

Pantheon Report

Generated at 2018-01-18 11:40:02 (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.

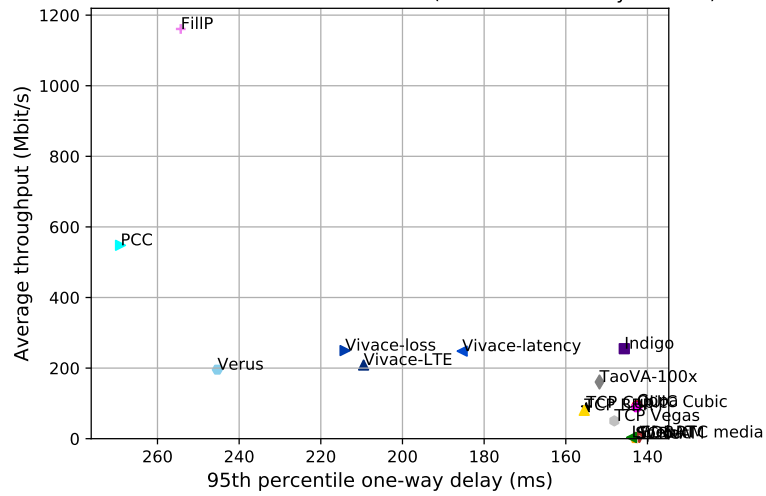
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

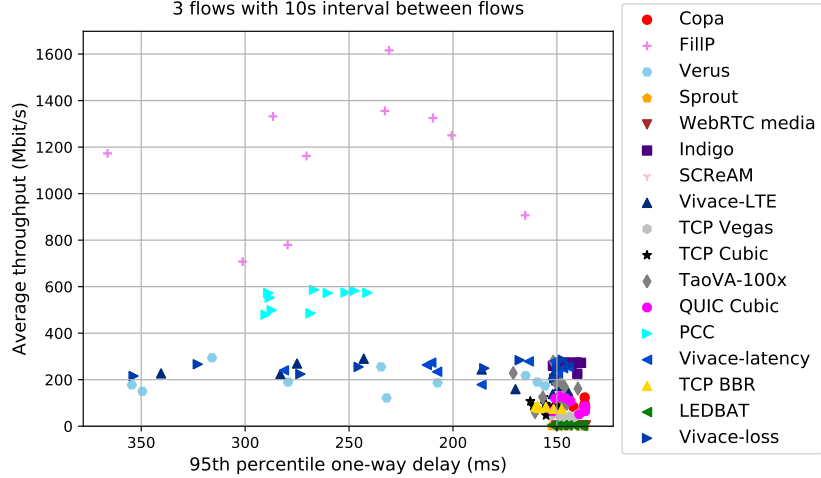
Git summary:

```
branch: master @ 54510ce29f849c716ac5c8199ca1604b6abdfbc3
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 423cbca3e8ea1d599e7b5cf725835e8a2b6bfac6
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



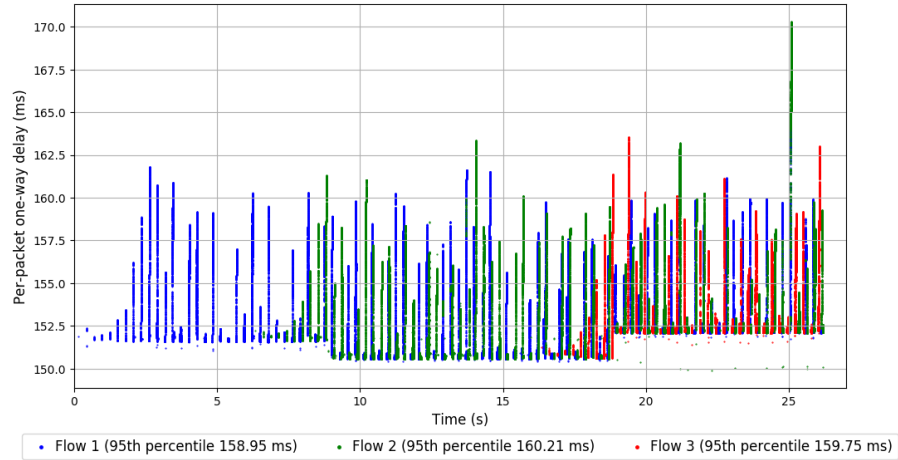
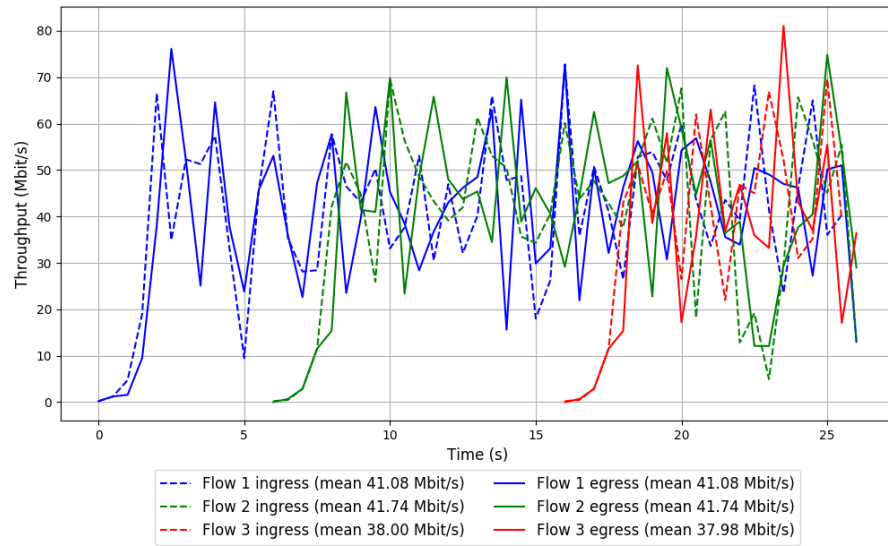
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	7	39.39	36.14	36.00	155.89	154.45	156.30	0.37	0.23	0.13
TCP Cubic	10	38.65	52.62	42.84	152.32	154.93	158.54	0.54	0.15	0.91
LEDBAT	10	1.92	1.84	1.04	143.81	143.87	143.45	0.63	0.53	0.29
PCC	10	408.60	193.99	37.00	276.30	251.25	240.94	3.91	4.02	3.28
QUIC Cubic	10	48.06	43.36	40.01	142.31	142.37	142.10	0.00	0.00	0.00
SCReAM	10	0.22	0.22	0.21	142.40	142.44	142.22	0.00	0.00	0.00
WebRTC media	9	1.98	1.18	0.35	141.59	141.74	141.75	0.00	0.00	0.00
Sprout	10	0.44	0.45	0.49	143.00	142.76	142.81	0.00	0.00	0.00
TaoVA-100x	10	59.27	113.00	102.45	145.78	149.96	148.27	0.01	0.01	0.21
TCP Vegas	10	20.81	29.72	29.67	145.01	148.62	149.23	0.35	0.46	0.07
Verus	10	118.66	88.47	59.88	220.01	252.42	256.03	1.40	3.96	4.80
Copa	9	62.76	32.37	33.55	142.48	142.52	144.75	0.05	0.11	5.14
FillP	10	641.34	558.98	446.48	237.86	252.02	260.93	7.74	9.74	6.28
Indigo	10	130.78	136.74	106.59	145.11	145.42	153.74	0.11	0.06	0.07
Vivace-latency	10	140.64	119.84	84.49	188.45	187.41	163.11	0.28	0.34	0.01
Vivace-loss	10	132.81	137.90	76.55	195.33	225.08	171.74	0.90	1.81	0.06
Vivace-LTE	10	108.10	114.92	80.58	206.43	155.77	220.62	0.59	0.15	2.14

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-18 05:06:40
End at: 2018-01-18 05:07:10

# Below is generated by plot.py at 2018-01-18 10:04:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.97 Mbit/s
95th percentile per-packet one-way delay: 159.391 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.08 Mbit/s
95th percentile per-packet one-way delay: 158.954 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.74 Mbit/s
95th percentile per-packet one-way delay: 160.211 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 37.98 Mbit/s
95th percentile per-packet one-way delay: 159.752 ms
Loss rate: 0.00%
```

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-18 05:26:55

End at: 2018-01-18 05:27:25

Below is generated by plot.py at 2018-01-18 10:04:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.71 Mbit/s

95th percentile per-packet one-way delay: 160.300 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.67 Mbit/s

95th percentile per-packet one-way delay: 160.442 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.98 Mbit/s

95th percentile per-packet one-way delay: 160.222 ms

Loss rate: 0.00%

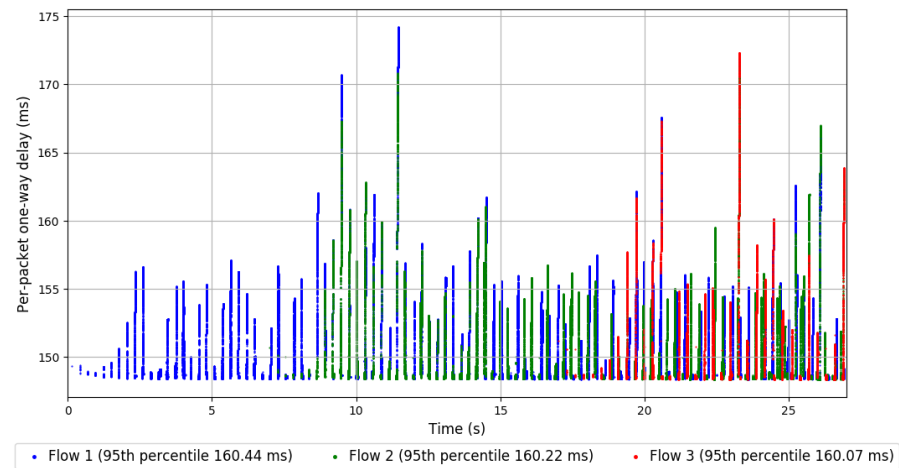
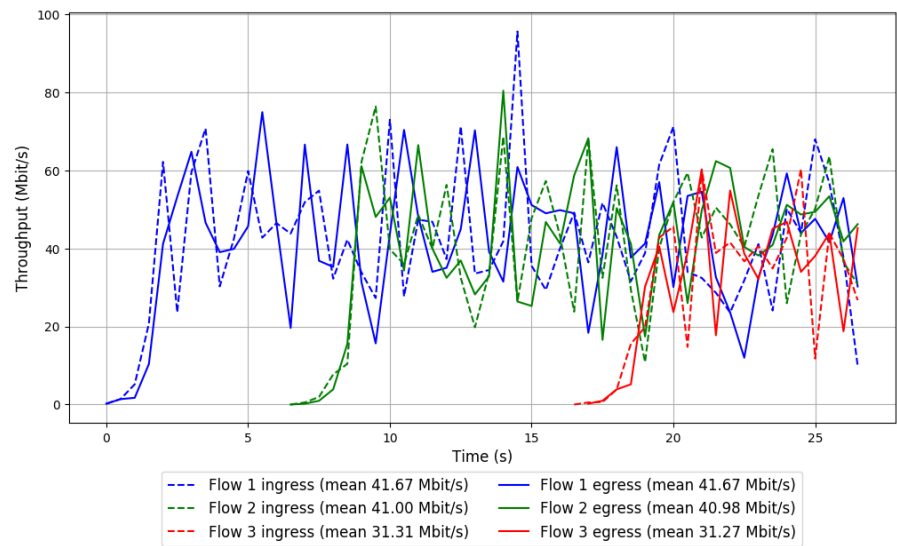
-- Flow 3:

Average throughput: 31.27 Mbit/s

95th percentile per-packet one-way delay: 160.074 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-18 05:46:39

End at: 2018-01-18 05:47:09

Below is generated by plot.py at 2018-01-18 10:04:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.61 Mbit/s

95th percentile per-packet one-way delay: 155.251 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 42.42 Mbit/s

95th percentile per-packet one-way delay: 154.604 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 33.44 Mbit/s

95th percentile per-packet one-way delay: 155.893 ms

Loss rate: 0.00%

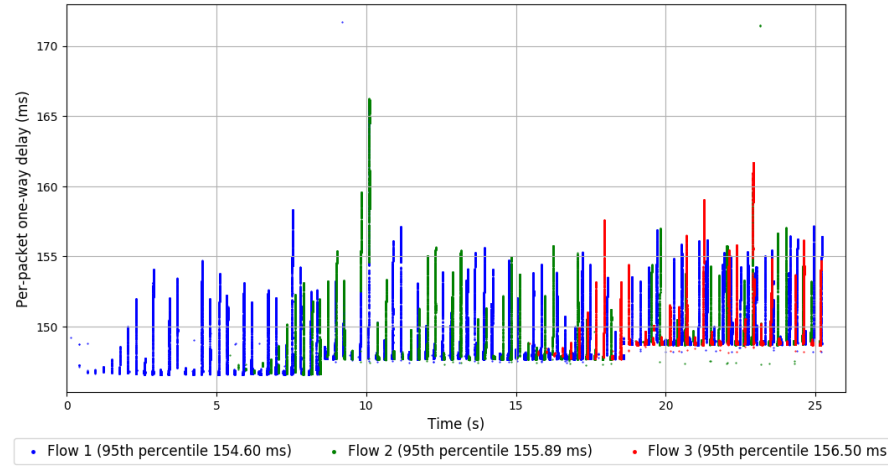
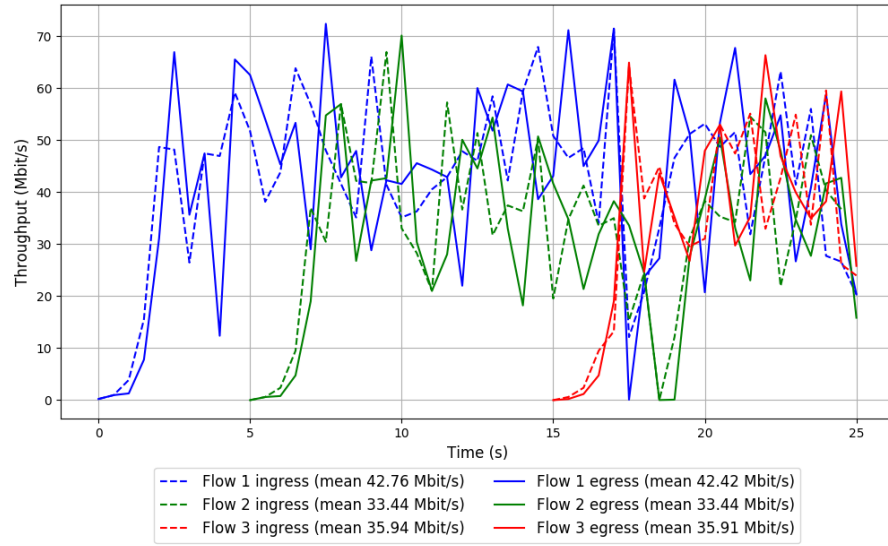
-- Flow 3:

Average throughput: 35.91 Mbit/s

95th percentile per-packet one-way delay: 156.502 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-18 06:06:16

End at: 2018-01-18 06:06:46

Below is generated by plot.py at 2018-01-18 10:04:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.31 Mbit/s

95th percentile per-packet one-way delay: 155.395 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 37.08 Mbit/s

95th percentile per-packet one-way delay: 155.947 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.59 Mbit/s

95th percentile per-packet one-way delay: 153.604 ms

Loss rate: 0.00%

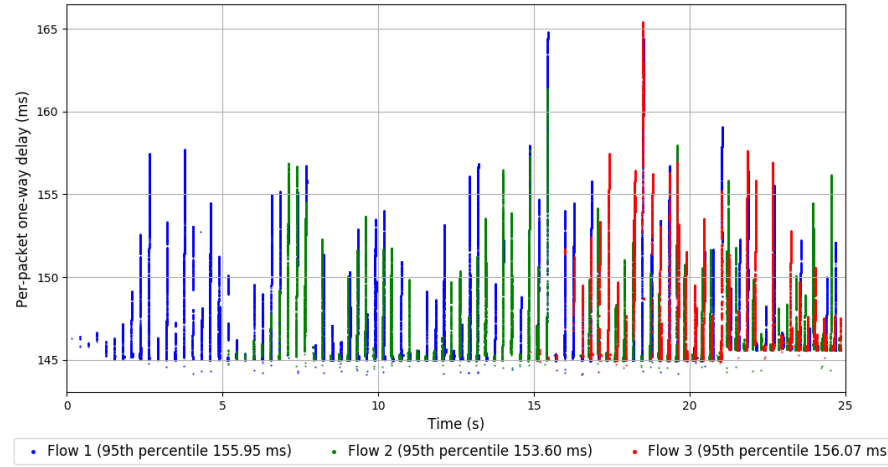
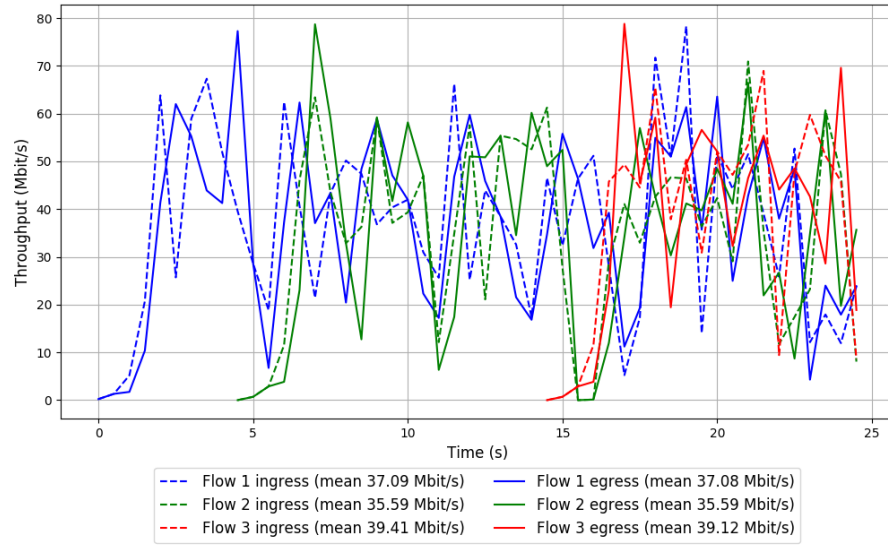
-- Flow 3:

Average throughput: 39.12 Mbit/s

95th percentile per-packet one-way delay: 156.074 ms

Loss rate: 0.73%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-18 06:26:01

End at: 2018-01-18 06:26:31

Below is generated by plot.py at 2018-01-18 10:04:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.00 Mbit/s

95th percentile per-packet one-way delay: 151.581 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 40.50 Mbit/s

95th percentile per-packet one-way delay: 154.016 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 29.23 Mbit/s

95th percentile per-packet one-way delay: 149.218 ms

Loss rate: 1.51%

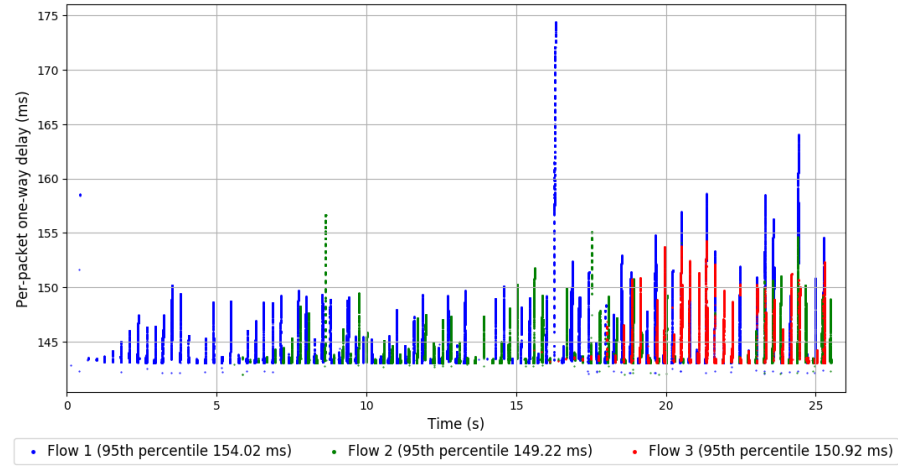
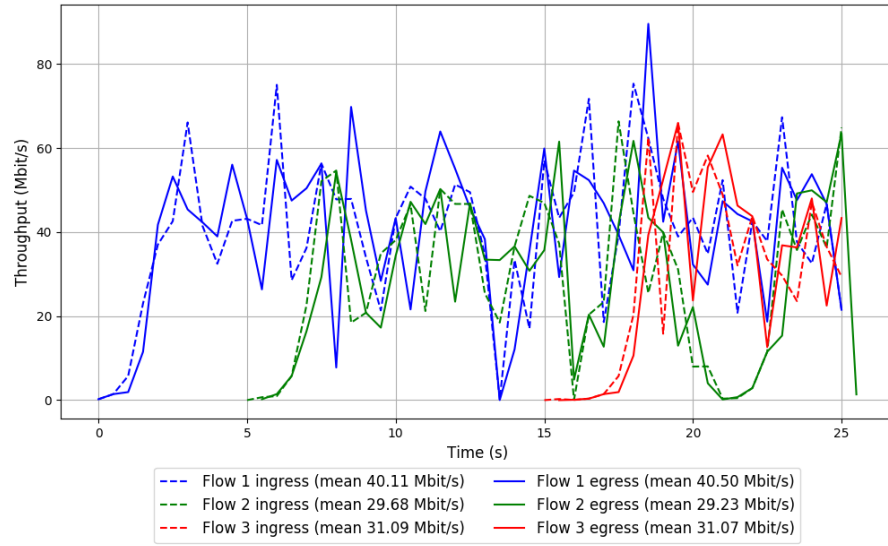
-- Flow 3:

Average throughput: 31.07 Mbit/s

95th percentile per-packet one-way delay: 150.924 ms

Loss rate: 0.04%

Run 5: Report of TCP BBR — Data Link

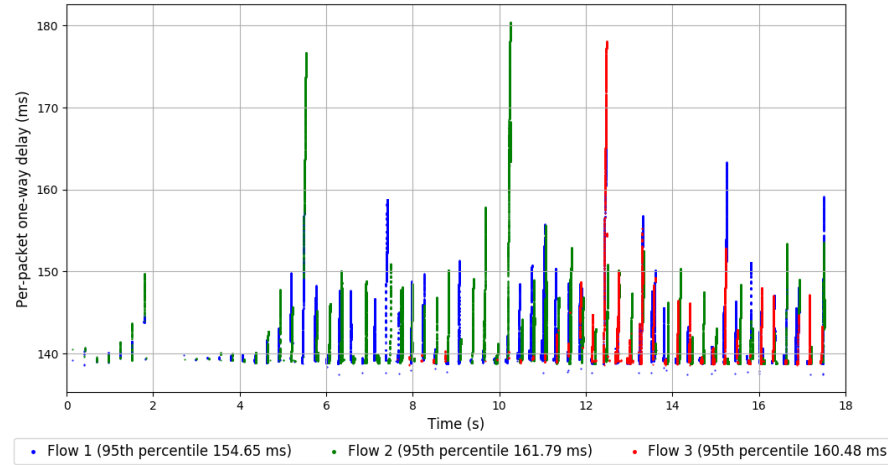
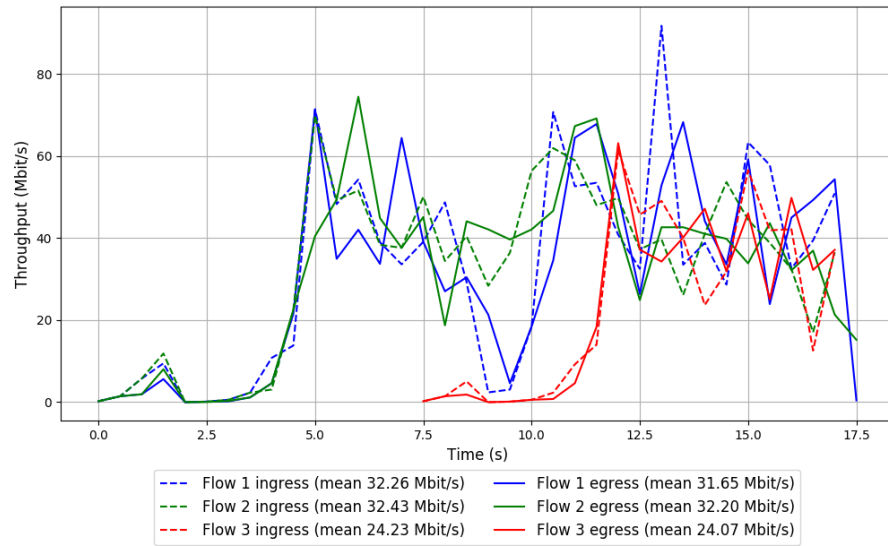


Run 6: Statistics of TCP BBR

Start at: 2018-01-18 06:45:55

End at: 2018-01-18 06:46:25

Run 6: Report of TCP BBR — Data Link

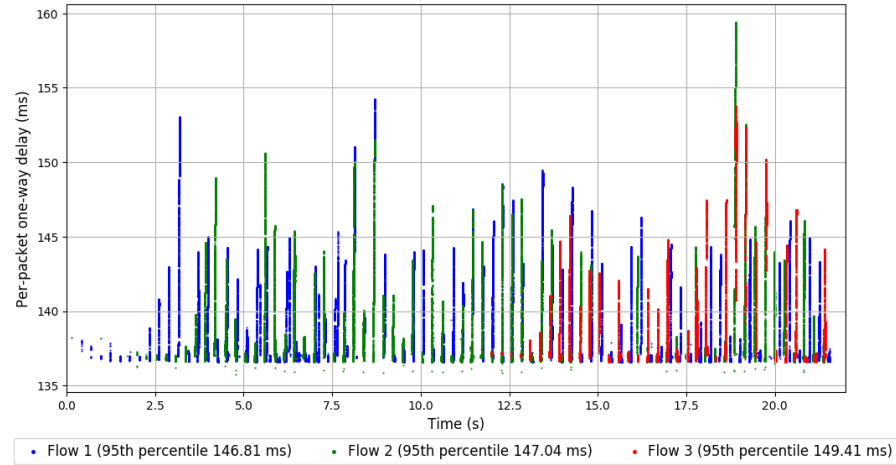
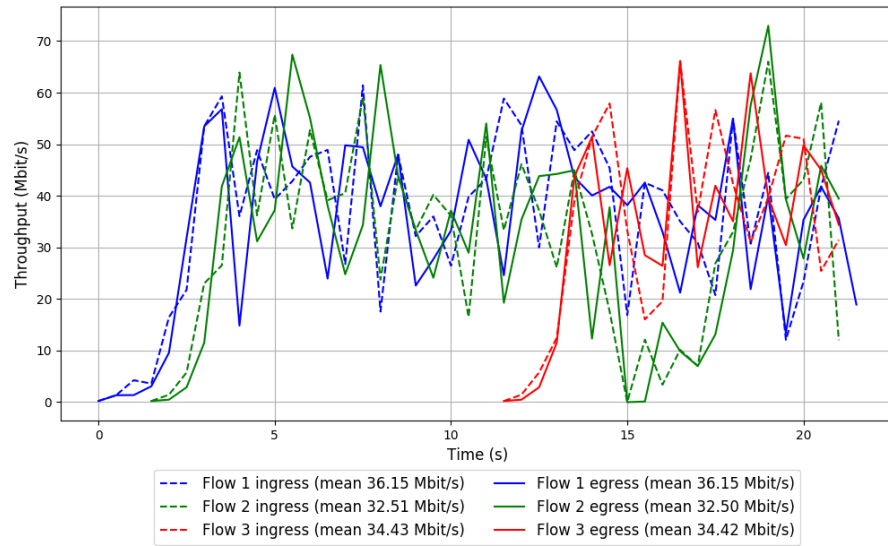


Run 7: Statistics of TCP BBR

Start at: 2018-01-18 07:05:22

End at: 2018-01-18 07:05:52

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-18 07:25:16

End at: 2018-01-18 07:25:46

Below is generated by plot.py at 2018-01-18 10:04:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.56 Mbit/s

95th percentile per-packet one-way delay: 158.848 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 41.49 Mbit/s

95th percentile per-packet one-way delay: 158.872 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 35.37 Mbit/s

95th percentile per-packet one-way delay: 154.531 ms

Loss rate: 0.05%

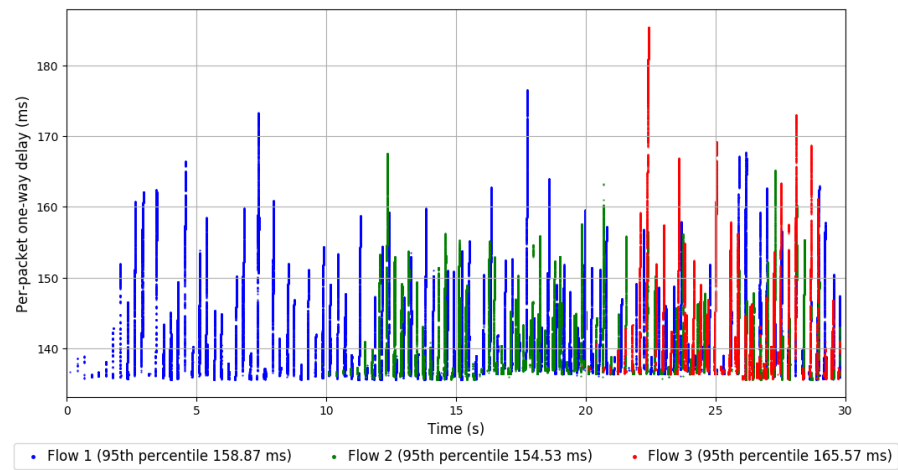
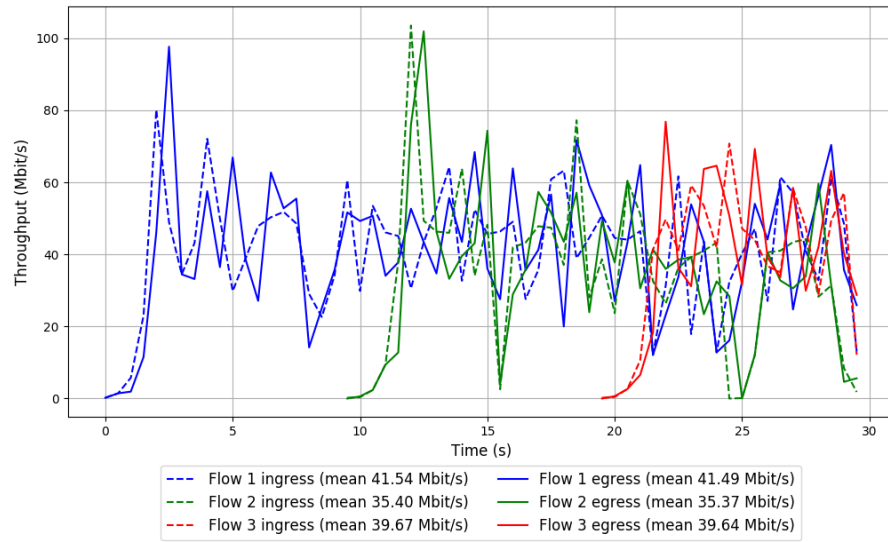
-- Flow 3:

Average throughput: 39.64 Mbit/s

95th percentile per-packet one-way delay: 165.575 ms

Loss rate: 0.03%

Run 8: Report of TCP BBR — Data Link

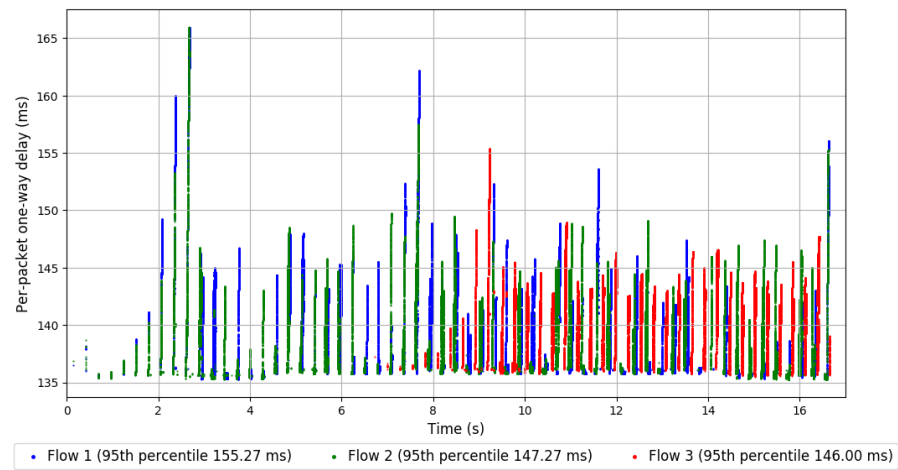
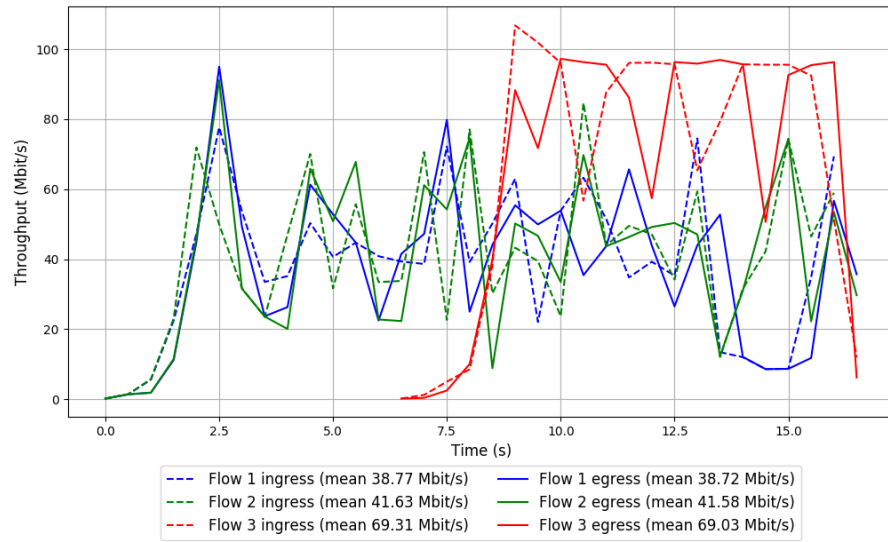


Run 9: Statistics of TCP BBR

Start at: 2018-01-18 07:44:45

End at: 2018-01-18 07:45:15

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-18 08:04:27

End at: 2018-01-18 08:04:57

Below is generated by plot.py at 2018-01-18 10:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.41 Mbit/s

95th percentile per-packet one-way delay: 147.667 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 31.47 Mbit/s

95th percentile per-packet one-way delay: 148.411 ms

Loss rate: 1.69%

-- Flow 2:

Average throughput: 36.65 Mbit/s

95th percentile per-packet one-way delay: 147.454 ms

Loss rate: 0.02%

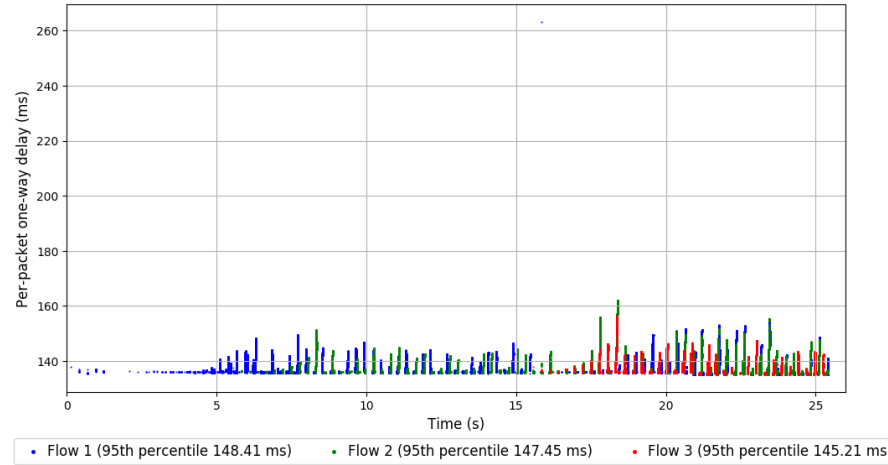
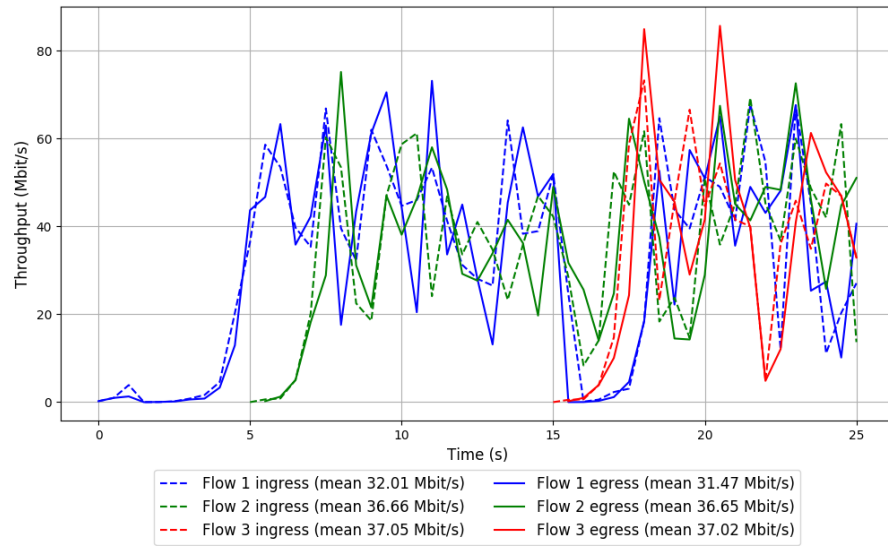
-- Flow 3:

Average throughput: 37.02 Mbit/s

95th percentile per-packet one-way delay: 145.207 ms

Loss rate: 0.10%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-18 05:09:13

End at: 2018-01-18 05:09:43

Below is generated by plot.py at 2018-01-18 10:05:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.54 Mbit/s

95th percentile per-packet one-way delay: 155.319 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 51.35 Mbit/s

95th percentile per-packet one-way delay: 152.835 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.32 Mbit/s

95th percentile per-packet one-way delay: 156.671 ms

Loss rate: 0.00%

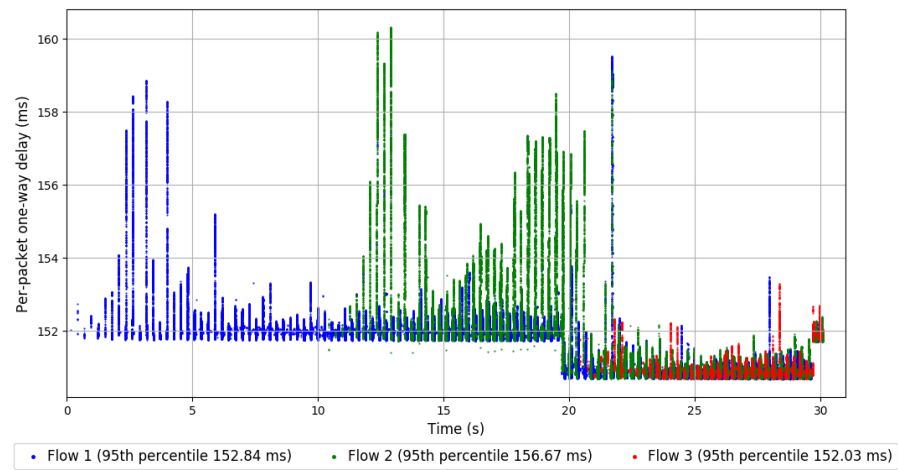
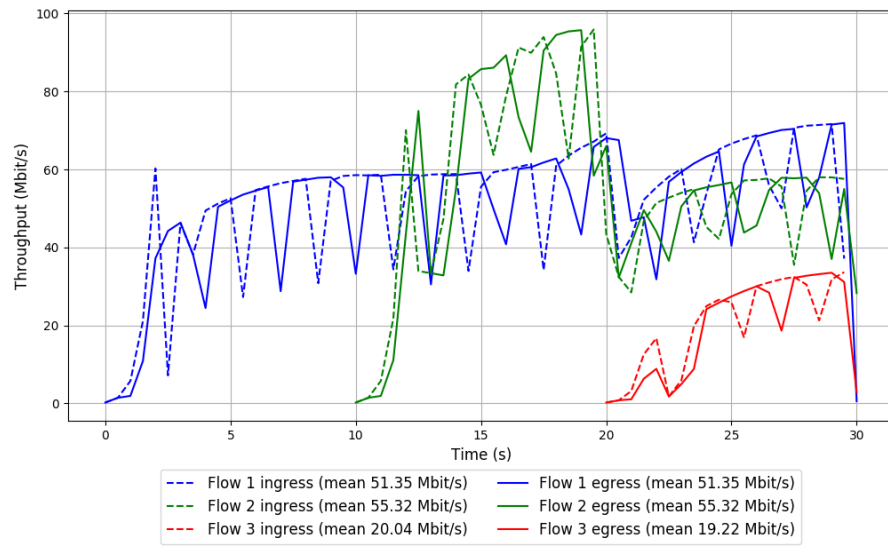
-- Flow 3:

Average throughput: 19.22 Mbit/s

95th percentile per-packet one-way delay: 152.035 ms

Loss rate: 4.08%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-18 05:29:30

End at: 2018-01-18 05:30:00

Below is generated by plot.py at 2018-01-18 10:06:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.05 Mbit/s

95th percentile per-packet one-way delay: 156.471 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.00 Mbit/s

95th percentile per-packet one-way delay: 156.672 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.03 Mbit/s

95th percentile per-packet one-way delay: 153.606 ms

Loss rate: 0.01%

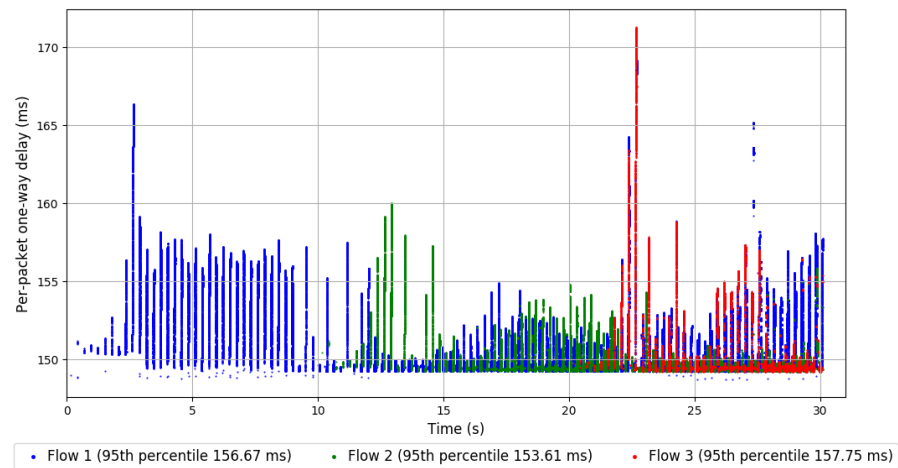
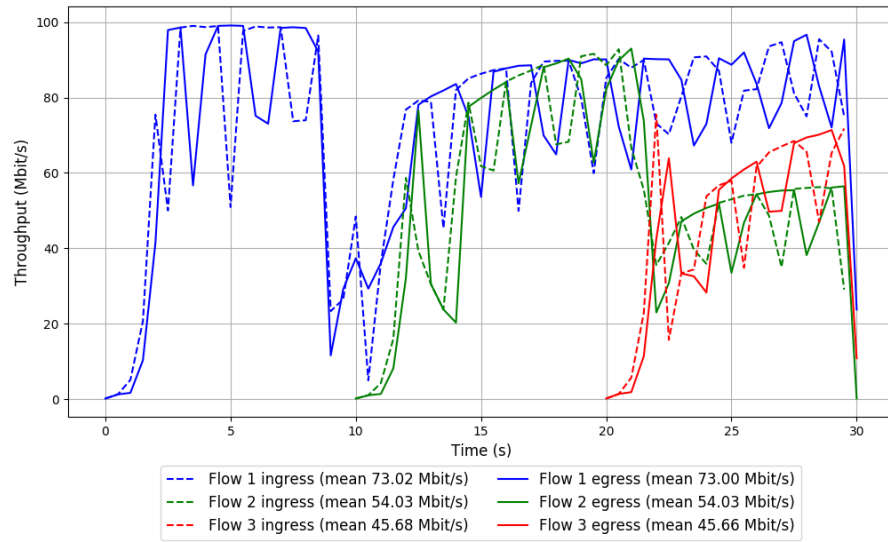
-- Flow 3:

Average throughput: 45.66 Mbit/s

95th percentile per-packet one-way delay: 157.753 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-18 05:49:12

End at: 2018-01-18 05:49:42

Below is generated by plot.py at 2018-01-18 10:06:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.43 Mbit/s

95th percentile per-packet one-way delay: 151.677 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 41.66 Mbit/s

95th percentile per-packet one-way delay: 149.949 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 35.45 Mbit/s

95th percentile per-packet one-way delay: 152.574 ms

Loss rate: 0.00%

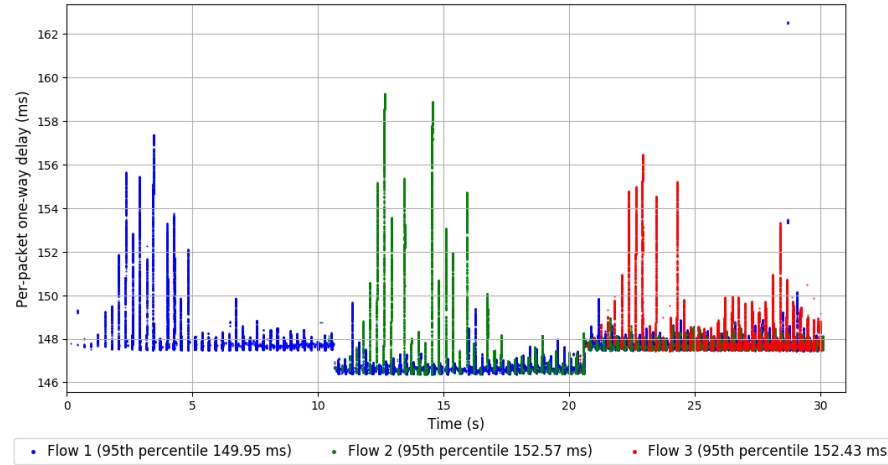
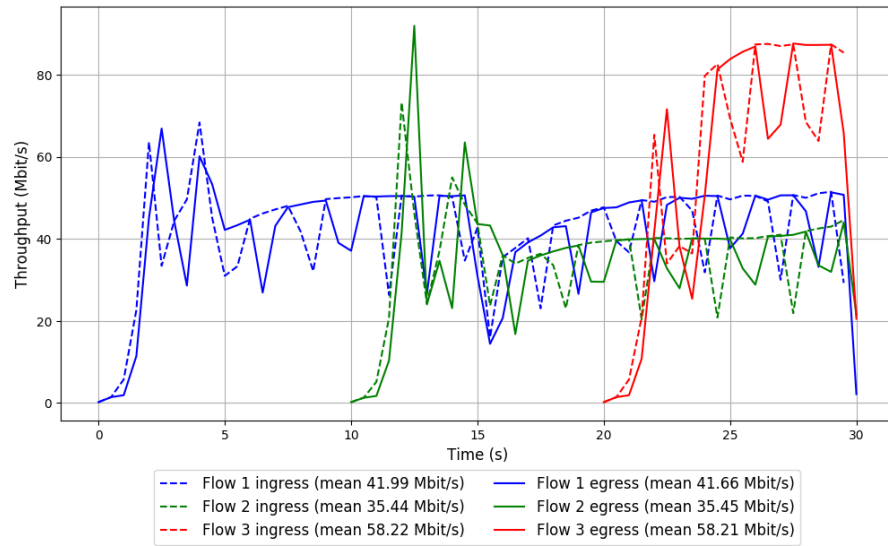
-- Flow 3:

Average throughput: 58.21 Mbit/s

95th percentile per-packet one-way delay: 152.431 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-18 06:08:48

End at: 2018-01-18 06:09:18

Below is generated by plot.py at 2018-01-18 10:06:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.96 Mbit/s

95th percentile per-packet one-way delay: 149.667 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 35.74 Mbit/s

95th percentile per-packet one-way delay: 147.791 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.79 Mbit/s

95th percentile per-packet one-way delay: 146.470 ms

Loss rate: 0.00%

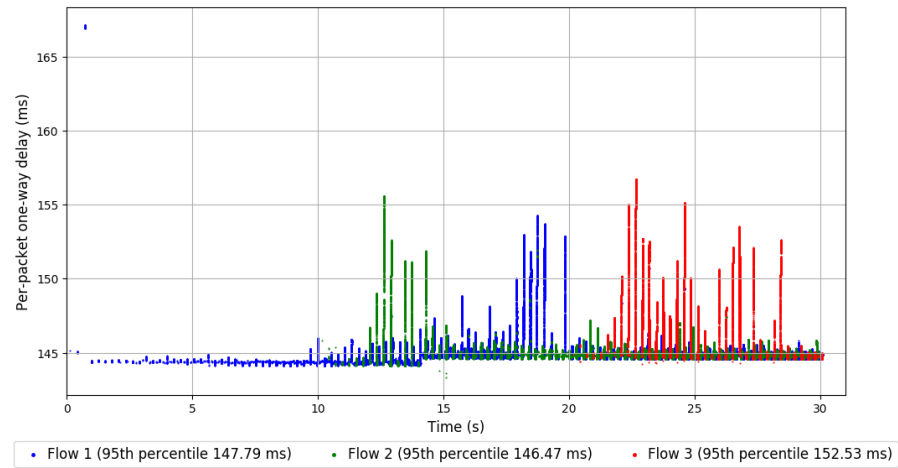
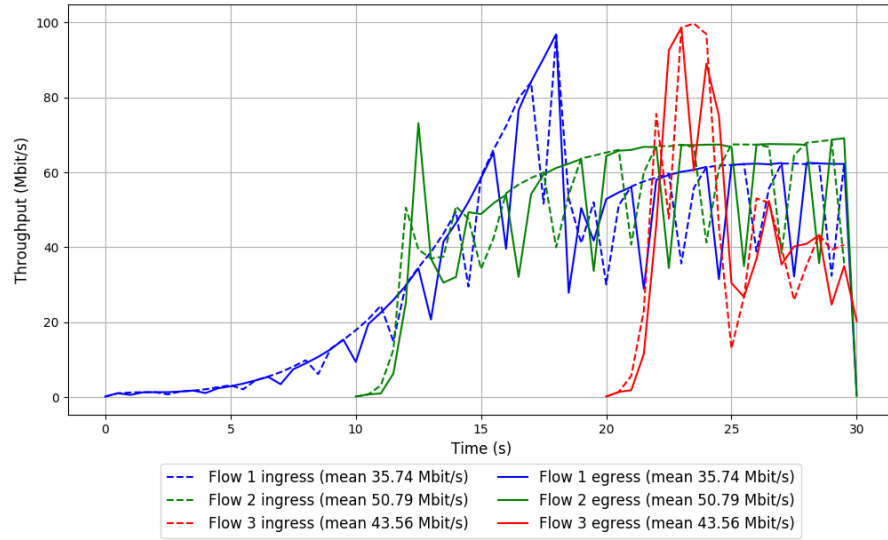
-- Flow 3:

Average throughput: 43.56 Mbit/s

95th percentile per-packet one-way delay: 152.526 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-18 06:28:33

End at: 2018-01-18 06:29:03

Below is generated by plot.py at 2018-01-18 10:06:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.56 Mbit/s

95th percentile per-packet one-way delay: 148.806 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 44.95 Mbit/s

95th percentile per-packet one-way delay: 148.888 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.97 Mbit/s

95th percentile per-packet one-way delay: 148.430 ms

Loss rate: 0.44%

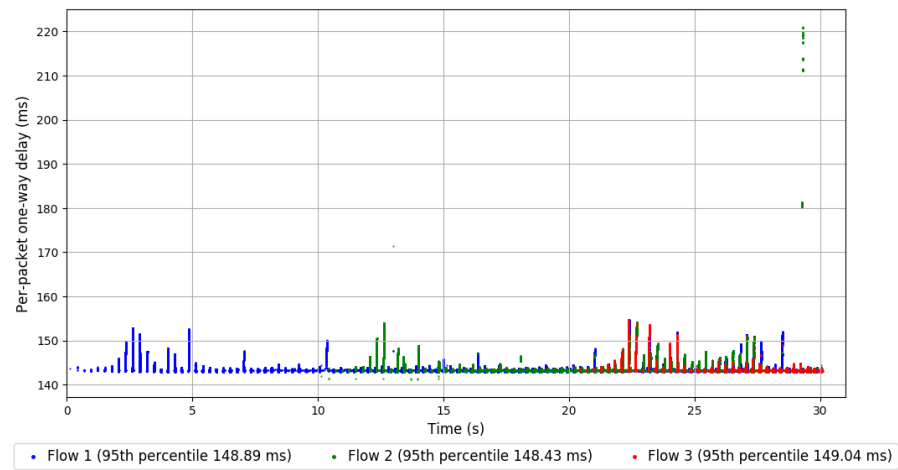
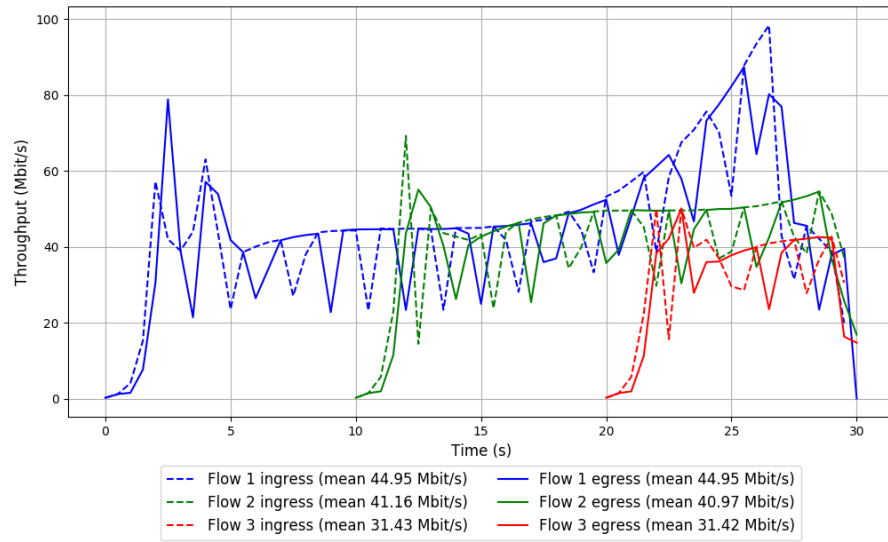
-- Flow 3:

Average throughput: 31.42 Mbit/s

95th percentile per-packet one-way delay: 149.043 ms

Loss rate: 0.02%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-18 06:48:26

End at: 2018-01-18 06:48:56

Below is generated by plot.py at 2018-01-18 10:06:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.31 Mbit/s

95th percentile per-packet one-way delay: 161.391 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 25.59 Mbit/s

95th percentile per-packet one-way delay: 151.275 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 71.32 Mbit/s

95th percentile per-packet one-way delay: 162.974 ms

Loss rate: 0.00%

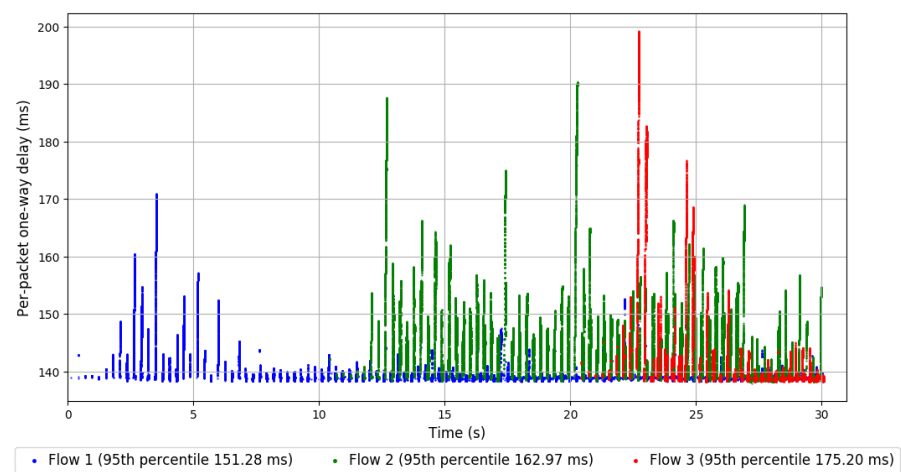
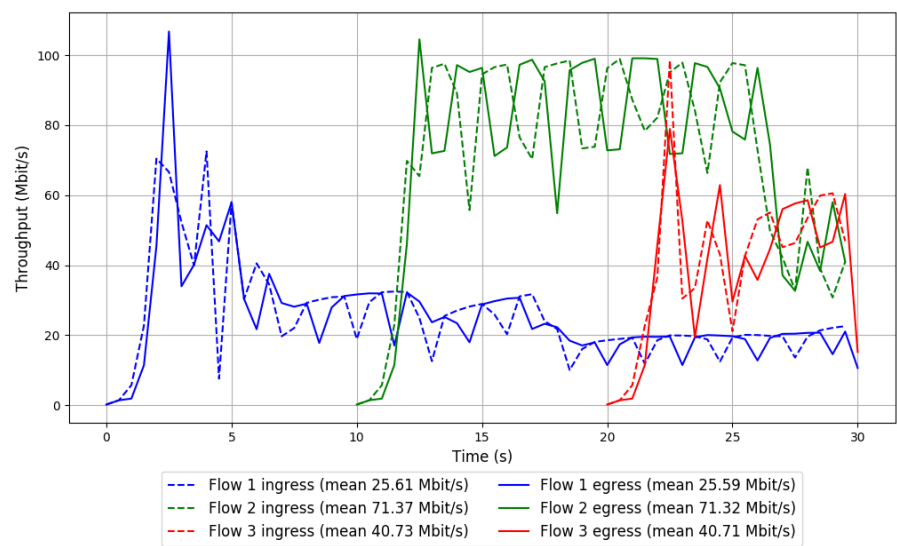
-- Flow 3:

Average throughput: 40.71 Mbit/s

95th percentile per-packet one-way delay: 175.200 ms

Loss rate: 0.06%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-18 07:07:55

End at: 2018-01-18 07:08:25

Below is generated by plot.py at 2018-01-18 10:06:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.28 Mbit/s

95th percentile per-packet one-way delay: 152.853 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 34.16 Mbit/s

95th percentile per-packet one-way delay: 149.971 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 29.36 Mbit/s

95th percentile per-packet one-way delay: 156.609 ms

Loss rate: 0.06%

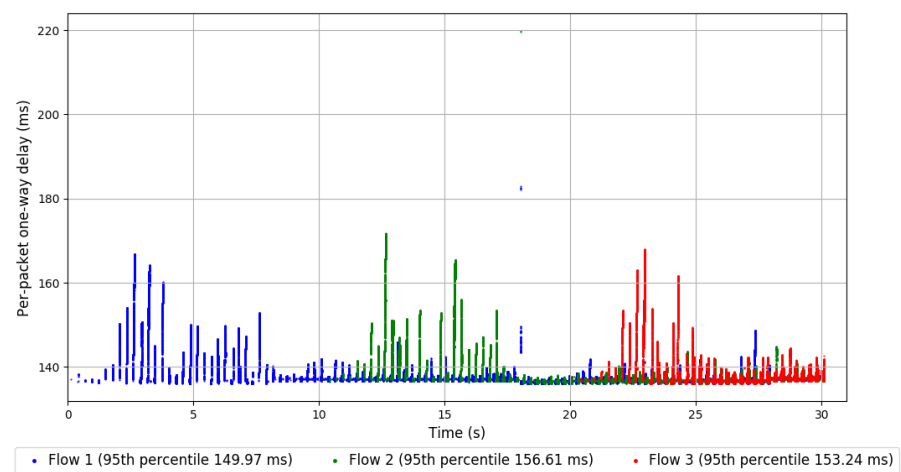
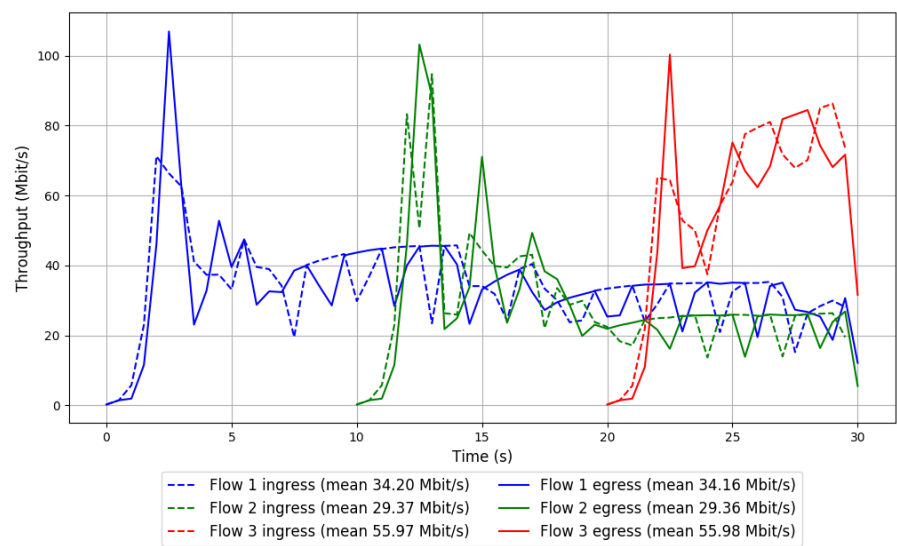
-- Flow 3:

Average throughput: 55.98 Mbit/s

95th percentile per-packet one-way delay: 153.239 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-18 07:27:50

End at: 2018-01-18 07:28:20

Below is generated by plot.py at 2018-01-18 10:06:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 46.53 Mbit/s

95th percentile per-packet one-way delay: 155.217 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 8.12 Mbit/s

95th percentile per-packet one-way delay: 161.172 ms

Loss rate: 3.81%

-- Flow 2:

Average throughput: 37.27 Mbit/s

95th percentile per-packet one-way delay: 152.069 ms

Loss rate: 0.05%

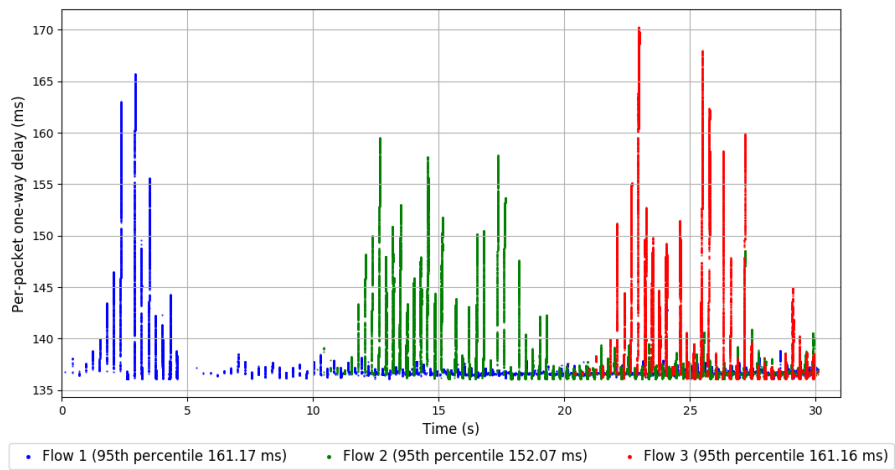
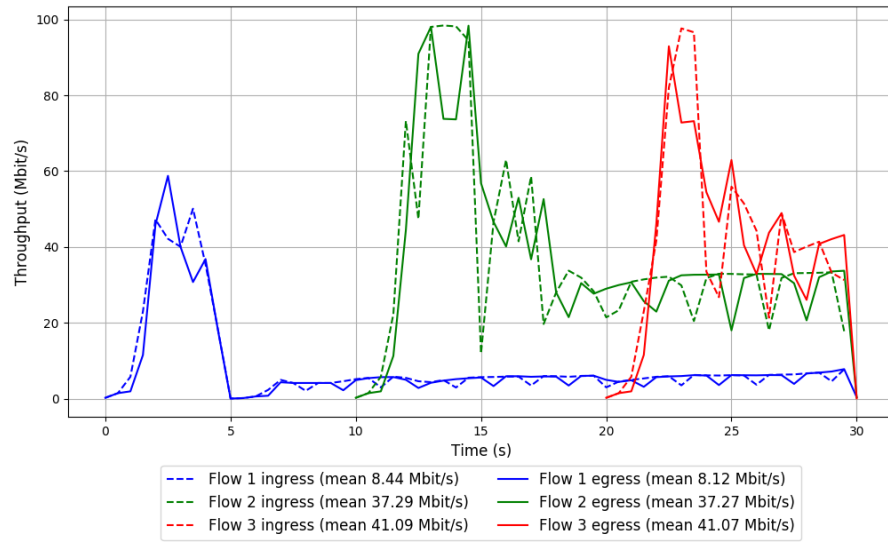
-- Flow 3:

Average throughput: 41.07 Mbit/s

95th percentile per-packet one-way delay: 161.160 ms

Loss rate: 0.05%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-18 07:47:17

End at: 2018-01-18 07:47:47

Below is generated by plot.py at 2018-01-18 10:07:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.38 Mbit/s

95th percentile per-packet one-way delay: 162.796 ms

Loss rate: 1.42%

-- Flow 1:

Average throughput: 42.77 Mbit/s

95th percentile per-packet one-way delay: 155.417 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 72.76 Mbit/s

95th percentile per-packet one-way delay: 163.261 ms

Loss rate: 0.99%

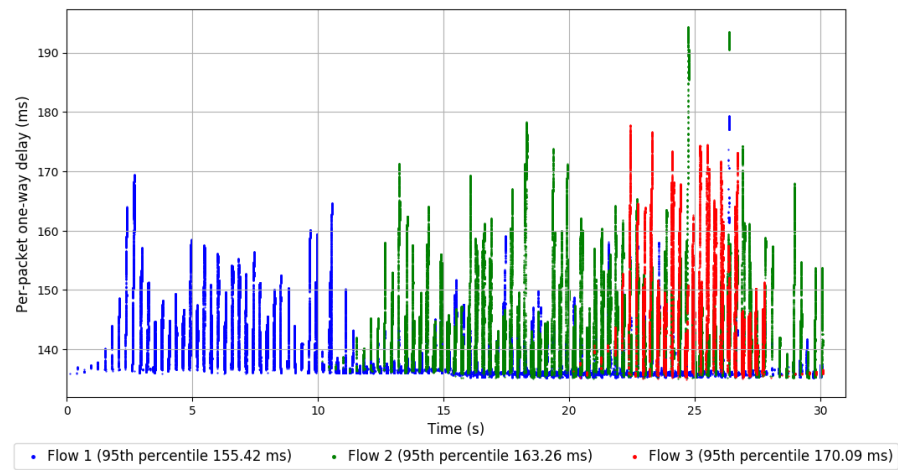
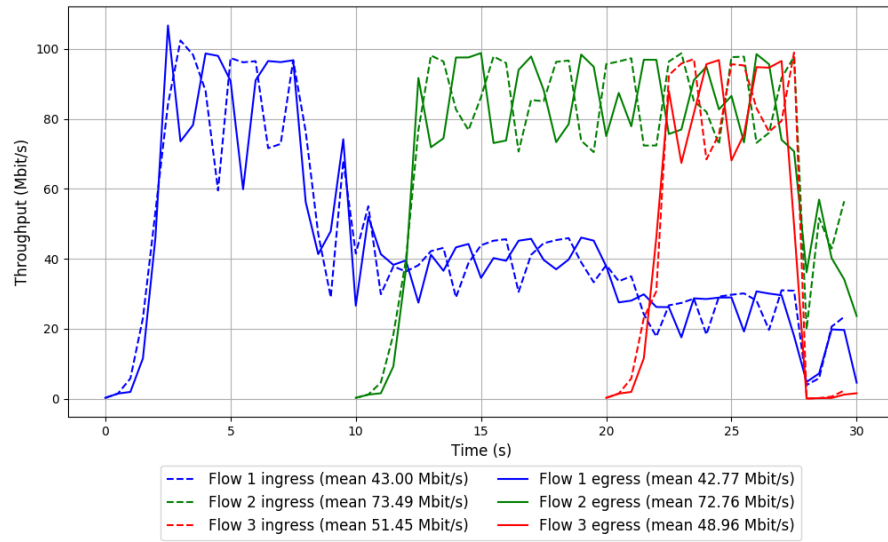
-- Flow 3:

Average throughput: 48.96 Mbit/s

95th percentile per-packet one-way delay: 170.088 ms

Loss rate: 4.83%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-18 08:07:00

End at: 2018-01-18 08:07:30

Below is generated by plot.py at 2018-01-18 10:07:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.94 Mbit/s

95th percentile per-packet one-way delay: 155.718 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 29.15 Mbit/s

95th percentile per-packet one-way delay: 149.204 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 78.91 Mbit/s

95th percentile per-packet one-way delay: 156.645 ms

Loss rate: 0.00%

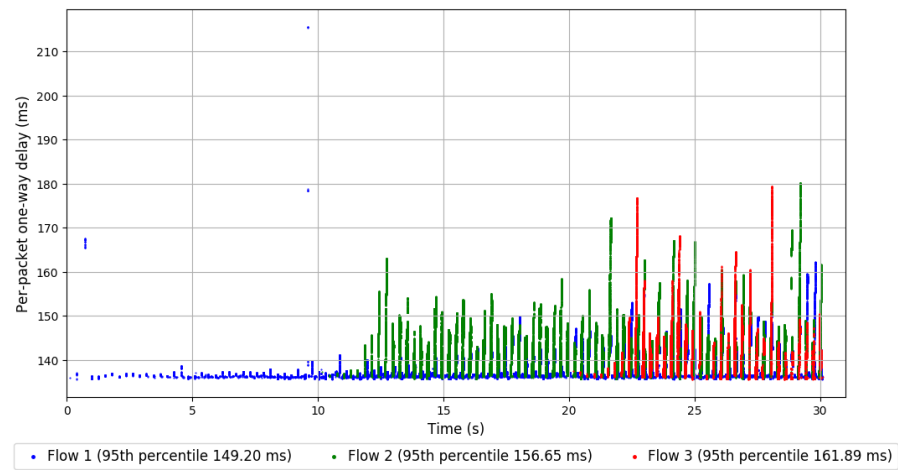
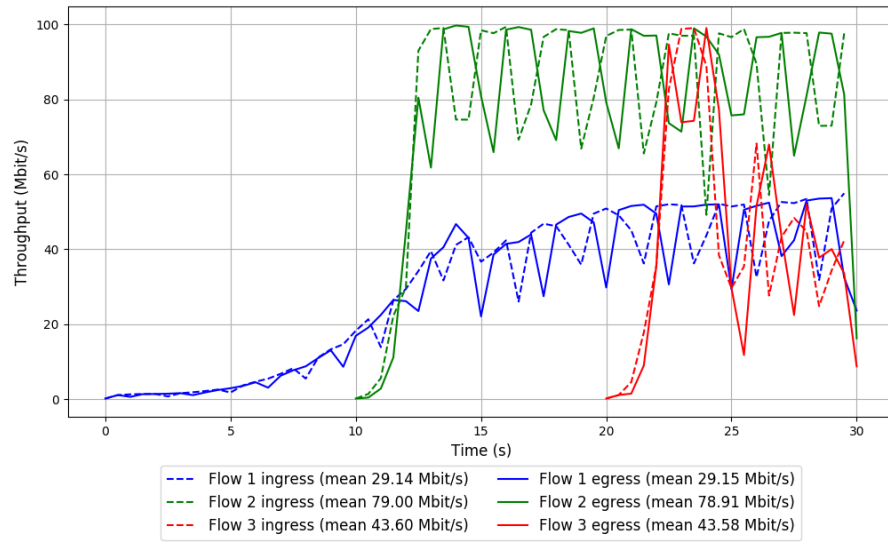
-- Flow 3:

