

Pantheon Report

Generated at 2018-01-09 18:51:07 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

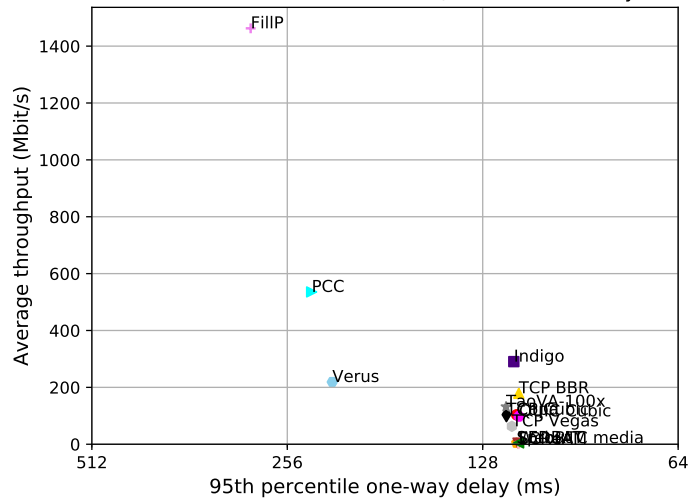
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

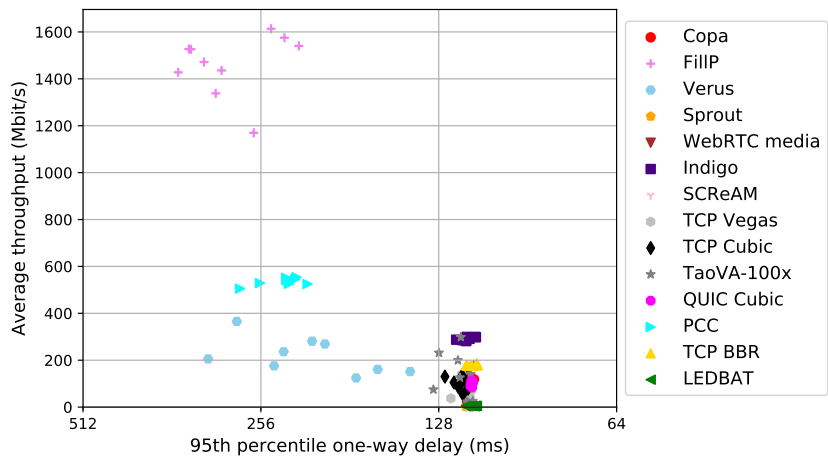
Git summary:

```
branch: master @ 56d1792c316a5efca3f2d21342905405fedffb48
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	92.39	90.11	83.03	112.58	112.53	113.01	0.86	1.15	2.75
TCP Cubic	10	54.69	51.21	47.36	116.48	117.47	118.99	1.14	1.52	4.01
LEDBAT	10	2.45	2.62	1.47	112.71	112.66	112.67	1.83	2.03	3.71
PCC	10	480.26	56.11	56.29	236.95	213.02	215.69	3.18	1.68	3.66
QUIC Cubic	10	51.13	50.93	40.72	111.86	111.95	112.06	0.98	1.28	2.17
SCReAM	10	0.21	0.21	0.21	112.45	111.94	111.15	0.63	1.10	2.23
WebRTC media	10	2.06	1.27	0.44	112.50	112.25	113.17	0.99	1.35	4.16
Sprout	10	2.22	2.19	1.62	113.46	113.38	113.16	1.04	1.62	3.12
TaoVA-100x	10	60.91	82.76	65.63	120.09	115.01	125.92	1.33	1.00	4.40
TCP Vegas	9	28.67	36.40	31.56	114.20	114.23	116.06	0.80	1.34	3.07
Verus	9	125.45	107.68	69.43	195.87	208.31	192.68	1.95	2.62	3.95
Copa	10	55.68	56.62	42.26	112.99	118.73	112.70	0.67	5.43	5.18
FillP	10	781.88	701.92	661.98	251.70	299.31	269.87	7.95	10.88	16.39
Indigo	10	156.19	144.02	121.72	114.53	115.07	114.66	0.78	1.20	2.77

Run 1: Statistics of TCP BBR

Start at: 2018-01-09 12:24:06

End at: 2018-01-09 12:24:36

Below is generated by plot.py at 2018-01-09 17:38:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 176.46 Mbit/s

95th percentile per-packet one-way delay: 113.154 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 92.04 Mbit/s

95th percentile per-packet one-way delay: 113.131 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 88.22 Mbit/s

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

Loss rate: 1.38%

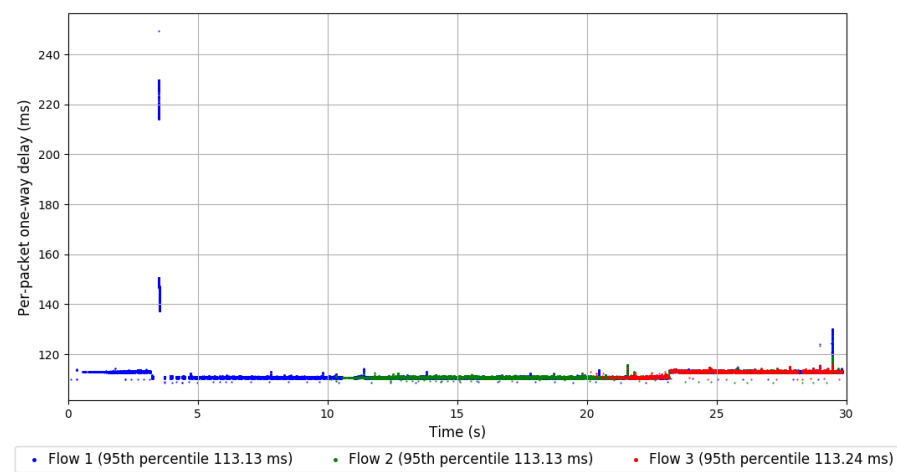
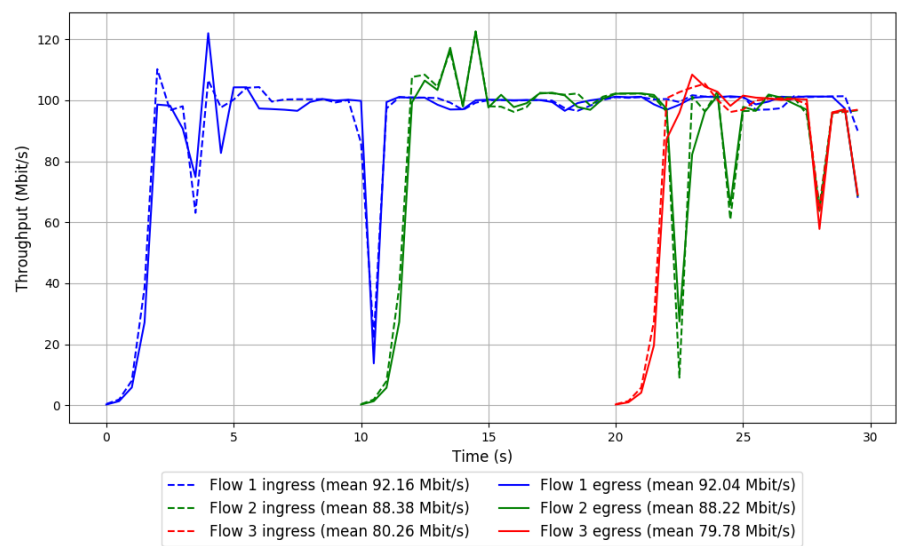
-- Flow 3:

Average throughput: 79.78 Mbit/s

95th percentile per-packet one-way delay: 113.238 ms

Loss rate: 3.04%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-09 12:39:37

End at: 2018-01-09 12:40:07

Below is generated by plot.py at 2018-01-09 17:38:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 177.28 Mbit/s

95th percentile per-packet one-way delay: 112.597 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 90.89 Mbit/s

95th percentile per-packet one-way delay: 112.492 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 89.57 Mbit/s

95th percentile per-packet one-way delay: 112.522 ms

Loss rate: 1.21%

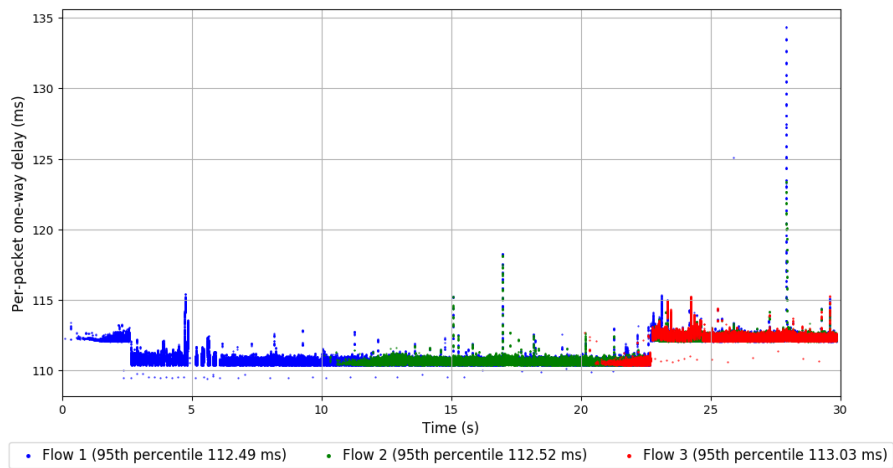
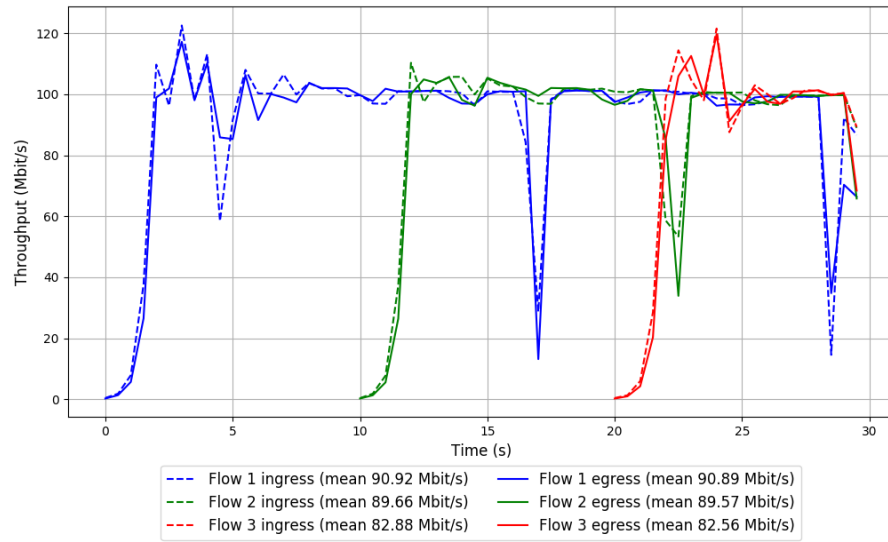
-- Flow 3:

Average throughput: 82.56 Mbit/s

95th percentile per-packet one-way delay: 113.029 ms

Loss rate: 2.62%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-09 12:54:51

End at: 2018-01-09 12:55:21

Below is generated by plot.py at 2018-01-09 17:38:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.18 Mbit/s

95th percentile per-packet one-way delay: 110.374 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 95.70 Mbit/s

95th percentile per-packet one-way delay: 110.030 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 96.65 Mbit/s

95th percentile per-packet one-way delay: 110.268 ms

Loss rate: 0.00%

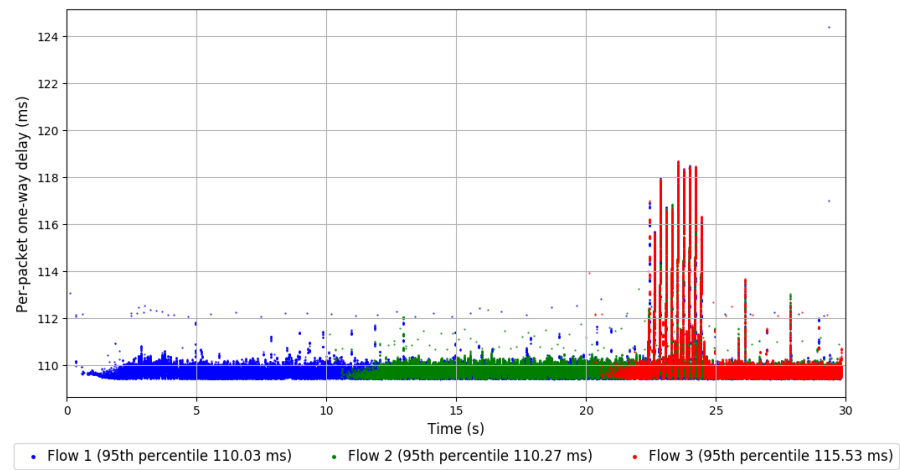
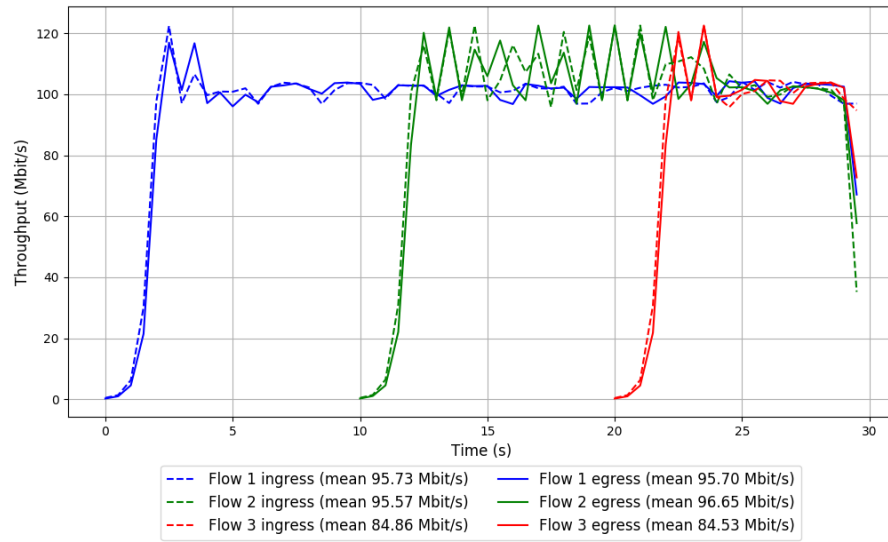
-- Flow 3:

Average throughput: 84.53 Mbit/s

95th percentile per-packet one-way delay: 115.533 ms

Loss rate: 2.74%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-09 13:10:24

End at: 2018-01-09 13:10:54

Below is generated by plot.py at 2018-01-09 17:38:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.04 Mbit/s

95th percentile per-packet one-way delay: 110.331 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 94.42 Mbit/s

95th percentile per-packet one-way delay: 110.288 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 89.82 Mbit/s

95th percentile per-packet one-way delay: 110.338 ms

Loss rate: 1.21%

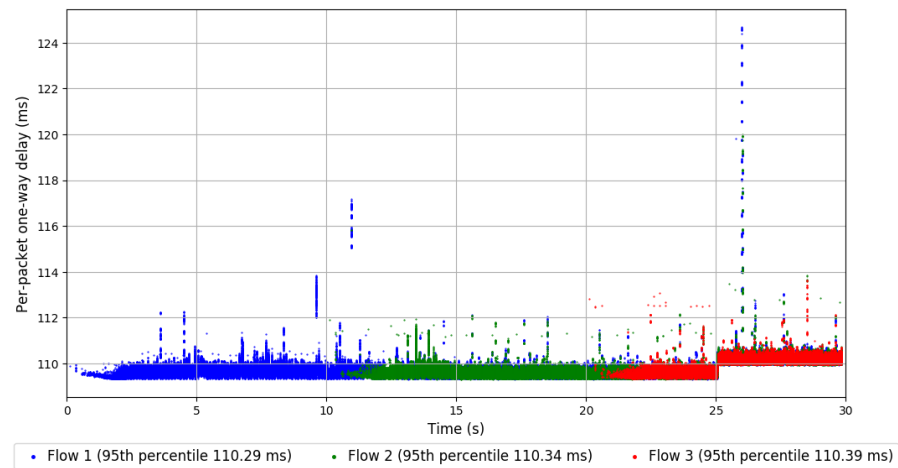
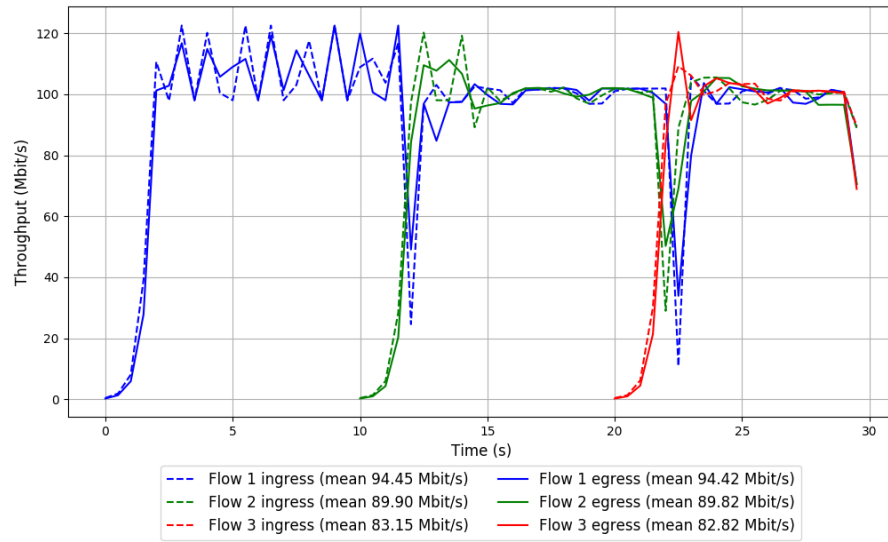
-- Flow 3:

Average throughput: 82.82 Mbit/s

95th percentile per-packet one-way delay: 110.391 ms

Loss rate: 2.64%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-09 13:26:12

End at: 2018-01-09 13:26:42

Below is generated by plot.py at 2018-01-09 17:38:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.61 Mbit/s

95th percentile per-packet one-way delay: 109.892 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 93.27 Mbit/s

95th percentile per-packet one-way delay: 109.888 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 88.10 Mbit/s

95th percentile per-packet one-way delay: 109.887 ms

Loss rate: 1.34%

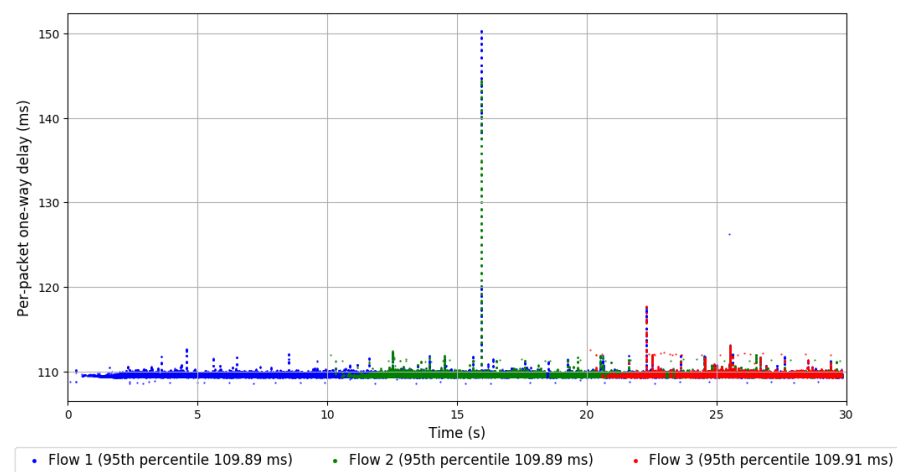
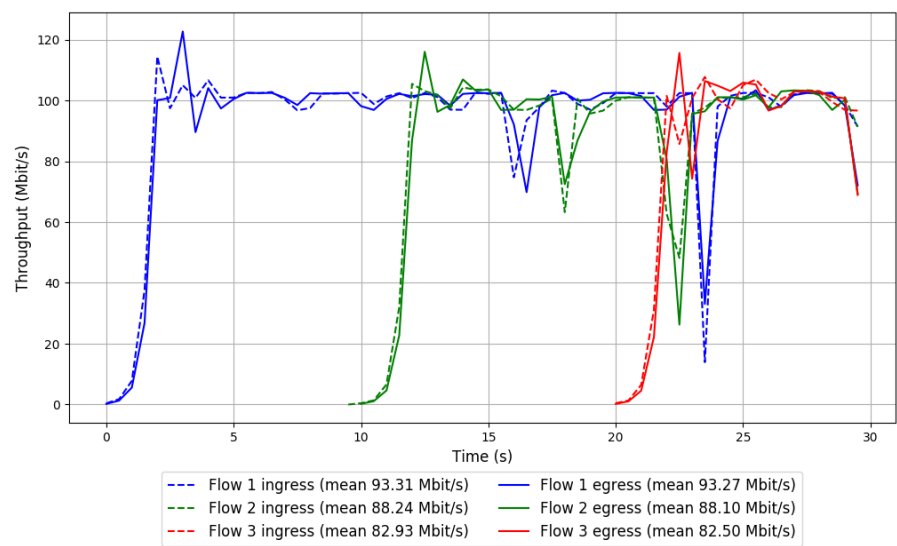
-- Flow 3:

Average throughput: 82.50 Mbit/s

95th percentile per-packet one-way delay: 109.912 ms

Loss rate: 2.93%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-09 13:41:37

End at: 2018-01-09 13:42:07

Below is generated by plot.py at 2018-01-09 17:38:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 177.40 Mbit/s

95th percentile per-packet one-way delay: 110.627 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 90.91 Mbit/s

95th percentile per-packet one-way delay: 110.704 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 89.91 Mbit/s

95th percentile per-packet one-way delay: 109.962 ms

Loss rate: 1.21%

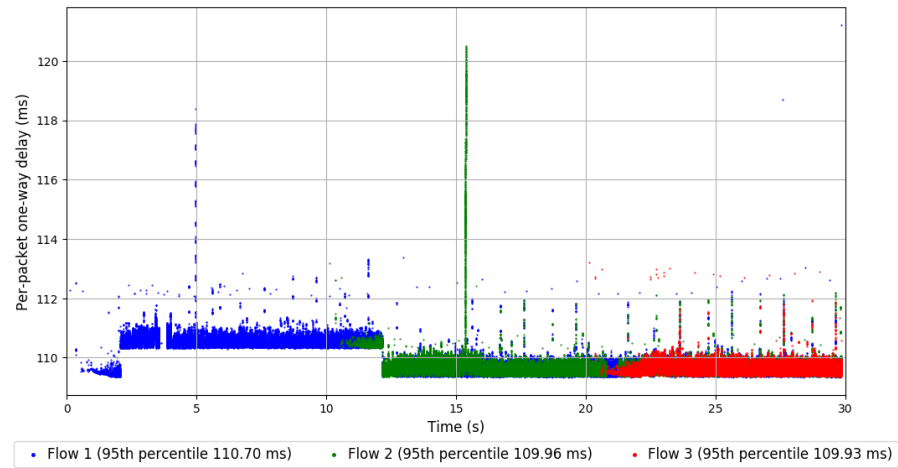
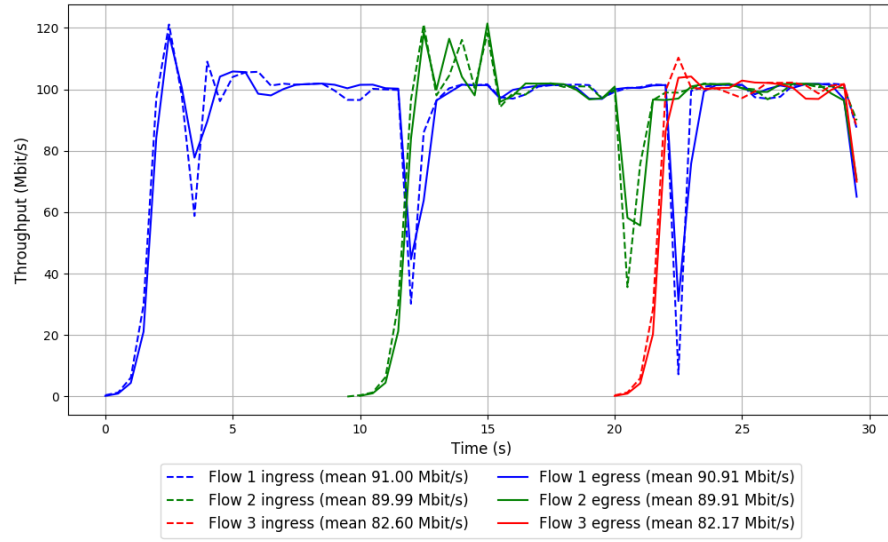
-- Flow 3:

Average throughput: 82.17 Mbit/s

95th percentile per-packet one-way delay: 109.933 ms

Loss rate: 2.65%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-09 13:56:33

End at: 2018-01-09 13:57:03

Below is generated by plot.py at 2018-01-09 17:38:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 176.40 Mbit/s

95th percentile per-packet one-way delay: 114.712 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 90.24 Mbit/s

95th percentile per-packet one-way delay: 114.699 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 89.15 Mbit/s

95th percentile per-packet one-way delay: 114.750 ms

Loss rate: 1.30%

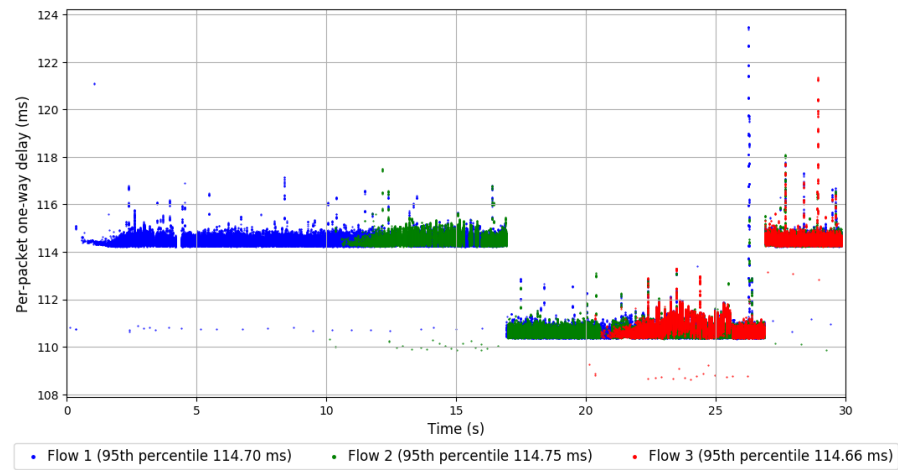
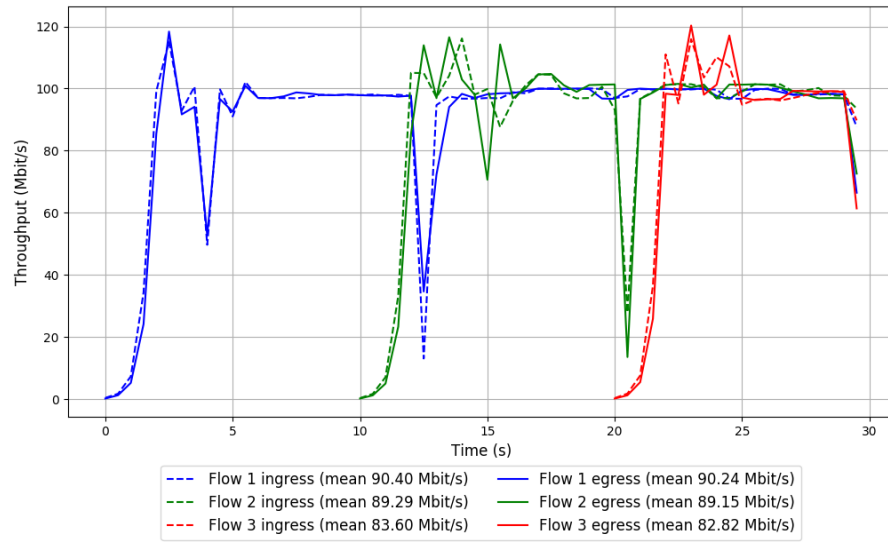
-- Flow 3:

Average throughput: 82.82 Mbit/s

95th percentile per-packet one-way delay: 114.655 ms

Loss rate: 2.75%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-09 14:11:56

End at: 2018-01-09 14:12:26

Below is generated by plot.py at 2018-01-09 17:38:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 180.32 Mbit/s

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

Loss rate: 1.36%

-- Flow 1:

Average throughput: 92.85 Mbit/s

95th percentile per-packet one-way delay: 114.951 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 88.44 Mbit/s

95th percentile per-packet one-way delay: 114.718 ms

Loss rate: 1.38%

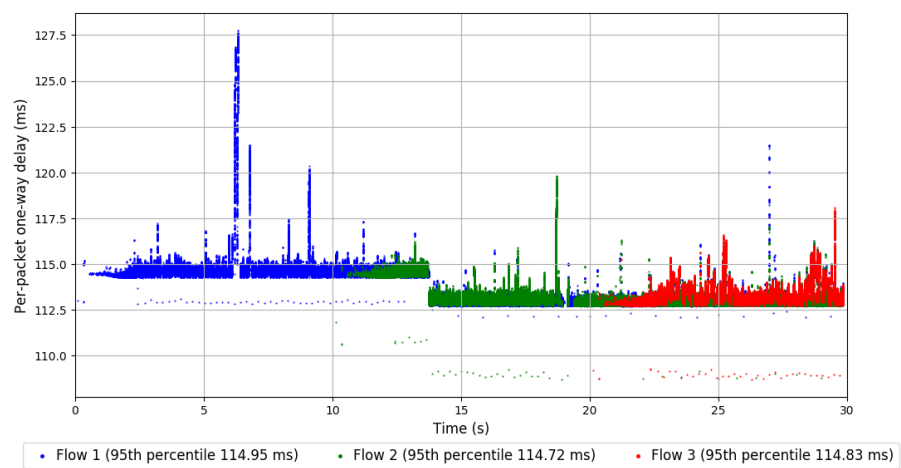
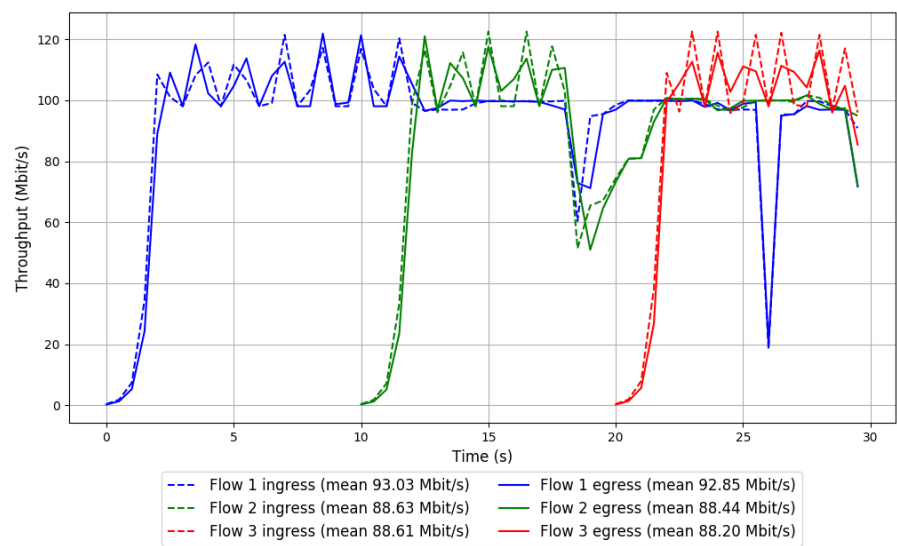
-- Flow 3:

Average throughput: 88.20 Mbit/s

95th percentile per-packet one-way delay: 114.834 ms

Loss rate: 2.68%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-09 14:27:05

End at: 2018-01-09 14:27:35

Below is generated by plot.py at 2018-01-09 17:42:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 176.94 Mbit/s

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

Loss rate: 1.32%

-- Flow 1:

Average throughput: 89.84 Mbit/s

95th percentile per-packet one-way delay: 114.855 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 89.74 Mbit/s

95th percentile per-packet one-way delay: 114.931 ms

Loss rate: 1.21%

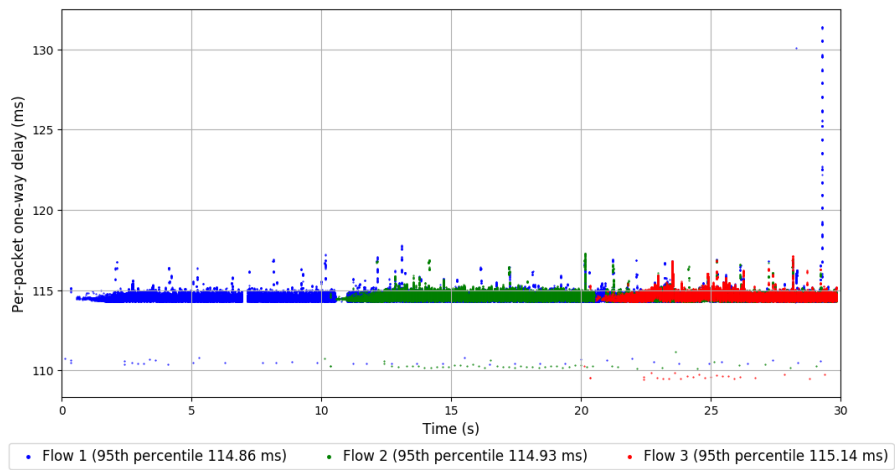
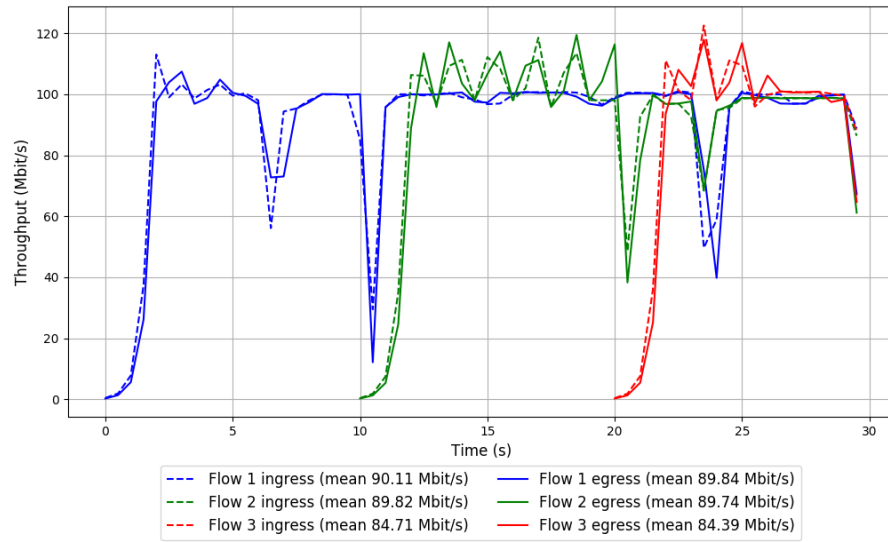
-- Flow 3:

Average throughput: 84.39 Mbit/s

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

Loss rate: 2.62%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-09 14:41:50

End at: 2018-01-09 14:42:20

Below is generated by plot.py at 2018-01-09 17:42:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 180.58 Mbit/s

95th percentile per-packet one-way delay: 114.743 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 93.70 Mbit/s

95th percentile per-packet one-way delay: 114.718 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 91.45 Mbit/s

95th percentile per-packet one-way delay: 114.817 ms

Loss rate: 1.21%

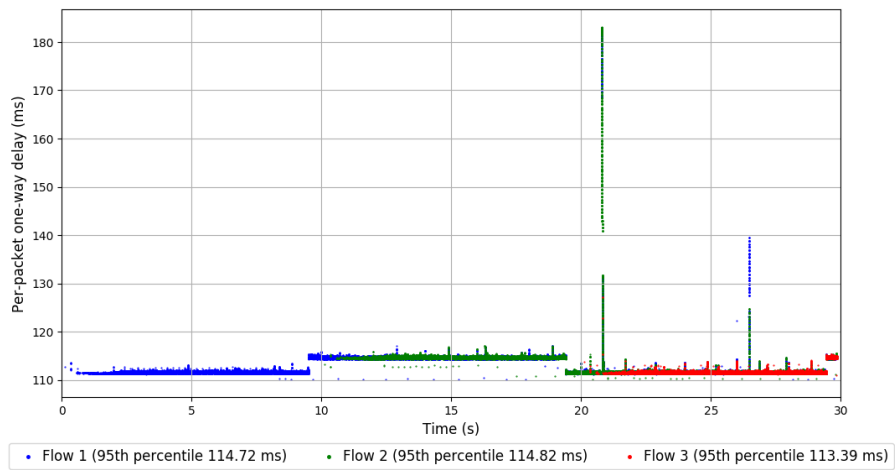
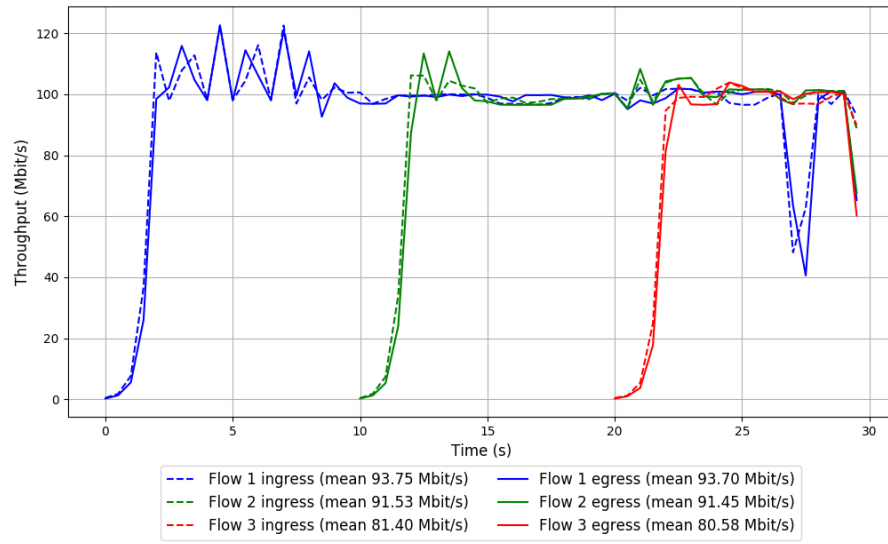
-- Flow 3:

Average throughput: 80.58 Mbit/s

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

Loss rate: 2.84%

Run 10: Report of TCP BBR — Data Link

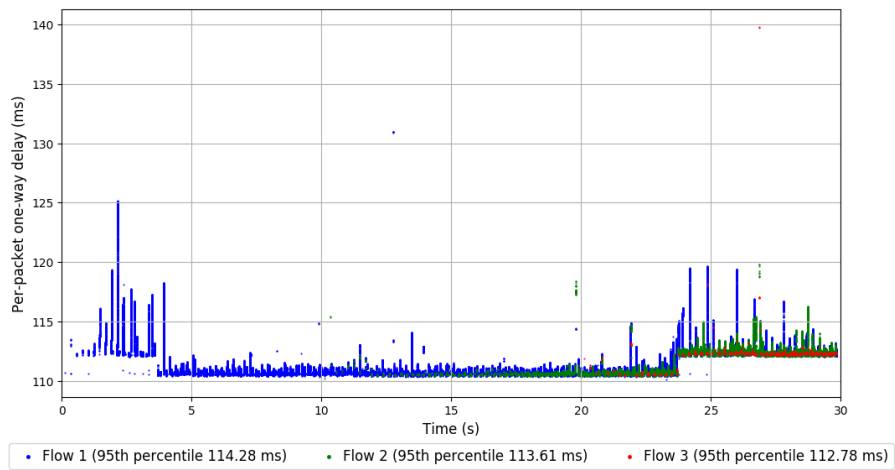
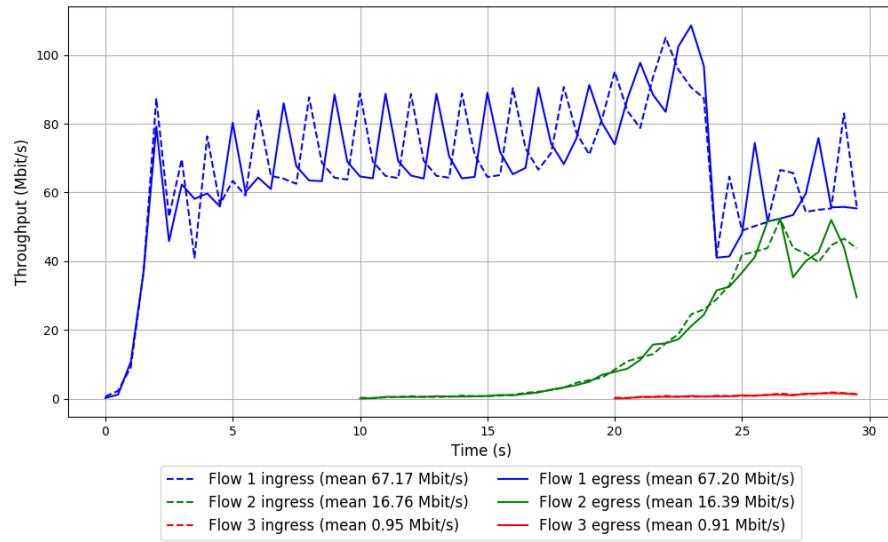


```
Run 1: Statistics of TCP Cubic

Start at: 2018-01-09 12:35:26
End at: 2018-01-09 12:35:56

# Below is generated by plot.py at 2018-01-09 17:42:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.35 Mbit/s
95th percentile per-packet one-way delay: 114.157 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 67.20 Mbit/s
95th percentile per-packet one-way delay: 114.278 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 16.39 Mbit/s
95th percentile per-packet one-way delay: 113.606 ms
Loss rate: 3.33%
-- Flow 3:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 112.781 ms
Loss rate: 5.86%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-09 12:51:01

End at: 2018-01-09 12:51:31

Below is generated by plot.py at 2018-01-09 17:42:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.70 Mbit/s

95th percentile per-packet one-way delay: 116.766 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 64.22 Mbit/s

95th percentile per-packet one-way delay: 116.417 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 48.32 Mbit/s

95th percentile per-packet one-way delay: 116.044 ms

Loss rate: 1.42%

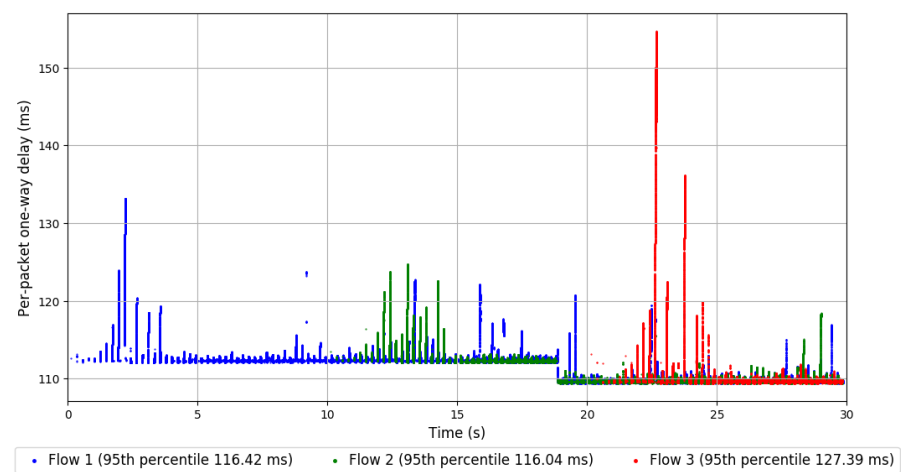
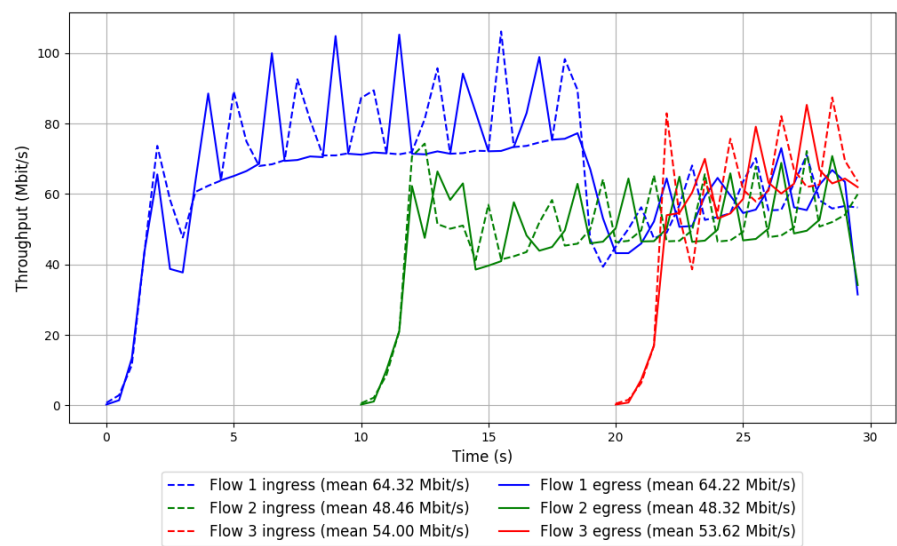
-- Flow 3:

Average throughput: 53.62 Mbit/s

95th percentile per-packet one-way delay: 127.395 ms

Loss rate: 2.97%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-09 13:06:12

End at: 2018-01-09 13:06:42

Below is generated by plot.py at 2018-01-09 17:42:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.24 Mbit/s

95th percentile per-packet one-way delay: 114.862 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 57.62 Mbit/s

95th percentile per-packet one-way delay: 113.053 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 51.76 Mbit/s

95th percentile per-packet one-way delay: 116.599 ms

Loss rate: 1.19%

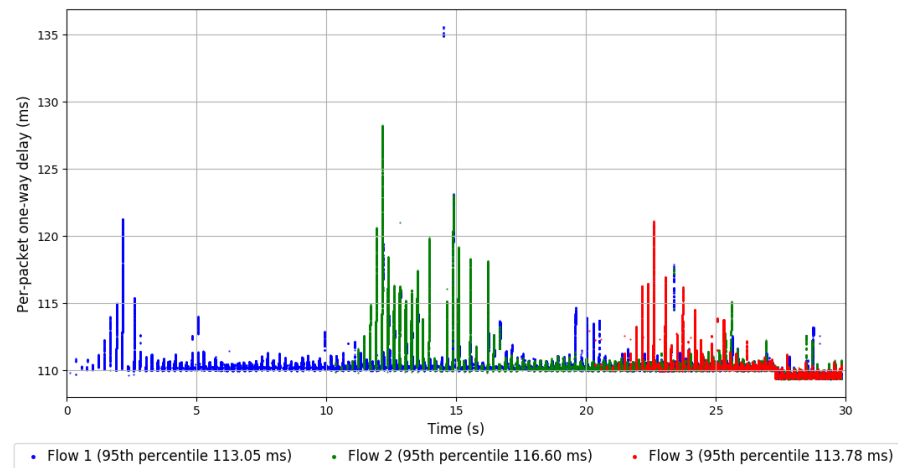
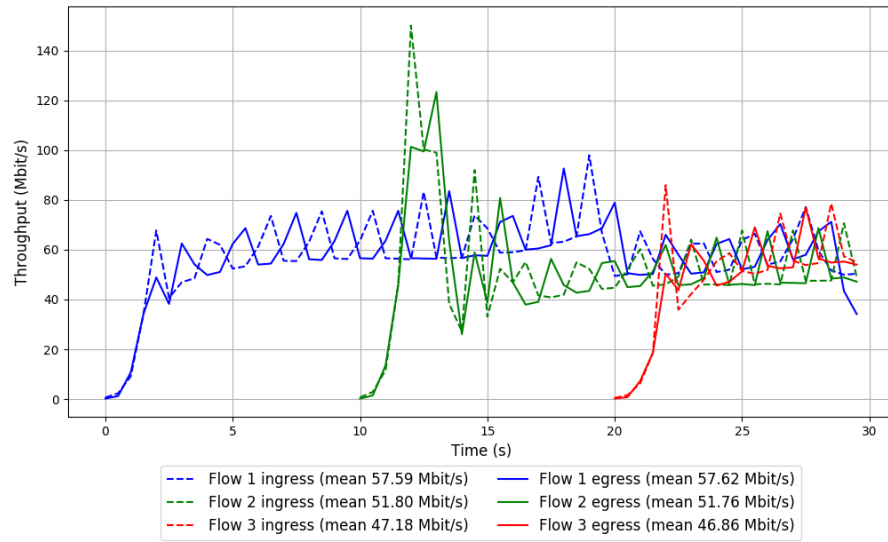
-- Flow 3:

Average throughput: 46.86 Mbit/s

95th percentile per-packet one-way delay: 113.775 ms

Loss rate: 2.94%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-09 13:22:05

End at: 2018-01-09 13:22:35

Below is generated by plot.py at 2018-01-09 17:42:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 116.54 Mbit/s

95th percentile per-packet one-way delay: 116.179 ms

Loss rate: 1.60%

-- Flow 1:

Average throughput: 62.90 Mbit/s

95th percentile per-packet one-way delay: 113.224 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 54.57 Mbit/s

95th percentile per-packet one-way delay: 117.658 ms

Loss rate: 1.68%

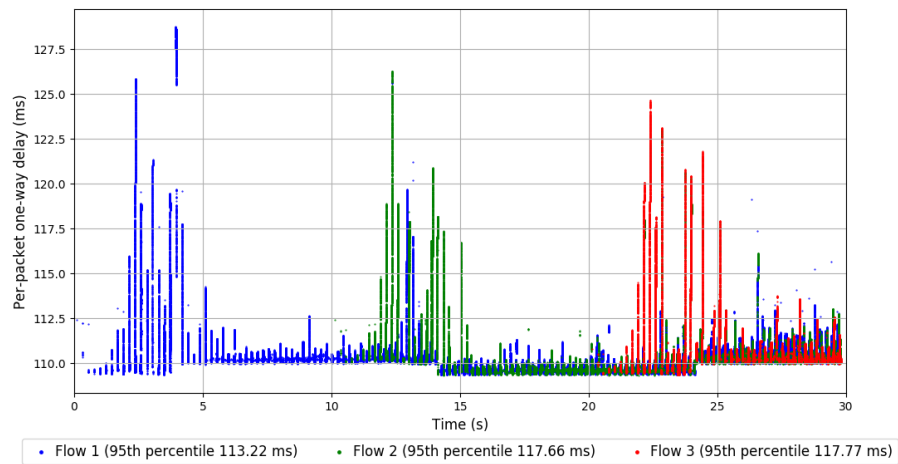
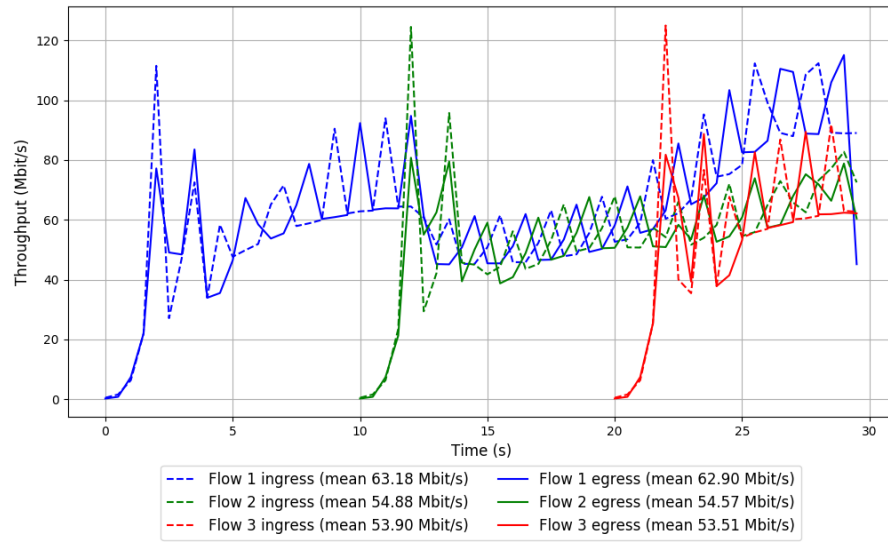
-- Flow 3:

Average throughput: 53.51 Mbit/s

95th percentile per-packet one-way delay: 117.769 ms

Loss rate: 2.93%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-09 13:37:21

End at: 2018-01-09 13:37:51

Below is generated by plot.py at 2018-01-09 17:42:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.31 Mbit/s

95th percentile per-packet one-way delay: 117.286 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 45.22 Mbit/s

95th percentile per-packet one-way delay: 114.511 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 61.83 Mbit/s

95th percentile per-packet one-way delay: 118.086 ms

Loss rate: 0.98%

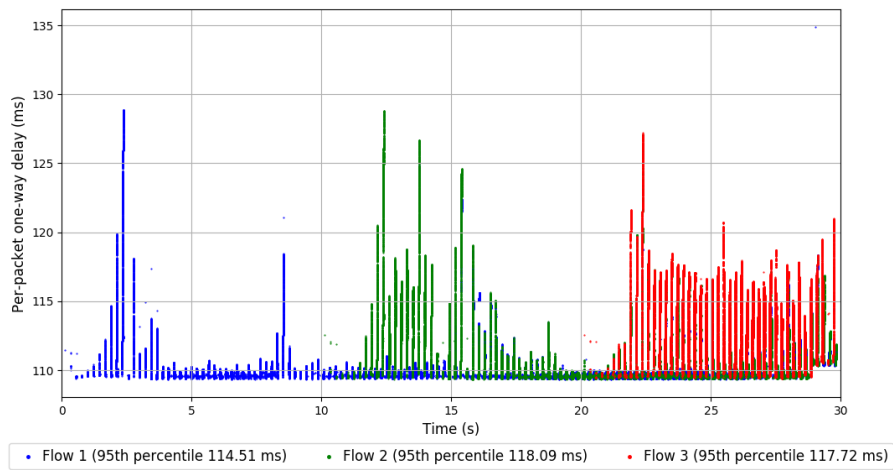
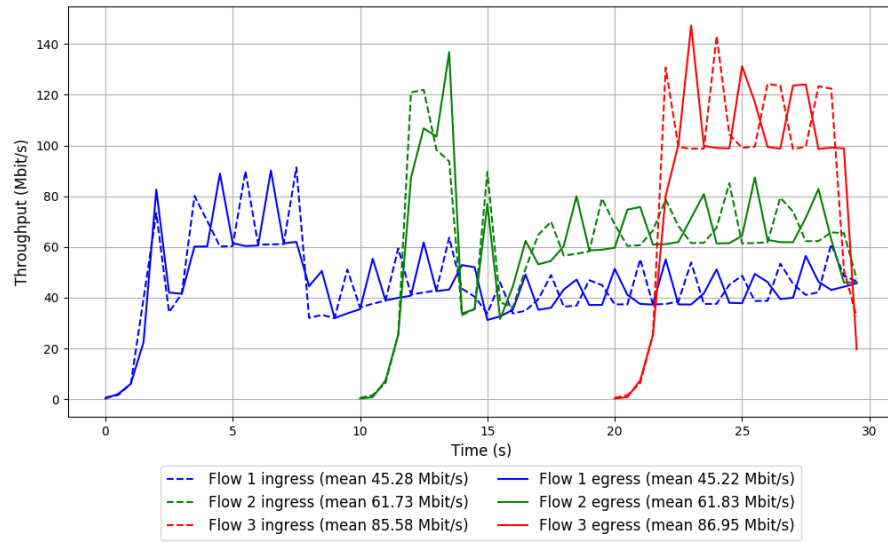
-- Flow 3:

Average throughput: 86.95 Mbit/s

95th percentile per-packet one-way delay: 117.718 ms

Loss rate: 0.76%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-09 13:52:34

End at: 2018-01-09 13:53:04

Below is generated by plot.py at 2018-01-09 17:42:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.94 Mbit/s

95th percentile per-packet one-way delay: 118.570 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 54.70 Mbit/s

95th percentile per-packet one-way delay: 117.414 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 46.29 Mbit/s

95th percentile per-packet one-way delay: 119.732 ms

Loss rate: 1.18%

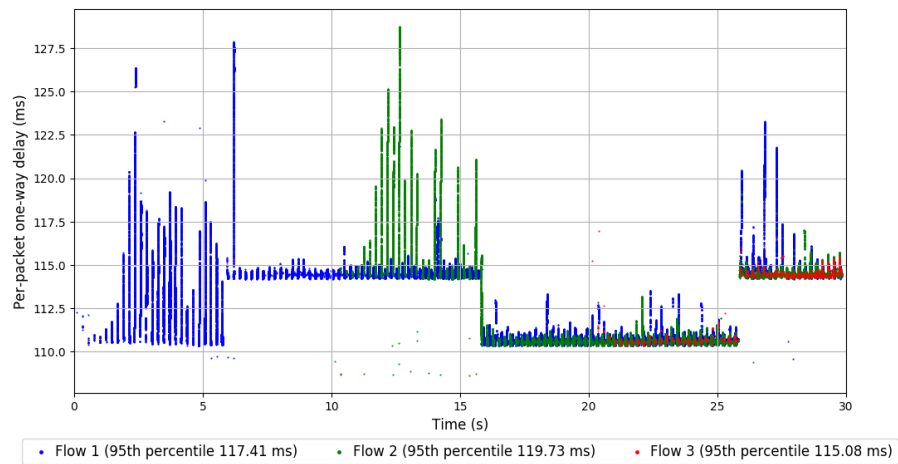
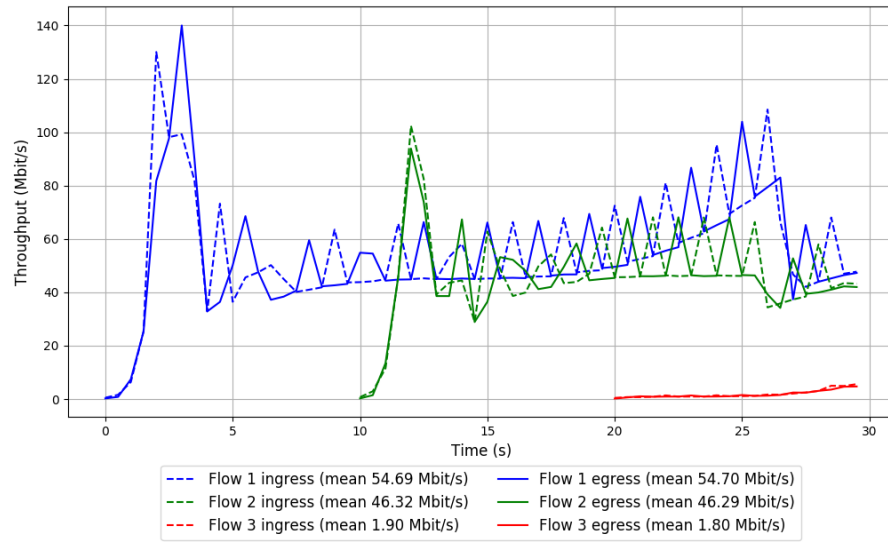
-- Flow 3:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 115.080 ms

Loss rate: 7.77%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-09 14:07:48

End at: 2018-01-09 14:08:18

Below is generated by plot.py at 2018-01-09 17:42:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.02 Mbit/s

95th percentile per-packet one-way delay: 120.627 ms

Loss rate: 1.64%

-- Flow 1:

Average throughput: 55.40 Mbit/s

95th percentile per-packet one-way delay: 119.944 ms

Loss rate: 1.50%

-- Flow 2:

