

Pantheon Report

Generated at 2018-01-09 18:49:50 (UTC).

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

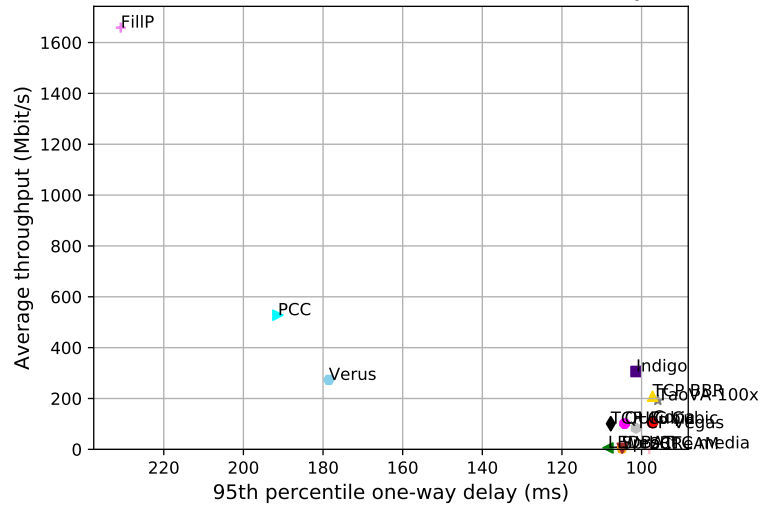
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

