

Pantheon Report

Generated at 2017-09-22 07:14:32 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

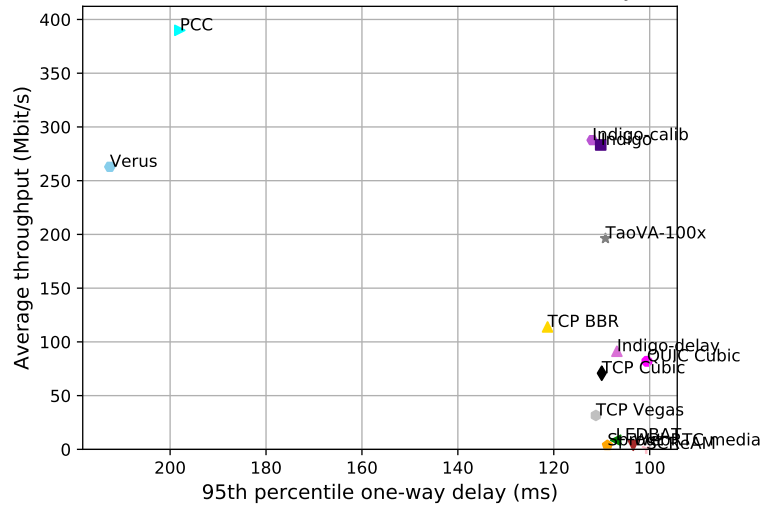
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

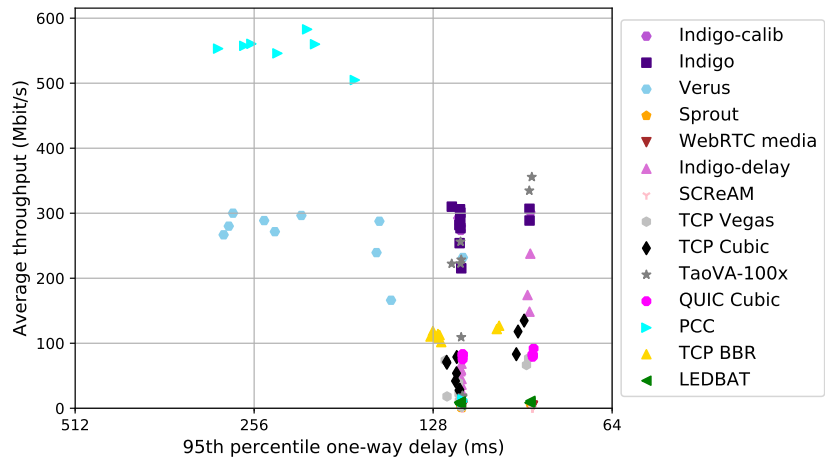
Git summary:

```
branch: indigos @ 46c7c812d4acb71eea4f5fb0b03b3657cea3062f
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



test from GCE Iowa Ethernet to GCE Sydney 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	55.70	57.66	60.61	120.85	121.71	121.86	0.20	0.02	0.24
TCP Cubic	10	32.90	49.64	14.85	109.05	110.00	108.65	0.16	0.34	0.24
LEDBAT	10	5.10	4.04	2.27	107.06	107.11	106.89	0.14	0.05	0.21
PCC	10	362.01	37.06	9.93	199.50	175.08	154.30	1.29	0.69	0.89
QUIC Cubic	10	46.28	39.41	29.44	86.83	95.09	95.95	0.00	0.05	0.07
SCReAM	10	0.22	0.22	0.21	92.37	92.53	92.61	0.00	0.00	0.07
WebRTC media	10	2.08	1.25	0.40	89.63	95.21	106.22	0.01	0.06	0.38
Sprout	9	1.73	2.56	1.09	108.65	108.78	108.57	0.25	0.25	0.11
TaoVA-100x	9	142.59	65.38	48.37	109.12	108.91	109.04	0.05	0.06	0.04
TCP Vegas	10	18.01	7.88	24.61	110.09	109.74	112.96	0.15	0.21	0.01
Verus	10	163.20	110.22	84.37	198.45	184.40	203.58	1.34	1.40	2.49
Indigo	10	149.71	146.26	109.01	109.70	111.08	112.39	0.05	0.11	0.22
Indigo-calib	8	156.01	148.73	103.60	111.60	112.27	113.00	0.07	0.11	0.28
Indigo-delay	10	49.56	46.04	35.40	106.73	106.89	107.16	0.05	0.04	0.34

Run 1: Statistics of TCP BBR

Start at: 2017-09-22 03:20:13

End at: 2017-09-22 03:20:43

Below is generated by plot.py at 2017-09-22 06:30:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.88 Mbit/s

95th percentile per-packet one-way delay: 100.037 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 63.74 Mbit/s

95th percentile per-packet one-way delay: 100.224 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 54.98 Mbit/s

95th percentile per-packet one-way delay: 99.825 ms

Loss rate: 0.01%

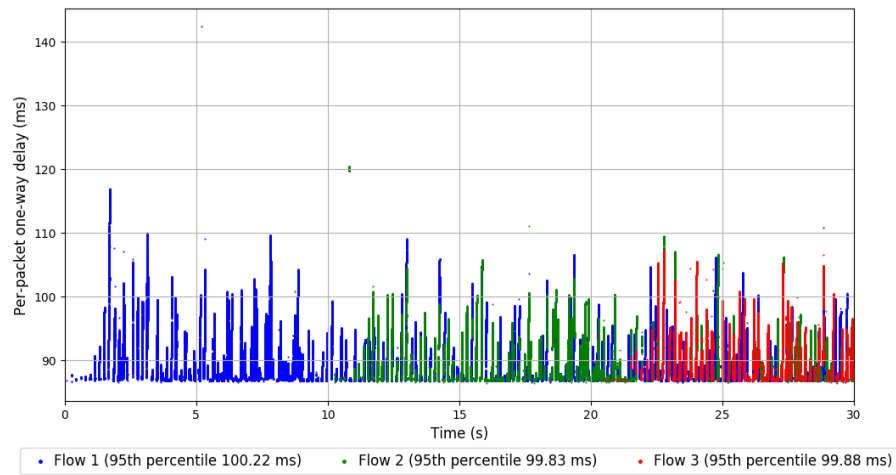
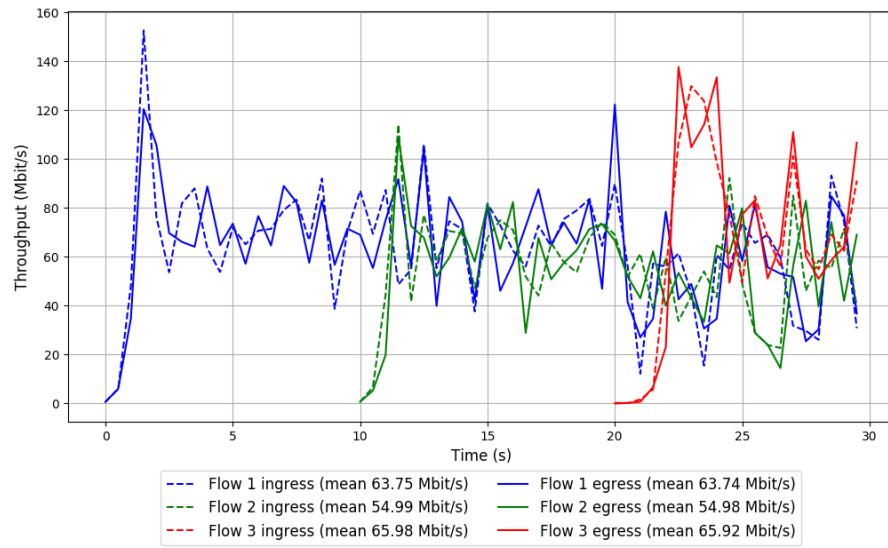
-- Flow 3:

Average throughput: 65.92 Mbit/s

95th percentile per-packet one-way delay: 99.876 ms

Loss rate: 0.03%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-09-22 03:33:28

End at: 2017-09-22 03:33:58

Below is generated by plot.py at 2017-09-22 06:30:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.95 Mbit/s

95th percentile per-packet one-way delay: 99.121 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 63.67 Mbit/s

95th percentile per-packet one-way delay: 98.783 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 65.04 Mbit/s

95th percentile per-packet one-way delay: 100.368 ms

Loss rate: 0.02%

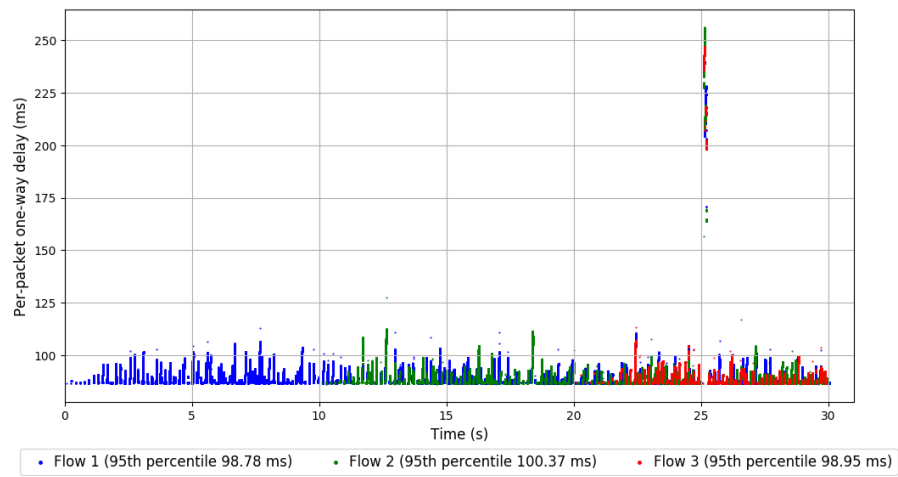
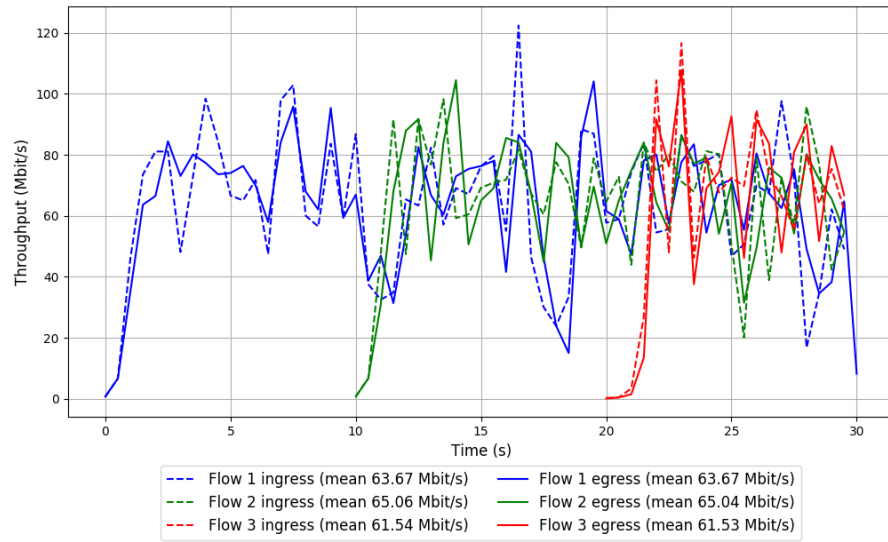
-- Flow 3:

Average throughput: 61.53 Mbit/s

95th percentile per-packet one-way delay: 98.953 ms

Loss rate: 0.02%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-09-22 03:46:30

End at: 2017-09-22 03:47:00

Below is generated by plot.py at 2017-09-22 06:30:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.77 Mbit/s

95th percentile per-packet one-way delay: 128.111 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 61.46 Mbit/s

95th percentile per-packet one-way delay: 127.220 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 64.88 Mbit/s

95th percentile per-packet one-way delay: 128.477 ms

Loss rate: 0.00%

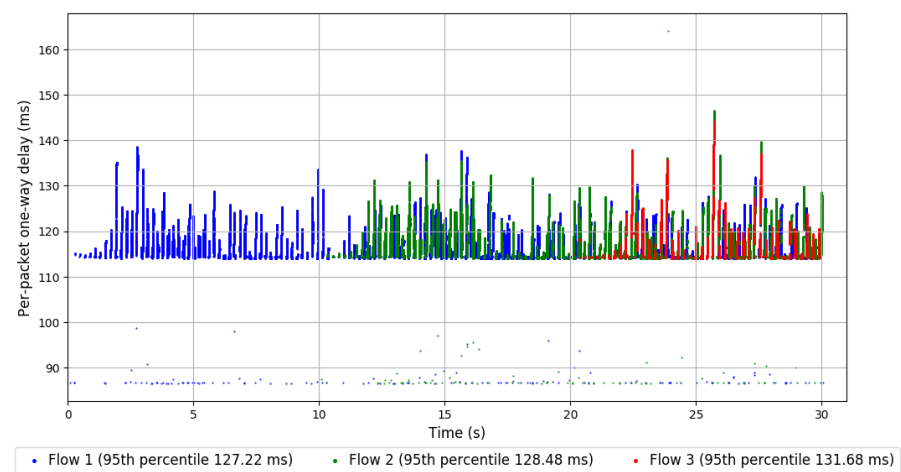
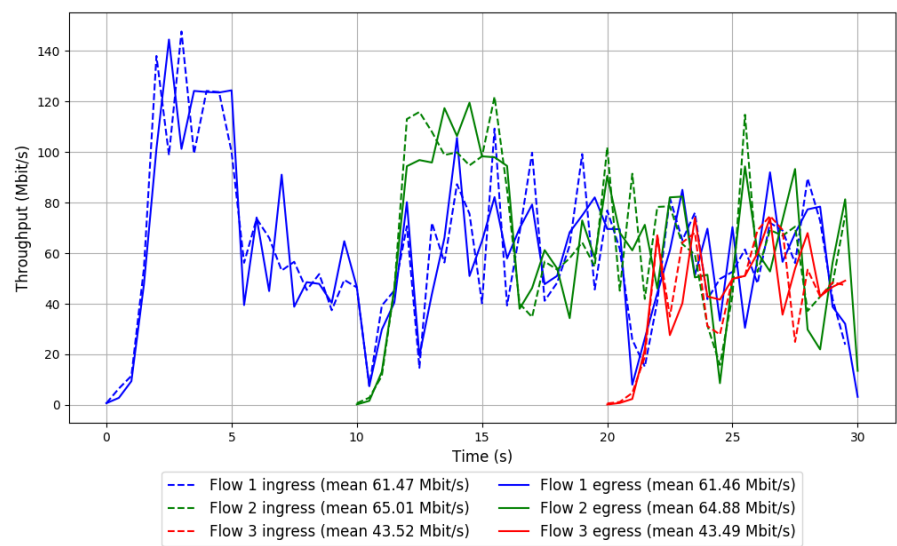
-- Flow 3:

Average throughput: 43.49 Mbit/s

95th percentile per-packet one-way delay: 131.676 ms

Loss rate: 0.01%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-09-22 03:58:41

End at: 2017-09-22 03:59:11

Below is generated by plot.py at 2017-09-22 06:30:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.25 Mbit/s

95th percentile per-packet one-way delay: 125.310 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 56.78 Mbit/s

95th percentile per-packet one-way delay: 125.159 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 53.28 Mbit/s

95th percentile per-packet one-way delay: 126.277 ms

Loss rate: 0.00%

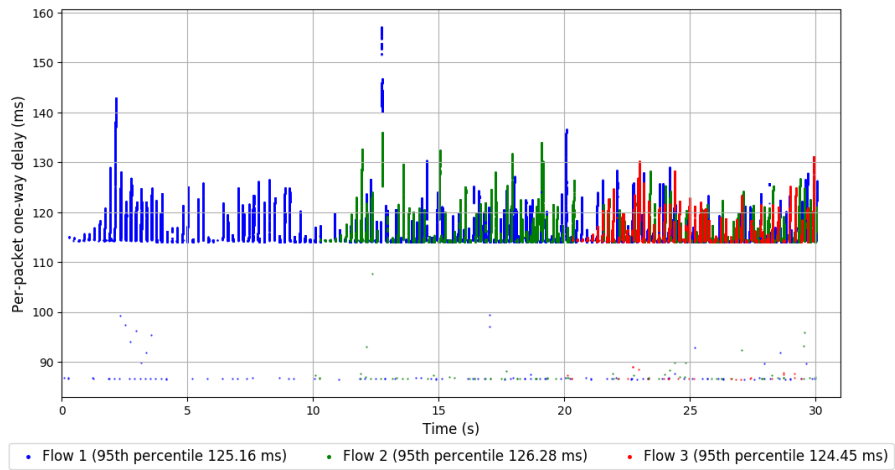
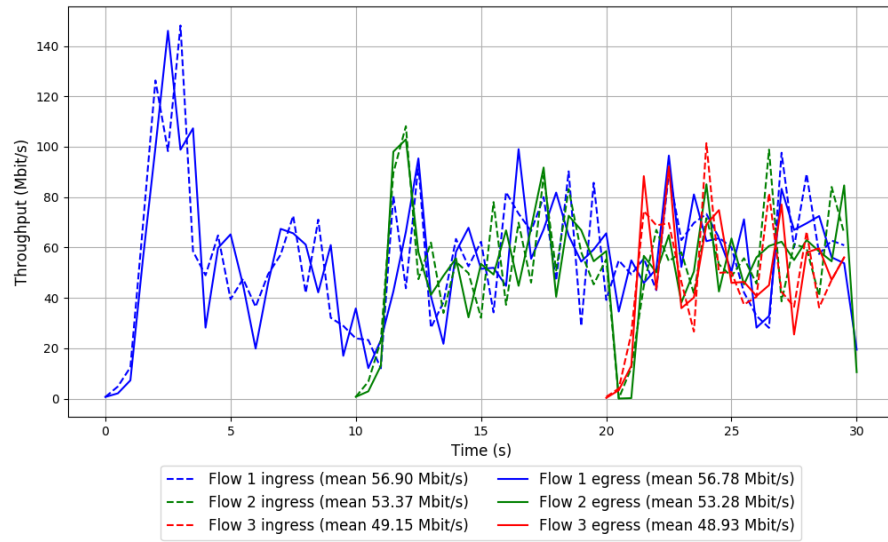
-- Flow 3:

Average throughput: 48.93 Mbit/s

95th percentile per-packet one-way delay: 124.451 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-09-22 04:11:10

End at: 2017-09-22 04:11:40

Below is generated by plot.py at 2017-09-22 06:30:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.63 Mbit/s

95th percentile per-packet one-way delay: 128.600 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 53.35 Mbit/s

95th percentile per-packet one-way delay: 127.750 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 51.61 Mbit/s

95th percentile per-packet one-way delay: 130.199 ms

Loss rate: 0.01%

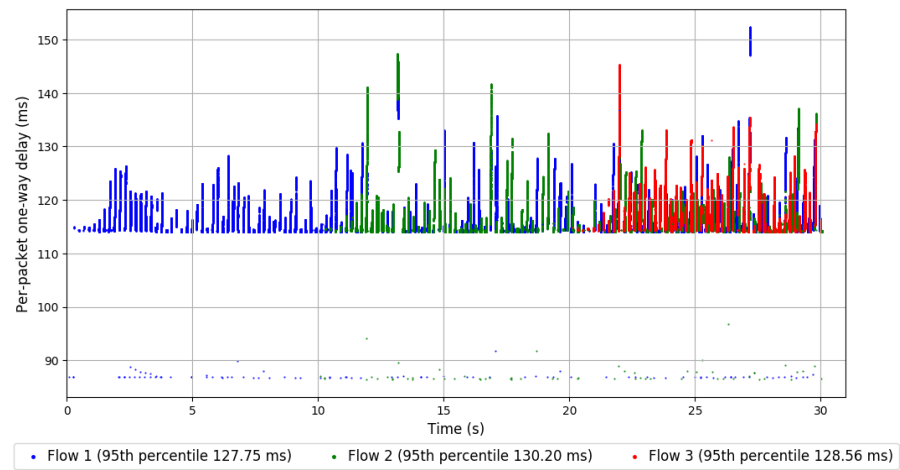
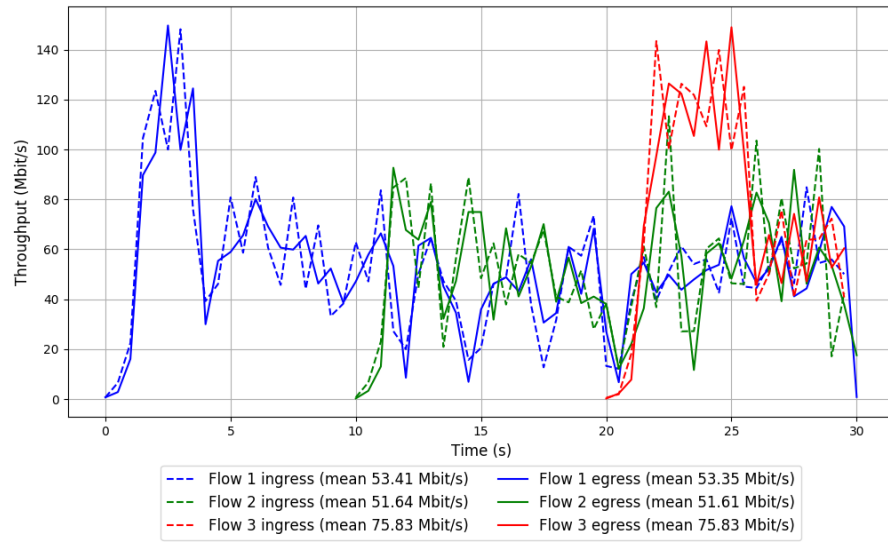
-- Flow 3:

Average throughput: 75.83 Mbit/s

95th percentile per-packet one-way delay: 128.562 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-09-22 04:23:06

End at: 2017-09-22 04:23:36

Below is generated by plot.py at 2017-09-22 06:30:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.63 Mbit/s

95th percentile per-packet one-way delay: 124.837 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 49.73 Mbit/s

95th percentile per-packet one-way delay: 124.384 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.05 Mbit/s

95th percentile per-packet one-way delay: 124.884 ms

Loss rate: 0.09%

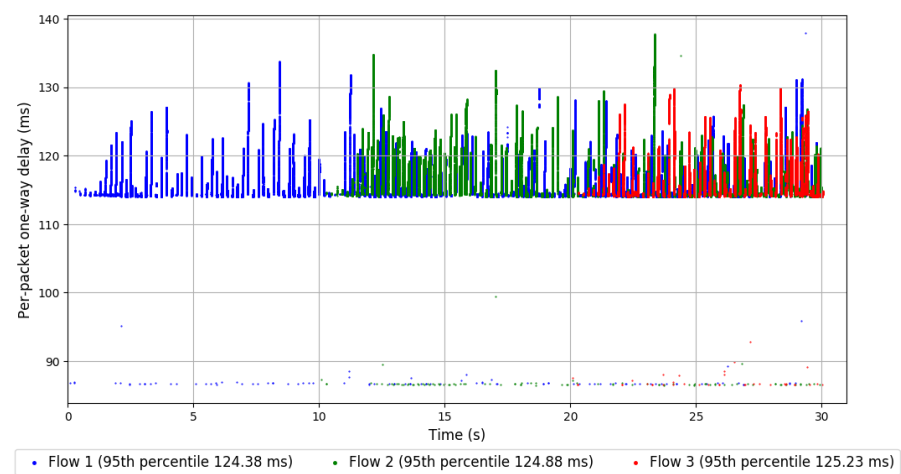
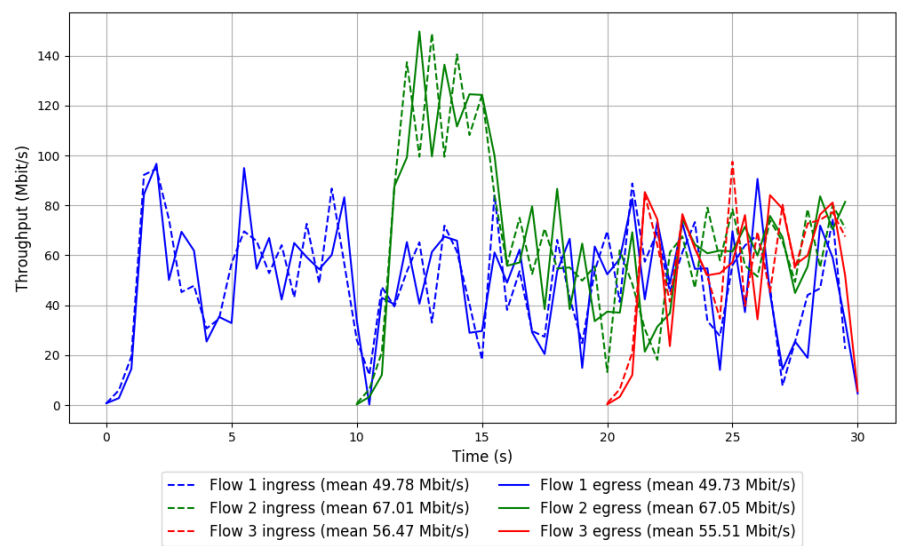
-- Flow 3:

Average throughput: 55.51 Mbit/s

95th percentile per-packet one-way delay: 125.232 ms

Loss rate: 1.50%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-09-22 04:35:16

End at: 2017-09-22 04:35:46

Below is generated by plot.py at 2017-09-22 06:30:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 110.37 Mbit/s

95th percentile per-packet one-way delay: 129.308 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 56.95 Mbit/s

95th percentile per-packet one-way delay: 130.251 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 52.08 Mbit/s

95th percentile per-packet one-way delay: 127.913 ms

Loss rate: 0.00%

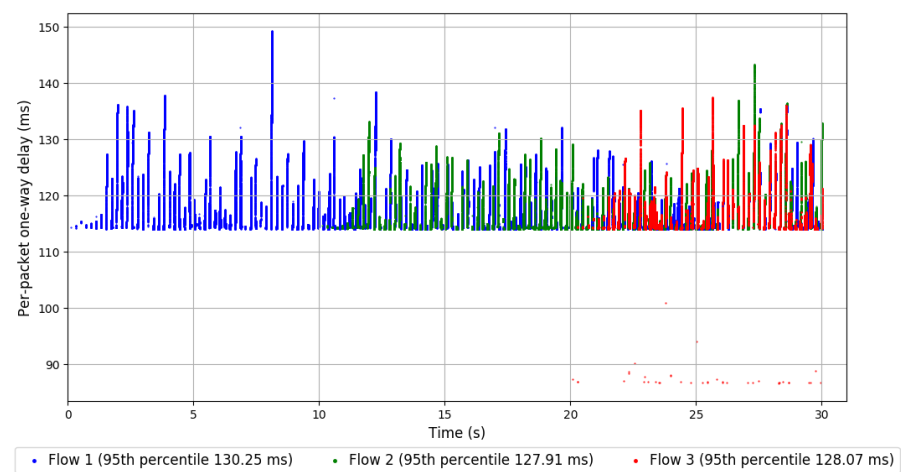
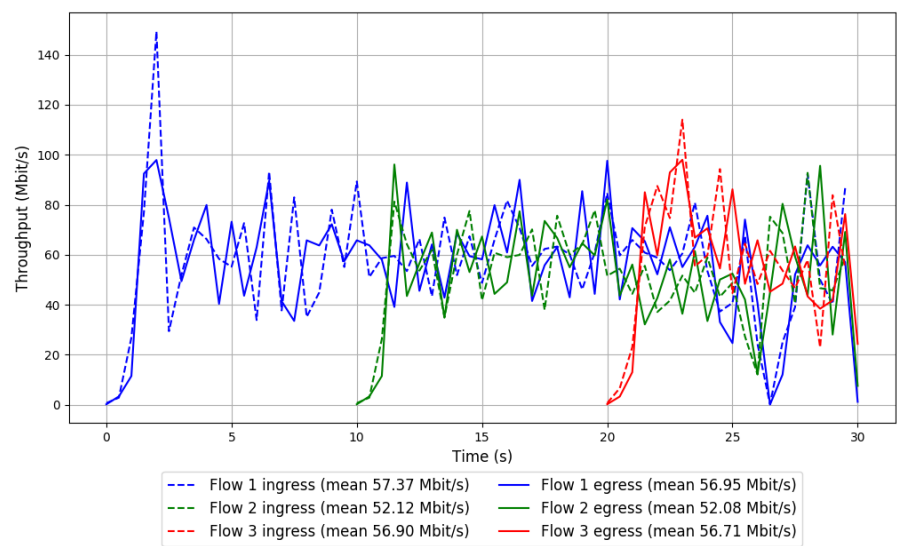
-- Flow 3:

Average throughput: 56.71 Mbit/s

95th percentile per-packet one-way delay: 128.072 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-09-22 04:48:00

End at: 2017-09-22 04:48:30

Below is generated by plot.py at 2017-09-22 06:30:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.85 Mbit/s

95th percentile per-packet one-way delay: 127.974 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 44.77 Mbit/s

95th percentile per-packet one-way delay: 125.852 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 56.51 Mbit/s

95th percentile per-packet one-way delay: 131.239 ms

Loss rate: 0.00%

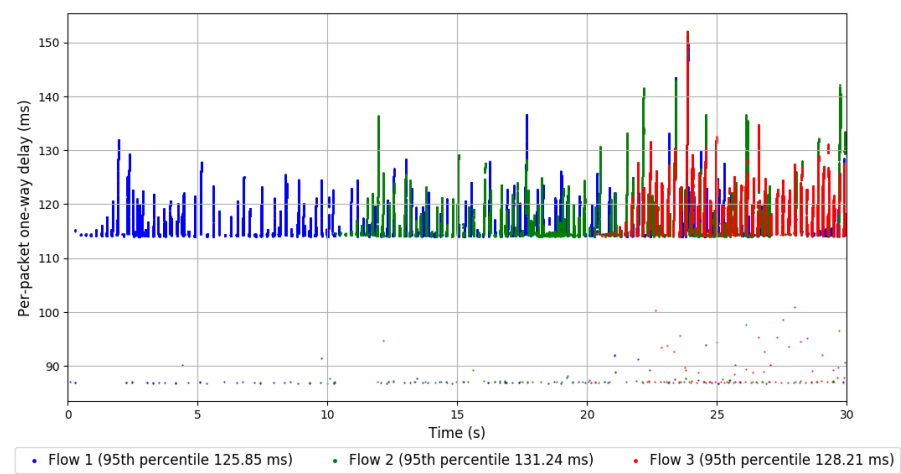
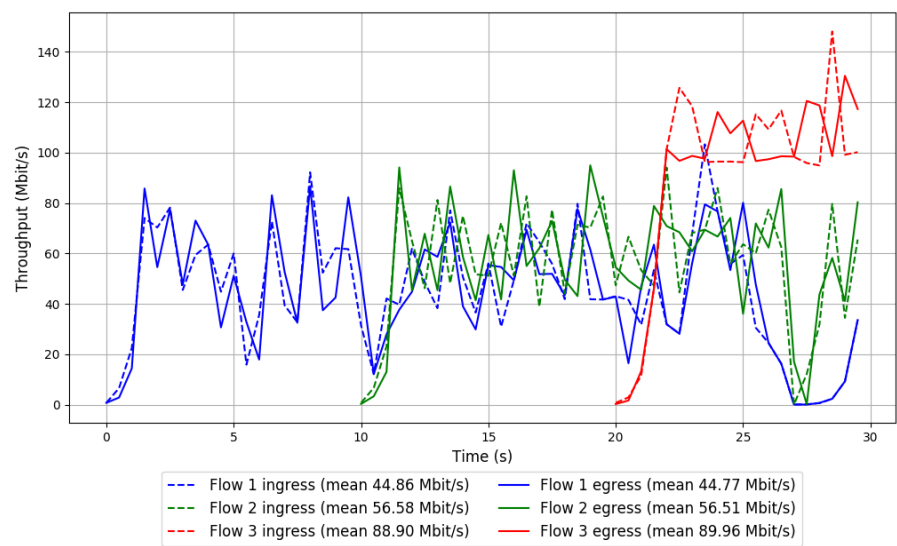
-- Flow 3:

Average throughput: 89.96 Mbit/s

95th percentile per-packet one-way delay: 128.212 ms

Loss rate: 0.06%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-09-22 05:00:19

End at: 2017-09-22 05:00:49

Below is generated by plot.py at 2017-09-22 06:32:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.78 Mbit/s

95th percentile per-packet one-way delay: 124.045 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 49.70 Mbit/s

95th percentile per-packet one-way delay: 123.312 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 53.03 Mbit/s

95th percentile per-packet one-way delay: 124.873 ms

Loss rate: 0.01%

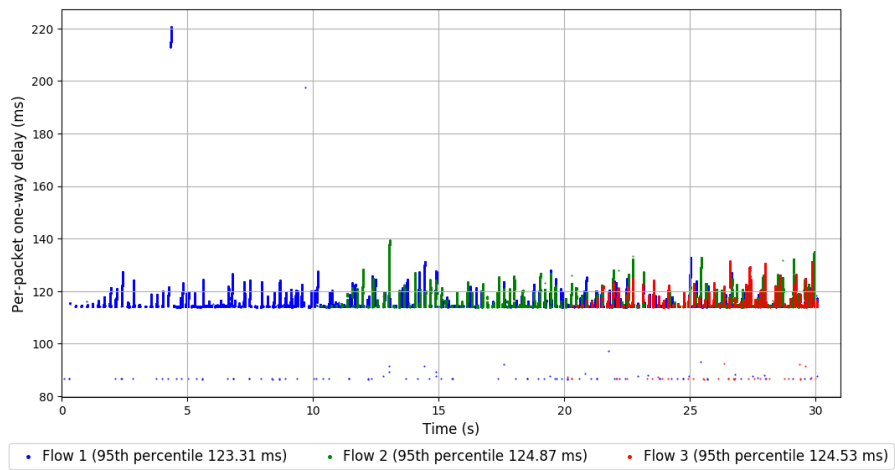
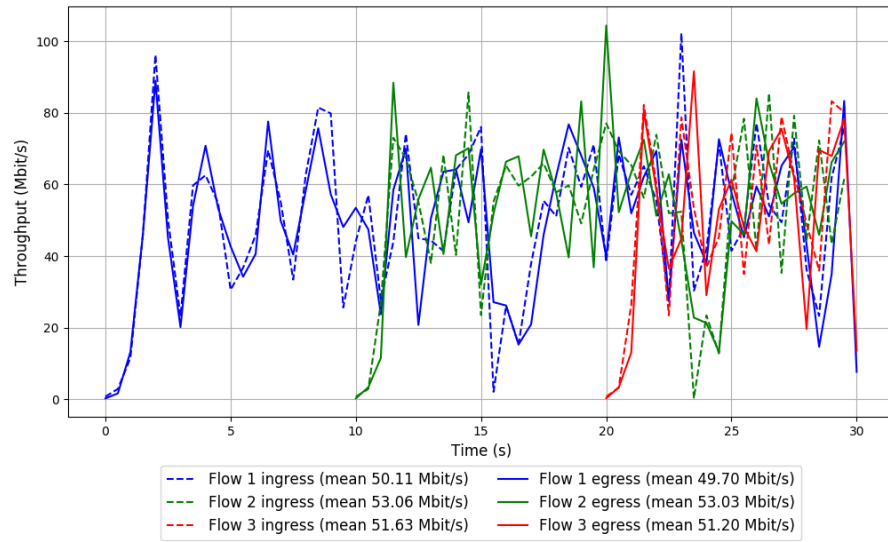
-- Flow 3:

Average throughput: 51.20 Mbit/s

95th percentile per-packet one-way delay: 124.531 ms

Loss rate: 0.71%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-09-22 05:14:25

End at: 2017-09-22 05:14:55

Below is generated by plot.py at 2017-09-22 06:32:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.24 Mbit/s

95th percentile per-packet one-way delay: 125.630 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 56.87 Mbit/s

95th percentile per-packet one-way delay: 125.612 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 58.13 Mbit/s

95th percentile per-packet one-way delay: 123.014 ms

Loss rate: 0.04%

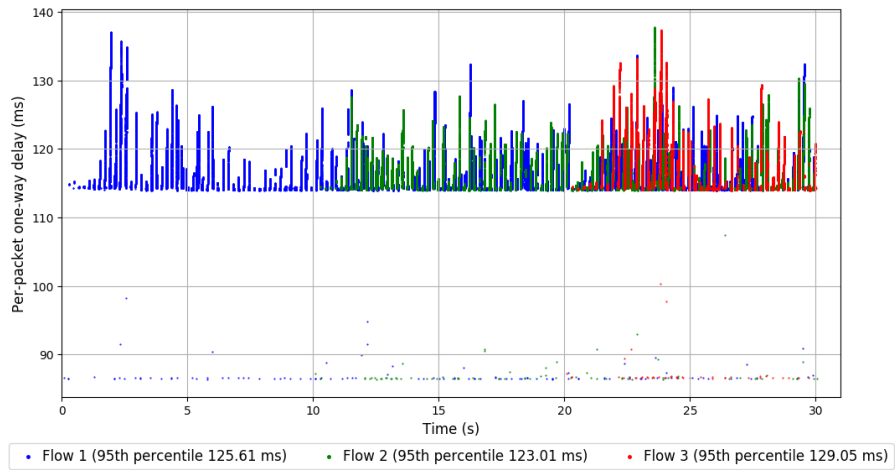
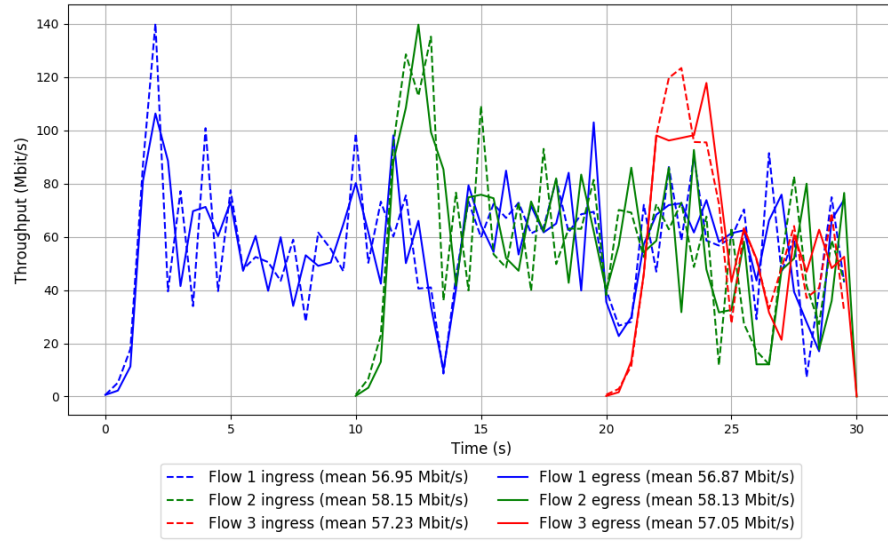
-- Flow 3:

Average throughput: 57.05 Mbit/s

95th percentile per-packet one-way delay: 129.052 ms

Loss rate: 0.04%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-09-22 03:16:39

End at: 2017-09-22 03:17:09

Below is generated by plot.py at 2017-09-22 06:32:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.03 Mbit/s

95th percentile per-packet one-way delay: 92.125 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 80.48 Mbit/s

95th percentile per-packet one-way delay: 92.844 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 55.19 Mbit/s

95th percentile per-packet one-way delay: 90.715 ms

Loss rate: 0.00%

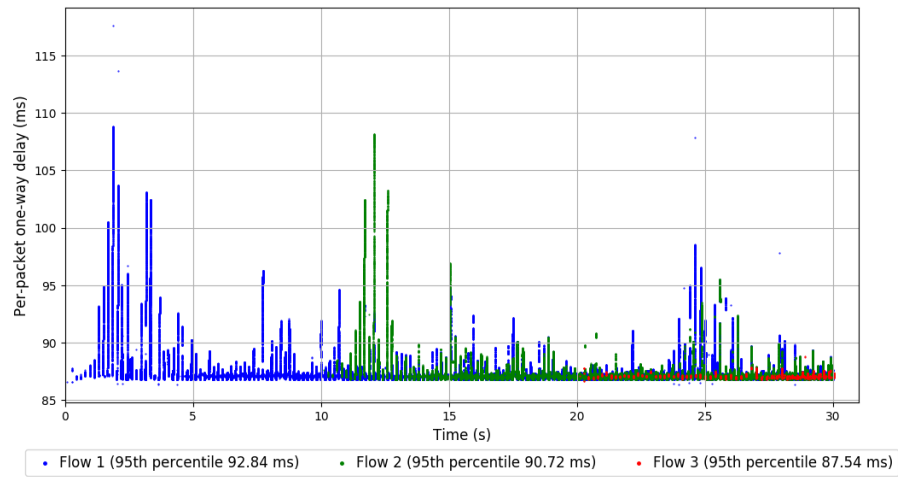
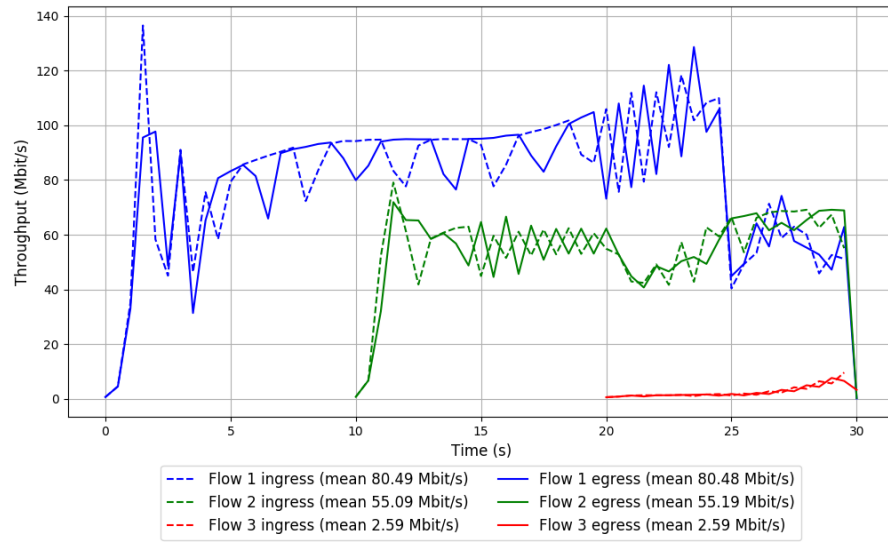
-- Flow 3:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 87.536 ms

Loss rate: 0.09%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-09-22 03:29:54

End at: 2017-09-22 03:30:24

Below is generated by plot.py at 2017-09-22 06:32:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.84 Mbit/s

95th percentile per-packet one-way delay: 89.967 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.78 Mbit/s

95th percentile per-packet one-way delay: 89.336 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 100.27 Mbit/s

95th percentile per-packet one-way delay: 89.795 ms

Loss rate: 0.00%

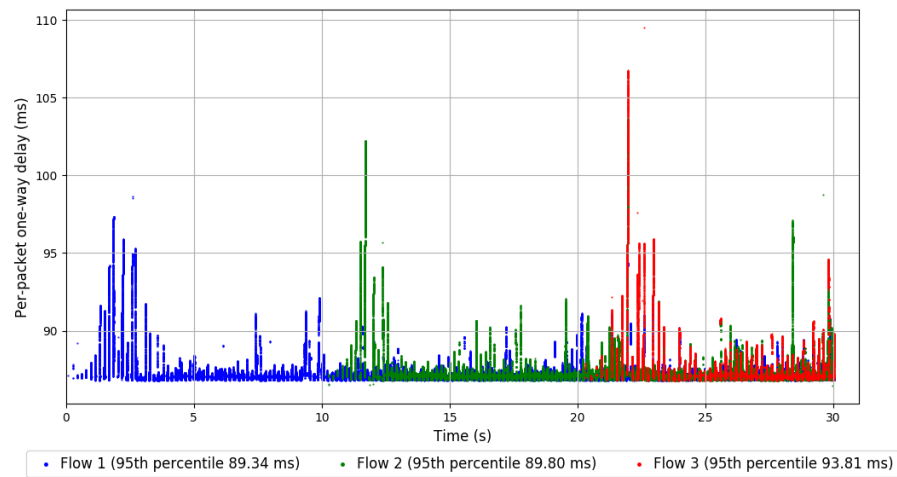
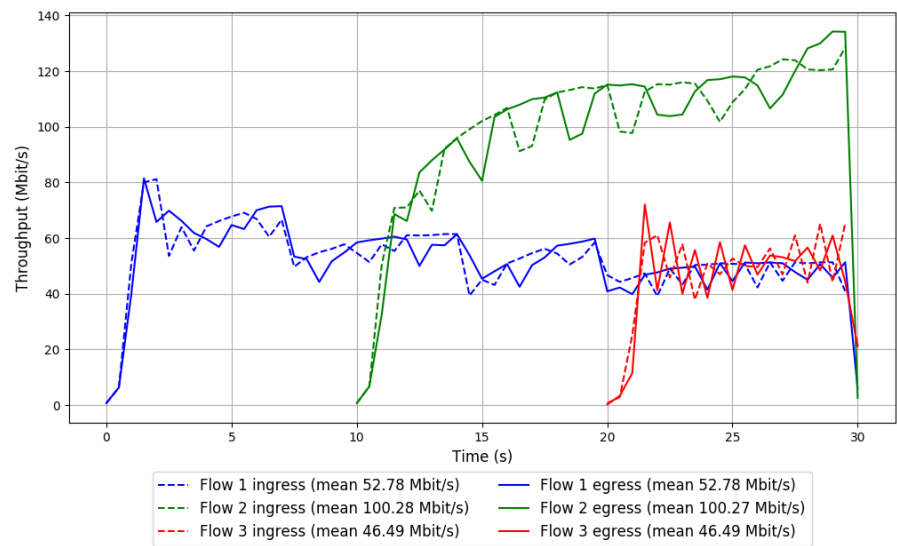
-- Flow 3:

Average throughput: 46.49 Mbit/s

95th percentile per-packet one-way delay: 93.809 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-09-22 03:43:00

End at: 2017-09-22 03:43:30

Below is generated by plot.py at 2017-09-22 06:32:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.17 Mbit/s

95th percentile per-packet one-way delay: 92.738 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 24.23 Mbit/s

95th percentile per-packet one-way delay: 88.415 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 58.90 Mbit/s

95th percentile per-packet one-way delay: 93.537 ms

Loss rate: 0.00%

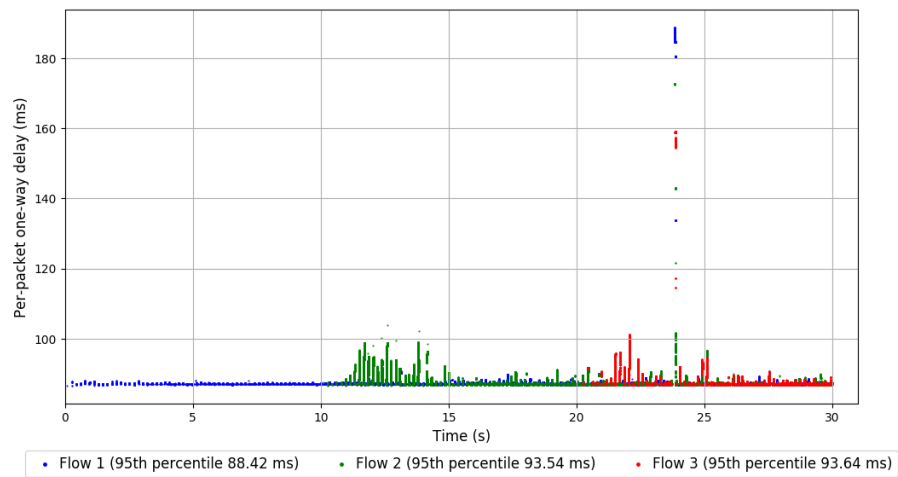
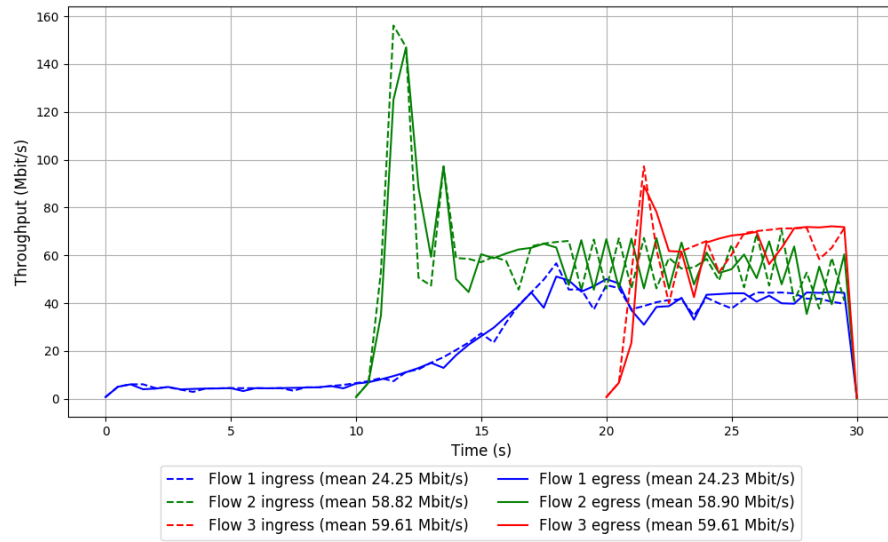
-- Flow 3:

Average throughput: 59.61 Mbit/s

95th percentile per-packet one-way delay: 93.639 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-09-22 03:55:18

End at: 2017-09-22 03:55:48

Below is generated by plot.py at 2017-09-22 06:32:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 27.74 Mbit/s

95th percentile per-packet one-way delay: 115.792 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 15.78 Mbit/s

95th percentile per-packet one-way delay: 115.639 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 14.52 Mbit/s

95th percentile per-packet one-way delay: 115.906 ms

Loss rate: 0.01%

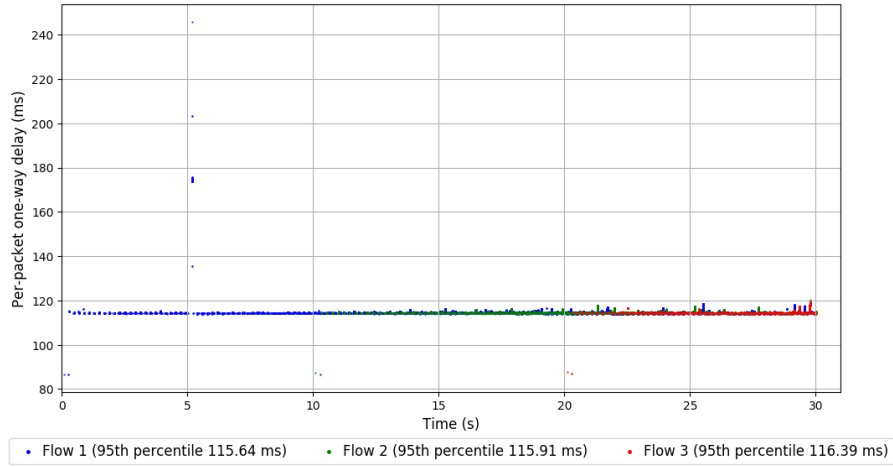
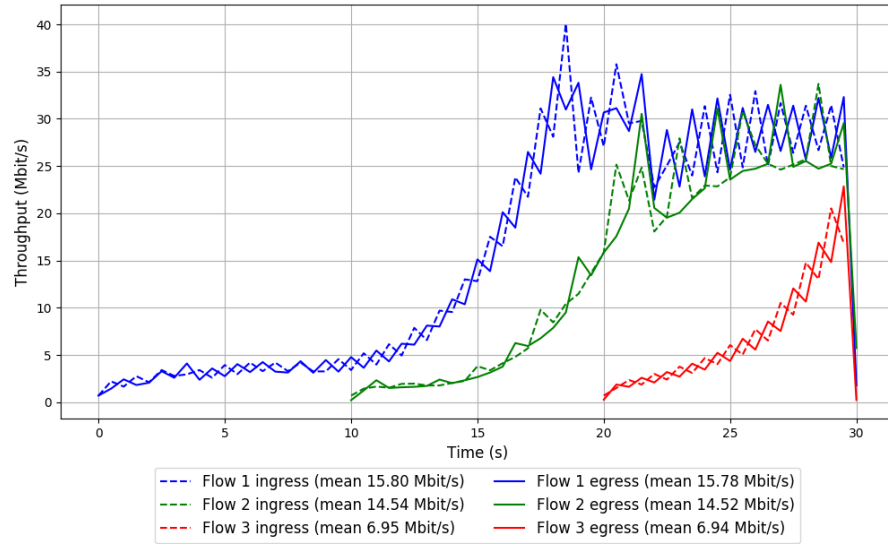
-- Flow 3:

Average throughput: 6.94 Mbit/s

95th percentile per-packet one-way delay: 116.389 ms

Loss rate: 0.24%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-09-22 04:07:46

End at: 2017-09-22 04:08:16

Below is generated by plot.py at 2017-09-22 06:32:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.94 Mbit/s

95th percentile per-packet one-way delay: 117.377 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 12.23 Mbit/s

95th percentile per-packet one-way delay: 115.655 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 41.15 Mbit/s

95th percentile per-packet one-way delay: 118.178 ms

Loss rate: 1.23%

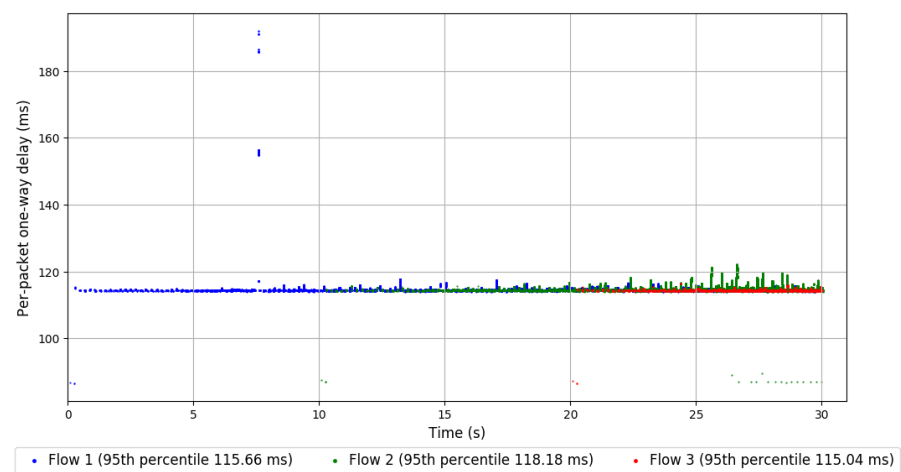
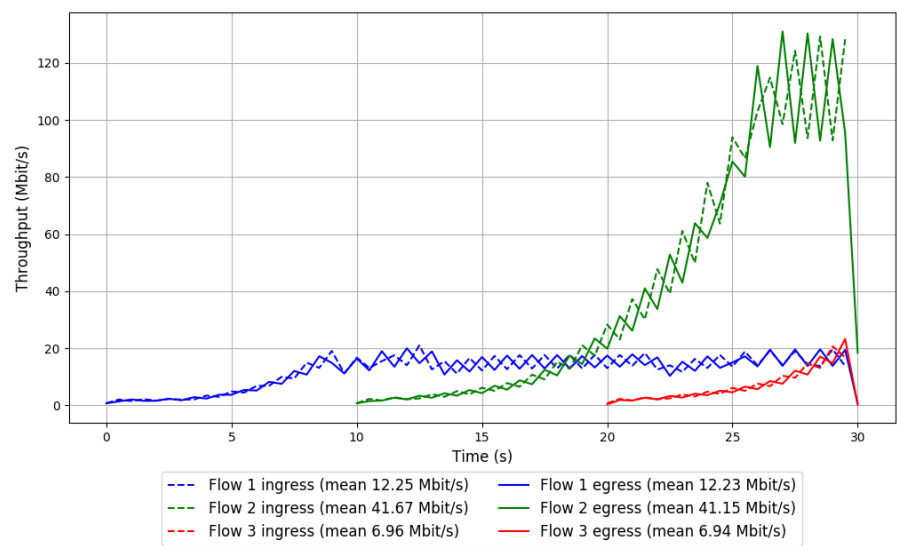
-- Flow 3:

Average throughput: 6.94 Mbit/s

95th percentile per-packet one-way delay: 115.038 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-09-22 04:20:07

End at: 2017-09-22 04:20:37

Below is generated by plot.py at 2017-09-22 06:32:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.81 Mbit/s

95th percentile per-packet one-way delay: 116.924 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 25.21 Mbit/s

95th percentile per-packet one-way delay: 116.399 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 41.57 Mbit/s

95th percentile per-packet one-way delay: 117.494 ms

Loss rate: 1.09%

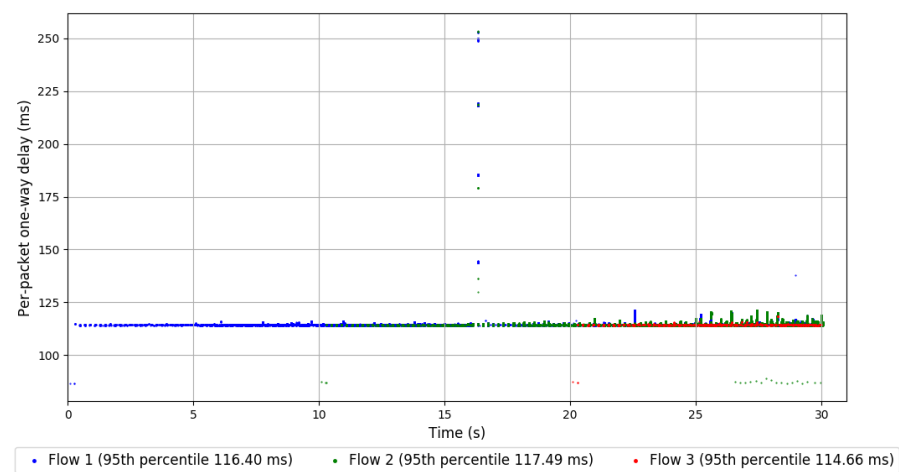
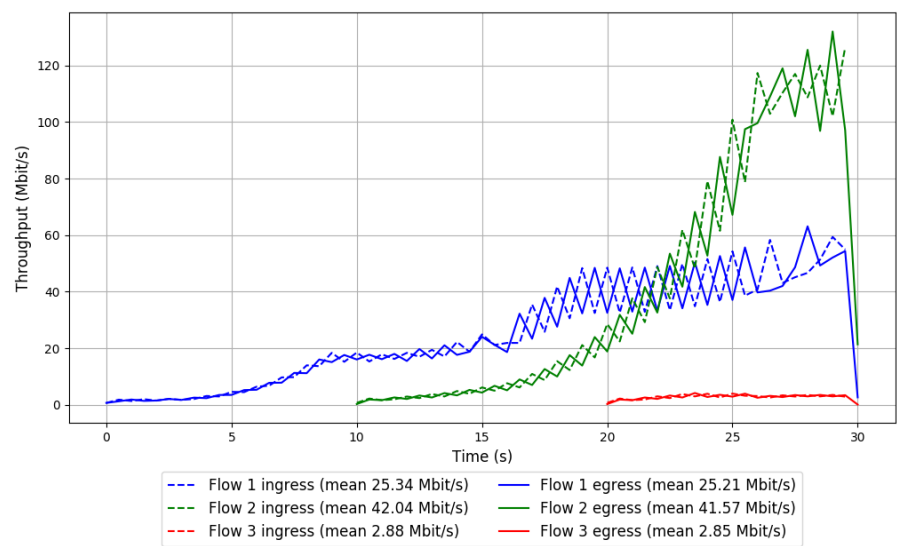
-- Flow 3:

Average throughput: 2.85 Mbit/s

95th percentile per-packet one-way delay: 114.663 ms

Loss rate: 1.13%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-09-22 04:32:13

End at: 2017-09-22 04:32:43

Below is generated by plot.py at 2017-09-22 06:32:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.42 Mbit/s

95th percentile per-packet one-way delay: 121.480 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 42.66 Mbit/s

95th percentile per-packet one-way delay: 122.429 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.51 Mbit/s

95th percentile per-packet one-way delay: 119.101 ms

Loss rate: 0.93%

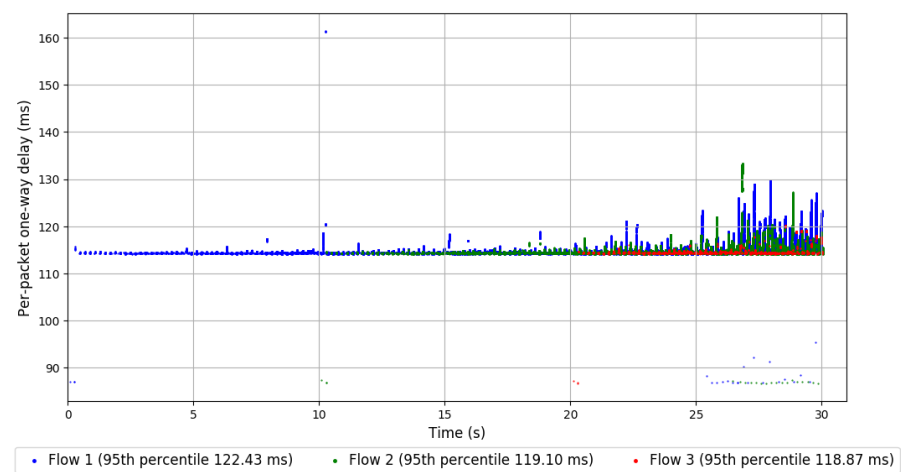
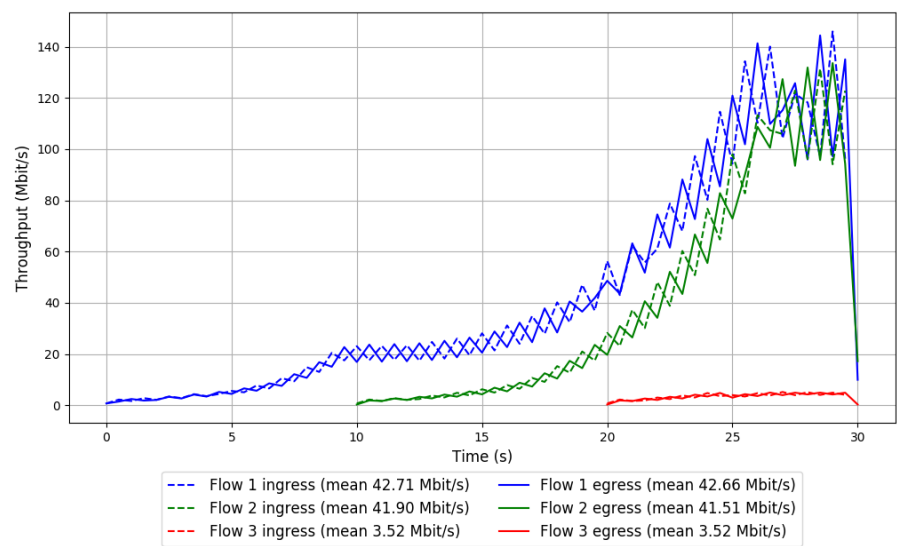
-- Flow 3:

Average throughput: 3.52 Mbit/s

95th percentile per-packet one-way delay: 118.867 ms

Loss rate: 0.24%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-09-22 04:44:35

End at: 2017-09-22 04:45:06

Below is generated by plot.py at 2017-09-22 06:32:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.80 Mbit/s

95th percentile per-packet one-way delay: 116.805 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 29.73 Mbit/s

95th percentile per-packet one-way delay: 116.303 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 70.36 Mbit/s

95th percentile per-packet one-way delay: 117.293 ms

Loss rate: 0.00%

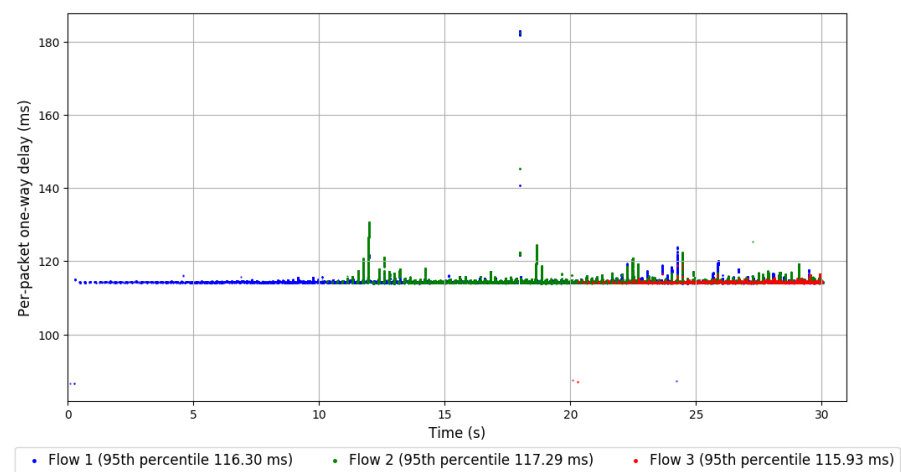
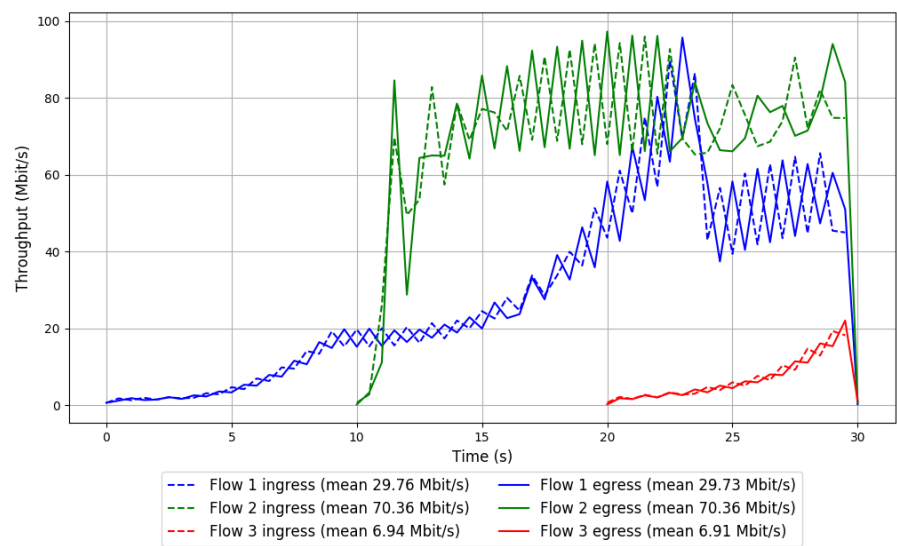
-- Flow 3:

Average throughput: 6.91 Mbit/s

95th percentile per-packet one-way delay: 115.931 ms

Loss rate: 0.52%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-09-22 04:56:47

End at: 2017-09-22 04:57:17

Below is generated by plot.py at 2017-09-22 06:32:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.44 Mbit/s

95th percentile per-packet one-way delay: 115.430 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 19.62 Mbit/s

95th percentile per-packet one-way delay: 115.489 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 9.88 Mbit/s

95th percentile per-packet one-way delay: 115.490 ms

Loss rate: 0.09%

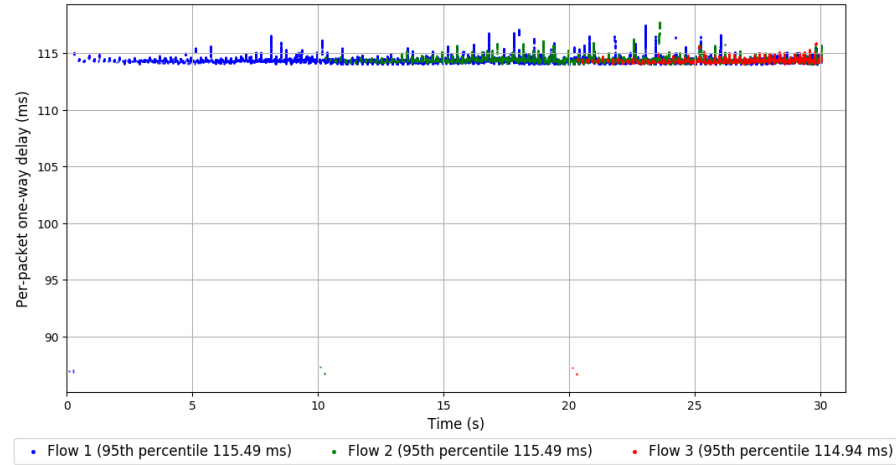
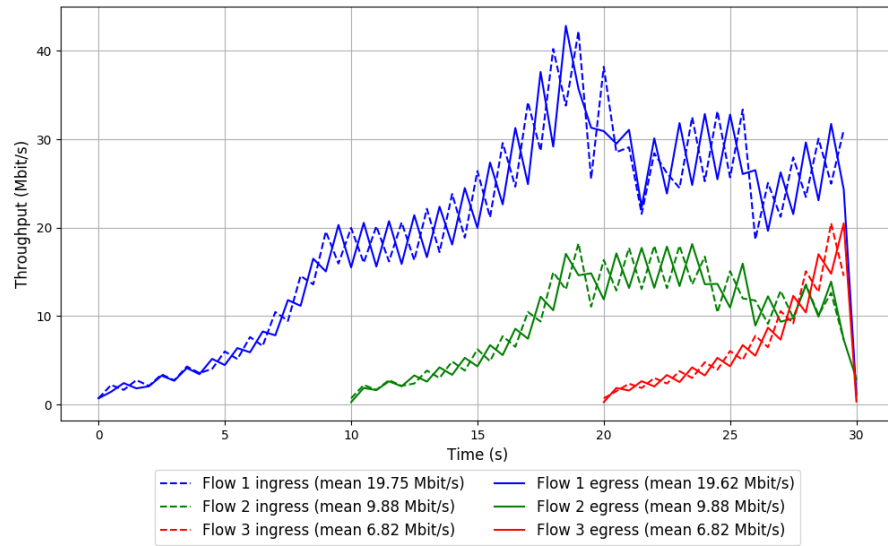
-- Flow 3:

Average throughput: 6.82 Mbit/s

95th percentile per-packet one-way delay: 114.935 ms

Loss rate: 0.18%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-09-22 05:10:54

End at: 2017-09-22 05:11:24

Below is generated by plot.py at 2017-09-22 06:33:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.03 Mbit/s

95th percentile per-packet one-way delay: 121.344 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 26.24 Mbit/s

95th percentile per-packet one-way delay: 117.999 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 63.01 Mbit/s

95th percentile per-packet one-way delay: 122.472 ms

Loss rate: 0.04%

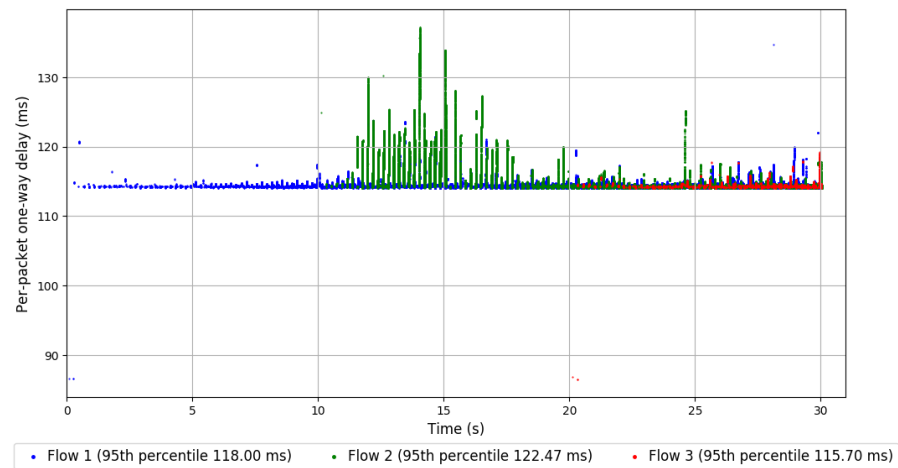
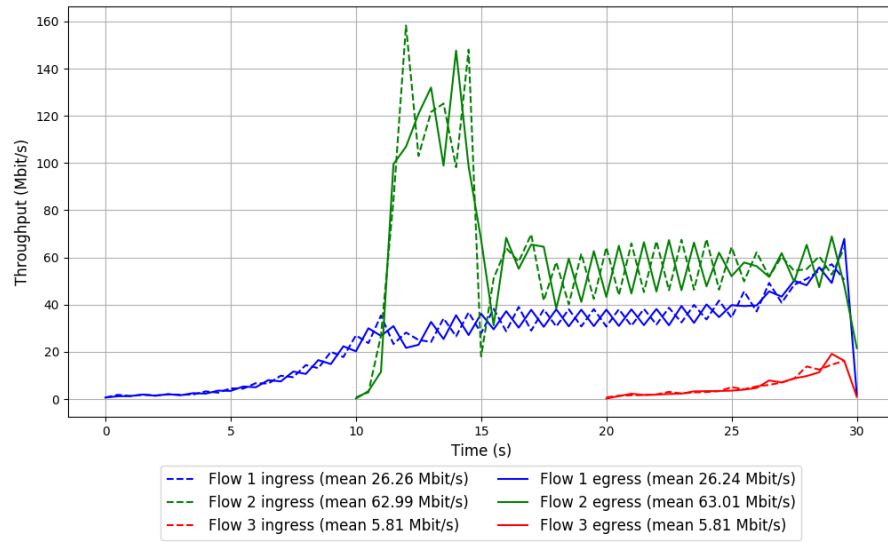
-- Flow 3:

Average throughput: 5.81 Mbit/s

95th percentile per-packet one-way delay: 115.705 ms

Loss rate: 0.04%

Run 10: Report of TCP Cubic — Data Link

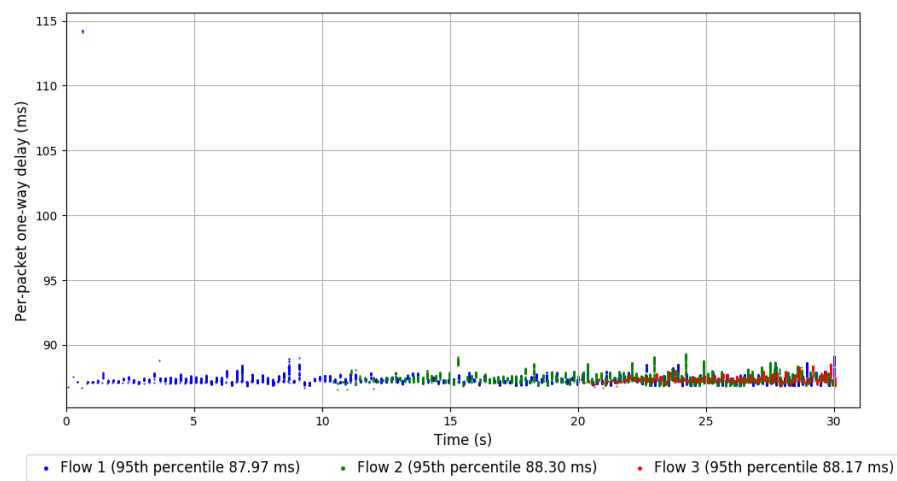
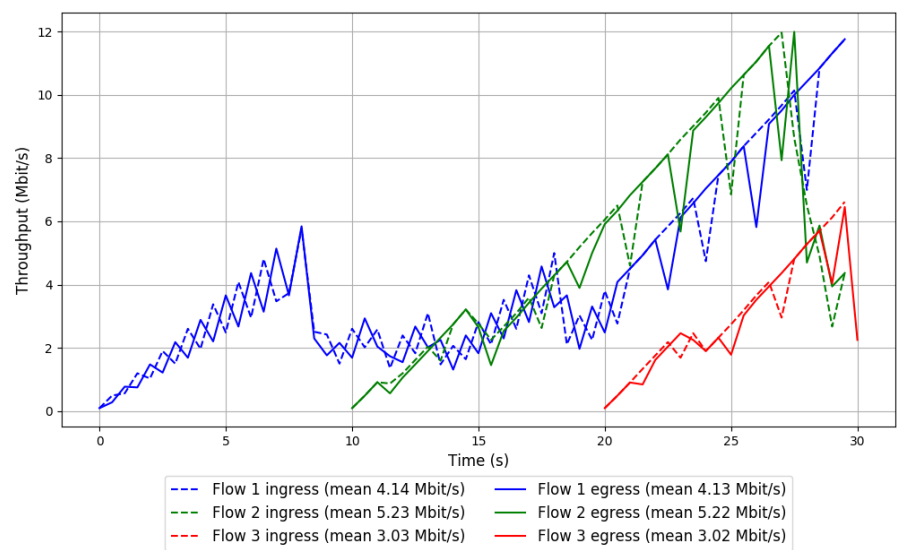


