

Pantheon Report

Generated at 2018-04-11 12:53:43 (UTC).

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

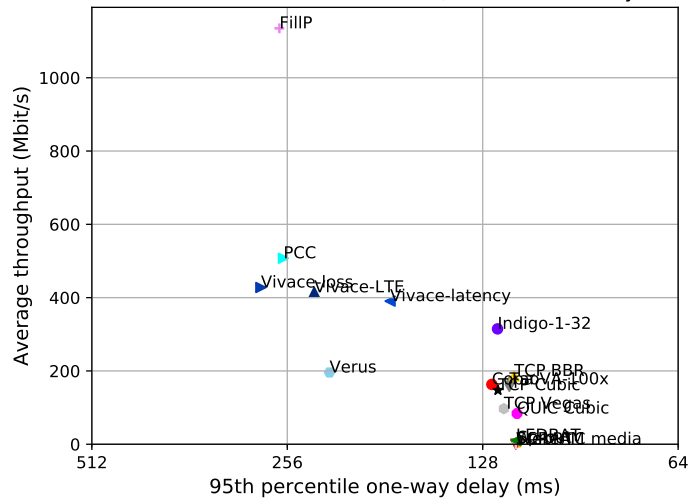
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

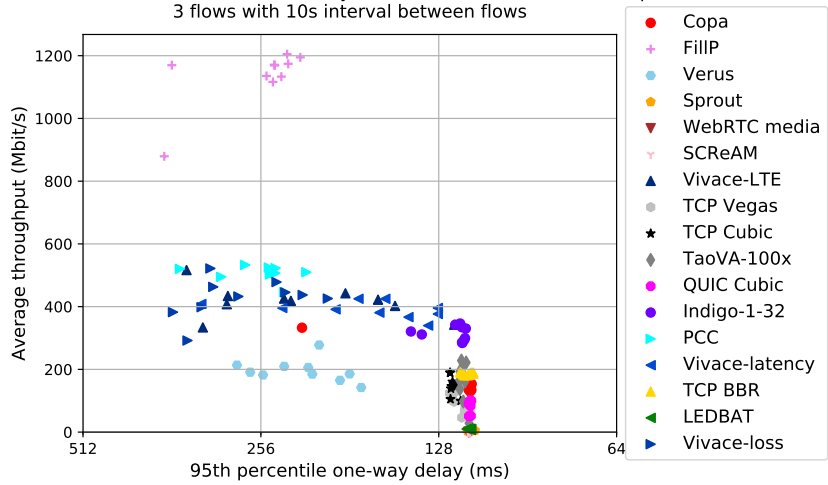
Git summary:

```
branch: master @ eb420b5be9bafccd22cf68b99ff5a2000462fc59
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ f271183af822eee5d0031620f4bebf38aedc5581
```

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



test from GCE London Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows



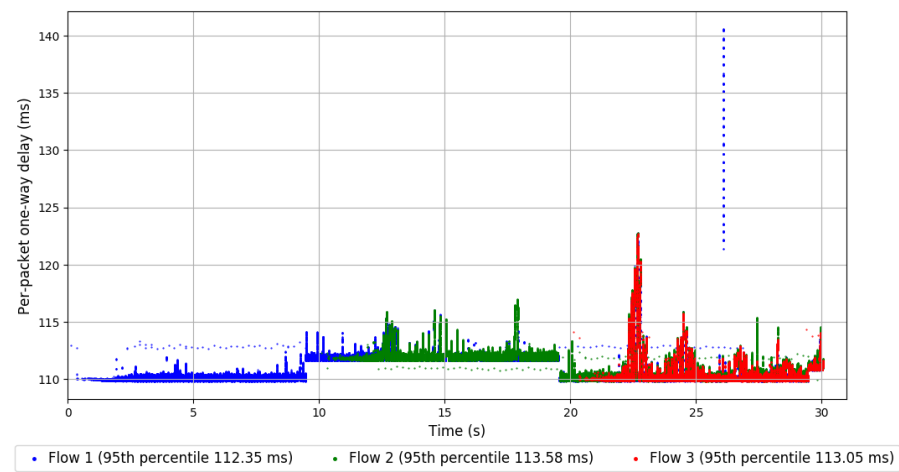
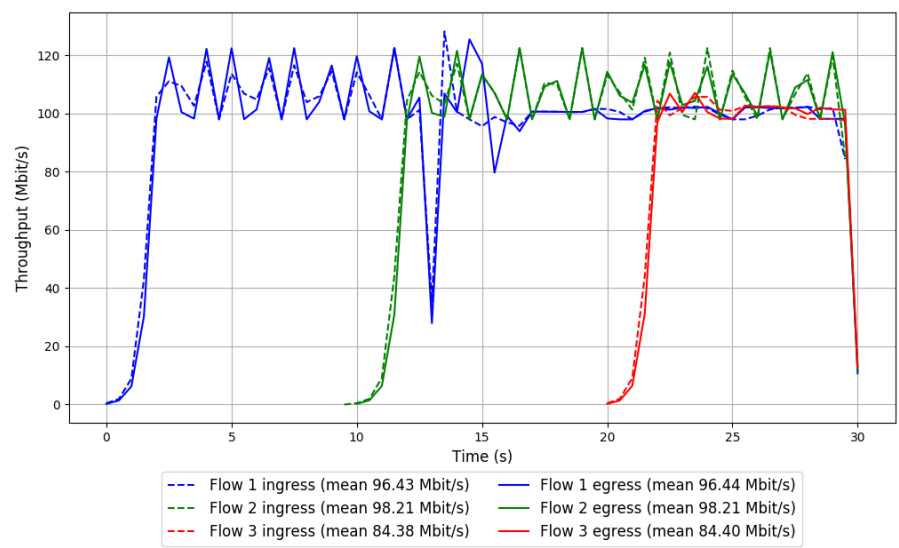
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	95.21	94.22	85.88	113.60	114.69	115.30	0.00	0.01	0.02
TCP Cubic	10	85.48	75.79	35.61	121.03	121.12	118.69	0.01	0.02	0.45
LEDBAT	10	6.40	4.44	1.97	113.80	113.72	113.15	0.00	0.00	0.00
PCC	10	440.97	81.25	38.20	262.60	235.27	218.28	2.73	1.02	1.15
QUIC Cubic	10	39.60	51.16	31.98	112.50	112.19	112.81	0.00	0.00	0.00
SCReAM	10	0.21	0.20	0.21	113.49	112.95	112.93	0.00	0.00	0.00
WebRTC media	10	0.06	0.06	0.05	113.47	113.41	113.32	0.00	0.00	0.00
Sprout	10	2.05	2.04	1.90	113.22	113.38	113.10	0.00	0.00	0.00
TaoVA-100x	10	102.71	42.55	100.24	115.76	119.98	114.94	0.00	0.00	0.00
TCP Vegas	10	54.73	46.31	34.55	117.31	116.94	121.60	0.01	0.00	0.04
Verus	10	107.62	105.45	56.66	202.84	212.96	244.77	0.35	0.63	3.18
Copa	10	100.60	63.55	61.13	123.83	114.49	115.08	2.90	0.00	0.02
FillP	10	620.24	555.88	438.24	245.38	265.88	286.91	6.87	8.87	12.93
Indigo-1-32	10	163.99	161.37	136.54	118.69	122.16	124.42	0.00	0.00	0.01
Vivace-latency	10	232.41	183.58	109.72	182.35	144.58	148.84	0.21	0.69	0.00
Vivace-loss	10	253.19	206.65	113.73	279.85	234.37	263.67	2.95	2.39	4.11
Vivace-LTE	10	257.43	168.11	138.37	238.39	189.05	205.24	1.05	1.47	1.48

```
Run 1: Statistics of TCP BBR

Start at: 2018-04-11 06:29:10
End at: 2018-04-11 06:29:40

# Below is generated by plot.py at 2018-04-11 11:20:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 189.89 Mbit/s
95th percentile per-packet one-way delay: 112.962 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 96.44 Mbit/s
95th percentile per-packet one-way delay: 112.353 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 98.21 Mbit/s
95th percentile per-packet one-way delay: 113.575 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 84.40 Mbit/s
95th percentile per-packet one-way delay: 113.048 ms
Loss rate: 0.00%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-04-11 06:48:16

End at: 2018-04-11 06:48:46

Below is generated by plot.py at 2018-04-11 11:20:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.29 Mbit/s

95th percentile per-packet one-way delay: 111.791 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 96.47 Mbit/s

95th percentile per-packet one-way delay: 111.733 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.21 Mbit/s

95th percentile per-packet one-way delay: 111.810 ms

Loss rate: 0.00%

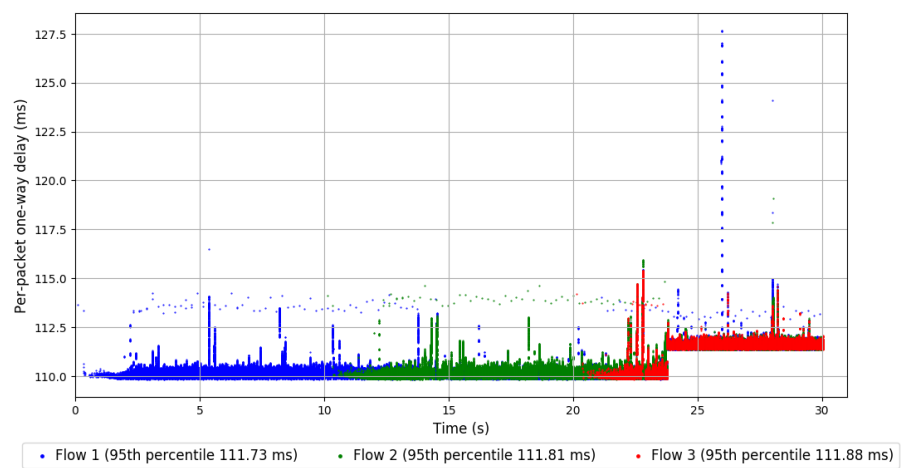
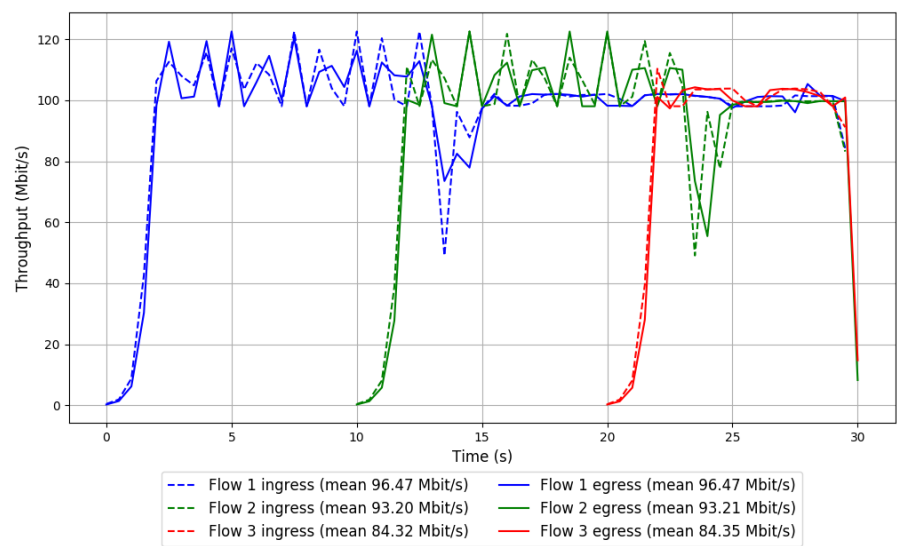
-- Flow 3:

Average throughput: 84.35 Mbit/s

95th percentile per-packet one-way delay: 111.884 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-04-11 07:07:24

End at: 2018-04-11 07:07:54

Below is generated by plot.py at 2018-04-11 11:20:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.98 Mbit/s

95th percentile per-packet one-way delay: 113.572 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 92.88 Mbit/s

95th percentile per-packet one-way delay: 113.670 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.42 Mbit/s

95th percentile per-packet one-way delay: 111.954 ms

Loss rate: 0.00%

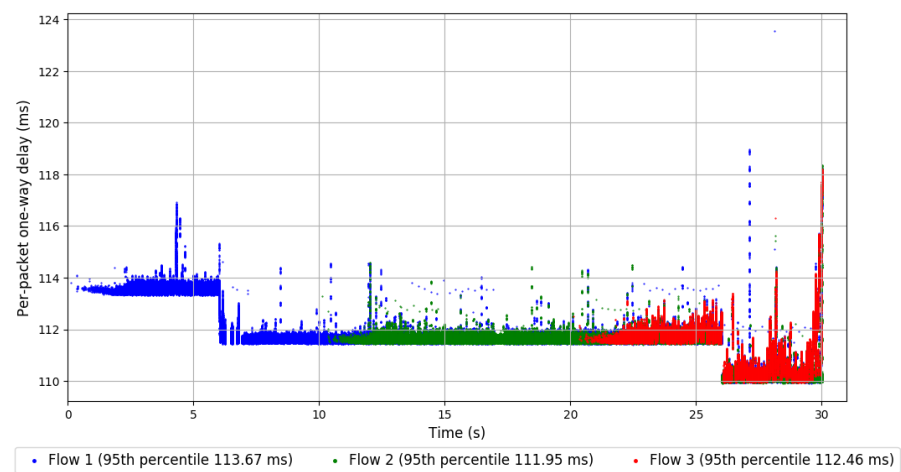
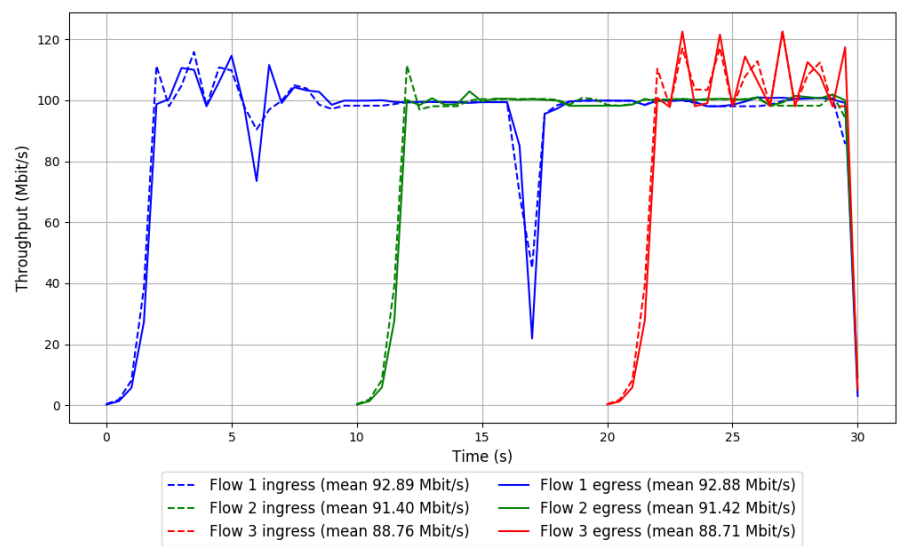
-- Flow 3:

Average throughput: 88.71 Mbit/s

95th percentile per-packet one-way delay: 112.456 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-04-11 07:26:43

End at: 2018-04-11 07:27:13

Below is generated by plot.py at 2018-04-11 11:20:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 191.27 Mbit/s

95th percentile per-packet one-way delay: 117.764 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.26 Mbit/s

95th percentile per-packet one-way delay: 116.503 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.07 Mbit/s

95th percentile per-packet one-way delay: 118.544 ms

Loss rate: 0.01%

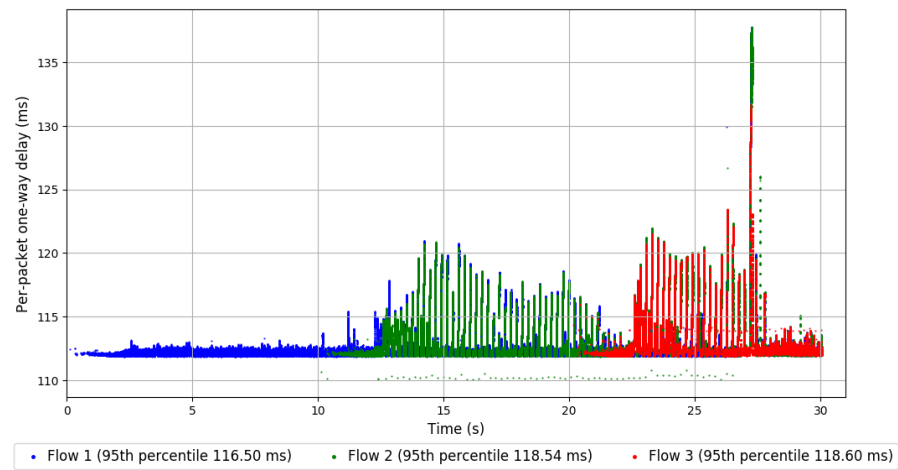
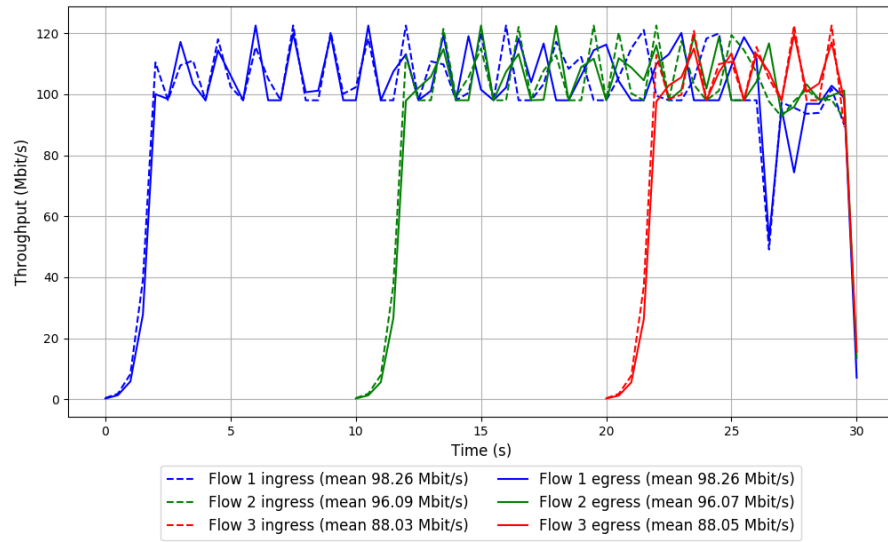
-- Flow 3:

Average throughput: 88.05 Mbit/s

95th percentile per-packet one-way delay: 118.599 ms

Loss rate: 0.01%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-04-11 07:45:44

End at: 2018-04-11 07:46:14

Below is generated by plot.py at 2018-04-11 11:20:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.26 Mbit/s

95th percentile per-packet one-way delay: 114.309 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 92.28 Mbit/s

95th percentile per-packet one-way delay: 114.178 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.14 Mbit/s

95th percentile per-packet one-way delay: 114.236 ms

Loss rate: 0.01%

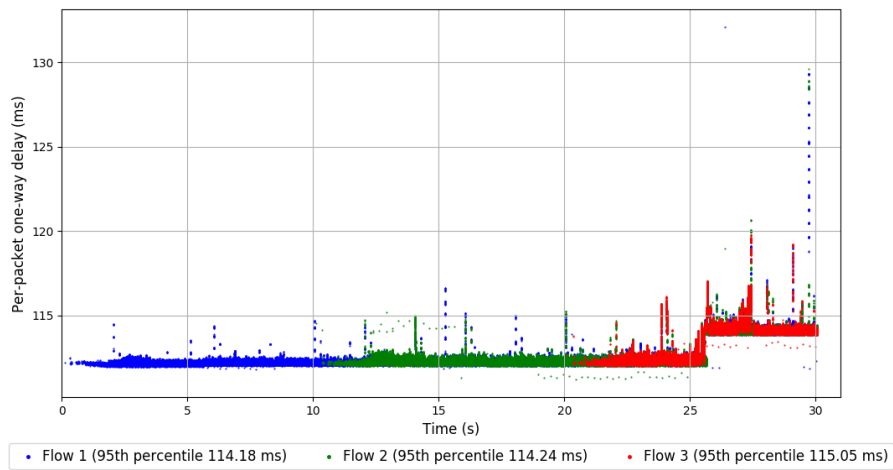
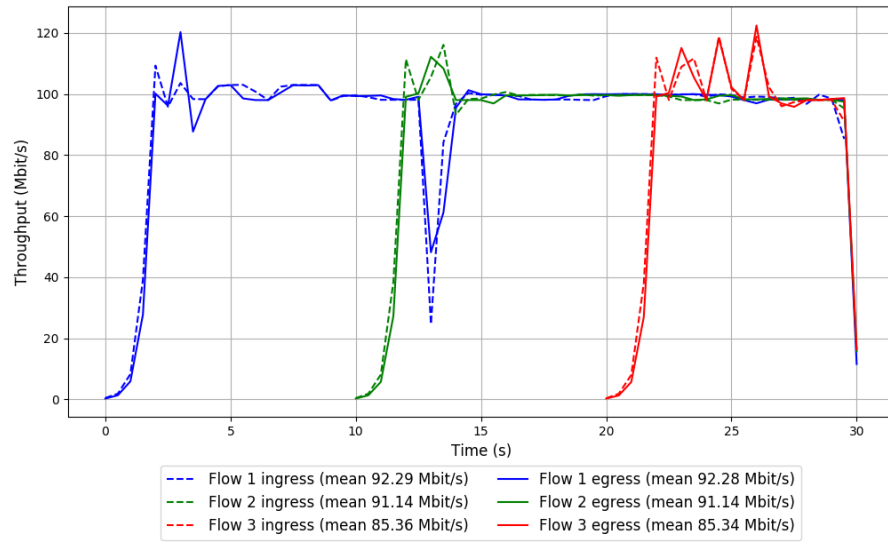
-- Flow 3:

Average throughput: 85.34 Mbit/s

95th percentile per-packet one-way delay: 115.048 ms

Loss rate: 0.02%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-04-11 08:04:50

End at: 2018-04-11 08:05:20

Below is generated by plot.py at 2018-04-11 11:20:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 180.99 Mbit/s

95th percentile per-packet one-way delay: 115.782 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 93.19 Mbit/s

95th percentile per-packet one-way delay: 114.514 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 88.72 Mbit/s

95th percentile per-packet one-way delay: 114.913 ms

Loss rate: 0.01%

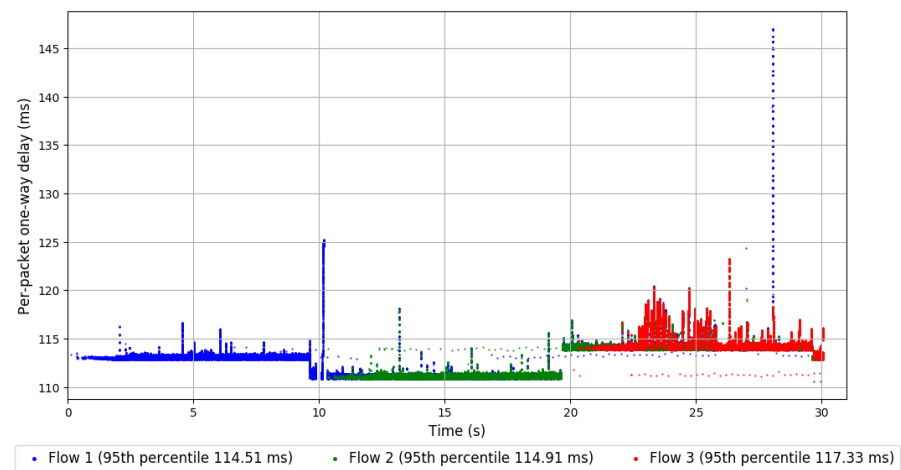
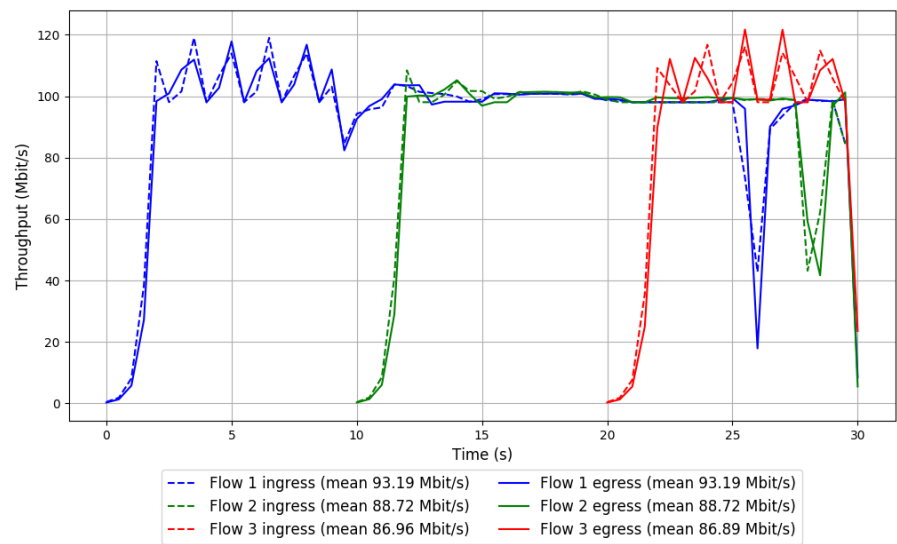
-- Flow 3:

Average throughput: 86.89 Mbit/s

95th percentile per-packet one-way delay: 117.333 ms

Loss rate: 0.06%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-04-11 08:24:14

End at: 2018-04-11 08:24:44

Below is generated by plot.py at 2018-04-11 11:20:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.90 Mbit/s

95th percentile per-packet one-way delay: 113.166 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 97.61 Mbit/s

95th percentile per-packet one-way delay: 113.133 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.54 Mbit/s

95th percentile per-packet one-way delay: 113.171 ms

Loss rate: 0.00%

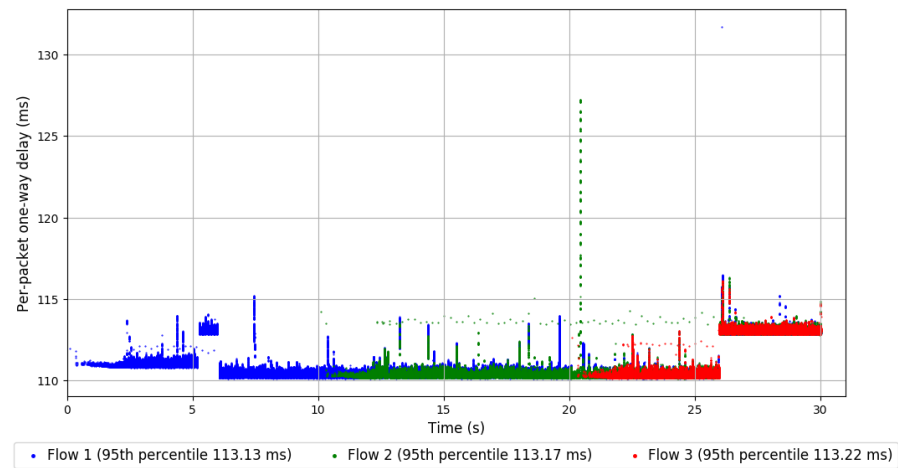
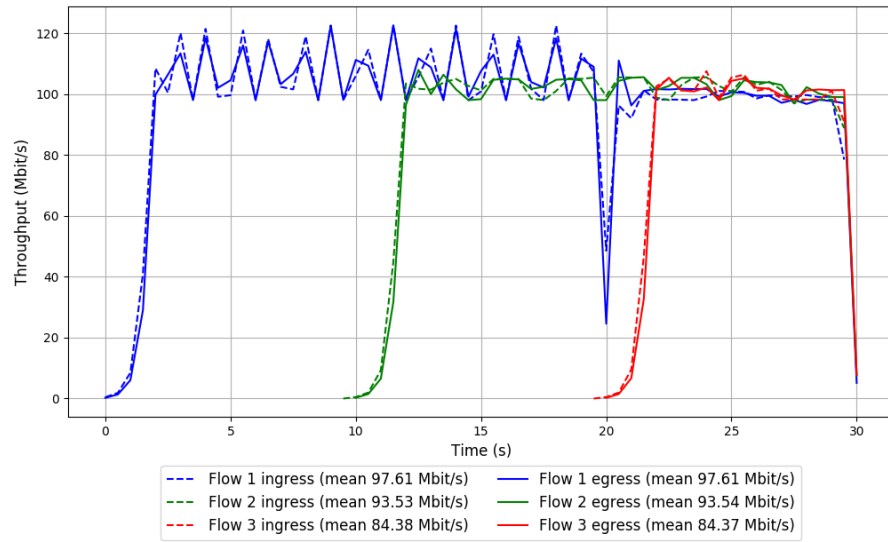
-- Flow 3:

Average throughput: 84.37 Mbit/s

95th percentile per-packet one-way delay: 113.216 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-04-11 08:43:14

End at: 2018-04-11 08:43:44

Below is generated by plot.py at 2018-04-11 11:20:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.61 Mbit/s

95th percentile per-packet one-way delay: 117.367 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 94.82 Mbit/s

95th percentile per-packet one-way delay: 114.085 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 97.49 Mbit/s

95th percentile per-packet one-way delay: 118.205 ms

Loss rate: 0.00%

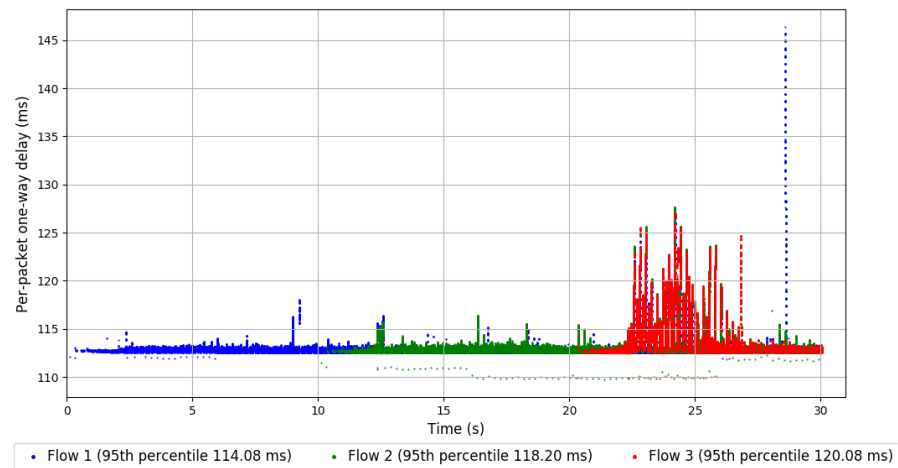
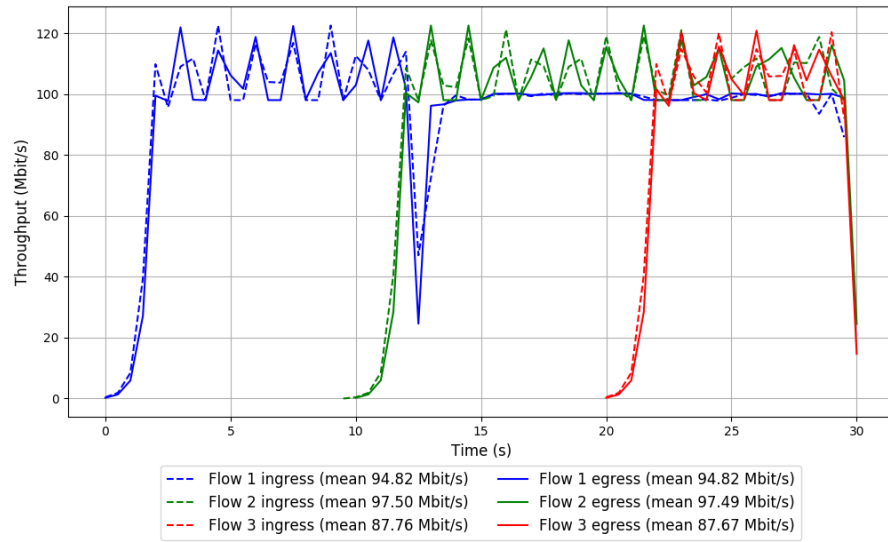
-- Flow 3:

Average throughput: 87.67 Mbit/s

95th percentile per-packet one-way delay: 120.085 ms

Loss rate: 0.10%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-04-11 09:01:49

End at: 2018-04-11 09:02:19

Below is generated by plot.py at 2018-04-11 11:22:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.18 Mbit/s

95th percentile per-packet one-way delay: 116.390 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 93.89 Mbit/s

95th percentile per-packet one-way delay: 114.064 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 94.35 Mbit/s

95th percentile per-packet one-way delay: 118.504 ms

Loss rate: 0.02%

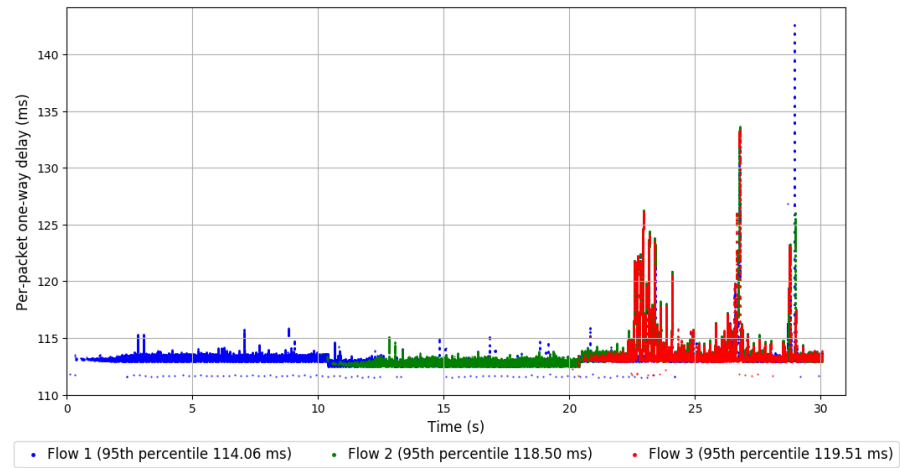
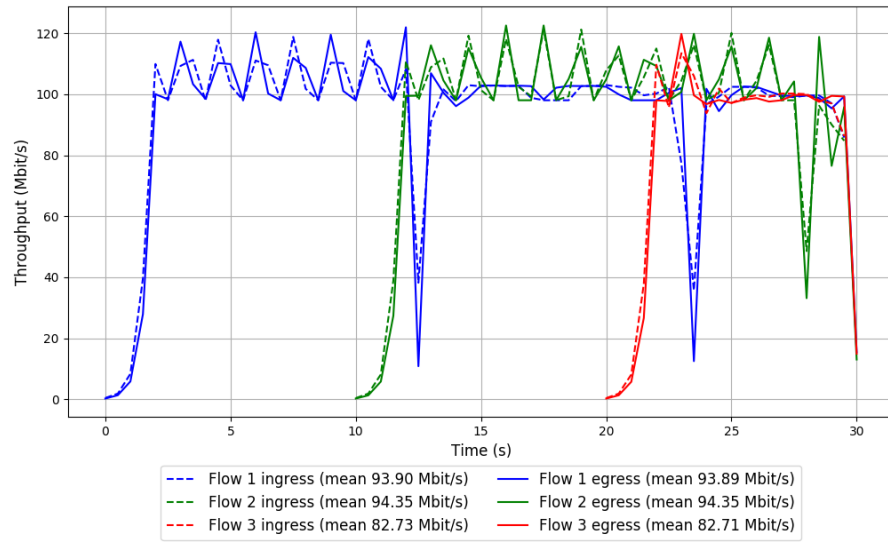
-- Flow 3:

Average throughput: 82.71 Mbit/s

95th percentile per-packet one-way delay: 119.513 ms

Loss rate: 0.05%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-04-11 09:20:34

End at: 2018-04-11 09:21:04

Below is generated by plot.py at 2018-04-11 11:22:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.24 Mbit/s

95th percentile per-packet one-way delay: 111.878 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 96.27 Mbit/s

95th percentile per-packet one-way delay: 111.779 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 98.10 Mbit/s

95th percentile per-packet one-way delay: 112.030 ms

Loss rate: 0.00%

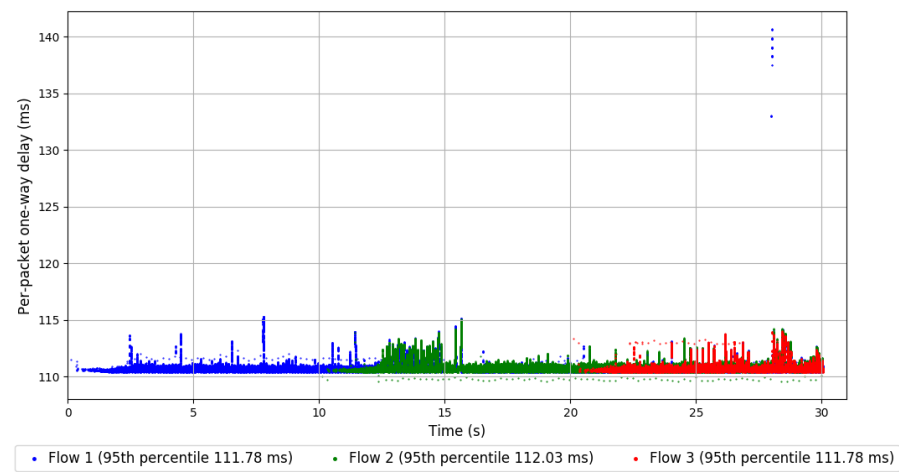
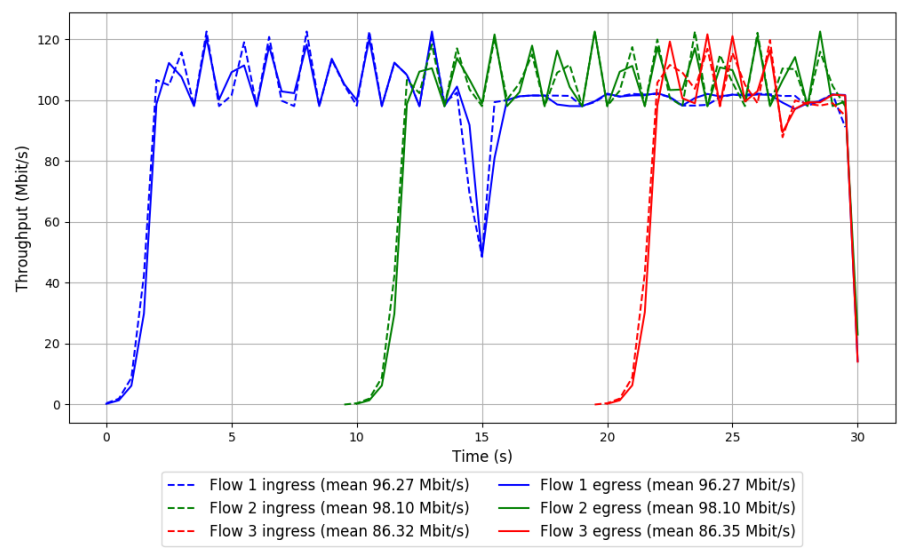
-- Flow 3:

Average throughput: 86.35 Mbit/s

95th percentile per-packet one-way delay: 111.781 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-04-11 06:22:15

End at: 2018-04-11 06:22:45

Below is generated by plot.py at 2018-04-11 11:22:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.72 Mbit/s

95th percentile per-packet one-way delay: 122.068 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.32 Mbit/s

95th percentile per-packet one-way delay: 121.636 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.19 Mbit/s

95th percentile per-packet one-way delay: 122.539 ms

Loss rate: 0.00%

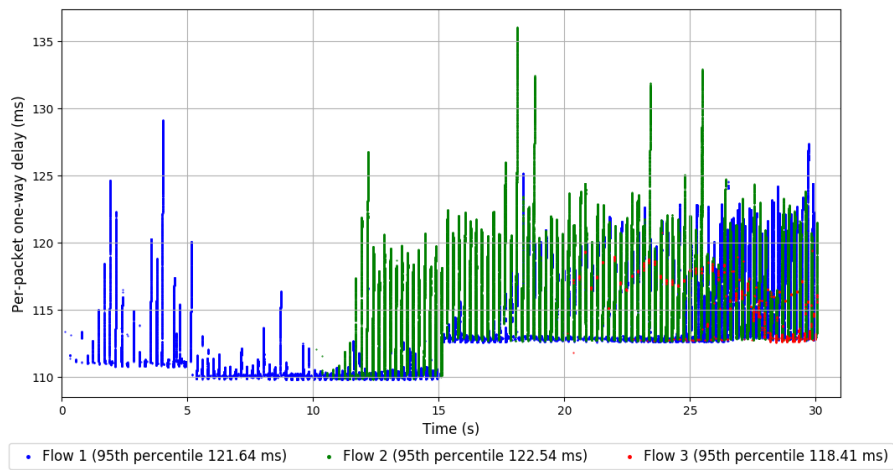
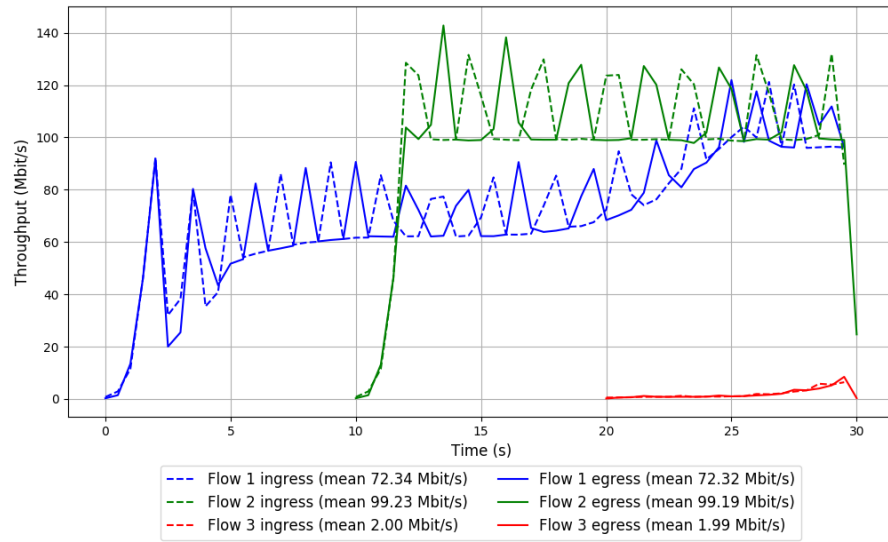
-- Flow 3:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 118.414 ms

Loss rate: 0.24%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-04-11 06:40:58

End at: 2018-04-11 06:41:28

Below is generated by plot.py at 2018-04-11 11:22:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.18 Mbit/s

95th percentile per-packet one-way delay: 120.311 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 102.51 Mbit/s

95th percentile per-packet one-way delay: 120.248 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.65 Mbit/s

95th percentile per-packet one-way delay: 120.588 ms

Loss rate: 0.00%

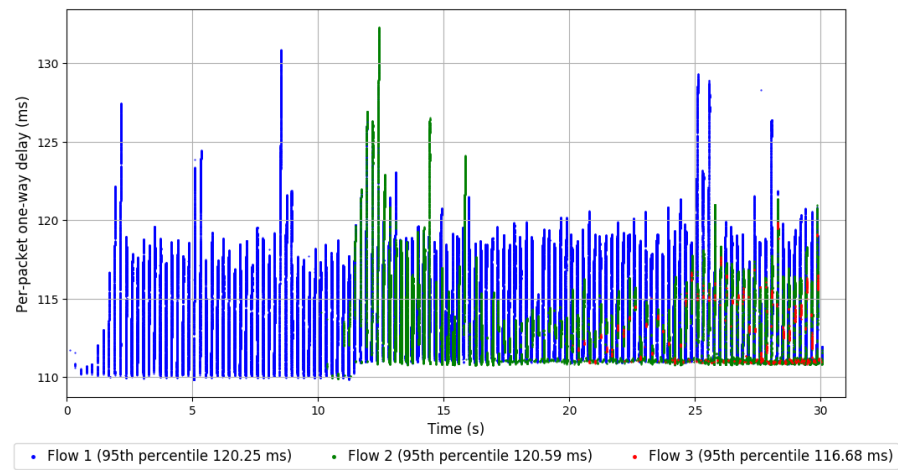
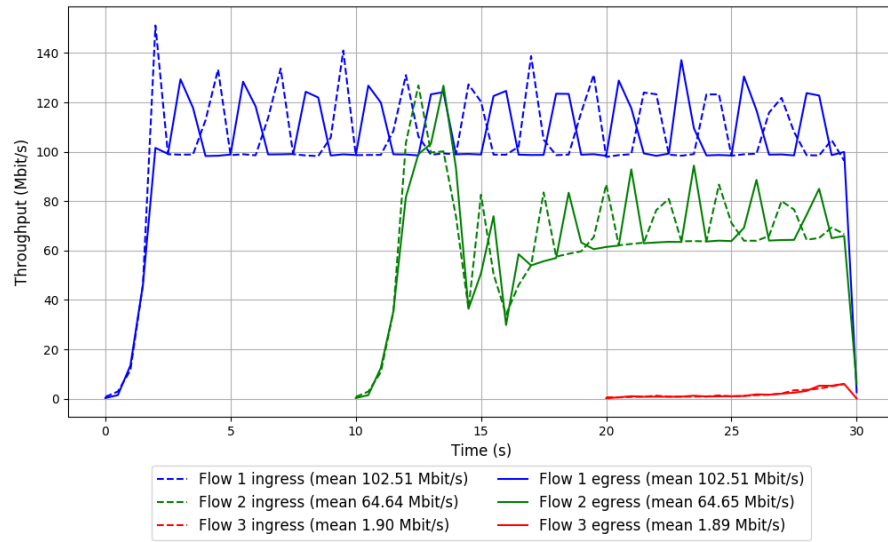
-- Flow 3:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 116.680 ms

Loss rate: 0.19%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-04-11 07:00:12

End at: 2018-04-11 07:00:42

Below is generated by plot.py at 2018-04-11 11:22:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 153.25 Mbit/s

95th percentile per-packet one-way delay: 120.853 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 64.35 Mbit/s

95th percentile per-packet one-way delay: 119.458 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 89.25 Mbit/s

95th percentile per-packet one-way delay: 121.971 ms

Loss rate: 0.00%

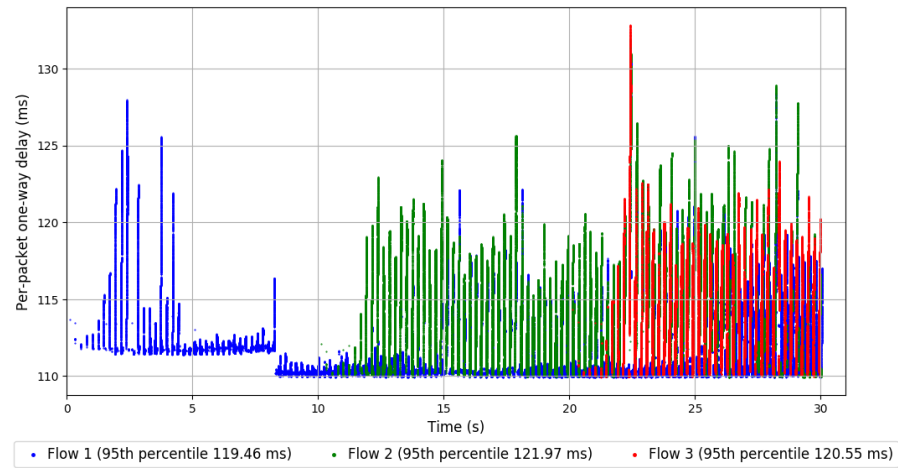
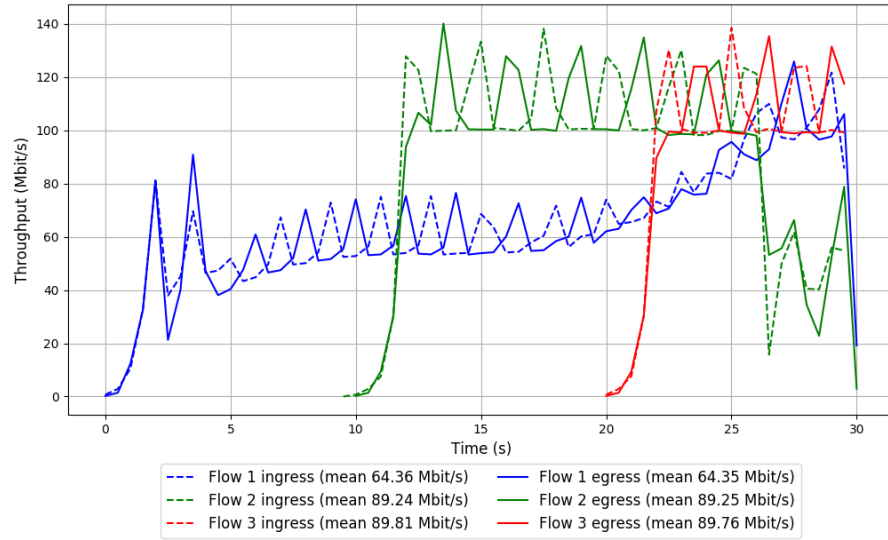
-- Flow 3:

Average throughput: 89.76 Mbit/s

95th percentile per-packet one-way delay: 120.548 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-04-11 07:19:29

End at: 2018-04-11 07:19:59

Below is generated by plot.py at 2018-04-11 11:22:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.45 Mbit/s

95th percentile per-packet one-way delay: 117.519 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.82 Mbit/s

95th percentile per-packet one-way delay: 117.809 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.48 Mbit/s

95th percentile per-packet one-way delay: 117.158 ms

Loss rate: 0.00%

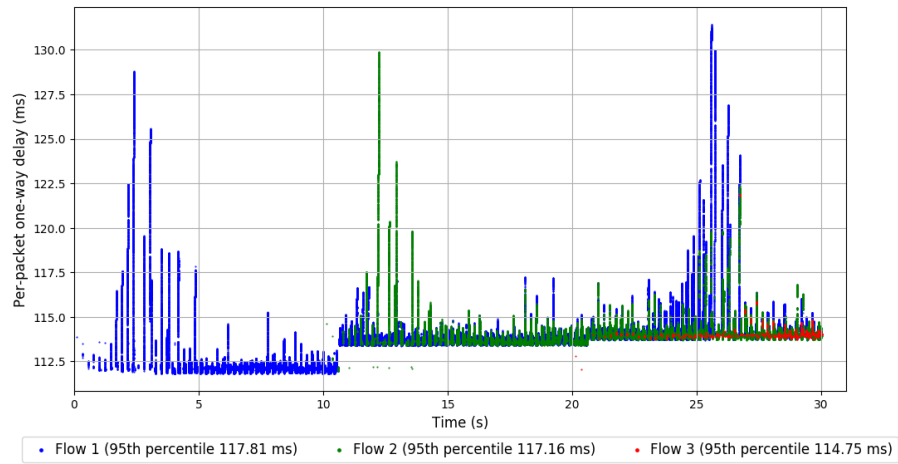
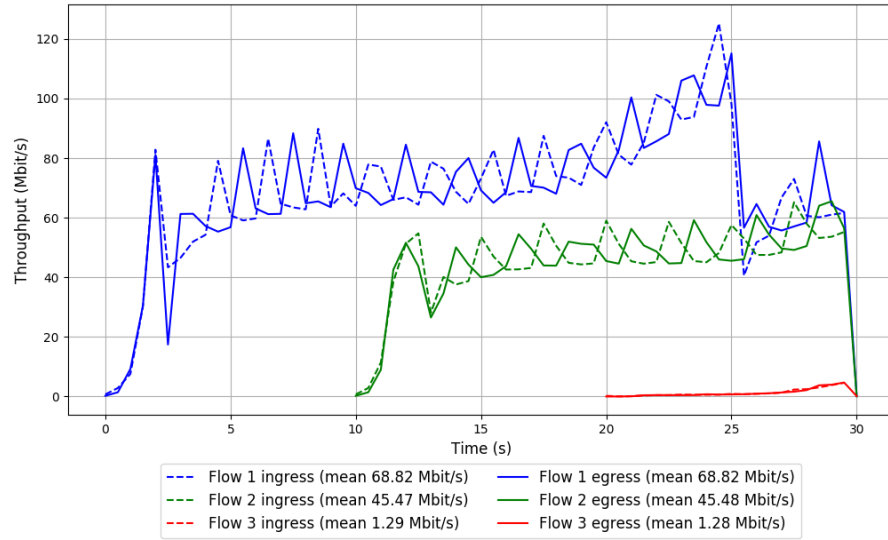
-- Flow 3:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 114.746 ms

Loss rate: 0.94%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-04-11 07:38:30

End at: 2018-04-11 07:39:00

Below is generated by plot.py at 2018-04-11 11:22:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.60 Mbit/s

95th percentile per-packet one-way delay: 121.724 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 85.24 Mbit/s

95th percentile per-packet one-way delay: 121.884 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 91.60 Mbit/s

95th percentile per-packet one-way delay: 121.136 ms

Loss rate: 0.00%

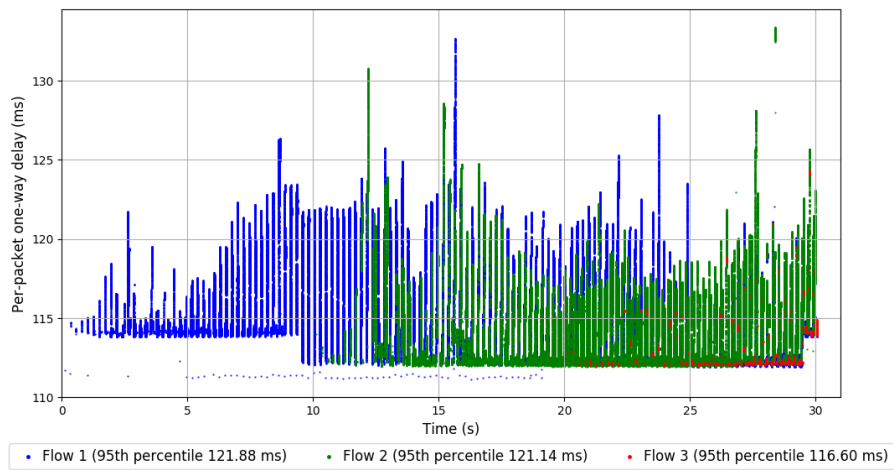
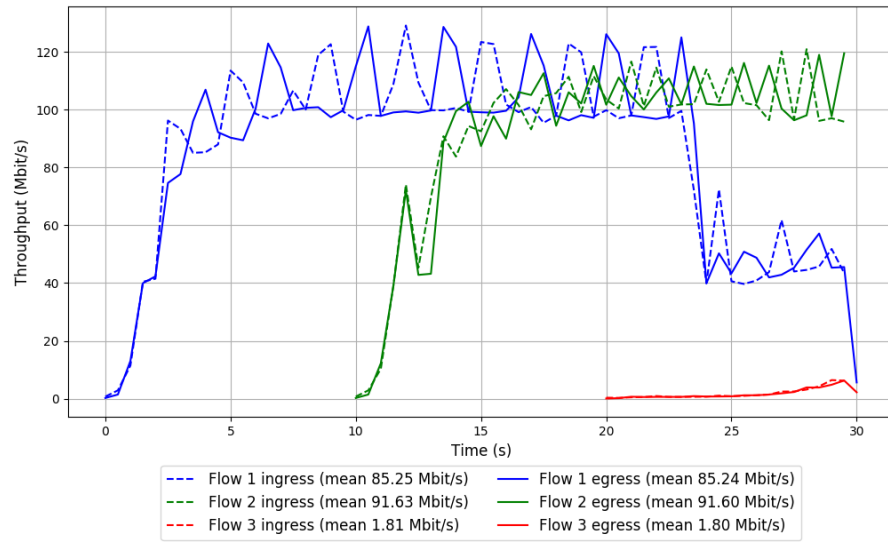
-- Flow 3:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 116.603 ms

Loss rate: 0.54%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-04-11 07:57:29

End at: 2018-04-11 07:57:59

Below is generated by plot.py at 2018-04-11 11:23:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.99 Mbit/s

95th percentile per-packet one-way delay: 122.420 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 101.07 Mbit/s

95th percentile per-packet one-way delay: 122.783 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 87.37 Mbit/s

95th percentile per-packet one-way delay: 121.765 ms

Loss rate: 0.00%

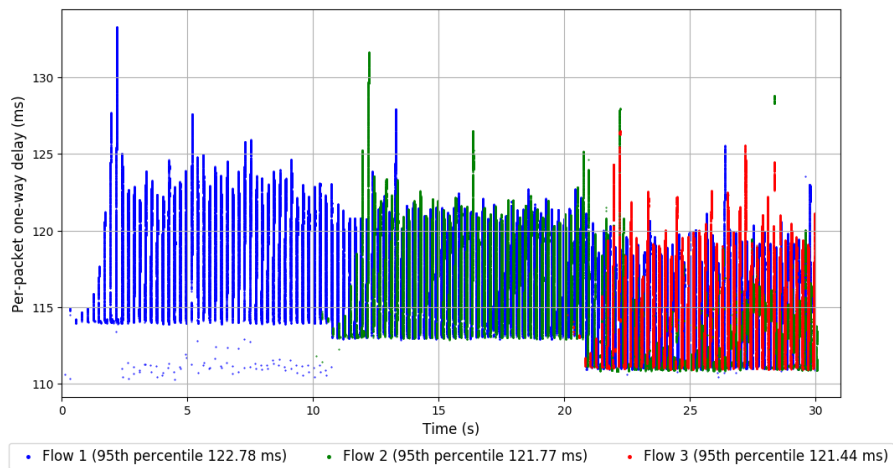
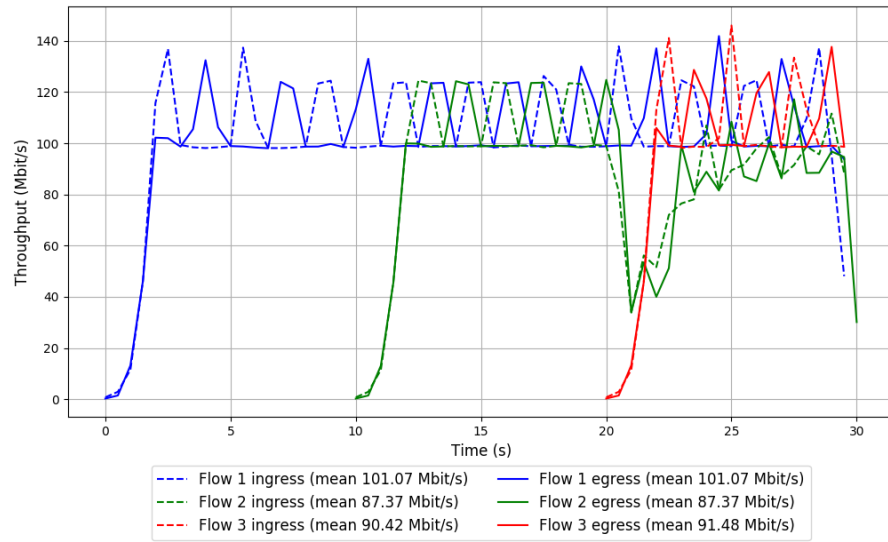
-- Flow 3:

Average throughput: 91.48 Mbit/s

95th percentile per-packet one-way delay: 121.441 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-04-11 08:16:51

End at: 2018-04-11 08:17:21

Below is generated by plot.py at 2018-04-11 11:24:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 160.49 Mbit/s

95th percentile per-packet one-way delay: 121.320 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 93.59 Mbit/s

95th percentile per-packet one-way delay: 120.697 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 100.08 Mbit/s

95th percentile per-packet one-way delay: 121.858 ms

Loss rate: 0.00%

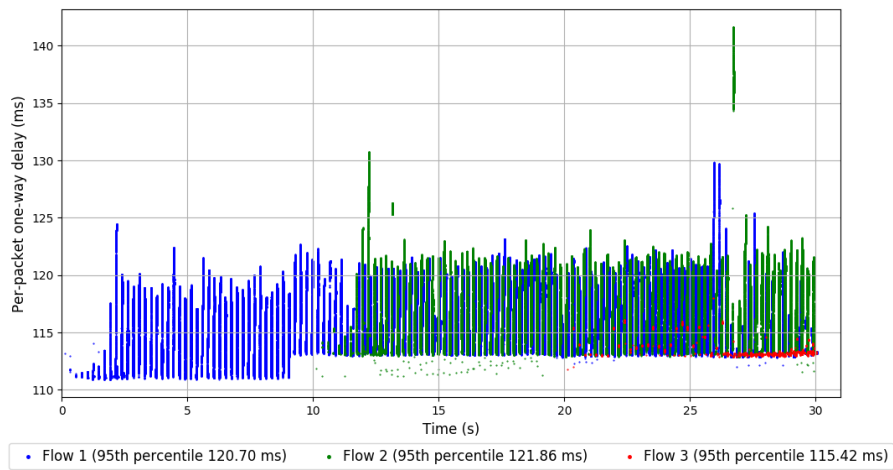
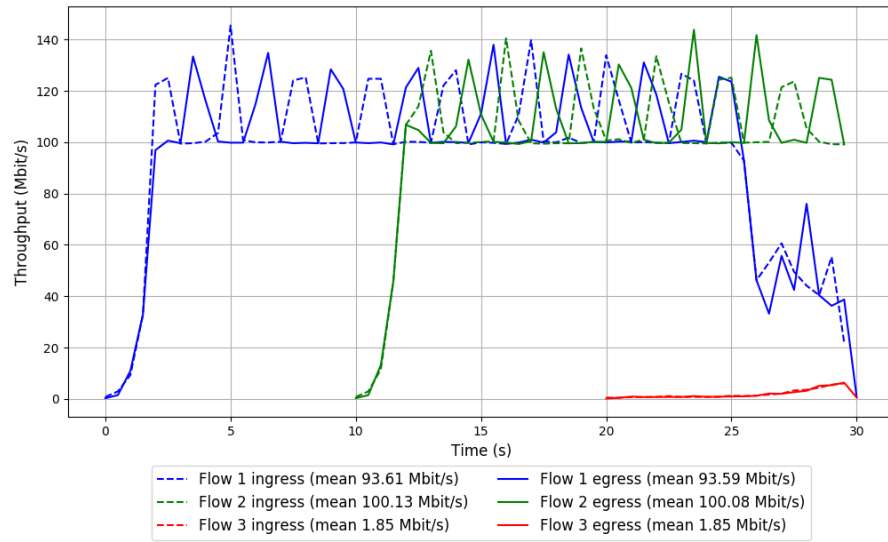
-- Flow 3:

Average throughput: 1.85 Mbit/s

95th percentile per-packet one-way delay: 115.418 ms

Loss rate: 0.46%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-04-11 08:36:05

End at: 2018-04-11 08:36:35

Below is generated by plot.py at 2018-04-11 11:24:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.41 Mbit/s

95th percentile per-packet one-way delay: 121.705 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 102.06 Mbit/s

95th percentile per-packet one-way delay: 121.868 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.01 Mbit/s

95th percentile per-packet one-way delay: 120.740 ms

Loss rate: 0.18%

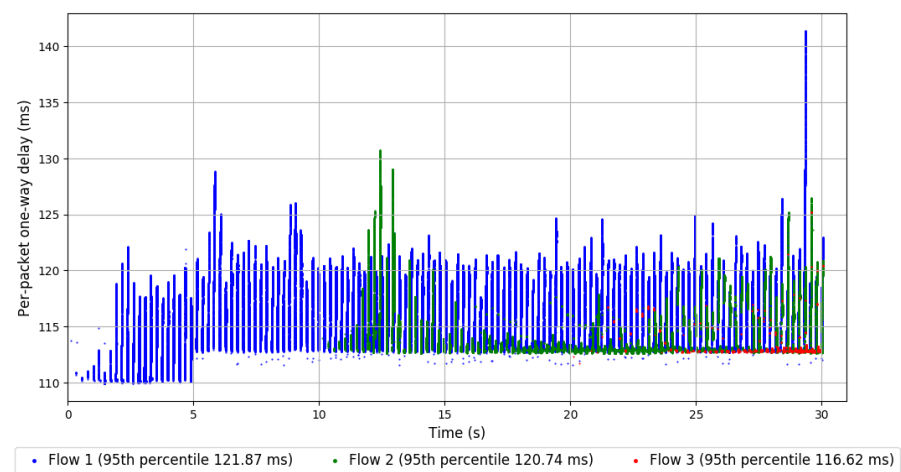
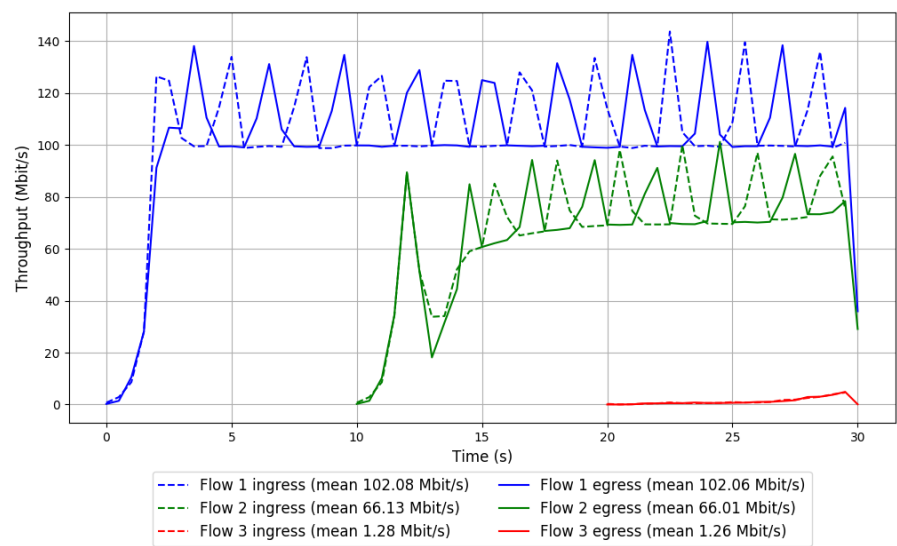
-- Flow 3:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 116.616 ms

Loss rate: 1.60%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-04-11 08:54:48

End at: 2018-04-11 08:55:18

Below is generated by plot.py at 2018-04-11 11:25:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.56 Mbit/s

95th percentile per-packet one-way delay: 122.489 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 98.35 Mbit/s

95th percentile per-packet one-way delay: 121.597 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 92.65 Mbit/s

95th percentile per-packet one-way delay: 123.111 ms

Loss rate: 0.00%

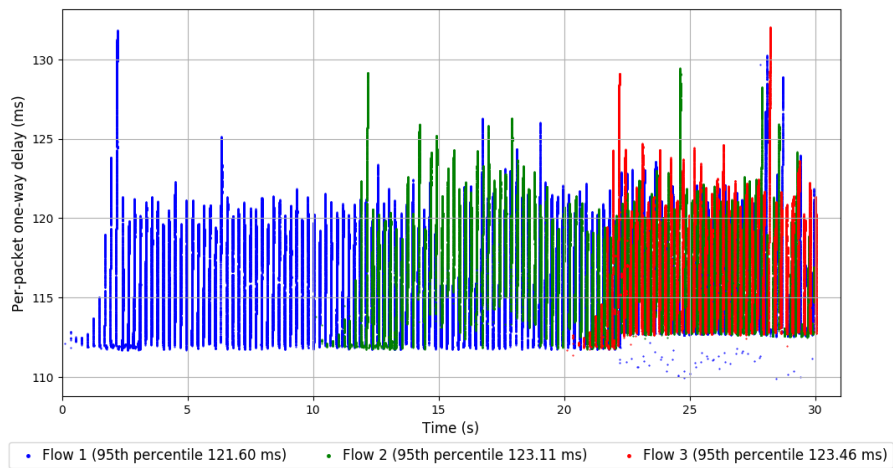
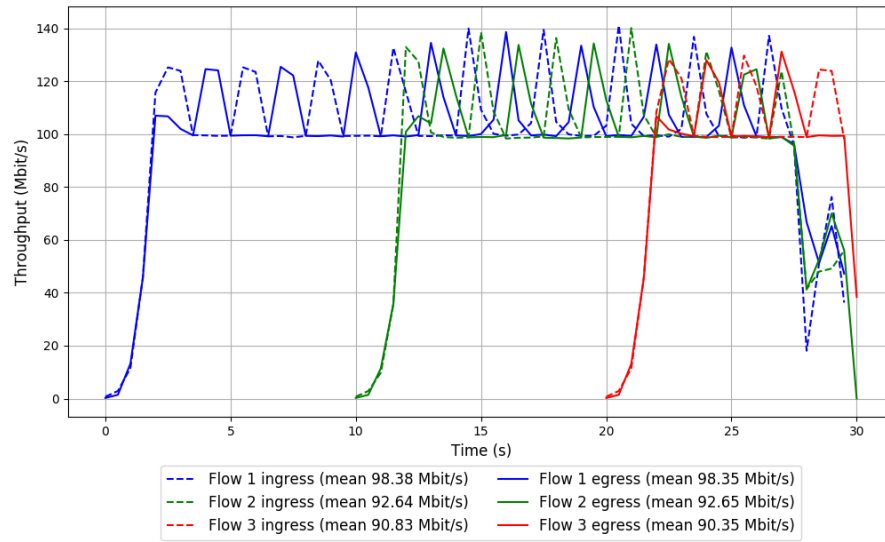
-- Flow 3:

Average throughput: 90.35 Mbit/s

95th percentile per-packet one-way delay: 123.461 ms

Loss rate: 0.54%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-04-11 09:13:23

End at: 2018-04-11 09:13:53

Below is generated by plot.py at 2018-04-11 11:25:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.16 Mbit/s

95th percentile per-packet one-way delay: 122.272 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.47 Mbit/s

95th percentile per-packet one-way delay: 122.280 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.59 Mbit/s

95th percentile per-packet one-way delay: 120.356 ms

Loss rate: 0.00%

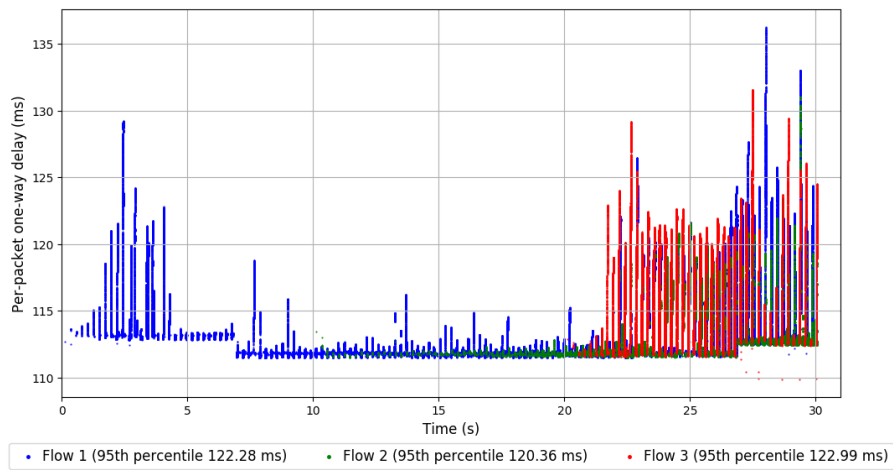
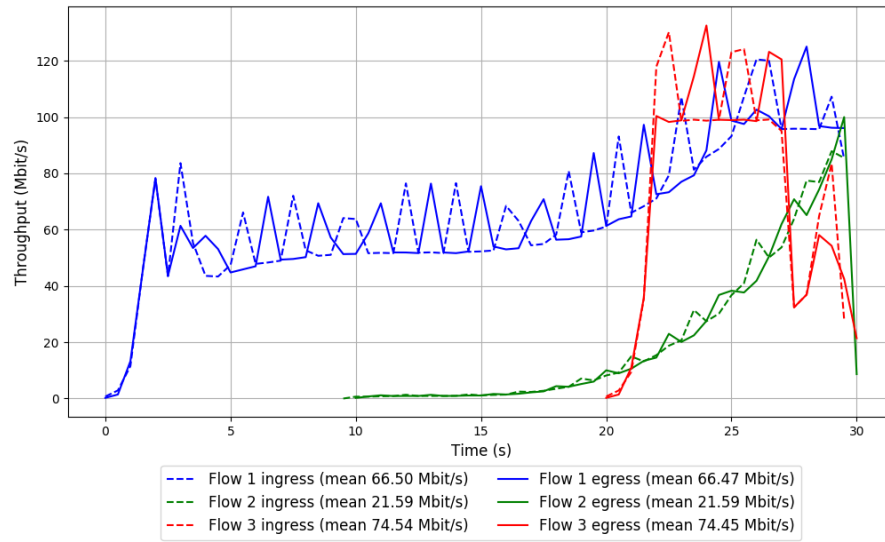
-- Flow 3:

Average throughput: 74.45 Mbit/s

95th percentile per-packet one-way delay: 122.994 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

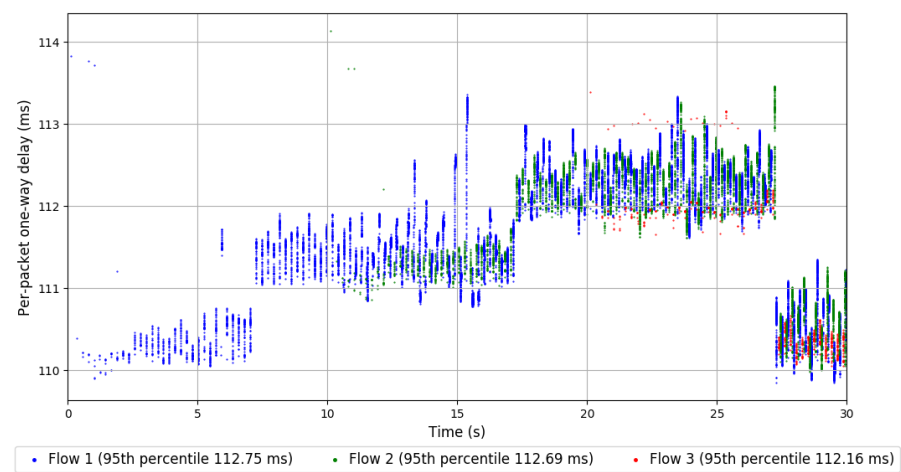
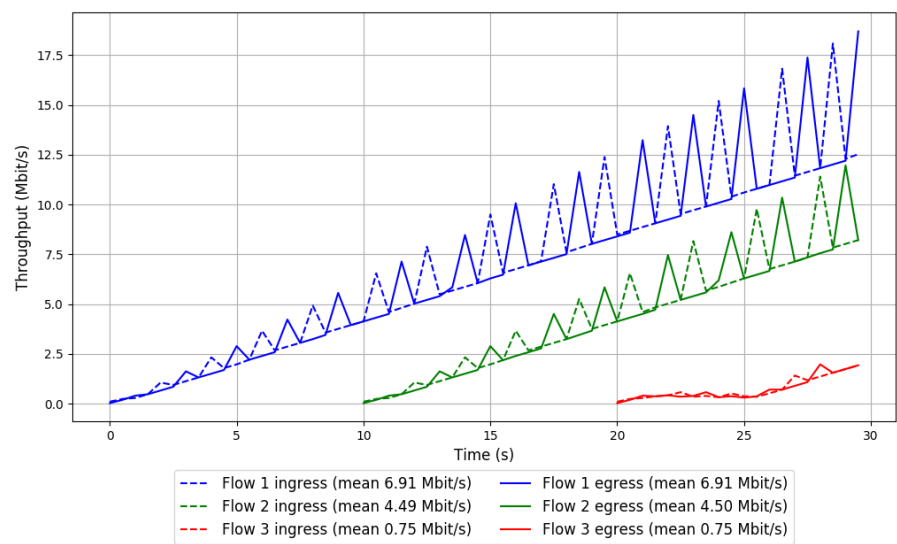


