

Pantheon Report

Generated at 2018-03-07 13:26:37 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

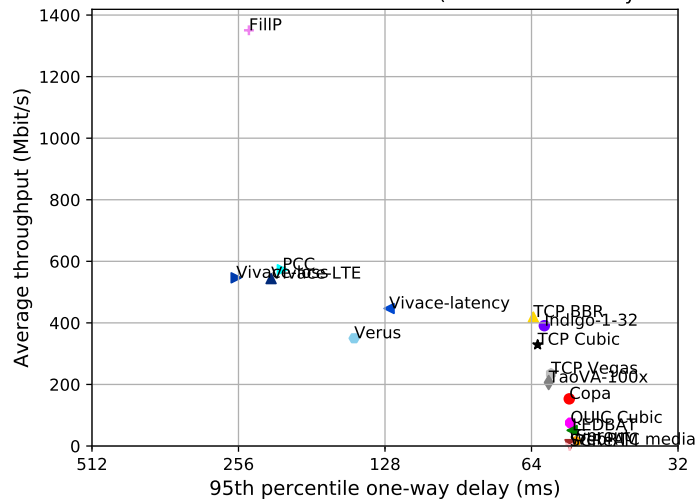
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

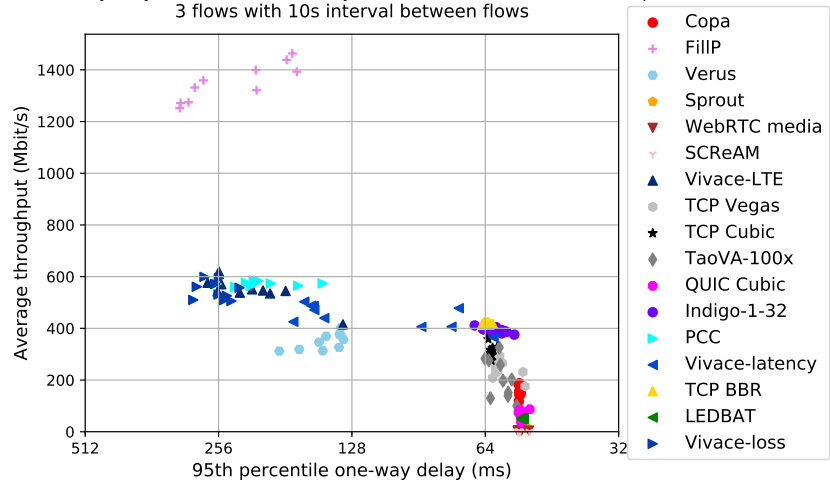
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	214.19	207.48	201.03	62.39	63.75	64.84	0.02	0.02	0.03
TCP Cubic	10	174.39	160.98	143.04	61.30	61.99	60.24	0.01	0.02	0.03
LEDBAT	10	32.89	21.68	10.65	53.06	52.52	52.02	0.00	0.01	0.00
PCC	10	483.56	110.61	47.55	214.76	160.59	148.72	2.97	1.60	1.92
QUIC Cubic	10	45.15	36.39	17.78	52.95	52.27	51.77	0.00	0.00	0.00
SCReAM	10	0.21	0.21	0.22	52.84	52.39	52.64	0.00	0.00	0.00
WebRTC media	10	2.29	1.46	0.64	51.89	52.15	52.66	0.00	0.01	0.00
Sprout	10	7.85	7.79	7.51	51.79	52.12	52.34	0.00	0.00	0.00
TaoVA-100x	10	95.51	107.40	120.69	57.32	57.63	57.52	0.03	0.07	0.16
TCP Vegas	10	136.62	111.29	73.27	56.65	57.55	54.96	0.00	0.01	0.03
Verus	10	195.02	170.64	129.30	141.28	143.61	178.89	1.04	0.80	1.56
Copa	10	83.17	73.72	63.06	52.36	53.20	53.11	0.00	0.00	0.00
FillP	10	716.20	663.74	582.31	197.59	253.24	249.90	12.83	14.03	16.05
Indigo-1-32	10	206.82	198.92	161.90	59.61	62.46	56.45	0.01	0.02	0.01
Vivace-latency	10	257.86	225.67	118.33	126.47	115.61	65.93	0.15	0.05	0.13
Vivace-loss	10	301.16	279.82	180.18	240.83	253.32	244.48	3.94	5.61	9.93
Vivace-LTE	10	309.83	264.14	178.14	213.07	182.76	114.71	0.90	2.17	0.50

Run 1: Statistics of TCP BBR

Start at: 2018-03-07 06:06:04

End at: 2018-03-07 06:06:34

Below is generated by plot.py at 2018-03-07 11:26:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 417.71 Mbit/s

95th percentile per-packet one-way delay: 64.225 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 211.60 Mbit/s

95th percentile per-packet one-way delay: 63.569 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 208.33 Mbit/s

95th percentile per-packet one-way delay: 64.559 ms

Loss rate: 0.00%

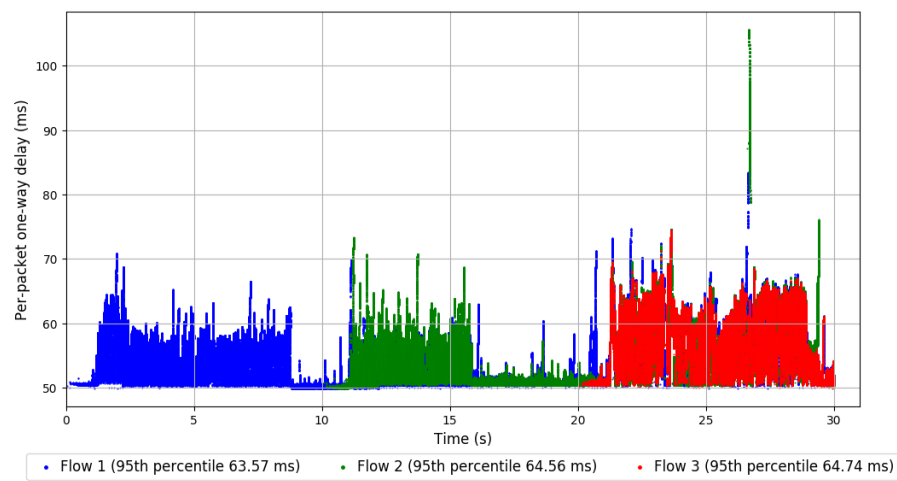
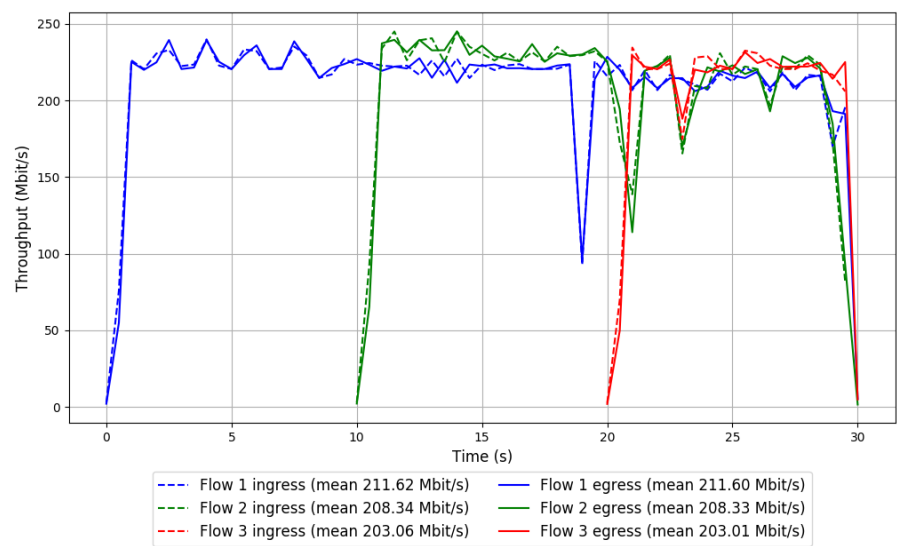
-- Flow 3:

Average throughput: 203.01 Mbit/s

95th percentile per-packet one-way delay: 64.740 ms

Loss rate: 0.02%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-03-07 06:23:30

End at: 2018-03-07 06:24:00

Below is generated by plot.py at 2018-03-07 11:26:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 416.08 Mbit/s

95th percentile per-packet one-way delay: 62.341 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 213.55 Mbit/s

95th percentile per-packet one-way delay: 61.605 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 204.38 Mbit/s

95th percentile per-packet one-way delay: 62.349 ms

Loss rate: 0.02%

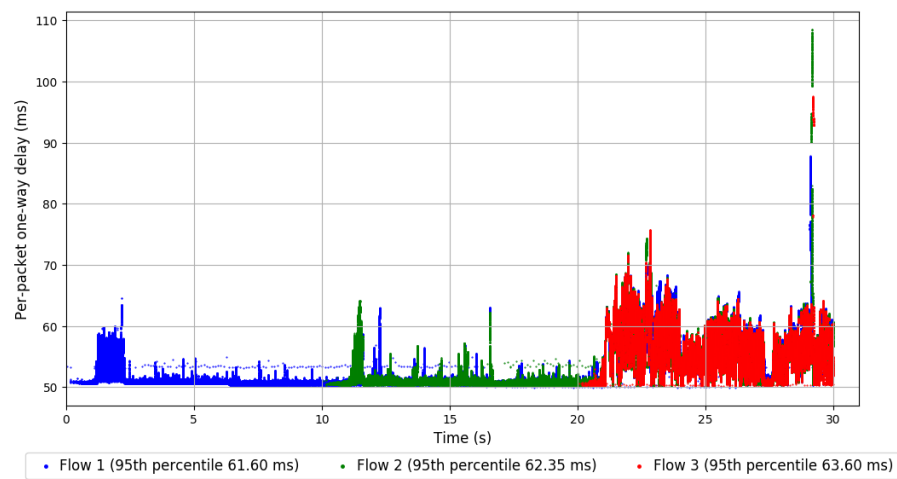
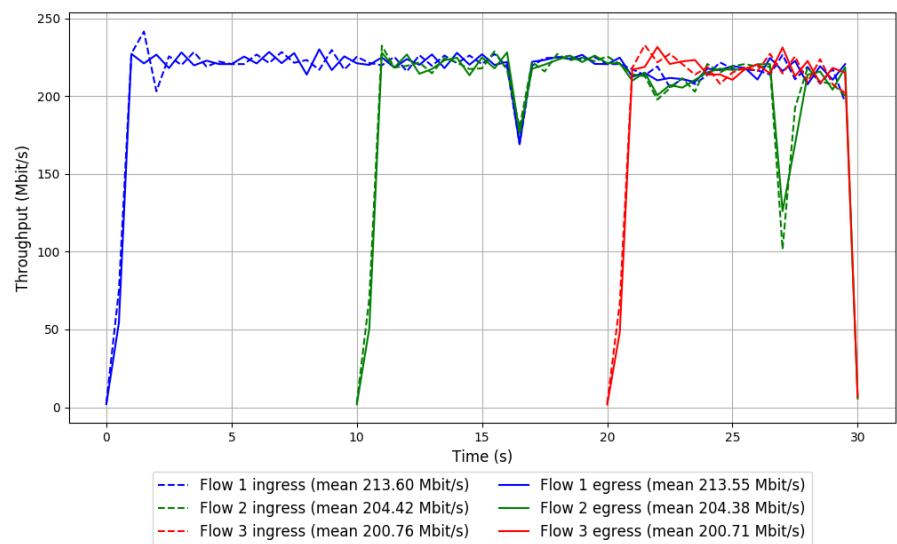
-- Flow 3:

Average throughput: 200.71 Mbit/s

95th percentile per-packet one-way delay: 63.600 ms

Loss rate: 0.02%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-03-07 06:40:52

End at: 2018-03-07 06:41:22

Below is generated by plot.py at 2018-03-07 11:26:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 414.79 Mbit/s

95th percentile per-packet one-way delay: 62.879 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 211.06 Mbit/s

95th percentile per-packet one-way delay: 61.690 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 207.60 Mbit/s

95th percentile per-packet one-way delay: 63.292 ms

Loss rate: 0.06%

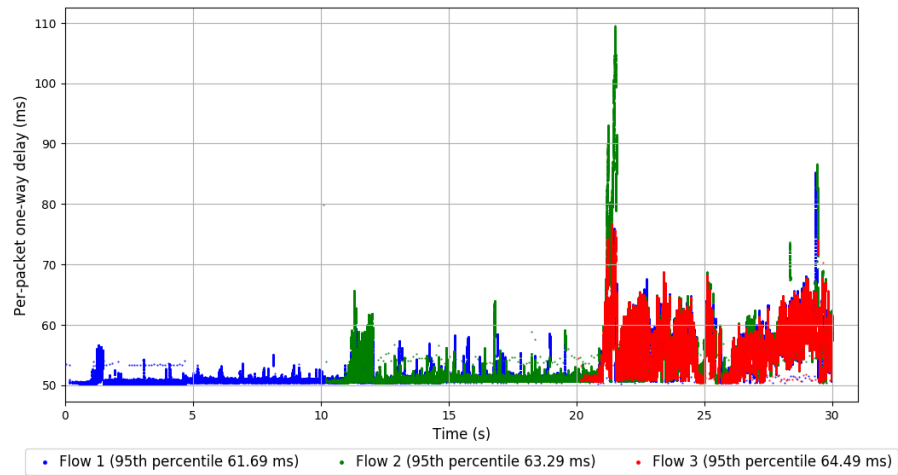
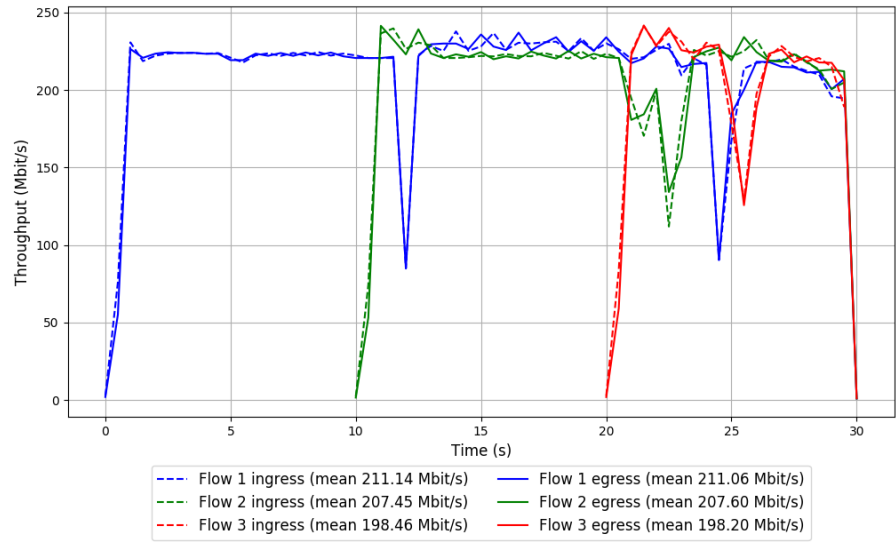
-- Flow 3:

Average throughput: 198.20 Mbit/s

95th percentile per-packet one-way delay: 64.494 ms

Loss rate: 0.15%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-03-07 06:58:16

End at: 2018-03-07 06:58:46

Below is generated by plot.py at 2018-03-07 11:26:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 425.15 Mbit/s

95th percentile per-packet one-way delay: 63.178 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 220.01 Mbit/s

95th percentile per-packet one-way delay: 62.230 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 206.03 Mbit/s

95th percentile per-packet one-way delay: 63.130 ms

Loss rate: 0.03%

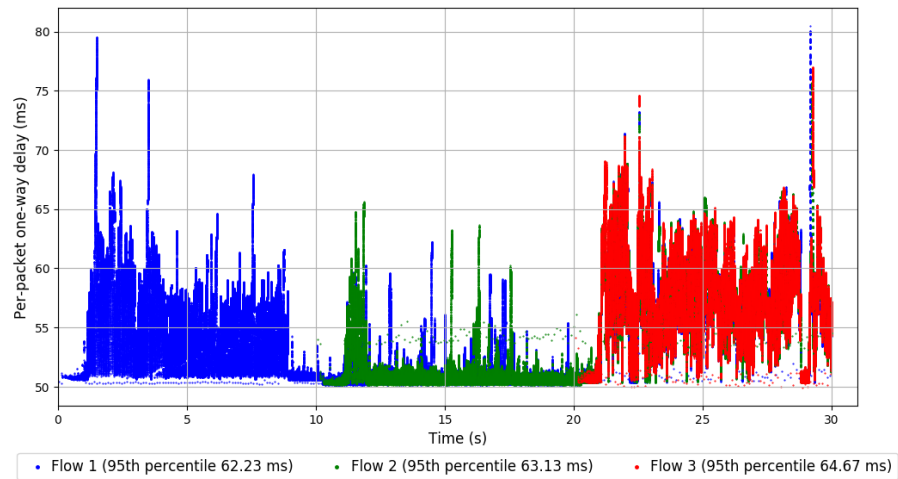
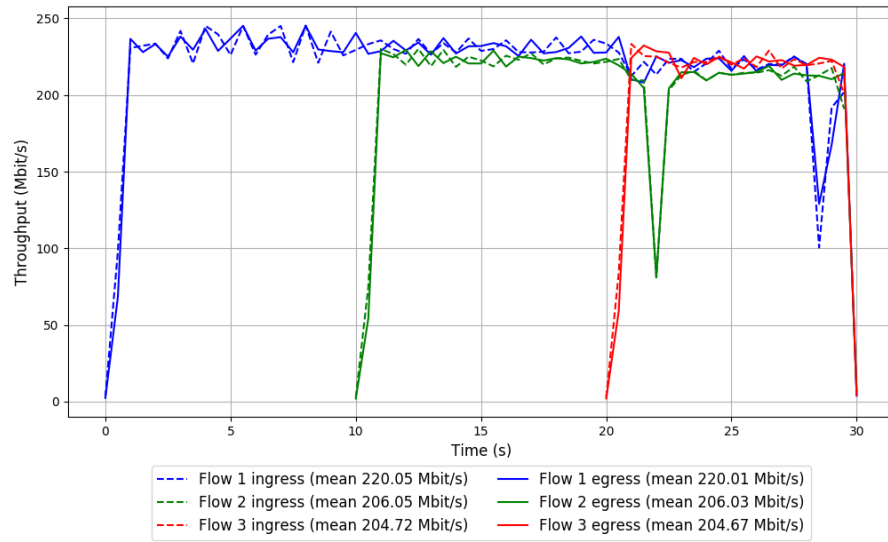
-- Flow 3:

Average throughput: 204.67 Mbit/s

95th percentile per-packet one-way delay: 64.670 ms

Loss rate: 0.05%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-03-07 07:15:42

End at: 2018-03-07 07:16:12

Below is generated by plot.py at 2018-03-07 11:26:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 418.42 Mbit/s

95th percentile per-packet one-way delay: 61.589 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 215.44 Mbit/s

95th percentile per-packet one-way delay: 60.721 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 214.00 Mbit/s

95th percentile per-packet one-way delay: 61.454 ms

Loss rate: 0.03%

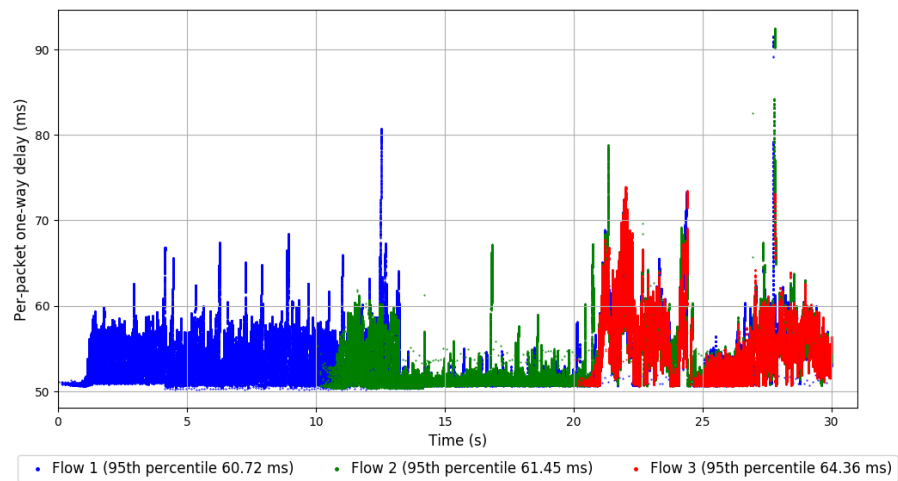
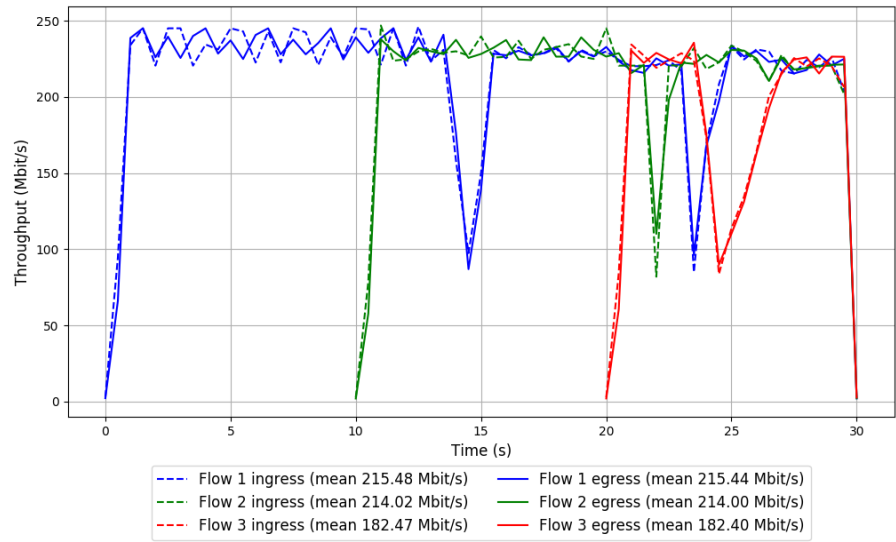
-- Flow 3:

Average throughput: 182.40 Mbit/s

95th percentile per-packet one-way delay: 64.358 ms

Loss rate: 0.03%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-03-07 07:33:17

End at: 2018-03-07 07:33:47

Below is generated by plot.py at 2018-03-07 11:26:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 421.25 Mbit/s

95th percentile per-packet one-way delay: 63.388 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 216.20 Mbit/s

95th percentile per-packet one-way delay: 61.905 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 206.12 Mbit/s

95th percentile per-packet one-way delay: 64.274 ms

Loss rate: 0.01%

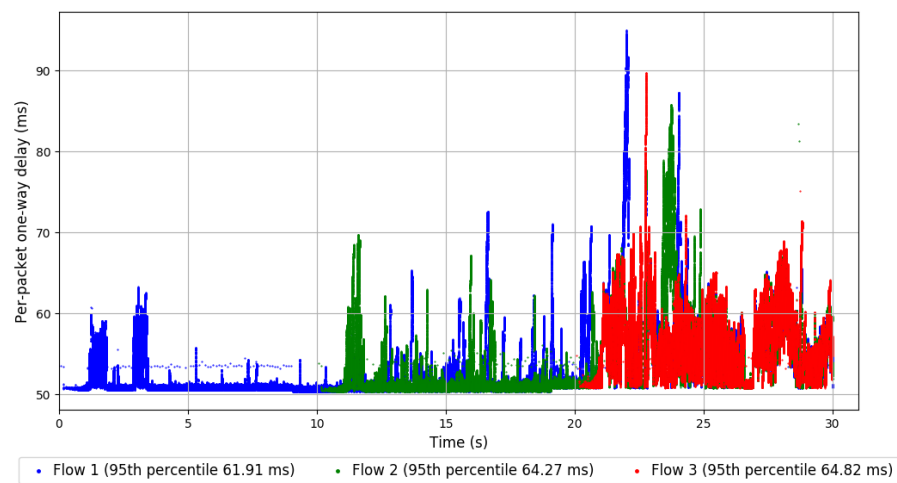
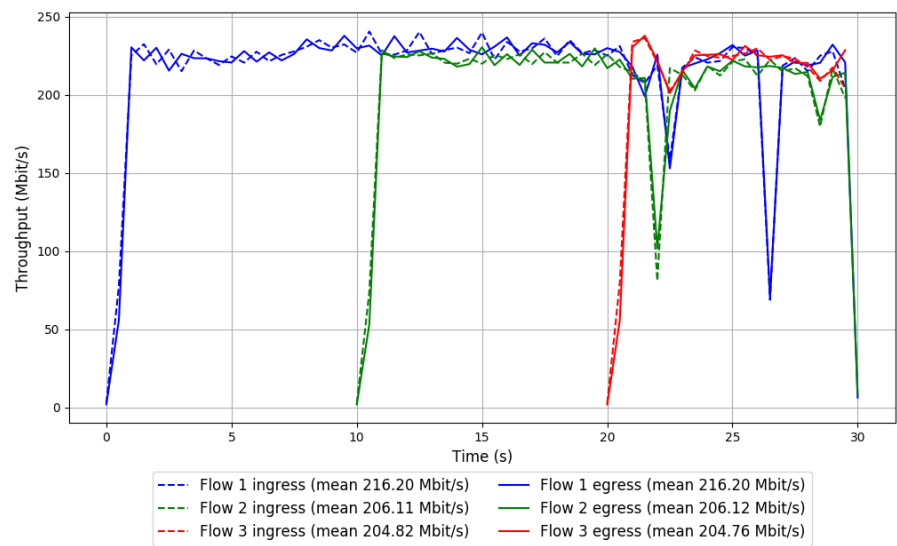
-- Flow 3:

Average throughput: 204.76 Mbit/s

95th percentile per-packet one-way delay: 64.817 ms

Loss rate: 0.03%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-03-07 07:50:40

End at: 2018-03-07 07:51:10

Below is generated by plot.py at 2018-03-07 11:26:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 424.07 Mbit/s

95th percentile per-packet one-way delay: 64.281 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 220.06 Mbit/s

95th percentile per-packet one-way delay: 62.897 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 205.90 Mbit/s

95th percentile per-packet one-way delay: 64.856 ms

Loss rate: 0.05%

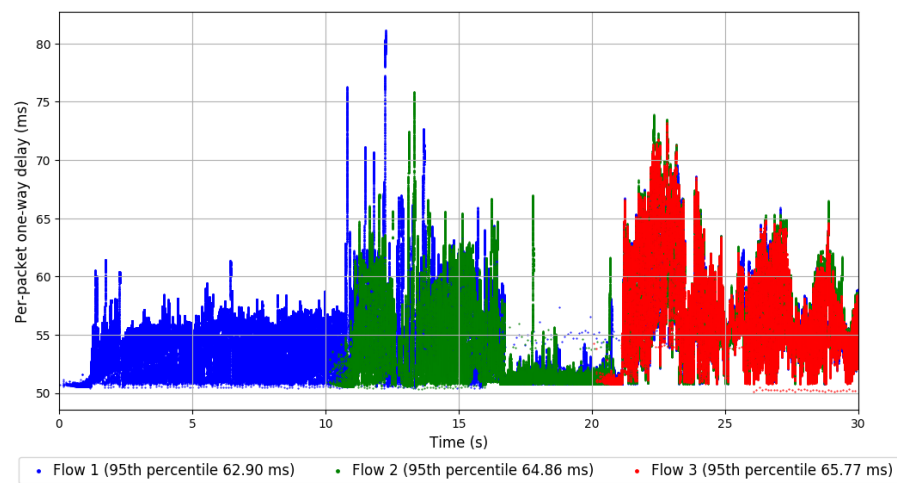
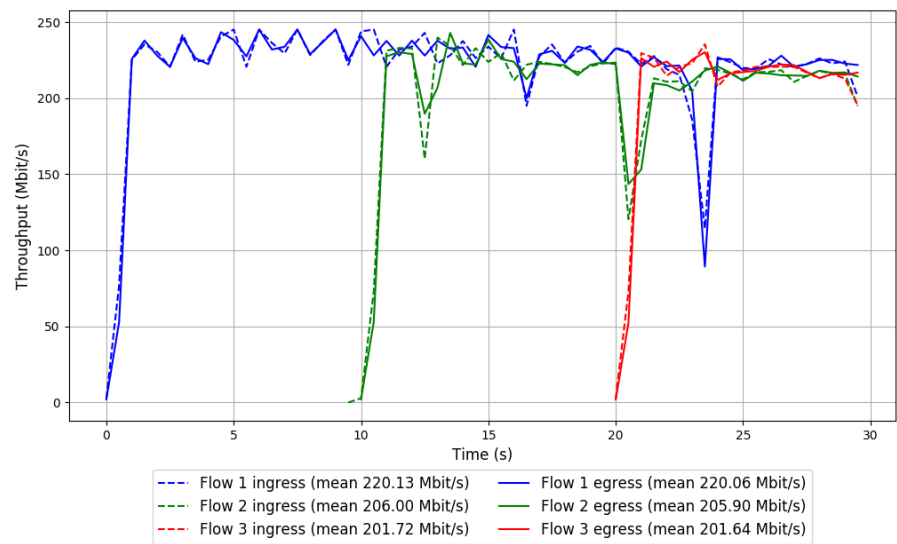
-- Flow 3:

Average throughput: 201.64 Mbit/s

95th percentile per-packet one-way delay: 65.768 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-03-07 08:08:21

End at: 2018-03-07 08:08:51

Below is generated by plot.py at 2018-03-07 11:26:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 413.49 Mbit/s

95th percentile per-packet one-way delay: 65.046 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 208.56 Mbit/s

95th percentile per-packet one-way delay: 63.913 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 205.51 Mbit/s

95th percentile per-packet one-way delay: 65.805 ms

Loss rate: 0.00%

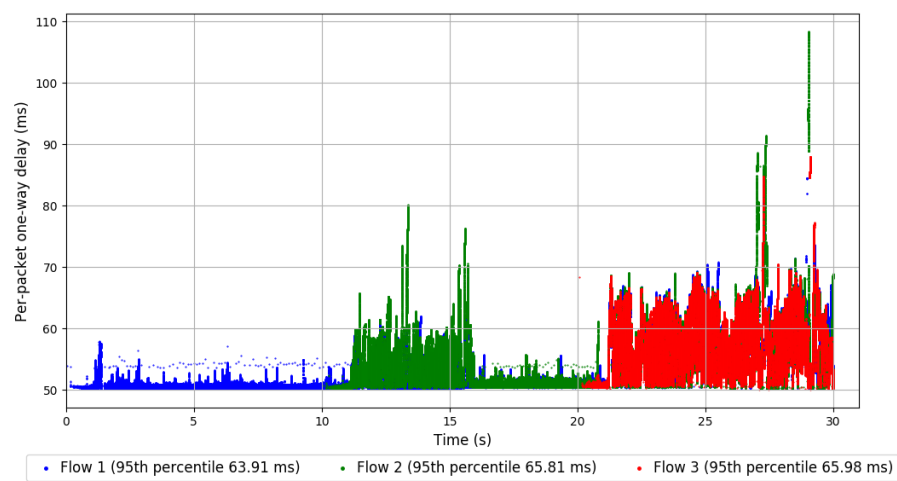
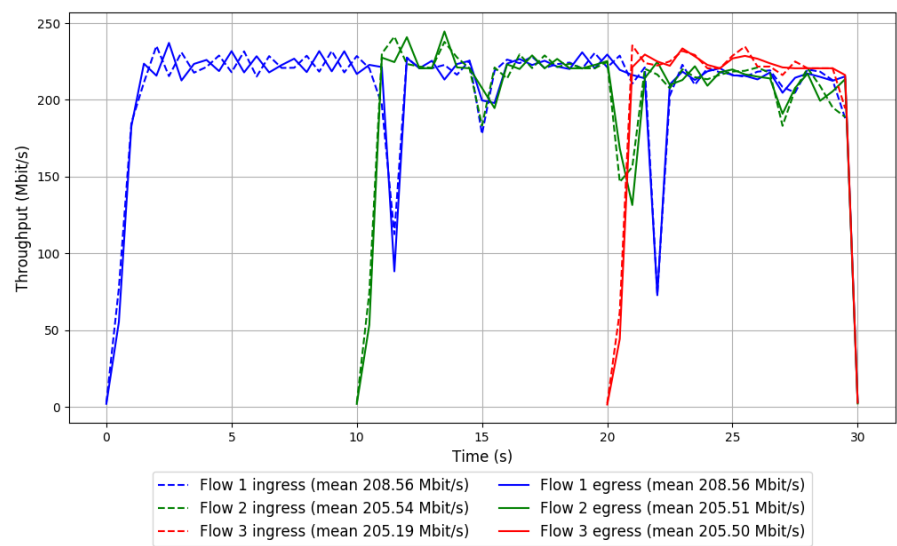
-- Flow 3:

Average throughput: 205.50 Mbit/s

95th percentile per-packet one-way delay: 65.976 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-03-07 08:25:50

End at: 2018-03-07 08:26:20

Below is generated by plot.py at 2018-03-07 11:32:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 418.93 Mbit/s

95th percentile per-packet one-way delay: 64.867 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 215.77 Mbit/s

95th percentile per-packet one-way delay: 63.698 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 204.58 Mbit/s

95th percentile per-packet one-way delay: 65.395 ms

Loss rate: 0.01%

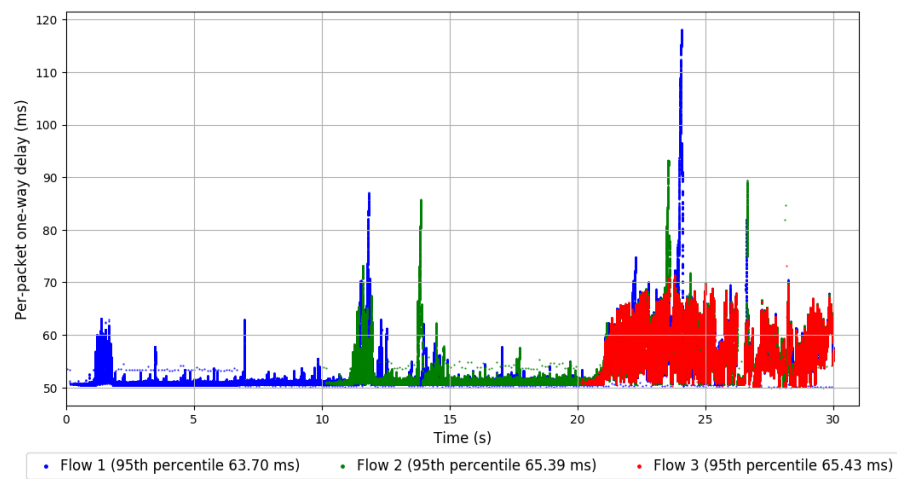
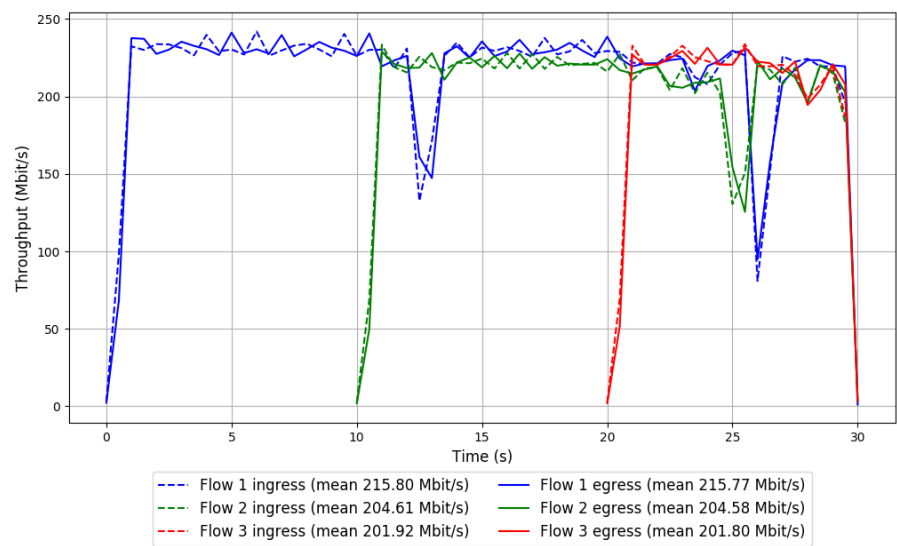
-- Flow 3:

Average throughput: 201.80 Mbit/s

95th percentile per-packet one-way delay: 65.427 ms

Loss rate: 0.02%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-03-07 08:42:57

End at: 2018-03-07 08:43:27

Below is generated by plot.py at 2018-03-07 11:32:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 419.87 Mbit/s

95th percentile per-packet one-way delay: 62.717 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 209.61 Mbit/s

95th percentile per-packet one-way delay: 61.688 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 212.38 Mbit/s

95th percentile per-packet one-way delay: 62.337 ms

Loss rate: 0.00%

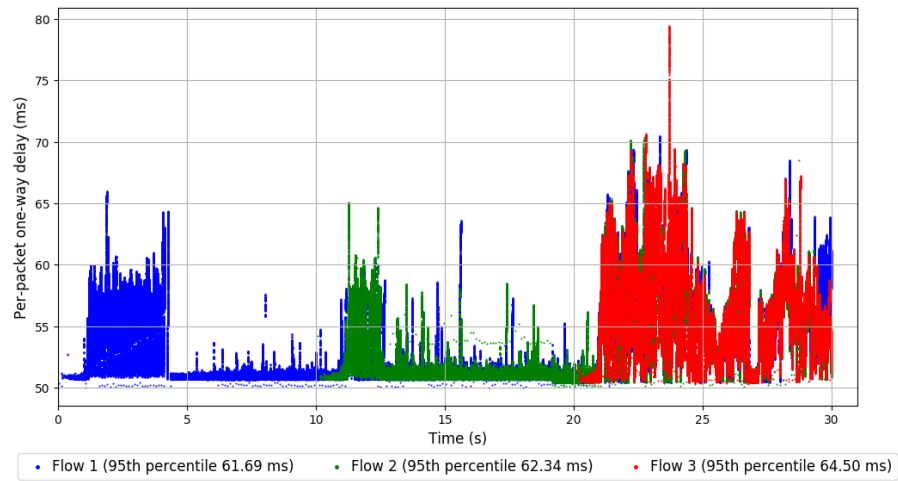
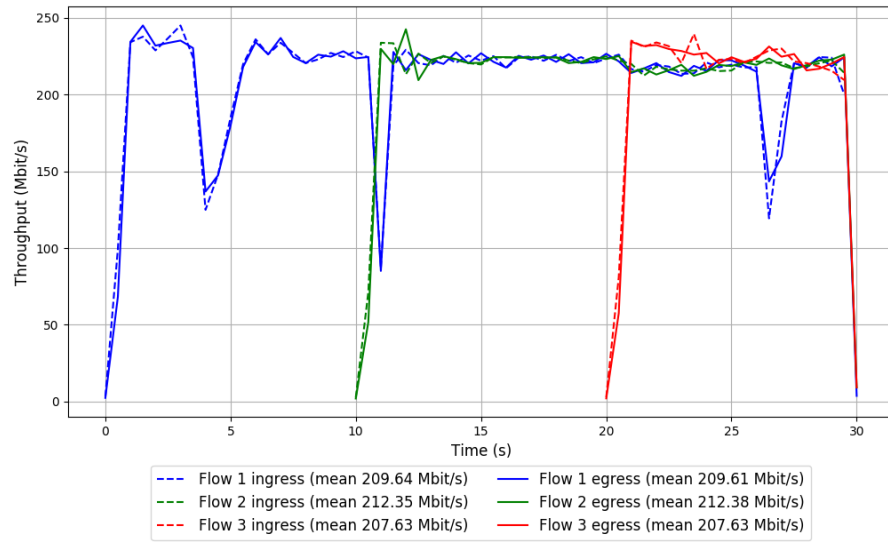
-- Flow 3:

Average throughput: 207.63 Mbit/s

95th percentile per-packet one-way delay: 64.502 ms

Loss rate: 0.01%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-03-07 06:12:50

End at: 2018-03-07 06:13:20

Below is generated by plot.py at 2018-03-07 11:32:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.84 Mbit/s

95th percentile per-packet one-way delay: 62.533 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 144.60 Mbit/s

95th percentile per-packet one-way delay: 60.534 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 201.09 Mbit/s

95th percentile per-packet one-way delay: 67.056 ms

Loss rate: 0.00%

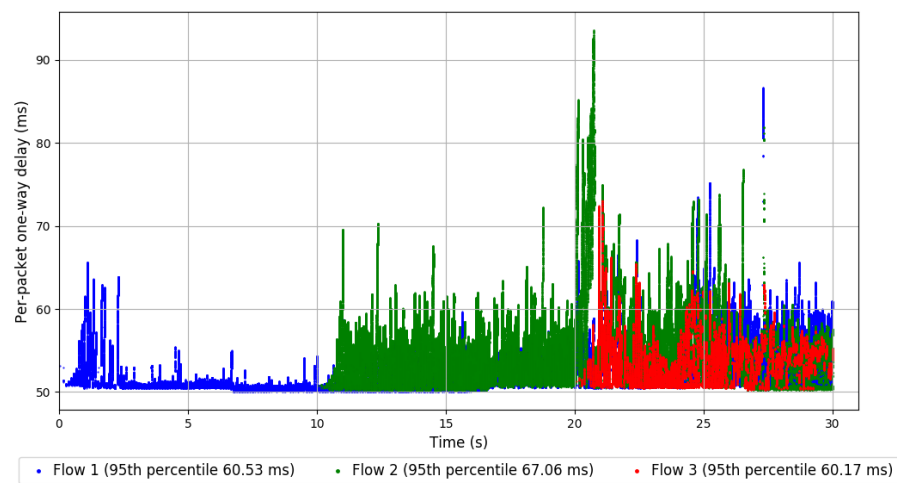
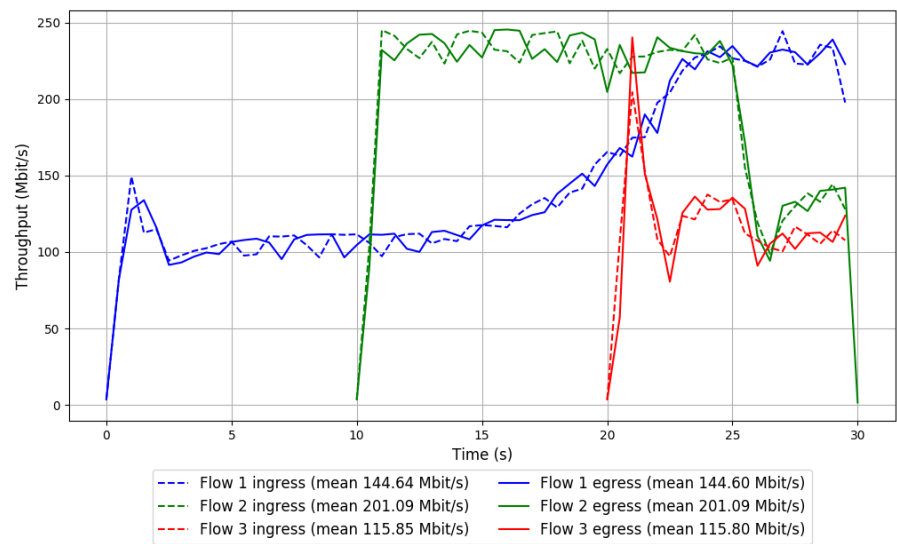
-- Flow 3:

Average throughput: 115.80 Mbit/s

95th percentile per-packet one-way delay: 60.174 ms

Loss rate: 0.02%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-03-07 06:30:18

End at: 2018-03-07 06:30:48

Below is generated by plot.py at 2018-03-07 11:32:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 377.64 Mbit/s

95th percentile per-packet one-way delay: 63.043 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 219.41 Mbit/s

95th percentile per-packet one-way delay: 62.716 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 131.63 Mbit/s

95th percentile per-packet one-way delay: 58.678 ms

Loss rate: 0.00%

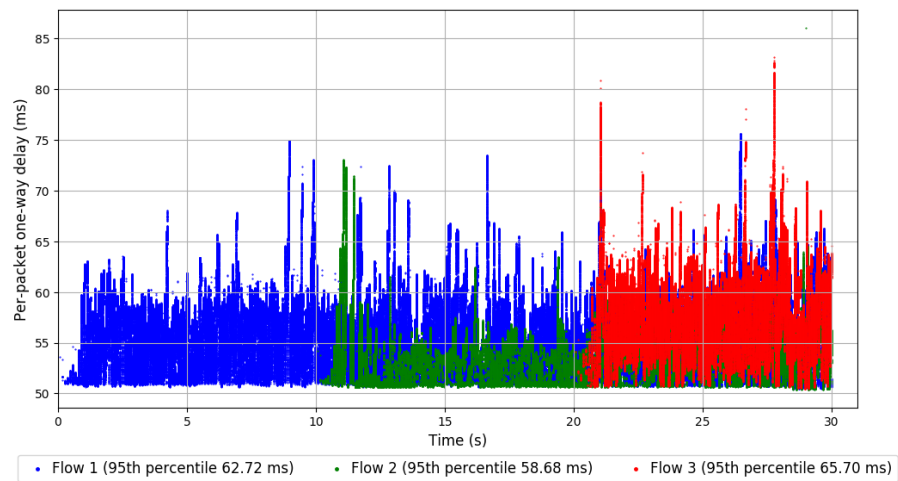
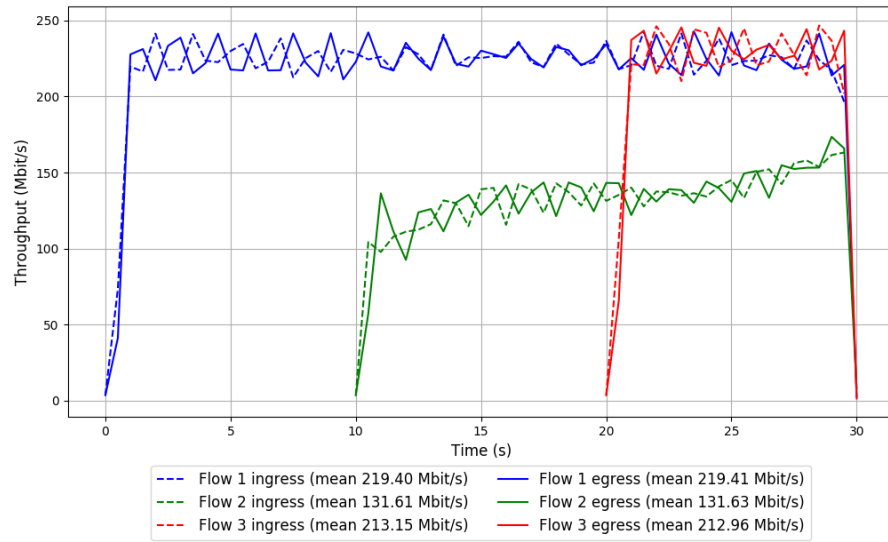
-- Flow 3:

Average throughput: 212.96 Mbit/s

95th percentile per-packet one-way delay: 65.699 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-03-07 06:47:38

End at: 2018-03-07 06:48:08

Below is generated by plot.py at 2018-03-07 11:32:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 296.44 Mbit/s

95th percentile per-packet one-way delay: 61.854 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 175.17 Mbit/s

95th percentile per-packet one-way delay: 61.252 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.77 Mbit/s

95th percentile per-packet one-way delay: 62.877 ms

Loss rate: 0.00%

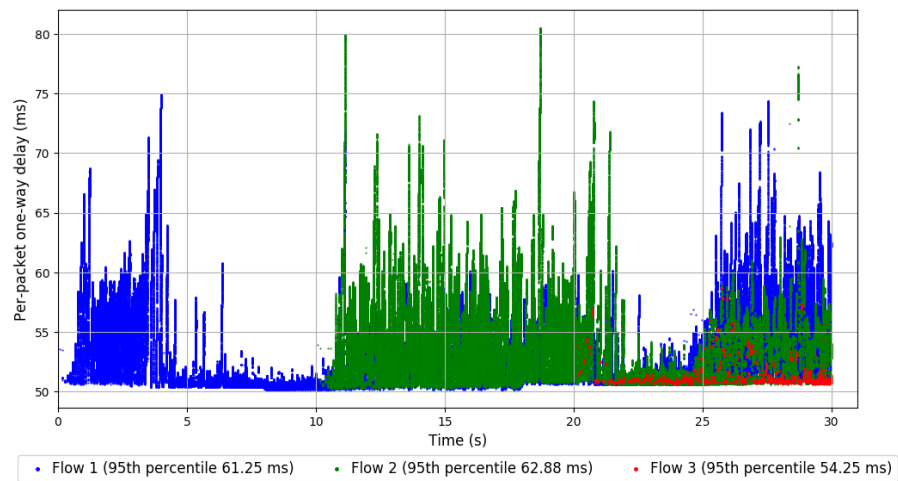
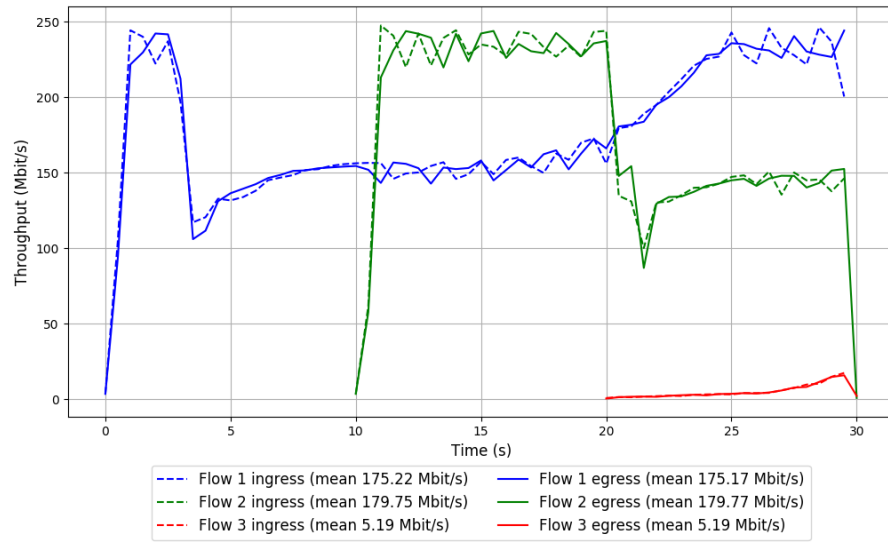
-- Flow 3:

Average throughput: 5.19 Mbit/s

95th percentile per-packet one-way delay: 54.254 ms

Loss rate: 0.14%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-03-07 07:05:00

End at: 2018-03-07 07:05:30

Below is generated by plot.py at 2018-03-07 11:32:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 392.21 Mbit/s

95th percentile per-packet one-way delay: 63.858 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 217.45 Mbit/s

95th percentile per-packet one-way delay: 63.417 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 208.07 Mbit/s

95th percentile per-packet one-way delay: 64.937 ms

Loss rate: 0.00%

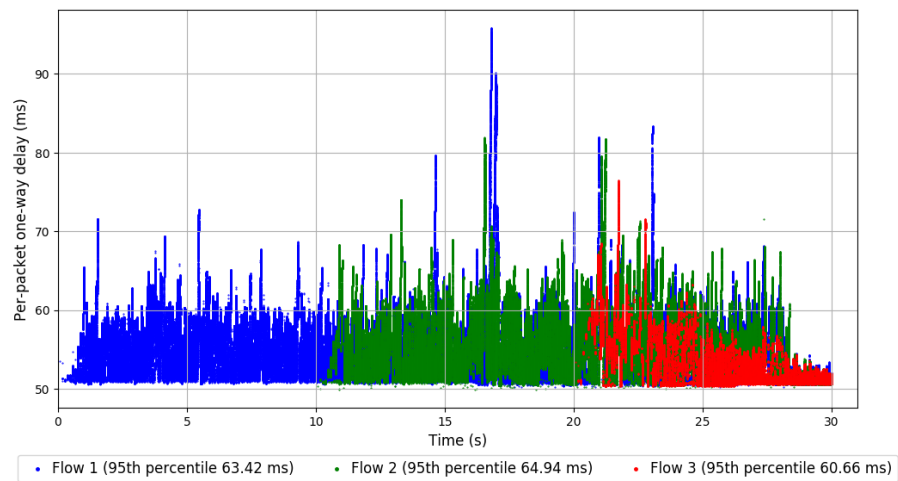
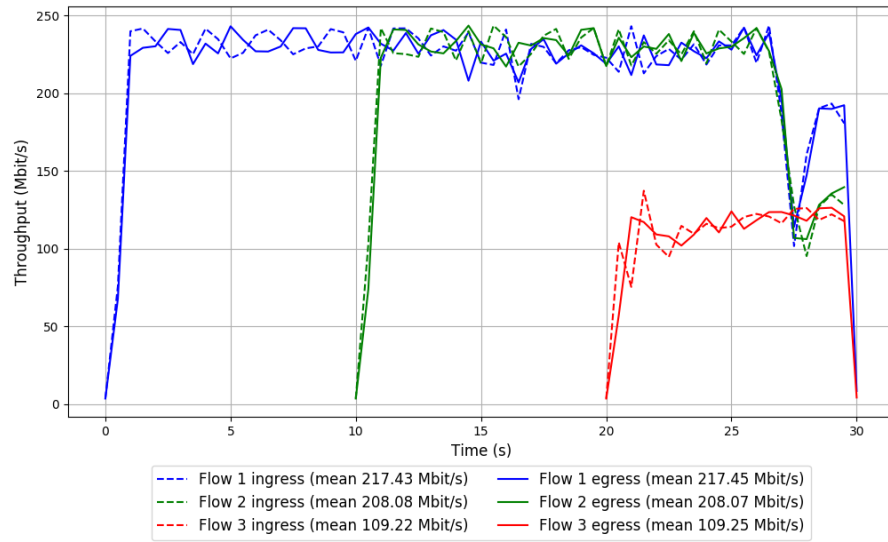
-- Flow 3:

Average throughput: 109.25 Mbit/s

95th percentile per-packet one-way delay: 60.664 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-03-07 07:22:33

End at: 2018-03-07 07:23:03

Below is generated by plot.py at 2018-03-07 11:32:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.33 Mbit/s

95th percentile per-packet one-way delay: 61.343 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 172.32 Mbit/s

95th percentile per-packet one-way delay: 62.672 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 111.30 Mbit/s

95th percentile per-packet one-way delay: 58.765 ms

Loss rate: 0.08%

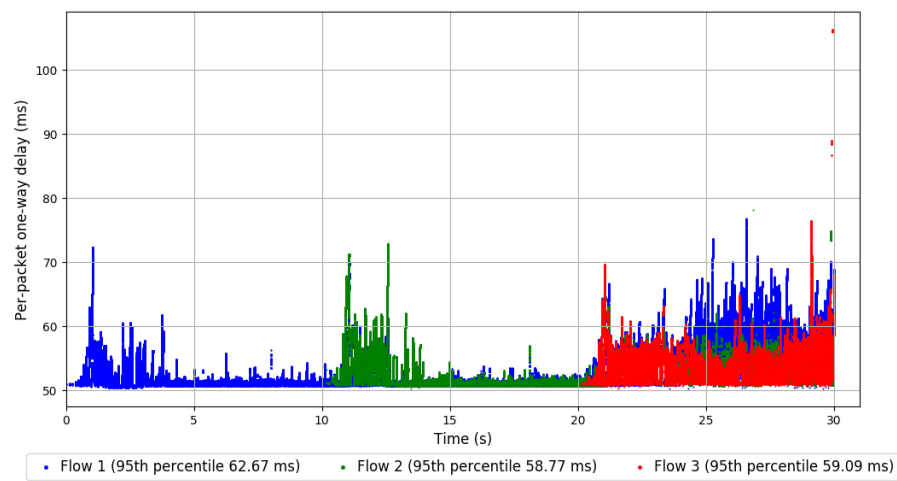
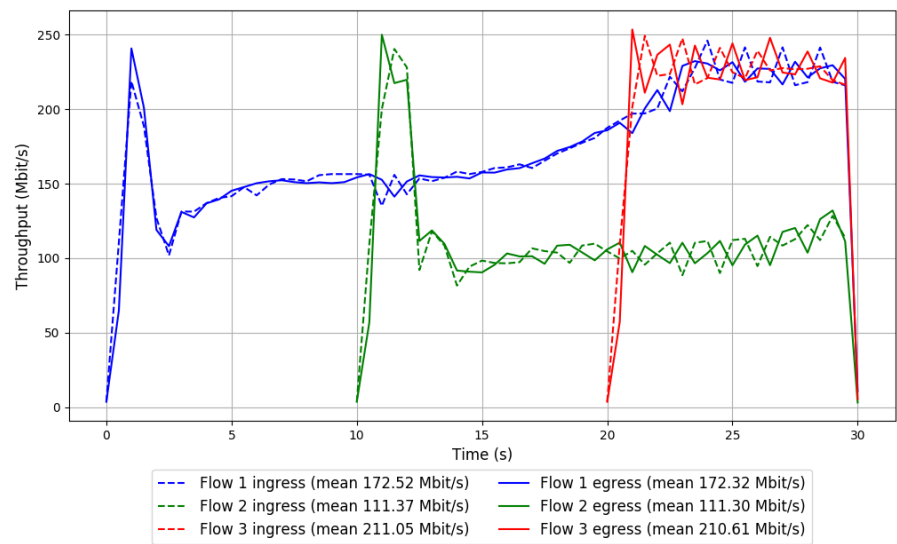
-- Flow 3:

Average throughput: 210.61 Mbit/s

95th percentile per-packet one-way delay: 59.093 ms

Loss rate: 0.05%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-03-07 07:40:03

End at: 2018-03-07 07:40:33

Below is generated by plot.py at 2018-03-07 11:32:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 324.44 Mbit/s

95th percentile per-packet one-way delay: 61.623 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 178.42 Mbit/s

95th percentile per-packet one-way delay: 61.707 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 152.96 Mbit/s

95th percentile per-packet one-way delay: 62.029 ms

Loss rate: 0.00%

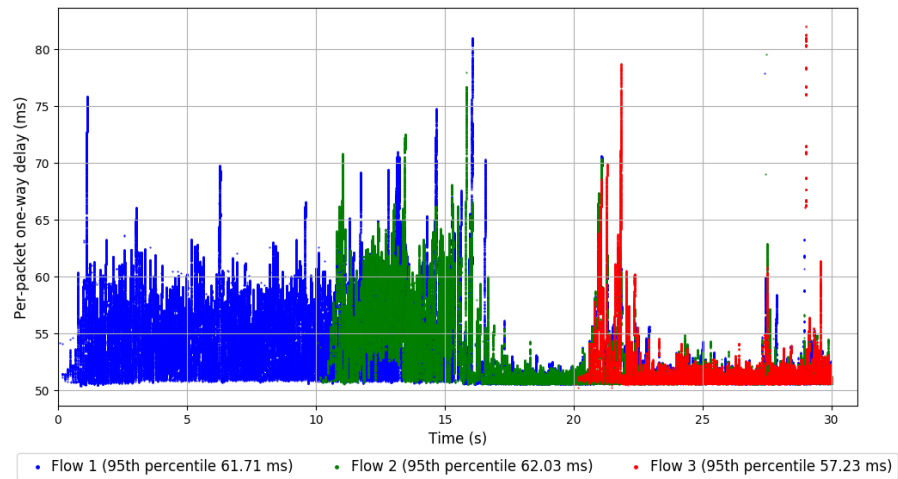
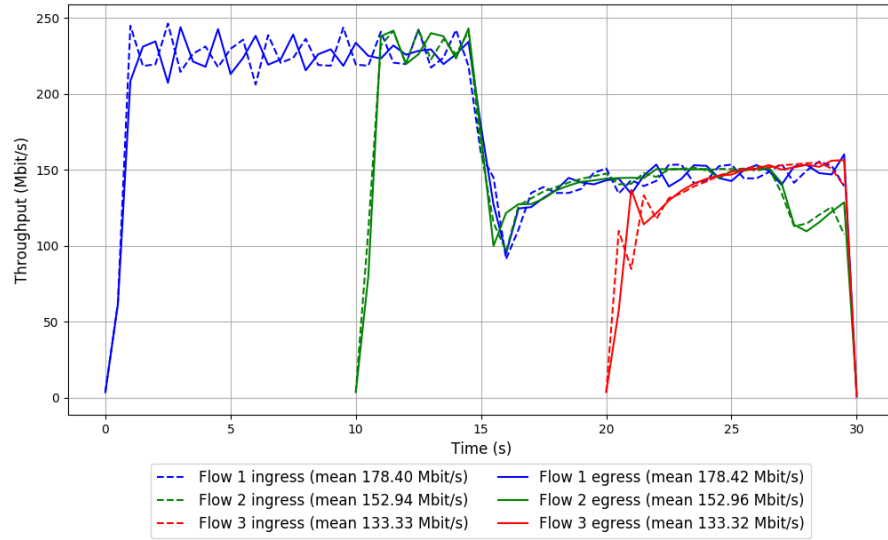
-- Flow 3:

Average throughput: 133.32 Mbit/s

95th percentile per-packet one-way delay: 57.233 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-03-07 07:57:26

End at: 2018-03-07 07:57:56

Below is generated by plot.py at 2018-03-07 11:35:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.09 Mbit/s

95th percentile per-packet one-way delay: 60.161 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 190.44 Mbit/s

95th percentile per-packet one-way delay: 60.849 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 138.81 Mbit/s

95th percentile per-packet one-way delay: 59.414 ms

Loss rate: 0.01%

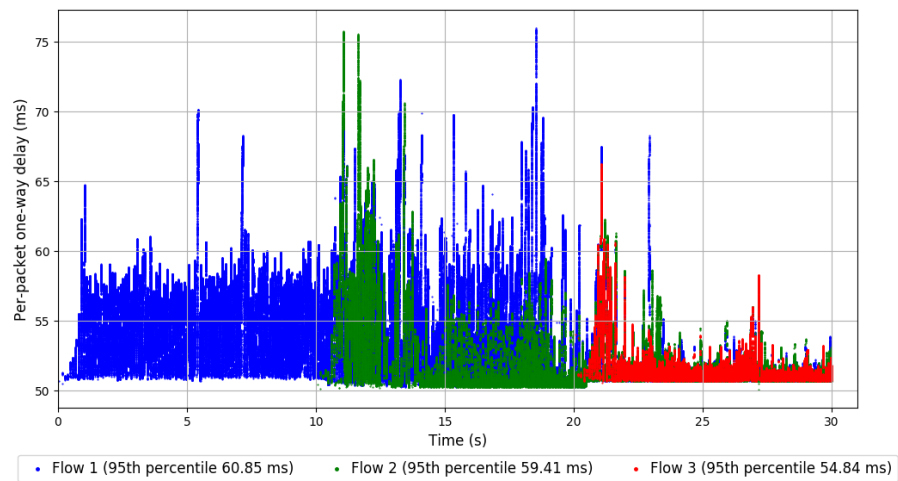
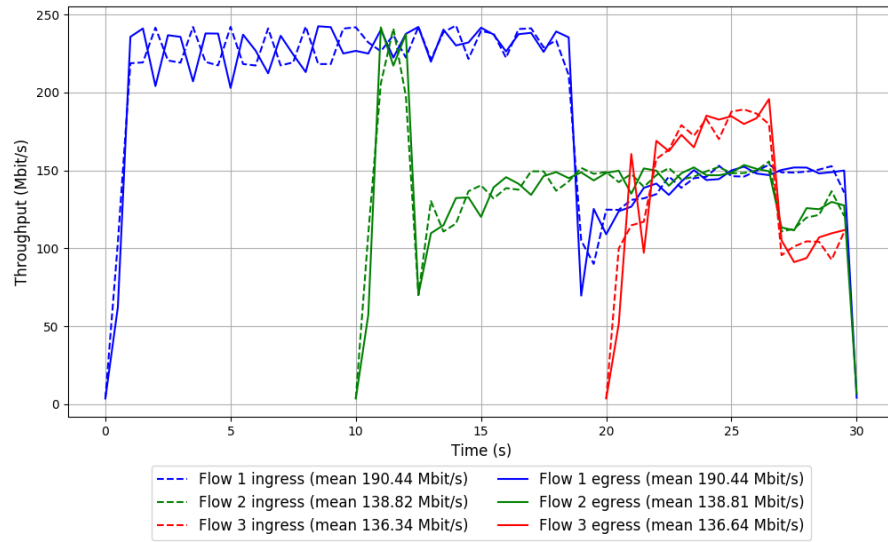
-- Flow 3:

Average throughput: 136.64 Mbit/s

95th percentile per-packet one-way delay: 54.836 ms

Loss rate: 0.01%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-03-07 08:15:09

End at: 2018-03-07 08:15:39

Below is generated by plot.py at 2018-03-07 11:35:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 275.46 Mbit/s

95th percentile per-packet one-way delay: 61.992 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 114.80 Mbit/s

95th percentile per-packet one-way delay: 57.633 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 189.10 Mbit/s

95th percentile per-packet one-way delay: 64.691 ms

Loss rate: 0.00%

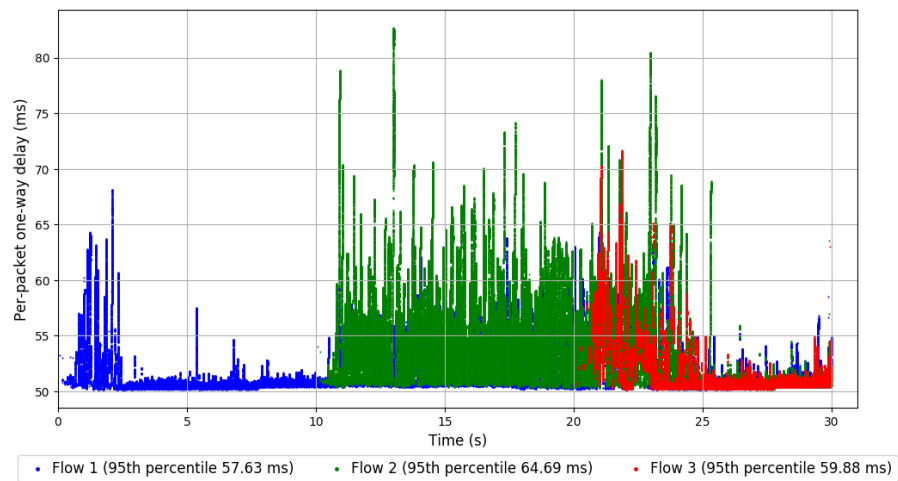
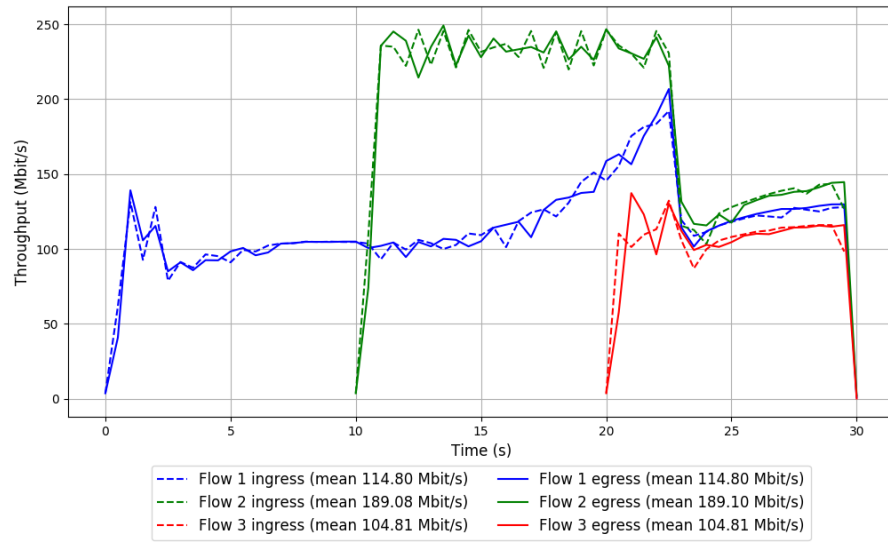
-- Flow 3:

Average throughput: 104.81 Mbit/s

95th percentile per-packet one-way delay: 59.884 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-03-07 08:32:36

End at: 2018-03-07 08:33:06

Below is generated by plot.py at 2018-03-07 11:35:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 303.86 Mbit/s

95th percentile per-packet one-way delay: 62.286 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 130.47 Mbit/s

95th percentile per-packet one-way delay: 59.088 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 152.72 Mbit/s

95th percentile per-packet one-way delay: 62.932 ms

Loss rate: 0.07%

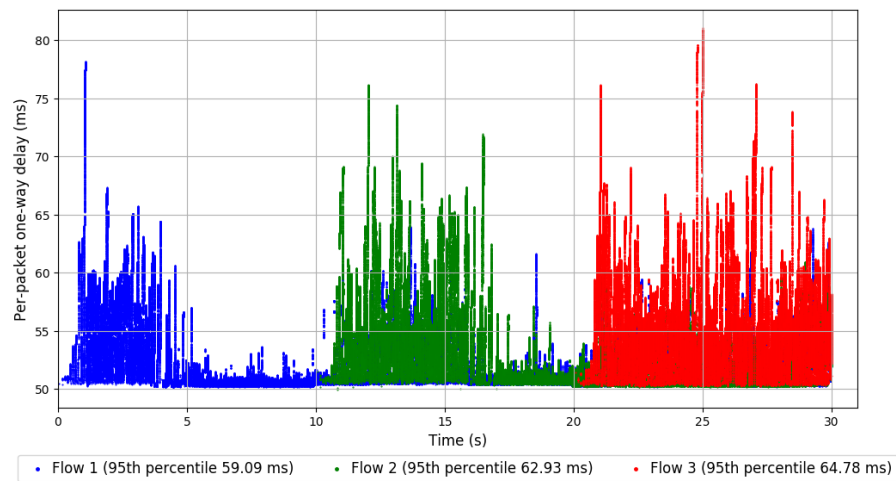
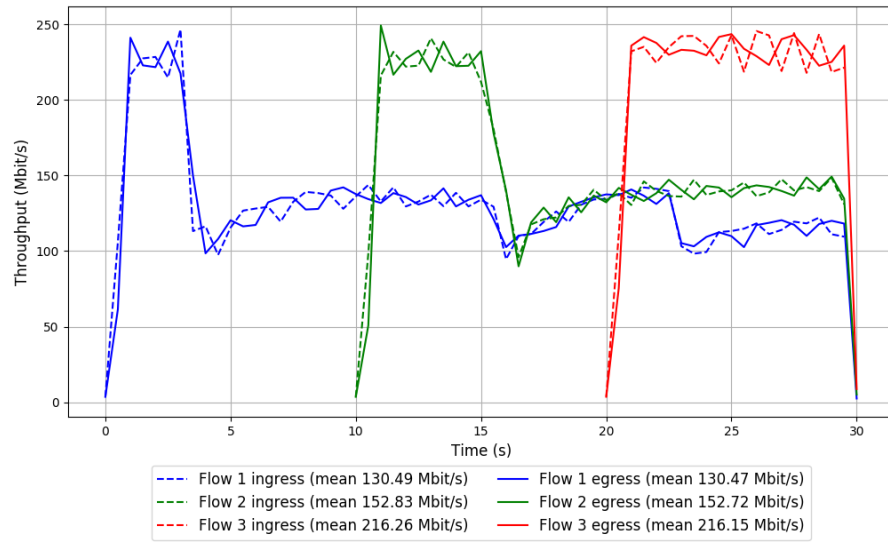
-- Flow 3:

Average throughput: 216.15 Mbit/s

95th percentile per-packet one-way delay: 64.776 ms

Loss rate: 0.03%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-03-07 08:49:48

End at: 2018-03-07 08:50:18

Below is generated by plot.py at 2018-03-07 11:36:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 358.49 Mbit/s

95th percentile per-packet one-way delay: 63.053 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 200.85 Mbit/s

95th percentile per-packet one-way delay: 63.093 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 144.33 Mbit/s

95th percentile per-packet one-way delay: 58.568 ms

Loss rate: 0.00%

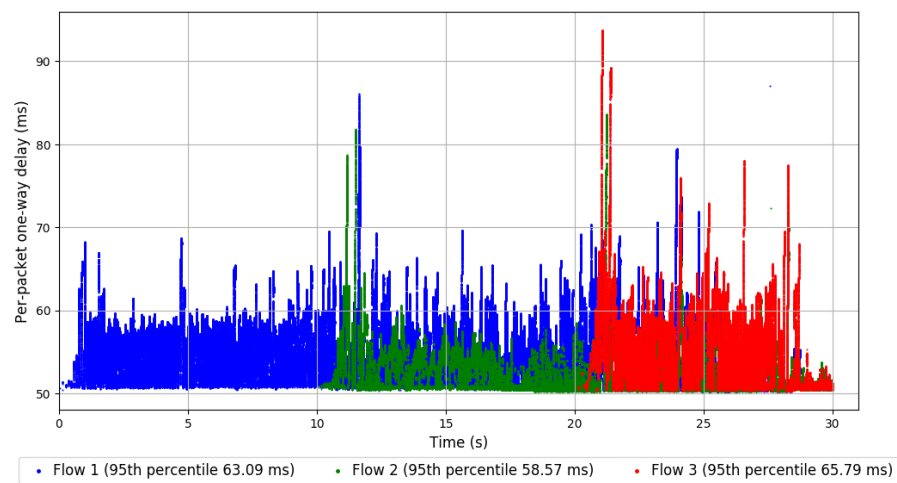
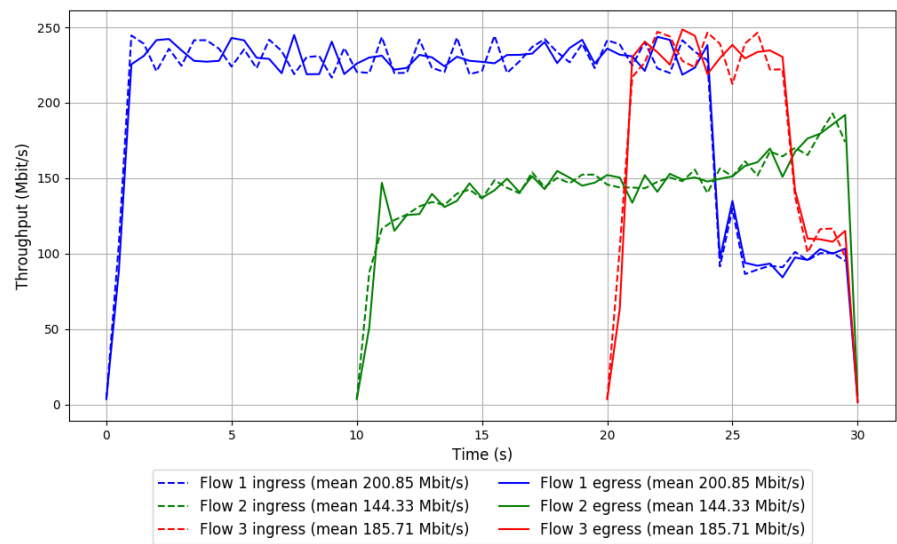
-- Flow 3:

Average throughput: 185.71 Mbit/s

95th percentile per-packet one-way delay: 65.788 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

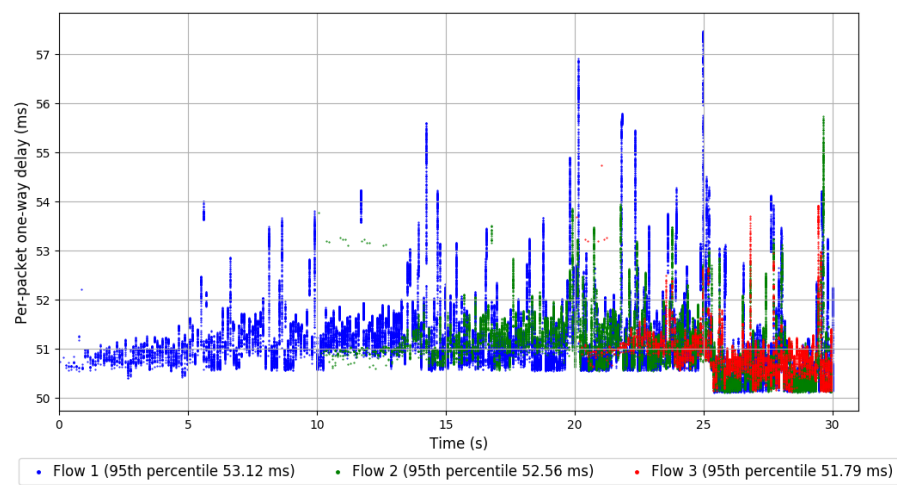
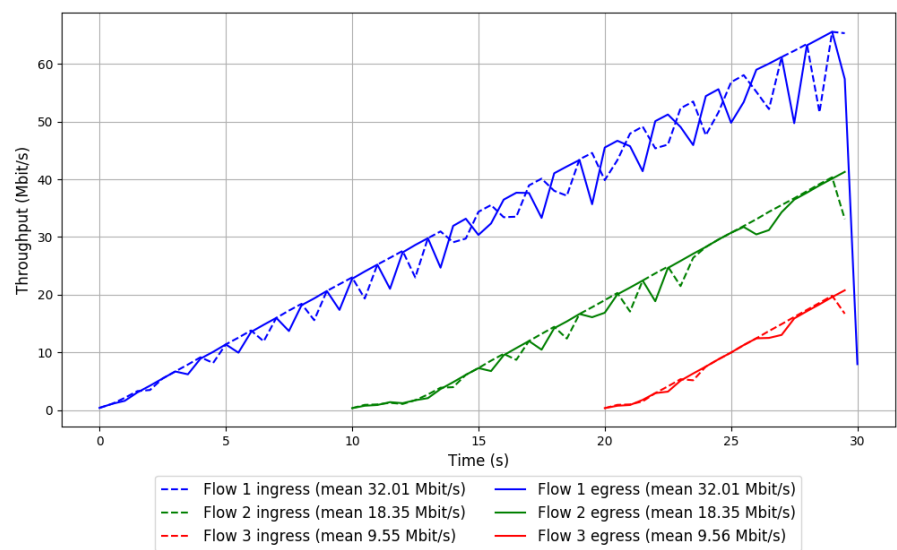


```
Run 1: Statistics of LEDBAT

Start at: 2018-03-07 06:18:41
End at: 2018-03-07 06:19:11

# Below is generated by plot.py at 2018-03-07 11:36:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.33 Mbit/s
95th percentile per-packet one-way delay: 52.906 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.01 Mbit/s
95th percentile per-packet one-way delay: 53.121 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.35 Mbit/s
95th percentile per-packet one-way delay: 52.562 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.56 Mbit/s
95th percentile per-packet one-way delay: 51.788 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

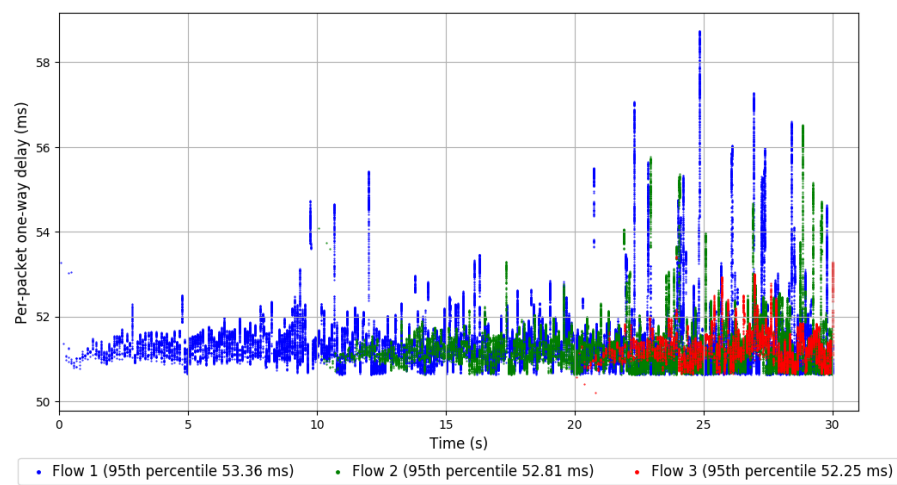
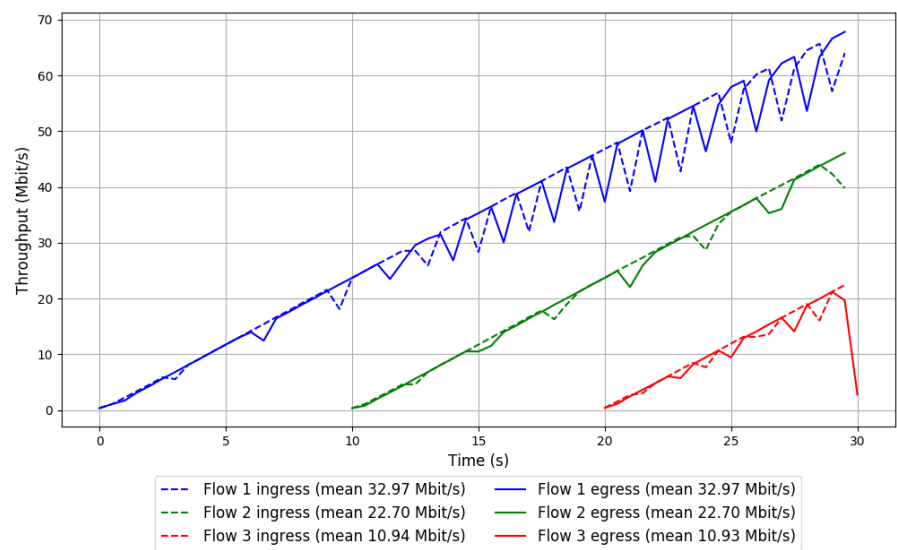


```
Run 2: Statistics of LEDBAT

Start at: 2018-03-07 06:36:13
End at: 2018-03-07 06:36:43

# Below is generated by plot.py at 2018-03-07 11:36:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.66 Mbit/s
95th percentile per-packet one-way delay: 53.112 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.97 Mbit/s
95th percentile per-packet one-way delay: 53.364 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.70 Mbit/s
95th percentile per-packet one-way delay: 52.814 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.93 Mbit/s
95th percentile per-packet one-way delay: 52.248 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-03-07 06:53:21

End at: 2018-03-07 06:53:52

Below is generated by plot.py at 2018-03-07 11:36:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.08 Mbit/s

95th percentile per-packet one-way delay: 52.385 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 33.24 Mbit/s

95th percentile per-packet one-way delay: 52.629 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.69 Mbit/s

95th percentile per-packet one-way delay: 52.171 ms

Loss rate: 0.00%

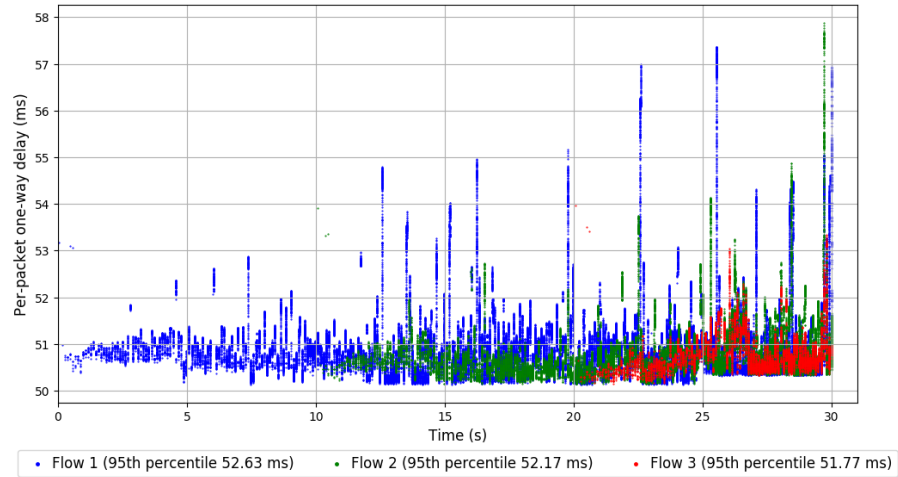
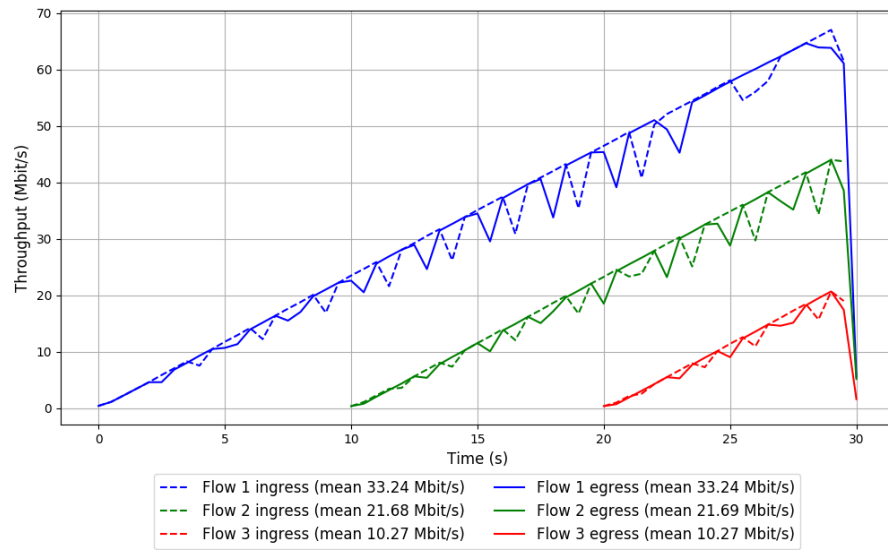
-- Flow 3:

Average throughput: 10.27 Mbit/s

95th percentile per-packet one-way delay: 51.769 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-03-07 07:10:52

End at: 2018-03-07 07:11:22

Below is generated by plot.py at 2018-03-07 11:36:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.11 Mbit/s

95th percentile per-packet one-way delay: 52.914 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 34.01 Mbit/s

95th percentile per-packet one-way delay: 53.137 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.94 Mbit/s

95th percentile per-packet one-way delay: 52.727 ms

Loss rate: 0.00%

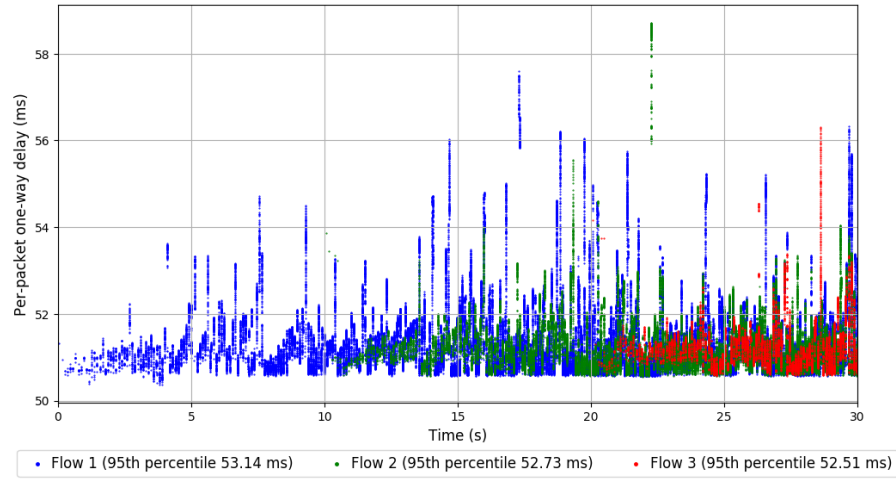
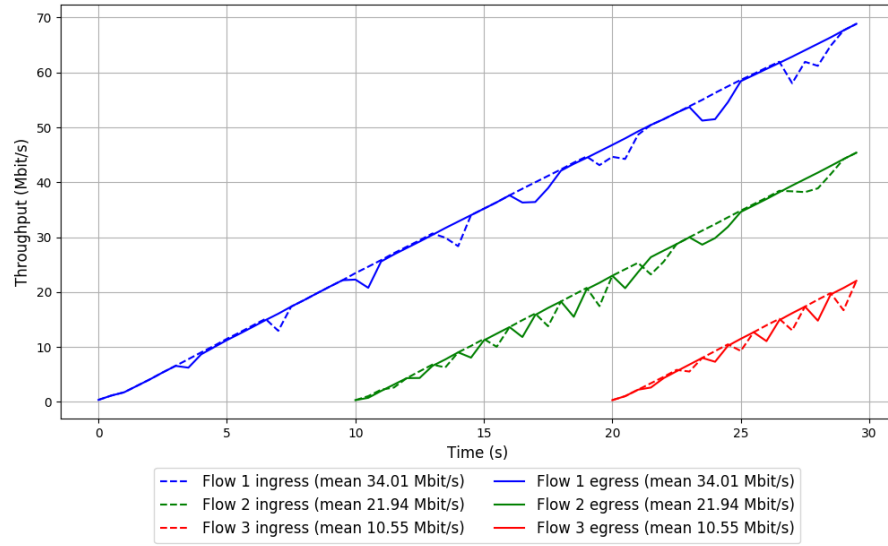
-- Flow 3:

Average throughput: 10.55 Mbit/s

95th percentile per-packet one-way delay: 52.511 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-03-07 07:28:18

End at: 2018-03-07 07:28:48

Below is generated by plot.py at 2018-03-07 11:36:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.51 Mbit/s

95th percentile per-packet one-way delay: 53.150 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 33.05 Mbit/s

95th percentile per-packet one-way delay: 53.430 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.14 Mbit/s

95th percentile per-packet one-way delay: 52.677 ms

Loss rate: 0.00%

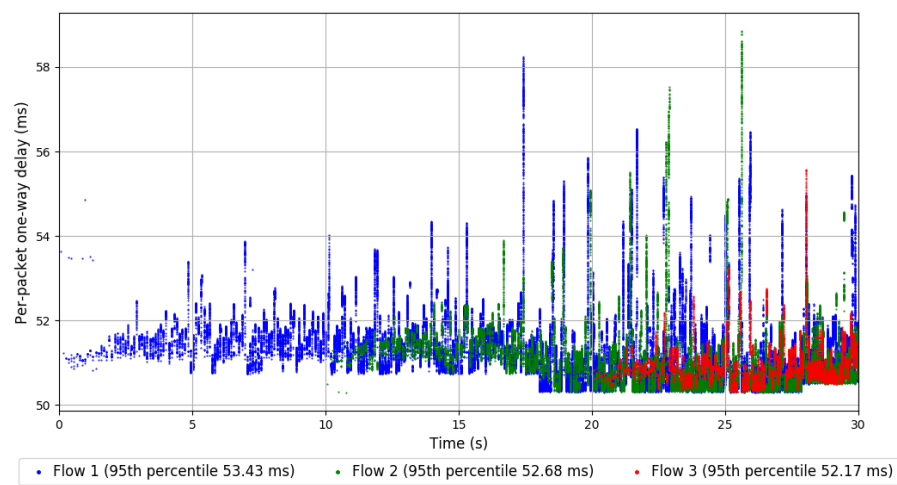
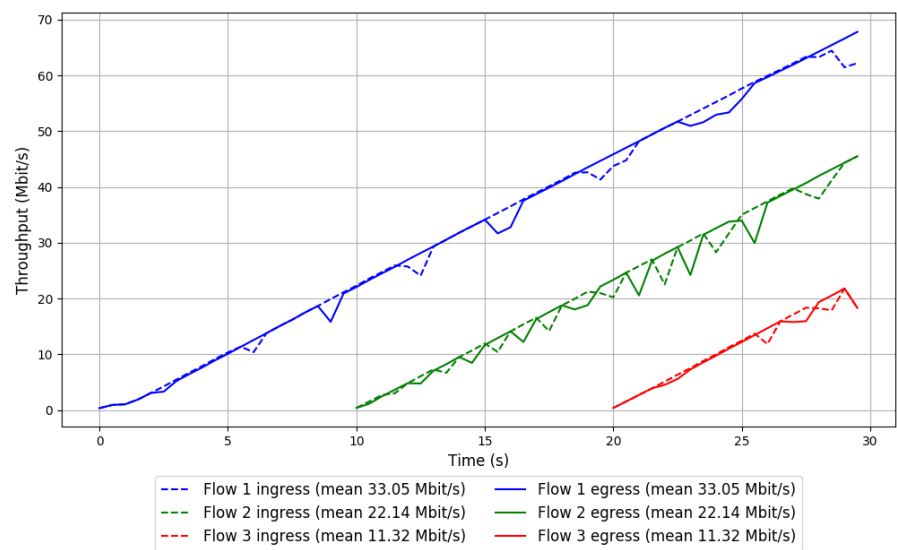
-- Flow 3:

Average throughput: 11.32 Mbit/s

95th percentile per-packet one-way delay: 52.175 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-03-07 07:45:46

End at: 2018-03-07 07:46:16

Below is generated by plot.py at 2018-03-07 11:36:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.02 Mbit/s

95th percentile per-packet one-way delay: 52.942 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.26 Mbit/s

95th percentile per-packet one-way delay: 53.065 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.70 Mbit/s

95th percentile per-packet one-way delay: 52.611 ms

Loss rate: 0.00%

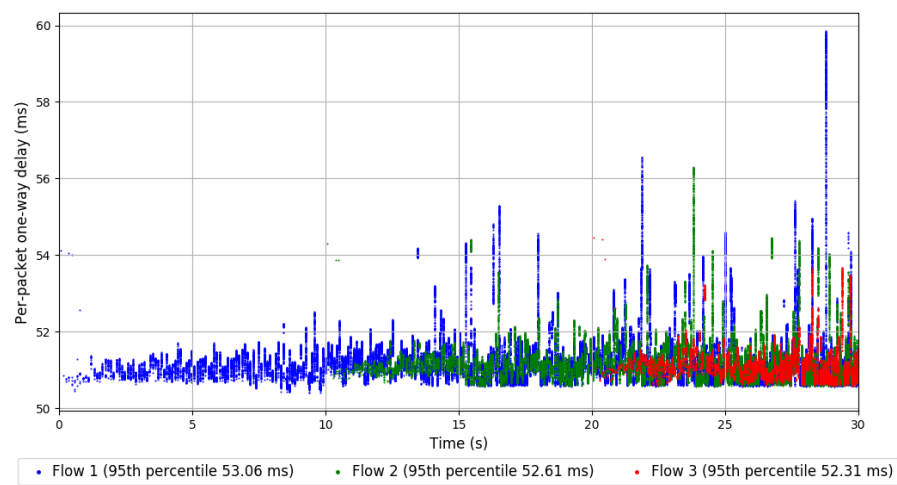
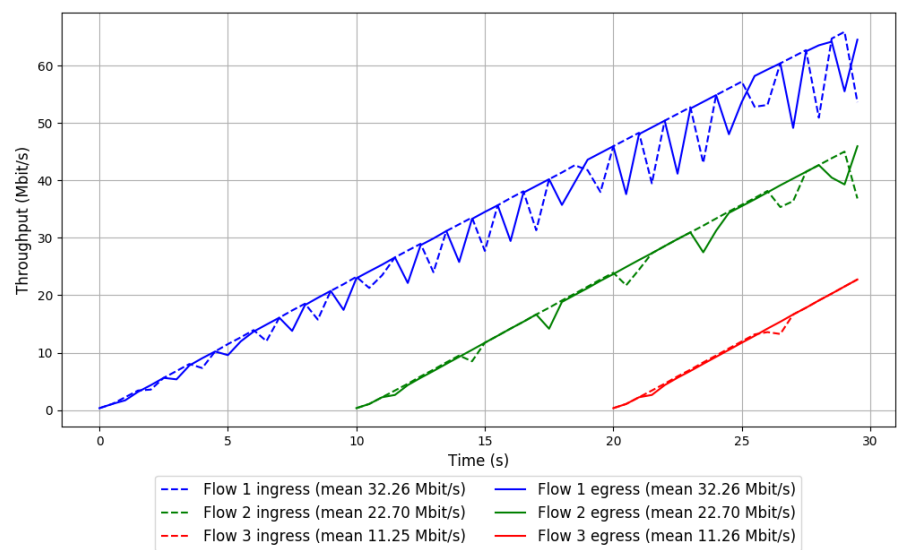
-- Flow 3:

Average throughput: 11.26 Mbit/s

95th percentile per-packet one-way delay: 52.312 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-03-07 08:03:22

End at: 2018-03-07 08:03:52

Below is generated by plot.py at 2018-03-07 11:36:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.18 Mbit/s

95th percentile per-packet one-way delay: 52.605 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 32.66 Mbit/s

95th percentile per-packet one-way delay: 52.739 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.17 Mbit/s

95th percentile per-packet one-way delay: 52.418 ms

Loss rate: 0.09%

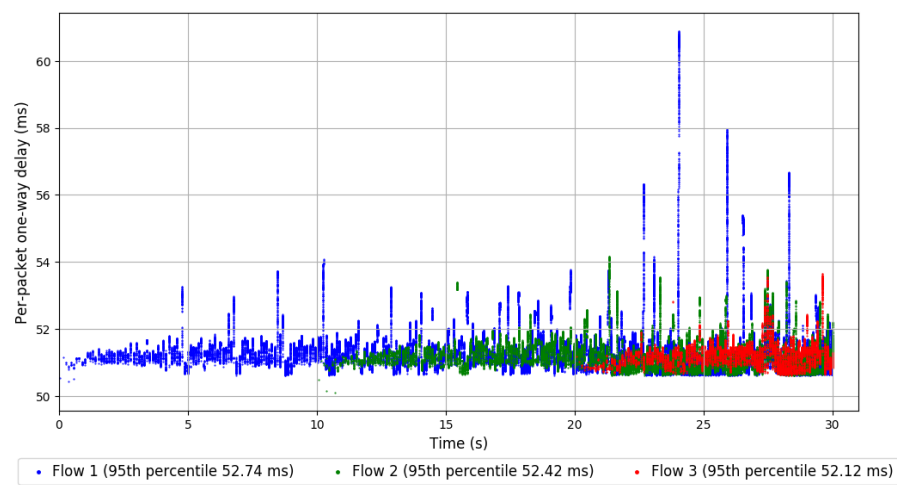
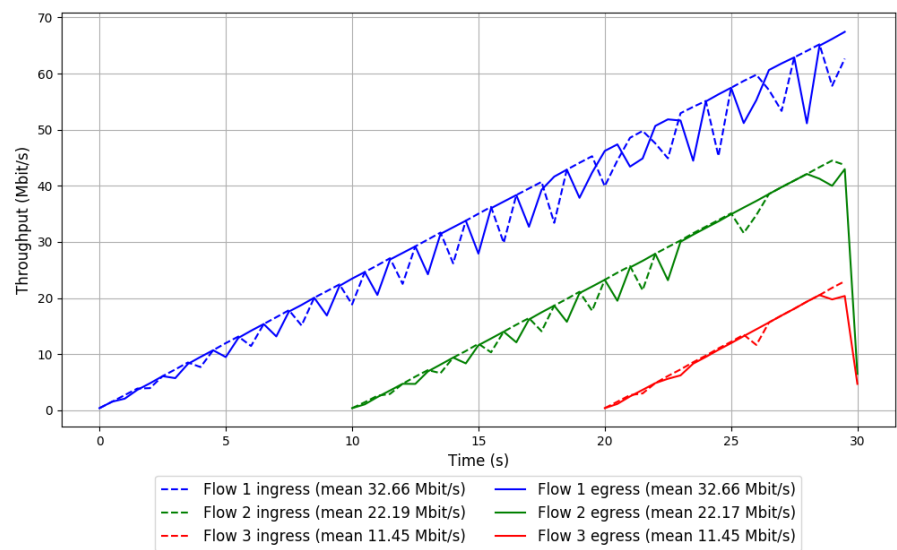
-- Flow 3:

Average throughput: 11.45 Mbit/s

95th percentile per-packet one-way delay: 52.115 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-03-07 08:21:05

End at: 2018-03-07 08:21:35

Below is generated by plot.py at 2018-03-07 11:36:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.58 Mbit/s

95th percentile per-packet one-way delay: 52.805 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.28 Mbit/s

95th percentile per-packet one-way delay: 52.975 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.71 Mbit/s

95th percentile per-packet one-way delay: 52.469 ms

Loss rate: 0.00%

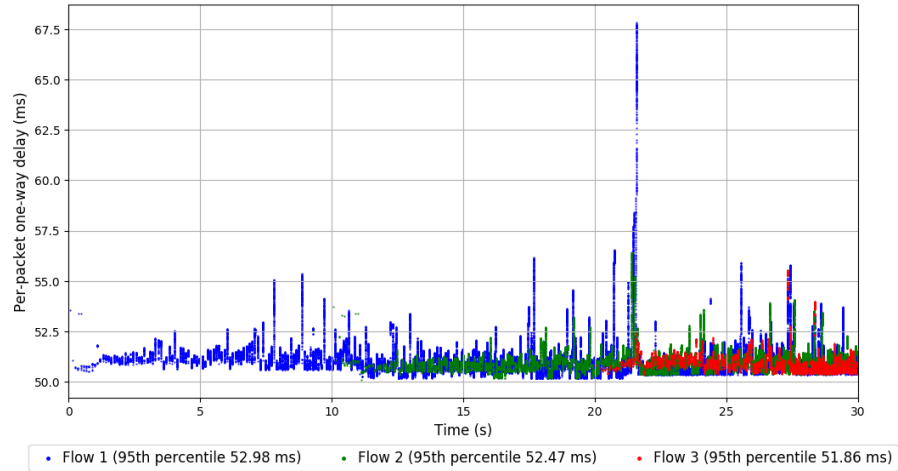
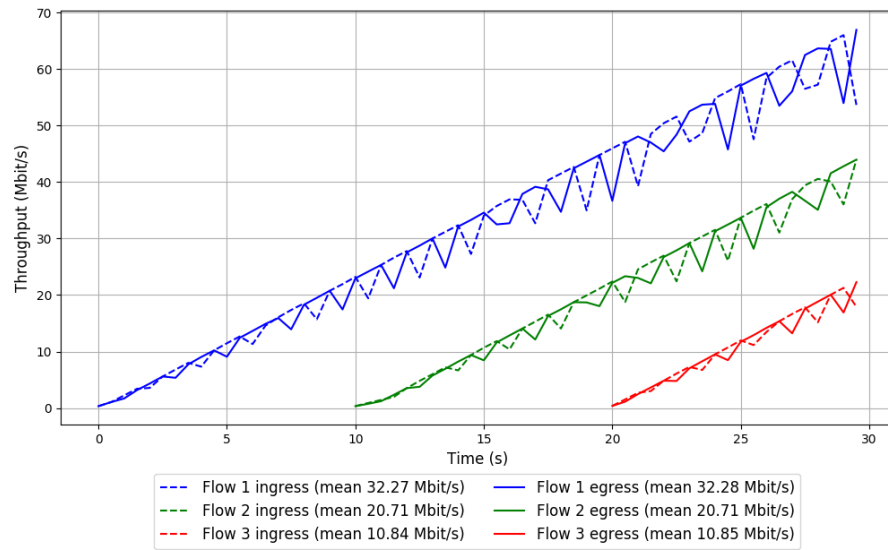
-- Flow 3:

Average throughput: 10.85 Mbit/s

95th percentile per-packet one-way delay: 51.864 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-03-07 08:38:14

End at: 2018-03-07 08:38:44

Below is generated by plot.py at 2018-03-07 11:36:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.88 Mbit/s

95th percentile per-packet one-way delay: 52.609 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 32.98 Mbit/s

95th percentile per-packet one-way delay: 52.852 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.74 Mbit/s

95th percentile per-packet one-way delay: 52.271 ms

Loss rate: 0.00%

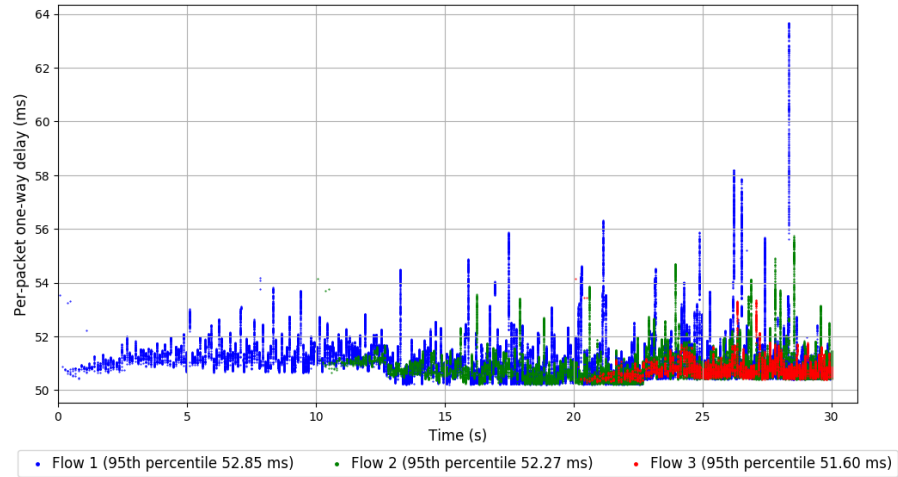
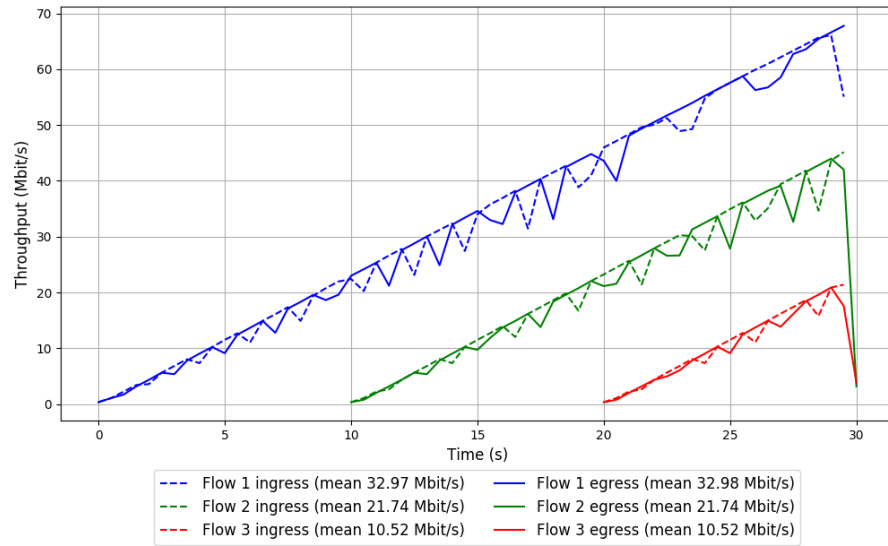
-- Flow 3:

Average throughput: 10.52 Mbit/s

95th percentile per-packet one-way delay: 51.600 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

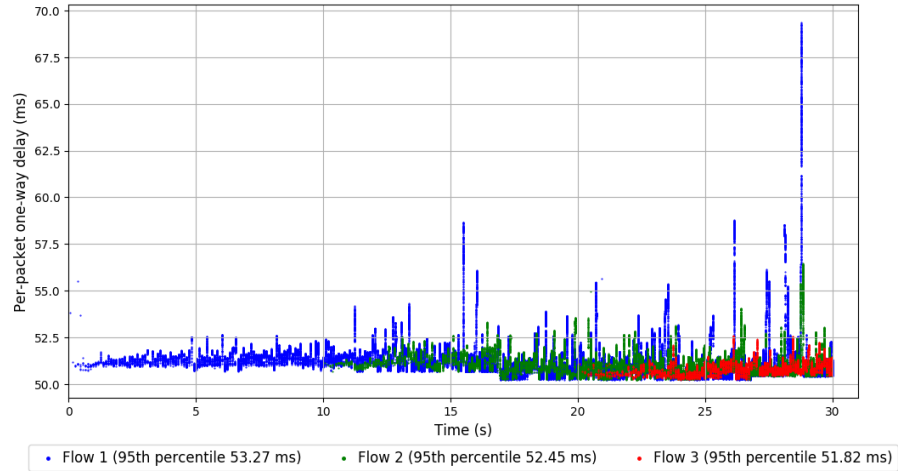
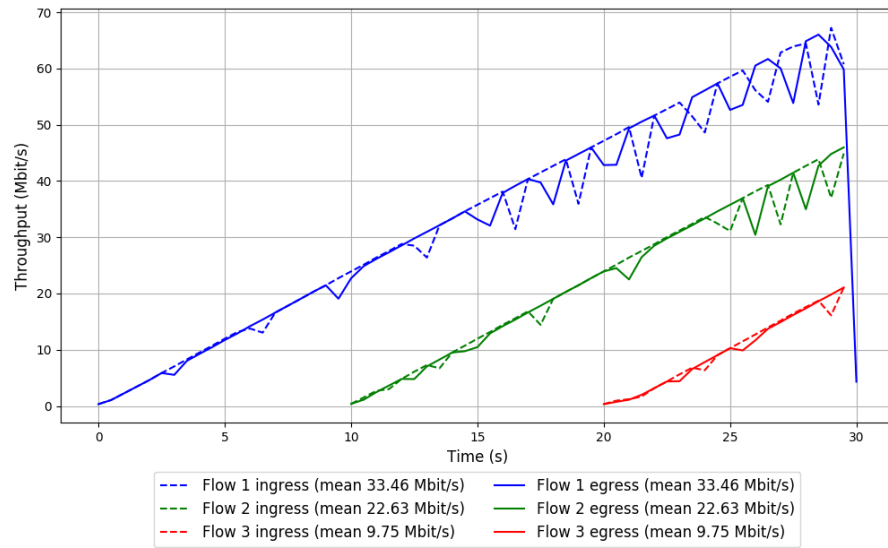


```
Run 10: Statistics of LEDBAT

Start at: 2018-03-07 08:55:30
End at: 2018-03-07 08:56:00

# Below is generated by plot.py at 2018-03-07 11:36:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.73 Mbit/s
95th percentile per-packet one-way delay: 52.792 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.46 Mbit/s
95th percentile per-packet one-way delay: 53.265 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.63 Mbit/s
95th percentile per-packet one-way delay: 52.449 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.75 Mbit/s
95th percentile per-packet one-way delay: 51.817 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

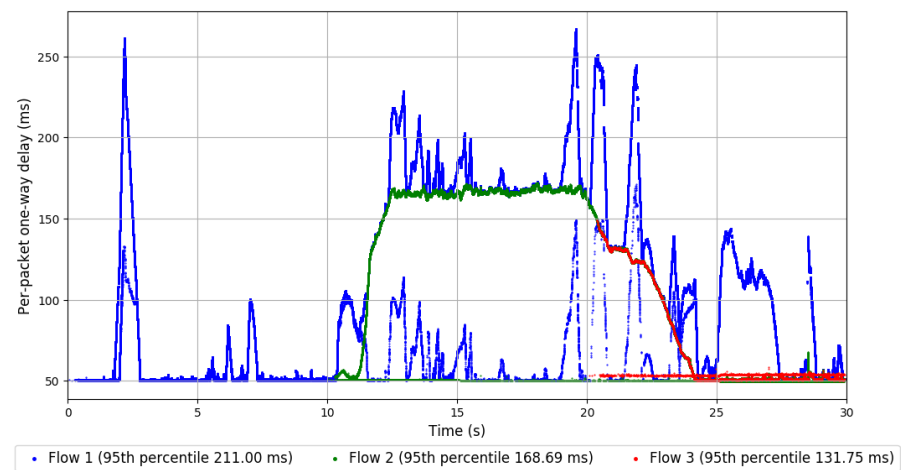
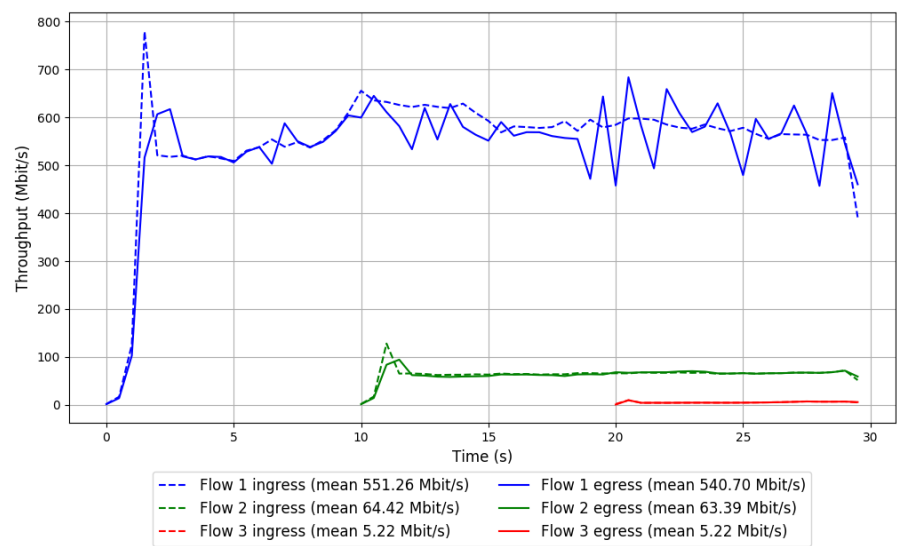


```
Run 1: Statistics of PCC

Start at: 2018-03-07 06:17:41
End at: 2018-03-07 06:18:11

# Below is generated by plot.py at 2018-03-07 11:43:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 584.51 Mbit/s
95th percentile per-packet one-way delay: 208.398 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 540.70 Mbit/s
95th percentile per-packet one-way delay: 211.000 ms
Loss rate: 1.91%
-- Flow 2:
Average throughput: 63.39 Mbit/s
95th percentile per-packet one-way delay: 168.692 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 131.746 ms
Loss rate: 0.00%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-03-07 06:35:14

End at: 2018-03-07 06:35:44

Below is generated by plot.py at 2018-03-07 11:43:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 559.84 Mbit/s

95th percentile per-packet one-way delay: 235.063 ms

Loss rate: 5.69%

-- Flow 1:

Average throughput: 489.17 Mbit/s

95th percentile per-packet one-way delay: 238.707 ms

Loss rate: 5.93%

-- Flow 2:

Average throughput: 78.11 Mbit/s

95th percentile per-packet one-way delay: 167.992 ms

Loss rate: 3.26%

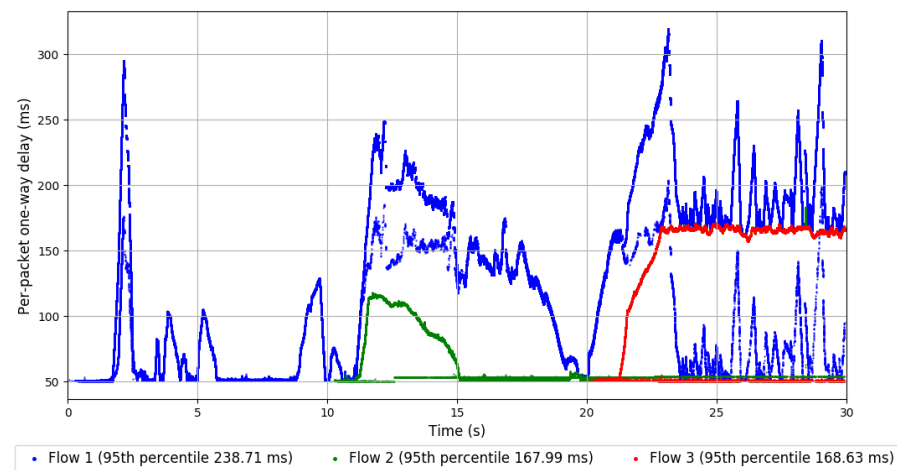
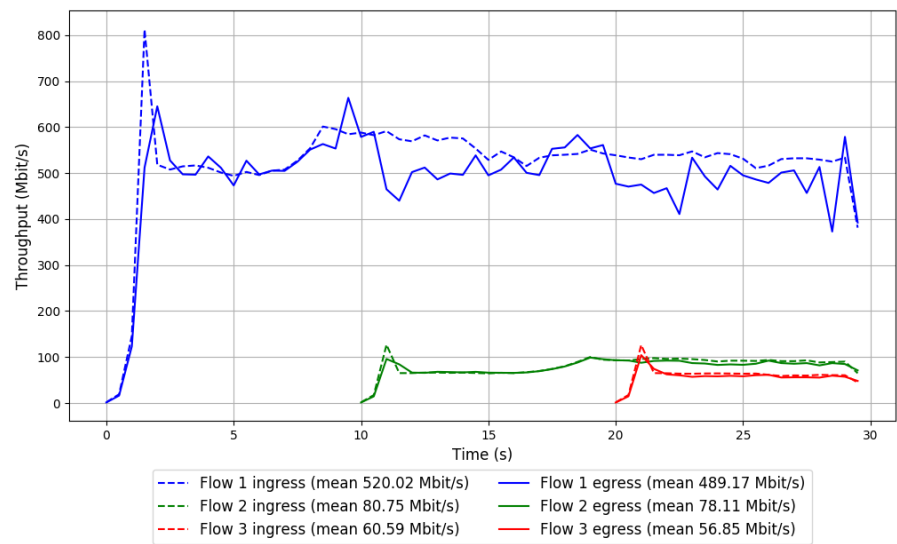
-- Flow 3:

Average throughput: 56.85 Mbit/s

95th percentile per-packet one-way delay: 168.635 ms

Loss rate: 6.16%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-03-07 06:52:21

End at: 2018-03-07 06:52:51

Below is generated by plot.py at 2018-03-07 11:43:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 576.57 Mbit/s

95th percentile per-packet one-way delay: 222.042 ms

Loss rate: 5.06%

-- Flow 1:

Average throughput: 485.41 Mbit/s

95th percentile per-packet one-way delay: 230.981 ms

Loss rate: 5.37%

-- Flow 2:

Average throughput: 107.82 Mbit/s

95th percentile per-packet one-way delay: 166.412 ms

Loss rate: 2.97%

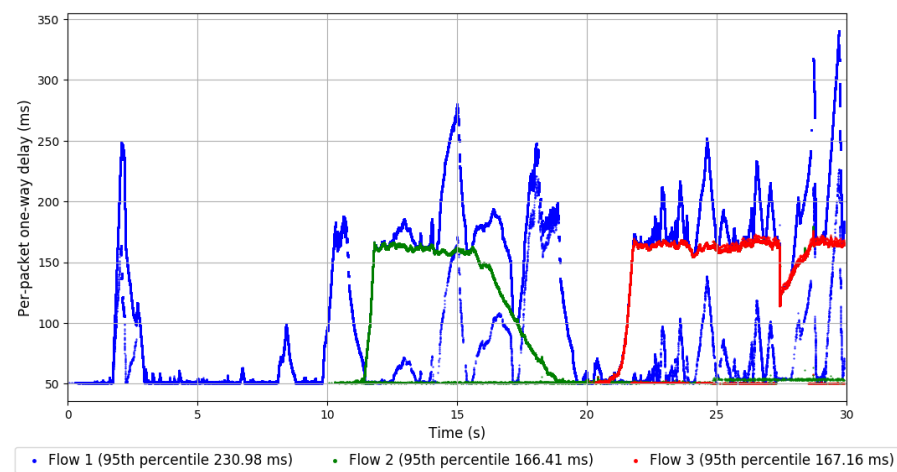
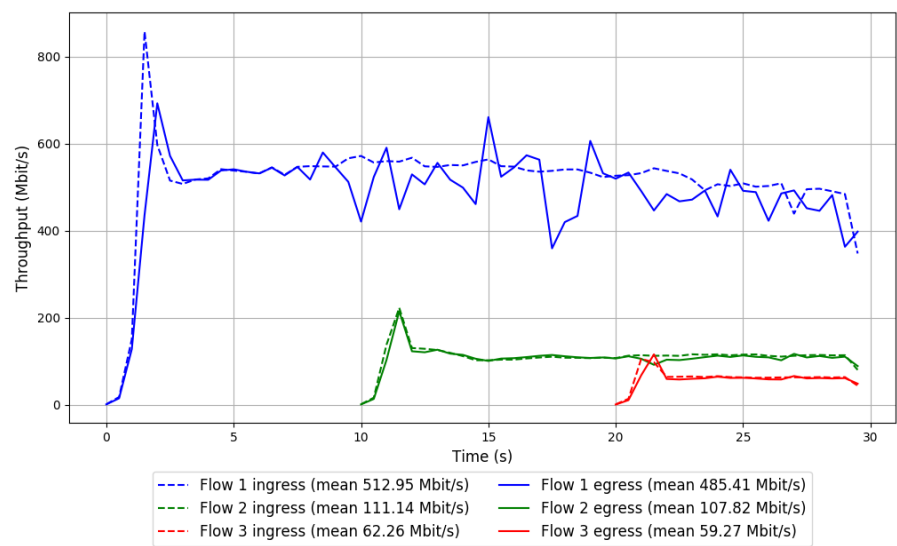
-- Flow 3:

Average throughput: 59.27 Mbit/s

95th percentile per-packet one-way delay: 167.162 ms

Loss rate: 4.80%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-03-07 07:09:53

End at: 2018-03-07 07:10:23

Below is generated by plot.py at 2018-03-07 11:43:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 572.34 Mbit/s

95th percentile per-packet one-way delay: 258.578 ms

Loss rate: 3.48%

-- Flow 1:

Average throughput: 469.54 Mbit/s

95th percentile per-packet one-way delay: 262.226 ms

Loss rate: 3.79%

-- Flow 2:

Average throughput: 124.38 Mbit/s

95th percentile per-packet one-way delay: 164.654 ms

Loss rate: 1.77%

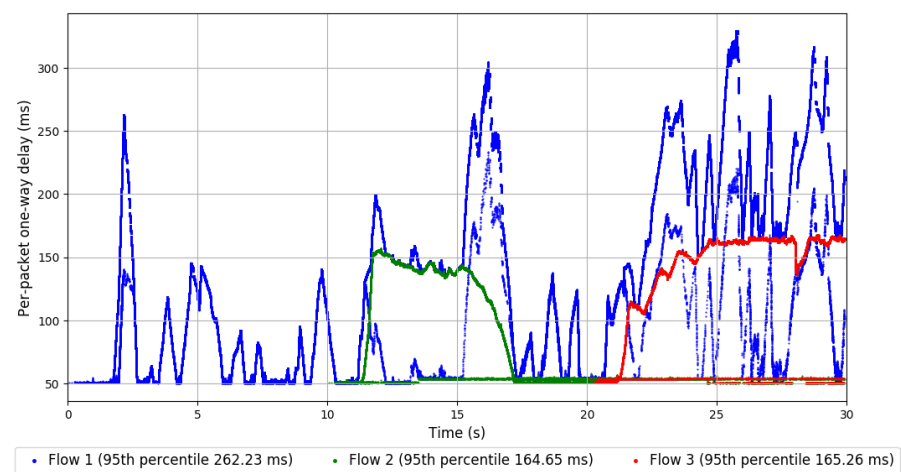
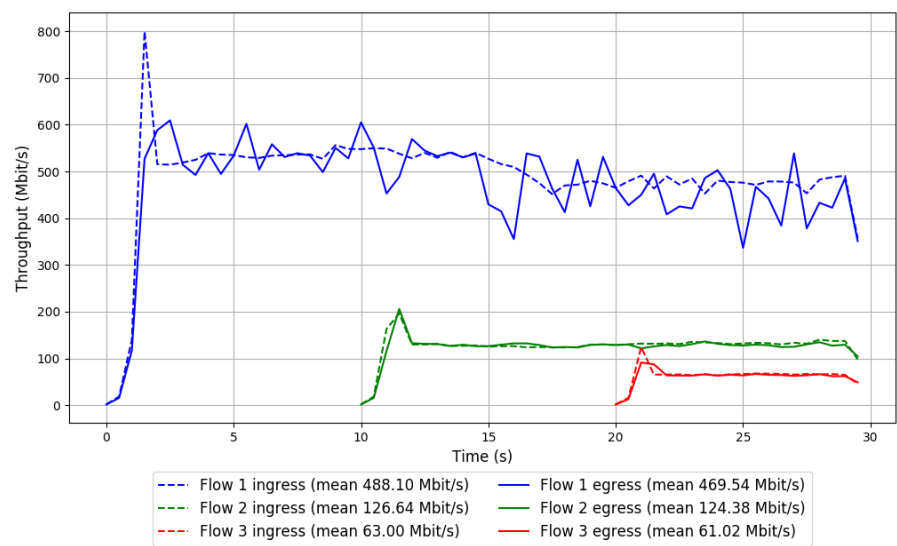
-- Flow 3:

Average throughput: 61.02 Mbit/s

95th percentile per-packet one-way delay: 165.264 ms

Loss rate: 3.15%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-03-07 07:27:19

End at: 2018-03-07 07:27:49

Below is generated by plot.py at 2018-03-07 11:44:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 573.62 Mbit/s

95th percentile per-packet one-way delay: 195.076 ms

Loss rate: 2.68%

-- Flow 1:

Average throughput: 470.62 Mbit/s

95th percentile per-packet one-way delay: 201.222 ms

Loss rate: 2.64%

-- Flow 2:

Average throughput: 124.88 Mbit/s

95th percentile per-packet one-way delay: 168.814 ms

Loss rate: 2.63%

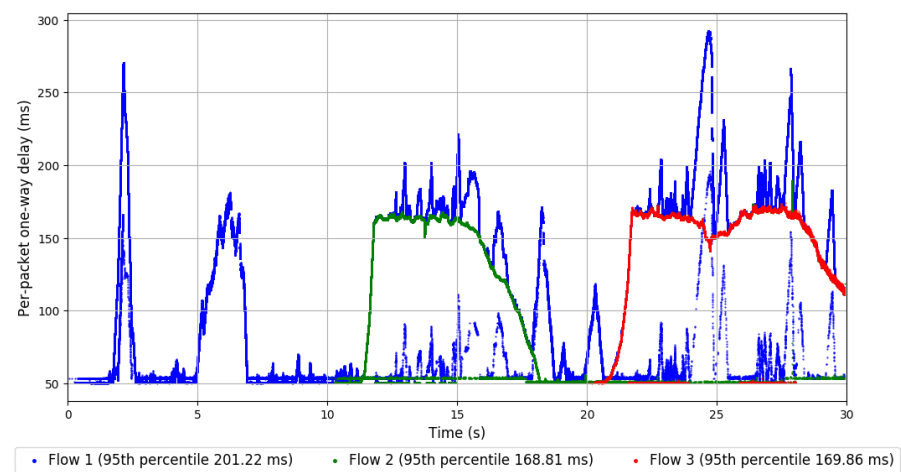
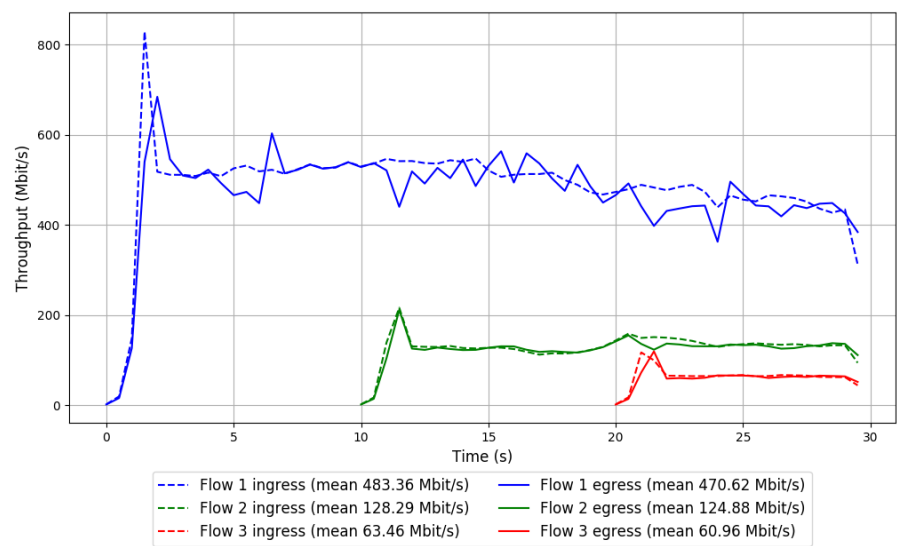
-- Flow 3:

Average throughput: 60.96 Mbit/s

95th percentile per-packet one-way delay: 169.858 ms

Loss rate: 3.91%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-03-07 07:44:47

End at: 2018-03-07 07:45:17

Below is generated by plot.py at 2018-03-07 11:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 572.64 Mbit/s

95th percentile per-packet one-way delay: 212.820 ms

Loss rate: 2.15%

-- Flow 1:

Average throughput: 468.68 Mbit/s

95th percentile per-packet one-way delay: 228.166 ms

Loss rate: 2.49%

-- Flow 2:

Average throughput: 125.35 Mbit/s

95th percentile per-packet one-way delay: 167.040 ms

Loss rate: 0.50%

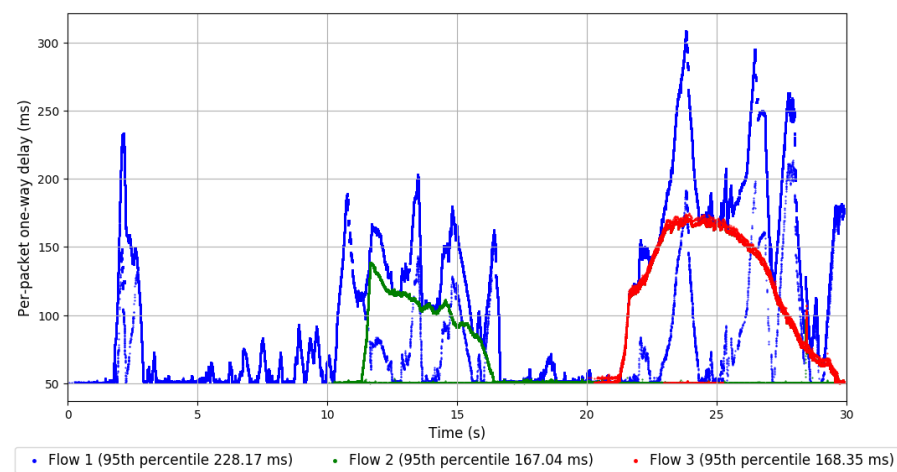
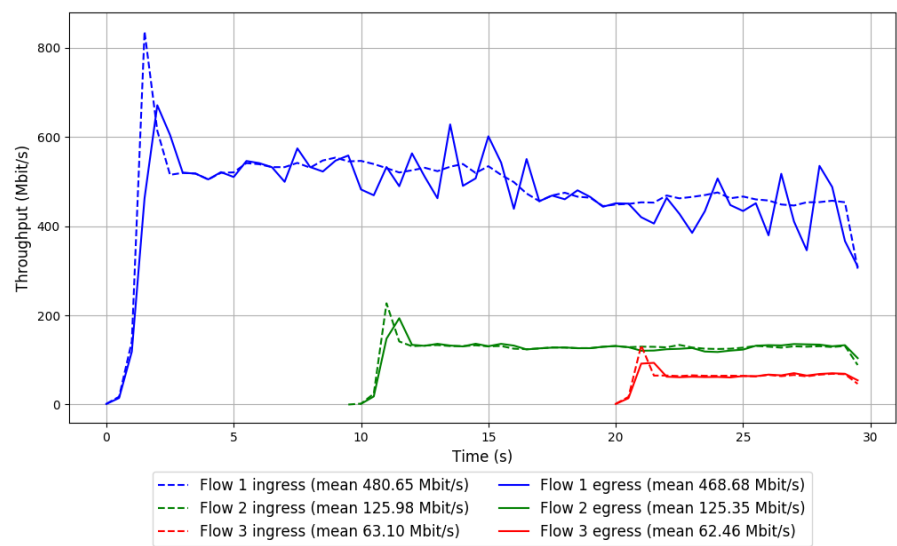
-- Flow 3:

Average throughput: 62.46 Mbit/s

95th percentile per-packet one-way delay: 168.350 ms

Loss rate: 1.04%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-03-07 08:02:22

End at: 2018-03-07 08:02:52

Below is generated by plot.py at 2018-03-07 11:45:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 565.14 Mbit/s

95th percentile per-packet one-way delay: 169.199 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 494.19 Mbit/s

95th percentile per-packet one-way delay: 173.881 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 74.81 Mbit/s

95th percentile per-packet one-way delay: 152.452 ms

Loss rate: 0.02%

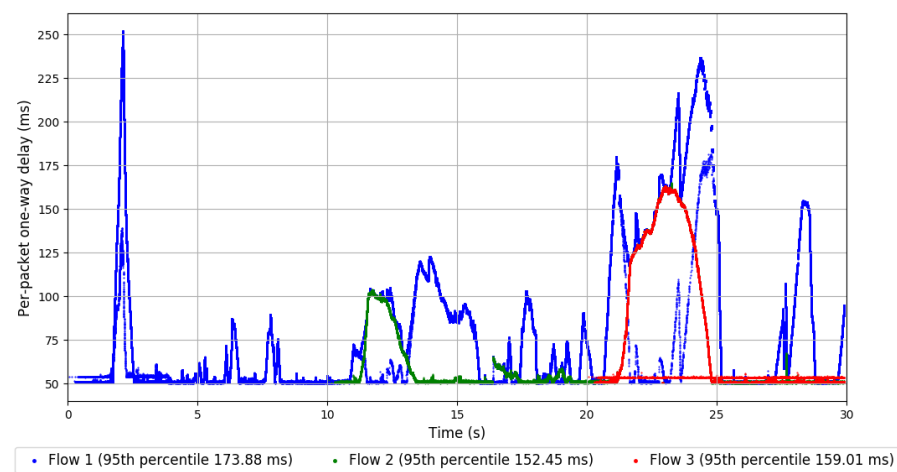
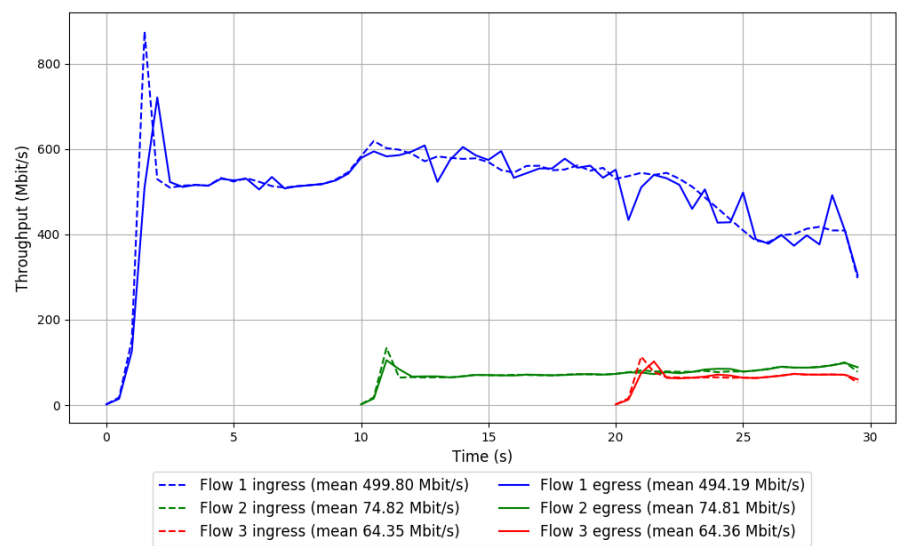
-- Flow 3:

Average throughput: 64.36 Mbit/s

95th percentile per-packet one-way delay: 159.013 ms

Loss rate: 0.02%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-03-07 08:20:05

End at: 2018-03-07 08:20:35

Below is generated by plot.py at 2018-03-07 11:47:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 573.81 Mbit/s

95th percentile per-packet one-way delay: 149.049 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 454.12 Mbit/s

95th percentile per-packet one-way delay: 158.647 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 164.06 Mbit/s

95th percentile per-packet one-way delay: 122.270 ms

Loss rate: 0.03%

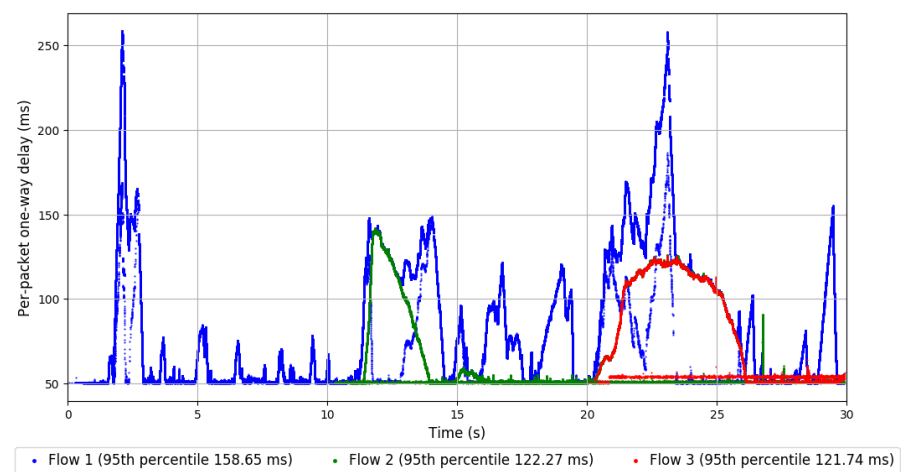
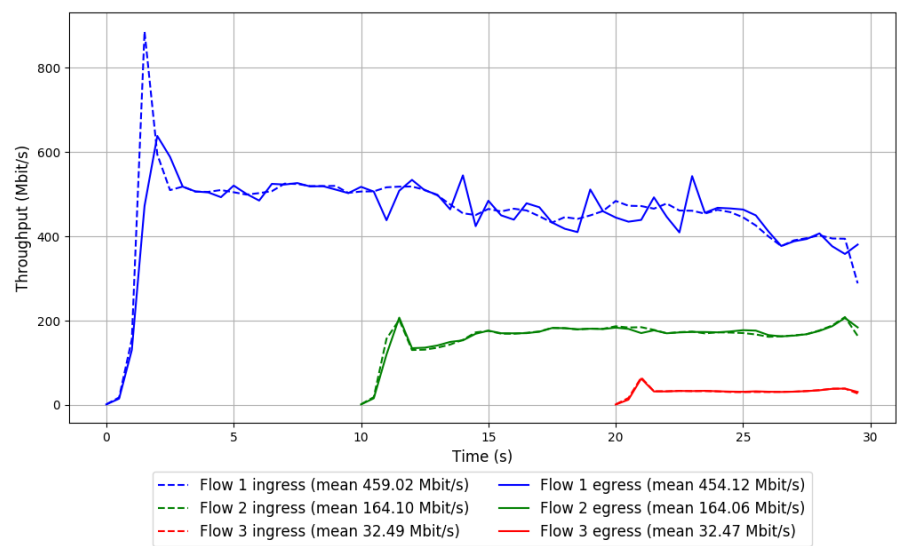
-- Flow 3:

Average throughput: 32.47 Mbit/s

95th percentile per-packet one-way delay: 121.741 ms

Loss rate: 0.05%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-03-07 08:37:14

End at: 2018-03-07 08:37:44

Below is generated by plot.py at 2018-03-07 11:52:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 563.32 Mbit/s

95th percentile per-packet one-way delay: 216.649 ms

Loss rate: 2.14%

-- Flow 1:

Average throughput: 458.83 Mbit/s

95th percentile per-packet one-way delay: 227.165 ms

Loss rate: 2.59%

-- Flow 2:

Average throughput: 122.45 Mbit/s

95th percentile per-packet one-way delay: 161.831 ms

Loss rate: 0.19%

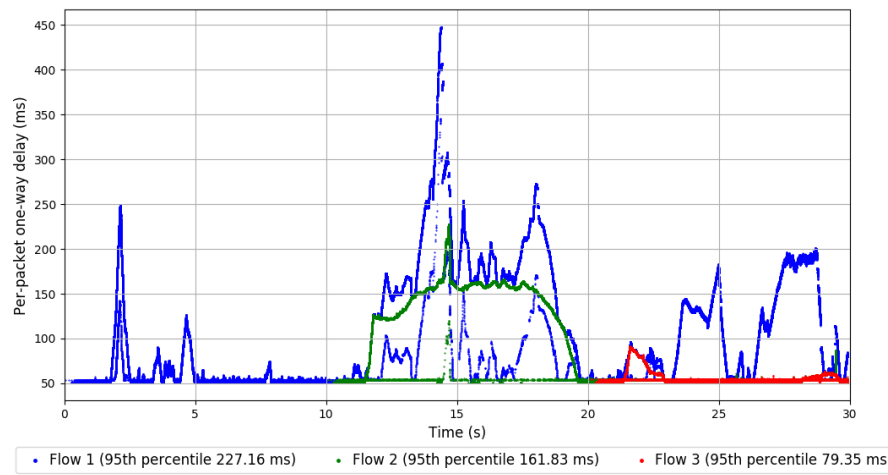
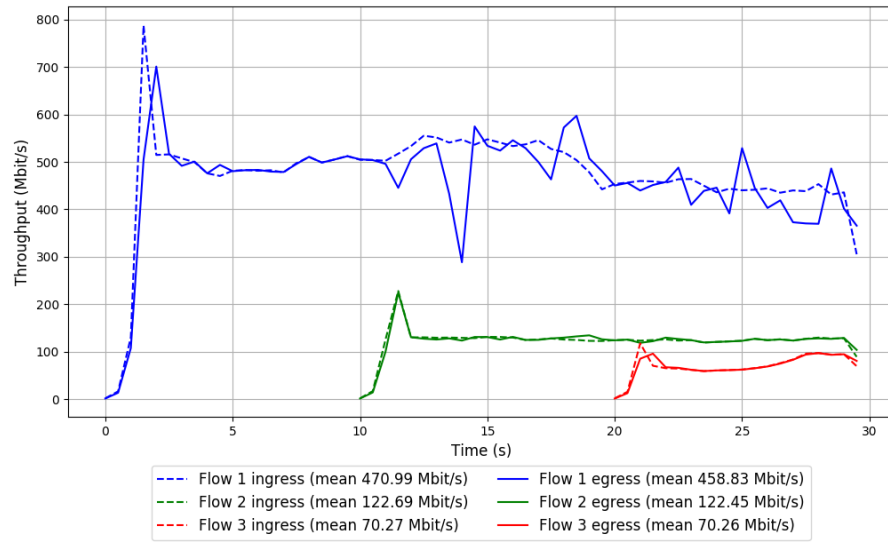
-- Flow 3:

Average throughput: 70.26 Mbit/s

95th percentile per-packet one-way delay: 79.346 ms

Loss rate: 0.01%

Run 9: Report of PCC — Data Link

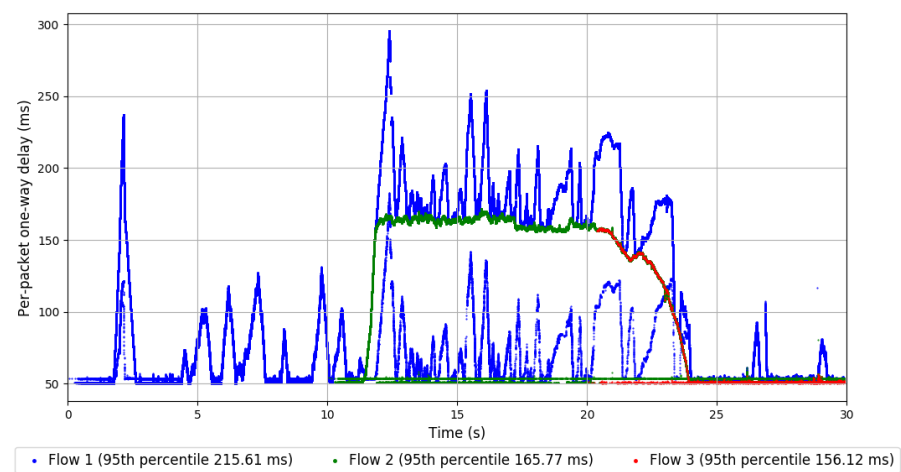
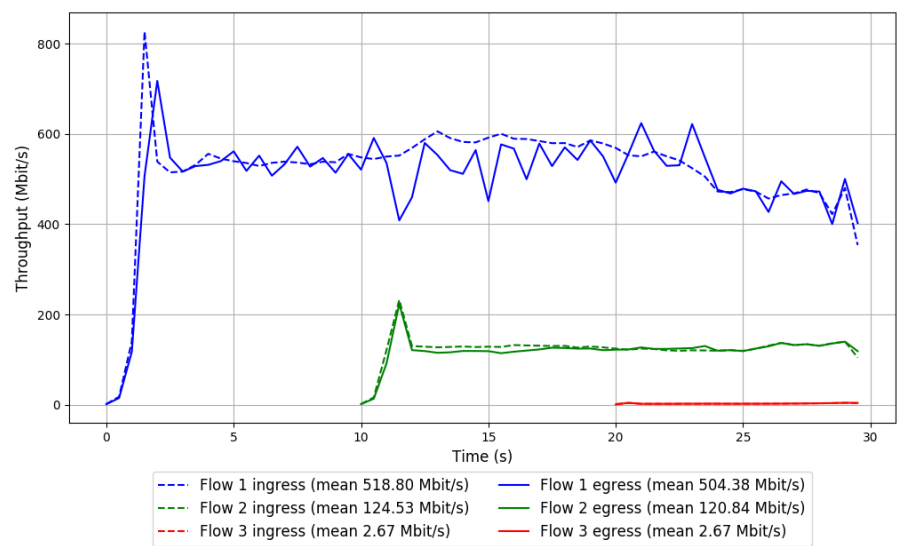


```
Run 10: Statistics of PCC

Start at: 2018-03-07 08:54:29
End at: 2018-03-07 08:54:59

# Below is generated by plot.py at 2018-03-07 11:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 585.59 Mbit/s
95th percentile per-packet one-way delay: 213.257 ms
Loss rate: 2.81%
-- Flow 1:
Average throughput: 504.38 Mbit/s
95th percentile per-packet one-way delay: 215.606 ms
Loss rate: 2.79%
-- Flow 2:
Average throughput: 120.84 Mbit/s
95th percentile per-packet one-way delay: 165.767 ms
Loss rate: 2.98%
-- Flow 3:
Average throughput: 2.67 Mbit/s
95th percentile per-packet one-way delay: 156.115 ms
Loss rate: 0.05%
```

Run 10: Report of PCC — Data Link

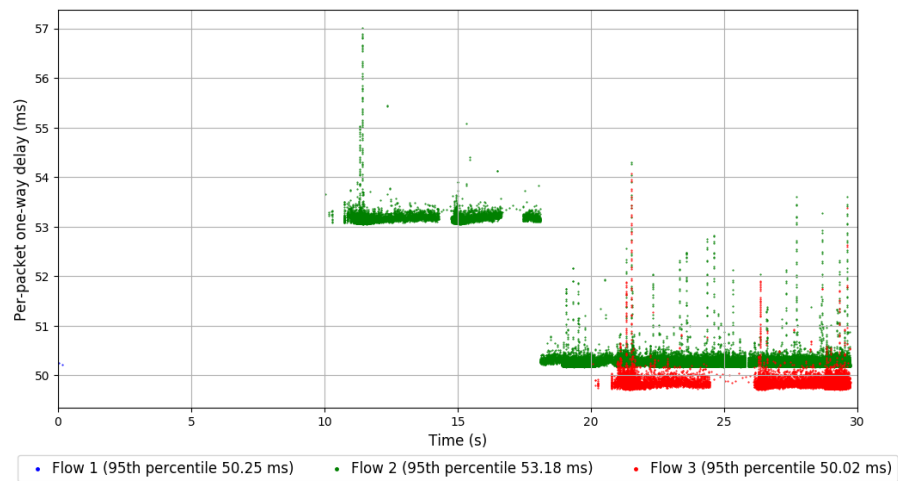
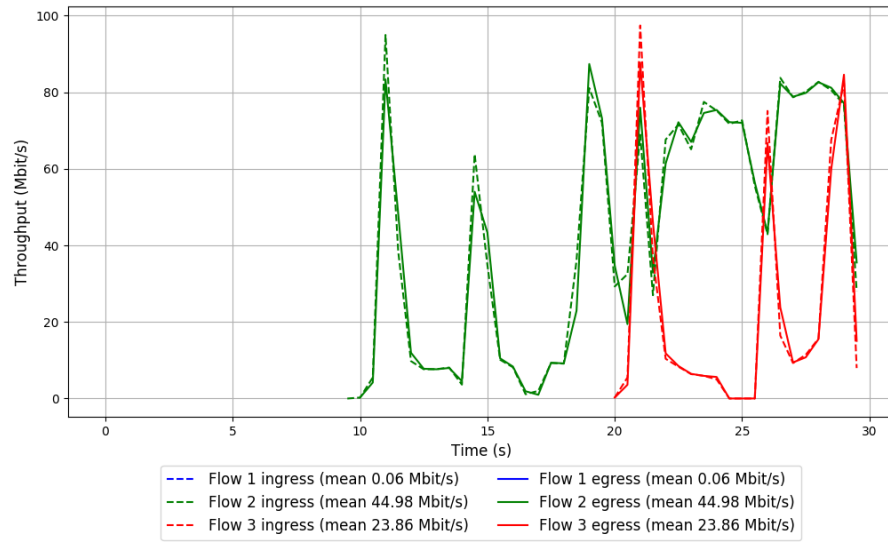


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-03-07 06:15:18
End at: 2018-03-07 06:15:48

# Below is generated by plot.py at 2018-03-07 11:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.63 Mbit/s
95th percentile per-packet one-way delay: 53.164 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 50.247 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.98 Mbit/s
95th percentile per-packet one-way delay: 53.178 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.86 Mbit/s
95th percentile per-packet one-way delay: 50.023 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-03-07 06:32:46