```
Run 1: Statistics of LEDBAT

Start at: 2017-09-22 03:15:53
End at: 2017-09-22 03:16:23

# Below is generated by plot.py at 2017-09-22 06:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 88.161 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 87.974 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 88.304 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 88.166 ms
Loss rate: 0.35%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-09-22 03:29:08

End at: 2017-09-22 03:29:38

Below is generated by plot.py at 2017-09-22 06:33:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.17 Mbit/s

95th percentile per-packet one-way delay: 87.831 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 87.949 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 4.94 Mbit/s

95th percentile per-packet one-way delay: 87.693 ms

Loss rate: 0.01%

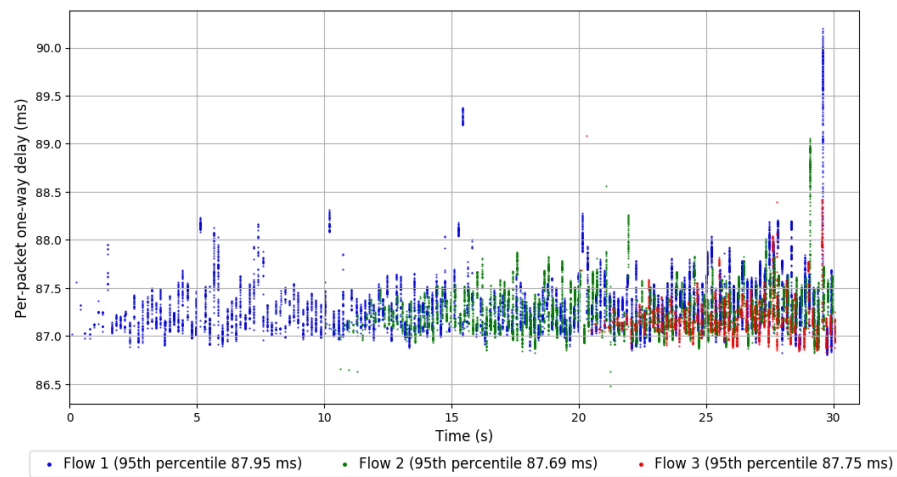
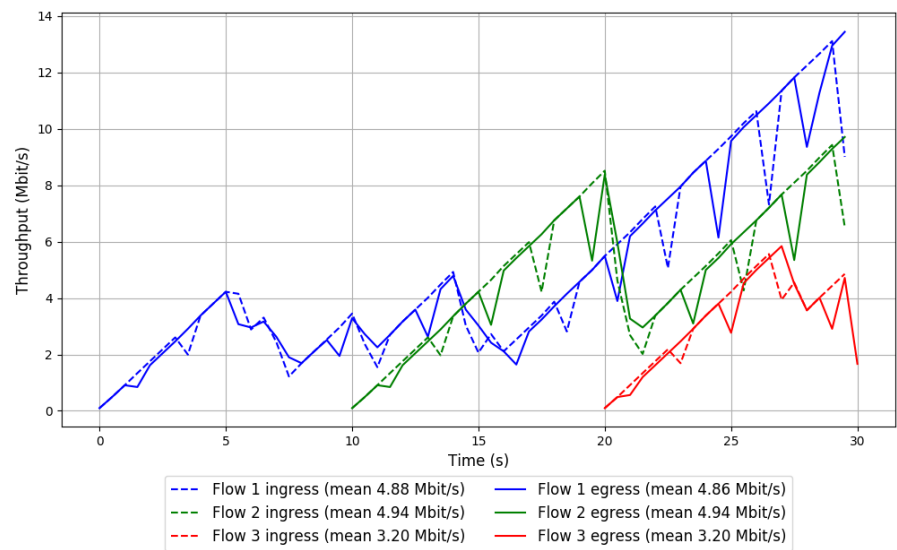
-- Flow 3:

Average throughput: 3.20 Mbit/s

95th percentile per-packet one-way delay: 87.751 ms

Loss rate: 0.07%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-09-22 03:42:15

End at: 2017-09-22 03:42:45

Below is generated by plot.py at 2017-09-22 06:33:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.44 Mbit/s

95th percentile per-packet one-way delay: 87.819 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 7.98 Mbit/s

95th percentile per-packet one-way delay: 87.652 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 88.038 ms

Loss rate: 0.00%

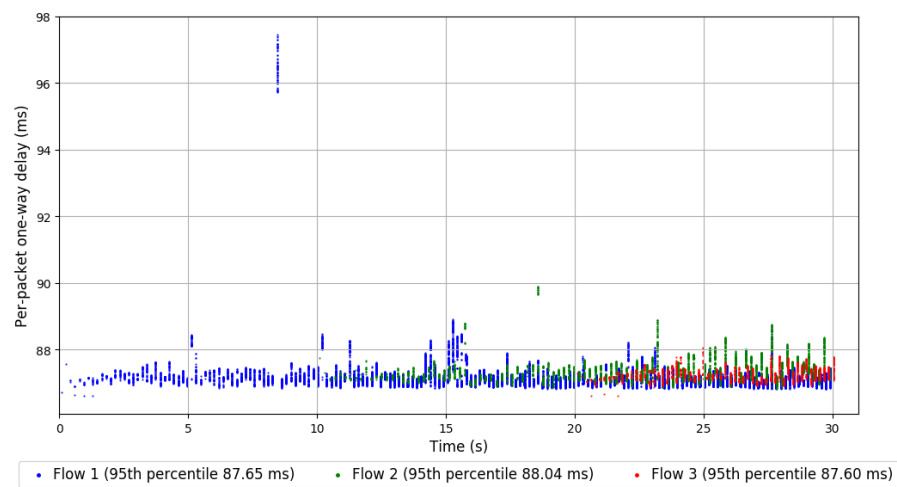
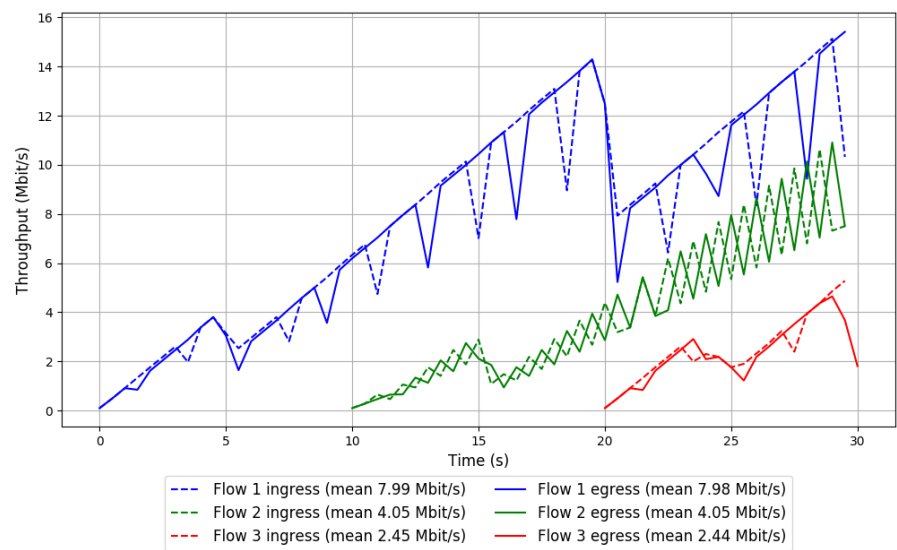
-- Flow 3:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 87.603 ms

Loss rate: 0.43%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-09-22 03:54:33

End at: 2017-09-22 03:55:03

Below is generated by plot.py at 2017-09-22 06:33:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.67 Mbit/s

95th percentile per-packet one-way delay: 115.156 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 115.074 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 3.49 Mbit/s

95th percentile per-packet one-way delay: 115.319 ms

Loss rate: 0.14%

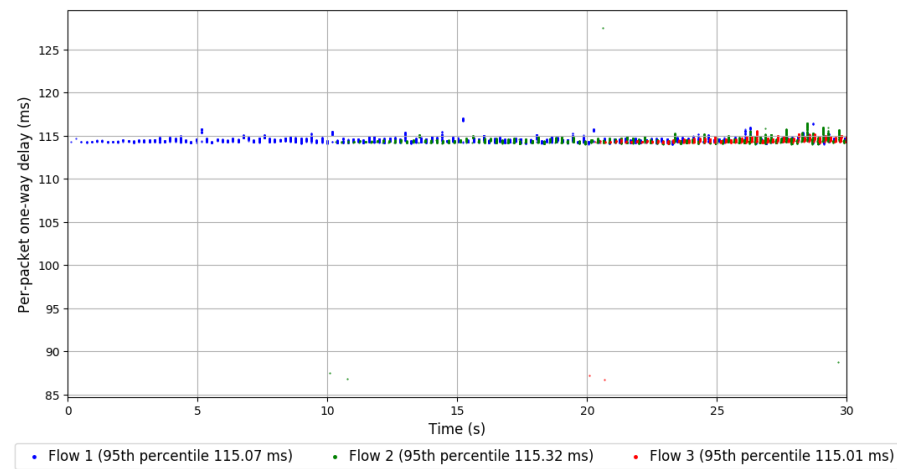
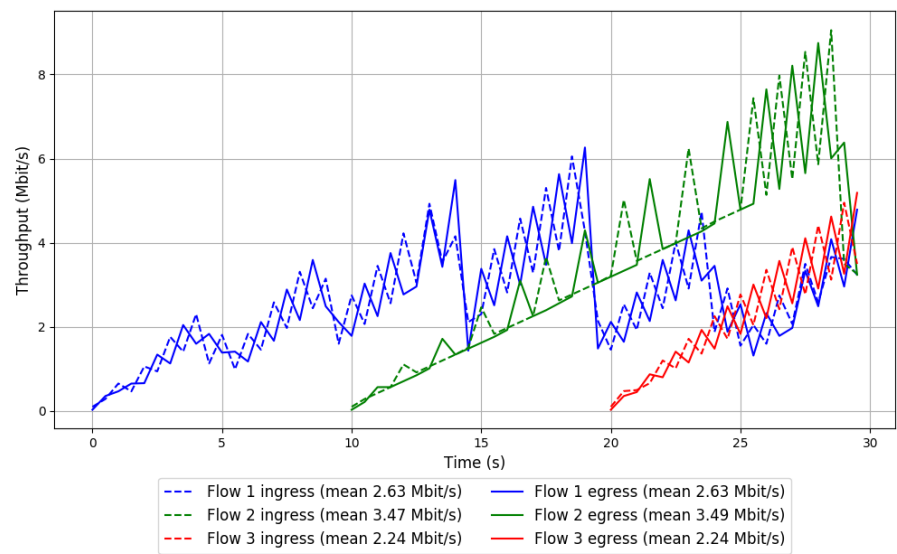
-- Flow 3:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 115.013 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-09-22 04:07:00

End at: 2017-09-22 04:07:30

Below is generated by plot.py at 2017-09-22 06:33:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.18 Mbit/s

95th percentile per-packet one-way delay: 115.531 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 5.01 Mbit/s

95th percentile per-packet one-way delay: 115.567 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 115.544 ms

Loss rate: 0.00%

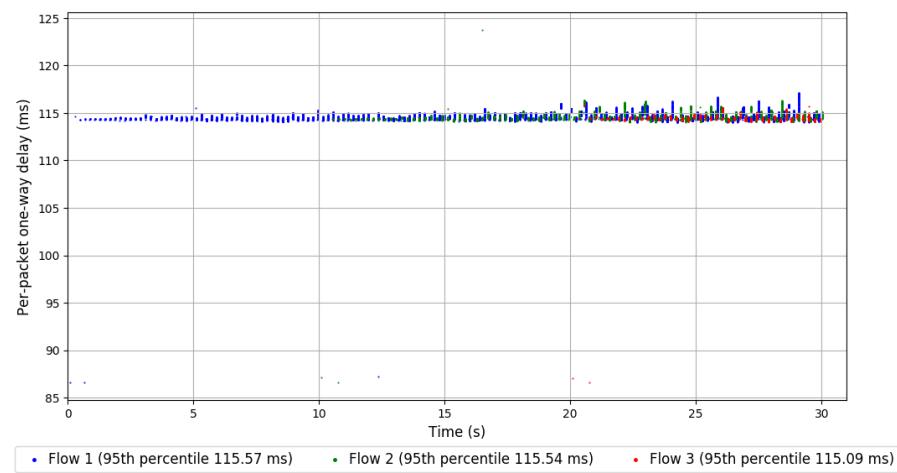
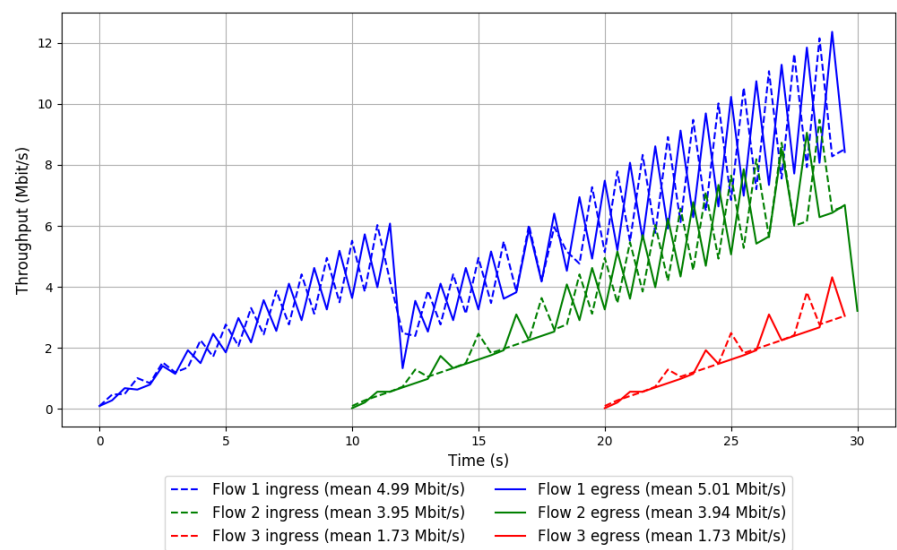
-- Flow 3:

Average throughput: 1.73 Mbit/s

95th percentile per-packet one-way delay: 115.093 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-09-22 04:19:23

End at: 2017-09-22 04:19:53

Below is generated by plot.py at 2017-09-22 06:33:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.52 Mbit/s

95th percentile per-packet one-way delay: 115.010 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 115.070 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.41 Mbit/s

95th percentile per-packet one-way delay: 114.833 ms

Loss rate: 0.00%

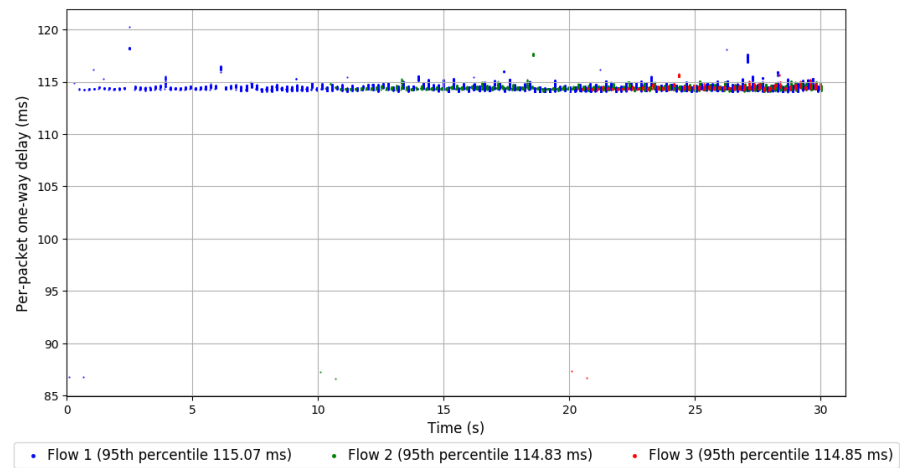
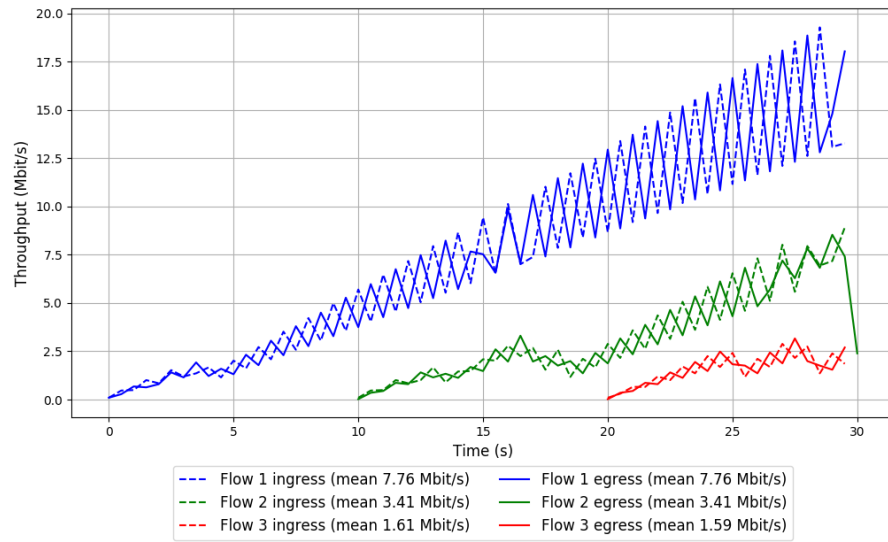
-- Flow 3:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 114.854 ms

Loss rate: 1.11%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-09-22 04:31:29

End at: 2017-09-22 04:31:59

Below is generated by plot.py at 2017-09-22 06:33:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 115.316 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 3.97 Mbit/s

95th percentile per-packet one-way delay: 115.209 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 3.52 Mbit/s

95th percentile per-packet one-way delay: 115.652 ms

Loss rate: 0.00%

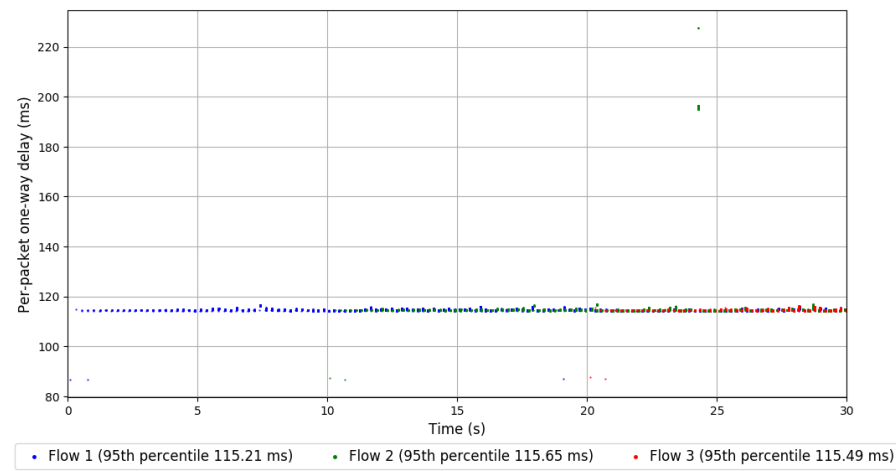
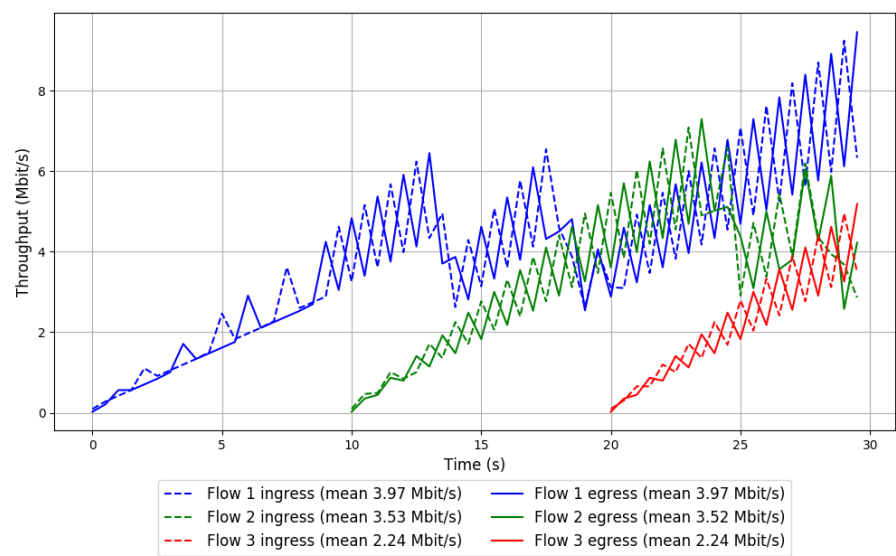
-- Flow 3:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 115.489 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-09-22 04:43:51

End at: 2017-09-22 04:44:21

Below is generated by plot.py at 2017-09-22 06:33:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.43 Mbit/s

95th percentile per-packet one-way delay: 114.970 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 5.27 Mbit/s

95th percentile per-packet one-way delay: 115.028 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 3.77 Mbit/s

95th percentile per-packet one-way delay: 114.917 ms

Loss rate: 0.17%

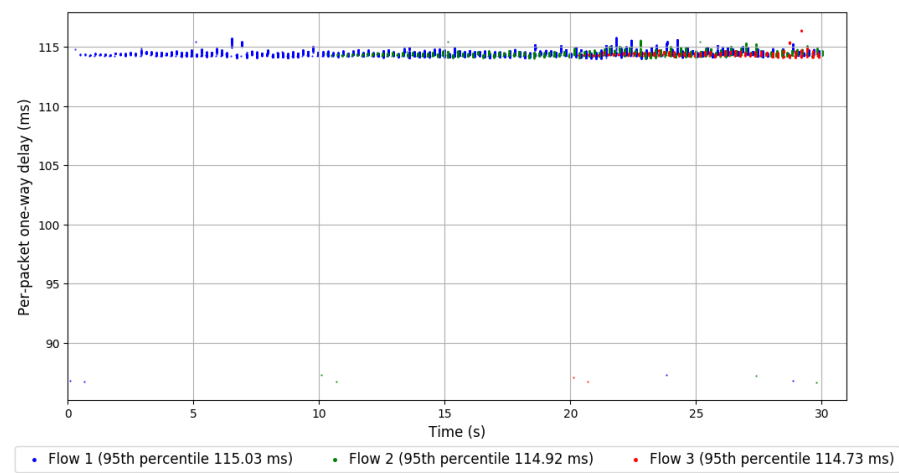
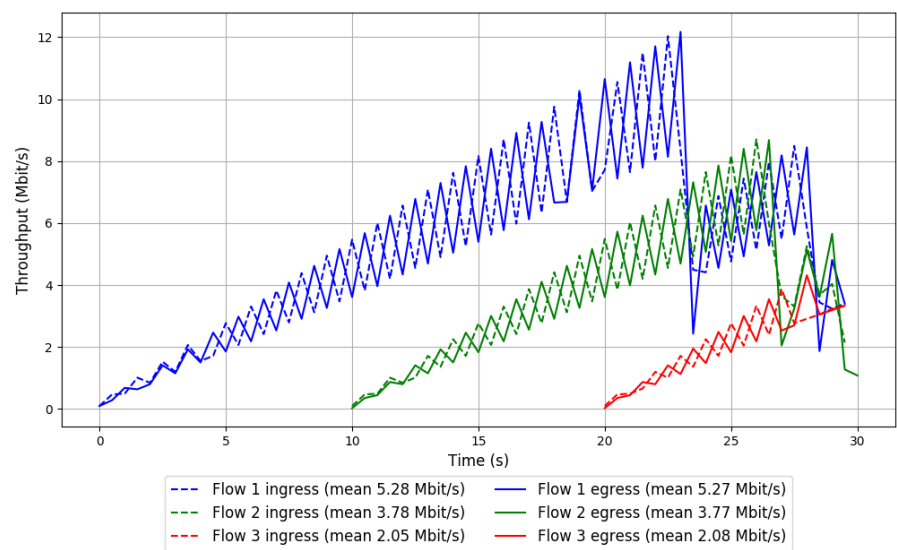
-- Flow 3:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 114.728 ms

Loss rate: 0.12%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-09-22 04:56:02

End at: 2017-09-22 04:56:32

Below is generated by plot.py at 2017-09-22 06:33:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.92 Mbit/s

95th percentile per-packet one-way delay: 115.422 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 3.23 Mbit/s

95th percentile per-packet one-way delay: 115.184 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 115.696 ms

Loss rate: 0.00%

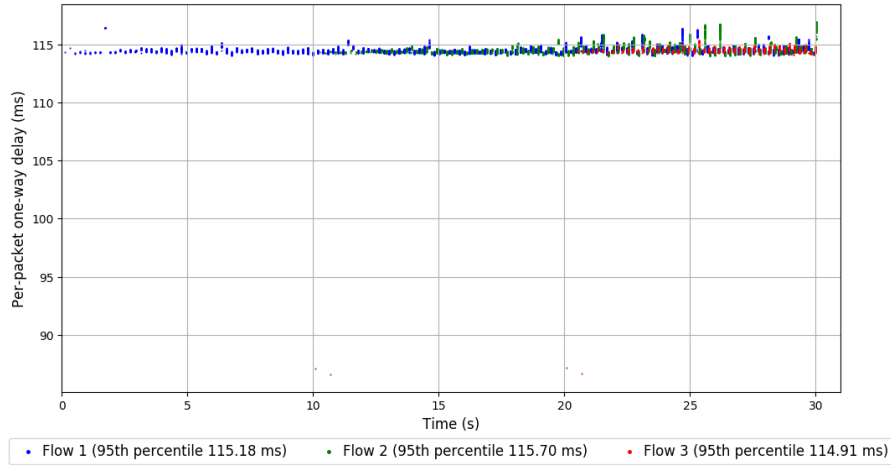
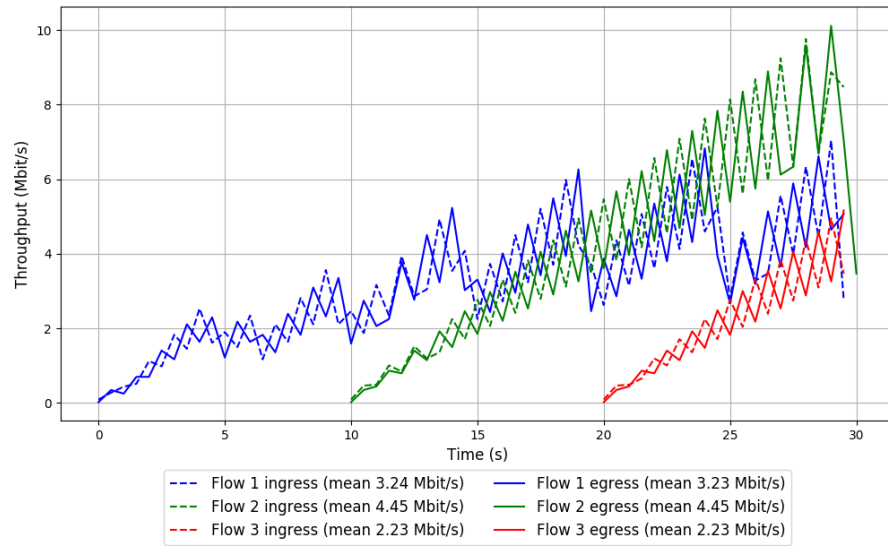
-- Flow 3:

Average throughput: 2.23 Mbit/s

95th percentile per-packet one-way delay: 114.907 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-09-22 05:10:08

End at: 2017-09-22 05:10:38

Below is generated by plot.py at 2017-09-22 06:33:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.15 Mbit/s

95th percentile per-packet one-way delay: 115.755 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 6.15 Mbit/s

95th percentile per-packet one-way delay: 115.875 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 115.139 ms

Loss rate: 0.00%

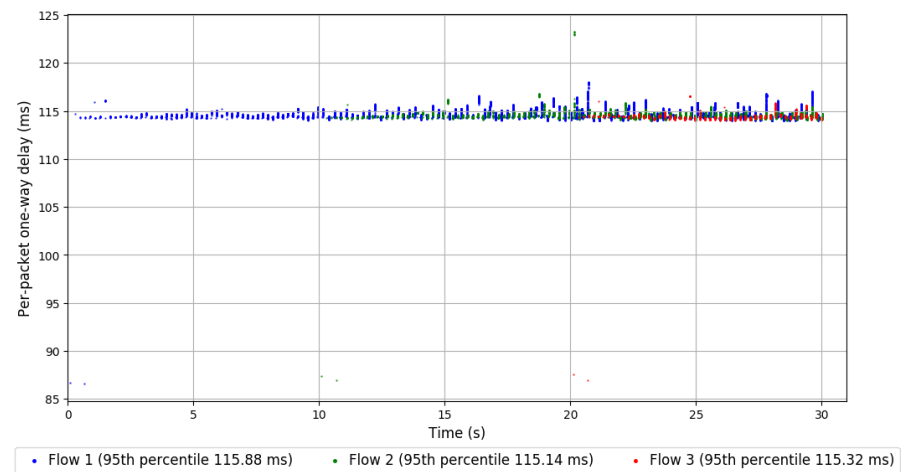
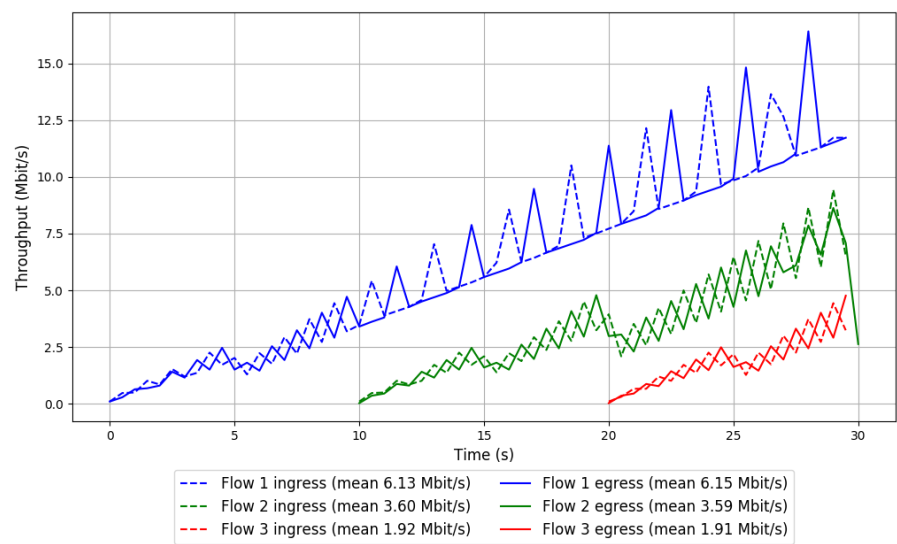
-- Flow 3:

