

Pantheon Report

Generated at 2018-02-01 08:42:35 (UTC).

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

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.

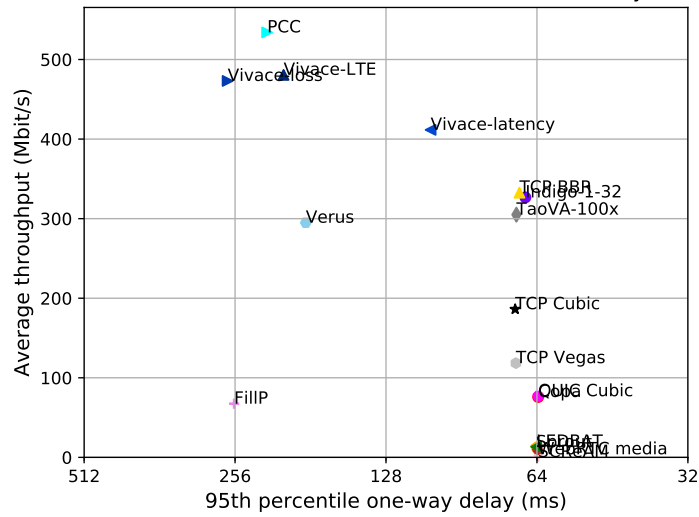
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

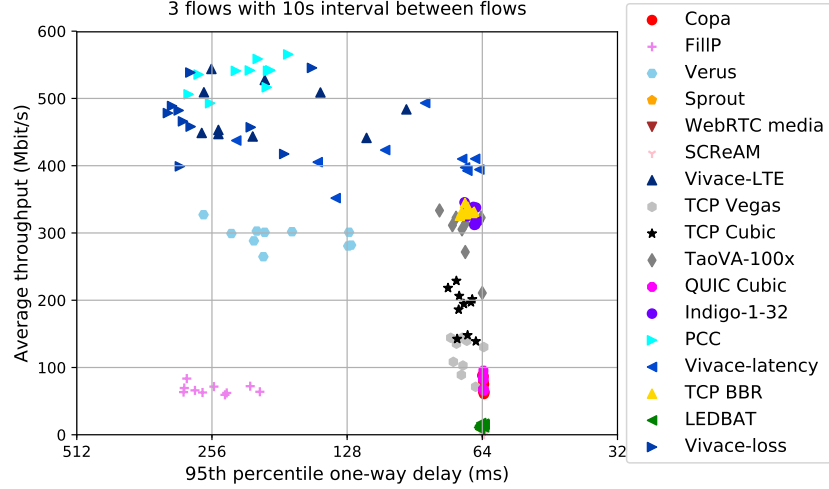
Git summary:

```
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1c1b0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



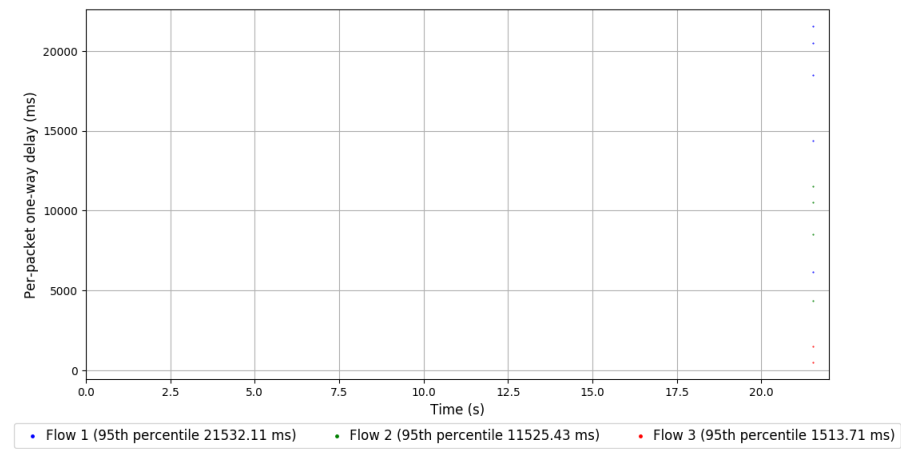
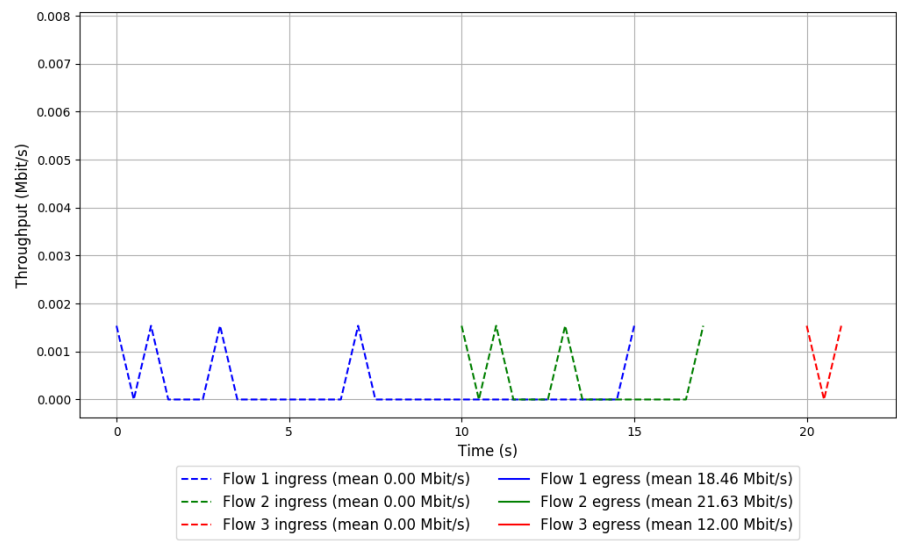
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	9	170.48	166.63	156.72	68.13	70.18	70.37	0.46	0.71	1.47
TCP Cubic	10	99.84	88.78	82.49	70.99	68.88	70.46	0.60	0.87	1.86
LEDBAT	10	6.66	7.33	5.46	64.25	64.10	64.07	1.11	1.60	2.78
PCC	10	465.08	79.91	49.16	225.91	177.41	173.48	2.87	1.91	2.98
QUIC Cubic	10	44.17	35.31	27.47	63.55	63.15	63.53	0.63	0.77	1.28
SCReAM	9	0.22	0.22	0.22	63.48	63.49	63.17	0.38	0.65	1.15
WebRTC media	10	2.08	1.33	0.52	63.73	63.65	63.48	0.54	0.89	1.98
Sprout	10	6.41	6.38	6.01	64.24	64.25	64.26	0.82	1.08	1.48
TaoVA-100x	10	160.34	139.56	158.69	70.09	69.53	70.67	0.44	0.60	1.42
TCP Vegas	9	47.76	75.06	62.63	148.96	69.44	70.12	0.35	0.63	1.26
Verus	10	175.46	137.73	85.96	167.31	170.94	183.86	0.98	1.11	4.87
Copa	10	47.74	30.24	24.20	63.34	63.69	63.75	0.33	0.66	1.12
FillP	10	22.95	32.45	70.09	249.44	282.29	251.28	11.33	15.05	12.99
Indigo-1-32	10	177.04	155.04	145.25	66.65	69.62	67.65	0.40	0.64	1.51
Vivace-latency	10	235.62	205.92	120.88	118.37	88.13	70.79	0.61	0.82	1.88
Vivace-loss	10	257.00	224.12	207.85	259.14	251.11	181.96	2.96	3.27	3.90
Vivace-LTE	10	273.45	231.29	165.57	191.06	183.33	101.86	1.14	1.34	1.89

Run 1: Statistics of TCP BBR

Start at: 2018-02-01 01:24:26

End at: 2018-02-01 01:24:56

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-01 01:40:57

End at: 2018-02-01 01:41:27

Below is generated by plot.py at 2018-02-01 07:09:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 331.63 Mbit/s

95th percentile per-packet one-way delay: 66.716 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 170.58 Mbit/s

95th percentile per-packet one-way delay: 66.134 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 165.71 Mbit/s

95th percentile per-packet one-way delay: 67.280 ms

Loss rate: 0.71%

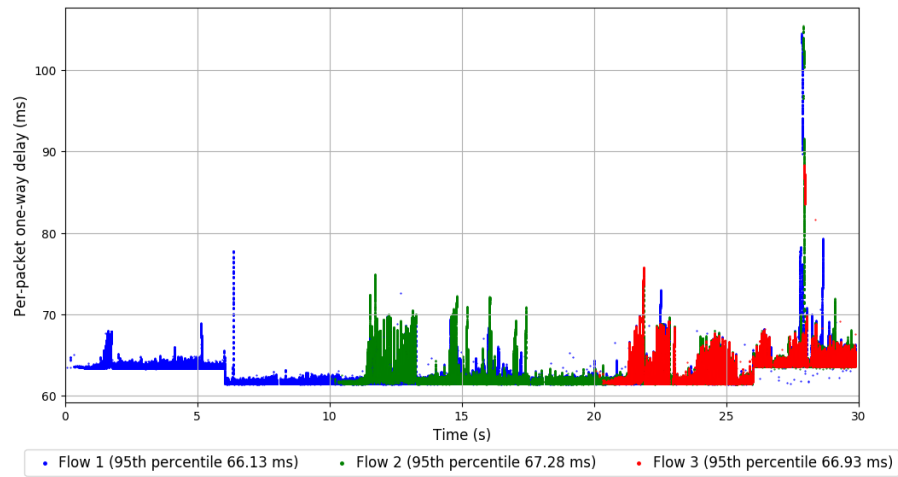
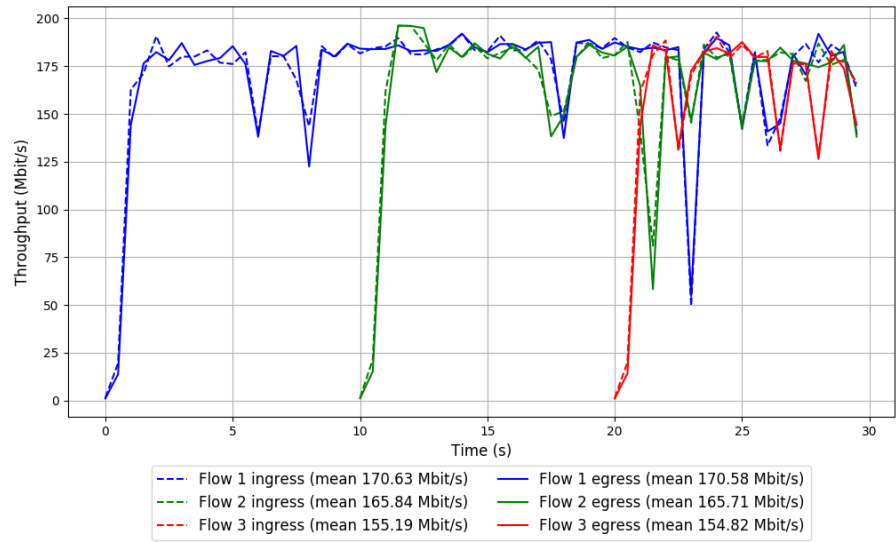
-- Flow 3:

Average throughput: 154.82 Mbit/s

95th percentile per-packet one-way delay: 66.933 ms

Loss rate: 1.50%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-01 01:57:55

End at: 2018-02-01 01:58:25

Below is generated by plot.py at 2018-02-01 07:09:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 331.36 Mbit/s

95th percentile per-packet one-way delay: 71.133 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 171.07 Mbit/s

95th percentile per-packet one-way delay: 70.085 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 165.32 Mbit/s

95th percentile per-packet one-way delay: 71.236 ms

Loss rate: 0.79%

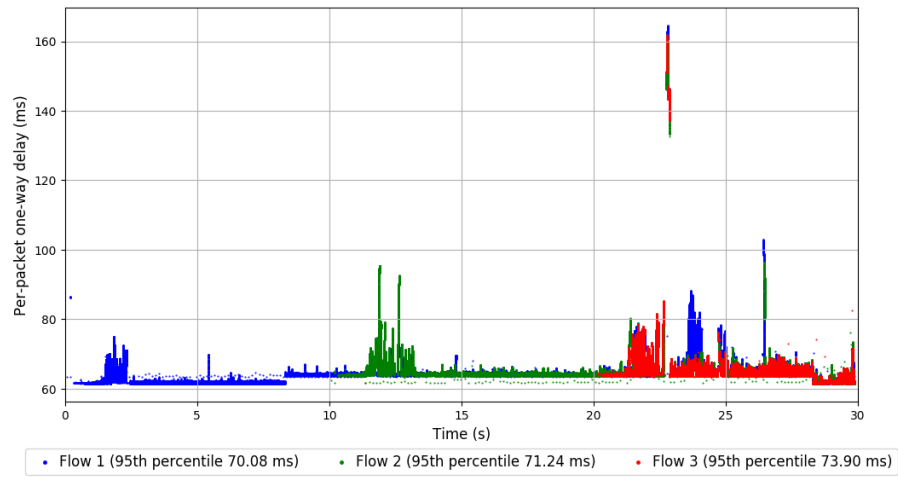
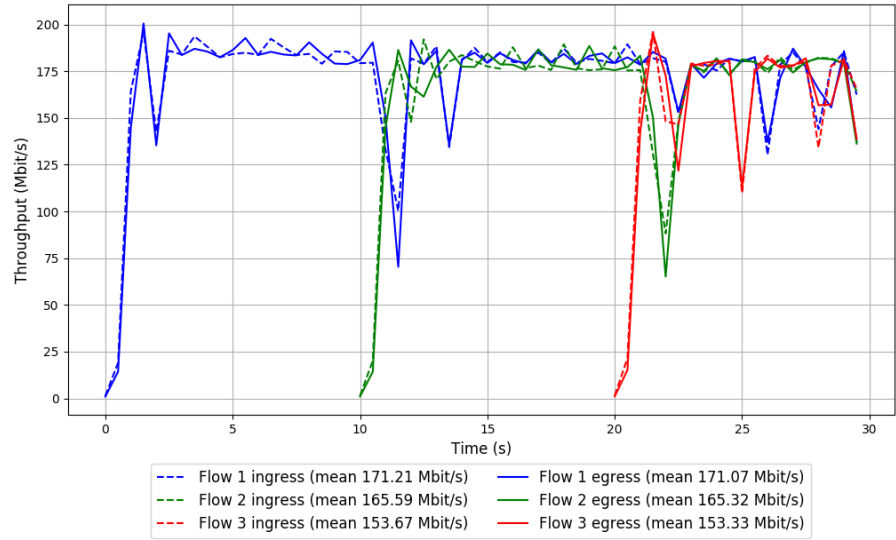
-- Flow 3:

Average throughput: 153.33 Mbit/s

95th percentile per-packet one-way delay: 73.903 ms

Loss rate: 1.56%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-01 02:14:51

End at: 2018-02-01 02:15:21

Below is generated by plot.py at 2018-02-01 07:09:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 325.66 Mbit/s

95th percentile per-packet one-way delay: 71.799 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 166.22 Mbit/s

95th percentile per-packet one-way delay: 69.991 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 164.10 Mbit/s

95th percentile per-packet one-way delay: 72.256 ms

Loss rate: 0.65%

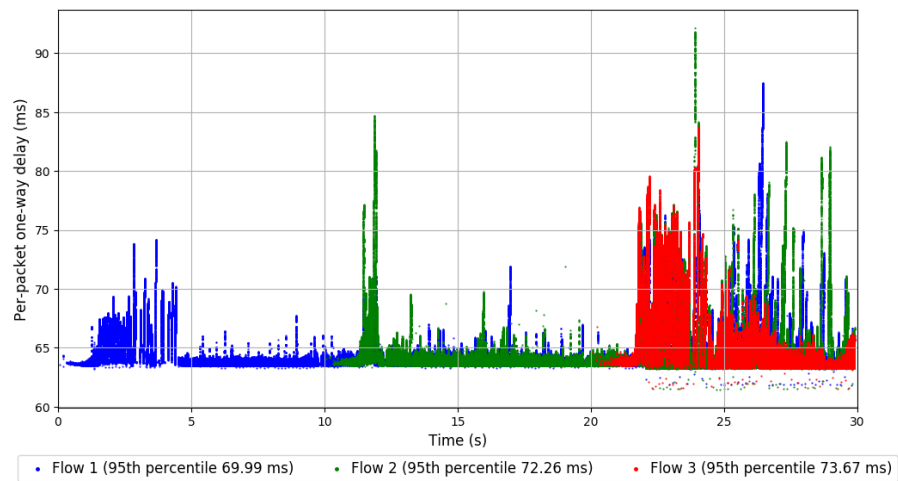
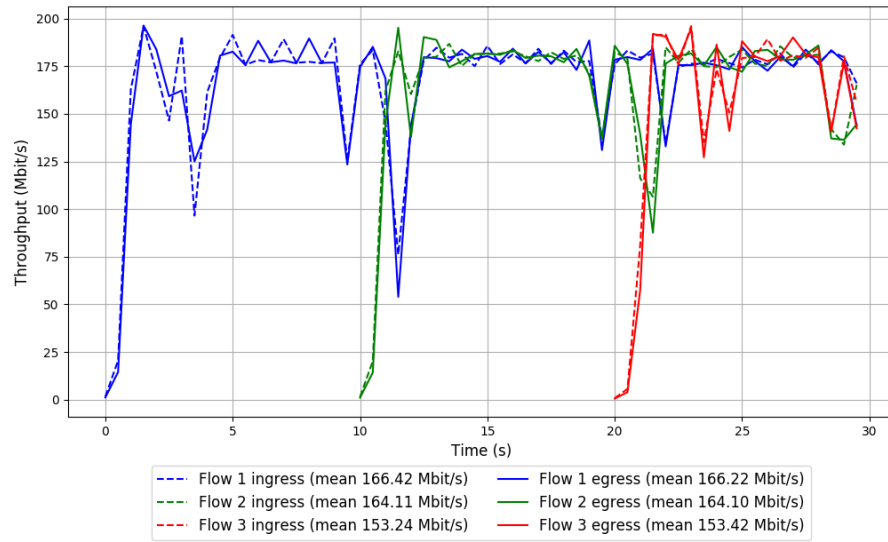
-- Flow 3:

Average throughput: 153.42 Mbit/s

95th percentile per-packet one-way delay: 73.675 ms

Loss rate: 1.30%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-01 02:31:39

End at: 2018-02-01 02:32:09

Below is generated by plot.py at 2018-02-01 07:09:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.73 Mbit/s

95th percentile per-packet one-way delay: 69.918 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 177.59 Mbit/s

95th percentile per-packet one-way delay: 68.557 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 171.35 Mbit/s

95th percentile per-packet one-way delay: 69.961 ms

Loss rate: 0.71%

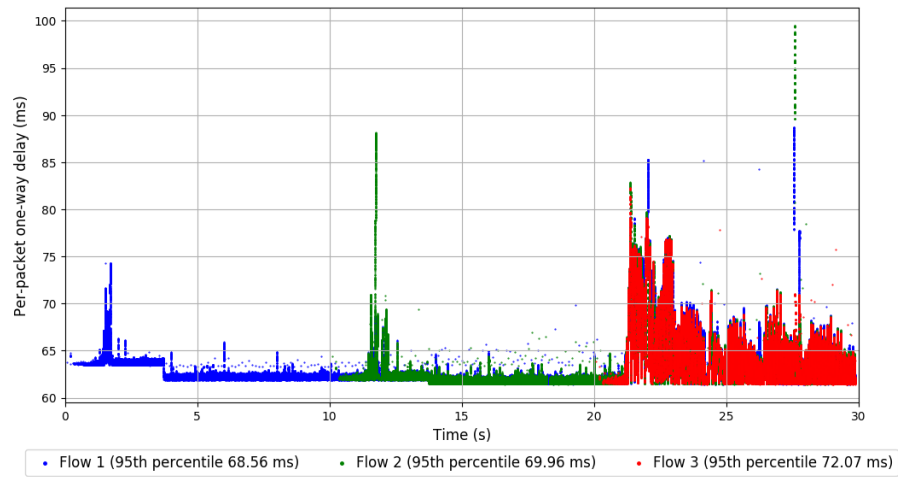
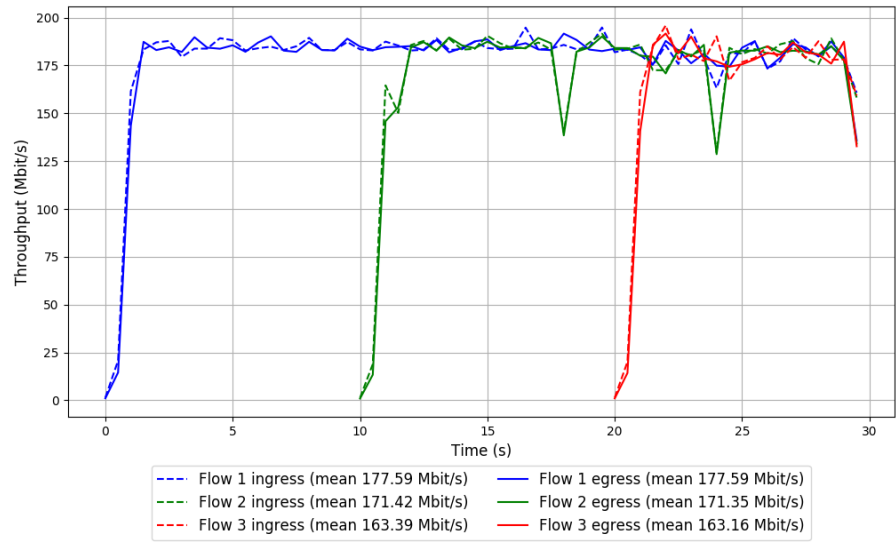
-- Flow 3:

Average throughput: 163.16 Mbit/s

95th percentile per-packet one-way delay: 72.074 ms

Loss rate: 1.41%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-01 02:48:33

End at: 2018-02-01 02:49:03

Below is generated by plot.py at 2018-02-01 07:09:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 329.80 Mbit/s

95th percentile per-packet one-way delay: 67.358 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 169.56 Mbit/s

95th percentile per-packet one-way delay: 66.910 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 164.77 Mbit/s

95th percentile per-packet one-way delay: 67.489 ms

Loss rate: 0.68%

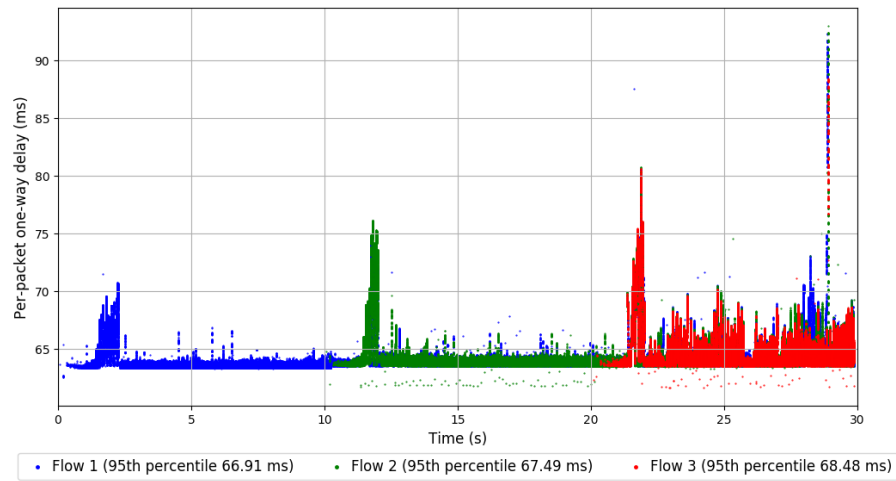
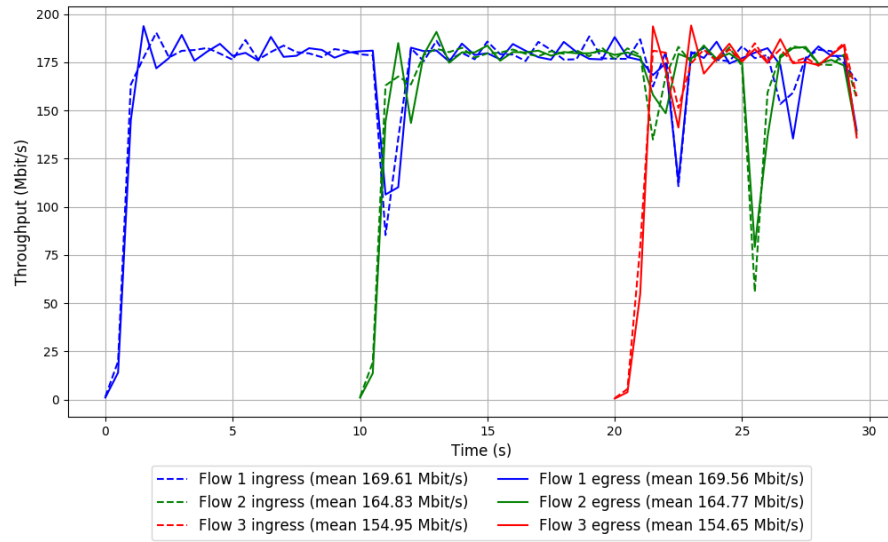
-- Flow 3:

Average throughput: 154.65 Mbit/s

95th percentile per-packet one-way delay: 68.481 ms

Loss rate: 1.47%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-01 03:05:25

End at: 2018-02-01 03:05:55

Below is generated by plot.py at 2018-02-01 07:09:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 332.13 Mbit/s

95th percentile per-packet one-way delay: 69.445 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 170.15 Mbit/s

95th percentile per-packet one-way delay: 67.984 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 164.70 Mbit/s

95th percentile per-packet one-way delay: 69.759 ms

Loss rate: 0.74%

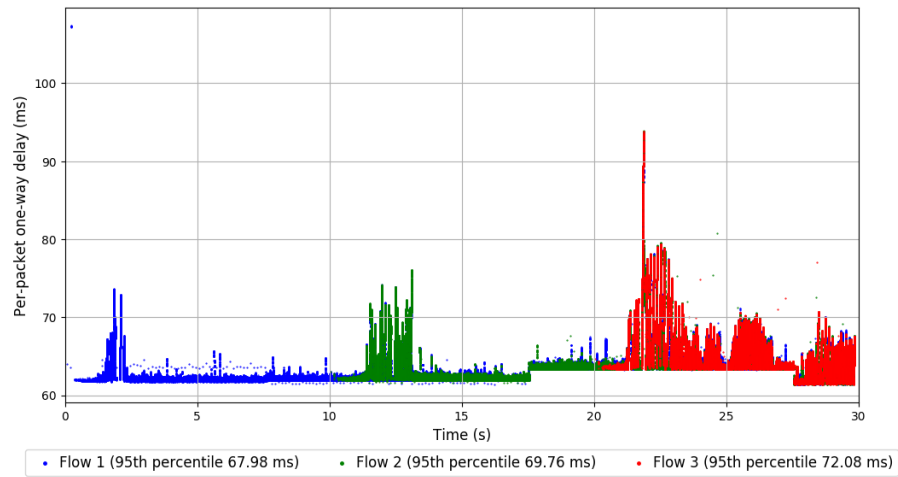
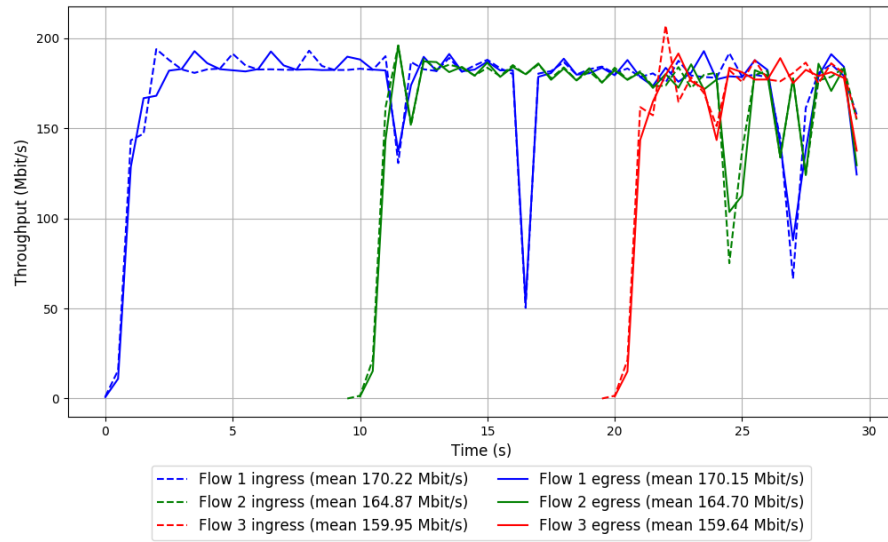
-- Flow 3:

Average throughput: 159.64 Mbit/s

95th percentile per-packet one-way delay: 72.079 ms

Loss rate: 1.49%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-01 03:22:06

End at: 2018-02-01 03:22:36

Below is generated by plot.py at 2018-02-01 07:09:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 331.53 Mbit/s

95th percentile per-packet one-way delay: 69.261 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 166.84 Mbit/s

95th percentile per-packet one-way delay: 68.320 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 169.65 Mbit/s

95th percentile per-packet one-way delay: 69.624 ms

Loss rate: 0.69%

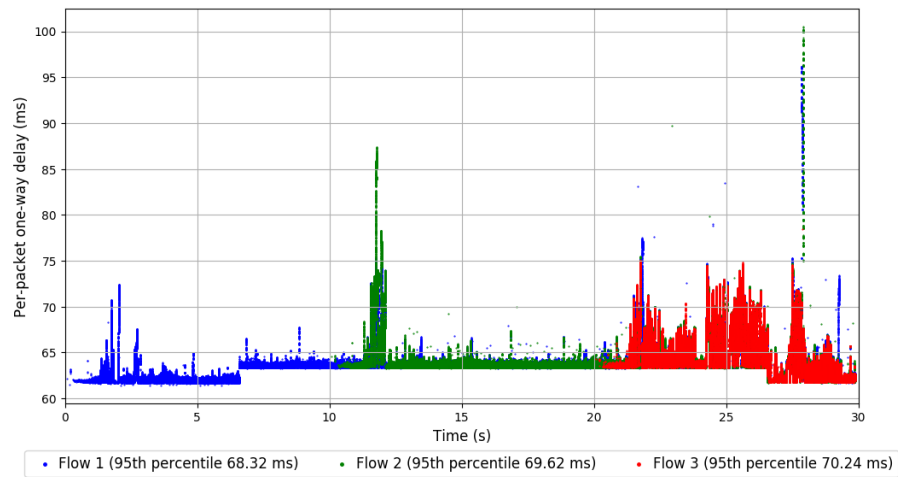
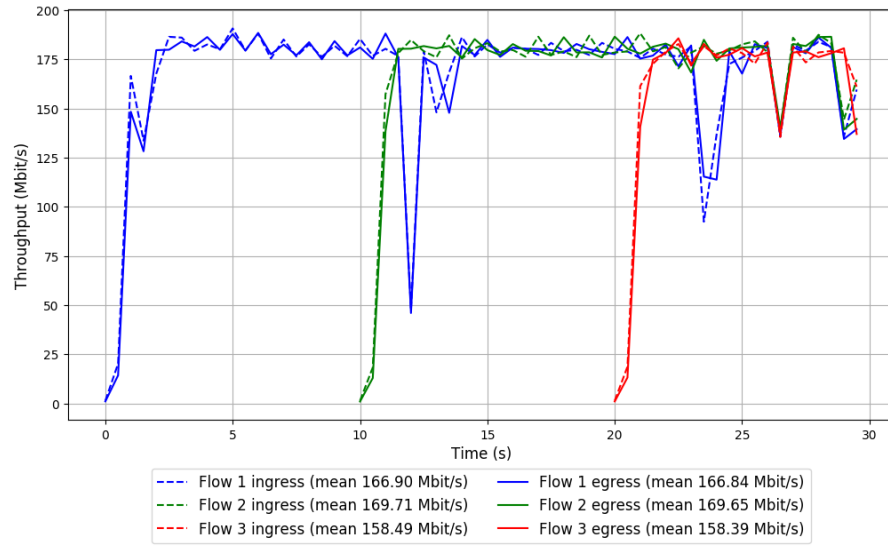
-- Flow 3:

Average throughput: 158.39 Mbit/s

95th percentile per-packet one-way delay: 70.242 ms

Loss rate: 1.46%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-01 03:38:59

End at: 2018-02-01 03:39:29

Below is generated by plot.py at 2018-02-01 07:09:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 327.87 Mbit/s

95th percentile per-packet one-way delay: 69.604 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 167.41 Mbit/s

95th percentile per-packet one-way delay: 68.394 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 165.03 Mbit/s

95th percentile per-packet one-way delay: 71.157 ms

Loss rate: 0.71%

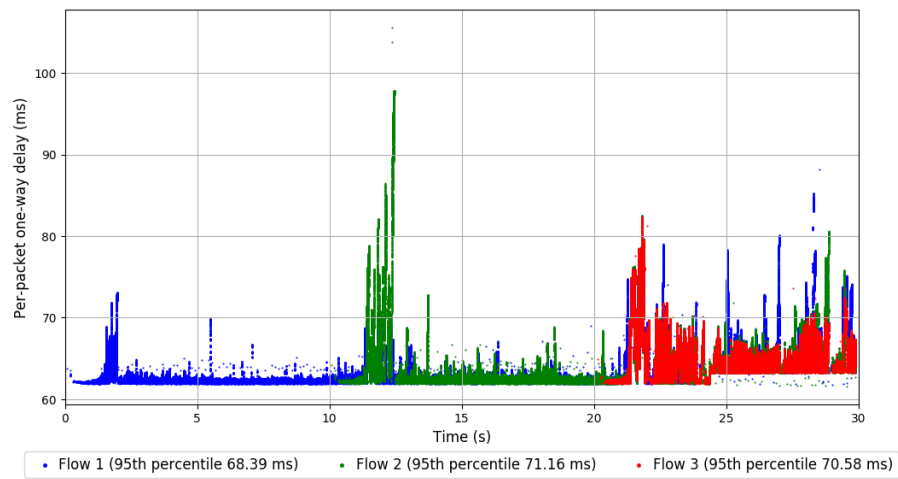
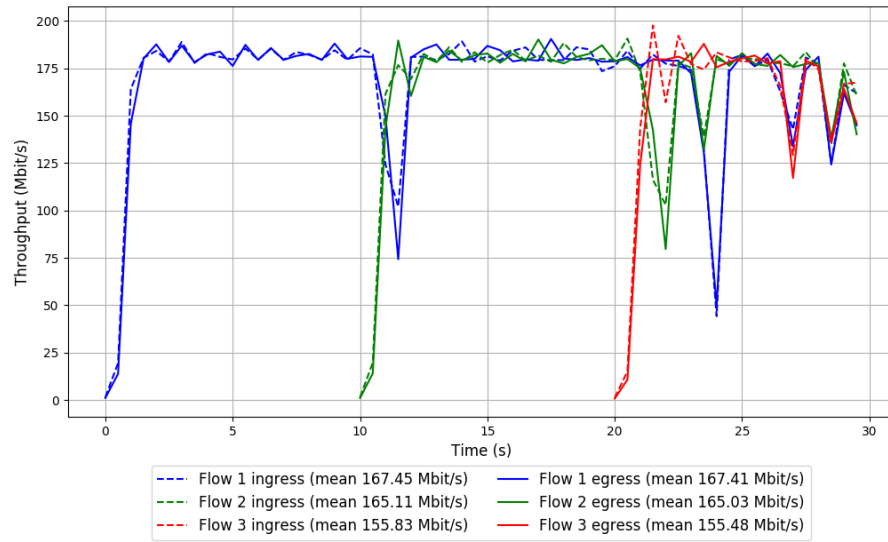
-- Flow 3:

Average throughput: 155.48 Mbit/s

95th percentile per-packet one-way delay: 70.581 ms

Loss rate: 1.54%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-01 03:55:50

End at: 2018-02-01 03:56:20

Below is generated by plot.py at 2018-02-01 07:15:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 339.00 Mbit/s

95th percentile per-packet one-way delay: 68.985 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 174.88 Mbit/s

95th percentile per-packet one-way delay: 66.770 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 169.06 Mbit/s

95th percentile per-packet one-way delay: 72.901 ms

Loss rate: 0.71%

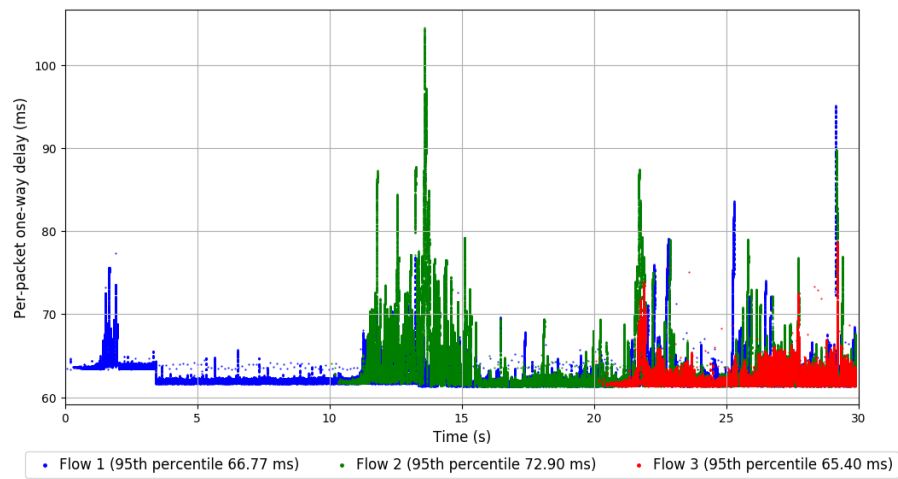
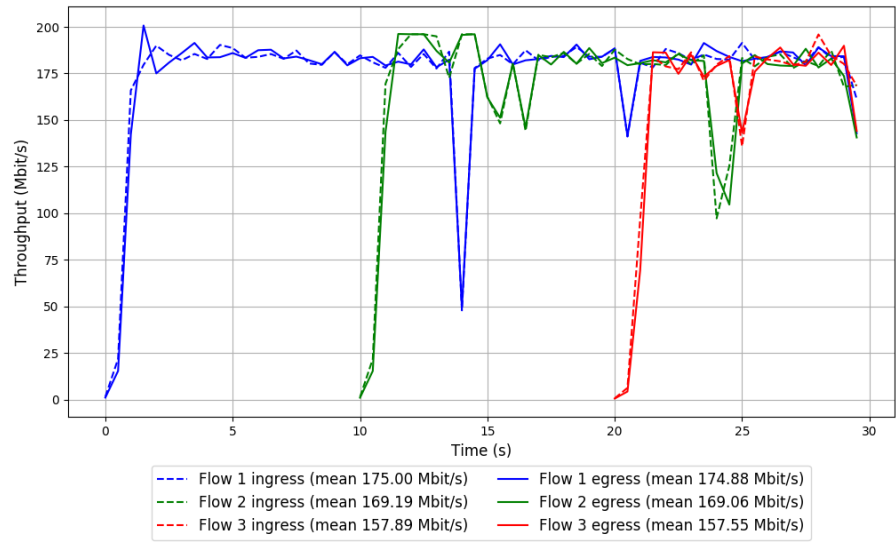
-- Flow 3:

Average throughput: 157.55 Mbit/s

95th percentile per-packet one-way delay: 65.398 ms

Loss rate: 1.51%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-01 01:16:33

End at: 2018-02-01 01:17:03

Below is generated by plot.py at 2018-02-01 07:15:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 228.84 Mbit/s

95th percentile per-packet one-way delay: 73.097 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 110.02 Mbit/s

95th percentile per-packet one-way delay: 73.784 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 126.70 Mbit/s

95th percentile per-packet one-way delay: 72.258 ms

Loss rate: 0.82%

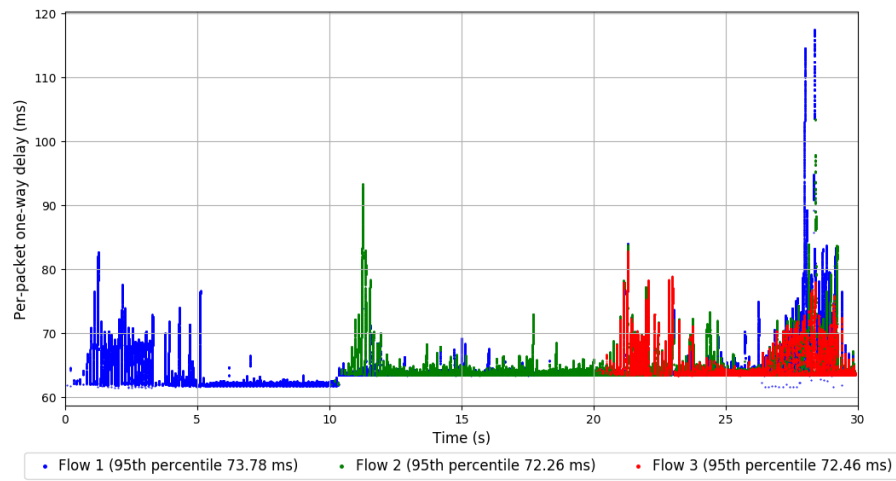
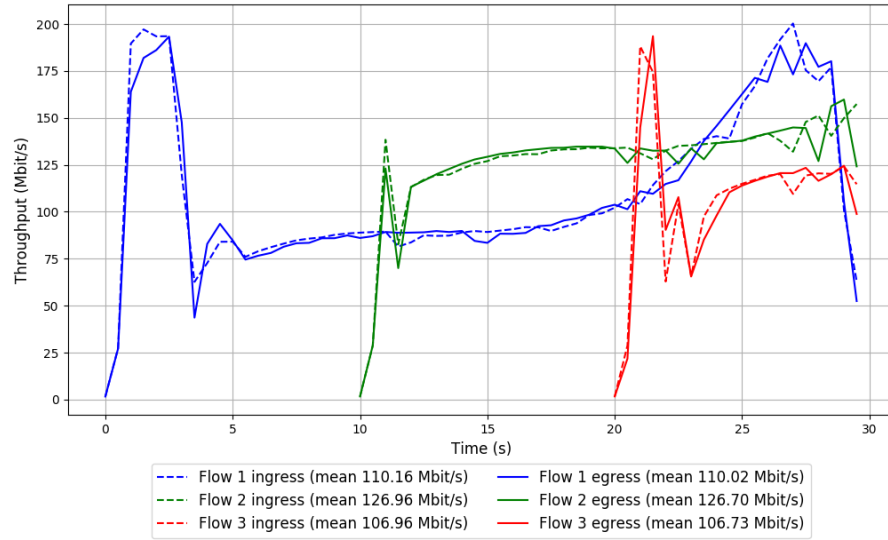
-- Flow 3:

Average throughput: 106.73 Mbit/s

95th percentile per-packet one-way delay: 72.458 ms

Loss rate: 1.48%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-01 01:33:22

End at: 2018-02-01 01:33:52

Below is generated by plot.py at 2018-02-01 07:15:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.07 Mbit/s

95th percentile per-packet one-way delay: 72.263 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 84.15 Mbit/s

95th percentile per-packet one-way delay: 71.255 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 110.44 Mbit/s

95th percentile per-packet one-way delay: 73.379 ms

Loss rate: 0.61%

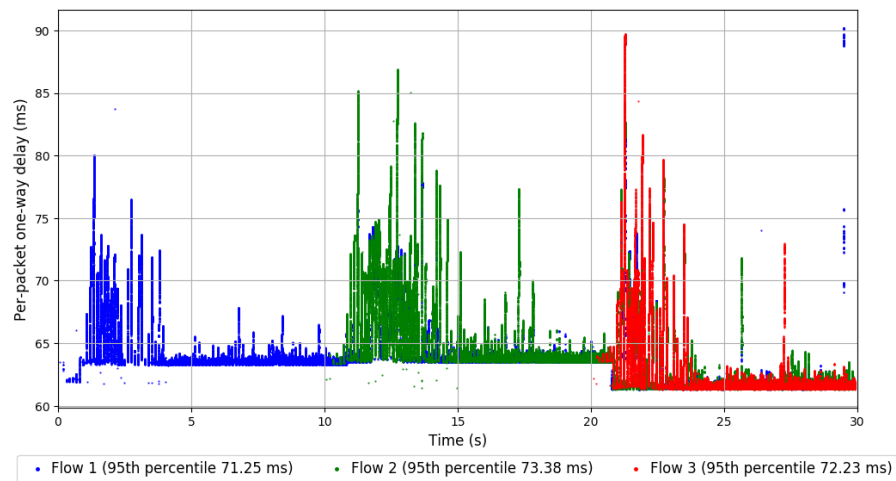
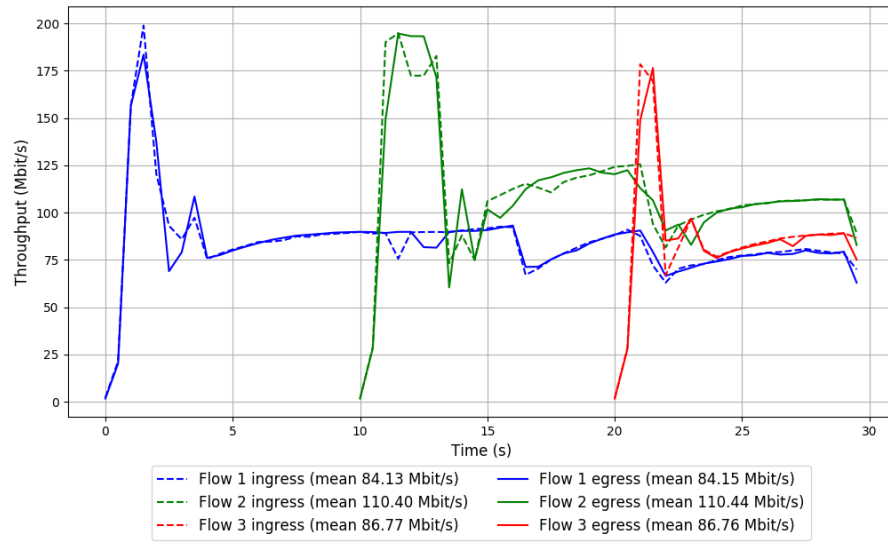
-- Flow 3:

Average throughput: 86.76 Mbit/s

95th percentile per-packet one-way delay: 72.235 ms

Loss rate: 1.27%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-01 01:50:13

End at: 2018-02-01 01:50:43

Below is generated by plot.py at 2018-02-01 07:15:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 218.24 Mbit/s

95th percentile per-packet one-way delay: 76.302 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 111.55 Mbit/s

95th percentile per-packet one-way delay: 76.088 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 108.33 Mbit/s

95th percentile per-packet one-way delay: 70.837 ms

Loss rate: 0.62%

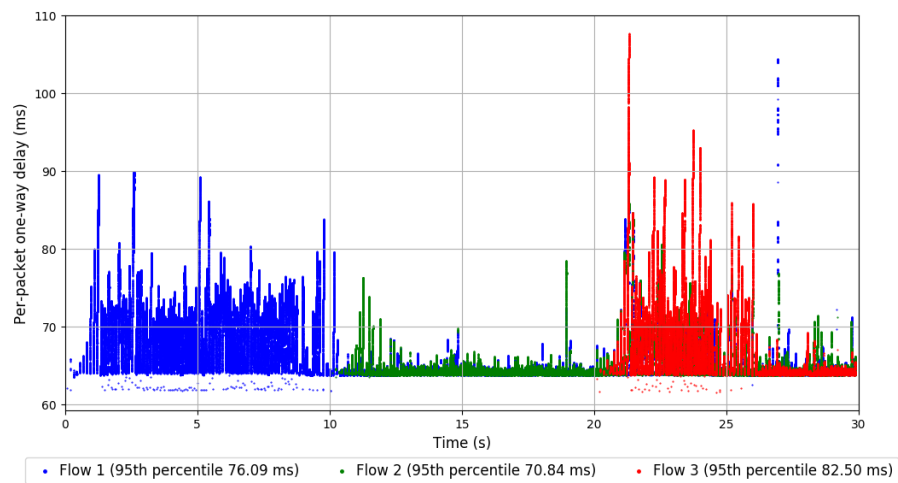
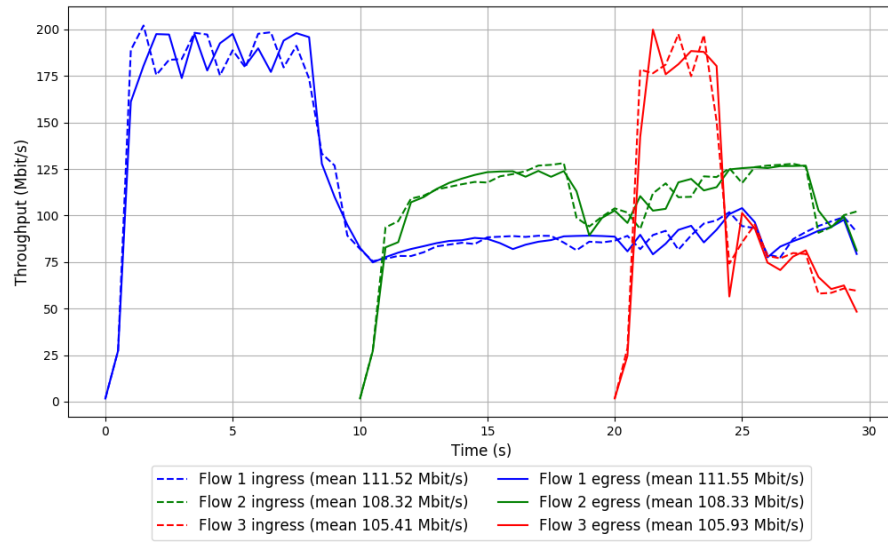
-- Flow 3:

Average throughput: 105.93 Mbit/s

95th percentile per-packet one-way delay: 82.500 ms

Loss rate: 0.79%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

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

End at: 2018-02-01 02:07:32

Below is generated by plot.py at 2018-02-01 07:15:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 194.57 Mbit/s

95th percentile per-packet one-way delay: 70.354 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 117.02 Mbit/s

95th percentile per-packet one-way delay: 71.205 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 76.77 Mbit/s

95th percentile per-packet one-way delay: 67.623 ms

Loss rate: 0.72%

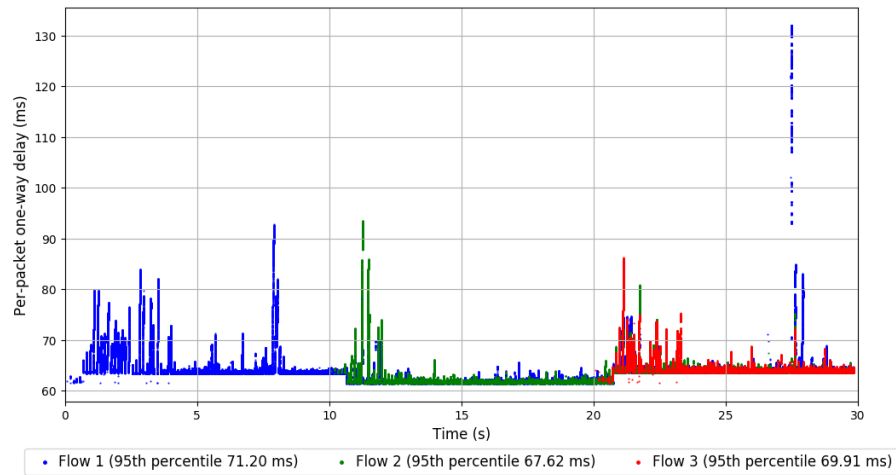
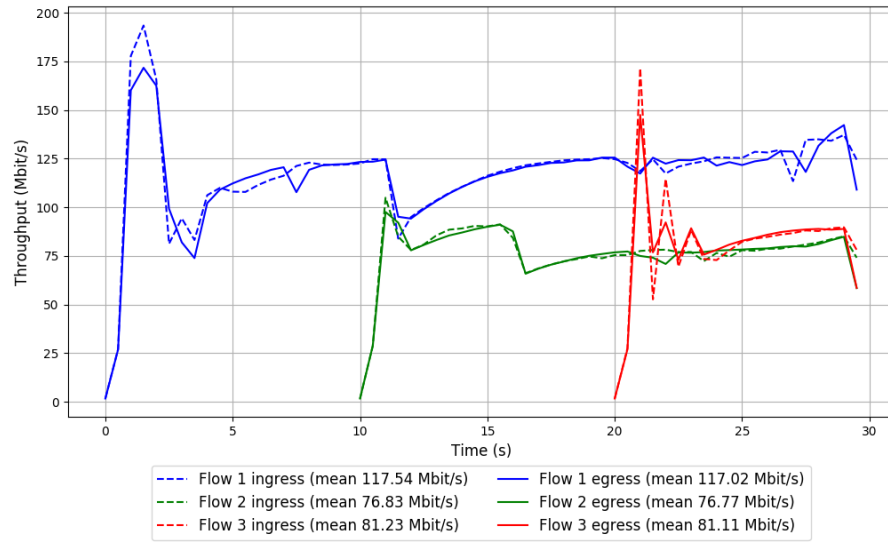
-- Flow 3:

Average throughput: 81.11 Mbit/s

95th percentile per-packet one-way delay: 69.908 ms

Loss rate: 1.41%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-01 02:23:59

End at: 2018-02-01 02:24:29

Below is generated by plot.py at 2018-02-01 07:15:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 201.42 Mbit/s

95th percentile per-packet one-way delay: 67.389 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 100.78 Mbit/s

95th percentile per-packet one-way delay: 66.110 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 105.04 Mbit/s

95th percentile per-packet one-way delay: 70.354 ms

Loss rate: 0.78%

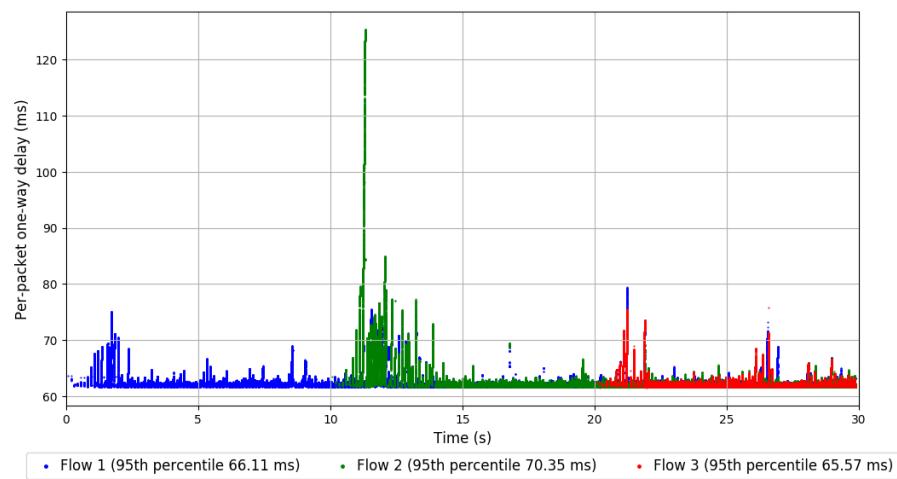
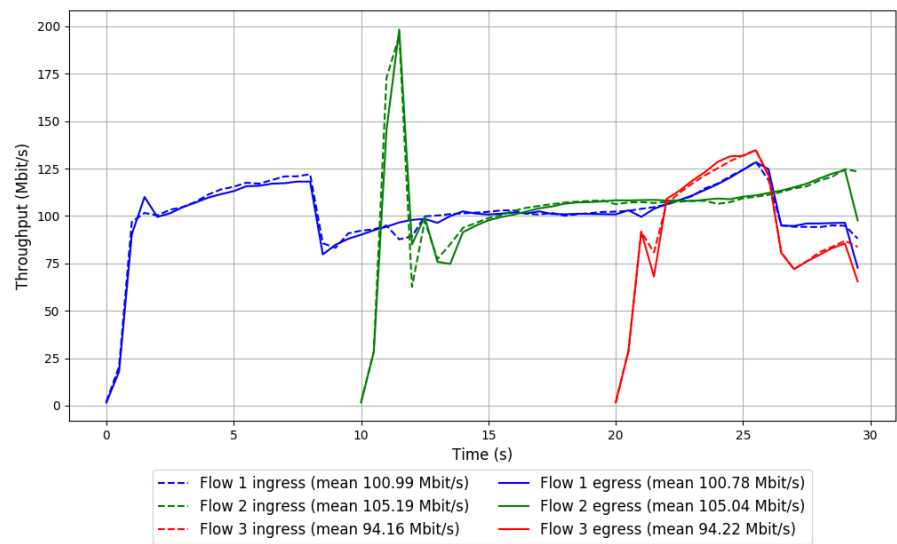
-- Flow 3:

Average throughput: 94.22 Mbit/s

95th percentile per-packet one-way delay: 65.570 ms

Loss rate: 1.19%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-01 02:40:50

End at: 2018-02-01 02:41:20

Below is generated by plot.py at 2018-02-01 07:15:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 206.40 Mbit/s

95th percentile per-packet one-way delay: 72.051 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 114.96 Mbit/s

95th percentile per-packet one-way delay: 71.878 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 85.40 Mbit/s

95th percentile per-packet one-way delay: 70.189 ms

Loss rate: 0.51%

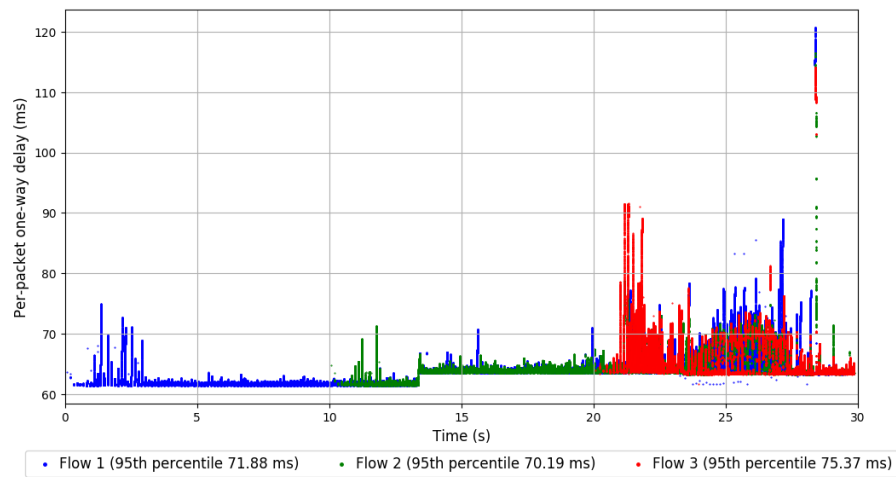
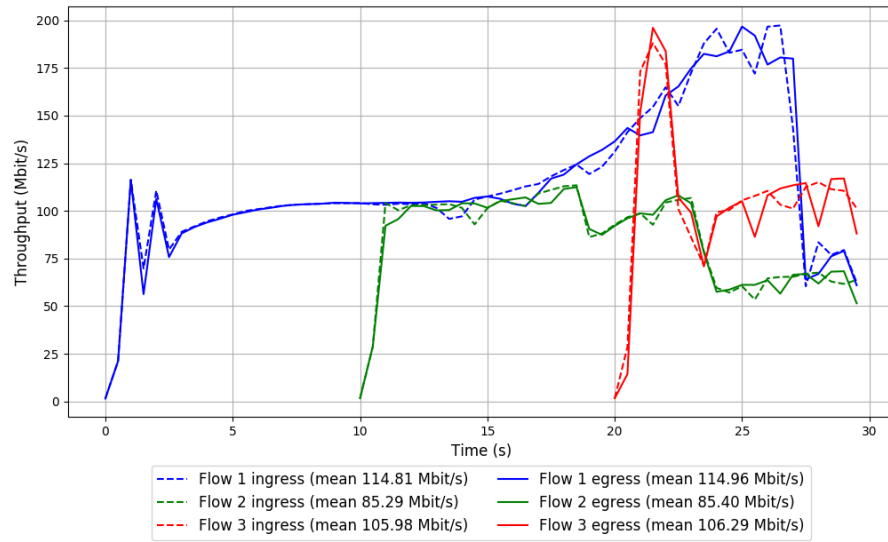
-- Flow 3:

Average throughput: 106.29 Mbit/s

95th percentile per-packet one-way delay: 75.374 ms

Loss rate: 1.39%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-01 02:57:42

End at: 2018-02-01 02:58:12

Below is generated by plot.py at 2018-02-01 07:15:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 196.99 Mbit/s

95th percentile per-packet one-way delay: 67.849 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 143.03 Mbit/s

95th percentile per-packet one-way delay: 67.025 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 10.17 Mbit/s

95th percentile per-packet one-way delay: 65.734 ms

Loss rate: 2.32%

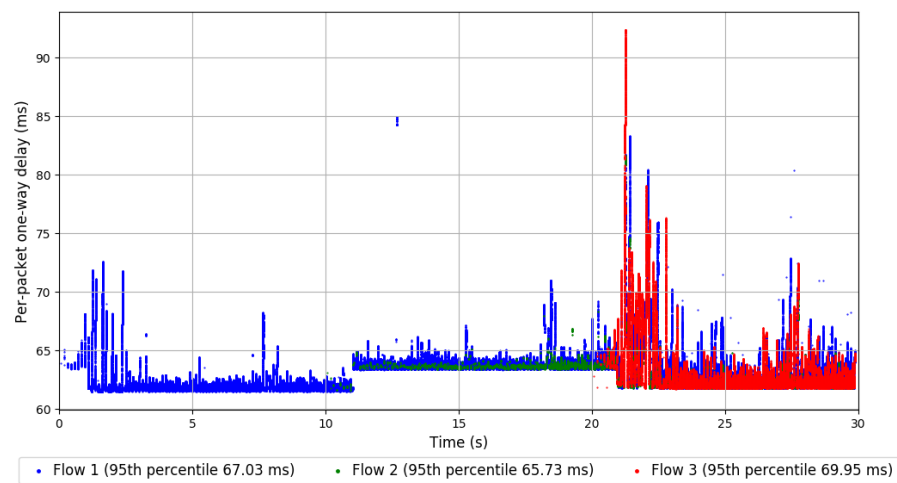
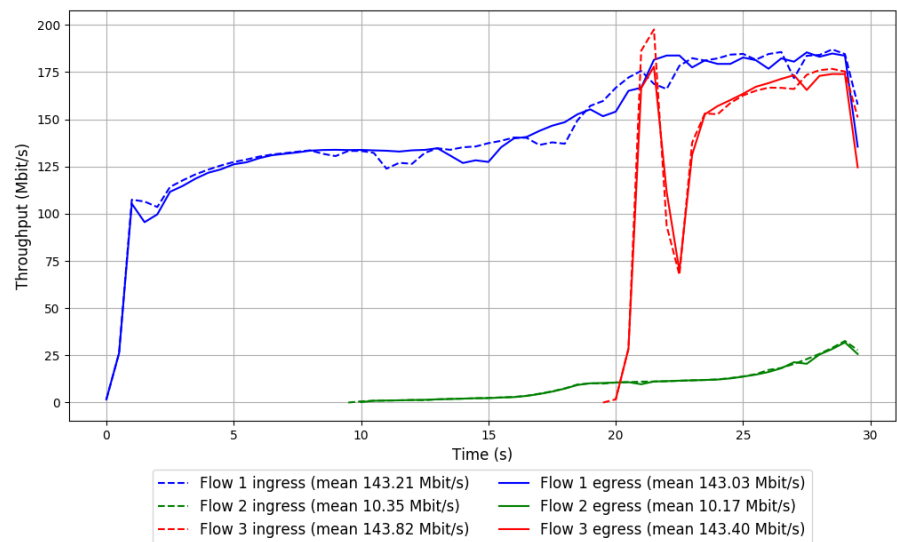
-- Flow 3:

Average throughput: 143.40 Mbit/s

95th percentile per-packet one-way delay: 69.952 ms

Loss rate: 1.56%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-01 03:14:27

End at: 2018-02-01 03:14:57

Below is generated by plot.py at 2018-02-01 07:15:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.50 Mbit/s

95th percentile per-packet one-way delay: 72.816 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 85.07 Mbit/s

95th percentile per-packet one-way delay: 75.141 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 84.04 Mbit/s

95th percentile per-packet one-way delay: 66.607 ms

Loss rate: 0.88%

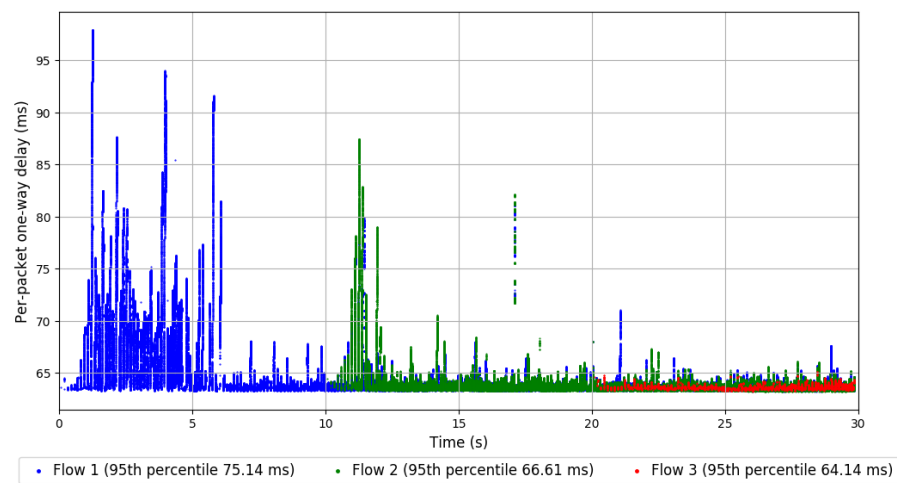
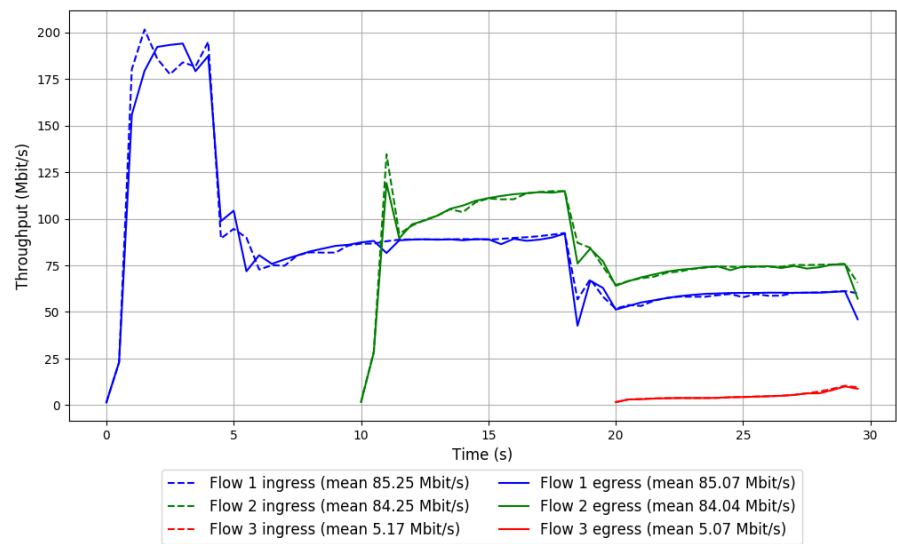
-- Flow 3:

Average throughput: 5.07 Mbit/s

95th percentile per-packet one-way delay: 64.140 ms

Loss rate: 3.15%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-01 03:31:14

End at: 2018-02-01 03:31:44

Below is generated by plot.py at 2018-02-01 07:15:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.94 Mbit/s

95th percentile per-packet one-way delay: 66.148 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 45.49 Mbit/s

95th percentile per-packet one-way delay: 65.432 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 95.55 Mbit/s

95th percentile per-packet one-way delay: 66.242 ms

Loss rate: 0.73%

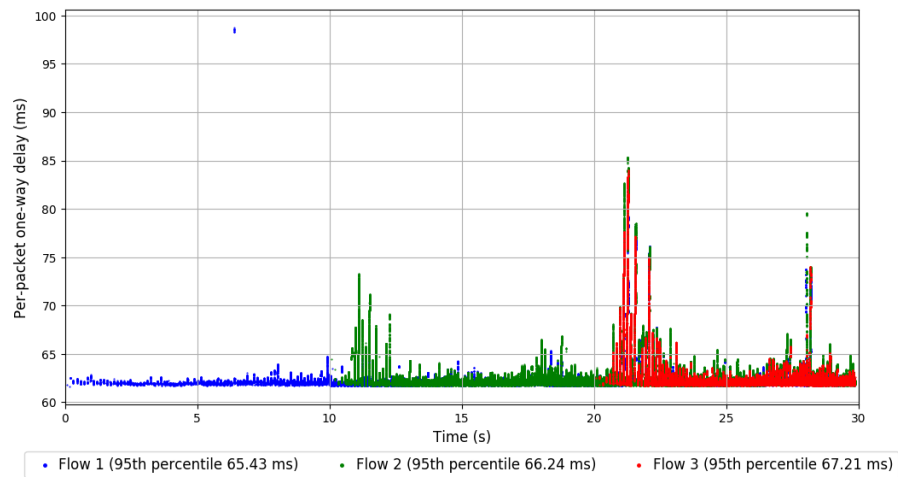
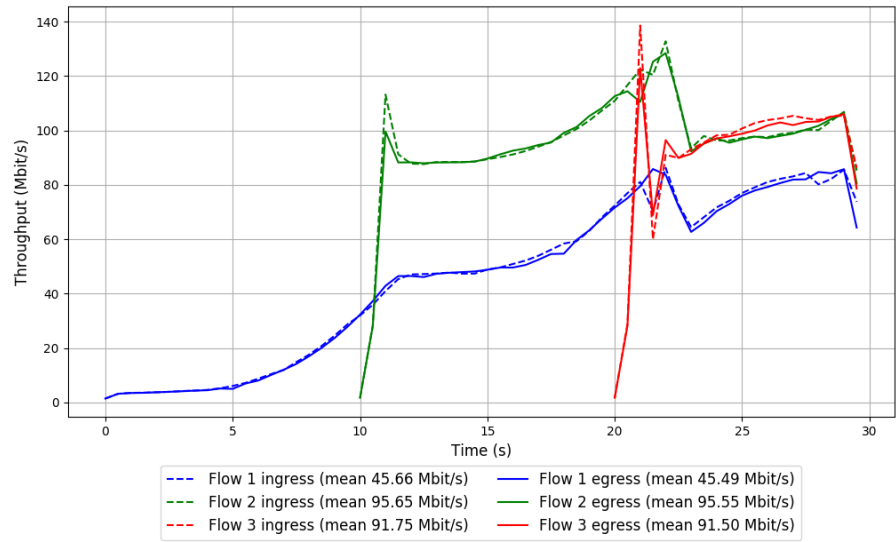
-- Flow 3:

Average throughput: 91.50 Mbit/s

95th percentile per-packet one-way delay: 67.206 ms

Loss rate: 1.46%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-01 03:48:03

End at: 2018-02-01 03:48:33

Below is generated by plot.py at 2018-02-01 07:15:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.03 Mbit/s

95th percentile per-packet one-way delay: 69.022 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 86.32 Mbit/s

95th percentile per-packet one-way delay: 71.960 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 85.36 Mbit/s

95th percentile per-packet one-way delay: 65.595 ms

Loss rate: 0.72%

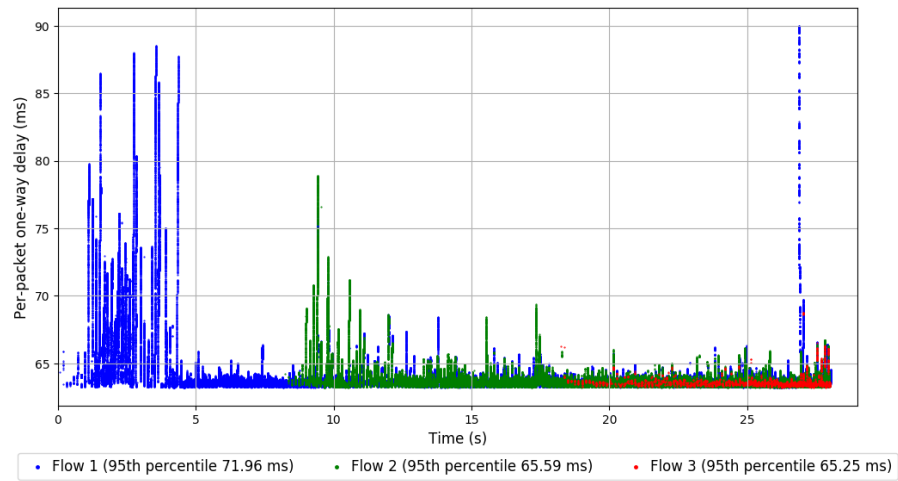
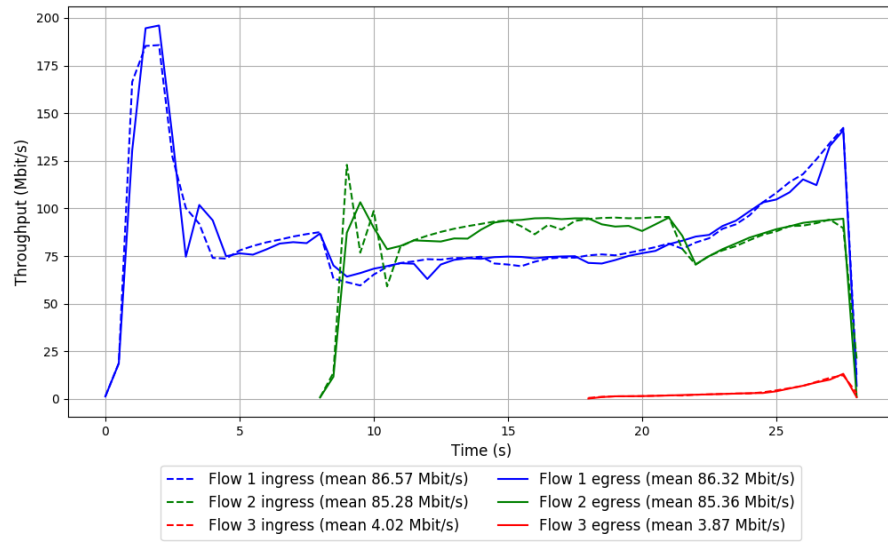
-- Flow 3:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 65.252 ms

Loss rate: 4.86%

Run 10: Report of TCP Cubic — Data Link

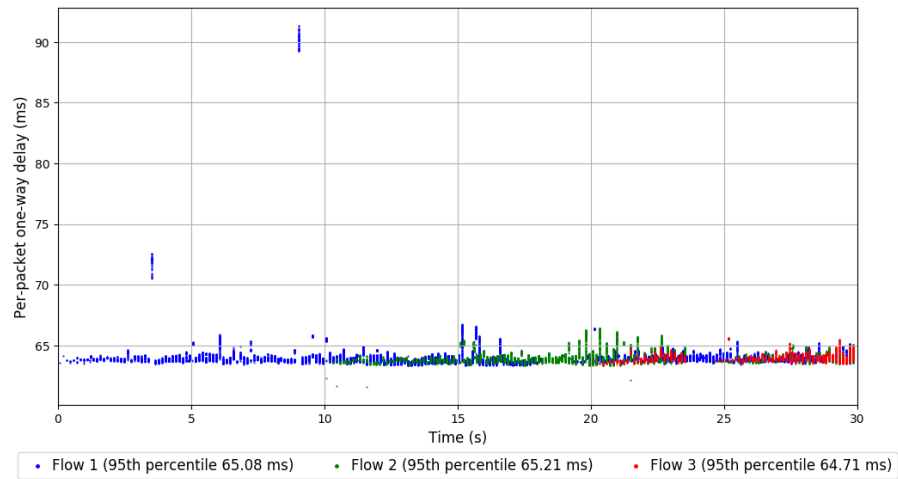
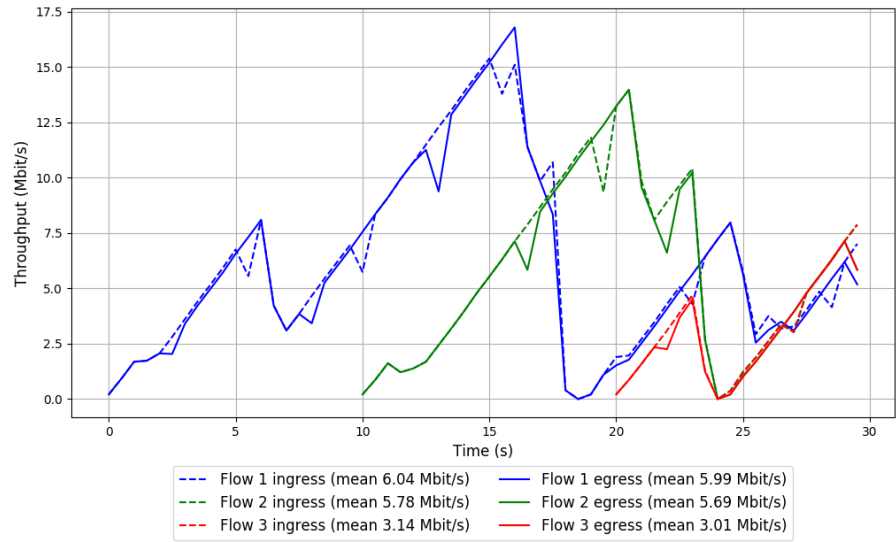


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-01 01:30:32
End at: 2018-02-01 01:31:02

# Below is generated by plot.py at 2018-02-01 07:15:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.75 Mbit/s
95th percentile per-packet one-way delay: 65.096 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 5.99 Mbit/s
95th percentile per-packet one-way delay: 65.085 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 5.69 Mbit/s
95th percentile per-packet one-way delay: 65.210 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 3.01 Mbit/s
95th percentile per-packet one-way delay: 64.710 ms
Loss rate: 5.36%
```


