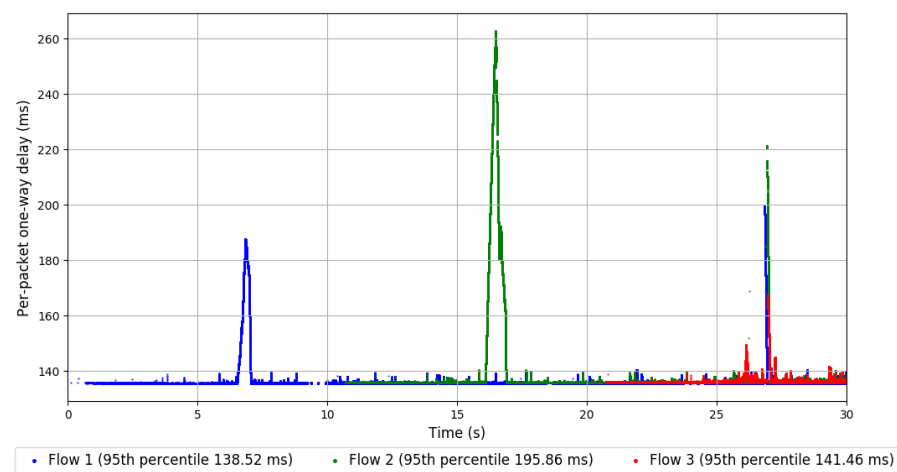
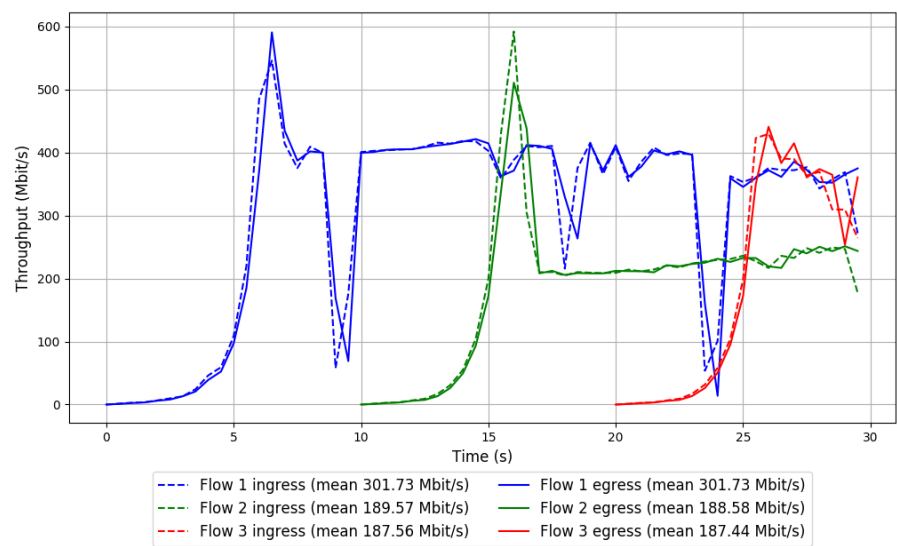
-- Flow 3:

Average throughput: 187.44 Mbit/s

95th percentile per-packet one-way delay: 141.464 ms

Loss rate: 0.07%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-21 18:43:26

End at: 2018-02-21 18:43:56

Below is generated by plot.py at 2018-02-22 01:20:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 479.18 Mbit/s

95th percentile per-packet one-way delay: 136.889 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 308.63 Mbit/s

95th percentile per-packet one-way delay: 137.054 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.92 Mbit/s