Average throughput: 1.91 Mbit/s

95th percentile per-packet one-way delay: 115.321 ms

Loss rate: 0.00%

Run 10: Report of LEDBAT — Data Link

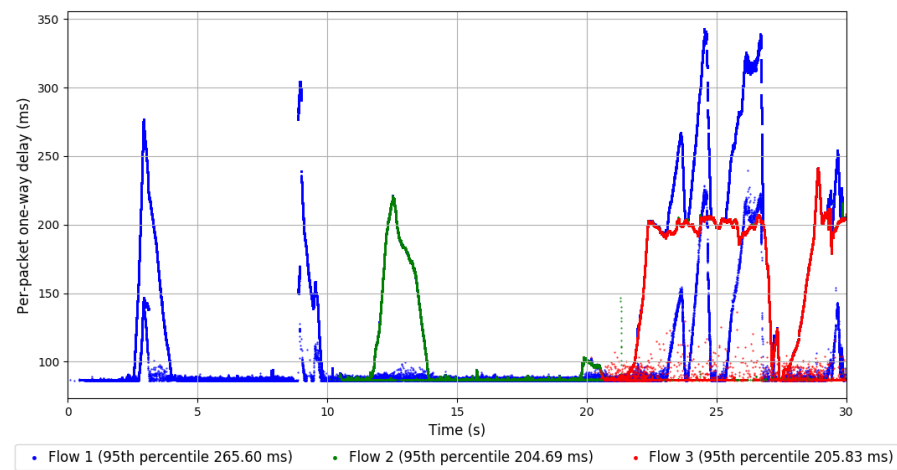
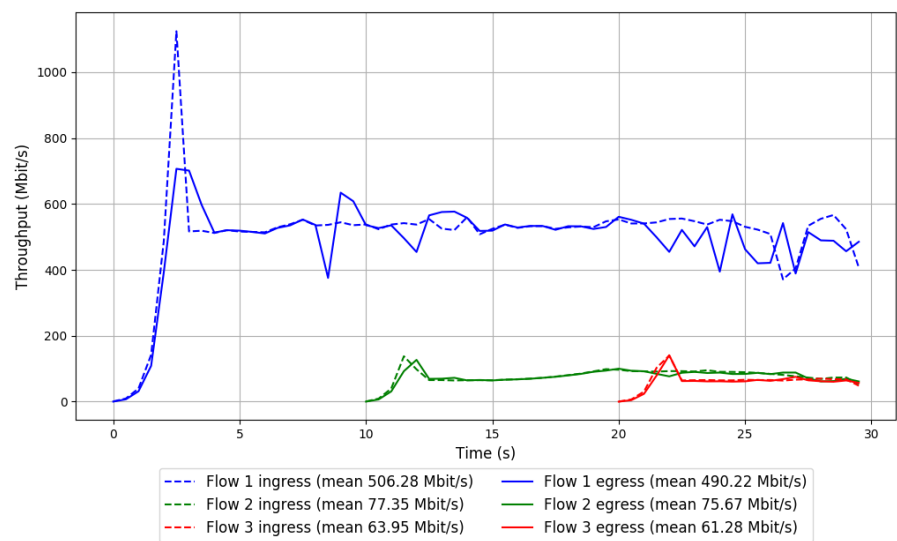


```
Run 1: Statistics of PCC

Start at: 2017-09-22 03:18:15
End at: 2017-09-22 03:18:45

# Below is generated by plot.py at 2017-09-22 06:43:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 560.58 Mbit/s
95th percentile per-packet one-way delay: 258.737 ms
Loss rate: 3.12%
-- Flow 1:
Average throughput: 490.22 Mbit/s
95th percentile per-packet one-way delay: 265.597 ms
Loss rate: 3.17%
-- Flow 2:
Average throughput: 75.67 Mbit/s
95th percentile per-packet one-way delay: 204.693 ms
Loss rate: 2.17%
-- Flow 3:
Average throughput: 61.28 Mbit/s
95th percentile per-packet one-way delay: 205.830 ms
Loss rate: 4.30%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-09-22 03:31:31

End at: 2017-09-22 03:32:01

Below is generated by plot.py at 2017-09-22 06:43:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 559.94 Mbit/s

95th percentile per-packet one-way delay: 202.214 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 475.23 Mbit/s

95th percentile per-packet one-way delay: 202.150 ms

Loss rate: 1.90%

-- Flow 2:

Average throughput: 125.35 Mbit/s

95th percentile per-packet one-way delay: 202.649 ms

Loss rate: 1.24%

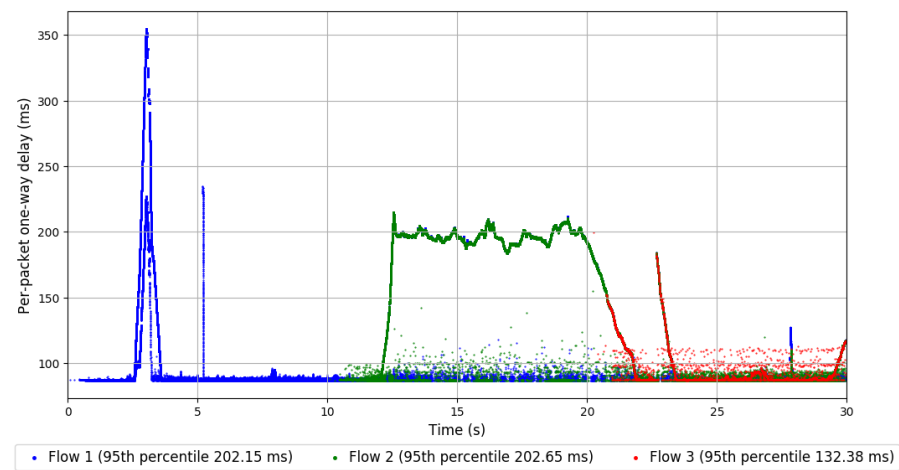
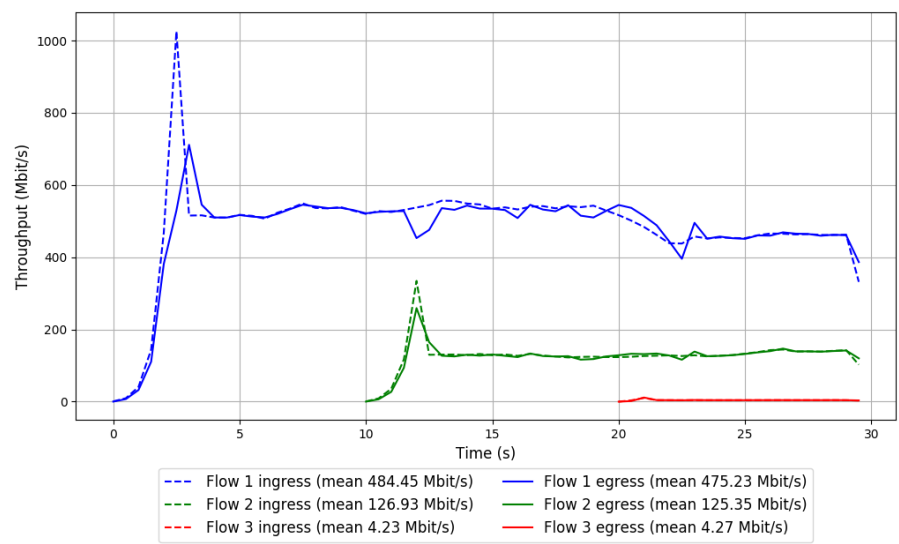
-- Flow 3:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 132.380 ms

Loss rate: 0.29%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-09-22 03:44:32

End at: 2017-09-22 03:45:02

Below is generated by plot.py at 2017-09-22 06:43:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 557.47 Mbit/s

95th percentile per-packet one-way delay: 265.967 ms

Loss rate: 2.15%

-- Flow 1:

Average throughput: 508.73 Mbit/s

95th percentile per-packet one-way delay: 273.358 ms

Loss rate: 2.32%

-- Flow 2:

Average throughput: 72.22 Mbit/s

95th percentile per-packet one-way delay: 222.252 ms

Loss rate: 0.41%

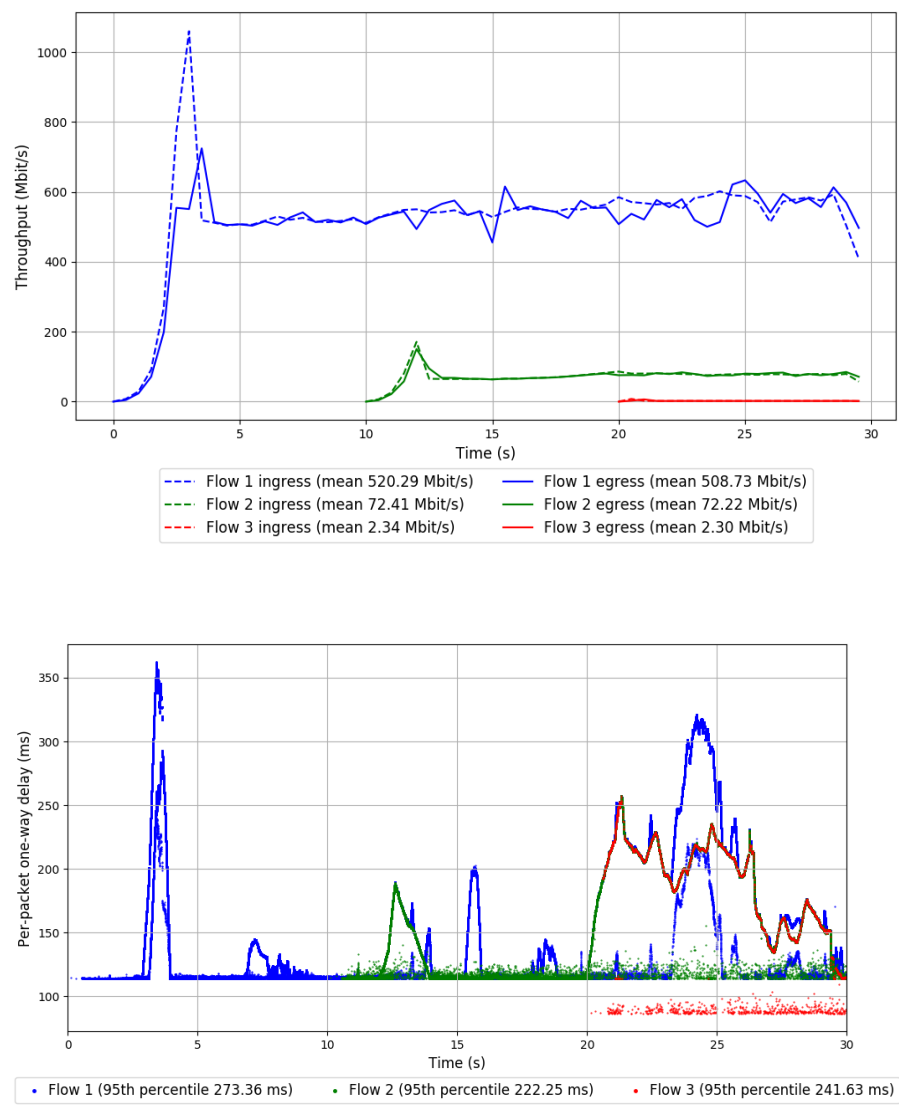
-- Flow 3:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 241.629 ms

Loss rate: 1.52%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-09-22 03:56:49

End at: 2017-09-22 03:57:19

Below is generated by plot.py at 2017-09-22 06:43:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 545.89 Mbit/s

95th percentile per-packet one-way delay: 233.914 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 502.15 Mbit/s

95th percentile per-packet one-way delay: 233.904 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 63.66 Mbit/s

95th percentile per-packet one-way delay: 234.369 ms

Loss rate: 0.50%

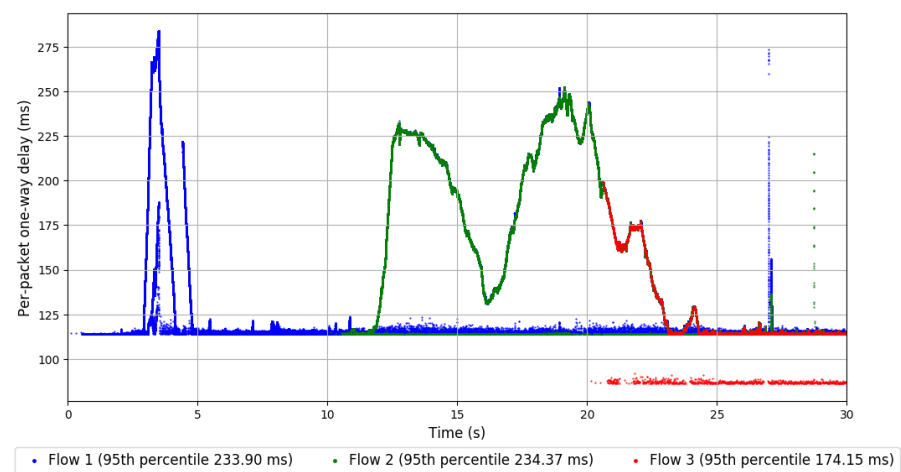
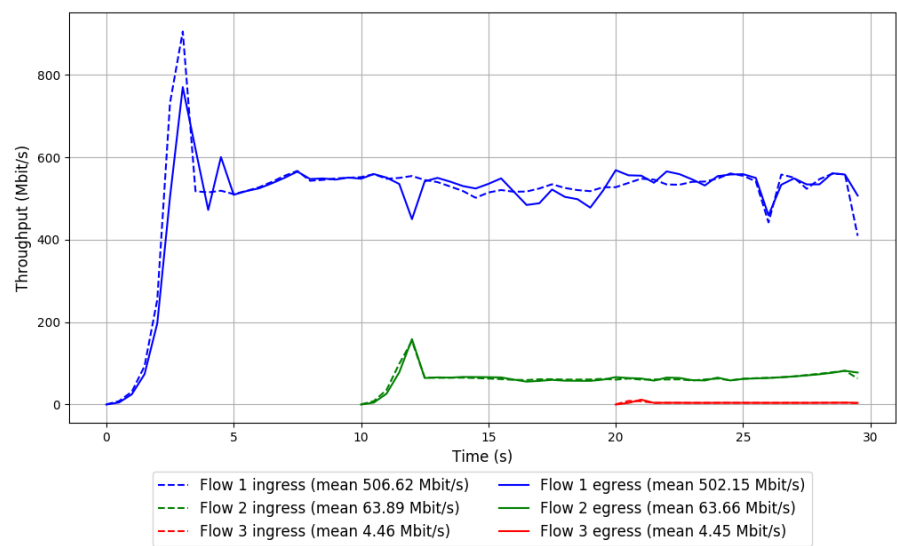
-- Flow 3:

Average throughput: 4.45 Mbit/s

95th percentile per-packet one-way delay: 174.146 ms

Loss rate: 0.30%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-09-22 04:09:17

End at: 2017-09-22 04:09:47

Below is generated by plot.py at 2017-09-22 06:43:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 504.88 Mbit/s

95th percentile per-packet one-way delay: 173.327 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 499.96 Mbit/s

95th percentile per-packet one-way delay: 174.295 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 5.06 Mbit/s

95th percentile per-packet one-way delay: 115.596 ms

Loss rate: 0.14%

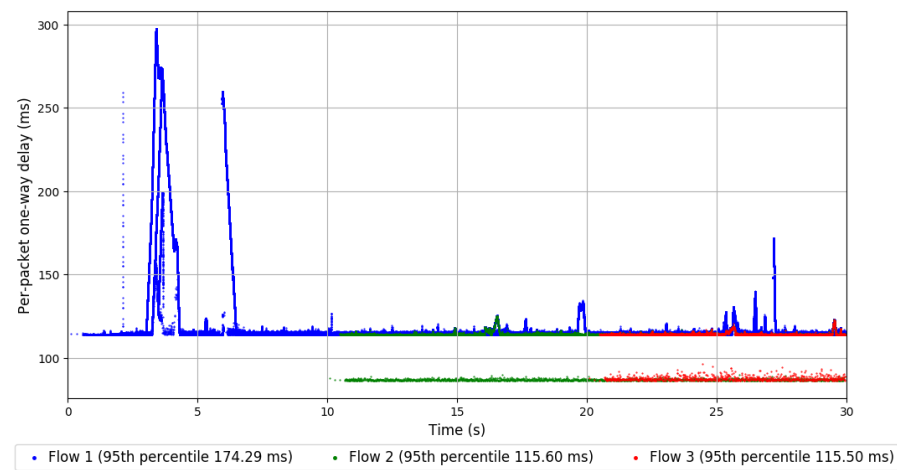
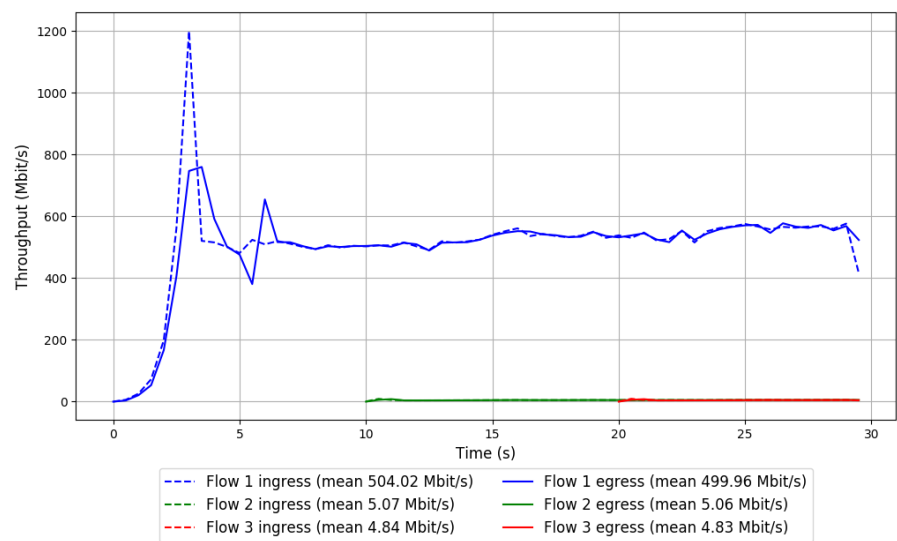
-- Flow 3:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 115.496 ms

Loss rate: 0.28%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-09-22 04:21:38

End at: 2017-09-22 04:22:08

Below is generated by plot.py at 2017-09-22 06:43:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.16 Mbit/s

95th percentile per-packet one-way delay: 114.283 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 5.32 Mbit/s

95th percentile per-packet one-way delay: 114.294 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 4.90 Mbit/s

95th percentile per-packet one-way delay: 114.272 ms

Loss rate: 0.21%

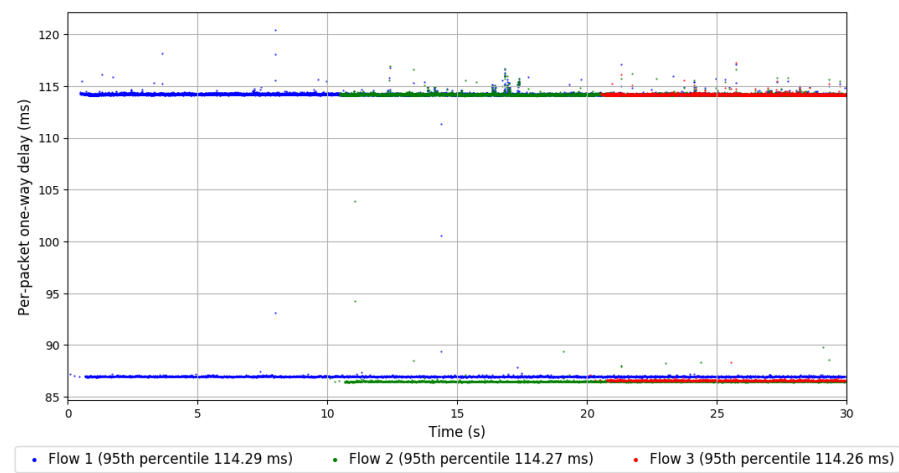
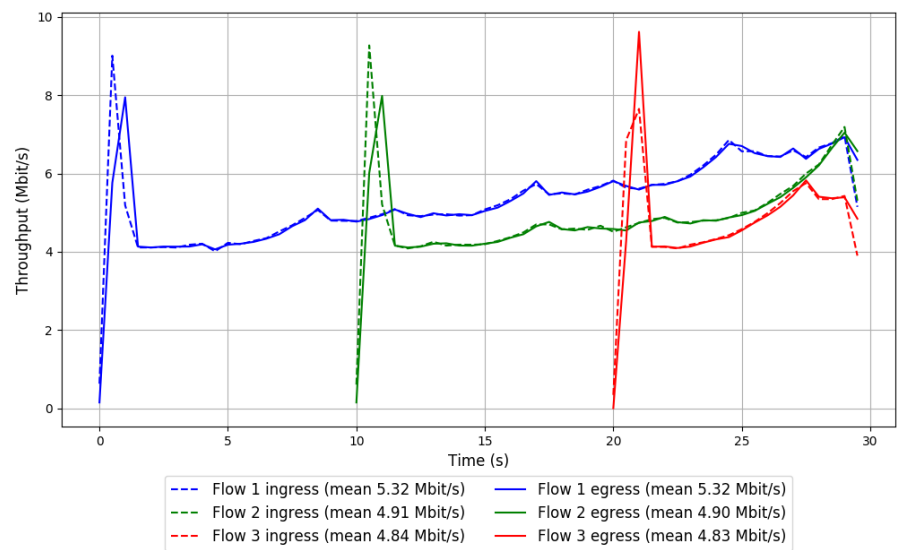
-- Flow 3:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 114.256 ms

Loss rate: 0.30%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-09-22 04:33:47

End at: 2017-09-22 04:34:17

Below is generated by plot.py at 2017-09-22 06:43:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.43 Mbit/s

95th percentile per-packet one-way delay: 114.298 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 114.302 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 114.289 ms

Loss rate: 0.17%

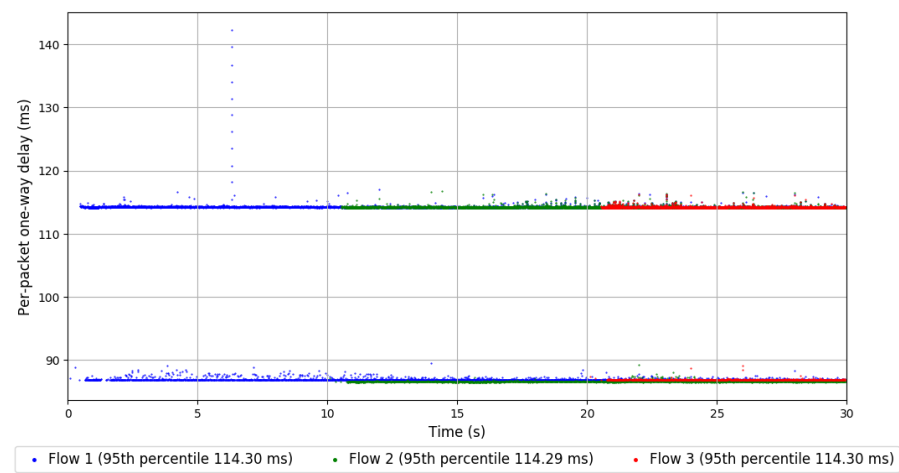
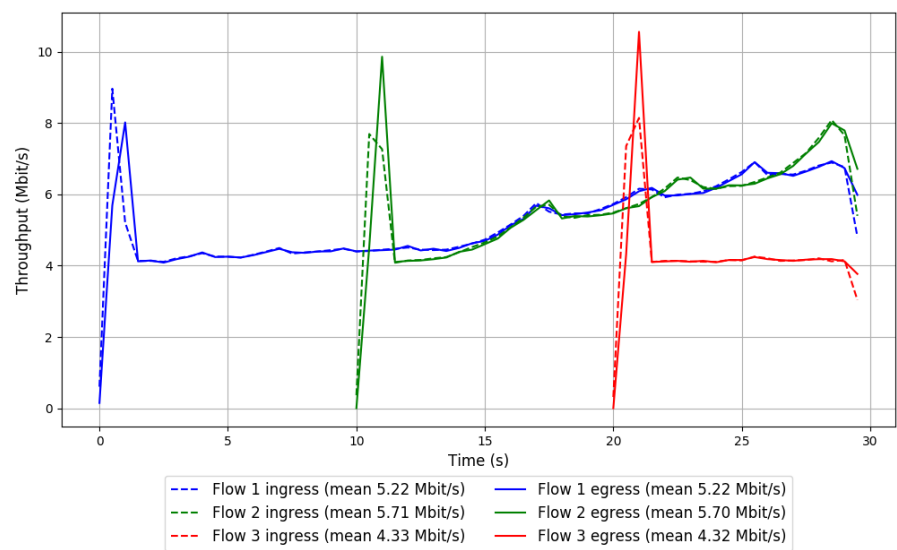
-- Flow 3:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 114.300 ms

Loss rate: 0.25%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-09-22 04:46:07

End at: 2017-09-22 04:46:37

Below is generated by plot.py at 2017-09-22 06:43:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 553.15 Mbit/s

95th percentile per-packet one-way delay: 294.313 ms

Loss rate: 2.23%

-- Flow 1:

Average throughput: 548.85 Mbit/s

95th percentile per-packet one-way delay: 294.417 ms

Loss rate: 2.24%

-- Flow 2:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 229.693 ms

Loss rate: 1.41%

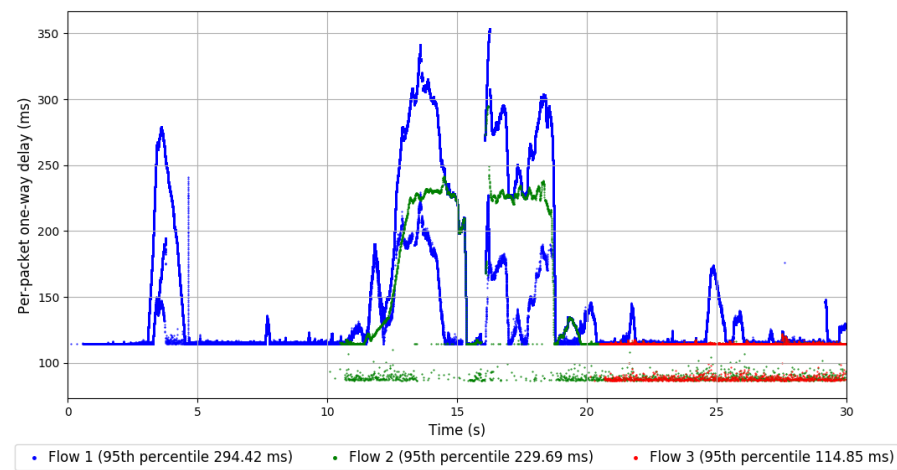
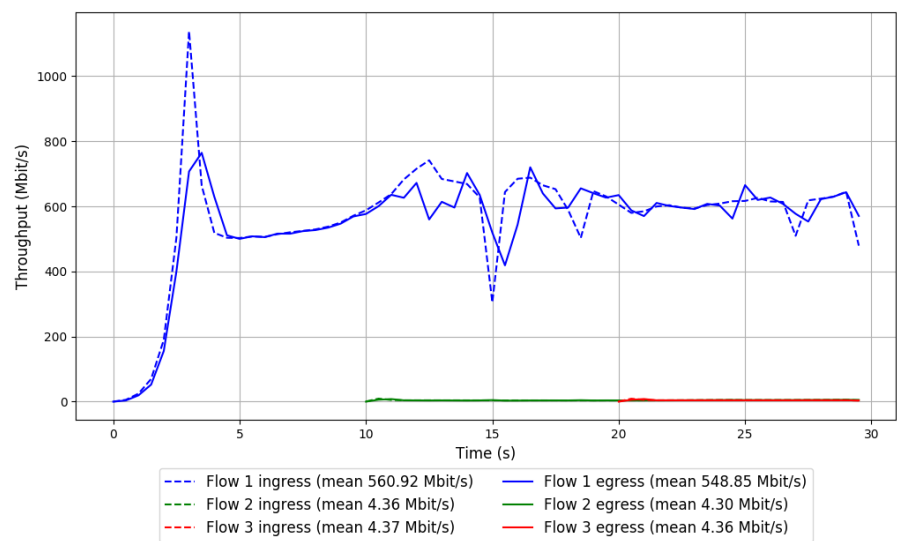
-- Flow 3:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 114.847 ms

Loss rate: 0.28%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-09-22 04:58:17

End at: 2017-09-22 04:58:47

Below is generated by plot.py at 2017-09-22 06:44:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 582.81 Mbit/s

95th percentile per-packet one-way delay: 208.480 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 578.49 Mbit/s

95th percentile per-packet one-way delay: 208.493 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 198.812 ms

Loss rate: 0.49%

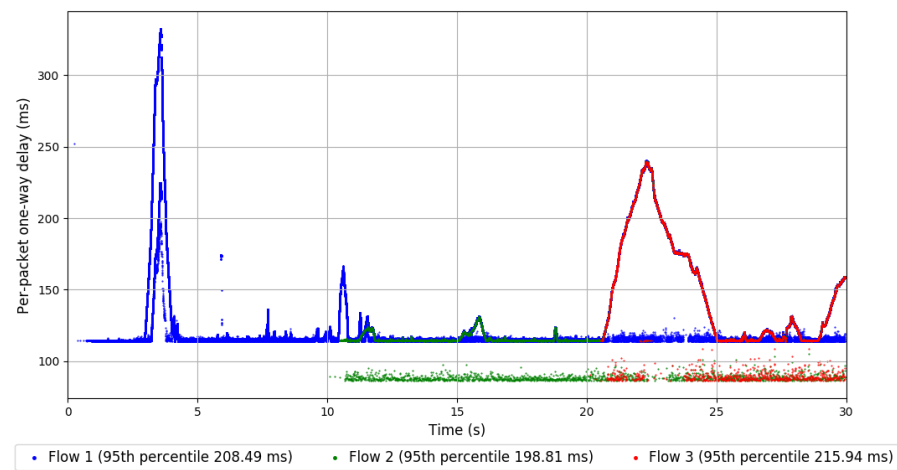
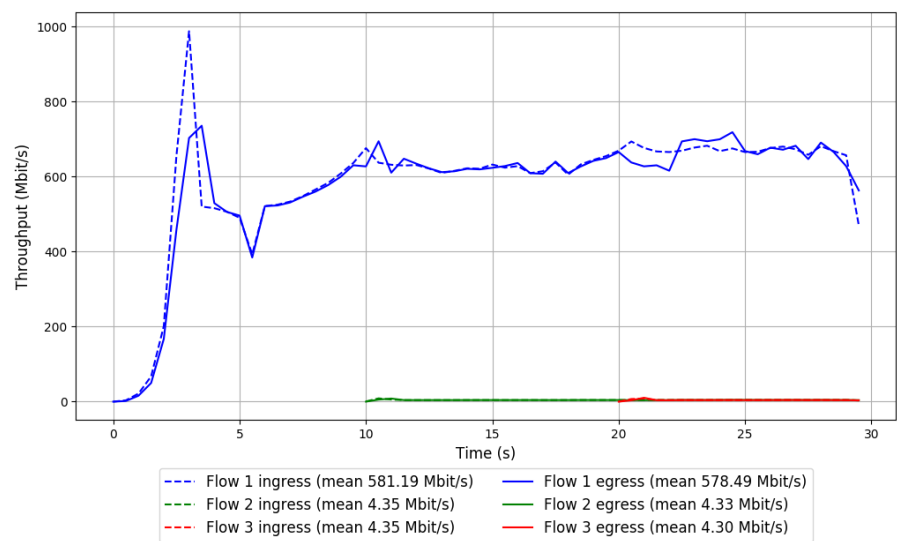
-- Flow 3:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 215.944 ms

Loss rate: 1.15%

Run 9: Report of PCC — Data Link

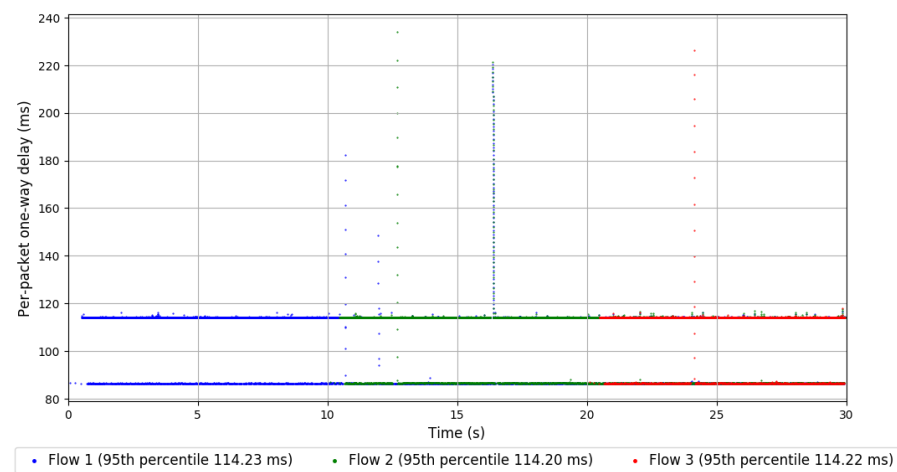
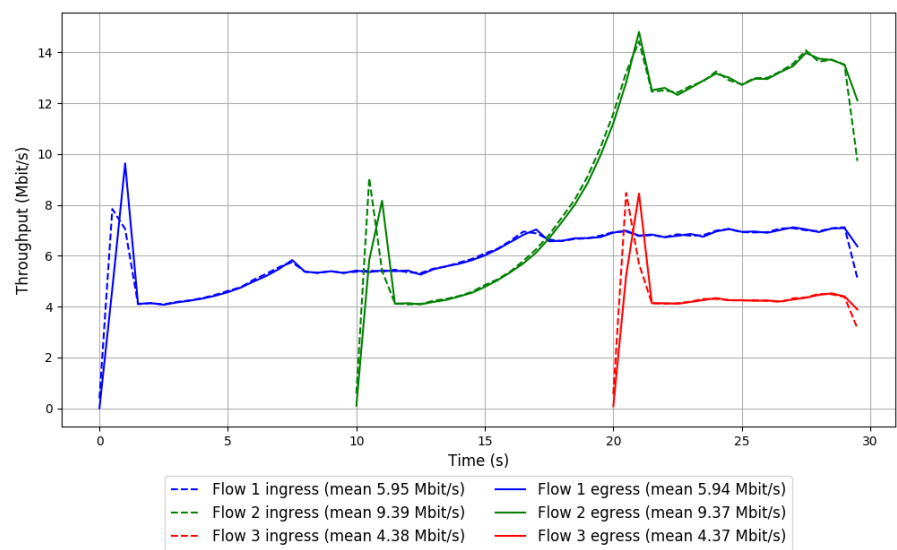


```
Run 10: Statistics of PCC

Start at: 2017-09-22 05:12:37
End at: 2017-09-22 05:13:07

# Below is generated by plot.py at 2017-09-22 06:44:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.61 Mbit/s
95th percentile per-packet one-way delay: 114.221 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 5.94 Mbit/s
95th percentile per-packet one-way delay: 114.232 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 9.37 Mbit/s
95th percentile per-packet one-way delay: 114.204 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 114.220 ms
Loss rate: 0.28%
```

Run 10: Report of PCC — Data Link

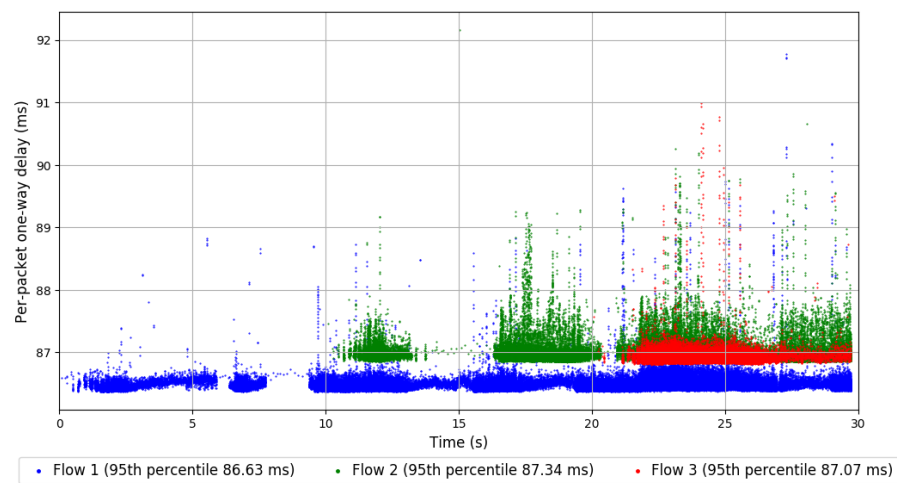
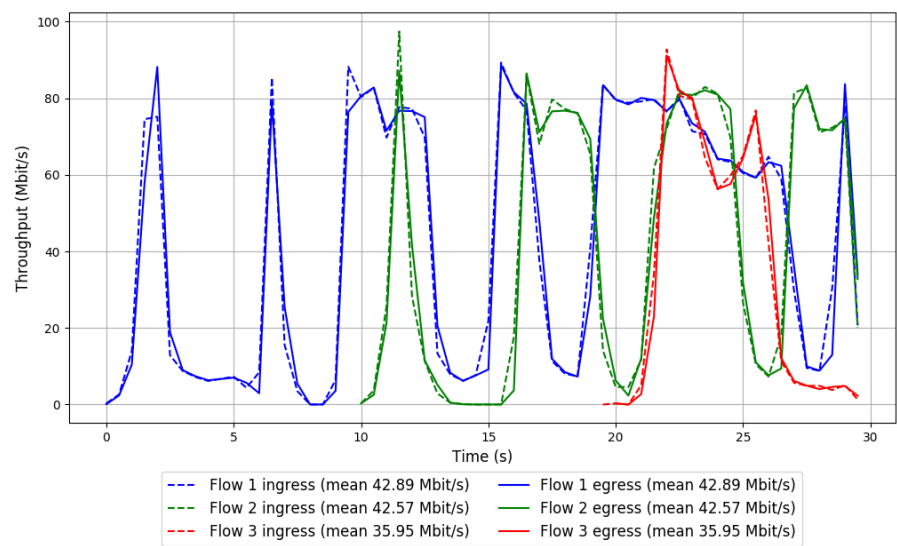


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-09-22 03:21:06
End at: 2017-09-22 03:21:36

# Below is generated by plot.py at 2017-09-22 06:44:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.78 Mbit/s
95th percentile per-packet one-way delay: 87.136 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.89 Mbit/s
95th percentile per-packet one-way delay: 86.629 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.57 Mbit/s
95th percentile per-packet one-way delay: 87.340 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.95 Mbit/s
95th percentile per-packet one-way delay: 87.072 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-09-22 03:34:22

End at: 2017-09-22 03:34:52

Below is generated by plot.py at 2017-09-22 06:44:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.36 Mbit/s

95th percentile per-packet one-way delay: 87.009 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.63 Mbit/s

95th percentile per-packet one-way delay: 86.743 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.31 Mbit/s

95th percentile per-packet one-way delay: 87.047 ms

Loss rate: 0.00%

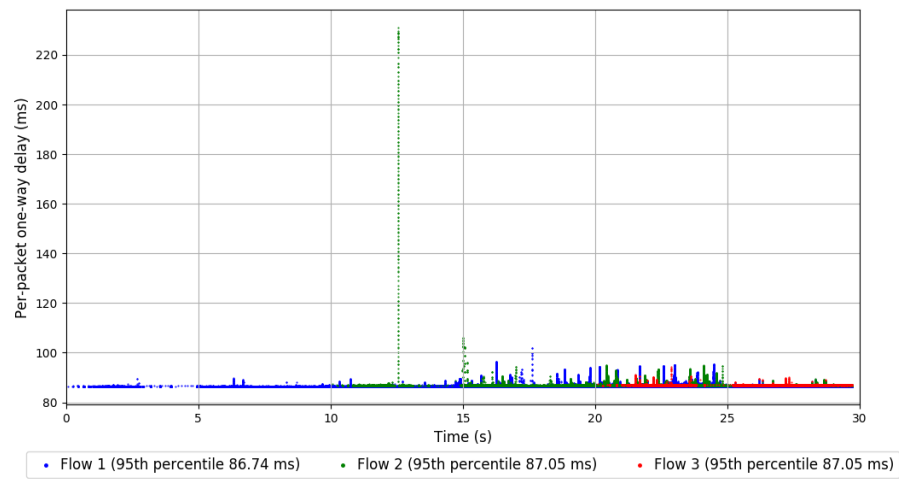
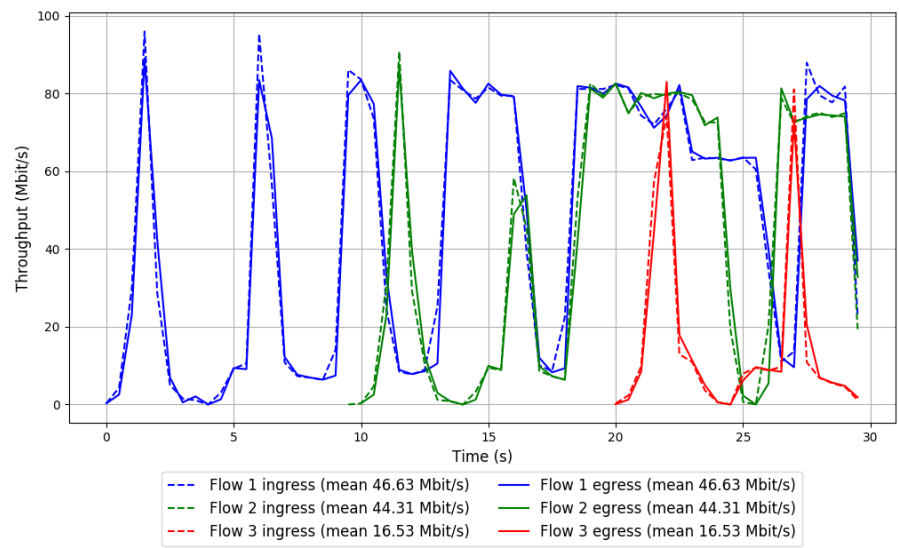
-- Flow 3:

Average throughput: 16.53 Mbit/s

95th percentile per-packet one-way delay: 87.054 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-09-22 03:47:22

End at: 2017-09-22 03:47:52

Below is generated by plot.py at 2017-09-22 06:44:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.11 Mbit/s

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

Loss rate: 0.01%

-- Flow 1:

Average throughput: 53.25 Mbit/s

95th percentile per-packet one-way delay: 86.614 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.69 Mbit/s

95th percentile per-packet one-way delay: 86.703 ms

Loss rate: 0.00%

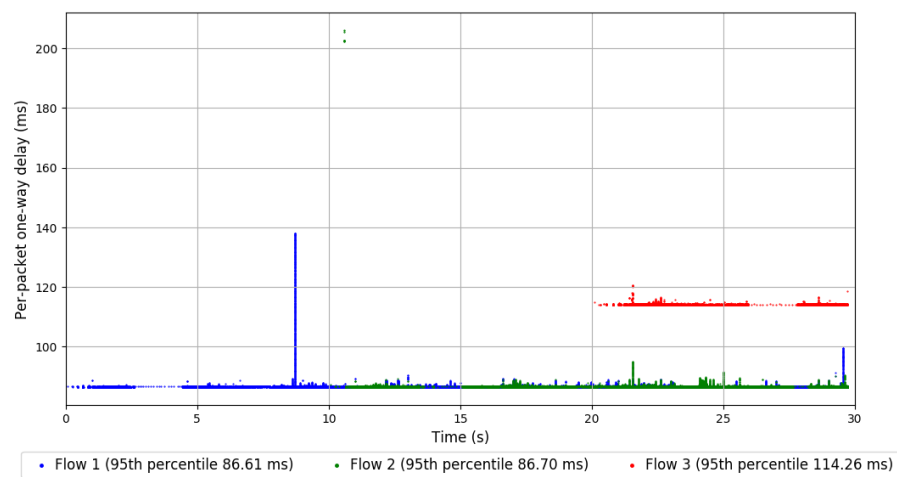
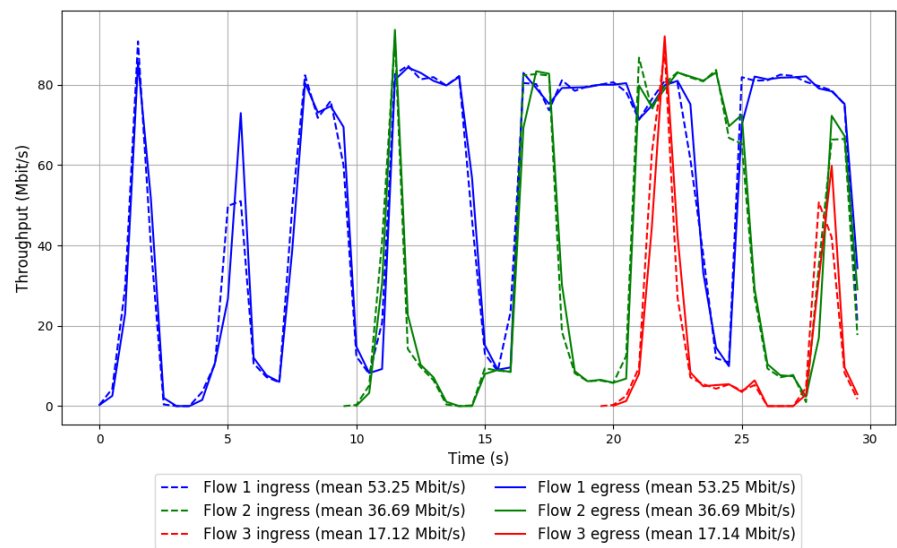
-- Flow 3:

Average throughput: 17.14 Mbit/s

95th percentile per-packet one-way delay: 114.264 ms

Loss rate: 0.10%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-09-22 03:59:32

End at: 2017-09-22 04:00:03

Below is generated by plot.py at 2017-09-22 06:44:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.12 Mbit/s

95th percentile per-packet one-way delay: 114.176 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 42.84 Mbit/s

95th percentile per-packet one-way delay: 87.073 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.76 Mbit/s

95th percentile per-packet one-way delay: 86.691 ms

Loss rate: 0.00%

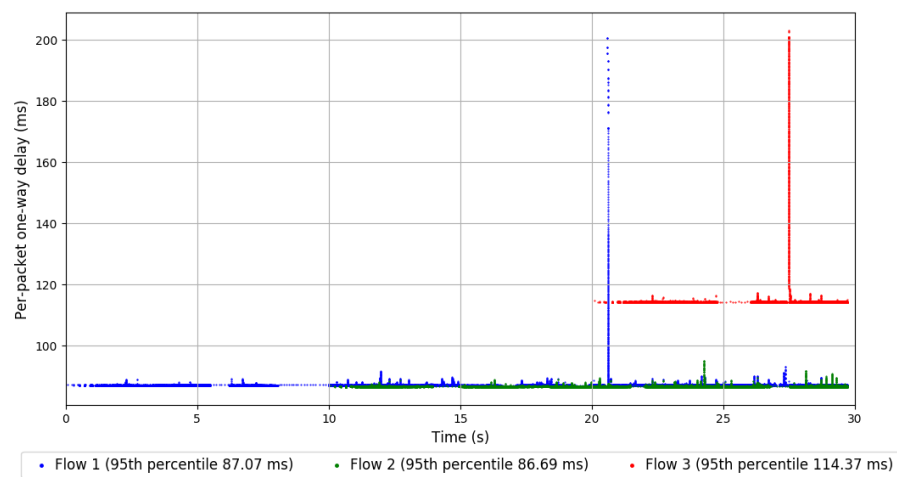
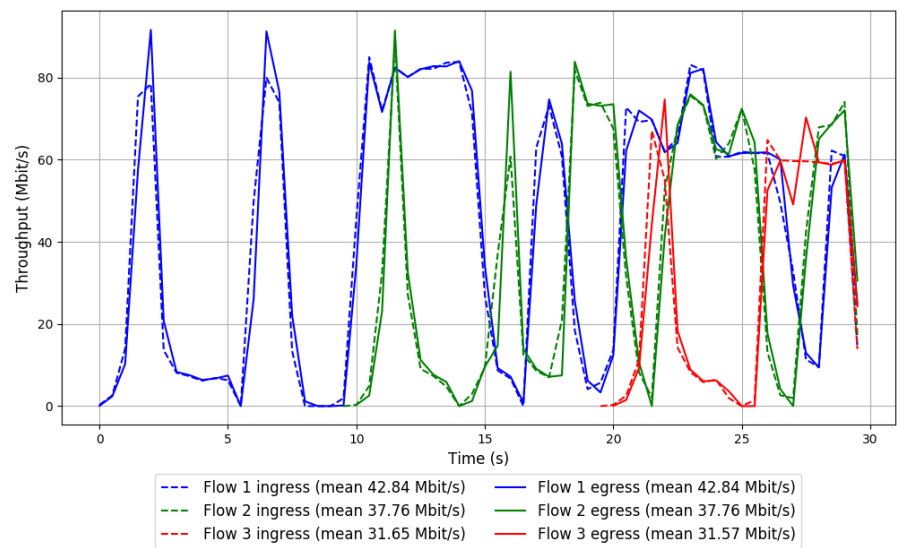
-- Flow 3:

Average throughput: 31.57 Mbit/s

95th percentile per-packet one-way delay: 114.368 ms

Loss rate: 0.52%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-09-22 04:12:04

End at: 2017-09-22 04:12:34

Below is generated by plot.py at 2017-09-22 06:44:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.88 Mbit/s

95th percentile per-packet one-way delay: 114.257 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 50.06 Mbit/s

95th percentile per-packet one-way delay: 86.663 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.02 Mbit/s

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

Loss rate: 0.23%

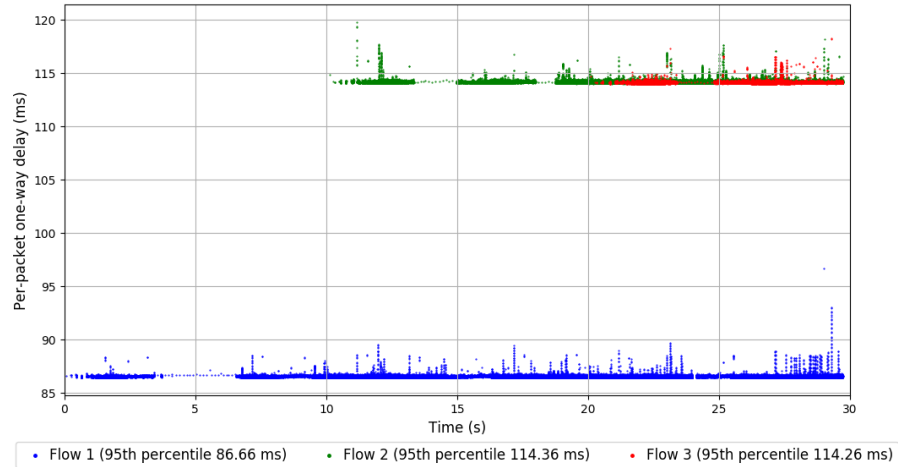
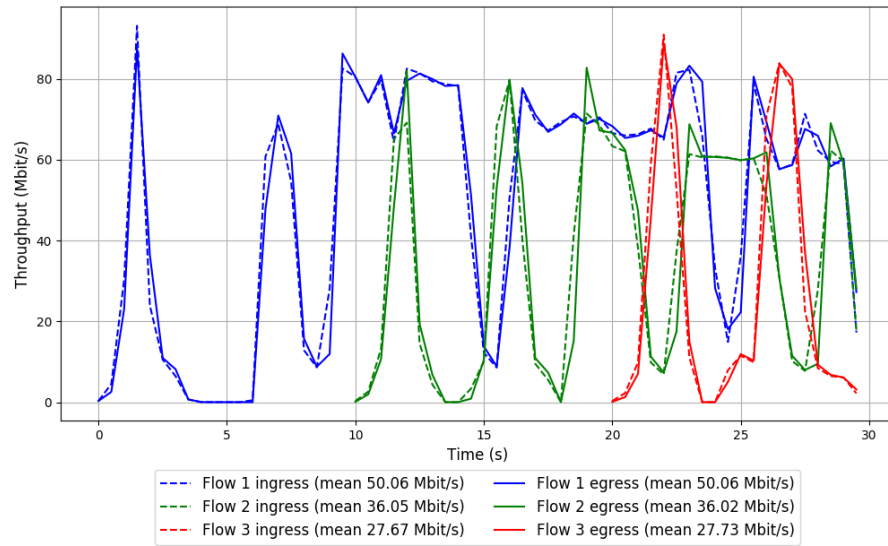
-- Flow 3:

Average throughput: 27.73 Mbit/s

95th percentile per-packet one-way delay: 114.263 ms

Loss rate: 0.08%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-09-22 04:23:59

End at: 2017-09-22 04:24:29

Below is generated by plot.py at 2017-09-22 06:44:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.07 Mbit/s

95th percentile per-packet one-way delay: 87.002 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.24 Mbit/s

95th percentile per-packet one-way delay: 87.159 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.75 Mbit/s

95th percentile per-packet one-way delay: 86.640 ms

Loss rate: 0.00%

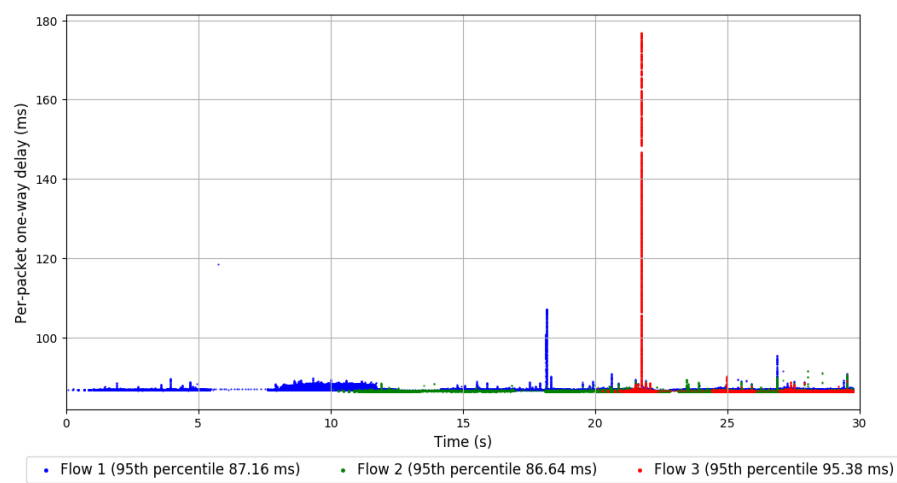
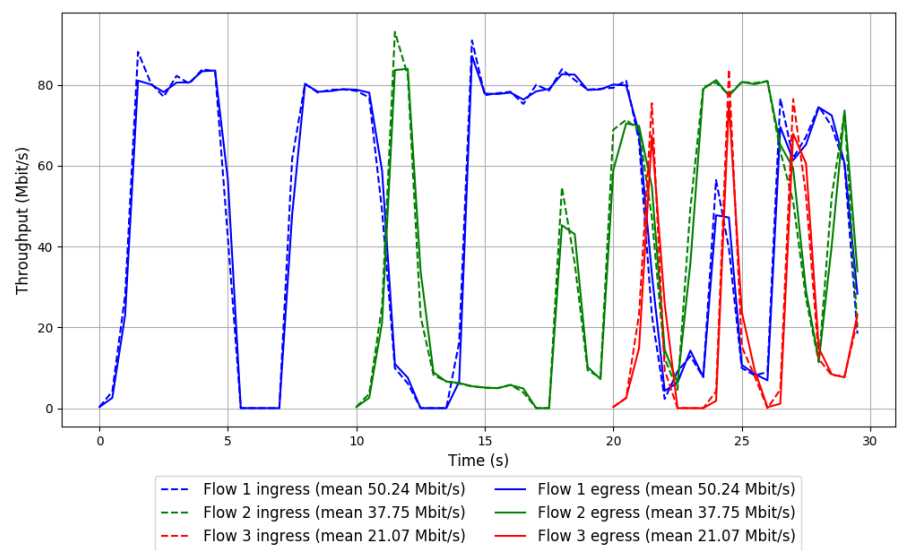
-- Flow 3:

Average throughput: 21.07 Mbit/s

95th percentile per-packet one-way delay: 95.379 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-09-22 04:36:08

End at: 2017-09-22 04:36:38

Below is generated by plot.py at 2017-09-22 06:44:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.41 Mbit/s

95th percentile per-packet one-way delay: 114.206 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 43.77 Mbit/s

95th percentile per-packet one-way delay: 87.124 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.61 Mbit/s

95th percentile per-packet one-way delay: 114.273 ms

Loss rate: 0.18%

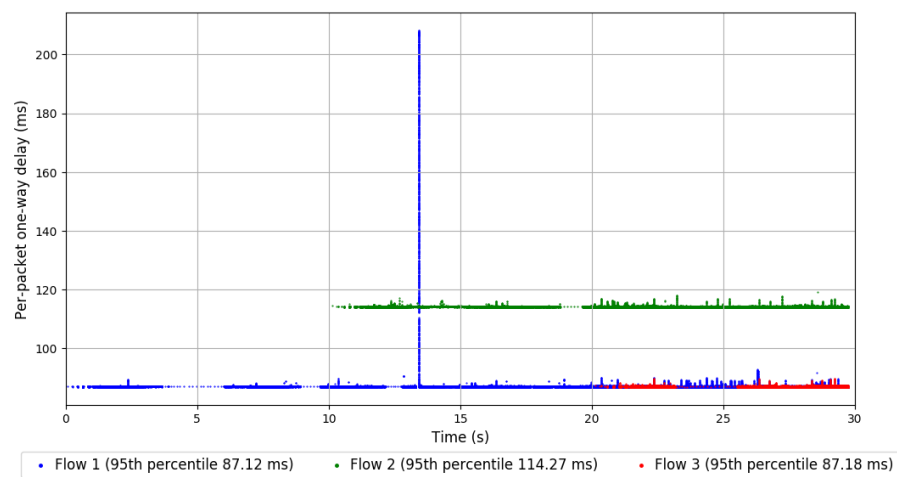
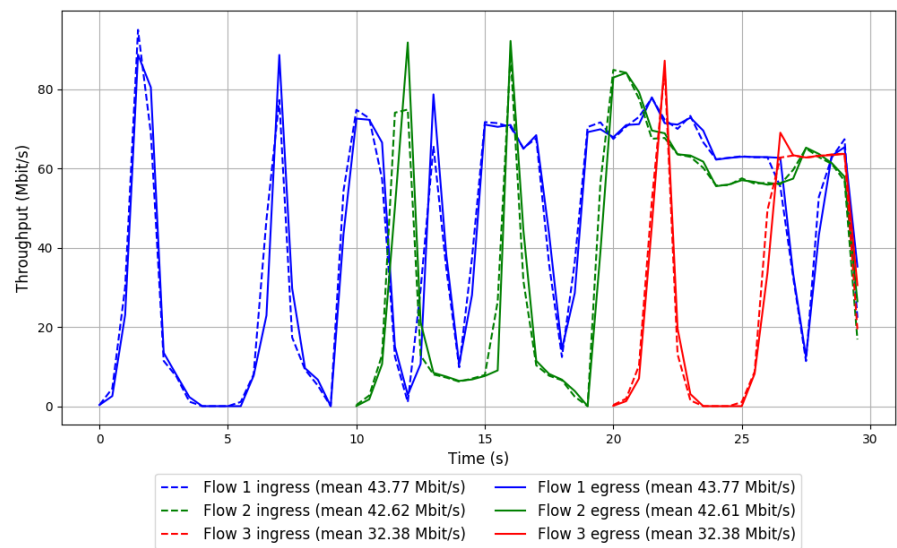
-- Flow 3:

Average throughput: 32.38 Mbit/s

95th percentile per-packet one-way delay: 87.182 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-09-22 04:48:52

End at: 2017-09-22 04:49:22

Below is generated by plot.py at 2017-09-22 06:45:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.14 Mbit/s

95th percentile per-packet one-way delay: 87.021 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.00 Mbit/s

95th percentile per-packet one-way delay: 87.053 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.41 Mbit/s

95th percentile per-packet one-way delay: 86.611 ms

Loss rate: 0.00%

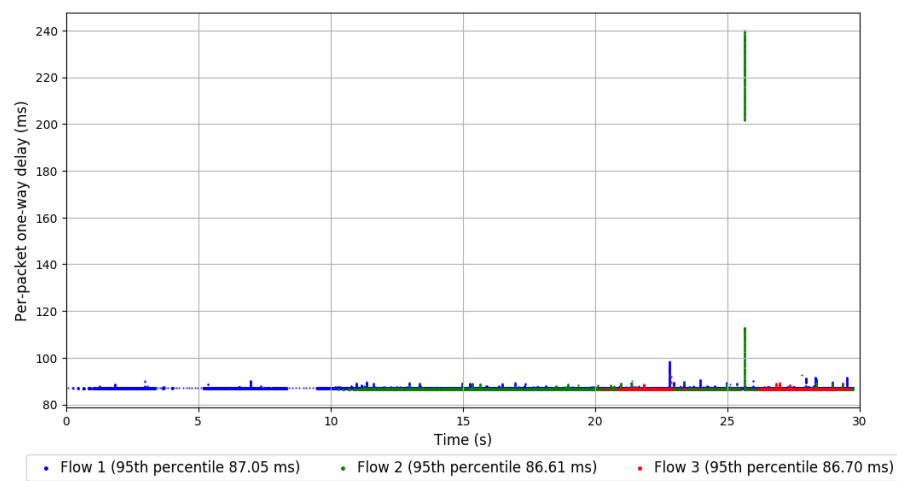
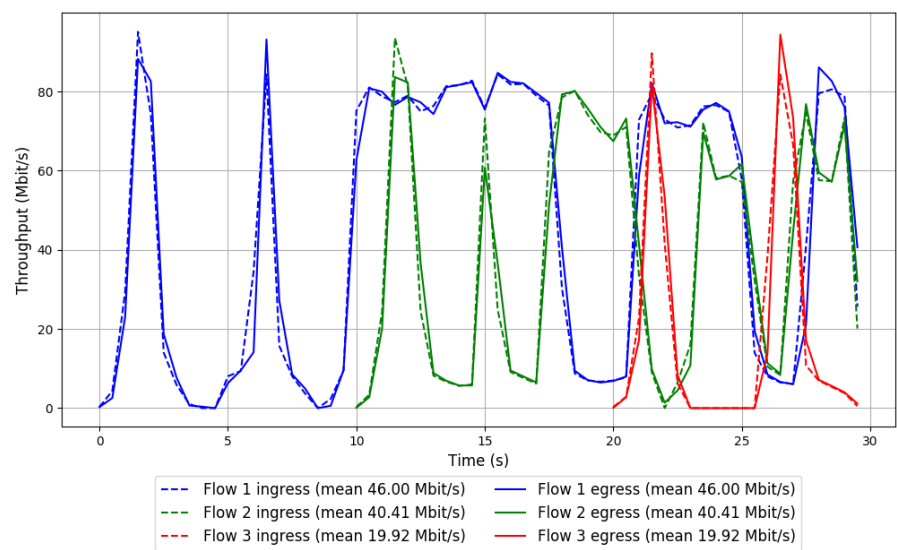
-- Flow 3:

Average throughput: 19.92 Mbit/s

95th percentile per-packet one-way delay: 86.704 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-09-22 05:01:14

End at: 2017-09-22 05:01:44

Below is generated by plot.py at 2017-09-22 06:45:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.22 Mbit/s

95th percentile per-packet one-way delay: 114.179 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 42.79 Mbit/s

95th percentile per-packet one-way delay: 86.600 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.44 Mbit/s

95th percentile per-packet one-way delay: 114.281 ms

Loss rate: 0.05%

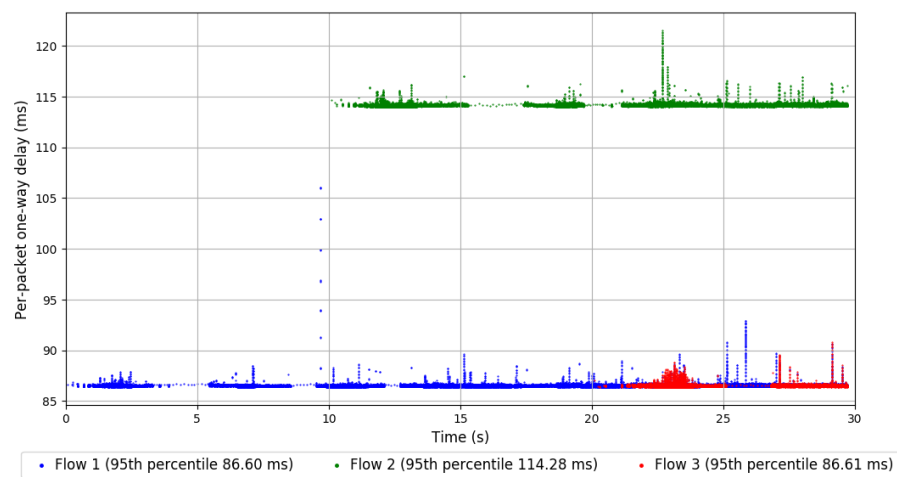
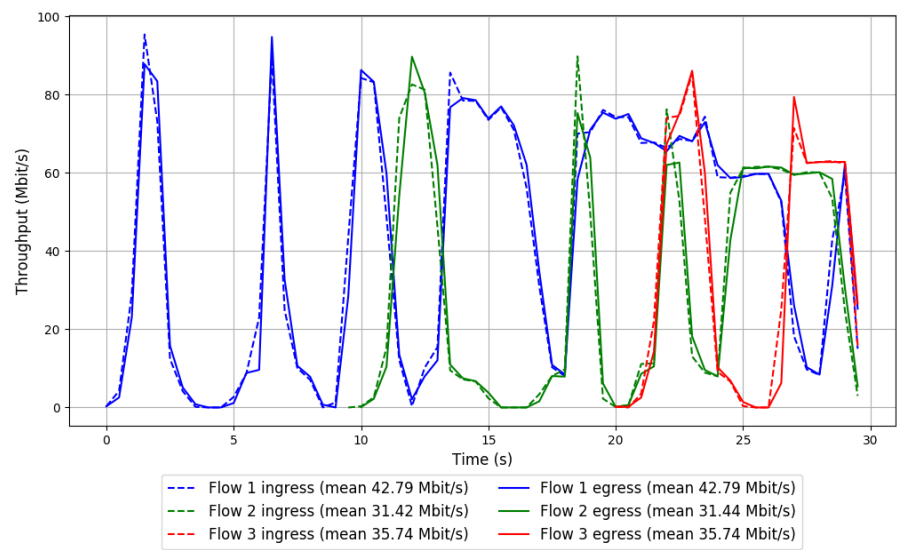
-- Flow 3:

Average throughput: 35.74 Mbit/s

95th percentile per-packet one-way delay: 86.612 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-09-22 05:15:24

End at: 2017-09-22 05:15:54

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.03 Mbit/s

95th percentile per-packet one-way delay: 86.742 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.32 Mbit/s

95th percentile per-packet one-way delay: 86.634 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.50 Mbit/s

95th percentile per-packet one-way delay: 86.930 ms

Loss rate: 0.00%

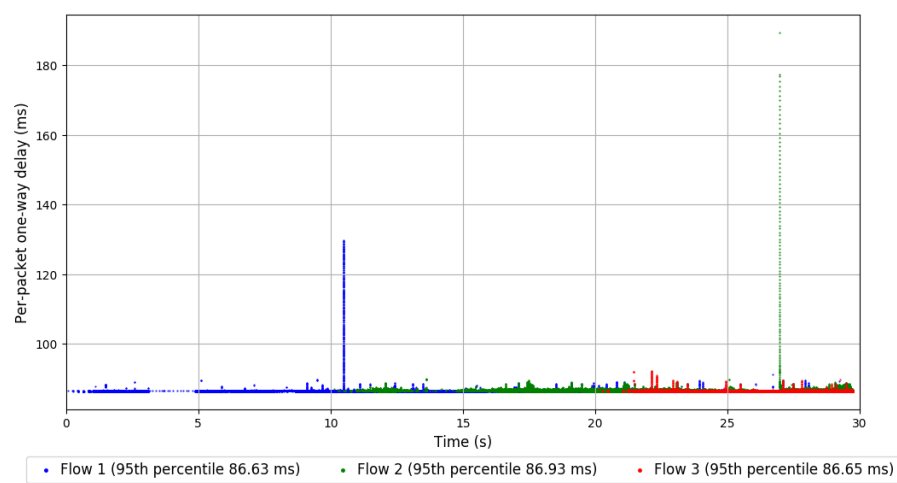
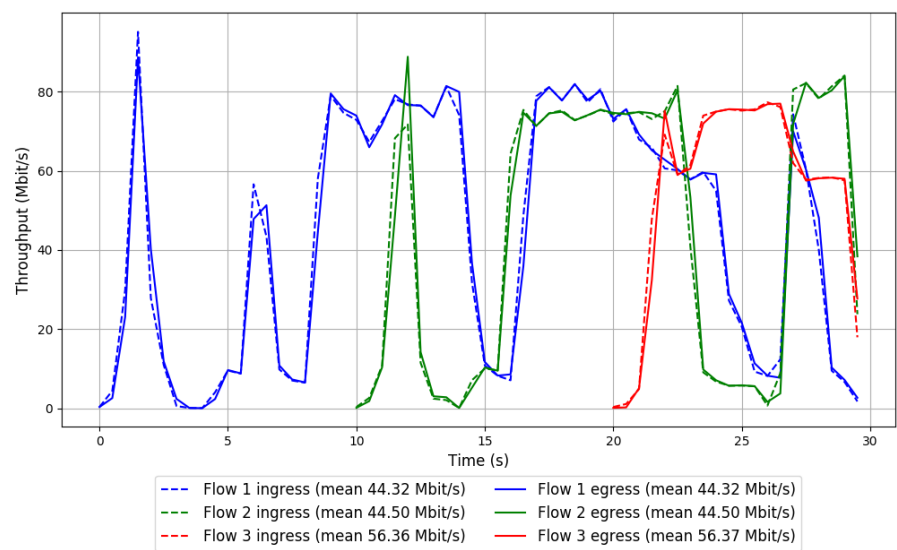
-- Flow 3:

Average throughput: 56.37 Mbit/s

95th percentile per-packet one-way delay: 86.650 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

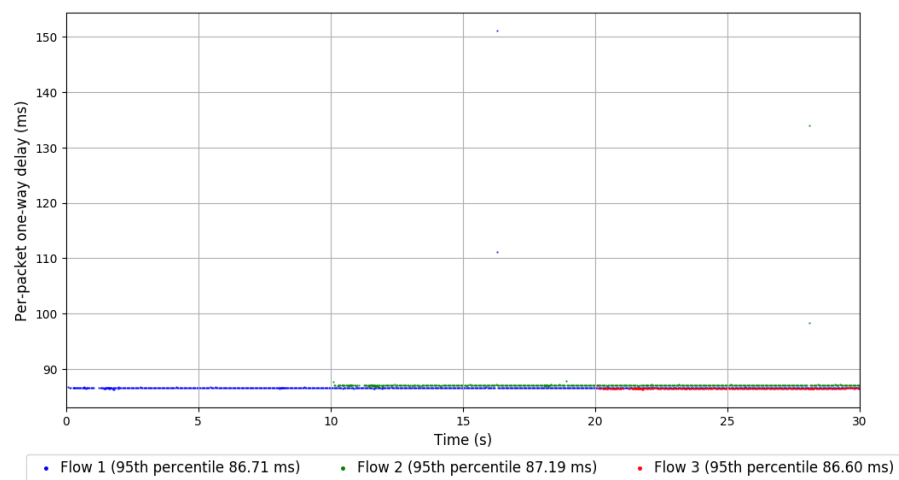
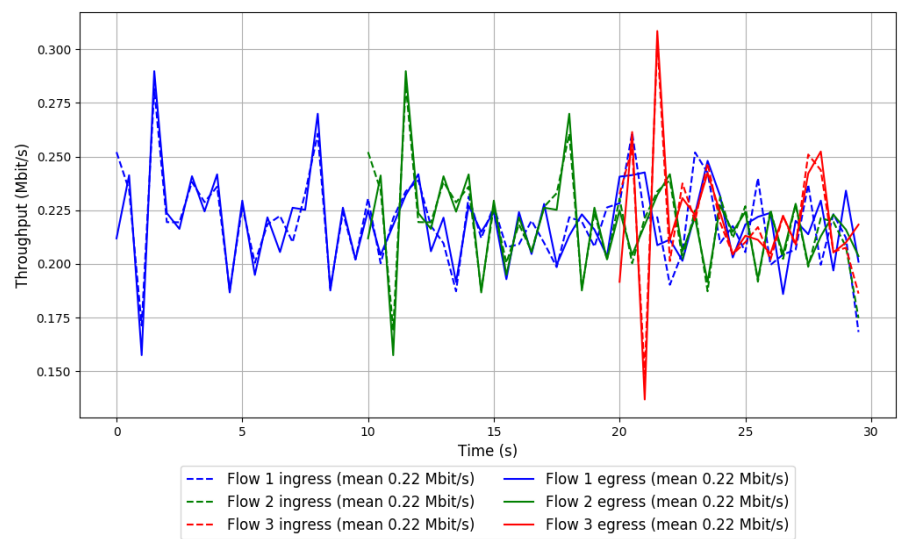