Run 1: Report of LEDBAT — Data Link

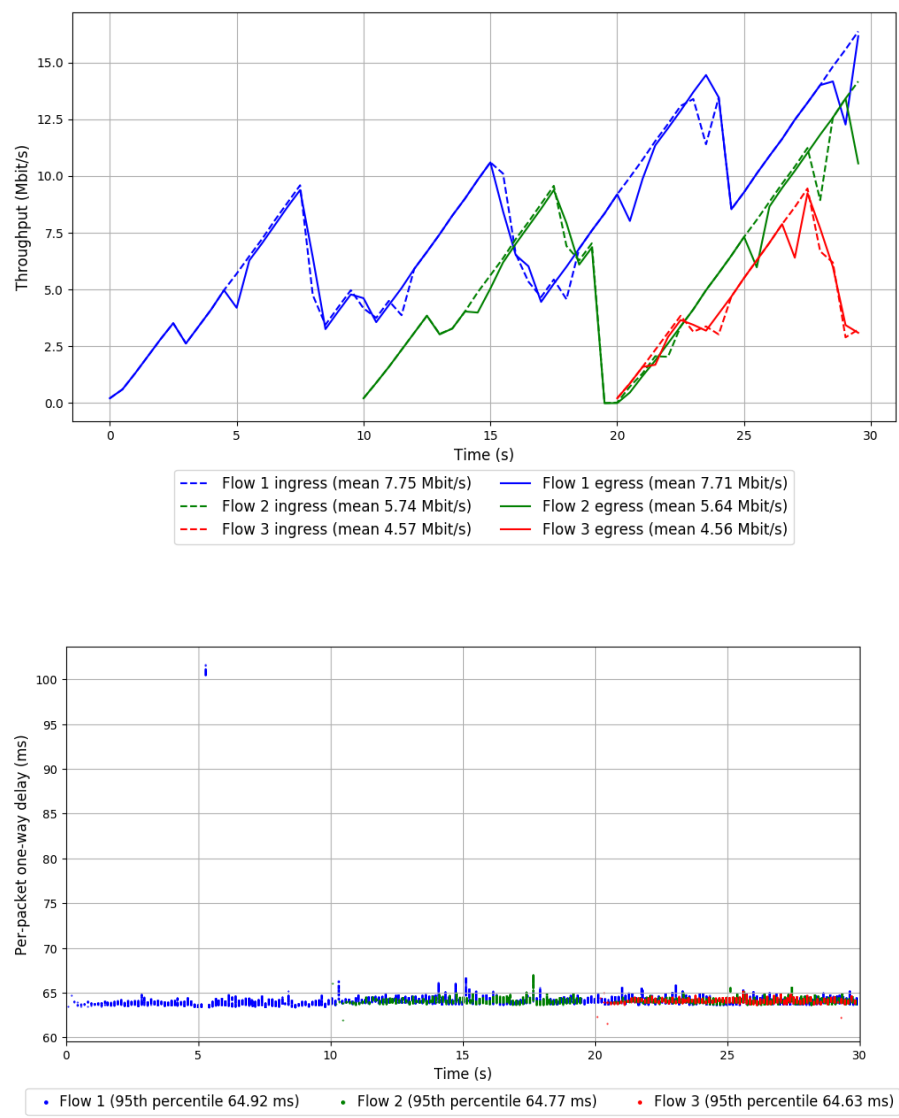


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-01 01:47:23
End at: 2018-02-01 01:47:53

# Below is generated by plot.py at 2018-02-01 07:15:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.94 Mbit/s
95th percentile per-packet one-way delay: 64.858 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 64.919 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 5.64 Mbit/s
95th percentile per-packet one-way delay: 64.771 ms
Loss rate: 2.39%
-- Flow 3:
Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 64.629 ms
Loss rate: 1.35%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-01 02:04:16

End at: 2018-02-01 02:04:46

Below is generated by plot.py at 2018-02-01 07:15:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.57 Mbit/s

95th percentile per-packet one-way delay: 64.459 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 4.91 Mbit/s

95th percentile per-packet one-way delay: 64.508 ms

Loss rate: 1.97%

-- Flow 2:

Average throughput: 13.17 Mbit/s

95th percentile per-packet one-way delay: 64.433 ms

Loss rate: 0.83%

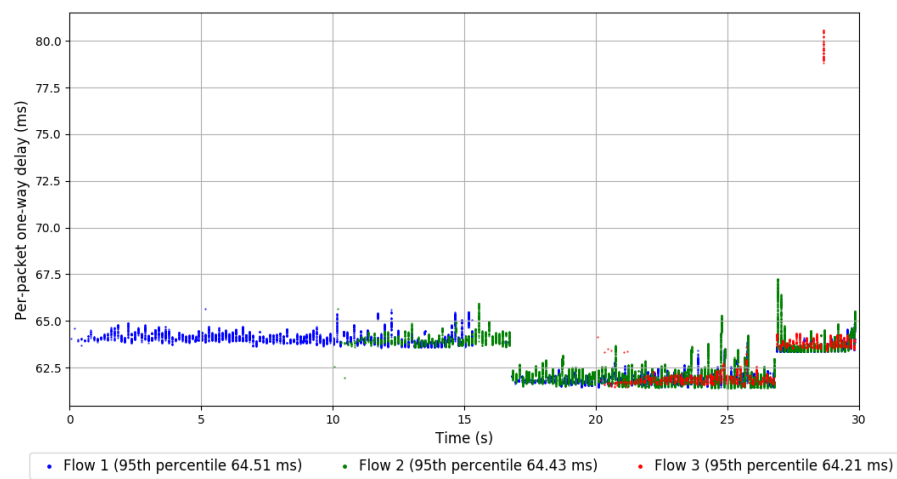
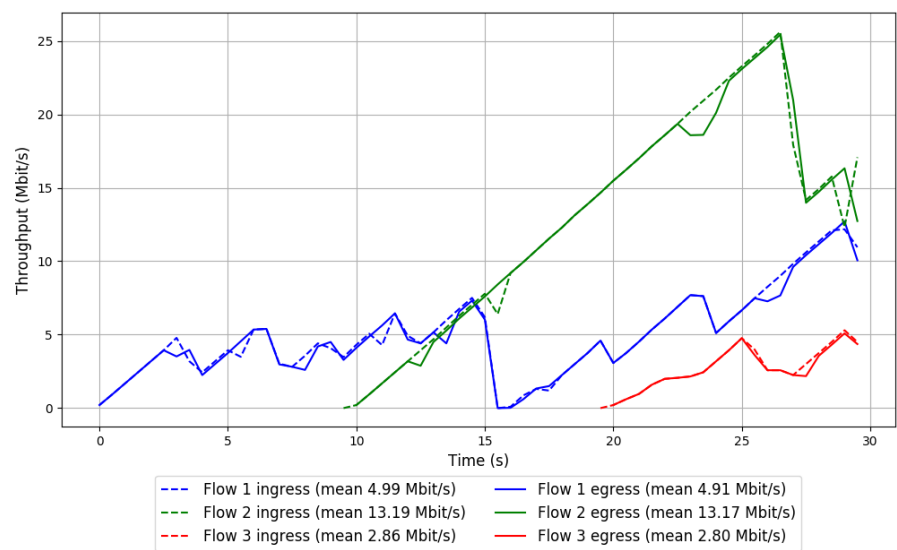
-- Flow 3:

Average throughput: 2.80 Mbit/s

95th percentile per-packet one-way delay: 64.210 ms

Loss rate: 3.41%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-01 02:21:14

End at: 2018-02-01 02:21:44

Below is generated by plot.py at 2018-02-01 07:15:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.02 Mbit/s

95th percentile per-packet one-way delay: 63.398 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 63.566 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 63.203 ms

Loss rate: 1.25%

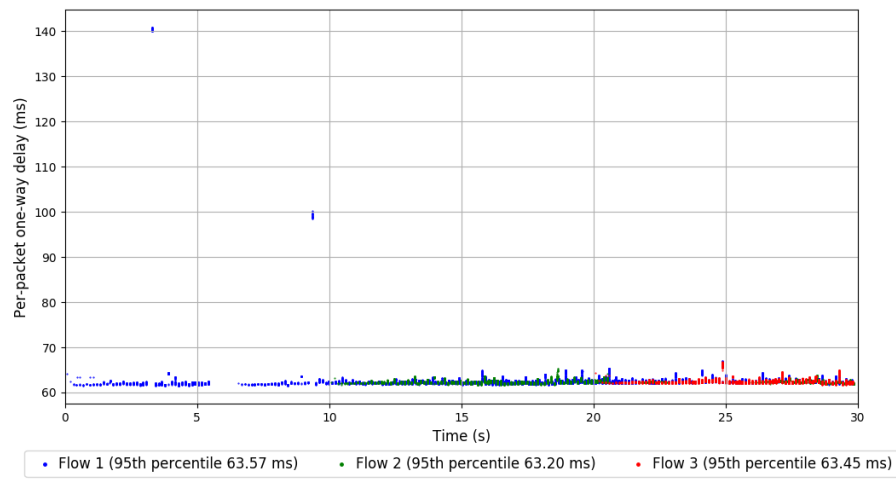
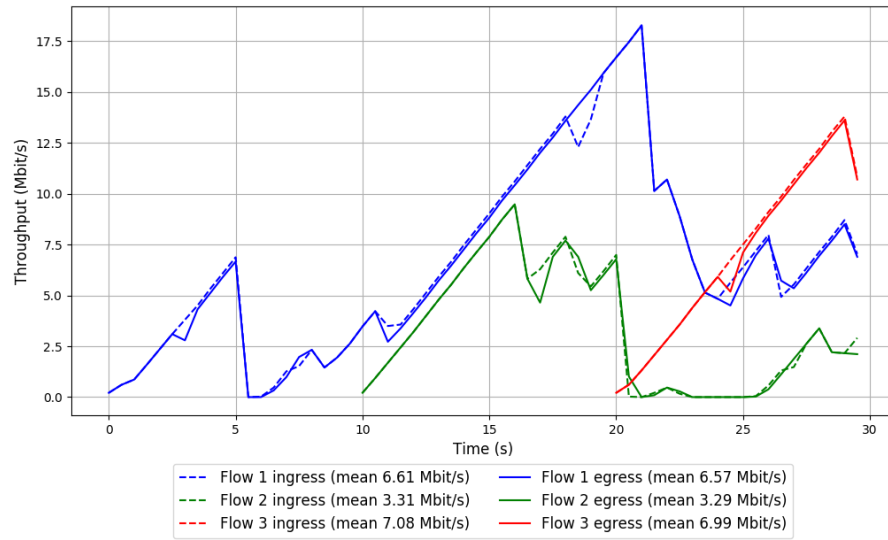
-- Flow 3:

Average throughput: 6.99 Mbit/s

95th percentile per-packet one-way delay: 63.450 ms

Loss rate: 2.62%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-01 02:37:58

End at: 2018-02-01 02:38:28

Below is generated by plot.py at 2018-02-01 07:15:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.16 Mbit/s

95th percentile per-packet one-way delay: 63.245 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 8.73 Mbit/s

95th percentile per-packet one-way delay: 63.373 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 6.18 Mbit/s

95th percentile per-packet one-way delay: 63.079 ms

Loss rate: 0.63%

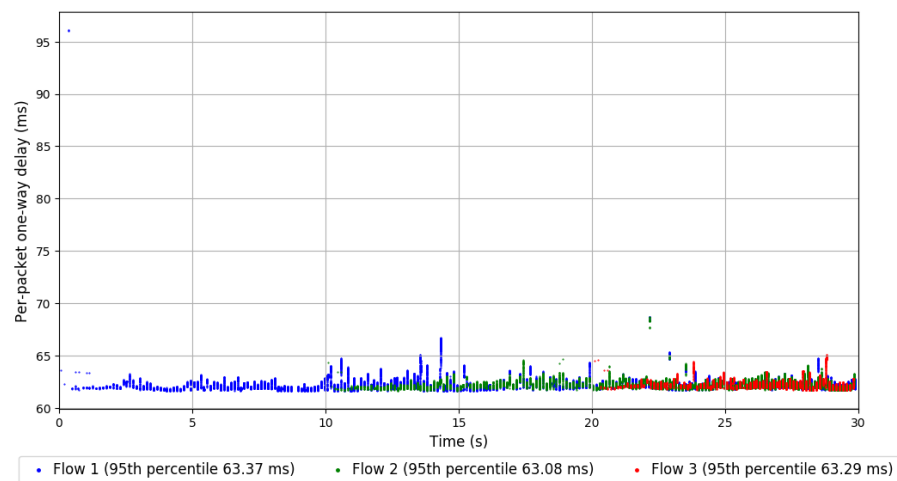
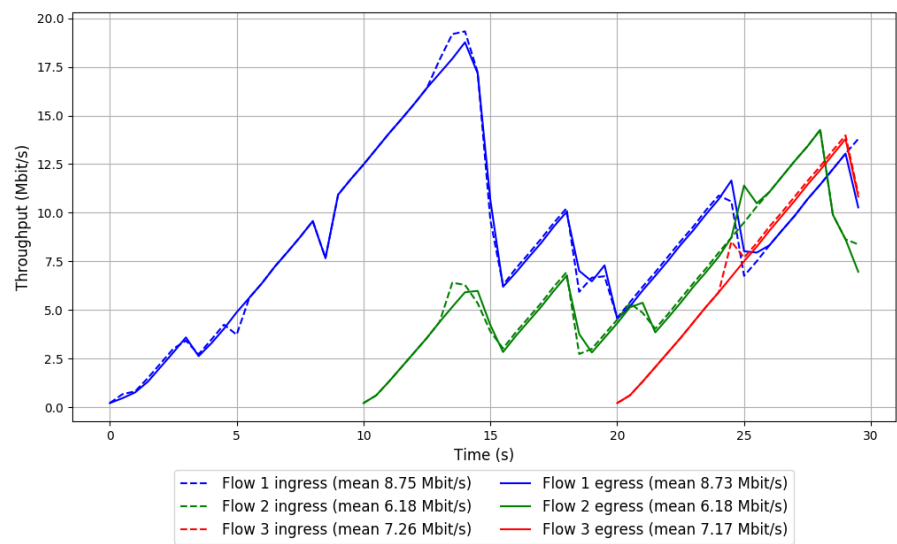
-- Flow 3:

Average throughput: 7.17 Mbit/s

95th percentile per-packet one-way delay: 63.290 ms

Loss rate: 2.59%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-01 02:54:50

End at: 2018-02-01 02:55:20

Below is generated by plot.py at 2018-02-01 07:15:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.75 Mbit/s

95th percentile per-packet one-way delay: 64.492 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 5.57 Mbit/s

95th percentile per-packet one-way delay: 64.403 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 8.72 Mbit/s

95th percentile per-packet one-way delay: 64.555 ms

Loss rate: 1.04%

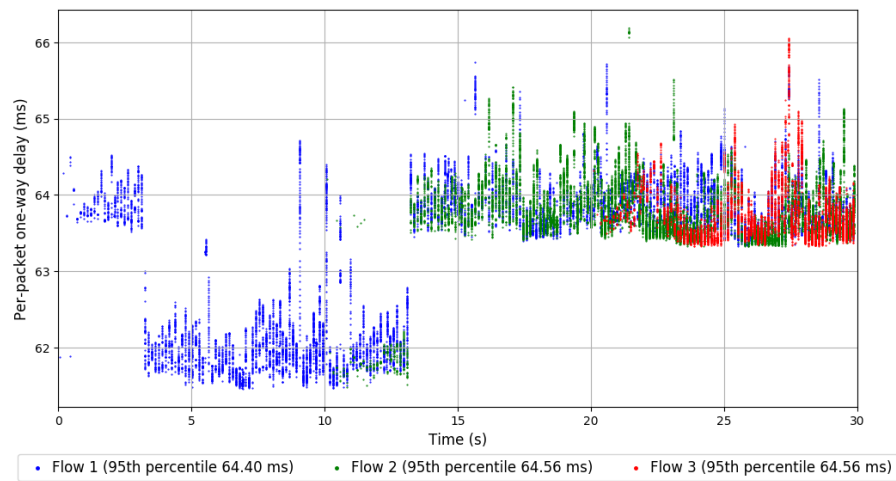
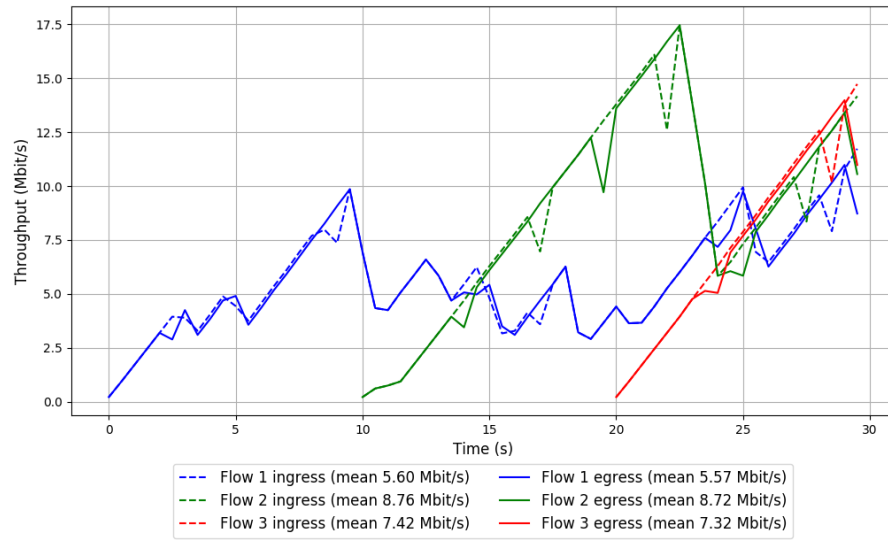
-- Flow 3:

Average throughput: 7.32 Mbit/s

95th percentile per-packet one-way delay: 64.555 ms

Loss rate: 2.56%

Run 6: Report of LEDBAT — Data Link

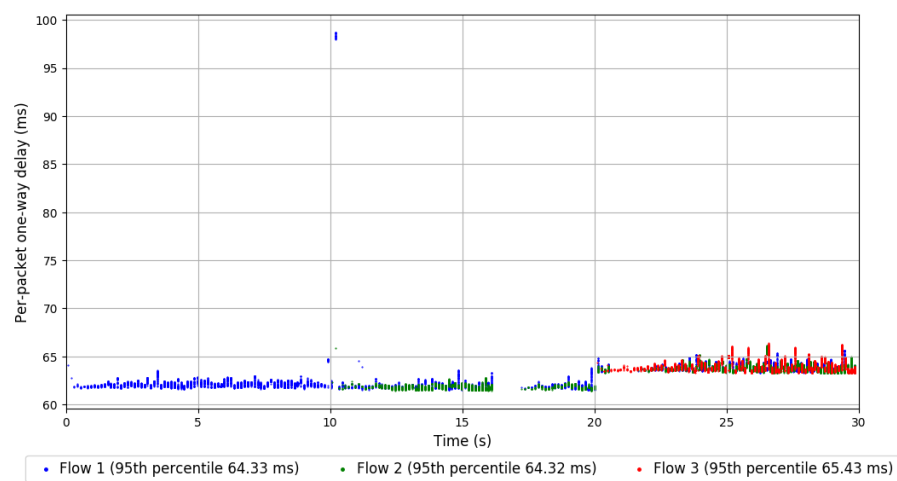
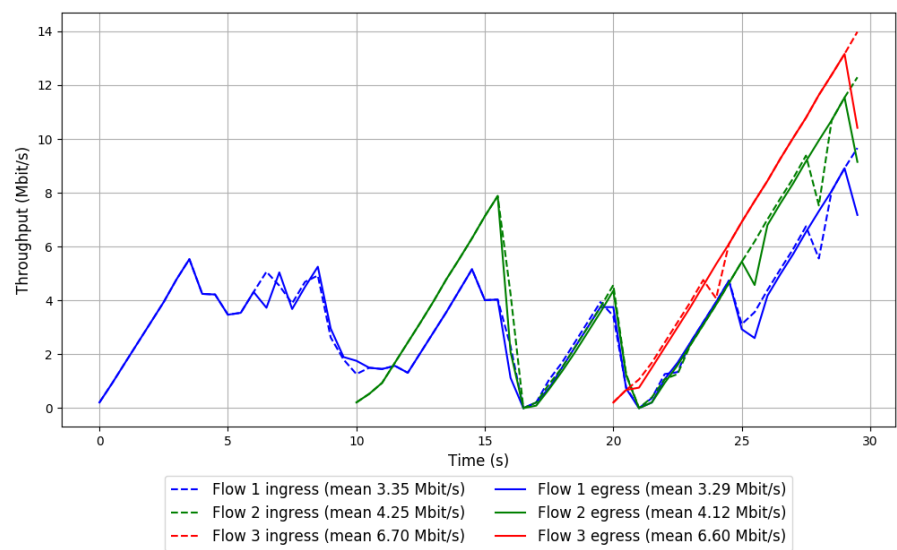


```
Run 7: Statistics of LEDBAT

Start at: 2018-02-01 03:11:43
End at: 2018-02-01 03:12:13

# Below is generated by plot.py at 2018-02-01 07:15:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.18 Mbit/s
95th percentile per-packet one-way delay: 64.737 ms
Loss rate: 2.94%
-- Flow 1:
Average throughput: 3.29 Mbit/s
95th percentile per-packet one-way delay: 64.331 ms
Loss rate: 2.30%
-- Flow 2:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 64.316 ms
Loss rate: 3.88%
-- Flow 3:
Average throughput: 6.60 Mbit/s
95th percentile per-packet one-way delay: 65.429 ms
Loss rate: 2.69%
```

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-01 03:28:24

End at: 2018-02-01 03:28:54

Below is generated by plot.py at 2018-02-01 07:15:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.47 Mbit/s

95th percentile per-packet one-way delay: 64.380 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 10.59 Mbit/s

95th percentile per-packet one-way delay: 64.455 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 6.94 Mbit/s

95th percentile per-packet one-way delay: 64.226 ms

Loss rate: 1.03%

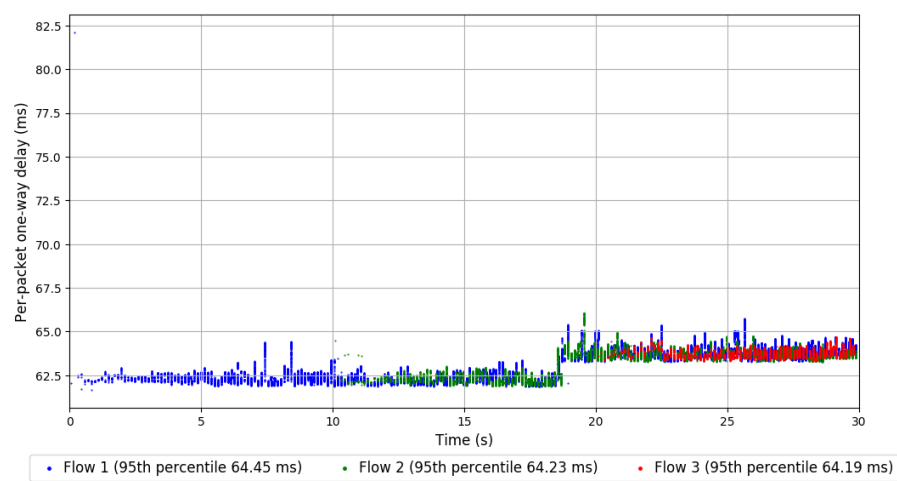
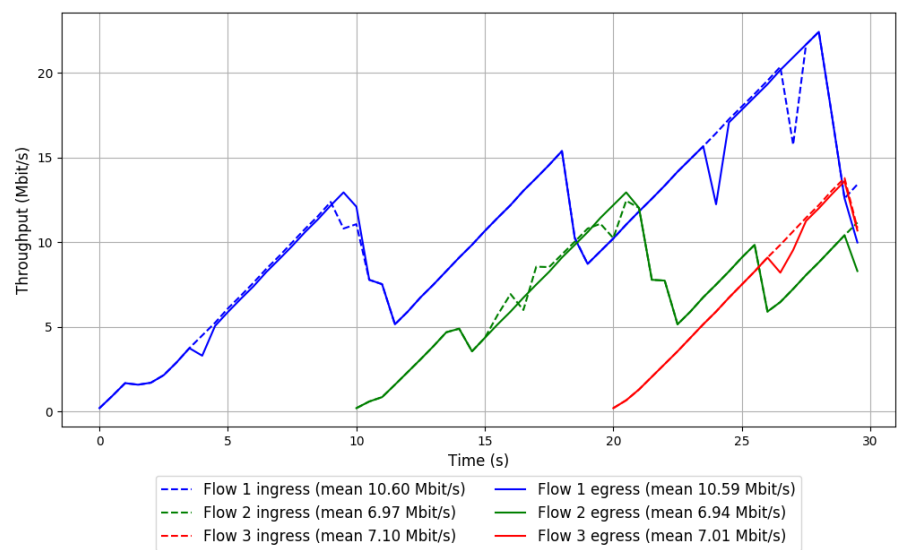
-- Flow 3:

Average throughput: 7.01 Mbit/s

95th percentile per-packet one-way delay: 64.188 ms

Loss rate: 2.62%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-01 03:45:17

End at: 2018-02-01 03:45:47

Below is generated by plot.py at 2018-02-01 07:15:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.45 Mbit/s

95th percentile per-packet one-way delay: 63.404 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 7.38 Mbit/s

95th percentile per-packet one-way delay: 63.873 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 11.65 Mbit/s

95th percentile per-packet one-way delay: 62.737 ms

Loss rate: 1.38%

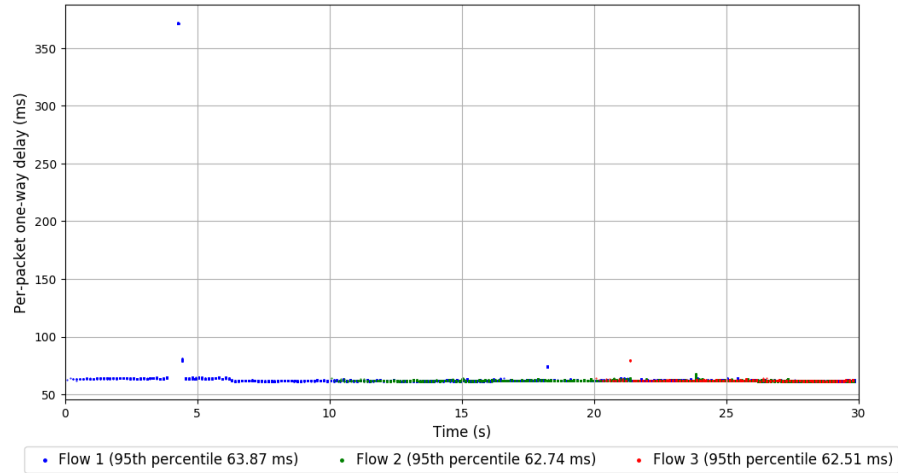
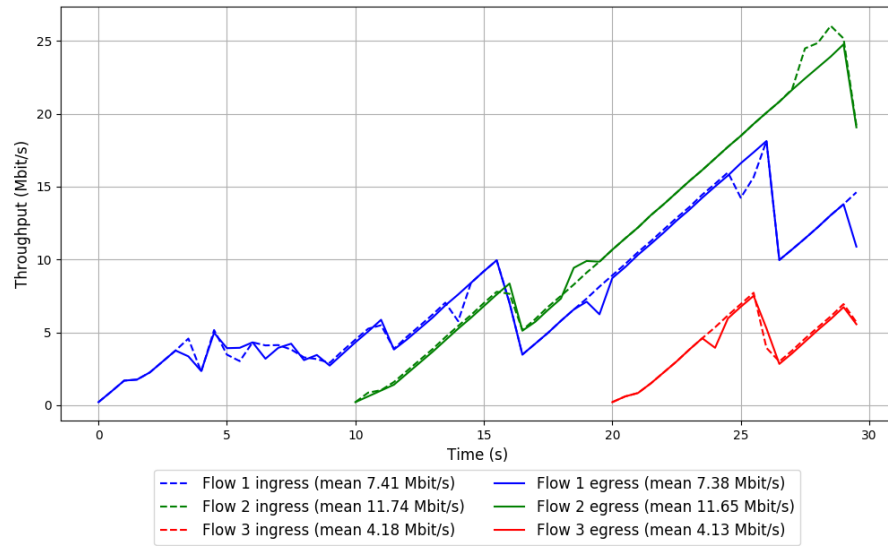
-- Flow 3:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 62.505 ms

Loss rate: 2.39%

Run 9: Report of LEDBAT — Data Link

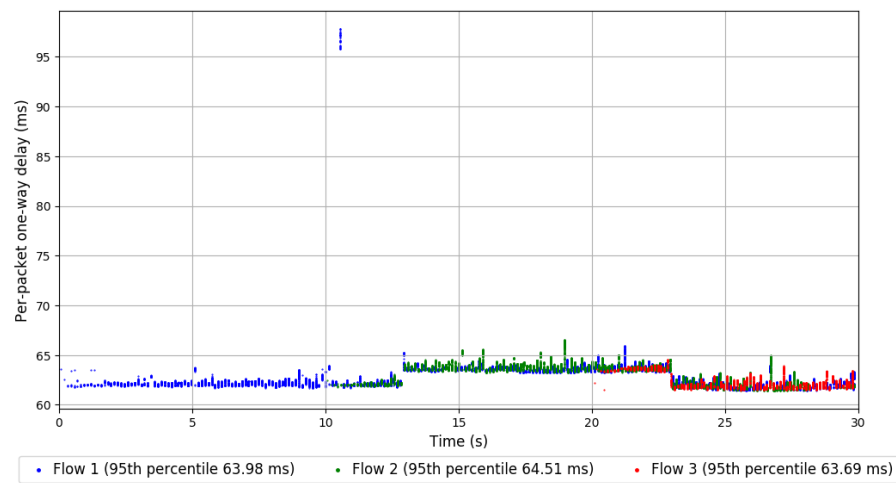
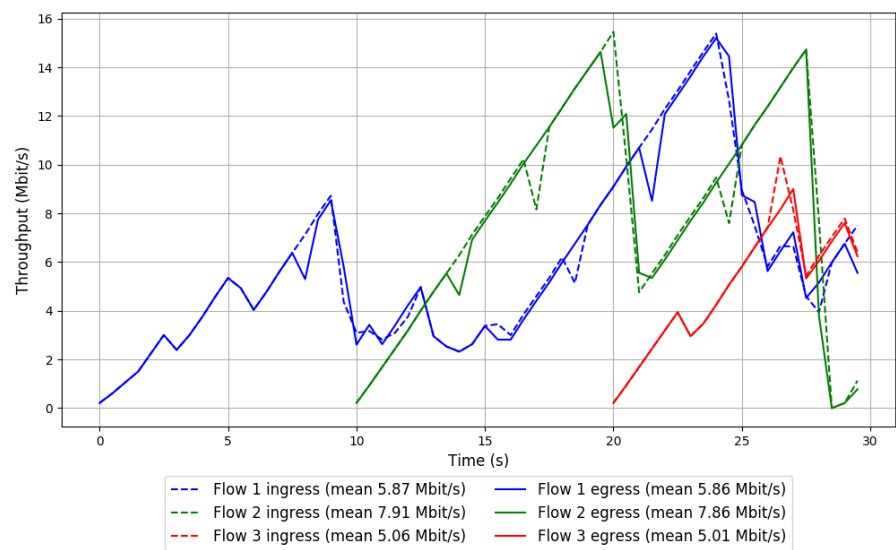


```
Run 10: Statistics of LEDBAT

Start at: 2018-02-01 04:02:10
End at: 2018-02-01 04:02:40

# Below is generated by plot.py at 2018-02-01 07:15:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.70 Mbit/s
95th percentile per-packet one-way delay: 64.222 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 5.86 Mbit/s
95th percentile per-packet one-way delay: 63.983 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 64.513 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 5.01 Mbit/s
95th percentile per-packet one-way delay: 63.686 ms
Loss rate: 2.19%
```

Run 10: Report of LEDBAT — Data Link

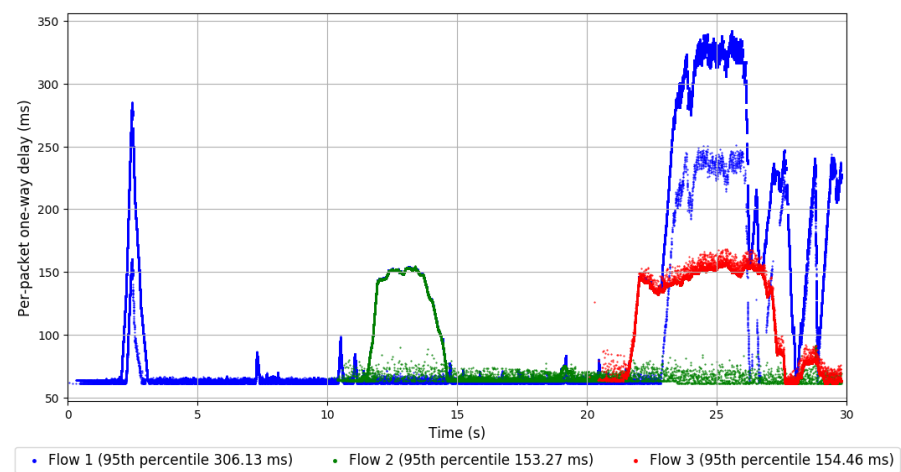
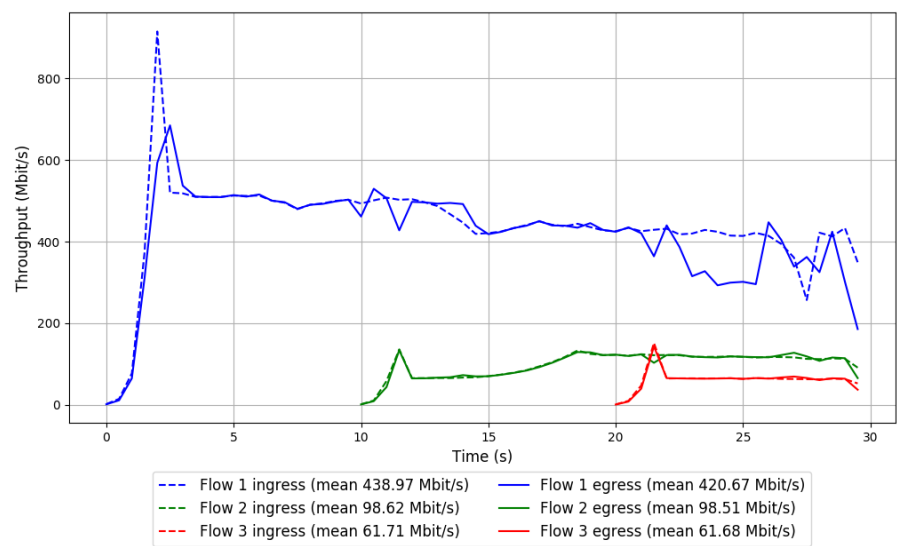


```
Run 1: Statistics of PCC

Start at: 2018-02-01 01:29:29
End at: 2018-02-01 01:29:59

# Below is generated by plot.py at 2018-02-01 07:24:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 506.11 Mbit/s
95th percentile per-packet one-way delay: 288.549 ms
Loss rate: 4.17%
-- Flow 1:
Average throughput: 420.67 Mbit/s
95th percentile per-packet one-way delay: 306.134 ms
Loss rate: 4.74%
-- Flow 2:
Average throughput: 98.51 Mbit/s
95th percentile per-packet one-way delay: 153.267 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 61.68 Mbit/s
95th percentile per-packet one-way delay: 154.462 ms
Loss rate: 1.91%
```

Run 1: Report of PCC — Data Link

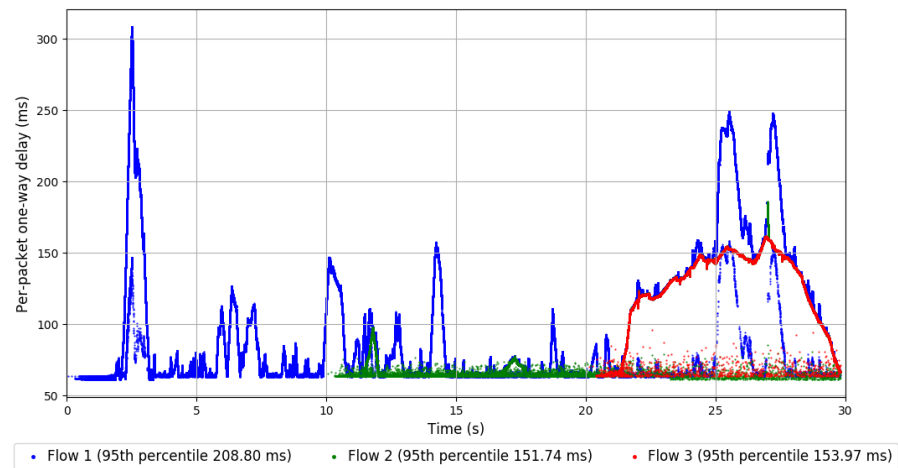
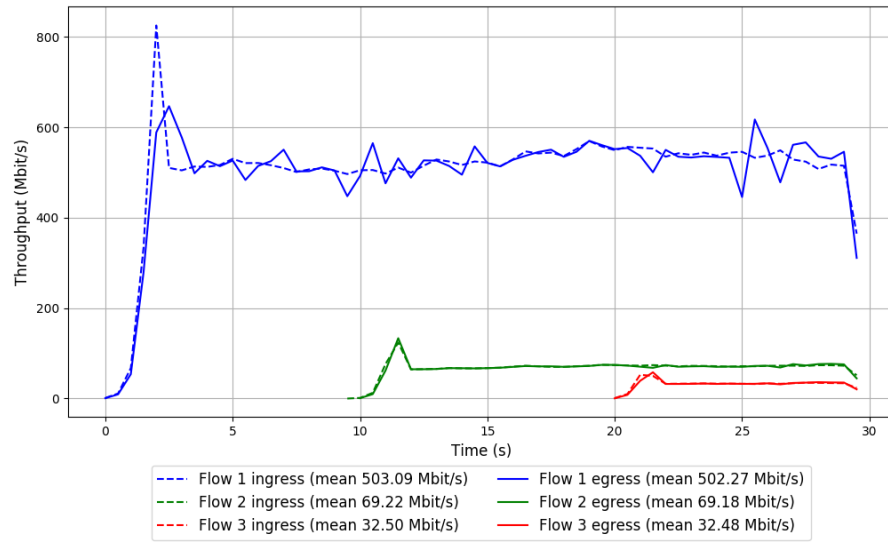


```
Run 2: Statistics of PCC

Start at: 2018-02-01 01:46:20
End at: 2018-02-01 01:46:50

# Below is generated by plot.py at 2018-02-01 07:25:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 558.67 Mbit/s
95th percentile per-packet one-way delay: 202.442 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 502.27 Mbit/s
95th percentile per-packet one-way delay: 208.800 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 69.18 Mbit/s
95th percentile per-packet one-way delay: 151.742 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 32.48 Mbit/s
95th percentile per-packet one-way delay: 153.970 ms
Loss rate: 1.36%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-01 02:03:14

End at: 2018-02-01 02:03:44

Below is generated by plot.py at 2018-02-01 07:25:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 535.51 Mbit/s

95th percentile per-packet one-way delay: 274.097 ms

Loss rate: 5.09%

-- Flow 1:

Average throughput: 459.10 Mbit/s

95th percentile per-packet one-way delay: 281.372 ms

Loss rate: 5.26%

-- Flow 2:

Average throughput: 114.14 Mbit/s

95th percentile per-packet one-way delay: 190.479 ms

Loss rate: 4.05%

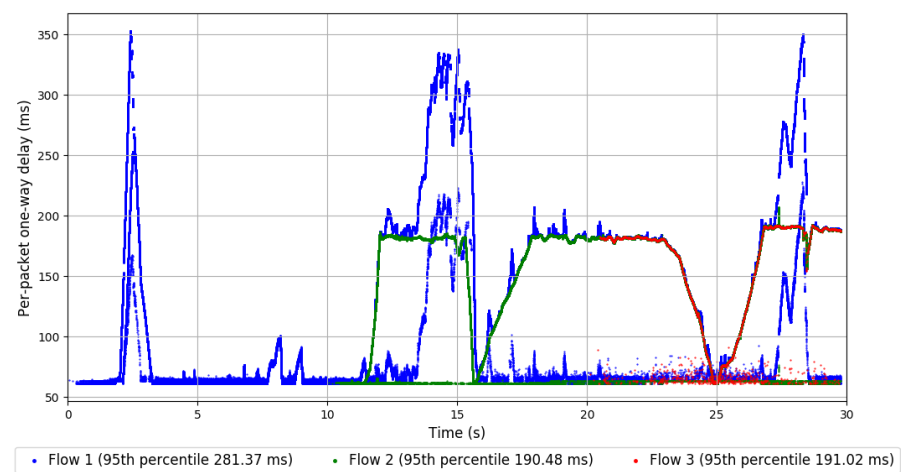
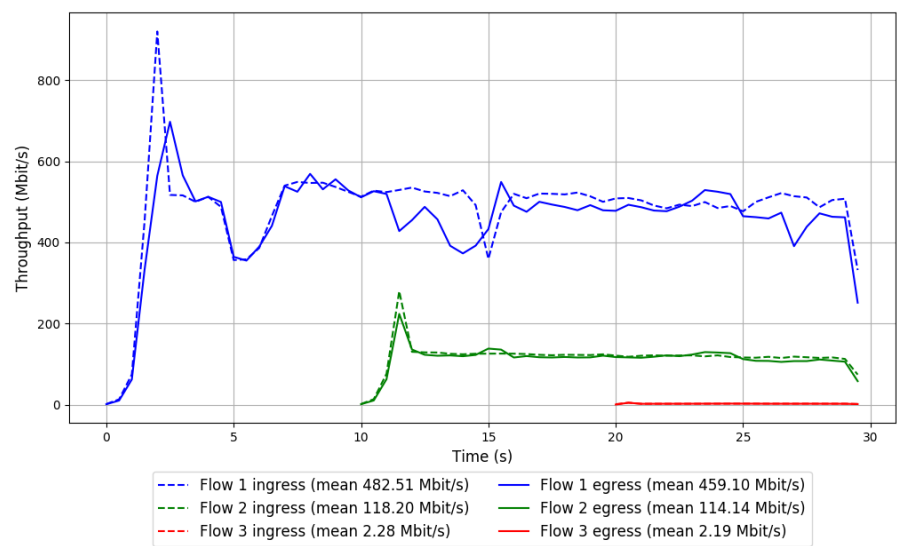
-- Flow 3:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 191.022 ms

Loss rate: 5.45%

Run 3: Report of PCC — Data Link

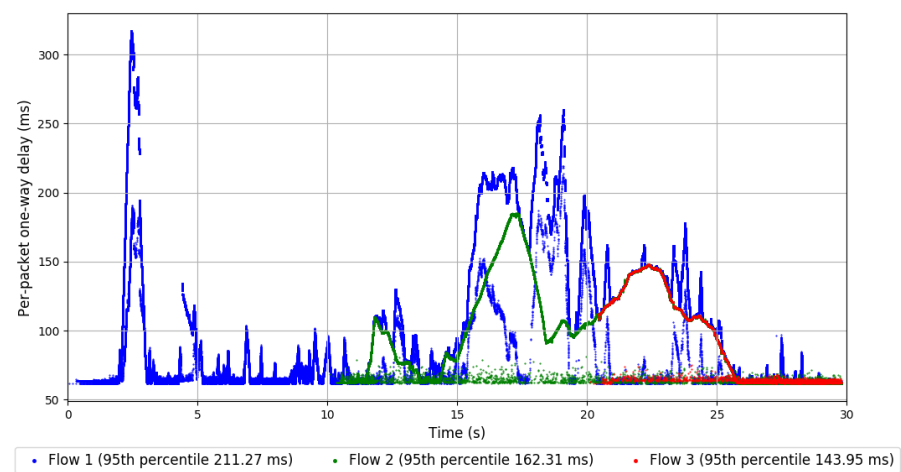
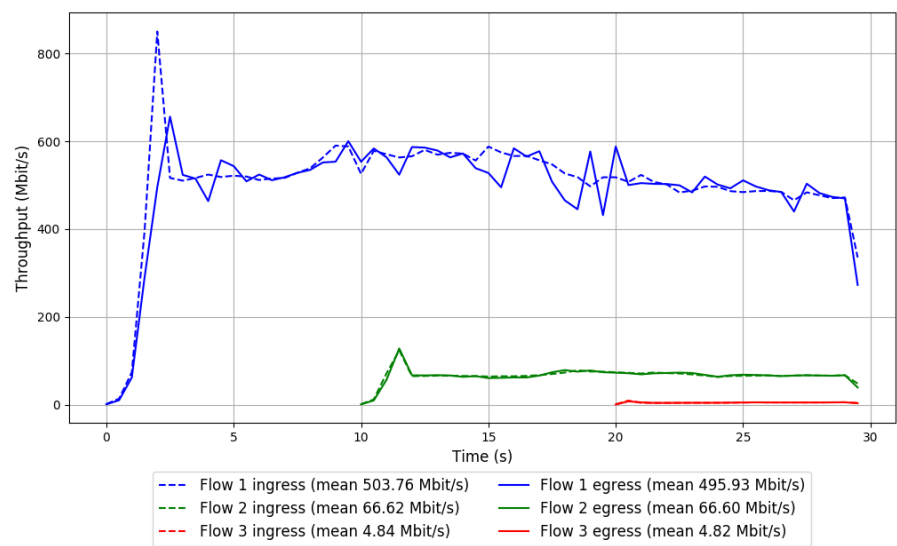


```
Run 4: Statistics of PCC

Start at: 2018-02-01 02:20:12
End at: 2018-02-01 02:20:42

# Below is generated by plot.py at 2018-02-01 07:25:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 541.63 Mbit/s
95th percentile per-packet one-way delay: 210.812 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 495.93 Mbit/s
95th percentile per-packet one-way delay: 211.269 ms
Loss rate: 1.97%
-- Flow 2:
Average throughput: 66.60 Mbit/s
95th percentile per-packet one-way delay: 162.307 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 143.950 ms
Loss rate: 1.56%
```

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-01 02:36:56

End at: 2018-02-01 02:37:26

Below is generated by plot.py at 2018-02-01 07:25:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 540.93 Mbit/s

95th percentile per-packet one-way delay: 226.435 ms

Loss rate: 3.82%

-- Flow 1:

Average throughput: 492.43 Mbit/s

95th percentile per-packet one-way delay: 232.884 ms

Loss rate: 3.91%

-- Flow 2:

Average throughput: 16.15 Mbit/s

95th percentile per-packet one-way delay: 191.208 ms

Loss rate: 2.26%

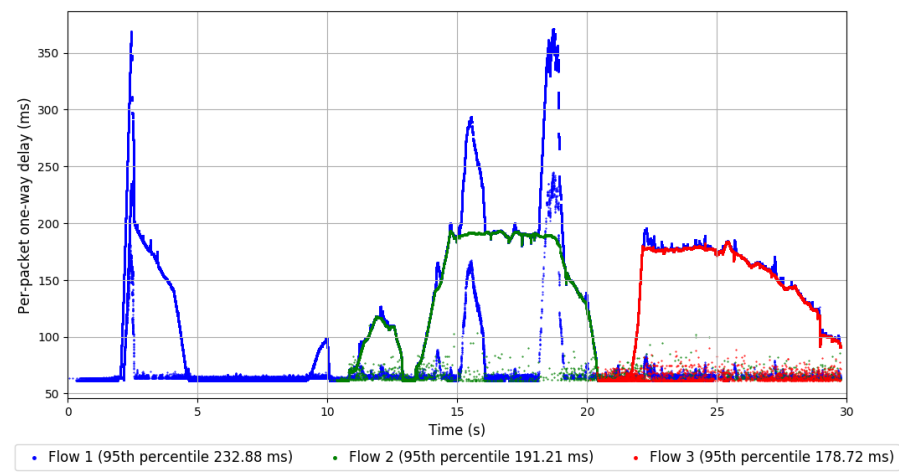
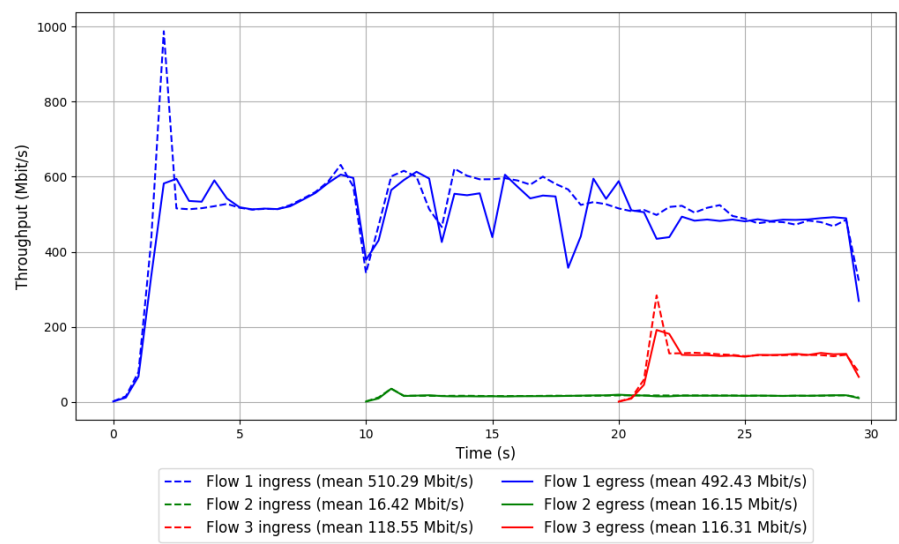
-- Flow 3:

Average throughput: 116.31 Mbit/s

95th percentile per-packet one-way delay: 178.717 ms

Loss rate: 3.14%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-01 02:53:49

End at: 2018-02-01 02:54:19

Below is generated by plot.py at 2018-02-01 07:25:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 516.55 Mbit/s

95th percentile per-packet one-way delay: 193.253 ms

Loss rate: 2.02%

-- Flow 1:

Average throughput: 459.39 Mbit/s

95th percentile per-packet one-way delay: 193.397 ms

Loss rate: 1.91%

-- Flow 2:

Average throughput: 56.15 Mbit/s

95th percentile per-packet one-way delay: 192.515 ms

Loss rate: 2.10%

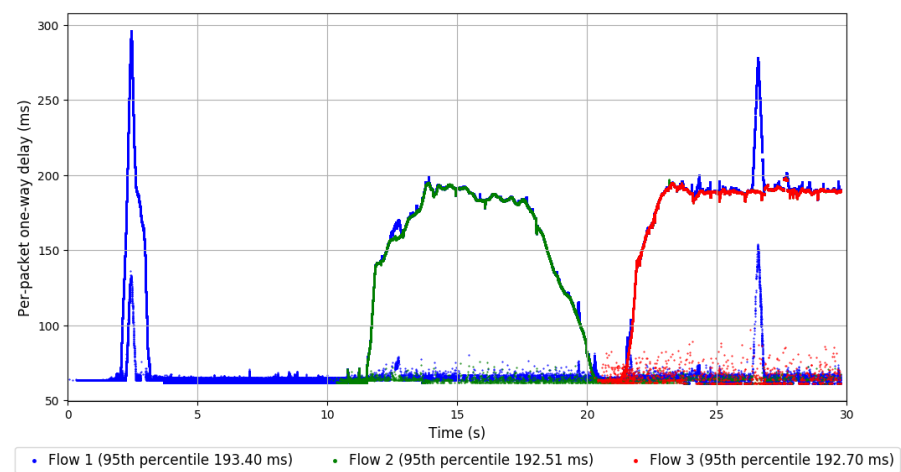
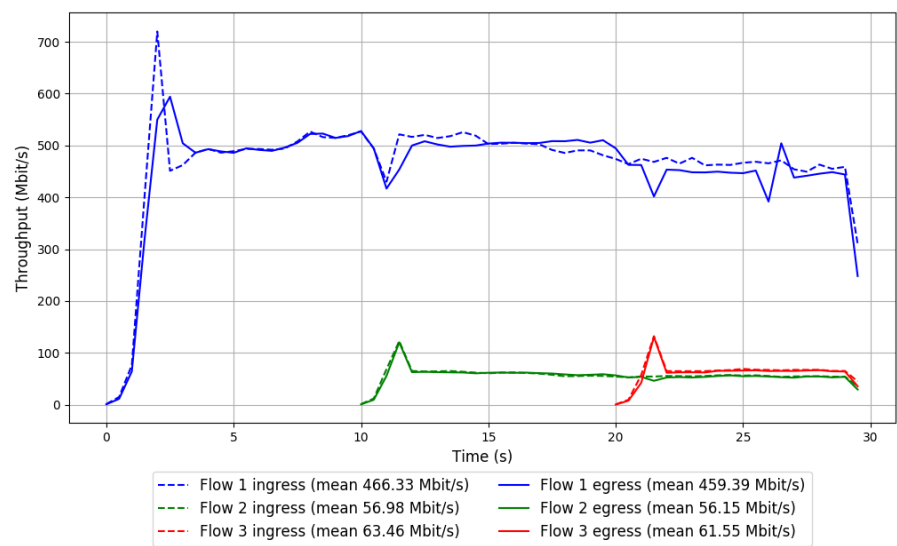
-- Flow 3:

Average throughput: 61.55 Mbit/s

95th percentile per-packet one-way delay: 192.696 ms

Loss rate: 4.32%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-01 03:10:40

End at: 2018-02-01 03:11:10

Below is generated by plot.py at 2018-02-01 07:26:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 540.99 Mbit/s

95th percentile per-packet one-way delay: 192.012 ms

Loss rate: 3.09%

-- Flow 1:

Average throughput: 439.83 Mbit/s

95th percentile per-packet one-way delay: 195.354 ms

Loss rate: 3.15%

-- Flow 2:

Average throughput: 94.22 Mbit/s

95th percentile per-packet one-way delay: 188.978 ms

Loss rate: 2.94%

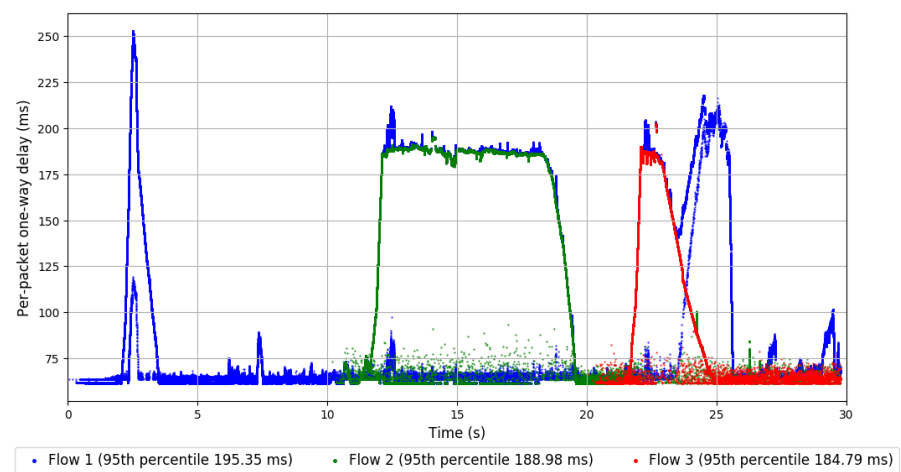
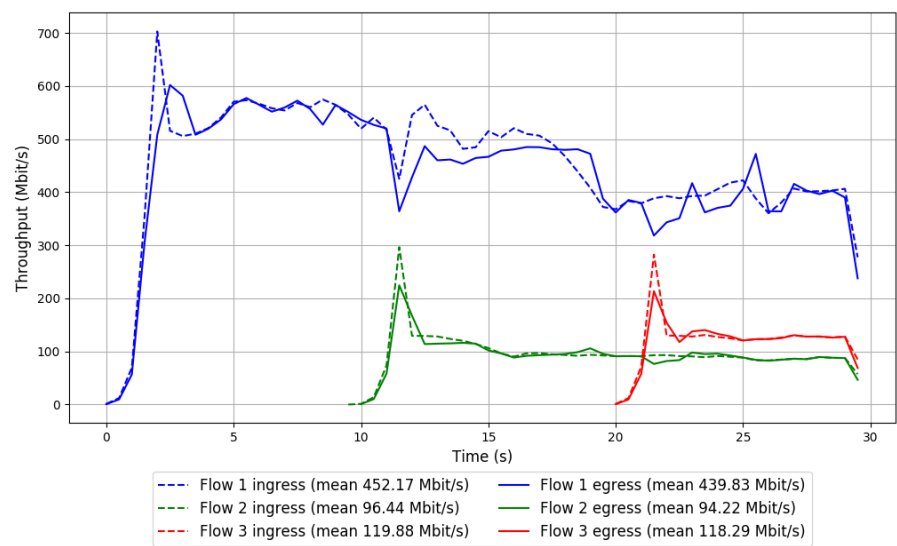
-- Flow 3:

Average throughput: 118.29 Mbit/s

95th percentile per-packet one-way delay: 184.794 ms

Loss rate: 2.64%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-01 03:27:22

End at: 2018-02-01 03:27:52

Below is generated by plot.py at 2018-02-01 07:26:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 565.43 Mbit/s

95th percentile per-packet one-way delay: 173.140 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 481.19 Mbit/s

95th percentile per-packet one-way delay: 173.193 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 125.13 Mbit/s

95th percentile per-packet one-way delay: 172.946 ms

Loss rate: 0.91%

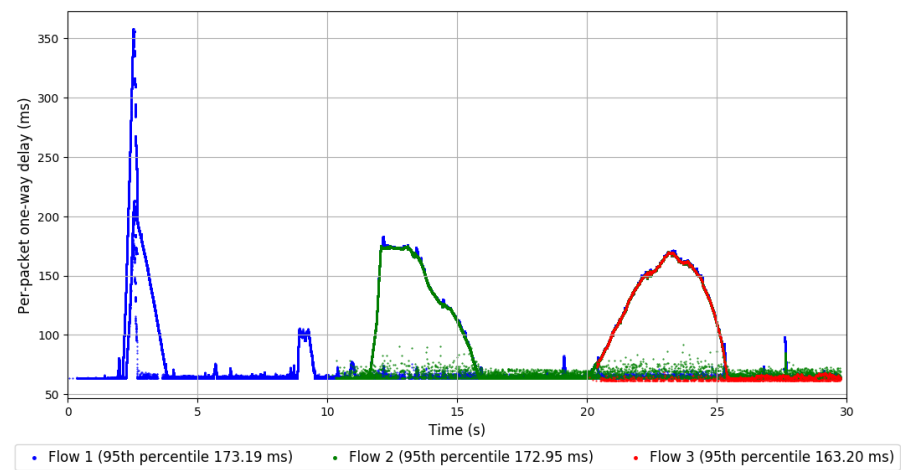
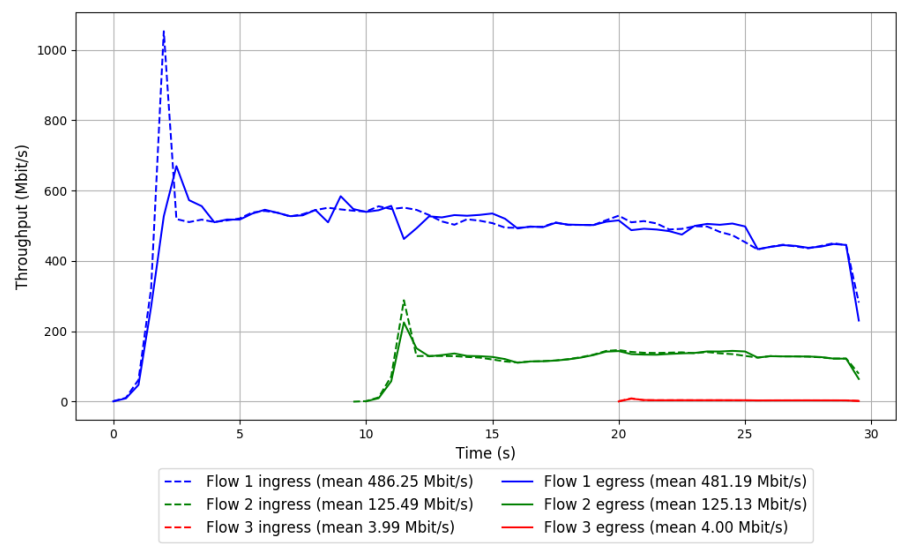
-- Flow 3:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 163.196 ms

Loss rate: 1.16%

Run 8: Report of PCC — Data Link

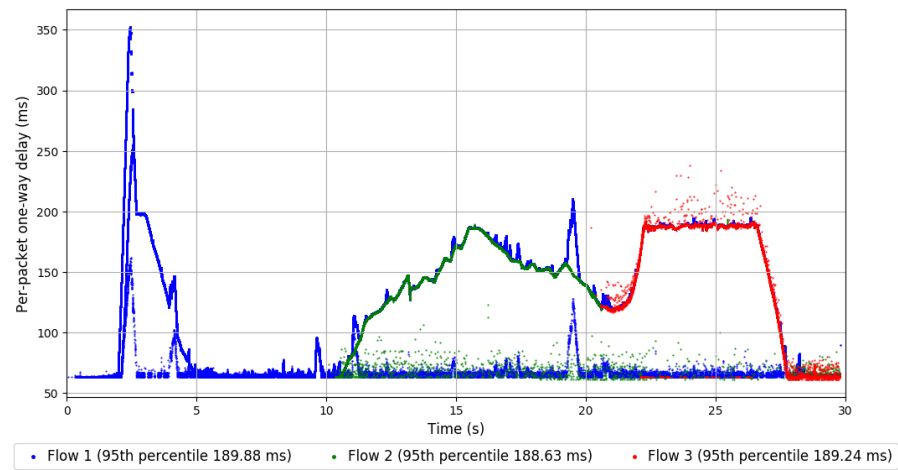
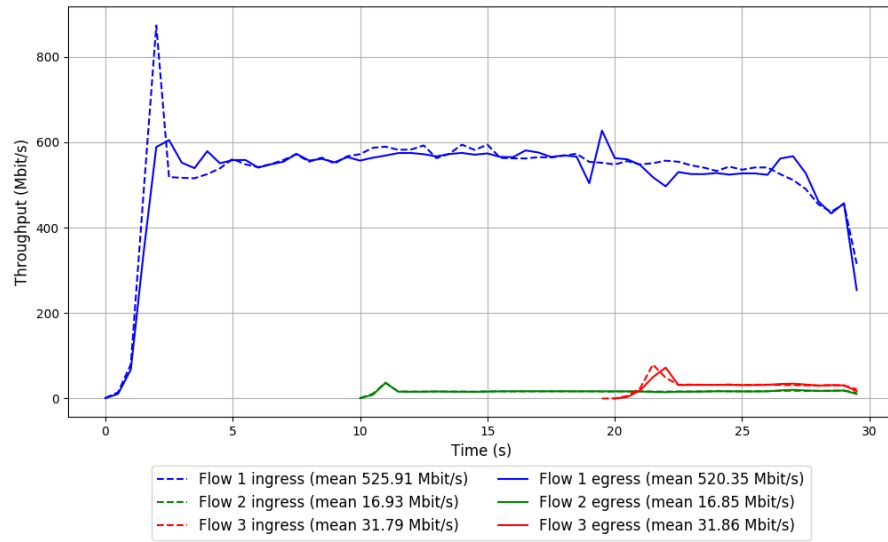


```
Run 9: Statistics of PCC

Start at: 2018-02-01 03:44:15
End at: 2018-02-01 03:44:45

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 541.79 Mbit/s
95th percentile per-packet one-way delay: 189.780 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 520.35 Mbit/s
95th percentile per-packet one-way delay: 189.880 ms
Loss rate: 1.40%
-- Flow 2:
Average throughput: 16.85 Mbit/s
95th percentile per-packet one-way delay: 188.633 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 31.86 Mbit/s
95th percentile per-packet one-way delay: 189.238 ms
Loss rate: 2.31%
```

Run 9: Report of PCC — Data Link

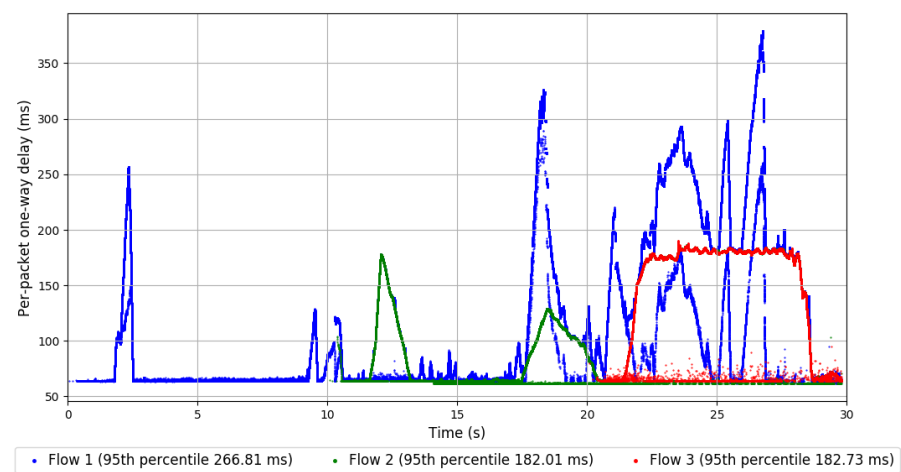
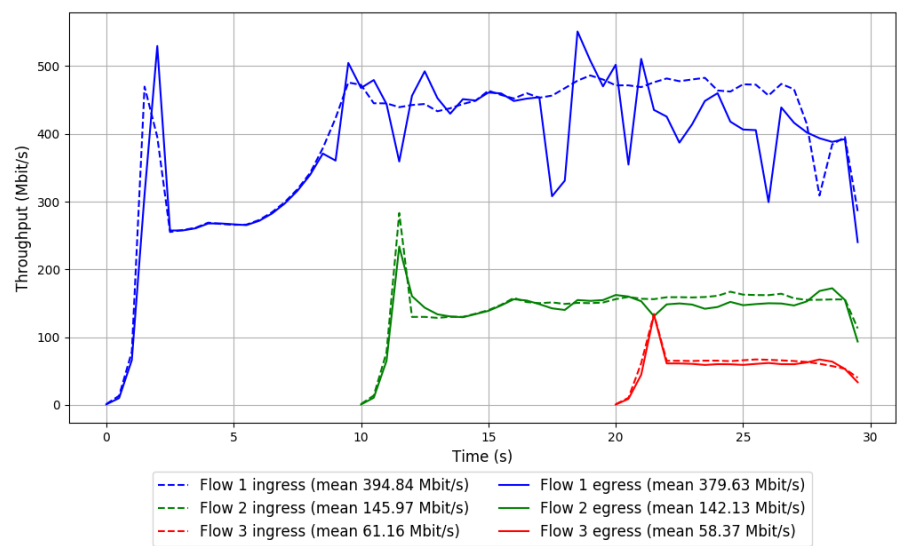


```
Run 10: Statistics of PCC

Start at: 2018-02-01 04:01:09
End at: 2018-02-01 04:01:39

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 492.87 Mbit/s
95th percentile per-packet one-way delay: 258.441 ms
Loss rate: 4.13%
-- Flow 1:
Average throughput: 379.63 Mbit/s
95th percentile per-packet one-way delay: 266.809 ms
Loss rate: 4.26%
-- Flow 2:
Average throughput: 142.13 Mbit/s
95th percentile per-packet one-way delay: 182.012 ms
Loss rate: 3.23%
-- Flow 3:
Average throughput: 58.37 Mbit/s
95th percentile per-packet one-way delay: 182.730 ms
Loss rate: 5.95%
```

Run 10: Report of PCC — Data Link

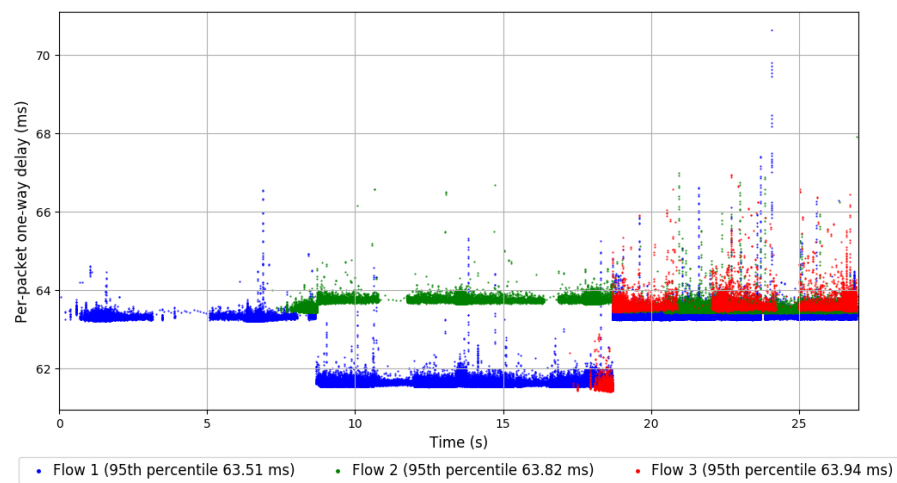
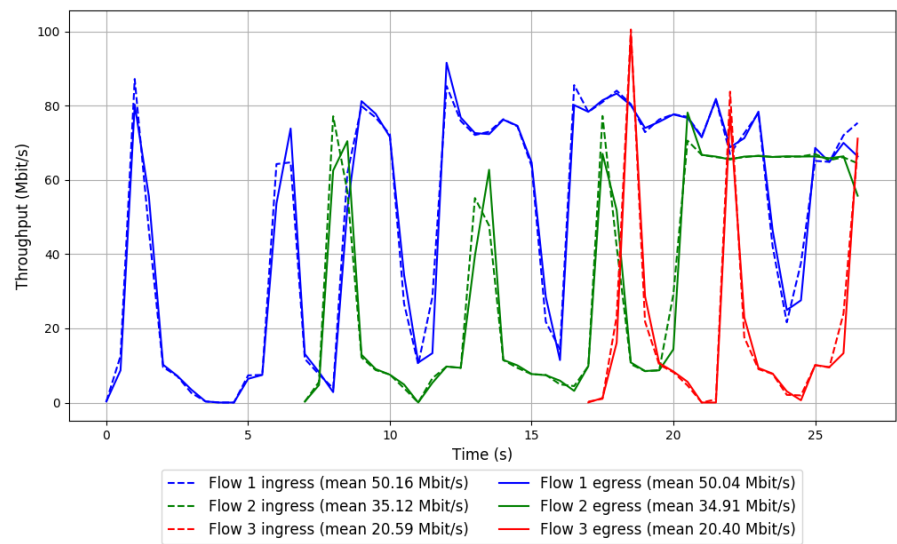


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-01 01:22:21
End at: 2018-02-01 01:22:51

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.03 Mbit/s
95th percentile per-packet one-way delay: 63.765 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 50.04 Mbit/s
95th percentile per-packet one-way delay: 63.507 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 34.91 Mbit/s
95th percentile per-packet one-way delay: 63.820 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 20.40 Mbit/s
95th percentile per-packet one-way delay: 63.937 ms
Loss rate: 2.20%
```