```
Run 1: Statistics of LEDBAT

Start at: 2018-04-11 06:27:33
End at: 2018-04-11 06:28:03

# Below is generated by plot.py at 2018-04-11 11:25:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.14 Mbit/s
95th percentile per-packet one-way delay: 112.739 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.91 Mbit/s
95th percentile per-packet one-way delay: 112.753 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.50 Mbit/s
95th percentile per-packet one-way delay: 112.694 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 112.155 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

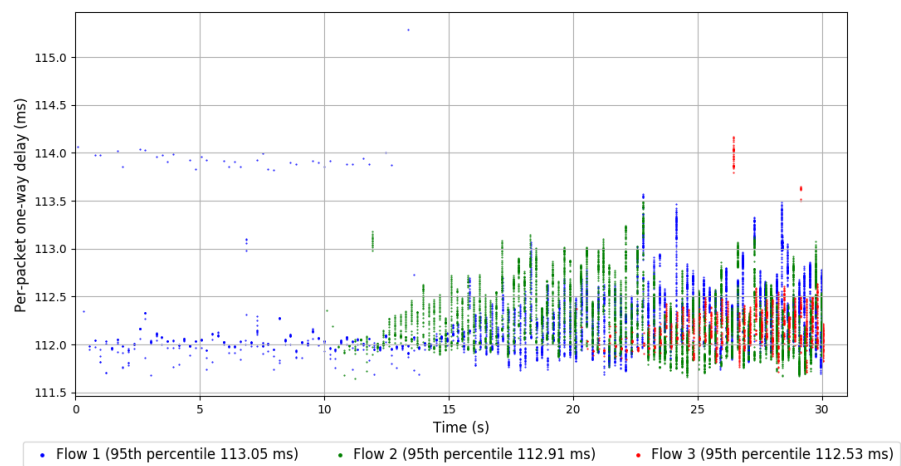
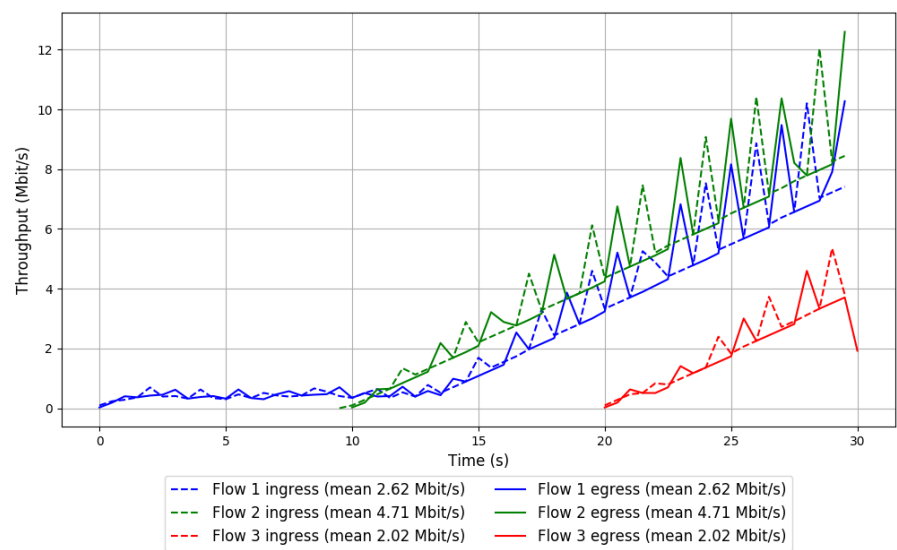


```
Run 2: Statistics of LEDBAT

Start at: 2018-04-11 06:46:22
End at: 2018-04-11 06:46:52

# Below is generated by plot.py at 2018-04-11 11:25:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 112.940 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 113.050 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 112.914 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 112.532 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-04-11 07:05:29

End at: 2018-04-11 07:05:59

Below is generated by plot.py at 2018-04-11 11:25:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.74 Mbit/s

95th percentile per-packet one-way delay: 114.121 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.07 Mbit/s

95th percentile per-packet one-way delay: 114.181 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.41 Mbit/s

95th percentile per-packet one-way delay: 113.941 ms

Loss rate: 0.00%

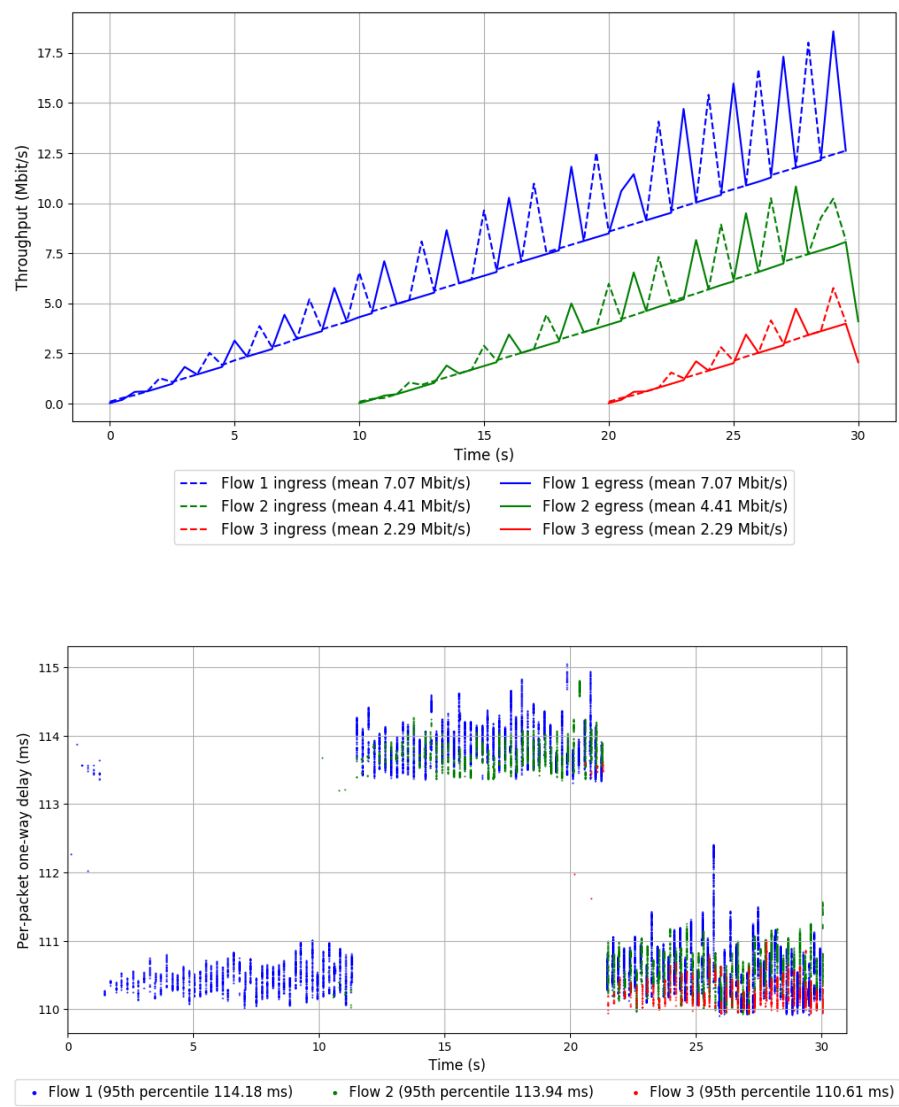
-- Flow 3:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 110.606 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-04-11 07:24:54

End at: 2018-04-11 07:25:24

Below is generated by plot.py at 2018-04-11 11:25:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.29 Mbit/s

95th percentile per-packet one-way delay: 113.203 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.67 Mbit/s

95th percentile per-packet one-way delay: 113.250 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.52 Mbit/s

95th percentile per-packet one-way delay: 113.048 ms

Loss rate: 0.00%

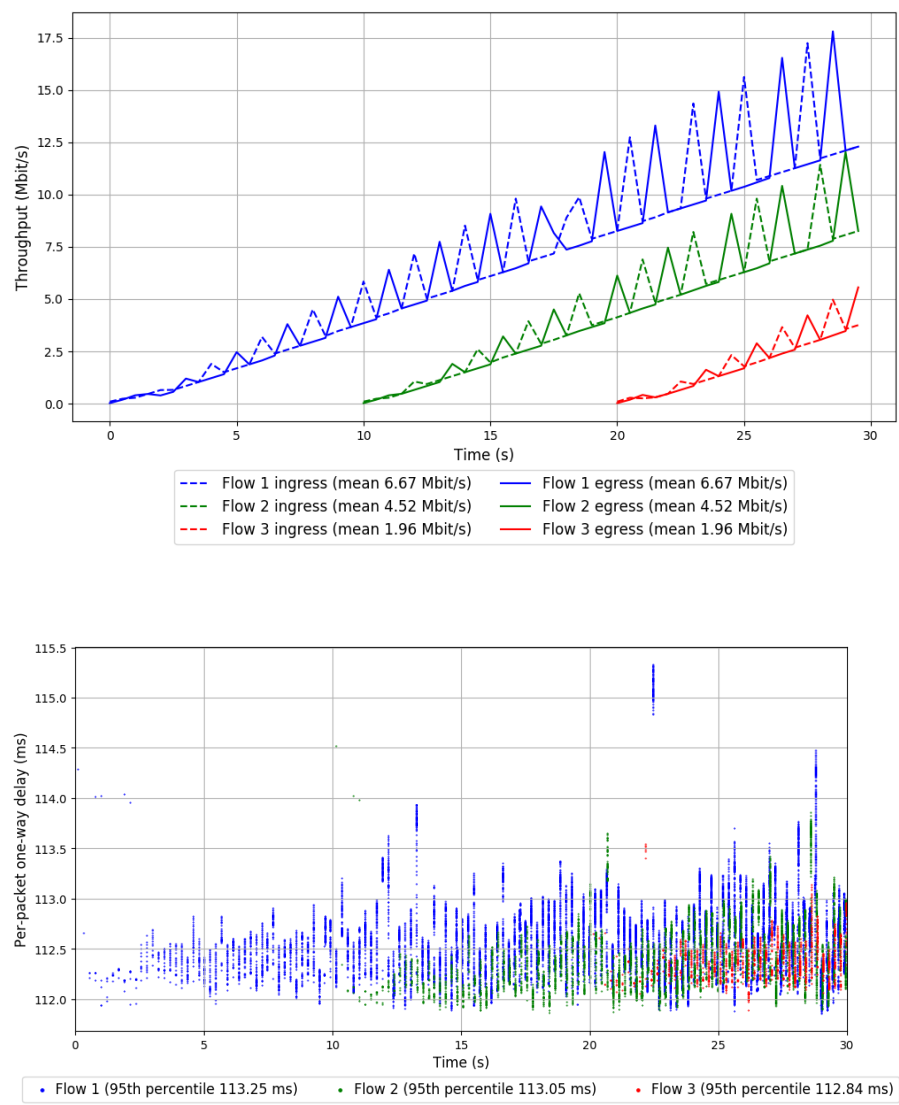
-- Flow 3:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 112.843 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-04-11 07:43:53

End at: 2018-04-11 07:44:23

Below is generated by plot.py at 2018-04-11 11:25:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.73 Mbit/s

95th percentile per-packet one-way delay: 114.853 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.03 Mbit/s

95th percentile per-packet one-way delay: 114.887 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 114.752 ms

Loss rate: 0.00%

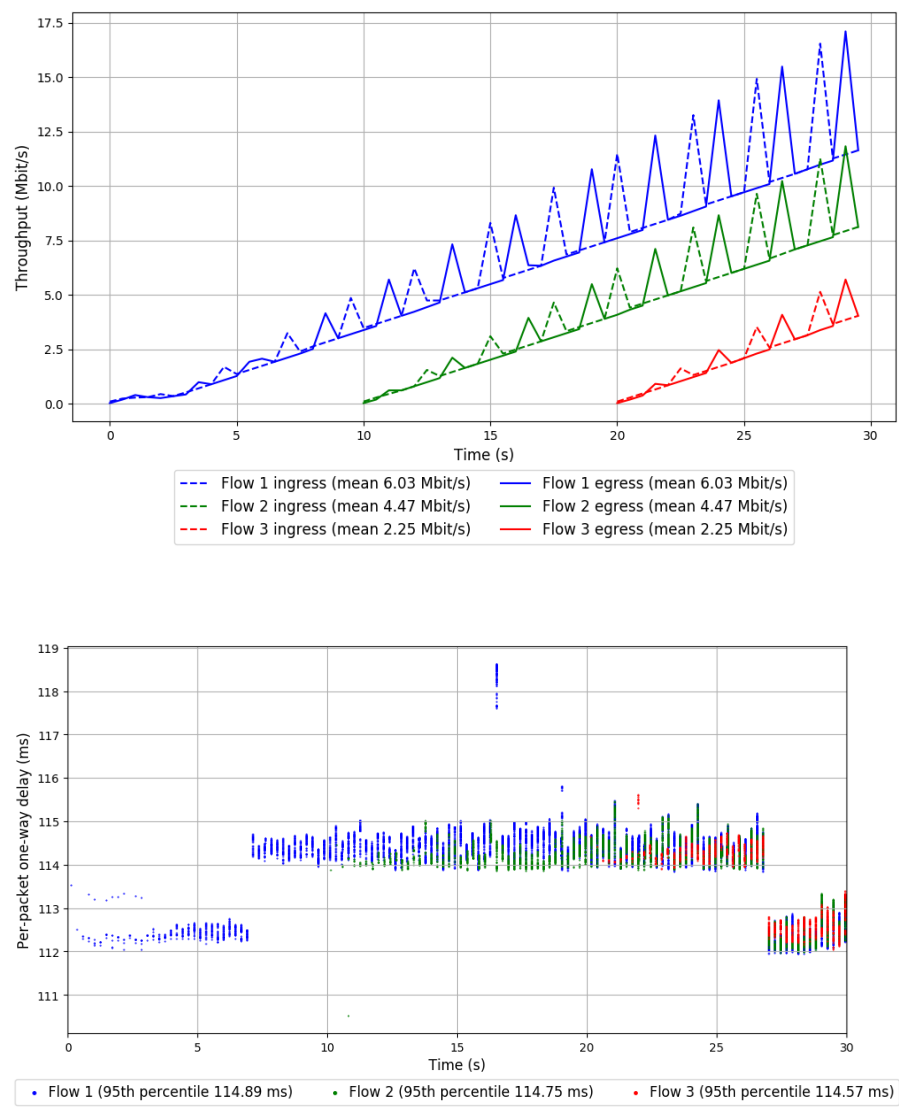
-- Flow 3:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 114.572 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-04-11 08:02:53

End at: 2018-04-11 08:03:23

Below is generated by plot.py at 2018-04-11 11:25:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.27 Mbit/s

95th percentile per-packet one-way delay: 114.162 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.11 Mbit/s

95th percentile per-packet one-way delay: 114.211 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 114.147 ms

Loss rate: 0.00%

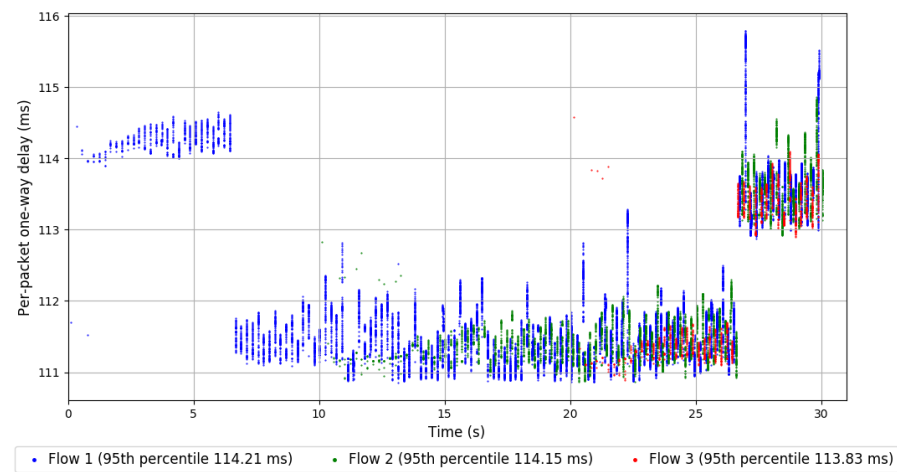
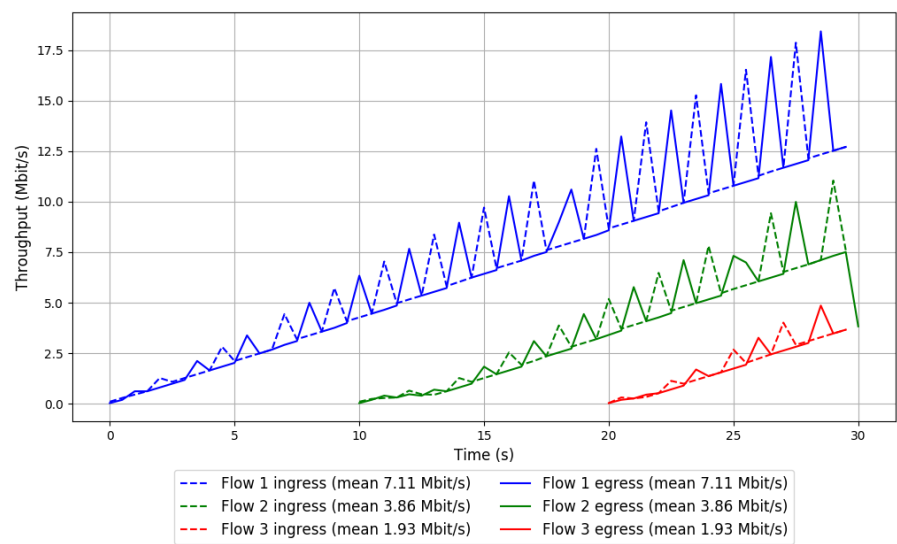
-- Flow 3:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 113.827 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-04-11 08:22:14

End at: 2018-04-11 08:22:44

Below is generated by plot.py at 2018-04-11 11:25:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.71 Mbit/s

95th percentile per-packet one-way delay: 114.058 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.14 Mbit/s

95th percentile per-packet one-way delay: 114.031 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 114.213 ms

Loss rate: 0.00%

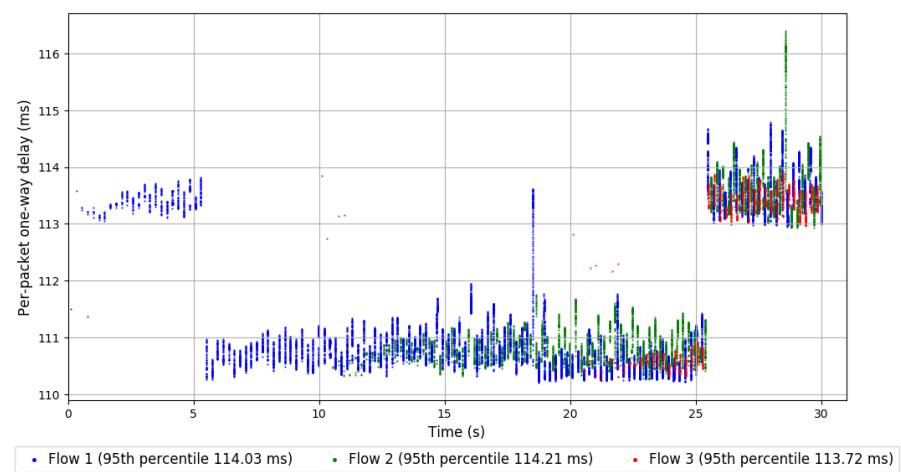
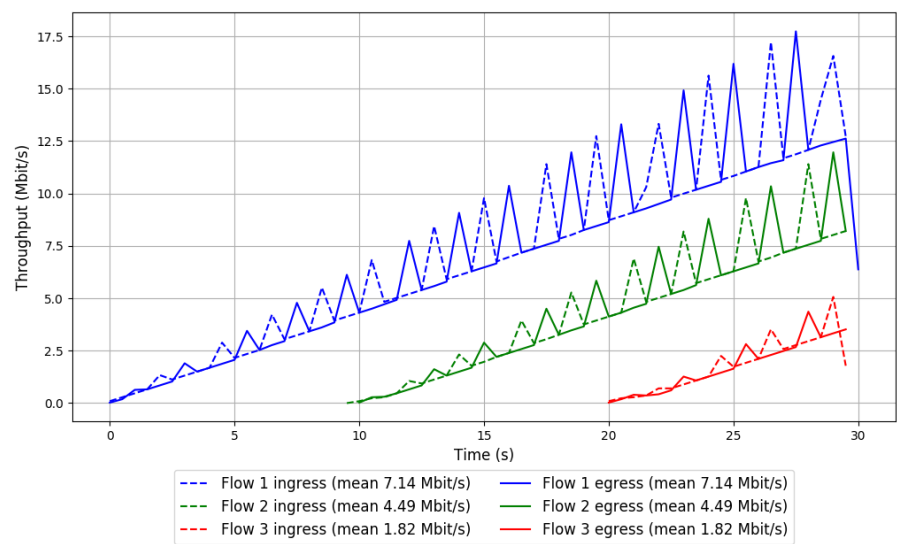
-- Flow 3:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 113.722 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-04-11 08:41:22

End at: 2018-04-11 08:41:52

Below is generated by plot.py at 2018-04-11 11:25:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.54 Mbit/s

95th percentile per-packet one-way delay: 113.482 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 6.84 Mbit/s

95th percentile per-packet one-way delay: 113.494 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 113.480 ms

Loss rate: 0.00%

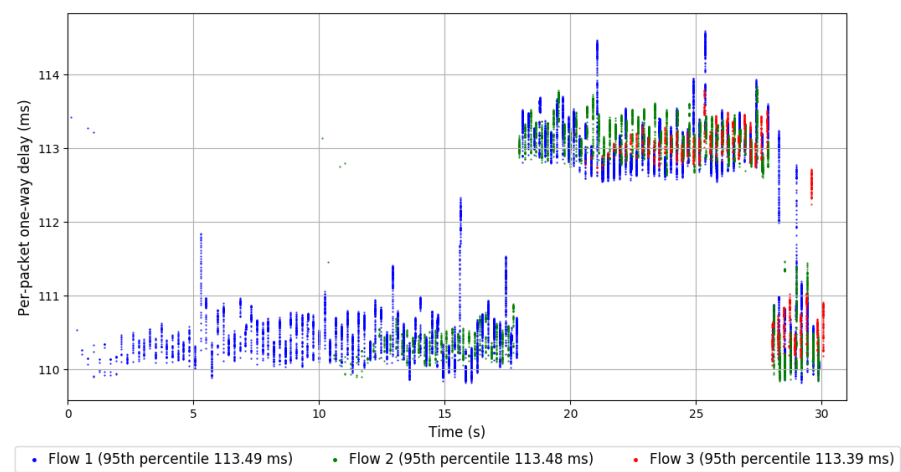
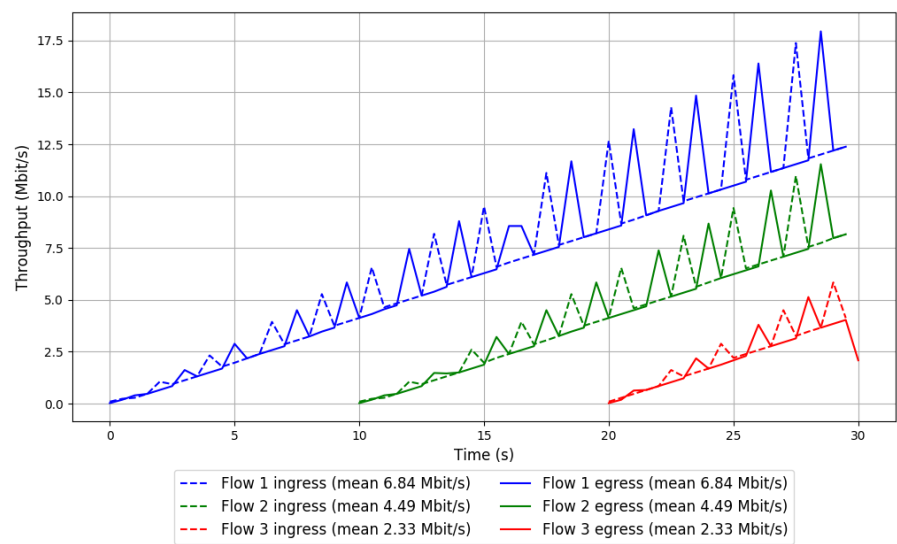
-- Flow 3:

Average throughput: 2.33 Mbit/s

95th percentile per-packet one-way delay: 113.387 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-04-11 09:00:06

End at: 2018-04-11 09:00:36

Below is generated by plot.py at 2018-04-11 11:25:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.89 Mbit/s

95th percentile per-packet one-way delay: 114.150 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.05 Mbit/s

95th percentile per-packet one-way delay: 114.114 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.70 Mbit/s

95th percentile per-packet one-way delay: 114.196 ms

Loss rate: 0.00%

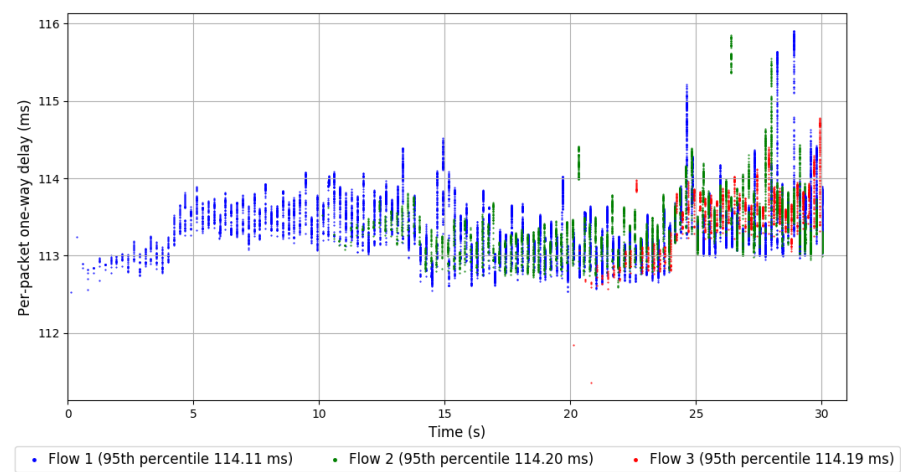
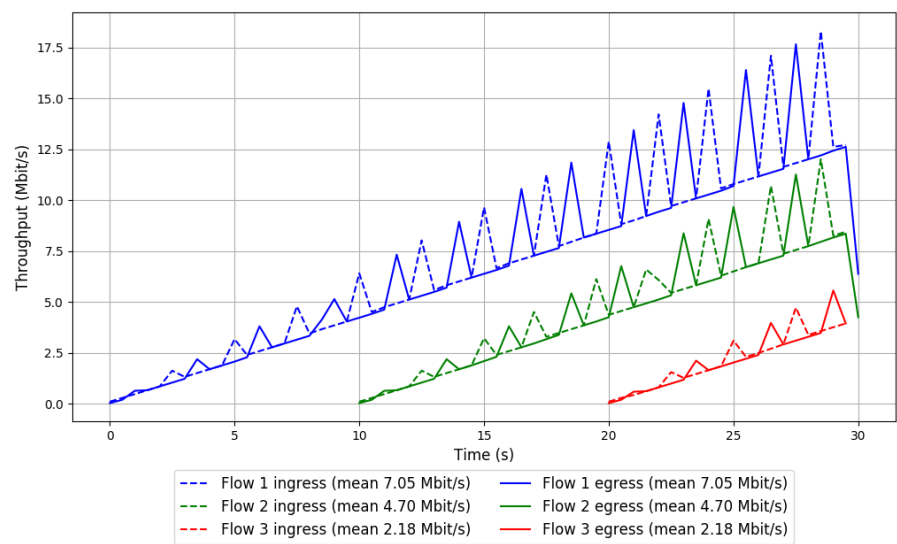
-- Flow 3:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 114.188 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

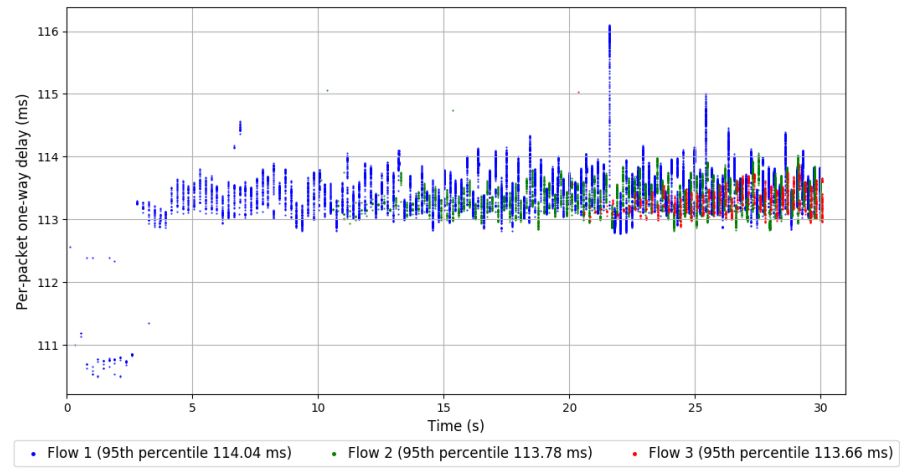
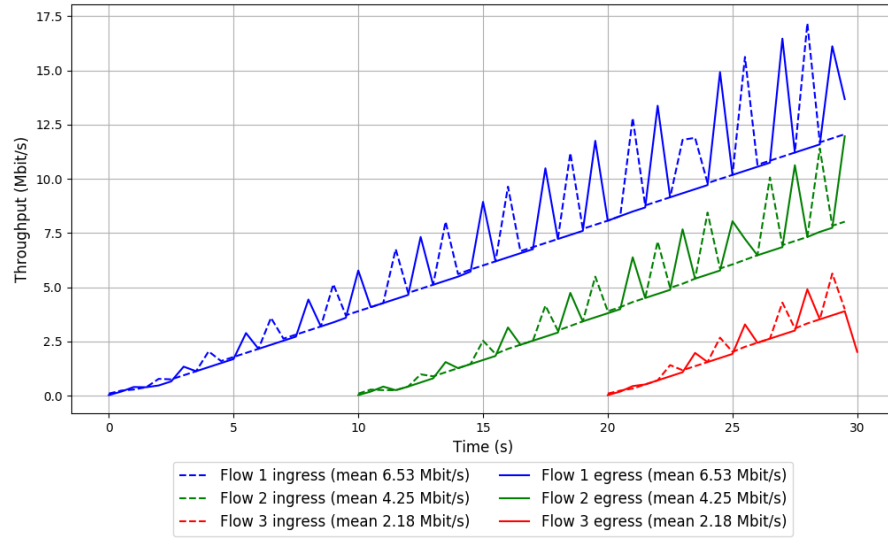


```
Run 10: Statistics of LEDBAT

Start at: 2018-04-11 09:18:37
End at: 2018-04-11 09:19:07

# Below is generated by plot.py at 2018-04-11 11:25:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.05 Mbit/s
95th percentile per-packet one-way delay: 113.967 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 114.041 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.25 Mbit/s
95th percentile per-packet one-way delay: 113.778 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 113.659 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

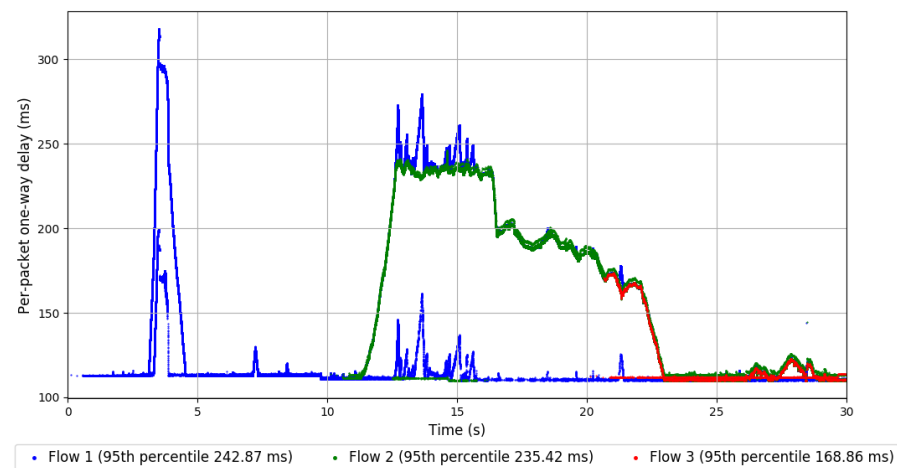
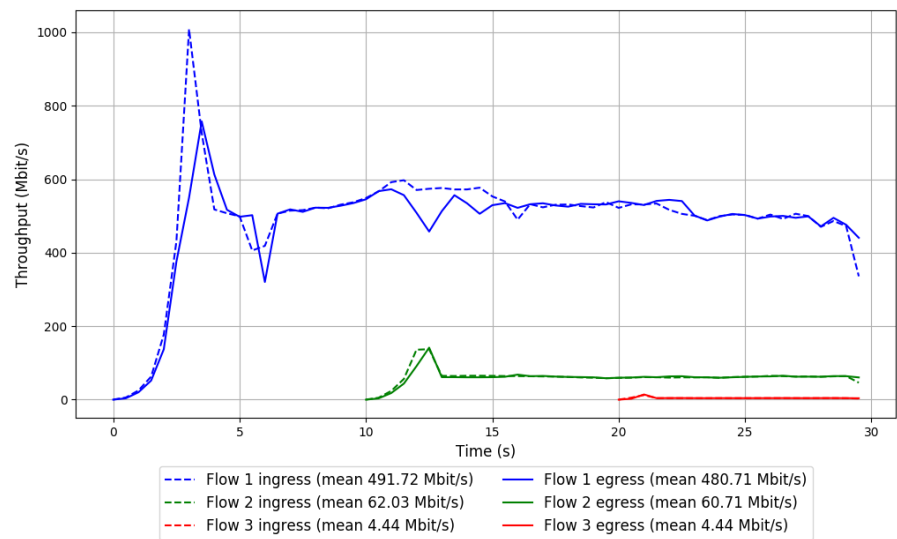


```
Run 1: Statistics of PCC

Start at: 2018-04-11 06:18:30
End at: 2018-04-11 06:19:00

# Below is generated by plot.py at 2018-04-11 11:31:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 522.51 Mbit/s
95th percentile per-packet one-way delay: 241.614 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 480.71 Mbit/s
95th percentile per-packet one-way delay: 242.870 ms
Loss rate: 2.25%
-- Flow 2:
Average throughput: 60.71 Mbit/s
95th percentile per-packet one-way delay: 235.419 ms
Loss rate: 2.14%
-- Flow 3:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 168.860 ms
Loss rate: 0.00%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-04-11 06:37:14

End at: 2018-04-11 06:37:44

Below is generated by plot.py at 2018-04-11 11:31:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 513.79 Mbit/s

95th percentile per-packet one-way delay: 246.238 ms

Loss rate: 2.59%

-- Flow 1:

Average throughput: 440.85 Mbit/s

95th percentile per-packet one-way delay: 249.839 ms

Loss rate: 2.97%

-- Flow 2:

Average throughput: 78.41 Mbit/s

95th percentile per-packet one-way delay: 226.780 ms

Loss rate: 0.15%

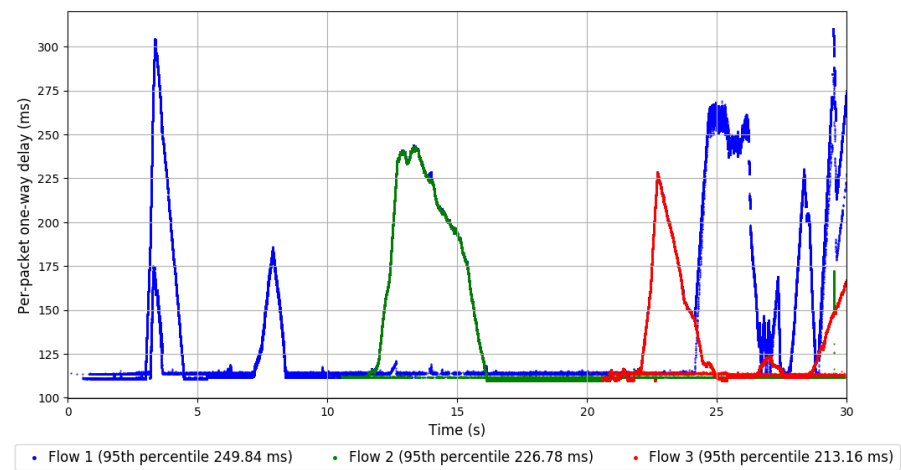
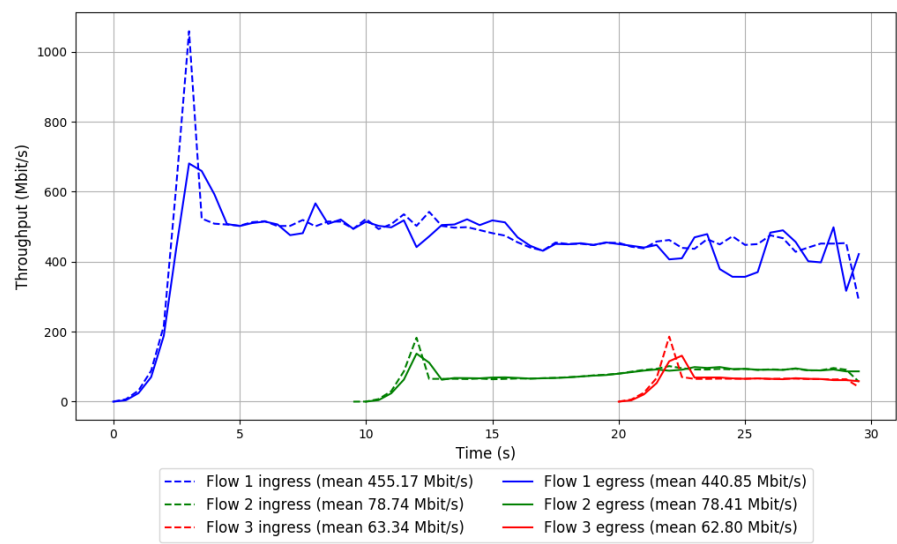
-- Flow 3:

Average throughput: 62.80 Mbit/s

95th percentile per-packet one-way delay: 213.161 ms

Loss rate: 0.53%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-04-11 06:56:27

End at: 2018-04-11 06:56:57

Below is generated by plot.py at 2018-04-11 11:31:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 520.26 Mbit/s

95th percentile per-packet one-way delay: 350.952 ms

Loss rate: 2.34%

-- Flow 1:

Average throughput: 466.41 Mbit/s

95th percentile per-packet one-way delay: 352.391 ms

Loss rate: 2.59%

-- Flow 2:

Average throughput: 64.89 Mbit/s

95th percentile per-packet one-way delay: 235.130 ms

Loss rate: 0.05%

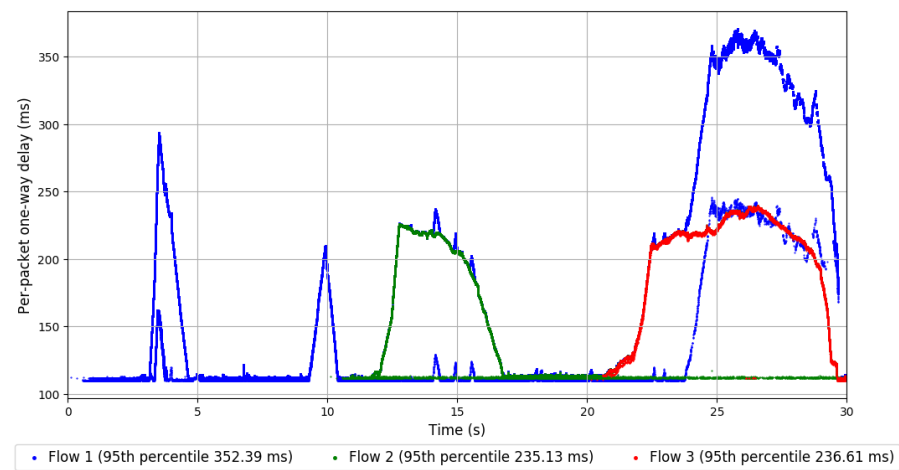
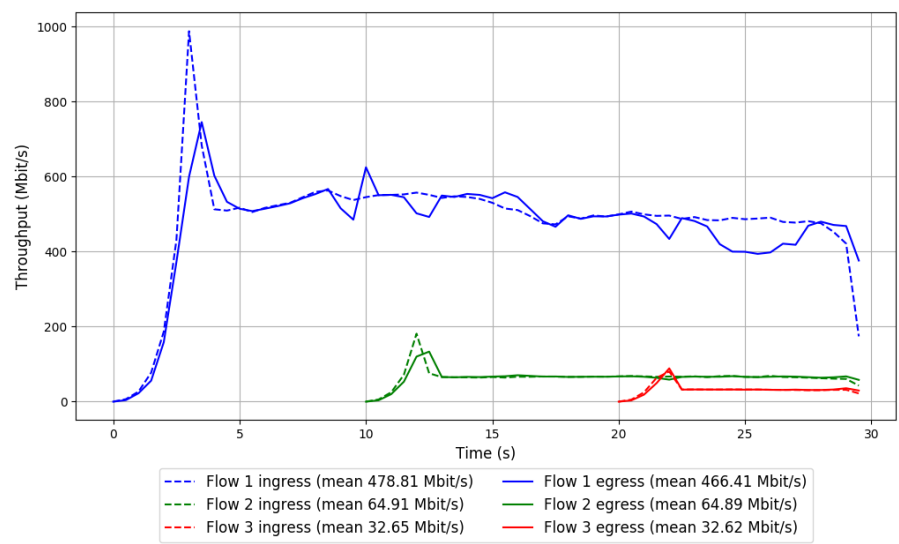
-- Flow 3:

Average throughput: 32.62 Mbit/s

95th percentile per-packet one-way delay: 236.612 ms

Loss rate: 0.09%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-04-11 07:15:32

End at: 2018-04-11 07:16:02

Below is generated by plot.py at 2018-04-11 11:32:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 533.06 Mbit/s

95th percentile per-packet one-way delay: 272.146 ms

Loss rate: 3.44%

-- Flow 1:

Average throughput: 470.69 Mbit/s

95th percentile per-packet one-way delay: 277.712 ms

Loss rate: 3.48%

-- Flow 2:

Average throughput: 64.92 Mbit/s

95th percentile per-packet one-way delay: 240.658 ms

Loss rate: 2.16%

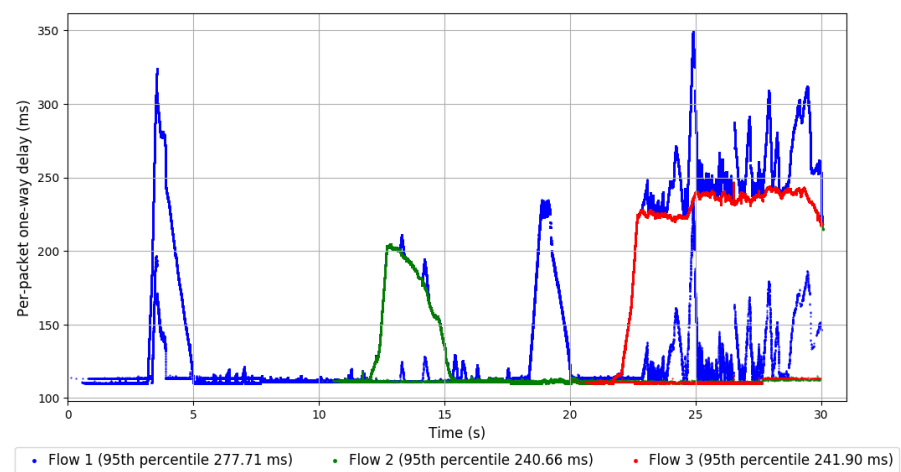
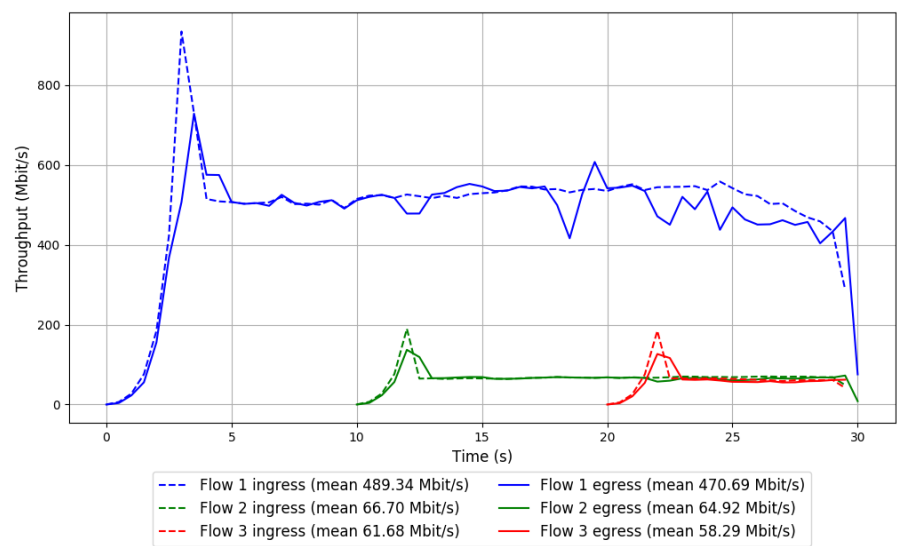
-- Flow 3:

Average throughput: 58.29 Mbit/s

95th percentile per-packet one-way delay: 241.895 ms

Loss rate: 5.12%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-04-11 07:34:49

End at: 2018-04-11 07:35:19

Below is generated by plot.py at 2018-04-11 11:32:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 446.47 Mbit/s

95th percentile per-packet one-way delay: 233.672 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 256.98 Mbit/s

95th percentile per-packet one-way delay: 234.581 ms

Loss rate: 2.31%

-- Flow 2:

Average throughput: 254.17 Mbit/s

95th percentile per-packet one-way delay: 232.967 ms

Loss rate: 1.21%

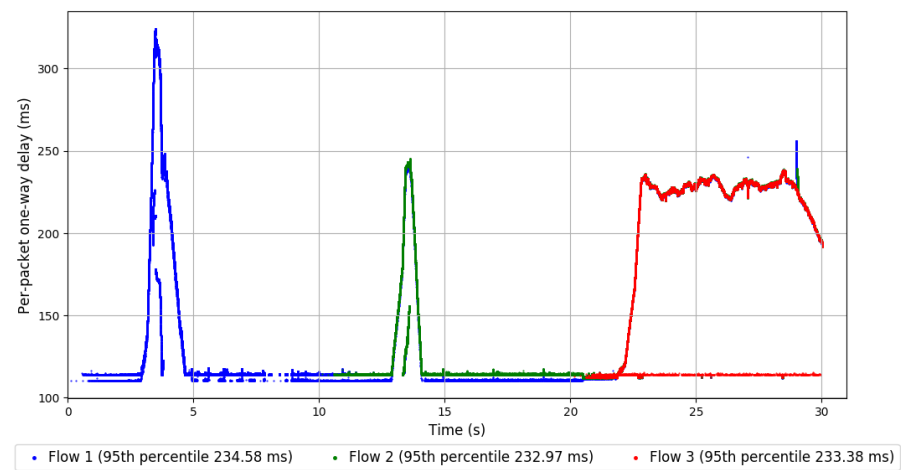
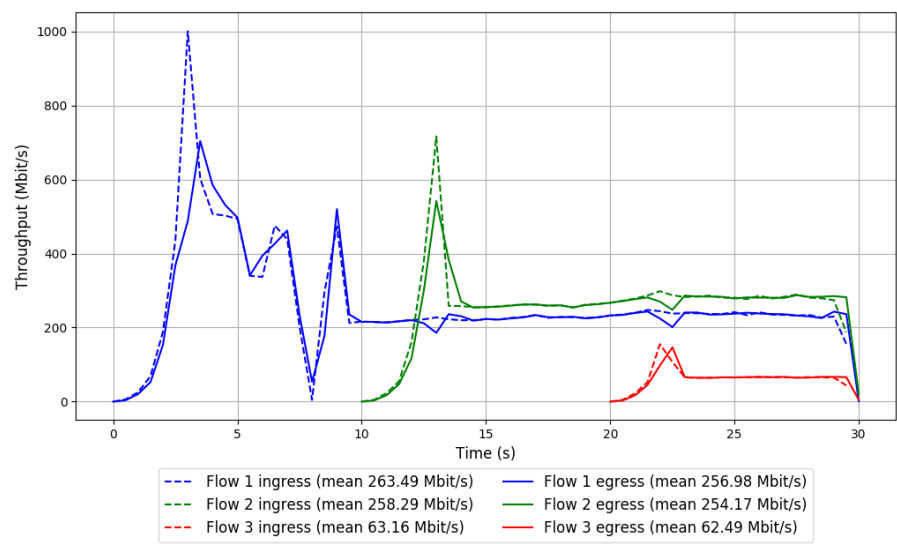
-- Flow 3:

Average throughput: 62.49 Mbit/s

95th percentile per-packet one-way delay: 233.385 ms

Loss rate: 0.25%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-04-11 07:53:47

End at: 2018-04-11 07:54:17

Below is generated by plot.py at 2018-04-11 11:32:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 494.89 Mbit/s

95th percentile per-packet one-way delay: 298.730 ms

Loss rate: 3.84%

-- Flow 1:

Average throughput: 440.60 Mbit/s

95th percentile per-packet one-way delay: 313.439 ms

Loss rate: 4.24%

-- Flow 2:

Average throughput: 65.56 Mbit/s

95th percentile per-packet one-way delay: 243.568 ms

Loss rate: 0.62%

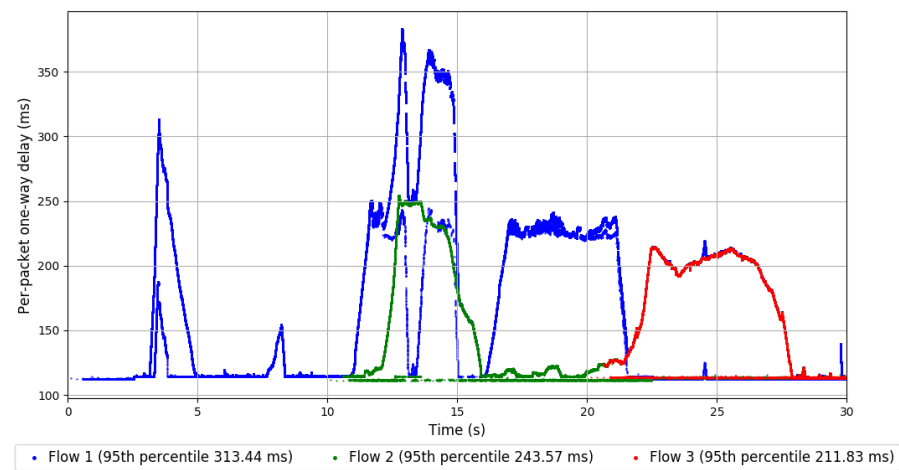
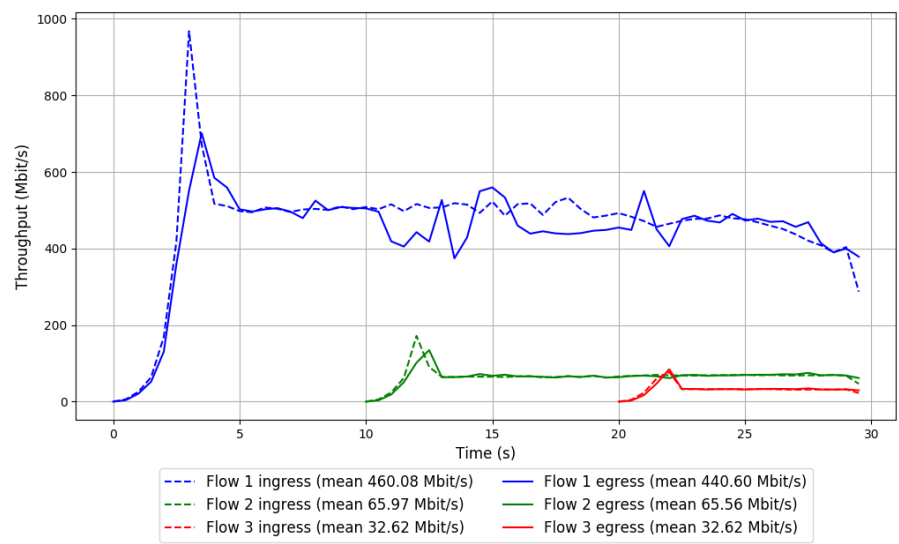
-- Flow 3:

Average throughput: 32.62 Mbit/s

95th percentile per-packet one-way delay: 211.828 ms

Loss rate: 0.01%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-04-11 08:13:05

End at: 2018-04-11 08:13:35

Below is generated by plot.py at 2018-04-11 11:33:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 524.89 Mbit/s

95th percentile per-packet one-way delay: 248.199 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 483.46 Mbit/s

95th percentile per-packet one-way delay: 248.503 ms

Loss rate: 1.88%

-- Flow 2:

Average throughput: 31.48 Mbit/s

95th percentile per-packet one-way delay: 248.293 ms

Loss rate: 1.14%

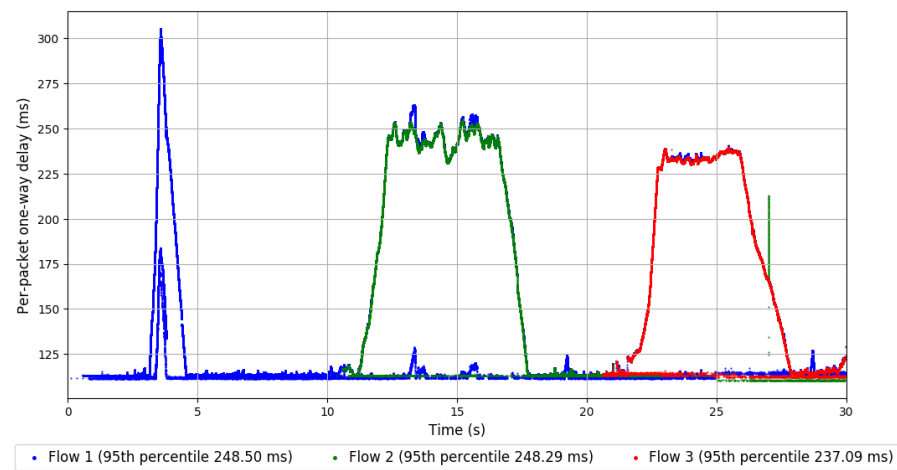
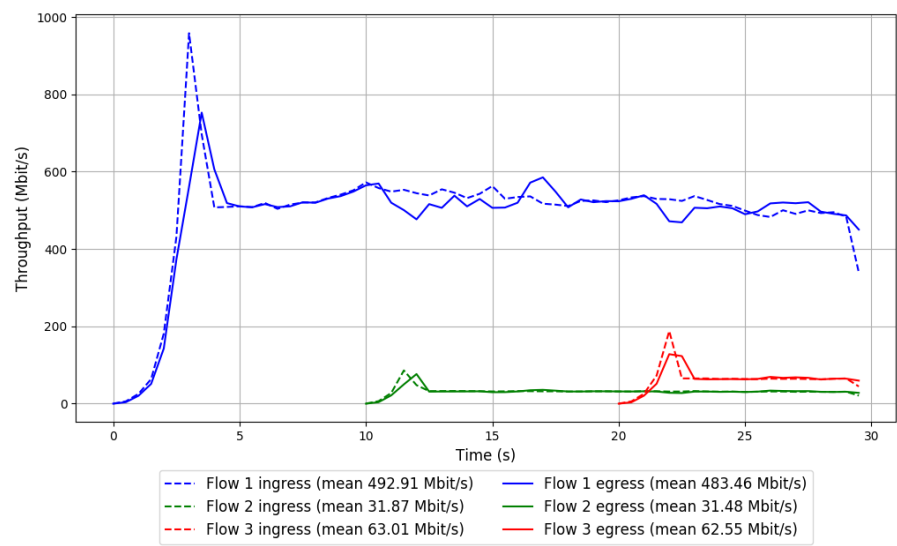
-- Flow 3:

Average throughput: 62.55 Mbit/s

95th percentile per-packet one-way delay: 237.093 ms

Loss rate: 0.59%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-04-11 08:32:24

End at: 2018-04-11 08:32:54

Below is generated by plot.py at 2018-04-11 11:33:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 509.80 Mbit/s

95th percentile per-packet one-way delay: 214.428 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 464.71 Mbit/s

95th percentile per-packet one-way delay: 214.768 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 65.65 Mbit/s

95th percentile per-packet one-way delay: 207.300 ms

Loss rate: 0.00%

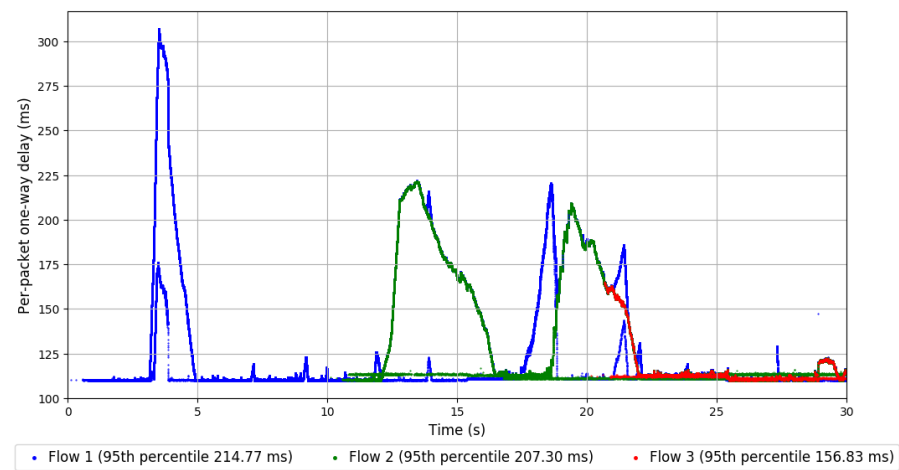
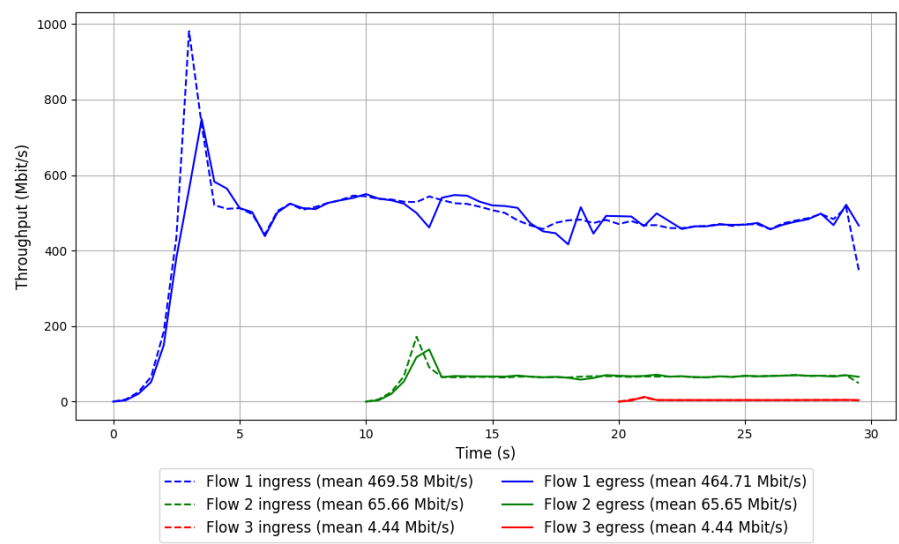
-- Flow 3:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 156.833 ms

Loss rate: 0.00%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-04-11 08:51:08

End at: 2018-04-11 08:51:38

Below is generated by plot.py at 2018-04-11 11:39:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 506.51 Mbit/s

95th percentile per-packet one-way delay: 241.992 ms

Loss rate: 1.95%

-- Flow 1:

Average throughput: 461.98 Mbit/s

95th percentile per-packet one-way delay: 242.338 ms

Loss rate: 2.02%

-- Flow 2:

Average throughput: 65.85 Mbit/s

95th percentile per-packet one-way delay: 240.735 ms

Loss rate: 1.17%

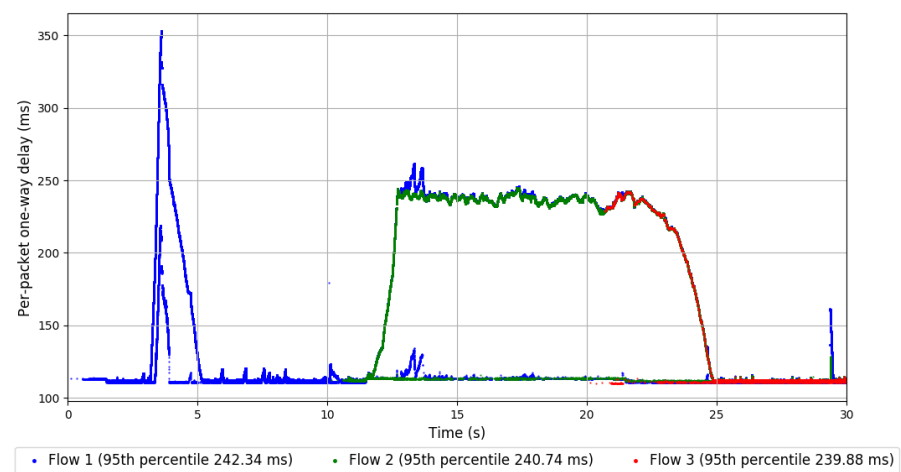
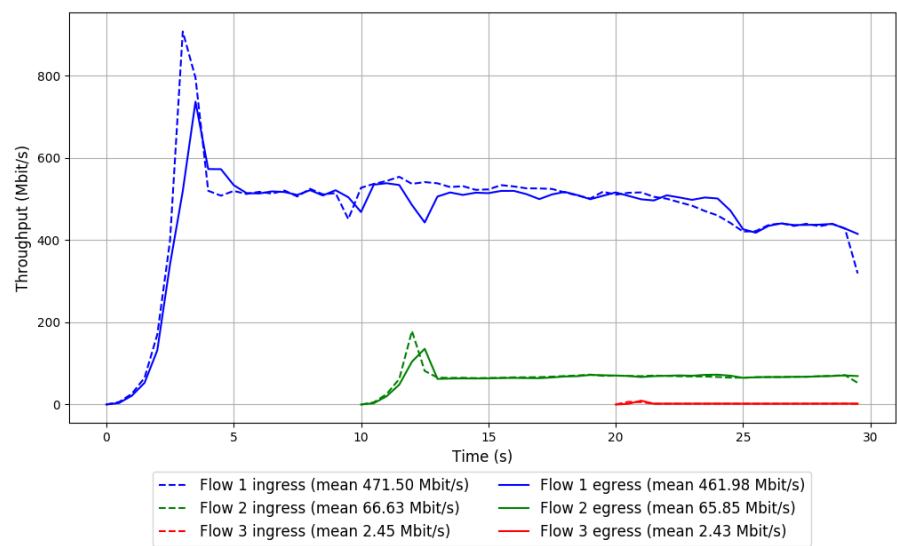
-- Flow 3:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 239.876 ms

Loss rate: 0.75%

Run 9: Report of PCC — Data Link

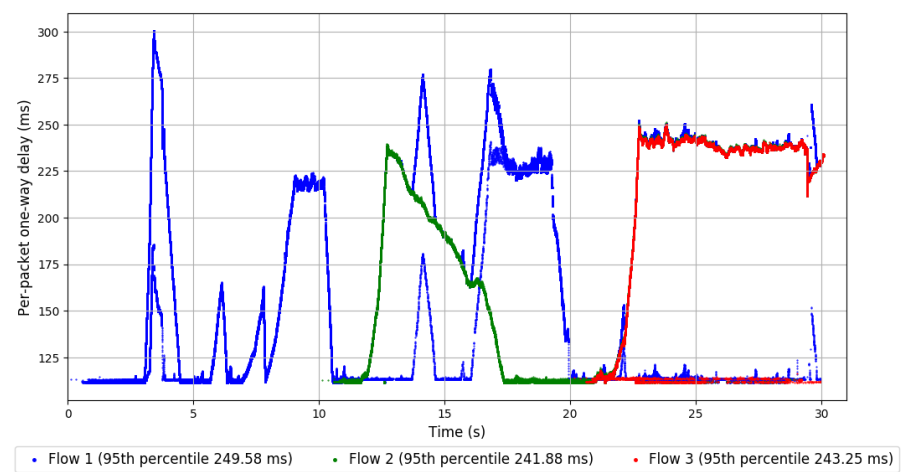
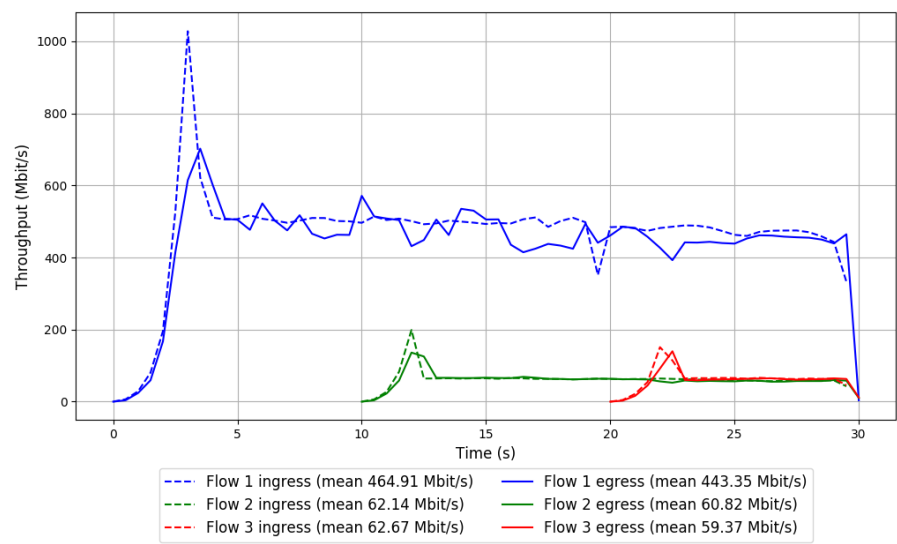


```
Run 10: Statistics of PCC

Start at: 2018-04-11 09:09:41
End at: 2018-04-11 09:10:11

# Below is generated by plot.py at 2018-04-11 11:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 502.25 Mbit/s
95th percentile per-packet one-way delay: 247.173 ms
Loss rate: 4.28%
-- Flow 1:
Average throughput: 443.35 Mbit/s
95th percentile per-packet one-way delay: 249.580 ms
Loss rate: 4.53%
-- Flow 2:
Average throughput: 60.82 Mbit/s
95th percentile per-packet one-way delay: 241.881 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 59.37 Mbit/s
95th percentile per-packet one-way delay: 243.252 ms
Loss rate: 4.12%
```

Run 10: Report of PCC — Data Link

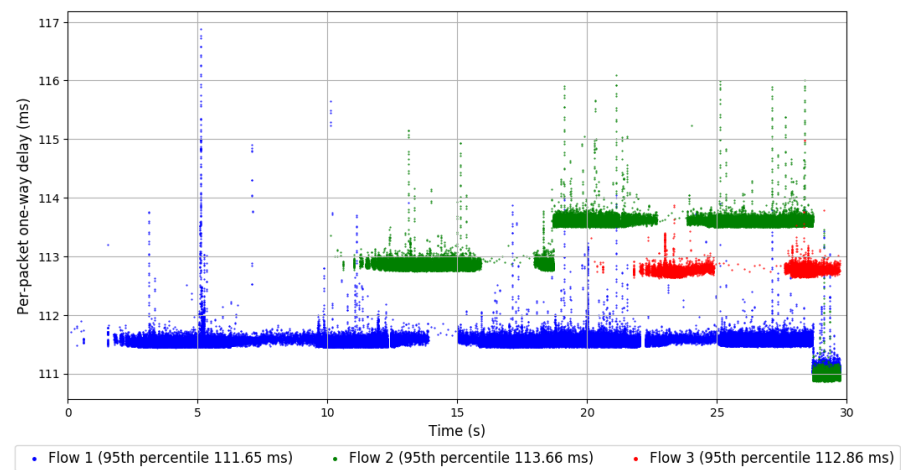
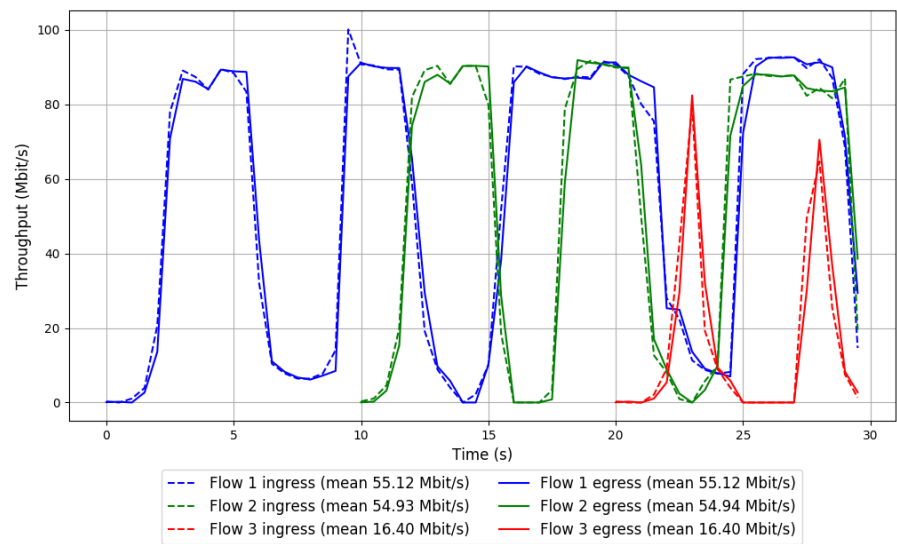


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-11 06:25:31
End at: 2018-04-11 06:26:01

# Below is generated by plot.py at 2018-04-11 11:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.78 Mbit/s
95th percentile per-packet one-way delay: 113.620 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.12 Mbit/s
95th percentile per-packet one-way delay: 111.648 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 54.94 Mbit/s
95th percentile per-packet one-way delay: 113.659 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.40 Mbit/s
95th percentile per-packet one-way delay: 112.855 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link

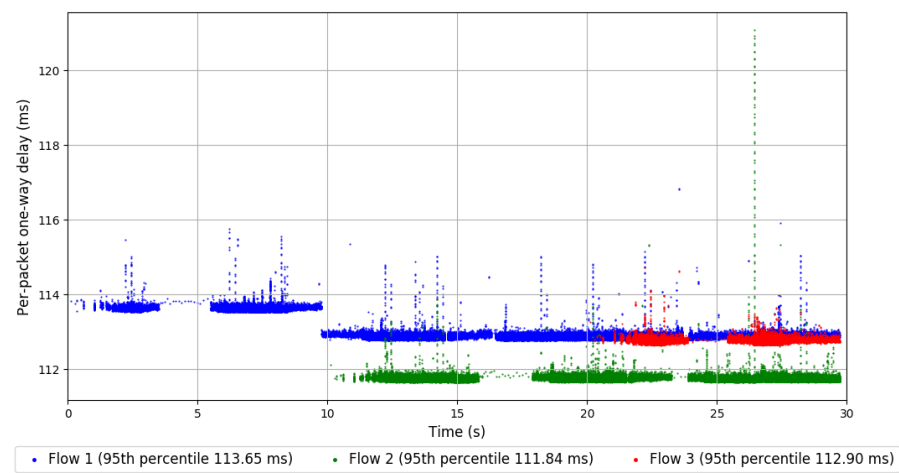
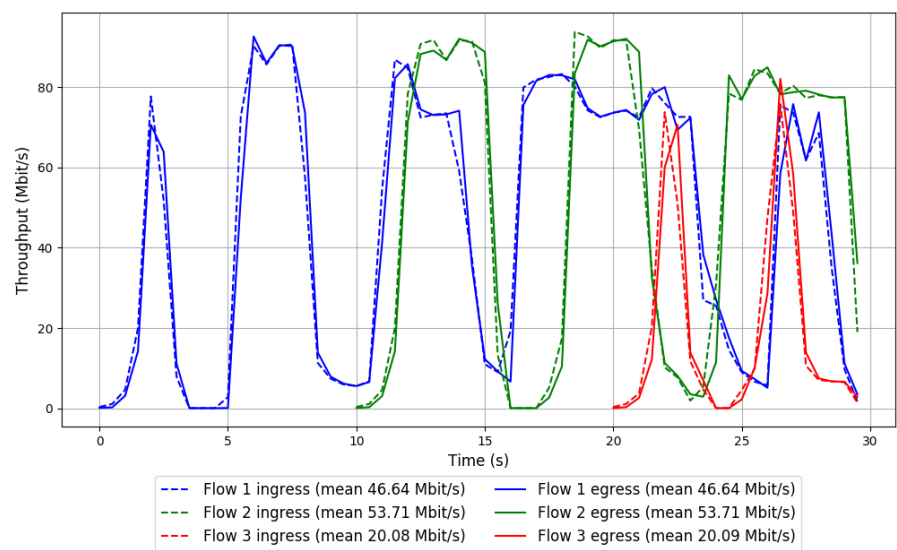