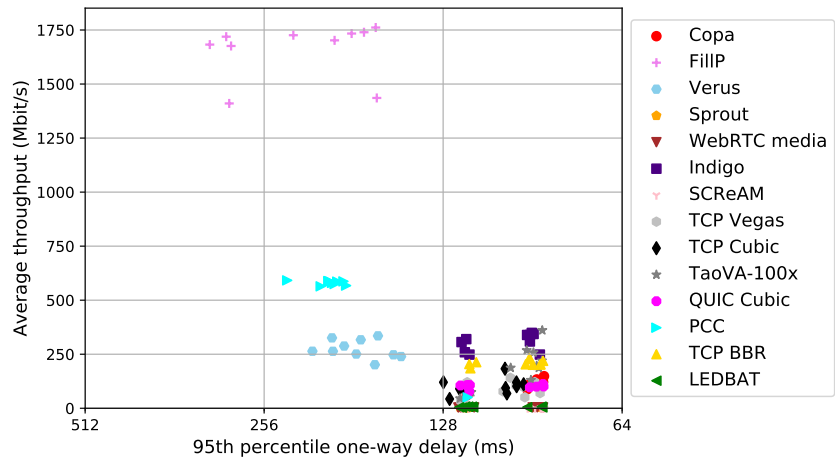
Git summary:

```
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 @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



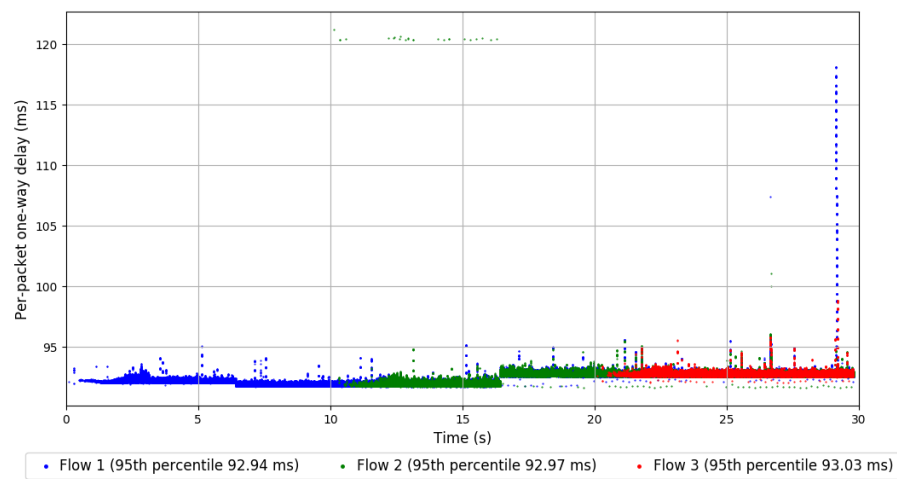
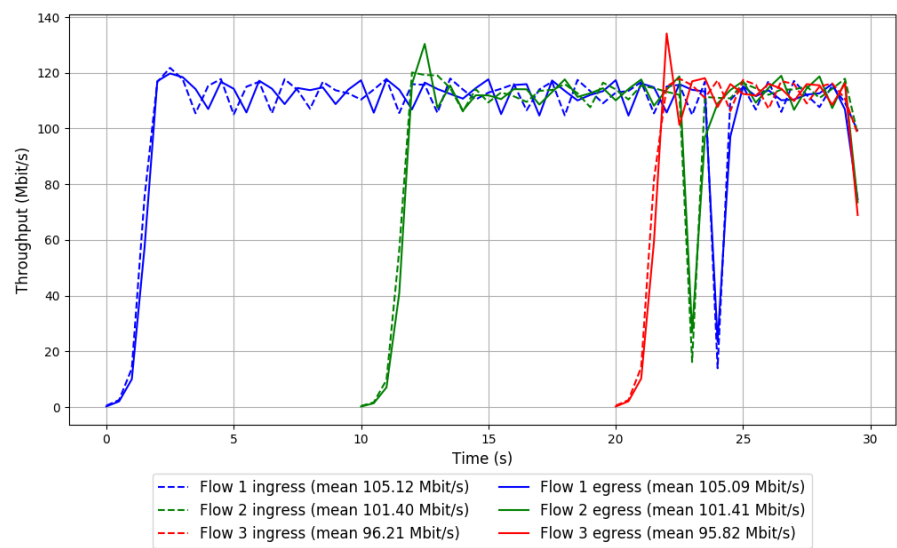
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	108.91	102.96	97.80	97.23	94.65	95.01	0.74	1.14	2.47
TCP Cubic	10	46.98	57.01	49.64	108.27	102.00	103.36	1.43	1.66	3.46
LEDBAT	10	3.23	2.77	1.84	108.39	103.22	103.12	1.26	2.03	3.85
PCC	10	484.06	46.03	40.62	192.19	185.12	177.96	2.73	2.52	4.62
QUIC Cubic	9	57.93	50.63	30.70	104.24	91.73	88.93	0.79	1.38	2.02
SCReAM	9	0.22	0.22	0.22	95.01	97.54	91.82	0.64	1.03	1.82
WebRTC media	9	2.07	1.34	0.48	101.77	92.65	95.53	0.84	1.33	3.57
Sprout	9	1.90	1.79	1.66	107.63	100.36	103.31	1.39	2.56	4.23
TaoVA-100x	10	106.80	121.04	94.33	95.07	100.87	102.39	2.84	0.36	4.00
TCP Vegas	10	42.87	41.44	39.95	99.41	100.97	97.88	0.82	1.46	2.31
Verus	10	158.33	134.60	83.37	179.84	178.51	174.92	1.98	2.69	4.76
Copa	10	57.94	52.69	49.63	94.71	99.94	94.46	0.86	1.35	3.91
FillP	10	899.57	749.36	803.19	229.47	200.67	212.36	4.67	6.94	9.82
Indigo	10	153.38	161.58	142.56	101.35	101.34	99.08	0.60	0.78	2.32

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-09 12:26:38
End at: 2018-01-09 12:27:08

# Below is generated by plot.py at 2018-01-09 17:36:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 203.41 Mbit/s
95th percentile per-packet one-way delay: 92.968 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 105.09 Mbit/s
95th percentile per-packet one-way delay: 92.941 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 101.41 Mbit/s
95th percentile per-packet one-way delay: 92.972 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 95.82 Mbit/s
95th percentile per-packet one-way delay: 93.025 ms
Loss rate: 2.57%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-09 12:41:40

End at: 2018-01-09 12:42:10

Below is generated by plot.py at 2018-01-09 17:36:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 231.21 Mbit/s

95th percentile per-packet one-way delay: 91.679 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 118.32 Mbit/s

95th percentile per-packet one-way delay: 91.598 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 116.34 Mbit/s

95th percentile per-packet one-way delay: 91.731 ms

Loss rate: 1.37%

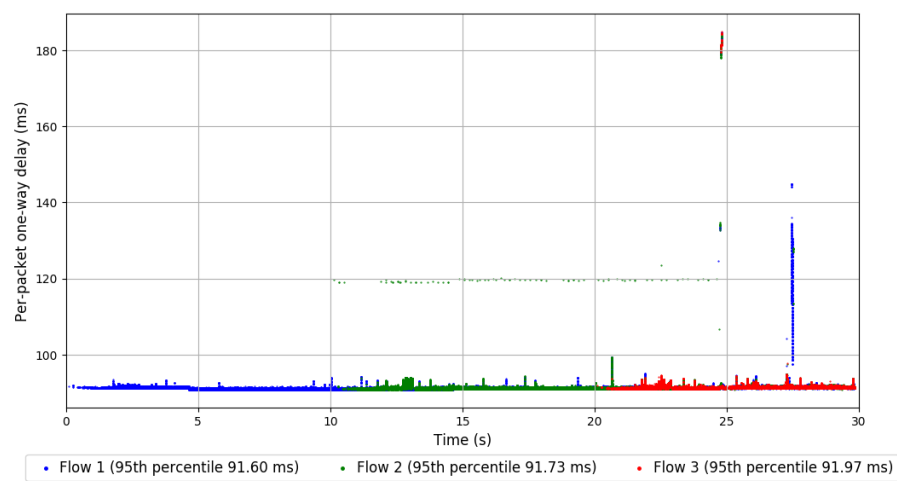
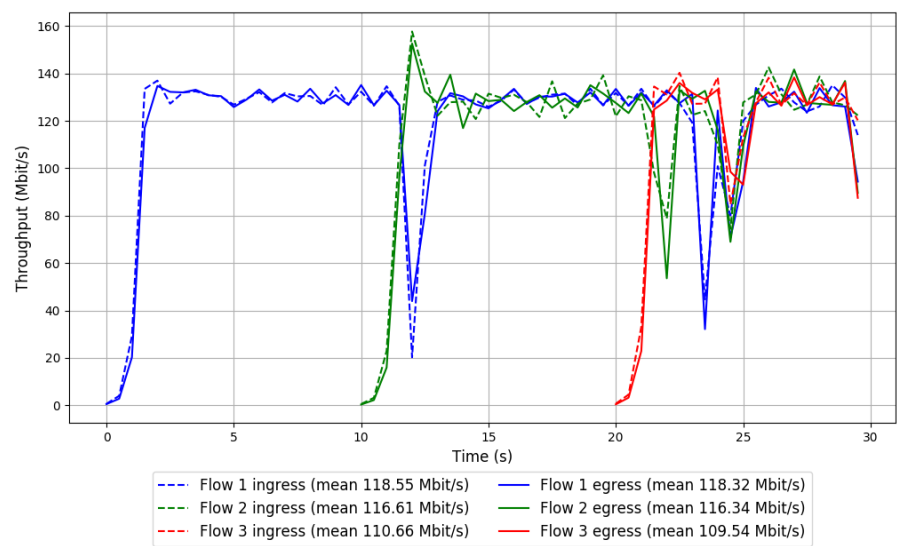
-- Flow 3:

Average throughput: 109.54 Mbit/s

95th percentile per-packet one-way delay: 91.965 ms

Loss rate: 3.01%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

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

End at: 2018-01-09 12:57:39

Below is generated by plot.py at 2018-01-09 17:36:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.13 Mbit/s

95th percentile per-packet one-way delay: 91.378 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 121.58 Mbit/s

95th percentile per-packet one-way delay: 91.312 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 104.36 Mbit/s

95th percentile per-packet one-way delay: 91.404 ms

Loss rate: 1.15%

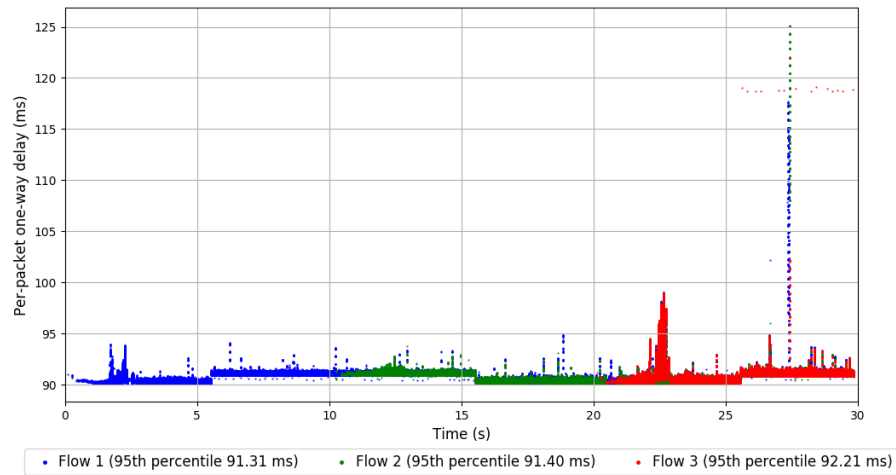
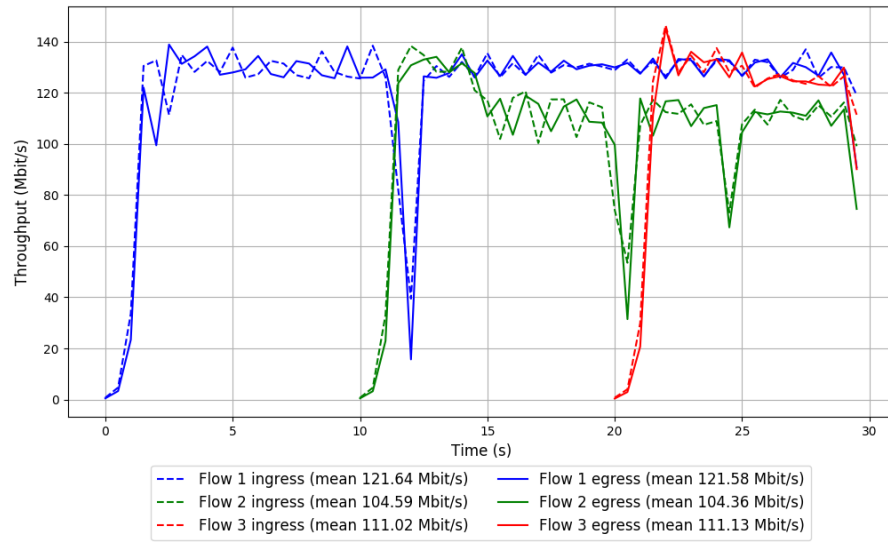
-- Flow 3:

Average throughput: 111.13 Mbit/s