```
Run 1: Statistics of SCReAM

Start at: 2017-09-22 03:17:31
End at: 2017-09-22 03:18:01

# Below is generated by plot.py at 2017-09-22 06:45:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.163 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.710 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.192 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.603 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

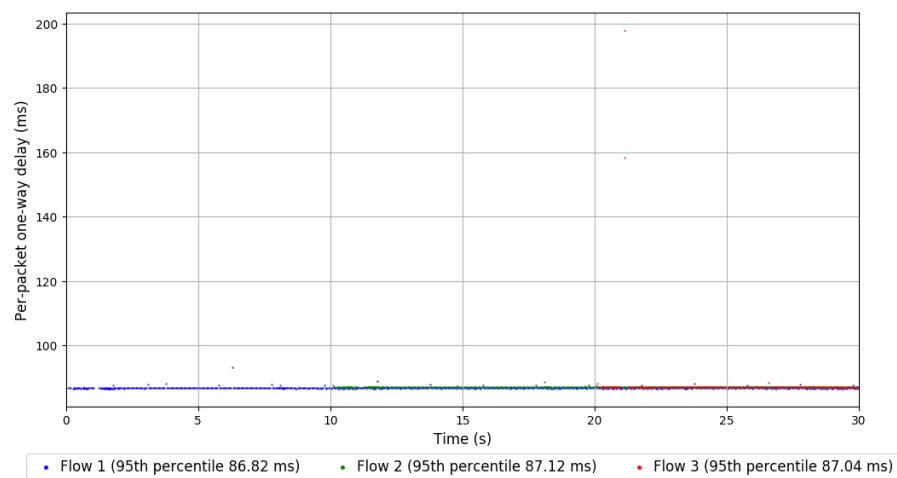
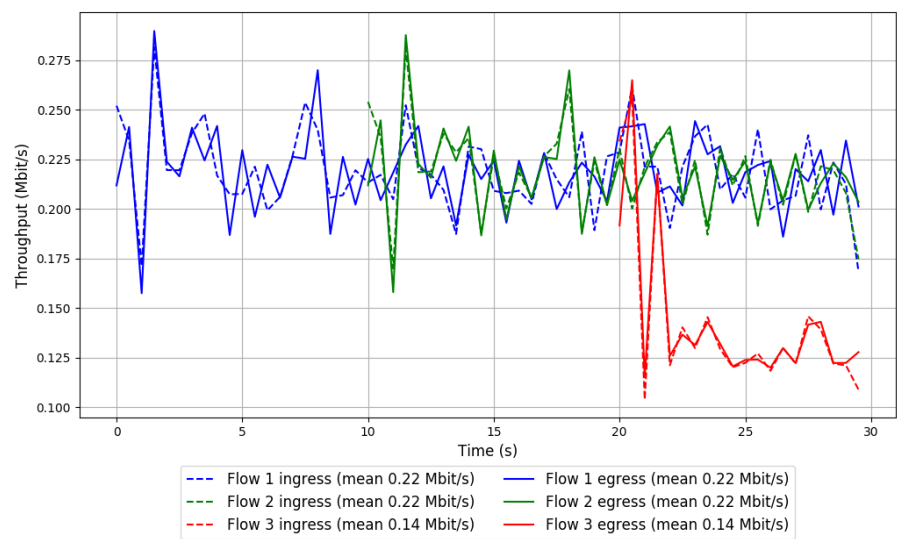


```
Run 2: Statistics of SReAM

Start at: 2017-09-22 03:30:47
End at: 2017-09-22 03:31:17

# Below is generated by plot.py at 2017-09-22 06:45:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 87.109 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.818 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.124 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 87.042 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-09-22 03:43:48

End at: 2017-09-22 03:44:18

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.132 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.724 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.150 ms

Loss rate: 0.00%

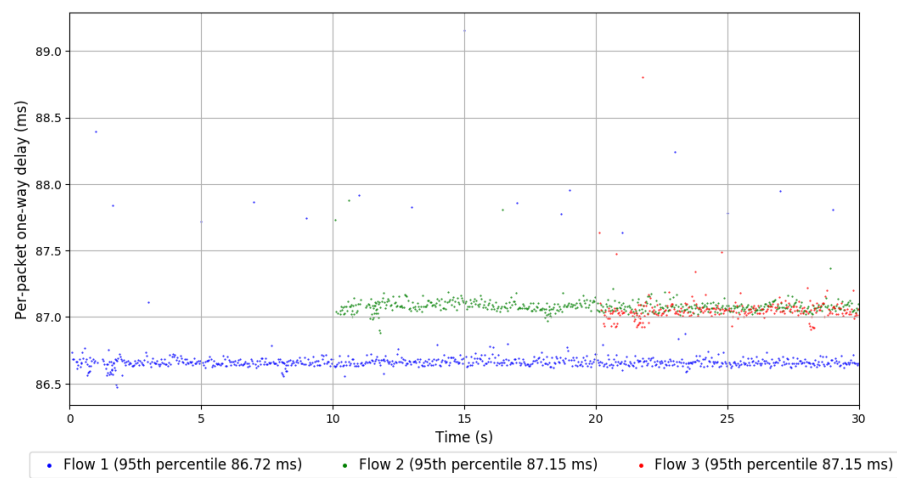
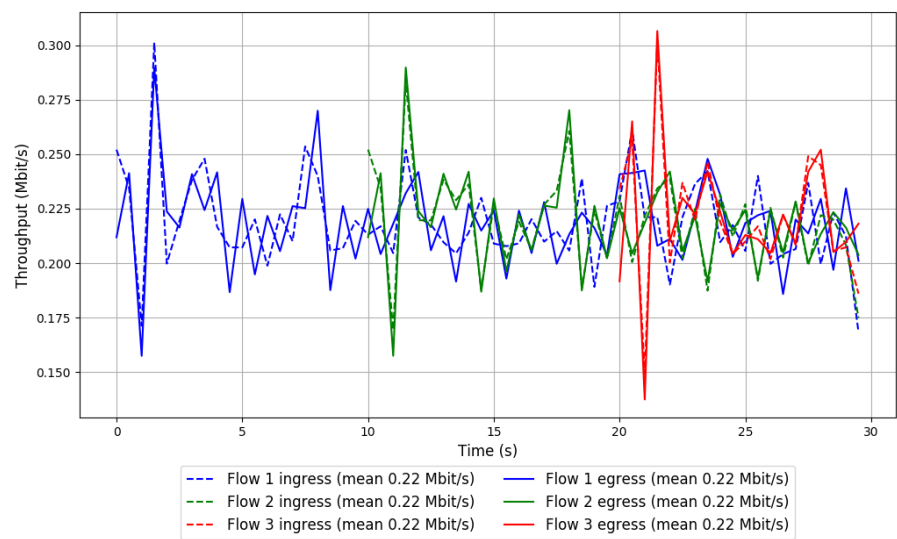
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.153 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-09-22 03:56:04

End at: 2017-09-22 03:56:34

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.235 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.985 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.677 ms

Loss rate: 0.00%

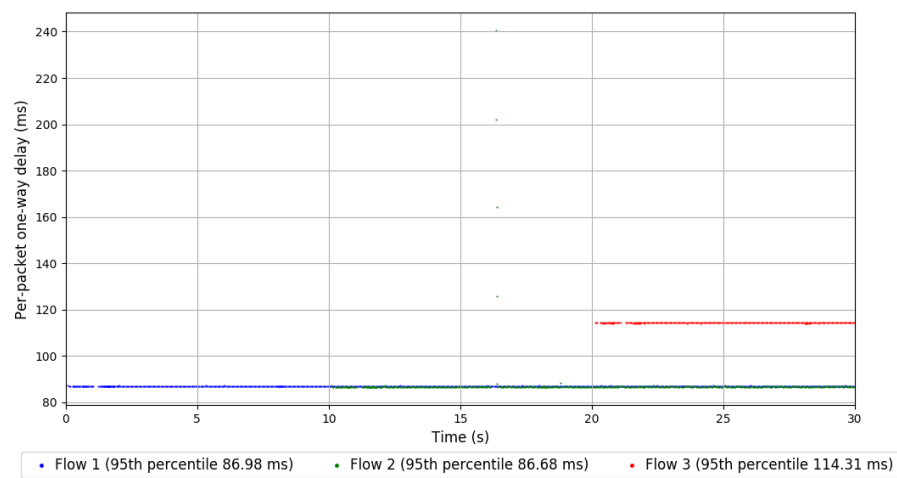
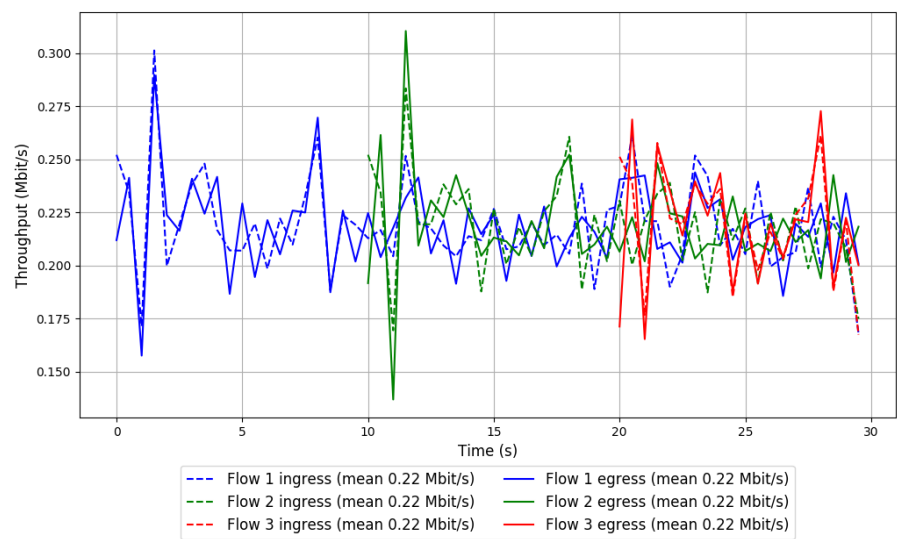
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.312 ms

Loss rate: 0.35%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2017-09-22 04:08:33

End at: 2017-09-22 04:09:03

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.343 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.365 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.061 ms

Loss rate: 0.00%

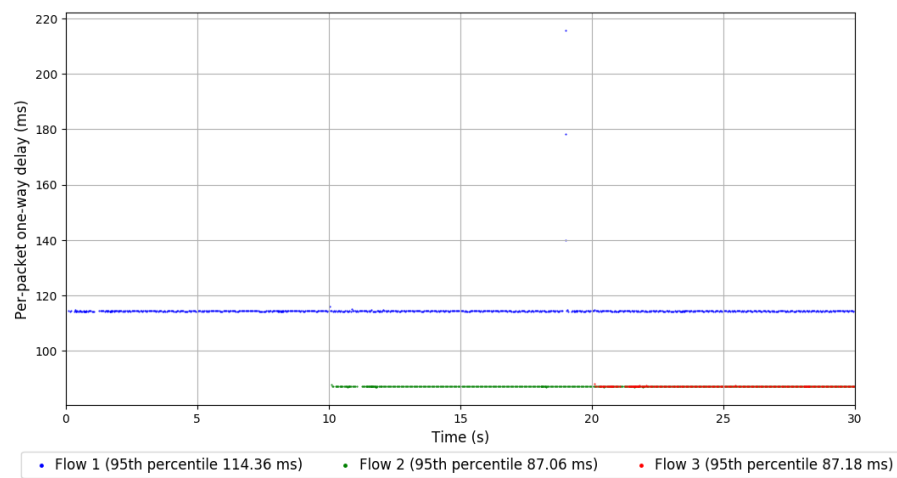
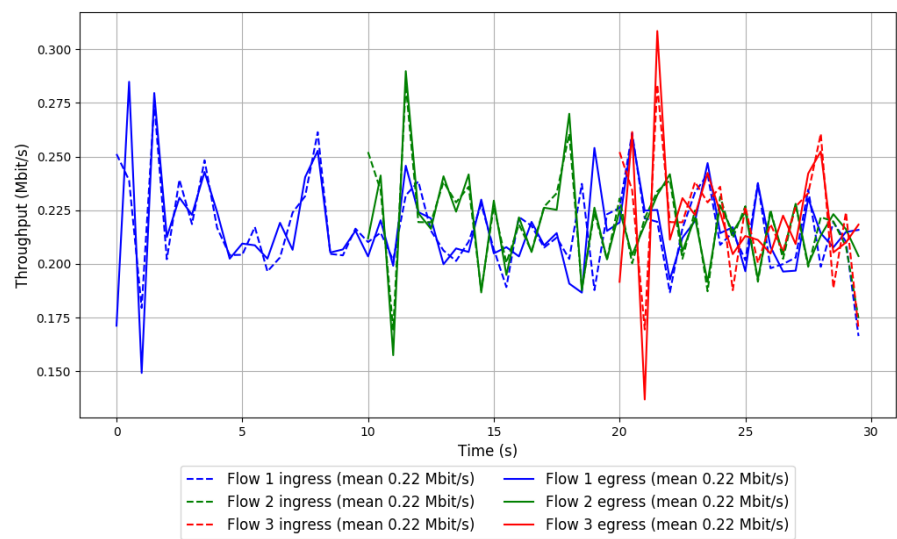
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.183 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-09-22 04:20:54

End at: 2017-09-22 04:21:24

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.335 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.712 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.381 ms

Loss rate: 0.00%

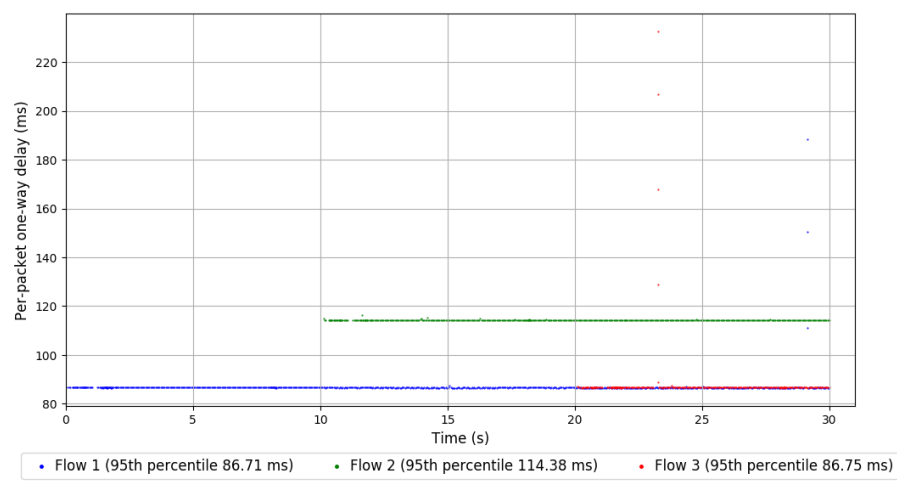
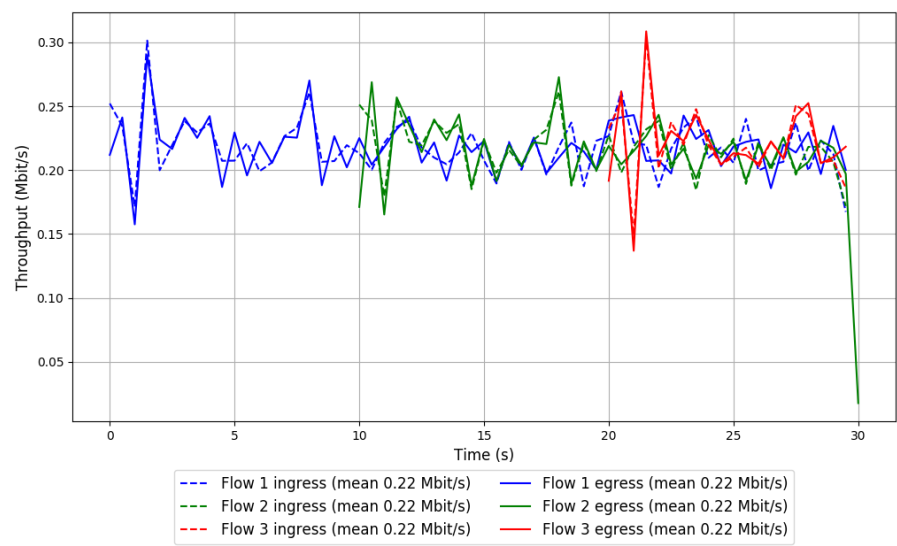
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.746 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2017-09-22 04:33:02

End at: 2017-09-22 04:33:32

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.398 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.434 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.130 ms

Loss rate: 0.00%

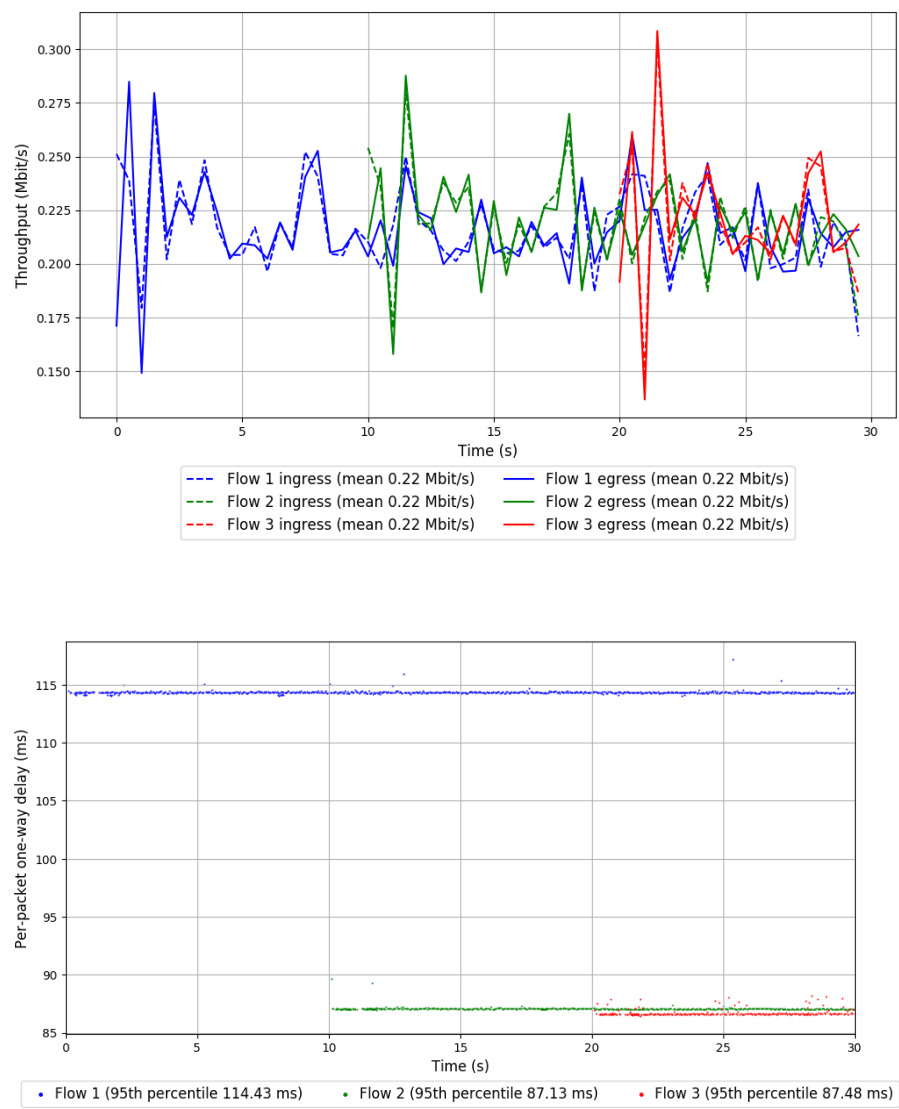
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.483 ms

Loss rate: 0.00%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-09-22 04:45:24

End at: 2017-09-22 04:45:54

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.141 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.157 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.103 ms

Loss rate: 0.00%

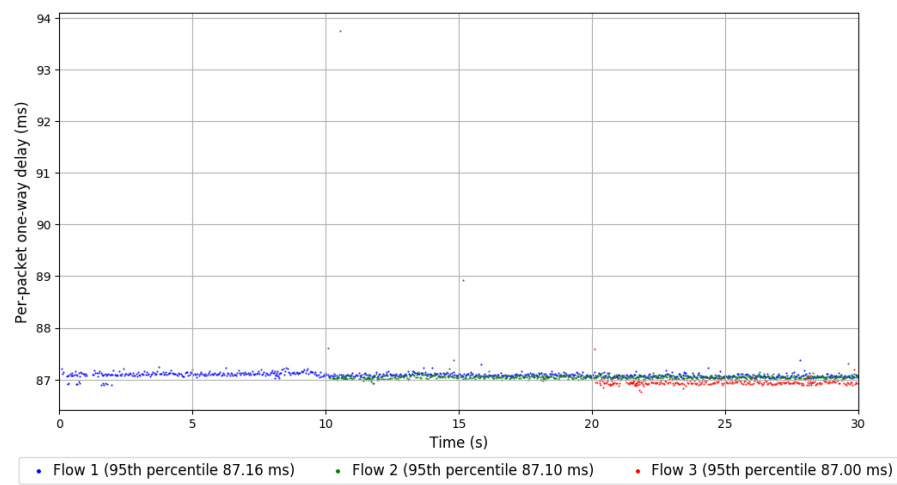
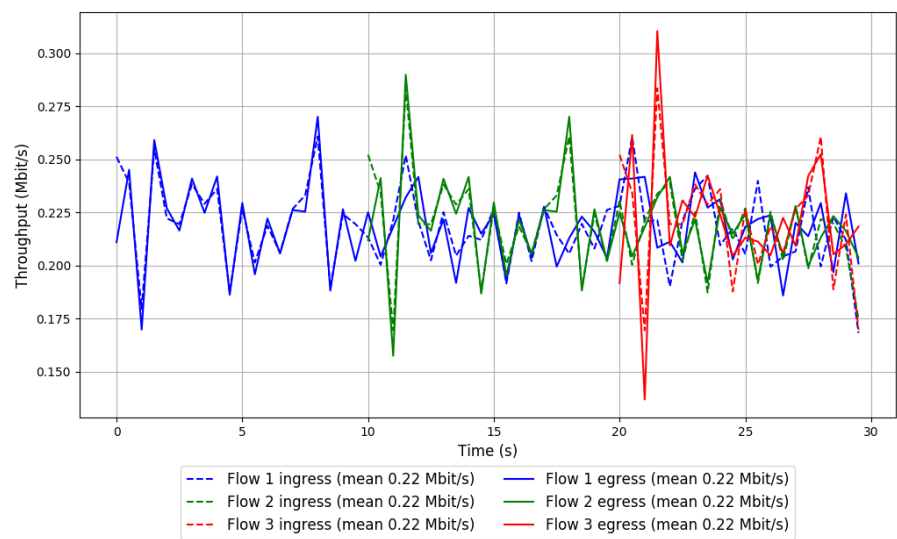
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.998 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-09-22 04:57:33

End at: 2017-09-22 04:58:03

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.129 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.129 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.013 ms

Loss rate: 0.00%

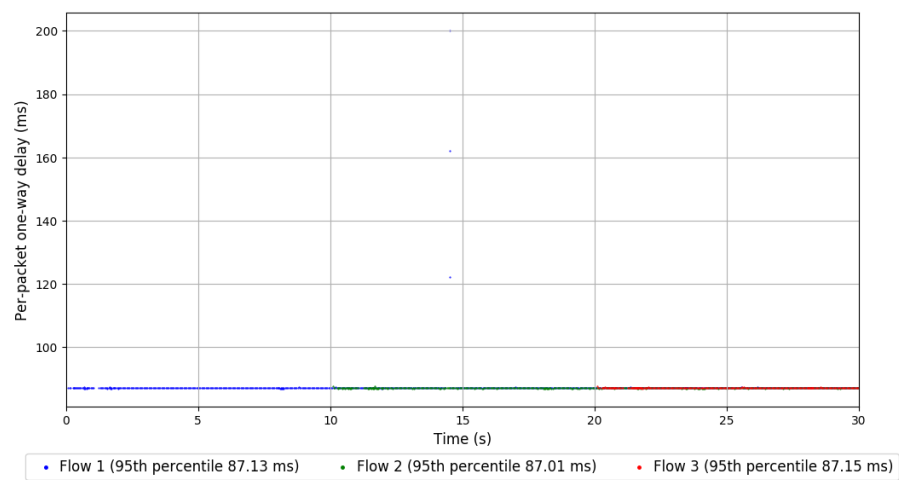
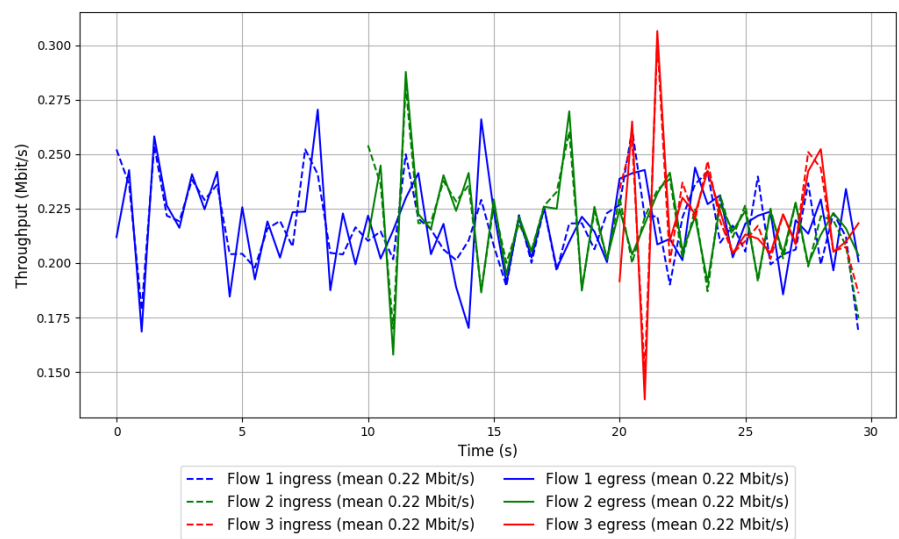
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.153 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

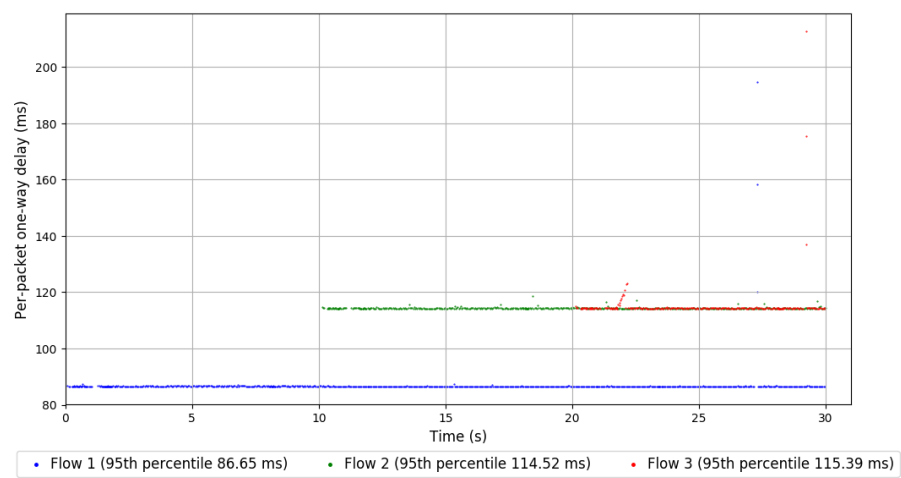
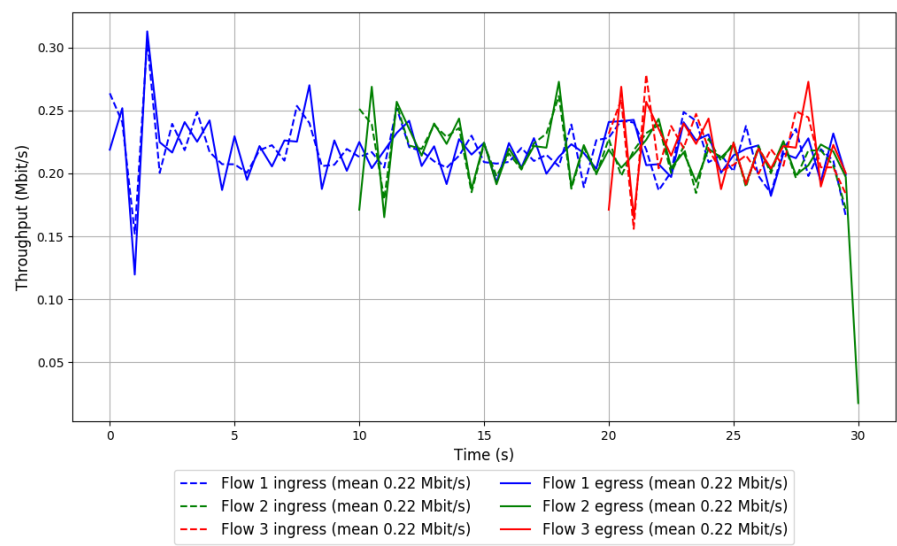


```
Run 10: Statistics of SReAM

Start at: 2017-09-22 05:11:52
End at: 2017-09-22 05:12:22

# Below is generated by plot.py at 2017-09-22 06:45:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.377 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.654 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.517 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 115.392 ms
Loss rate: 0.35%
```

Run 10: Report of SReAM — Data Link

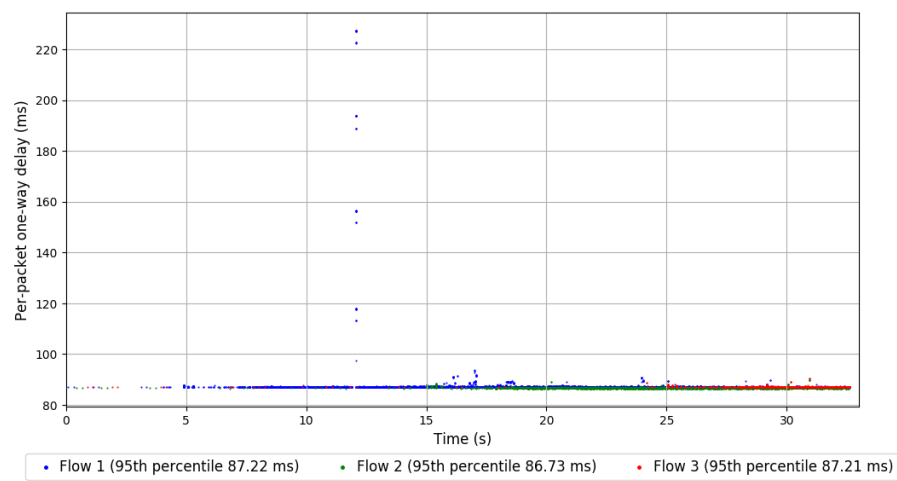
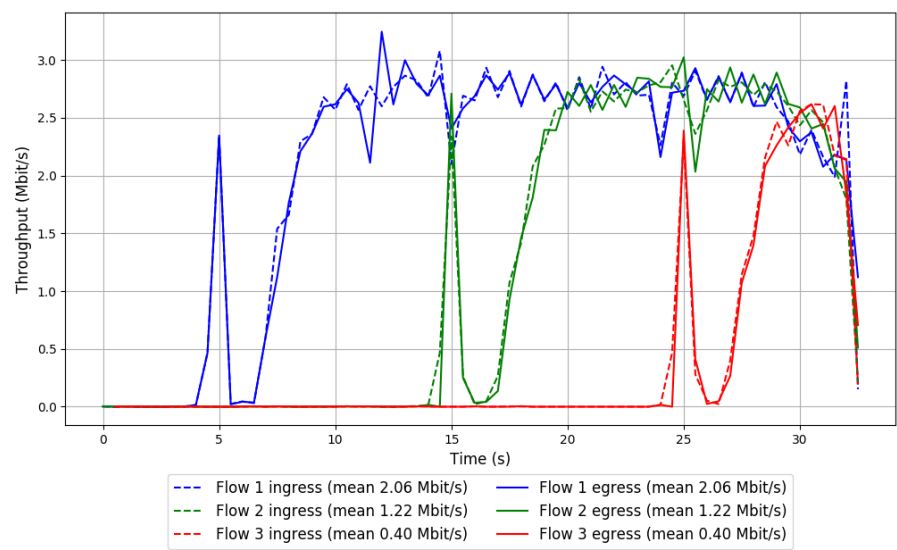


```
Run 1: Statistics of WebRTC media

Start at: 2017-09-22 03:14:10
End at: 2017-09-22 03:14:40

# Below is generated by plot.py at 2017-09-22 06:45:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.65 Mbit/s
95th percentile per-packet one-way delay: 87.175 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 87.215 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 86.730 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 87.213 ms
Loss rate: 1.04%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-09-22 03:27:20

End at: 2017-09-22 03:27:50

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.70 Mbit/s

95th percentile per-packet one-way delay: 86.949 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 86.742 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 87.002 ms

Loss rate: 0.00%

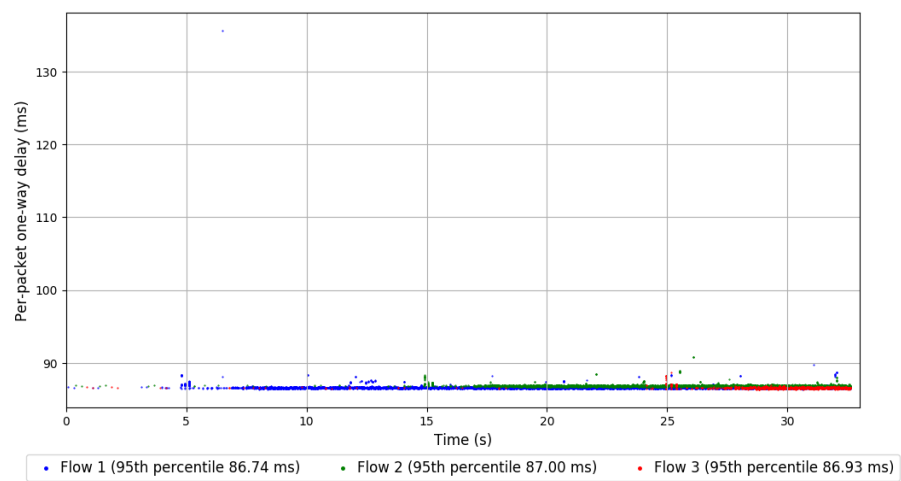
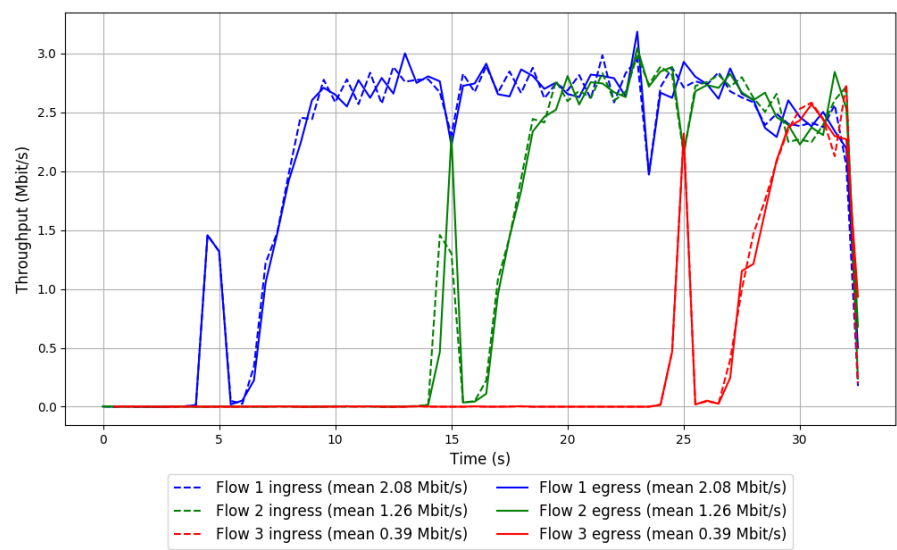
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 86.934 ms

Loss rate: 0.01%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-09-22 03:40:35

End at: 2017-09-22 03:41:05

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.76 Mbit/s

95th percentile per-packet one-way delay: 87.127 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 86.794 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 86.962 ms

Loss rate: 0.00%

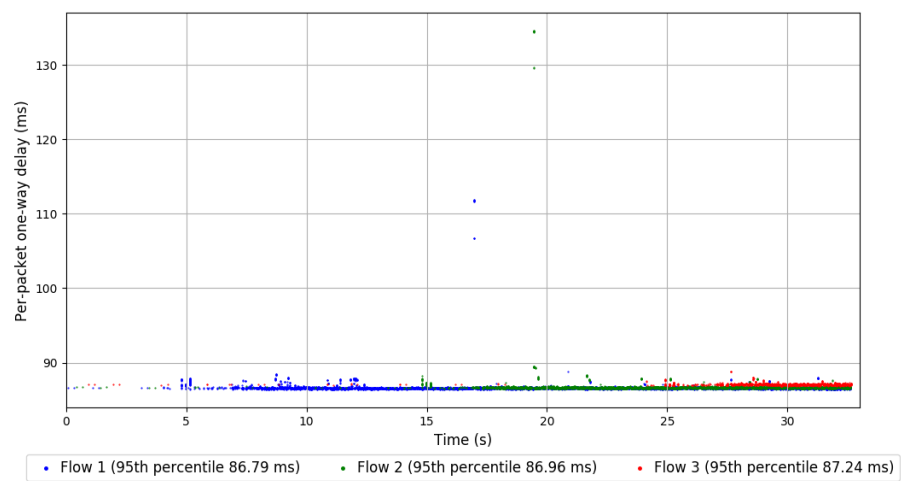
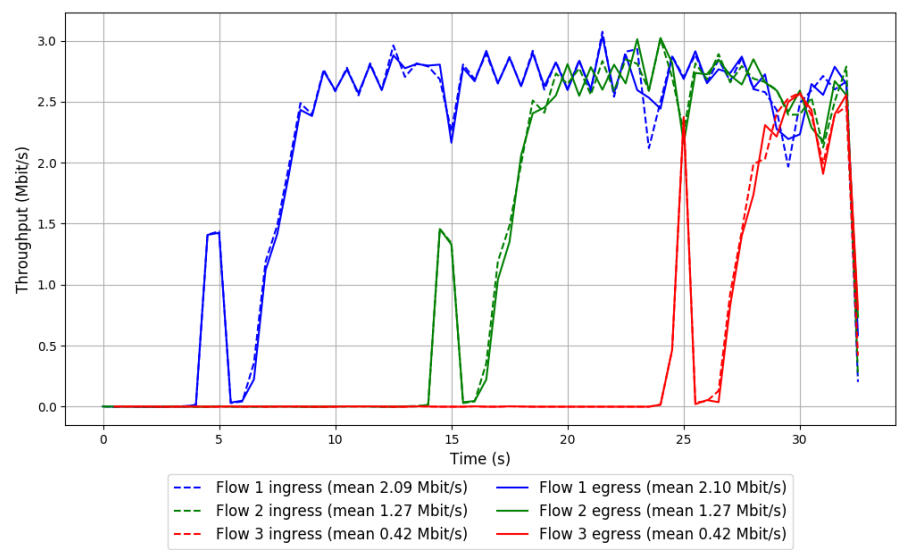
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 87.242 ms

Loss rate: 0.01%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-09-22 03:53:03

End at: 2017-09-22 03:53:33

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 114.418 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 86.829 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

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

Loss rate: 0.23%

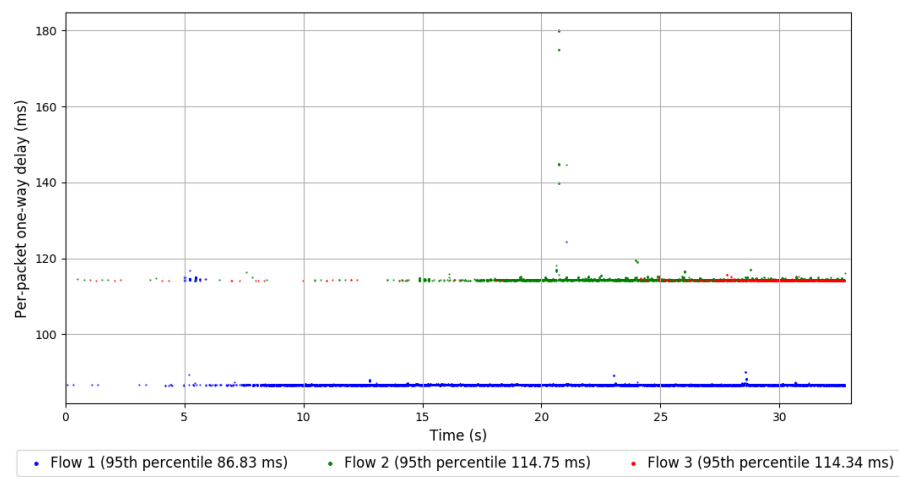
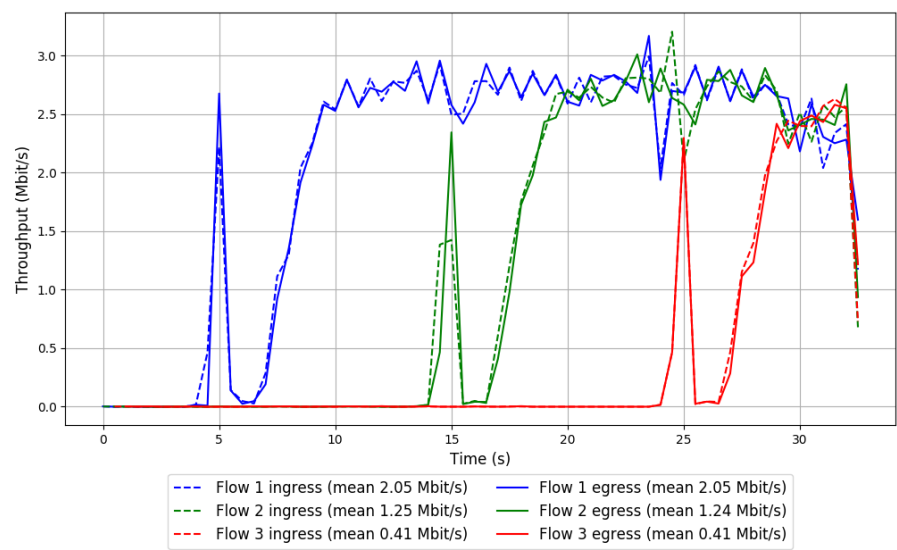
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 114.340 ms

Loss rate: 0.75%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-09-22 04:05:27

End at: 2017-09-22 04:05:57

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.72 Mbit/s

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

Loss rate: 0.08%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 87.115 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 86.771 ms

Loss rate: 0.00%

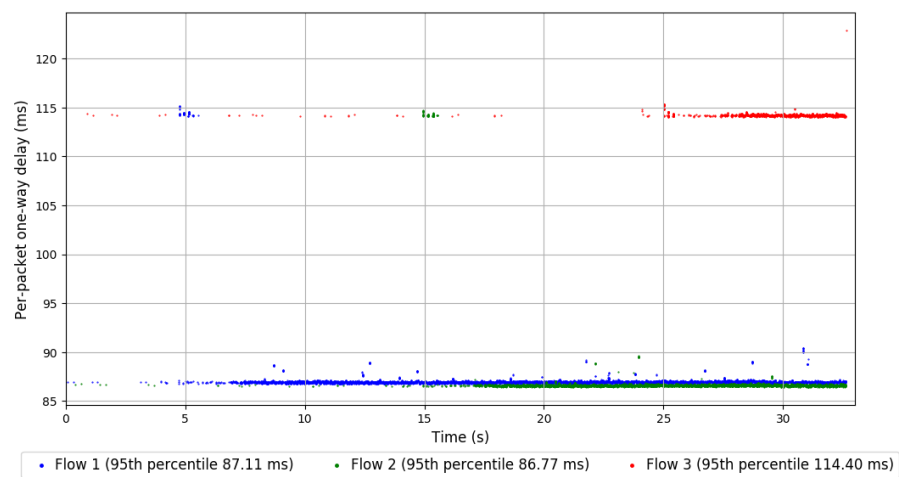
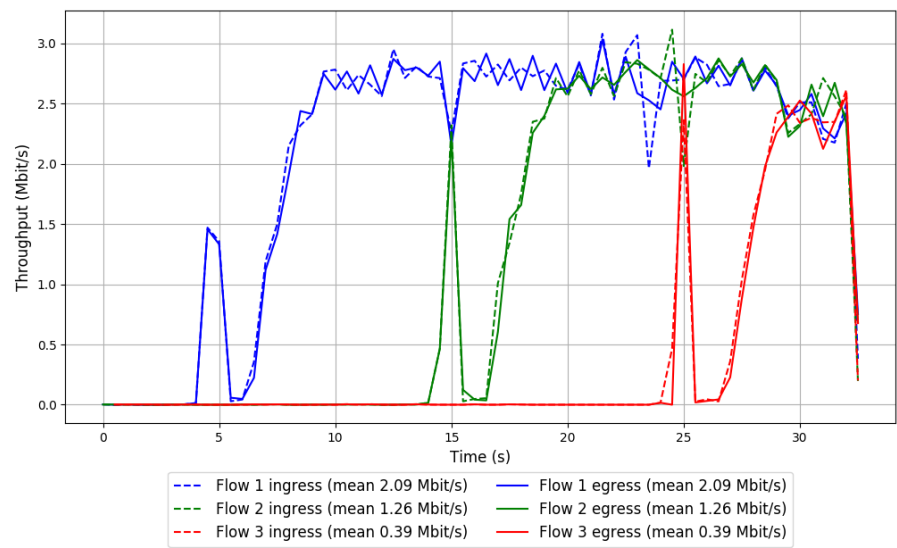
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 114.402 ms

Loss rate: 0.73%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-09-22 04:17:52

End at: 2017-09-22 04:18:22

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.69 Mbit/s

95th percentile per-packet one-way delay: 114.367 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 86.804 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 114.560 ms

Loss rate: 0.29%

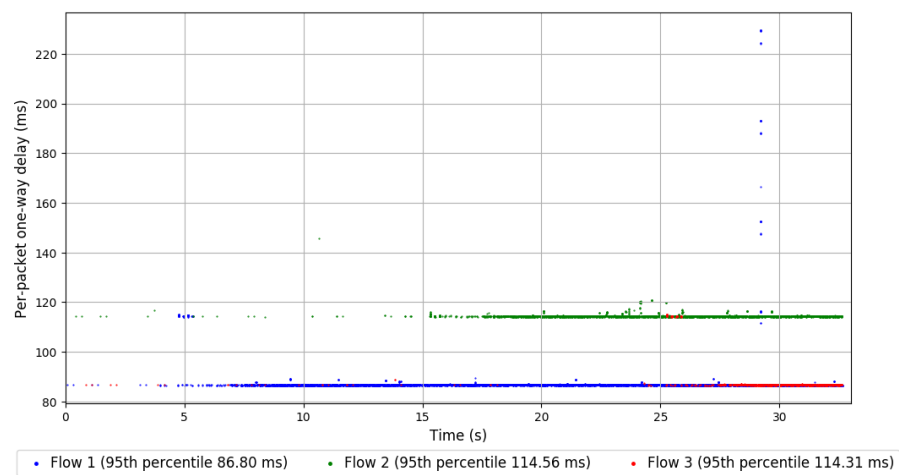
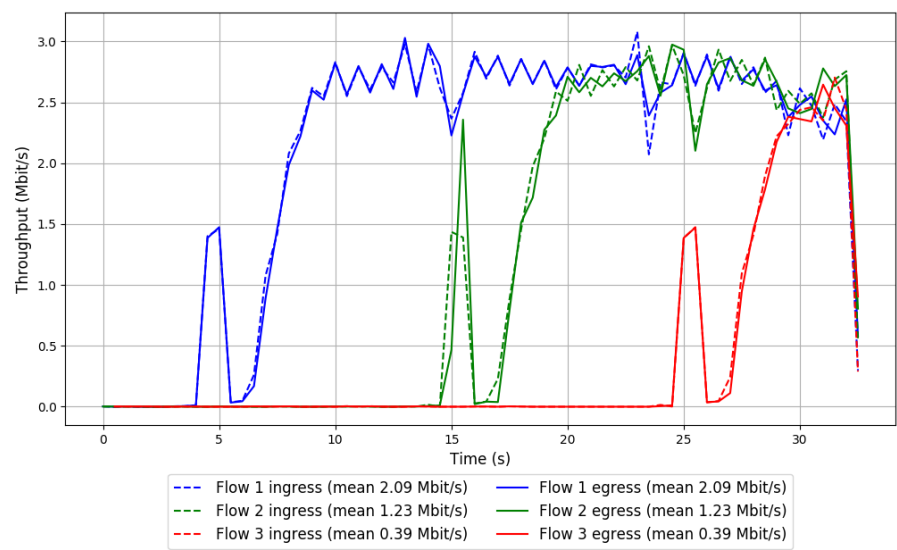
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 114.305 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-09-22 04:29:57

End at: 2017-09-22 04:30:27

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 114.238 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 86.789 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 86.825 ms

Loss rate: 0.00%

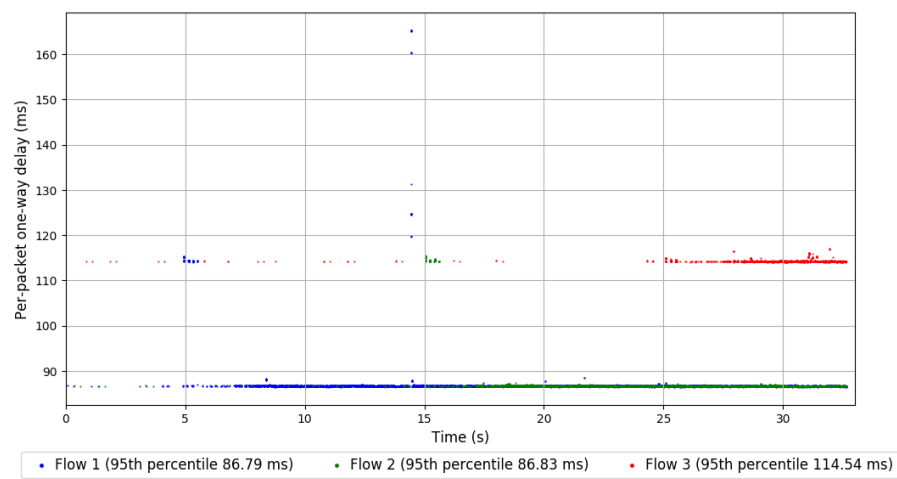
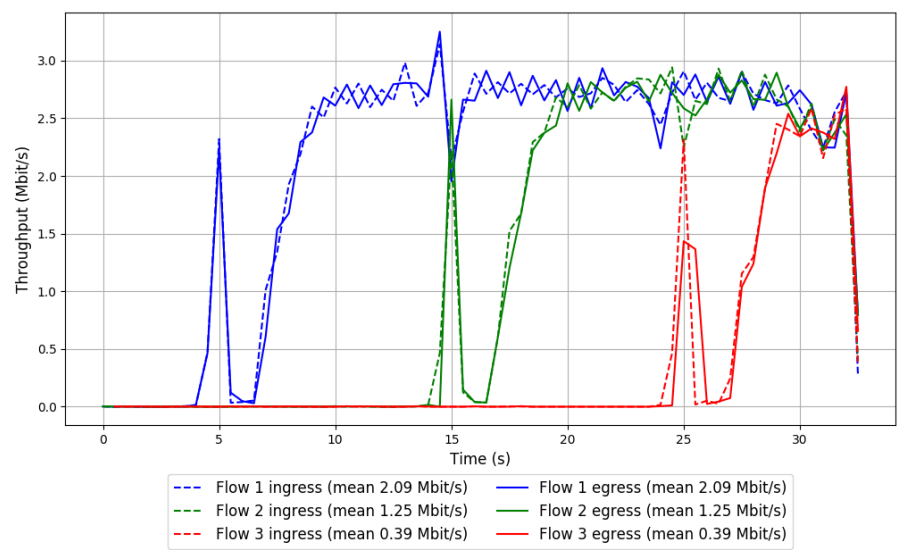
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 114.542 ms

Loss rate: 0.61%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-09-22 04:42:18

End at: 2017-09-22 04:42:48

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 114.301 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 86.873 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 87.018 ms

Loss rate: 0.00%

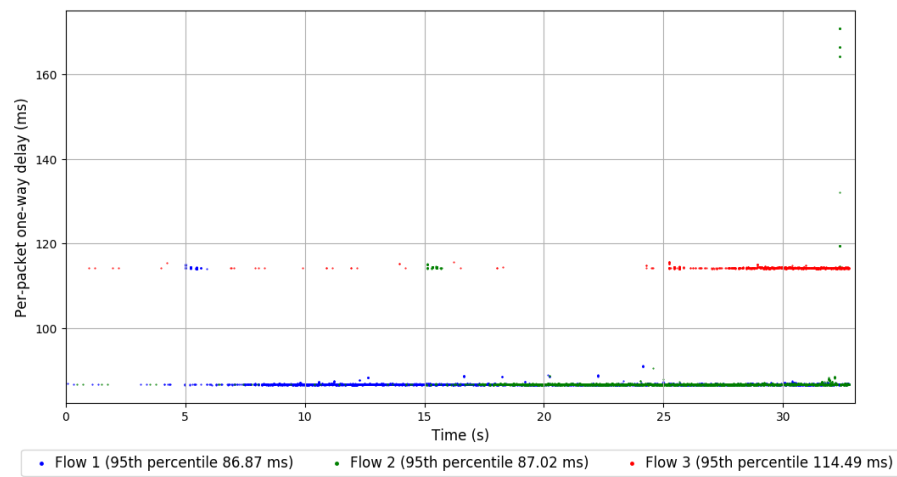
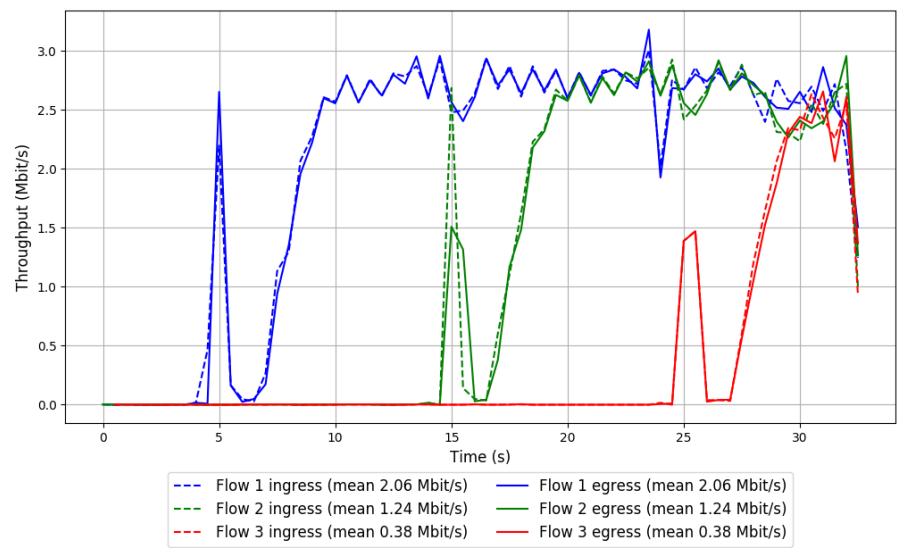
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 114.488 ms

Loss rate: 0.63%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-09-22 04:54:29

End at: 2017-09-22 04:54:59

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 87.107 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 86.775 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 87.103 ms

Loss rate: 0.00%

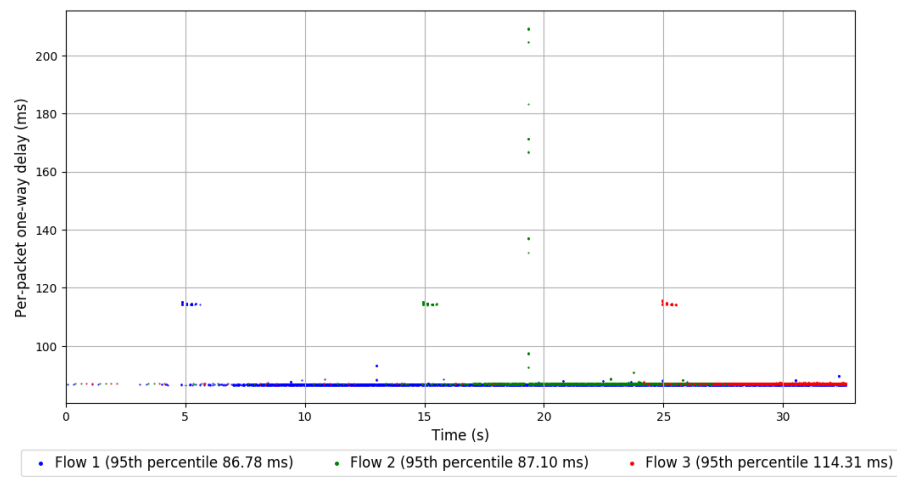
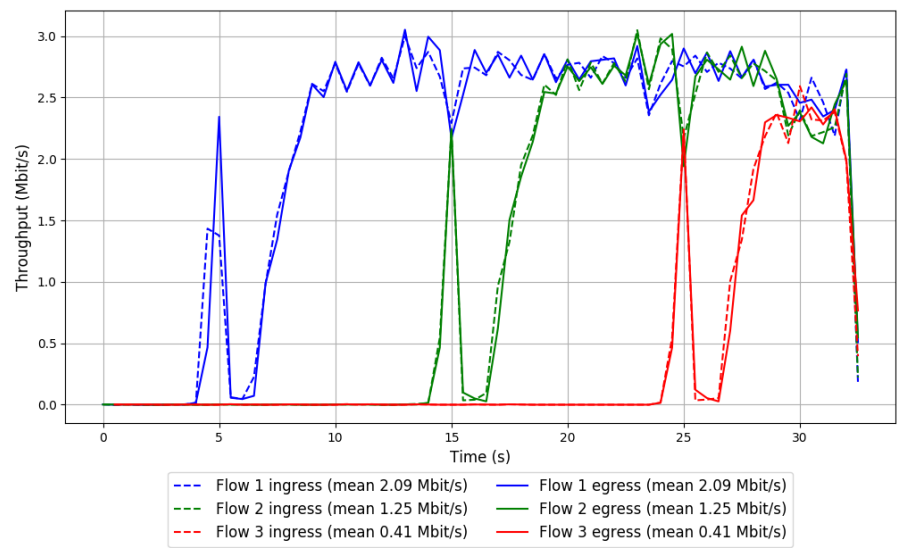
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 114.307 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-09-22 05:08:18

End at: 2017-09-22 05:08:48

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 114.392 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 114.350 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 114.410 ms