Average throughput: 43.58 Mbit/s

95th percentile per-packet one-way delay: 161.891 ms

Loss rate: 0.07%

Run 10: Report of TCP Cubic — Data Link

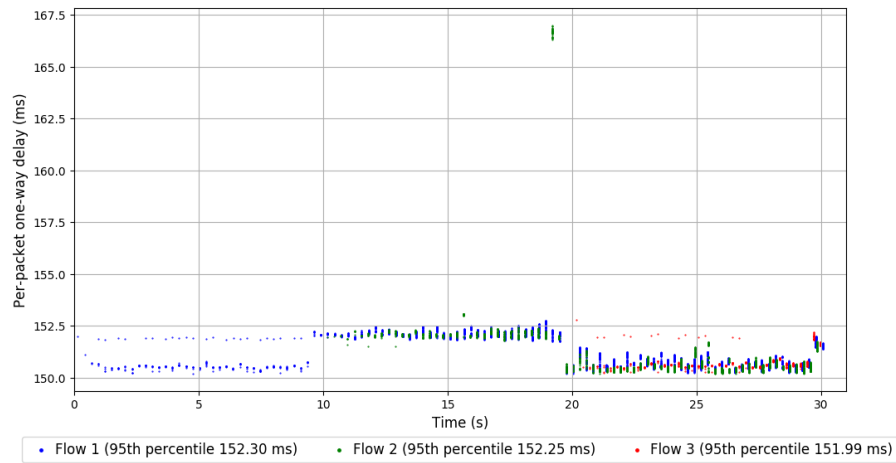
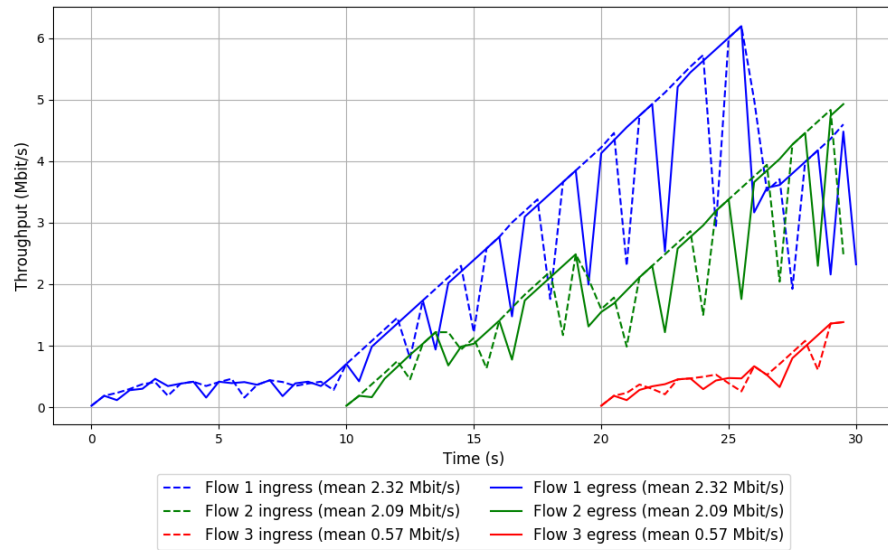


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-18 05:00:43
End at: 2018-01-18 05:01:13

# Below is generated by plot.py at 2018-01-18 10:07:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 152.274 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.32 Mbit/s
95th percentile per-packet one-way delay: 152.303 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 152.248 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 151.988 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

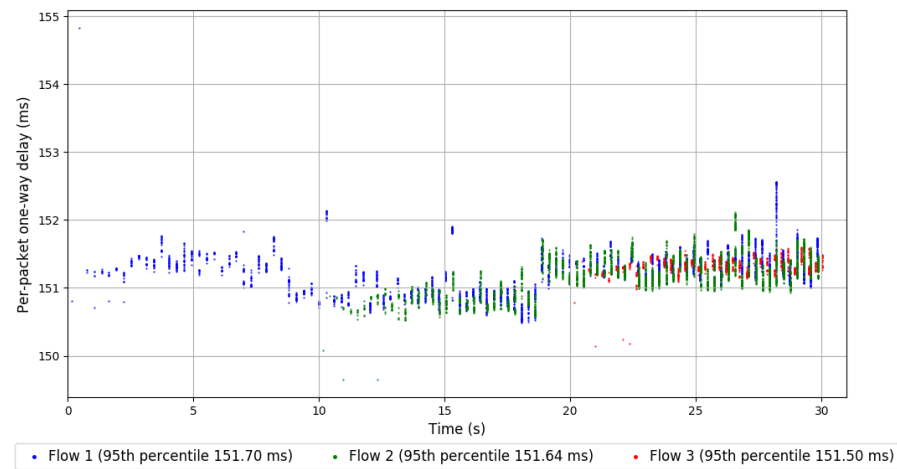
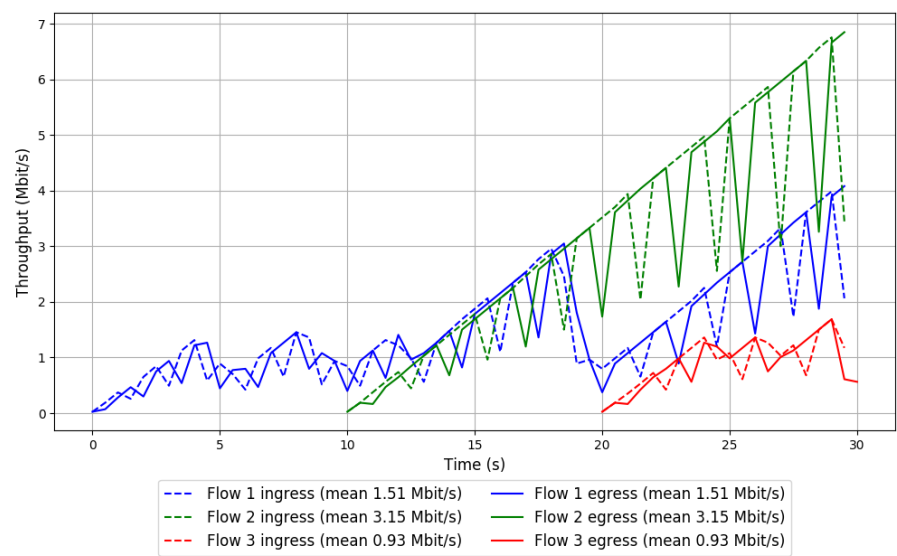


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-18 05:20:54
End at: 2018-01-18 05:21:24

# Below is generated by plot.py at 2018-01-18 10:07:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 151.654 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 151.702 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 151.638 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 151.499 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-18 05:40:43

End at: 2018-01-18 05:41:13

Below is generated by plot.py at 2018-01-18 10:07:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.69 Mbit/s

95th percentile per-packet one-way delay: 149.732 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 149.711 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.15 Mbit/s

95th percentile per-packet one-way delay: 149.737 ms

Loss rate: 0.00%

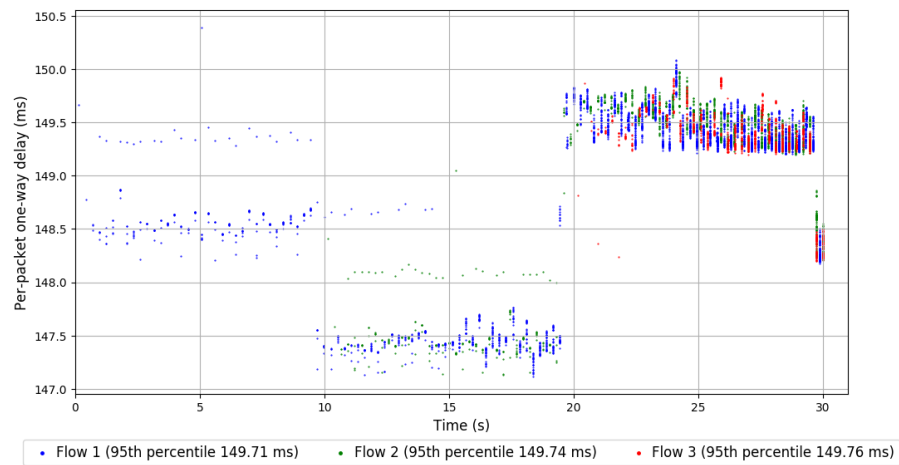
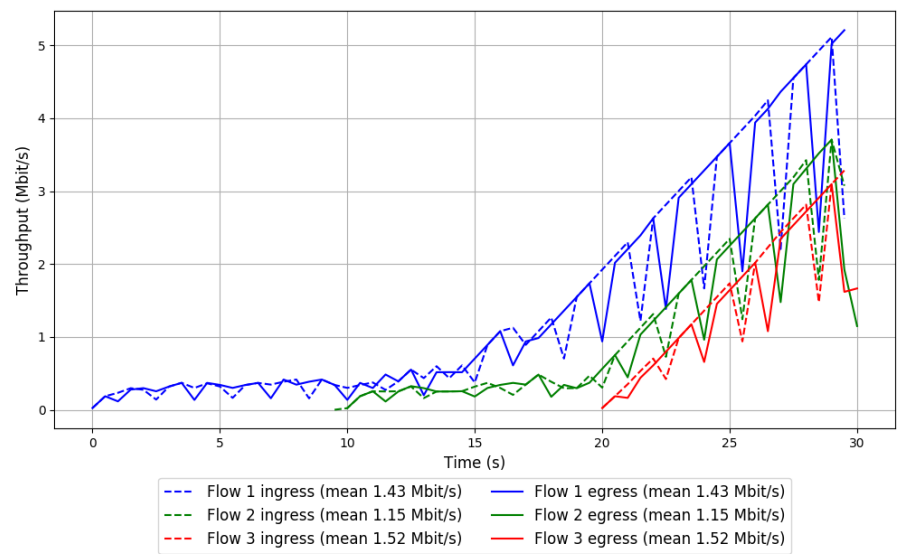
-- Flow 3:

Average throughput: 1.52 Mbit/s

95th percentile per-packet one-way delay: 149.759 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-18 06:00:20

End at: 2018-01-18 06:00:50

Below is generated by plot.py at 2018-01-18 10:07:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 147.089 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 147.132 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 146.877 ms

Loss rate: 0.00%

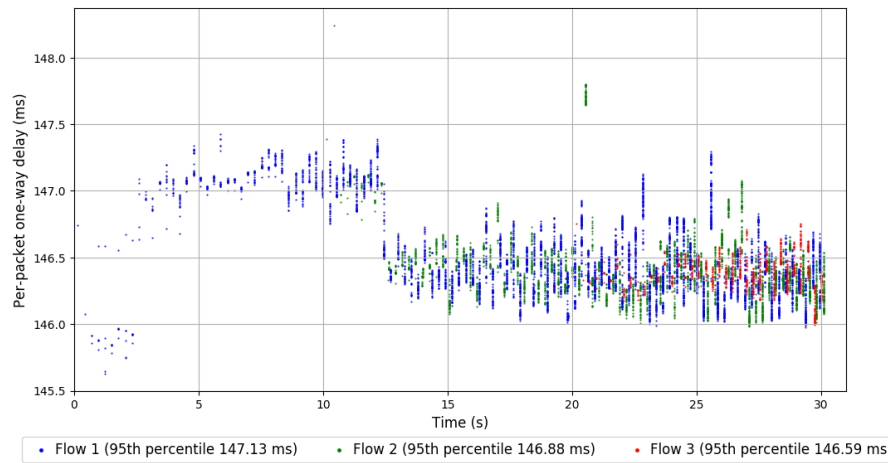
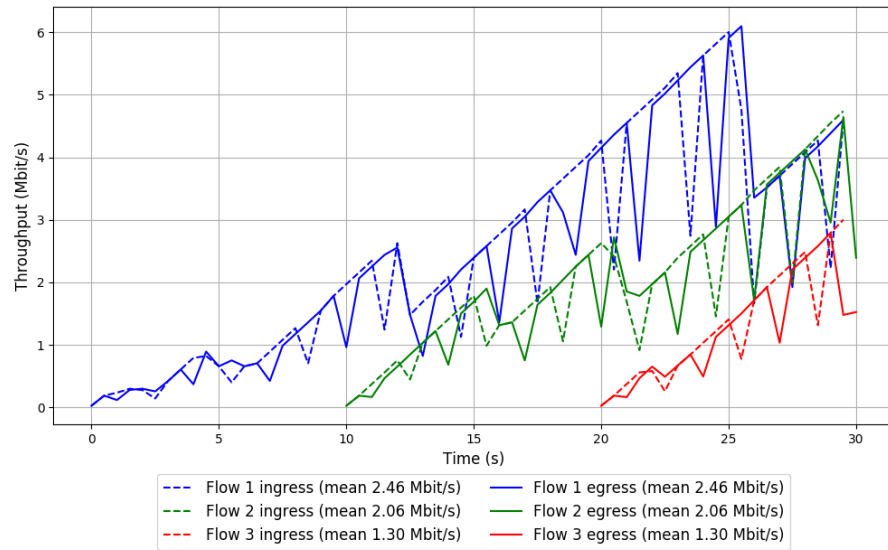
-- Flow 3:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 146.593 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-18 06:20:06

End at: 2018-01-18 06:20:36

Below is generated by plot.py at 2018-01-18 10:07:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.45 Mbit/s

95th percentile per-packet one-way delay: 144.820 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 144.801 ms

Loss rate: 2.12%

-- Flow 2:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 144.864 ms

Loss rate: 0.00%

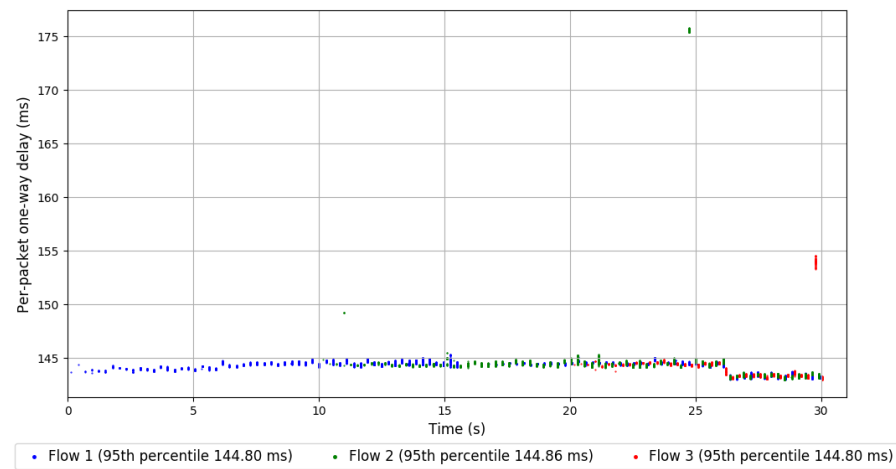
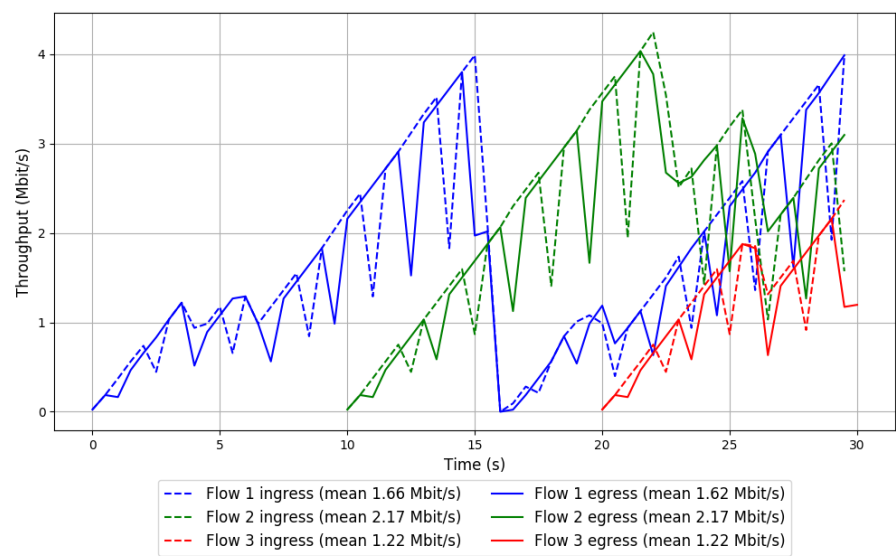
-- Flow 3:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 144.798 ms

Loss rate: 0.10%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-18 06:40:10

End at: 2018-01-18 06:40:40

Below is generated by plot.py at 2018-01-18 10:07:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.02 Mbit/s

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

Loss rate: 1.79%

-- Flow 1:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 141.675 ms

Loss rate: 2.41%

-- Flow 2:

Average throughput: 1.60 Mbit/s

95th percentile per-packet one-way delay: 141.677 ms

Loss rate: 0.63%

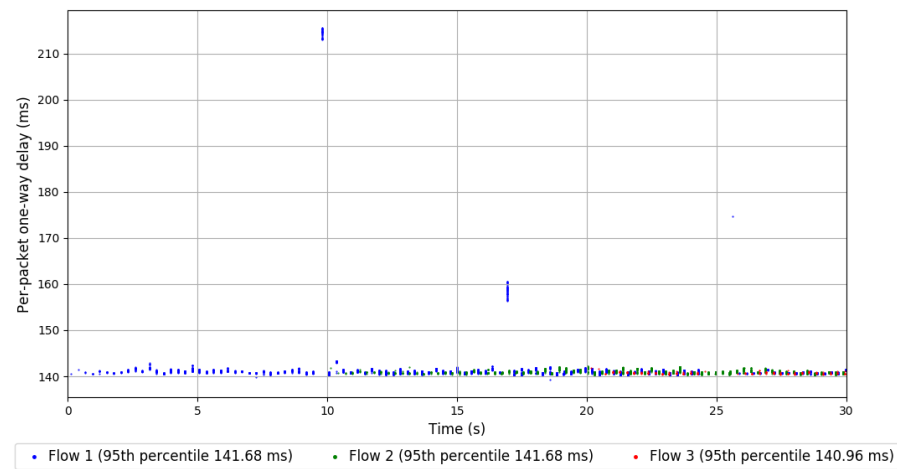
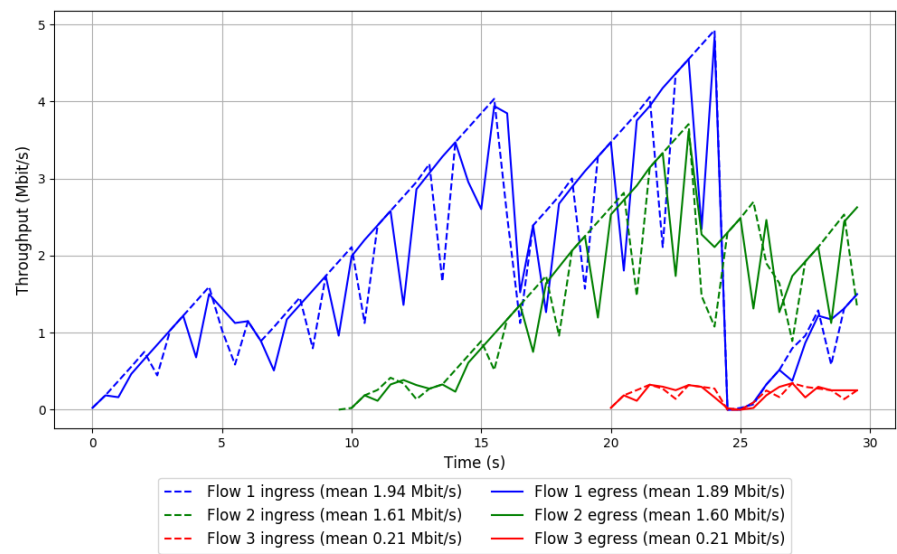
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 140.961 ms

Loss rate: 2.25%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-18 06:59:31

End at: 2018-01-18 07:00:01

Below is generated by plot.py at 2018-01-18 10:07:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 137.584 ms

Loss rate: 1.97%

-- Flow 1:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 137.564 ms

Loss rate: 1.29%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 137.558 ms

Loss rate: 4.08%

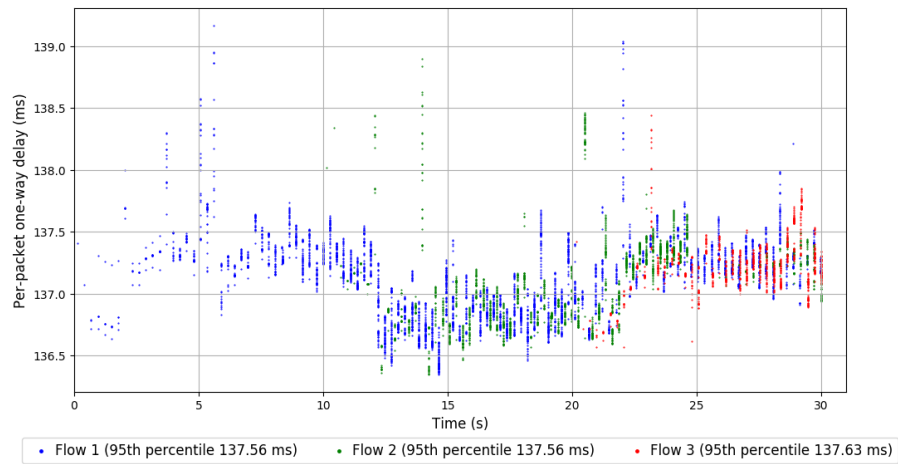
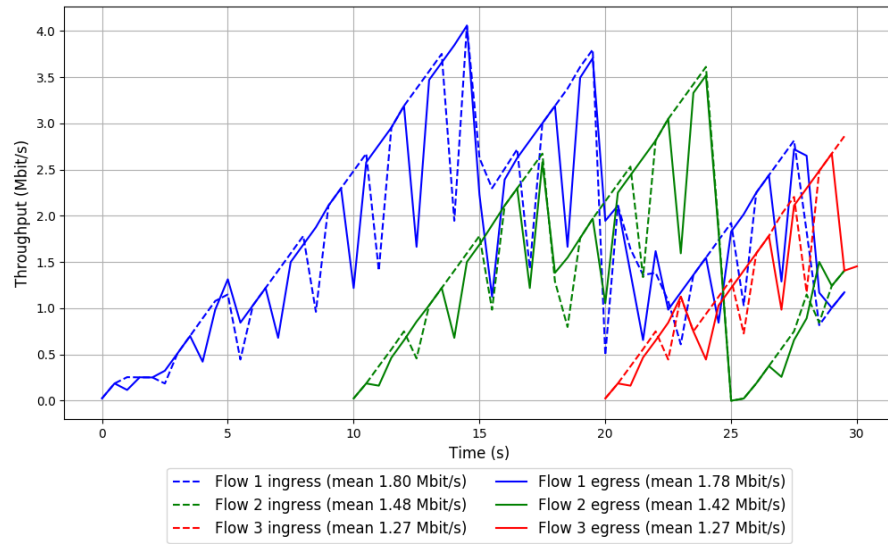
-- Flow 3:

Average throughput: 1.27 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-18 07:19:19

End at: 2018-01-18 07:19:49

Below is generated by plot.py at 2018-01-18 10:07:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 138.395 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 137.342 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 138.585 ms

Loss rate: 0.00%

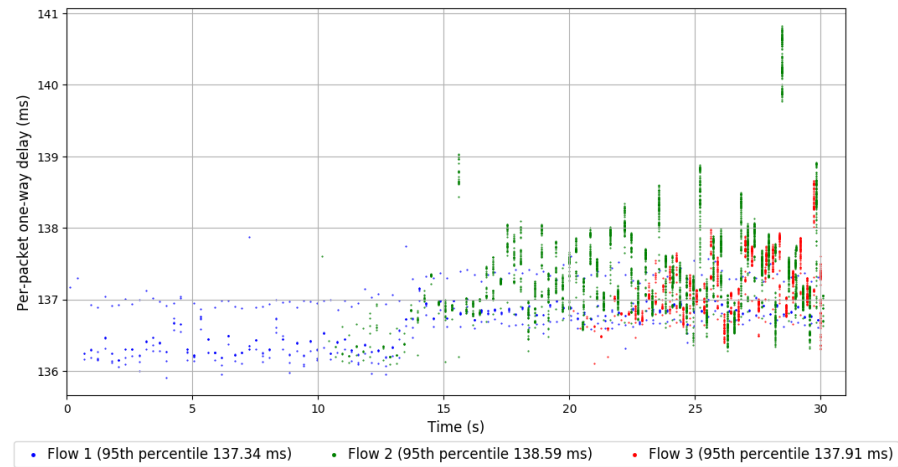
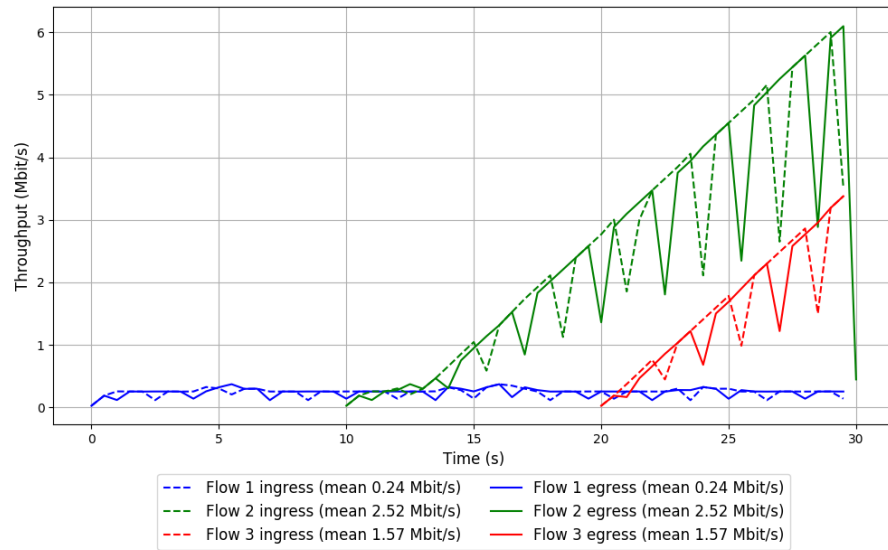
-- Flow 3:

Average throughput: 1.57 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-18 07:39:00

End at: 2018-01-18 07:39:30

Below is generated by plot.py at 2018-01-18 10:07:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 137.377 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 137.442 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 137.367 ms

Loss rate: 0.00%

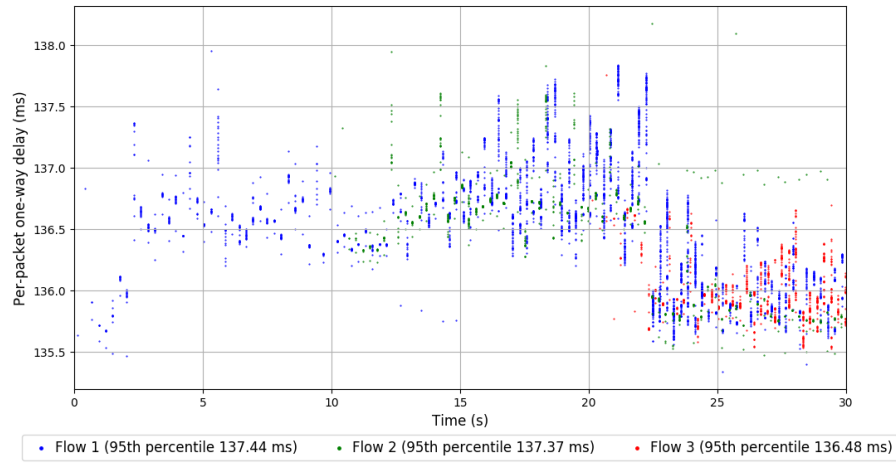
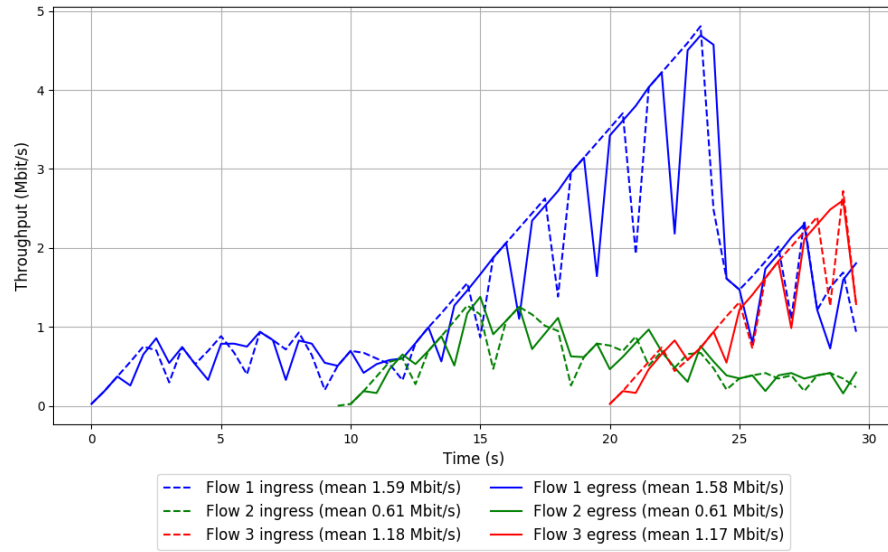
-- Flow 3:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 136.484 ms

Loss rate: 0.51%

Run 9: Report of LEDBAT — Data Link

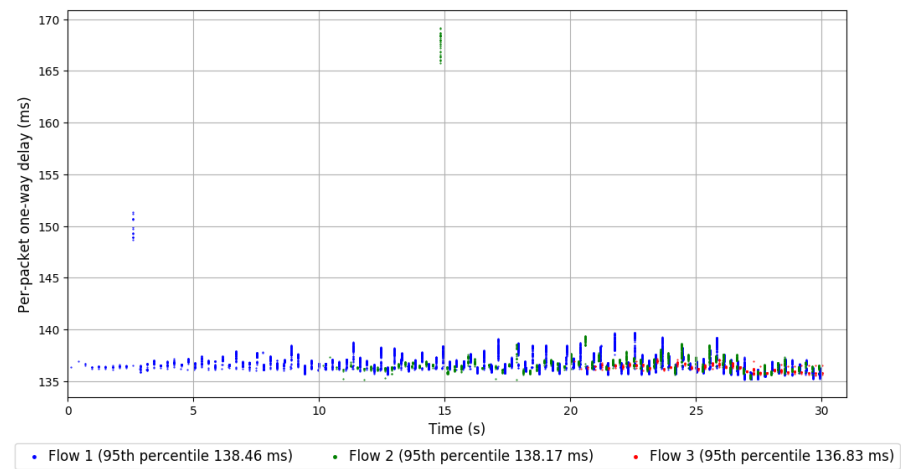
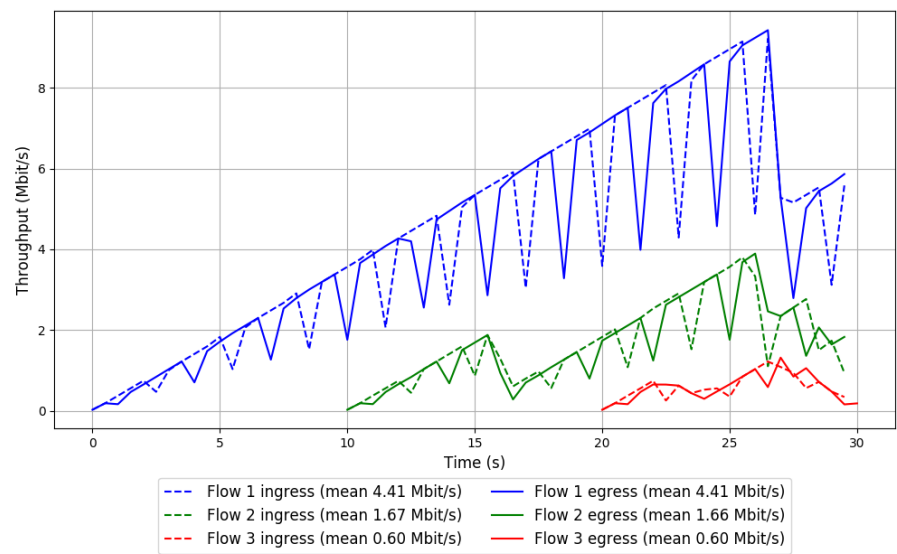


```
Run 10: Statistics of LEDBAT

Start at: 2018-01-18 07:58:36
End at: 2018-01-18 07:59:06

# Below is generated by plot.py at 2018-01-18 10:07:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.69 Mbit/s
95th percentile per-packet one-way delay: 138.389 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 4.41 Mbit/s
95th percentile per-packet one-way delay: 138.455 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.66 Mbit/s
95th percentile per-packet one-way delay: 138.172 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 0.60 Mbit/s
95th percentile per-packet one-way delay: 136.834 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

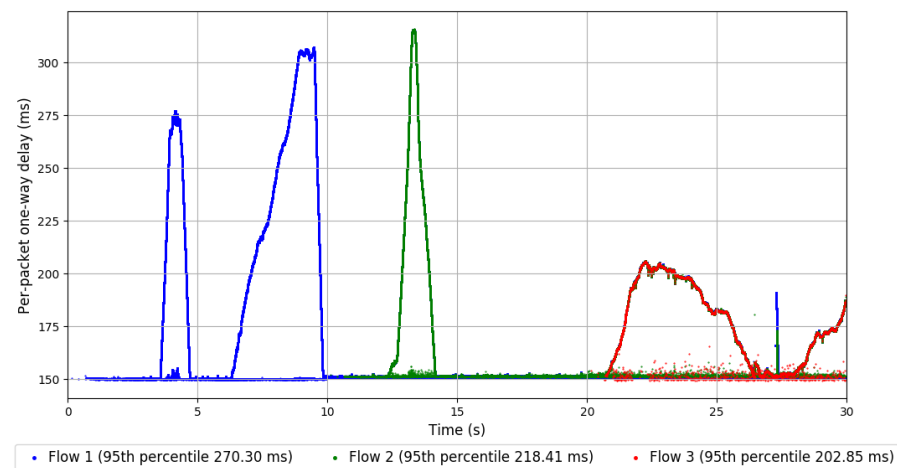
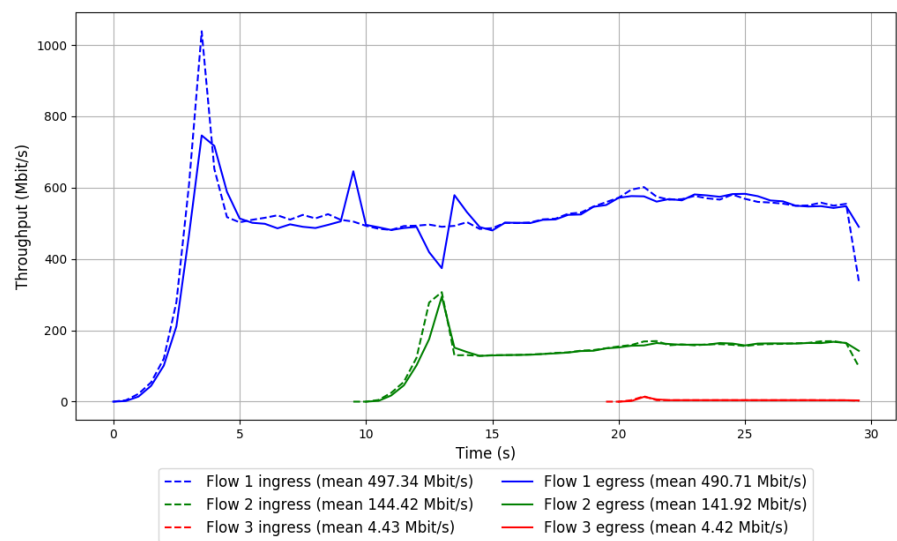


```
Run 1: Statistics of PCC

Start at: 2018-01-18 05:01:33
End at: 2018-01-18 05:02:03

# Below is generated by plot.py at 2018-01-18 10:16:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 586.59 Mbit/s
95th percentile per-packet one-way delay: 266.874 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 490.71 Mbit/s
95th percentile per-packet one-way delay: 270.303 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 141.92 Mbit/s
95th percentile per-packet one-way delay: 218.412 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 202.846 ms
Loss rate: 0.30%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-18 05:21:44

End at: 2018-01-18 05:22:14

Below is generated by plot.py at 2018-01-18 10:16:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 572.55 Mbit/s

95th percentile per-packet one-way delay: 260.263 ms

Loss rate: 4.91%

-- Flow 1:

Average throughput: 423.65 Mbit/s

95th percentile per-packet one-way delay: 260.154 ms

Loss rate: 4.60%

-- Flow 2:

Average throughput: 219.99 Mbit/s

95th percentile per-packet one-way delay: 260.687 ms

Loss rate: 5.85%

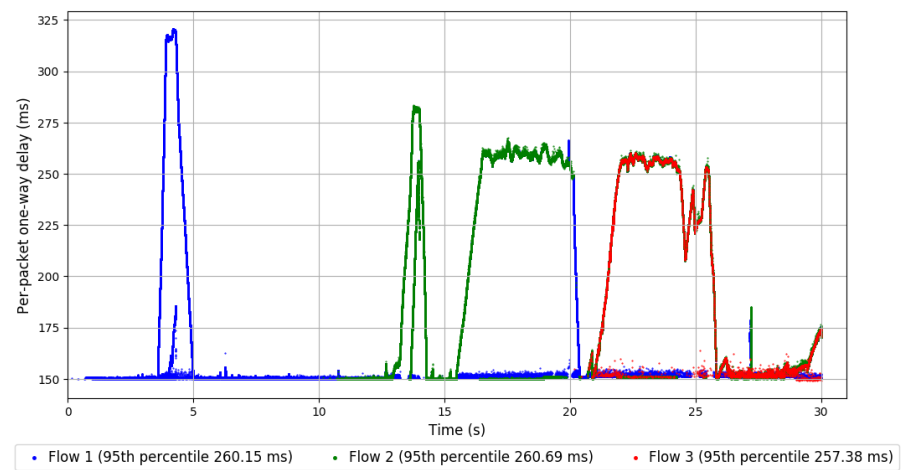
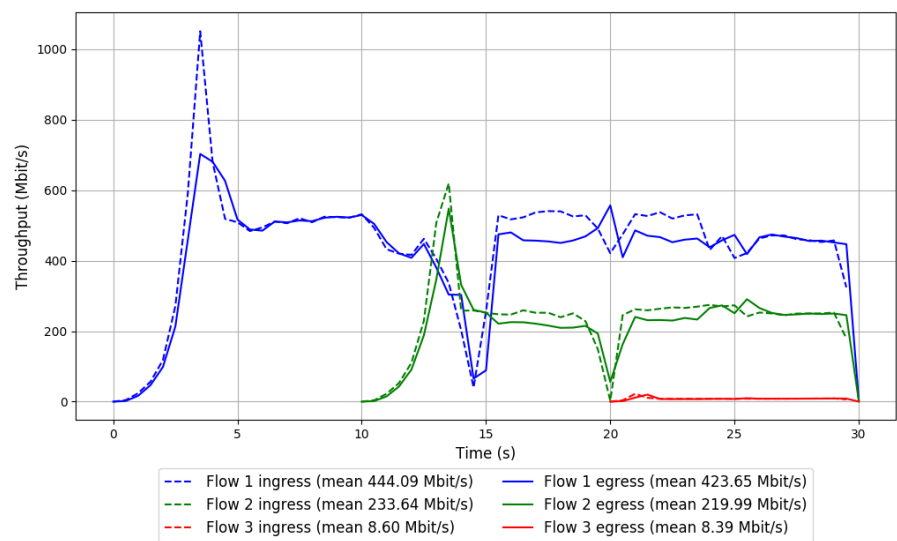
-- Flow 3:

Average throughput: 8.39 Mbit/s

95th percentile per-packet one-way delay: 257.383 ms

Loss rate: 2.55%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-18 05:41:32

End at: 2018-01-18 05:42:02

Below is generated by plot.py at 2018-01-18 10:16:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 572.59 Mbit/s

95th percentile per-packet one-way delay: 288.880 ms

Loss rate: 6.42%

-- Flow 1:

Average throughput: 417.41 Mbit/s

95th percentile per-packet one-way delay: 288.127 ms

Loss rate: 6.08%

-- Flow 2:

Average throughput: 232.56 Mbit/s

95th percentile per-packet one-way delay: 292.972 ms

Loss rate: 7.35%

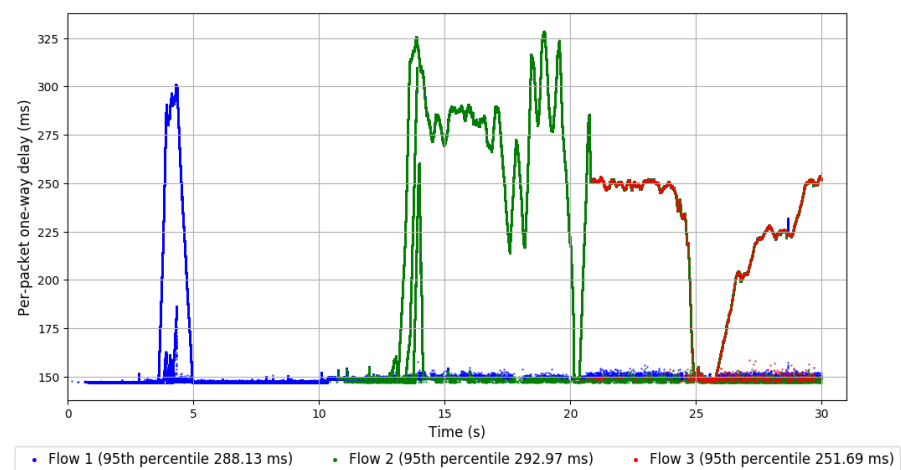
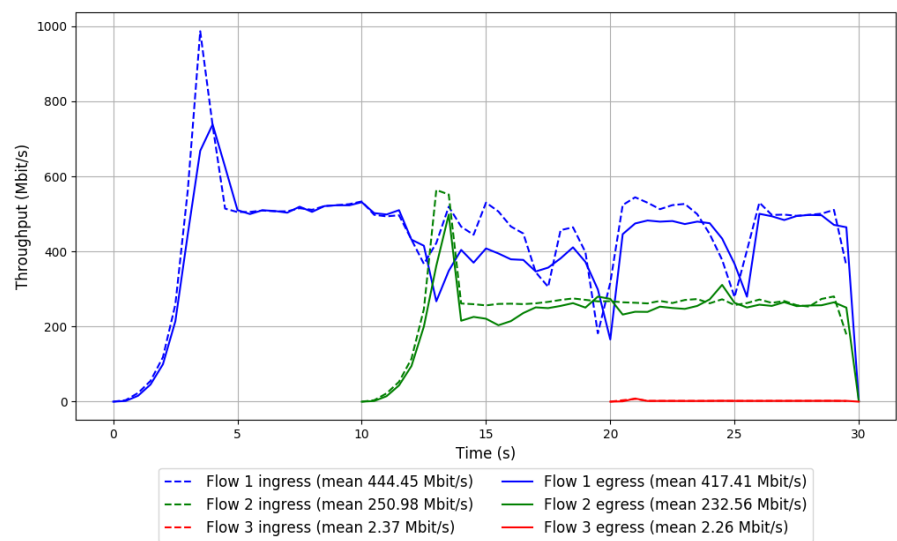
-- Flow 3:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 251.689 ms

Loss rate: 4.74%

Run 3: Report of PCC — Data Link

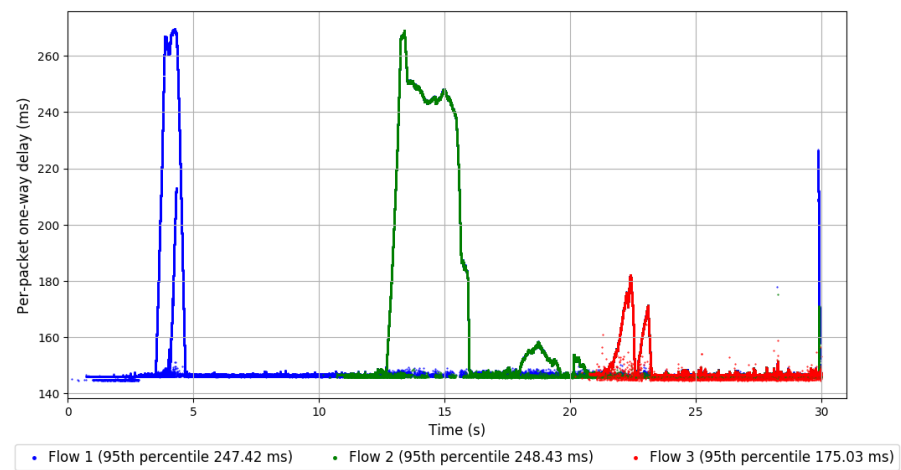
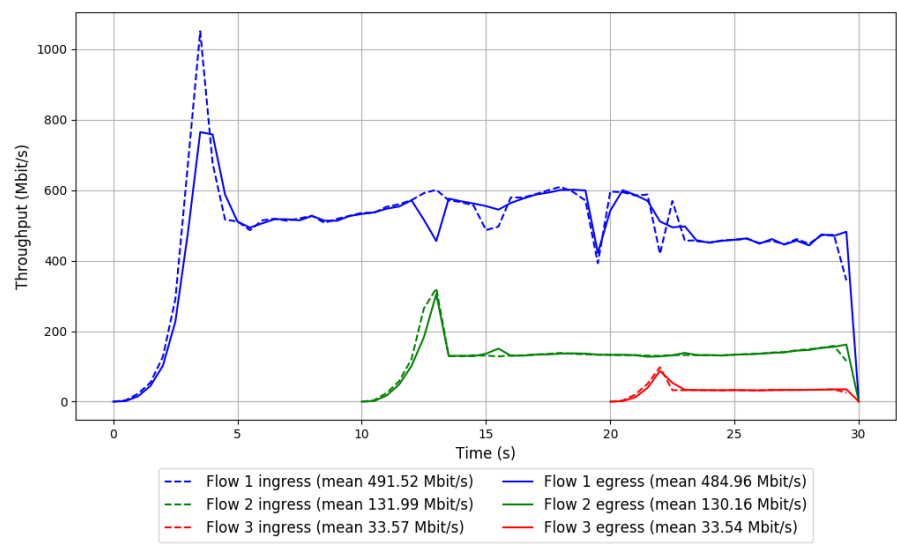


```
Run 4: Statistics of PCC

Start at: 2018-01-18 06:01:10
End at: 2018-01-18 06:01:40

# Below is generated by plot.py at 2018-01-18 10:16:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 582.37 Mbit/s
95th percentile per-packet one-way delay: 247.456 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 484.96 Mbit/s
95th percentile per-packet one-way delay: 247.419 ms
Loss rate: 1.33%
-- Flow 2:
Average throughput: 130.16 Mbit/s
95th percentile per-packet one-way delay: 248.429 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 33.54 Mbit/s
95th percentile per-packet one-way delay: 175.032 ms
Loss rate: 0.01%
```

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-18 06:20:56

End at: 2018-01-18 06:21:26

Below is generated by plot.py at 2018-01-18 10:16:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 574.84 Mbit/s

95th percentile per-packet one-way delay: 251.681 ms

Loss rate: 5.47%

-- Flow 1:

Average throughput: 418.64 Mbit/s

95th percentile per-packet one-way delay: 251.670 ms

Loss rate: 5.22%

-- Flow 2:

Average throughput: 233.02 Mbit/s

95th percentile per-packet one-way delay: 251.710 ms

Loss rate: 6.17%

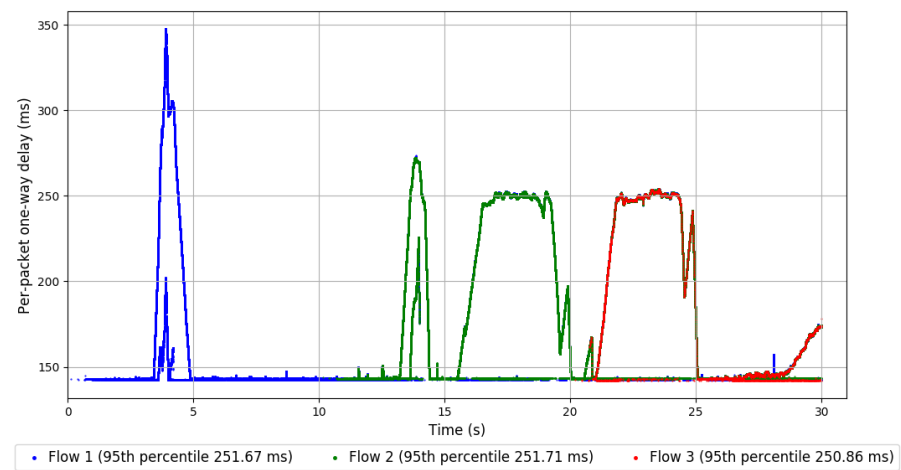
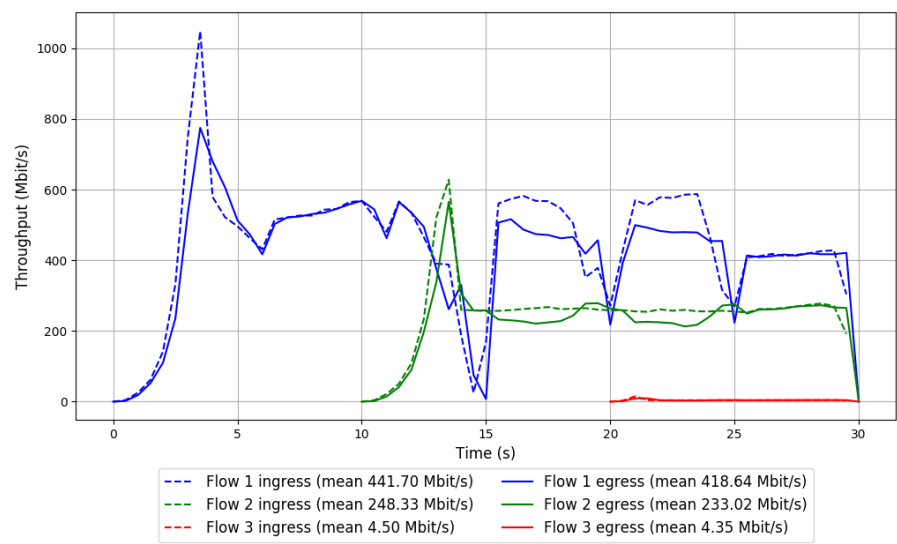
-- Flow 3:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 250.863 ms

Loss rate: 3.35%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-18 06:40:59

End at: 2018-01-18 06:41:29

Below is generated by plot.py at 2018-01-18 10:16:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 498.81 Mbit/s

95th percentile per-packet one-way delay: 287.210 ms

Loss rate: 3.41%

-- Flow 1:

Average throughput: 303.20 Mbit/s

95th percentile per-packet one-way delay: 297.379 ms

Loss rate: 3.25%

-- Flow 2:

Average throughput: 235.16 Mbit/s

95th percentile per-packet one-way delay: 244.619 ms

Loss rate: 3.36%

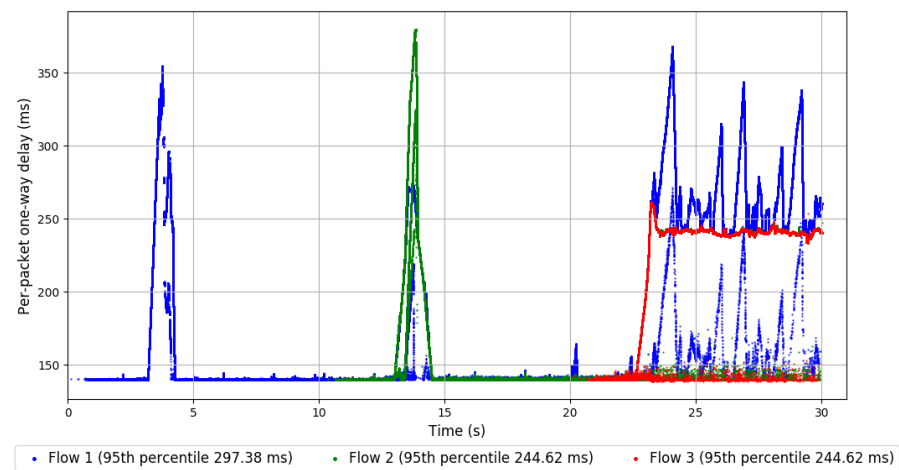
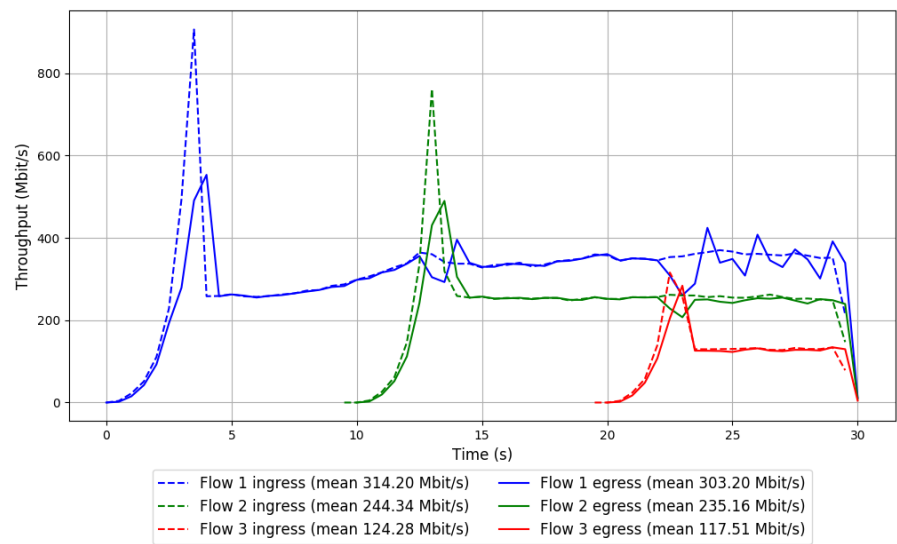
-- Flow 3:

Average throughput: 117.51 Mbit/s

95th percentile per-packet one-way delay: 244.617 ms

Loss rate: 4.79%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-18 07:00:20

End at: 2018-01-18 07:00:50

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 573.77 Mbit/s

95th percentile per-packet one-way delay: 241.188 ms

Loss rate: 2.34%

-- Flow 1:

Average throughput: 474.91 Mbit/s

95th percentile per-packet one-way delay: 241.355 ms

Loss rate: 2.42%

-- Flow 2:

Average throughput: 140.71 Mbit/s

95th percentile per-packet one-way delay: 240.837 ms

Loss rate: 1.89%

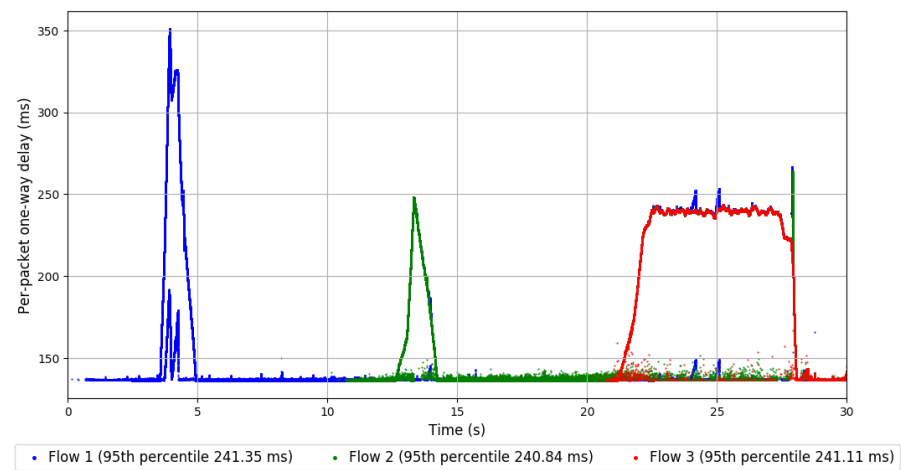
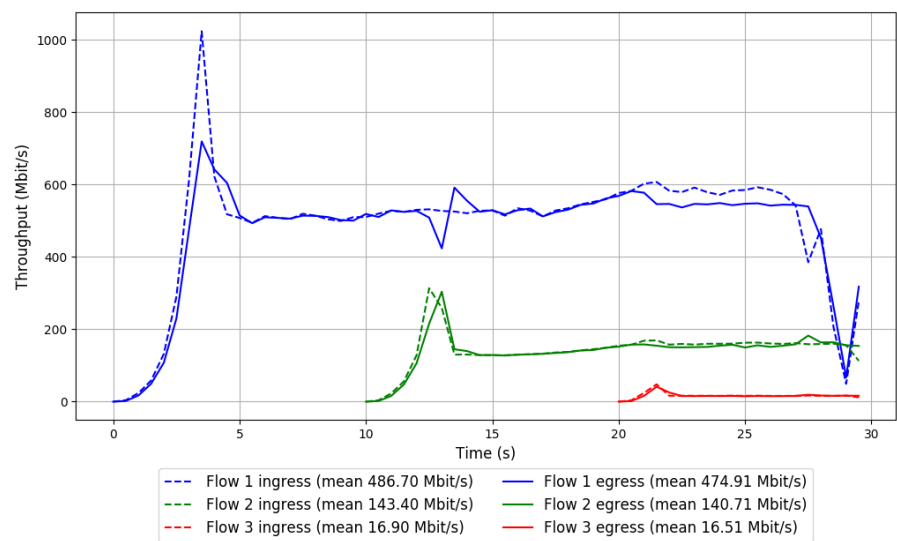
-- Flow 3:

Average throughput: 16.51 Mbit/s

95th percentile per-packet one-way delay: 241.109 ms

Loss rate: 2.29%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-18 07:20:08

End at: 2018-01-18 07:20:38

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 485.45 Mbit/s

95th percentile per-packet one-way delay: 268.562 ms

Loss rate: 2.69%

-- Flow 1:

Average throughput: 286.58 Mbit/s

95th percentile per-packet one-way delay: 284.827 ms

Loss rate: 2.24%

-- Flow 2:

Average throughput: 240.86 Mbit/s

95th percentile per-packet one-way delay: 244.218 ms

Loss rate: 2.96%

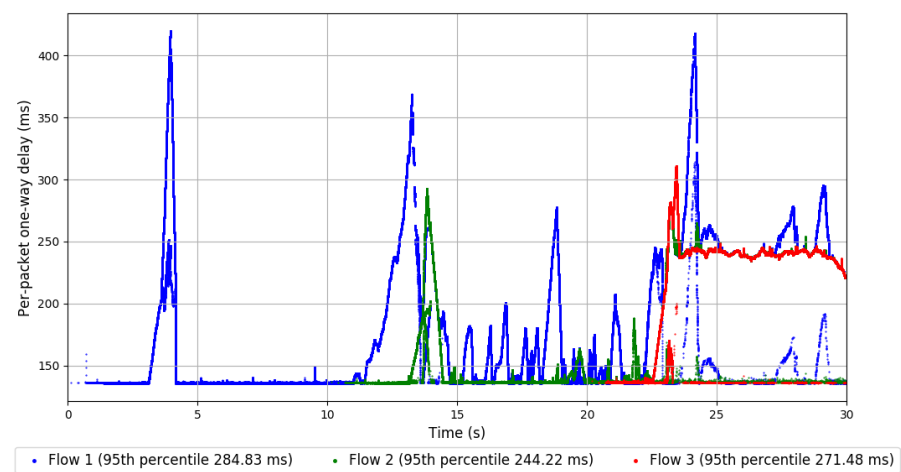
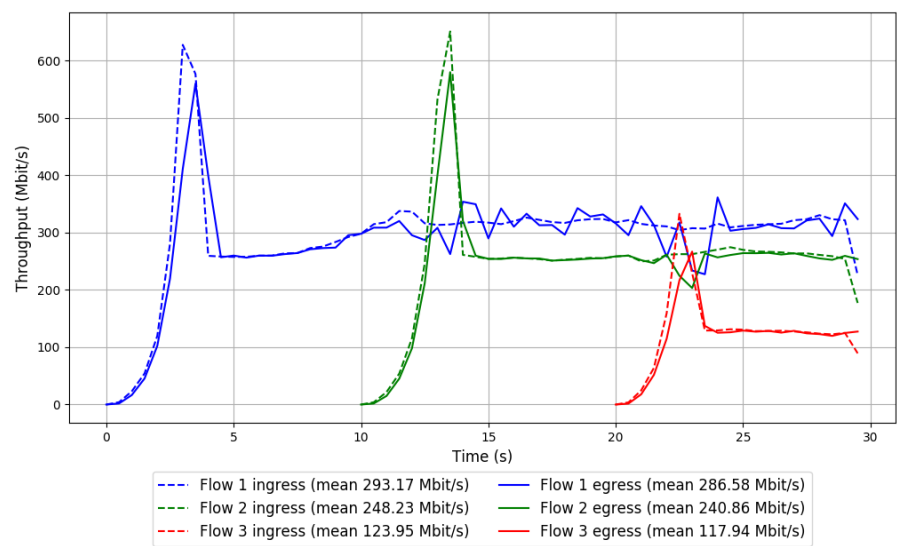
-- Flow 3:

Average throughput: 117.94 Mbit/s

95th percentile per-packet one-way delay: 271.482 ms

Loss rate: 4.85%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-18 07:39:49

End at: 2018-01-18 07:40:19

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 552.51 Mbit/s

95th percentile per-packet one-way delay: 288.203 ms

Loss rate: 3.25%

-- Flow 1:

Average throughput: 464.12 Mbit/s

95th percentile per-packet one-way delay: 297.327 ms

Loss rate: 3.40%

-- Flow 2:

Average throughput: 129.20 Mbit/s

95th percentile per-packet one-way delay: 244.159 ms

Loss rate: 2.40%

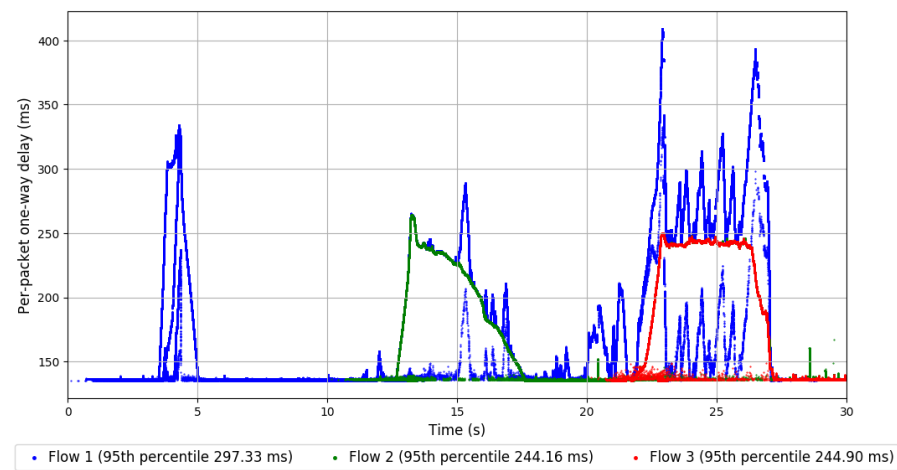
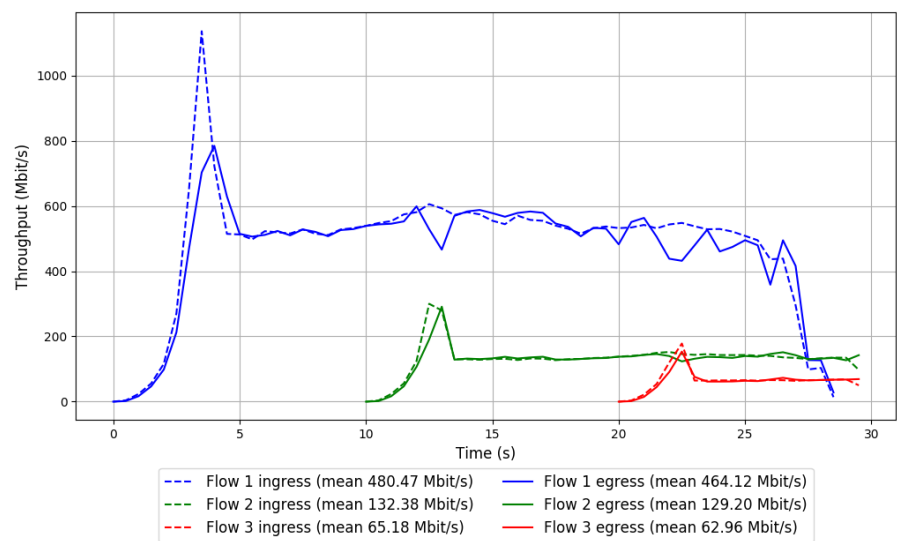
-- Flow 3:

Average throughput: 62.96 Mbit/s

95th percentile per-packet one-way delay: 244.899 ms

Loss rate: 3.42%

Run 9: Report of PCC — Data Link

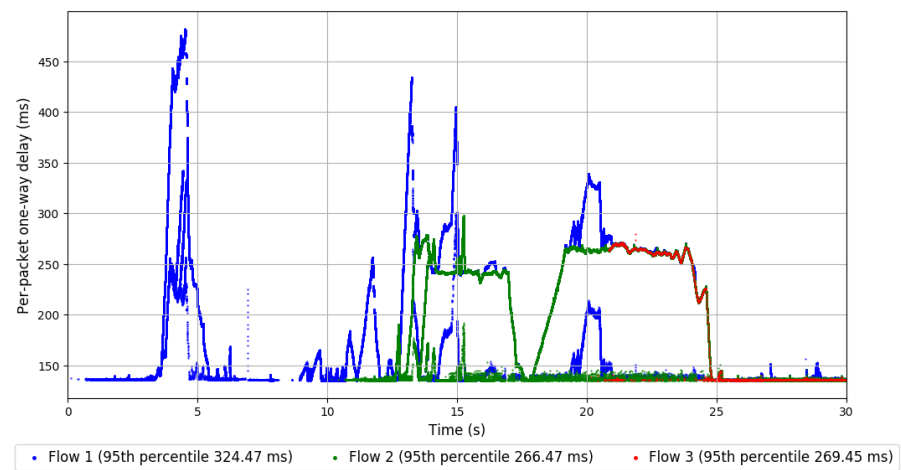
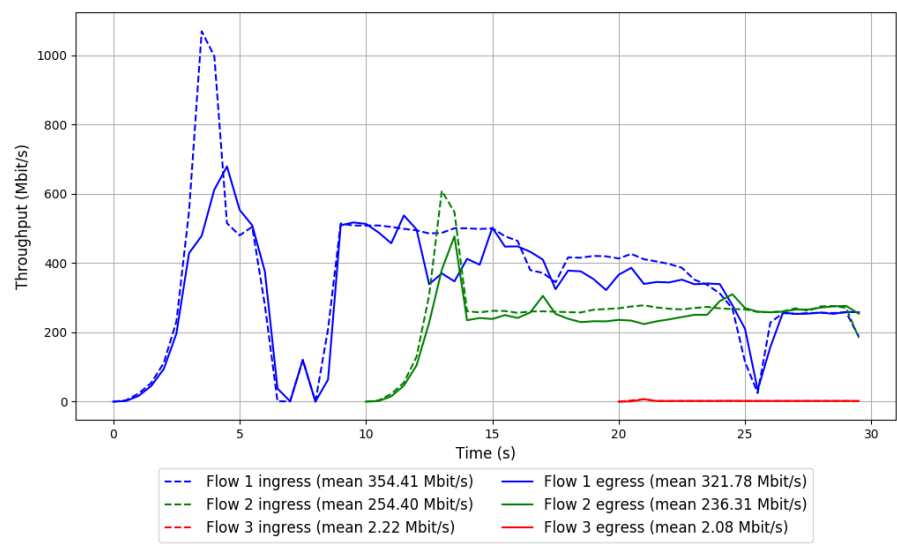


```
Run 10: Statistics of PCC

Start at: 2018-01-18 07:59:26
End at: 2018-01-18 07:59:56

# Below is generated by plot.py at 2018-01-18 10:26:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 479.41 Mbit/s
95th percentile per-packet one-way delay: 290.177 ms
Loss rate: 8.53%
-- Flow 1:
Average throughput: 321.78 Mbit/s
95th percentile per-packet one-way delay: 324.473 ms
Loss rate: 9.21%
-- Flow 2:
Average throughput: 236.31 Mbit/s
95th percentile per-packet one-way delay: 266.474 ms
Loss rate: 7.12%
-- Flow 3:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 269.455 ms
Loss rate: 6.53%
```


Run 10: Report of PCC — Data Link

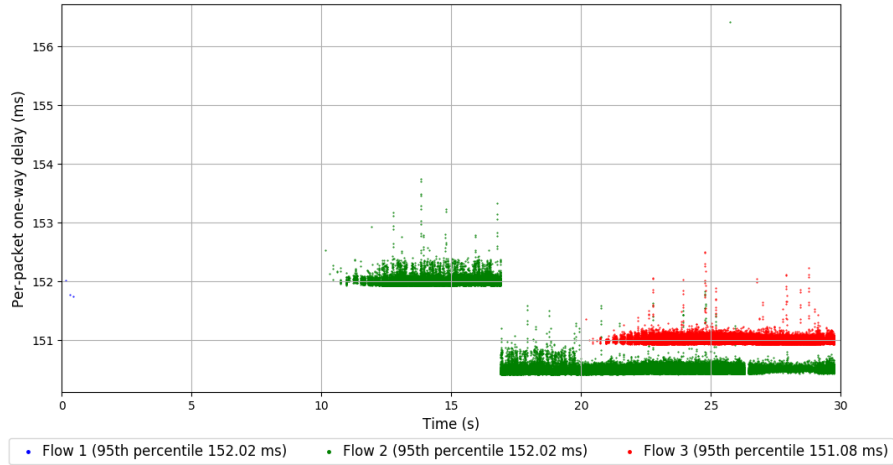
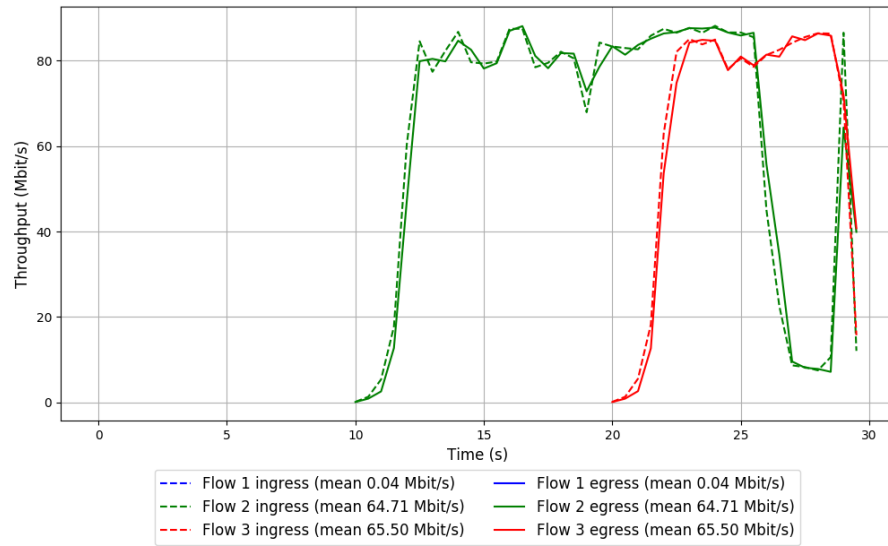


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-18 05:05:45
End at: 2018-01-18 05:06:15

# Below is generated by plot.py at 2018-01-18 10:26:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.01 Mbit/s
95th percentile per-packet one-way delay: 151.996 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 152.021 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 64.71 Mbit/s
95th percentile per-packet one-way delay: 152.017 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 65.50 Mbit/s
95th percentile per-packet one-way delay: 151.077 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-18 05:25:56

End at: 2018-01-18 05:26:26

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.20 Mbit/s

95th percentile per-packet one-way delay: 150.834 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.10 Mbit/s

95th percentile per-packet one-way delay: 150.858 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 61.30 Mbit/s