95th percentile per-packet one-way delay: 135.715 ms

Loss rate: 0.00%

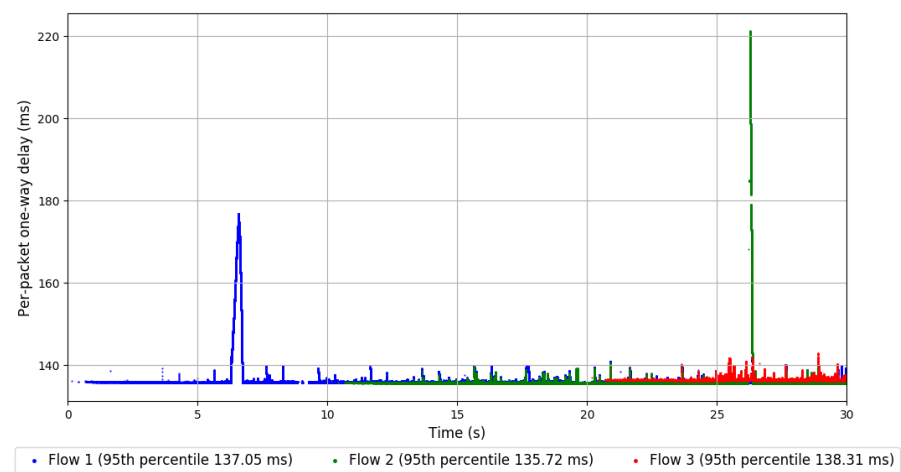
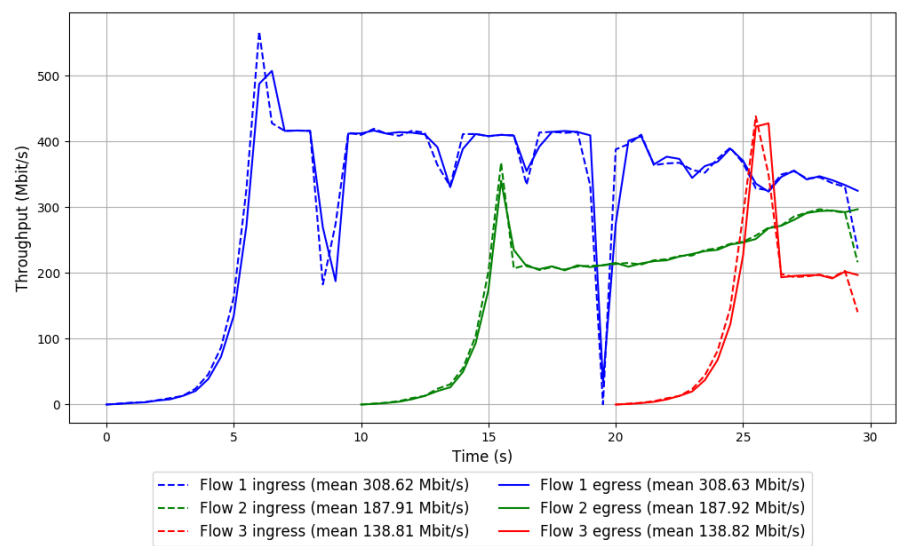
-- Flow 3:

Average throughput: 138.82 Mbit/s

95th percentile per-packet one-way delay: 138.314 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-21 19:04:19

End at: 2018-02-21 19:04:49

Below is generated by plot.py at 2018-02-22 01:20:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 429.61 Mbit/s

95th percentile per-packet one-way delay: 137.711 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 285.05 Mbit/s

95th percentile per-packet one-way delay: 137.558 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 171.47 Mbit/s