```
Run 2: Statistics of QUIC Cubic

Start at: 2018-04-11 06:44:20
End at: 2018-04-11 06:44:50

# Below is generated by plot.py at 2018-04-11 11:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.71 Mbit/s
95th percentile per-packet one-way delay: 113.621 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.64 Mbit/s
95th percentile per-packet one-way delay: 113.654 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.71 Mbit/s
95th percentile per-packet one-way delay: 111.844 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.09 Mbit/s
95th percentile per-packet one-way delay: 112.897 ms
Loss rate: 0.00%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-04-11 07:03:24

End at: 2018-04-11 07:03:54

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.45 Mbit/s

95th percentile per-packet one-way delay: 112.734 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.99 Mbit/s

95th percentile per-packet one-way delay: 111.168 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.04 Mbit/s

95th percentile per-packet one-way delay: 111.825 ms

Loss rate: 0.00%

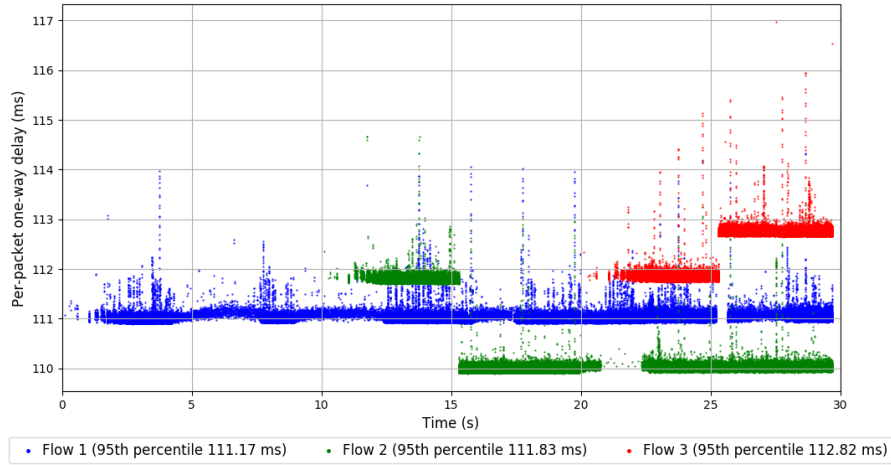
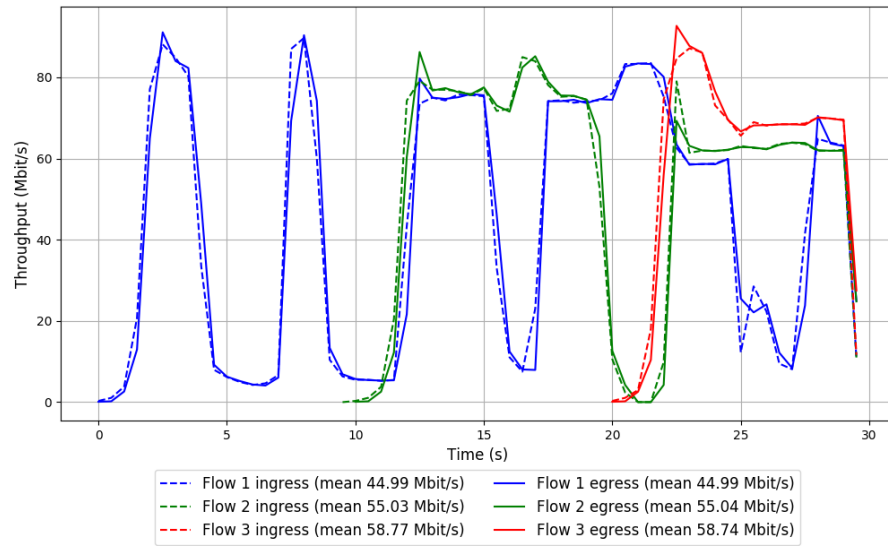
-- Flow 3:

Average throughput: 58.74 Mbit/s

95th percentile per-packet one-way delay: 112.820 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-04-11 07:22:50

End at: 2018-04-11 07:23:20

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.52 Mbit/s

95th percentile per-packet one-way delay: 112.916 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 113.005 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.11 Mbit/s

95th percentile per-packet one-way delay: 112.962 ms

Loss rate: 0.00%

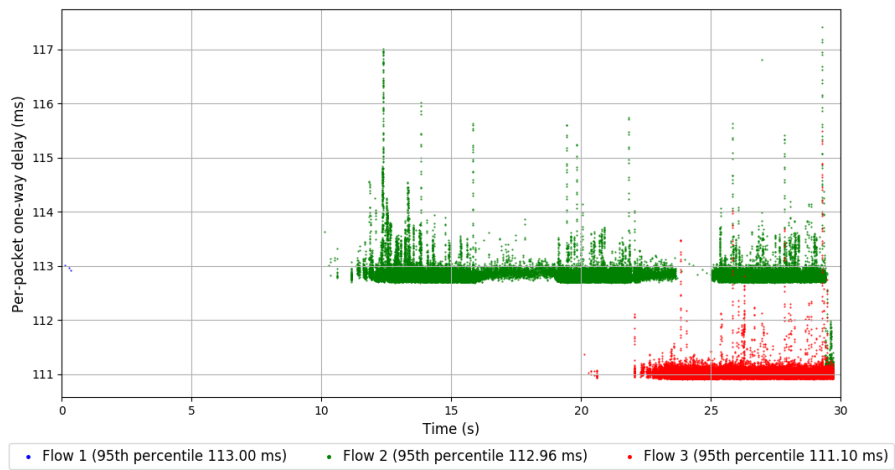
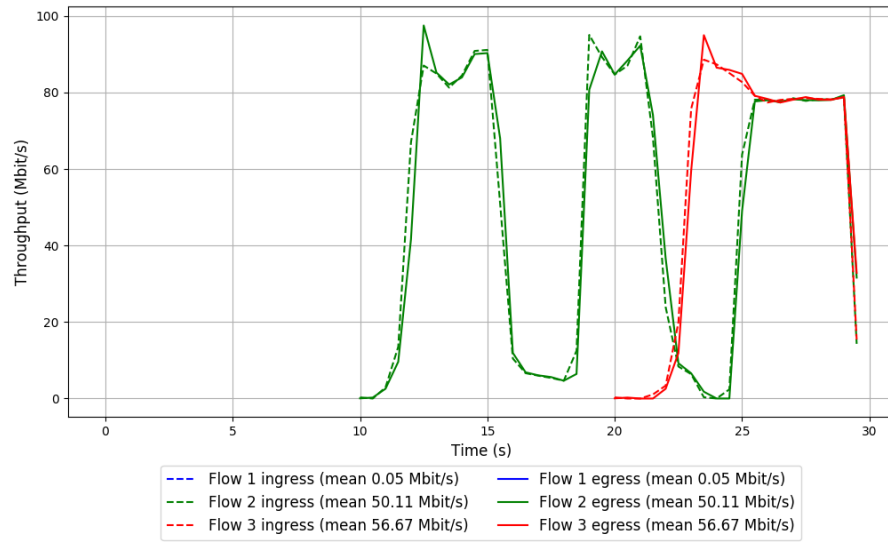
-- Flow 3:

Average throughput: 56.67 Mbit/s

95th percentile per-packet one-way delay: 111.102 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-04-11 07:41:47

End at: 2018-04-11 07:42:17

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.47 Mbit/s

95th percentile per-packet one-way delay: 113.925 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.80 Mbit/s

95th percentile per-packet one-way delay: 113.855 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.50 Mbit/s

95th percentile per-packet one-way delay: 112.039 ms

Loss rate: 0.00%

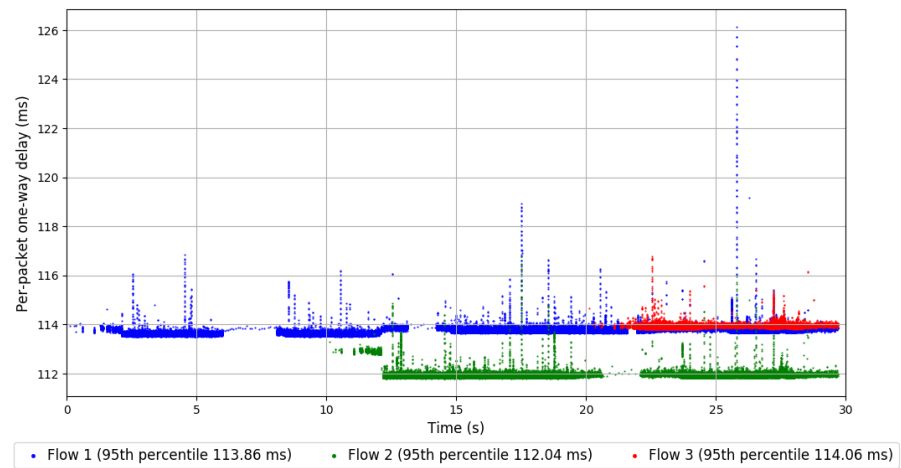
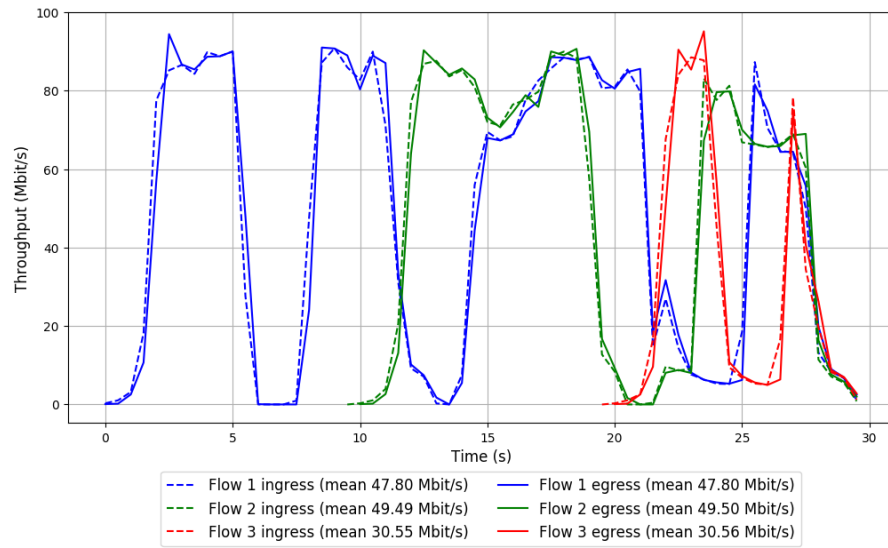
-- Flow 3:

Average throughput: 30.56 Mbit/s

95th percentile per-packet one-way delay: 114.055 ms

Loss rate: 0.01%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-04-11 08:00:49

End at: 2018-04-11 08:01:19

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.73 Mbit/s

95th percentile per-packet one-way delay: 113.098 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.53 Mbit/s

95th percentile per-packet one-way delay: 113.134 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.56 Mbit/s

95th percentile per-packet one-way delay: 110.360 ms

Loss rate: 0.00%

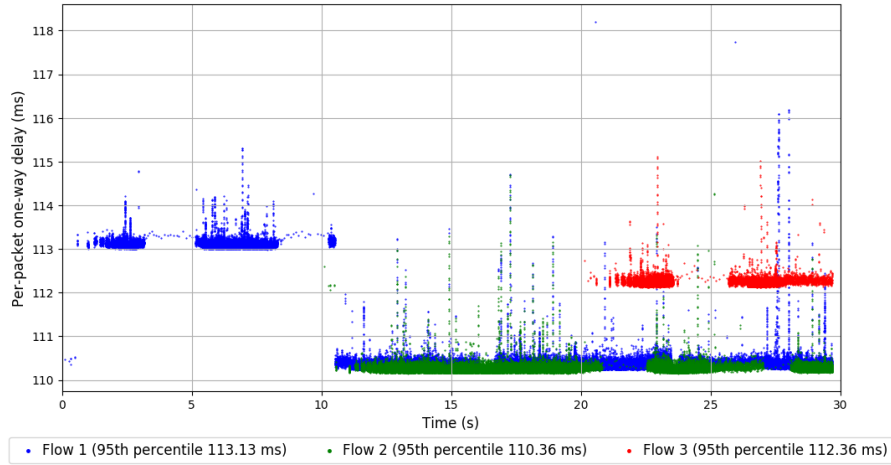
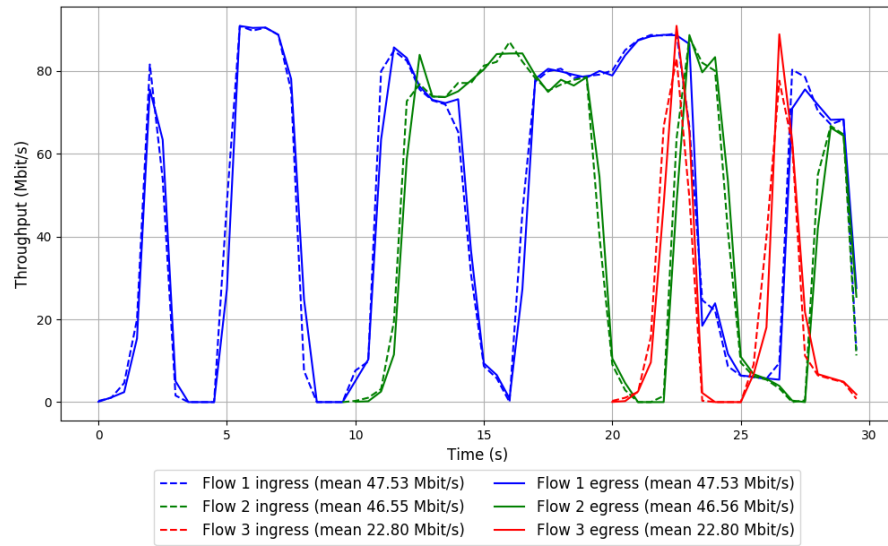
-- Flow 3:

Average throughput: 22.80 Mbit/s

95th percentile per-packet one-way delay: 112.361 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-04-11 08:20:11

End at: 2018-04-11 08:20:41

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.15 Mbit/s

95th percentile per-packet one-way delay: 113.817 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 111.578 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.51 Mbit/s

95th percentile per-packet one-way delay: 112.121 ms

Loss rate: 0.00%

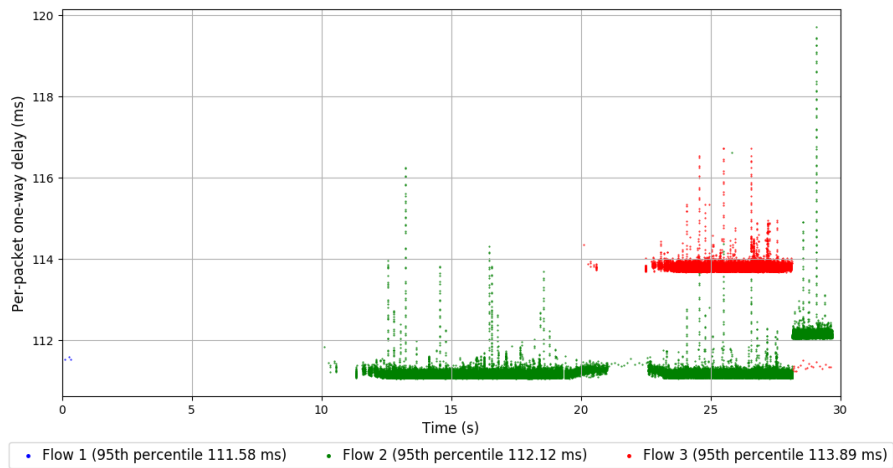
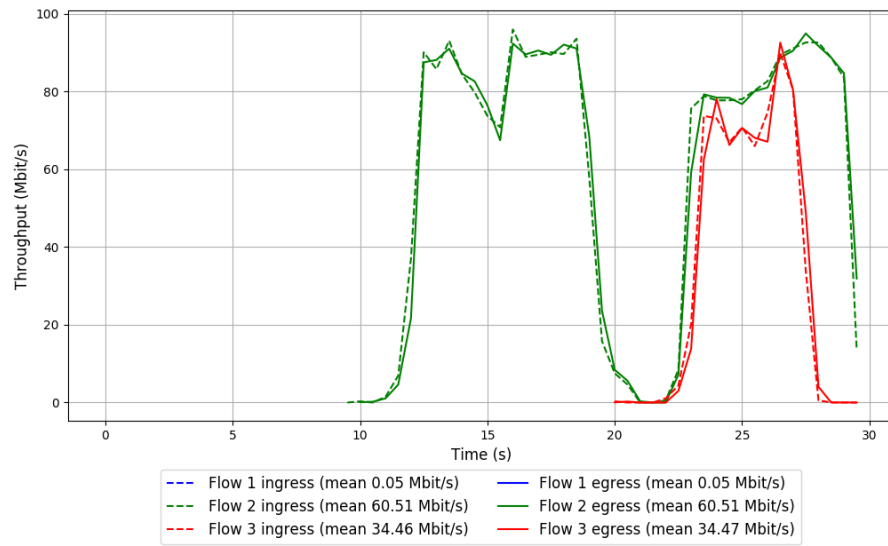
-- Flow 3:

Average throughput: 34.47 Mbit/s

95th percentile per-packet one-way delay: 113.893 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-04-11 08:39:22

End at: 2018-04-11 08:39:52

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.00 Mbit/s

95th percentile per-packet one-way delay: 113.168 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 42.72 Mbit/s

95th percentile per-packet one-way delay: 110.903 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.64 Mbit/s

95th percentile per-packet one-way delay: 113.189 ms

Loss rate: 0.00%

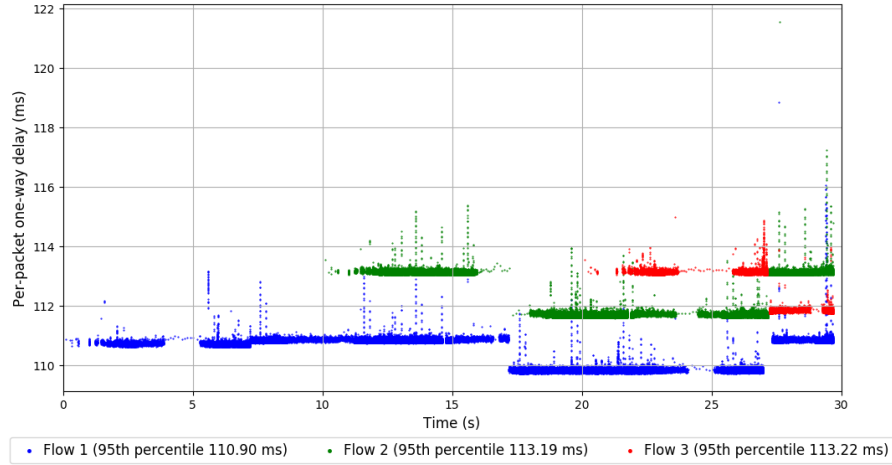
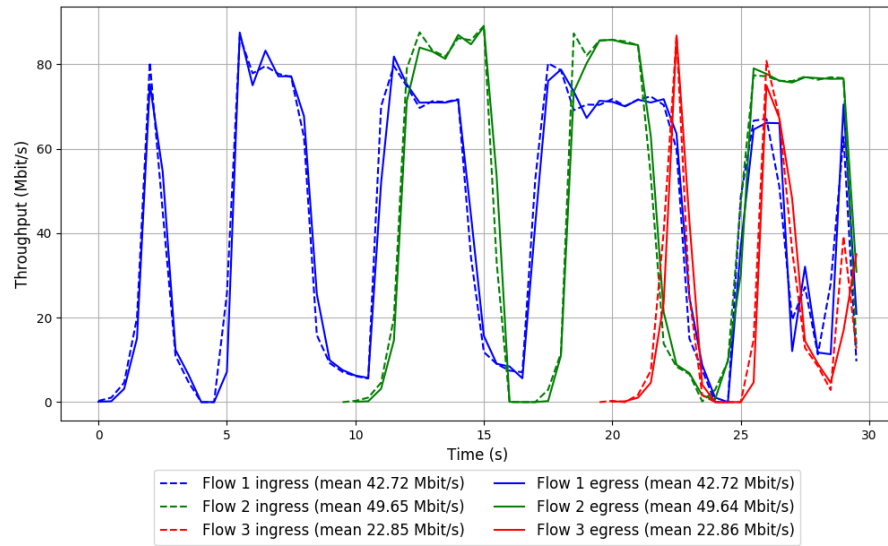
-- Flow 3:

Average throughput: 22.86 Mbit/s

95th percentile per-packet one-way delay: 113.221 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-04-11 08:58:05

End at: 2018-04-11 08:58:36

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.71 Mbit/s

95th percentile per-packet one-way delay: 113.185 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.85 Mbit/s

95th percentile per-packet one-way delay: 112.650 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.74 Mbit/s

95th percentile per-packet one-way delay: 113.231 ms

Loss rate: 0.01%

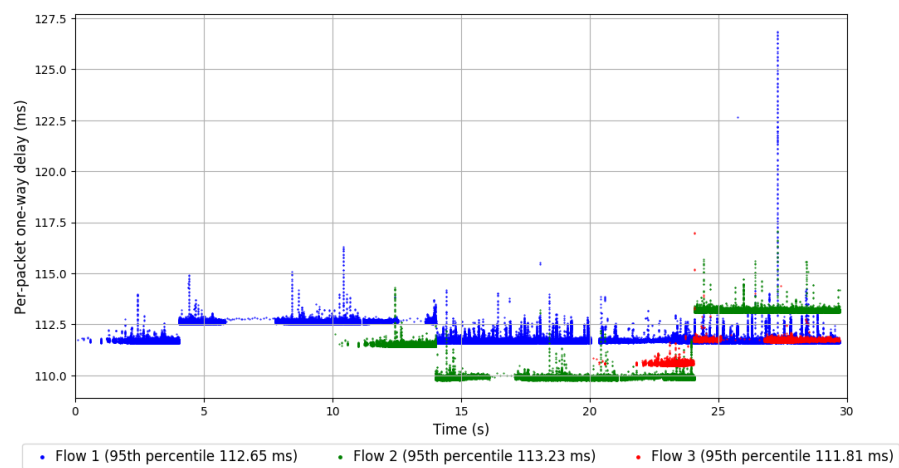
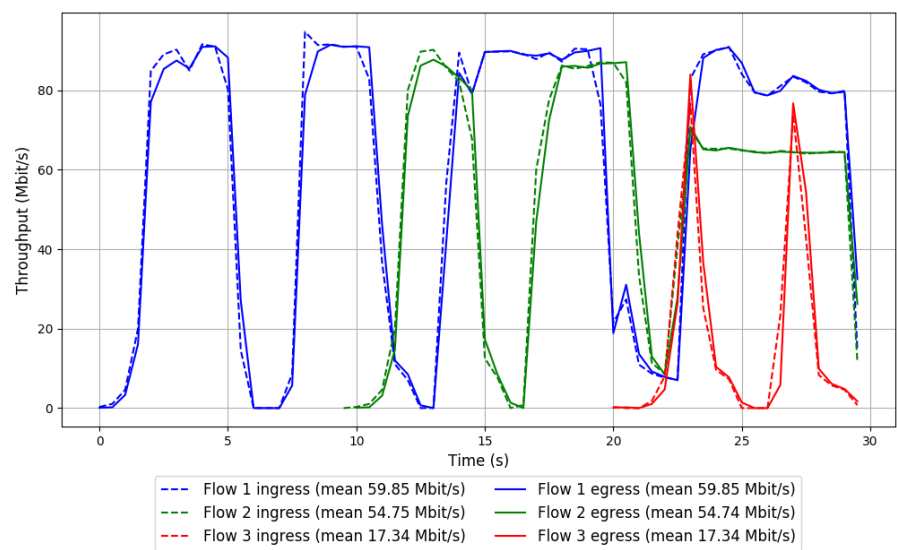
-- Flow 3:

Average throughput: 17.34 Mbit/s

95th percentile per-packet one-way delay: 111.805 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

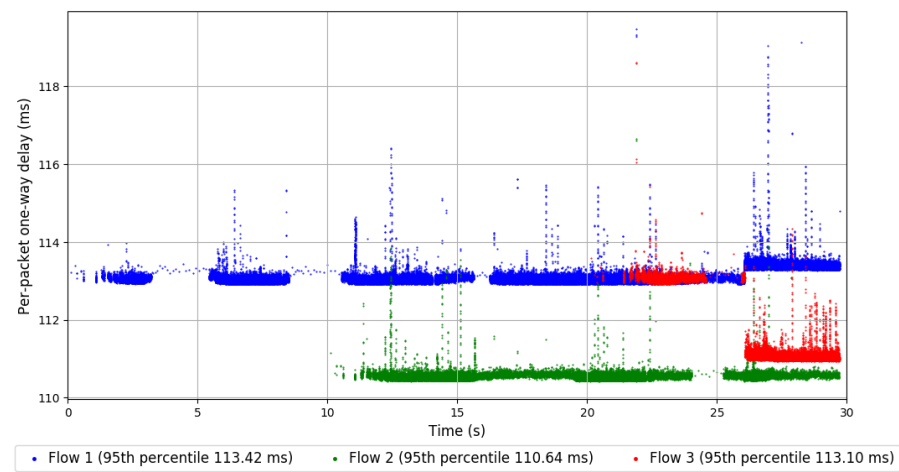
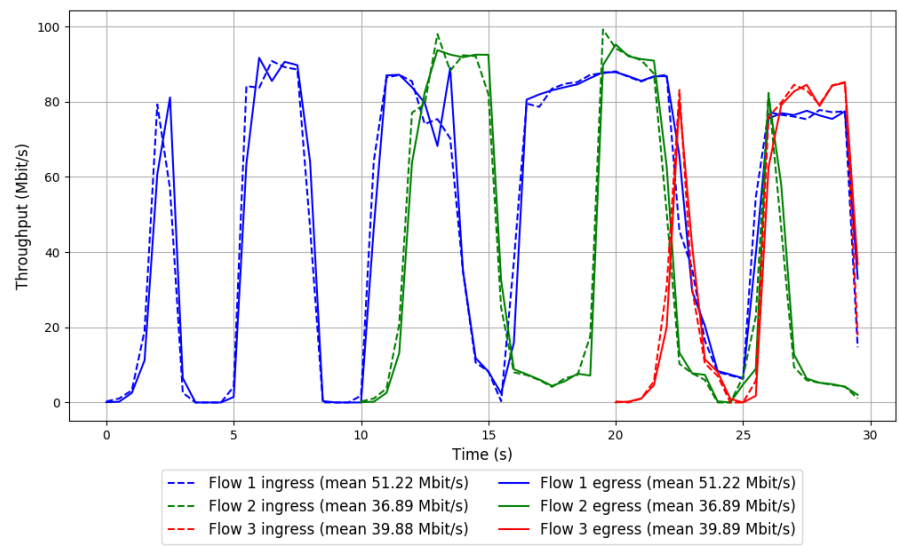


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-11 09:16:34
End at: 2018-04-11 09:17:04

# Below is generated by plot.py at 2018-04-11 11:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.53 Mbit/s
95th percentile per-packet one-way delay: 113.385 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.22 Mbit/s
95th percentile per-packet one-way delay: 113.418 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.89 Mbit/s
95th percentile per-packet one-way delay: 110.636 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.89 Mbit/s
95th percentile per-packet one-way delay: 113.101 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

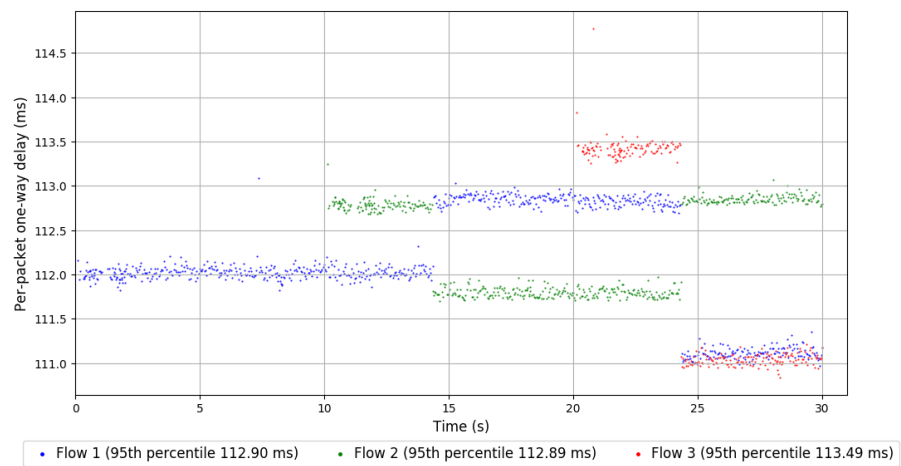
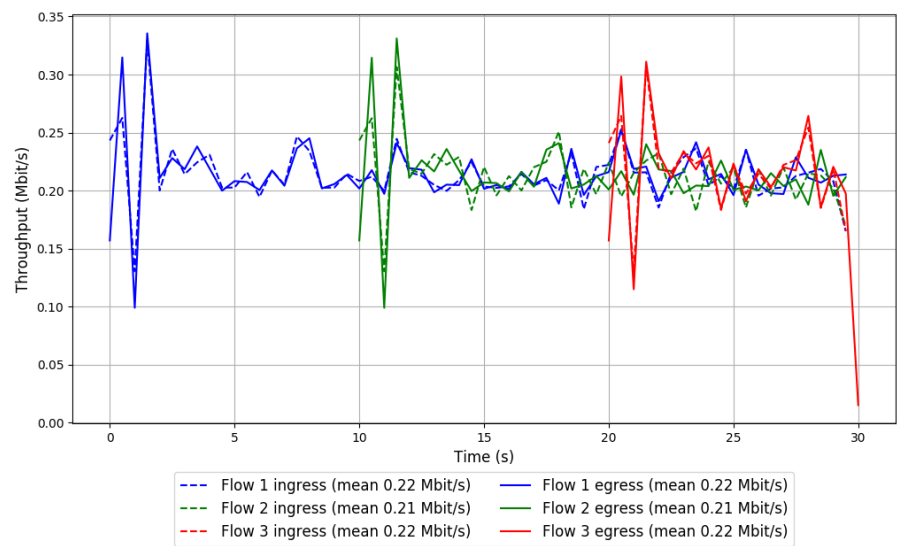


```
Run 1: Statistics of SCReAM

Start at: 2018-04-11 06:12:15
End at: 2018-04-11 06:12:45

# Below is generated by plot.py at 2018-04-11 11:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.393 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.901 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.891 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.486 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

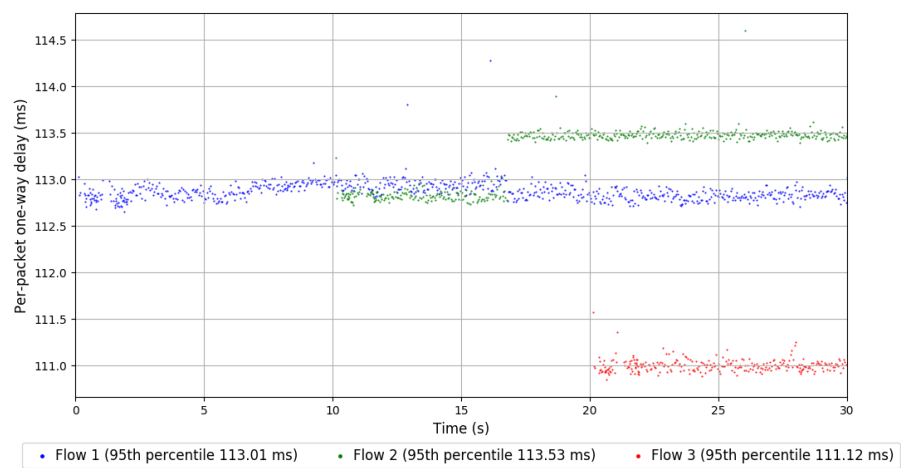
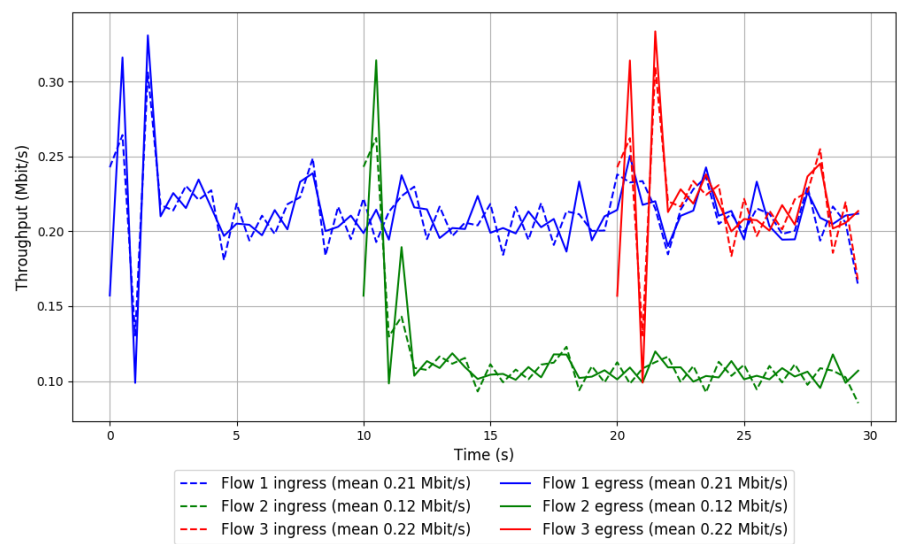


```
Run 2: Statistics of SCReAM

Start at: 2018-04-11 06:31:03
End at: 2018-04-11 06:31:33

# Below is generated by plot.py at 2018-04-11 11:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 113.501 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.009 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 113.528 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.116 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-04-11 06:50:11

End at: 2018-04-11 06:50:41

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 113.994 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 114.022 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.889 ms

Loss rate: 0.00%

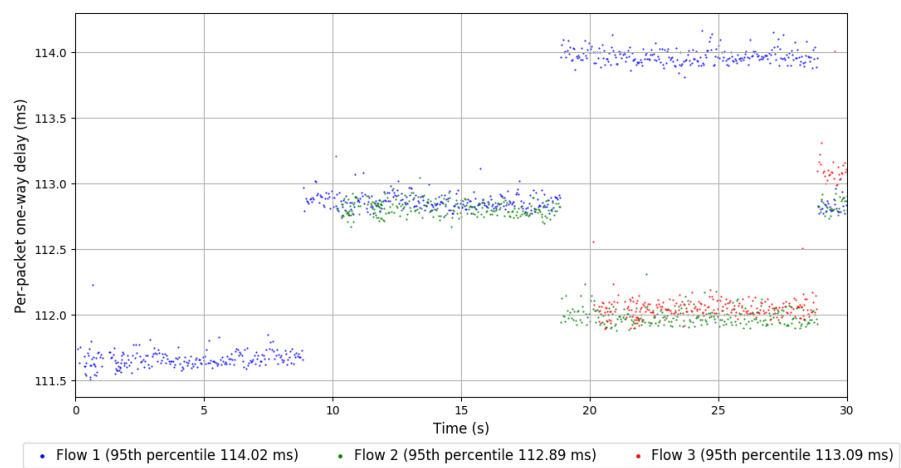
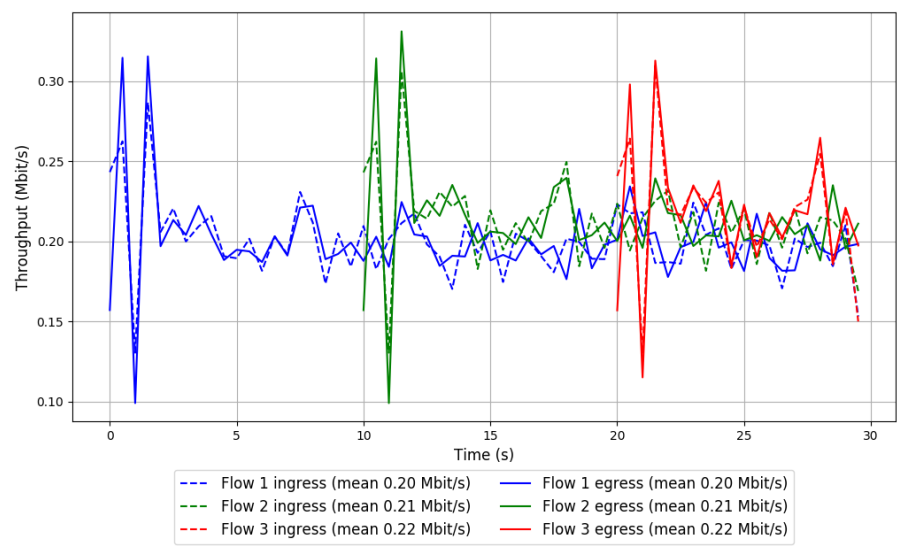
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.088 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

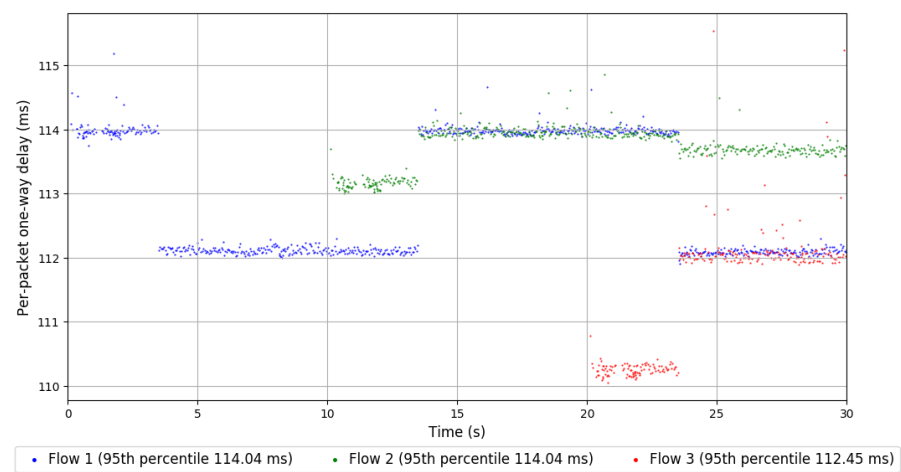
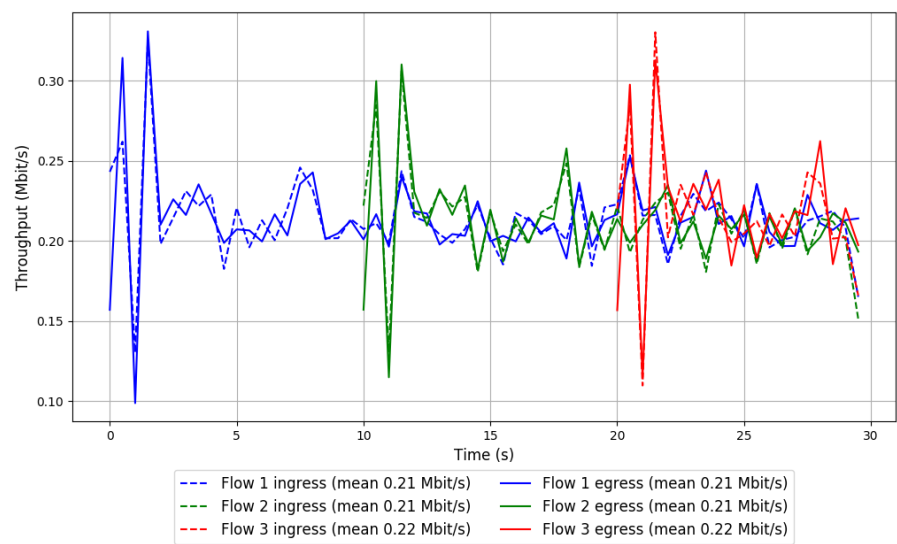


```
Run 4: Statistics of SCReAM

Start at: 2018-04-11 07:09:16
End at: 2018-04-11 07:09:46

# Below is generated by plot.py at 2018-04-11 11:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 114.034 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.037 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.043 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.447 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-04-11 07:28:34

End at: 2018-04-11 07:29:04

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 114.124 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.273 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.278 ms

Loss rate: 0.00%

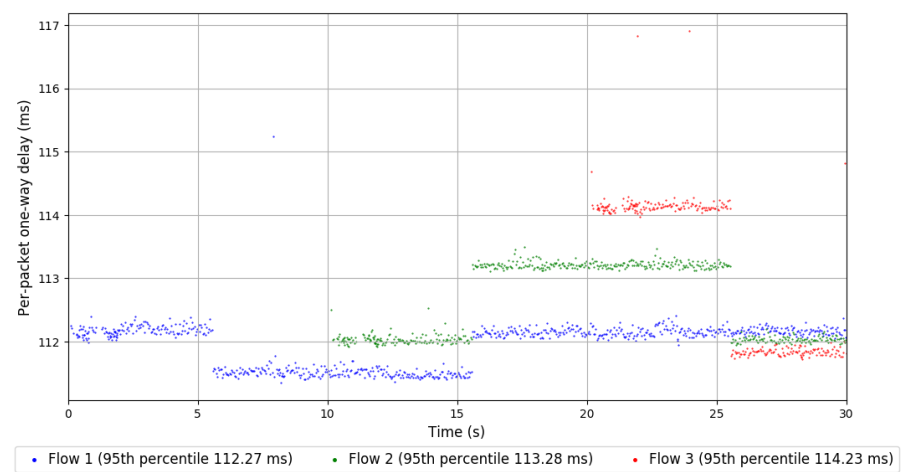
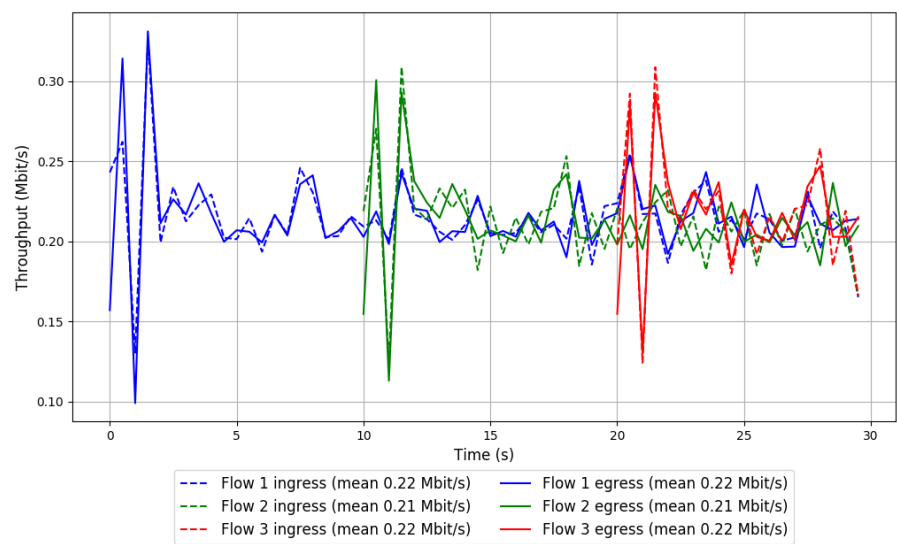
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.232 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-04-11 07:47:36

End at: 2018-04-11 07:48:06

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 114.344 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.364 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.027 ms

Loss rate: 0.00%

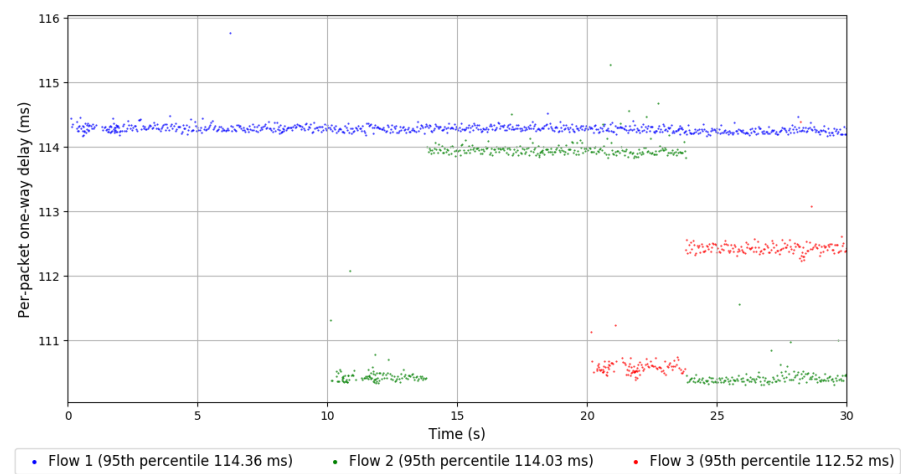
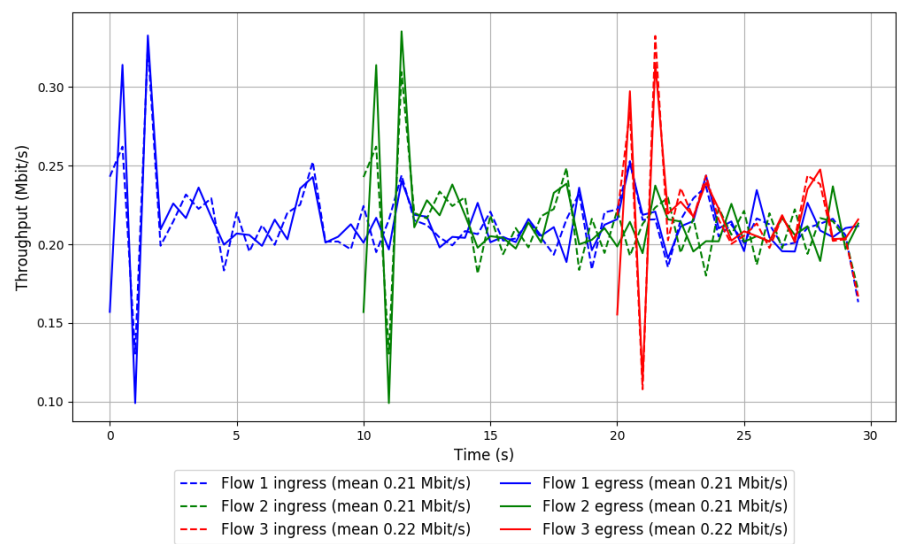
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.523 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

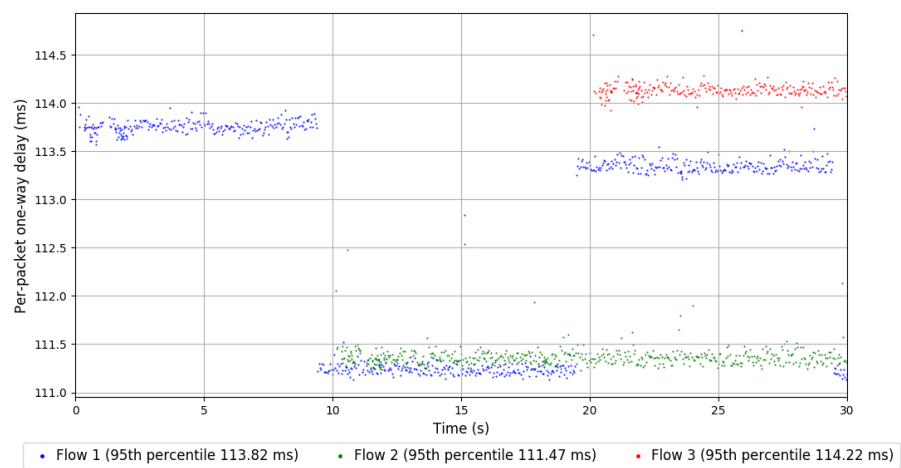
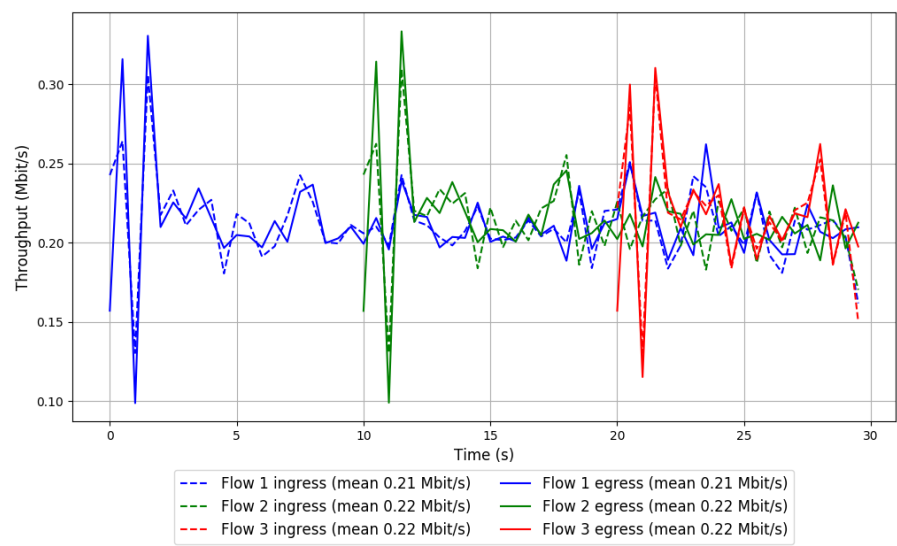


```
Run 7: Statistics of SCReAM

Start at: 2018-04-11 08:06:40
End at: 2018-04-11 08:07:10

# Below is generated by plot.py at 2018-04-11 11:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 114.161 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.818 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.475 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.223 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-04-11 08:26:05

End at: 2018-04-11 08:26:35

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 114.097 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.878 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.155 ms

Loss rate: 0.00%

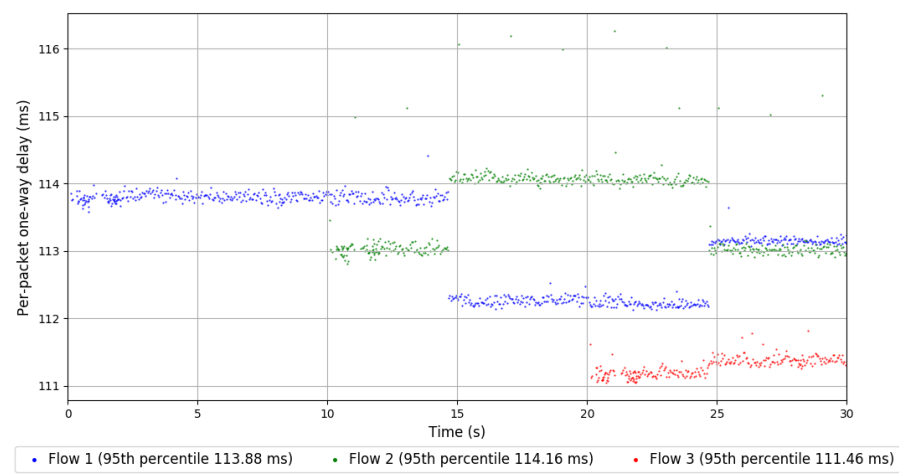
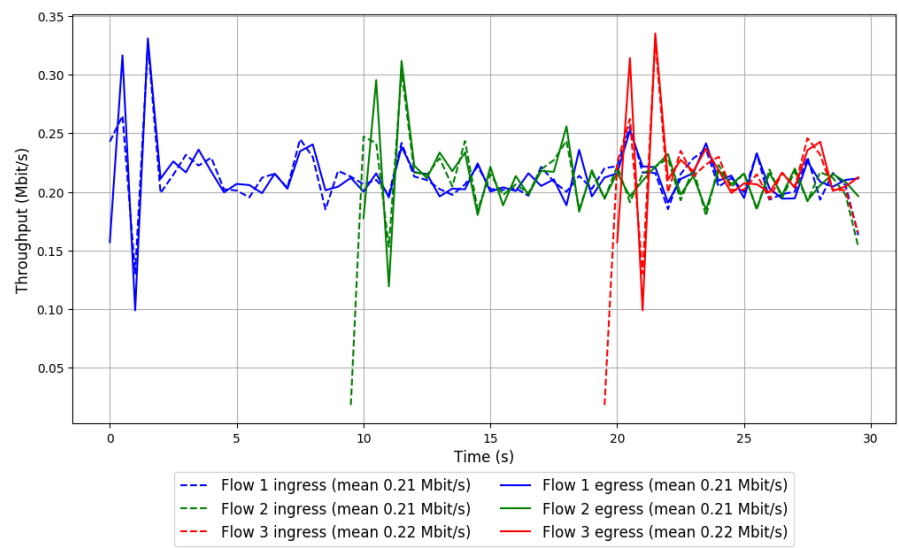
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.464 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-04-11 08:45:07

End at: 2018-04-11 08:45:37

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 113.390 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 113.375 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 111.454 ms

Loss rate: 0.00%

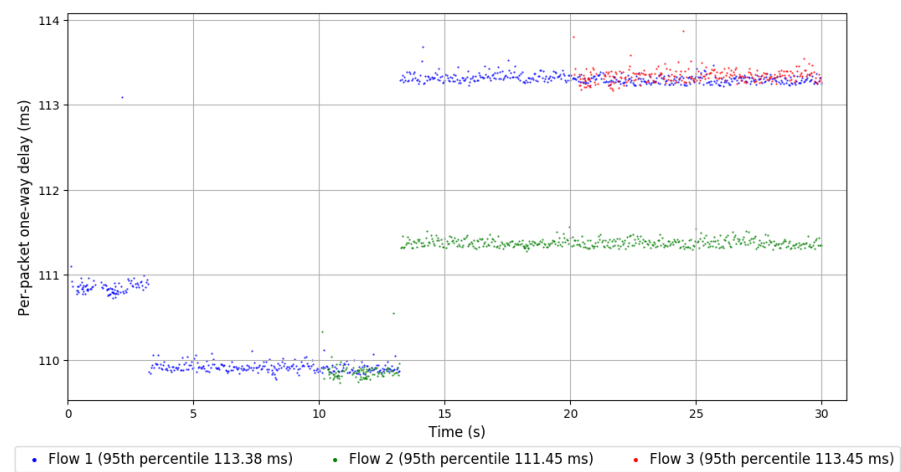
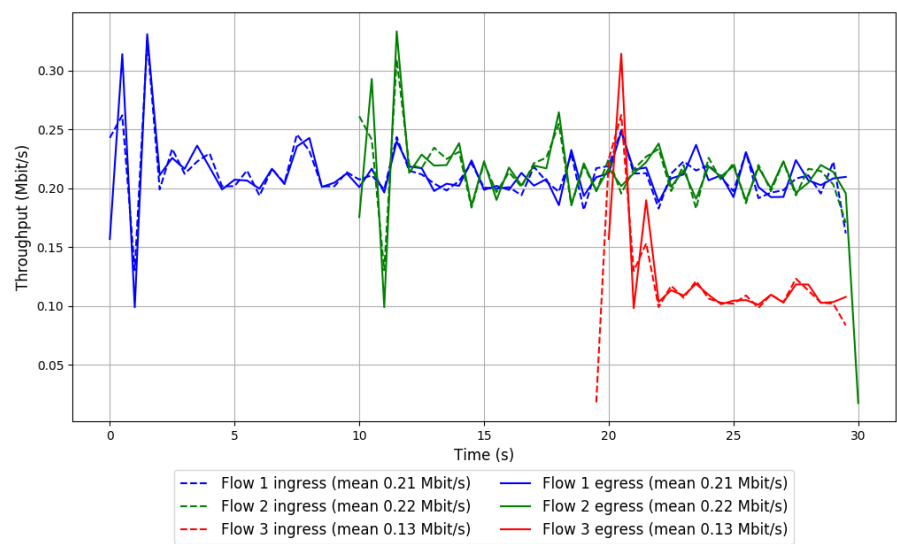
-- Flow 3:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 113.452 ms

Loss rate: 0.00%

Run 9: Report of SCReAM — Data Link

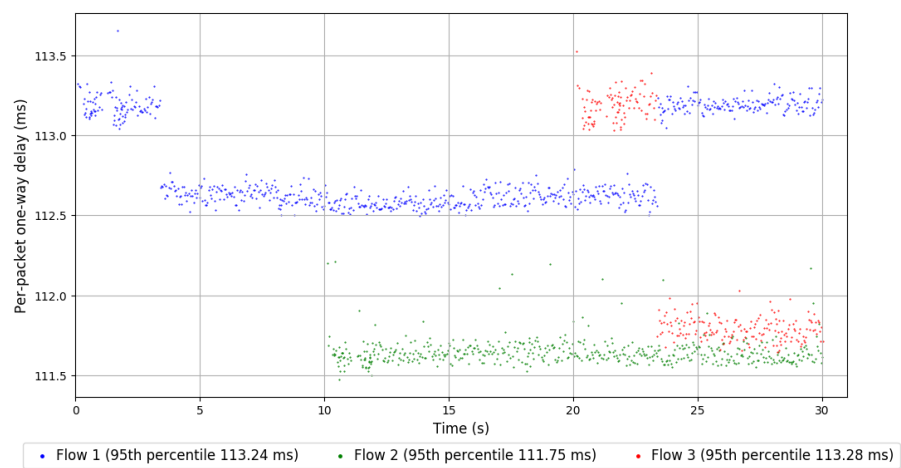
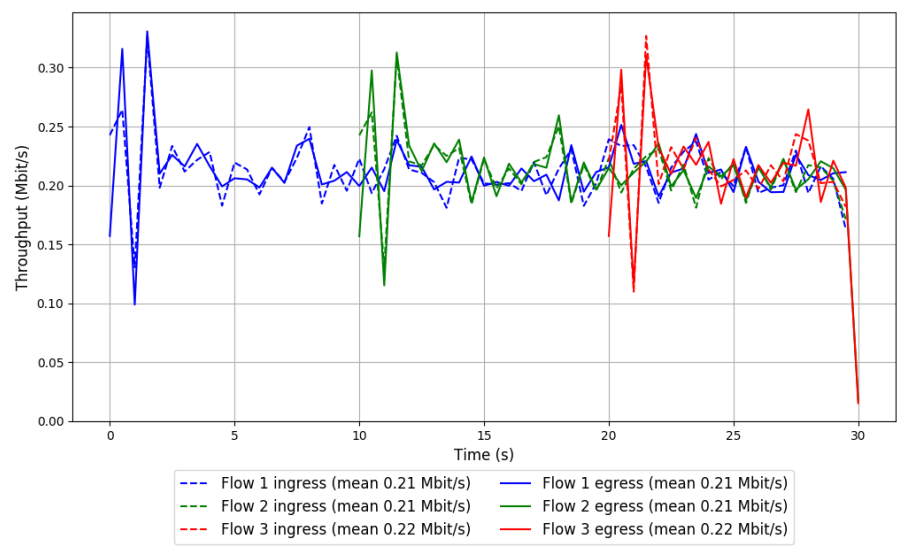


```
Run 10: Statistics of SCReAM

Start at: 2018-04-11 09:03:36
End at: 2018-04-11 09:04:07

# Below is generated by plot.py at 2018-04-11 11:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.229 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.241 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 111.745 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.277 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

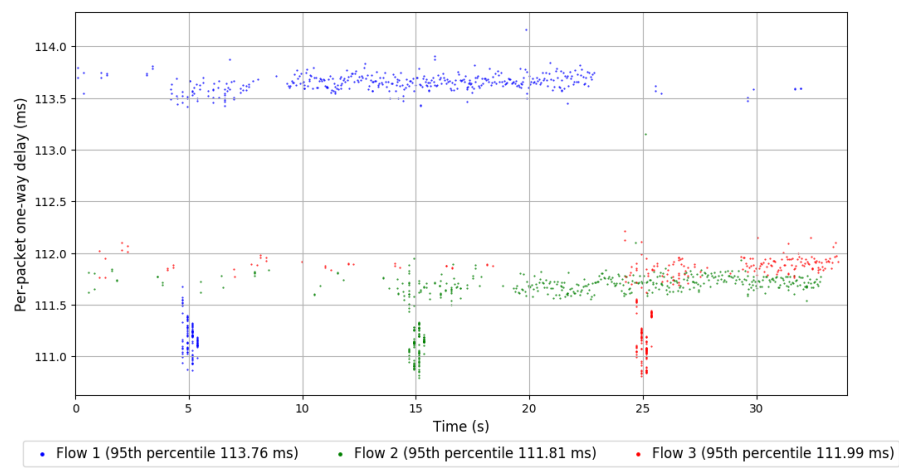
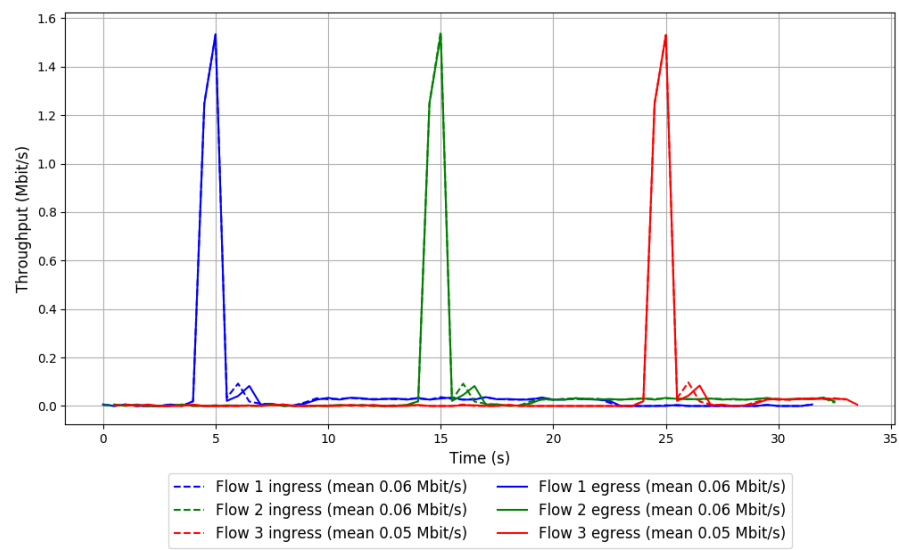


```
Run 1: Statistics of WebRTC media

Start at: 2018-04-11 06:21:29
End at: 2018-04-11 06:21:59

# Below is generated by plot.py at 2018-04-11 11:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 113.717 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 113.758 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 111.814 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 111.990 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-04-11 06:40:13

End at: 2018-04-11 06:40:43

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 113.894 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.988 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.924 ms

Loss rate: 0.00%

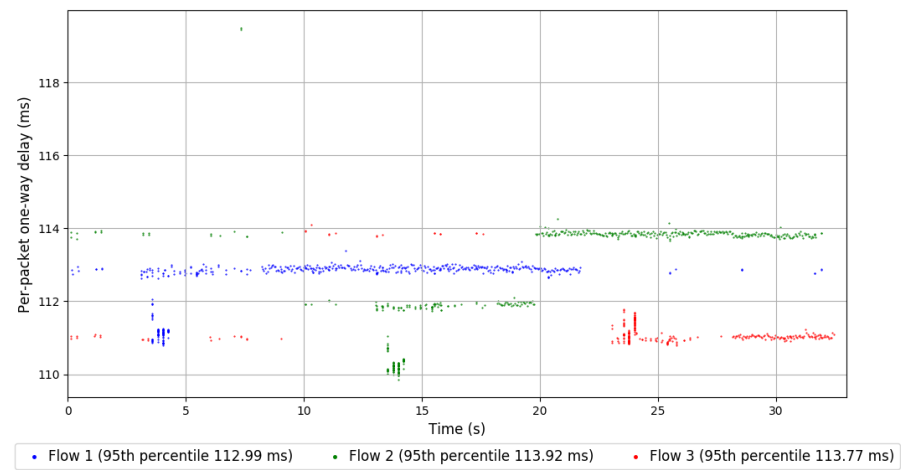
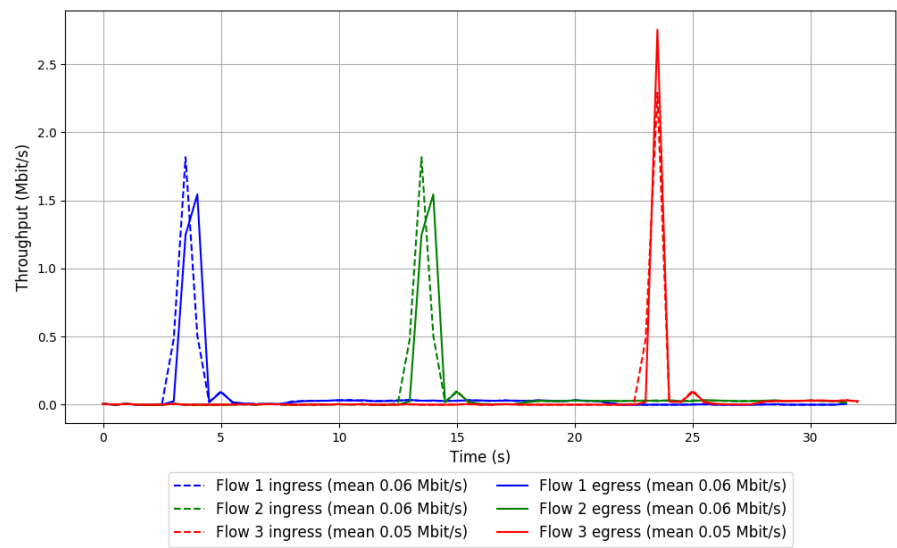
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 113.768 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-04-11 06:59:26

End at: 2018-04-11 06:59:56

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 113.679 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.666 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.672 ms

Loss rate: 0.00%

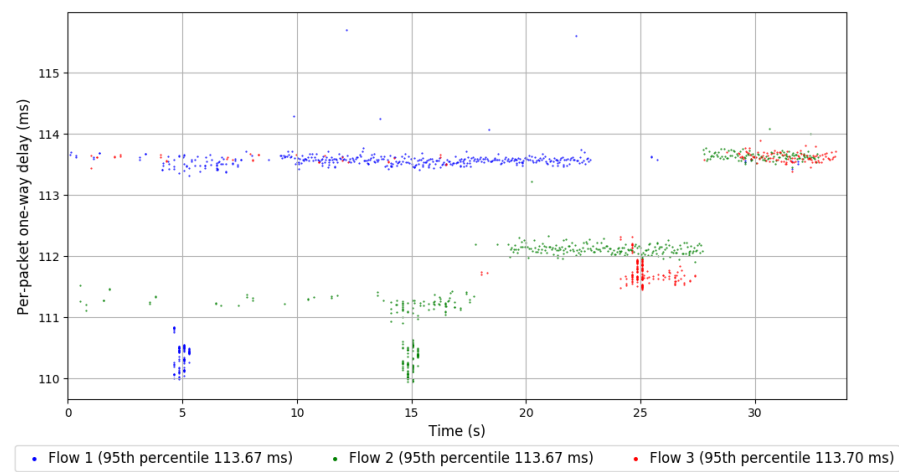
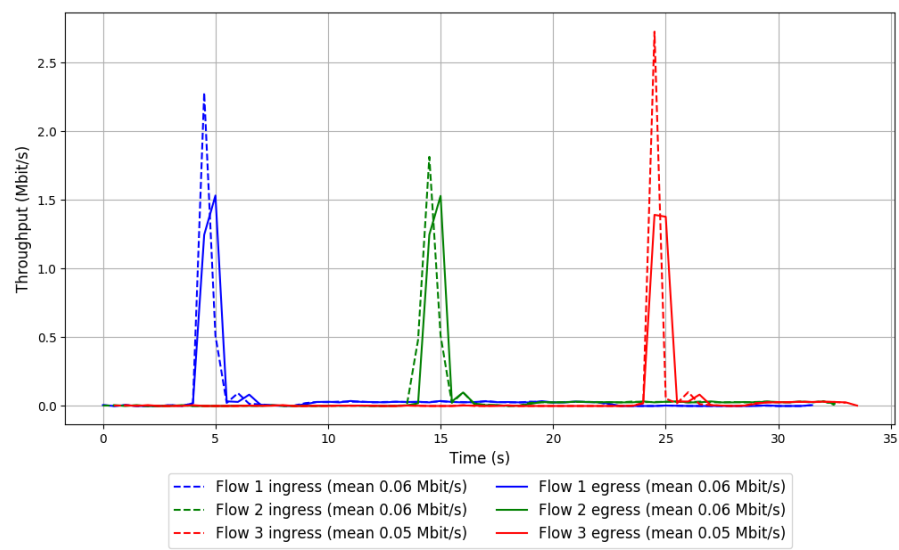
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 113.697 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-04-11 07:18:43

End at: 2018-04-11 07:19:13

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 114.063 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 114.106 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.118 ms

Loss rate: 0.00%

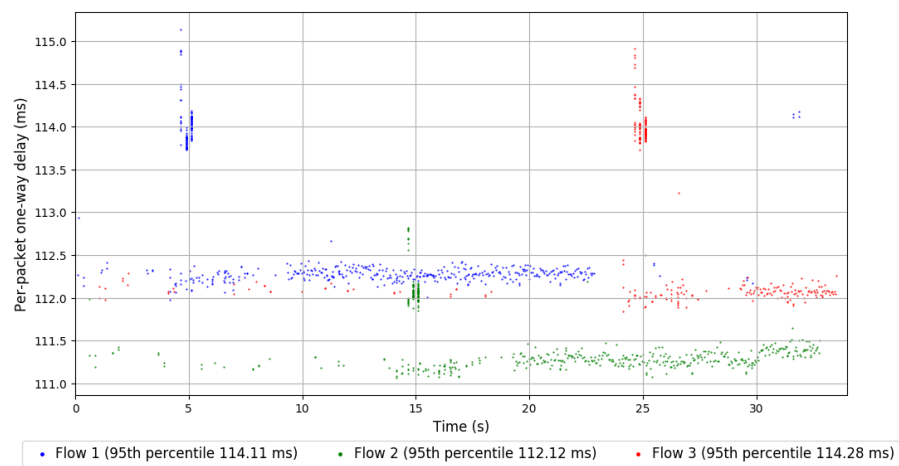
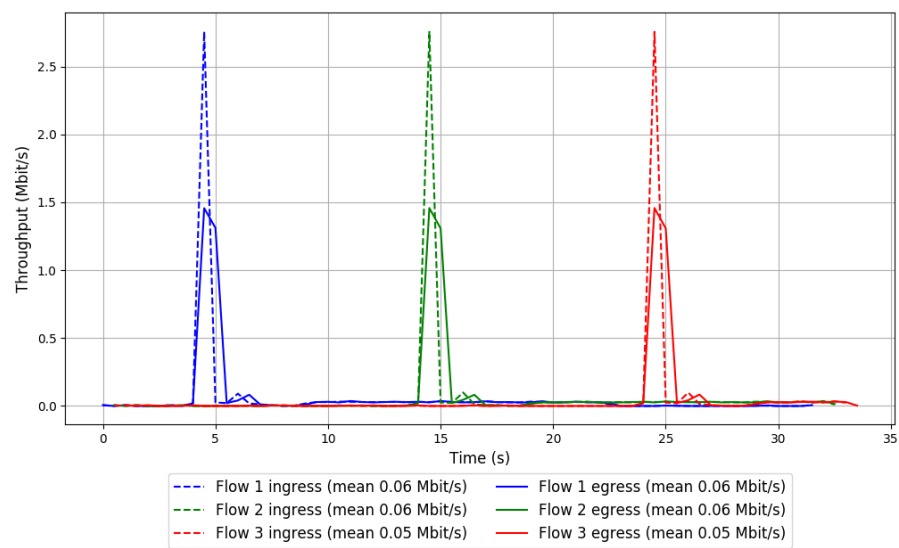
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 114.276 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-04-11 07:37:45