95th percentile per-packet one-way delay: 149.739 ms

Loss rate: 0.00%

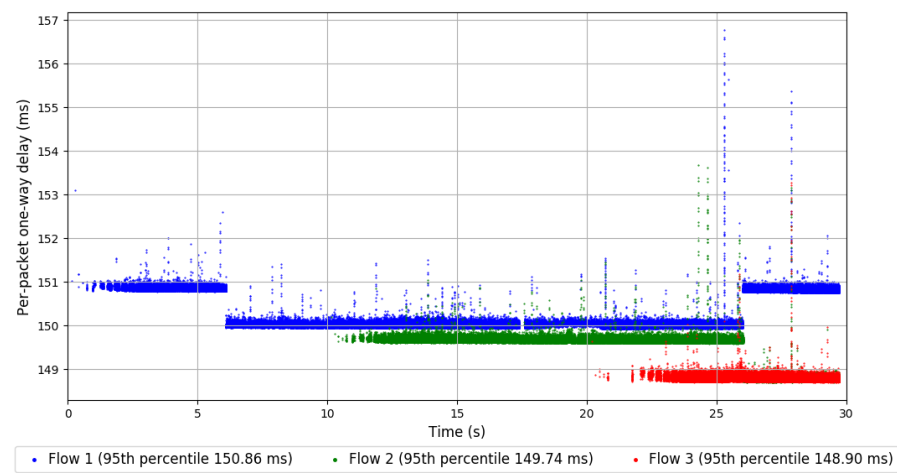
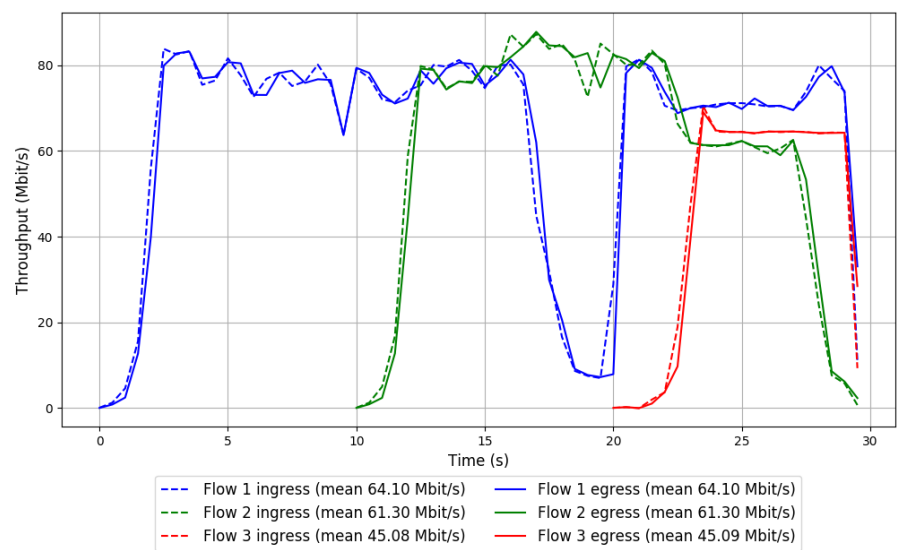
-- Flow 3:

Average throughput: 45.09 Mbit/s

95th percentile per-packet one-way delay: 148.899 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-18 05:45:40

End at: 2018-01-18 05:46:10

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.79 Mbit/s

95th percentile per-packet one-way delay: 148.780 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.03 Mbit/s

95th percentile per-packet one-way delay: 147.031 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.45 Mbit/s

95th percentile per-packet one-way delay: 148.811 ms

Loss rate: 0.00%

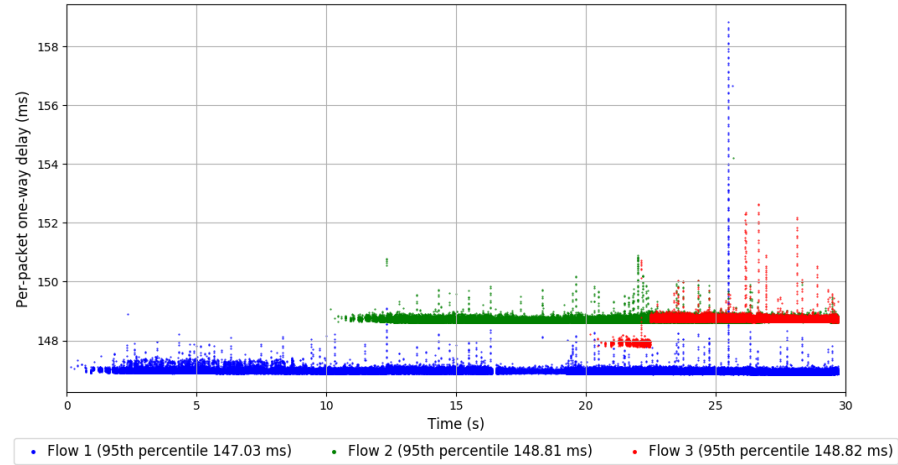
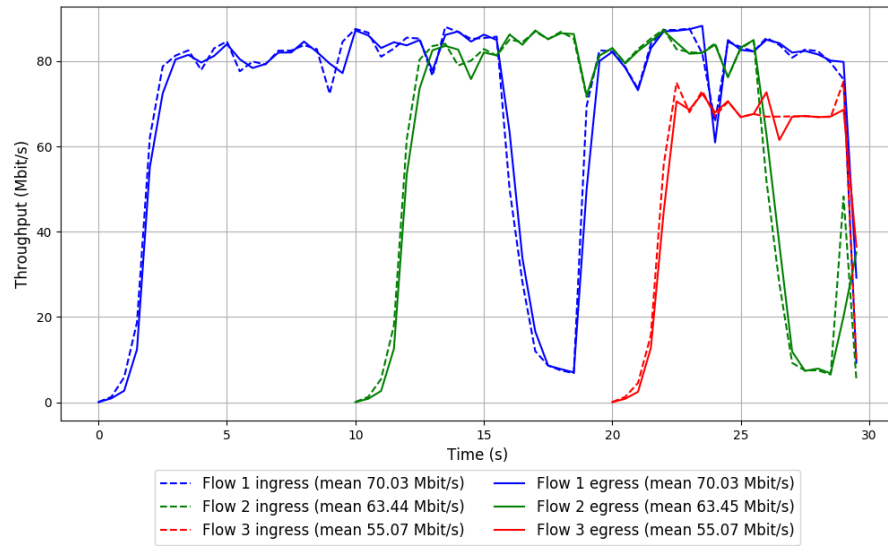
-- Flow 3:

Average throughput: 55.07 Mbit/s

95th percentile per-packet one-way delay: 148.825 ms

Loss rate: 0.01%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-18 06:05:17

End at: 2018-01-18 06:05:47

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.22 Mbit/s

95th percentile per-packet one-way delay: 145.695 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.15 Mbit/s

95th percentile per-packet one-way delay: 145.735 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.13 Mbit/s

95th percentile per-packet one-way delay: 145.272 ms

Loss rate: 0.00%

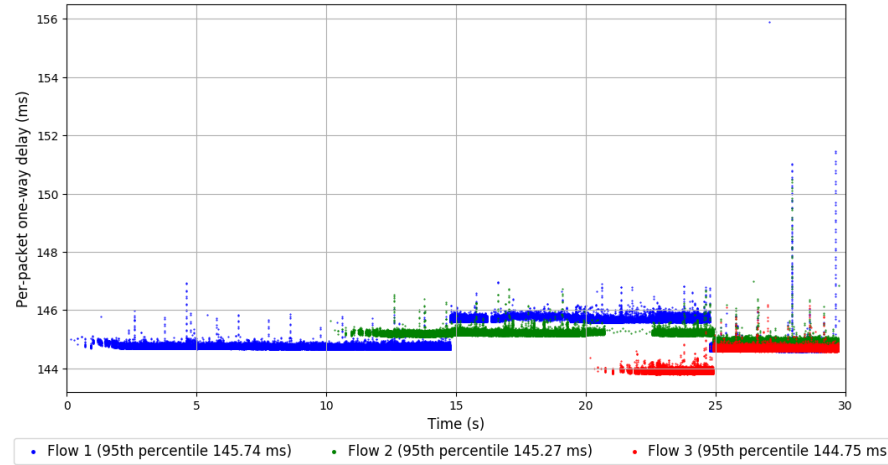
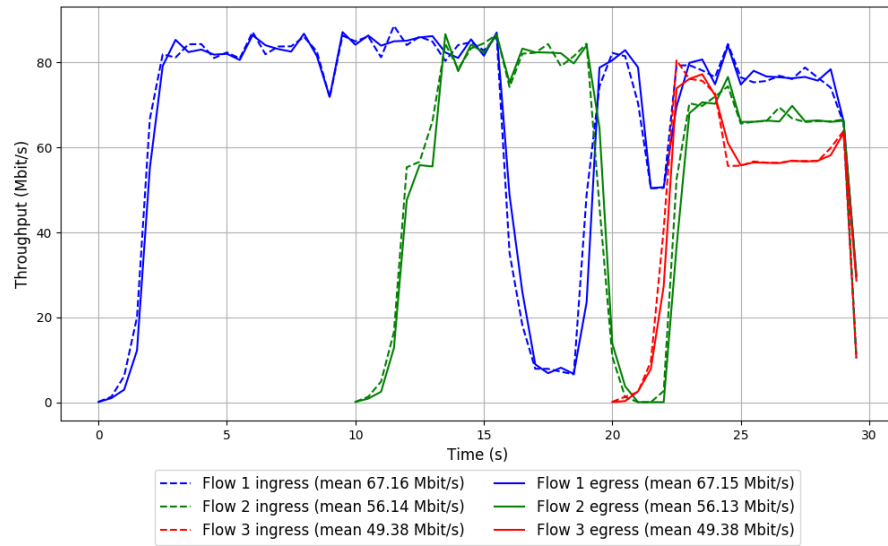
-- Flow 3:

Average throughput: 49.38 Mbit/s

95th percentile per-packet one-way delay: 144.752 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-18 06:25:03

End at: 2018-01-18 06:25:33

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.38 Mbit/s

95th percentile per-packet one-way delay: 143.436 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.41 Mbit/s

95th percentile per-packet one-way delay: 143.445 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.46 Mbit/s

95th percentile per-packet one-way delay: 143.439 ms

Loss rate: 0.00%

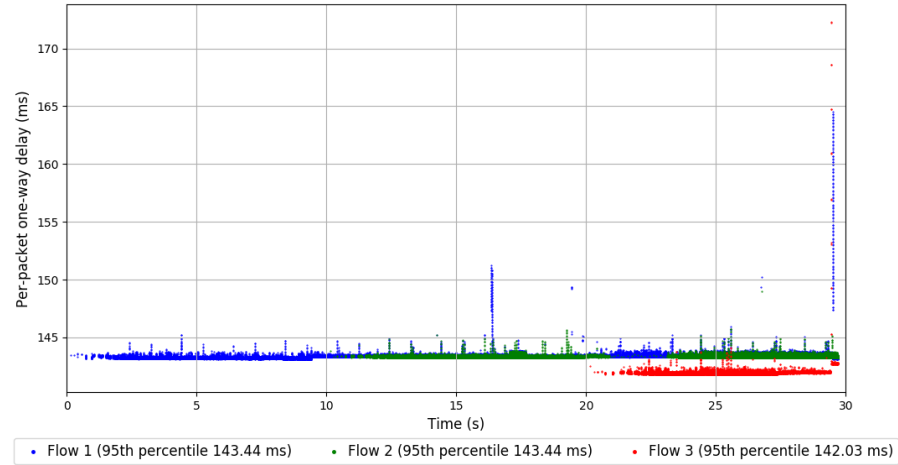
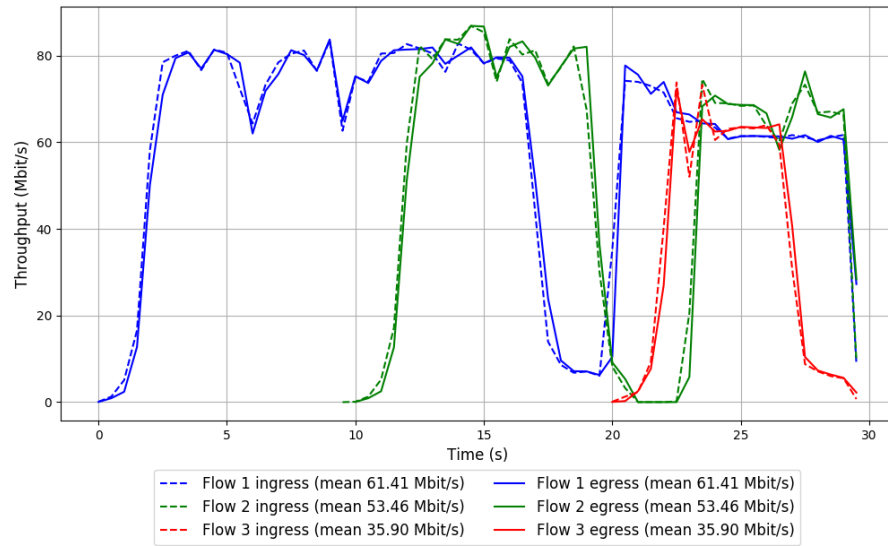
-- Flow 3:

Average throughput: 35.90 Mbit/s

95th percentile per-packet one-way delay: 142.029 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-18 06:45:01

End at: 2018-01-18 06:45:31

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.40 Mbit/s

95th percentile per-packet one-way delay: 139.277 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.29 Mbit/s

95th percentile per-packet one-way delay: 139.310 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.59 Mbit/s

95th percentile per-packet one-way delay: 138.877 ms

Loss rate: 0.00%

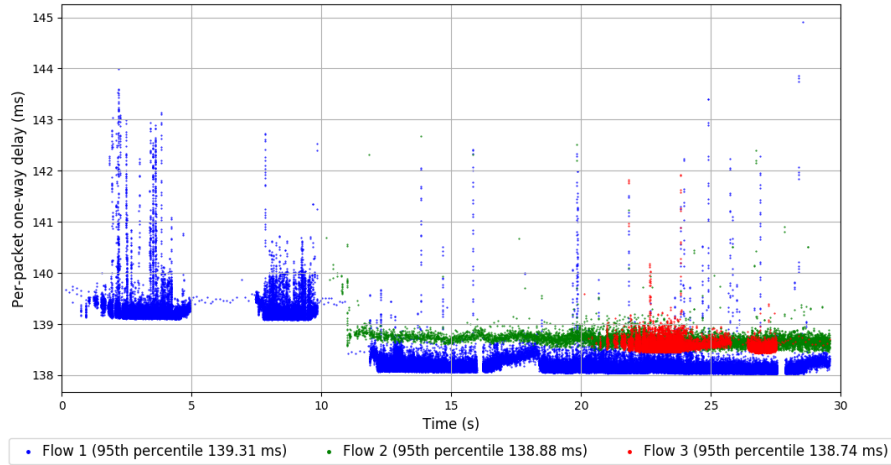
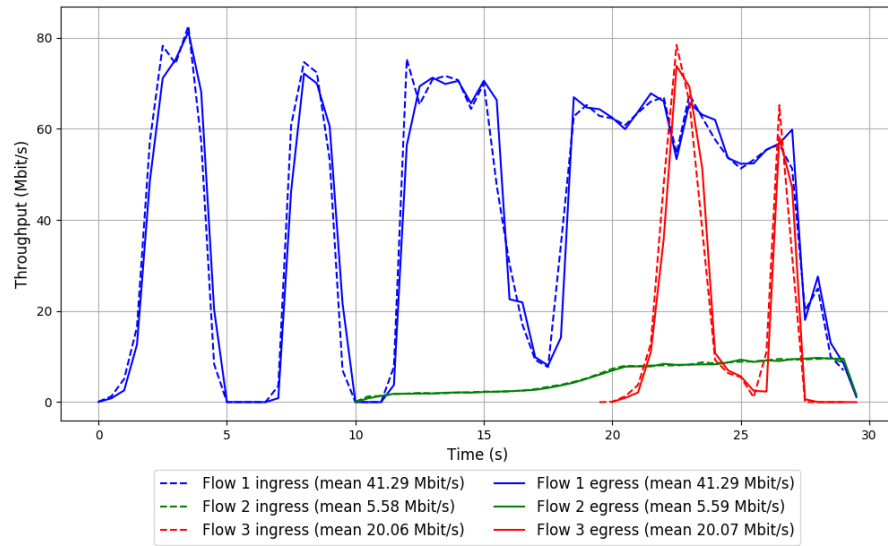
-- Flow 3:

Average throughput: 20.07 Mbit/s

95th percentile per-packet one-way delay: 138.735 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-18 07:04:26

End at: 2018-01-18 07:04:56

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.98 Mbit/s

95th percentile per-packet one-way delay: 137.060 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.08 Mbit/s

95th percentile per-packet one-way delay: 136.804 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.95 Mbit/s

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

Loss rate: 0.00%

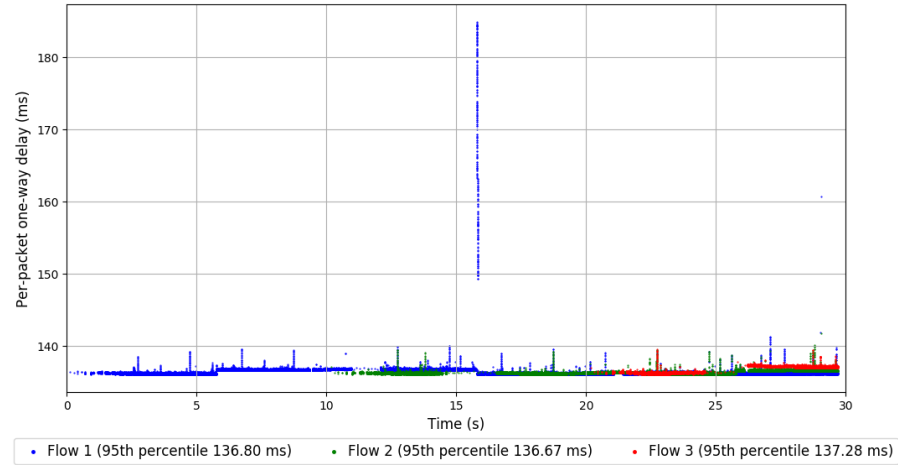
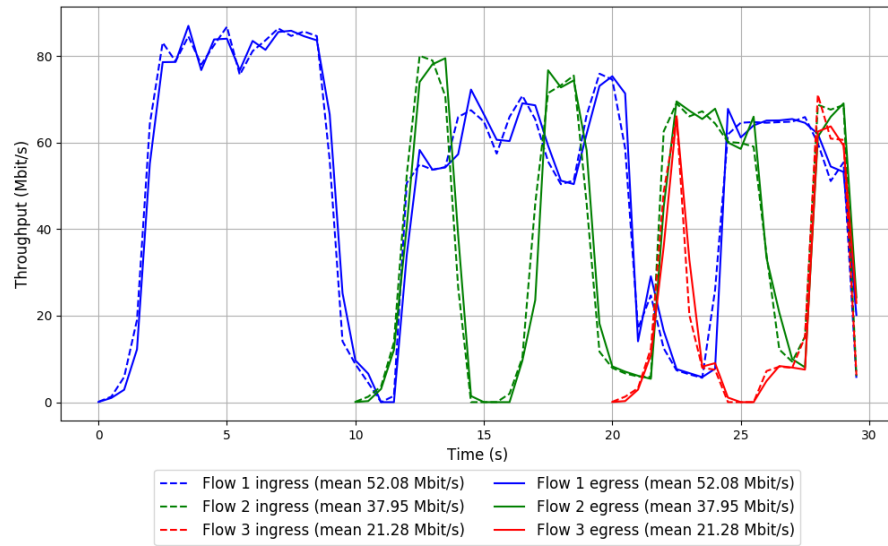
-- Flow 3:

Average throughput: 21.28 Mbit/s

95th percentile per-packet one-way delay: 137.283 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-18 07:24:22

End at: 2018-01-18 07:24:52

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.84 Mbit/s

95th percentile per-packet one-way delay: 136.422 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 36.24 Mbit/s

95th percentile per-packet one-way delay: 136.340 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 33.68 Mbit/s

95th percentile per-packet one-way delay: 136.500 ms

Loss rate: 0.01%

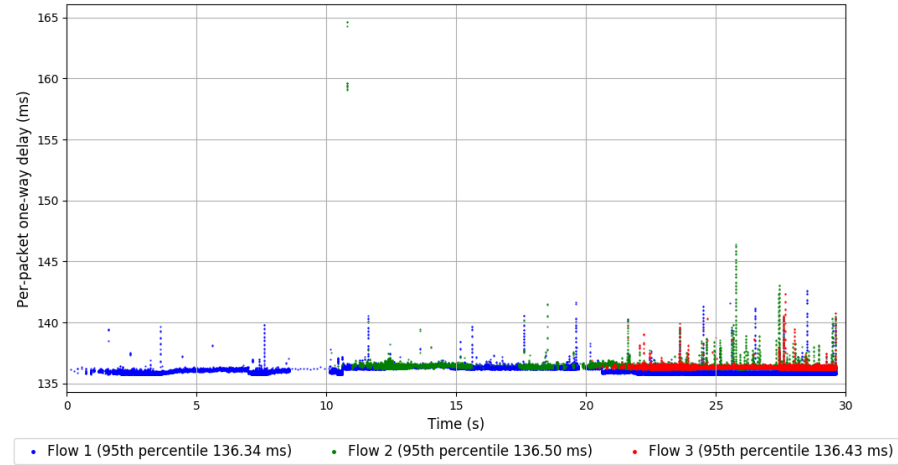
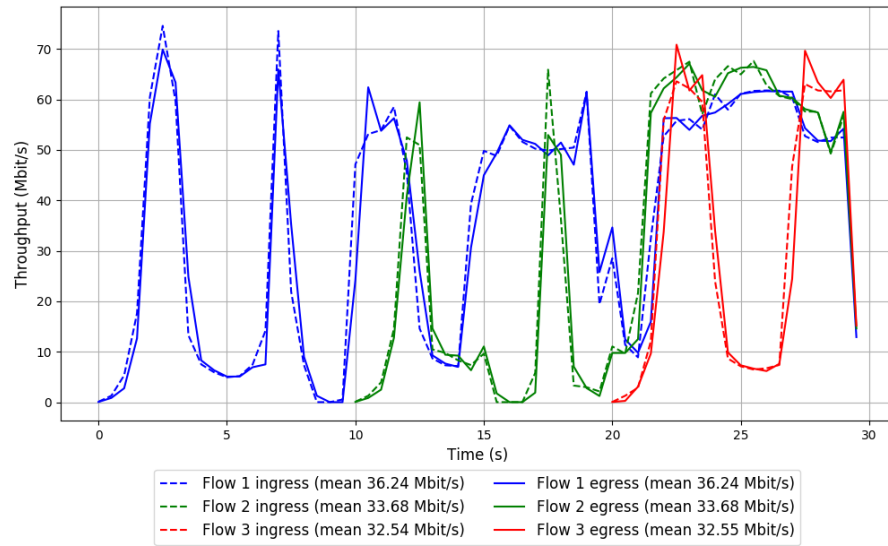
-- Flow 3:

Average throughput: 32.55 Mbit/s

95th percentile per-packet one-way delay: 136.432 ms

Loss rate: 0.01%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-18 07:43:50

End at: 2018-01-18 07:44:20

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.09 Mbit/s

95th percentile per-packet one-way delay: 136.393 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 36.57 Mbit/s

95th percentile per-packet one-way delay: 135.689 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.95 Mbit/s

95th percentile per-packet one-way delay: 135.896 ms

Loss rate: 0.00%

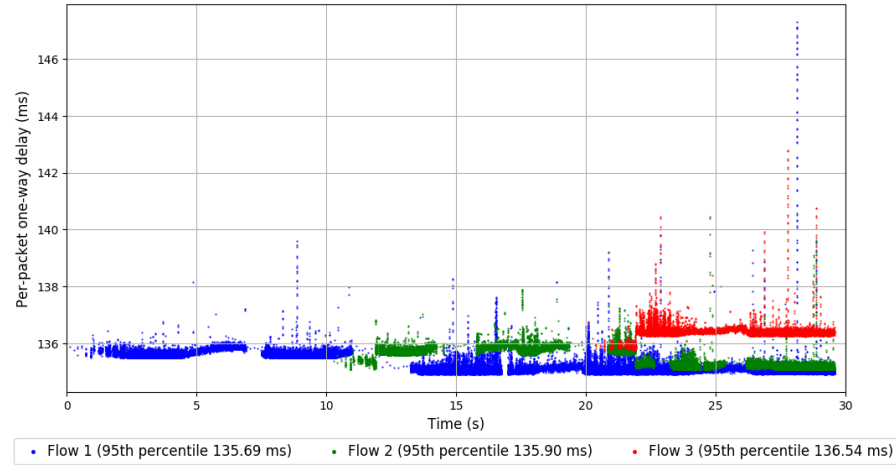
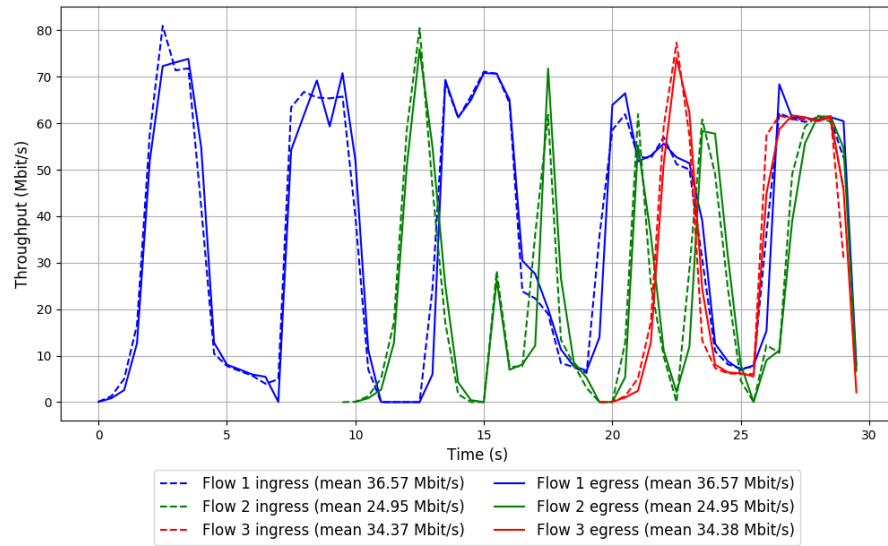
-- Flow 3:

Average throughput: 34.38 Mbit/s

95th percentile per-packet one-way delay: 136.537 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-01-18 08:03:31

End at: 2018-01-18 08:04:01

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.23 Mbit/s

95th percentile per-packet one-way delay: 136.446 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.66 Mbit/s

95th percentile per-packet one-way delay: 135.887 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.41 Mbit/s

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

Loss rate: 0.00%

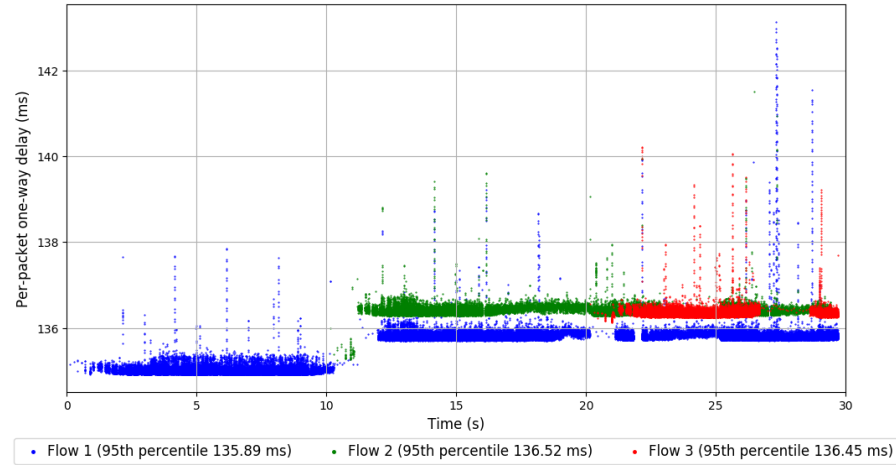
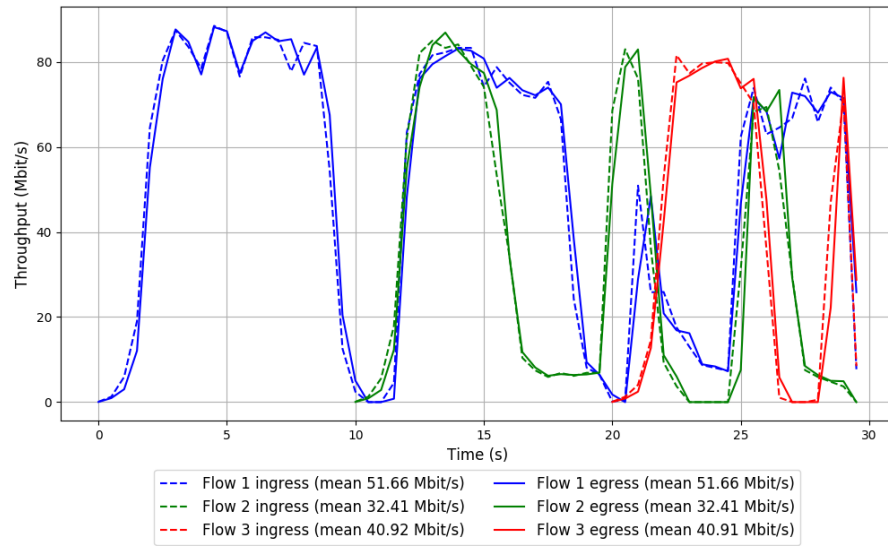
-- Flow 3:

Average throughput: 40.91 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

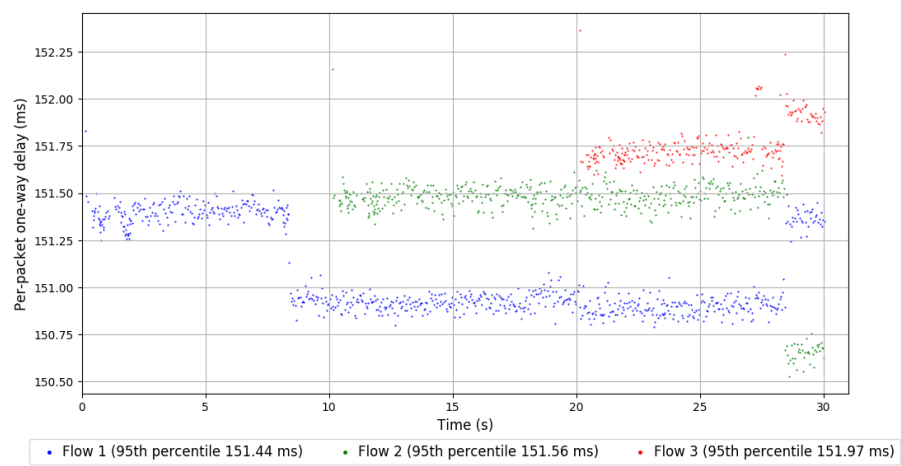
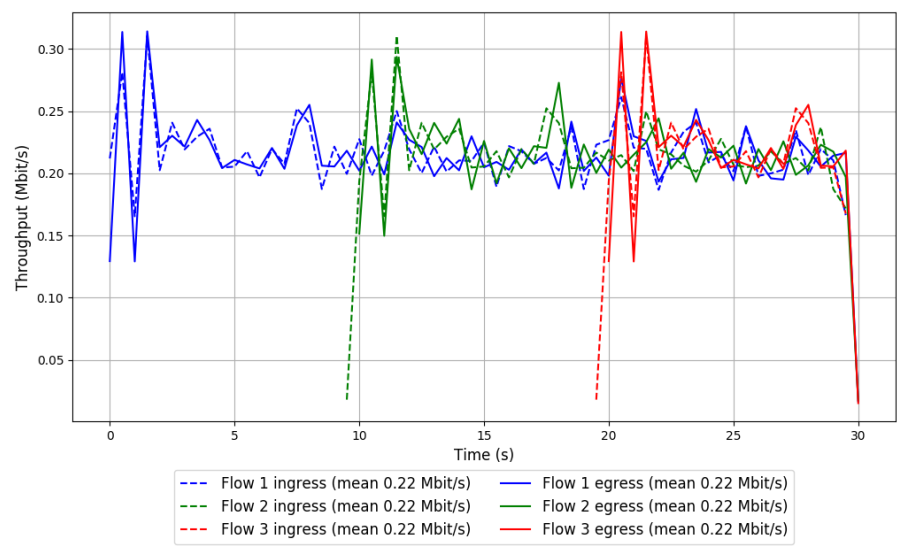


```
Run 1: Statistics of SCReAM

Start at: 2018-01-18 05:08:24
End at: 2018-01-18 05:08:54

# Below is generated by plot.py at 2018-01-18 10:26:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 151.766 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 151.443 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 151.562 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 151.968 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

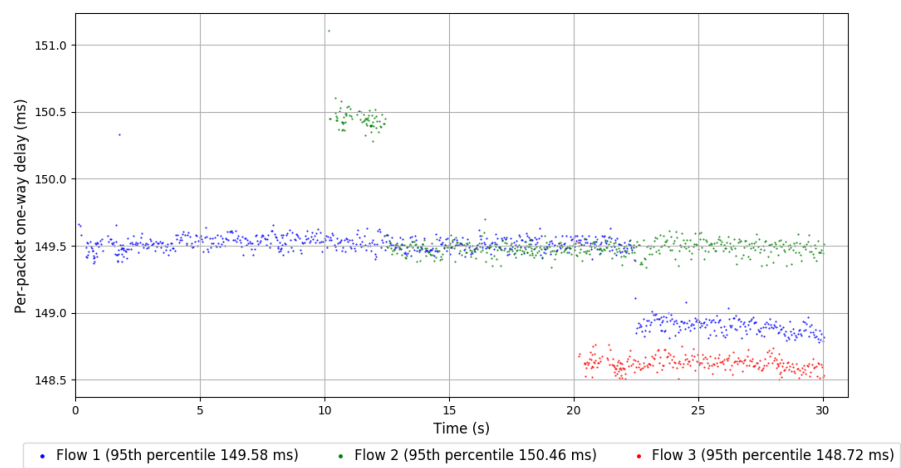
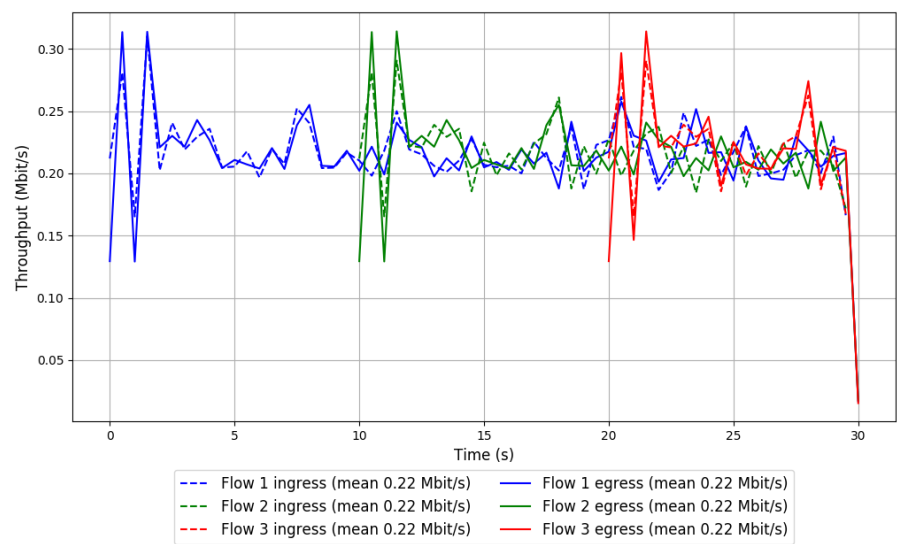


```
Run 2: Statistics of SReAM

Start at: 2018-01-18 05:28:40
End at: 2018-01-18 05:29:10

# Below is generated by plot.py at 2018-01-18 10:26:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 149.645 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 149.584 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 150.460 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 148.719 ms
Loss rate: 0.00%
```


Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-01-18 05:48:23

End at: 2018-01-18 05:48:53

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 149.034 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 149.056 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 148.673 ms

Loss rate: 0.00%

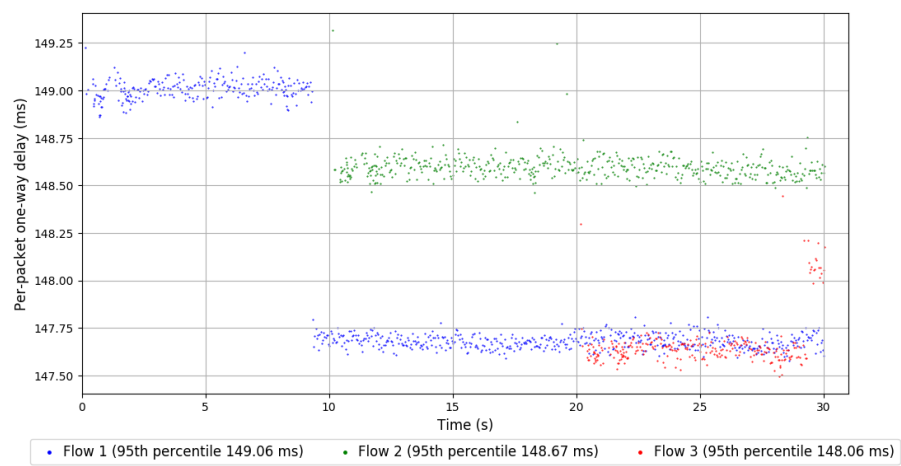
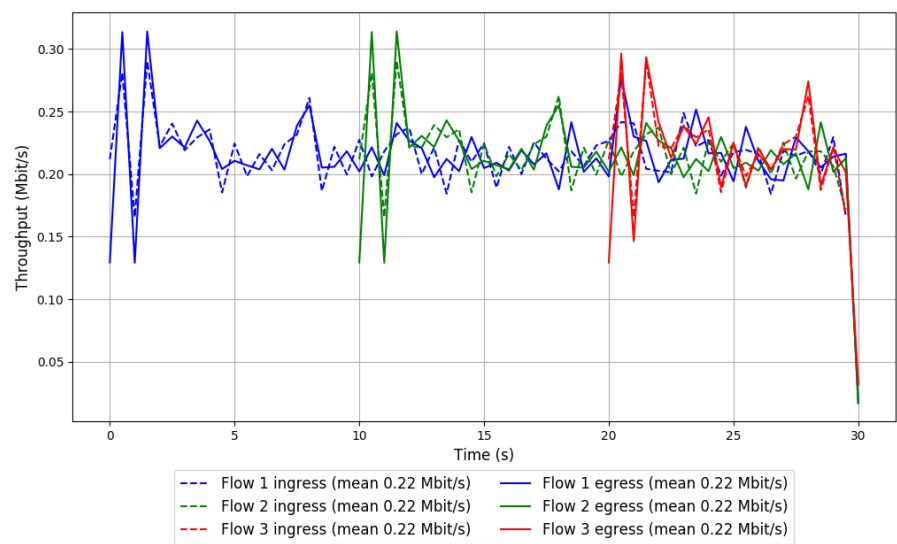
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 148.060 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

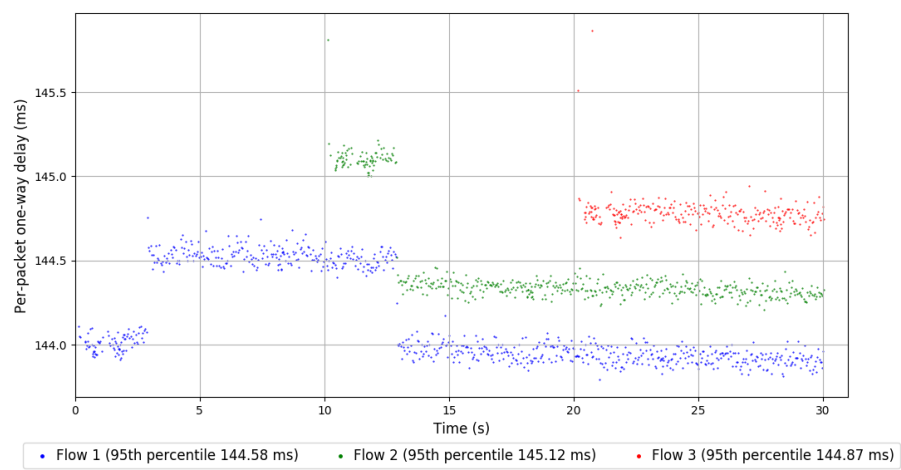
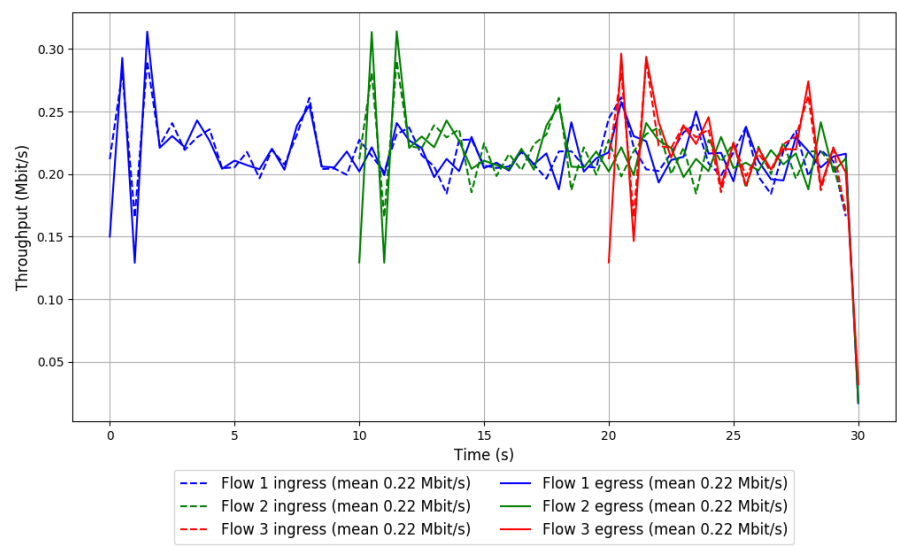


```
Run 4: Statistics of SReAM

Start at: 2018-01-18 06:08:00
End at: 2018-01-18 06:08:30

# Below is generated by plot.py at 2018-01-18 10:26:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 145.048 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 144.576 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 145.119 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 144.866 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-01-18 06:27:45

End at: 2018-01-18 06:28:15

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 143.828 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 143.837 ms

Loss rate: 0.00%

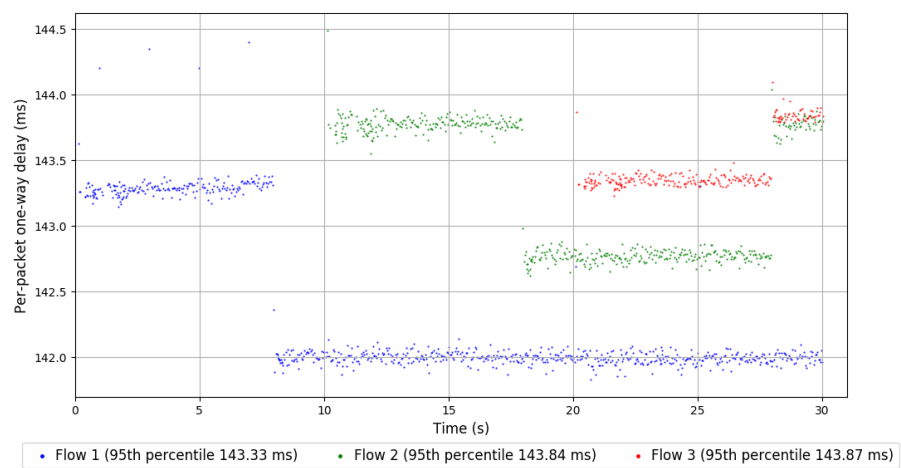
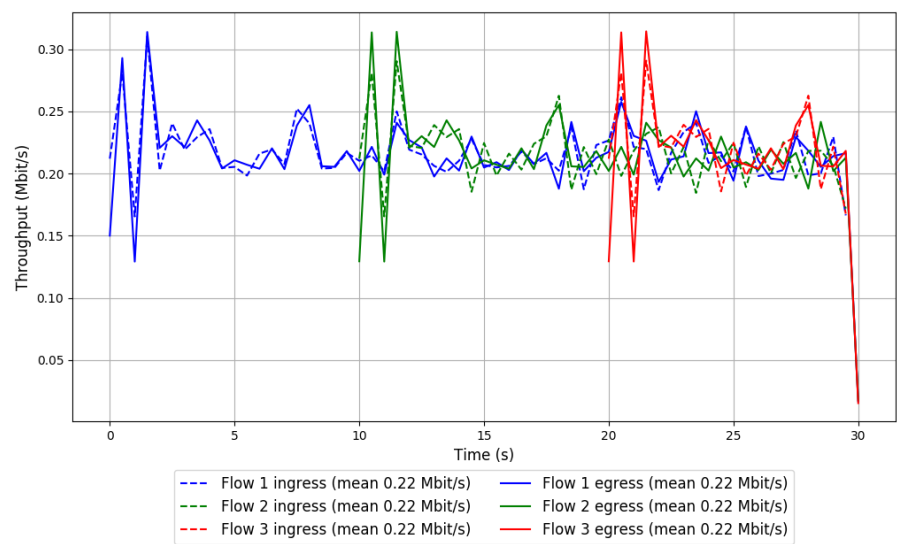
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 143.866 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-01-18 06:47:37

End at: 2018-01-18 06:48:07

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 139.028 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 139.074 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 138.822 ms

Loss rate: 0.00%

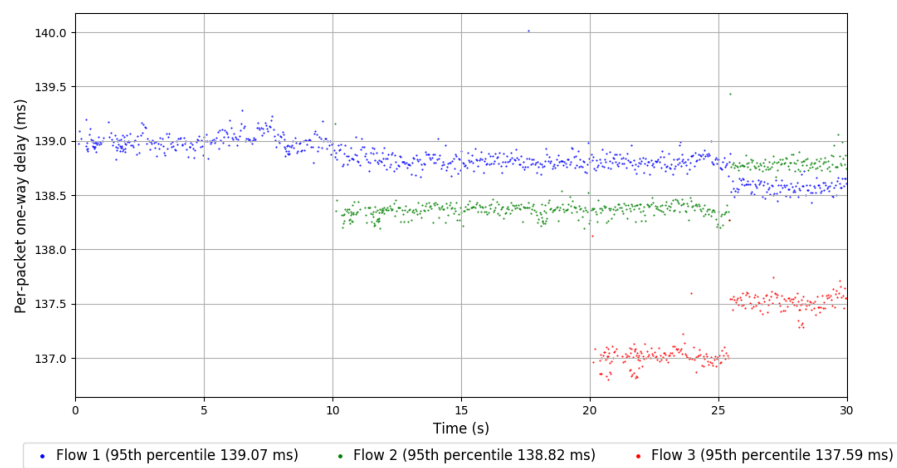
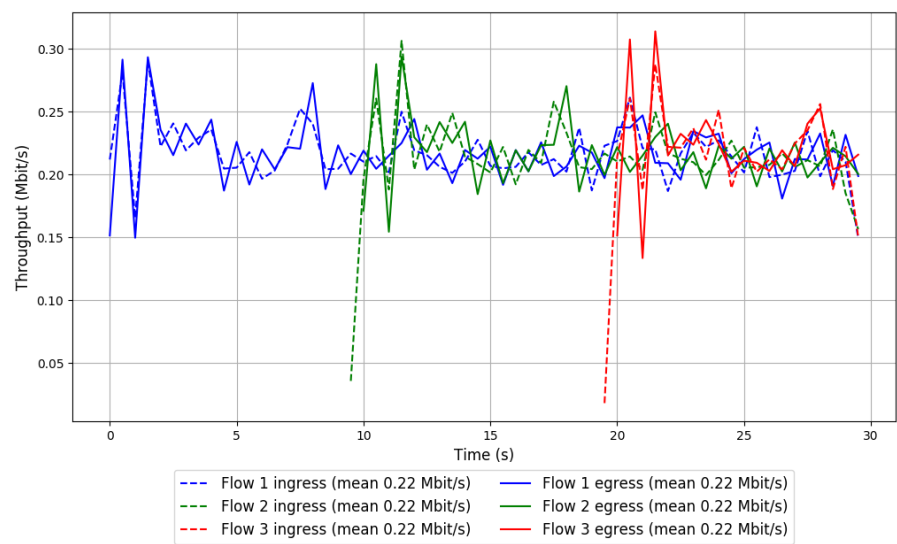
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2018-01-18 07:07:06

End at: 2018-01-18 07:07:36

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.107 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.966 ms

Loss rate: 0.00%

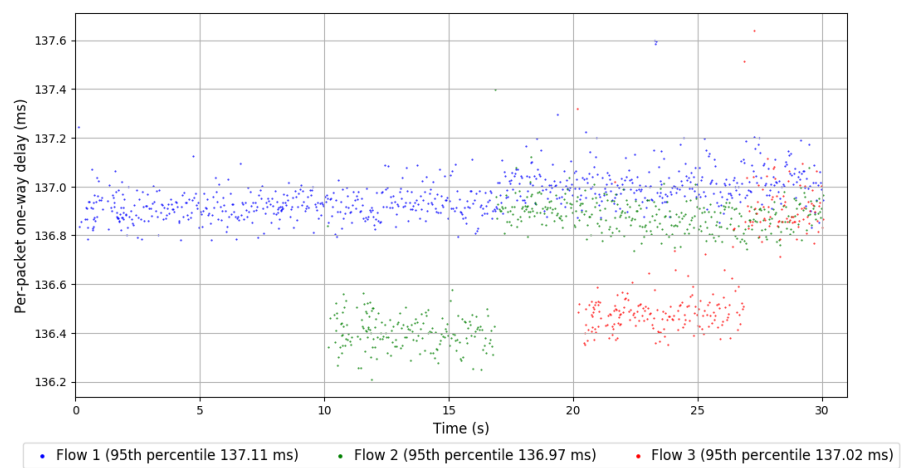
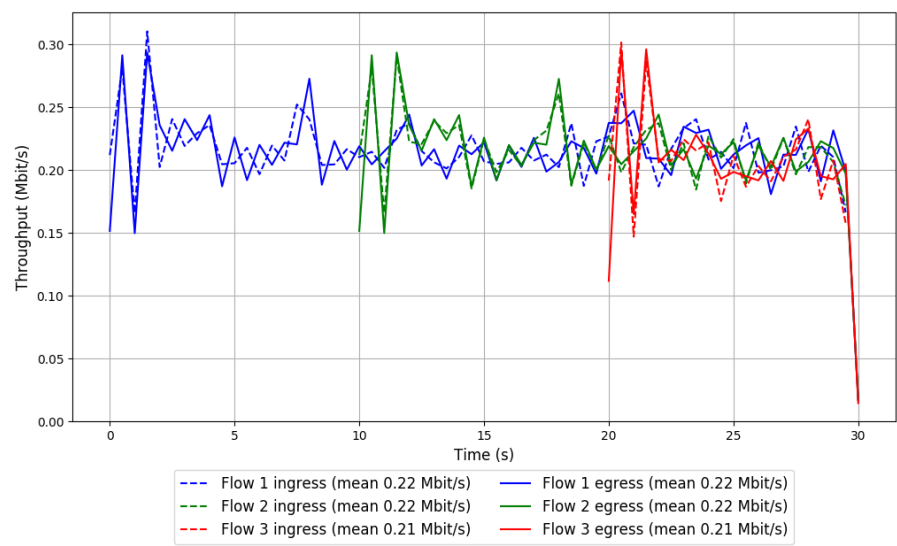
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 137.022 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-01-18 07:27:01

End at: 2018-01-18 07:27:31

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 137.366 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.637 ms

Loss rate: 0.00%

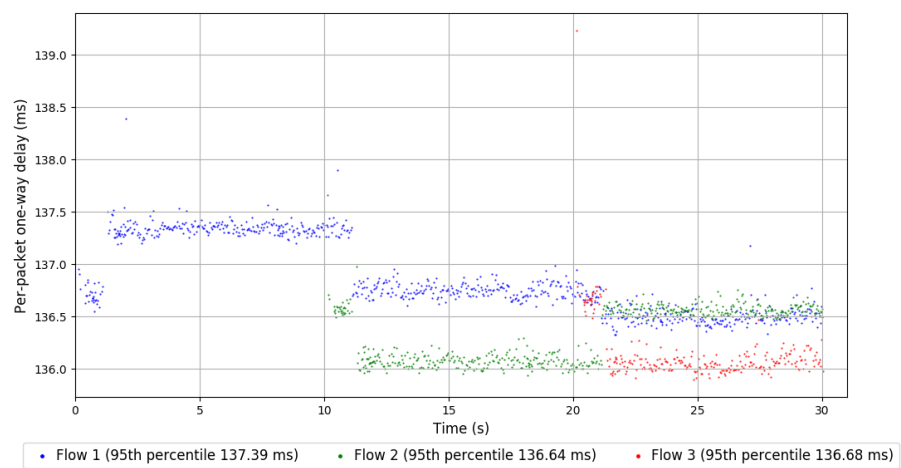
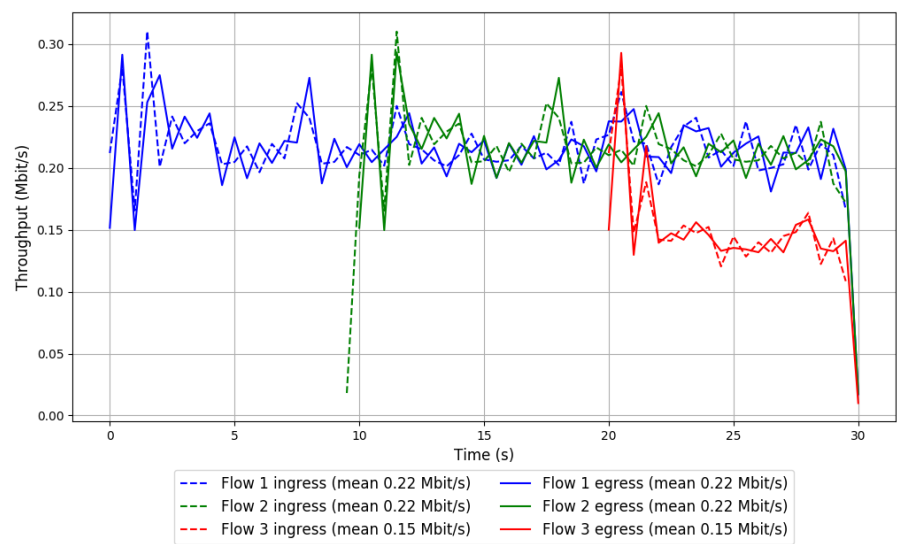
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 136.675 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-01-18 07:46:29

End at: 2018-01-18 07:46:59

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 136.661 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 135.927 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.108 ms

Loss rate: 0.00%

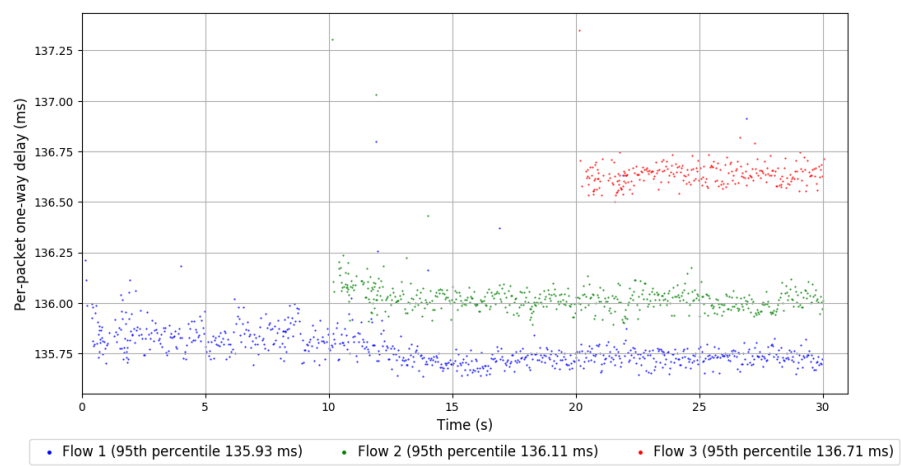
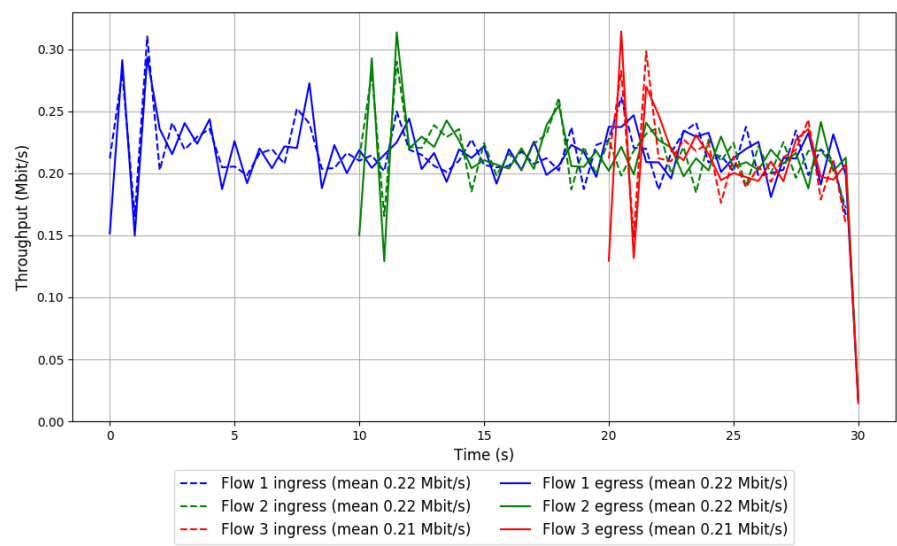
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 136.712 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

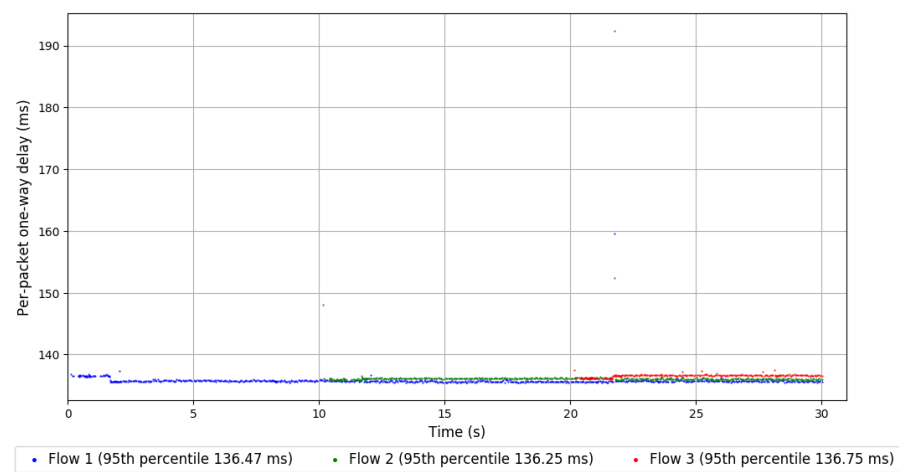
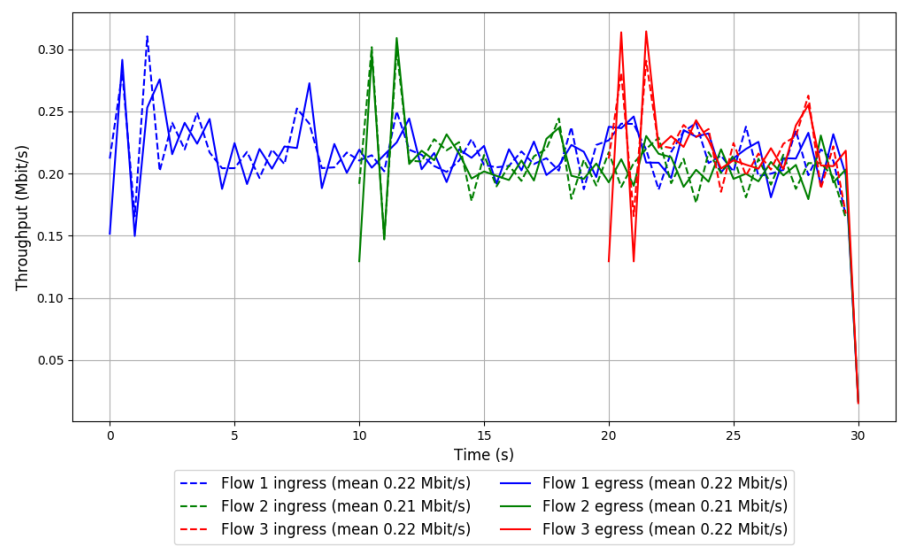


```
Run 10: Statistics of SReAM

Start at: 2018-01-18 08:06:11
End at: 2018-01-18 08:06:41

# Below is generated by plot.py at 2018-01-18 10:26:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 136.670 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.471 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 136.255 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.748 ms
Loss rate: 0.00%
```


Run 10: Report of SReAM — Data Link

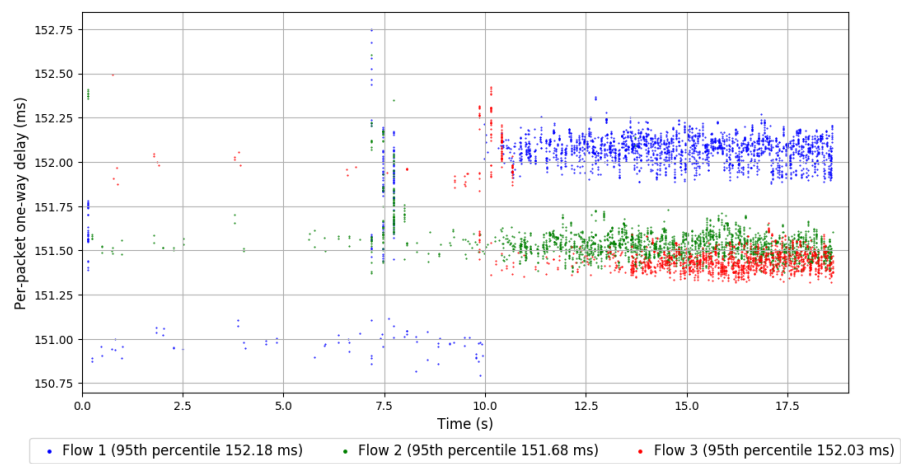
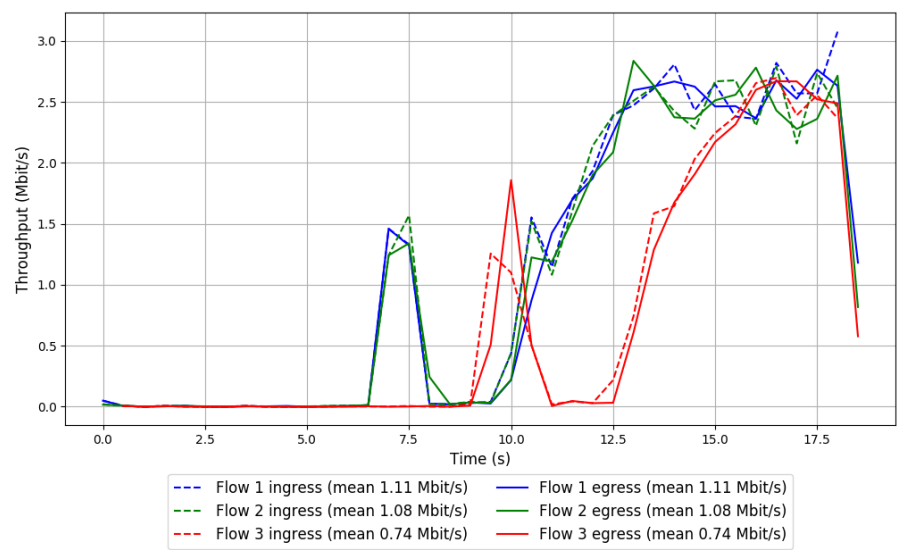


Run 1: Statistics of WebRTC media

Start at: 2018-01-18 05:02:51

End at: 2018-01-18 05:03:21

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-18 05:23:04

End at: 2018-01-18 05:23:34

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 150.522 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 149.560 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 150.572 ms

Loss rate: 0.00%

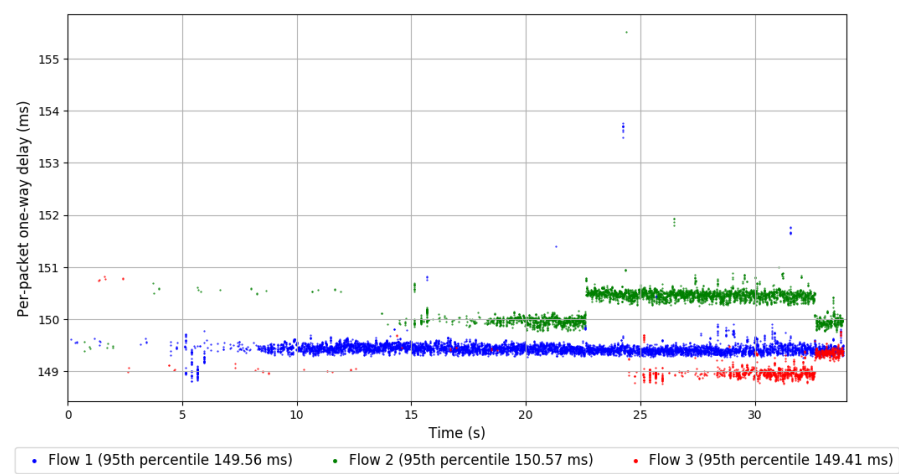
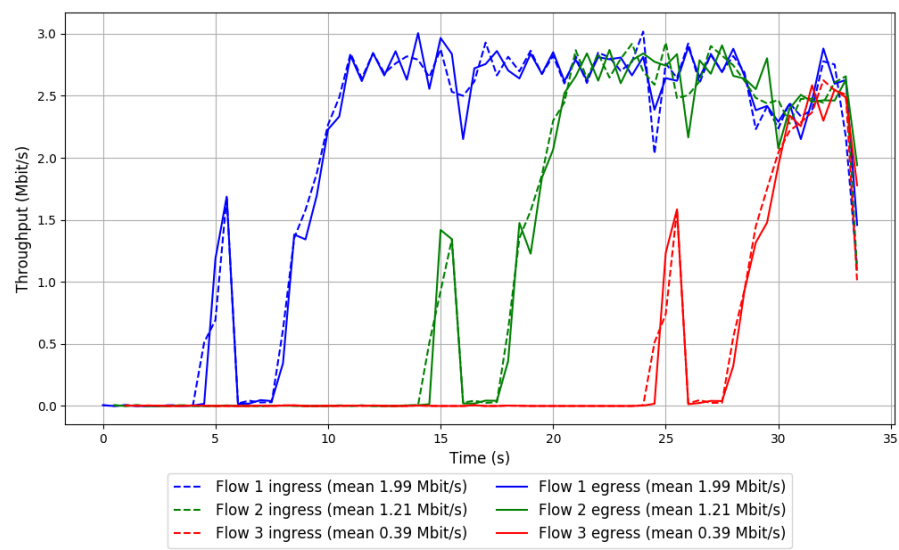
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 149.411 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-18 05:42:52

End at: 2018-01-18 05:43:22

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 149.190 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 149.199 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 148.691 ms

Loss rate: 0.00%

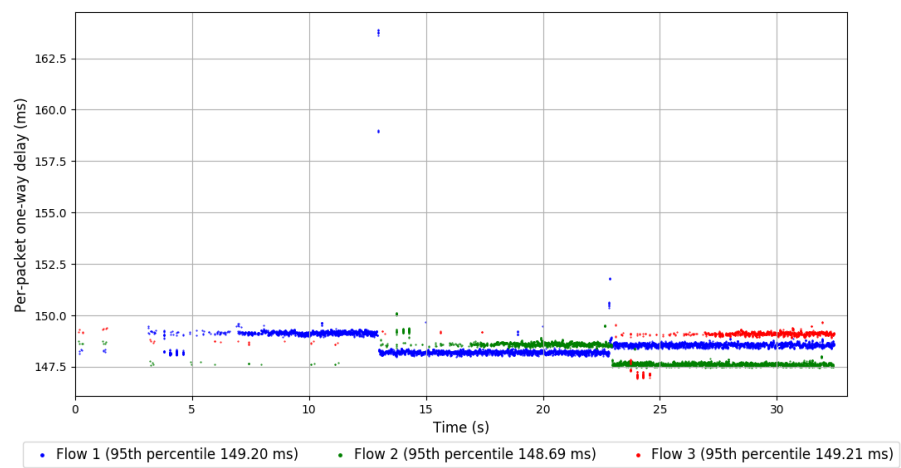
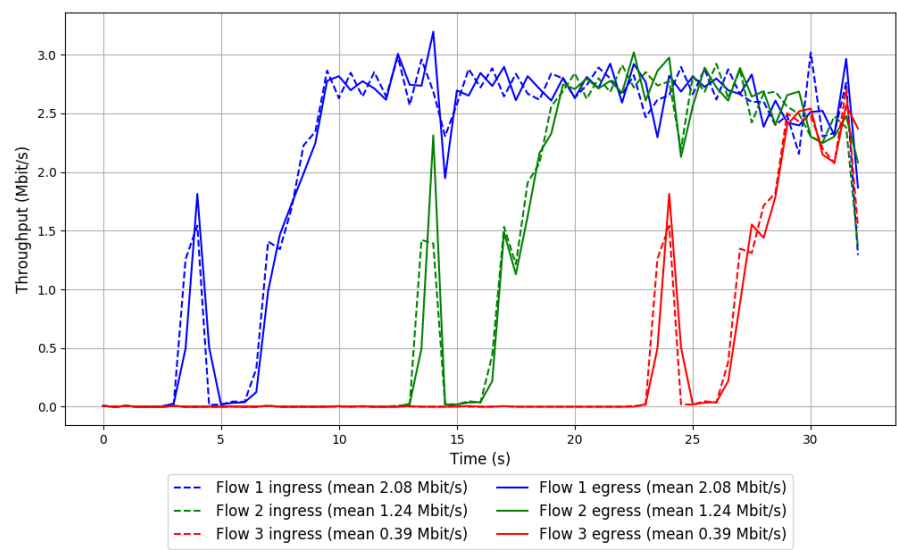
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 149.206 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-18 06:02:28

End at: 2018-01-18 06:02:58

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.55 Mbit/s

95th percentile per-packet one-way delay: 146.011 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 144.625 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 146.052 ms

Loss rate: 0.00%

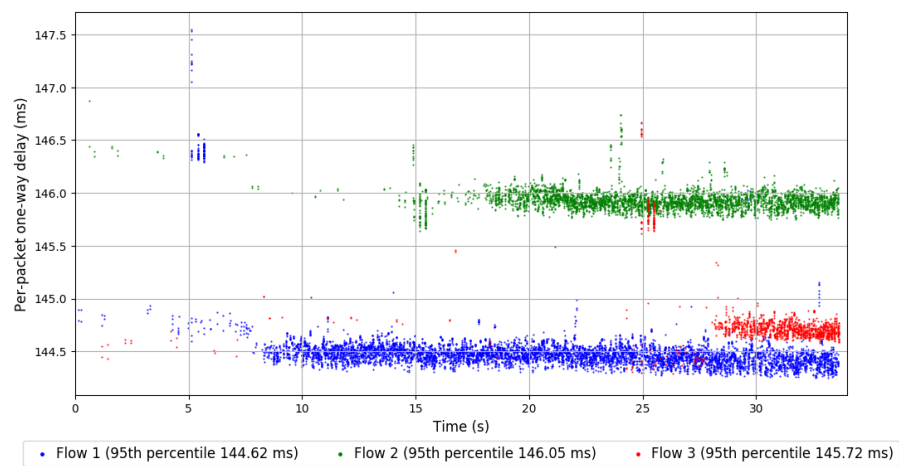
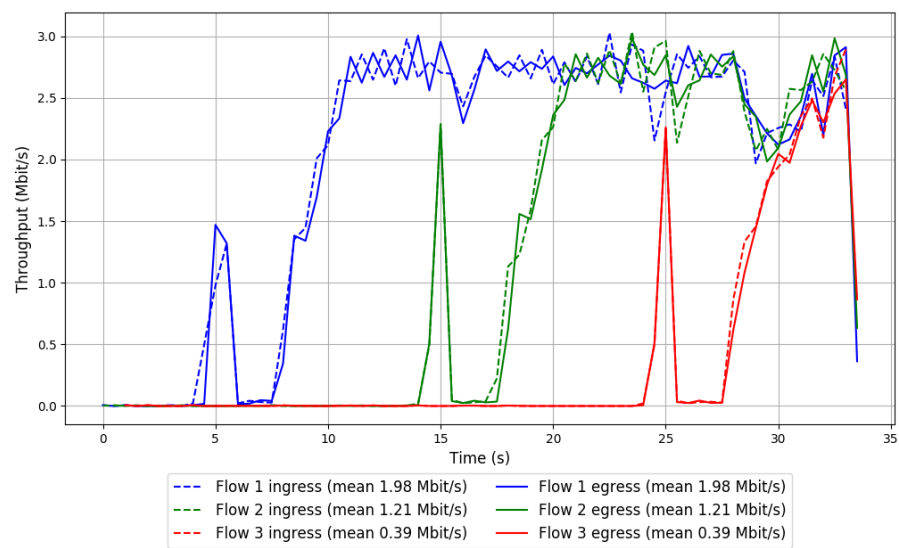
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 145.723 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-18 06:22:14