95th percentile per-packet one-way delay: 92.206 ms

Loss rate: 1.94%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-09 13:11:58

End at: 2018-01-09 13:12:28

Below is generated by plot.py at 2018-01-09 17:36:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 201.15 Mbit/s

95th percentile per-packet one-way delay: 90.400 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 104.23 Mbit/s

95th percentile per-packet one-way delay: 90.356 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 100.82 Mbit/s

95th percentile per-packet one-way delay: 90.412 ms

Loss rate: 1.03%

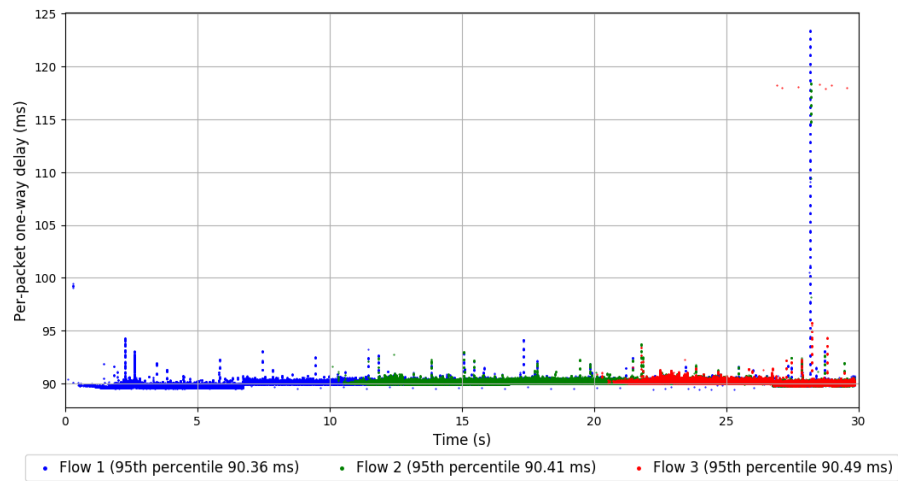
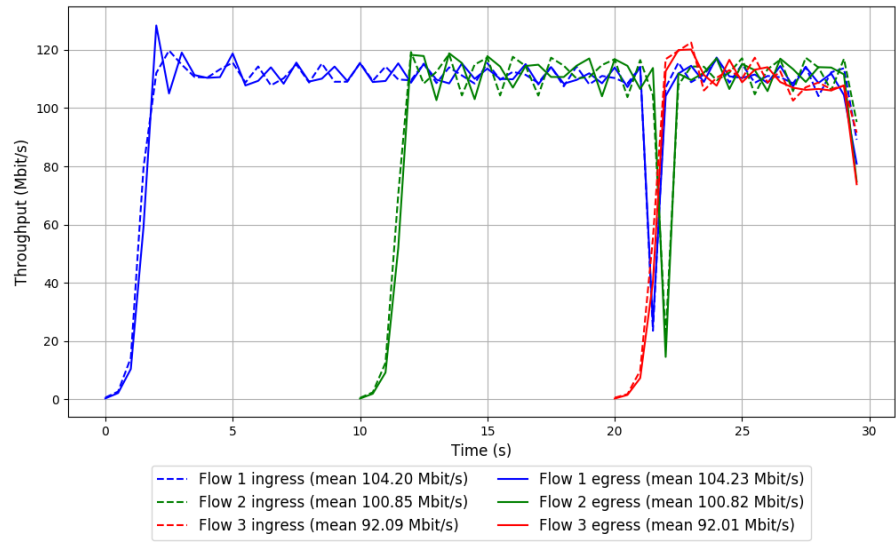
-- Flow 3:

Average throughput: 92.01 Mbit/s

95th percentile per-packet one-way delay: 90.491 ms

Loss rate: 2.12%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-09 13:27:35

End at: 2018-01-09 13:28:05

Below is generated by plot.py at 2018-01-09 17:36:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 204.73 Mbit/s

95th percentile per-packet one-way delay: 115.645 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 114.92 Mbit/s

95th percentile per-packet one-way delay: 115.419 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 94.47 Mbit/s

95th percentile per-packet one-way delay: 115.515 ms

Loss rate: 1.38%

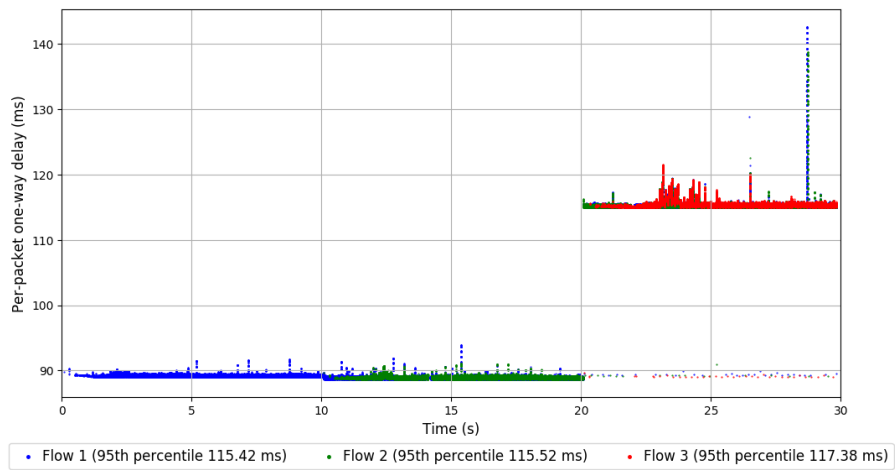
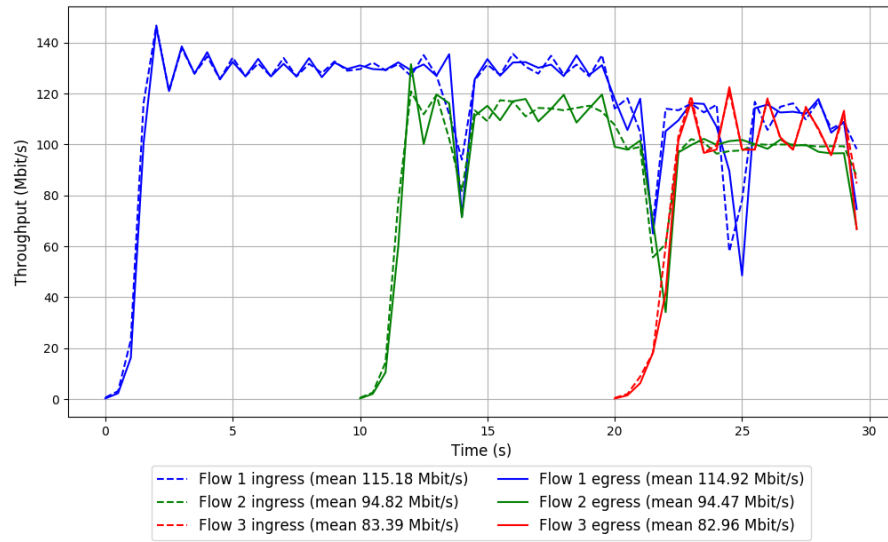
-- Flow 3:

Average throughput: 82.96 Mbit/s

95th percentile per-packet one-way delay: 117.376 ms

Loss rate: 2.56%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-09 13:42:53

End at: 2018-01-09 13:43:23

Below is generated by plot.py at 2018-01-09 17:36:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 184.91 Mbit/s

95th percentile per-packet one-way delay: 115.174 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 95.71 Mbit/s

95th percentile per-packet one-way delay: 115.225 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 94.52 Mbit/s

95th percentile per-packet one-way delay: 115.047 ms

Loss rate: 1.16%

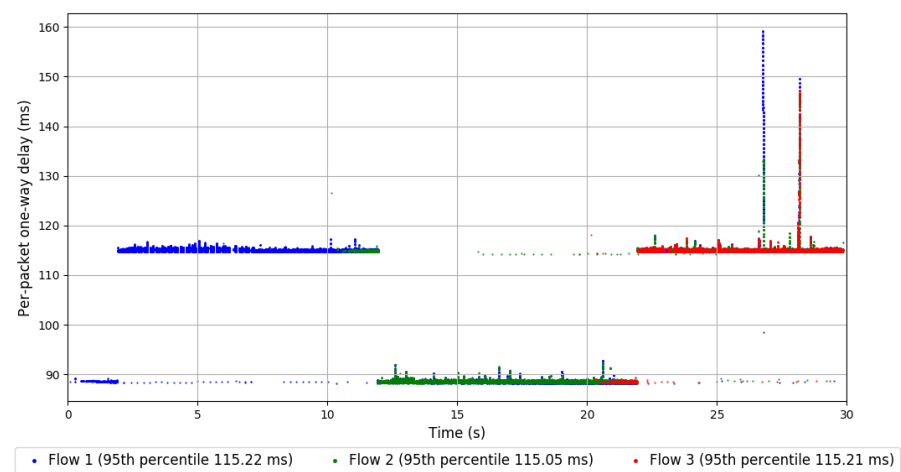
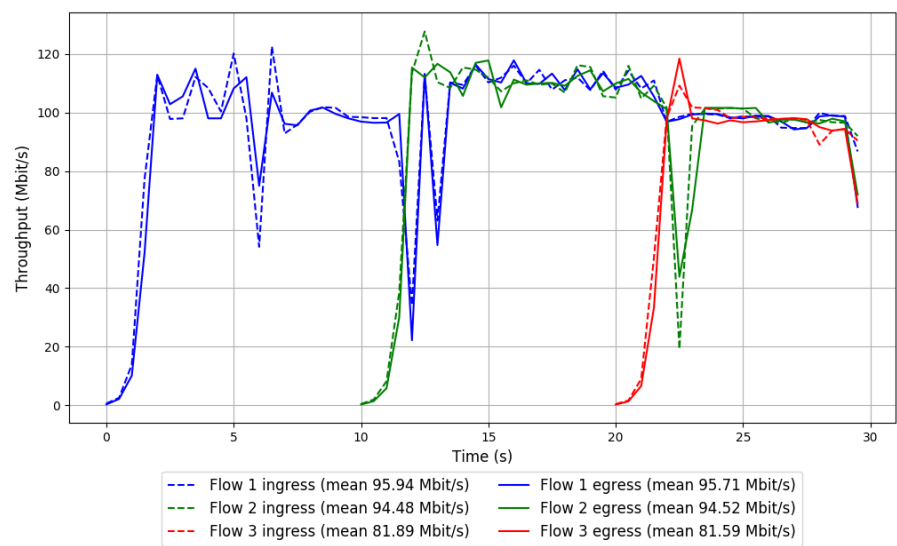
-- Flow 3:

Average throughput: 81.59 Mbit/s

95th percentile per-packet one-way delay: 115.206 ms

Loss rate: 2.69%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-09 13:57:43

End at: 2018-01-09 13:58:13

Below is generated by plot.py at 2018-01-09 17:36:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 202.27 Mbit/s

95th percentile per-packet one-way delay: 87.912 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 100.44 Mbit/s

95th percentile per-packet one-way delay: 87.956 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 100.85 Mbit/s

95th percentile per-packet one-way delay: 87.803 ms

Loss rate: 1.32%

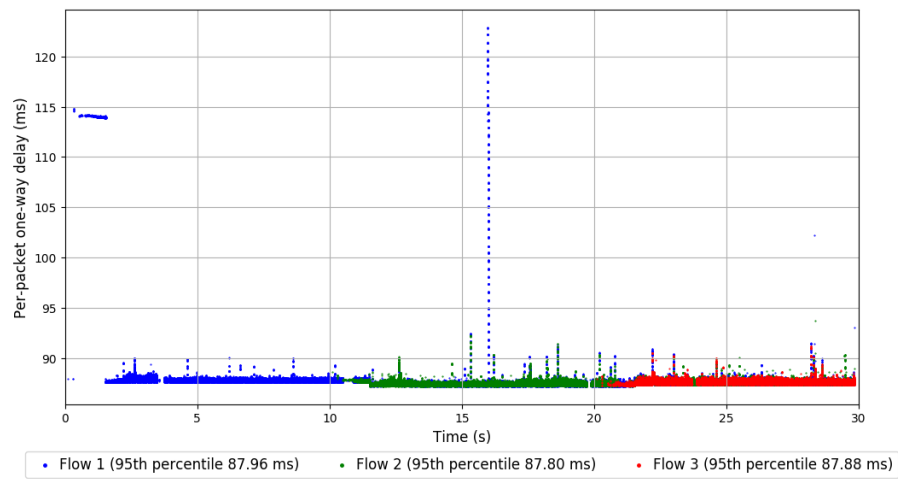
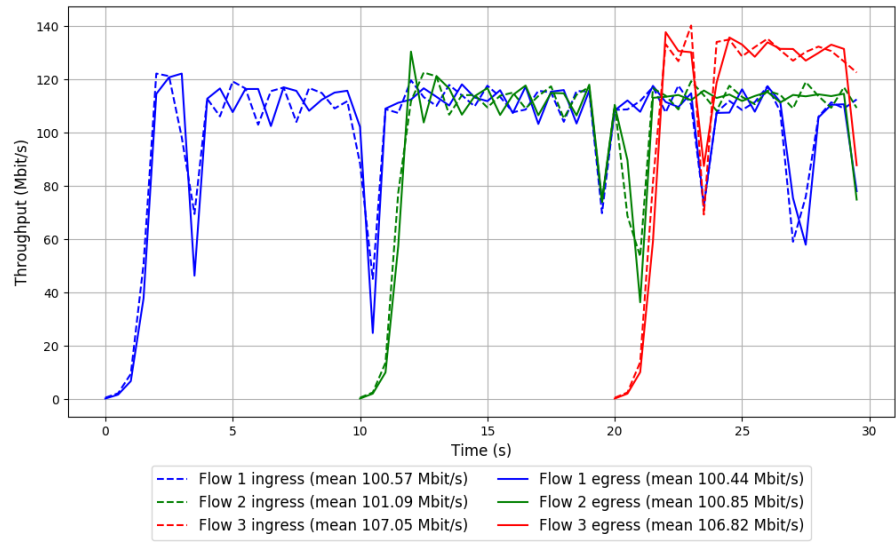
-- Flow 3:

Average throughput: 106.82 Mbit/s

95th percentile per-packet one-way delay: 87.878 ms

Loss rate: 2.51%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-09 14:13:12

End at: 2018-01-09 14:13:42

Below is generated by plot.py at 2018-01-09 17:36:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 203.72 Mbit/s

95th percentile per-packet one-way delay: 87.800 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 106.80 Mbit/s