Average throughput: 49.98 Mbit/s

95th percentile per-packet one-way delay: 121.111 ms

Loss rate: 1.24%

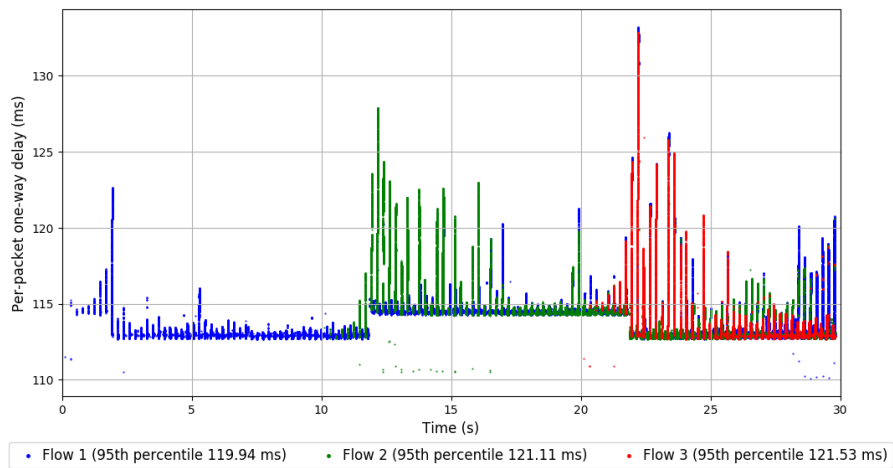
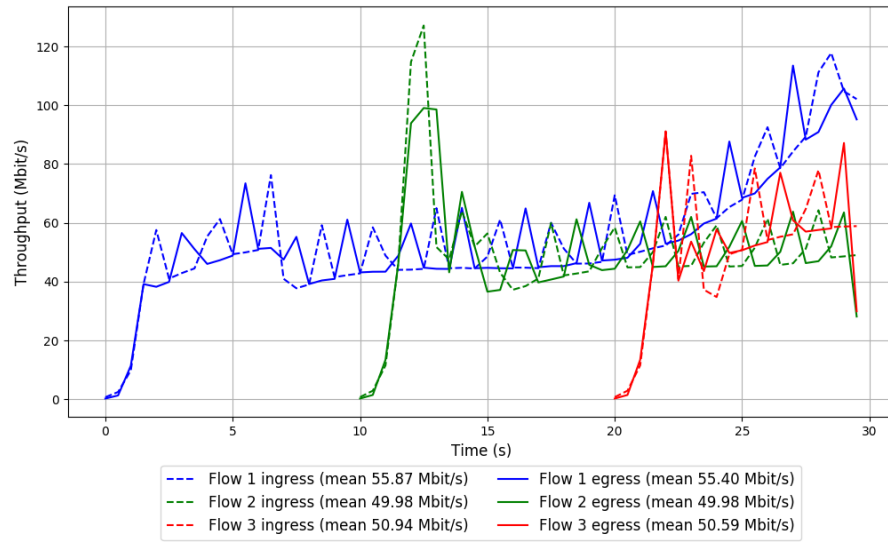
-- Flow 3:

Average throughput: 50.59 Mbit/s

95th percentile per-packet one-way delay: 121.525 ms

Loss rate: 2.92%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-09 14:22:59

End at: 2018-01-09 14:23:29

Below is generated by plot.py at 2018-01-09 17:42:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.01 Mbit/s

95th percentile per-packet one-way delay: 124.946 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 60.88 Mbit/s

95th percentile per-packet one-way delay: 122.964 ms

Loss rate: 1.31%

-- Flow 2:

Average throughput: 60.24 Mbit/s

95th percentile per-packet one-way delay: 118.933 ms

Loss rate: 1.37%

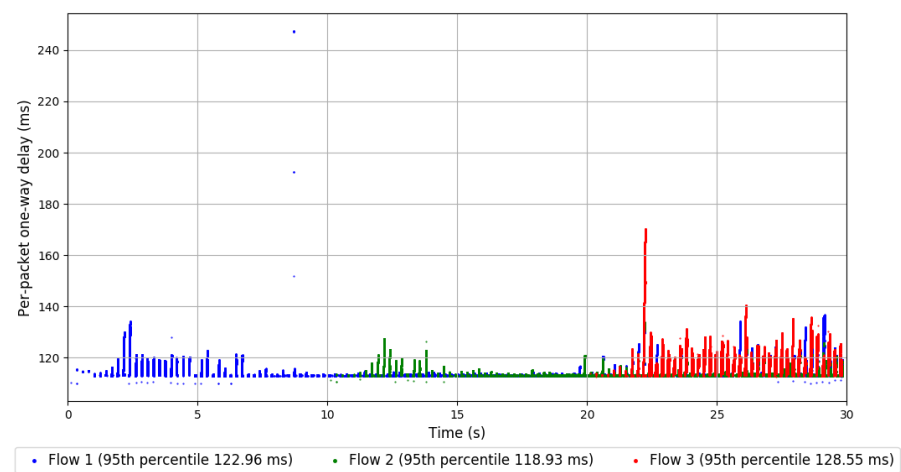
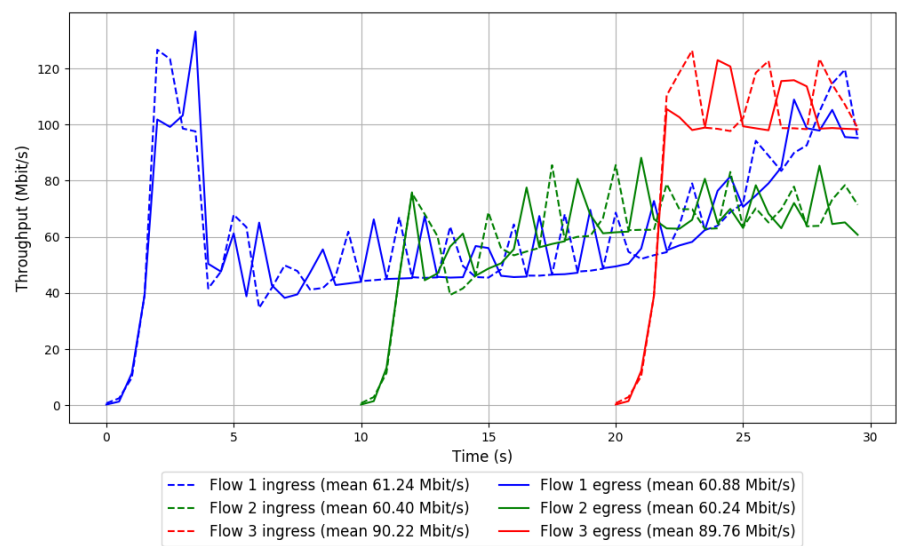
-- Flow 3:

Average throughput: 89.76 Mbit/s

95th percentile per-packet one-way delay: 128.552 ms

Loss rate: 2.77%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-09 14:37:47

End at: 2018-01-09 14:38:17

Below is generated by plot.py at 2018-01-09 17:42:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.25 Mbit/s

95th percentile per-packet one-way delay: 116.480 ms

Loss rate: 2.16%

-- Flow 1:

Average throughput: 25.43 Mbit/s

95th percentile per-packet one-way delay: 115.511 ms

Loss rate: 2.92%

-- Flow 2:

Average throughput: 42.91 Mbit/s

95th percentile per-packet one-way delay: 118.614 ms

Loss rate: 1.37%

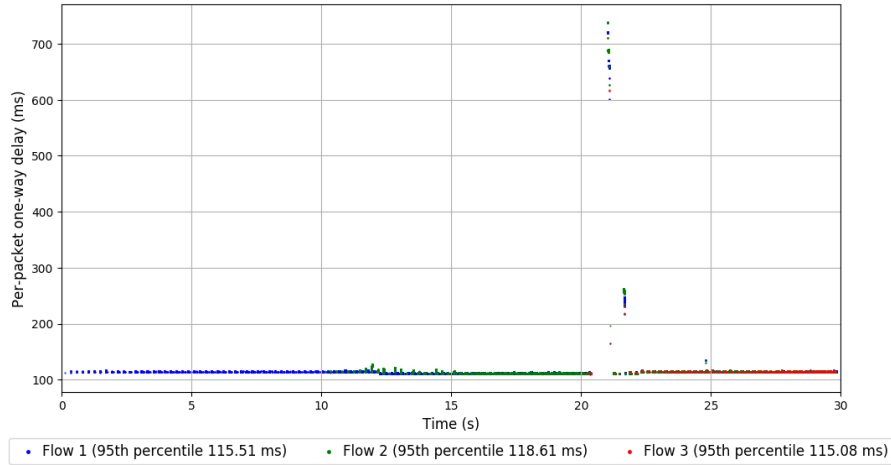
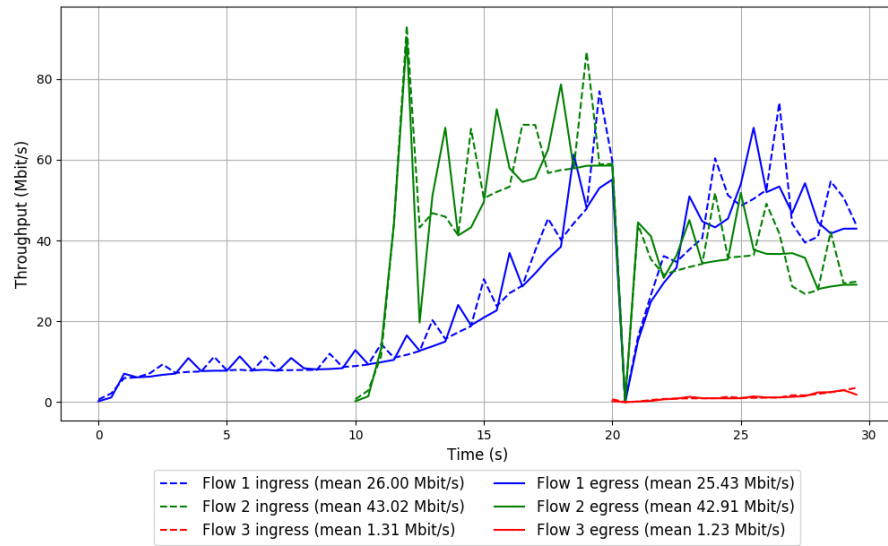
-- Flow 3:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 115.081 ms

Loss rate: 8.79%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-09 14:53:20

End at: 2018-01-09 14:53:50

Below is generated by plot.py at 2018-01-09 17:43:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.92 Mbit/s

95th percentile per-packet one-way delay: 116.868 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 53.35 Mbit/s

95th percentile per-packet one-way delay: 117.479 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 79.81 Mbit/s

95th percentile per-packet one-way delay: 114.322 ms

Loss rate: 1.41%

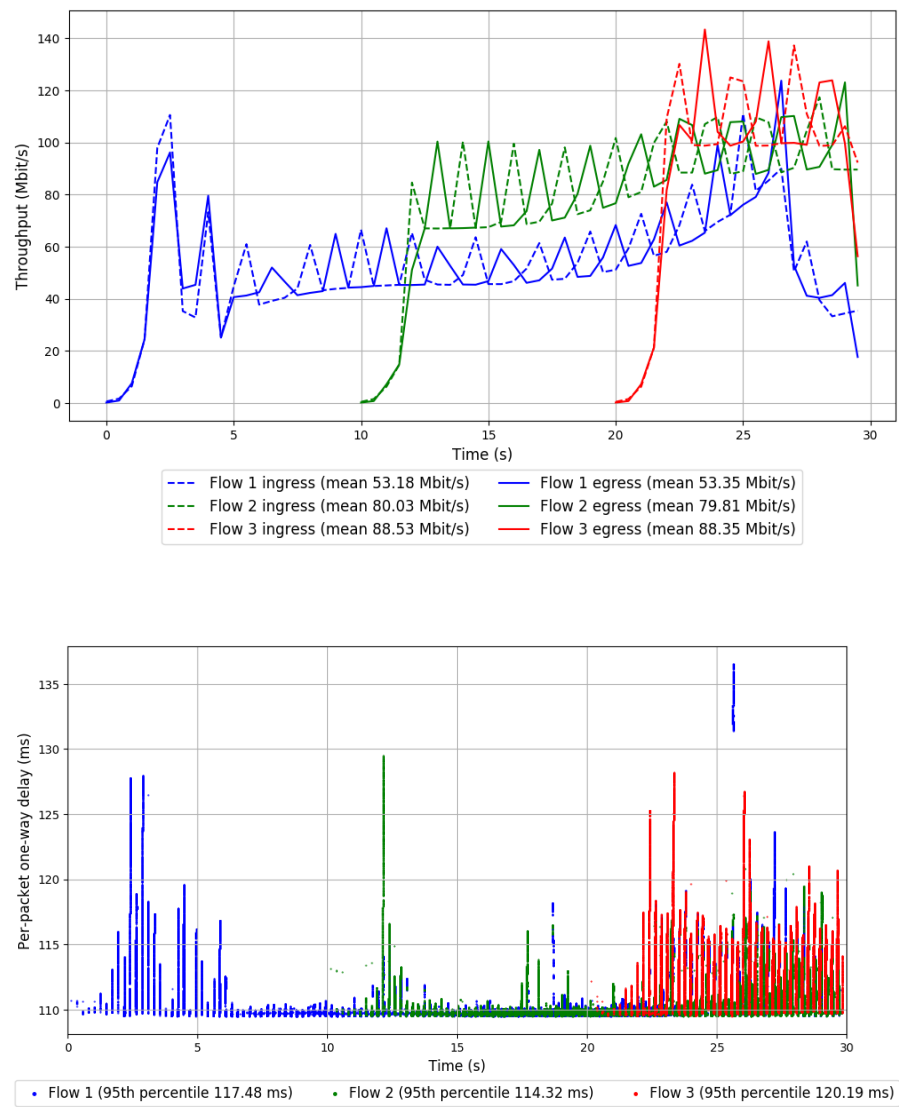
-- Flow 3:

Average throughput: 88.35 Mbit/s

95th percentile per-packet one-way delay: 120.191 ms

Loss rate: 2.42%

Run 10: Report of TCP Cubic — Data Link

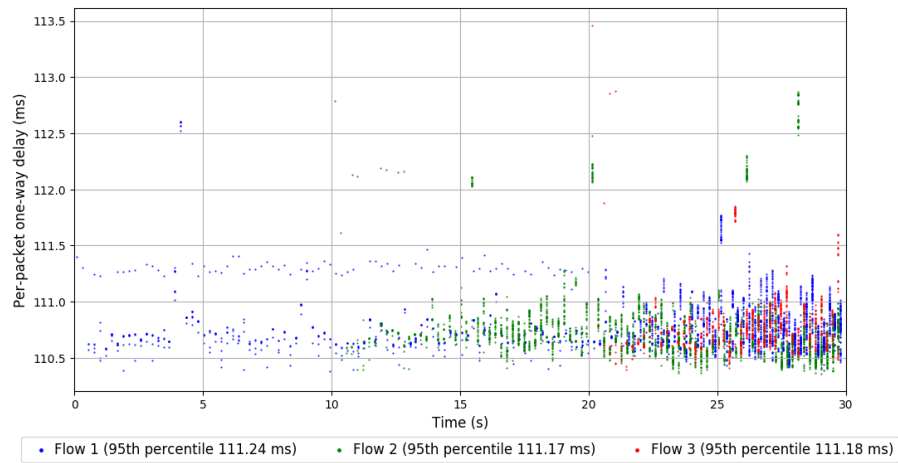
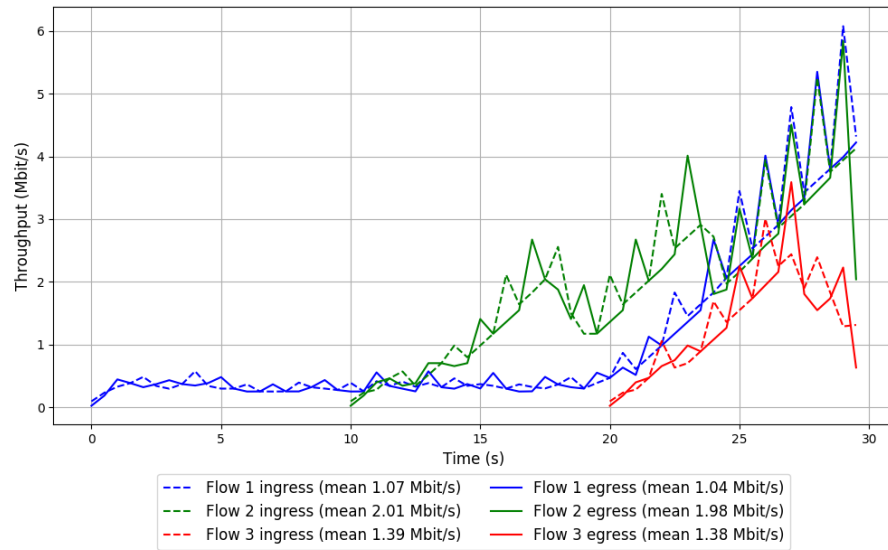


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-09 12:28:46
End at: 2018-01-09 12:29:16

# Below is generated by plot.py at 2018-01-09 17:43:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.79 Mbit/s
95th percentile per-packet one-way delay: 111.222 ms
Loss rate: 2.96%
-- Flow 1:
Average throughput: 1.04 Mbit/s
95th percentile per-packet one-way delay: 111.236 ms
Loss rate: 3.42%
-- Flow 2:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 111.165 ms
Loss rate: 2.62%
-- Flow 3:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 111.178 ms
Loss rate: 2.85%
```


Run 1: Report of LEDBAT — Data Link

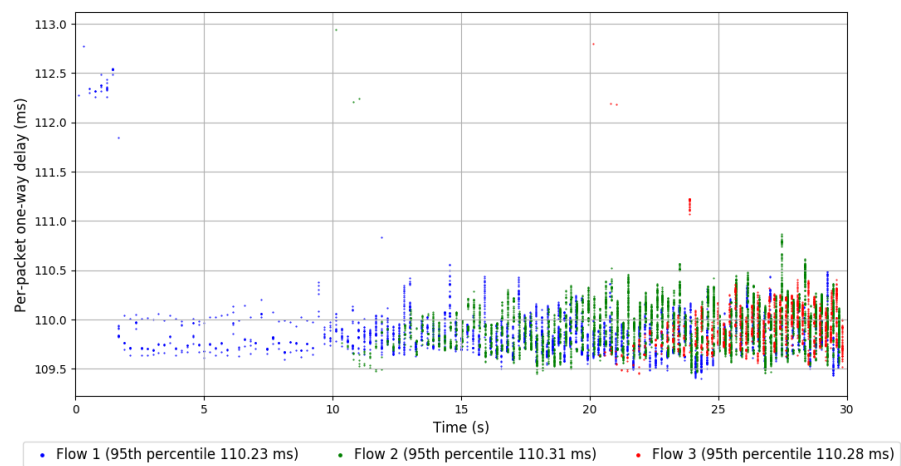
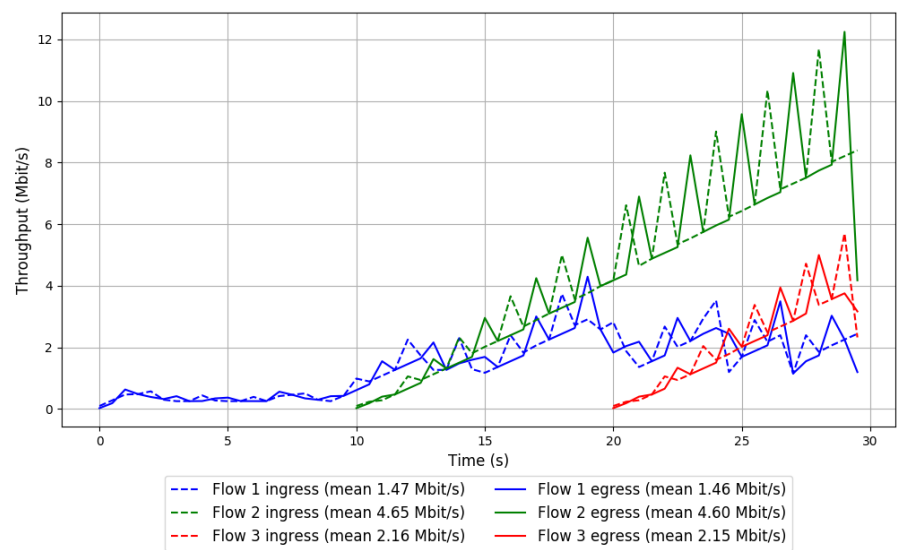


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-09 12:44:18
End at: 2018-01-09 12:44:48

# Below is generated by plot.py at 2018-01-09 17:43:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 110.288 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 110.230 ms
Loss rate: 1.60%
-- Flow 2:
Average throughput: 4.60 Mbit/s
95th percentile per-packet one-way delay: 110.305 ms
Loss rate: 2.29%
-- Flow 3:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 110.281 ms
Loss rate: 2.58%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-09 12:59:32

End at: 2018-01-09 13:00:02

Below is generated by plot.py at 2018-01-09 17:43:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 112.816 ms

Loss rate: 2.85%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 112.816 ms

Loss rate: 2.76%

-- Flow 2:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 112.854 ms

Loss rate: 2.76%

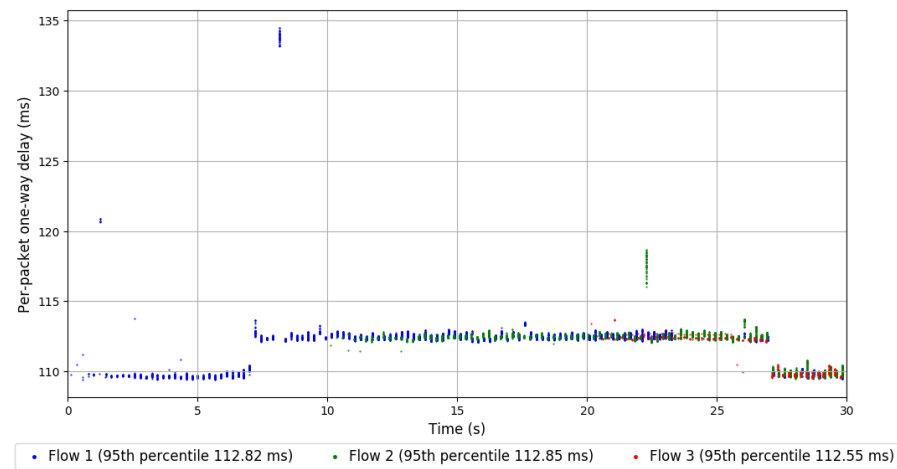
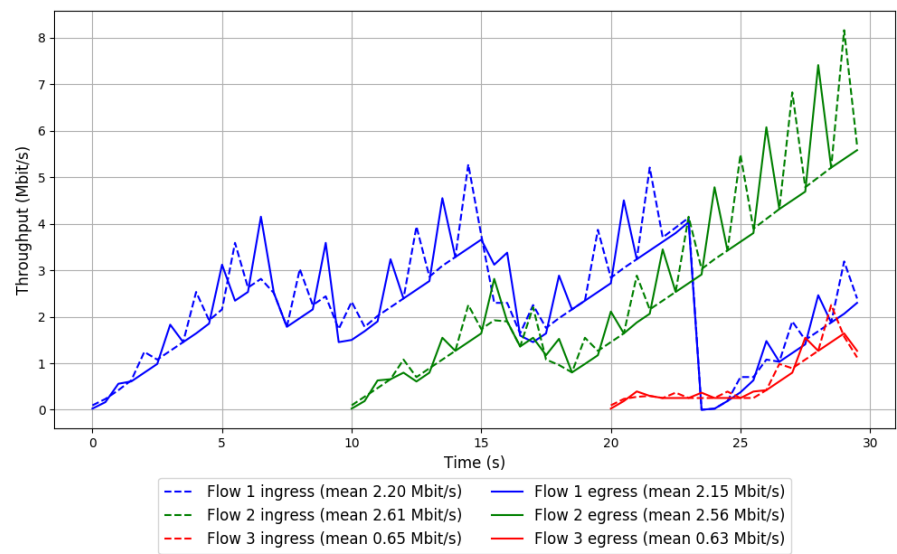
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 112.548 ms

Loss rate: 4.59%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-09 13:15:10

End at: 2018-01-09 13:15:40

Below is generated by plot.py at 2018-01-09 17:43:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.44 Mbit/s

95th percentile per-packet one-way delay: 110.615 ms

Loss rate: 2.24%

-- Flow 1:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 110.687 ms

Loss rate: 2.04%

-- Flow 2:

Average throughput: 2.71 Mbit/s

95th percentile per-packet one-way delay: 110.567 ms

Loss rate: 2.51%

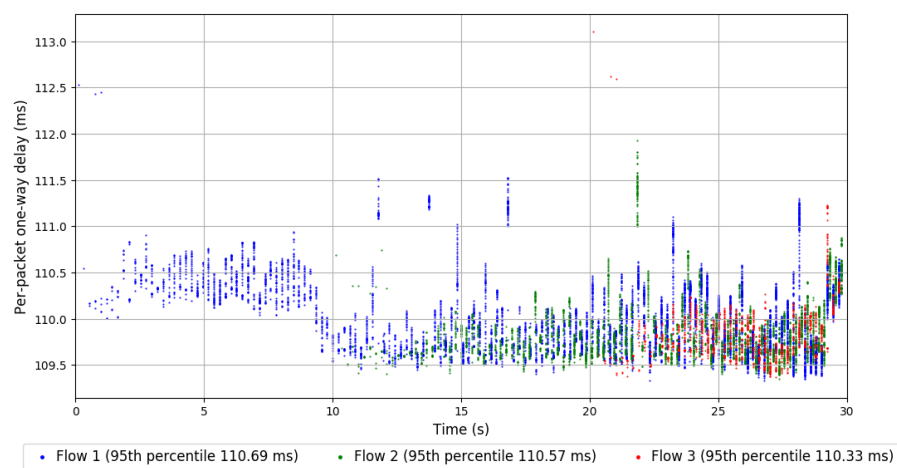
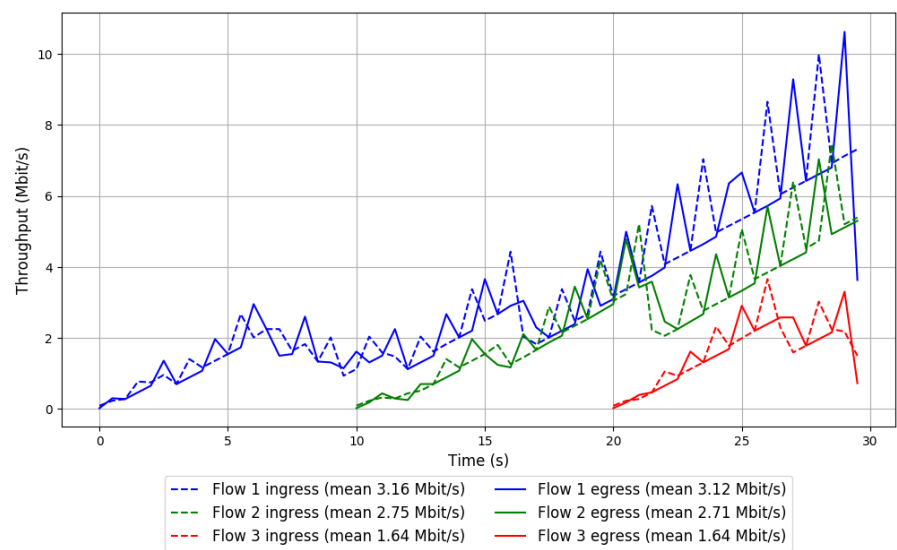
-- Flow 3:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 110.325 ms

Loss rate: 2.48%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-09 13:30:54

End at: 2018-01-09 13:31:24

Below is generated by plot.py at 2018-01-09 17:43:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.65 Mbit/s

95th percentile per-packet one-way delay: 111.073 ms

Loss rate: 2.18%

-- Flow 1:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 111.030 ms

Loss rate: 1.85%

-- Flow 2:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 111.010 ms

Loss rate: 2.32%

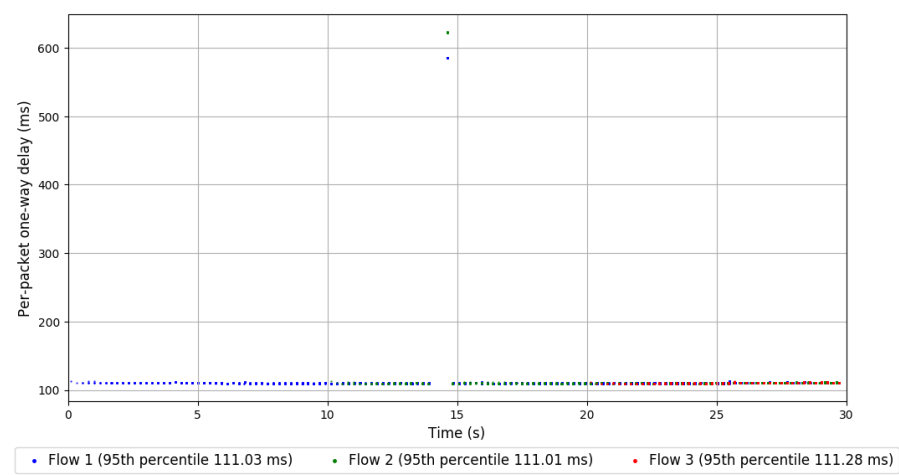
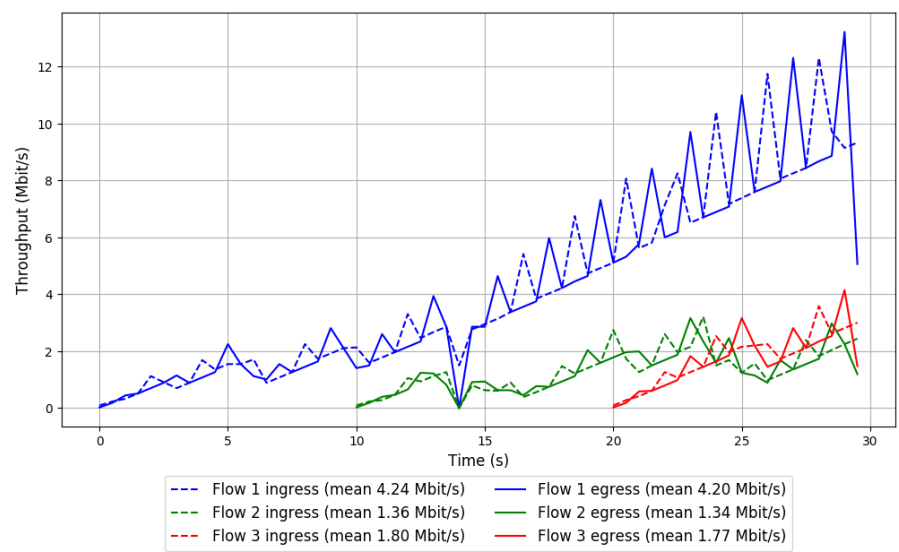
-- Flow 3:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 111.276 ms

Loss rate: 4.31%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-09 13:46:22

End at: 2018-01-09 13:46:52

Below is generated by plot.py at 2018-01-09 17:43:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.11 Mbit/s

95th percentile per-packet one-way delay: 114.961 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 114.861 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 115.021 ms

Loss rate: 1.54%

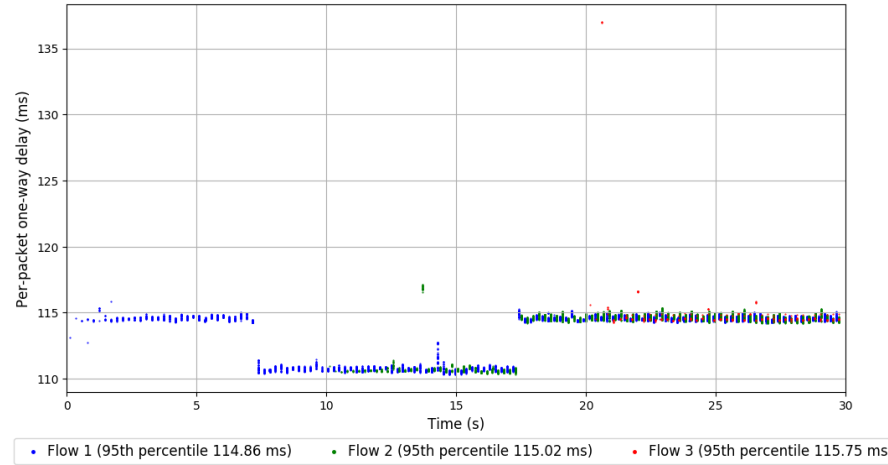
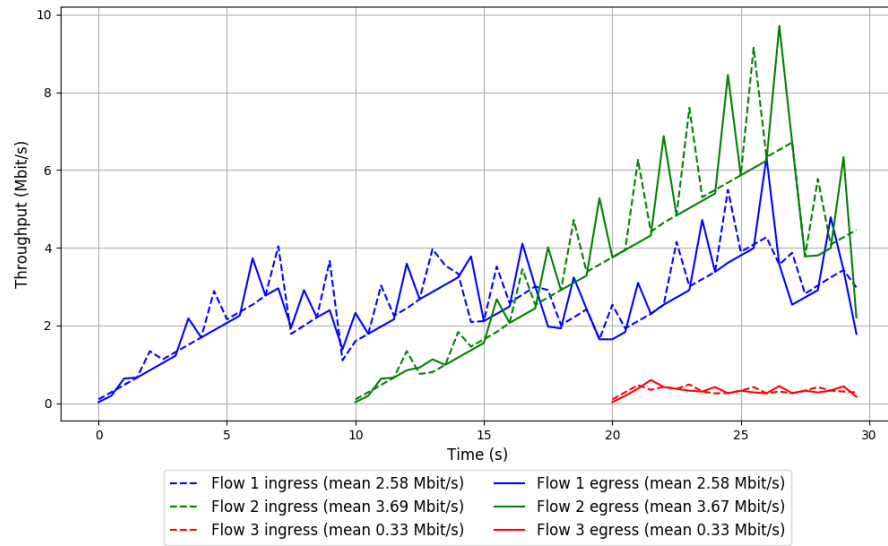
-- Flow 3:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 115.748 ms

Loss rate: 1.78%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-09 14:01:12

End at: 2018-01-09 14:01:42

Below is generated by plot.py at 2018-01-09 17:43:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 115.098 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 115.123 ms

Loss rate: 1.18%

-- Flow 2:

Average throughput: 2.59 Mbit/s

95th percentile per-packet one-way delay: 115.085 ms

Loss rate: 1.46%

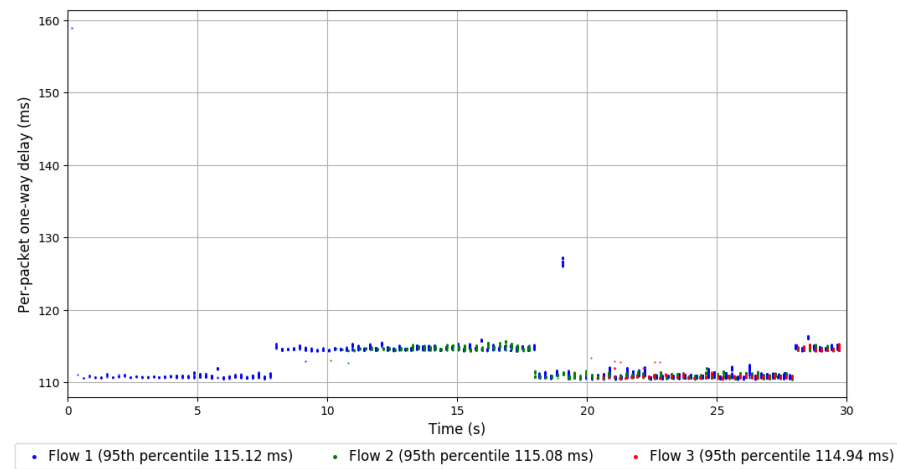
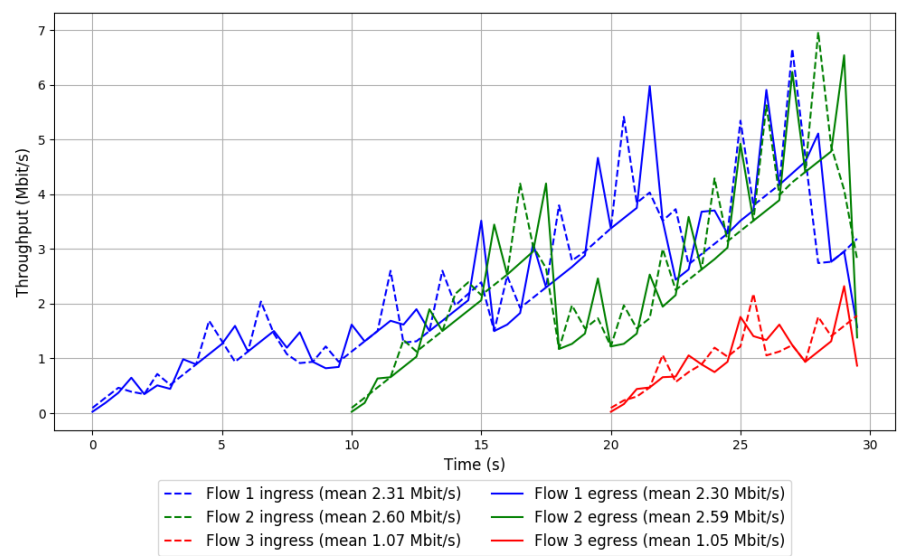
-- Flow 3:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 114.940 ms

Loss rate: 4.38%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-09 14:16:37

End at: 2018-01-09 14:17:07

Below is generated by plot.py at 2018-01-09 17:43:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 113.948 ms

Loss rate: 2.16%

-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 114.048 ms

Loss rate: 2.07%

-- Flow 2:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 113.797 ms

Loss rate: 1.14%

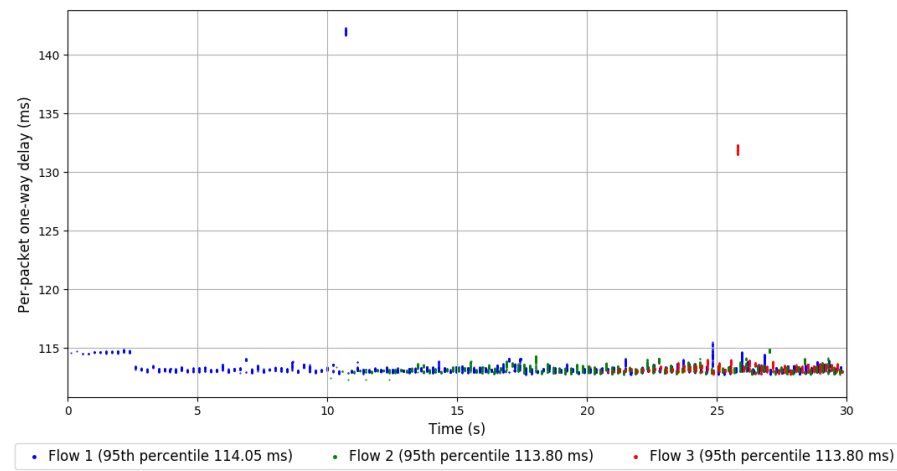
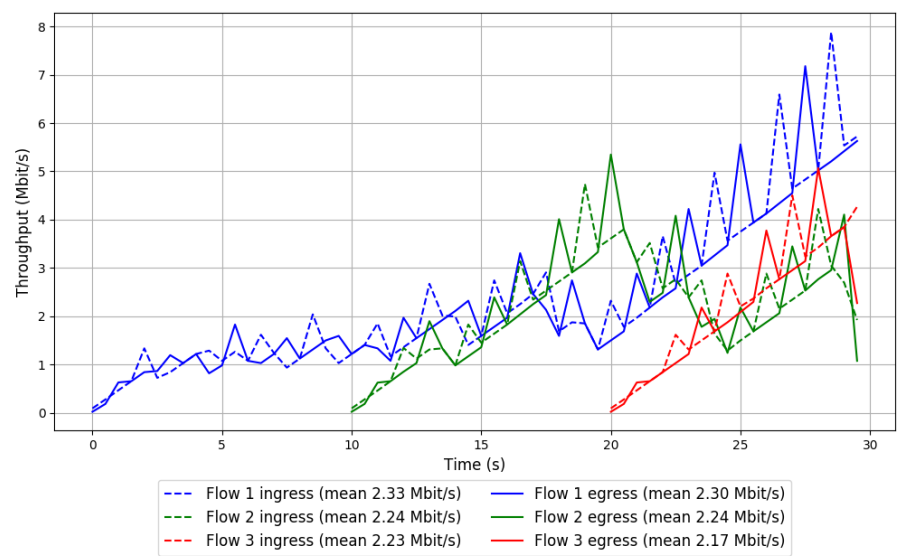
-- Flow 3:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 113.799 ms

Loss rate: 4.51%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-09 14:31:46

End at: 2018-01-09 14:32:16

Below is generated by plot.py at 2018-01-09 17:43:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.77 Mbit/s

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

Loss rate: 2.07%

-- Flow 1:

Average throughput: 3.02 Mbit/s

95th percentile per-packet one-way delay: 115.063 ms

Loss rate: 1.62%

-- Flow 2:

Average throughput: 1.57 Mbit/s

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

Loss rate: 1.65%

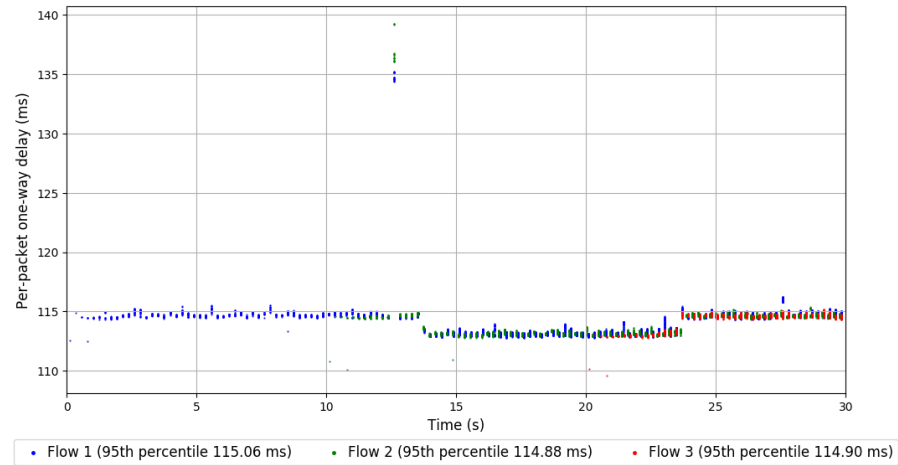
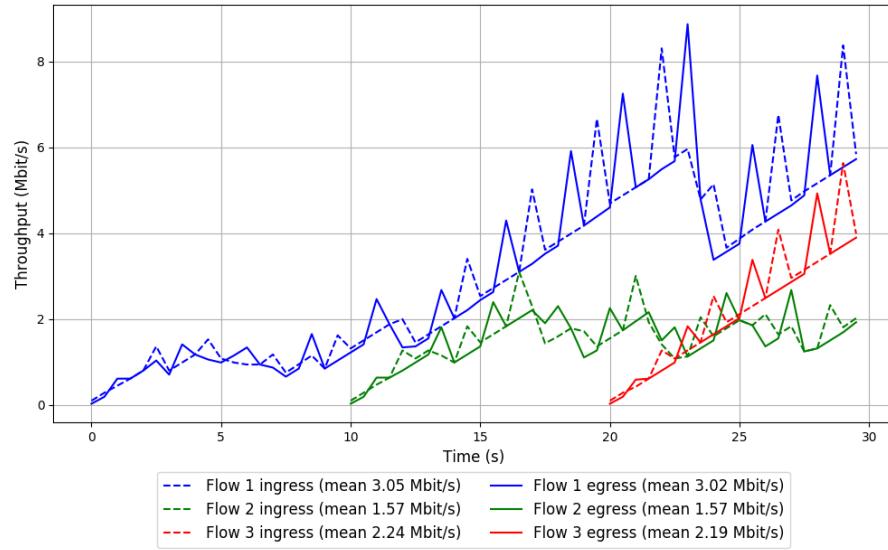
-- Flow 3:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 114.902 ms

Loss rate: 4.54%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-09 14:46:26

End at: 2018-01-09 14:46:56

Below is generated by plot.py at 2018-01-09 17:43:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.79 Mbit/s

95th percentile per-packet one-way delay: 111.950 ms

Loss rate: 1.73%

-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 111.977 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 2.99 Mbit/s

95th percentile per-packet one-way delay: 111.953 ms

Loss rate: 2.02%

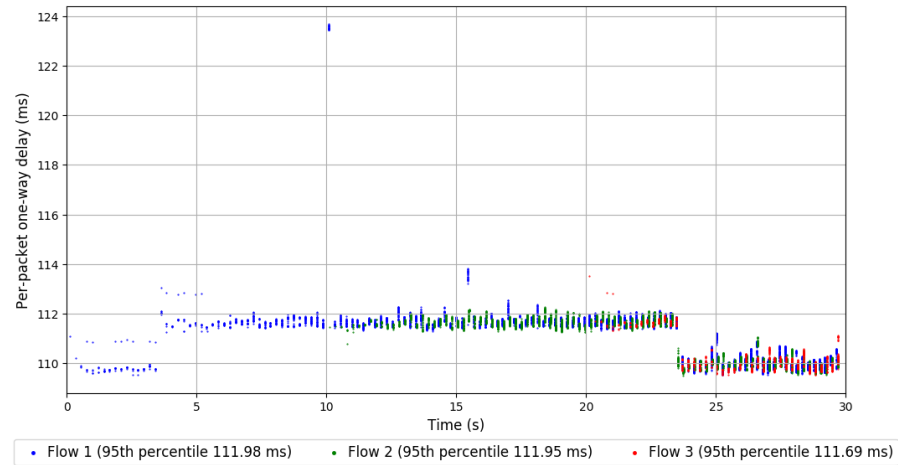
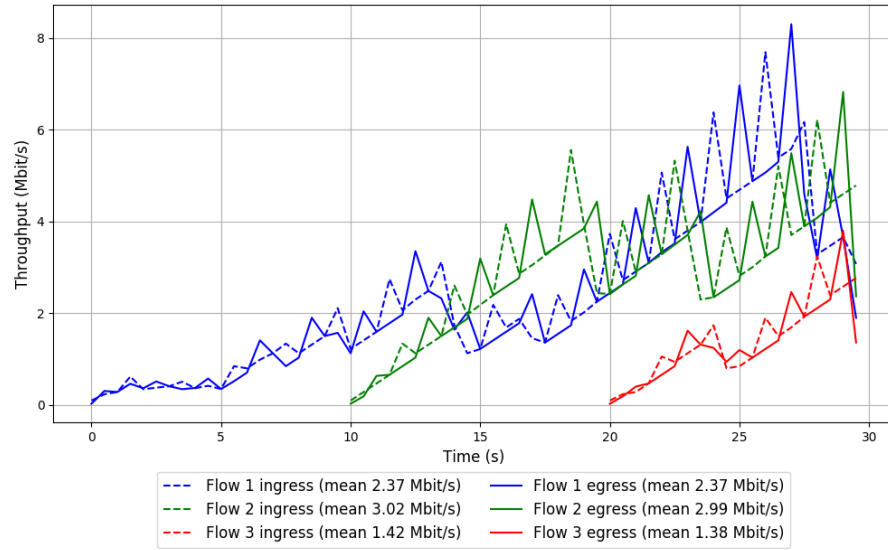
-- Flow 3:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 111.693 ms

Loss rate: 5.04%

Run 10: Report of LEDBAT — Data Link

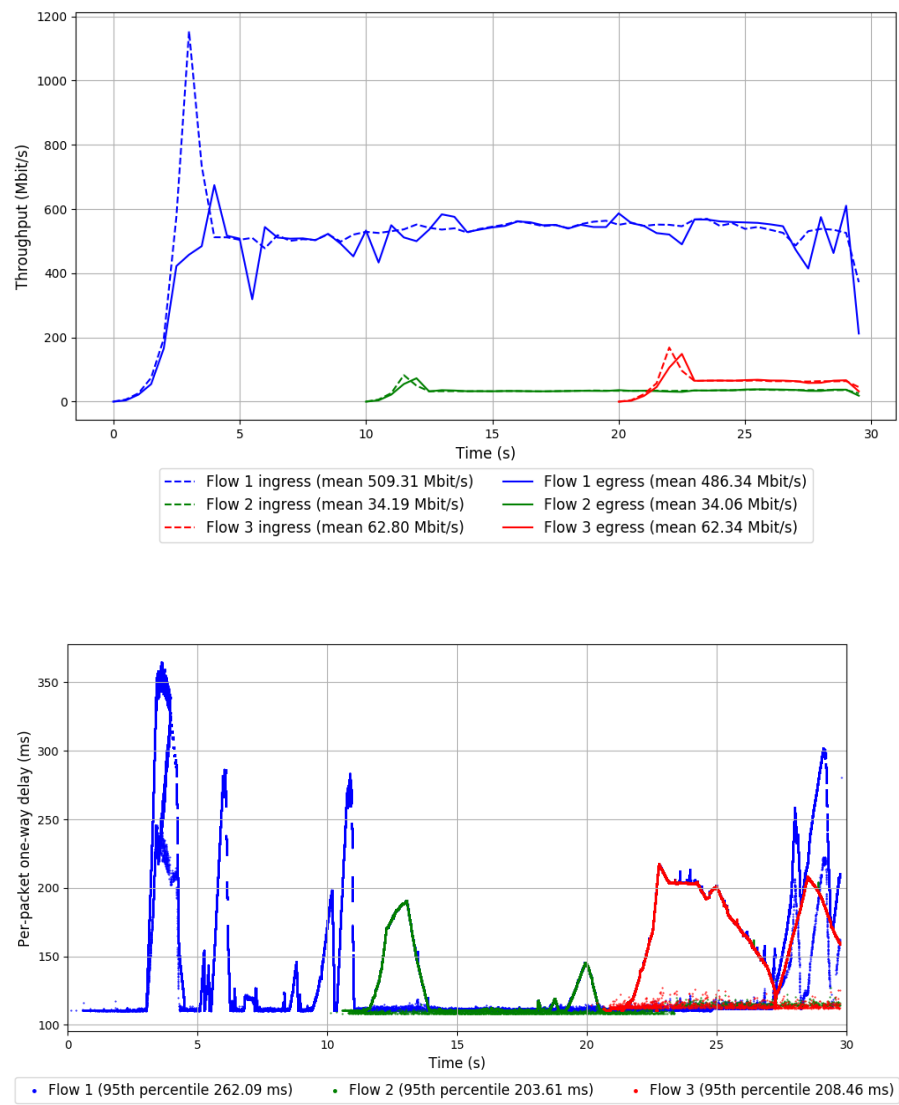


```
Run 1: Statistics of PCC

Start at: 2018-01-09 12:32:35
End at: 2018-01-09 12:33:05

# Below is generated by plot.py at 2018-01-09 17:50:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 528.97 Mbit/s
95th percentile per-packet one-way delay: 256.885 ms
Loss rate: 4.80%
-- Flow 1:
Average throughput: 486.34 Mbit/s
95th percentile per-packet one-way delay: 262.090 ms
Loss rate: 5.02%
-- Flow 2:
Average throughput: 34.06 Mbit/s
95th percentile per-packet one-way delay: 203.610 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 62.34 Mbit/s
95th percentile per-packet one-way delay: 208.457 ms
Loss rate: 3.02%
```

Run 1: Report of PCC — Data Link

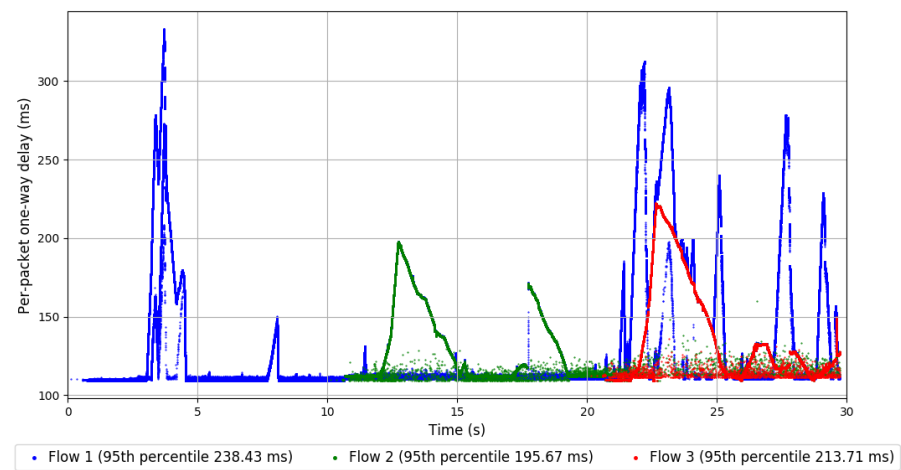
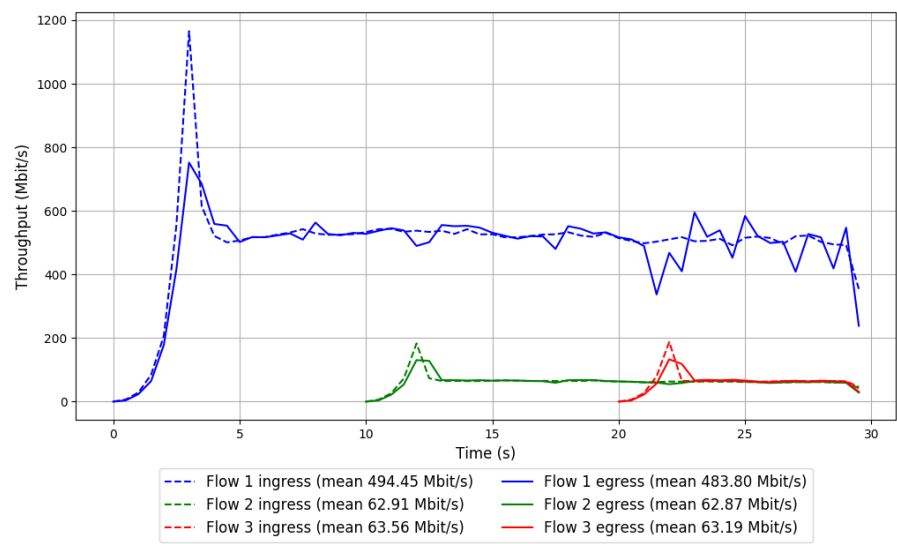


```
Run 2: Statistics of PCC

Start at: 2018-01-09 12:48:09
End at: 2018-01-09 12:48:39

# Below is generated by plot.py at 2018-01-09 17:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 545.91 Mbit/s
95th percentile per-packet one-way delay: 231.809 ms
Loss rate: 2.75%
-- Flow 1:
Average throughput: 483.80 Mbit/s
95th percentile per-packet one-way delay: 238.431 ms
Loss rate: 2.88%
-- Flow 2:
Average throughput: 62.87 Mbit/s
95th percentile per-packet one-way delay: 195.673 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 63.19 Mbit/s
95th percentile per-packet one-way delay: 213.706 ms
Loss rate: 2.84%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-09 13:03:19

End at: 2018-01-09 13:03:49

Below is generated by plot.py at 2018-01-09 17:51:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 545.12 Mbit/s

95th percentile per-packet one-way delay: 224.139 ms

Loss rate: 4.26%

-- Flow 1:

Average throughput: 465.62 Mbit/s

95th percentile per-packet one-way delay: 223.768 ms

Loss rate: 3.96%

-- Flow 2:

Average throughput: 64.97 Mbit/s

95th percentile per-packet one-way delay: 223.476 ms

Loss rate: 3.09%

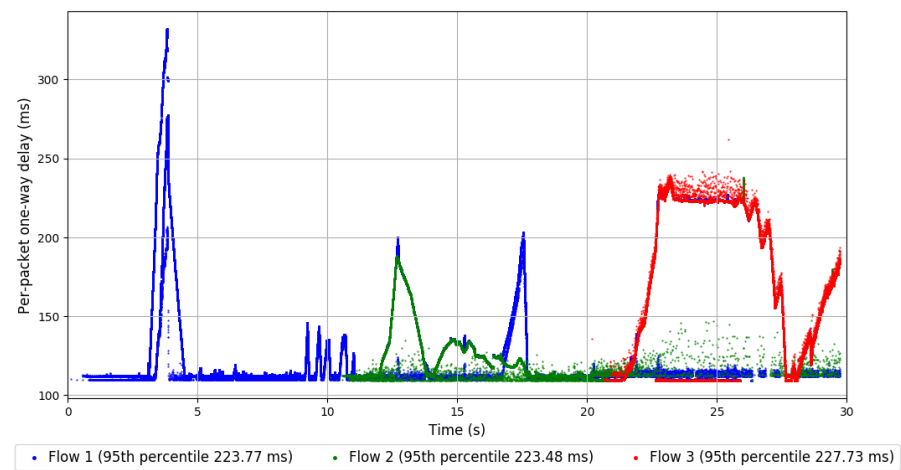
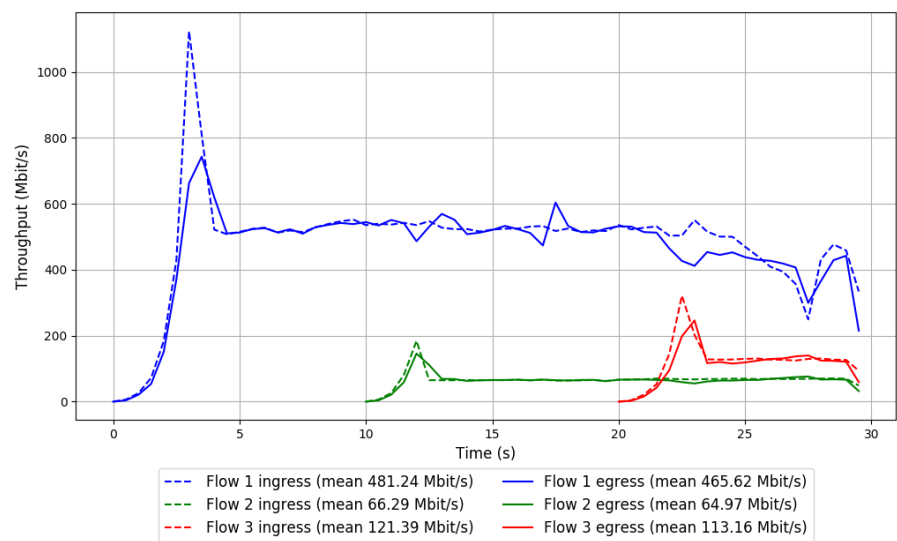
-- Flow 3:

Average throughput: 113.16 Mbit/s

95th percentile per-packet one-way delay: 227.732 ms

Loss rate: 9.12%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-09 13:19:13

End at: 2018-01-09 13:19:43

Below is generated by plot.py at 2018-01-09 17:51:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 551.55 Mbit/s

95th percentile per-packet one-way delay: 231.872 ms

Loss rate: 3.52%

-- Flow 1:

Average throughput: 498.44 Mbit/s

95th percentile per-packet one-way delay: 232.472 ms

Loss rate: 3.64%

-- Flow 2:

Average throughput: 64.28 Mbit/s

95th percentile per-packet one-way delay: 224.174 ms

Loss rate: 1.95%

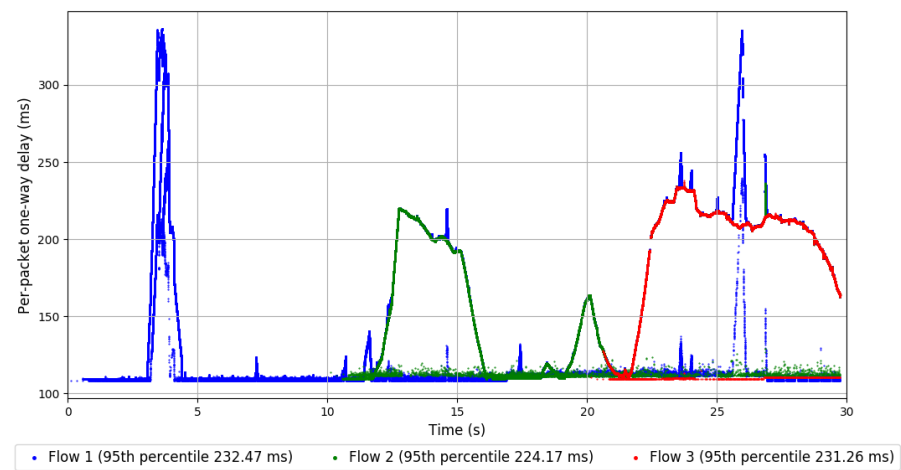
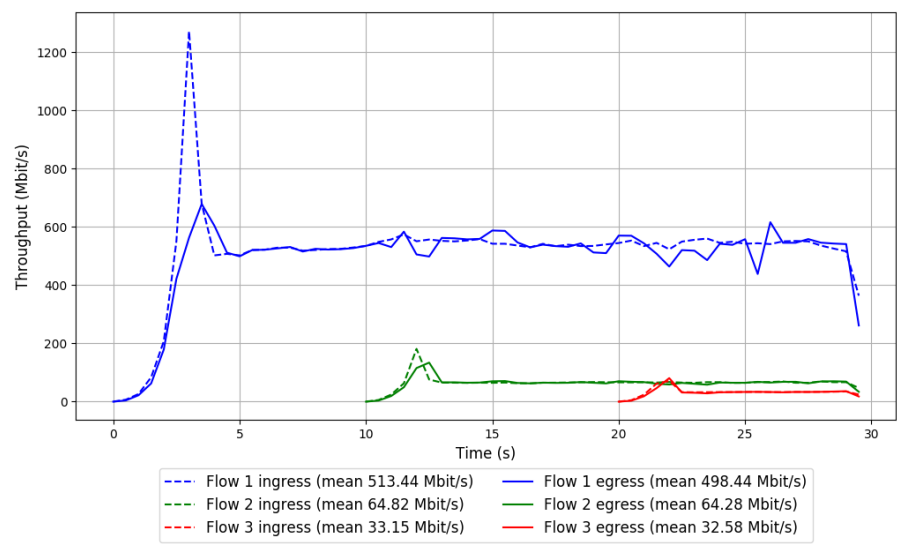
-- Flow 3:

Average throughput: 32.58 Mbit/s

95th percentile per-packet one-way delay: 231.264 ms

Loss rate: 3.94%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-09 13:34:29

End at: 2018-01-09 13:34:59

Below is generated by plot.py at 2018-01-09 17:51:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 540.24 Mbit/s

95th percentile per-packet one-way delay: 231.603 ms

Loss rate: 3.42%

-- Flow 1:

Average throughput: 478.92 Mbit/s

95th percentile per-packet one-way delay: 234.231 ms

Loss rate: 3.51%

-- Flow 2:

Average throughput: 61.78 Mbit/s

95th percentile per-packet one-way delay: 229.484 ms

Loss rate: 1.86%

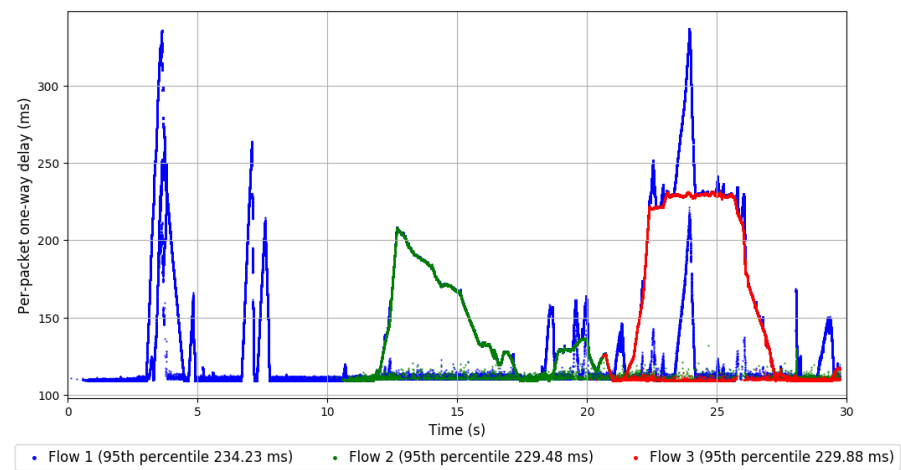
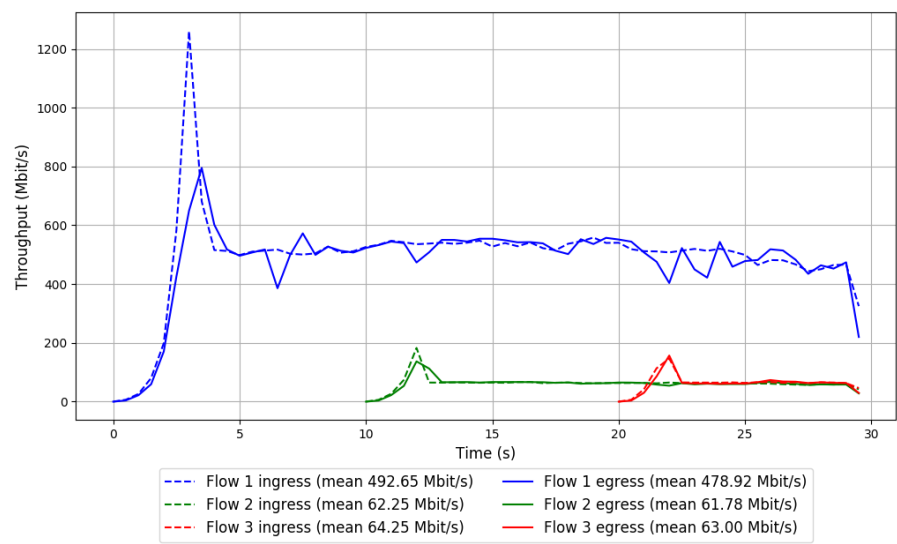
-- Flow 3:

Average throughput: 63.00 Mbit/s

95th percentile per-packet one-way delay: 229.879 ms

Loss rate: 4.18%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-09 13:49:45

End at: 2018-01-09 13:50:15

Below is generated by plot.py at 2018-01-09 17:51:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 524.90 Mbit/s

95th percentile per-packet one-way delay: 213.422 ms

Loss rate: 1.89%

-- Flow 1:

Average throughput: 480.47 Mbit/s

95th percentile per-packet one-way delay: 215.500 ms

Loss rate: 1.95%

-- Flow 2:

Average throughput: 64.98 Mbit/s

95th percentile per-packet one-way delay: 207.127 ms

Loss rate: 1.27%

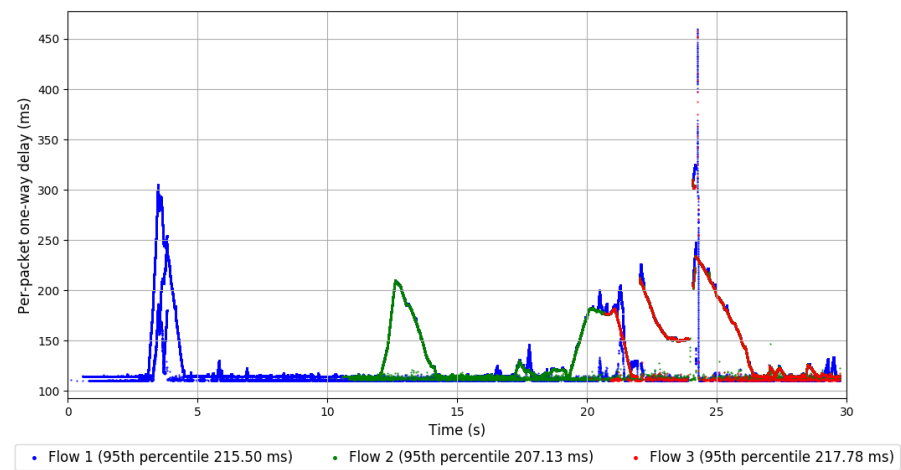
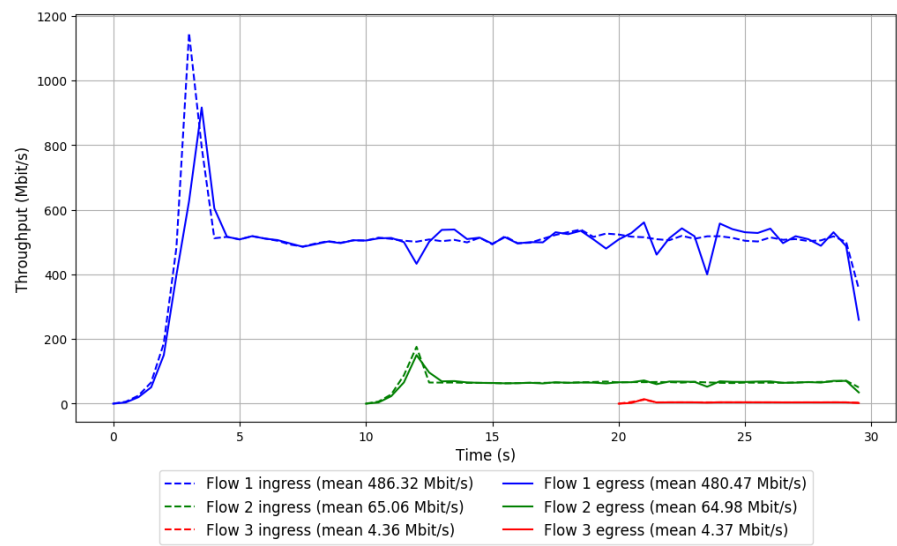
-- Flow 3:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 217.779 ms

Loss rate: 2.14%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-09 14:04:58

End at: 2018-01-09 14:05:28

Below is generated by plot.py at 2018-01-09 17:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 534.14 Mbit/s

95th percentile per-packet one-way delay: 228.443 ms

Loss rate: 3.24%

-- Flow 1:

Average throughput: 480.67 Mbit/s

95th percentile per-packet one-way delay: 232.147 ms

Loss rate: 3.39%

-- Flow 2:

Average throughput: 64.63 Mbit/s

95th percentile per-packet one-way delay: 198.794 ms

Loss rate: 1.60%

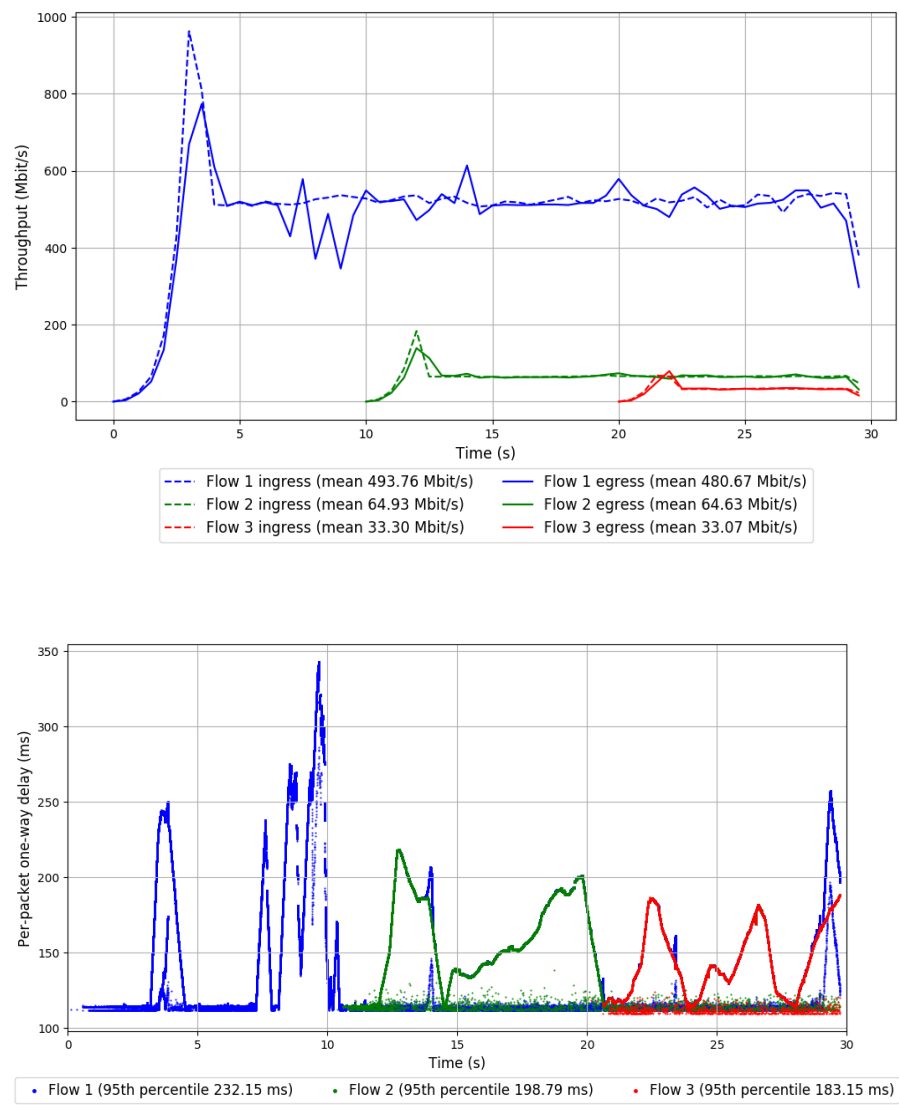
-- Flow 3:

Average throughput: 33.07 Mbit/s

95th percentile per-packet one-way delay: 183.147 ms

Loss rate: 3.03%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-09 14:20:09

End at: 2018-01-09 14:20:39

Below is generated by plot.py at 2018-01-09 17:52:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 525.85 Mbit/s

95th percentile per-packet one-way delay: 229.607 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 462.10 Mbit/s

95th percentile per-packet one-way delay: 230.328 ms

Loss rate: 1.64%

-- Flow 2:

Average throughput: 65.31 Mbit/s

95th percentile per-packet one-way delay: 226.269 ms

Loss rate: 1.29%

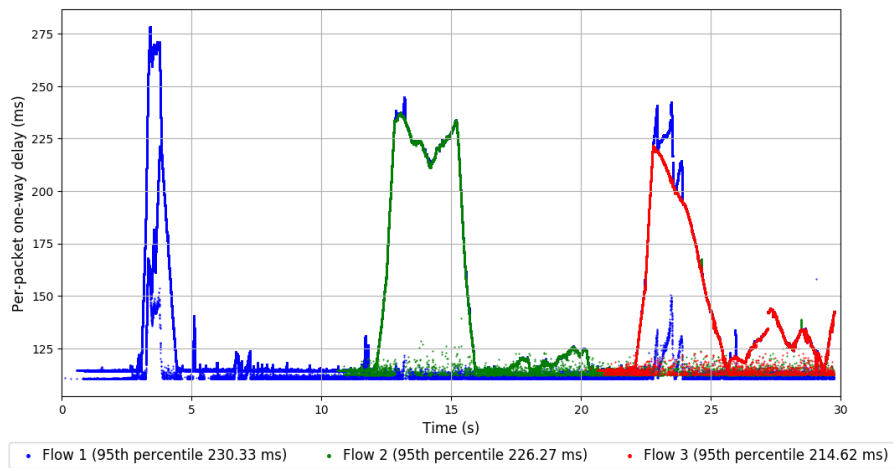
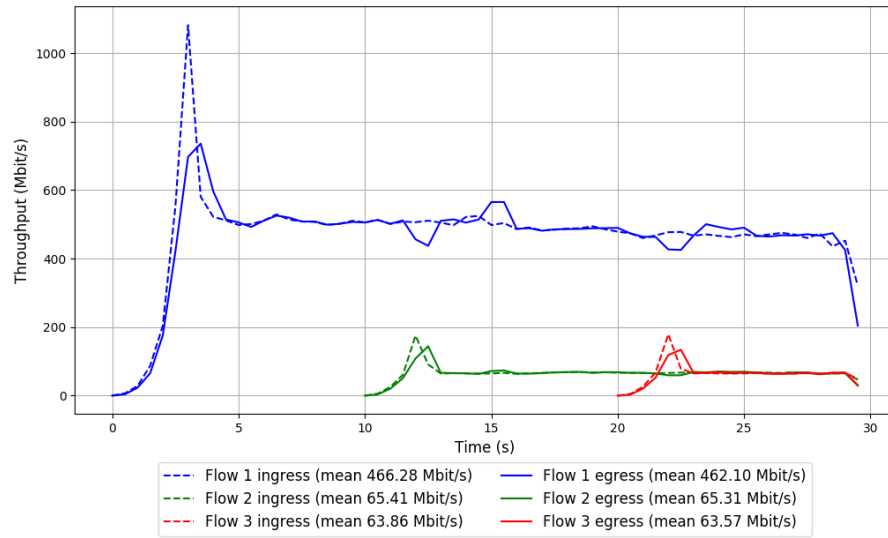
-- Flow 3:

Average throughput: 63.57 Mbit/s

95th percentile per-packet one-way delay: 214.620 ms

Loss rate: 2.77%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-09 14:34:57

End at: 2018-01-09 14:35:27

Below is generated by plot.py at 2018-01-09 18:00:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 505.29 Mbit/s

95th percentile per-packet one-way delay: 277.510 ms

Loss rate: 3.61%

-- Flow 1:

Average throughput: 476.33 Mbit/s

95th percentile per-packet one-way delay: 277.822 ms

Loss rate: 3.70%

-- Flow 2:

Average throughput: 13.13 Mbit/s

95th percentile per-packet one-way delay: 199.170 ms

Loss rate: 1.50%

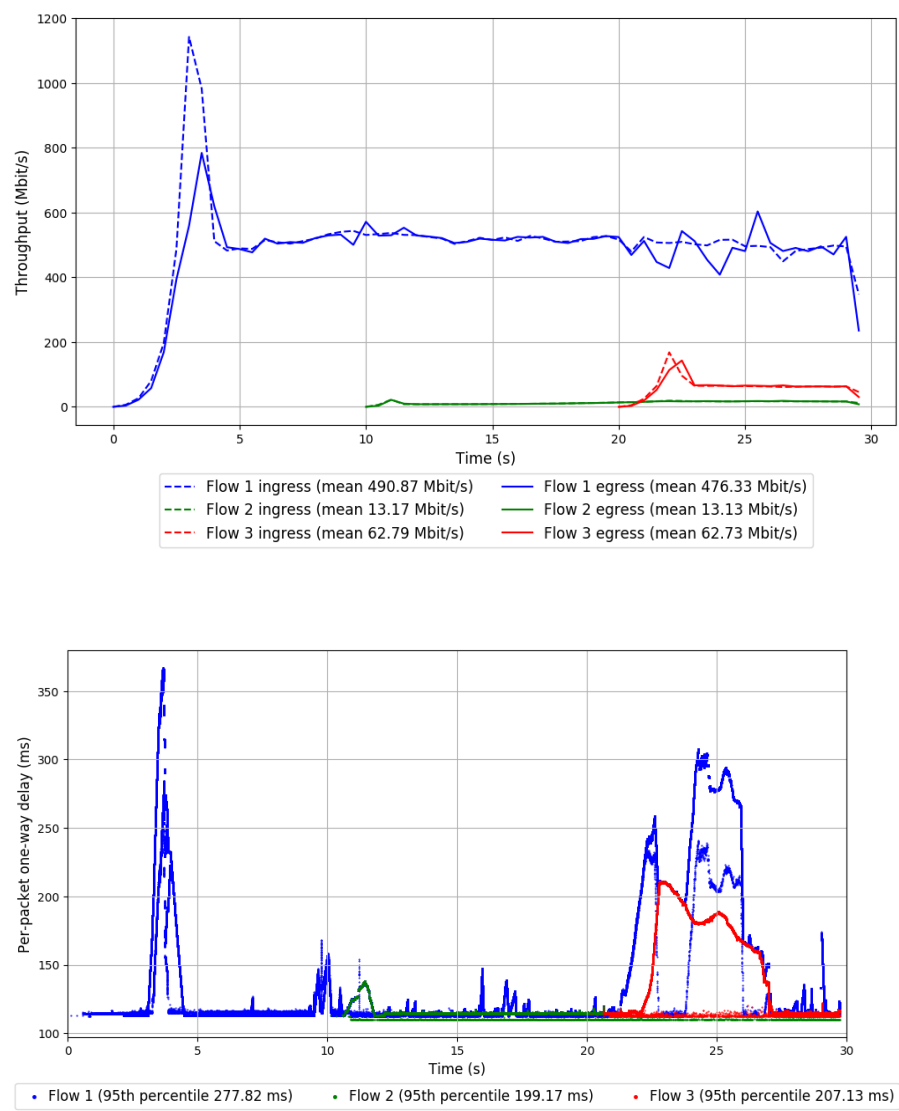
-- Flow 3:

Average throughput: 62.73 Mbit/s

95th percentile per-packet one-way delay: 207.126 ms

Loss rate: 2.42%

Run 9: Report of PCC — Data Link

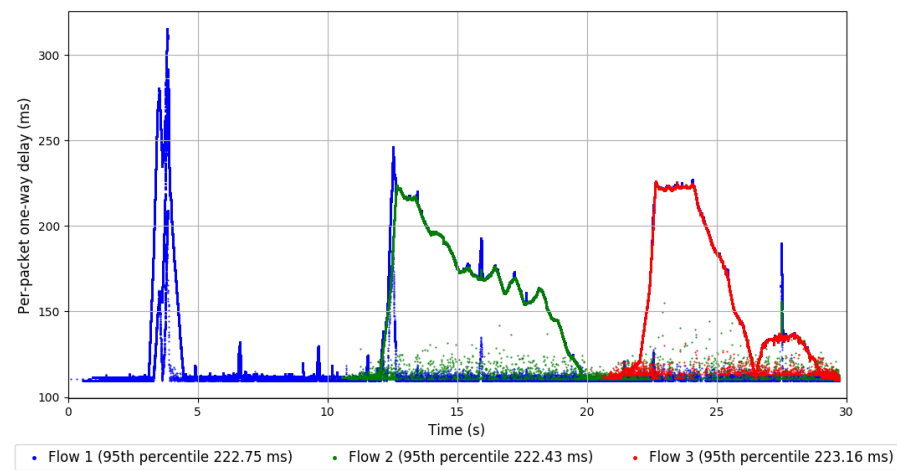
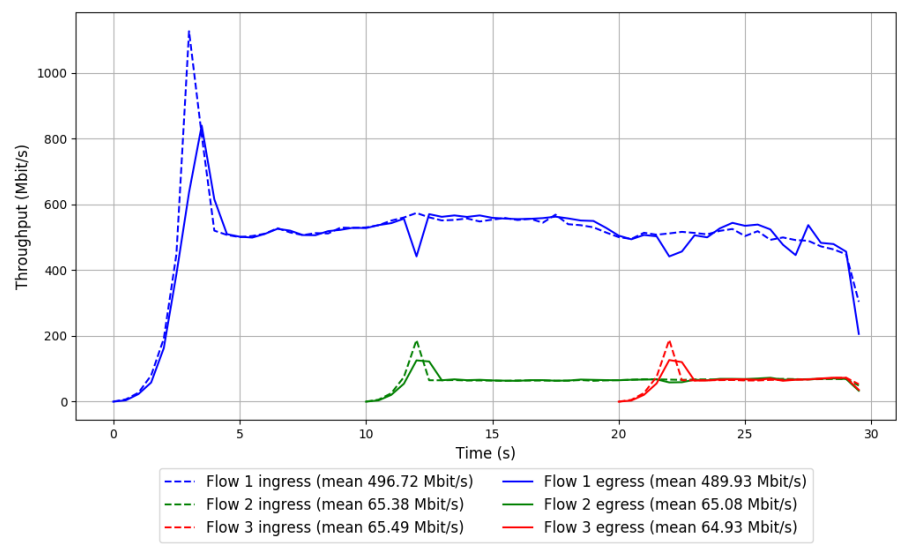


```
Run 10: Statistics of PCC

Start at: 2018-01-09 14:50:28
End at: 2018-01-09 14:50:58

# Below is generated by plot.py at 2018-01-09 18:01:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 554.05 Mbit/s
95th percentile per-packet one-way delay: 222.757 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 489.93 Mbit/s
95th percentile per-packet one-way delay: 222.746 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 65.08 Mbit/s
95th percentile per-packet one-way delay: 222.428 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 64.93 Mbit/s
95th percentile per-packet one-way delay: 223.156 ms
Loss rate: 3.18%
```

Run 10: Report of PCC — Data Link

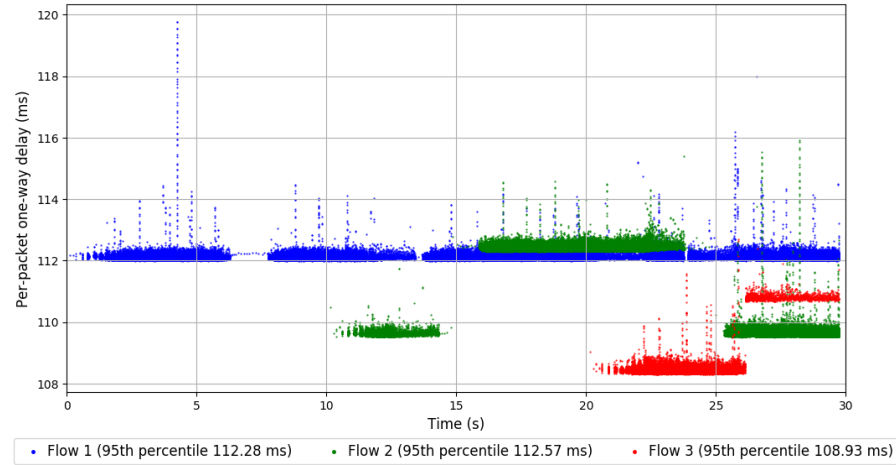
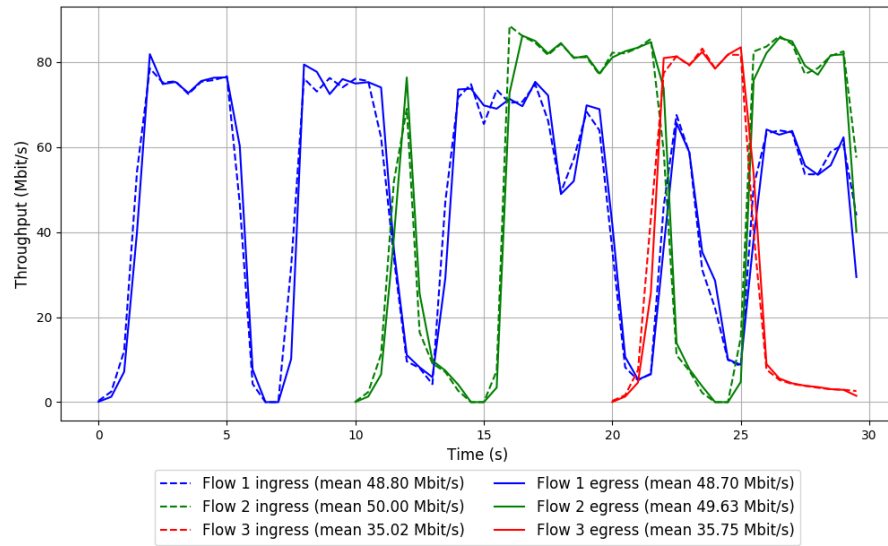


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-09 12:34:33
End at: 2018-01-09 12:35:03

# Below is generated by plot.py at 2018-01-09 18:01:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.11 Mbit/s
95th percentile per-packet one-way delay: 112.479 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 48.70 Mbit/s
95th percentile per-packet one-way delay: 112.277 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 49.63 Mbit/s
95th percentile per-packet one-way delay: 112.567 ms
Loss rate: 1.82%
-- Flow 3:
Average throughput: 35.75 Mbit/s
95th percentile per-packet one-way delay: 108.930 ms
Loss rate: 0.26%
```


Run 1: Report of QUIC Cubic — Data Link

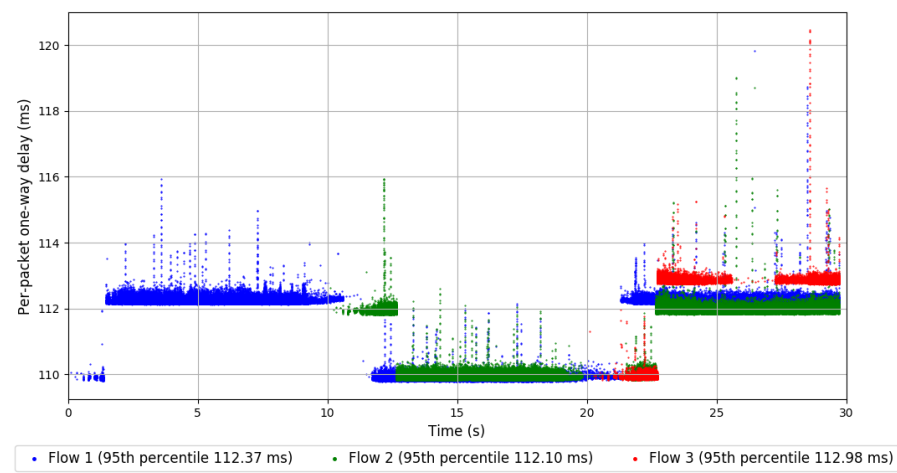
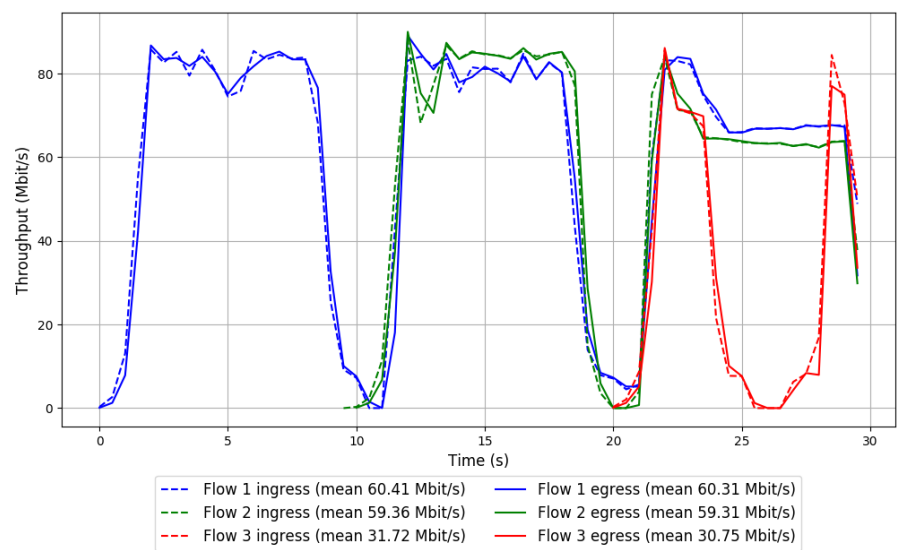


```
Run 2: Statistics of QUIC Cubic

Start at: 2018-01-09 12:50:07
End at: 2018-01-09 12:50:37

# Below is generated by plot.py at 2018-01-09 18:01:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 109.59 Mbit/s
95th percentile per-packet one-way delay: 112.818 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 60.31 Mbit/s
95th percentile per-packet one-way delay: 112.372 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 59.31 Mbit/s
95th percentile per-packet one-way delay: 112.097 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 30.75 Mbit/s
95th percentile per-packet one-way delay: 112.983 ms
Loss rate: 5.25%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

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

End at: 2018-01-09 13:05:48

Below is generated by plot.py at 2018-01-09 18:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.28 Mbit/s

95th percentile per-packet one-way delay: 112.154 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 52.64 Mbit/s

95th percentile per-packet one-way delay: 110.848 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 60.79 Mbit/s

95th percentile per-packet one-way delay: 112.229 ms

Loss rate: 0.23%

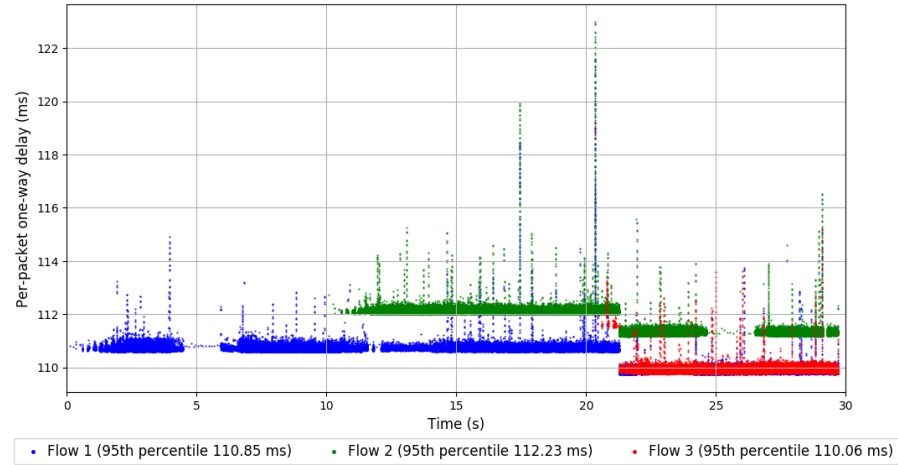
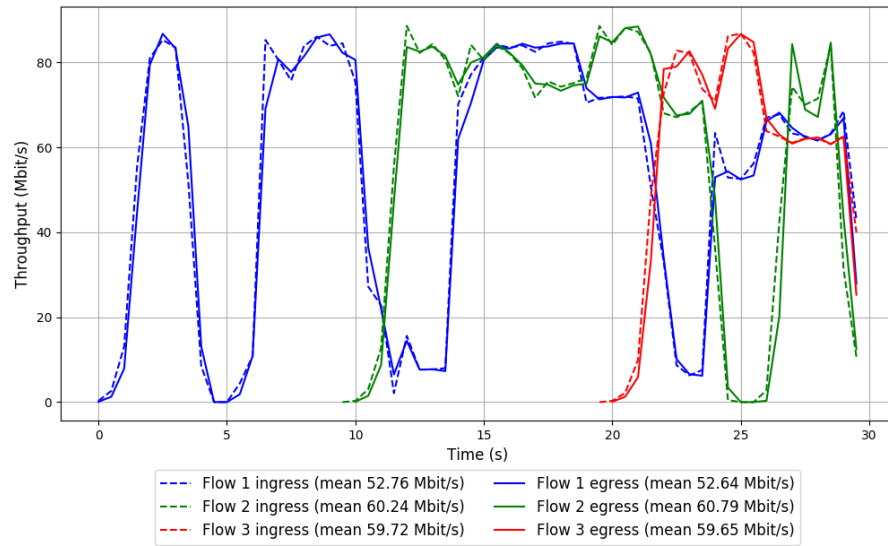
-- Flow 3:

Average throughput: 59.65 Mbit/s

95th percentile per-packet one-way delay: 110.061 ms

Loss rate: 2.40%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-09 13:21:11

End at: 2018-01-09 13:21:41

Below is generated by plot.py at 2018-01-09 18:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.06 Mbit/s

95th percentile per-packet one-way delay: 112.076 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 62.99 Mbit/s

95th percentile per-packet one-way delay: 112.072 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 52.29 Mbit/s

95th percentile per-packet one-way delay: 110.386 ms

Loss rate: 1.58%

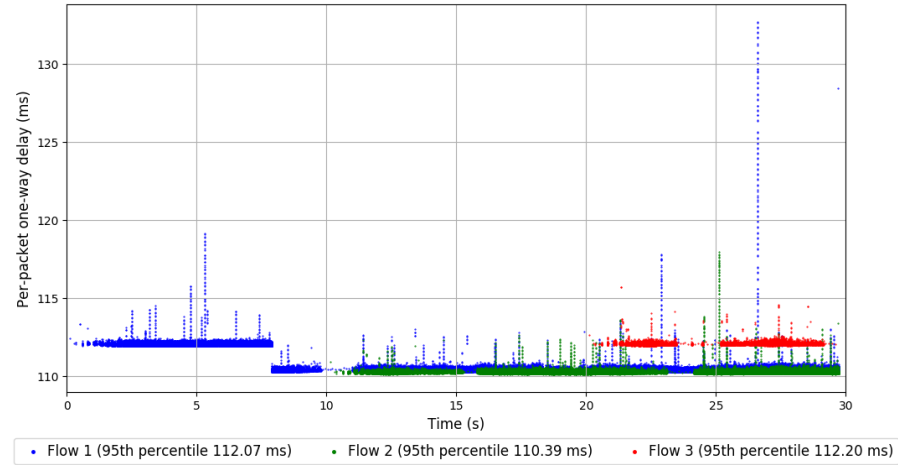
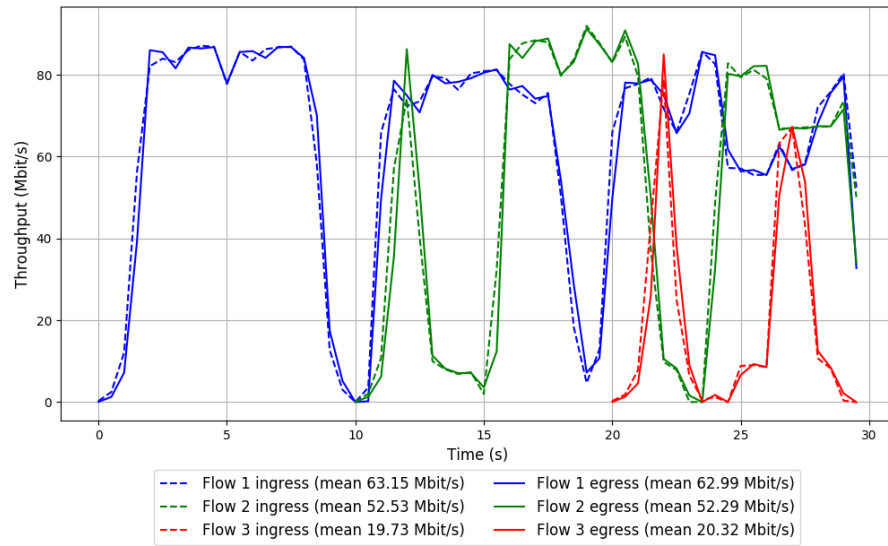
-- Flow 3:

Average throughput: 20.32 Mbit/s

95th percentile per-packet one-way delay: 112.202 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-09 13:36:27

End at: 2018-01-09 13:36:57

Below is generated by plot.py at 2018-01-09 18:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 105.82 Mbit/s

95th percentile per-packet one-way delay: 112.237 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 59.98 Mbit/s

95th percentile per-packet one-way delay: 111.909 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 54.24 Mbit/s

95th percentile per-packet one-way delay: 112.269 ms

Loss rate: 0.21%

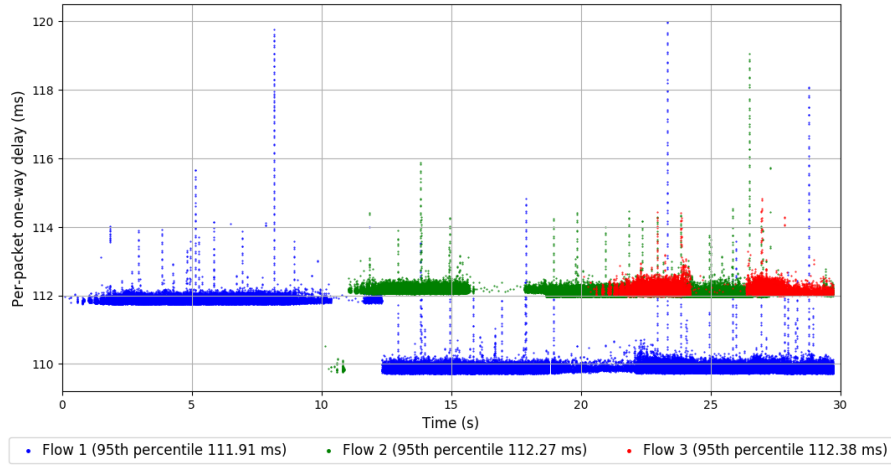
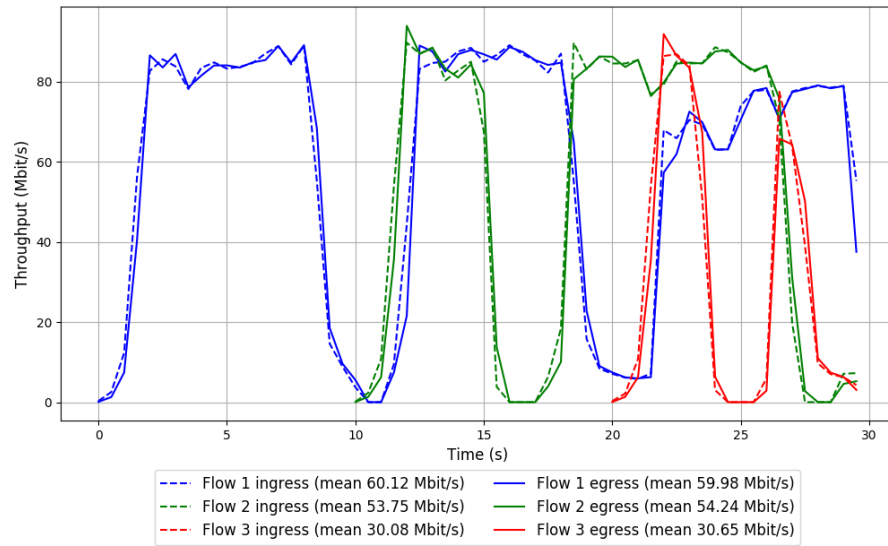
-- Flow 3:

Average throughput: 30.65 Mbit/s

95th percentile per-packet one-way delay: 112.381 ms

Loss rate: 0.45%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-09 13:51:41

End at: 2018-01-09 13:52:11

Below is generated by plot.py at 2018-01-09 18:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.37 Mbit/s

95th percentile per-packet one-way delay: 112.975 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 41.76 Mbit/s

95th percentile per-packet one-way delay: 112.683 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 51.23 Mbit/s

95th percentile per-packet one-way delay: 113.054 ms

Loss rate: 1.46%

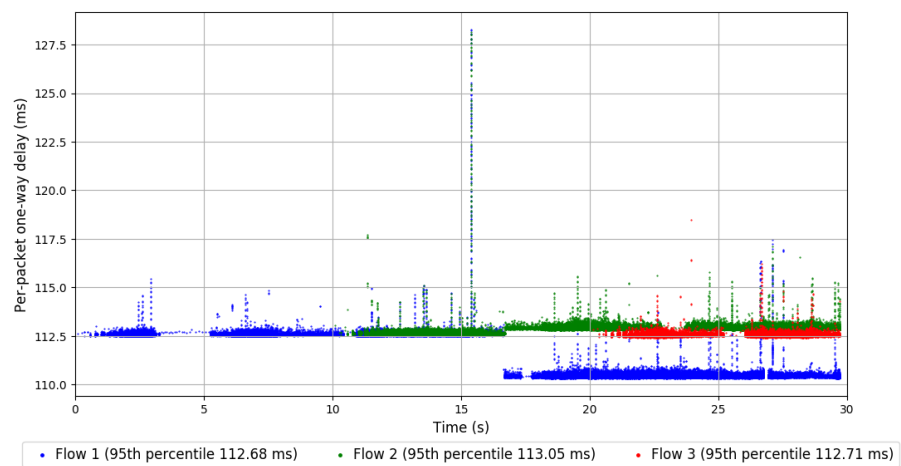
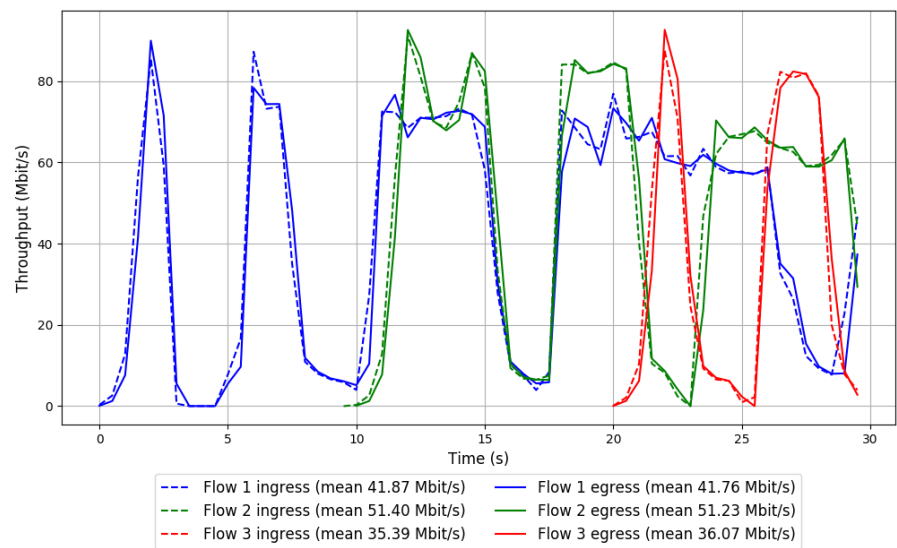
-- Flow 3:

Average throughput: 36.07 Mbit/s

95th percentile per-packet one-way delay: 112.713 ms

Loss rate: 0.36%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-09 14:06:55

End at: 2018-01-09 14:07:25

Below is generated by plot.py at 2018-01-09 18:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.73 Mbit/s

95th percentile per-packet one-way delay: 112.886 ms

Loss rate: 1.64%

-- Flow 1:

Average throughput: 43.52 Mbit/s

95th percentile per-packet one-way delay: 112.559 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 39.85 Mbit/s

95th percentile per-packet one-way delay: 112.742 ms

Loss rate: 1.77%

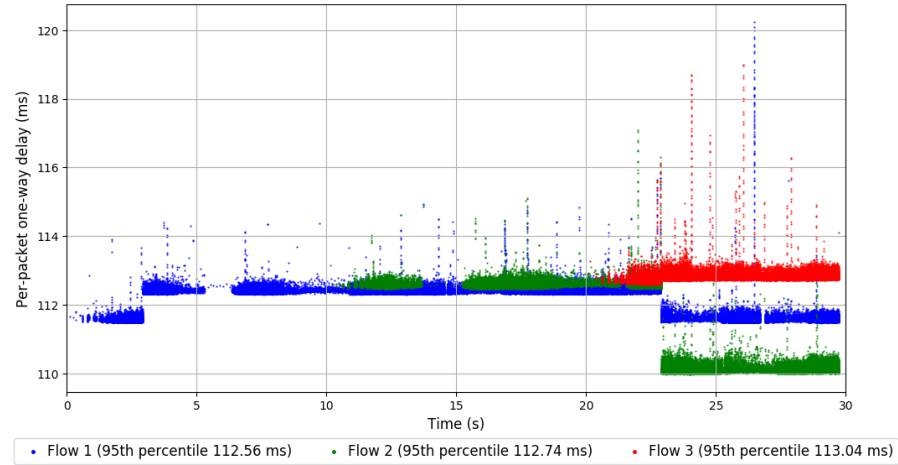
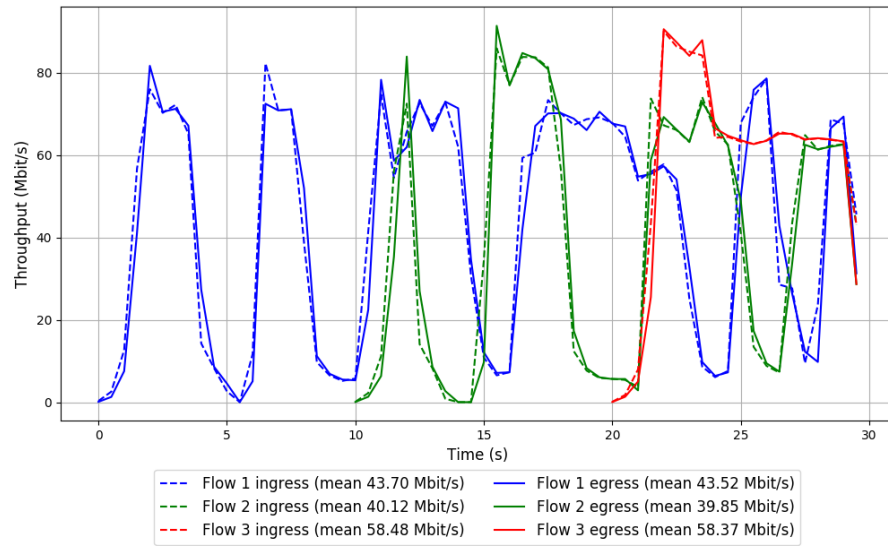
-- Flow 3:

Average throughput: 58.37 Mbit/s

95th percentile per-packet one-way delay: 113.038 ms

Loss rate: 2.51%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-09 14:22:06

End at: 2018-01-09 14:22:36

Below is generated by plot.py at 2018-01-09 18:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.50 Mbit/s

95th percentile per-packet one-way delay: 112.382 ms

Loss rate: 1.64%

-- Flow 1:

Average throughput: 38.36 Mbit/s

95th percentile per-packet one-way delay: 110.635 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 47.40 Mbit/s

95th percentile per-packet one-way delay: 112.430 ms

Loss rate: 1.37%

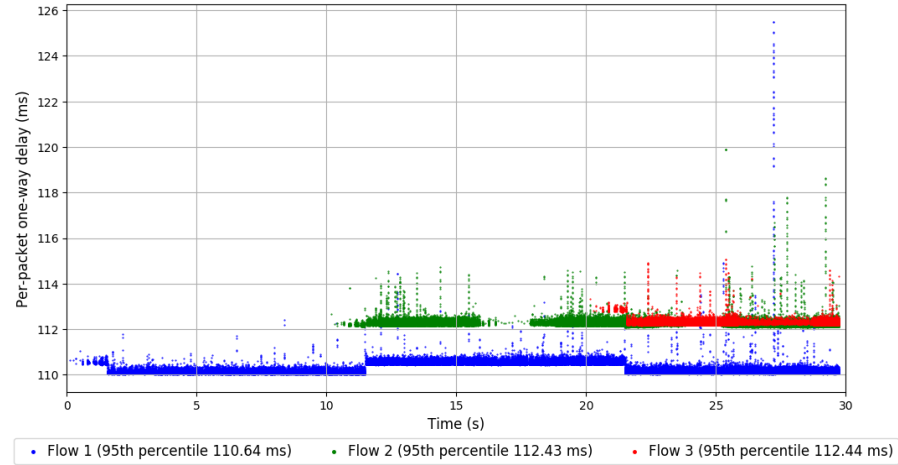
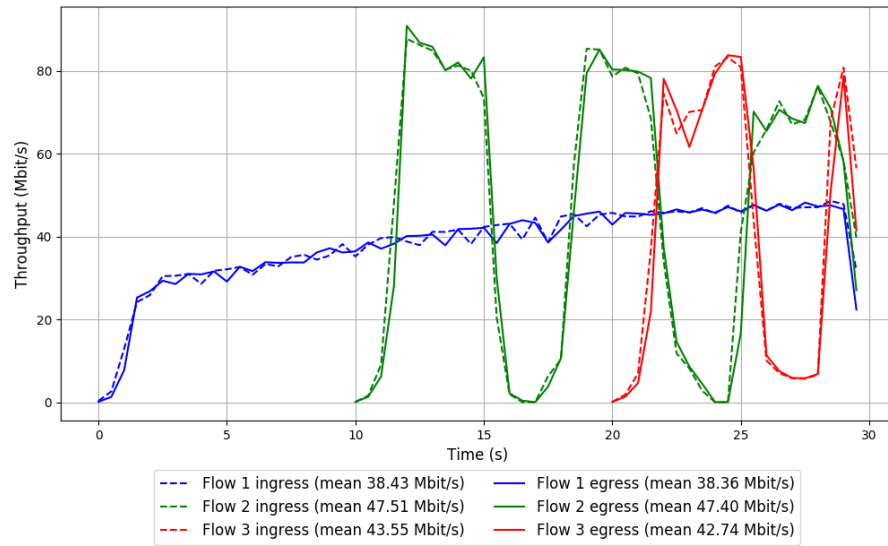
-- Flow 3:

Average throughput: 42.74 Mbit/s

95th percentile per-packet one-way delay: 112.436 ms

Loss rate: 4.11%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-09 14:36:54

End at: 2018-01-09 14:37:24

Below is generated by plot.py at 2018-01-09 18:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.50 Mbit/s

95th percentile per-packet one-way delay: 112.483 ms

Loss rate: 1.51%

-- Flow 1:

Average throughput: 53.54 Mbit/s

95th percentile per-packet one-way delay: 112.491 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 43.75 Mbit/s

95th percentile per-packet one-way delay: 110.973 ms

Loss rate: 2.03%

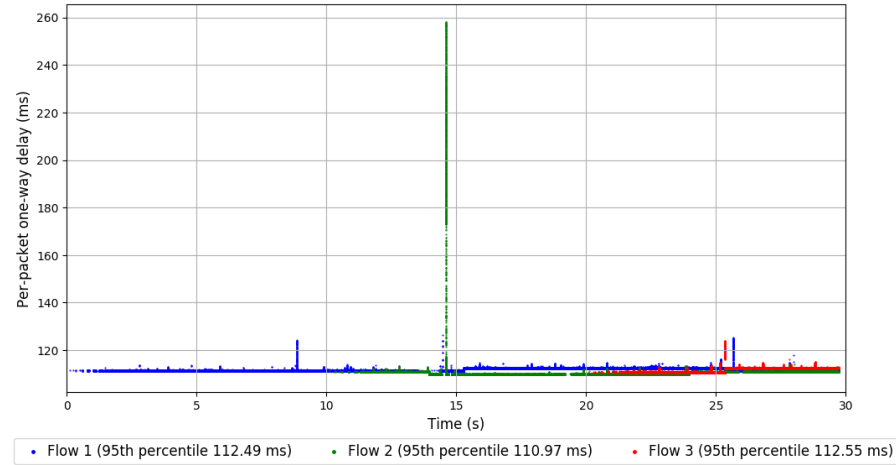
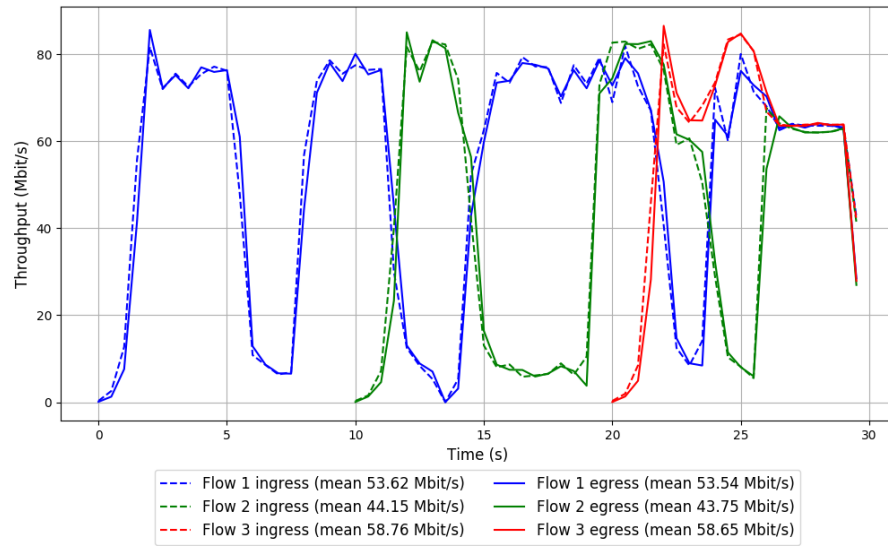
-- Flow 3:

Average throughput: 58.65 Mbit/s

95th percentile per-packet one-way delay: 112.550 ms

Loss rate: 2.46%

Run 9: Report of QUIC Cubic — Data Link

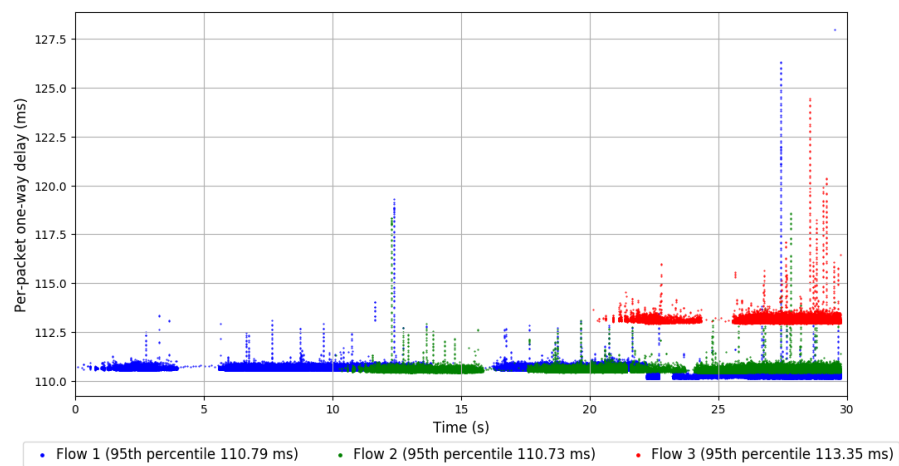
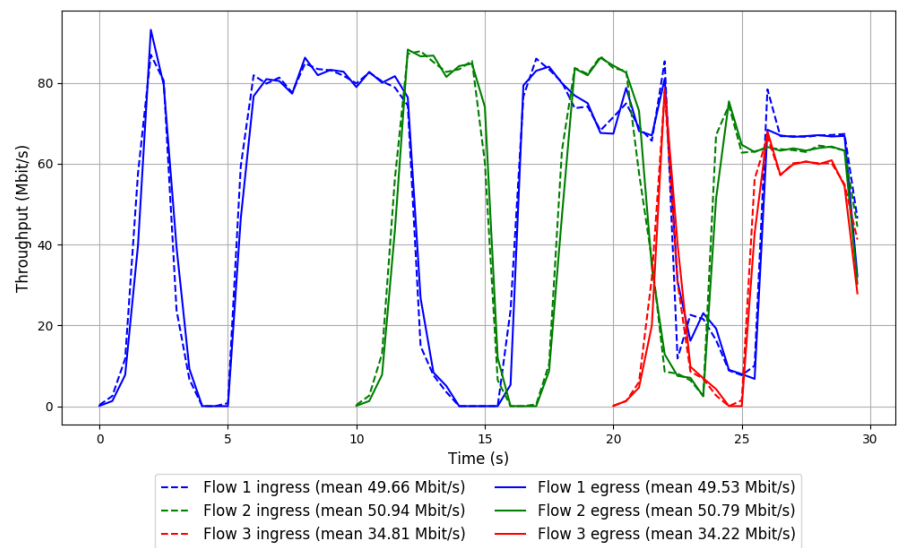


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-09 14:52:27
End at: 2018-01-09 14:52:57

# Below is generated by plot.py at 2018-01-09 18:01:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.25 Mbit/s
95th percentile per-packet one-way delay: 113.083 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 49.53 Mbit/s
95th percentile per-packet one-way delay: 110.788 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 50.79 Mbit/s
95th percentile per-packet one-way delay: 110.730 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 34.22 Mbit/s
95th percentile per-packet one-way delay: 113.353 ms
Loss rate: 3.93%
```

Run 10: Report of QUIC Cubic — Data Link

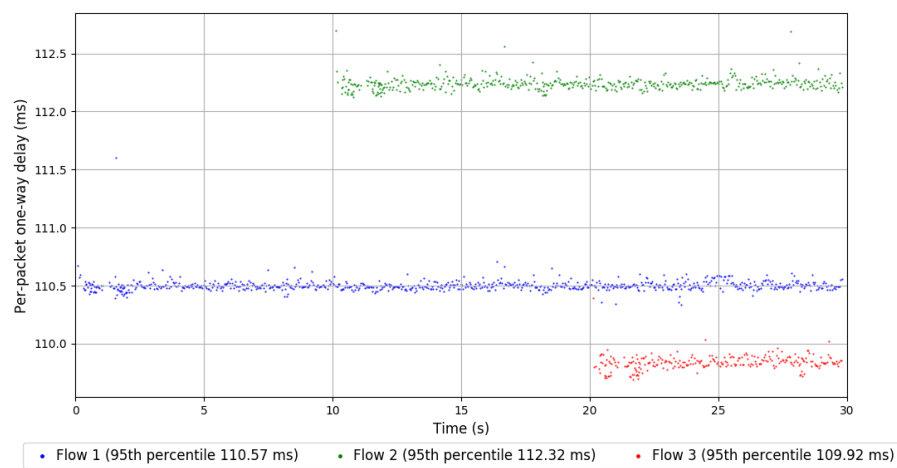
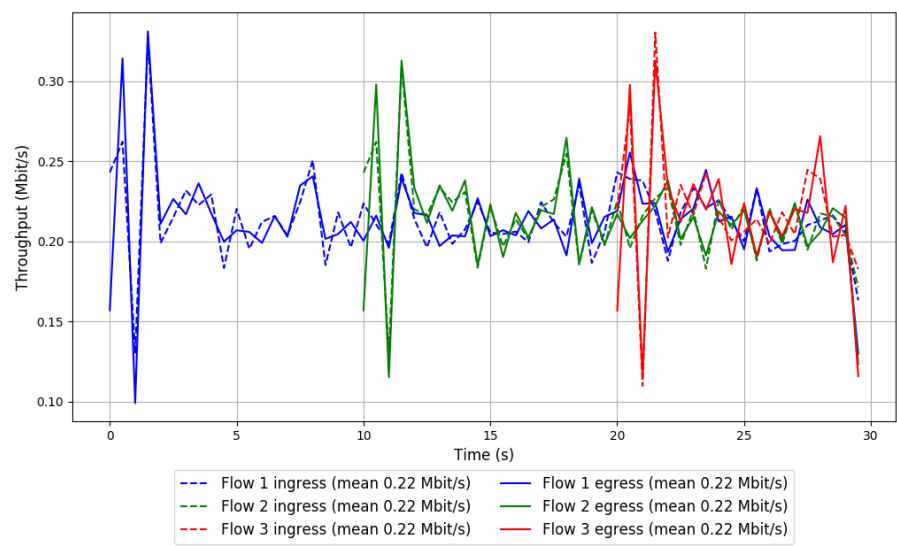