End at: 2018-01-18 06:22:44

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 143.899 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 143.746 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 143.976 ms

Loss rate: 0.00%

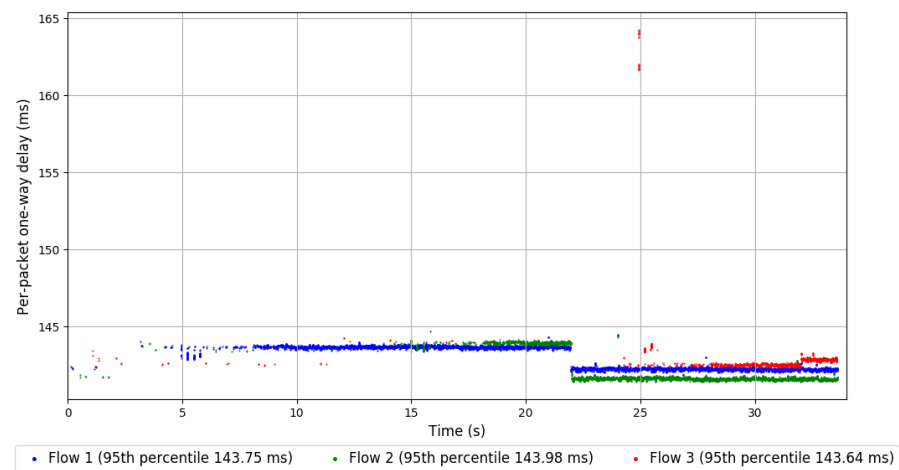
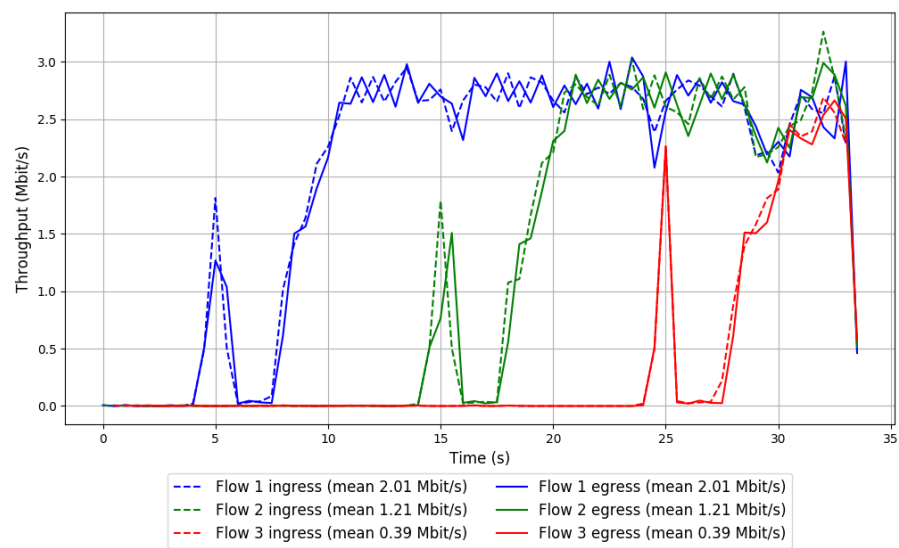
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 143.643 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-18 06:42:15

End at: 2018-01-18 06:42:45

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.49 Mbit/s

95th percentile per-packet one-way delay: 140.256 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 139.832 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.19 Mbit/s

95th percentile per-packet one-way delay: 140.326 ms

Loss rate: 0.00%

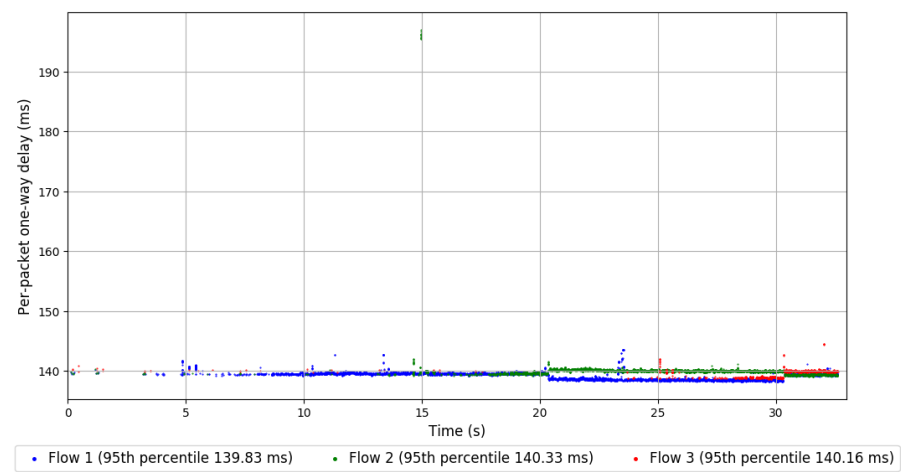
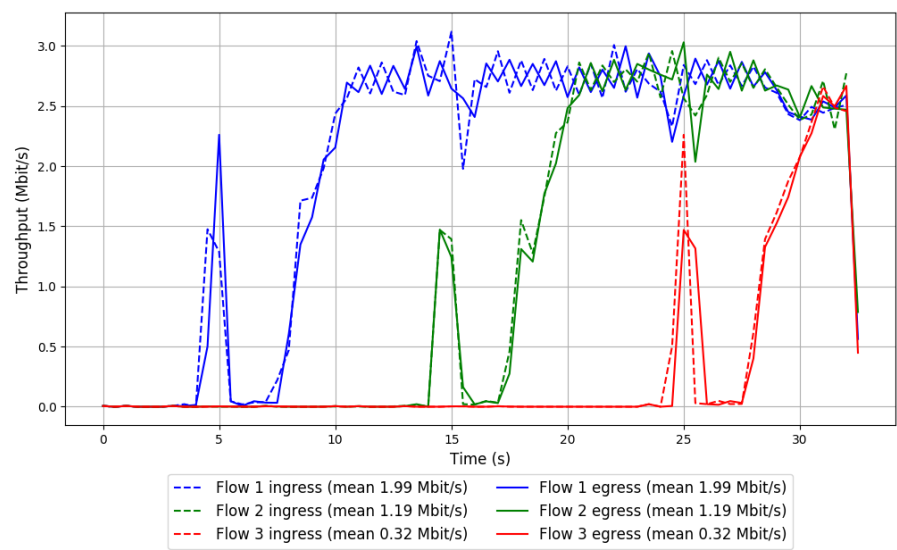
-- Flow 3:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 140.157 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-18 07:01:38

End at: 2018-01-18 07:02:08

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.49 Mbit/s

95th percentile per-packet one-way delay: 137.596 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 137.607 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 137.130 ms

Loss rate: 0.00%

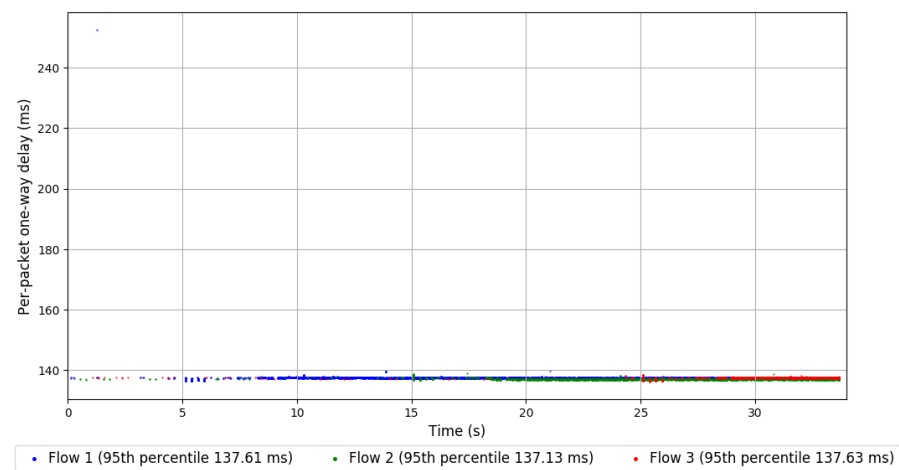
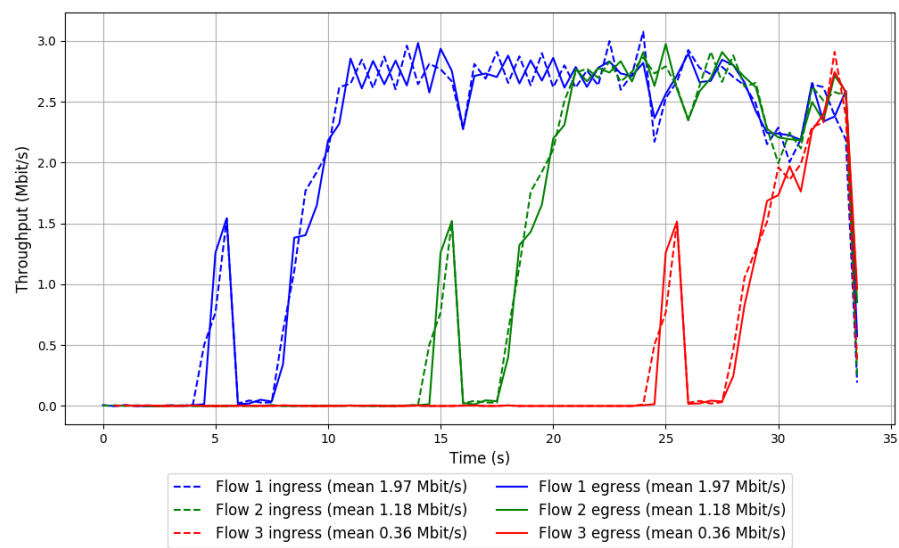
-- Flow 3:

Average throughput: 0.36 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-18 07:21:23

End at: 2018-01-18 07:21:53

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.21 Mbit/s

95th percentile per-packet one-way delay: 137.153 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.87 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 136.835 ms

Loss rate: 0.00%

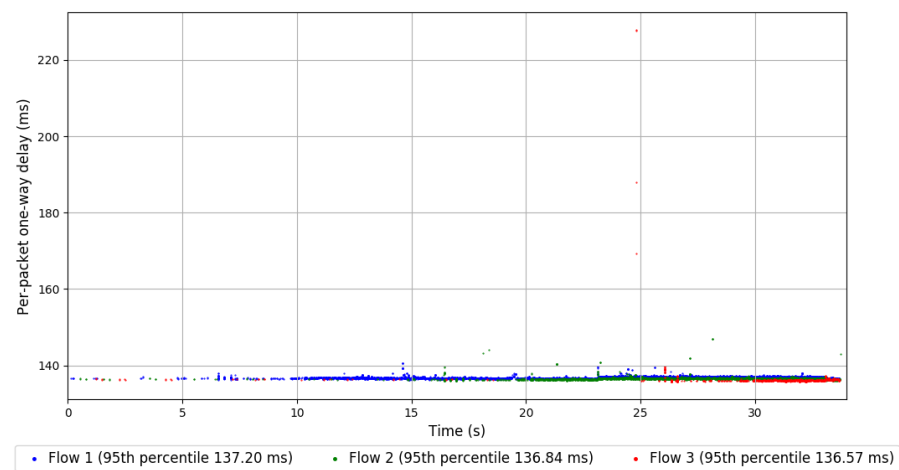
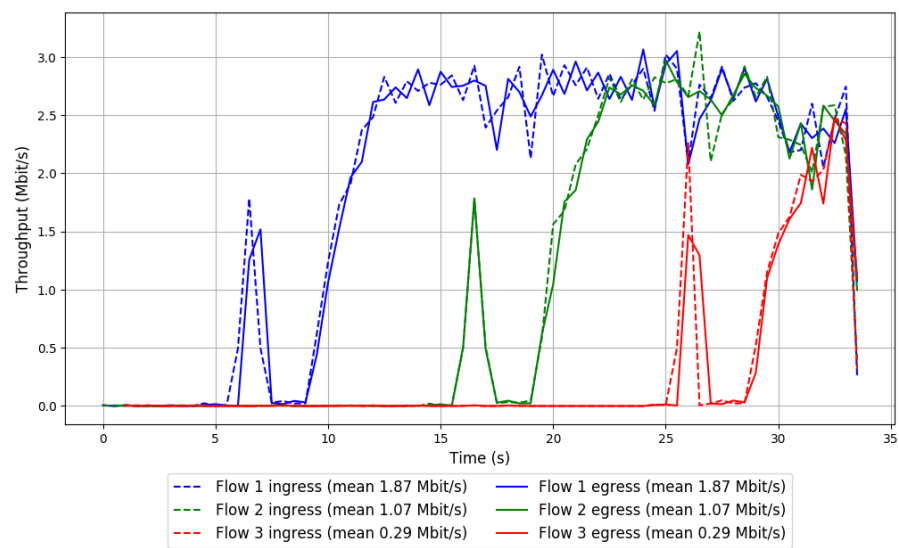
-- Flow 3:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 136.566 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-18 07:41:06

End at: 2018-01-18 07:41:36

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.40 Mbit/s

95th percentile per-packet one-way delay: 136.930 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 136.938 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 136.428 ms

Loss rate: 0.00%

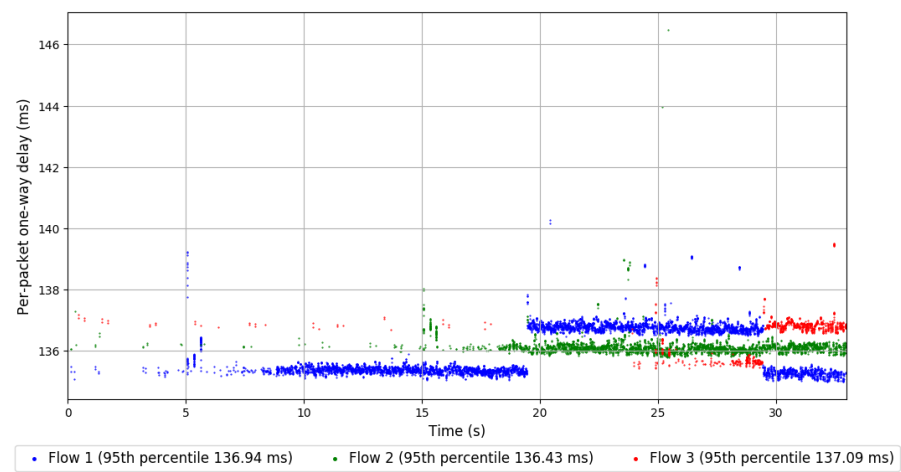
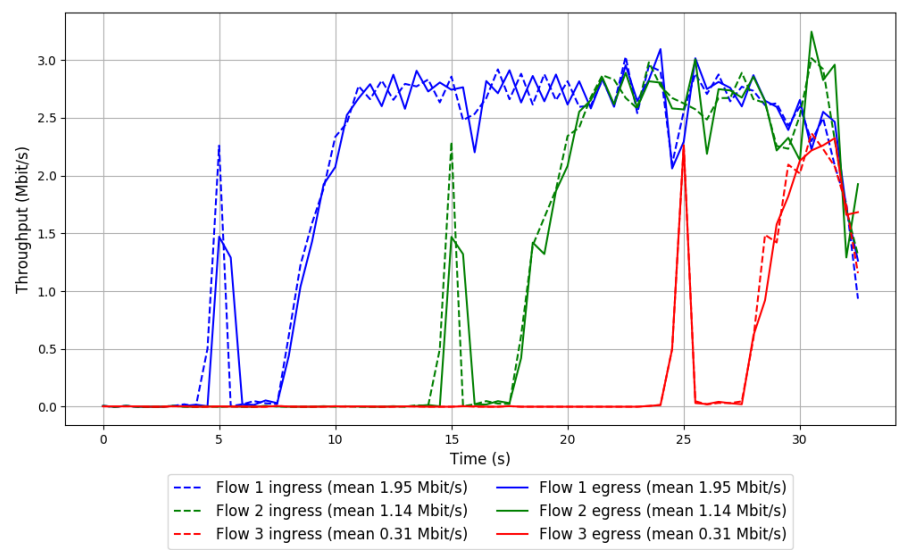
-- Flow 3:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 137.085 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-18 08:00:39

End at: 2018-01-18 08:01:10

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.44 Mbit/s

95th percentile per-packet one-way delay: 136.041 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.95 Mbit/s

95th percentile per-packet one-way delay: 135.643 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 135.693 ms

Loss rate: 0.00%

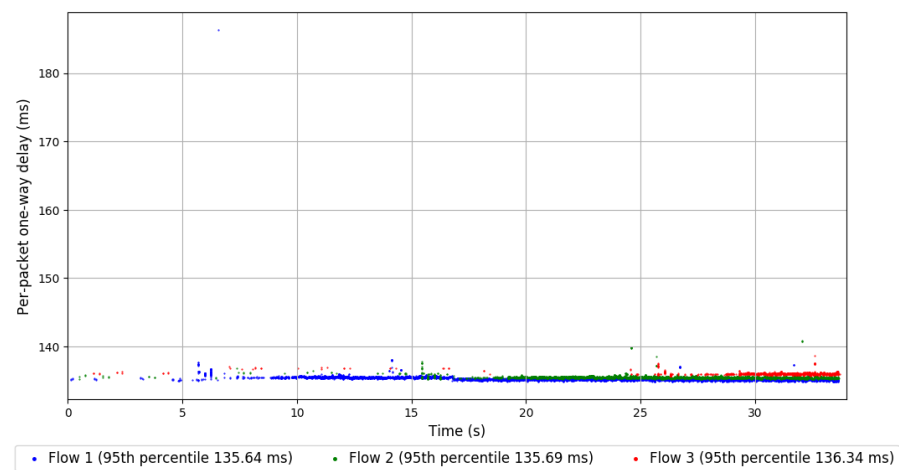
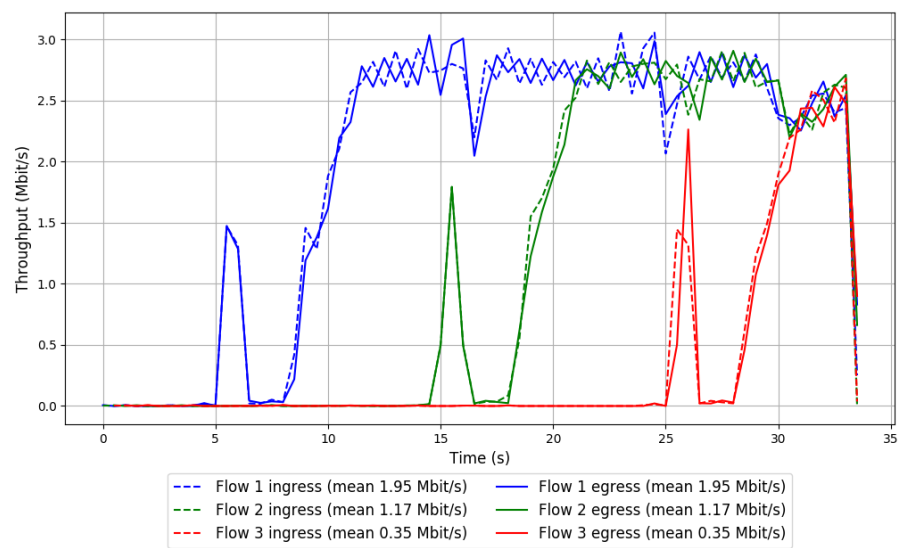
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 136.338 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-01-18 05:07:35

End at: 2018-01-18 05:08:05

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.92 Mbit/s

95th percentile per-packet one-way delay: 152.542 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 152.567 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 152.461 ms

Loss rate: 0.00%

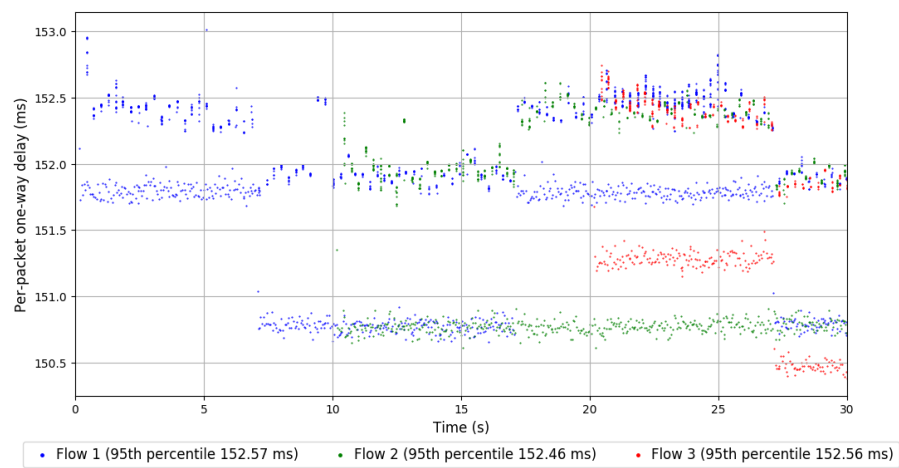
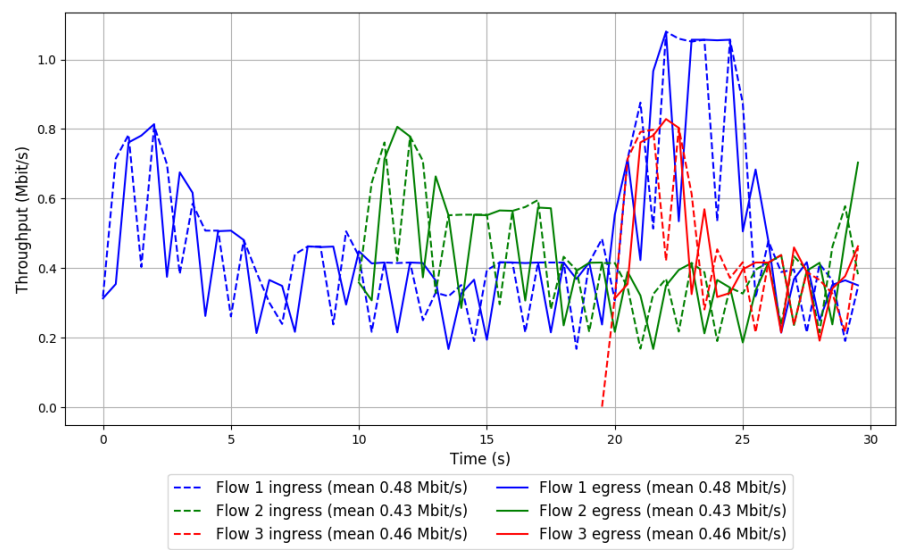
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 152.559 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-18 05:27:51

End at: 2018-01-18 05:28:21

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.89 Mbit/s

95th percentile per-packet one-way delay: 150.838 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 150.870 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 150.762 ms

Loss rate: 0.00%

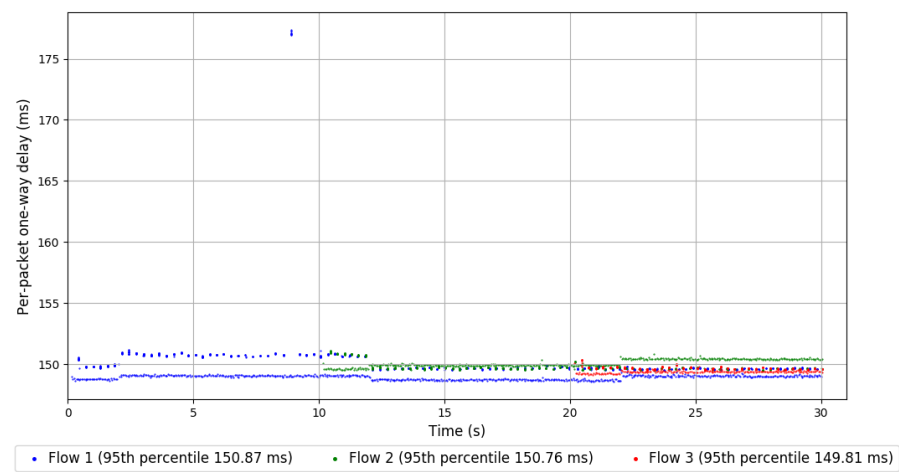
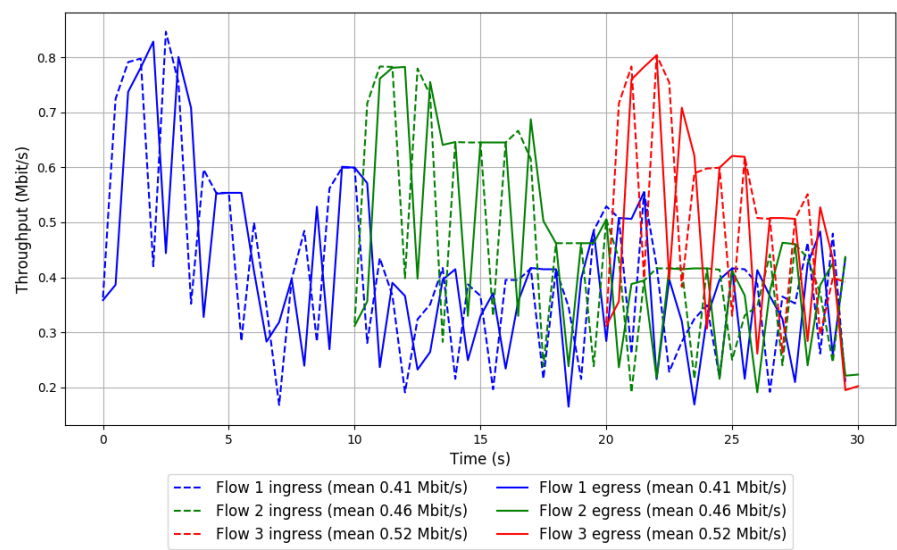
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 149.810 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-18 05:47:34

End at: 2018-01-18 05:48:04

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.84 Mbit/s

95th percentile per-packet one-way delay: 148.975 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 149.024 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 147.760 ms

Loss rate: 0.00%

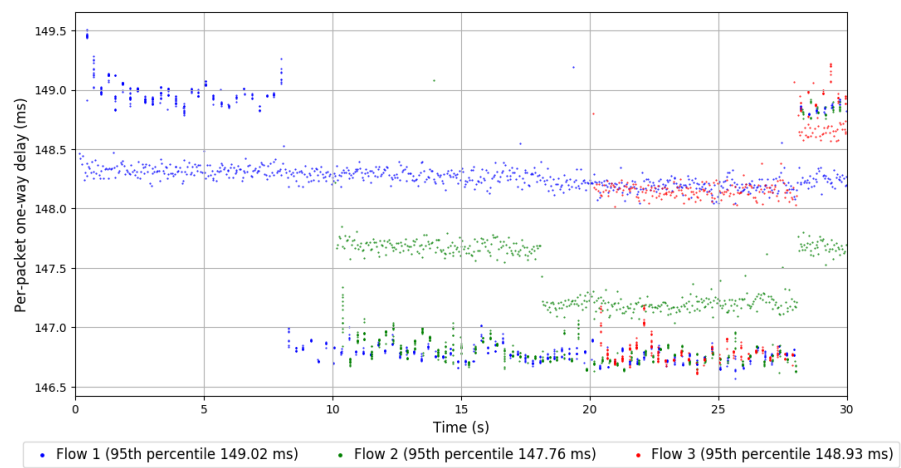
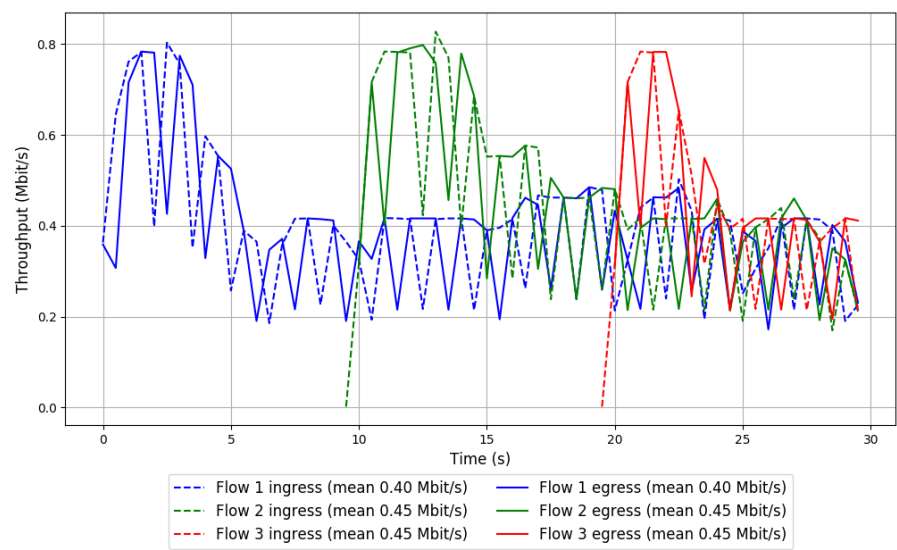
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 148.933 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-18 06:07:11

End at: 2018-01-18 06:07:41

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.77 Mbit/s

95th percentile per-packet one-way delay: 145.812 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 145.824 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 145.791 ms

Loss rate: 0.00%

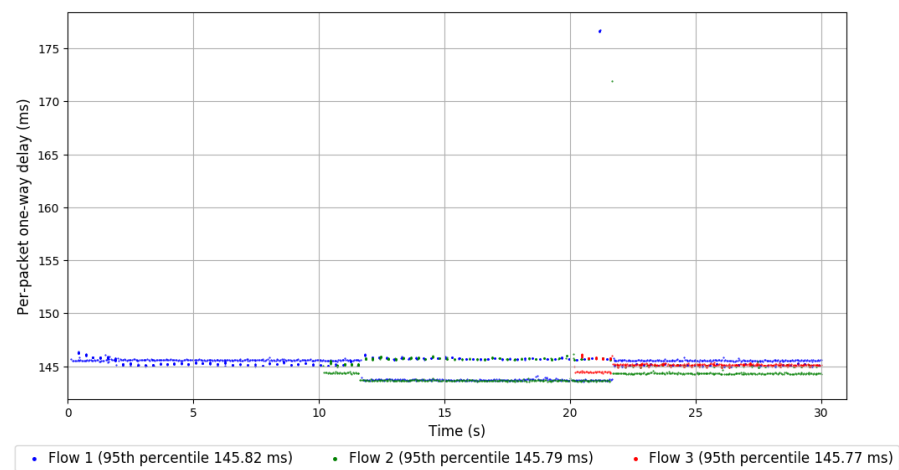
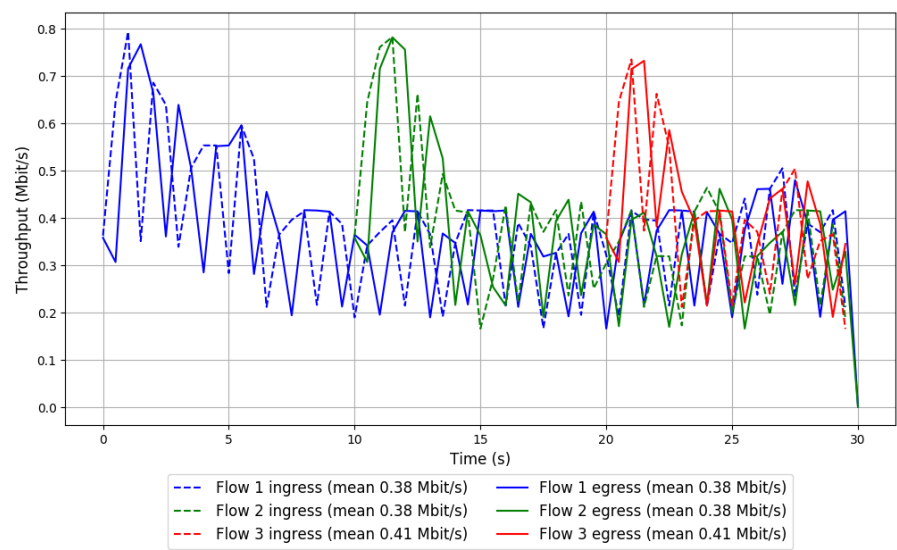
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 145.774 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-18 06:26:56

End at: 2018-01-18 06:27:26

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.87 Mbit/s

95th percentile per-packet one-way delay: 143.825 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 143.533 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 143.452 ms

Loss rate: 0.00%

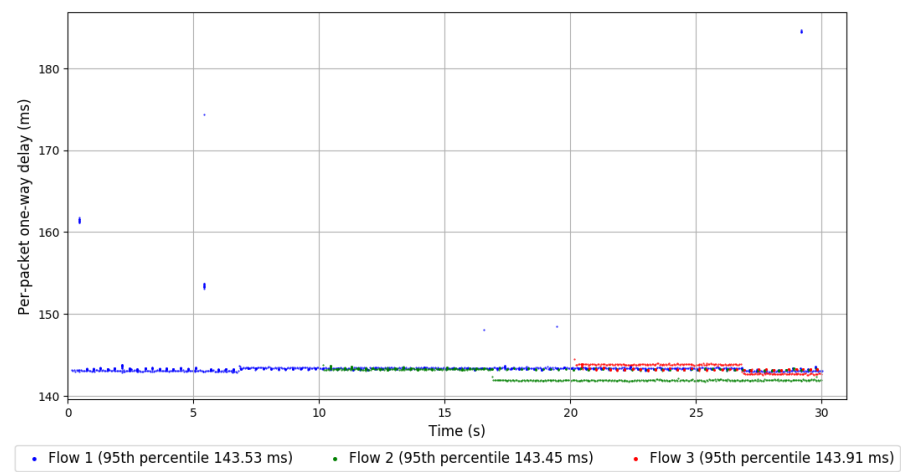
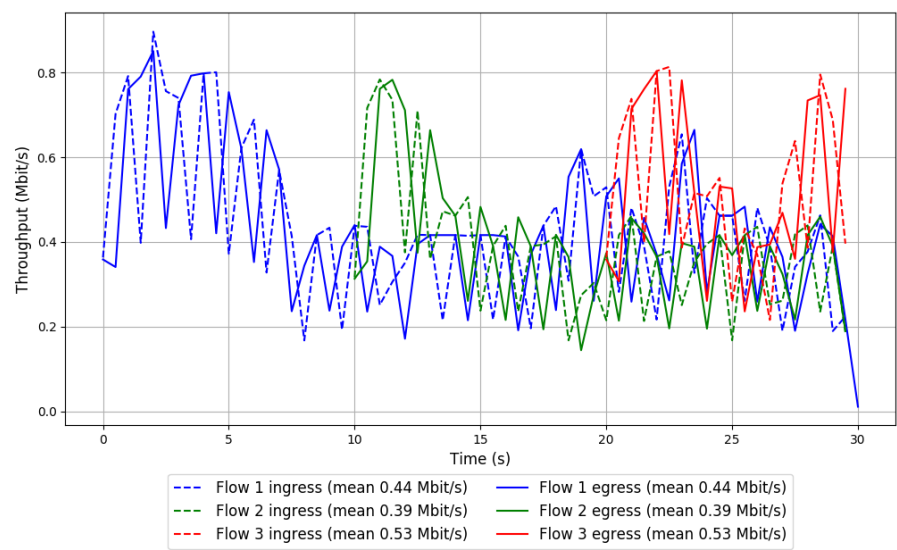
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 143.912 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-18 06:46:48

End at: 2018-01-18 06:47:18

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.87 Mbit/s

95th percentile per-packet one-way delay: 139.511 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 140.031 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 139.343 ms

Loss rate: 0.00%

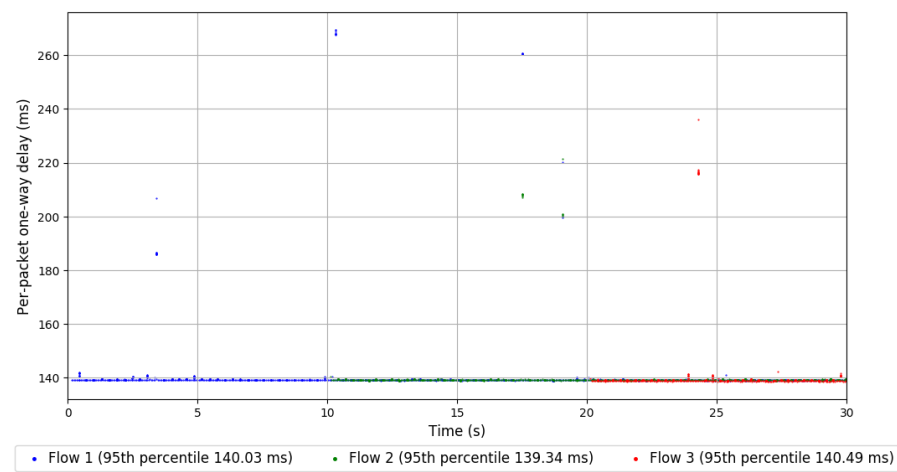
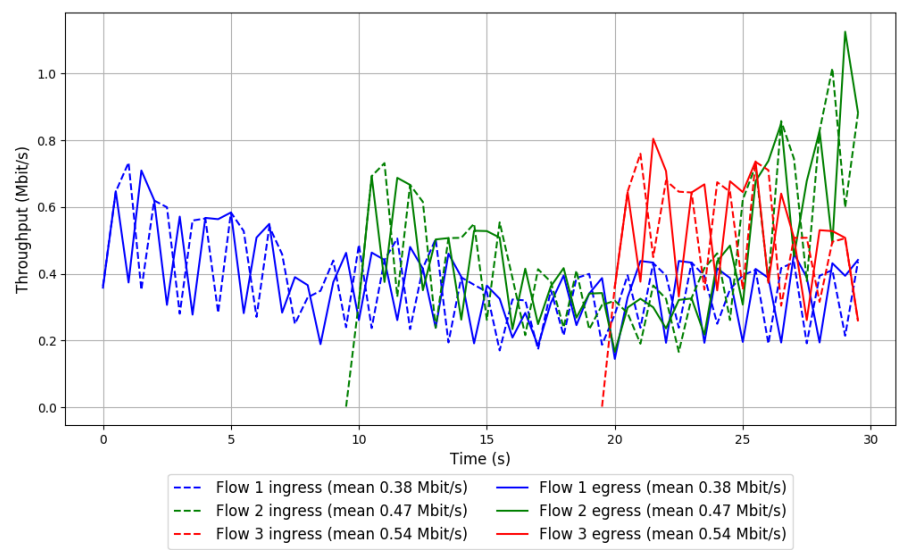
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 140.489 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-18 07:06:17

End at: 2018-01-18 07:06:47

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.90 Mbit/s

95th percentile per-packet one-way delay: 137.727 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.43 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 137.563 ms

Loss rate: 0.00%

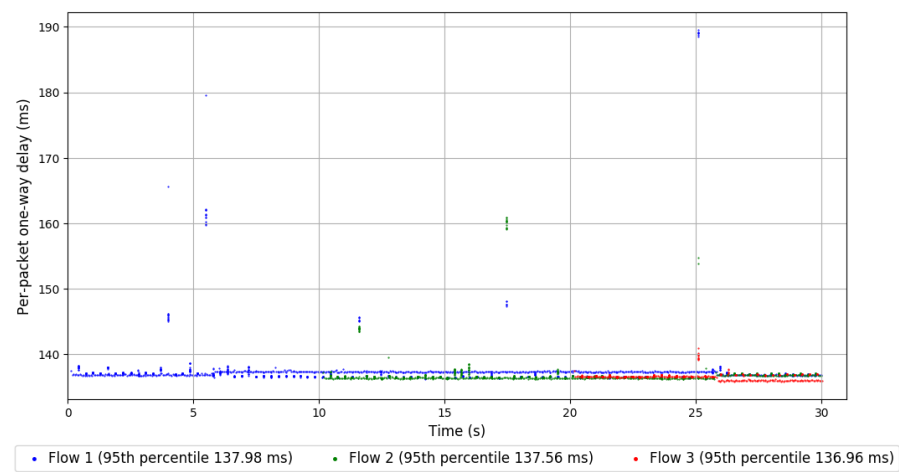
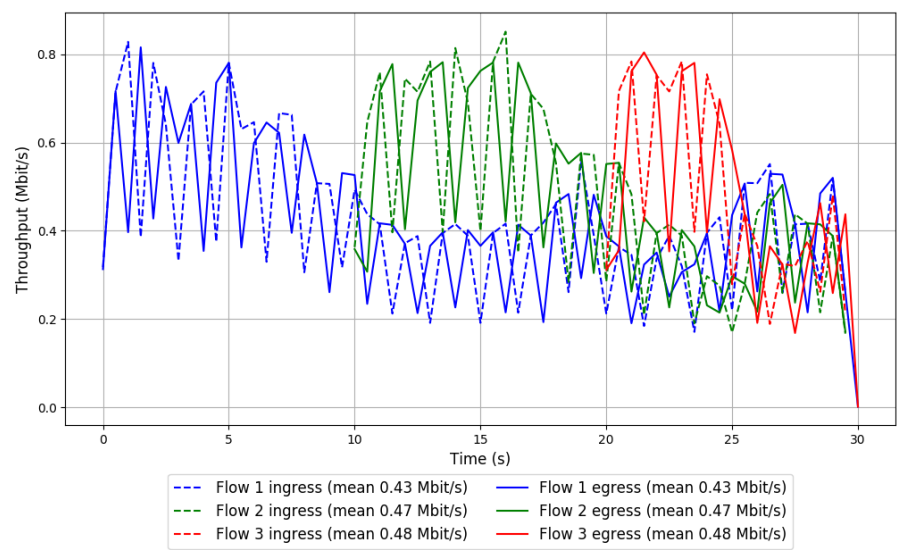
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 136.957 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-18 07:26:12

End at: 2018-01-18 07:26:42

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.95 Mbit/s

95th percentile per-packet one-way delay: 136.726 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 136.797 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 136.670 ms

Loss rate: 0.00%

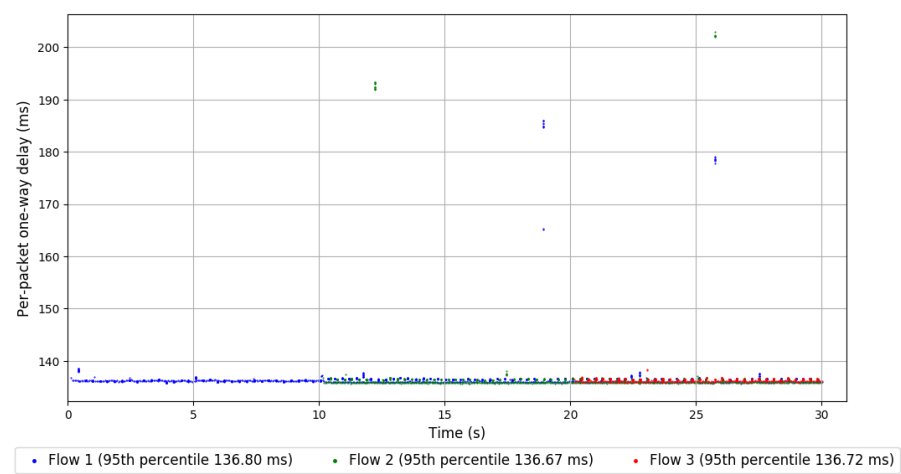
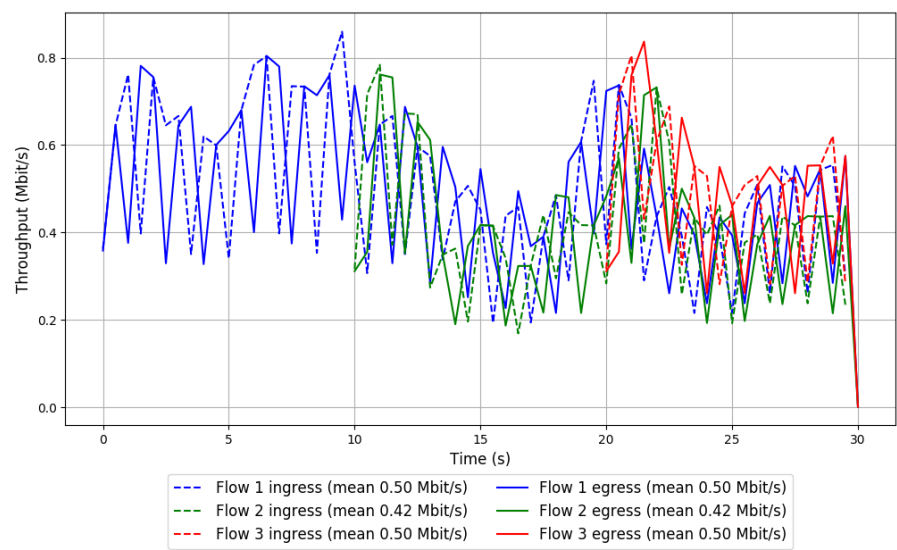
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 136.715 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-18 07:45:39

End at: 2018-01-18 07:46:09

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 136.959 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 136.755 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 137.007 ms

Loss rate: 0.00%

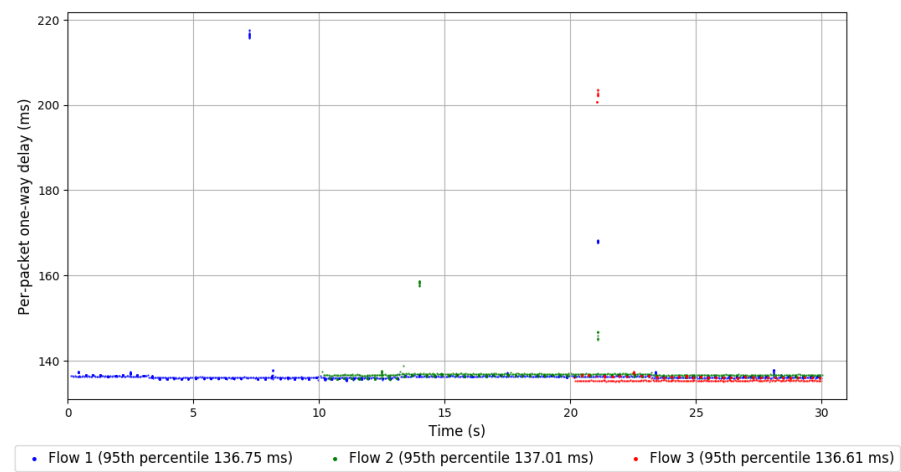
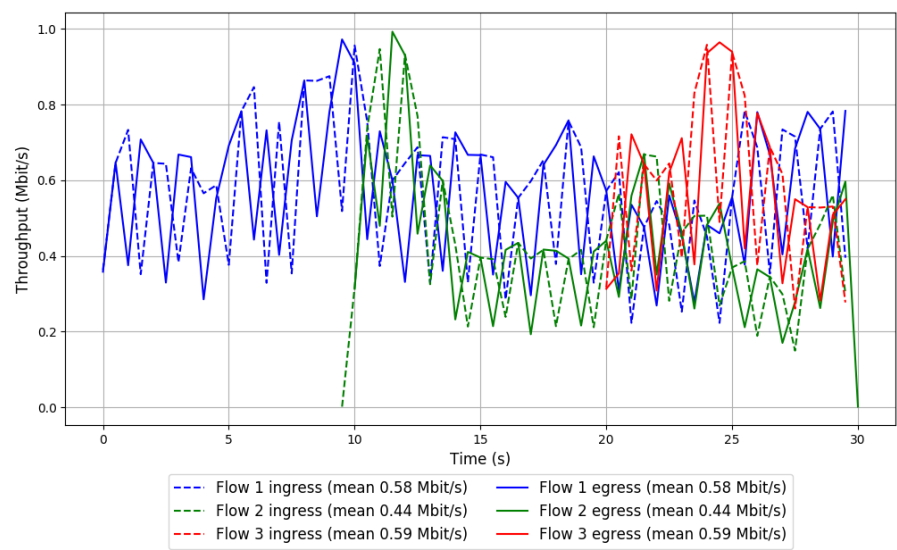
-- Flow 3:

Average throughput: 0.59 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-18 08:05:22

End at: 2018-01-18 08:05:52

Below is generated by plot.py at 2018-01-18 10:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.96 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.573 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.63 Mbit/s

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

Loss rate: 0.00%

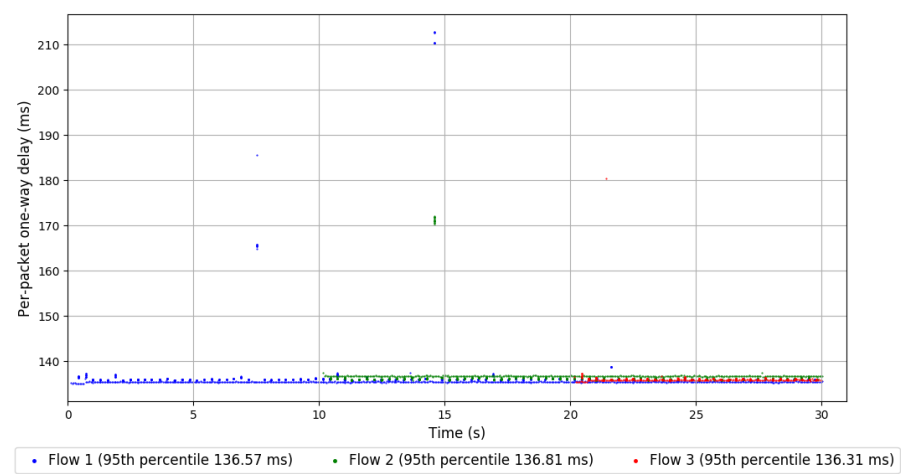
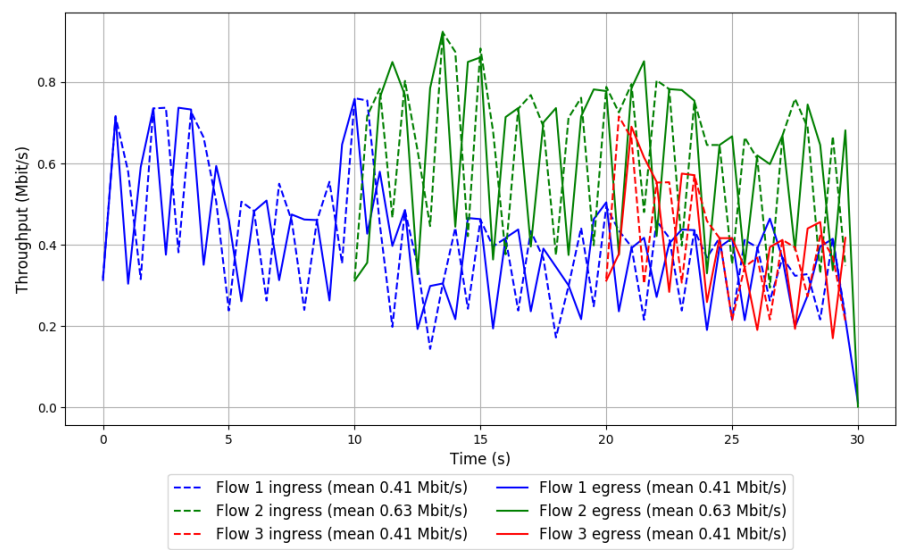
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.315 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

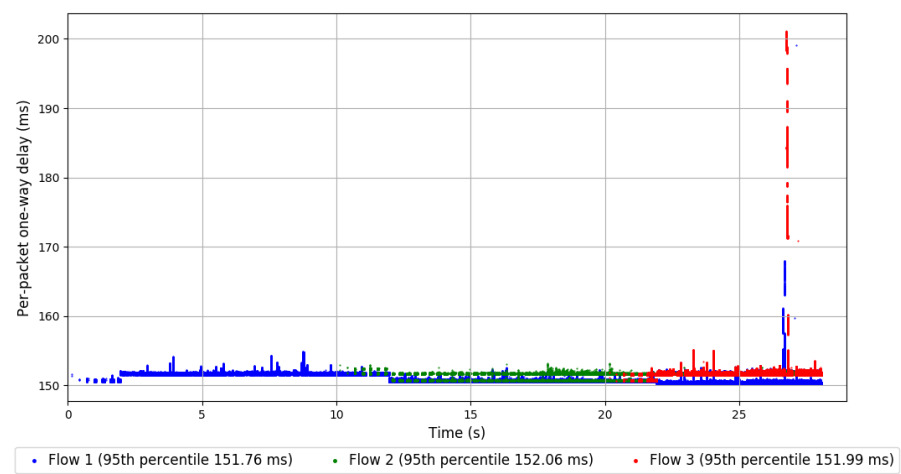
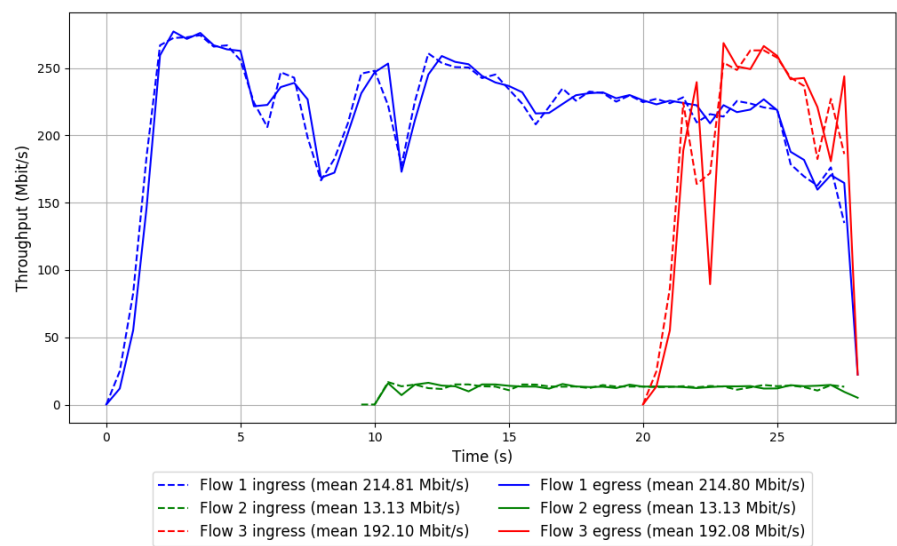


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-18 05:10:09
End at: 2018-01-18 05:10:39

# Below is generated by plot.py at 2018-01-18 10:28:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 277.58 Mbit/s
95th percentile per-packet one-way delay: 151.785 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 214.80 Mbit/s
95th percentile per-packet one-way delay: 151.759 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.13 Mbit/s
95th percentile per-packet one-way delay: 152.058 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 192.08 Mbit/s
95th percentile per-packet one-way delay: 151.987 ms
Loss rate: 0.00%
```

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

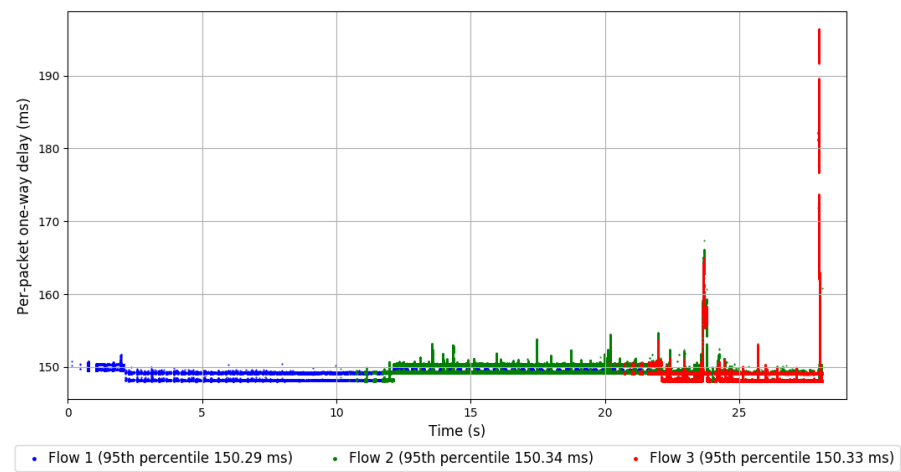
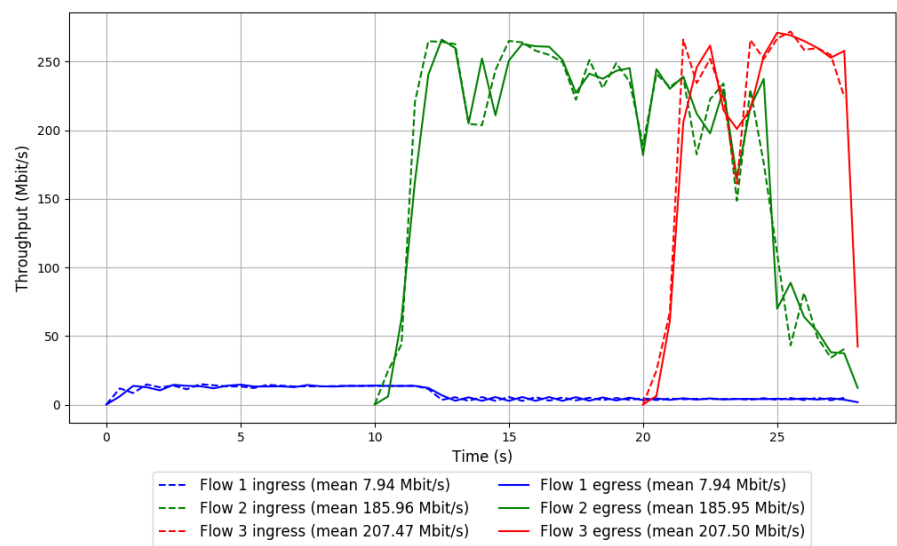


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-18 05:30:28
End at: 2018-01-18 05:30:58

# Below is generated by plot.py at 2018-01-18 10:28:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 185.98 Mbit/s
95th percentile per-packet one-way delay: 150.332 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.94 Mbit/s
95th percentile per-packet one-way delay: 150.288 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 185.95 Mbit/s
95th percentile per-packet one-way delay: 150.338 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 207.50 Mbit/s
95th percentile per-packet one-way delay: 150.328 ms
Loss rate: 0.00%
```

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

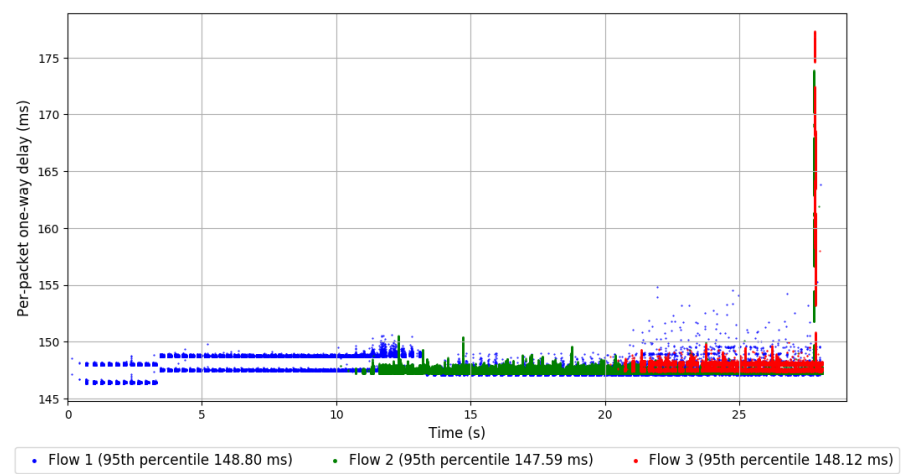
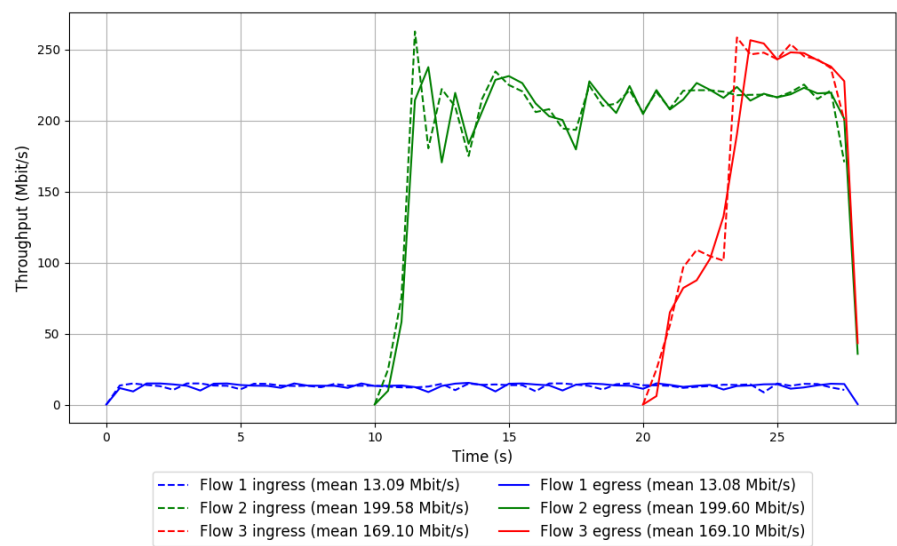


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-18 05:50:07
End at: 2018-01-18 05:50:37

# Below is generated by plot.py at 2018-01-18 10:28:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 188.80 Mbit/s
95th percentile per-packet one-way delay: 148.079 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.08 Mbit/s
95th percentile per-packet one-way delay: 148.798 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 199.60 Mbit/s
95th percentile per-packet one-way delay: 147.587 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 169.10 Mbit/s
95th percentile per-packet one-way delay: 148.120 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-18 06:09:44

End at: 2018-01-18 06:10:14

Below is generated by plot.py at 2018-01-18 10:28:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.09 Mbit/s

95th percentile per-packet one-way delay: 145.220 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 13.27 Mbit/s

95th percentile per-packet one-way delay: 145.230 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 123.48 Mbit/s

95th percentile per-packet one-way delay: 145.214 ms

Loss rate: 0.01%

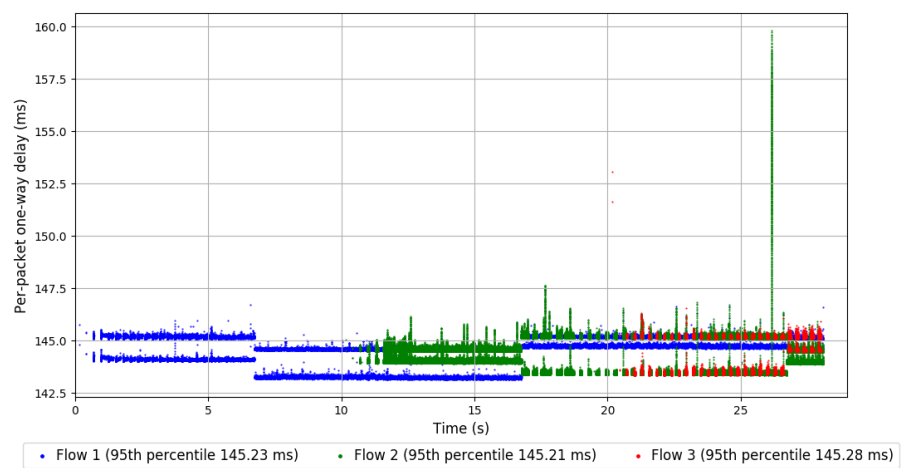
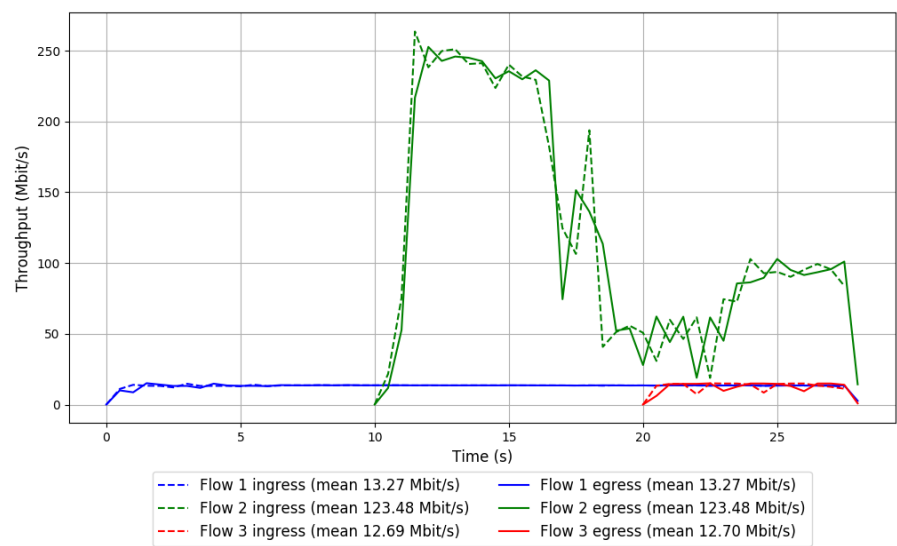
-- Flow 3:

Average throughput: 12.70 Mbit/s

95th percentile per-packet one-way delay: 145.283 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-18 06:29:29

End at: 2018-01-18 06:29:59

Below is generated by plot.py at 2018-01-18 10:28:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 168.51 Mbit/s

95th percentile per-packet one-way delay: 146.318 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 13.15 Mbit/s

95th percentile per-packet one-way delay: 143.317 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 170.80 Mbit/s

95th percentile per-packet one-way delay: 147.987 ms

Loss rate: 0.08%

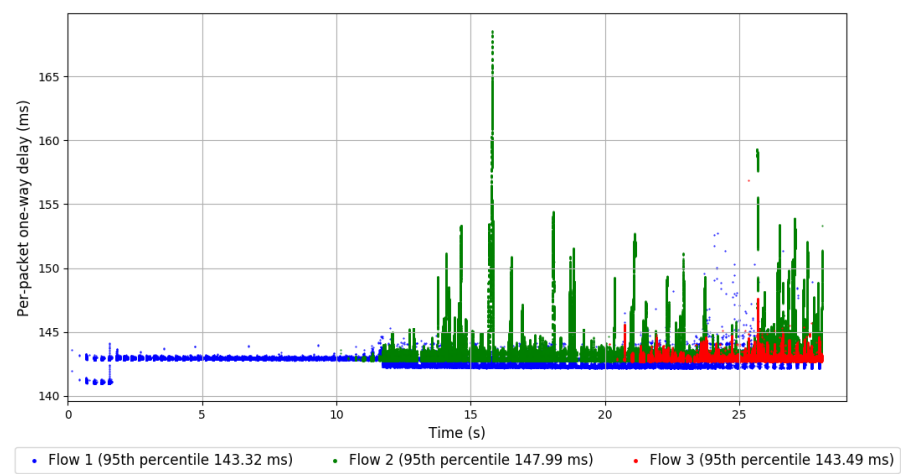
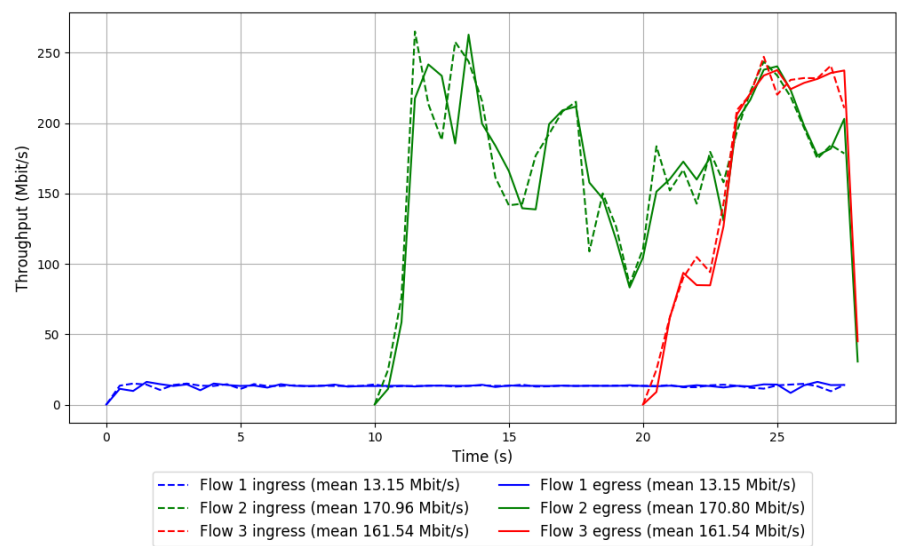
-- Flow 3:

Average throughput: 161.54 Mbit/s

95th percentile per-packet one-way delay: 143.491 ms

Loss rate: 0.02%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-18 06:49:22

End at: 2018-01-18 06:49:52

Below is generated by plot.py at 2018-01-18 10:28:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 161.78 Mbit/s

95th percentile per-packet one-way delay: 139.884 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 149.71 Mbit/s

95th percentile per-packet one-way delay: 139.986 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.21 Mbit/s

95th percentile per-packet one-way delay: 138.302 ms

Loss rate: 0.00%

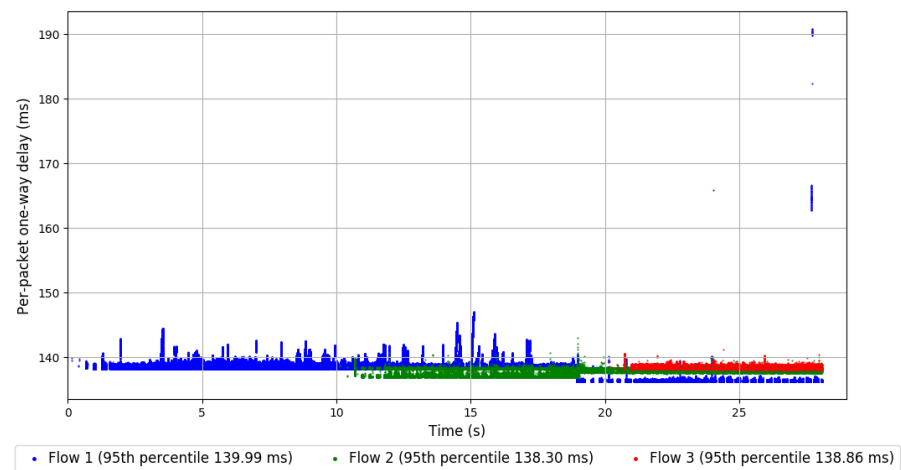
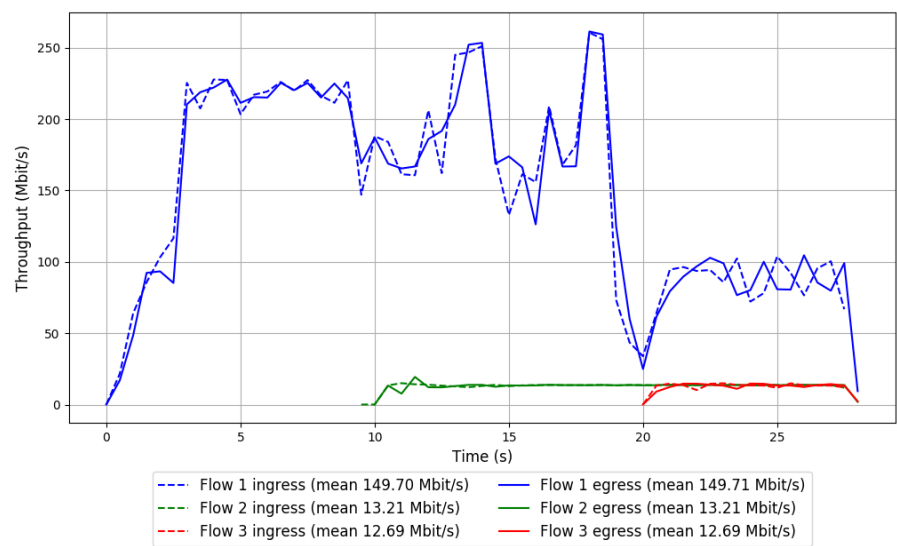
-- Flow 3:

Average throughput: 12.69 Mbit/s

95th percentile per-packet one-way delay: 138.859 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-18 07:08:50

End at: 2018-01-18 07:09:20

Below is generated by plot.py at 2018-01-18 10:28:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.13 Mbit/s

95th percentile per-packet one-way delay: 147.624 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 12.95 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 154.62 Mbit/s

95th percentile per-packet one-way delay: 150.594 ms

Loss rate: 0.01%

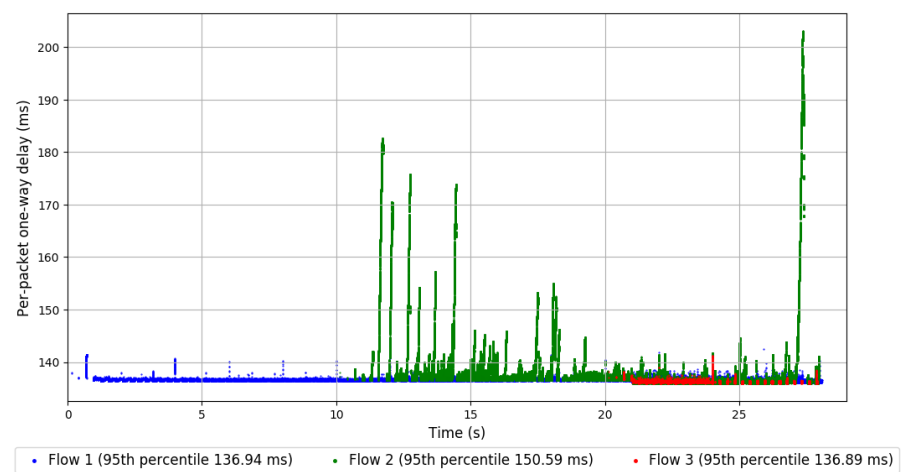
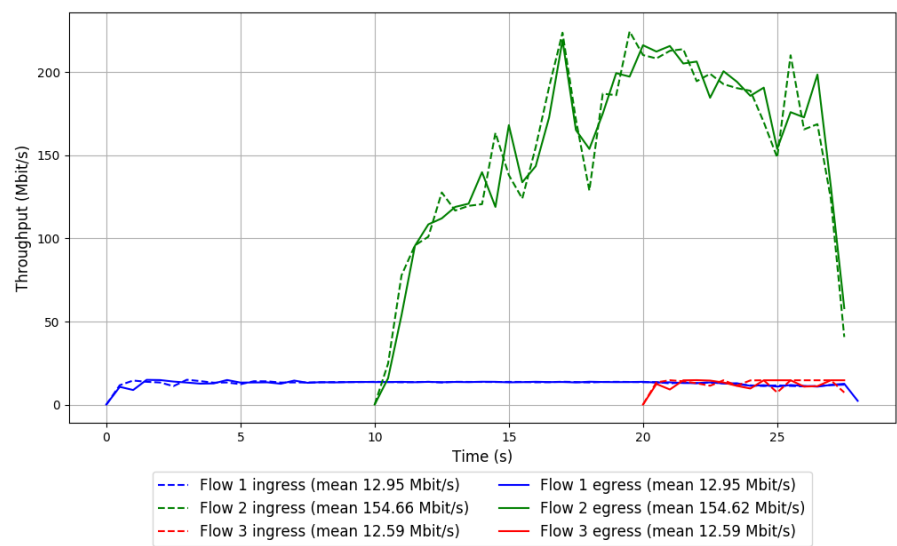
-- Flow 3:

Average throughput: 12.59 Mbit/s

95th percentile per-packet one-way delay: 136.890 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-18 07:28:43

End at: 2018-01-18 07:29:13

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 228.36 Mbit/s

95th percentile per-packet one-way delay: 171.001 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 141.85 Mbit/s

95th percentile per-packet one-way delay: 169.179 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 130.73 Mbit/s

95th percentile per-packet one-way delay: 174.835 ms

Loss rate: 0.00%

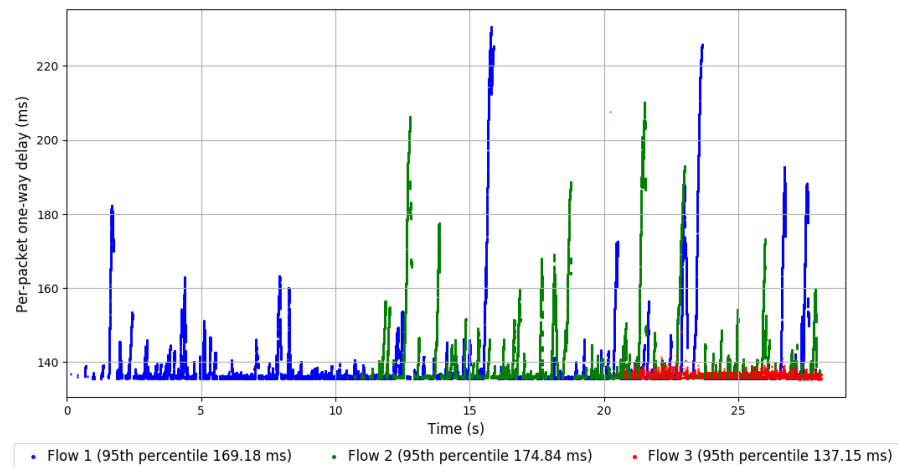
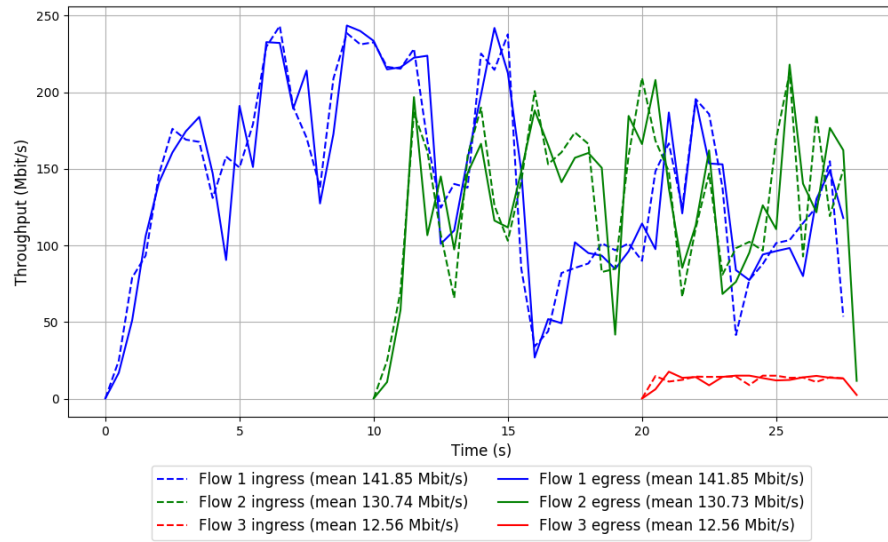
-- Flow 3:

Average throughput: 12.56 Mbit/s

95th percentile per-packet one-way delay: 137.149 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-18 07:48:15

End at: 2018-01-18 07:48:45

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.54 Mbit/s

95th percentile per-packet one-way delay: 160.491 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 12.94 Mbit/s

95th percentile per-packet one-way delay: 136.261 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 12.89 Mbit/s

95th percentile per-packet one-way delay: 136.310 ms

Loss rate: 0.00%

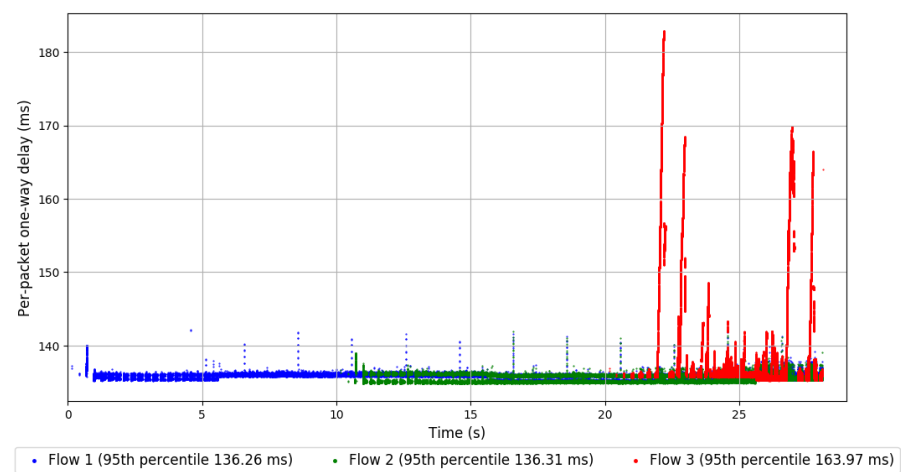
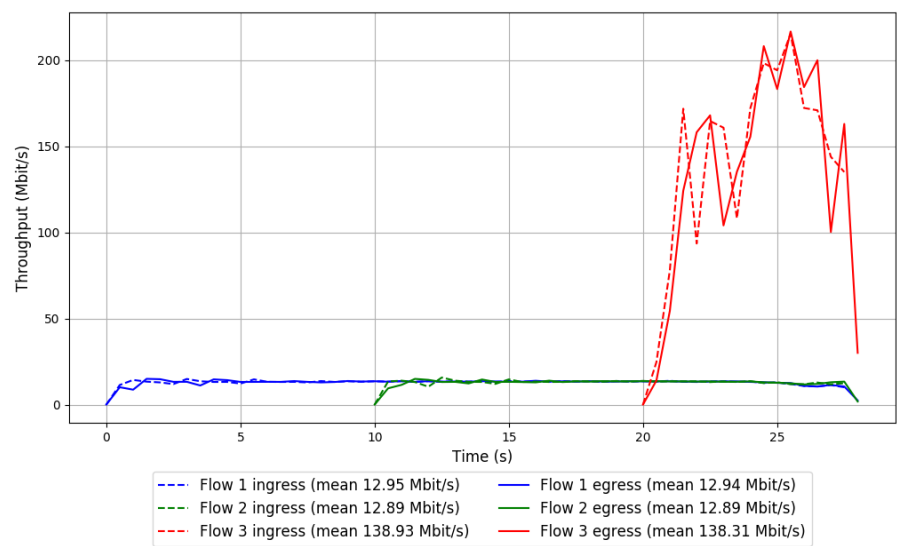
-- Flow 3:

Average throughput: 138.31 Mbit/s

95th percentile per-packet one-way delay: 163.966 ms

Loss rate: 0.20%

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

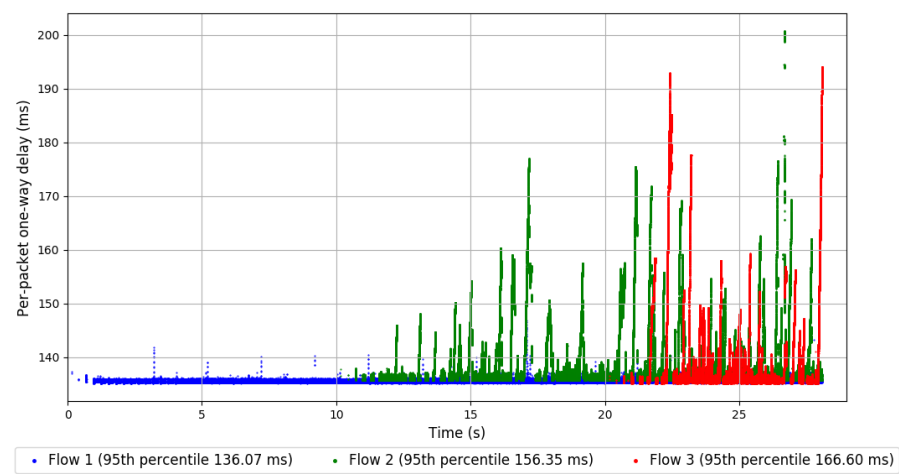
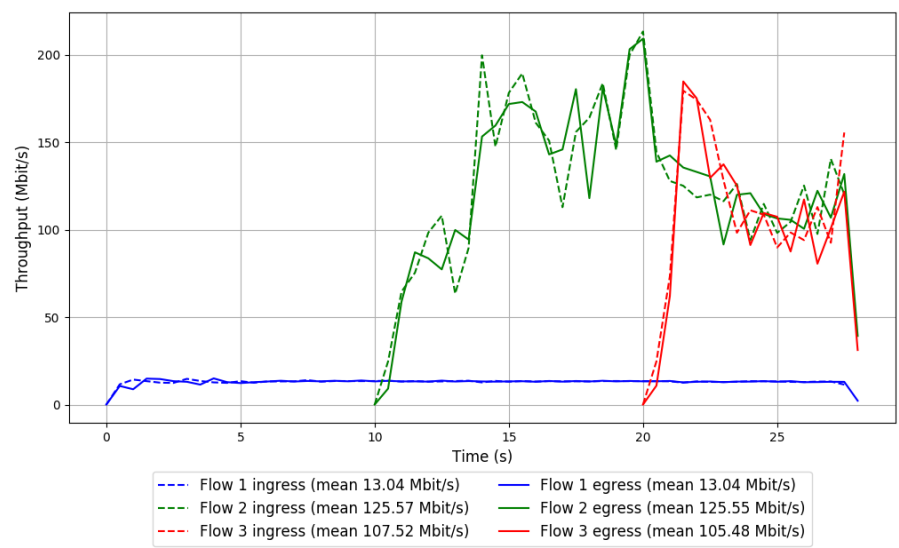


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-18 08:07:56
End at: 2018-01-18 08:08:26

# Below is generated by plot.py at 2018-01-18 10:32:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.50 Mbit/s
95th percentile per-packet one-way delay: 156.802 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 13.04 Mbit/s
95th percentile per-packet one-way delay: 136.066 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 125.55 Mbit/s
95th percentile per-packet one-way delay: 156.349 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 105.48 Mbit/s
95th percentile per-packet one-way delay: 166.602 ms
Loss rate: 1.87%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-18 05:03:40

End at: 2018-01-18 05:04:10

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.71 Mbit/s

95th percentile per-packet one-way delay: 153.041 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 26.30 Mbit/s

95th percentile per-packet one-way delay: 152.522 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.45 Mbit/s

95th percentile per-packet one-way delay: 152.901 ms

Loss rate: 2.27%

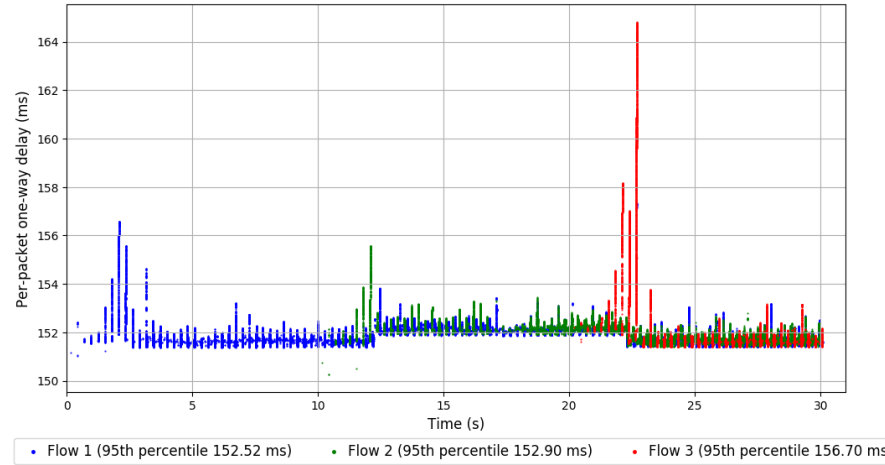
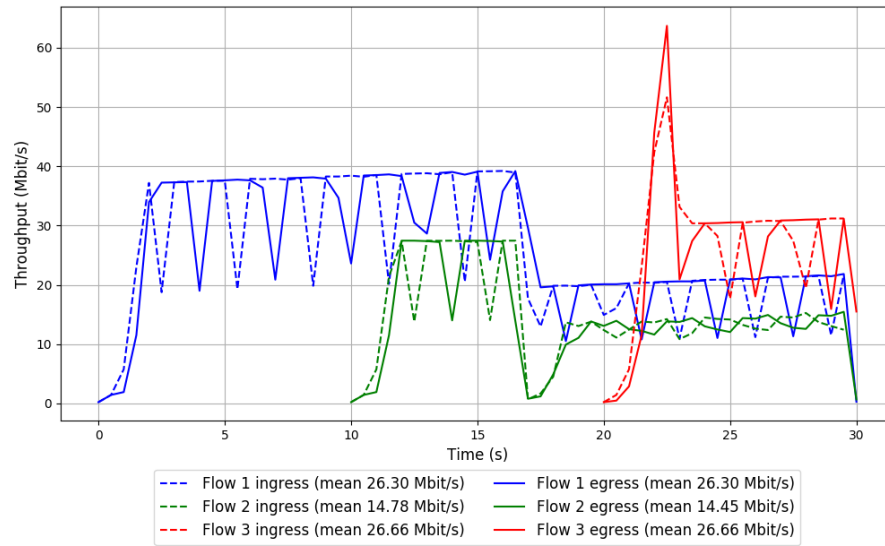
-- Flow 3:

Average throughput: 26.66 Mbit/s

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

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-18 05:23:54

End at: 2018-01-18 05:24:24

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.00 Mbit/s

95th percentile per-packet one-way delay: 153.762 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 31.44 Mbit/s

95th percentile per-packet one-way delay: 151.715 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 30.12 Mbit/s

95th percentile per-packet one-way delay: 156.450 ms

Loss rate: 0.00%

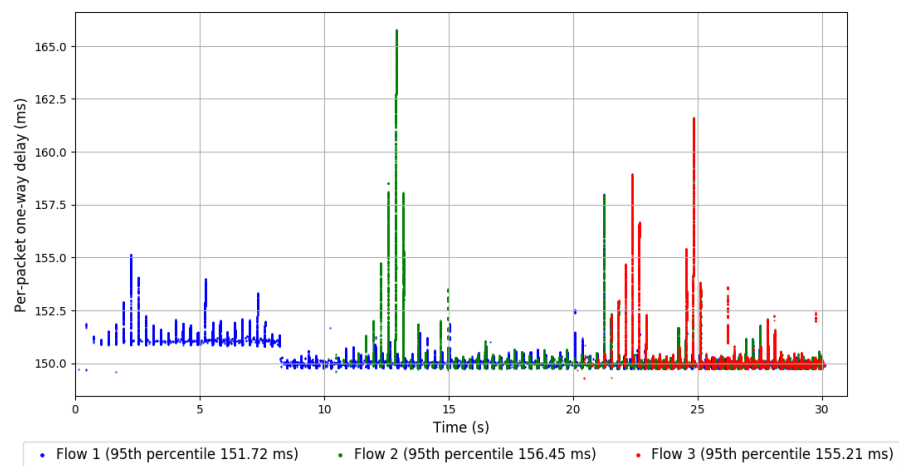
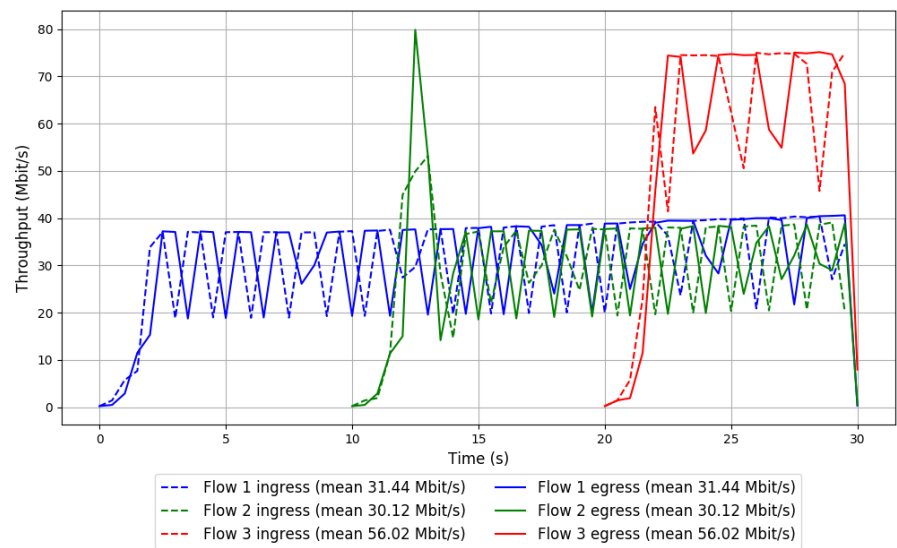
-- Flow 3:

Average throughput: 56.02 Mbit/s

95th percentile per-packet one-way delay: 155.213 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-18 05:43:42

End at: 2018-01-18 05:44:12

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.46 Mbit/s

95th percentile per-packet one-way delay: 151.844 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 25.66 Mbit/s

95th percentile per-packet one-way delay: 153.412 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.43 Mbit/s

95th percentile per-packet one-way delay: 150.913 ms

Loss rate: 0.00%

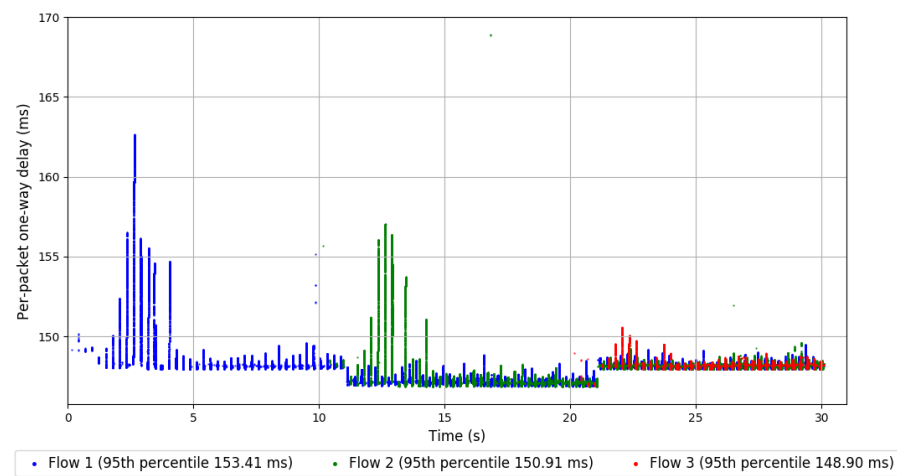
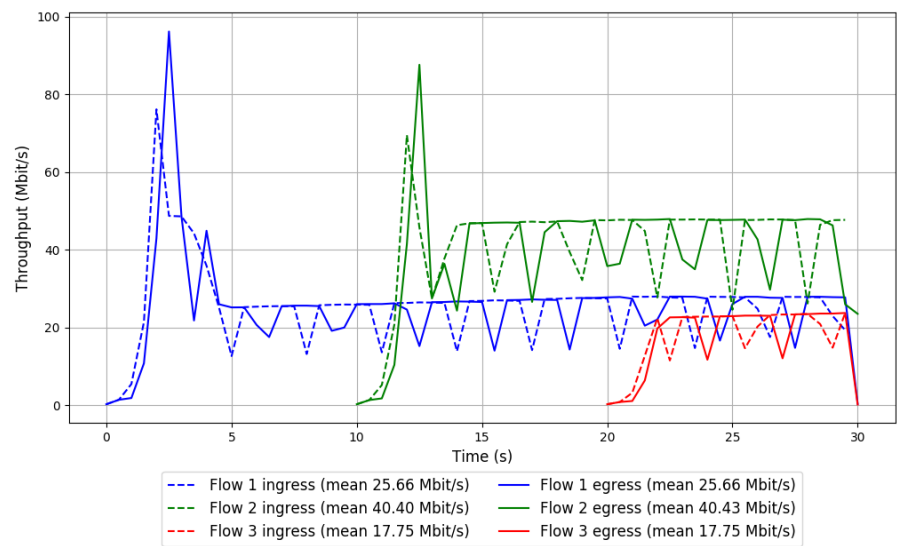
-- Flow 3:

Average throughput: 17.75 Mbit/s

95th percentile per-packet one-way delay: 148.897 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-18 06:03:18

End at: 2018-01-18 06:03:48

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 55.54 Mbit/s

95th percentile per-packet one-way delay: 147.971 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 28.05 Mbit/s

95th percentile per-packet one-way delay: 146.625 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.69 Mbit/s

95th percentile per-packet one-way delay: 152.149 ms

Loss rate: 0.00%

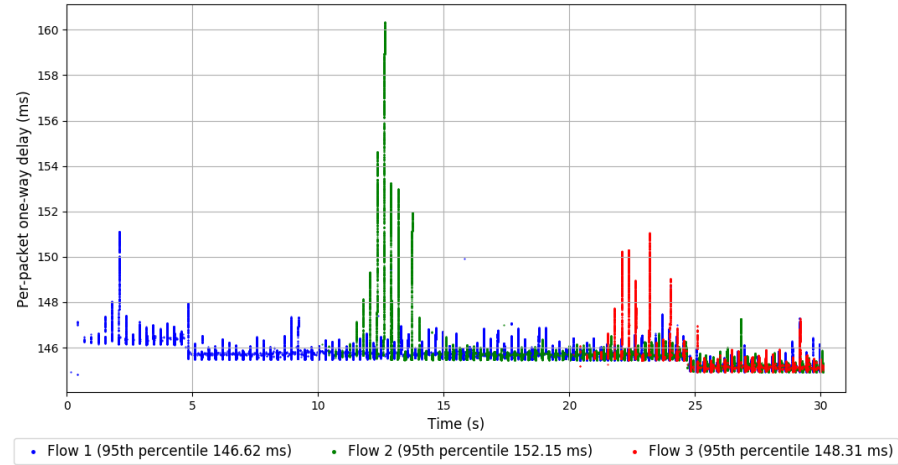
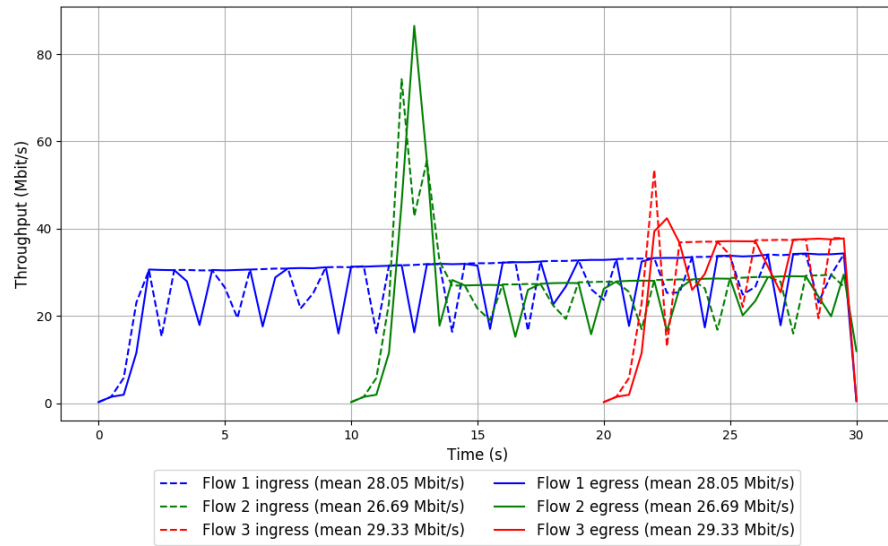
-- Flow 3:

Average throughput: 29.33 Mbit/s

95th percentile per-packet one-way delay: 148.310 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-18 06:23:04

End at: 2018-01-18 06:23:34

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.68 Mbit/s

95th percentile per-packet one-way delay: 144.190 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 17.83 Mbit/s

95th percentile per-packet one-way delay: 144.163 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.28 Mbit/s

95th percentile per-packet one-way delay: 144.226 ms

Loss rate: 0.00%

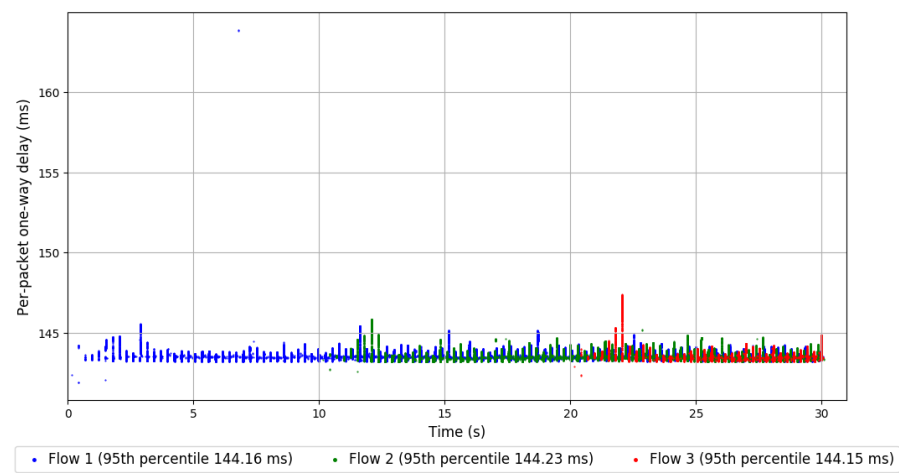
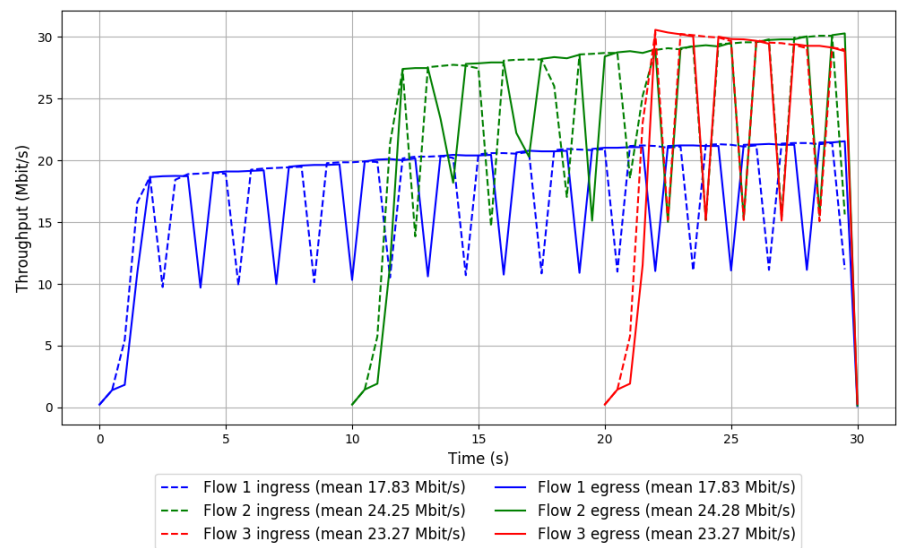
-- Flow 3:

Average throughput: 23.27 Mbit/s

95th percentile per-packet one-way delay: 144.150 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-18 06:43:04

End at: 2018-01-18 06:43:34

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.63 Mbit/s

95th percentile per-packet one-way delay: 149.249 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 11.39 Mbit/s

95th percentile per-packet one-way delay: 147.046 ms

Loss rate: 2.66%

-- Flow 2:

Average throughput: 48.65 Mbit/s

95th percentile per-packet one-way delay: 150.423 ms

Loss rate: 0.81%

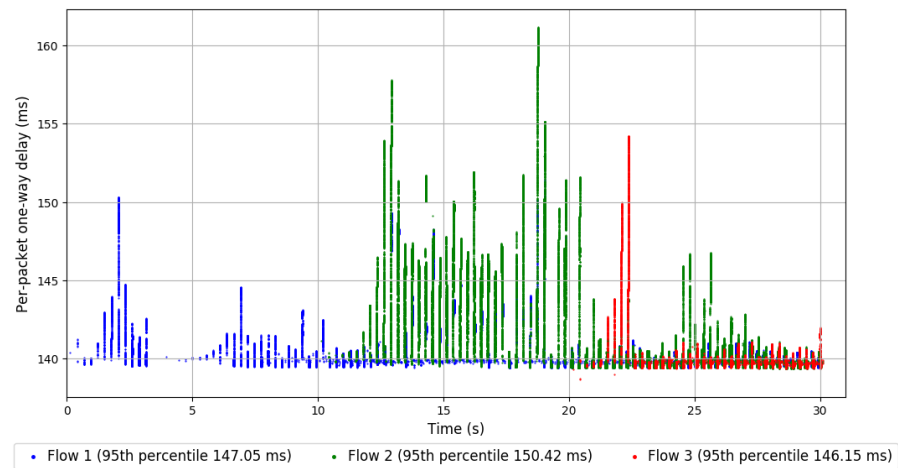
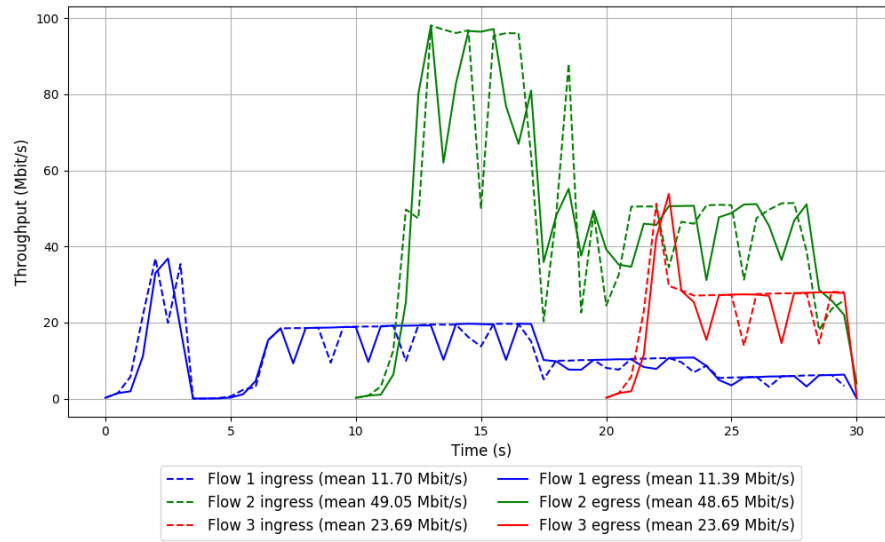
-- Flow 3:

Average throughput: 23.69 Mbit/s

95th percentile per-packet one-way delay: 146.151 ms

Loss rate: 0.03%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-18 07:02:27

End at: 2018-01-18 07:02:57

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 38.50 Mbit/s

95th percentile per-packet one-way delay: 141.503 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 16.29 Mbit/s

95th percentile per-packet one-way delay: 138.010 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 20.99 Mbit/s

95th percentile per-packet one-way delay: 143.060 ms

Loss rate: 0.04%

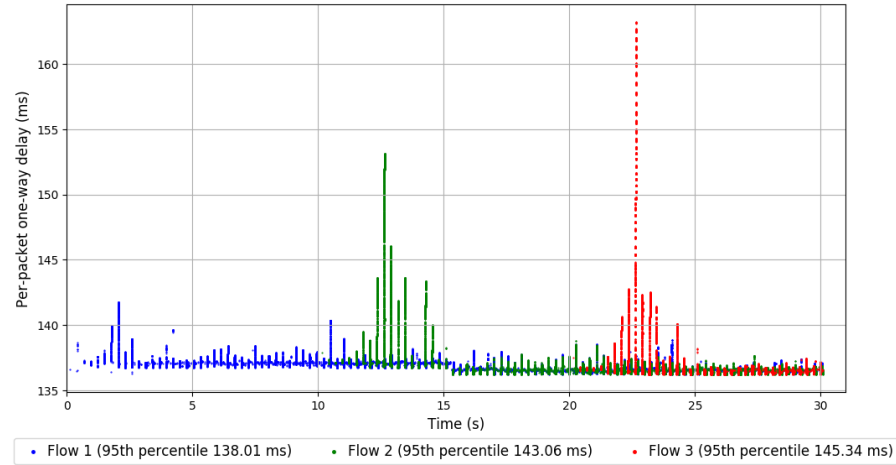
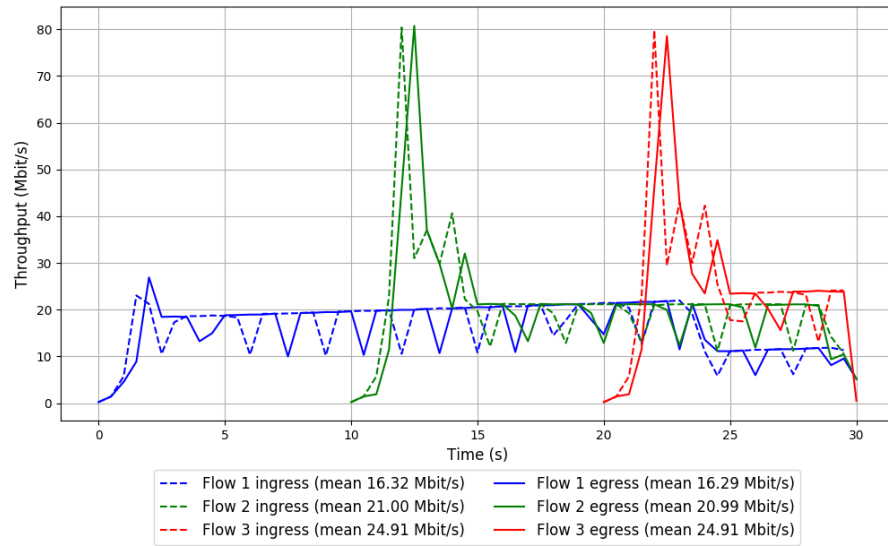
-- Flow 3:

Average throughput: 24.91 Mbit/s

95th percentile per-packet one-way delay: 145.338 ms

Loss rate: 0.01%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-18 07:22:13

End at: 2018-01-18 07:22:43

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 32.79 Mbit/s

95th percentile per-packet one-way delay: 147.714 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 137.751 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 29.41 Mbit/s

95th percentile per-packet one-way delay: 151.451 ms

Loss rate: 1.37%

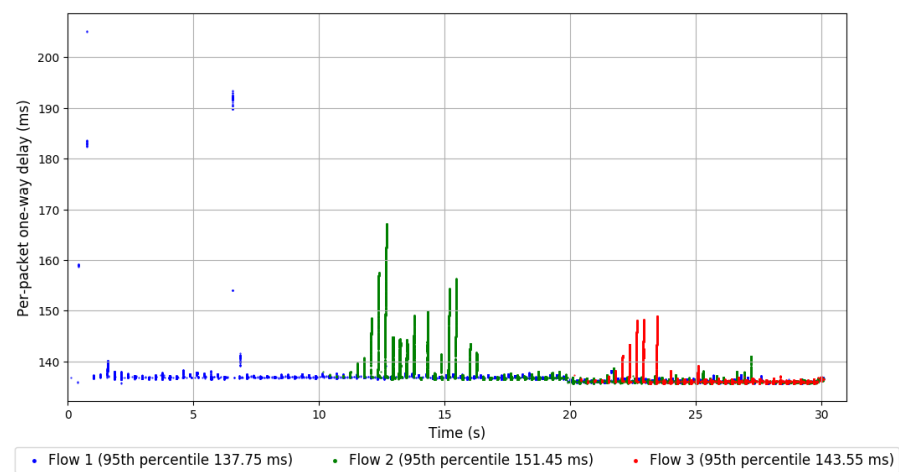
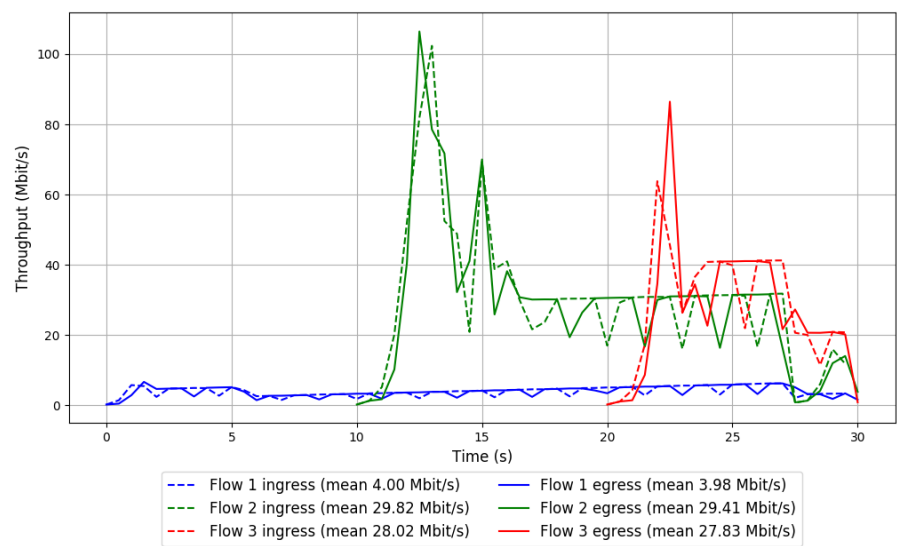
-- Flow 3:

Average throughput: 27.83 Mbit/s

95th percentile per-packet one-way delay: 143.546 ms

Loss rate: 0.69%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-18 07:41:55

End at: 2018-01-18 07:42:25

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.32 Mbit/s

95th percentile per-packet one-way delay: 152.059 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 23.50 Mbit/s

95th percentile per-packet one-way delay: 139.446 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 29.50 Mbit/s

95th percentile per-packet one-way delay: 145.124 ms

Loss rate: 0.09%

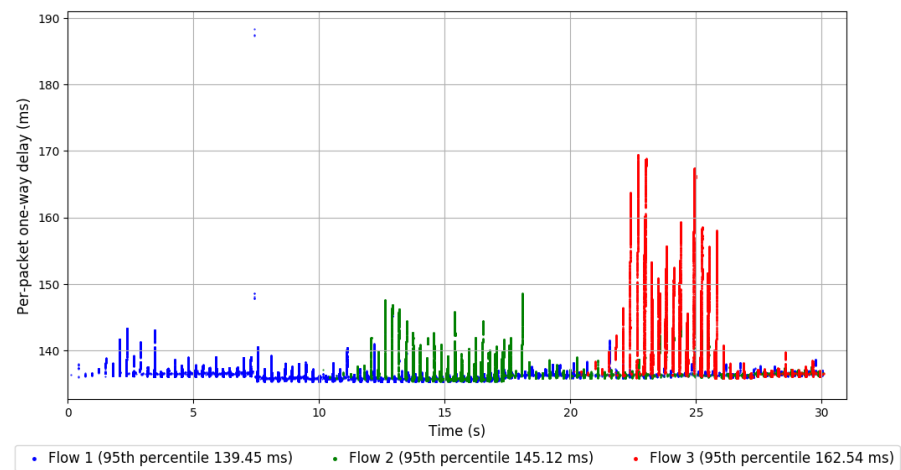
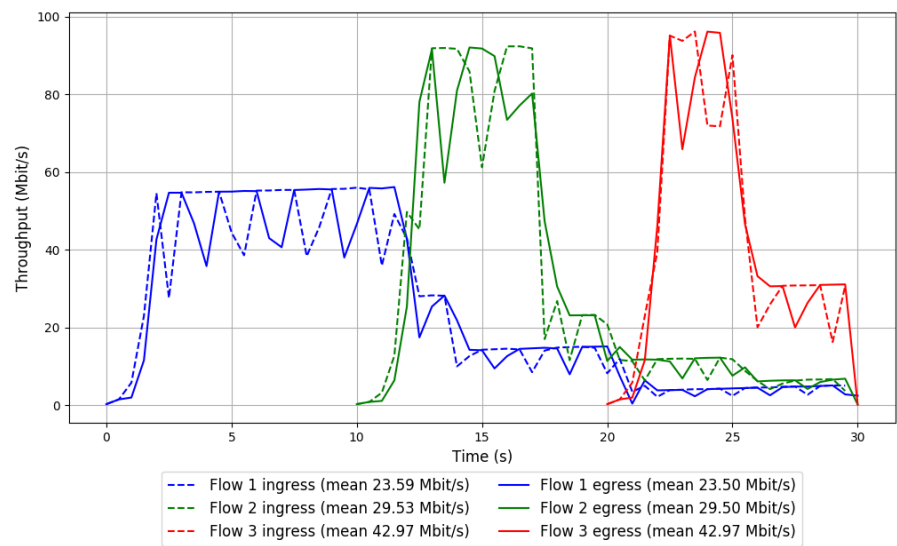
-- Flow 3:

Average throughput: 42.97 Mbit/s

95th percentile per-packet one-way delay: 162.543 ms

Loss rate: 0.01%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-18 08:01:29

End at: 2018-01-18 08:01:59

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.44 Mbit/s

95th percentile per-packet one-way delay: 139.848 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 23.65 Mbit/s

95th percentile per-packet one-way delay: 139.399 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.70 Mbit/s

95th percentile per-packet one-way delay: 139.515 ms

Loss rate: 0.05%

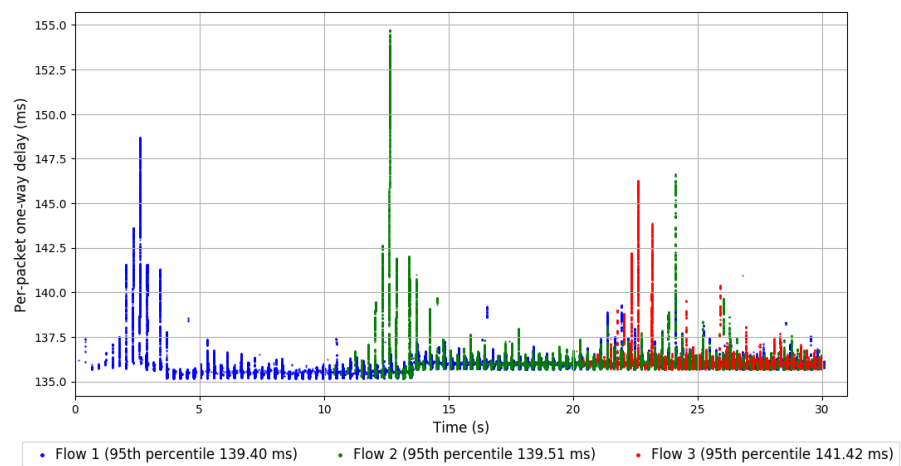
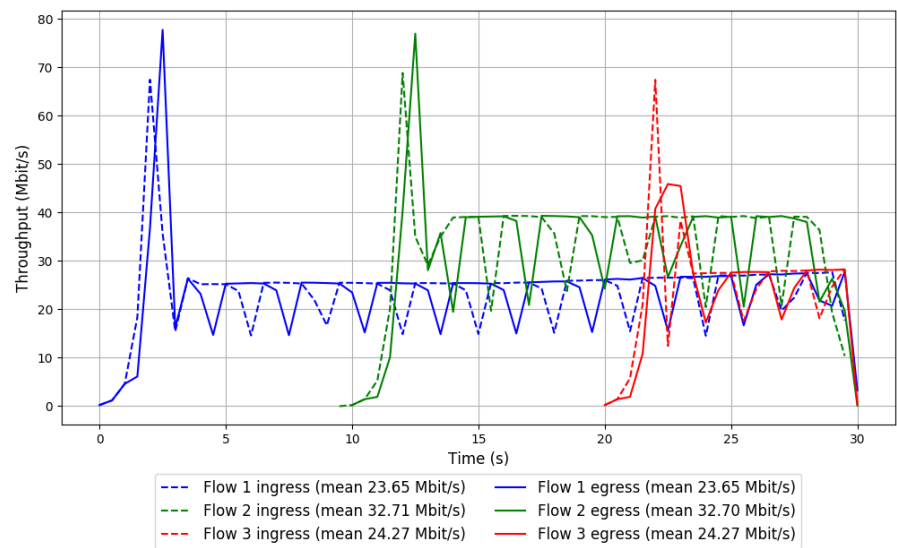
-- Flow 3:

Average throughput: 24.27 Mbit/s

95th percentile per-packet one-way delay: 141.419 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

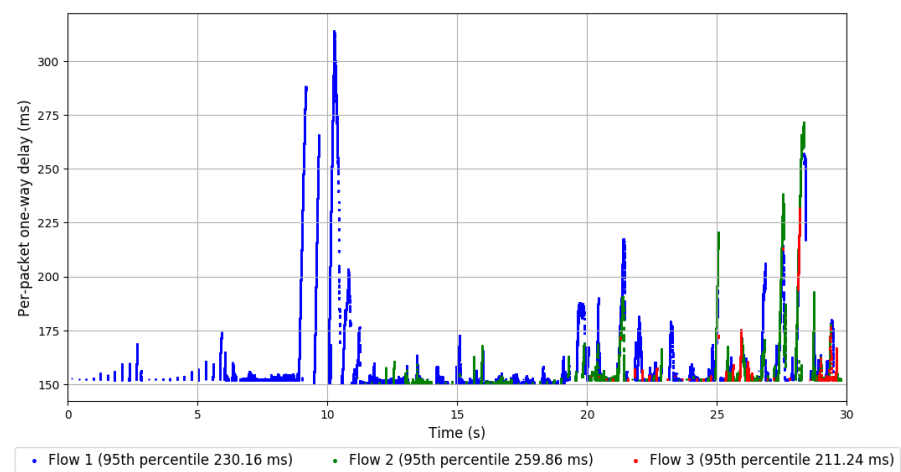
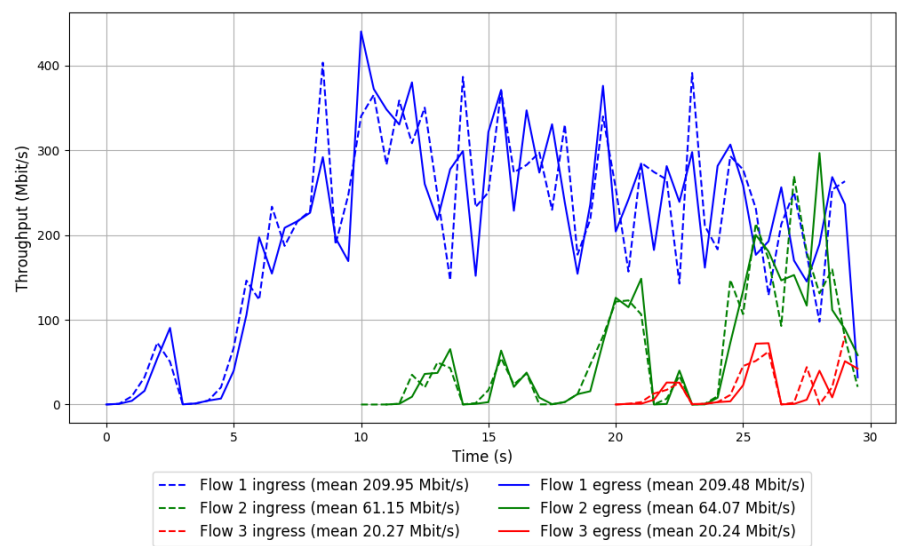


```
Run 1: Statistics of Verus

Start at: 2018-01-18 05:04:33
End at: 2018-01-18 05:05:03

# Below is generated by plot.py at 2018-01-18 10:32:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.11 Mbit/s
95th percentile per-packet one-way delay: 234.568 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 209.48 Mbit/s
95th percentile per-packet one-way delay: 230.163 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 64.07 Mbit/s
95th percentile per-packet one-way delay: 259.855 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 20.24 Mbit/s
95th percentile per-packet one-way delay: 211.243 ms
Loss rate: 0.00%
```

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-18 05:24:48

End at: 2018-01-18 05:25:18

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.74 Mbit/s

95th percentile per-packet one-way delay: 159.374 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 129.19 Mbit/s

95th percentile per-packet one-way delay: 159.284 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.55 Mbit/s

95th percentile per-packet one-way delay: 162.561 ms

Loss rate: 0.00%

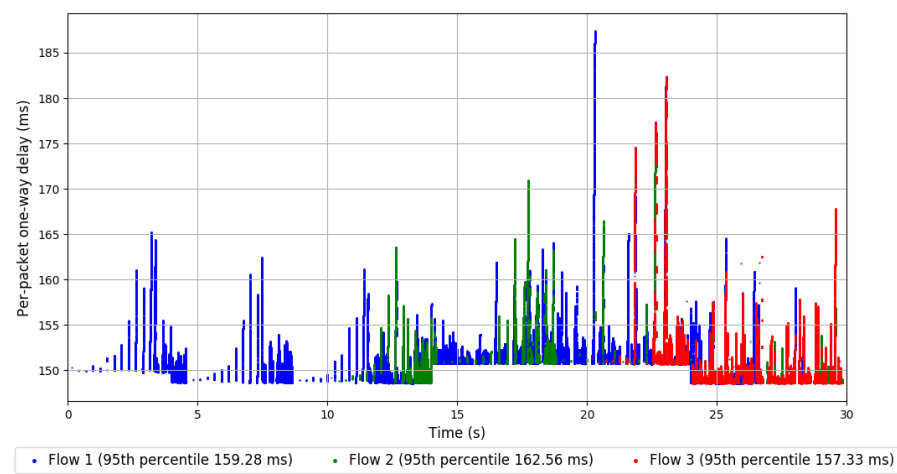
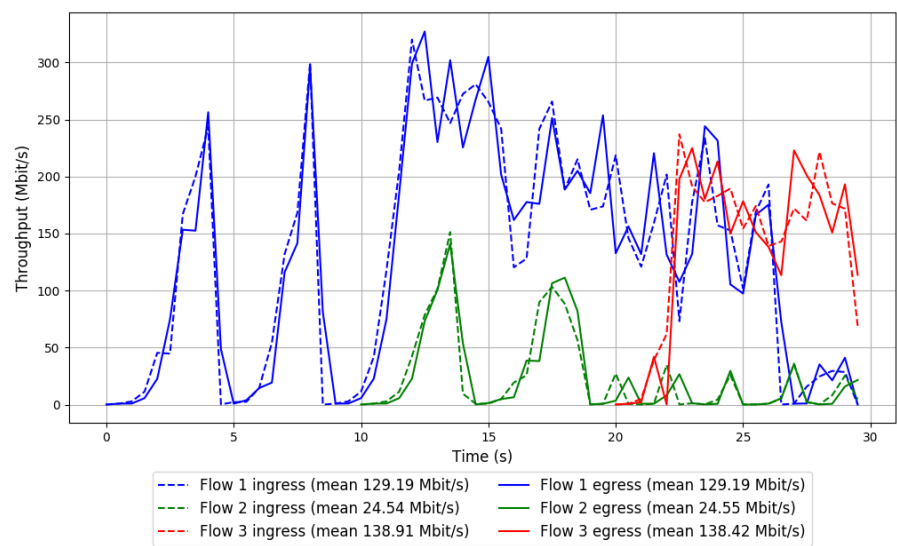
-- Flow 3:

Average throughput: 138.42 Mbit/s

95th percentile per-packet one-way delay: 157.326 ms

Loss rate: 0.36%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-18 05:44:35

End at: 2018-01-18 05:45:05

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 173.06 Mbit/s

95th percentile per-packet one-way delay: 155.756 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 132.64 Mbit/s

95th percentile per-packet one-way delay: 155.730 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 41.70 Mbit/s

95th percentile per-packet one-way delay: 155.686 ms

Loss rate: 0.00%

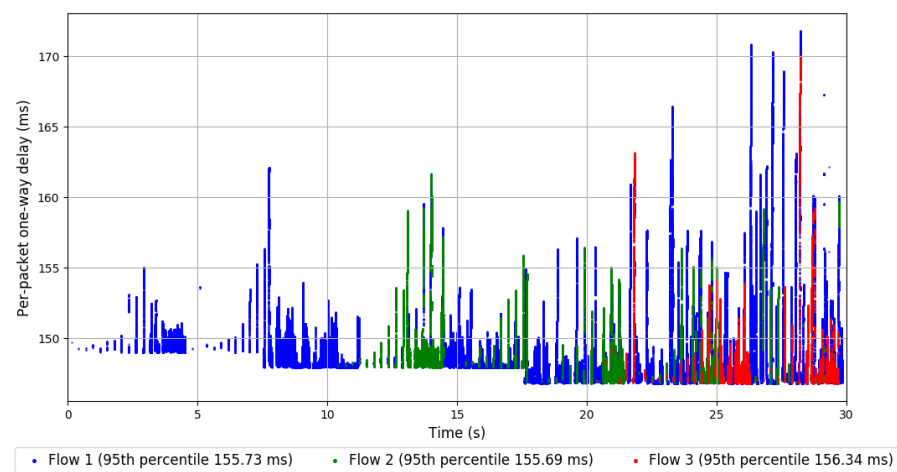
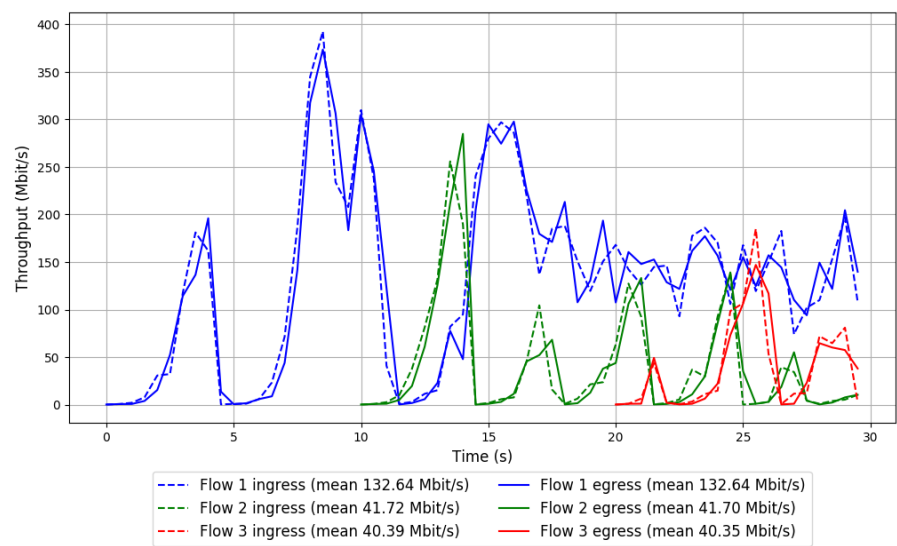
-- Flow 3:

Average throughput: 40.35 Mbit/s

95th percentile per-packet one-way delay: 156.338 ms

Loss rate: 0.00%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-18 06:04:11

End at: 2018-01-18 06:04:41

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.34 Mbit/s

95th percentile per-packet one-way delay: 207.438 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 88.14 Mbit/s

95th percentile per-packet one-way delay: 153.419 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.57 Mbit/s

95th percentile per-packet one-way delay: 167.983 ms

Loss rate: 0.00%

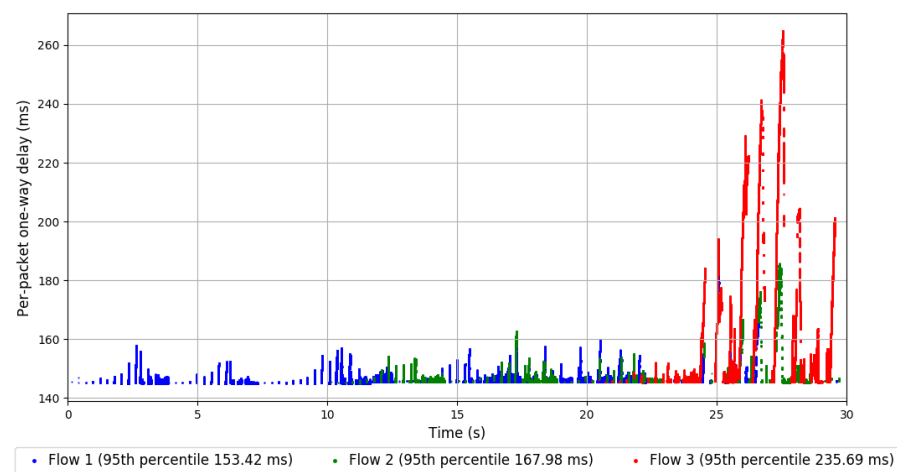
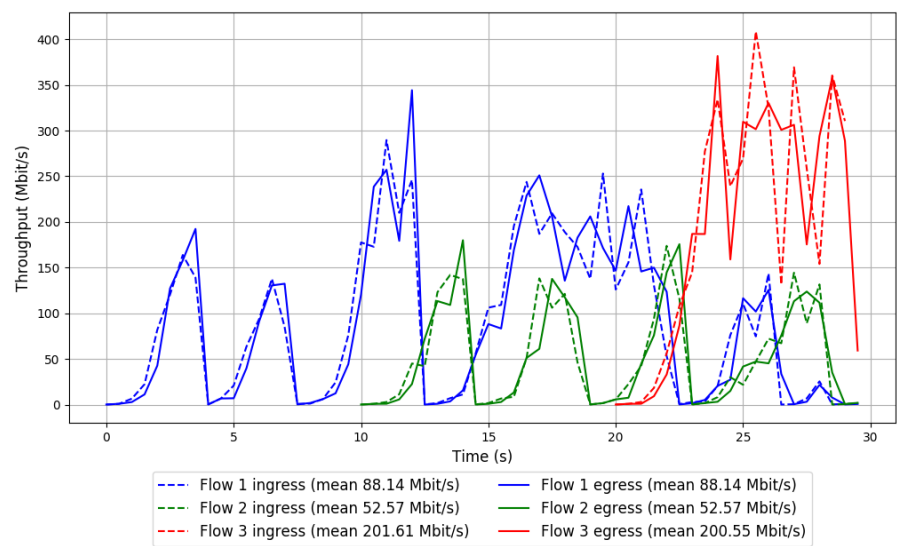
-- Flow 3:

Average throughput: 200.55 Mbit/s

95th percentile per-packet one-way delay: 235.692 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-18 06:23:56

End at: 2018-01-18 06:24:26

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.84 Mbit/s

95th percentile per-packet one-way delay: 279.349 ms

Loss rate: 2.09%

-- Flow 1:

Average throughput: 59.63 Mbit/s

95th percentile per-packet one-way delay: 288.469 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 184.06 Mbit/s

95th percentile per-packet one-way delay: 279.923 ms

Loss rate: 2.52%

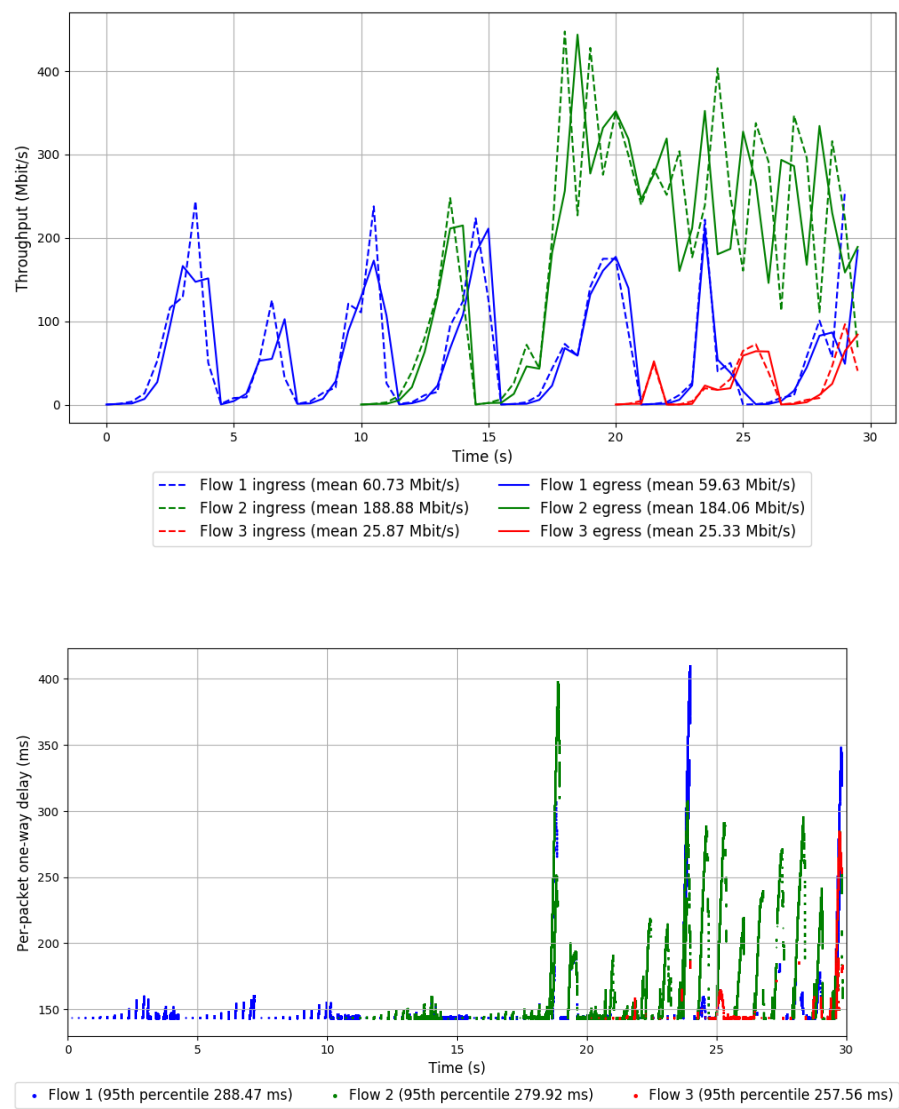
-- Flow 3:

Average throughput: 25.33 Mbit/s

95th percentile per-packet one-way delay: 257.564 ms

Loss rate: 2.06%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-18 06:43:57

End at: 2018-01-18 06:44:27

Below is generated by plot.py at 2018-01-18 10:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.08 Mbit/s

95th percentile per-packet one-way delay: 349.442 ms

Loss rate: 8.54%

-- Flow 1:

Average throughput: 103.38 Mbit/s

95th percentile per-packet one-way delay: 321.439 ms

Loss rate: 6.36%

-- Flow 2:

Average throughput: 53.84 Mbit/s

95th percentile per-packet one-way delay: 416.004 ms

Loss rate: 15.74%

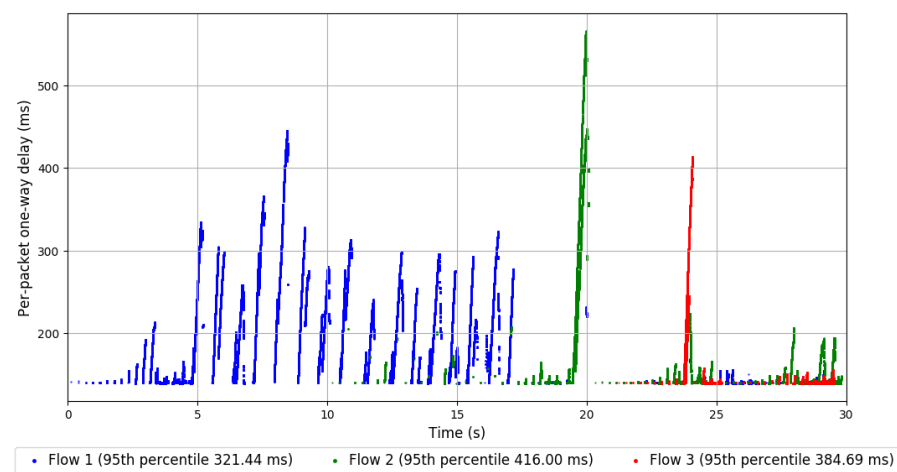
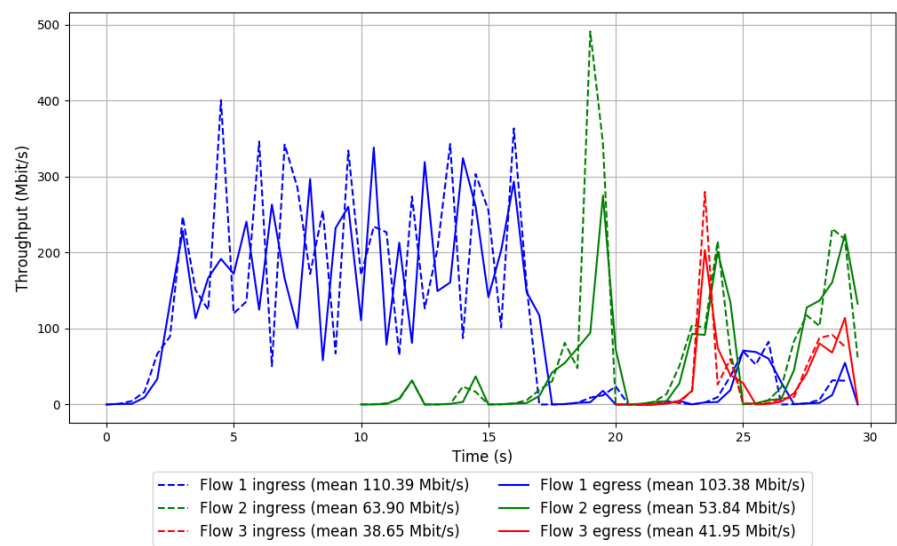
-- Flow 3:

Average throughput: 41.95 Mbit/s

95th percentile per-packet one-way delay: 384.687 ms

Loss rate: 3.16%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-18 07:03:20

End at: 2018-01-18 07:03:50

Below is generated by plot.py at 2018-01-18 10:32:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.01 Mbit/s

95th percentile per-packet one-way delay: 354.523 ms

Loss rate: 10.51%

-- Flow 1:

Average throughput: 42.99 Mbit/s

95th percentile per-packet one-way delay: 254.822 ms

Loss rate: 3.83%

-- Flow 2:

Average throughput: 192.23 Mbit/s

95th percentile per-packet one-way delay: 369.312 ms

Loss rate: 12.22%

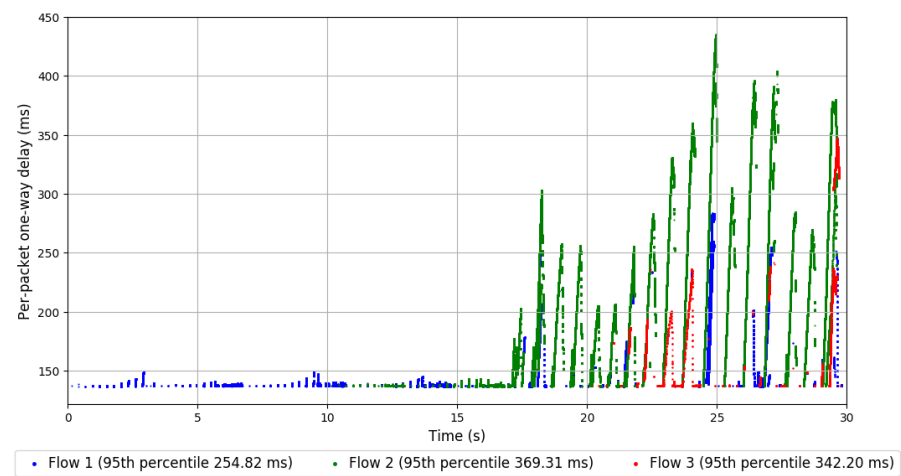
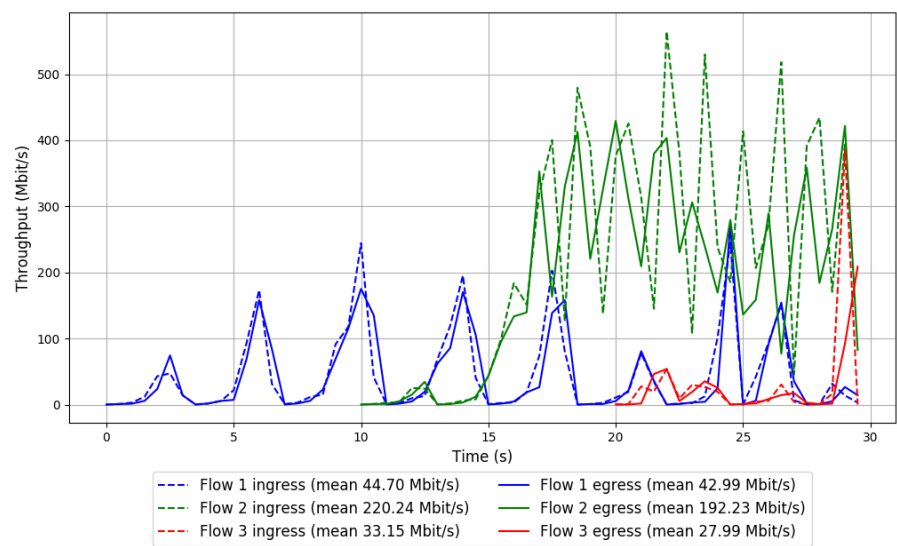
-- Flow 3:

Average throughput: 27.99 Mbit/s

95th percentile per-packet one-way delay: 342.198 ms

Loss rate: 15.59%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-18 07:23:05

End at: 2018-01-18 07:23:35

Below is generated by plot.py at 2018-01-18 10:36:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 294.31 Mbit/s

95th percentile per-packet one-way delay: 315.929 ms

Loss rate: 4.48%

-- Flow 1:

Average throughput: 175.52 Mbit/s

95th percentile per-packet one-way delay: 261.493 ms

Loss rate: 2.27%

-- Flow 2:

Average throughput: 158.74 Mbit/s

95th percentile per-packet one-way delay: 349.232 ms

Loss rate: 8.50%

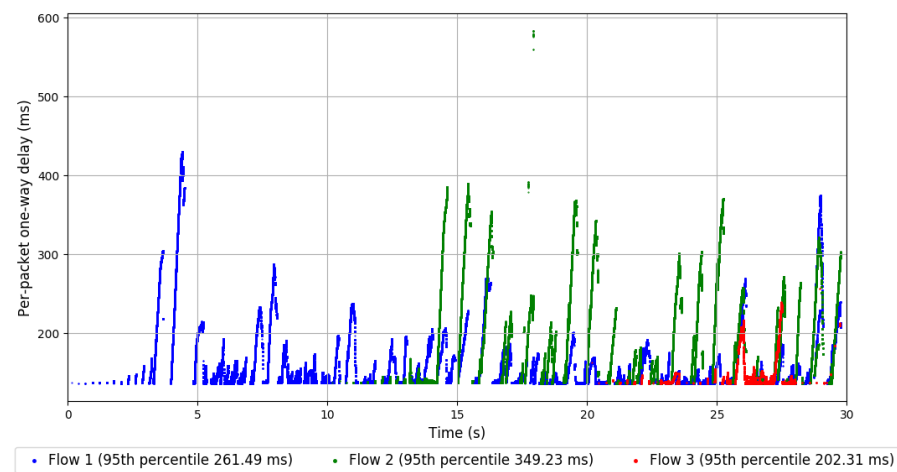
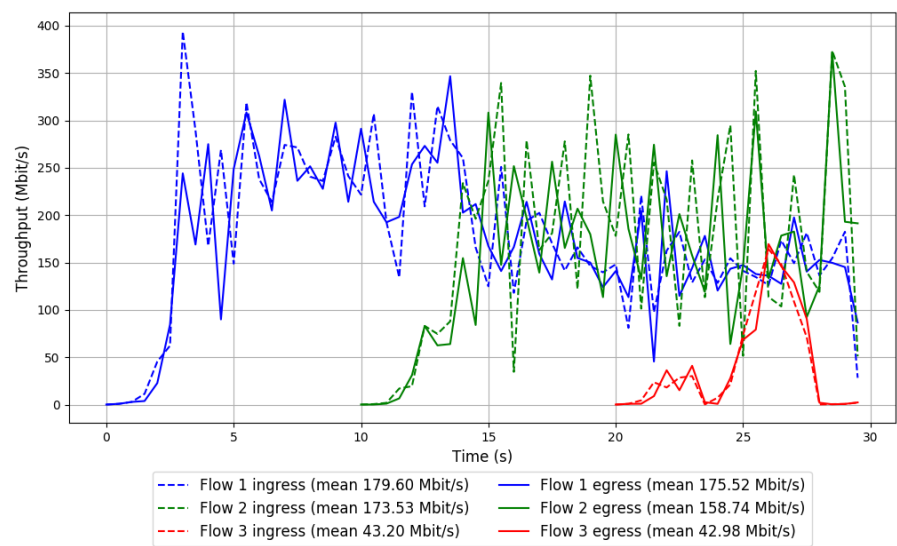
-- Flow 3:

Average throughput: 42.98 Mbit/s

95th percentile per-packet one-way delay: 202.314 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-18 07:42:49

End at: 2018-01-18 07:43:19

Below is generated by plot.py at 2018-01-18 10:36:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.69 Mbit/s

95th percentile per-packet one-way delay: 231.950 ms

Loss rate: 3.14%

-- Flow 1:

Average throughput: 53.15 Mbit/s

95th percentile per-packet one-way delay: 208.314 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 88.22 Mbit/s

95th percentile per-packet one-way delay: 206.087 ms

Loss rate: 0.05%

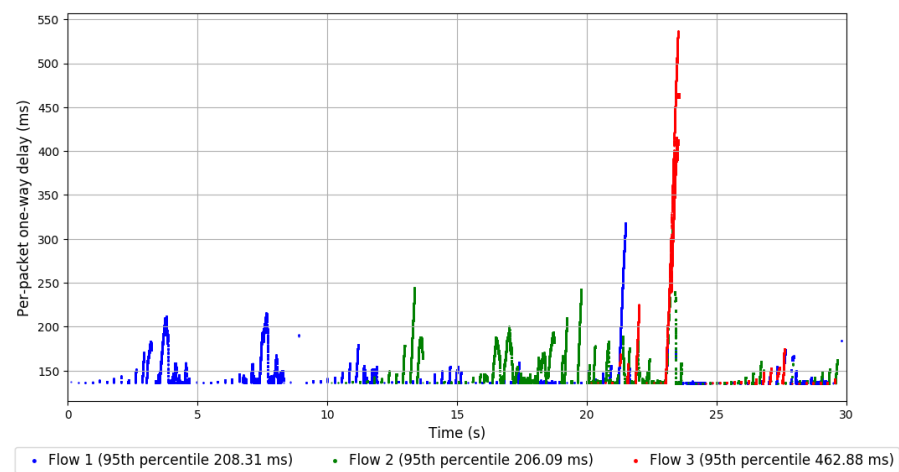
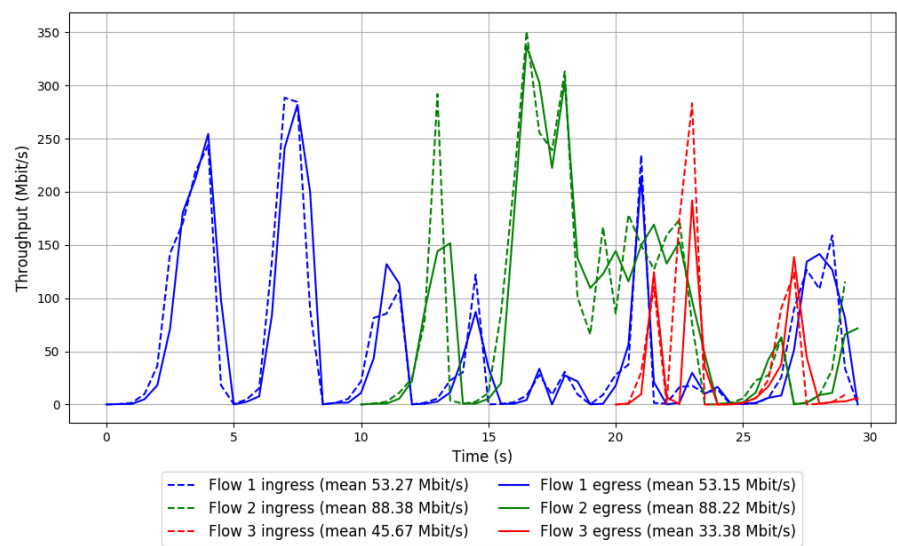
-- Flow 3:

Average throughput: 33.38 Mbit/s

95th percentile per-packet one-way delay: 462.885 ms

Loss rate: 26.88%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-18 08:02:22

End at: 2018-01-18 08:02:52

Below is generated by plot.py at 2018-01-18 10:36:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 217.67 Mbit/s

95th percentile per-packet one-way delay: 165.054 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 192.49 Mbit/s

95th percentile per-packet one-way delay: 166.938 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.70 Mbit/s

95th percentile per-packet one-way delay: 157.583 ms

Loss rate: 0.01%

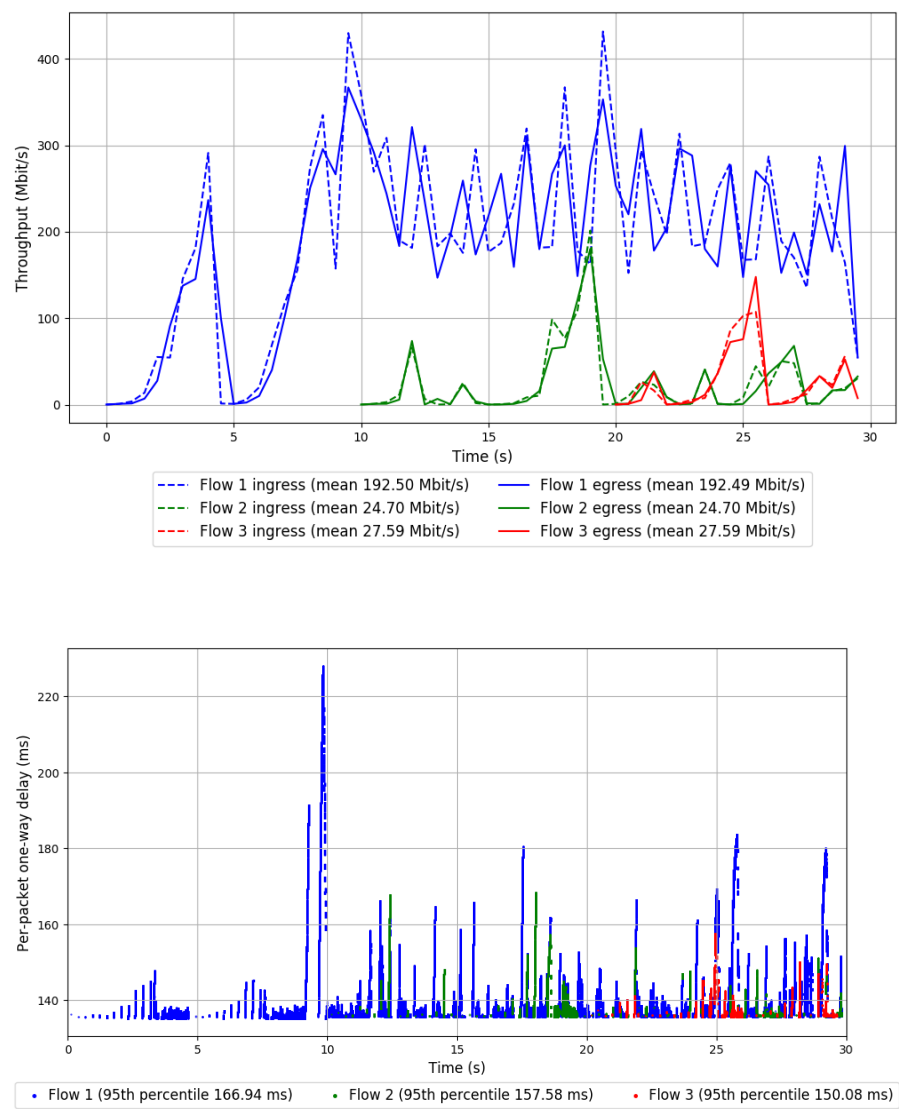
-- Flow 3:

Average throughput: 27.59 Mbit/s

95th percentile per-packet one-way delay: 150.083 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-01-18 05:13:56

End at: 2018-01-18 05:14:26

Below is generated by plot.py at 2018-01-18 10:36:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.31 Mbit/s

95th percentile per-packet one-way delay: 151.744 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 68.13 Mbit/s

95th percentile per-packet one-way delay: 151.750 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 151.925 ms

Loss rate: 0.00%

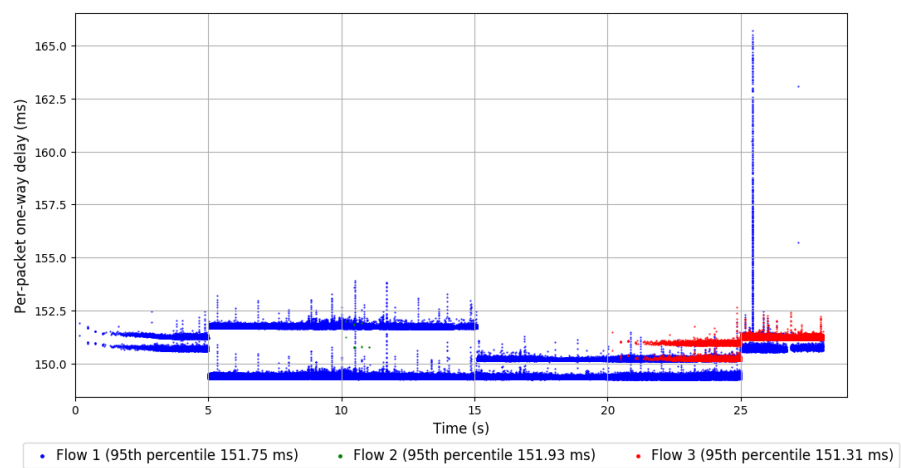
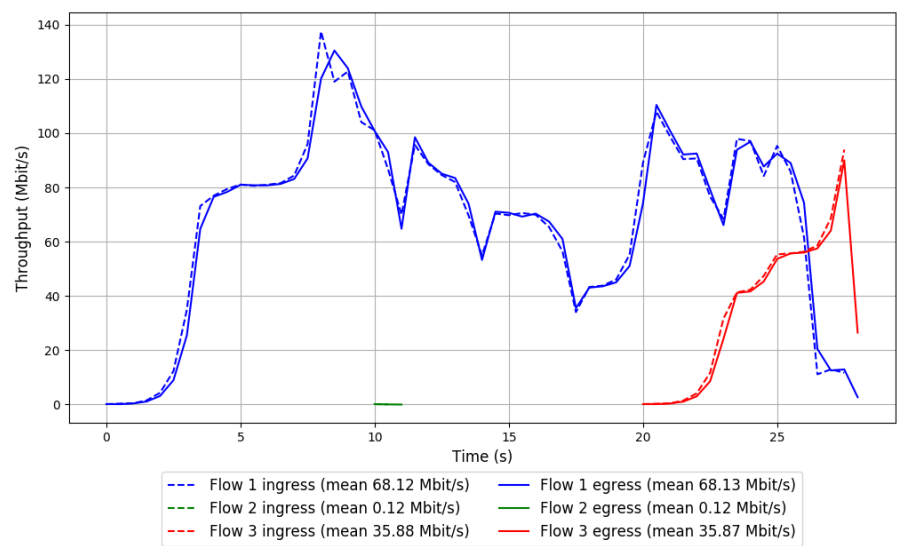
-- Flow 3:

Average throughput: 35.87 Mbit/s

95th percentile per-packet one-way delay: 151.313 ms

Loss rate: 0.05%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-18 05:34:01

End at: 2018-01-18 05:34:31

Below is generated by plot.py at 2018-01-18 10:36:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.24 Mbit/s

95th percentile per-packet one-way delay: 149.899 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.46 Mbit/s

95th percentile per-packet one-way delay: 149.907 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 149.958 ms

Loss rate: 0.00%

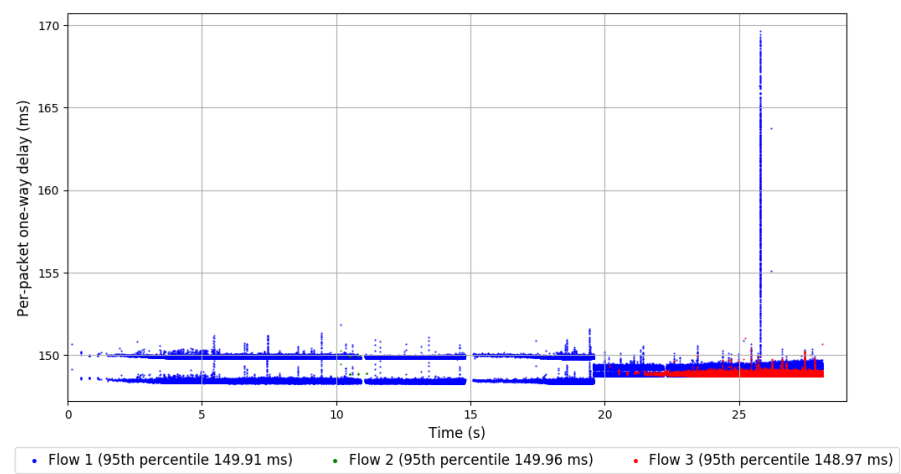
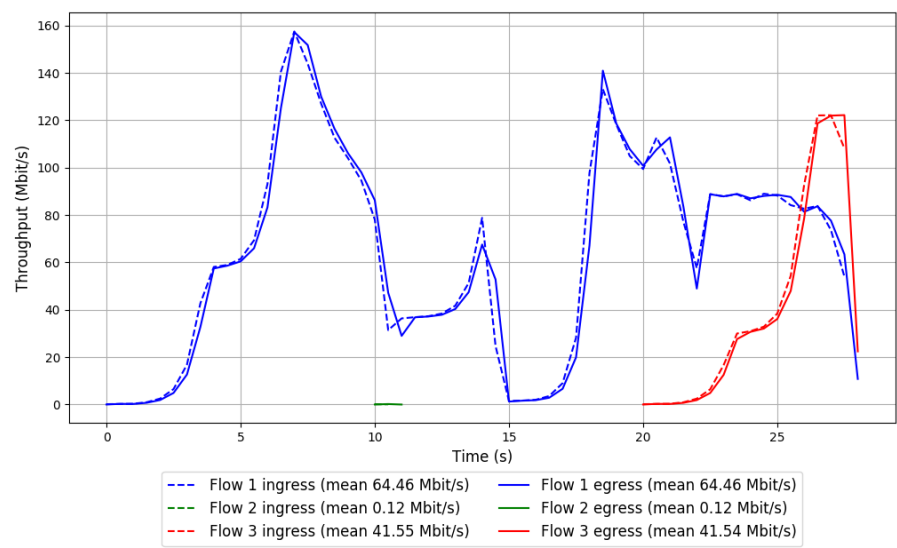
-- Flow 3:

Average throughput: 41.54 Mbit/s

95th percentile per-packet one-way delay: 148.973 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-18 05:53:46

End at: 2018-01-18 05:54:16

Below is generated by plot.py at 2018-01-18 10:36:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.01 Mbit/s

95th percentile per-packet one-way delay: 148.225 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.25 Mbit/s

95th percentile per-packet one-way delay: 148.238 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.94 Mbit/s

95th percentile per-packet one-way delay: 148.209 ms

Loss rate: 0.00%

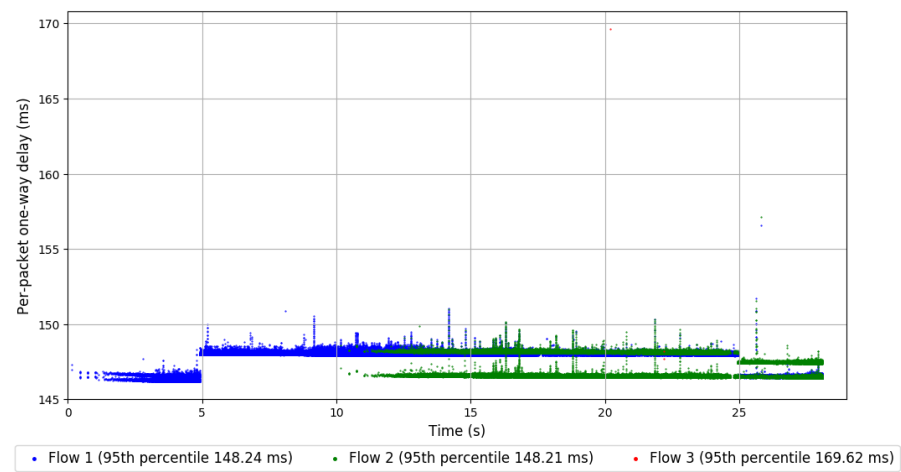
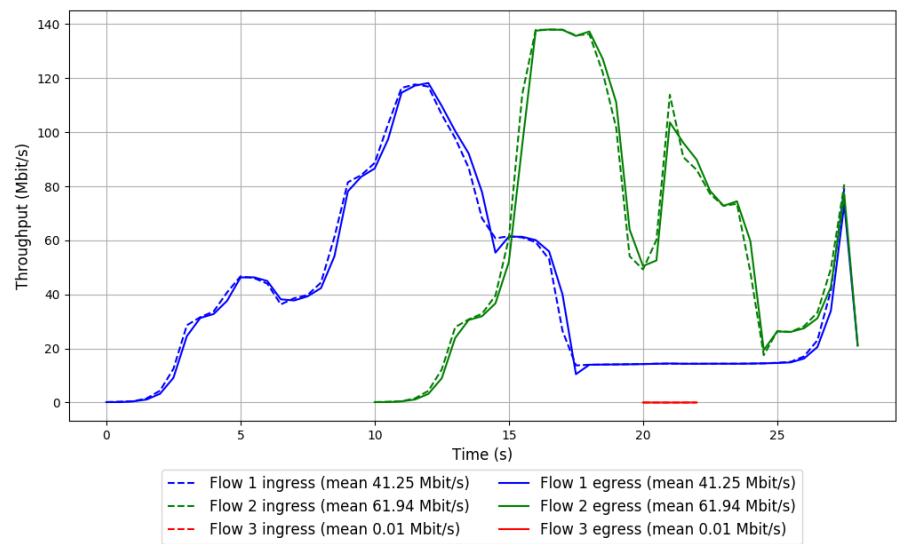
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 169.621 ms

Loss rate: 46.17%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-18 06:13:11

End at: 2018-01-18 06:13:41

Below is generated by plot.py at 2018-01-18 10:36:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 128.30 Mbit/s

95th percentile per-packet one-way delay: 144.755 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.38 Mbit/s

95th percentile per-packet one-way delay: 144.783 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.02 Mbit/s

95th percentile per-packet one-way delay: 144.203 ms

Loss rate: 0.00%

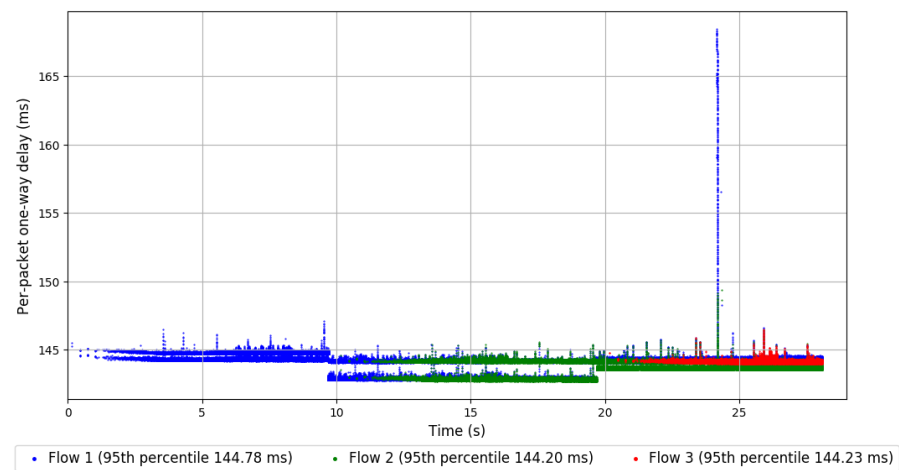
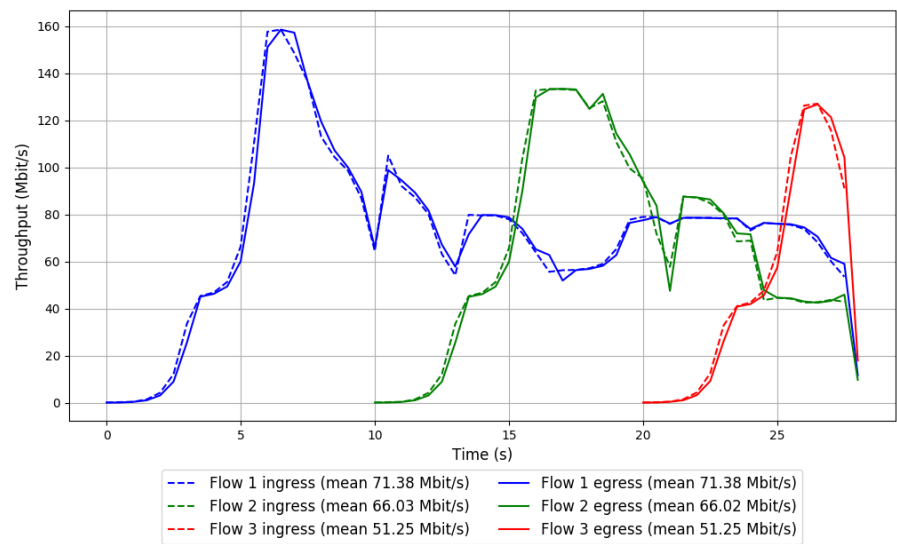
-- Flow 3:

Average throughput: 51.25 Mbit/s

95th percentile per-packet one-way delay: 144.233 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-18 06:33:04

End at: 2018-01-18 06:33:34

Below is generated by plot.py at 2018-01-18 10:36:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.02 Mbit/s

95th percentile per-packet one-way delay: 142.022 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 70.39 Mbit/s

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

Loss rate: 0.12%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 142.280 ms

Loss rate: 0.00%

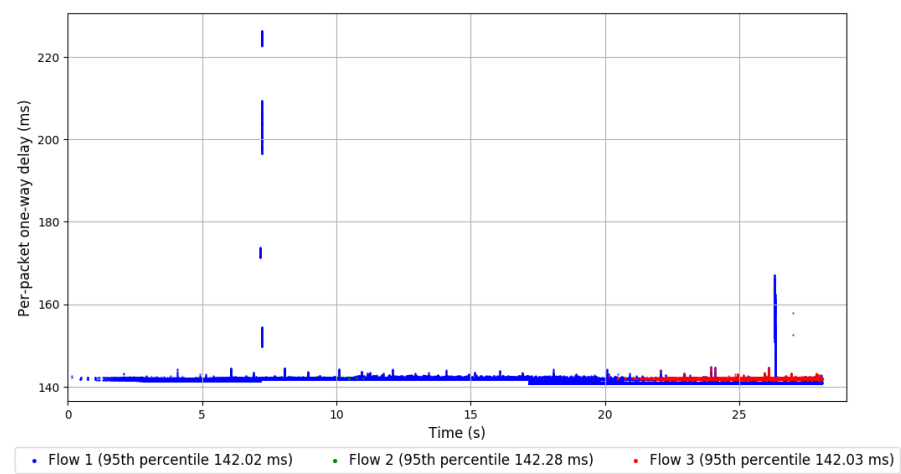
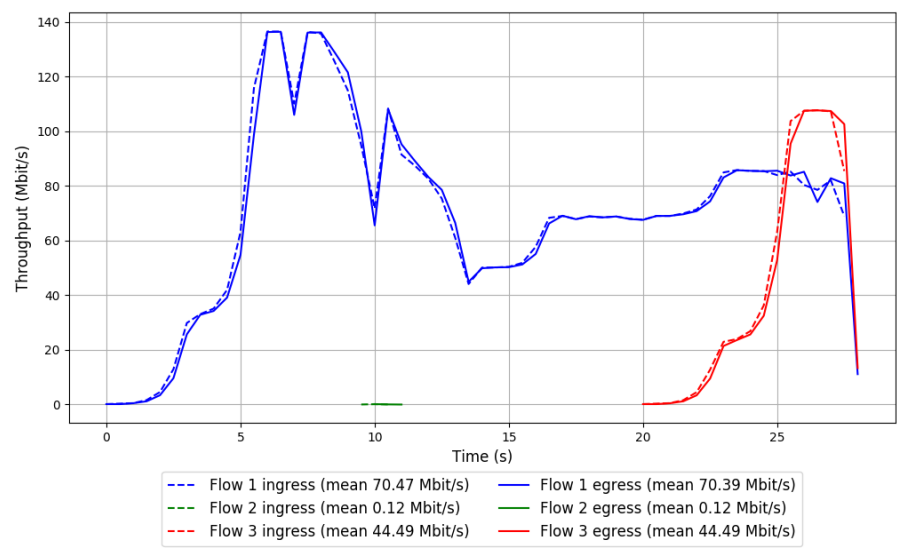
-- Flow 3:

Average throughput: 44.49 Mbit/s

95th percentile per-packet one-way delay: 142.026 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link

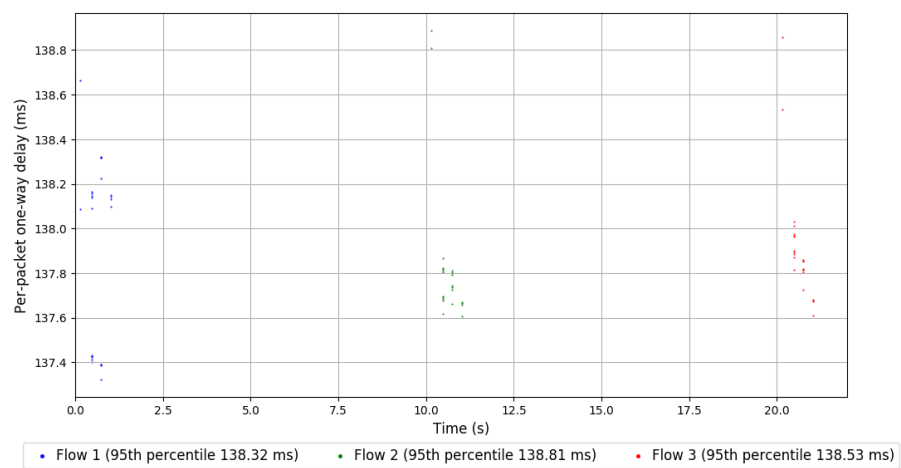
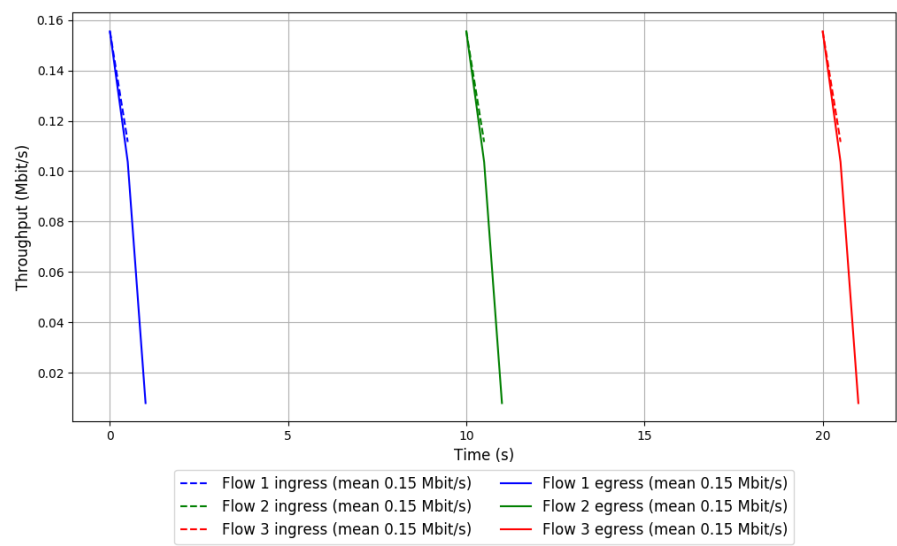


Run 6: Statistics of Copa

Start at: 2018-01-18 06:52:54

End at: 2018-01-18 06:53:24

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-18 07:12:19

End at: 2018-01-18 07:12:49

Below is generated by plot.py at 2018-01-18 10:37:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.60 Mbit/s

95th percentile per-packet one-way delay: 136.629 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 73.03 Mbit/s

95th percentile per-packet one-way delay: 136.624 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.35 Mbit/s

95th percentile per-packet one-way delay: 136.611 ms

Loss rate: 0.01%

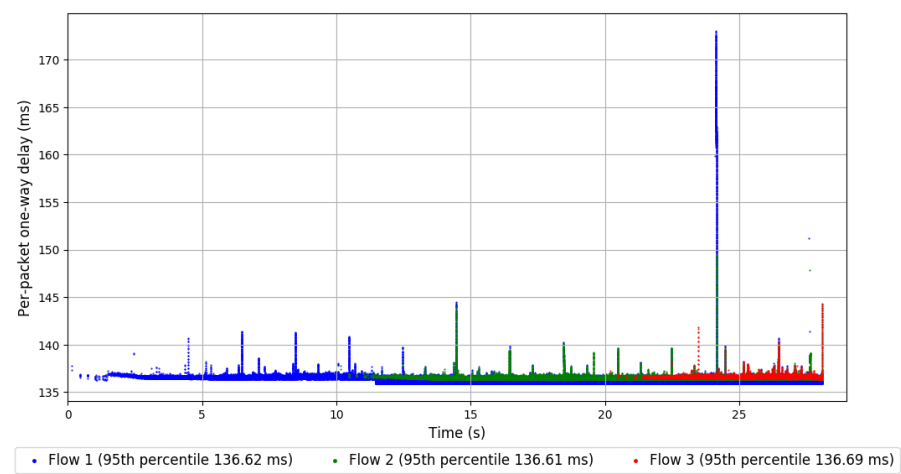
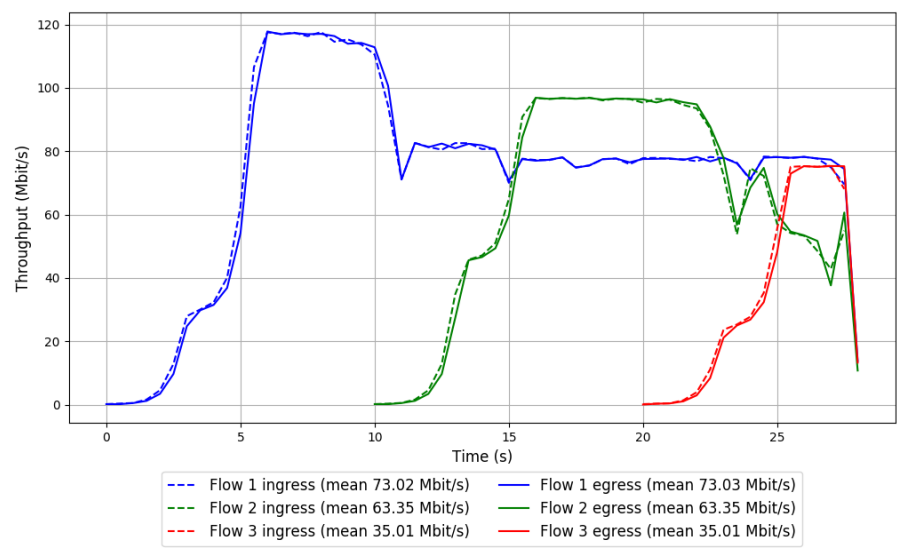
-- Flow 3:

Average throughput: 35.01 Mbit/s

95th percentile per-packet one-way delay: 136.687 ms

Loss rate: 0.03%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-18 07:32:23

End at: 2018-01-18 07:32:53

Below is generated by plot.py at 2018-01-18 10:37:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.83 Mbit/s

95th percentile per-packet one-way delay: 136.662 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 52.17 Mbit/s

95th percentile per-packet one-way delay: 136.432 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 48.40 Mbit/s

95th percentile per-packet one-way delay: 136.445 ms

Loss rate: 0.96%

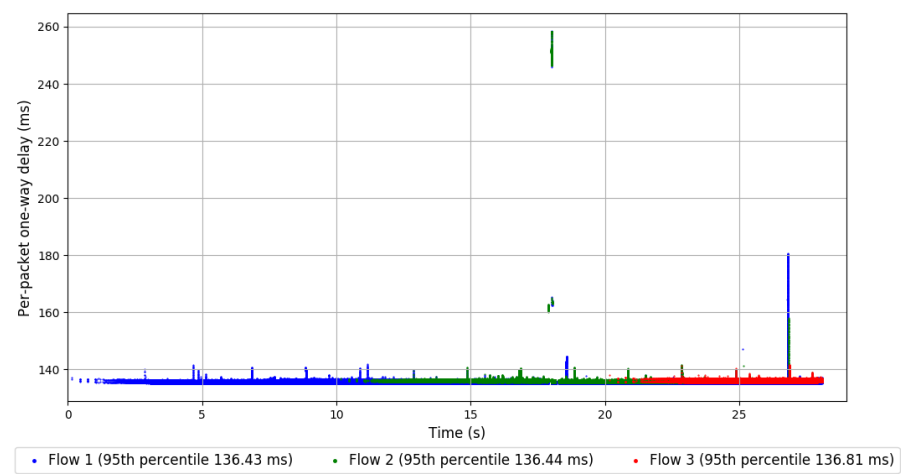
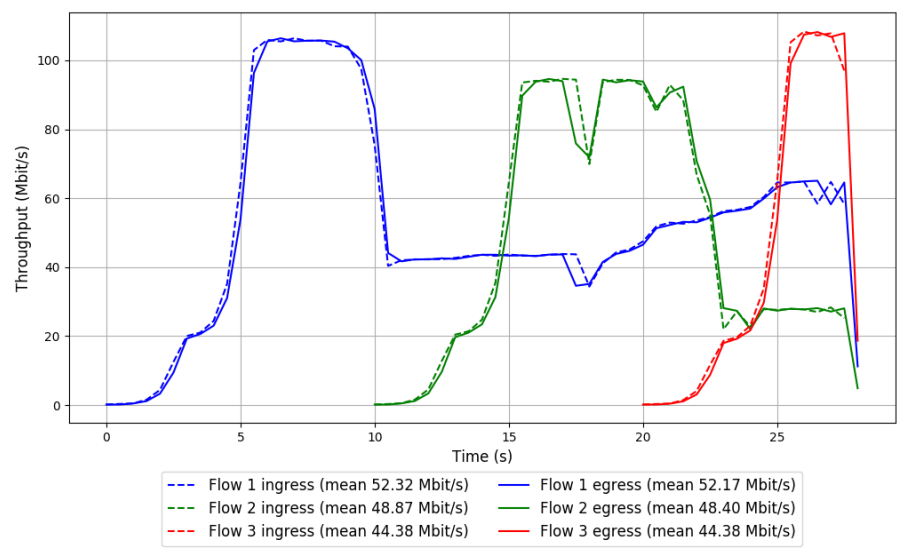
-- Flow 3:

Average throughput: 44.38 Mbit/s

95th percentile per-packet one-way delay: 136.807 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-18 07:51:32

End at: 2018-01-18 07:52:02

Below is generated by plot.py at 2018-01-18 10:37:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.42 Mbit/s

95th percentile per-packet one-way delay: 136.401 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 67.44 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.12 Mbit/s

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

Loss rate: 0.00%

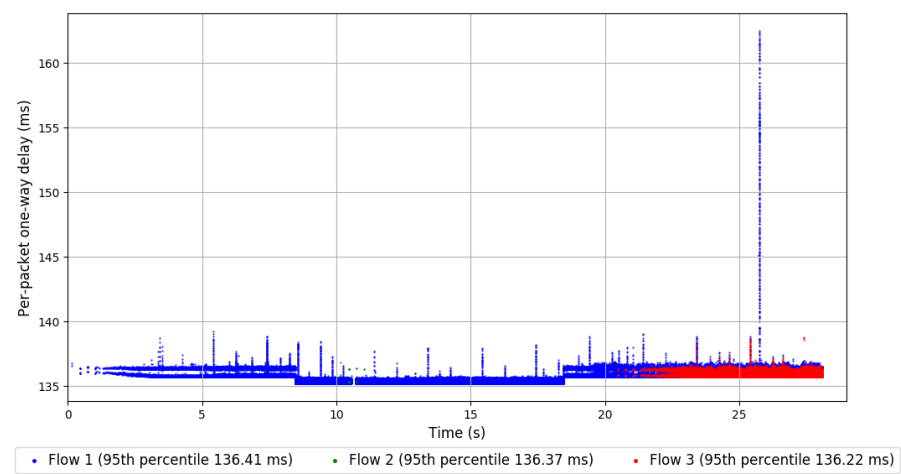
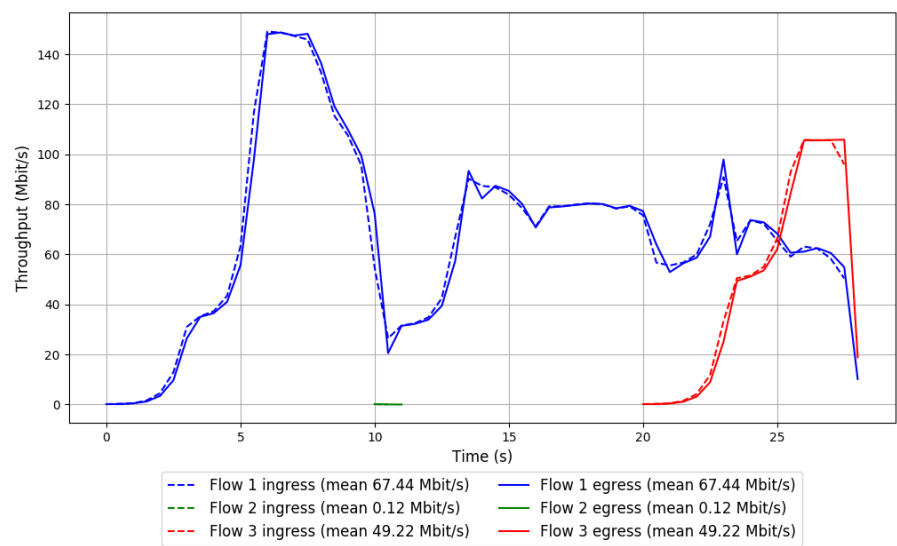
-- Flow 3:

Average throughput: 49.22 Mbit/s

95th percentile per-packet one-way delay: 136.222 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-18 08:11:25

End at: 2018-01-18 08:11:55

Below is generated by plot.py at 2018-01-18 10:37:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.33 Mbit/s

95th percentile per-packet one-way delay: 136.603 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.61 Mbit/s

95th percentile per-packet one-way delay: 136.139 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 51.16 Mbit/s

95th percentile per-packet one-way delay: 136.712 ms

Loss rate: 0.00%

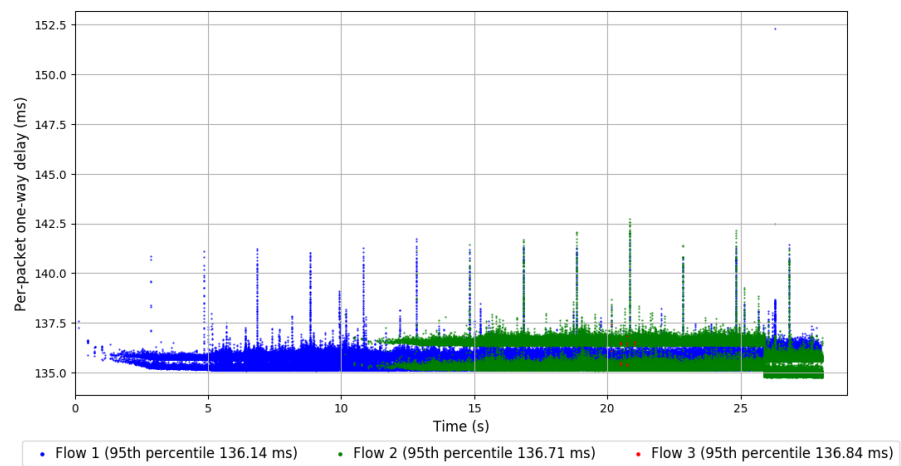
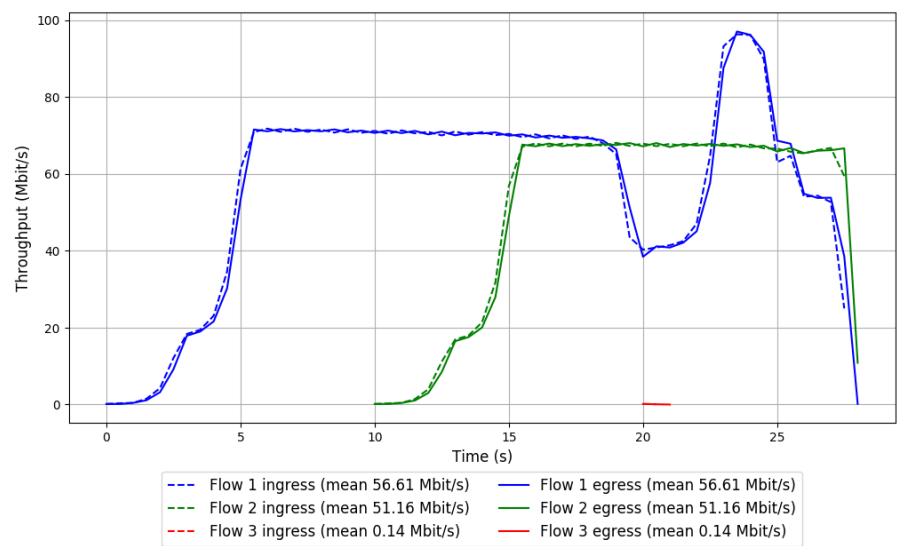
-- Flow 3:

Average throughput: 0.14 Mbit/s

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

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

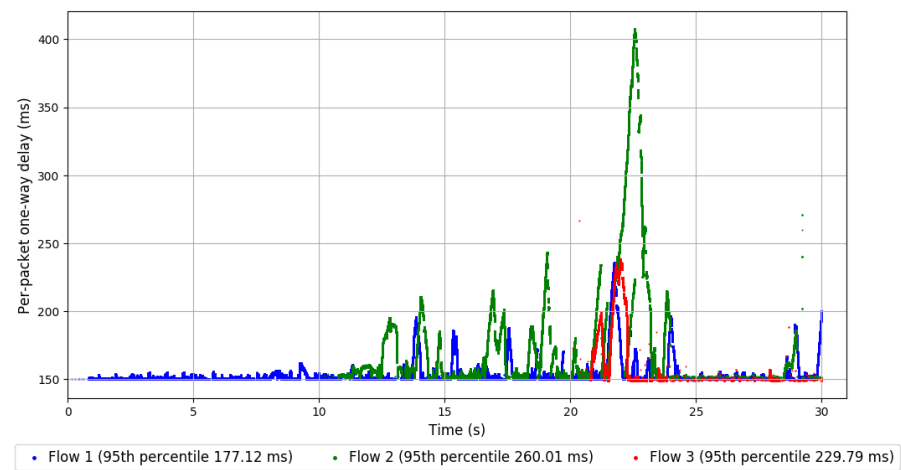
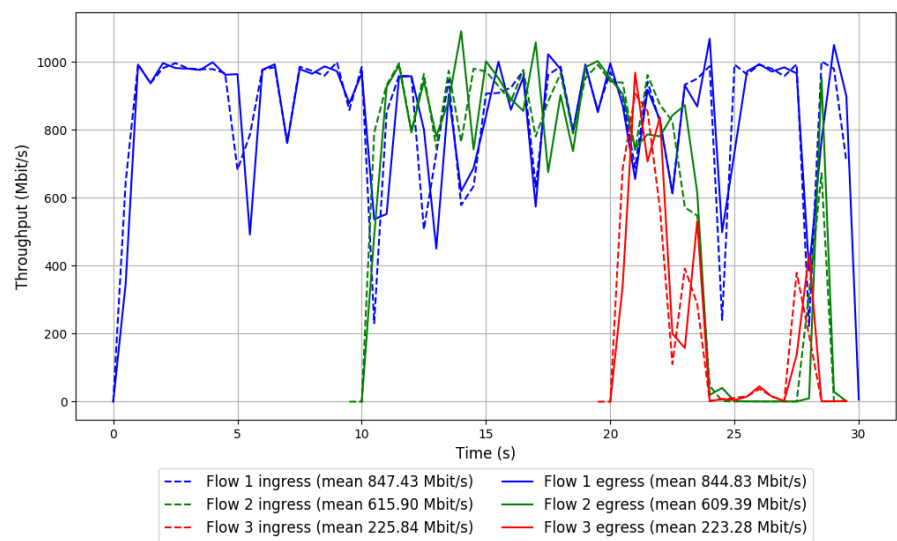


```
Run 1: Statistics of FillP

Start at: 2018-01-18 05:14:56
End at: 2018-01-18 05:15:26

# Below is generated by plot.py at 2018-01-18 11:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1325.19 Mbit/s
95th percentile per-packet one-way delay: 209.644 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 844.83 Mbit/s
95th percentile per-packet one-way delay: 177.125 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 609.39 Mbit/s
95th percentile per-packet one-way delay: 260.015 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 223.28 Mbit/s
95th percentile per-packet one-way delay: 229.793 ms
Loss rate: 1.36%
```

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-18 05:35:01

End at: 2018-01-18 05:35:31

Below is generated by plot.py at 2018-01-18 11:00:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 1250.34 Mbit/s

95th percentile per-packet one-way delay: 200.602 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 832.45 Mbit/s

95th percentile per-packet one-way delay: 196.493 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 511.21 Mbit/s

95th percentile per-packet one-way delay: 211.223 ms

Loss rate: 0.95%

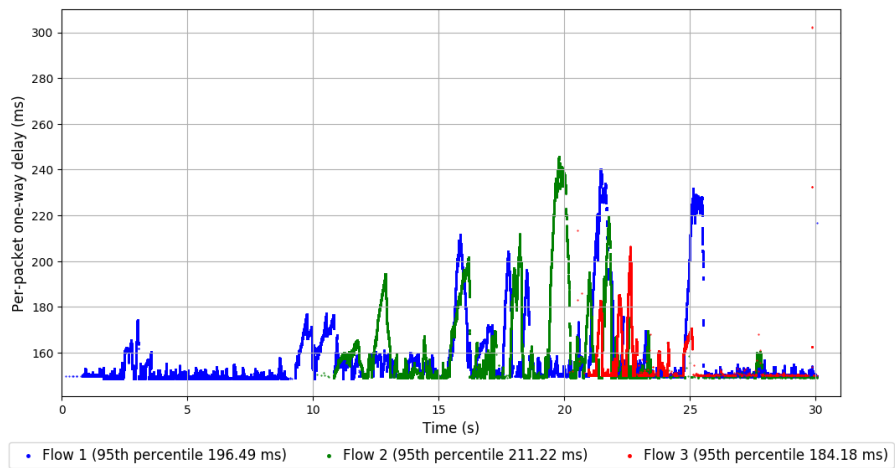
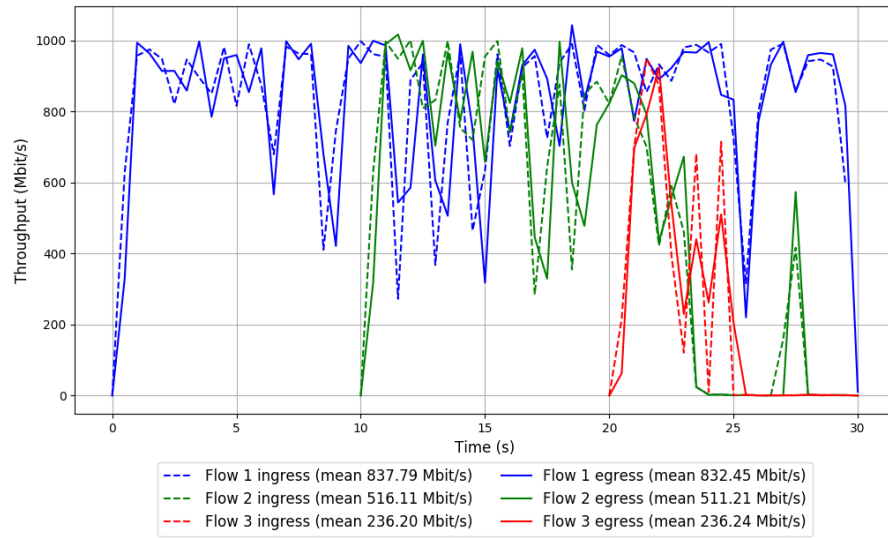
-- Flow 3:

Average throughput: 236.24 Mbit/s

95th percentile per-packet one-way delay: 184.175 ms

Loss rate: 0.00%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-18 05:54:45

End at: 2018-01-18 05:55:15

Below is generated by plot.py at 2018-01-18 11:00:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 906.68 Mbit/s

95th percentile per-packet one-way delay: 165.273 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 622.46 Mbit/s

95th percentile per-packet one-way delay: 153.791 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 321.04 Mbit/s

95th percentile per-packet one-way delay: 171.750 ms

Loss rate: 0.00%

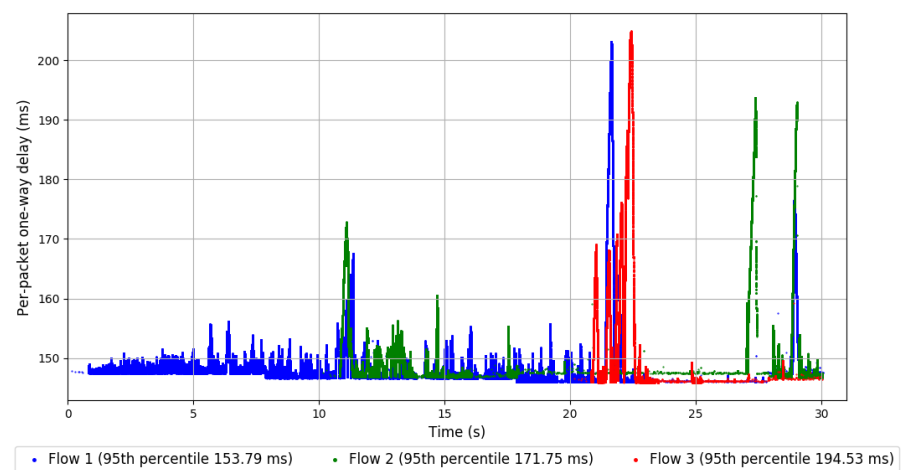
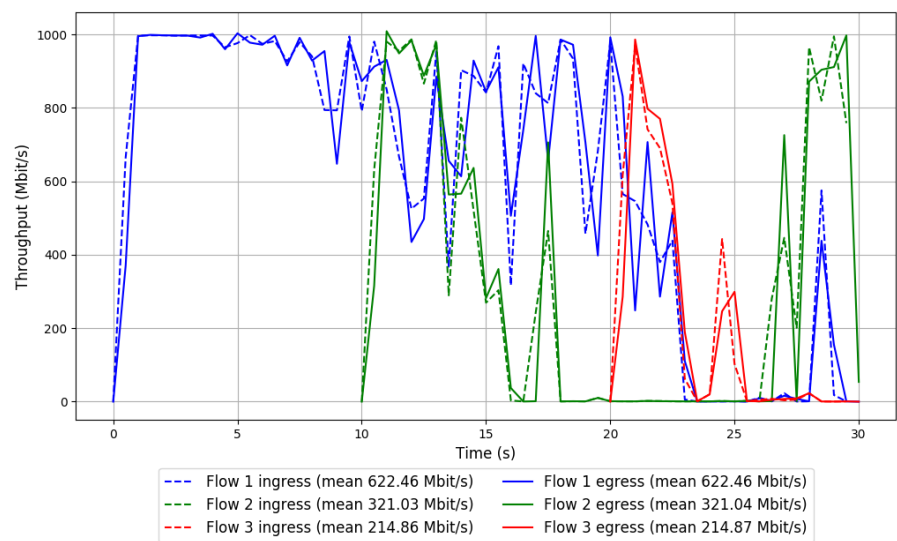
-- Flow 3:

Average throughput: 214.87 Mbit/s

95th percentile per-packet one-way delay: 194.531 ms

Loss rate: 0.00%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-18 06:14:17

End at: 2018-01-18 06:14:47

Below is generated by plot.py at 2018-01-18 11:01:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 1331.99 Mbit/s

95th percentile per-packet one-way delay: 286.599 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 625.02 Mbit/s

95th percentile per-packet one-way delay: 167.764 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 714.27 Mbit/s

95th percentile per-packet one-way delay: 292.518 ms

Loss rate: 0.59%

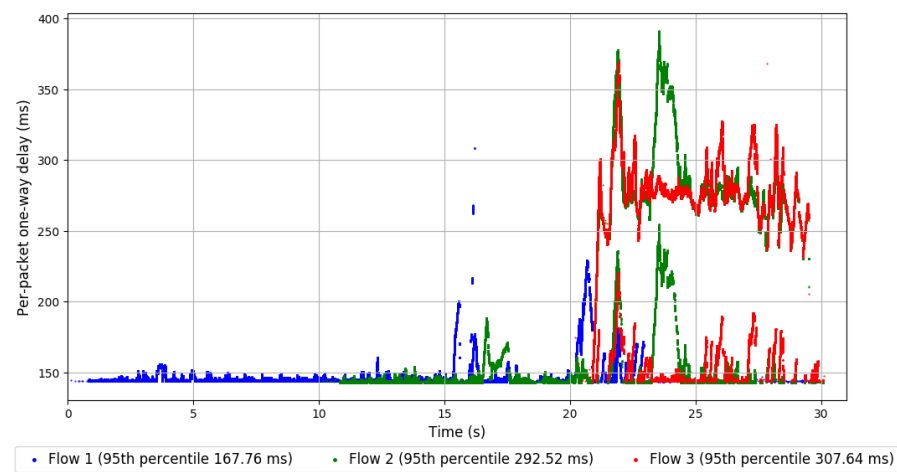
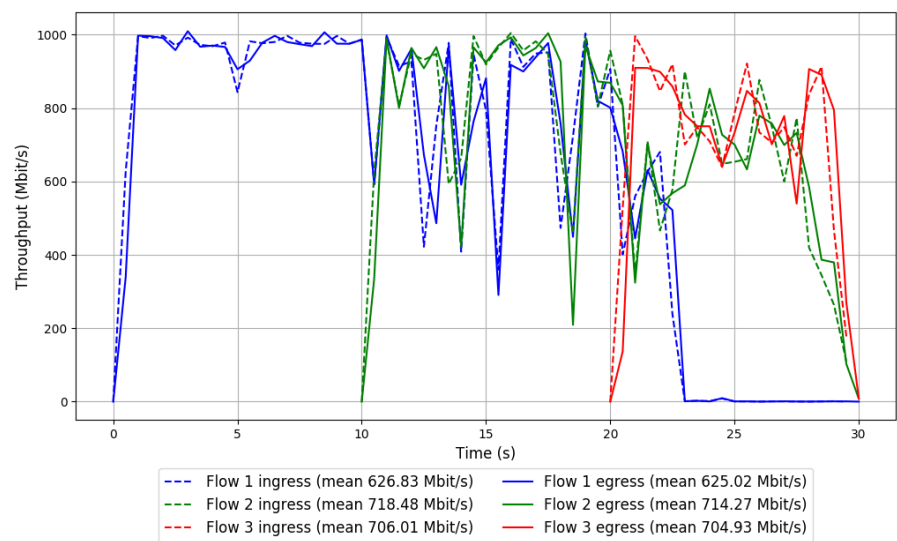
-- Flow 3:

Average throughput: 704.93 Mbit/s

95th percentile per-packet one-way delay: 307.639 ms

Loss rate: 0.43%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-18 06:34:04

End at: 2018-01-18 06:34:34

Below is generated by plot.py at 2018-01-18 11:02:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 1355.74 Mbit/s

95th percentile per-packet one-way delay: 232.750 ms

Loss rate: 7.82%

-- Flow 1:

Average throughput: 694.93 Mbit/s

95th percentile per-packet one-way delay: 230.247 ms

Loss rate: 7.59%

-- Flow 2:

Average throughput: 610.41 Mbit/s

95th percentile per-packet one-way delay: 235.282 ms

Loss rate: 8.87%

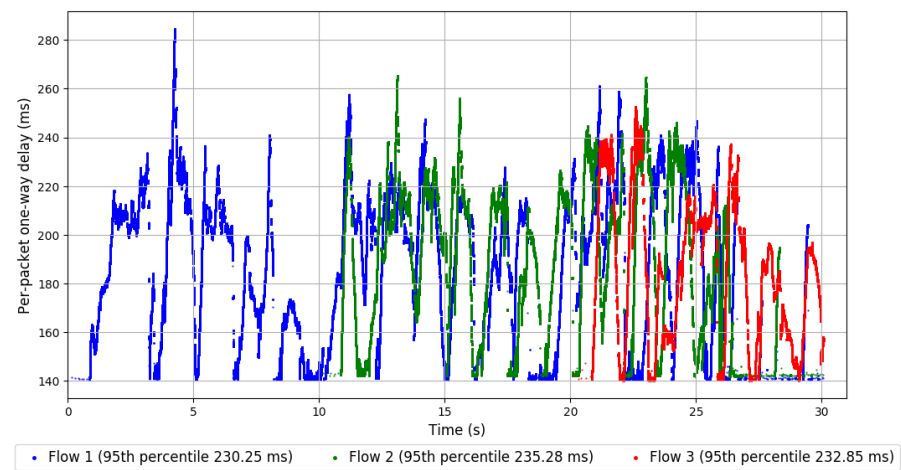
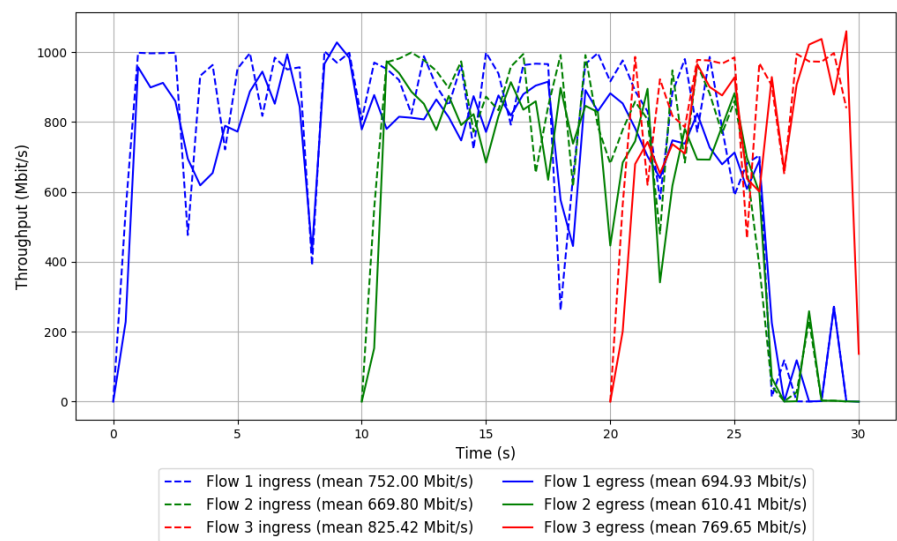
-- Flow 3:

Average throughput: 769.65 Mbit/s

95th percentile per-packet one-way delay: 232.851 ms

Loss rate: 6.76%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-18 06:53:43

End at: 2018-01-18 06:54:13

Below is generated by plot.py at 2018-01-18 11:02:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 1162.02 Mbit/s

95th percentile per-packet one-way delay: 270.489 ms

Loss rate: 13.07%

-- Flow 1:

Average throughput: 708.83 Mbit/s

95th percentile per-packet one-way delay: 275.587 ms

Loss rate: 11.14%

-- Flow 2:

Average throughput: 490.55 Mbit/s

95th percentile per-packet one-way delay: 268.334 ms

Loss rate: 17.03%

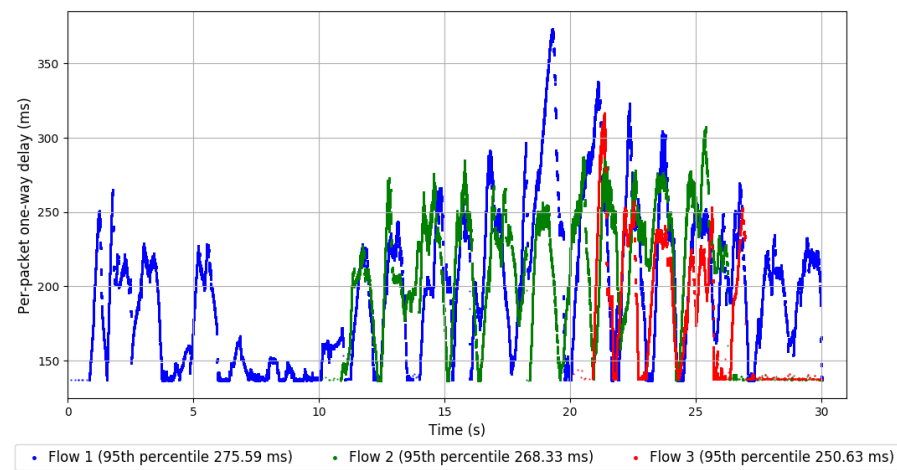
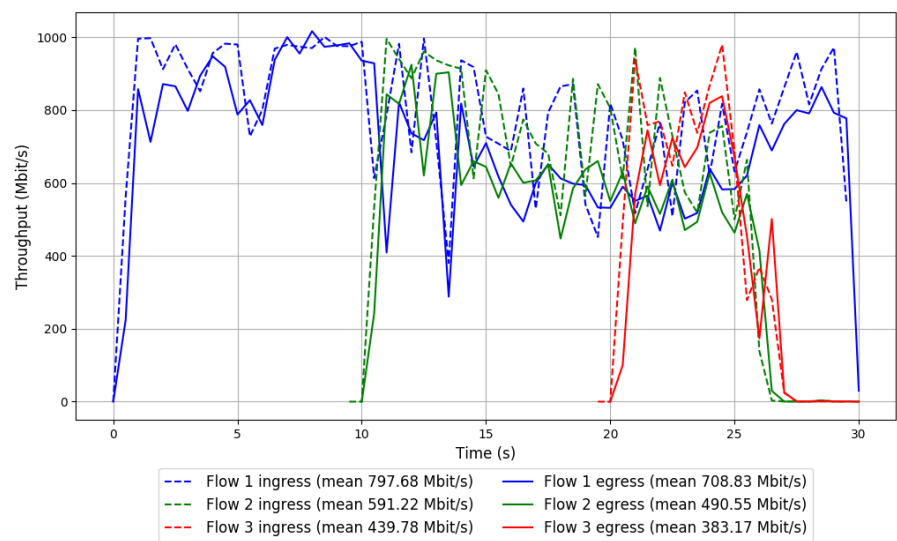
-- Flow 3:

Average throughput: 383.17 Mbit/s

95th percentile per-packet one-way delay: 250.633 ms

Loss rate: 12.90%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-18 07:13:24

End at: 2018-01-18 07:13:54

Below is generated by plot.py at 2018-01-18 11:02:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 1173.13 Mbit/s

95th percentile per-packet one-way delay: 366.215 ms

Loss rate: 18.71%

-- Flow 1:

Average throughput: 614.60 Mbit/s

95th percentile per-packet one-way delay: 375.174 ms

Loss rate: 17.01%

-- Flow 2:

Average throughput: 560.88 Mbit/s

95th percentile per-packet one-way delay: 270.404 ms

Loss rate: 20.58%

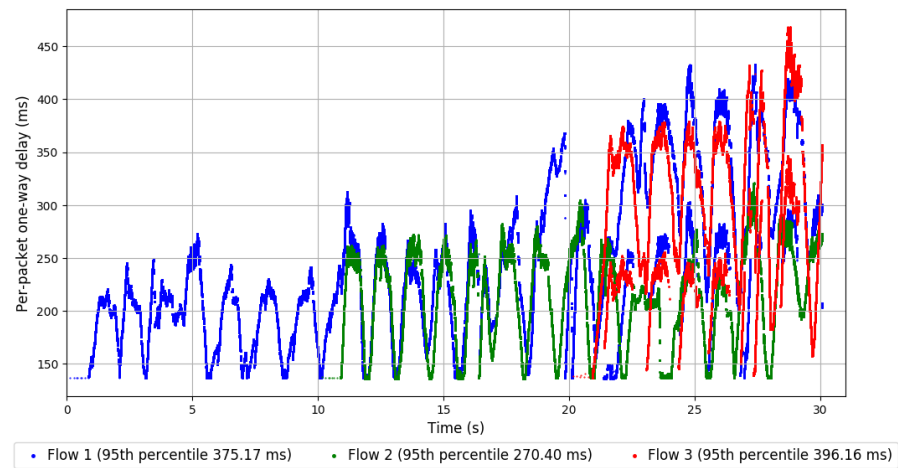
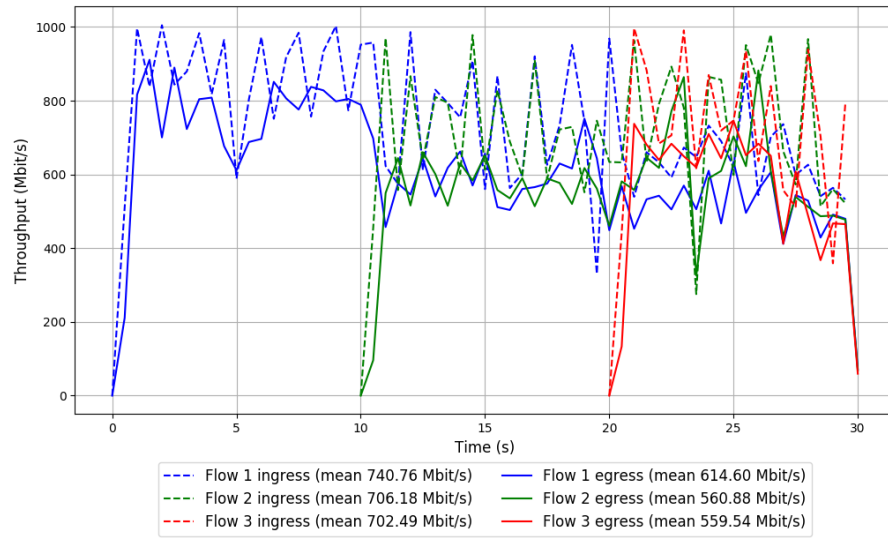
-- Flow 3:

Average throughput: 559.54 Mbit/s

95th percentile per-packet one-way delay: 396.164 ms

Loss rate: 20.35%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-18 07:33:24

End at: 2018-01-18 07:33:54

Below is generated by plot.py at 2018-01-18 11:02:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 707.78 Mbit/s

95th percentile per-packet one-way delay: 301.158 ms

Loss rate: 17.73%

-- Flow 1:

Average throughput: 187.21 Mbit/s

95th percentile per-packet one-way delay: 303.176 ms

Loss rate: 15.42%

-- Flow 2:

Average throughput: 555.26 Mbit/s

95th percentile per-packet one-way delay: 313.010 ms

Loss rate: 21.24%

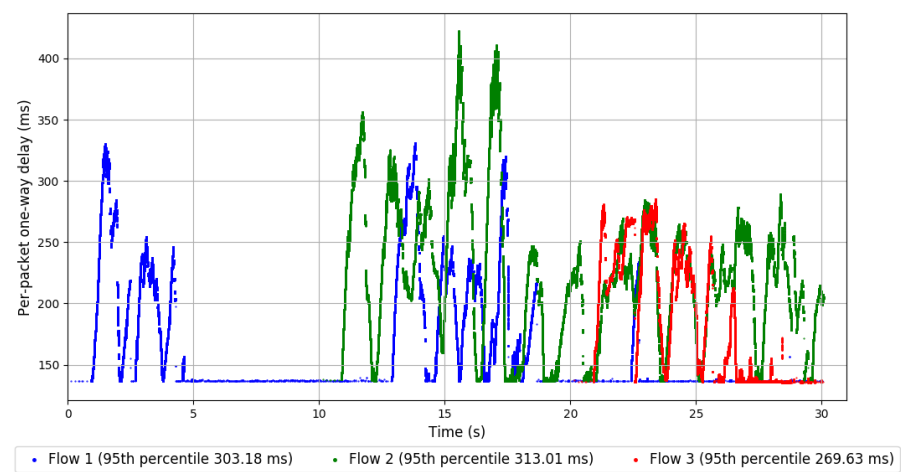
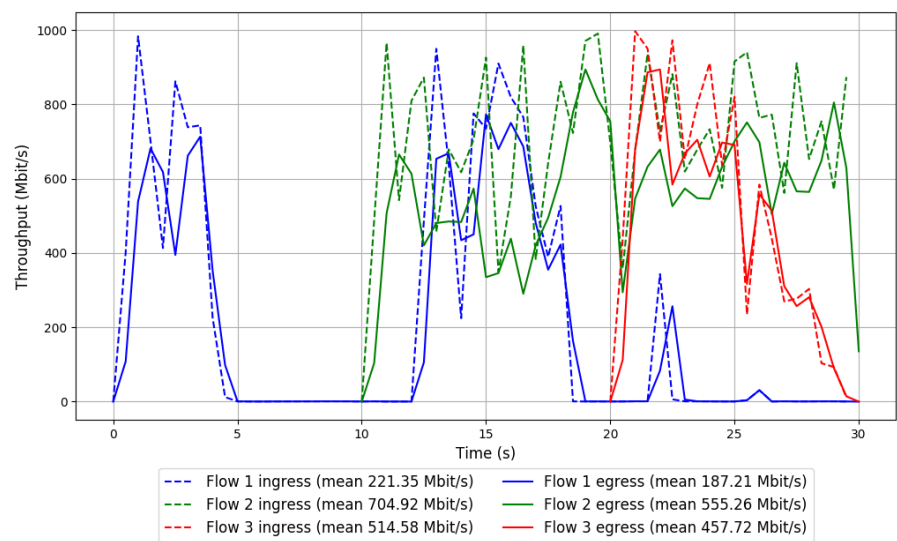
-- Flow 3:

Average throughput: 457.72 Mbit/s

95th percentile per-packet one-way delay: 269.633 ms

Loss rate: 11.06%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-18 07:52:32

End at: 2018-01-18 07:53:02

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 1615.86 Mbit/s

95th percentile per-packet one-way delay: 230.744 ms

Loss rate: 3.65%

-- Flow 1:

Average throughput: 834.89 Mbit/s

95th percentile per-packet one-way delay: 217.344 ms

Loss rate: 3.11%

-- Flow 2:

Average throughput: 834.35 Mbit/s

95th percentile per-packet one-way delay: 216.045 ms

Loss rate: 3.89%

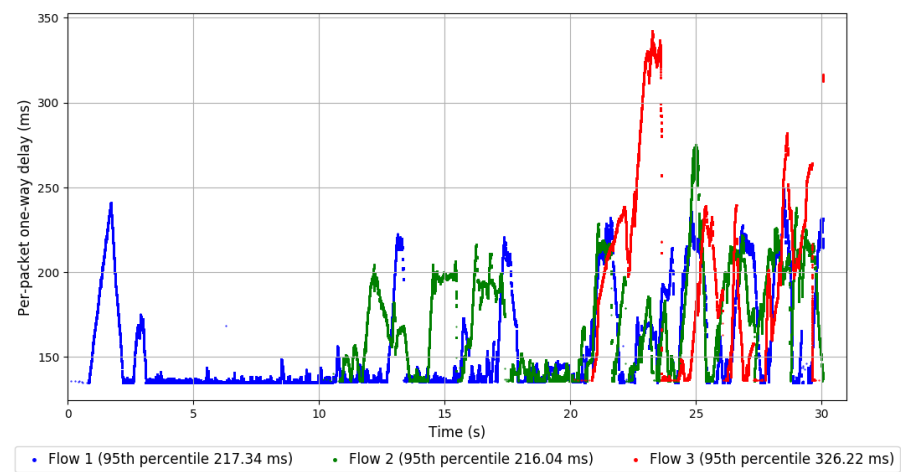
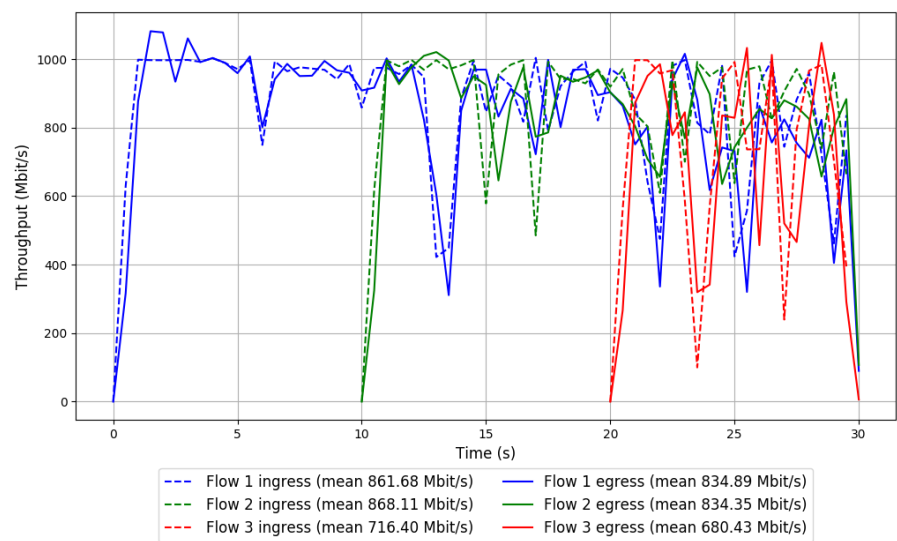
-- Flow 3:

Average throughput: 680.43 Mbit/s

95th percentile per-packet one-way delay: 326.220 ms

Loss rate: 5.02%

Run 9: Report of FillP — Data Link

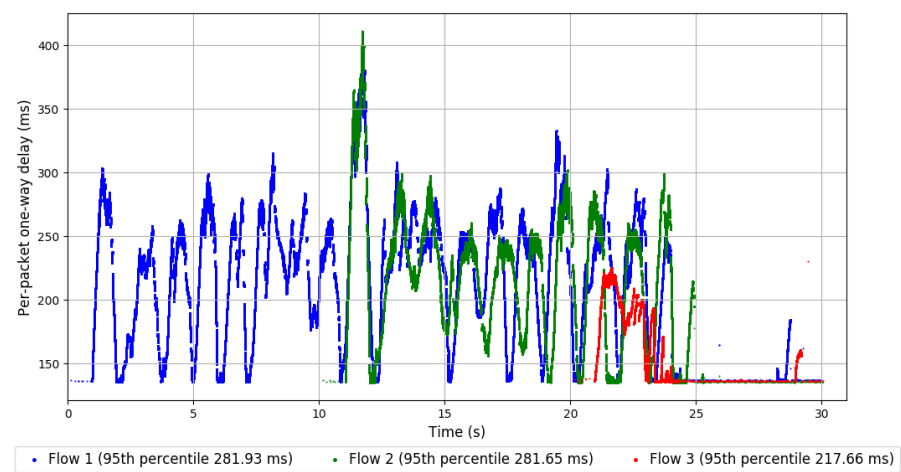
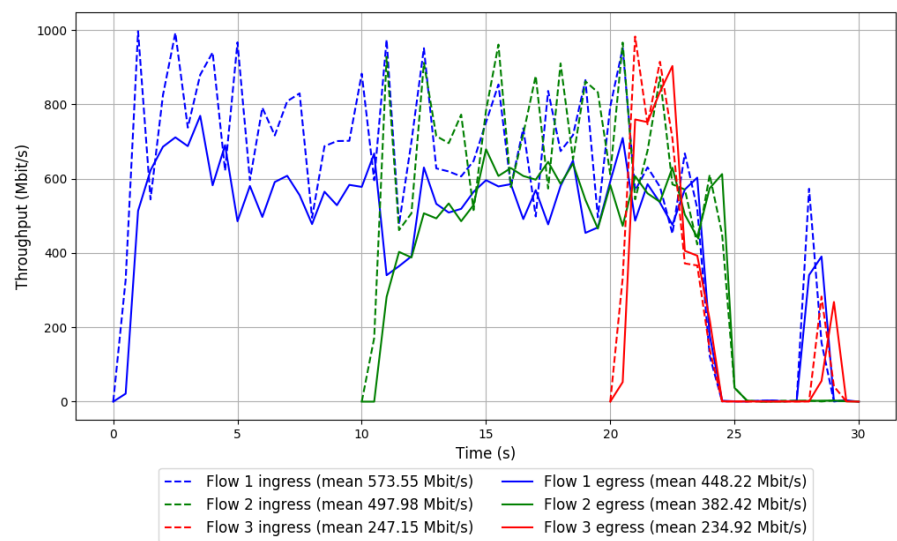


```
Run 10: Statistics of FillP

Start at: 2018-01-18 08:12:26
End at: 2018-01-18 08:12:56

# Below is generated by plot.py at 2018-01-18 11:25:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 779.43 Mbit/s
95th percentile per-packet one-way delay: 279.569 ms
Loss rate: 20.91%
-- Flow 1:
Average throughput: 448.22 Mbit/s
95th percentile per-packet one-way delay: 281.927 ms
Loss rate: 21.85%
-- Flow 2:
Average throughput: 382.42 Mbit/s
95th percentile per-packet one-way delay: 281.649 ms
Loss rate: 23.21%
-- Flow 3:
Average throughput: 234.92 Mbit/s
95th percentile per-packet one-way delay: 217.661 ms
Loss rate: 4.96%
```

Run 10: Report of FillP — Data Link

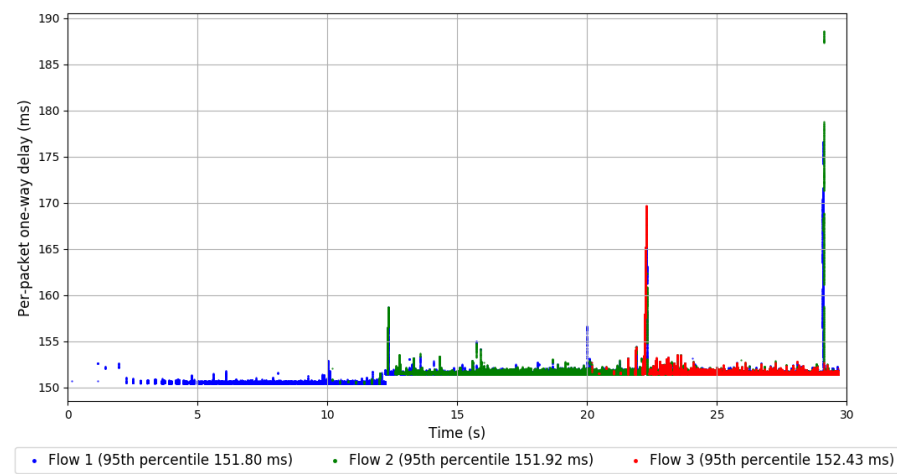
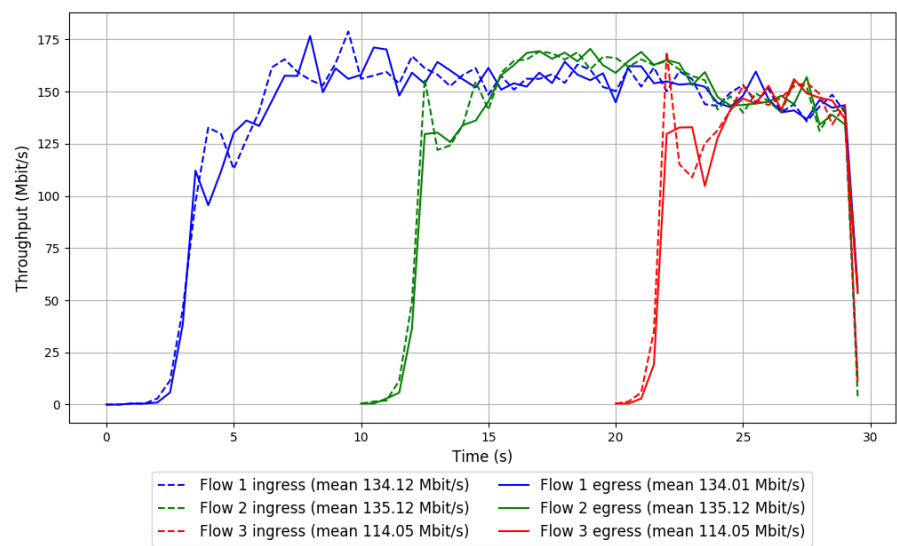


```
Run 1: Statistics of Indigo

Start at: 2018-01-18 05:11:30
End at: 2018-01-18 05:12:00

# Below is generated by plot.py at 2018-01-18 11:25:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 259.88 Mbit/s
95th percentile per-packet one-way delay: 151.899 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 134.01 Mbit/s
95th percentile per-packet one-way delay: 151.801 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 135.12 Mbit/s
95th percentile per-packet one-way delay: 151.920 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 114.05 Mbit/s
95th percentile per-packet one-way delay: 152.429 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

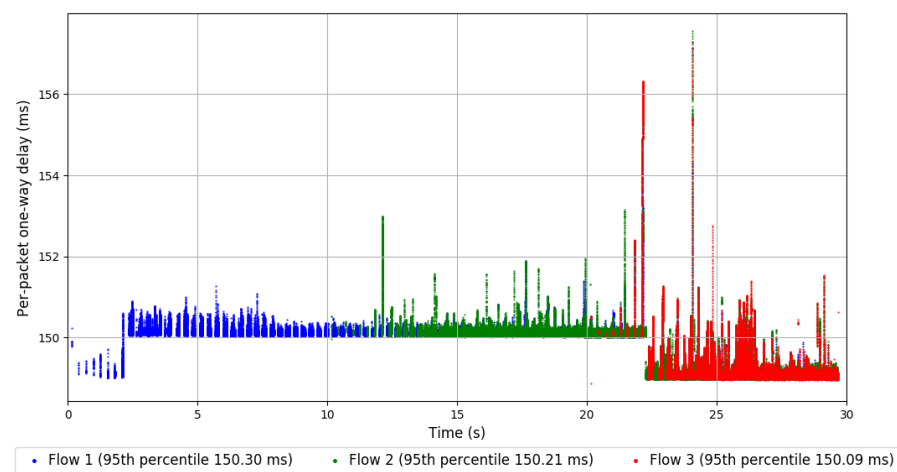
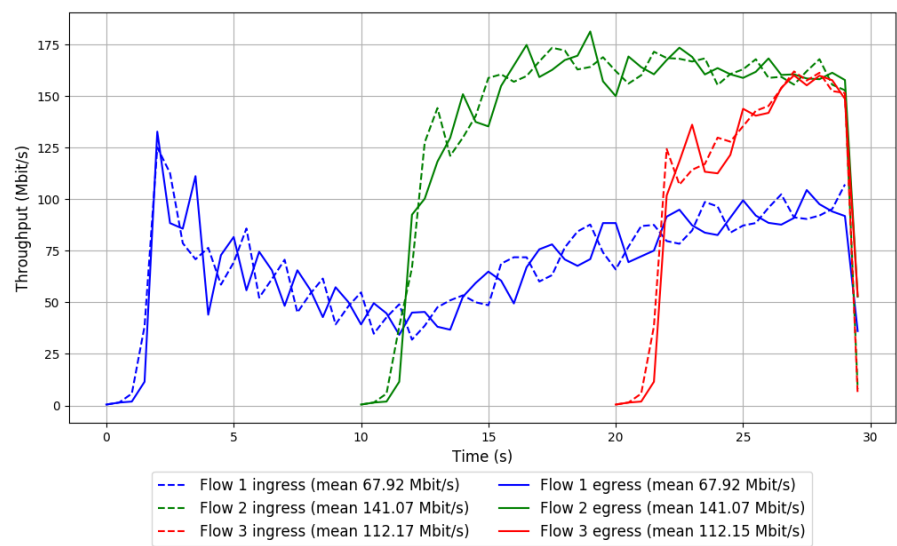


```
Run 2: Statistics of Indigo

Start at: 2018-01-18 05:31:40
End at: 2018-01-18 05:32:10

# Below is generated by plot.py at 2018-01-18 11:25:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 197.24 Mbit/s
95th percentile per-packet one-way delay: 150.243 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.92 Mbit/s
95th percentile per-packet one-way delay: 150.303 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 141.07 Mbit/s
95th percentile per-packet one-way delay: 150.213 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 112.15 Mbit/s
95th percentile per-packet one-way delay: 150.095 ms
Loss rate: 0.00%
```


Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-18 05:51:18

End at: 2018-01-18 05:51:48

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 269.03 Mbit/s

95th percentile per-packet one-way delay: 147.741 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 140.41 Mbit/s

95th percentile per-packet one-way delay: 148.405 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 138.55 Mbit/s

95th percentile per-packet one-way delay: 147.369 ms

Loss rate: 0.00%

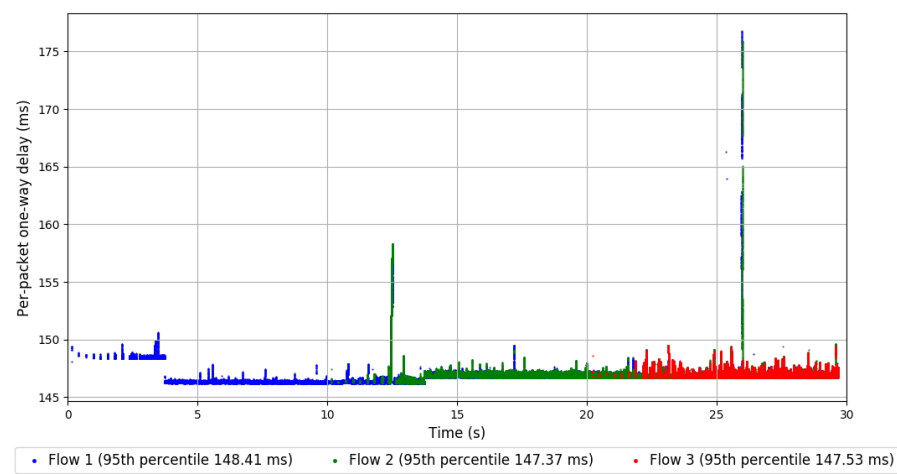
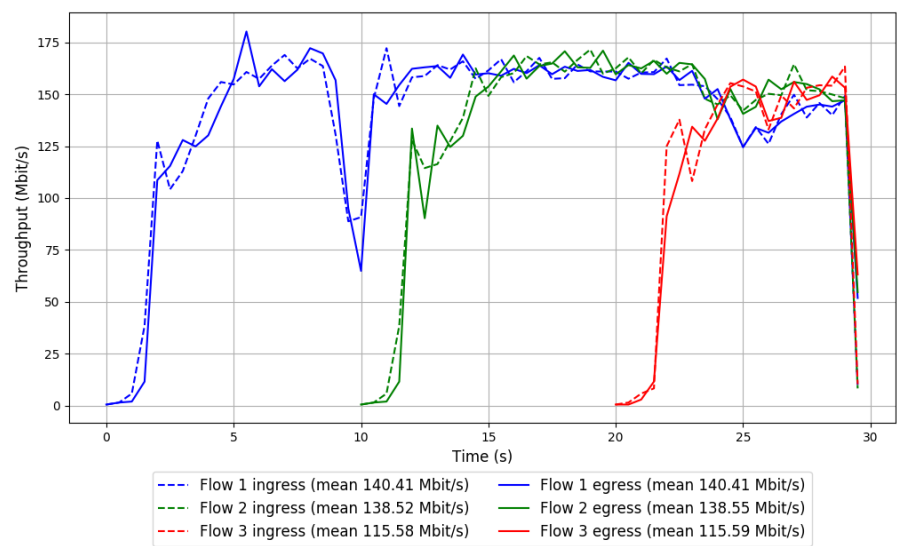
-- Flow 3:

Average throughput: 115.59 Mbit/s

95th percentile per-packet one-way delay: 147.535 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-18 06:10:44

End at: 2018-01-18 06:11:14

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.27 Mbit/s

95th percentile per-packet one-way delay: 145.366 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 145.22 Mbit/s

95th percentile per-packet one-way delay: 145.240 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 138.54 Mbit/s

95th percentile per-packet one-way delay: 145.463 ms

Loss rate: 0.01%

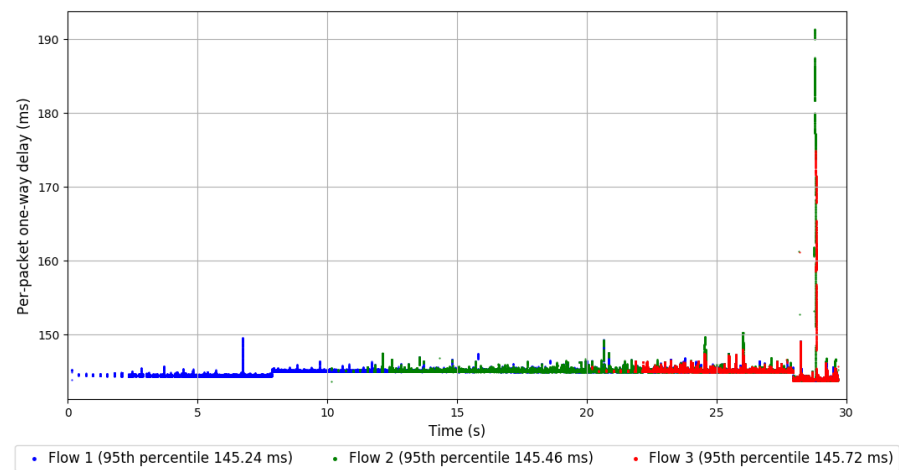
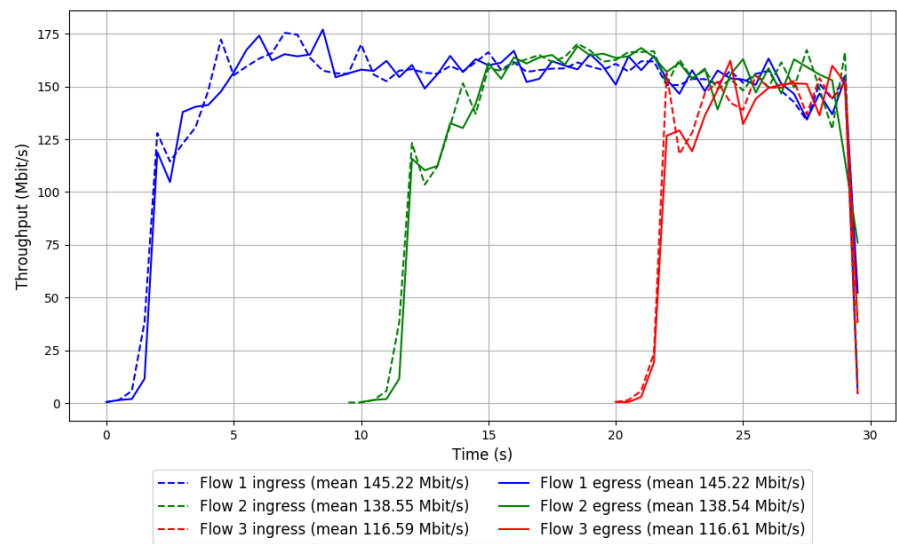
-- Flow 3:

Average throughput: 116.61 Mbit/s

95th percentile per-packet one-way delay: 145.722 ms

Loss rate: 0.02%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-18 06:30:38

End at: 2018-01-18 06:31:08

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 267.33 Mbit/s

95th percentile per-packet one-way delay: 142.999 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 142.53 Mbit/s

95th percentile per-packet one-way delay: 142.817 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 137.28 Mbit/s

95th percentile per-packet one-way delay: 143.349 ms

Loss rate: 0.01%

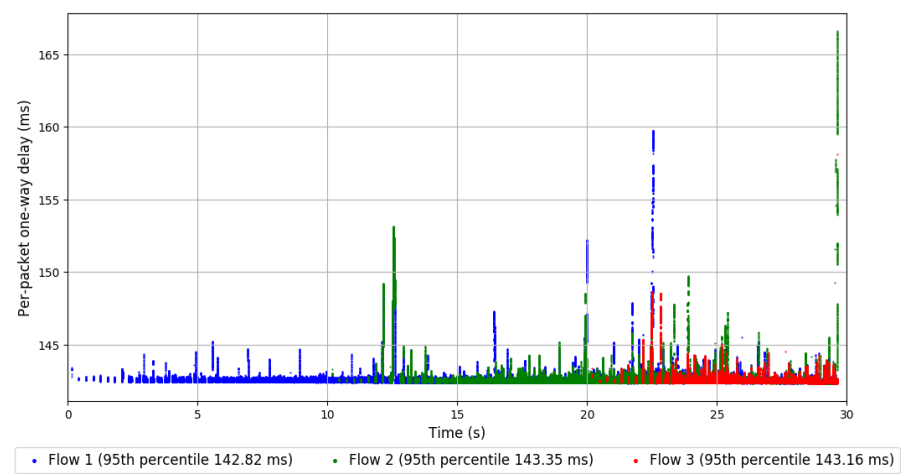
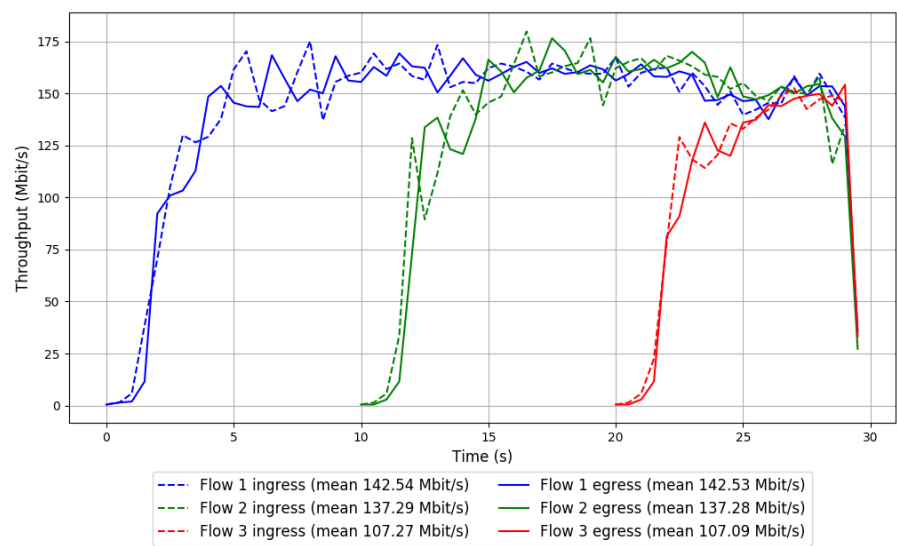
-- Flow 3:

Average throughput: 107.09 Mbit/s

95th percentile per-packet one-way delay: 143.164 ms

Loss rate: 0.10%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-18 06:50:30

End at: 2018-01-18 06:51:00

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.54 Mbit/s

95th percentile per-packet one-way delay: 138.412 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 148.48 Mbit/s

95th percentile per-packet one-way delay: 138.164 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 134.47 Mbit/s

95th percentile per-packet one-way delay: 138.438 ms

Loss rate: 0.29%

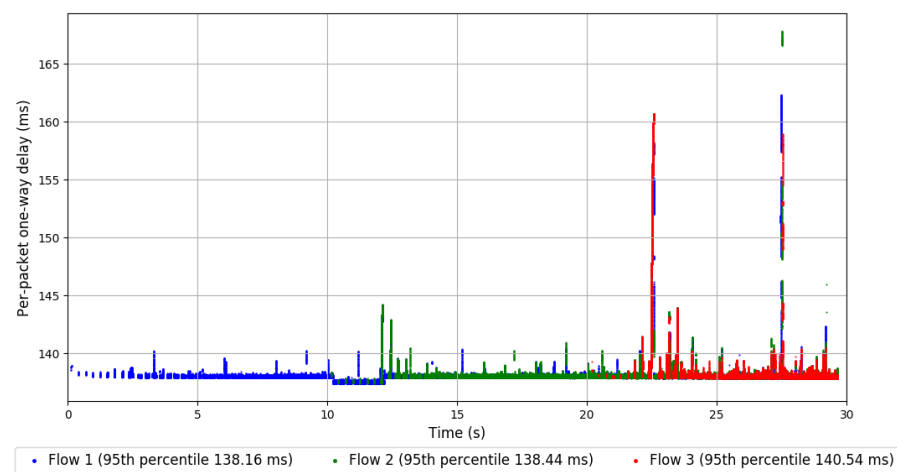
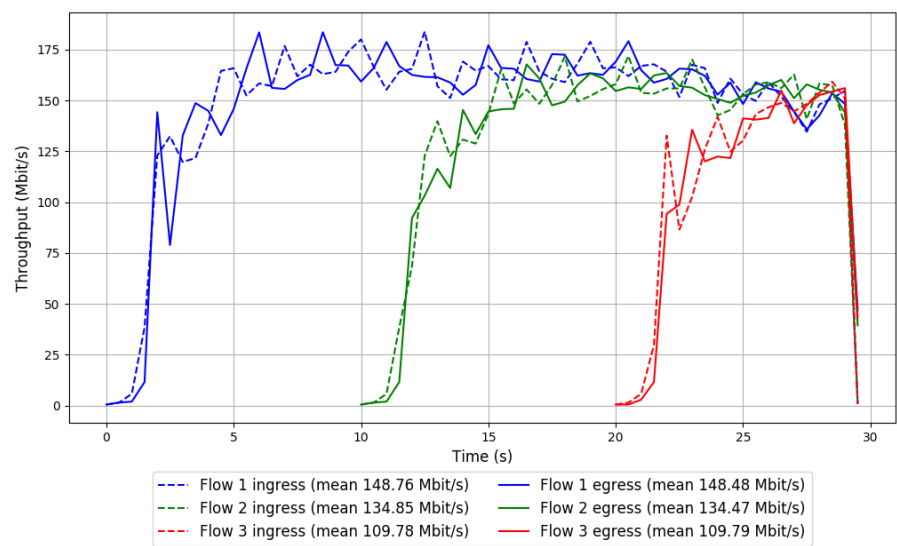
-- Flow 3:

Average throughput: 109.79 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-18 07:09:53

End at: 2018-01-18 07:10:23

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.36 Mbit/s

95th percentile per-packet one-way delay: 140.500 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 146.94 Mbit/s

95th percentile per-packet one-way delay: 139.143 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 139.53 Mbit/s

95th percentile per-packet one-way delay: 141.335 ms

Loss rate: 0.01%

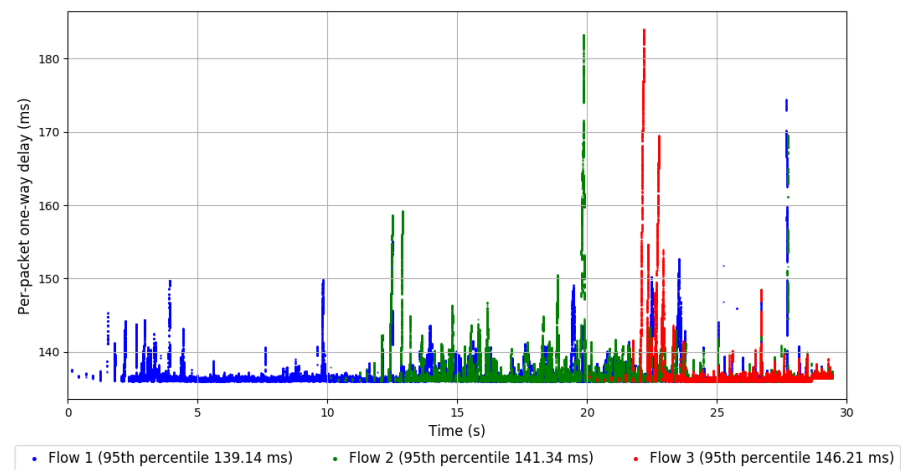
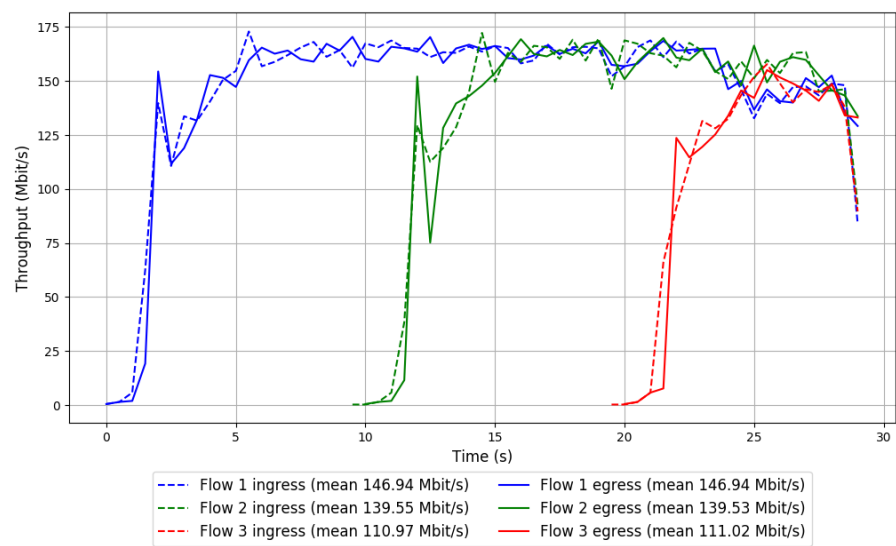
-- Flow 3:

Average throughput: 111.02 Mbit/s

95th percentile per-packet one-way delay: 146.212 ms

Loss rate: 0.00%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-18 07:30:00

End at: 2018-01-18 07:30:30

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 225.57 Mbit/s

95th percentile per-packet one-way delay: 140.190 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 111.44 Mbit/s

95th percentile per-packet one-way delay: 139.219 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 138.21 Mbit/s

95th percentile per-packet one-way delay: 139.651 ms

Loss rate: 0.26%

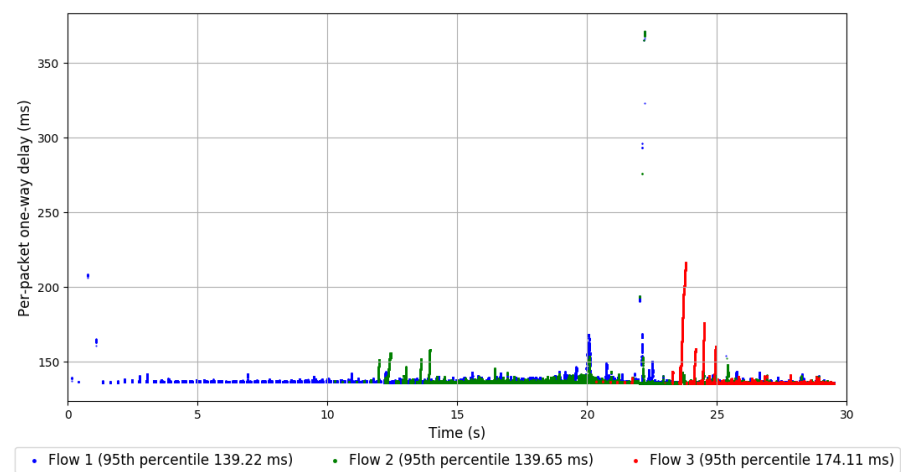
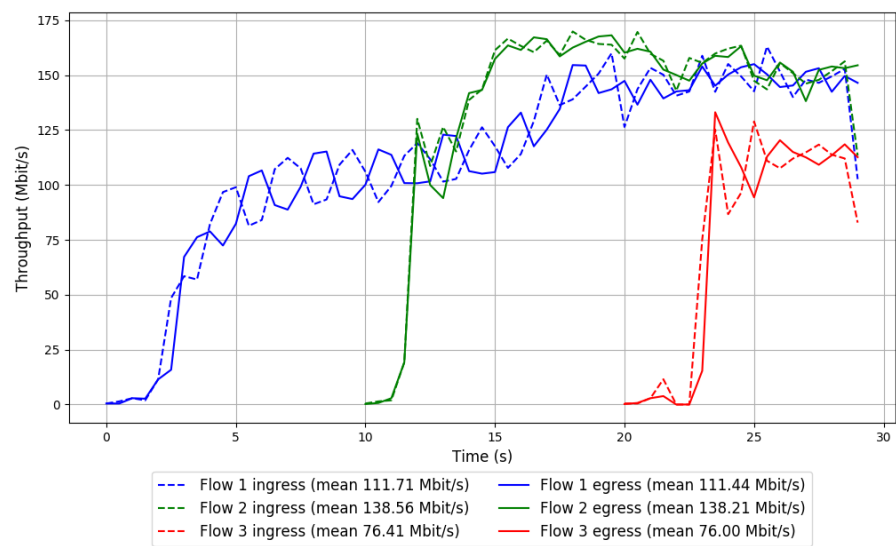
-- Flow 3:

Average throughput: 76.00 Mbit/s

95th percentile per-packet one-way delay: 174.113 ms

Loss rate: 0.55%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-18 07:49:11

End at: 2018-01-18 07:49:41

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 256.09 Mbit/s

95th percentile per-packet one-way delay: 150.022 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 135.37 Mbit/s

95th percentile per-packet one-way delay: 147.679 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 134.53 Mbit/s

95th percentile per-packet one-way delay: 146.713 ms

Loss rate: 0.02%

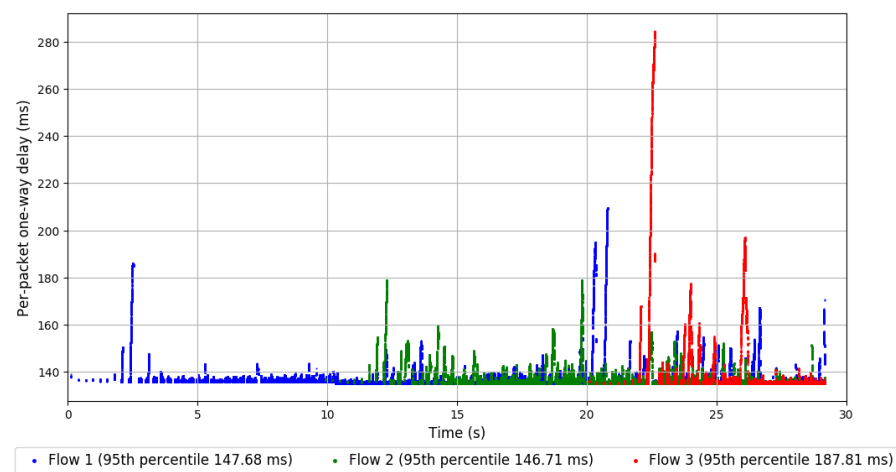
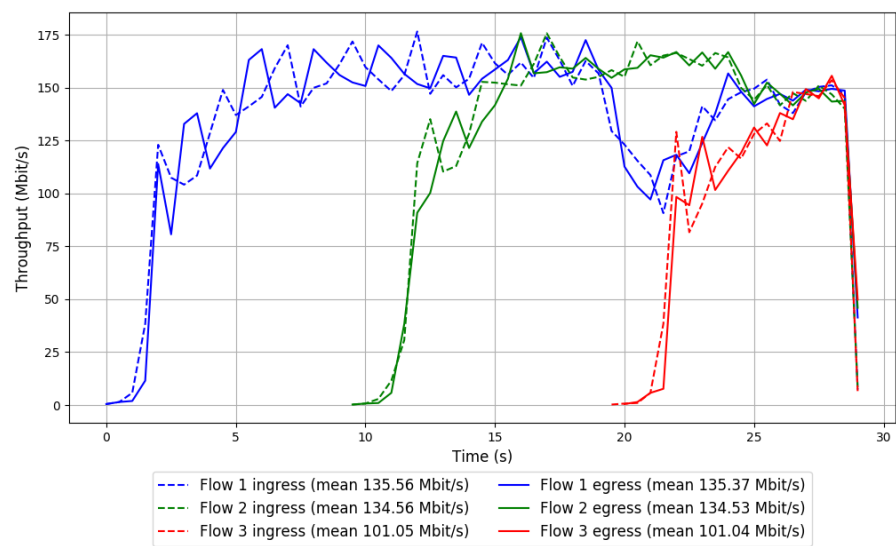
-- Flow 3:

Average throughput: 101.04 Mbit/s

95th percentile per-packet one-way delay: 187.814 ms

Loss rate: 0.01%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-18 08:09:01

End at: 2018-01-18 08:09:31

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.22 Mbit/s

95th percentile per-packet one-way delay: 149.413 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 135.48 Mbit/s

95th percentile per-packet one-way delay: 148.340 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 130.13 Mbit/s

95th percentile per-packet one-way delay: 149.783 ms

Loss rate: 0.01%

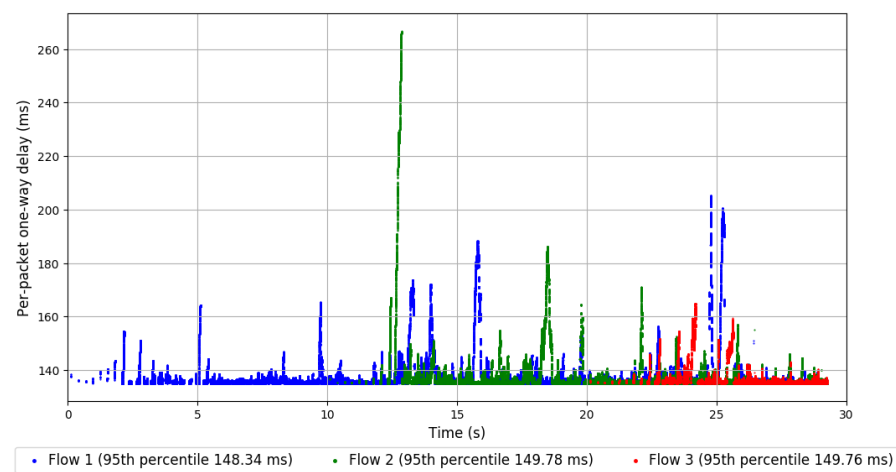
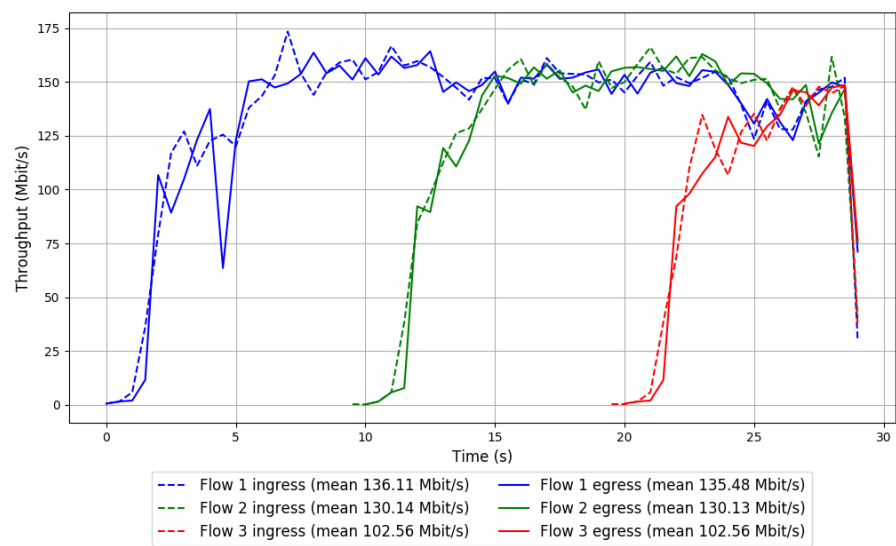
-- Flow 3:

Average throughput: 102.56 Mbit/s

95th percentile per-packet one-way delay: 149.759 ms

Loss rate: 0.00%

Run 10: Report of Indigo — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-01-18 05:19:28

End at: 2018-01-18 05:19:58

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 279.88 Mbit/s

95th percentile per-packet one-way delay: 151.227 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 182.36 Mbit/s

95th percentile per-packet one-way delay: 150.918 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 106.15 Mbit/s

95th percentile per-packet one-way delay: 150.824 ms

Loss rate: 0.01%

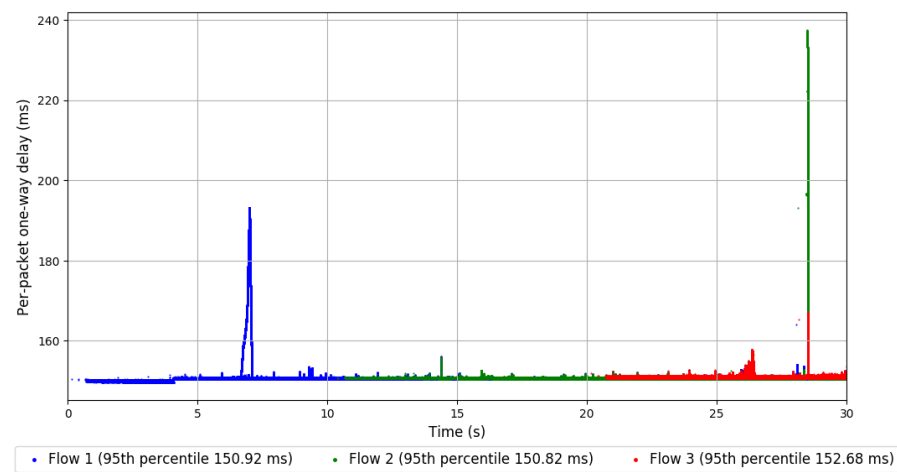
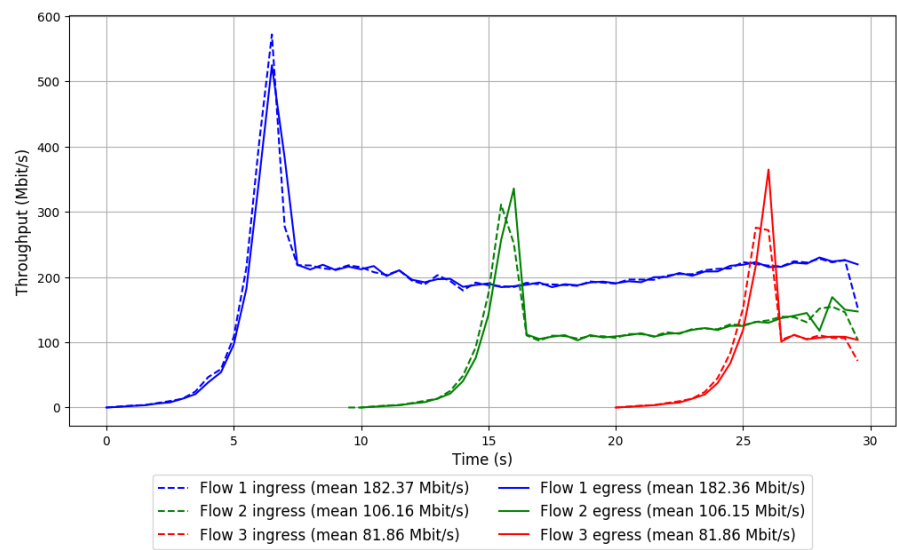
-- Flow 3:

Average throughput: 81.86 Mbit/s

95th percentile per-packet one-way delay: 152.679 ms

Loss rate: 0.00%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-01-18 05:39:24

End at: 2018-01-18 05:39:54

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 228.81 Mbit/s

95th percentile per-packet one-way delay: 149.478 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.45 Mbit/s

95th percentile per-packet one-way delay: 149.451 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 146.41 Mbit/s

95th percentile per-packet one-way delay: 149.472 ms

Loss rate: 0.00%

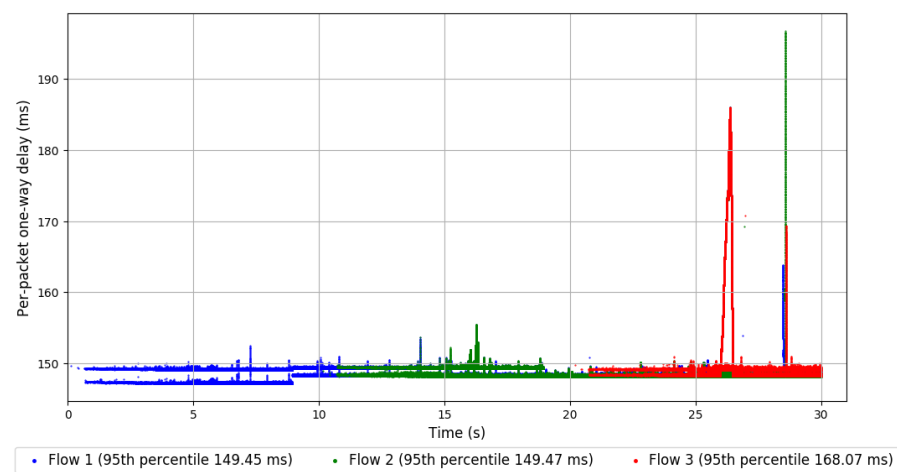
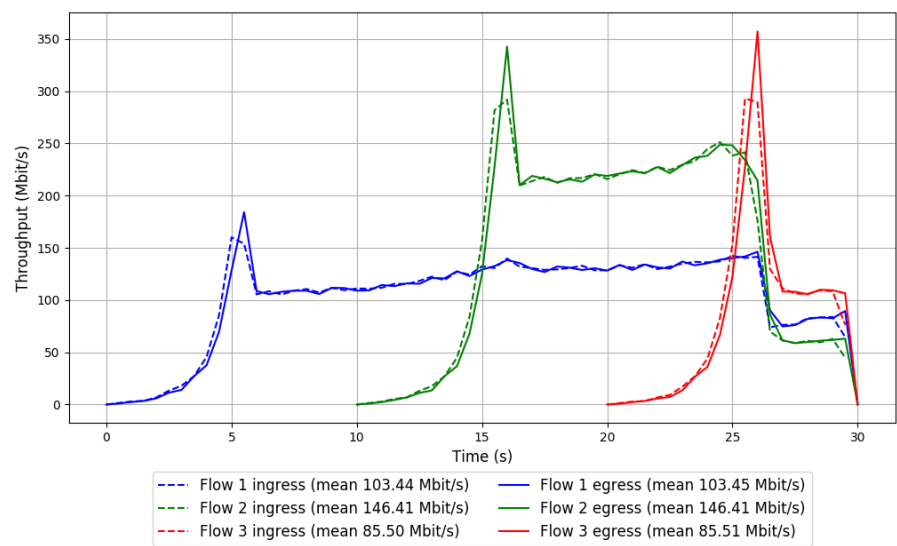
-- Flow 3:

Average throughput: 85.51 Mbit/s

95th percentile per-packet one-way delay: 168.069 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-01-18 05:58:59

End at: 2018-01-18 05:59:29

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 249.31 Mbit/s

95th percentile per-packet one-way delay: 146.998 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 127.15 Mbit/s

95th percentile per-packet one-way delay: 146.985 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 139.32 Mbit/s

95th percentile per-packet one-way delay: 146.859 ms

Loss rate: 0.00%

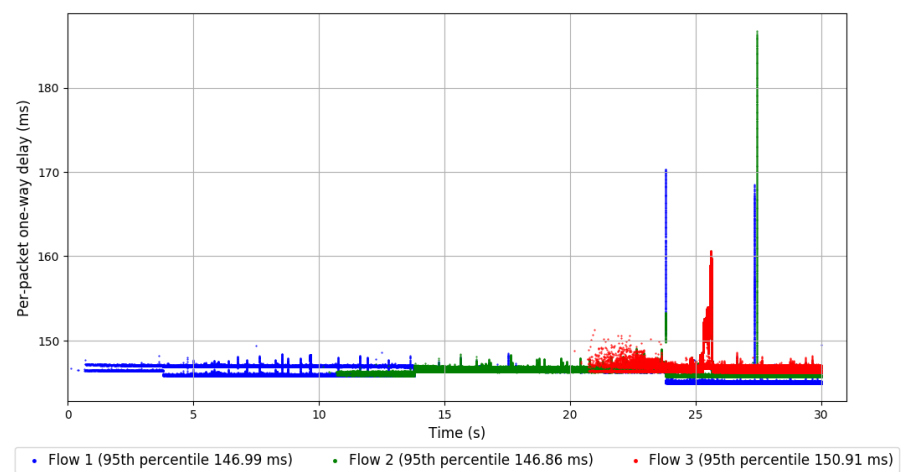
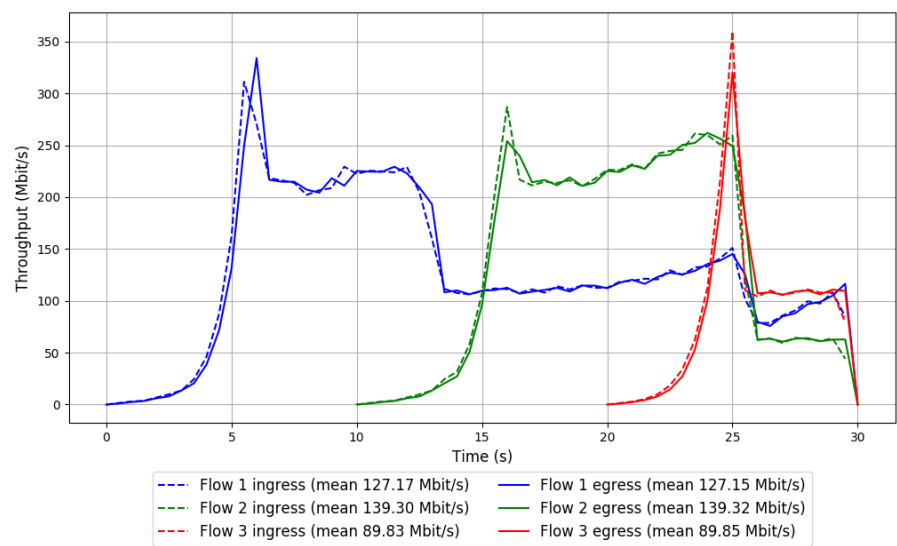
-- Flow 3:

Average throughput: 89.85 Mbit/s

95th percentile per-packet one-way delay: 150.907 ms

Loss rate: 0.03%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-01-18 06:18:45

End at: 2018-01-18 06:19:15

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.94 Mbit/s

95th percentile per-packet one-way delay: 144.367 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 141.46 Mbit/s

95th percentile per-packet one-way delay: 144.325 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 107.51 Mbit/s

95th percentile per-packet one-way delay: 144.369 ms

Loss rate: 0.00%

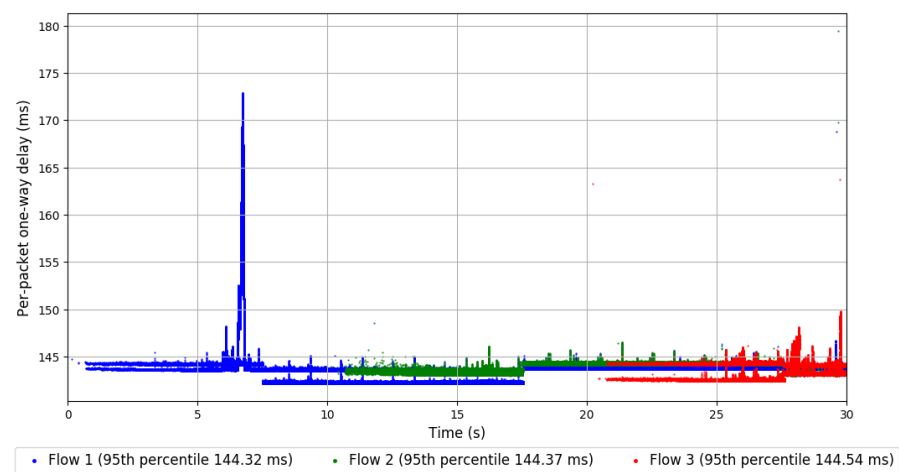
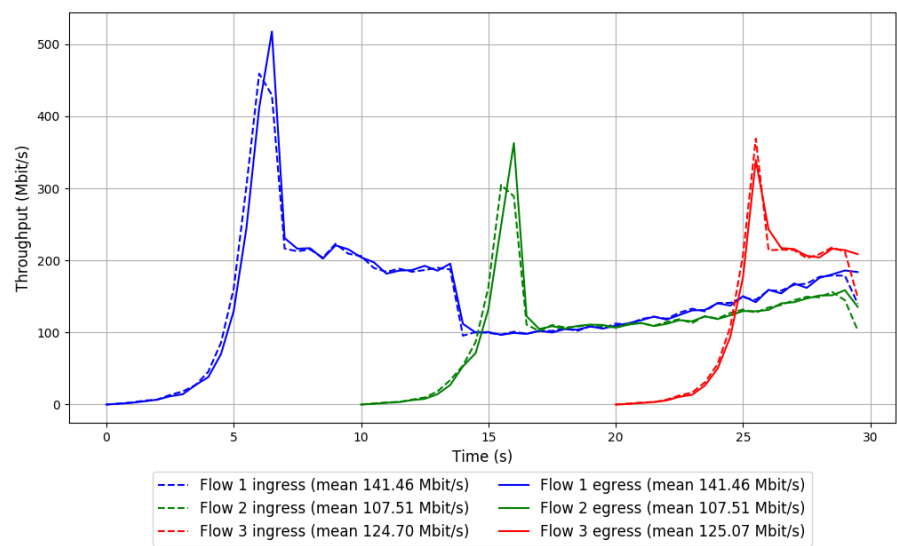
-- Flow 3:

Average throughput: 125.07 Mbit/s

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

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-01-18 06:38:46

End at: 2018-01-18 06:39:16

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 263.34 Mbit/s

95th percentile per-packet one-way delay: 212.598 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 170.14 Mbit/s

95th percentile per-packet one-way delay: 203.600 ms

Loss rate: 1.22%

-- Flow 2:

Average throughput: 107.88 Mbit/s

95th percentile per-packet one-way delay: 236.037 ms

Loss rate: 0.03%

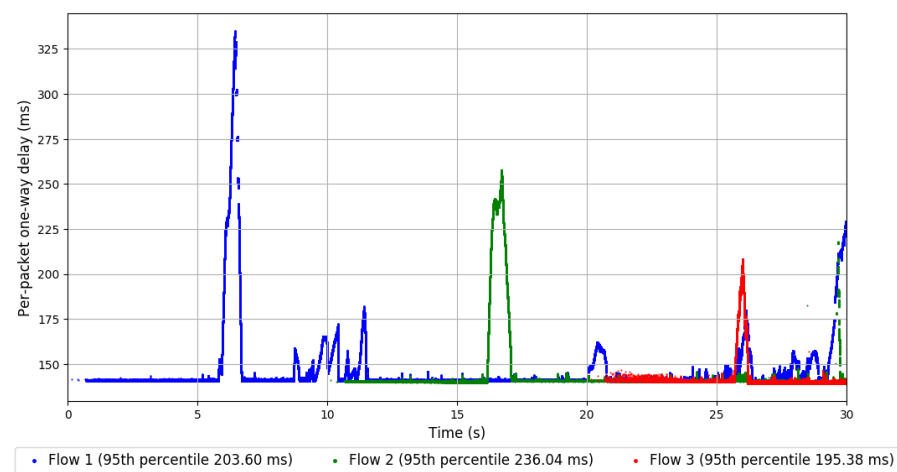
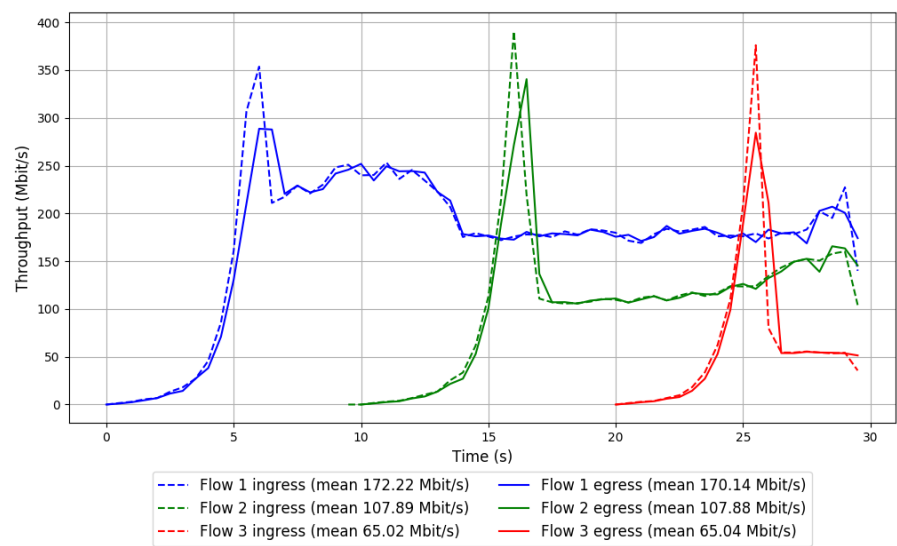
-- Flow 3:

Average throughput: 65.04 Mbit/s

95th percentile per-packet one-way delay: 195.380 ms

Loss rate: 0.02%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-01-18 06:58:06

End at: 2018-01-18 06:58:36

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.76 Mbit/s

95th percentile per-packet one-way delay: 163.514 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 192.23 Mbit/s

95th percentile per-packet one-way delay: 170.874 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 85.29 Mbit/s

95th percentile per-packet one-way delay: 137.163 ms

Loss rate: 0.00%

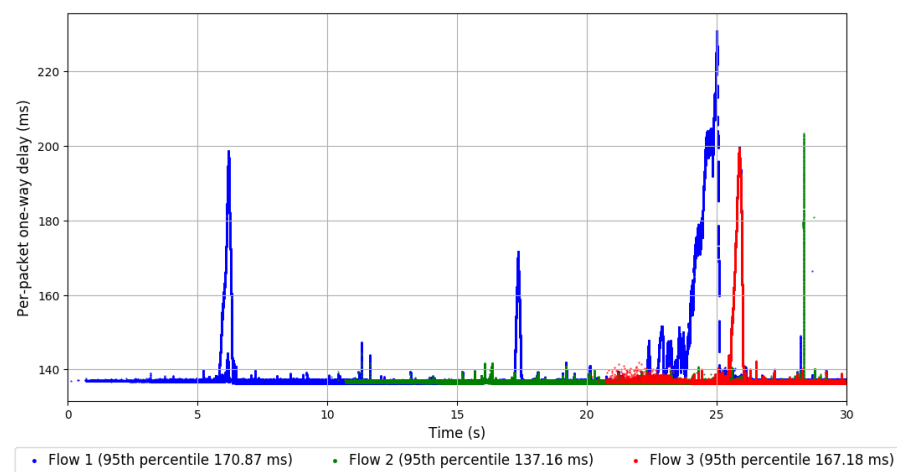
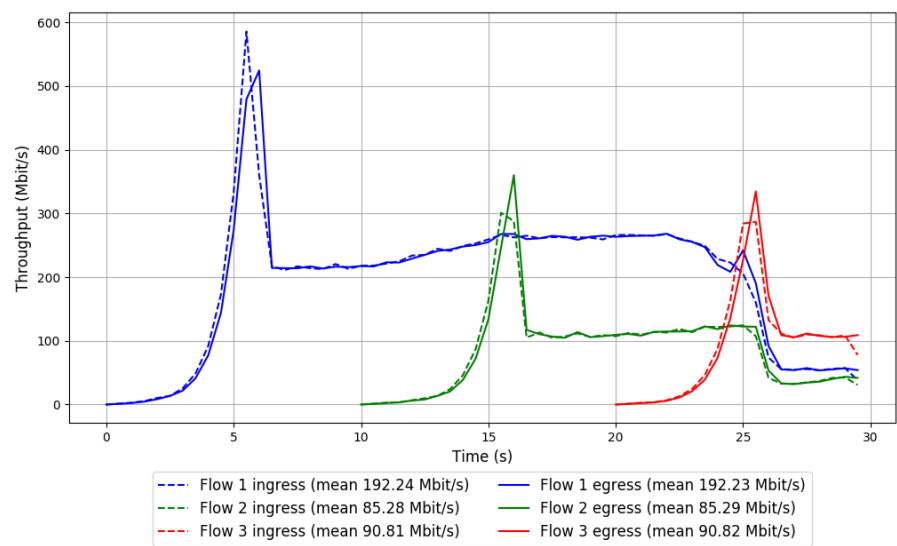
-- Flow 3:

Average throughput: 90.82 Mbit/s

95th percentile per-packet one-way delay: 167.182 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-01-18 07:17:59

End at: 2018-01-18 07:18:30

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.16 Mbit/s

95th percentile per-packet one-way delay: 207.628 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 113.72 Mbit/s

95th percentile per-packet one-way delay: 235.465 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 137.41 Mbit/s

95th percentile per-packet one-way delay: 222.061 ms

Loss rate: 0.12%

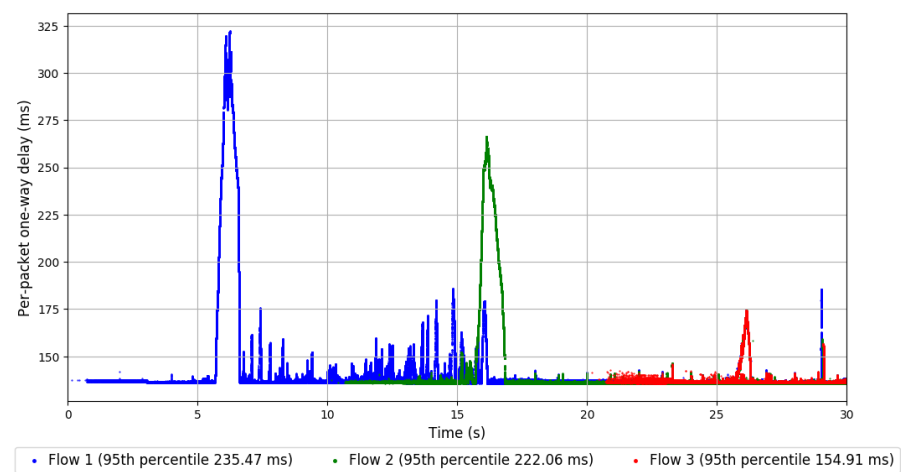
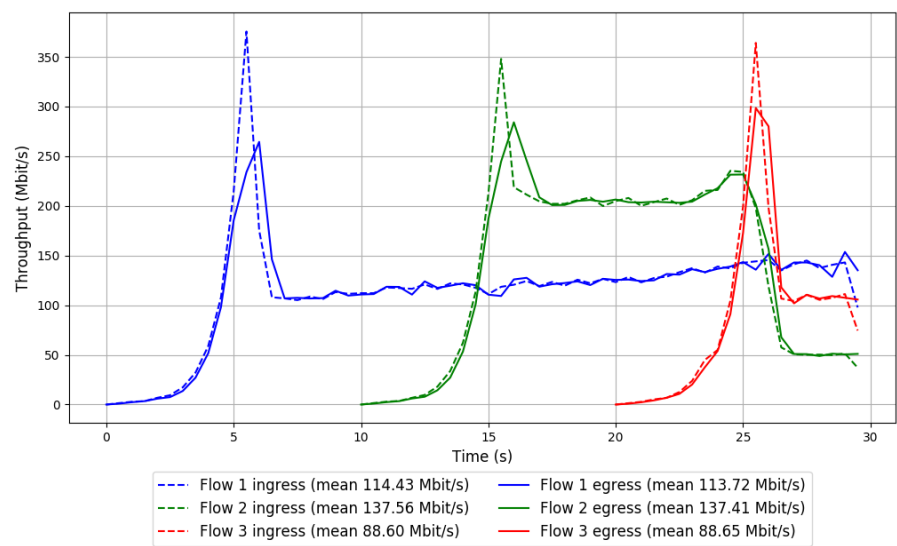
-- Flow 3:

Average throughput: 88.65 Mbit/s

95th percentile per-packet one-way delay: 154.915 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-01-18 07:37:38

End at: 2018-01-18 07:38:08

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 240.21 Mbit/s

95th percentile per-packet one-way delay: 281.342 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 147.58 Mbit/s

95th percentile per-packet one-way delay: 286.261 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 105.61 Mbit/s

95th percentile per-packet one-way delay: 283.672 ms

Loss rate: 2.73%

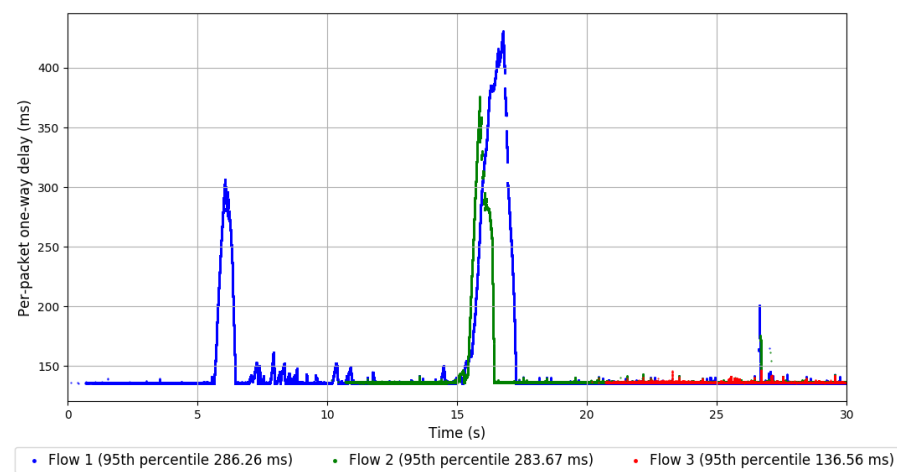
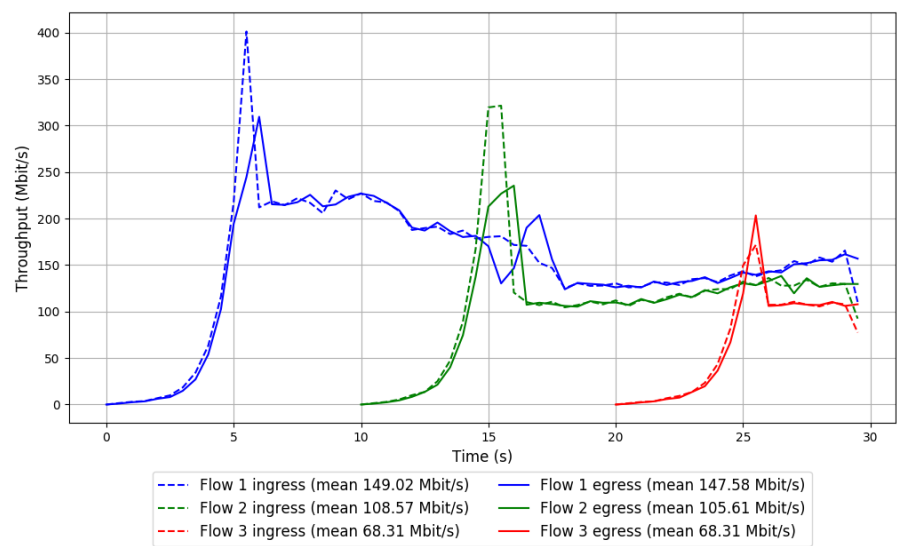
-- Flow 3:

Average throughput: 68.31 Mbit/s

95th percentile per-packet one-way delay: 136.555 ms

Loss rate: 0.01%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-01-18 07:57:22

End at: 2018-01-18 07:57:52

Below is generated by plot.py at 2018-01-18 11:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.83 Mbit/s

95th percentile per-packet one-way delay: 186.261 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 80.18 Mbit/s

95th percentile per-packet one-way delay: 184.711 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 106.87 Mbit/s

95th percentile per-packet one-way delay: 194.534 ms

Loss rate: 0.04%

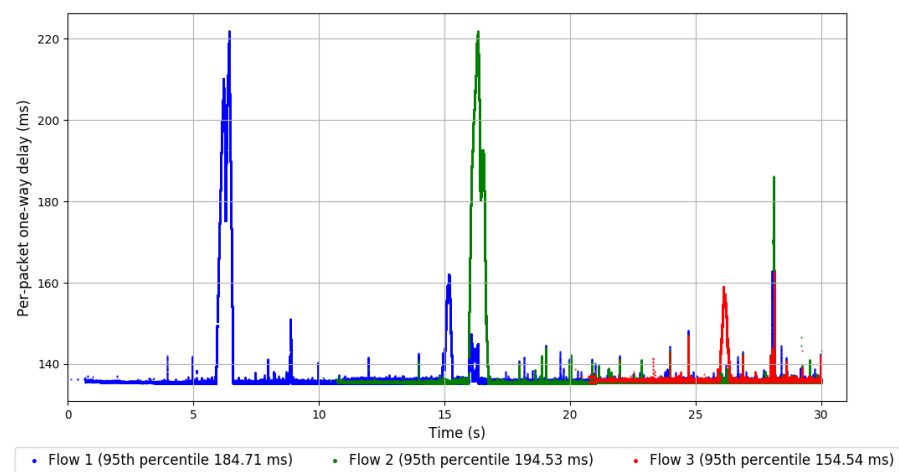
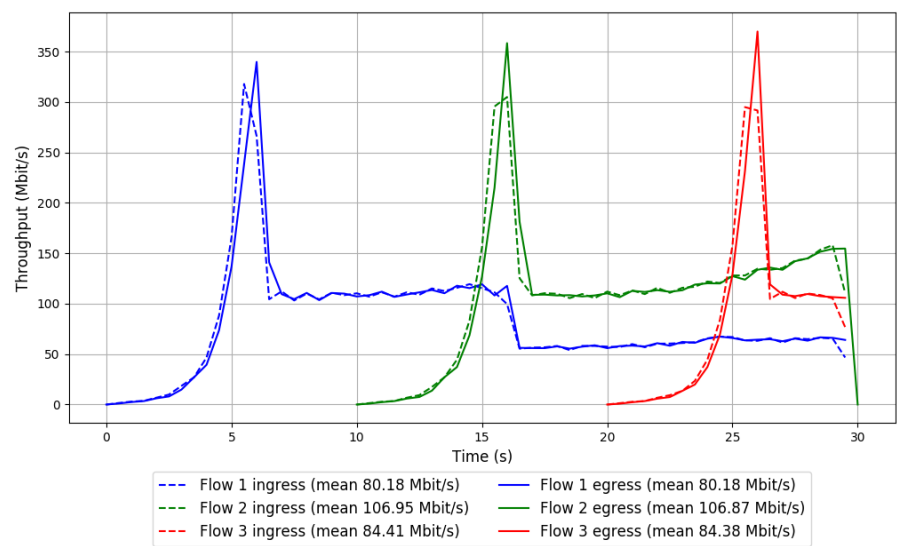
-- Flow 3:

Average throughput: 84.38 Mbit/s

95th percentile per-packet one-way delay: 154.539 ms

Loss rate: 0.06%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-01-18 08:16:36

End at: 2018-01-18 08:17:06

Below is generated by plot.py at 2018-01-18 11:25:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 273.23 Mbit/s

95th percentile per-packet one-way delay: 210.461 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 148.09 Mbit/s

95th percentile per-packet one-way delay: 211.897 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 155.96 Mbit/s

95th percentile per-packet one-way delay: 209.120 ms

Loss rate: 0.47%

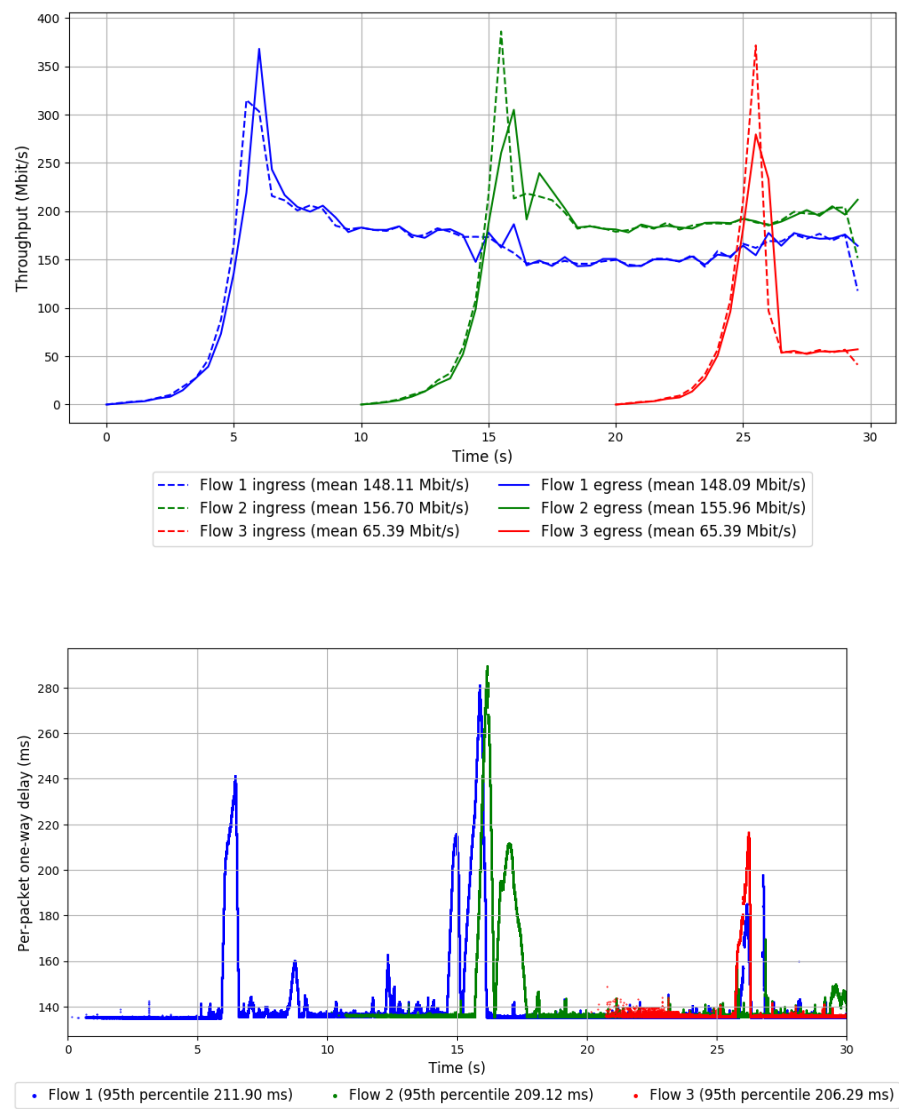
-- Flow 3:

Average throughput: 65.39 Mbit/s

95th percentile per-packet one-way delay: 206.293 ms

Loss rate: 0.03%

Run 10: Report of Vivace-latency — Data Link

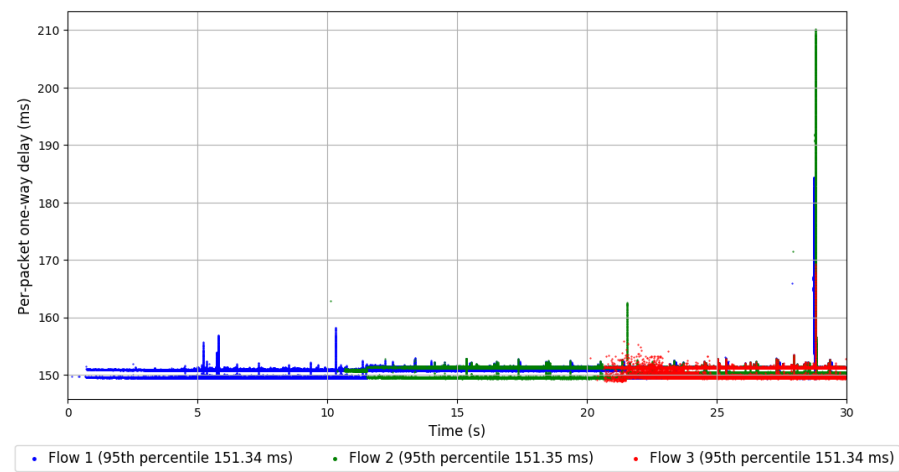
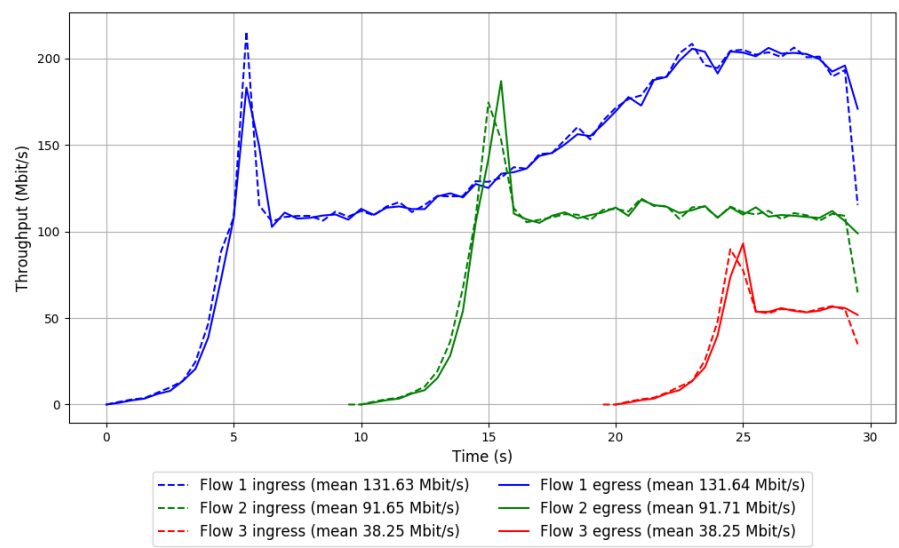