Run 1: Report of QUIC Cubic — Data Link

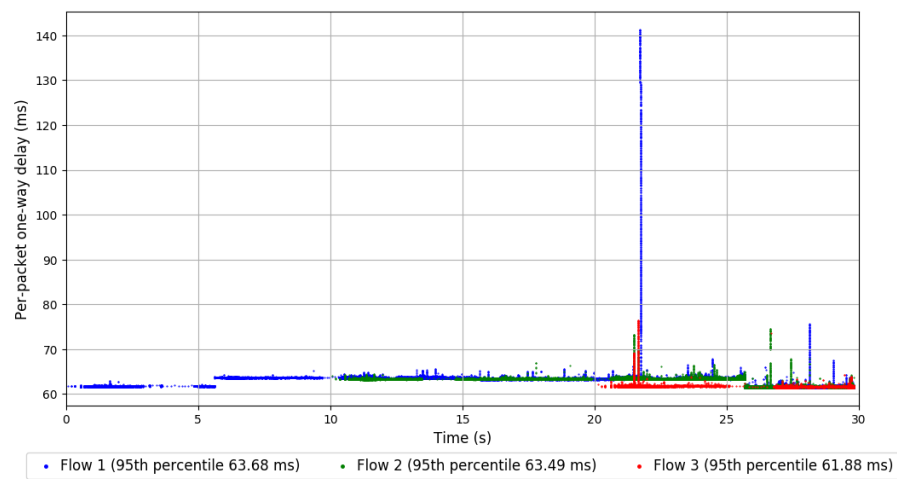
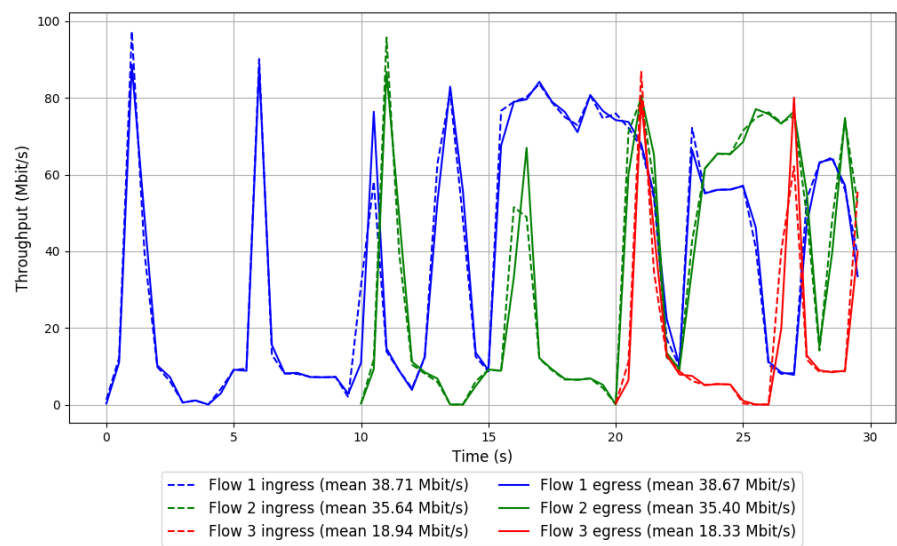


```
Run 2: Statistics of QUIC Cubic

Start at: 2018-02-01 01:38:57
End at: 2018-02-01 01:39:27

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.12 Mbit/s
95th percentile per-packet one-way delay: 63.646 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 38.67 Mbit/s
95th percentile per-packet one-way delay: 63.677 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 35.40 Mbit/s
95th percentile per-packet one-way delay: 63.489 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 18.33 Mbit/s
95th percentile per-packet one-way delay: 61.882 ms
Loss rate: 4.44%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-01 01:55:48

End at: 2018-02-01 01:56:18

Below is generated by plot.py at 2018-02-01 07:34:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.43 Mbit/s

95th percentile per-packet one-way delay: 63.719 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 42.33 Mbit/s

95th percentile per-packet one-way delay: 63.625 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 29.46 Mbit/s

95th percentile per-packet one-way delay: 63.804 ms

Loss rate: 0.21%

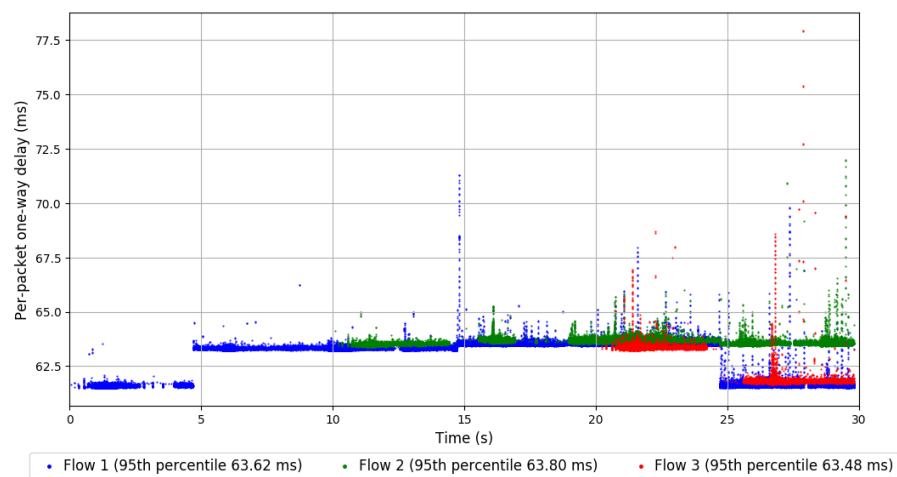
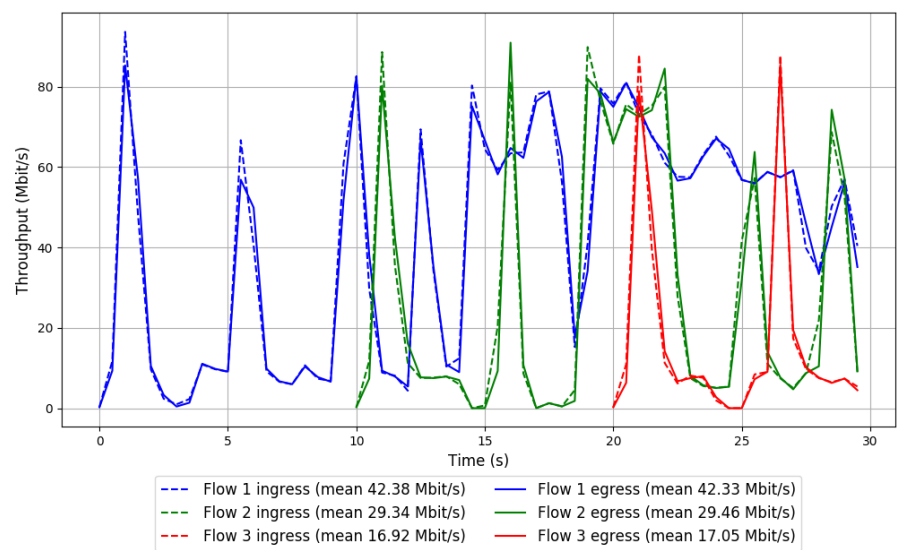
-- Flow 3:

Average throughput: 17.05 Mbit/s

95th percentile per-packet one-way delay: 63.479 ms

Loss rate: 0.55%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-01 02:12:51

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

Below is generated by plot.py at 2018-02-01 07:34:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.53 Mbit/s

95th percentile per-packet one-way delay: 63.521 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 41.98 Mbit/s

95th percentile per-packet one-way delay: 63.321 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 27.30 Mbit/s

95th percentile per-packet one-way delay: 61.808 ms

Loss rate: 1.30%

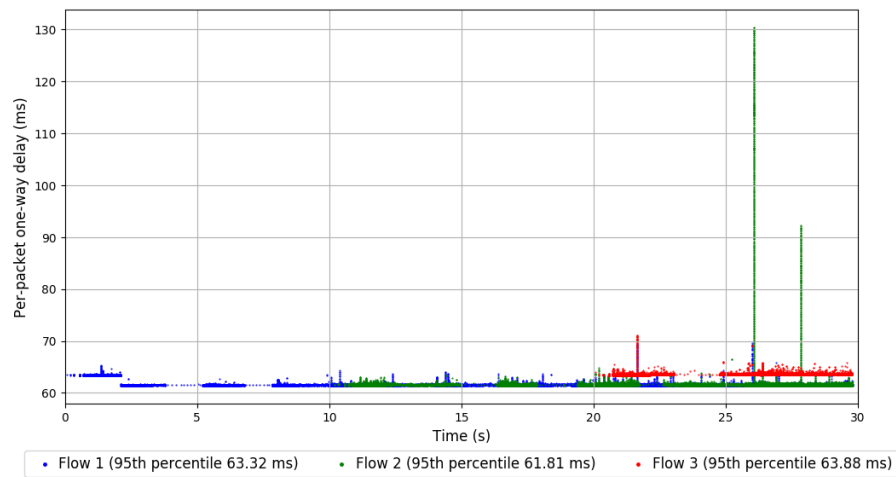
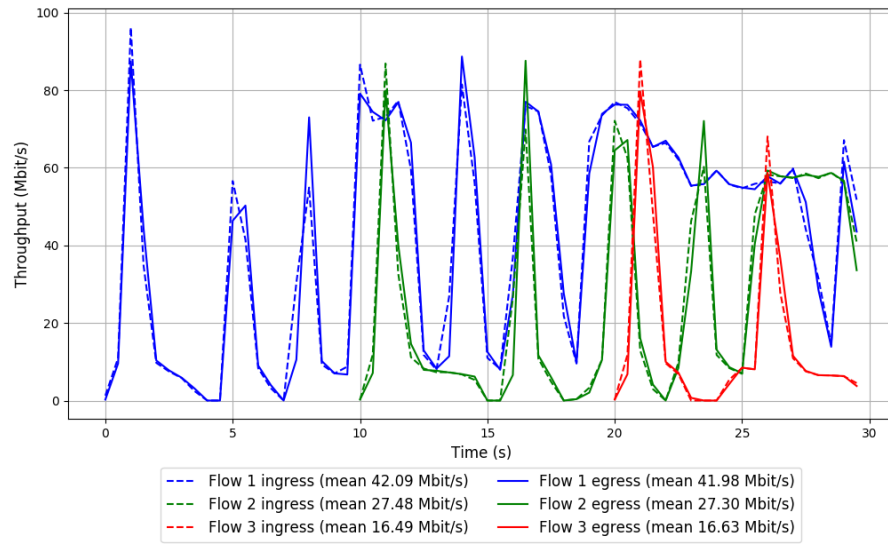
-- Flow 3:

Average throughput: 16.63 Mbit/s

95th percentile per-packet one-way delay: 63.877 ms

Loss rate: 0.47%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-01 02:29:38

End at: 2018-02-01 02:30:08

Below is generated by plot.py at 2018-02-01 07:34:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.21 Mbit/s

95th percentile per-packet one-way delay: 63.677 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 48.00 Mbit/s

95th percentile per-packet one-way delay: 63.501 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 37.75 Mbit/s

95th percentile per-packet one-way delay: 63.785 ms

Loss rate: 0.10%

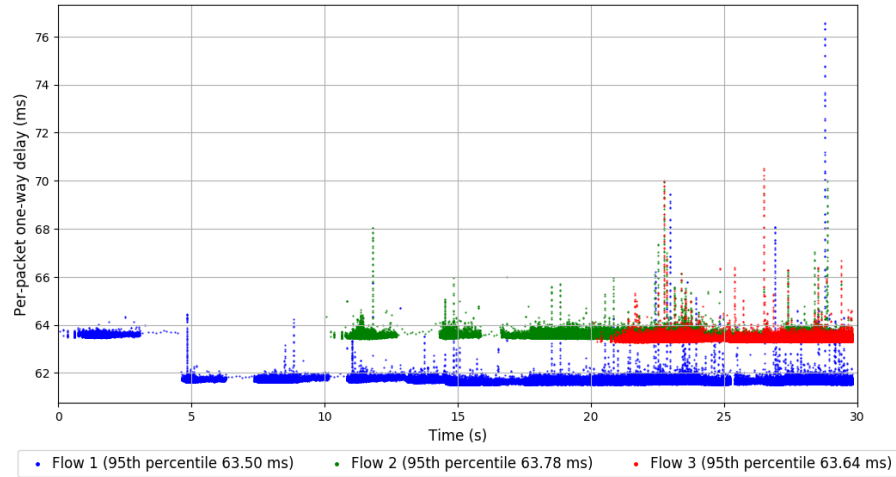
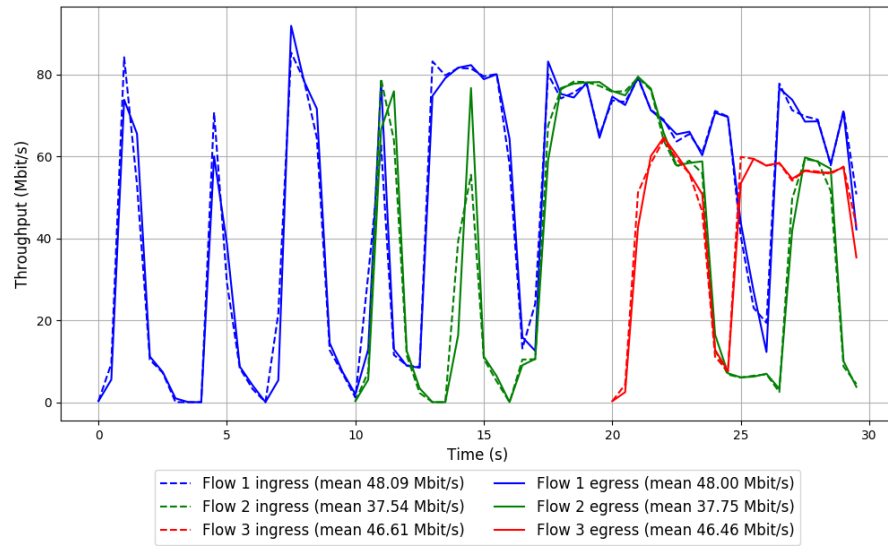
-- Flow 3:

Average throughput: 46.46 Mbit/s

95th percentile per-packet one-way delay: 63.637 ms

Loss rate: 1.64%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-01 02:46:29

End at: 2018-02-01 02:46:59

Below is generated by plot.py at 2018-02-01 07:34:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.30 Mbit/s

95th percentile per-packet one-way delay: 63.535 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 49.41 Mbit/s

95th percentile per-packet one-way delay: 63.535 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 41.43 Mbit/s

95th percentile per-packet one-way delay: 61.962 ms

Loss rate: 0.95%

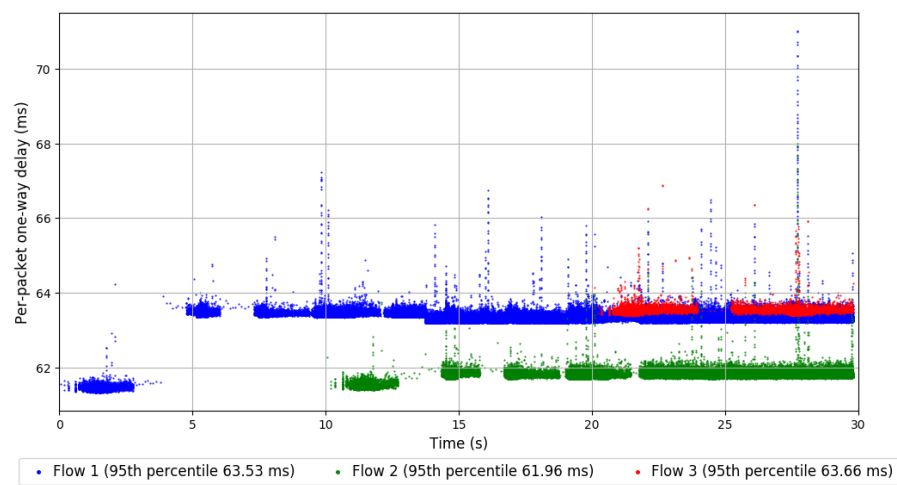
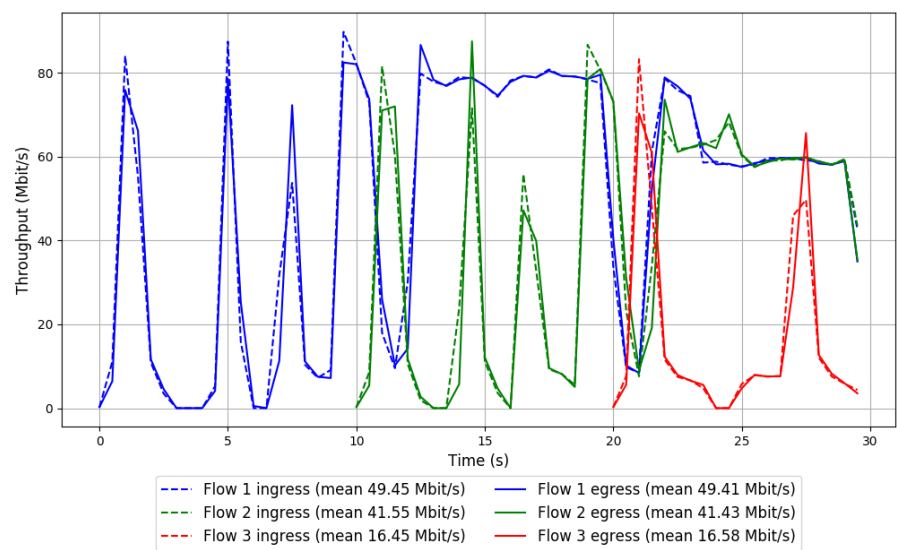
-- Flow 3:

Average throughput: 16.58 Mbit/s

95th percentile per-packet one-way delay: 63.659 ms

Loss rate: 0.47%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-01 03:03:25

End at: 2018-02-01 03:03:55

Below is generated by plot.py at 2018-02-01 07:34:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.43 Mbit/s

95th percentile per-packet one-way delay: 63.637 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 44.93 Mbit/s

95th percentile per-packet one-way delay: 63.595 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 47.10 Mbit/s

95th percentile per-packet one-way delay: 63.623 ms

Loss rate: 1.00%

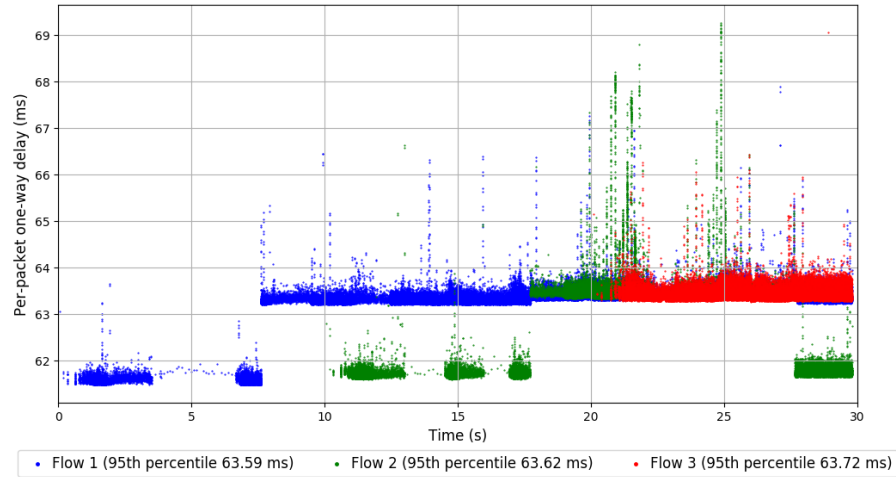
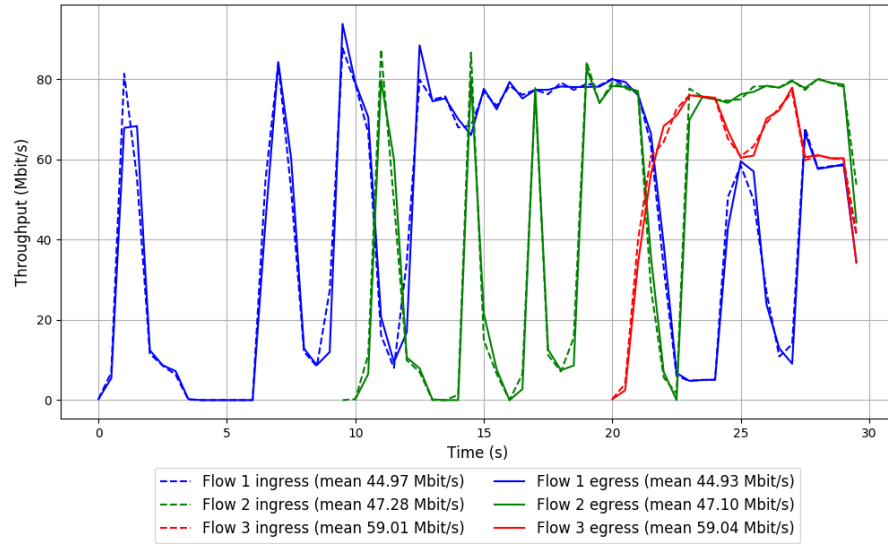
-- Flow 3:

Average throughput: 59.04 Mbit/s

95th percentile per-packet one-way delay: 63.718 ms

Loss rate: 1.27%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-01 03:20:07

End at: 2018-02-01 03:20:37

Below is generated by plot.py at 2018-02-01 07:34:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.12 Mbit/s

95th percentile per-packet one-way delay: 63.705 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 50.39 Mbit/s

95th percentile per-packet one-way delay: 63.573 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 28.57 Mbit/s

95th percentile per-packet one-way delay: 63.704 ms

Loss rate: 1.21%

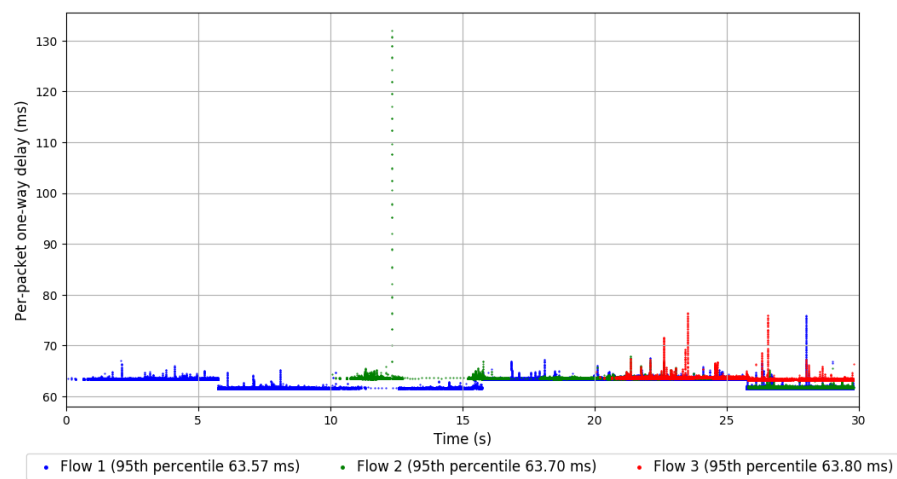
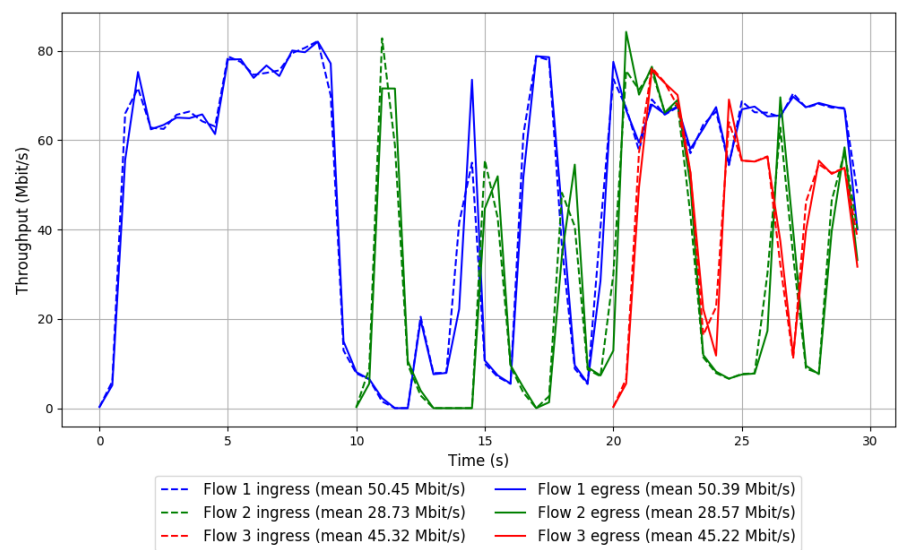
-- Flow 3:

Average throughput: 45.22 Mbit/s

95th percentile per-packet one-way delay: 63.802 ms

Loss rate: 1.50%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-01 03:36:55

End at: 2018-02-01 03:37:25

Below is generated by plot.py at 2018-02-01 07:34:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.22 Mbit/s

95th percentile per-packet one-way delay: 63.635 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 44.04 Mbit/s

95th percentile per-packet one-way delay: 63.485 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 23.72 Mbit/s

95th percentile per-packet one-way delay: 63.728 ms

Loss rate: 0.36%

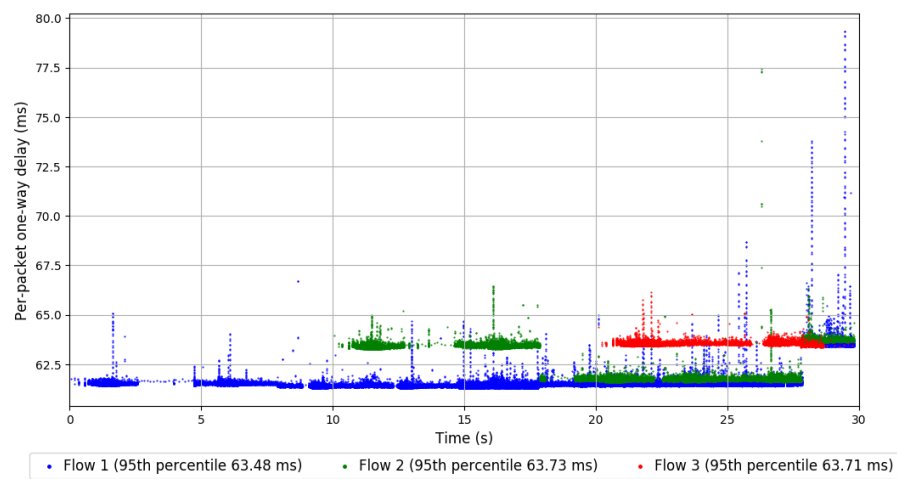
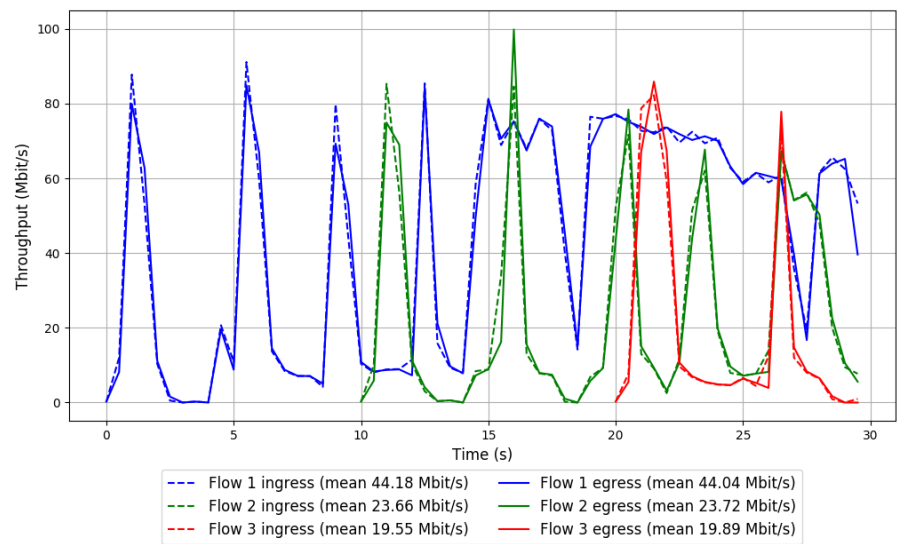
-- Flow 3:

Average throughput: 19.89 Mbit/s

95th percentile per-packet one-way delay: 63.708 ms

Loss rate: 0.25%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-01 03:53:43

End at: 2018-02-01 03:54:13

Below is generated by plot.py at 2018-02-01 07:34:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.27 Mbit/s

95th percentile per-packet one-way delay: 63.597 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 31.92 Mbit/s

95th percentile per-packet one-way delay: 63.661 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 47.45 Mbit/s

95th percentile per-packet one-way delay: 61.784 ms

Loss rate: 0.07%

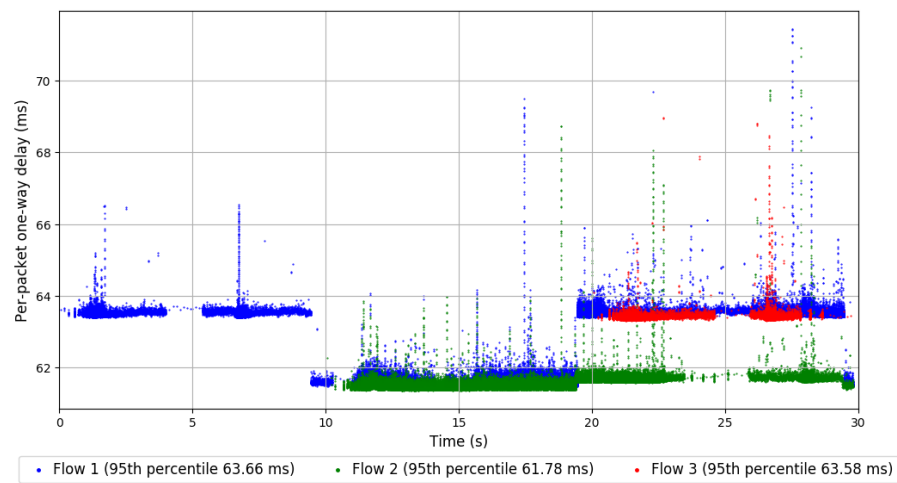
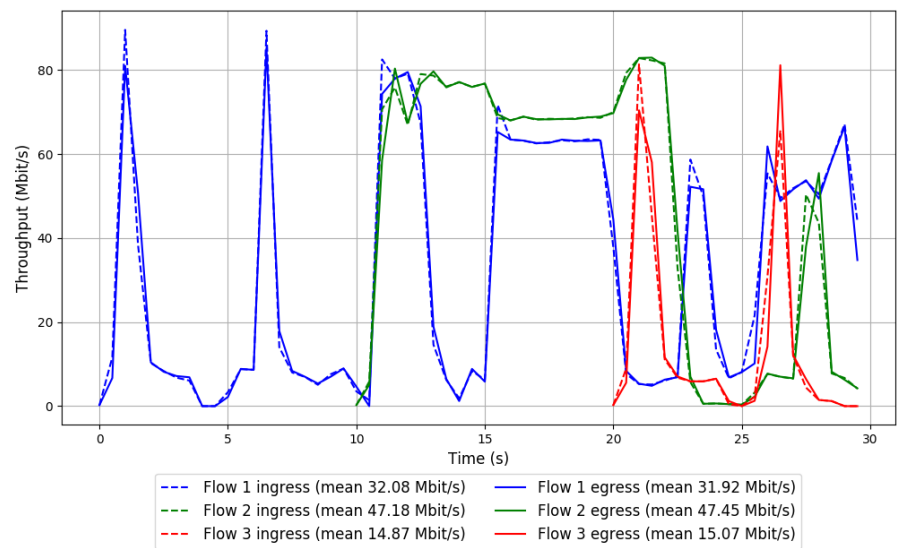
-- Flow 3:

Average throughput: 15.07 Mbit/s

95th percentile per-packet one-way delay: 63.582 ms

Loss rate: 0.00%

Run 10: Report of QUIC Cubic — Data Link

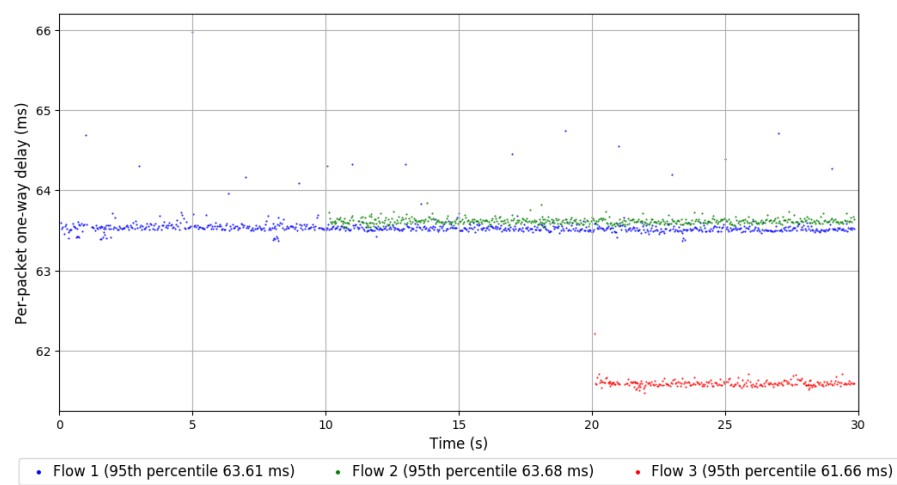
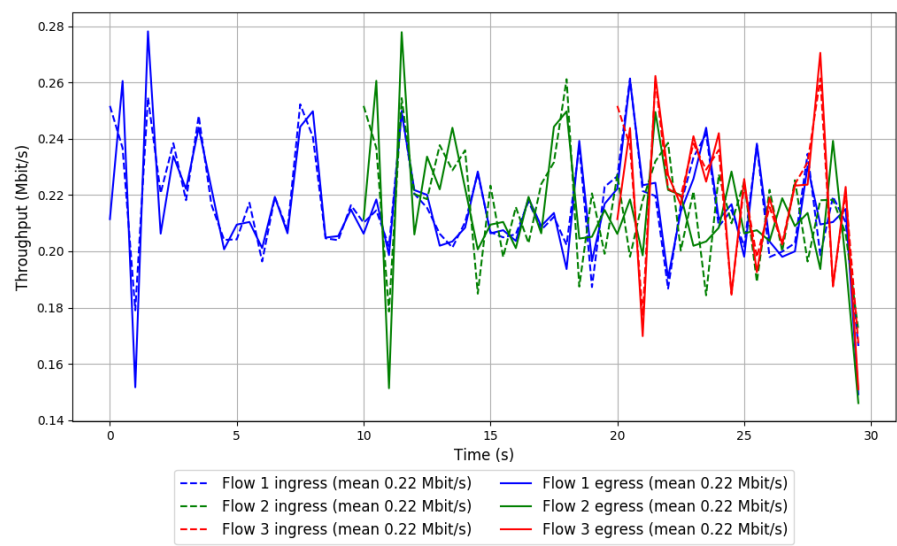


```
Run 1: Statistics of SCReAM

Start at: 2018-02-01 01:28:08
End at: 2018-02-01 01:28:38

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.662 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.614 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.681 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.659 ms
Loss rate: 1.10%
```

Run 1: Report of SReAM — Data Link

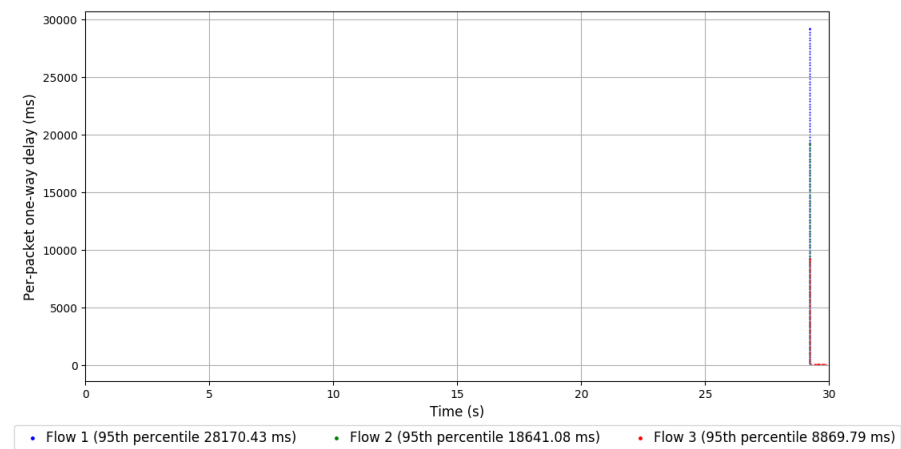
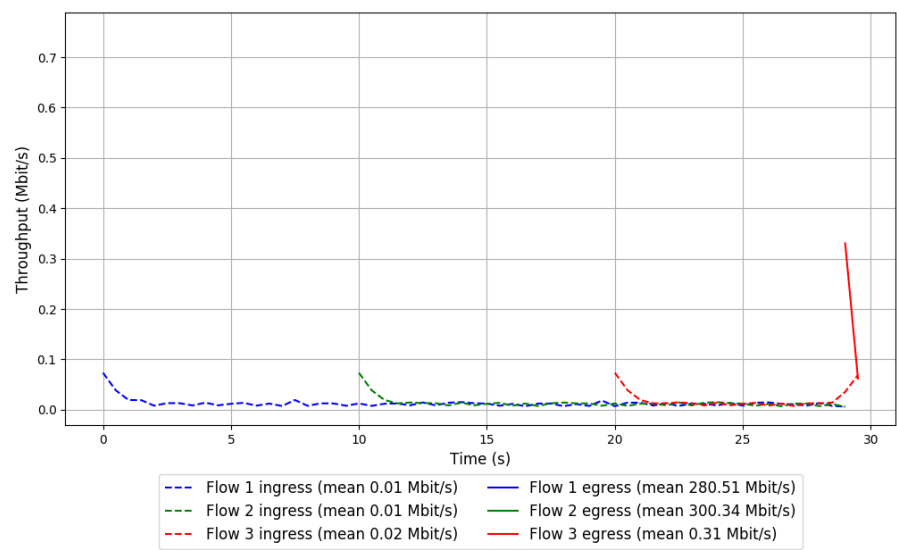


Run 2: Statistics of SReAM

Start at: 2018-02-01 01:44:58

End at: 2018-02-01 01:45:28

Run 2: Report of SReAM — Data Link

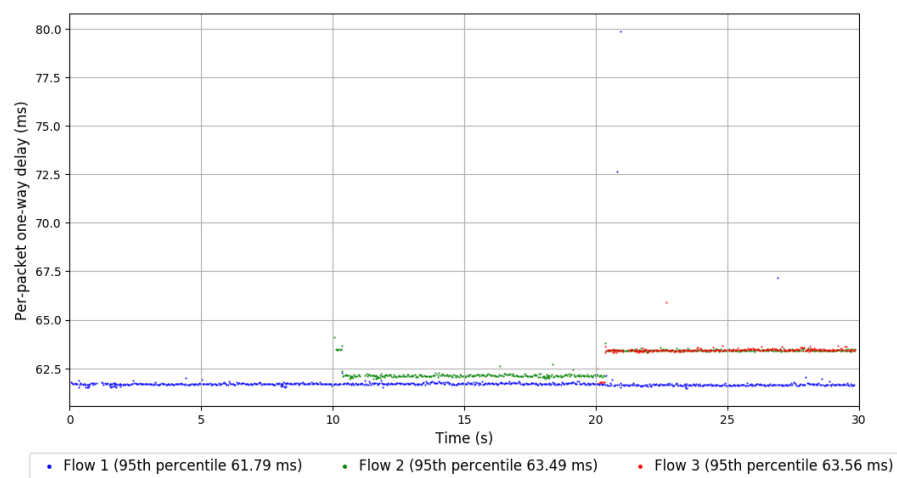
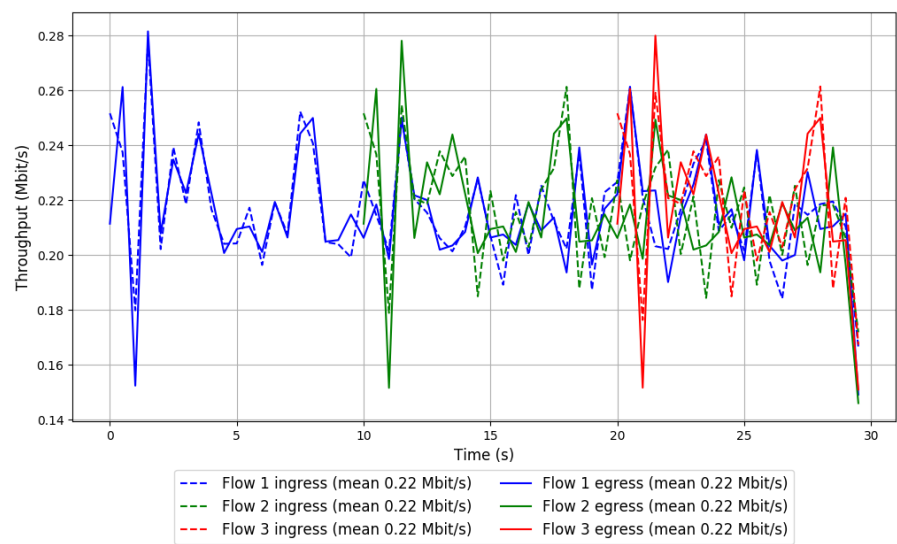


```
Run 3: Statistics of SCReAM

Start at: 2018-02-01 02:01:53
End at: 2018-02-01 02:02:23

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.479 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.787 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.486 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.565 ms
Loss rate: 1.10%
```


Run 3: Report of SReAM — Data Link

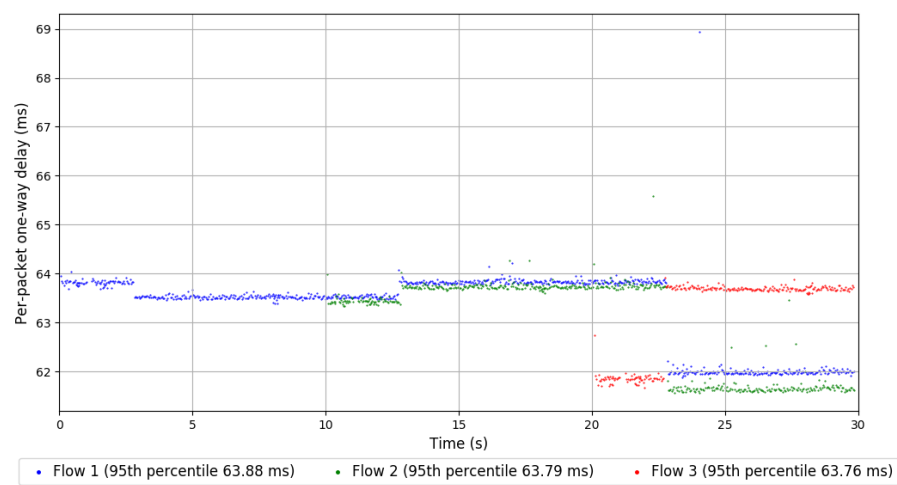
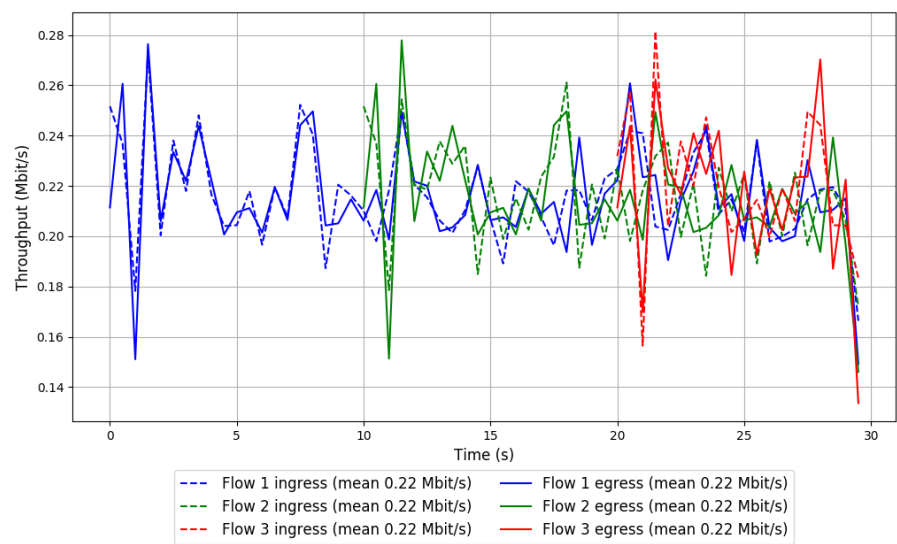


```
Run 4: Statistics of SCReAM

Start at: 2018-02-01 02:18:50
End at: 2018-02-01 02:19:20

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.863 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.879 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.790 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.762 ms
Loss rate: 1.49%
```

Run 4: Report of SReAM — Data Link

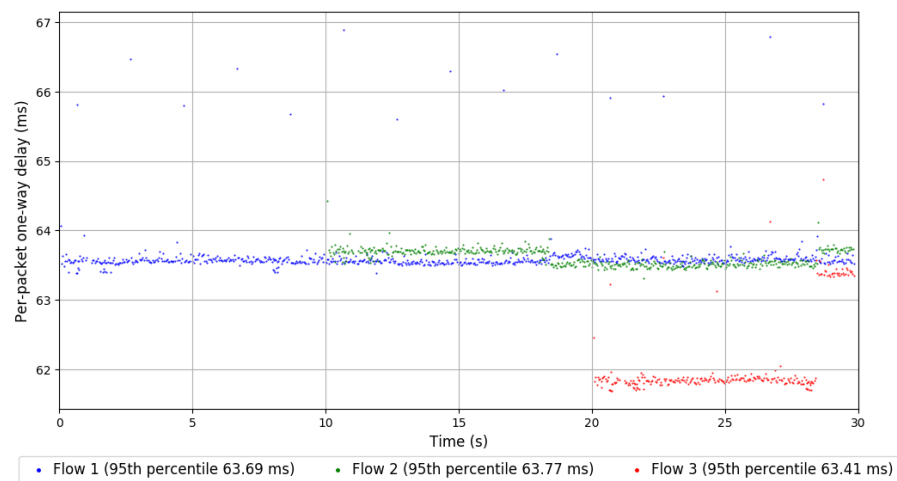
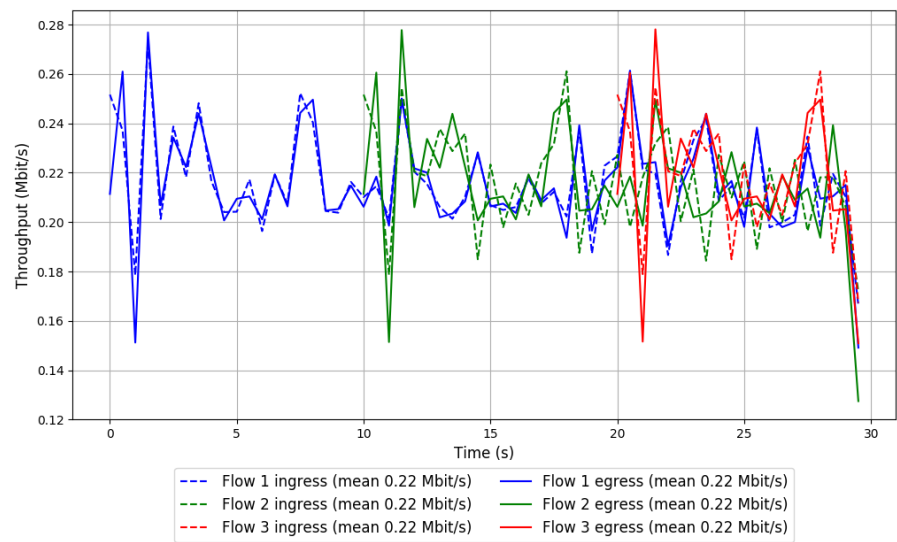


```
Run 5: Statistics of SCReAM

Start at: 2018-02-01 02:35:34
End at: 2018-02-01 02:36:05

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.740 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.688 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.765 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.408 ms
Loss rate: 1.10%
```

Run 5: Report of SReAM — Data Link

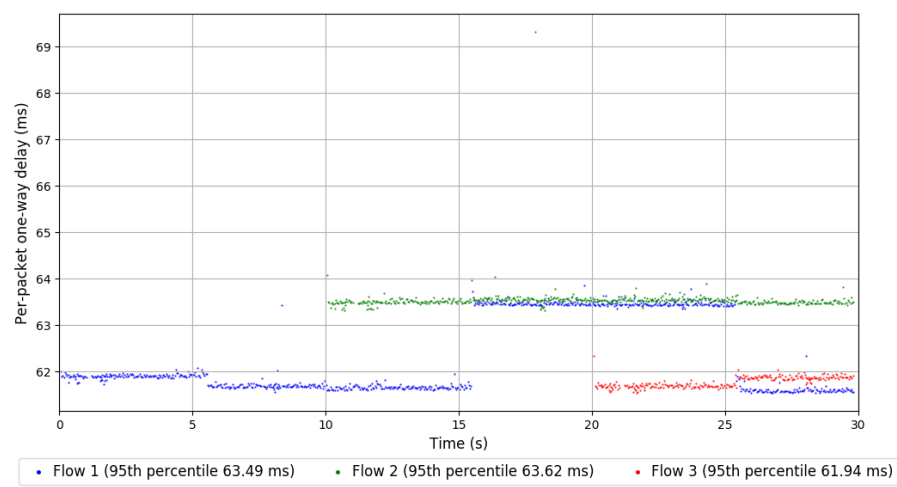
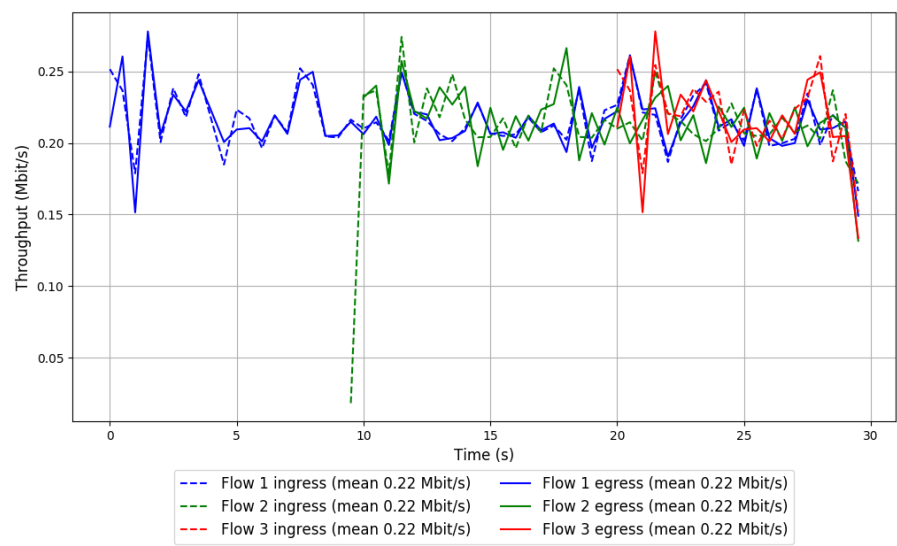


```
Run 6: Statistics of SCReAM

Start at: 2018-02-01 02:52:27
End at: 2018-02-01 02:52:57

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.578 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.495 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.620 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.938 ms
Loss rate: 1.15%
```

Run 6: Report of SReAM — Data Link

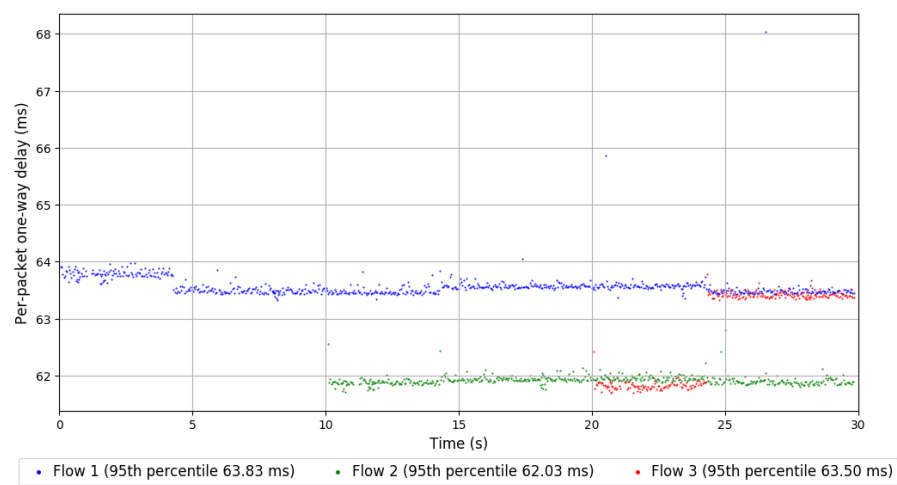
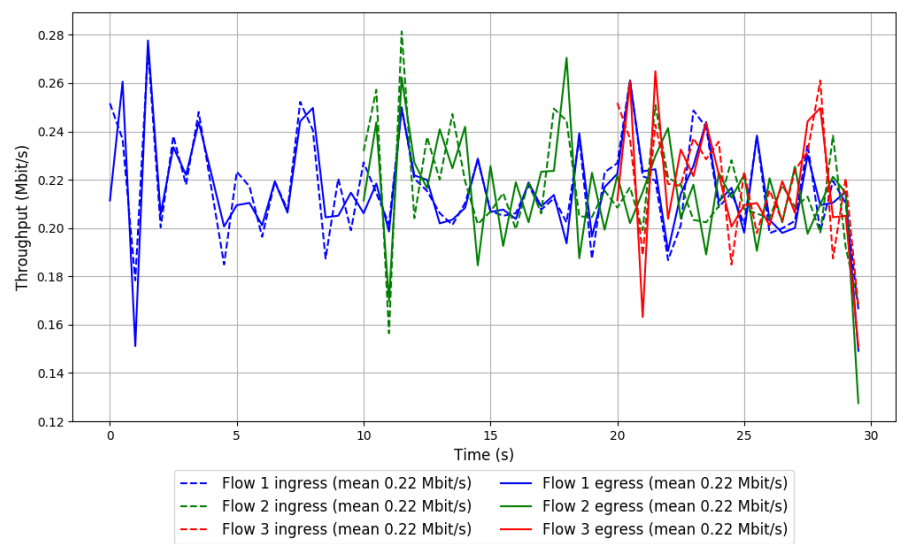


```
Run 7: Statistics of SReAM

Start at: 2018-02-01 03:09:19
End at: 2018-02-01 03:09:49

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.773 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.825 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.032 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.501 ms
Loss rate: 1.11%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-01 03:26:00

End at: 2018-02-01 03:26:30

Below is generated by plot.py at 2018-02-01 07:34:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 63.711 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.665 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.783 ms

Loss rate: 0.63%

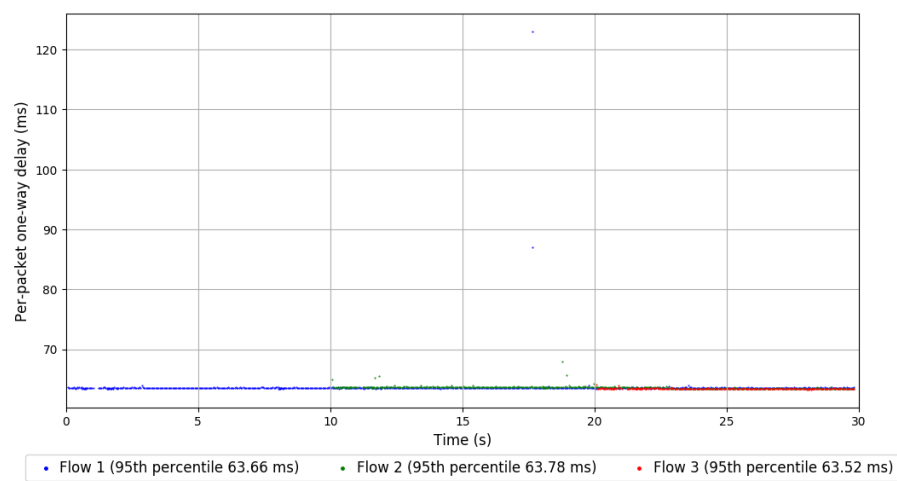
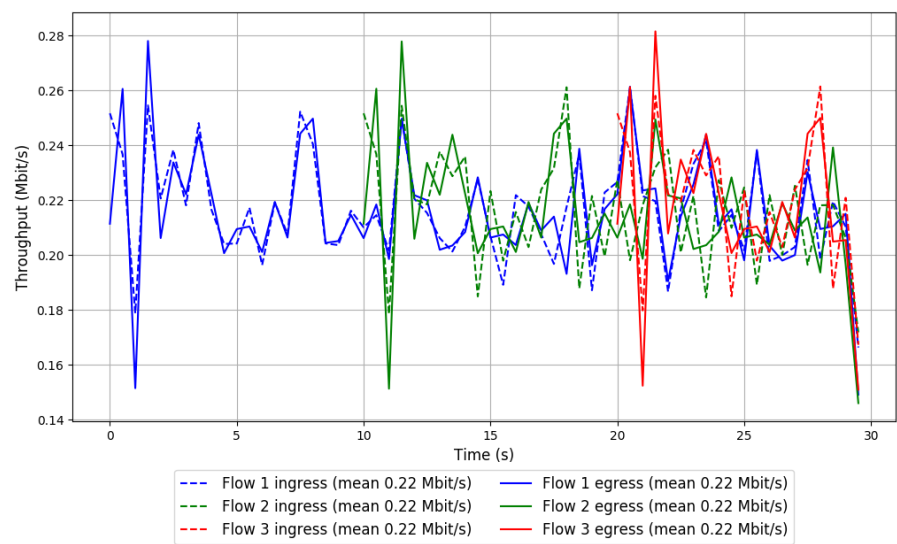
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.516 ms

Loss rate: 1.10%

Run 8: Report of SReAM — Data Link

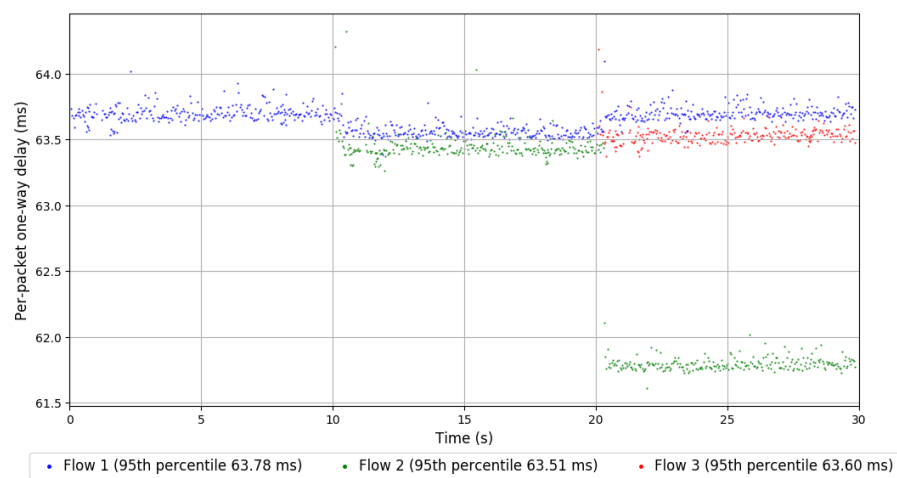
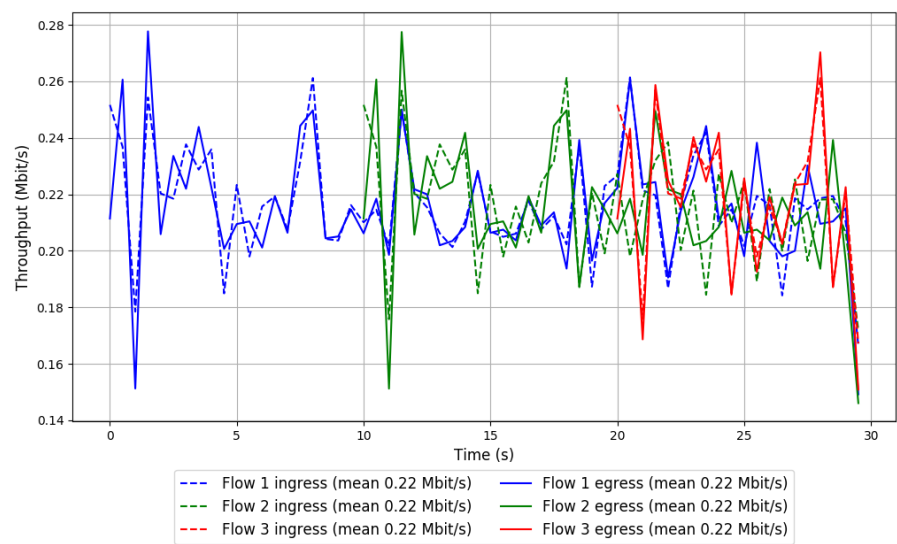


```
Run 9: Statistics of SCReAM

Start at: 2018-02-01 03:42:53
End at: 2018-02-01 03:43:23

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.753 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.785 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.510 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.604 ms
Loss rate: 1.10%
```

Run 9: Report of SReAM — Data Link

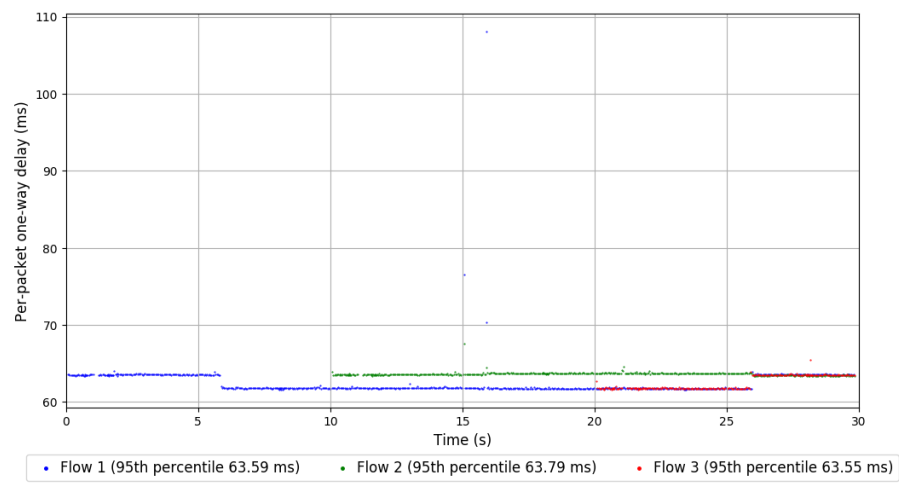
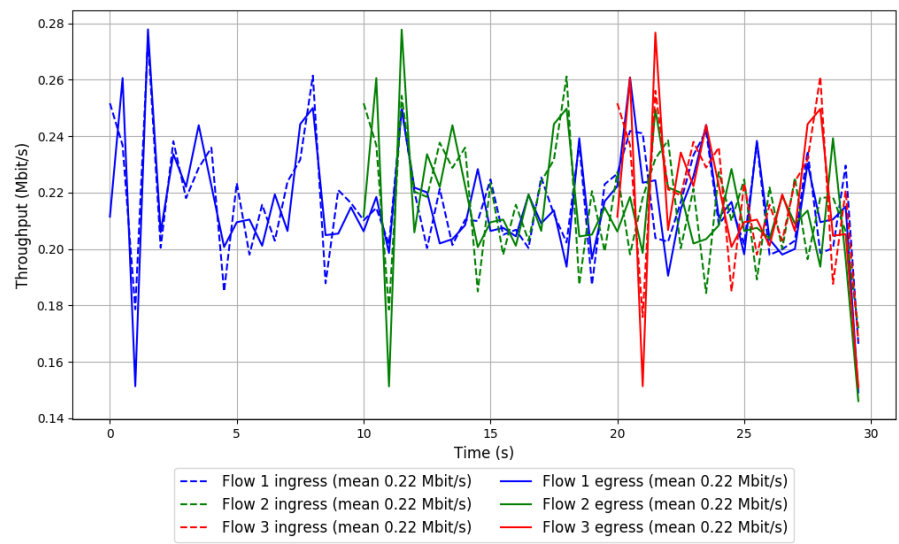


```
Run 10: Statistics of SReAM

Start at: 2018-02-01 03:59:47
End at: 2018-02-01 04:00:17

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.746 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.590 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.787 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.550 ms
Loss rate: 1.10%
```

Run 10: Report of SCReAM — Data Link

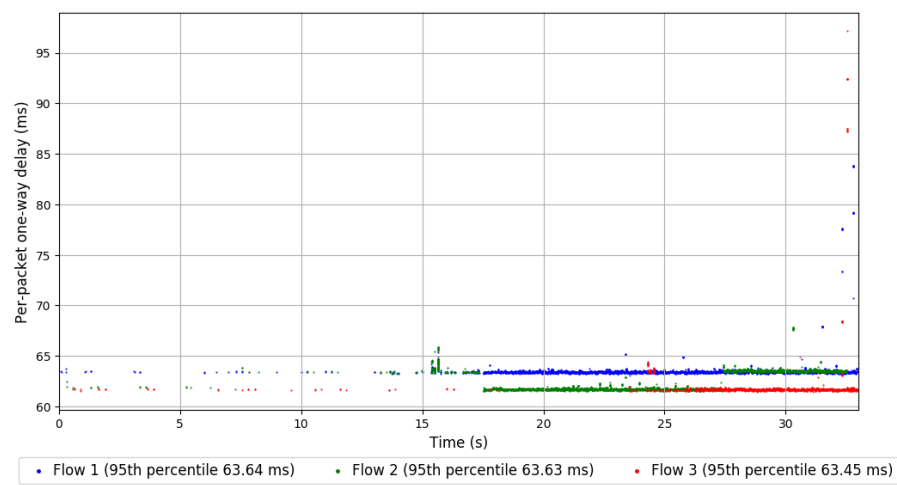
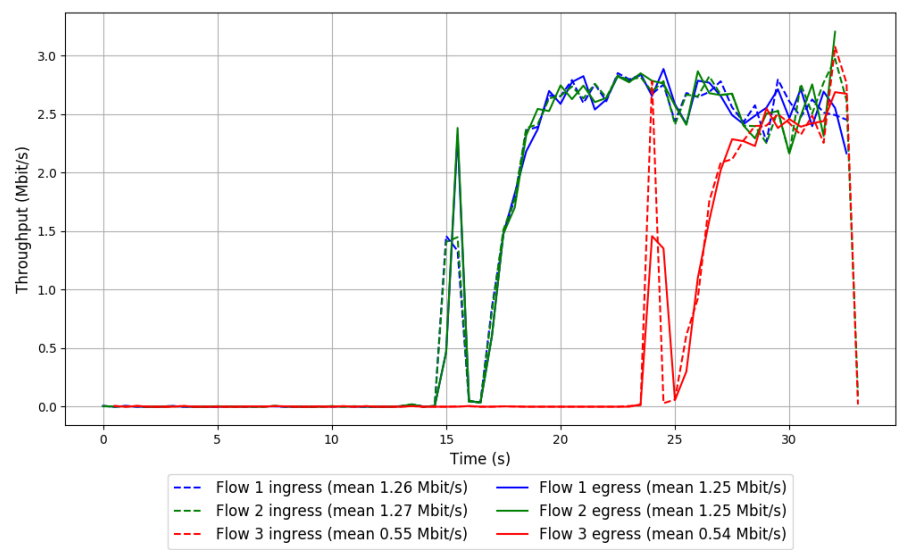


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-01 01:28:49
End at: 2018-02-01 01:29:19

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.00 Mbit/s
95th percentile per-packet one-way delay: 63.615 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 63.637 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 1.25 Mbit/s
95th percentile per-packet one-way delay: 63.626 ms
Loss rate: 3.83%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 63.454 ms
Loss rate: 1.74%
```


Run 1: Report of WebRTC media — Data Link

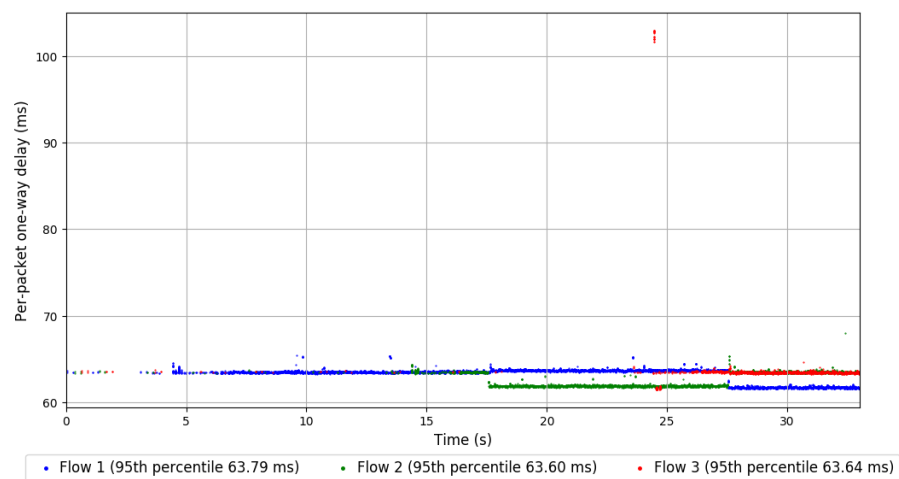
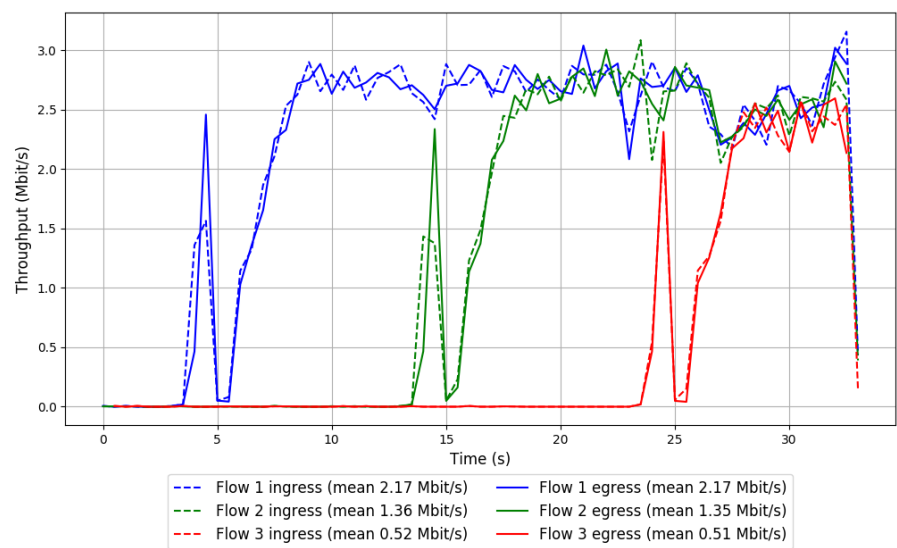


```
Run 2: Statistics of WebRTC media

Start at: 2018-02-01 01:45:38
End at: 2018-02-01 01:46:08

# Below is generated by plot.py at 2018-02-01 07:34:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 63.756 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 63.789 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 1.35 Mbit/s
95th percentile per-packet one-way delay: 63.604 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 63.641 ms
Loss rate: 1.68%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-01 02:02:33

End at: 2018-02-01 02:03:03

Below is generated by plot.py at 2018-02-01 07:34:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.04 Mbit/s

95th percentile per-packet one-way delay: 63.591 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 63.550 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 63.625 ms

Loss rate: 0.72%

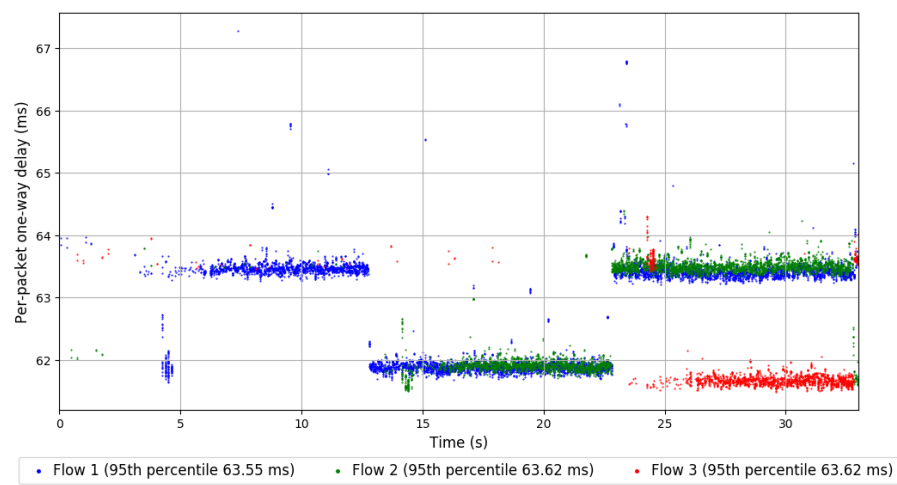
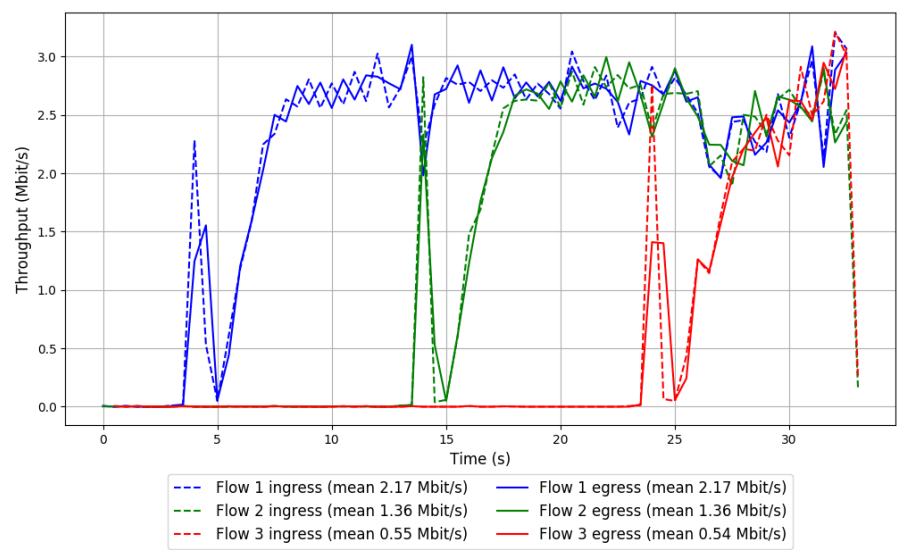
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 63.616 ms

Loss rate: 1.95%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-01 02:19:31

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

Below is generated by plot.py at 2018-02-01 07:34:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 63.772 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 63.782 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 63.773 ms