Loss rate: 0.00%

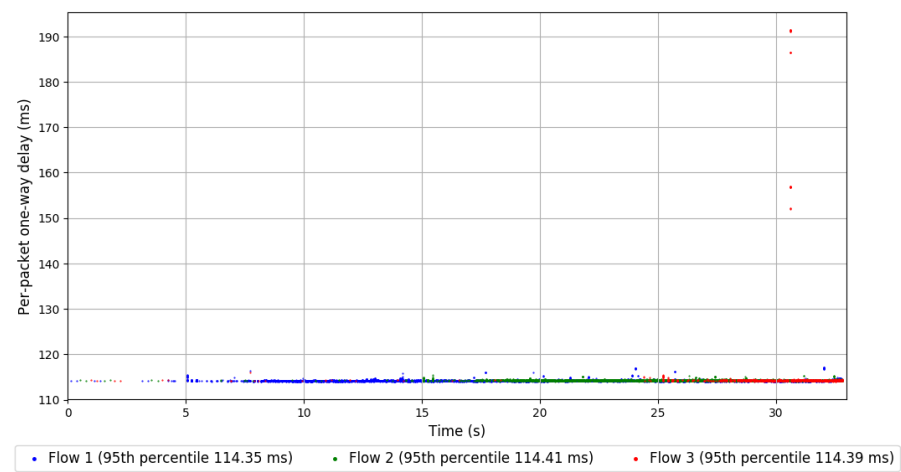
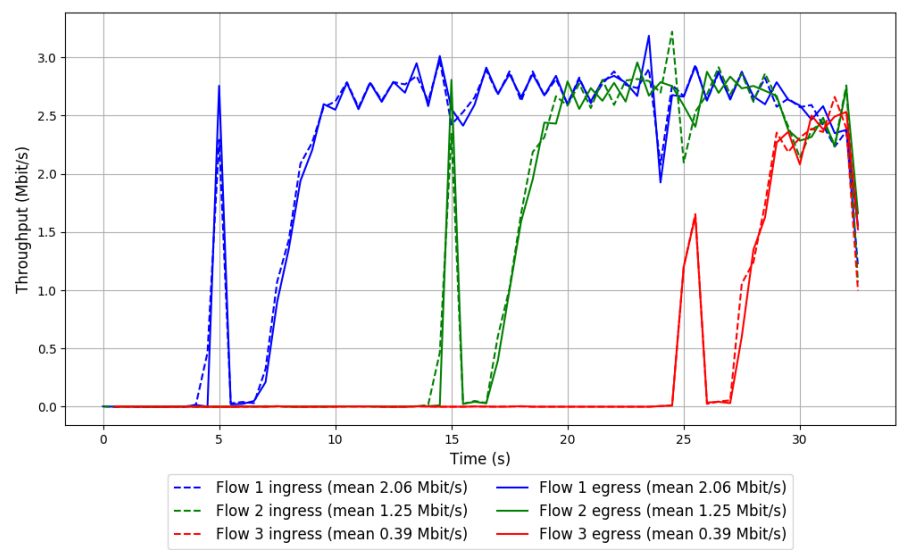
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 114.390 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-09-22 03:25:31

End at: 2017-09-22 03:26:01

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 87.628 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 87.568 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 87.719 ms

Loss rate: 0.00%

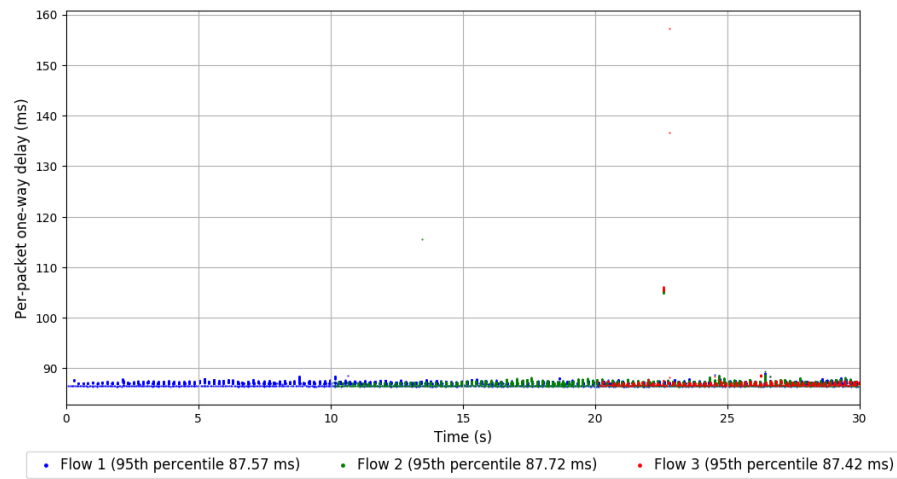
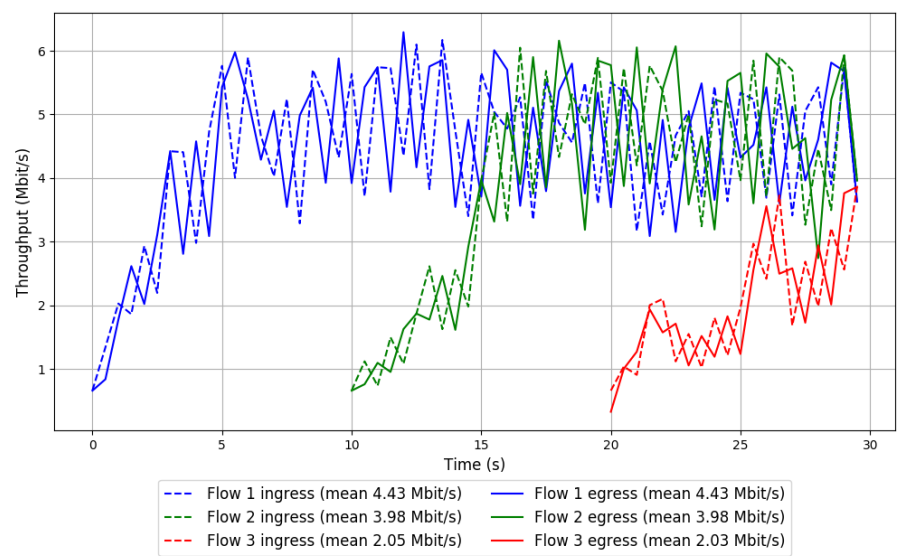
-- Flow 3:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 87.423 ms

Loss rate: 0.82%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-09-22 03:38:43

End at: 2017-09-22 03:39:13

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.80 Mbit/s

95th percentile per-packet one-way delay: 87.944 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 88.078 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 87.683 ms

Loss rate: 0.18%

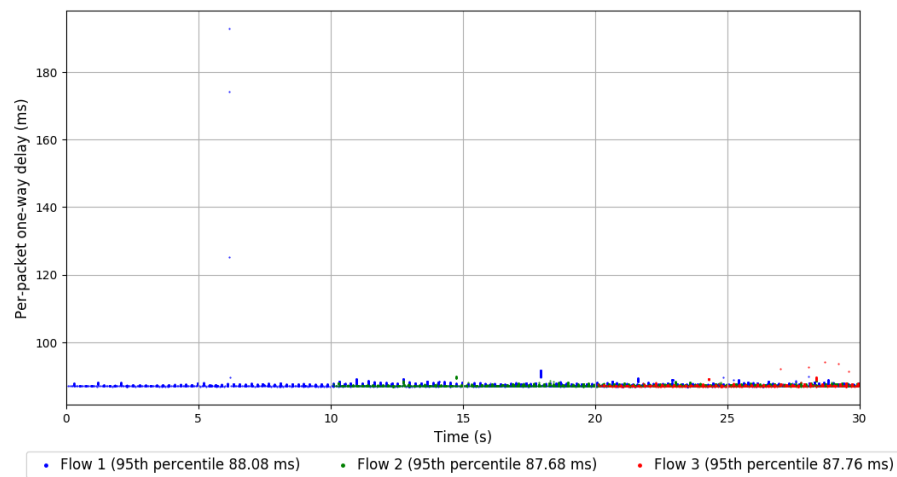
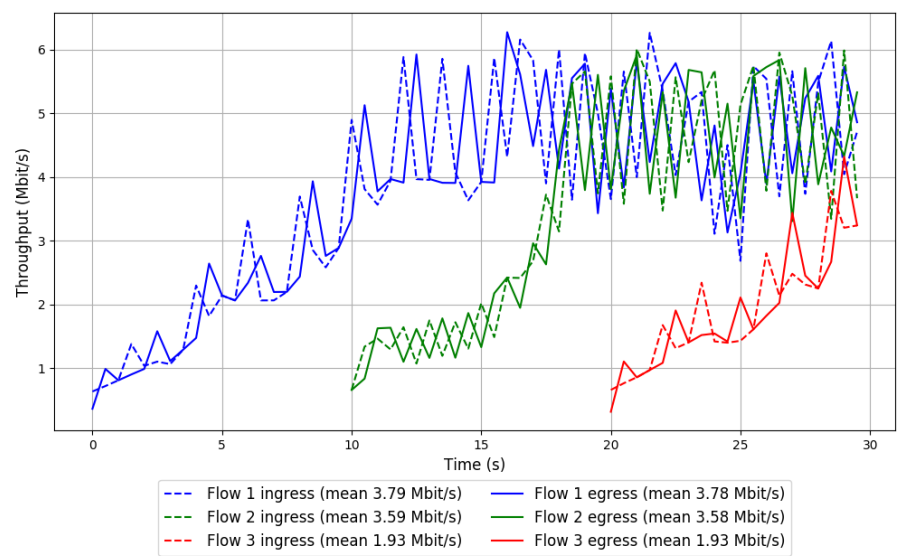
-- Flow 3:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 87.760 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-09-22 03:51:11

End at: 2017-09-22 03:51:41

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 114.825 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 114.379 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 114.886 ms

Loss rate: 0.00%

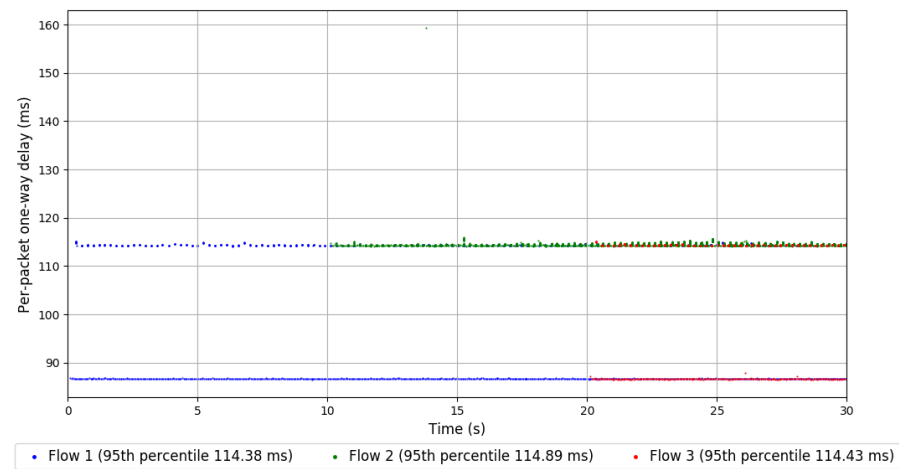
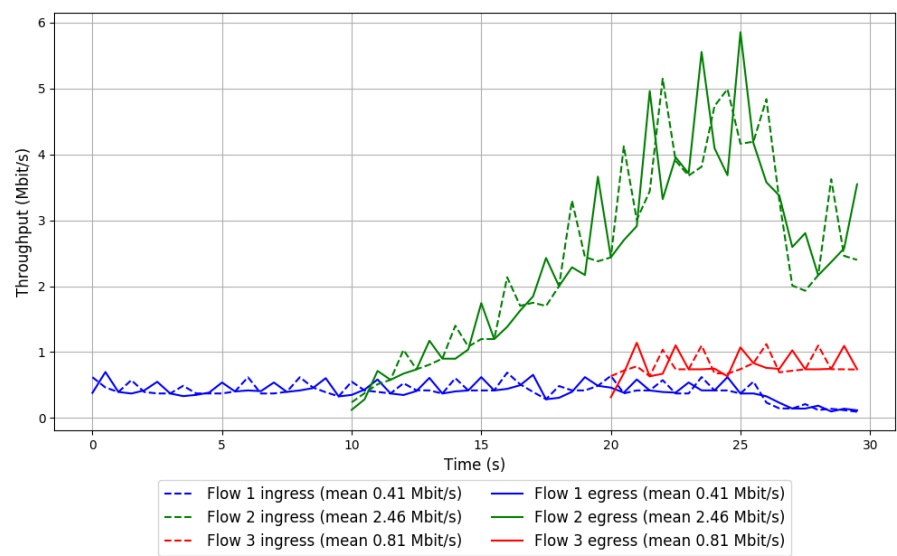
-- Flow 3:

Average throughput: 0.81 Mbit/s

95th percentile per-packet one-way delay: 114.427 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



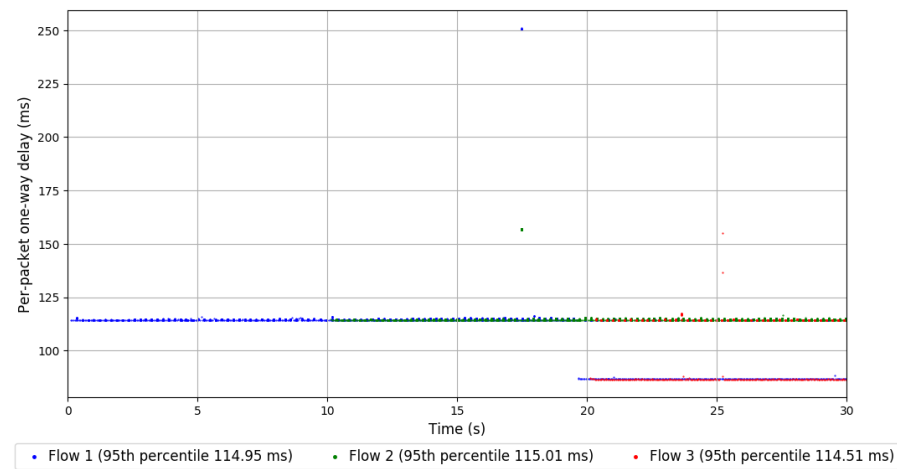
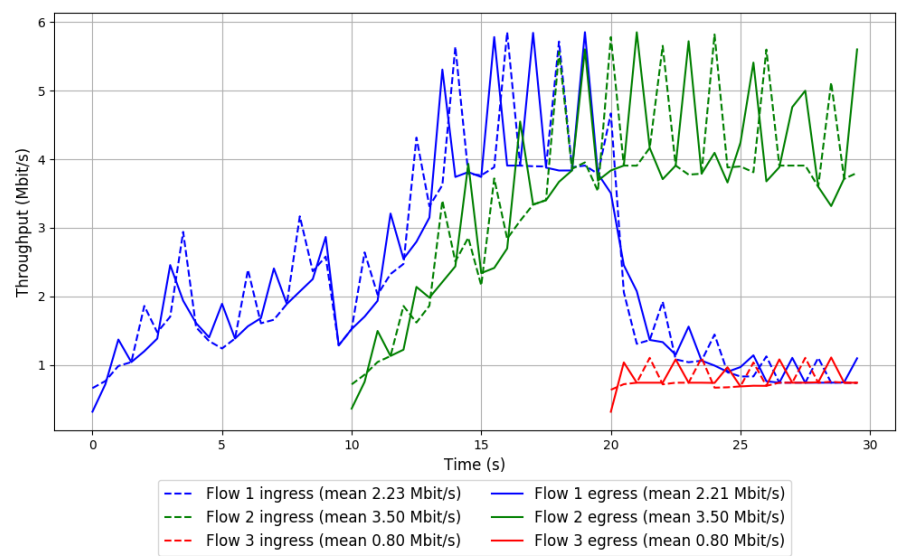
Run 4: Statistics of Sprout

Start at: 2017-09-22 04:03:36

End at: 2017-09-22 04:04:06

```
# Below is generated by plot.py at 2017-09-22 06:45:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 114.972 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 114.951 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 3.50 Mbit/s
95th percentile per-packet one-way delay: 115.007 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 114.511 ms
Loss rate: 0.00%
```

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-09-22 04:16:08

End at: 2017-09-22 04:16:38

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 114.849 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 114.663 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 114.611 ms

Loss rate: 0.00%

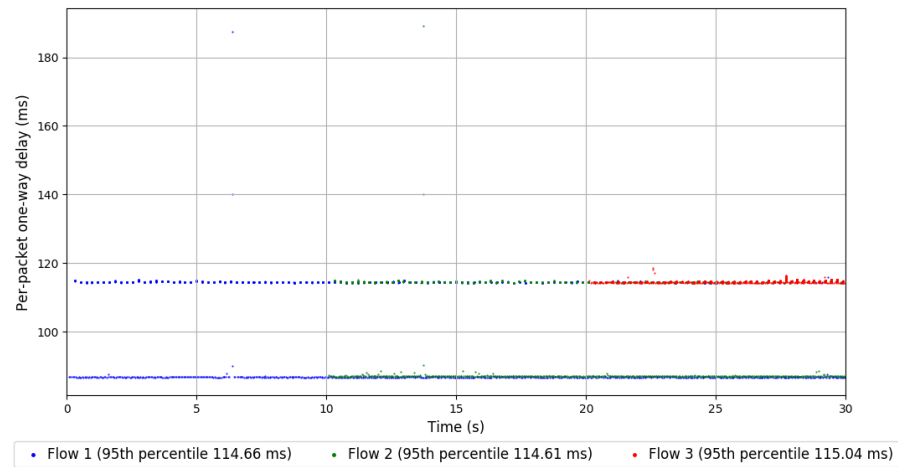
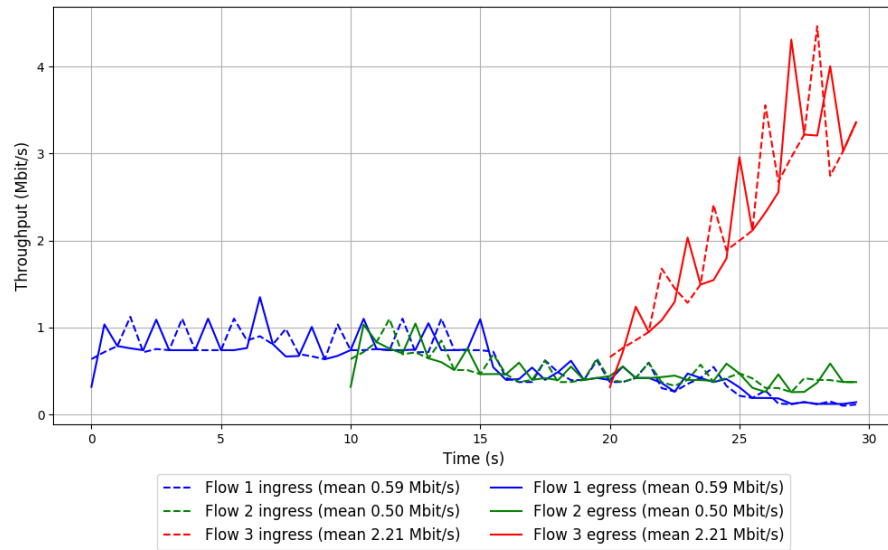
-- Flow 3:

Average throughput: 2.21 Mbit/s

95th percentile per-packet one-way delay: 115.043 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link

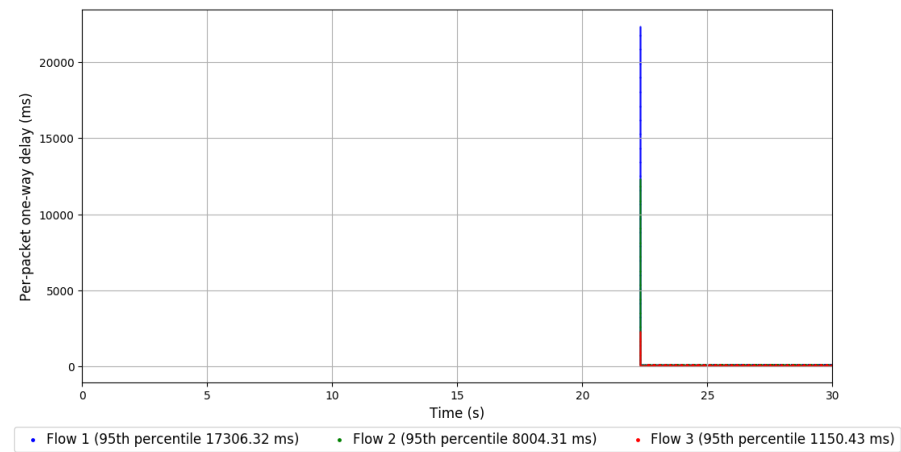
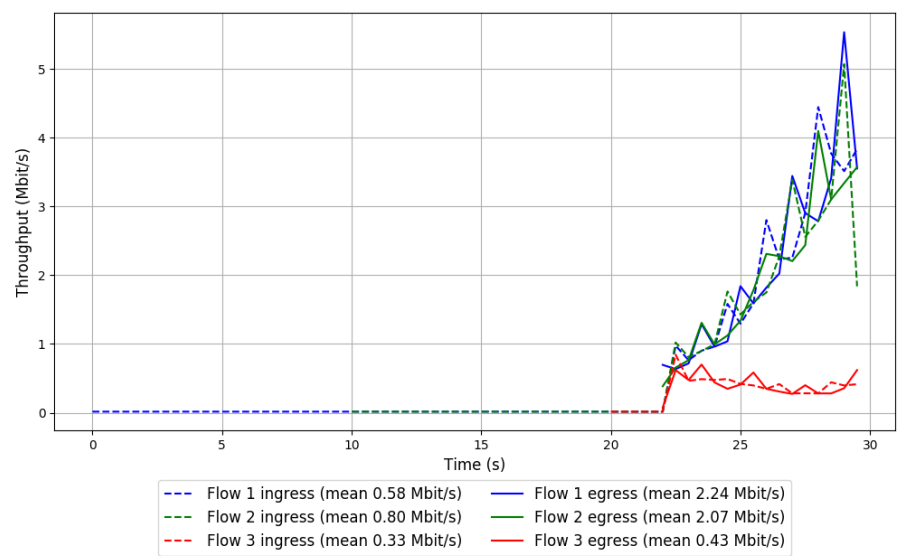


Run 6: Statistics of Sprout

Start at: 2017-09-22 04:28:07

End at: 2017-09-22 04:28:37

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-09-22 04:40:25

End at: 2017-09-22 04:40:55

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.29 Mbit/s

95th percentile per-packet one-way delay: 114.930 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 114.926 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 2.91 Mbit/s

95th percentile per-packet one-way delay: 114.949 ms

Loss rate: 0.00%

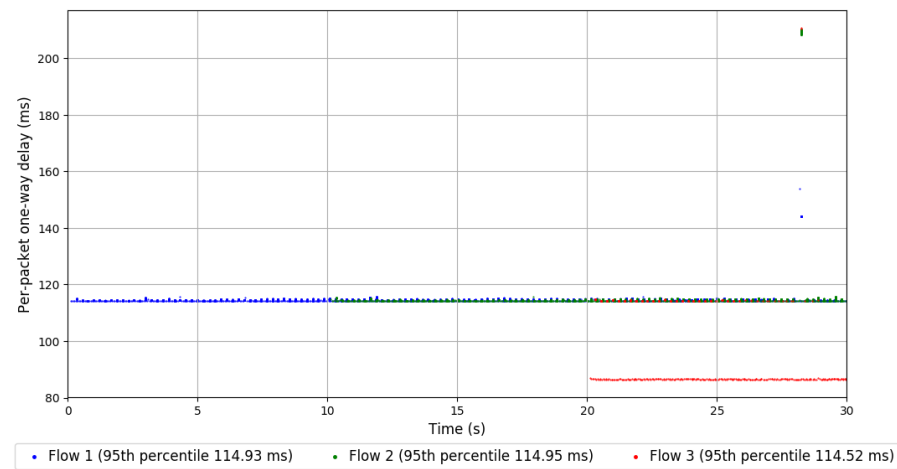
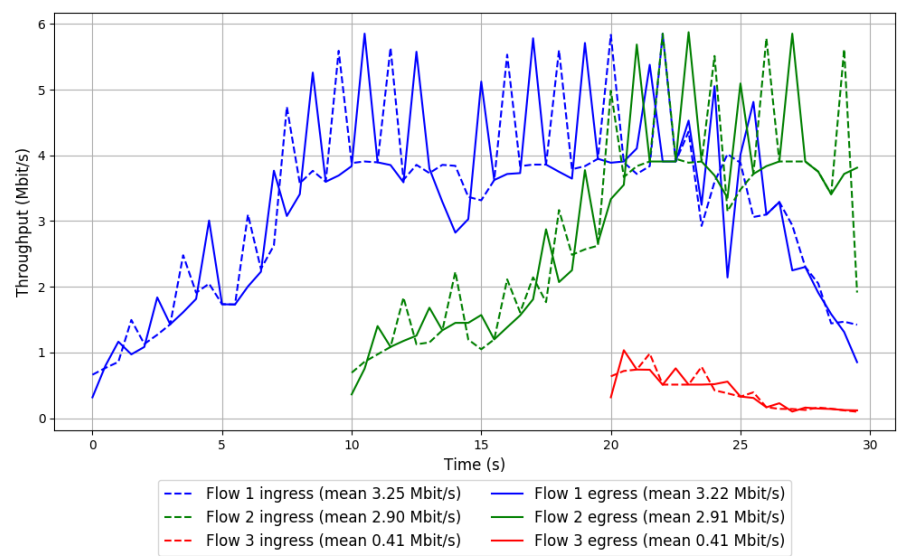
-- Flow 3:

Average throughput: 0.41 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: 2017-09-22 04:52:42

End at: 2017-09-22 04:53:12

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 114.896 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 114.317 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.27 Mbit/s

95th percentile per-packet one-way delay: 114.942 ms

Loss rate: 0.00%

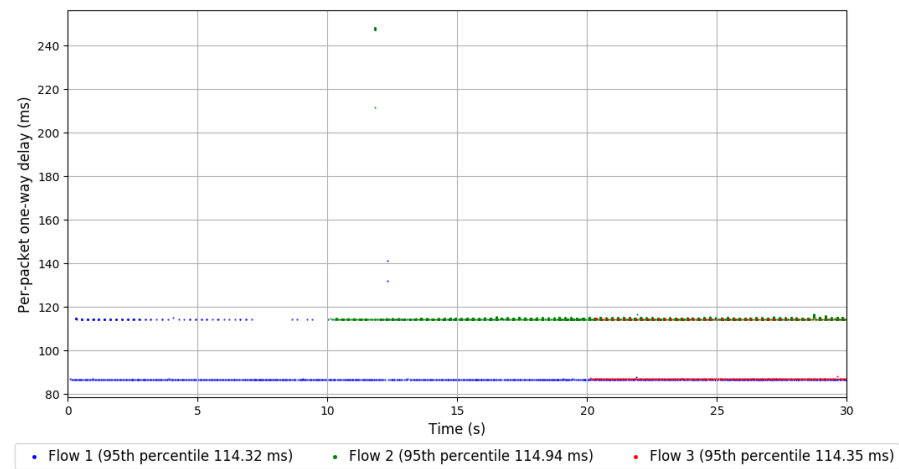
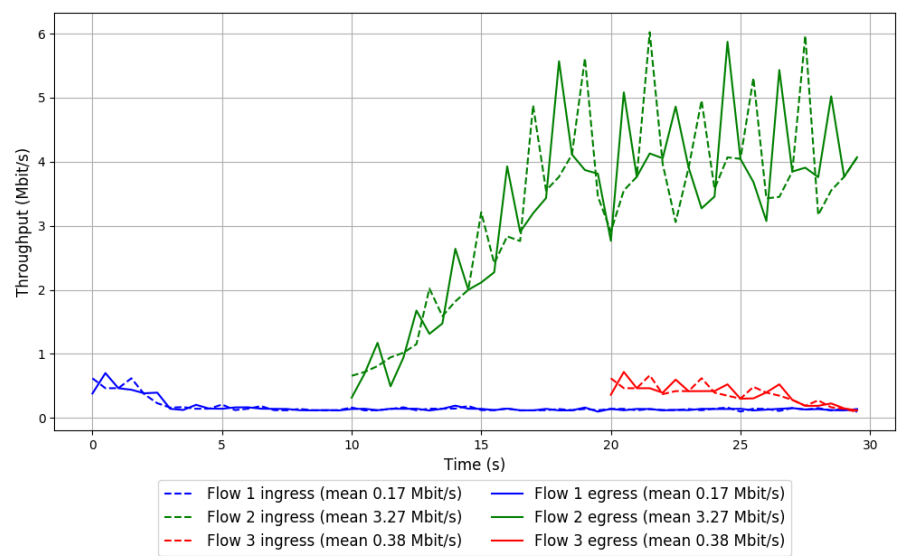
-- Flow 3:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 114.353 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-09-22 05:05:58

End at: 2017-09-22 05:06:28

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.74 Mbit/s

95th percentile per-packet one-way delay: 114.461 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 114.492 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 114.200 ms

Loss rate: 0.44%

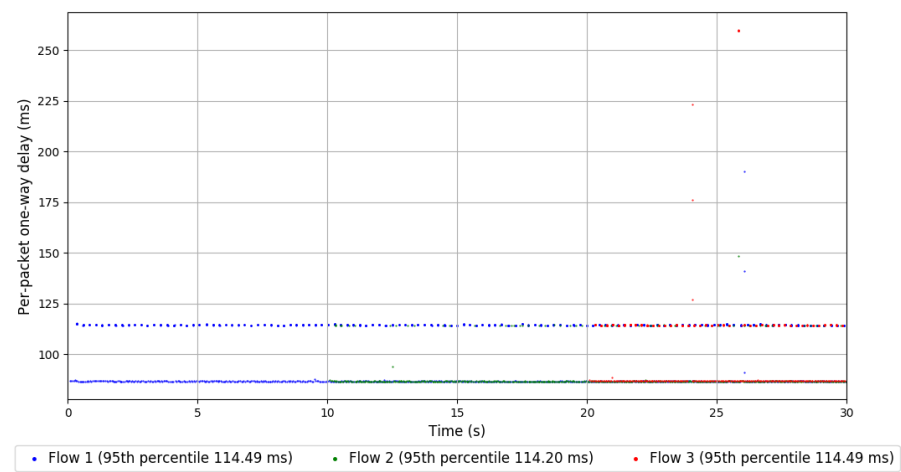
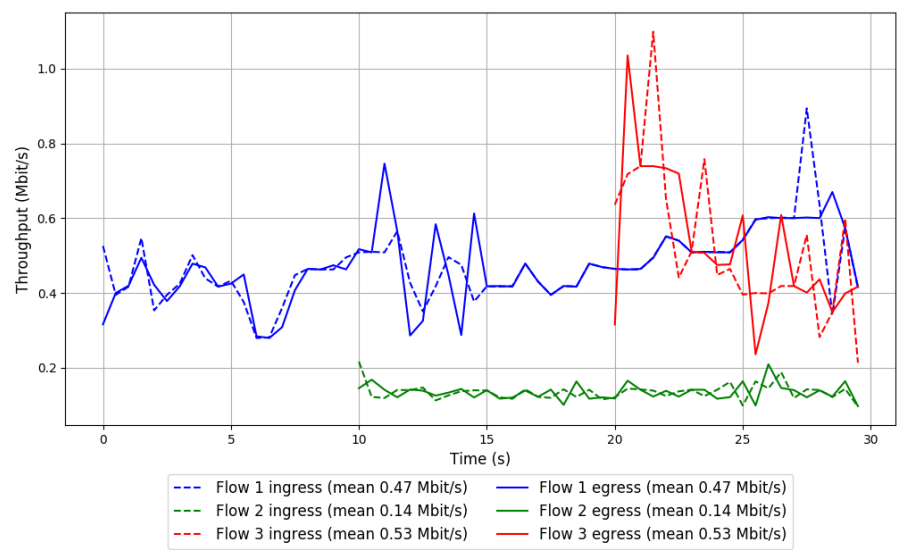
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 114.489 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-09-22 05:19:21

End at: 2017-09-22 05:19:51

Below is generated by plot.py at 2017-09-22 06:45:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 114.934 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 114.476 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 114.996 ms

Loss rate: 1.57%

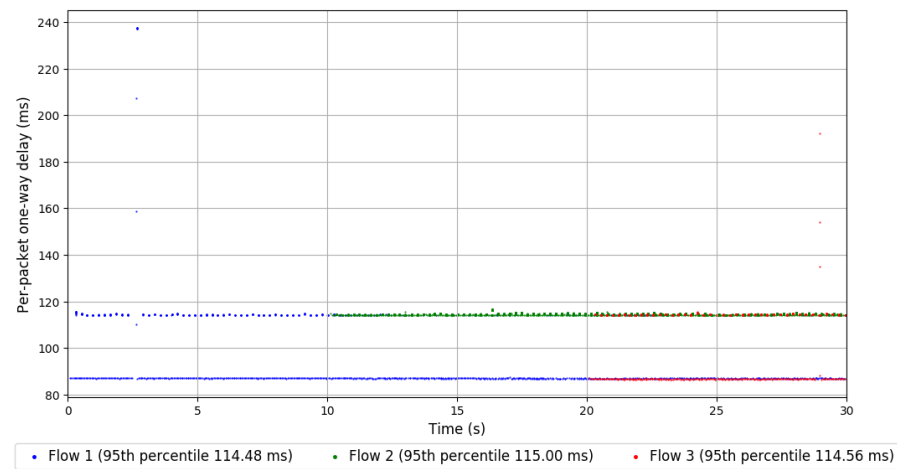
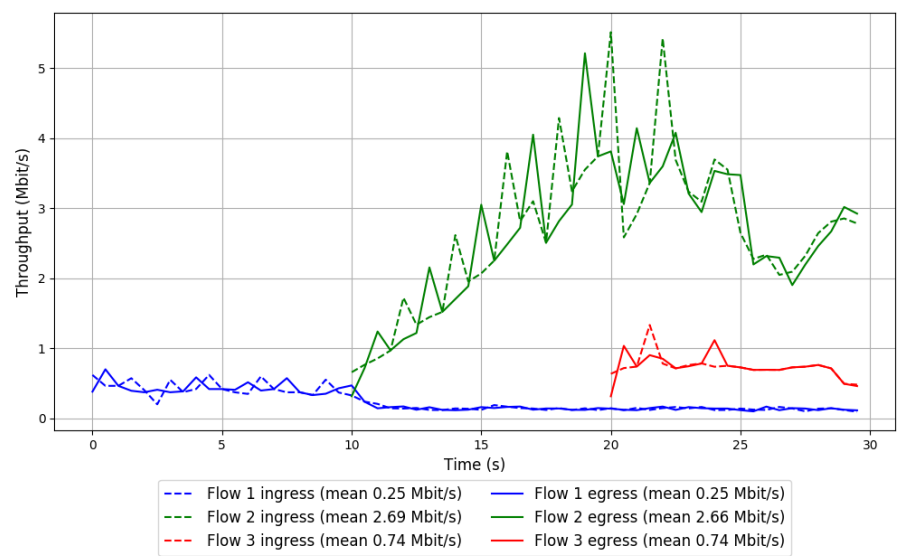
-- Flow 3:

Average throughput: 0.74 Mbit/s

95th percentile per-packet one-way delay: 114.561 ms

Loss rate: 0.16%

Run 10: Report of Sprout — Data Link

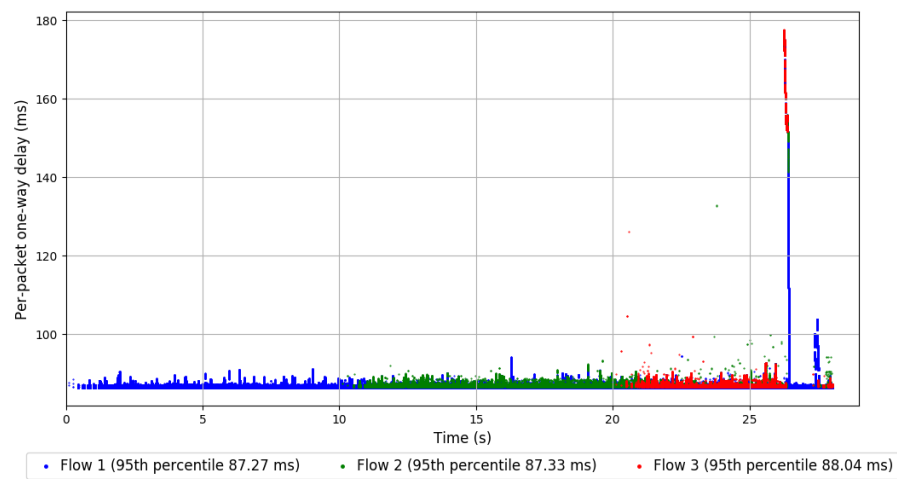
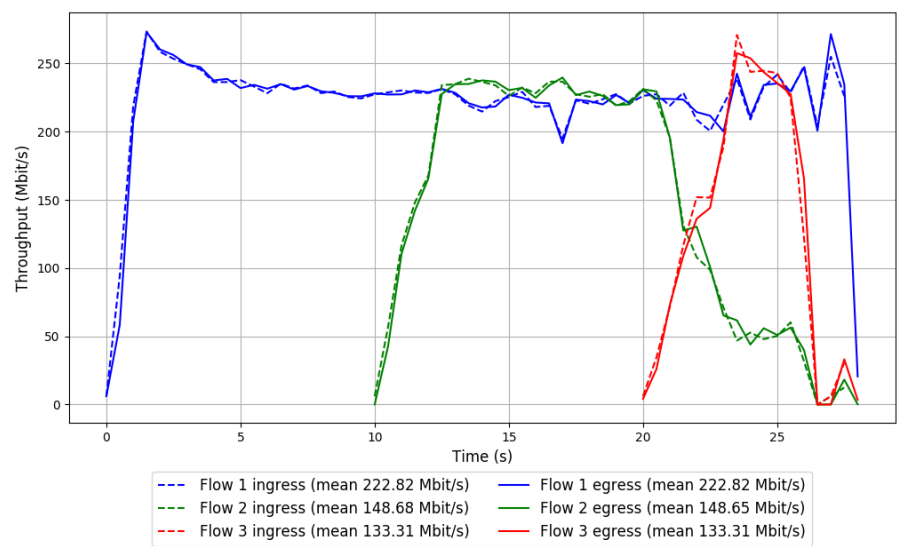


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-09-22 03:21:55
End at: 2017-09-22 03:22:25