95th percentile per-packet one-way delay: 87.756 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 99.72 Mbit/s

95th percentile per-packet one-way delay: 87.774 ms

Loss rate: 1.22%

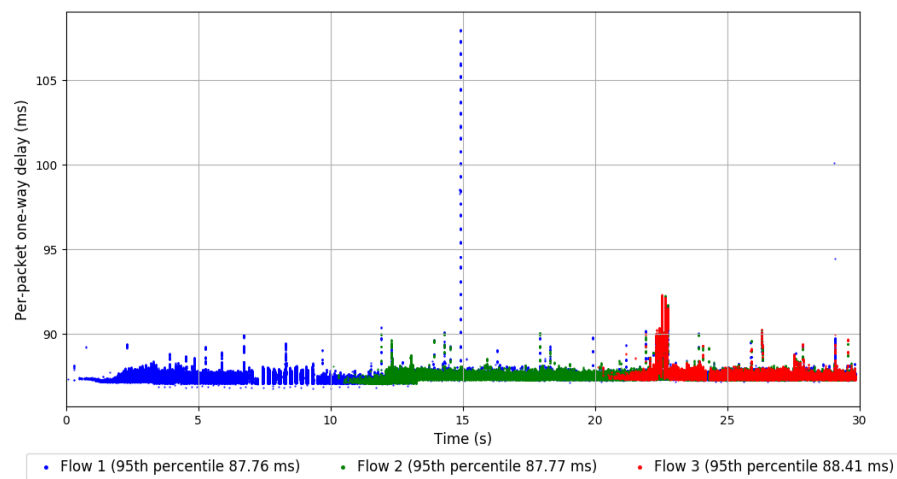
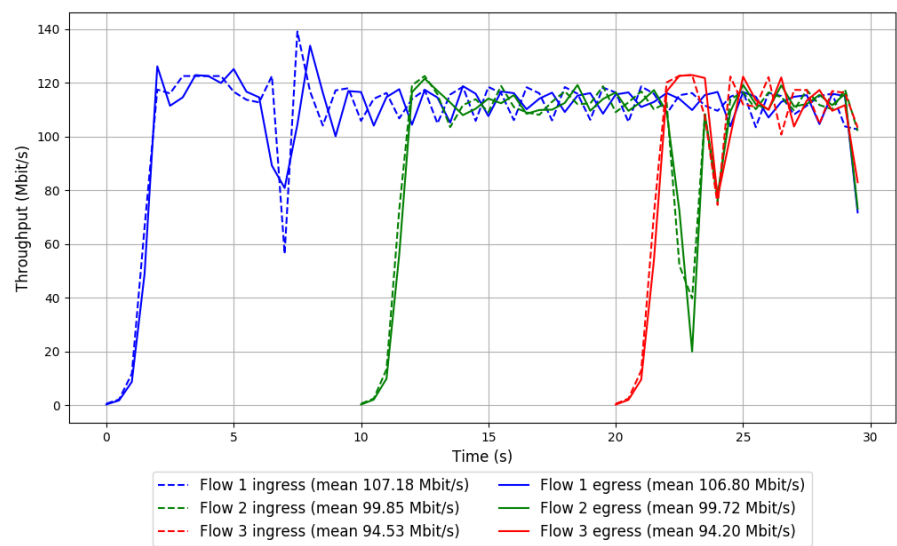
-- Flow 3:

Average throughput: 94.20 Mbit/s

95th percentile per-packet one-way delay: 88.410 ms

Loss rate: 2.39%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

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

End at: 2018-01-09 14:29:20

Below is generated by plot.py at 2018-01-09 17:39:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 213.24 Mbit/s

95th percentile per-packet one-way delay: 112.590 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 107.43 Mbit/s

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

Loss rate: 0.27%

-- Flow 2:

Average throughput: 106.28 Mbit/s

95th percentile per-packet one-way delay: 86.951 ms

Loss rate: 0.60%

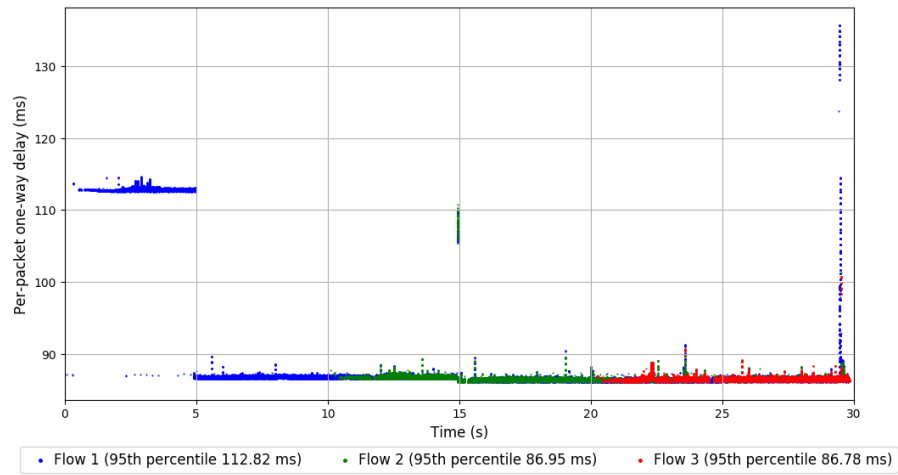
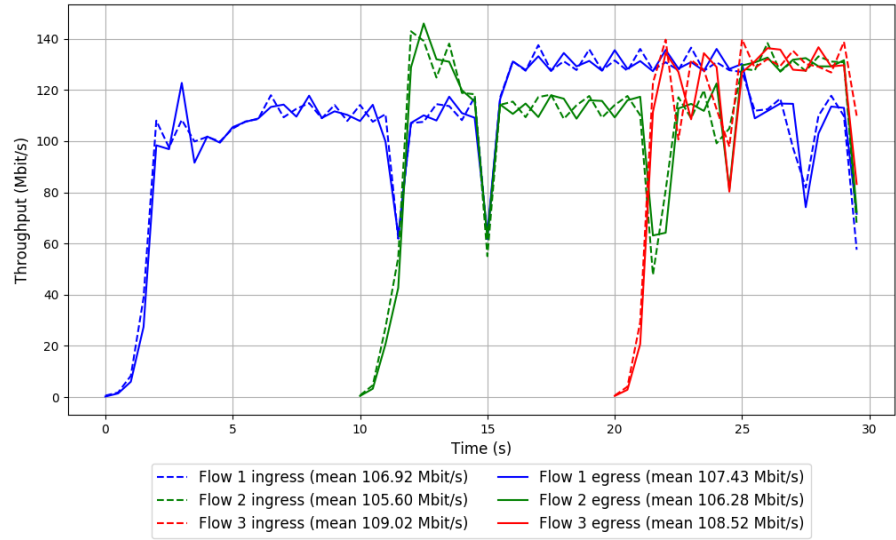
-- Flow 3:

Average throughput: 108.52 Mbit/s

95th percentile per-packet one-way delay: 86.779 ms

Loss rate: 2.46%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-09 14:44:03

End at: 2018-01-09 14:44:33

Below is generated by plot.py at 2018-01-09 17:39:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 219.38 Mbit/s

95th percentile per-packet one-way delay: 86.901 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 114.57 Mbit/s

95th percentile per-packet one-way delay: 86.942 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 110.86 Mbit/s

95th percentile per-packet one-way delay: 86.879 ms

Loss rate: 1.00%

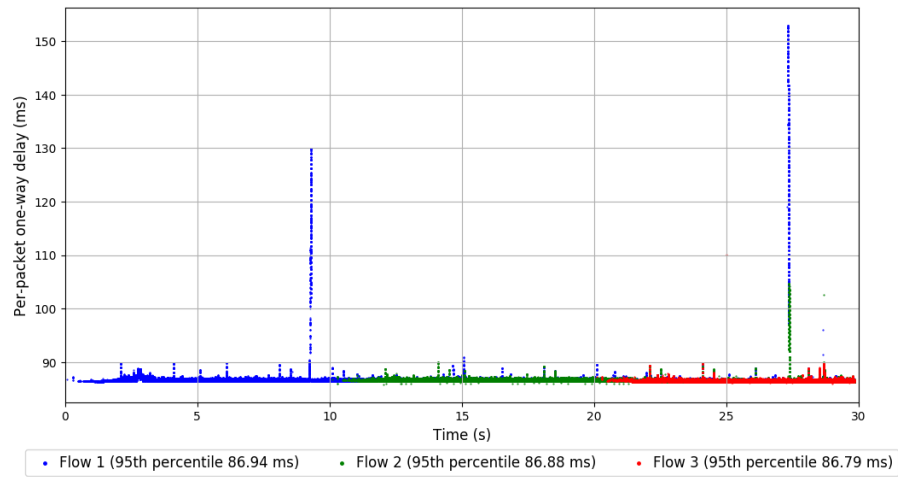
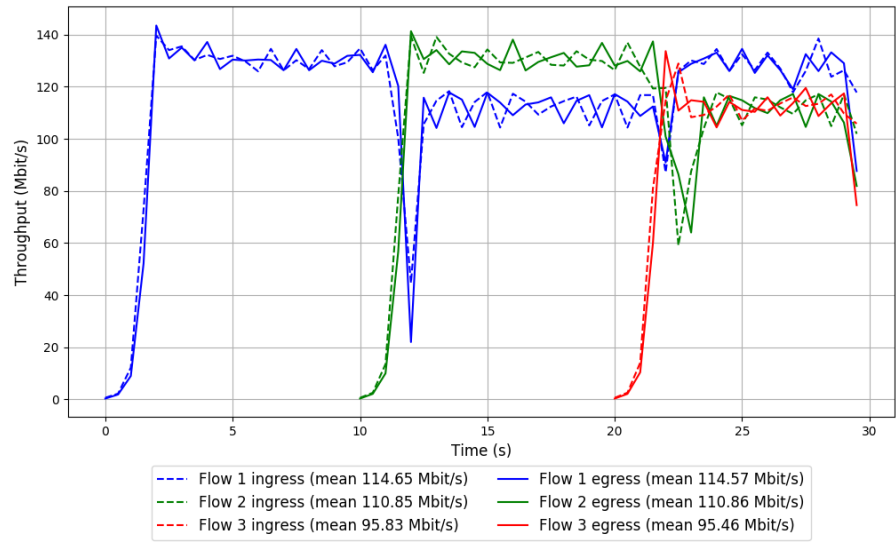
-- Flow 3:

Average throughput: 95.46 Mbit/s

95th percentile per-packet one-way delay: 86.786 ms

Loss rate: 2.48%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-09 12:22:55

End at: 2018-01-09 12:23:25

Below is generated by plot.py at 2018-01-09 17:39:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.30 Mbit/s

95th percentile per-packet one-way delay: 127.845 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 66.41 Mbit/s

95th percentile per-packet one-way delay: 128.429 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 54.87 Mbit/s

95th percentile per-packet one-way delay: 103.725 ms

Loss rate: 1.36%

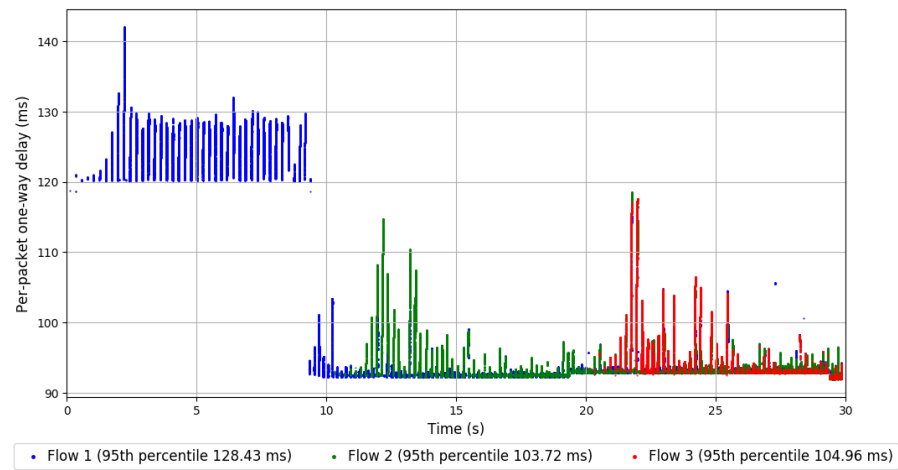
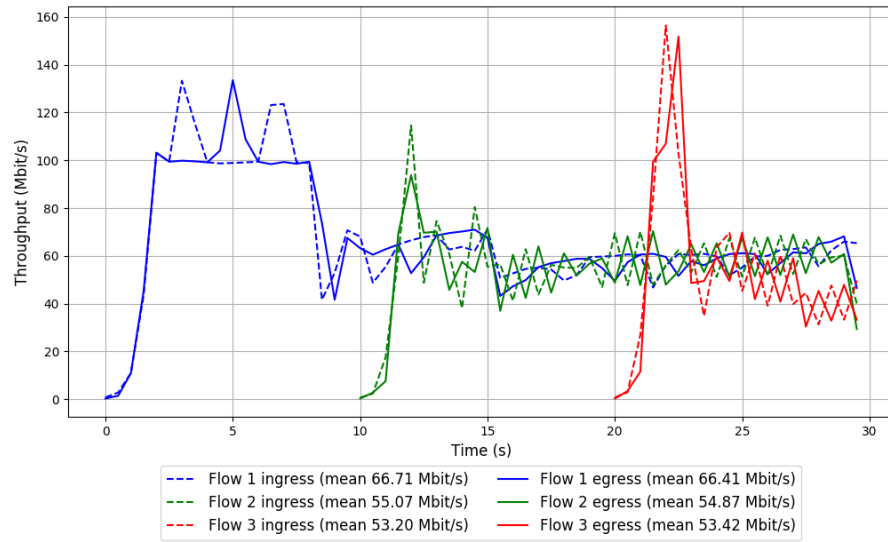
-- Flow 3:

Average throughput: 53.42 Mbit/s

95th percentile per-packet one-way delay: 104.964 ms

Loss rate: 1.63%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-09 12:37:59

End at: 2018-01-09 12:38:29

Below is generated by plot.py at 2018-01-09 17:39:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.45 Mbit/s

95th percentile per-packet one-way delay: 99.994 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 33.03 Mbit/s

95th percentile per-packet one-way delay: 93.352 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 9.22 Mbit/s

95th percentile per-packet one-way delay: 95.546 ms

Loss rate: 2.80%

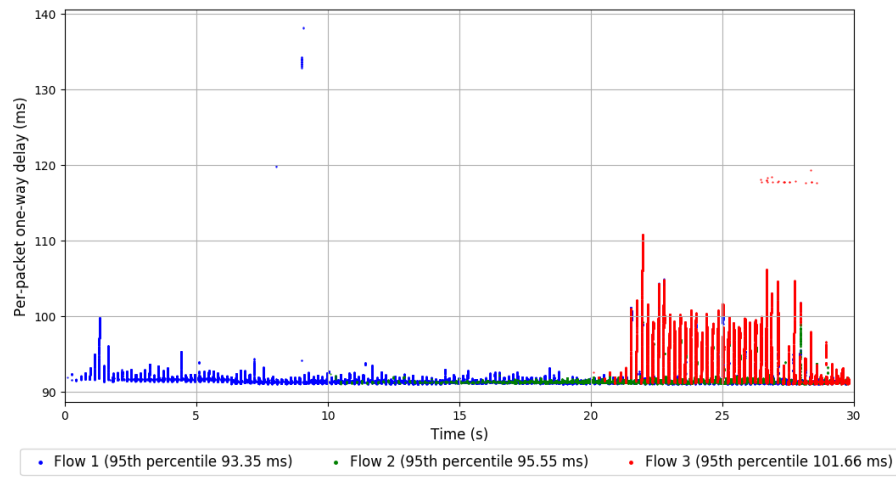
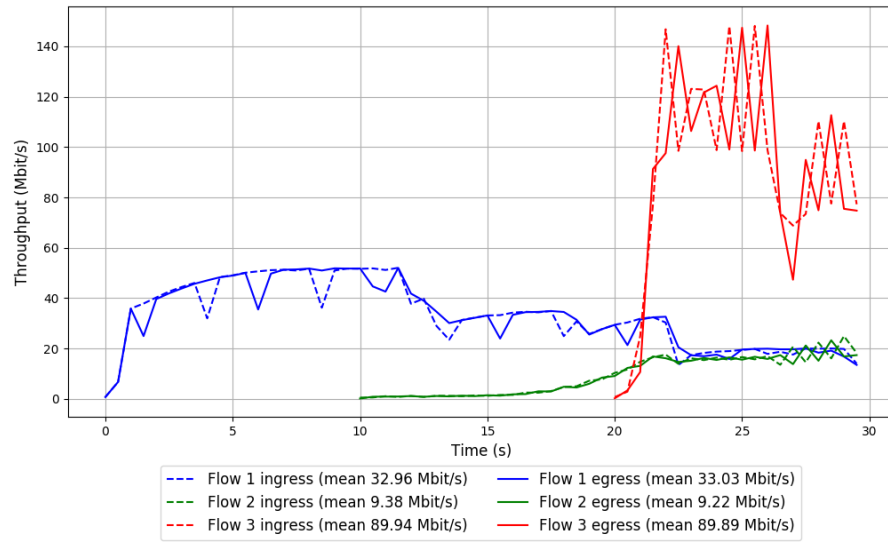
-- Flow 3:

Average throughput: 89.89 Mbit/s