Loss rate: 0.61%

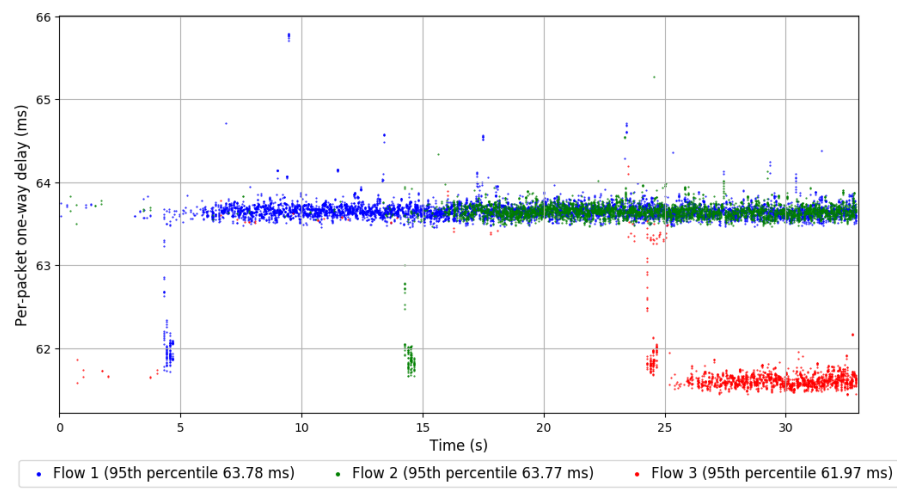
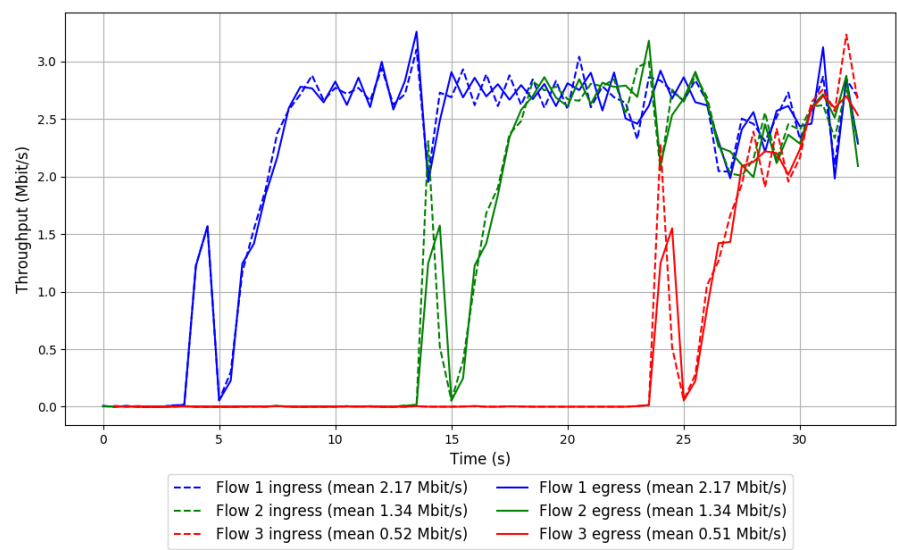
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 61.965 ms

Loss rate: 2.82%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-01 02:36:15

End at: 2018-02-01 02:36:45

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 63.592 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 63.603 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 63.469 ms

Loss rate: 0.55%

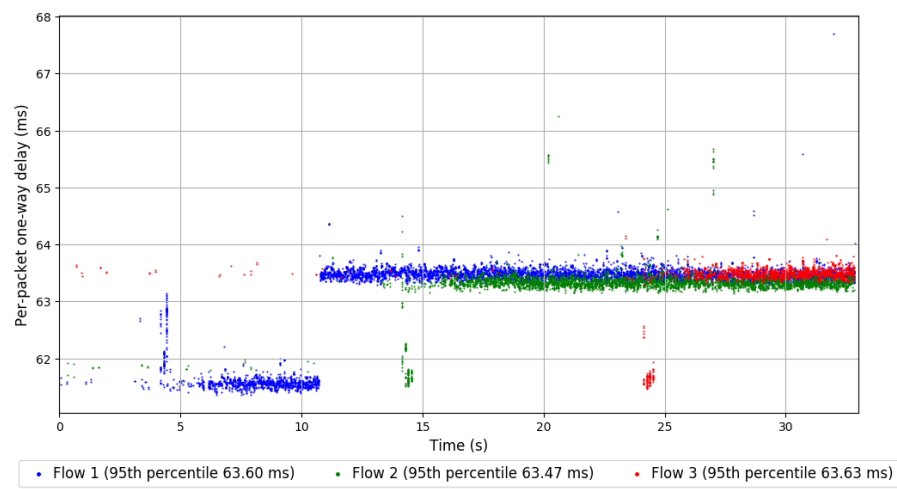
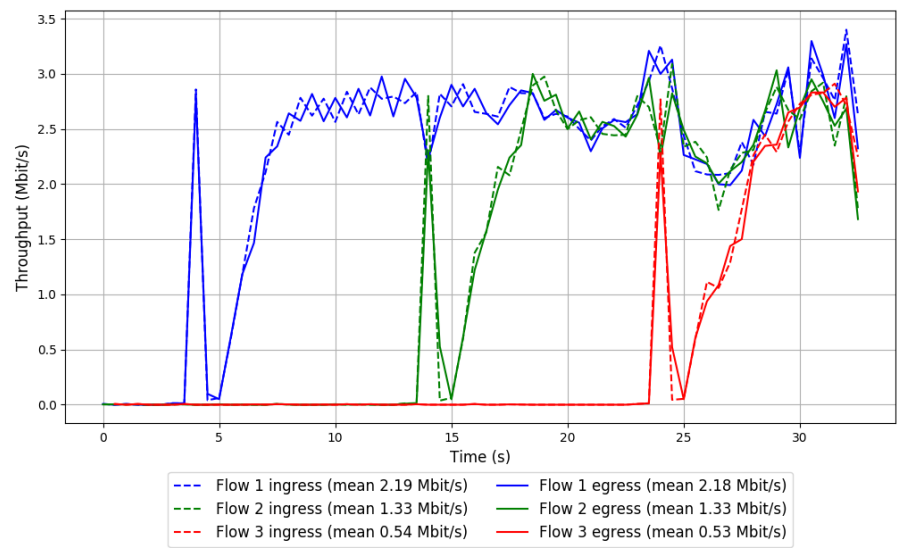
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 63.633 ms

Loss rate: 2.17%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-01 02:53:08

End at: 2018-02-01 02:53:38

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 63.994 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 64.023 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 63.740 ms

Loss rate: 0.49%

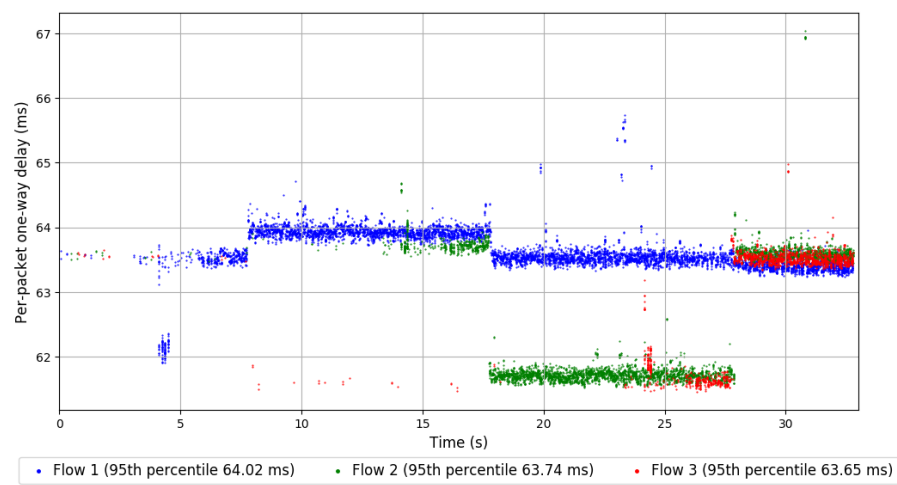
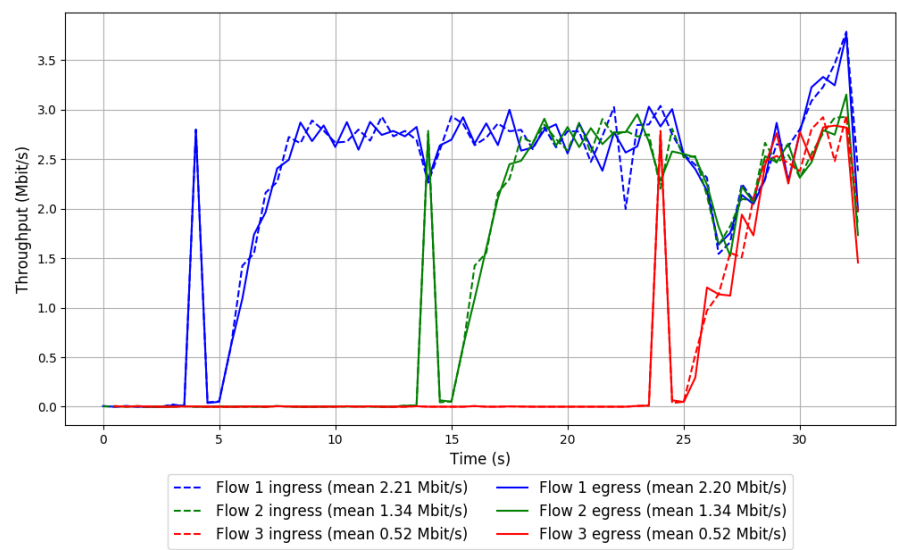
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 63.650 ms

Loss rate: 2.04%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-01 03:09:59

End at: 2018-02-01 03:10:29

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.91 Mbit/s

95th percentile per-packet one-way delay: 63.625 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 63.620 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 63.617 ms

Loss rate: 0.30%

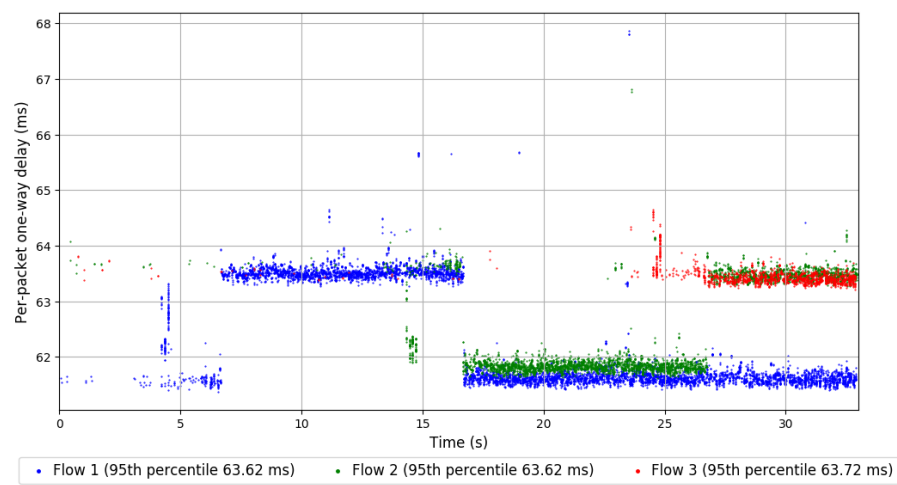
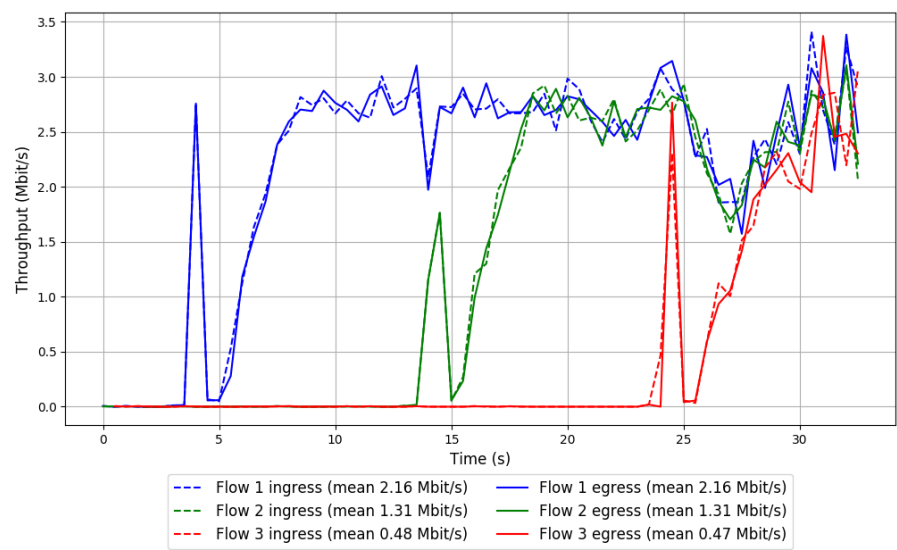
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 63.721 ms

Loss rate: 2.85%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-01 03:26:41

End at: 2018-02-01 03:27:11

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 63.683 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 63.595 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 63.734 ms

Loss rate: 0.65%

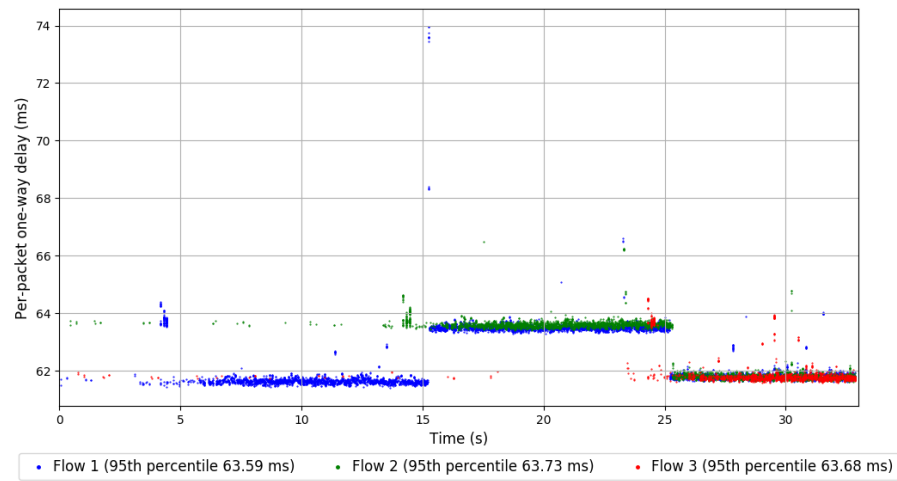
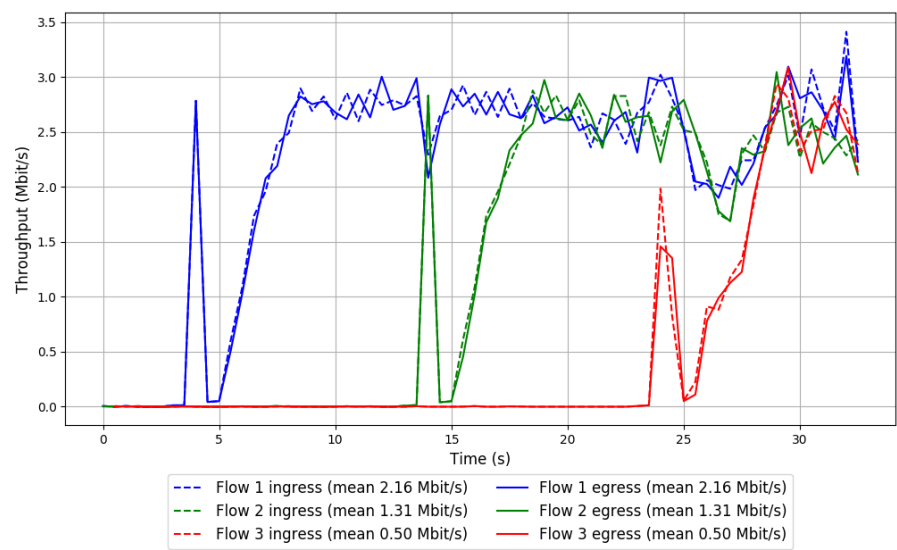
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 63.677 ms

Loss rate: 0.97%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-01 03:43:33

End at: 2018-02-01 03:44:03

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 63.992 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 64.028 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 63.607 ms

Loss rate: 0.43%

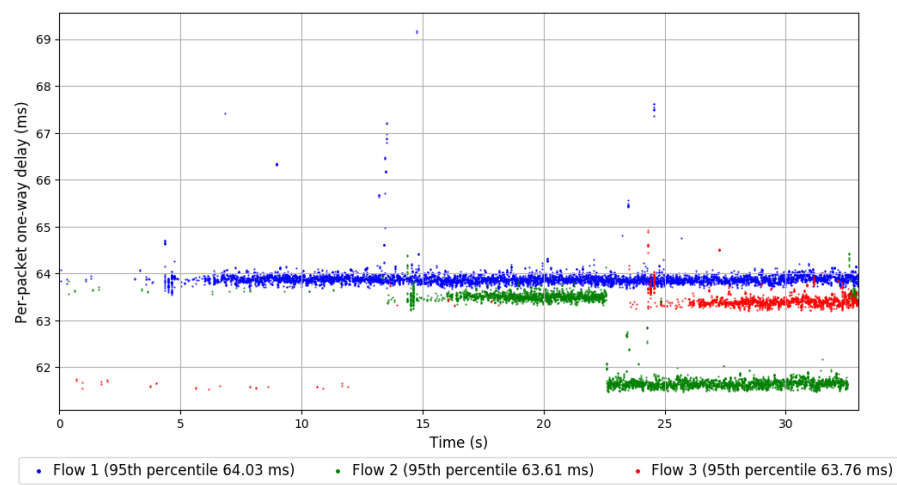
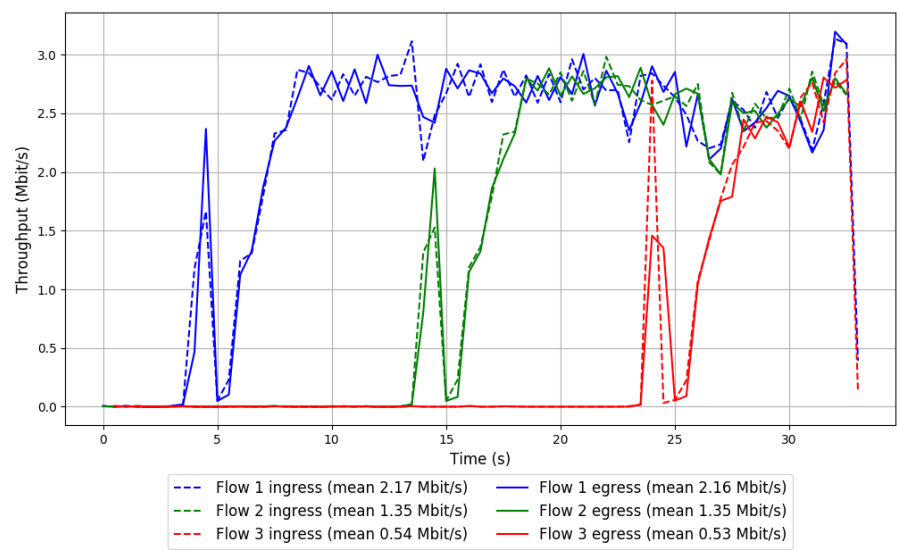
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 63.757 ms

Loss rate: 2.07%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-01 04:00:28

End at: 2018-02-01 04:00:58

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.04 Mbit/s

95th percentile per-packet one-way delay: 63.654 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 63.633 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 63.665 ms

Loss rate: 0.68%

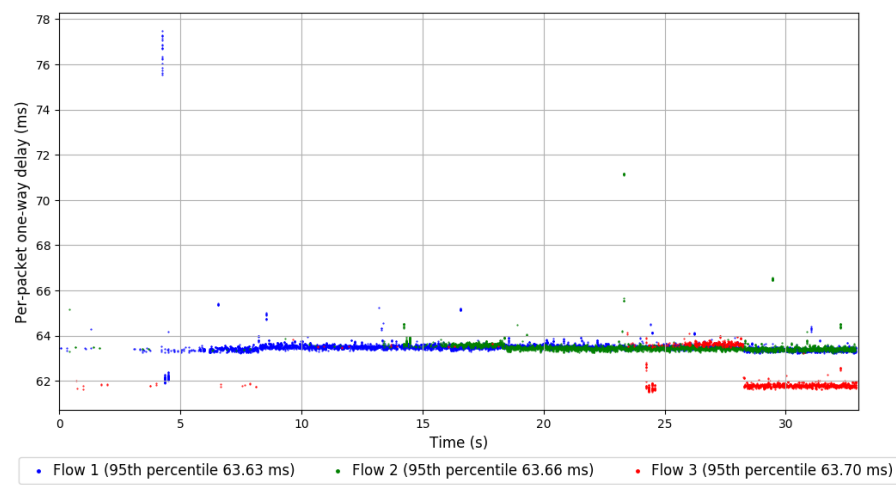
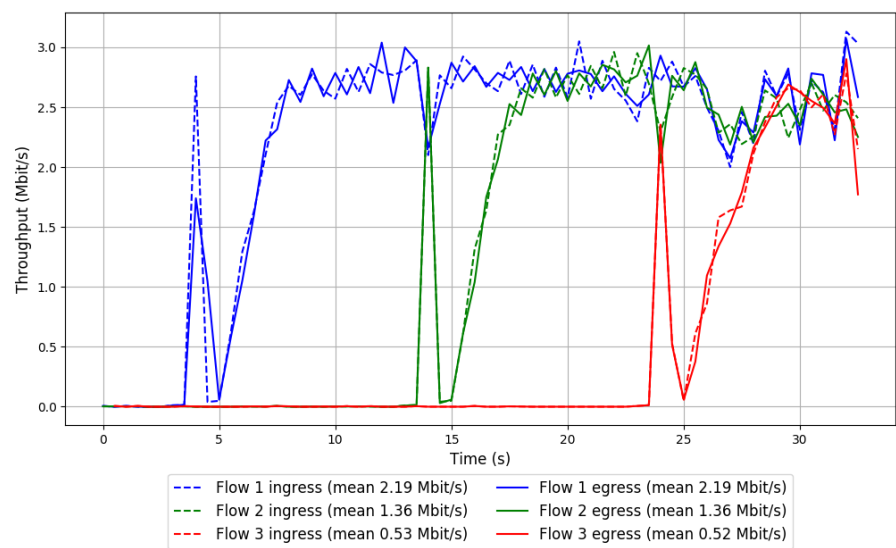
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 63.696 ms

Loss rate: 1.51%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-01 01:26:13

End at: 2018-02-01 01:26:43

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.46 Mbit/s

95th percentile per-packet one-way delay: 64.682 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 6.29 Mbit/s

95th percentile per-packet one-way delay: 64.634 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 6.38 Mbit/s

95th percentile per-packet one-way delay: 64.621 ms

Loss rate: 0.70%

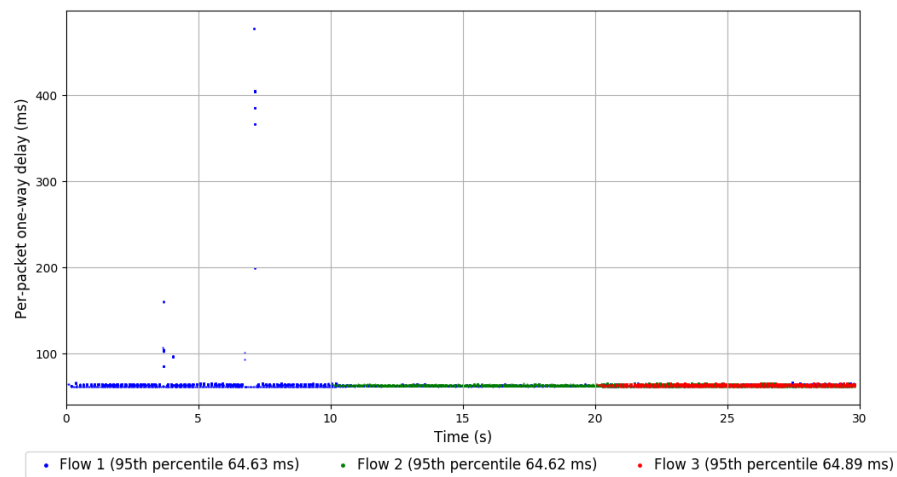
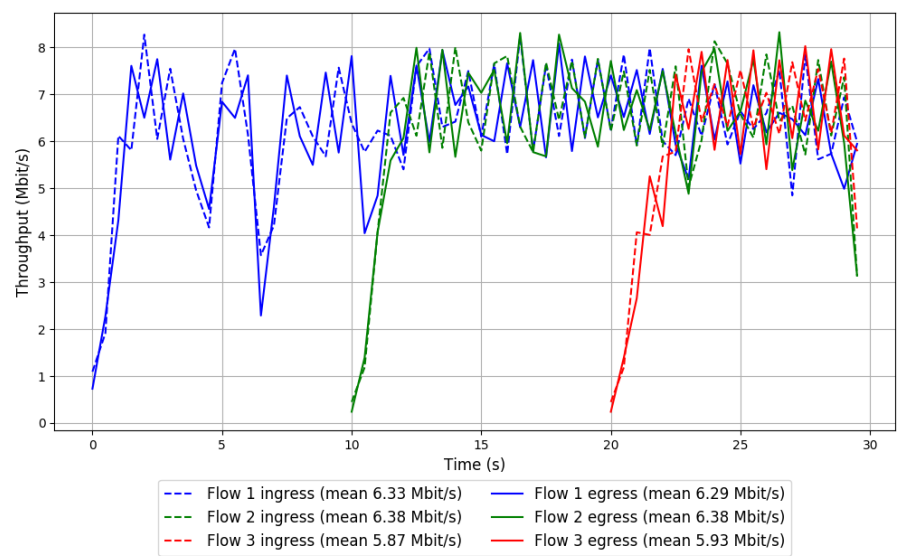
-- Flow 3:

Average throughput: 5.93 Mbit/s

95th percentile per-packet one-way delay: 64.887 ms

Loss rate: 0.30%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-01 01:42:59

End at: 2018-02-01 01:43:29

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.37 Mbit/s

95th percentile per-packet one-way delay: 64.798 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 6.24 Mbit/s

95th percentile per-packet one-way delay: 64.752 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 6.26 Mbit/s

95th percentile per-packet one-way delay: 64.735 ms

Loss rate: 1.39%

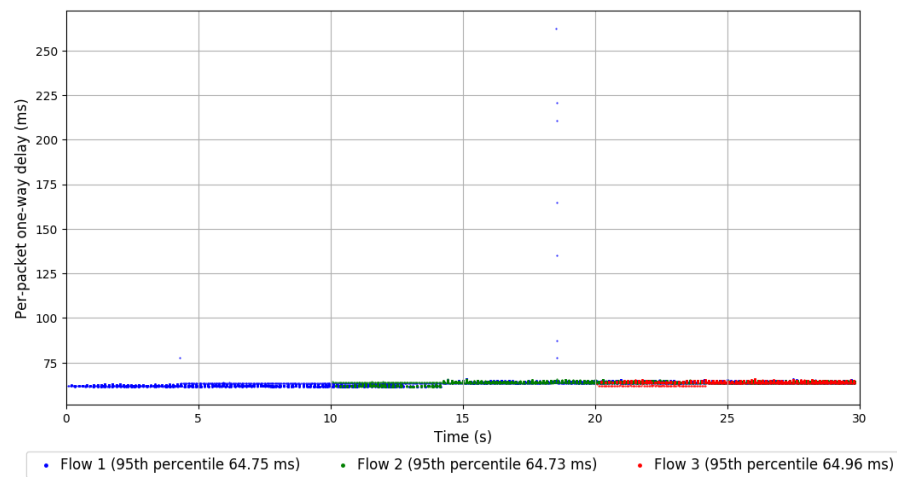
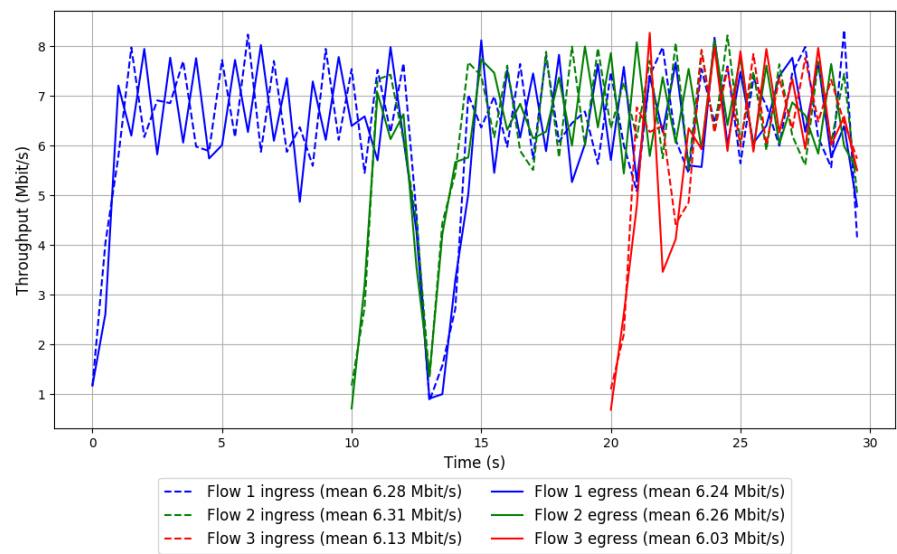
-- Flow 3:

Average throughput: 6.03 Mbit/s

95th percentile per-packet one-way delay: 64.960 ms

Loss rate: 3.04%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-01 01:59:58

End at: 2018-02-01 02:00:28

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.97 Mbit/s

95th percentile per-packet one-way delay: 64.514 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 64.555 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 5.84 Mbit/s

95th percentile per-packet one-way delay: 64.352 ms

Loss rate: 1.95%

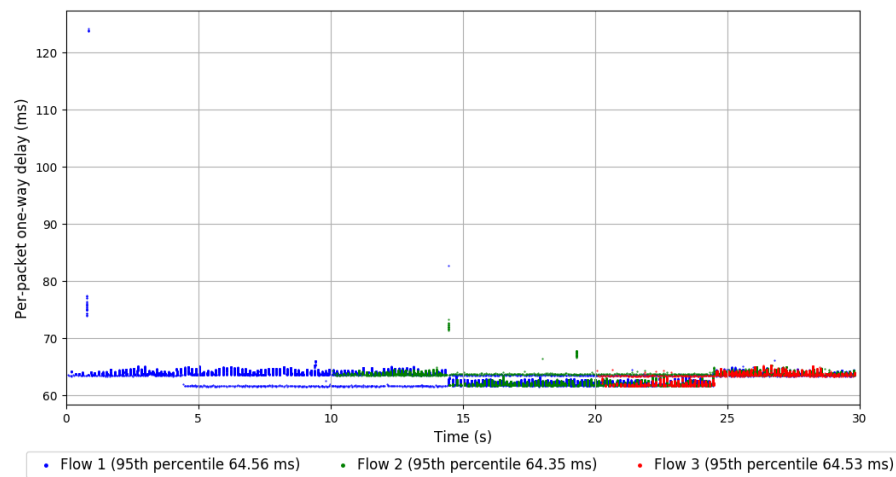
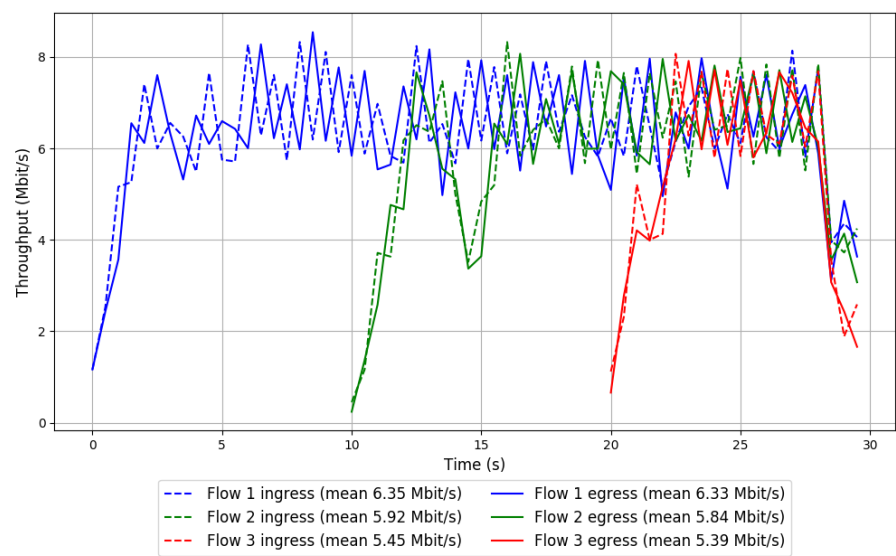
-- Flow 3:

Average throughput: 5.39 Mbit/s

95th percentile per-packet one-way delay: 64.535 ms

Loss rate: 2.47%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-01 02:16:56

End at: 2018-02-01 02:17:26

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.75 Mbit/s

95th percentile per-packet one-way delay: 63.301 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 6.64 Mbit/s

95th percentile per-packet one-way delay: 63.160 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 63.383 ms

Loss rate: 1.42%

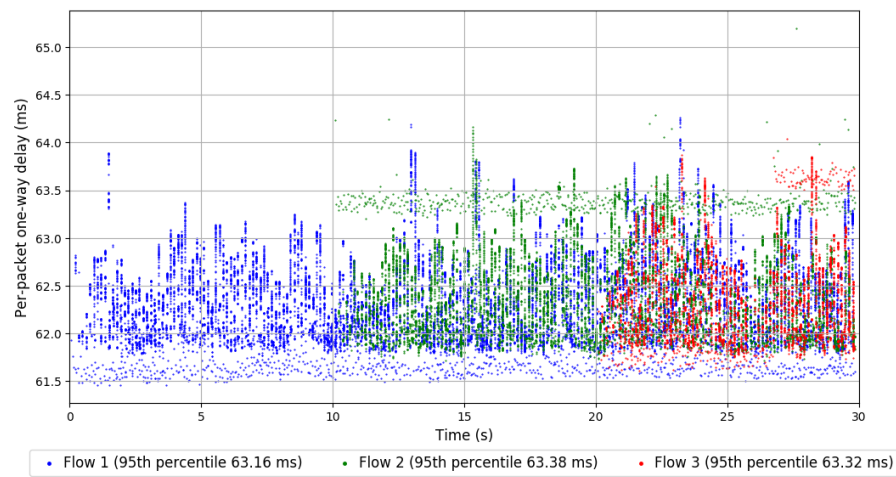
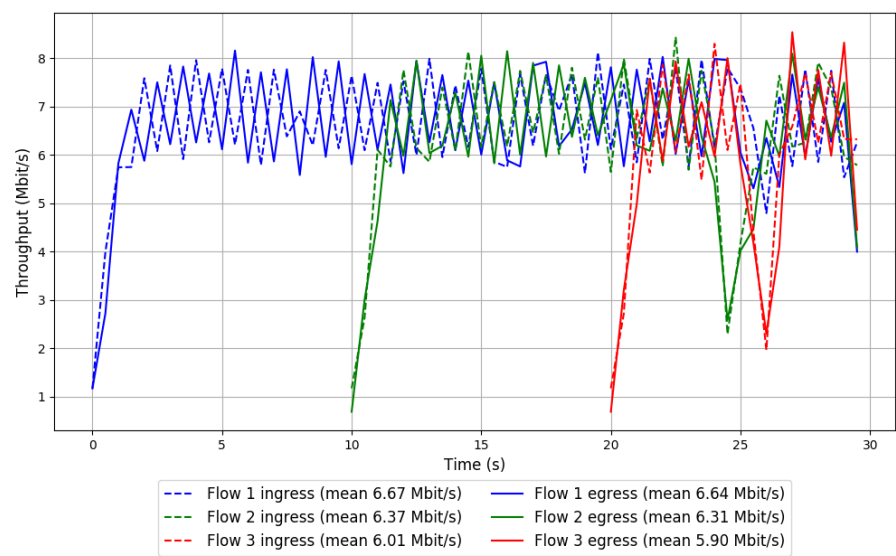
-- Flow 3:

Average throughput: 5.90 Mbit/s

95th percentile per-packet one-way delay: 63.317 ms

Loss rate: 3.22%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-01 02:33:43

End at: 2018-02-01 02:34:13

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.78 Mbit/s

95th percentile per-packet one-way delay: 64.185 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 64.021 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 6.57 Mbit/s

95th percentile per-packet one-way delay: 64.247 ms

Loss rate: 0.77%

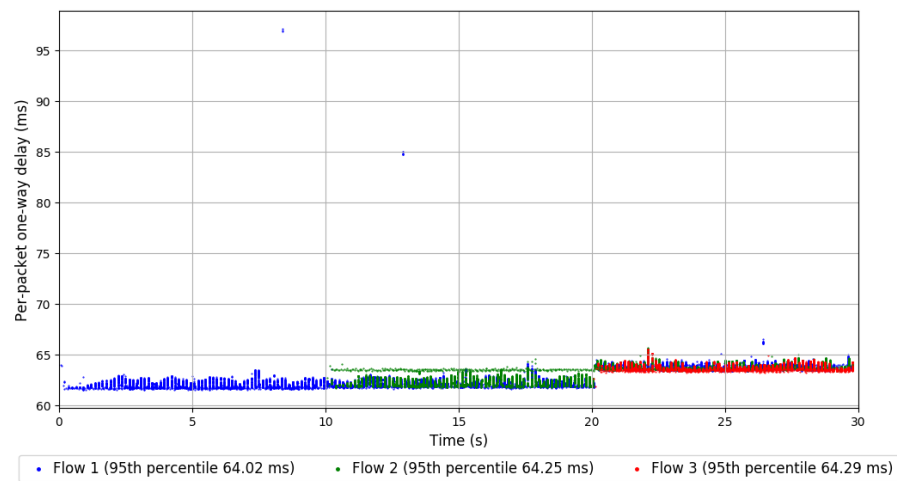
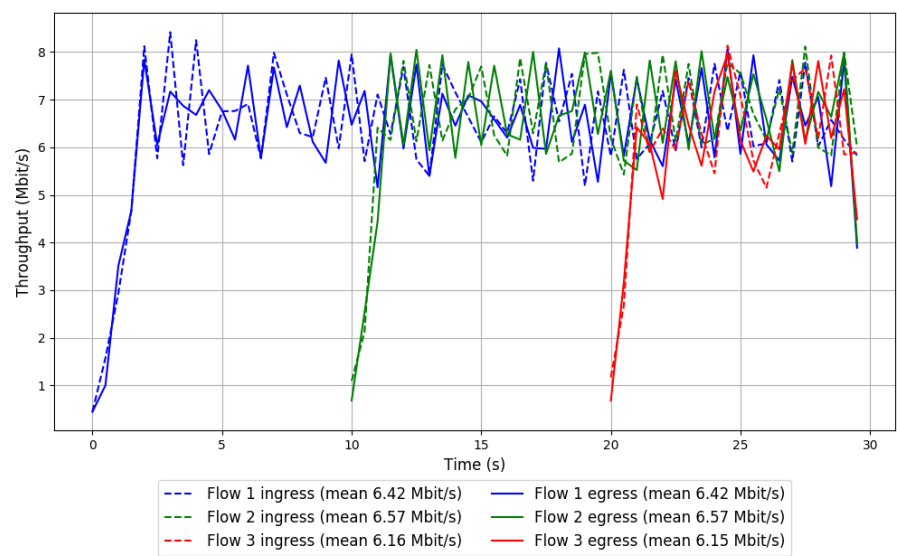
-- Flow 3:

Average throughput: 6.15 Mbit/s

95th percentile per-packet one-way delay: 64.294 ms

Loss rate: 1.63%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-01 02:50:35

End at: 2018-02-01 02:51:05

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.89 Mbit/s

95th percentile per-packet one-way delay: 64.413 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 64.444 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 64.451 ms

Loss rate: 1.45%

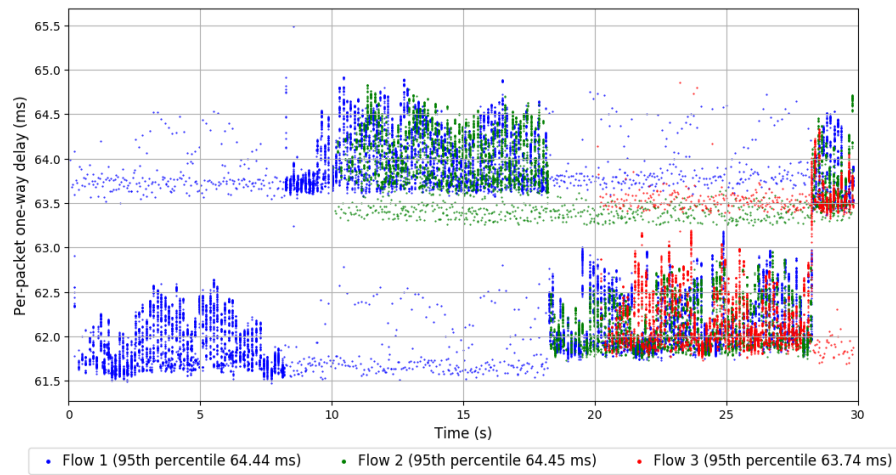
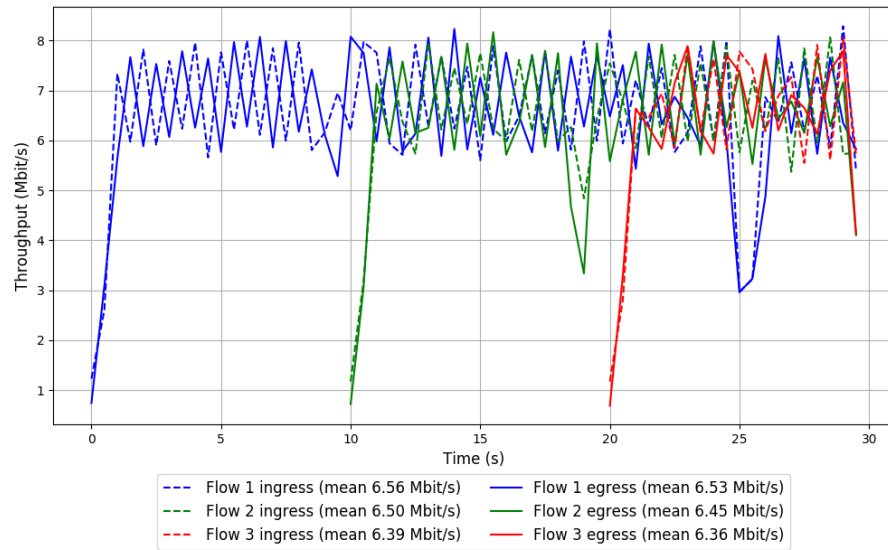
-- Flow 3:

Average throughput: 6.36 Mbit/s

95th percentile per-packet one-way delay: 63.742 ms

Loss rate: 1.46%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-01 03:07:27

End at: 2018-02-01 03:07:57

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.02 Mbit/s

95th percentile per-packet one-way delay: 64.194 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 6.58 Mbit/s

95th percentile per-packet one-way delay: 63.972 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 6.63 Mbit/s

95th percentile per-packet one-way delay: 64.210 ms

Loss rate: 0.73%

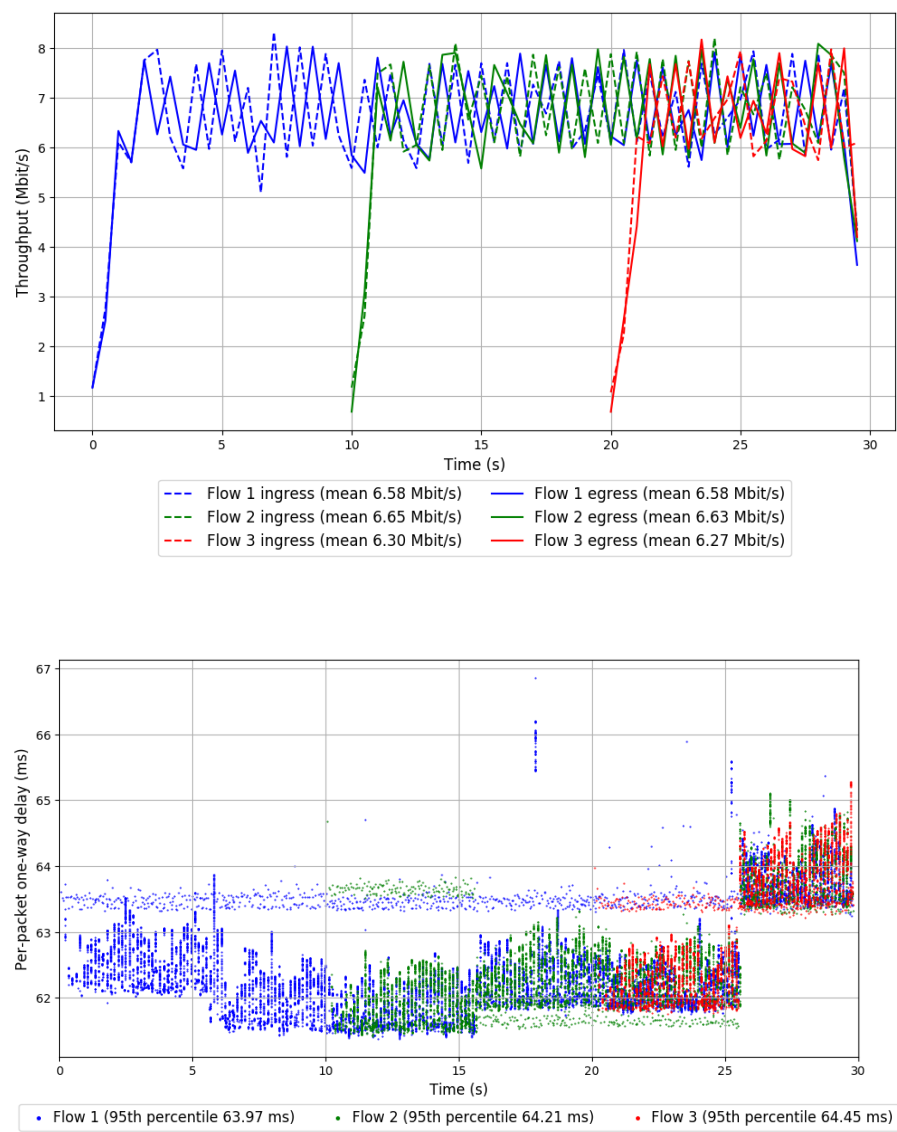
-- Flow 3:

Average throughput: 6.27 Mbit/s

95th percentile per-packet one-way delay: 64.449 ms

Loss rate: 1.53%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-01 03:24:08

End at: 2018-02-01 03:24:38

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.04 Mbit/s

95th percentile per-packet one-way delay: 64.453 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 6.69 Mbit/s

95th percentile per-packet one-way delay: 64.273 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 64.516 ms

Loss rate: 0.89%

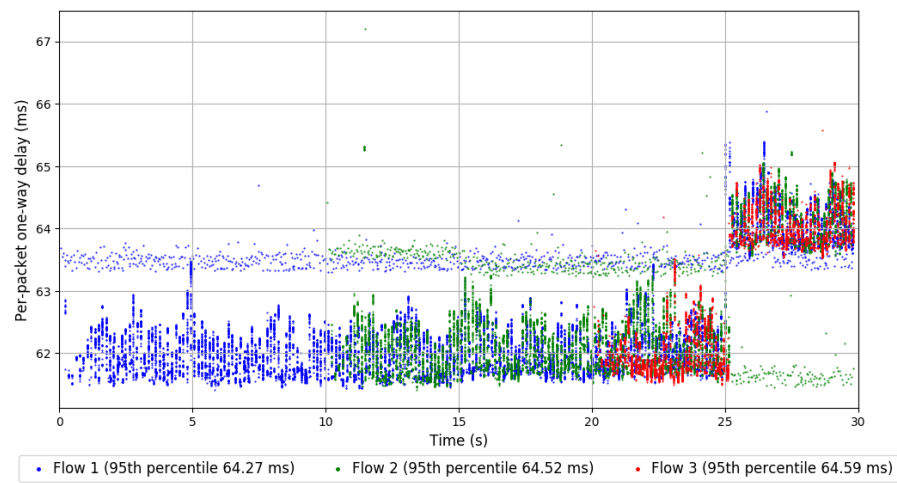
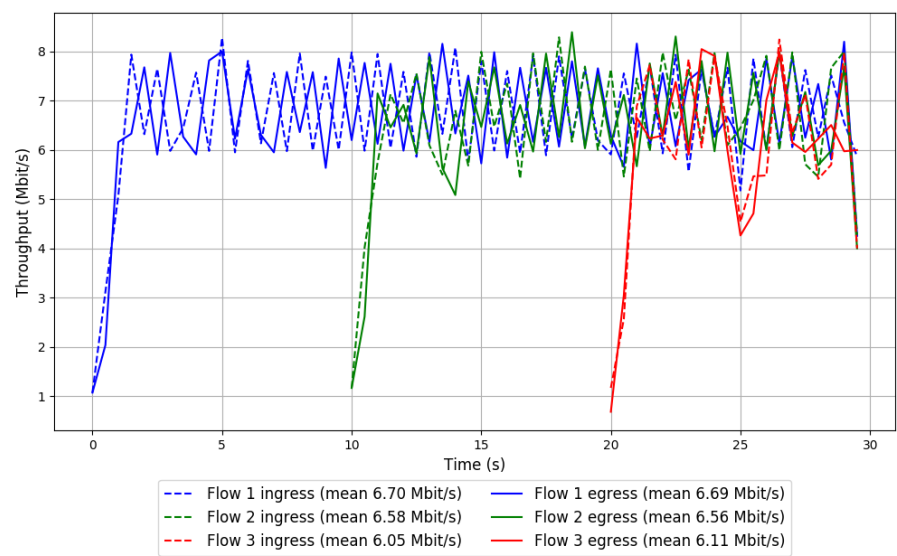
-- Flow 3:

Average throughput: 6.11 Mbit/s

95th percentile per-packet one-way delay: 64.588 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-01 03:41:03

End at: 2018-02-01 03:41:33

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.27 Mbit/s

95th percentile per-packet one-way delay: 64.616 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 6.15 Mbit/s

95th percentile per-packet one-way delay: 64.504 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 6.24 Mbit/s

95th percentile per-packet one-way delay: 64.795 ms

Loss rate: 0.71%

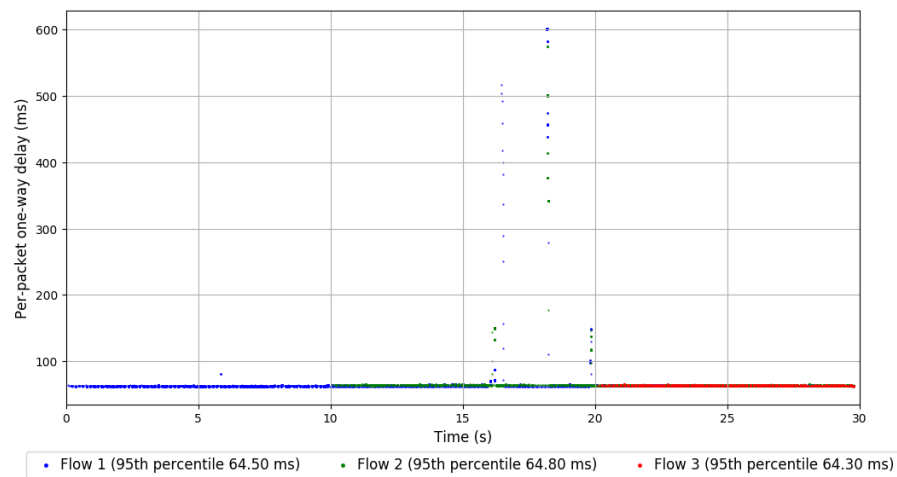
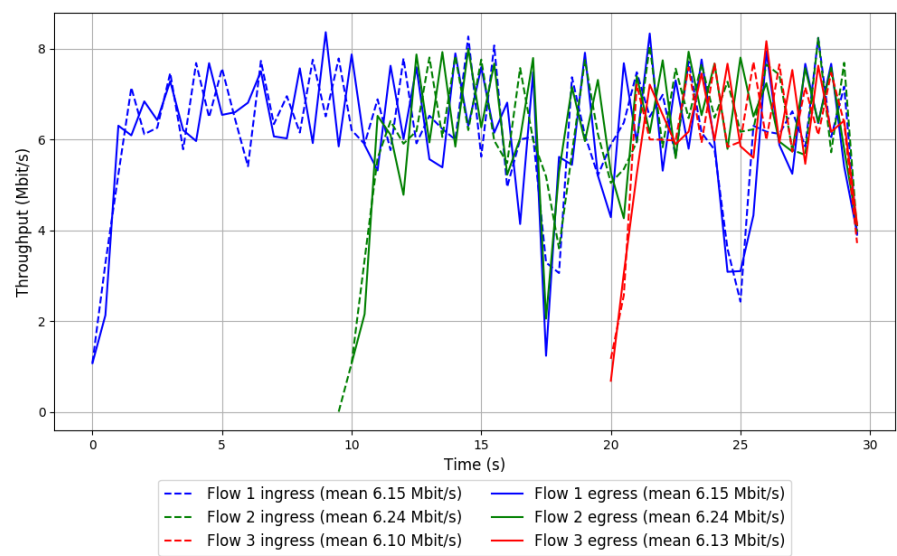
-- Flow 3:

Average throughput: 6.13 Mbit/s

95th percentile per-packet one-way delay: 64.296 ms

Loss rate: 0.84%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-01 03:57:55

End at: 2018-02-01 03:58:25

Below is generated by plot.py at 2018-02-01 07:34:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.49 Mbit/s

95th percentile per-packet one-way delay: 63.939 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 6.20 Mbit/s

95th percentile per-packet one-way delay: 64.132 ms

Loss rate: 1.66%

-- Flow 2:

Average throughput: 6.60 Mbit/s

95th percentile per-packet one-way delay: 63.193 ms

Loss rate: 0.76%

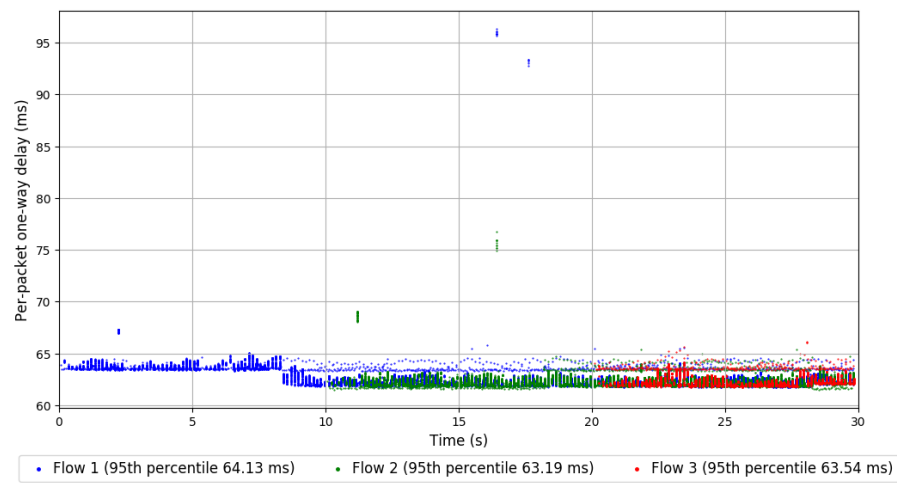
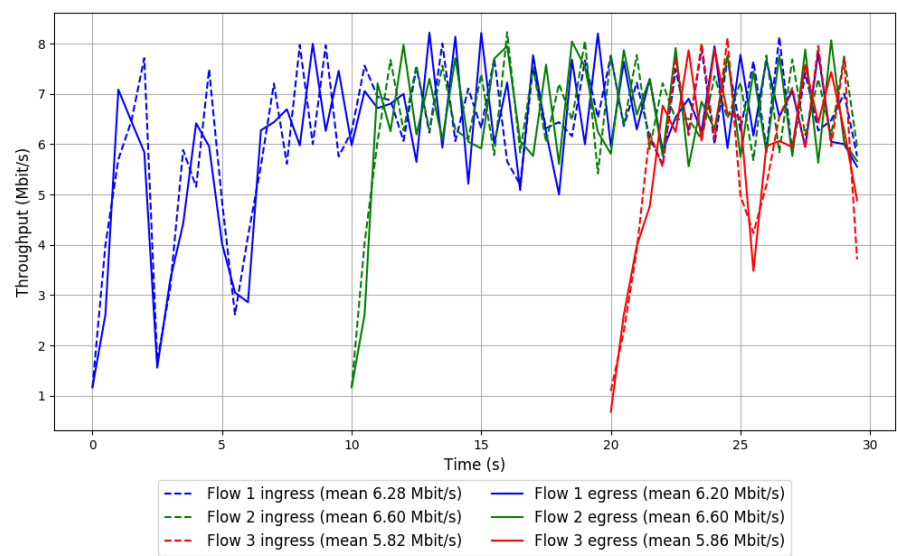
-- Flow 3:

Average throughput: 5.86 Mbit/s

95th percentile per-packet one-way delay: 63.539 ms

Loss rate: 0.34%

Run 10: Report of Sprout — Data Link

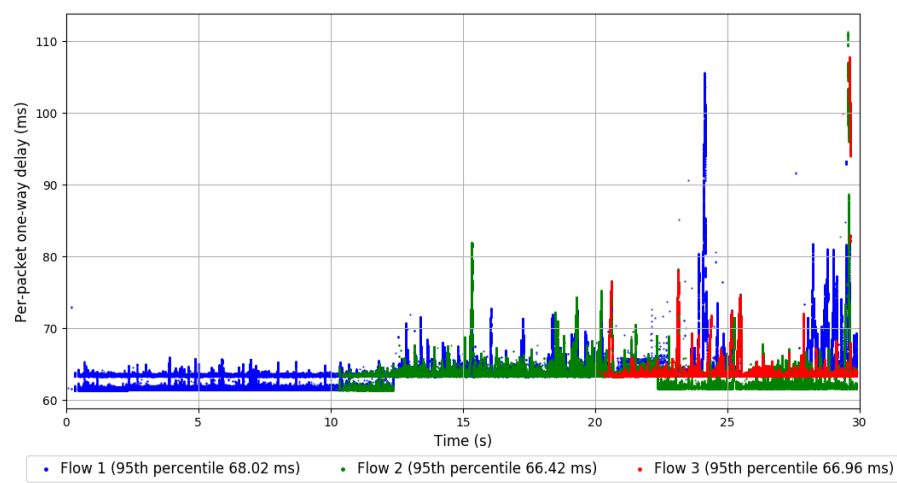
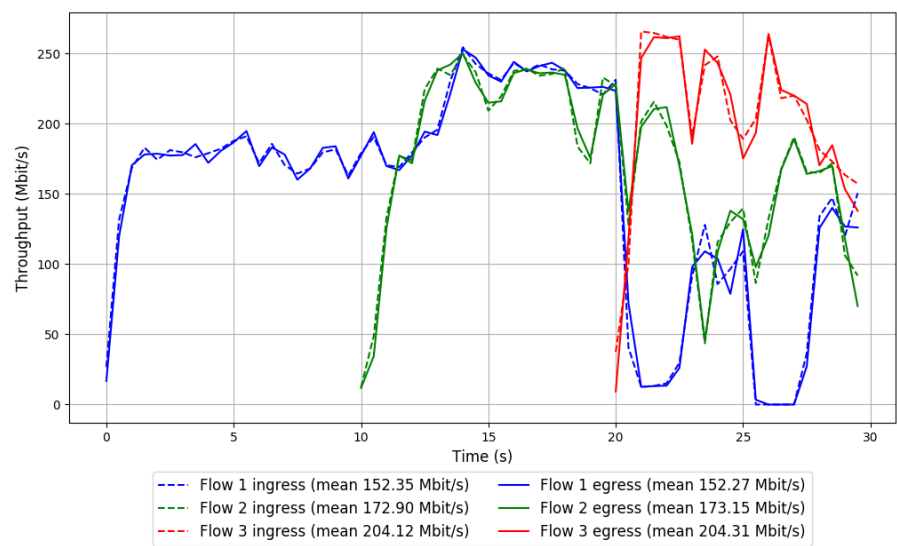


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-01 01:18:31
End at: 2018-02-01 01:19:01

# Below is generated by plot.py at 2018-02-01 07:40:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.32 Mbit/s
95th percentile per-packet one-way delay: 67.208 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 152.27 Mbit/s
95th percentile per-packet one-way delay: 68.017 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 173.15 Mbit/s
95th percentile per-packet one-way delay: 66.419 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 204.31 Mbit/s
95th percentile per-packet one-way delay: 66.959 ms
Loss rate: 1.13%
```


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

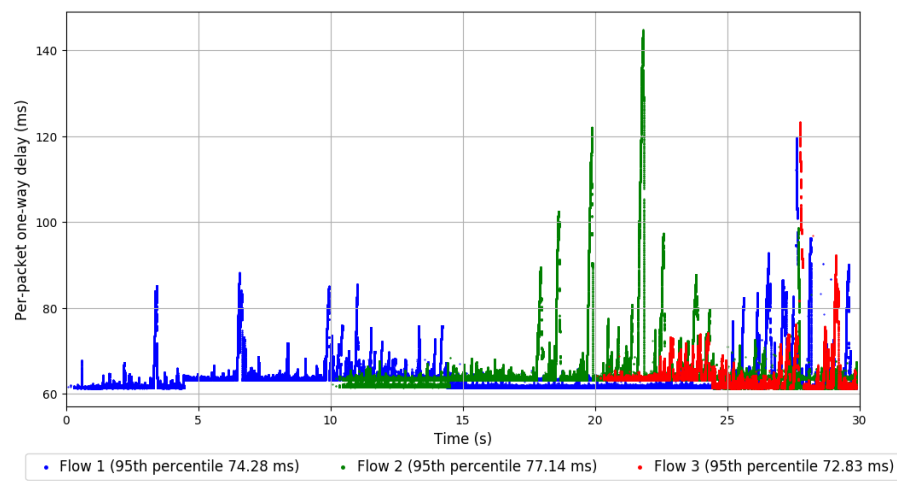
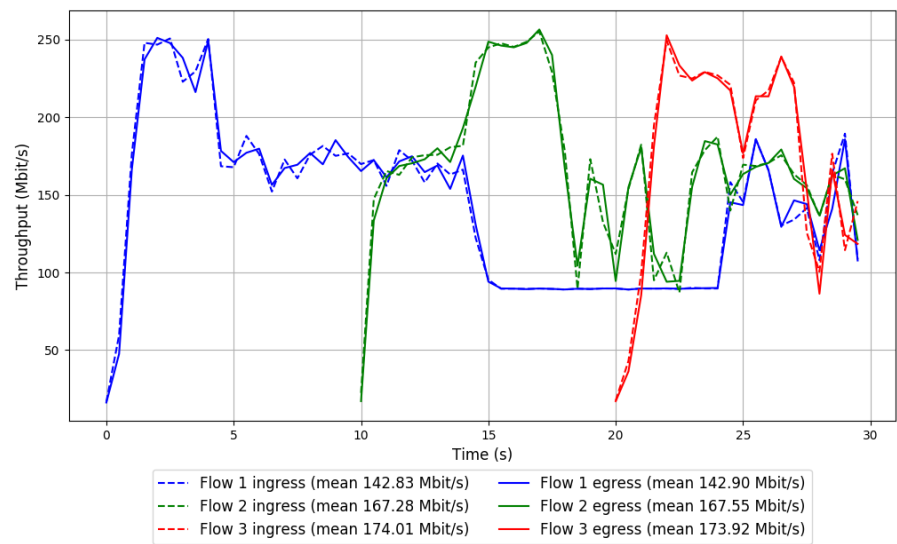


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-01 01:35:18
End at: 2018-02-01 01:35:48

# Below is generated by plot.py at 2018-02-01 07:40:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.38 Mbit/s
95th percentile per-packet one-way delay: 74.591 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 142.90 Mbit/s
95th percentile per-packet one-way delay: 74.275 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 167.55 Mbit/s
95th percentile per-packet one-way delay: 77.139 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 173.92 Mbit/s
95th percentile per-packet one-way delay: 72.835 ms
Loss rate: 1.37%
```

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

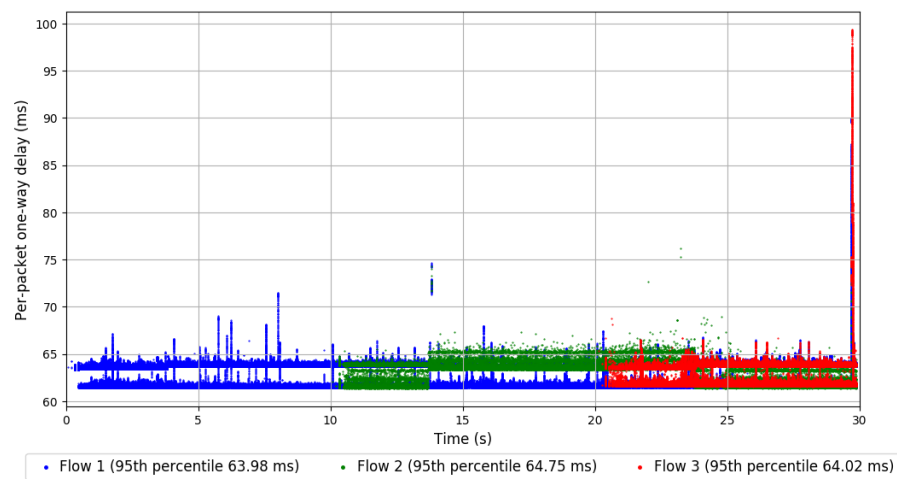
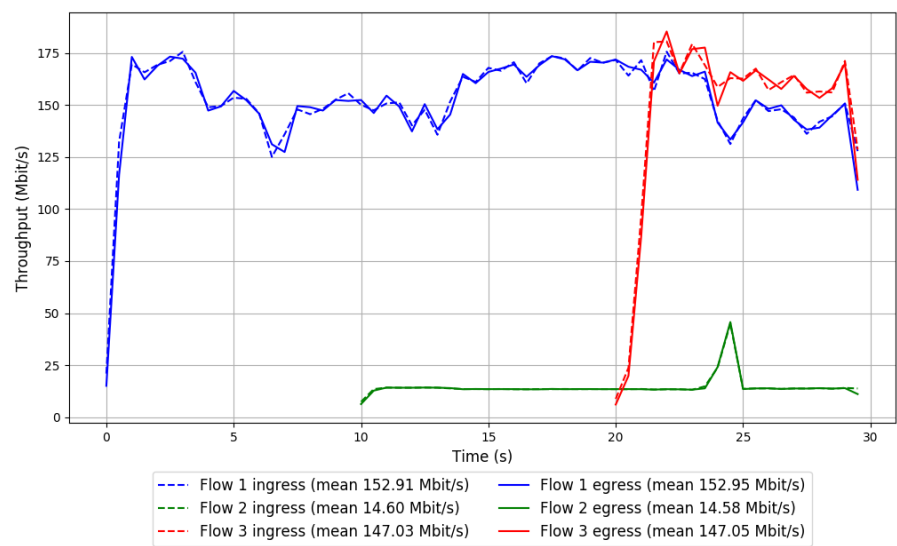


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-01 01:52:09
End at: 2018-02-01 01:52:39

# Below is generated by plot.py at 2018-02-01 07:40:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.74 Mbit/s
95th percentile per-packet one-way delay: 64.004 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 152.95 Mbit/s
95th percentile per-packet one-way delay: 63.982 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 14.58 Mbit/s
95th percentile per-packet one-way delay: 64.745 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 147.05 Mbit/s
95th percentile per-packet one-way delay: 64.016 ms
Loss rate: 1.26%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-01 02:09:02

End at: 2018-02-01 02:09:32

Below is generated by plot.py at 2018-02-01 07:40:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 333.48 Mbit/s

95th percentile per-packet one-way delay: 79.706 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 196.55 Mbit/s

95th percentile per-packet one-way delay: 79.744 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 119.07 Mbit/s

95th percentile per-packet one-way delay: 73.478 ms

Loss rate: 0.58%

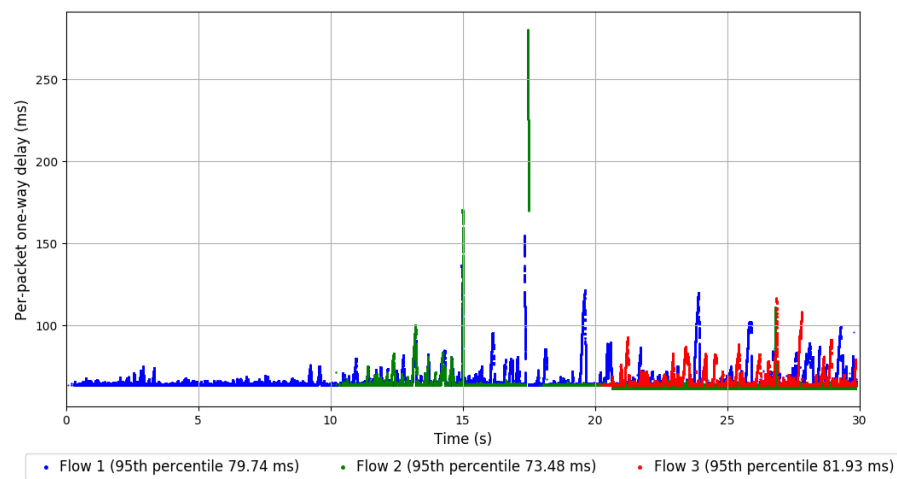
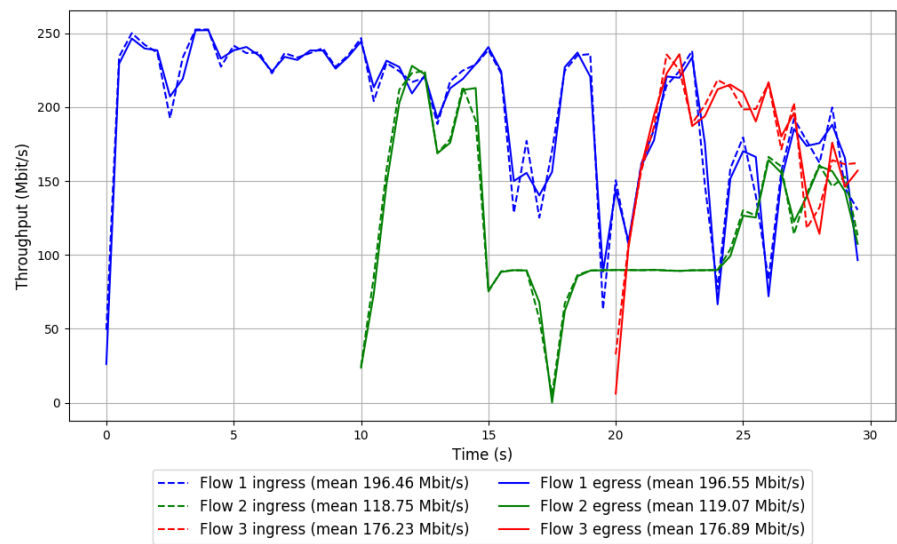
-- Flow 3:

Average throughput: 176.89 Mbit/s

95th percentile per-packet one-way delay: 81.928 ms

Loss rate: 0.93%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-01 02:25:55

End at: 2018-02-01 02:26:25

Below is generated by plot.py at 2018-02-01 07:40:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 271.68 Mbit/s

95th percentile per-packet one-way delay: 69.840 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 135.58 Mbit/s

95th percentile per-packet one-way delay: 69.423 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 141.51 Mbit/s

95th percentile per-packet one-way delay: 74.283 ms

Loss rate: 0.70%

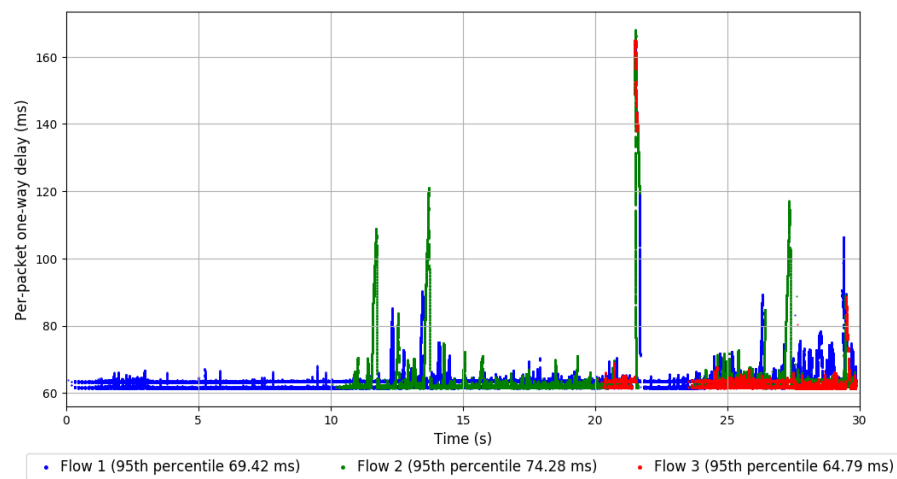
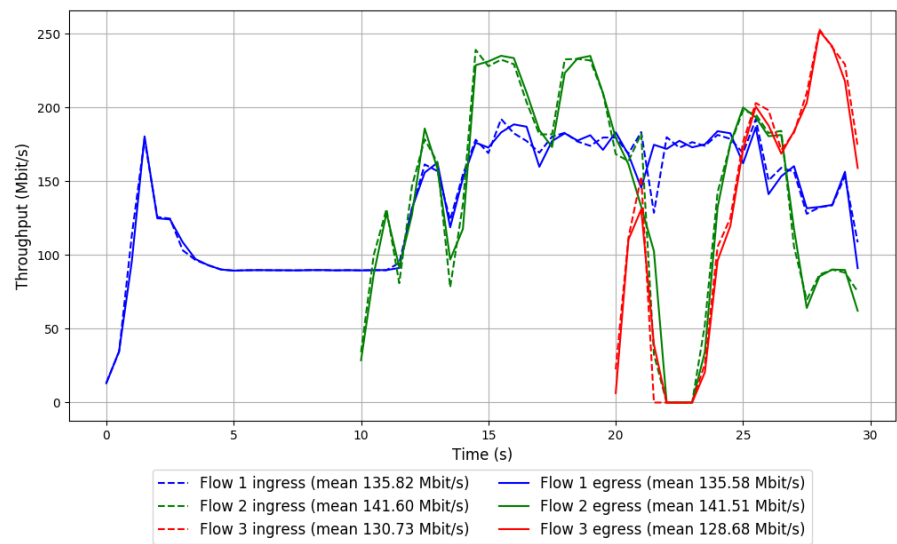
-- Flow 3:

Average throughput: 128.68 Mbit/s

95th percentile per-packet one-way delay: 64.788 ms

Loss rate: 2.84%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-01 02:42:45

End at: 2018-02-01 02:43:15

Below is generated by plot.py at 2018-02-01 07:40:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.71 Mbit/s

95th percentile per-packet one-way delay: 64.368 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 164.79 Mbit/s

95th percentile per-packet one-way delay: 63.995 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 162.06 Mbit/s