# Below is generated by plot.py at 2017-09-22 06:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.75 Mbit/s
95th percentile per-packet one-way delay: 87.350 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 222.82 Mbit/s
95th percentile per-packet one-way delay: 87.274 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 148.65 Mbit/s
95th percentile per-packet one-way delay: 87.327 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 133.31 Mbit/s
95th percentile per-packet one-way delay: 88.043 ms
Loss rate: 0.00%
```


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

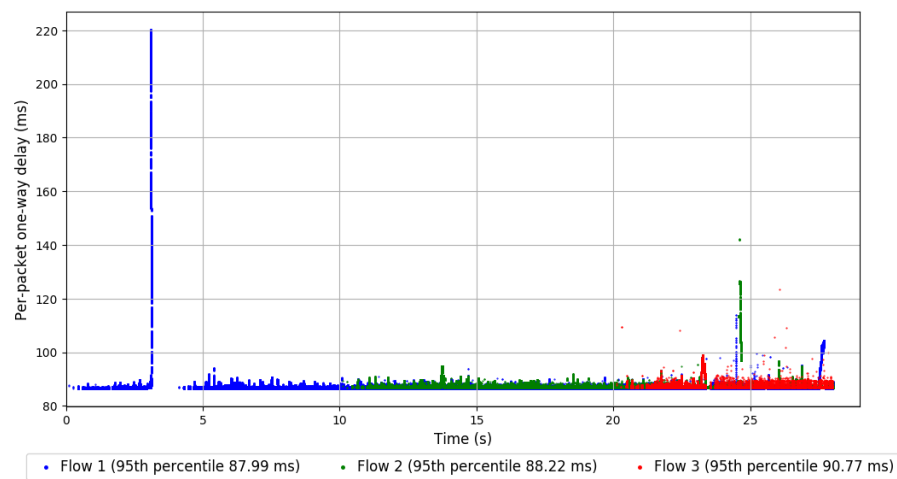
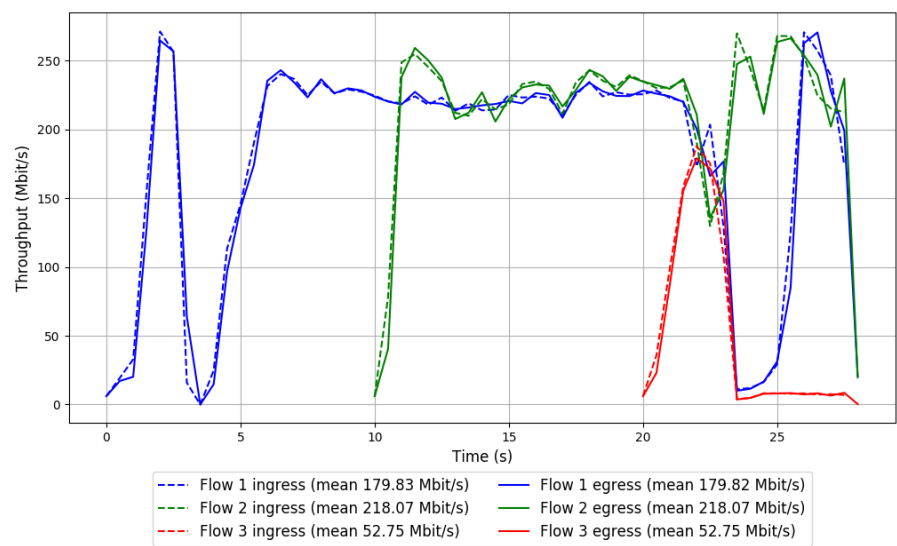


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-09-22 03:35:12
End at: 2017-09-22 03:35:42

# Below is generated by plot.py at 2017-09-22 06:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.74 Mbit/s
95th percentile per-packet one-way delay: 88.192 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 179.82 Mbit/s
95th percentile per-packet one-way delay: 87.990 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 218.07 Mbit/s
95th percentile per-packet one-way delay: 88.220 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 52.75 Mbit/s
95th percentile per-packet one-way delay: 90.774 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-09-22 03:48:12

End at: 2017-09-22 03:48:42

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 19.46 Mbit/s

95th percentile per-packet one-way delay: 114.272 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 8.44 Mbit/s

95th percentile per-packet one-way delay: 114.225 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.09 Mbit/s

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

Loss rate: 0.12%

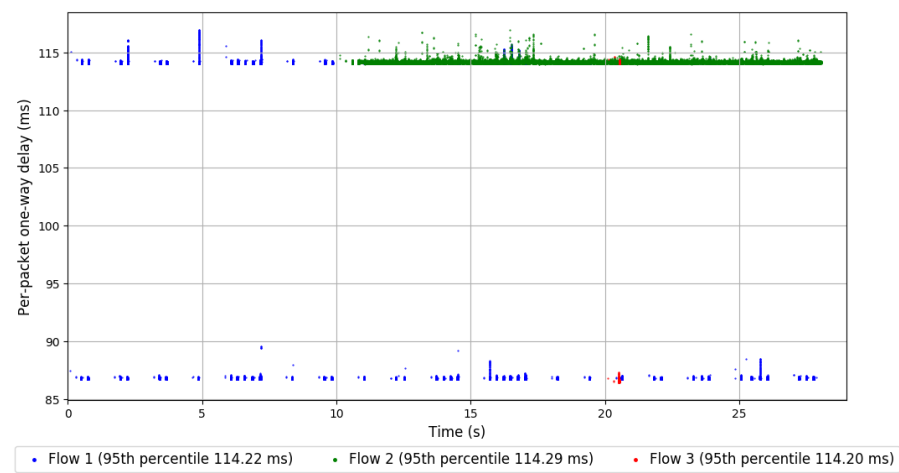
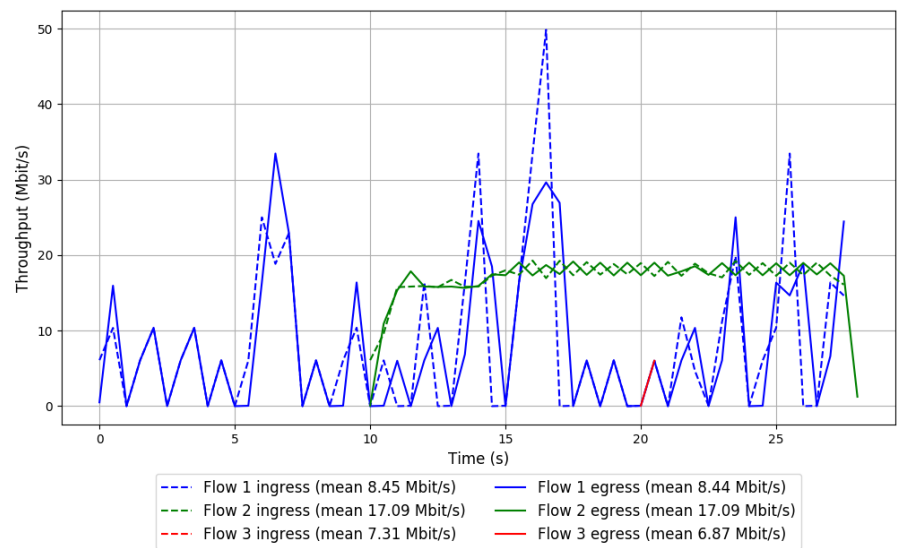
-- Flow 3:

Average throughput: 6.87 Mbit/s

95th percentile per-packet one-way delay: 114.198 ms

Loss rate: 0.00%

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

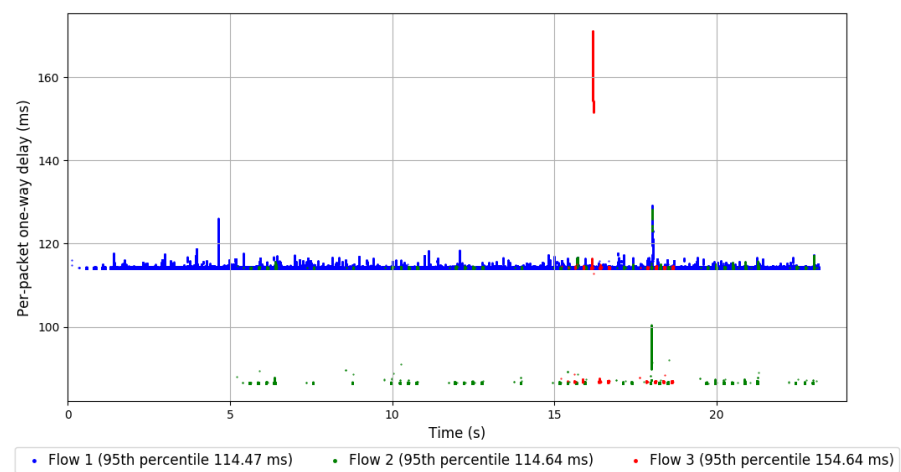
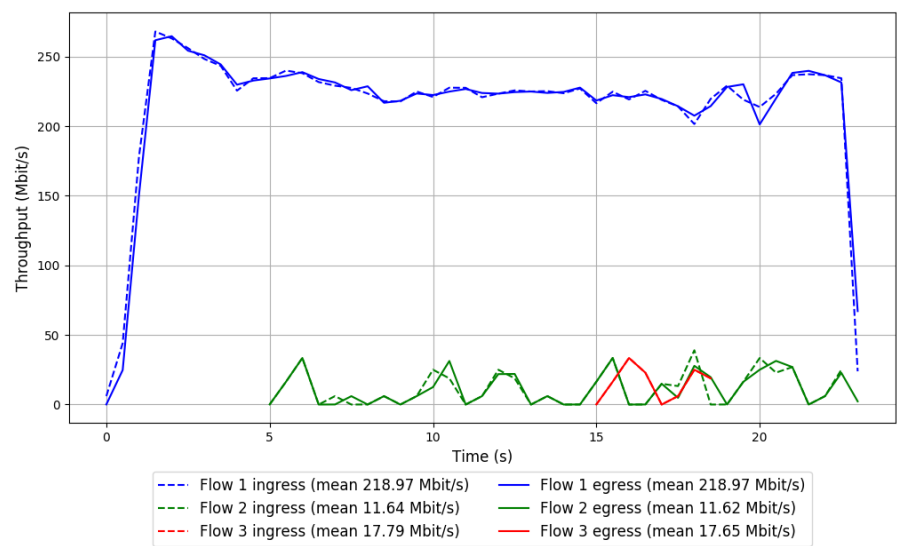


Run 4: Statistics of TaoVA-100x

Start at: 2017-09-22 04:00:21

End at: 2017-09-22 04:00:51

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-09-22 04:12:54

End at: 2017-09-22 04:13:24

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 228.53 Mbit/s

95th percentile per-packet one-way delay: 114.780 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 221.60 Mbit/s

95th percentile per-packet one-way delay: 114.789 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 9.55 Mbit/s

95th percentile per-packet one-way delay: 114.466 ms

Loss rate: 0.00%

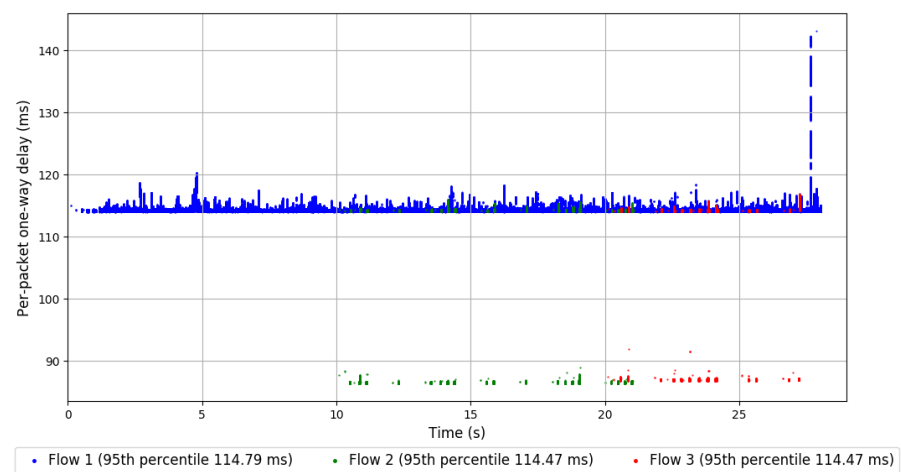
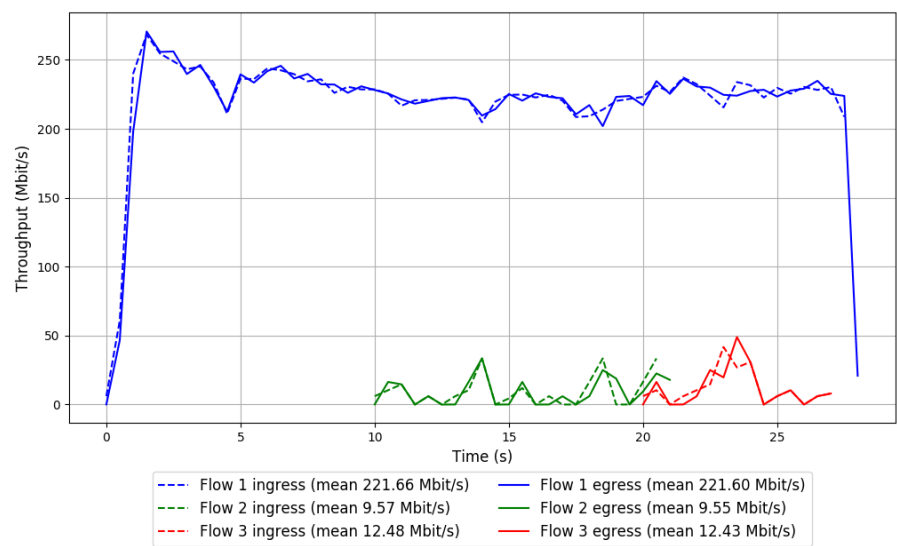
-- Flow 3:

Average throughput: 12.43 Mbit/s

95th percentile per-packet one-way delay: 114.475 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-09-22 04:24:49

End at: 2017-09-22 04:25:19

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.70 Mbit/s

95th percentile per-packet one-way delay: 115.130 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 217.09 Mbit/s

95th percentile per-packet one-way delay: 115.105 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 8.24 Mbit/s

95th percentile per-packet one-way delay: 117.842 ms

Loss rate: 0.00%

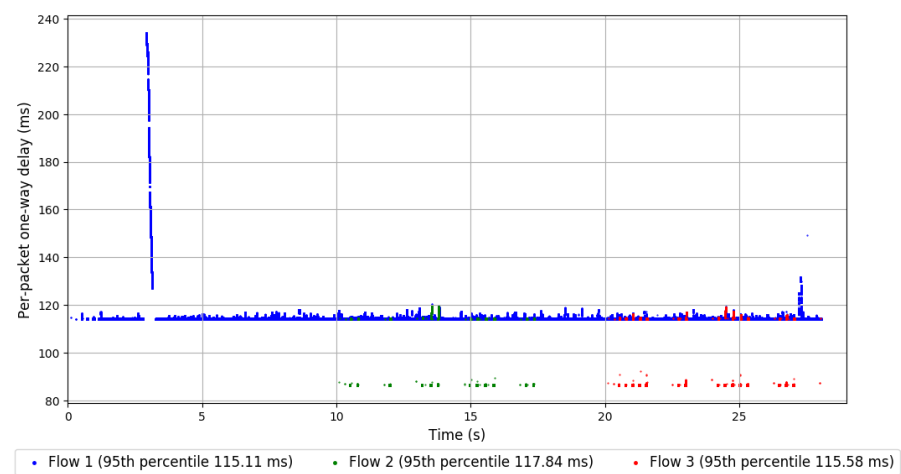
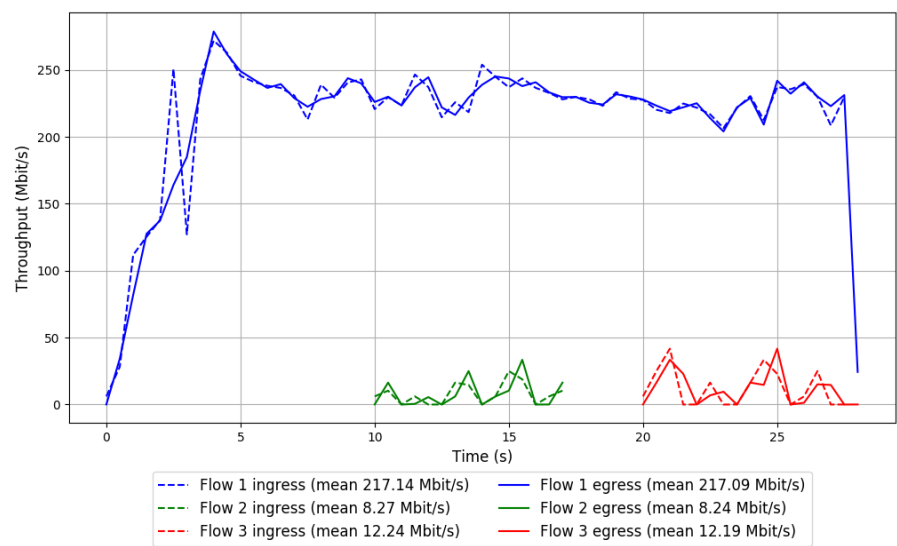
-- Flow 3:

Average throughput: 12.19 Mbit/s

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

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-09-22 04:36:59

End at: 2017-09-22 04:37:29

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 256.19 Mbit/s

95th percentile per-packet one-way delay: 115.107 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 200.25 Mbit/s

95th percentile per-packet one-way delay: 115.040 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 10.43 Mbit/s

95th percentile per-packet one-way delay: 114.540 ms

Loss rate: 0.19%

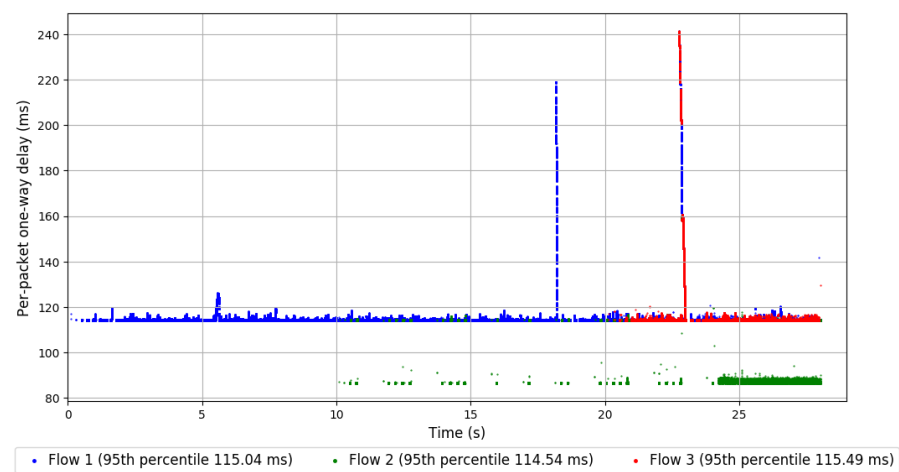
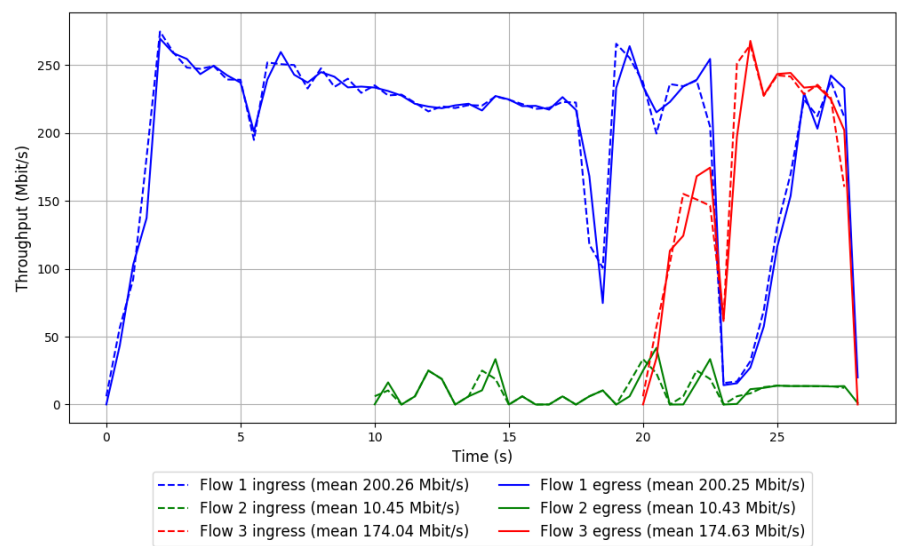
-- Flow 3:

Average throughput: 174.63 Mbit/s

95th percentile per-packet one-way delay: 115.487 ms

Loss rate: 0.36%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-09-22 04:49:41

End at: 2017-09-22 04:50:11

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.60 Mbit/s

95th percentile per-packet one-way delay: 114.228 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 10.17 Mbit/s

95th percentile per-packet one-way delay: 114.235 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.64 Mbit/s

95th percentile per-packet one-way delay: 114.226 ms

Loss rate: 0.00%

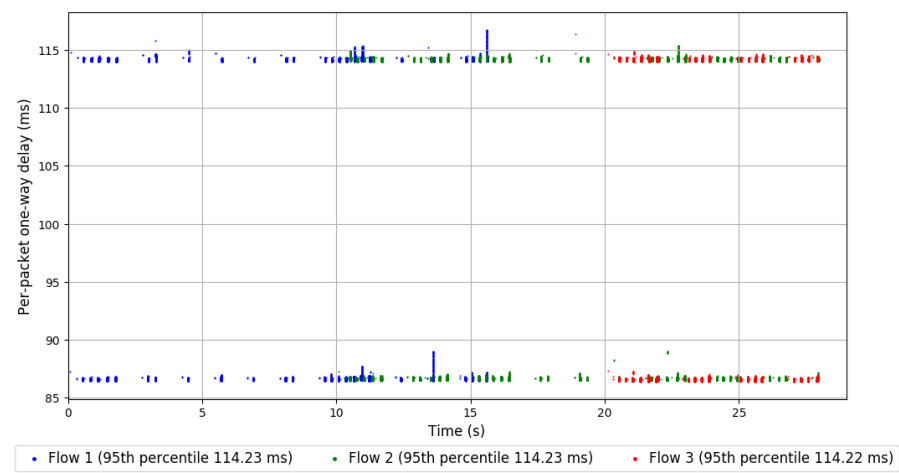
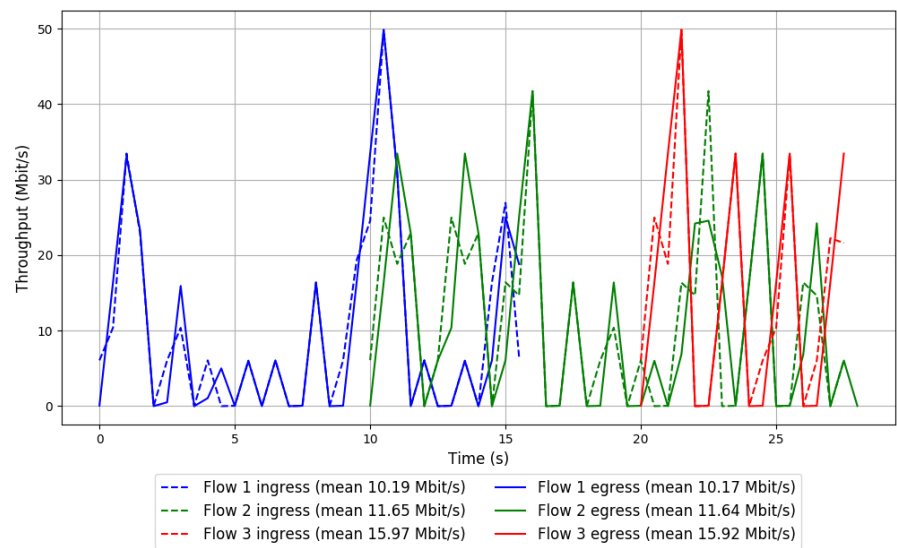
-- Flow 3:

Average throughput: 15.92 Mbit/s

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

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-09-22 05:02:04

End at: 2017-09-22 05:02:34

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 222.28 Mbit/s

95th percentile per-packet one-way delay: 119.122 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 215.12 Mbit/s

95th percentile per-packet one-way delay: 119.200 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 8.36 Mbit/s

95th percentile per-packet one-way delay: 114.401 ms

Loss rate: 0.00%

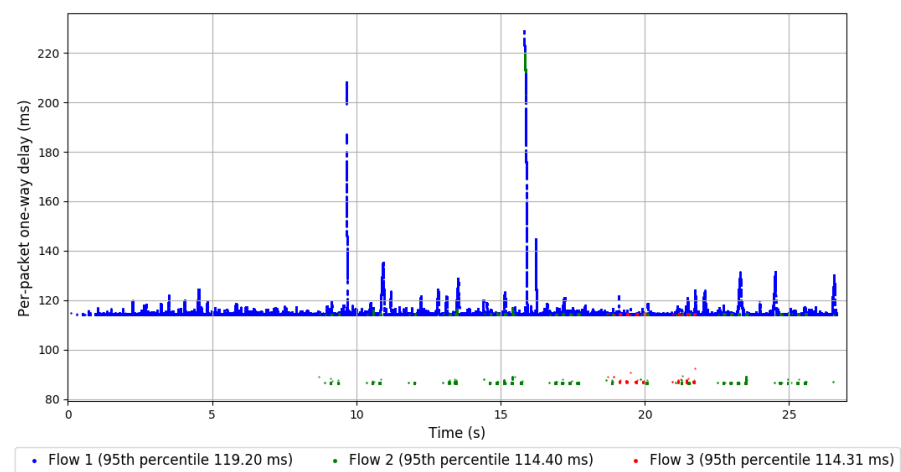
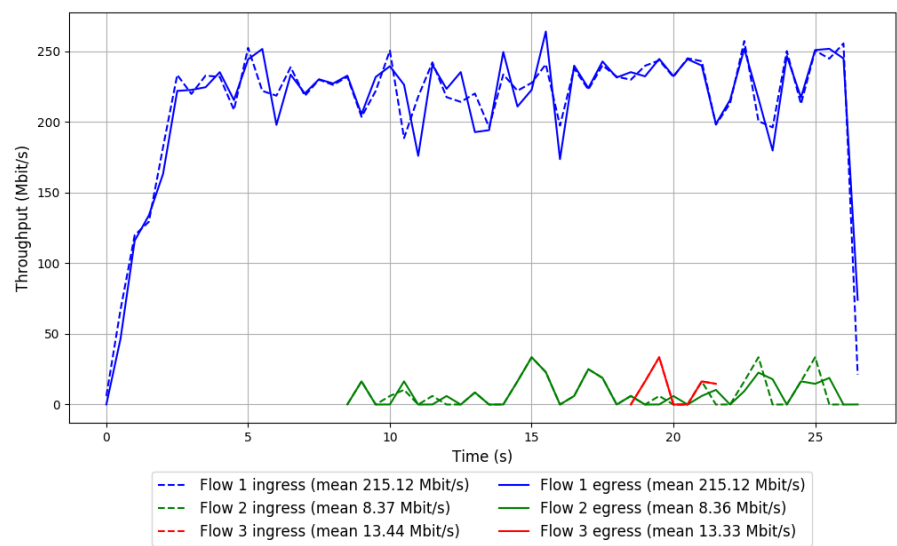
-- Flow 3:

Average throughput: 13.33 Mbit/s

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

Loss rate: 0.00%

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

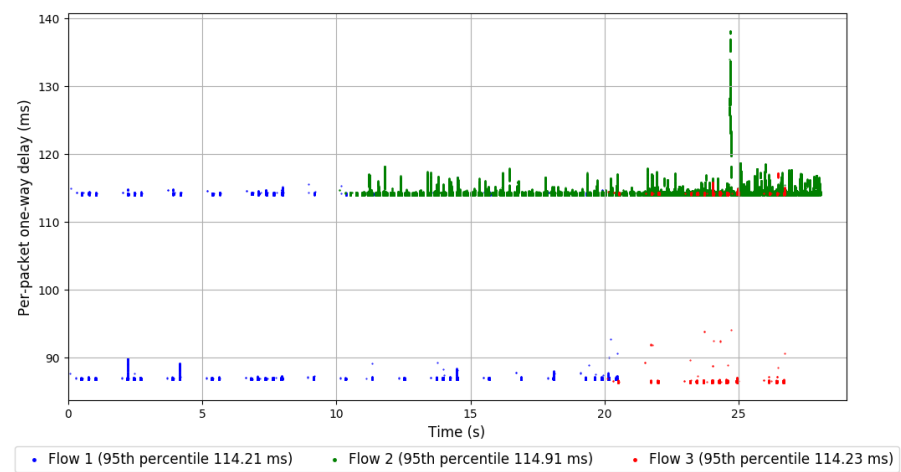
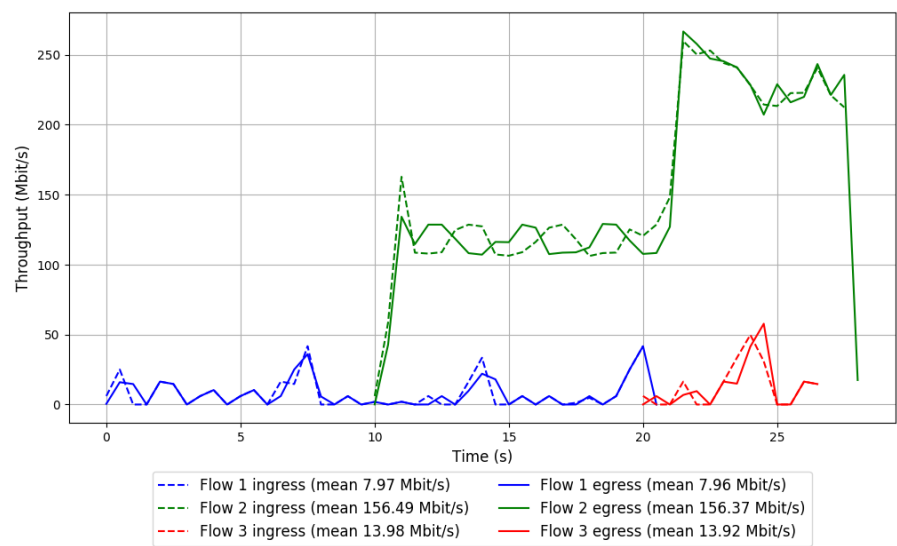


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-09-22 05:16:15
End at: 2017-09-22 05:16:45

# Below is generated by plot.py at 2017-09-22 06:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 109.33 Mbit/s
95th percentile per-packet one-way delay: 114.821 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 114.210 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 156.37 Mbit/s
95th percentile per-packet one-way delay: 114.909 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 13.92 Mbit/s
95th percentile per-packet one-way delay: 114.235 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-09-22 03:19:23

End at: 2017-09-22 03:19:53

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.49 Mbit/s

95th percentile per-packet one-way delay: 89.169 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 37.82 Mbit/s

95th percentile per-packet one-way delay: 88.485 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 28.76 Mbit/s

95th percentile per-packet one-way delay: 88.933 ms

Loss rate: 0.02%

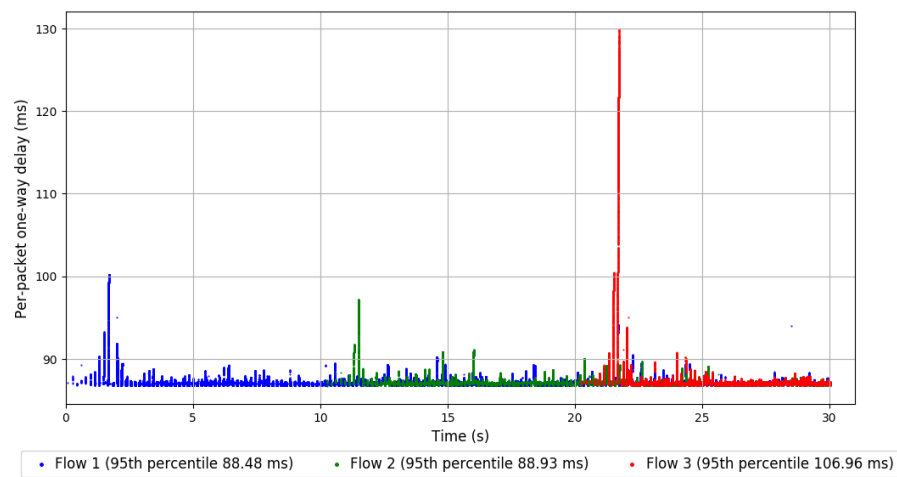
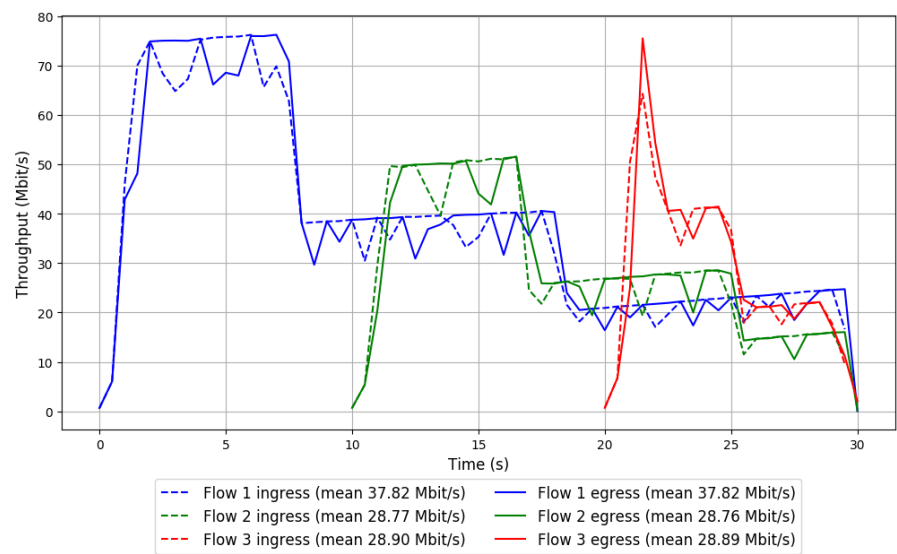
-- Flow 3:

Average throughput: 28.89 Mbit/s

95th percentile per-packet one-way delay: 106.960 ms

Loss rate: 0.04%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-09-22 03:32:40

End at: 2017-09-22 03:33:10

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.87 Mbit/s

95th percentile per-packet one-way delay: 88.440 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 36.43 Mbit/s

95th percentile per-packet one-way delay: 88.436 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 40.21 Mbit/s

95th percentile per-packet one-way delay: 88.451 ms

Loss rate: 0.00%

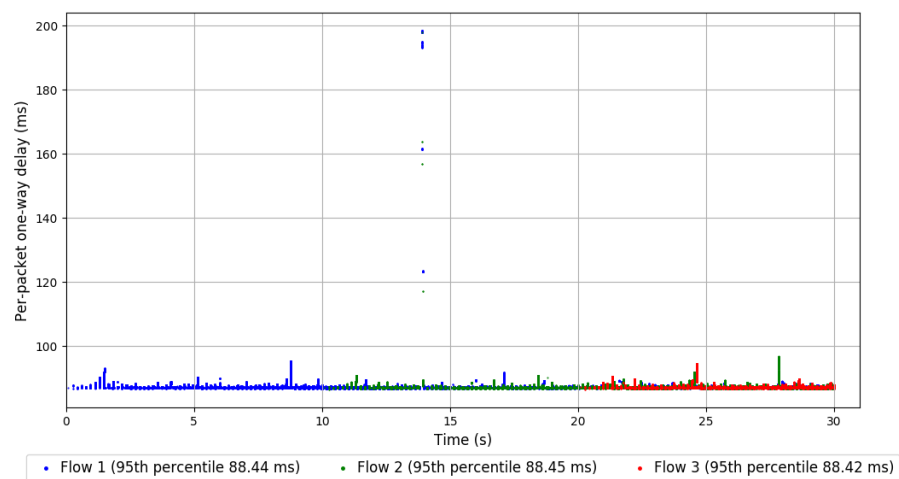
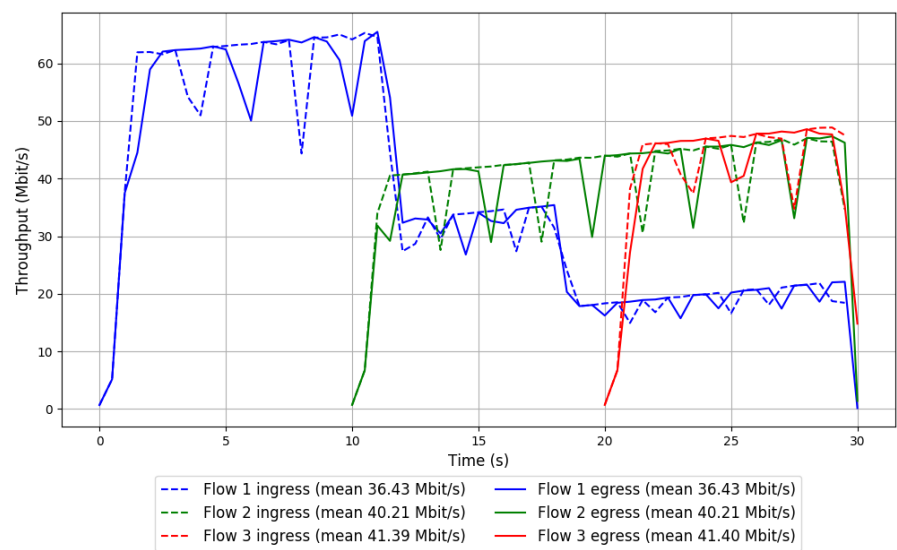
-- Flow 3:

Average throughput: 41.40 Mbit/s

95th percentile per-packet one-way delay: 88.418 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-09-22 03:45:43

End at: 2017-09-22 03:46:13

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 22.34 Mbit/s

95th percentile per-packet one-way delay: 115.791 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 21.29 Mbit/s

95th percentile per-packet one-way delay: 115.845 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 114.625 ms

Loss rate: 1.01%

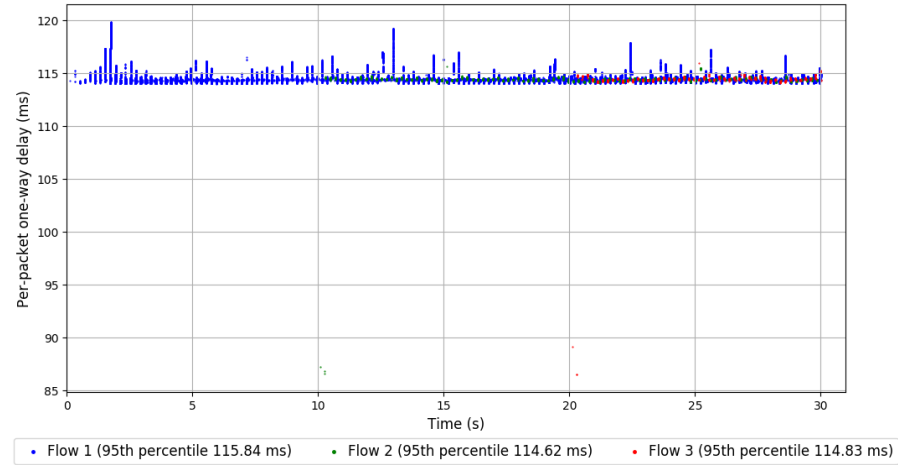
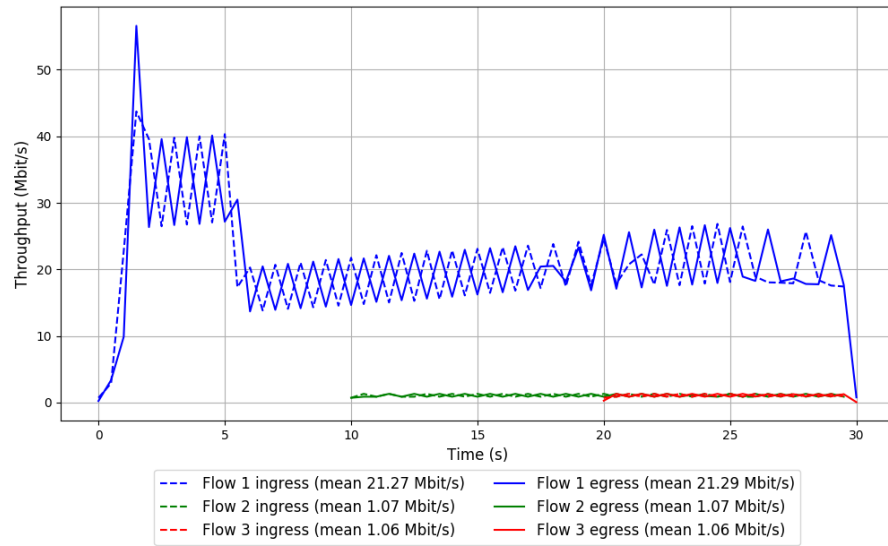
-- Flow 3:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 114.829 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-09-22 03:57:56

End at: 2017-09-22 03:58:26

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.66 Mbit/s

95th percentile per-packet one-way delay: 115.635 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 114.776 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 114.689 ms

Loss rate: 0.02%

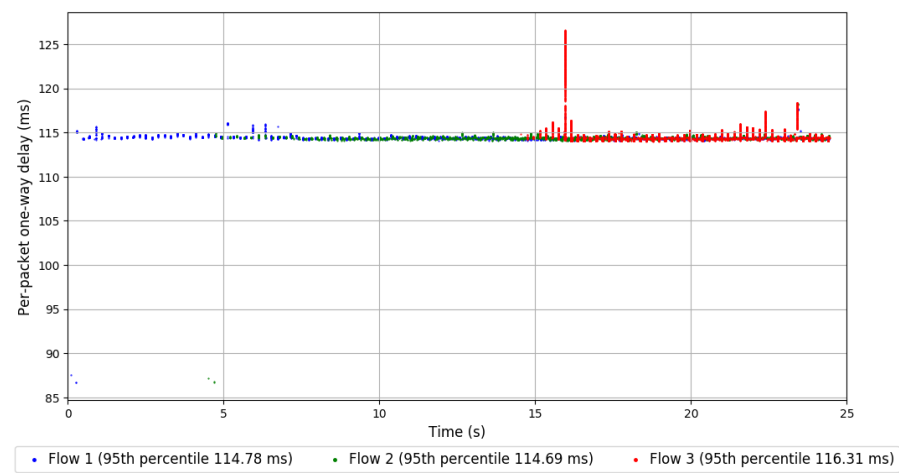
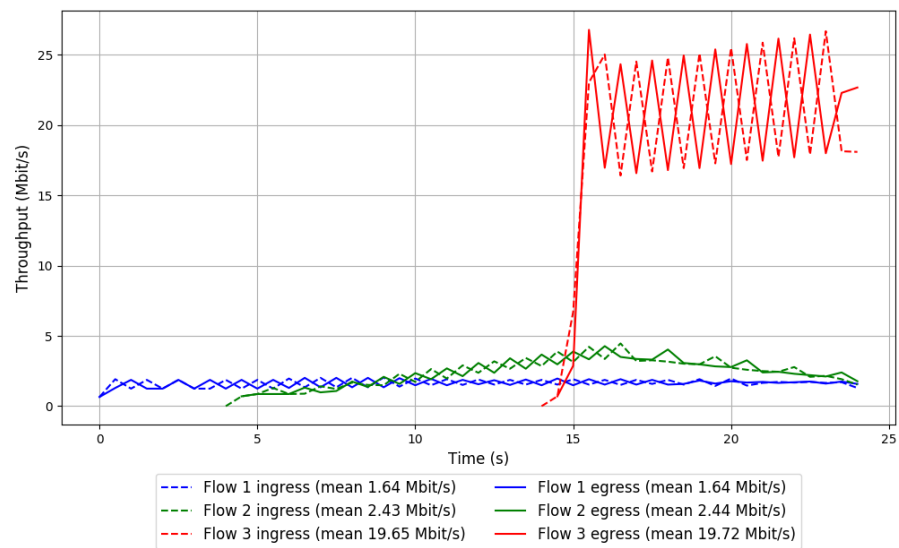
-- Flow 3:

Average throughput: 19.72 Mbit/s

95th percentile per-packet one-way delay: 116.312 ms

Loss rate: 0.05%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-09-22 04:10:23

End at: 2017-09-22 04:10:53

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 39.21 Mbit/s

95th percentile per-packet one-way delay: 116.015 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 38.15 Mbit/s

95th percentile per-packet one-way delay: 116.057 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 114.631 ms

Loss rate: 0.00%

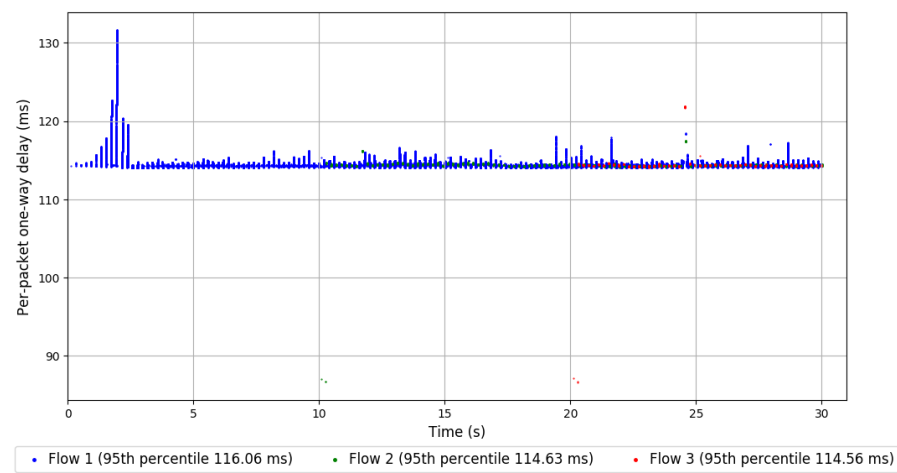
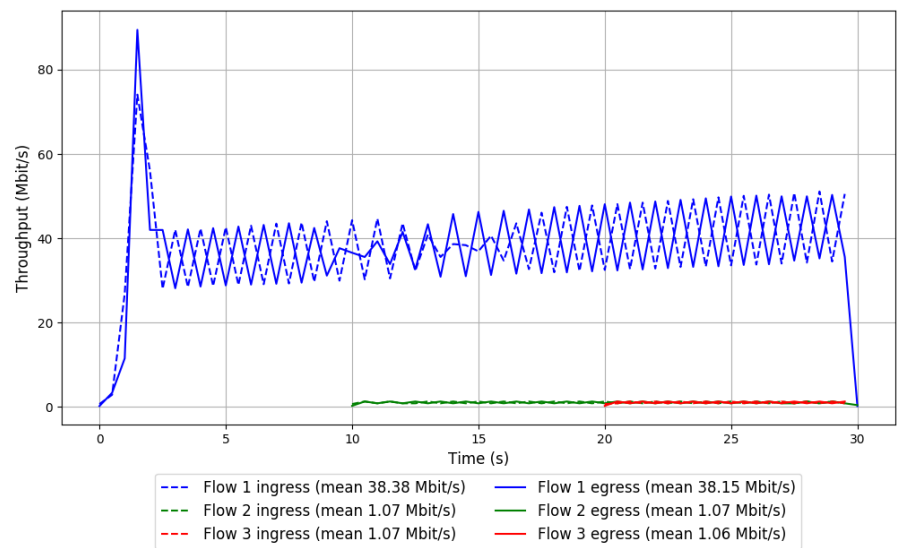
-- Flow 3:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 114.557 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-09-22 04:22:22

End at: 2017-09-22 04:22:52

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 114.582 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 114.591 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 114.595 ms

Loss rate: 0.00%

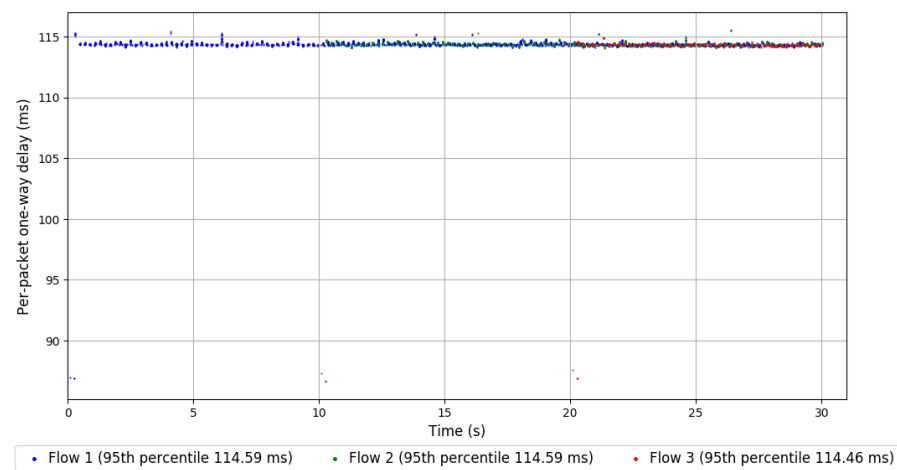
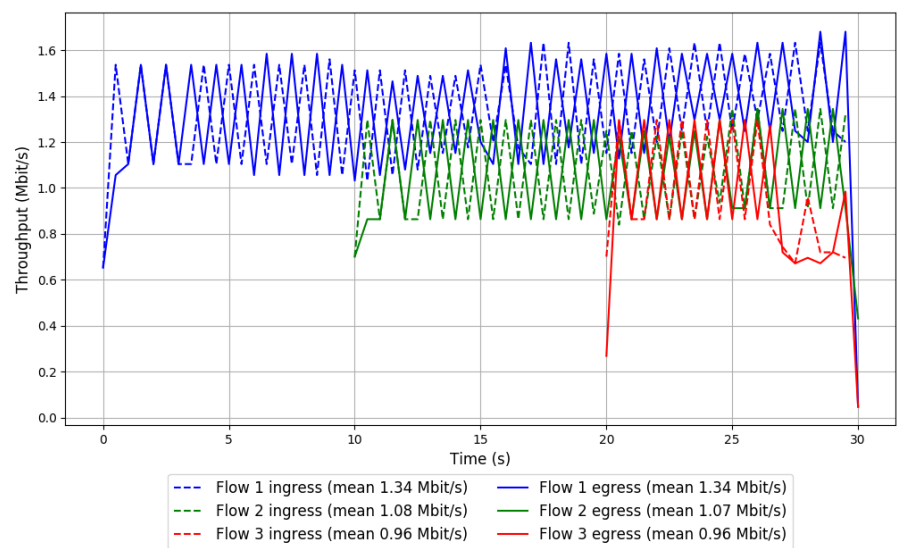
-- Flow 3:

Average throughput: 0.96 Mbit/s

95th percentile per-packet one-way delay: 114.460 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-09-22 04:34:31

End at: 2017-09-22 04:35:01

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 114.596 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 1.11 Mbit/s

95th percentile per-packet one-way delay: 114.664 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 1.04 Mbit/s

95th percentile per-packet one-way delay: 114.557 ms

Loss rate: 0.92%

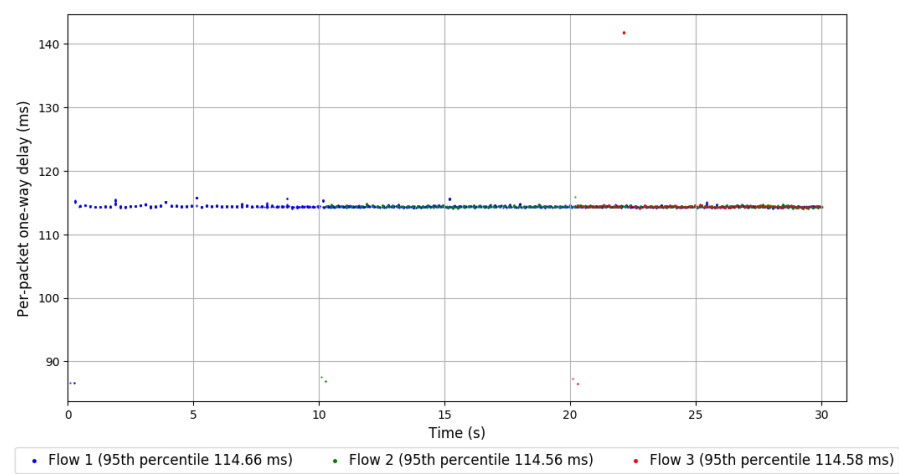
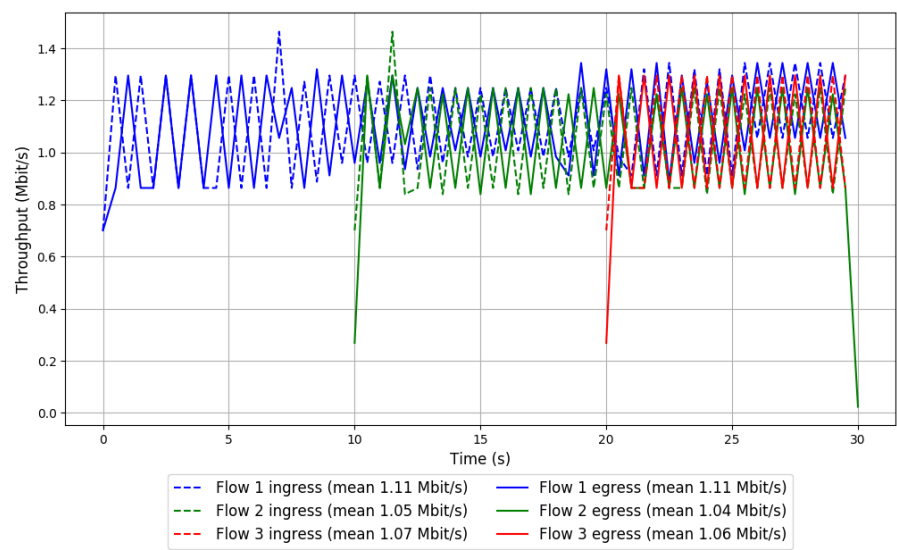
-- Flow 3:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 114.581 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-09-22 04:47:16

End at: 2017-09-22 04:47:46

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 114.563 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 1.54 Mbit/s

95th percentile per-packet one-way delay: 114.590 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 114.506 ms

Loss rate: 0.00%

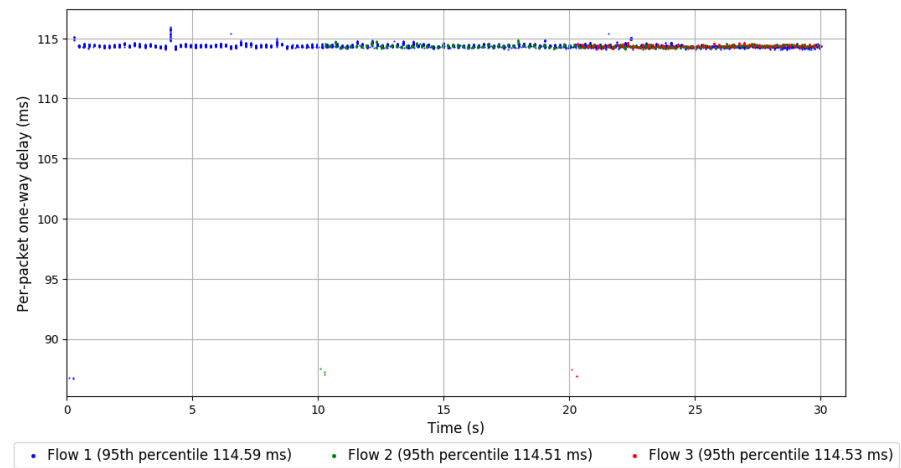
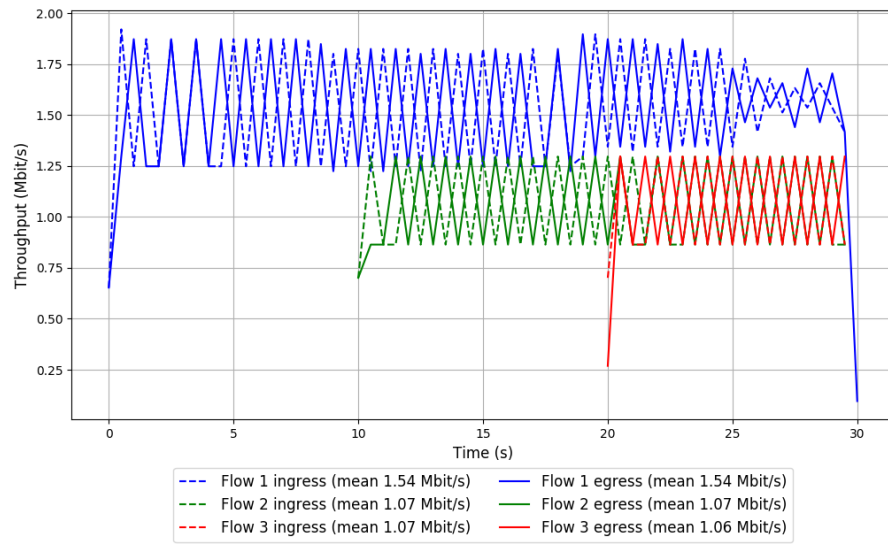
-- Flow 3:

Average throughput: 1.06 Mbit/s

95th percentile per-packet one-way delay: 114.535 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-09-22 04:59:30

End at: 2017-09-22 05:00:00

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.54 Mbit/s

95th percentile per-packet one-way delay: 122.121 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 39.01 Mbit/s

95th percentile per-packet one-way delay: 118.817 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.07 Mbit/s

95th percentile per-packet one-way delay: 117.885 ms

Loss rate: 0.00%

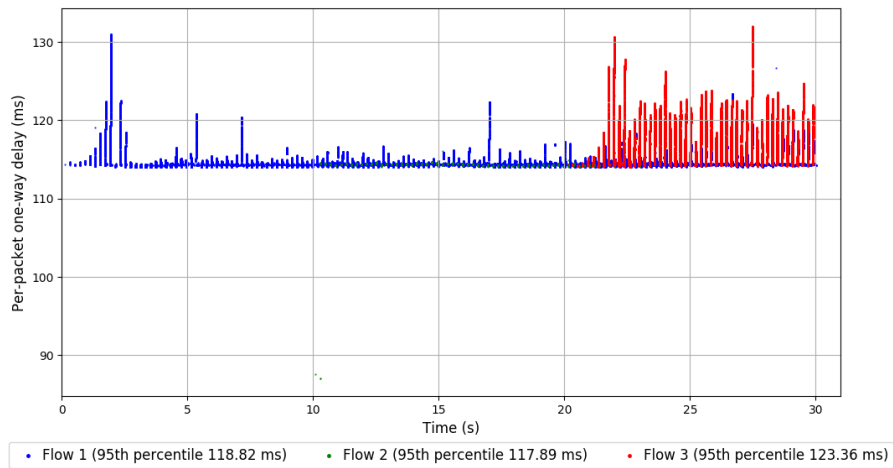
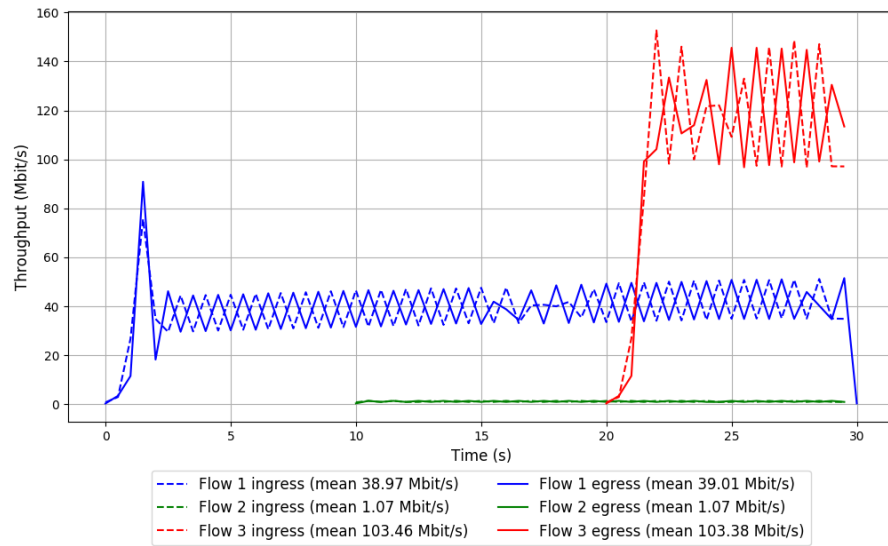
-- Flow 3:

Average throughput: 103.38 Mbit/s

95th percentile per-packet one-way delay: 123.361 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-09-22 05:13:30

End at: 2017-09-22 05:14:00

Below is generated by plot.py at 2017-09-22 06:56:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.17 Mbit/s

95th percentile per-packet one-way delay: 121.299 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 114.592 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 114.556 ms

Loss rate: 0.11%

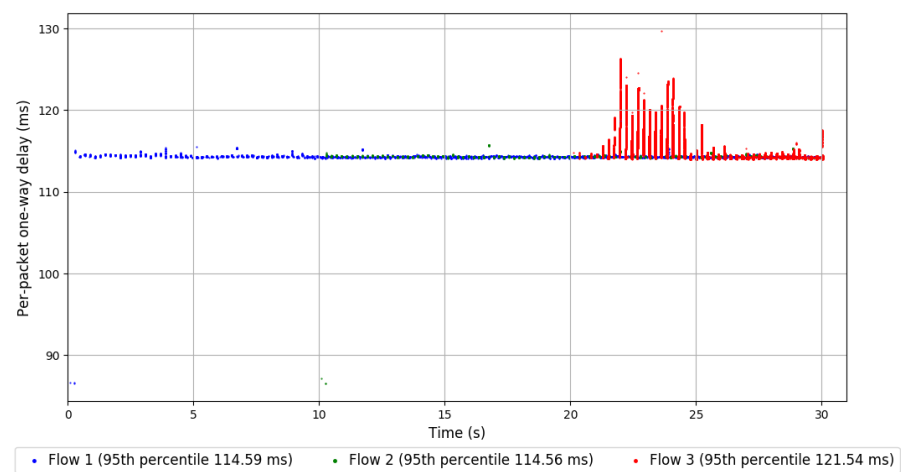
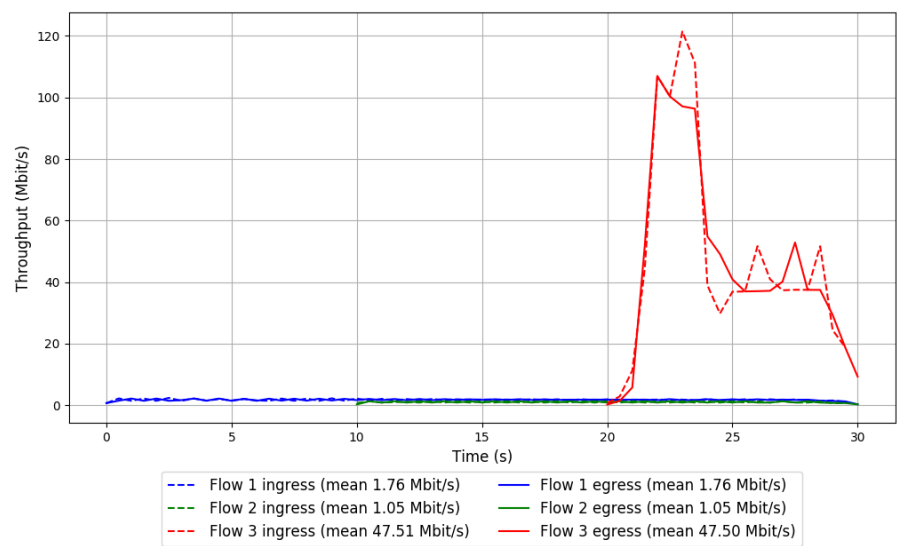
-- Flow 3:

Average throughput: 47.50 Mbit/s

95th percentile per-packet one-way delay: 121.538 ms

Loss rate: 0.03%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-09-22 03:13:01

End at: 2017-09-22 03:13:31

Below is generated by plot.py at 2017-09-22 06:57:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 300.07 Mbit/s

95th percentile per-packet one-way delay: 277.853 ms

Loss rate: 3.66%

-- Flow 1:

Average throughput: 223.28 Mbit/s

95th percentile per-packet one-way delay: 282.223 ms

Loss rate: 4.85%

-- Flow 2:

Average throughput: 67.03 Mbit/s

95th percentile per-packet one-way delay: 108.971 ms

Loss rate: 0.01%

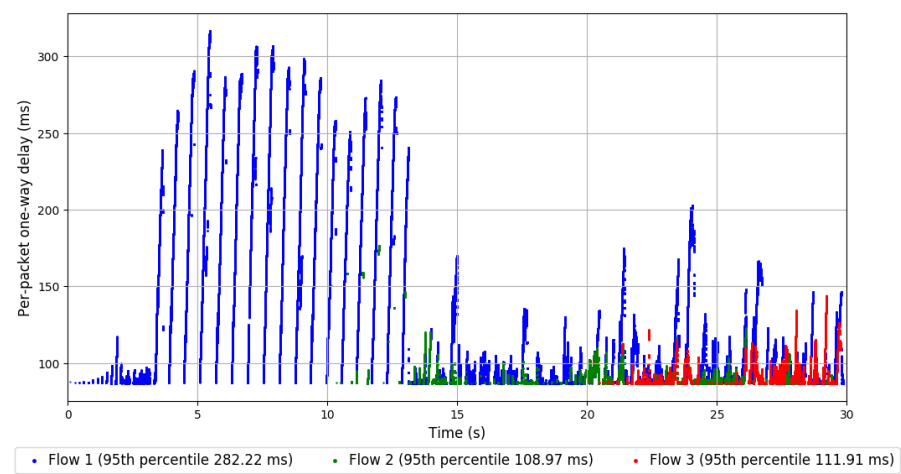
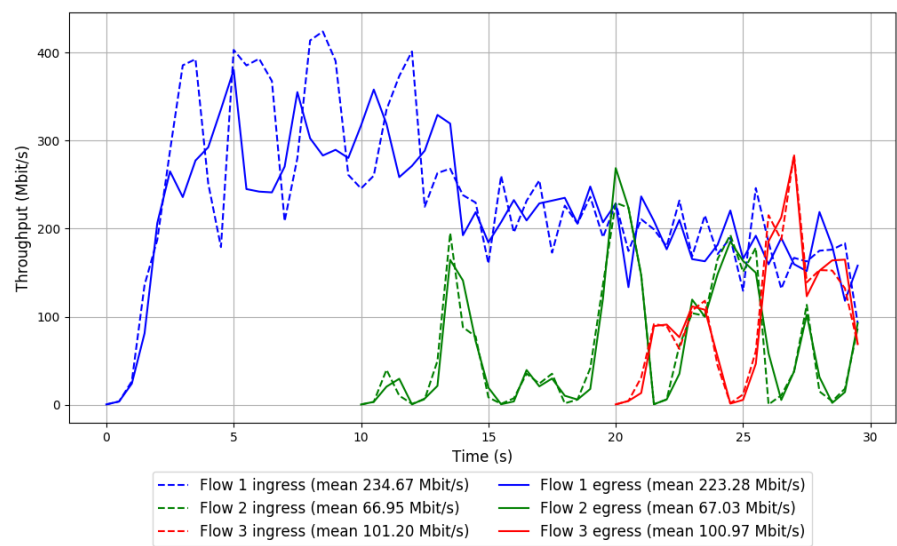
-- Flow 3:

Average throughput: 100.97 Mbit/s

95th percentile per-packet one-way delay: 111.913 ms

Loss rate: 0.00%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-09-22 03:26:16

End at: 2017-09-22 03:26:46

Below is generated by plot.py at 2017-09-22 06:57:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 231.91 Mbit/s

95th percentile per-packet one-way delay: 114.051 ms

Loss rate: 0.27%

-- Flow 1:

Average throughput: 152.76 Mbit/s

95th percentile per-packet one-way delay: 113.187 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 87.44 Mbit/s

95th percentile per-packet one-way delay: 128.882 ms

Loss rate: 0.02%

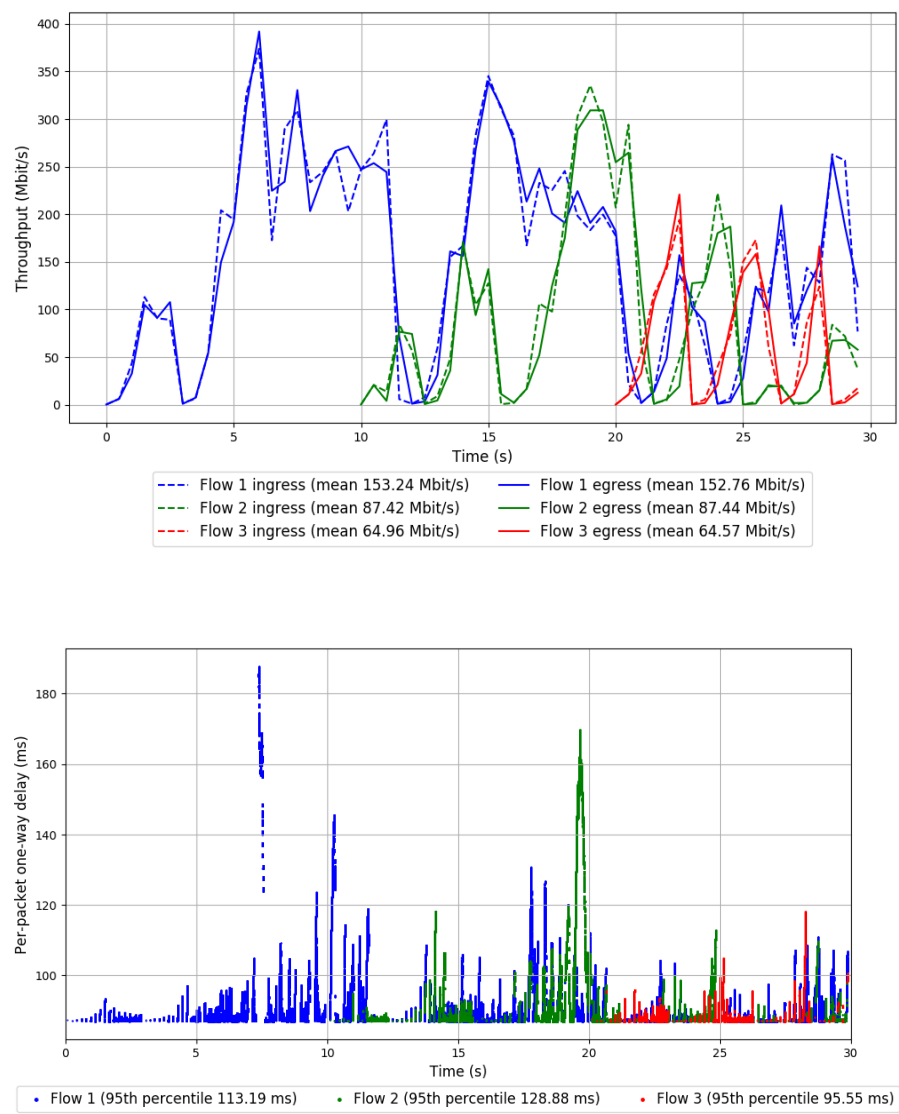
-- Flow 3:

Average throughput: 64.57 Mbit/s

95th percentile per-packet one-way delay: 95.550 ms

Loss rate: 0.62%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-09-22 03:39:28

End at: 2017-09-22 03:39:58

Below is generated by plot.py at 2017-09-22 06:57:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 287.65 Mbit/s

95th percentile per-packet one-way delay: 157.609 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 161.07 Mbit/s

95th percentile per-packet one-way delay: 159.790 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 113.79 Mbit/s

95th percentile per-packet one-way delay: 170.997 ms

Loss rate: 0.25%

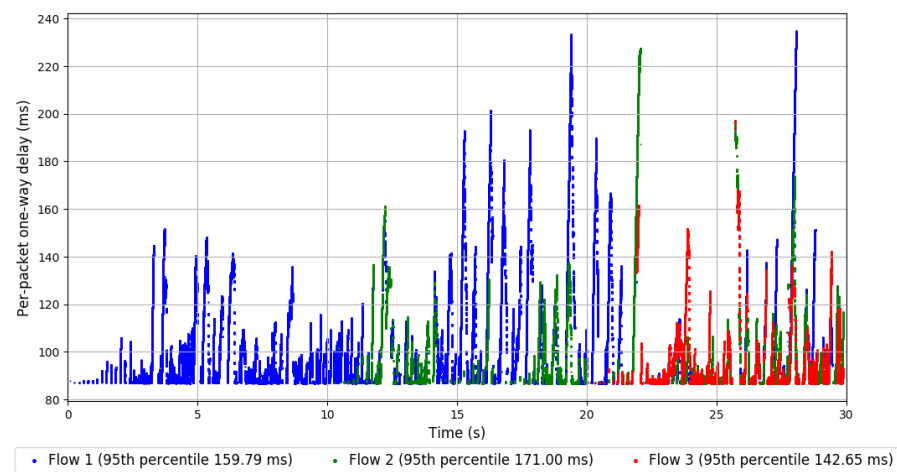
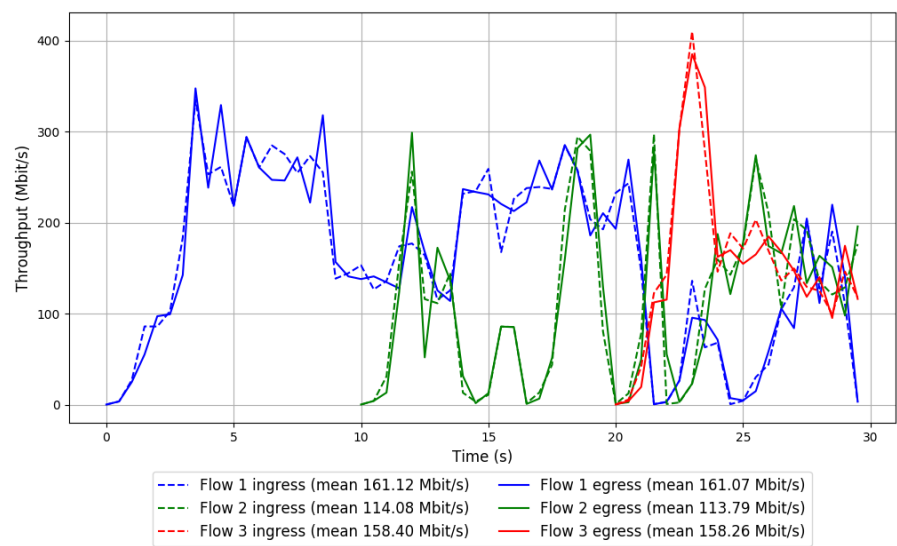
-- Flow 3:

Average throughput: 158.26 Mbit/s

95th percentile per-packet one-way delay: 142.645 ms

Loss rate: 0.07%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-09-22 03:51:57

End at: 2017-09-22 03:52:27

Below is generated by plot.py at 2017-09-22 06:57:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 266.79 Mbit/s

95th percentile per-packet one-way delay: 288.105 ms

Loss rate: 3.22%

-- Flow 1:

Average throughput: 152.28 Mbit/s

95th percentile per-packet one-way delay: 225.156 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 157.41 Mbit/s

95th percentile per-packet one-way delay: 338.512 ms

Loss rate: 6.71%

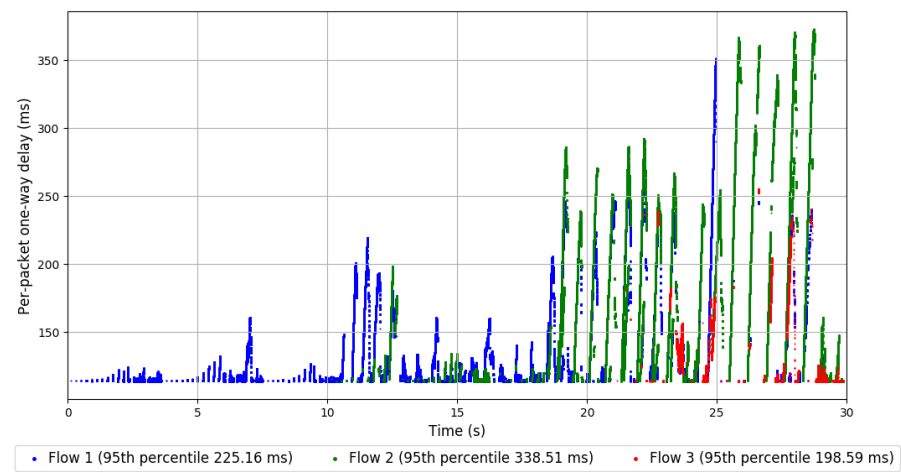
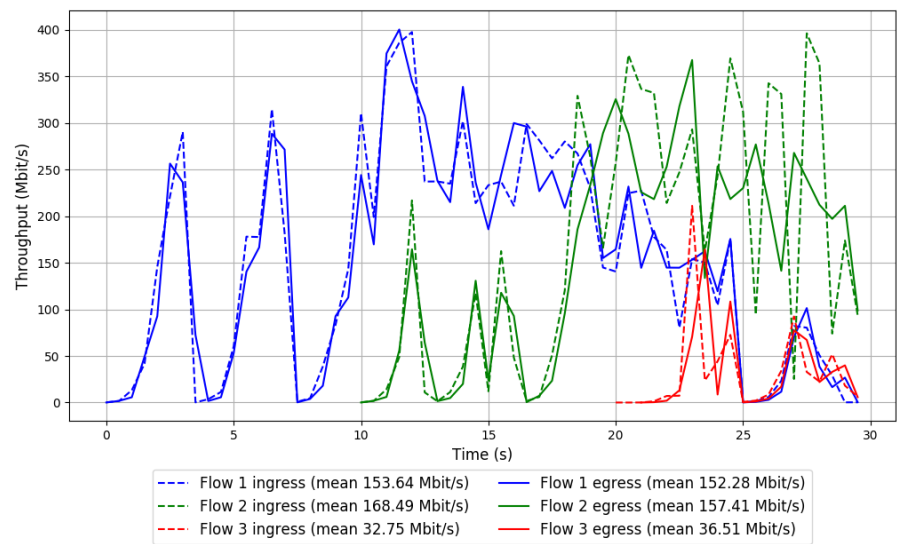
-- Flow 3:

Average throughput: 36.51 Mbit/s

95th percentile per-packet one-way delay: 198.586 ms

Loss rate: 0.26%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-09-22 04:04:21

End at: 2017-09-22 04:04:51

Below is generated by plot.py at 2017-09-22 06:58:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 271.63 Mbit/s

95th percentile per-packet one-way delay: 236.246 ms

Loss rate: 1.65%

-- Flow 1:

Average throughput: 138.16 Mbit/s

95th percentile per-packet one-way delay: 162.660 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 144.97 Mbit/s

95th percentile per-packet one-way delay: 208.038 ms

Loss rate: 0.55%

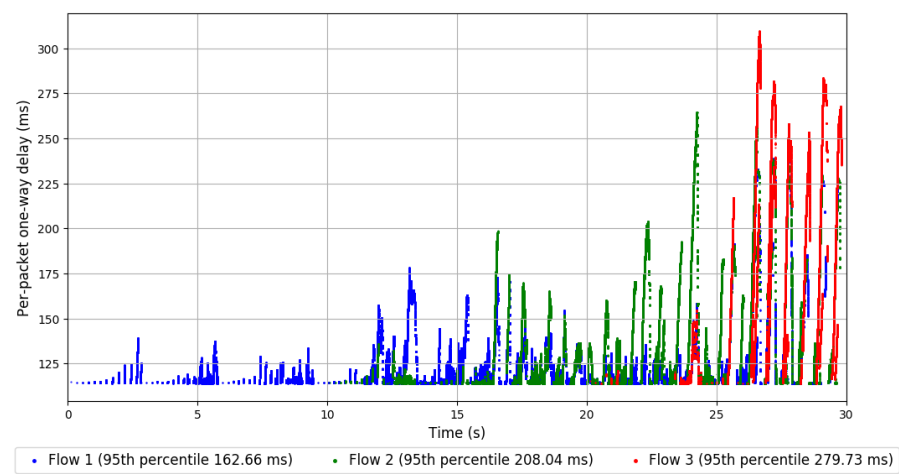
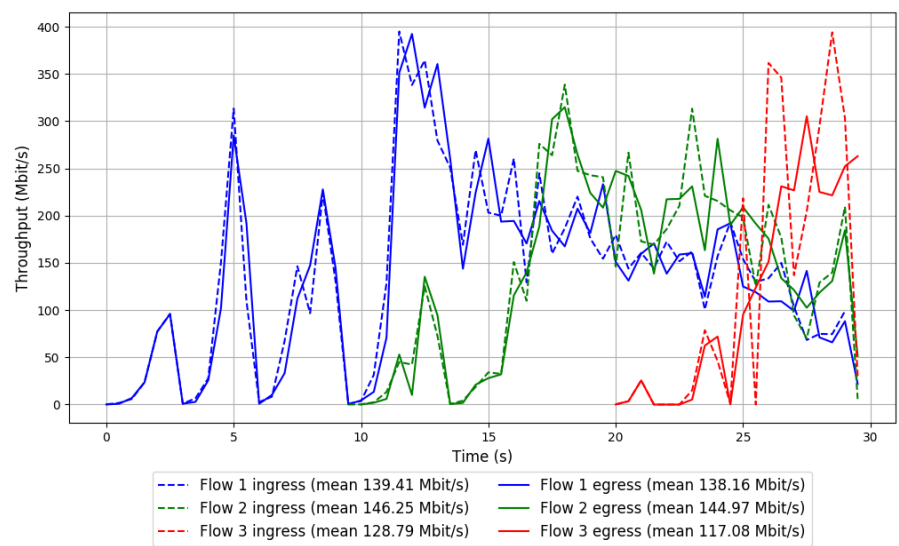
-- Flow 3:

Average throughput: 117.08 Mbit/s

95th percentile per-packet one-way delay: 279.730 ms

Loss rate: 7.95%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-09-22 04:16:53

End at: 2017-09-22 04:17:23

Below is generated by plot.py at 2017-09-22 06:58:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 166.14 Mbit/s

95th percentile per-packet one-way delay: 150.657 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 66.78 Mbit/s

95th percentile per-packet one-way delay: 143.879 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 113.81 Mbit/s

95th percentile per-packet one-way delay: 162.594 ms

Loss rate: 2.98%

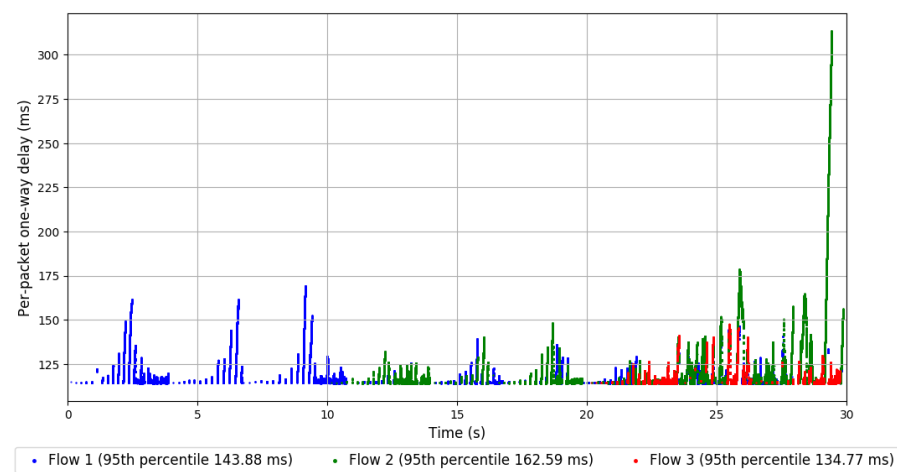
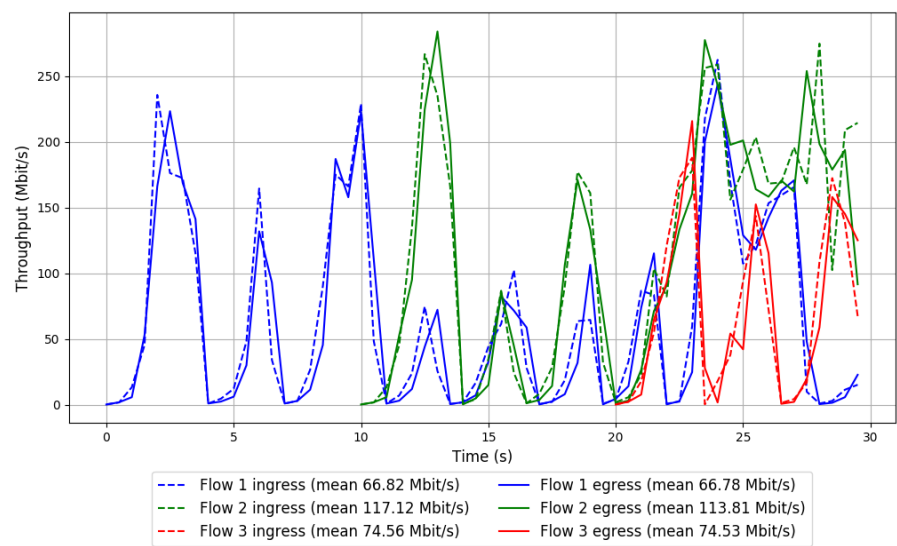
-- Flow 3:

Average throughput: 74.53 Mbit/s

95th percentile per-packet one-way delay: 134.771 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-09-22 04:28:51

End at: 2017-09-22 04:29:21

Below is generated by plot.py at 2017-09-22 07:00:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.11 Mbit/s

95th percentile per-packet one-way delay: 282.425 ms

Loss rate: 4.43%

-- Flow 1:

Average throughput: 236.80 Mbit/s

95th percentile per-packet one-way delay: 280.748 ms

Loss rate: 4.69%

-- Flow 2:

Average throughput: 31.54 Mbit/s

95th percentile per-packet one-way delay: 134.346 ms

Loss rate: 0.00%

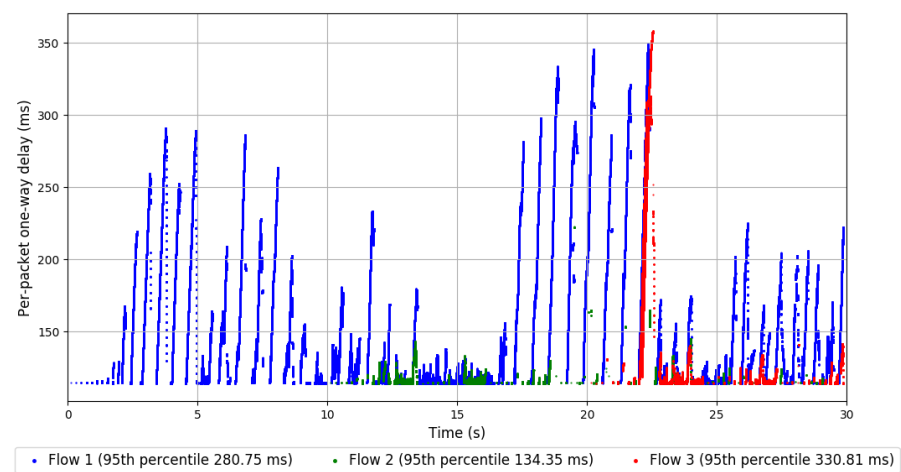
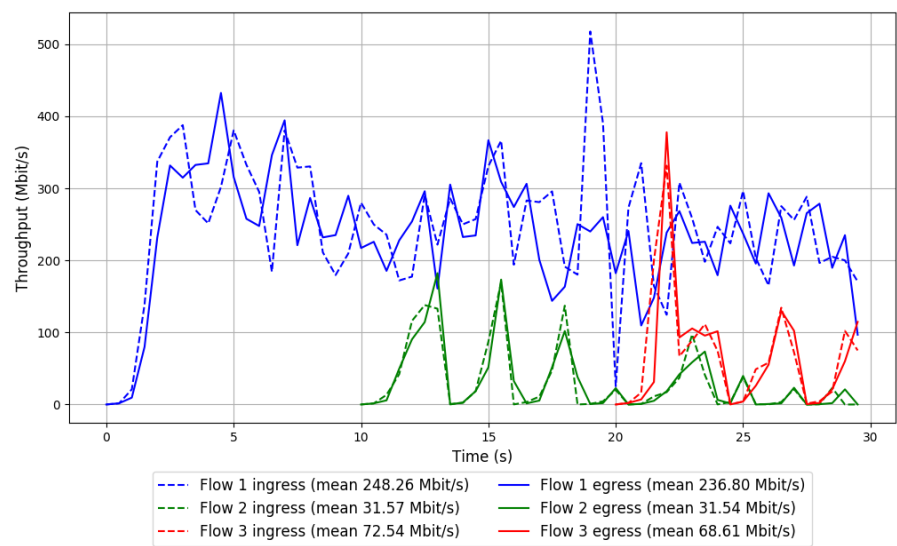
-- Flow 3:

Average throughput: 68.61 Mbit/s

95th percentile per-packet one-way delay: 330.814 ms

Loss rate: 5.66%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-09-22 04:41:10

End at: 2017-09-22 04:41:40

Below is generated by plot.py at 2017-09-22 07:01:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 296.54 Mbit/s

95th percentile per-packet one-way delay: 213.190 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 205.40 Mbit/s

95th percentile per-packet one-way delay: 219.526 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 76.98 Mbit/s

95th percentile per-packet one-way delay: 191.795 ms

Loss rate: 0.20%

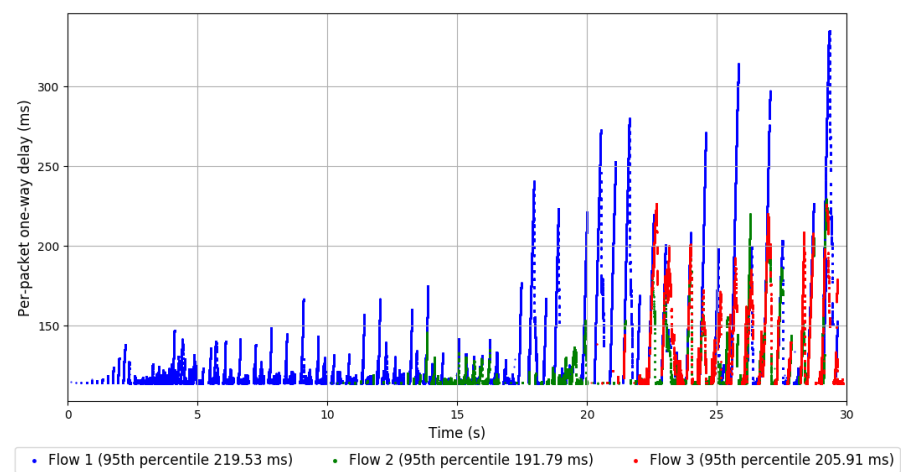
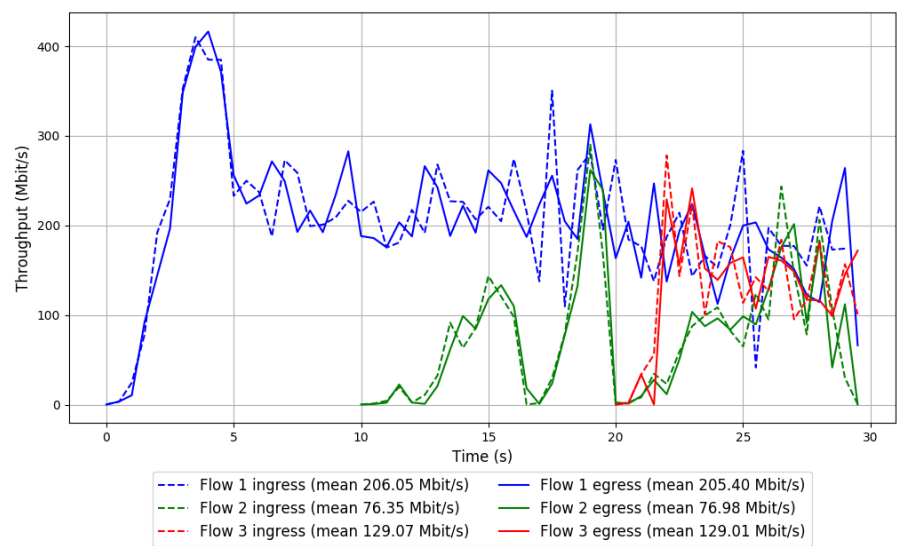
-- Flow 3:

Average throughput: 129.01 Mbit/s

95th percentile per-packet one-way delay: 205.914 ms

Loss rate: 0.17%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-09-22 04:53:26

End at: 2017-09-22 04:53:56

Below is generated by plot.py at 2017-09-22 07:01:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 239.42 Mbit/s

95th percentile per-packet one-way delay: 159.359 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 119.54 Mbit/s

95th percentile per-packet one-way delay: 159.573 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 159.17 Mbit/s

95th percentile per-packet one-way delay: 146.862 ms

Loss rate: 0.02%

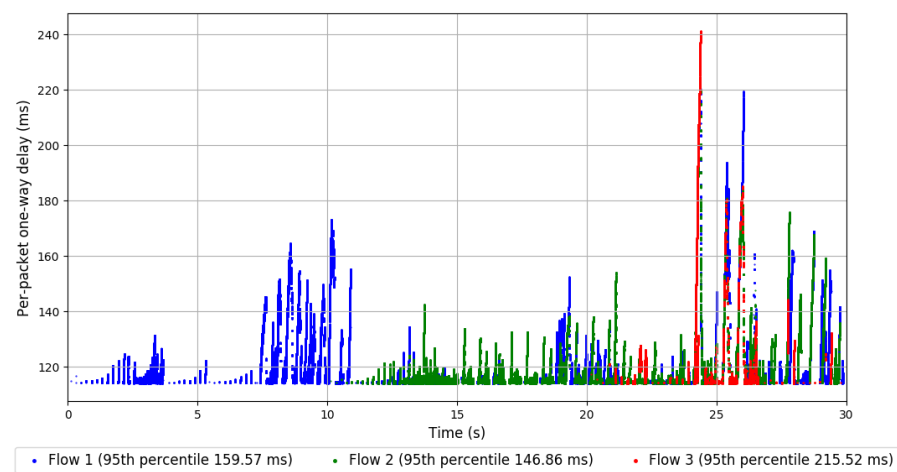
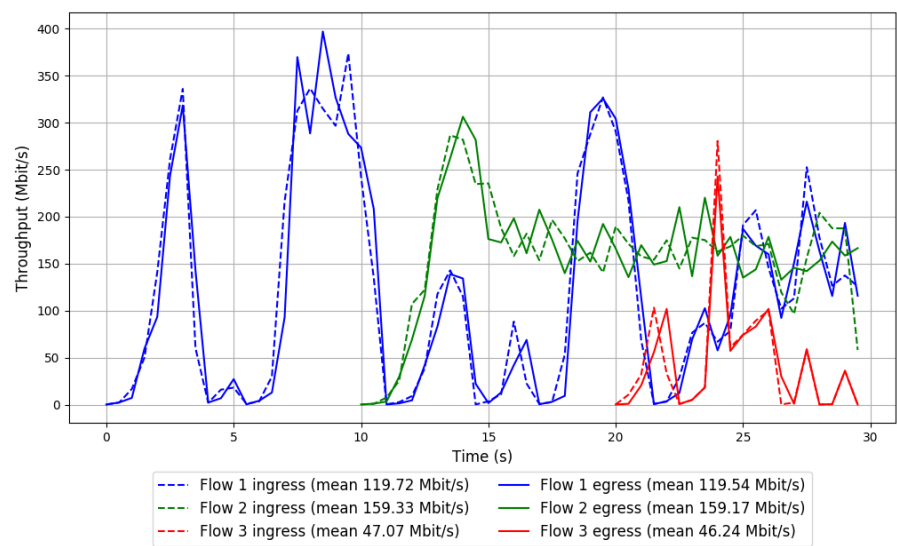
-- Flow 3:

Average throughput: 46.24 Mbit/s

95th percentile per-packet one-way delay: 215.524 ms

Loss rate: 1.80%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-09-22 05:06:42

End at: 2017-09-22 05:07:12

Below is generated by plot.py at 2017-09-22 07:02:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.69 Mbit/s

95th percentile per-packet one-way delay: 246.246 ms

Loss rate: 2.61%

-- Flow 1:

Average throughput: 175.95 Mbit/s

95th percentile per-packet one-way delay: 237.734 ms

Loss rate: 1.70%

-- Flow 2:

Average throughput: 150.03 Mbit/s

95th percentile per-packet one-way delay: 253.009 ms

Loss rate: 3.21%

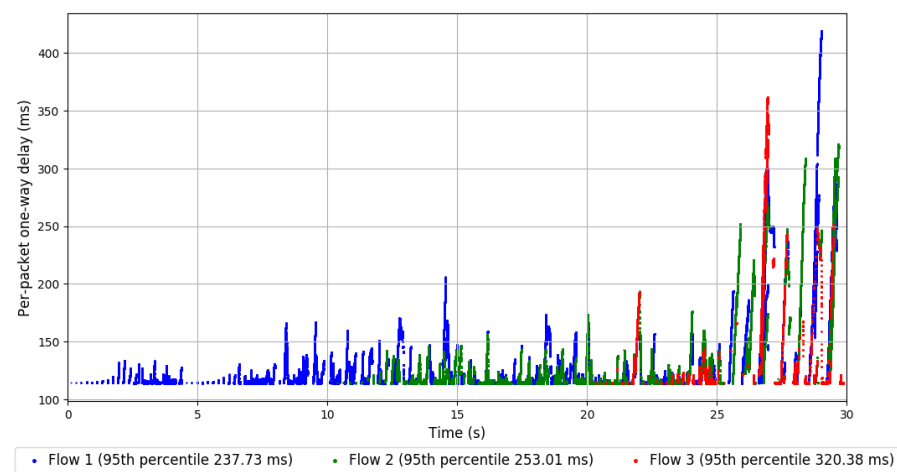
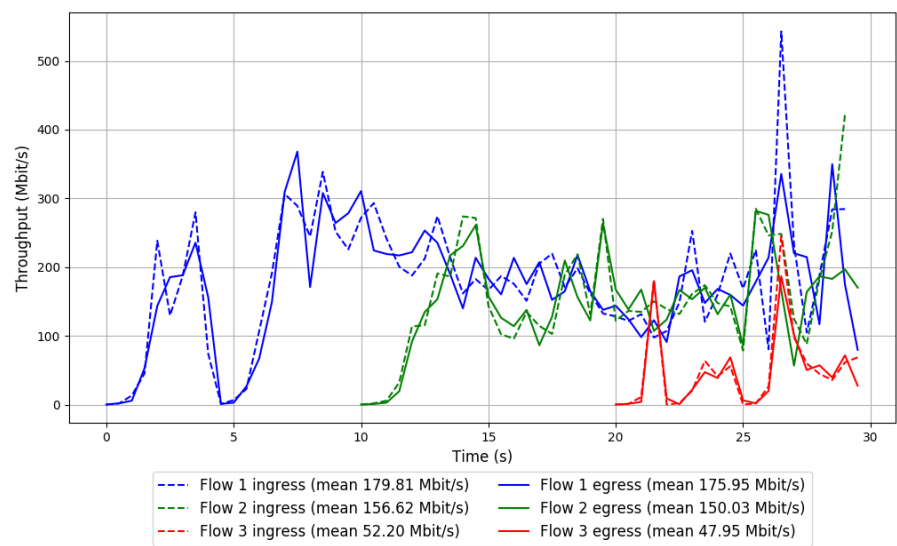
-- Flow 3:

Average throughput: 47.95 Mbit/s

95th percentile per-packet one-way delay: 320.375 ms

Loss rate: 8.41%

Run 10: Report of Verus — Data Link

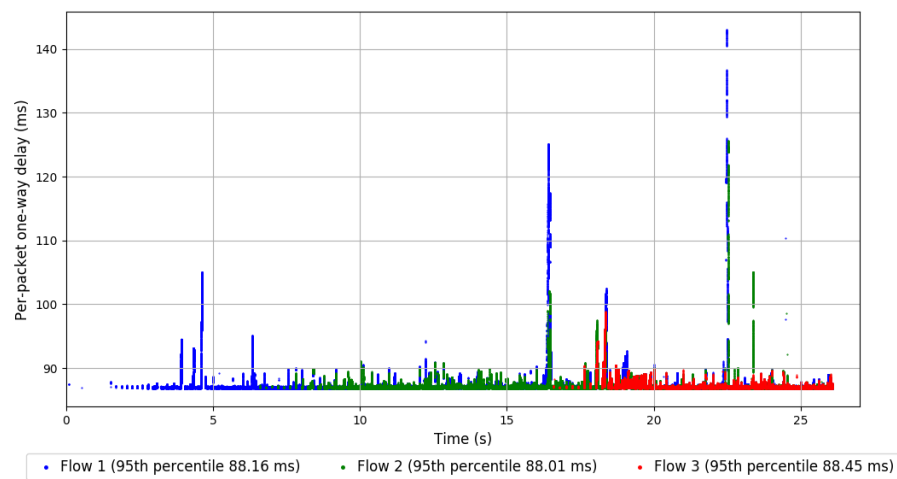
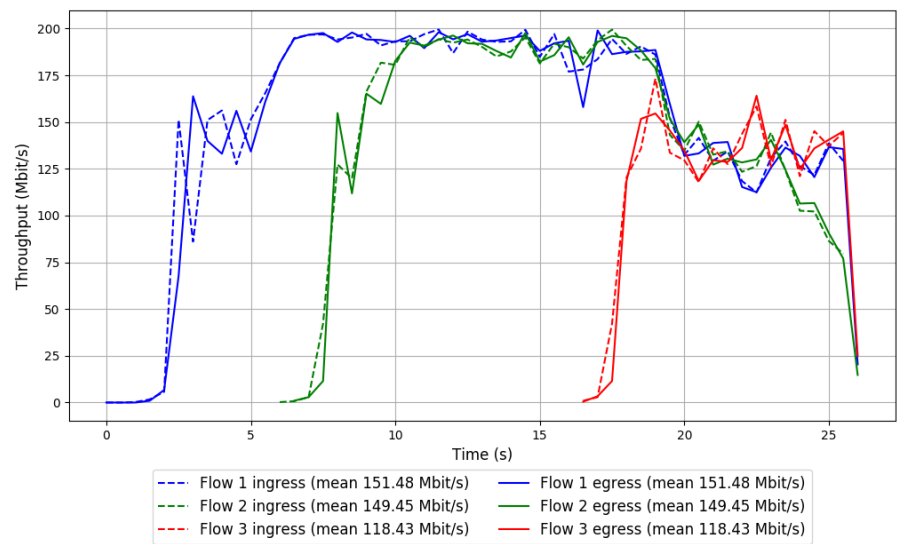