```
Run 1: Statistics of Vivace-loss

Start at: 2018-01-18 05:18:11
End at: 2018-01-18 05:18:41

# Below is generated by plot.py at 2018-01-18 11:25:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 205.26 Mbit/s
95th percentile per-packet one-way delay: 151.342 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 131.64 Mbit/s
95th percentile per-packet one-way delay: 151.339 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 91.71 Mbit/s
95th percentile per-packet one-way delay: 151.349 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 38.25 Mbit/s
95th percentile per-packet one-way delay: 151.335 ms
Loss rate: 0.02%
```

Run 1: Report of Vivace-loss — Data Link

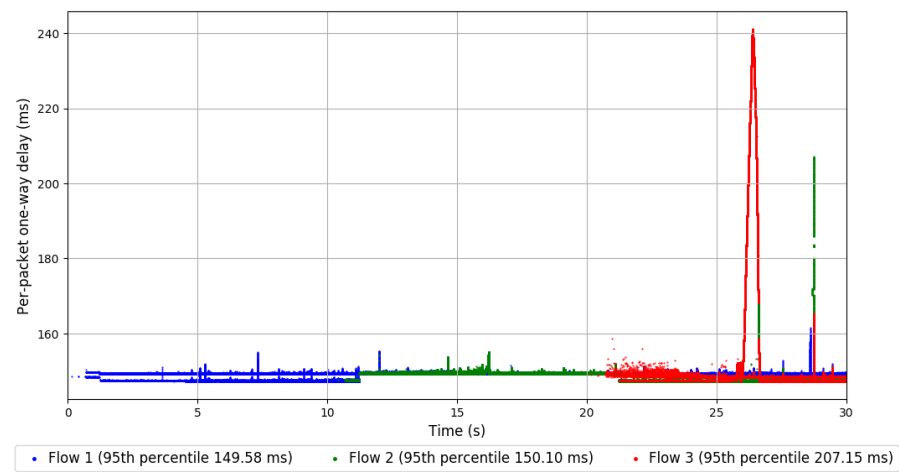
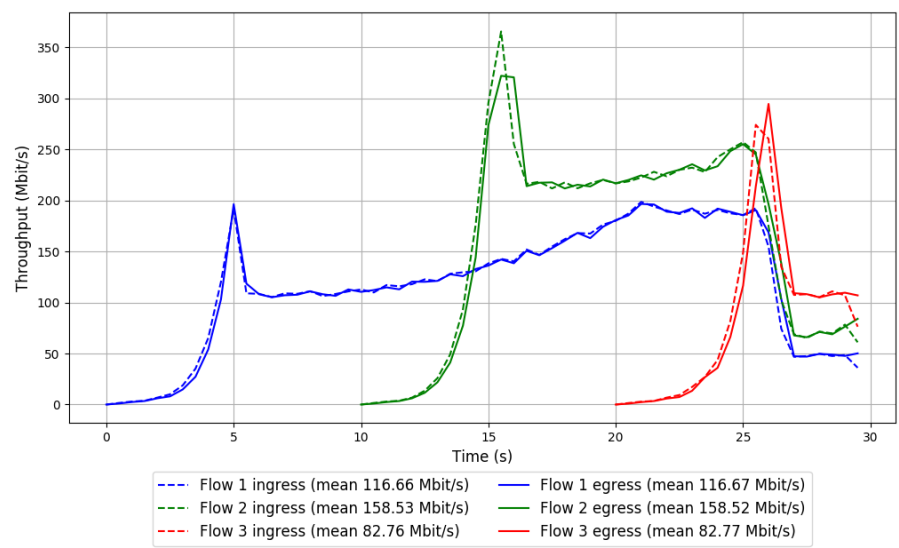


```
Run 2: Statistics of Vivace-loss

Start at: 2018-01-18 05:38:01
End at: 2018-01-18 05:38:31

# Below is generated by plot.py at 2018-01-18 11:26:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 249.30 Mbit/s
95th percentile per-packet one-way delay: 149.825 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 116.67 Mbit/s
95th percentile per-packet one-way delay: 149.577 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 158.52 Mbit/s
95th percentile per-packet one-way delay: 150.101 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 82.77 Mbit/s
95th percentile per-packet one-way delay: 207.147 ms
Loss rate: 0.01%
```


Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-01-18 05:57:33

End at: 2018-01-18 05:58:03

Below is generated by plot.py at 2018-01-18 11:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.08 Mbit/s

95th percentile per-packet one-way delay: 147.252 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 135.24 Mbit/s

95th percentile per-packet one-way delay: 147.250 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 191.61 Mbit/s

95th percentile per-packet one-way delay: 146.215 ms

Loss rate: 0.01%

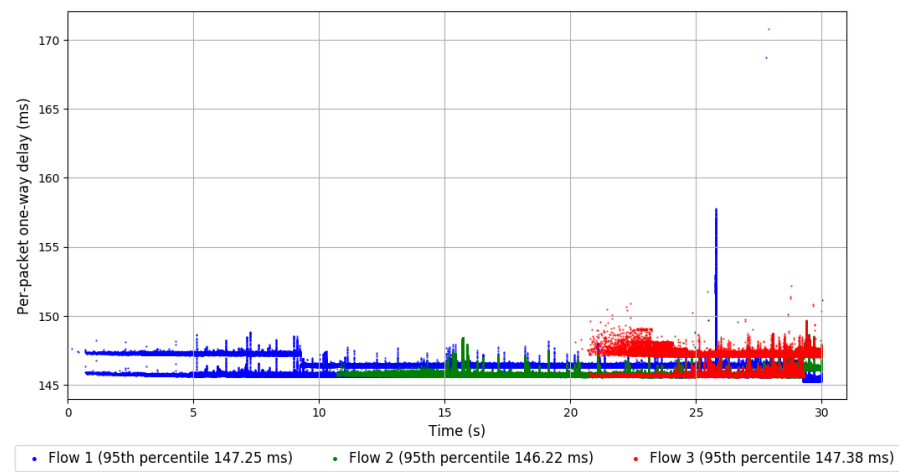
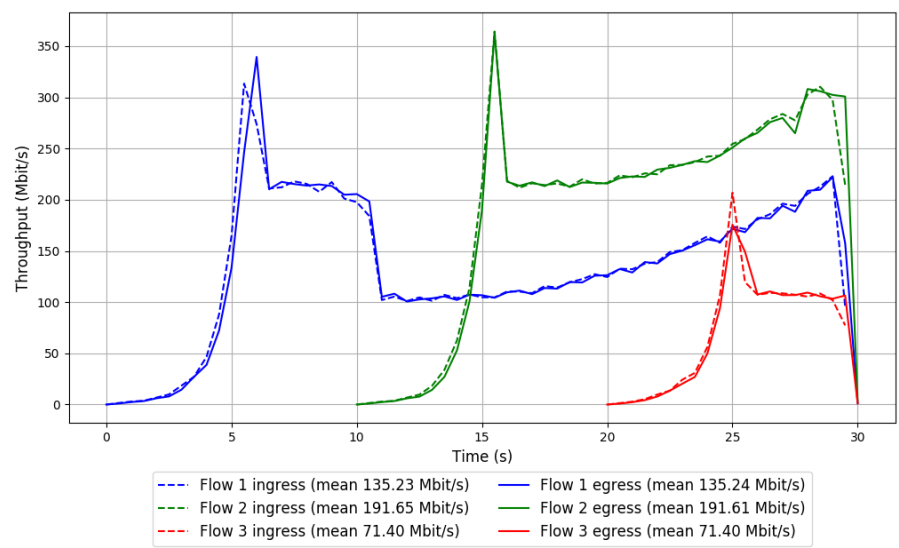
-- Flow 3:

Average throughput: 71.40 Mbit/s

95th percentile per-packet one-way delay: 147.377 ms

Loss rate: 0.01%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-01-18 06:17:23

End at: 2018-01-18 06:17:53

Below is generated by plot.py at 2018-01-18 11:28:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 261.79 Mbit/s

95th percentile per-packet one-way delay: 143.985 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 173.34 Mbit/s

95th percentile per-packet one-way delay: 143.947 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 90.08 Mbit/s

95th percentile per-packet one-way delay: 143.873 ms

Loss rate: 0.01%

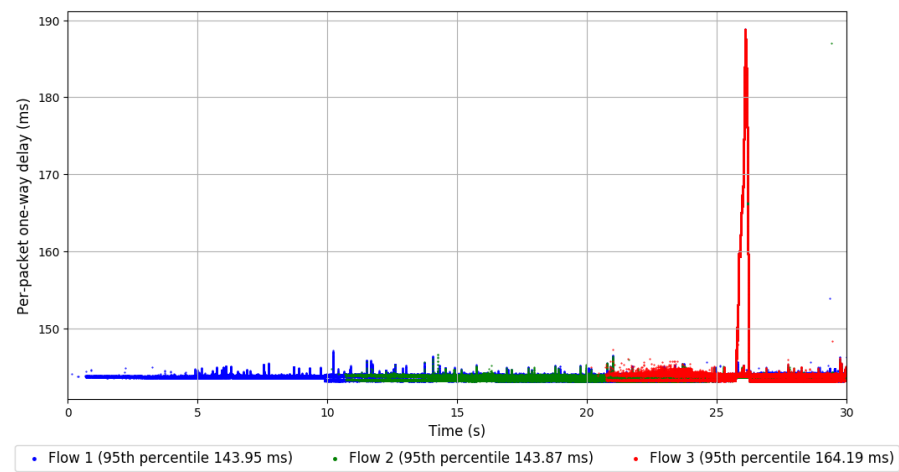
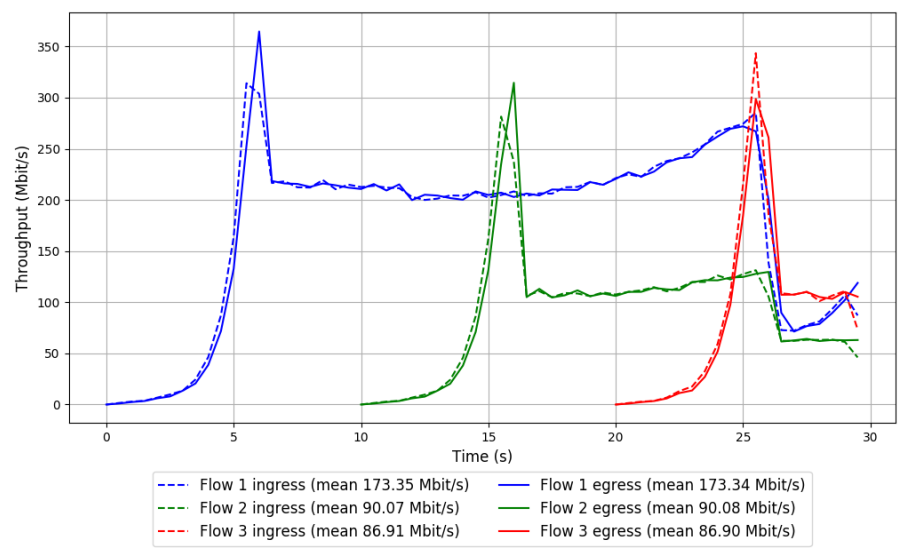
-- Flow 3:

Average throughput: 86.90 Mbit/s

95th percentile per-packet one-way delay: 164.191 ms

Loss rate: 0.04%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-01-18 06:37:25

End at: 2018-01-18 06:37:55

Below is generated by plot.py at 2018-01-18 11:30:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 249.13 Mbit/s

95th percentile per-packet one-way delay: 184.939 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 140.18 Mbit/s

95th percentile per-packet one-way delay: 146.201 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 105.63 Mbit/s

95th percentile per-packet one-way delay: 141.074 ms

Loss rate: 0.00%

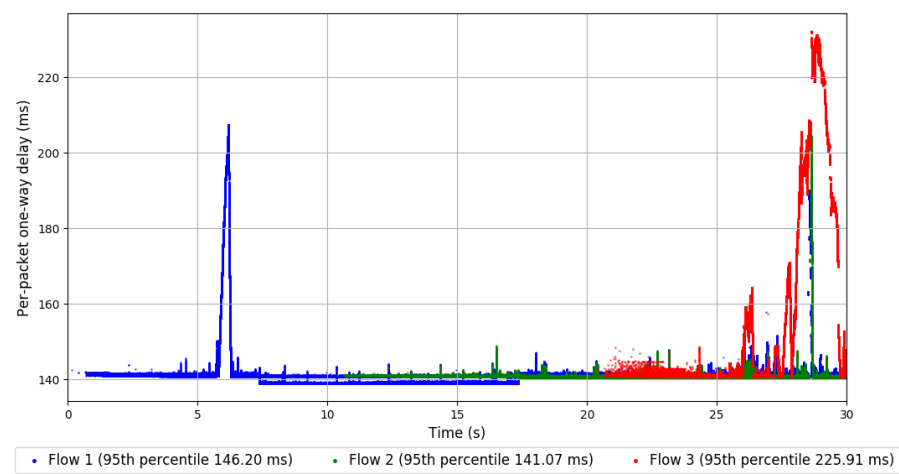
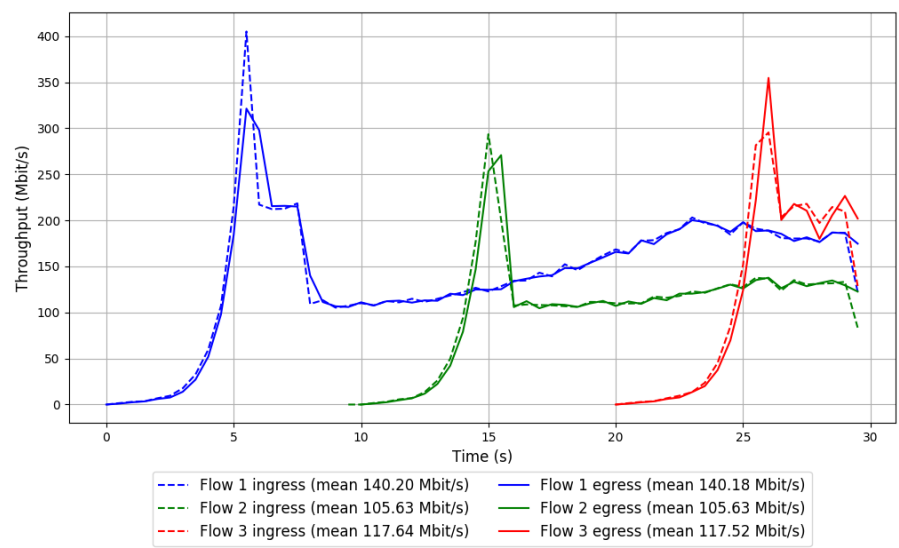
-- Flow 3:

Average throughput: 117.52 Mbit/s

95th percentile per-packet one-way delay: 225.906 ms

Loss rate: 0.11%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-01-18 06:56:42

End at: 2018-01-18 06:57:12

Below is generated by plot.py at 2018-01-18 11:32:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 283.88 Mbit/s

95th percentile per-packet one-way delay: 167.906 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 133.41 Mbit/s

95th percentile per-packet one-way delay: 177.648 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 192.26 Mbit/s

95th percentile per-packet one-way delay: 150.922 ms

Loss rate: 0.00%

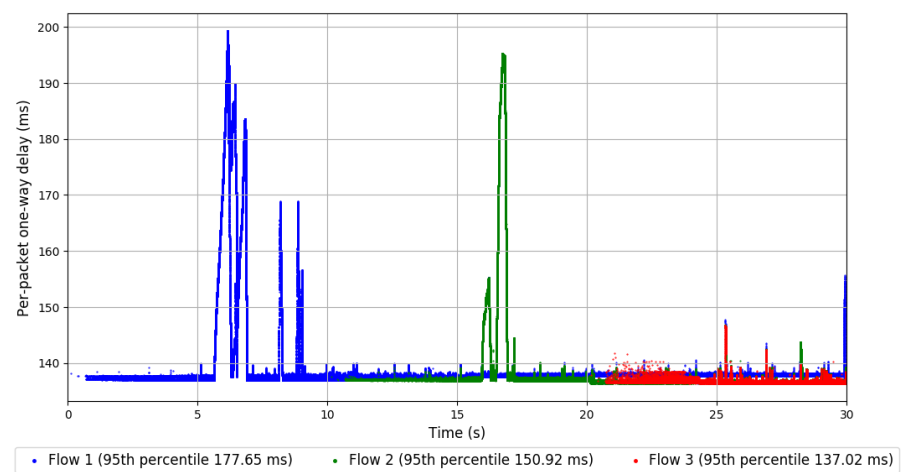
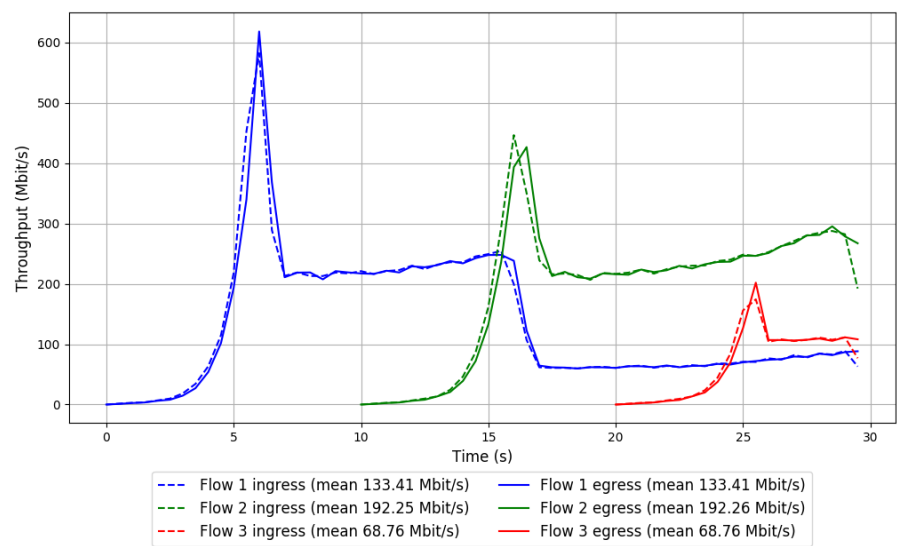
-- Flow 3:

Average throughput: 68.76 Mbit/s

95th percentile per-packet one-way delay: 137.023 ms

Loss rate: 0.00%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-01-18 07:16:36

End at: 2018-01-18 07:17:06

Below is generated by plot.py at 2018-01-18 11:32:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.50 Mbit/s

95th percentile per-packet one-way delay: 322.800 ms

Loss rate: 1.82%

-- Flow 1:

Average throughput: 139.10 Mbit/s

95th percentile per-packet one-way delay: 235.556 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 158.13 Mbit/s

95th percentile per-packet one-way delay: 370.047 ms

Loss rate: 3.52%

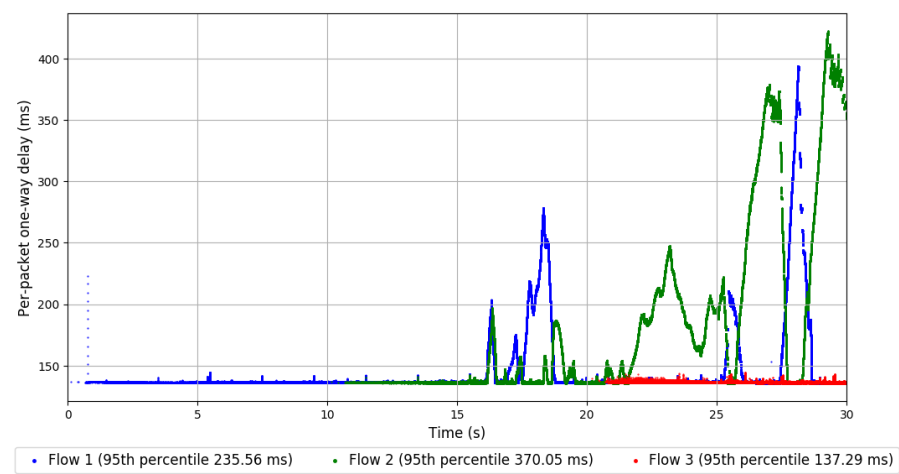
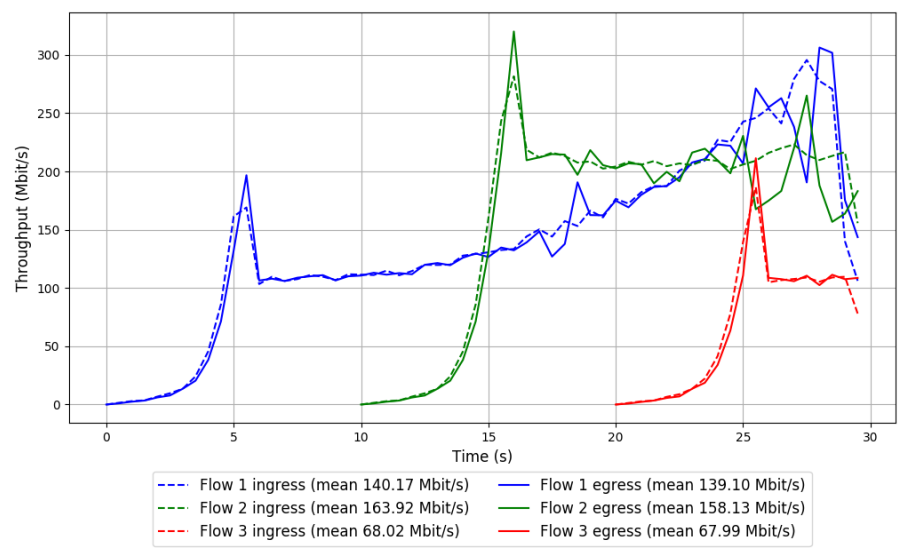
-- Flow 3:

Average throughput: 67.99 Mbit/s

95th percentile per-packet one-way delay: 137.292 ms

Loss rate: 0.08%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-01-18 07:36:16

End at: 2018-01-18 07:36:46

Below is generated by plot.py at 2018-01-18 11:34:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 254.93 Mbit/s

95th percentile per-packet one-way delay: 245.405 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 143.06 Mbit/s

95th percentile per-packet one-way delay: 263.443 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 134.23 Mbit/s

95th percentile per-packet one-way delay: 231.618 ms

Loss rate: 2.02%

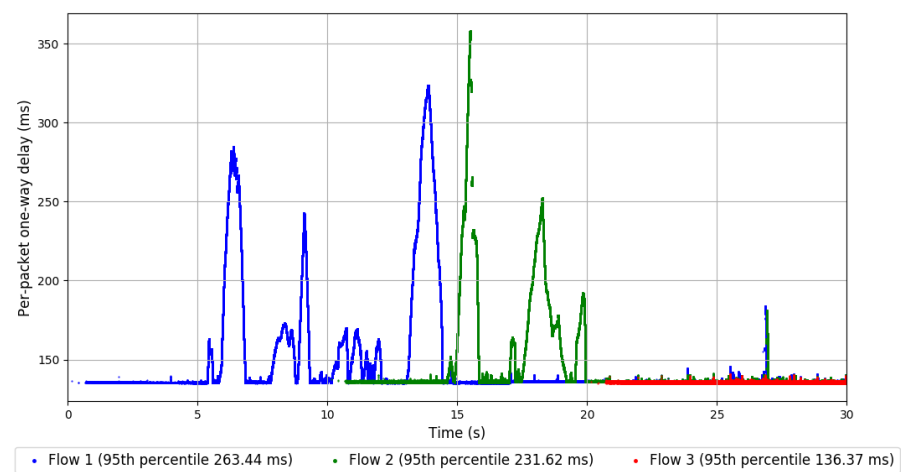
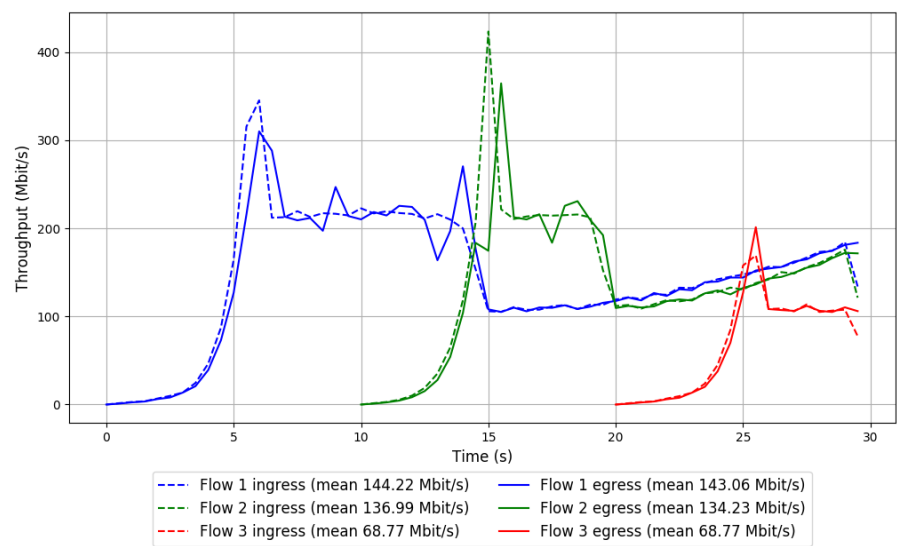
-- Flow 3:

Average throughput: 68.77 Mbit/s

95th percentile per-packet one-way delay: 136.374 ms

Loss rate: 0.00%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-01-18 07:56:04

End at: 2018-01-18 07:56:34

Below is generated by plot.py at 2018-01-18 11:34:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 223.92 Mbit/s

95th percentile per-packet one-way delay: 273.426 ms

Loss rate: 3.98%

-- Flow 1:

Average throughput: 126.74 Mbit/s

95th percentile per-packet one-way delay: 237.879 ms

Loss rate: 1.74%

-- Flow 2:

Average throughput: 106.11 Mbit/s

95th percentile per-packet one-way delay: 402.820 ms

Loss rate: 8.97%

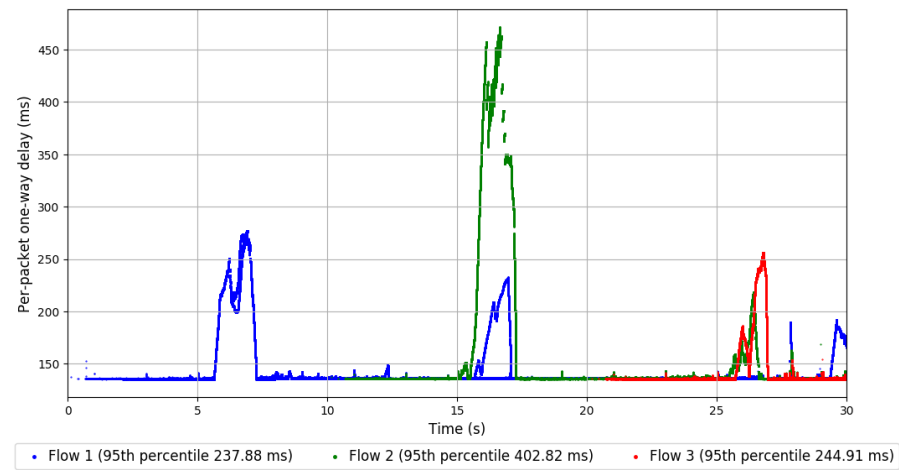
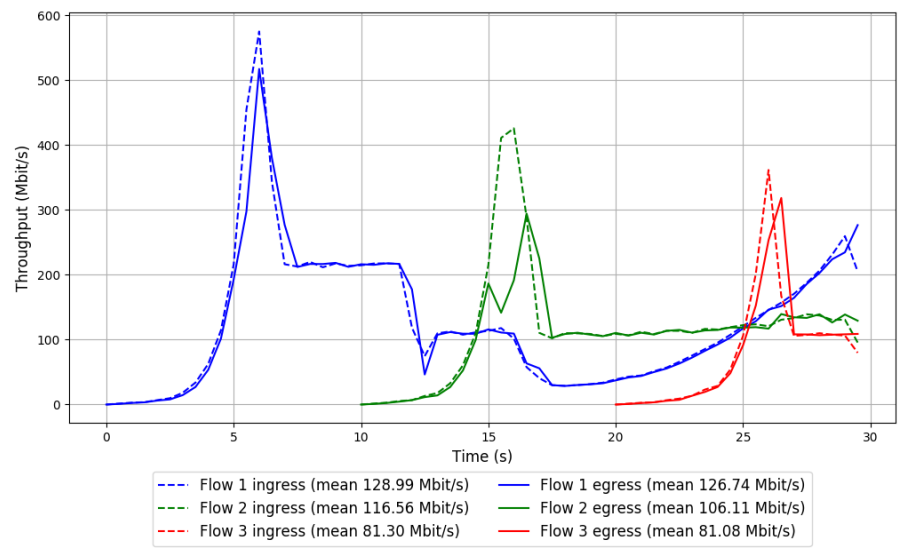
-- Flow 3:

Average throughput: 81.08 Mbit/s

95th percentile per-packet one-way delay: 244.912 ms

Loss rate: 0.27%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-01-18 08:15:18

End at: 2018-01-18 08:15:48

Below is generated by plot.py at 2018-01-18 11:34:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 215.79 Mbit/s

95th percentile per-packet one-way delay: 353.675 ms

Loss rate: 4.02%

-- Flow 1:

Average throughput: 88.76 Mbit/s

95th percentile per-packet one-way delay: 300.436 ms

Loss rate: 5.69%

-- Flow 2:

Average throughput: 150.74 Mbit/s

95th percentile per-packet one-way delay: 362.745 ms

Loss rate: 3.56%

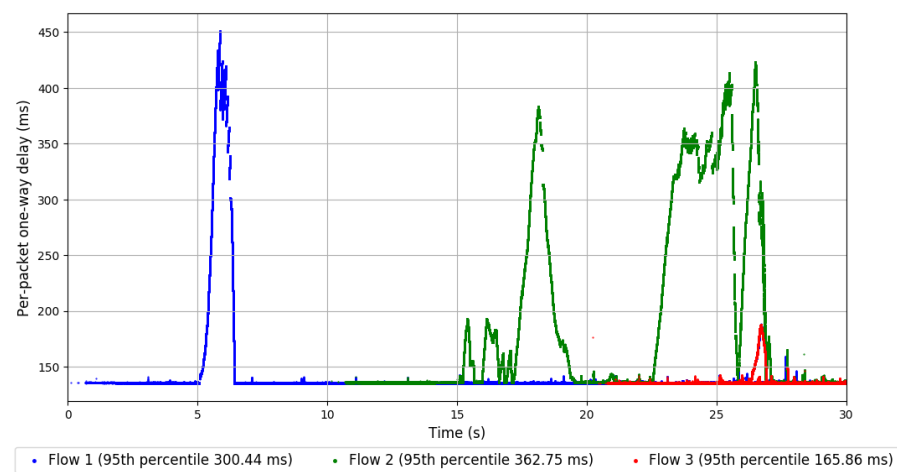
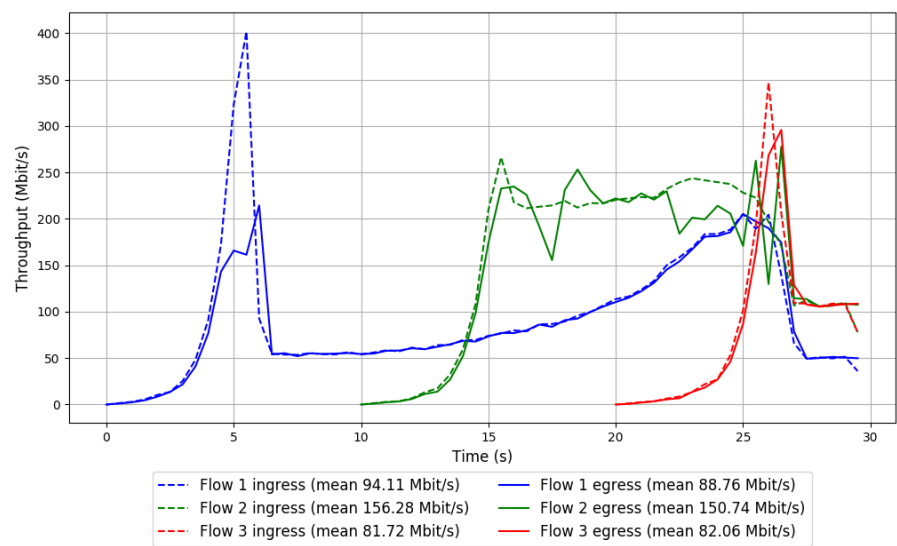
-- Flow 3:

Average throughput: 82.06 Mbit/s

95th percentile per-packet one-way delay: 165.859 ms

Loss rate: 0.01%

Run 10: Report of Vivace-loss — Data Link

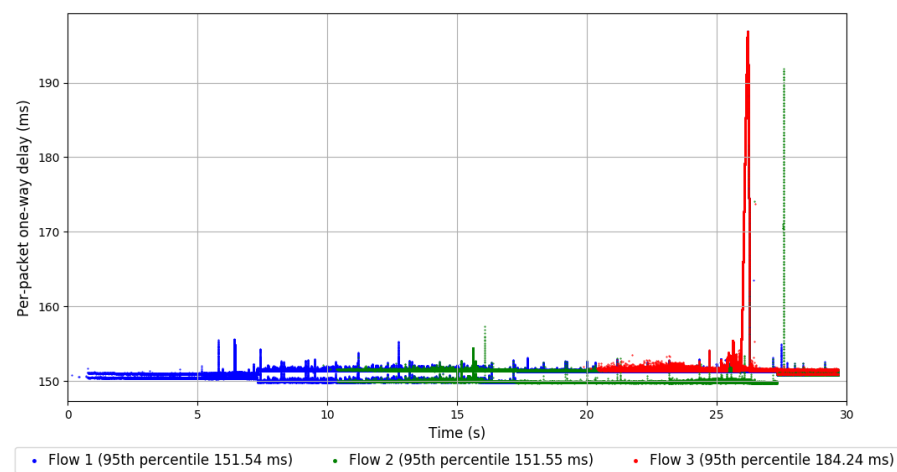
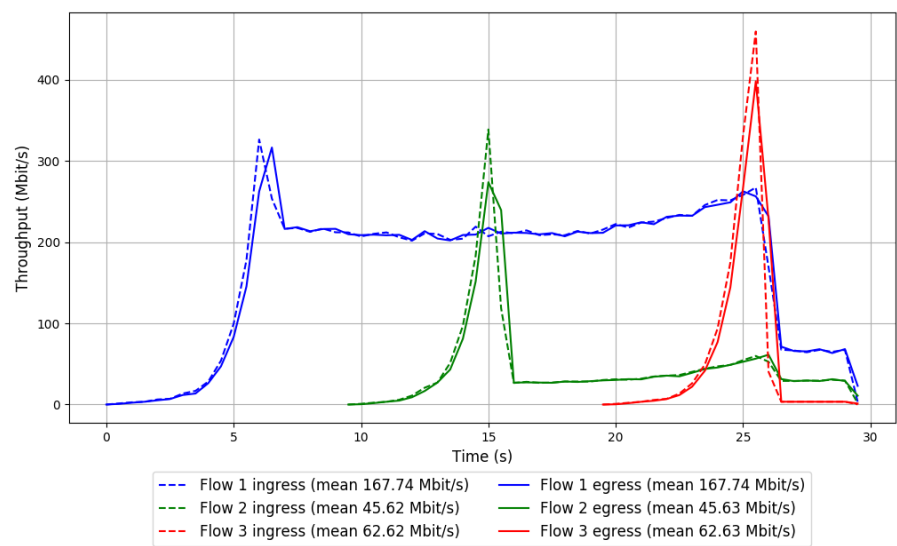


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-01-18 05:16:55
End at: 2018-01-18 05:17:25

# Below is generated by plot.py at 2018-01-18 11:35:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 219.20 Mbit/s
95th percentile per-packet one-way delay: 151.986 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.74 Mbit/s
95th percentile per-packet one-way delay: 151.543 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.63 Mbit/s
95th percentile per-packet one-way delay: 151.551 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.63 Mbit/s
95th percentile per-packet one-way delay: 184.239 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-01-18 05:36:54

End at: 2018-01-18 05:37:24

Below is generated by plot.py at 2018-01-18 11:35:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.06 Mbit/s

95th percentile per-packet one-way delay: 152.027 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 106.47 Mbit/s

95th percentile per-packet one-way delay: 151.371 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 24.39 Mbit/s

95th percentile per-packet one-way delay: 149.346 ms

Loss rate: 0.00%

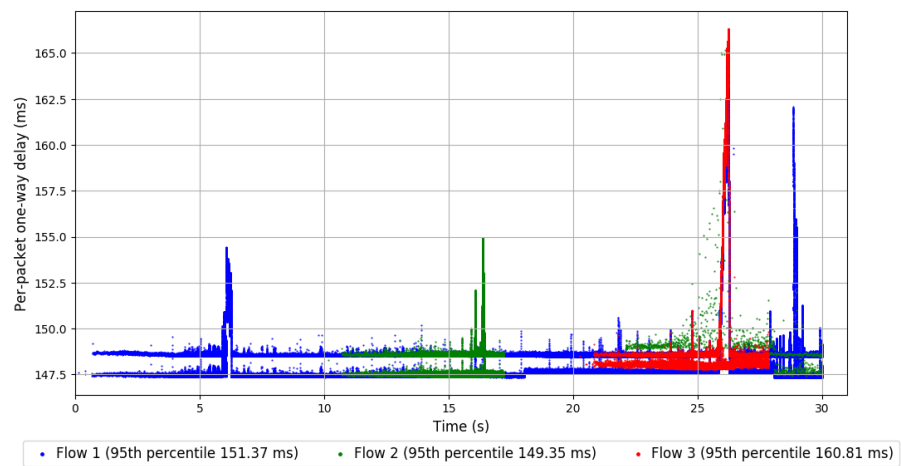
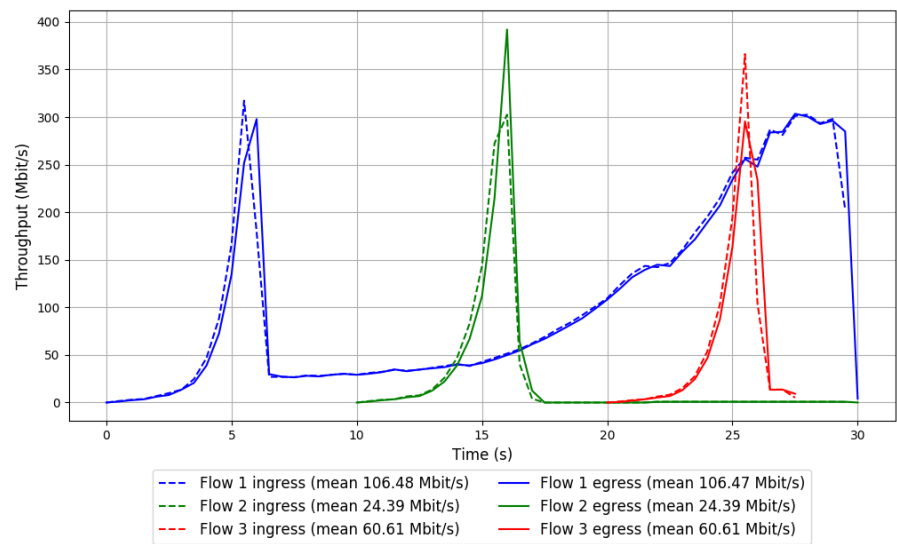
-- Flow 3:

Average throughput: 60.61 Mbit/s

95th percentile per-packet one-way delay: 160.814 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-01-18 05:56:22

End at: 2018-01-18 05:56:52

Below is generated by plot.py at 2018-01-18 11:36:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 172.69 Mbit/s

95th percentile per-packet one-way delay: 149.053 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 23.04 Mbit/s

95th percentile per-packet one-way delay: 147.825 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 190.68 Mbit/s

95th percentile per-packet one-way delay: 154.840 ms

Loss rate: 0.00%

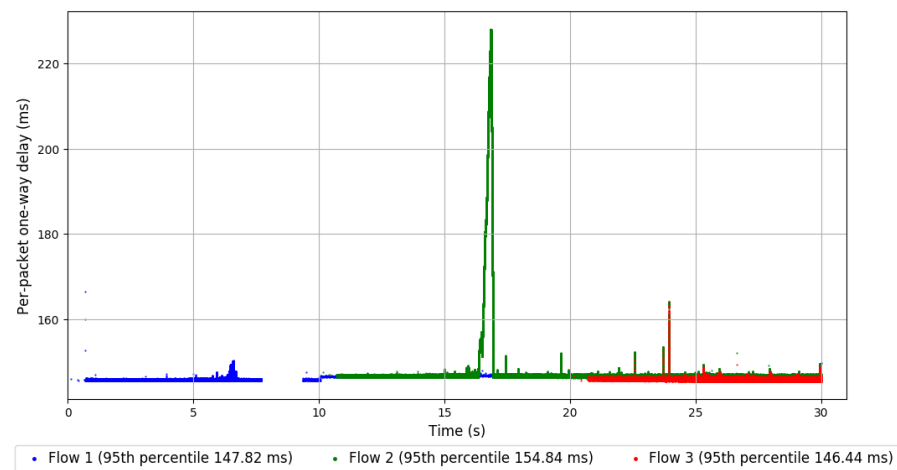
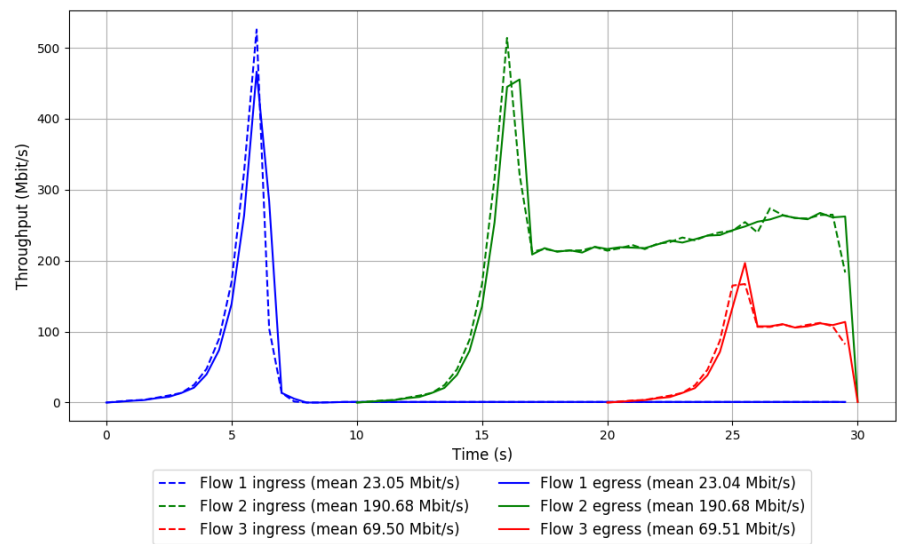
-- Flow 3:

Average throughput: 69.51 Mbit/s

95th percentile per-packet one-way delay: 146.440 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-01-18 06:16:15

End at: 2018-01-18 06:16:45

Below is generated by plot.py at 2018-01-18 11:37:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.23 Mbit/s

95th percentile per-packet one-way delay: 144.438 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 16.09 Mbit/s

95th percentile per-packet one-way delay: 143.952 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 158.97 Mbit/s

95th percentile per-packet one-way delay: 144.400 ms

Loss rate: 0.00%

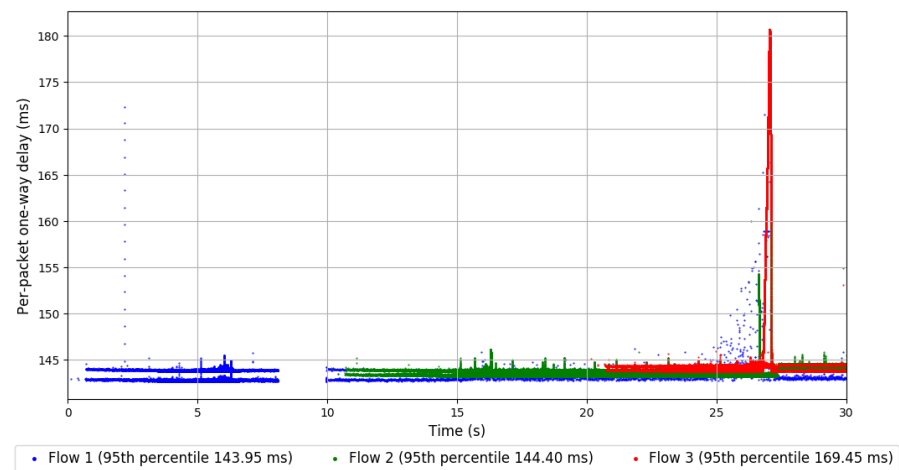
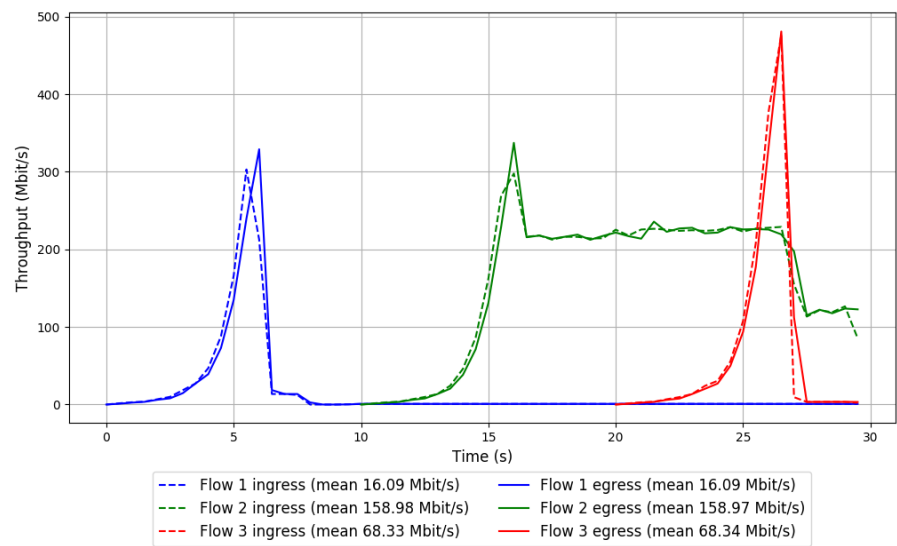
-- Flow 3:

Average throughput: 68.34 Mbit/s

95th percentile per-packet one-way delay: 169.452 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-01-18 06:36:02

End at: 2018-01-18 06:36:32

Below is generated by plot.py at 2018-01-18 11:39:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.25 Mbit/s

95th percentile per-packet one-way delay: 242.938 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 177.78 Mbit/s

95th percentile per-packet one-way delay: 244.638 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 157.31 Mbit/s

95th percentile per-packet one-way delay: 231.763 ms

Loss rate: 1.24%

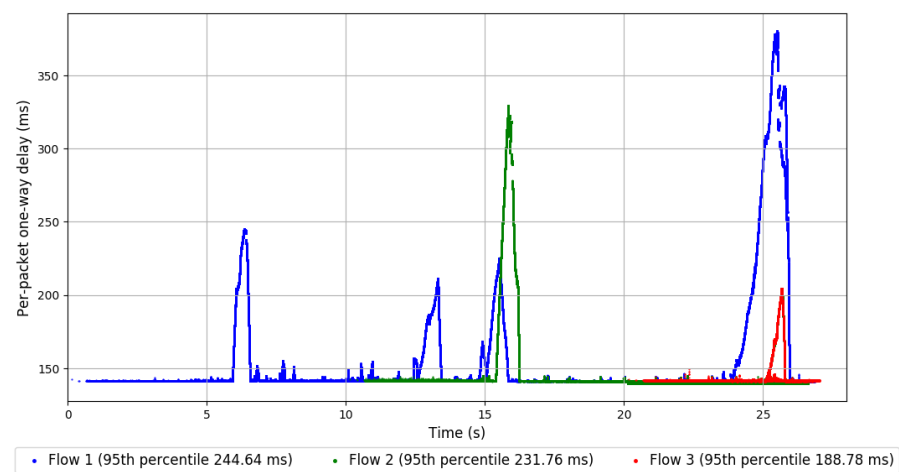
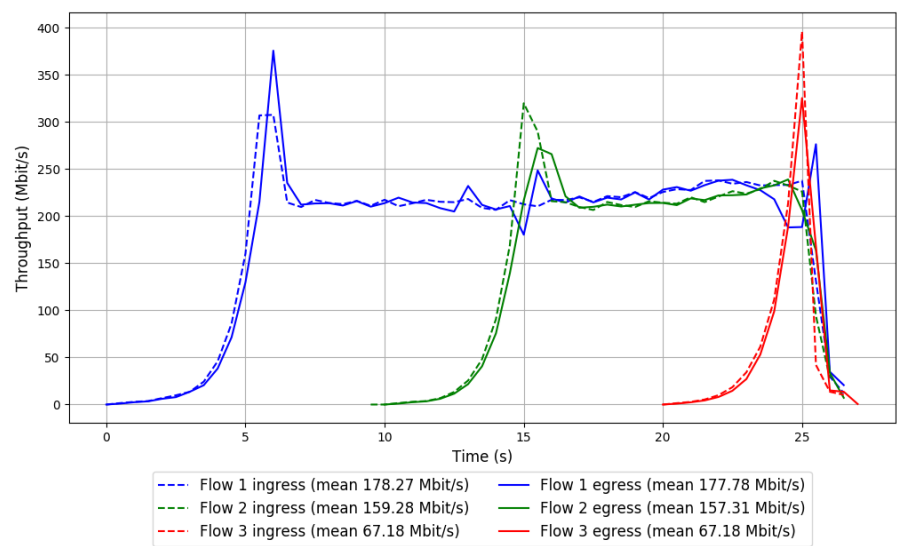
-- Flow 3:

Average throughput: 67.18 Mbit/s

95th percentile per-packet one-way delay: 188.775 ms

Loss rate: 0.02%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-01-18 06:55:34

End at: 2018-01-18 06:56:04

Below is generated by plot.py at 2018-01-18 11:39:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.49 Mbit/s

95th percentile per-packet one-way delay: 169.941 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 25.10 Mbit/s

95th percentile per-packet one-way delay: 204.033 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 178.83 Mbit/s

95th percentile per-packet one-way delay: 153.485 ms

Loss rate: 0.00%

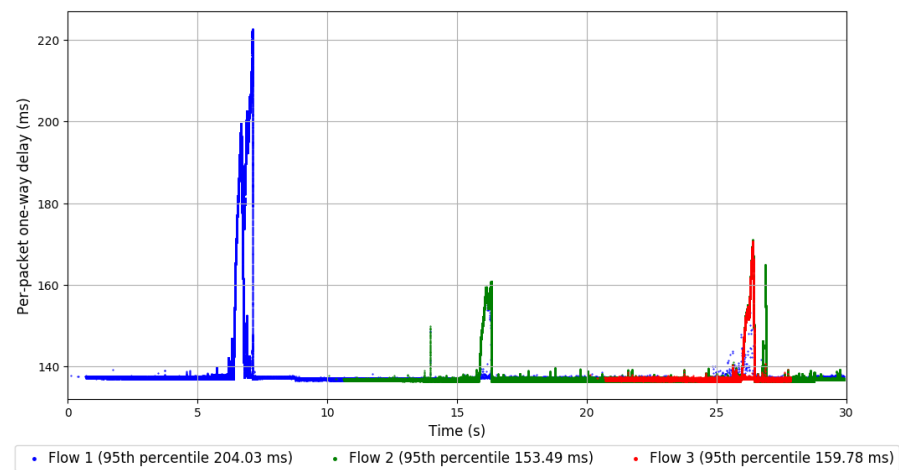
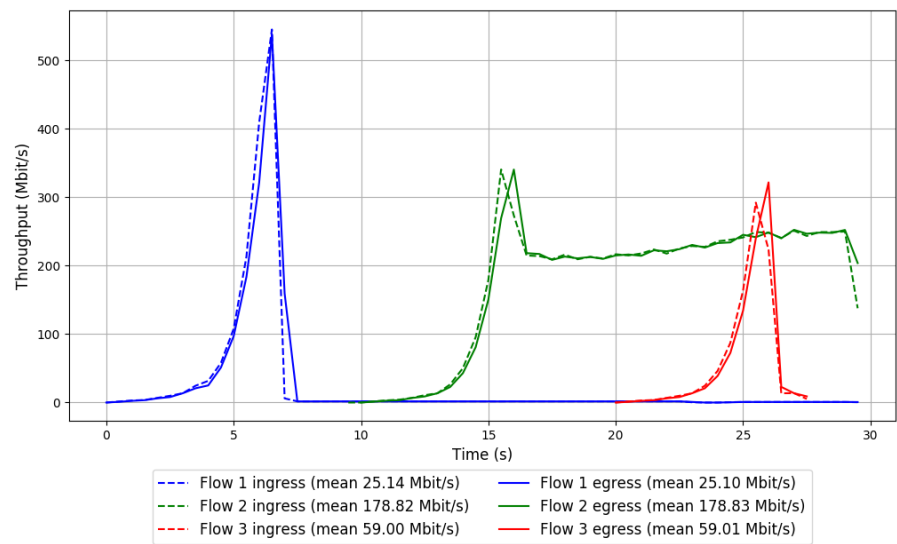
-- Flow 3:

Average throughput: 59.01 Mbit/s

95th percentile per-packet one-way delay: 159.775 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-01-18 07:15:17

End at: 2018-01-18 07:15:47

Below is generated by plot.py at 2018-01-18 11:39:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 223.19 Mbit/s

95th percentile per-packet one-way delay: 283.076 ms

Loss rate: 1.99%

-- Flow 1:

Average throughput: 85.98 Mbit/s

95th percentile per-packet one-way delay: 324.379 ms

Loss rate: 1.60%

-- Flow 2:

Average throughput: 183.89 Mbit/s

95th percentile per-packet one-way delay: 142.153 ms

Loss rate: 0.03%

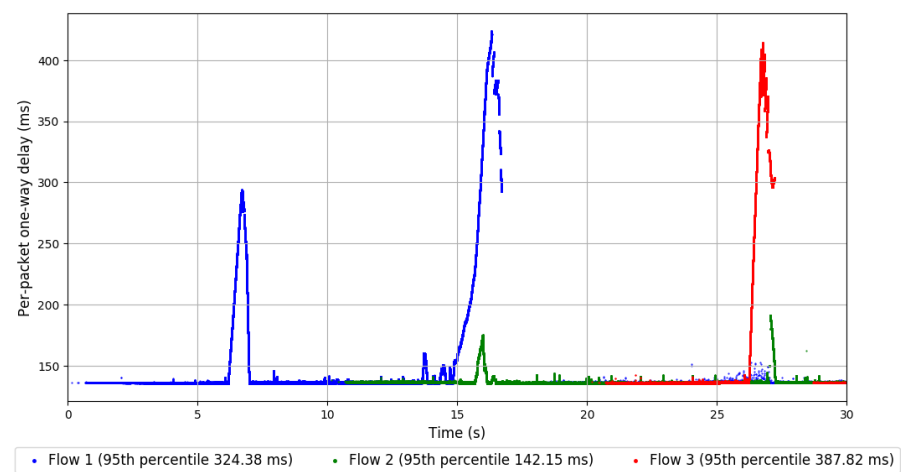
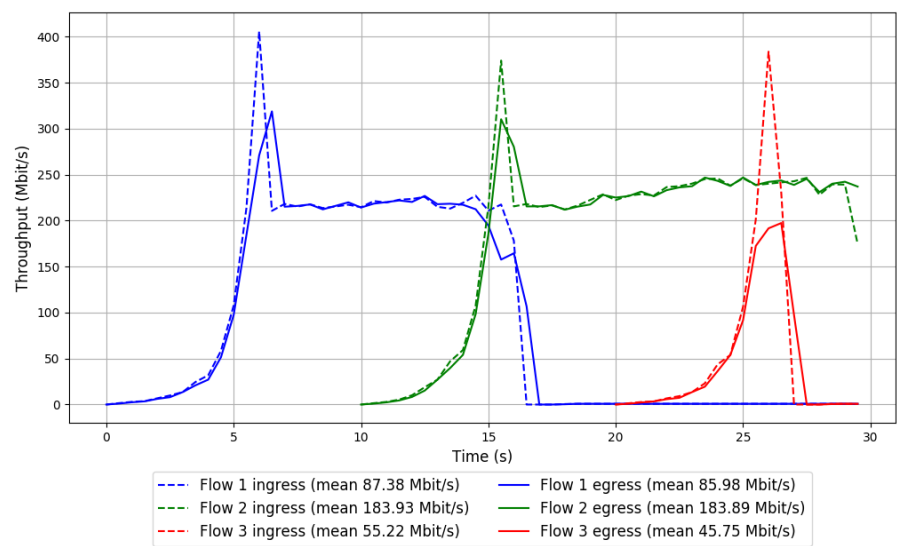
-- Flow 3:

Average throughput: 45.75 Mbit/s

95th percentile per-packet one-way delay: 387.822 ms

Loss rate: 17.15%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-01-18 07:34:55

End at: 2018-01-18 07:35:25

Below is generated by plot.py at 2018-01-18 11:39:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 243.93 Mbit/s

95th percentile per-packet one-way delay: 186.205 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 147.77 Mbit/s

95th percentile per-packet one-way delay: 226.620 ms

Loss rate: 2.69%

-- Flow 2:

Average throughput: 79.74 Mbit/s

95th percentile per-packet one-way delay: 137.349 ms

Loss rate: 0.00%

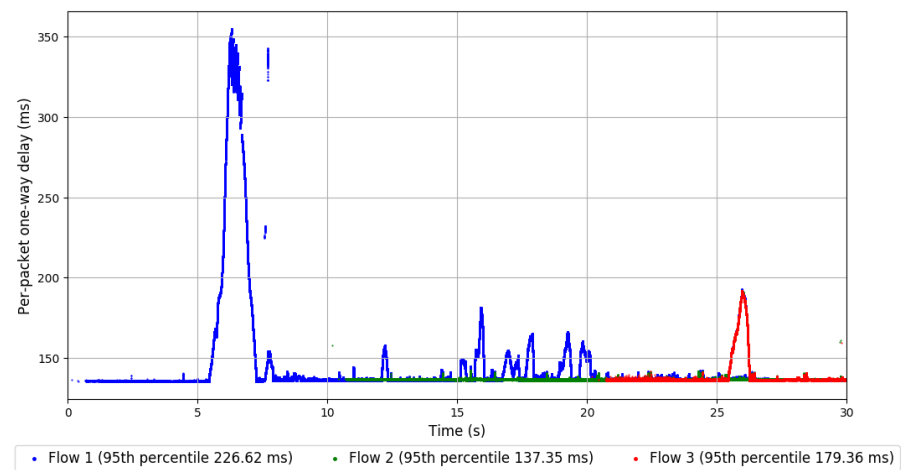
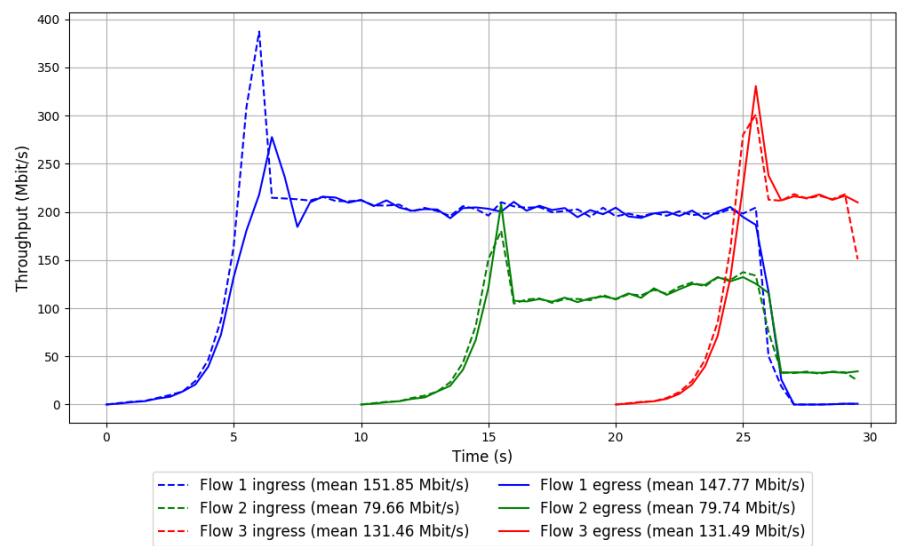
-- Flow 3:

Average throughput: 131.49 Mbit/s

95th percentile per-packet one-way delay: 179.358 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-01-18 07:54:42

End at: 2018-01-18 07:55:12

Below is generated by plot.py at 2018-01-18 11:39:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 269.47 Mbit/s

95th percentile per-packet one-way delay: 275.035 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 210.90 Mbit/s

95th percentile per-packet one-way delay: 286.687 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 27.71 Mbit/s

95th percentile per-packet one-way delay: 136.038 ms

Loss rate: 0.00%

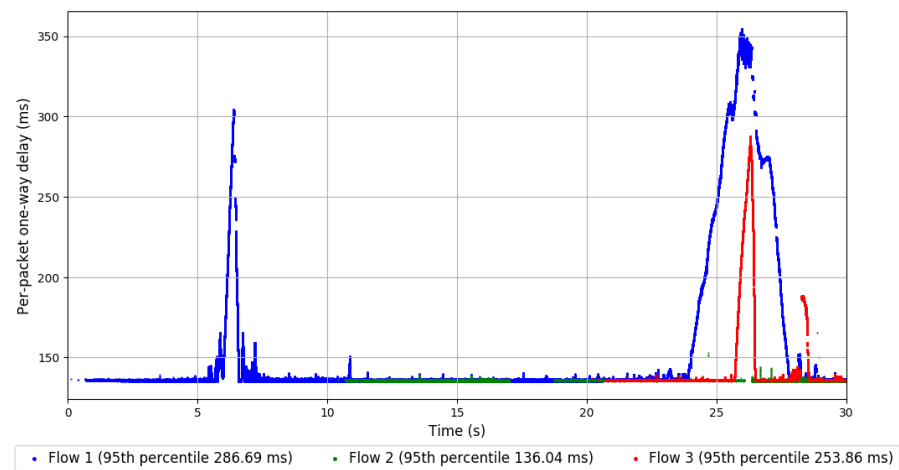
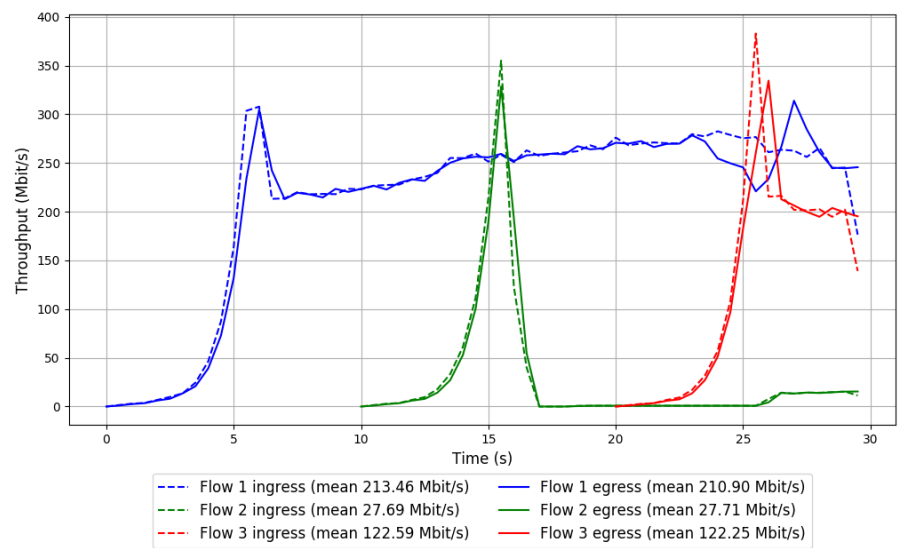
-- Flow 3:

Average throughput: 122.25 Mbit/s

95th percentile per-packet one-way delay: 253.857 ms

Loss rate: 0.30%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-01-18 08:13:59

End at: 2018-01-18 08:14:29

Below is generated by plot.py at 2018-01-18 11:40:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.07 Mbit/s

95th percentile per-packet one-way delay: 340.474 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 120.16 Mbit/s

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

Loss rate: 0.02%

-- Flow 2:

Average throughput: 102.04 Mbit/s

95th percentile per-packet one-way delay: 156.807 ms

Loss rate: 0.20%

-- Flow 3:

Average throughput: 119.01 Mbit/s

95th percentile per-packet one-way delay: 375.624 ms

Loss rate: 3.93%

Run 10: Report of Vivace-LTE — Data Link