End at: 2018-04-11 07:38:15

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 114.204 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 112.354 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 114.221 ms

Loss rate: 0.00%

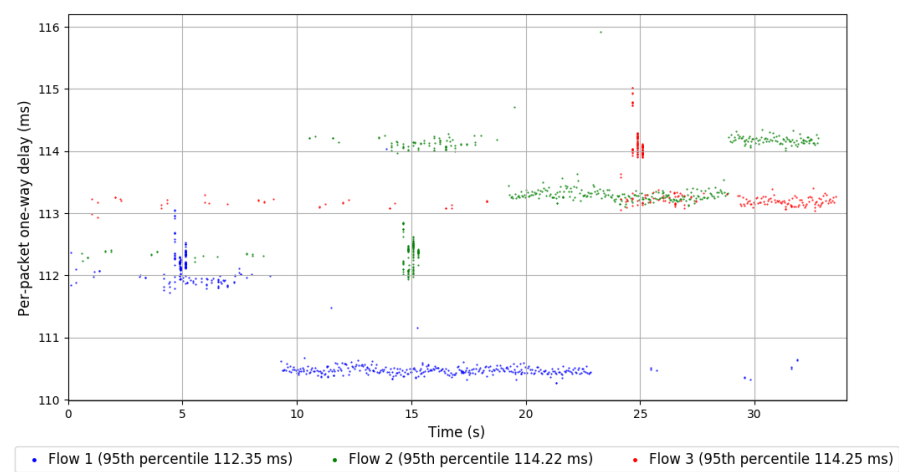
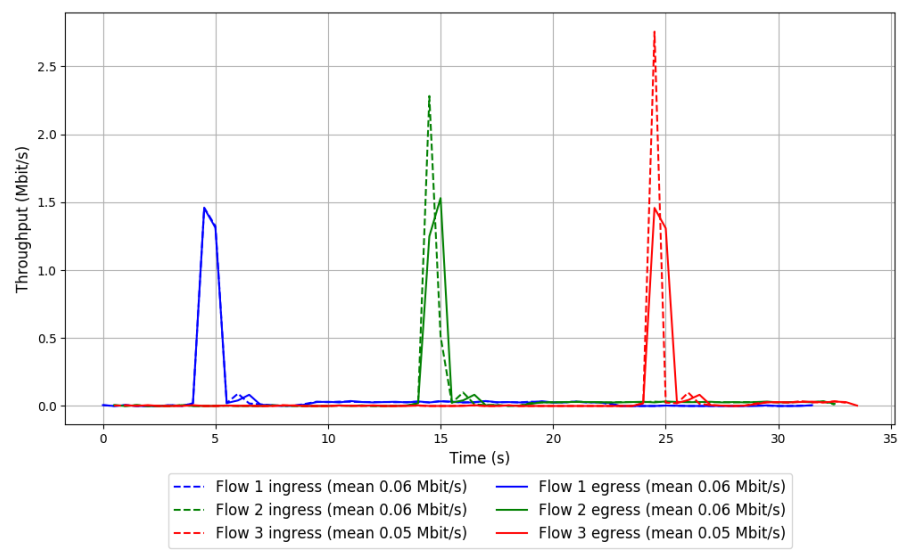
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 114.248 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-04-11 07:56:43

End at: 2018-04-11 07:57:13

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 114.090 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.358 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 114.219 ms

Loss rate: 0.00%

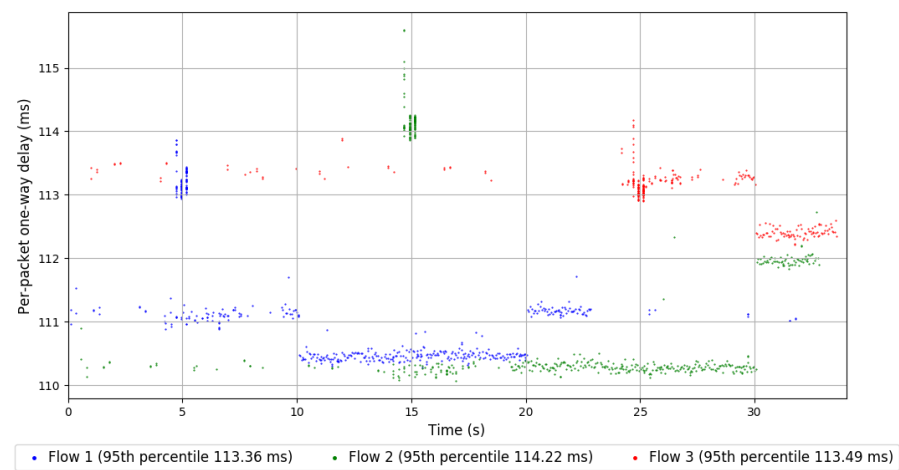
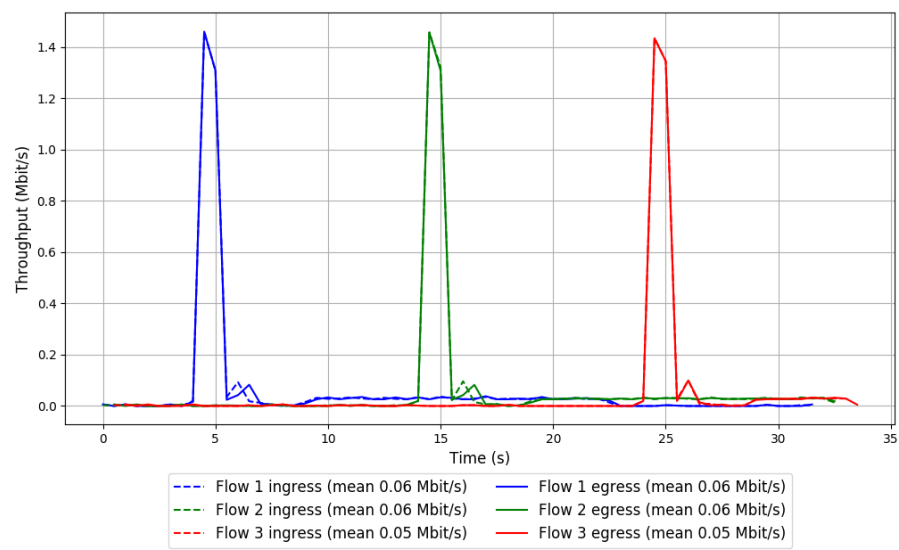
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 113.487 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-04-11 08:16:05

End at: 2018-04-11 08:16:35

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 114.074 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 114.123 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 114.059 ms

Loss rate: 0.00%

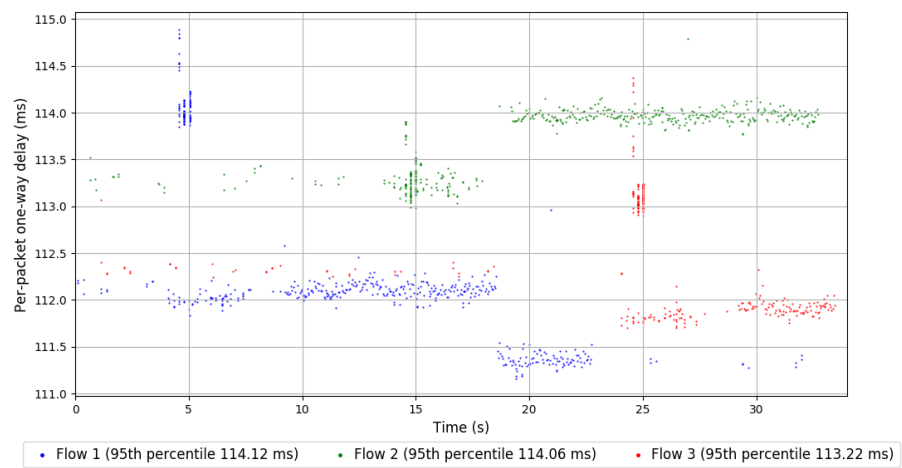
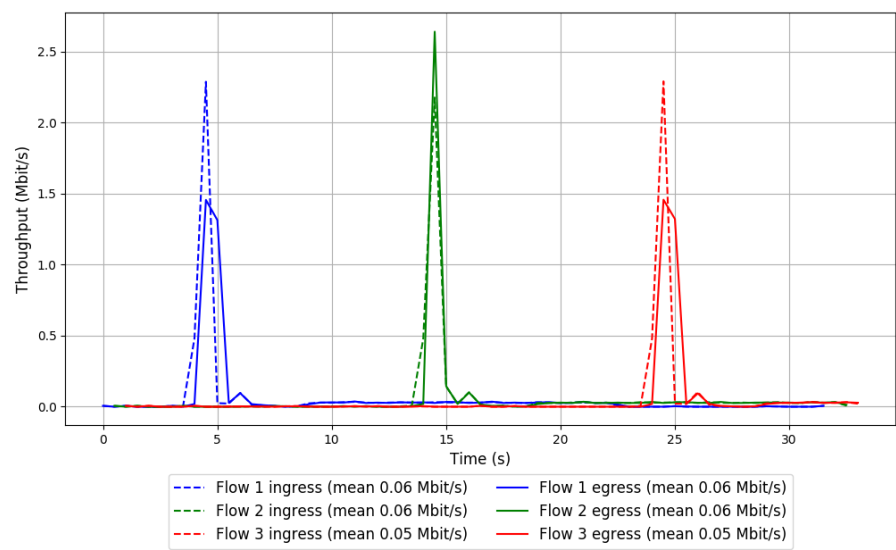
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 113.223 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-04-11 08:35:19

End at: 2018-04-11 08:35:49

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 113.833 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.867 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.481 ms

Loss rate: 0.00%

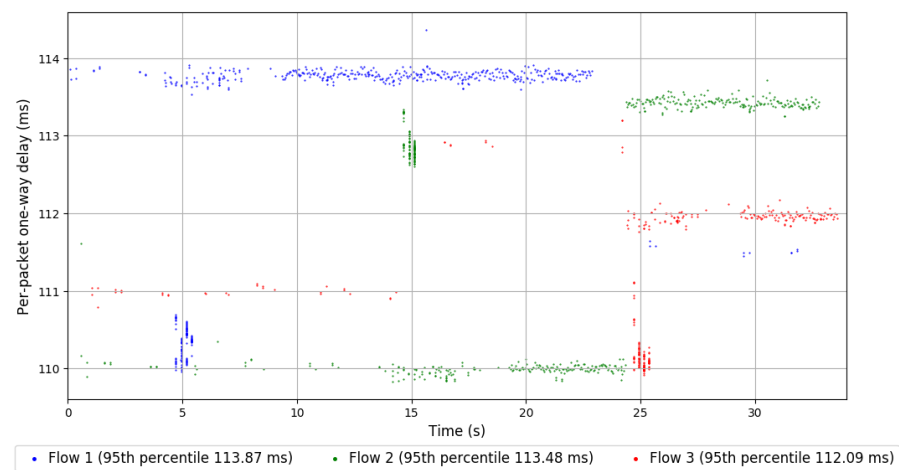
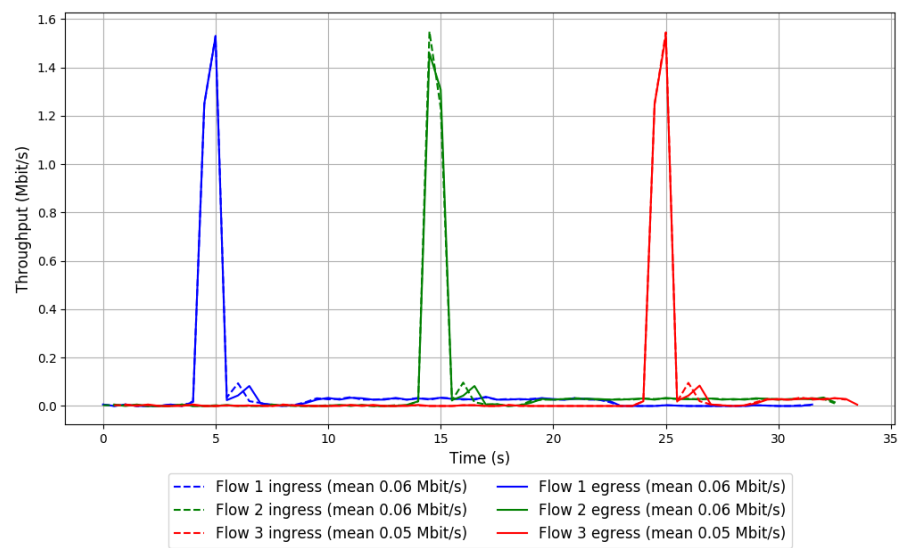
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.094 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-04-11 08:54:02

End at: 2018-04-11 08:54:32

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 113.385 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.278 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.307 ms

Loss rate: 0.00%

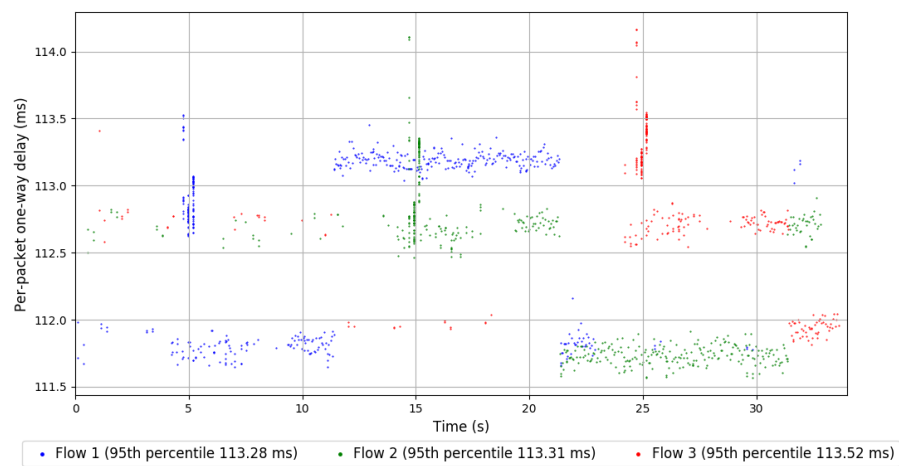
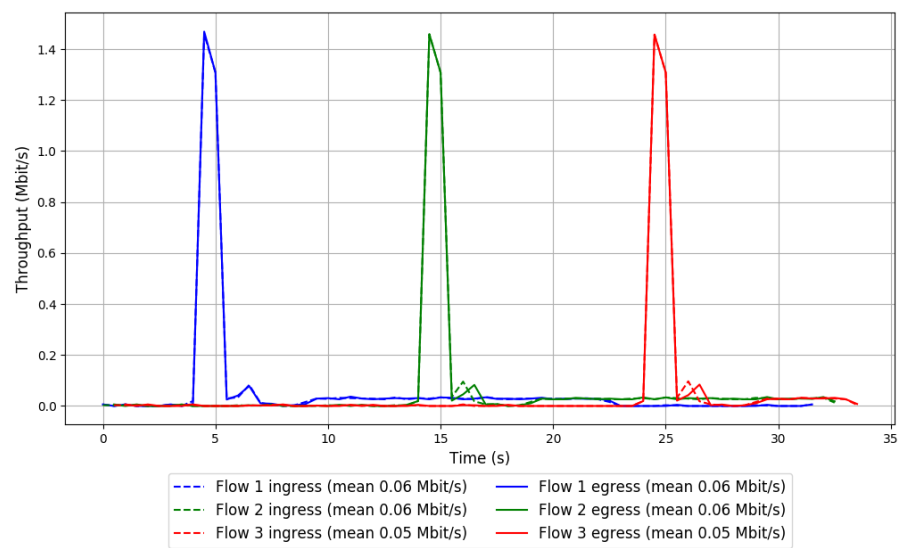
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 113.518 ms

Loss rate: 0.04%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-04-11 09:12:37

End at: 2018-04-11 09:13:07

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 113.221 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.205 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 113.241 ms

Loss rate: 0.00%

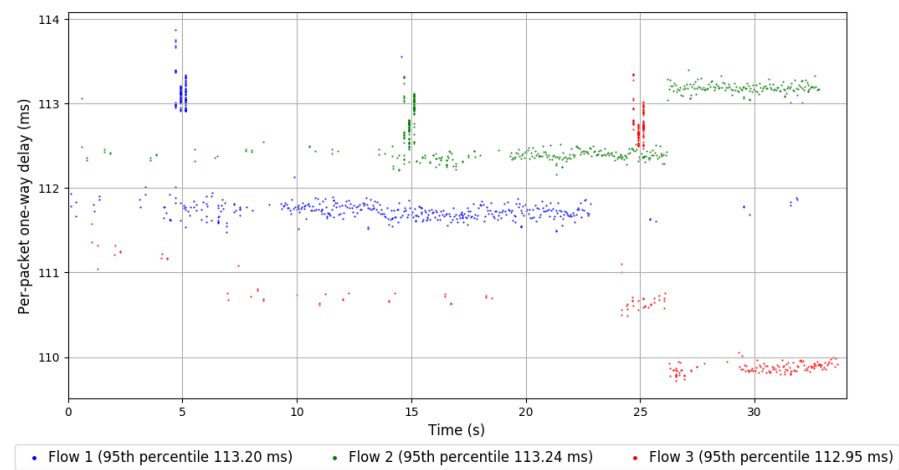
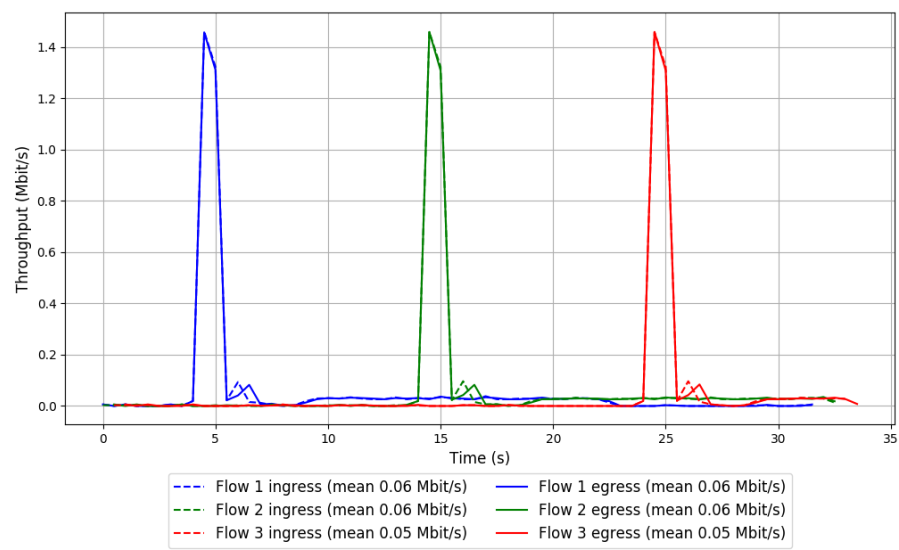
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 112.946 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

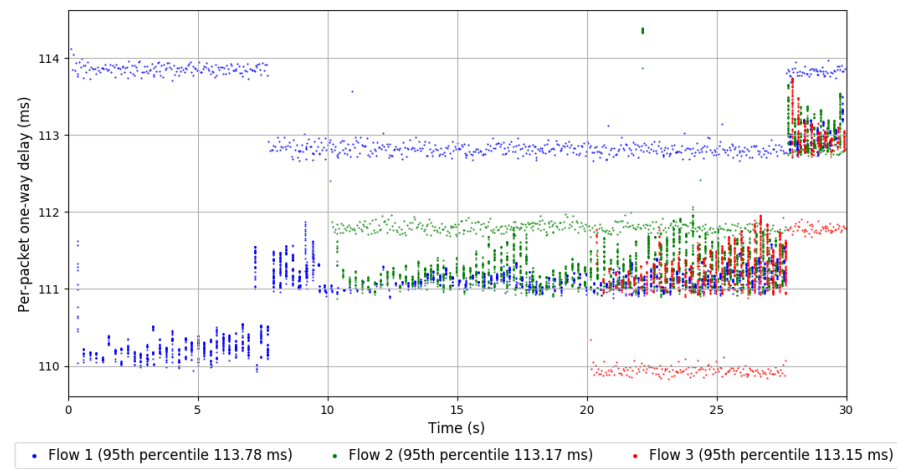
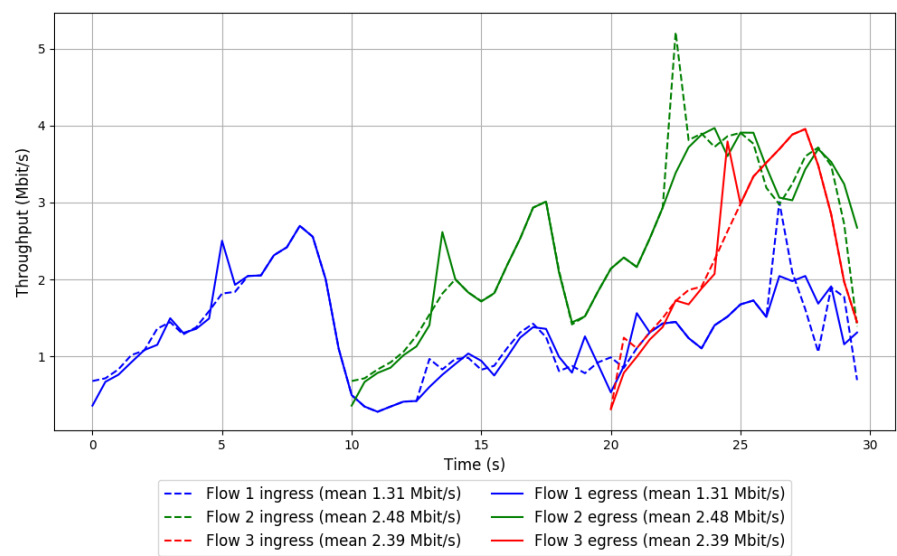


```
Run 1: Statistics of Sprout

Start at: 2018-04-11 06:20:42
End at: 2018-04-11 06:21:12

# Below is generated by plot.py at 2018-04-11 11:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 113.205 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 113.781 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.48 Mbit/s
95th percentile per-packet one-way delay: 113.172 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 113.150 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-04-11 06:39:26

End at: 2018-04-11 06:39:56

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.09 Mbit/s

95th percentile per-packet one-way delay: 111.887 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 111.935 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.52 Mbit/s

95th percentile per-packet one-way delay: 111.881 ms

Loss rate: 0.00%

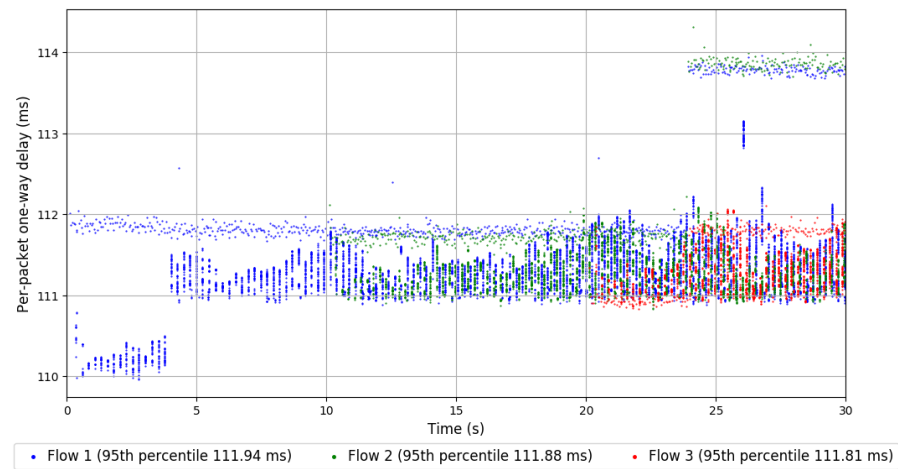
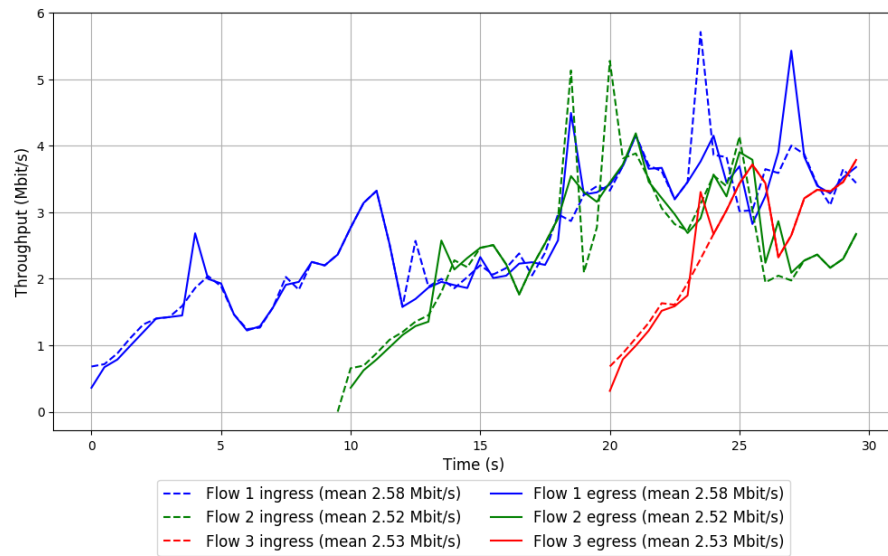
-- Flow 3:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 111.814 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-04-11 06:58:39

End at: 2018-04-11 06:59:09

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.38 Mbit/s

95th percentile per-packet one-way delay: 111.107 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 110.944 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 112.864 ms

Loss rate: 0.00%

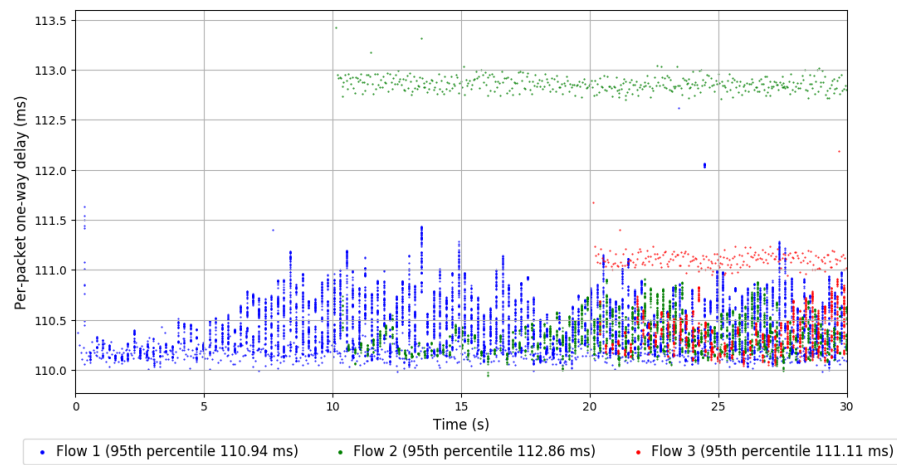
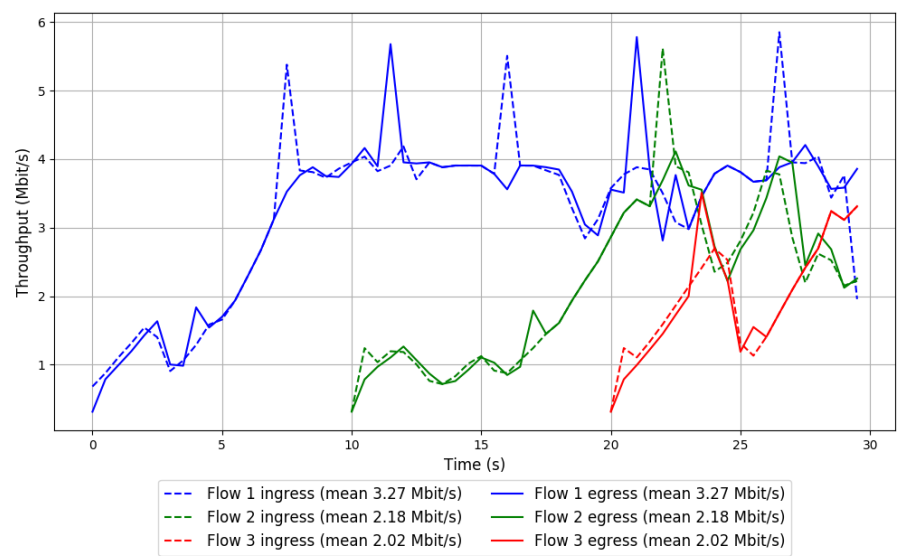
-- Flow 3:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 111.115 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-04-11 07:17:57

End at: 2018-04-11 07:18:27

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.92 Mbit/s

95th percentile per-packet one-way delay: 114.293 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 114.270 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 114.356 ms

Loss rate: 0.00%

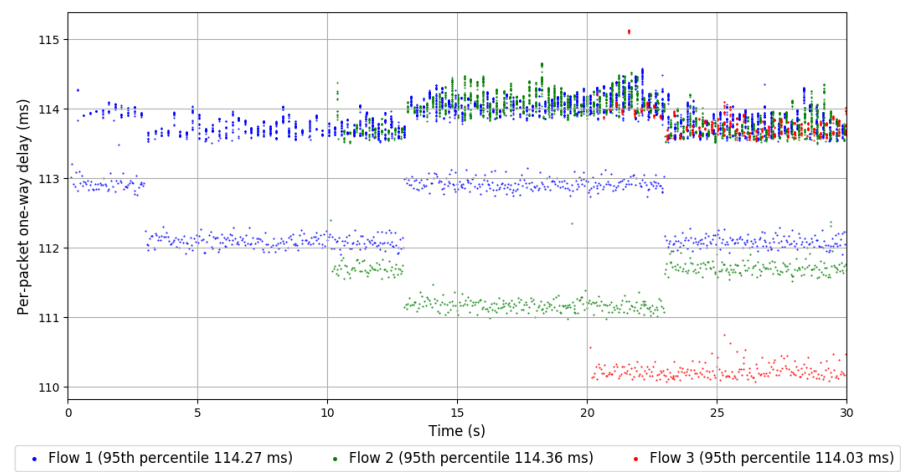
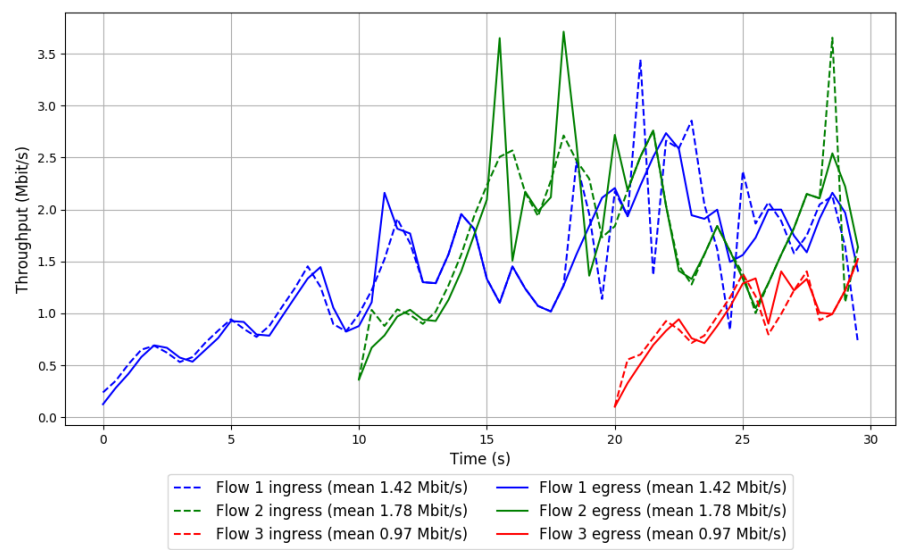
-- Flow 3:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 114.028 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-04-11 07:36:58

End at: 2018-04-11 07:37:28

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.06 Mbit/s

95th percentile per-packet one-way delay: 113.166 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 113.035 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 113.248 ms

Loss rate: 0.00%

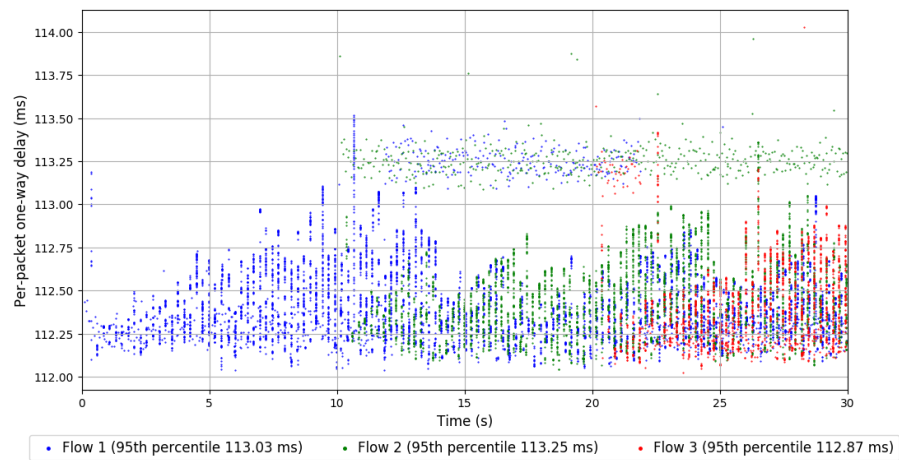
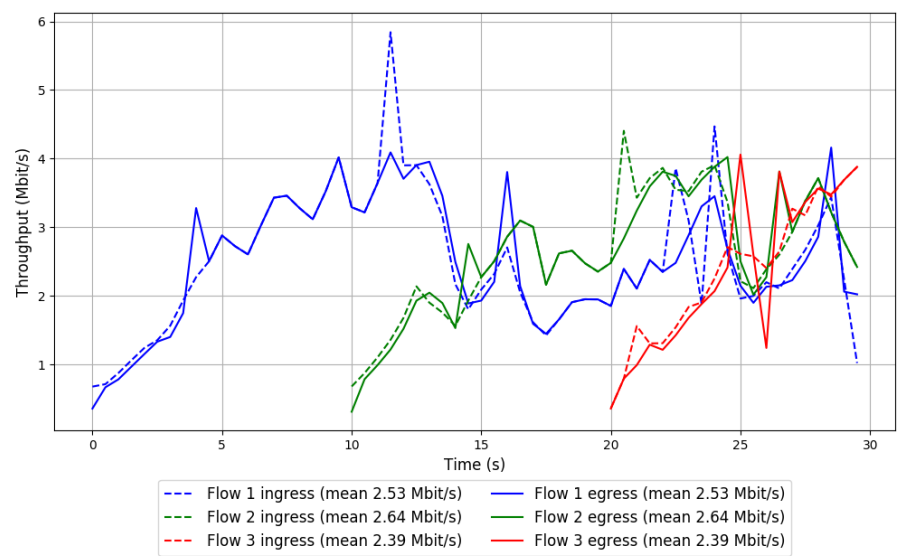
-- Flow 3:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 112.869 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-04-11 07:55:57

End at: 2018-04-11 07:56:27

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.63 Mbit/s

95th percentile per-packet one-way delay: 113.637 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 113.664 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 113.621 ms

Loss rate: 0.00%

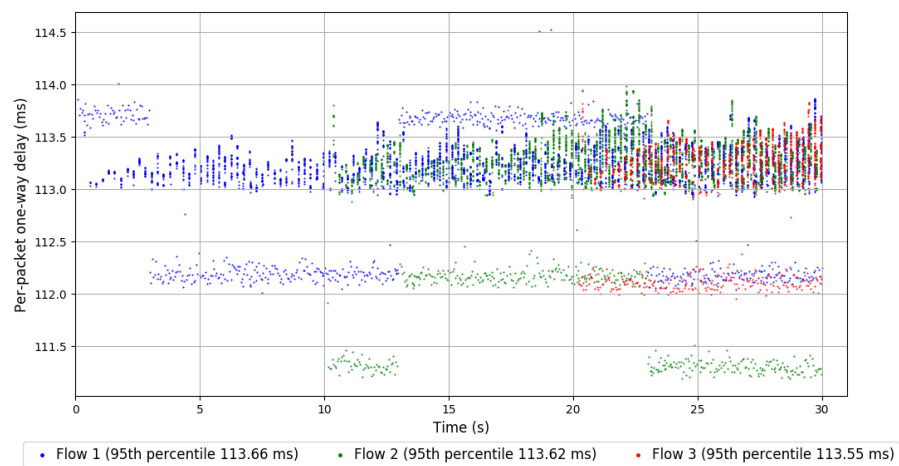
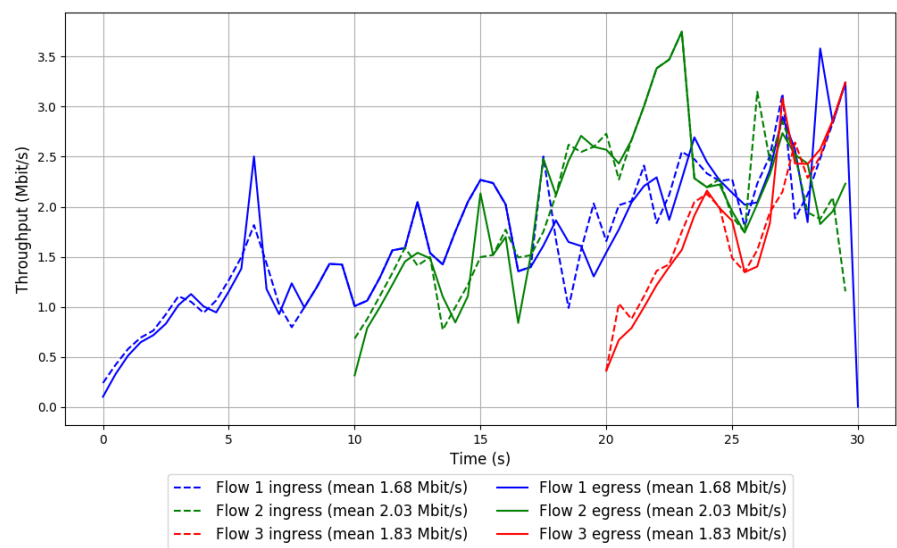
-- Flow 3:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 113.553 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-04-11 08:15:18

End at: 2018-04-11 08:15:48

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 114.482 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 114.446 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 114.519 ms

Loss rate: 0.00%

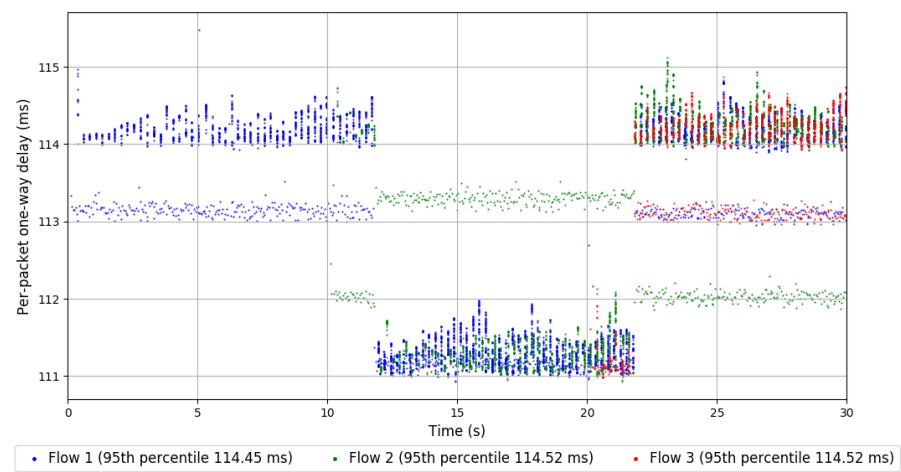
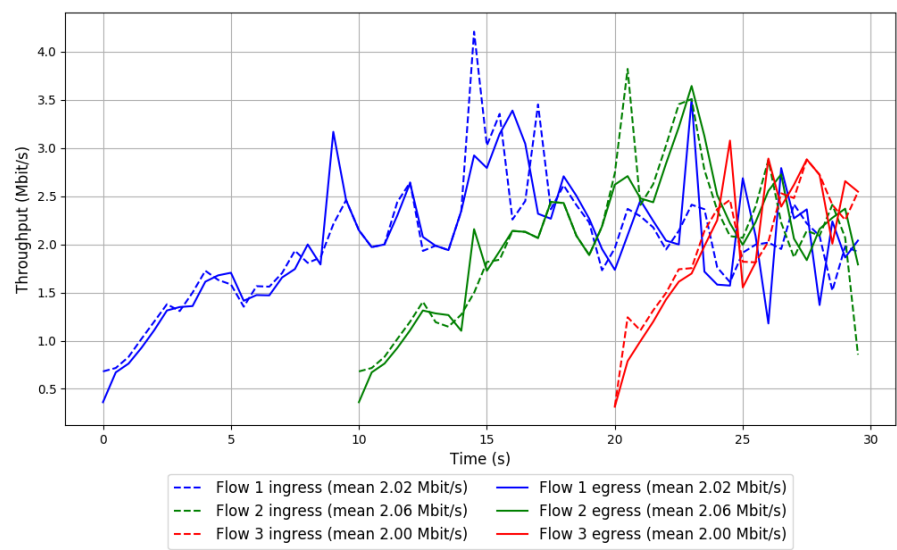
-- Flow 3:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 114.521 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-04-11 08:34:32

End at: 2018-04-11 08:35:02

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.74 Mbit/s

95th percentile per-packet one-way delay: 113.496 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 113.528 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 113.472 ms

Loss rate: 0.00%

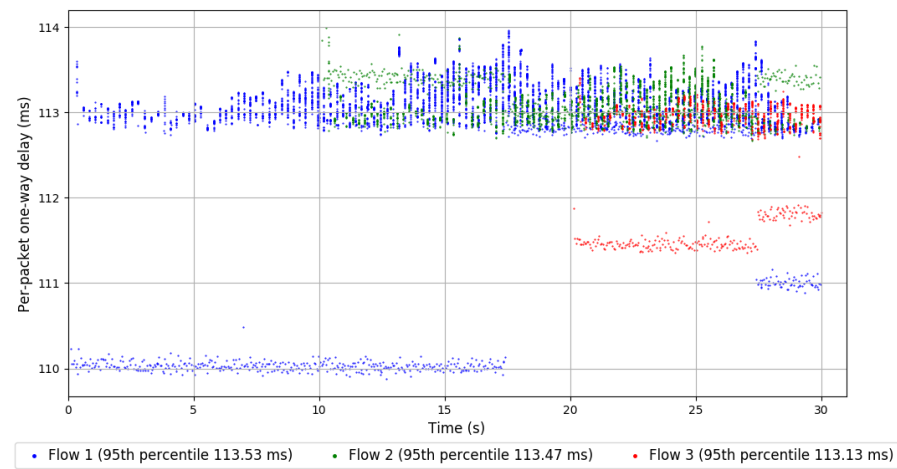
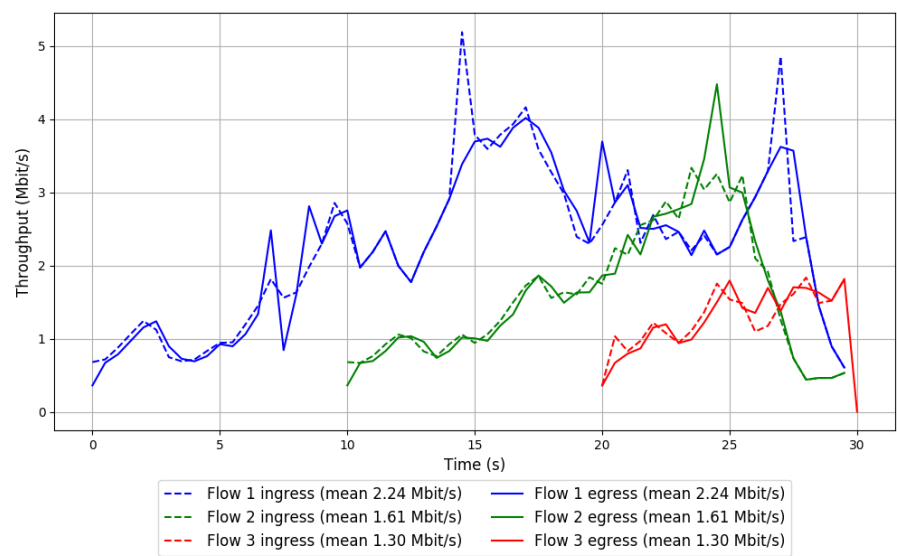
-- Flow 3:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 113.126 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-04-11 08:53:16

End at: 2018-04-11 08:53:46

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.47 Mbit/s

95th percentile per-packet one-way delay: 113.262 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 113.218 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 113.311 ms

Loss rate: 0.00%

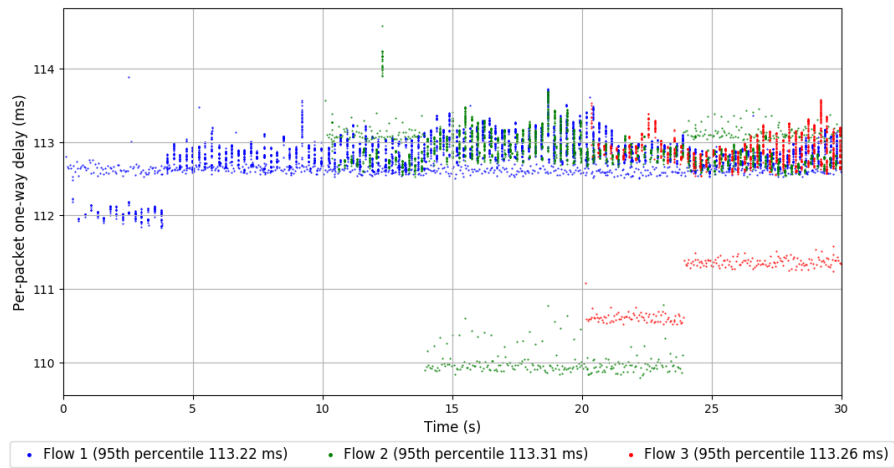
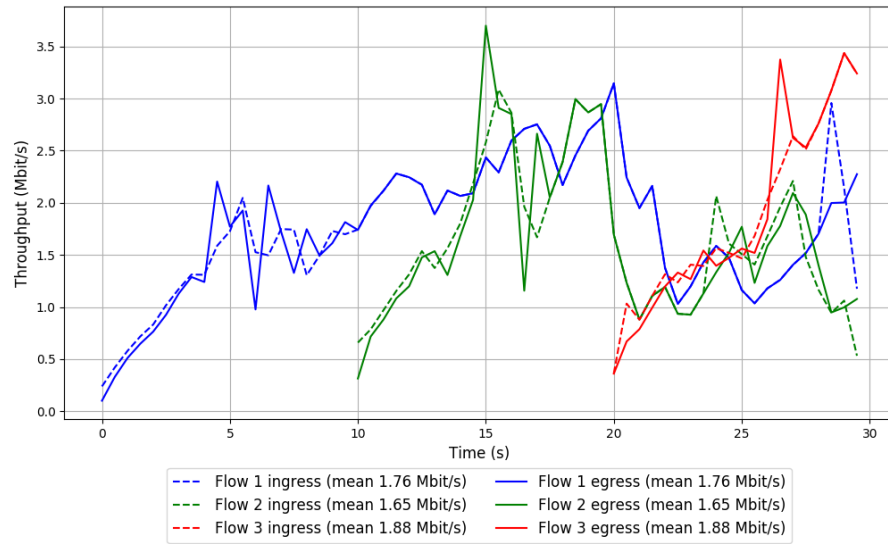
-- Flow 3:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 113.263 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-04-11 09:11:51

End at: 2018-04-11 09:12:21

Below is generated by plot.py at 2018-04-11 11:40:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.18 Mbit/s

95th percentile per-packet one-way delay: 113.429 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 113.397 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 113.378 ms

Loss rate: 0.00%

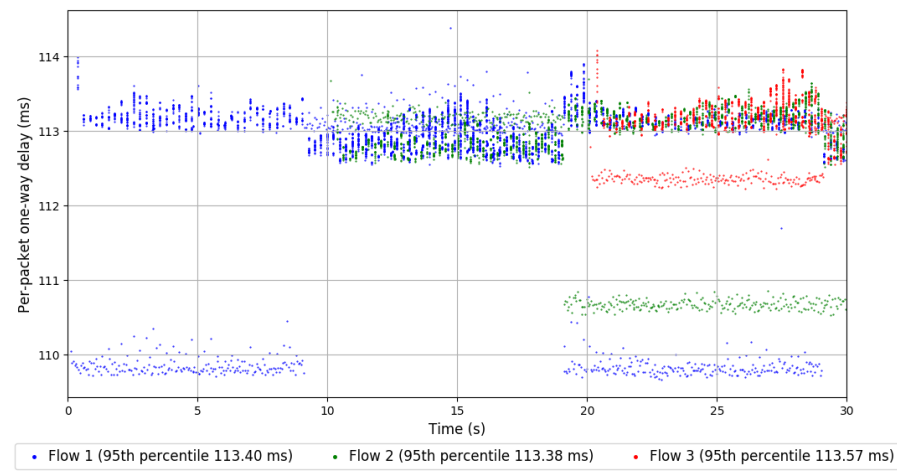
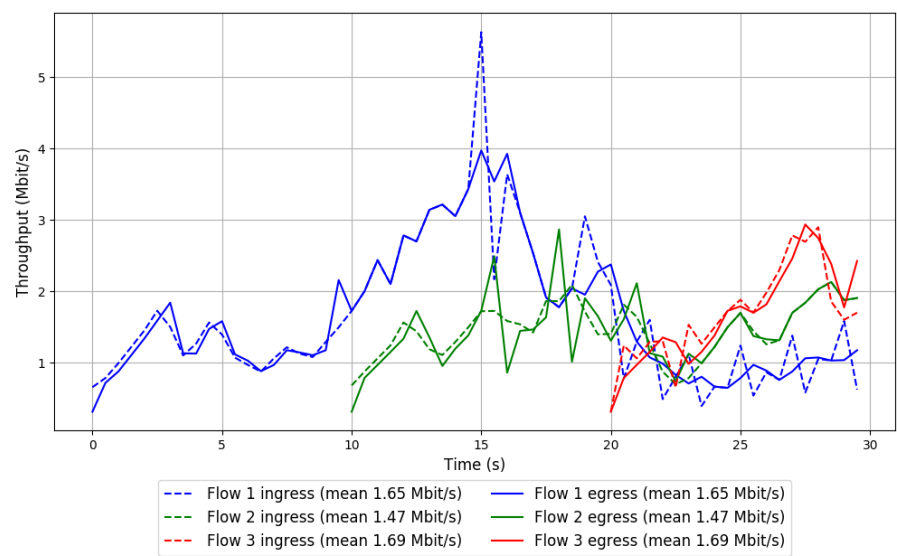
-- Flow 3:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 113.572 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

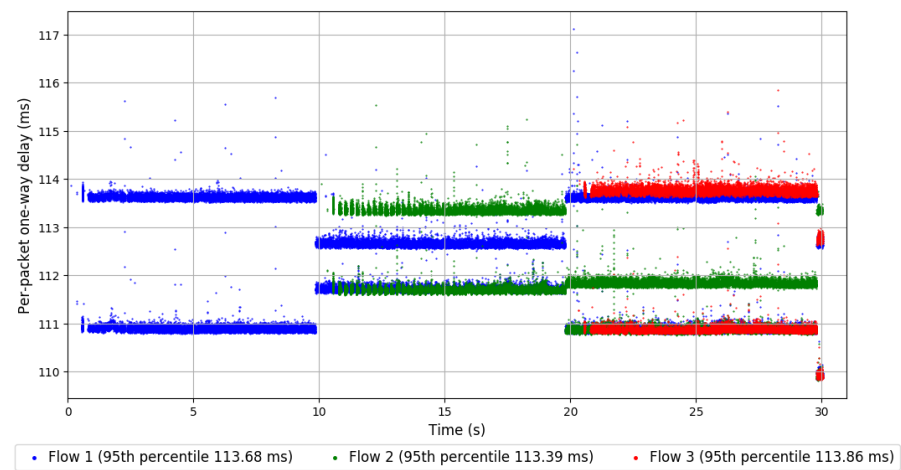
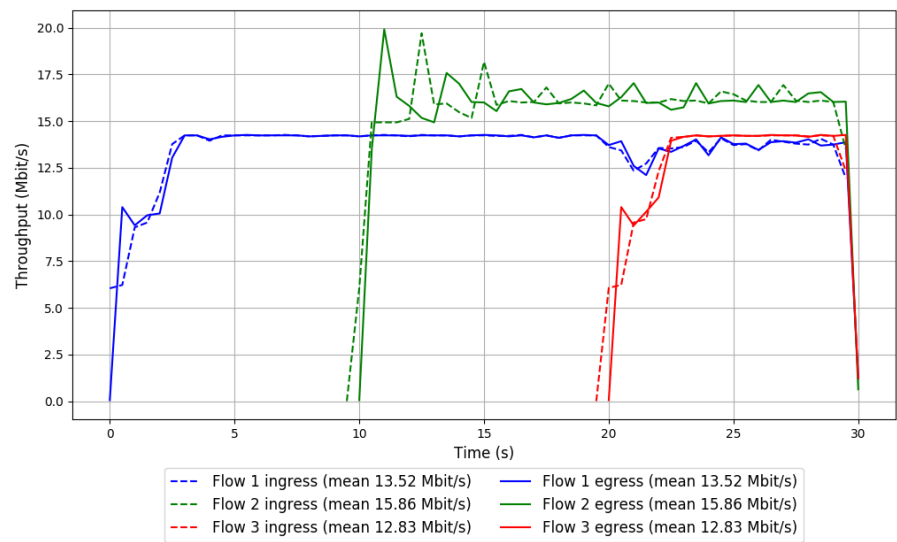


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-11 06:28:20
End at: 2018-04-11 06:28:50

# Below is generated by plot.py at 2018-04-11 11:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.34 Mbit/s
95th percentile per-packet one-way delay: 113.747 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.52 Mbit/s
95th percentile per-packet one-way delay: 113.683 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.86 Mbit/s
95th percentile per-packet one-way delay: 113.394 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.83 Mbit/s
95th percentile per-packet one-way delay: 113.857 ms
Loss rate: 0.00%
```


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

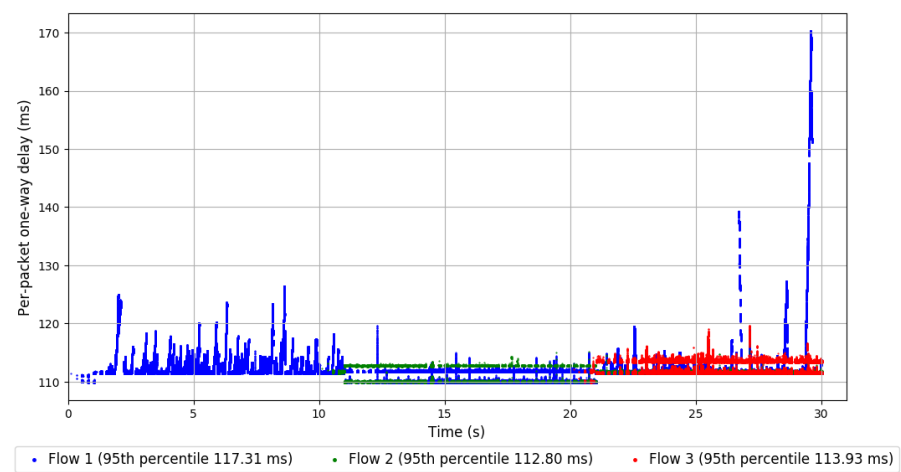
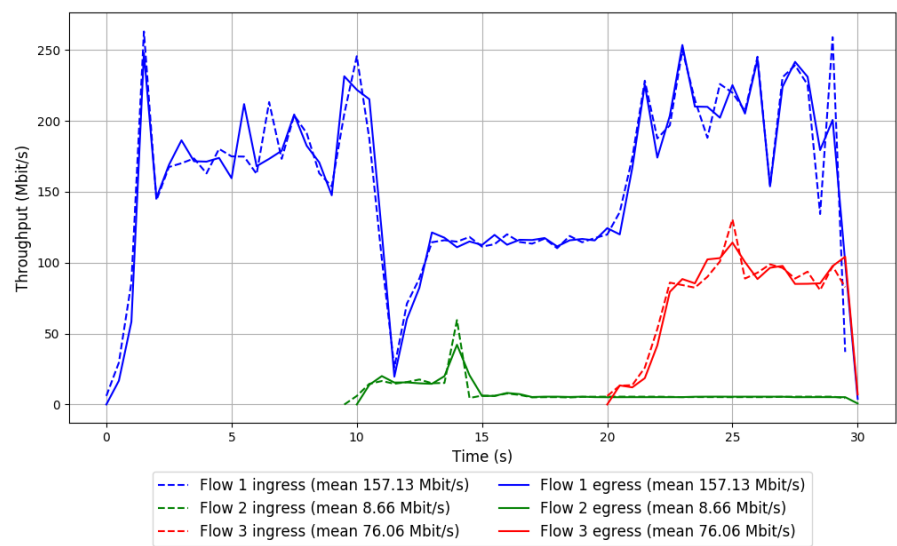


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-04-11 06:47:09
End at: 2018-04-11 06:47:39

# Below is generated by plot.py at 2018-04-11 11:40:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 188.06 Mbit/s
95th percentile per-packet one-way delay: 116.684 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 157.13 Mbit/s
95th percentile per-packet one-way delay: 117.314 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.66 Mbit/s
95th percentile per-packet one-way delay: 112.795 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 76.06 Mbit/s
95th percentile per-packet one-way delay: 113.928 ms
Loss rate: 0.00%
```

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

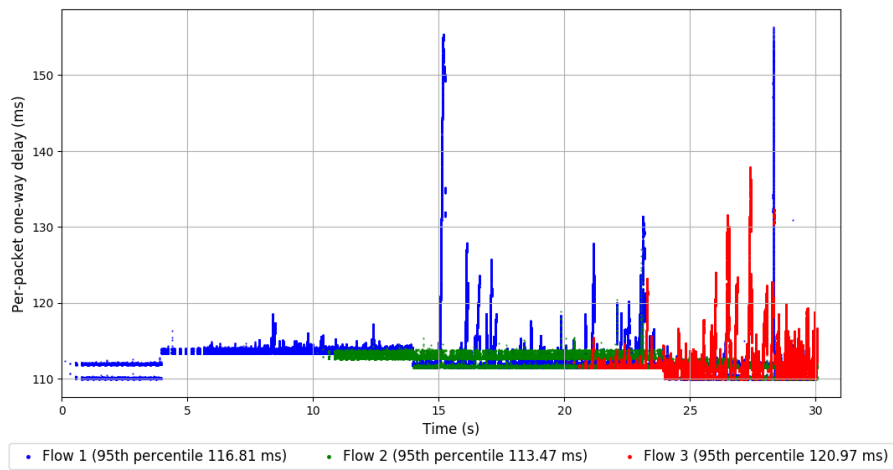
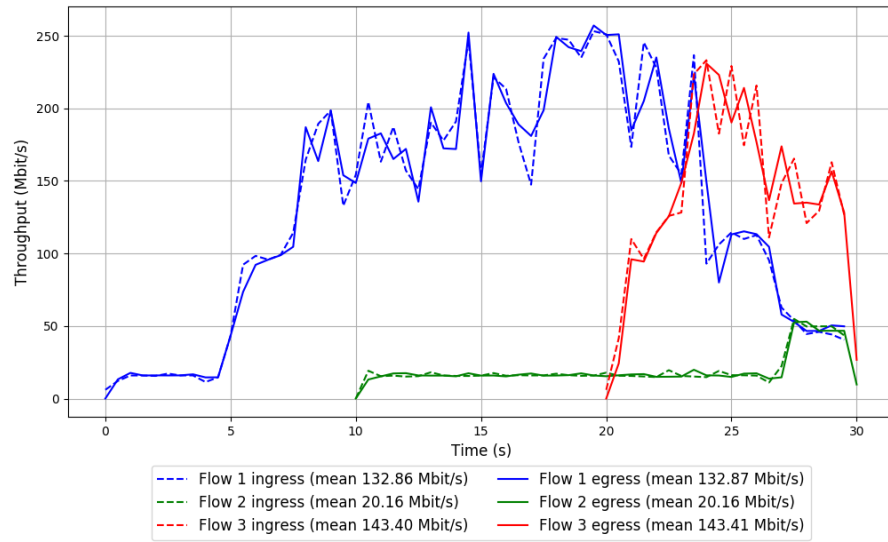


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-04-11 07:06:16
End at: 2018-04-11 07:06:46

# Below is generated by plot.py at 2018-04-11 11:41:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 193.35 Mbit/s
95th percentile per-packet one-way delay: 117.908 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 132.87 Mbit/s
95th percentile per-packet one-way delay: 116.811 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.16 Mbit/s
95th percentile per-packet one-way delay: 113.469 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 143.41 Mbit/s
95th percentile per-packet one-way delay: 120.974 ms
Loss rate: 0.00%
```

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

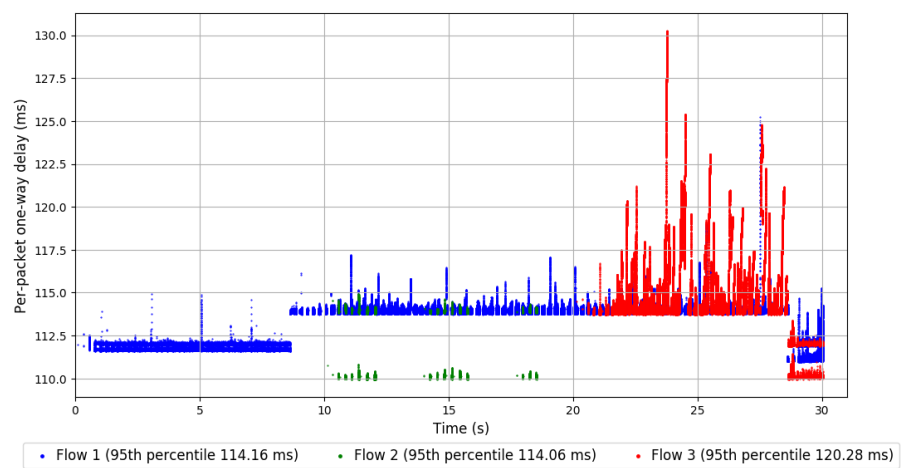
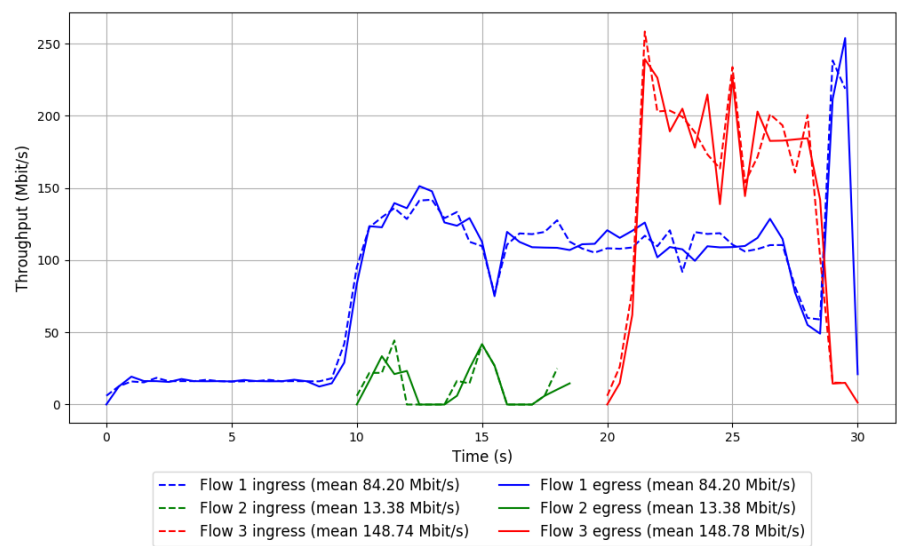


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-04-11 07:25:41
End at: 2018-04-11 07:26:11

# Below is generated by plot.py at 2018-04-11 11:41:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 137.18 Mbit/s
95th percentile per-packet one-way delay: 117.848 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.20 Mbit/s
95th percentile per-packet one-way delay: 114.157 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.38 Mbit/s
95th percentile per-packet one-way delay: 114.064 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 148.78 Mbit/s
95th percentile per-packet one-way delay: 120.285 ms
Loss rate: 0.00%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-04-11 07:44:40

End at: 2018-04-11 07:45:10

Below is generated by plot.py at 2018-04-11 11:41:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 161.77 Mbit/s

95th percentile per-packet one-way delay: 115.583 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 111.13 Mbit/s

95th percentile per-packet one-way delay: 116.254 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 68.46 Mbit/s

95th percentile per-packet one-way delay: 114.105 ms

Loss rate: 0.01%

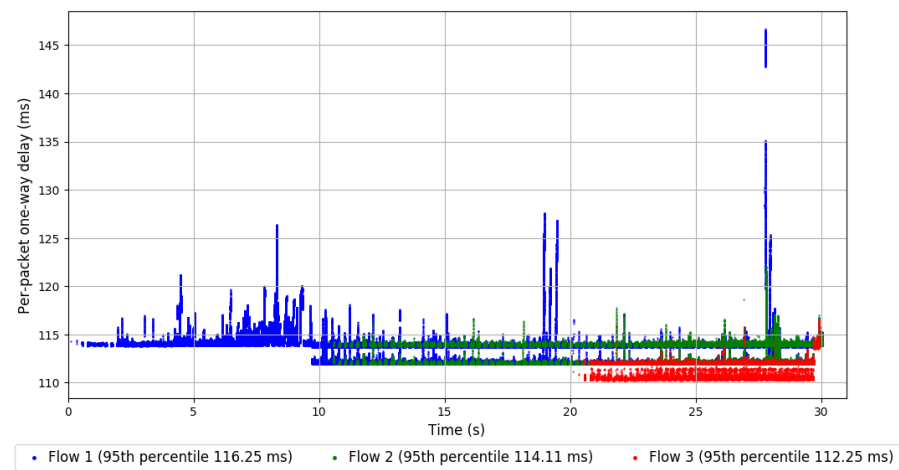
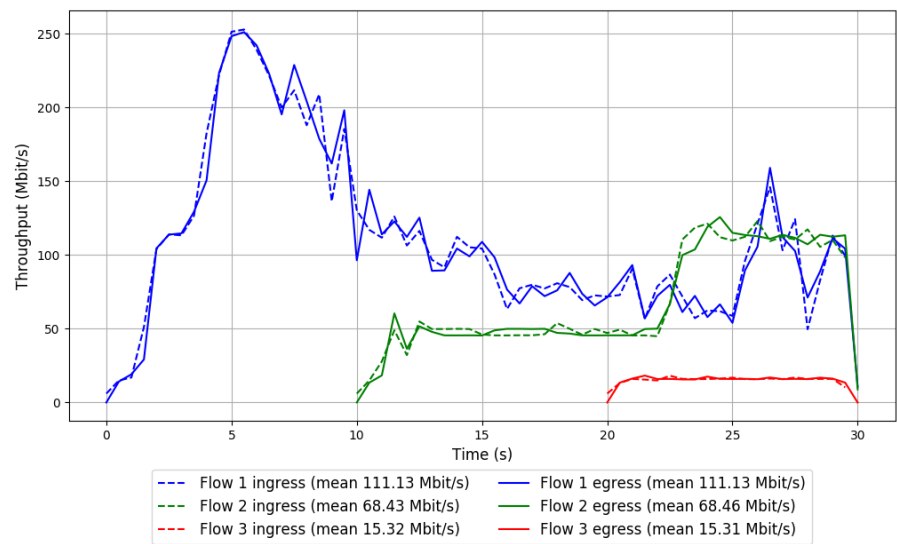
-- Flow 3:

Average throughput: 15.31 Mbit/s

95th percentile per-packet one-way delay: 112.247 ms

Loss rate: 0.01%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-04-11 08:03:41

End at: 2018-04-11 08:04:11

Below is generated by plot.py at 2018-04-11 11:42:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 221.67 Mbit/s

95th percentile per-packet one-way delay: 115.027 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 153.44 Mbit/s

95th percentile per-packet one-way delay: 115.142 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.21 Mbit/s

95th percentile per-packet one-way delay: 114.177 ms

Loss rate: 0.00%

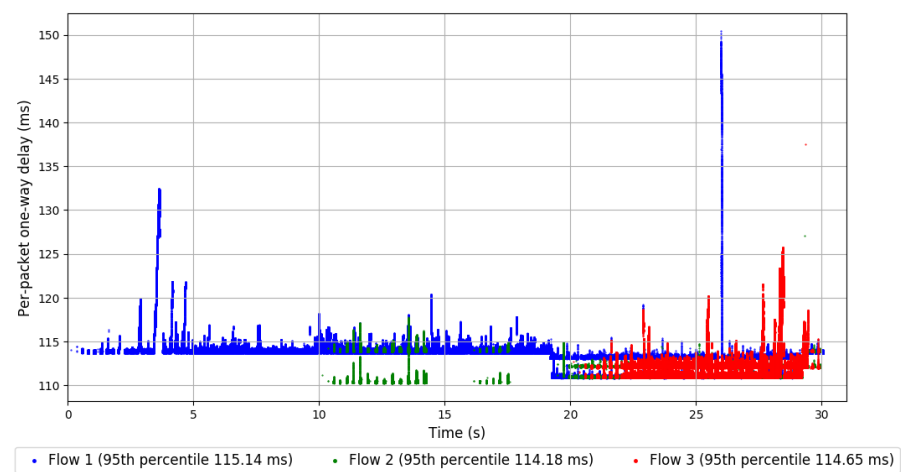
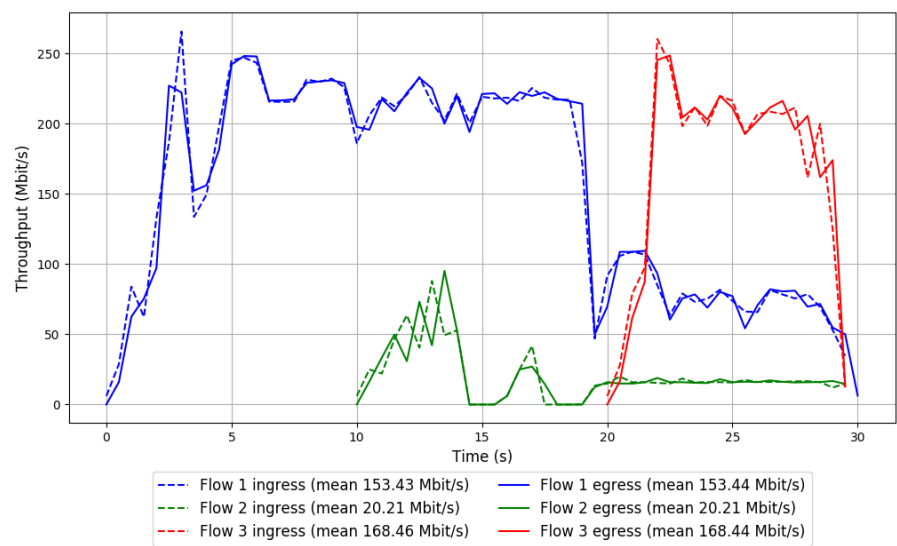
-- Flow 3:

Average throughput: 168.44 Mbit/s

95th percentile per-packet one-way delay: 114.651 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-04-11 08:23:02

End at: 2018-04-11 08:23:32

Below is generated by plot.py at 2018-04-11 11:43:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 228.11 Mbit/s

95th percentile per-packet one-way delay: 117.174 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 160.49 Mbit/s

95th percentile per-packet one-way delay: 115.795 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 79.50 Mbit/s