95th percentile per-packet one-way delay: 136.464 ms

Loss rate: 0.00%

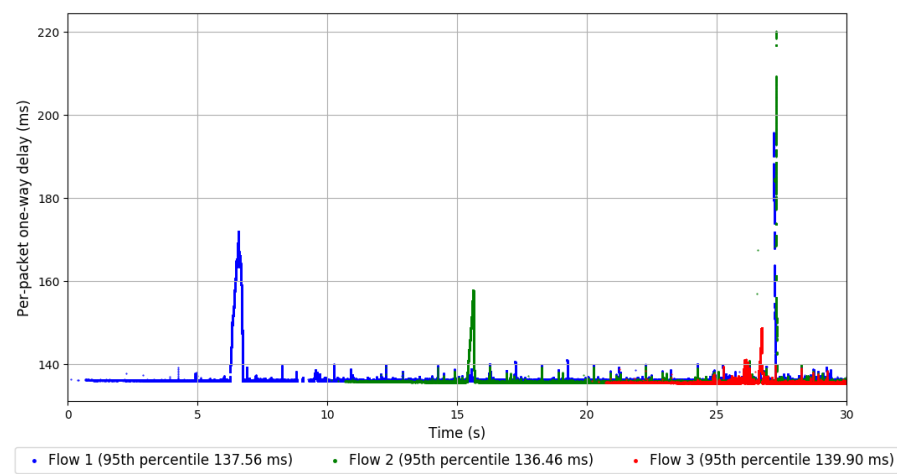
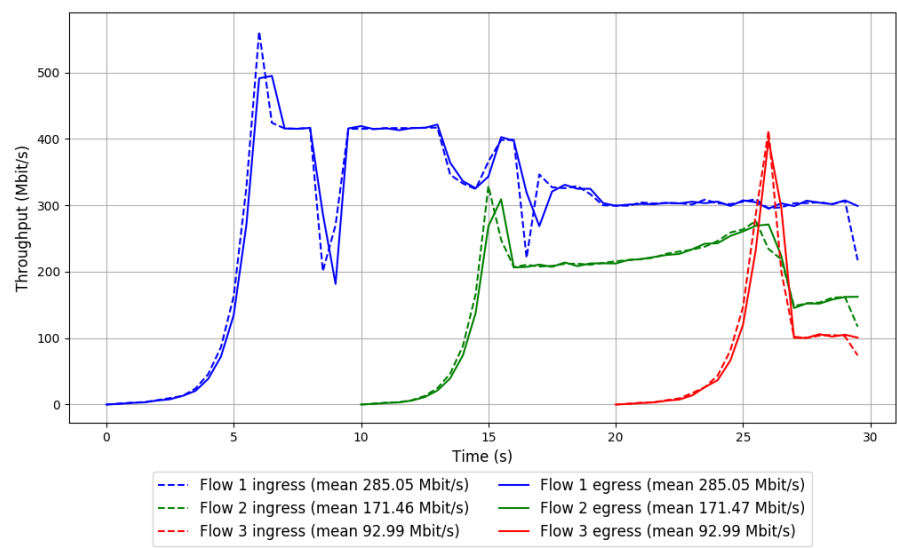
-- Flow 3:

Average throughput: 92.99 Mbit/s

95th percentile per-packet one-way delay: 139.902 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-21 19:25:00

End at: 2018-02-21 19:25:30

Below is generated by plot.py at 2018-02-22 01:21:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 463.03 Mbit/s

95th percentile per-packet one-way delay: 140.047 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 303.36 Mbit/s

95th percentile per-packet one-way delay: 138.058 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 177.54 Mbit/s

95th percentile per-packet one-way delay: 136.513 ms

Loss rate: 0.00%

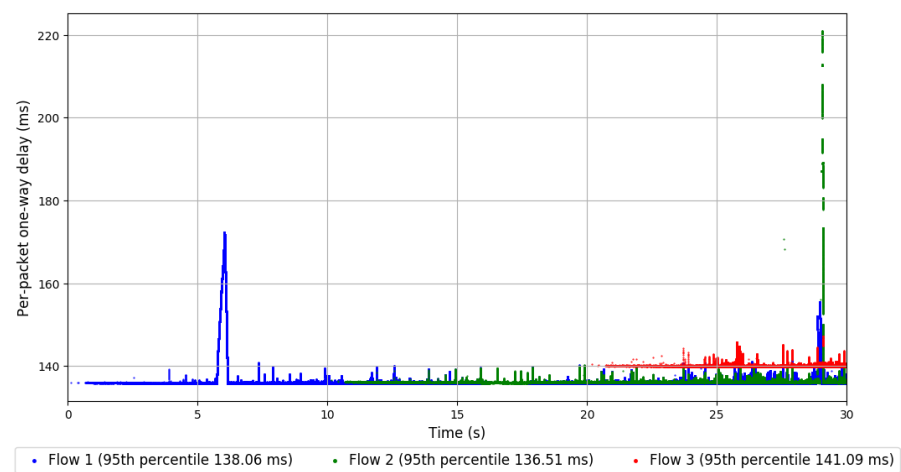
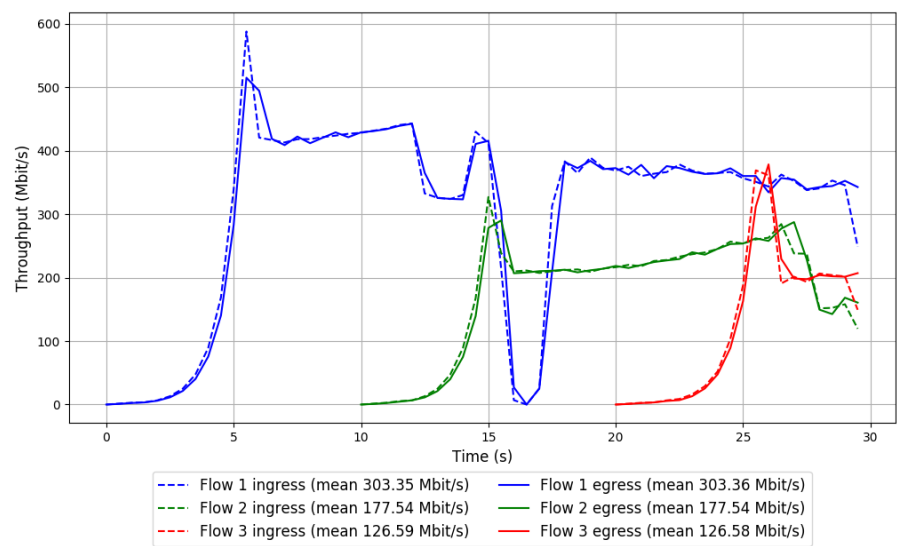
-- Flow 3:

Average throughput: 126.58 Mbit/s

95th percentile per-packet one-way delay: 141.095 ms

Loss rate: 0.05%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-21 19:45:12

End at: 2018-02-21 19:45:42

Below is generated by plot.py at 2018-02-22 01:22:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 512.95 Mbit/s

95th percentile per-packet one-way delay: 140.694 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 294.35 Mbit/s

95th percentile per-packet one-way delay: 135.657 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 268.00 Mbit/s

95th percentile per-packet one-way delay: 142.288 ms

Loss rate: 0.03%

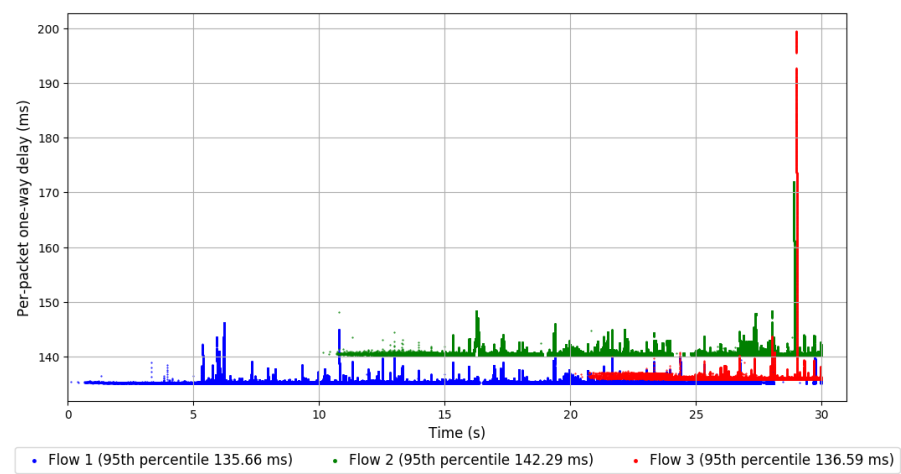
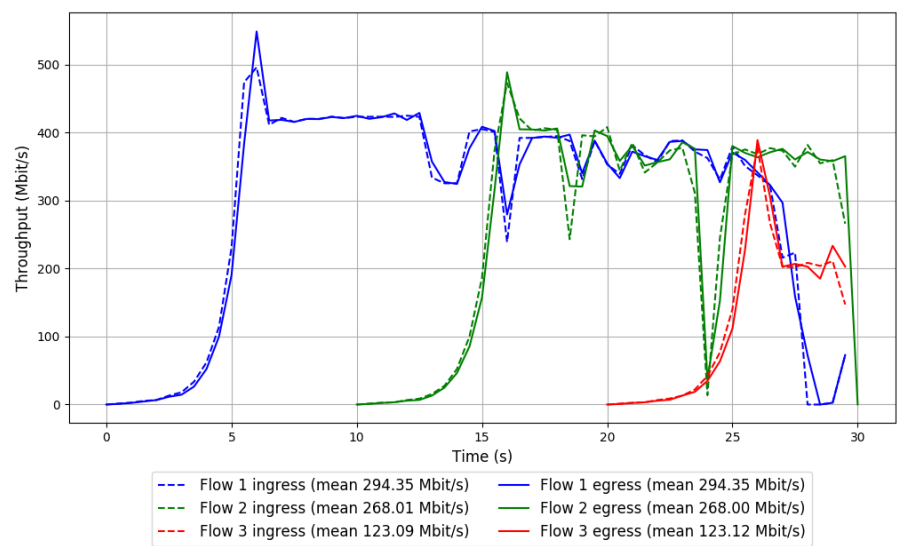
-- Flow 3:

Average throughput: 123.12 Mbit/s

95th percentile per-packet one-way delay: 136.589 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-21 20:05:55

End at: 2018-02-21 20:06:25

Below is generated by plot.py at 2018-02-22 01:22:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 471.76 Mbit/s

95th percentile per-packet one-way delay: 138.034 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 309.61 Mbit/s

95th percentile per-packet one-way delay: 138.604 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.37 Mbit/s

95th percentile per-packet one-way delay: 137.051 ms

Loss rate: 0.00%

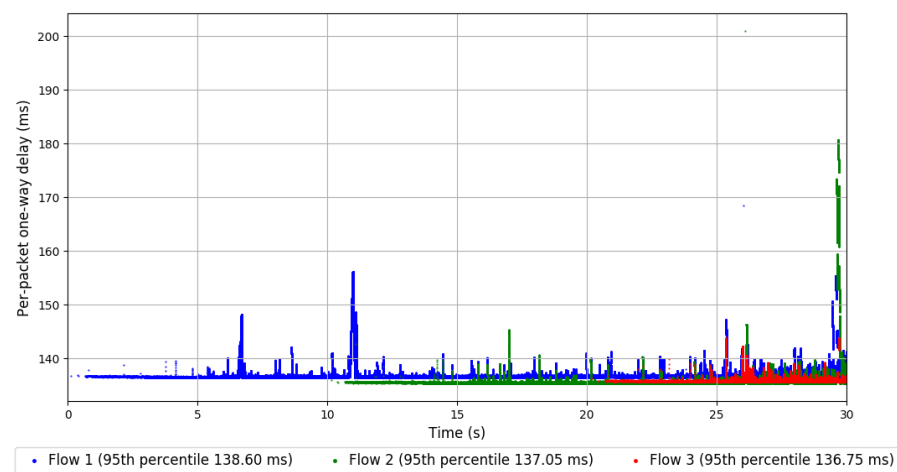
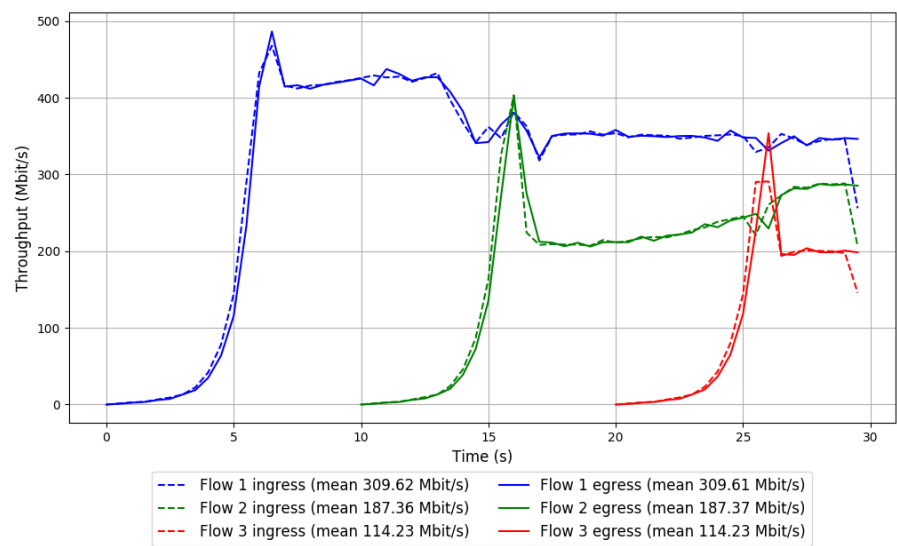
-- Flow 3:

Average throughput: 114.23 Mbit/s

95th percentile per-packet one-way delay: 136.745 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-21 20:26:25

End at: 2018-02-21 20:26:55

Below is generated by plot.py at 2018-02-22 01:23:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 481.04 Mbit/s

95th percentile per-packet one-way delay: 138.806 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 312.44 Mbit/s

95th percentile per-packet one-way delay: 138.558 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 192.85 Mbit/s

95th percentile per-packet one-way delay: 140.513 ms

Loss rate: 0.00%

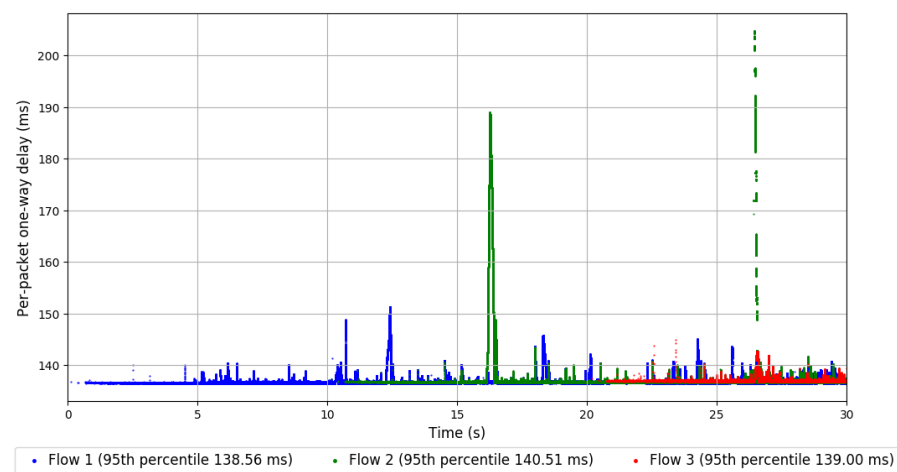
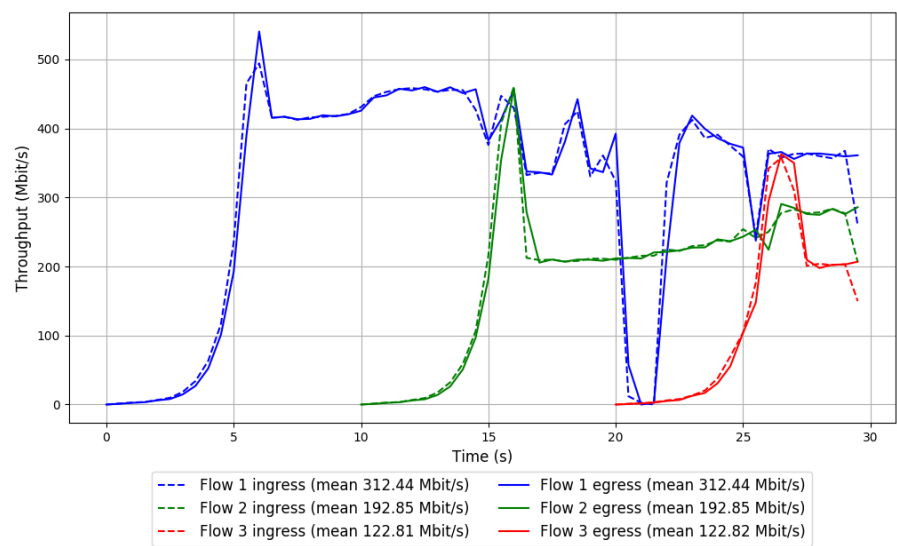
-- Flow 3:

Average throughput: 122.82 Mbit/s

95th percentile per-packet one-way delay: 139.001 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-21 20:46:20