End at: 2018-03-07 06:33:16

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.43 Mbit/s

95th percentile per-packet one-way delay: 53.806 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 45.62 Mbit/s

95th percentile per-packet one-way delay: 53.840 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.75 Mbit/s

95th percentile per-packet one-way delay: 53.377 ms

Loss rate: 0.02%

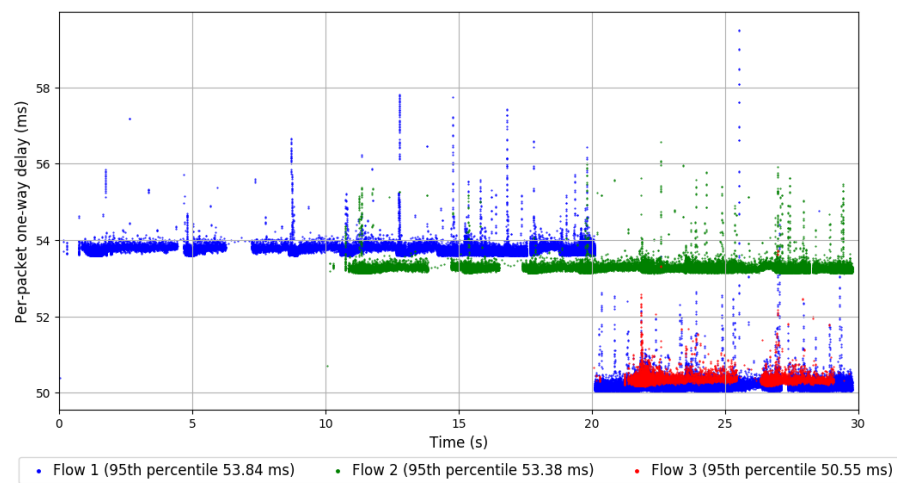
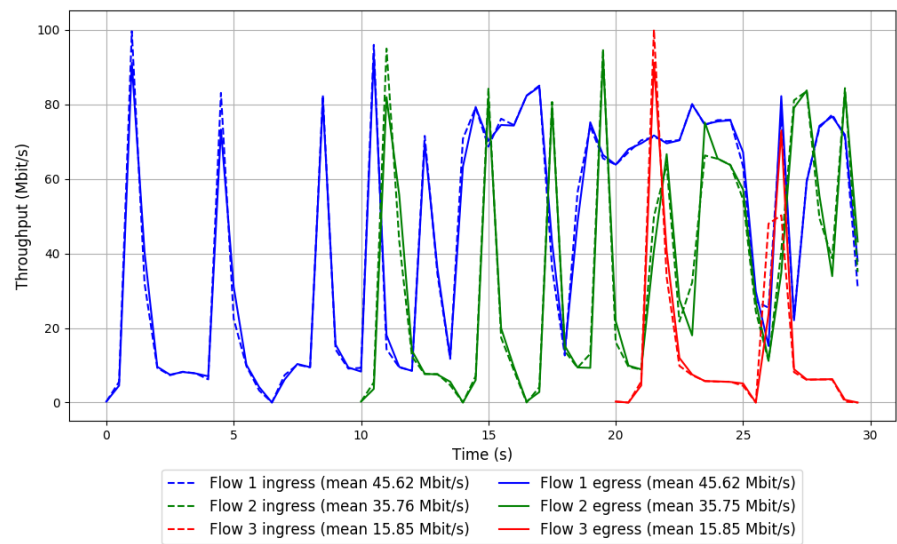
-- Flow 3:

Average throughput: 15.85 Mbit/s

95th percentile per-packet one-way delay: 50.552 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-03-07 06:50:05

End at: 2018-03-07 06:50:35

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.91 Mbit/s

95th percentile per-packet one-way delay: 53.483 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 53.03 Mbit/s

95th percentile per-packet one-way delay: 53.353 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 41.64 Mbit/s

95th percentile per-packet one-way delay: 50.743 ms

Loss rate: 0.00%

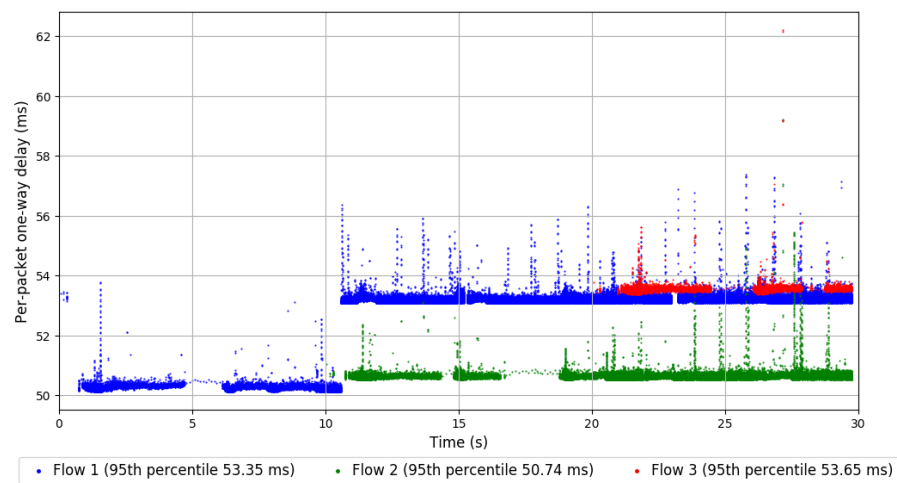
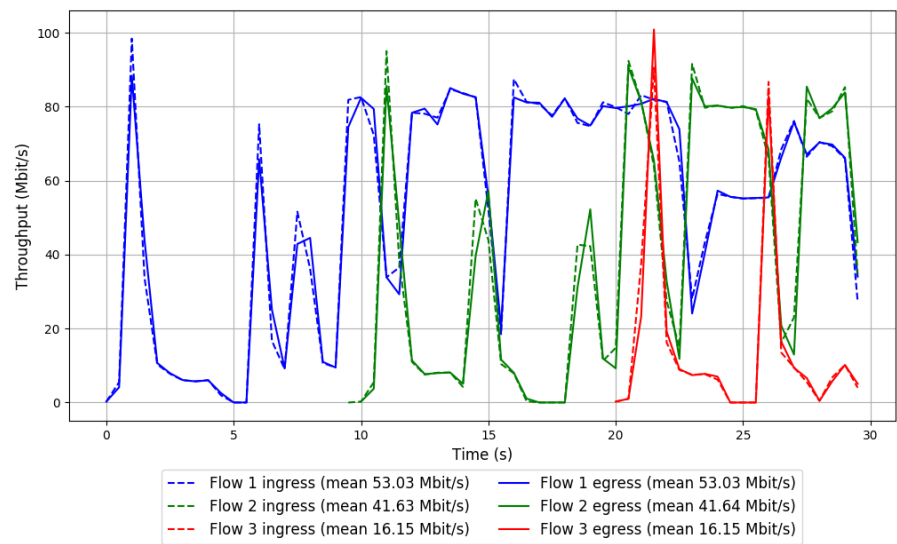
-- Flow 3:

Average throughput: 16.15 Mbit/s

95th percentile per-packet one-way delay: 53.653 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-03-07 07:07:32

End at: 2018-03-07 07:08:02

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.74 Mbit/s

95th percentile per-packet one-way delay: 53.597 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.78 Mbit/s

95th percentile per-packet one-way delay: 53.573 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.09 Mbit/s

95th percentile per-packet one-way delay: 50.337 ms

Loss rate: 0.00%

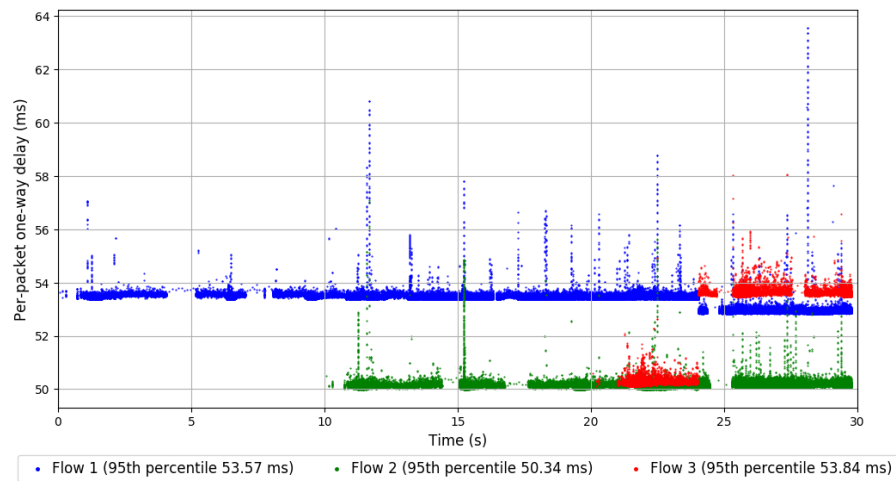
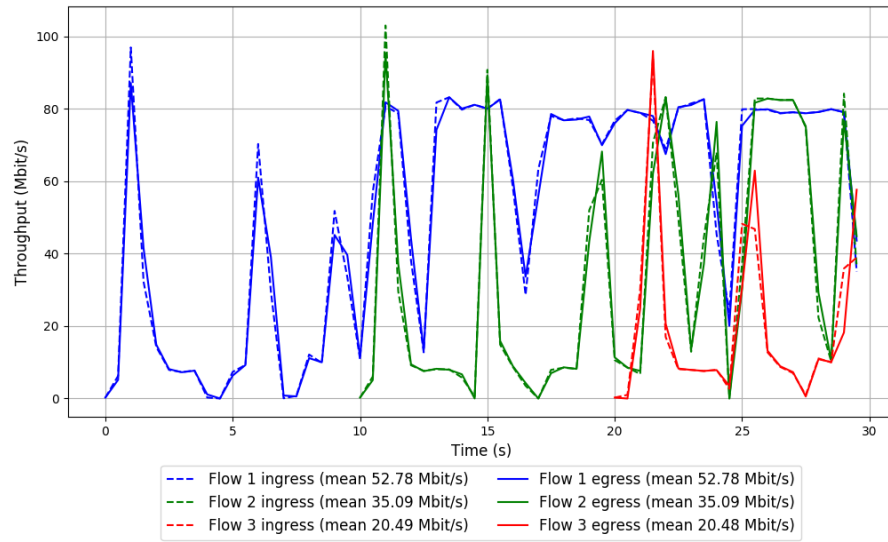
-- Flow 3:

Average throughput: 20.48 Mbit/s

95th percentile per-packet one-way delay: 53.842 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-03-07 07:24:58

End at: 2018-03-07 07:25:28

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.15 Mbit/s

95th percentile per-packet one-way delay: 53.359 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.22 Mbit/s

95th percentile per-packet one-way delay: 53.332 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.02 Mbit/s

95th percentile per-packet one-way delay: 53.356 ms

Loss rate: 0.00%

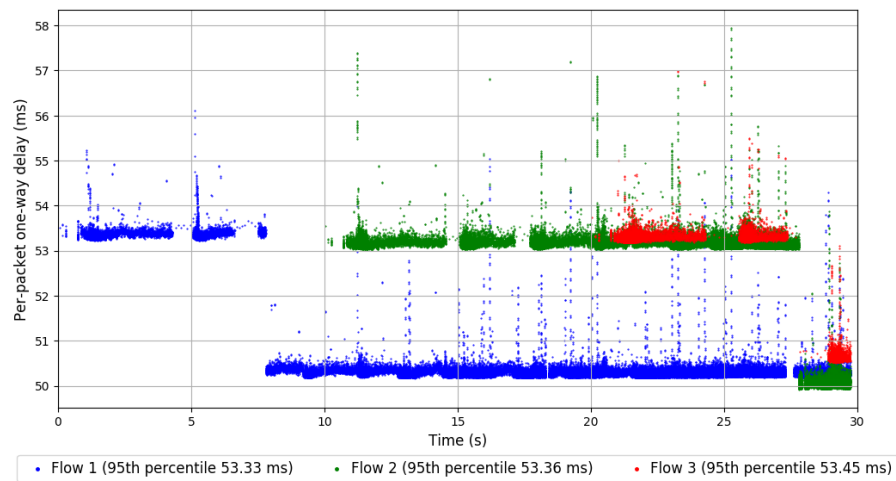
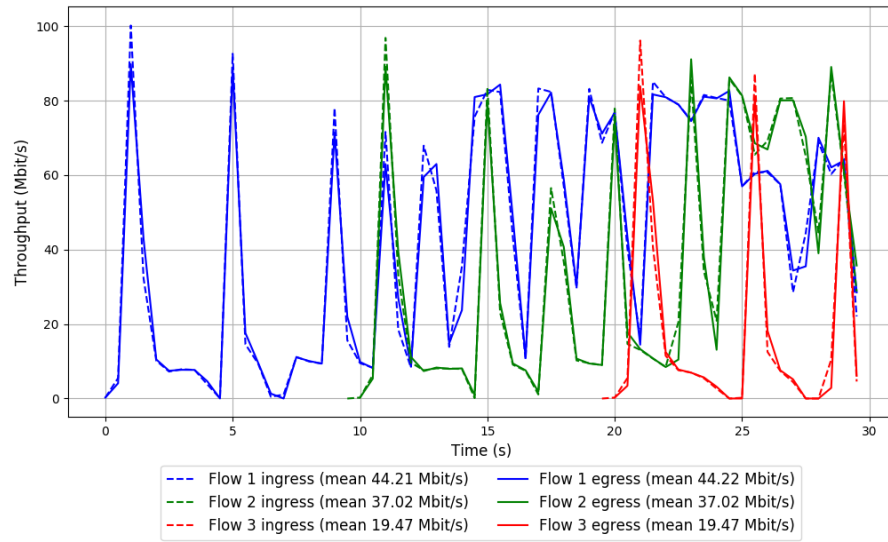
-- Flow 3:

Average throughput: 19.47 Mbit/s

95th percentile per-packet one-way delay: 53.450 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-03-07 07:42:30

End at: 2018-03-07 07:43:00

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.64 Mbit/s

95th percentile per-packet one-way delay: 53.737 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 45.15 Mbit/s

95th percentile per-packet one-way delay: 53.764 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.21 Mbit/s

95th percentile per-packet one-way delay: 53.591 ms

Loss rate: 0.00%

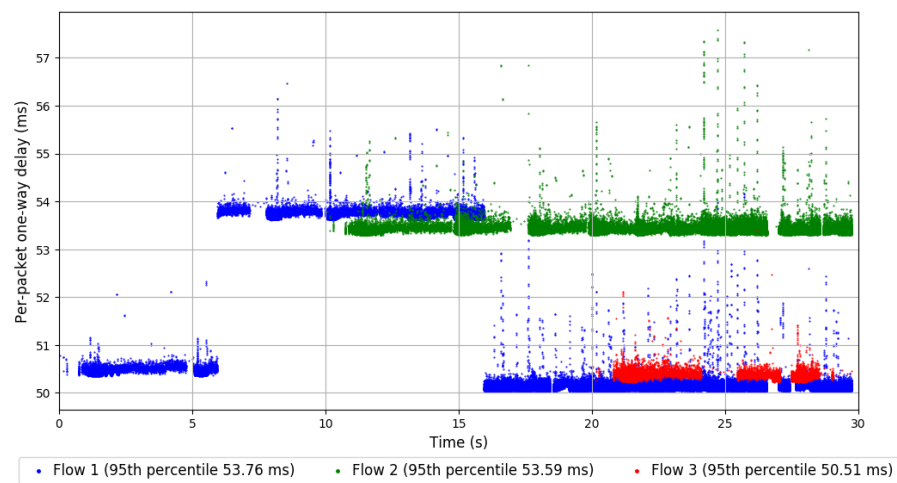
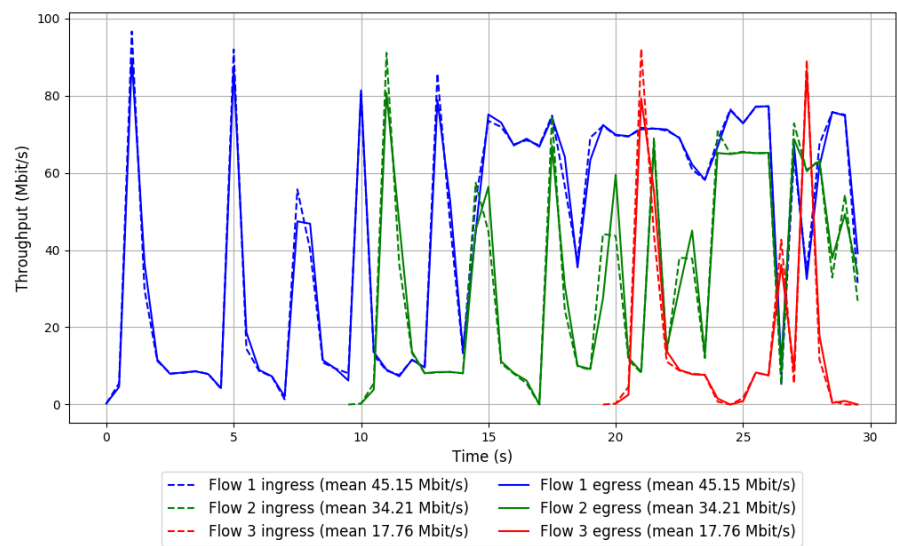
-- Flow 3:

Average throughput: 17.76 Mbit/s

95th percentile per-packet one-way delay: 50.506 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-03-07 07:59:55

End at: 2018-03-07 08:00:25

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.16 Mbit/s

95th percentile per-packet one-way delay: 50.811 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.47 Mbit/s

95th percentile per-packet one-way delay: 50.792 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 27.47 Mbit/s

95th percentile per-packet one-way delay: 50.800 ms

Loss rate: 0.00%

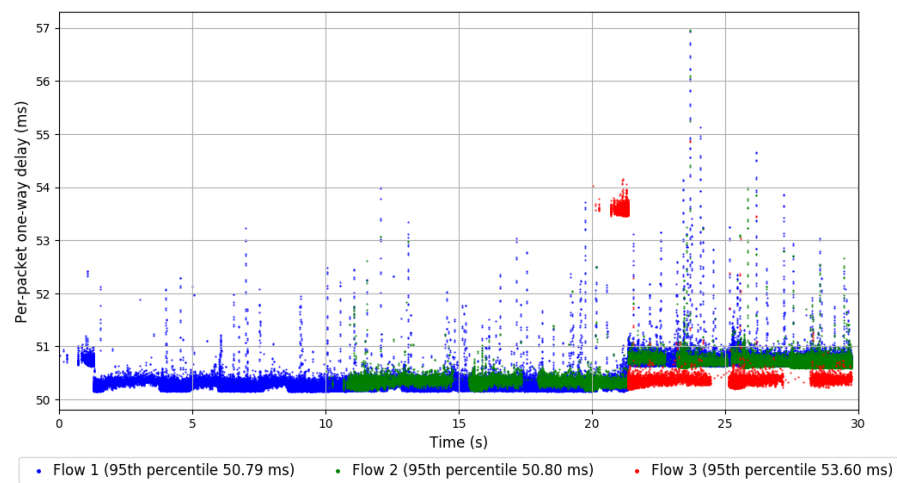
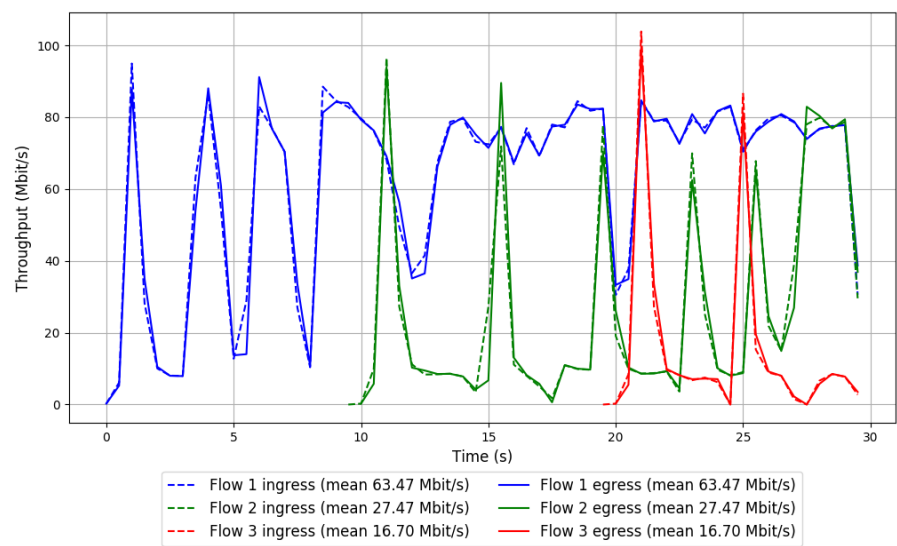
-- Flow 3:

Average throughput: 16.70 Mbit/s

95th percentile per-packet one-way delay: 53.599 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-03-07 08:17:34

End at: 2018-03-07 08:18:04

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.82 Mbit/s

95th percentile per-packet one-way delay: 53.138 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.88 Mbit/s

95th percentile per-packet one-way delay: 53.116 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 41.92 Mbit/s

95th percentile per-packet one-way delay: 53.187 ms

Loss rate: 0.00%

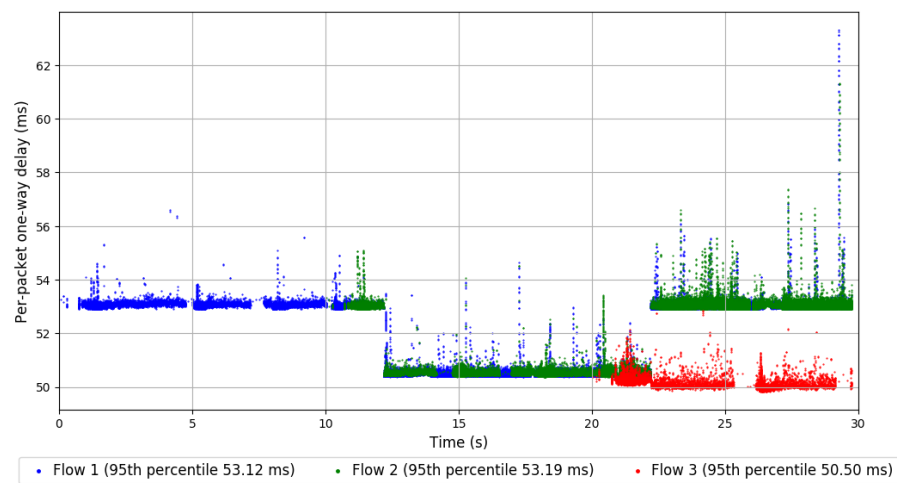
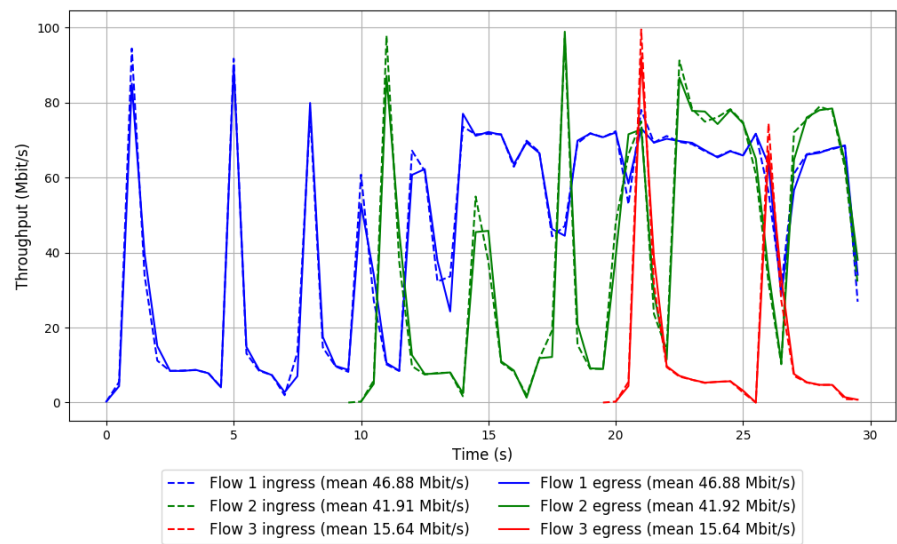
-- Flow 3:

Average throughput: 15.64 Mbit/s

95th percentile per-packet one-way delay: 50.501 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-03-07 08:35:02

End at: 2018-03-07 08:35:32

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.65 Mbit/s

95th percentile per-packet one-way delay: 53.814 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.27 Mbit/s

95th percentile per-packet one-way delay: 53.852 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.01 Mbit/s

95th percentile per-packet one-way delay: 53.286 ms

Loss rate: 0.00%

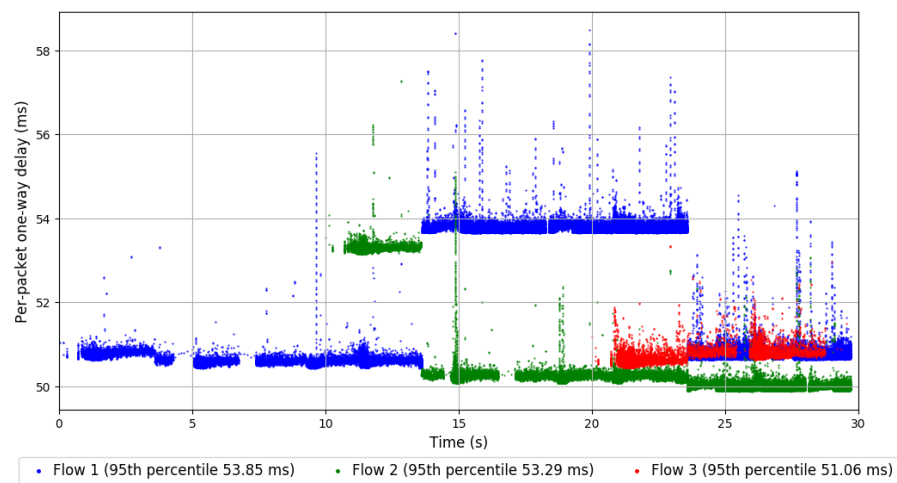
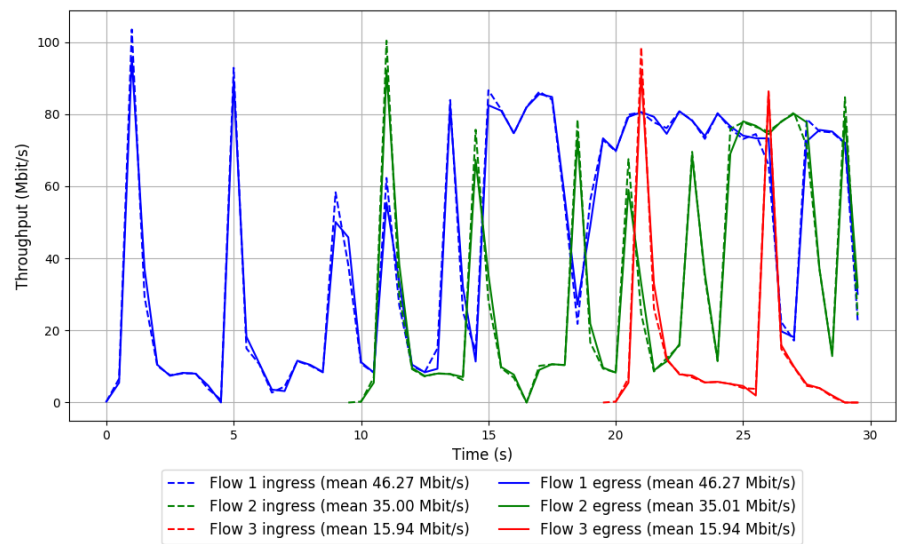
-- Flow 3:

Average throughput: 15.94 Mbit/s

95th percentile per-packet one-way delay: 51.056 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

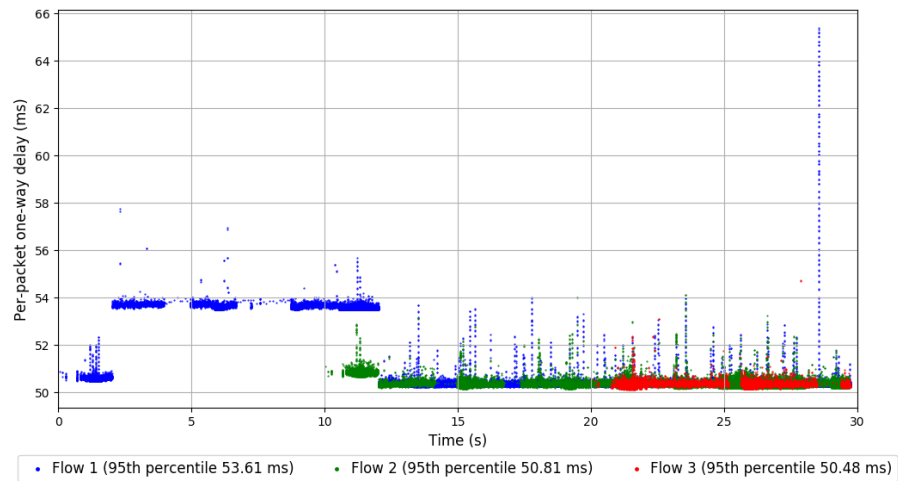
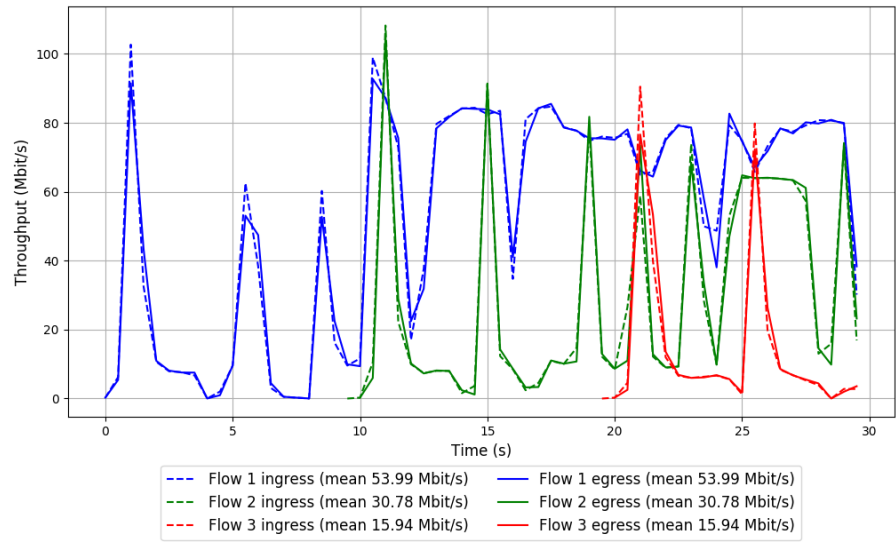


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-03-07 08:52:14
End at: 2018-03-07 08:52:44

# Below is generated by plot.py at 2018-03-07 11:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.59 Mbit/s
95th percentile per-packet one-way delay: 53.577 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.99 Mbit/s
95th percentile per-packet one-way delay: 53.610 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 30.78 Mbit/s
95th percentile per-packet one-way delay: 50.813 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.94 Mbit/s
95th percentile per-packet one-way delay: 50.485 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

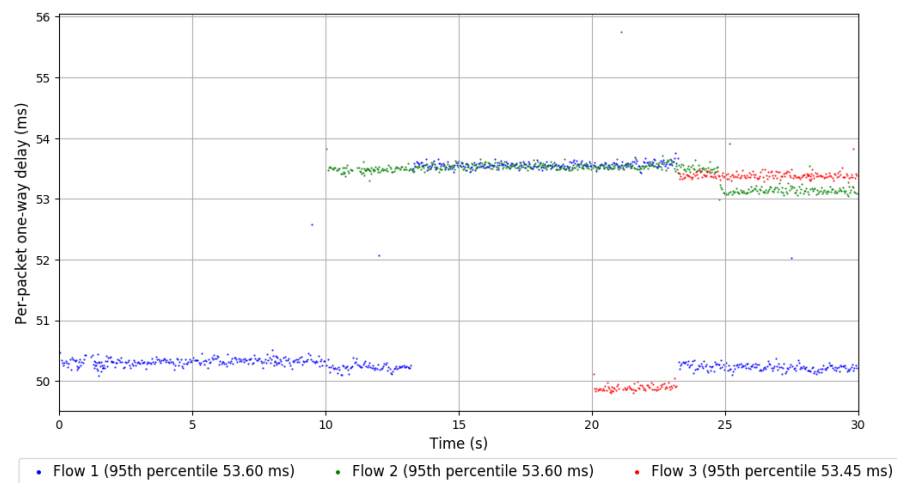
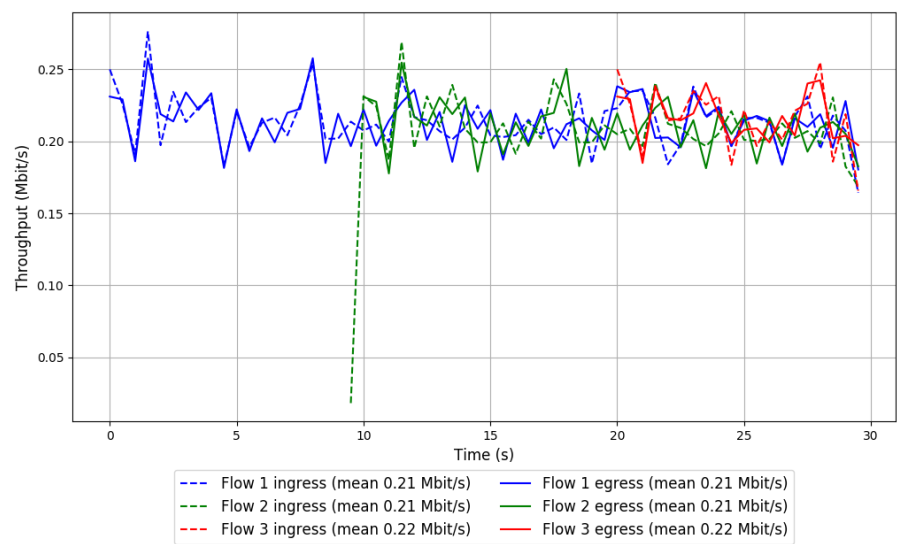


```
Run 1: Statistics of SCReAM

Start at: 2018-03-07 06:09:13
End at: 2018-03-07 06:09:43

# Below is generated by plot.py at 2018-03-07 11:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.597 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.603 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.603 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.455 ms
Loss rate: 0.00%
```

Run 1: Report of SCReAM — Data Link

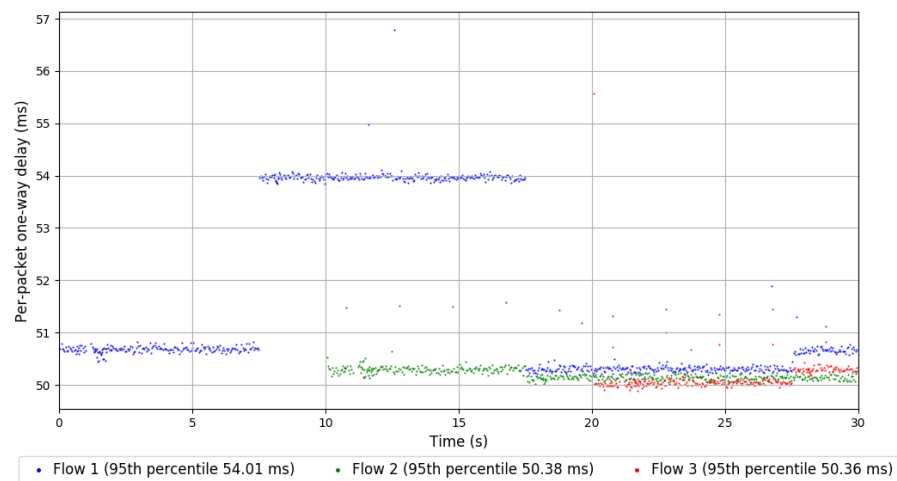
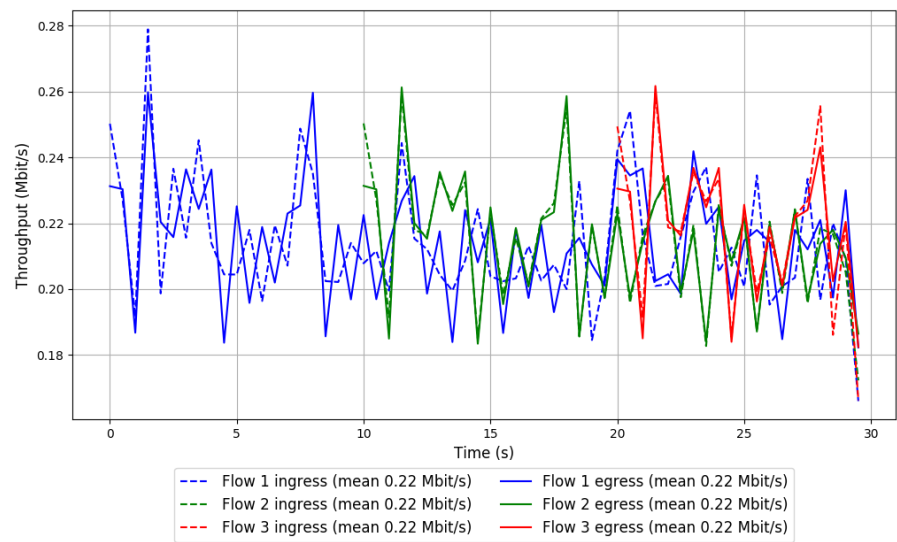


```
Run 2: Statistics of SReAM

Start at: 2018-03-07 06:26:39
End at: 2018-03-07 06:27:09

# Below is generated by plot.py at 2018-03-07 11:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.986 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.013 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.377 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.360 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

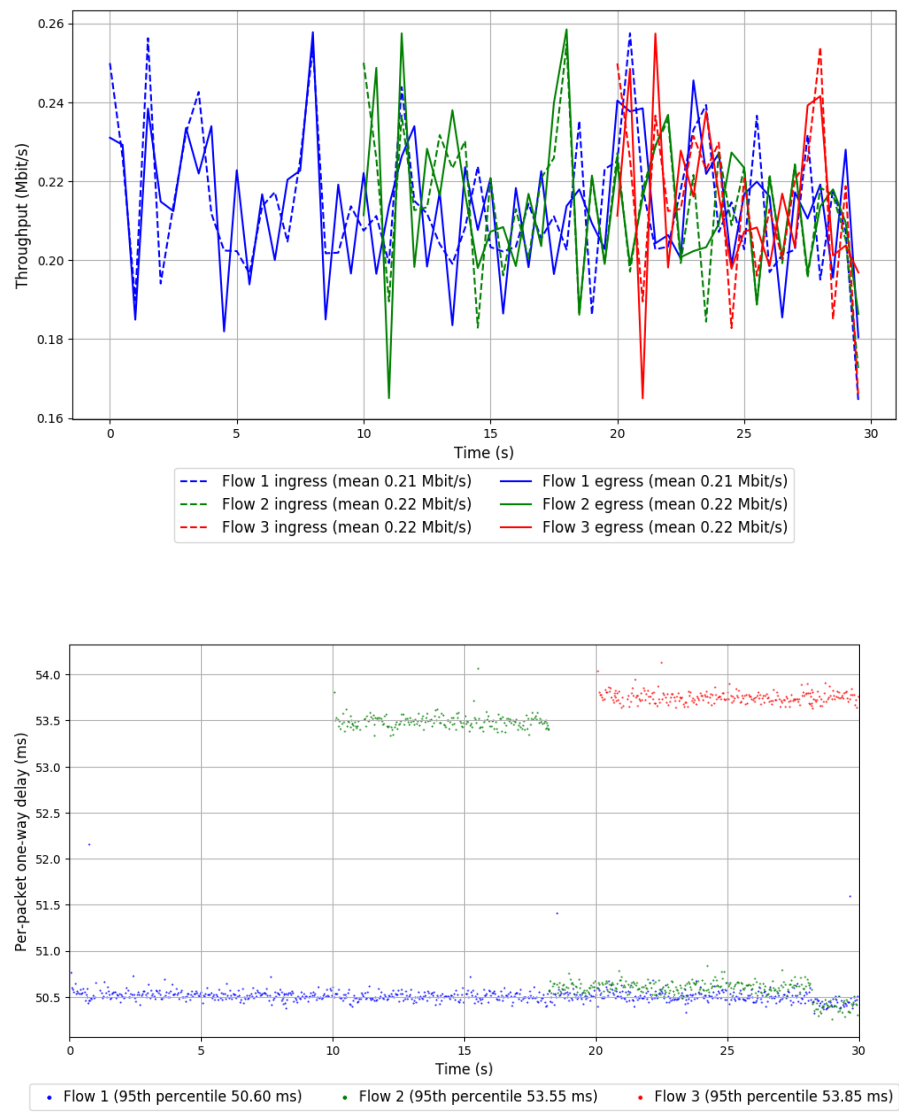


```
Run 3: Statistics of SCReAM

Start at: 2018-03-07 06:43:58
End at: 2018-03-07 06:44:28

# Below is generated by plot.py at 2018-03-07 11:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.779 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.596 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.552 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.851 ms
Loss rate: 0.00%
```


Run 3: Report of SReAM — Data Link

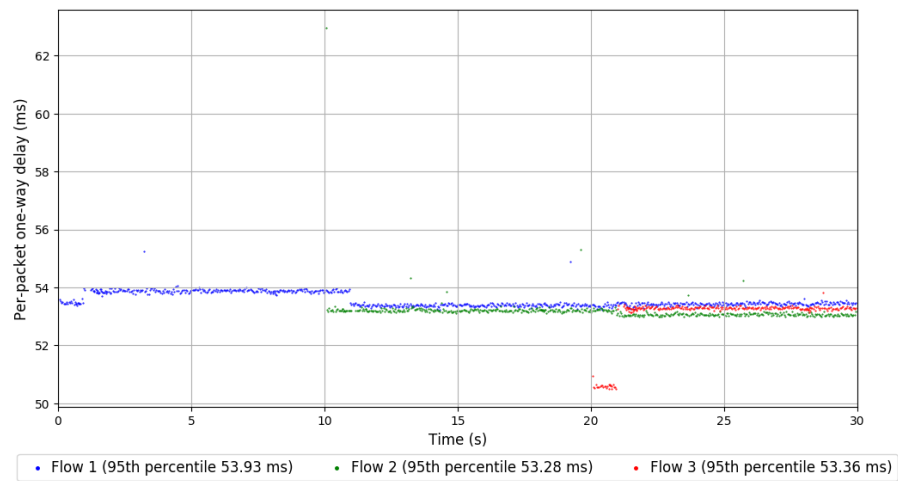
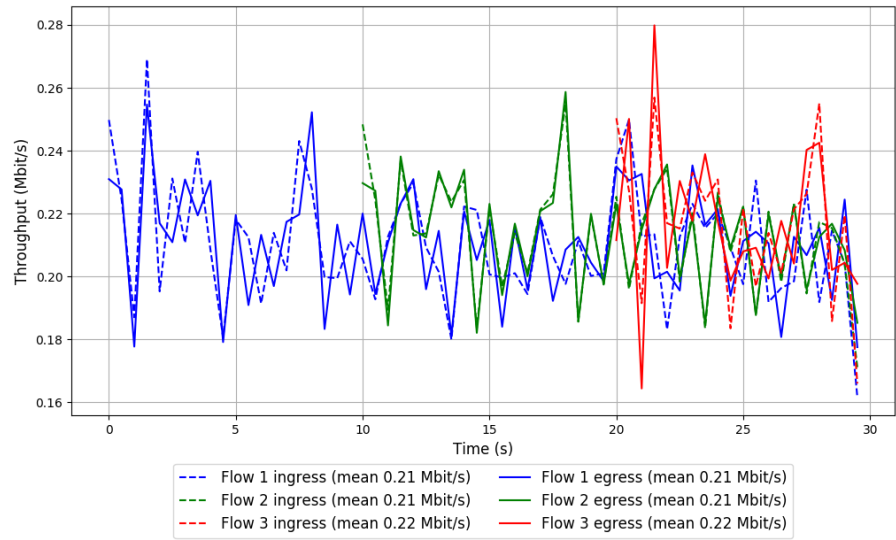


```
Run 4: Statistics of SCReAM

Start at: 2018-03-07 07:01:25
End at: 2018-03-07 07:01:55

# Below is generated by plot.py at 2018-03-07 11:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.908 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.928 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.284 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.356 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-03-07 07:18:52

End at: 2018-03-07 07:19:22

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.641 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.687 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.547 ms

Loss rate: 0.00%

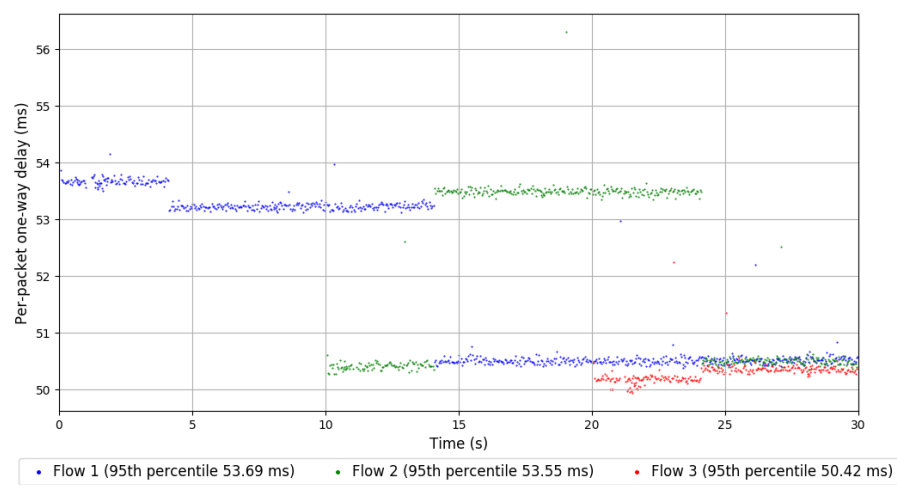
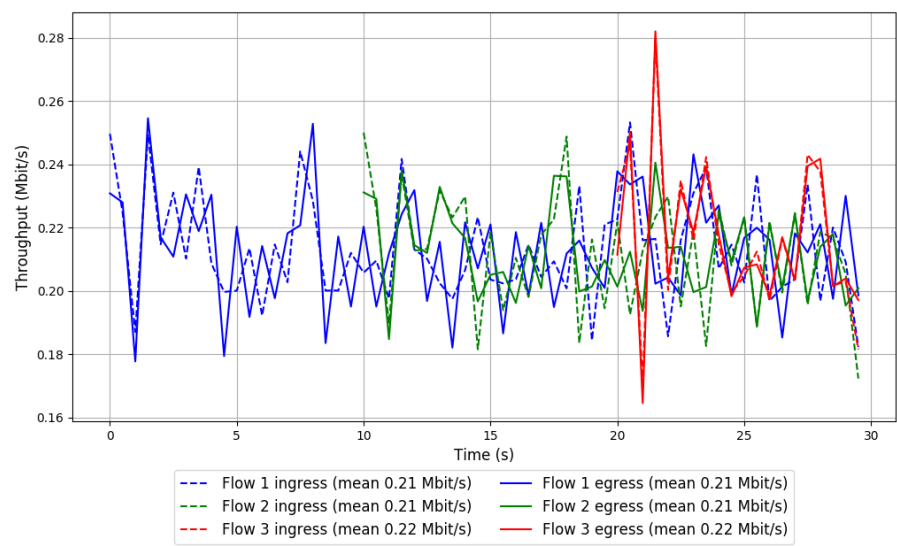
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.423 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-03-07 07:36:23

End at: 2018-03-07 07:36:53

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 54.064 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.877 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 54.099 ms

Loss rate: 0.00%

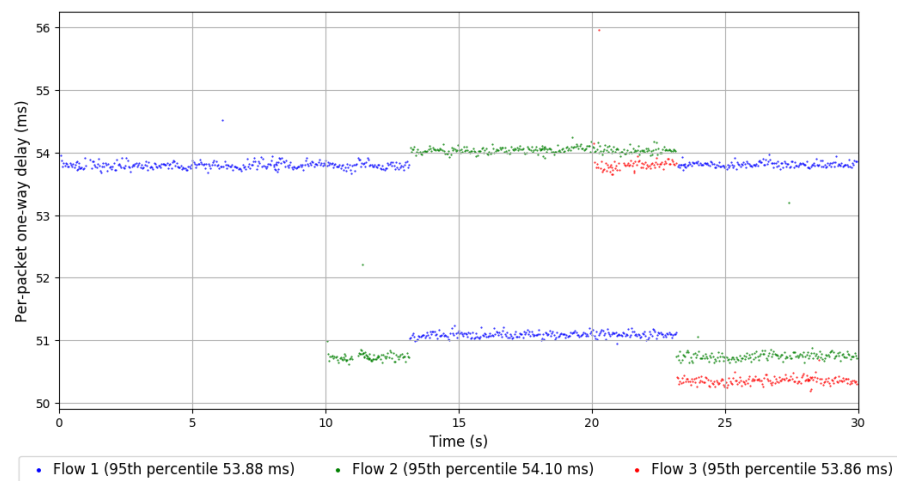
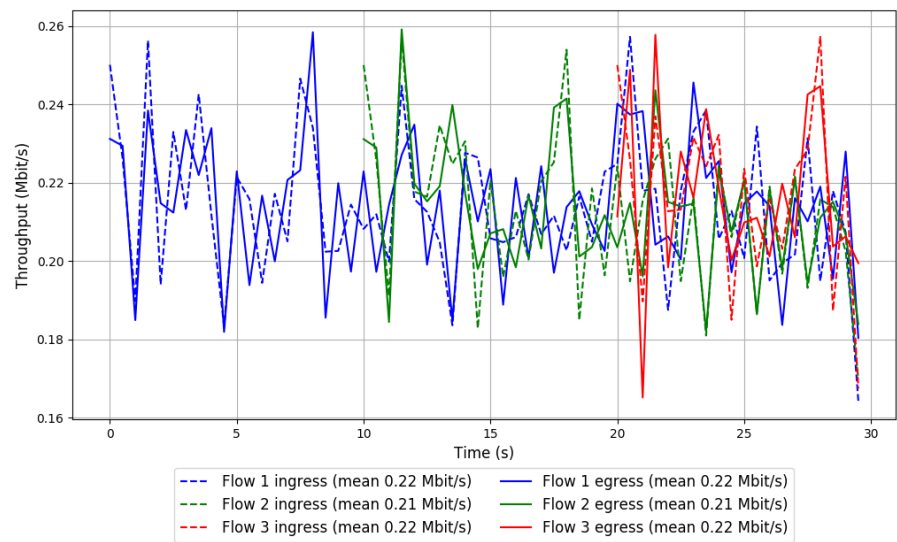
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.864 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

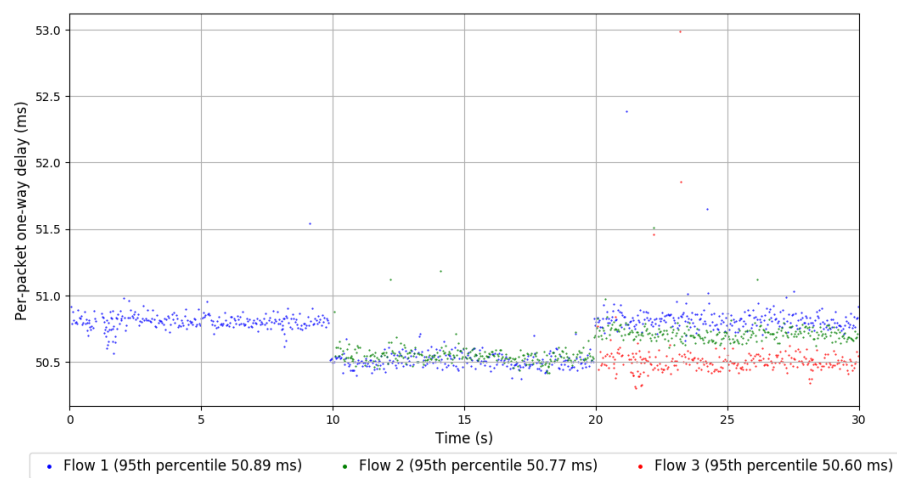
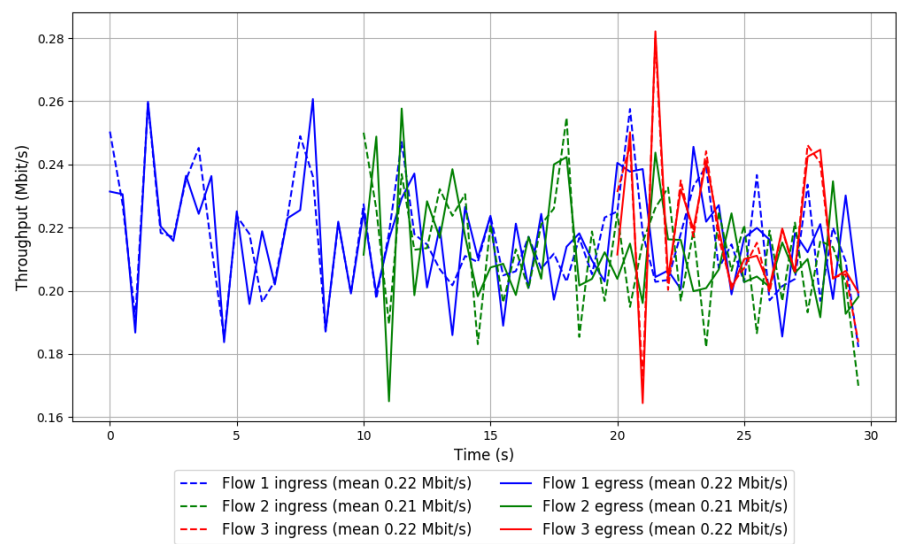


```
Run 7: Statistics of SReAM

Start at: 2018-03-07 07:53:46
End at: 2018-03-07 07:54:16

# Below is generated by plot.py at 2018-03-07 11:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.868 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.888 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.773 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.602 ms
Loss rate: 0.00%
```


Run 7: Report of SReAM — Data Link

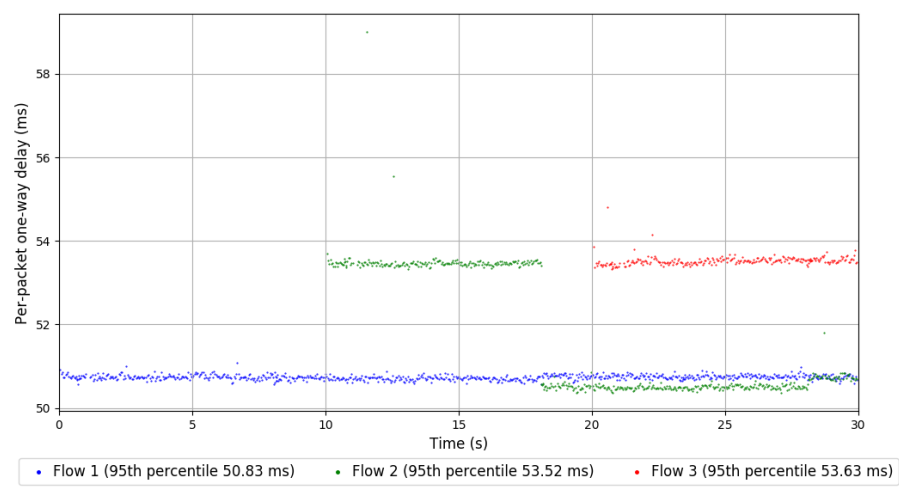
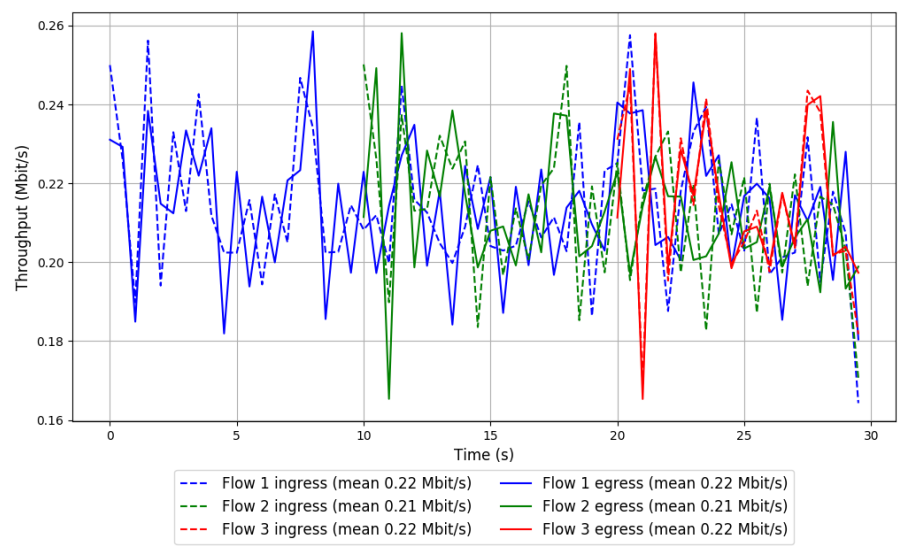


```
Run 8: Statistics of SCReAM

Start at: 2018-03-07 08:11:28
End at: 2018-03-07 08:11:58

# Below is generated by plot.py at 2018-03-07 11:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.554 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.834 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.515 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.633 ms
Loss rate: 0.00%
```

Run 8: Report of SCRaM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-03-07 08:28:55

End at: 2018-03-07 08:29:25

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.332 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.352 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 50.445 ms

Loss rate: 0.00%

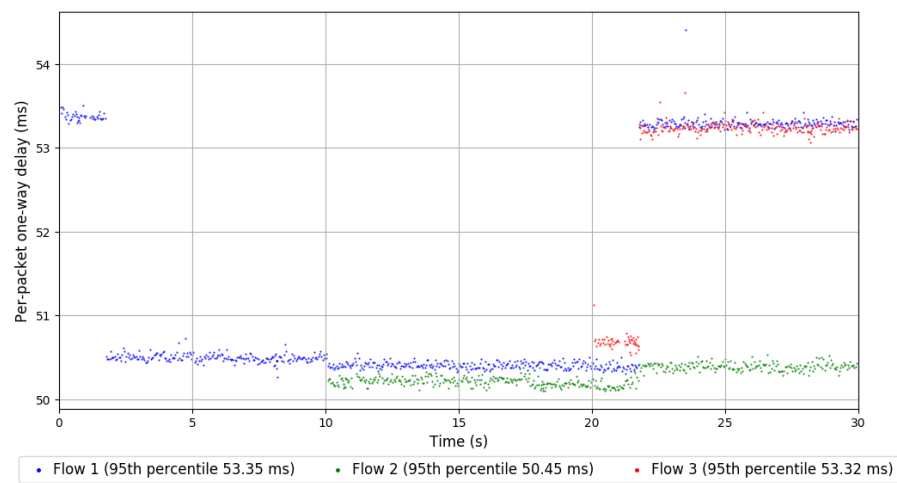
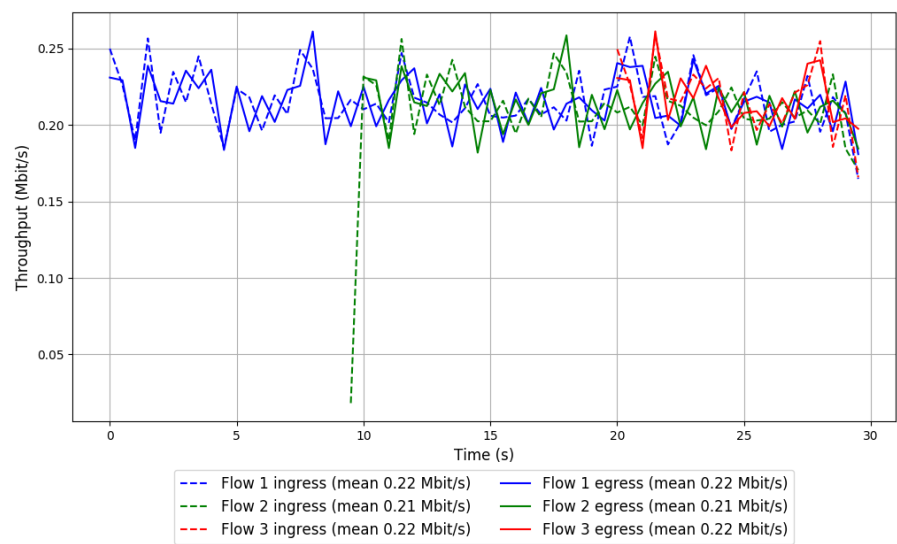
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.317 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

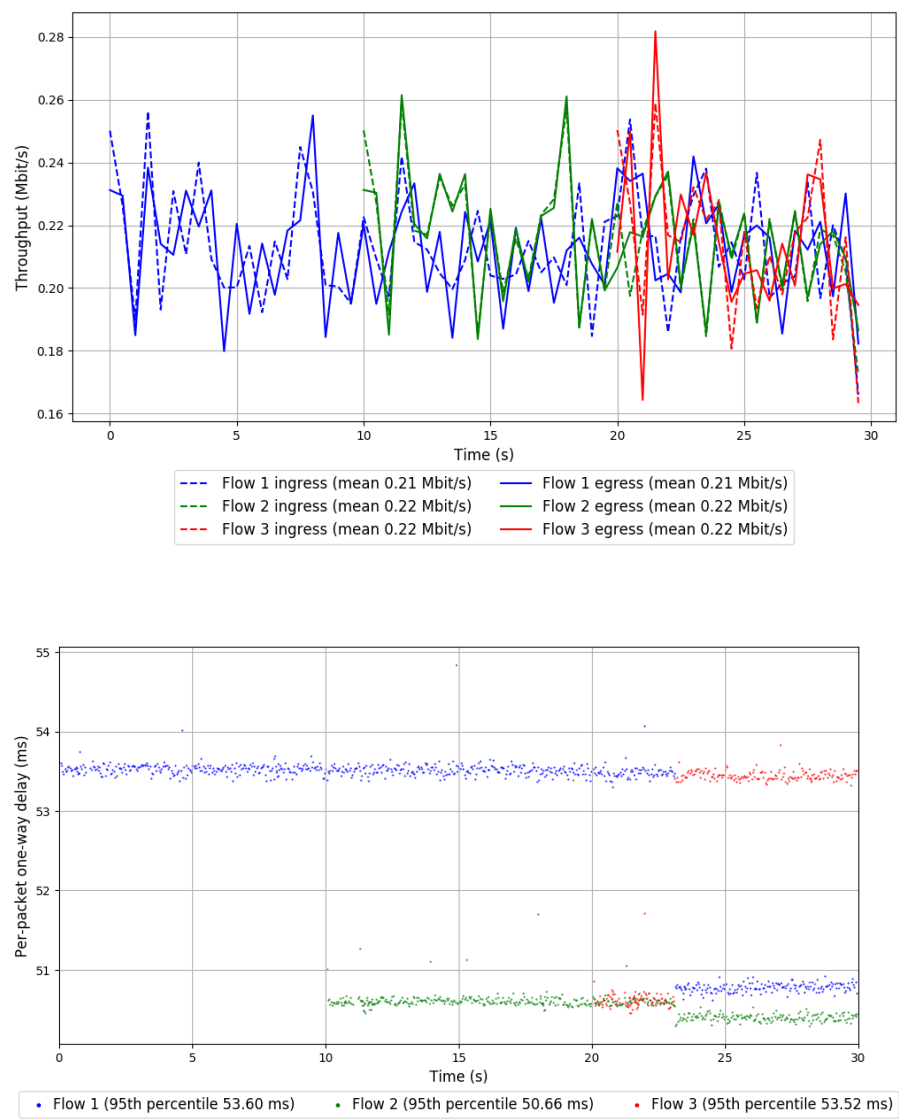


```
Run 10: Statistics of SReAM

Start at: 2018-03-07 08:46:03
End at: 2018-03-07 08:46:33

# Below is generated by plot.py at 2018-03-07 11:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.578 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.598 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.662 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.525 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

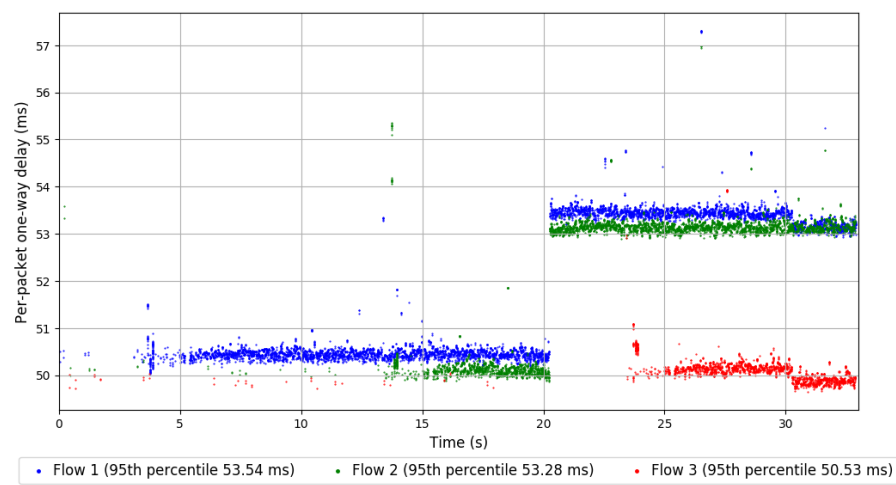
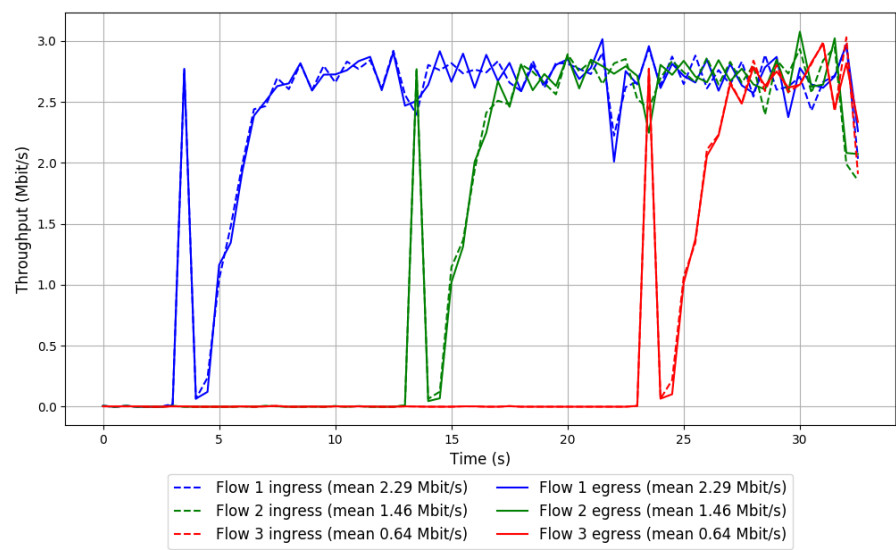


```
Run 1: Statistics of WebRTC media

Start at: 2018-03-07 06:03:09
End at: 2018-03-07 06:03:39

# Below is generated by plot.py at 2018-03-07 11:53:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 53.508 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 53.543 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 53.283 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 50.529 ms
Loss rate: 0.00%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-03-07 06:20:40

End at: 2018-03-07 06:21:10

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 53.096 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.311 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 50.596 ms

Loss rate: 0.00%

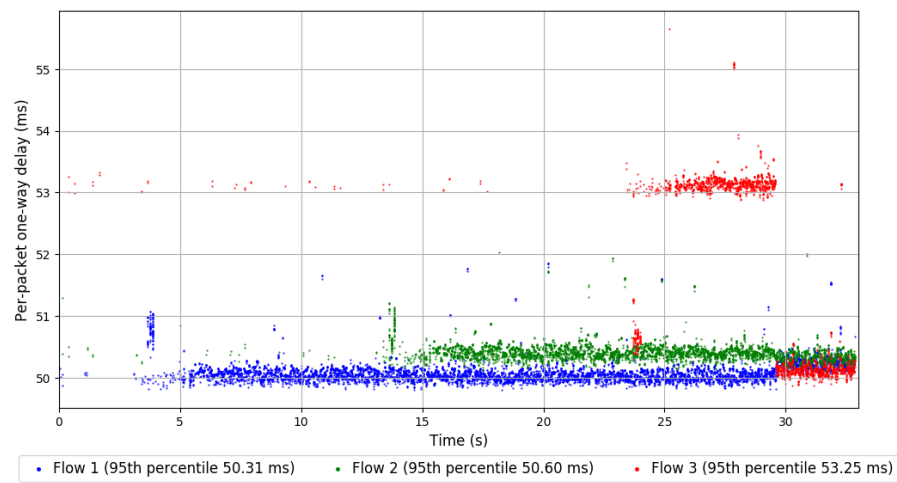
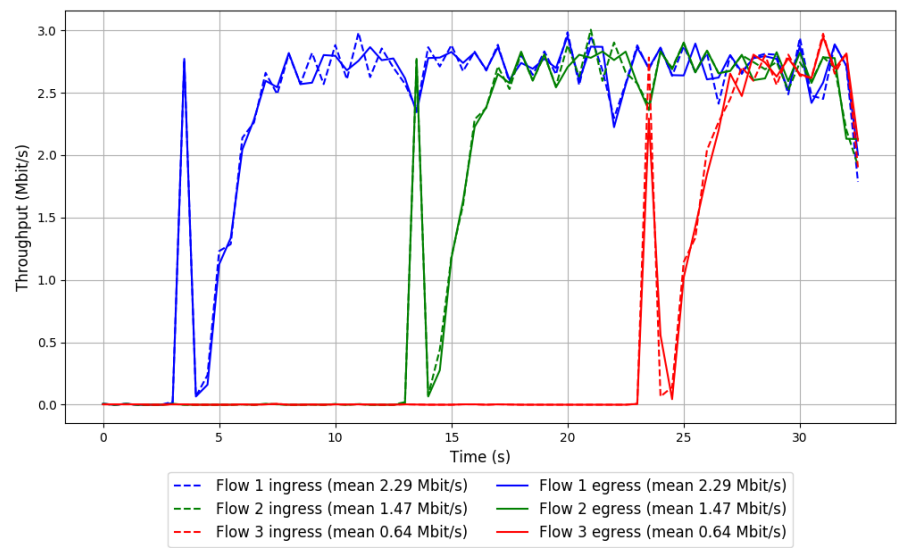
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.250 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-03-07 06:38:04

End at: 2018-03-07 06:38:34

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 51.007 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 51.037 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 50.375 ms

Loss rate: 0.00%

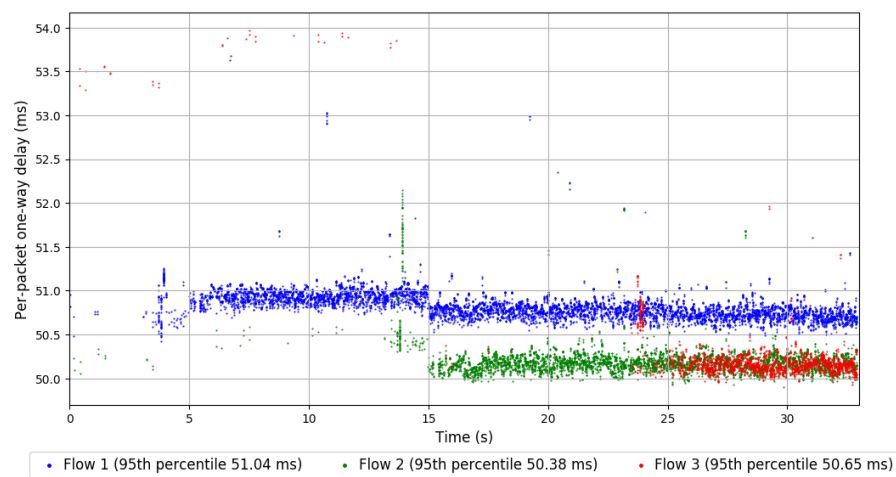
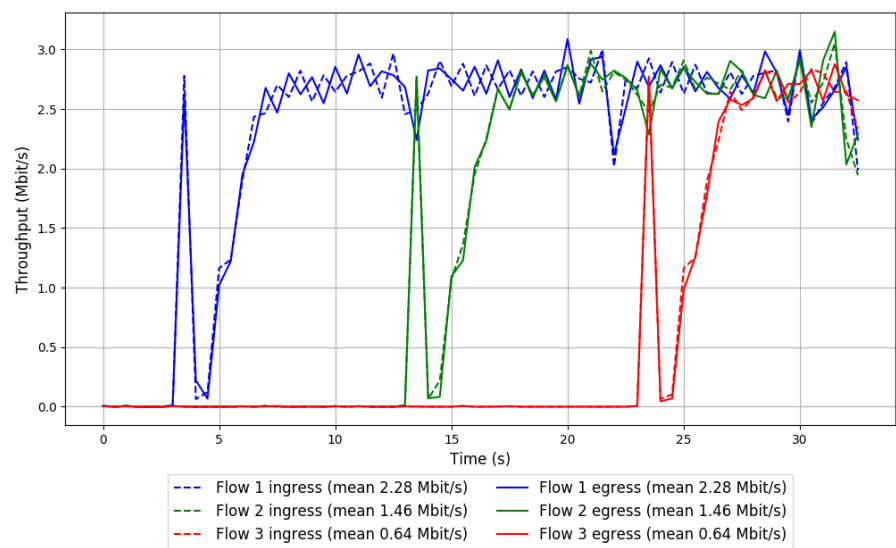
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 50.647 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-03-07 06:55:20

End at: 2018-03-07 06:55:50

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 53.547 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 53.583 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 50.271 ms