95th percentile per-packet one-way delay: 121.657 ms

Loss rate: 0.00%

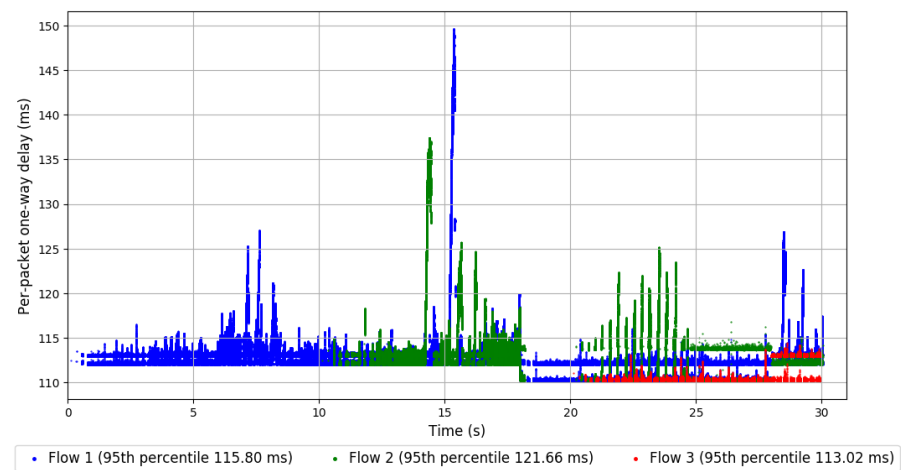
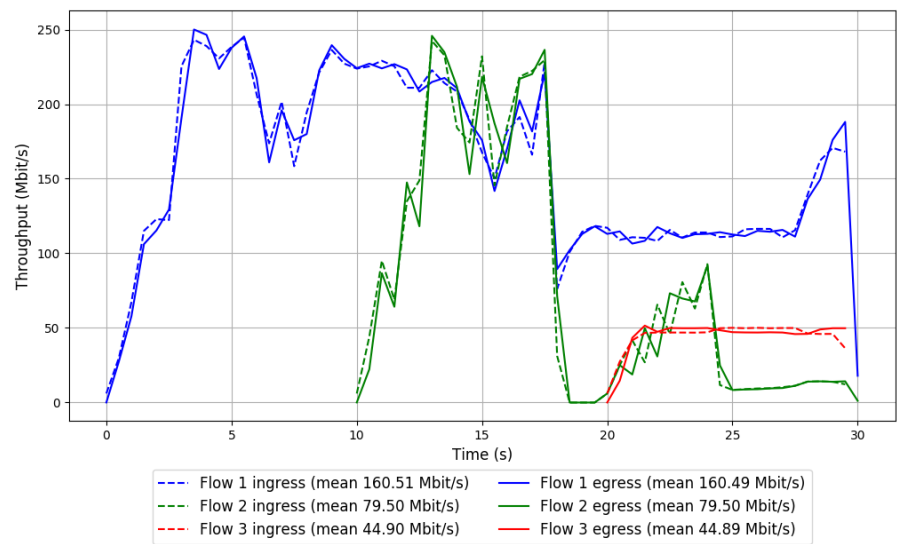
-- Flow 3:

Average throughput: 44.89 Mbit/s

95th percentile per-packet one-way delay: 113.015 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-04-11 08:42:09

End at: 2018-04-11 08:42:39

Below is generated by plot.py at 2018-04-11 11:44:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 165.22 Mbit/s

95th percentile per-packet one-way delay: 117.967 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 92.70 Mbit/s

95th percentile per-packet one-way delay: 119.439 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.47 Mbit/s

95th percentile per-packet one-way delay: 116.084 ms

Loss rate: 0.00%

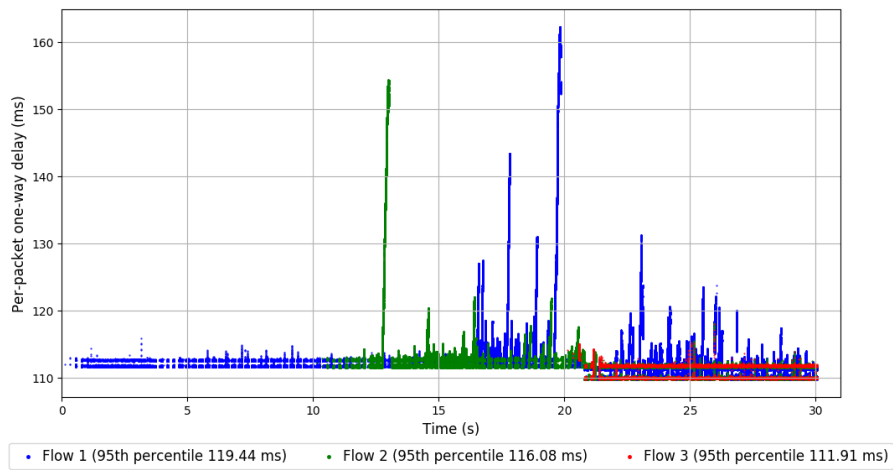
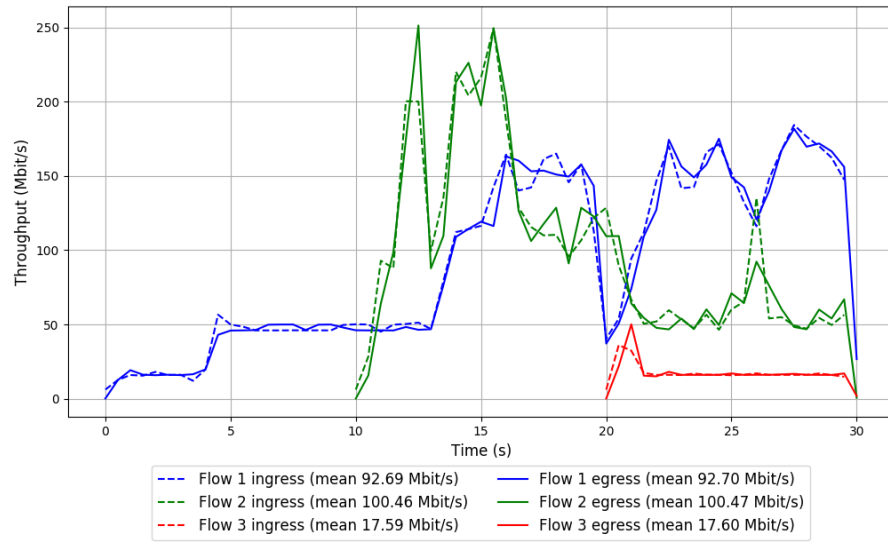
-- Flow 3:

Average throughput: 17.60 Mbit/s

95th percentile per-packet one-way delay: 111.912 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-04-11 09:00:53

End at: 2018-04-11 09:01:23

Below is generated by plot.py at 2018-04-11 11:44:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.43 Mbit/s

95th percentile per-packet one-way delay: 116.306 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.97 Mbit/s

95th percentile per-packet one-way delay: 113.169 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.82 Mbit/s

95th percentile per-packet one-way delay: 151.954 ms

Loss rate: 0.00%

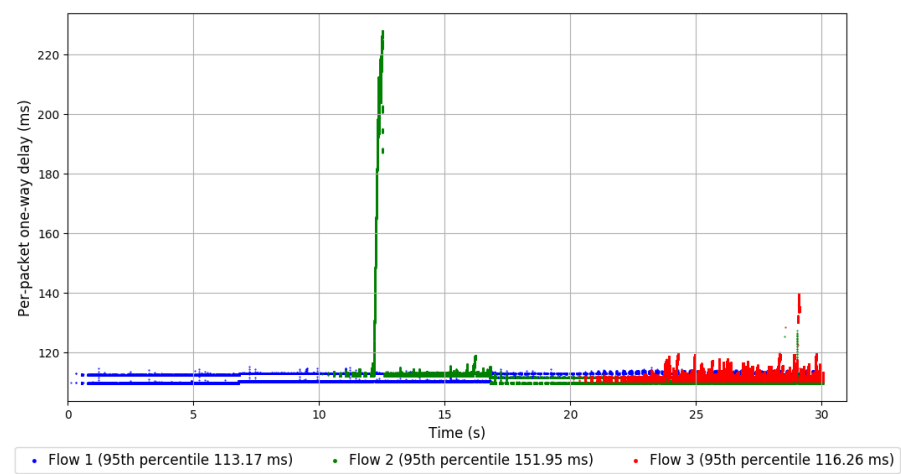
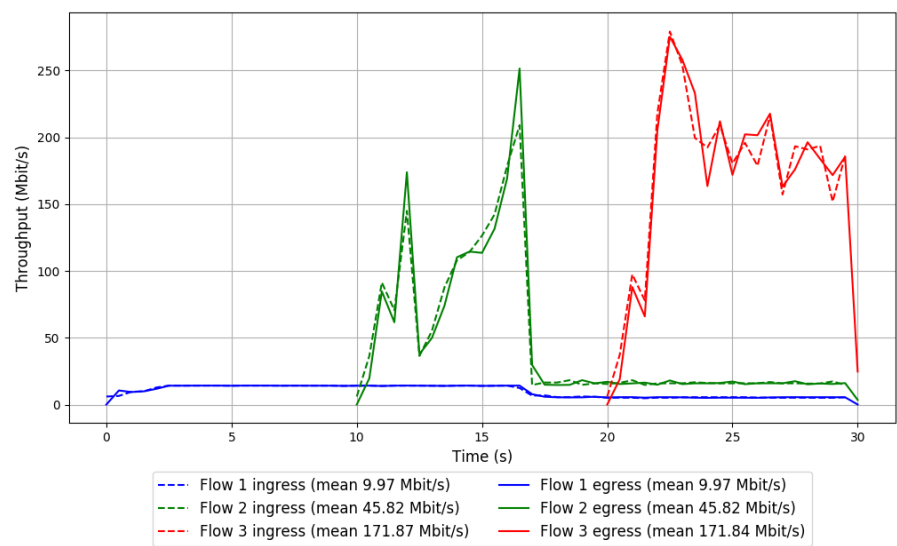
-- Flow 3:

Average throughput: 171.84 Mbit/s

95th percentile per-packet one-way delay: 116.260 ms

Loss rate: 0.01%

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

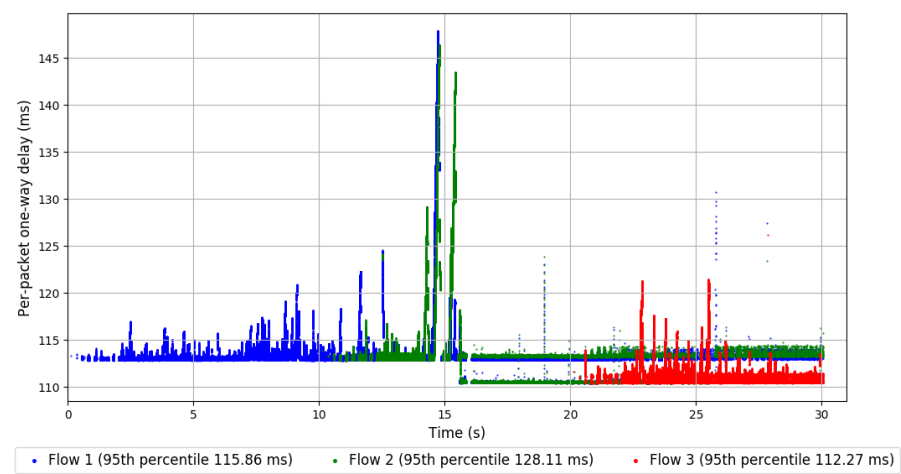
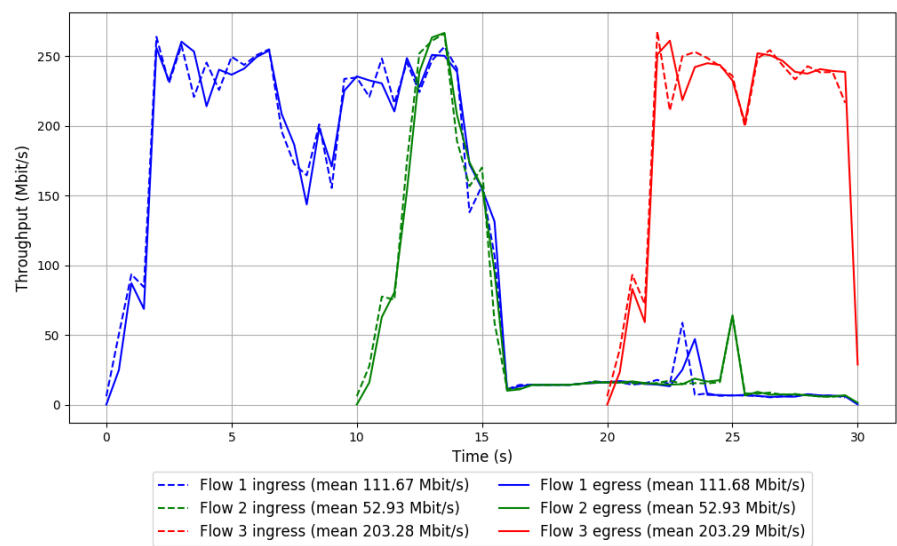


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-04-11 09:19:24
End at: 2018-04-11 09:19:54

# Below is generated by plot.py at 2018-04-11 11:46:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 214.28 Mbit/s
95th percentile per-packet one-way delay: 116.332 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 111.68 Mbit/s
95th percentile per-packet one-way delay: 115.860 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 52.93 Mbit/s
95th percentile per-packet one-way delay: 128.108 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 203.29 Mbit/s
95th percentile per-packet one-way delay: 112.267 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-04-11 06:30:08

End at: 2018-04-11 06:30:38

Below is generated by plot.py at 2018-04-11 11:46:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.67 Mbit/s

95th percentile per-packet one-way delay: 122.739 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 30.10 Mbit/s

95th percentile per-packet one-way delay: 117.033 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 97.88 Mbit/s

95th percentile per-packet one-way delay: 123.064 ms

Loss rate: 0.00%

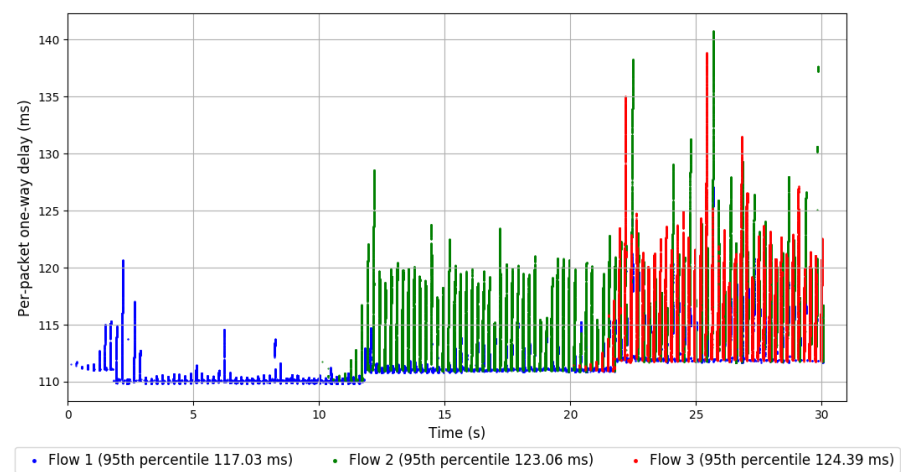
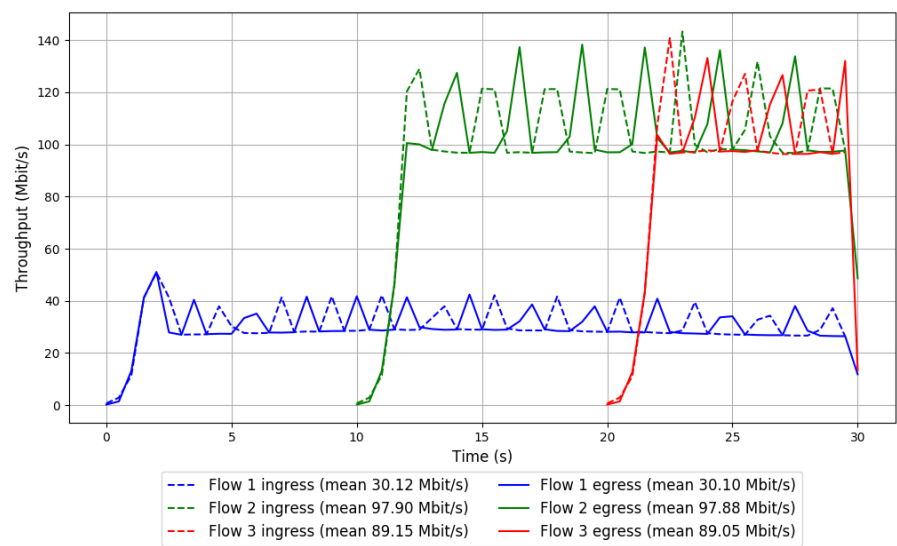
-- Flow 3:

Average throughput: 89.05 Mbit/s

95th percentile per-packet one-way delay: 124.392 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-04-11 06:49:14

End at: 2018-04-11 06:49:44

Below is generated by plot.py at 2018-04-11 11:46:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.52 Mbit/s

95th percentile per-packet one-way delay: 119.847 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 103.78 Mbit/s

95th percentile per-packet one-way delay: 120.034 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.52 Mbit/s

95th percentile per-packet one-way delay: 118.508 ms

Loss rate: 0.00%

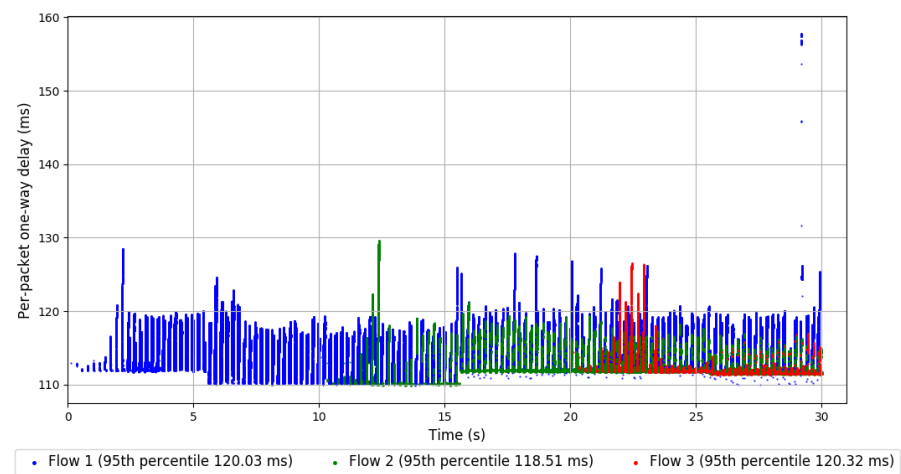
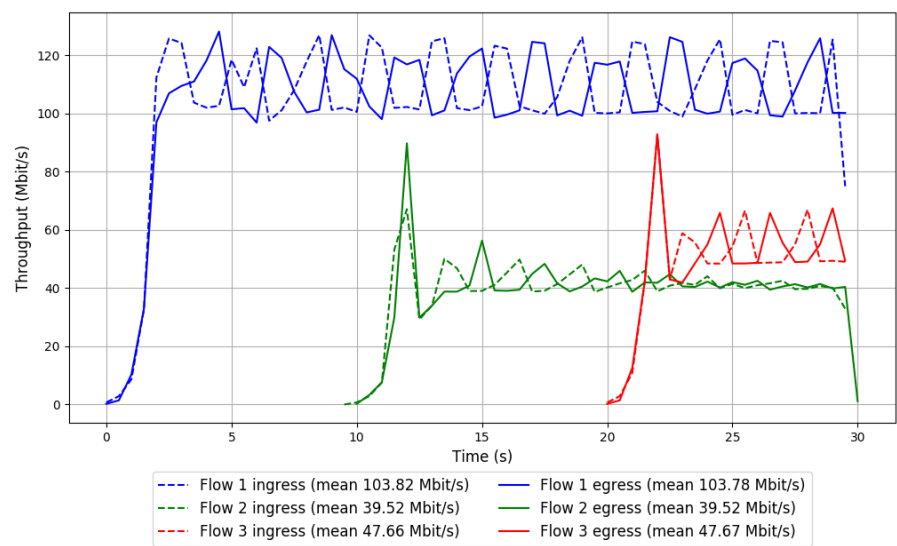
-- Flow 3:

Average throughput: 47.67 Mbit/s

95th percentile per-packet one-way delay: 120.316 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-04-11 07:08:22

End at: 2018-04-11 07:08:52

Below is generated by plot.py at 2018-04-11 11:46:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.06 Mbit/s

95th percentile per-packet one-way delay: 121.385 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 95.00 Mbit/s

95th percentile per-packet one-way delay: 121.618 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 20.95 Mbit/s

95th percentile per-packet one-way delay: 114.153 ms

Loss rate: 0.00%

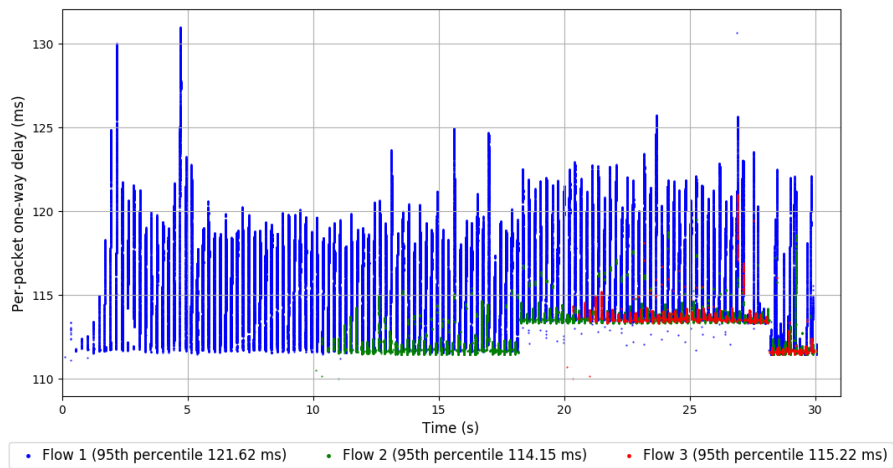
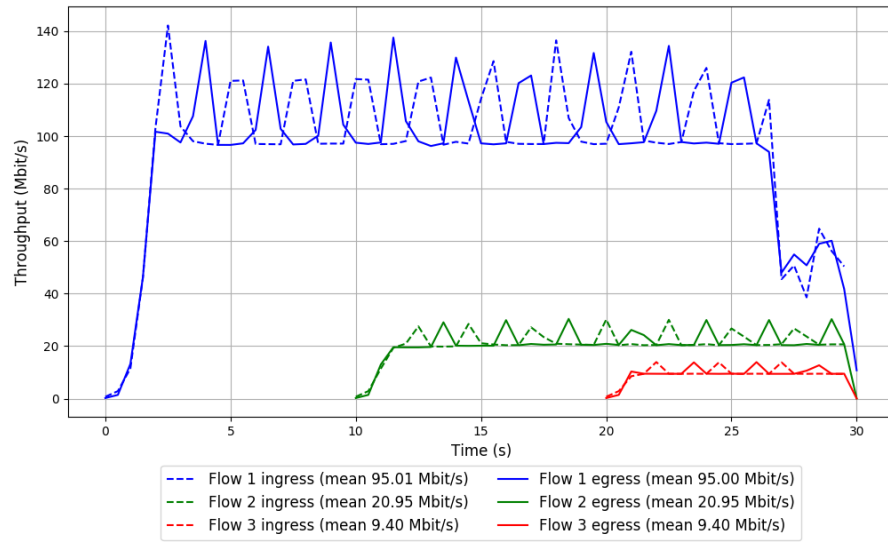
-- Flow 3:

Average throughput: 9.40 Mbit/s

95th percentile per-packet one-way delay: 115.215 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-04-11 07:27:42

End at: 2018-04-11 07:28:12

Below is generated by plot.py at 2018-04-11 11:46:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.37 Mbit/s

95th percentile per-packet one-way delay: 115.590 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 37.34 Mbit/s

95th percentile per-packet one-way delay: 114.360 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.69 Mbit/s

95th percentile per-packet one-way delay: 116.477 ms

Loss rate: 0.00%

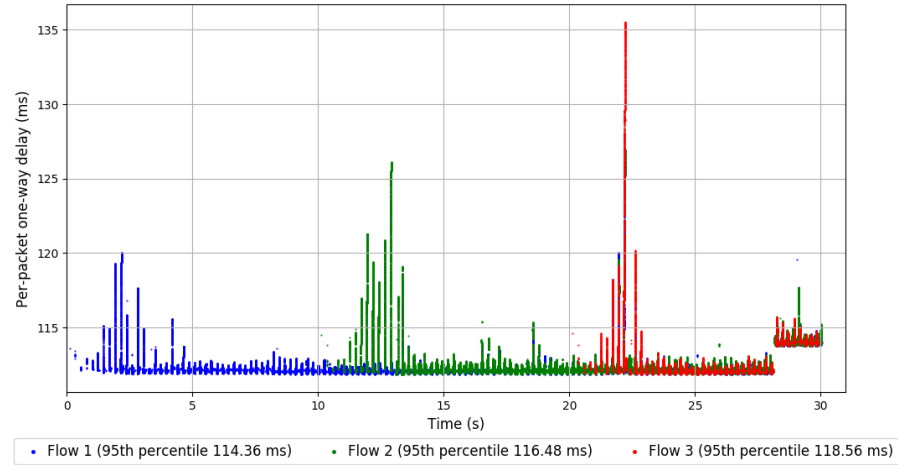
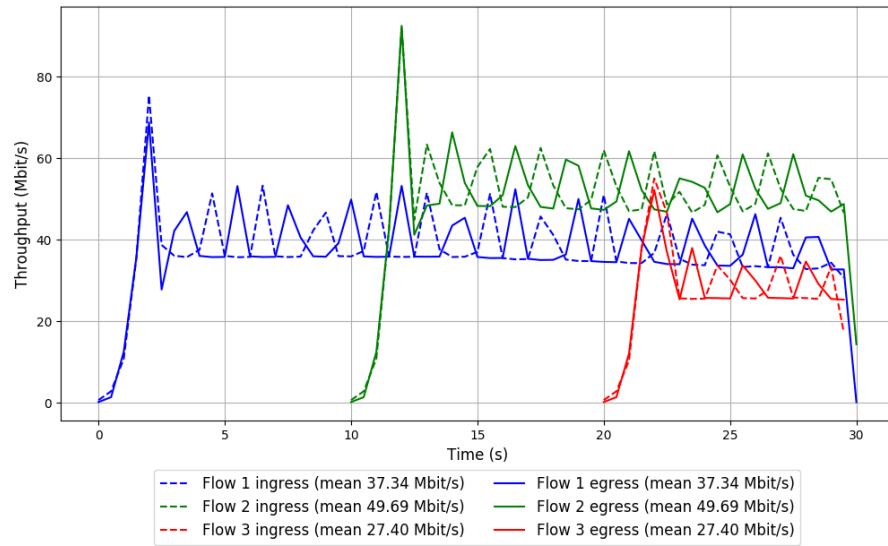
-- Flow 3:

Average throughput: 27.40 Mbit/s

95th percentile per-packet one-way delay: 118.555 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-04-11 07:46:42

End at: 2018-04-11 07:47:12

Below is generated by plot.py at 2018-04-11 11:46:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.90 Mbit/s

95th percentile per-packet one-way delay: 120.876 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.85 Mbit/s

95th percentile per-packet one-way delay: 121.022 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.15 Mbit/s

95th percentile per-packet one-way delay: 118.031 ms

Loss rate: 0.00%

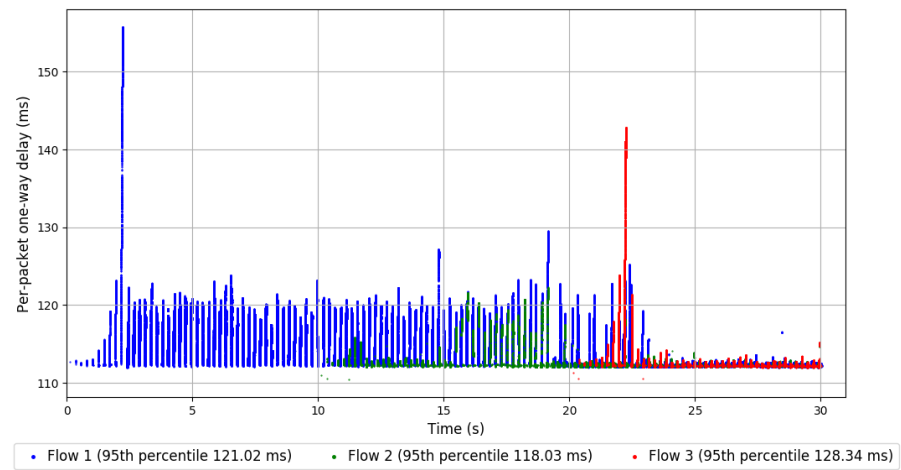
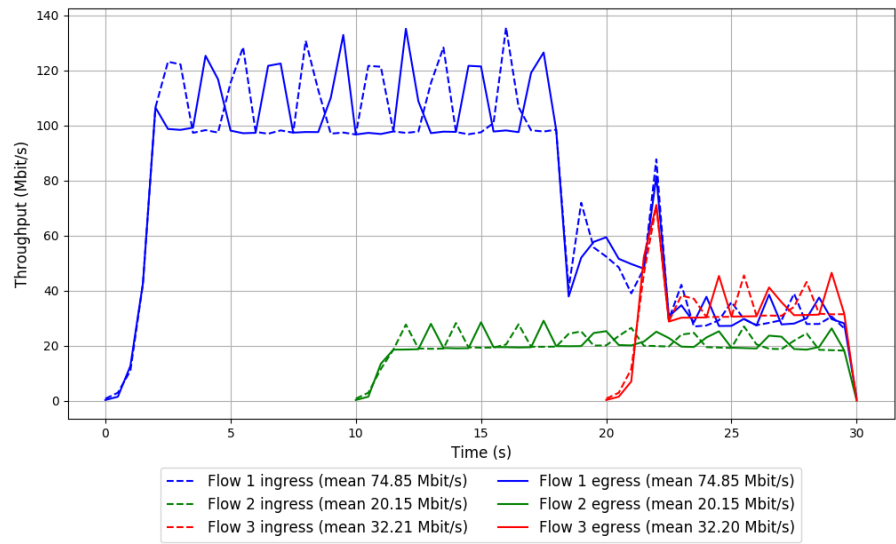
-- Flow 3:

Average throughput: 32.20 Mbit/s

95th percentile per-packet one-way delay: 128.345 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-04-11 08:05:48

End at: 2018-04-11 08:06:18

Below is generated by plot.py at 2018-04-11 11:46:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.72 Mbit/s

95th percentile per-packet one-way delay: 115.774 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.09 Mbit/s

95th percentile per-packet one-way delay: 114.734 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.00 Mbit/s

95th percentile per-packet one-way delay: 117.580 ms

Loss rate: 0.00%

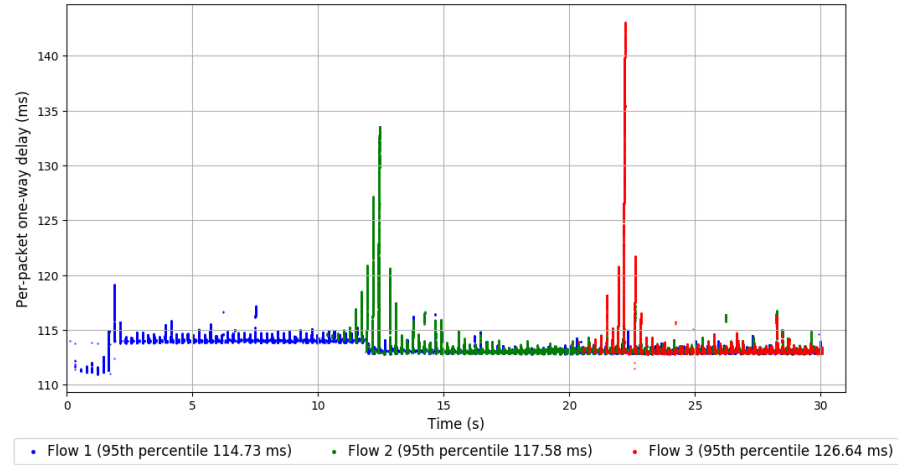
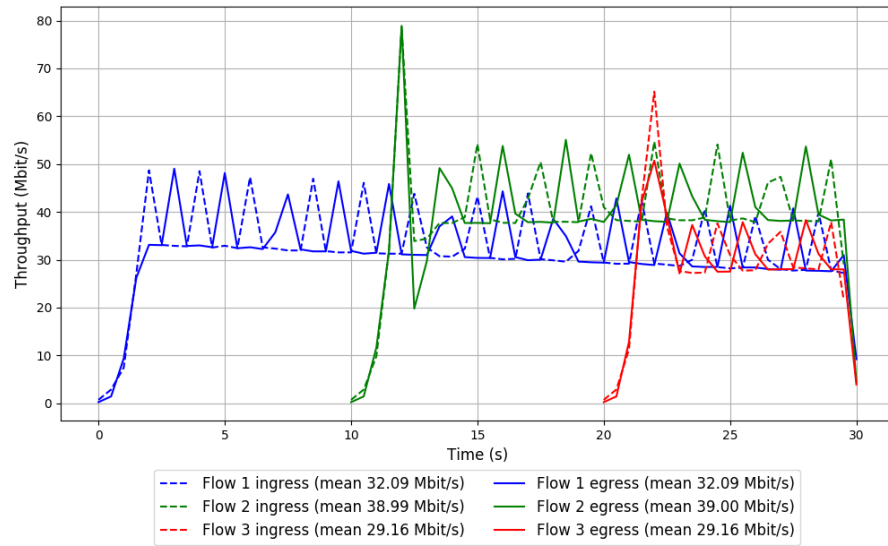
-- Flow 3:

Average throughput: 29.16 Mbit/s

95th percentile per-packet one-way delay: 126.643 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-04-11 08:25:13

End at: 2018-04-11 08:25:43

Below is generated by plot.py at 2018-04-11 11:46:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.05 Mbit/s

95th percentile per-packet one-way delay: 113.395 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 35.43 Mbit/s

95th percentile per-packet one-way delay: 112.128 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.71 Mbit/s

95th percentile per-packet one-way delay: 112.944 ms

Loss rate: 0.00%

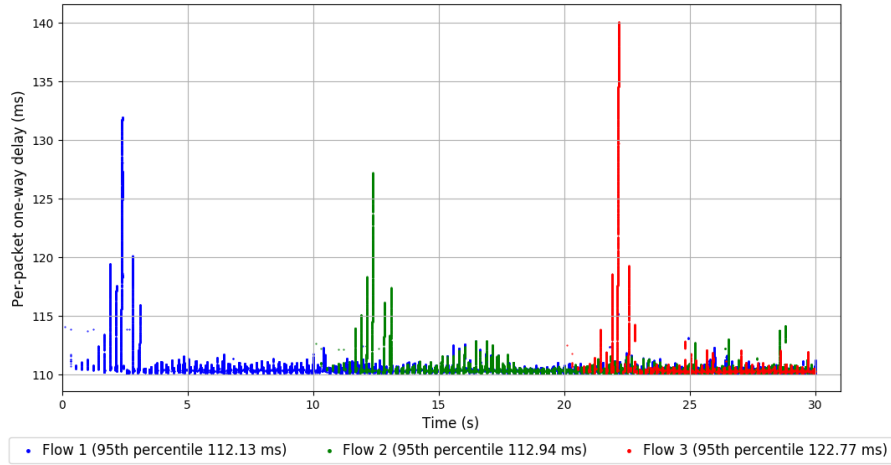
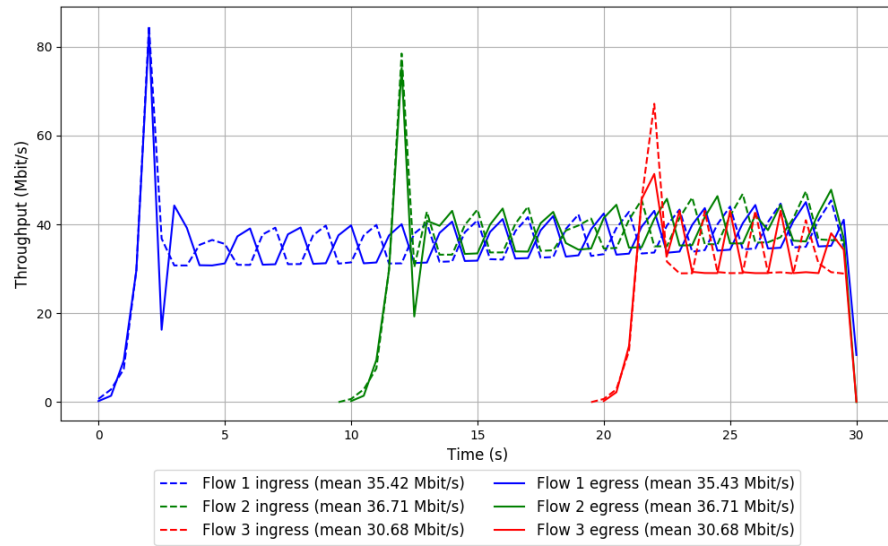
-- Flow 3:

Average throughput: 30.68 Mbit/s

95th percentile per-packet one-way delay: 122.765 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-04-11 08:44:12

End at: 2018-04-11 08:44:42

Below is generated by plot.py at 2018-04-11 11:46:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.68 Mbit/s

95th percentile per-packet one-way delay: 120.317 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 83.45 Mbit/s

95th percentile per-packet one-way delay: 120.678 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.61 Mbit/s

95th percentile per-packet one-way delay: 114.250 ms

Loss rate: 0.00%

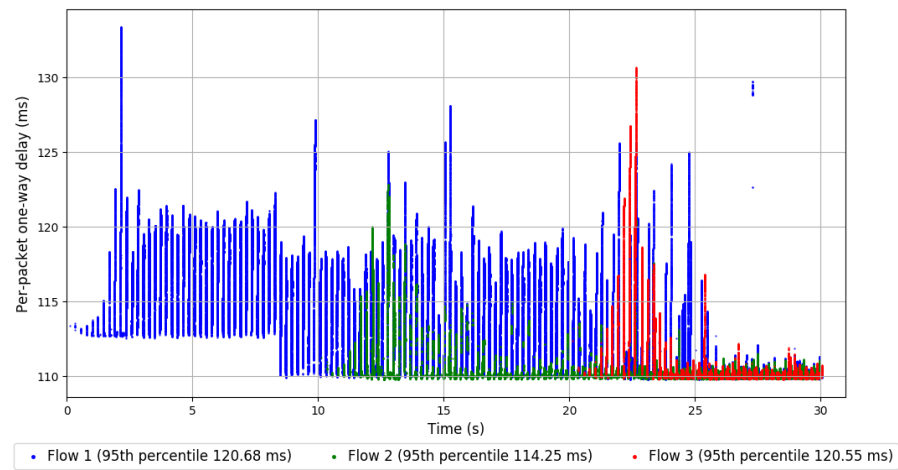
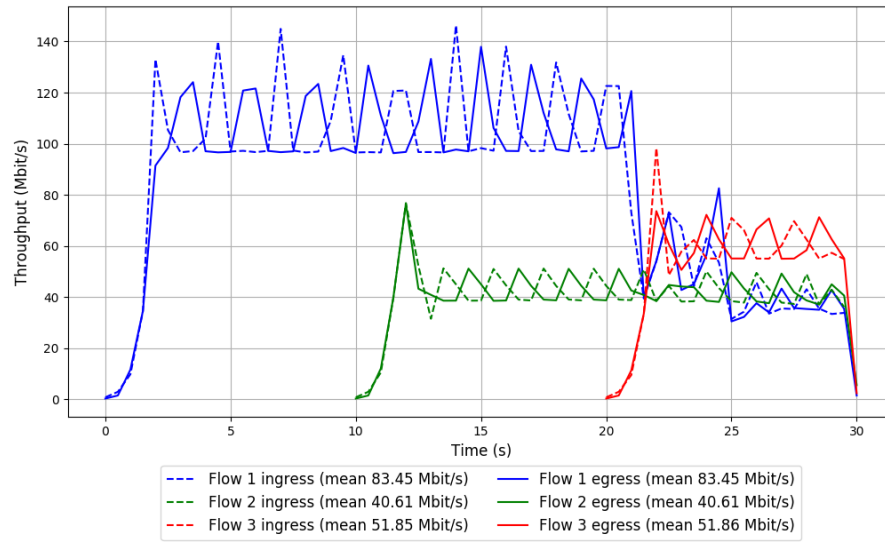
-- Flow 3:

Average throughput: 51.86 Mbit/s

95th percentile per-packet one-way delay: 120.545 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-04-11 09:02:46

End at: 2018-04-11 09:03:16

Below is generated by plot.py at 2018-04-11 11:46:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 46.29 Mbit/s

95th percentile per-packet one-way delay: 117.014 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 24.63 Mbit/s

95th percentile per-packet one-way delay: 115.258 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 19.34 Mbit/s

95th percentile per-packet one-way delay: 113.554 ms

Loss rate: 0.00%

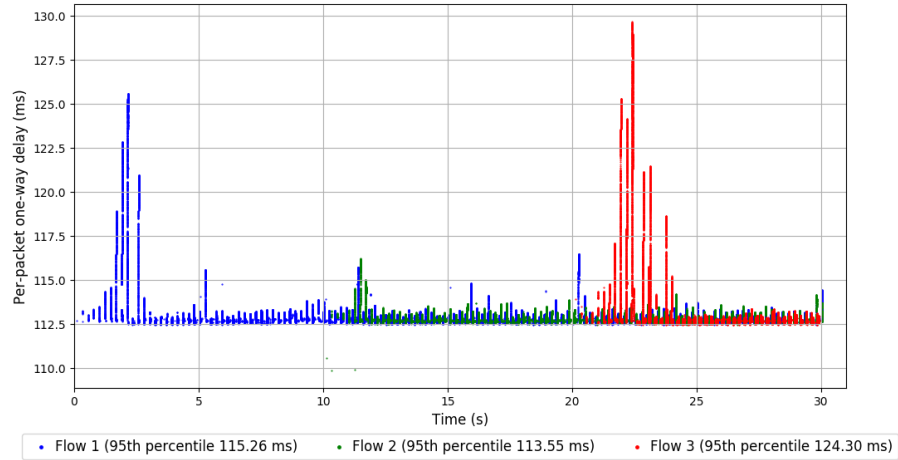
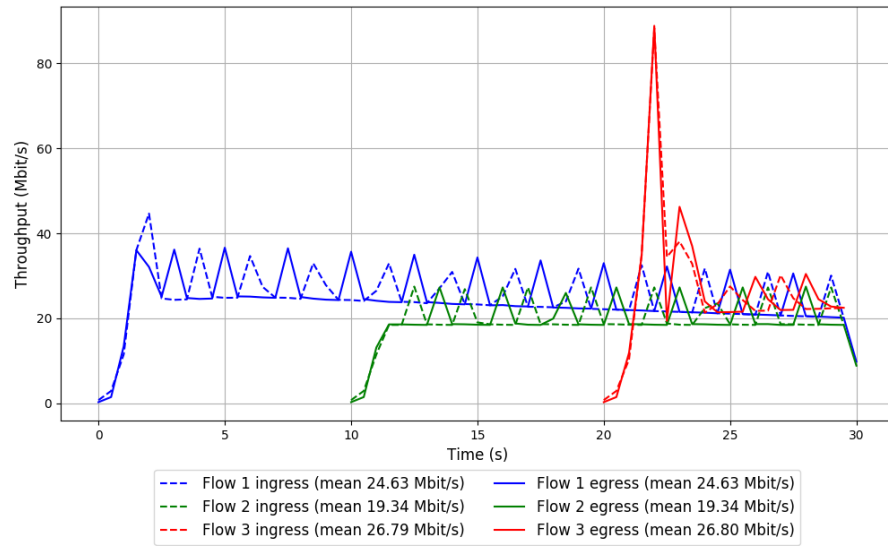
-- Flow 3:

Average throughput: 26.80 Mbit/s

95th percentile per-packet one-way delay: 124.298 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-04-11 09:21:31

End at: 2018-04-11 09:22:01

Below is generated by plot.py at 2018-04-11 11:46:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.12 Mbit/s

95th percentile per-packet one-way delay: 120.560 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 30.60 Mbit/s

95th percentile per-packet one-way delay: 116.204 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 99.21 Mbit/s

95th percentile per-packet one-way delay: 120.871 ms

Loss rate: 0.00%

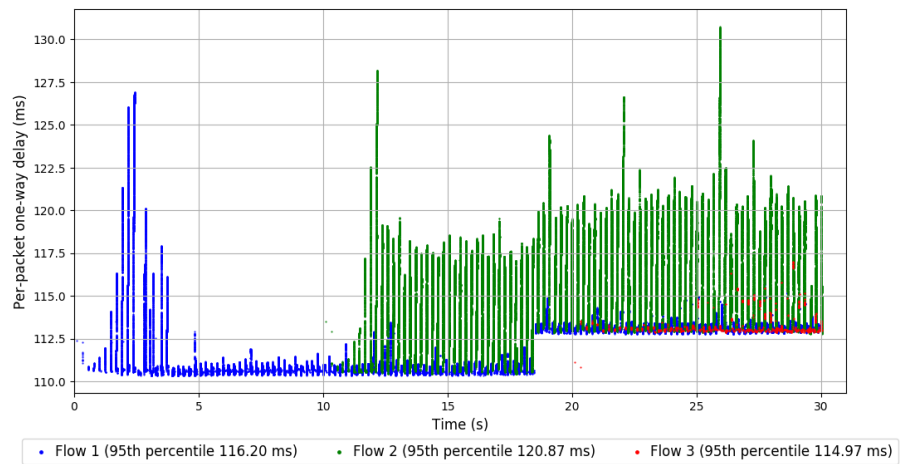
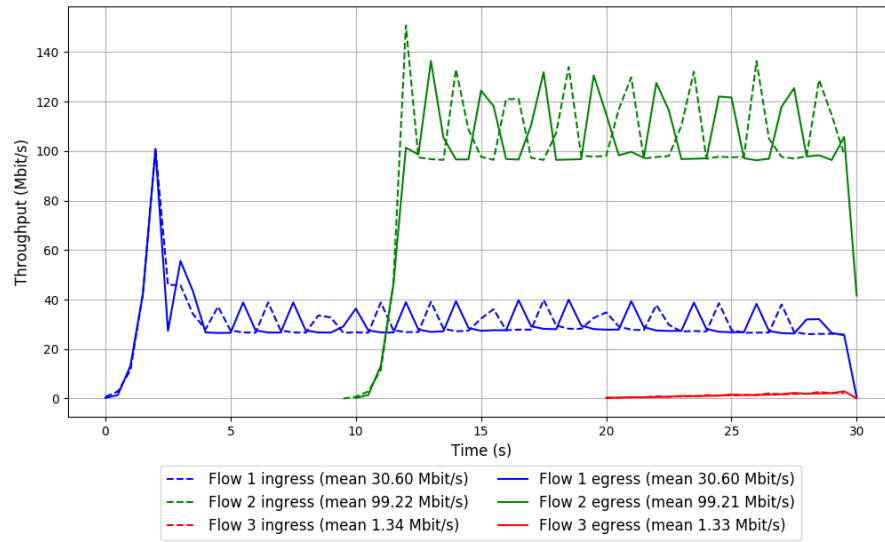
-- Flow 3:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 114.969 ms

Loss rate: 0.45%

Run 10: Report of TCP Vegas — Data Link

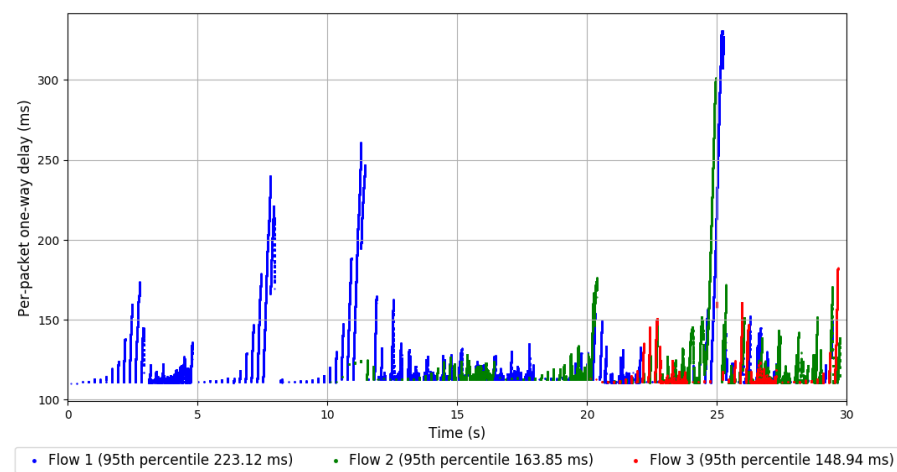
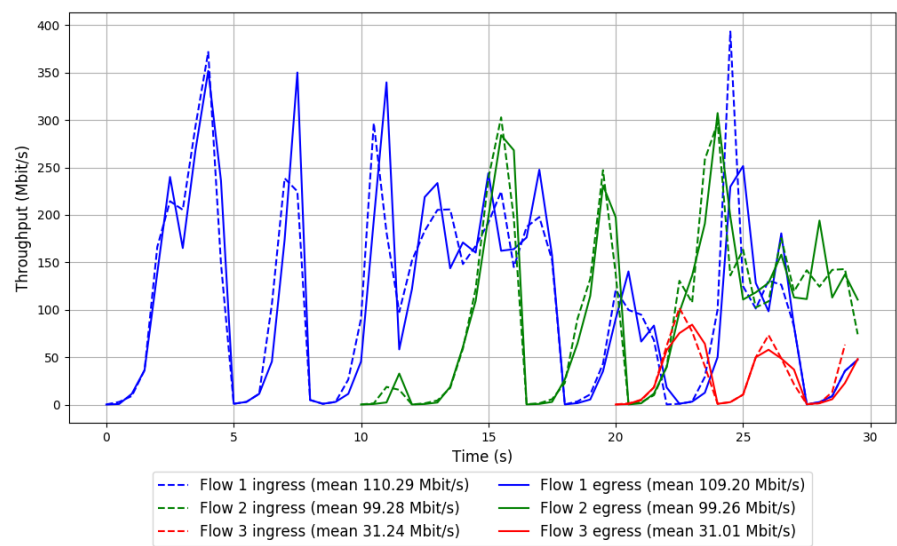


```
Run 1: Statistics of Verus

Start at: 2018-04-11 06:23:09
End at: 2018-04-11 06:23:39

# Below is generated by plot.py at 2018-04-11 11:47:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 184.78 Mbit/s
95th percentile per-packet one-way delay: 209.487 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 109.20 Mbit/s
95th percentile per-packet one-way delay: 223.120 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 99.26 Mbit/s
95th percentile per-packet one-way delay: 163.848 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.01 Mbit/s
95th percentile per-packet one-way delay: 148.943 ms
Loss rate: 0.00%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-04-11 06:41:54

End at: 2018-04-11 06:42:24

Below is generated by plot.py at 2018-04-11 11:47:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 165.11 Mbit/s

95th percentile per-packet one-way delay: 188.065 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 58.34 Mbit/s

95th percentile per-packet one-way delay: 161.054 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 115.90 Mbit/s

95th percentile per-packet one-way delay: 182.461 ms

Loss rate: 0.00%

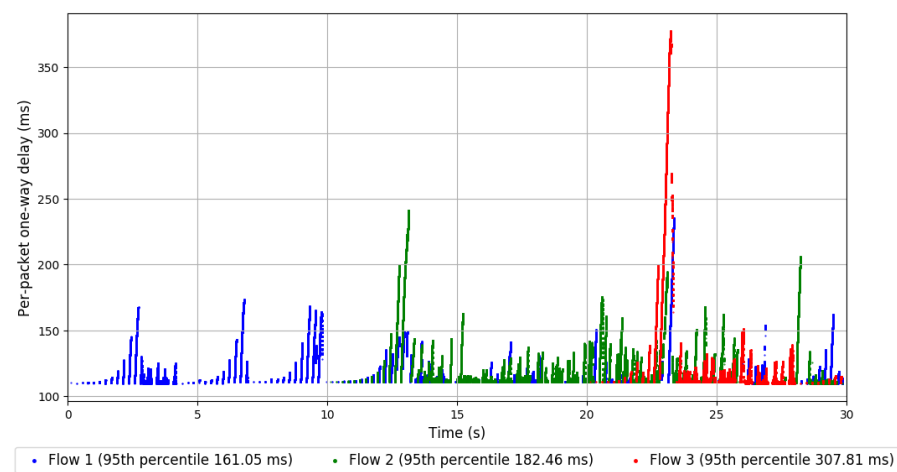
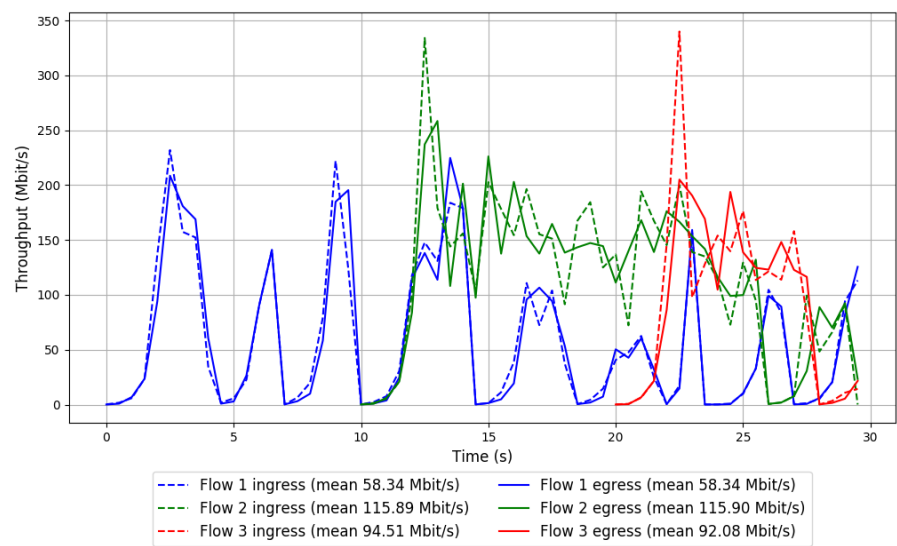
-- Flow 3:

Average throughput: 92.08 Mbit/s

95th percentile per-packet one-way delay: 307.809 ms

Loss rate: 2.54%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-04-11 07:01:07

End at: 2018-04-11 07:01:37

Below is generated by plot.py at 2018-04-11 11:47:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.96 Mbit/s

95th percentile per-packet one-way delay: 266.891 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 117.91 Mbit/s

95th percentile per-packet one-way delay: 199.857 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 92.05 Mbit/s

95th percentile per-packet one-way delay: 336.335 ms

Loss rate: 1.80%

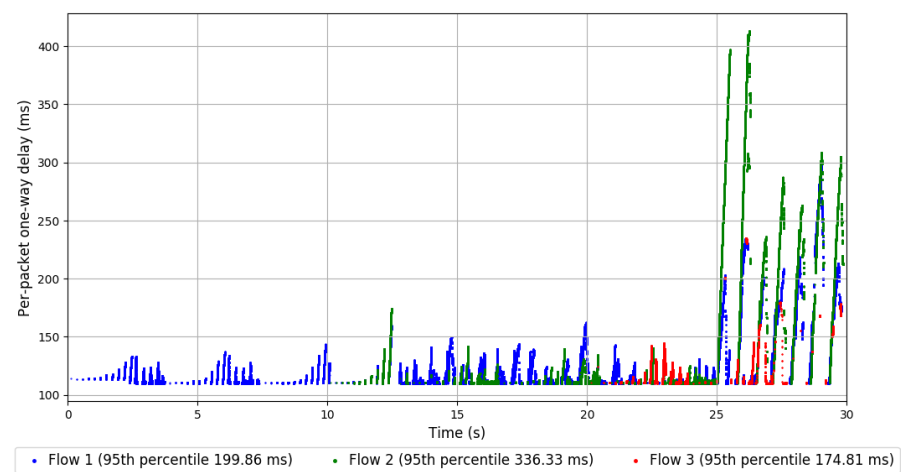
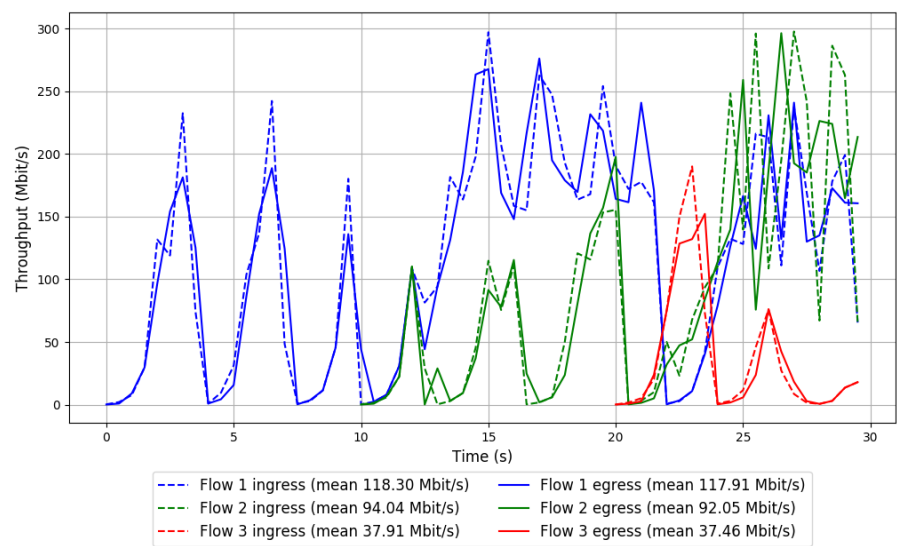
-- Flow 3:

Average throughput: 37.46 Mbit/s

95th percentile per-packet one-way delay: 174.812 ms

Loss rate: 0.48%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-04-11 07:20:22

End at: 2018-04-11 07:20:52

Below is generated by plot.py at 2018-04-11 11:48:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 213.45 Mbit/s

95th percentile per-packet one-way delay: 281.011 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 117.10 Mbit/s

95th percentile per-packet one-way delay: 251.026 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 122.11 Mbit/s

95th percentile per-packet one-way delay: 332.296 ms

Loss rate: 2.10%

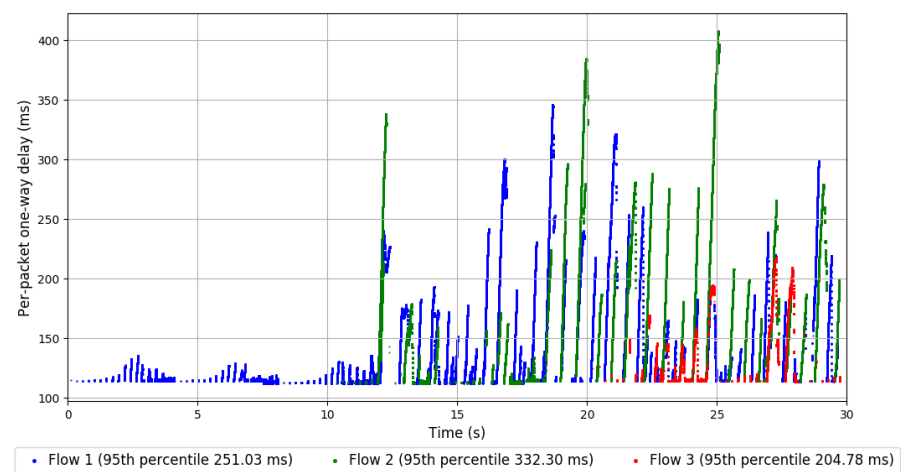
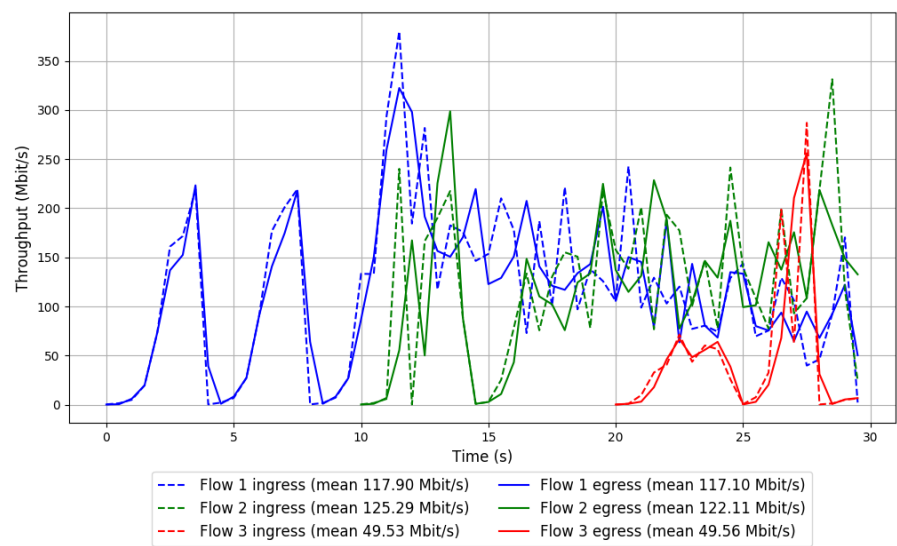
-- Flow 3:

Average throughput: 49.56 Mbit/s

95th percentile per-packet one-way delay: 204.781 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-04-11 07:39:26

End at: 2018-04-11 07:39:56

Below is generated by plot.py at 2018-04-11 11:48:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.07 Mbit/s

95th percentile per-packet one-way delay: 253.836 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 73.92 Mbit/s

95th percentile per-packet one-way delay: 213.608 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 150.04 Mbit/s

95th percentile per-packet one-way delay: 265.164 ms

Loss rate: 2.01%

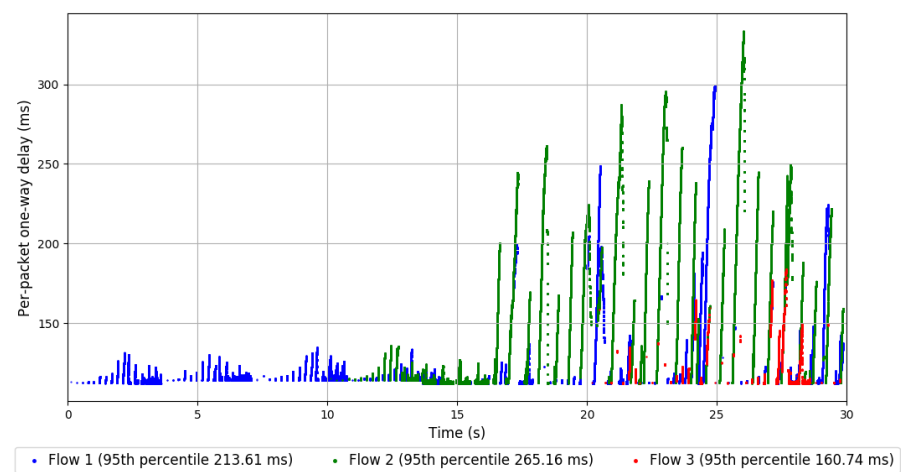
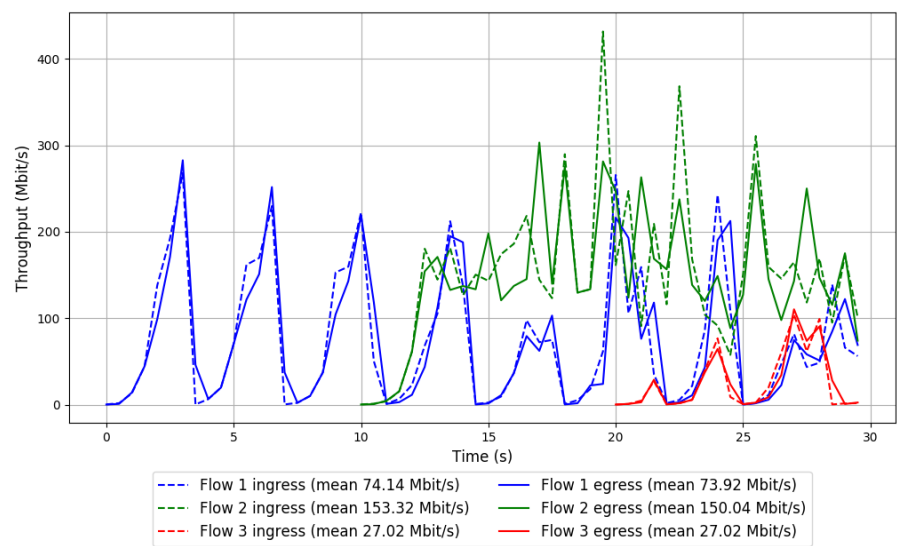
-- Flow 3:

Average throughput: 27.02 Mbit/s

95th percentile per-packet one-way delay: 160.737 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-04-11 07:58:27

End at: 2018-04-11 07:58:57

Below is generated by plot.py at 2018-04-11 11:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 206.00 Mbit/s

95th percentile per-packet one-way delay: 212.850 ms

Loss rate: 1.87%

-- Flow 1:

Average throughput: 152.10 Mbit/s

95th percentile per-packet one-way delay: 190.283 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 41.88 Mbit/s

95th percentile per-packet one-way delay: 165.080 ms

Loss rate: 0.00%

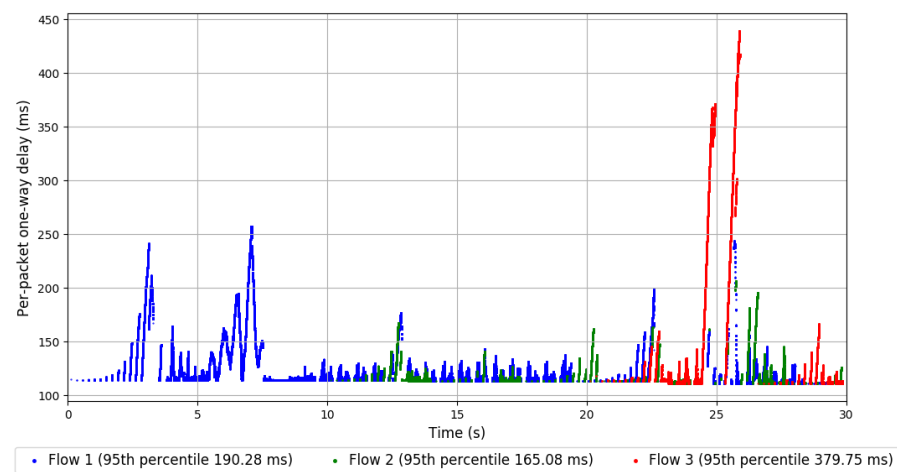
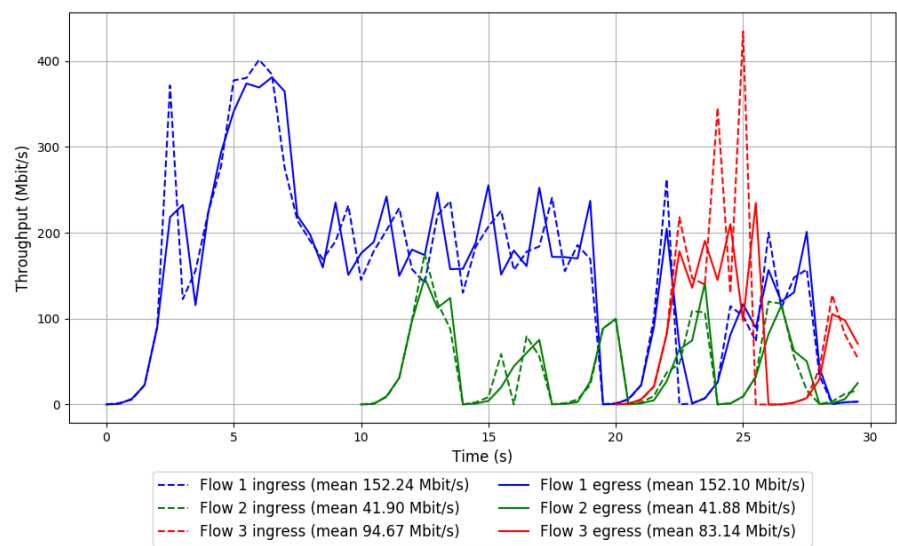
-- Flow 3:

Average throughput: 83.14 Mbit/s

95th percentile per-packet one-way delay: 379.750 ms

Loss rate: 12.21%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-04-11 08:17:48

End at: 2018-04-11 08:18:18

Below is generated by plot.py at 2018-04-11 11:48:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.64 Mbit/s

95th percentile per-packet one-way delay: 181.131 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 85.54 Mbit/s

95th percentile per-packet one-way delay: 166.438 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 132.33 Mbit/s

95th percentile per-packet one-way delay: 185.017 ms

Loss rate: 0.00%

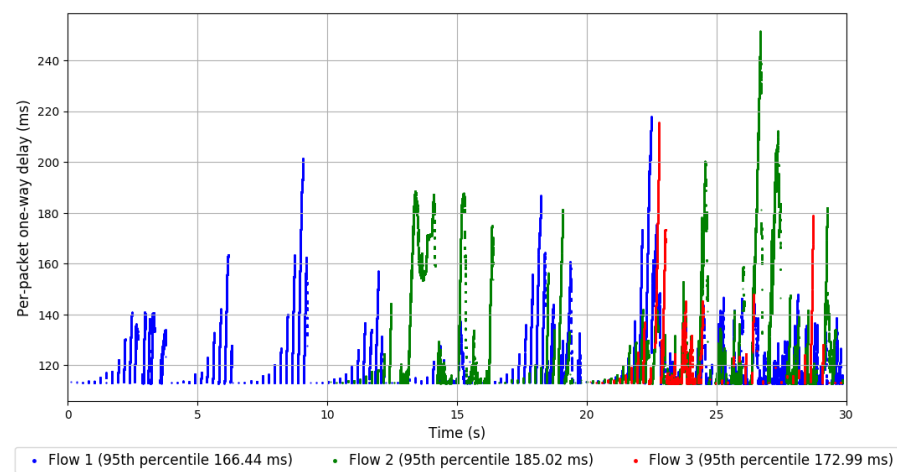
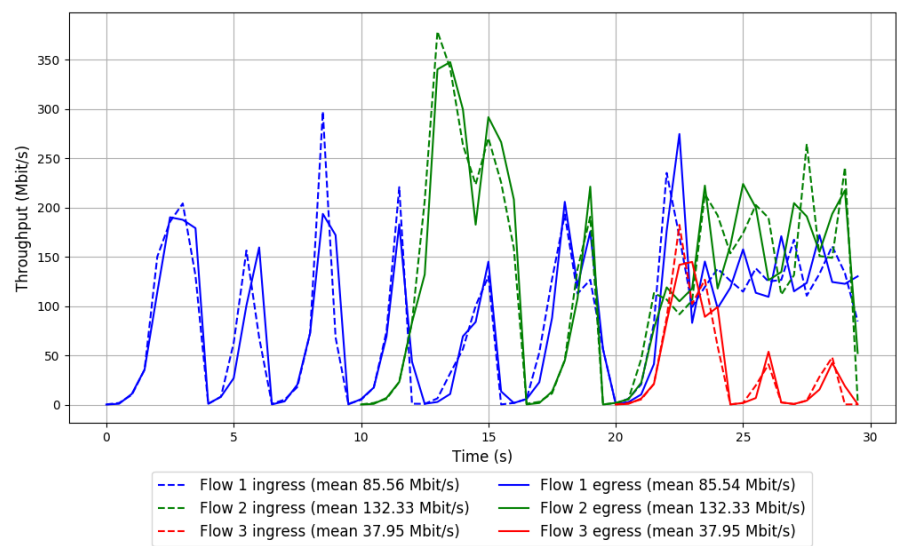
-- Flow 3:

Average throughput: 37.95 Mbit/s

95th percentile per-packet one-way delay: 172.988 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-04-11 08:37:00

End at: 2018-04-11 08:37:30

Below is generated by plot.py at 2018-04-11 11:50:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 209.54 Mbit/s

95th percentile per-packet one-way delay: 233.723 ms

Loss rate: 1.86%

-- Flow 1:

Average throughput: 126.36 Mbit/s

95th percentile per-packet one-way delay: 229.968 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 85.28 Mbit/s

95th percentile per-packet one-way delay: 174.392 ms

Loss rate: 0.17%

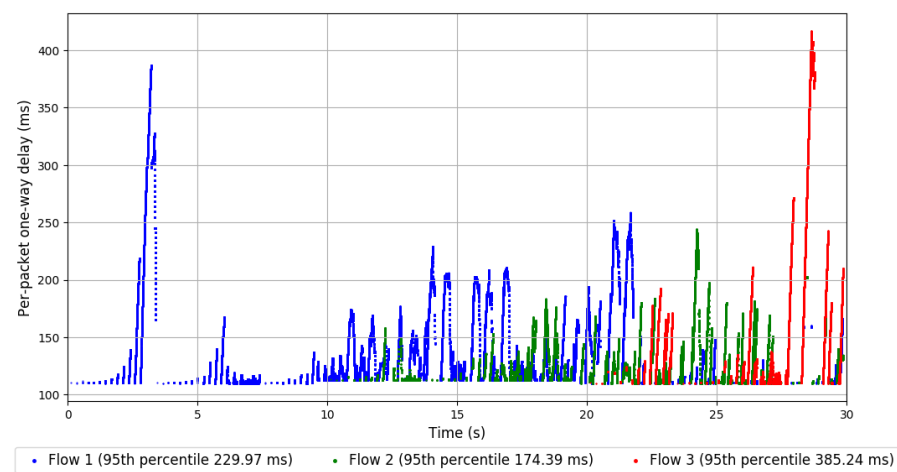
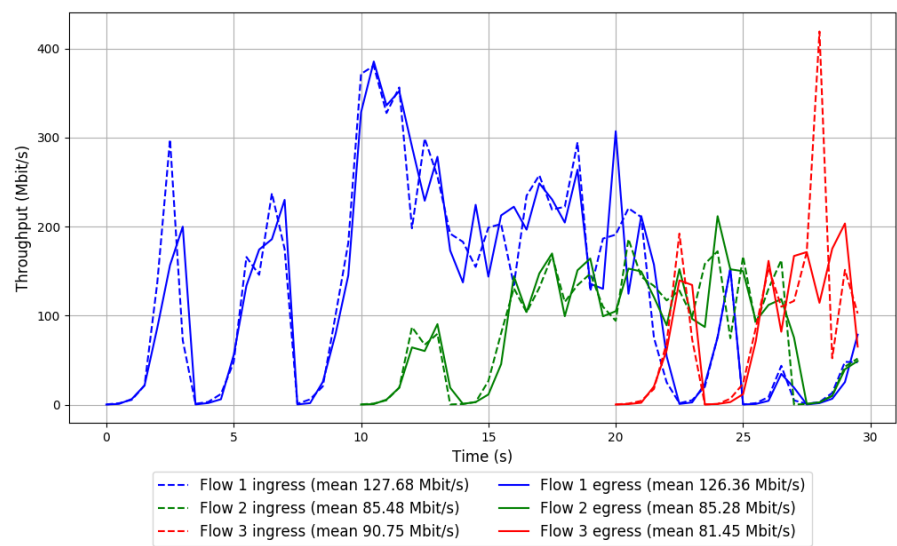
-- Flow 3:

Average throughput: 81.45 Mbit/s

95th percentile per-packet one-way delay: 385.242 ms

Loss rate: 9.53%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-04-11 08:55:45

End at: 2018-04-11 08:56:15

Below is generated by plot.py at 2018-04-11 11:51:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.63 Mbit/s

95th percentile per-packet one-way delay: 203.991 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 158.54 Mbit/s

95th percentile per-packet one-way delay: 194.284 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 137.56 Mbit/s

95th percentile per-packet one-way delay: 177.853 ms

Loss rate: 0.20%

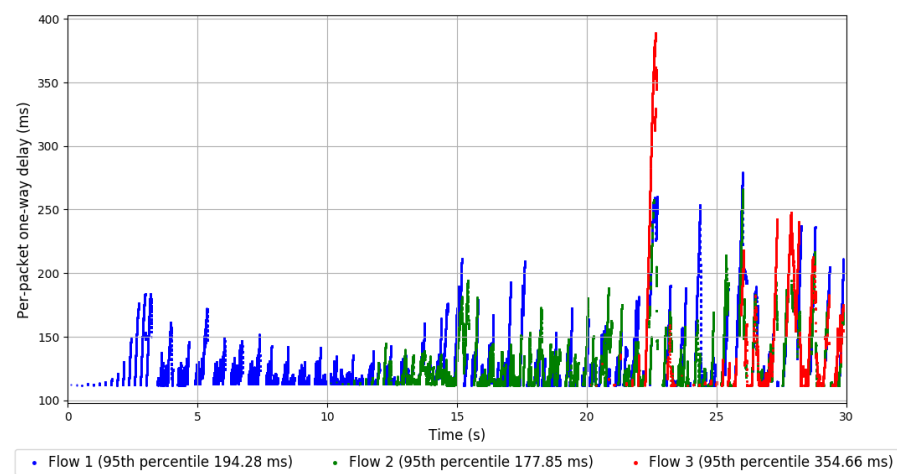
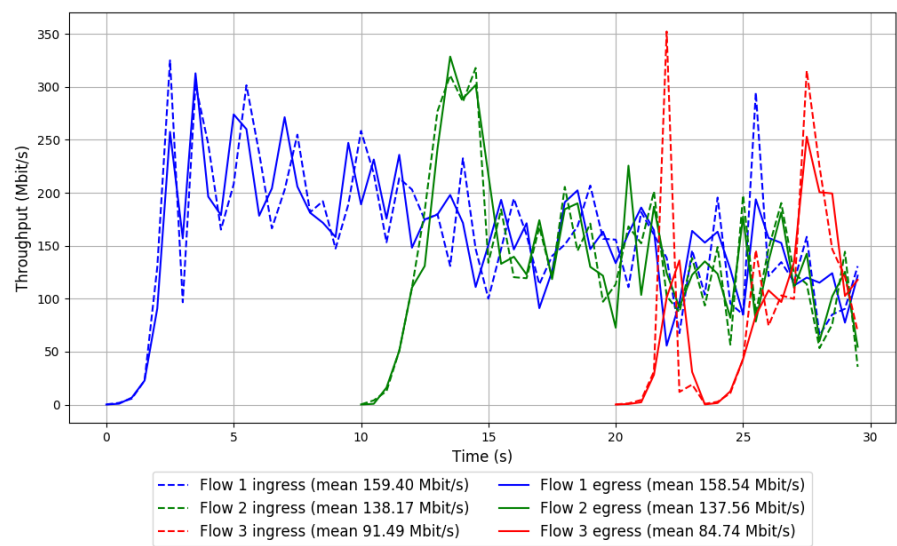
-- Flow 3:

Average throughput: 84.74 Mbit/s

95th percentile per-packet one-way delay: 354.664 ms

Loss rate: 7.01%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-04-11 09:14:16

End at: 2018-04-11 09:14:46

Below is generated by plot.py at 2018-04-11 11:51:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.15 Mbit/s

95th percentile per-packet one-way delay: 173.134 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 77.21 Mbit/s

95th percentile per-packet one-way delay: 198.728 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 78.10 Mbit/s

95th percentile per-packet one-way delay: 147.111 ms

Loss rate: 0.00%

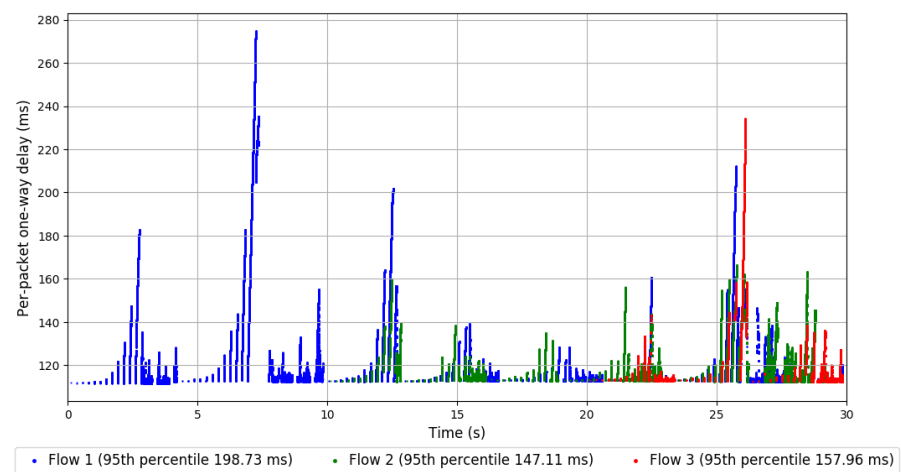
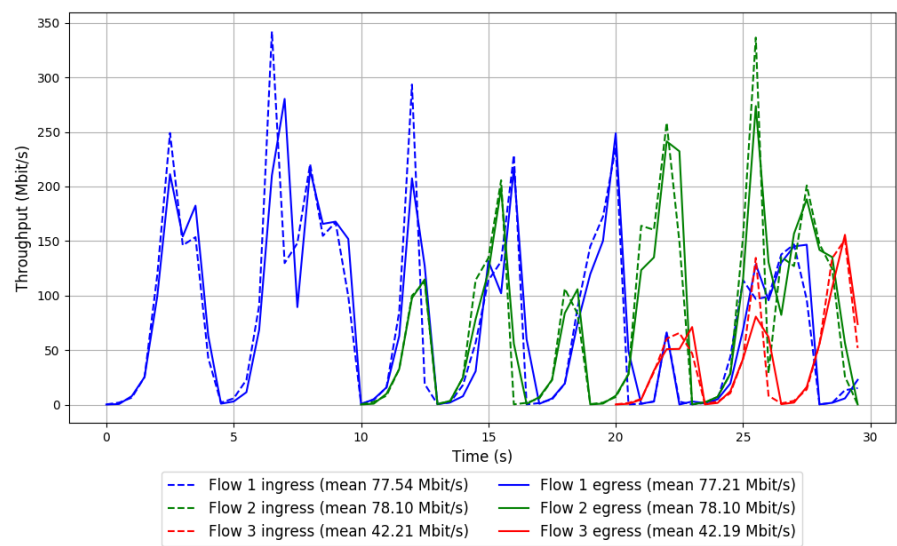
-- Flow 3:

Average throughput: 42.19 Mbit/s

95th percentile per-packet one-way delay: 157.955 ms

Loss rate: 0.06%

Run 10: Report of Verus — Data Link

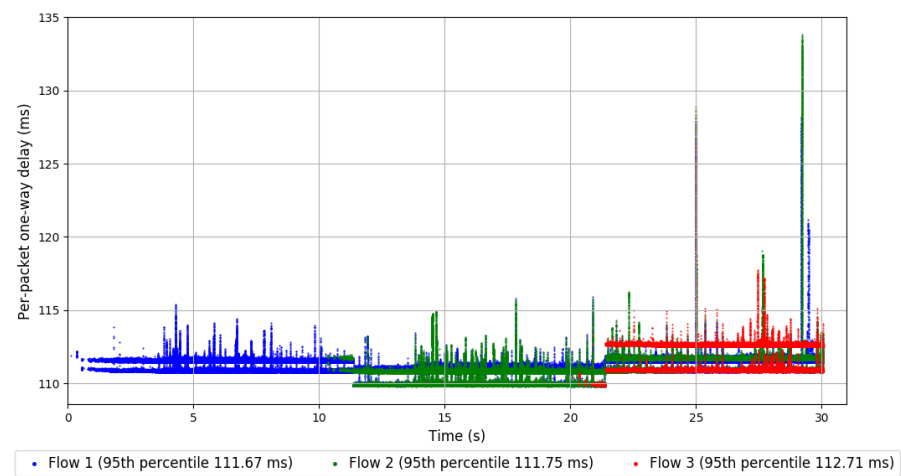
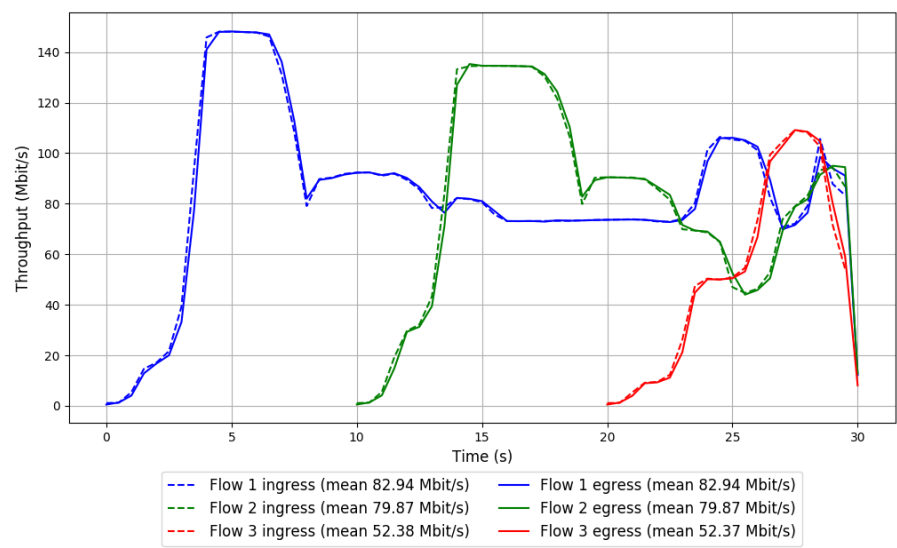