End at: 2018-02-21 20:46:50

Below is generated by plot.py at 2018-02-22 01:23:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 480.79 Mbit/s

95th percentile per-packet one-way delay: 146.090 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 278.03 Mbit/s

95th percentile per-packet one-way delay: 140.608 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 257.81 Mbit/s

95th percentile per-packet one-way delay: 187.262 ms

Loss rate: 0.00%

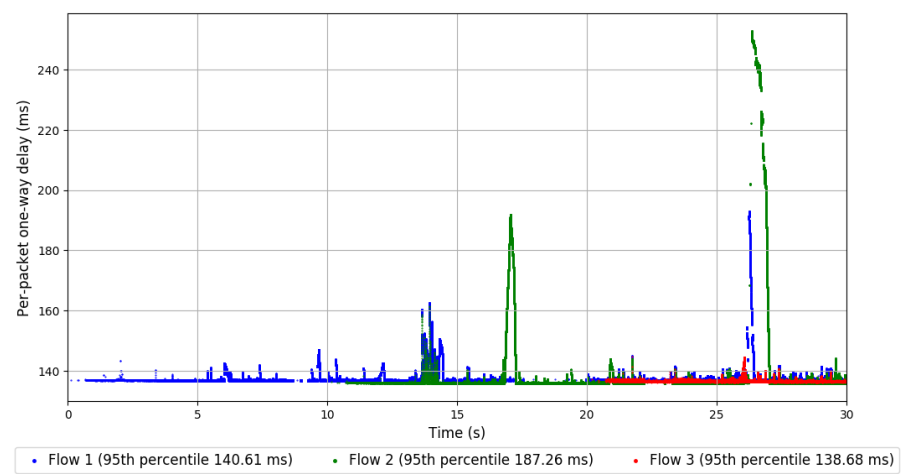
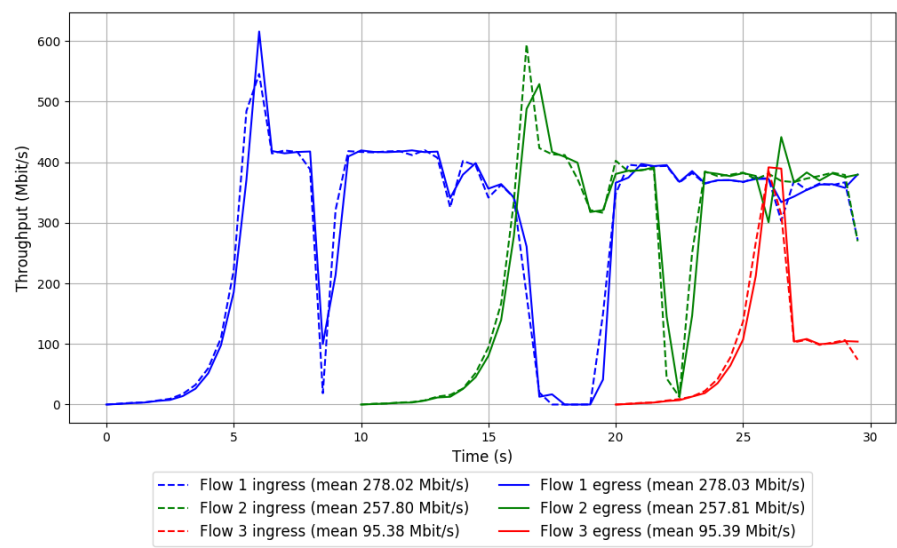
-- Flow 3:

Average throughput: 95.39 Mbit/s

95th percentile per-packet one-way delay: 138.680 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-21 21:06:22
End at: 2018-02-21 21:06:52

# Below is generated by plot.py at 2018-02-22 01:23:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 553.83 Mbit/s
95th percentile per-packet one-way delay: 137.725 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 321.68 Mbit/s
95th percentile per-packet one-way delay: 136.776 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 261.74 Mbit/s
95th percentile per-packet one-way delay: 137.090 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 176.89 Mbit/s
95th percentile per-packet one-way delay: 167.126 ms
Loss rate: 0.00%
```

Run 10: Report of Vivace-LTE — Data Link