95th percentile per-packet one-way delay: 101.661 ms

Loss rate: 2.11%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-09 12:53:31

End at: 2018-01-09 12:54:01

Below is generated by plot.py at 2018-01-09 17:39:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.88 Mbit/s

95th percentile per-packet one-way delay: 120.122 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 61.55 Mbit/s

95th percentile per-packet one-way delay: 120.467 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 20.18 Mbit/s

95th percentile per-packet one-way delay: 93.042 ms

Loss rate: 1.79%

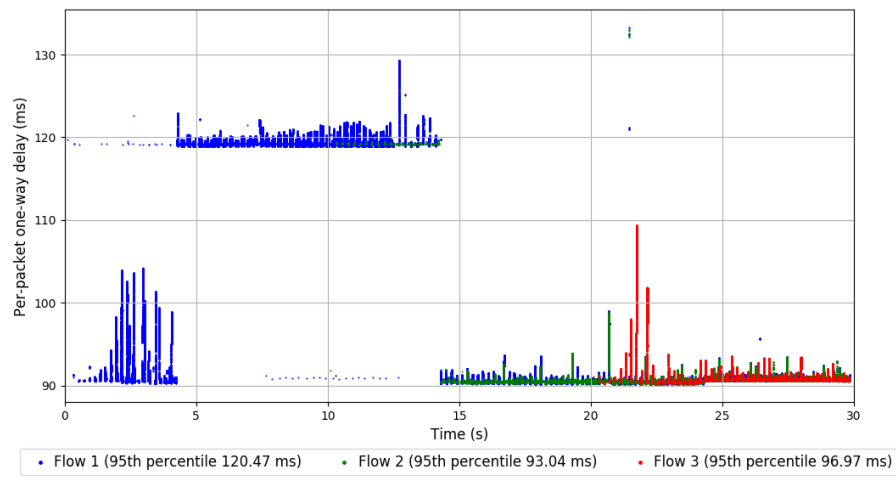
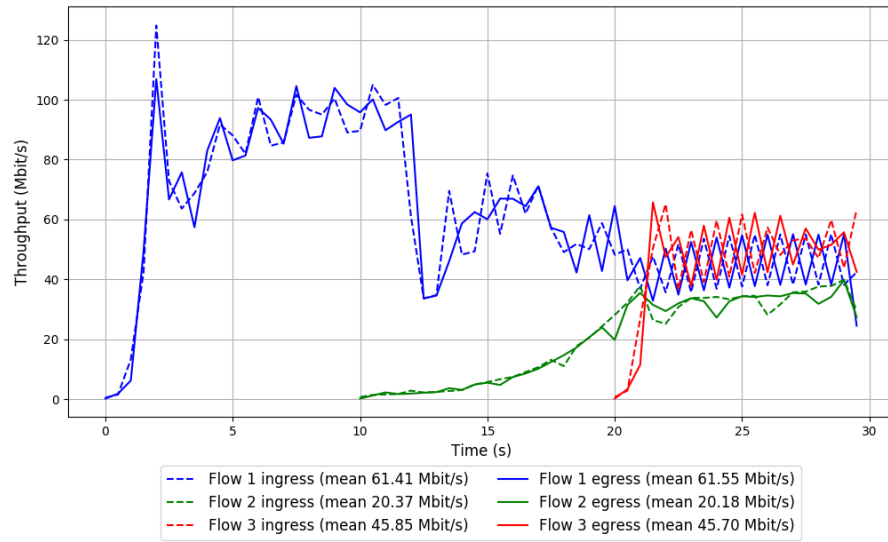
-- Flow 3:

Average throughput: 45.70 Mbit/s

95th percentile per-packet one-way delay: 96.967 ms

Loss rate: 2.36%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-09 13:08:25

End at: 2018-01-09 13:08:55

Below is generated by plot.py at 2018-01-09 17:39:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.87 Mbit/s

95th percentile per-packet one-way delay: 100.492 ms

Loss rate: 1.30%

-- Flow 1:

Average throughput: 21.14 Mbit/s

95th percentile per-packet one-way delay: 116.857 ms

Loss rate: 2.24%

-- Flow 2:

Average throughput: 79.09 Mbit/s

95th percentile per-packet one-way delay: 99.704 ms

Loss rate: 0.72%

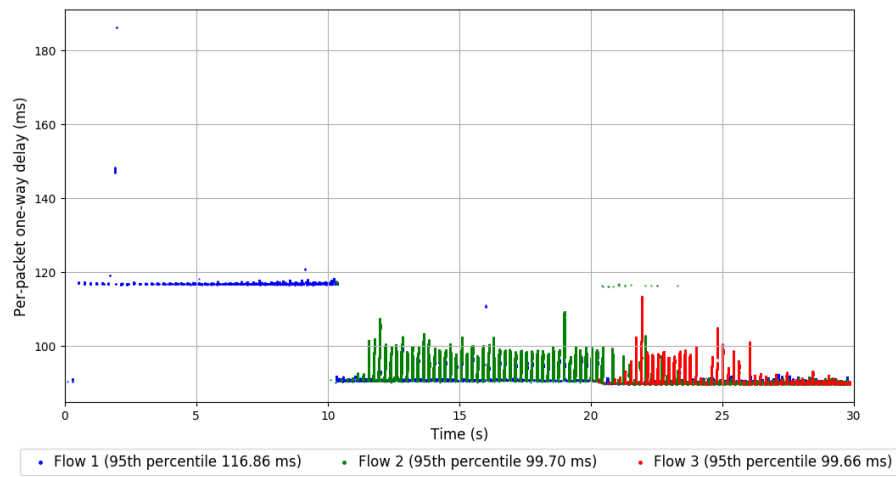
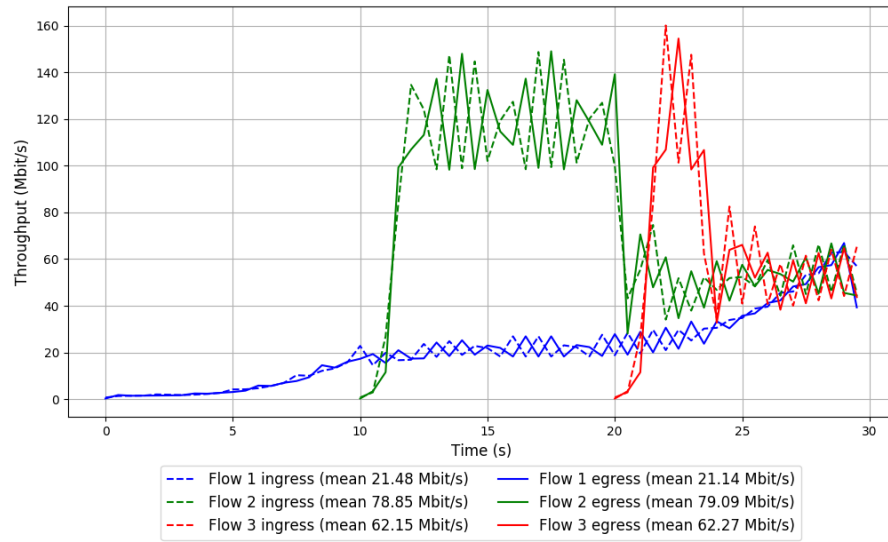
-- Flow 3:

Average throughput: 62.27 Mbit/s

95th percentile per-packet one-way delay: 99.660 ms

Loss rate: 1.82%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-09 13:23:39

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

Below is generated by plot.py at 2018-01-09 17:39:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.95 Mbit/s

95th percentile per-packet one-way delay: 100.726 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 65.46 Mbit/s

95th percentile per-packet one-way delay: 98.798 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 126.68 Mbit/s

95th percentile per-packet one-way delay: 100.085 ms

Loss rate: 1.00%

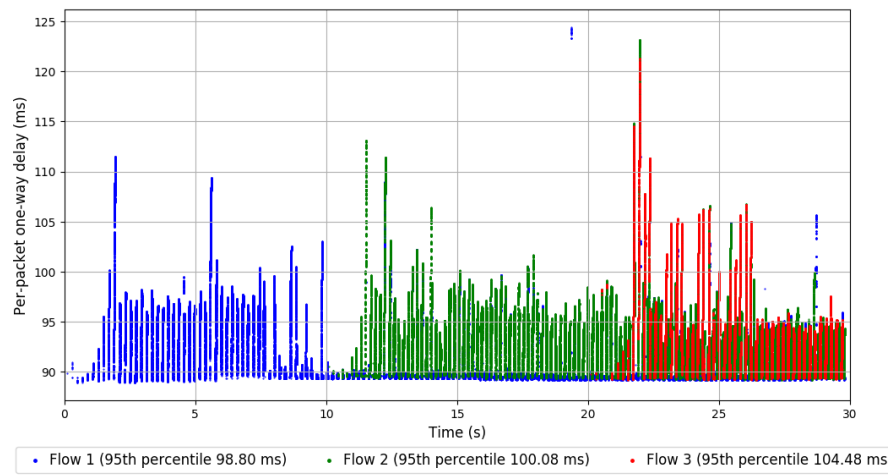
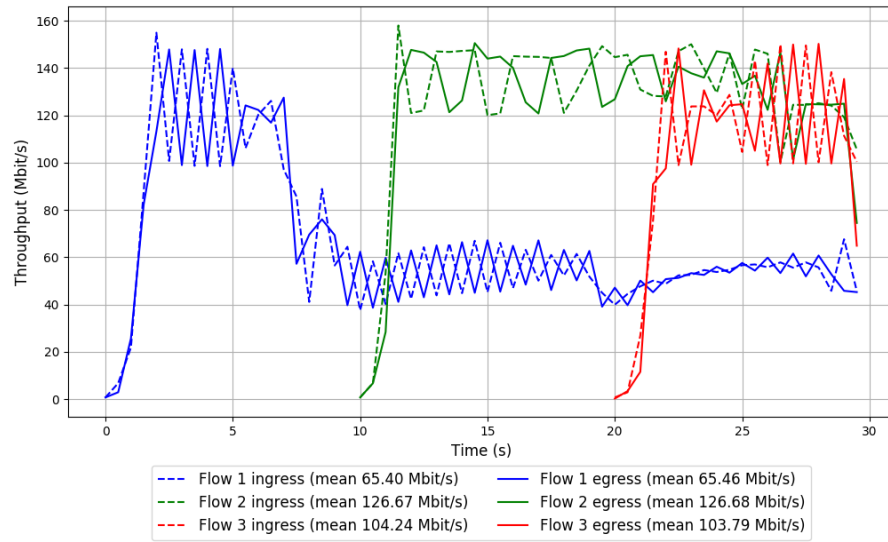
-- Flow 3:

Average throughput: 103.79 Mbit/s

95th percentile per-packet one-way delay: 104.478 ms

Loss rate: 2.45%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-09 13:39:10

End at: 2018-01-09 13:39:40

Below is generated by plot.py at 2018-01-09 17:39:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.18 Mbit/s

95th percentile per-packet one-way delay: 117.071 ms

Loss rate: 2.24%

-- Flow 1:

Average throughput: 39.64 Mbit/s

95th percentile per-packet one-way delay: 115.716 ms

Loss rate: 2.45%

-- Flow 2:

Average throughput: 57.02 Mbit/s

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

Loss rate: 1.96%

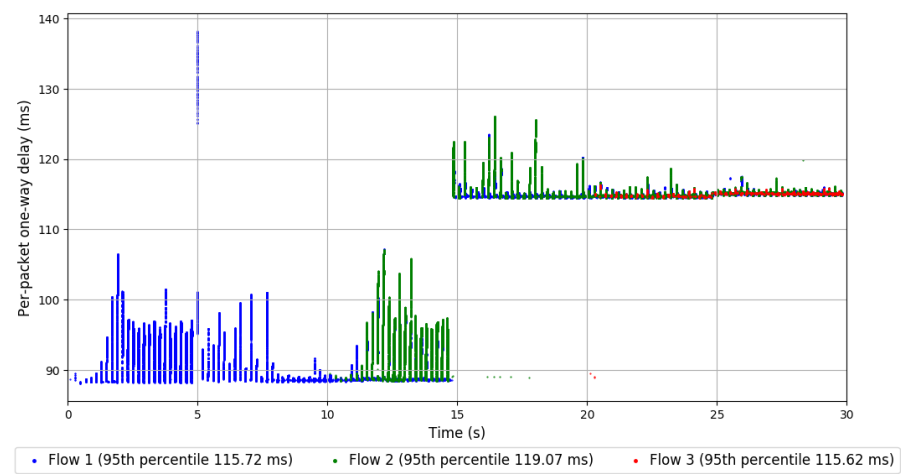
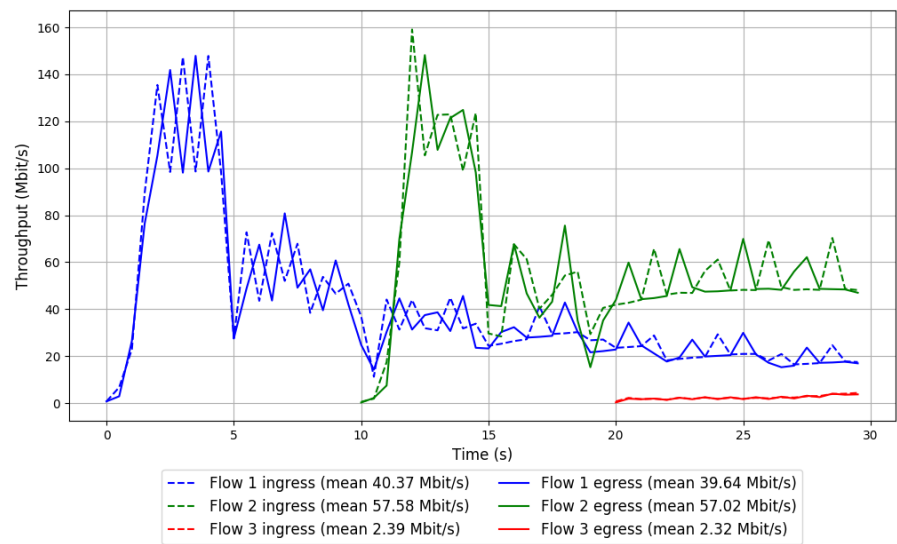
-- Flow 3:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 115.624 ms

Loss rate: 4.73%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-09 13:54:05

End at: 2018-01-09 13:54:35

Below is generated by plot.py at 2018-01-09 17:39:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.95 Mbit/s

95th percentile per-packet one-way delay: 124.817 ms

Loss rate: 2.57%

-- Flow 1:

Average throughput: 31.80 Mbit/s