```
Run 1: Statistics of Copa

Start at: 2018-04-11 06:19:38
End at: 2018-04-11 06:20:08

# Below is generated by plot.py at 2018-04-11 11:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 153.50 Mbit/s
95th percentile per-packet one-way delay: 112.584 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.94 Mbit/s
95th percentile per-packet one-way delay: 111.667 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 79.87 Mbit/s
95th percentile per-packet one-way delay: 111.745 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 52.37 Mbit/s
95th percentile per-packet one-way delay: 112.713 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-04-11 06:38:23

End at: 2018-04-11 06:38:53

Below is generated by plot.py at 2018-04-11 11:51:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.20 Mbit/s

95th percentile per-packet one-way delay: 113.733 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 80.09 Mbit/s

95th percentile per-packet one-way delay: 113.592 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.80 Mbit/s

95th percentile per-packet one-way delay: 113.708 ms

Loss rate: 0.00%

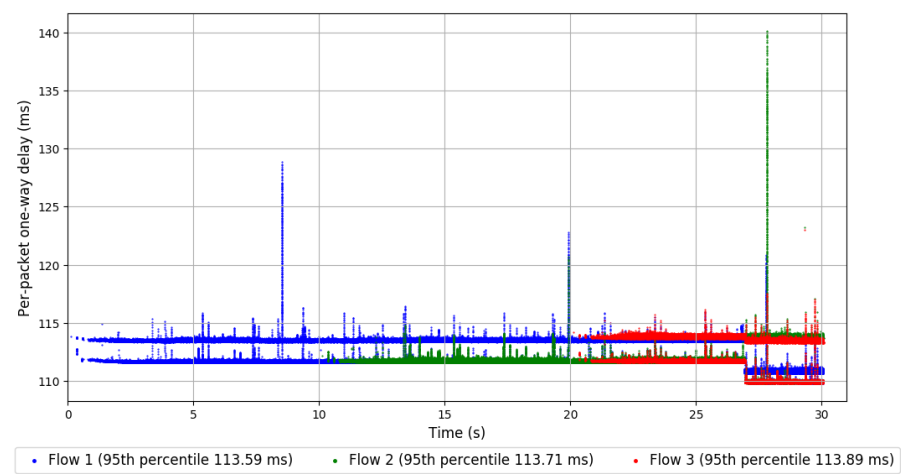
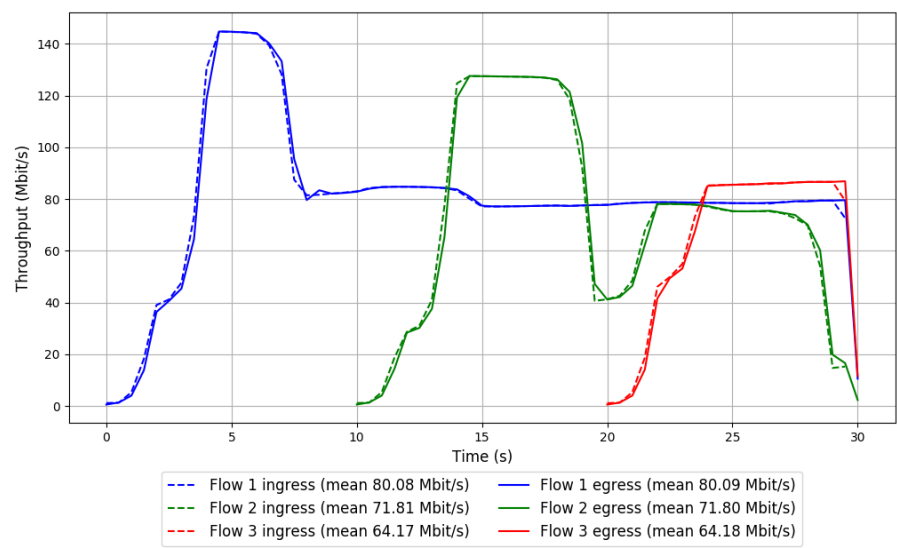
-- Flow 3:

Average throughput: 64.18 Mbit/s

95th percentile per-packet one-way delay: 113.895 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-04-11 06:57:36

End at: 2018-04-11 06:58:06

Below is generated by plot.py at 2018-04-11 11:52:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.19 Mbit/s

95th percentile per-packet one-way delay: 113.561 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.61 Mbit/s

95th percentile per-packet one-way delay: 113.512 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.22 Mbit/s

95th percentile per-packet one-way delay: 113.645 ms

Loss rate: 0.00%

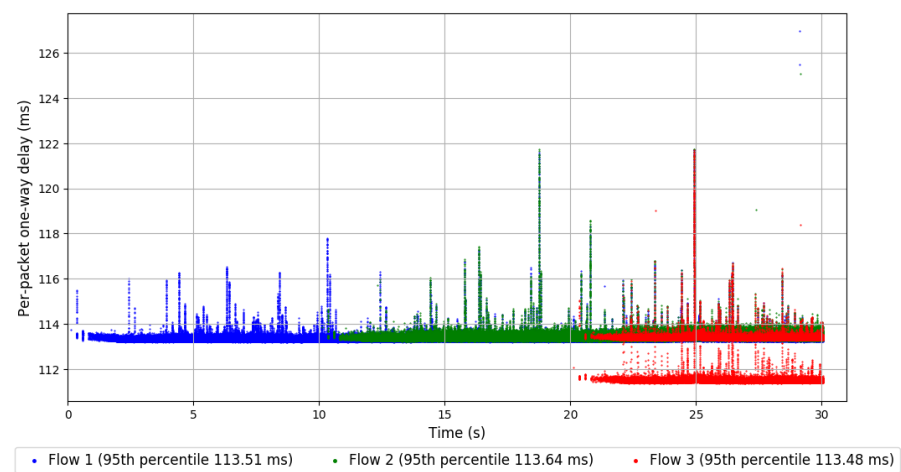
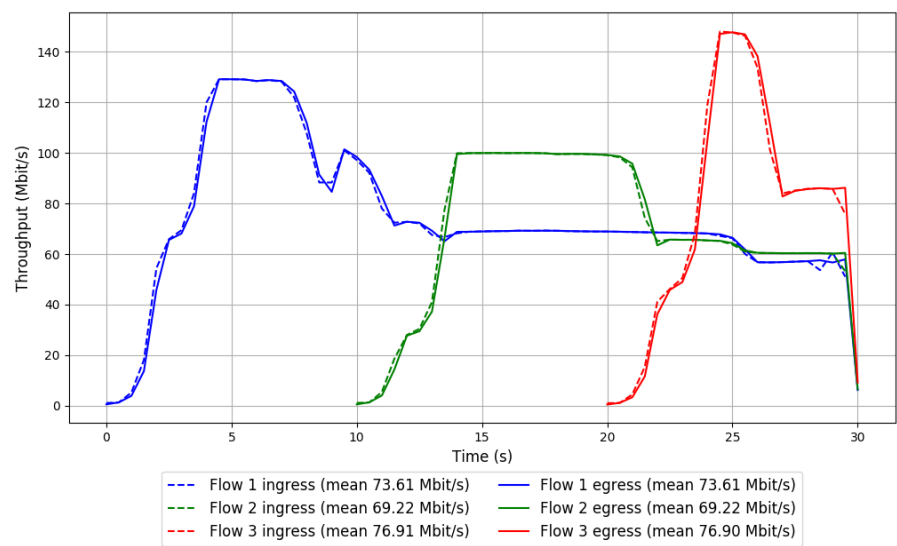
-- Flow 3:

Average throughput: 76.90 Mbit/s

95th percentile per-packet one-way delay: 113.476 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-04-11 07:16:42

End at: 2018-04-11 07:17:12

Below is generated by plot.py at 2018-04-11 11:58:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 332.79 Mbit/s

95th percentile per-packet one-way delay: 218.106 ms

Loss rate: 27.83%

-- Flow 1:

Average throughput: 313.88 Mbit/s

95th percentile per-packet one-way delay: 218.619 ms

Loss rate: 29.02%

-- Flow 2:

Average throughput: 20.95 Mbit/s

95th percentile per-packet one-way delay: 124.788 ms

Loss rate: 0.01%

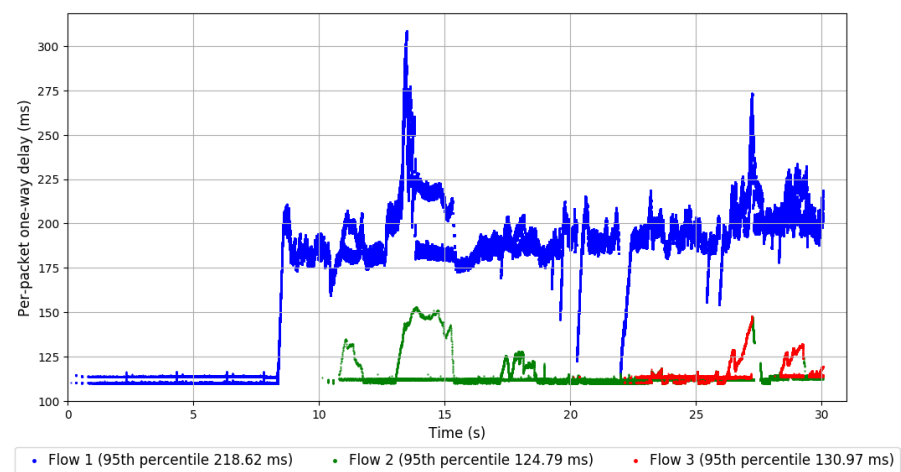
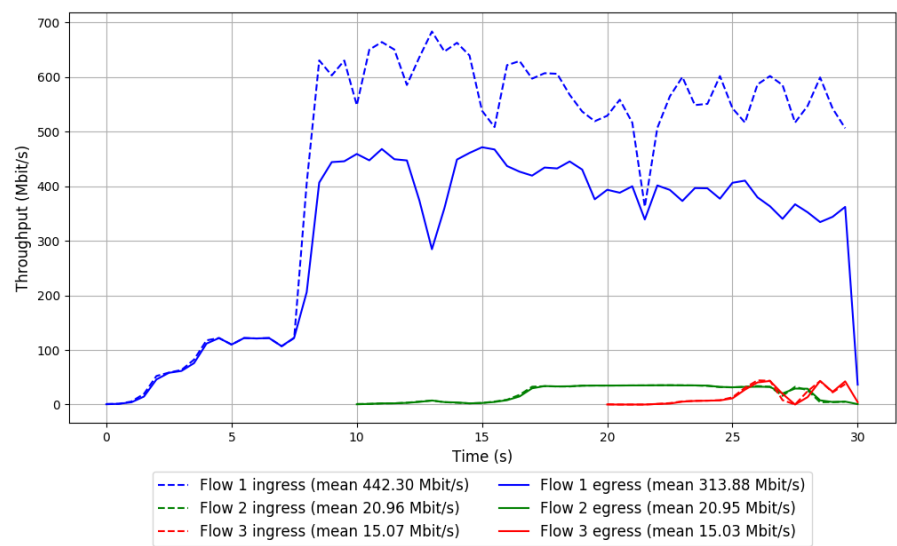
-- Flow 3:

Average throughput: 15.03 Mbit/s

95th percentile per-packet one-way delay: 130.974 ms

Loss rate: 0.19%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-04-11 07:35:56

End at: 2018-04-11 07:36:26

Below is generated by plot.py at 2018-04-11 11:58:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.40 Mbit/s

95th percentile per-packet one-way delay: 113.936 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 66.37 Mbit/s

95th percentile per-packet one-way delay: 113.925 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.68 Mbit/s

95th percentile per-packet one-way delay: 113.957 ms

Loss rate: 0.00%

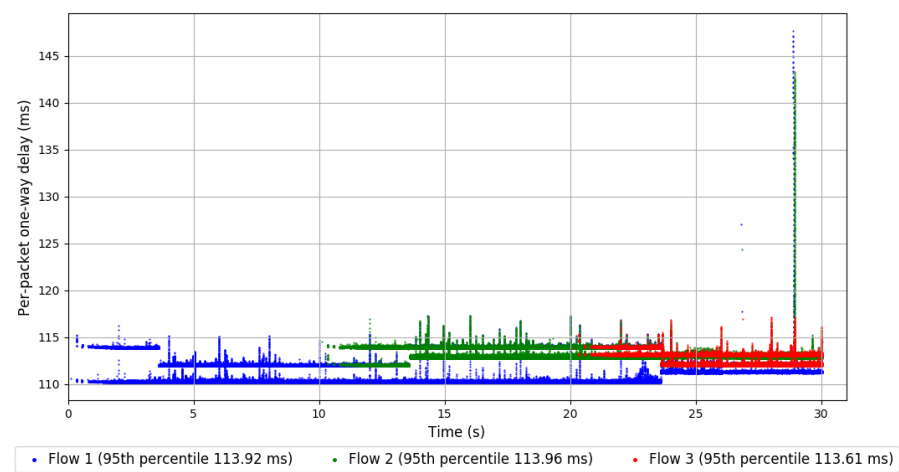
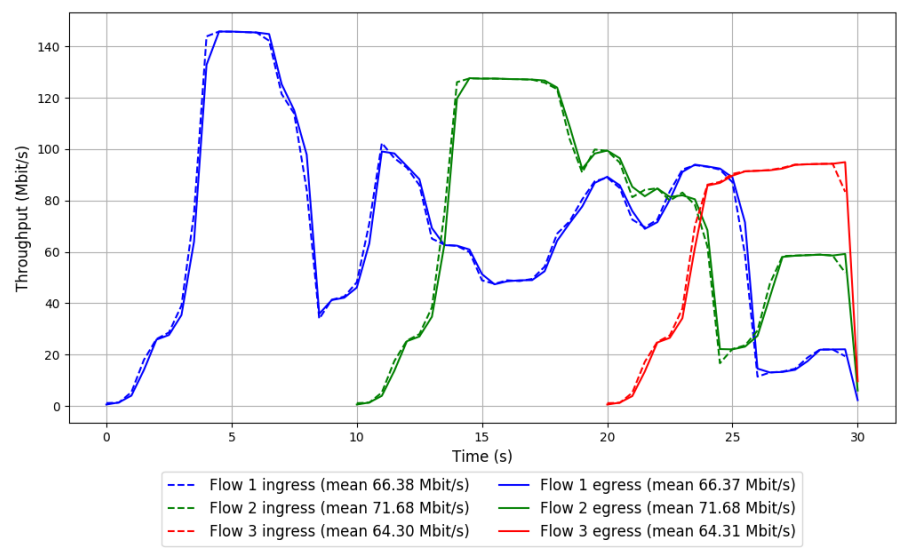
-- Flow 3:

Average throughput: 64.31 Mbit/s

95th percentile per-packet one-way delay: 113.605 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-04-11 07:54:54

End at: 2018-04-11 07:55:24

Below is generated by plot.py at 2018-04-11 11:58:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 162.12 Mbit/s

95th percentile per-packet one-way delay: 114.040 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 96.12 Mbit/s

95th percentile per-packet one-way delay: 114.067 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 69.10 Mbit/s

95th percentile per-packet one-way delay: 113.953 ms

Loss rate: 0.01%

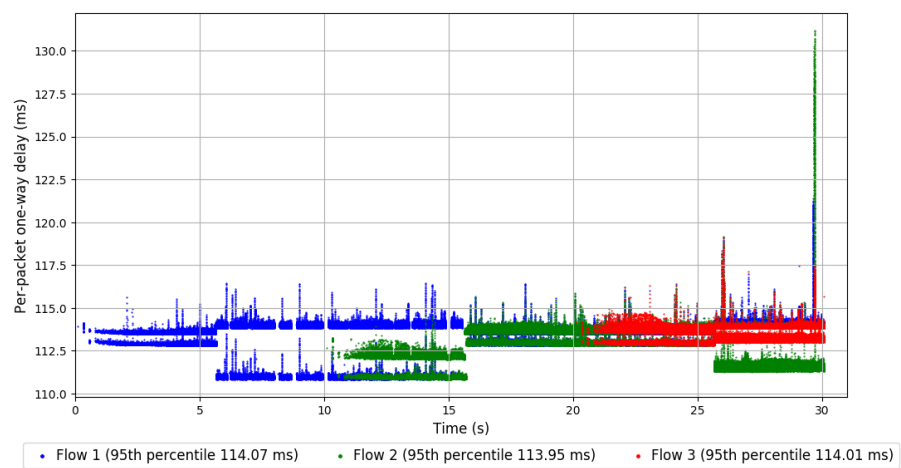
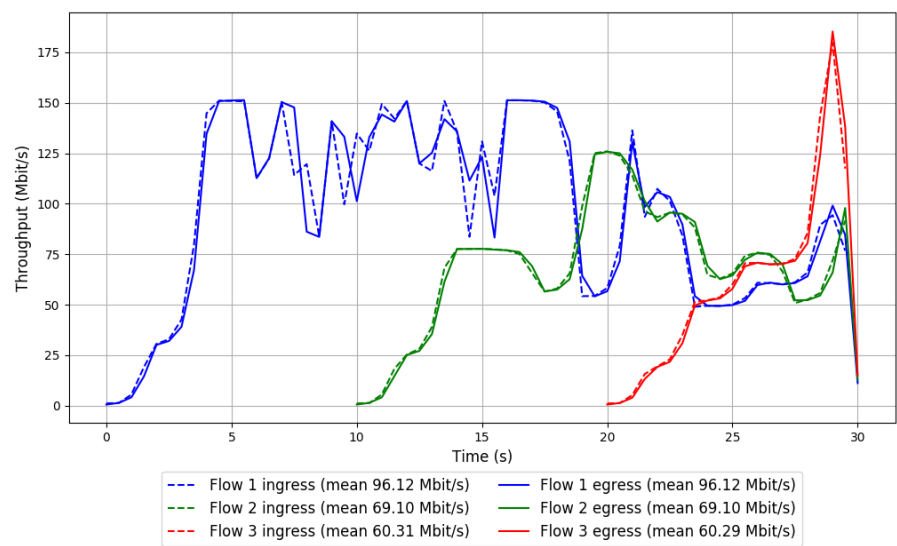
-- Flow 3:

Average throughput: 60.29 Mbit/s

95th percentile per-packet one-way delay: 114.013 ms

Loss rate: 0.03%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-04-11 08:14:14

End at: 2018-04-11 08:14:44

Below is generated by plot.py at 2018-04-11 11:58:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.74 Mbit/s

95th percentile per-packet one-way delay: 114.057 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 77.86 Mbit/s

95th percentile per-packet one-way delay: 113.966 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.59 Mbit/s

95th percentile per-packet one-way delay: 114.000 ms

Loss rate: 0.00%

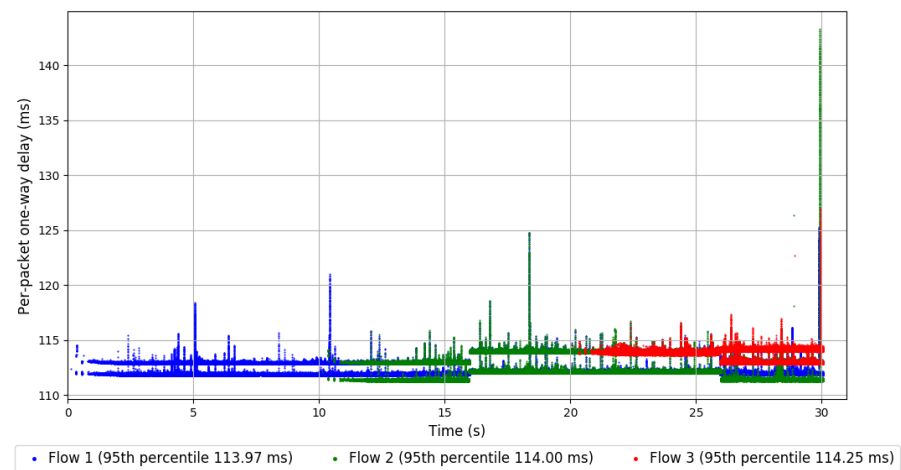
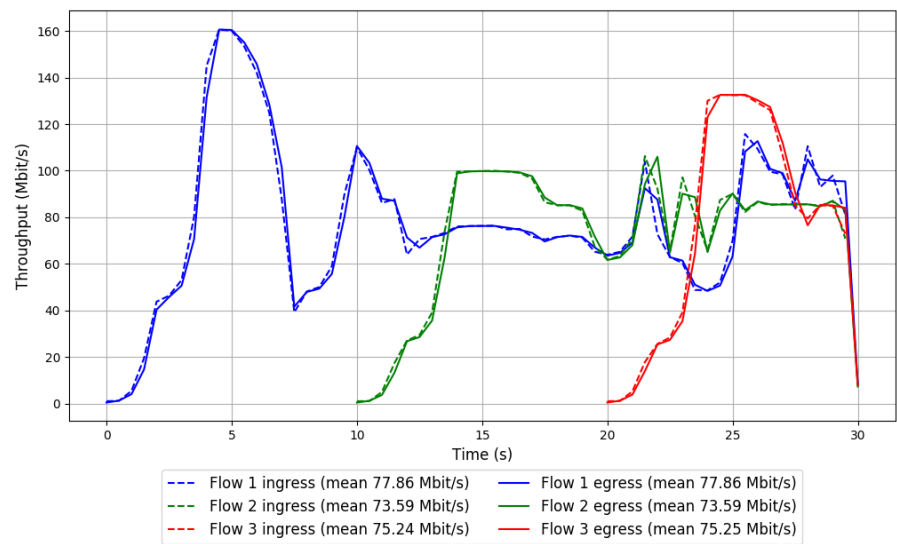
-- Flow 3:

Average throughput: 75.25 Mbit/s

95th percentile per-packet one-way delay: 114.245 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-04-11 08:33:32

End at: 2018-04-11 08:34:02

Below is generated by plot.py at 2018-04-11 11:58:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.37 Mbit/s

95th percentile per-packet one-way delay: 113.287 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.84 Mbit/s

95th percentile per-packet one-way delay: 113.329 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.59 Mbit/s

95th percentile per-packet one-way delay: 112.788 ms

Loss rate: 0.00%

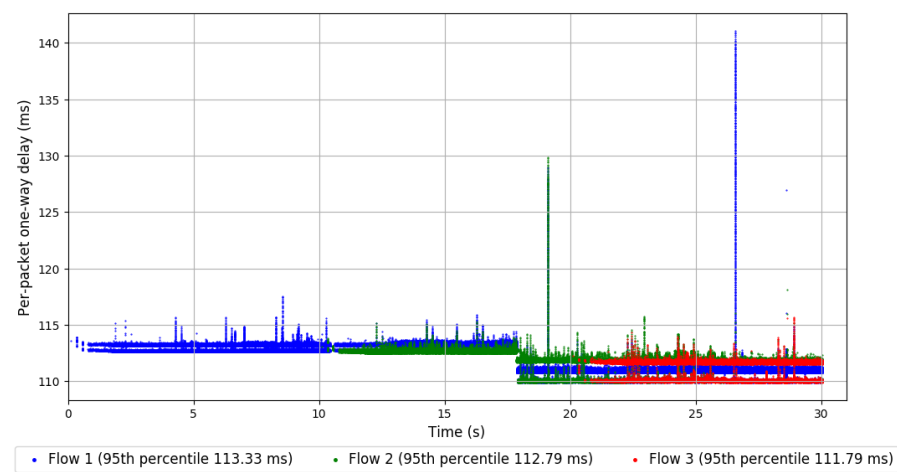
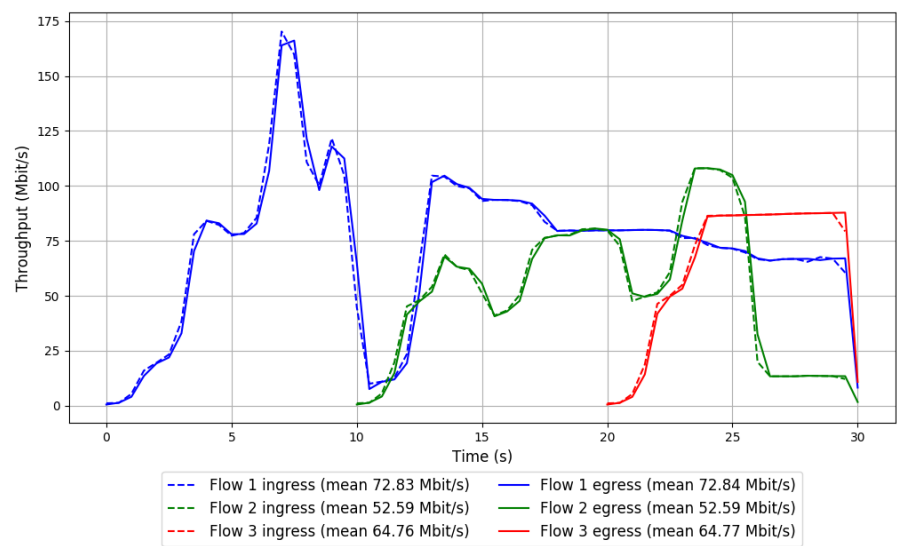
-- Flow 3:

Average throughput: 64.77 Mbit/s

95th percentile per-packet one-way delay: 111.789 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-04-11 08:52:15

End at: 2018-04-11 08:52:46

Below is generated by plot.py at 2018-04-11 11:58:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.15 Mbit/s

95th percentile per-packet one-way delay: 112.730 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 70.49 Mbit/s

95th percentile per-packet one-way delay: 112.646 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 59.38 Mbit/s

95th percentile per-packet one-way delay: 113.078 ms

Loss rate: 0.00%

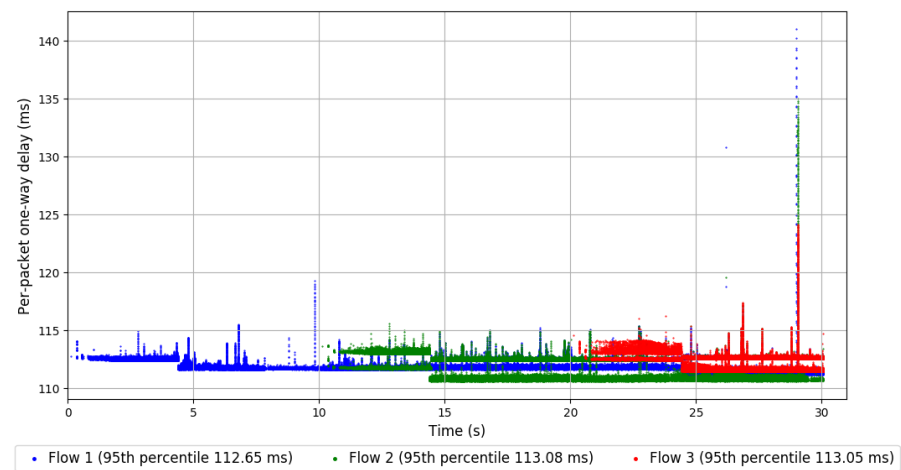
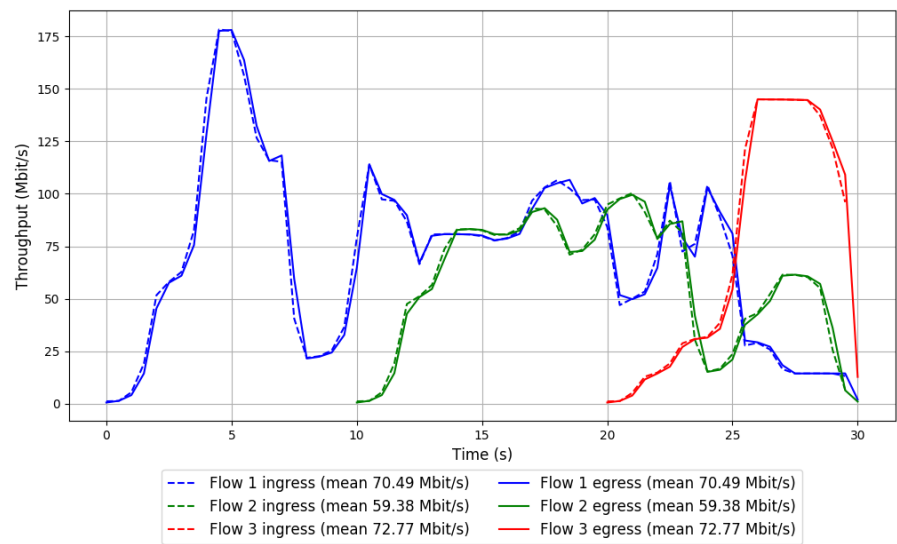
-- Flow 3:

Average throughput: 72.77 Mbit/s

95th percentile per-packet one-way delay: 113.049 ms

Loss rate: 0.02%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-04-11 09:10:49

End at: 2018-04-11 09:11:19

Below is generated by plot.py at 2018-04-11 11:58:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.28 Mbit/s

95th percentile per-packet one-way delay: 113.141 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 71.77 Mbit/s

95th percentile per-packet one-way delay: 112.970 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.29 Mbit/s

95th percentile per-packet one-way delay: 113.266 ms

Loss rate: 0.00%

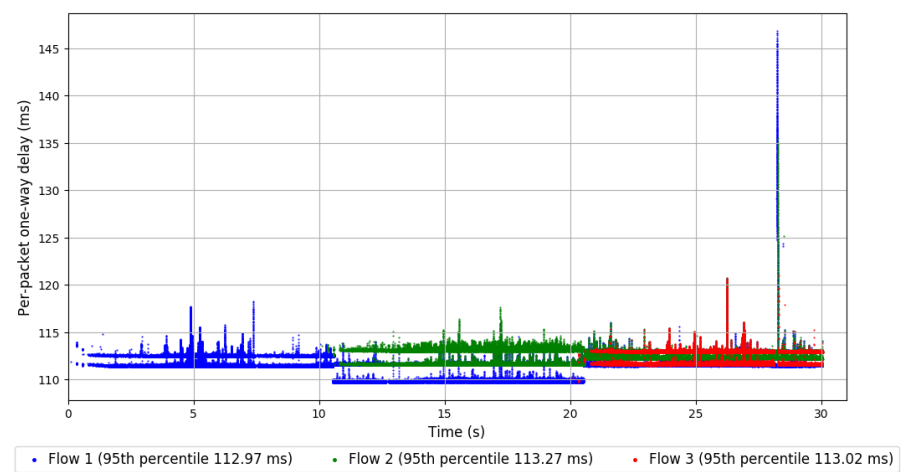
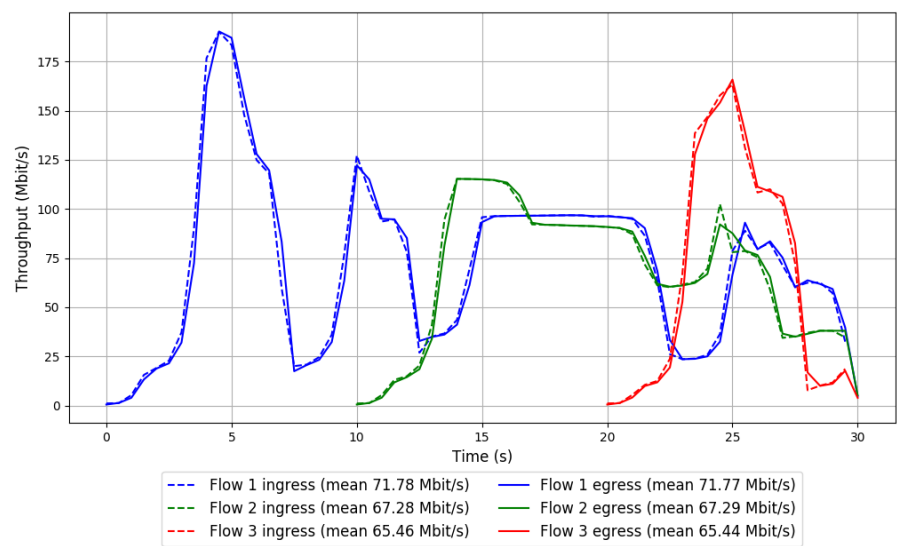
-- Flow 3:

Average throughput: 65.44 Mbit/s

95th percentile per-packet one-way delay: 113.021 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

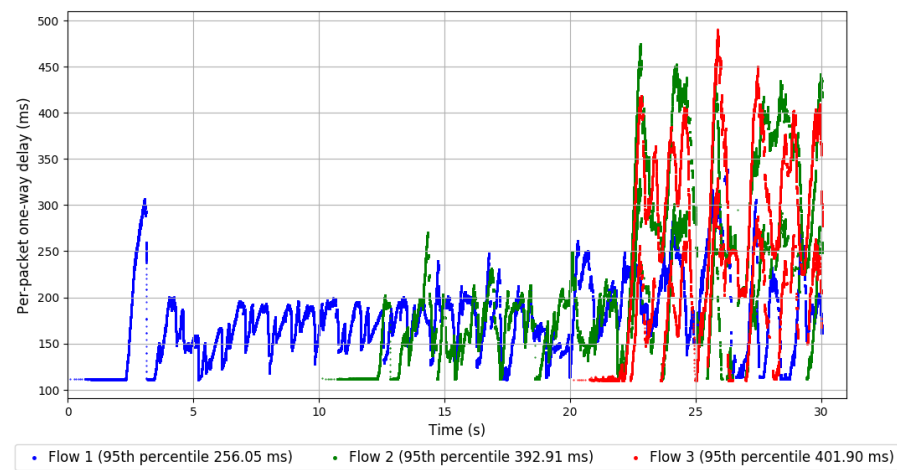
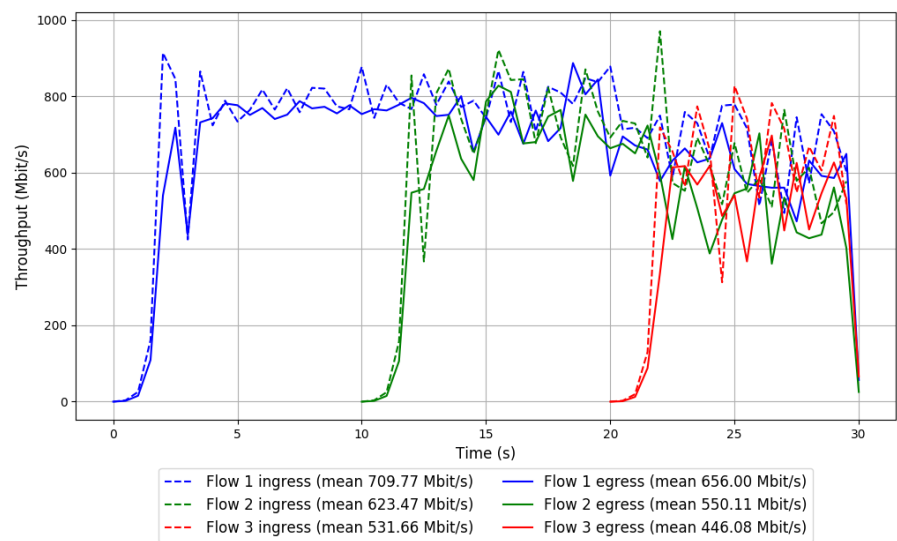


```
Run 1: Statistics of FillP

Start at: 2018-04-11 06:16:52
End at: 2018-04-11 06:17:22

# Below is generated by plot.py at 2018-04-11 12:11:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1169.73 Mbit/s
95th percentile per-packet one-way delay: 362.209 ms
Loss rate: 10.07%
-- Flow 1:
Average throughput: 656.00 Mbit/s
95th percentile per-packet one-way delay: 256.049 ms
Loss rate: 7.57%
-- Flow 2:
Average throughput: 550.11 Mbit/s
95th percentile per-packet one-way delay: 392.908 ms
Loss rate: 11.77%
-- Flow 3:
Average throughput: 446.08 Mbit/s
95th percentile per-packet one-way delay: 401.901 ms
Loss rate: 16.09%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-04-11 06:35:37

End at: 2018-04-11 06:36:07

Below is generated by plot.py at 2018-04-11 12:12:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 1204.98 Mbit/s

95th percentile per-packet one-way delay: 231.152 ms

Loss rate: 9.36%

-- Flow 1:

Average throughput: 649.73 Mbit/s

95th percentile per-packet one-way delay: 214.705 ms

Loss rate: 7.05%

-- Flow 2:

Average throughput: 578.43 Mbit/s

95th percentile per-packet one-way delay: 238.315 ms

Loss rate: 9.91%

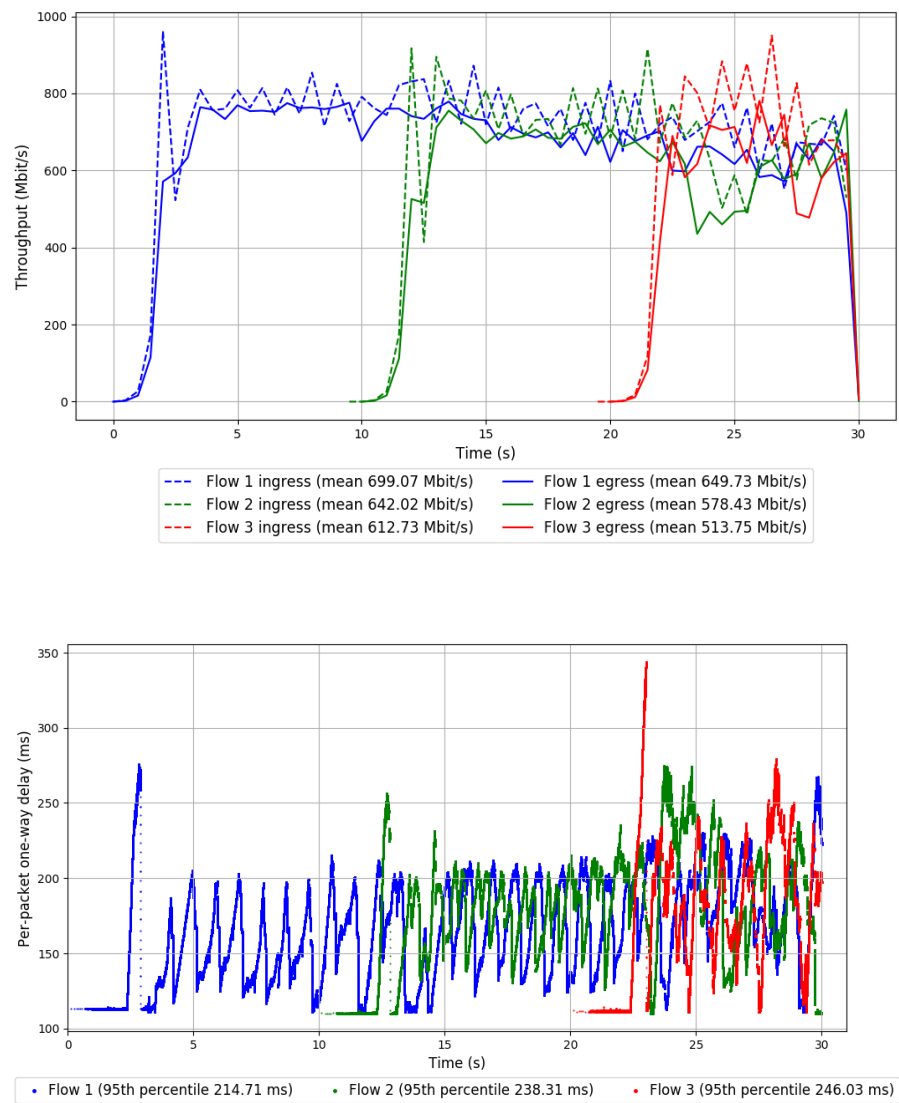
-- Flow 3:

Average throughput: 513.75 Mbit/s

95th percentile per-packet one-way delay: 246.025 ms

Loss rate: 16.14%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-04-11 06:54:52

End at: 2018-04-11 06:55:22

Below is generated by plot.py at 2018-04-11 12:12:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 1133.20 Mbit/s

95th percentile per-packet one-way delay: 236.382 ms

Loss rate: 6.64%

-- Flow 1:

Average throughput: 599.49 Mbit/s

95th percentile per-packet one-way delay: 246.115 ms

Loss rate: 6.56%

-- Flow 2:

Average throughput: 569.85 Mbit/s

95th percentile per-packet one-way delay: 222.412 ms

Loss rate: 4.91%

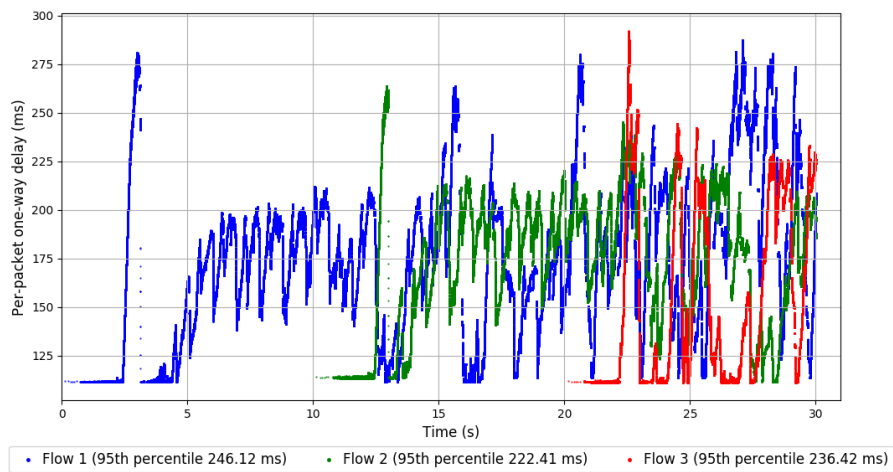
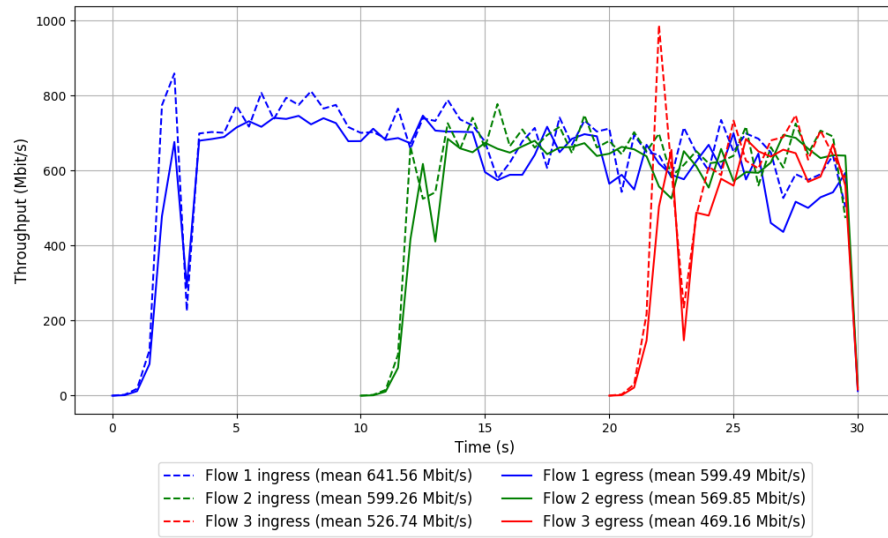
-- Flow 3:

Average throughput: 469.16 Mbit/s

95th percentile per-packet one-way delay: 236.416 ms

Loss rate: 10.92%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-04-11 07:13:56

End at: 2018-04-11 07:14:26

Below is generated by plot.py at 2018-04-11 12:13:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 1116.43 Mbit/s

95th percentile per-packet one-way delay: 244.288 ms

Loss rate: 7.88%

-- Flow 1:

Average throughput: 601.48 Mbit/s

95th percentile per-packet one-way delay: 233.215 ms

Loss rate: 6.48%

-- Flow 2:

Average throughput: 573.66 Mbit/s

95th percentile per-packet one-way delay: 223.689 ms

Loss rate: 6.55%

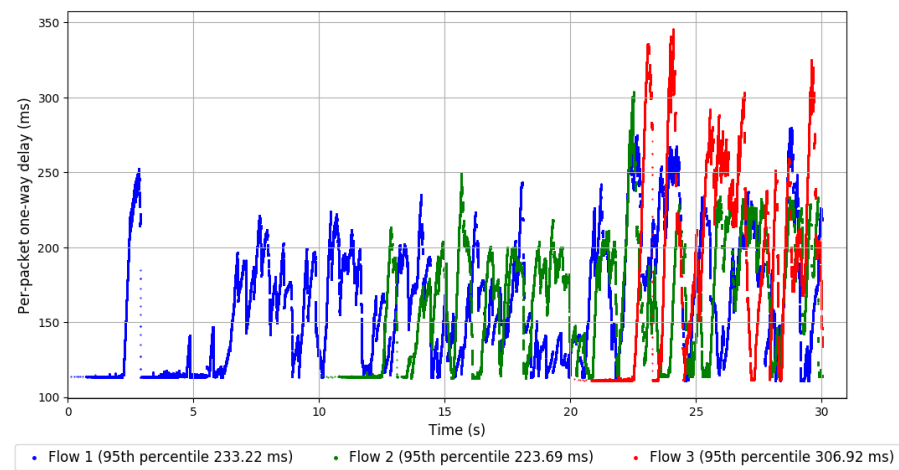
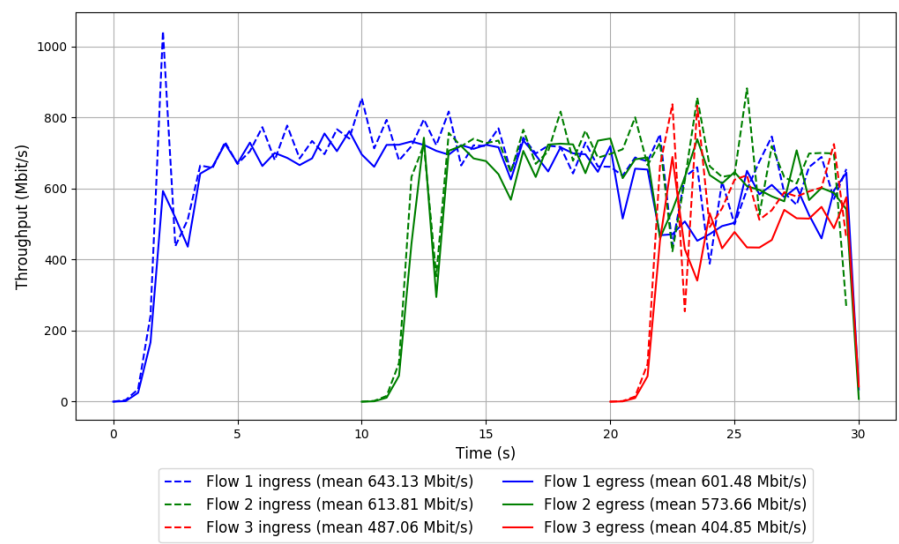
-- Flow 3:

Average throughput: 404.85 Mbit/s

95th percentile per-packet one-way delay: 306.924 ms

Loss rate: 16.89%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-04-11 07:33:13

End at: 2018-04-11 07:33:43

Below is generated by plot.py at 2018-04-11 12:14:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 1135.44 Mbit/s

95th percentile per-packet one-way delay: 250.463 ms

Loss rate: 8.28%

-- Flow 1:

Average throughput: 625.85 Mbit/s

95th percentile per-packet one-way delay: 222.146 ms

Loss rate: 6.55%

-- Flow 2:

Average throughput: 536.97 Mbit/s

95th percentile per-packet one-way delay: 272.030 ms

Loss rate: 9.42%

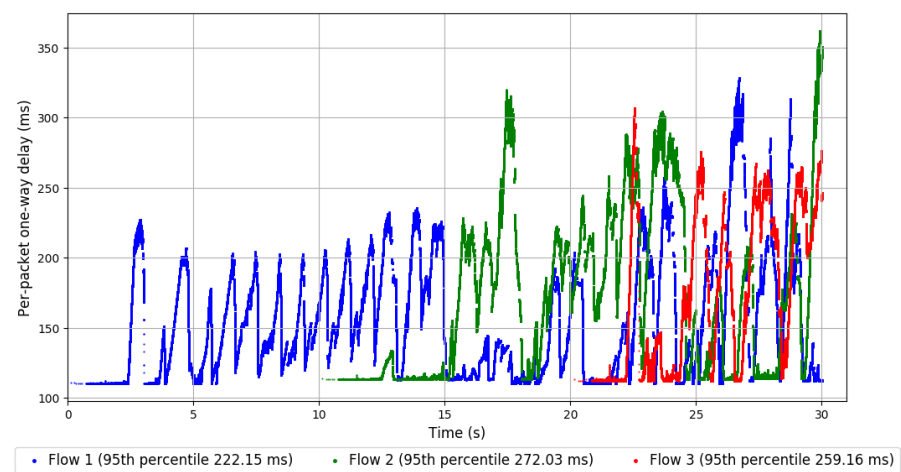
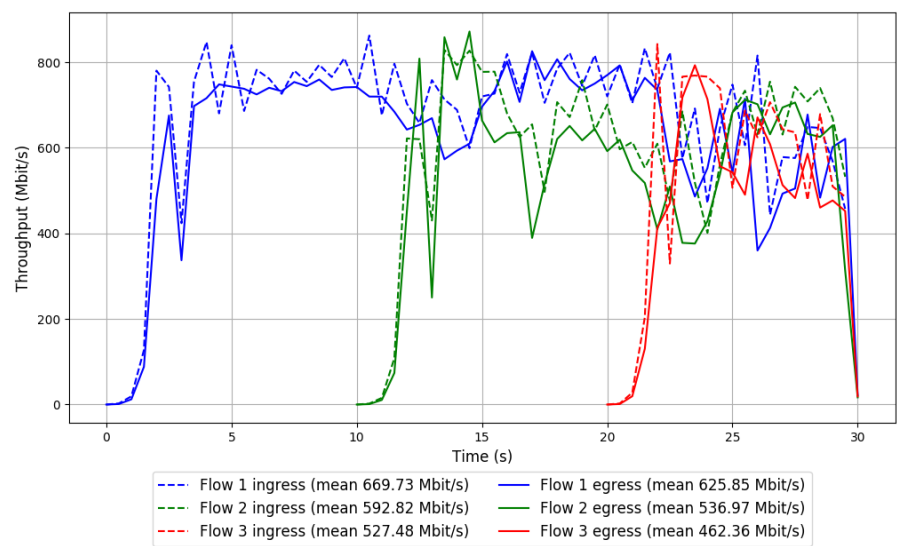
-- Flow 3:

Average throughput: 462.36 Mbit/s

95th percentile per-packet one-way delay: 259.162 ms

Loss rate: 12.34%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-04-11 07:52:11

End at: 2018-04-11 07:52:41

Below is generated by plot.py at 2018-04-11 12:15:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 1174.20 Mbit/s

95th percentile per-packet one-way delay: 230.153 ms

Loss rate: 7.05%

-- Flow 1:

Average throughput: 637.70 Mbit/s

95th percentile per-packet one-way delay: 231.494 ms

Loss rate: 6.52%

-- Flow 2:

Average throughput: 565.26 Mbit/s

95th percentile per-packet one-way delay: 221.424 ms

Loss rate: 6.93%

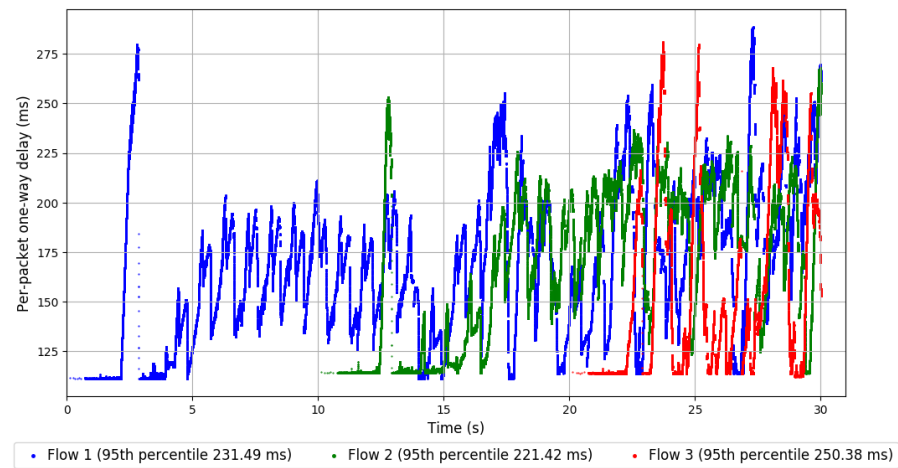
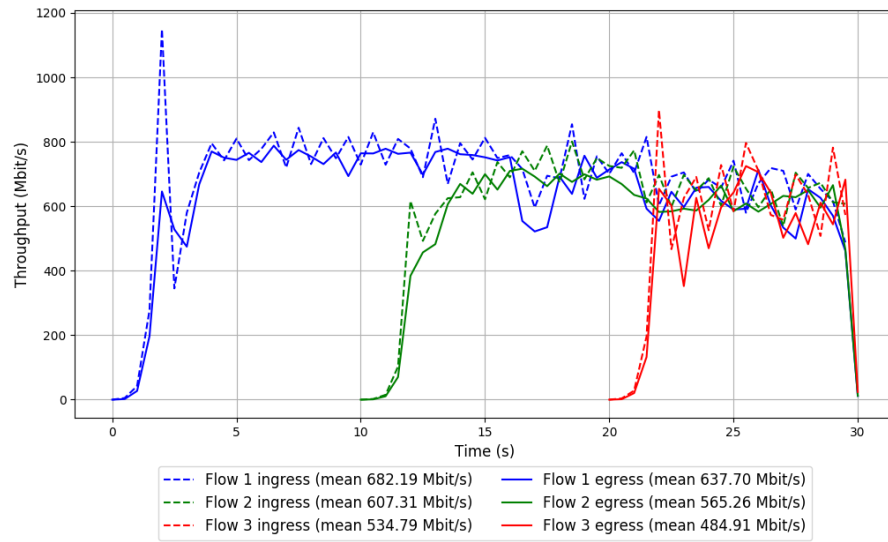
-- Flow 3:

Average throughput: 484.91 Mbit/s

95th percentile per-packet one-way delay: 250.383 ms

Loss rate: 9.34%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-04-11 08:11:25

End at: 2018-04-11 08:11:55

Below is generated by plot.py at 2018-04-11 12:16:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 1194.76 Mbit/s

95th percentile per-packet one-way delay: 219.531 ms

Loss rate: 4.72%

-- Flow 1:

Average throughput: 643.07 Mbit/s

95th percentile per-packet one-way delay: 220.840 ms

Loss rate: 4.35%

-- Flow 2:

Average throughput: 614.83 Mbit/s

95th percentile per-packet one-way delay: 209.825 ms

Loss rate: 3.89%

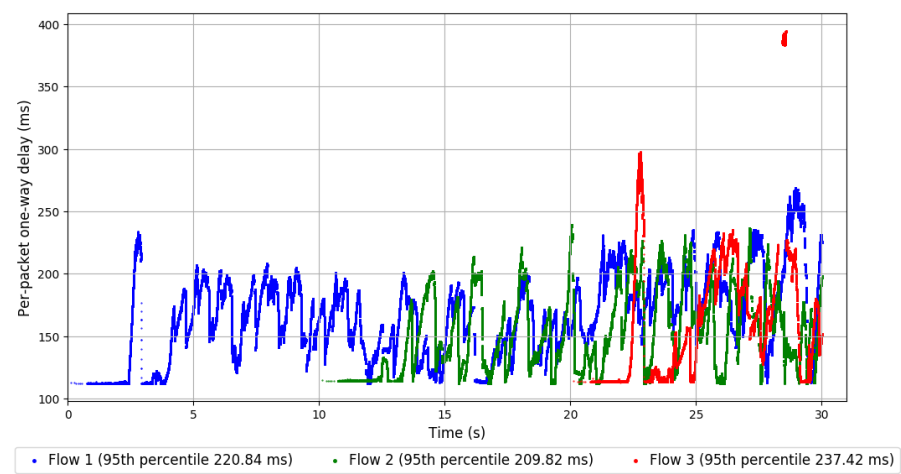
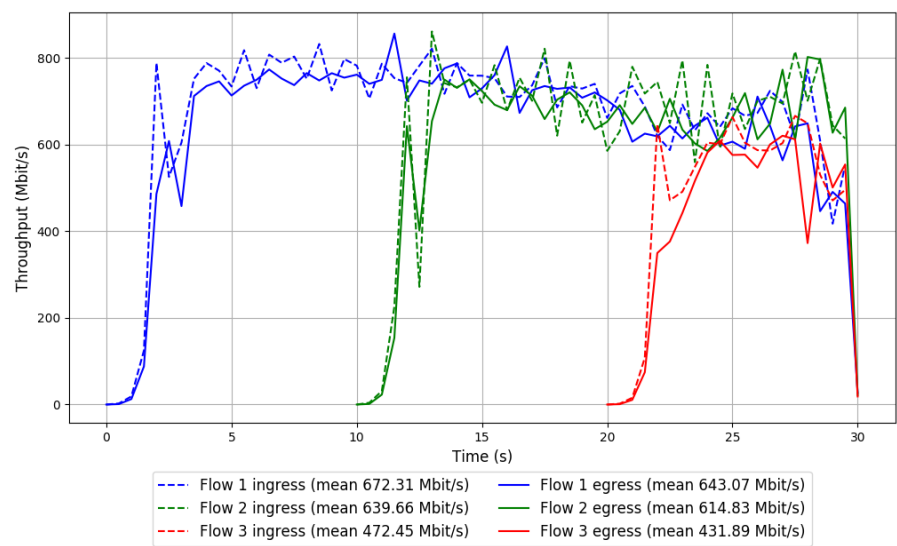
-- Flow 3:

Average throughput: 431.89 Mbit/s

95th percentile per-packet one-way delay: 237.417 ms

Loss rate: 8.61%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-04-11 08:30:48

End at: 2018-04-11 08:31:18

Below is generated by plot.py at 2018-04-11 12:20:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 1168.75 Mbit/s

95th percentile per-packet one-way delay: 242.517 ms

Loss rate: 8.94%

-- Flow 1:

Average throughput: 632.40 Mbit/s

95th percentile per-packet one-way delay: 239.035 ms

Loss rate: 7.41%

-- Flow 2:

Average throughput: 544.62 Mbit/s

95th percentile per-packet one-way delay: 248.469 ms

Loss rate: 11.42%

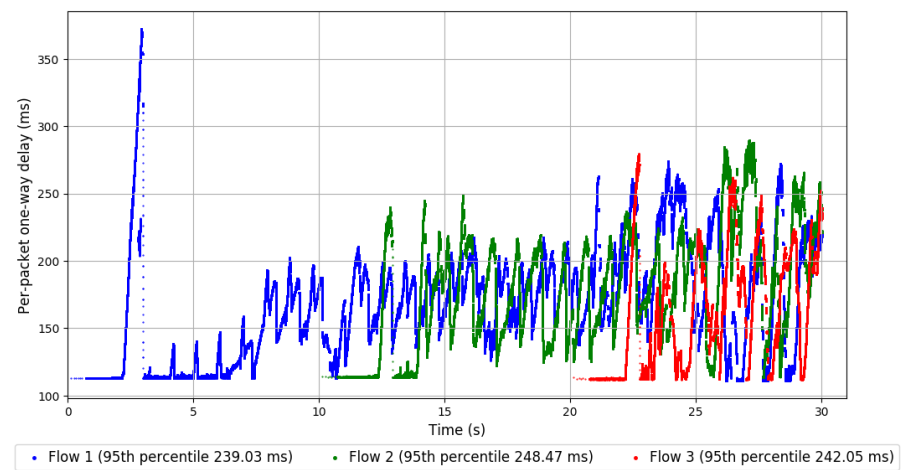
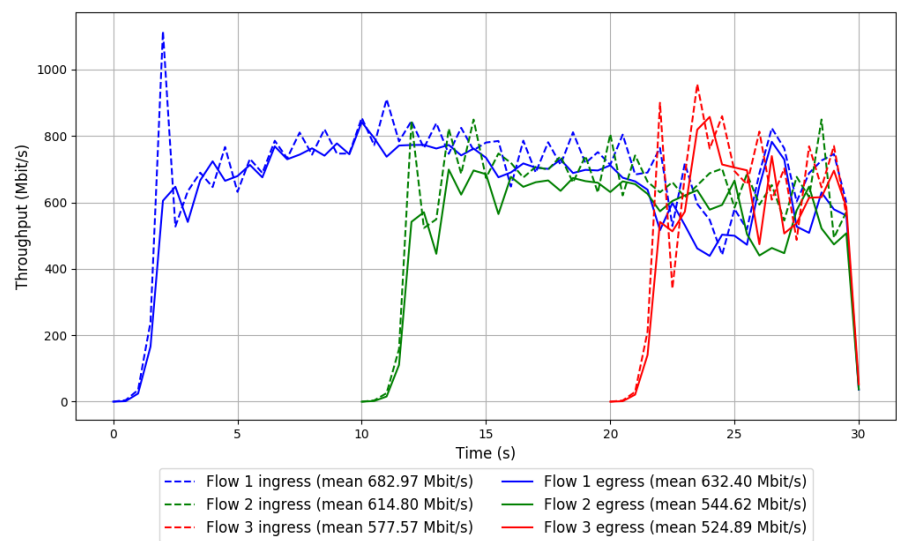
-- Flow 3:

Average throughput: 524.89 Mbit/s

95th percentile per-packet one-way delay: 242.054 ms

Loss rate: 9.13%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-04-11 08:49:40

End at: 2018-04-11 08:50:10

Below is generated by plot.py at 2018-04-11 12:28:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 879.23 Mbit/s

95th percentile per-packet one-way delay: 373.001 ms

Loss rate: 9.16%

-- Flow 1:

Average throughput: 503.79 Mbit/s

95th percentile per-packet one-way delay: 362.158 ms

Loss rate: 8.39%

-- Flow 2:

Average throughput: 469.54 Mbit/s

95th percentile per-packet one-way delay: 377.187 ms

Loss rate: 9.23%

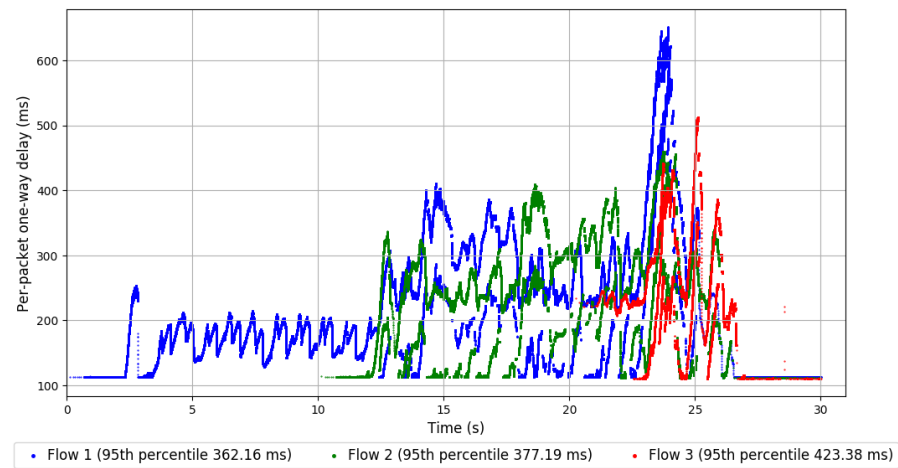
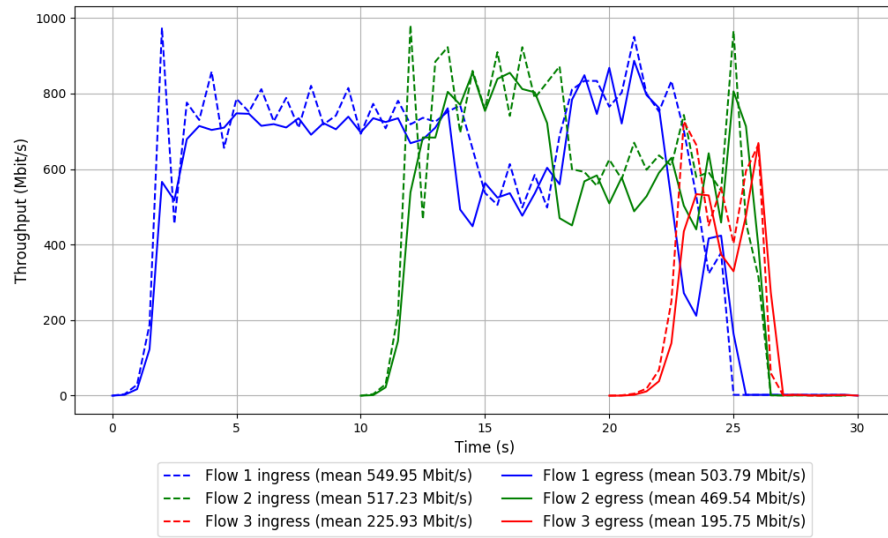
-- Flow 3:

Average throughput: 195.75 Mbit/s

95th percentile per-packet one-way delay: 423.382 ms

Loss rate: 14.44%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-04-11 09:08:05

End at: 2018-04-11 09:08:35

Below is generated by plot.py at 2018-04-11 12:34:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 1171.29 Mbit/s

95th percentile per-packet one-way delay: 242.998 ms

Loss rate: 11.10%

-- Flow 1:

Average throughput: 652.84 Mbit/s

95th percentile per-packet one-way delay: 228.029 ms

Loss rate: 7.83%

-- Flow 2:

Average throughput: 555.49 Mbit/s

95th percentile per-packet one-way delay: 252.513 ms

Loss rate: 14.70%

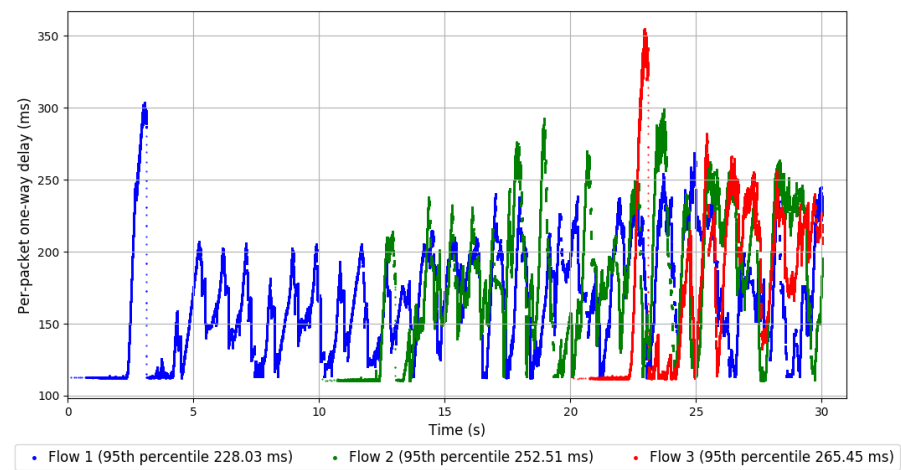
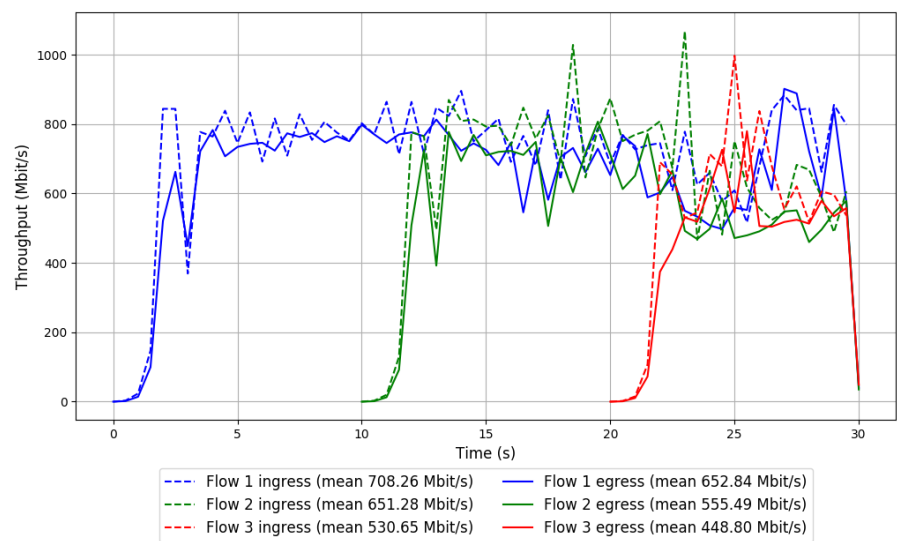
-- Flow 3:

Average throughput: 448.80 Mbit/s

95th percentile per-packet one-way delay: 265.448 ms

Loss rate: 15.42%

Run 10: Report of FillP — Data Link

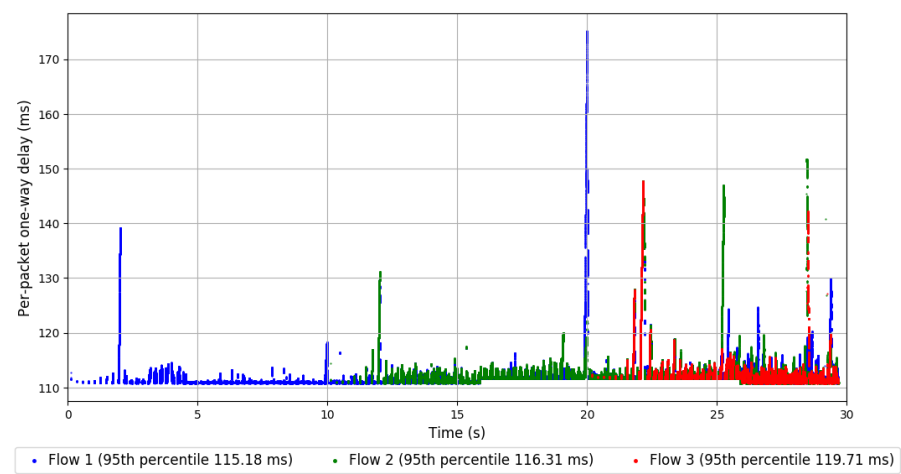
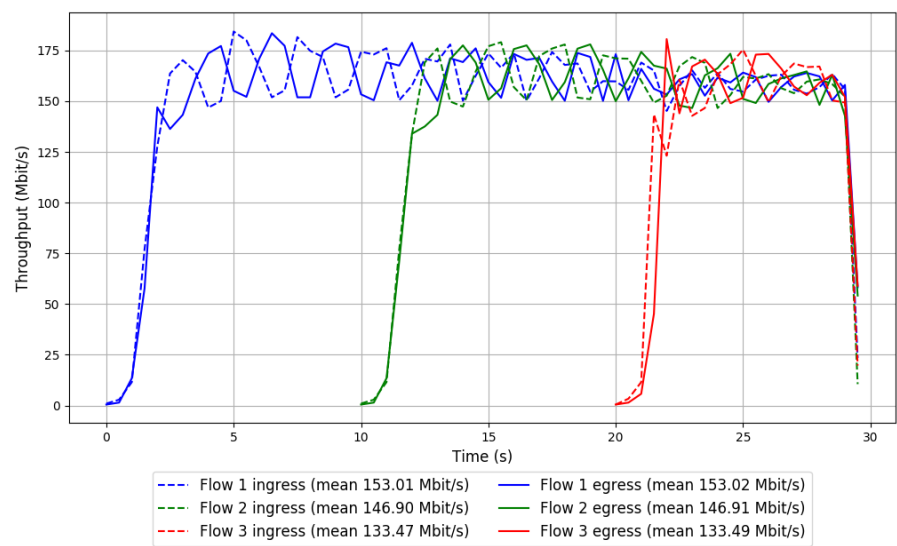


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-04-11 06:26:24
End at: 2018-04-11 06:26:54

# Below is generated by plot.py at 2018-04-11 12:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 293.08 Mbit/s
95th percentile per-packet one-way delay: 115.975 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 153.02 Mbit/s
95th percentile per-packet one-way delay: 115.179 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 146.91 Mbit/s
95th percentile per-packet one-way delay: 116.310 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 133.49 Mbit/s
95th percentile per-packet one-way delay: 119.710 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-1-32 — Data Link

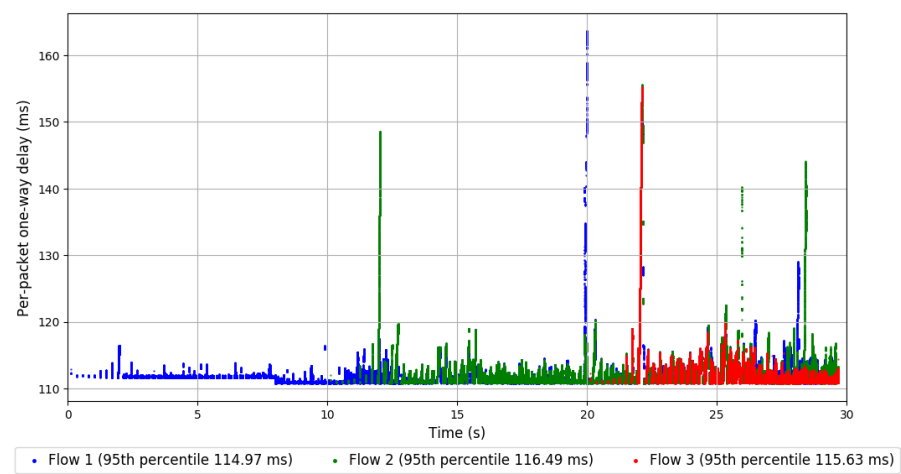
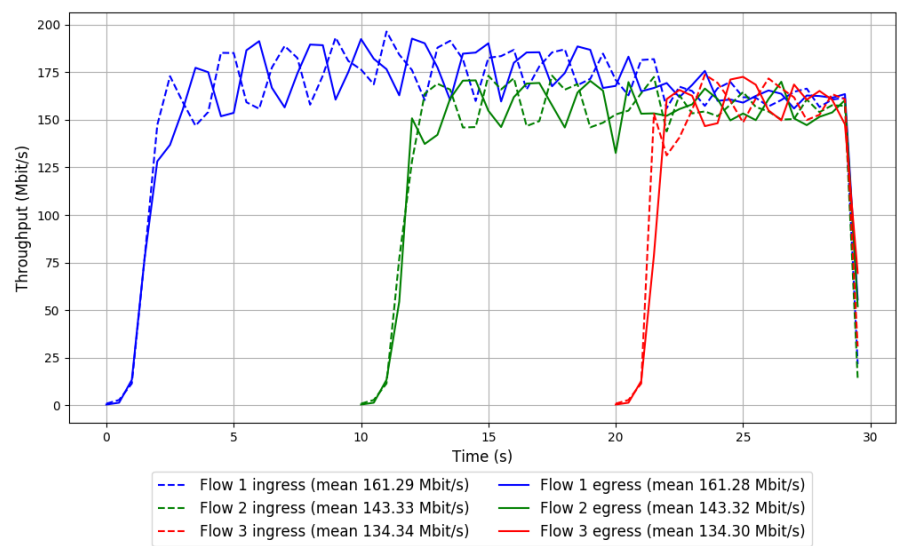


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-04-11 06:45:11
End at: 2018-04-11 06:45:41

# Below is generated by plot.py at 2018-04-11 12:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 299.47 Mbit/s
95th percentile per-packet one-way delay: 115.543 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 161.28 Mbit/s
95th percentile per-packet one-way delay: 114.972 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 143.32 Mbit/s
95th percentile per-packet one-way delay: 116.488 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 134.30 Mbit/s
95th percentile per-packet one-way delay: 115.627 ms
Loss rate: 0.01%
```