```
Run 1: Statistics of Indigo

Start at: 2017-09-22 03:23:15
End at: 2017-09-22 03:23:45

# Below is generated by plot.py at 2017-09-22 07:02:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 306.79 Mbit/s
95th percentile per-packet one-way delay: 88.134 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 151.48 Mbit/s
95th percentile per-packet one-way delay: 88.158 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 149.45 Mbit/s
95th percentile per-packet one-way delay: 88.013 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 118.43 Mbit/s
95th percentile per-packet one-way delay: 88.450 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-09-22 03:36:32

End at: 2017-09-22 03:37:02

Below is generated by plot.py at 2017-09-22 07:03:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.79 Mbit/s

95th percentile per-packet one-way delay: 88.111 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 162.20 Mbit/s

95th percentile per-packet one-way delay: 87.808 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 143.84 Mbit/s

95th percentile per-packet one-way delay: 88.497 ms

Loss rate: 0.01%

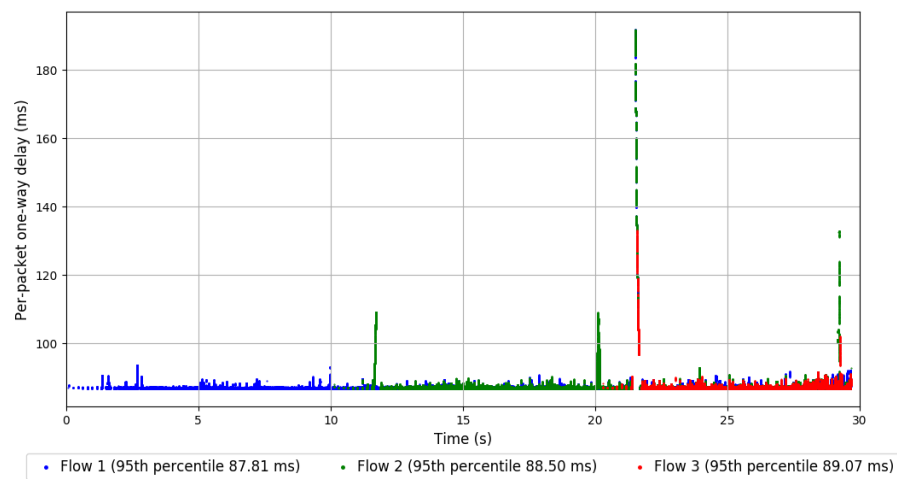
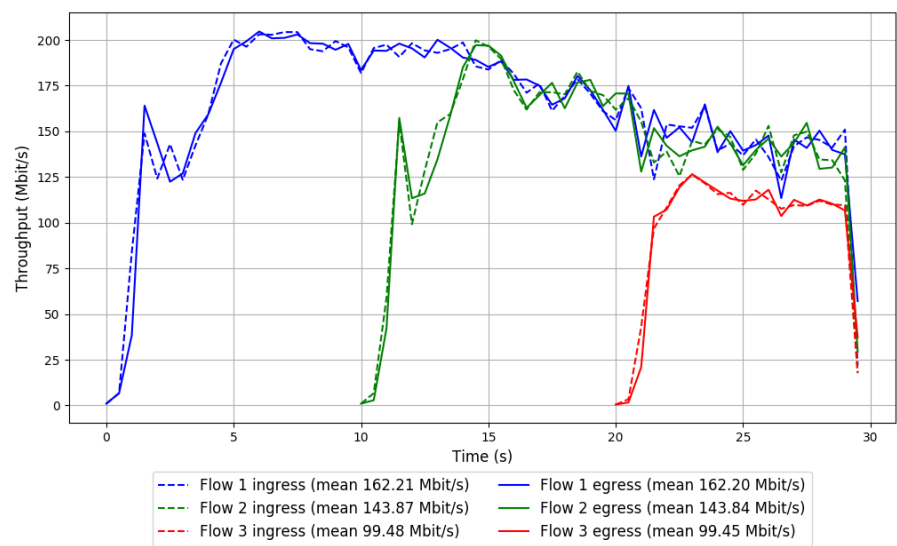
-- Flow 3:

Average throughput: 99.45 Mbit/s

95th percentile per-packet one-way delay: 89.073 ms

Loss rate: 0.02%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-09-22 03:48:58

End at: 2017-09-22 03:49:28

Below is generated by plot.py at 2017-09-22 07:03:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 281.82 Mbit/s

95th percentile per-packet one-way delay: 115.623 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 172.97 Mbit/s

95th percentile per-packet one-way delay: 115.131 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 162.38 Mbit/s

95th percentile per-packet one-way delay: 117.207 ms

Loss rate: 0.15%

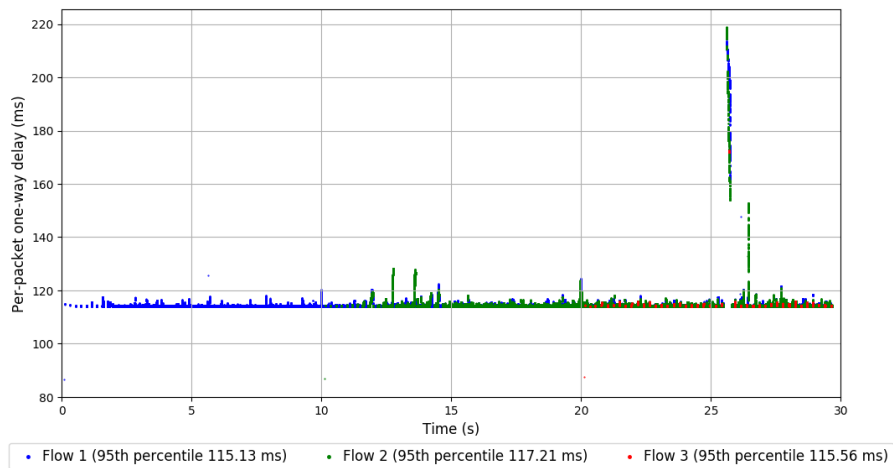
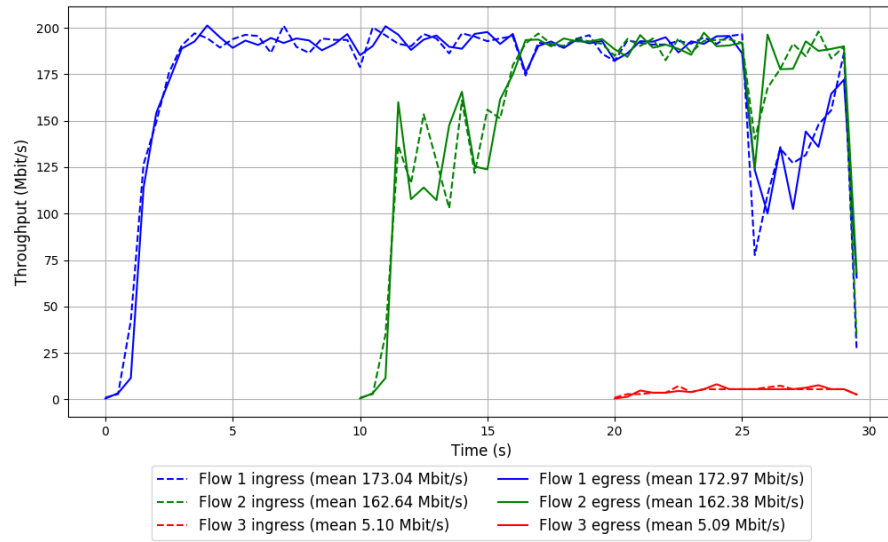
-- Flow 3:

Average throughput: 5.09 Mbit/s

95th percentile per-packet one-way delay: 115.565 ms

Loss rate: 0.00%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-09-22 04:01:24

End at: 2017-09-22 04:01:54

Below is generated by plot.py at 2017-09-22 07:03:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 253.99 Mbit/s

95th percentile per-packet one-way delay: 115.507 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 159.10 Mbit/s

95th percentile per-packet one-way delay: 114.906 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 75.76 Mbit/s

95th percentile per-packet one-way delay: 119.322 ms

Loss rate: 0.19%

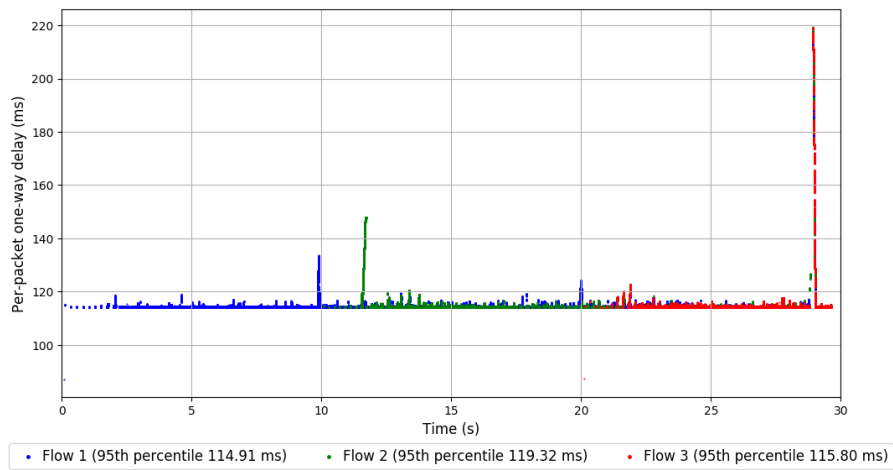
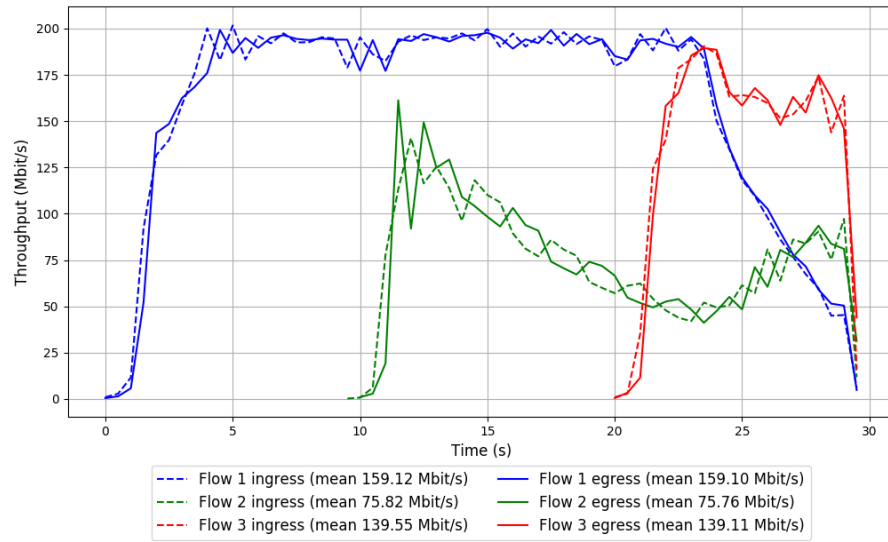
-- Flow 3:

Average throughput: 139.11 Mbit/s

95th percentile per-packet one-way delay: 115.803 ms

Loss rate: 0.31%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-09-22 04:14:01

End at: 2017-09-22 04:14:31

Below is generated by plot.py at 2017-09-22 07:04:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 215.30 Mbit/s

95th percentile per-packet one-way delay: 114.792 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 63.75 Mbit/s

95th percentile per-packet one-way delay: 114.877 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 159.85 Mbit/s

95th percentile per-packet one-way delay: 114.672 ms

Loss rate: 0.12%

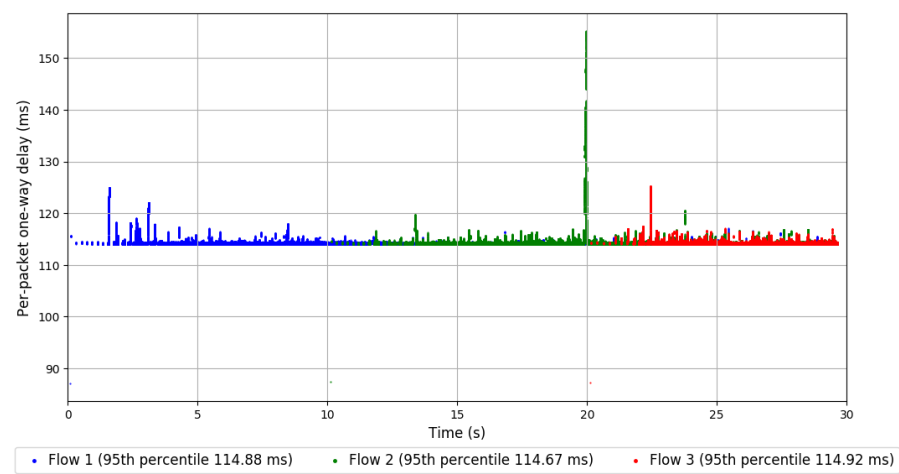
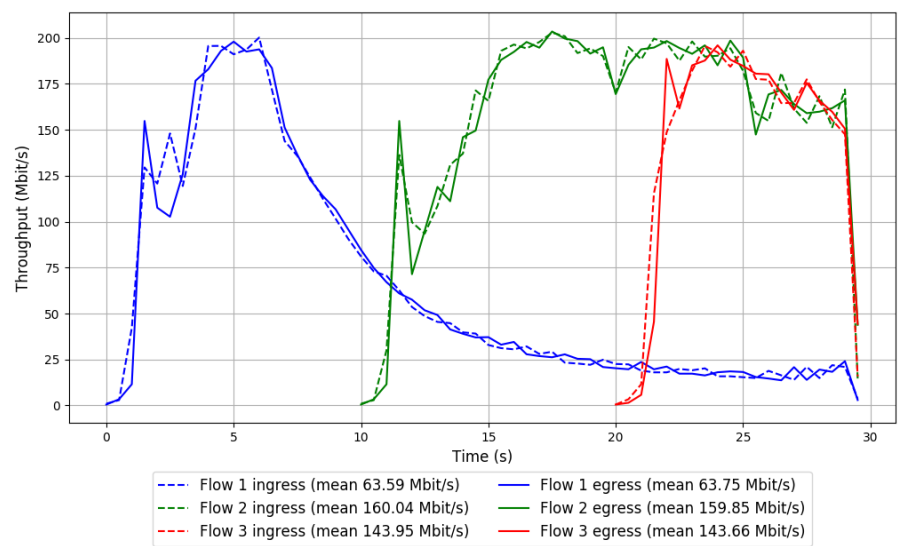
-- Flow 3:

Average throughput: 143.66 Mbit/s

95th percentile per-packet one-way delay: 114.922 ms

Loss rate: 0.19%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-09-22 04:25:54

End at: 2017-09-22 04:26:24

Below is generated by plot.py at 2017-09-22 07:05:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 276.97 Mbit/s

95th percentile per-packet one-way delay: 115.131 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 129.17 Mbit/s

95th percentile per-packet one-way delay: 114.539 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 159.58 Mbit/s

95th percentile per-packet one-way delay: 115.519 ms

Loss rate: 0.15%

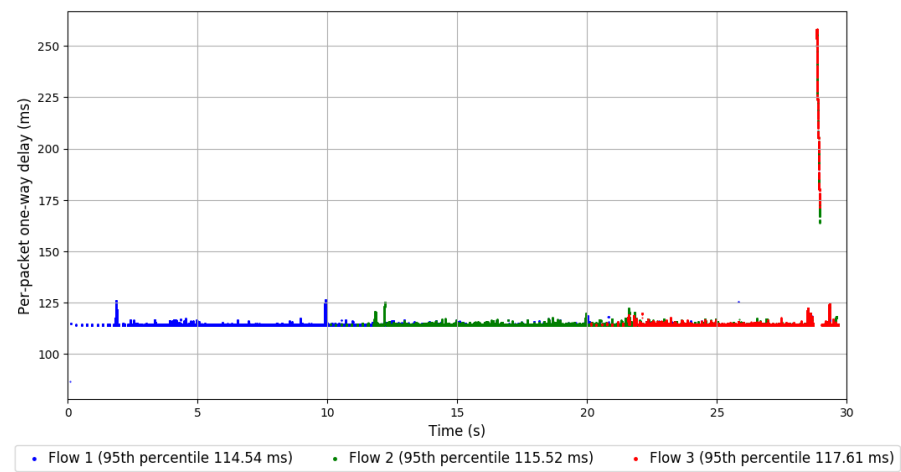
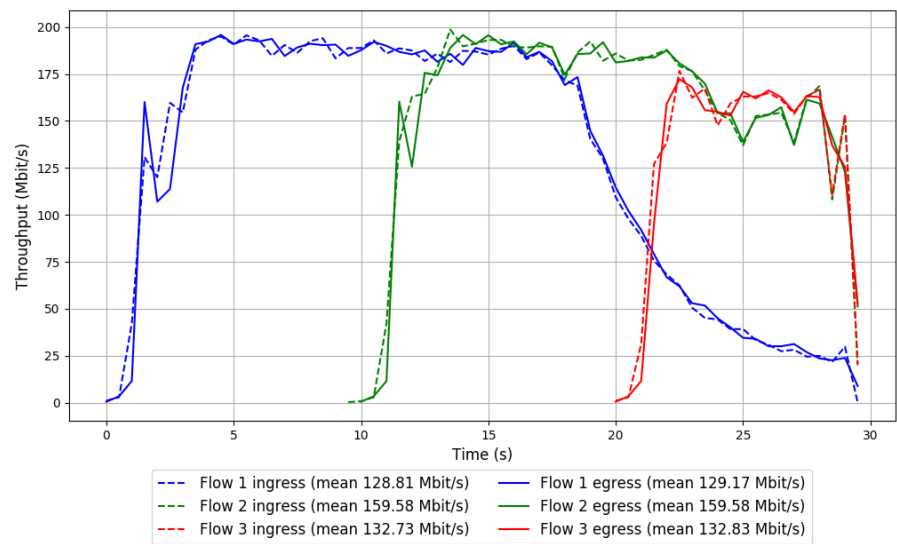
-- Flow 3:

Average throughput: 132.83 Mbit/s

95th percentile per-packet one-way delay: 117.608 ms

Loss rate: 0.34%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-09-22 04:38:09

End at: 2017-09-22 04:38:39

Below is generated by plot.py at 2017-09-22 07:07:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 300.86 Mbit/s

95th percentile per-packet one-way delay: 115.194 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 168.78 Mbit/s

95th percentile per-packet one-way delay: 114.810 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 153.32 Mbit/s

95th percentile per-packet one-way delay: 115.589 ms

Loss rate: 0.18%

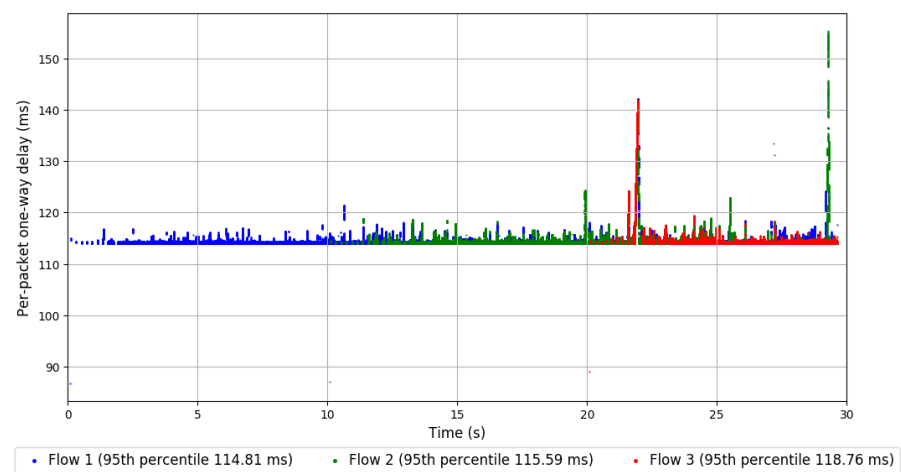
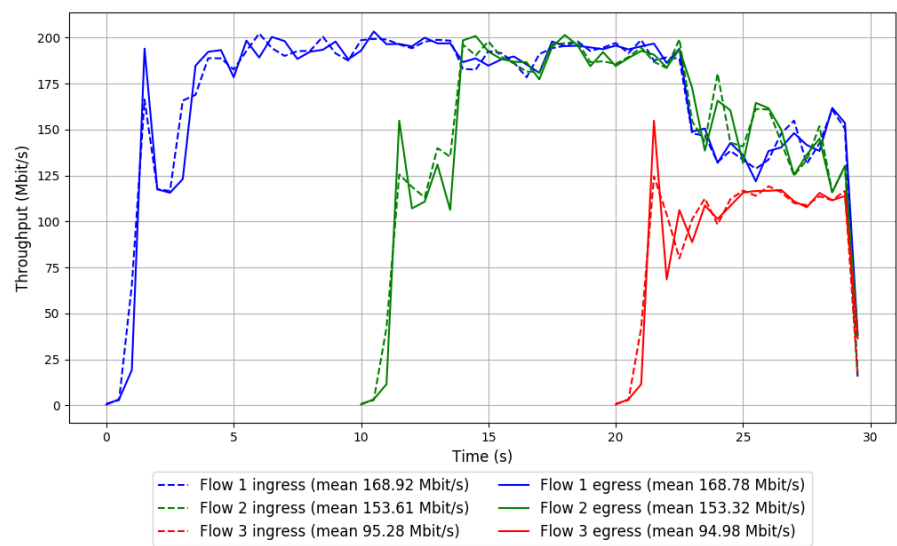
-- Flow 3:

Average throughput: 94.98 Mbit/s

95th percentile per-packet one-way delay: 118.758 ms

Loss rate: 0.36%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-09-22 04:50:26

End at: 2017-09-22 04:50:56

Below is generated by plot.py at 2017-09-22 07:07:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 310.08 Mbit/s

95th percentile per-packet one-way delay: 119.067 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 169.06 Mbit/s

95th percentile per-packet one-way delay: 116.553 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 155.26 Mbit/s

95th percentile per-packet one-way delay: 120.936 ms

Loss rate: 0.11%

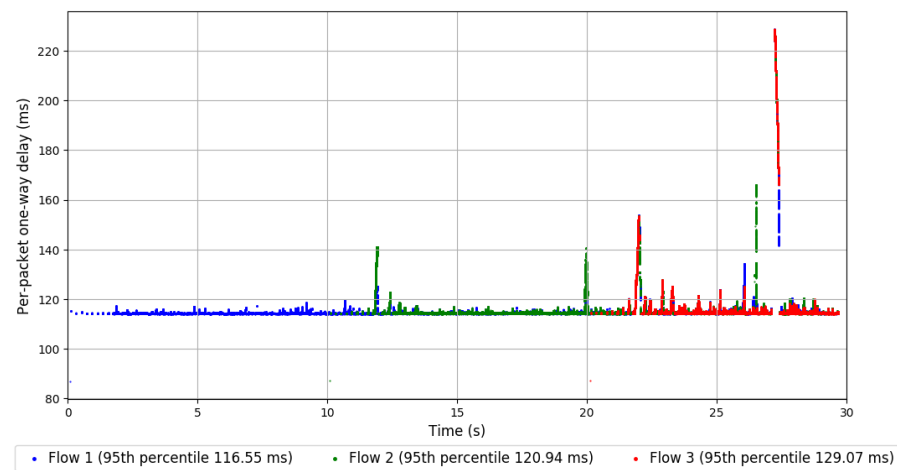
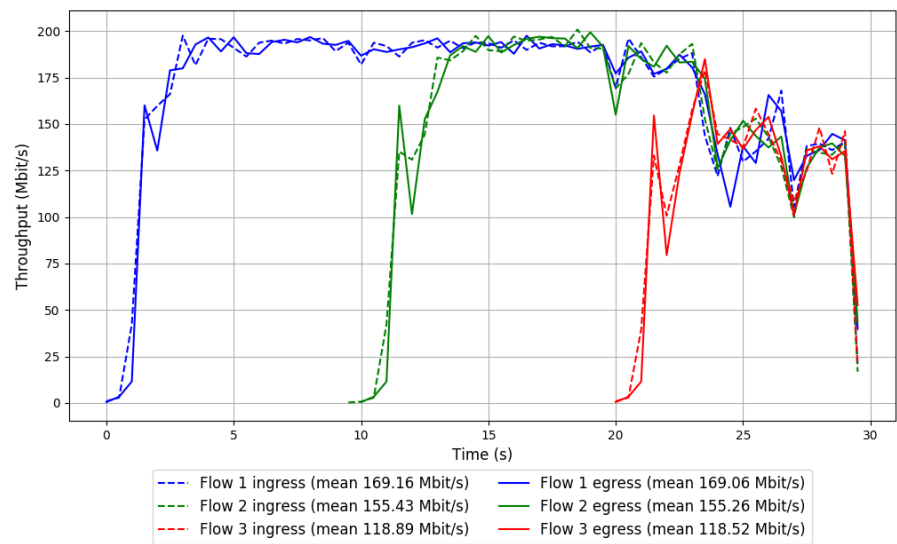
-- Flow 3:

Average throughput: 118.52 Mbit/s

95th percentile per-packet one-way delay: 129.066 ms

Loss rate: 0.29%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-09-22 05:03:13

End at: 2017-09-22 05:03:43

Below is generated by plot.py at 2017-09-22 07:07:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.65 Mbit/s

95th percentile per-packet one-way delay: 115.224 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 157.91 Mbit/s

95th percentile per-packet one-way delay: 115.538 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 146.03 Mbit/s

95th percentile per-packet one-way delay: 115.200 ms

Loss rate: 0.04%

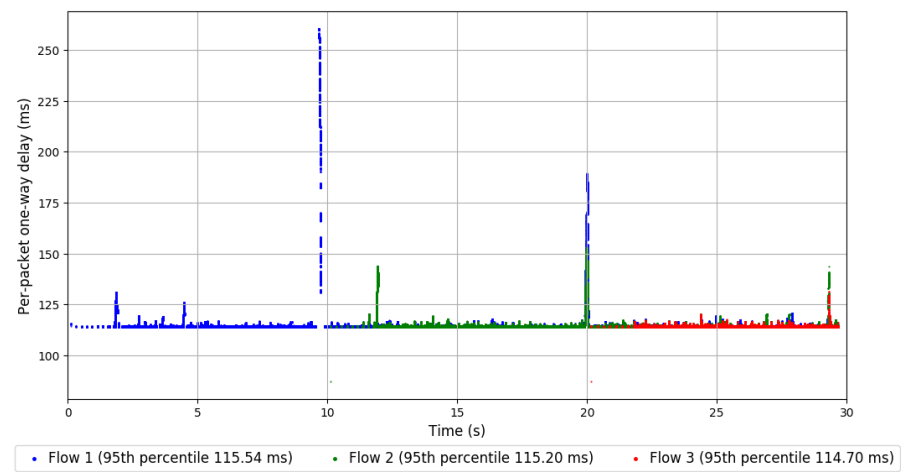
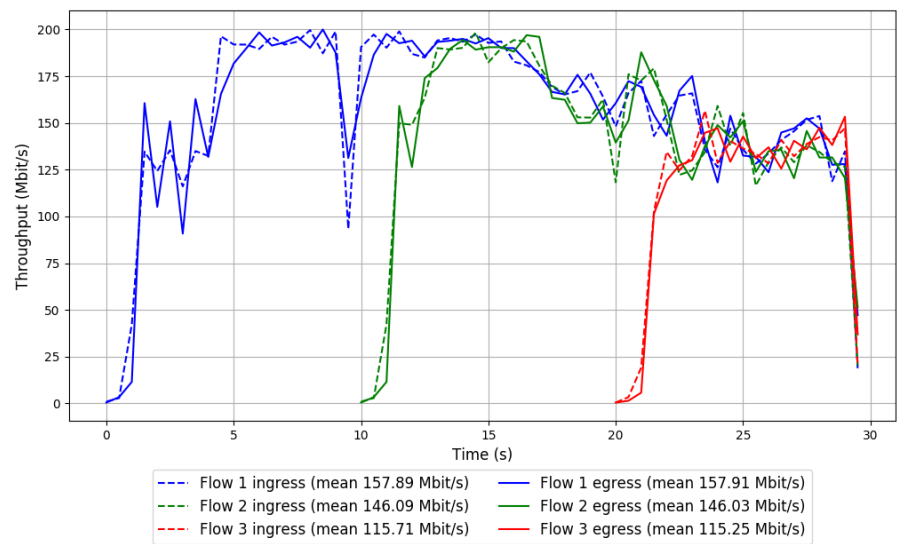
-- Flow 3:

Average throughput: 115.25 Mbit/s

95th percentile per-packet one-way delay: 114.705 ms

Loss rate: 0.36%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-09-22 05:17:12

End at: 2017-09-22 05:17:42

Below is generated by plot.py at 2017-09-22 07:08:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 306.06 Mbit/s

95th percentile per-packet one-way delay: 115.342 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 162.70 Mbit/s

95th percentile per-packet one-way delay: 114.709 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 157.17 Mbit/s

95th percentile per-packet one-way delay: 115.836 ms

Loss rate: 0.14%

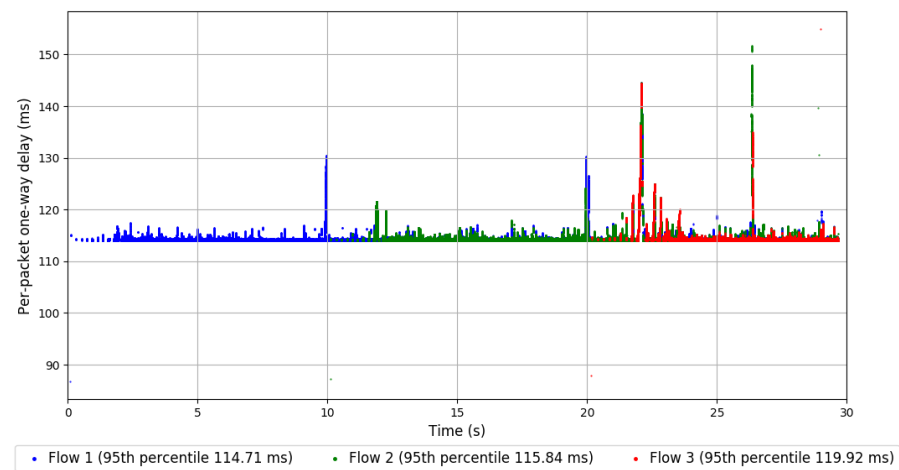
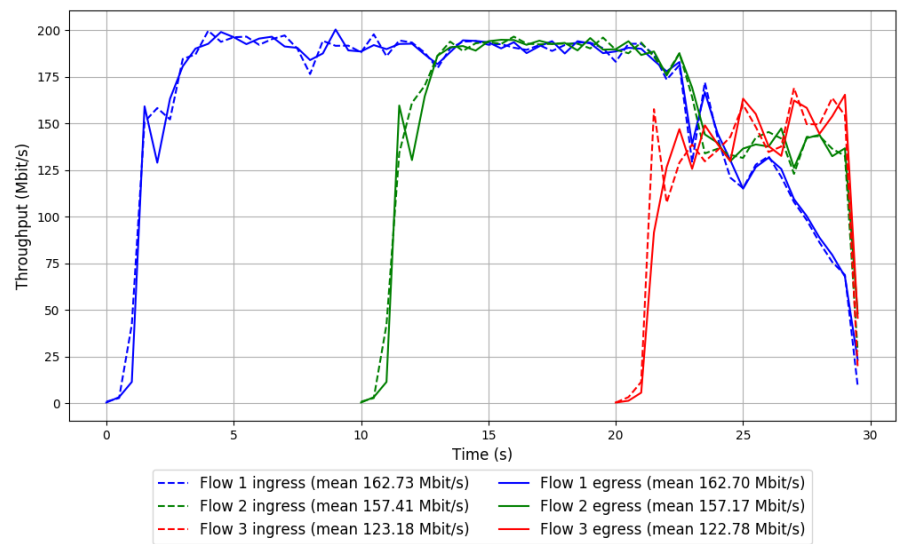
-- Flow 3:

Average throughput: 122.78 Mbit/s

95th percentile per-packet one-way delay: 119.915 ms

Loss rate: 0.30%

Run 10: Report of Indigo — Data Link

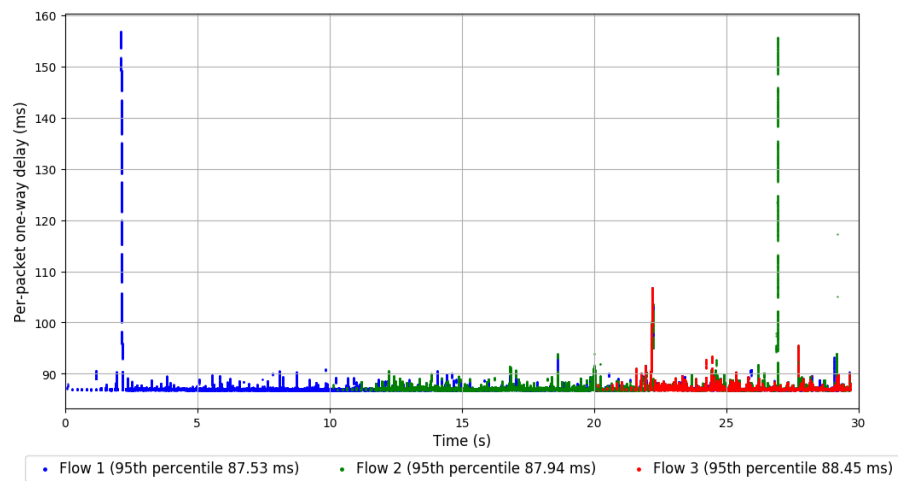
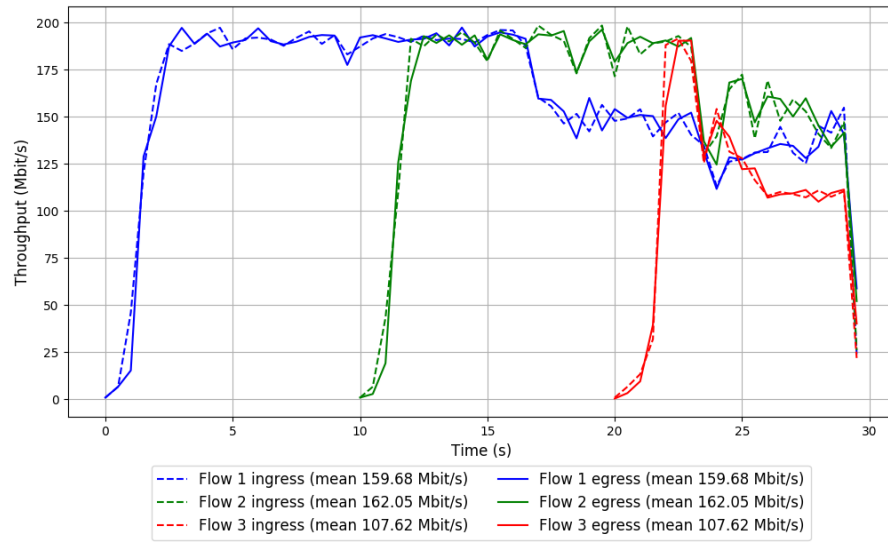


```
Run 1: Statistics of Indigo-calib

Start at: 2017-09-22 03:24:21
End at: 2017-09-22 03:24:51

# Below is generated by plot.py at 2017-09-22 07:08:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 301.46 Mbit/s
95th percentile per-packet one-way delay: 87.802 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 159.68 Mbit/s
95th percentile per-packet one-way delay: 87.529 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 162.05 Mbit/s
95th percentile per-packet one-way delay: 87.941 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 107.62 Mbit/s
95th percentile per-packet one-way delay: 88.447 ms
Loss rate: 0.00%
```


Run 1: Report of Indigo-calib — Data Link

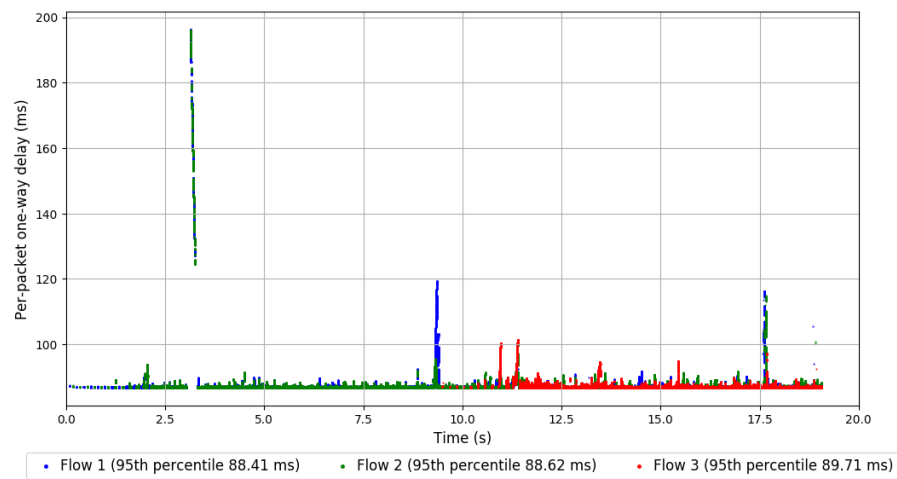
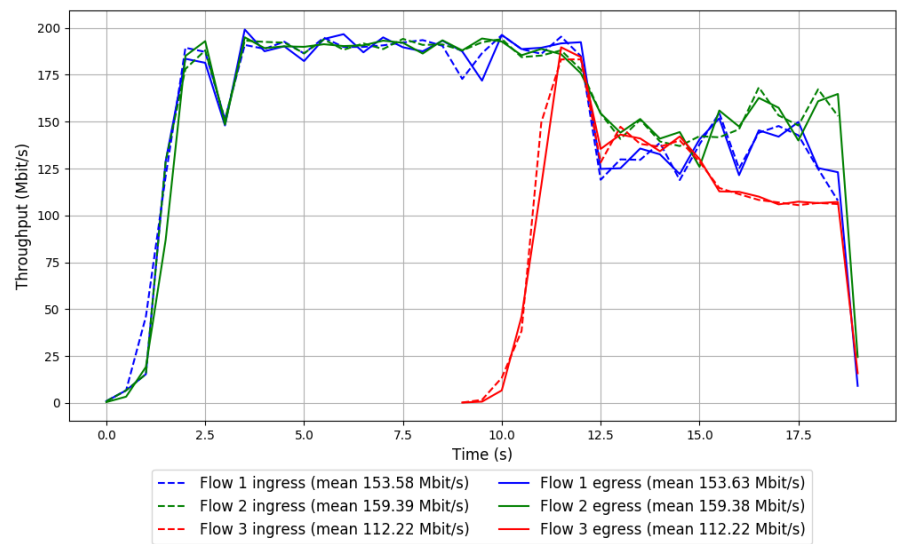


Run 2: Statistics of Indigo-calib

Start at: 2017-09-22 03:37:39

End at: 2017-09-22 03:38:09

Run 2: Report of Indigo-calib — Data Link



Run 3: Statistics of Indigo-calib

Start at: 2017-09-22 03:50:04

End at: 2017-09-22 03:50:34

Below is generated by plot.py at 2017-09-22 07:10:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 295.00 Mbit/s

95th percentile per-packet one-way delay: 115.367 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 159.62 Mbit/s

95th percentile per-packet one-way delay: 115.009 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 144.90 Mbit/s