95th percentile per-packet one-way delay: 125.171 ms

Loss rate: 2.52%

-- Flow 2:

Average throughput: 14.80 Mbit/s

95th percentile per-packet one-way delay: 121.903 ms

Loss rate: 2.54%

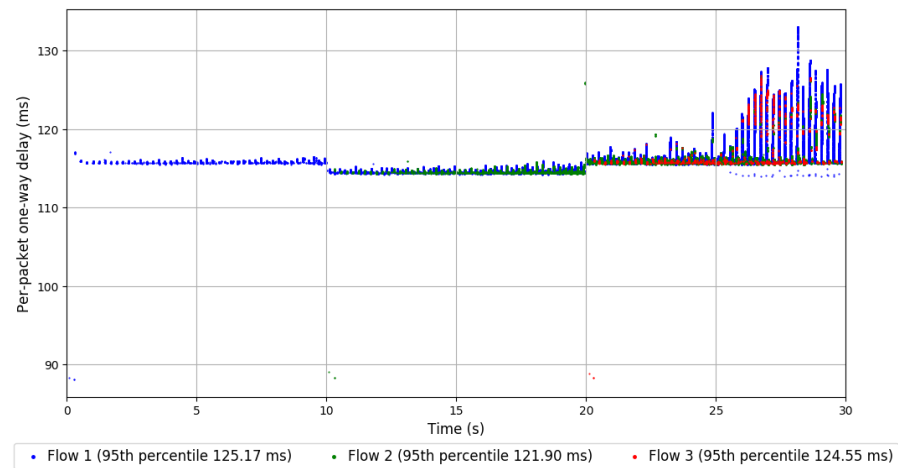
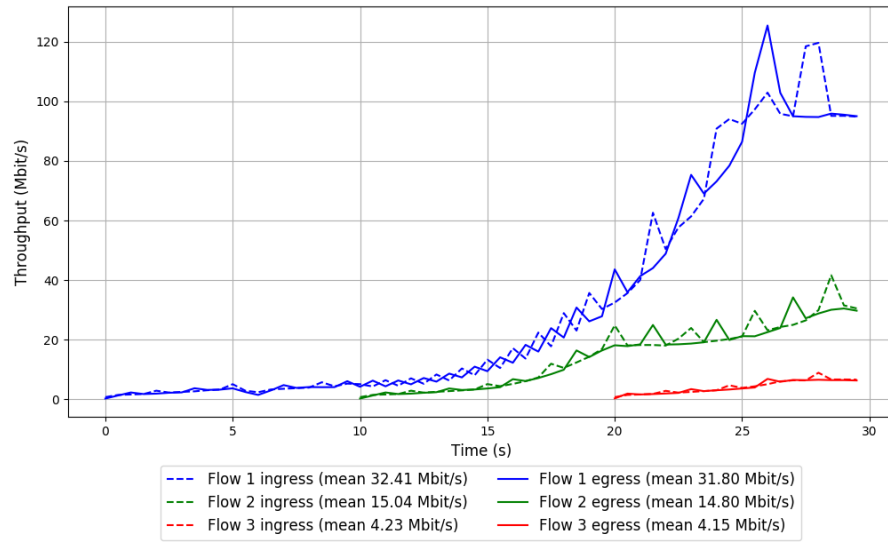
-- Flow 3:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 124.553 ms

Loss rate: 3.95%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

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

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

Below is generated by plot.py at 2018-01-09 17:39:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.66 Mbit/s

95th percentile per-packet one-way delay: 96.346 ms

Loss rate: 1.46%

-- Flow 1:

Average throughput: 41.80 Mbit/s

95th percentile per-packet one-way delay: 94.252 ms

Loss rate: 1.79%

-- Flow 2:

Average throughput: 91.82 Mbit/s

95th percentile per-packet one-way delay: 96.269 ms

Loss rate: 1.03%

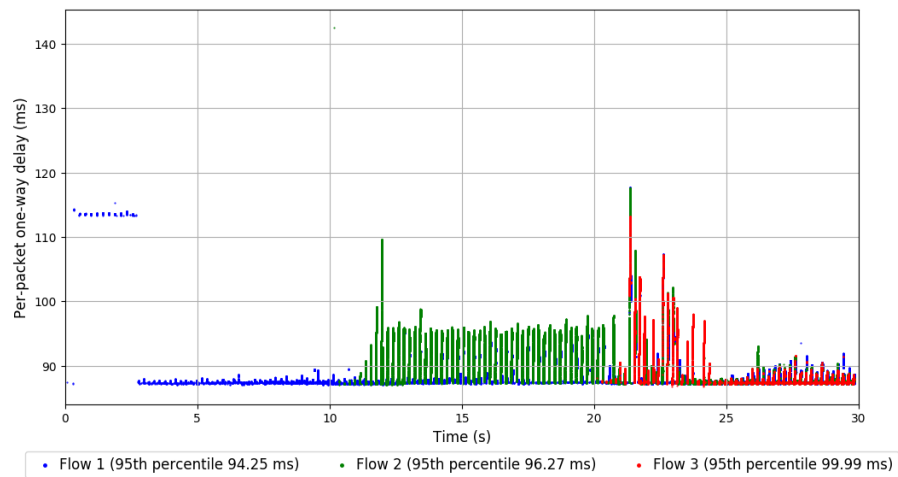
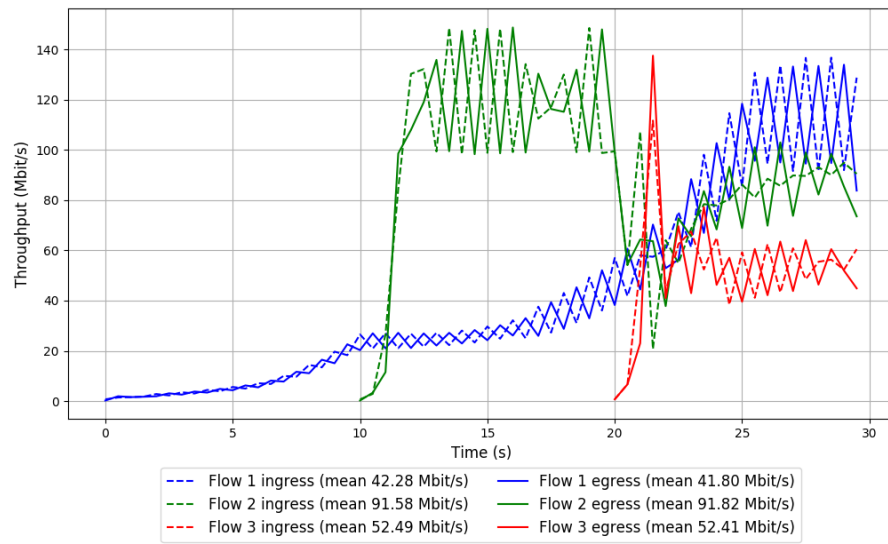
-- Flow 3:

Average throughput: 52.41 Mbit/s

95th percentile per-packet one-way delay: 99.988 ms

Loss rate: 2.19%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-09 14:25:03

End at: 2018-01-09 14:25:33

Below is generated by plot.py at 2018-01-09 17:39:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.06 Mbit/s

95th percentile per-packet one-way delay: 96.296 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 55.81 Mbit/s

95th percentile per-packet one-way delay: 95.667 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 68.92 Mbit/s

95th percentile per-packet one-way delay: 97.284 ms

Loss rate: 0.83%

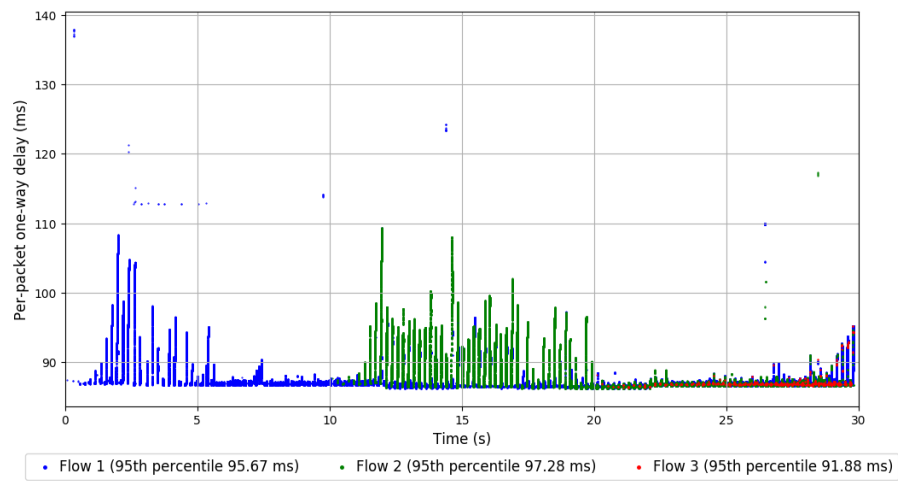
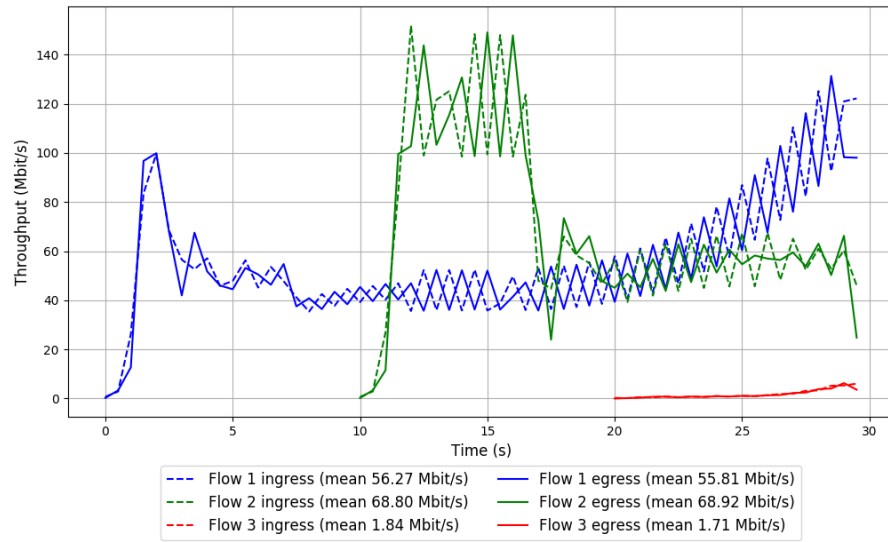
-- Flow 3:

Average throughput: 1.71 Mbit/s

95th percentile per-packet one-way delay: 91.878 ms

Loss rate: 8.90%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-09 14:40:34

End at: 2018-01-09 14:41:04

Below is generated by plot.py at 2018-01-09 17:39:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.01 Mbit/s

95th percentile per-packet one-way delay: 93.724 ms

Loss rate: 2.37%

-- Flow 1:

Average throughput: 53.12 Mbit/s

95th percentile per-packet one-way delay: 93.950 ms

Loss rate: 1.19%

-- Flow 2:

Average throughput: 47.47 Mbit/s

95th percentile per-packet one-way delay: 93.339 ms

Loss rate: 2.52%

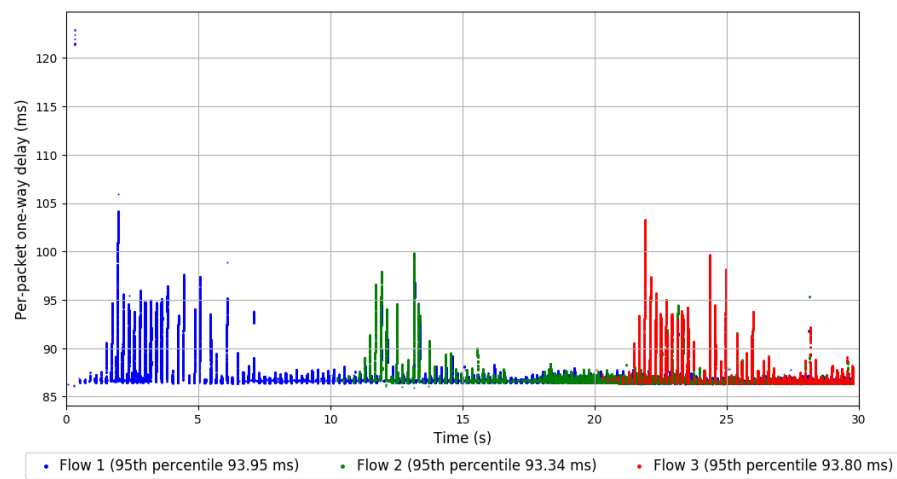
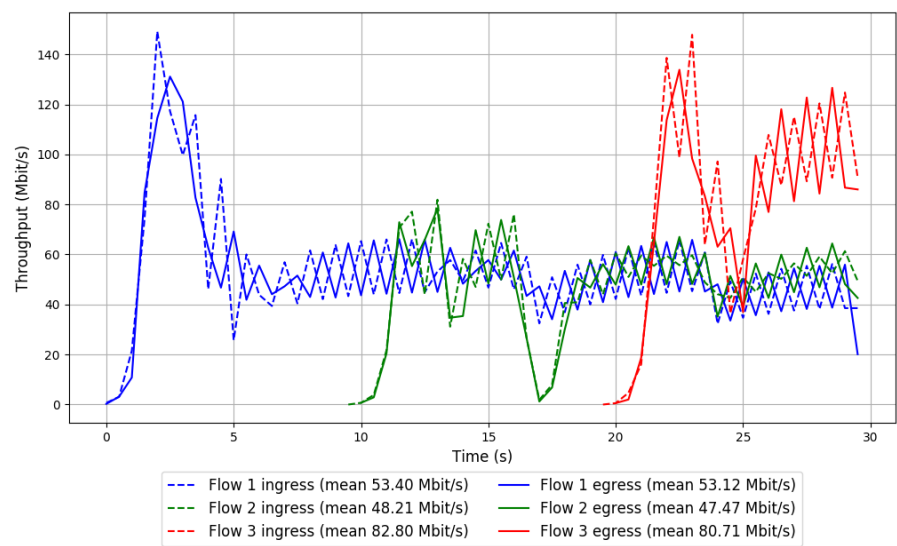
-- Flow 3:

Average throughput: 80.71 Mbit/s

95th percentile per-packet one-way delay: 93.804 ms

Loss rate: 4.49%

Run 10: Report of TCP Cubic — Data Link

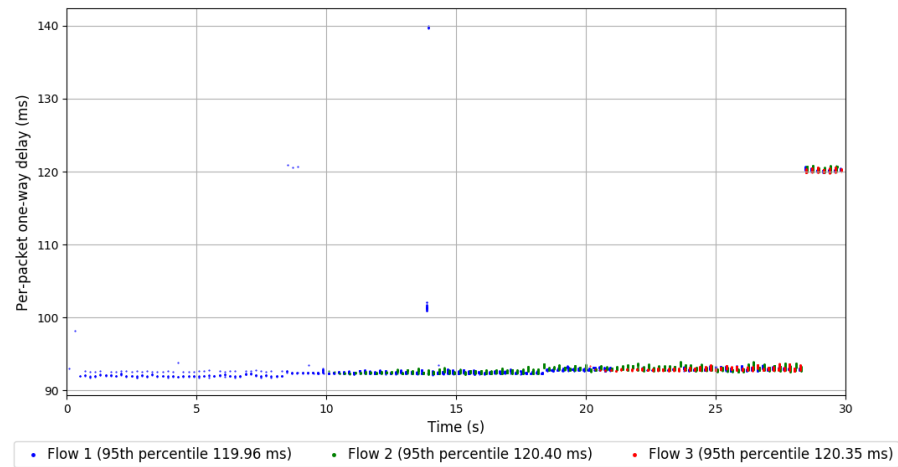
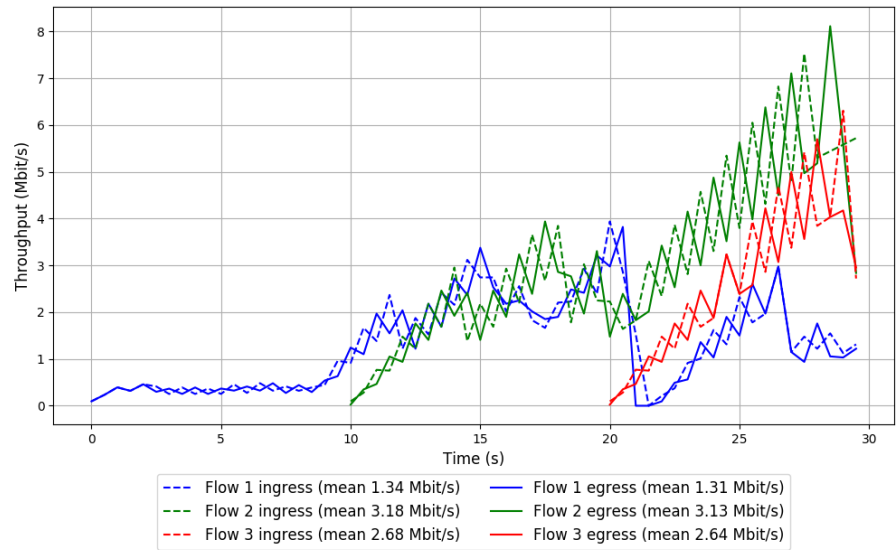


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-09 12:27:37
End at: 2018-01-09 12:28:07

# Below is generated by plot.py at 2018-01-09 17:39:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.23 Mbit/s
95th percentile per-packet one-way delay: 120.313 ms
Loss rate: 2.70%
-- Flow 1:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 119.959 ms
Loss rate: 2.75%
-- Flow 2:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 120.403 ms
Loss rate: 2.30%
-- Flow 3:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 120.352 ms
Loss rate: 3.57%
```