95th percentile per-packet one-way delay: 64.898 ms

Loss rate: 0.71%

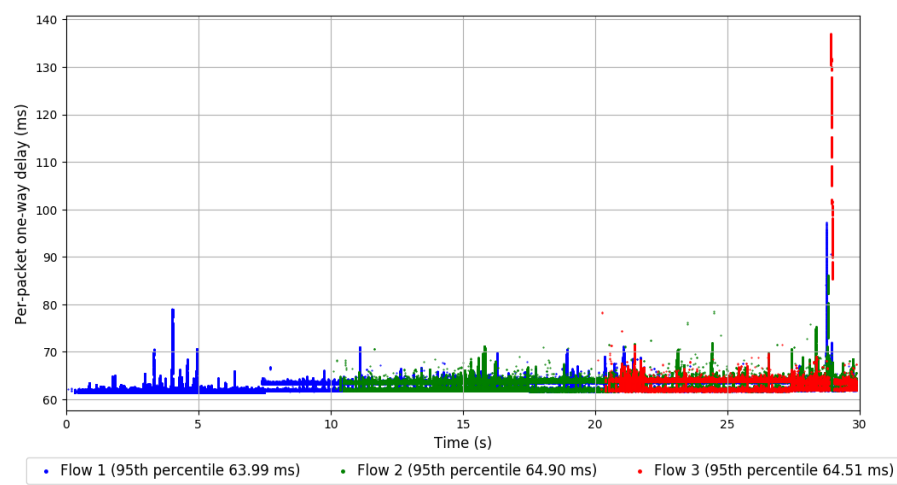
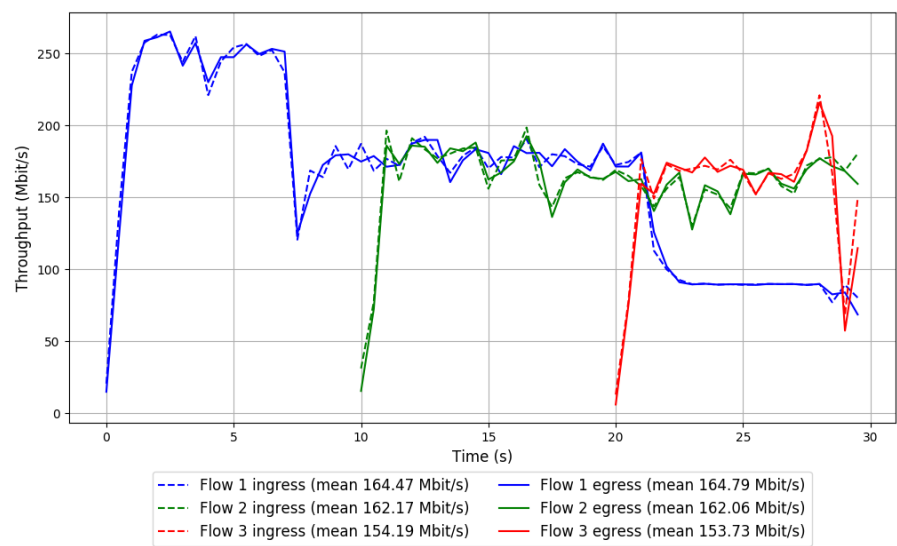
-- Flow 3:

Average throughput: 153.73 Mbit/s

95th percentile per-packet one-way delay: 64.507 ms

Loss rate: 1.53%

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

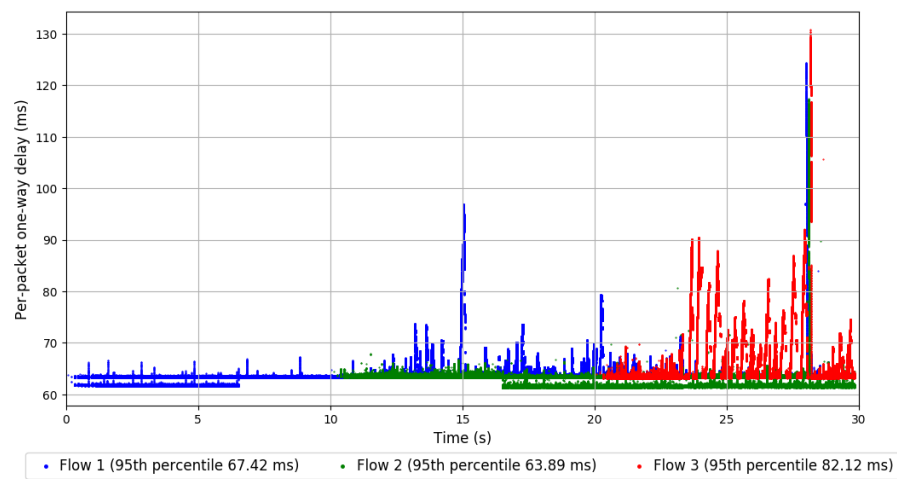
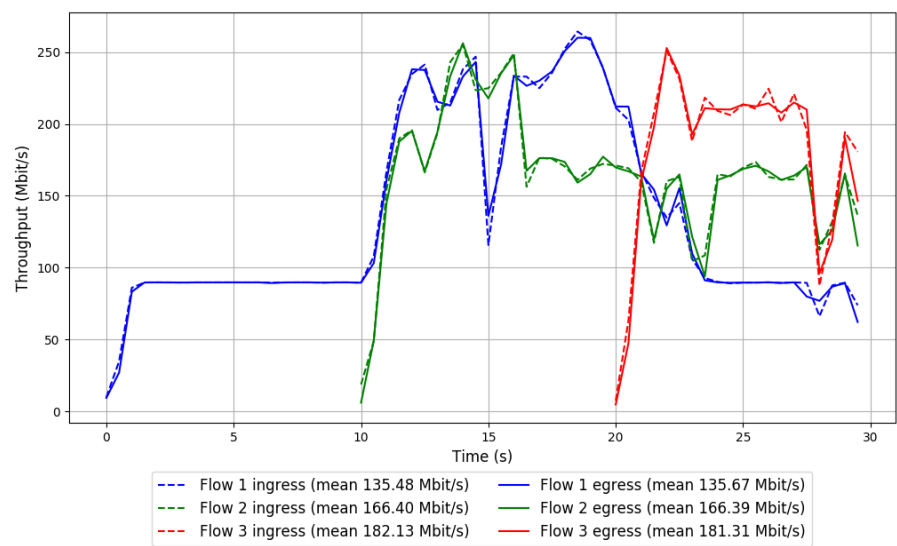


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-01 02:59:36
End at: 2018-02-01 03:00:06

# Below is generated by plot.py at 2018-02-01 07:45:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.39 Mbit/s
95th percentile per-packet one-way delay: 71.026 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 135.67 Mbit/s
95th percentile per-packet one-way delay: 67.419 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 166.39 Mbit/s
95th percentile per-packet one-way delay: 63.893 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 181.31 Mbit/s
95th percentile per-packet one-way delay: 82.118 ms
Loss rate: 1.74%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-01 03:16:20

End at: 2018-02-01 03:16:50

Below is generated by plot.py at 2018-02-01 07:46:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 314.45 Mbit/s

95th percentile per-packet one-way delay: 69.740 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 171.72 Mbit/s

95th percentile per-packet one-way delay: 72.171 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 149.90 Mbit/s

95th percentile per-packet one-way delay: 68.699 ms

Loss rate: 0.64%

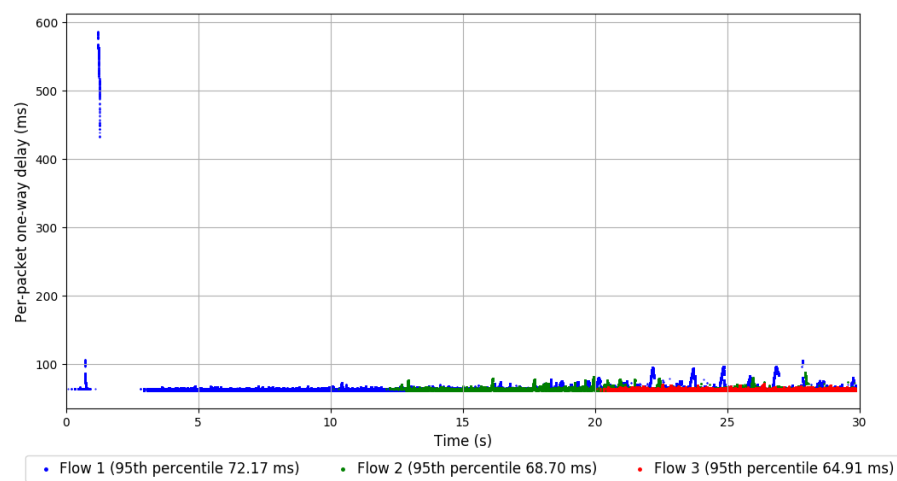
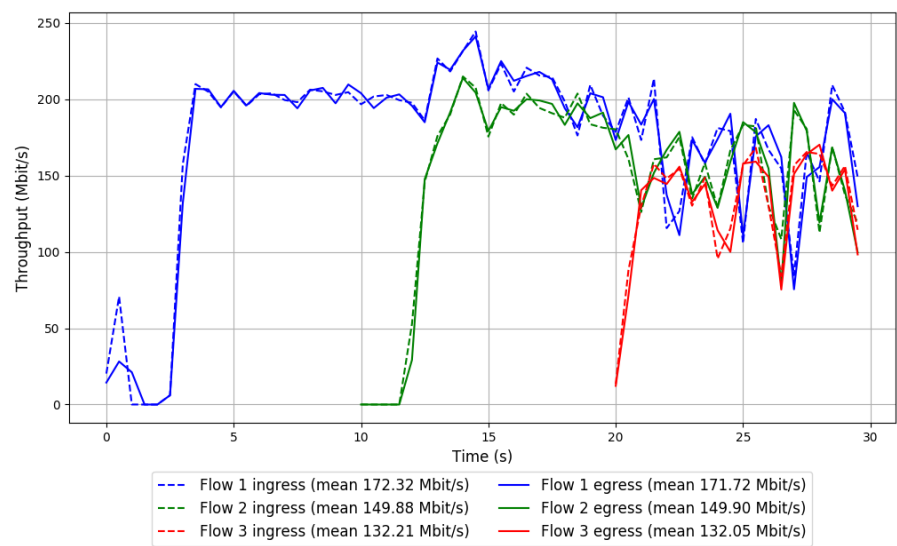
-- Flow 3:

Average throughput: 132.05 Mbit/s

95th percentile per-packet one-way delay: 64.910 ms

Loss rate: 1.42%

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



Run 9: Statistics of TaoVA-100x

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

End at: 2018-02-01 03:33:35

Below is generated by plot.py at 2018-02-01 07:48:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.64 Mbit/s

95th percentile per-packet one-way delay: 73.221 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 171.75 Mbit/s

95th percentile per-packet one-way delay: 68.084 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 147.52 Mbit/s

95th percentile per-packet one-way delay: 77.828 ms

Loss rate: 0.38%

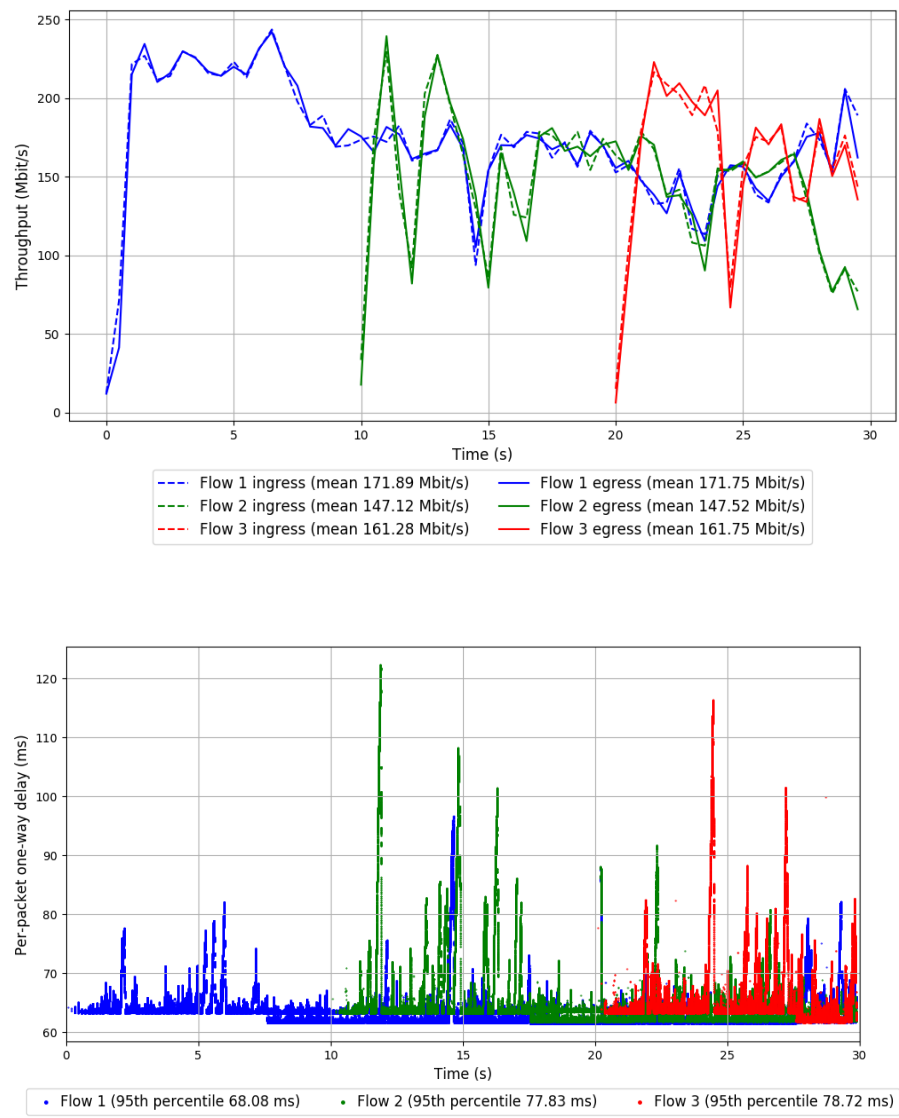
-- Flow 3:

Average throughput: 161.75 Mbit/s

95th percentile per-packet one-way delay: 78.724 ms

Loss rate: 1.14%

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

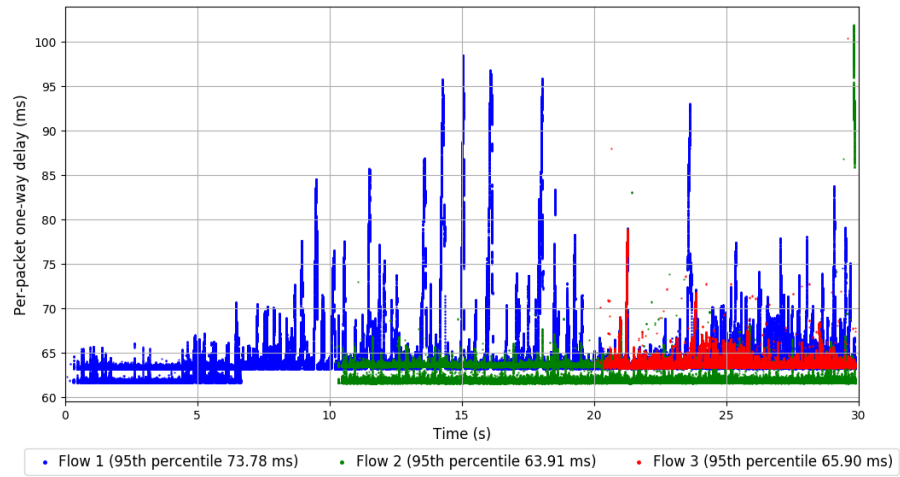
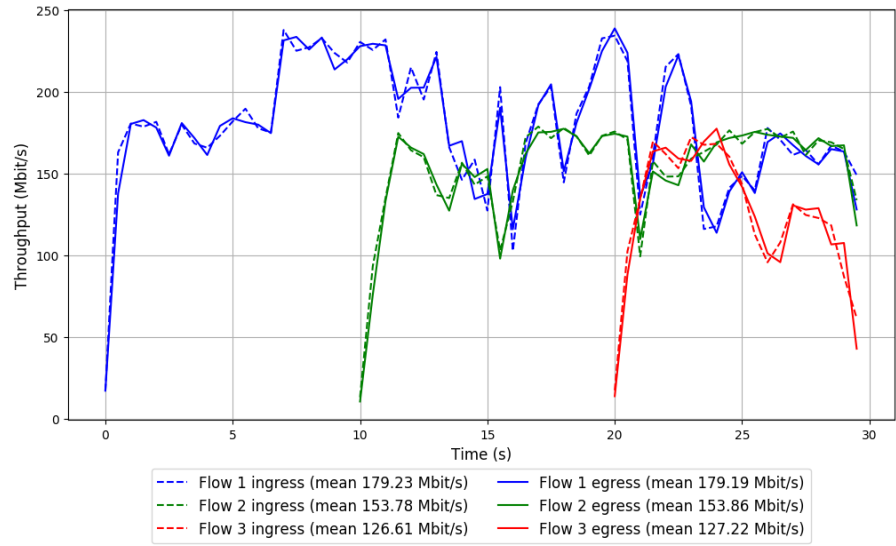


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-01 03:49:56
End at: 2018-02-01 03:50:26

# Below is generated by plot.py at 2018-02-01 07:50:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 323.16 Mbit/s
95th percentile per-packet one-way delay: 69.624 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 179.19 Mbit/s
95th percentile per-packet one-way delay: 73.782 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 153.86 Mbit/s
95th percentile per-packet one-way delay: 63.908 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 127.22 Mbit/s
95th percentile per-packet one-way delay: 65.898 ms
Loss rate: 0.82%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-01 01:20:31

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

Below is generated by plot.py at 2018-02-01 07:50:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.95 Mbit/s

95th percentile per-packet one-way delay: 71.259 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 788.956 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 100.61 Mbit/s

95th percentile per-packet one-way delay: 67.749 ms

Loss rate: 0.68%

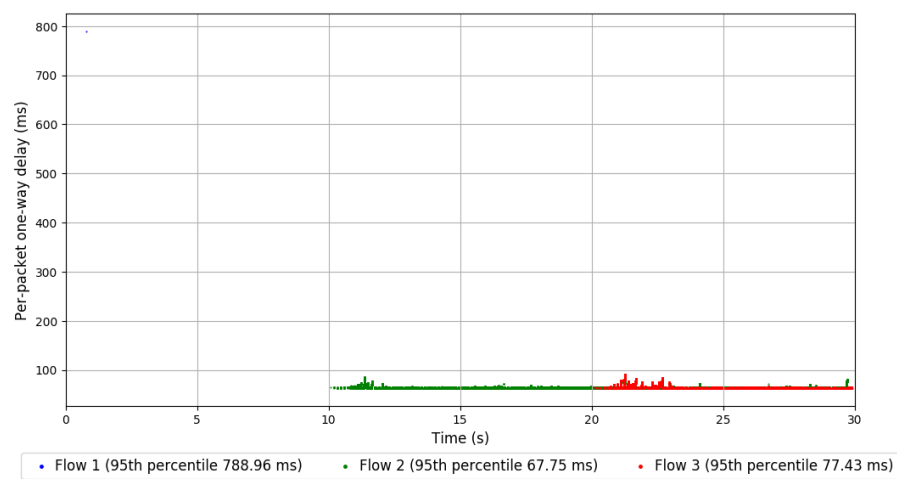
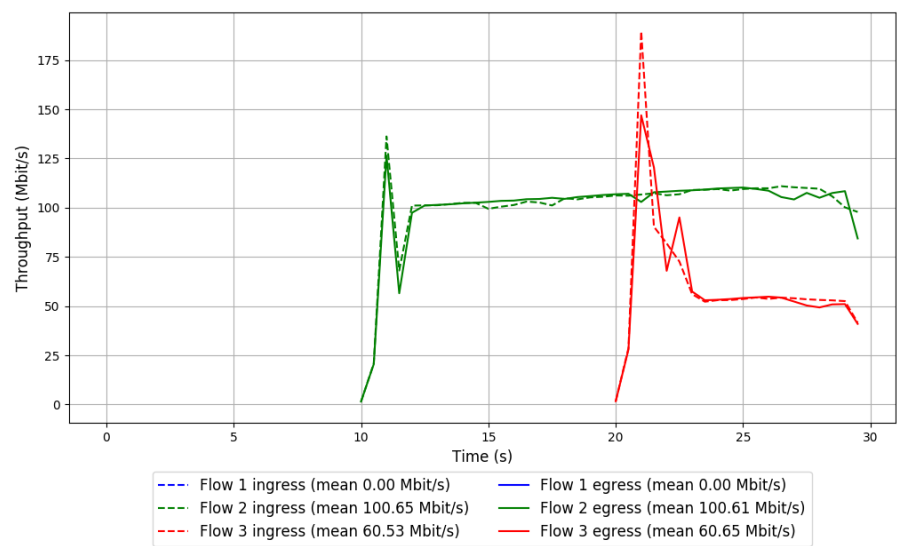
-- Flow 3:

Average throughput: 60.65 Mbit/s

95th percentile per-packet one-way delay: 77.430 ms

Loss rate: 1.07%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-01 01:37:16

End at: 2018-02-01 01:37:46

Run 2: Report of TCP Vegas — Data Link

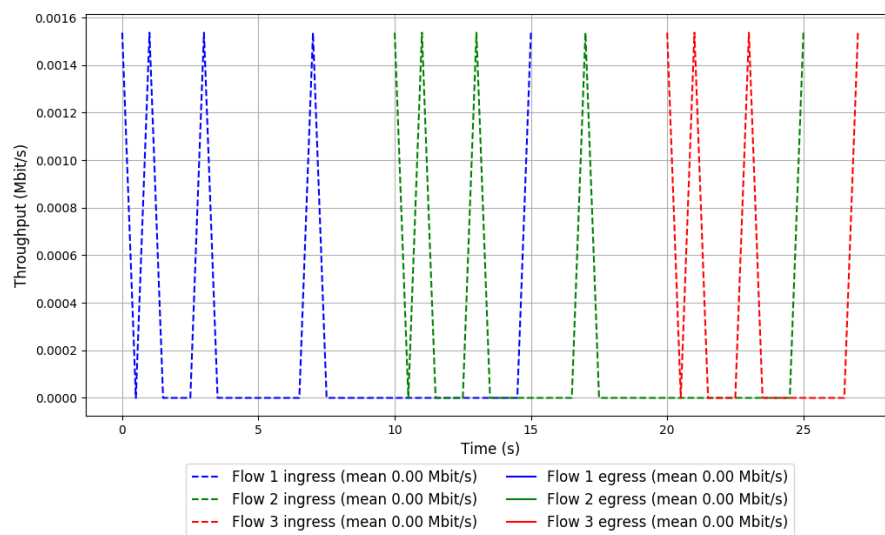


Figure is missing

Run 3: Statistics of TCP Vegas

Start at: 2018-02-01 01:53:55

End at: 2018-02-01 01:54:25

Below is generated by plot.py at 2018-02-01 07:50:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.15 Mbit/s

95th percentile per-packet one-way delay: 75.249 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 58.88 Mbit/s

95th percentile per-packet one-way delay: 71.946 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 86.98 Mbit/s

95th percentile per-packet one-way delay: 77.025 ms

Loss rate: 0.41%

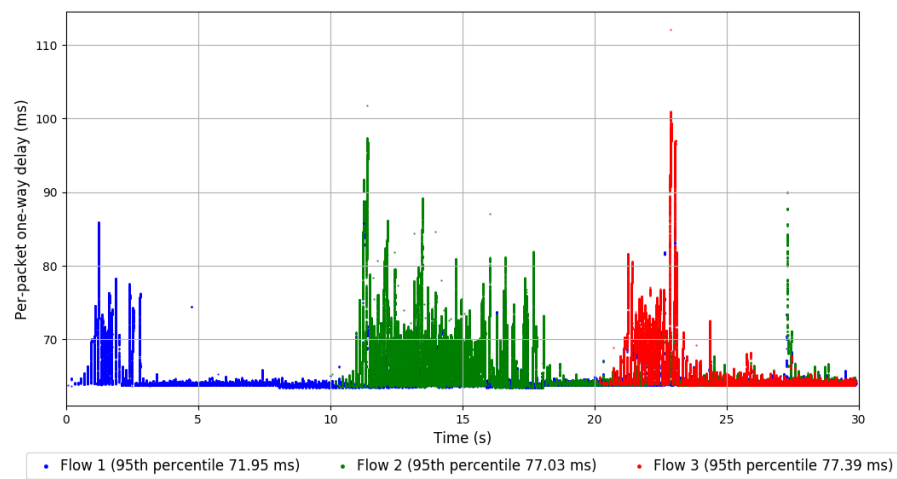
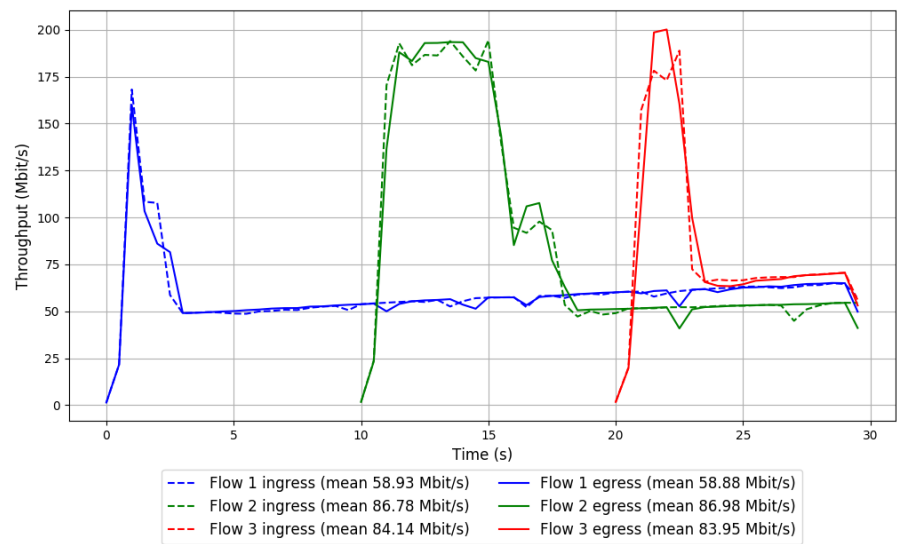
-- Flow 3:

Average throughput: 83.95 Mbit/s

95th percentile per-packet one-way delay: 77.390 ms

Loss rate: 1.07%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-01 02:11:02

End at: 2018-02-01 02:11:32

Below is generated by plot.py at 2018-02-01 07:50:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.39 Mbit/s

95th percentile per-packet one-way delay: 74.249 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 26.99 Mbit/s

95th percentile per-packet one-way delay: 73.360 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 101.71 Mbit/s

95th percentile per-packet one-way delay: 74.730 ms

Loss rate: 0.27%

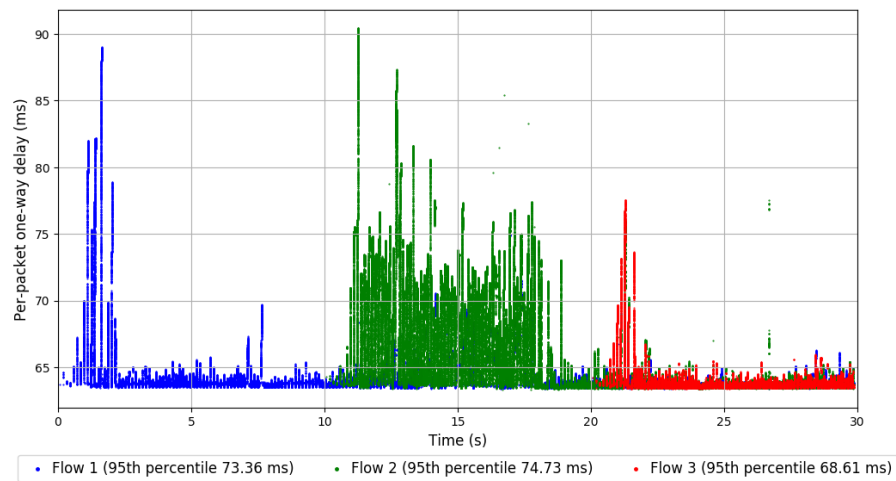
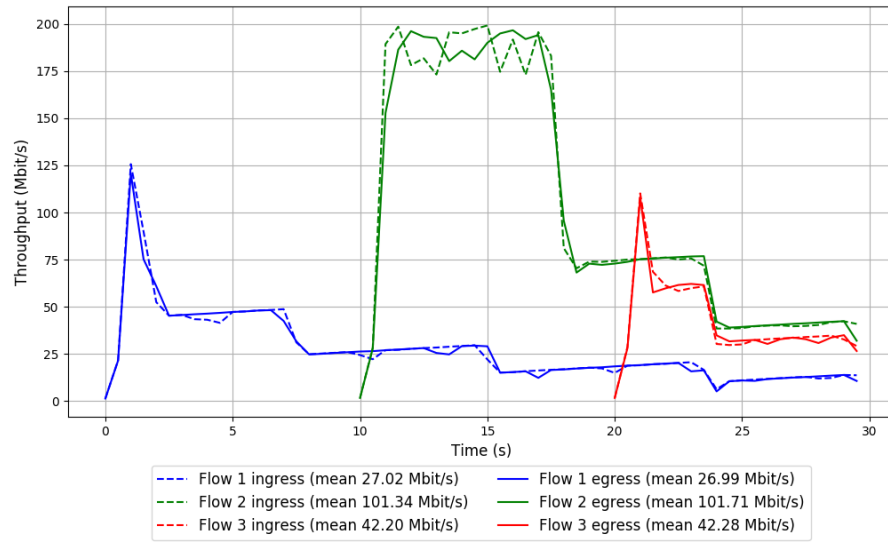
-- Flow 3:

Average throughput: 42.28 Mbit/s

95th percentile per-packet one-way delay: 68.615 ms

Loss rate: 1.10%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-01 02:27:48

End at: 2018-02-01 02:28:18

Below is generated by plot.py at 2018-02-01 07:50:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.69 Mbit/s

95th percentile per-packet one-way delay: 69.294 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 72.39 Mbit/s

95th percentile per-packet one-way delay: 70.608 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 71.25 Mbit/s

95th percentile per-packet one-way delay: 63.655 ms

Loss rate: 0.70%

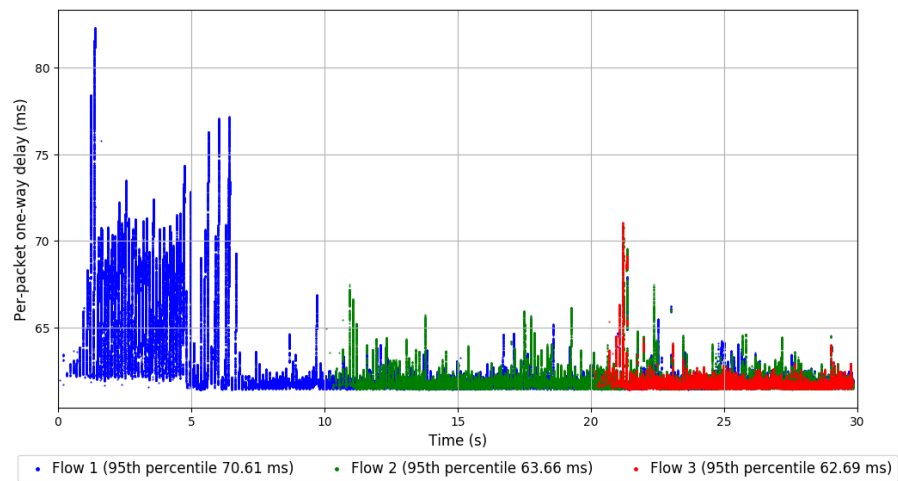
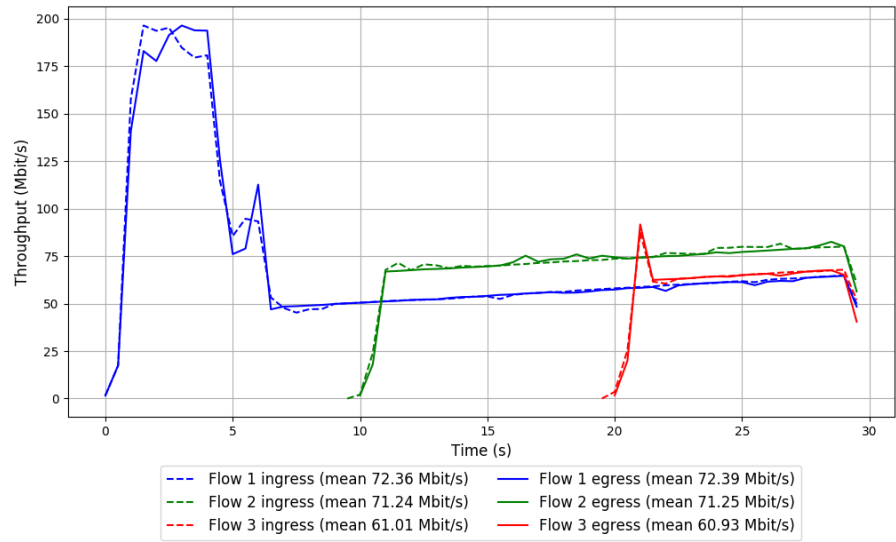
-- Flow 3:

Average throughput: 60.93 Mbit/s

95th percentile per-packet one-way delay: 62.690 ms

Loss rate: 1.42%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-01 02:44:42

End at: 2018-02-01 02:45:12

Below is generated by plot.py at 2018-02-01 07:50:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.33 Mbit/s

95th percentile per-packet one-way delay: 66.232 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 46.34 Mbit/s

95th percentile per-packet one-way delay: 65.650 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 5.80 Mbit/s

95th percentile per-packet one-way delay: 63.846 ms

Loss rate: 1.77%

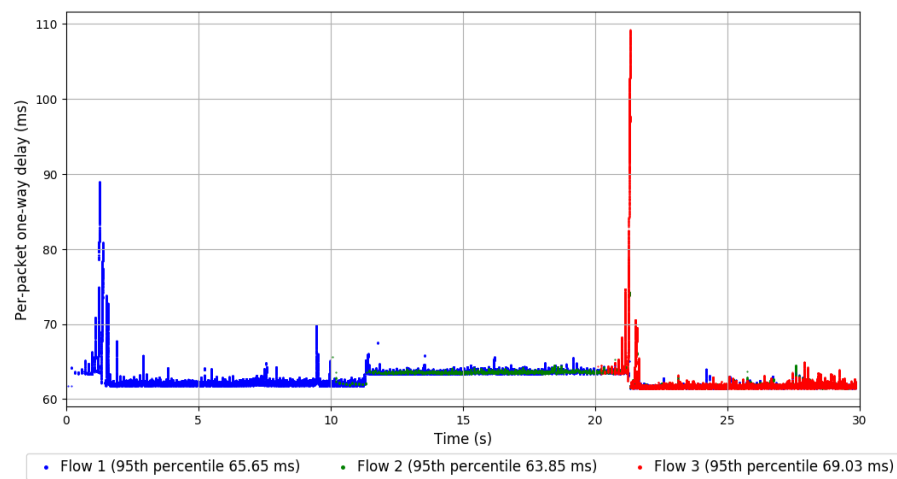
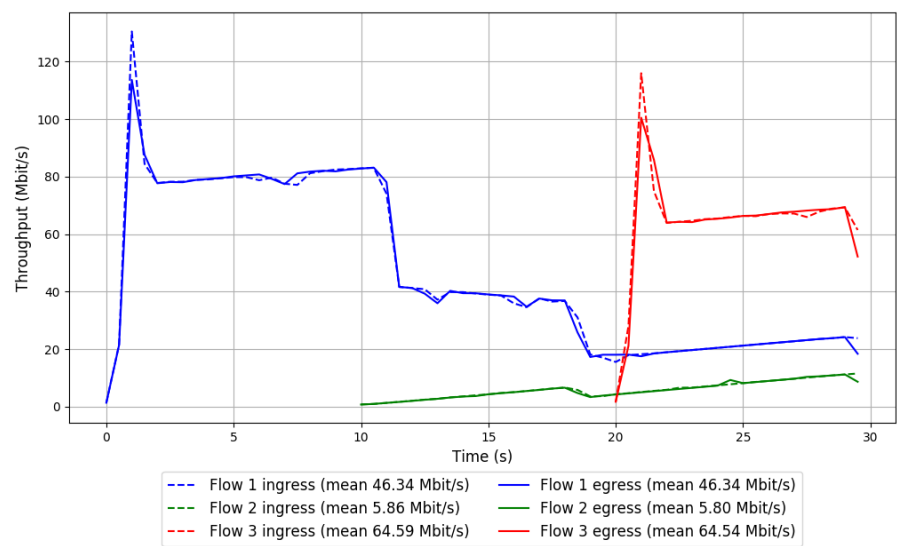
-- Flow 3:

Average throughput: 64.54 Mbit/s

95th percentile per-packet one-way delay: 69.032 ms

Loss rate: 1.37%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-01 03:01:33

End at: 2018-02-01 03:02:03

Below is generated by plot.py at 2018-02-01 07:50:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.35 Mbit/s

95th percentile per-packet one-way delay: 70.916 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 58.76 Mbit/s

95th percentile per-packet one-way delay: 70.263 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 114.90 Mbit/s

95th percentile per-packet one-way delay: 71.928 ms

Loss rate: 0.50%

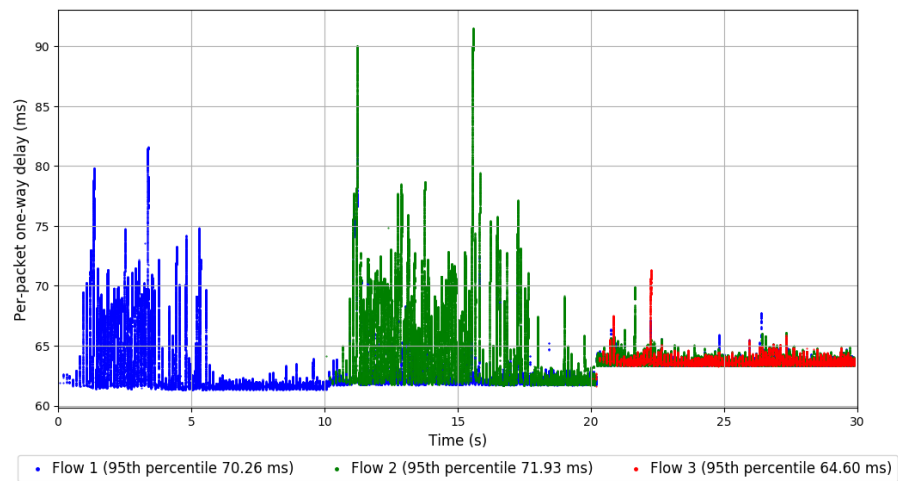
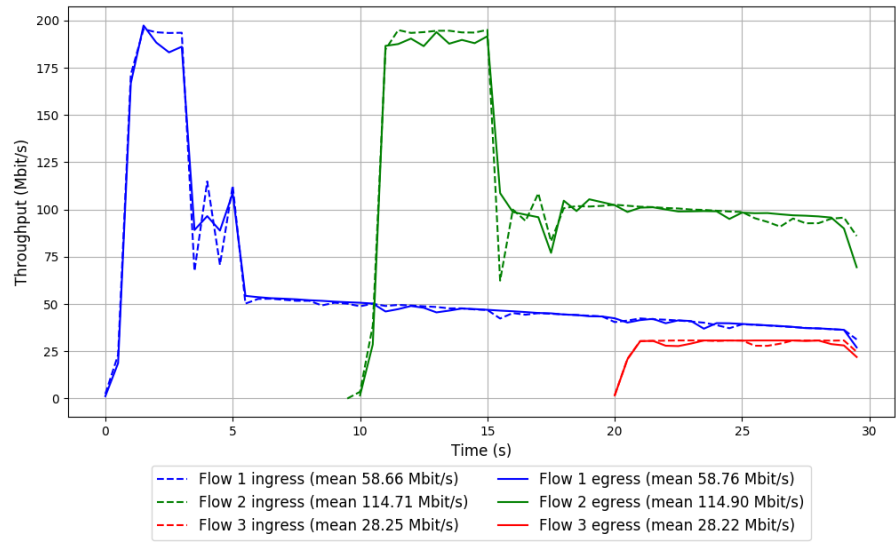
-- Flow 3:

Average throughput: 28.22 Mbit/s

95th percentile per-packet one-way delay: 64.596 ms

Loss rate: 1.35%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-01 03:18:18

End at: 2018-02-01 03:18:48

Below is generated by plot.py at 2018-02-01 07:50:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.42 Mbit/s

95th percentile per-packet one-way delay: 63.531 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 76.24 Mbit/s

95th percentile per-packet one-way delay: 63.287 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 52.23 Mbit/s

95th percentile per-packet one-way delay: 63.249 ms

Loss rate: 0.33%

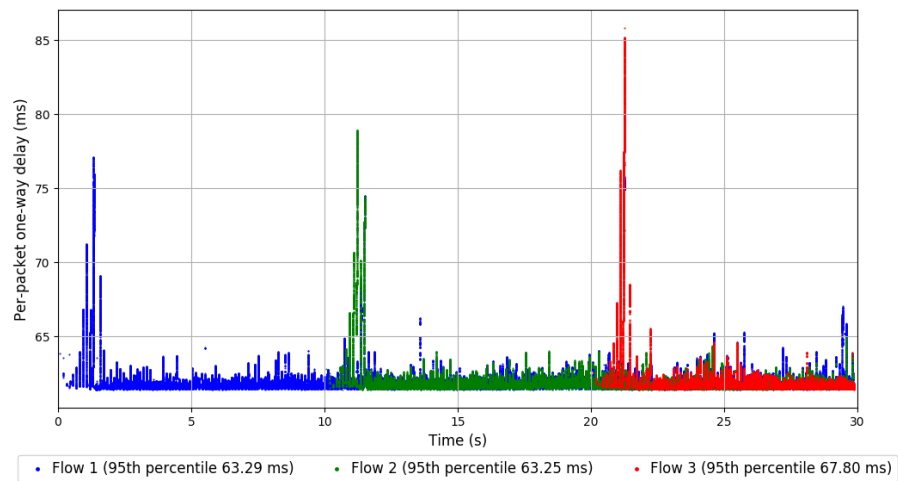
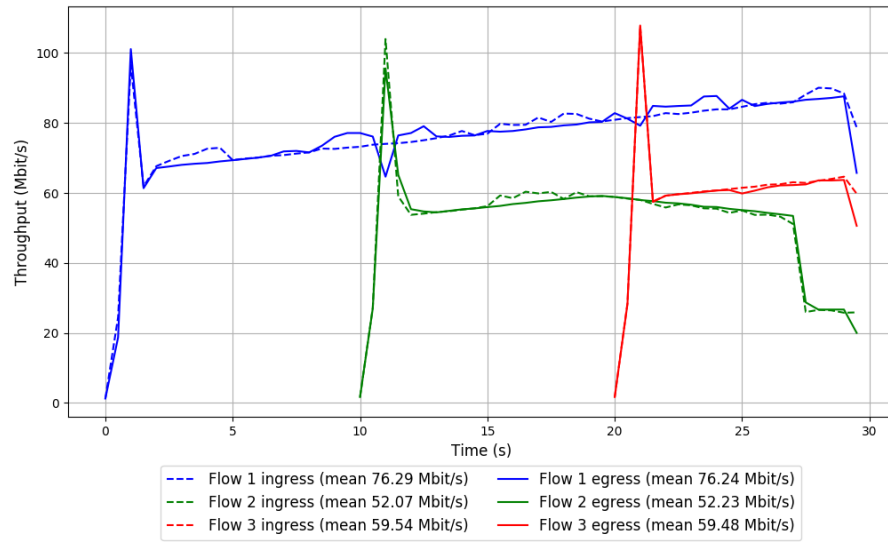
-- Flow 3:

Average throughput: 59.48 Mbit/s

95th percentile per-packet one-way delay: 67.797 ms

Loss rate: 1.38%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-01 03:35:04

End at: 2018-02-01 03:35:34

Below is generated by plot.py at 2018-02-01 07:50:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.41 Mbit/s

95th percentile per-packet one-way delay: 73.065 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 42.09 Mbit/s

95th percentile per-packet one-way delay: 68.781 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 82.07 Mbit/s

95th percentile per-packet one-way delay: 70.855 ms

Loss rate: 0.62%

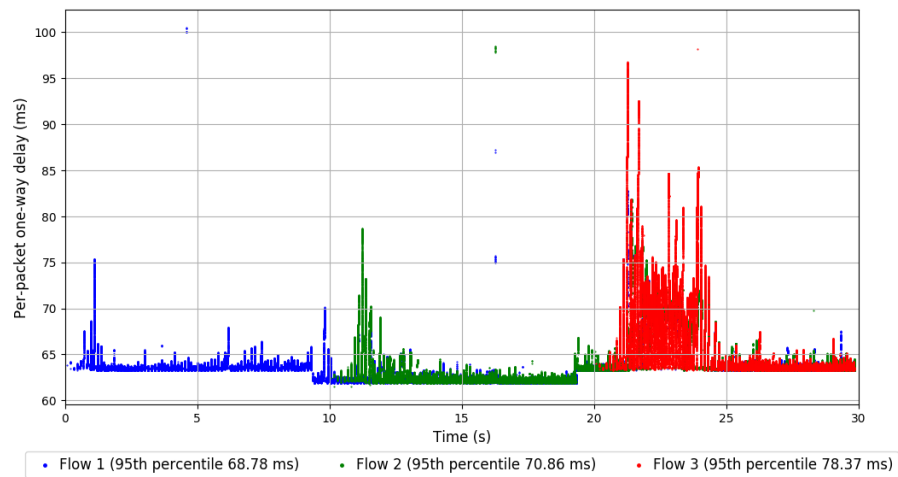
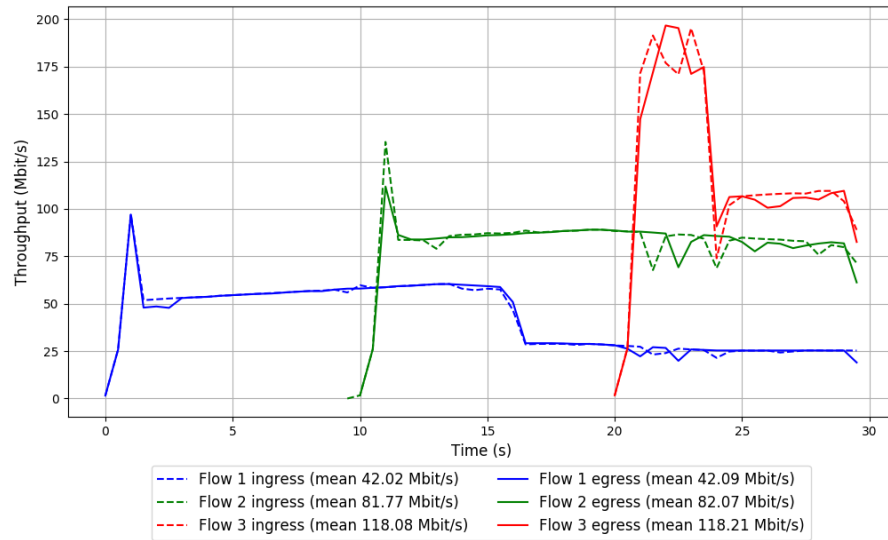
-- Flow 3:

Average throughput: 118.21 Mbit/s

95th percentile per-packet one-way delay: 78.371 ms

Loss rate: 1.18%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-01 03:51:54

End at: 2018-02-01 03:52:24

Below is generated by plot.py at 2018-02-01 07:50:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.91 Mbit/s

95th percentile per-packet one-way delay: 70.683 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 48.18 Mbit/s

95th percentile per-packet one-way delay: 67.818 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 60.01 Mbit/s

95th percentile per-packet one-way delay: 71.953 ms

Loss rate: 0.40%

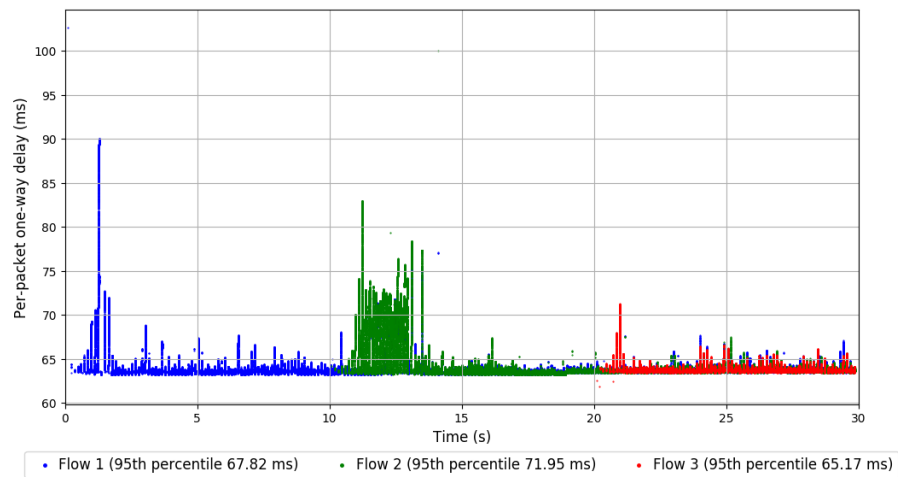
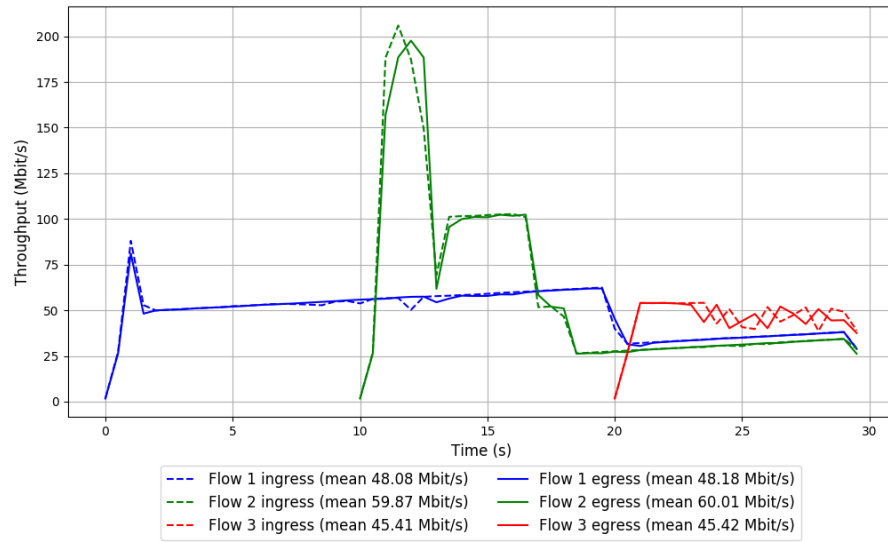
-- Flow 3:

Average throughput: 45.42 Mbit/s

95th percentile per-packet one-way delay: 65.175 ms

Loss rate: 1.40%

Run 10: Report of TCP Vegas — Data Link

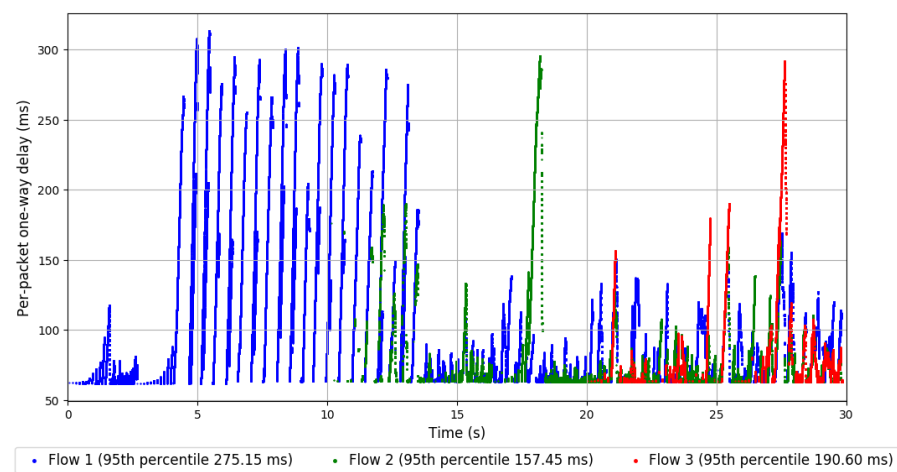
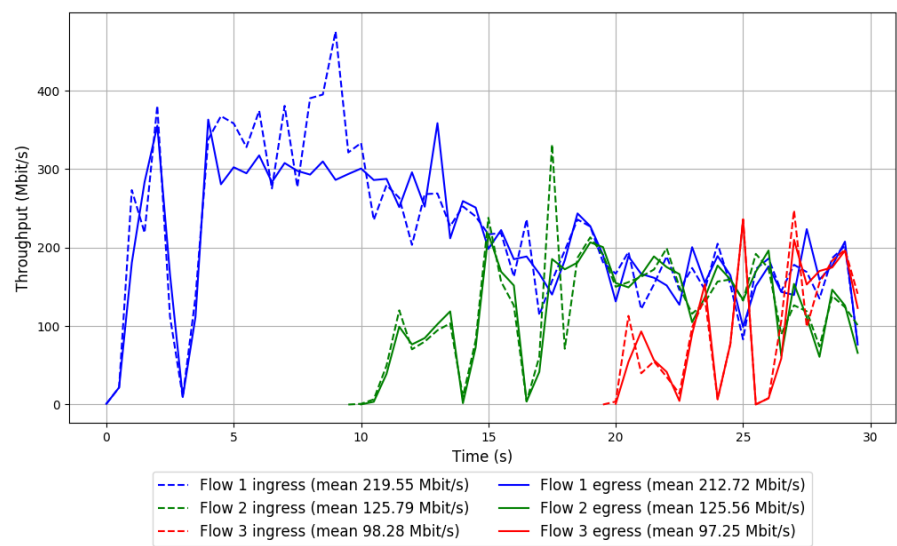


```
Run 1: Statistics of Verus

Start at: 2018-02-01 01:21:17
End at: 2018-02-01 01:21:47

# Below is generated by plot.py at 2018-02-01 07:52:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.14 Mbit/s
95th percentile per-packet one-way delay: 267.268 ms
Loss rate: 3.07%
-- Flow 1:
Average throughput: 212.72 Mbit/s
95th percentile per-packet one-way delay: 275.154 ms
Loss rate: 3.70%
-- Flow 2:
Average throughput: 125.56 Mbit/s
95th percentile per-packet one-way delay: 157.452 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 97.25 Mbit/s
95th percentile per-packet one-way delay: 190.603 ms
Loss rate: 2.31%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-01 01:37:57

End at: 2018-02-01 01:38:27

Below is generated by plot.py at 2018-02-01 07:52:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 264.72 Mbit/s

95th percentile per-packet one-way delay: 196.674 ms

Loss rate: 2.29%

-- Flow 1:

Average throughput: 143.69 Mbit/s

95th percentile per-packet one-way delay: 214.739 ms

Loss rate: 1.74%

-- Flow 2:

Average throughput: 142.92 Mbit/s

95th percentile per-packet one-way delay: 198.394 ms

Loss rate: 2.97%

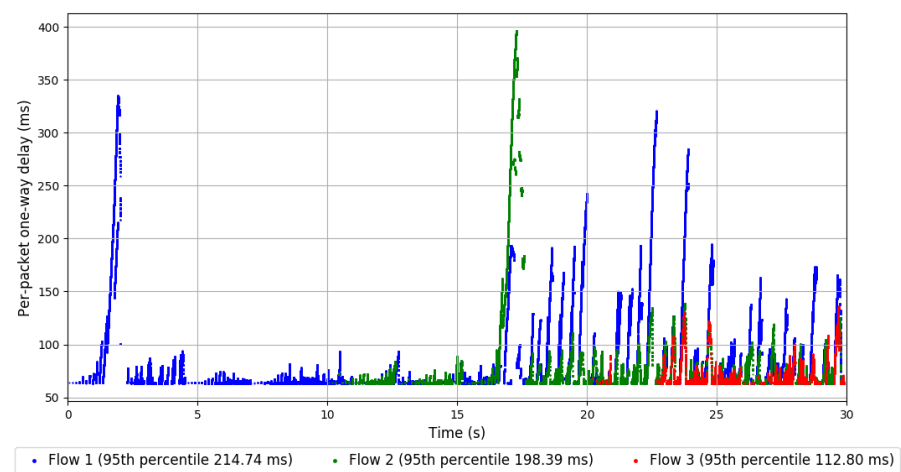
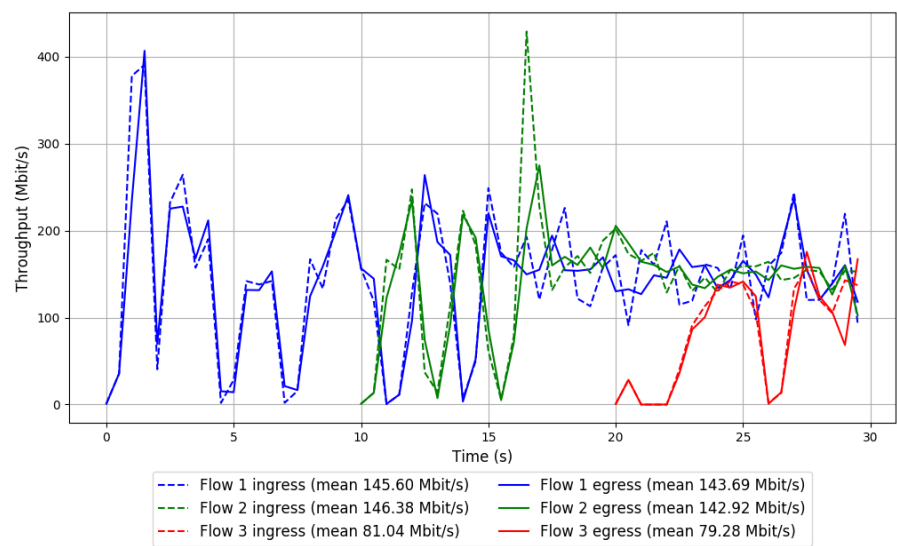
-- Flow 3:

Average throughput: 79.28 Mbit/s

95th percentile per-packet one-way delay: 112.803 ms

Loss rate: 2.79%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-01 01:54:44

End at: 2018-02-01 01:55:14

Below is generated by plot.py at 2018-02-01 07:52:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.10 Mbit/s

95th percentile per-packet one-way delay: 126.747 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 195.26 Mbit/s

95th percentile per-packet one-way delay: 133.243 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 112.11 Mbit/s

95th percentile per-packet one-way delay: 104.579 ms

Loss rate: 0.01%

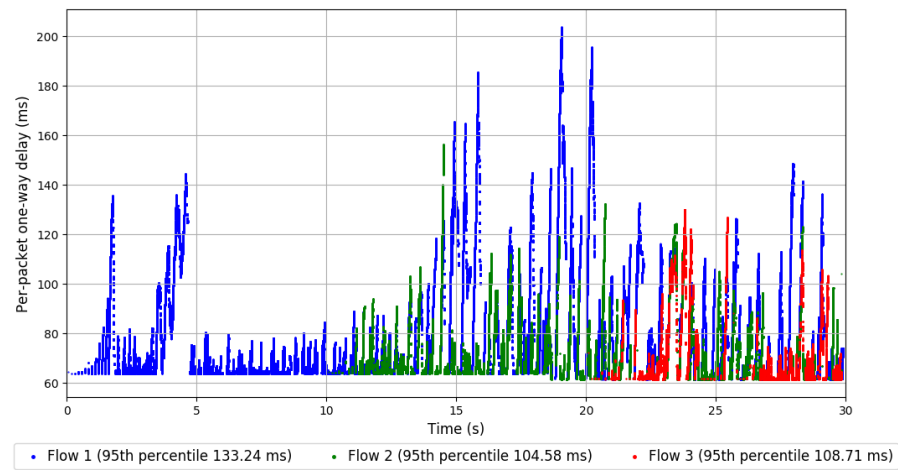
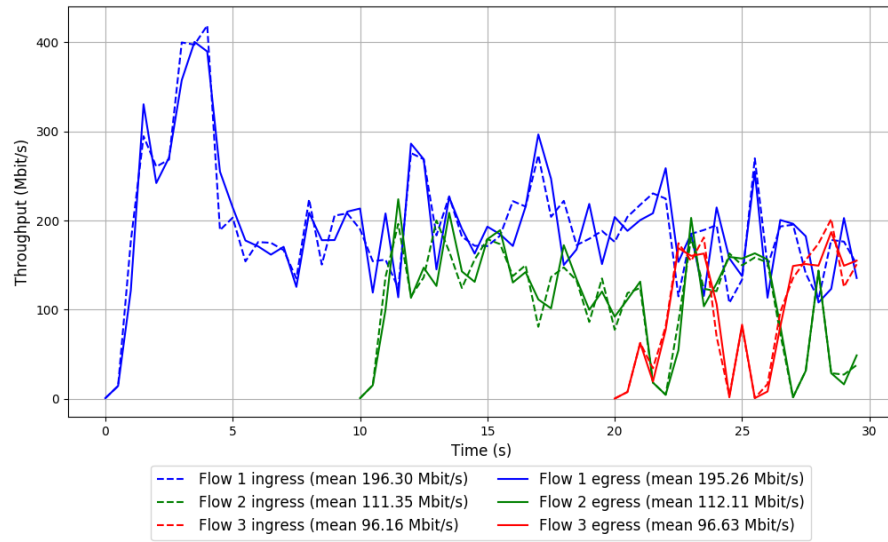
-- Flow 3:

Average throughput: 96.63 Mbit/s

95th percentile per-packet one-way delay: 108.706 ms

Loss rate: 1.43%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-01 02:11:49

End at: 2018-02-01 02:12:19

Below is generated by plot.py at 2018-02-01 07:52:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.30 Mbit/s

95th percentile per-packet one-way delay: 206.451 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 195.95 Mbit/s

95th percentile per-packet one-way delay: 219.807 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 97.84 Mbit/s

95th percentile per-packet one-way delay: 151.483 ms

Loss rate: 0.16%

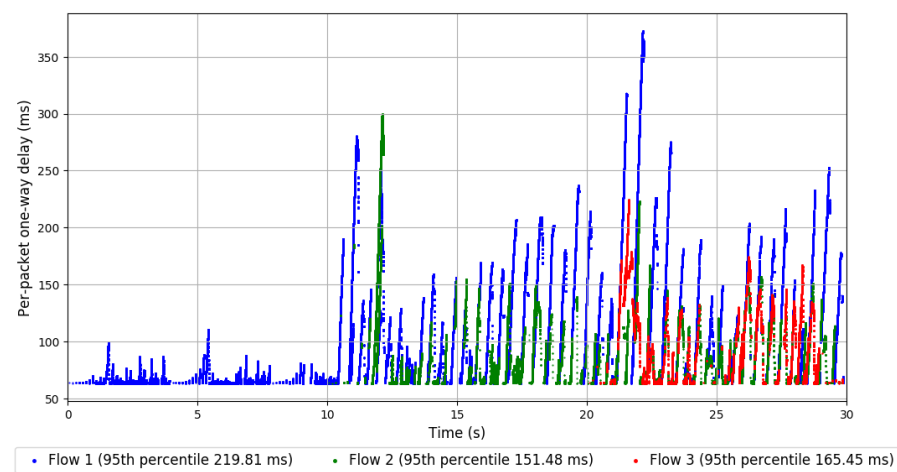
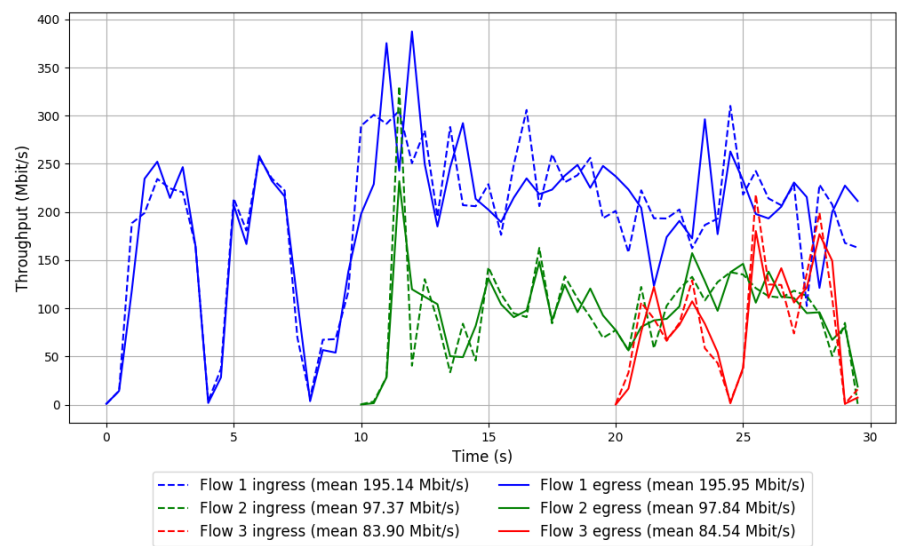
-- Flow 3:

Average throughput: 84.54 Mbit/s

95th percentile per-packet one-way delay: 165.452 ms

Loss rate: 0.55%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-01 02:28:37

End at: 2018-02-01 02:29:07

Below is generated by plot.py at 2018-02-01 07:52:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 281.96 Mbit/s

95th percentile per-packet one-way delay: 125.446 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 168.36 Mbit/s

95th percentile per-packet one-way delay: 123.410 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 148.29 Mbit/s

95th percentile per-packet one-way delay: 128.415 ms

Loss rate: 0.54%

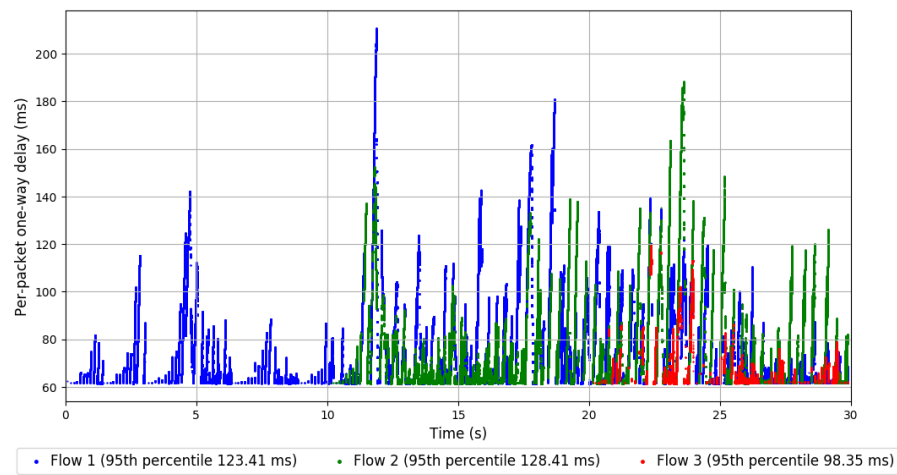
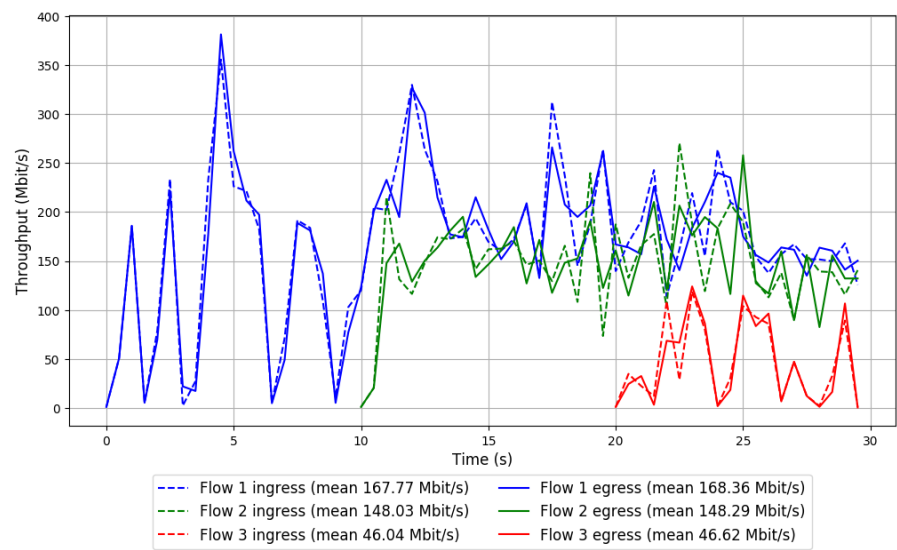
-- Flow 3:

Average throughput: 46.62 Mbit/s

95th percentile per-packet one-way delay: 98.354 ms

Loss rate: 0.04%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-01 02:45:27

End at: 2018-02-01 02:45:57

Below is generated by plot.py at 2018-02-01 07:52:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.82 Mbit/s

95th percentile per-packet one-way delay: 203.434 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 156.26 Mbit/s

95th percentile per-packet one-way delay: 135.223 ms

Loss rate: 1.16%

-- Flow 2:

Average throughput: 173.53 Mbit/s

95th percentile per-packet one-way delay: 245.597 ms

Loss rate: 0.69%

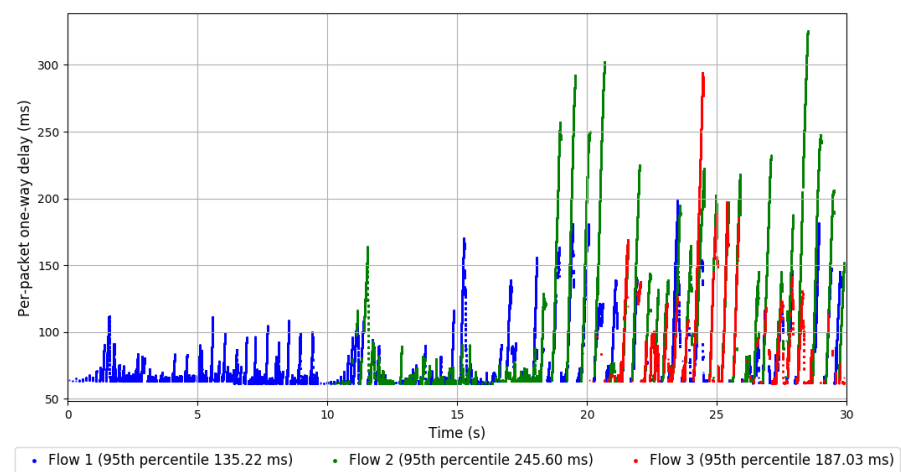
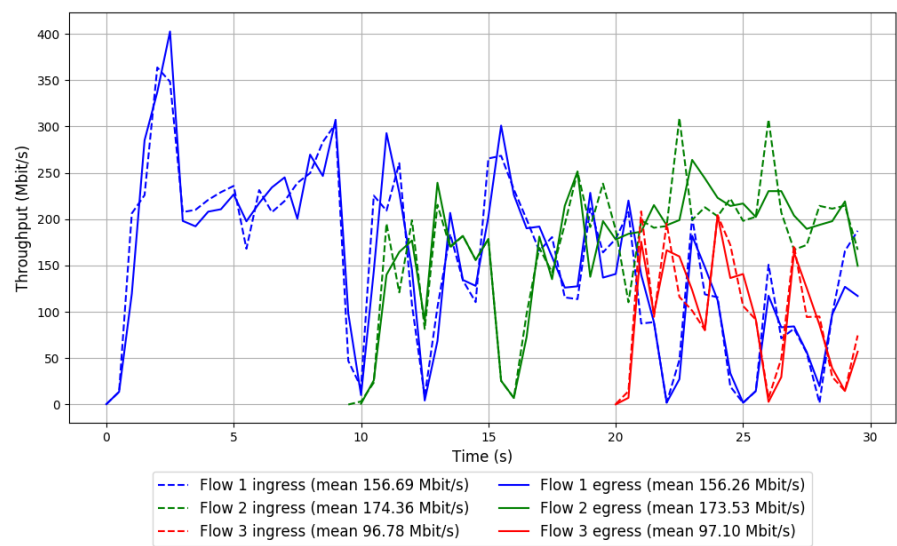
-- Flow 3:

Average throughput: 97.10 Mbit/s

95th percentile per-packet one-way delay: 187.029 ms

Loss rate: 0.97%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-01 03:02:22

End at: 2018-02-01 03:02:52

Below is generated by plot.py at 2018-02-01 07:54:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.19 Mbit/s

95th percentile per-packet one-way delay: 231.707 ms

Loss rate: 4.85%

-- Flow 1:

Average throughput: 170.76 Mbit/s

95th percentile per-packet one-way delay: 144.305 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 162.05 Mbit/s

95th percentile per-packet one-way delay: 255.364 ms

Loss rate: 2.14%

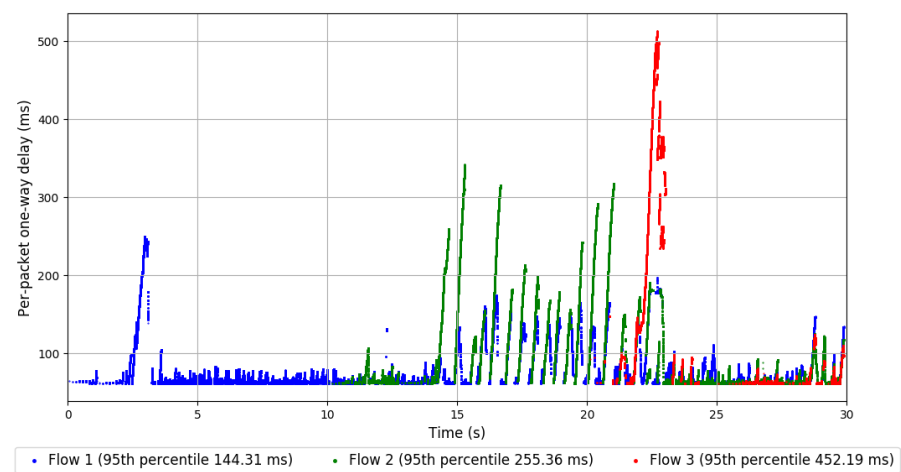
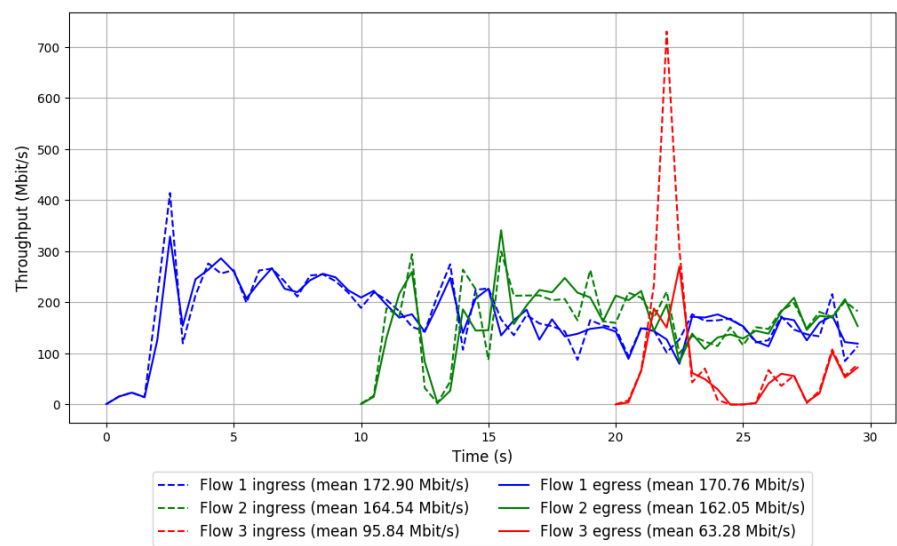
-- Flow 3:

Average throughput: 63.28 Mbit/s

95th percentile per-packet one-way delay: 452.191 ms

Loss rate: 35.02%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-01 03:19:06

End at: 2018-02-01 03:19:36

Below is generated by plot.py at 2018-02-01 07:56:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.62 Mbit/s

95th percentile per-packet one-way delay: 127.277 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 146.85 Mbit/s

95th percentile per-packet one-way delay: 143.547 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 172.13 Mbit/s

95th percentile per-packet one-way delay: 107.416 ms

Loss rate: 1.03%

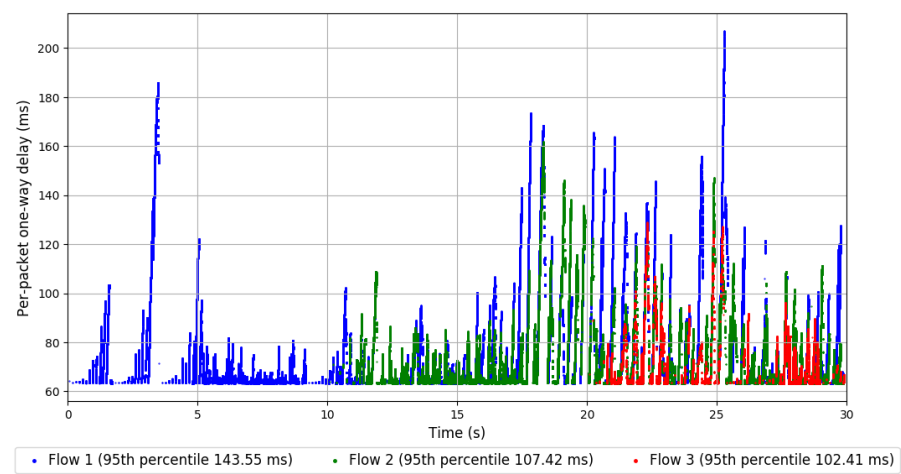
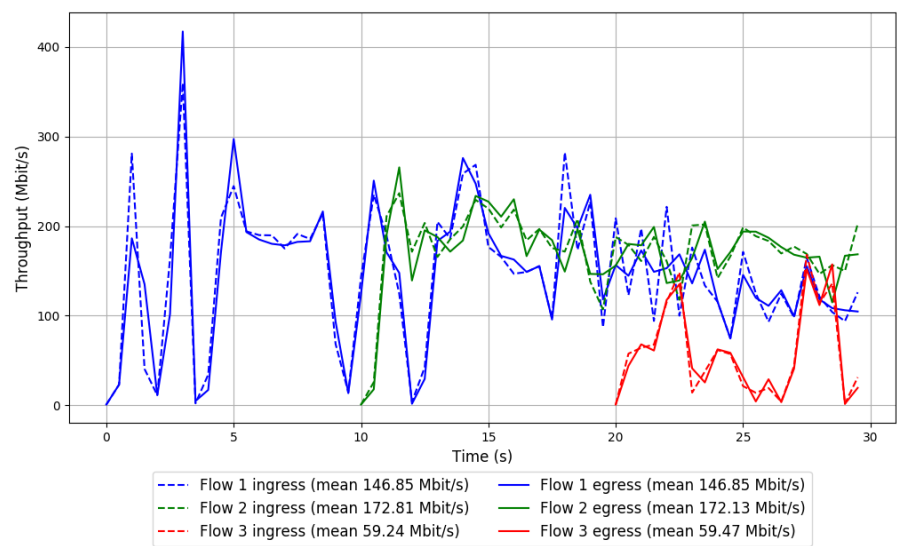
-- Flow 3:

Average throughput: 59.47 Mbit/s

95th percentile per-packet one-way delay: 102.407 ms

Loss rate: 1.01%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-01 03:35:52

End at: 2018-02-01 03:36:22

Below is generated by plot.py at 2018-02-01 07:57:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.89 Mbit/s

95th percentile per-packet one-way delay: 169.790 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 186.93 Mbit/s

95th percentile per-packet one-way delay: 152.320 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 142.67 Mbit/s

95th percentile per-packet one-way delay: 203.900 ms

Loss rate: 0.14%

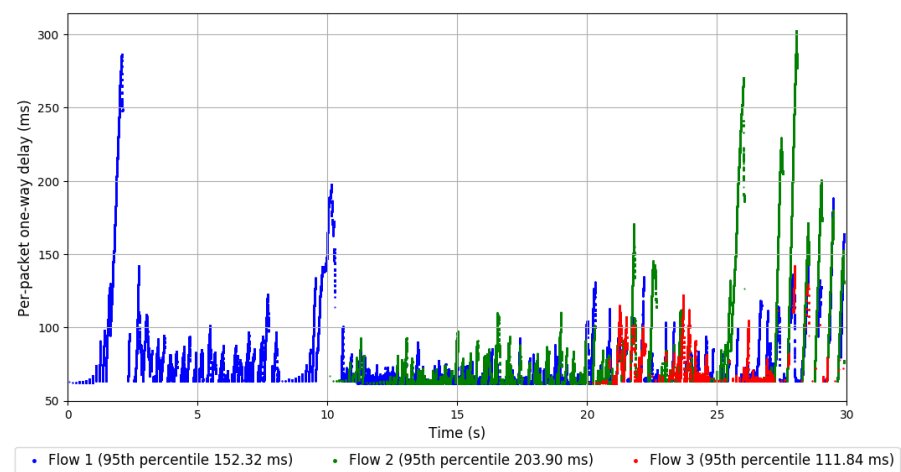
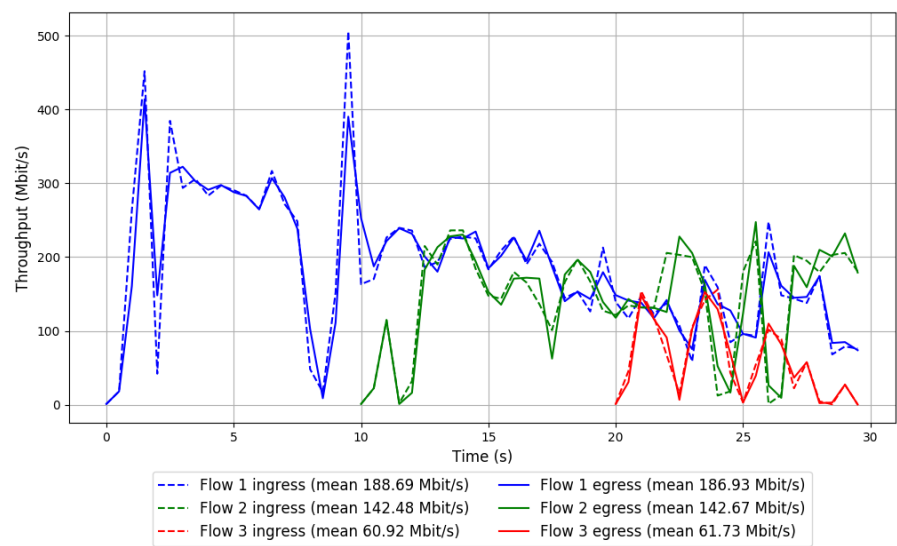
-- Flow 3:

Average throughput: 61.73 Mbit/s

95th percentile per-packet one-way delay: 111.841 ms

Loss rate: 0.01%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-01 03:52:41

End at: 2018-02-01 03:53:11

Below is generated by plot.py at 2018-02-01 07:57:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.02 Mbit/s

95th percentile per-packet one-way delay: 195.391 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 177.86 Mbit/s

95th percentile per-packet one-way delay: 131.402 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 100.15 Mbit/s

95th percentile per-packet one-way delay: 156.804 ms

Loss rate: 1.72%

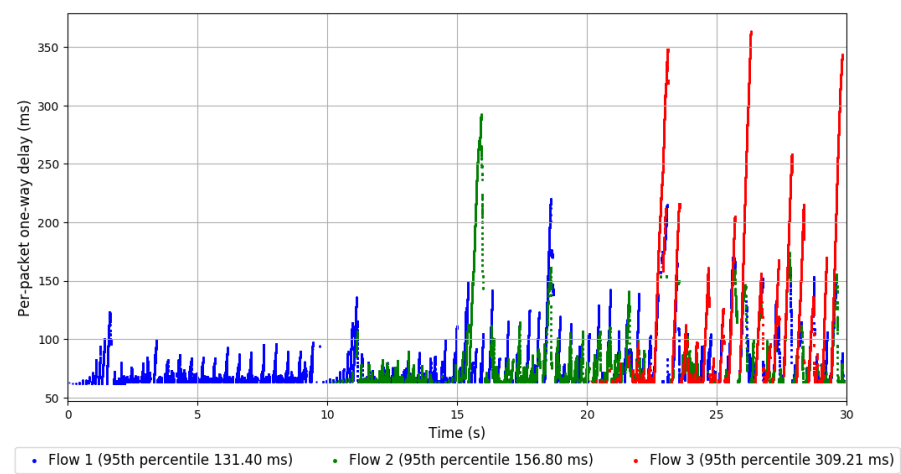
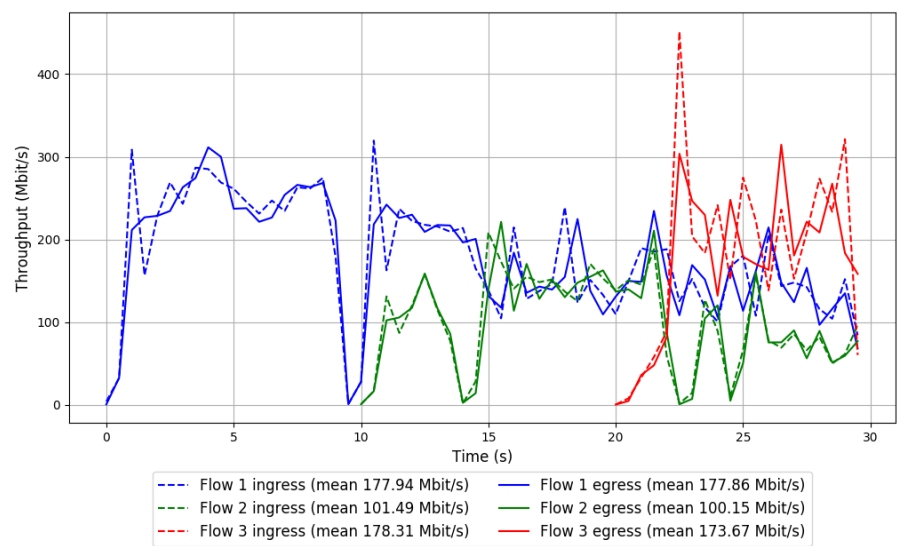
-- Flow 3:

Average throughput: 173.67 Mbit/s

95th percentile per-packet one-way delay: 309.215 ms

Loss rate: 4.61%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-01 01:15:42

End at: 2018-02-01 01:16:12

Below is generated by plot.py at 2018-02-01 07:57:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.58 Mbit/s

95th percentile per-packet one-way delay: 63.669 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 52.45 Mbit/s

95th percentile per-packet one-way delay: 63.616 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 31.21 Mbit/s

95th percentile per-packet one-way delay: 63.740 ms

Loss rate: 0.65%

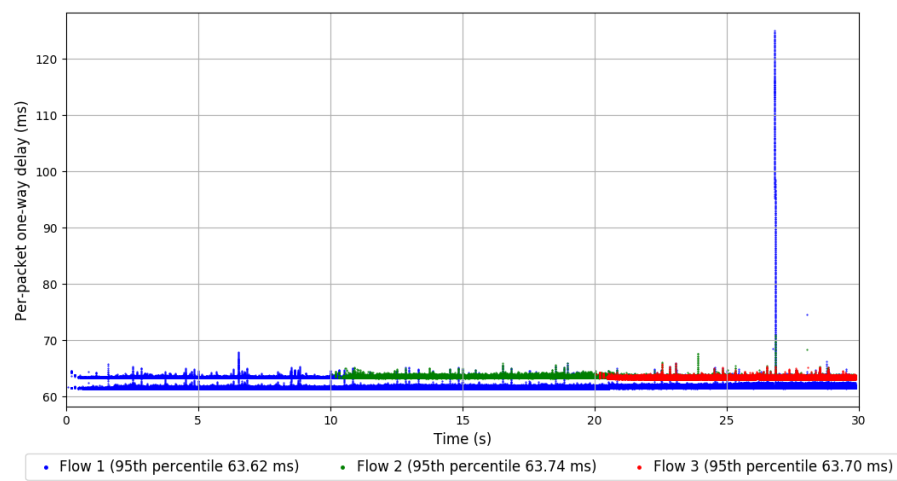
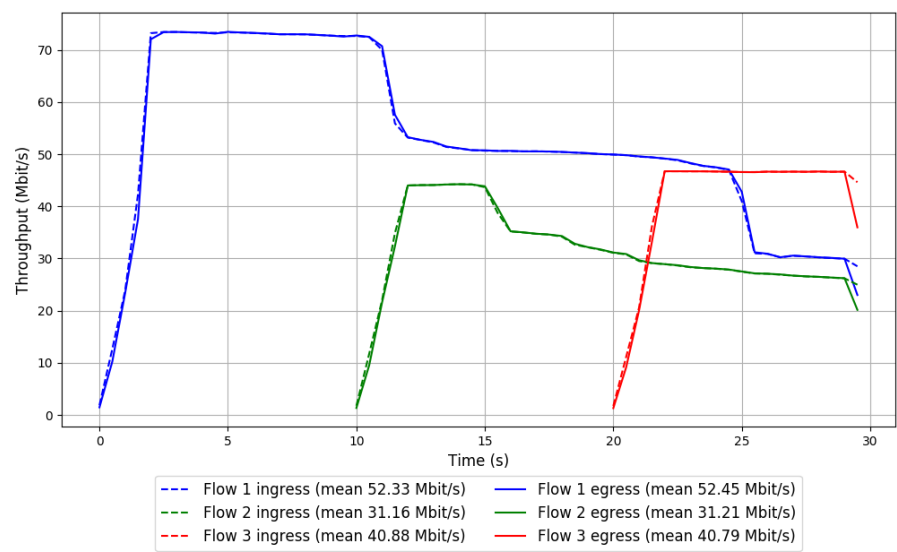
-- Flow 3:

Average throughput: 40.79 Mbit/s

95th percentile per-packet one-way delay: 63.697 ms

Loss rate: 1.79%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-01 01:32:32

End at: 2018-02-01 01:33:02

Below is generated by plot.py at 2018-02-01 07:57:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.51 Mbit/s

95th percentile per-packet one-way delay: 63.634 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 48.34 Mbit/s

95th percentile per-packet one-way delay: 63.583 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 25.99 Mbit/s

95th percentile per-packet one-way delay: 63.743 ms

Loss rate: 0.62%

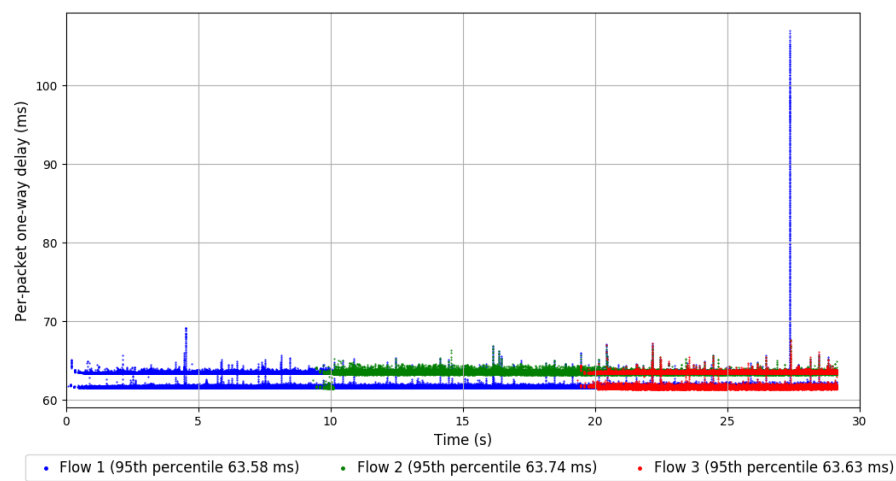
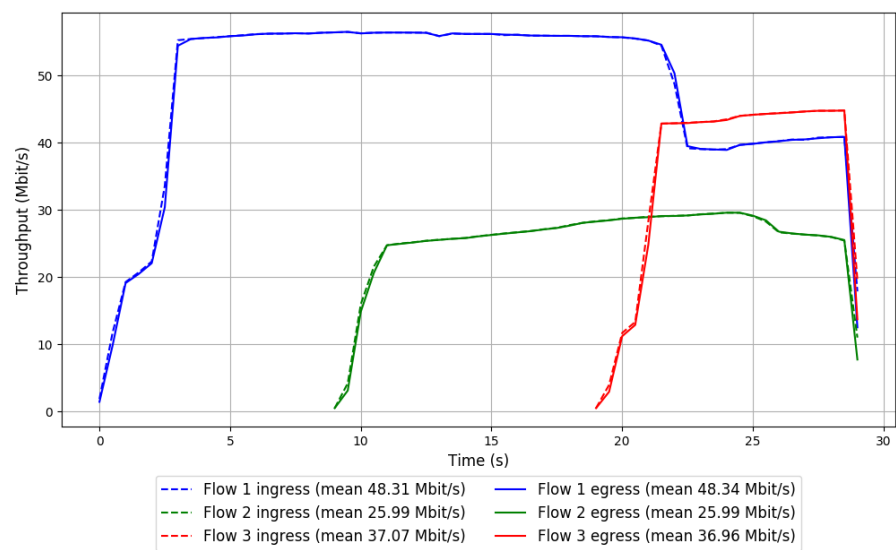
-- Flow 3:

Average throughput: 36.96 Mbit/s

95th percentile per-packet one-way delay: 63.634 ms

Loss rate: 1.57%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-01 01:49:22

End at: 2018-02-01 01:49:52

Below is generated by plot.py at 2018-02-01 07:57:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.43 Mbit/s

95th percentile per-packet one-way delay: 63.956 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 54.60 Mbit/s

95th percentile per-packet one-way delay: 63.948 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 41.81 Mbit/s

95th percentile per-packet one-way delay: 63.958 ms

Loss rate: 0.71%

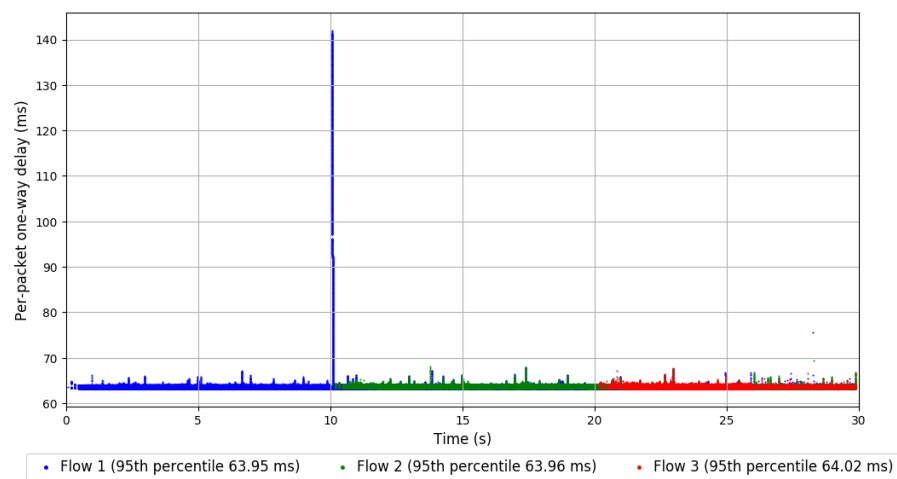
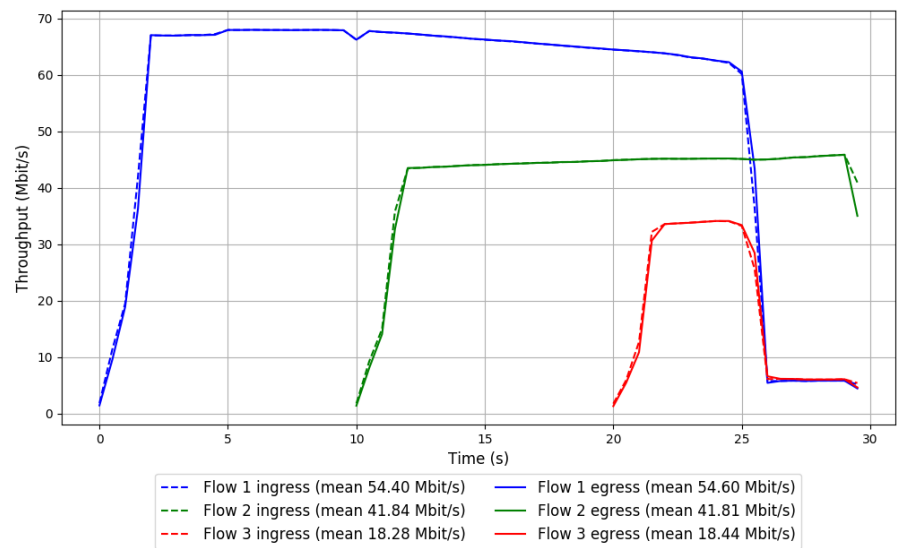
-- Flow 3:

Average throughput: 18.44 Mbit/s

95th percentile per-packet one-way delay: 64.017 ms

Loss rate: 0.43%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-01 02:06:12

End at: 2018-02-01 02:06:42

Below is generated by plot.py at 2018-02-01 07:57:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.54 Mbit/s

95th percentile per-packet one-way delay: 63.870 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 52.05 Mbit/s

95th percentile per-packet one-way delay: 63.911 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 43.66 Mbit/s

95th percentile per-packet one-way delay: 63.643 ms

Loss rate: 0.68%

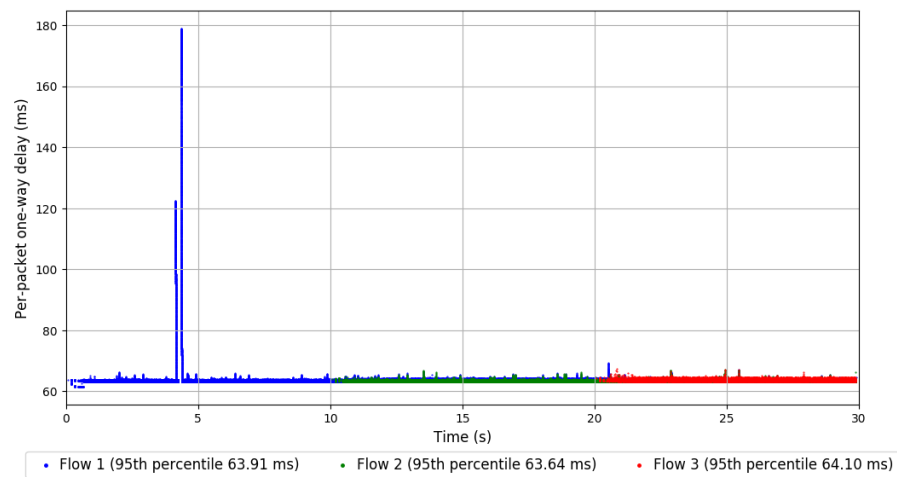
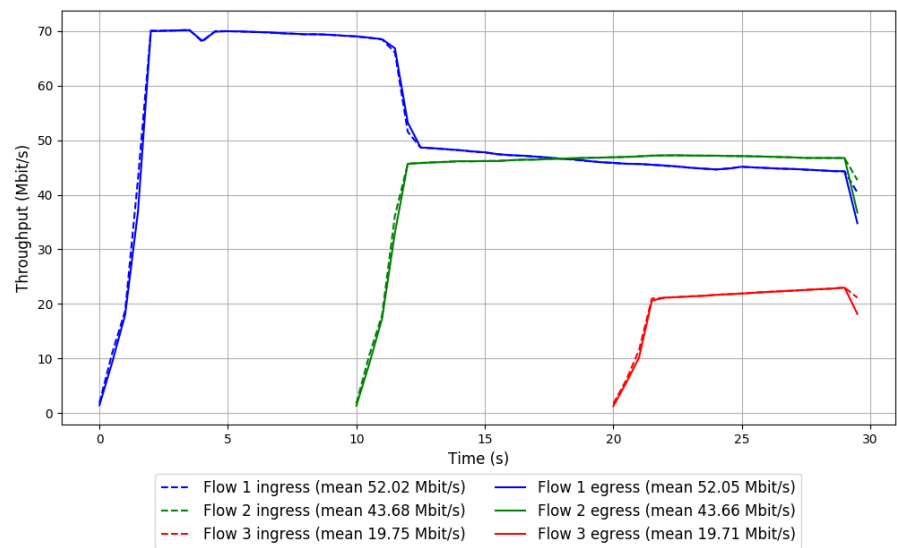
-- Flow 3:

Average throughput: 19.71 Mbit/s

95th percentile per-packet one-way delay: 64.103 ms

Loss rate: 1.51%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-01 02:23:11

End at: 2018-02-01 02:23:41

Below is generated by plot.py at 2018-02-01 07:57:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.37 Mbit/s

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

Loss rate: 0.40%

-- Flow 1:

Average throughput: 52.19 Mbit/s

95th percentile per-packet one-way delay: 61.883 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 6.91 Mbit/s

95th percentile per-packet one-way delay: 63.796 ms

Loss rate: 0.28%

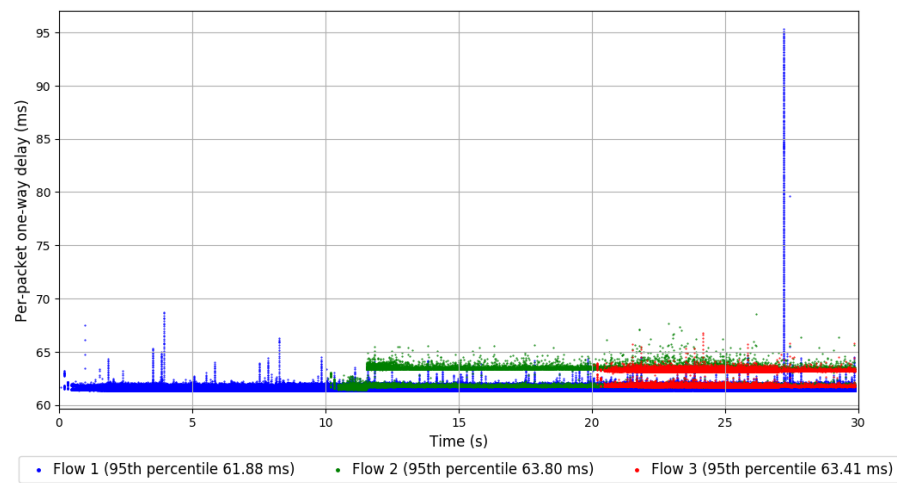
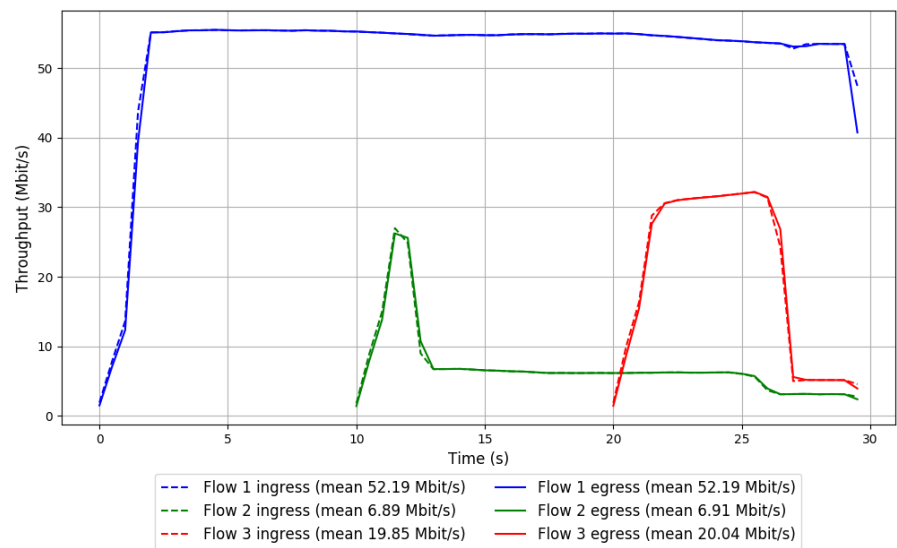
-- Flow 3:

Average throughput: 20.04 Mbit/s

95th percentile per-packet one-way delay: 63.411 ms

Loss rate: 0.32%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-01 02:40:01

End at: 2018-02-01 02:40:31

Below is generated by plot.py at 2018-02-01 07:57:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.94 Mbit/s

95th percentile per-packet one-way delay: 63.473 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 45.35 Mbit/s

95th percentile per-packet one-way delay: 61.982 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 30.59 Mbit/s

95th percentile per-packet one-way delay: 63.564 ms

Loss rate: 0.68%

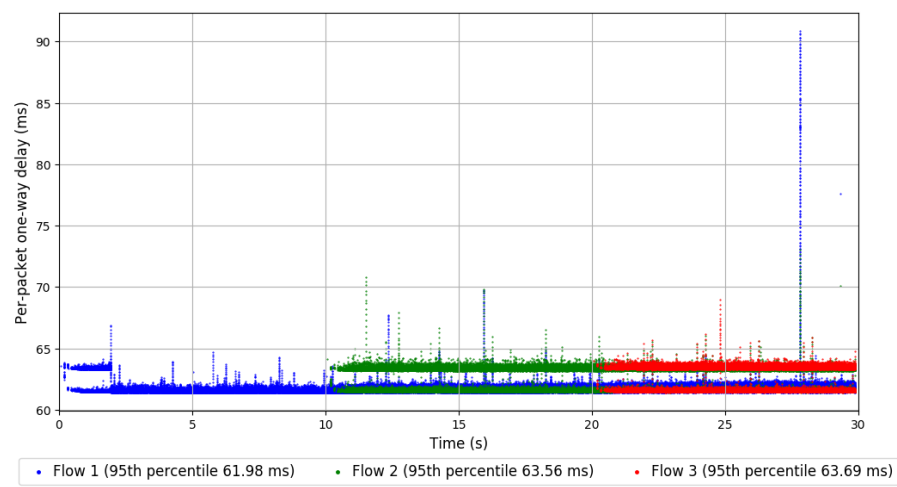
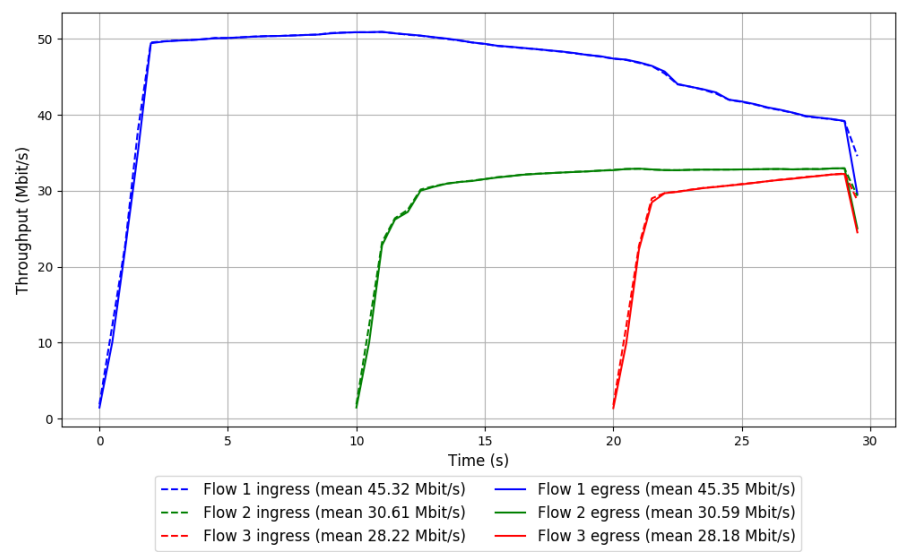
-- Flow 3:

Average throughput: 28.18 Mbit/s

95th percentile per-packet one-way delay: 63.689 ms

Loss rate: 1.46%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-01 02:56:54

End at: 2018-02-01 02:57:24

Below is generated by plot.py at 2018-02-01 07:57:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.35 Mbit/s

95th percentile per-packet one-way delay: 63.674 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 44.54 Mbit/s

95th percentile per-packet one-way delay: 63.620 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 27.01 Mbit/s

95th percentile per-packet one-way delay: 63.672 ms

Loss rate: 0.15%

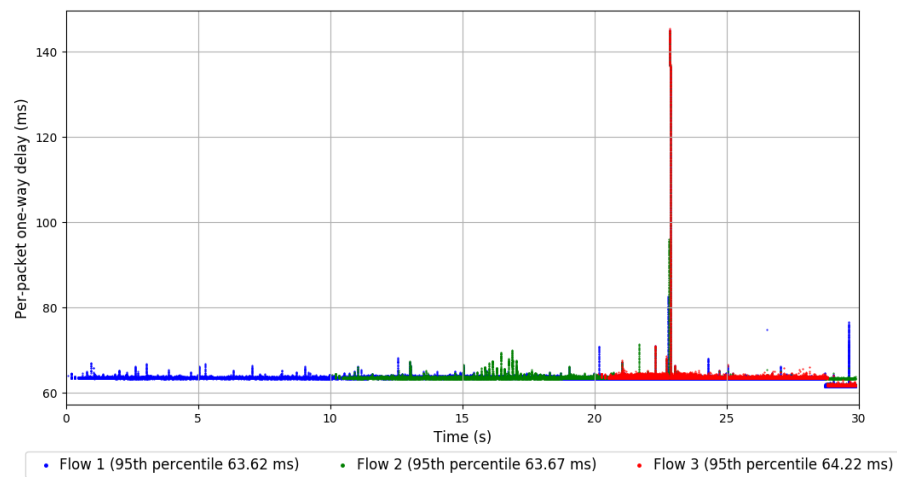
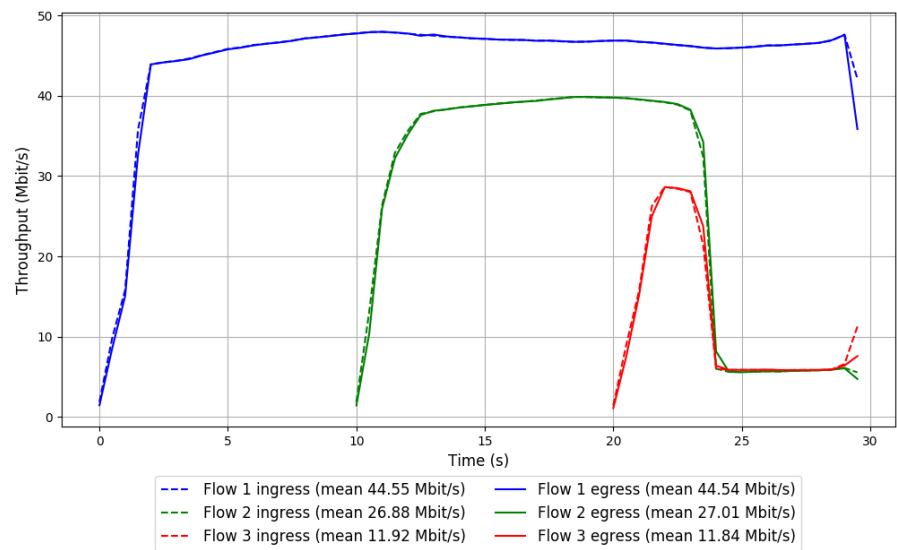
-- Flow 3:

Average throughput: 11.84 Mbit/s

95th percentile per-packet one-way delay: 64.215 ms

Loss rate: 1.96%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-01 03:13:40

End at: 2018-02-01 03:14:10

Below is generated by plot.py at 2018-02-01 07:57:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.64 Mbit/s

95th percentile per-packet one-way delay: 63.455 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 44.10 Mbit/s

95th percentile per-packet one-way delay: 63.344 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 20.02 Mbit/s

95th percentile per-packet one-way delay: 63.436 ms

Loss rate: 1.48%

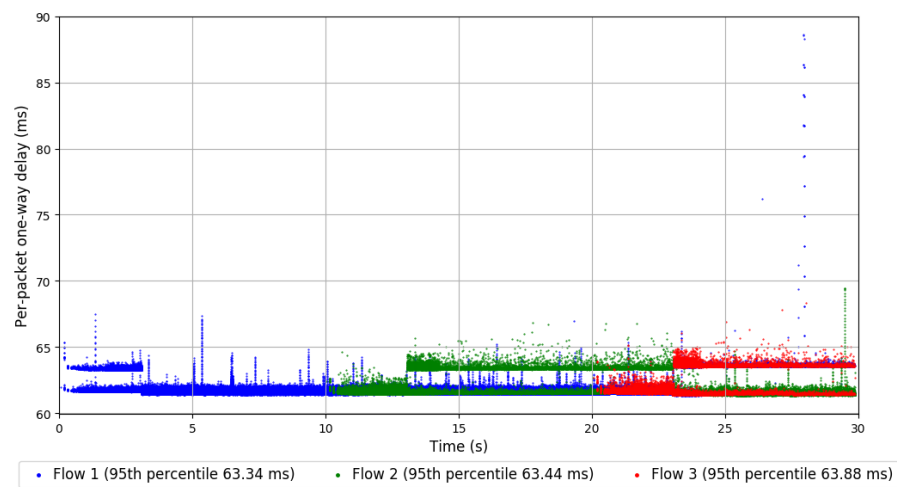
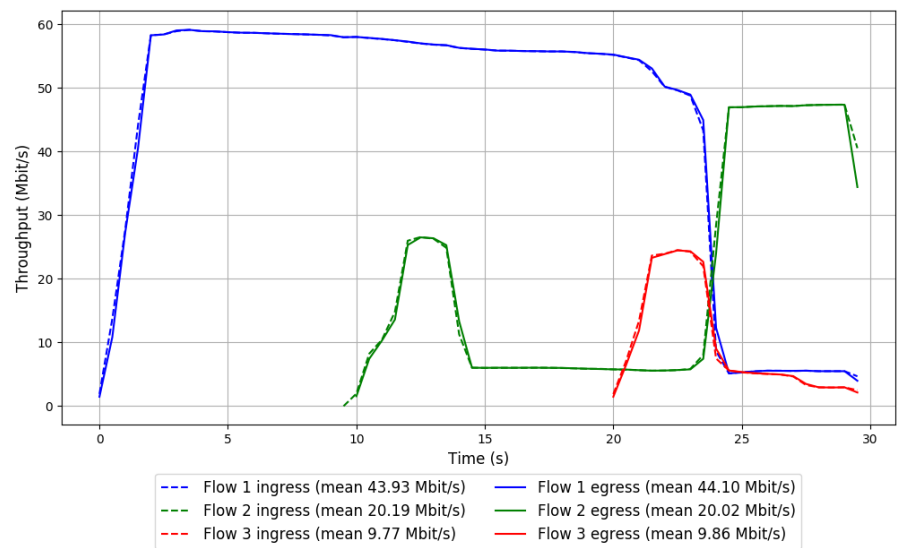
-- Flow 3:

Average throughput: 9.86 Mbit/s

95th percentile per-packet one-way delay: 63.885 ms

Loss rate: 0.38%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-01 03:30:24

End at: 2018-02-01 03:30:54

Below is generated by plot.py at 2018-02-01 07:58:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.67 Mbit/s

95th percentile per-packet one-way delay: 63.685 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 53.62 Mbit/s

95th percentile per-packet one-way delay: 63.722 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 34.75 Mbit/s

95th percentile per-packet one-way delay: 63.626 ms

Loss rate: 0.70%

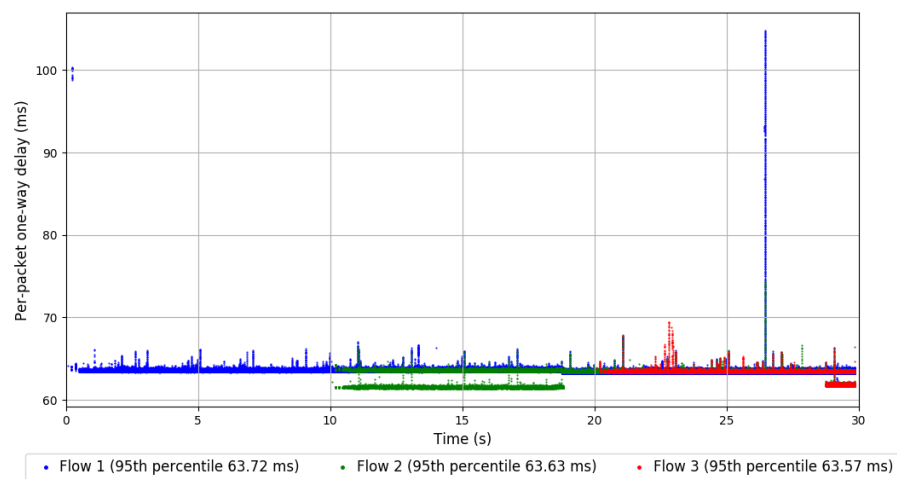
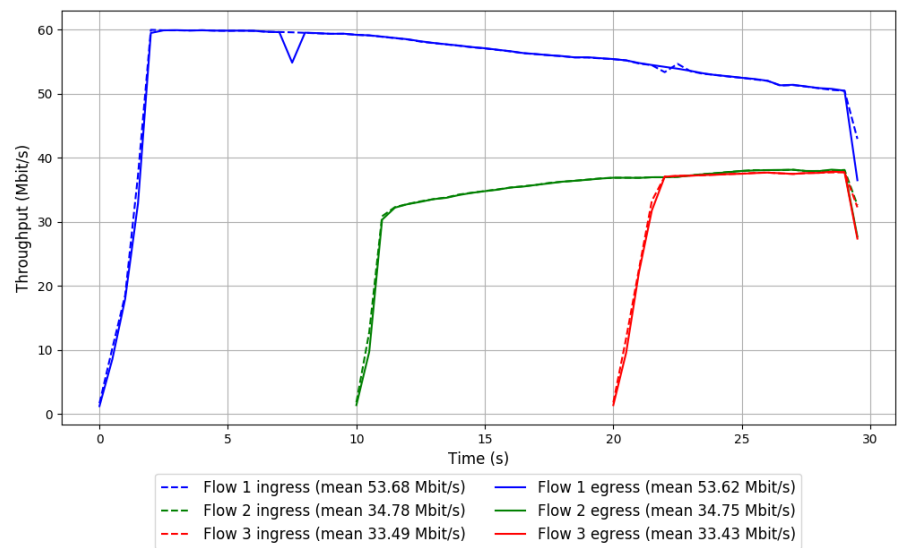
-- Flow 3:

Average throughput: 33.43 Mbit/s

95th percentile per-packet one-way delay: 63.573 ms

Loss rate: 1.44%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-01 03:47:15

End at: 2018-02-01 03:47:45

Below is generated by plot.py at 2018-02-01 07:58:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 64.38 Mbit/s

95th percentile per-packet one-way delay: 63.721 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 30.15 Mbit/s

95th percentile per-packet one-way delay: 63.746 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 40.41 Mbit/s

95th percentile per-packet one-way delay: 63.736 ms

Loss rate: 0.66%

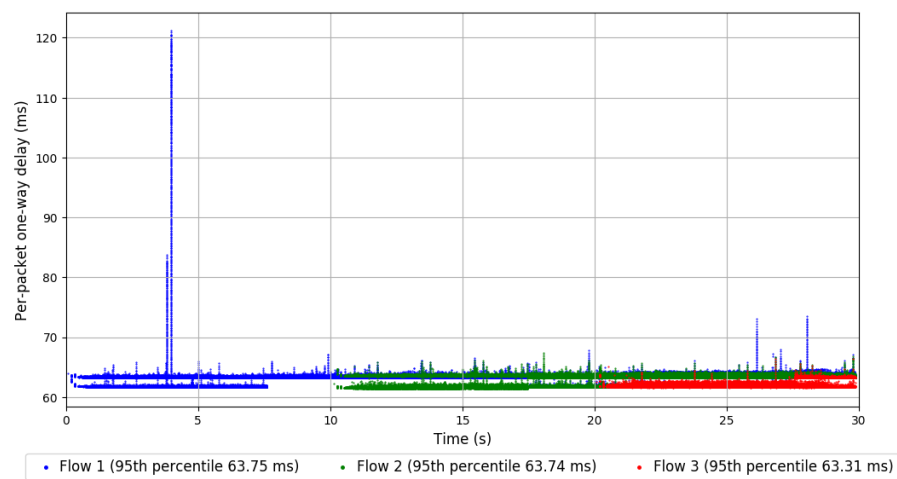
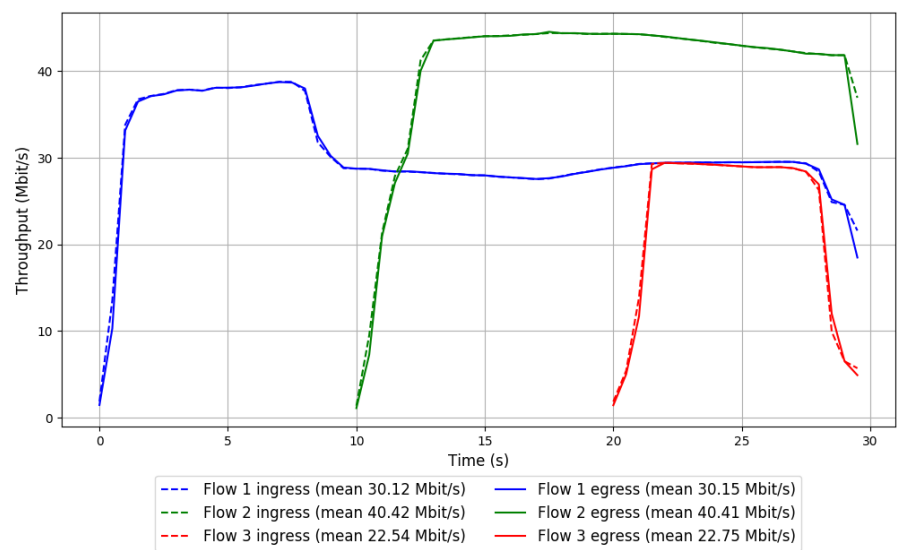
-- Flow 3:

Average throughput: 22.75 Mbit/s

95th percentile per-packet one-way delay: 63.313 ms

Loss rate: 0.36%

Run 10: Report of Copa — Data Link

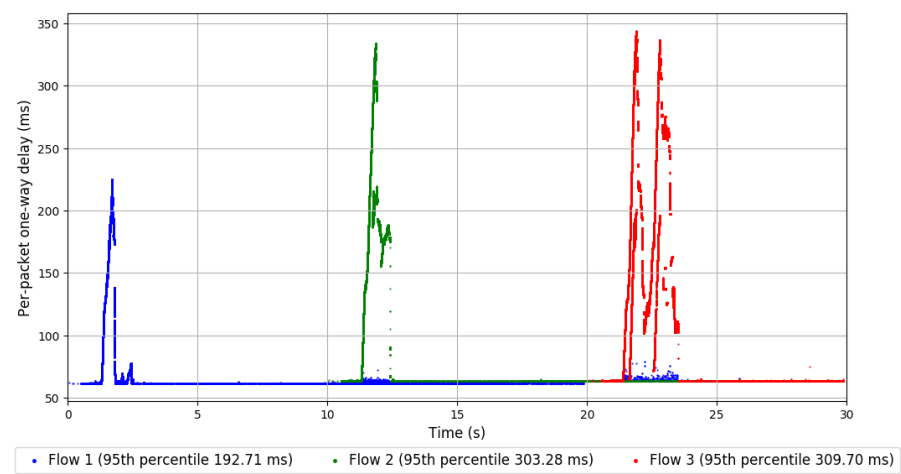
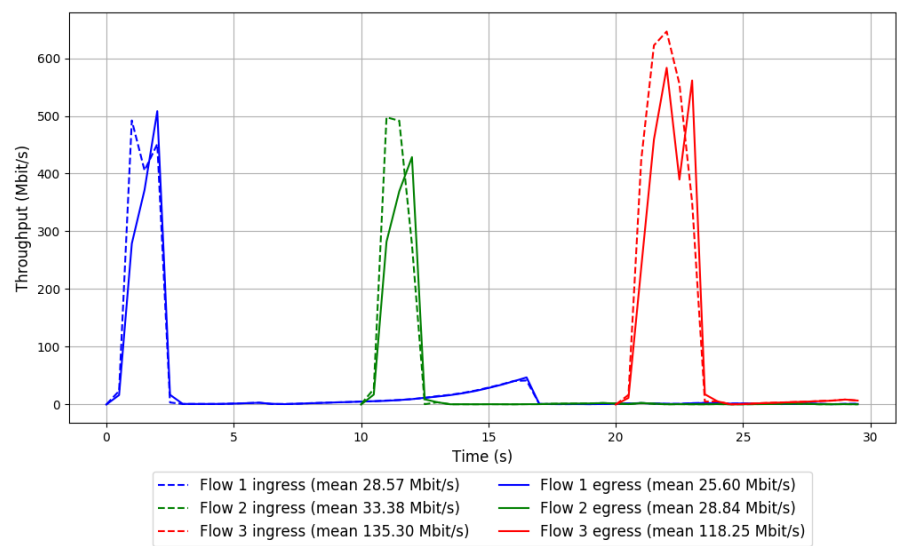


```
Run 1: Statistics of FillP

Start at: 2018-02-01 01:19:43
End at: 2018-02-01 01:20:13

# Below is generated by plot.py at 2018-02-01 08:00:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.52 Mbit/s
95th percentile per-packet one-way delay: 291.253 ms
Loss rate: 12.82%
-- Flow 1:
Average throughput: 25.60 Mbit/s
95th percentile per-packet one-way delay: 192.707 ms
Loss rate: 10.76%
-- Flow 2:
Average throughput: 28.84 Mbit/s
95th percentile per-packet one-way delay: 303.278 ms
Loss rate: 14.13%
-- Flow 3:
Average throughput: 118.25 Mbit/s
95th percentile per-packet one-way delay: 309.704 ms
Loss rate: 13.49%
```


Run 1: Report of FillP — Data Link

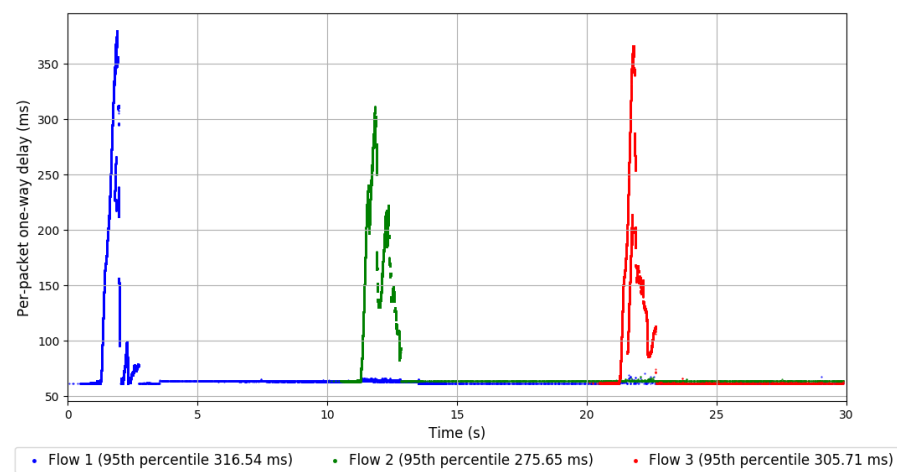
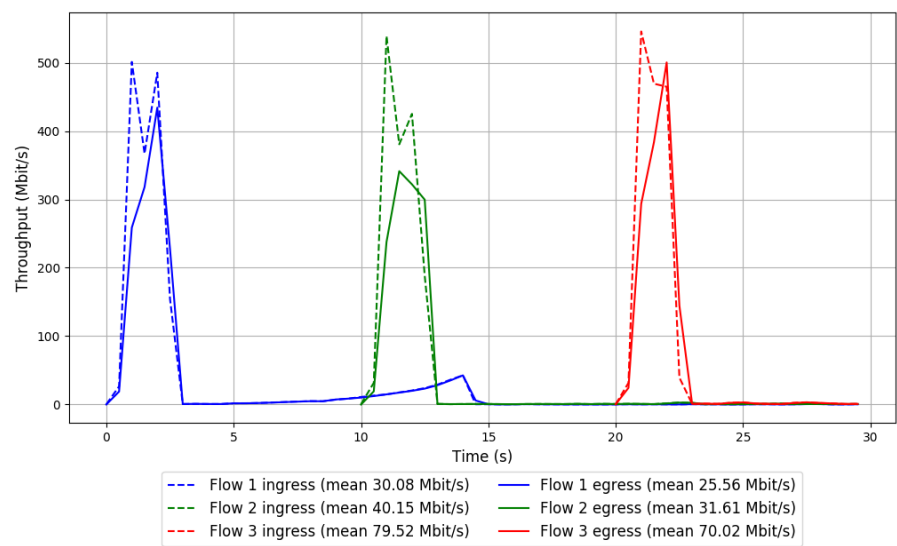


```
Run 2: Statistics of FillP

Start at: 2018-02-01 01:36:29
End at: 2018-02-01 01:36:59

# Below is generated by plot.py at 2018-02-01 08:00:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.52 Mbit/s
95th percentile per-packet one-way delay: 295.027 ms
Loss rate: 16.64%
-- Flow 1:
Average throughput: 25.56 Mbit/s
95th percentile per-packet one-way delay: 316.540 ms
Loss rate: 15.38%
-- Flow 2:
Average throughput: 31.61 Mbit/s
95th percentile per-packet one-way delay: 275.653 ms
Loss rate: 21.66%
-- Flow 3:
Average throughput: 70.02 Mbit/s
95th percentile per-packet one-way delay: 305.707 ms
Loss rate: 13.00%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-01 01:53:08

End at: 2018-02-01 01:53:38

Below is generated by plot.py at 2018-02-01 08:00:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.21 Mbit/s

95th percentile per-packet one-way delay: 237.330 ms

Loss rate: 11.46%

-- Flow 1:

Average throughput: 21.17 Mbit/s

95th percentile per-packet one-way delay: 306.902 ms

Loss rate: 11.29%

-- Flow 2:

Average throughput: 33.08 Mbit/s

95th percentile per-packet one-way delay: 222.774 ms

Loss rate: 6.19%

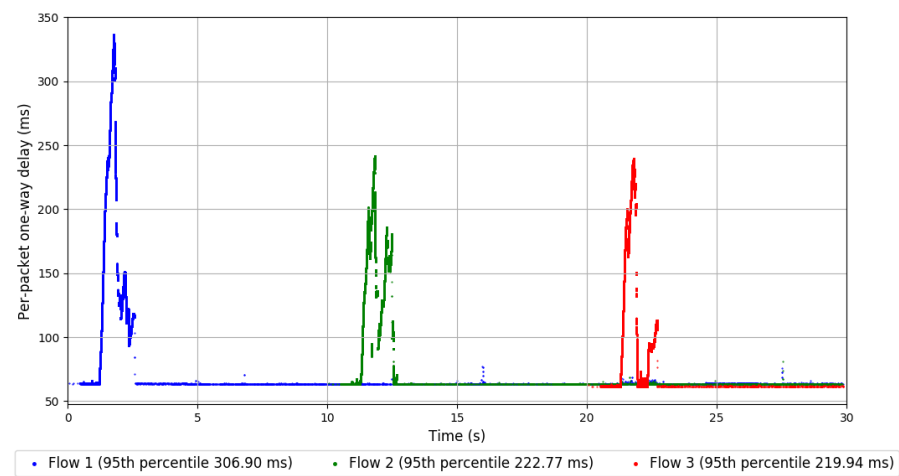
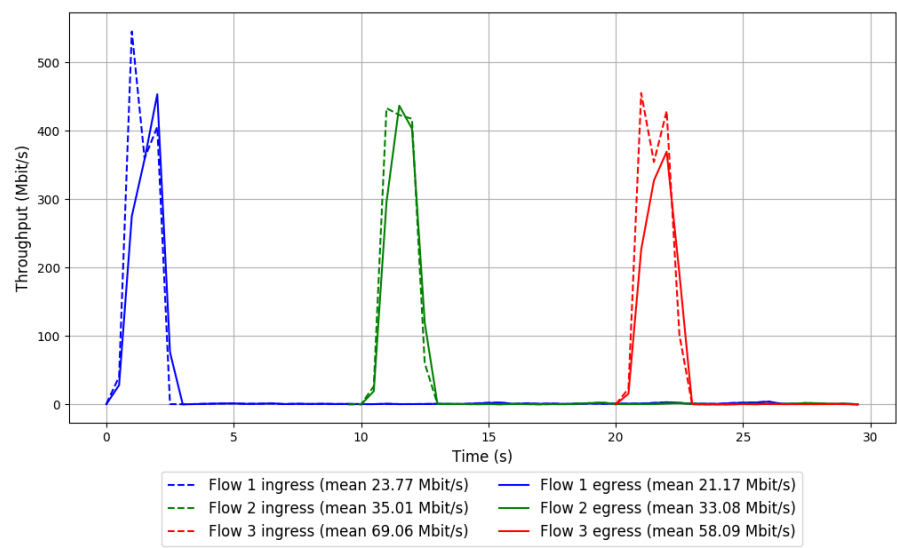
-- Flow 3:

Average throughput: 58.09 Mbit/s

95th percentile per-packet one-way delay: 219.942 ms

Loss rate: 16.99%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-01 02:10:15

End at: 2018-02-01 02:10:45

Below is generated by plot.py at 2018-02-01 08:00:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.58 Mbit/s

95th percentile per-packet one-way delay: 253.446 ms

Loss rate: 10.29%

-- Flow 1:

Average throughput: 29.00 Mbit/s

95th percentile per-packet one-way delay: 278.589 ms

Loss rate: 6.49%

-- Flow 2:

Average throughput: 33.64 Mbit/s

95th percentile per-packet one-way delay: 288.515 ms

Loss rate: 10.36%

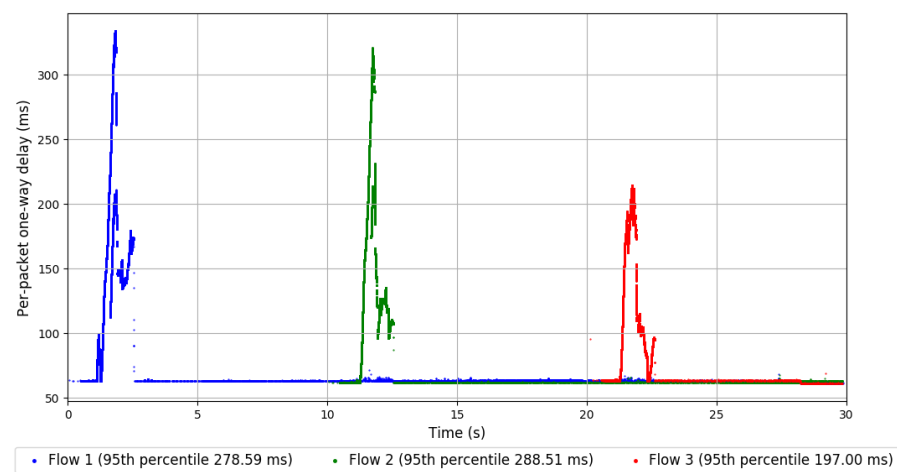
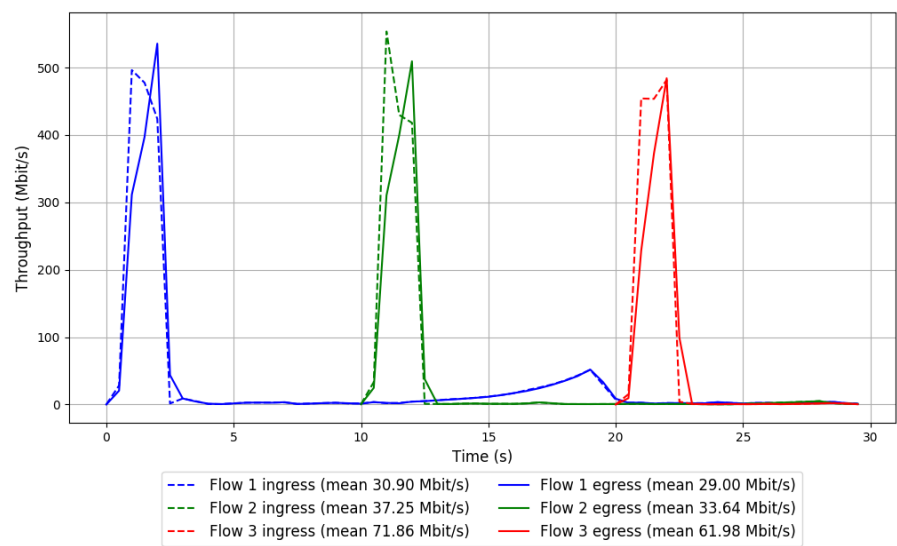
-- Flow 3:

Average throughput: 61.98 Mbit/s

95th percentile per-packet one-way delay: 197.005 ms

Loss rate: 15.18%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

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

End at: 2018-02-01 02:27:32

Below is generated by plot.py at 2018-02-01 08:00:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.45 Mbit/s

95th percentile per-packet one-way delay: 296.114 ms

Loss rate: 12.59%

-- Flow 1:

Average throughput: 20.83 Mbit/s

95th percentile per-packet one-way delay: 231.358 ms

Loss rate: 7.97%

-- Flow 2:

Average throughput: 32.62 Mbit/s

95th percentile per-packet one-way delay: 357.247 ms

Loss rate: 18.18%

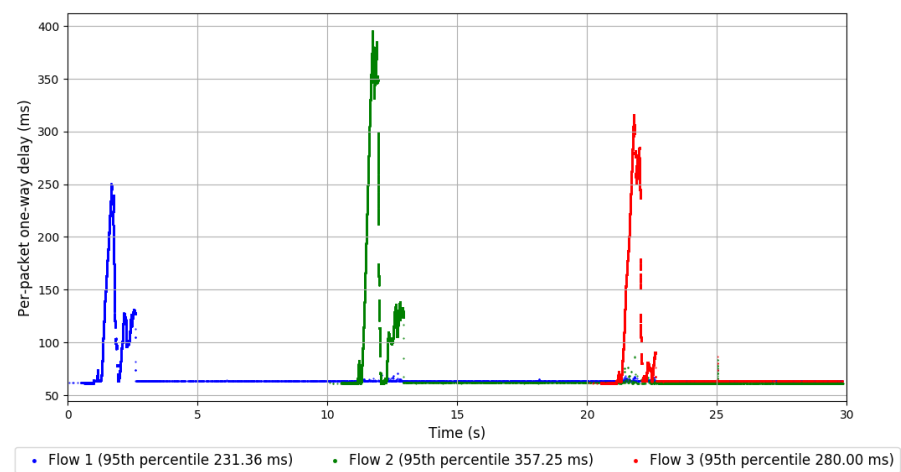
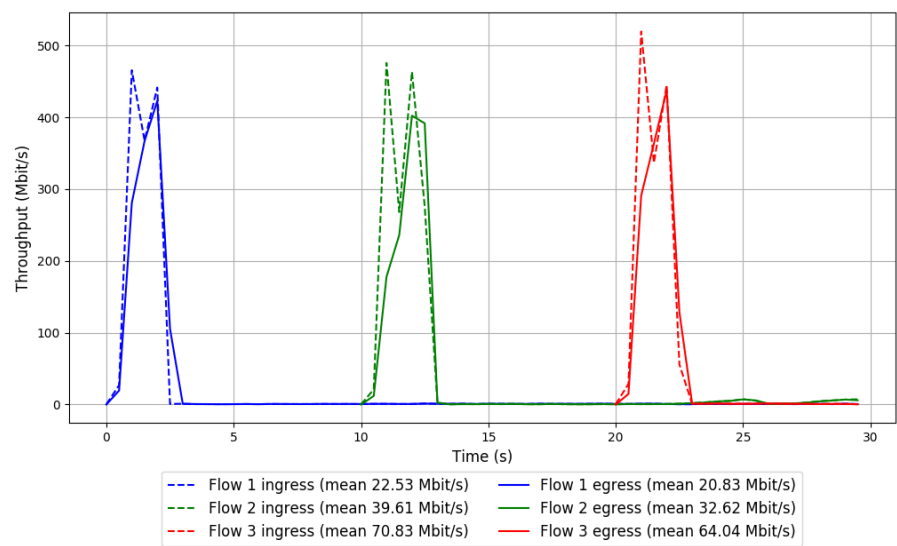
-- Flow 3:

Average throughput: 64.04 Mbit/s

95th percentile per-packet one-way delay: 279.999 ms

Loss rate: 10.75%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-01 02:43:56

End at: 2018-02-01 02:44:26

Below is generated by plot.py at 2018-02-01 08:00:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.93 Mbit/s

95th percentile per-packet one-way delay: 200.258 ms

Loss rate: 7.95%

-- Flow 1:

Average throughput: 20.40 Mbit/s

95th percentile per-packet one-way delay: 186.705 ms

Loss rate: 6.91%

-- Flow 2:

Average throughput: 34.66 Mbit/s

95th percentile per-packet one-way delay: 307.993 ms

Loss rate: 12.19%

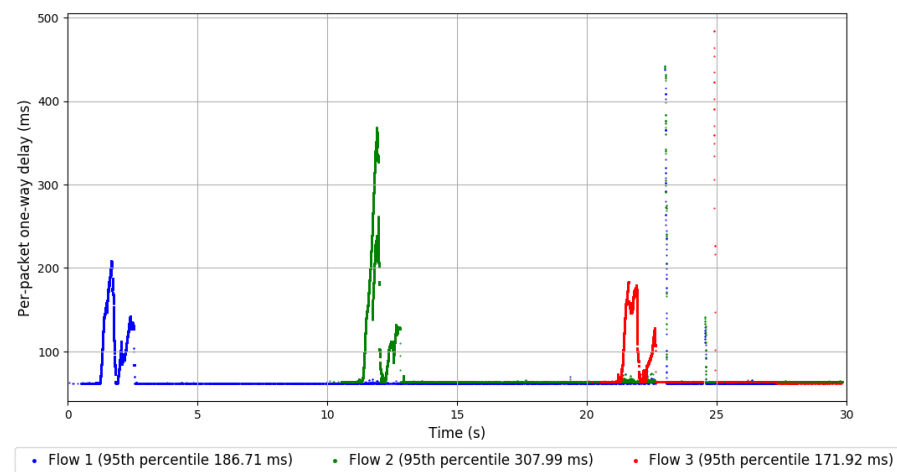
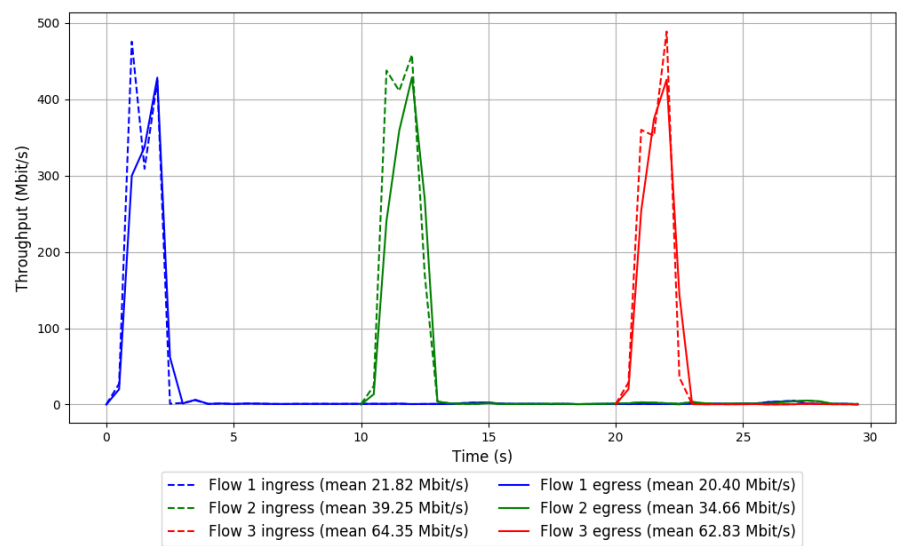
-- Flow 3:

Average throughput: 62.83 Mbit/s

95th percentile per-packet one-way delay: 171.916 ms

Loss rate: 3.82%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-01 03:00:46

End at: 2018-02-01 03:01:16

Below is generated by plot.py at 2018-02-01 08:01:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.85 Mbit/s

95th percentile per-packet one-way delay: 268.673 ms

Loss rate: 16.46%

-- Flow 1:

Average throughput: 21.20 Mbit/s

95th percentile per-packet one-way delay: 273.520 ms

Loss rate: 14.18%

-- Flow 2:

Average throughput: 31.51 Mbit/s

95th percentile per-packet one-way delay: 298.485 ms

Loss rate: 19.58%

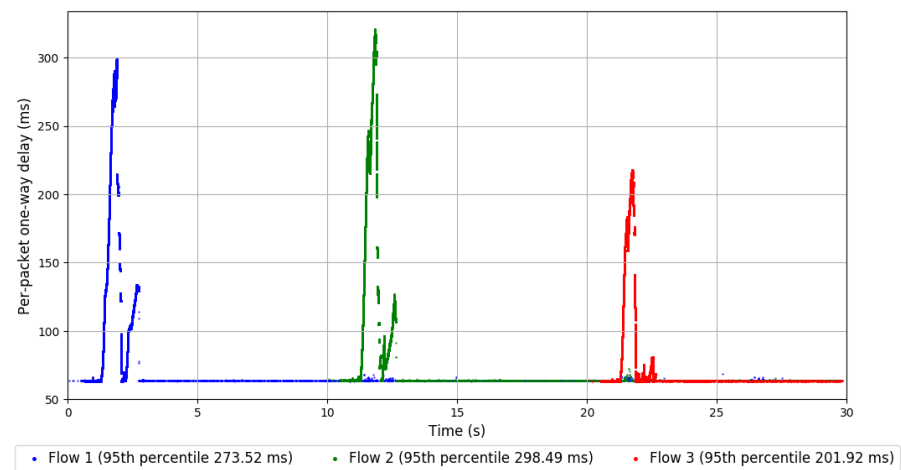
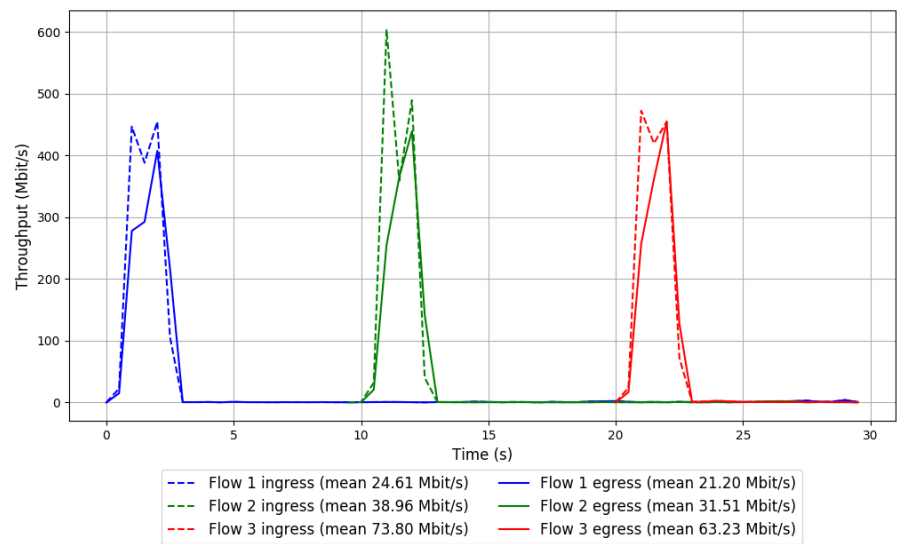
-- Flow 3:

Average throughput: 63.23 Mbit/s

95th percentile per-packet one-way delay: 201.916 ms

Loss rate: 15.44%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-01 03:17:31

End at: 2018-02-01 03:18:01

Below is generated by plot.py at 2018-02-01 08:01:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.99 Mbit/s

95th percentile per-packet one-way delay: 279.325 ms

Loss rate: 15.15%

-- Flow 1:

Average throughput: 21.62 Mbit/s

95th percentile per-packet one-way delay: 278.058 ms

Loss rate: 18.89%

-- Flow 2:

Average throughput: 35.57 Mbit/s

95th percentile per-packet one-way delay: 341.736 ms

Loss rate: 15.23%

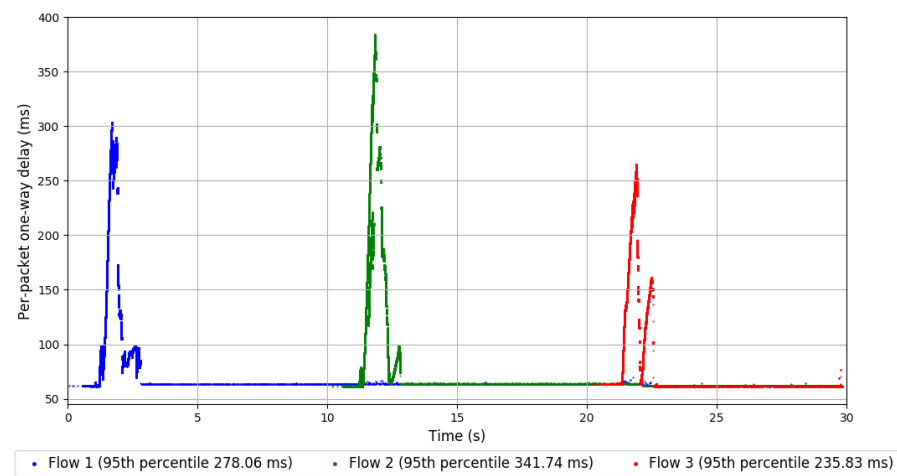
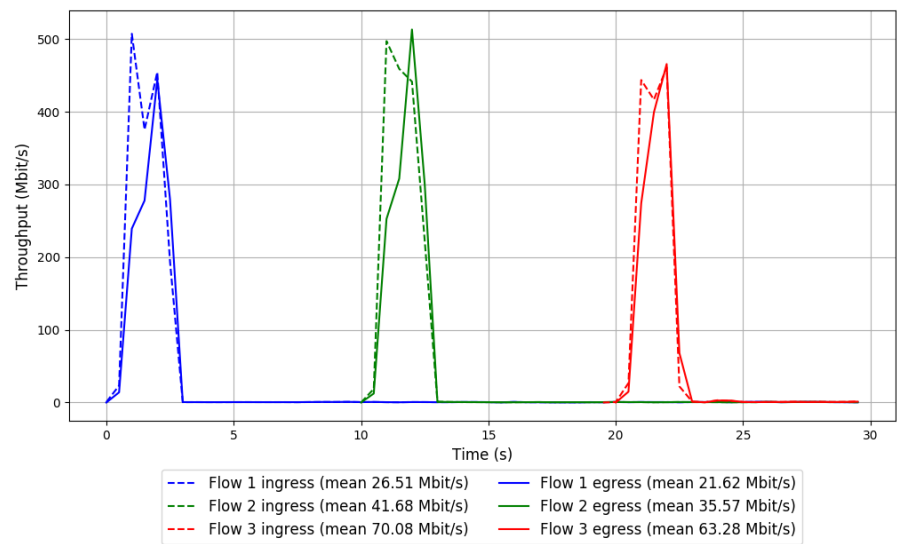
-- Flow 3:

Average throughput: 63.28 Mbit/s

95th percentile per-packet one-way delay: 235.833 ms

Loss rate: 10.77%

Run 8: Report of FillP — Data Link

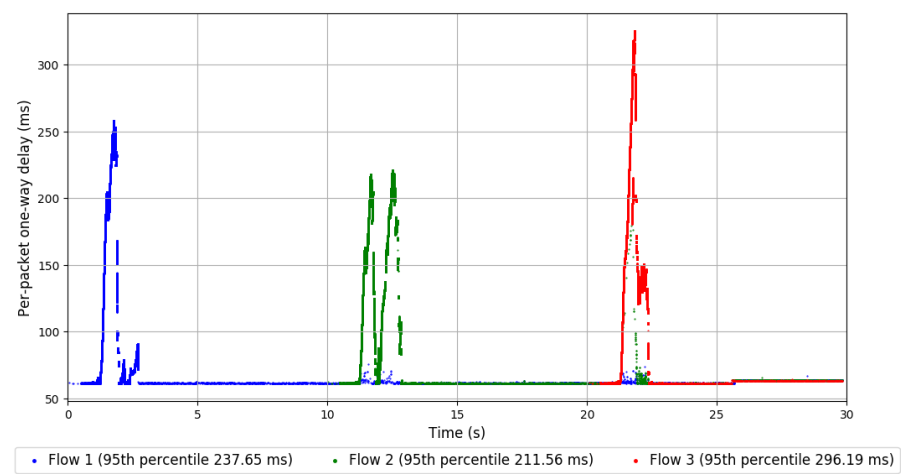
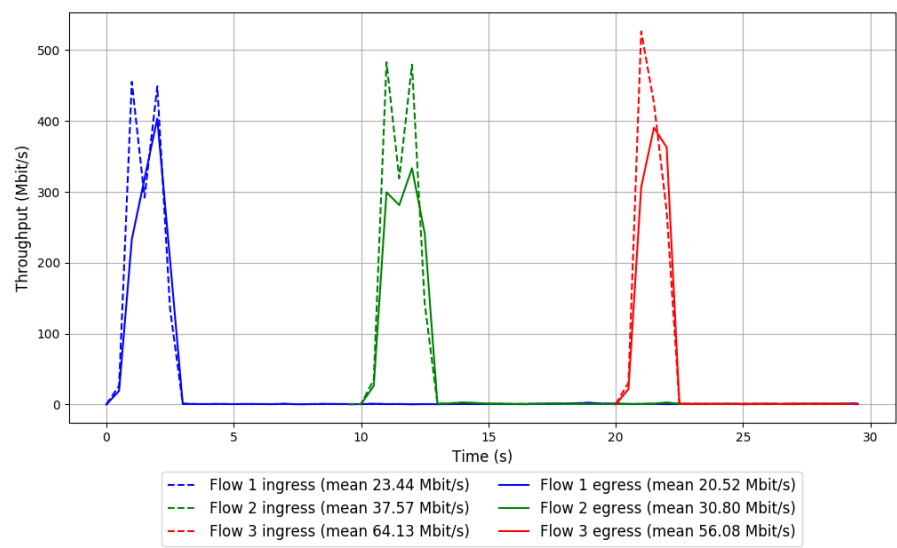


```
Run 9: Statistics of FillP

Start at: 2018-02-01 03:34:17
End at: 2018-02-01 03:34:47

# Below is generated by plot.py at 2018-02-01 08:02:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.38 Mbit/s
95th percentile per-packet one-way delay: 239.476 ms
Loss rate: 15.15%
-- Flow 1:
Average throughput: 20.52 Mbit/s
95th percentile per-packet one-way delay: 237.653 ms
Loss rate: 12.85%
-- Flow 2:
Average throughput: 30.80 Mbit/s
95th percentile per-packet one-way delay: 211.560 ms
Loss rate: 18.53%
-- Flow 3:
Average throughput: 56.08 Mbit/s
95th percentile per-packet one-way delay: 296.191 ms
Loss rate: 13.70%
```


Run 9: Report of FillP — Data Link

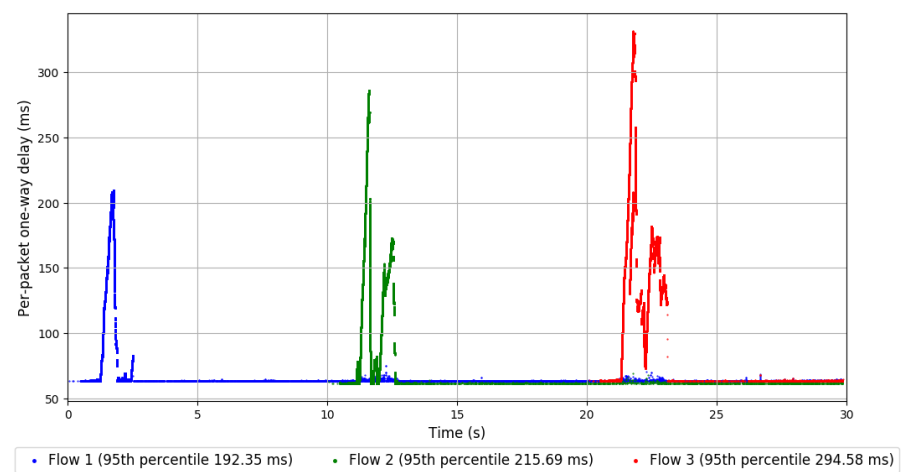
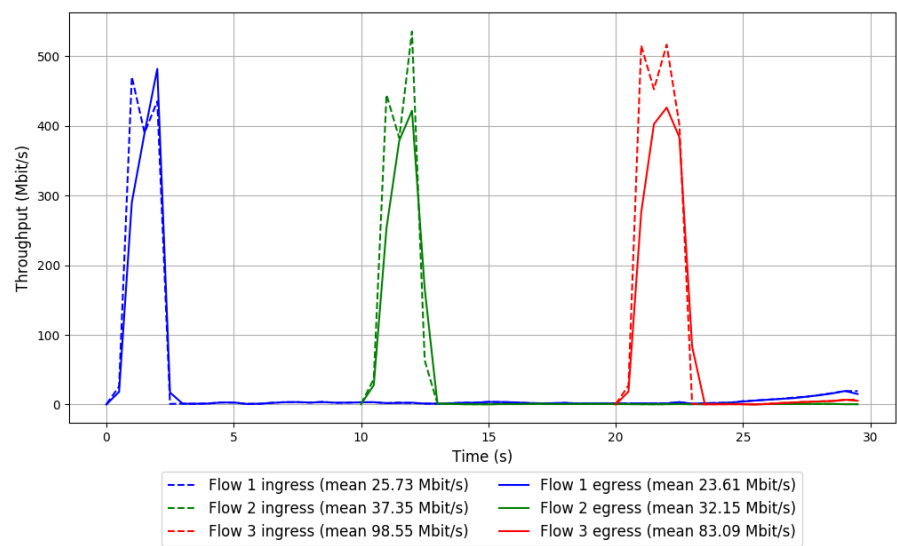


```
Run 10: Statistics of FillP

Start at: 2018-02-01 03:51:07
End at: 2018-02-01 03:51:37

# Below is generated by plot.py at 2018-02-01 08:02:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.22 Mbit/s
95th percentile per-packet one-way delay: 210.407 ms
Loss rate: 13.55%
-- Flow 1:
Average throughput: 23.61 Mbit/s
95th percentile per-packet one-way delay: 192.353 ms
Loss rate: 8.61%
-- Flow 2:
Average throughput: 32.15 Mbit/s
95th percentile per-packet one-way delay: 215.694 ms
Loss rate: 14.46%
-- Flow 3:
Average throughput: 83.09 Mbit/s
95th percentile per-packet one-way delay: 294.577 ms
Loss rate: 16.76%
```

Run 10: Report of FillP — Data Link

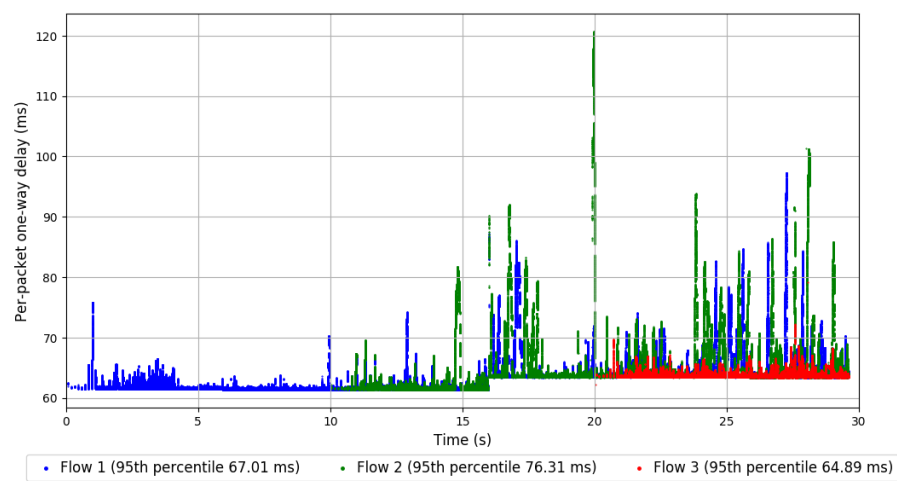
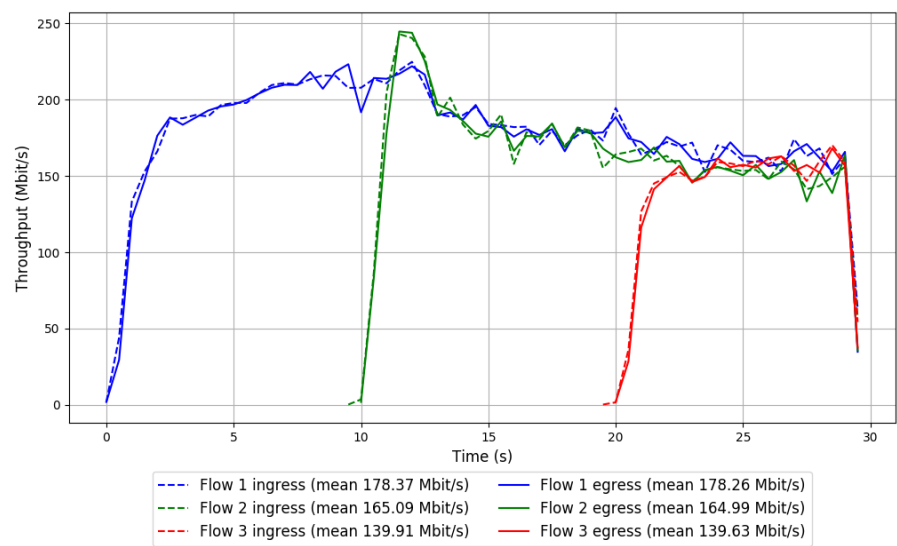


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-01 01:25:07
End at: 2018-02-01 01:25:37

# Below is generated by plot.py at 2018-02-01 08:06:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.76 Mbit/s
95th percentile per-packet one-way delay: 69.612 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 178.26 Mbit/s
95th percentile per-packet one-way delay: 67.012 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 164.99 Mbit/s
95th percentile per-packet one-way delay: 76.308 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 139.63 Mbit/s
95th percentile per-packet one-way delay: 64.890 ms
Loss rate: 1.51%
```

Run 1: Report of Indigo-1-32 — Data Link

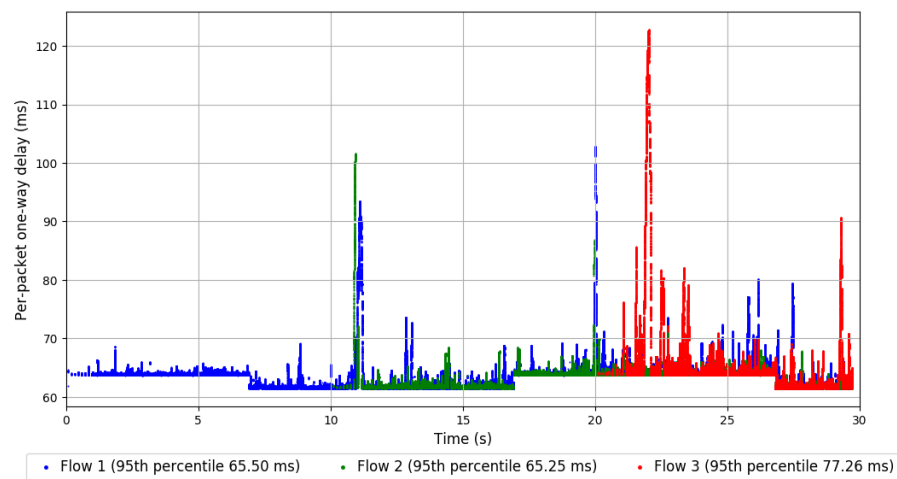
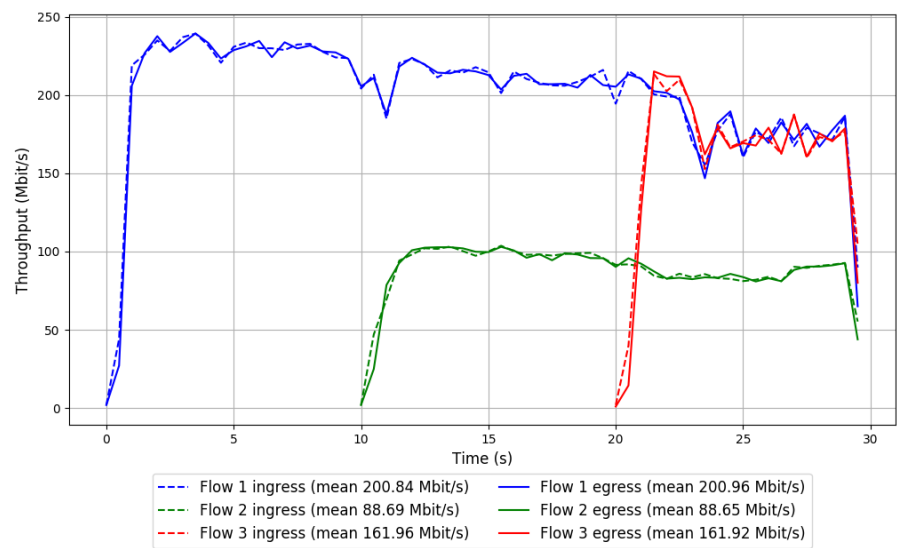


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-01 01:41:56
End at: 2018-02-01 01:42:26

# Below is generated by plot.py at 2018-02-01 08:06:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.05 Mbit/s
95th percentile per-packet one-way delay: 66.688 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 200.96 Mbit/s
95th percentile per-packet one-way delay: 65.496 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 88.65 Mbit/s
95th percentile per-packet one-way delay: 65.249 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 161.92 Mbit/s
95th percentile per-packet one-way delay: 77.261 ms
Loss rate: 1.34%
```

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-01 01:58:54

End at: 2018-02-01 01:59:24

Below is generated by plot.py at 2018-02-01 08:06:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.73 Mbit/s

95th percentile per-packet one-way delay: 66.107 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 182.70 Mbit/s

95th percentile per-packet one-way delay: 65.347 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 164.48 Mbit/s

95th percentile per-packet one-way delay: 68.393 ms

Loss rate: 0.57%

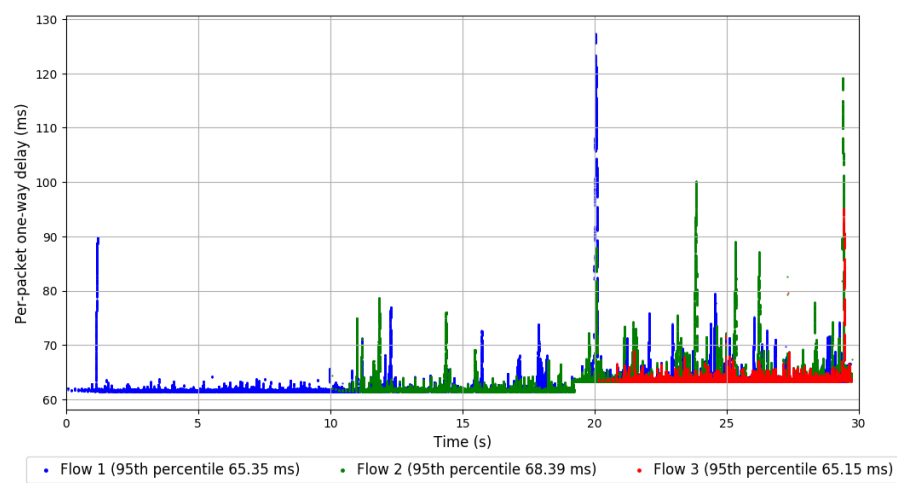
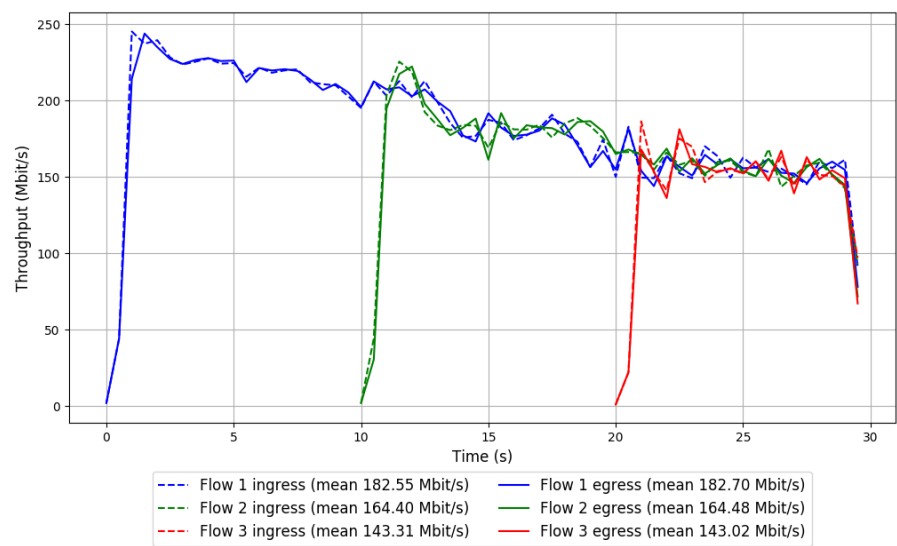
-- Flow 3:

Average throughput: 143.02 Mbit/s

95th percentile per-packet one-way delay: 65.150 ms

Loss rate: 1.52%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-01 02:15:51

End at: 2018-02-01 02:16:21

Below is generated by plot.py at 2018-02-01 08:06:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.62 Mbit/s

95th percentile per-packet one-way delay: 68.258 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 165.40 Mbit/s

95th percentile per-packet one-way delay: 66.456 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 172.61 Mbit/s

95th percentile per-packet one-way delay: 70.508 ms

Loss rate: 0.55%

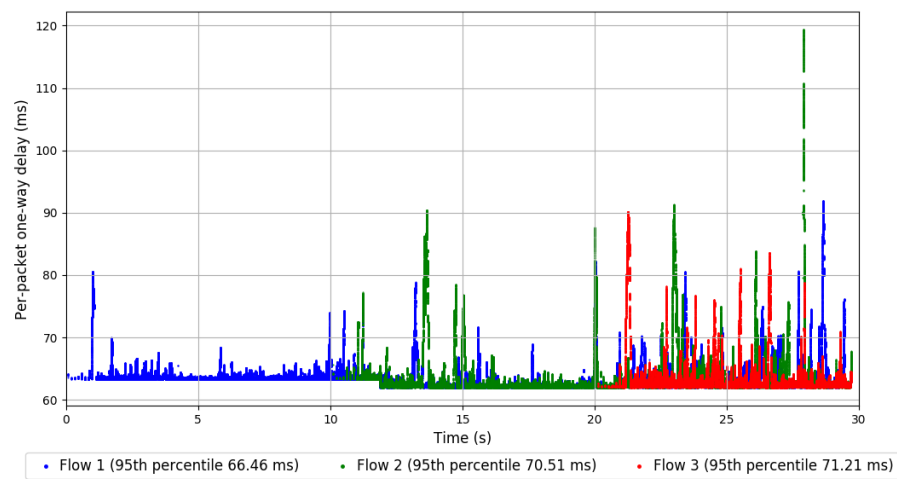
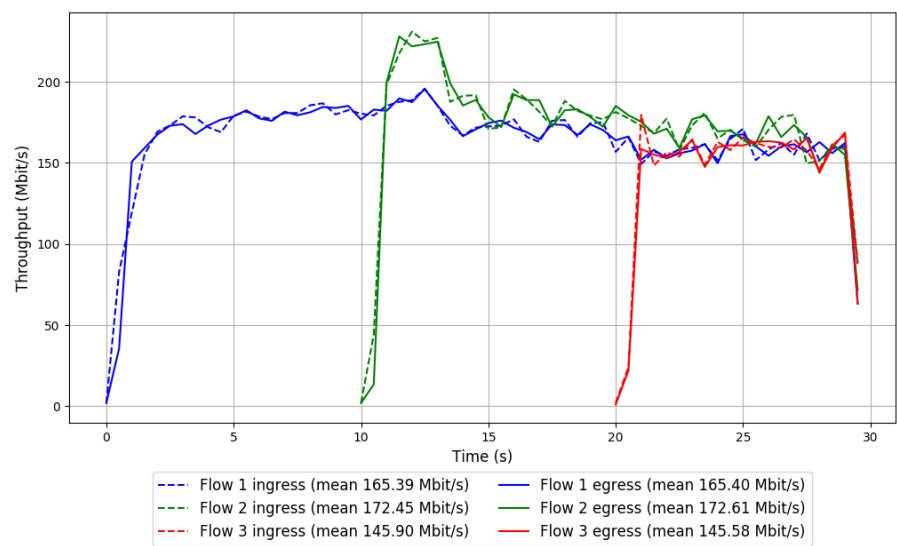
-- Flow 3:

Average throughput: 145.58 Mbit/s

95th percentile per-packet one-way delay: 71.212 ms

Loss rate: 1.52%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-01 02:32:39

End at: 2018-02-01 02:33:09

Below is generated by plot.py at 2018-02-01 08:07:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 324.98 Mbit/s

95th percentile per-packet one-way delay: 69.276 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 174.60 Mbit/s

95th percentile per-packet one-way delay: 72.214 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 154.19 Mbit/s

95th percentile per-packet one-way delay: 67.585 ms

Loss rate: 0.73%

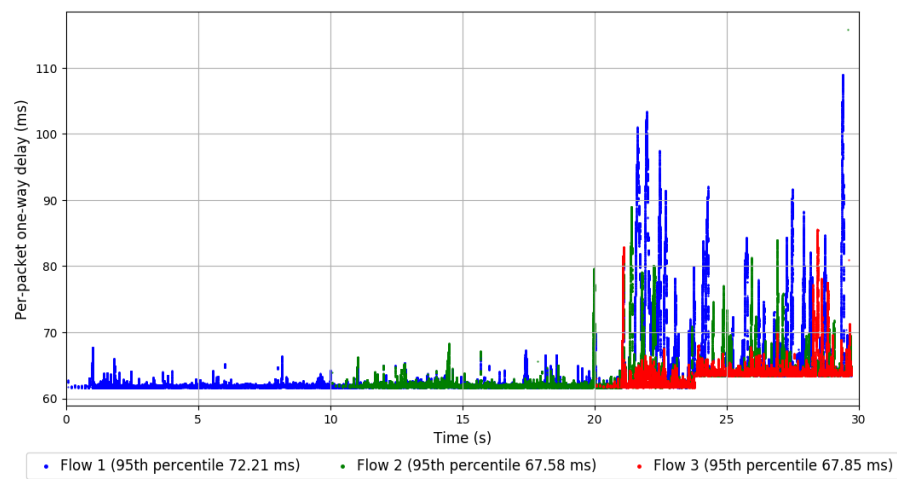
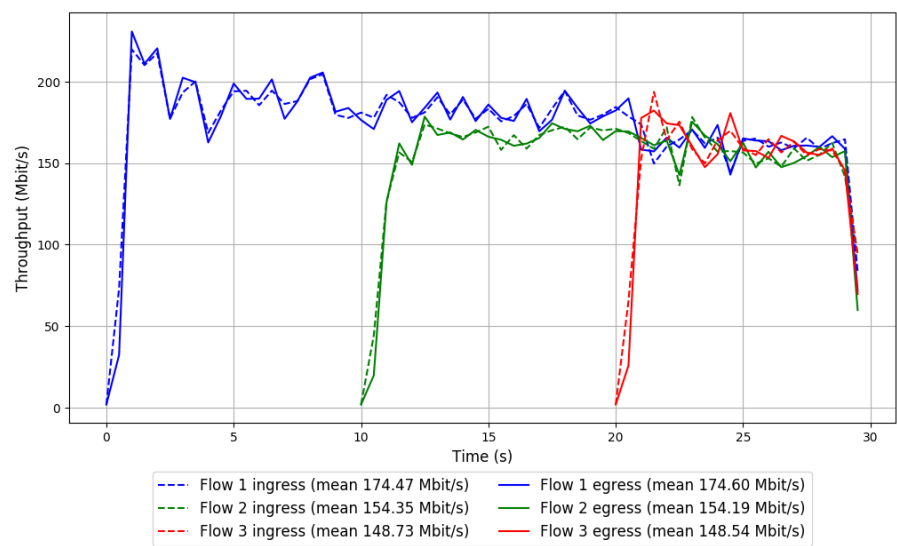
-- Flow 3:

Average throughput: 148.54 Mbit/s

95th percentile per-packet one-way delay: 67.850 ms

Loss rate: 1.43%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-01 02:49:31

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

Below is generated by plot.py at 2018-02-01 08:07:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.77 Mbit/s

95th percentile per-packet one-way delay: 66.206 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 166.18 Mbit/s

95th percentile per-packet one-way delay: 65.441 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 160.50 Mbit/s

95th percentile per-packet one-way delay: 67.552 ms

Loss rate: 0.61%

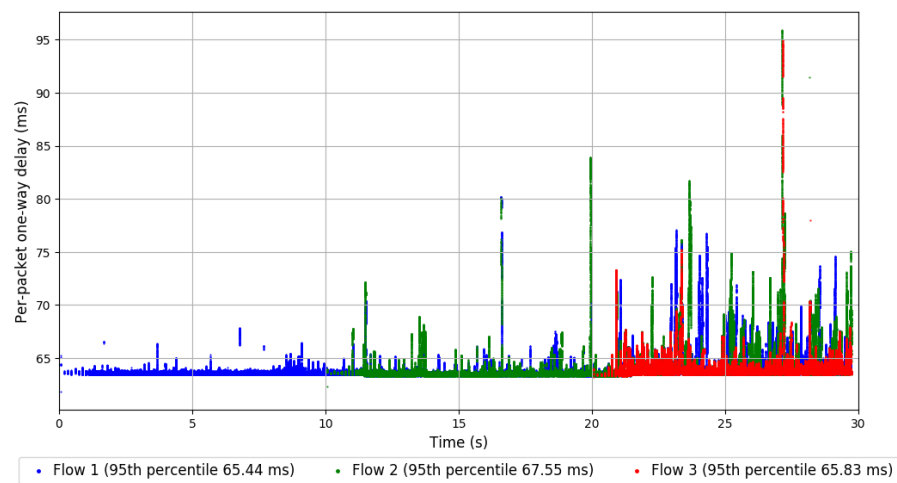
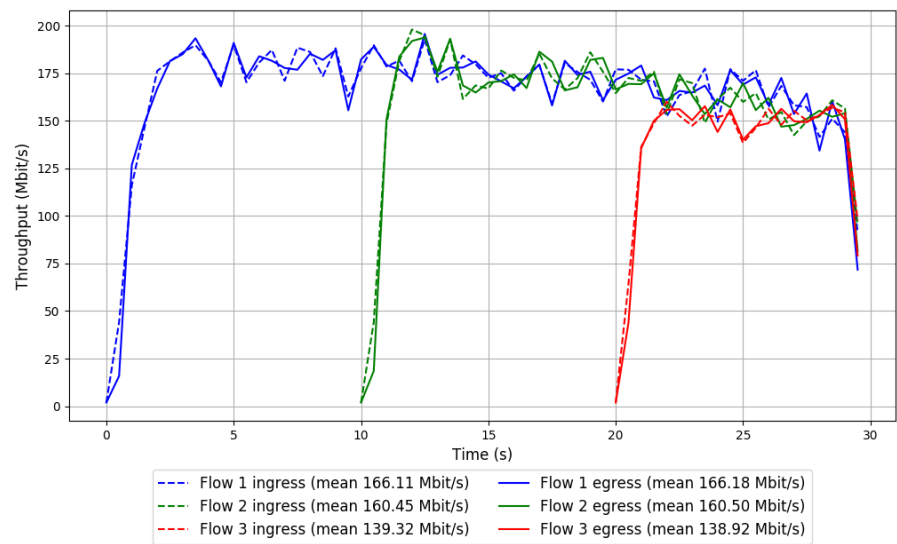
-- Flow 3:

Average throughput: 138.92 Mbit/s

95th percentile per-packet one-way delay: 65.833 ms

Loss rate: 1.57%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-01 03:06:24

End at: 2018-02-01 03:06:54

Below is generated by plot.py at 2018-02-01 08:08:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.84 Mbit/s

95th percentile per-packet one-way delay: 65.382 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 173.05 Mbit/s

95th percentile per-packet one-way delay: 64.899 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 148.39 Mbit/s

95th percentile per-packet one-way delay: 65.641 ms

Loss rate: 0.57%

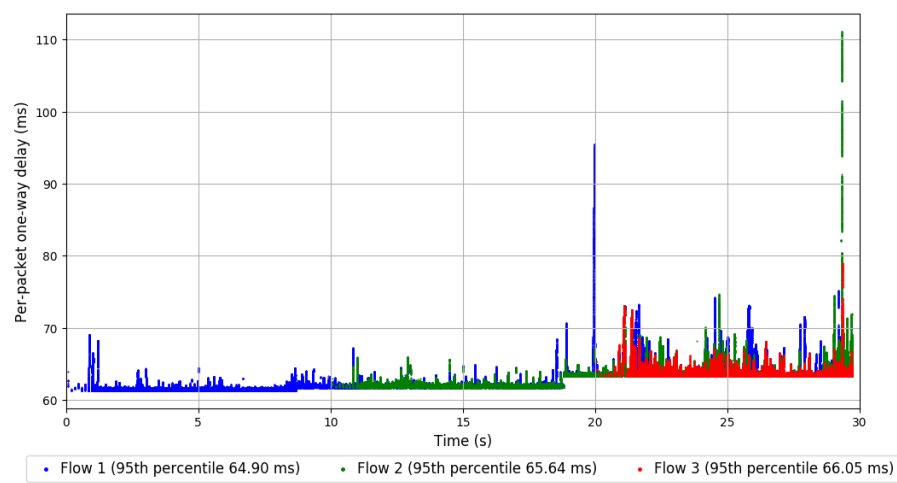
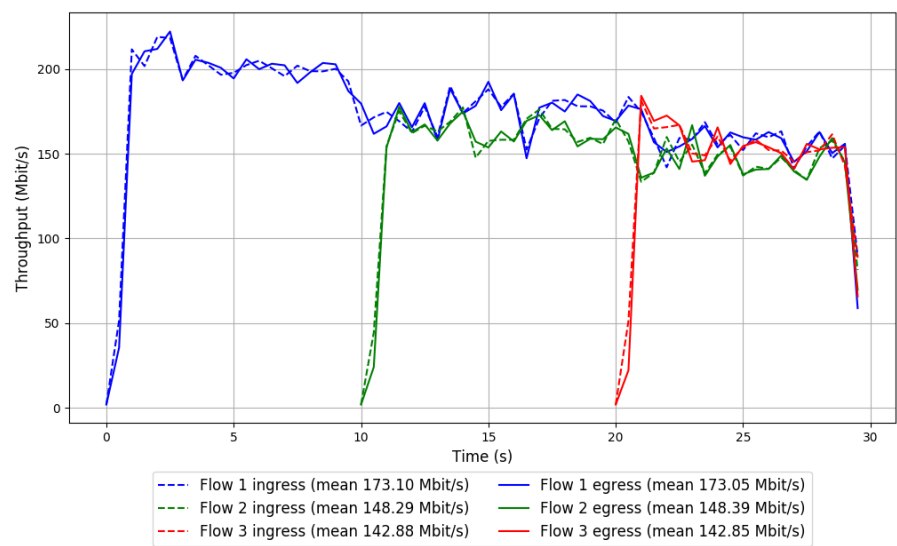
-- Flow 3:

Average throughput: 142.85 Mbit/s

95th percentile per-packet one-way delay: 66.048 ms

Loss rate: 1.38%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-01 03:23:05

End at: 2018-02-01 03:23:35

Below is generated by plot.py at 2018-02-01 08:08:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.61 Mbit/s

95th percentile per-packet one-way delay: 66.305 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 164.88 Mbit/s

95th percentile per-packet one-way delay: 65.740 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 153.23 Mbit/s

95th percentile per-packet one-way delay: 68.297 ms

Loss rate: 0.72%

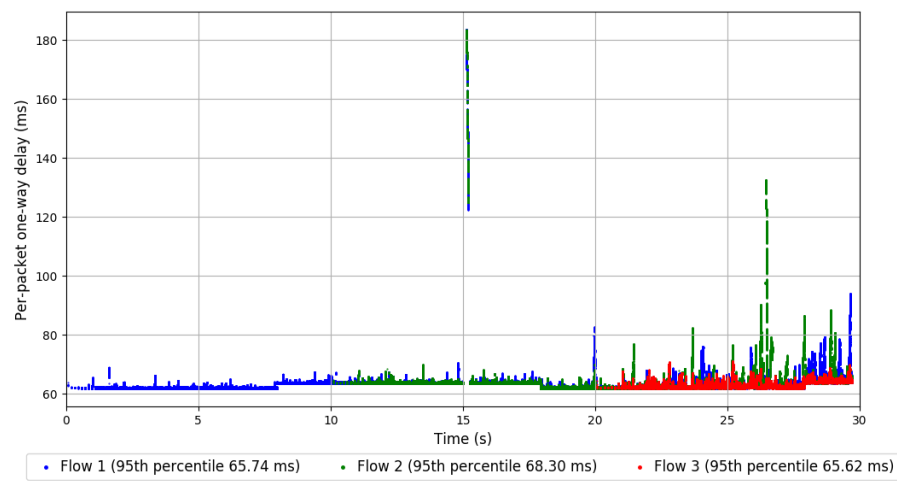
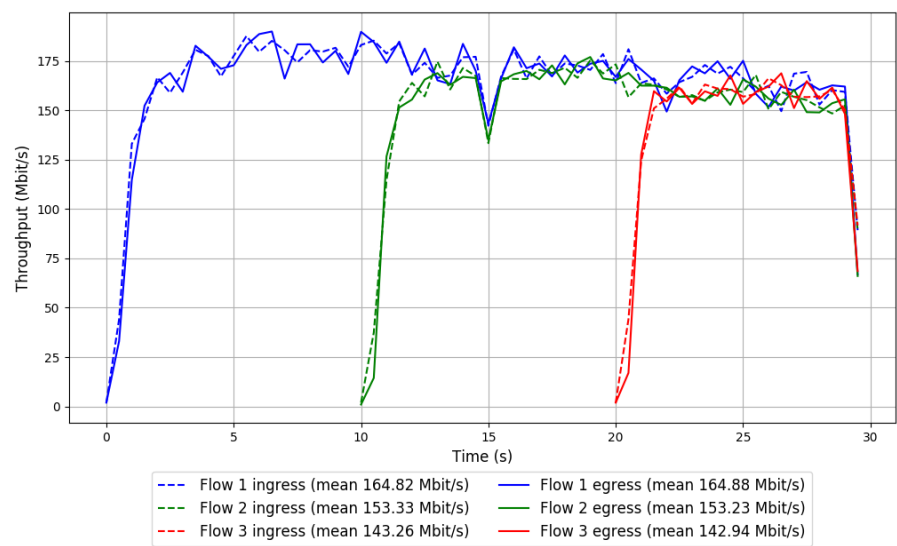
-- Flow 3:

Average throughput: 142.94 Mbit/s

95th percentile per-packet one-way delay: 65.617 ms

Loss rate: 1.49%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-01 03:39:58

End at: 2018-02-01 03:40:28

Below is generated by plot.py at 2018-02-01 08:11:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 338.70 Mbit/s

95th percentile per-packet one-way delay: 66.982 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 185.15 Mbit/s

95th percentile per-packet one-way delay: 66.724 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 164.58 Mbit/s

95th percentile per-packet one-way delay: 68.015 ms

Loss rate: 0.71%

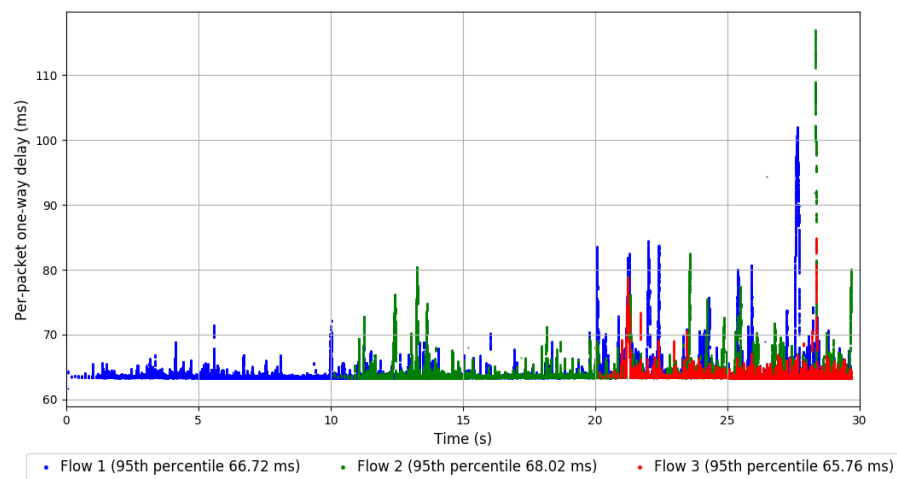
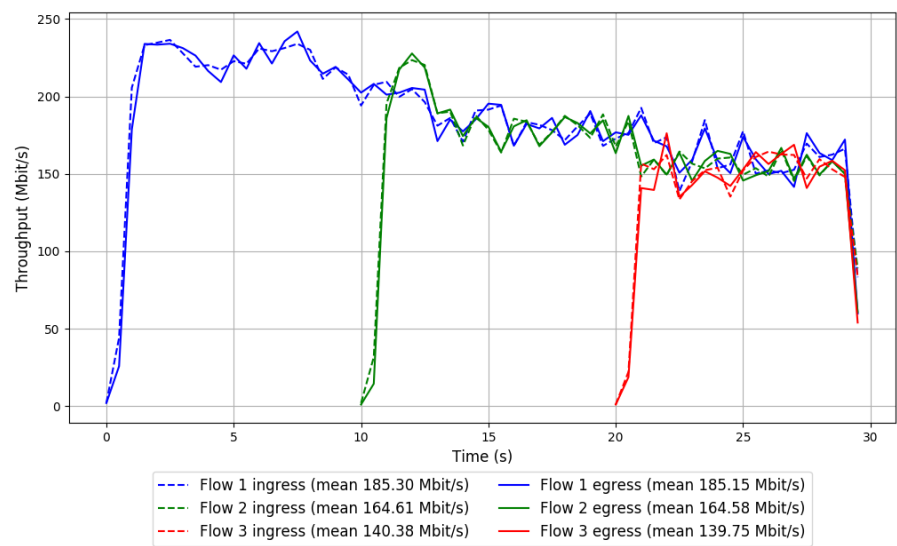
-- Flow 3:

Average throughput: 139.75 Mbit/s

95th percentile per-packet one-way delay: 65.763 ms

Loss rate: 1.76%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-01 03:56:49

End at: 2018-02-01 03:57:19

Below is generated by plot.py at 2018-02-01 08:12:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 345.57 Mbit/s

95th percentile per-packet one-way delay: 70.100 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 179.17 Mbit/s

95th percentile per-packet one-way delay: 67.127 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 178.83 Mbit/s

95th percentile per-packet one-way delay: 78.621 ms

Loss rate: 0.56%

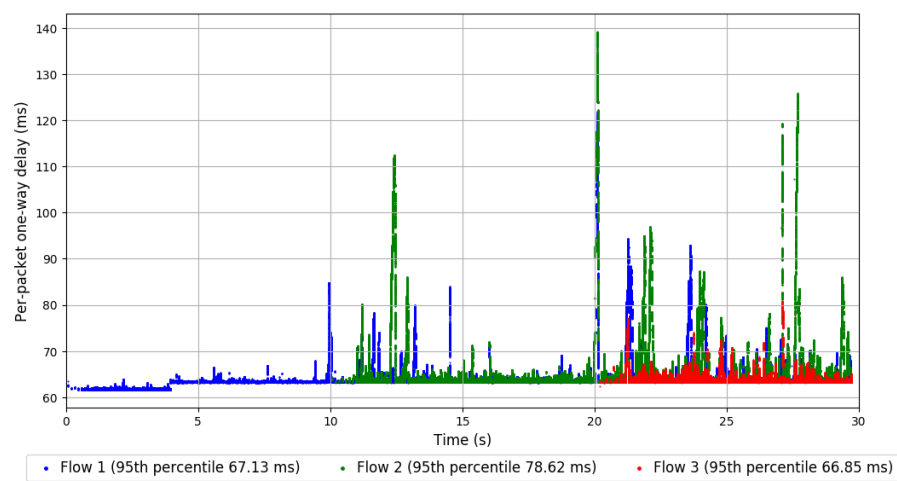
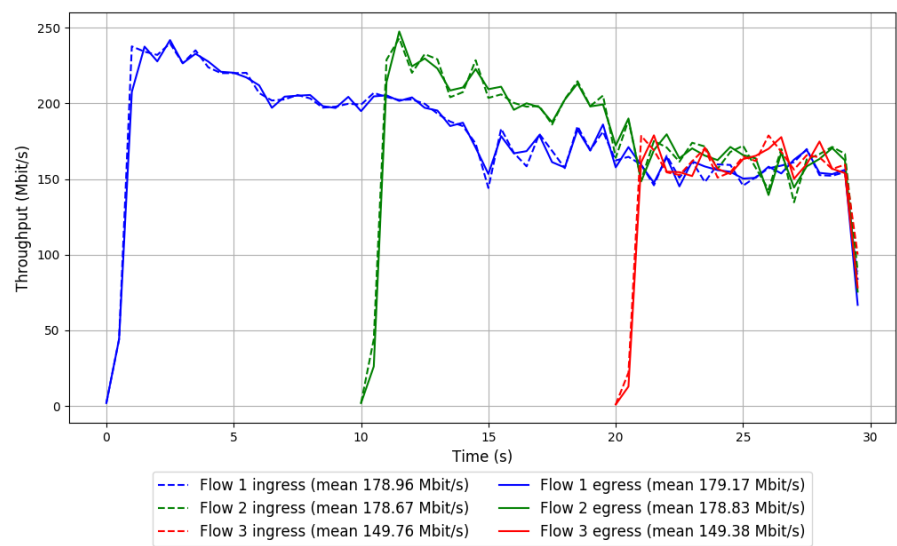
-- Flow 3:

Average throughput: 149.38 Mbit/s

95th percentile per-packet one-way delay: 66.854 ms

Loss rate: 1.56%

Run 10: Report of Indigo-1-32 — Data Link

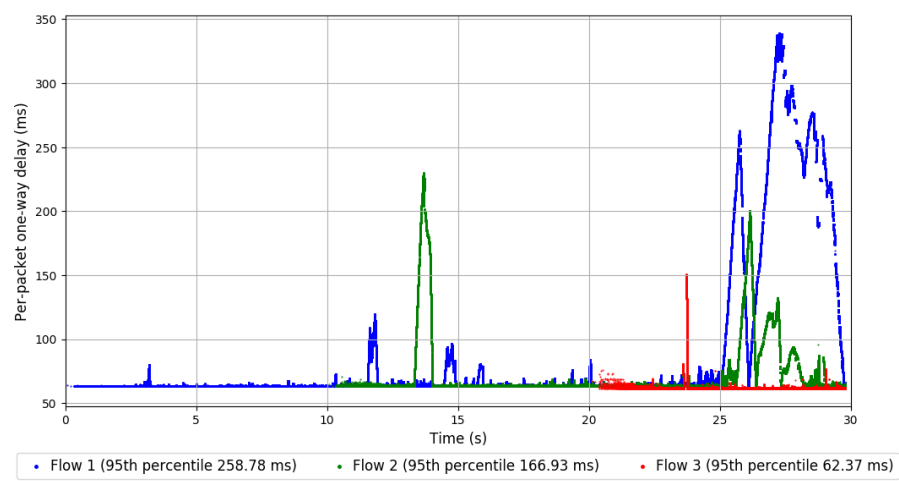
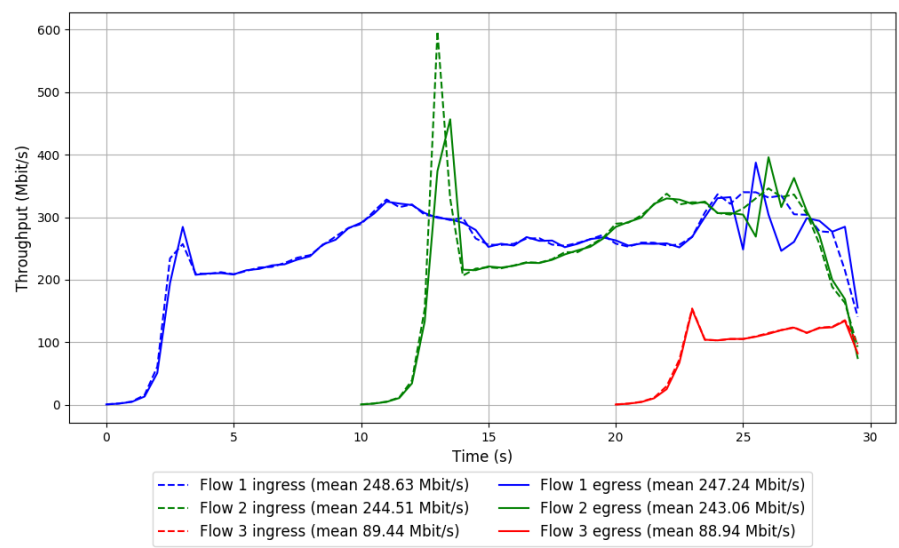


```
Run 1: Statistics of Vivace-latency

Start at: 2018-02-01 01:26:54
End at: 2018-02-01 01:27:24

# Below is generated by plot.py at 2018-02-01 08:15:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 437.42 Mbit/s
95th percentile per-packet one-way delay: 226.003 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 247.24 Mbit/s
95th percentile per-packet one-way delay: 258.780 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 243.06 Mbit/s
95th percentile per-packet one-way delay: 166.927 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 88.94 Mbit/s
95th percentile per-packet one-way delay: 62.366 ms
Loss rate: 1.87%
```


Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-01 01:43:40

End at: 2018-02-01 01:44:10

Below is generated by plot.py at 2018-02-01 08:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 493.20 Mbit/s

95th percentile per-packet one-way delay: 85.792 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 298.55 Mbit/s

95th percentile per-packet one-way delay: 90.012 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 219.02 Mbit/s

95th percentile per-packet one-way delay: 82.399 ms

Loss rate: 0.78%

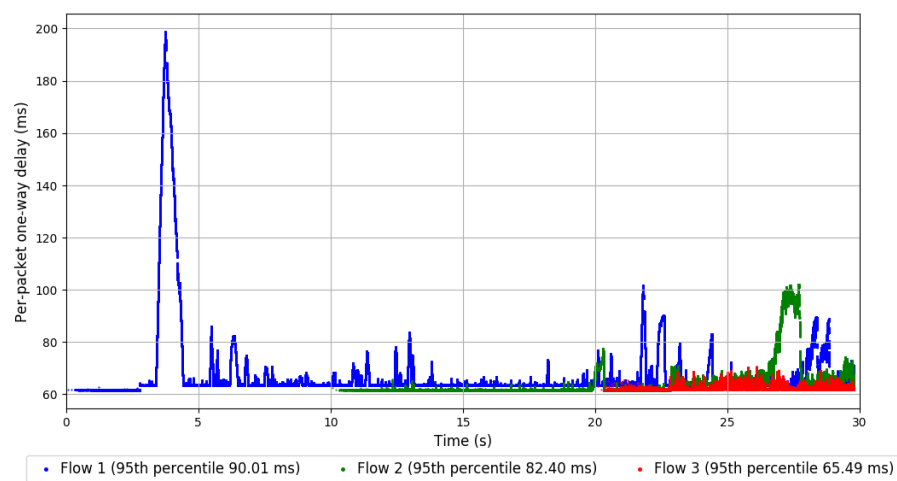
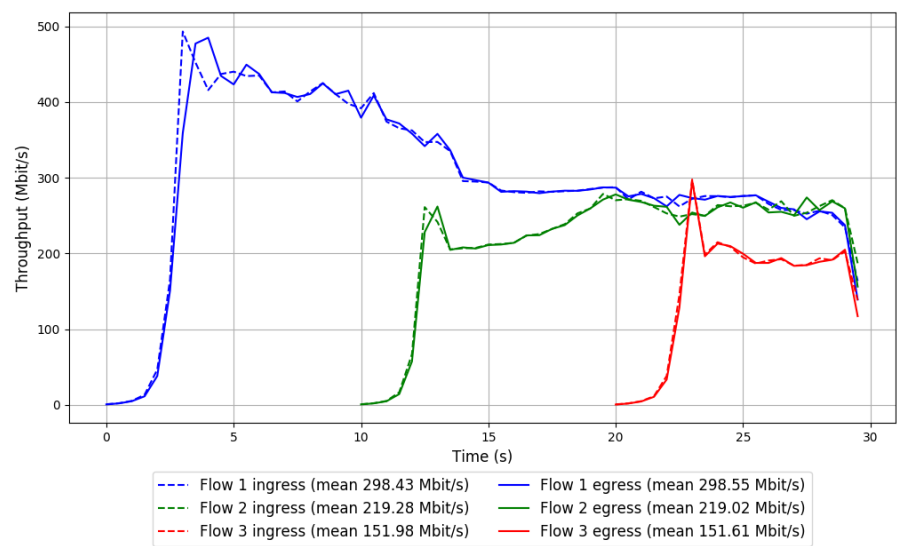
-- Flow 3:

Average throughput: 151.61 Mbit/s

95th percentile per-packet one-way delay: 65.489 ms

Loss rate: 1.58%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-01 02:00:40

End at: 2018-02-01 02:01:10

Below is generated by plot.py at 2018-02-01 08:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 410.01 Mbit/s

95th percentile per-packet one-way delay: 70.969 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 214.98 Mbit/s

95th percentile per-packet one-way delay: 69.527 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 215.43 Mbit/s

95th percentile per-packet one-way delay: 71.398 ms

Loss rate: 0.74%

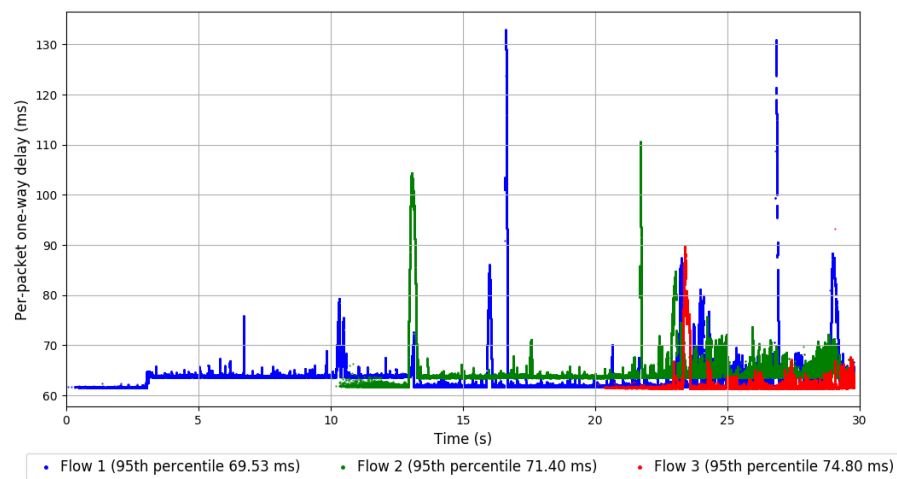
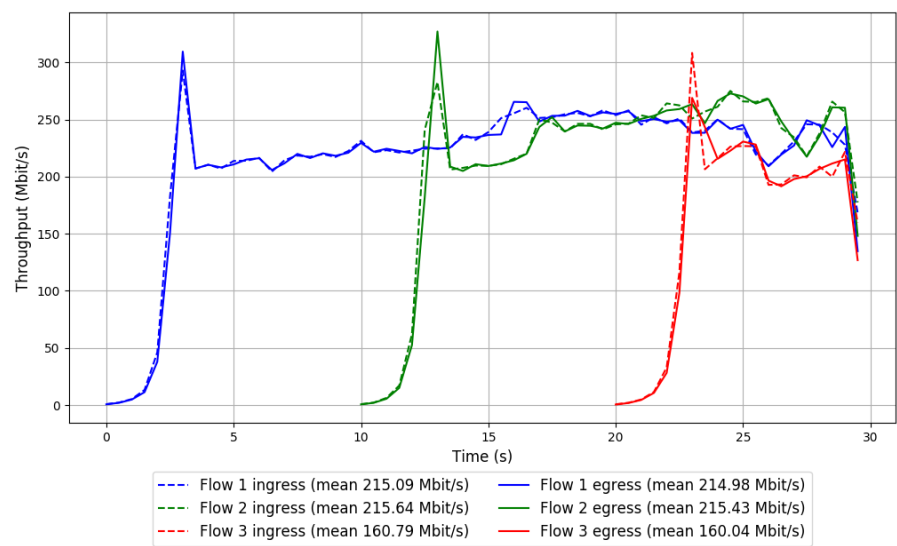
-- Flow 3:

Average throughput: 160.04 Mbit/s

95th percentile per-packet one-way delay: 74.798 ms

Loss rate: 1.77%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-01 02:17:38

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

Below is generated by plot.py at 2018-02-01 08:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 423.28 Mbit/s

95th percentile per-packet one-way delay: 105.316 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 267.94 Mbit/s

95th percentile per-packet one-way delay: 93.540 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 192.48 Mbit/s

95th percentile per-packet one-way delay: 113.574 ms

Loss rate: 0.38%

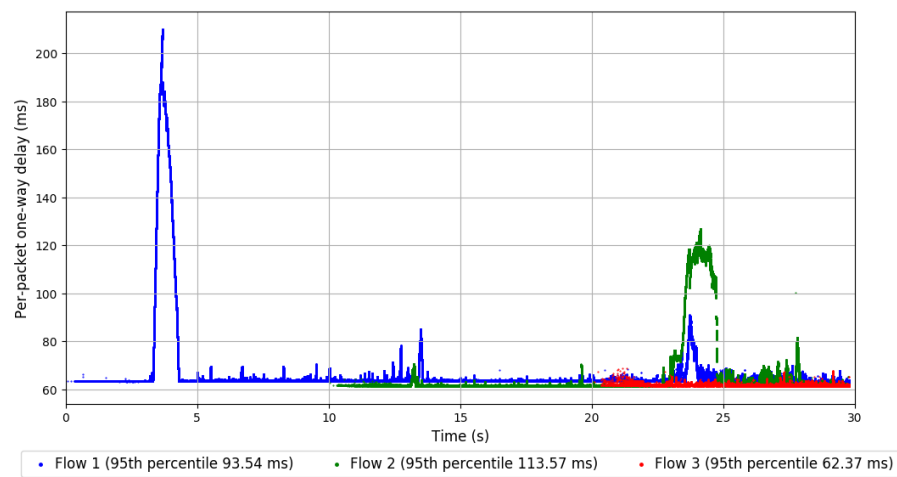
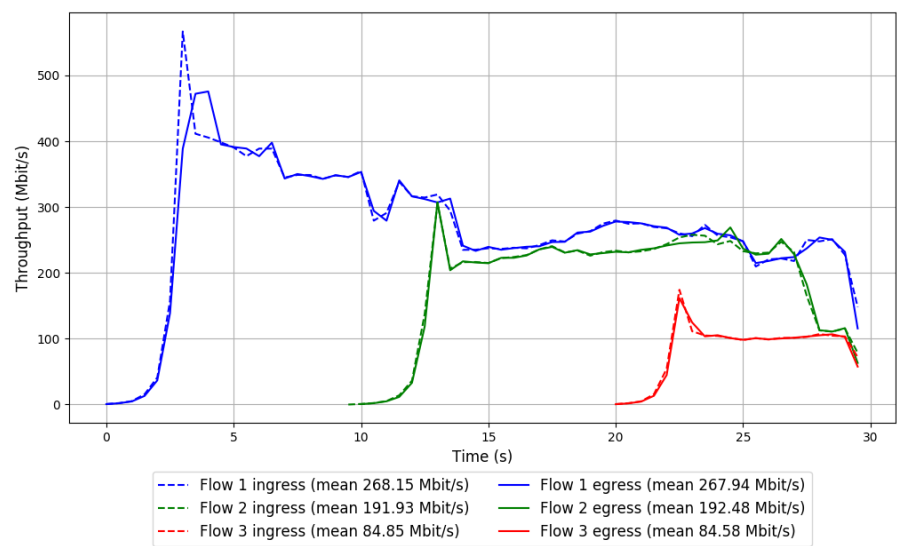
-- Flow 3:

Average throughput: 84.58 Mbit/s

95th percentile per-packet one-way delay: 62.369 ms

Loss rate: 1.66%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-01 02:34:24

End at: 2018-02-01 02:34:54

Below is generated by plot.py at 2018-02-01 08:16:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 394.30 Mbit/s

95th percentile per-packet one-way delay: 64.987 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 202.83 Mbit/s

95th percentile per-packet one-way delay: 64.210 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 209.68 Mbit/s

95th percentile per-packet one-way delay: 66.064 ms

Loss rate: 0.64%

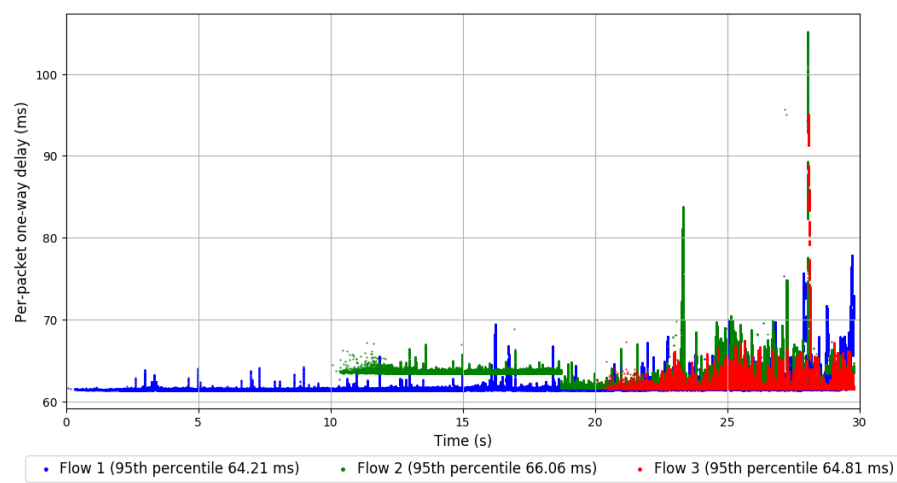
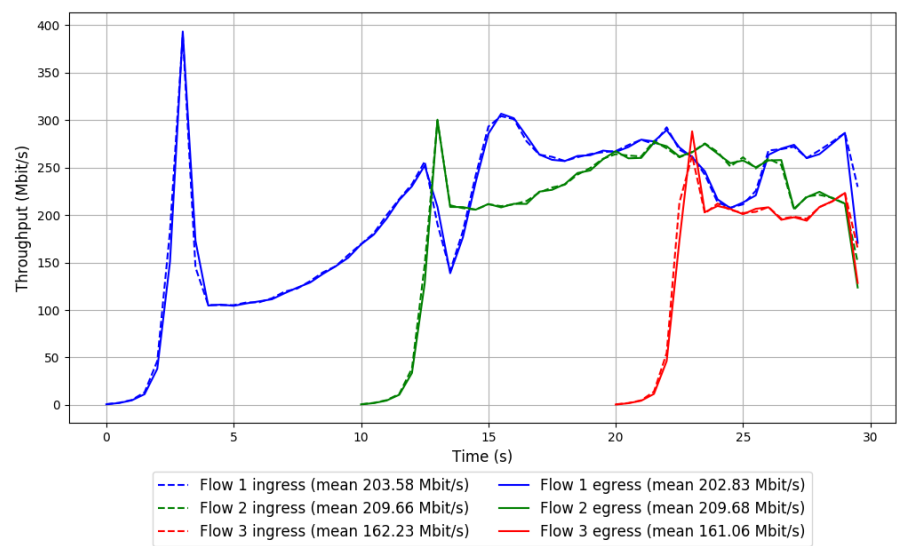
-- Flow 3:

Average throughput: 161.06 Mbit/s

95th percentile per-packet one-way delay: 64.805 ms

Loss rate: 2.03%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-01 02:51:16

End at: 2018-02-01 02:51:46

Below is generated by plot.py at 2018-02-01 08:16:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 410.24 Mbit/s

95th percentile per-packet one-way delay: 66.380 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 215.24 Mbit/s

95th percentile per-packet one-way delay: 65.411 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 242.41 Mbit/s

95th percentile per-packet one-way delay: 107.370 ms

Loss rate: 0.64%

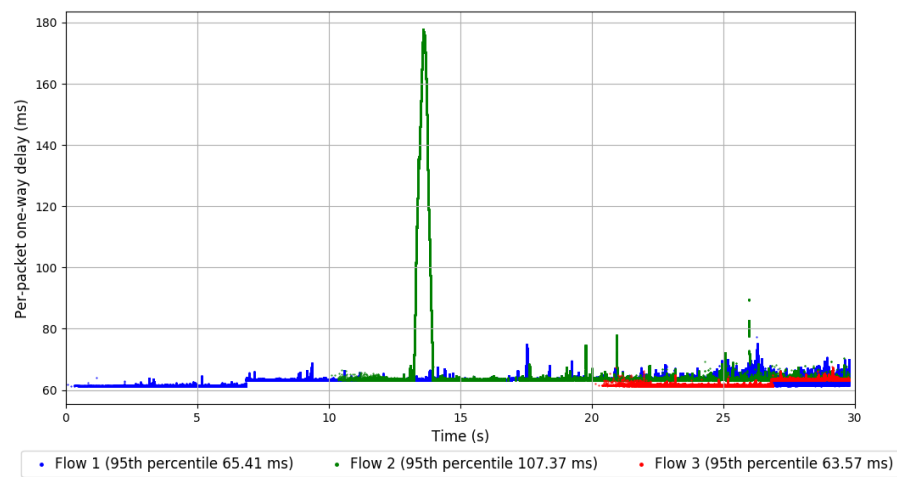
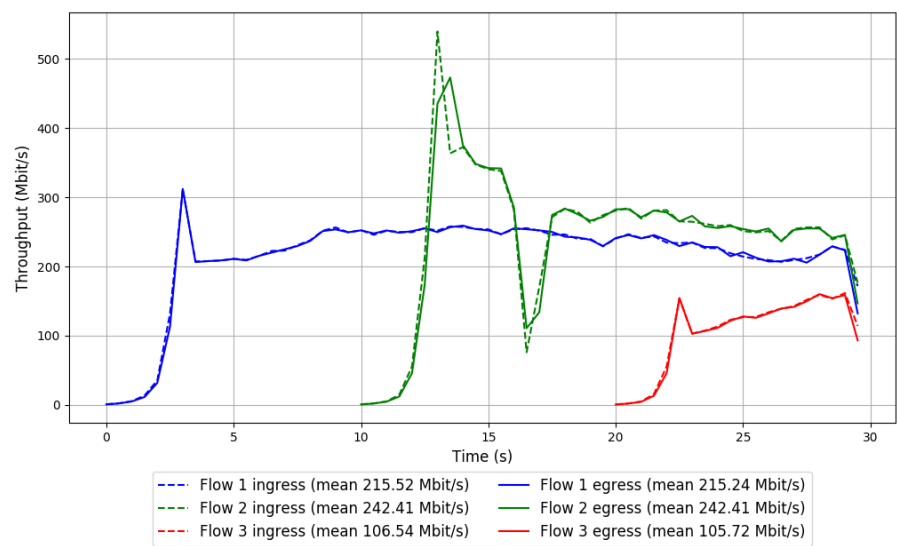
-- Flow 3:

Average throughput: 105.72 Mbit/s

95th percentile per-packet one-way delay: 63.571 ms

Loss rate: 2.03%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-01 03:08:09

End at: 2018-02-01 03:08:39

Below is generated by plot.py at 2018-02-01 08:19:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 392.52 Mbit/s

95th percentile per-packet one-way delay: 69.097 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 193.67 Mbit/s

95th percentile per-packet one-way delay: 66.462 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 214.74 Mbit/s

95th percentile per-packet one-way delay: 70.744 ms

Loss rate: 0.70%

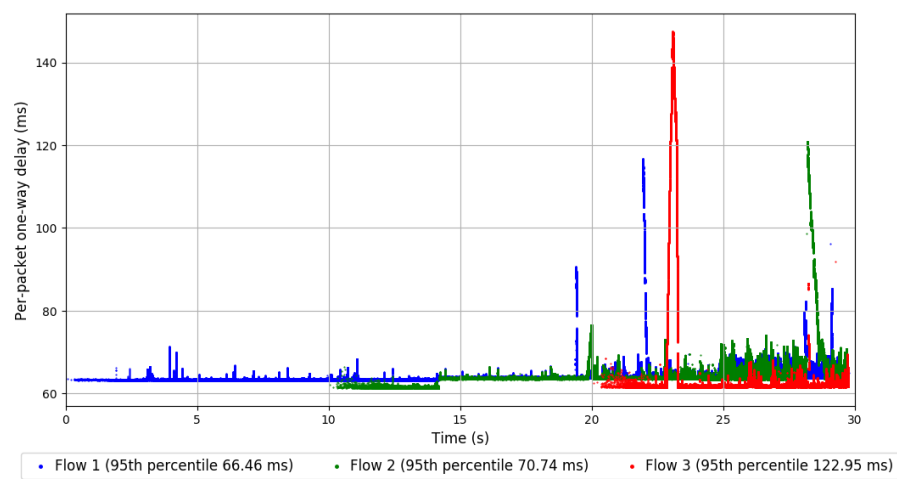
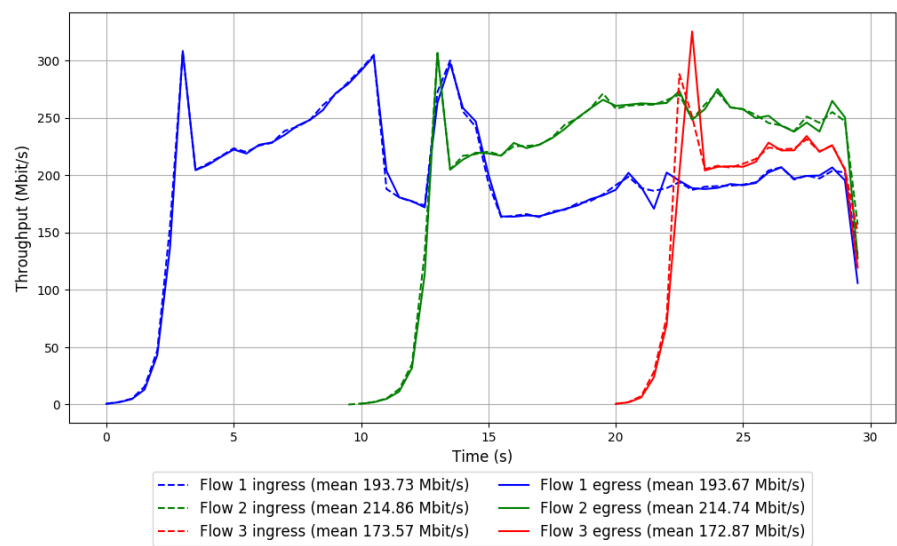
-- Flow 3:

Average throughput: 172.87 Mbit/s

95th percentile per-packet one-way delay: 122.951 ms

Loss rate: 1.70%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-01 03:24:49

End at: 2018-02-01 03:25:19

Below is generated by plot.py at 2018-02-01 08:20:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 405.27 Mbit/s

95th percentile per-packet one-way delay: 148.842 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 219.10 Mbit/s

95th percentile per-packet one-way delay: 261.494 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 197.06 Mbit/s

95th percentile per-packet one-way delay: 66.918 ms

Loss rate: 0.56%

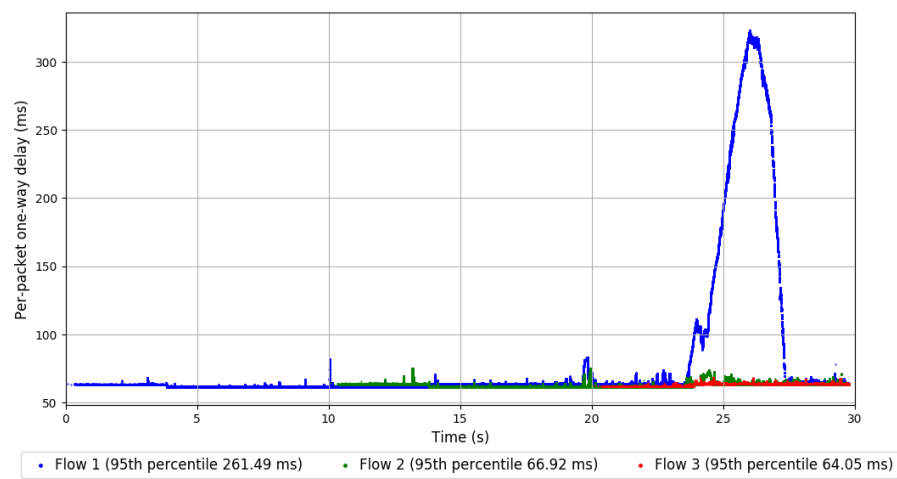
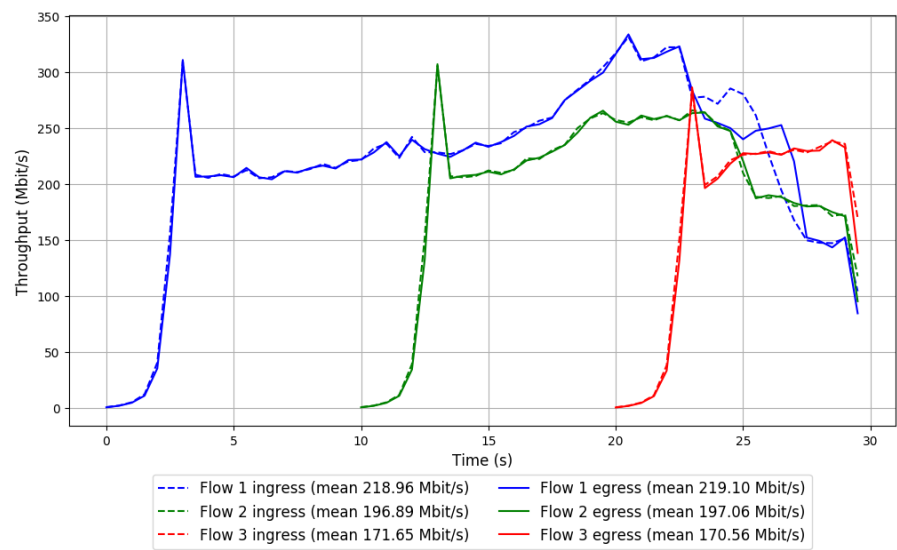
-- Flow 3:

Average throughput: 170.56 Mbit/s

95th percentile per-packet one-way delay: 64.050 ms

Loss rate: 1.93%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-01 03:41:44

End at: 2018-02-01 03:42:14

Below is generated by plot.py at 2018-02-01 08:21:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 351.85 Mbit/s

95th percentile per-packet one-way delay: 135.776 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 267.24 Mbit/s

95th percentile per-packet one-way delay: 144.329 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 83.58 Mbit/s

95th percentile per-packet one-way delay: 65.650 ms

Loss rate: 1.86%

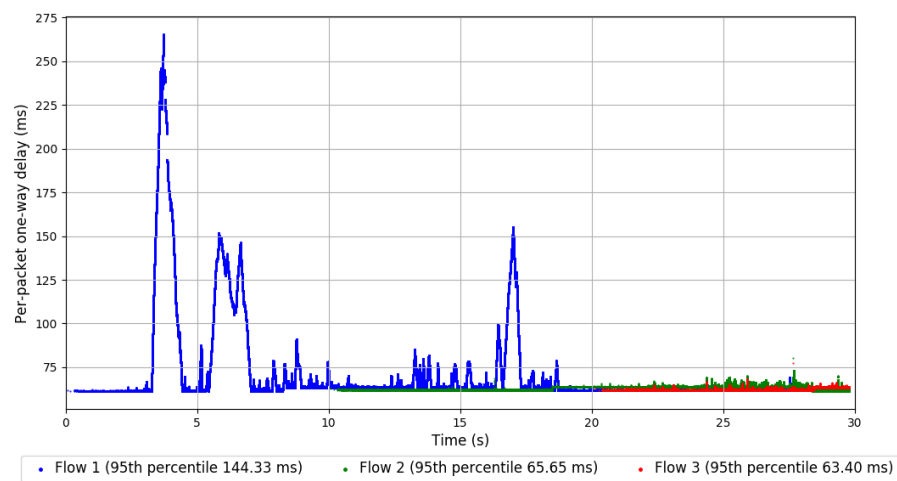
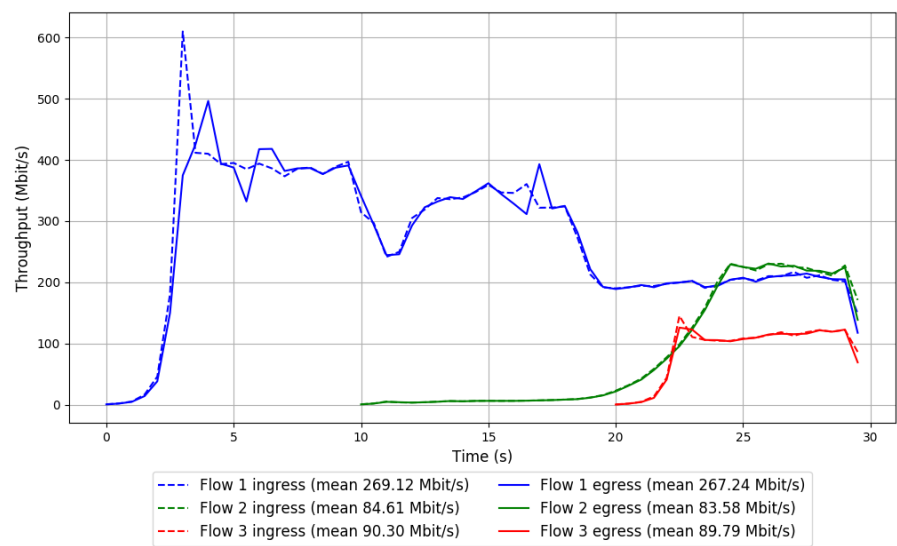
-- Flow 3:

Average throughput: 89.79 Mbit/s

95th percentile per-packet one-way delay: 63.398 ms

Loss rate: 1.86%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-01 03:58:36

End at: 2018-02-01 03:59:06

Below is generated by plot.py at 2018-02-01 08:23:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 397.41 Mbit/s

95th percentile per-packet one-way delay: 69.925 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 229.40 Mbit/s

95th percentile per-packet one-way delay: 69.951 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 241.75 Mbit/s

95th percentile per-packet one-way delay: 70.276 ms

Loss rate: 0.71%

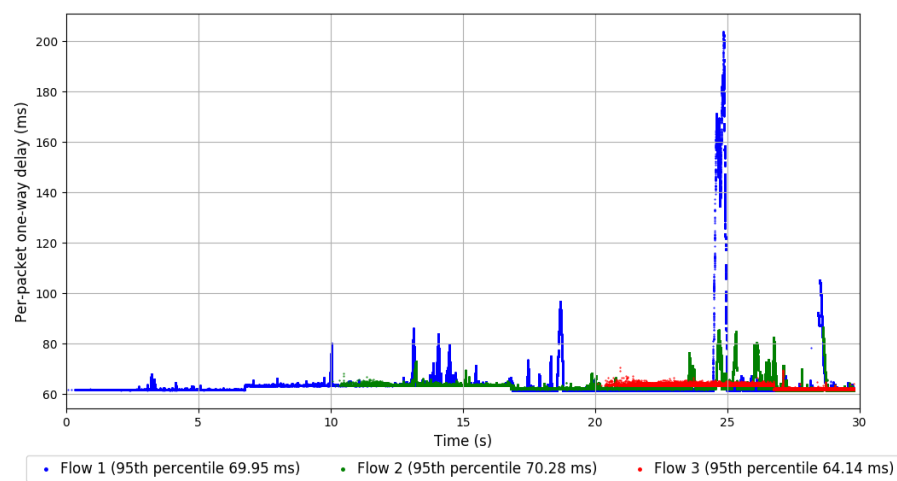
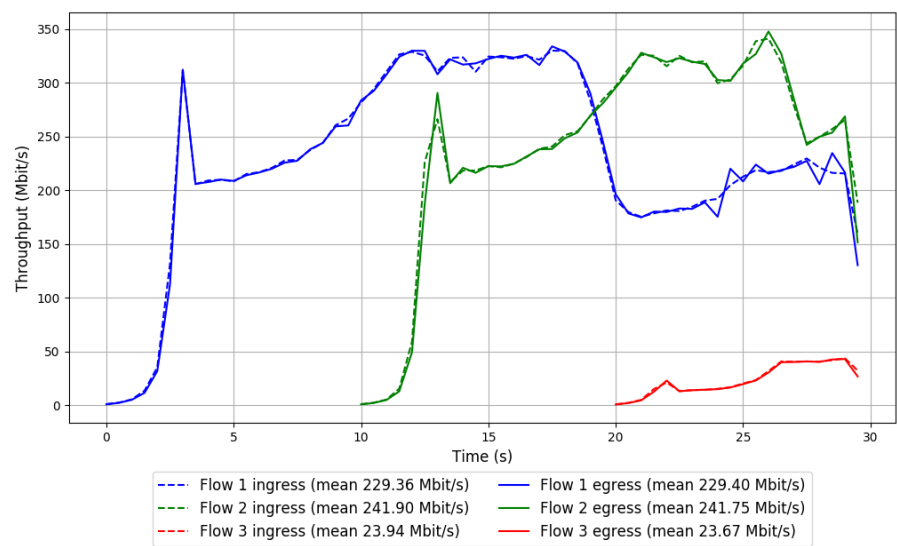
-- Flow 3:

Average throughput: 23.67 Mbit/s

95th percentile per-packet one-way delay: 64.139 ms

Loss rate: 2.37%

Run 10: Report of Vivace-latency — Data Link

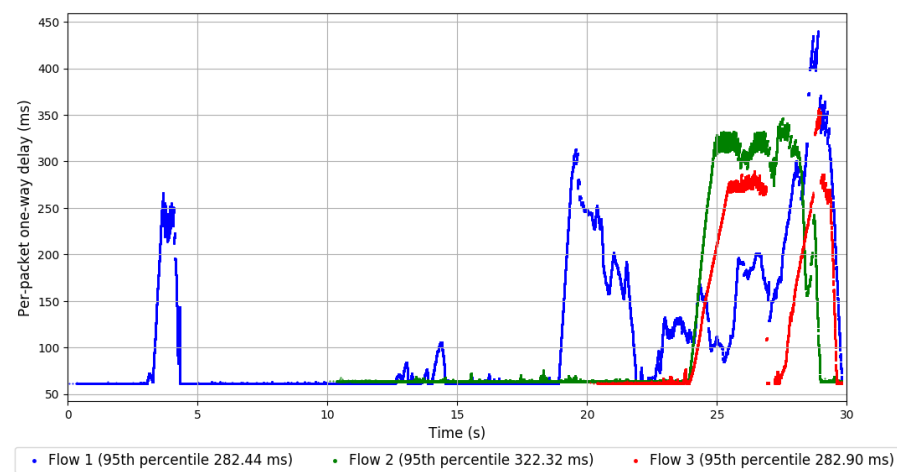
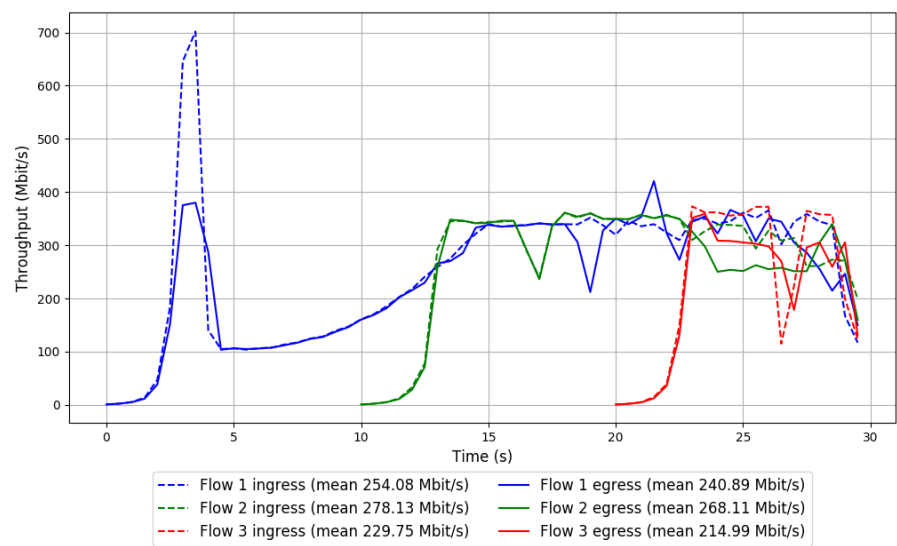


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-01 01:31:13
End at: 2018-02-01 01:31:43

# Below is generated by plot.py at 2018-02-01 08:25:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 488.72 Mbit/s
95th percentile per-packet one-way delay: 314.103 ms
Loss rate: 5.41%
-- Flow 1:
Average throughput: 240.89 Mbit/s
95th percentile per-packet one-way delay: 282.439 ms
Loss rate: 5.59%
-- Flow 2:
Average throughput: 268.11 Mbit/s
95th percentile per-packet one-way delay: 322.320 ms
Loss rate: 4.25%
-- Flow 3:
Average throughput: 214.99 Mbit/s
95th percentile per-packet one-way delay: 282.899 ms
Loss rate: 7.62%
```

Run 1: Report of Vivace-loss — Data Link

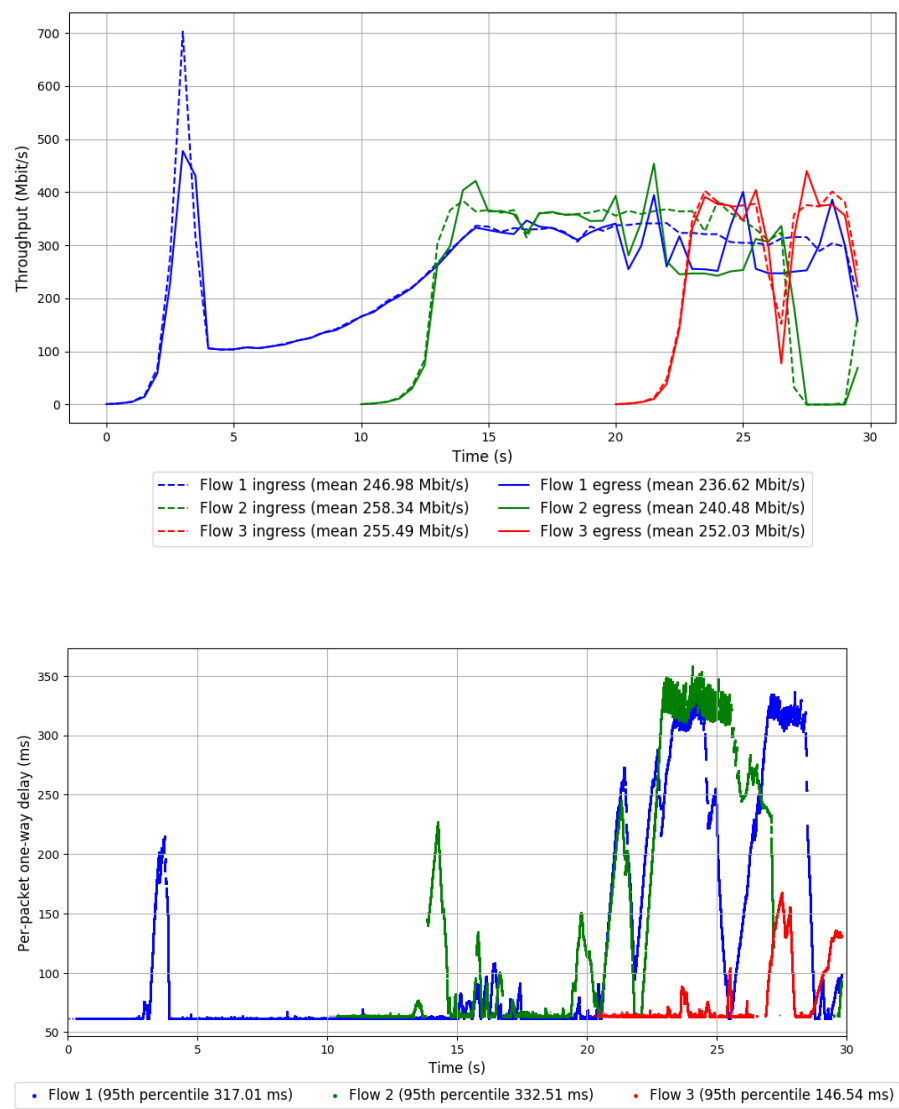


```
Run 2: Statistics of Vivace-loss

Start at: 2018-02-01 01:48:04
End at: 2018-02-01 01:48:34

# Below is generated by plot.py at 2018-02-01 08:25:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 478.23 Mbit/s
95th percentile per-packet one-way delay: 320.879 ms
Loss rate: 5.26%
-- Flow 1:
Average throughput: 236.62 Mbit/s
95th percentile per-packet one-way delay: 317.011 ms
Loss rate: 4.59%
-- Flow 2:
Average throughput: 240.48 Mbit/s
95th percentile per-packet one-way delay: 332.515 ms
Loss rate: 7.51%
-- Flow 3:
Average throughput: 252.03 Mbit/s
95th percentile per-packet one-way delay: 146.537 ms
Loss rate: 2.61%
```

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-01 02:04:58

End at: 2018-02-01 02:05:28

Below is generated by plot.py at 2018-02-01 08:25:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 417.44 Mbit/s

95th percentile per-packet one-way delay: 176.741 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 247.75 Mbit/s

95th percentile per-packet one-way delay: 175.047 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 173.85 Mbit/s

95th percentile per-packet one-way delay: 193.596 ms

Loss rate: 0.72%

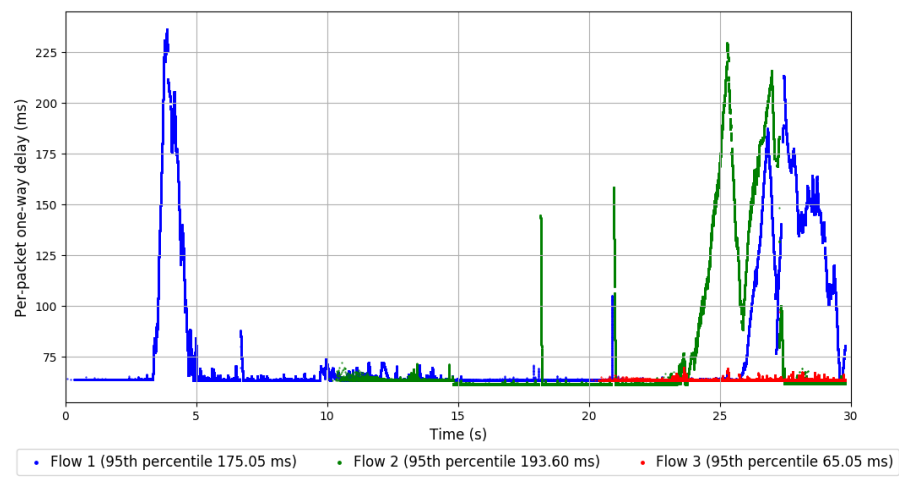
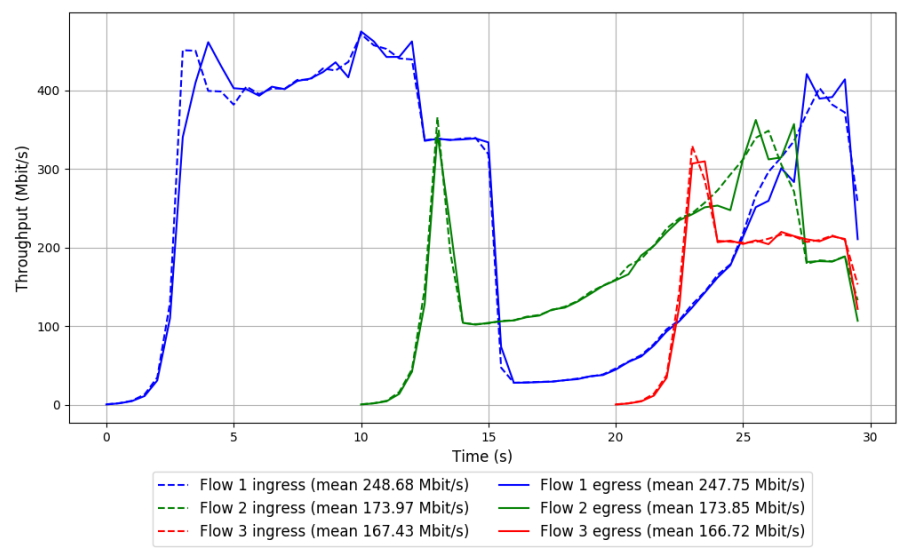
-- Flow 3:

Average throughput: 166.72 Mbit/s

95th percentile per-packet one-way delay: 65.054 ms

Loss rate: 1.74%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-01 02:21:56

End at: 2018-02-01 02:22:26

Below is generated by plot.py at 2018-02-01 08:25:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 457.11 Mbit/s

95th percentile per-packet one-way delay: 209.823 ms

Loss rate: 2.32%

-- Flow 1:

Average throughput: 253.50 Mbit/s

95th percentile per-packet one-way delay: 157.392 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 195.08 Mbit/s

95th percentile per-packet one-way delay: 238.787 ms

Loss rate: 2.79%

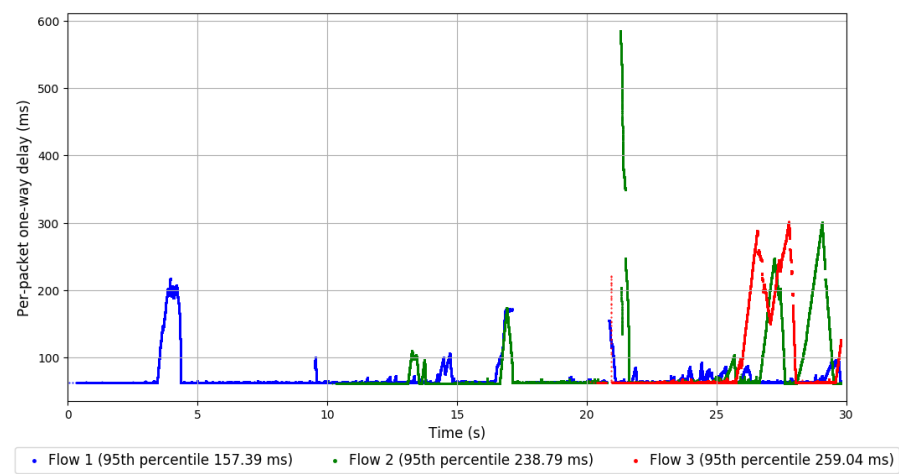
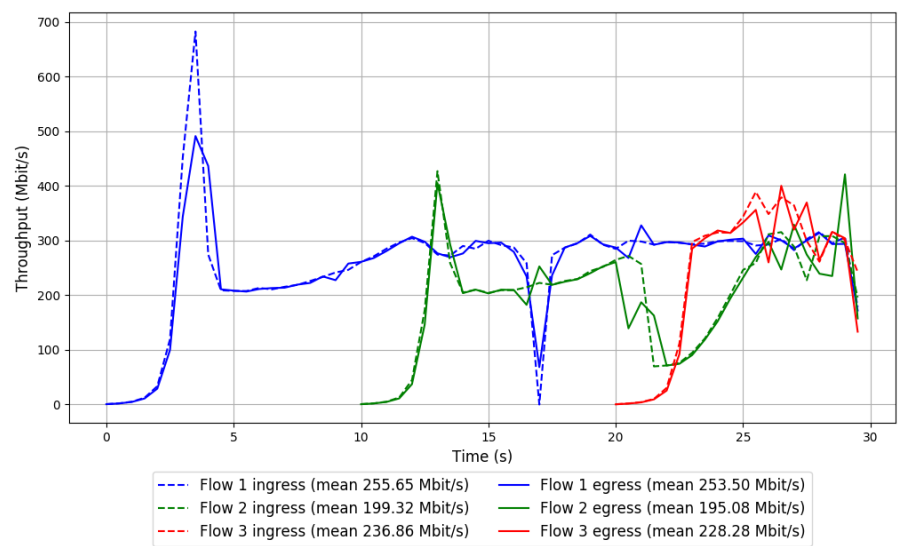
-- Flow 3:

Average throughput: 228.28 Mbit/s

95th percentile per-packet one-way delay: 259.039 ms

Loss rate: 4.92%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-01 02:38:40

End at: 2018-02-01 02:39:10

Below is generated by plot.py at 2018-02-01 08:31:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 538.52 Mbit/s

95th percentile per-packet one-way delay: 286.018 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 334.28 Mbit/s

95th percentile per-packet one-way delay: 291.013 ms

Loss rate: 1.75%

-- Flow 2:

Average throughput: 229.28 Mbit/s

95th percentile per-packet one-way delay: 284.778 ms

Loss rate: 1.34%

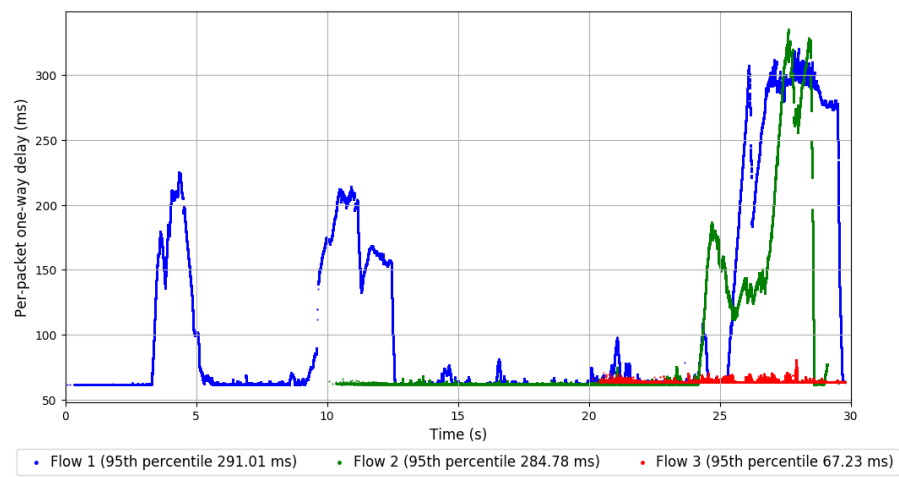
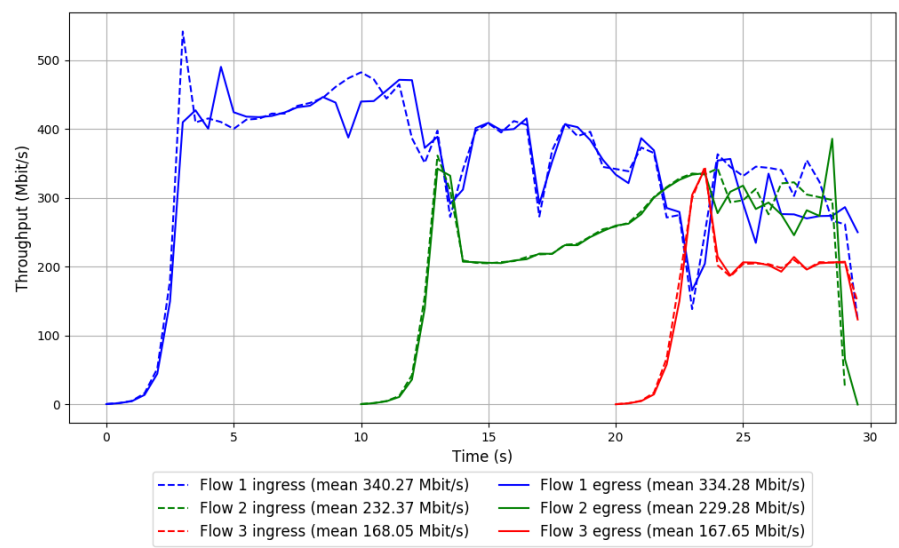
-- Flow 3:

Average throughput: 167.65 Mbit/s

95th percentile per-packet one-way delay: 67.228 ms

Loss rate: 1.59%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-01 02:55:32

End at: 2018-02-01 02:56:02

Below is generated by plot.py at 2018-02-01 08:31:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 545.39 Mbit/s

95th percentile per-packet one-way delay: 153.274 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 302.60 Mbit/s

95th percentile per-packet one-way delay: 176.452 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 257.66 Mbit/s

95th percentile per-packet one-way delay: 135.541 ms

Loss rate: 0.58%

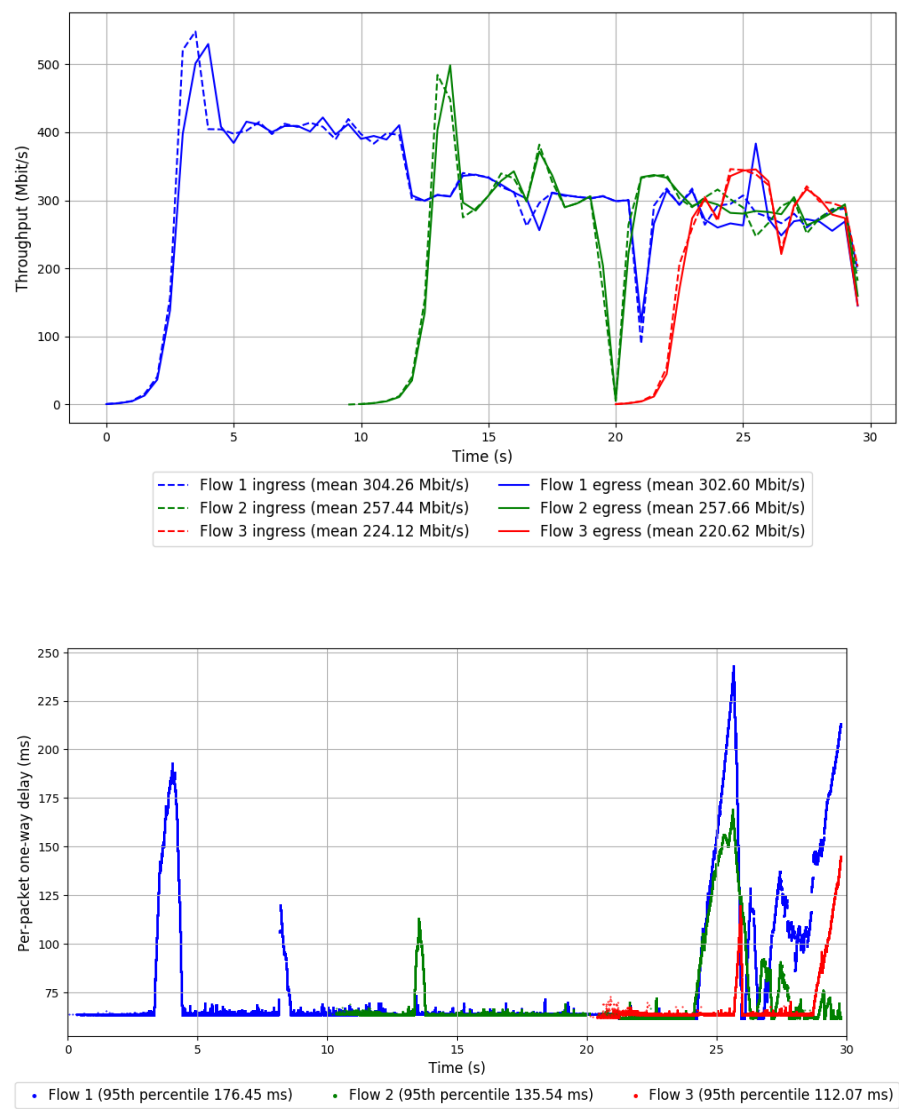
-- Flow 3:

Average throughput: 220.62 Mbit/s

95th percentile per-packet one-way delay: 112.071 ms

Loss rate: 2.87%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-01 03:12:24

End at: 2018-02-01 03:12:54

Below is generated by plot.py at 2018-02-01 08:31:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 458.11 Mbit/s

95th percentile per-packet one-way delay: 285.522 ms

Loss rate: 2.97%

-- Flow 1:

Average throughput: 229.39 Mbit/s

95th percentile per-packet one-way delay: 291.369 ms

Loss rate: 1.15%

-- Flow 2:

Average throughput: 228.54 Mbit/s

95th percentile per-packet one-way delay: 287.890 ms

Loss rate: 4.55%

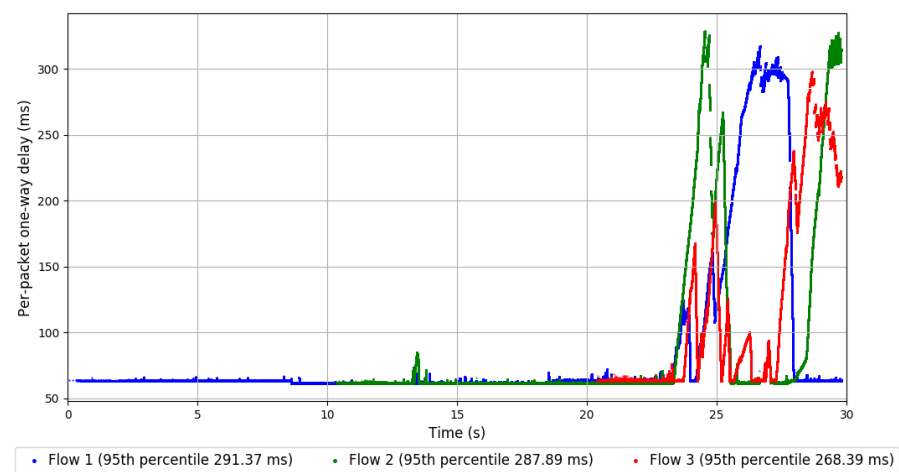
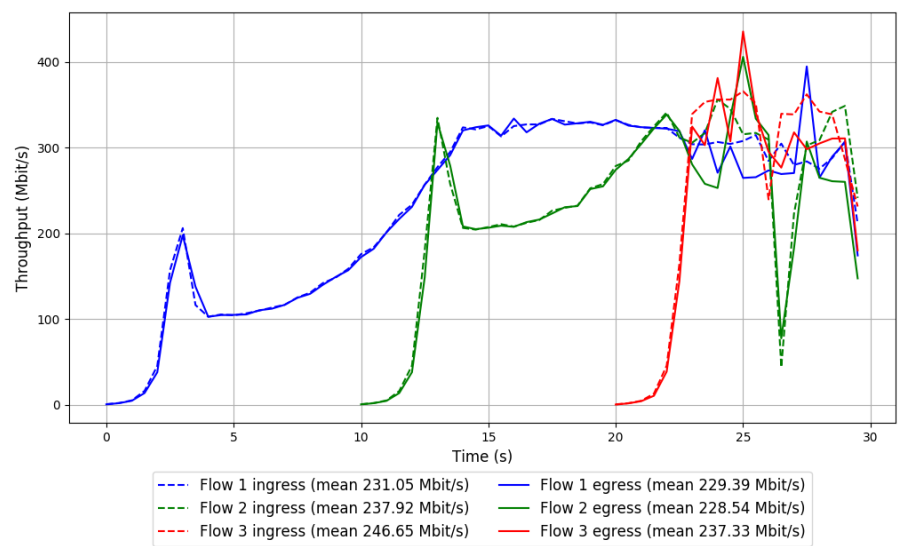
-- Flow 3:

Average throughput: 237.33 Mbit/s

95th percentile per-packet one-way delay: 268.387 ms

Loss rate: 5.06%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-01 03:29:06

End at: 2018-02-01 03:29:36

Below is generated by plot.py at 2018-02-01 08:33:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 482.14 Mbit/s

95th percentile per-packet one-way delay: 303.597 ms

Loss rate: 4.15%

-- Flow 1:

Average throughput: 243.25 Mbit/s

95th percentile per-packet one-way delay: 279.128 ms

Loss rate: 5.08%

-- Flow 2:

Average throughput: 262.82 Mbit/s

95th percentile per-packet one-way delay: 314.628 ms

Loss rate: 3.86%

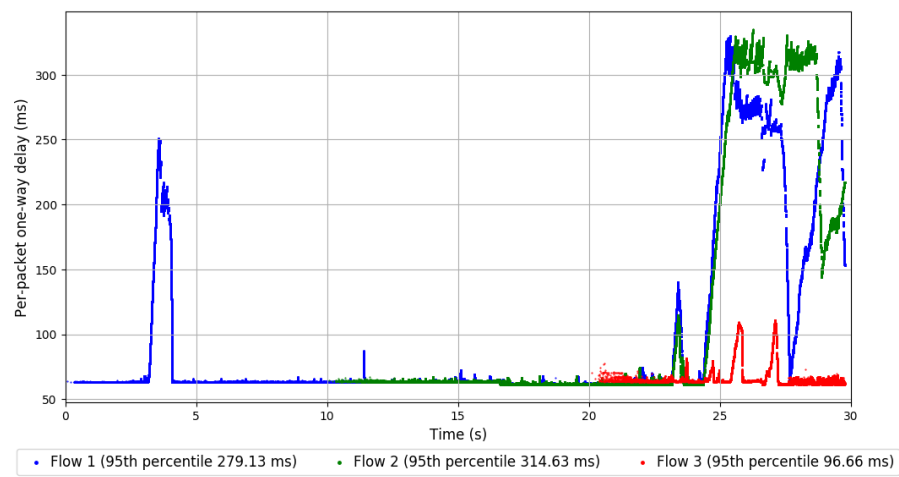
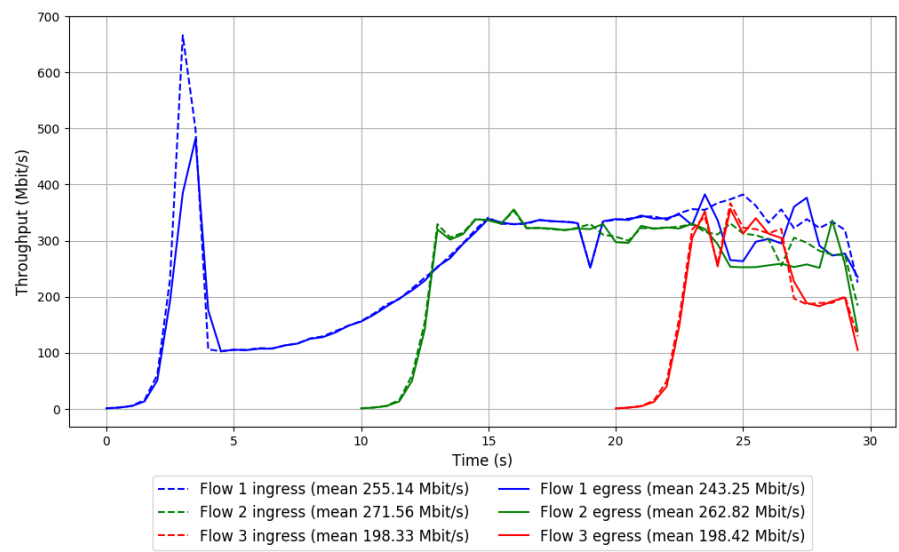
-- Flow 3:

Average throughput: 198.42 Mbit/s

95th percentile per-packet one-way delay: 96.664 ms

Loss rate: 1.35%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-01 03:45:59

End at: 2018-02-01 03:46:29

Below is generated by plot.py at 2018-02-01 08:33:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 465.94 Mbit/s

95th percentile per-packet one-way delay: 297.015 ms

Loss rate: 3.43%

-- Flow 1:

Average throughput: 256.09 Mbit/s

95th percentile per-packet one-way delay: 320.512 ms

Loss rate: 3.22%

-- Flow 2:

Average throughput: 206.35 Mbit/s

95th percentile per-packet one-way delay: 67.444 ms

Loss rate: 1.55%

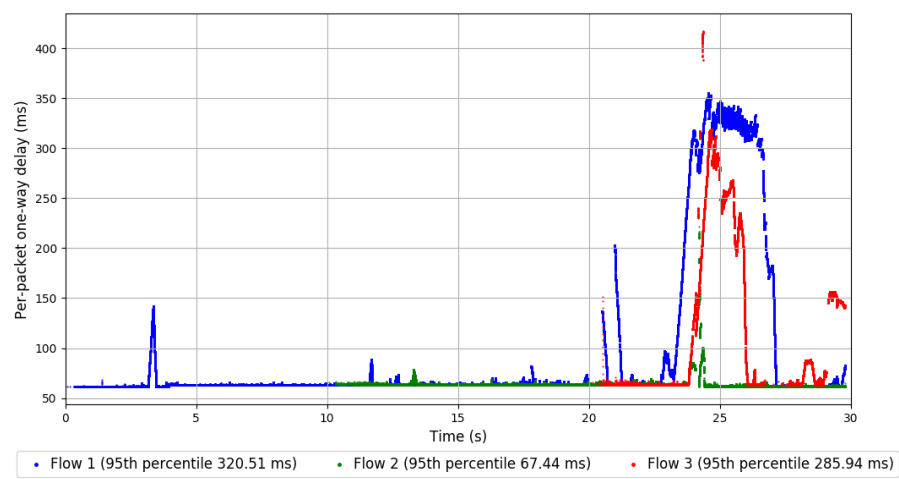
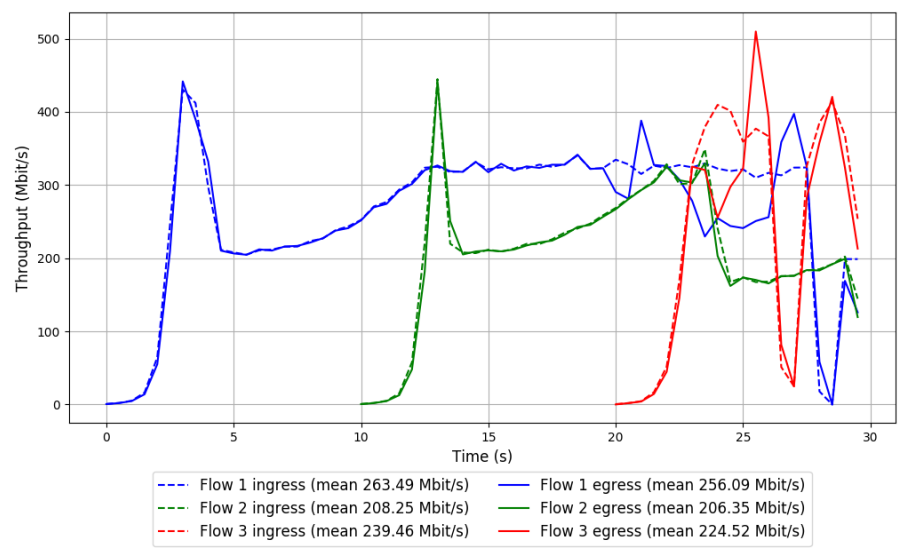
-- Flow 3:

Average throughput: 224.52 Mbit/s

95th percentile per-packet one-way delay: 285.937 ms

Loss rate: 7.48%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-01 04:02:52

End at: 2018-02-01 04:03:22

Below is generated by plot.py at 2018-02-01 08:33:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 399.03 Mbit/s

95th percentile per-packet one-way delay: 301.748 ms

Loss rate: 5.07%

-- Flow 1:

Average throughput: 225.59 Mbit/s

95th percentile per-packet one-way delay: 301.003 ms

Loss rate: 5.12%

-- Flow 2:

Average throughput: 179.02 Mbit/s

95th percentile per-packet one-way delay: 333.633 ms

Loss rate: 5.56%

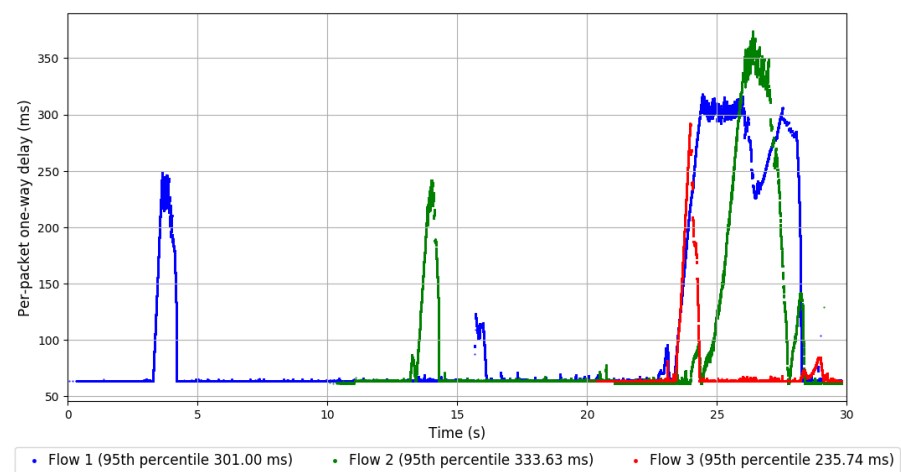
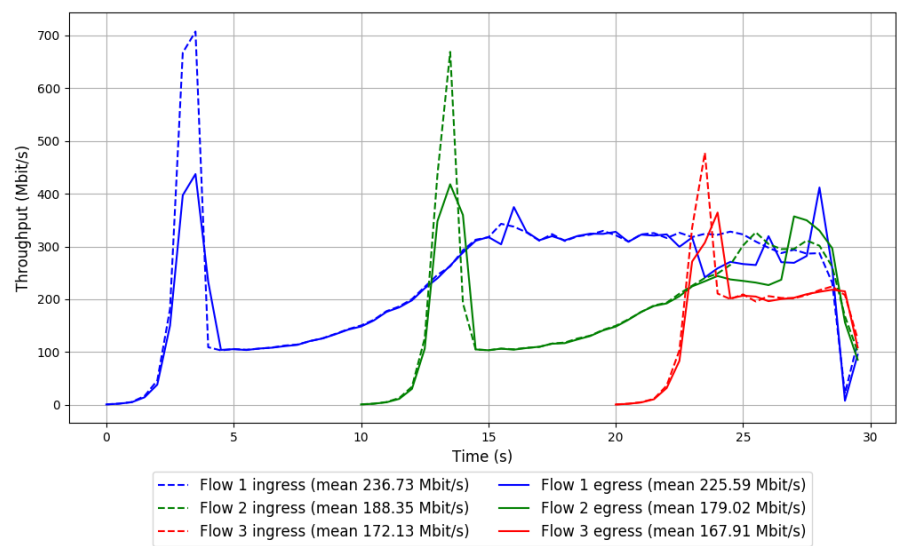
-- Flow 3:

Average throughput: 167.91 Mbit/s

95th percentile per-packet one-way delay: 235.743 ms

Loss rate: 3.74%

Run 10: Report of Vivace-loss — Data Link

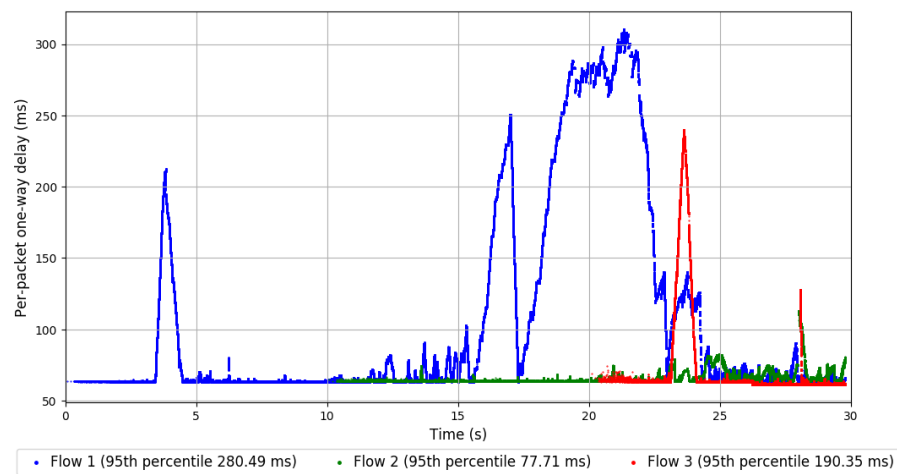
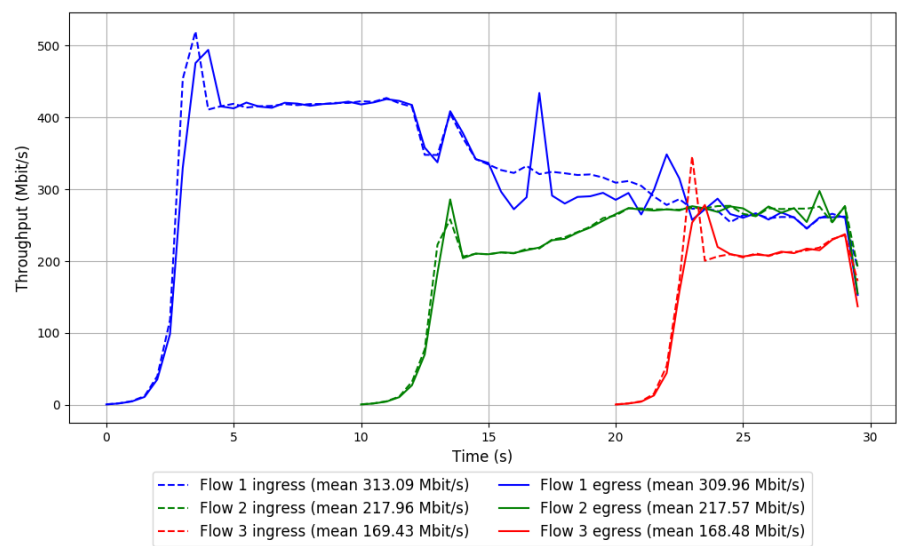


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-01 01:23:07
End at: 2018-02-01 01:23:37

# Below is generated by plot.py at 2018-02-01 08:35:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 509.16 Mbit/s
95th percentile per-packet one-way delay: 266.797 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 309.96 Mbit/s
95th percentile per-packet one-way delay: 280.489 ms
Loss rate: 1.43%
-- Flow 2:
Average throughput: 217.57 Mbit/s
95th percentile per-packet one-way delay: 77.708 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 168.48 Mbit/s
95th percentile per-packet one-way delay: 190.352 ms
Loss rate: 1.93%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-01 01:39:42

End at: 2018-02-01 01:40:12

Below is generated by plot.py at 2018-02-01 08:35:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 453.21 Mbit/s

95th percentile per-packet one-way delay: 247.674 ms

Loss rate: 2.12%

-- Flow 1:

Average throughput: 259.05 Mbit/s

95th percentile per-packet one-way delay: 270.585 ms

Loss rate: 2.86%

-- Flow 2:

Average throughput: 213.08 Mbit/s

95th percentile per-packet one-way delay: 71.149 ms

Loss rate: 0.80%

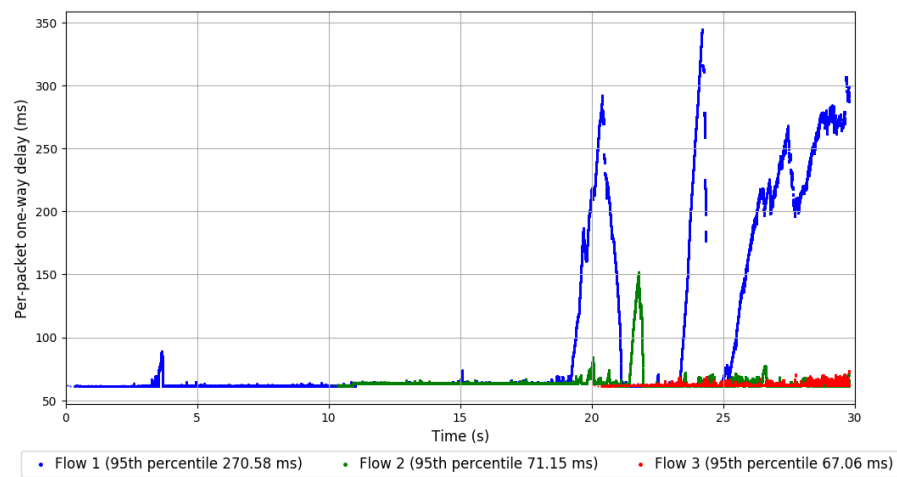
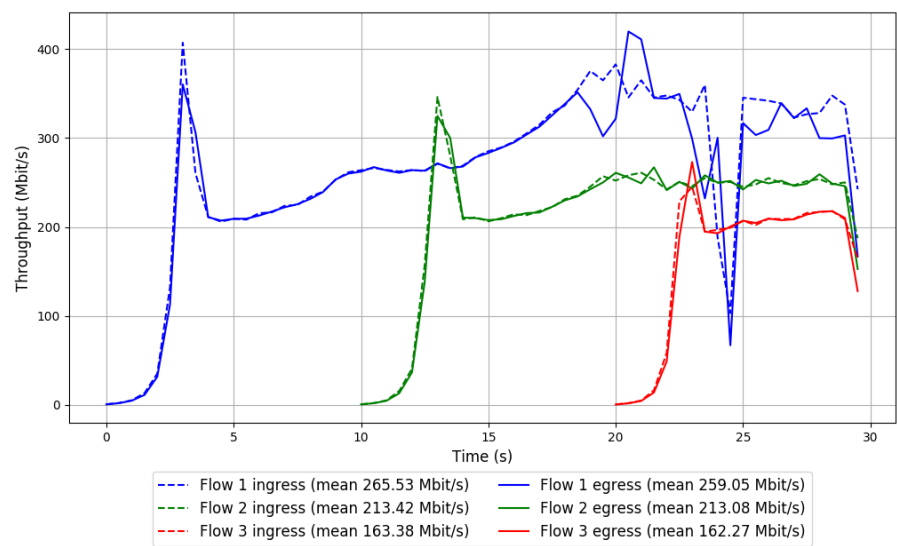
-- Flow 3:

Average throughput: 162.27 Mbit/s

95th percentile per-packet one-way delay: 67.064 ms

Loss rate: 1.97%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-01 01:56:33

End at: 2018-02-01 01:57:03

Below is generated by plot.py at 2018-02-01 08:41:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 543.85 Mbit/s

95th percentile per-packet one-way delay: 256.746 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 306.32 Mbit/s

95th percentile per-packet one-way delay: 114.679 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 275.78 Mbit/s

95th percentile per-packet one-way delay: 294.905 ms

Loss rate: 1.84%

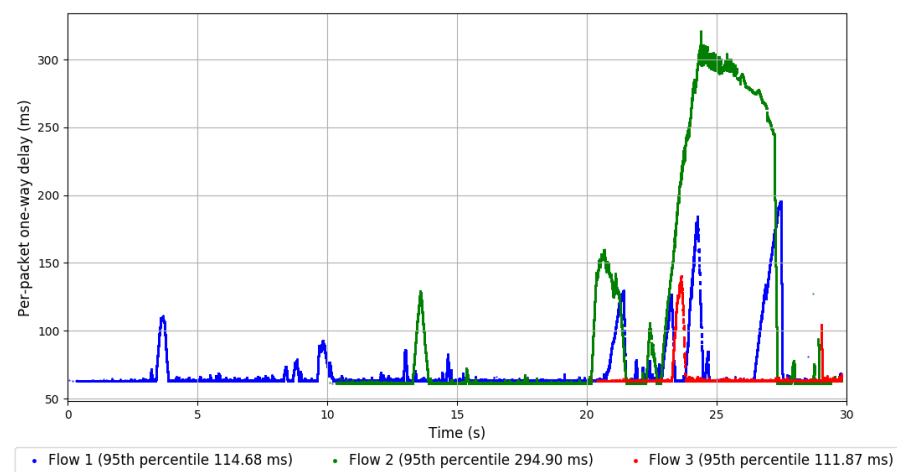
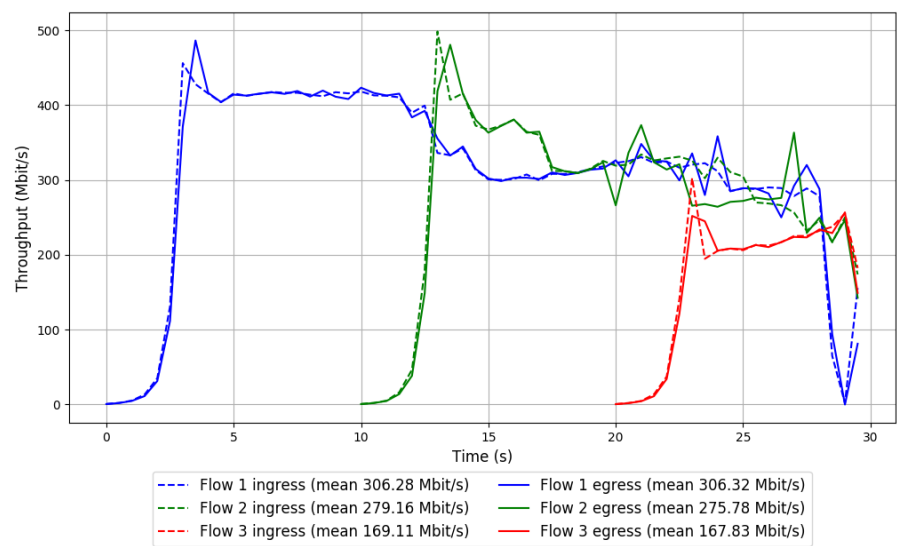
-- Flow 3:

Average throughput: 167.83 Mbit/s

95th percentile per-packet one-way delay: 111.870 ms

Loss rate: 2.06%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-01 02:13:36

End at: 2018-02-01 02:14:06

Below is generated by plot.py at 2018-02-01 08:41:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 447.09 Mbit/s

95th percentile per-packet one-way delay: 247.676 ms

Loss rate: 1.78%

-- Flow 1:

Average throughput: 248.00 Mbit/s

95th percentile per-packet one-way delay: 311.220 ms

Loss rate: 2.31%

-- Flow 2:

Average throughput: 219.88 Mbit/s

95th percentile per-packet one-way delay: 138.982 ms

Loss rate: 0.85%

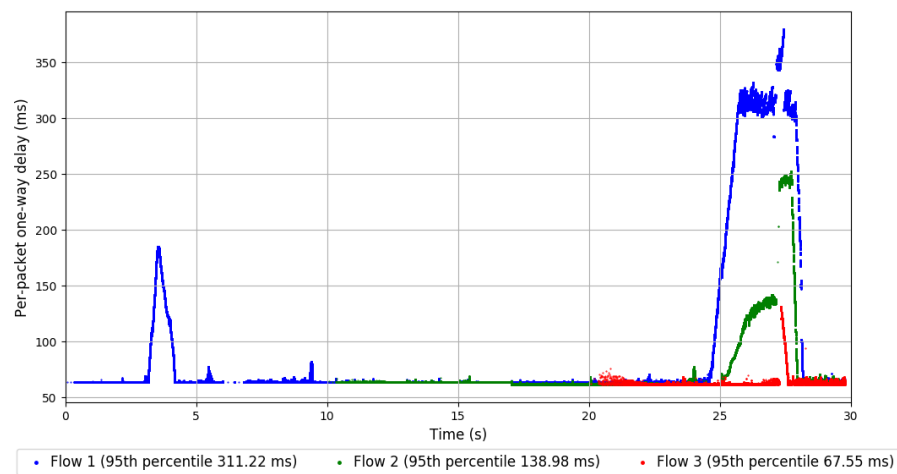
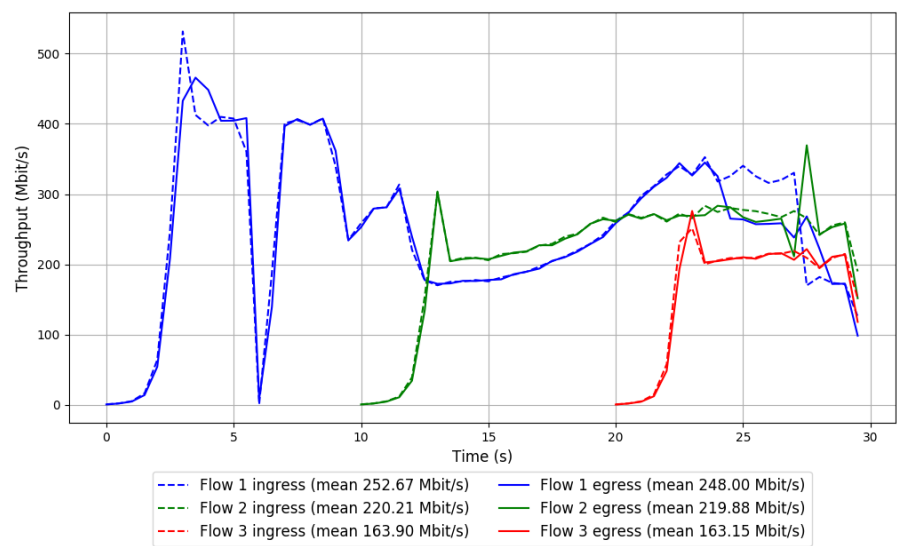
-- Flow 3:

Average throughput: 163.15 Mbit/s

95th percentile per-packet one-way delay: 67.546 ms

Loss rate: 1.84%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-01 02:30:25

End at: 2018-02-01 02:30:55

Below is generated by plot.py at 2018-02-01 08:41:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 441.35 Mbit/s

95th percentile per-packet one-way delay: 115.876 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 240.47 Mbit/s

95th percentile per-packet one-way delay: 72.587 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 222.89 Mbit/s

95th percentile per-packet one-way delay: 249.631 ms

Loss rate: 1.47%

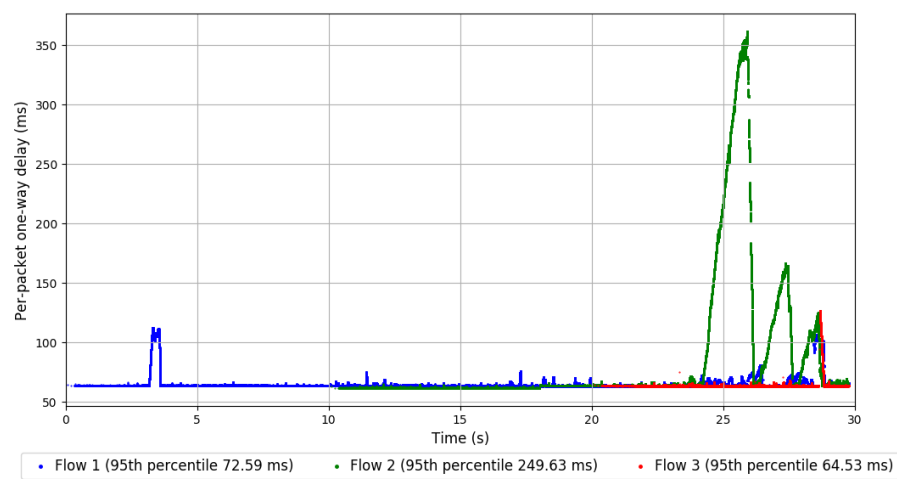
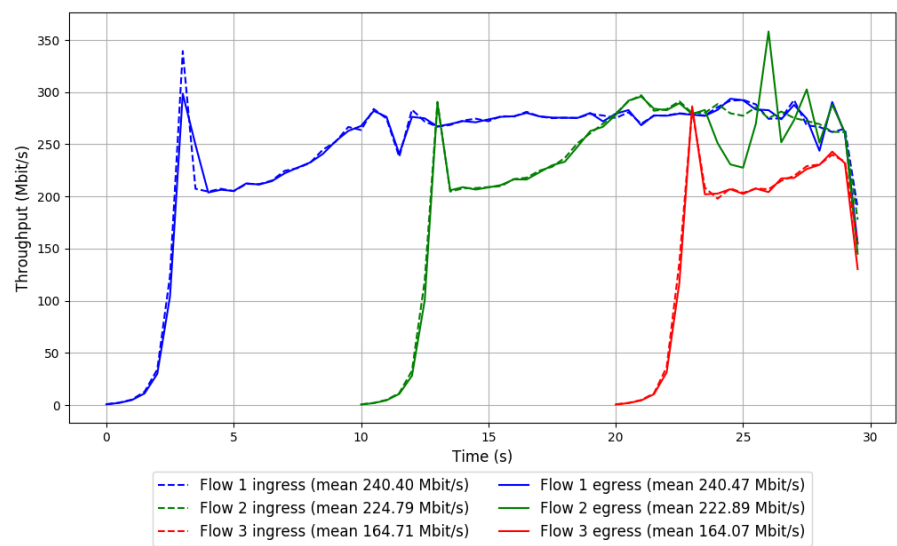
-- Flow 3:

Average throughput: 164.07 Mbit/s

95th percentile per-packet one-way delay: 64.526 ms

Loss rate: 1.69%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-01 02:47:15

End at: 2018-02-01 02:47:45

Below is generated by plot.py at 2018-02-01 08:41:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 508.86 Mbit/s

95th percentile per-packet one-way delay: 146.770 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 301.62 Mbit/s

95th percentile per-packet one-way delay: 127.424 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 232.28 Mbit/s

95th percentile per-packet one-way delay: 244.215 ms

Loss rate: 1.19%

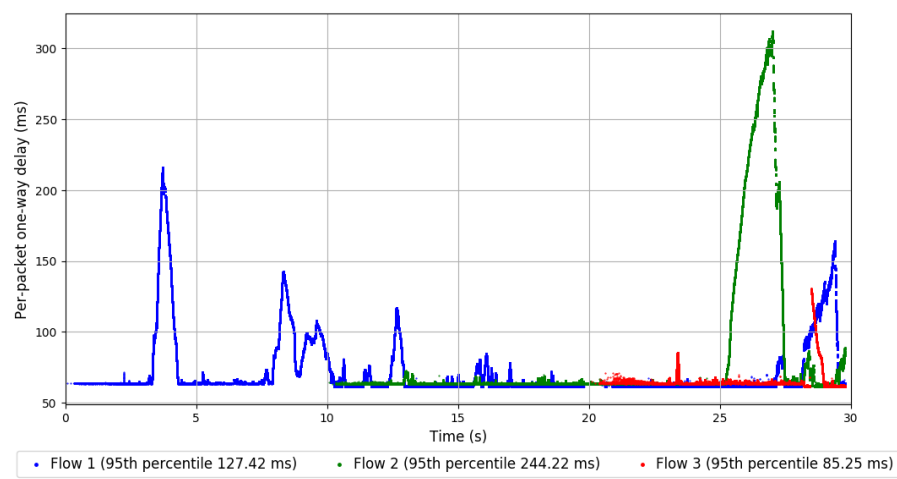
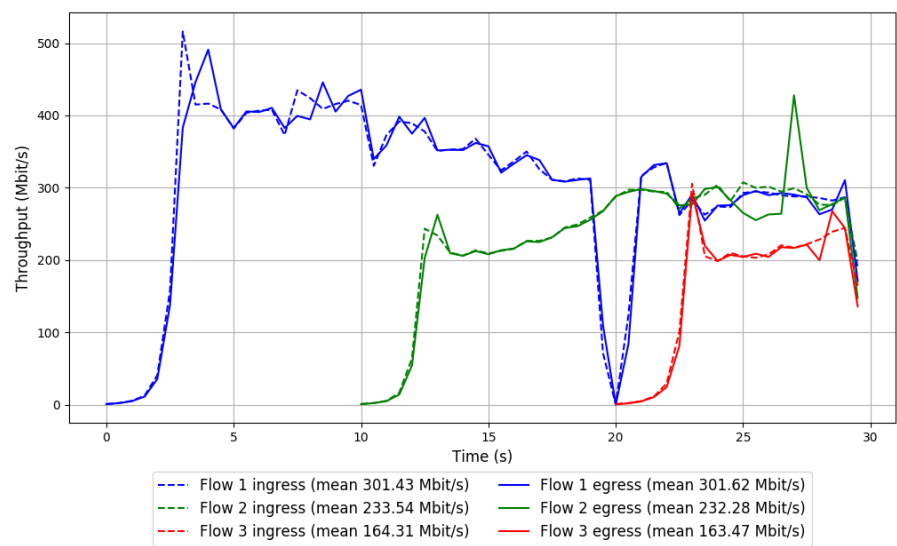
-- Flow 3:

Average throughput: 163.47 Mbit/s

95th percentile per-packet one-way delay: 85.250 ms

Loss rate: 1.84%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-01 03:04:12

End at: 2018-02-01 03:04:42

Below is generated by plot.py at 2018-02-01 08:41:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 448.72 Mbit/s

95th percentile per-packet one-way delay: 269.807 ms

Loss rate: 1.47%

-- Flow 1:

Average throughput: 257.27 Mbit/s

95th percentile per-packet one-way delay: 193.446 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 208.96 Mbit/s

95th percentile per-packet one-way delay: 314.963 ms

Loss rate: 2.32%

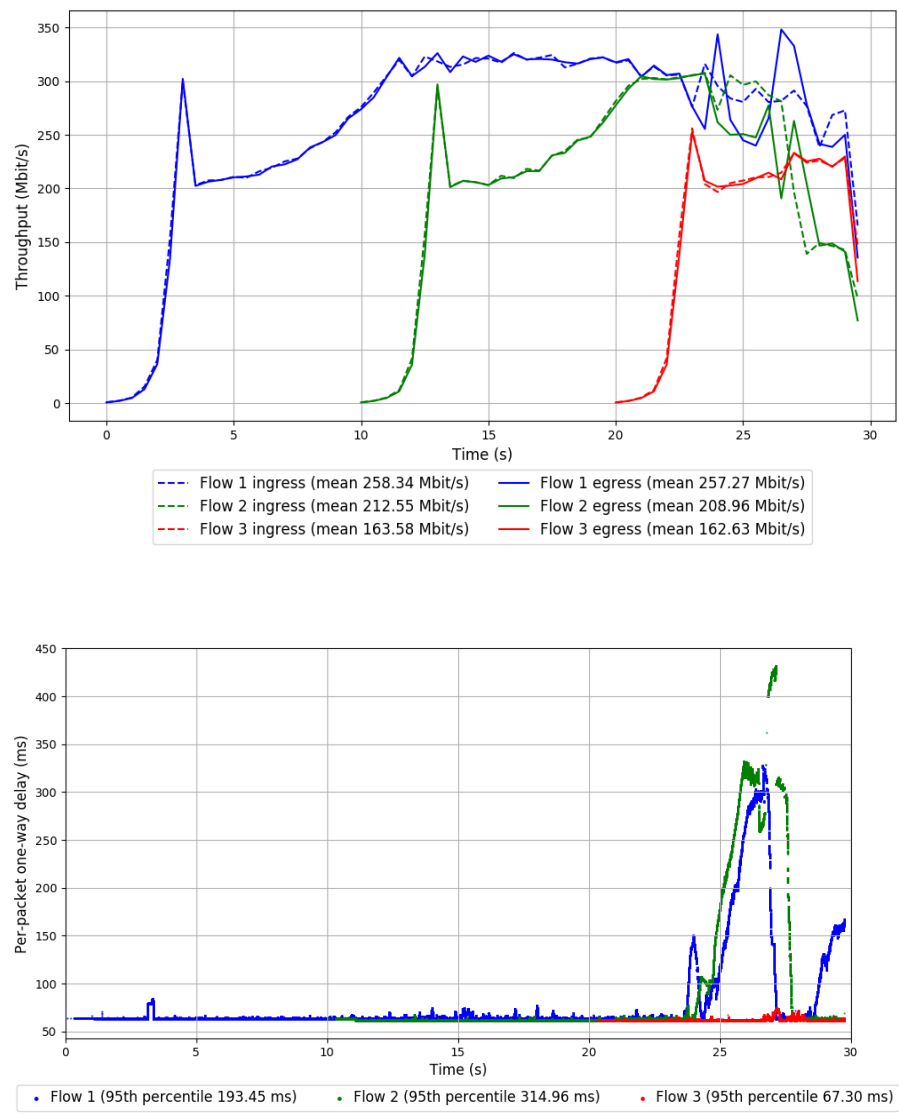
-- Flow 3:

Average throughput: 162.63 Mbit/s

95th percentile per-packet one-way delay: 67.301 ms

Loss rate: 1.86%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-01 03:20:53

End at: 2018-02-01 03:21:23

Below is generated by plot.py at 2018-02-01 08:41:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 443.48 Mbit/s

95th percentile per-packet one-way delay: 207.751 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 246.42 Mbit/s

95th percentile per-packet one-way delay: 162.171 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 213.98 Mbit/s

95th percentile per-packet one-way delay: 282.501 ms

Loss rate: 2.40%

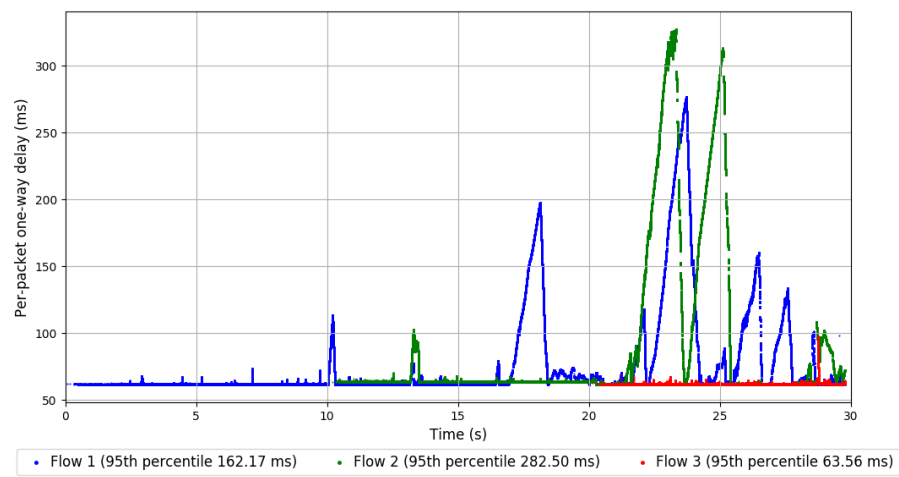
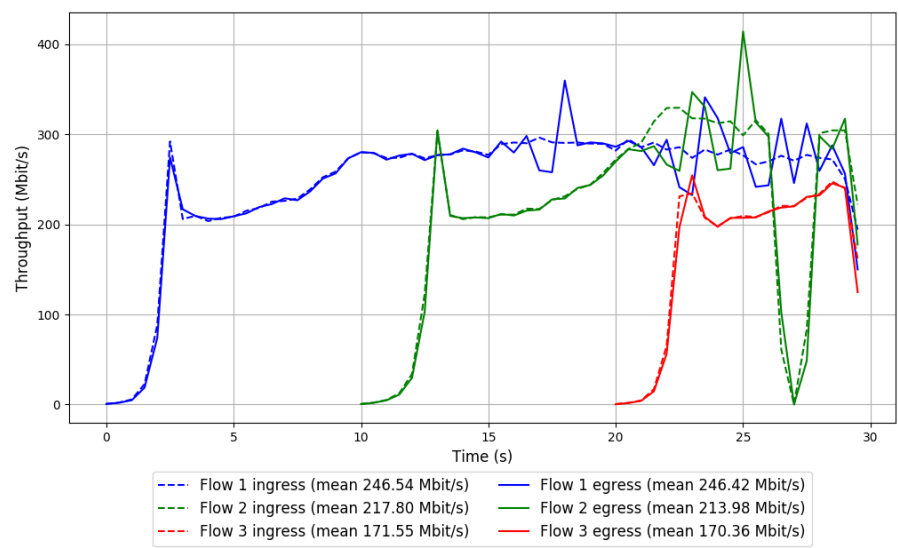
-- Flow 3:

Average throughput: 170.36 Mbit/s

95th percentile per-packet one-way delay: 63.564 ms

Loss rate: 2.02%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-01 03:37:40

End at: 2018-02-01 03:38:10

Below is generated by plot.py at 2018-02-01 08:42:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 483.77 Mbit/s

95th percentile per-packet one-way delay: 94.453 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 239.72 Mbit/s

95th percentile per-packet one-way delay: 92.984 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 286.48 Mbit/s

95th percentile per-packet one-way delay: 87.212 ms

Loss rate: 0.67%

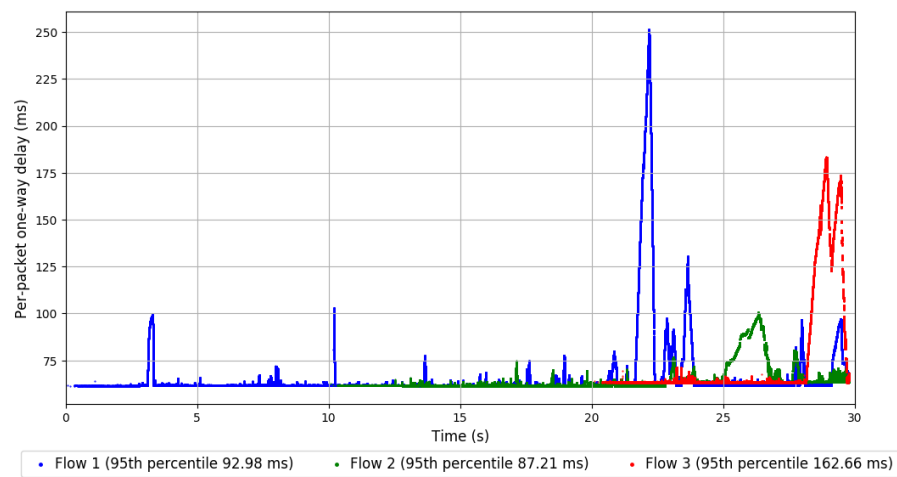
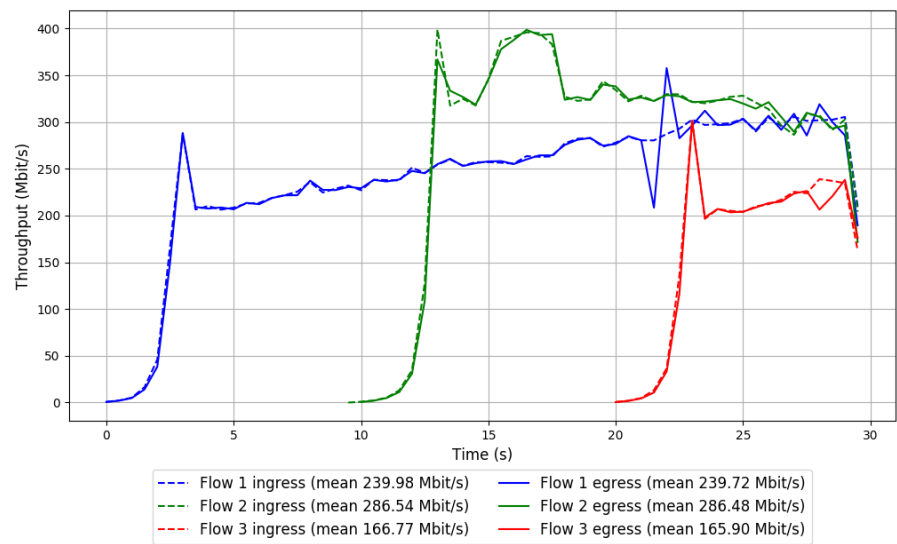
-- Flow 3:

Average throughput: 165.90 Mbit/s

95th percentile per-packet one-way delay: 162.658 ms

Loss rate: 1.82%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-01 03:54:29
End at: 2018-02-01 03:54:59

# Below is generated by plot.py at 2018-02-01 08:42:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 527.47 Mbit/s
95th percentile per-packet one-way delay: 195.245 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 325.63 Mbit/s
95th percentile per-packet one-way delay: 285.061 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 222.01 Mbit/s
95th percentile per-packet one-way delay: 72.080 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 167.58 Mbit/s
95th percentile per-packet one-way delay: 138.439 ms
Loss rate: 1.88%
```

Run 10: Report of Vivace-LTE — Data Link