95th percentile per-packet one-way delay: 115.705 ms

Loss rate: 0.11%

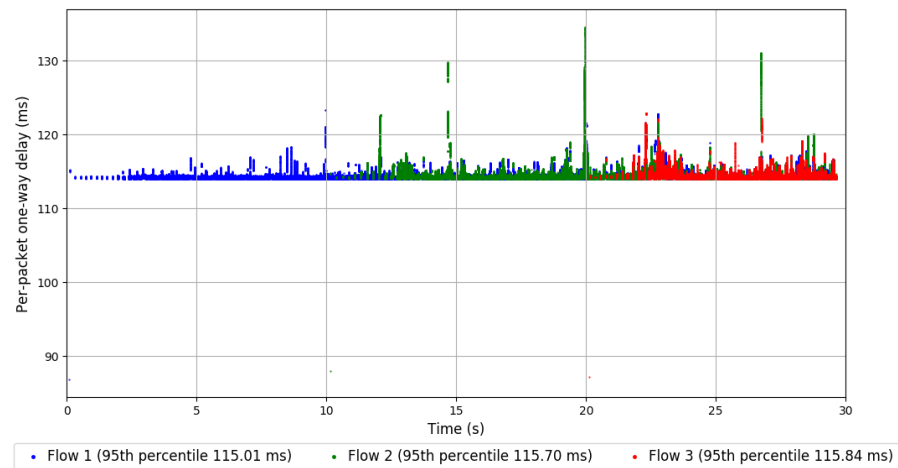
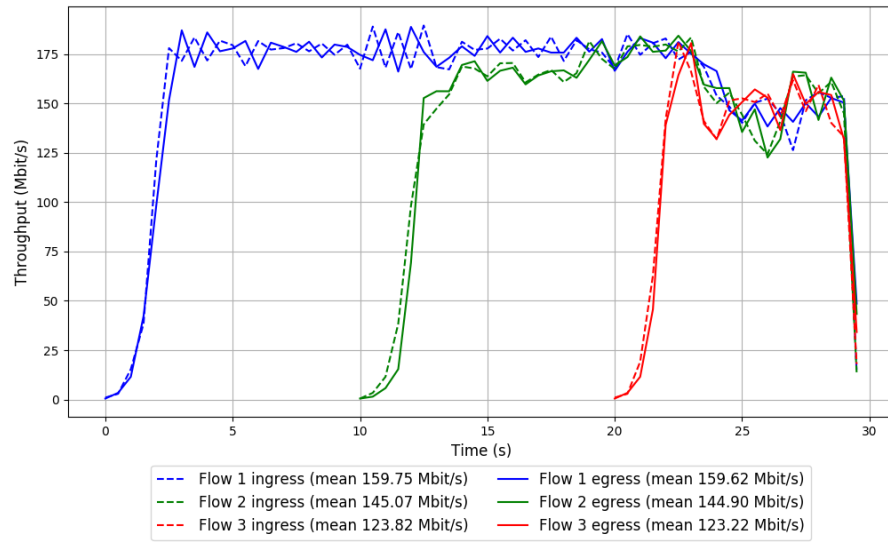
-- Flow 3:

Average throughput: 123.22 Mbit/s

95th percentile per-packet one-way delay: 115.843 ms

Loss rate: 0.47%

Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-09-22 04:02:29

End at: 2017-09-22 04:02:59

Below is generated by plot.py at 2017-09-22 07:11:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 292.31 Mbit/s

95th percentile per-packet one-way delay: 115.996 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 159.06 Mbit/s

95th percentile per-packet one-way delay: 115.310 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 139.08 Mbit/s

95th percentile per-packet one-way delay: 116.344 ms

Loss rate: 0.18%

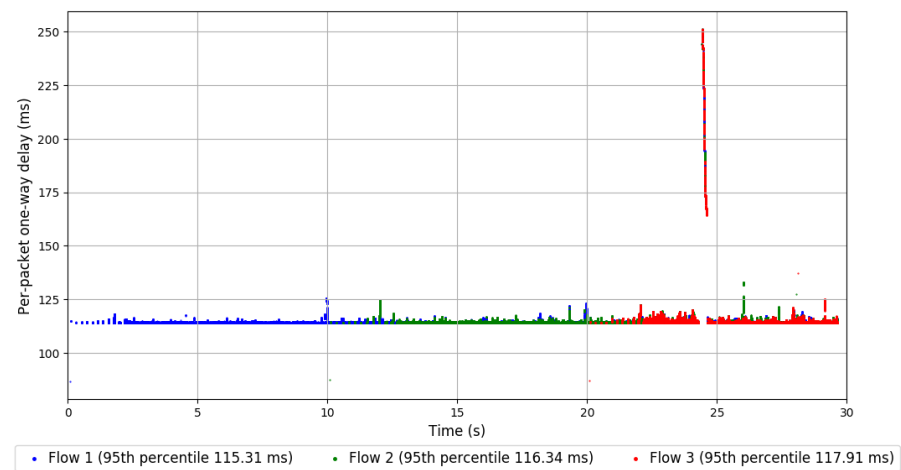
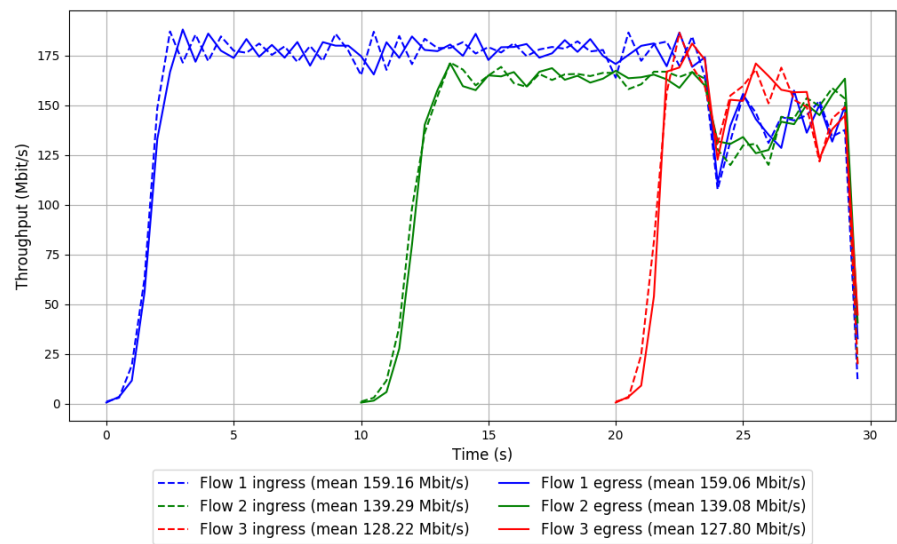
-- Flow 3:

Average throughput: 127.80 Mbit/s

95th percentile per-packet one-way delay: 117.914 ms

Loss rate: 0.36%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-09-22 04:15:02

End at: 2017-09-22 04:15:32

Below is generated by plot.py at 2017-09-22 07:12:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 273.48 Mbit/s

95th percentile per-packet one-way delay: 115.008 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 166.53 Mbit/s

95th percentile per-packet one-way delay: 114.849 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 158.53 Mbit/s

95th percentile per-packet one-way delay: 115.342 ms

Loss rate: 0.17%

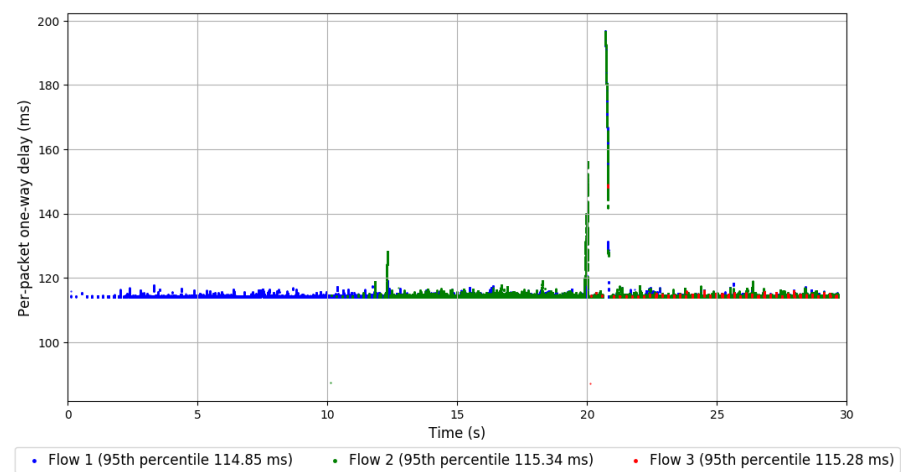
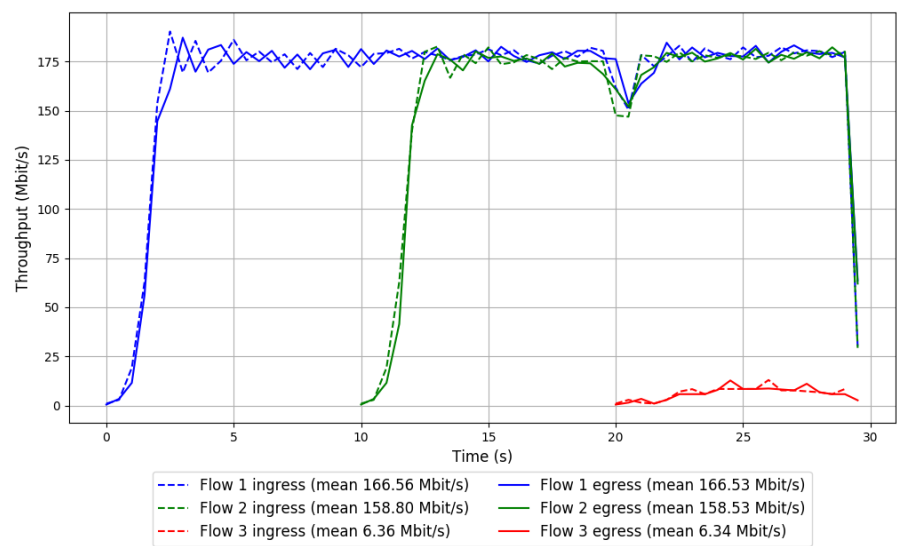
-- Flow 3:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 115.284 ms

Loss rate: 0.00%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-09-22 04:27:00

End at: 2017-09-22 04:27:30

Below is generated by plot.py at 2017-09-22 07:12:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 283.75 Mbit/s

95th percentile per-packet one-way delay: 115.355 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 144.83 Mbit/s

95th percentile per-packet one-way delay: 114.973 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 152.79 Mbit/s

95th percentile per-packet one-way delay: 115.363 ms

Loss rate: 0.13%

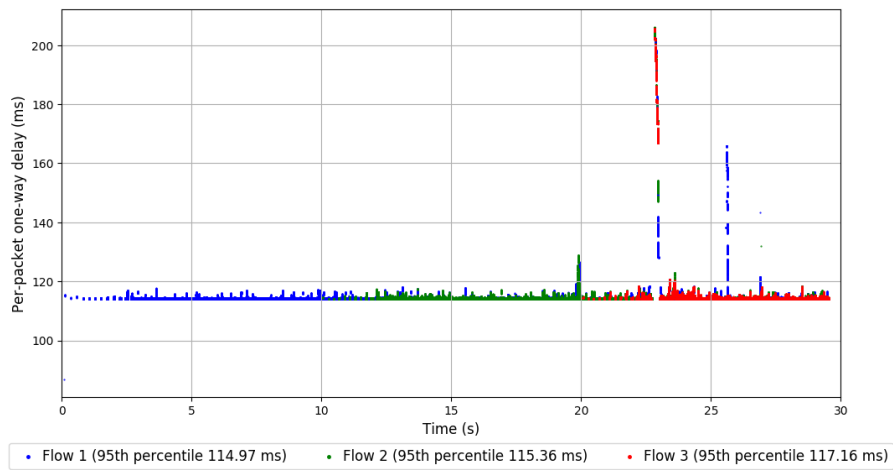
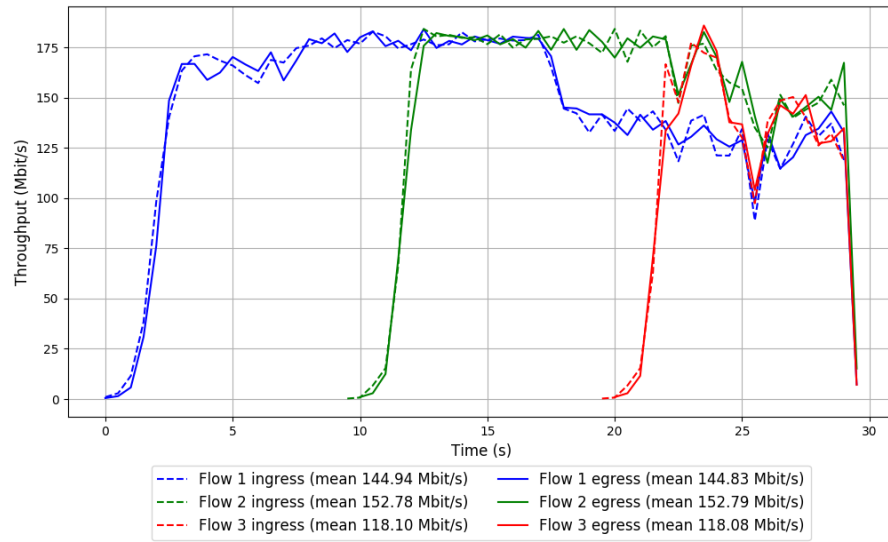
-- Flow 3:

Average throughput: 118.08 Mbit/s

95th percentile per-packet one-way delay: 117.160 ms

Loss rate: 0.29%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-09-22 04:39:18

End at: 2017-09-22 04:39:48

Below is generated by plot.py at 2017-09-22 07:12:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.46 Mbit/s

95th percentile per-packet one-way delay: 114.942 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 154.84 Mbit/s

95th percentile per-packet one-way delay: 114.860 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 137.21 Mbit/s

95th percentile per-packet one-way delay: 114.946 ms

Loss rate: 0.11%

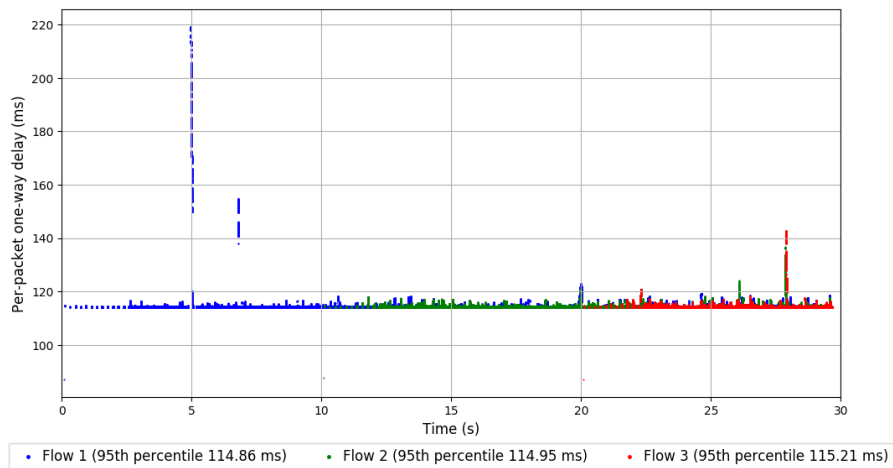
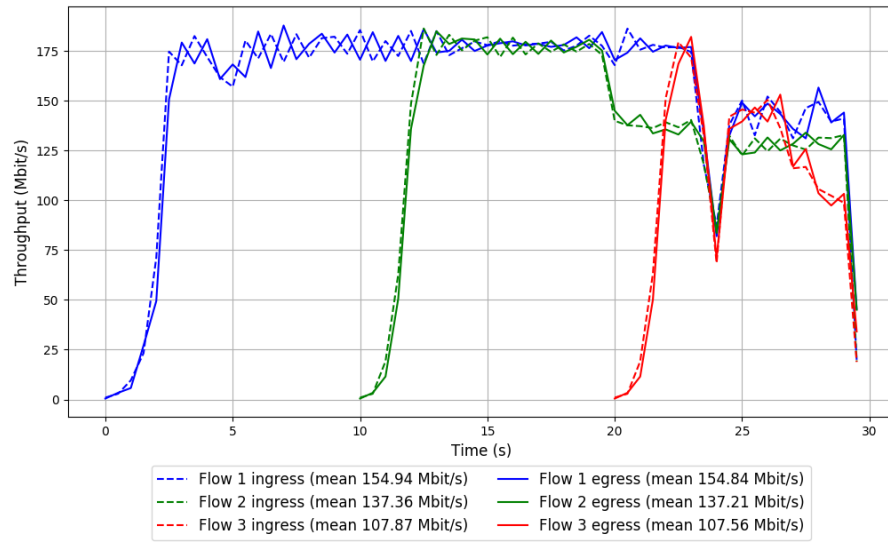
-- Flow 3:

Average throughput: 107.56 Mbit/s

95th percentile per-packet one-way delay: 115.213 ms

Loss rate: 0.28%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-09-22 04:51:35

End at: 2017-09-22 04:52:05

Below is generated by plot.py at 2017-09-22 07:13:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 282.52 Mbit/s

95th percentile per-packet one-way delay: 115.456 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 145.19 Mbit/s

95th percentile per-packet one-way delay: 115.080 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 147.54 Mbit/s

95th percentile per-packet one-way delay: 115.814 ms

Loss rate: 0.12%

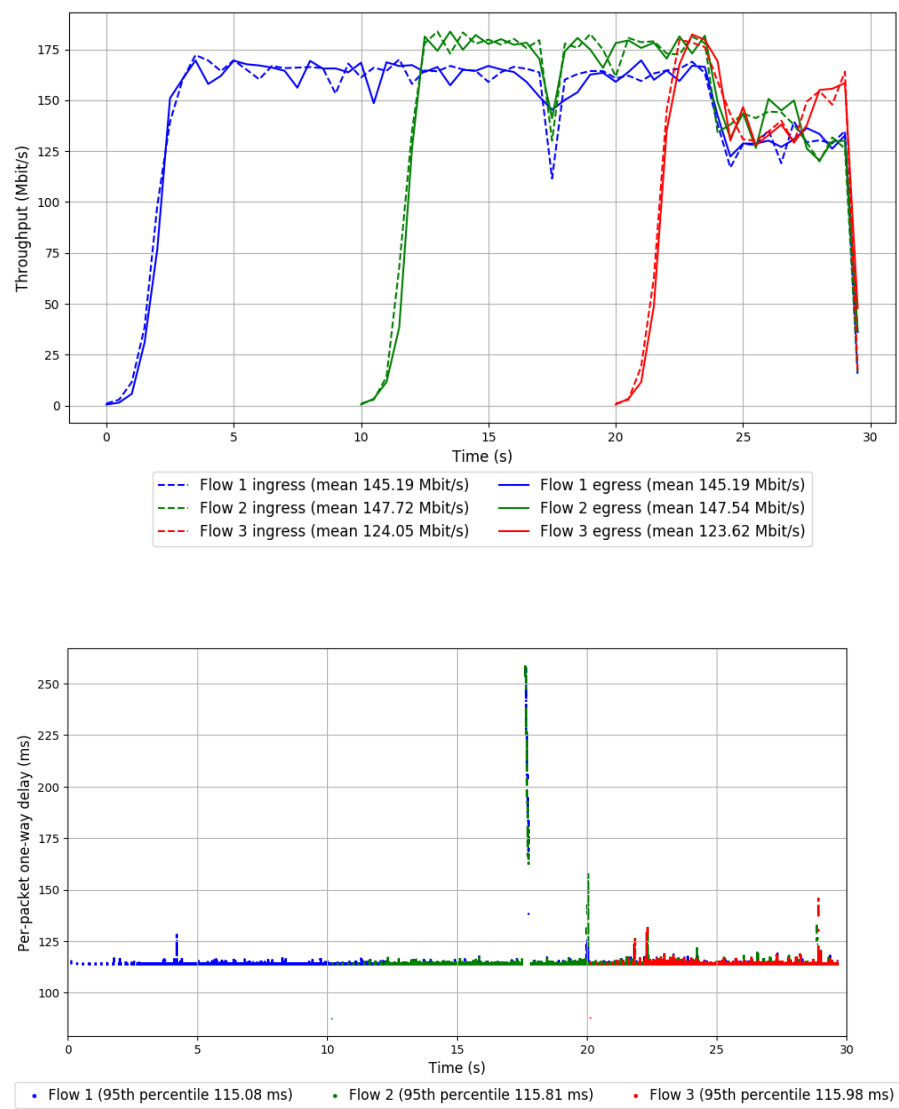
-- Flow 3:

Average throughput: 123.62 Mbit/s

95th percentile per-packet one-way delay: 115.983 ms

Loss rate: 0.34%

Run 8: Report of Indigo-calib — Data Link

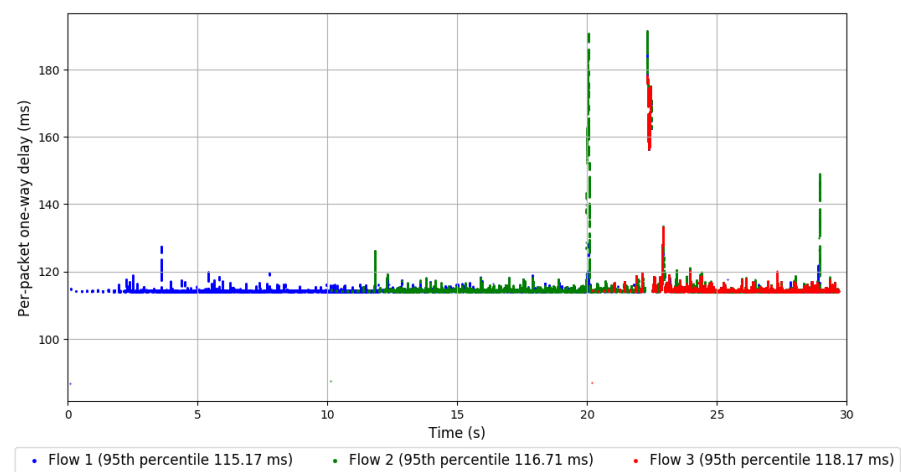
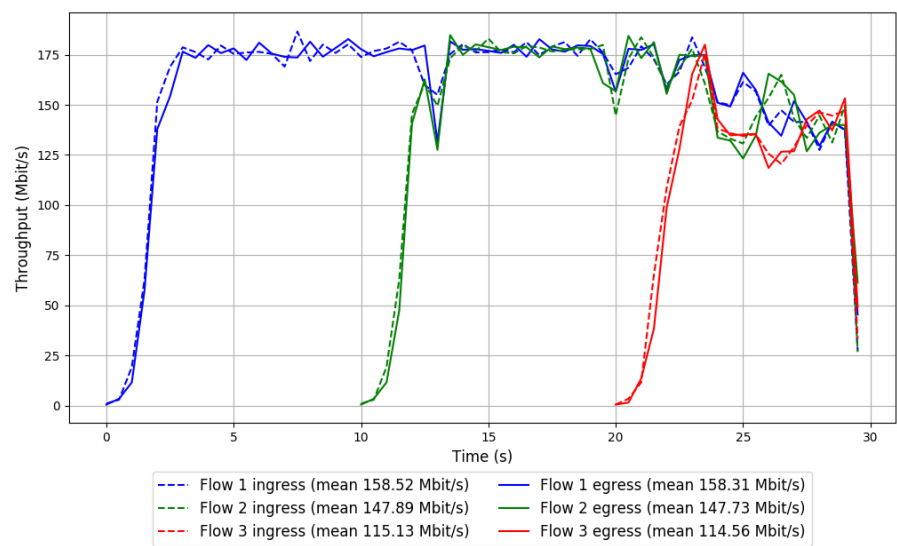


```
Run 9: Statistics of Indigo-calib

Start at: 2017-09-22 05:04:31
End at: 2017-09-22 05:05:01

# Below is generated by plot.py at 2017-09-22 07:14:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.73 Mbit/s
95th percentile per-packet one-way delay: 115.999 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 158.31 Mbit/s
95th percentile per-packet one-way delay: 115.175 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 147.73 Mbit/s
95th percentile per-packet one-way delay: 116.710 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 114.56 Mbit/s
95th percentile per-packet one-way delay: 118.165 ms
Loss rate: 0.49%
```


Run 9: Report of Indigo-calib — Data Link

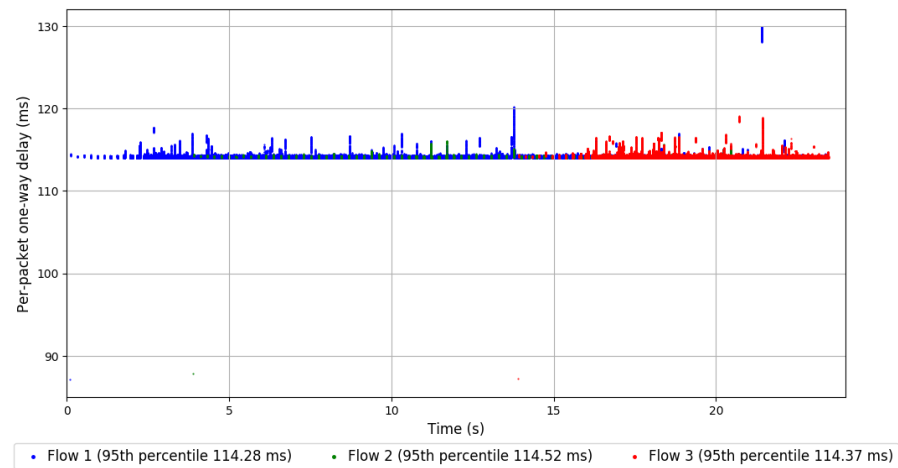
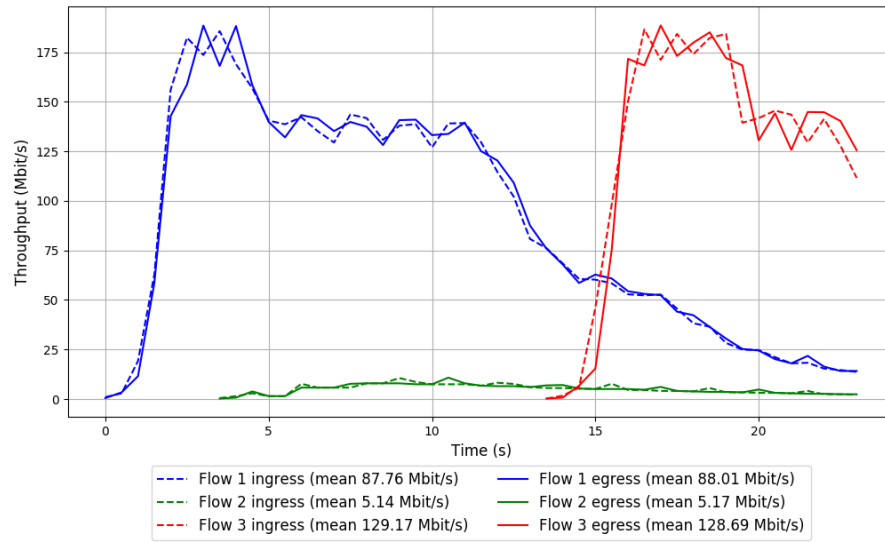


Run 10: Statistics of Indigo-calib

Start at: 2017-09-22 05:18:22

End at: 2017-09-22 05:18:52

Run 10: Report of Indigo-calib — Data Link

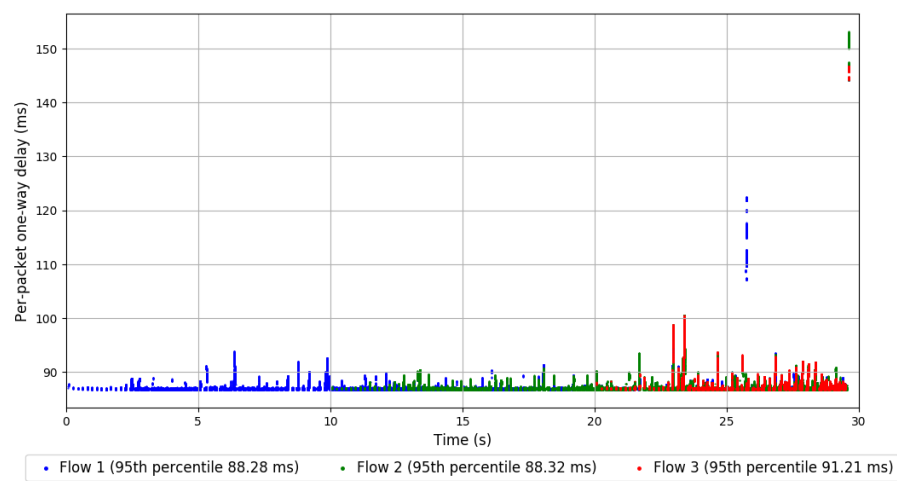
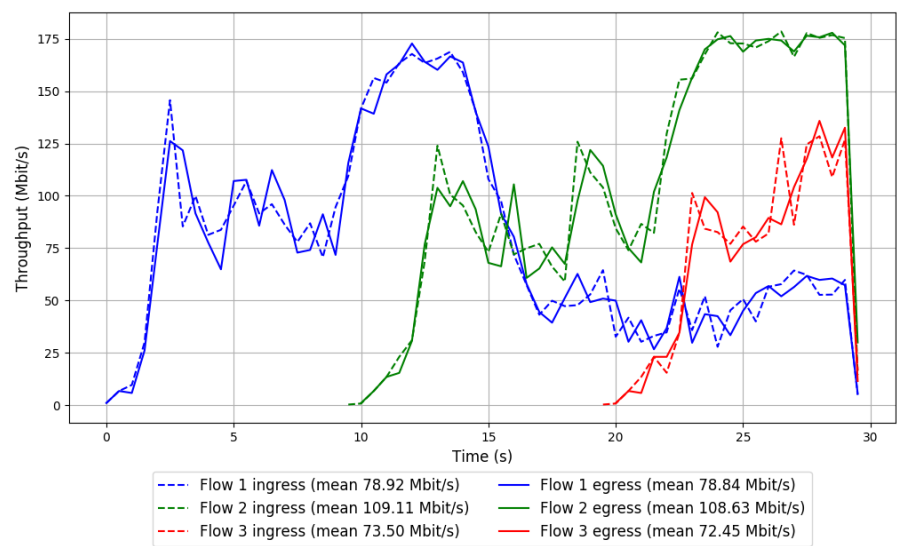


```
Run 1: Statistics of Indigo-delay

Start at: 2017-09-22 03:14:53
End at: 2017-09-22 03:15:23

# Below is generated by plot.py at 2017-09-22 07:14:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 174.22 Mbit/s
95th percentile per-packet one-way delay: 88.802 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 78.84 Mbit/s
95th percentile per-packet one-way delay: 88.280 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 108.63 Mbit/s
95th percentile per-packet one-way delay: 88.317 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 72.45 Mbit/s
95th percentile per-packet one-way delay: 91.206 ms
Loss rate: 1.44%
```

Run 1: Report of Indigo-delay — Data Link

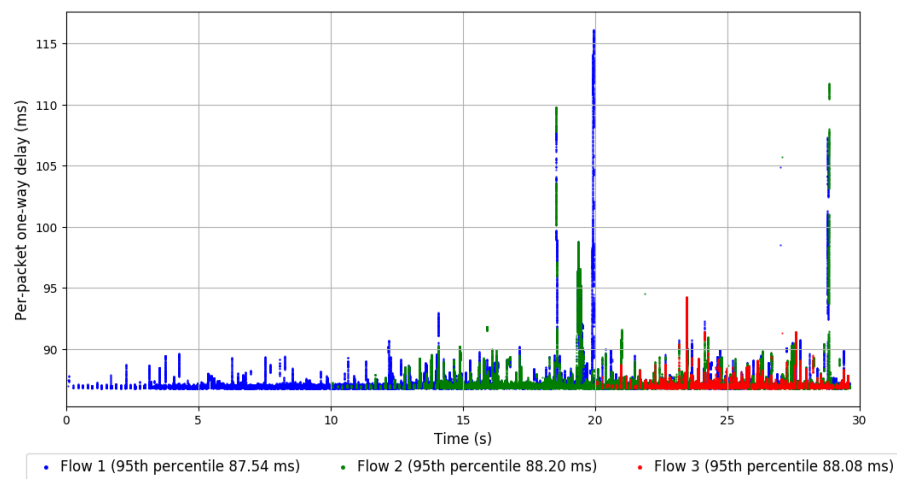
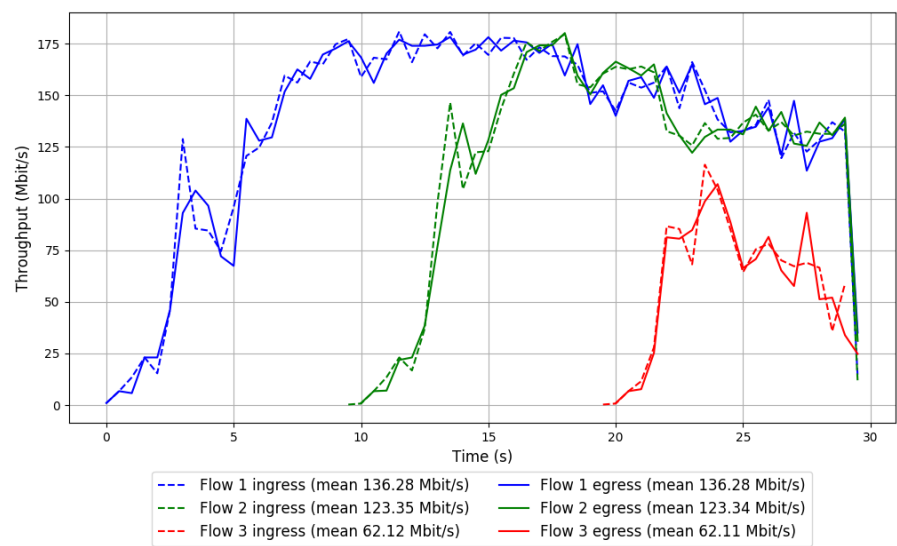


```
Run 2: Statistics of Indigo-delay

Start at: 2017-09-22 03:28:04
End at: 2017-09-22 03:28:34

# Below is generated by plot.py at 2017-09-22 07:14:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.84 Mbit/s
95th percentile per-packet one-way delay: 87.853 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 136.28 Mbit/s
95th percentile per-packet one-way delay: 87.537 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 123.34 Mbit/s
95th percentile per-packet one-way delay: 88.203 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.11 Mbit/s
95th percentile per-packet one-way delay: 88.076 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-delay — Data Link



Run 3: Statistics of Indigo-delay

Start at: 2017-09-22 03:41:19

End at: 2017-09-22 03:41:49

Below is generated by plot.py at 2017-09-22 07:14:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.61 Mbit/s

95th percentile per-packet one-way delay: 88.120 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.58 Mbit/s

95th percentile per-packet one-way delay: 88.426 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 39.39 Mbit/s

95th percentile per-packet one-way delay: 87.890 ms

Loss rate: 0.00%

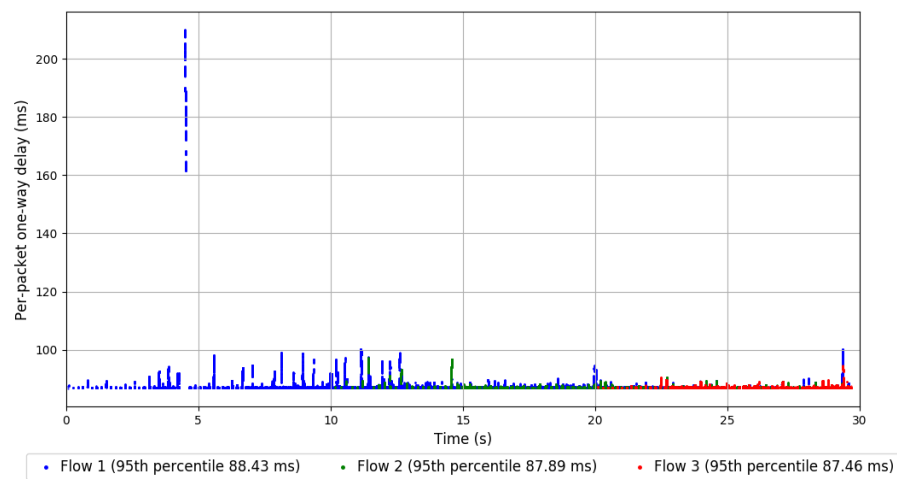
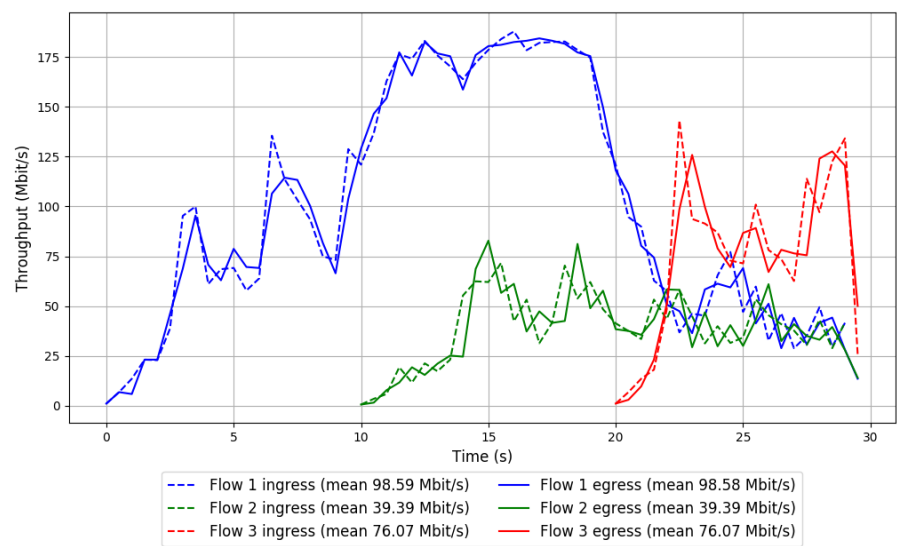
-- Flow 3:

Average throughput: 76.07 Mbit/s

95th percentile per-packet one-way delay: 87.462 ms

Loss rate: 0.00%

Run 3: Report of Indigo-delay — Data Link



Run 4: Statistics of Indigo-delay

Start at: 2017-09-22 03:53:47

End at: 2017-09-22 03:54:17

Below is generated by plot.py at 2017-09-22 07:14:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.40 Mbit/s

95th percentile per-packet one-way delay: 114.563 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 10.58 Mbit/s

95th percentile per-packet one-way delay: 114.701 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 9.65 Mbit/s

95th percentile per-packet one-way delay: 114.326 ms

Loss rate: 0.00%

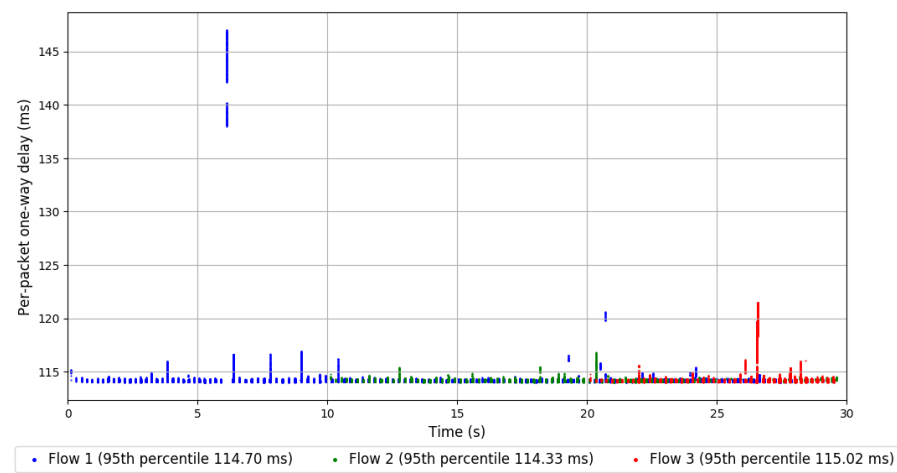
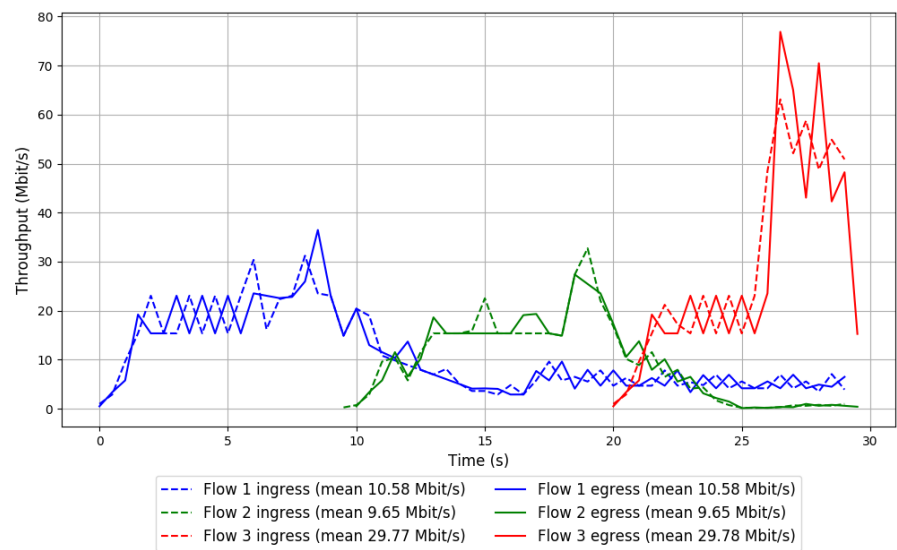
-- Flow 3:

Average throughput: 29.78 Mbit/s

95th percentile per-packet one-way delay: 115.018 ms

Loss rate: 0.00%

Run 4: Report of Indigo-delay — Data Link



Run 5: Statistics of Indigo-delay

Start at: 2017-09-22 04:06:12

End at: 2017-09-22 04:06:42

Below is generated by plot.py at 2017-09-22 07:14:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 45.06 Mbit/s

95th percentile per-packet one-way delay: 114.656 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 34.30 Mbit/s

95th percentile per-packet one-way delay: 114.437 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 8.69 Mbit/s

95th percentile per-packet one-way delay: 115.034 ms

Loss rate: 0.00%

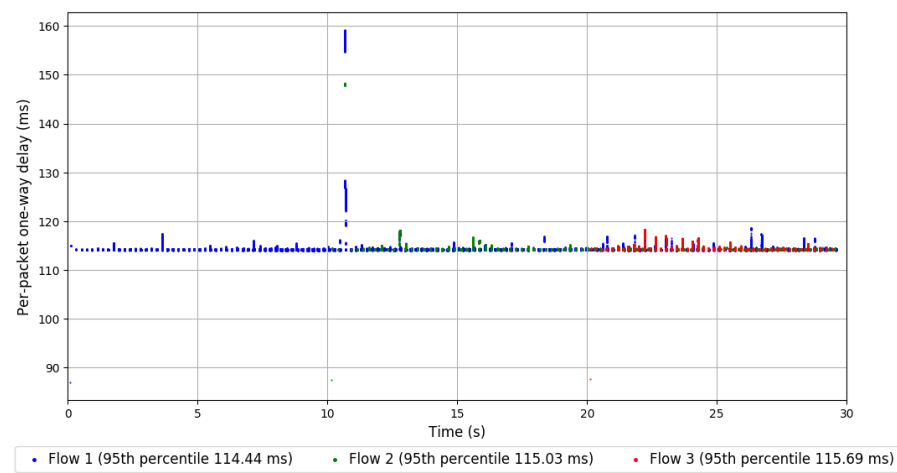
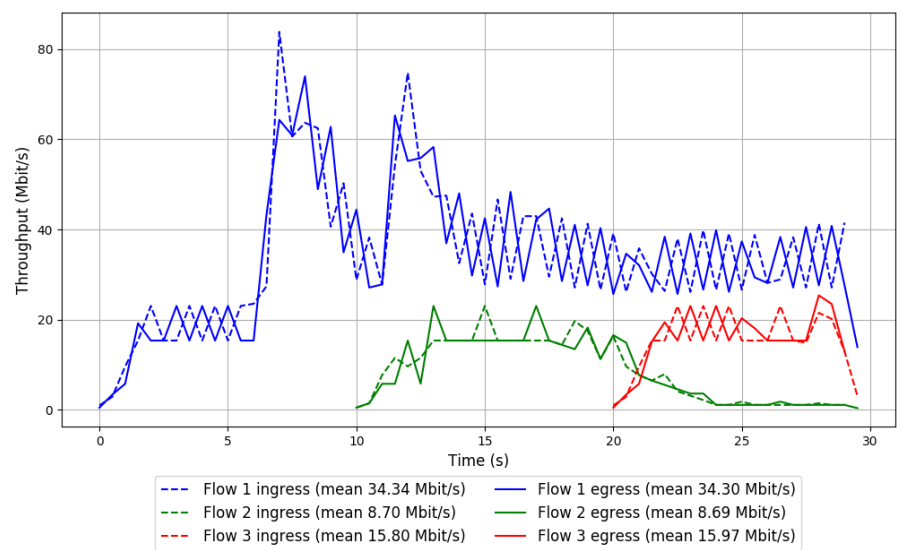
-- Flow 3:

Average throughput: 15.97 Mbit/s

95th percentile per-packet one-way delay: 115.689 ms

Loss rate: 1.02%

Run 5: Report of Indigo-delay — Data Link



Run 6: Statistics of Indigo-delay

Start at: 2017-09-22 04:18:36

End at: 2017-09-22 04:19:06

Below is generated by plot.py at 2017-09-22 07:14:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.35 Mbit/s

95th percentile per-packet one-way delay: 114.674 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.08 Mbit/s

95th percentile per-packet one-way delay: 114.562 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.66 Mbit/s

95th percentile per-packet one-way delay: 114.650 ms

Loss rate: 0.00%

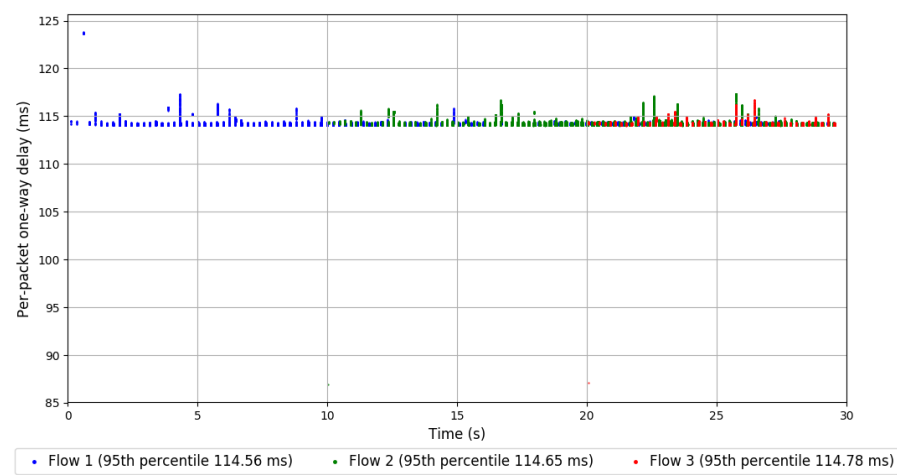
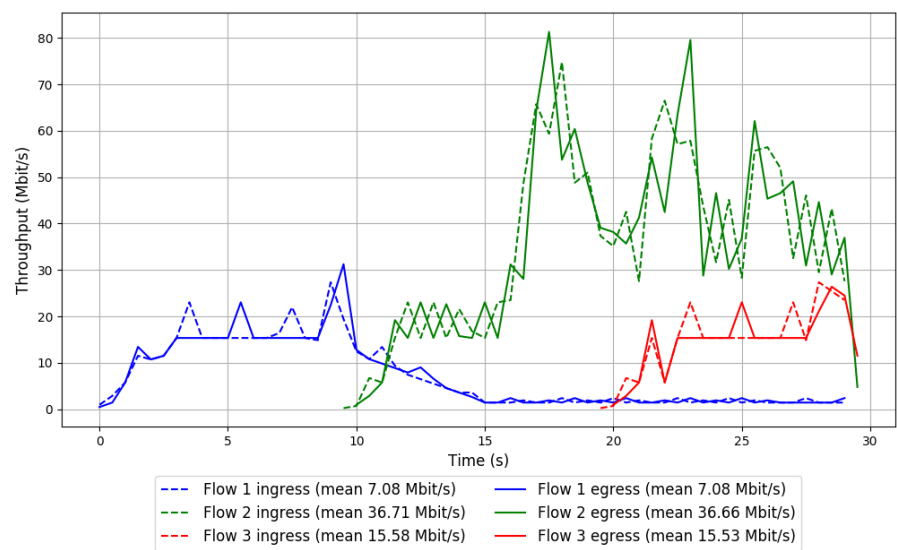
-- Flow 3:

Average throughput: 15.53 Mbit/s

95th percentile per-packet one-way delay: 114.775 ms

Loss rate: 0.00%

Run 6: Report of Indigo-delay — Data Link



Run 7: Statistics of Indigo-delay

Start at: 2017-09-22 04:30:40

End at: 2017-09-22 04:31:11

Below is generated by plot.py at 2017-09-22 07:14:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.56 Mbit/s

95th percentile per-packet one-way delay: 114.666 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 34.88 Mbit/s

95th percentile per-packet one-way delay: 114.553 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 36.34 Mbit/s

95th percentile per-packet one-way delay: 114.916 ms

Loss rate: 0.00%

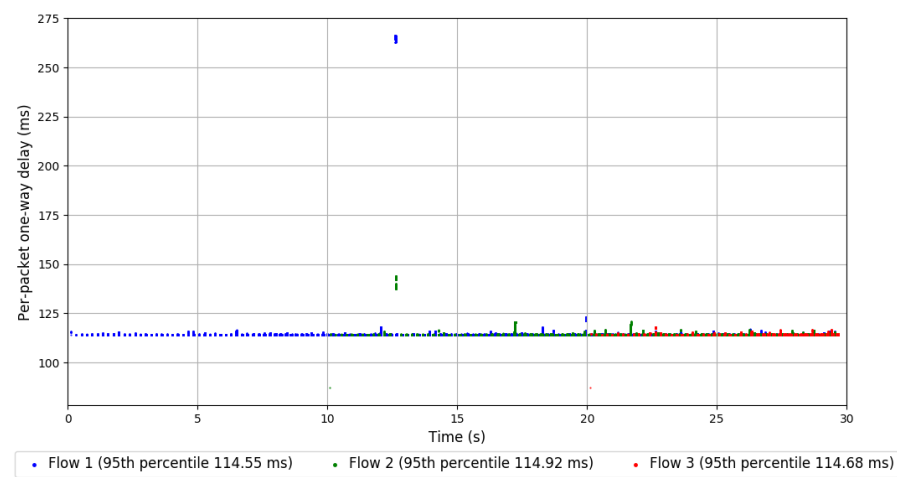
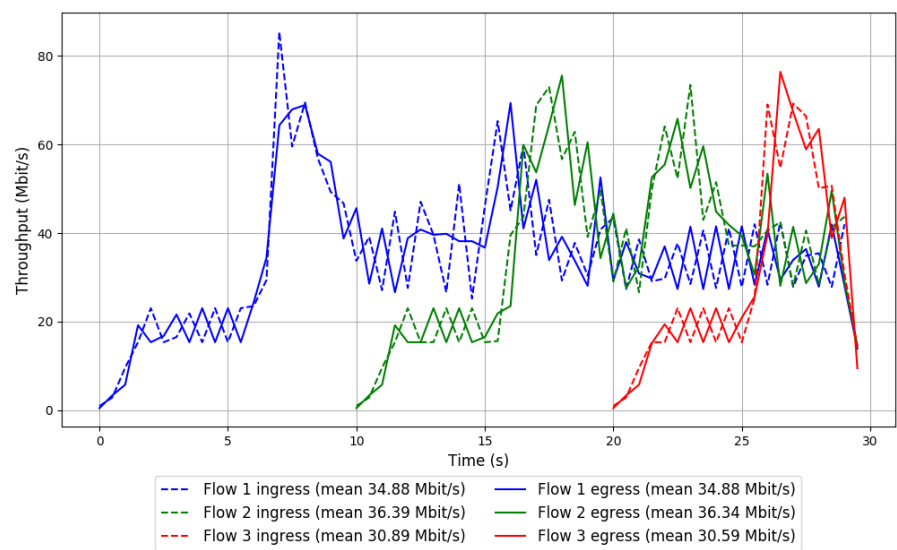
-- Flow 3:

Average throughput: 30.59 Mbit/s

95th percentile per-packet one-way delay: 114.684 ms

Loss rate: 0.84%

Run 7: Report of Indigo-delay — Data Link



Run 8: Statistics of Indigo-delay

Start at: 2017-09-22 04:43:03

End at: 2017-09-22 04:43:33

Below is generated by plot.py at 2017-09-22 07:14:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.10 Mbit/s

95th percentile per-packet one-way delay: 114.904 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 34.20 Mbit/s

95th percentile per-packet one-way delay: 114.774 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 30.90 Mbit/s

95th percentile per-packet one-way delay: 115.037 ms

Loss rate: 0.00%

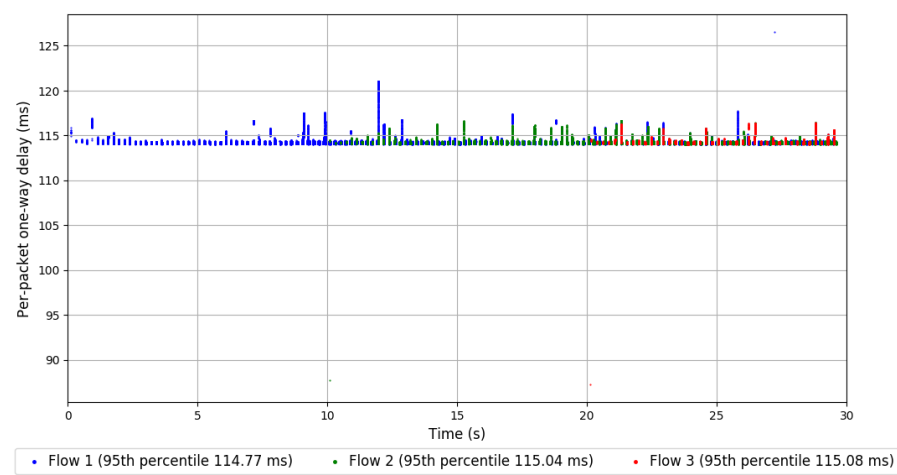
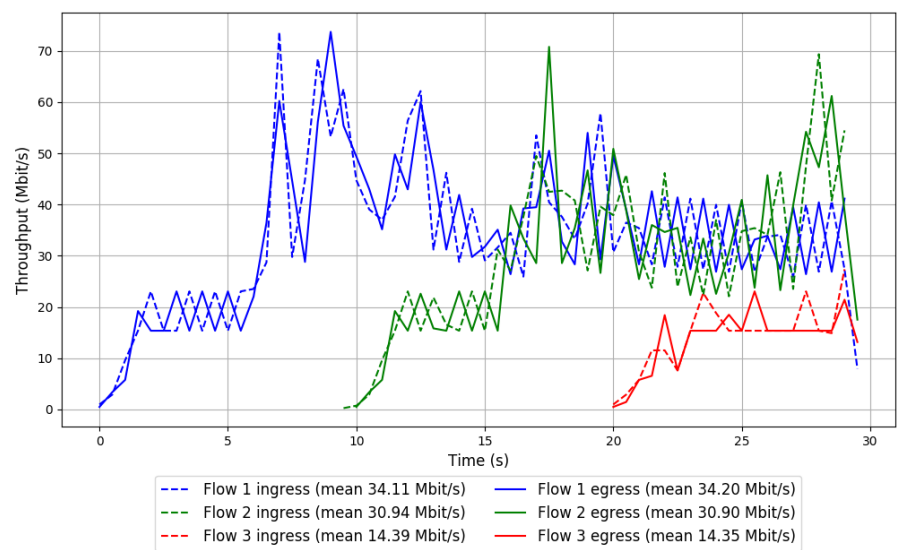
-- Flow 3:

Average throughput: 14.35 Mbit/s

95th percentile per-packet one-way delay: 115.082 ms

Loss rate: 0.00%

Run 8: Report of Indigo-delay — Data Link



Run 9: Statistics of Indigo-delay

Start at: 2017-09-22 04:55:13

End at: 2017-09-22 04:55:43

Below is generated by plot.py at 2017-09-22 07:14:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.83 Mbit/s

95th percentile per-packet one-way delay: 114.960 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 36.39 Mbit/s

95th percentile per-packet one-way delay: 115.074 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 26.27 Mbit/s

95th percentile per-packet one-way delay: 114.936 ms

Loss rate: 0.02%

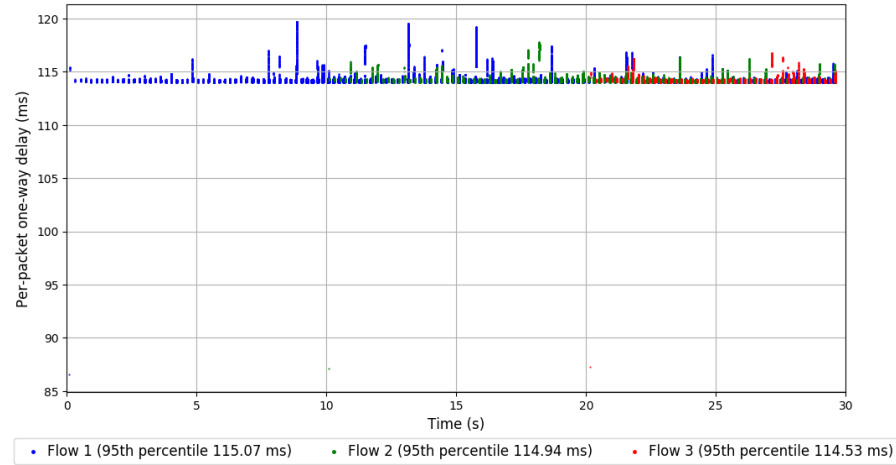
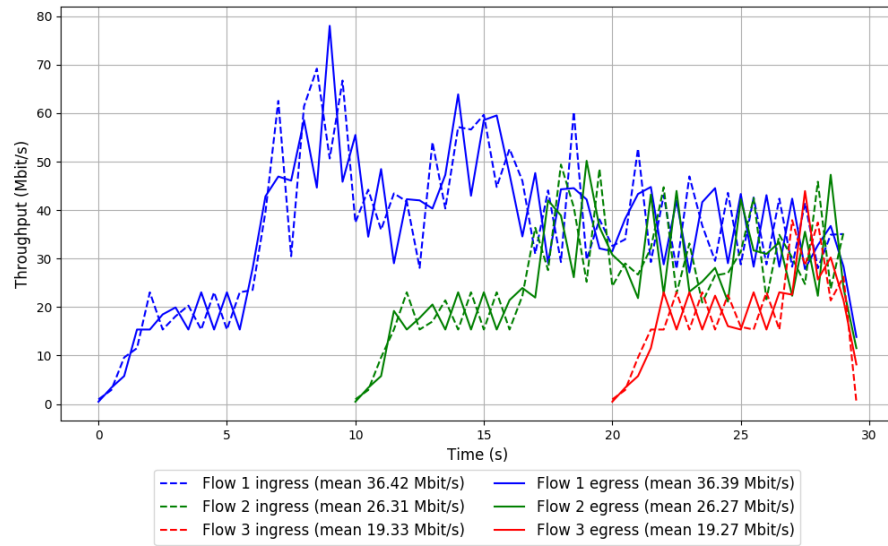
-- Flow 3:

Average throughput: 19.27 Mbit/s

95th percentile per-packet one-way delay: 114.535 ms

Loss rate: 0.00%

Run 9: Report of Indigo-delay — Data Link



Run 10: Statistics of Indigo-delay

Start at: 2017-09-22 05:09:03

End at: 2017-09-22 05:09:33

Below is generated by plot.py at 2017-09-22 07:14:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.00 Mbit/s

95th percentile per-packet one-way delay: 115.182 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 24.49 Mbit/s

95th percentile per-packet one-way delay: 114.950 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.50 Mbit/s

95th percentile per-packet one-way delay: 115.601 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 17.86 Mbit/s

95th percentile per-packet one-way delay: 115.083 ms

Loss rate: 0.08%

Run 10: Report of Indigo-delay — Data Link