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-04-11 07:04:17

End at: 2018-04-11 07:04:47

Below is generated by plot.py at 2018-04-11 12:34:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.28 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 143.92 Mbit/s

95th percentile per-packet one-way delay: 123.253 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.66 Mbit/s

95th percentile per-packet one-way delay: 135.753 ms

Loss rate: 0.00%

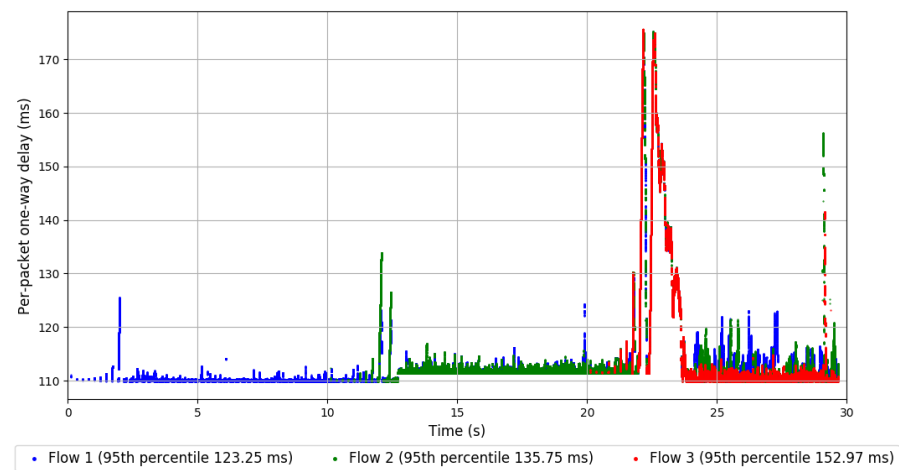
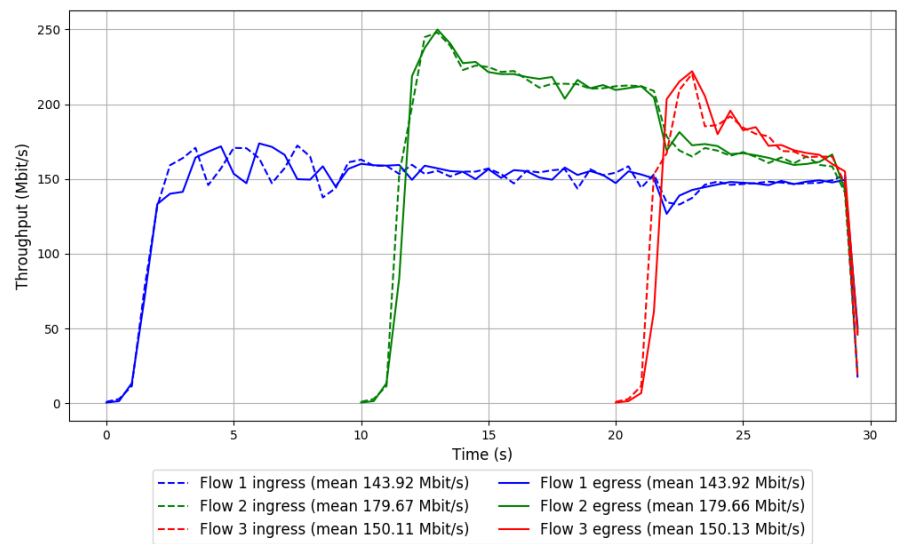
-- Flow 3:

Average throughput: 150.13 Mbit/s

95th percentile per-packet one-way delay: 152.969 ms

Loss rate: 0.00%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-04-11 07:23:40

End at: 2018-04-11 07:24:10

Below is generated by plot.py at 2018-04-11 12:34:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 346.09 Mbit/s

95th percentile per-packet one-way delay: 117.750 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 185.68 Mbit/s

95th percentile per-packet one-way delay: 116.982 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.47 Mbit/s

95th percentile per-packet one-way delay: 120.423 ms

Loss rate: 0.00%

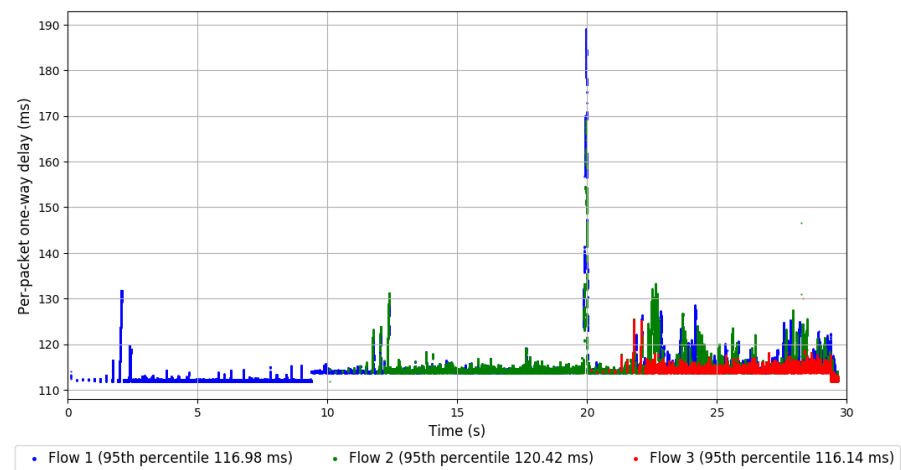
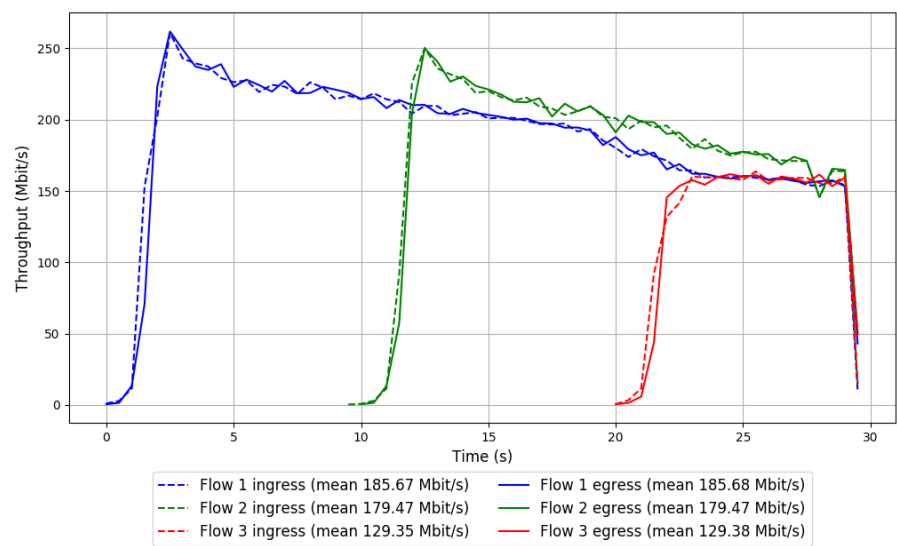
-- Flow 3:

Average throughput: 129.38 Mbit/s

95th percentile per-packet one-way delay: 116.136 ms

Loss rate: 0.00%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-04-11 07:42:40

End at: 2018-04-11 07:43:10

Below is generated by plot.py at 2018-04-11 12:34:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 342.27 Mbit/s

95th percentile per-packet one-way delay: 120.049 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 185.18 Mbit/s

95th percentile per-packet one-way delay: 118.071 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 169.02 Mbit/s

95th percentile per-packet one-way delay: 121.931 ms

Loss rate: 0.00%

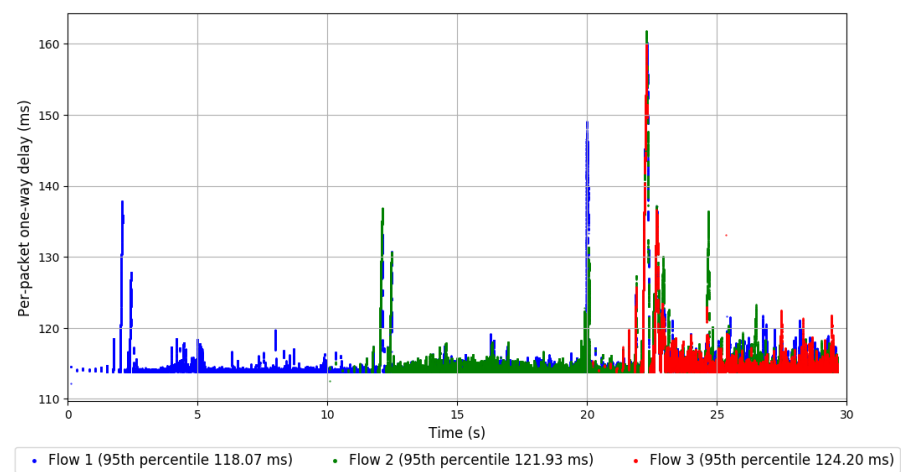
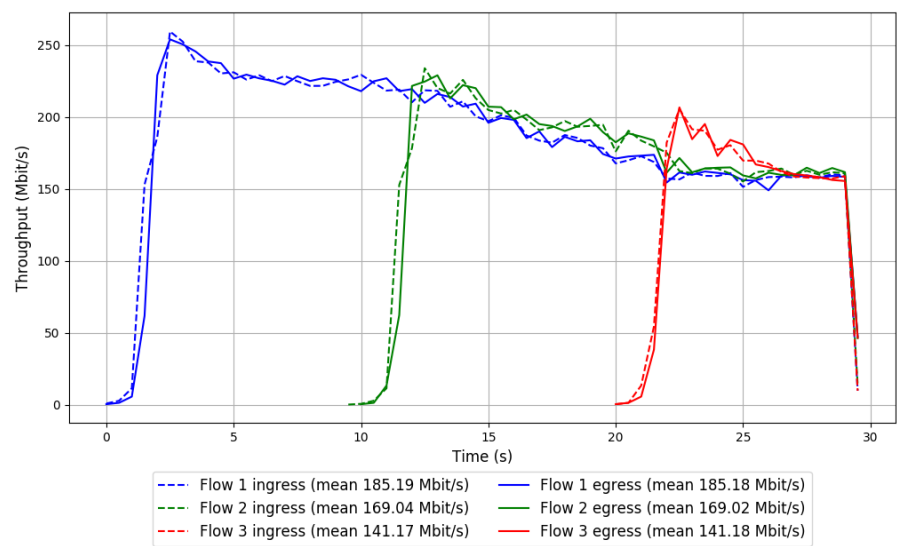
-- Flow 3:

Average throughput: 141.18 Mbit/s

95th percentile per-packet one-way delay: 124.199 ms

Loss rate: 0.02%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-04-11 08:01:41

End at: 2018-04-11 08:02:11

Below is generated by plot.py at 2018-04-11 12:34:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 334.18 Mbit/s

95th percentile per-packet one-way delay: 116.919 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 183.87 Mbit/s

95th percentile per-packet one-way delay: 116.639 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 164.11 Mbit/s

95th percentile per-packet one-way delay: 117.580 ms

Loss rate: 0.00%

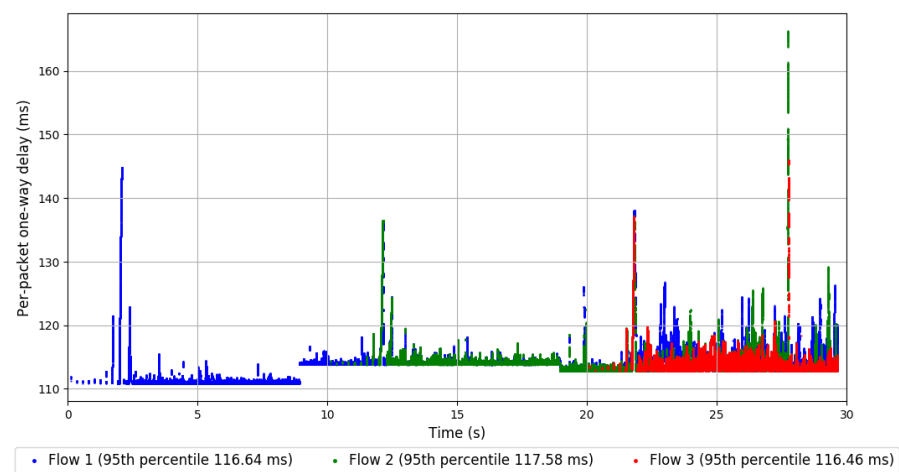
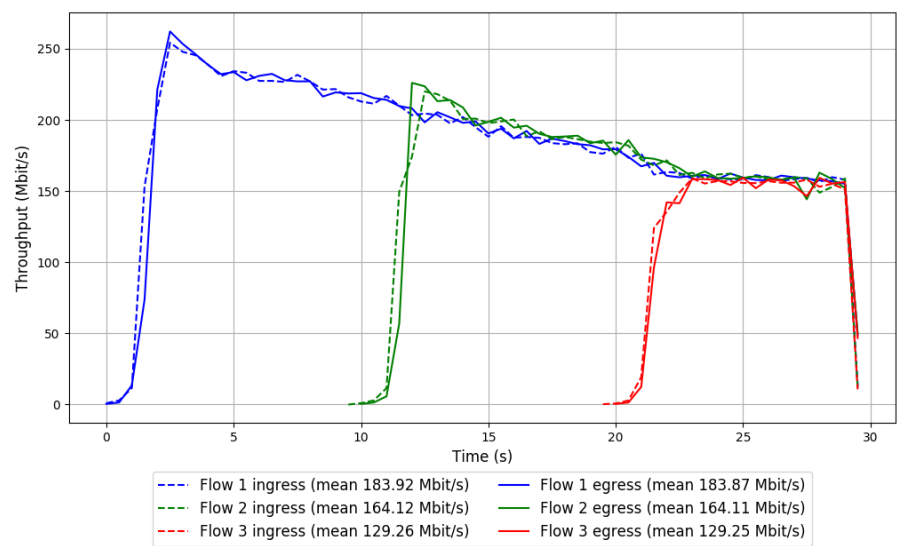
-- Flow 3:

Average throughput: 129.25 Mbit/s

95th percentile per-packet one-way delay: 116.463 ms

Loss rate: 0.00%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-04-11 08:21:02

End at: 2018-04-11 08:21:32

Below is generated by plot.py at 2018-04-11 12:34:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 330.19 Mbit/s

95th percentile per-packet one-way delay: 115.201 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 184.35 Mbit/s

95th percentile per-packet one-way delay: 114.894 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 159.59 Mbit/s

95th percentile per-packet one-way delay: 116.673 ms

Loss rate: 0.00%

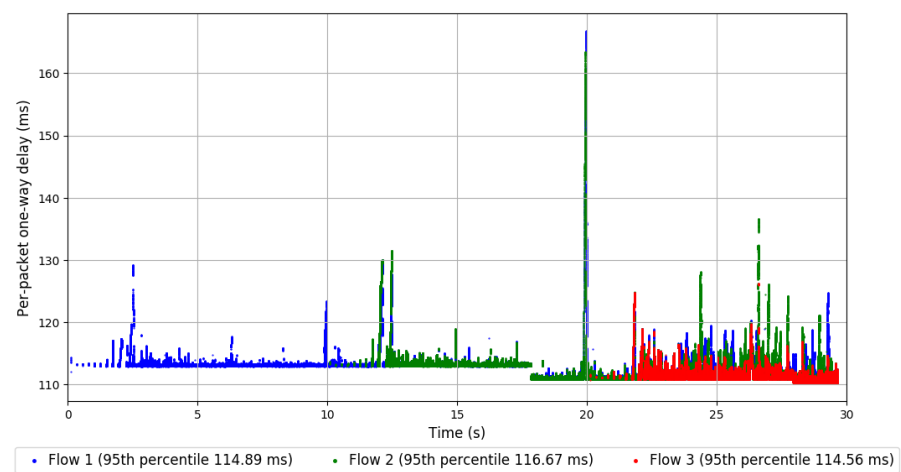
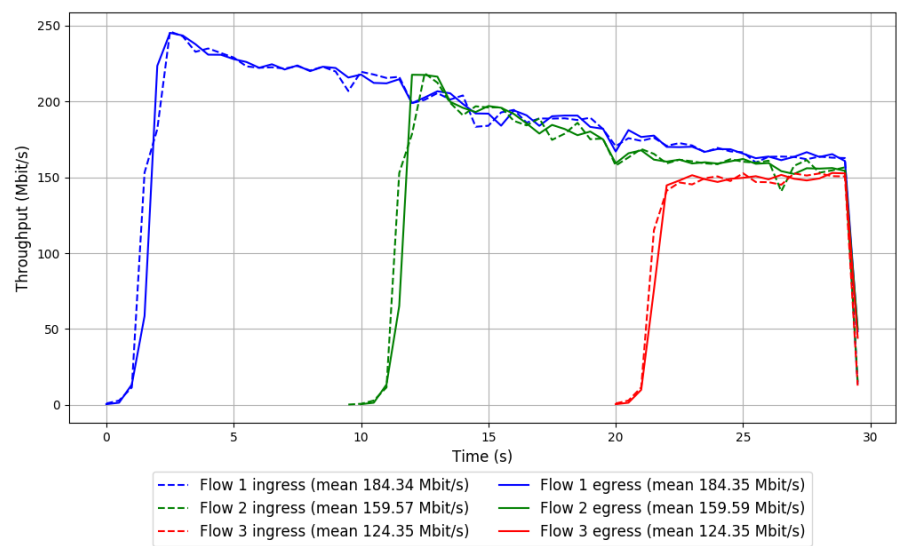
-- Flow 3:

Average throughput: 124.35 Mbit/s

95th percentile per-packet one-way delay: 114.560 ms

Loss rate: 0.00%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-04-11 08:40:14

End at: 2018-04-11 08:40:44

Below is generated by plot.py at 2018-04-11 12:34:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 284.16 Mbit/s

95th percentile per-packet one-way delay: 116.764 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 147.18 Mbit/s

95th percentile per-packet one-way delay: 116.398 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 142.51 Mbit/s

95th percentile per-packet one-way delay: 117.427 ms

Loss rate: 0.00%

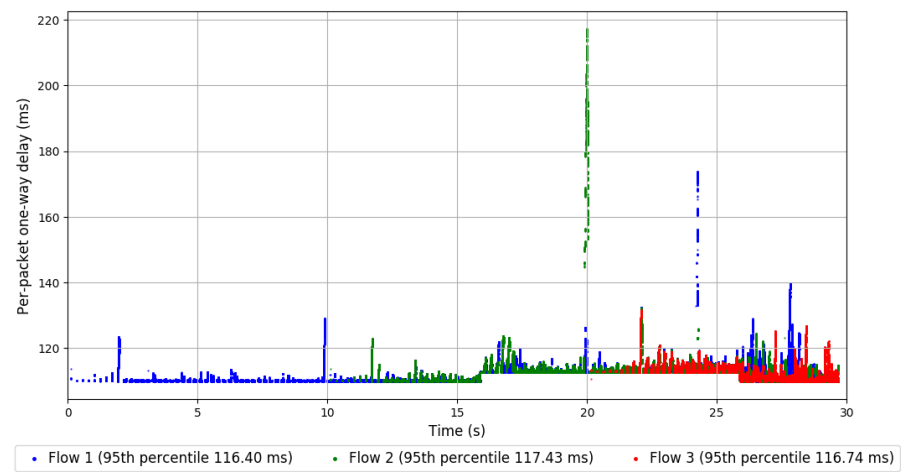
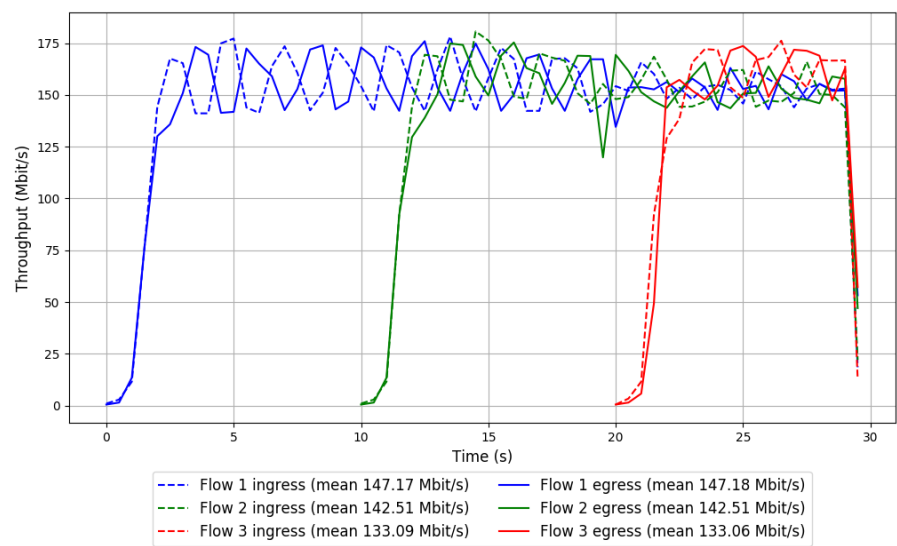
-- Flow 3:

Average throughput: 133.06 Mbit/s

95th percentile per-packet one-way delay: 116.741 ms

Loss rate: 0.00%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-04-11 08:58:58

End at: 2018-04-11 08:59:28

Below is generated by plot.py at 2018-04-11 12:34:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.03 Mbit/s

95th percentile per-packet one-way delay: 116.897 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 151.07 Mbit/s

95th percentile per-packet one-way delay: 116.468 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 143.70 Mbit/s

95th percentile per-packet one-way delay: 116.651 ms

Loss rate: 0.02%

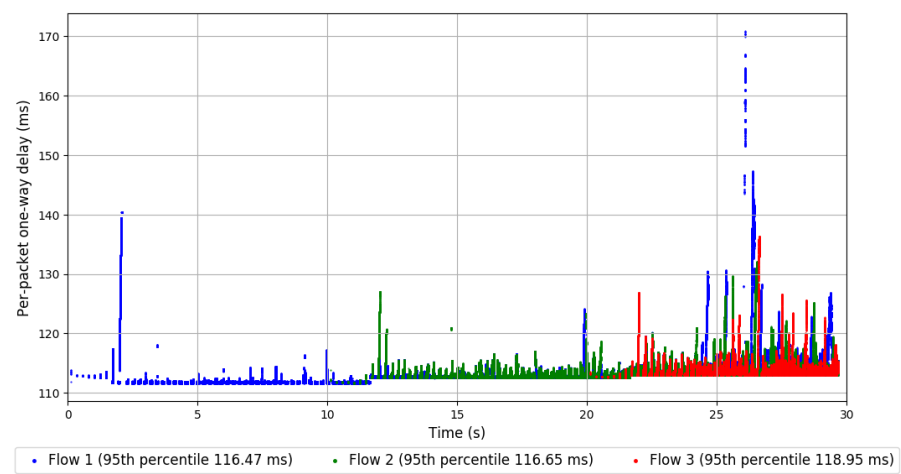
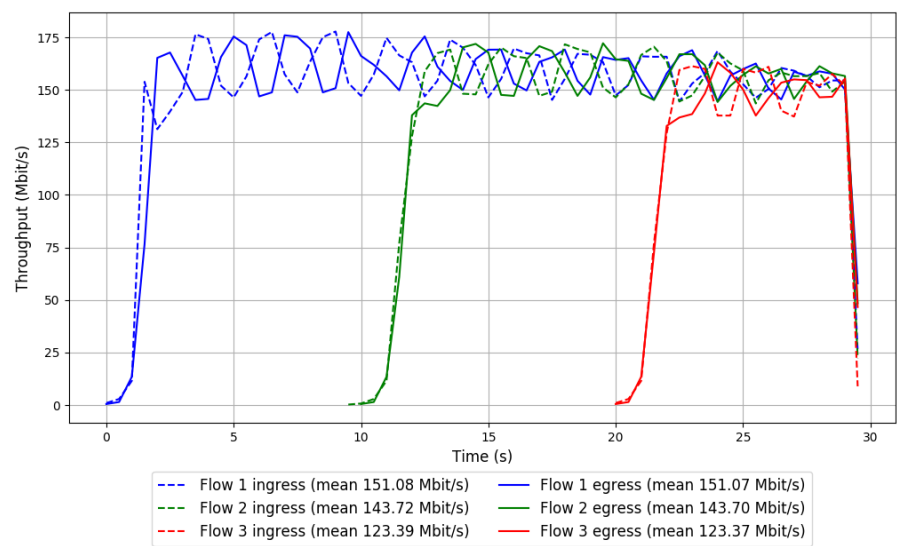
-- Flow 3:

Average throughput: 123.37 Mbit/s

95th percentile per-packet one-way delay: 118.948 ms

Loss rate: 0.04%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-04-11 09:17:25

End at: 2018-04-11 09:17:55

Below is generated by plot.py at 2018-04-11 12:34:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.78 Mbit/s

95th percentile per-packet one-way delay: 142.651 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 144.35 Mbit/s

95th percentile per-packet one-way delay: 134.062 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 185.37 Mbit/s

95th percentile per-packet one-way delay: 142.402 ms

Loss rate: 0.00%

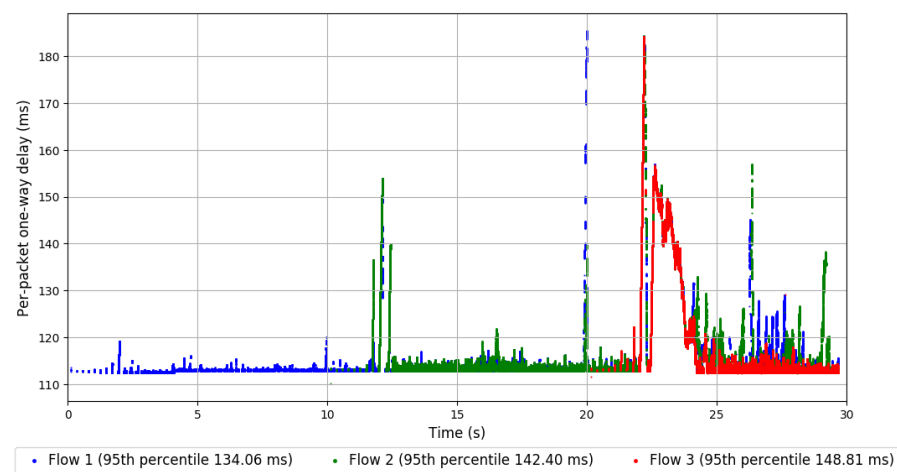
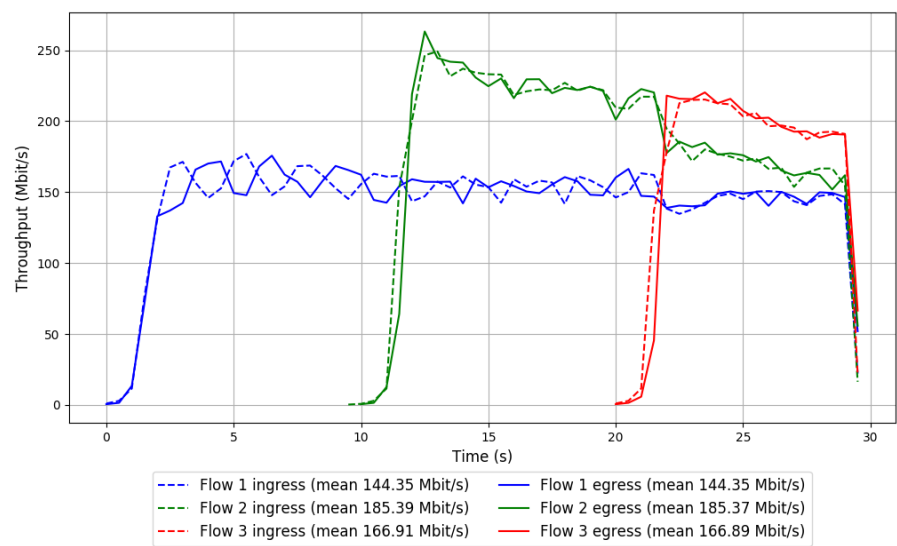
-- Flow 3:

Average throughput: 166.89 Mbit/s

95th percentile per-packet one-way delay: 148.813 ms

Loss rate: 0.01%

Run 10: Report of Indigo-1-32 — Data Link

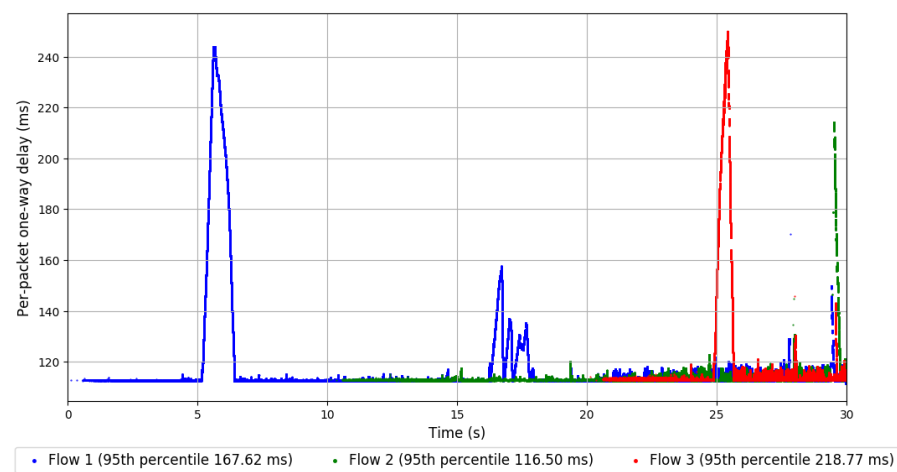
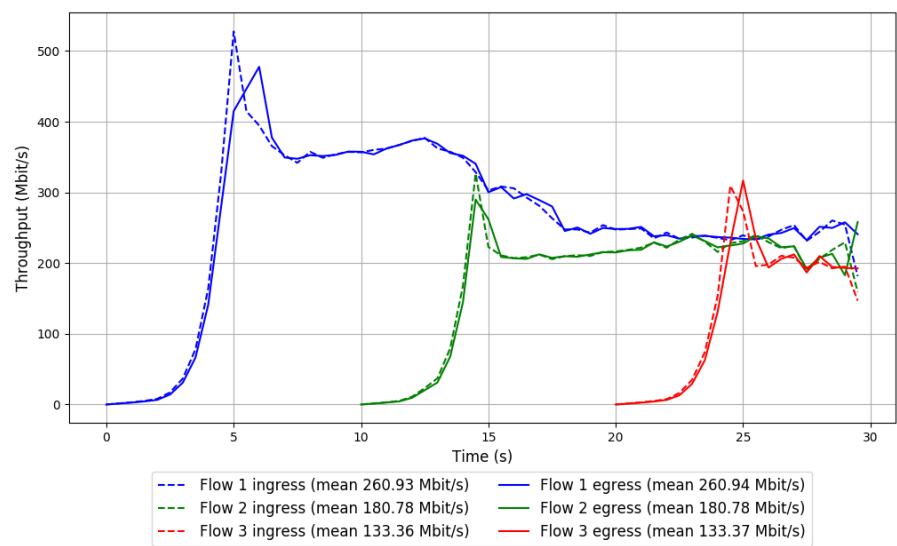


```
Run 1: Statistics of Vivace-latency

Start at: 2018-04-11 06:14:20
End at: 2018-04-11 06:14:50

# Below is generated by plot.py at 2018-04-11 12:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.01 Mbit/s
95th percentile per-packet one-way delay: 157.628 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 260.94 Mbit/s
95th percentile per-packet one-way delay: 167.623 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 180.78 Mbit/s
95th percentile per-packet one-way delay: 116.503 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 133.37 Mbit/s
95th percentile per-packet one-way delay: 218.772 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-04-11 06:33:07

End at: 2018-04-11 06:33:37

Below is generated by plot.py at 2018-04-11 12:34:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.63 Mbit/s

95th percentile per-packet one-way delay: 235.521 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 242.92 Mbit/s

95th percentile per-packet one-way delay: 266.261 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 192.52 Mbit/s

95th percentile per-packet one-way delay: 154.048 ms

Loss rate: 0.00%

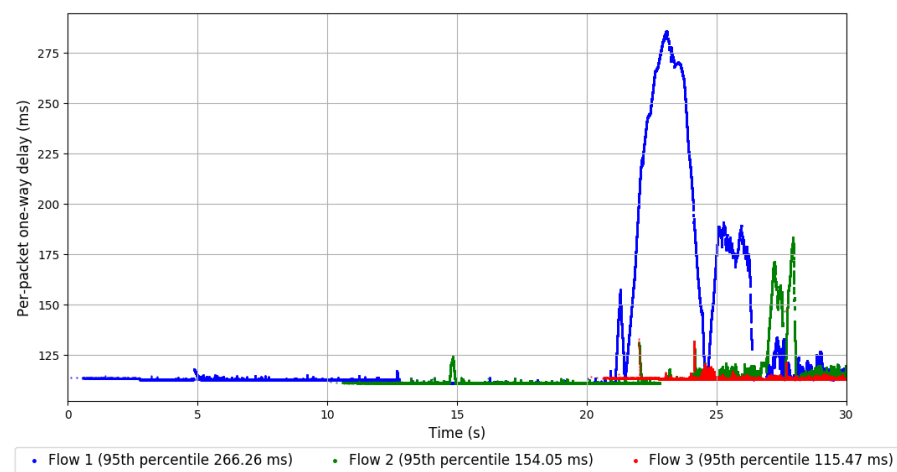
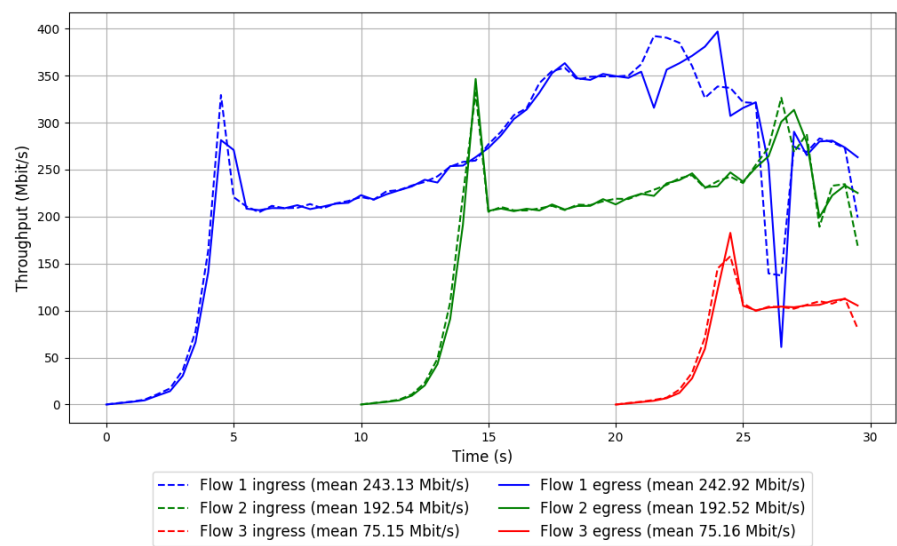
-- Flow 3:

Average throughput: 75.16 Mbit/s

95th percentile per-packet one-way delay: 115.475 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-04-11 06:52:22

End at: 2018-04-11 06:52:52

Below is generated by plot.py at 2018-04-11 12:34:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 376.62 Mbit/s

95th percentile per-packet one-way delay: 128.453 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 206.78 Mbit/s

95th percentile per-packet one-way delay: 175.005 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 189.20 Mbit/s

95th percentile per-packet one-way delay: 115.442 ms

Loss rate: 0.00%

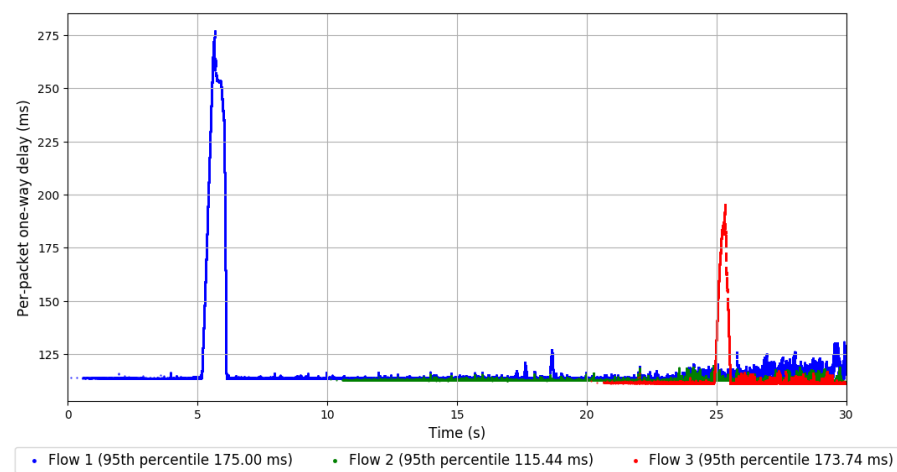
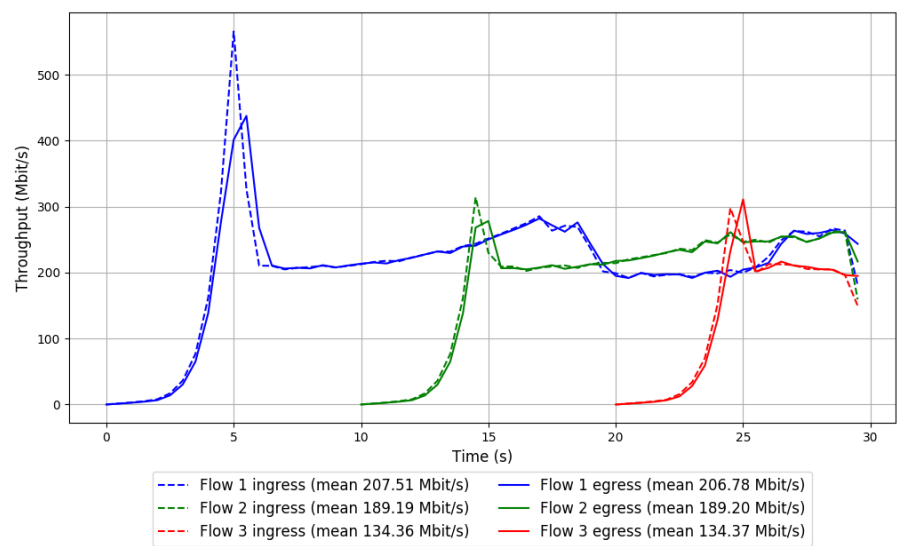
-- Flow 3:

Average throughput: 134.37 Mbit/s

95th percentile per-packet one-way delay: 173.742 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-04-11 07:11:25

End at: 2018-04-11 07:11:55

Below is generated by plot.py at 2018-04-11 12:34:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 391.32 Mbit/s

95th percentile per-packet one-way delay: 191.371 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 254.10 Mbit/s

95th percentile per-packet one-way delay: 213.006 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 169.62 Mbit/s

95th percentile per-packet one-way delay: 114.440 ms

Loss rate: 0.00%

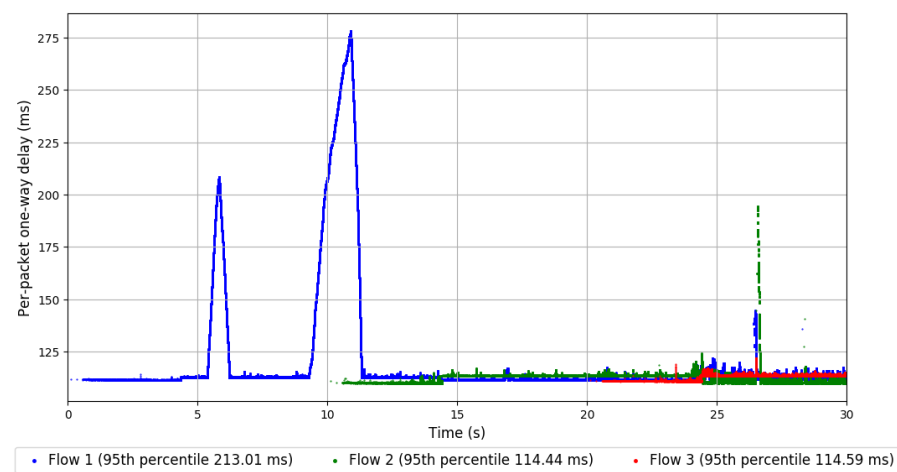
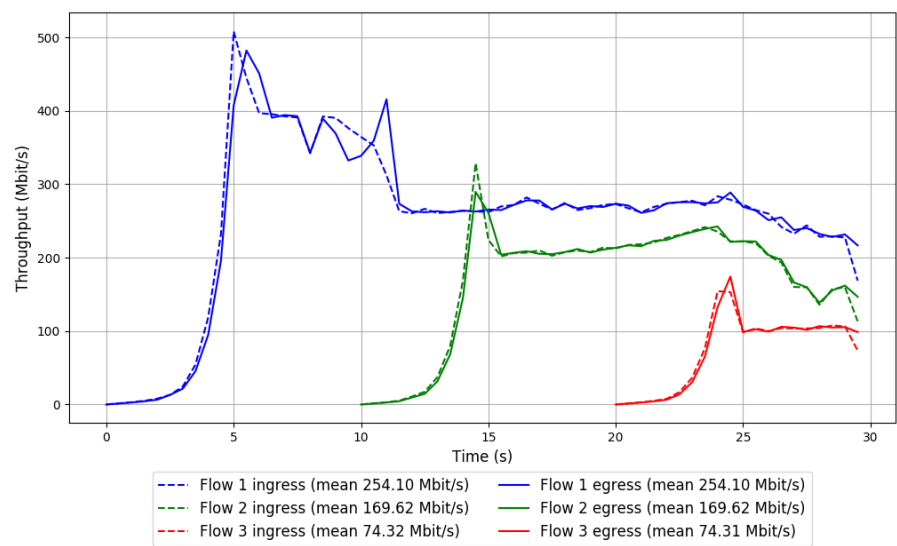
-- Flow 3:

Average throughput: 74.31 Mbit/s

95th percentile per-packet one-way delay: 114.595 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-04-11 07:30:42

End at: 2018-04-11 07:31:12

Below is generated by plot.py at 2018-04-11 12:34:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 395.72 Mbit/s

95th percentile per-packet one-way delay: 128.449 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 235.45 Mbit/s

95th percentile per-packet one-way delay: 147.420 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 181.19 Mbit/s

95th percentile per-packet one-way delay: 117.941 ms

Loss rate: 0.00%

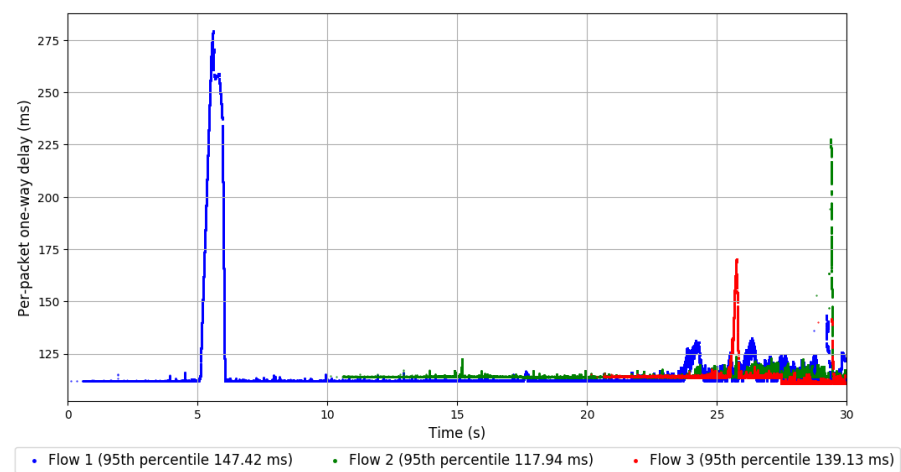
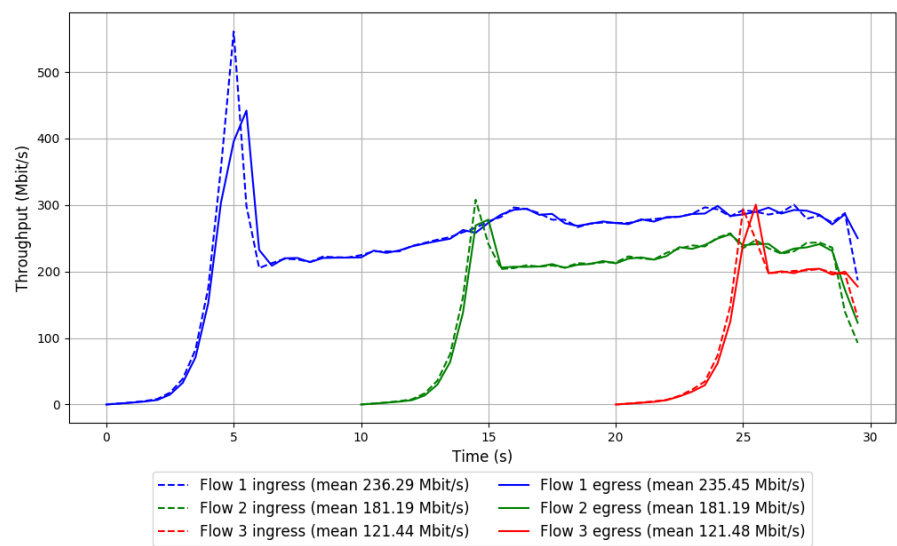
-- Flow 3:

Average throughput: 121.48 Mbit/s

95th percentile per-packet one-way delay: 139.128 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-04-11 07:49:45

End at: 2018-04-11 07:50:15

Below is generated by plot.py at 2018-04-11 12:34:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 339.56 Mbit/s

95th percentile per-packet one-way delay: 133.398 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 197.34 Mbit/s

95th percentile per-packet one-way delay: 183.293 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 177.57 Mbit/s

95th percentile per-packet one-way delay: 120.375 ms

Loss rate: 0.01%

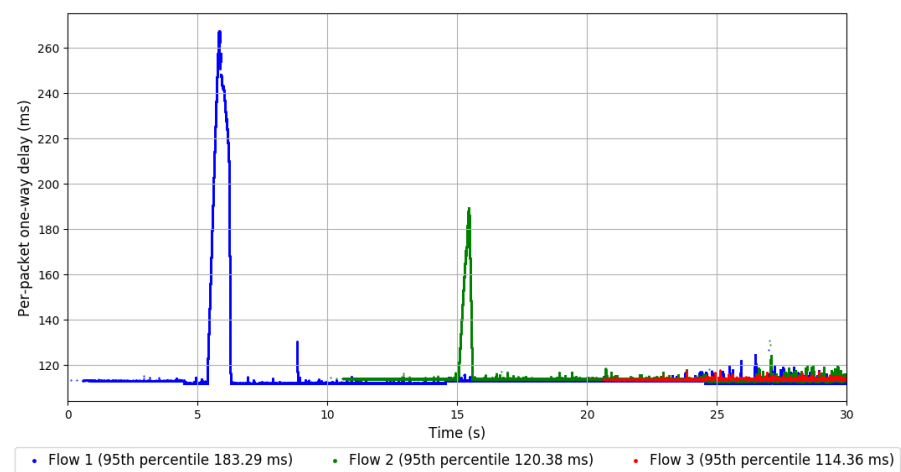
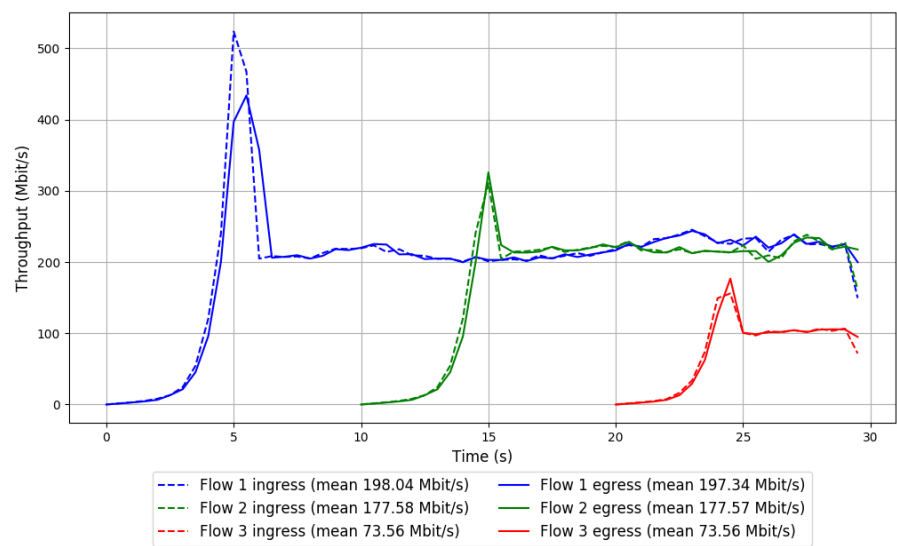
-- Flow 3:

Average throughput: 73.56 Mbit/s

95th percentile per-packet one-way delay: 114.357 ms

Loss rate: 0.01%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-04-11 08:08:52

End at: 2018-04-11 08:09:22

Below is generated by plot.py at 2018-04-11 12:36:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 425.08 Mbit/s

95th percentile per-packet one-way delay: 174.999 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 248.32 Mbit/s

95th percentile per-packet one-way delay: 184.726 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 197.99 Mbit/s

95th percentile per-packet one-way delay: 134.520 ms

Loss rate: 0.04%

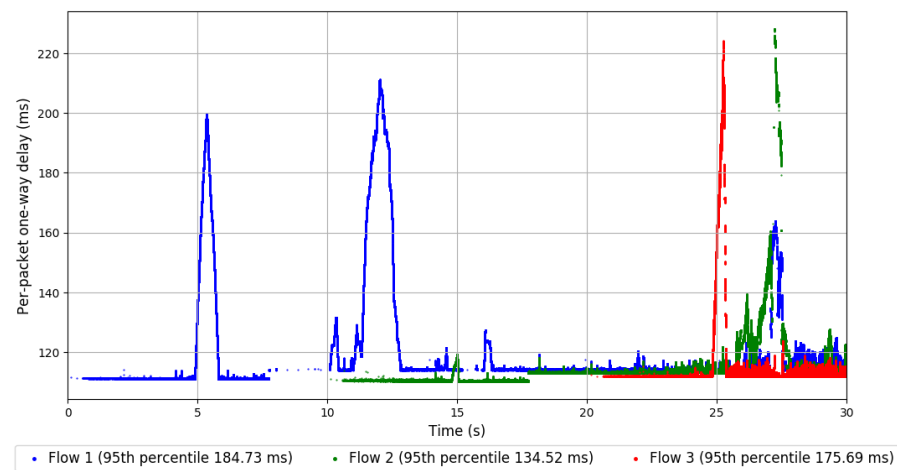
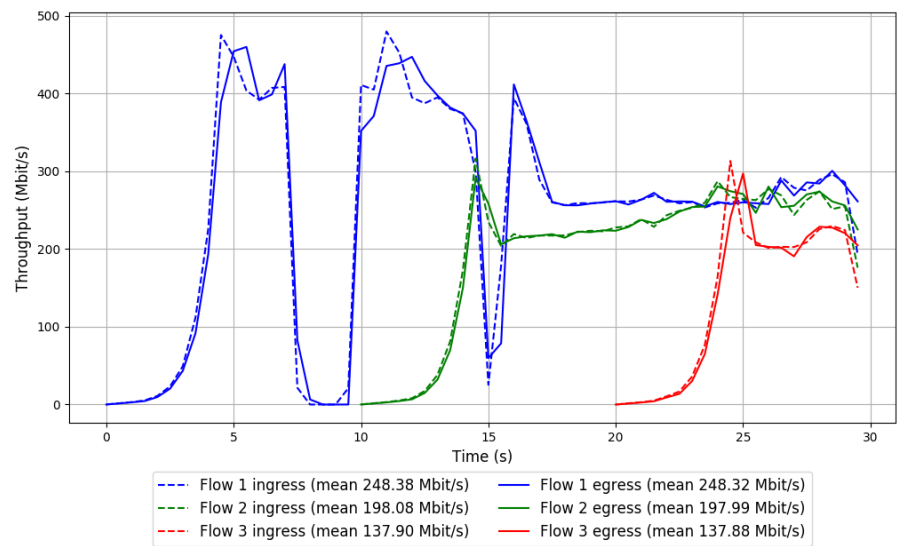
-- Flow 3:

Average throughput: 137.88 Mbit/s

95th percentile per-packet one-way delay: 175.686 ms

Loss rate: 0.02%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-04-11 08:28:19

End at: 2018-04-11 08:28:49

Below is generated by plot.py at 2018-04-11 12:36:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.87 Mbit/s

95th percentile per-packet one-way delay: 161.327 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 214.76 Mbit/s

95th percentile per-packet one-way delay: 169.576 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 182.20 Mbit/s

95th percentile per-packet one-way delay: 118.471 ms

Loss rate: 0.00%

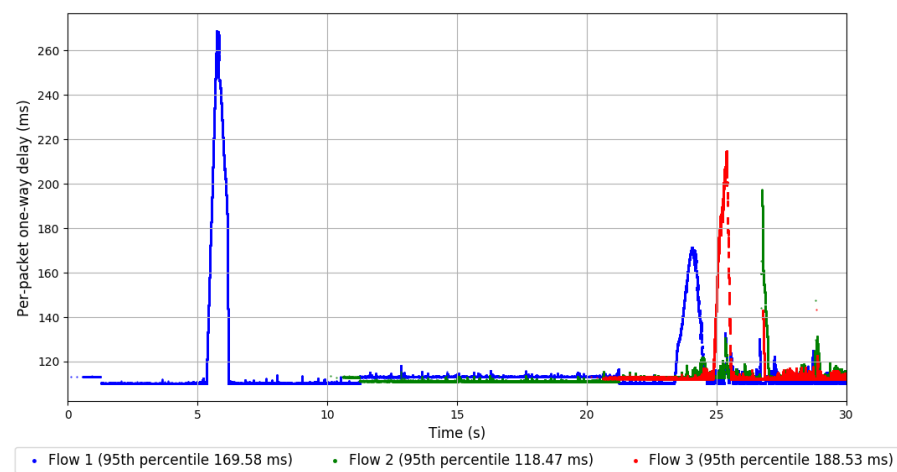
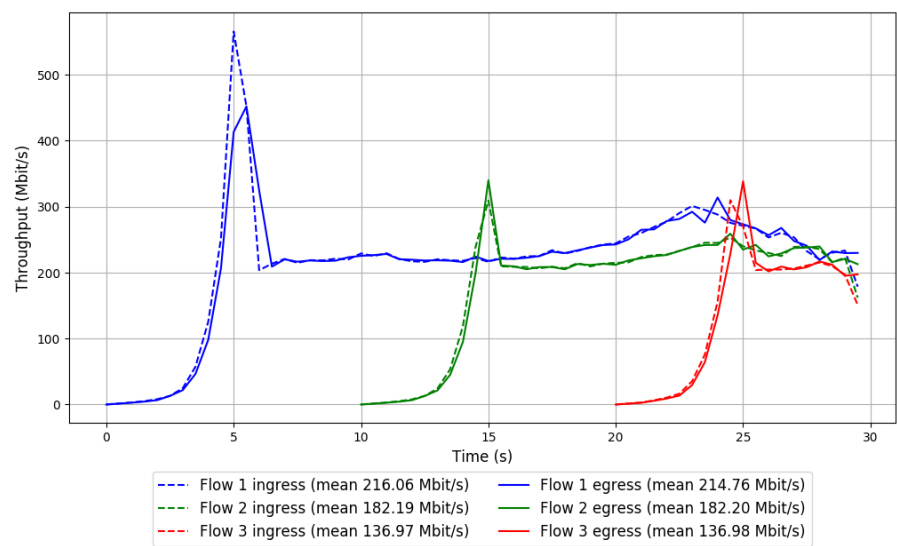
-- Flow 3:

Average throughput: 136.98 Mbit/s

95th percentile per-packet one-way delay: 188.533 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-04-11 08:47:13

End at: 2018-04-11 08:47:43

Below is generated by plot.py at 2018-04-11 12:36:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 366.57 Mbit/s

95th percentile per-packet one-way delay: 144.042 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 226.21 Mbit/s

95th percentile per-packet one-way delay: 163.296 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 175.15 Mbit/s

95th percentile per-packet one-way delay: 113.674 ms

Loss rate: 0.00%

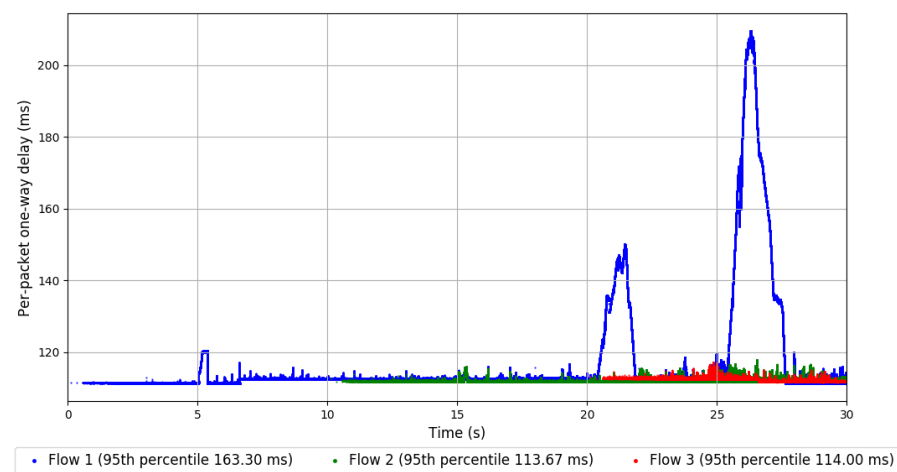
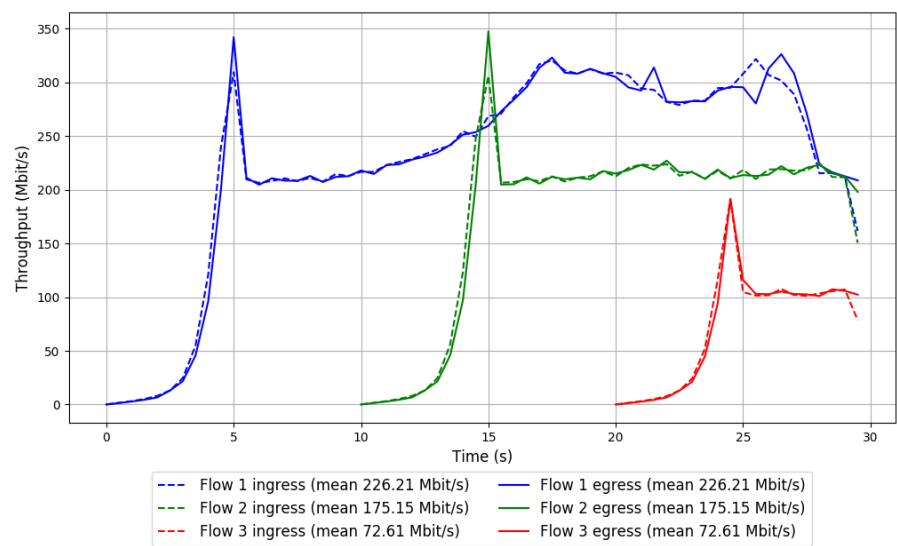
-- Flow 3:

Average throughput: 72.61 Mbit/s

95th percentile per-packet one-way delay: 114.001 ms

Loss rate: 0.01%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-04-11 09:05:33

End at: 2018-04-11 09:06:03

Below is generated by plot.py at 2018-04-11 12:37:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 408.48 Mbit/s

95th percentile per-packet one-way delay: 322.858 ms

Loss rate: 2.39%

-- Flow 1:

Average throughput: 237.25 Mbit/s

95th percentile per-packet one-way delay: 153.276 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 189.58 Mbit/s

95th percentile per-packet one-way delay: 340.403 ms

Loss rate: 6.82%

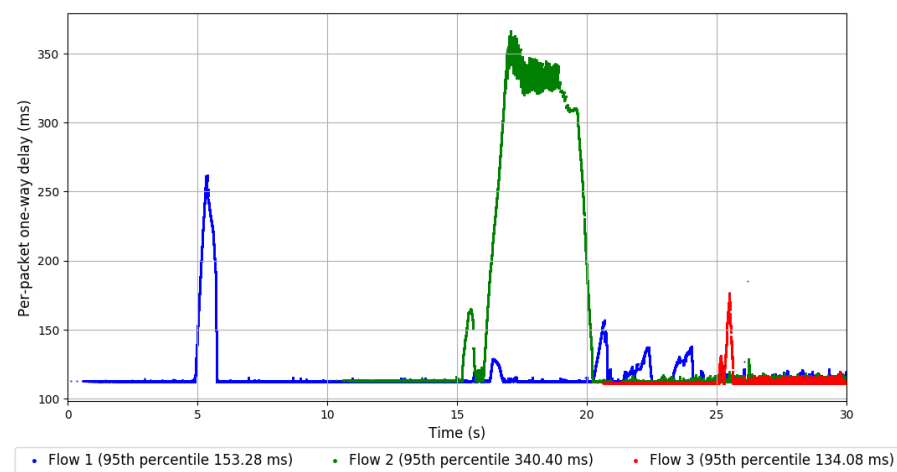
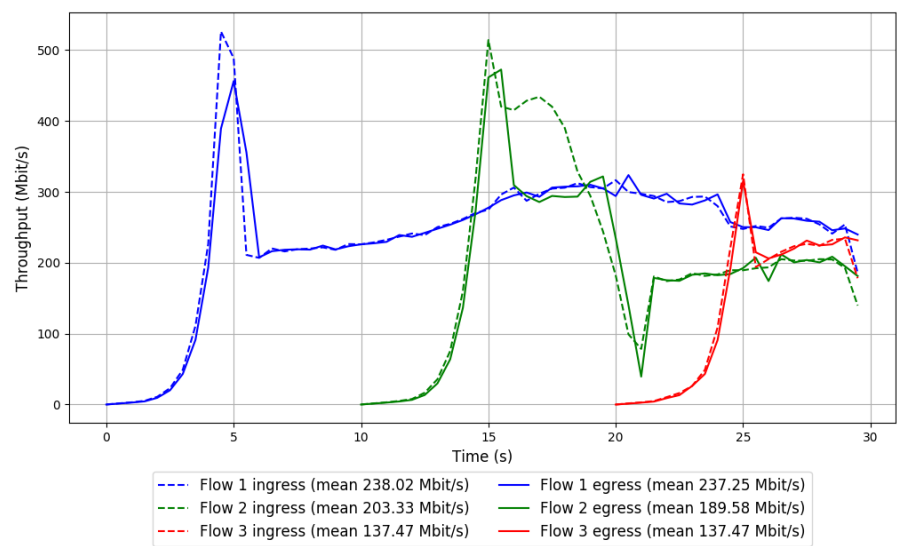
-- Flow 3:

Average throughput: 137.47 Mbit/s

95th percentile per-packet one-way delay: 134.080 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

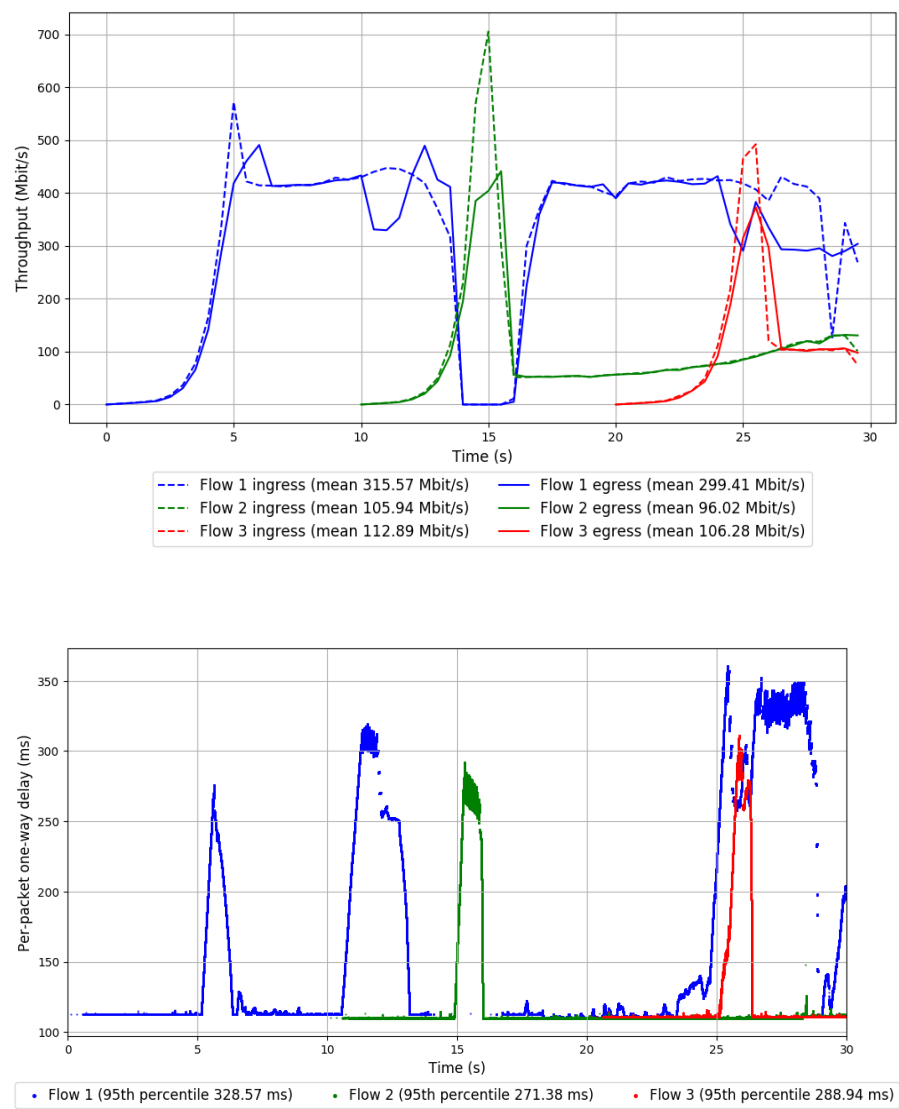