Loss rate: 0.02%

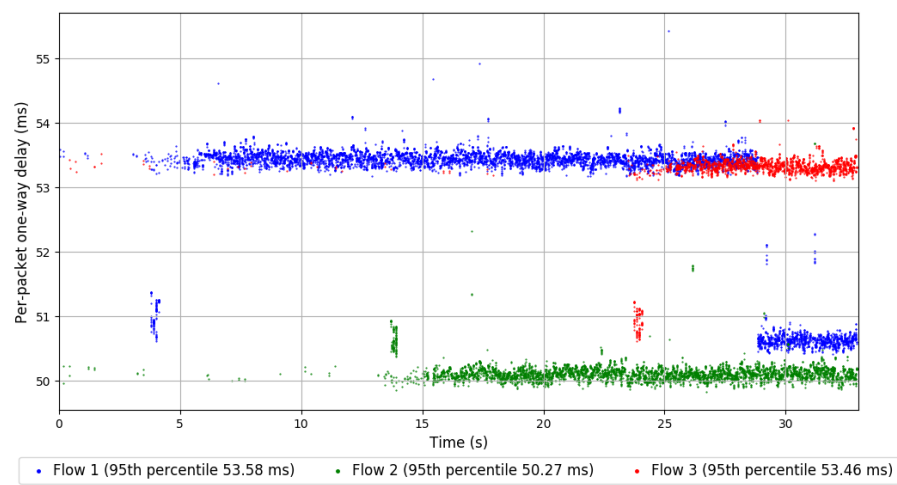
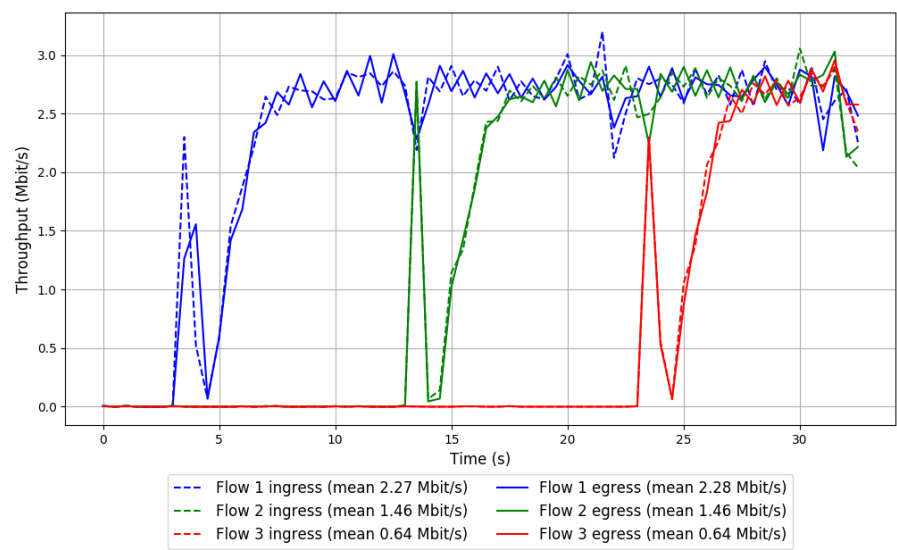
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.464 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-03-07 07:12:51

End at: 2018-03-07 07:13:21

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 53.596 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 50.800 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.45 Mbit/s

95th percentile per-packet one-way delay: 53.665 ms

Loss rate: 0.00%

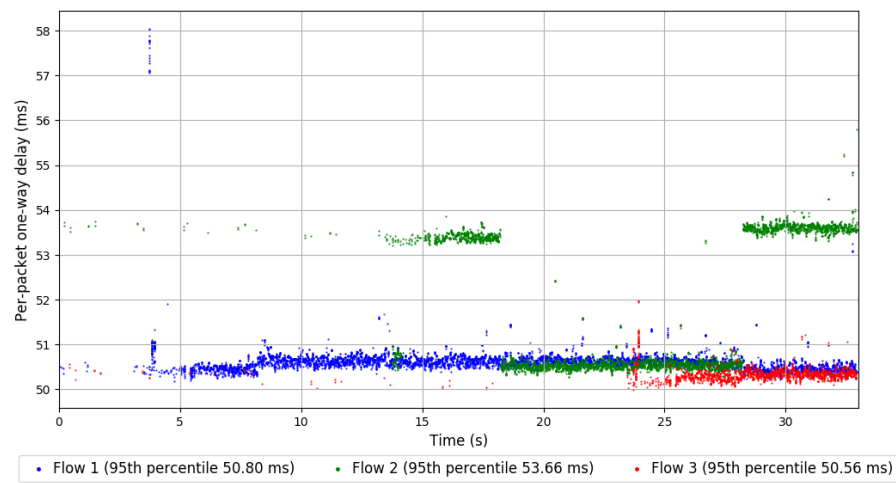
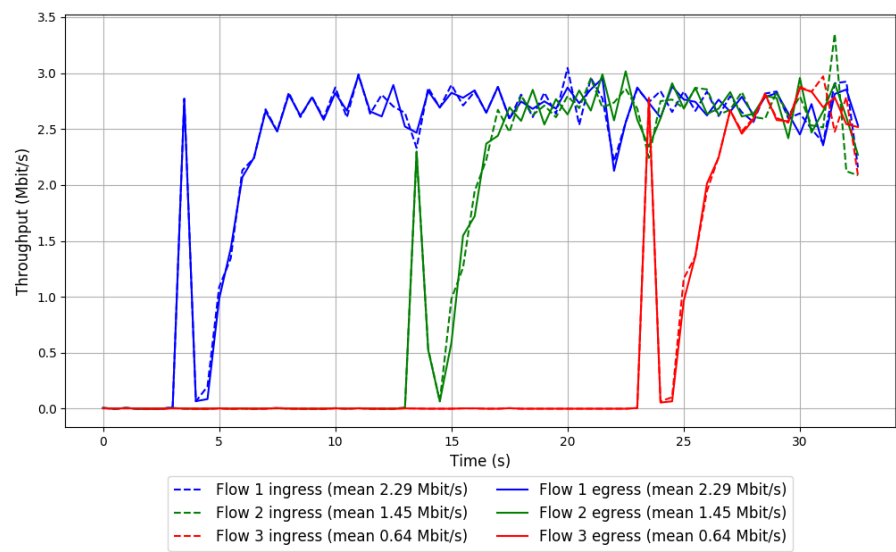
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 50.560 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-03-07 07:30:19

End at: 2018-03-07 07:30:49

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 53.435 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.658 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 53.468 ms

Loss rate: 0.00%

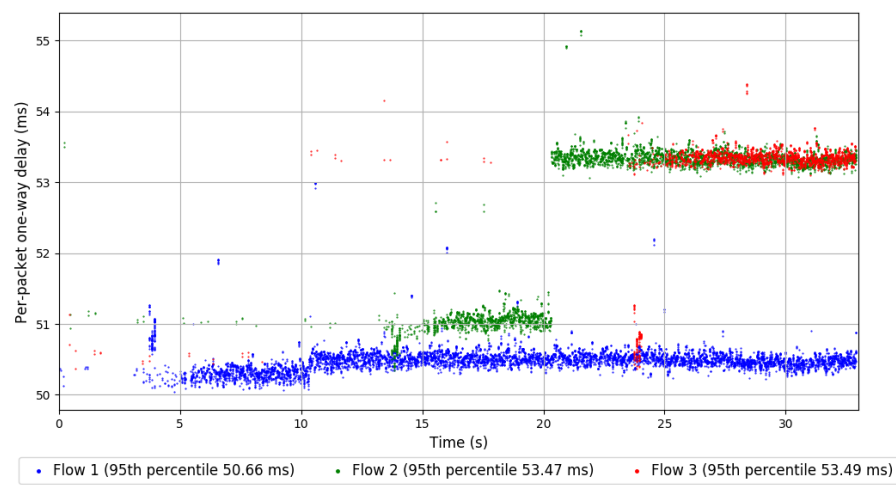
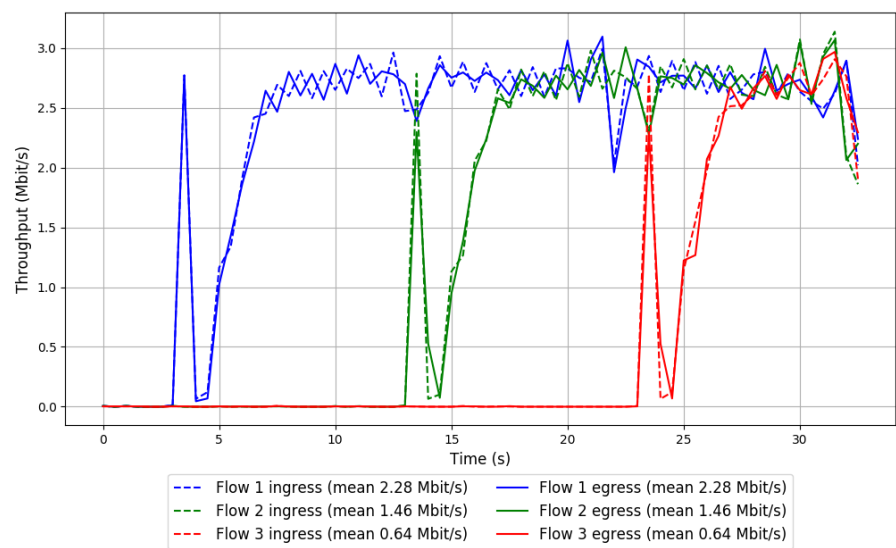
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.488 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-03-07 07:47:48

End at: 2018-03-07 07:48:18

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 54.063 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 53.938 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 54.107 ms

Loss rate: 0.00%

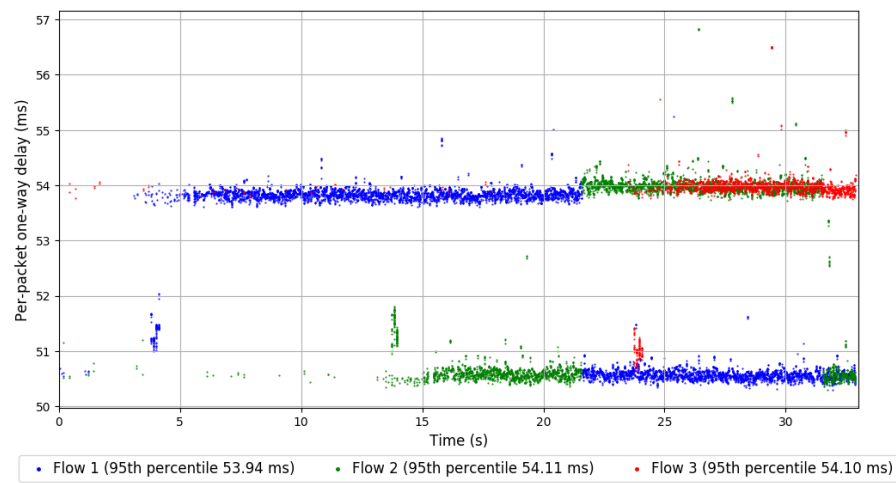
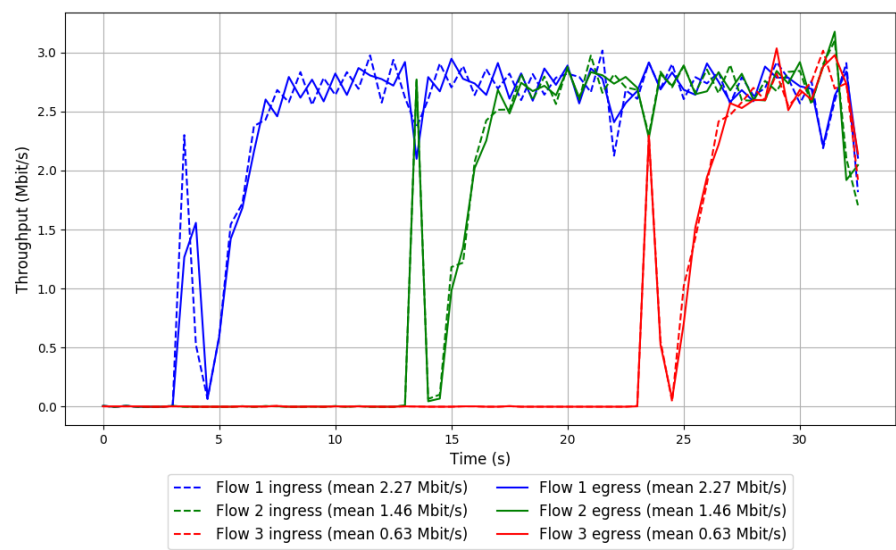
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 54.104 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-03-07 08:05:25

End at: 2018-03-07 08:05:55

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 53.898 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 53.928 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 50.820 ms

Loss rate: 0.02%

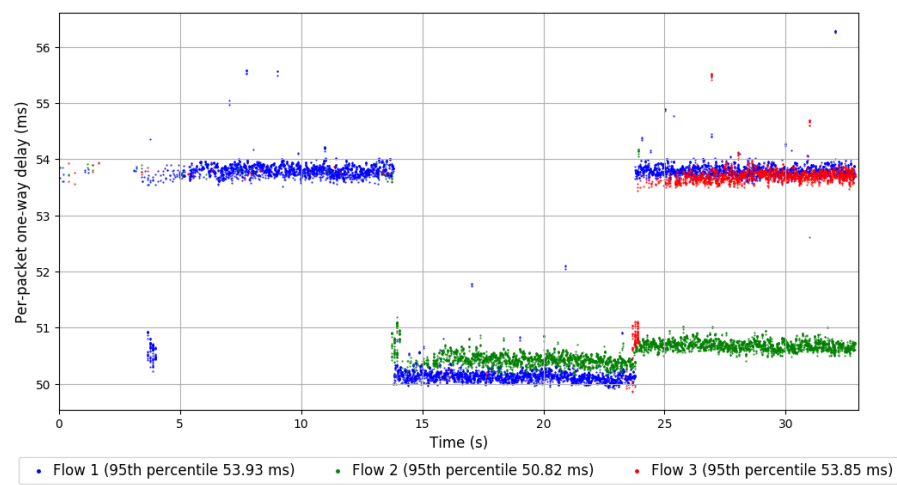
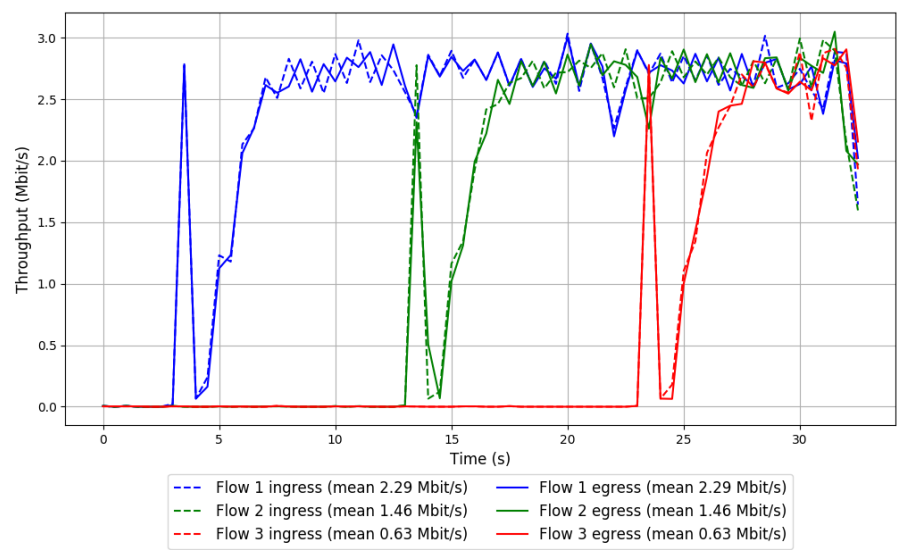
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 53.849 ms

Loss rate: 0.01%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-03-07 08:23:03

End at: 2018-03-07 08:23:33

Below is generated by plot.py at 2018-03-07 11:53:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 53.214 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.28 Mbit/s

95th percentile per-packet one-way delay: 50.482 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 50.821 ms

Loss rate: 0.00%

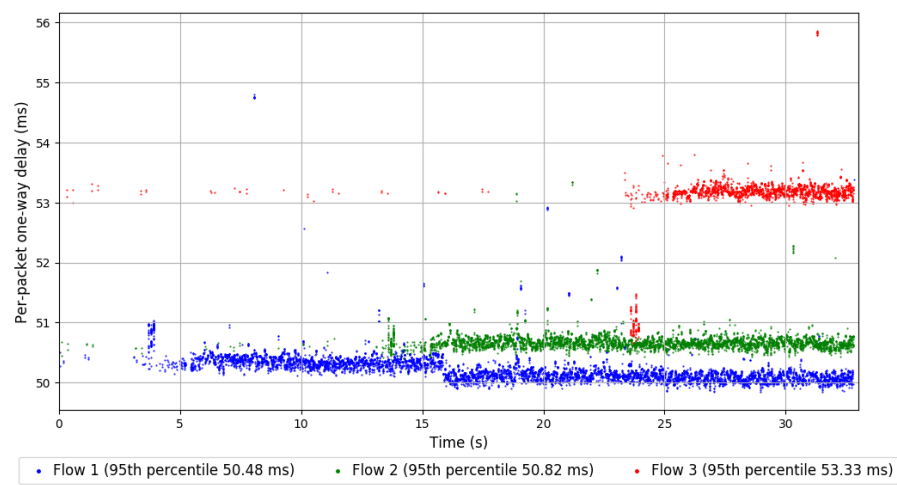
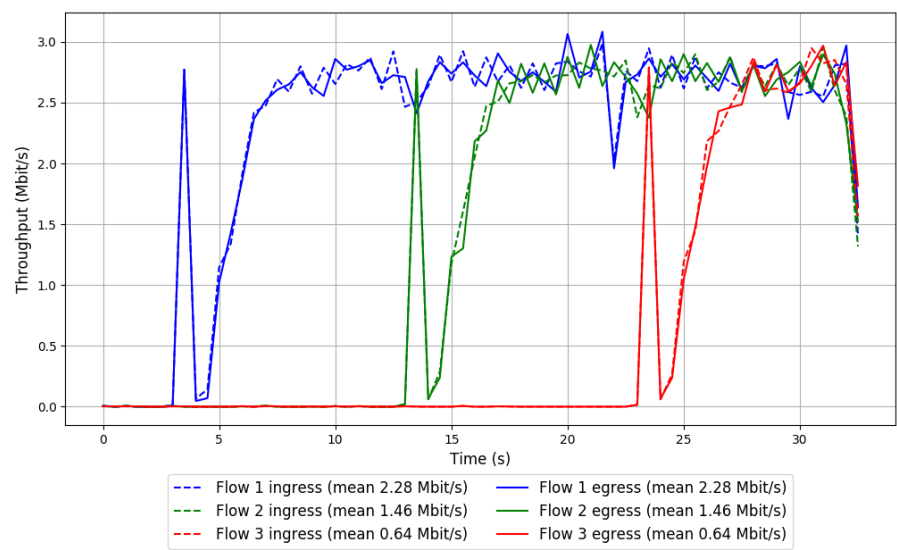
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 53.328 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-03-07 08:40:14

End at: 2018-03-07 08:40:44

Below is generated by plot.py at 2018-03-07 11:53:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.38 Mbit/s

95th percentile per-packet one-way delay: 53.996 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 50.586 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 54.066 ms

Loss rate: 0.02%

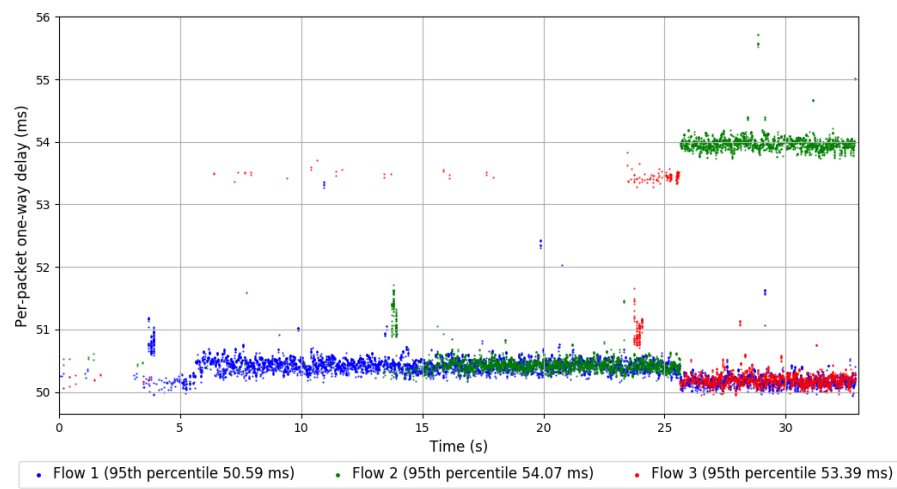
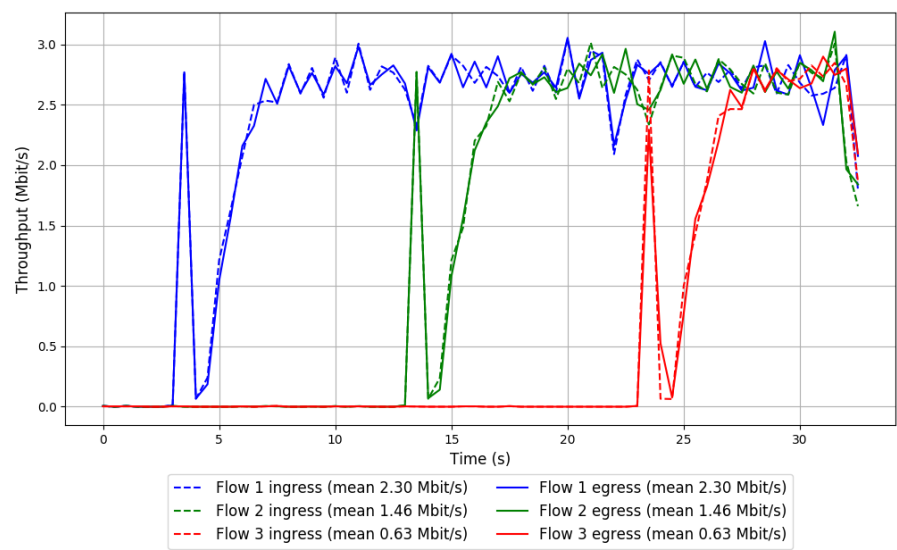
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 53.387 ms

Loss rate: 0.01%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-03-07 06:17:01

End at: 2018-03-07 06:17:31

Below is generated by plot.py at 2018-03-07 11:53:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.44 Mbit/s

95th percentile per-packet one-way delay: 51.775 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 51.715 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 51.920 ms

Loss rate: 0.00%

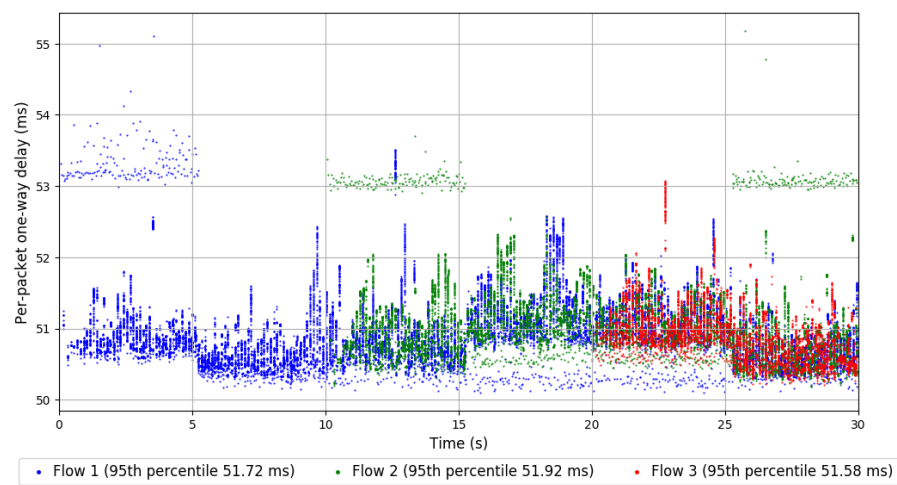
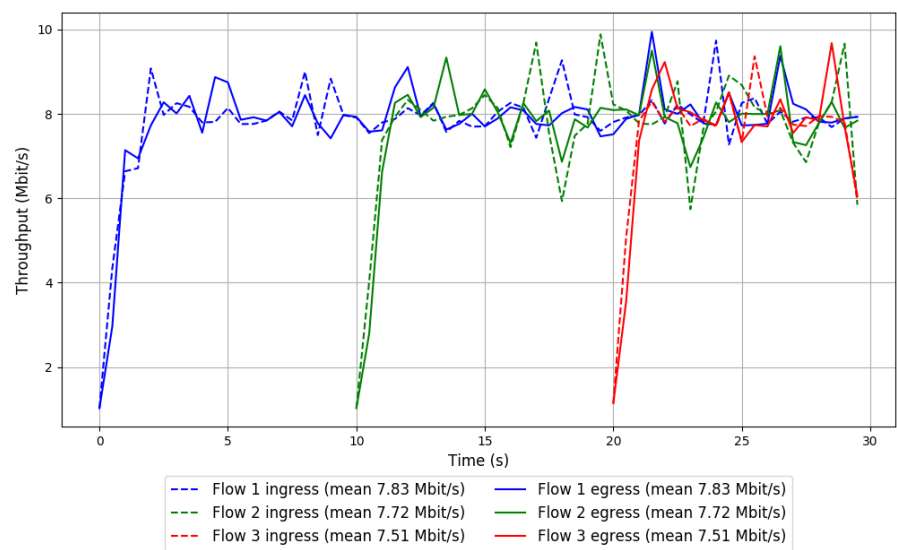
-- Flow 3:

Average throughput: 7.51 Mbit/s

95th percentile per-packet one-way delay: 51.579 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-03-07 06:34:33

End at: 2018-03-07 06:35:03

Below is generated by plot.py at 2018-03-07 11:53:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.54 Mbit/s

95th percentile per-packet one-way delay: 51.654 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.88 Mbit/s

95th percentile per-packet one-way delay: 51.798 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 51.487 ms

Loss rate: 0.00%

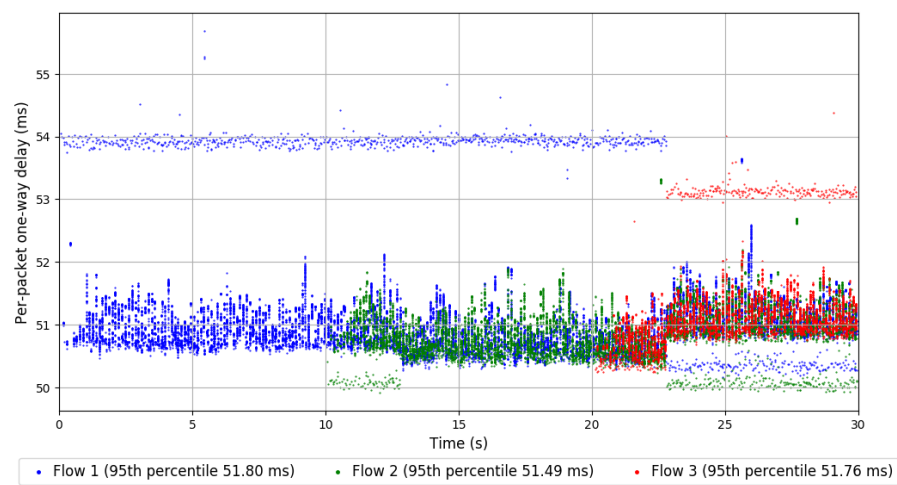
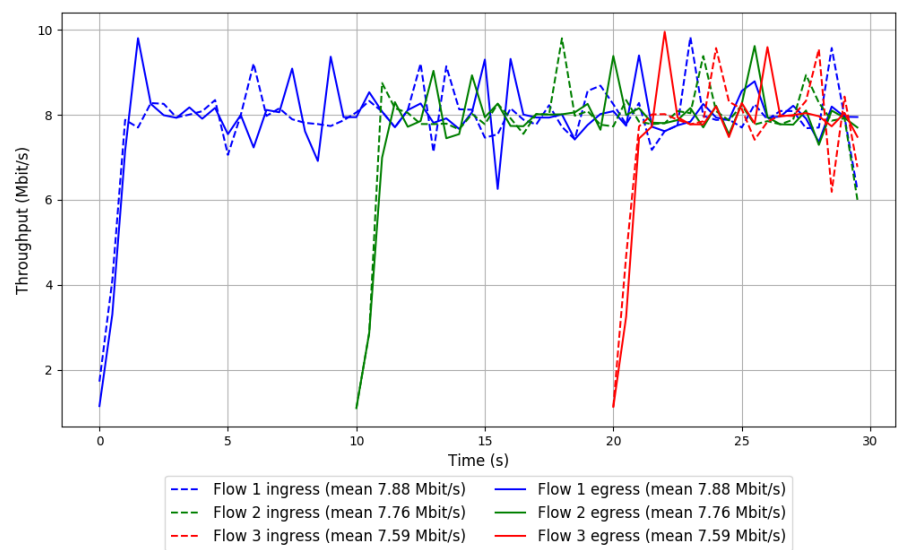
-- Flow 3:

Average throughput: 7.59 Mbit/s

95th percentile per-packet one-way delay: 51.762 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-03-07 06:51:41

End at: 2018-03-07 06:52:11

Below is generated by plot.py at 2018-03-07 11:53:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.55 Mbit/s

95th percentile per-packet one-way delay: 51.609 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 51.583 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.86 Mbit/s

95th percentile per-packet one-way delay: 51.570 ms

Loss rate: 0.00%

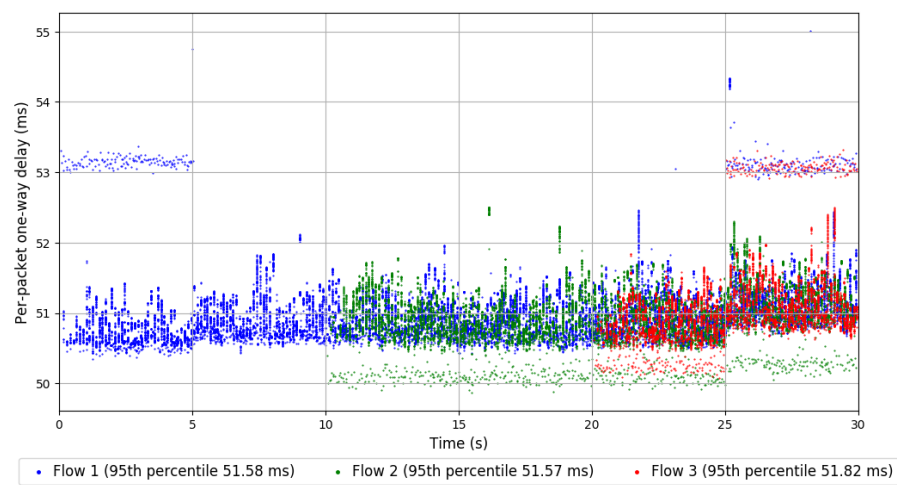
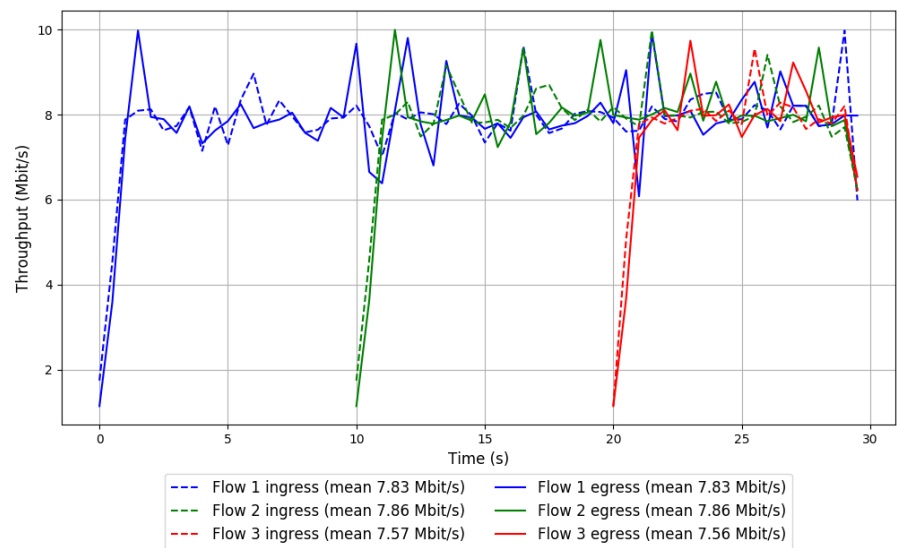
-- Flow 3:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 51.818 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-03-07 07:09:13

End at: 2018-03-07 07:09:43

Below is generated by plot.py at 2018-03-07 11:53:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.41 Mbit/s

95th percentile per-packet one-way delay: 51.950 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 51.779 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 53.547 ms

Loss rate: 0.00%

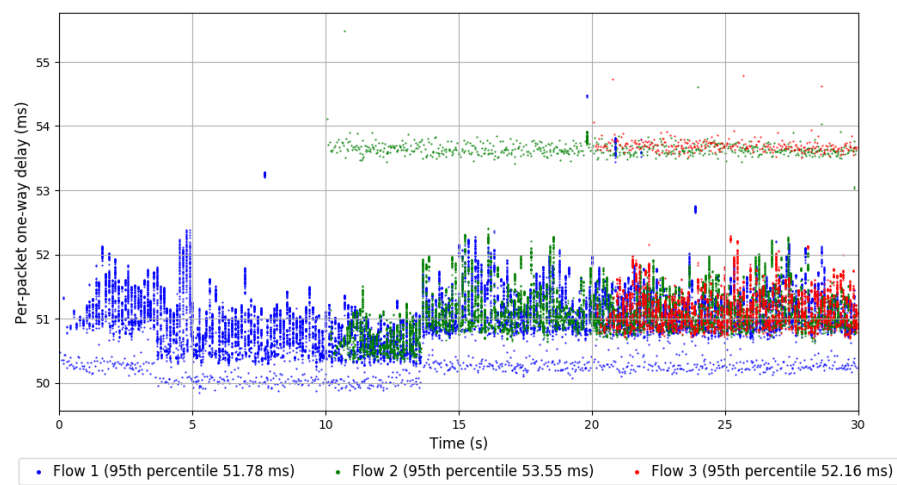
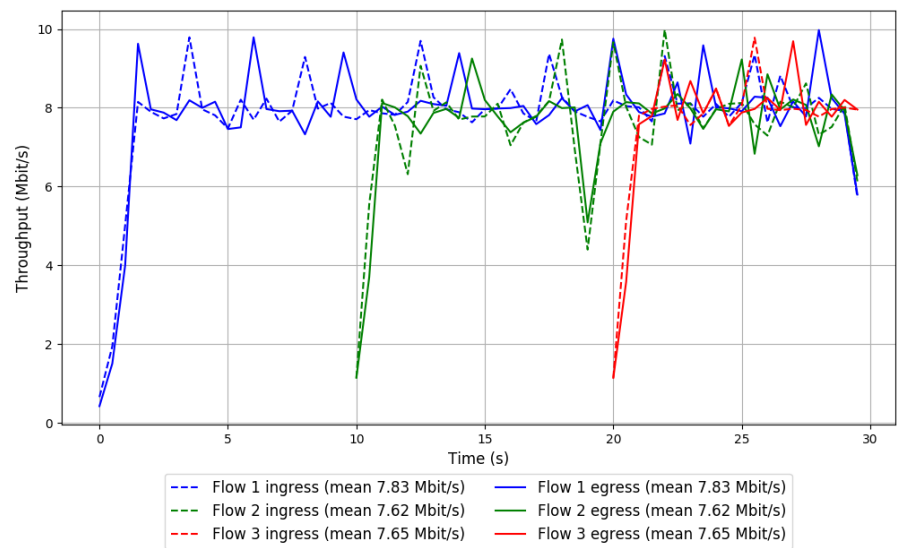
-- Flow 3:

Average throughput: 7.65 Mbit/s

95th percentile per-packet one-way delay: 52.158 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-03-07 07:26:38

End at: 2018-03-07 07:27:08

Below is generated by plot.py at 2018-03-07 11:53:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.62 Mbit/s

95th percentile per-packet one-way delay: 52.041 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.92 Mbit/s

95th percentile per-packet one-way delay: 51.982 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 52.285 ms

Loss rate: 0.00%

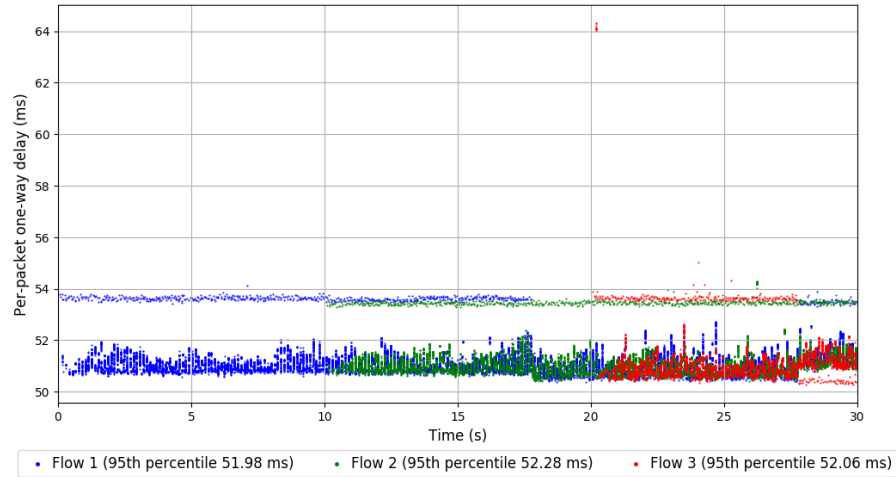
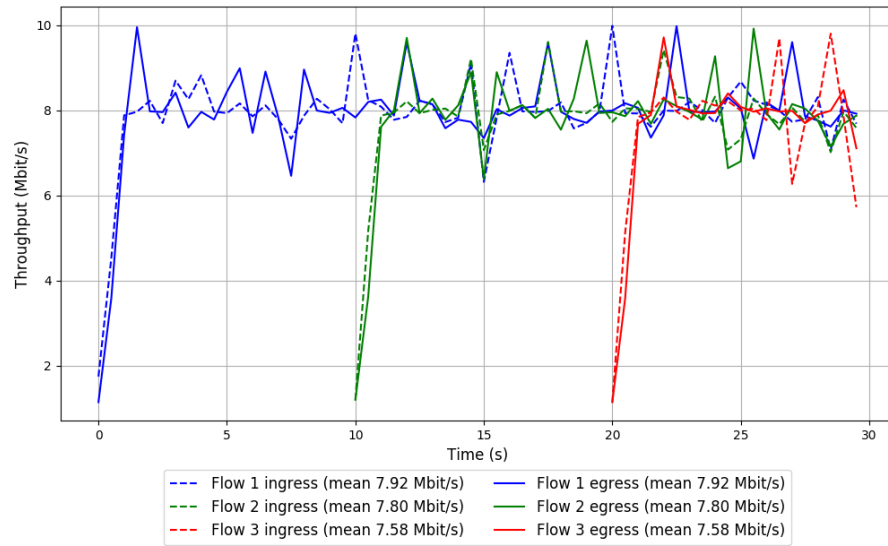
-- Flow 3:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 52.060 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-03-07 07:44:06

End at: 2018-03-07 07:44:36

Below is generated by plot.py at 2018-03-07 11:53:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.43 Mbit/s

95th percentile per-packet one-way delay: 52.014 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 51.796 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 52.244 ms

Loss rate: 0.00%

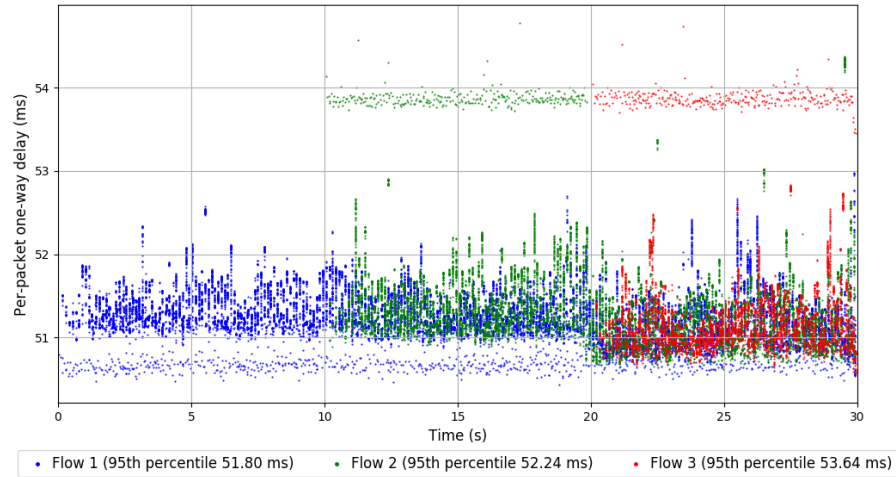
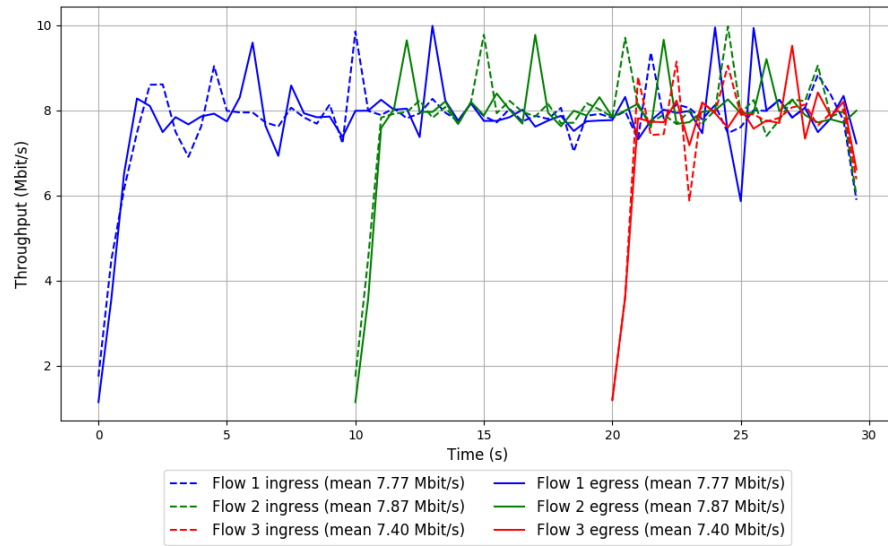
-- Flow 3:

Average throughput: 7.40 Mbit/s

95th percentile per-packet one-way delay: 53.638 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-03-07 08:01:42

End at: 2018-03-07 08:02:12

Below is generated by plot.py at 2018-03-07 11:53:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.39 Mbit/s

95th percentile per-packet one-way delay: 51.498 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 51.417 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.91 Mbit/s

95th percentile per-packet one-way delay: 51.577 ms

Loss rate: 0.00%

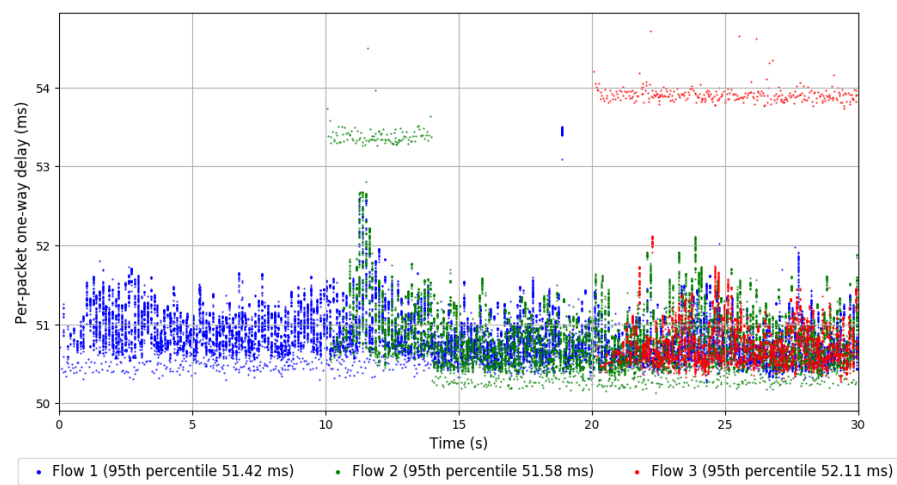
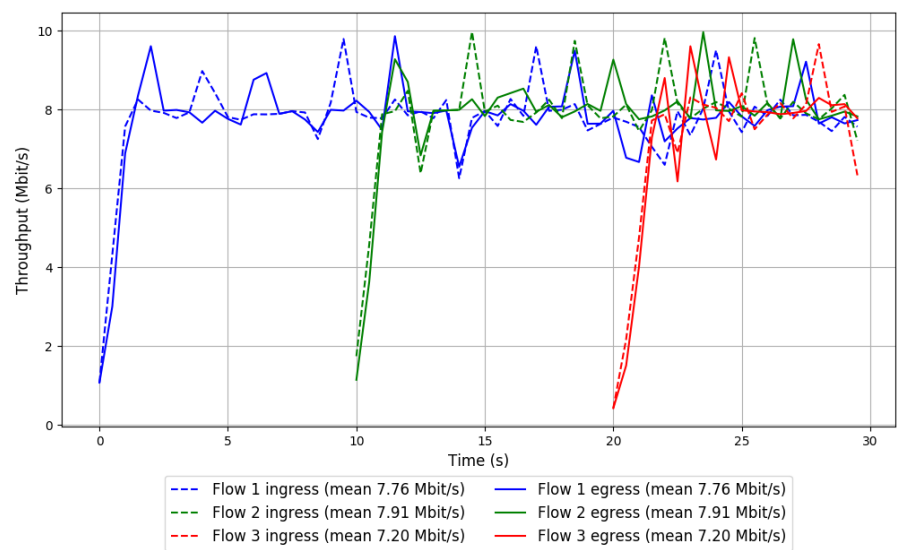
-- Flow 3:

Average throughput: 7.20 Mbit/s

95th percentile per-packet one-way delay: 52.107 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-03-07 08:19:25

End at: 2018-03-07 08:19:55

Below is generated by plot.py at 2018-03-07 11:53:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.40 Mbit/s

95th percentile per-packet one-way delay: 52.292 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 52.183 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 52.730 ms

Loss rate: 0.00%

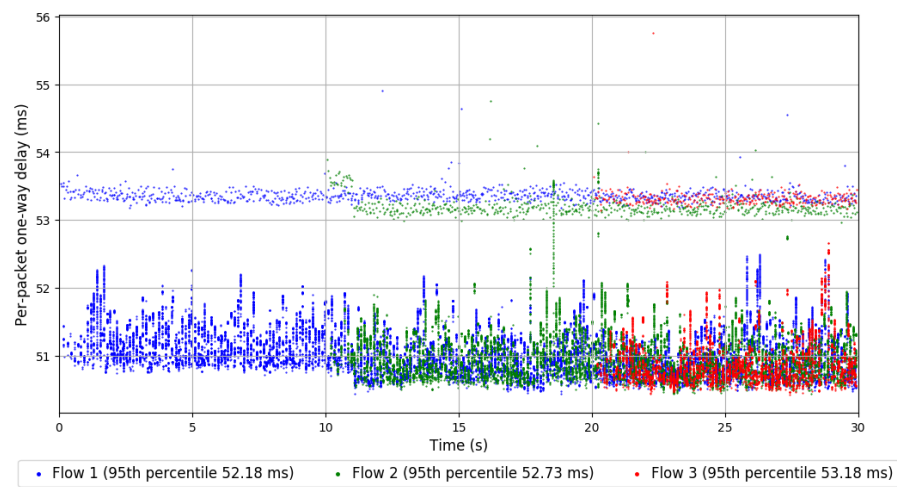
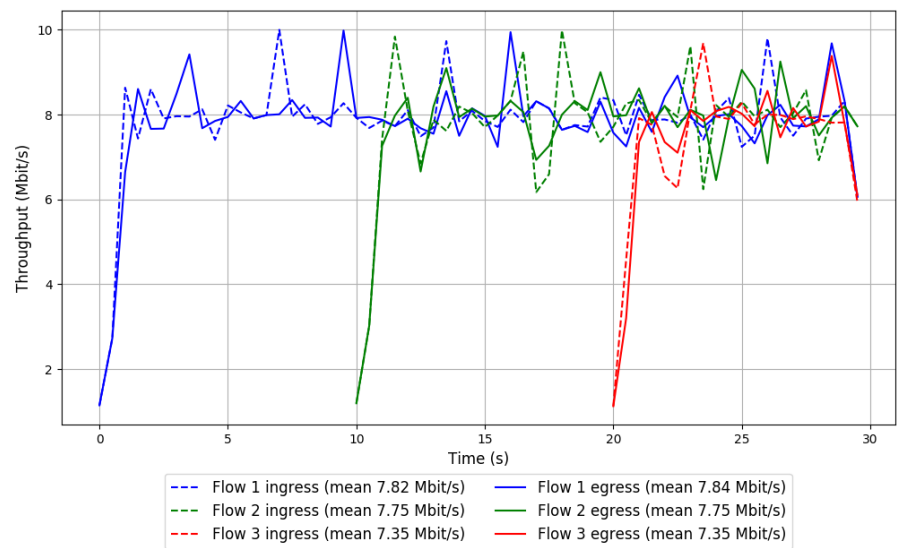
-- Flow 3:

Average throughput: 7.35 Mbit/s

95th percentile per-packet one-way delay: 53.184 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-03-07 08:36:34

End at: 2018-03-07 08:37:04

Below is generated by plot.py at 2018-03-07 11:53:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.70 Mbit/s

95th percentile per-packet one-way delay: 52.084 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.96 Mbit/s

95th percentile per-packet one-way delay: 52.140 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 52.409 ms

Loss rate: 0.00%

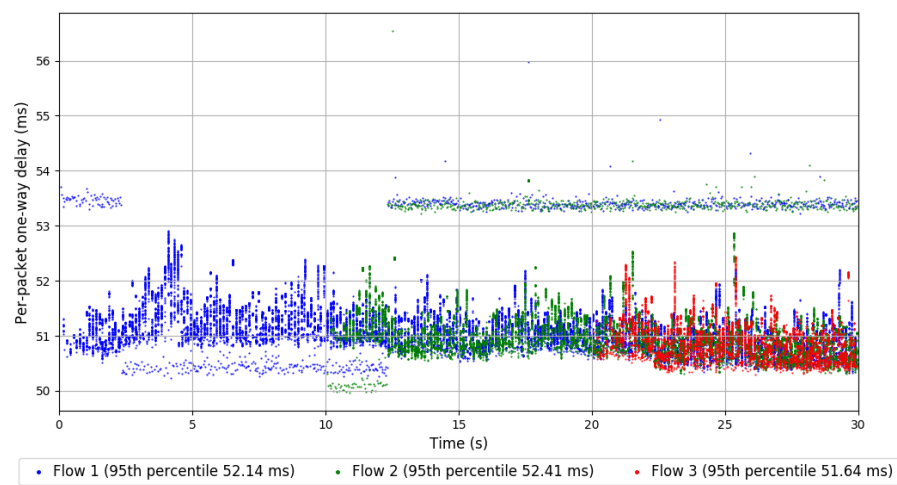
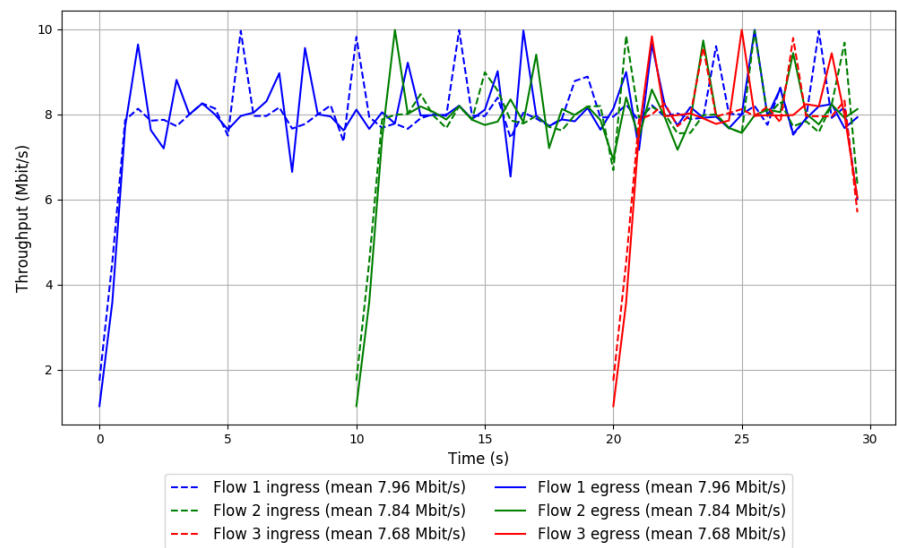
-- Flow 3:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 51.639 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-03-07 08:53:49

End at: 2018-03-07 08:54:19

Below is generated by plot.py at 2018-03-07 11:53:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.57 Mbit/s

95th percentile per-packet one-way delay: 51.505 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 51.514 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.80 Mbit/s

95th percentile per-packet one-way delay: 51.429 ms

Loss rate: 0.00%

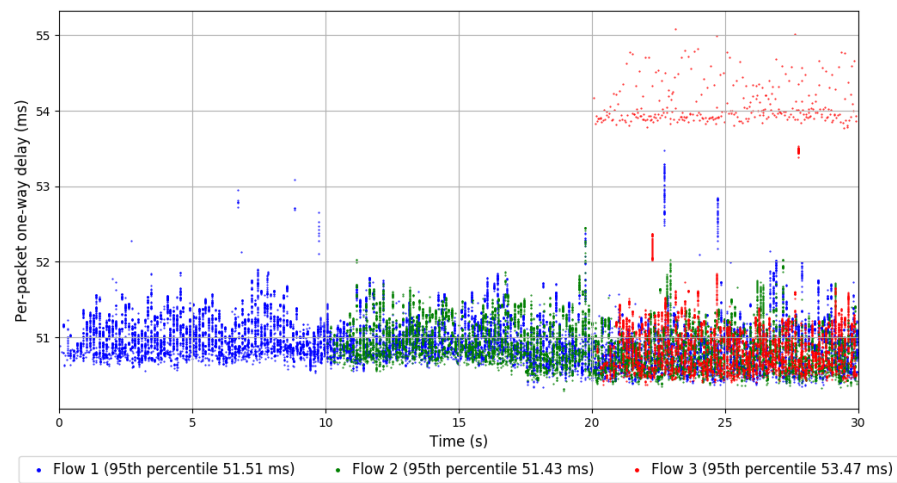
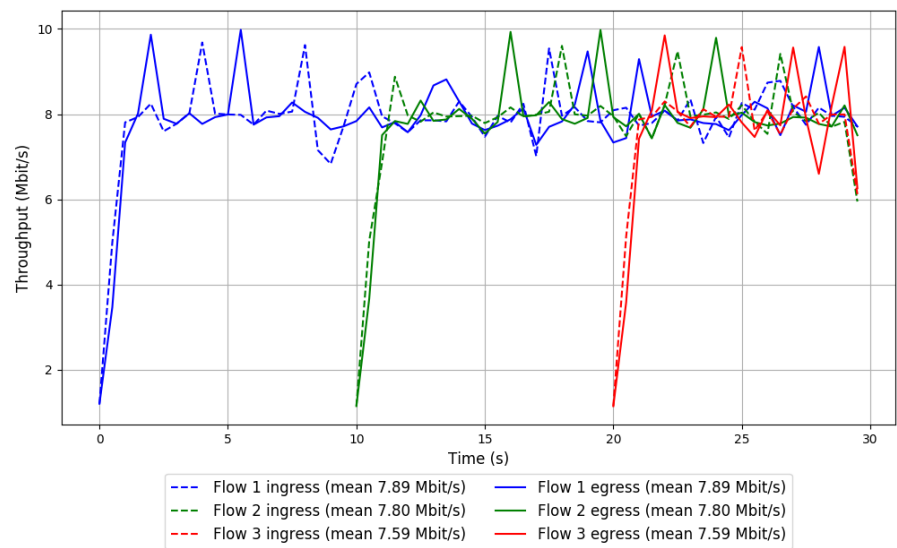
-- Flow 3:

Average throughput: 7.59 Mbit/s

95th percentile per-packet one-way delay: 53.466 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

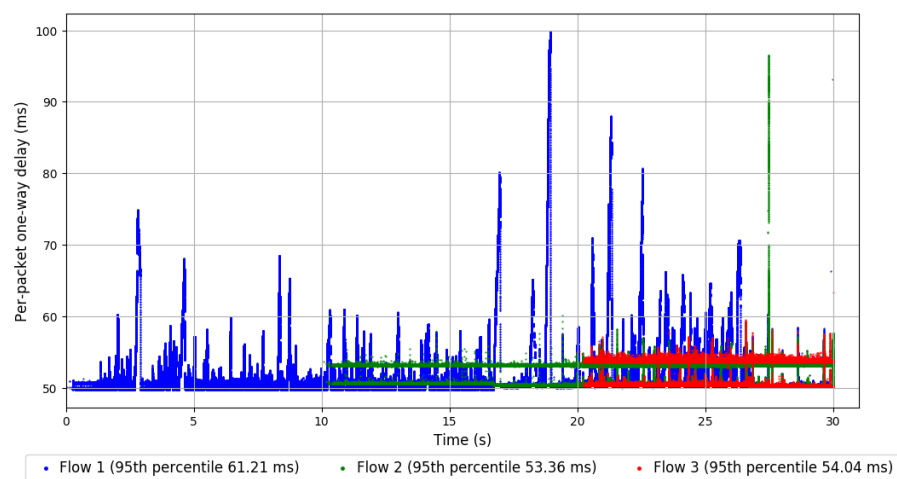
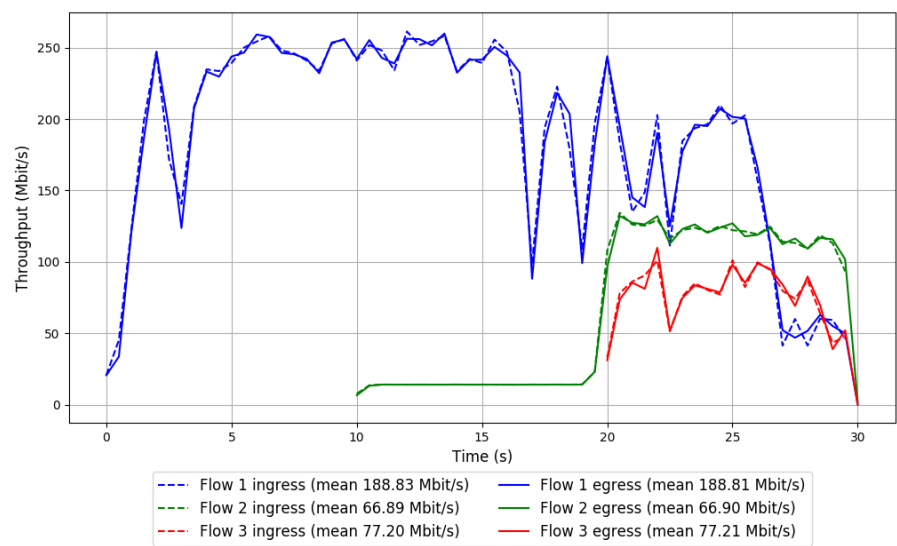


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-03-07 06:16:00
End at: 2018-03-07 06:16:30

# Below is generated by plot.py at 2018-03-07 11:55:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 258.96 Mbit/s
95th percentile per-packet one-way delay: 59.160 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 188.81 Mbit/s
95th percentile per-packet one-way delay: 61.210 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 66.90 Mbit/s
95th percentile per-packet one-way delay: 53.358 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 77.21 Mbit/s
95th percentile per-packet one-way delay: 54.039 ms
Loss rate: 0.00%
```


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

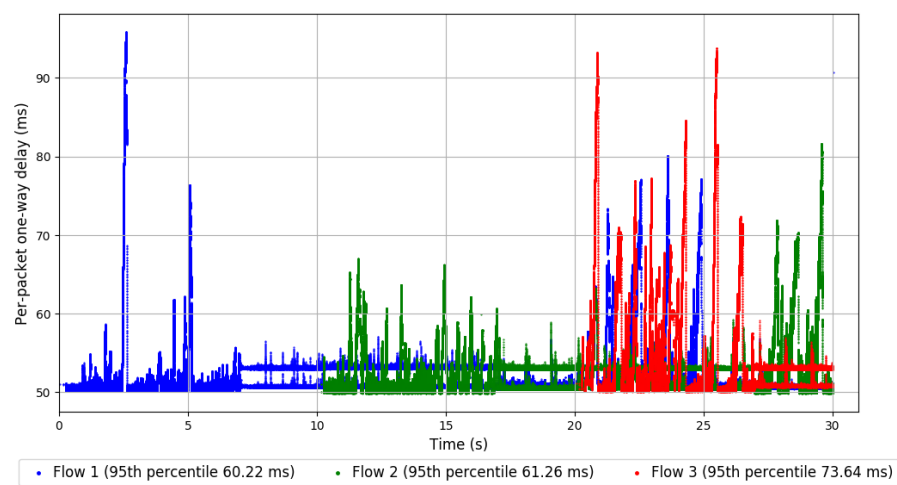
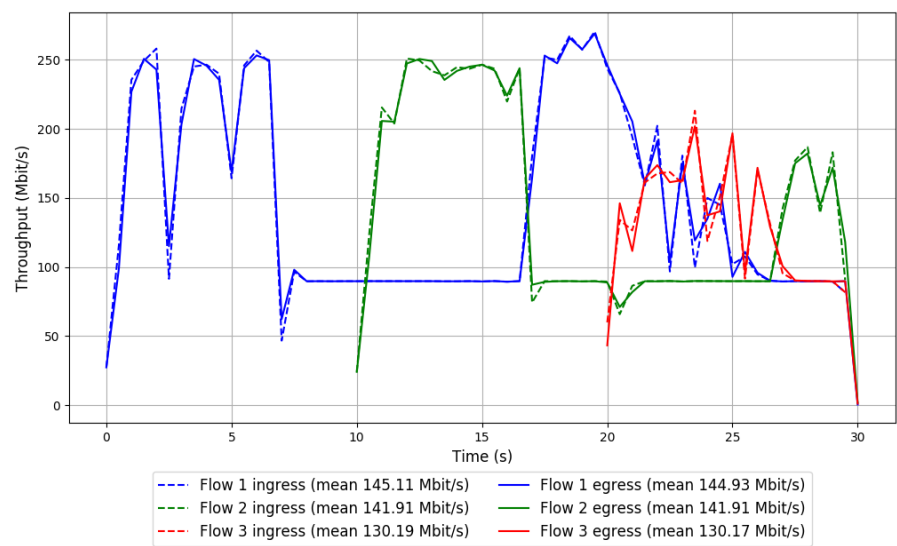


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-03-07 06:33:29
End at: 2018-03-07 06:33:59

# Below is generated by plot.py at 2018-03-07 11:56:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.43 Mbit/s
95th percentile per-packet one-way delay: 64.118 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 144.93 Mbit/s
95th percentile per-packet one-way delay: 60.215 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 141.91 Mbit/s
95th percentile per-packet one-way delay: 61.258 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 130.17 Mbit/s
95th percentile per-packet one-way delay: 73.637 ms
Loss rate: 0.00%
```

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

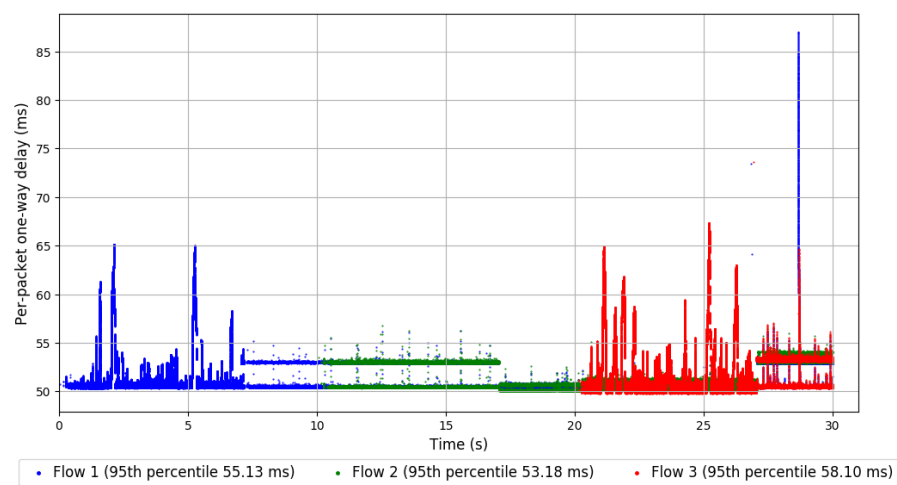
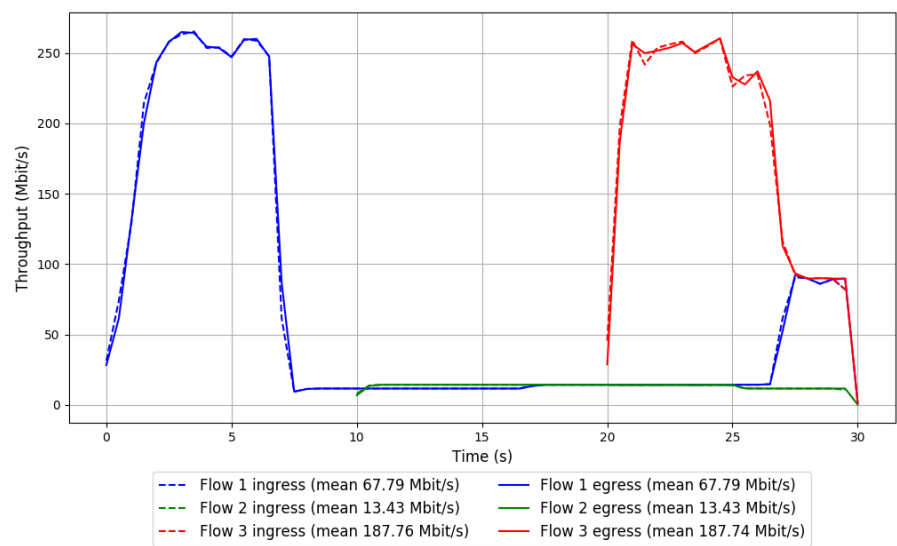


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-03-07 06:50:49
End at: 2018-03-07 06:51:19

# Below is generated by plot.py at 2018-03-07 11:56:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 139.00 Mbit/s
95th percentile per-packet one-way delay: 56.865 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.79 Mbit/s
95th percentile per-packet one-way delay: 55.134 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.43 Mbit/s
95th percentile per-packet one-way delay: 53.179 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 187.74 Mbit/s
95th percentile per-packet one-way delay: 58.105 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-03-07 07:08:16

End at: 2018-03-07 07:08:46

Below is generated by plot.py at 2018-03-07 11:56:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 201.97 Mbit/s

95th percentile per-packet one-way delay: 55.785 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 187.02 Mbit/s

95th percentile per-packet one-way delay: 56.160 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 16.42 Mbit/s

95th percentile per-packet one-way delay: 53.489 ms

Loss rate: 0.00%

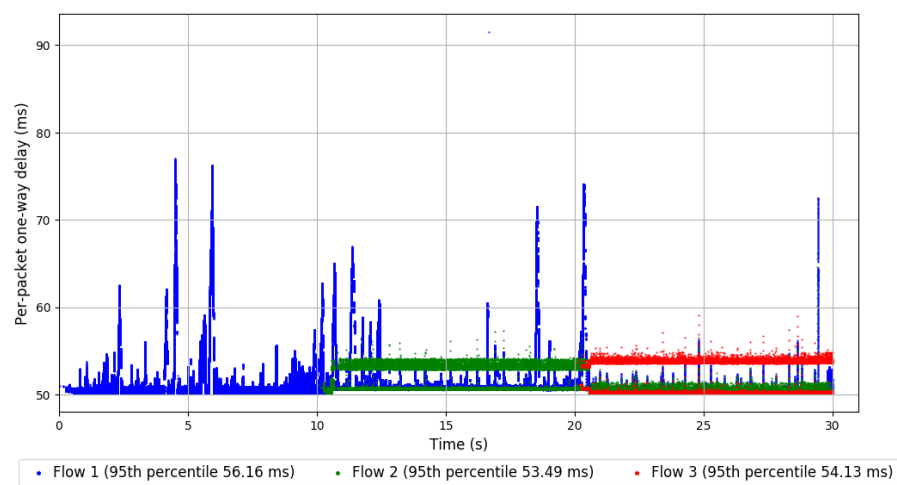
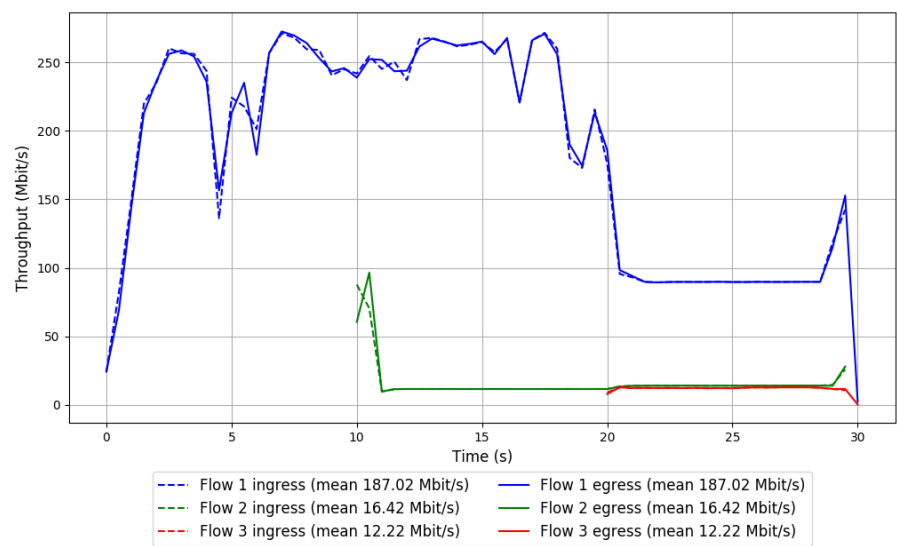
-- Flow 3:

Average throughput: 12.22 Mbit/s

95th percentile per-packet one-way delay: 54.132 ms

Loss rate: 0.00%

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

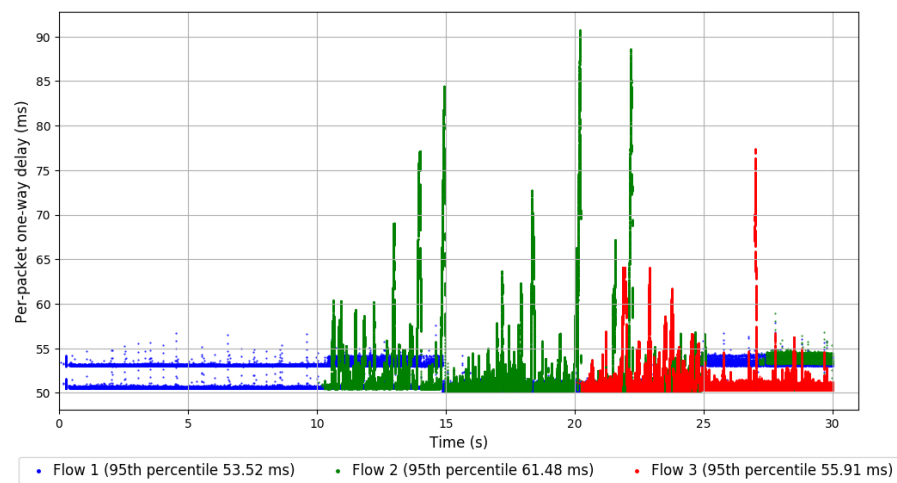
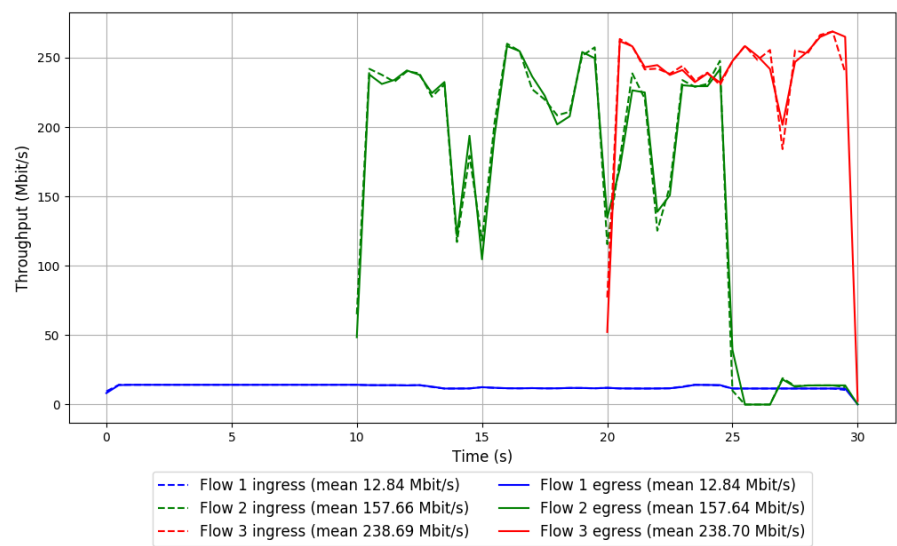


```
Run 5: Statistics of TaoVA-100x

Start at: 2018-03-07 07:25:41
End at: 2018-03-07 07:26:11

# Below is generated by plot.py at 2018-03-07 11:56:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 197.01 Mbit/s
95th percentile per-packet one-way delay: 58.364 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.84 Mbit/s
95th percentile per-packet one-way delay: 53.521 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 157.64 Mbit/s
95th percentile per-packet one-way delay: 61.483 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 238.70 Mbit/s
95th percentile per-packet one-way delay: 55.914 ms
Loss rate: 0.00%
```


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



Run 6: Statistics of TaoVA-100x

Start at: 2018-03-07 07:43:14

End at: 2018-03-07 07:43:44

Below is generated by plot.py at 2018-03-07 11:56:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.38 Mbit/s

95th percentile per-packet one-way delay: 56.803 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 15.17 Mbit/s

95th percentile per-packet one-way delay: 54.378 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 96.81 Mbit/s