```
Run 1: Statistics of SCReAM

Start at: 2018-01-09 12:25:04
End at: 2018-01-09 12:25:34

# Below is generated by plot.py at 2018-01-09 18:01:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.275 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.571 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.319 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.915 ms
Loss rate: 2.25%
```

Run 1: Report of SCSReAM — Data Link

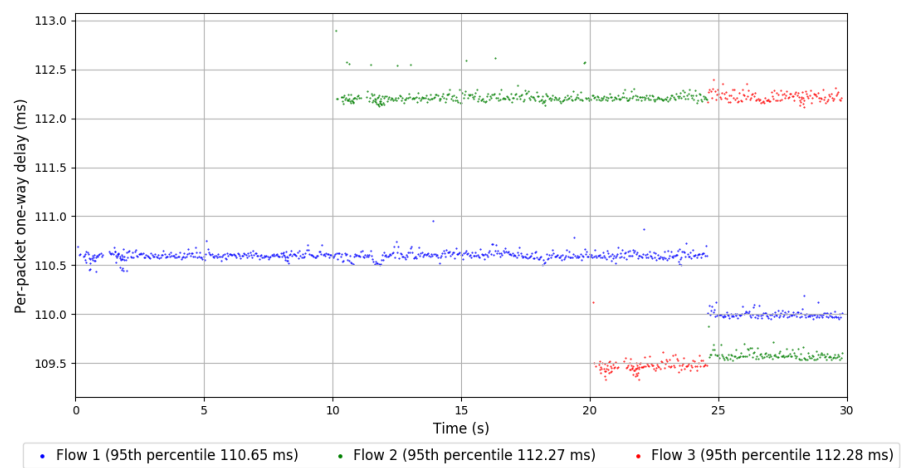
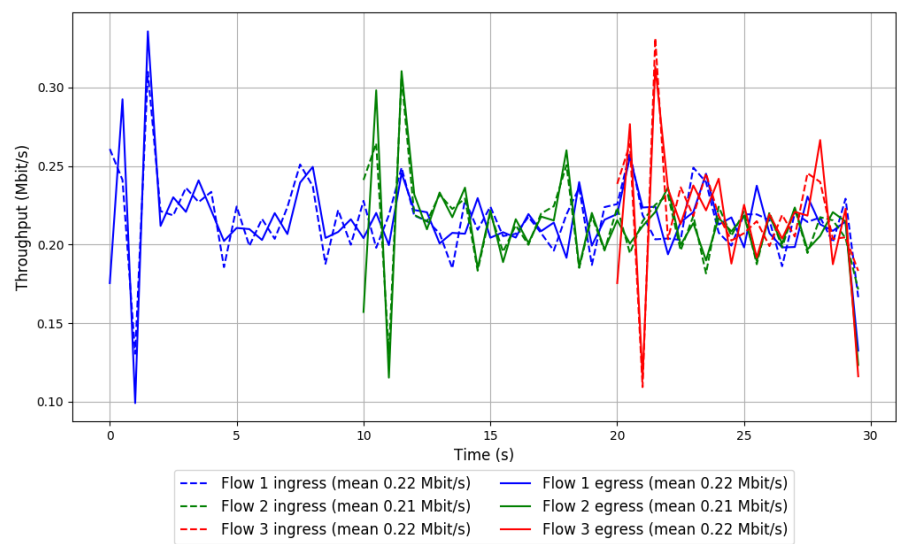


```
Run 2: Statistics of SCReAM

Start at: 2018-01-09 12:40:35
End at: 2018-01-09 12:41:05

# Below is generated by plot.py at 2018-01-09 18:01:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.249 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.653 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.271 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.285 ms
Loss rate: 2.25%
```

Run 2: Report of SReAM — Data Link

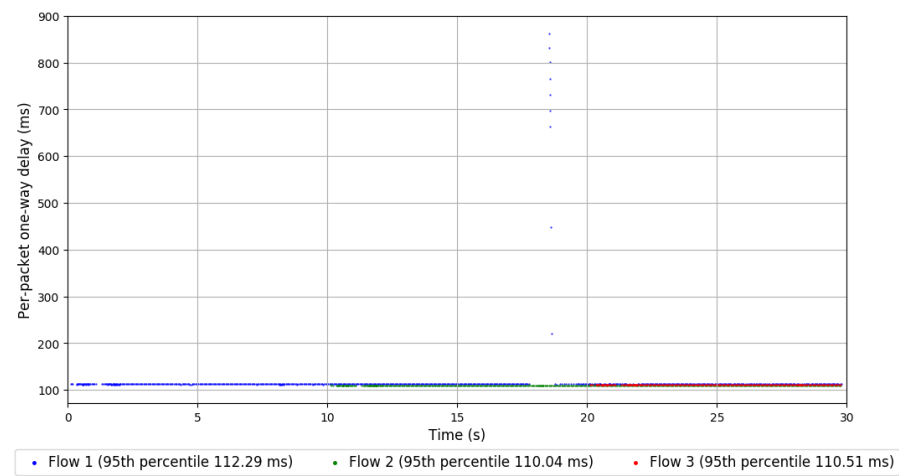
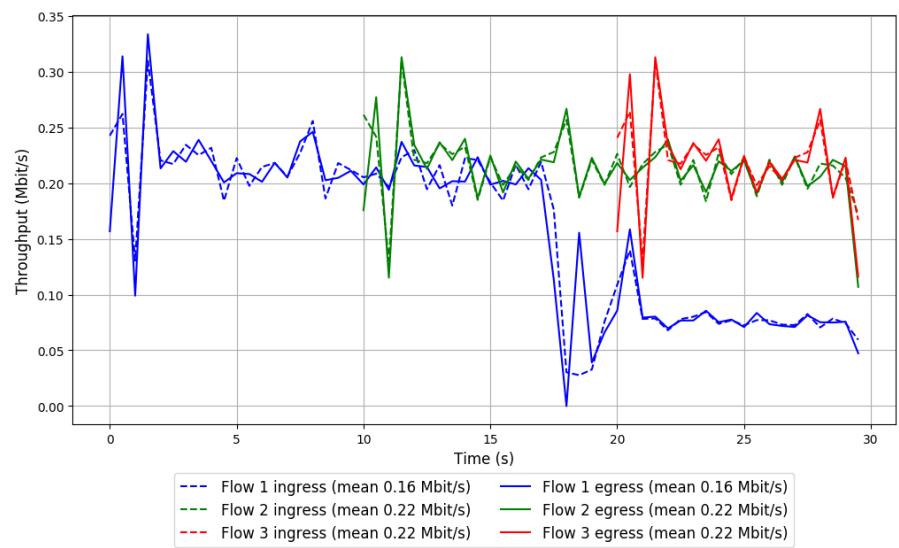


```
Run 3: Statistics of SCReAM

Start at: 2018-01-09 12:55:50
End at: 2018-01-09 12:56:20

# Below is generated by plot.py at 2018-01-09 18:01:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 112.264 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 112.286 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.042 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.511 ms
Loss rate: 2.26%
```


Run 3: Report of SReAM — Data Link

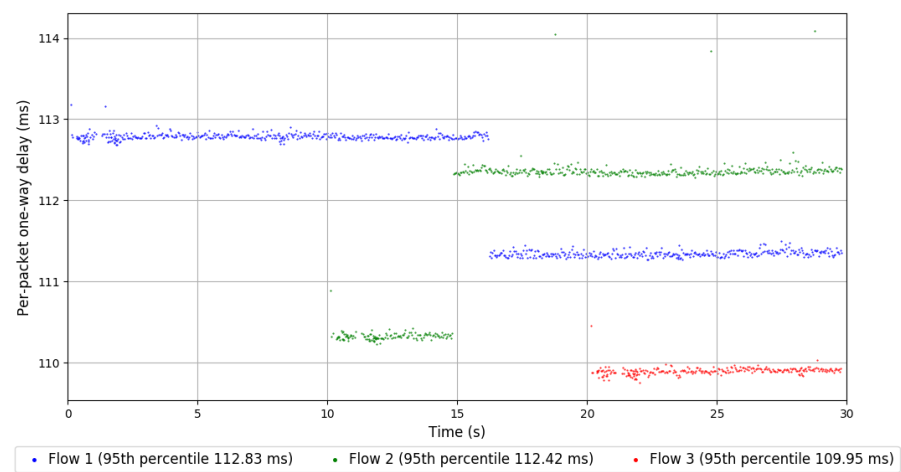
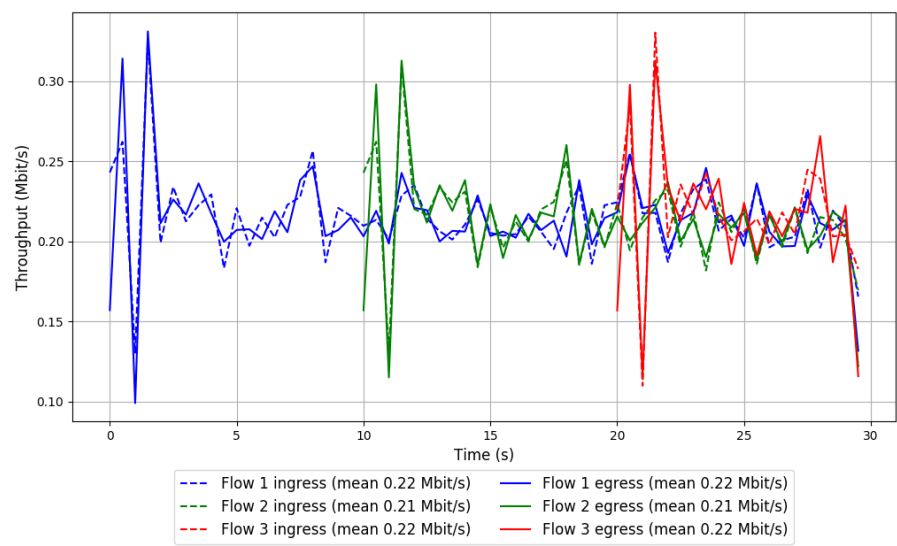


```
Run 4: Statistics of SCReAM

Start at: 2018-01-09 13:11:23
End at: 2018-01-09 13:11:53

# Below is generated by plot.py at 2018-01-09 18:01:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.812 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.831 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.423 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.949 ms
Loss rate: 2.25%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-01-09 13:27:11

End at: 2018-01-09 13:27:41

Below is generated by plot.py at 2018-01-09 18:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 112.767 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.798 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.277 ms

Loss rate: 1.25%

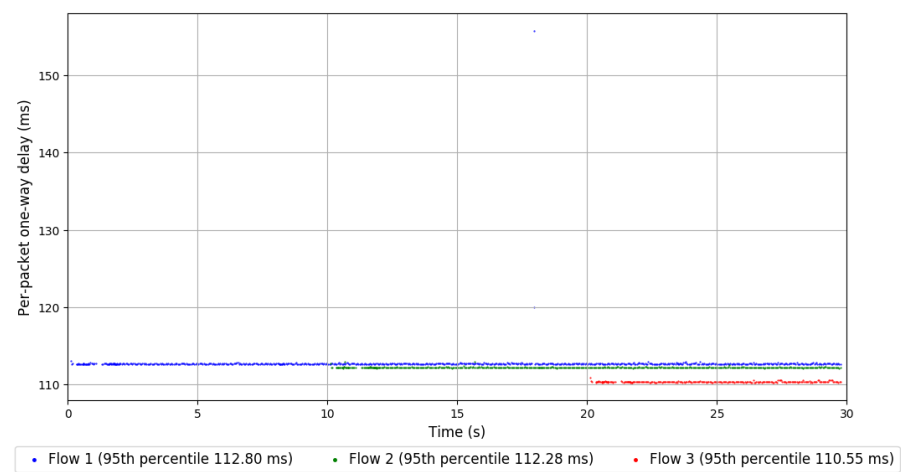
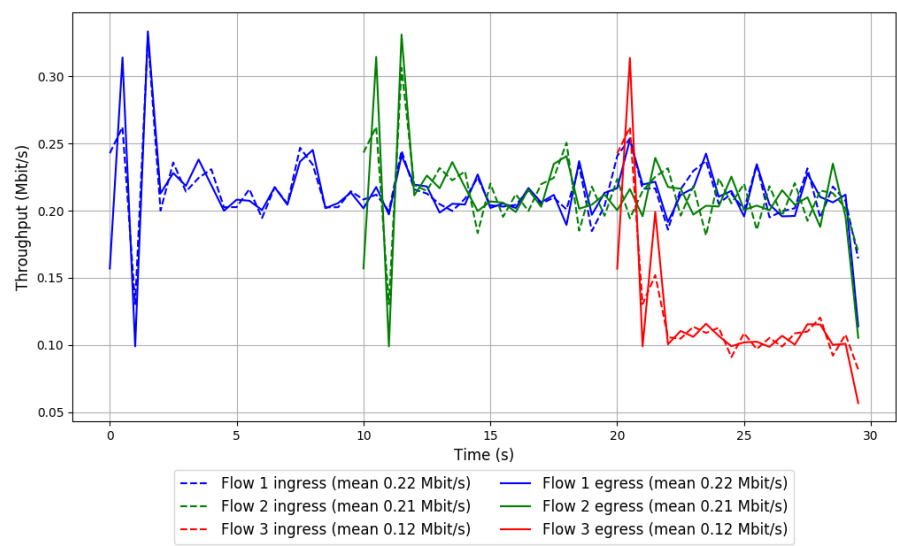
-- Flow 3:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 110.551 ms

Loss rate: 1.97%

Run 5: Report of SCRaM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-01-09 13:42:36

End at: 2018-01-09 13:43:06

Below is generated by plot.py at 2018-01-09 18:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.232 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.249 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.776 ms

Loss rate: 1.25%

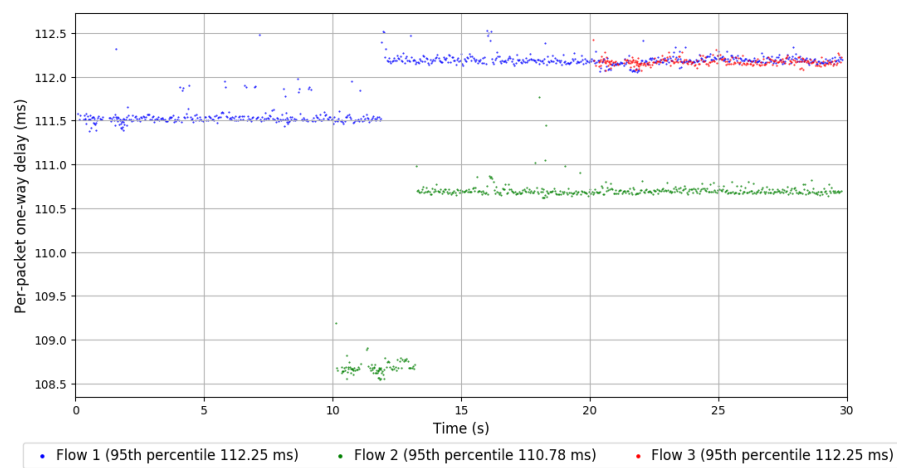
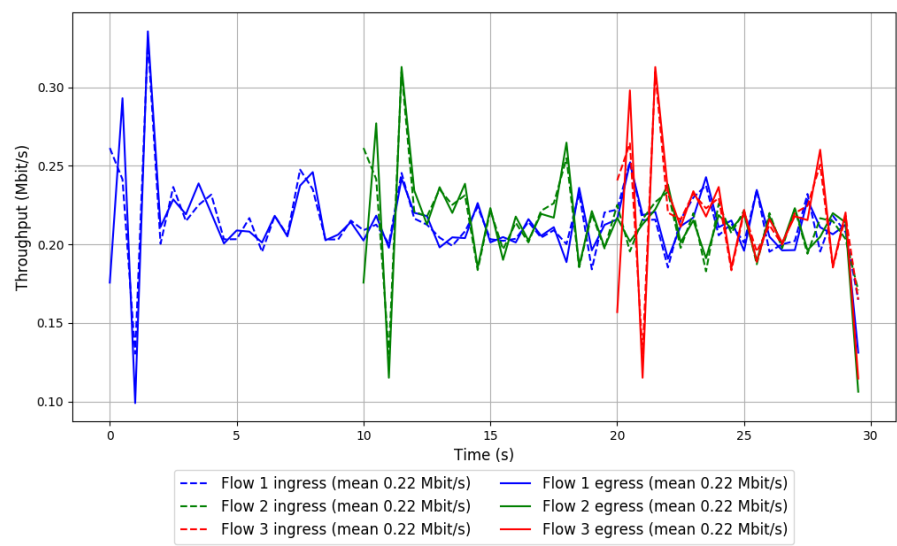
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 112.245 ms

Loss rate: 2.25%

Run 6: Report of SReAM — Data Link

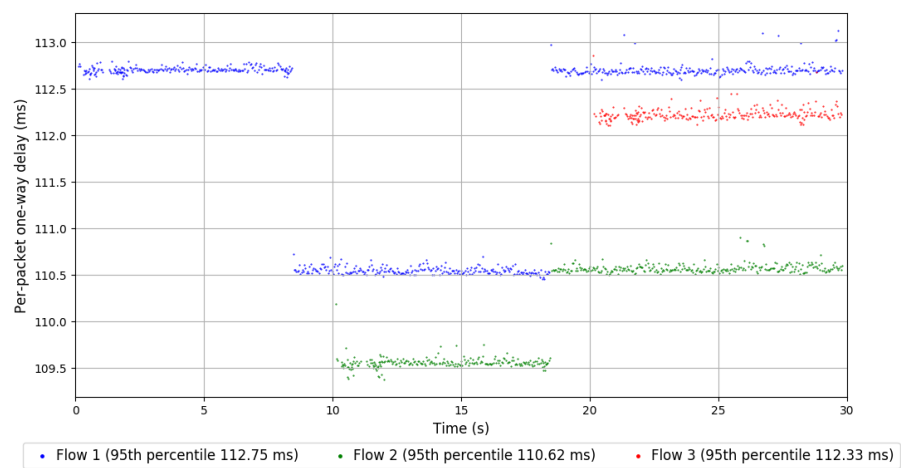
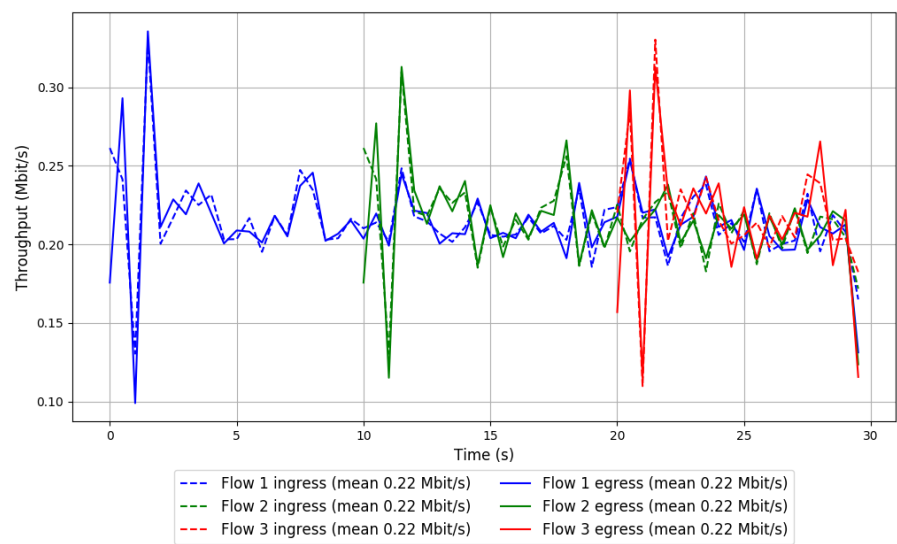


```
Run 7: Statistics of SReAM

Start at: 2018-01-09 13:57:31
End at: 2018-01-09 13:58:01

# Below is generated by plot.py at 2018-01-09 18:01:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.727 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.753 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.624 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.327 ms
Loss rate: 2.25%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-09 14:12:54

End at: 2018-01-09 14:13:24

Below is generated by plot.py at 2018-01-09 18:01:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.751 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.464 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 112.804 ms

Loss rate: 1.05%

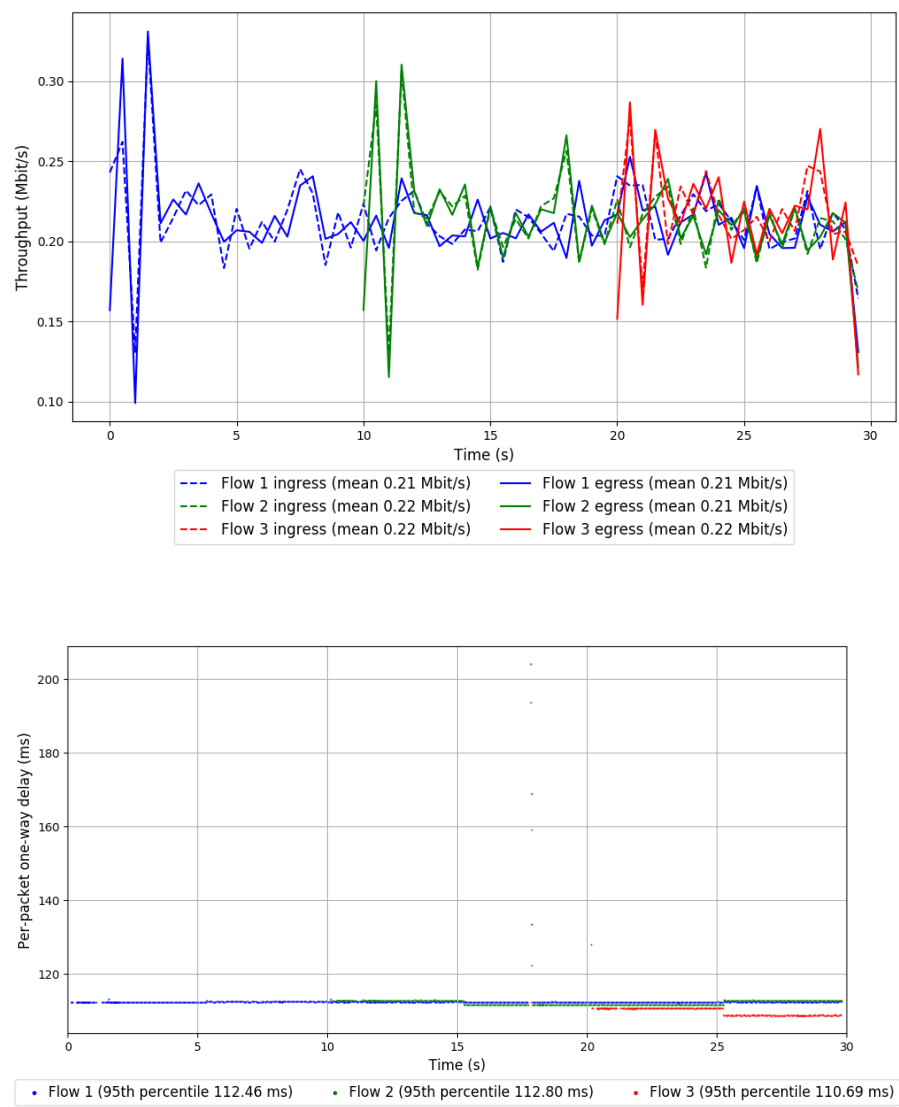
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.694 ms

Loss rate: 2.28%

Run 8: Report of SCRaM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-09 14:28:03

End at: 2018-01-09 14:28:33

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 112.961 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 112.981 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 0.22 Mbit/s

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

Loss rate: 1.25%

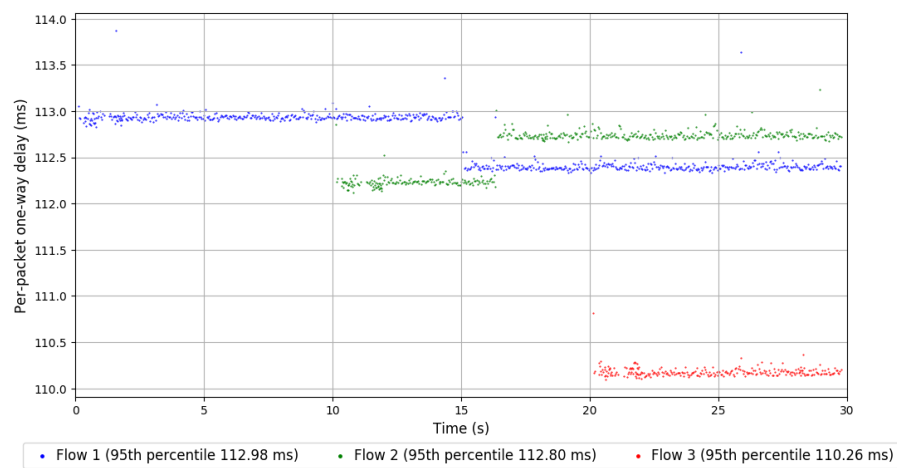
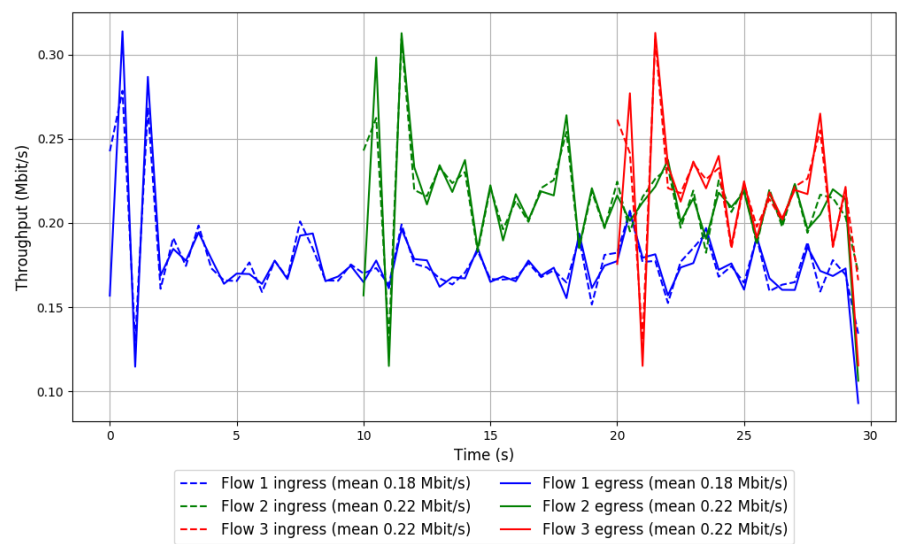
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 110.261 ms

Loss rate: 2.25%

Run 9: Report of SCSReAM — Data Link

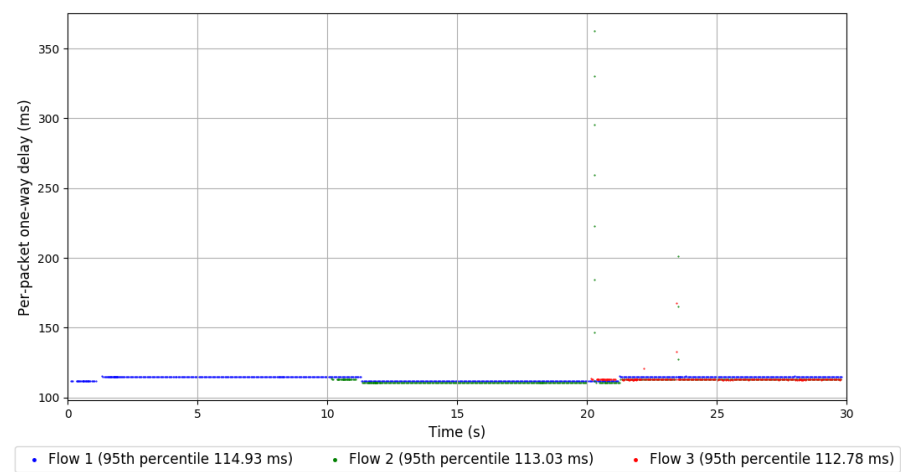
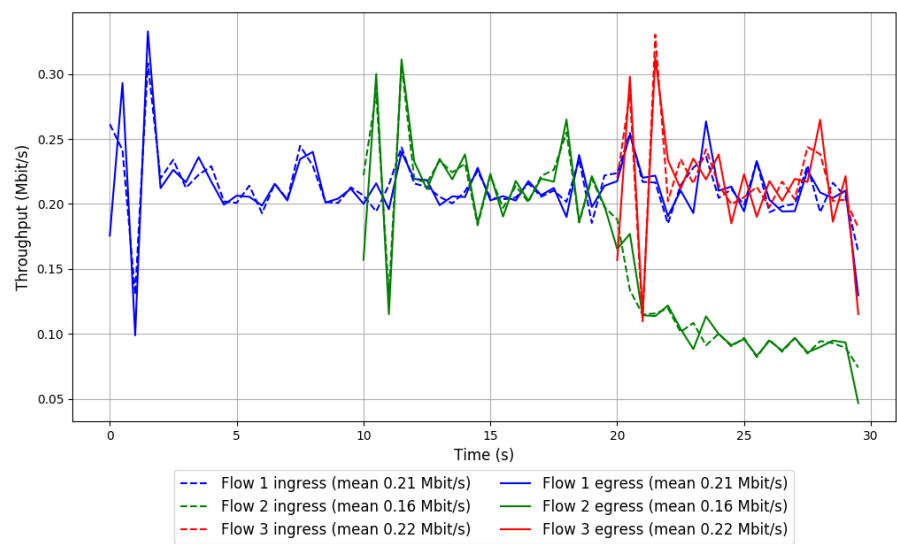


```
Run 10: Statistics of SReAM

Start at: 2018-01-09 14:42:48
End at: 2018-01-09 14:43:18

# Below is generated by plot.py at 2018-01-09 18:01:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 114.914 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.927 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 113.034 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.780 ms
Loss rate: 2.25%
```

Run 10: Report of SCRaM — Data Link

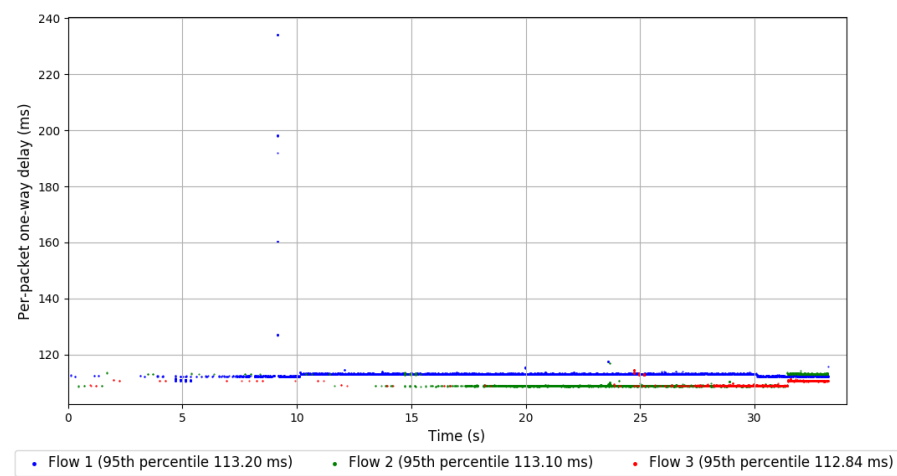
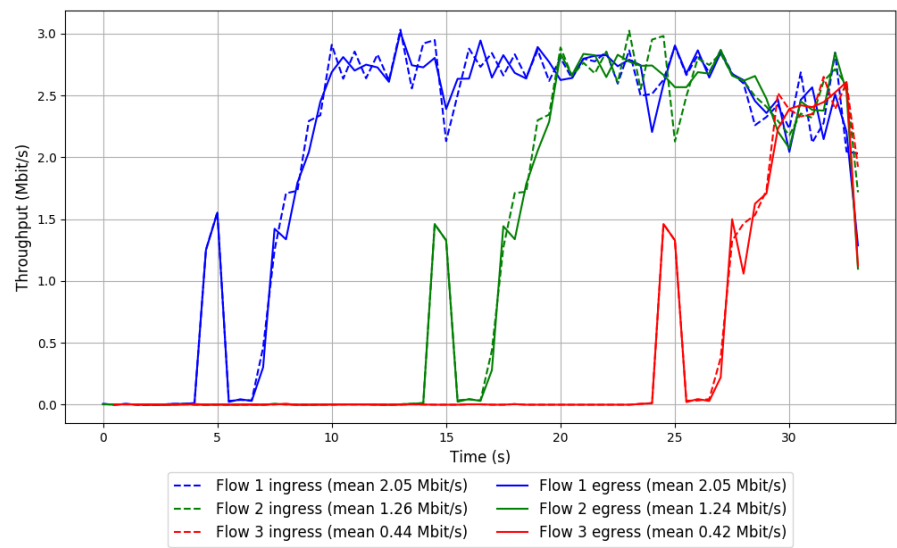


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-09 12:27:01
End at: 2018-01-09 12:27:31

# Below is generated by plot.py at 2018-01-09 18:01:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.69 Mbit/s
95th percentile per-packet one-way delay: 113.172 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 113.199 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 113.100 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 112.843 ms
Loss rate: 4.69%
```


Run 1: Report of WebRTC media — Data Link

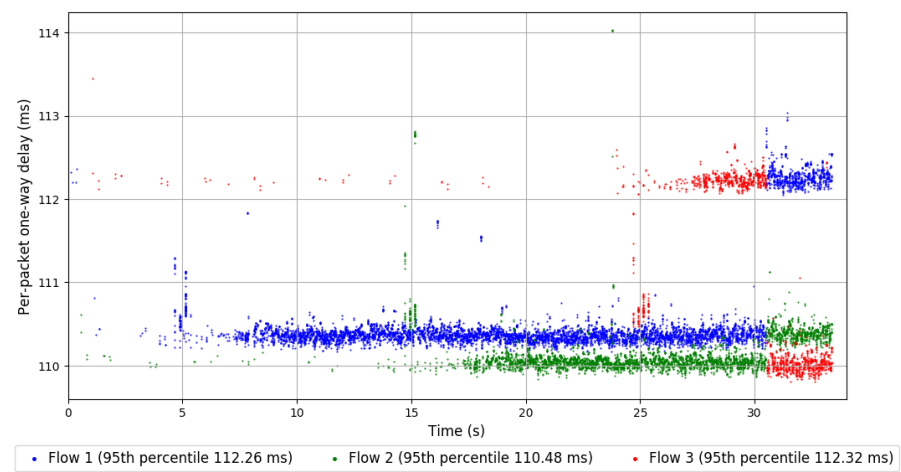
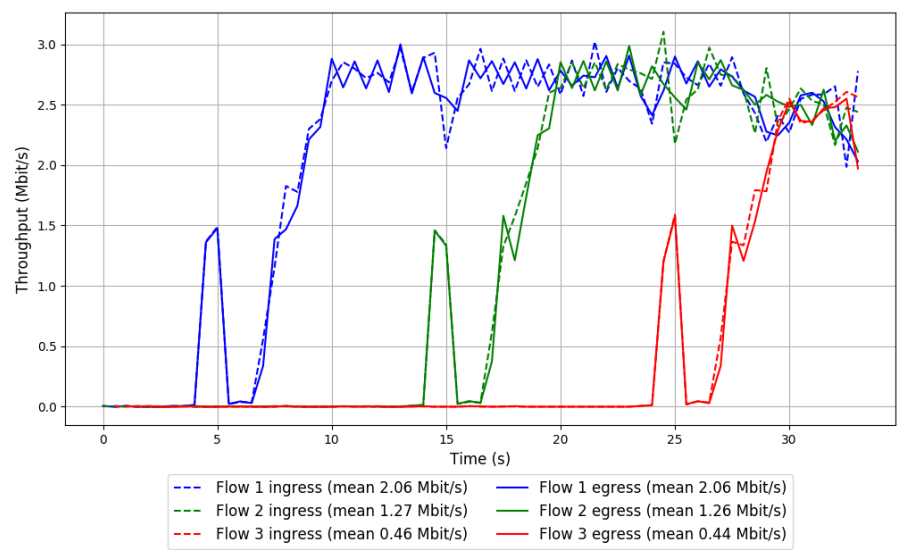


```
Run 2: Statistics of WebRTC media

Start at: 2018-01-09 12:42:32
End at: 2018-01-09 12:43:02

# Below is generated by plot.py at 2018-01-09 18:01:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 112.256 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 112.264 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 110.485 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 112.317 ms
Loss rate: 3.80%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-09 12:57:47

End at: 2018-01-09 12:58:17

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.76 Mbit/s

95th percentile per-packet one-way delay: 112.806 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 112.839 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 112.475 ms

Loss rate: 1.29%

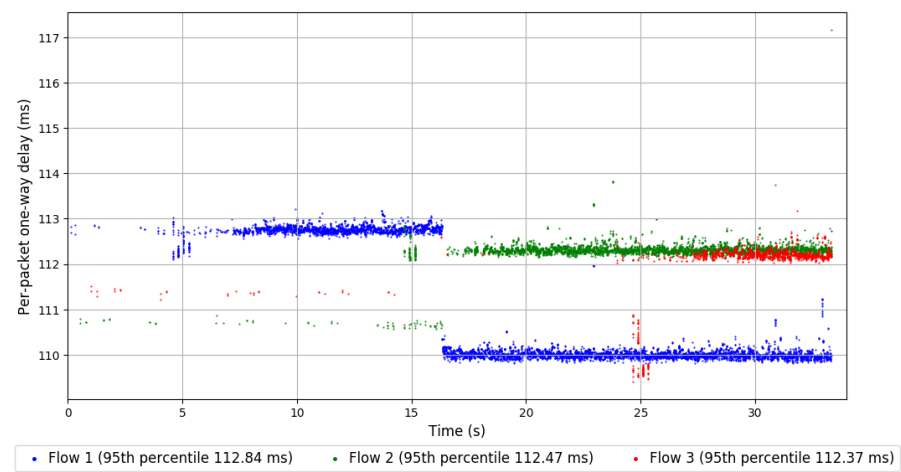
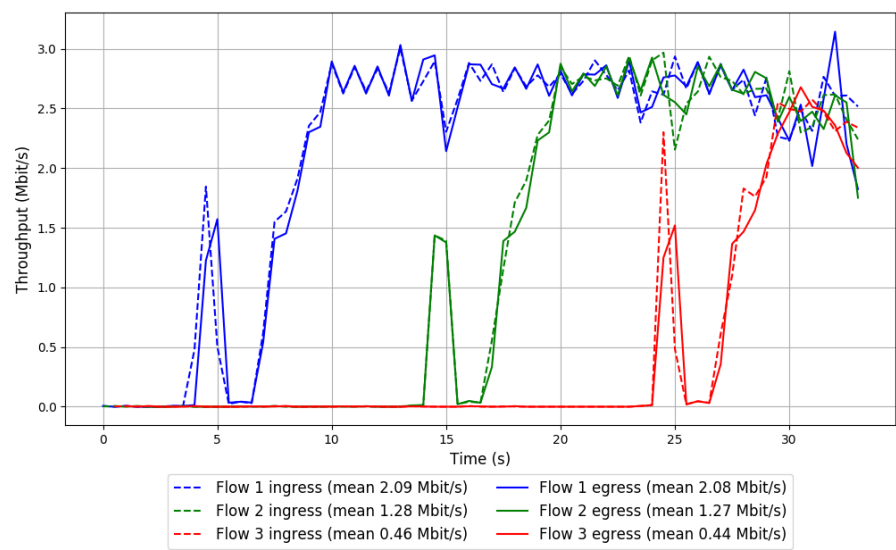
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 112.367 ms

Loss rate: 3.54%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-09 13:13:23

End at: 2018-01-09 13:13:53

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.76 Mbit/s

95th percentile per-packet one-way delay: 112.579 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 110.623 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 112.661 ms

Loss rate: 1.20%

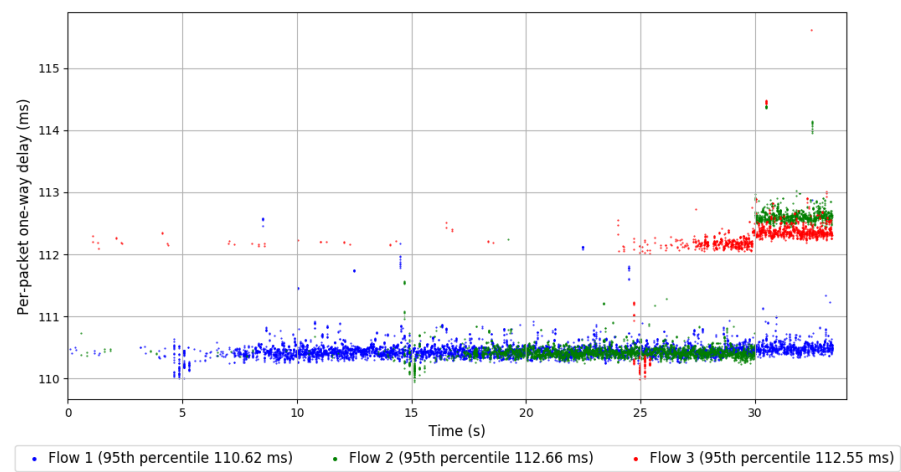
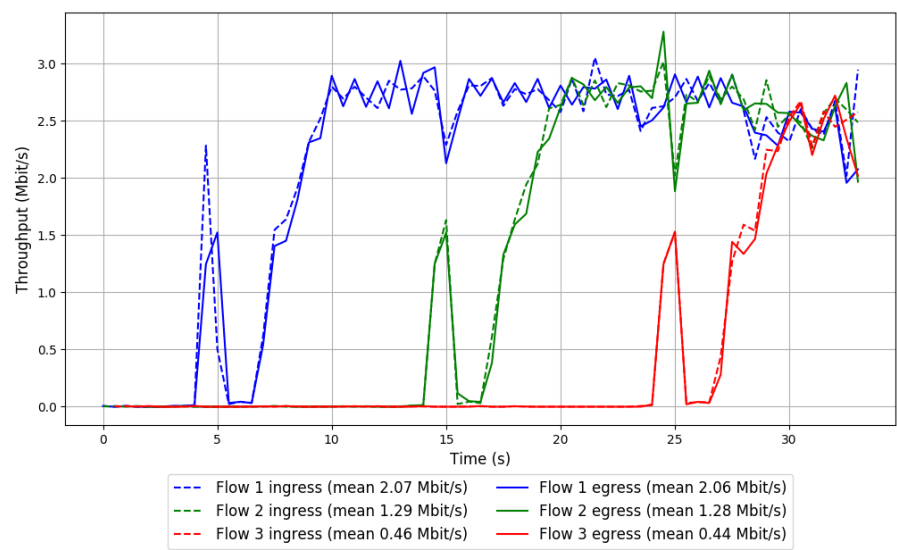
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 112.553 ms

Loss rate: 3.81%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-09 13:29:08

End at: 2018-01-09 13:29:38

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.78 Mbit/s

95th percentile per-packet one-way delay: 112.242 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.143 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 112.277 ms

Loss rate: 1.40%

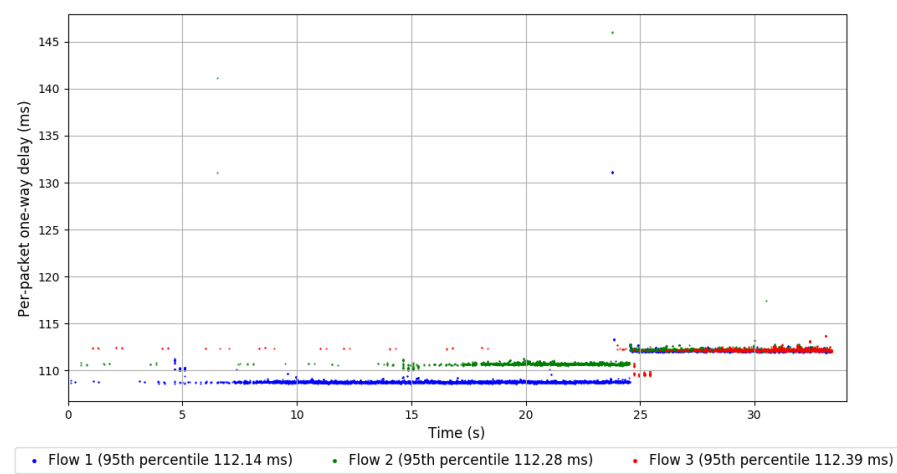
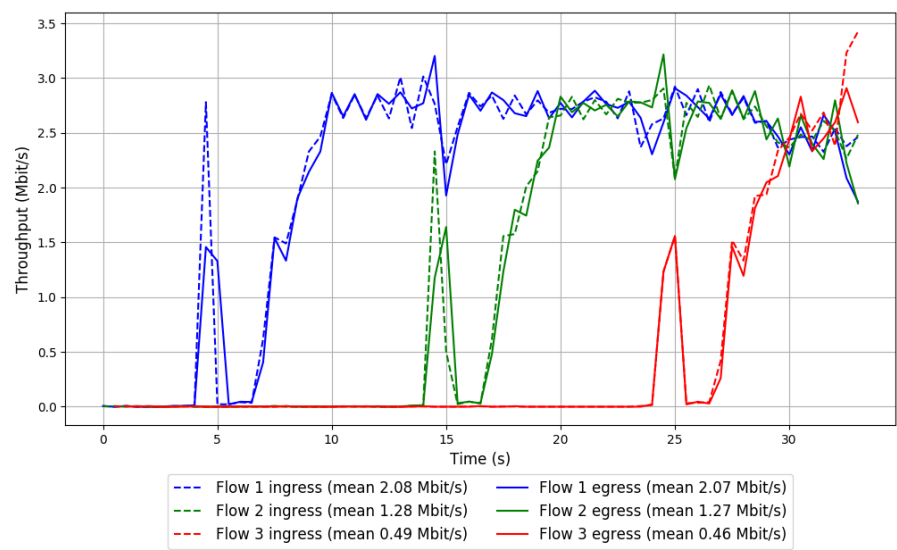
-- Flow 3:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 112.387 ms

Loss rate: 5.72%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-09 13:44:35

End at: 2018-01-09 13:45:05

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.76 Mbit/s

95th percentile per-packet one-way delay: 112.863 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 112.716 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 112.912 ms

Loss rate: 1.23%

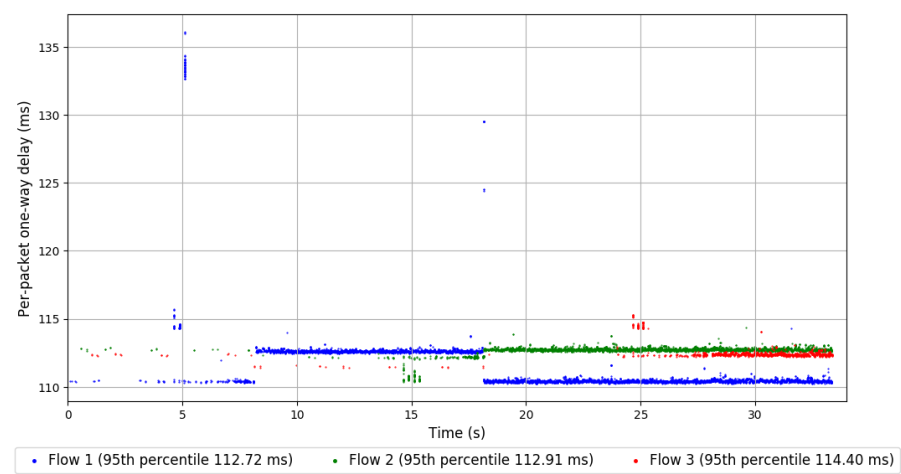
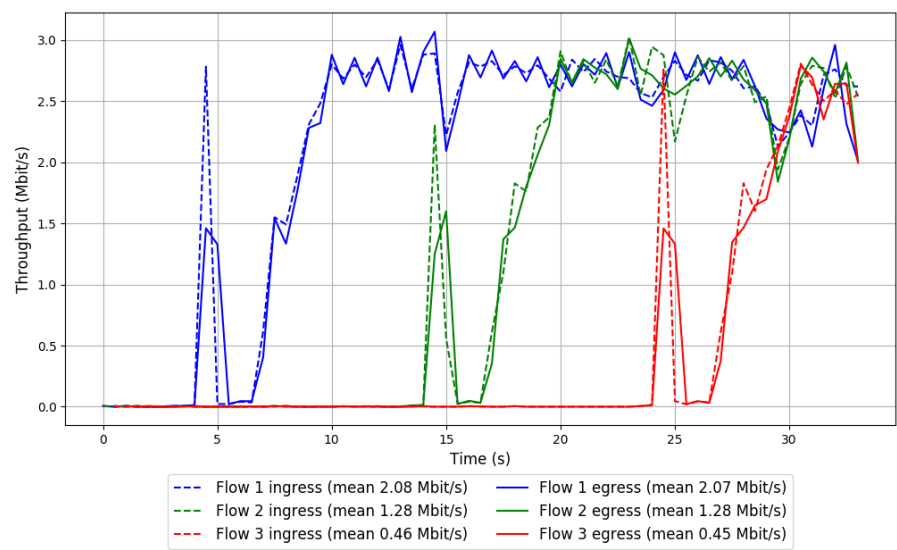
-- Flow 3:

Average throughput: 0.45 Mbit/s

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

Loss rate: 3.73%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-09 13:59:29

End at: 2018-01-09 13:59:59

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.76 Mbit/s

95th percentile per-packet one-way delay: 114.704 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 111.474 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 110.785 ms

Loss rate: 1.31%

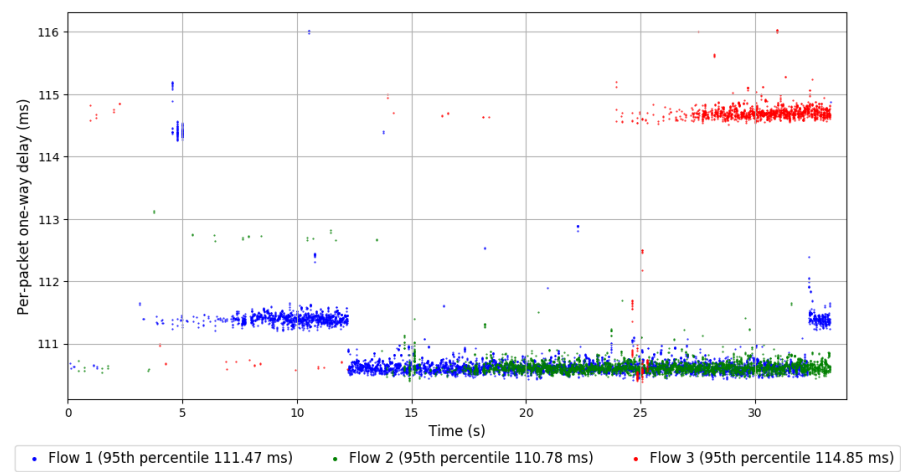
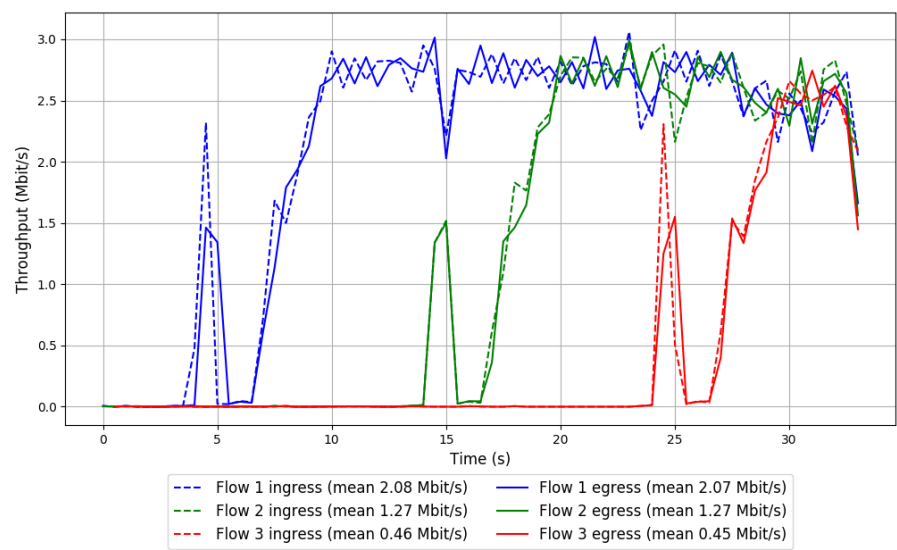
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 114.851 ms

Loss rate: 3.60%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-09 14:14:51

End at: 2018-01-09 14:15:21

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.73 Mbit/s

95th percentile per-packet one-way delay: 112.713 ms

Loss rate: 1.66%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 112.703 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 112.533 ms

Loss rate: 1.67%

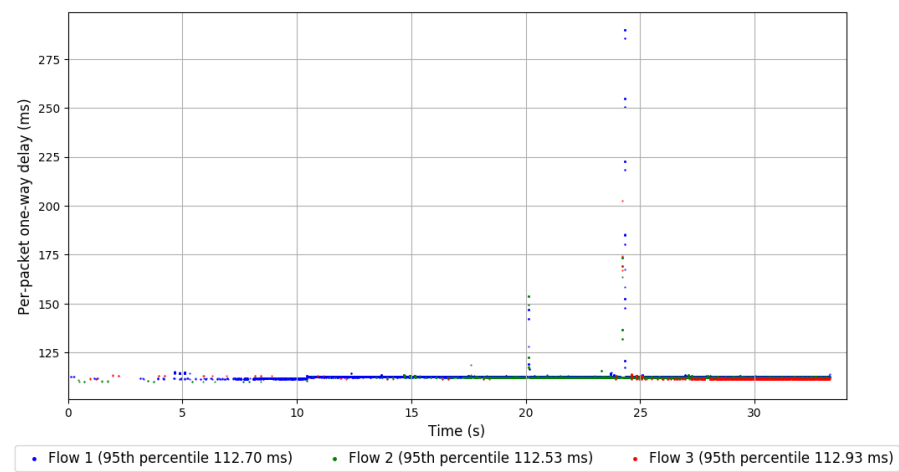
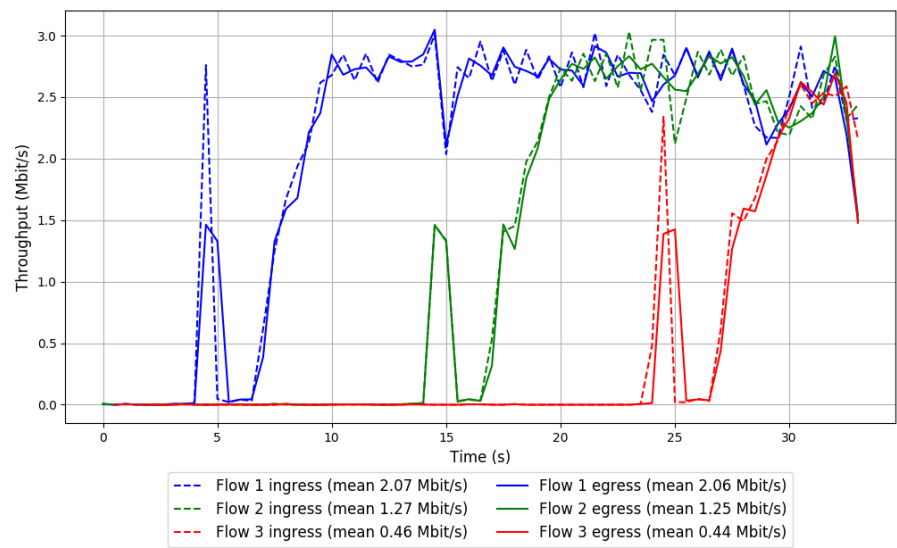
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 112.928 ms

Loss rate: 4.31%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-09 14:29:59

End at: 2018-01-09 14:30:29

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 113.530 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 2.06 Mbit/s

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

Loss rate: 1.14%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 112.593 ms

Loss rate: 1.30%

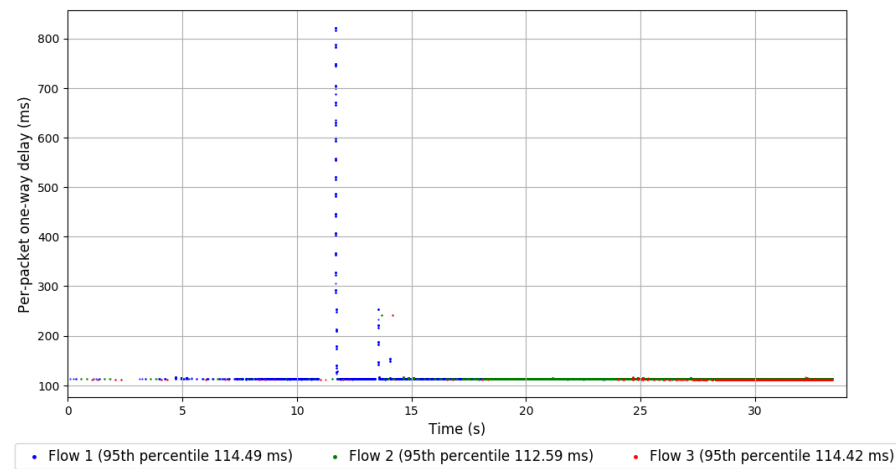
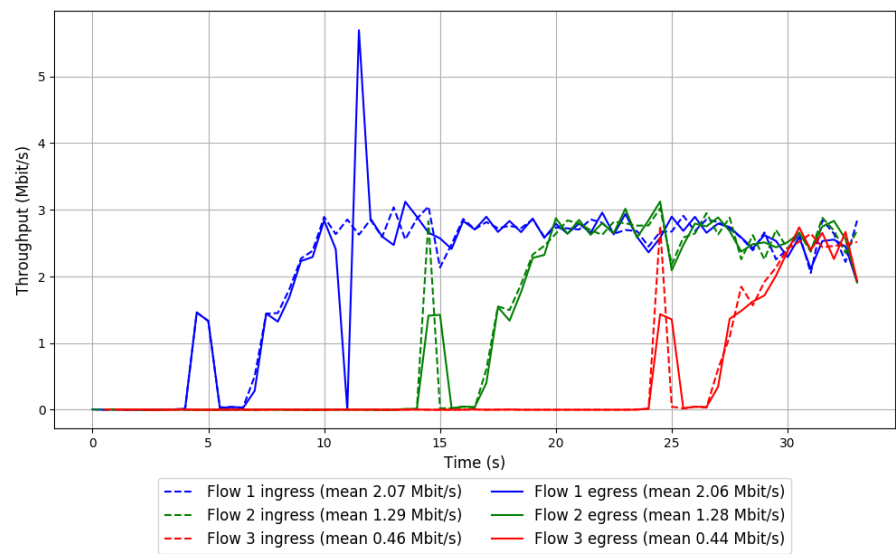
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 114.419 ms

Loss rate: 3.63%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-09 14:44:47

End at: 2018-01-09 14:45:17

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.71 Mbit/s

95th percentile per-packet one-way delay: 112.639 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 112.506 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 112.690 ms

Loss rate: 1.34%

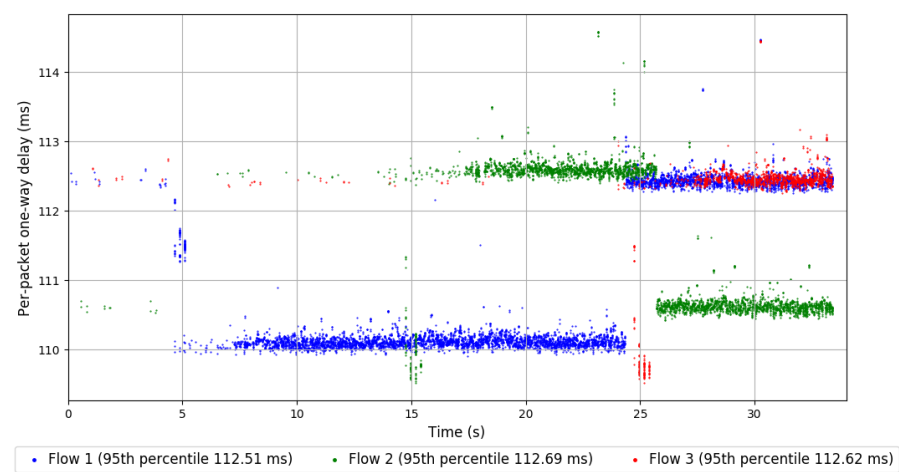
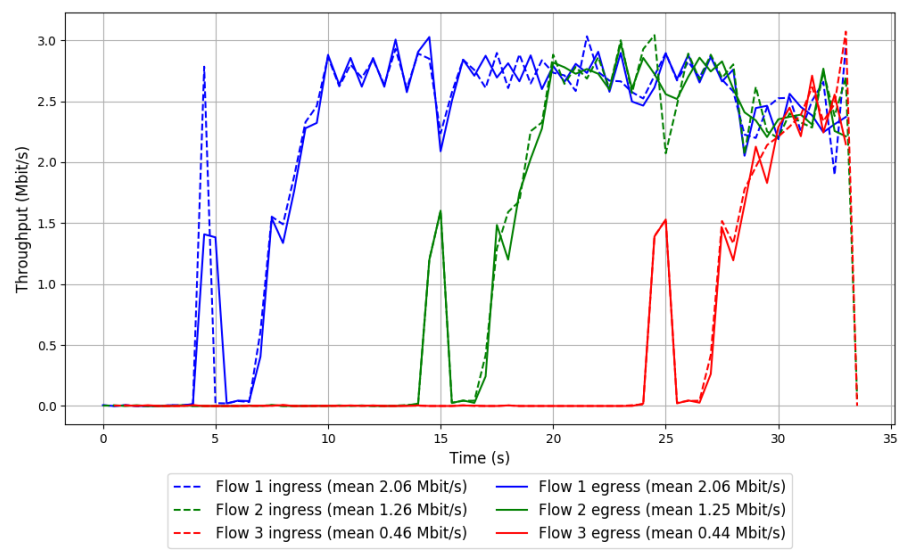
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 112.623 ms

Loss rate: 4.81%

Run 10: Report of WebRTC media — Data Link

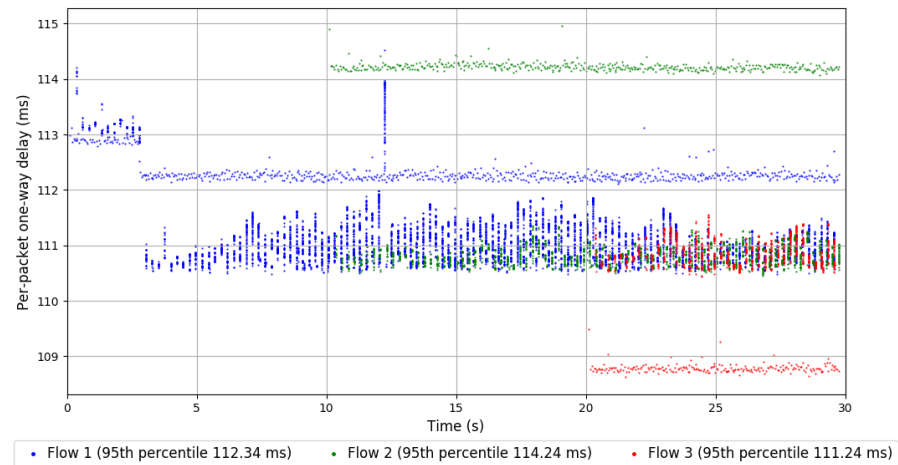
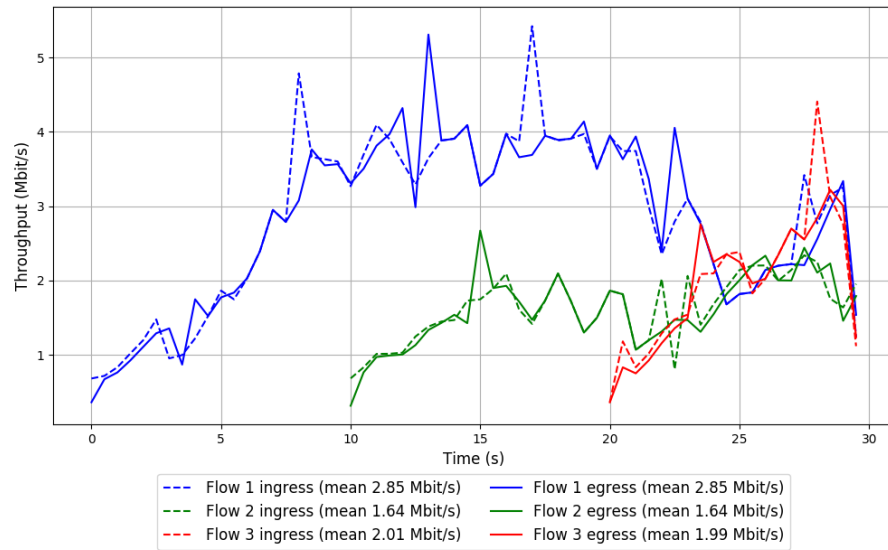