```
Run 1: Statistics of Vivace-loss

Start at: 2018-04-11 06:13:01
End at: 2018-04-11 06:13:31

# Below is generated by plot.py at 2018-04-11 12:38:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.16 Mbit/s
95th percentile per-packet one-way delay: 322.504 ms
Loss rate: 5.89%
-- Flow 1:
Average throughput: 299.41 Mbit/s
95th percentile per-packet one-way delay: 328.572 ms
Loss rate: 5.12%
-- Flow 2:
Average throughput: 96.02 Mbit/s
95th percentile per-packet one-way delay: 271.382 ms
Loss rate: 9.36%
-- Flow 3:
Average throughput: 106.28 Mbit/s
95th percentile per-packet one-way delay: 288.938 ms
Loss rate: 5.86%
```

Run 1: Report of Vivace-loss — Data Link

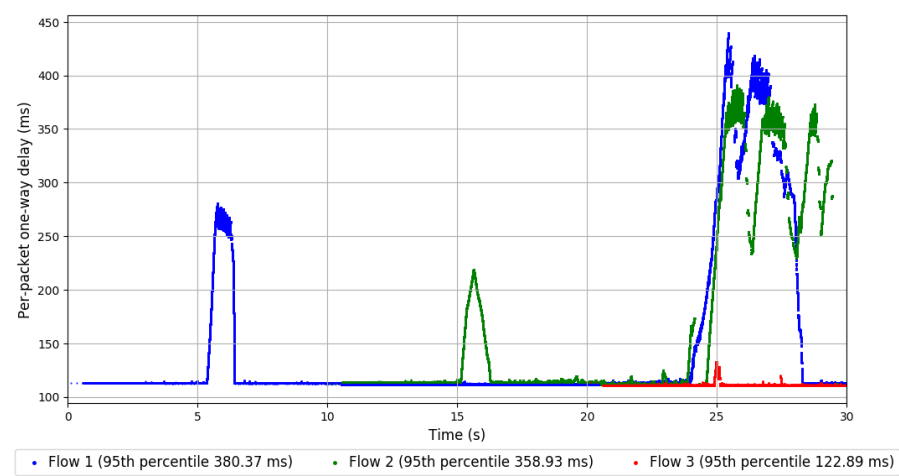
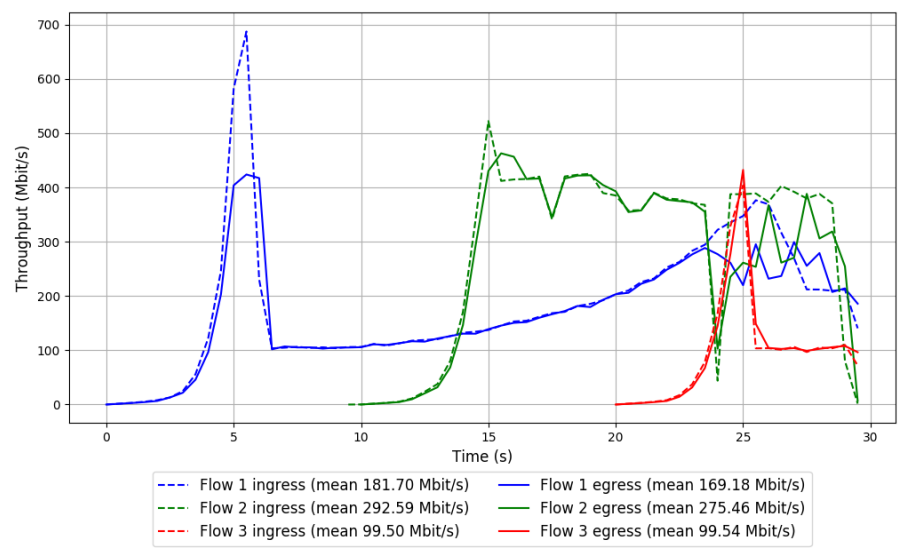


```
Run 2: Statistics of Vivace-loss

Start at: 2018-04-11 06:31:49
End at: 2018-04-11 06:32:19

# Below is generated by plot.py at 2018-04-11 12:39:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 382.47 Mbit/s
95th percentile per-packet one-way delay: 360.571 ms
Loss rate: 5.85%
-- Flow 1:
Average throughput: 169.18 Mbit/s
95th percentile per-packet one-way delay: 380.372 ms
Loss rate: 6.89%
-- Flow 2:
Average throughput: 275.46 Mbit/s
95th percentile per-packet one-way delay: 358.930 ms
Loss rate: 5.86%
-- Flow 3:
Average throughput: 99.54 Mbit/s
95th percentile per-packet one-way delay: 122.895 ms
Loss rate: 0.00%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-04-11 06:50:57

End at: 2018-04-11 06:51:27

Below is generated by plot.py at 2018-04-11 12:40:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 462.97 Mbit/s

95th percentile per-packet one-way delay: 308.166 ms

Loss rate: 2.40%

-- Flow 1:

Average throughput: 268.77 Mbit/s

95th percentile per-packet one-way delay: 306.227 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 239.97 Mbit/s

95th percentile per-packet one-way delay: 309.276 ms

Loss rate: 2.28%

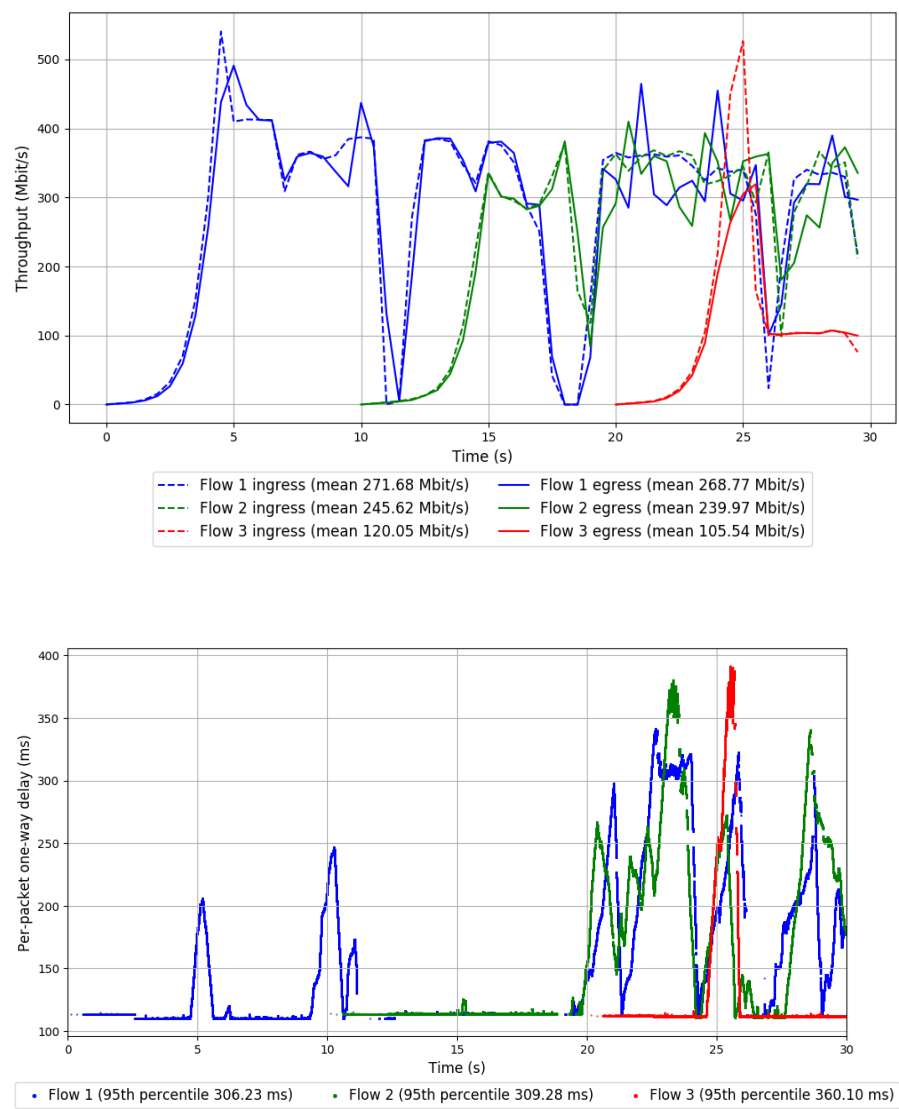
-- Flow 3:

Average throughput: 105.54 Mbit/s

95th percentile per-packet one-way delay: 360.100 ms

Loss rate: 12.10%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-04-11 07:10:02

End at: 2018-04-11 07:10:32

Below is generated by plot.py at 2018-04-11 12:42:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 445.53 Mbit/s

95th percentile per-packet one-way delay: 232.689 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 260.66 Mbit/s

95th percentile per-packet one-way delay: 165.002 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 240.68 Mbit/s

95th percentile per-packet one-way delay: 257.547 ms

Loss rate: 2.10%

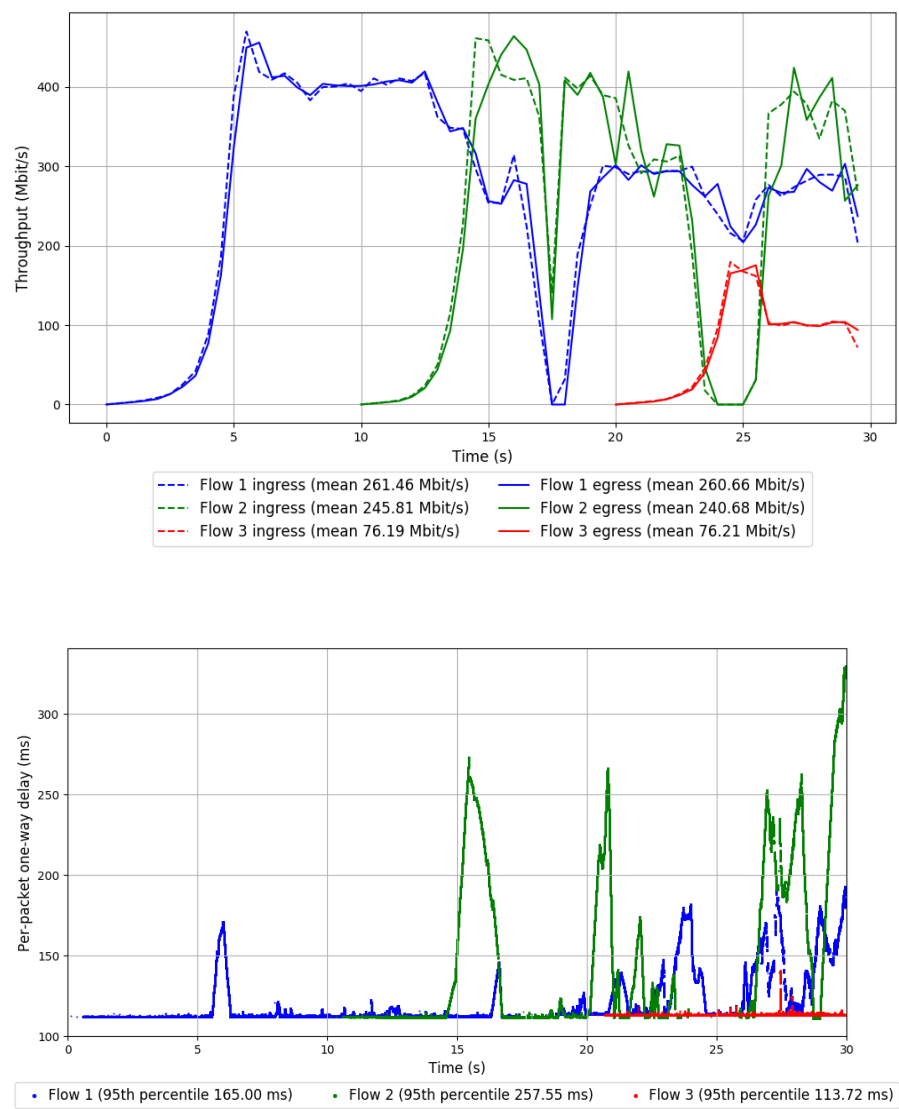
-- Flow 3:

Average throughput: 76.21 Mbit/s

95th percentile per-packet one-way delay: 113.717 ms

Loss rate: 0.01%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-04-11 07:29:20

End at: 2018-04-11 07:29:50

Below is generated by plot.py at 2018-04-11 12:43:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 425.81 Mbit/s

95th percentile per-packet one-way delay: 197.193 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 267.44 Mbit/s

95th percentile per-packet one-way delay: 185.631 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 195.83 Mbit/s

95th percentile per-packet one-way delay: 168.333 ms

Loss rate: 0.21%

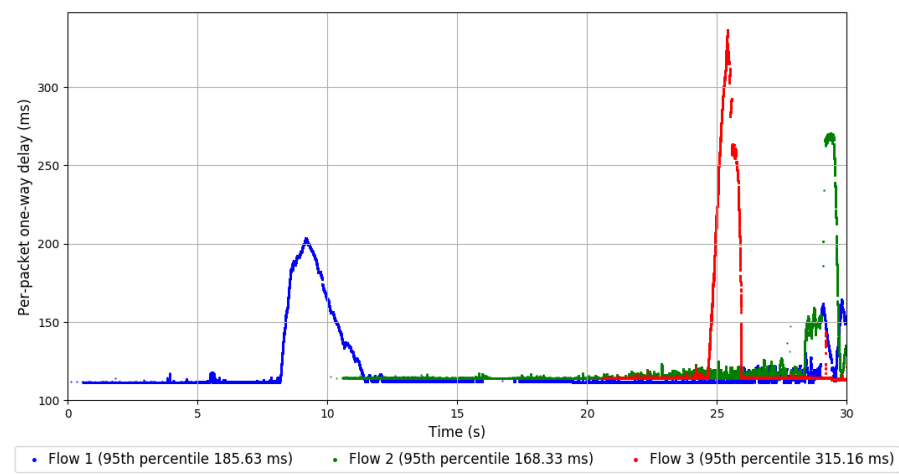
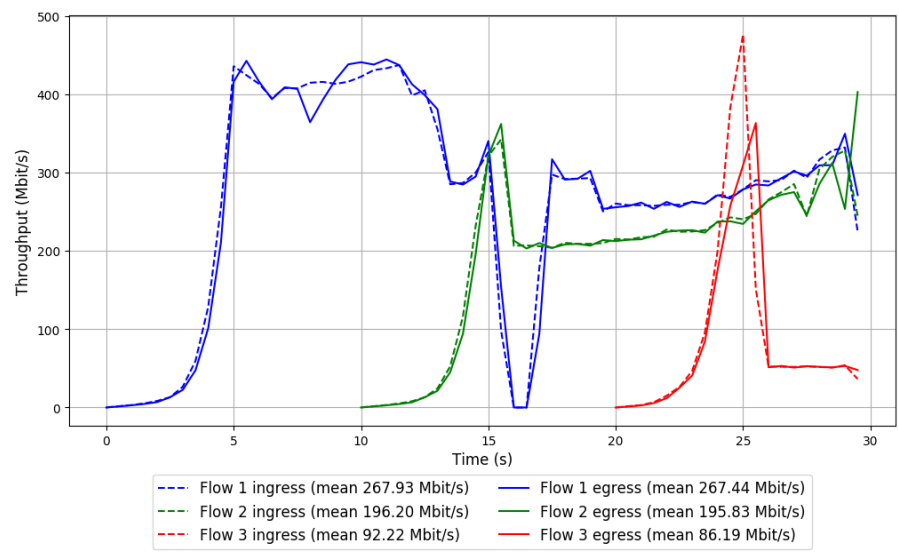
-- Flow 3:

Average throughput: 86.19 Mbit/s

95th percentile per-packet one-way delay: 315.161 ms

Loss rate: 6.49%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-04-11 07:48:22

End at: 2018-04-11 07:48:52

Below is generated by plot.py at 2018-04-11 12:43:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 437.21 Mbit/s

95th percentile per-packet one-way delay: 217.487 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 286.19 Mbit/s

95th percentile per-packet one-way delay: 238.415 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 179.56 Mbit/s

95th percentile per-packet one-way delay: 121.155 ms

Loss rate: 0.00%

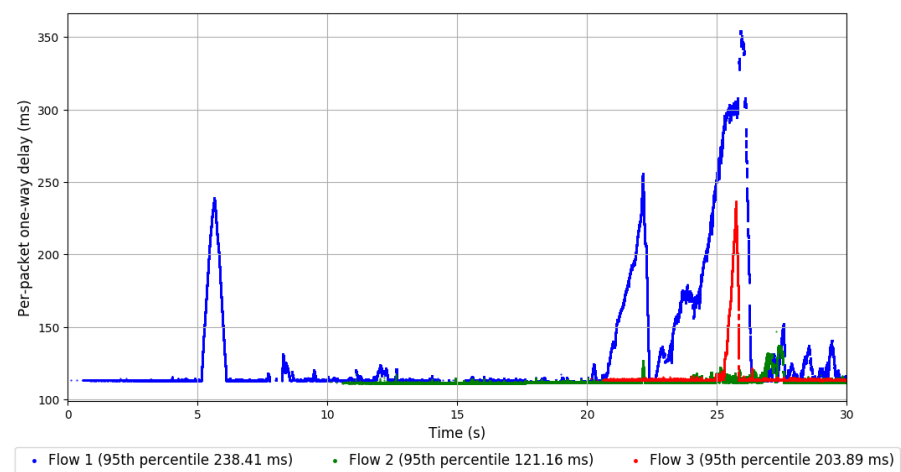
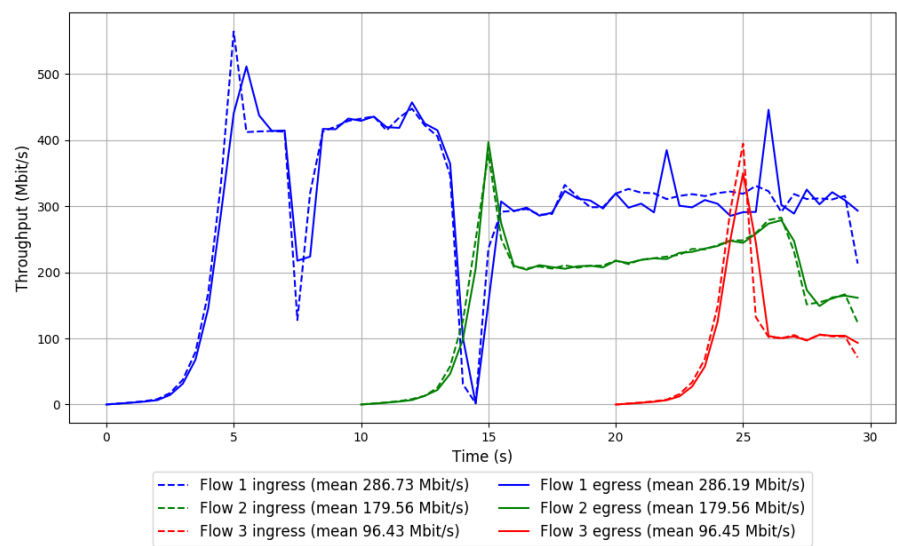
-- Flow 3:

Average throughput: 96.45 Mbit/s

95th percentile per-packet one-way delay: 203.893 ms

Loss rate: 0.00%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-04-11 08:07:26

End at: 2018-04-11 08:07:56

Below is generated by plot.py at 2018-04-11 12:44:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 478.36 Mbit/s

95th percentile per-packet one-way delay: 240.830 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 282.31 Mbit/s

95th percentile per-packet one-way delay: 231.704 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 245.36 Mbit/s

95th percentile per-packet one-way delay: 190.185 ms

Loss rate: 0.00%

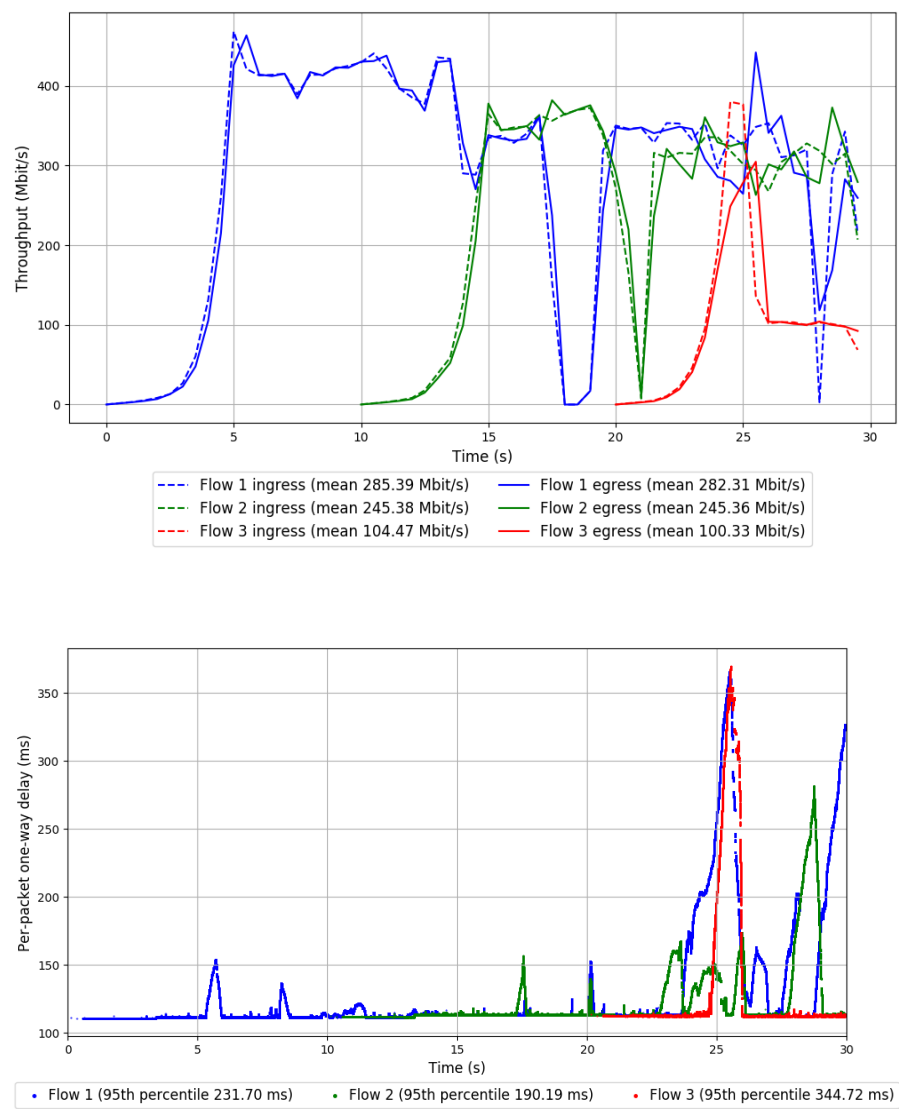
-- Flow 3:

Average throughput: 100.33 Mbit/s

95th percentile per-packet one-way delay: 344.718 ms

Loss rate: 3.97%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-04-11 08:26:51

End at: 2018-04-11 08:27:21

Below is generated by plot.py at 2018-04-11 12:46:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 521.72 Mbit/s

95th percentile per-packet one-way delay: 311.625 ms

Loss rate: 3.39%

-- Flow 1:

Average throughput: 339.63 Mbit/s

95th percentile per-packet one-way delay: 312.397 ms

Loss rate: 3.47%

-- Flow 2:

Average throughput: 205.84 Mbit/s

95th percentile per-packet one-way delay: 312.067 ms

Loss rate: 2.90%

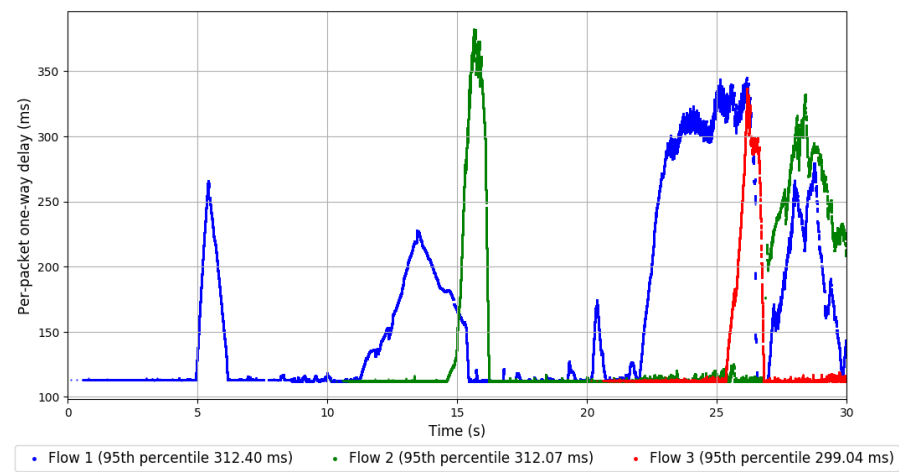
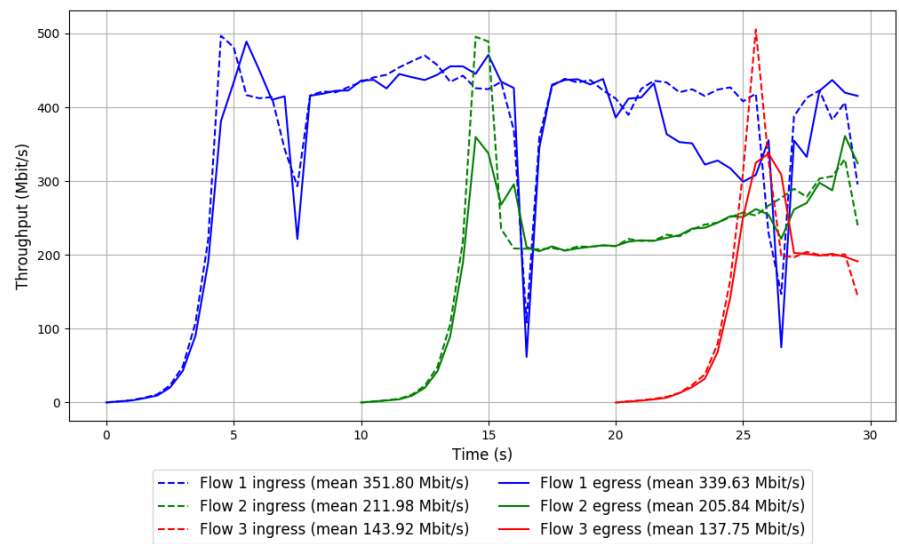
-- Flow 3:

Average throughput: 137.75 Mbit/s

95th percentile per-packet one-way delay: 299.041 ms

Loss rate: 4.29%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-04-11 08:45:52

End at: 2018-04-11 08:46:22

Below is generated by plot.py at 2018-04-11 12:46:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 432.34 Mbit/s

95th percentile per-packet one-way delay: 279.434 ms

Loss rate: 2.81%

-- Flow 1:

Average throughput: 183.36 Mbit/s

95th percentile per-packet one-way delay: 298.783 ms

Loss rate: 3.95%

-- Flow 2:

Average throughput: 265.09 Mbit/s

95th percentile per-packet one-way delay: 240.930 ms

Loss rate: 1.18%

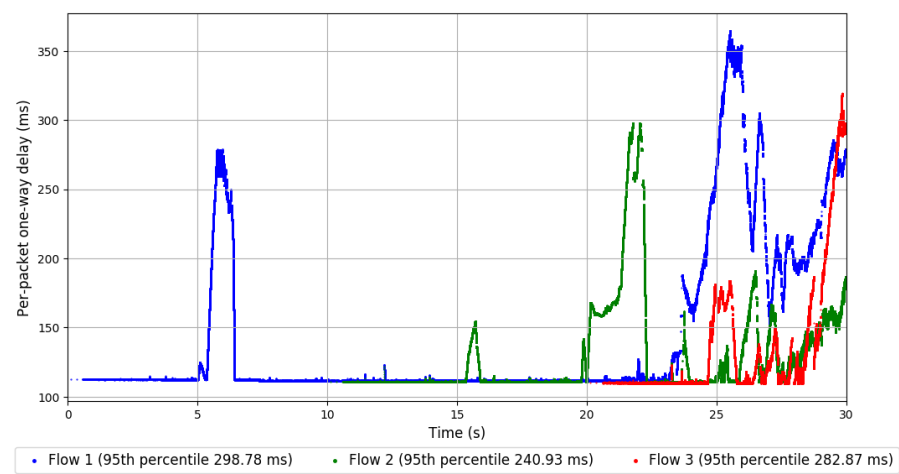
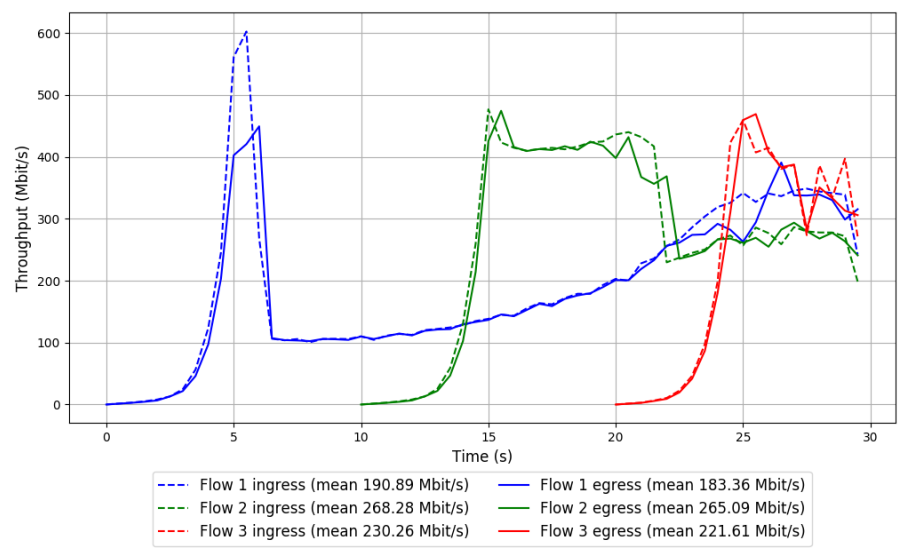
-- Flow 3:

Average throughput: 221.61 Mbit/s

95th percentile per-packet one-way delay: 282.872 ms

Loss rate: 3.74%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-04-11 09:04:22

End at: 2018-04-11 09:04:52

Below is generated by plot.py at 2018-04-11 12:46:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.90 Mbit/s

95th percentile per-packet one-way delay: 340.697 ms

Loss rate: 5.01%

-- Flow 1:

Average throughput: 174.99 Mbit/s

95th percentile per-packet one-way delay: 351.379 ms

Loss rate: 7.25%

-- Flow 2:

Average throughput: 122.68 Mbit/s

95th percentile per-packet one-way delay: 113.895 ms

Loss rate: 0.00%

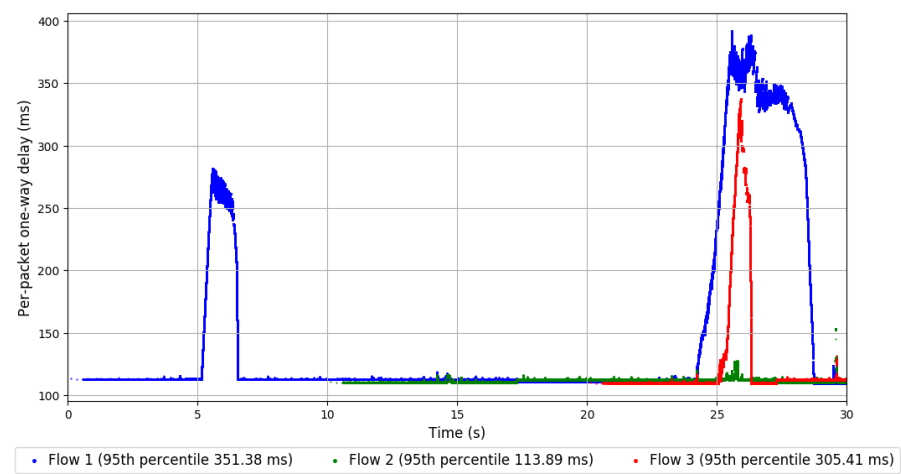
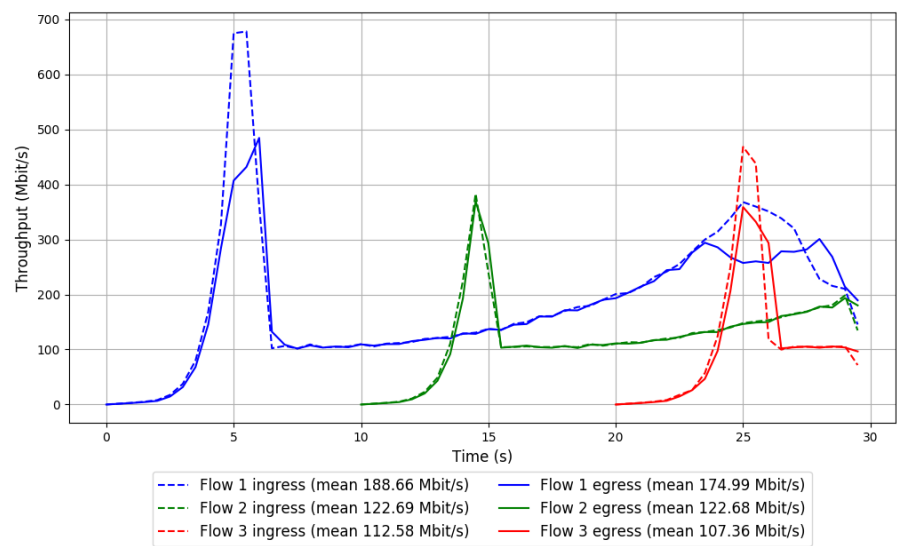
-- Flow 3:

Average throughput: 107.36 Mbit/s

95th percentile per-packet one-way delay: 305.411 ms

Loss rate: 4.63%

Run 10: Report of Vivace-loss — Data Link

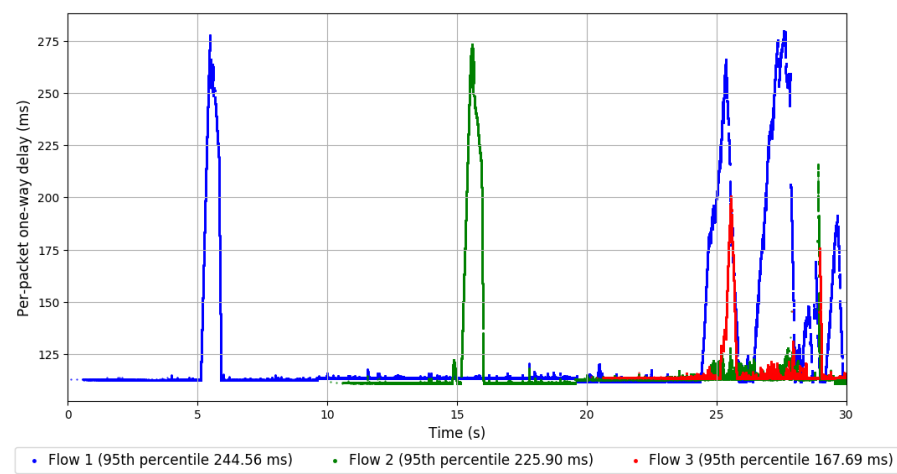
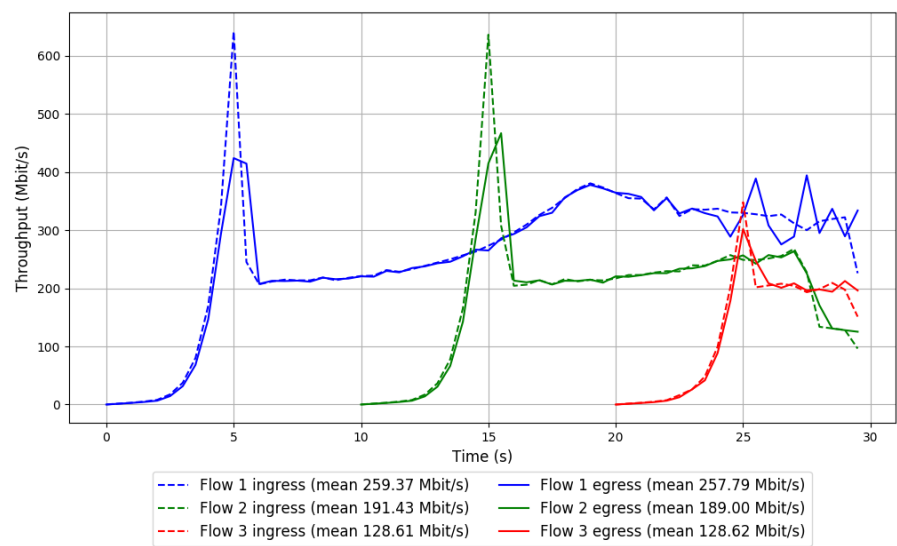


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-04-11 06:24:10
End at: 2018-04-11 06:24:40

# Below is generated by plot.py at 2018-04-11 12:48:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.69 Mbit/s
95th percentile per-packet one-way delay: 233.907 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 257.79 Mbit/s
95th percentile per-packet one-way delay: 244.561 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 189.00 Mbit/s
95th percentile per-packet one-way delay: 225.898 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 128.62 Mbit/s
95th percentile per-packet one-way delay: 167.693 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-04-11 06:42:52

End at: 2018-04-11 06:43:22

Below is generated by plot.py at 2018-04-11 12:52:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 516.62 Mbit/s

95th percentile per-packet one-way delay: 342.017 ms

Loss rate: 5.05%

-- Flow 1:

Average throughput: 298.31 Mbit/s

95th percentile per-packet one-way delay: 354.726 ms

Loss rate: 5.99%

-- Flow 2:

Average throughput: 229.51 Mbit/s

95th percentile per-packet one-way delay: 311.605 ms

Loss rate: 1.33%

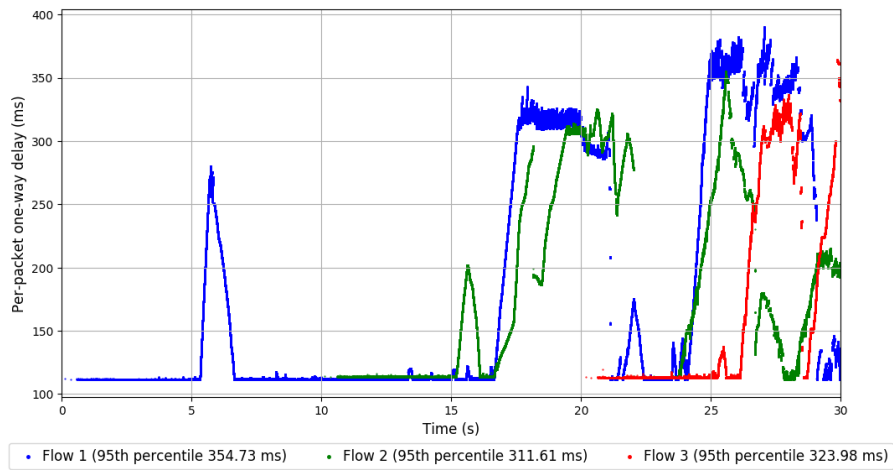
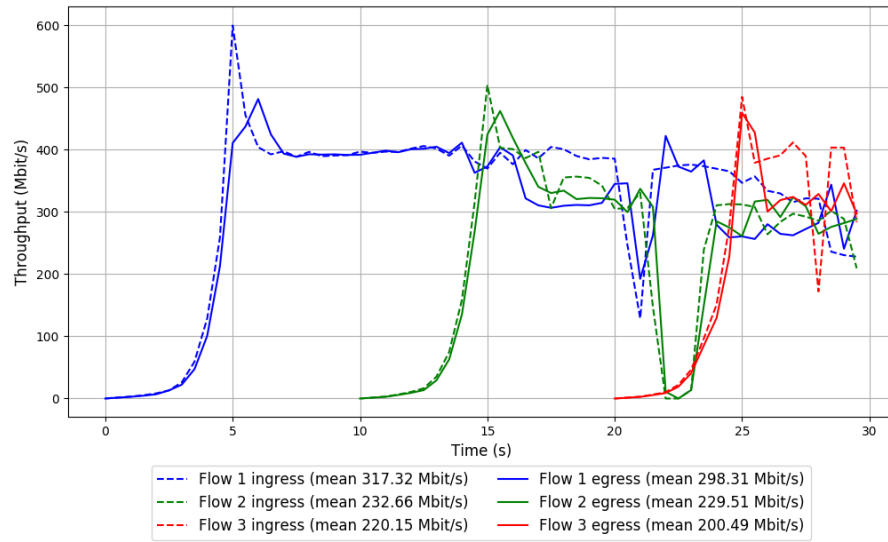
-- Flow 3:

Average throughput: 200.49 Mbit/s

95th percentile per-packet one-way delay: 323.978 ms

Loss rate: 8.87%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-04-11 07:02:09

End at: 2018-04-11 07:02:39

Below is generated by plot.py at 2018-04-11 12:52:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 342.41 Mbit/s

95th percentile per-packet one-way delay: 120.509 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 221.22 Mbit/s

95th percentile per-packet one-way delay: 120.836 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 113.04 Mbit/s

95th percentile per-packet one-way delay: 112.896 ms

Loss rate: 0.01%

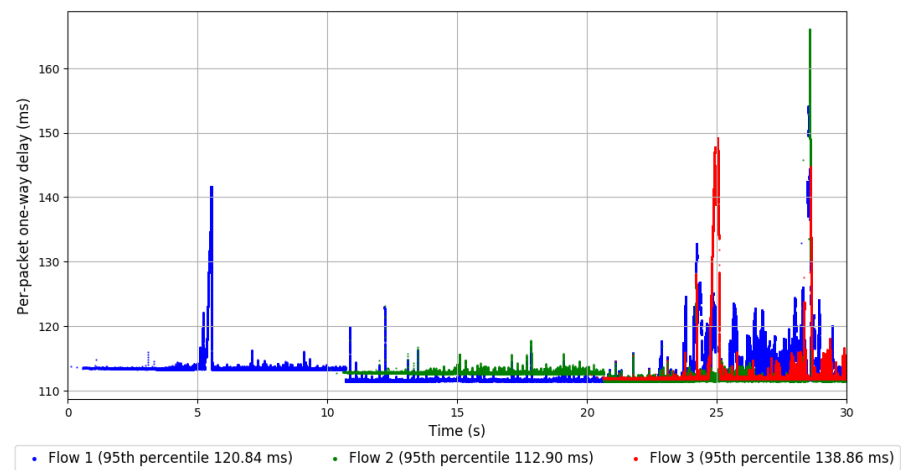
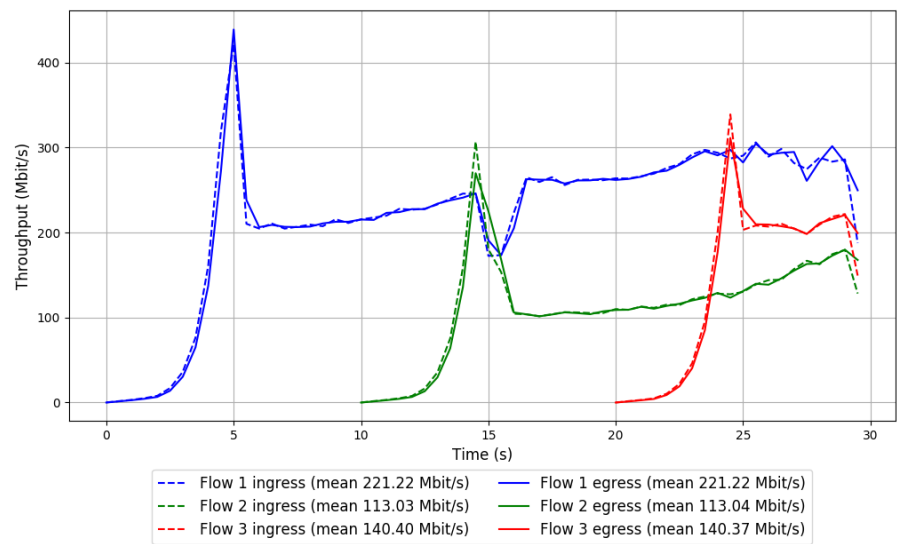
-- Flow 3:

Average throughput: 140.37 Mbit/s

95th percentile per-packet one-way delay: 138.856 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-04-11 07:21:26

End at: 2018-04-11 07:21:56

Below is generated by plot.py at 2018-04-11 12:52:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 442.65 Mbit/s

95th percentile per-packet one-way delay: 184.142 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 283.88 Mbit/s

95th percentile per-packet one-way delay: 153.835 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 187.00 Mbit/s

95th percentile per-packet one-way delay: 123.157 ms

Loss rate: 0.00%

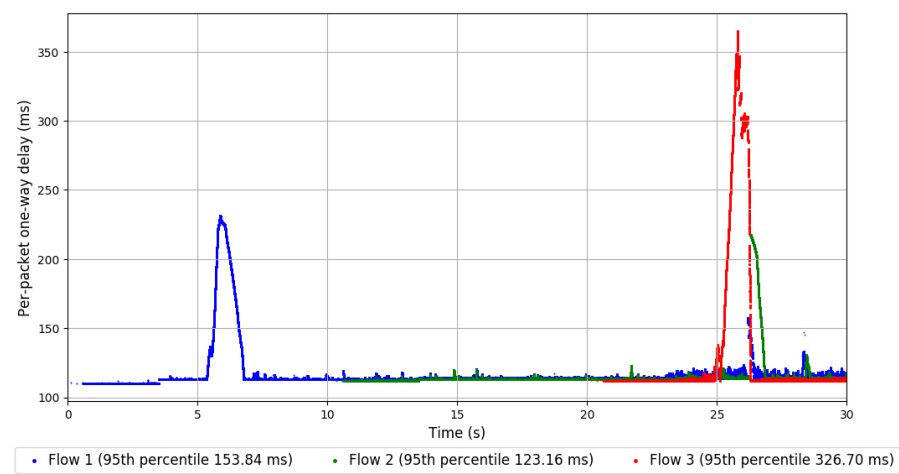
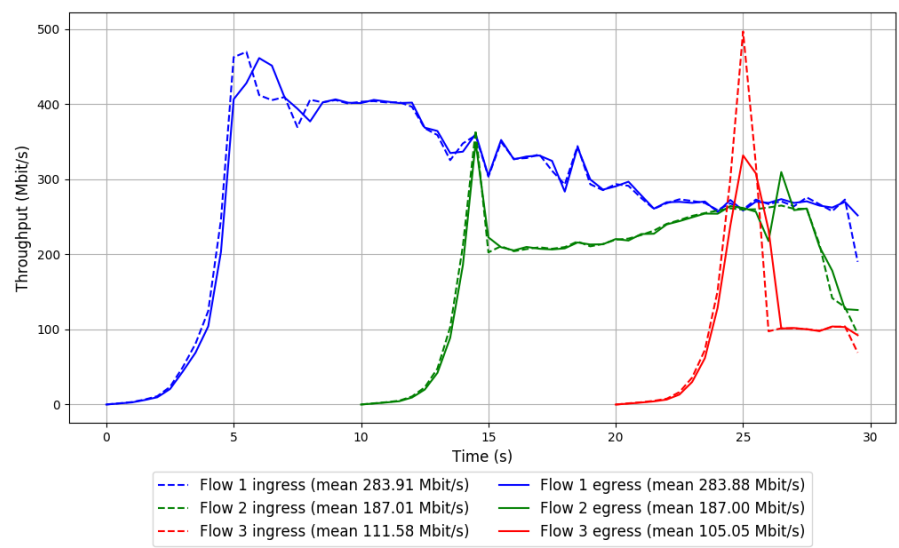
-- Flow 3:

Average throughput: 105.05 Mbit/s

95th percentile per-packet one-way delay: 326.700 ms

Loss rate: 5.86%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-04-11 07:40:28

End at: 2018-04-11 07:40:58

Below is generated by plot.py at 2018-04-11 12:52:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 402.30 Mbit/s

95th percentile per-packet one-way delay: 151.752 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 231.79 Mbit/s

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

Loss rate: 0.37%

-- Flow 2:

Average throughput: 194.89 Mbit/s

95th percentile per-packet one-way delay: 117.520 ms

Loss rate: 0.01%

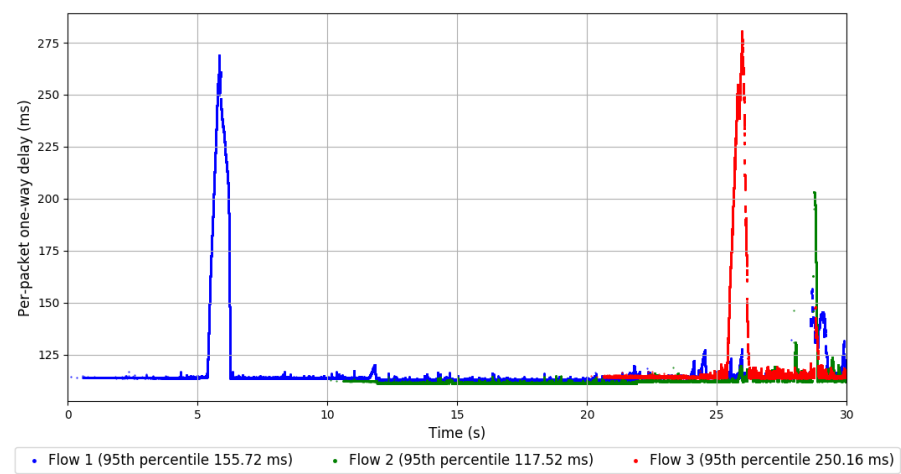
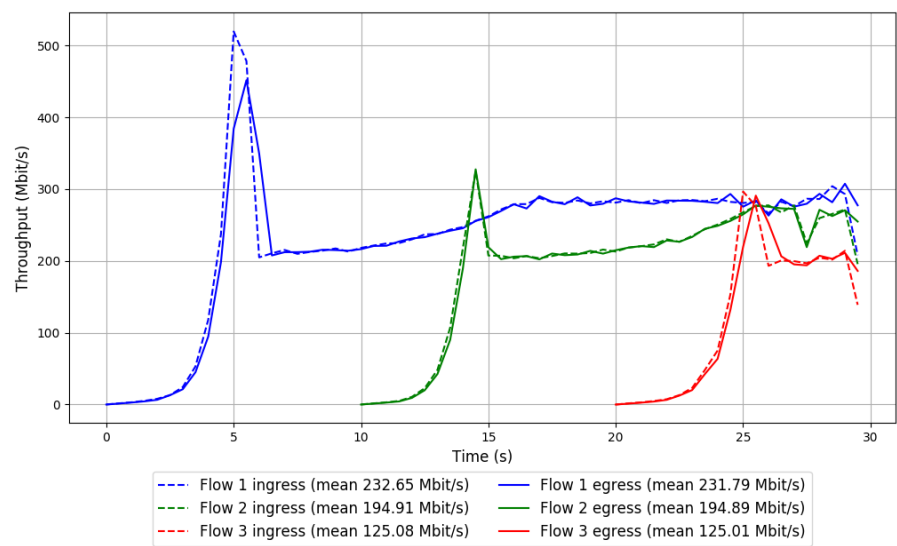
-- Flow 3:

Average throughput: 125.01 Mbit/s

95th percentile per-packet one-way delay: 250.164 ms

Loss rate: 0.07%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-04-11 07:59:28

End at: 2018-04-11 07:59:58

Below is generated by plot.py at 2018-04-11 12:52:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 433.95 Mbit/s

95th percentile per-packet one-way delay: 291.145 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 309.19 Mbit/s

95th percentile per-packet one-way delay: 294.418 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 120.32 Mbit/s

95th percentile per-packet one-way delay: 270.758 ms

Loss rate: 4.09%

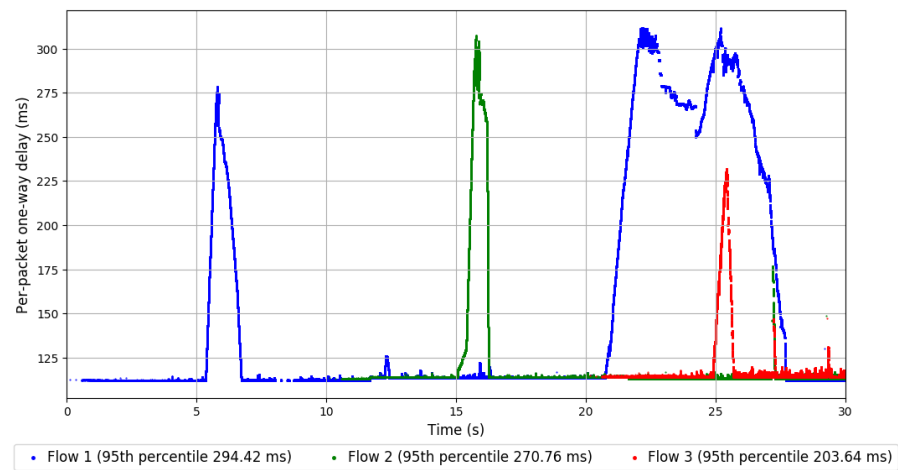
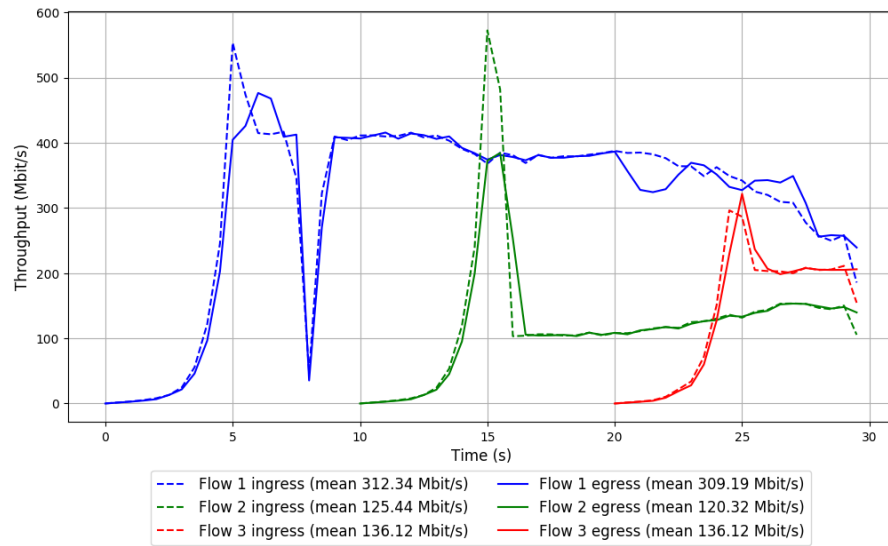
-- Flow 3:

Average throughput: 136.12 Mbit/s

95th percentile per-packet one-way delay: 203.637 ms

Loss rate: 0.03%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-04-11 08:18:50

End at: 2018-04-11 08:19:20

Below is generated by plot.py at 2018-04-11 12:53:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 422.14 Mbit/s

95th percentile per-packet one-way delay: 162.158 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 250.41 Mbit/s

95th percentile per-packet one-way delay: 188.984 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 190.32 Mbit/s

95th percentile per-packet one-way delay: 135.599 ms

Loss rate: 0.00%

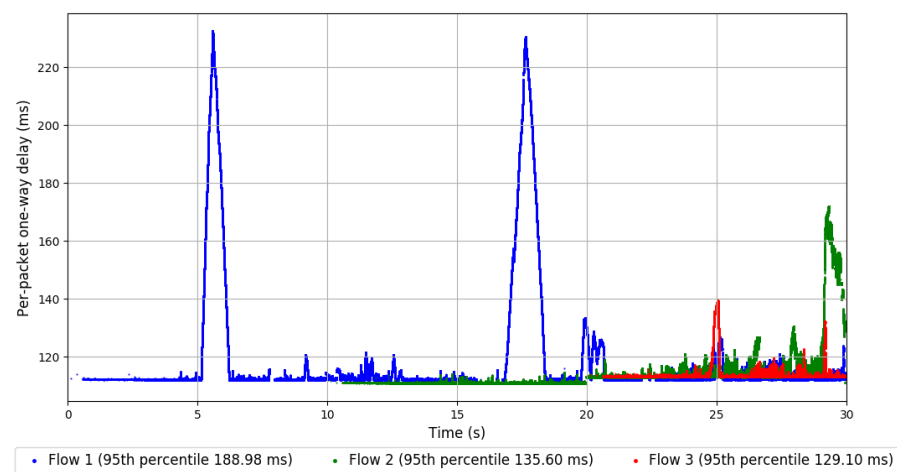
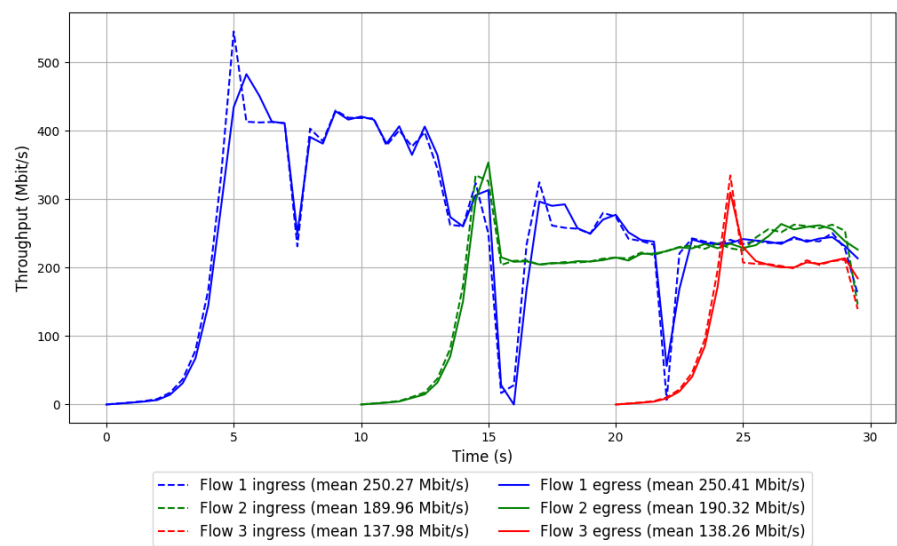
-- Flow 3:

Average throughput: 138.26 Mbit/s

95th percentile per-packet one-way delay: 129.099 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-04-11 08:38:03

End at: 2018-04-11 08:38:33

Below is generated by plot.py at 2018-04-11 12:53:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 418.54 Mbit/s

95th percentile per-packet one-way delay: 227.773 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 252.60 Mbit/s

95th percentile per-packet one-way delay: 247.981 ms

Loss rate: 1.30%

-- Flow 2:

Average throughput: 184.70 Mbit/s

95th percentile per-packet one-way delay: 133.813 ms

Loss rate: 0.00%

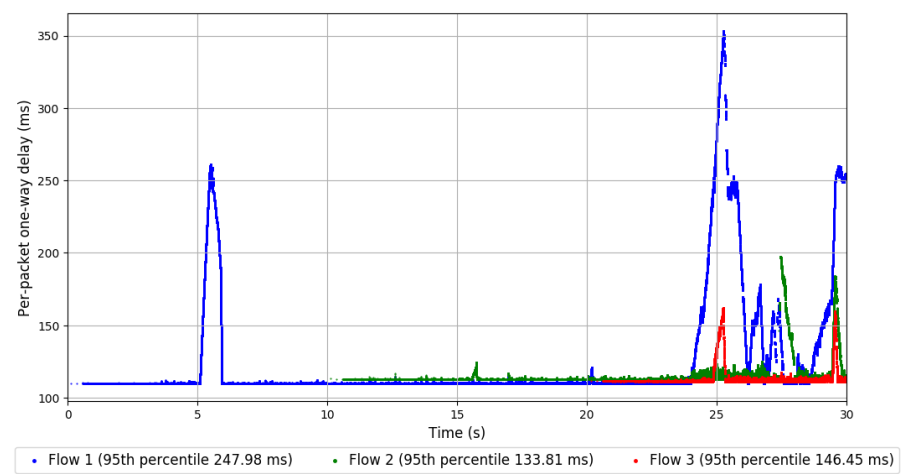
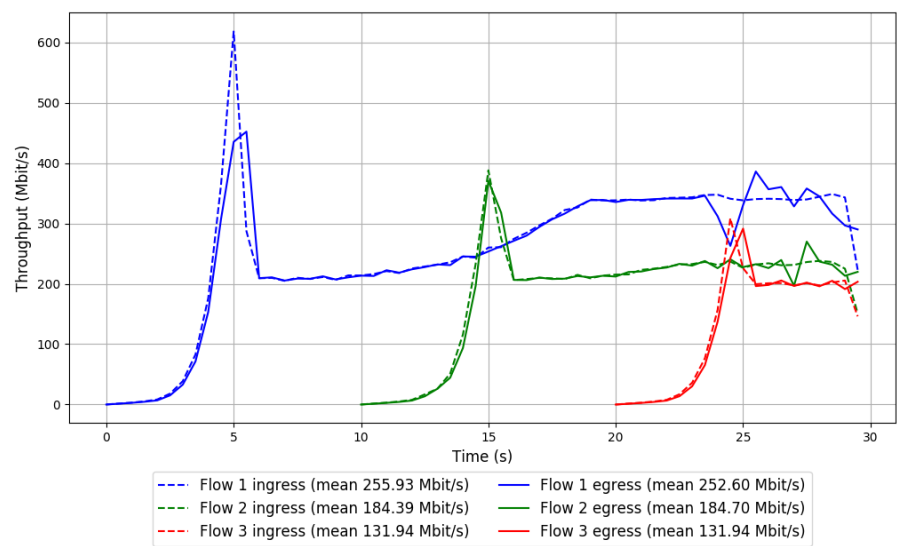
-- Flow 3:

Average throughput: 131.94 Mbit/s

95th percentile per-packet one-way delay: 146.447 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-04-11 08:56:53

End at: 2018-04-11 08:57:23

Below is generated by plot.py at 2018-04-11 12:53:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 333.76 Mbit/s

95th percentile per-packet one-way delay: 320.960 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 234.84 Mbit/s

95th percentile per-packet one-way delay: 320.817 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 82.33 Mbit/s

95th percentile per-packet one-way delay: 335.170 ms

Loss rate: 7.96%

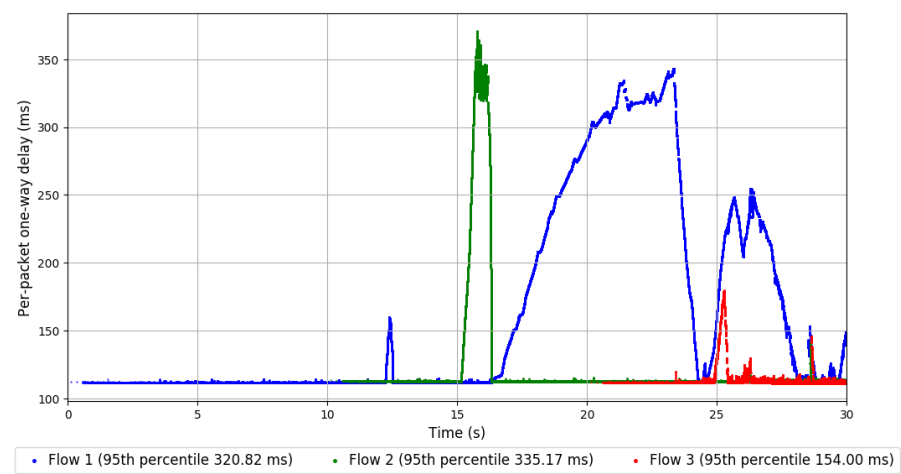
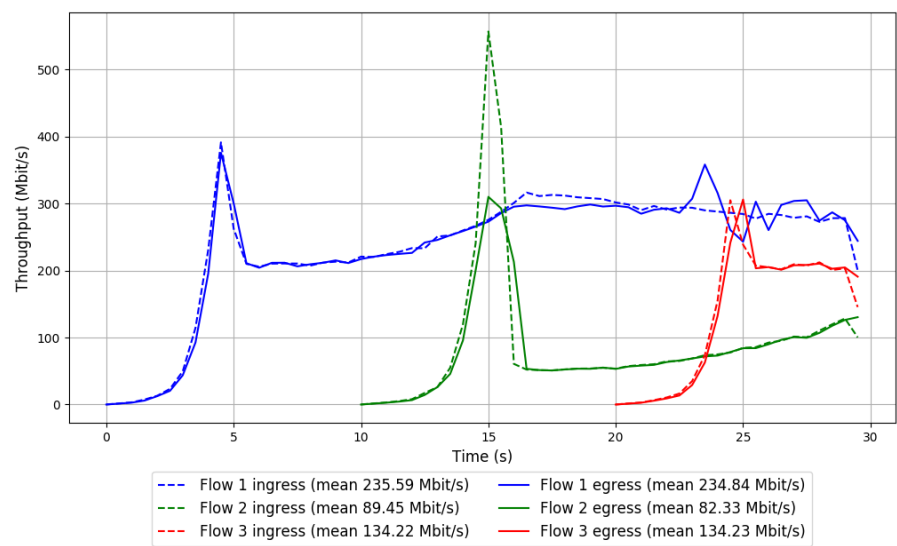
-- Flow 3:

Average throughput: 134.23 Mbit/s

95th percentile per-packet one-way delay: 154.003 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-04-11 09:15:14

End at: 2018-04-11 09:15:44

Below is generated by plot.py at 2018-04-11 12:53:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 407.79 Mbit/s

95th percentile per-packet one-way delay: 292.360 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 234.24 Mbit/s

95th percentile per-packet one-way delay: 302.028 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 190.04 Mbit/s

95th percentile per-packet one-way delay: 124.109 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 143.59 Mbit/s

95th percentile per-packet one-way delay: 211.778 ms

Loss rate: 0.00%

Run 10: Report of Vivace-LTE — Data Link