95th percentile per-packet one-way delay: 54.006 ms

Loss rate: 0.00%

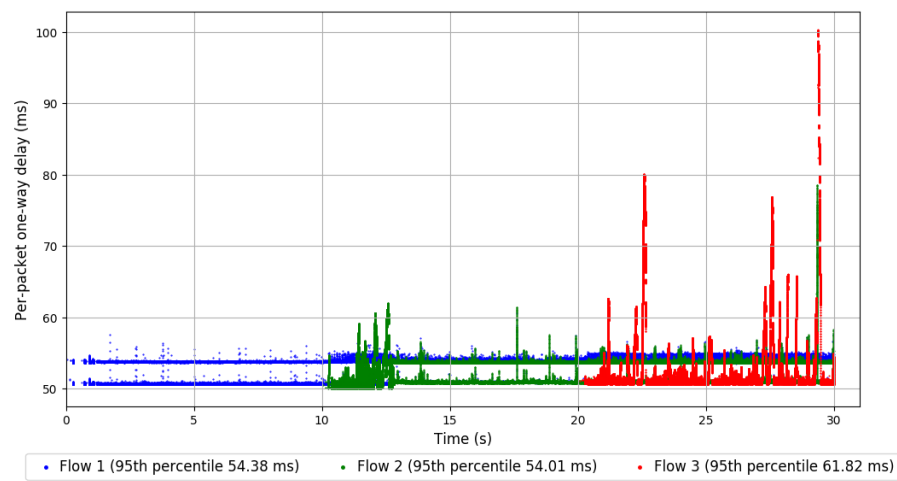
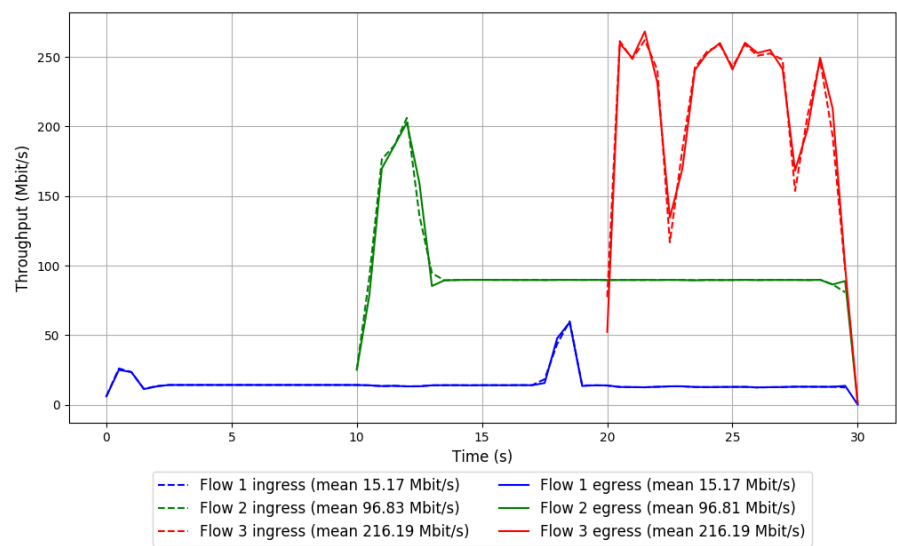
-- Flow 3:

Average throughput: 216.19 Mbit/s

95th percentile per-packet one-way delay: 61.817 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-03-07 08:00:39

End at: 2018-03-07 08:01:09

Below is generated by plot.py at 2018-03-07 12:00:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 276.56 Mbit/s

95th percentile per-packet one-way delay: 62.811 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 150.20 Mbit/s

95th percentile per-packet one-way delay: 64.383 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 195.30 Mbit/s

95th percentile per-packet one-way delay: 61.501 ms

Loss rate: 0.65%

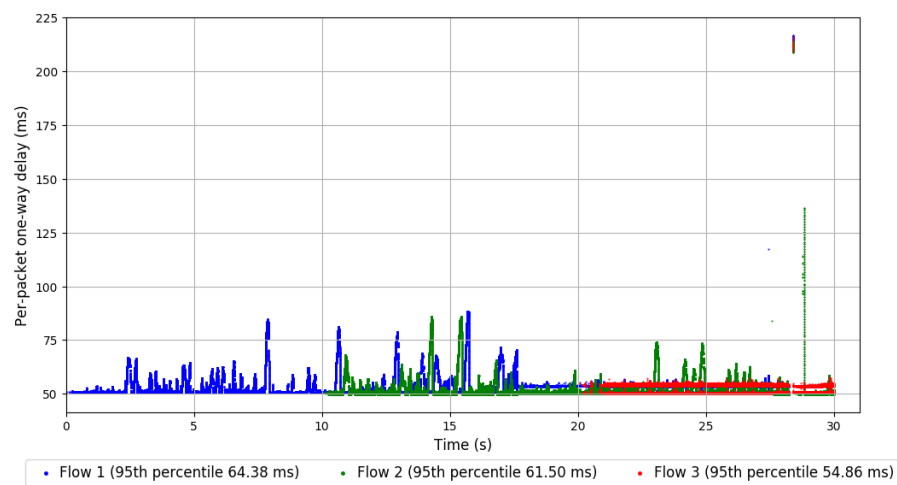
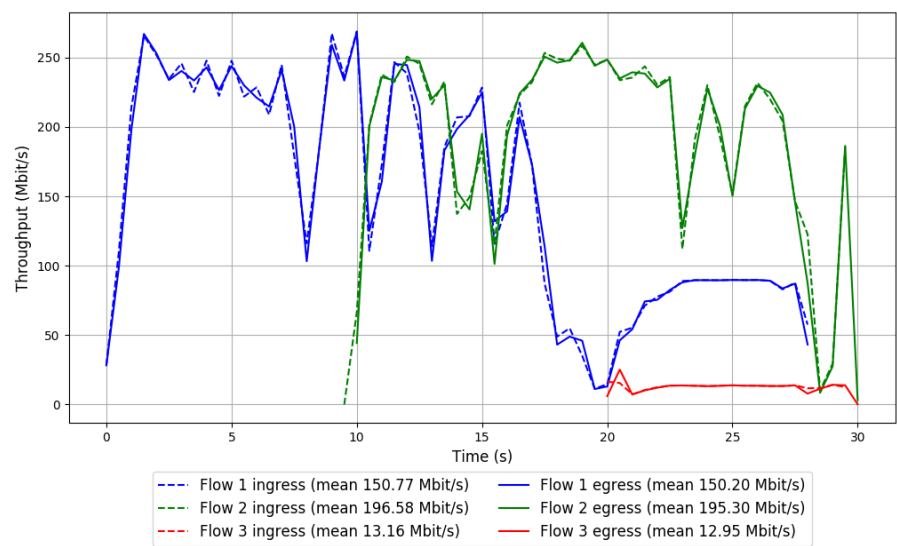
-- Flow 3:

Average throughput: 12.95 Mbit/s

95th percentile per-packet one-way delay: 54.856 ms

Loss rate: 1.65%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-03-07 08:18:17

End at: 2018-03-07 08:18:47

Below is generated by plot.py at 2018-03-07 12:02:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 325.40 Mbit/s

95th percentile per-packet one-way delay: 59.514 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 158.84 Mbit/s

95th percentile per-packet one-way delay: 59.529 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 206.68 Mbit/s

95th percentile per-packet one-way delay: 61.652 ms

Loss rate: 0.00%

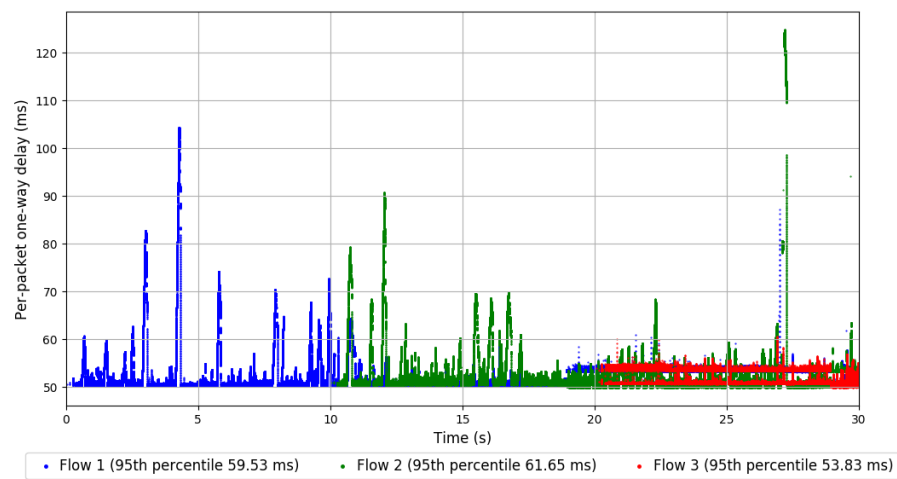
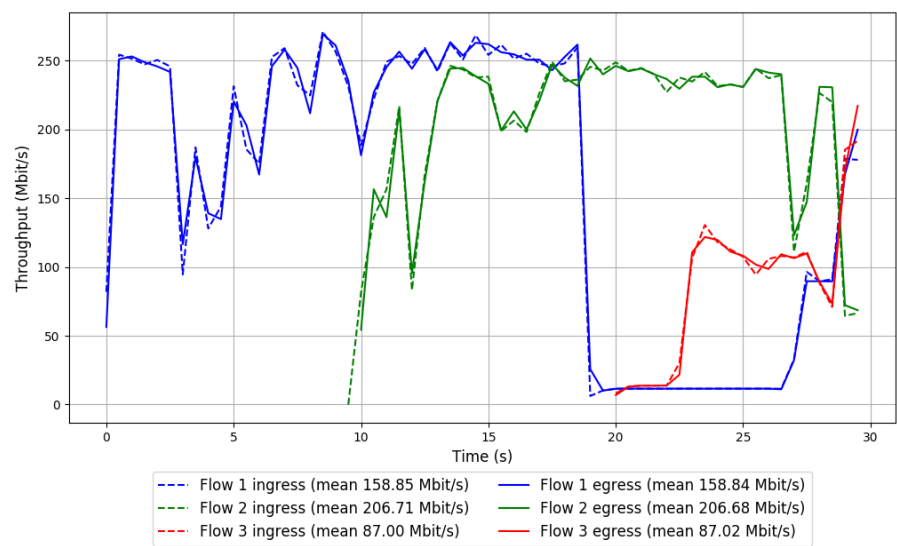
-- Flow 3:

Average throughput: 87.02 Mbit/s

95th percentile per-packet one-way delay: 53.827 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-03-07 08:35:46

End at: 2018-03-07 08:36:16

Below is generated by plot.py at 2018-03-07 12:02:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.08 Mbit/s

95th percentile per-packet one-way delay: 54.340 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 13.98 Mbit/s

95th percentile per-packet one-way delay: 54.321 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.99 Mbit/s

95th percentile per-packet one-way delay: 53.029 ms

Loss rate: 0.00%

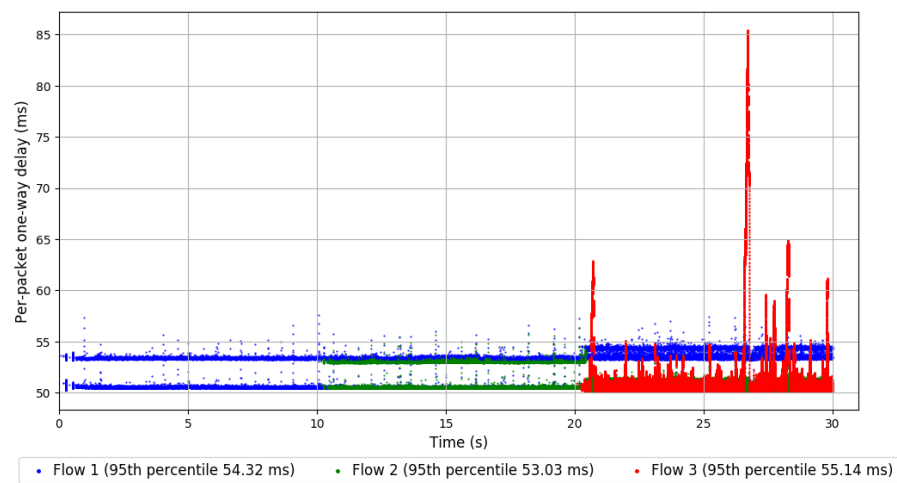
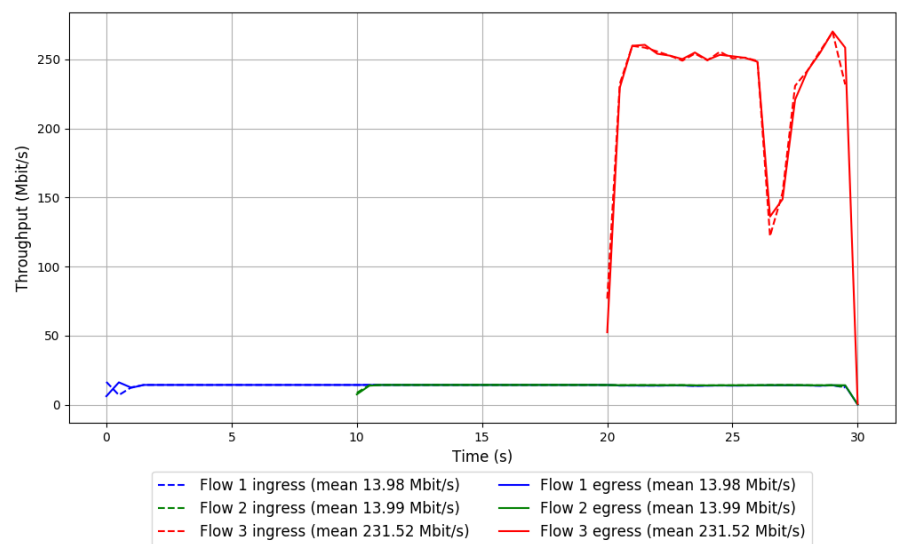
-- Flow 3:

Average throughput: 231.52 Mbit/s

95th percentile per-packet one-way delay: 55.138 ms

Loss rate: 0.00%

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

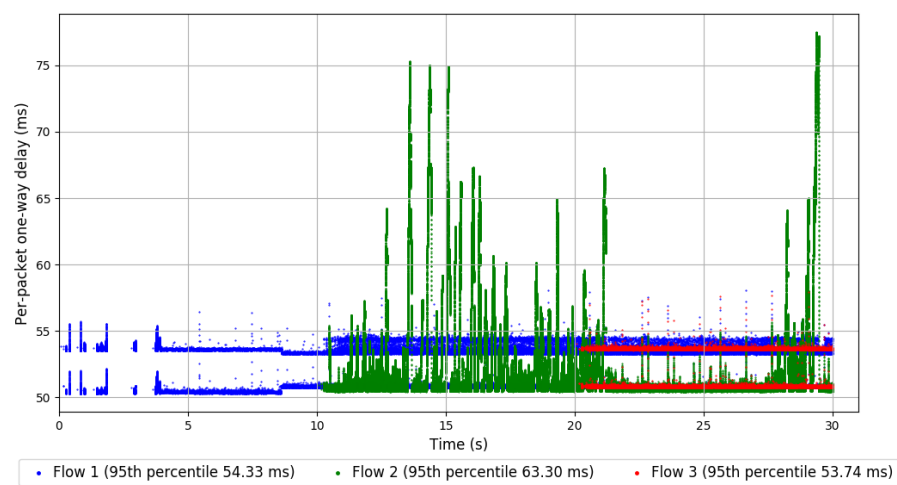
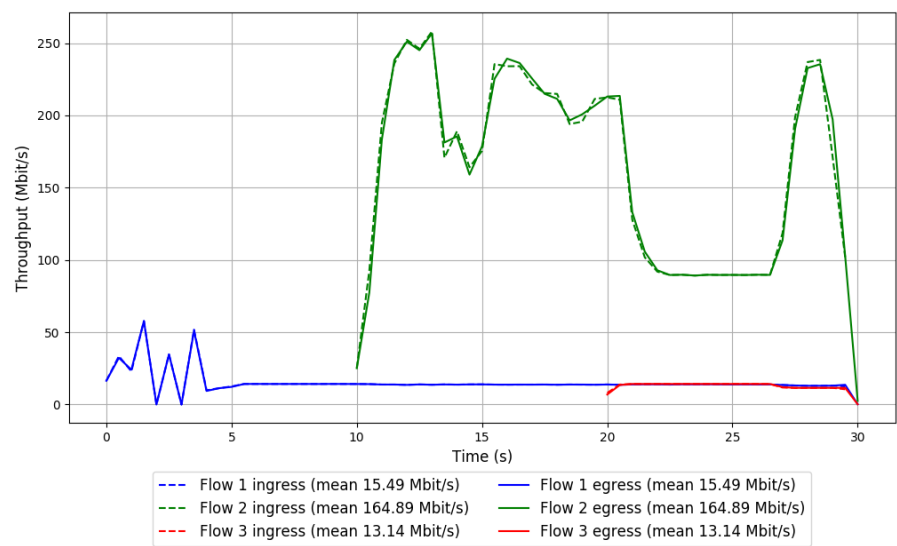


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-03-07 08:52:58
End at: 2018-03-07 08:53:28

# Below is generated by plot.py at 2018-03-07 12:02:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.65 Mbit/s
95th percentile per-packet one-way delay: 62.300 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 15.49 Mbit/s
95th percentile per-packet one-way delay: 54.328 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 164.89 Mbit/s
95th percentile per-packet one-way delay: 63.301 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.14 Mbit/s
95th percentile per-packet one-way delay: 53.737 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-03-07 06:12:00

End at: 2018-03-07 06:12:30

Below is generated by plot.py at 2018-03-07 12:02:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 199.77 Mbit/s

95th percentile per-packet one-way delay: 58.301 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 97.89 Mbit/s

95th percentile per-packet one-way delay: 54.864 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 116.18 Mbit/s

95th percentile per-packet one-way delay: 61.051 ms

Loss rate: 0.01%

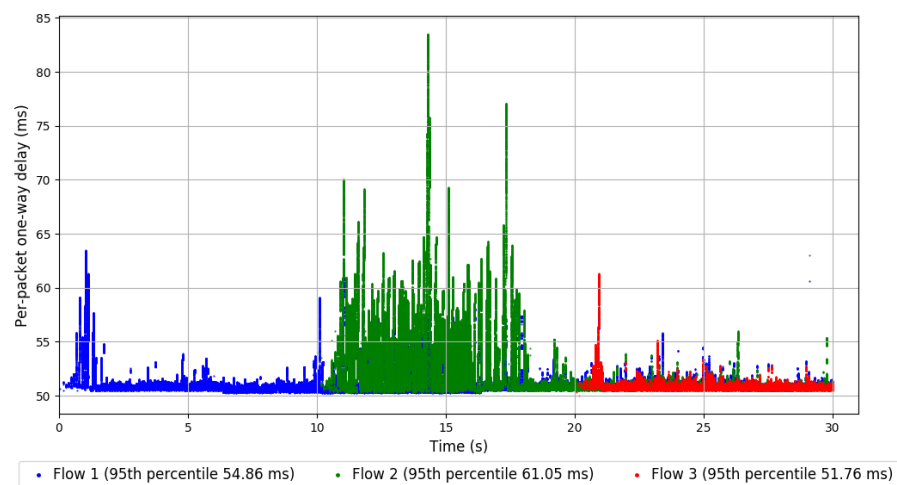
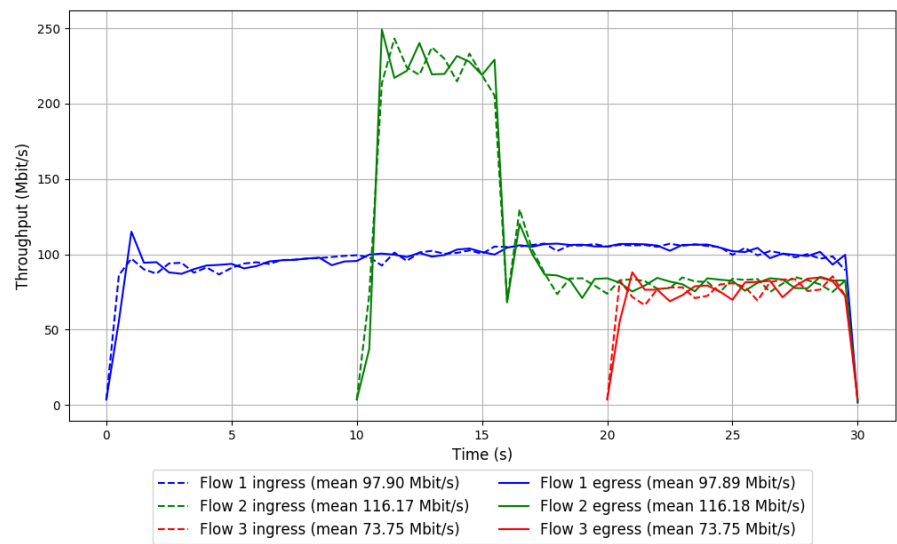
-- Flow 3:

Average throughput: 73.75 Mbit/s

95th percentile per-packet one-way delay: 51.759 ms

Loss rate: 0.00%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-03-07 06:29:25

End at: 2018-03-07 06:29:55

Below is generated by plot.py at 2018-03-07 12:02:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 249.63 Mbit/s

95th percentile per-packet one-way delay: 60.686 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 141.55 Mbit/s

95th percentile per-packet one-way delay: 57.011 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 130.14 Mbit/s

95th percentile per-packet one-way delay: 65.543 ms

Loss rate: 0.01%

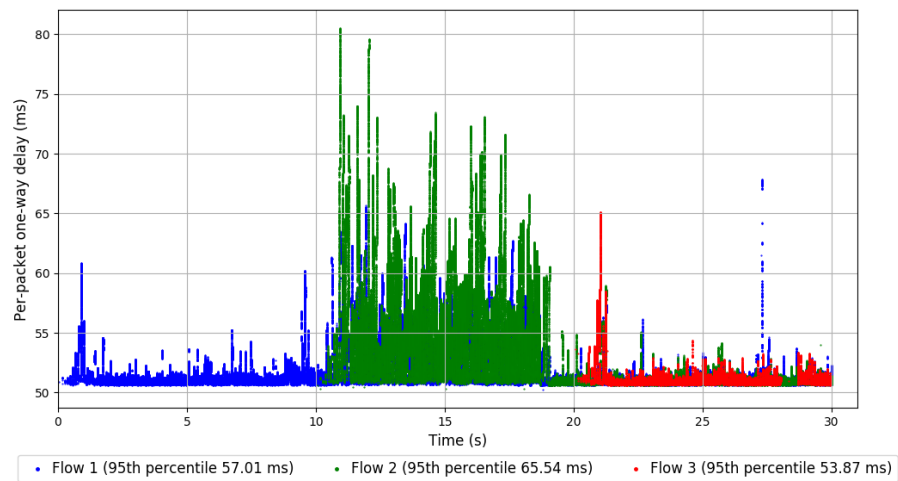
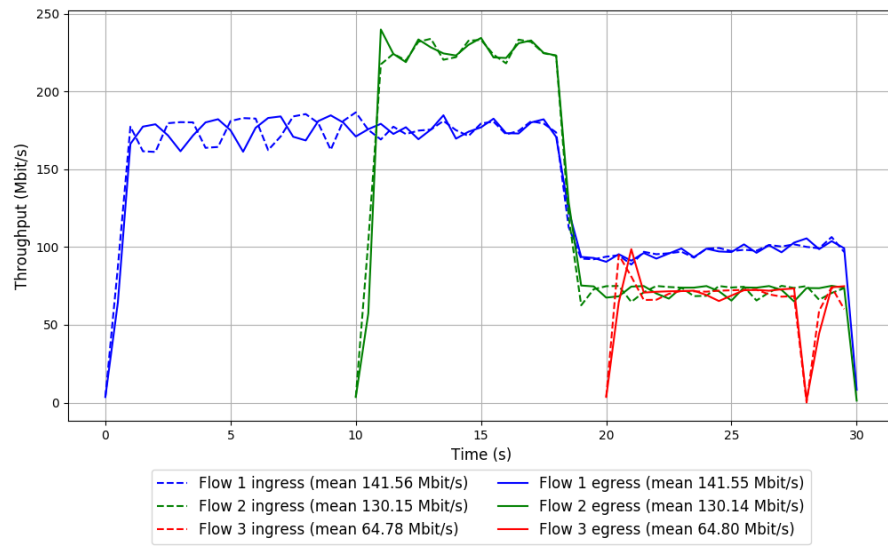
-- Flow 3:

Average throughput: 64.80 Mbit/s

95th percentile per-packet one-way delay: 53.868 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-03-07 06:46:48

End at: 2018-03-07 06:47:18

Below is generated by plot.py at 2018-03-07 12:02:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 208.33 Mbit/s

95th percentile per-packet one-way delay: 61.602 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 186.35 Mbit/s

95th percentile per-packet one-way delay: 61.996 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.10 Mbit/s

95th percentile per-packet one-way delay: 54.294 ms

Loss rate: 0.03%

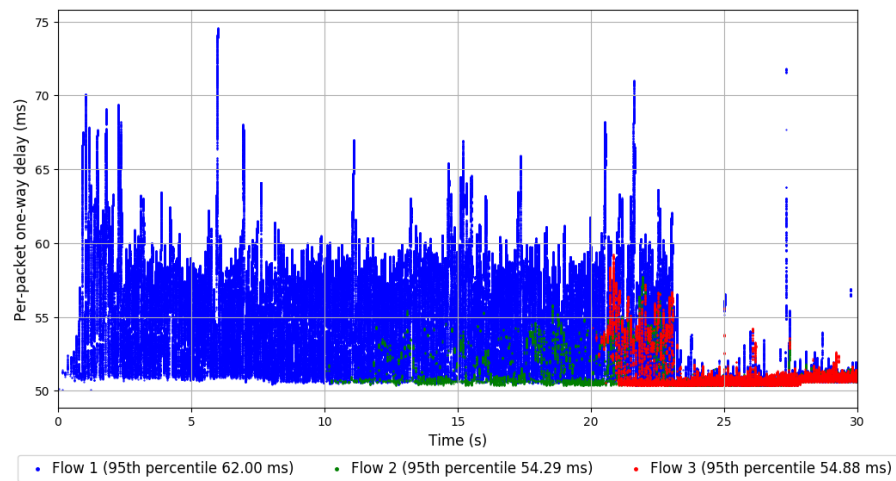
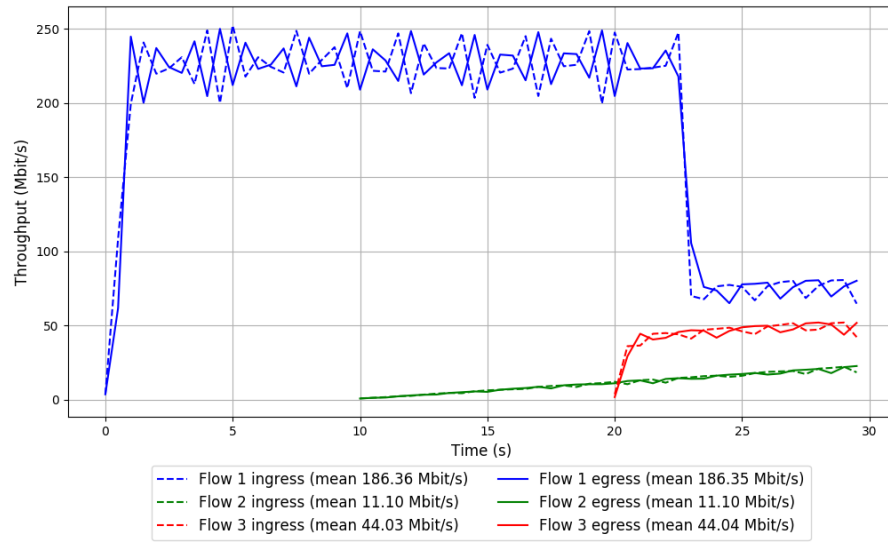
-- Flow 3:

Average throughput: 44.04 Mbit/s

95th percentile per-packet one-way delay: 54.875 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-03-07 07:04:12

End at: 2018-03-07 07:04:42

Below is generated by plot.py at 2018-03-07 12:02:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 176.11 Mbit/s

95th percentile per-packet one-way delay: 52.060 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 83.68 Mbit/s

95th percentile per-packet one-way delay: 52.117 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 135.97 Mbit/s

95th percentile per-packet one-way delay: 52.045 ms

Loss rate: 0.00%

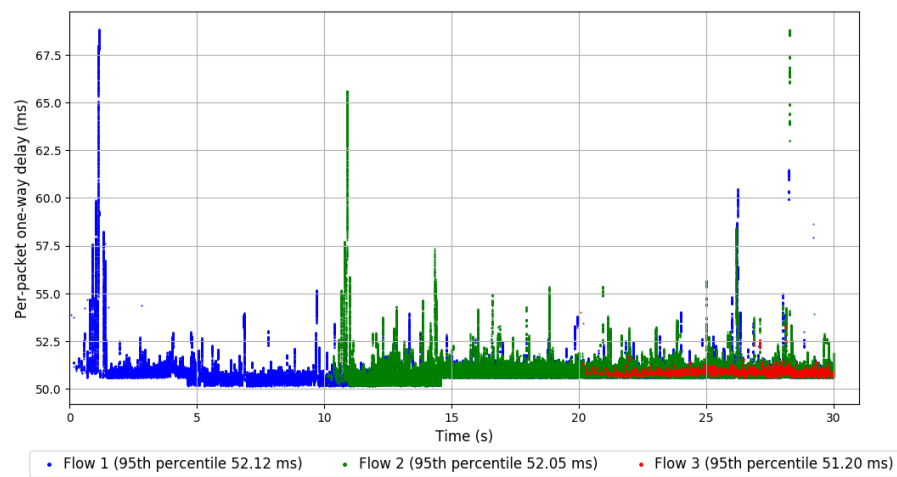
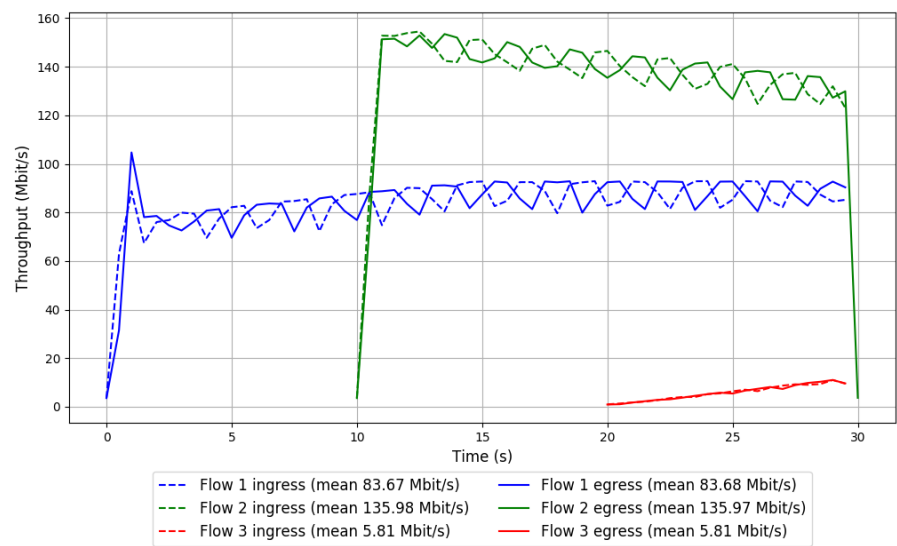
-- Flow 3:

Average throughput: 5.81 Mbit/s

95th percentile per-packet one-way delay: 51.199 ms

Loss rate: 0.06%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-03-07 07:21:41

End at: 2018-03-07 07:22:11

Below is generated by plot.py at 2018-03-07 12:02:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.46 Mbit/s

95th percentile per-packet one-way delay: 59.884 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 216.16 Mbit/s

95th percentile per-packet one-way delay: 60.270 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.71 Mbit/s

95th percentile per-packet one-way delay: 55.523 ms

Loss rate: 0.00%

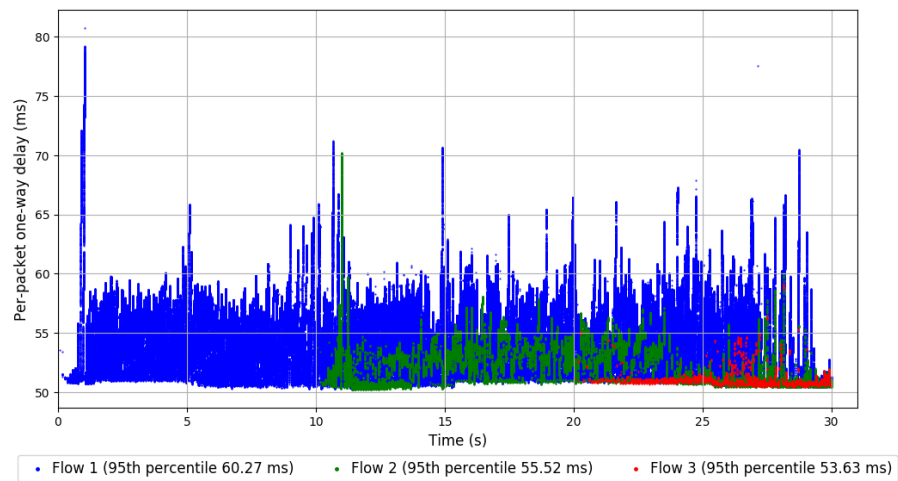
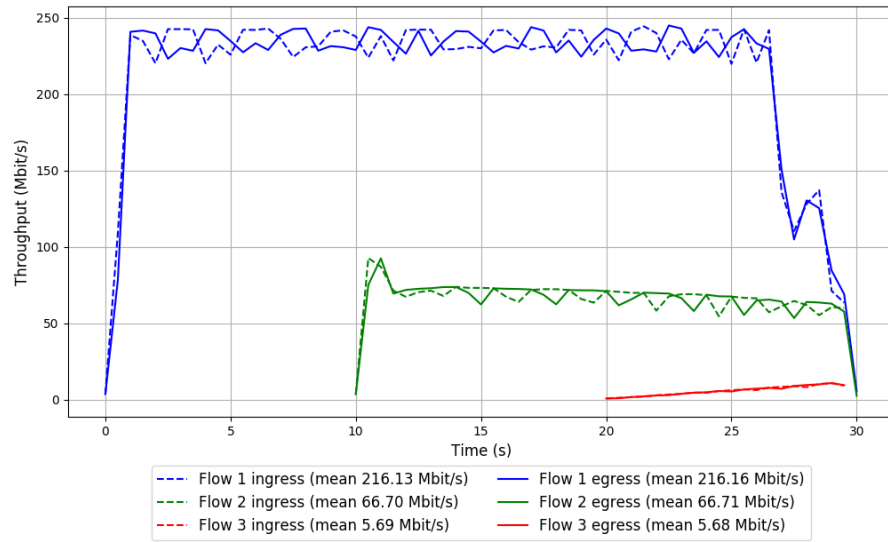
-- Flow 3:

Average throughput: 5.68 Mbit/s

95th percentile per-packet one-way delay: 53.631 ms

Loss rate: 0.11%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-03-07 07:39:09

End at: 2018-03-07 07:39:39

Below is generated by plot.py at 2018-03-07 12:02:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 293.15 Mbit/s

95th percentile per-packet one-way delay: 59.360 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 191.91 Mbit/s

95th percentile per-packet one-way delay: 60.371 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.32 Mbit/s

95th percentile per-packet one-way delay: 53.494 ms

Loss rate: 0.00%

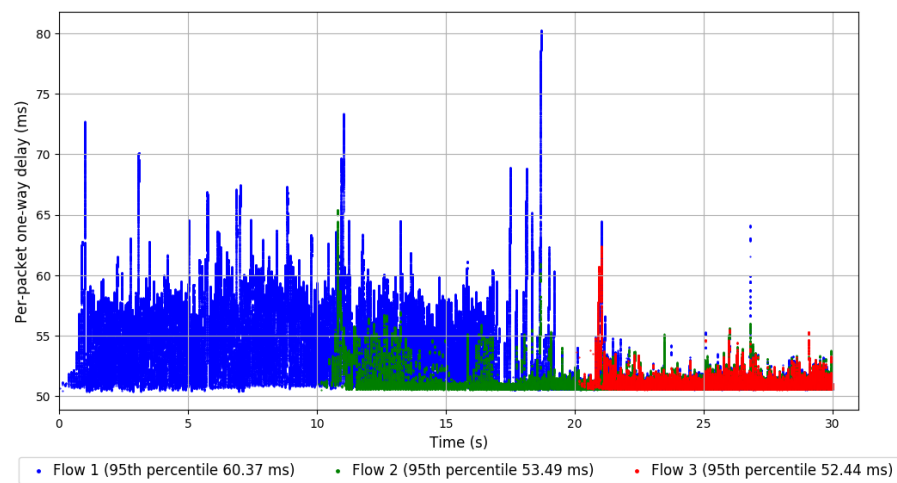
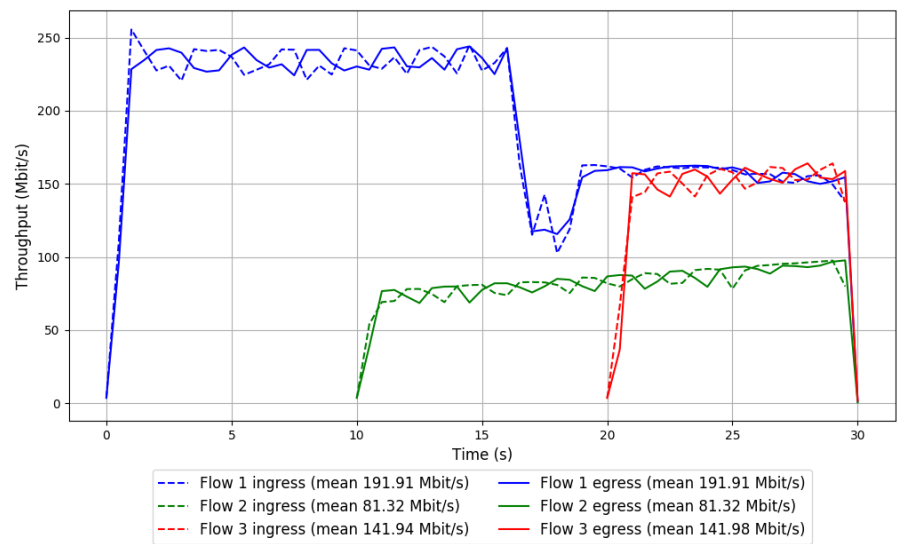
-- Flow 3:

Average throughput: 141.98 Mbit/s

95th percentile per-packet one-way delay: 52.435 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-03-07 07:56:35

End at: 2018-03-07 07:57:05

Below is generated by plot.py at 2018-03-07 12:02:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.05 Mbit/s

95th percentile per-packet one-way delay: 59.965 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 86.07 Mbit/s

95th percentile per-packet one-way delay: 55.030 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 190.91 Mbit/s

95th percentile per-packet one-way delay: 61.456 ms

Loss rate: 0.01%

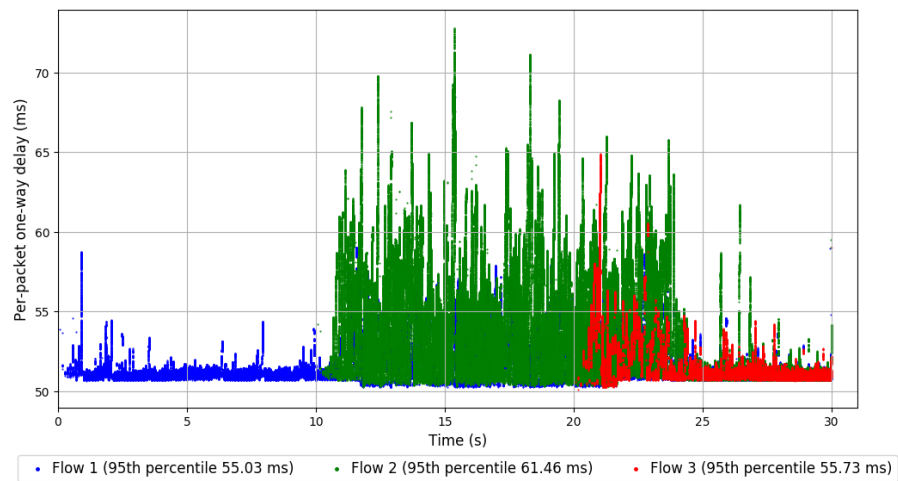
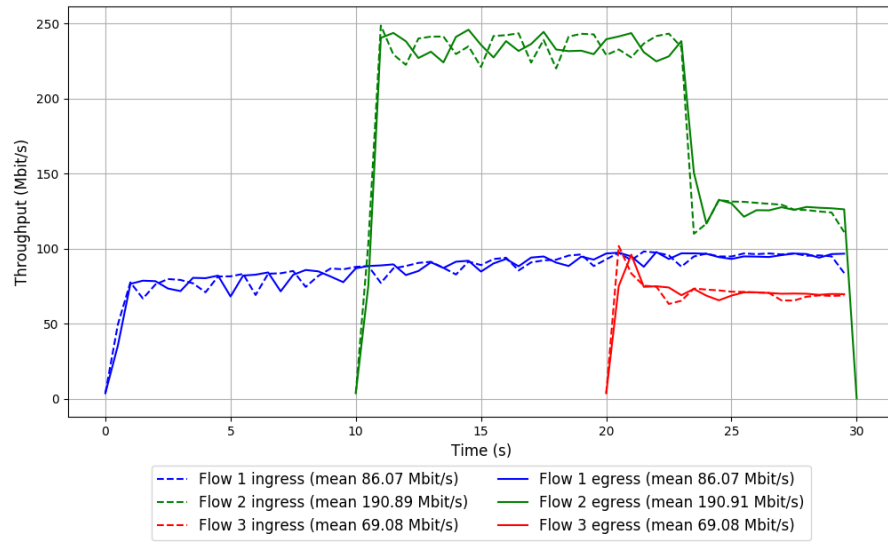
-- Flow 3:

Average throughput: 69.08 Mbit/s

95th percentile per-packet one-way delay: 55.732 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-03-07 08:14:17

End at: 2018-03-07 08:14:47

Below is generated by plot.py at 2018-03-07 12:02:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 231.24 Mbit/s

95th percentile per-packet one-way delay: 52.627 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 147.54 Mbit/s

95th percentile per-packet one-way delay: 52.708 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 87.49 Mbit/s

95th percentile per-packet one-way delay: 51.808 ms

Loss rate: 0.00%

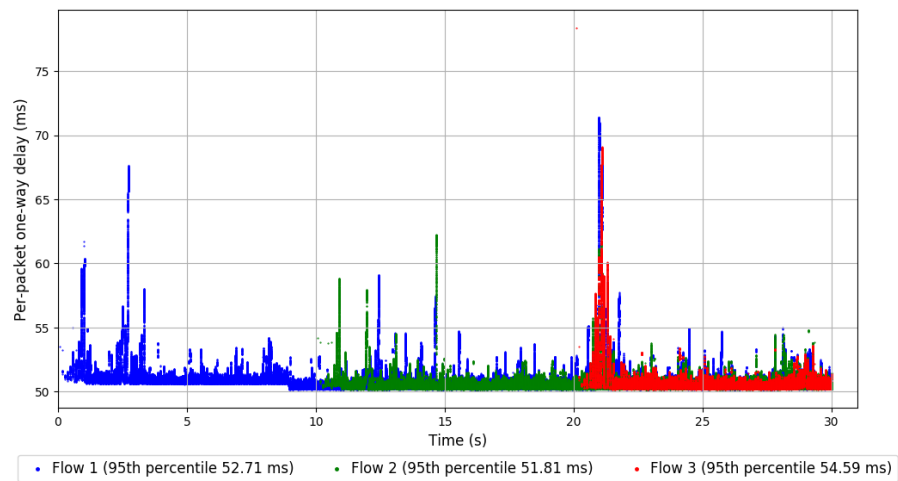
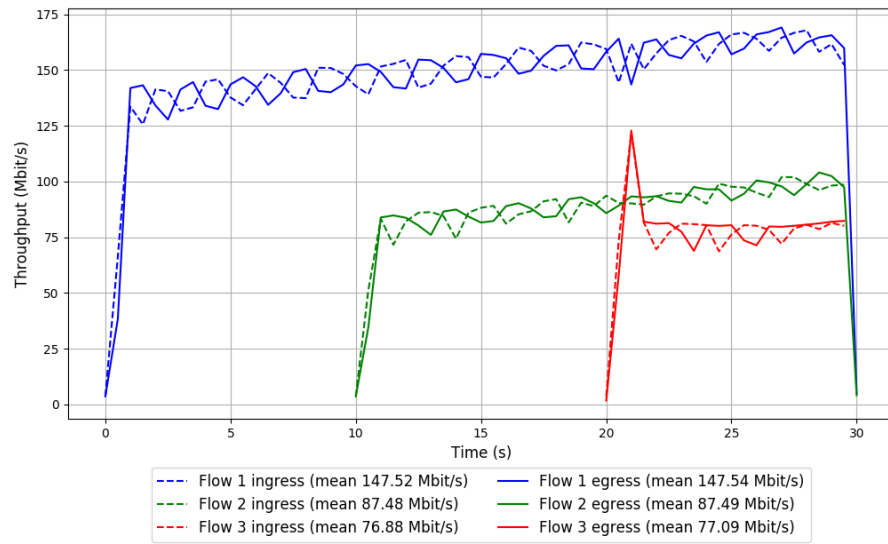
-- Flow 3:

Average throughput: 77.09 Mbit/s

95th percentile per-packet one-way delay: 54.586 ms

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-03-07 08:31:43

End at: 2018-03-07 08:32:13

Below is generated by plot.py at 2018-03-07 12:03:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 265.31 Mbit/s

95th percentile per-packet one-way delay: 58.553 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 112.85 Mbit/s

95th percentile per-packet one-way delay: 55.671 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 145.94 Mbit/s

95th percentile per-packet one-way delay: 57.583 ms

Loss rate: 0.01%

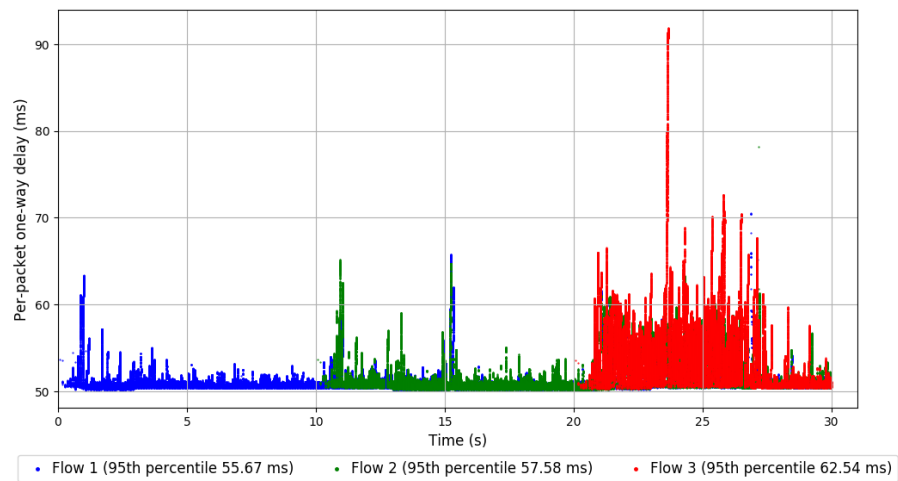
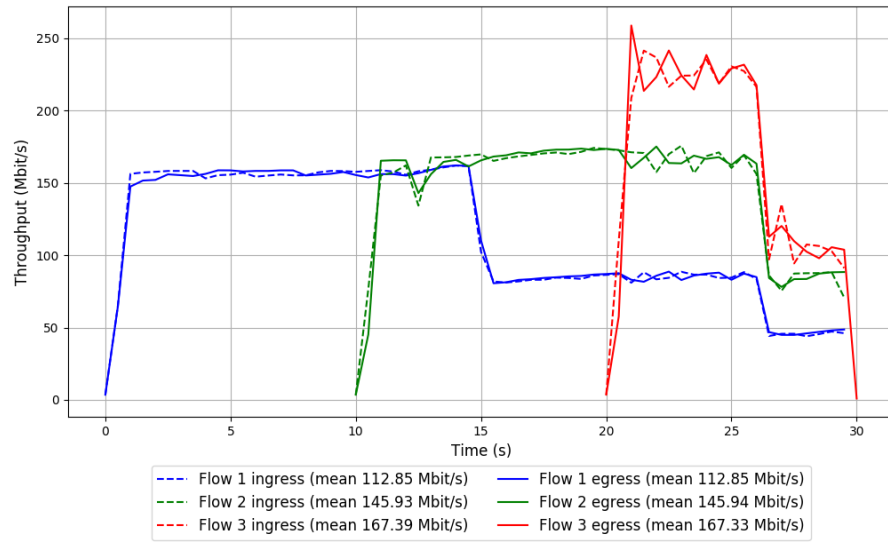
-- Flow 3:

Average throughput: 167.33 Mbit/s

95th percentile per-packet one-way delay: 62.543 ms

Loss rate: 0.06%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-03-07 08:48:57

End at: 2018-03-07 08:49:27

Below is generated by plot.py at 2018-03-07 12:03:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.68 Mbit/s

95th percentile per-packet one-way delay: 60.569 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 102.22 Mbit/s

95th percentile per-packet one-way delay: 56.509 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 147.14 Mbit/s

95th percentile per-packet one-way delay: 62.683 ms

Loss rate: 0.00%

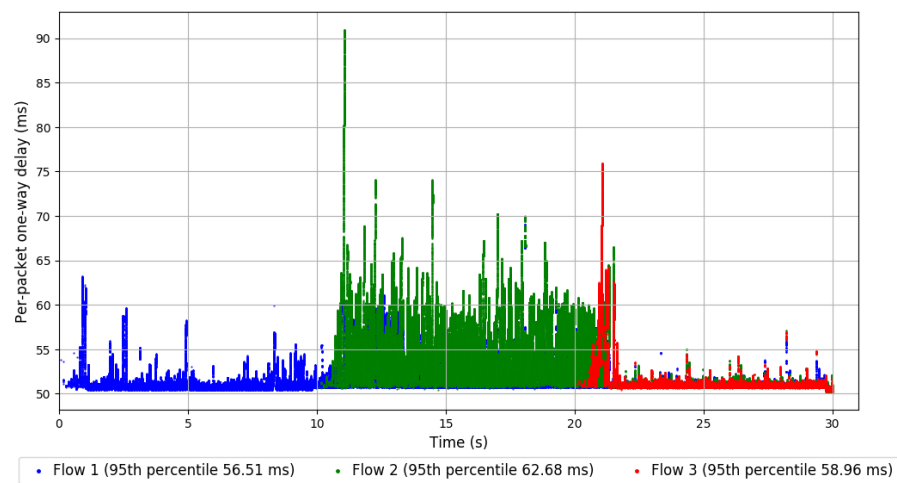
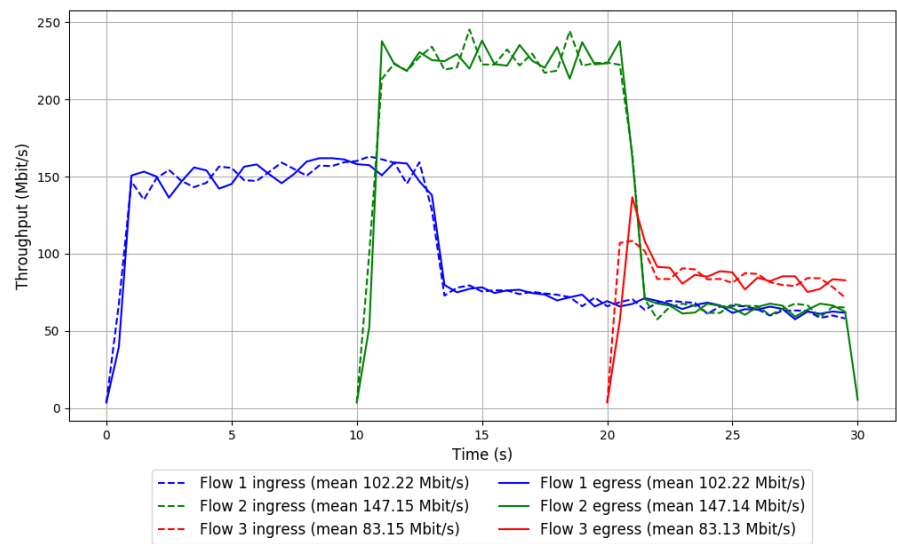
-- Flow 3:

Average throughput: 83.13 Mbit/s

95th percentile per-packet one-way delay: 58.962 ms

Loss rate: 0.03%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-03-07 06:03:48

End at: 2018-03-07 06:04:18

Below is generated by plot.py at 2018-03-07 12:06:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 369.56 Mbit/s

95th percentile per-packet one-way delay: 146.353 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 211.69 Mbit/s

95th percentile per-packet one-way delay: 134.775 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 168.51 Mbit/s

95th percentile per-packet one-way delay: 125.605 ms

Loss rate: 0.79%

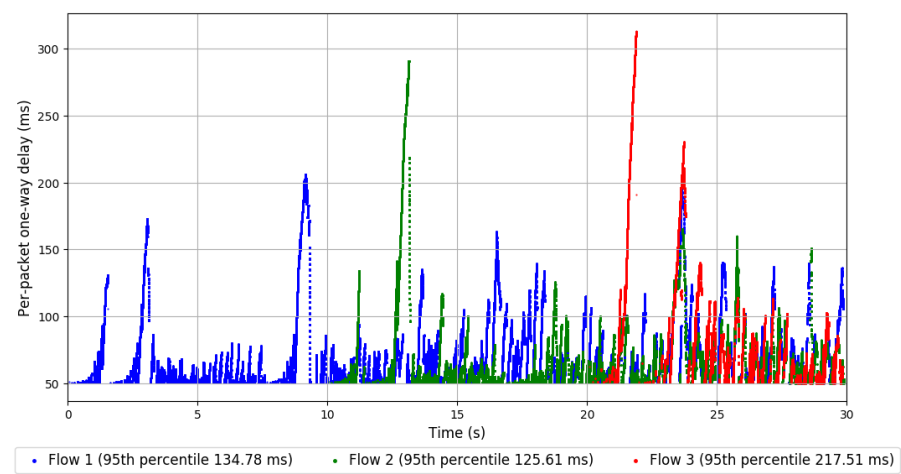
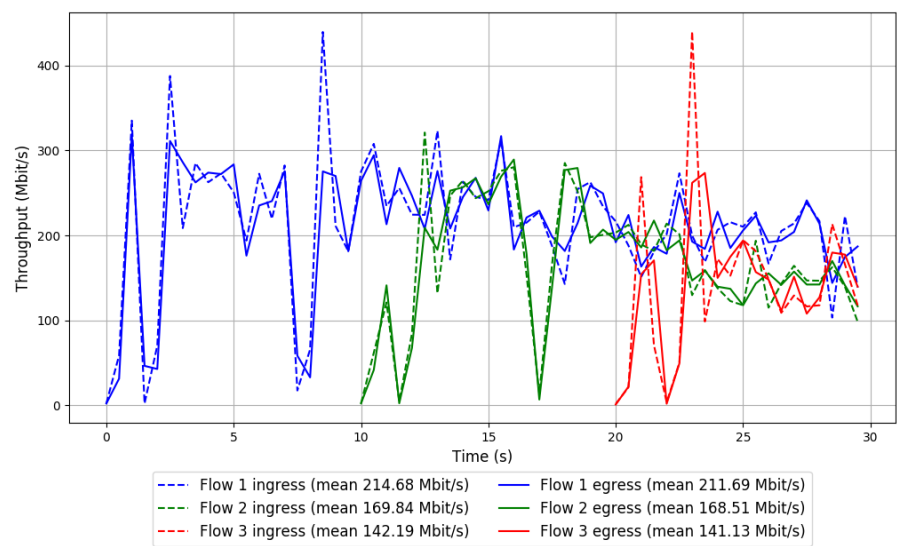
-- Flow 3:

Average throughput: 141.13 Mbit/s

95th percentile per-packet one-way delay: 217.509 ms

Loss rate: 0.75%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-03-07 06:21:19

End at: 2018-03-07 06:21:49

Below is generated by plot.py at 2018-03-07 12:06:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 346.57 Mbit/s

95th percentile per-packet one-way delay: 151.845 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 183.19 Mbit/s

95th percentile per-packet one-way delay: 147.063 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 184.07 Mbit/s

95th percentile per-packet one-way delay: 188.694 ms

Loss rate: 2.40%

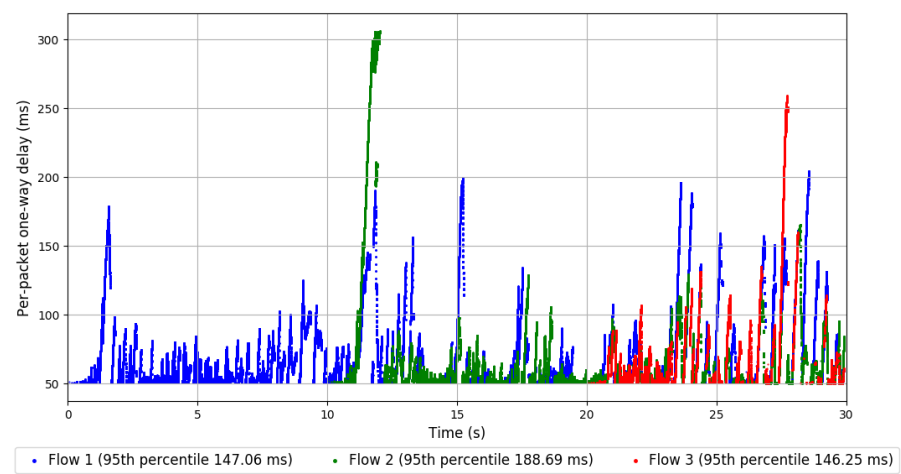
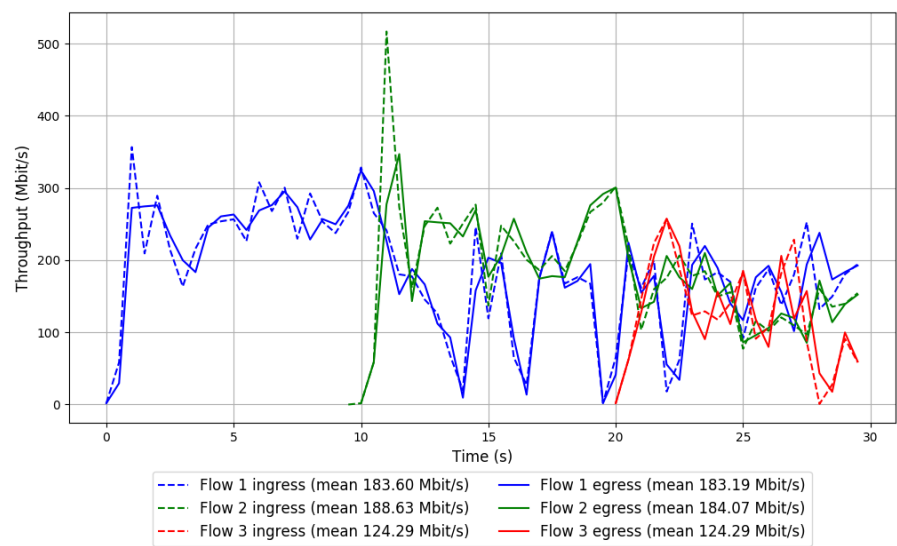
-- Flow 3:

Average throughput: 124.29 Mbit/s

95th percentile per-packet one-way delay: 146.255 ms

Loss rate: 0.02%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-03-07 06:38:44

End at: 2018-03-07 06:39:14

Below is generated by plot.py at 2018-03-07 12:06:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.48 Mbit/s

95th percentile per-packet one-way delay: 136.943 ms

Loss rate: 1.61%

-- Flow 1:

Average throughput: 190.89 Mbit/s

95th percentile per-packet one-way delay: 135.683 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 131.34 Mbit/s

95th percentile per-packet one-way delay: 123.784 ms

Loss rate: 1.10%

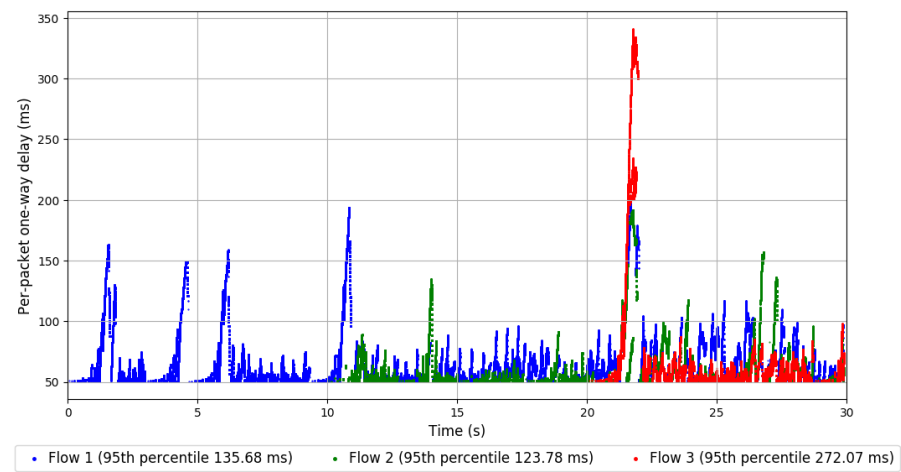
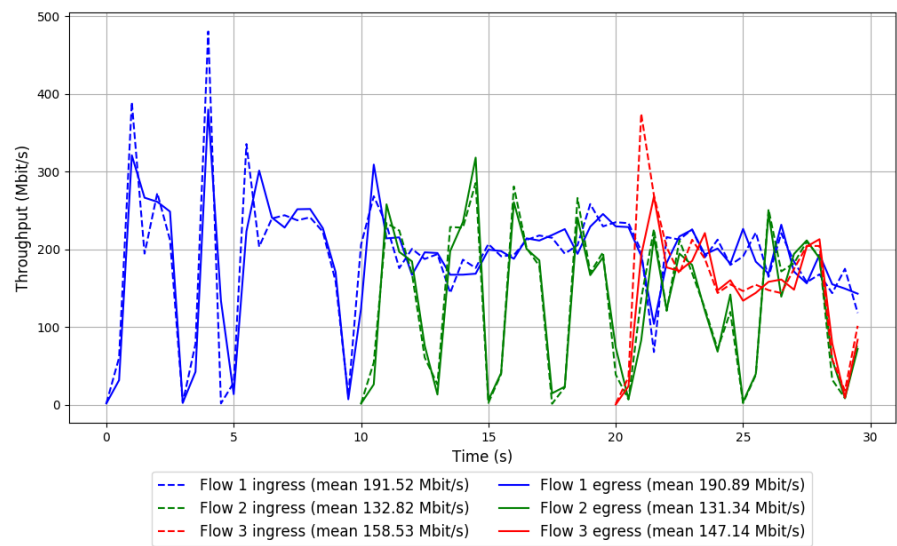
-- Flow 3:

Average throughput: 147.14 Mbit/s

95th percentile per-packet one-way delay: 272.073 ms

Loss rate: 7.19%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-03-07 06:56:00

End at: 2018-03-07 06:56:30

Below is generated by plot.py at 2018-03-07 12:07:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.04 Mbit/s

95th percentile per-packet one-way delay: 133.765 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 206.45 Mbit/s

95th percentile per-packet one-way delay: 148.520 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 174.40 Mbit/s

95th percentile per-packet one-way delay: 120.576 ms

Loss rate: 0.00%

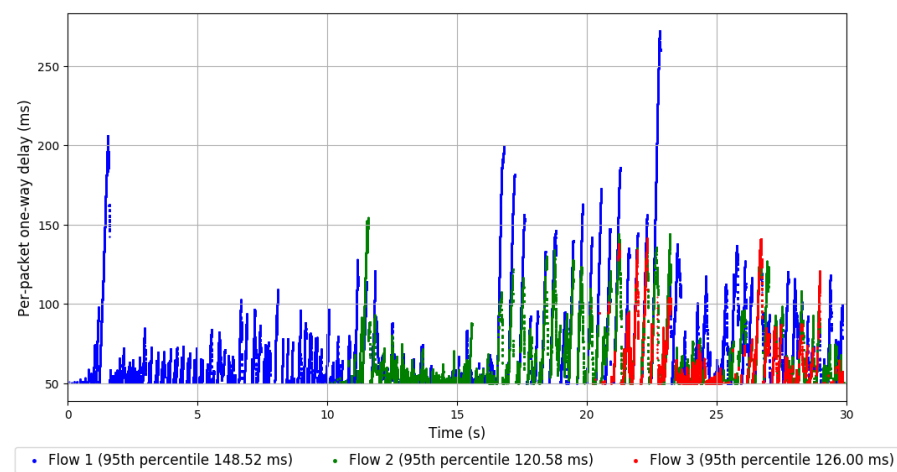
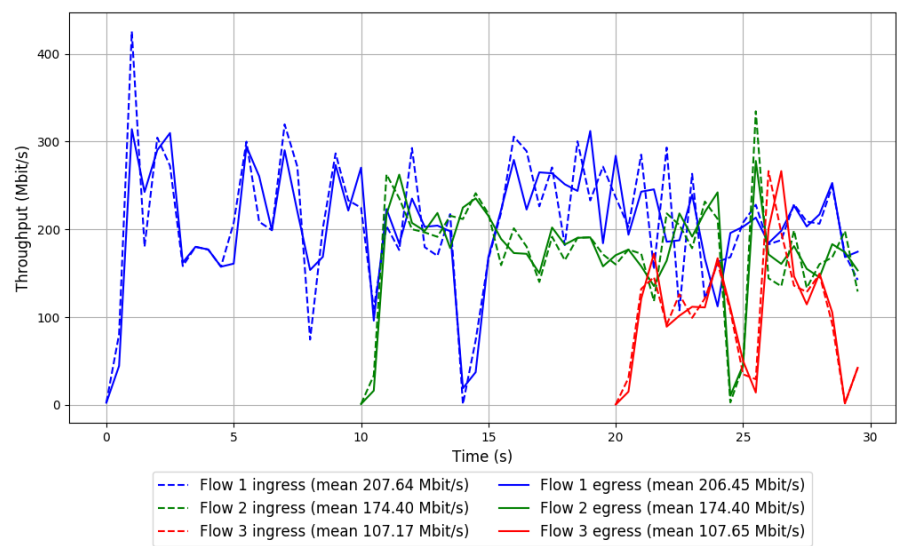
-- Flow 3:

Average throughput: 107.65 Mbit/s

95th percentile per-packet one-way delay: 125.999 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-03-07 07:13:31

End at: 2018-03-07 07:14:01

Below is generated by plot.py at 2018-03-07 12:07:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 318.53 Mbit/s

95th percentile per-packet one-way delay: 168.298 ms

Loss rate: 2.23%

-- Flow 1:

Average throughput: 172.56 Mbit/s

95th percentile per-packet one-way delay: 192.922 ms

Loss rate: 2.92%

-- Flow 2:

Average throughput: 152.71 Mbit/s

95th percentile per-packet one-way delay: 115.861 ms

Loss rate: 0.22%

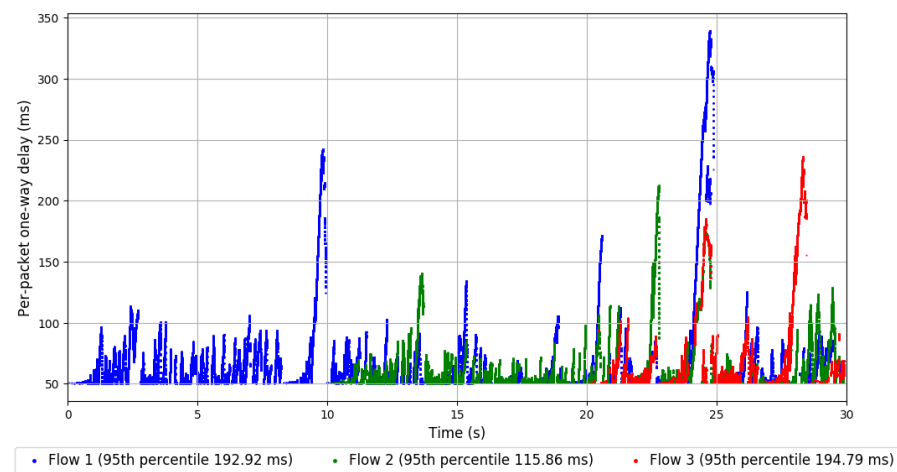
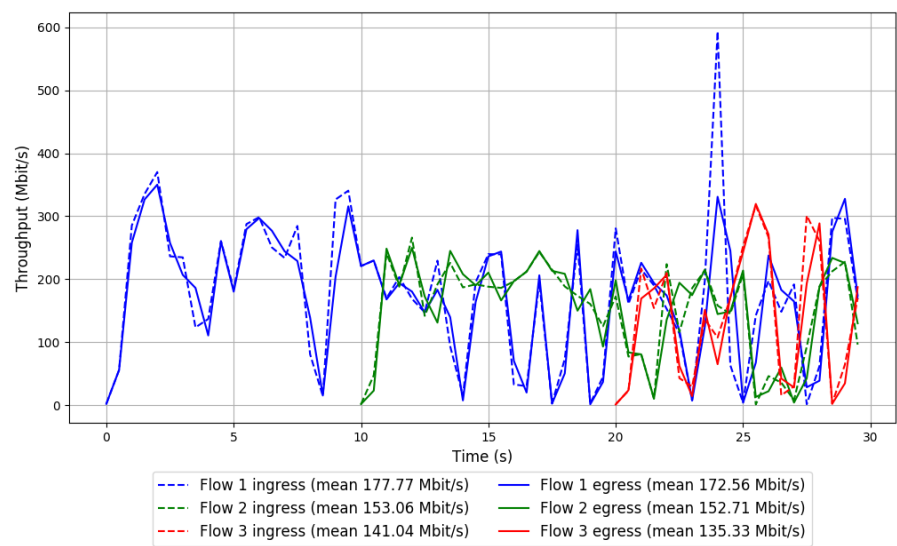
-- Flow 3:

Average throughput: 135.33 Mbit/s

95th percentile per-packet one-way delay: 194.787 ms

Loss rate: 4.02%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-03-07 07:30:59

End at: 2018-03-07 07:31:29

Below is generated by plot.py at 2018-03-07 12:08:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 401.85 Mbit/s

95th percentile per-packet one-way delay: 135.615 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 205.34 Mbit/s

95th percentile per-packet one-way delay: 112.600 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 211.72 Mbit/s

95th percentile per-packet one-way delay: 132.702 ms

Loss rate: 0.55%

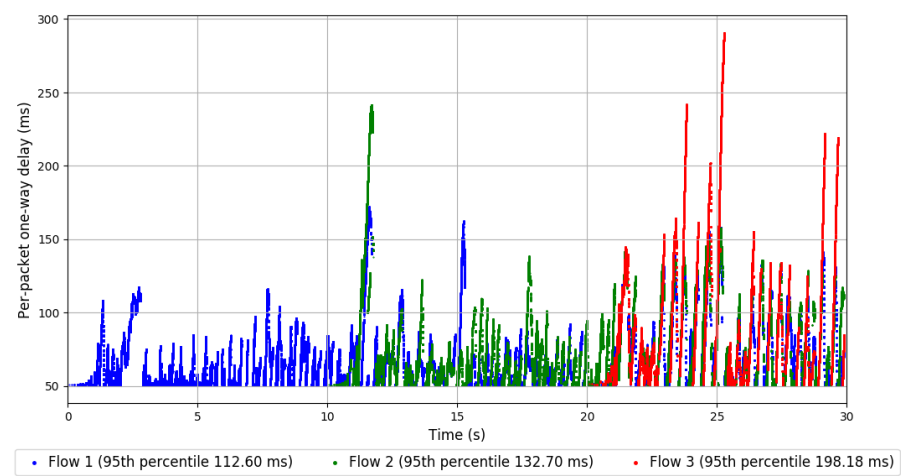
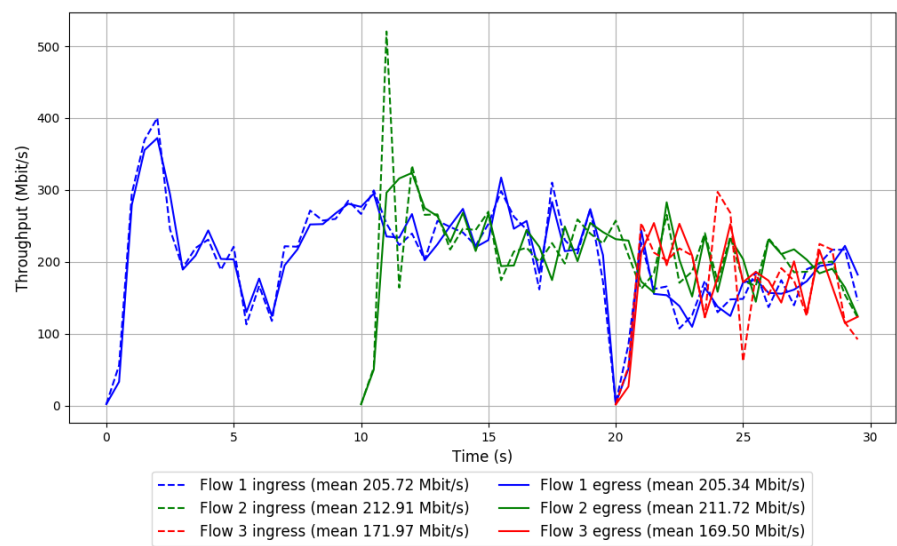
-- Flow 3:

Average throughput: 169.50 Mbit/s

95th percentile per-packet one-way delay: 198.183 ms

Loss rate: 1.42%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-03-07 07:48:27

End at: 2018-03-07 07:48:57

Below is generated by plot.py at 2018-03-07 12:09:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 375.17 Mbit/s

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

Loss rate: 0.20%

-- Flow 1:

Average throughput: 216.50 Mbit/s

95th percentile per-packet one-way delay: 132.360 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 183.27 Mbit/s

95th percentile per-packet one-way delay: 122.744 ms

Loss rate: 0.18%

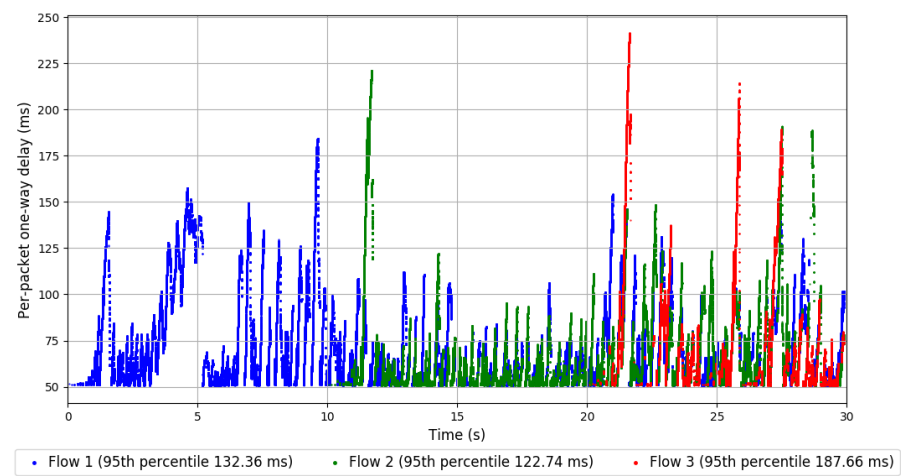
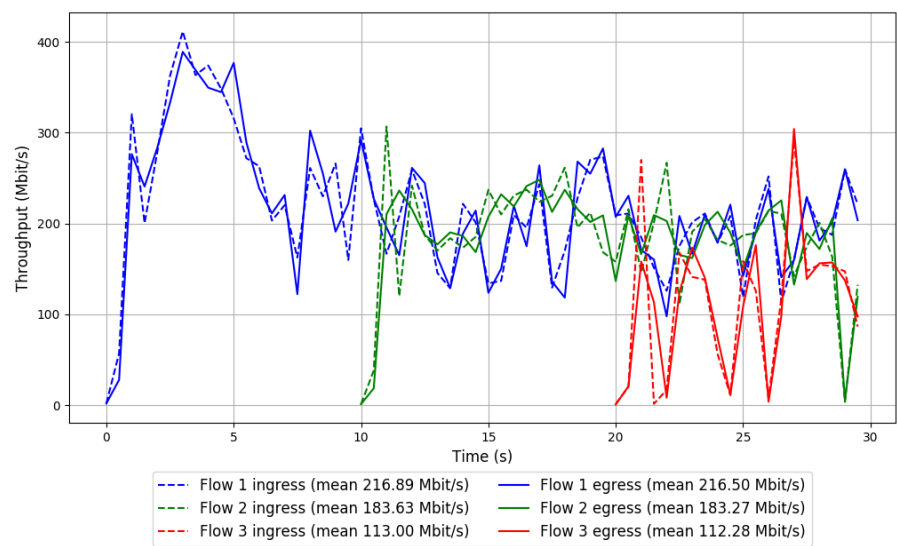
-- Flow 3:

Average throughput: 112.28 Mbit/s

95th percentile per-packet one-way delay: 187.663 ms

Loss rate: 0.61%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-03-07 08:06:05

End at: 2018-03-07 08:06:35

Below is generated by plot.py at 2018-03-07 12:09:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.31 Mbit/s

95th percentile per-packet one-way delay: 136.291 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 210.74 Mbit/s

95th percentile per-packet one-way delay: 128.354 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 183.83 Mbit/s

95th percentile per-packet one-way delay: 164.743 ms

Loss rate: 1.10%

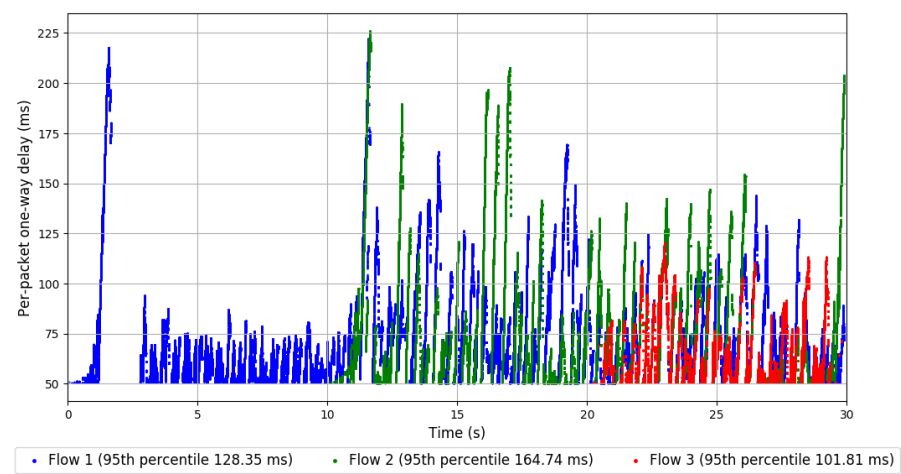
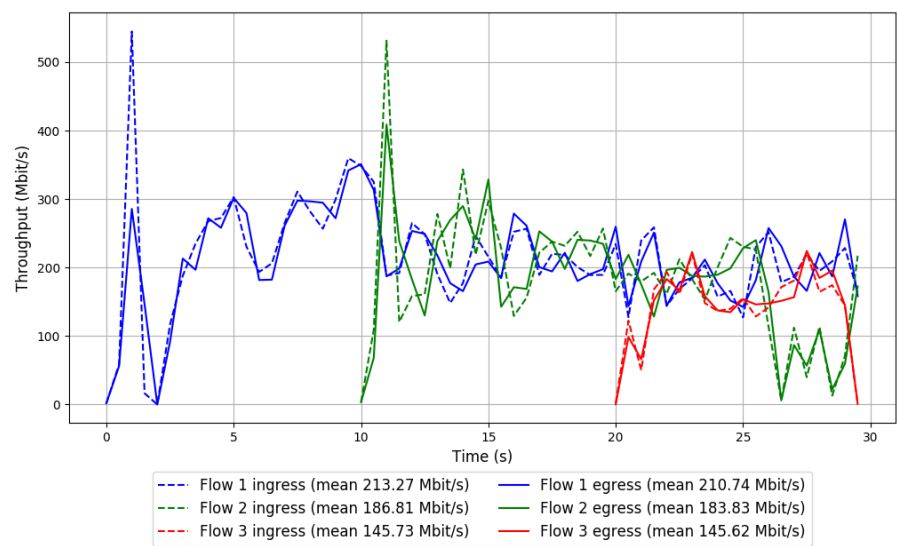
-- Flow 3:

Average throughput: 145.62 Mbit/s

95th percentile per-packet one-way delay: 101.807 ms

Loss rate: 0.00%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-03-07 08:23:43

End at: 2018-03-07 08:24:13

Below is generated by plot.py at 2018-03-07 12:11:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 313.07 Mbit/s

95th percentile per-packet one-way delay: 148.925 ms

Loss rate: 1.59%

-- Flow 1:

Average throughput: 181.03 Mbit/s

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

Loss rate: 2.71%

-- Flow 2:

Average throughput: 156.86 Mbit/s

95th percentile per-packet one-way delay: 163.567 ms

Loss rate: 0.00%

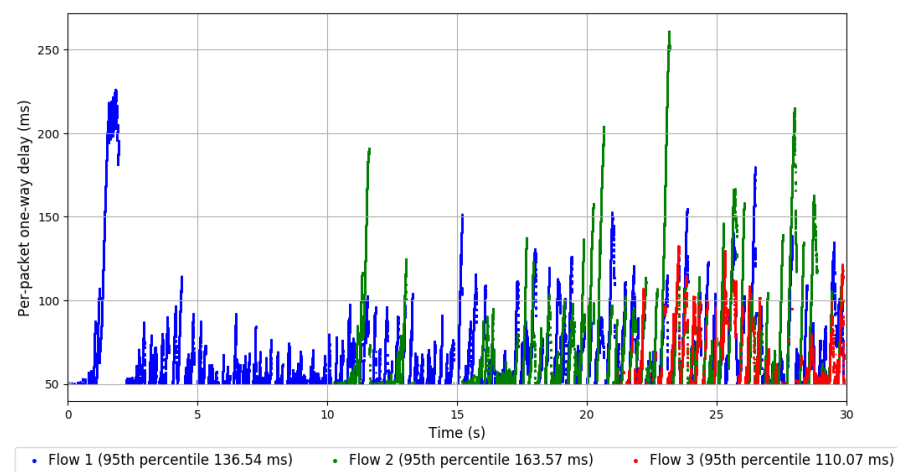
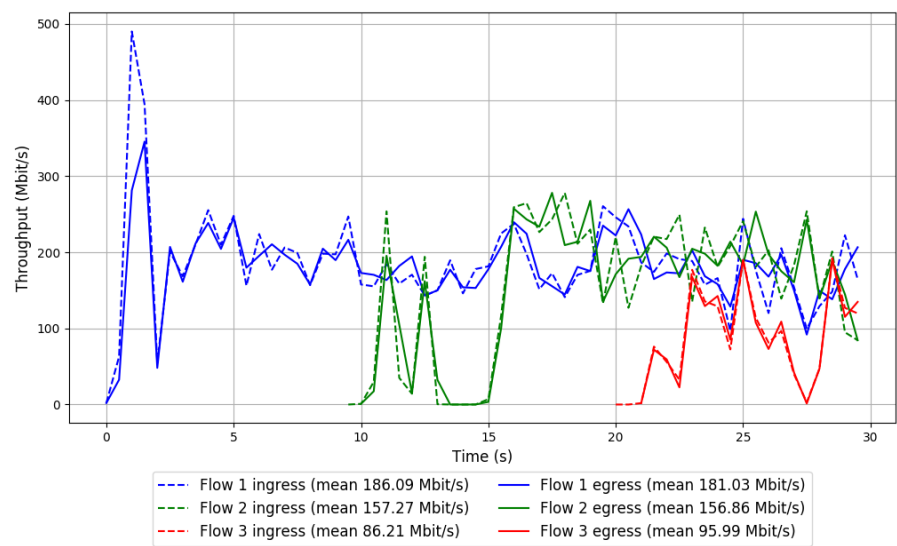
-- Flow 3:

Average throughput: 95.99 Mbit/s

95th percentile per-packet one-way delay: 110.070 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-03-07 08:40:53

End at: 2018-03-07 08:41:23

Below is generated by plot.py at 2018-03-07 12:11:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.74 Mbit/s

95th percentile per-packet one-way delay: 186.665 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 171.84 Mbit/s

95th percentile per-packet one-way delay: 143.998 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 159.70 Mbit/s

95th percentile per-packet one-way delay: 177.787 ms

Loss rate: 1.64%

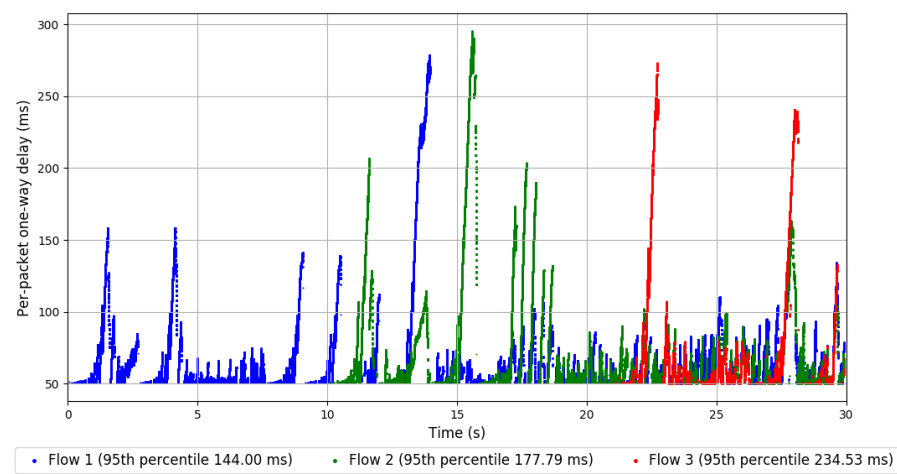
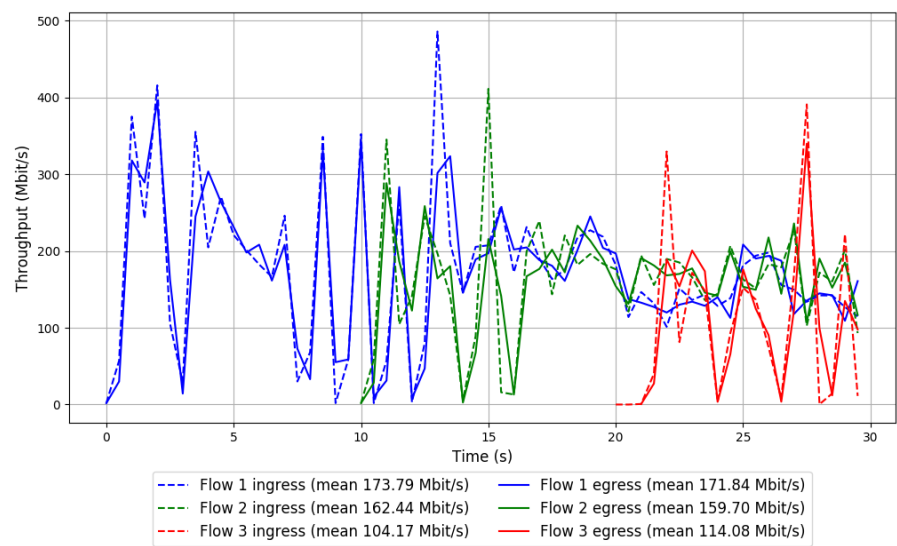
-- Flow 3:

Average throughput: 114.08 Mbit/s

95th percentile per-packet one-way delay: 234.526 ms

Loss rate: 1.56%

Run 10: Report of Verus — Data Link

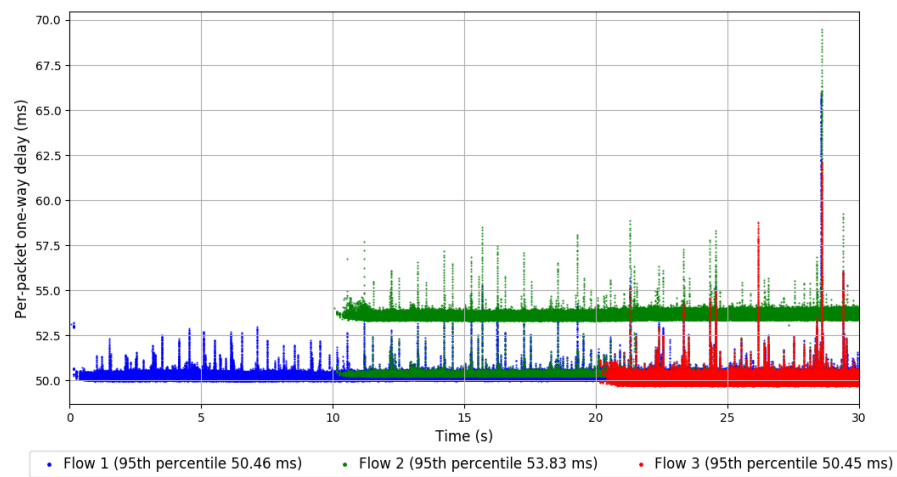
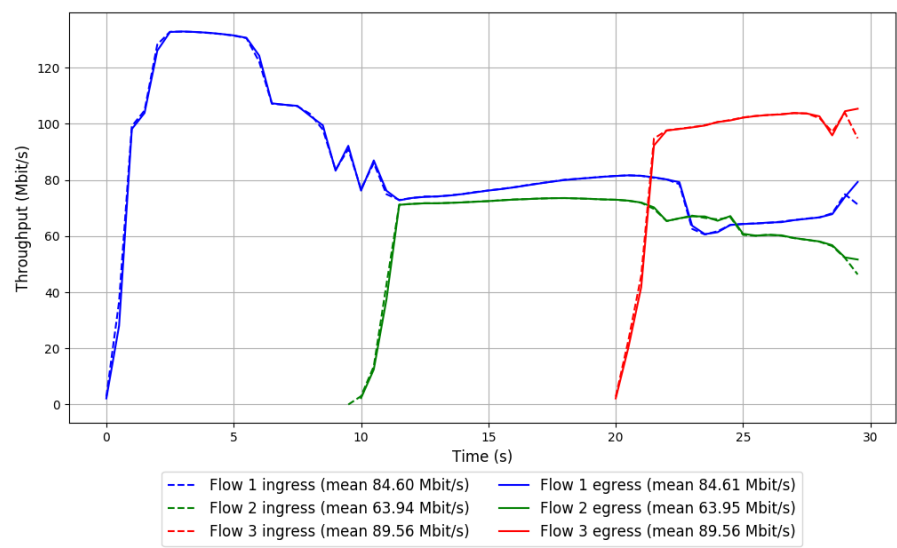


```
Run 1: Statistics of Copa

Start at: 2018-03-07 06:11:06
End at: 2018-03-07 06:11:36

# Below is generated by plot.py at 2018-03-07 12:11:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.93 Mbit/s
95th percentile per-packet one-way delay: 53.639 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.61 Mbit/s
95th percentile per-packet one-way delay: 50.460 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 63.95 Mbit/s
95th percentile per-packet one-way delay: 53.830 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 89.56 Mbit/s
95th percentile per-packet one-way delay: 50.455 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-03-07 06:28:32

End at: 2018-03-07 06:29:02

Below is generated by plot.py at 2018-03-07 12:11:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 154.17 Mbit/s

95th percentile per-packet one-way delay: 53.338 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.56 Mbit/s

95th percentile per-packet one-way delay: 50.801 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.33 Mbit/s

95th percentile per-packet one-way delay: 53.466 ms

Loss rate: 0.00%

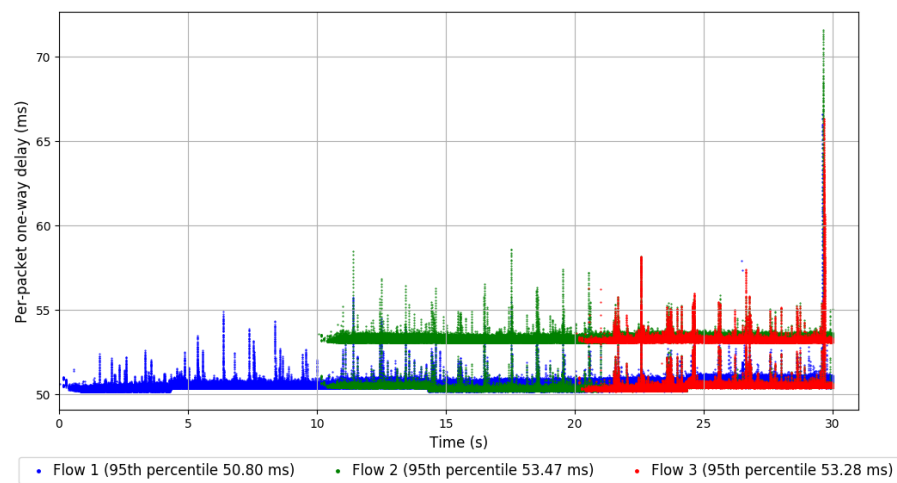
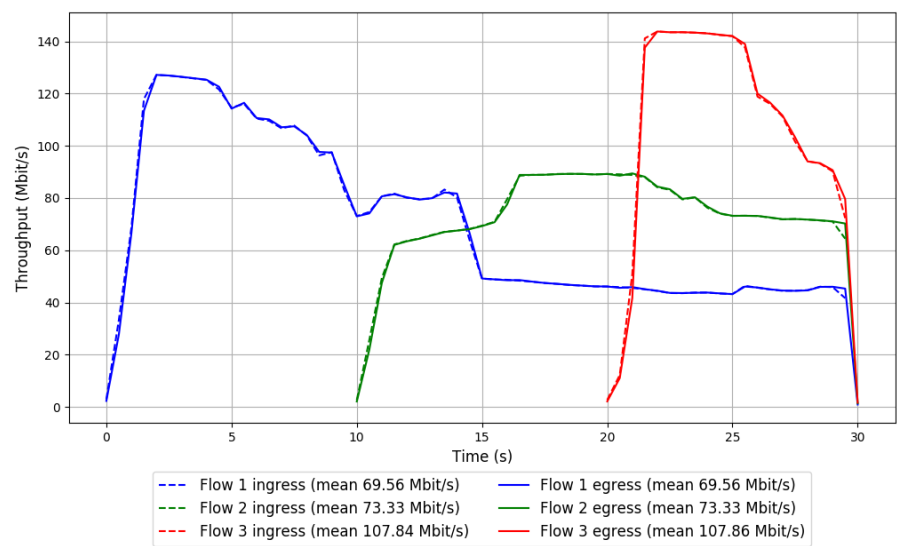
-- Flow 3:

Average throughput: 107.86 Mbit/s

95th percentile per-packet one-way delay: 53.283 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-03-07 06:45:55

End at: 2018-03-07 06:46:25

Below is generated by plot.py at 2018-03-07 12:12:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.56 Mbit/s

95th percentile per-packet one-way delay: 53.248 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 77.26 Mbit/s

95th percentile per-packet one-way delay: 53.112 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 81.59 Mbit/s

95th percentile per-packet one-way delay: 50.554 ms

Loss rate: 0.00%

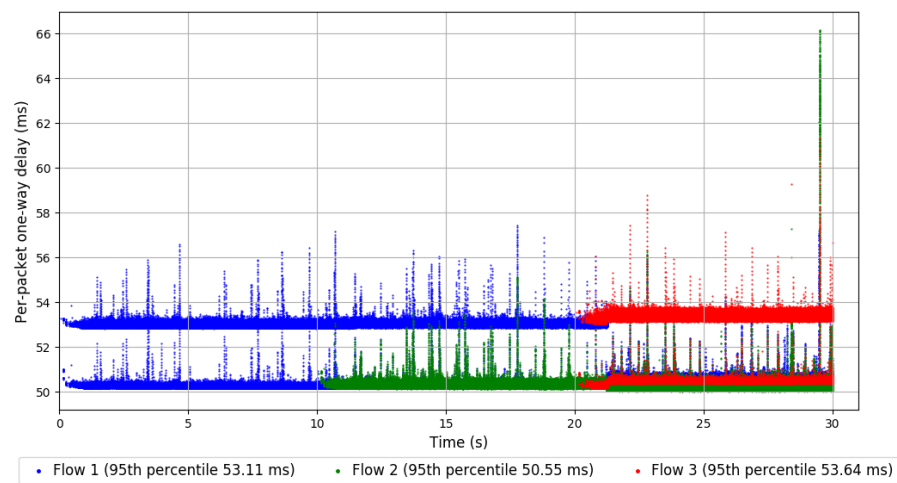
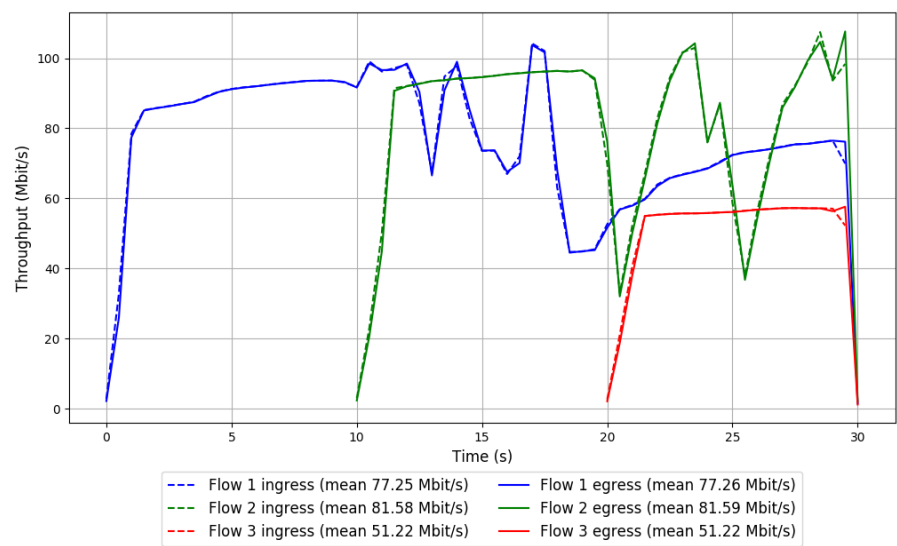
-- Flow 3:

Average throughput: 51.22 Mbit/s

95th percentile per-packet one-way delay: 53.638 ms

Loss rate: 0.00%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

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

End at: 2018-03-07 07:03:48

Below is generated by plot.py at 2018-03-07 12:13:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.44 Mbit/s

95th percentile per-packet one-way delay: 53.312 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 86.24 Mbit/s

95th percentile per-packet one-way delay: 50.747 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 78.51 Mbit/s

95th percentile per-packet one-way delay: 53.357 ms

Loss rate: 0.00%

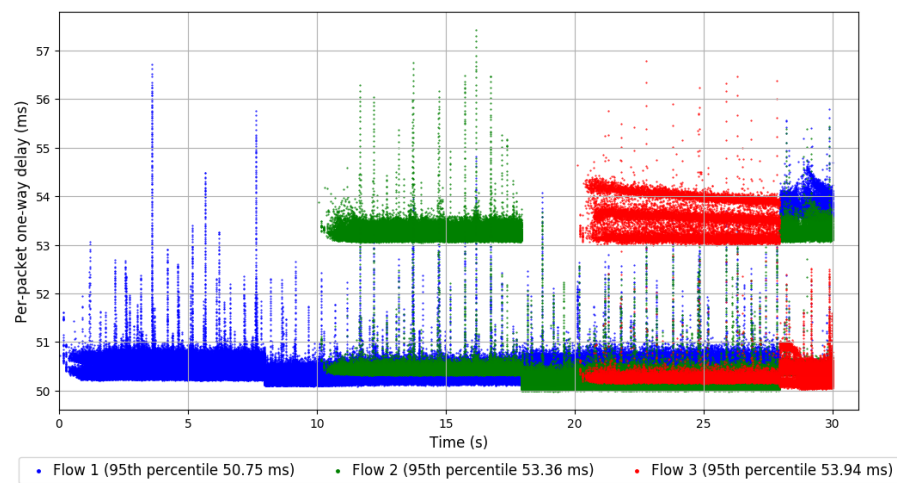
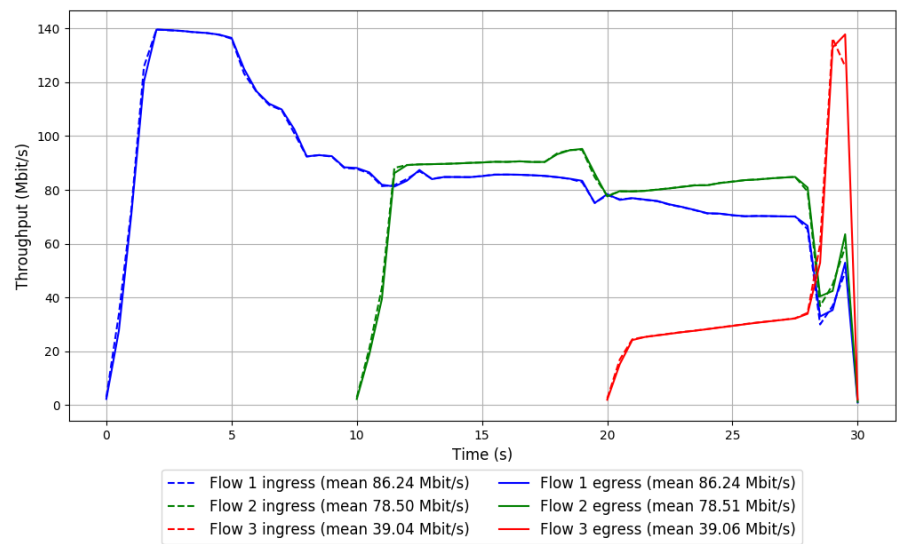
-- Flow 3:

Average throughput: 39.06 Mbit/s

95th percentile per-packet one-way delay: 53.937 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-03-07 07:20:49

End at: 2018-03-07 07:21:19

Below is generated by plot.py at 2018-03-07 12:13:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.43 Mbit/s

95th percentile per-packet one-way delay: 53.541 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.84 Mbit/s

95th percentile per-packet one-way delay: 53.473 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.37 Mbit/s

95th percentile per-packet one-way delay: 53.652 ms

Loss rate: 0.00%

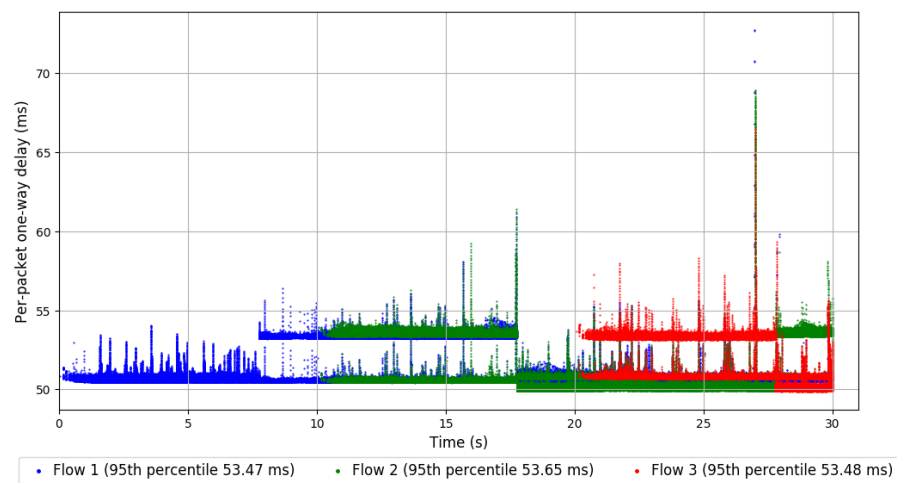
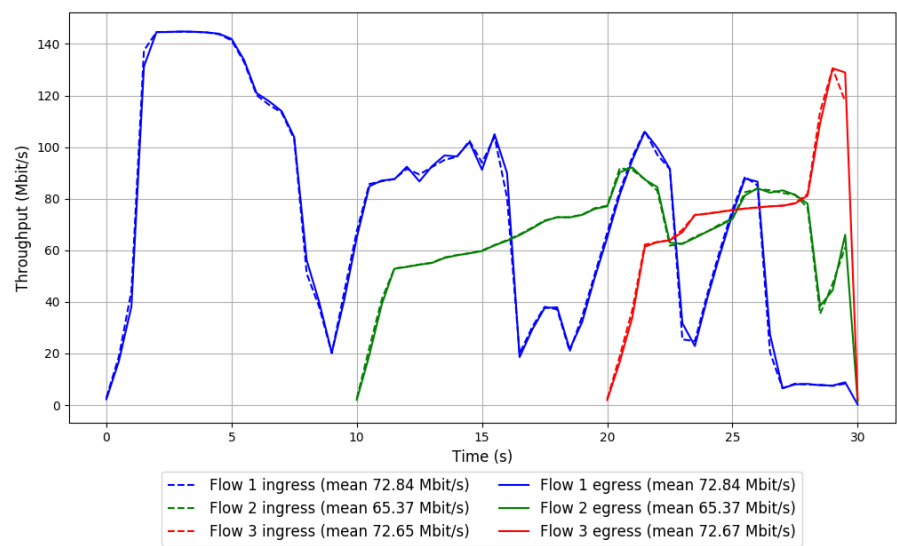
-- Flow 3:

Average throughput: 72.67 Mbit/s

95th percentile per-packet one-way delay: 53.477 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-03-07 07:38:16

End at: 2018-03-07 07:38:46

Below is generated by plot.py at 2018-03-07 12:14:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.31 Mbit/s

95th percentile per-packet one-way delay: 53.676 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 91.62 Mbit/s

95th percentile per-packet one-way delay: 53.671 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 58.23 Mbit/s

95th percentile per-packet one-way delay: 53.687 ms

Loss rate: 0.00%

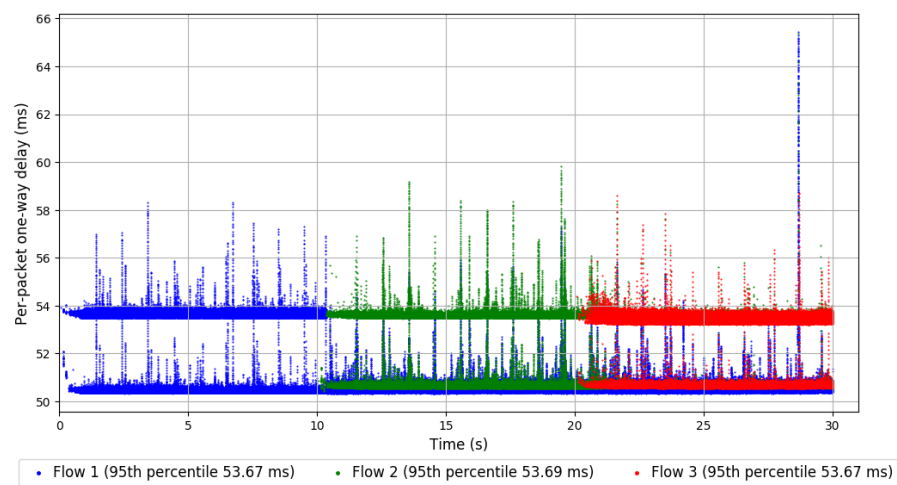
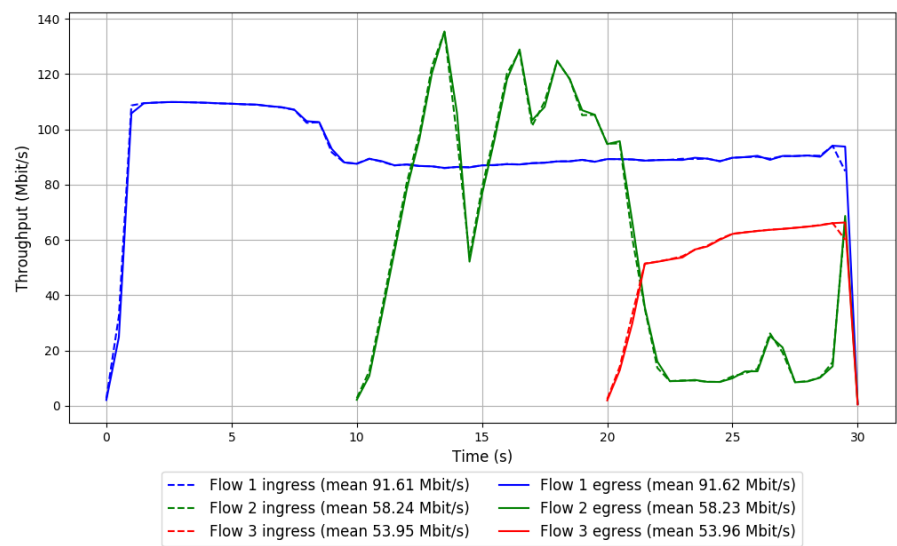
-- Flow 3:

Average throughput: 53.96 Mbit/s

95th percentile per-packet one-way delay: 53.672 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-03-07 07:55:40

End at: 2018-03-07 07:56:10

Below is generated by plot.py at 2018-03-07 12:16:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.09 Mbit/s

95th percentile per-packet one-way delay: 53.794 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 81.97 Mbit/s

95th percentile per-packet one-way delay: 50.838 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 101.90 Mbit/s

95th percentile per-packet one-way delay: 53.847 ms

Loss rate: 0.00%

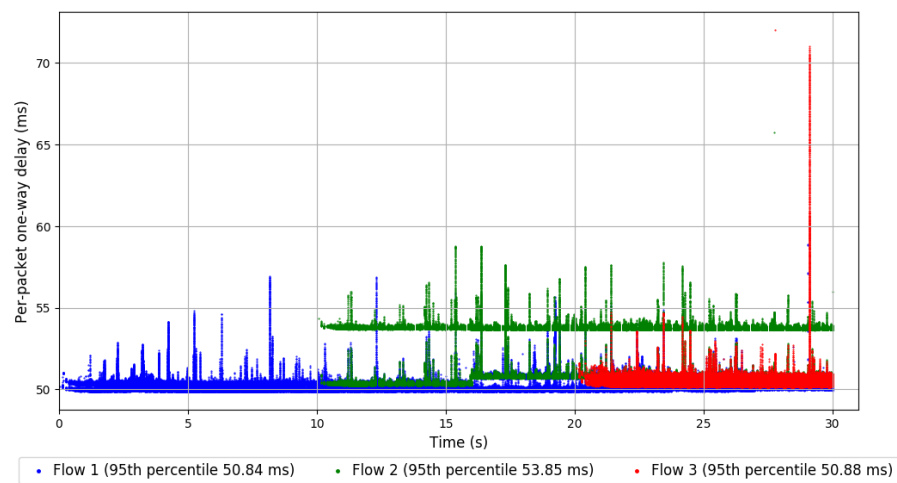
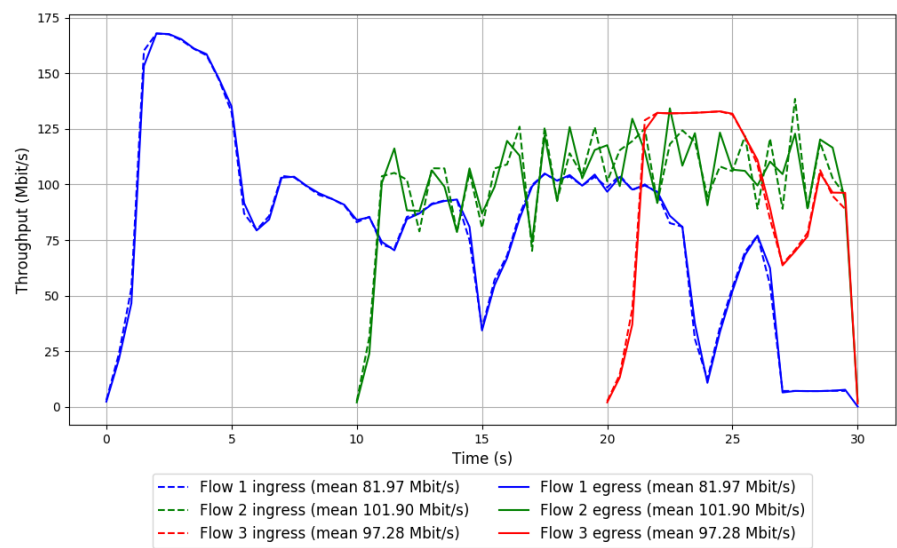
-- Flow 3:

Average throughput: 97.28 Mbit/s

95th percentile per-packet one-way delay: 50.881 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-03-07 08:13:27

End at: 2018-03-07 08:13:57

Below is generated by plot.py at 2018-03-07 12:16:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.45 Mbit/s

95th percentile per-packet one-way delay: 53.754 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.28 Mbit/s

95th percentile per-packet one-way delay: 53.447 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.84 Mbit/s

95th percentile per-packet one-way delay: 53.805 ms

Loss rate: 0.00%

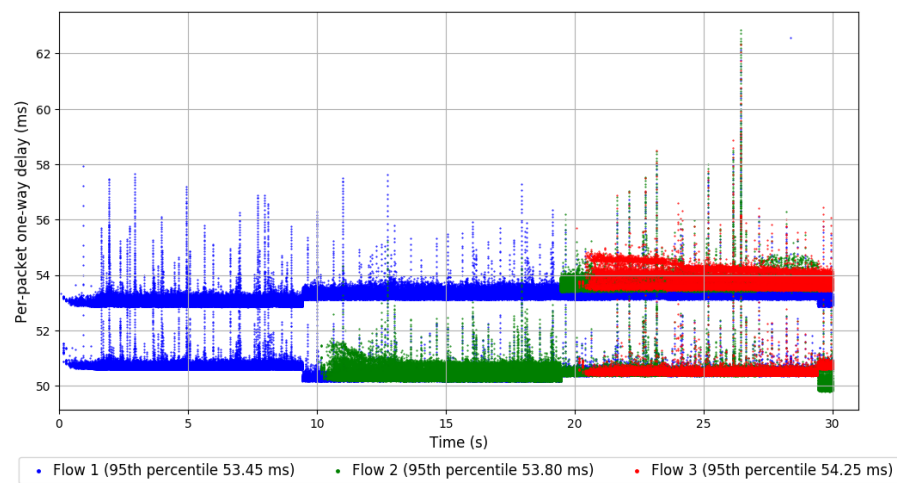
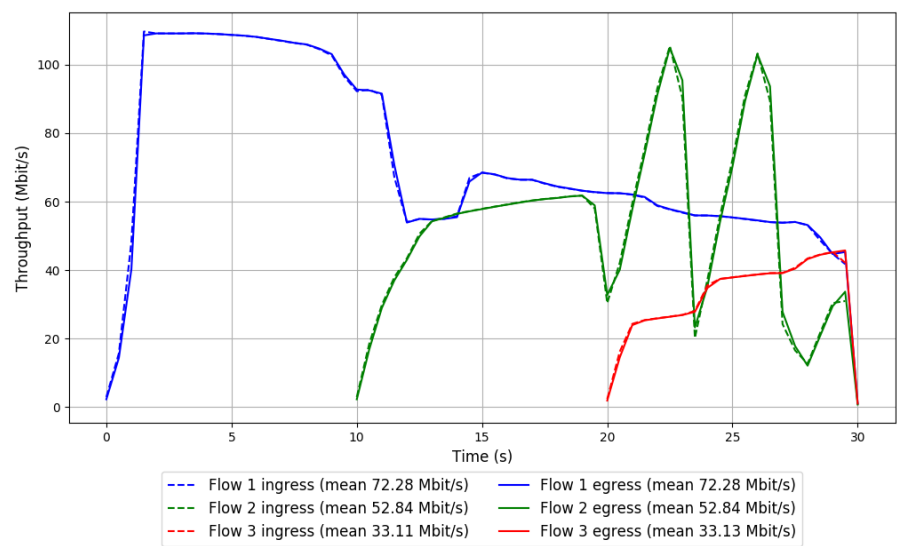
-- Flow 3:

Average throughput: 33.13 Mbit/s

95th percentile per-packet one-way delay: 54.254 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-03-07 08:30:50

End at: 2018-03-07 08:31:20

Below is generated by plot.py at 2018-03-07 12:16:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.62 Mbit/s

95th percentile per-packet one-way delay: 53.380 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.07 Mbit/s

95th percentile per-packet one-way delay: 53.404 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.21 Mbit/s

95th percentile per-packet one-way delay: 50.763 ms

Loss rate: 0.00%

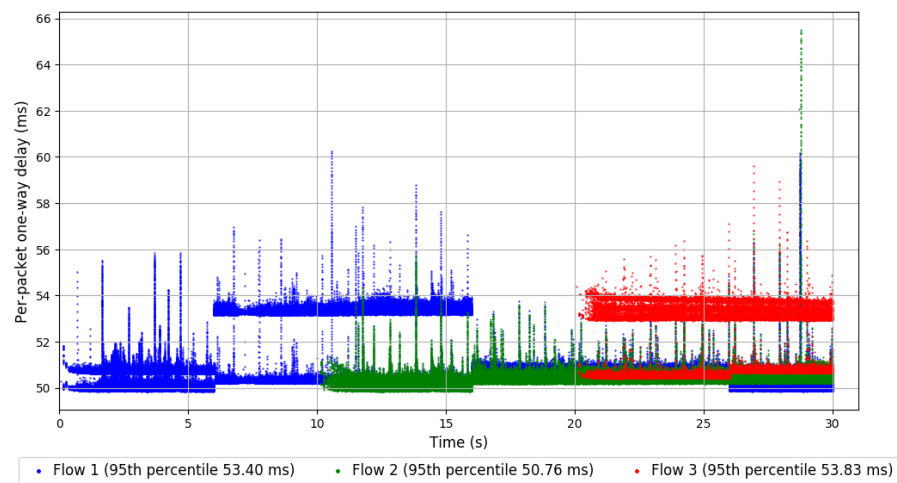
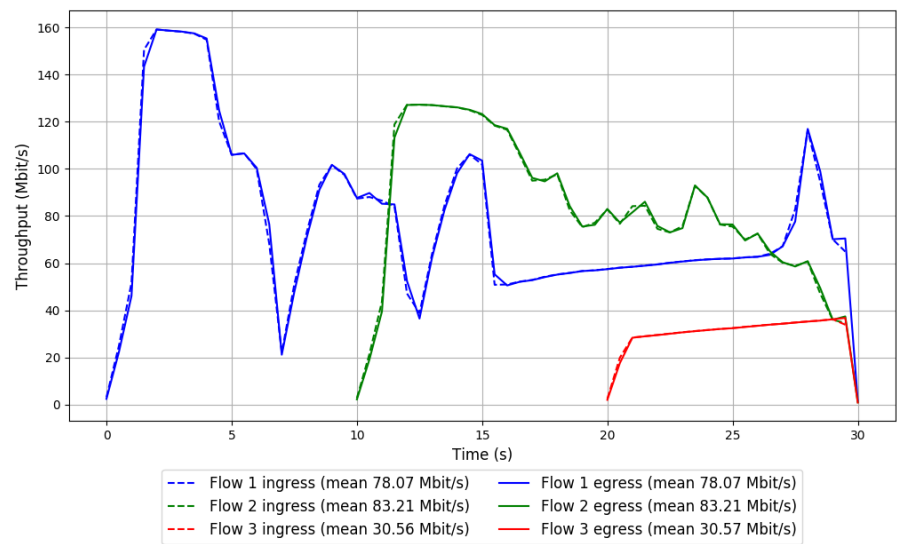
-- Flow 3:

Average throughput: 30.57 Mbit/s

95th percentile per-packet one-way delay: 53.831 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-03-07 08:48:03

End at: 2018-03-07 08:48:33

Below is generated by plot.py at 2018-03-07 12:17:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.77 Mbit/s

95th percentile per-packet one-way delay: 53.626 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 117.30 Mbit/s

95th percentile per-packet one-way delay: 53.616 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 78.32 Mbit/s

95th percentile per-packet one-way delay: 55.085 ms

Loss rate: 0.00%

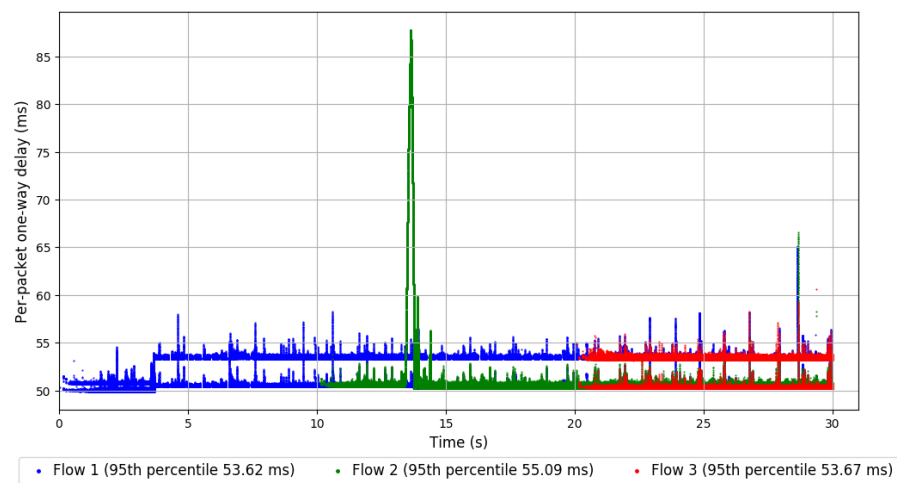
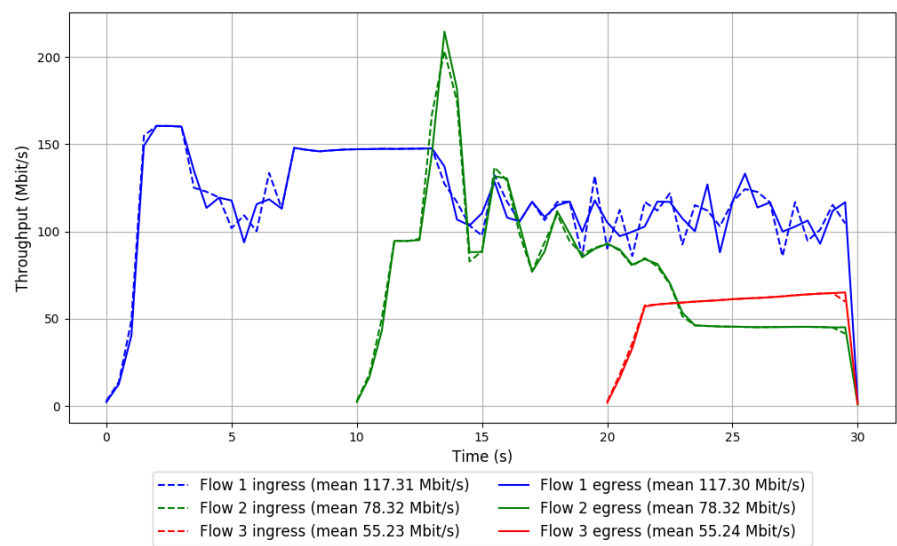
-- Flow 3:

Average throughput: 55.24 Mbit/s

95th percentile per-packet one-way delay: 53.669 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

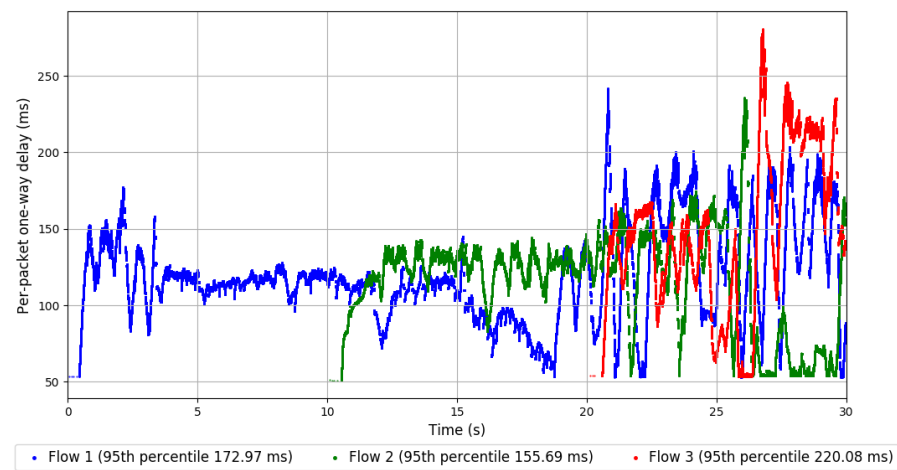
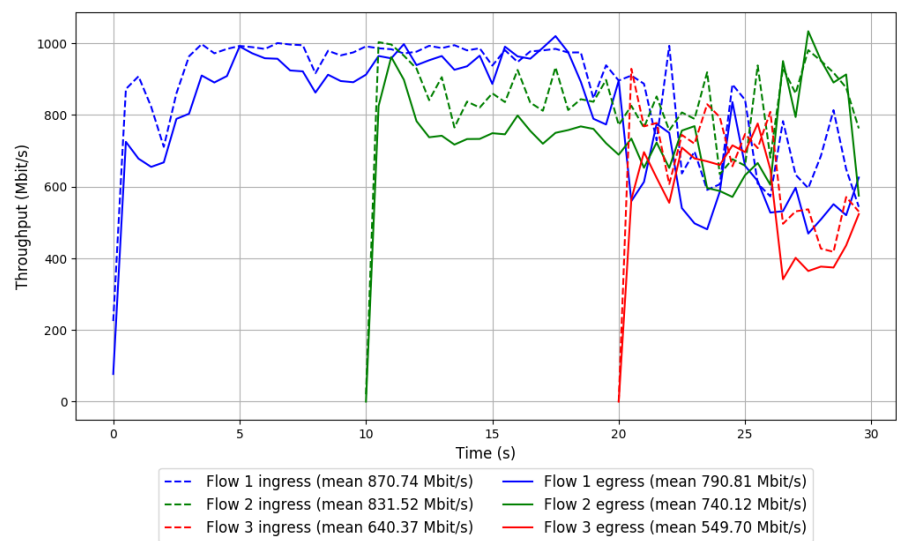


```
Run 1: Statistics of FillP

Start at: 2018-03-07 06:13:45
End at: 2018-03-07 06:14:15

# Below is generated by plot.py at 2018-03-07 12:37:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1463.47 Mbit/s
95th percentile per-packet one-way delay: 174.440 ms
Loss rate: 10.44%
-- Flow 1:
Average throughput: 790.81 Mbit/s
95th percentile per-packet one-way delay: 172.966 ms
Loss rate: 9.19%
-- Flow 2:
Average throughput: 740.12 Mbit/s
95th percentile per-packet one-way delay: 155.690 ms
Loss rate: 10.99%
-- Flow 3:
Average throughput: 549.70 Mbit/s
95th percentile per-packet one-way delay: 220.081 ms
Loss rate: 14.18%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-03-07 06:31:16

End at: 2018-03-07 06:31:46

Below is generated by plot.py at 2018-03-07 12:37:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 1321.09 Mbit/s

95th percentile per-packet one-way delay: 210.142 ms

Loss rate: 12.49%

-- Flow 1:

Average throughput: 709.81 Mbit/s

95th percentile per-packet one-way delay: 166.182 ms

Loss rate: 12.10%

-- Flow 2:

Average throughput: 558.99 Mbit/s

95th percentile per-packet one-way delay: 236.926 ms

Loss rate: 14.90%

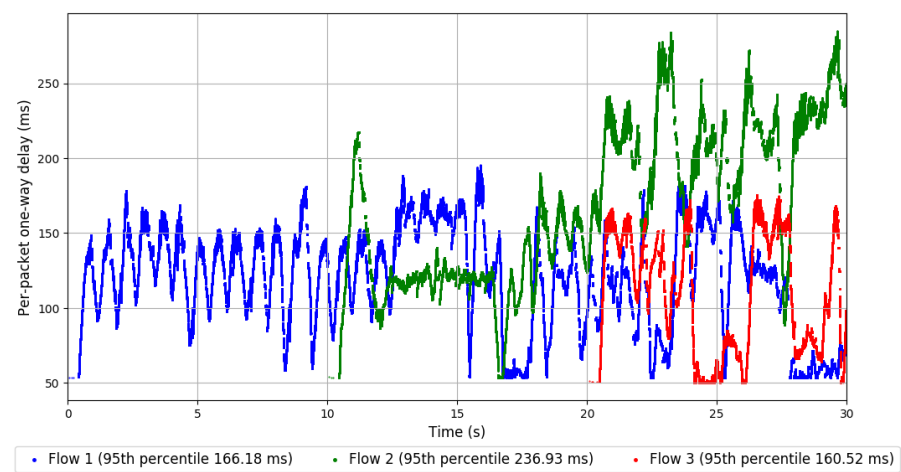
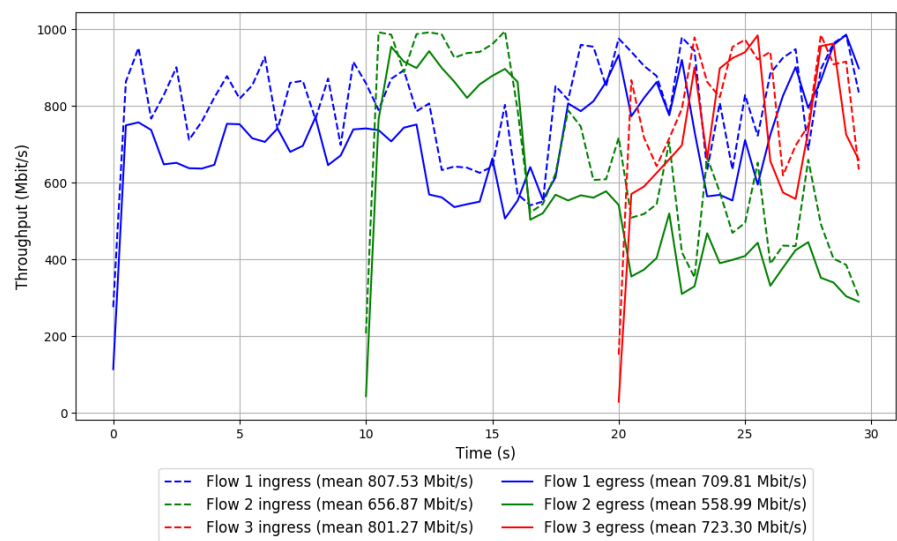
-- Flow 3:

Average throughput: 723.30 Mbit/s

95th percentile per-packet one-way delay: 160.516 ms

Loss rate: 9.71%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-03-07 06:48:32

End at: 2018-03-07 06:49:02

Below is generated by plot.py at 2018-03-07 12:39:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 1438.72 Mbit/s

95th percentile per-packet one-way delay: 179.689 ms

Loss rate: 12.98%

-- Flow 1:

Average throughput: 712.76 Mbit/s

95th percentile per-packet one-way delay: 161.362 ms

Loss rate: 14.28%

-- Flow 2:

Average throughput: 756.79 Mbit/s

95th percentile per-packet one-way delay: 184.689 ms

Loss rate: 10.86%

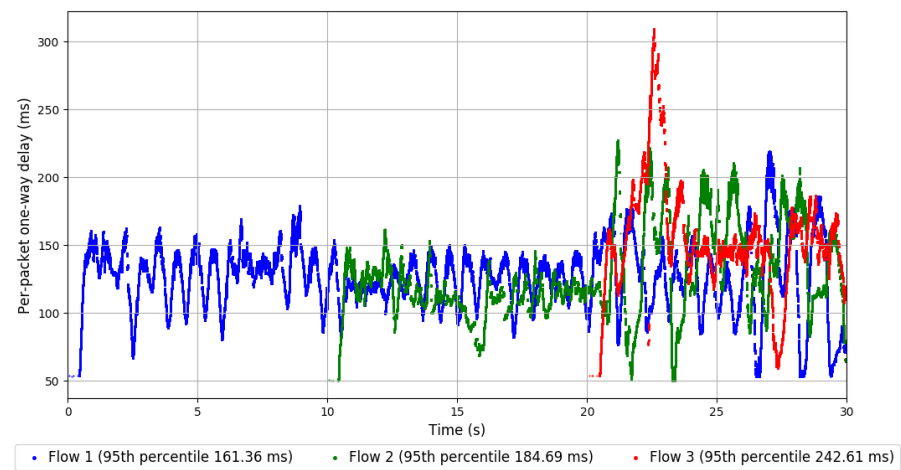
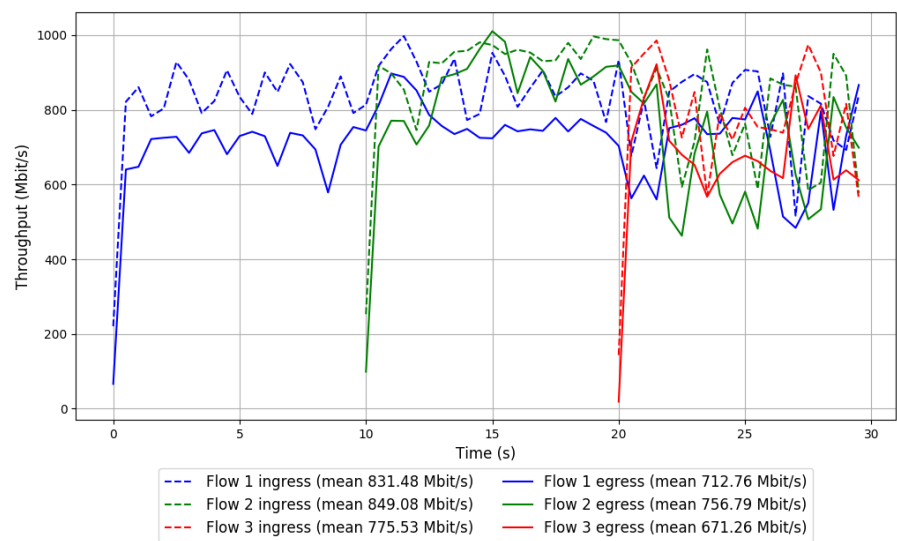
-- Flow 3:

Average throughput: 671.26 Mbit/s

95th percentile per-packet one-way delay: 242.613 ms

Loss rate: 13.46%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-03-07 07:06:00

End at: 2018-03-07 07:06:30

Below is generated by plot.py at 2018-03-07 12:39:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 1331.54 Mbit/s

95th percentile per-packet one-way delay: 289.831 ms

Loss rate: 14.75%

-- Flow 1:

Average throughput: 720.20 Mbit/s

95th percentile per-packet one-way delay: 172.323 ms

Loss rate: 13.66%

-- Flow 2:

Average throughput: 625.63 Mbit/s

95th percentile per-packet one-way delay: 319.174 ms

Loss rate: 16.39%

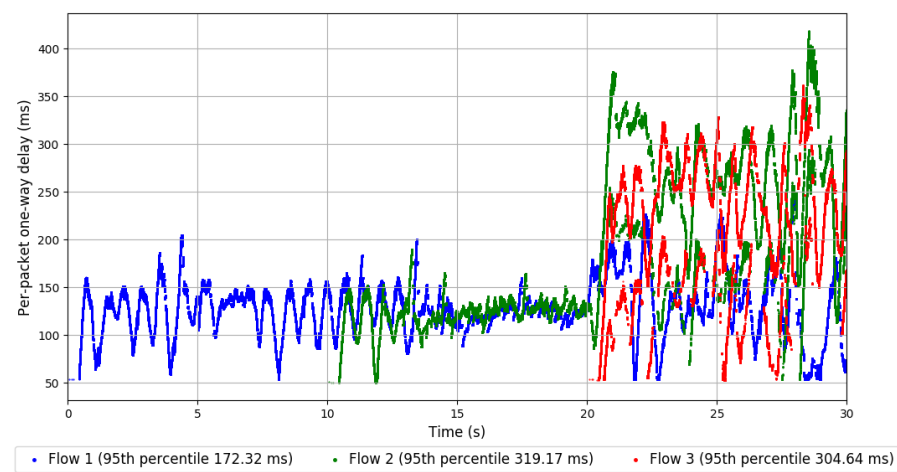
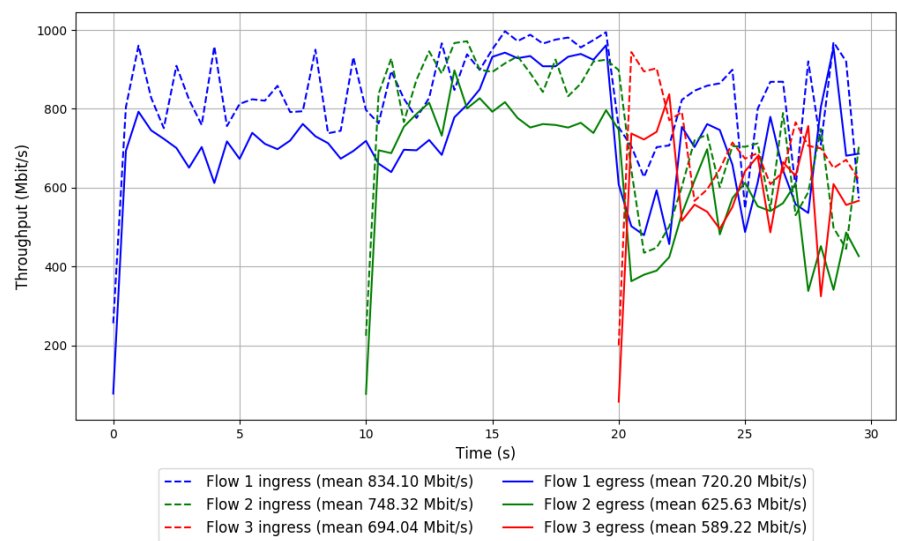
-- Flow 3:

Average throughput: 589.22 Mbit/s

95th percentile per-packet one-way delay: 304.641 ms

Loss rate: 15.12%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-03-07 07:23:29

End at: 2018-03-07 07:23:59

Below is generated by plot.py at 2018-03-07 12:39:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 1274.75 Mbit/s

95th percentile per-packet one-way delay: 299.396 ms

Loss rate: 15.23%

-- Flow 1:

Average throughput: 643.31 Mbit/s

95th percentile per-packet one-way delay: 295.596 ms

Loss rate: 16.38%

-- Flow 2:

Average throughput: 682.76 Mbit/s

95th percentile per-packet one-way delay: 291.400 ms

Loss rate: 12.66%

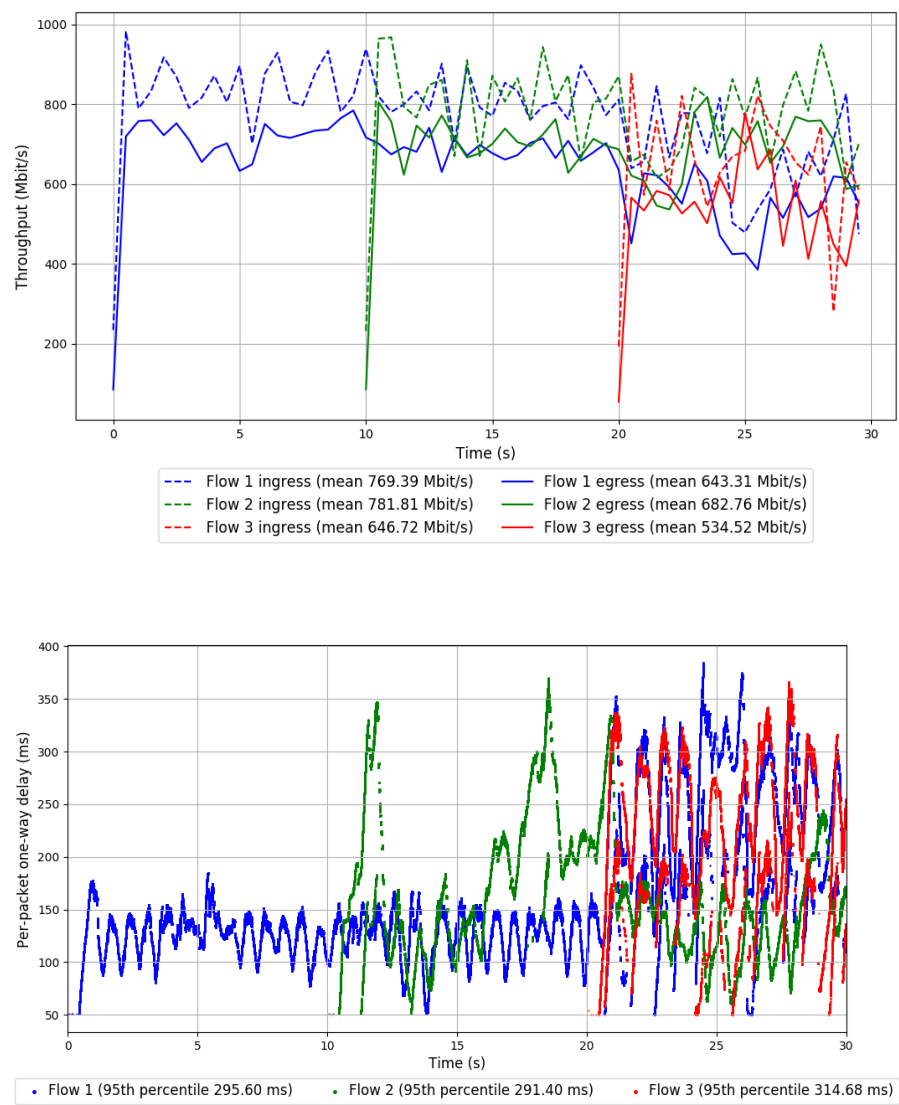
-- Flow 3:

Average throughput: 534.52 Mbit/s

95th percentile per-packet one-way delay: 314.683 ms

Loss rate: 17.35%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-03-07 07:40:59

End at: 2018-03-07 07:41:29

Below is generated by plot.py at 2018-03-07 12:41:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 1399.29 Mbit/s

95th percentile per-packet one-way delay: 211.004 ms

Loss rate: 13.68%

-- Flow 1:

Average throughput: 785.90 Mbit/s

95th percentile per-packet one-way delay: 193.313 ms

Loss rate: 10.21%

-- Flow 2:

Average throughput: 645.50 Mbit/s

95th percentile per-packet one-way delay: 222.568 ms

Loss rate: 17.06%

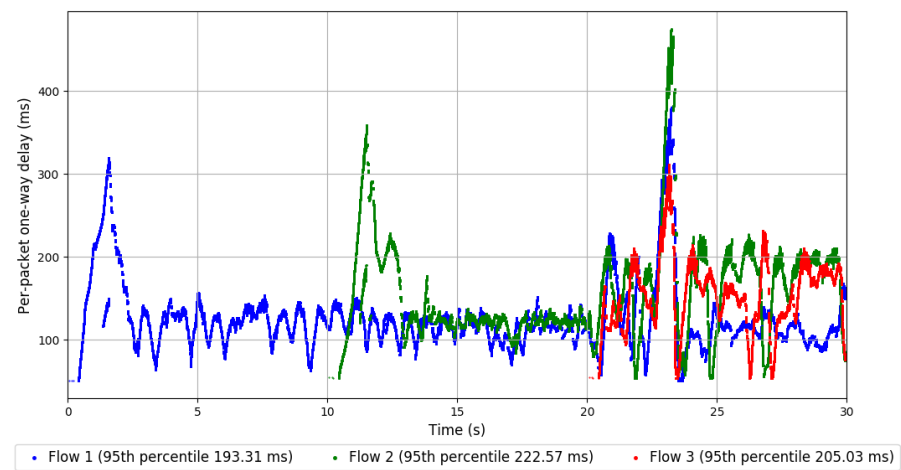
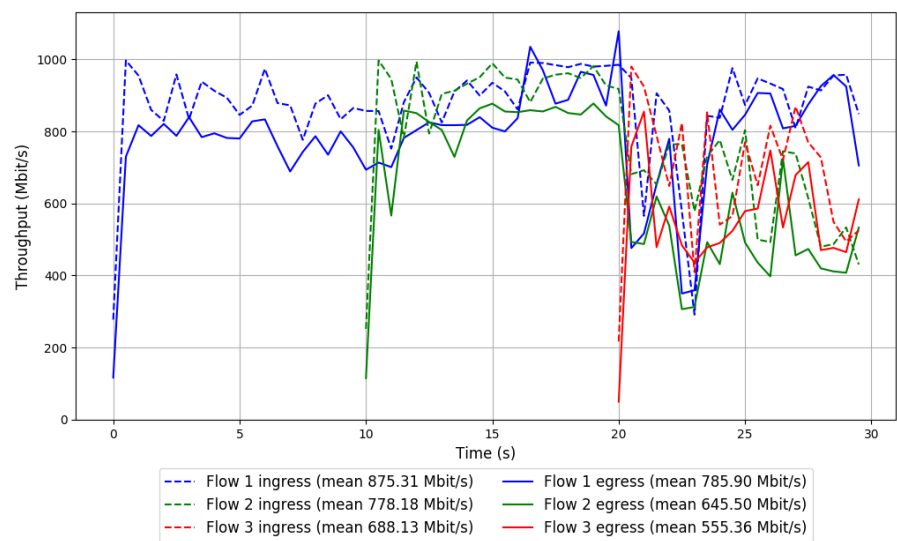
-- Flow 3:

Average throughput: 555.36 Mbit/s

95th percentile per-packet one-way delay: 205.030 ms

Loss rate: 19.31%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-03-07 07:58:22

End at: 2018-03-07 07:58:52

Below is generated by plot.py at 2018-03-07 12:41:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 1271.64 Mbit/s

95th percentile per-packet one-way delay: 311.803 ms

Loss rate: 14.05%

-- Flow 1:

Average throughput: 703.24 Mbit/s

95th percentile per-packet one-way delay: 308.202 ms

Loss rate: 10.43%

-- Flow 2:

Average throughput: 565.35 Mbit/s

95th percentile per-packet one-way delay: 322.020 ms

Loss rate: 17.85%

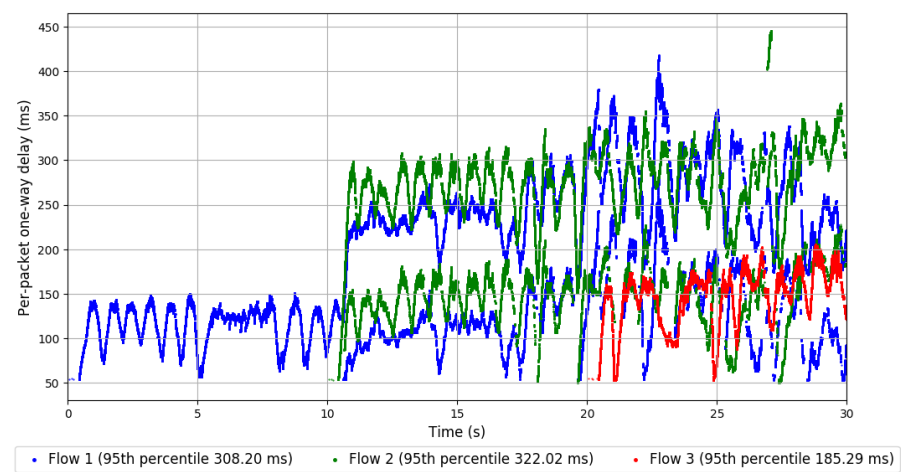
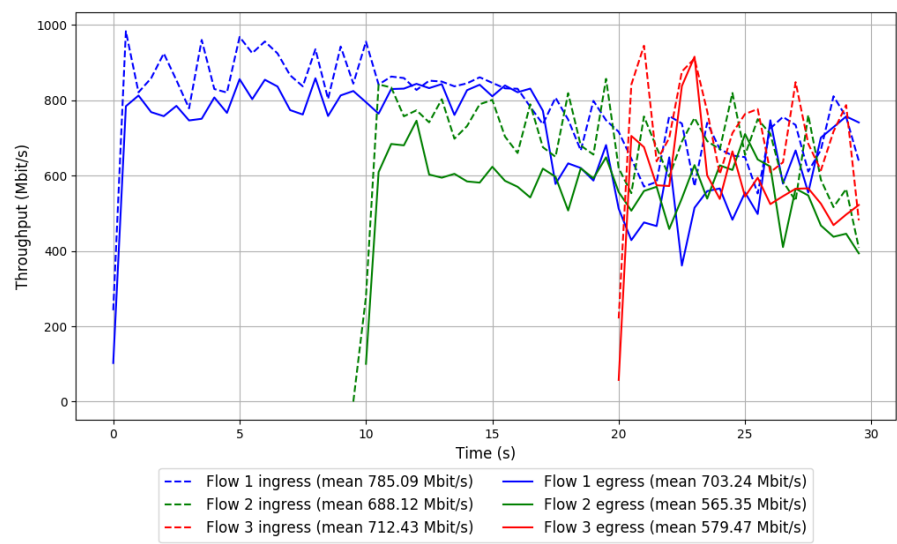
-- Flow 3:

Average throughput: 579.47 Mbit/s

95th percentile per-packet one-way delay: 185.289 ms

Loss rate: 18.70%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-03-07 08:16:02

End at: 2018-03-07 08:16:32

Below is generated by plot.py at 2018-03-07 12:42:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 1359.35 Mbit/s

95th percentile per-packet one-way delay: 277.013 ms

Loss rate: 12.73%

-- Flow 1:

Average throughput: 704.10 Mbit/s

95th percentile per-packet one-way delay: 168.731 ms

Loss rate: 13.25%

-- Flow 2:

Average throughput: 716.49 Mbit/s

95th percentile per-packet one-way delay: 294.656 ms

Loss rate: 11.12%

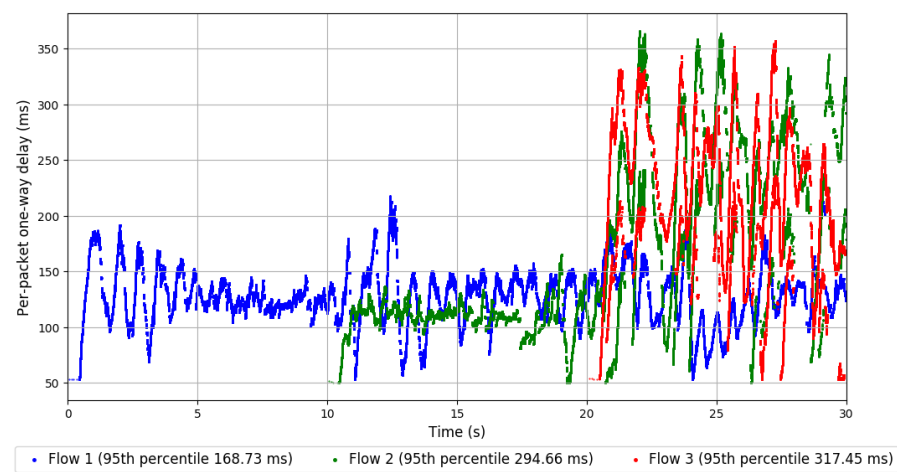
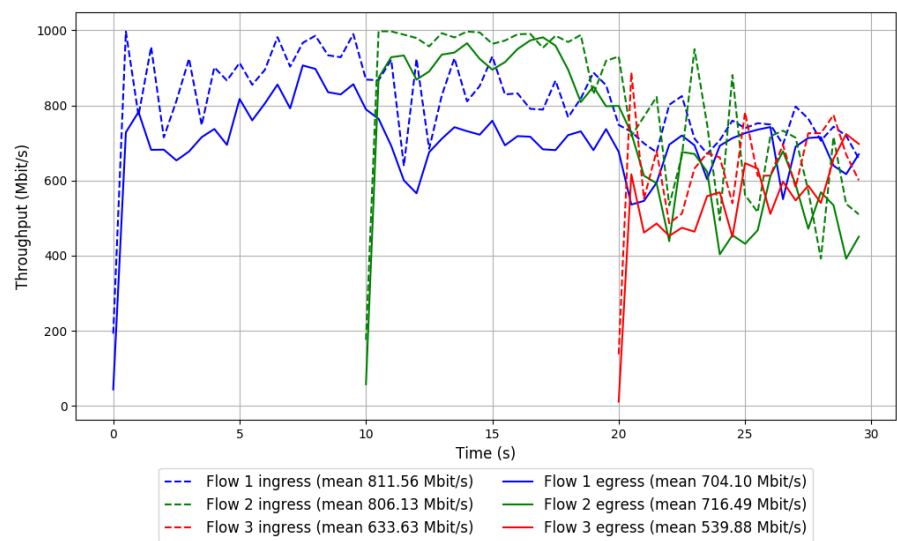
-- Flow 3:

Average throughput: 539.88 Mbit/s

95th percentile per-packet one-way delay: 317.450 ms

Loss rate: 14.82%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-03-07 08:33:31

End at: 2018-03-07 08:34:01

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 1392.85 Mbit/s

95th percentile per-packet one-way delay: 170.442 ms

Loss rate: 14.07%

-- Flow 1:

Average throughput: 709.47 Mbit/s

95th percentile per-packet one-way delay: 160.309 ms

Loss rate: 14.14%

-- Flow 2:

Average throughput: 746.66 Mbit/s

95th percentile per-packet one-way delay: 161.462 ms

Loss rate: 11.92%

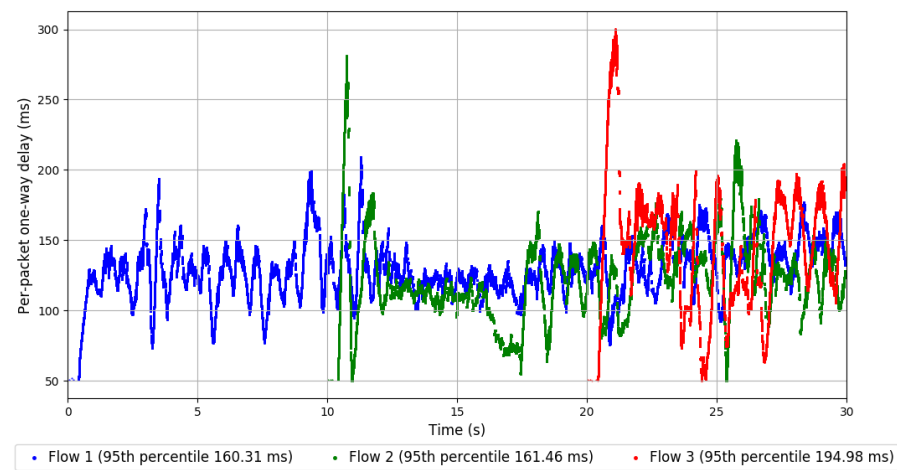
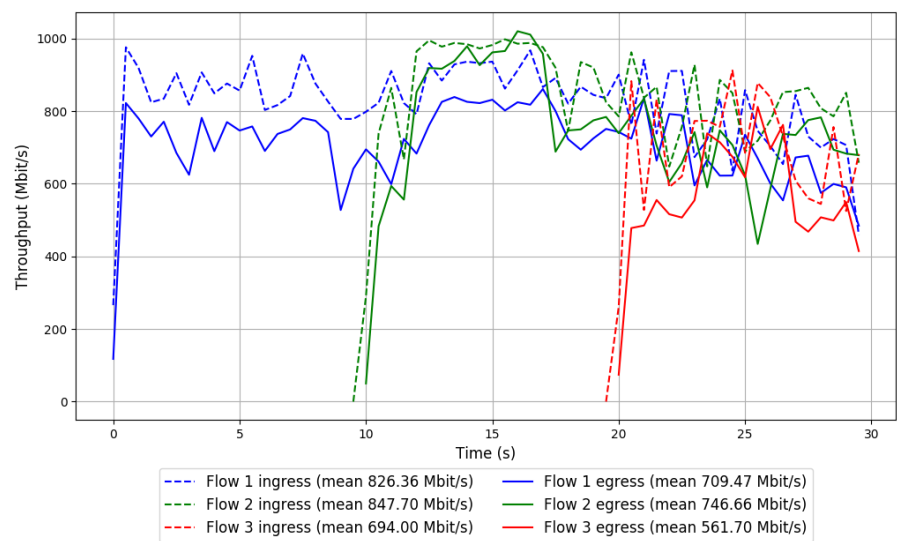
-- Flow 3:

Average throughput: 561.70 Mbit/s

95th percentile per-packet one-way delay: 194.976 ms

Loss rate: 19.06%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-03-07 08:50:45

End at: 2018-03-07 08:51:15

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 1252.47 Mbit/s

95th percentile per-packet one-way delay: 313.219 ms

Loss rate: 15.85%

-- Flow 1:

Average throughput: 682.35 Mbit/s

95th percentile per-packet one-way delay: 176.897 ms

Loss rate: 14.63%

-- Flow 2:

Average throughput: 599.12 Mbit/s

95th percentile per-packet one-way delay: 343.806 ms

Loss rate: 16.59%

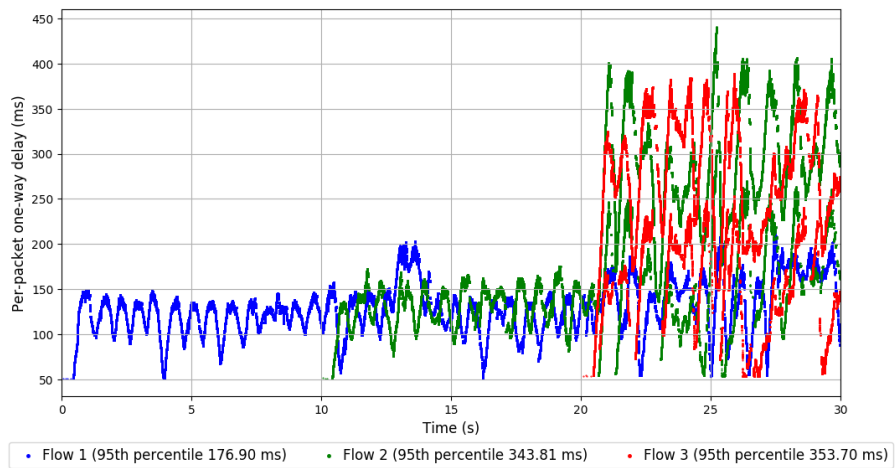
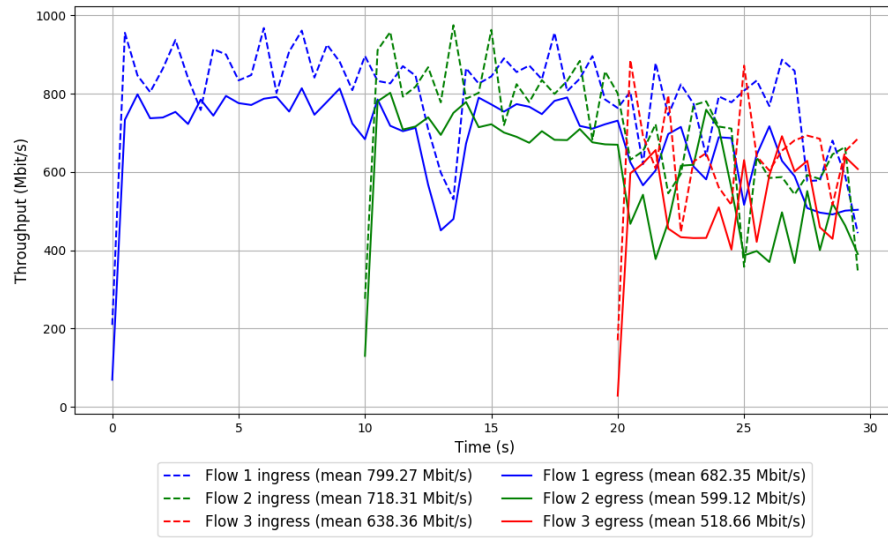
-- Flow 3:

Average throughput: 518.66 Mbit/s

95th percentile per-packet one-way delay: 353.702 ms

Loss rate: 18.77%

Run 10: Report of FillP — Data Link

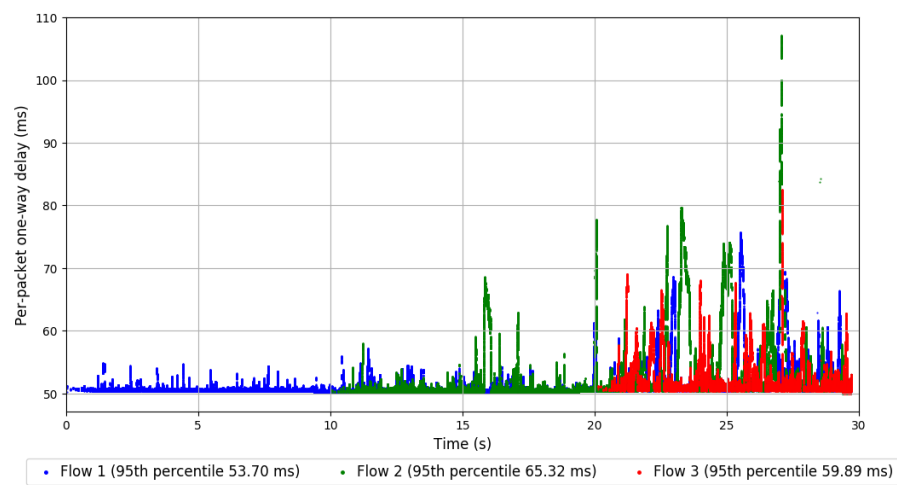
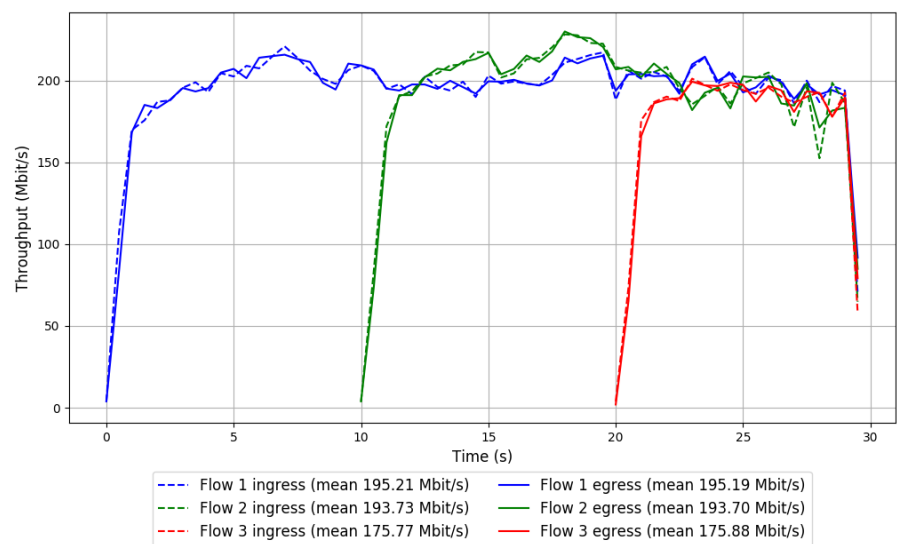


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-03-07 06:08:07
End at: 2018-03-07 06:08:37

# Below is generated by plot.py at 2018-03-07 13:03:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 380.42 Mbit/s
95th percentile per-packet one-way delay: 58.718 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 195.19 Mbit/s
95th percentile per-packet one-way delay: 53.696 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 193.70 Mbit/s
95th percentile per-packet one-way delay: 65.322 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 175.88 Mbit/s
95th percentile per-packet one-way delay: 59.888 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-1-32 — Data Link

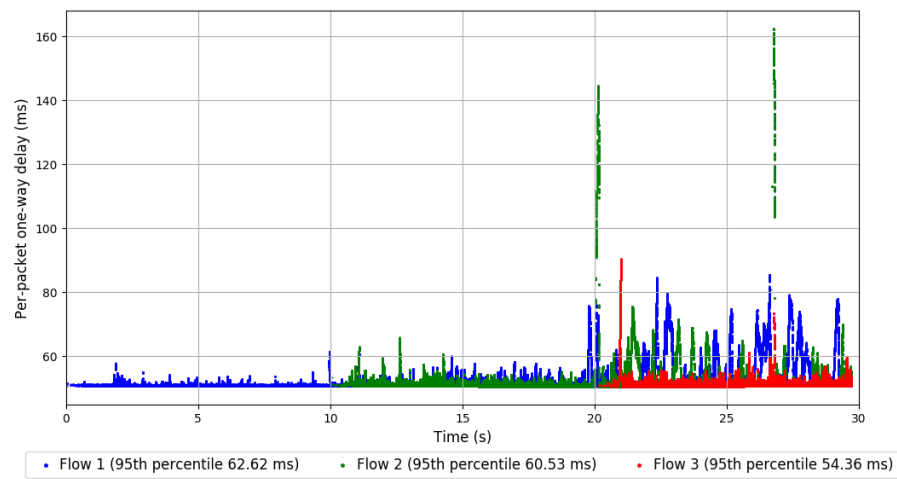
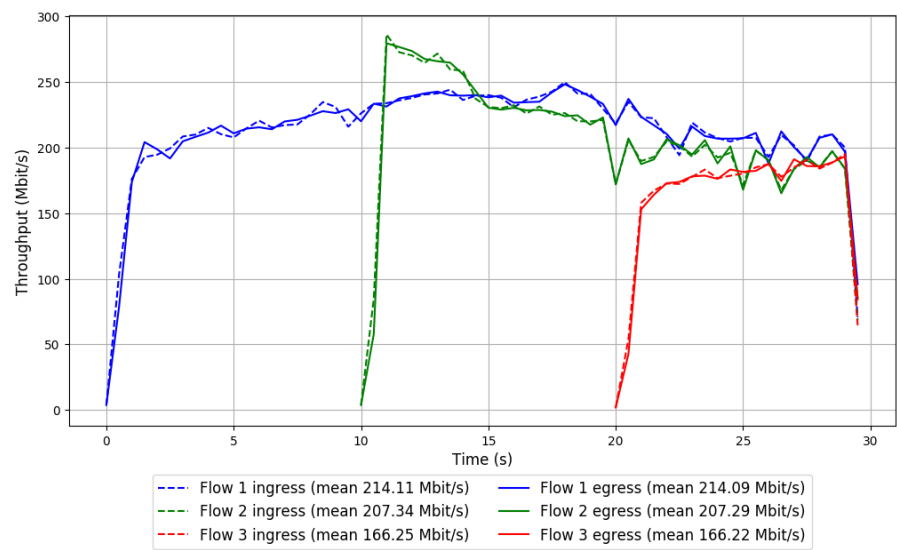


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-03-07 06:25:30
End at: 2018-03-07 06:26:00

# Below is generated by plot.py at 2018-03-07 13:03:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.03 Mbit/s
95th percentile per-packet one-way delay: 60.569 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 214.09 Mbit/s
95th percentile per-packet one-way delay: 62.625 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 207.29 Mbit/s
95th percentile per-packet one-way delay: 60.535 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 166.22 Mbit/s
95th percentile per-packet one-way delay: 54.360 ms
Loss rate: 0.02%
```

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-03-07 06:42:53

End at: 2018-03-07 06:43:23

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 393.59 Mbit/s

95th percentile per-packet one-way delay: 58.806 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 216.77 Mbit/s

95th percentile per-packet one-way delay: 56.982 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 218.44 Mbit/s

95th percentile per-packet one-way delay: 62.153 ms

Loss rate: 0.01%

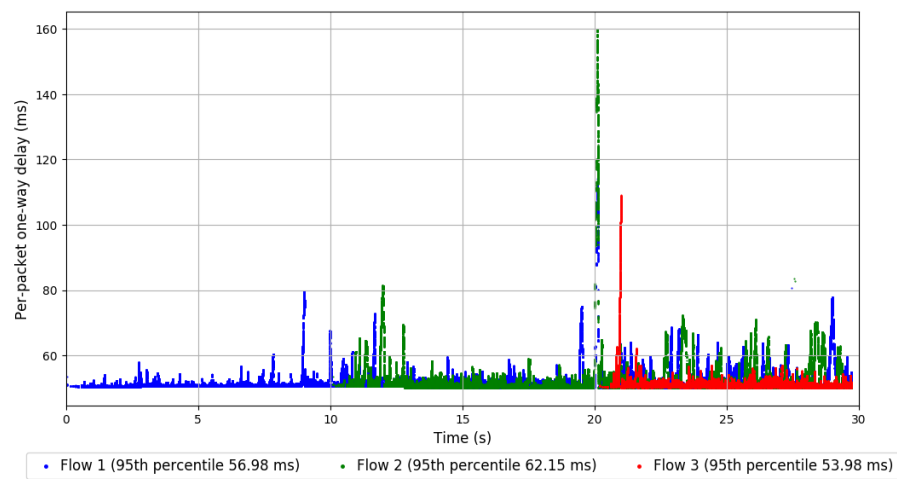
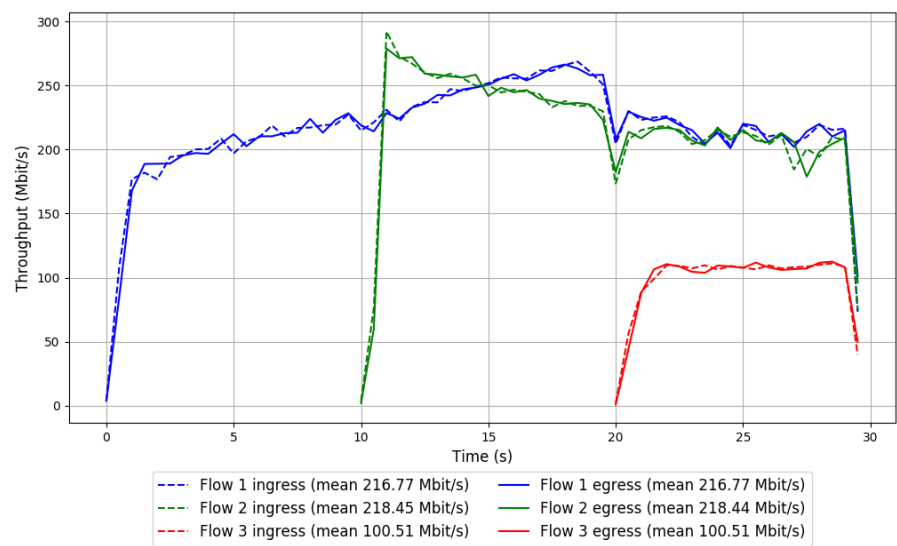
-- Flow 3:

Average throughput: 100.51 Mbit/s

95th percentile per-packet one-way delay: 53.980 ms

Loss rate: 0.00%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-03-07 07:00:19

End at: 2018-03-07 07:00:49

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 386.02 Mbit/s

95th percentile per-packet one-way delay: 57.279 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 208.51 Mbit/s

95th percentile per-packet one-way delay: 56.542 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 188.01 Mbit/s

95th percentile per-packet one-way delay: 58.324 ms

Loss rate: 0.01%

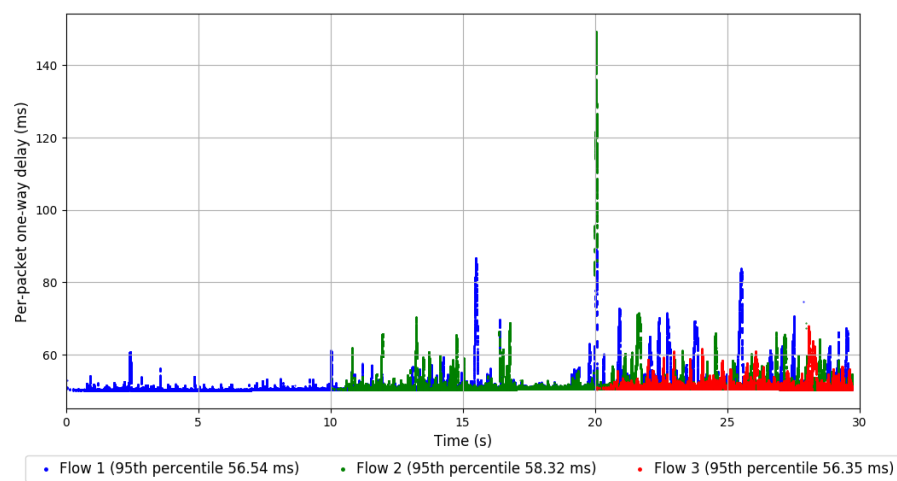
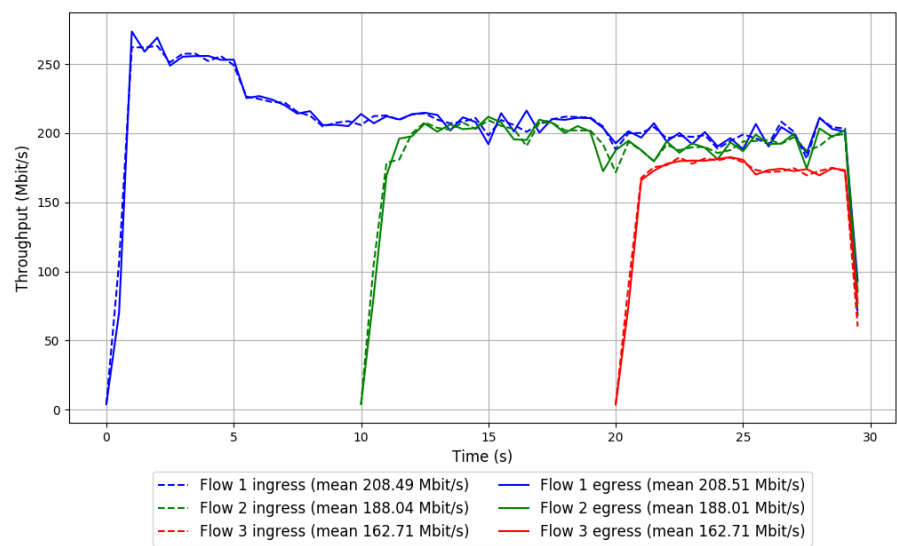
-- Flow 3:

Average throughput: 162.71 Mbit/s

95th percentile per-packet one-way delay: 56.351 ms

Loss rate: 0.00%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-03-07 07:17:46

End at: 2018-03-07 07:18:16

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 396.84 Mbit/s

95th percentile per-packet one-way delay: 64.790 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 211.18 Mbit/s

95th percentile per-packet one-way delay: 66.963 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 196.25 Mbit/s

95th percentile per-packet one-way delay: 60.633 ms

Loss rate: 0.00%

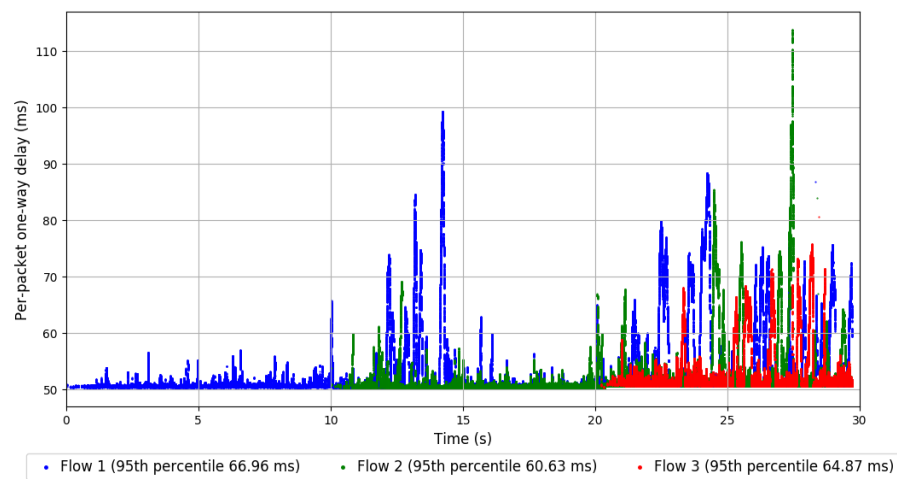
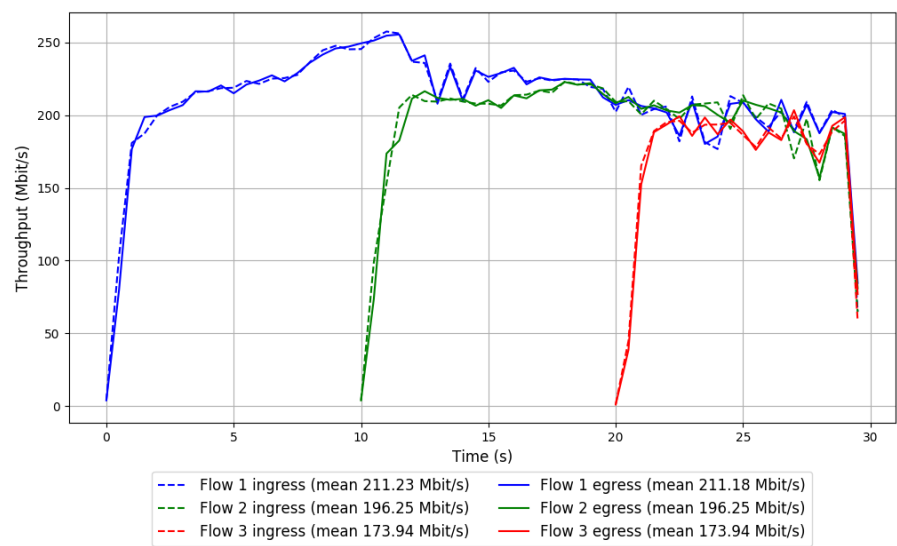
-- Flow 3:

Average throughput: 173.94 Mbit/s

95th percentile per-packet one-way delay: 64.866 ms

Loss rate: 0.01%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-03-07 07:35:19

End at: 2018-03-07 07:35:49

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 389.15 Mbit/s

95th percentile per-packet one-way delay: 57.792 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 211.53 Mbit/s

95th percentile per-packet one-way delay: 60.413 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 188.51 Mbit/s

95th percentile per-packet one-way delay: 58.243 ms

Loss rate: 0.10%

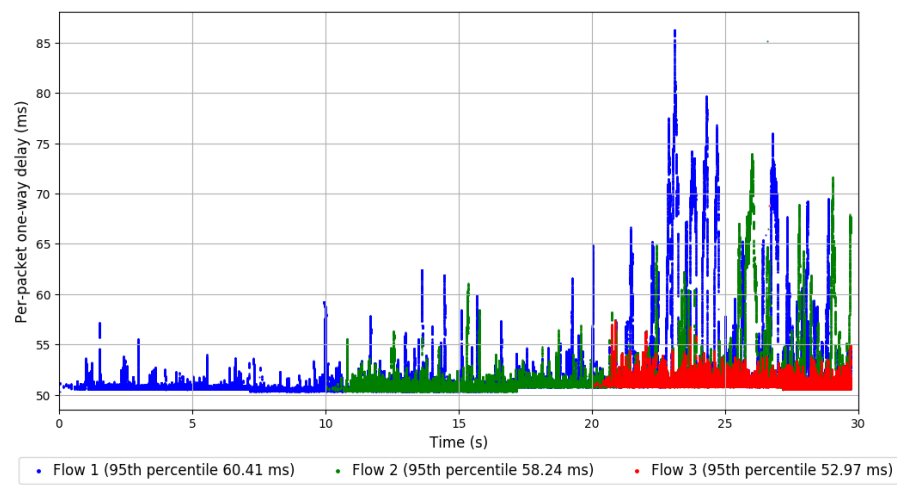
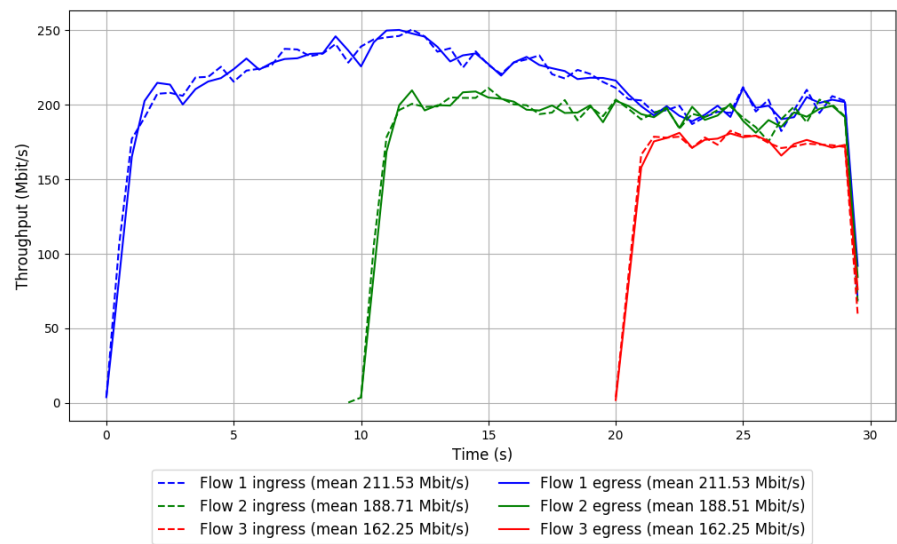
-- Flow 3:

Average throughput: 162.25 Mbit/s

95th percentile per-packet one-way delay: 52.974 ms

Loss rate: 0.00%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-03-07 07:52:41

End at: 2018-03-07 07:53:11

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 411.19 Mbit/s

95th percentile per-packet one-way delay: 67.615 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 217.15 Mbit/s

95th percentile per-packet one-way delay: 62.533 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 212.58 Mbit/s

95th percentile per-packet one-way delay: 74.496 ms

Loss rate: 0.01%

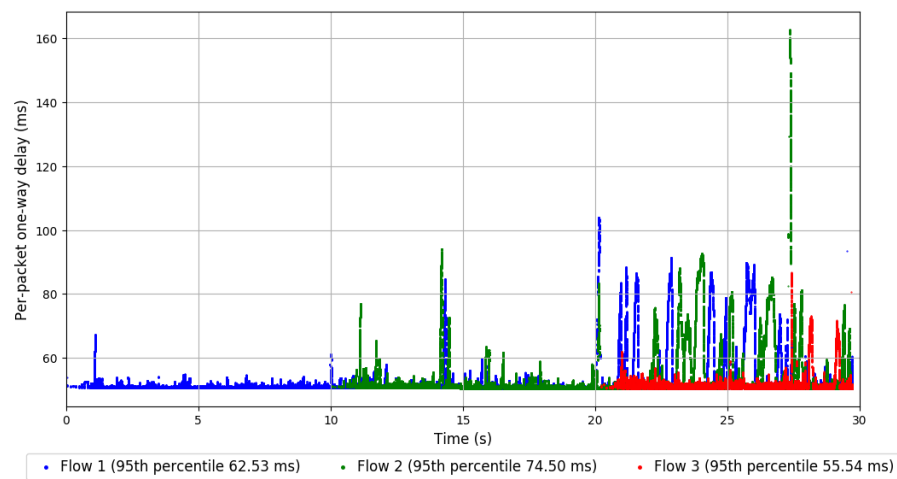
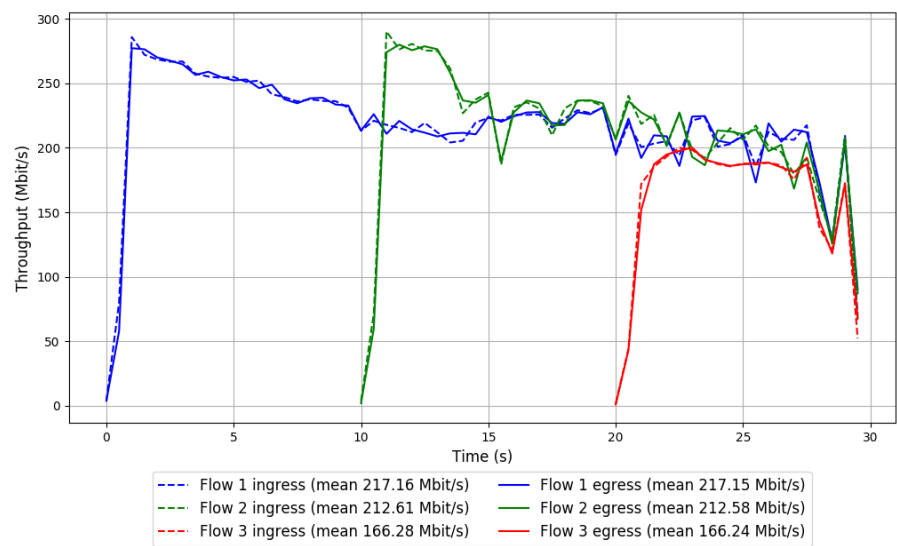
-- Flow 3:

Average throughput: 166.24 Mbit/s

95th percentile per-packet one-way delay: 55.541 ms

Loss rate: 0.03%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-03-07 08:10:23

End at: 2018-03-07 08:10:53

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.49 Mbit/s

95th percentile per-packet one-way delay: 61.603 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 203.38 Mbit/s

95th percentile per-packet one-way delay: 63.385 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 183.92 Mbit/s

95th percentile per-packet one-way delay: 61.399 ms

Loss rate: 0.00%

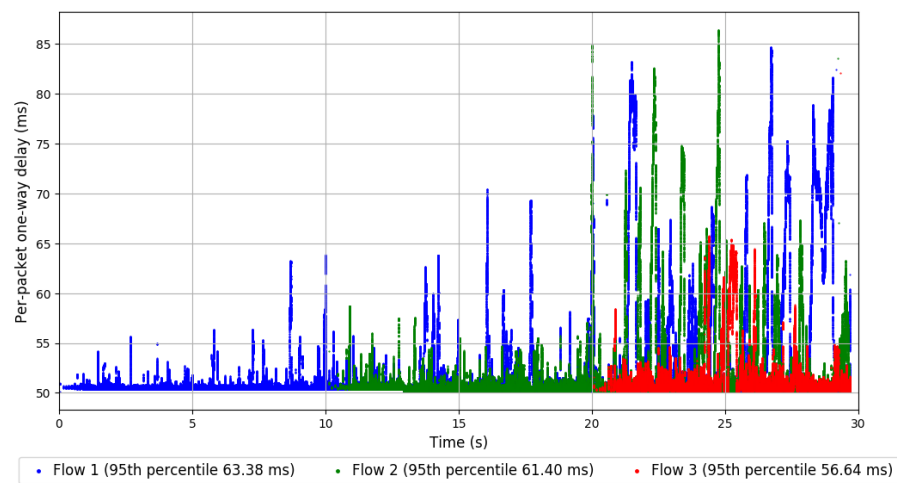
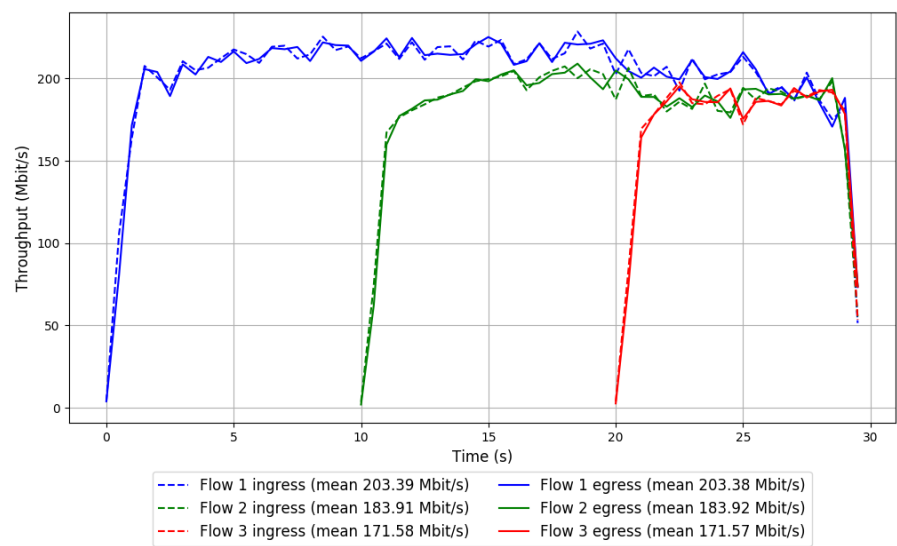
-- Flow 3:

Average throughput: 171.57 Mbit/s

95th percentile per-packet one-way delay: 56.641 ms

Loss rate: 0.00%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-03-07 08:27:51

End at: 2018-03-07 08:28:21

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 375.62 Mbit/s

95th percentile per-packet one-way delay: 55.035 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 191.16 Mbit/s

95th percentile per-packet one-way delay: 54.395 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 196.13 Mbit/s

95th percentile per-packet one-way delay: 56.947 ms

Loss rate: 0.01%

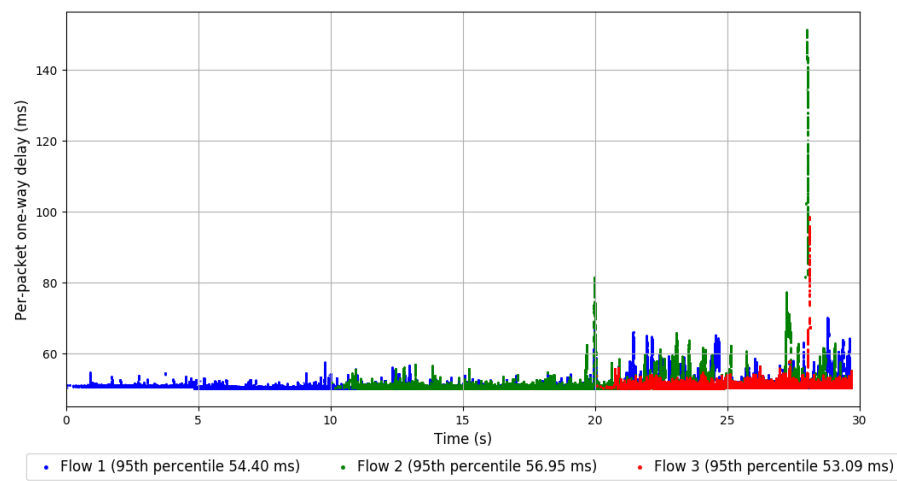
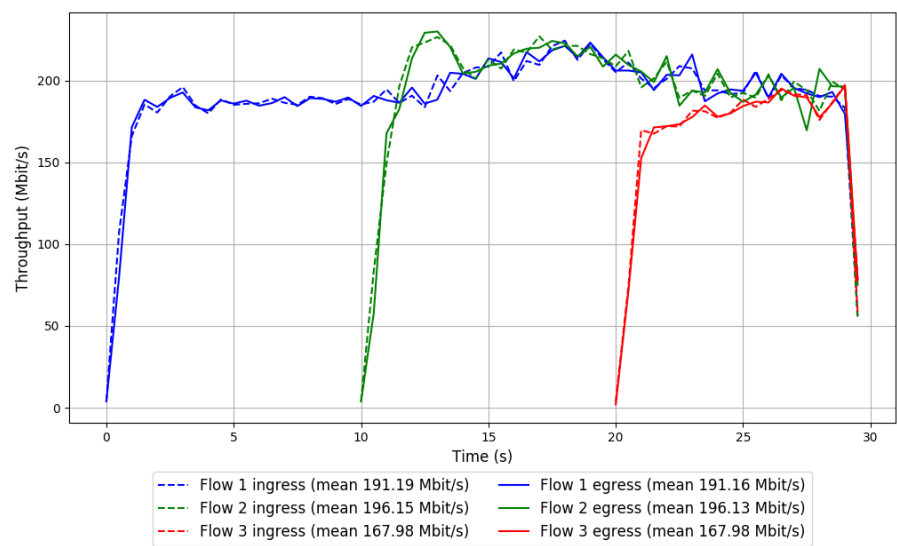
-- Flow 3:

Average throughput: 167.98 Mbit/s

95th percentile per-packet one-way delay: 53.095 ms

Loss rate: 0.01%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-03-07 08:44:59

End at: 2018-03-07 08:45:29

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 389.84 Mbit/s

95th percentile per-packet one-way delay: 60.066 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 199.24 Mbit/s

95th percentile per-packet one-way delay: 58.581 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 204.37 Mbit/s

95th percentile per-packet one-way delay: 66.557 ms

Loss rate: 0.01%

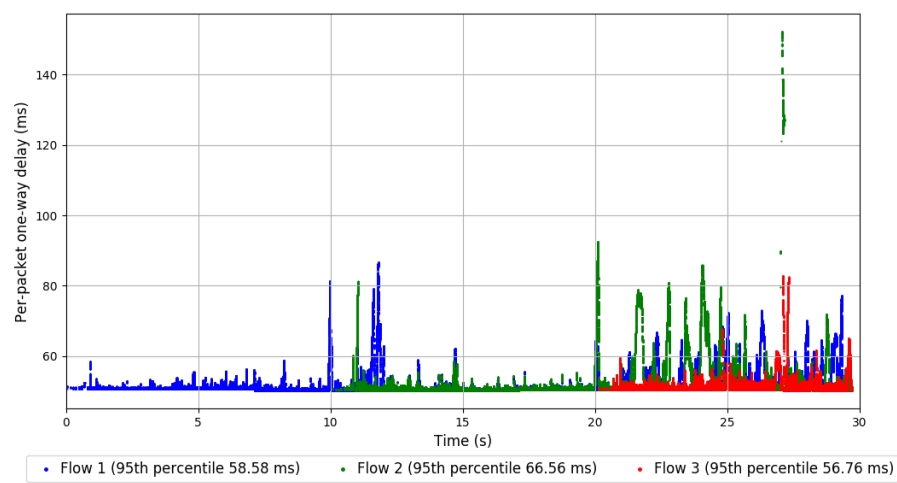
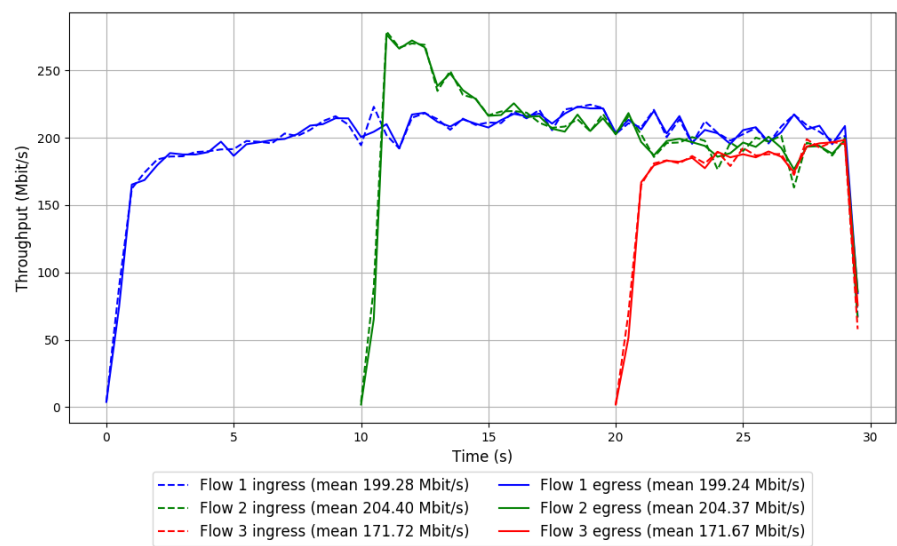
-- Flow 3:

Average throughput: 171.67 Mbit/s

95th percentile per-packet one-way delay: 56.762 ms

Loss rate: 0.04%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-03-07 06:04:52

End at: 2018-03-07 06:05:22

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 486.66 Mbit/s

95th percentile per-packet one-way delay: 156.136 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 283.33 Mbit/s

95th percentile per-packet one-way delay: 203.899 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 230.52 Mbit/s

95th percentile per-packet one-way delay: 66.490 ms

Loss rate: 0.01%

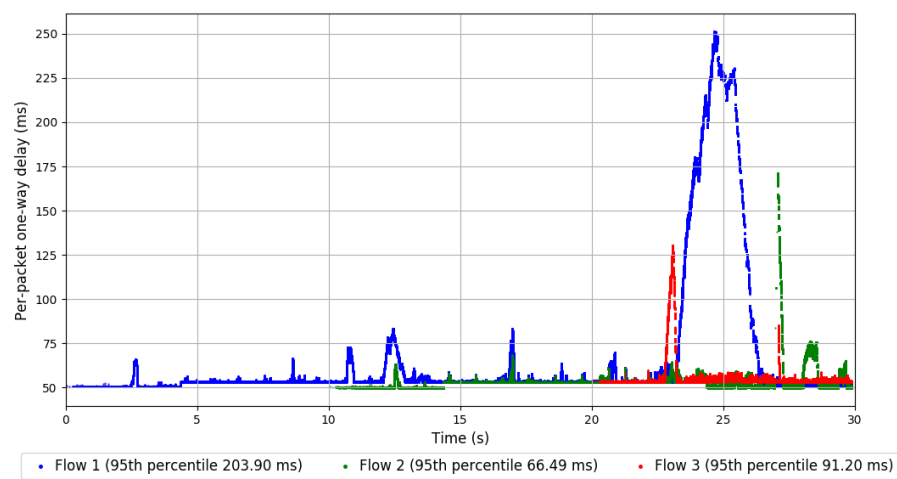
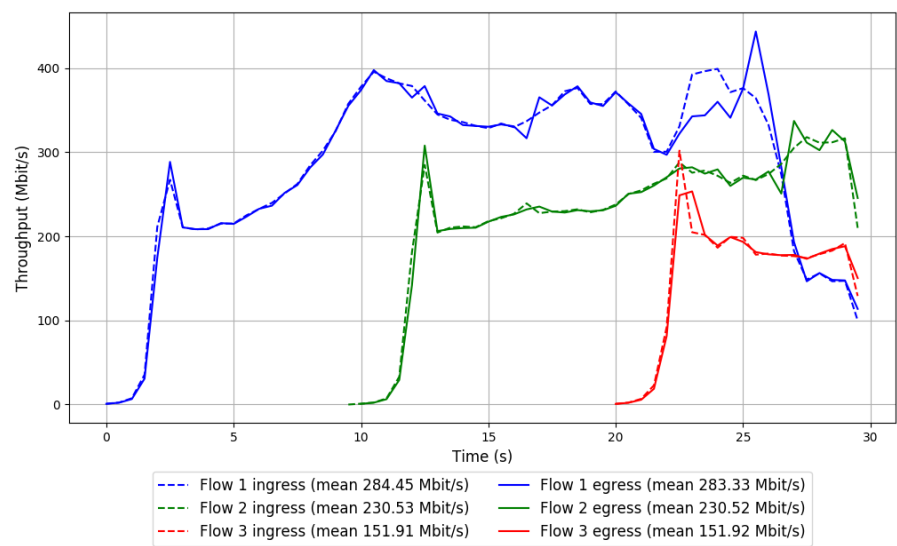
-- Flow 3:

Average throughput: 151.92 Mbit/s

95th percentile per-packet one-way delay: 91.200 ms

Loss rate: 0.00%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-03-07 06:22:22

End at: 2018-03-07 06:22:52

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 425.43 Mbit/s

95th percentile per-packet one-way delay: 173.577 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 249.44 Mbit/s

95th percentile per-packet one-way delay: 172.341 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 222.48 Mbit/s

95th percentile per-packet one-way delay: 194.603 ms

Loss rate: 0.14%

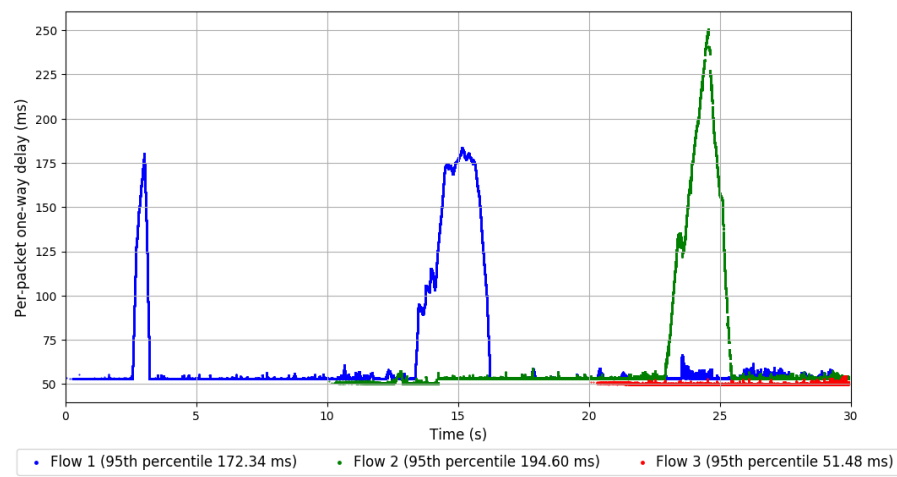
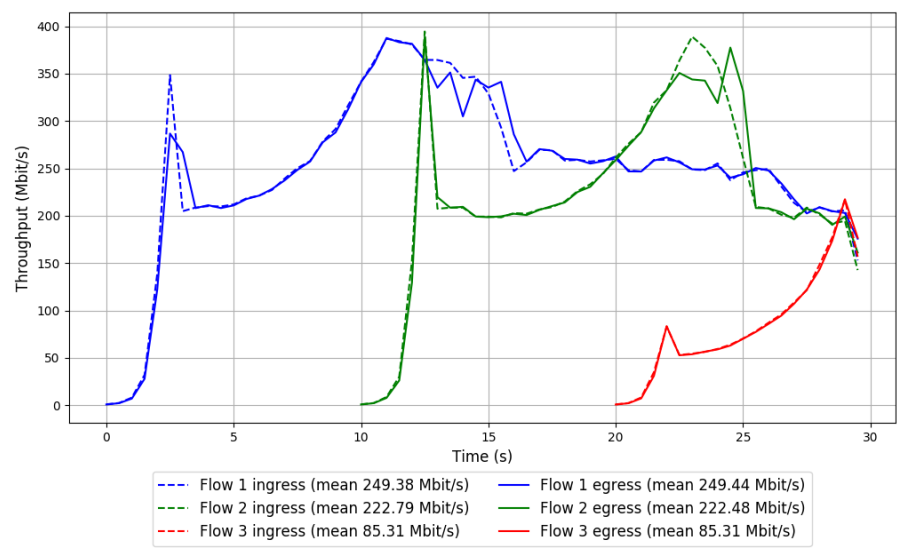
-- Flow 3:

Average throughput: 85.31 Mbit/s

95th percentile per-packet one-way delay: 51.475 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-03-07 06:39:45

End at: 2018-03-07 06:40:15

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 406.27 Mbit/s

95th percentile per-packet one-way delay: 76.312 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 246.29 Mbit/s

95th percentile per-packet one-way delay: 79.228 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 220.84 Mbit/s

95th percentile per-packet one-way delay: 69.020 ms

Loss rate: 0.01%

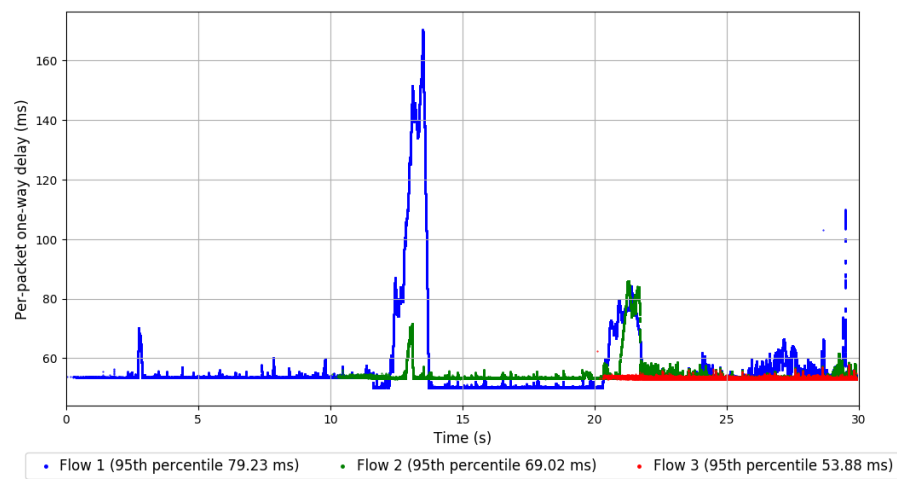
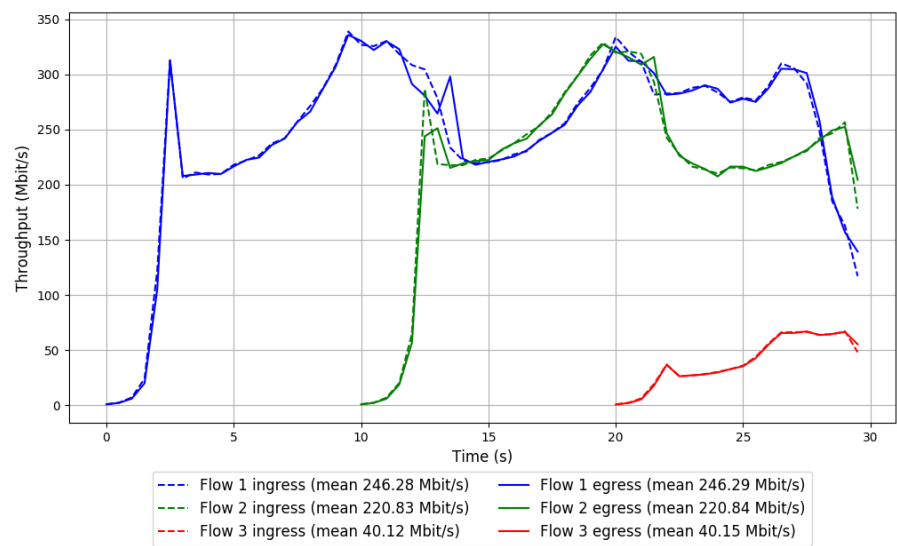
-- Flow 3:

Average throughput: 40.15 Mbit/s

95th percentile per-packet one-way delay: 53.884 ms

Loss rate: 0.03%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-03-07 06:57:03

End at: 2018-03-07 06:57:33

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 502.98 Mbit/s

95th percentile per-packet one-way delay: 163.944 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 295.88 Mbit/s

95th percentile per-packet one-way delay: 178.020 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 233.18 Mbit/s

95th percentile per-packet one-way delay: 139.366 ms

Loss rate: 0.00%

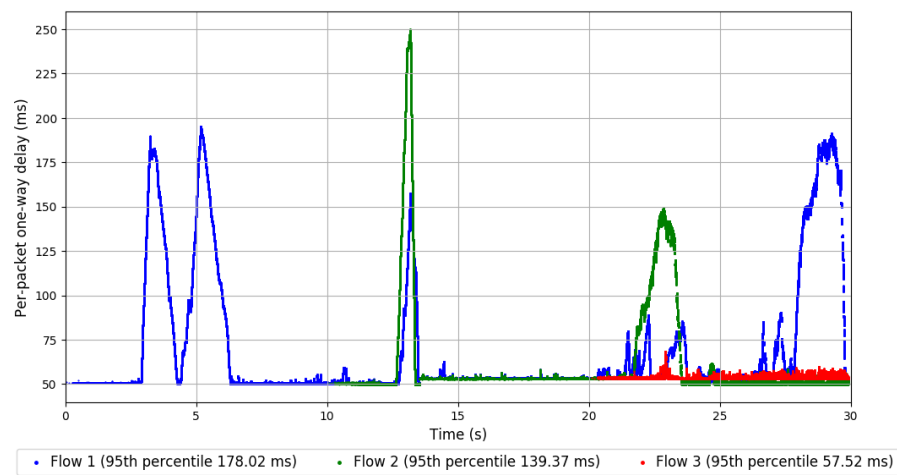
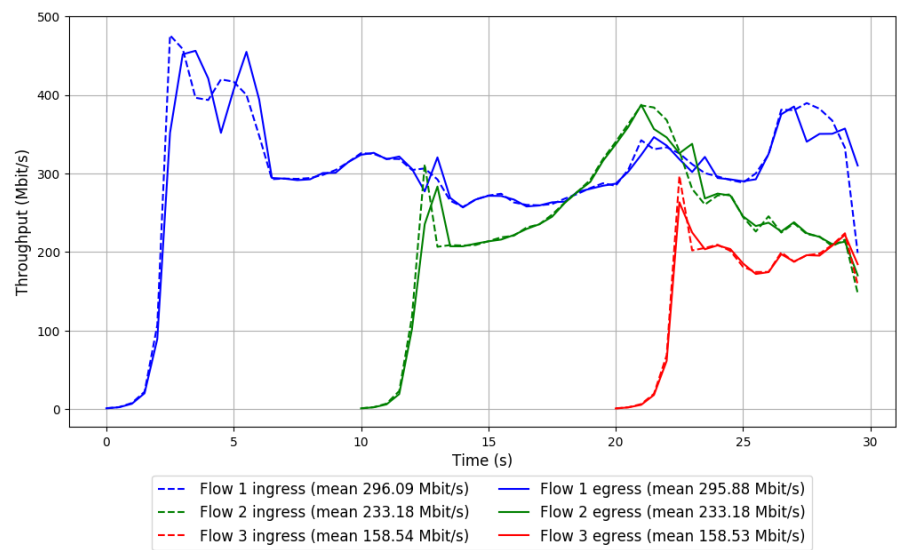
-- Flow 3:

Average throughput: 158.53 Mbit/s

95th percentile per-packet one-way delay: 57.525 ms

Loss rate: 0.03%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-03-07 07:14:31

End at: 2018-03-07 07:15:01

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 471.11 Mbit/s

95th percentile per-packet one-way delay: 155.624 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 281.38 Mbit/s

95th percentile per-packet one-way delay: 132.833 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 252.63 Mbit/s

95th percentile per-packet one-way delay: 177.757 ms

Loss rate: 0.28%

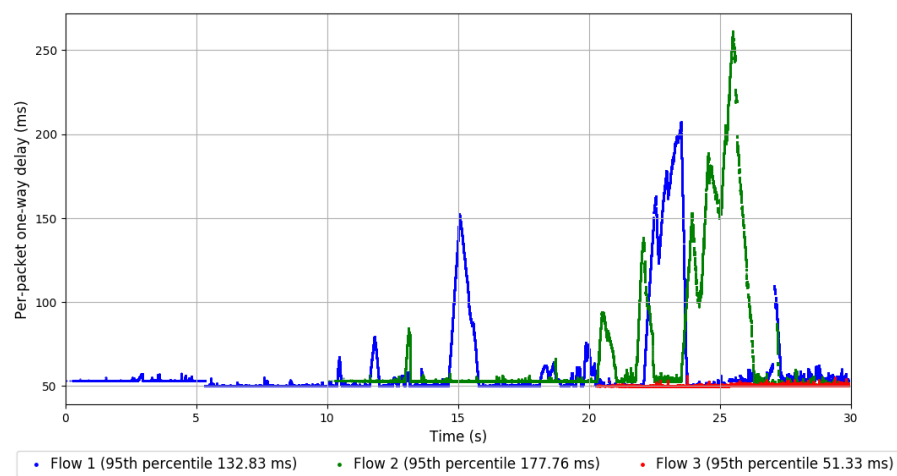
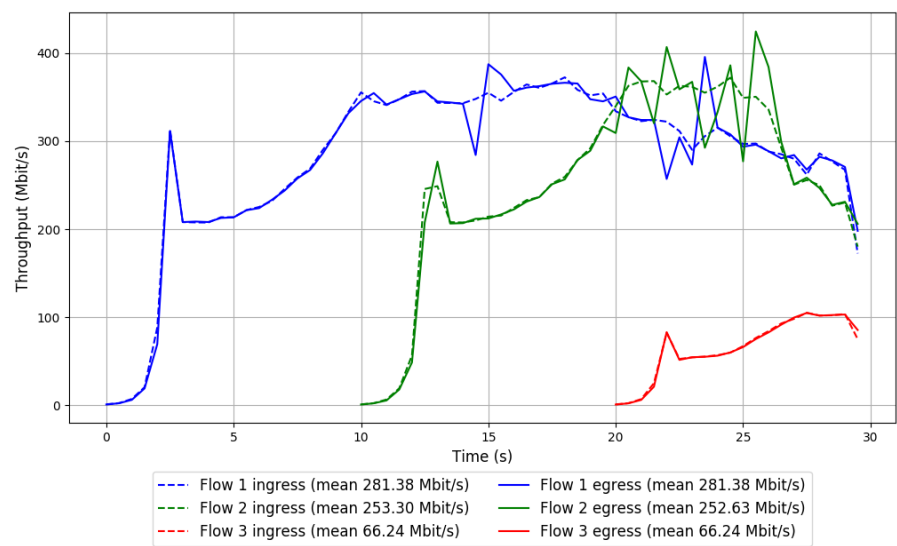
-- Flow 3:

Average throughput: 66.24 Mbit/s

95th percentile per-packet one-way delay: 51.326 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-03-07 07:32:04

End at: 2018-03-07 07:32:34

Below is generated by plot.py at 2018-03-07 13:03:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 487.45 Mbit/s

95th percentile per-packet one-way delay: 158.158 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 273.26 Mbit/s

95th percentile per-packet one-way delay: 191.256 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 241.09 Mbit/s

95th percentile per-packet one-way delay: 92.265 ms

Loss rate: 0.00%

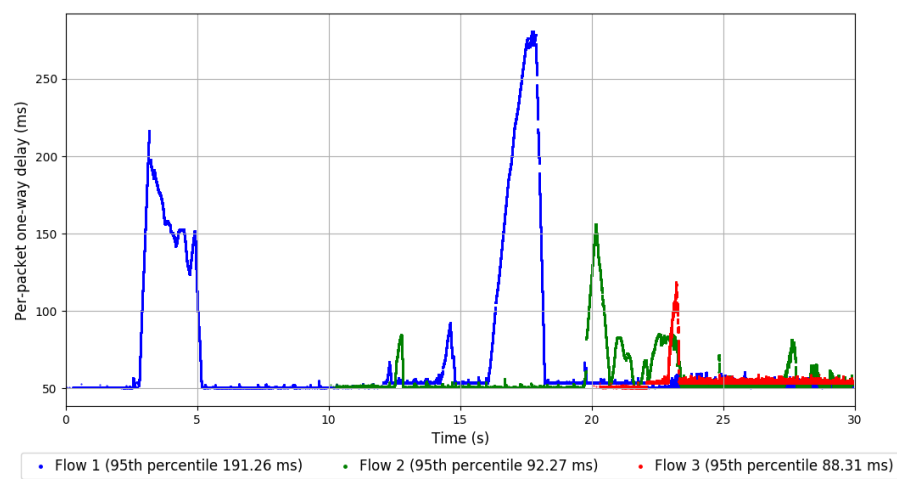
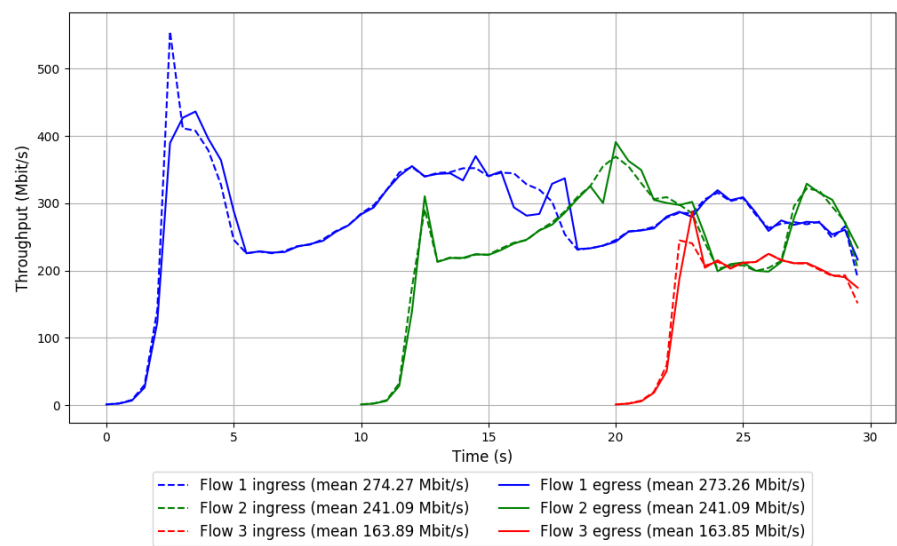
-- Flow 3:

Average throughput: 163.85 Mbit/s

95th percentile per-packet one-way delay: 88.307 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-03-07 07:49:31

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

Below is generated by plot.py at 2018-03-07 13:04:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 439.72 Mbit/s

95th percentile per-packet one-way delay: 147.768 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 240.24 Mbit/s

95th percentile per-packet one-way delay: 68.883 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 256.01 Mbit/s

95th percentile per-packet one-way delay: 192.240 ms

Loss rate: 0.01%

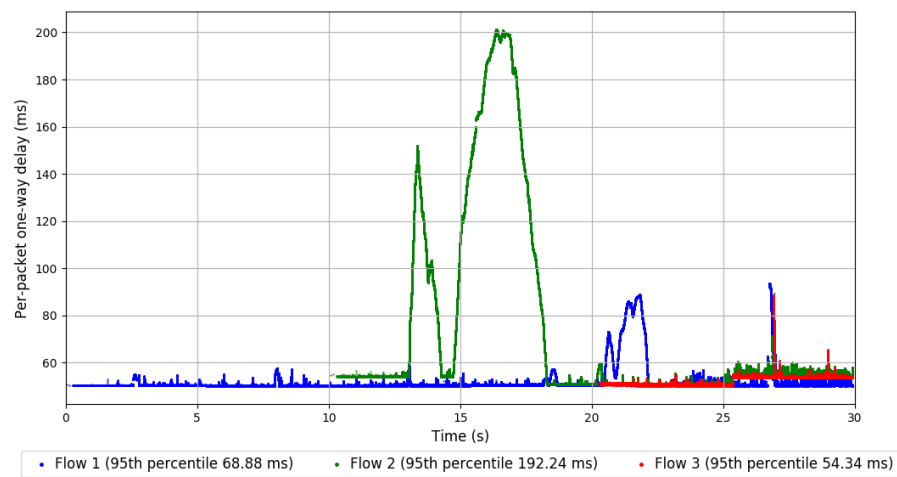
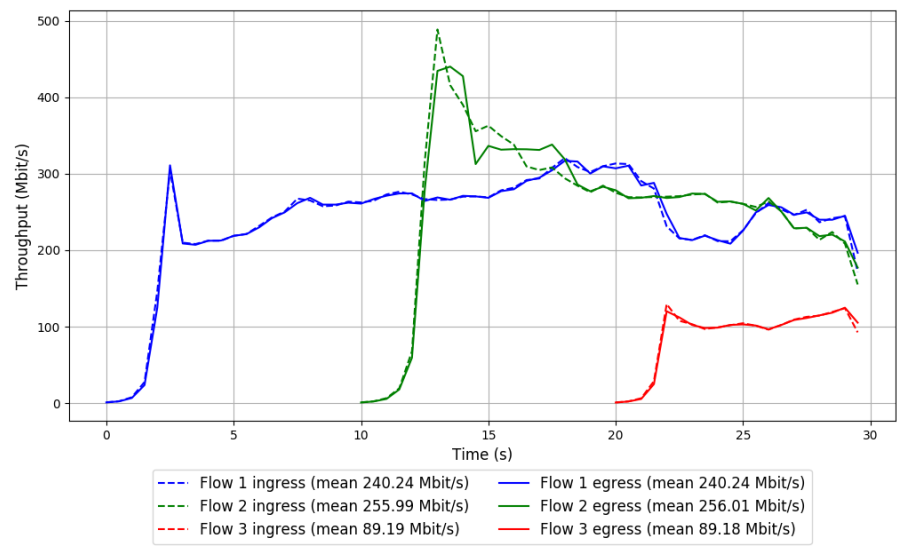
-- Flow 3:

Average throughput: 89.18 Mbit/s

95th percentile per-packet one-way delay: 54.342 ms

Loss rate: 0.01%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-03-07 08:07:09

End at: 2018-03-07 08:07:39

Below is generated by plot.py at 2018-03-07 13:04:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 477.73 Mbit/s

95th percentile per-packet one-way delay: 73.474 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 281.15 Mbit/s

95th percentile per-packet one-way delay: 71.749 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 218.60 Mbit/s

95th percentile per-packet one-way delay: 80.598 ms

Loss rate: 0.01%

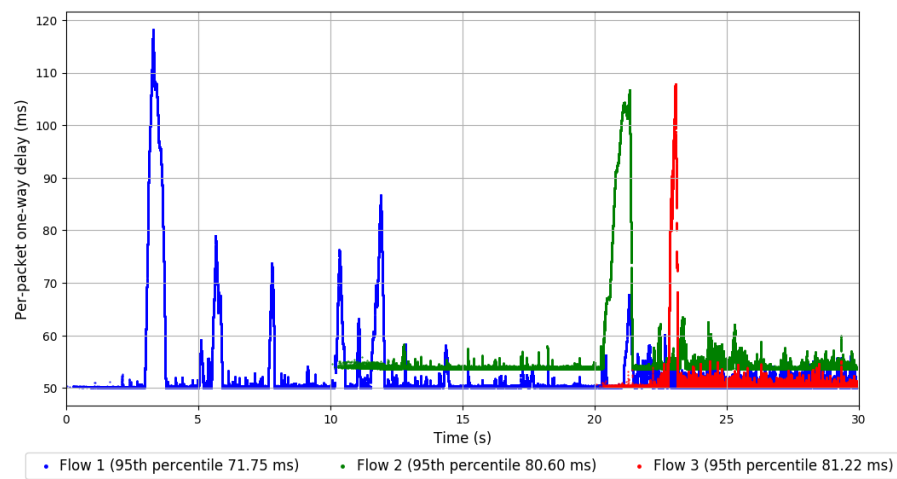
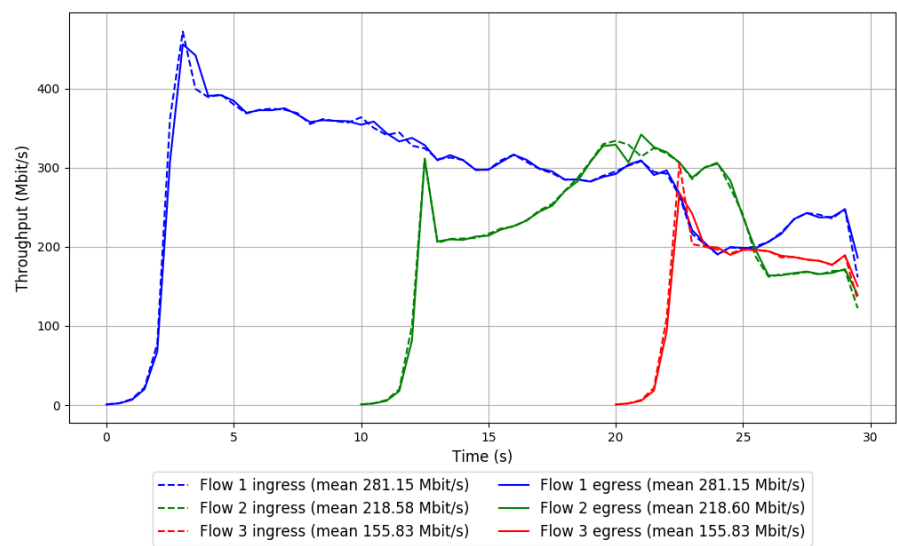
-- Flow 3:

Average throughput: 155.83 Mbit/s

95th percentile per-packet one-way delay: 81.221 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-03-07 08:24:43

End at: 2018-03-07 08:25:13

Below is generated by plot.py at 2018-03-07 13:04:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 405.74 Mbit/s

95th percentile per-packet one-way delay: 89.243 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 249.03 Mbit/s

95th percentile per-packet one-way delay: 98.845 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 144.49 Mbit/s

95th percentile per-packet one-way delay: 85.800 ms

Loss rate: 0.00%

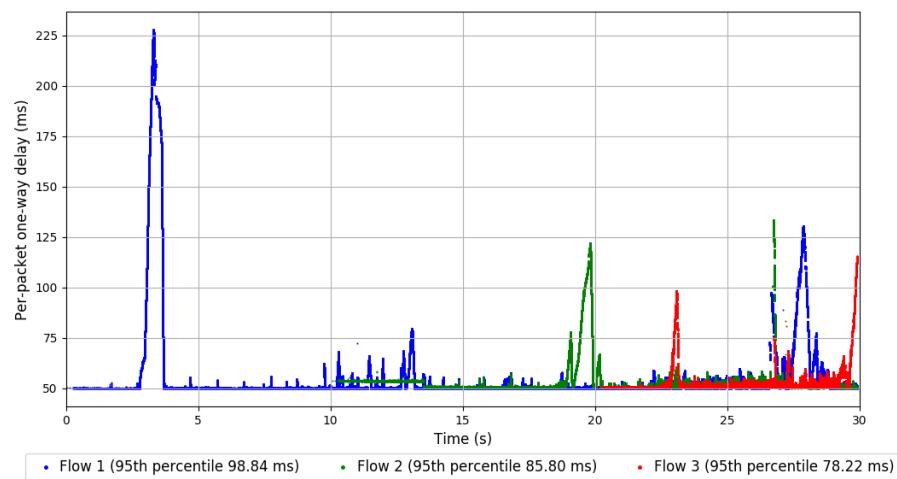
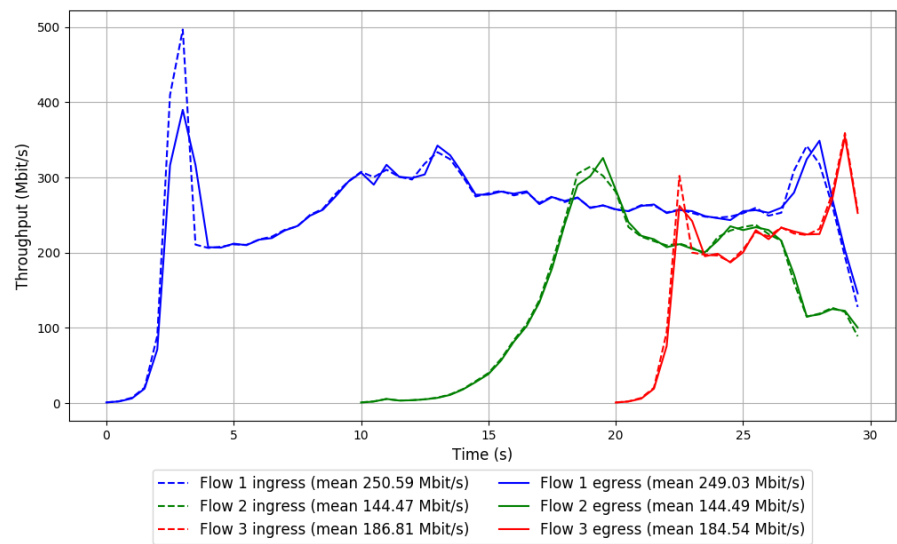
-- Flow 3:

Average throughput: 184.54 Mbit/s

95th percentile per-packet one-way delay: 78.220 ms

Loss rate: 1.20%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-03-07 08:41:53

End at: 2018-03-07 08:42:23

Below is generated by plot.py at 2018-03-07 13:05:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 364.86 Mbit/s

95th percentile per-packet one-way delay: 61.326 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 178.55 Mbit/s

95th percentile per-packet one-way delay: 67.630 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 236.82 Mbit/s

95th percentile per-packet one-way delay: 57.917 ms

Loss rate: 0.00%

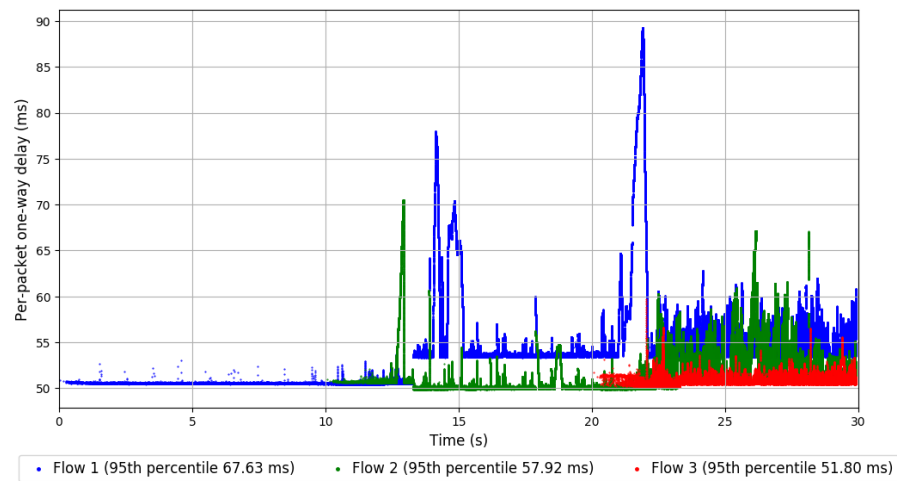
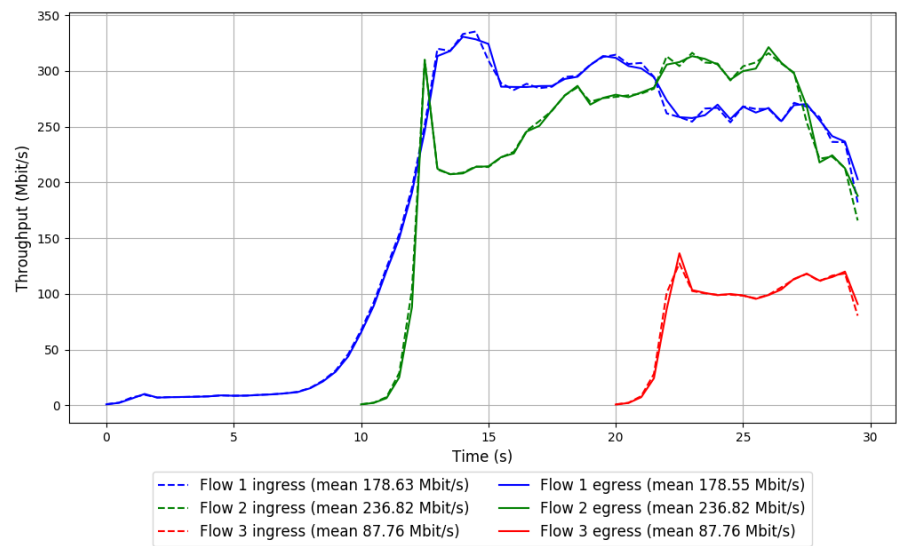
-- Flow 3:

Average throughput: 87.76 Mbit/s

95th percentile per-packet one-way delay: 51.796 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

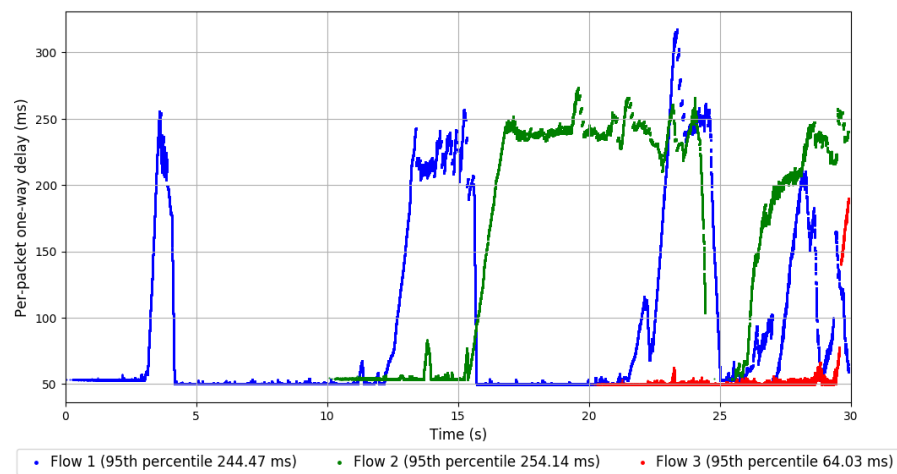
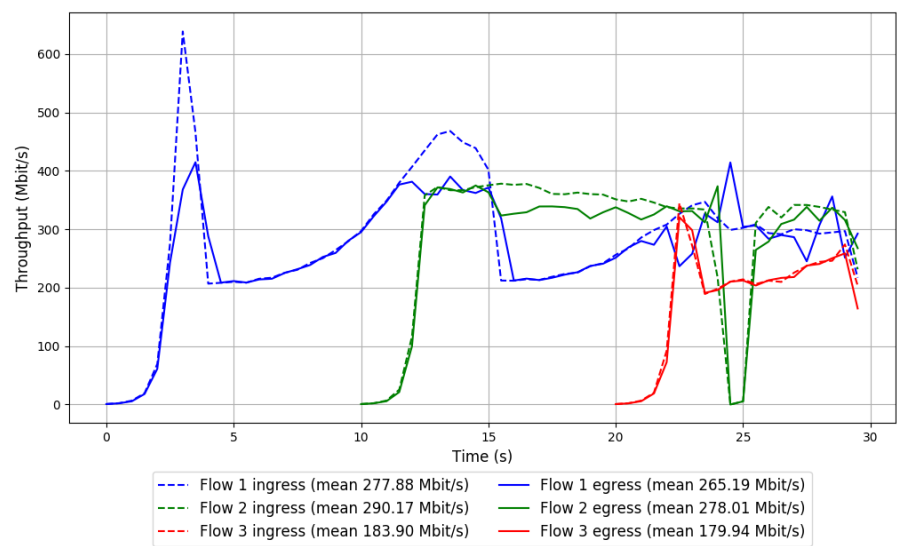