```
Run 1: Statistics of Sprout

Start at: 2018-01-09 12:33:47
End at: 2018-01-09 12:34:17

# Below is generated by plot.py at 2018-01-09 18:01:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 113.109 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 112.344 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 114.237 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 111.237 ms
Loss rate: 2.82%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-09 12:49:20

End at: 2018-01-09 12:49:50

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.32 Mbit/s

95th percentile per-packet one-way delay: 112.834 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 112.666 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 1.83 Mbit/s

95th percentile per-packet one-way delay: 112.947 ms

Loss rate: 2.60%

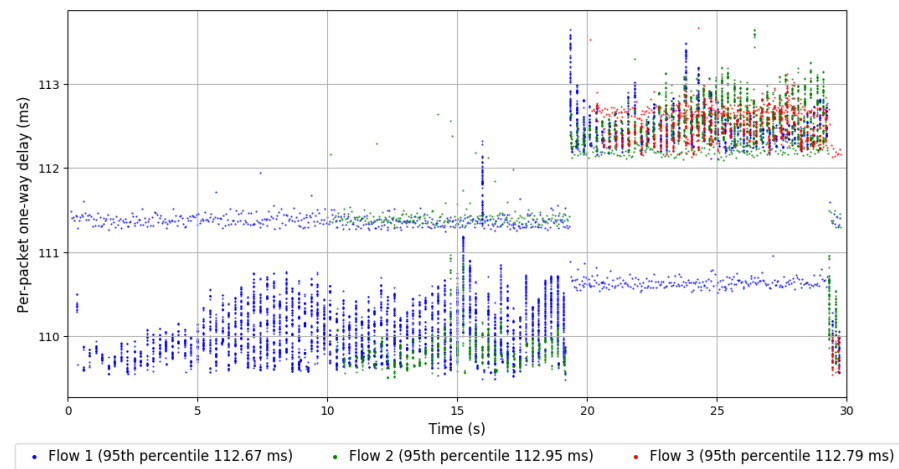
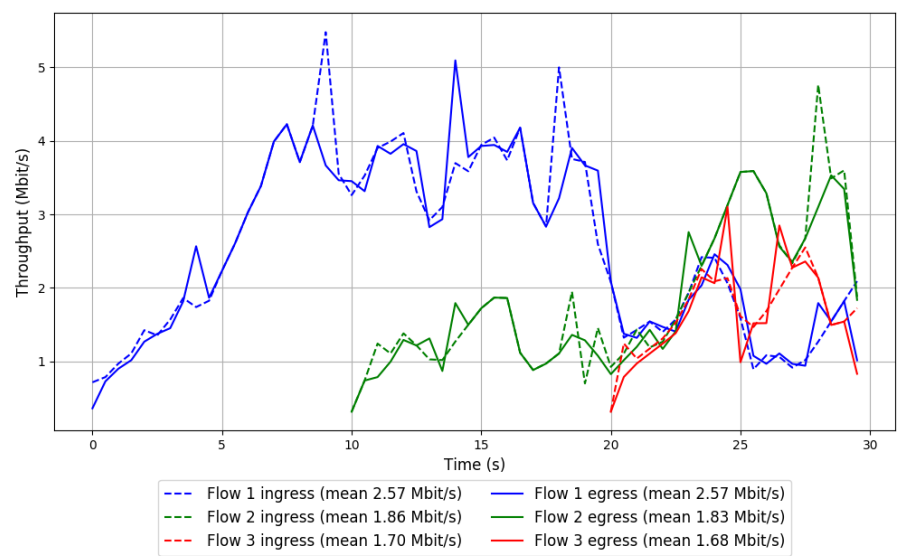
-- Flow 3:

Average throughput: 1.68 Mbit/s

95th percentile per-packet one-way delay: 112.790 ms

Loss rate: 3.25%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-09 13:04:31

End at: 2018-01-09 13:05:01

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 113.087 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 1.72 Mbit/s

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

Loss rate: 1.27%

-- Flow 2:

Average throughput: 3.21 Mbit/s

95th percentile per-packet one-way delay: 113.175 ms

Loss rate: 1.33%

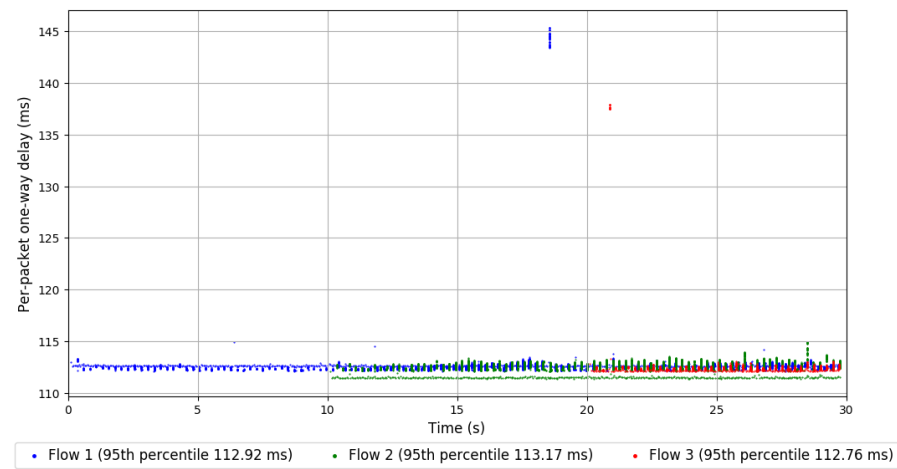
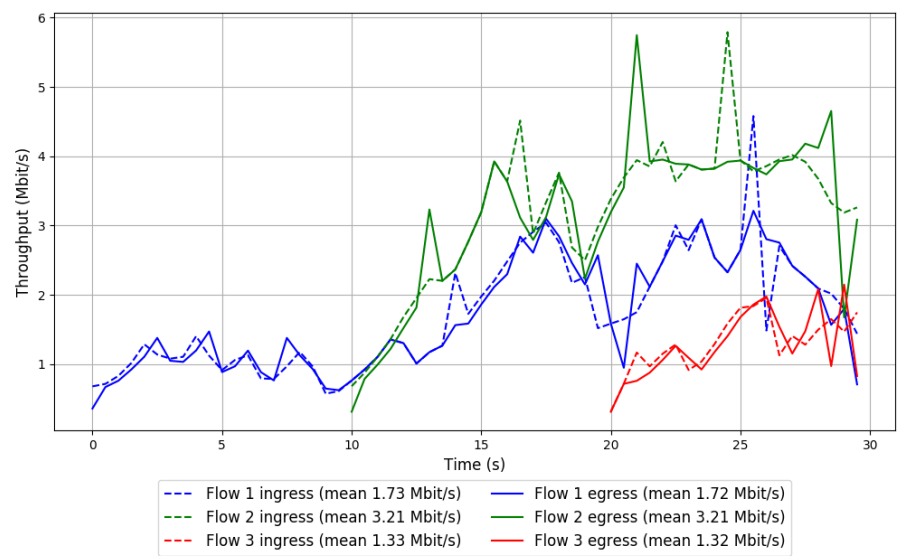
-- Flow 3:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 112.758 ms

Loss rate: 3.51%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-09 13:20:25

End at: 2018-01-09 13:20:55

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 112.113 ms

Loss rate: 2.76%

-- Flow 1:

Average throughput: 2.14 Mbit/s

95th percentile per-packet one-way delay: 112.161 ms

Loss rate: 2.97%

-- Flow 2:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 111.238 ms

Loss rate: 1.93%

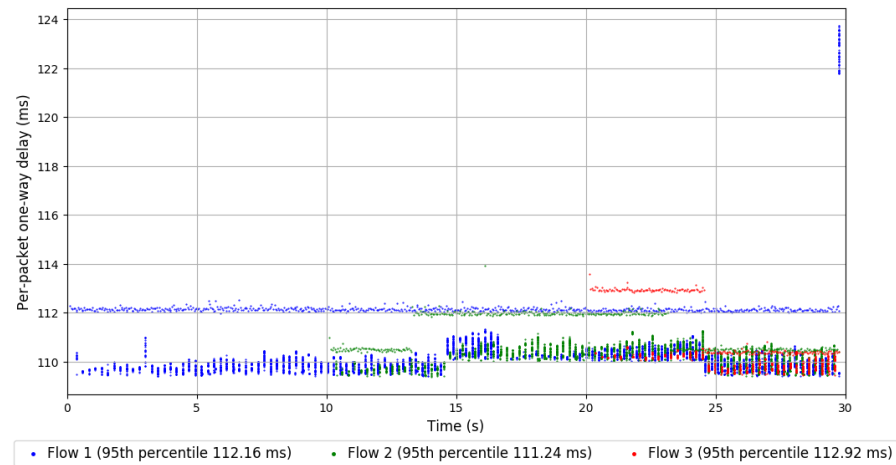
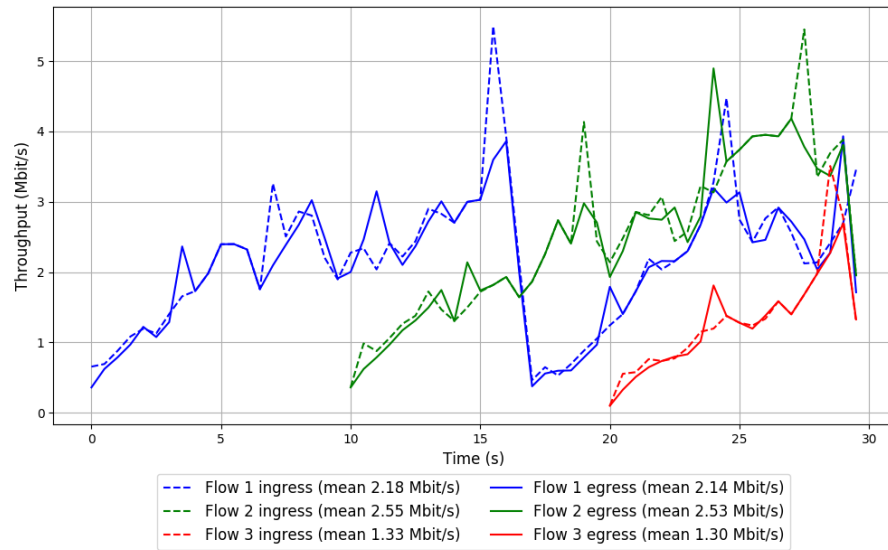
-- Flow 3:

Average throughput: 1.30 Mbit/s

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

Loss rate: 4.91%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-09 13:35:40

End at: 2018-01-09 13:36:10

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.03 Mbit/s

95th percentile per-packet one-way delay: 110.992 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 2.72 Mbit/s

95th percentile per-packet one-way delay: 111.162 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 110.691 ms

Loss rate: 0.72%

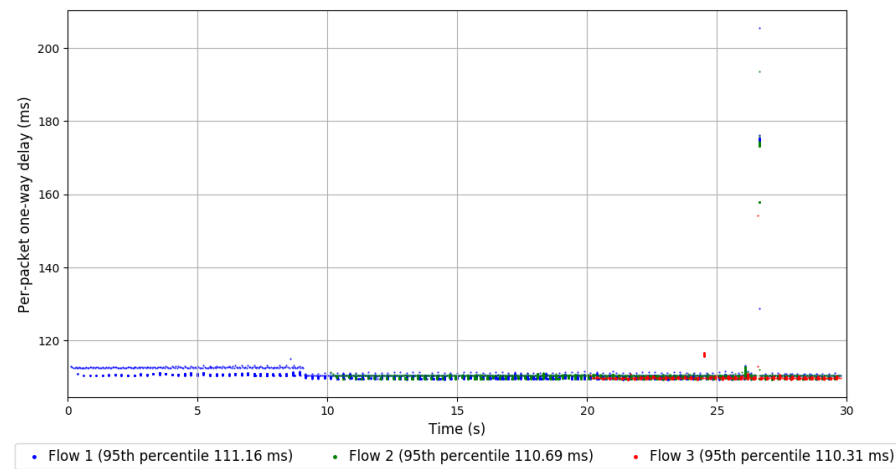
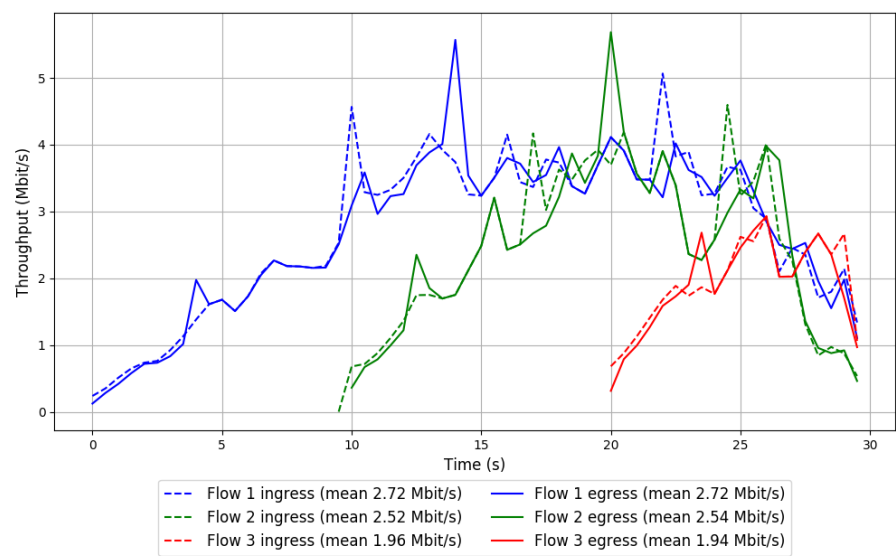
-- Flow 3:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 110.315 ms

Loss rate: 2.75%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-09 13:50:55

End at: 2018-01-09 13:51:25

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.52 Mbit/s

95th percentile per-packet one-way delay: 115.030 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 115.050 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 114.983 ms

Loss rate: 1.71%

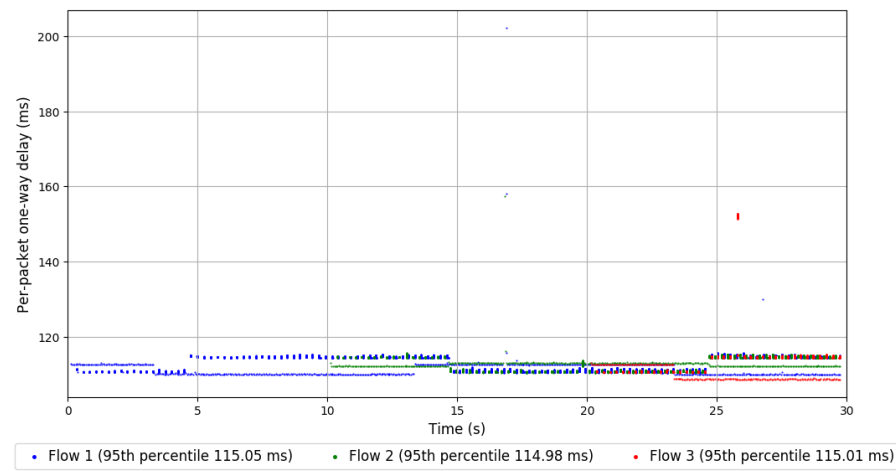
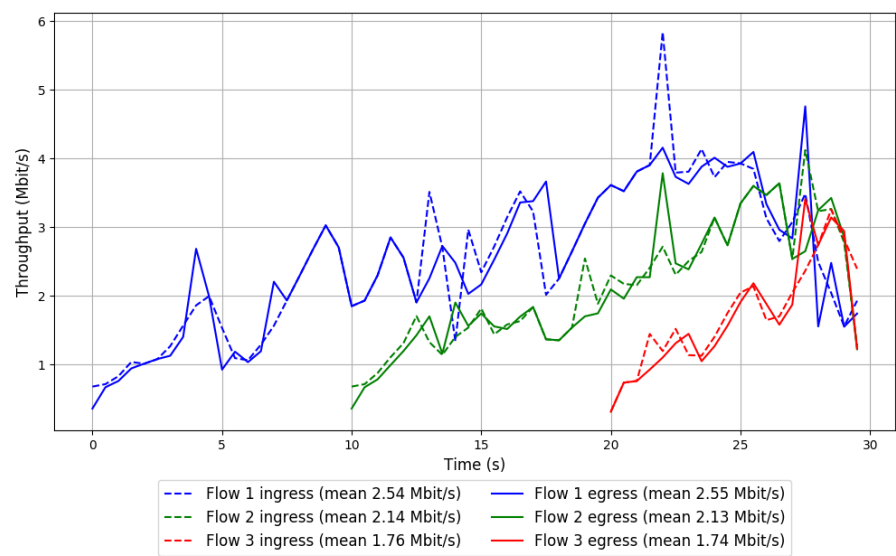
-- Flow 3:

Average throughput: 1.74 Mbit/s

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

Loss rate: 3.43%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-09 14:06:09

End at: 2018-01-09 14:06:39

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.49 Mbit/s

95th percentile per-packet one-way delay: 115.122 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 115.171 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 115.017 ms

Loss rate: 1.46%

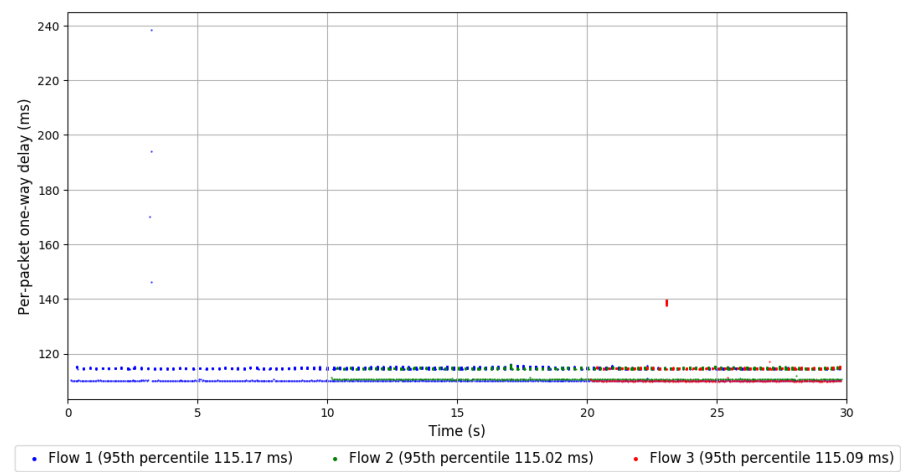
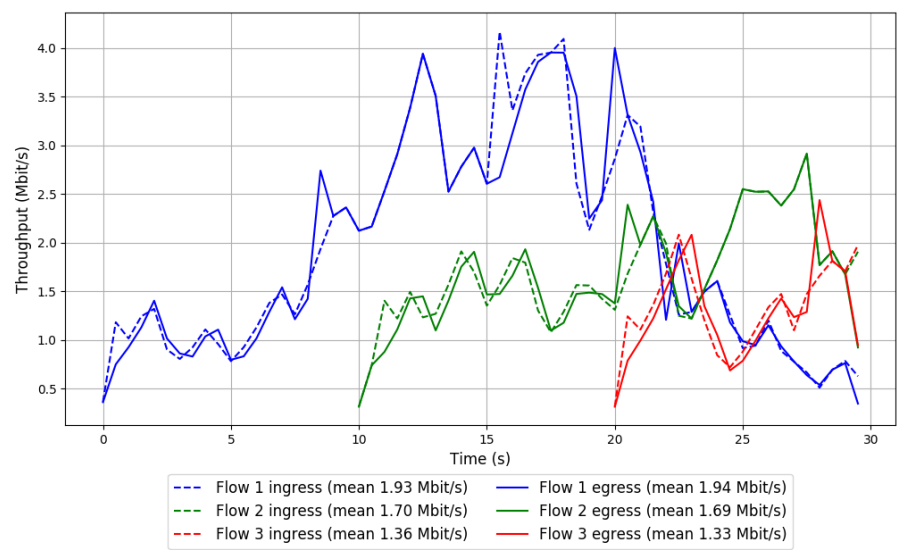
-- Flow 3:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 115.091 ms

Loss rate: 3.87%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-09 14:21:20

End at: 2018-01-09 14:21:50

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 115.128 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 1.72 Mbit/s

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

Loss rate: 1.03%

-- Flow 2:

Average throughput: 1.94 Mbit/s

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

Loss rate: 1.42%

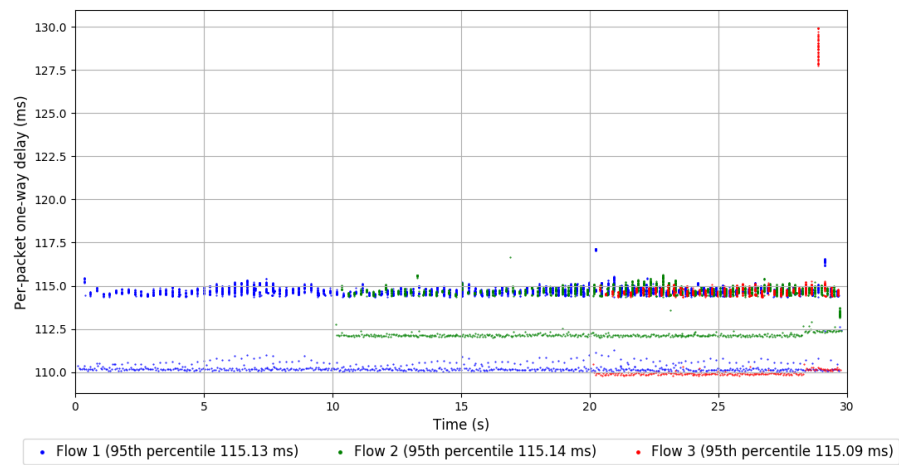
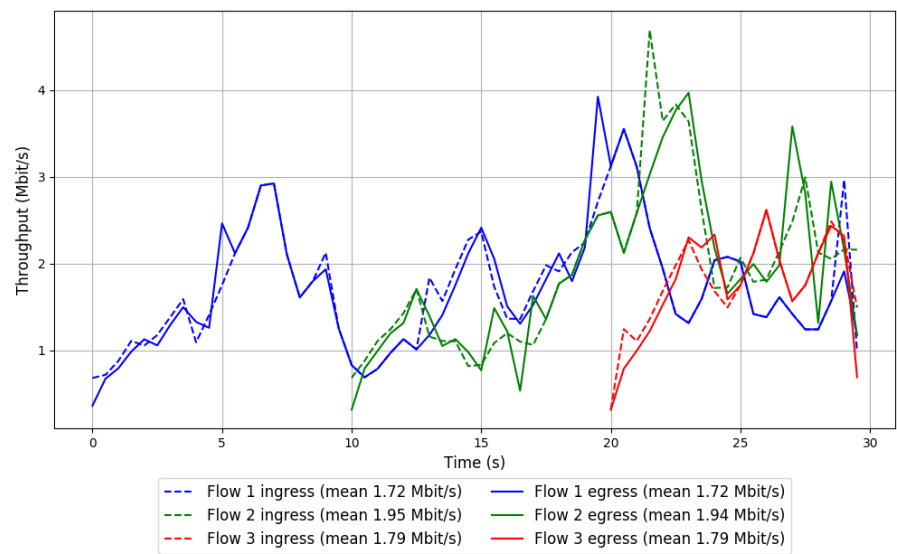
-- Flow 3:

Average throughput: 1.79 Mbit/s

95th percentile per-packet one-way delay: 115.090 ms

Loss rate: 2.29%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-09 14:36:07

End at: 2018-01-09 14:36:37

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 114.946 ms

Loss rate: 1.90%

-- Flow 1:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 115.012 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 114.870 ms

Loss rate: 1.94%

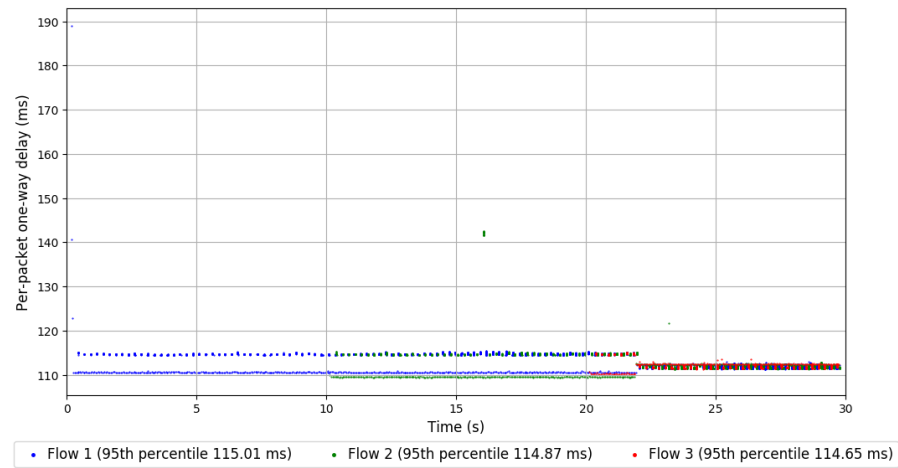
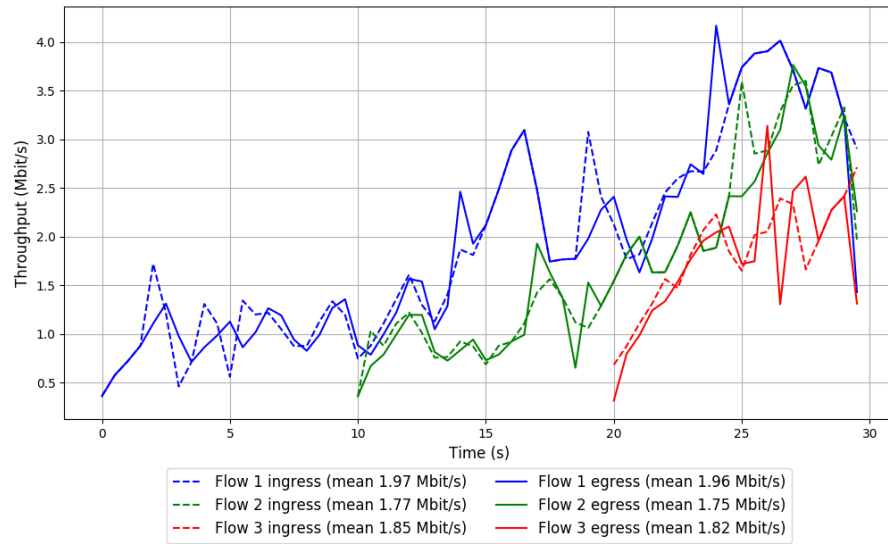
-- Flow 3:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 114.649 ms

Loss rate: 3.85%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-09 14:51:41

End at: 2018-01-09 14:52:11

Below is generated by plot.py at 2018-01-09 18:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 112.922 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 113.032 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 111.485 ms

Loss rate: 1.51%

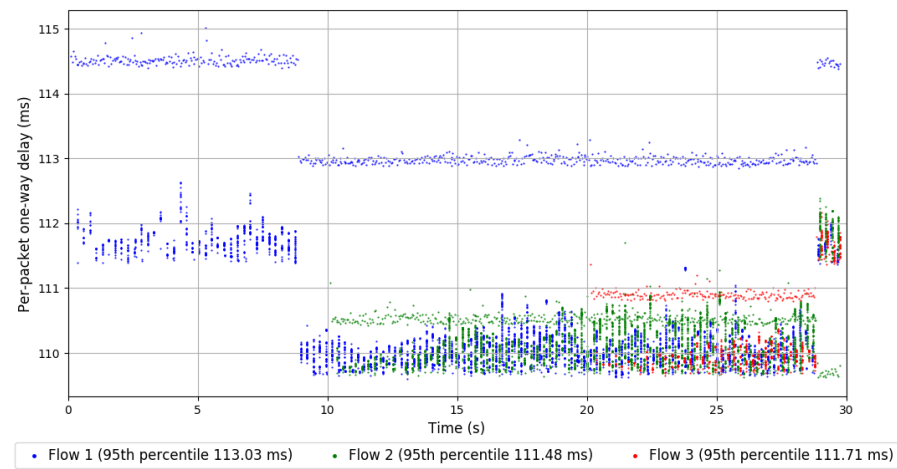
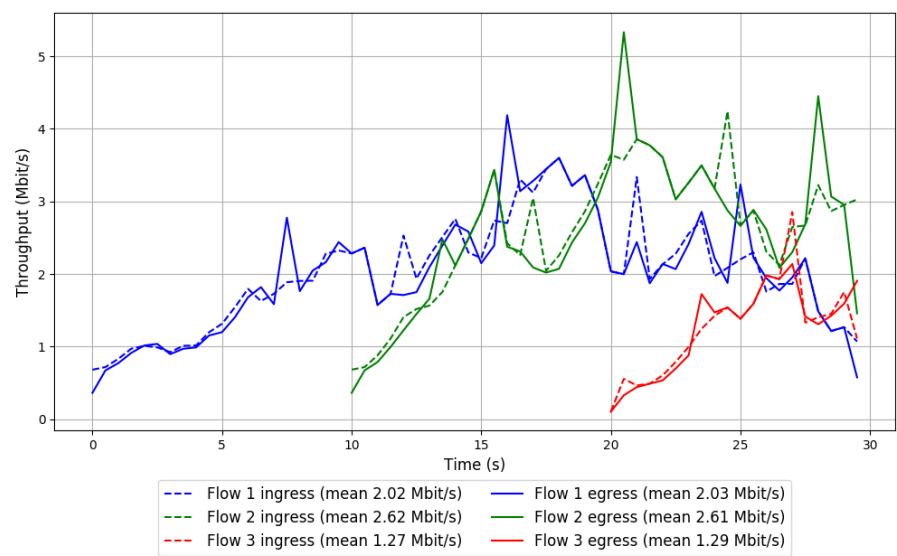
-- Flow 3:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 111.709 ms

Loss rate: 0.49%

Run 10: Report of Sprout — Data Link

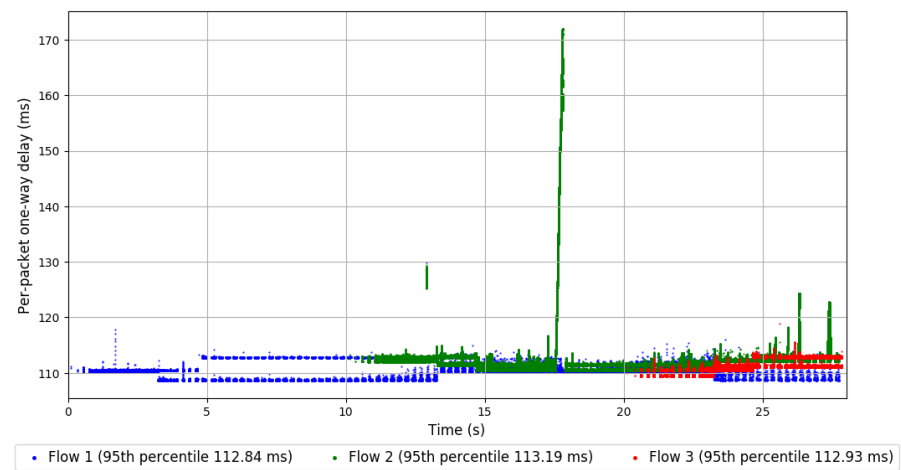
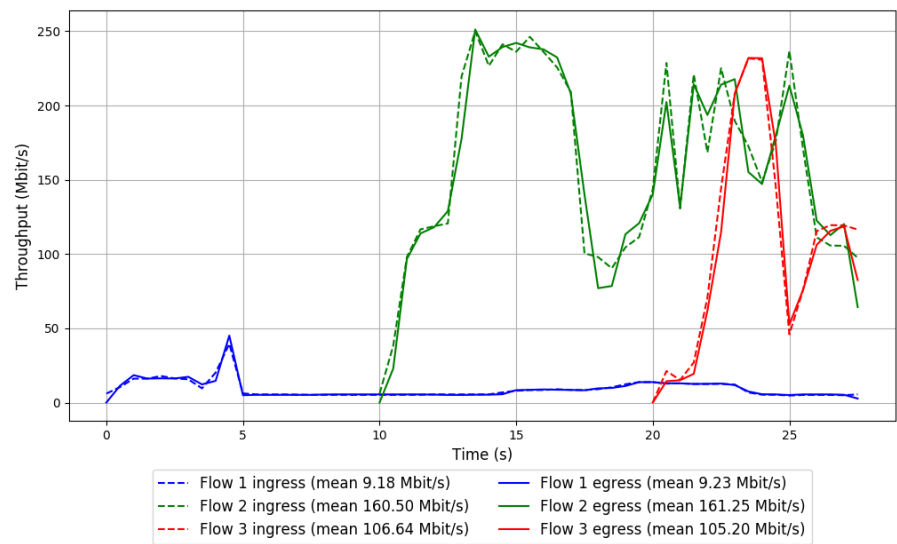


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-09 12:31:33
End at: 2018-01-09 12:32:03

# Below is generated by plot.py at 2018-01-09 18:01:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 140.85 Mbit/s
95th percentile per-packet one-way delay: 113.024 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 9.23 Mbit/s
95th percentile per-packet one-way delay: 112.844 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 161.25 Mbit/s
95th percentile per-packet one-way delay: 113.193 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 105.20 Mbit/s
95th percentile per-packet one-way delay: 112.926 ms
Loss rate: 3.83%
```


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

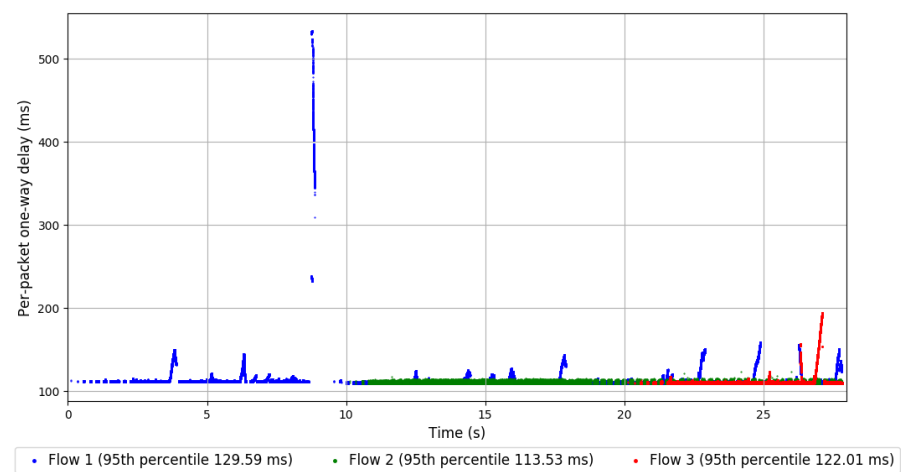
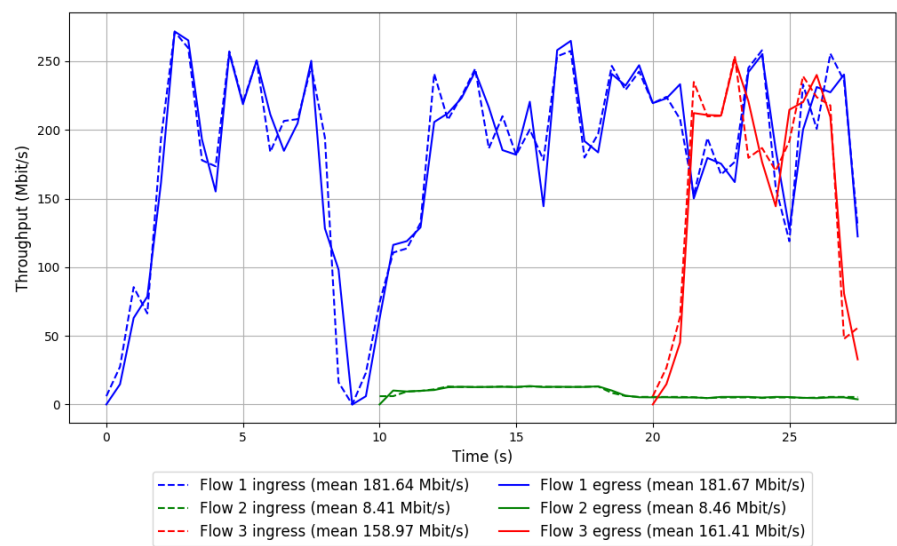


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-09 12:46:58
End at: 2018-01-09 12:47:28

# Below is generated by plot.py at 2018-01-09 18:02:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 231.70 Mbit/s
95th percentile per-packet one-way delay: 127.927 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 181.67 Mbit/s
95th percentile per-packet one-way delay: 129.595 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 8.46 Mbit/s
95th percentile per-packet one-way delay: 113.530 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 161.41 Mbit/s
95th percentile per-packet one-way delay: 122.014 ms
Loss rate: 1.32%
```

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

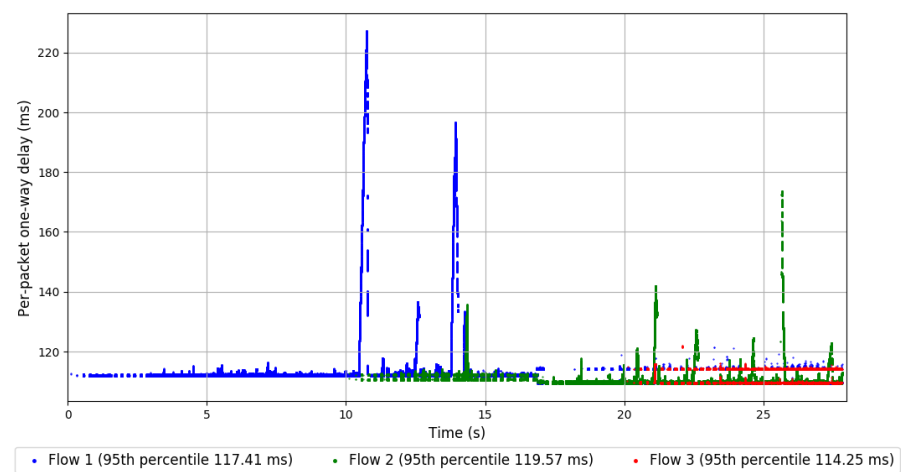
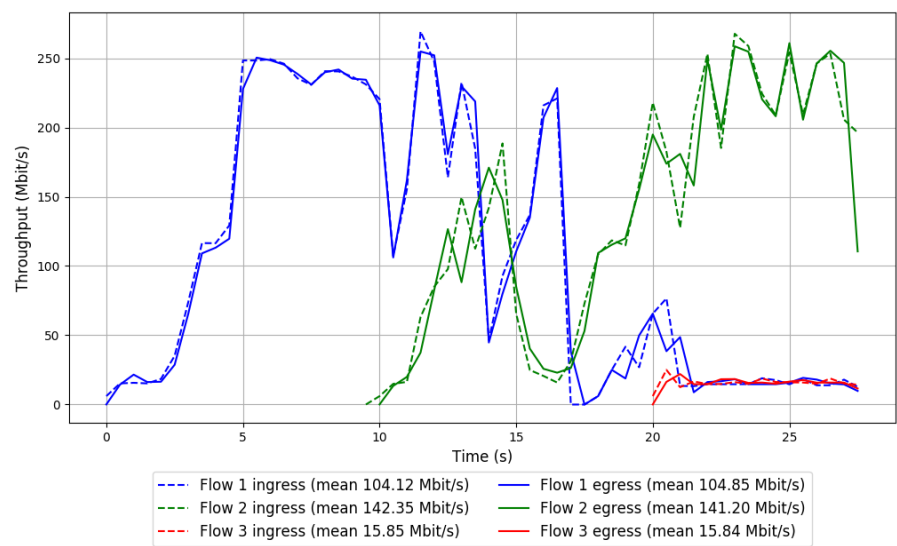


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-09 13:02:11
End at: 2018-01-09 13:02:41

# Below is generated by plot.py at 2018-01-09 18:02:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 199.54 Mbit/s
95th percentile per-packet one-way delay: 118.791 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 104.85 Mbit/s
95th percentile per-packet one-way delay: 117.407 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 141.20 Mbit/s
95th percentile per-packet one-way delay: 119.570 ms
Loss rate: 2.02%
-- Flow 3:
Average throughput: 15.84 Mbit/s
95th percentile per-packet one-way delay: 114.251 ms
Loss rate: 2.85%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-09 13:17:54

End at: 2018-01-09 13:18:24

Below is generated by plot.py at 2018-01-09 18:04:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 298.51 Mbit/s

95th percentile per-packet one-way delay: 117.446 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 172.52 Mbit/s

95th percentile per-packet one-way delay: 115.191 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 168.13 Mbit/s

95th percentile per-packet one-way delay: 123.047 ms

Loss rate: 1.08%

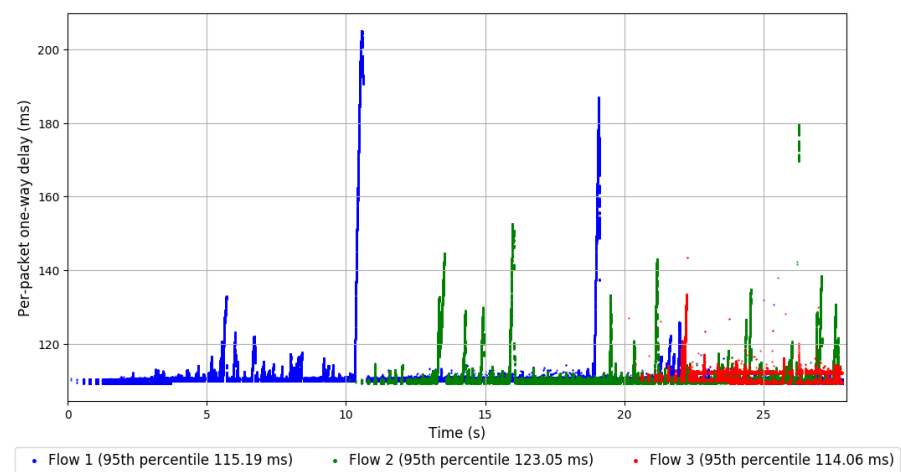
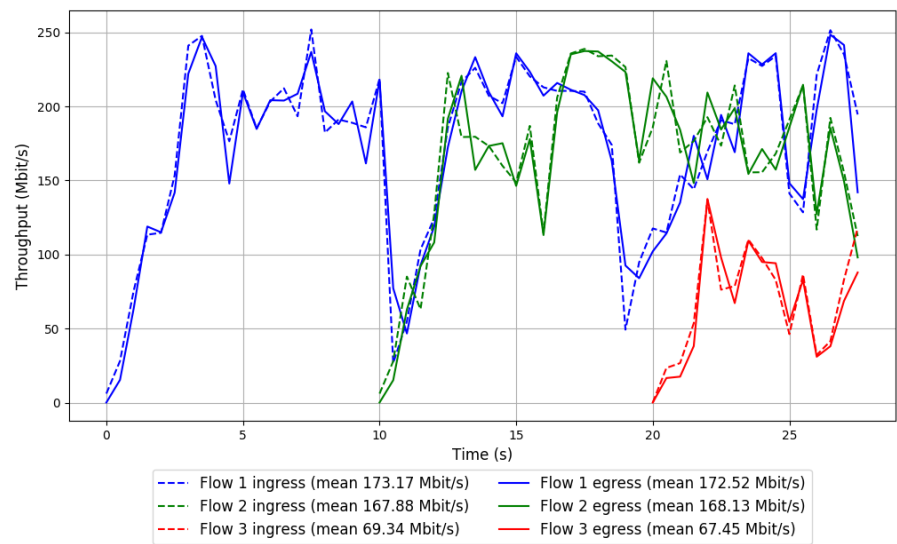
-- Flow 3:

Average throughput: 67.45 Mbit/s

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

Loss rate: 5.22%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-09 13:33:39

End at: 2018-01-09 13:34:09

Below is generated by plot.py at 2018-01-09 18:04:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.02 Mbit/s

95th percentile per-packet one-way delay: 112.115 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 15.73 Mbit/s

95th percentile per-packet one-way delay: 111.619 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 9.46 Mbit/s

95th percentile per-packet one-way delay: 111.920 ms

Loss rate: 0.65%

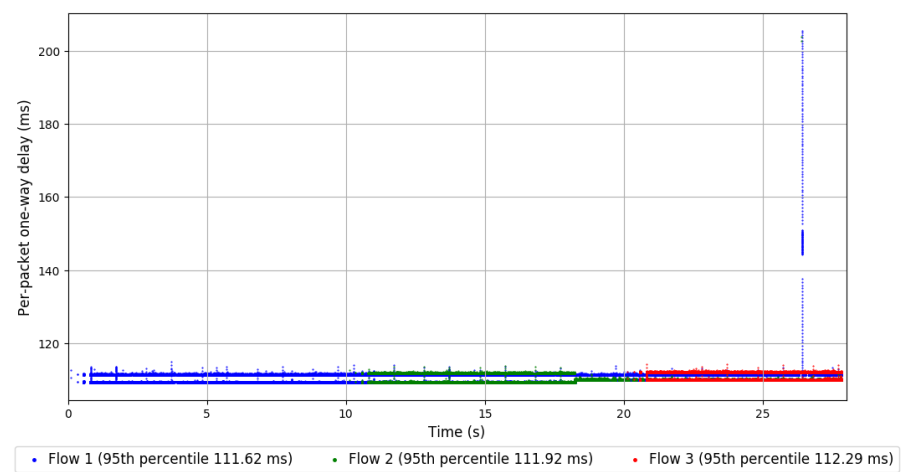
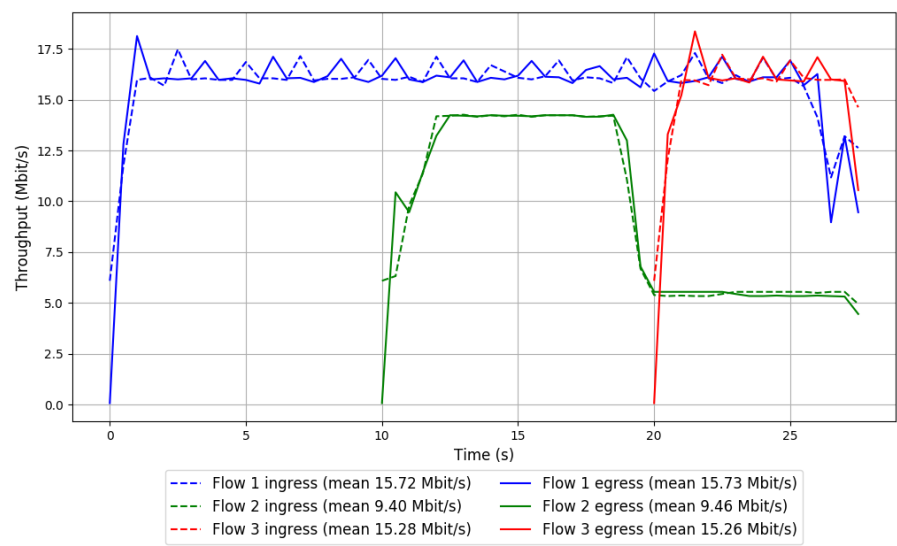
-- Flow 3:

Average throughput: 15.26 Mbit/s

95th percentile per-packet one-way delay: 112.286 ms

Loss rate: 2.97%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-09 13:48:56

End at: 2018-01-09 13:49:26

Below is generated by plot.py at 2018-01-09 18:04:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.44 Mbit/s

95th percentile per-packet one-way delay: 114.251 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 114.271 ms

Loss rate: 1.61%

-- Flow 2:

Average throughput: 9.60 Mbit/s

95th percentile per-packet one-way delay: 112.591 ms

Loss rate: 0.81%

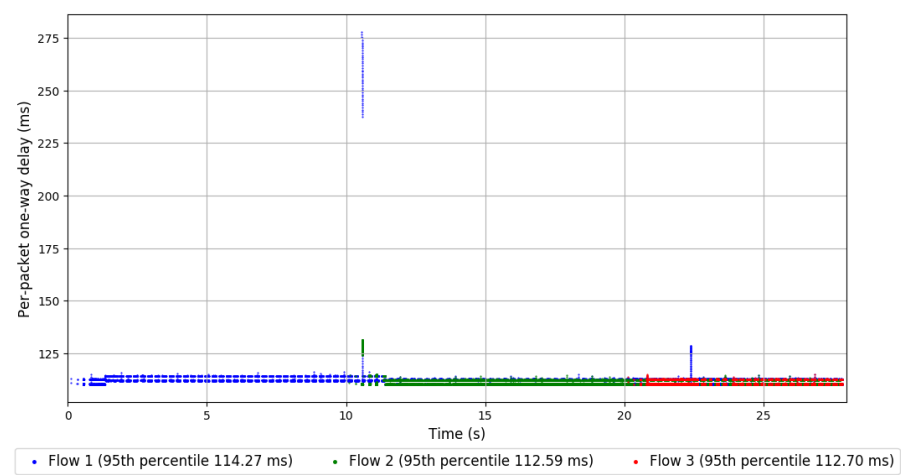
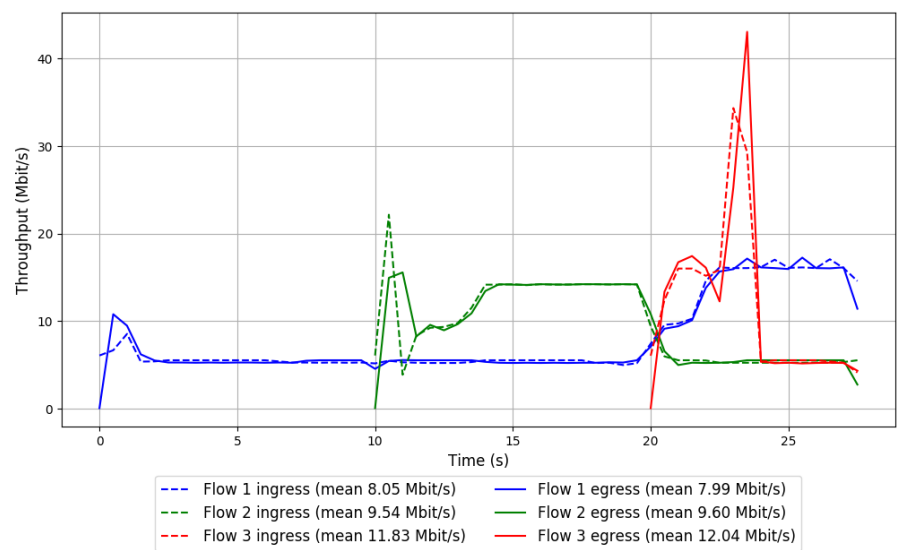
-- Flow 3:

Average throughput: 12.04 Mbit/s

95th percentile per-packet one-way delay: 112.701 ms

Loss rate: 1.09%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-09 14:03:58

End at: 2018-01-09 14:04:28

Below is generated by plot.py at 2018-01-09 18:04:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.05 Mbit/s

95th percentile per-packet one-way delay: 117.861 ms

Loss rate: 2.67%

-- Flow 1:

Average throughput: 28.13 Mbit/s

95th percentile per-packet one-way delay: 114.468 ms

Loss rate: 1.57%

-- Flow 2:

Average throughput: 99.27 Mbit/s

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

Loss rate: 1.29%

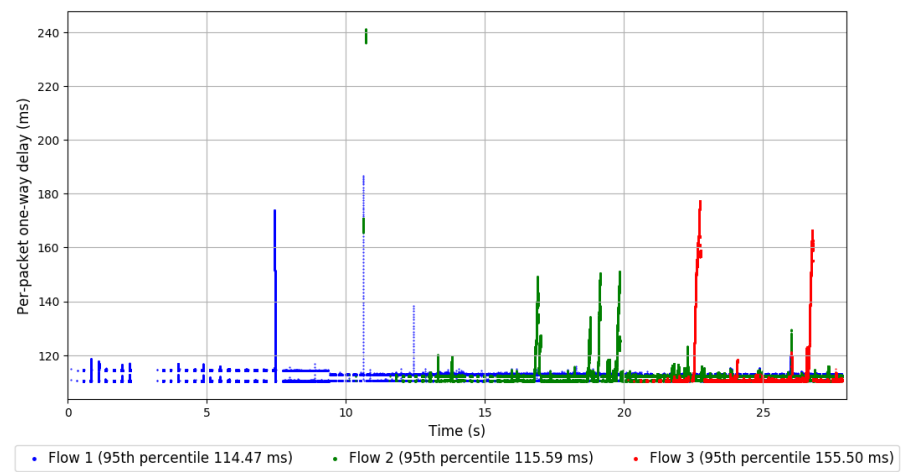
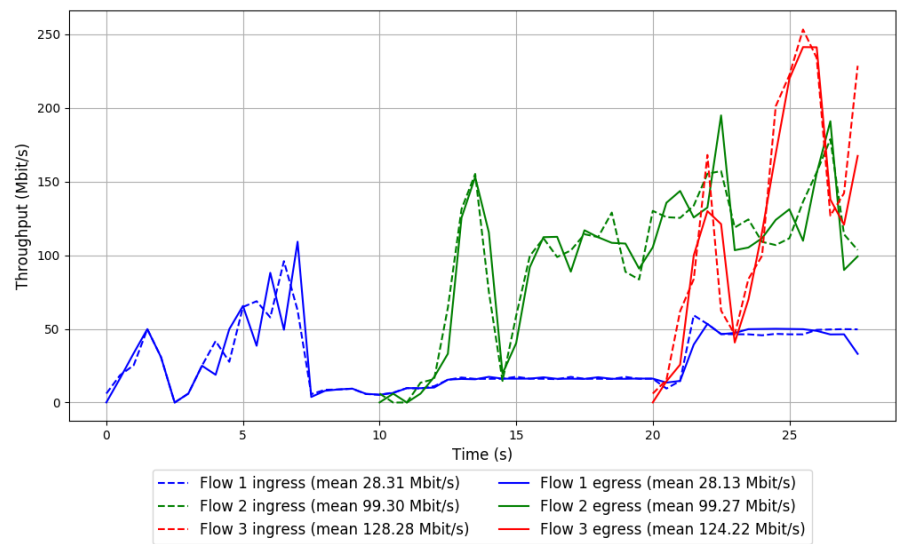
-- Flow 3:

Average throughput: 124.22 Mbit/s

95th percentile per-packet one-way delay: 155.496 ms

Loss rate: 5.94%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-09 14:19:15

End at: 2018-01-09 14:19:45

Below is generated by plot.py at 2018-01-09 18:04:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.98 Mbit/s

95th percentile per-packet one-way delay: 130.693 ms

Loss rate: 2.15%

-- Flow 1:

Average throughput: 20.20 Mbit/s

95th percentile per-packet one-way delay: 159.566 ms

Loss rate: 3.33%

-- Flow 2:

Average throughput: 43.54 Mbit/s

95th percentile per-packet one-way delay: 114.469 ms

Loss rate: 1.21%

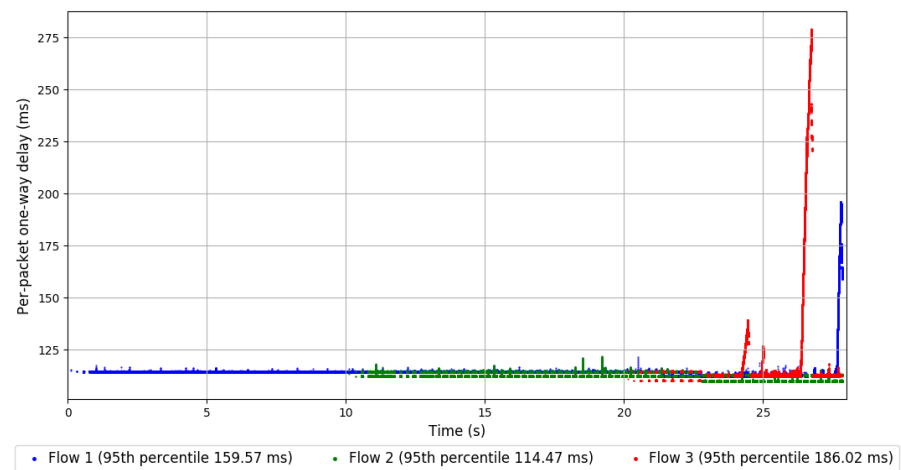
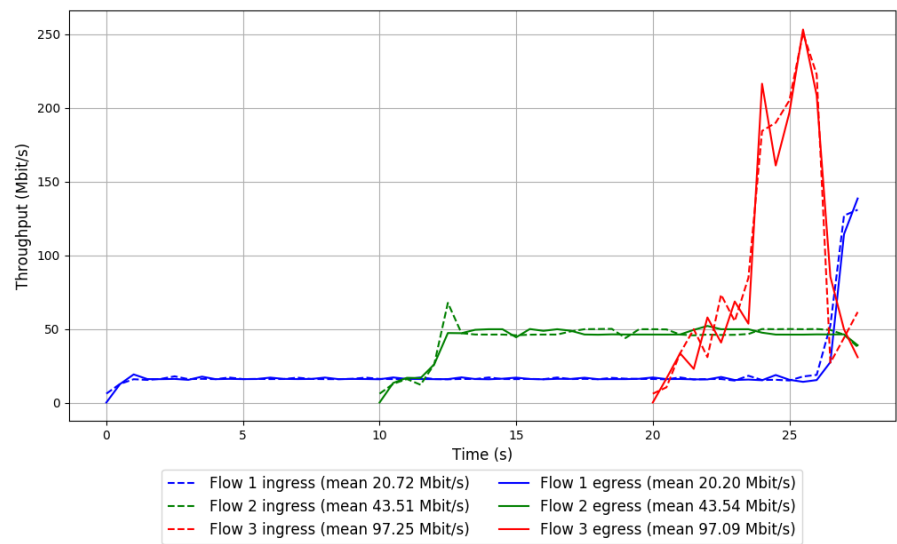
-- Flow 3:

Average throughput: 97.09 Mbit/s

95th percentile per-packet one-way delay: 186.018 ms

Loss rate: 2.22%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-01-09 14:34:08

End at: 2018-01-09 14:34:38

Below is generated by plot.py at 2018-01-09 18:04:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.40 Mbit/s

95th percentile per-packet one-way delay: 114.512 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 13.45 Mbit/s

95th percentile per-packet one-way delay: 114.472 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 8.94 Mbit/s

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

Loss rate: 0.87%

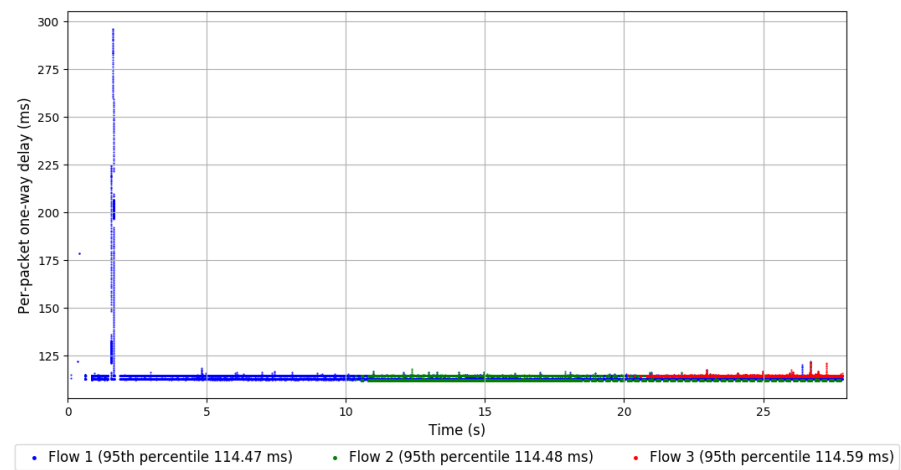
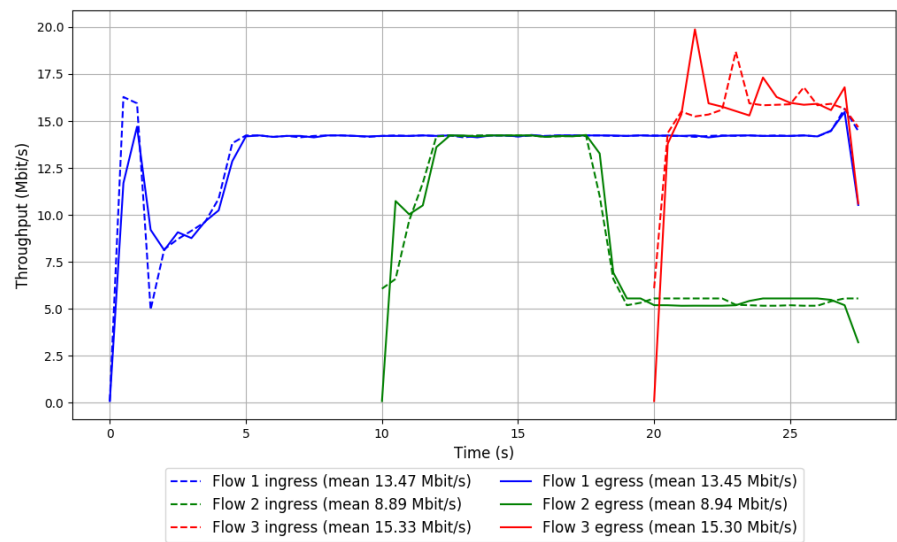
-- Flow 3:

Average throughput: 15.30 Mbit/s

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

Loss rate: 3.01%

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

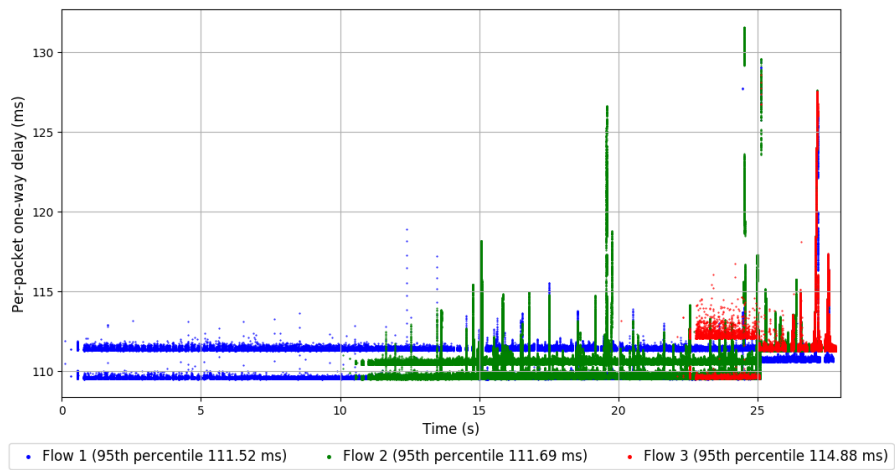
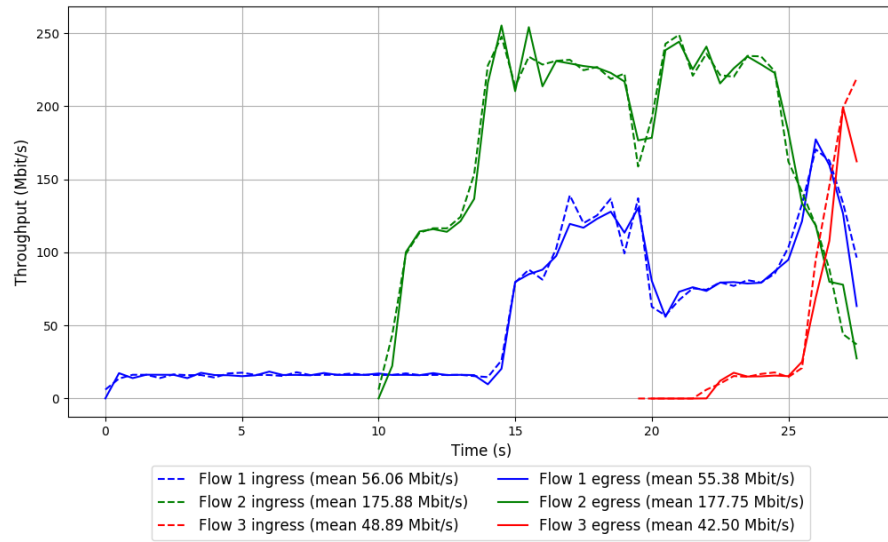


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-09 14:49:22
End at: 2018-01-09 14:49:52

# Below is generated by plot.py at 2018-01-09 18:05:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 180.34 Mbit/s
95th percentile per-packet one-way delay: 111.749 ms
Loss rate: 2.16%
-- Flow 1:
Average throughput: 55.38 Mbit/s
95th percentile per-packet one-way delay: 111.515 ms
Loss rate: 2.34%
-- Flow 2:
Average throughput: 177.75 Mbit/s
95th percentile per-packet one-way delay: 111.693 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 42.50 Mbit/s
95th percentile per-packet one-way delay: 114.880 ms
Loss rate: 15.56%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-09 12:29:32

End at: 2018-01-09 12:30:02

Below is generated by plot.py at 2018-01-09 18:05:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.43 Mbit/s

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

Loss rate: 1.12%

-- Flow 1:

Average throughput: 29.81 Mbit/s

95th percentile per-packet one-way delay: 113.520 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 6.59 Mbit/s

95th percentile per-packet one-way delay: 113.547 ms

Loss rate: 1.25%

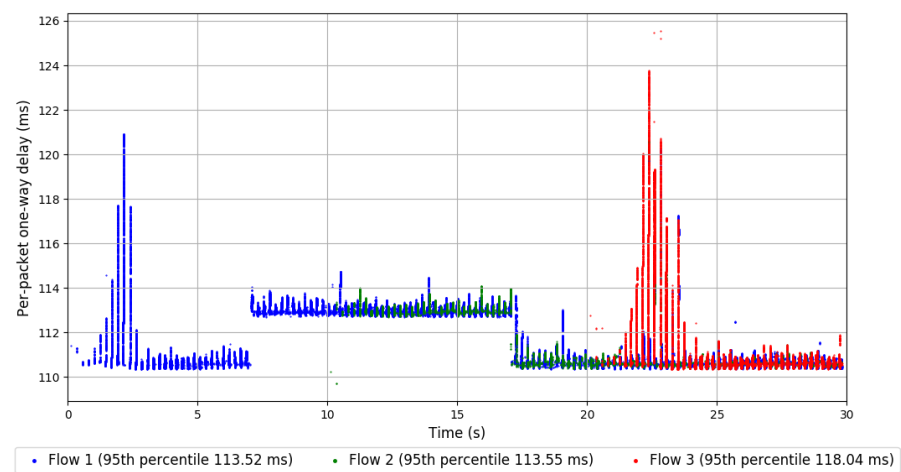
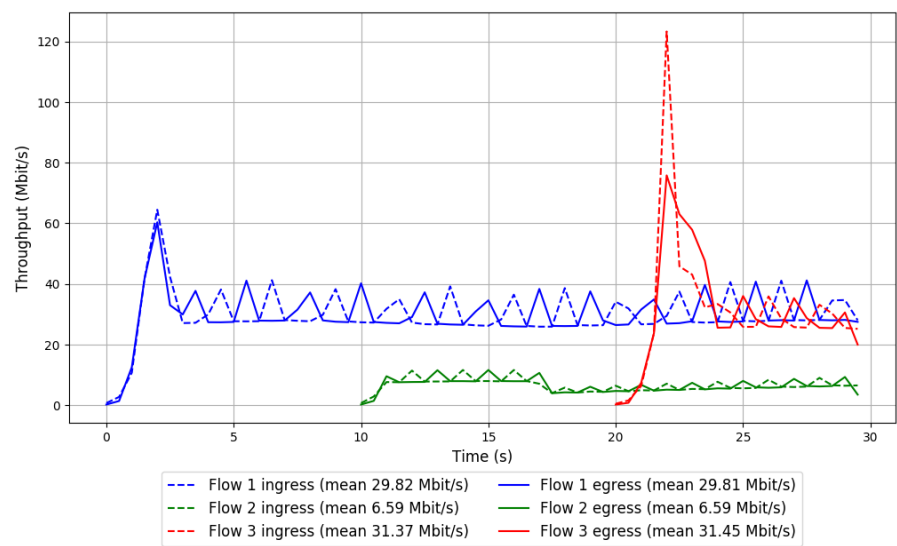
-- Flow 3:

Average throughput: 31.45 Mbit/s

95th percentile per-packet one-way delay: 118.041 ms

Loss rate: 2.04%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-09 12:45:04

End at: 2018-01-09 12:45:34

Below is generated by plot.py at 2018-01-09 18:05:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 38.41 Mbit/s

95th percentile per-packet one-way delay: 113.400 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 17.50 Mbit/s

95th percentile per-packet one-way delay: 112.599 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 19.33 Mbit/s

95th percentile per-packet one-way delay: 113.591 ms

Loss rate: 2.54%

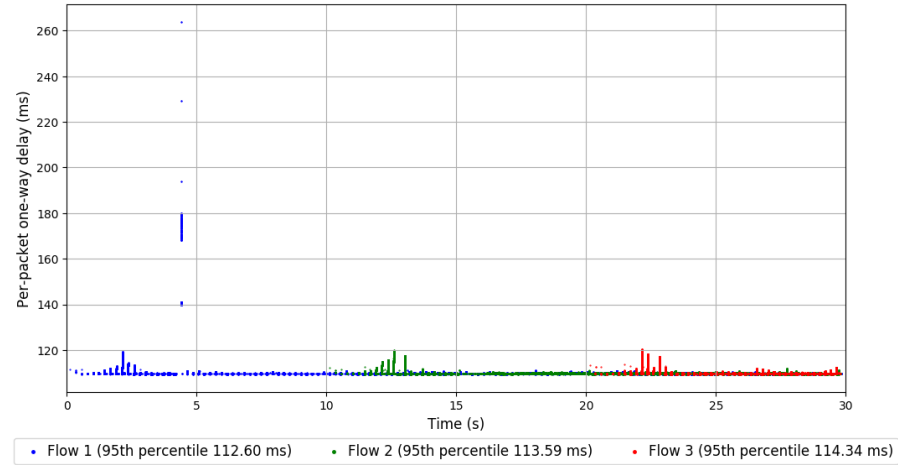
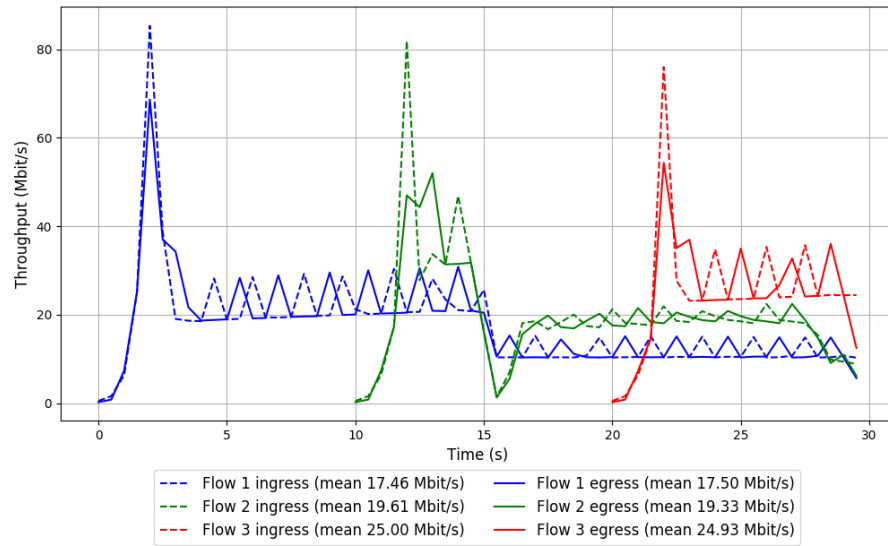
-- Flow 3:

Average throughput: 24.93 Mbit/s

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

Loss rate: 2.56%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-09 13:00:19

End at: 2018-01-09 13:00:49

Below is generated by plot.py at 2018-01-09 18:05:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.89 Mbit/s

95th percentile per-packet one-way delay: 115.097 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 21.58 Mbit/s

95th percentile per-packet one-way delay: 112.821 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 39.35 Mbit/s

95th percentile per-packet one-way delay: 111.355 ms

Loss rate: 0.56%

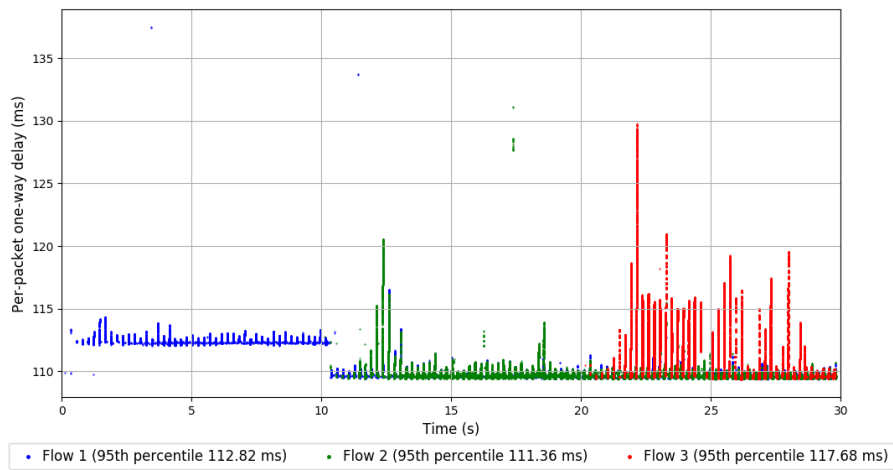
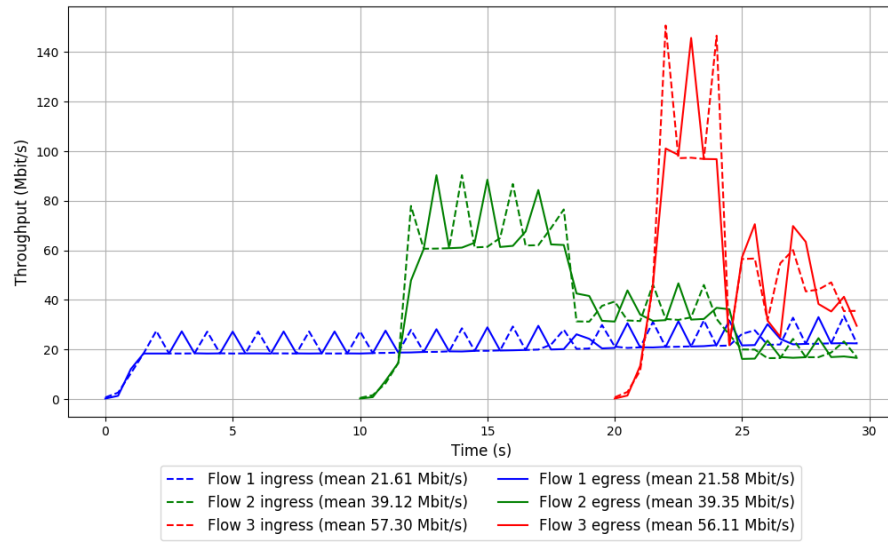
-- Flow 3:

Average throughput: 56.11 Mbit/s

95th percentile per-packet one-way delay: 117.683 ms

Loss rate: 4.68%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-09 13:15:57

End at: 2018-01-09 13:16:27

Below is generated by plot.py at 2018-01-09 18:05:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.36 Mbit/s

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

Loss rate: 1.64%

-- Flow 1:

Average throughput: 36.51 Mbit/s

95th percentile per-packet one-way delay: 112.265 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 110.642 ms

Loss rate: 2.27%

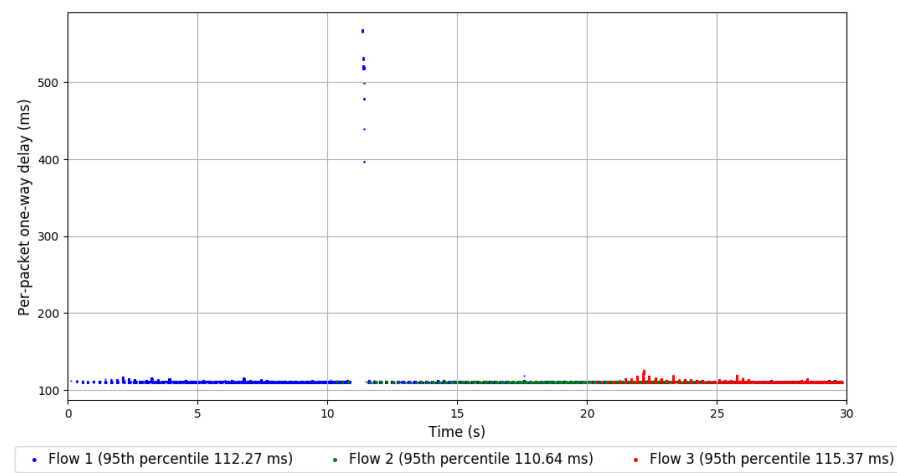
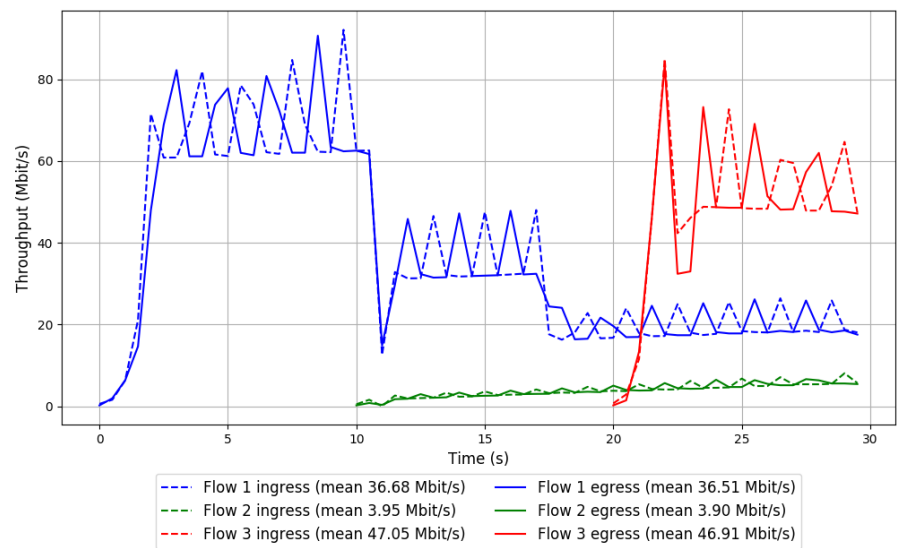
-- Flow 3:

Average throughput: 46.91 Mbit/s

95th percentile per-packet one-way delay: 115.366 ms

Loss rate: 2.54%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-09 13:31:41

End at: 2018-01-09 13:32:11

Below is generated by plot.py at 2018-01-09 18:05:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.74 Mbit/s

95th percentile per-packet one-way delay: 117.029 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 73.14 Mbit/s

95th percentile per-packet one-way delay: 118.116 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 75.47 Mbit/s

95th percentile per-packet one-way delay: 112.601 ms

Loss rate: 1.25%

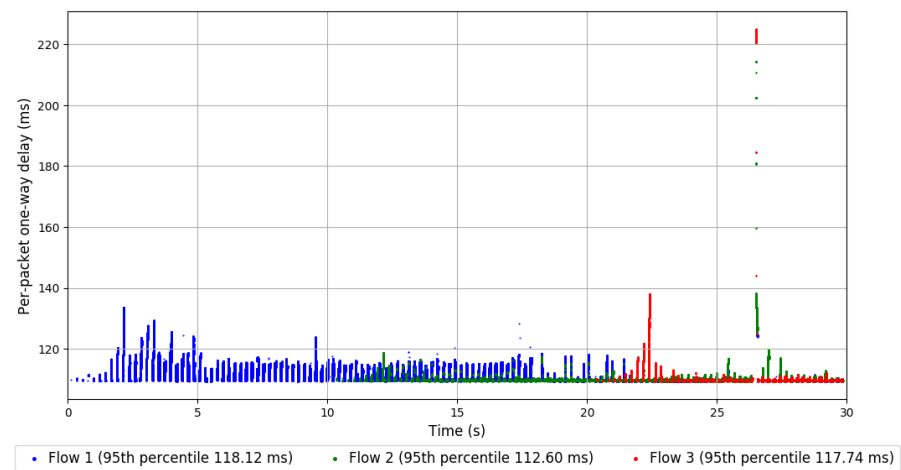
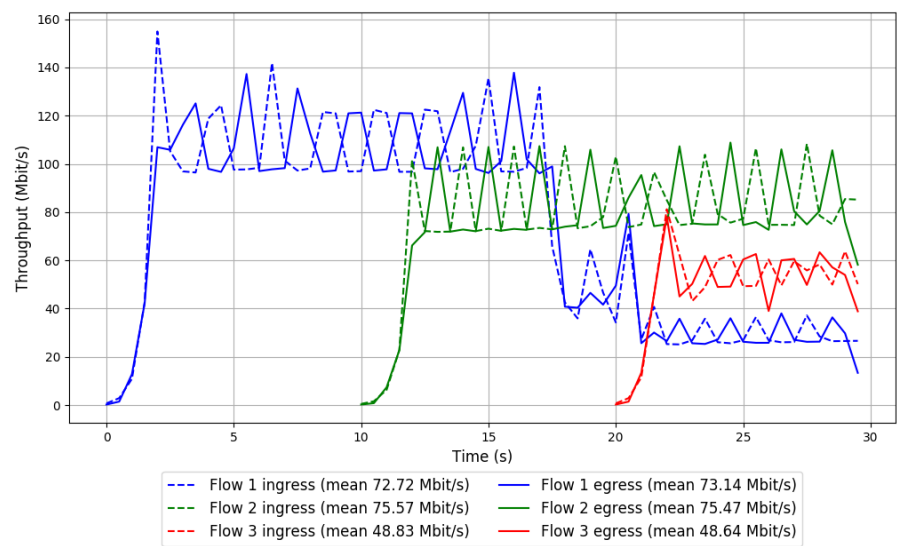
-- Flow 3:

Average throughput: 48.64 Mbit/s

95th percentile per-packet one-way delay: 117.737 ms

Loss rate: 2.60%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-09 13:47:08

End at: 2018-01-09 13:47:38

Below is generated by plot.py at 2018-01-09 18:05:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.68 Mbit/s

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

Loss rate: 1.39%

-- Flow 1:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 114.708 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 66.55 Mbit/s

95th percentile per-packet one-way delay: 114.715 ms

Loss rate: 1.22%

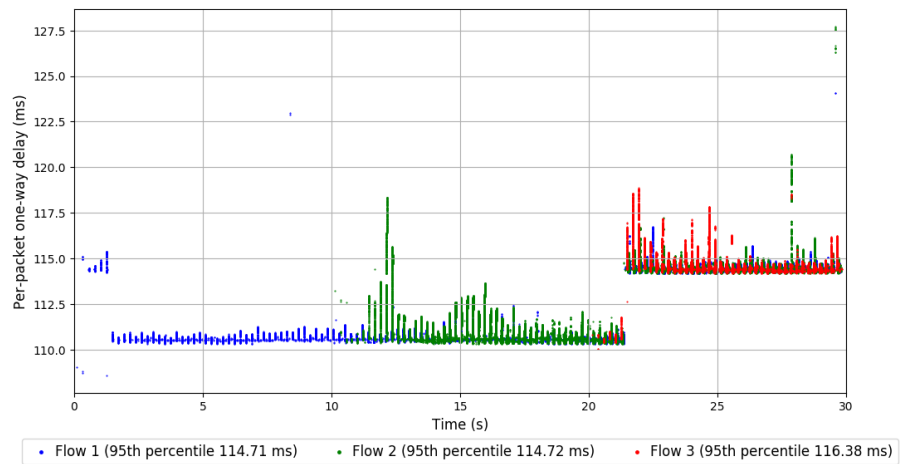
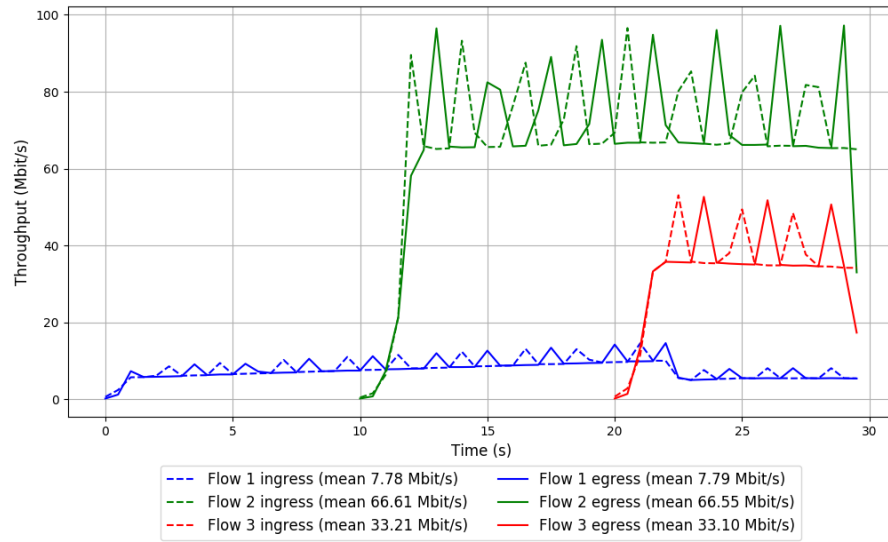
-- Flow 3:

Average throughput: 33.10 Mbit/s

95th percentile per-packet one-way delay: 116.379 ms

Loss rate: 2.58%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-09 14:01:58

End at: 2018-01-09 14:02:28

Below is generated by plot.py at 2018-01-09 18:05:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 37.44 Mbit/s

95th percentile per-packet one-way delay: 122.097 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 115.594 ms

Loss rate: 1.73%

-- Flow 2:

Average throughput: 42.89 Mbit/s

95th percentile per-packet one-way delay: 123.768 ms

Loss rate: 0.64%

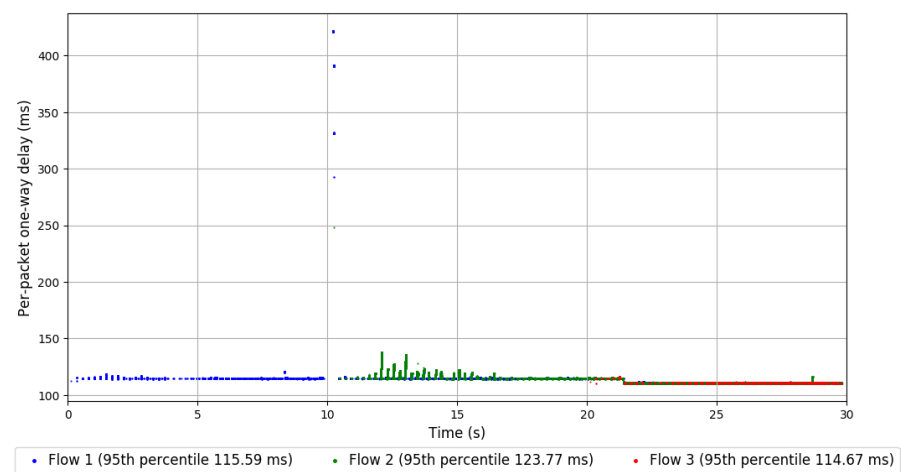
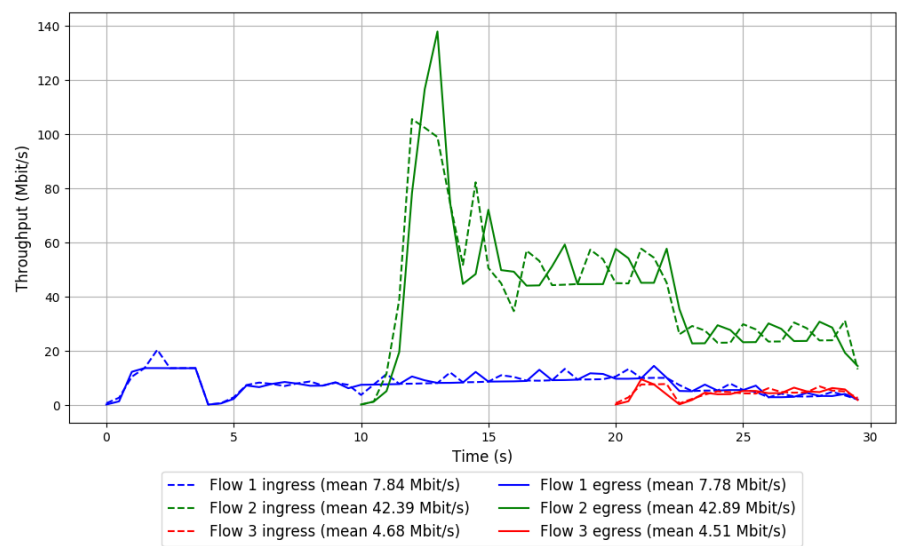
-- Flow 3:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 114.665 ms

Loss rate: 5.50%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-09 14:17:24

End at: 2018-01-09 14:17:54

Below is generated by plot.py at 2018-01-09 18:05:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.18 Mbit/s

95th percentile per-packet one-way delay: 115.198 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 32.27 Mbit/s

95th percentile per-packet one-way delay: 115.091 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 26.25 Mbit/s

95th percentile per-packet one-way delay: 116.035 ms

Loss rate: 1.16%

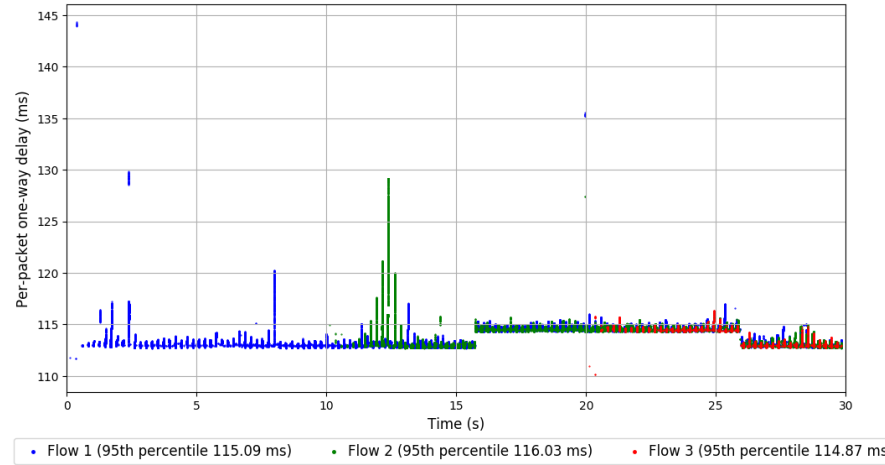
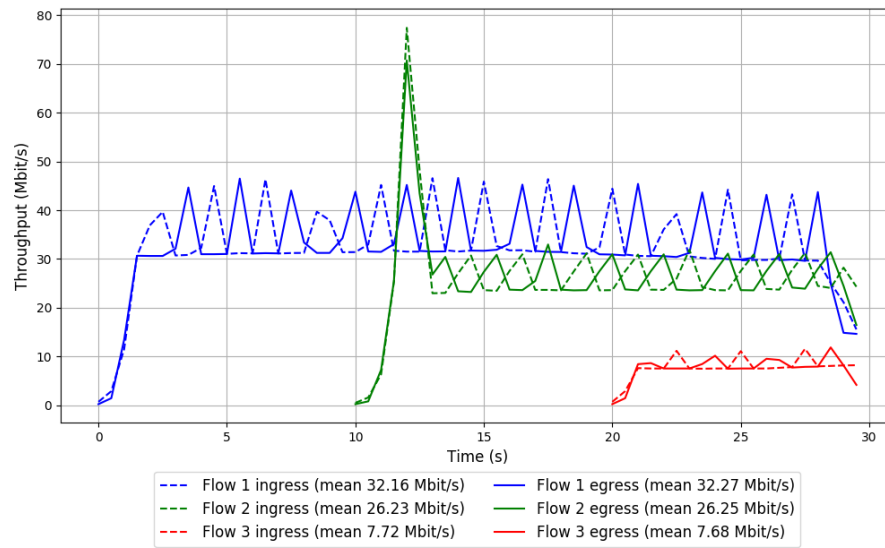
-- Flow 3:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 114.869 ms

Loss rate: 2.70%

Run 8: Report of TCP Vegas — Data Link

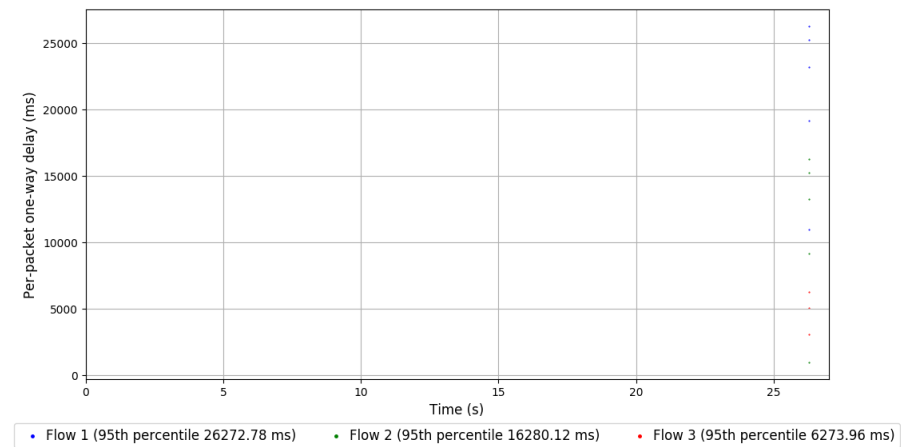
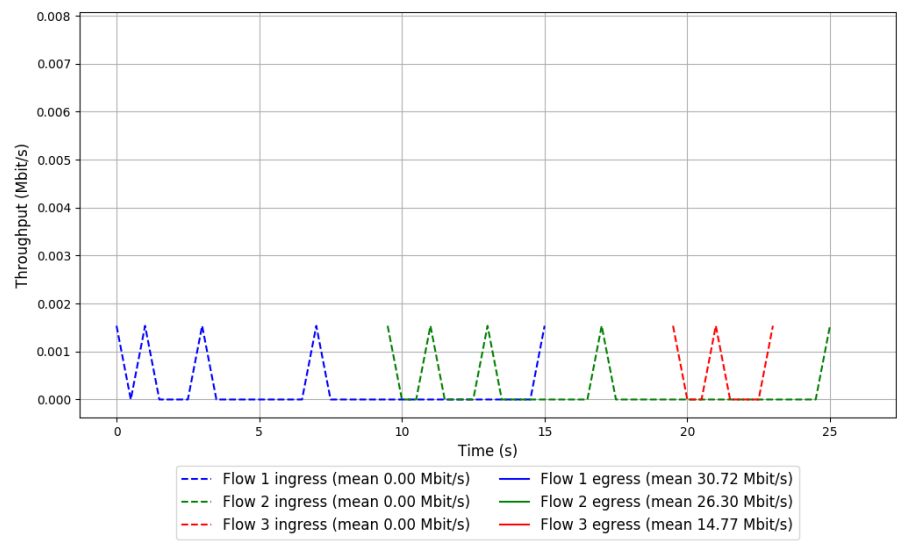


Run 9: Statistics of TCP Vegas

Start at: 2018-01-09 14:32:33

End at: 2018-01-09 14:33:03

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-09 14:47:13

End at: 2018-01-09 14:47:43

Below is generated by plot.py at 2018-01-09 18:05:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.96 Mbit/s

95th percentile per-packet one-way delay: 112.748 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 31.66 Mbit/s

95th percentile per-packet one-way delay: 113.047 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 47.25 Mbit/s

95th percentile per-packet one-way delay: 111.773 ms

Loss rate: 1.21%

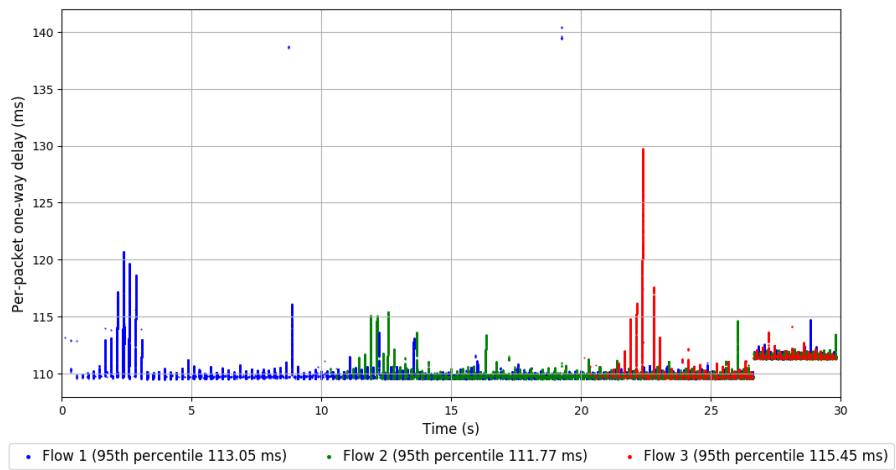
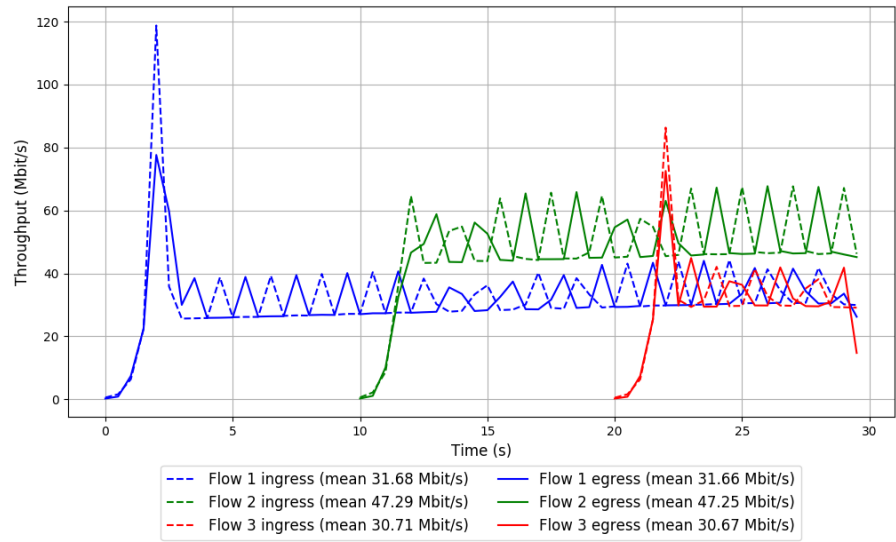
-- Flow 3:

Average throughput: 30.67 Mbit/s

95th percentile per-packet one-way delay: 115.452 ms

Loss rate: 2.39%

Run 10: Report of TCP Vegas — Data Link

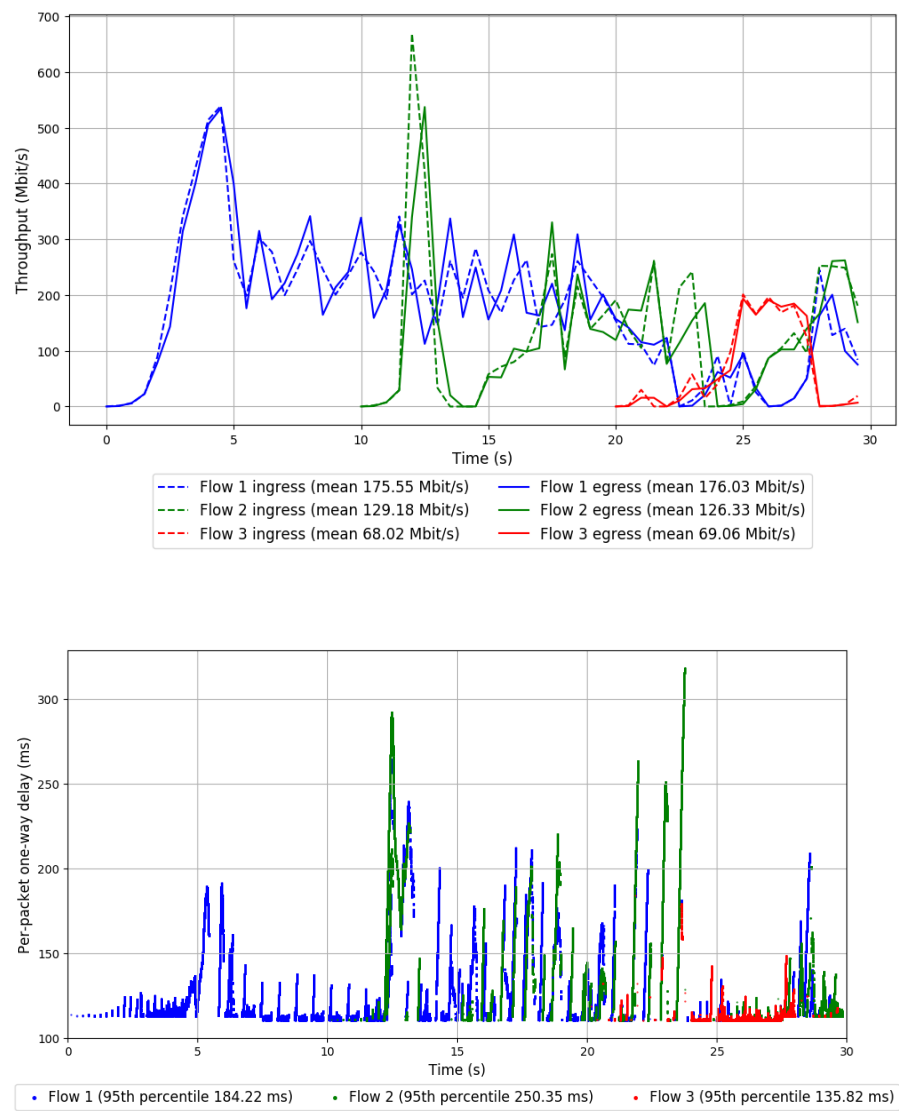


```
Run 1: Statistics of Verus

Start at: 2018-01-09 12:30:22
End at: 2018-01-09 12:30:52

# Below is generated by plot.py at 2018-01-09 18:07:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 280.91 Mbit/s
95th percentile per-packet one-way delay: 209.658 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 176.03 Mbit/s
95th percentile per-packet one-way delay: 184.225 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 126.33 Mbit/s
95th percentile per-packet one-way delay: 250.347 ms
Loss rate: 3.29%
-- Flow 3:
Average throughput: 69.06 Mbit/s
95th percentile per-packet one-way delay: 135.821 ms
Loss rate: 0.91%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-09 12:45:53

End at: 2018-01-09 12:46:23

Below is generated by plot.py at 2018-01-09 18:07:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 205.52 Mbit/s

95th percentile per-packet one-way delay: 314.410 ms

Loss rate: 6.84%

-- Flow 1:

Average throughput: 90.83 Mbit/s

95th percentile per-packet one-way delay: 180.303 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 77.67 Mbit/s

95th percentile per-packet one-way delay: 175.566 ms

Loss rate: 2.34%

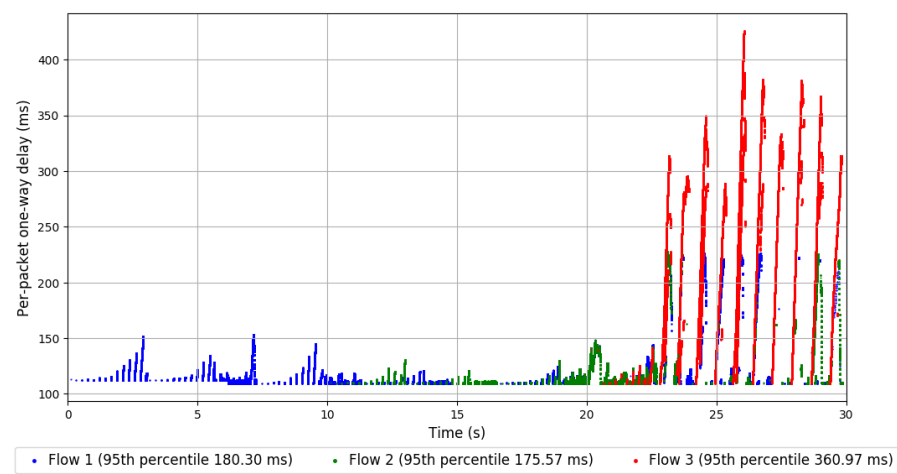
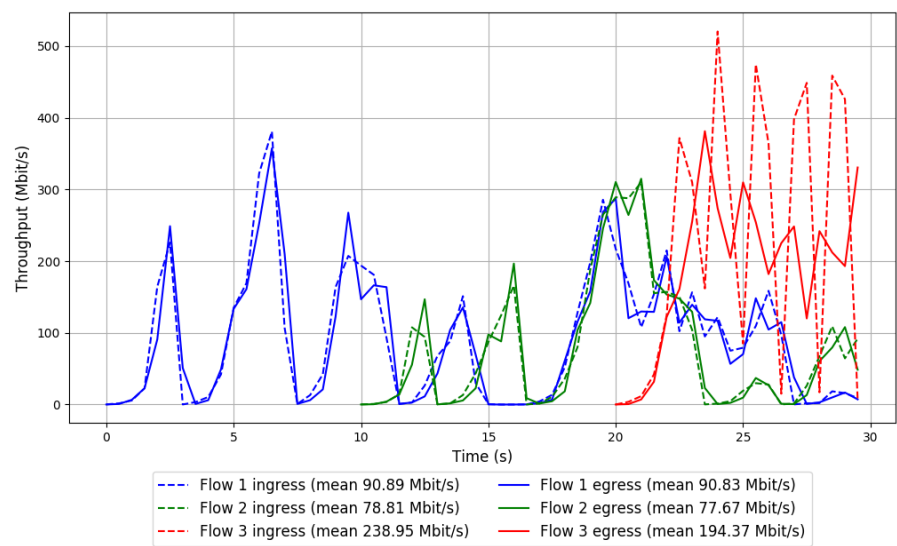
-- Flow 3:

Average throughput: 194.37 Mbit/s

95th percentile per-packet one-way delay: 360.966 ms

Loss rate: 17.19%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-09 13:01:10

End at: 2018-01-09 13:01:40

Below is generated by plot.py at 2018-01-09 18:07:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.60 Mbit/s

95th percentile per-packet one-way delay: 143.104 ms

Loss rate: 2.03%

-- Flow 1:

Average throughput: 83.78 Mbit/s

95th percentile per-packet one-way delay: 140.804 ms

Loss rate: 2.45%

-- Flow 2:

Average throughput: 76.03 Mbit/s

95th percentile per-packet one-way delay: 138.496 ms

Loss rate: 2.02%

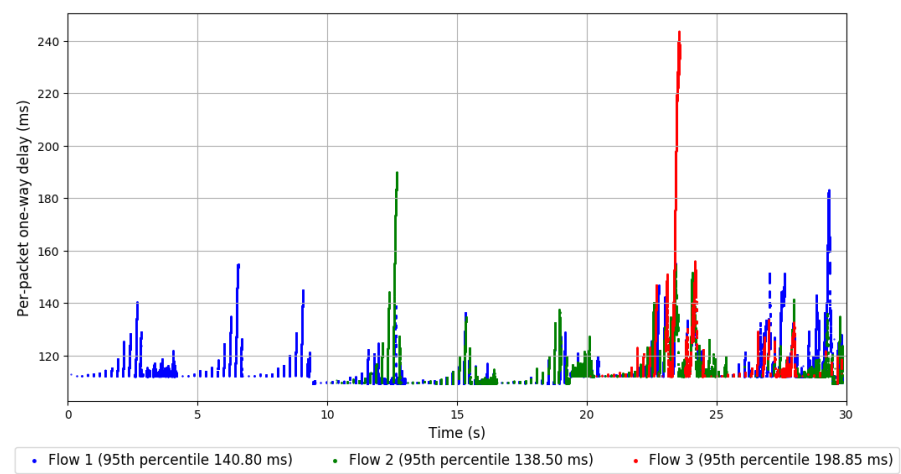
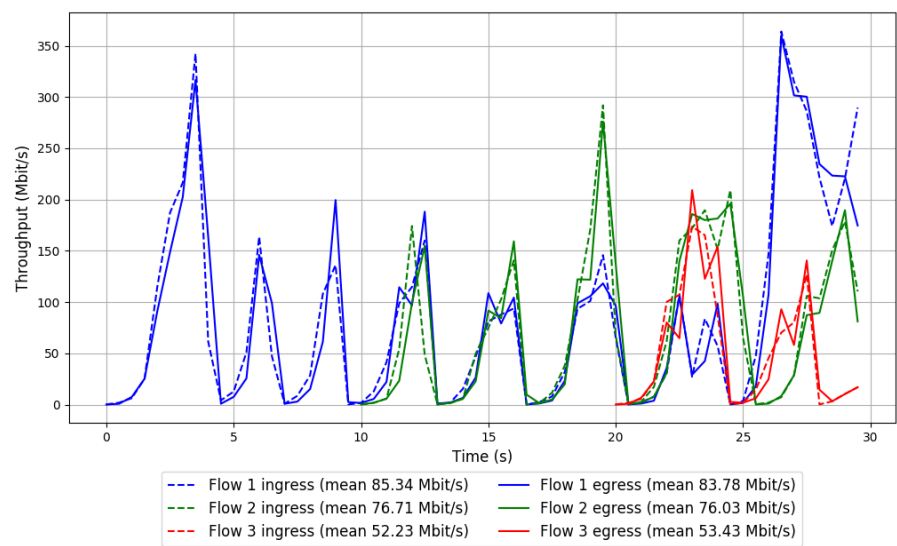
-- Flow 3:

Average throughput: 53.43 Mbit/s

95th percentile per-packet one-way delay: 198.850 ms

Loss rate: 0.01%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-09 13:16:47

End at: 2018-01-09 13:17:17

Below is generated by plot.py at 2018-01-09 18:07:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.12 Mbit/s

95th percentile per-packet one-way delay: 234.249 ms

Loss rate: 2.98%

-- Flow 1:

Average throughput: 178.16 Mbit/s

95th percentile per-packet one-way delay: 248.011 ms

Loss rate: 3.66%

-- Flow 2:

Average throughput: 51.70 Mbit/s

95th percentile per-packet one-way delay: 182.462 ms

Loss rate: 1.28%

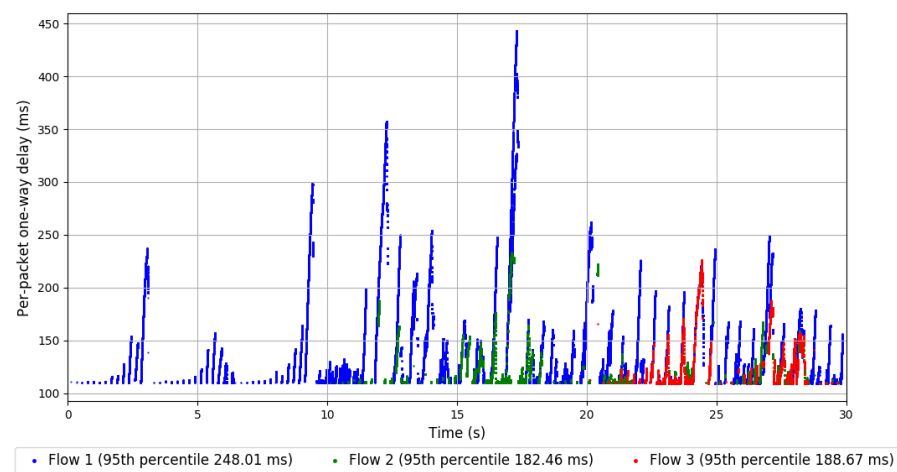
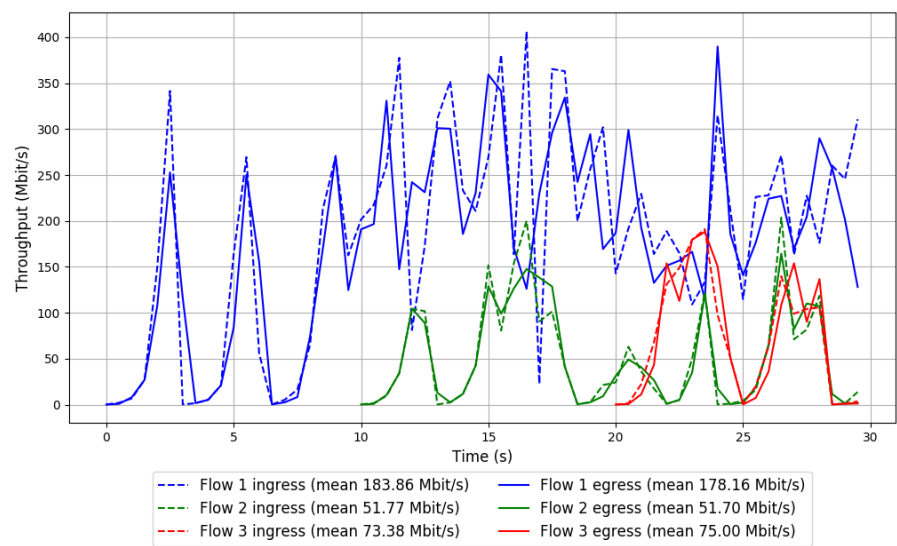
-- Flow 3:

Average throughput: 75.00 Mbit/s

95th percentile per-packet one-way delay: 188.667 ms

Loss rate: 0.17%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-09 13:32:37

End at: 2018-01-09 13:33:07

Below is generated by plot.py at 2018-01-09 18:07:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 175.87 Mbit/s

95th percentile per-packet one-way delay: 243.128 ms

Loss rate: 3.38%

-- Flow 1:

Average throughput: 94.14 Mbit/s

95th percentile per-packet one-way delay: 289.635 ms

Loss rate: 4.54%

-- Flow 2:

Average throughput: 103.65 Mbit/s

95th percentile per-packet one-way delay: 168.109 ms

Loss rate: 1.65%

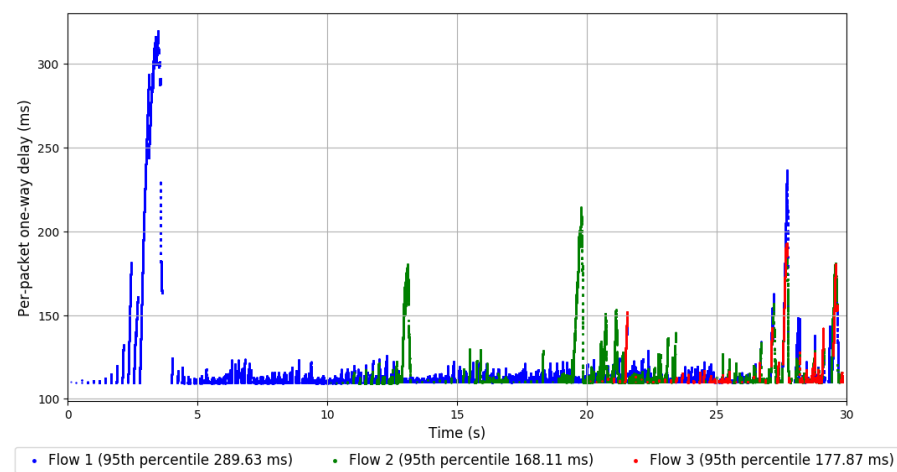
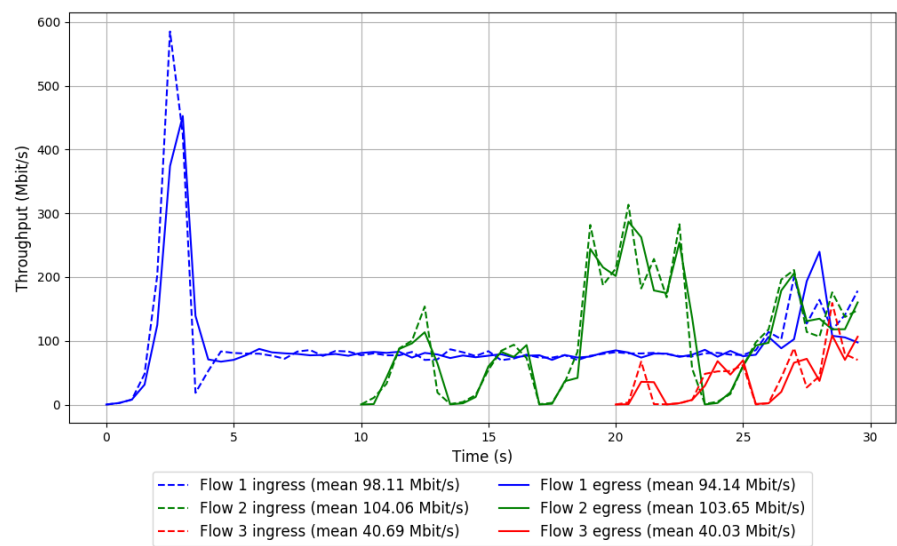
-- Flow 3:

Average throughput: 40.03 Mbit/s

95th percentile per-packet one-way delay: 177.867 ms

Loss rate: 3.85%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-09 13:47:58

End at: 2018-01-09 13:48:28

Below is generated by plot.py at 2018-01-09 18:07:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.37 Mbit/s

95th percentile per-packet one-way delay: 176.624 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 67.61 Mbit/s

95th percentile per-packet one-way delay: 154.745 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 73.03 Mbit/s

95th percentile per-packet one-way delay: 244.549 ms

Loss rate: 2.60%

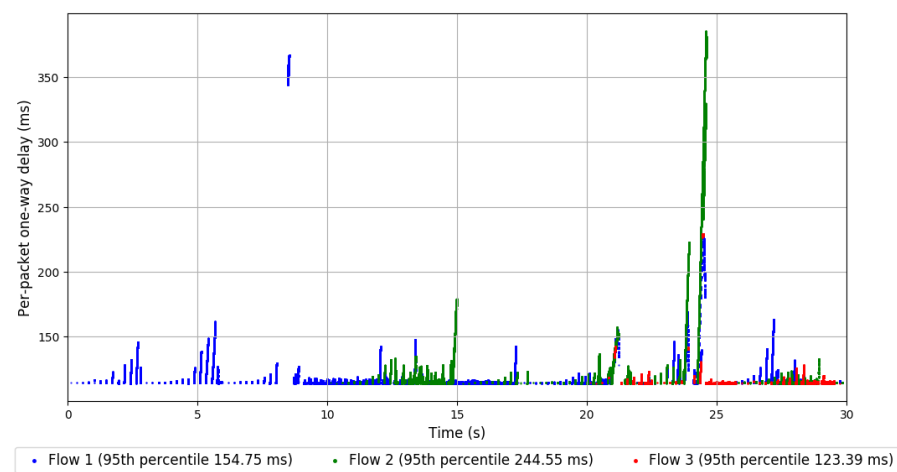
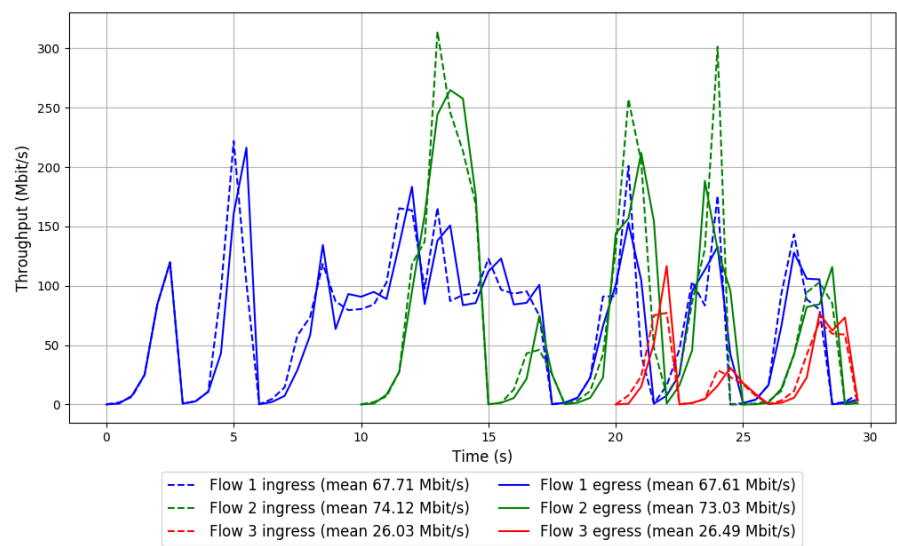
-- Flow 3:

Average throughput: 26.49 Mbit/s

95th percentile per-packet one-way delay: 123.394 ms

Loss rate: 0.58%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-09 14:02:47

End at: 2018-01-09 14:03:17

Below is generated by plot.py at 2018-01-09 18:09:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 269.21 Mbit/s

95th percentile per-packet one-way delay: 199.446 ms

Loss rate: 1.90%

-- Flow 1:

Average throughput: 149.00 Mbit/s

95th percentile per-packet one-way delay: 189.743 ms

Loss rate: 1.41%

-- Flow 2:

Average throughput: 153.03 Mbit/s

95th percentile per-packet one-way delay: 229.849 ms

Loss rate: 1.79%

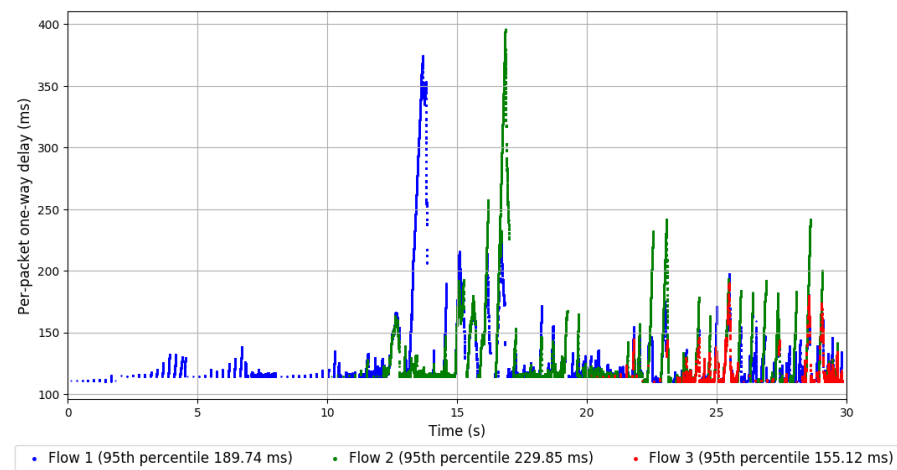
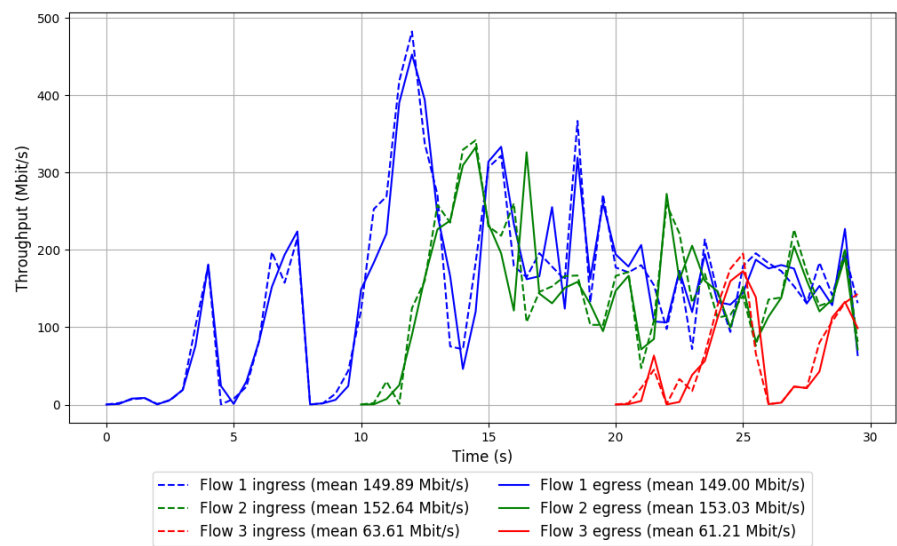
-- Flow 3:

Average throughput: 61.21 Mbit/s

95th percentile per-packet one-way delay: 155.121 ms

Loss rate: 5.98%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-09 14:18:14

End at: 2018-01-09 14:18:44

Below is generated by plot.py at 2018-01-09 18:09:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 161.01 Mbit/s

95th percentile per-packet one-way delay: 162.387 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 102.64 Mbit/s

95th percentile per-packet one-way delay: 156.122 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 65.23 Mbit/s

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

Loss rate: 0.77%

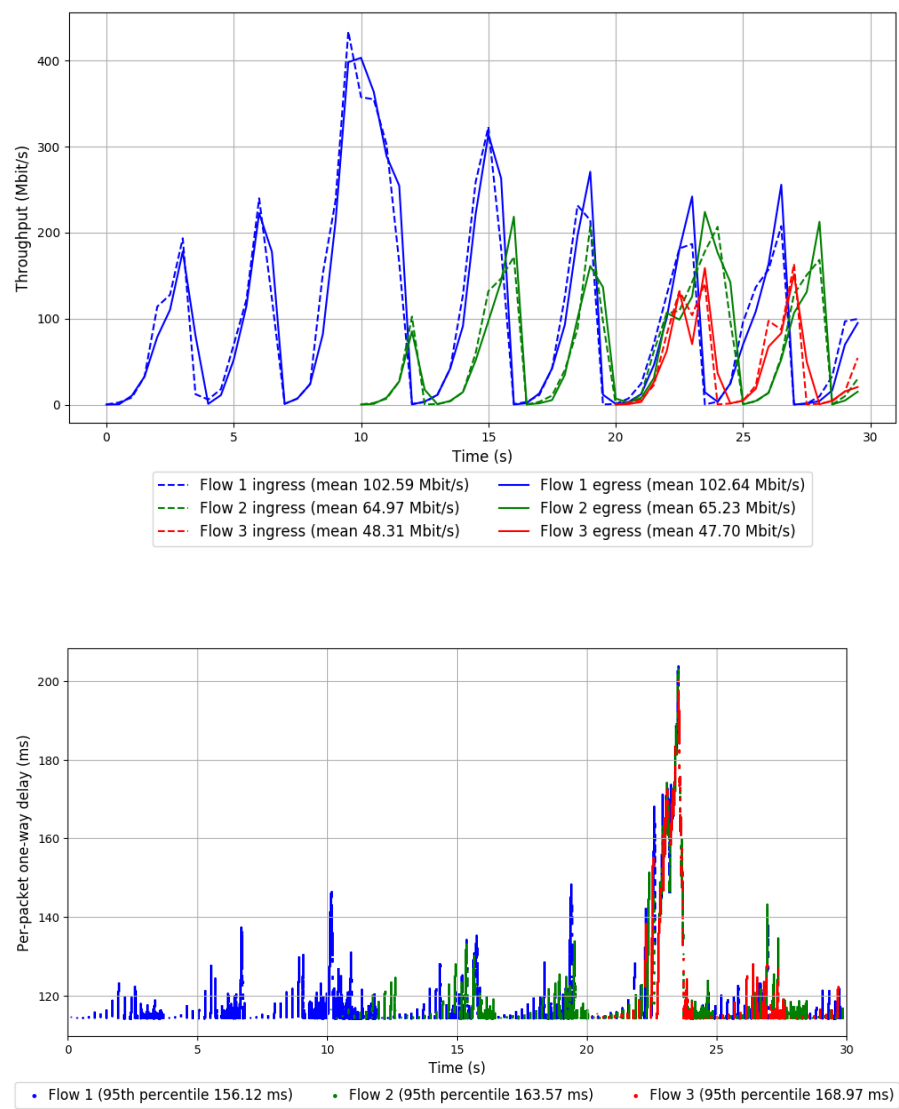
-- Flow 3:

Average throughput: 47.70 Mbit/s

95th percentile per-packet one-way delay: 168.970 ms

Loss rate: 3.61%

Run 8: Report of Verus — Data Link

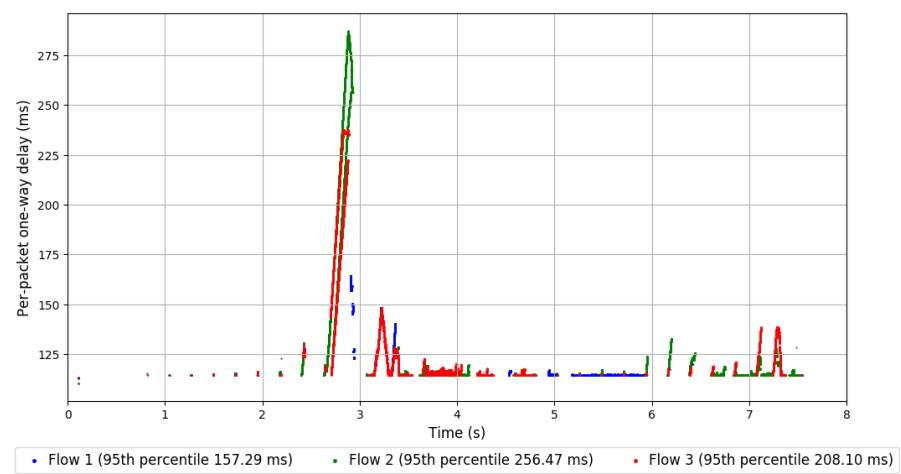
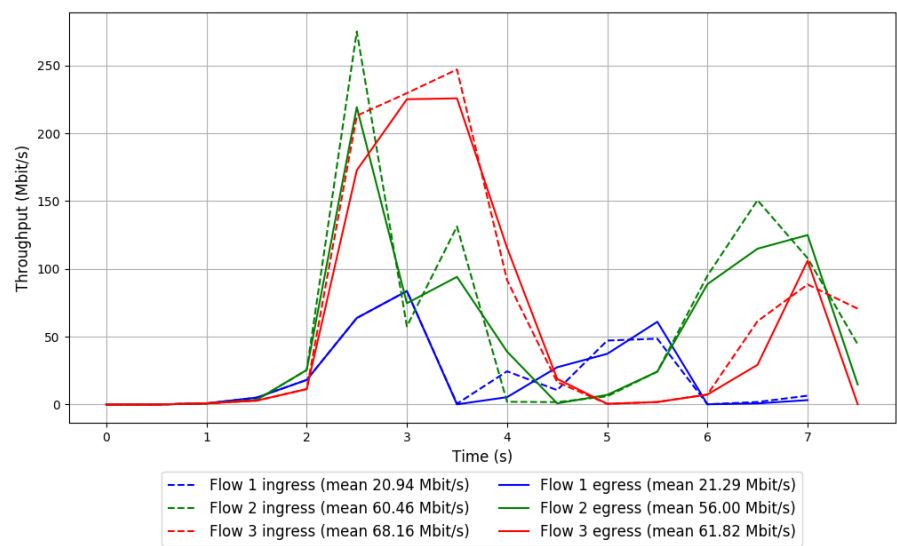


Run 9: Statistics of Verus

Start at: 2018-01-09 14:33:18

End at: 2018-01-09 14:33:48

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-09 14:48:04

End at: 2018-01-09 14:48:34

Below is generated by plot.py at 2018-01-09 18:12:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 365.58 Mbit/s

95th percentile per-packet one-way delay: 281.213 ms

Loss rate: 4.75%

-- Flow 1:

Average throughput: 186.83 Mbit/s

95th percentile per-packet one-way delay: 219.222 ms

Loss rate: 2.04%

-- Flow 2:

Average throughput: 242.48 Mbit/s

95th percentile per-packet one-way delay: 321.837 ms

Loss rate: 7.88%

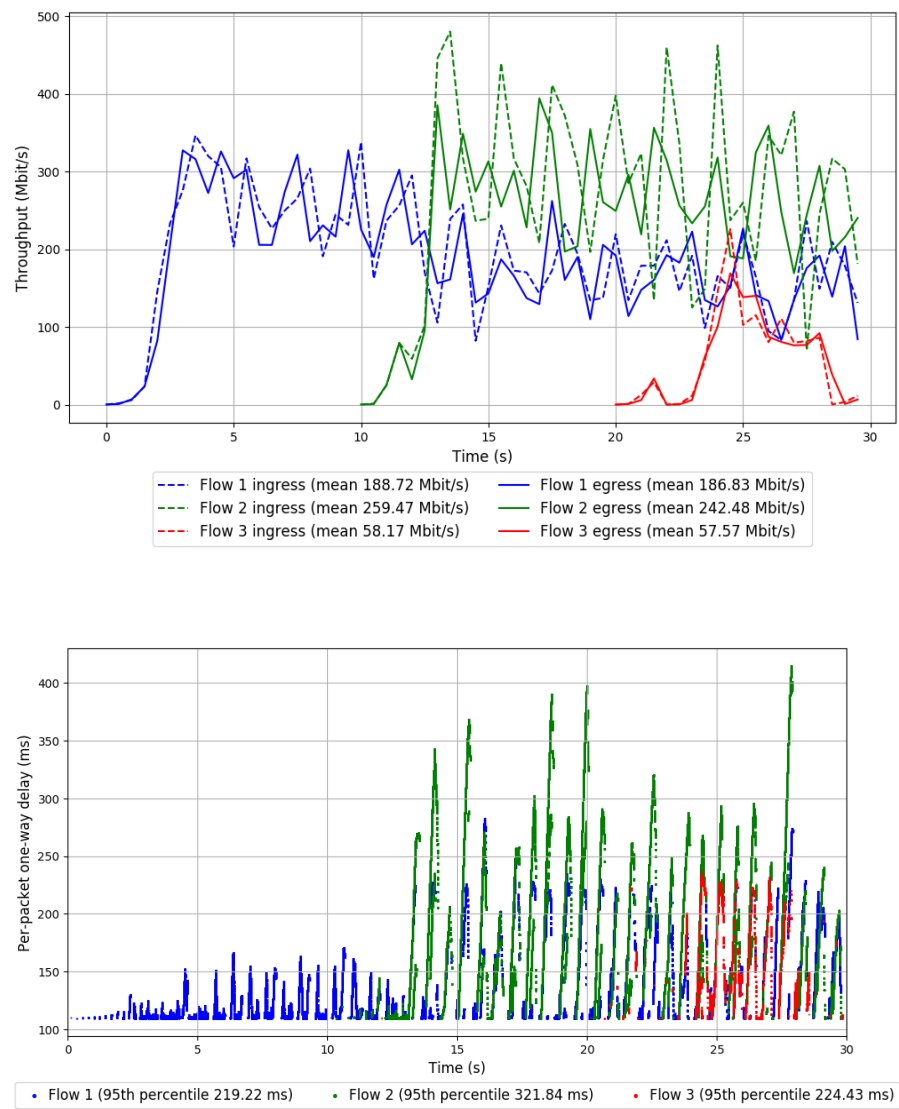
-- Flow 3:

Average throughput: 57.57 Mbit/s

95th percentile per-packet one-way delay: 224.425 ms

Loss rate: 3.26%

Run 10: Report of Verus — Data Link

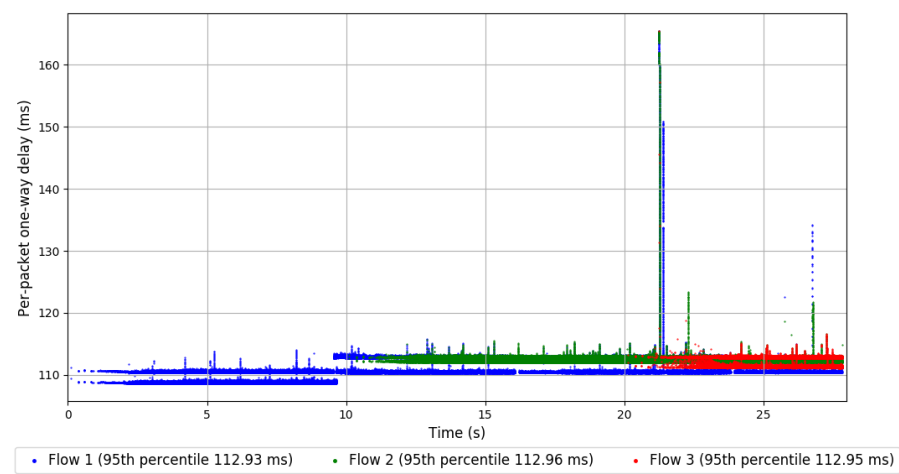
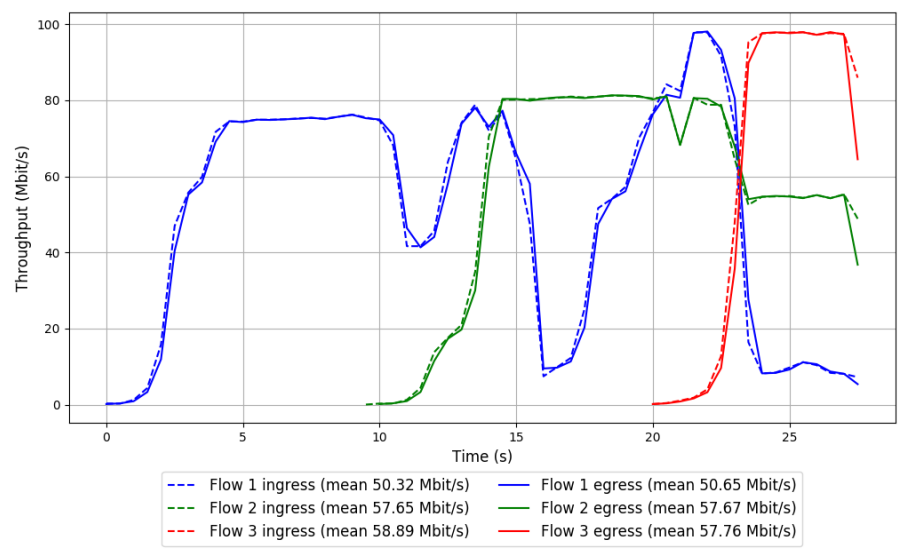


```
Run 1: Statistics of Copa

Start at: 2018-01-09 12:27:48
End at: 2018-01-09 12:28:18

# Below is generated by plot.py at 2018-01-09 18:12:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 103.55 Mbit/s
95th percentile per-packet one-way delay: 112.943 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 50.65 Mbit/s
95th percentile per-packet one-way delay: 112.928 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 57.67 Mbit/s
95th percentile per-packet one-way delay: 112.956 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 57.76 Mbit/s
95th percentile per-packet one-way delay: 112.949 ms
Loss rate: 4.67%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-09 12:43:19

End at: 2018-01-09 12:43:49

Below is generated by plot.py at 2018-01-09 18:12:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.25 Mbit/s

95th percentile per-packet one-way delay: 112.688 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 62.63 Mbit/s

95th percentile per-packet one-way delay: 112.758 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 50.52 Mbit/s

95th percentile per-packet one-way delay: 112.394 ms

Loss rate: 0.71%

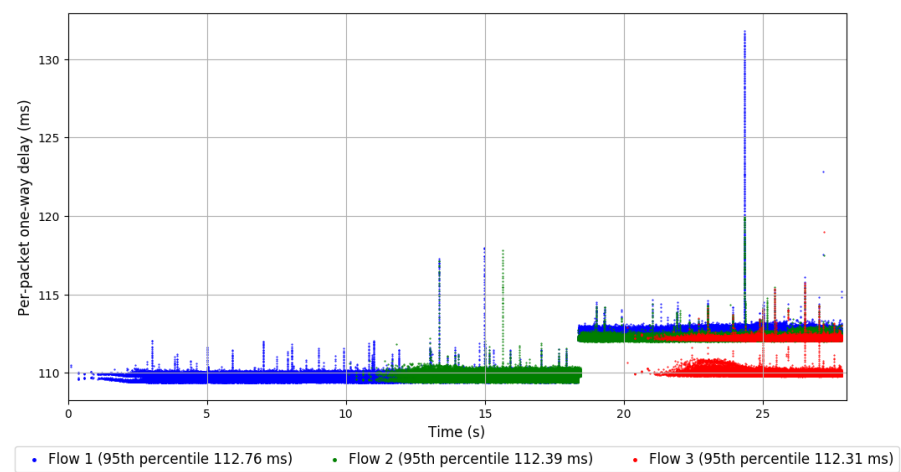
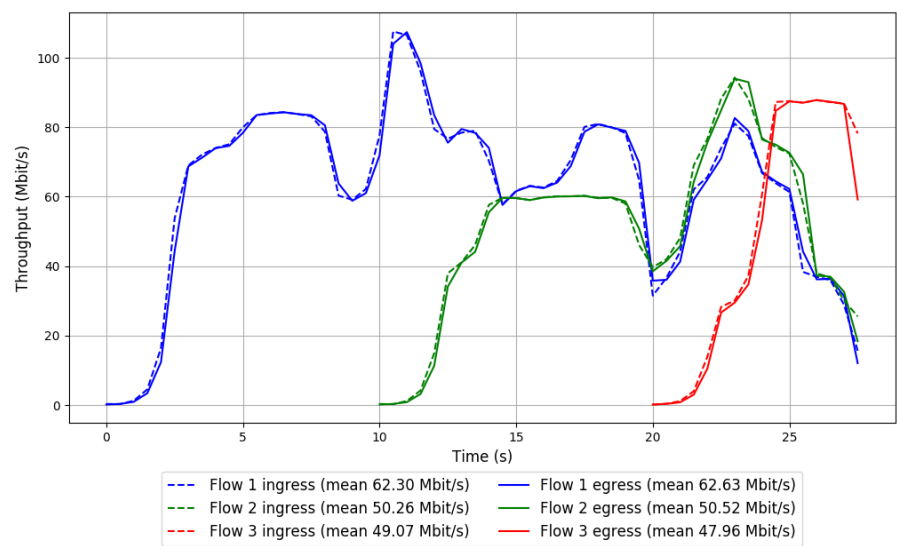
-- Flow 3:

Average throughput: 47.96 Mbit/s

95th percentile per-packet one-way delay: 112.315 ms

Loss rate: 4.98%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-09 12:58:33

End at: 2018-01-09 12:59:03

Below is generated by plot.py at 2018-01-09 18:12:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.96 Mbit/s

95th percentile per-packet one-way delay: 112.599 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 71.03 Mbit/s

95th percentile per-packet one-way delay: 112.597 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 55.83 Mbit/s

95th percentile per-packet one-way delay: 112.783 ms

Loss rate: 0.42%

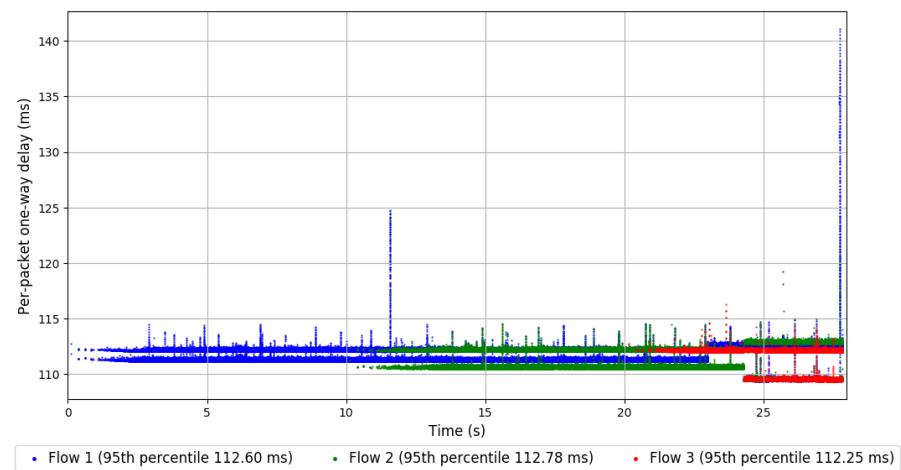
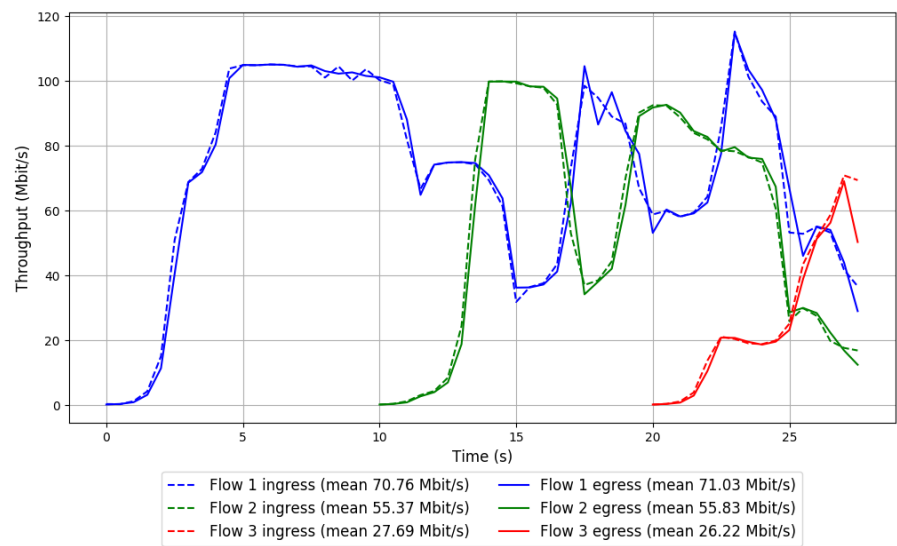
-- Flow 3:

Average throughput: 26.22 Mbit/s

95th percentile per-packet one-way delay: 112.252 ms

Loss rate: 7.98%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-09 13:14:10

End at: 2018-01-09 13:14:40

Below is generated by plot.py at 2018-01-09 18:12:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.70 Mbit/s

95th percentile per-packet one-way delay: 111.576 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 68.11 Mbit/s

95th percentile per-packet one-way delay: 110.267 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 67.66 Mbit/s

95th percentile per-packet one-way delay: 112.676 ms

Loss rate: 1.34%

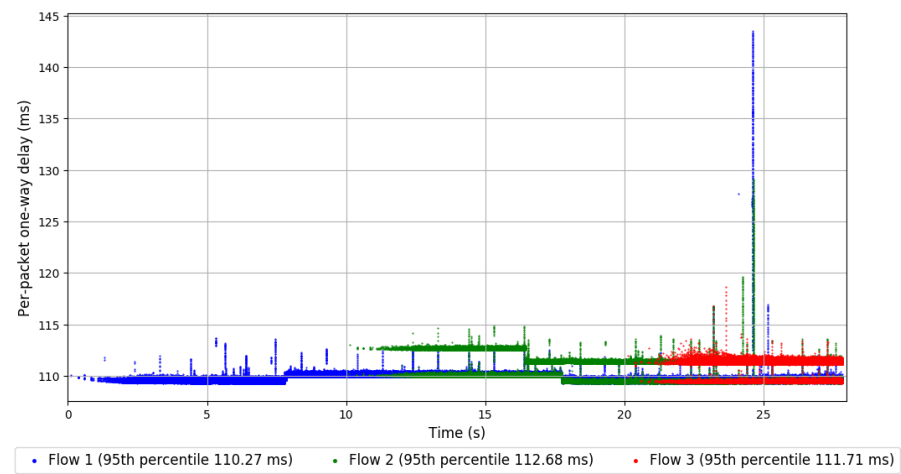
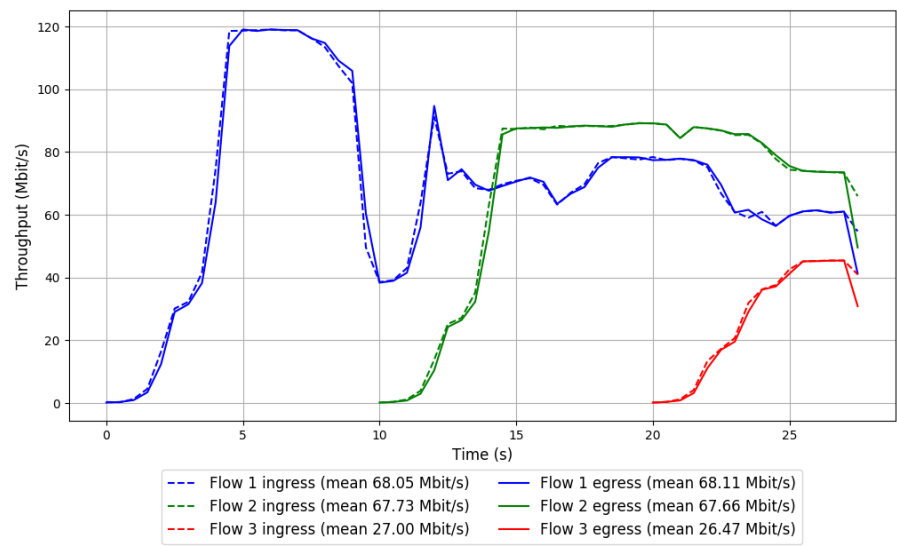
-- Flow 3:

Average throughput: 26.47 Mbit/s

95th percentile per-packet one-way delay: 111.714 ms

Loss rate: 4.70%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-09 13:29:55

End at: 2018-01-09 13:30:25

Below is generated by plot.py at 2018-01-09 18:12:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.88 Mbit/s

95th percentile per-packet one-way delay: 112.186 ms

Loss rate: 1.79%

-- Flow 1:

Average throughput: 50.06 Mbit/s

95th percentile per-packet one-way delay: 112.213 ms

Loss rate: 1.33%

-- Flow 2:

Average throughput: 67.59 Mbit/s

95th percentile per-packet one-way delay: 112.185 ms

Loss rate: 1.57%

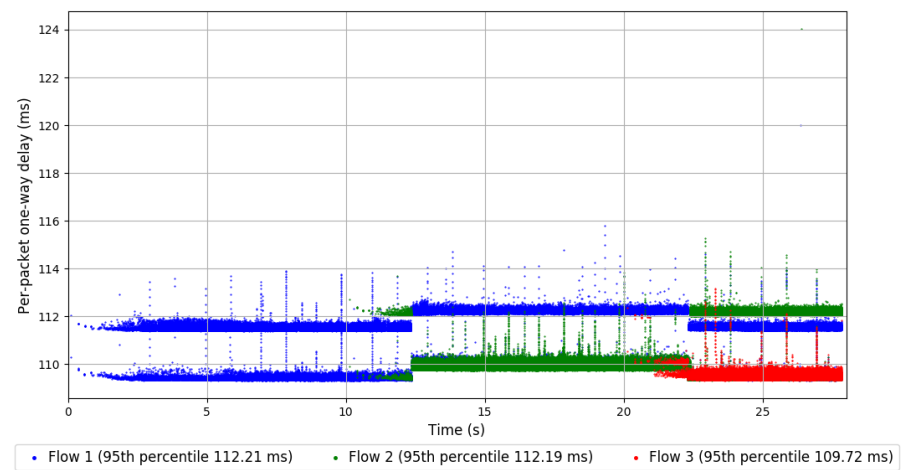
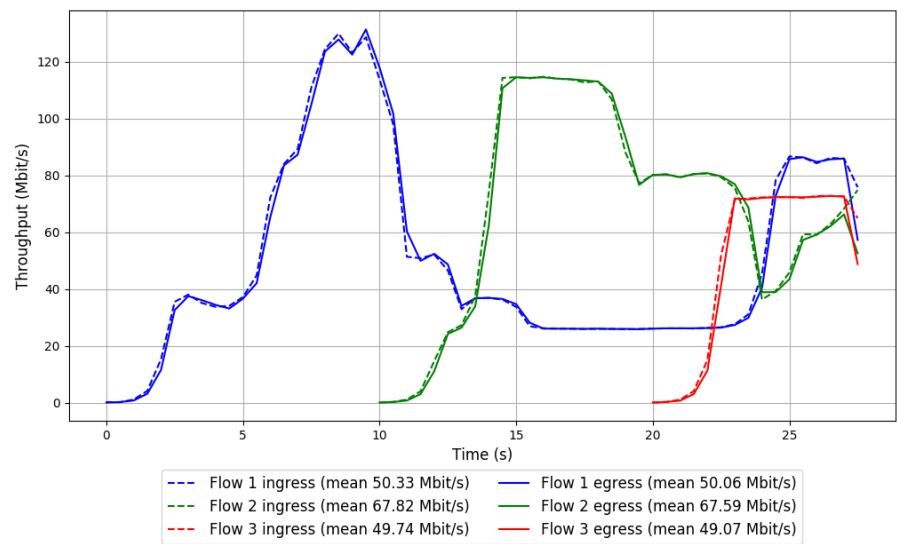
-- Flow 3:

Average throughput: 49.07 Mbit/s

95th percentile per-packet one-way delay: 109.720 ms

Loss rate: 4.08%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-09 13:45:22

End at: 2018-01-09 13:45:52

Below is generated by plot.py at 2018-01-09 18:12:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.31 Mbit/s

95th percentile per-packet one-way delay: 114.425 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 59.72 Mbit/s

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

Loss rate: 0.09%

-- Flow 2:

Average throughput: 64.05 Mbit/s

95th percentile per-packet one-way delay: 114.429 ms

Loss rate: 1.07%

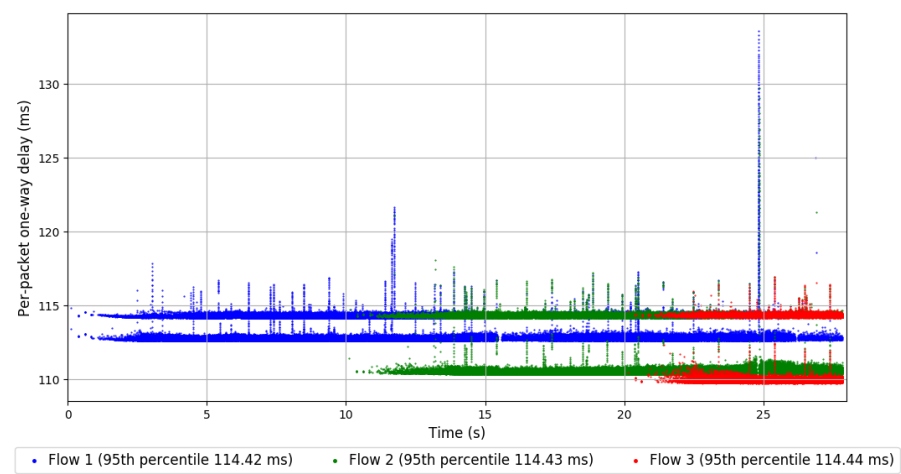
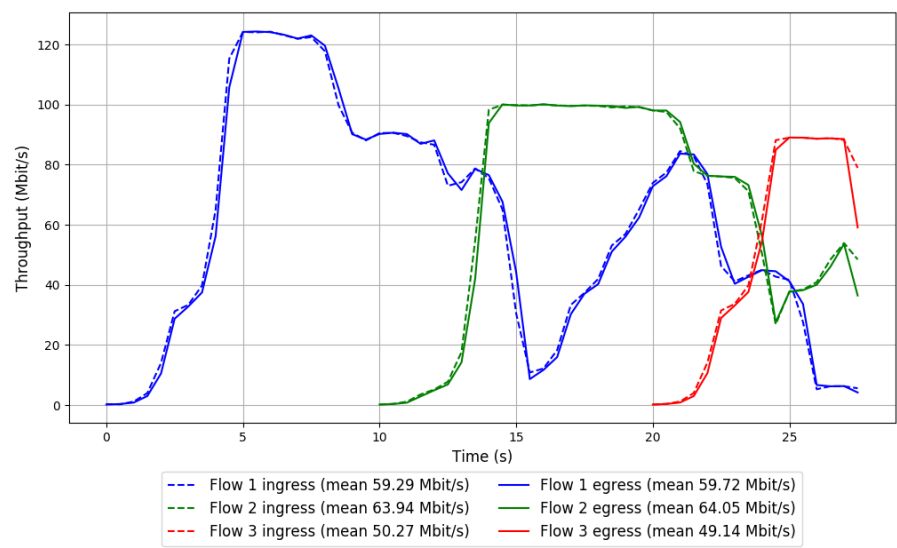
-- Flow 3:

Average throughput: 49.14 Mbit/s

95th percentile per-packet one-way delay: 114.440 ms

Loss rate: 5.01%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-09 14:00:16

End at: 2018-01-09 14:00:46

Below is generated by plot.py at 2018-01-09 18:12:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.88 Mbit/s

95th percentile per-packet one-way delay: 114.404 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 64.61 Mbit/s

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

Loss rate: 0.72%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 165.830 ms

Loss rate: 46.17%

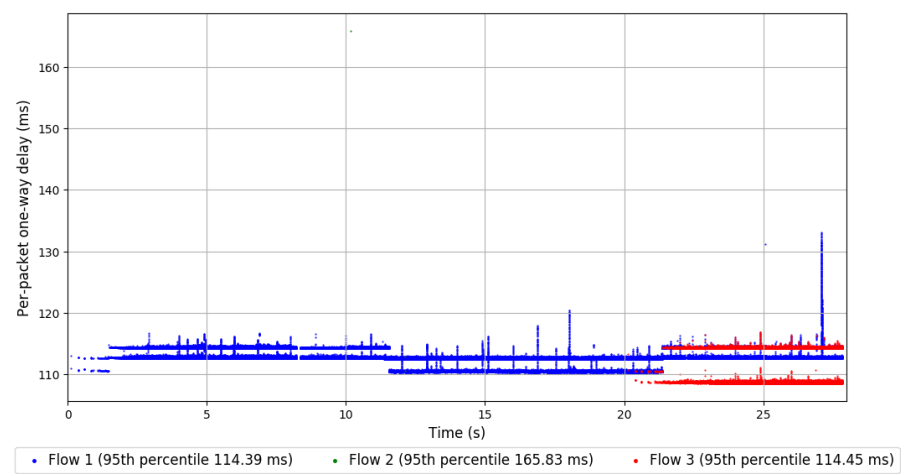
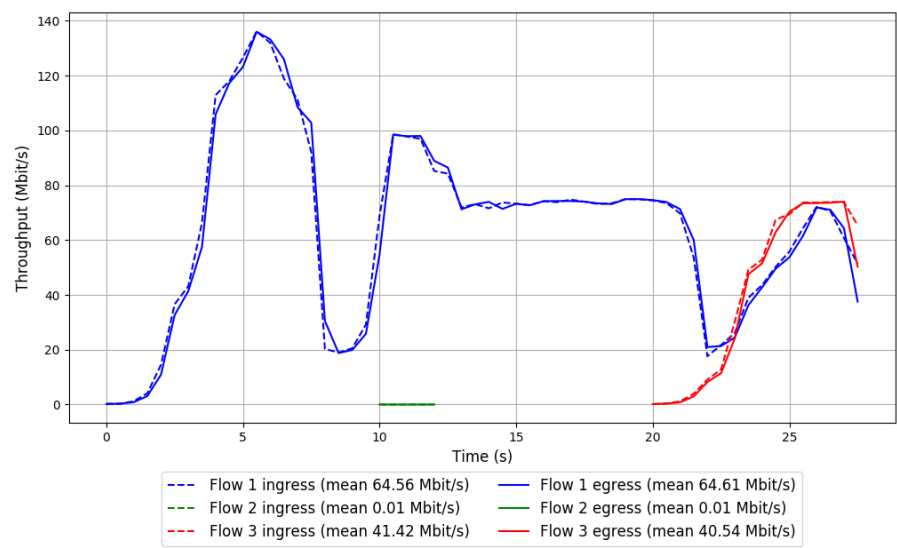
-- Flow 3:

Average throughput: 40.54 Mbit/s

95th percentile per-packet one-way delay: 114.453 ms

Loss rate: 4.89%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-09 14:15:38

End at: 2018-01-09 14:16:08

Below is generated by plot.py at 2018-01-09 18:12:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.38 Mbit/s

95th percentile per-packet one-way delay: 114.505 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 58.12 Mbit/s

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

Loss rate: 0.38%

-- Flow 2:

Average throughput: 65.46 Mbit/s

95th percentile per-packet one-way delay: 114.522 ms

Loss rate: 1.13%

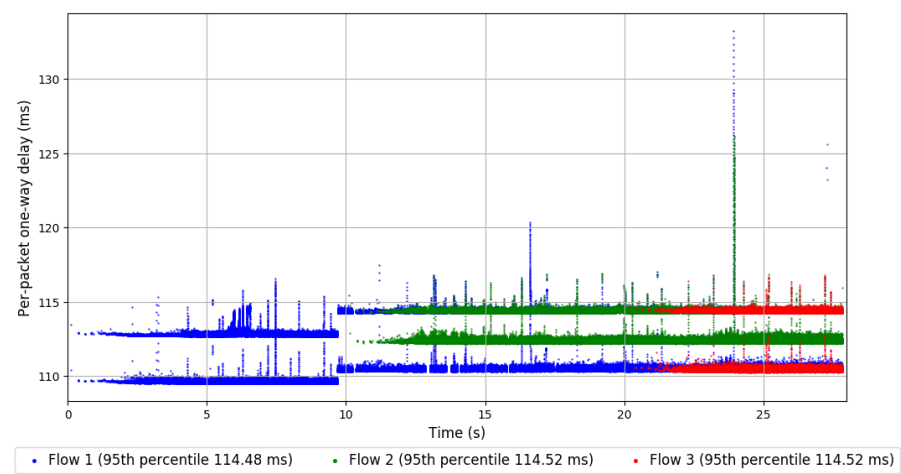
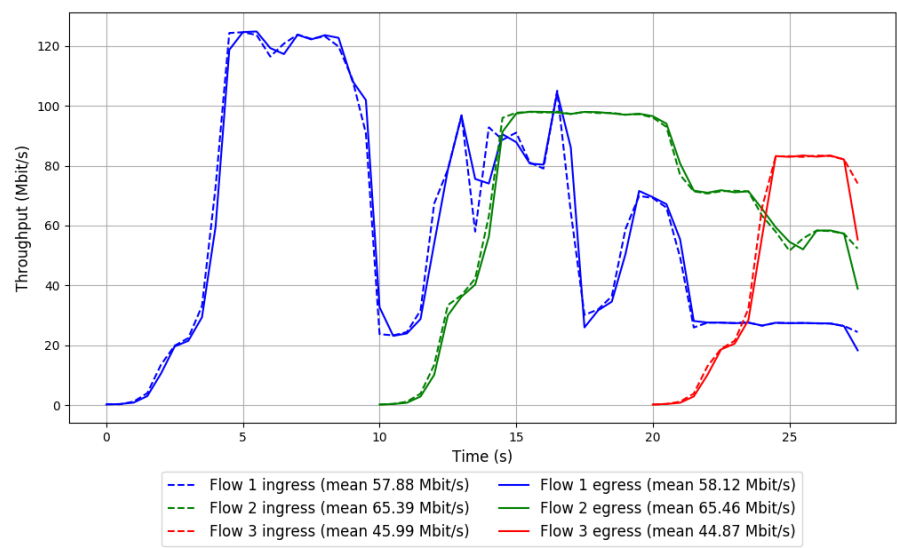
-- Flow 3:

Average throughput: 44.87 Mbit/s

95th percentile per-packet one-way delay: 114.520 ms

Loss rate: 5.16%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-09 14:30:46

End at: 2018-01-09 14:31:16

Below is generated by plot.py at 2018-01-09 18:13:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.13 Mbit/s

95th percentile per-packet one-way delay: 114.513 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 59.95 Mbit/s

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

Loss rate: 1.16%

-- Flow 2:

Average throughput: 100.85 Mbit/s

95th percentile per-packet one-way delay: 114.526 ms

Loss rate: 0.55%

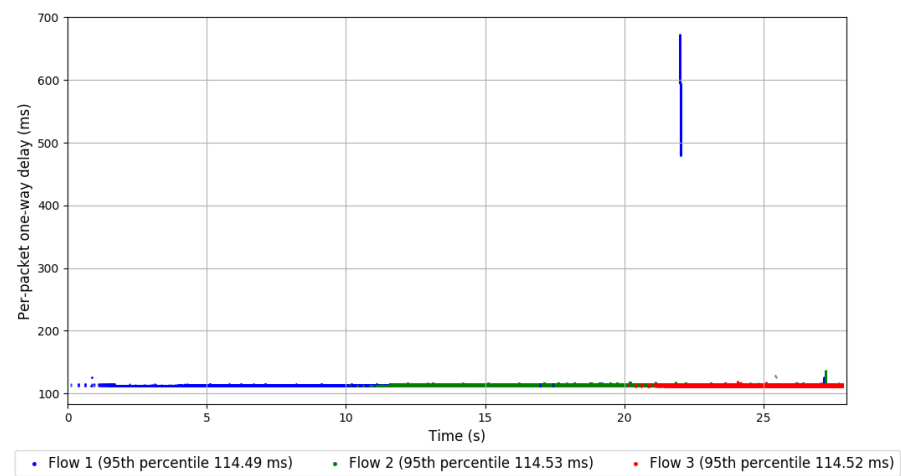
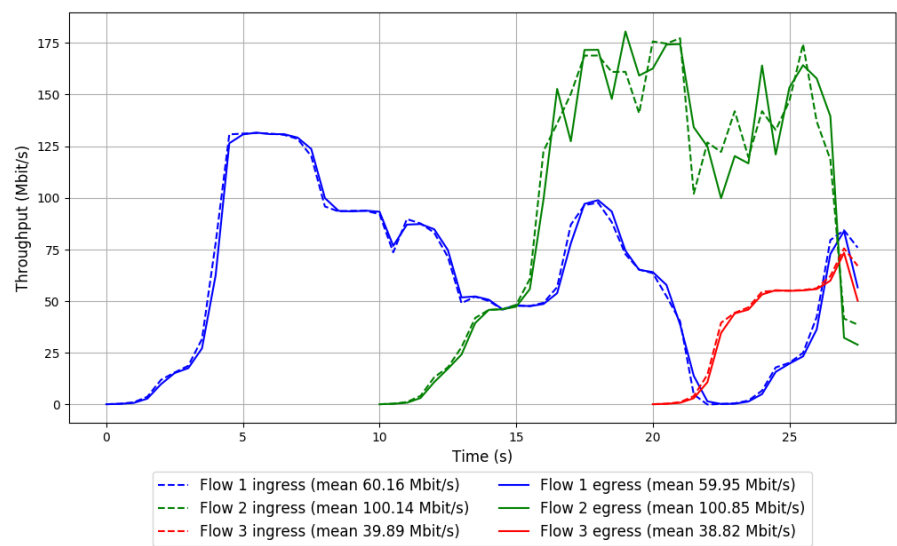
-- Flow 3:

Average throughput: 38.82 Mbit/s

95th percentile per-packet one-way delay: 114.522 ms

Loss rate: 5.42%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-09 14:45:34

End at: 2018-01-09 14:46:04

Below is generated by plot.py at 2018-01-09 18:13:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 46.93 Mbit/s

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

Loss rate: 1.70%

-- Flow 1:

Average throughput: 11.96 Mbit/s

95th percentile per-packet one-way delay: 111.333 ms

Loss rate: 1.46%

-- Flow 2:

Average throughput: 36.56 Mbit/s

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

Loss rate: 0.17%

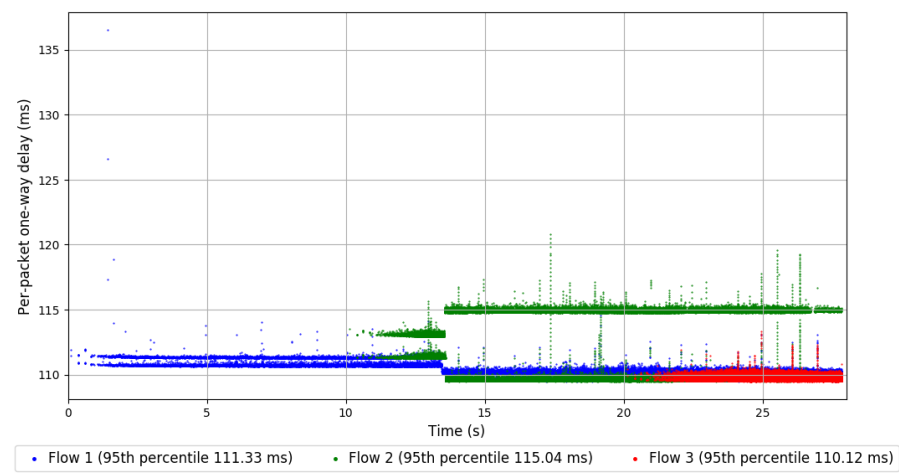
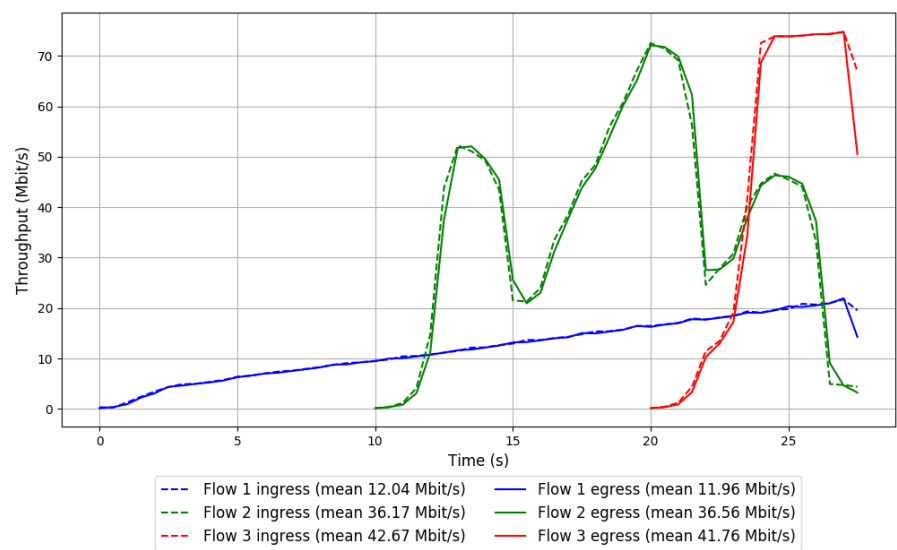
-- Flow 3:

Average throughput: 41.76 Mbit/s

95th percentile per-packet one-way delay: 110.119 ms

Loss rate: 4.87%

Run 10: Report of Copa — Data Link

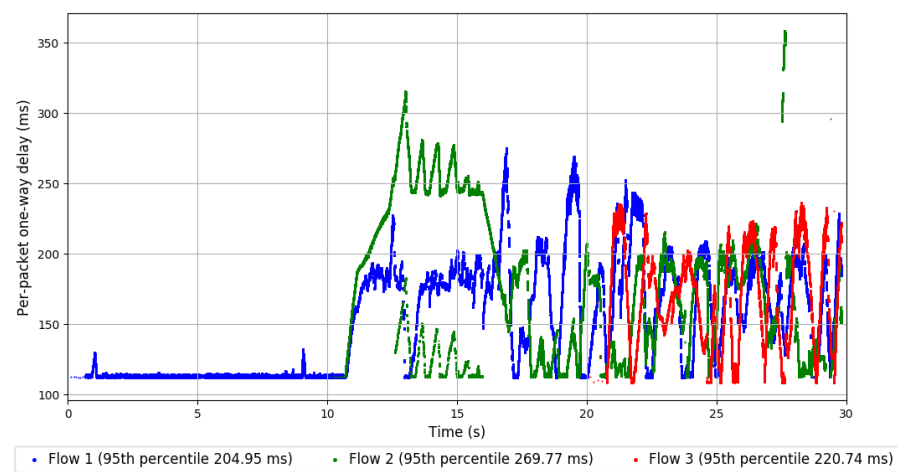
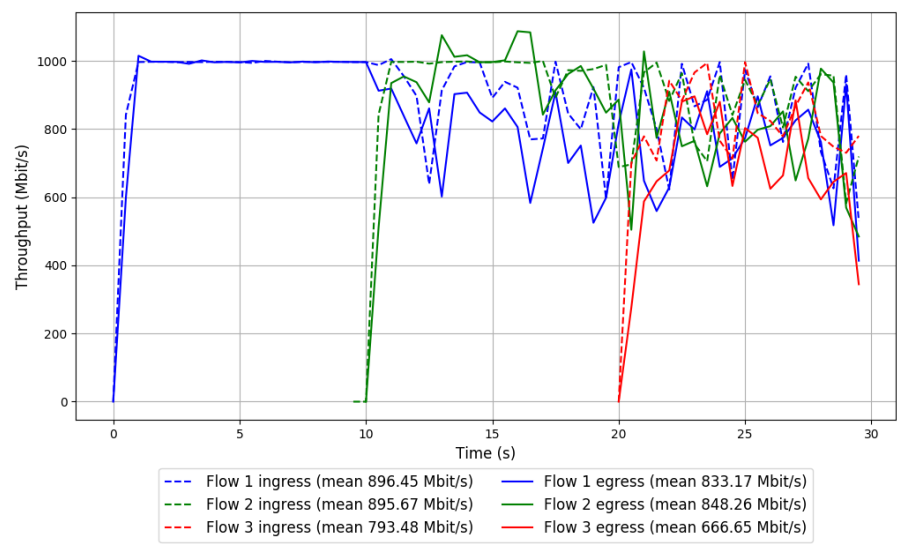


```
Run 1: Statistics of FillP

Start at: 2018-01-09 12:36:19
End at: 2018-01-09 12:36:49

# Below is generated by plot.py at 2018-01-09 18:40:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1613.58 Mbit/s
95th percentile per-packet one-way delay: 246.006 ms
Loss rate: 8.79%
-- Flow 1:
Average throughput: 833.17 Mbit/s
95th percentile per-packet one-way delay: 204.949 ms
Loss rate: 7.76%
-- Flow 2:
Average throughput: 848.26 Mbit/s
95th percentile per-packet one-way delay: 269.771 ms
Loss rate: 6.35%
-- Flow 3:
Average throughput: 666.65 Mbit/s
95th percentile per-packet one-way delay: 220.735 ms
Loss rate: 17.88%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-09 12:51:56

End at: 2018-01-09 12:52:26

Below is generated by plot.py at 2018-01-09 18:40:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1169.85 Mbit/s

95th percentile per-packet one-way delay: 263.209 ms

Loss rate: 8.04%

-- Flow 1:

Average throughput: 384.58 Mbit/s

95th percentile per-packet one-way delay: 174.354 ms

Loss rate: 5.26%

-- Flow 2:

Average throughput: 847.46 Mbit/s

95th percentile per-packet one-way delay: 300.508 ms

Loss rate: 6.47%

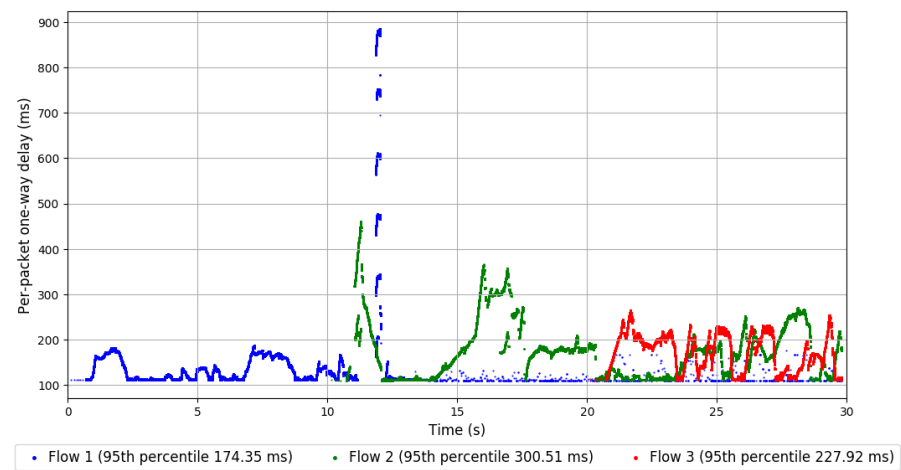
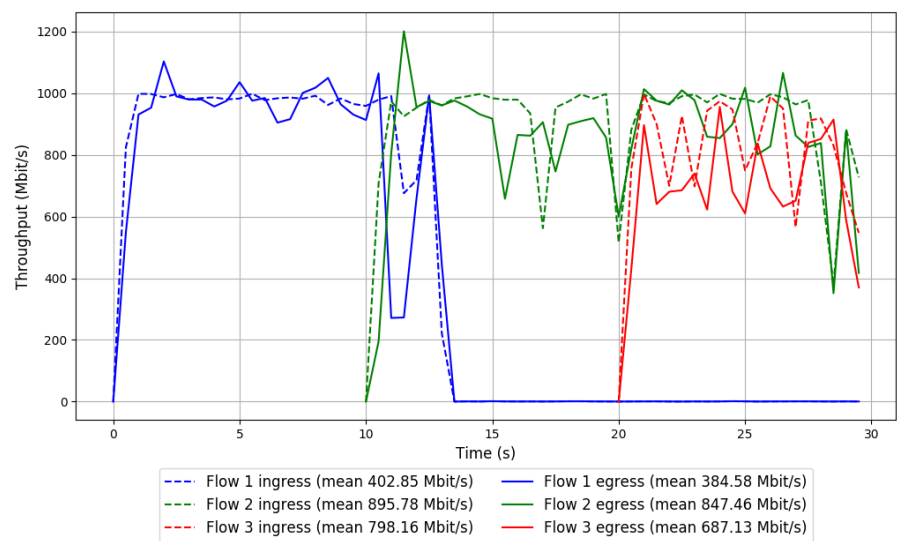
-- Flow 3:

Average throughput: 687.13 Mbit/s

95th percentile per-packet one-way delay: 227.922 ms

Loss rate: 15.81%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-09 13:07:07

End at: 2018-01-09 13:07:37

Below is generated by plot.py at 2018-01-09 18:40:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1525.84 Mbit/s

95th percentile per-packet one-way delay: 336.163 ms

Loss rate: 11.09%

-- Flow 1:

Average throughput: 820.53 Mbit/s

95th percentile per-packet one-way delay: 275.612 ms

Loss rate: 8.34%

-- Flow 2:

Average throughput: 782.69 Mbit/s

95th percentile per-packet one-way delay: 335.452 ms

Loss rate: 10.17%

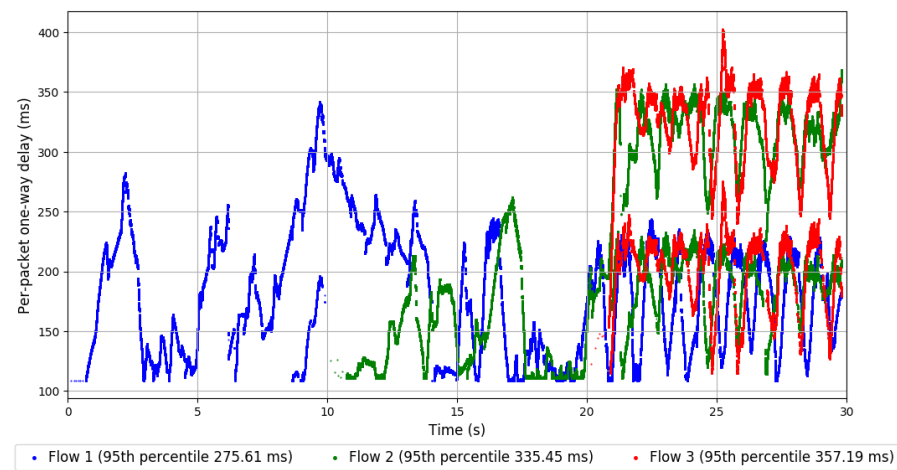
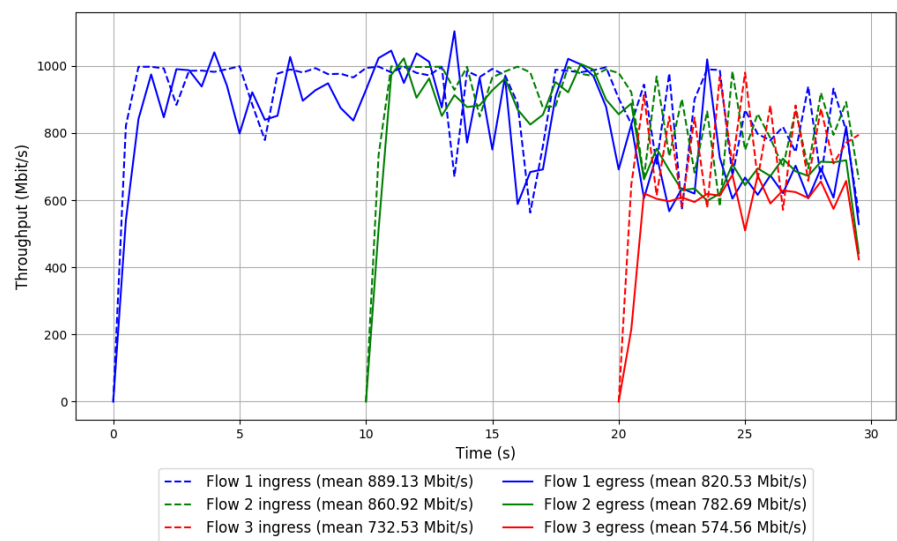
-- Flow 3:

Average throughput: 574.56 Mbit/s

95th percentile per-packet one-way delay: 357.194 ms

Loss rate: 23.43%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-09 13:23:01

End at: 2018-01-09 13:23:31

Below is generated by plot.py at 2018-01-09 18:40:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1436.01 Mbit/s

95th percentile per-packet one-way delay: 298.422 ms

Loss rate: 13.80%

-- Flow 1:

Average throughput: 767.37 Mbit/s

95th percentile per-packet one-way delay: 305.704 ms

Loss rate: 11.95%

-- Flow 2:

Average throughput: 635.66 Mbit/s

95th percentile per-packet one-way delay: 244.523 ms

Loss rate: 18.76%

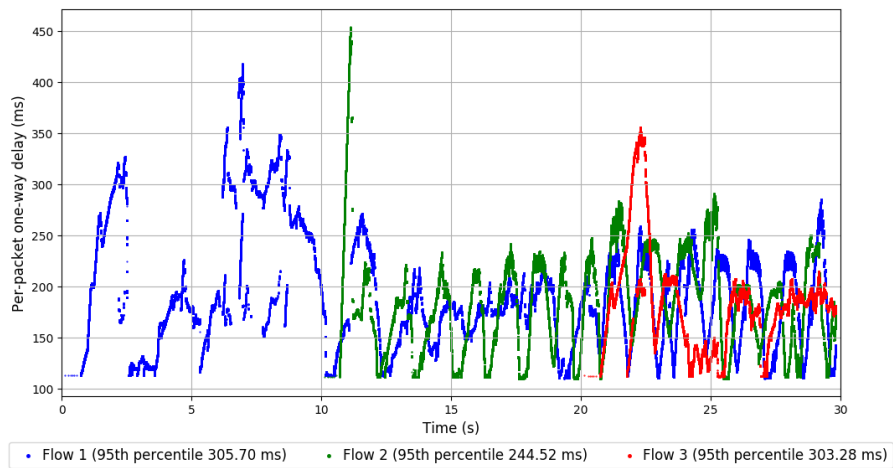
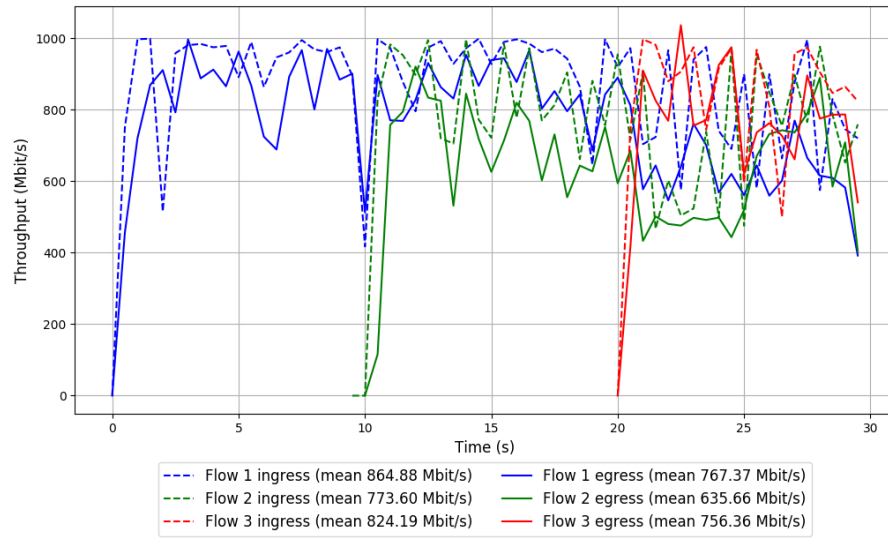
-- Flow 3:

Average throughput: 756.36 Mbit/s

95th percentile per-packet one-way delay: 303.281 ms

Loss rate: 10.31%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-09 13:38:15

End at: 2018-01-09 13:38:45

Below is generated by plot.py at 2018-01-09 18:40:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1471.73 Mbit/s

95th percentile per-packet one-way delay: 319.483 ms

Loss rate: 9.49%

-- Flow 1:

Average throughput: 862.99 Mbit/s

95th percentile per-packet one-way delay: 315.860 ms

Loss rate: 6.69%

-- Flow 2:

Average throughput: 600.01 Mbit/s

95th percentile per-packet one-way delay: 350.895 ms

Loss rate: 9.34%

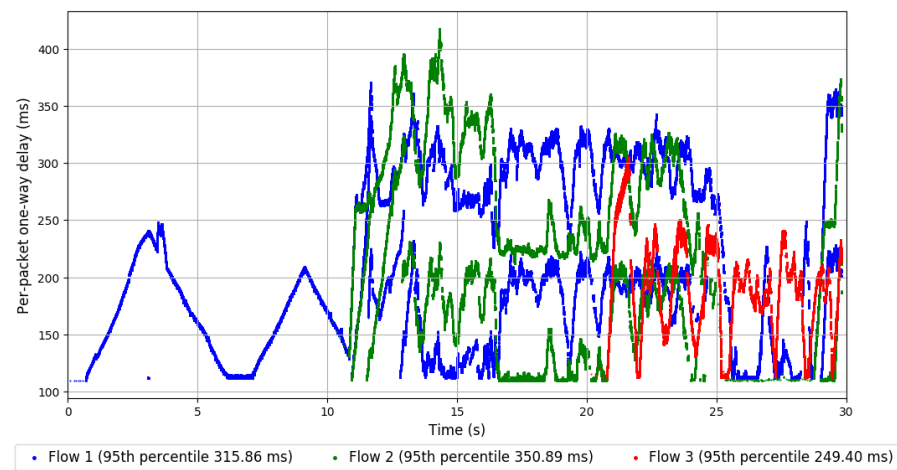
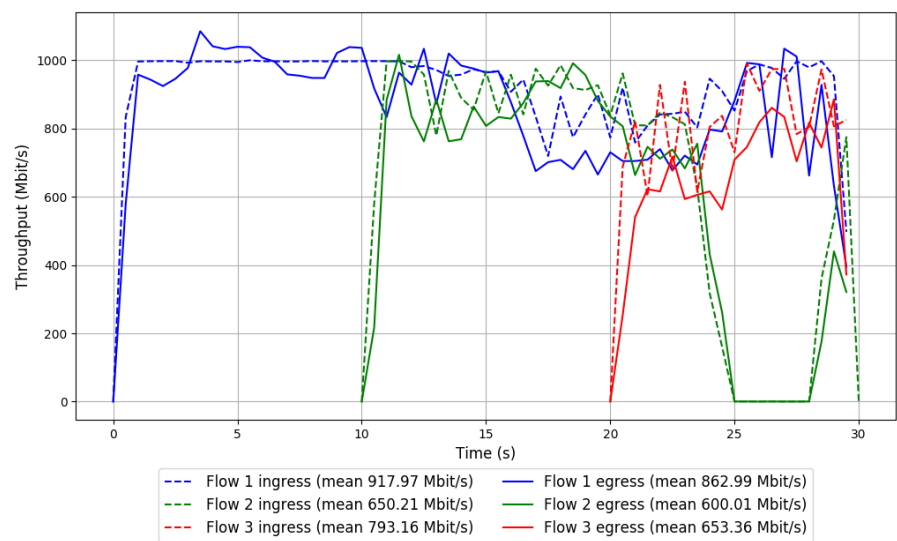
-- Flow 3:

Average throughput: 653.36 Mbit/s

95th percentile per-packet one-way delay: 249.398 ms

Loss rate: 19.54%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-09 13:53:27

End at: 2018-01-09 13:53:57

Below is generated by plot.py at 2018-01-09 18:40:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 1338.18 Mbit/s

95th percentile per-packet one-way delay: 305.229 ms

Loss rate: 6.72%

-- Flow 1:

Average throughput: 818.65 Mbit/s

95th percentile per-packet one-way delay: 245.828 ms

Loss rate: 8.05%

-- Flow 2:

Average throughput: 351.03 Mbit/s

95th percentile per-packet one-way delay: 335.569 ms

Loss rate: 4.24%

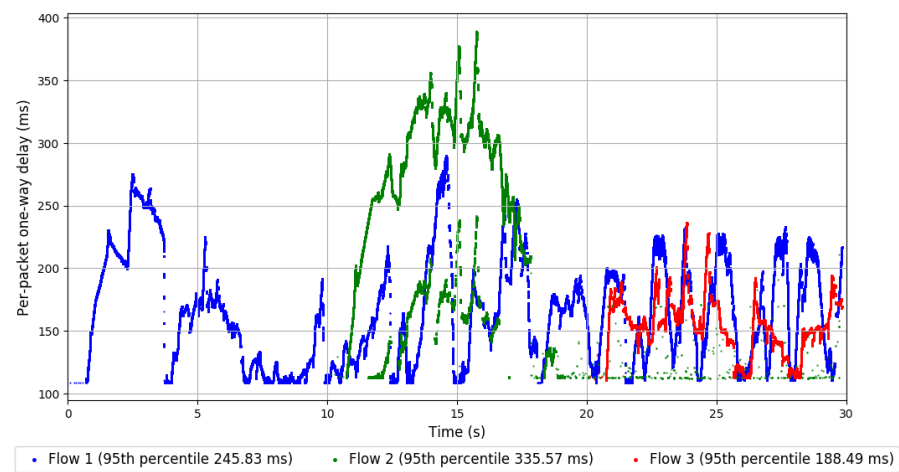
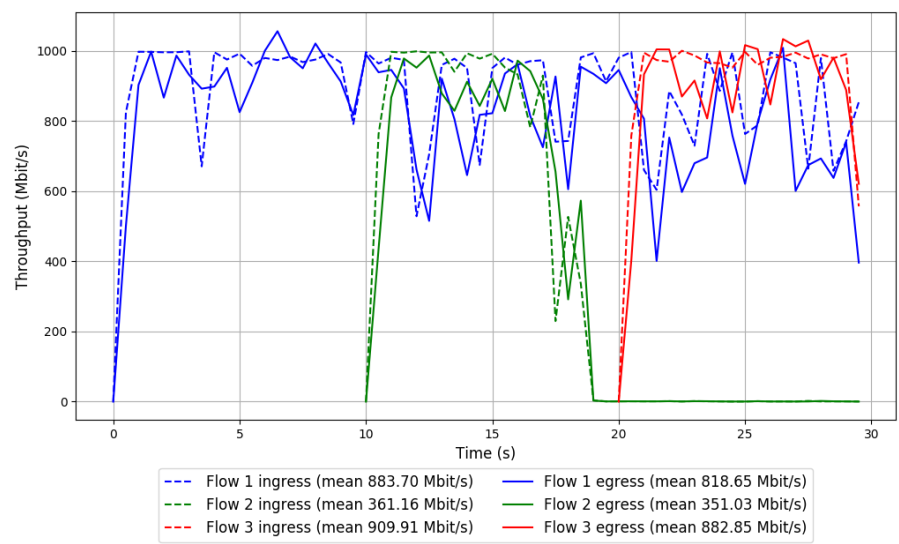
-- Flow 3:

Average throughput: 882.85 Mbit/s

95th percentile per-packet one-way delay: 188.488 ms

Loss rate: 4.81%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-09 14:08:42

End at: 2018-01-09 14:09:12

Below is generated by plot.py at 2018-01-09 18:42:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 1575.03 Mbit/s

95th percentile per-packet one-way delay: 233.535 ms

Loss rate: 10.16%

-- Flow 1:

Average throughput: 858.67 Mbit/s

95th percentile per-packet one-way delay: 215.919 ms

Loss rate: 6.05%

-- Flow 2:

Average throughput: 703.11 Mbit/s

95th percentile per-packet one-way delay: 229.587 ms

Loss rate: 16.70%

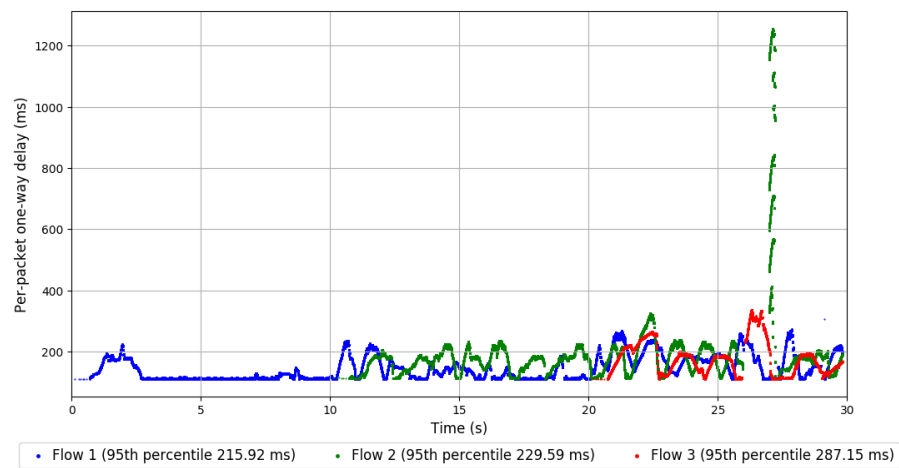
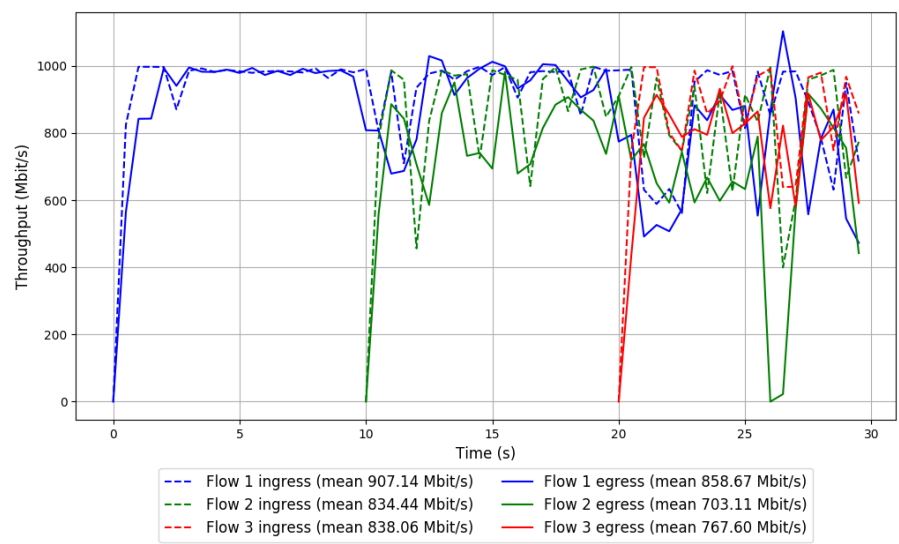
-- Flow 3:

Average throughput: 767.60 Mbit/s

95th percentile per-packet one-way delay: 287.154 ms

Loss rate: 10.47%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-09 14:23:54

End at: 2018-01-09 14:24:24

Below is generated by plot.py at 2018-01-09 18:42:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 1427.82 Mbit/s

95th percentile per-packet one-way delay: 353.300 ms

Loss rate: 14.54%

-- Flow 1:

Average throughput: 807.70 Mbit/s

95th percentile per-packet one-way delay: 219.114 ms

Loss rate: 10.79%

-- Flow 2:

Average throughput: 669.88 Mbit/s

95th percentile per-packet one-way delay: 365.242 ms

Loss rate: 16.59%

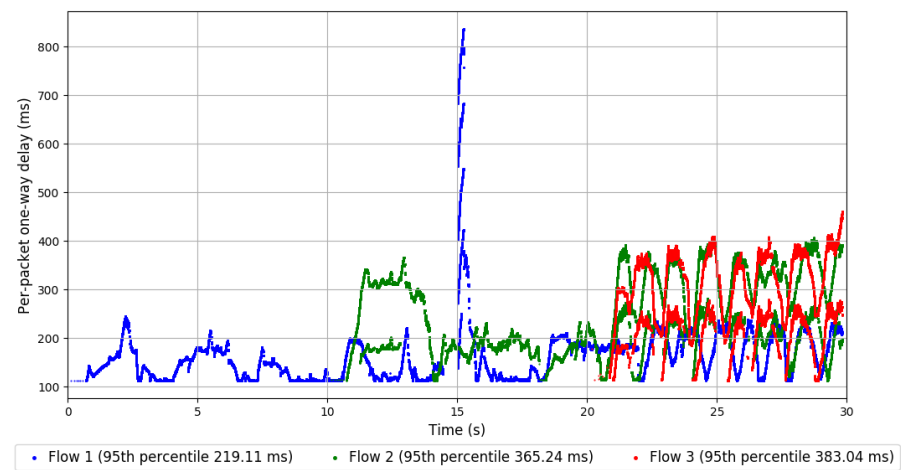
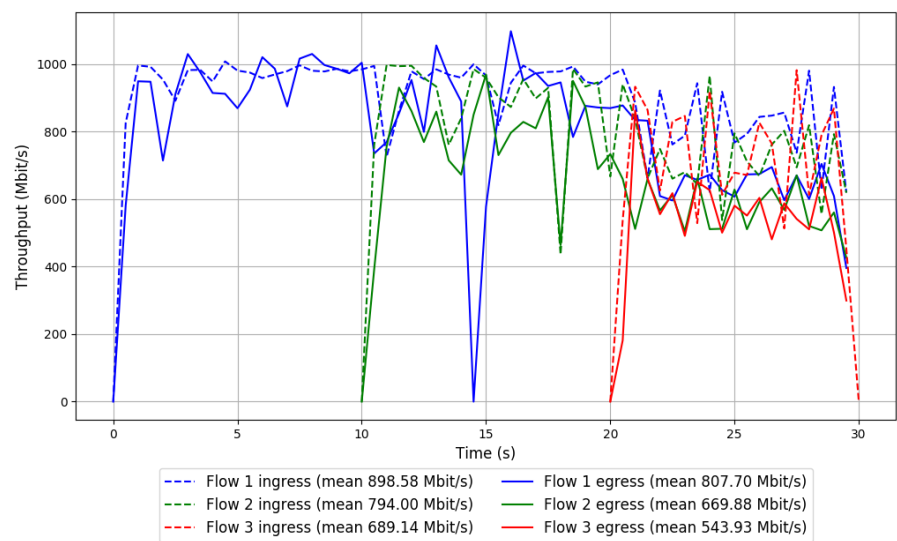
-- Flow 3:

Average throughput: 543.93 Mbit/s

95th percentile per-packet one-way delay: 383.041 ms

Loss rate: 24.45%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-09 14:38:38

End at: 2018-01-09 14:39:08

Below is generated by plot.py at 2018-01-09 18:50:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1540.44 Mbit/s

95th percentile per-packet one-way delay: 220.804 ms

Loss rate: 8.26%

-- Flow 1:

Average throughput: 852.79 Mbit/s

95th percentile per-packet one-way delay: 218.074 ms

Loss rate: 5.74%

-- Flow 2:

Average throughput: 814.51 Mbit/s

95th percentile per-packet one-way delay: 217.212 ms

Loss rate: 8.89%

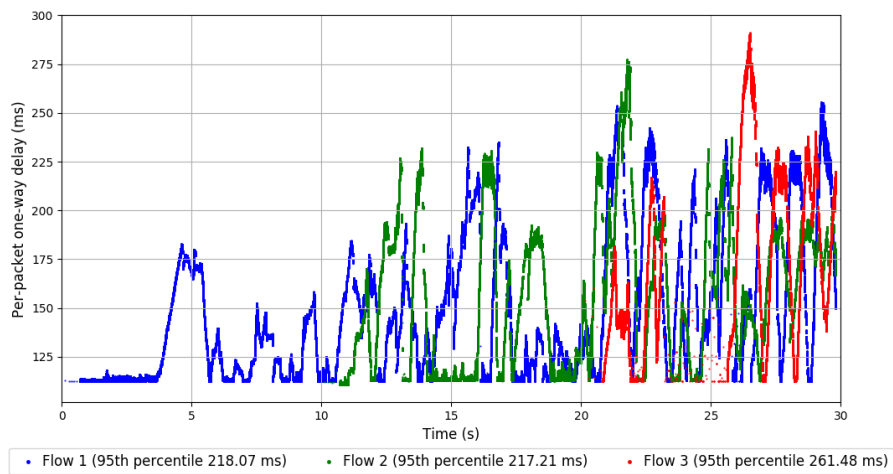
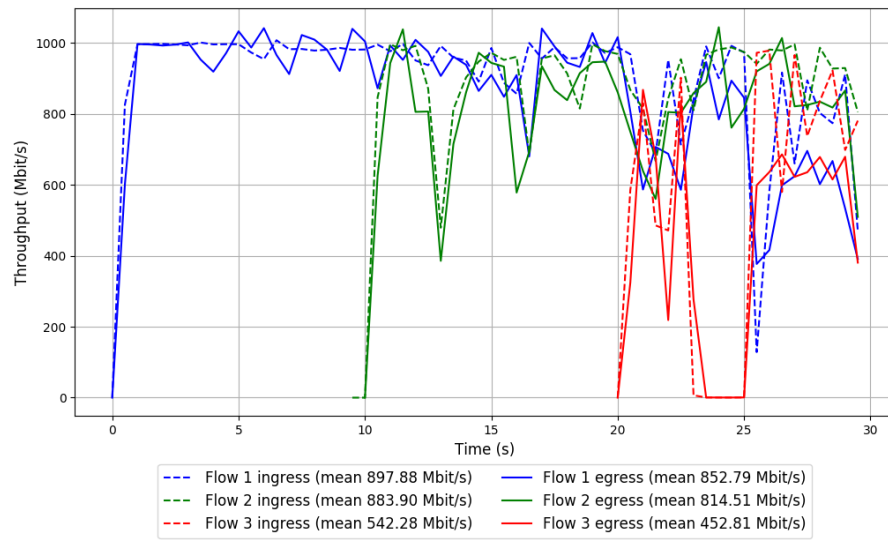
-- Flow 3:

Average throughput: 452.81 Mbit/s

95th percentile per-packet one-way delay: 261.482 ms

Loss rate: 18.75%

Run 9: Report of FillP — Data Link

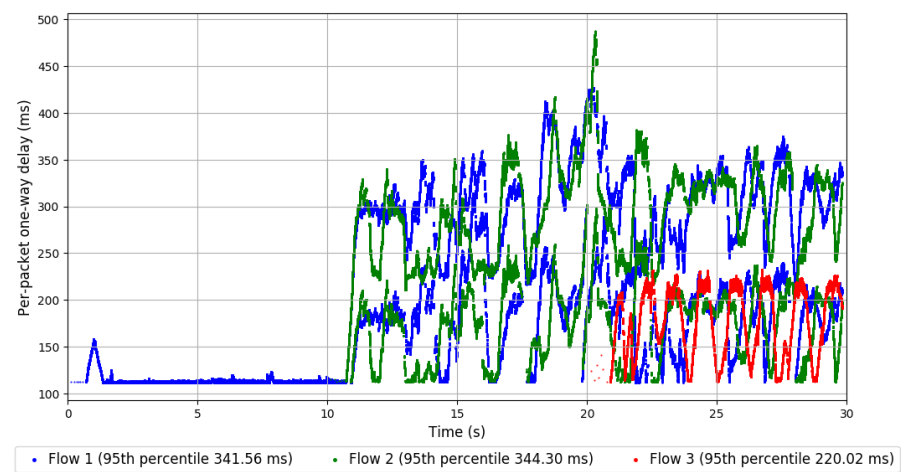
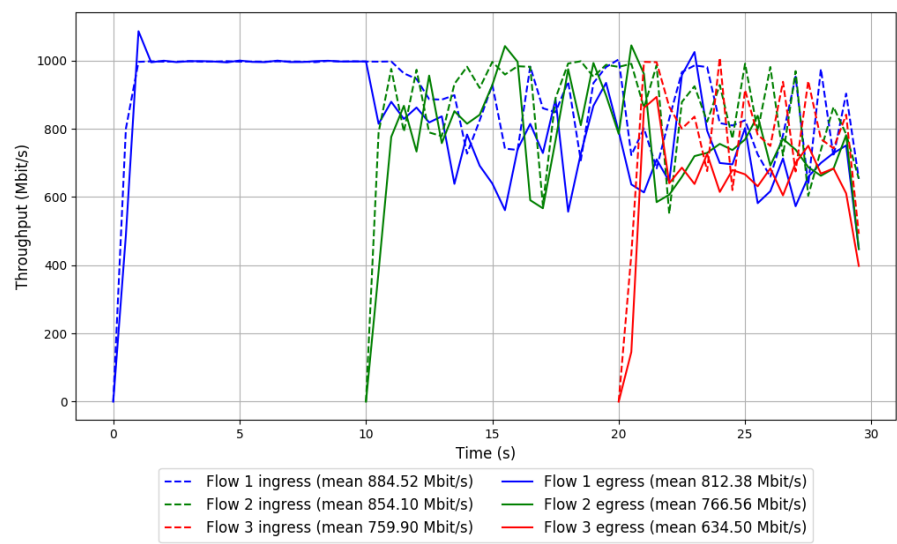


```
Run 10: Statistics of FillP

Start at: 2018-01-09 14:54:17
End at: 2018-01-09 14:54:47

# Below is generated by plot.py at 2018-01-09 18:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1527.24 Mbit/s
95th percentile per-packet one-way delay: 338.888 ms
Loss rate: 11.08%
-- Flow 1:
Average throughput: 812.38 Mbit/s
95th percentile per-packet one-way delay: 341.562 ms
Loss rate: 8.85%
-- Flow 2:
Average throughput: 766.56 Mbit/s
95th percentile per-packet one-way delay: 344.301 ms
Loss rate: 11.27%
-- Flow 3:
Average throughput: 634.50 Mbit/s
95th percentile per-packet one-way delay: 220.024 ms
Loss rate: 18.50%
```

Run 10: Report of FillP — Data Link

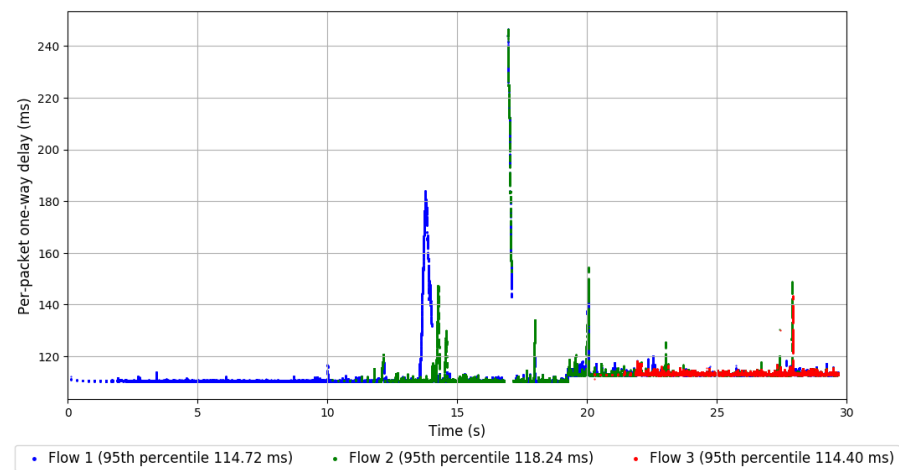
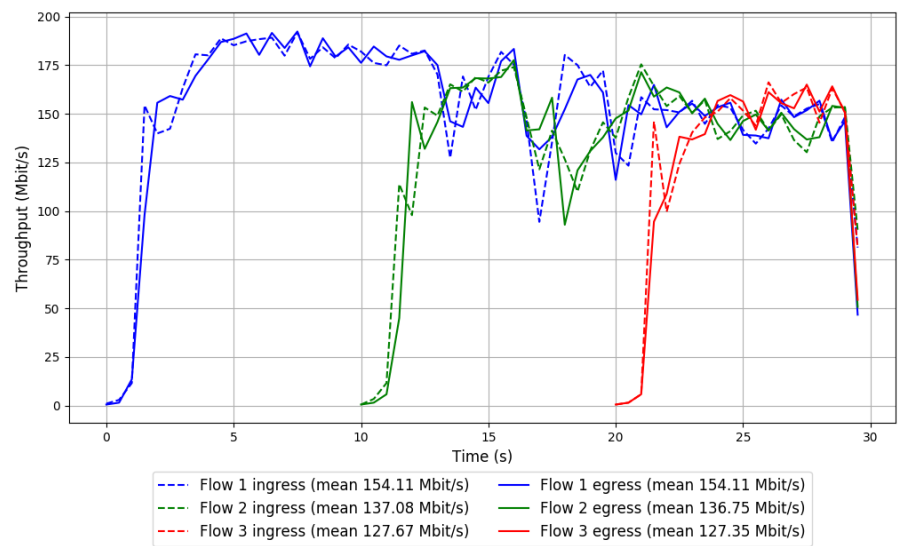


```
Run 1: Statistics of Indigo

Start at: 2018-01-09 12:25:50
End at: 2018-01-09 12:26:20

# Below is generated by plot.py at 2018-01-09 18:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 284.73 Mbit/s
95th percentile per-packet one-way delay: 115.425 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 154.11 Mbit/s
95th percentile per-packet one-way delay: 114.721 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 136.75 Mbit/s
95th percentile per-packet one-way delay: 118.237 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 127.35 Mbit/s
95th percentile per-packet one-way delay: 114.401 ms
Loss rate: 2.55%
```

Run 1: Report of Indigo — Data Link

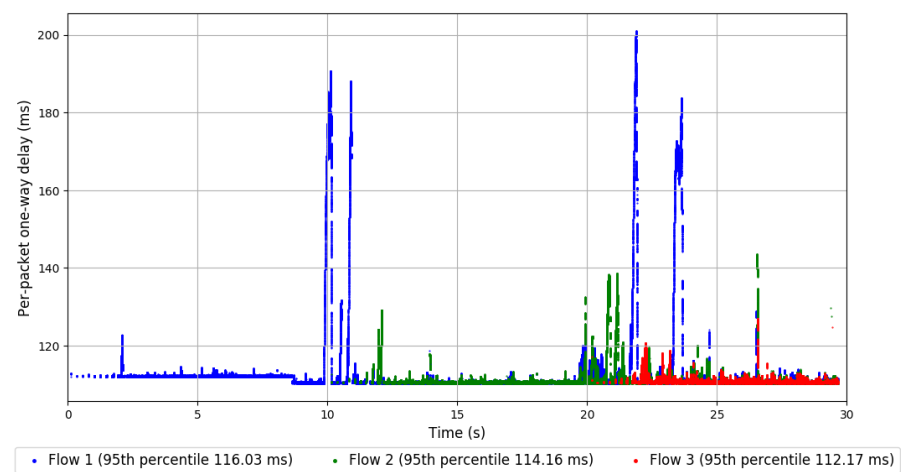
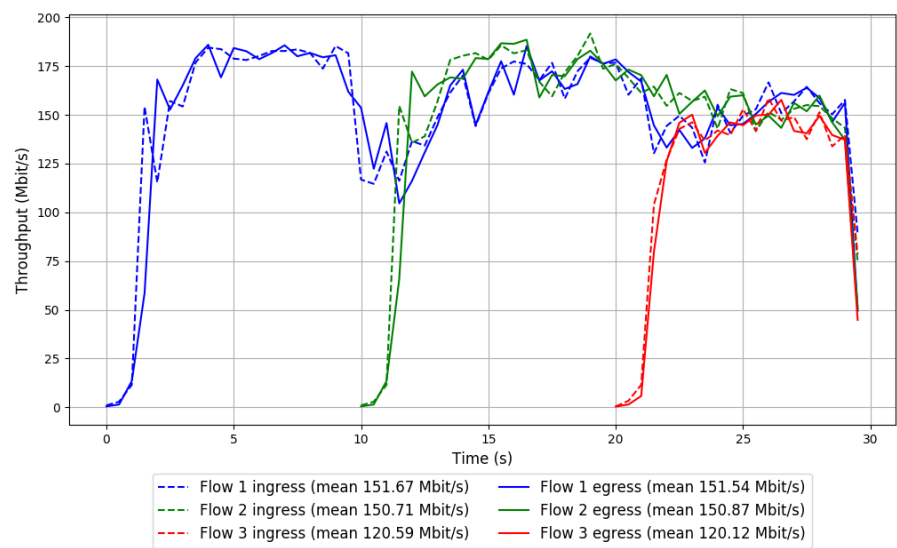


```
Run 2: Statistics of Indigo

Start at: 2018-01-09 12:41:21
End at: 2018-01-09 12:41:51

# Below is generated by plot.py at 2018-01-09 18:51:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 289.82 Mbit/s
95th percentile per-packet one-way delay: 114.426 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 151.54 Mbit/s
95th percentile per-packet one-way delay: 116.032 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 150.87 Mbit/s
95th percentile per-packet one-way delay: 114.162 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 120.12 Mbit/s
95th percentile per-packet one-way delay: 112.172 ms
Loss rate: 2.68%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-09 12:56:35

End at: 2018-01-09 12:57:05

Below is generated by plot.py at 2018-01-09 18:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.25 Mbit/s

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

Loss rate: 1.11%

-- Flow 1:

Average throughput: 156.12 Mbit/s

95th percentile per-packet one-way delay: 113.477 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 145.79 Mbit/s

95th percentile per-packet one-way delay: 113.486 ms

Loss rate: 1.14%

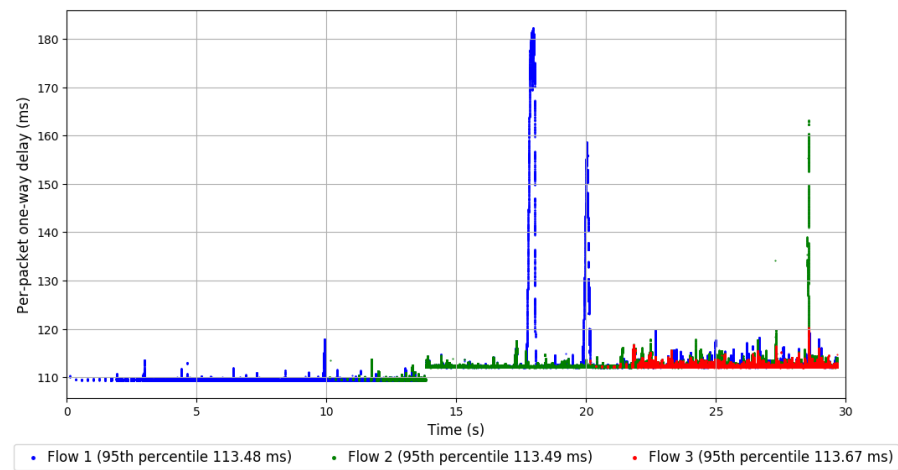
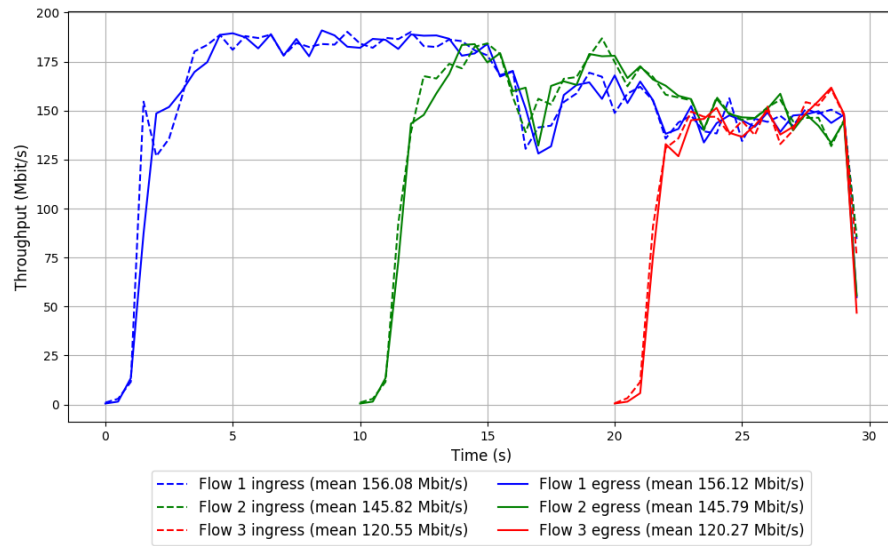
-- Flow 3:

Average throughput: 120.27 Mbit/s

95th percentile per-packet one-way delay: 113.673 ms

Loss rate: 2.54%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-09 13:12:09

End at: 2018-01-09 13:12:39

Below is generated by plot.py at 2018-01-09 18:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.38 Mbit/s

95th percentile per-packet one-way delay: 111.030 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 162.88 Mbit/s

95th percentile per-packet one-way delay: 110.670 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 146.47 Mbit/s

95th percentile per-packet one-way delay: 111.326 ms

Loss rate: 1.19%

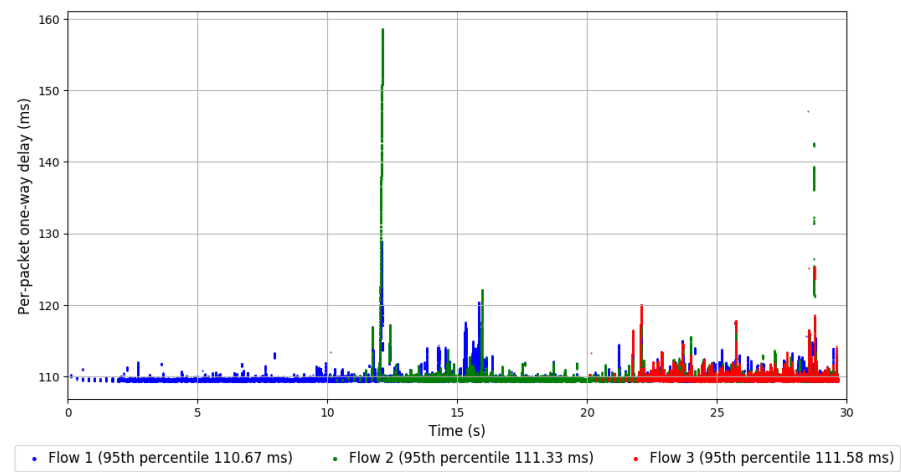
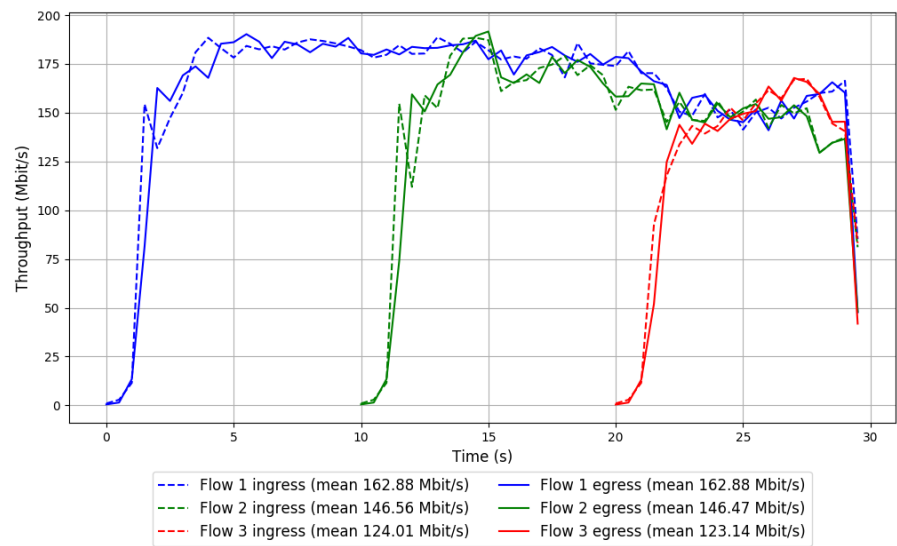
-- Flow 3:

Average throughput: 123.14 Mbit/s

95th percentile per-packet one-way delay: 111.576 ms

Loss rate: 2.93%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-09 13:27:57

End at: 2018-01-09 13:28:27

Below is generated by plot.py at 2018-01-09 18:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 287.55 Mbit/s

95th percentile per-packet one-way delay: 119.605 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 158.27 Mbit/s

95th percentile per-packet one-way delay: 116.642 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 137.87 Mbit/s

95th percentile per-packet one-way delay: 121.067 ms

Loss rate: 1.18%

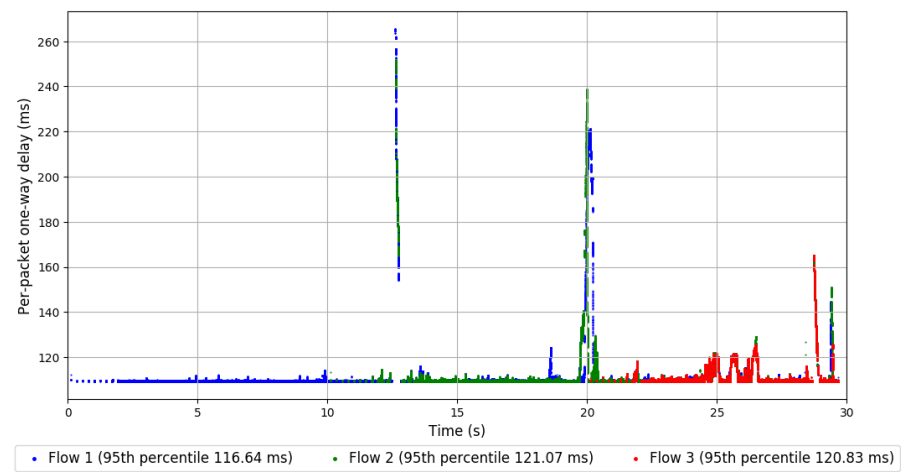
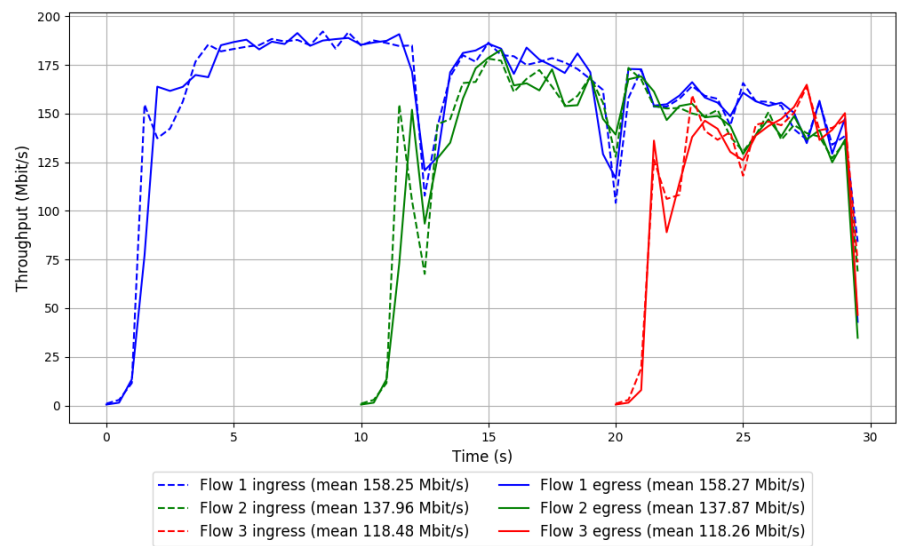
-- Flow 3:

Average throughput: 118.26 Mbit/s

95th percentile per-packet one-way delay: 120.830 ms

Loss rate: 2.47%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-09 13:43:23

End at: 2018-01-09 13:43:53

Below is generated by plot.py at 2018-01-09 18:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 288.54 Mbit/s

95th percentile per-packet one-way delay: 115.008 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 153.98 Mbit/s

95th percentile per-packet one-way delay: 114.869 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 142.77 Mbit/s

95th percentile per-packet one-way delay: 115.433 ms

Loss rate: 0.99%

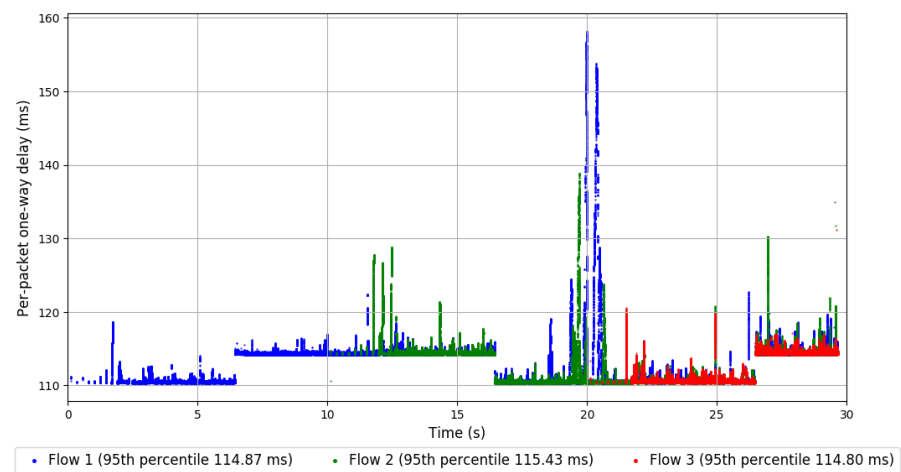
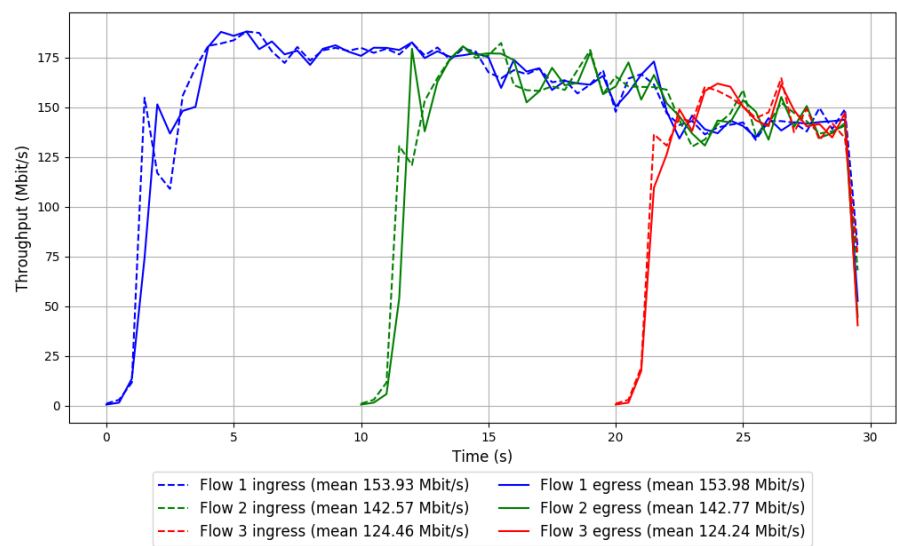
-- Flow 3:

Average throughput: 124.24 Mbit/s

95th percentile per-packet one-way delay: 114.803 ms

Loss rate: 2.46%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-09 13:58:17

End at: 2018-01-09 13:58:47

Below is generated by plot.py at 2018-01-09 18:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 299.33 Mbit/s

95th percentile per-packet one-way delay: 114.865 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 158.89 Mbit/s

95th percentile per-packet one-way delay: 114.747 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 150.62 Mbit/s

95th percentile per-packet one-way delay: 115.099 ms

Loss rate: 1.13%

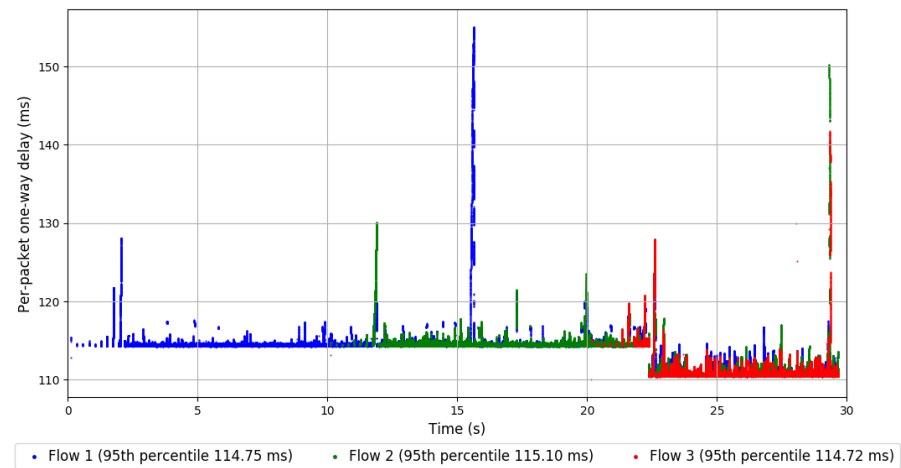
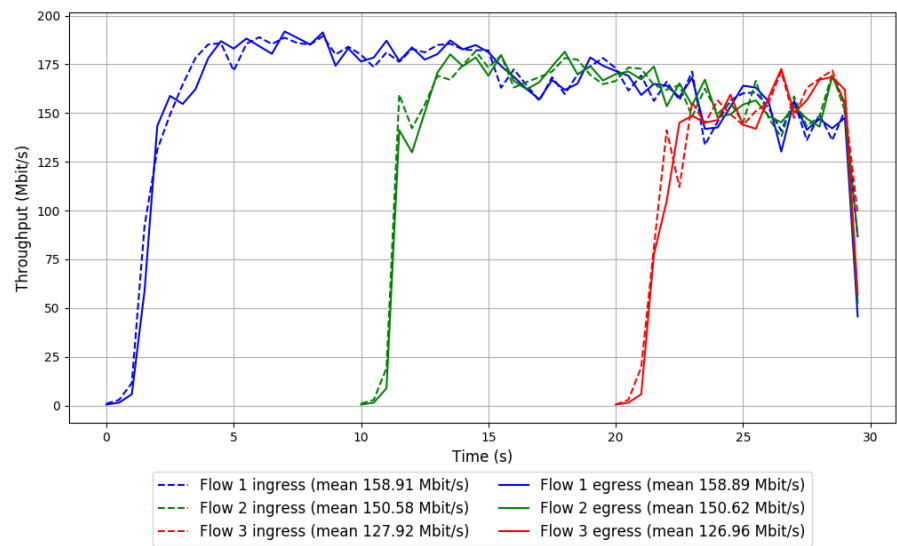
-- Flow 3:

Average throughput: 126.96 Mbit/s

95th percentile per-packet one-way delay: 114.720 ms

Loss rate: 3.02%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-09 14:13:40

End at: 2018-01-09 14:14:10

Below is generated by plot.py at 2018-01-09 18:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 285.12 Mbit/s

95th percentile per-packet one-way delay: 116.739 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 152.74 Mbit/s

95th percentile per-packet one-way delay: 119.040 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 143.62 Mbit/s

95th percentile per-packet one-way delay: 115.047 ms

Loss rate: 1.26%

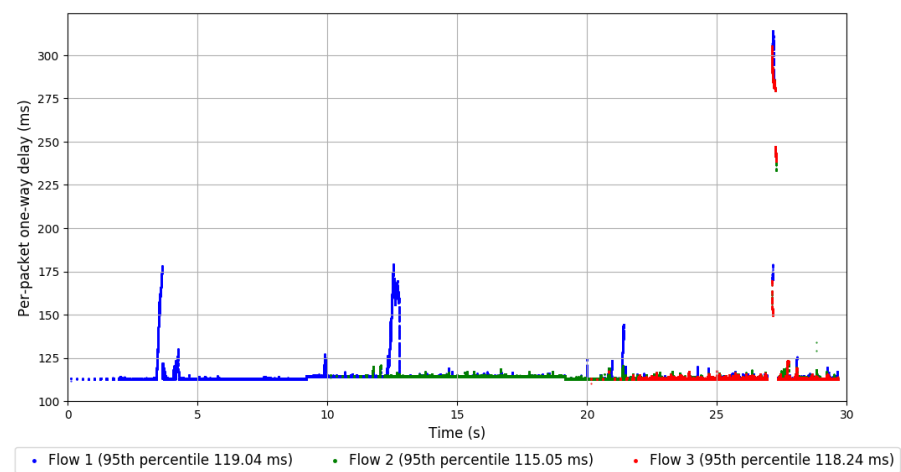
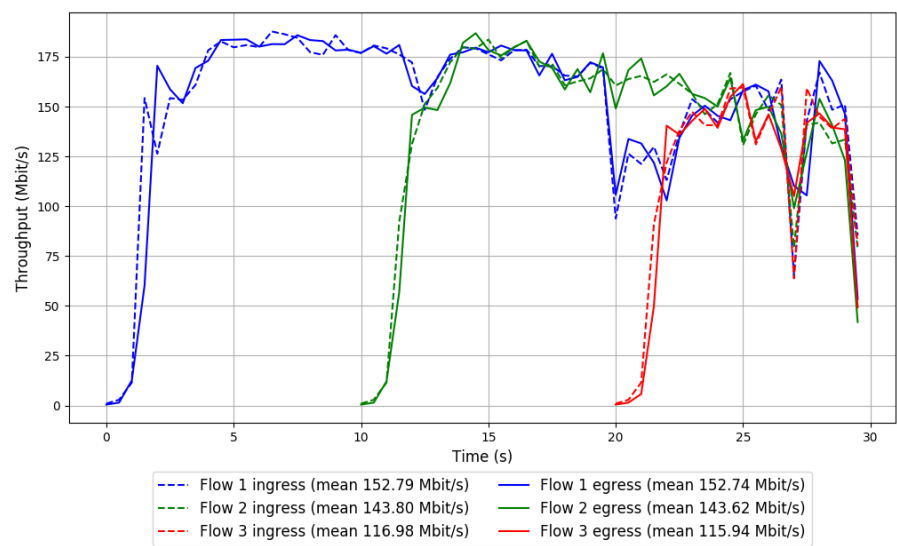
-- Flow 3:

Average throughput: 115.94 Mbit/s

95th percentile per-packet one-way delay: 118.237 ms

Loss rate: 3.16%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-09 14:28:49

End at: 2018-01-09 14:29:19

Below is generated by plot.py at 2018-01-09 18:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 281.38 Mbit/s

95th percentile per-packet one-way delay: 115.018 ms

Loss rate: 1.50%

-- Flow 1:

Average throughput: 152.56 Mbit/s

95th percentile per-packet one-way delay: 114.766 ms

Loss rate: 1.00%

-- Flow 2:

Average throughput: 135.84 Mbit/s

95th percentile per-packet one-way delay: 115.550 ms

Loss rate: 1.65%

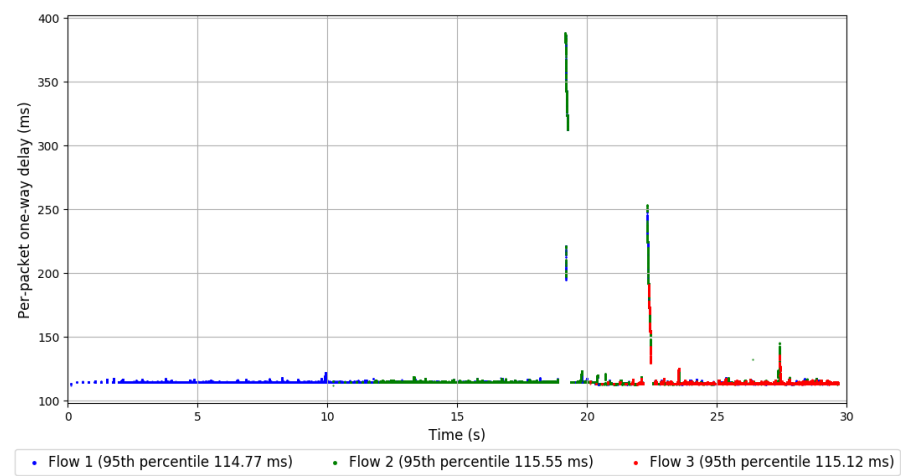
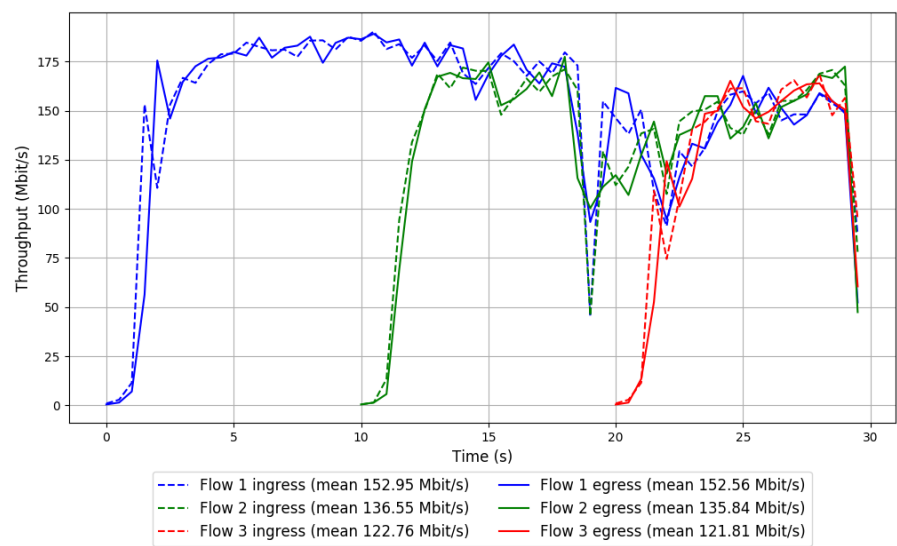
-- Flow 3:

Average throughput: 121.81 Mbit/s

95th percentile per-packet one-way delay: 115.120 ms

Loss rate: 3.06%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-09 14:43:34

End at: 2018-01-09 14:44:04

Below is generated by plot.py at 2018-01-09 18:51:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 297.94 Mbit/s

95th percentile per-packet one-way delay: 110.734 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 160.85 Mbit/s

95th percentile per-packet one-way delay: 110.348 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 149.56 Mbit/s

95th percentile per-packet one-way delay: 111.283 ms

Loss rate: 1.05%

-- Flow 3:

Average throughput: 119.11 Mbit/s

95th percentile per-packet one-way delay: 111.059 ms

Loss rate: 2.82%

Run 10: Report of Indigo — Data Link