```
Run 1: Statistics of Vivace-loss

Start at: 2018-03-07 06:09:52
End at: 2018-03-07 06:10:22

# Below is generated by plot.py at 2018-03-07 13:08:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 509.10 Mbit/s
95th percentile per-packet one-way delay: 248.683 ms
Loss rate: 4.16%
-- Flow 1:
Average throughput: 265.19 Mbit/s
95th percentile per-packet one-way delay: 244.467 ms
Loss rate: 4.57%
-- Flow 2:
Average throughput: 278.01 Mbit/s
95th percentile per-packet one-way delay: 254.137 ms
Loss rate: 4.21%
-- Flow 3:
Average throughput: 179.94 Mbit/s
95th percentile per-packet one-way delay: 64.034 ms
Loss rate: 2.15%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-03-07 06:27:18

End at: 2018-03-07 06:27:48

Below is generated by plot.py at 2018-03-07 13:09:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 525.64 Mbit/s

95th percentile per-packet one-way delay: 245.191 ms

Loss rate: 3.40%

-- Flow 1:

Average throughput: 317.59 Mbit/s

95th percentile per-packet one-way delay: 181.193 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 225.54 Mbit/s

95th percentile per-packet one-way delay: 273.737 ms

Loss rate: 8.80%

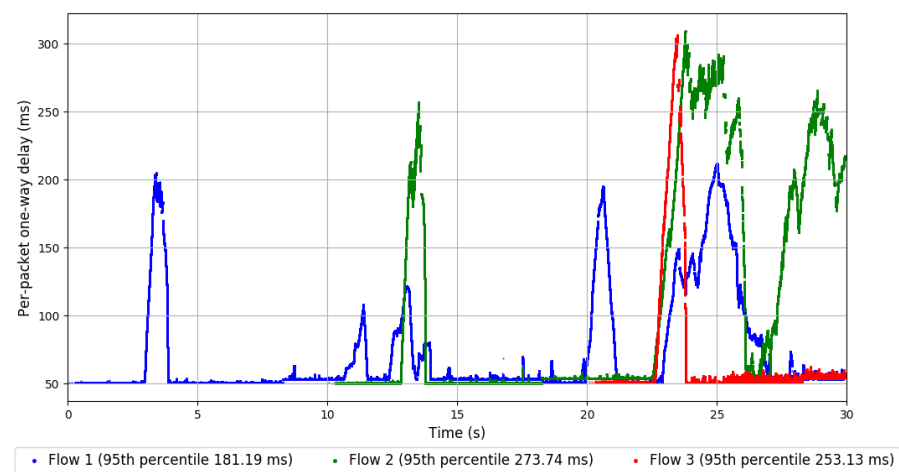
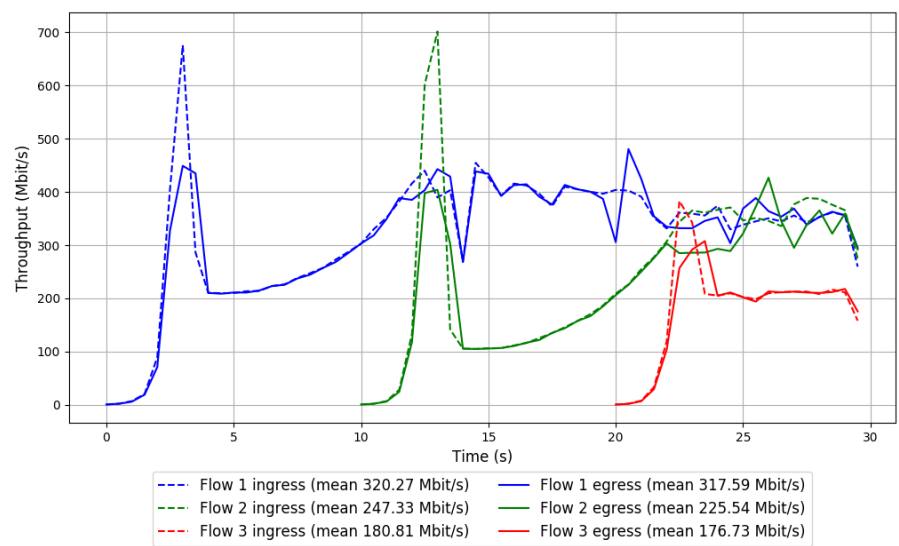
-- Flow 3:

Average throughput: 176.73 Mbit/s

95th percentile per-packet one-way delay: 253.128 ms

Loss rate: 2.25%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-03-07 06:44:37

End at: 2018-03-07 06:45:07

Below is generated by plot.py at 2018-03-07 13:11:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 571.51 Mbit/s

95th percentile per-packet one-way delay: 260.456 ms

Loss rate: 4.19%

-- Flow 1:

Average throughput: 335.71 Mbit/s

95th percentile per-packet one-way delay: 254.614 ms

Loss rate: 3.02%

-- Flow 2:

Average throughput: 238.80 Mbit/s

95th percentile per-packet one-way delay: 207.881 ms

Loss rate: 2.31%

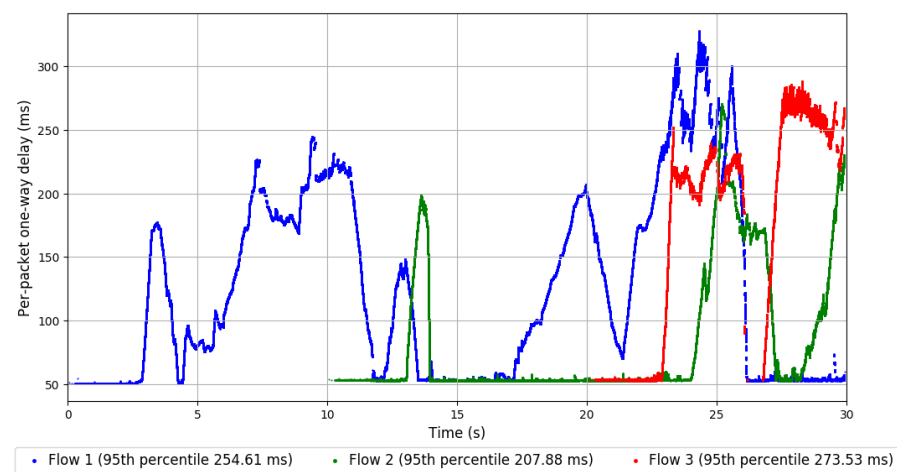
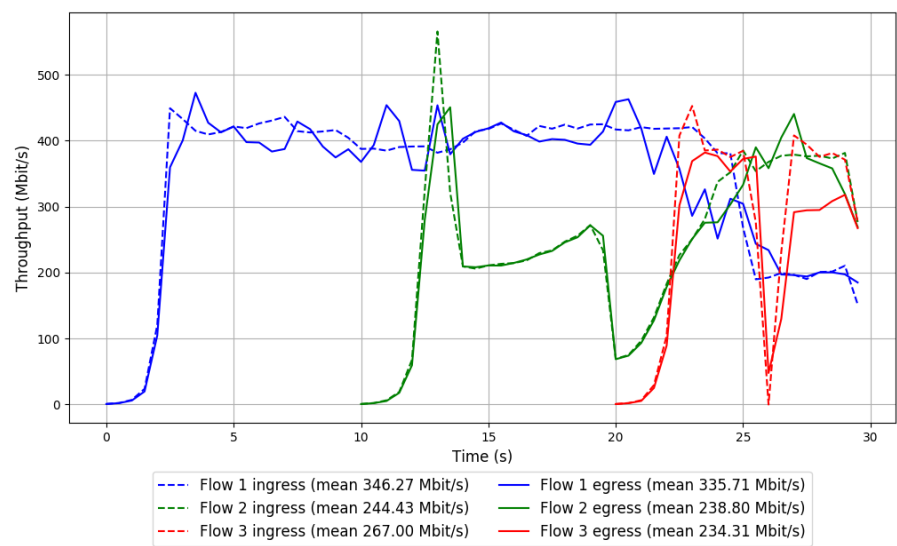
-- Flow 3:

Average throughput: 234.31 Mbit/s

95th percentile per-packet one-way delay: 273.531 ms

Loss rate: 12.25%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-03-07 07:02:05

End at: 2018-03-07 07:02:35

Below is generated by plot.py at 2018-03-07 13:11:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 509.99 Mbit/s

95th percentile per-packet one-way delay: 291.831 ms

Loss rate: 7.69%

-- Flow 1:

Average throughput: 254.53 Mbit/s

95th percentile per-packet one-way delay: 285.419 ms

Loss rate: 8.01%

-- Flow 2:

Average throughput: 292.24 Mbit/s

95th percentile per-packet one-way delay: 304.258 ms

Loss rate: 9.46%

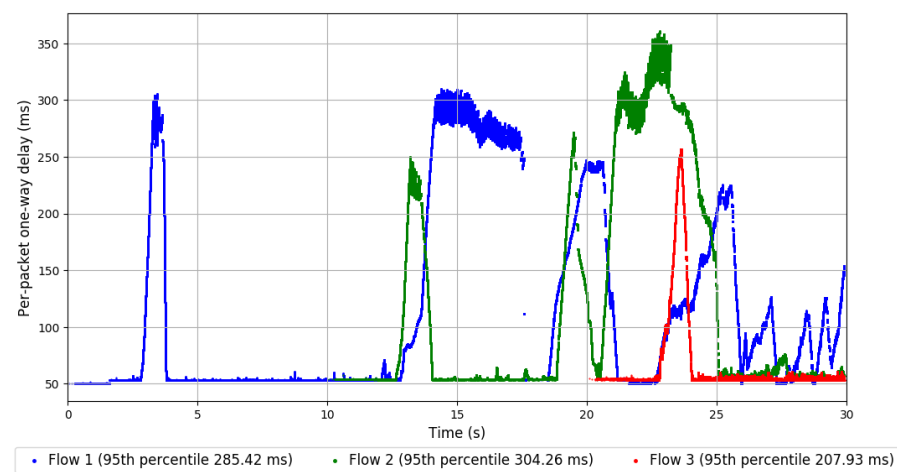
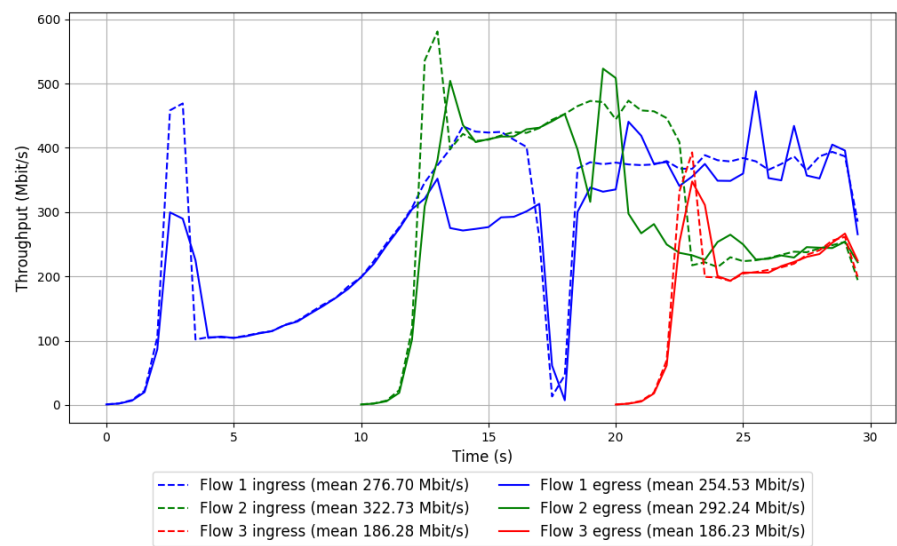
-- Flow 3:

Average throughput: 186.23 Mbit/s

95th percentile per-packet one-way delay: 207.932 ms

Loss rate: 0.06%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-03-07 07:19:31

End at: 2018-03-07 07:20:01

Below is generated by plot.py at 2018-03-07 13:13:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 560.84 Mbit/s

95th percentile per-packet one-way delay: 286.616 ms

Loss rate: 7.37%

-- Flow 1:

Average throughput: 335.68 Mbit/s

95th percentile per-packet one-way delay: 255.940 ms

Loss rate: 4.64%

-- Flow 2:

Average throughput: 305.60 Mbit/s

95th percentile per-packet one-way delay: 297.115 ms

Loss rate: 8.43%

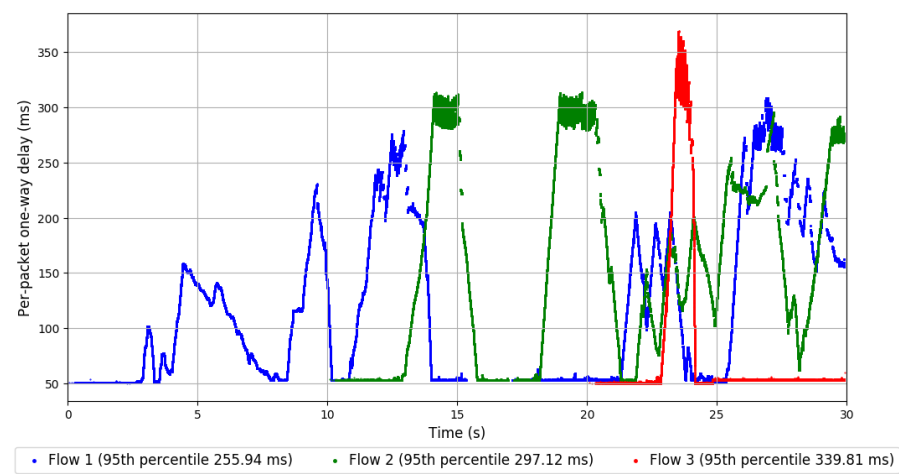
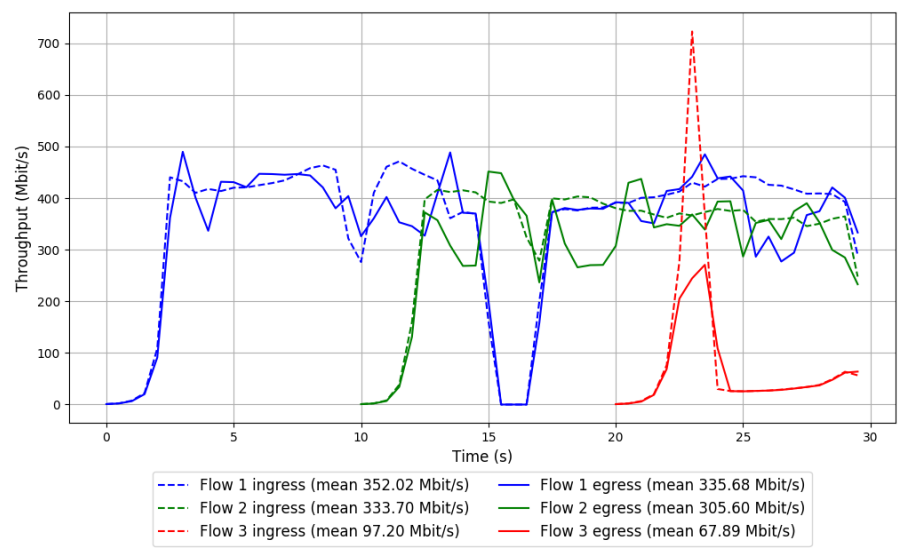
-- Flow 3:

Average throughput: 67.89 Mbit/s

95th percentile per-packet one-way delay: 339.812 ms

Loss rate: 30.10%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-03-07 07:37:02

End at: 2018-03-07 07:37:32

Below is generated by plot.py at 2018-03-07 13:13:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 505.67 Mbit/s

95th percentile per-packet one-way delay: 239.350 ms

Loss rate: 4.94%

-- Flow 1:

Average throughput: 312.42 Mbit/s

95th percentile per-packet one-way delay: 239.307 ms

Loss rate: 4.04%

-- Flow 2:

Average throughput: 233.32 Mbit/s

95th percentile per-packet one-way delay: 191.163 ms

Loss rate: 4.84%

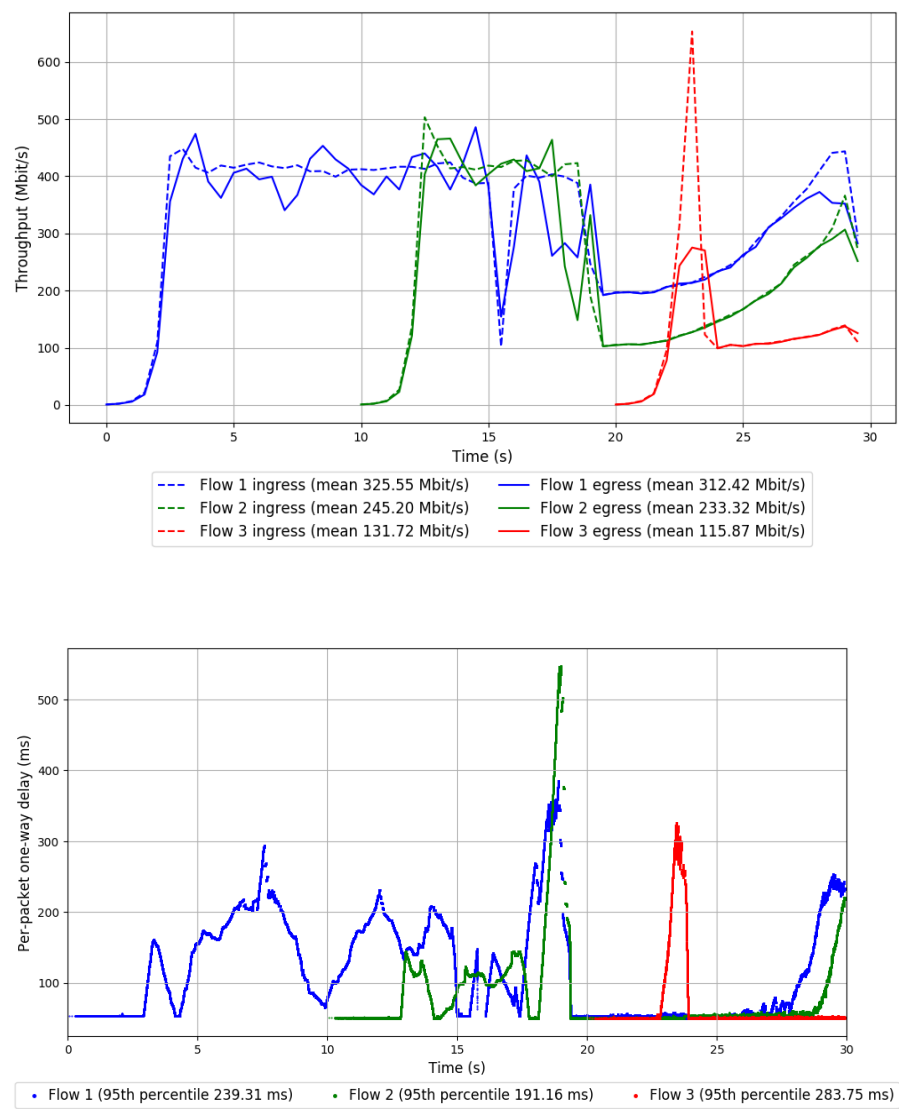
-- Flow 3:

Average throughput: 115.87 Mbit/s

95th percentile per-packet one-way delay: 283.753 ms

Loss rate: 12.03%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-03-07 07:54:26

End at: 2018-03-07 07:54:56

Below is generated by plot.py at 2018-03-07 13:13:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 530.67 Mbit/s

95th percentile per-packet one-way delay: 255.952 ms

Loss rate: 4.54%

-- Flow 1:

Average throughput: 246.73 Mbit/s

95th percentile per-packet one-way delay: 240.932 ms

Loss rate: 4.29%

-- Flow 2:

Average throughput: 306.57 Mbit/s

95th percentile per-packet one-way delay: 226.983 ms

Loss rate: 1.11%

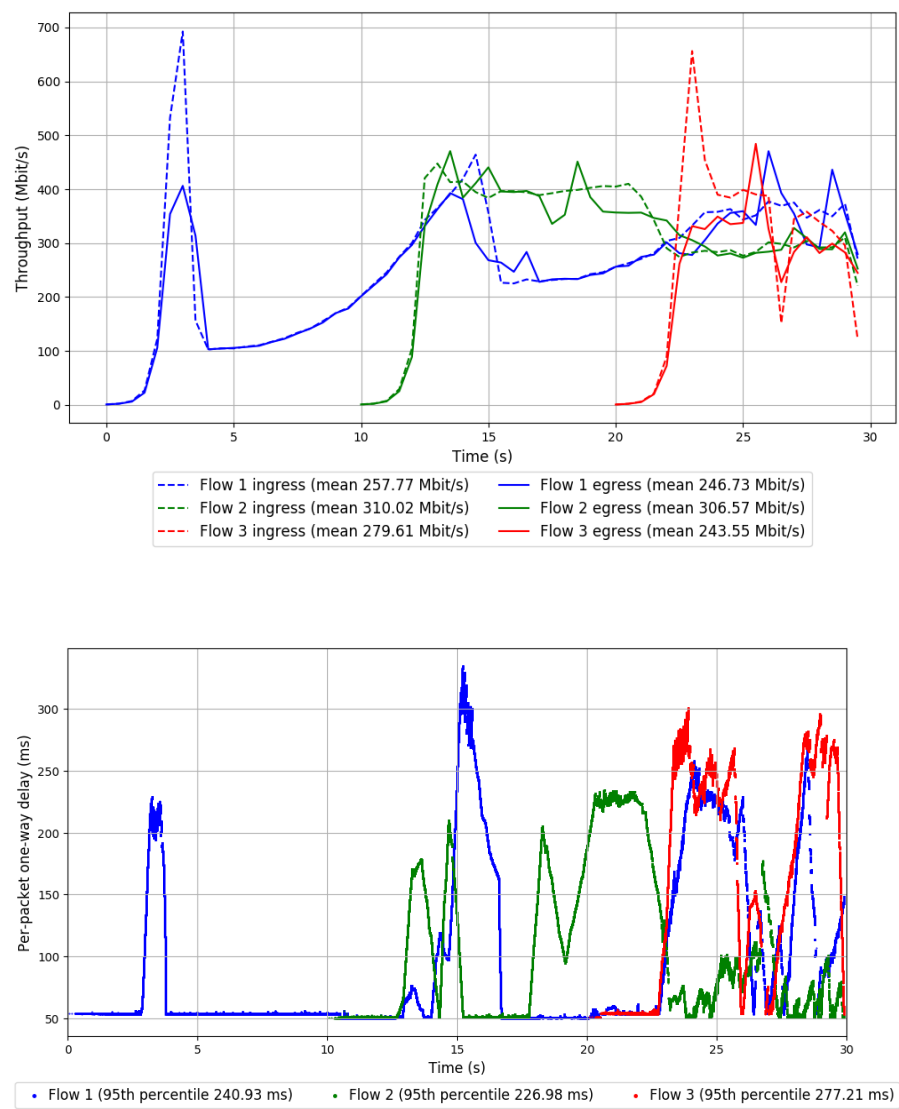
-- Flow 3:

Average throughput: 243.55 Mbit/s

95th percentile per-packet one-way delay: 277.209 ms

Loss rate: 12.91%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-03-07 08:12:08

End at: 2018-03-07 08:12:38

Below is generated by plot.py at 2018-03-07 13:15:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 599.25 Mbit/s

95th percentile per-packet one-way delay: 275.336 ms

Loss rate: 6.68%

-- Flow 1:

Average throughput: 334.42 Mbit/s

95th percentile per-packet one-way delay: 252.714 ms

Loss rate: 5.11%

-- Flow 2:

Average throughput: 305.93 Mbit/s

95th percentile per-packet one-way delay: 293.965 ms

Loss rate: 8.91%

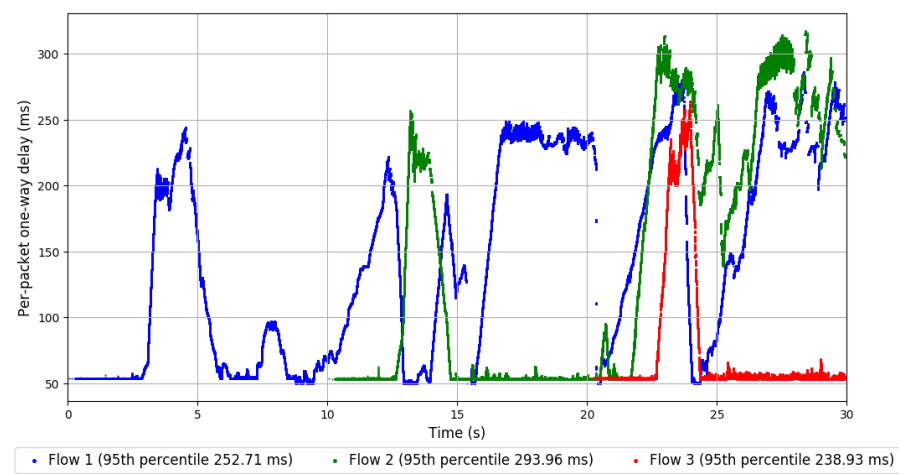
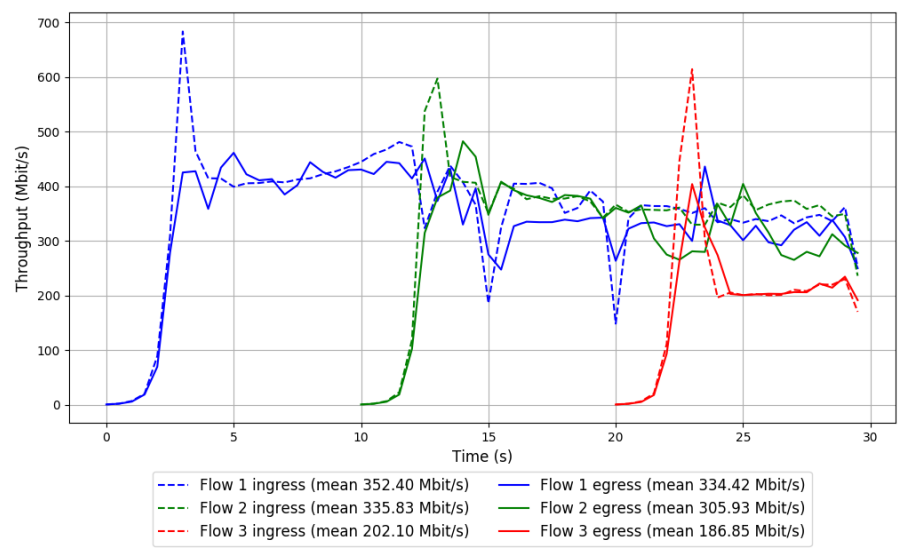
-- Flow 3:

Average throughput: 186.85 Mbit/s

95th percentile per-packet one-way delay: 238.925 ms

Loss rate: 7.57%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-03-07 08:29:34

End at: 2018-03-07 08:30:04

Below is generated by plot.py at 2018-03-07 13:17:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 557.20 Mbit/s

95th percentile per-packet one-way delay: 229.511 ms

Loss rate: 3.23%

-- Flow 1:

Average throughput: 264.12 Mbit/s

95th percentile per-packet one-way delay: 223.468 ms

Loss rate: 1.75%

-- Flow 2:

Average throughput: 347.35 Mbit/s

95th percentile per-packet one-way delay: 239.624 ms

Loss rate: 4.89%

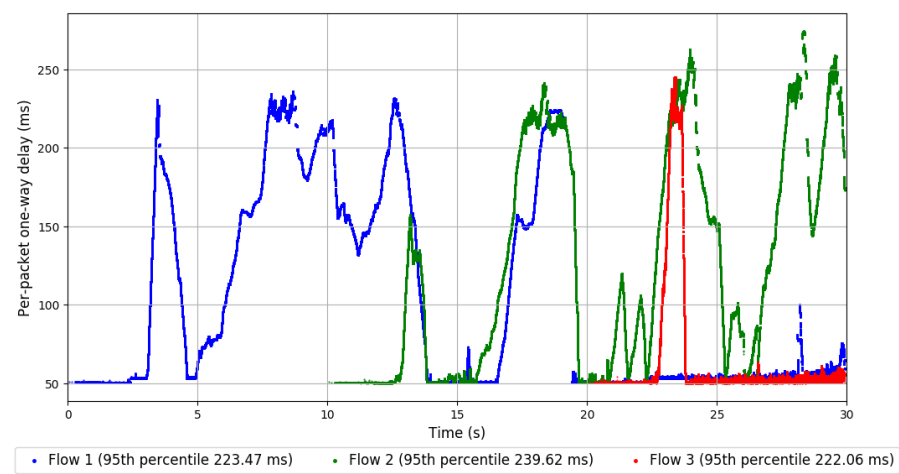
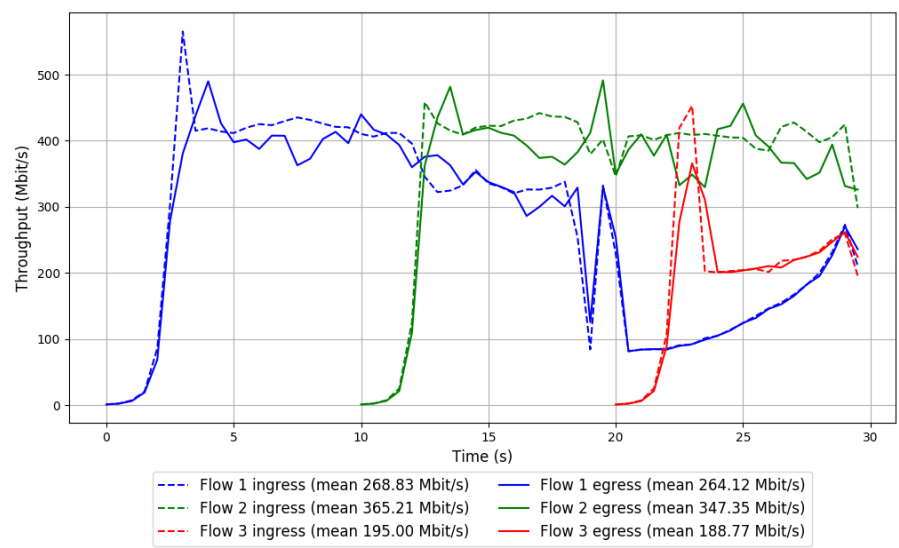
-- Flow 3:

Average throughput: 188.77 Mbit/s

95th percentile per-packet one-way delay: 222.061 ms

Loss rate: 3.20%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-03-07 08:46:43

End at: 2018-03-07 08:47:13

Below is generated by plot.py at 2018-03-07 13:19:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 594.17 Mbit/s

95th percentile per-packet one-way delay: 255.417 ms

Loss rate: 5.06%

-- Flow 1:

Average throughput: 345.20 Mbit/s

95th percentile per-packet one-way delay: 230.249 ms

Loss rate: 3.15%

-- Flow 2:

Average throughput: 264.87 Mbit/s

95th percentile per-packet one-way delay: 244.315 ms

Loss rate: 3.17%

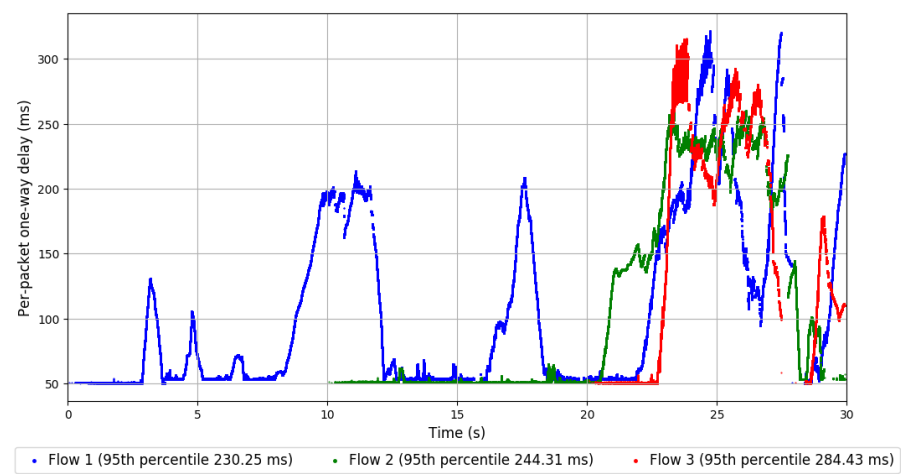
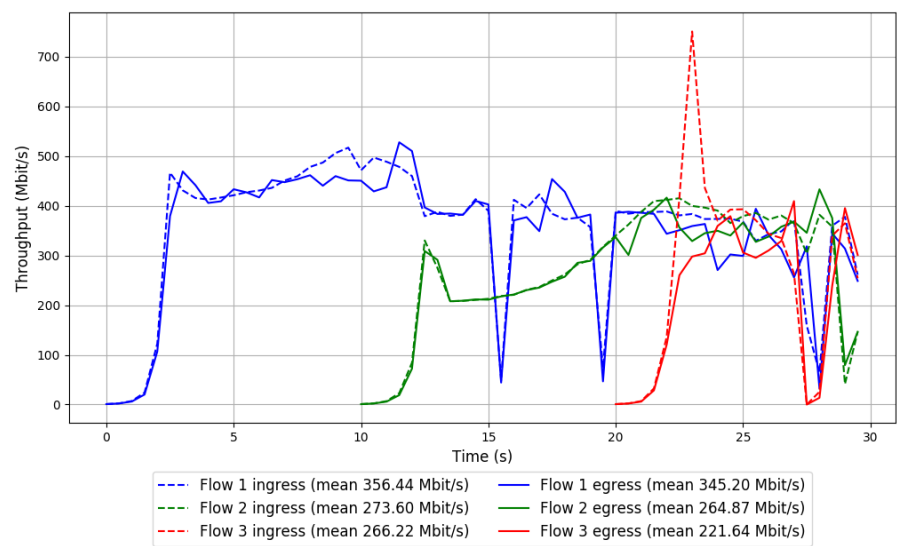
-- Flow 3:

Average throughput: 221.64 Mbit/s

95th percentile per-packet one-way delay: 284.432 ms

Loss rate: 16.75%

Run 10: Report of Vivace-loss — Data Link

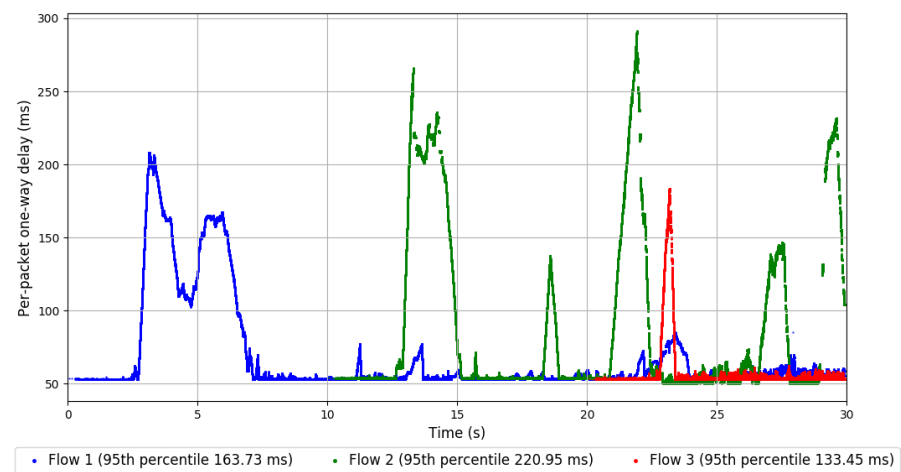
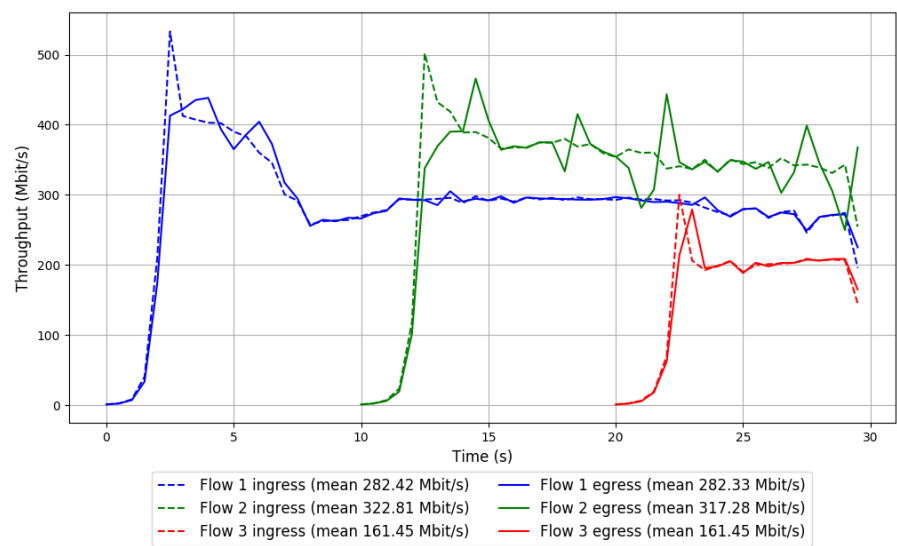


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-03-07 06:19:23
End at: 2018-03-07 06:19:53

# Below is generated by plot.py at 2018-03-07 13:20:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 546.30 Mbit/s
95th percentile per-packet one-way delay: 203.174 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 282.33 Mbit/s
95th percentile per-packet one-way delay: 163.730 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 317.28 Mbit/s
95th percentile per-packet one-way delay: 220.950 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 161.45 Mbit/s
95th percentile per-packet one-way delay: 133.454 ms
Loss rate: 0.02%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-03-07 06:36:56

End at: 2018-03-07 06:37:26

Below is generated by plot.py at 2018-03-07 13:20:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 415.38 Mbit/s

95th percentile per-packet one-way delay: 134.106 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 209.87 Mbit/s

95th percentile per-packet one-way delay: 204.227 ms

Loss rate: 1.52%

-- Flow 2:

Average throughput: 224.46 Mbit/s

95th percentile per-packet one-way delay: 71.749 ms

Loss rate: 0.00%

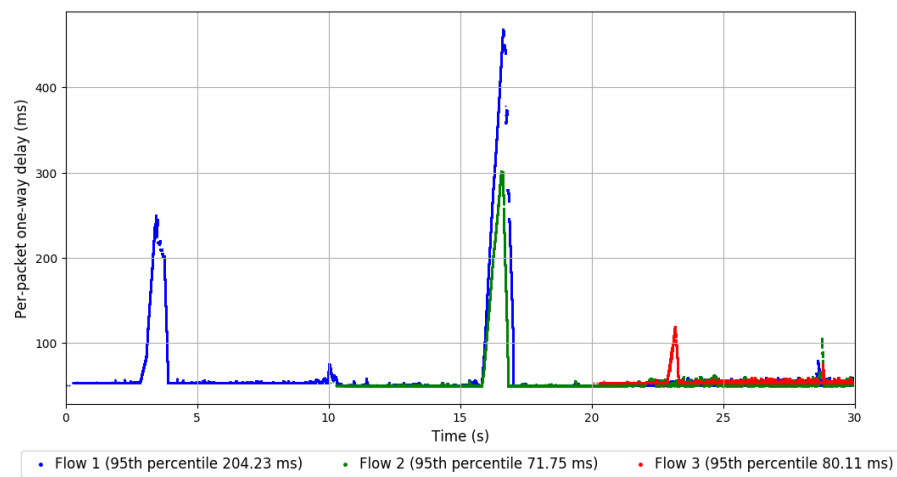
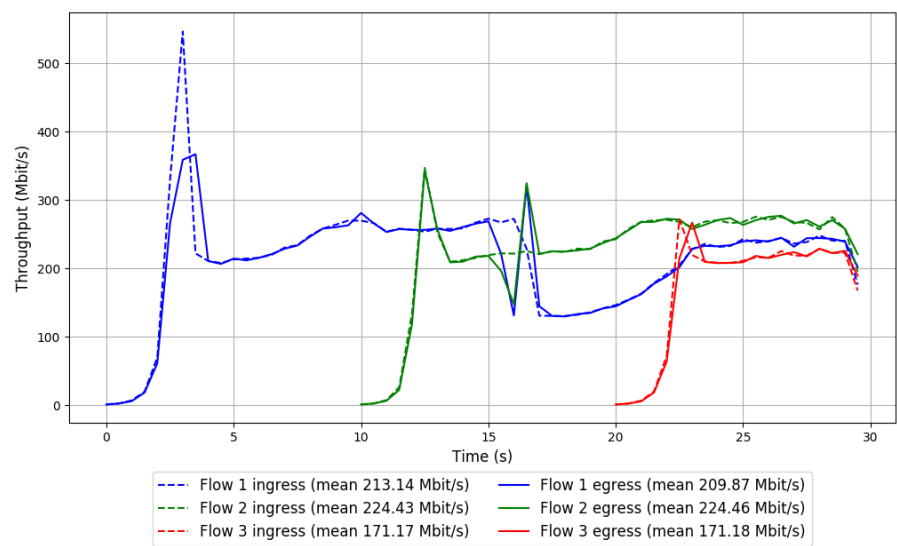
-- Flow 3:

Average throughput: 171.18 Mbit/s

95th percentile per-packet one-way delay: 80.109 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-03-07 06:54:04

End at: 2018-03-07 06:54:34

Below is generated by plot.py at 2018-03-07 13:22:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 544.66 Mbit/s

95th percentile per-packet one-way delay: 180.668 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 326.12 Mbit/s

95th percentile per-packet one-way delay: 200.031 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 246.18 Mbit/s

95th percentile per-packet one-way delay: 75.354 ms

Loss rate: 0.00%

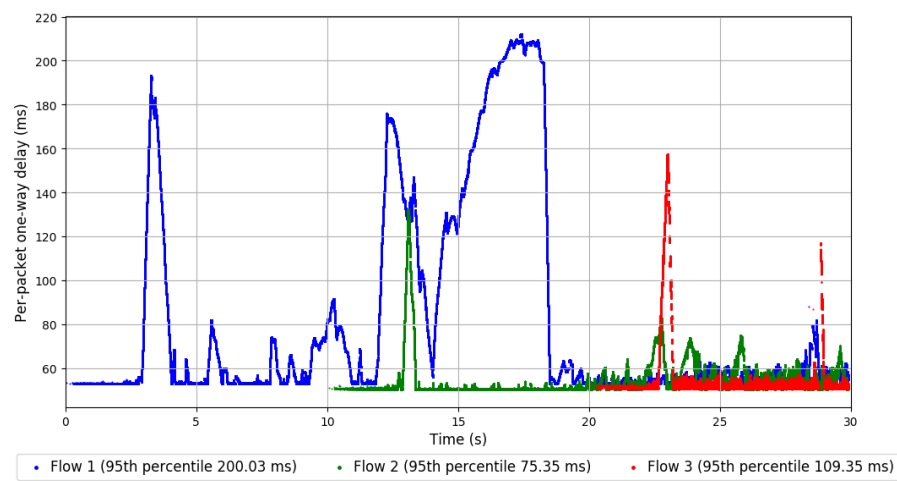
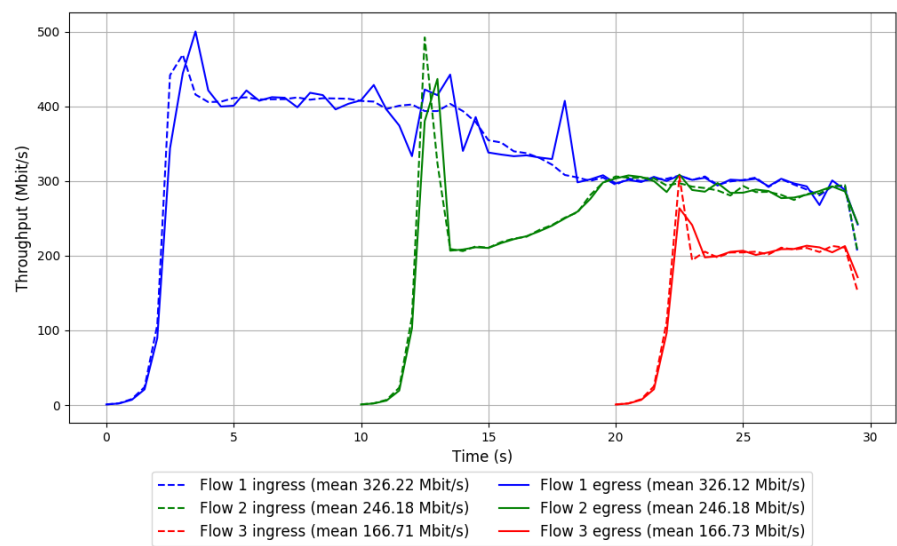
-- Flow 3:

Average throughput: 166.73 Mbit/s

95th percentile per-packet one-way delay: 109.346 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-03-07 07:11:35

End at: 2018-03-07 07:12:05

Below is generated by plot.py at 2018-03-07 13:22:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 542.37 Mbit/s

95th percentile per-packet one-way delay: 257.344 ms

Loss rate: 1.70%

-- Flow 1:

Average throughput: 316.78 Mbit/s

95th percentile per-packet one-way delay: 205.406 ms

Loss rate: 1.31%

-- Flow 2:

Average throughput: 257.37 Mbit/s

95th percentile per-packet one-way delay: 263.851 ms

Loss rate: 2.94%

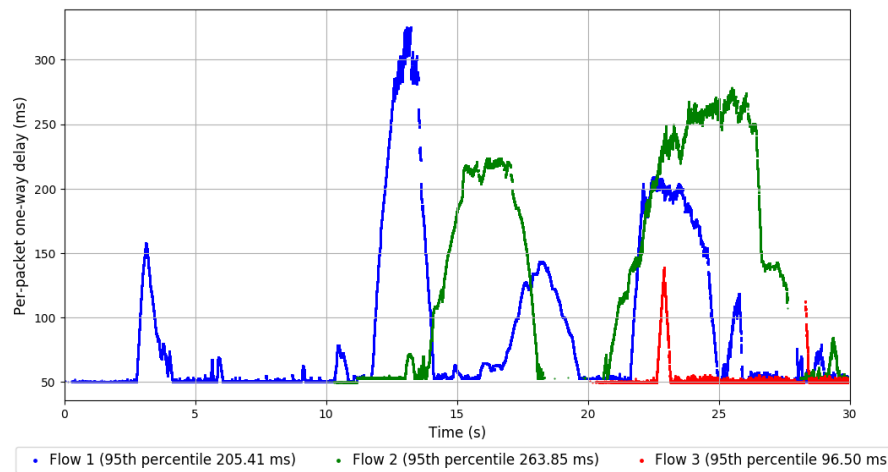
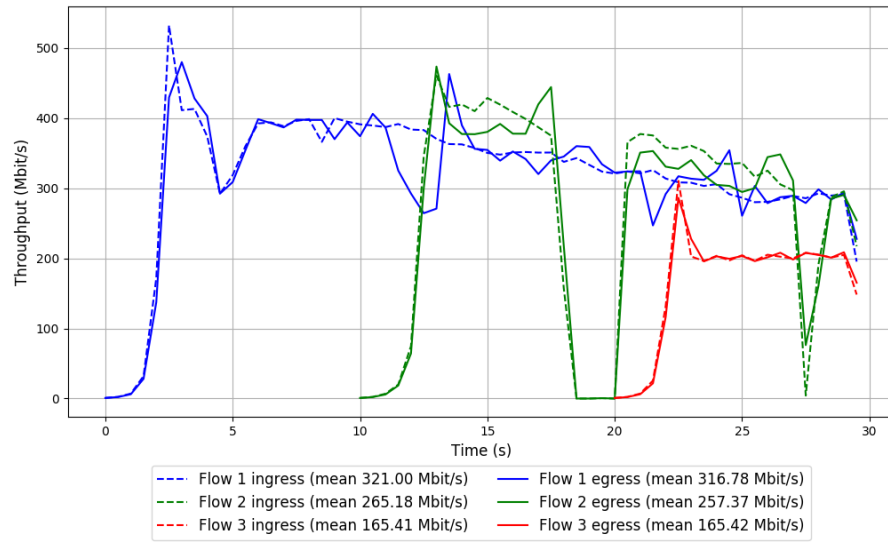
-- Flow 3:

Average throughput: 165.42 Mbit/s

95th percentile per-packet one-way delay: 96.498 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-03-07 07:29:01

End at: 2018-03-07 07:29:31

Below is generated by plot.py at 2018-03-07 13:23:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 570.65 Mbit/s

95th percentile per-packet one-way delay: 252.346 ms

Loss rate: 2.21%

-- Flow 1:

Average throughput: 286.75 Mbit/s

95th percentile per-packet one-way delay: 235.859 ms

Loss rate: 2.19%

-- Flow 2:

Average throughput: 297.55 Mbit/s

95th percentile per-packet one-way delay: 220.688 ms

Loss rate: 1.01%

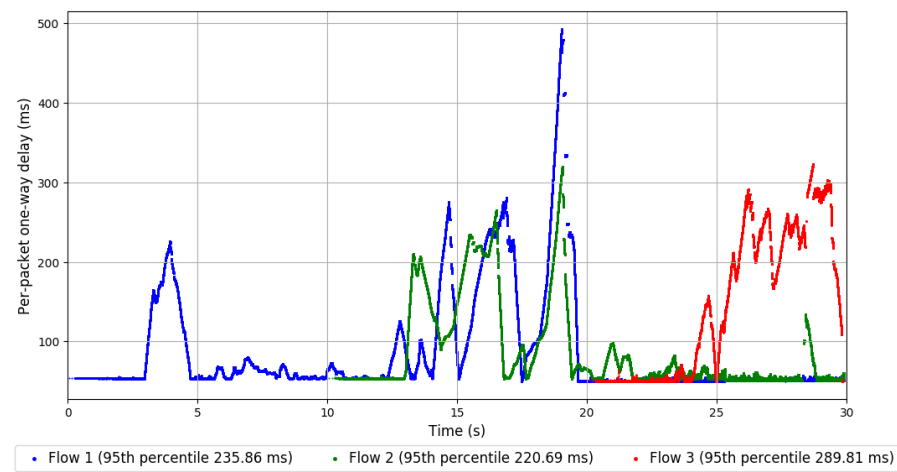
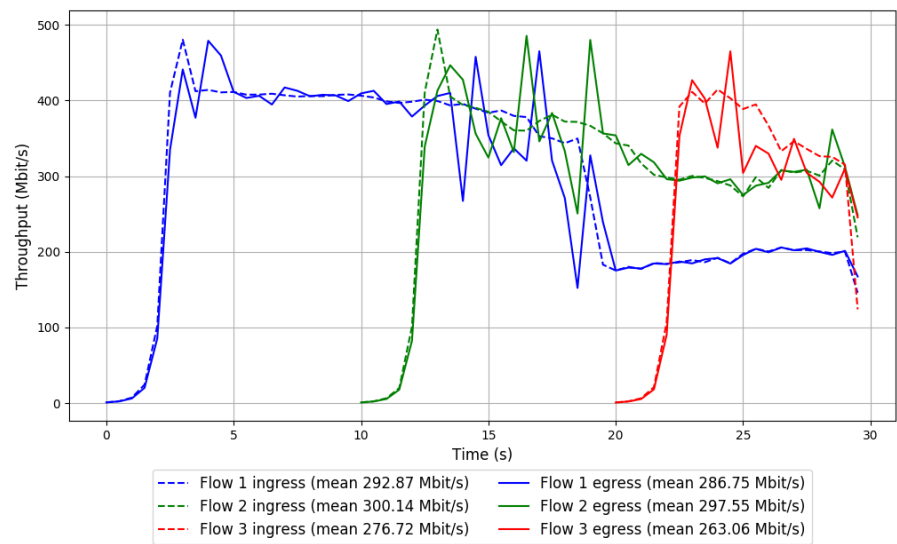
-- Flow 3:

Average throughput: 263.06 Mbit/s

95th percentile per-packet one-way delay: 289.806 ms

Loss rate: 4.94%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-03-07 07:46:29

End at: 2018-03-07 07:46:59

Below is generated by plot.py at 2018-03-07 13:25:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 576.38 Mbit/s

95th percentile per-packet one-way delay: 270.939 ms

Loss rate: 3.73%

-- Flow 1:

Average throughput: 348.69 Mbit/s

95th percentile per-packet one-way delay: 173.207 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 257.38 Mbit/s

95th percentile per-packet one-way delay: 281.475 ms

Loss rate: 10.60%

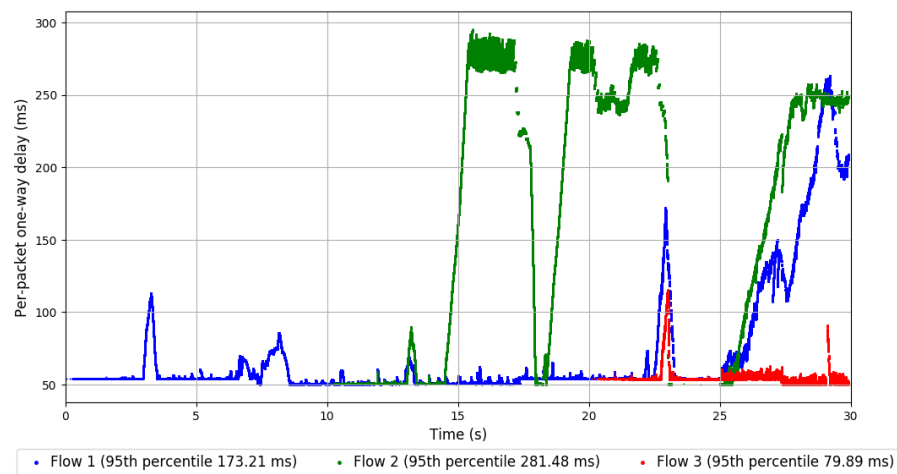
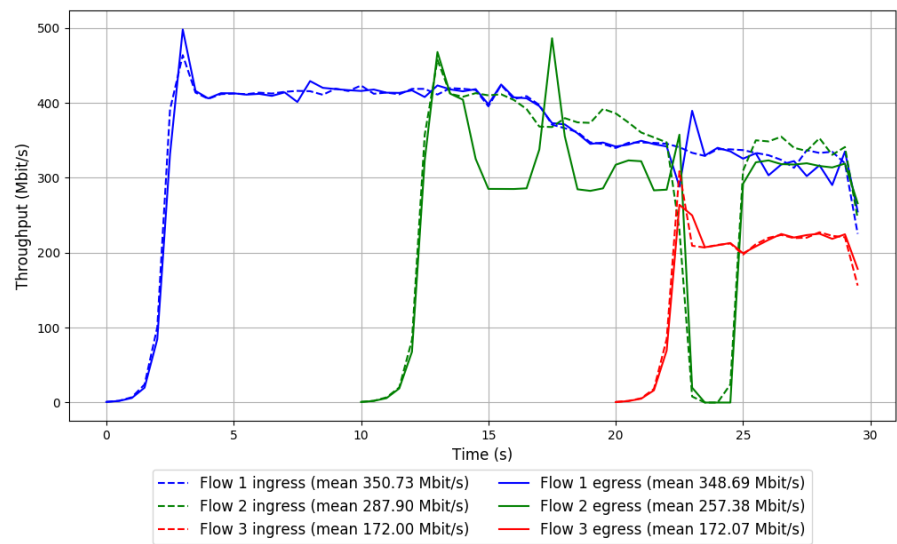
-- Flow 3:

Average throughput: 172.07 Mbit/s

95th percentile per-packet one-way delay: 79.894 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-03-07 08:04:04

End at: 2018-03-07 08:04:34

Below is generated by plot.py at 2018-03-07 13:26:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 619.56 Mbit/s

95th percentile per-packet one-way delay: 255.561 ms

Loss rate: 1.93%

-- Flow 1:

Average throughput: 333.75 Mbit/s

95th percentile per-packet one-way delay: 263.300 ms

Loss rate: 2.38%

-- Flow 2:

Average throughput: 350.26 Mbit/s

95th percentile per-packet one-way delay: 238.566 ms

Loss rate: 1.71%

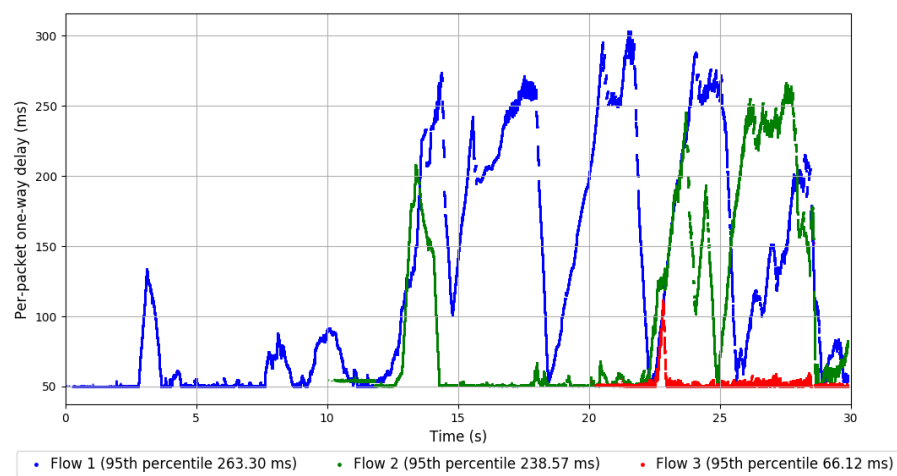
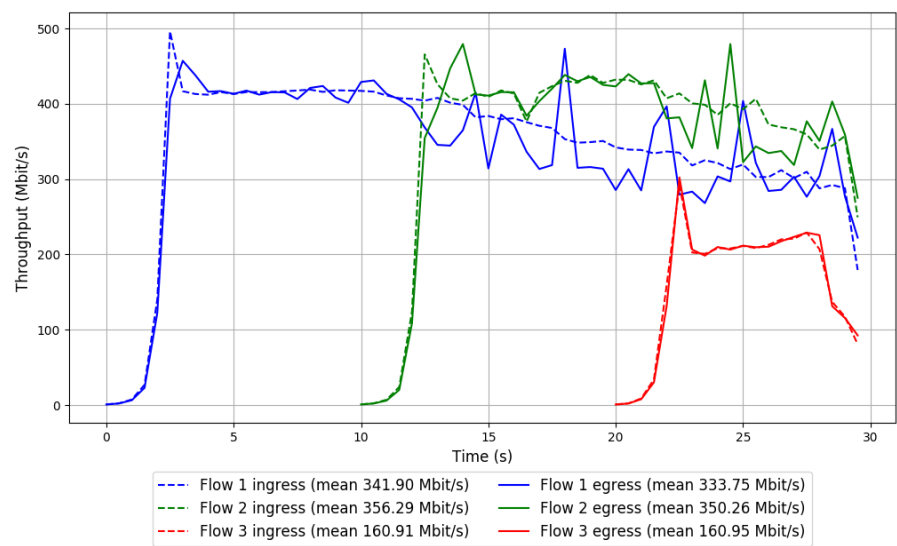
-- Flow 3:

Average throughput: 160.95 Mbit/s

95th percentile per-packet one-way delay: 66.120 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-03-07 08:21:48

End at: 2018-03-07 08:22:18

Below is generated by plot.py at 2018-03-07 13:26:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 538.01 Mbit/s

95th percentile per-packet one-way delay: 229.212 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 321.21 Mbit/s

95th percentile per-packet one-way delay: 263.498 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 241.06 Mbit/s

95th percentile per-packet one-way delay: 128.424 ms

Loss rate: 0.02%

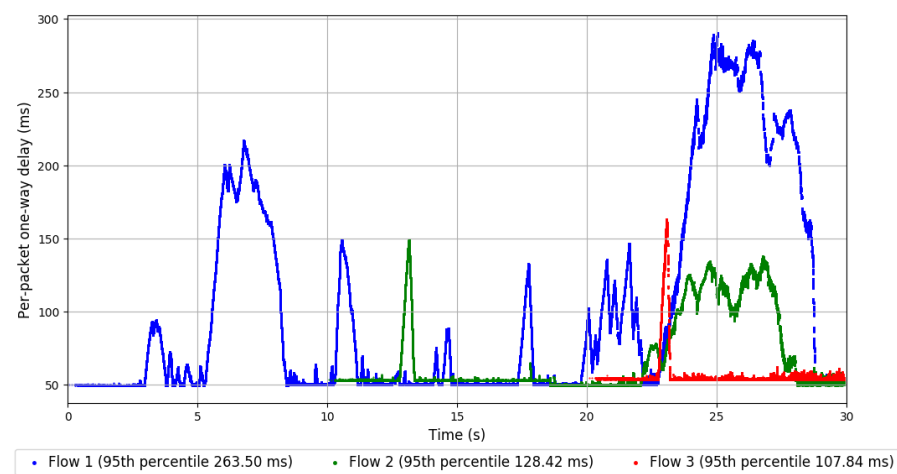
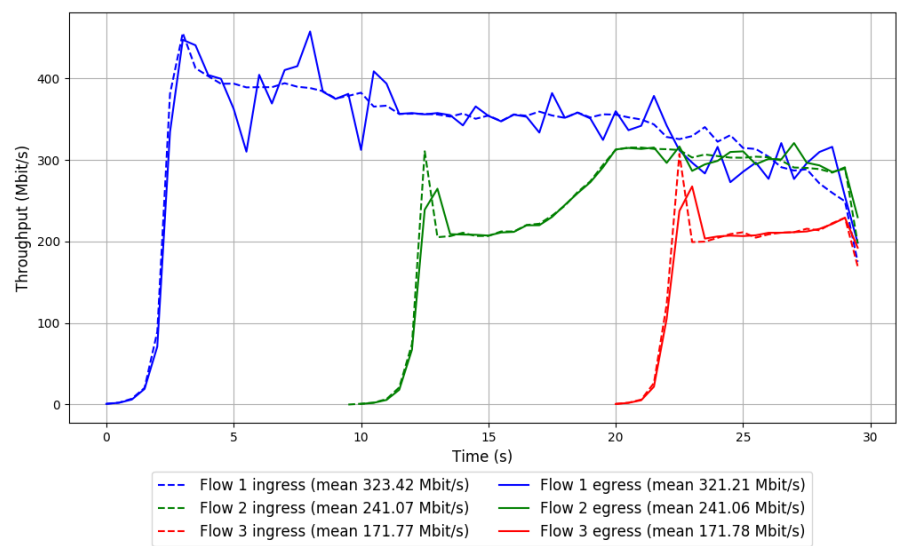
-- Flow 3:

Average throughput: 171.78 Mbit/s

95th percentile per-packet one-way delay: 107.839 ms

Loss rate: 0.04%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-03-07 08:38:57

End at: 2018-03-07 08:39:27

Below is generated by plot.py at 2018-03-07 13:26:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 550.90 Mbit/s

95th percentile per-packet one-way delay: 214.969 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 328.52 Mbit/s

95th percentile per-packet one-way delay: 217.401 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 246.63 Mbit/s

95th percentile per-packet one-way delay: 211.136 ms

Loss rate: 3.64%

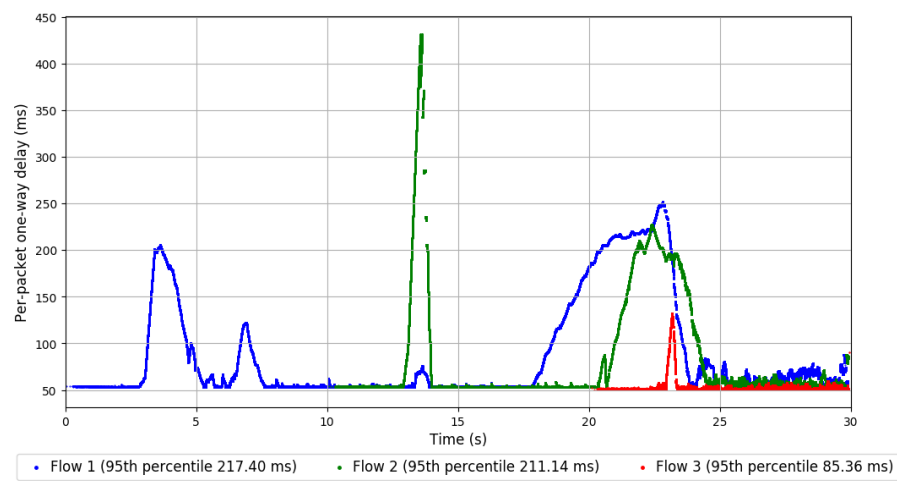
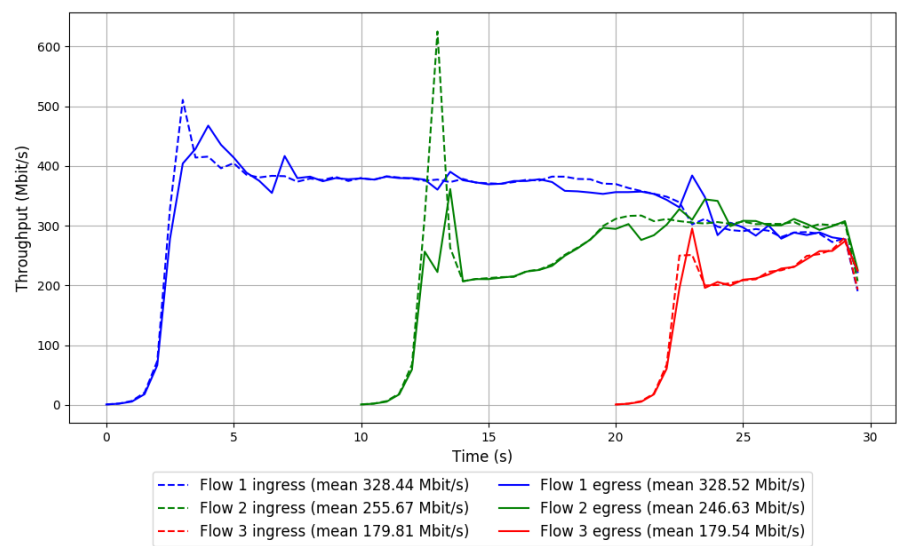
-- Flow 3:

Average throughput: 179.54 Mbit/s

95th percentile per-packet one-way delay: 85.357 ms

Loss rate: 0.02%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-03-07 08:56:12

End at: 2018-03-07 08:56:42

Below is generated by plot.py at 2018-03-07 13:26:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 535.06 Mbit/s

95th percentile per-packet one-way delay: 195.798 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 344.28 Mbit/s

95th percentile per-packet one-way delay: 204.006 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 203.26 Mbit/s

95th percentile per-packet one-way delay: 115.413 ms

Loss rate: 0.09%

-- Flow 3:

Average throughput: 169.21 Mbit/s

95th percentile per-packet one-way delay: 98.636 ms

Loss rate: 0.00%

Run 10: Report of Vivace-LTE — Data Link