Run 1: Report of LEDBAT — Data Link

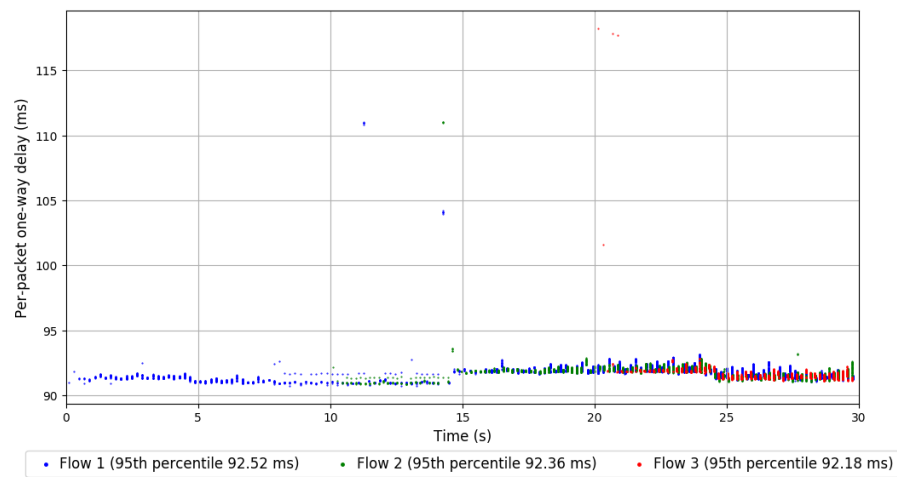
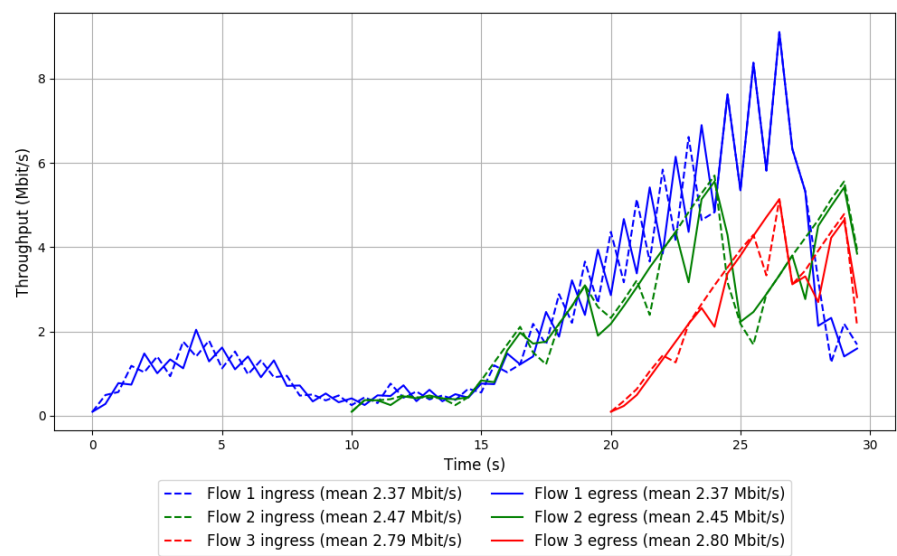


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-09 12:42:40
End at: 2018-01-09 12:43:10

# Below is generated by plot.py at 2018-01-09 17:39:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.90 Mbit/s
95th percentile per-packet one-way delay: 92.406 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 92.521 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 2.45 Mbit/s
95th percentile per-packet one-way delay: 92.360 ms
Loss rate: 2.03%
-- Flow 3:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 92.179 ms
Loss rate: 1.76%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

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

End at: 2018-01-09 12:58:39

Below is generated by plot.py at 2018-01-09 17:39:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.83 Mbit/s

95th percentile per-packet one-way delay: 119.020 ms

Loss rate: 2.64%

-- Flow 1:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 119.096 ms

Loss rate: 2.13%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 90.949 ms

Loss rate: 2.56%

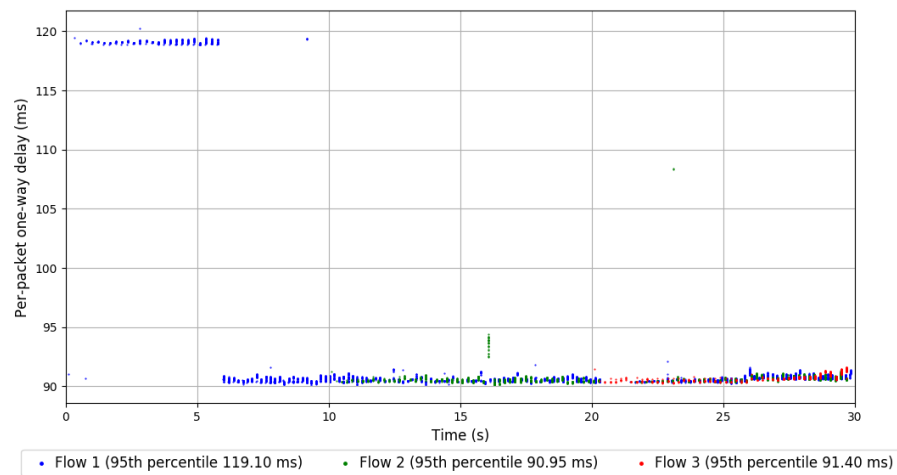
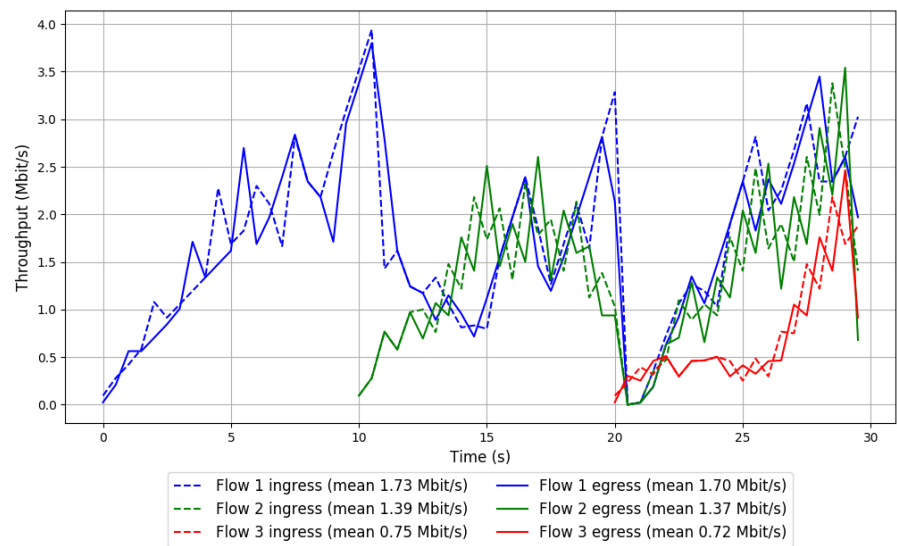
-- Flow 3:

Average throughput: 0.72 Mbit/s

95th percentile per-packet one-way delay: 91.398 ms

Loss rate: 6.53%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-09 13:12:57

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

Below is generated by plot.py at 2018-01-09 17:39:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.31 Mbit/s

95th percentile per-packet one-way delay: 116.101 ms

Loss rate: 1.88%

-- Flow 1:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 116.248 ms

Loss rate: 1.76%

-- Flow 2:

Average throughput: 3.10 Mbit/s

95th percentile per-packet one-way delay: 91.597 ms

Loss rate: 2.04%

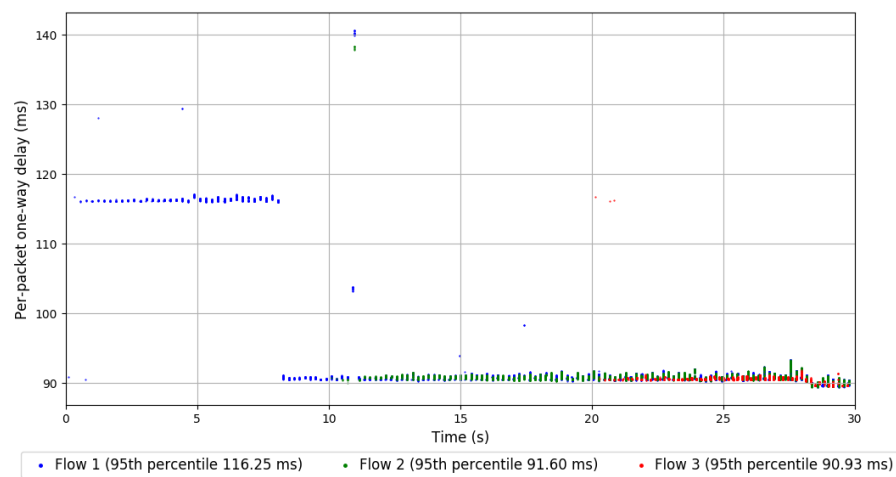
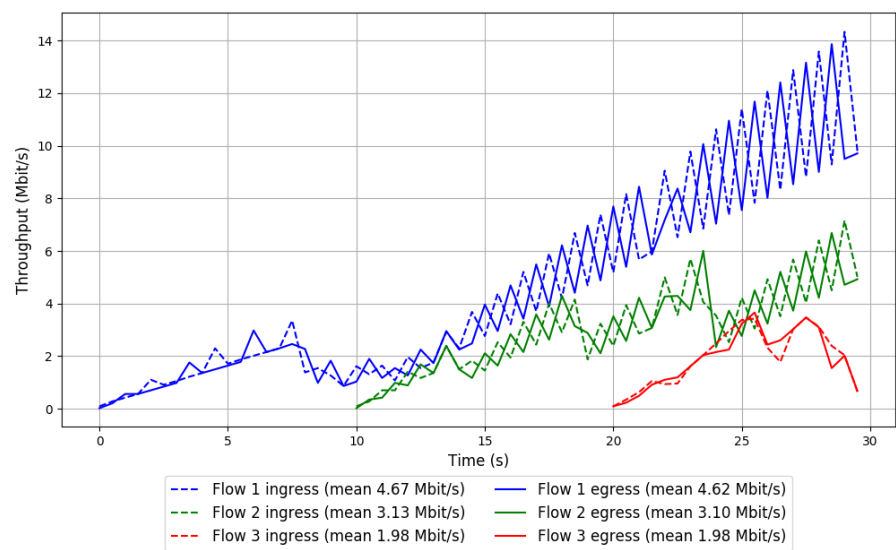
-- Flow 3:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 90.934 ms

Loss rate: 2.24%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-09 13:28:34

End at: 2018-01-09 13:29:04

Below is generated by plot.py at 2018-01-09 17:39:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 116.237 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 3.17 Mbit/s

95th percentile per-packet one-way delay: 116.034 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 116.320 ms

Loss rate: 0.84%

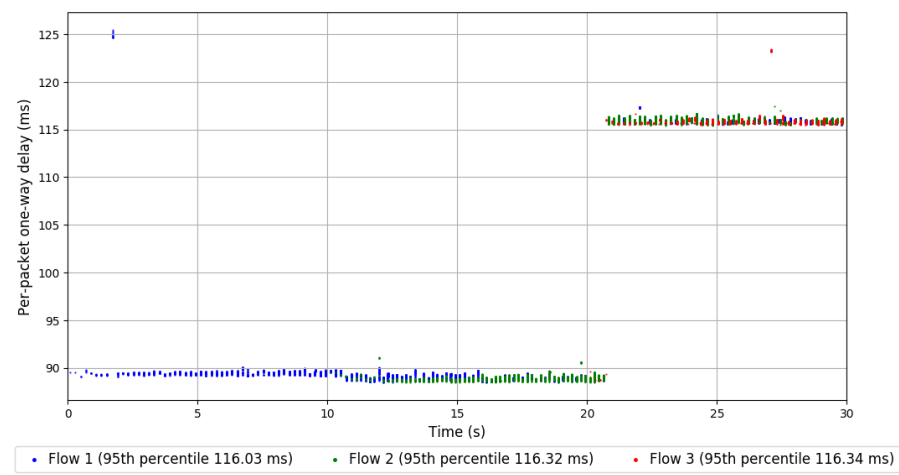
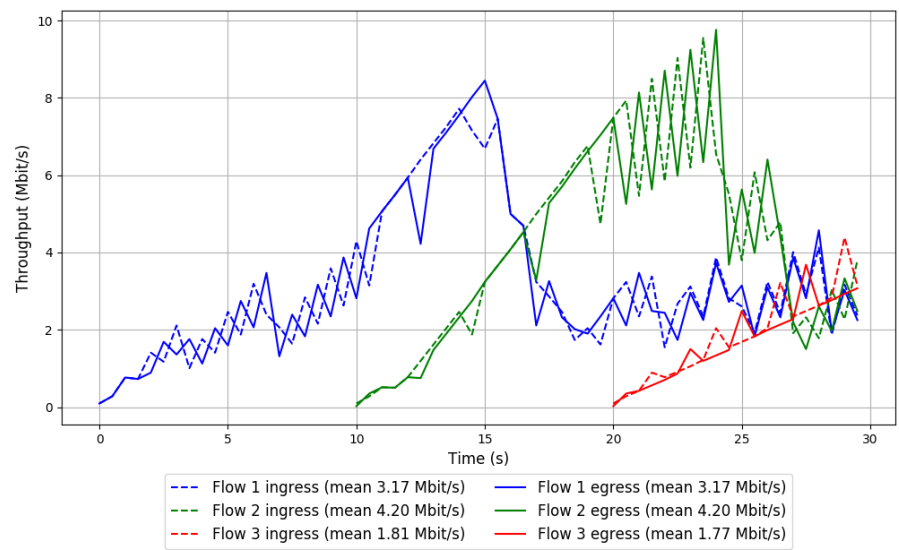
-- Flow 3:

Average throughput: 1.77 Mbit/s

95th percentile per-packet one-way delay: 116.337 ms

Loss rate: 4.45%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-09 13:43:50

End at: 2018-01-09 13:44:20

Below is generated by plot.py at 2018-01-09 17:39:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 117.483 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 117.240 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 117.705 ms

Loss rate: 2.10%

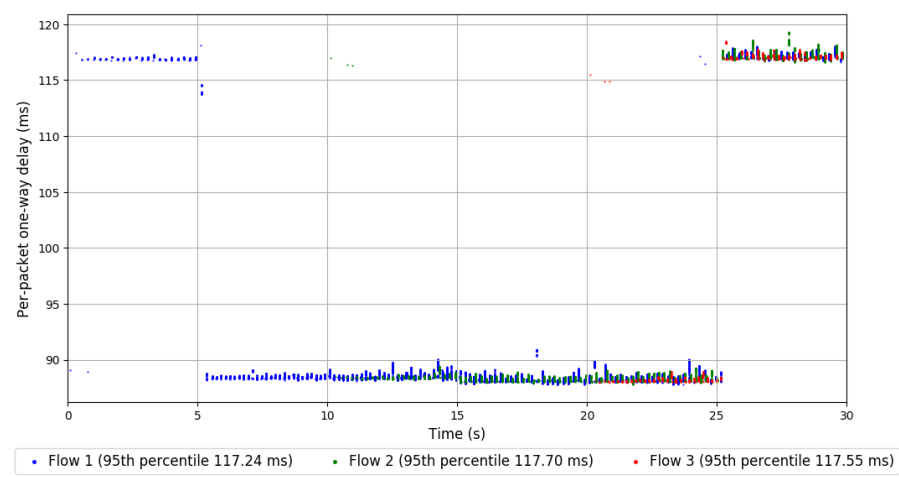
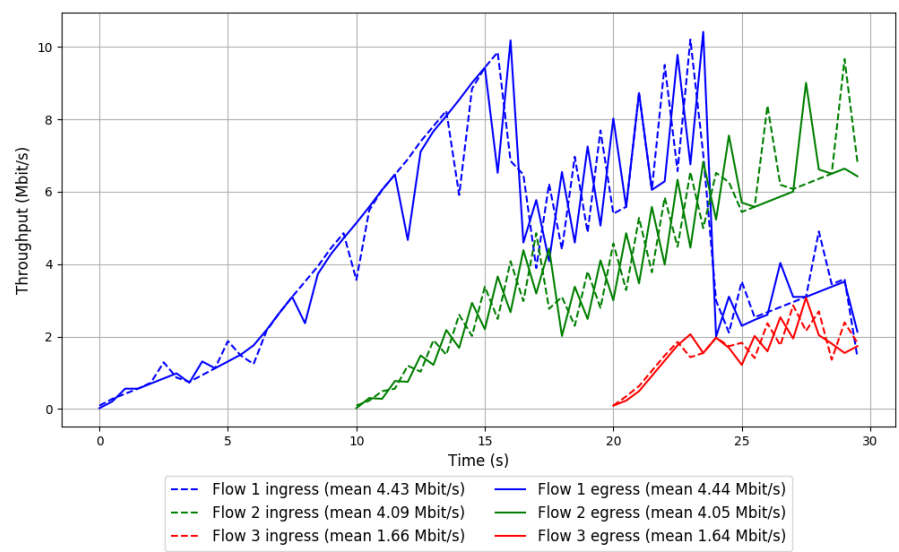
-- Flow 3:

Average throughput: 1.64 Mbit/s

95th percentile per-packet one-way delay: 117.546 ms

Loss rate: 3.65%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-09 13:58:41

End at: 2018-01-09 13:59:11

Below is generated by plot.py at 2018-01-09 17:39:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.51 Mbit/s

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

Loss rate: 1.16%

-- Flow 1:

Average throughput: 5.70 Mbit/s

95th percentile per-packet one-way delay: 114.494 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 114.569 ms

Loss rate: 1.52%

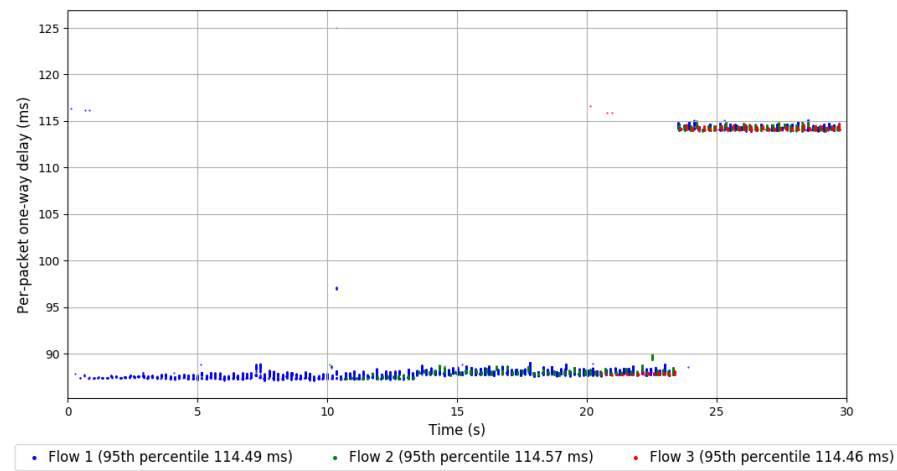
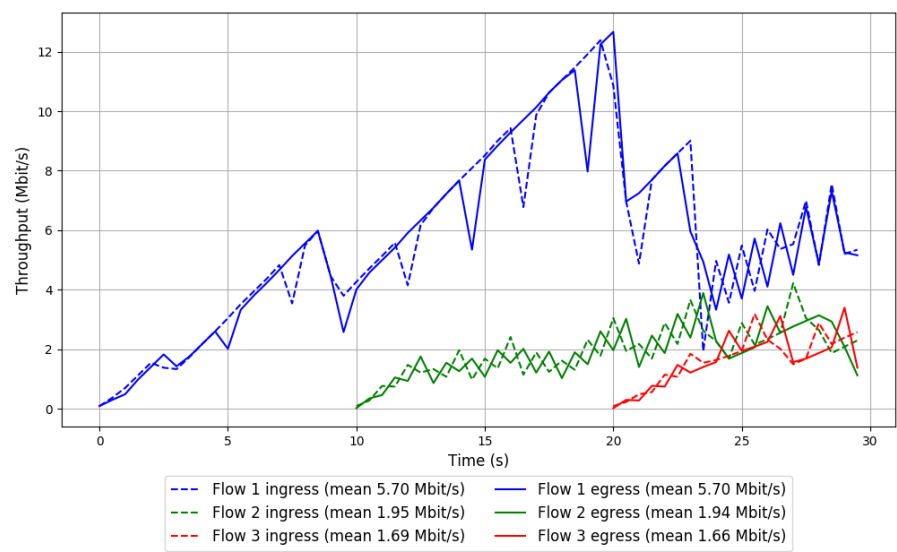
-- Flow 3:

Average throughput: 1.66 Mbit/s

95th percentile per-packet one-way delay: 114.463 ms

Loss rate: 3.96%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

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

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

Below is generated by plot.py at 2018-01-09 17:39:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 113.913 ms

Loss rate: 2.14%

-- Flow 1:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 113.509 ms

Loss rate: 1.86%

-- Flow 2:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 114.039 ms

Loss rate: 1.80%

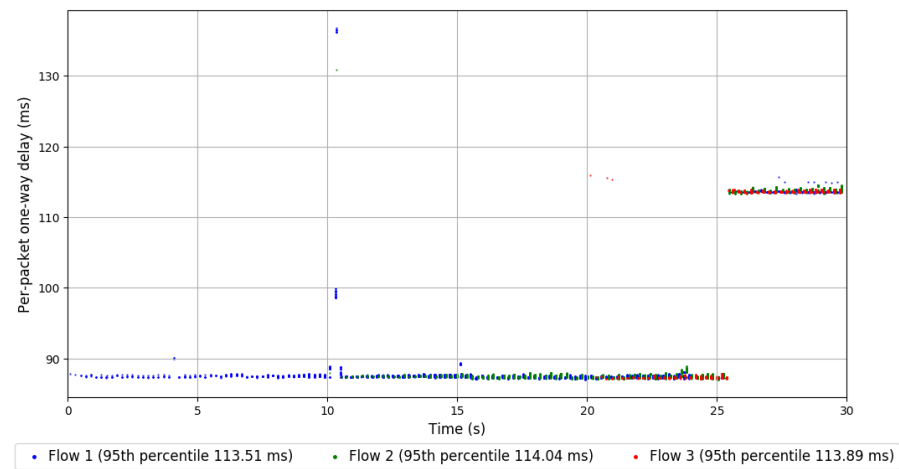
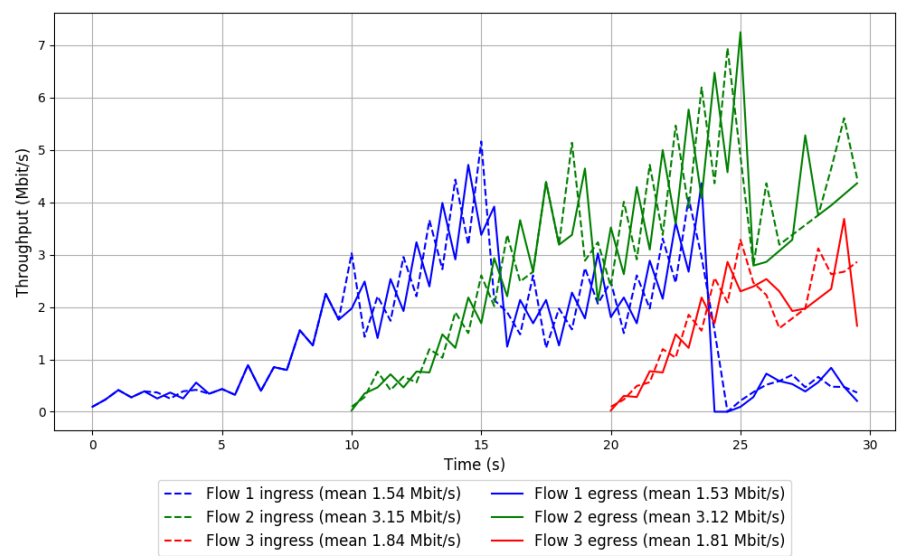
-- Flow 3:

Average throughput: 1.81 Mbit/s

95th percentile per-packet one-way delay: 113.886 ms

Loss rate: 4.01%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-09 14:29:50

End at: 2018-01-09 14:30:20

Below is generated by plot.py at 2018-01-09 17:39:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.78 Mbit/s

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

Loss rate: 1.99%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 87.234 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 2.00 Mbit/s

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

Loss rate: 2.36%

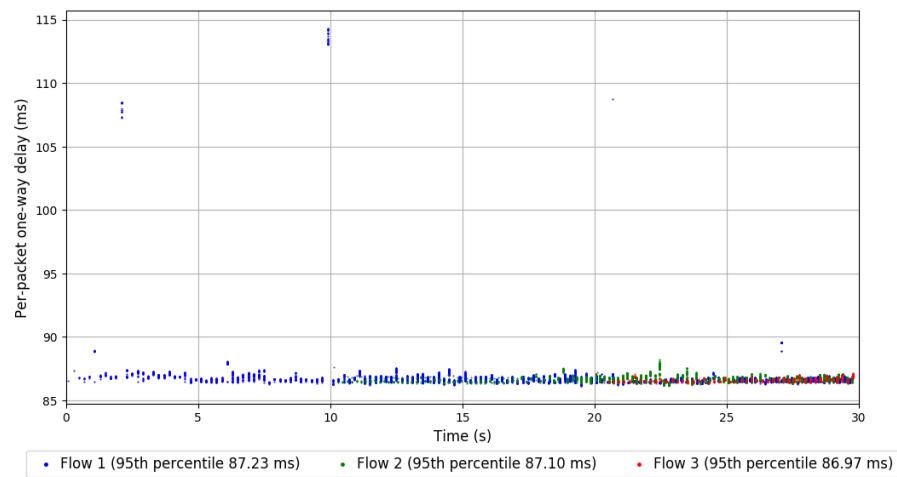
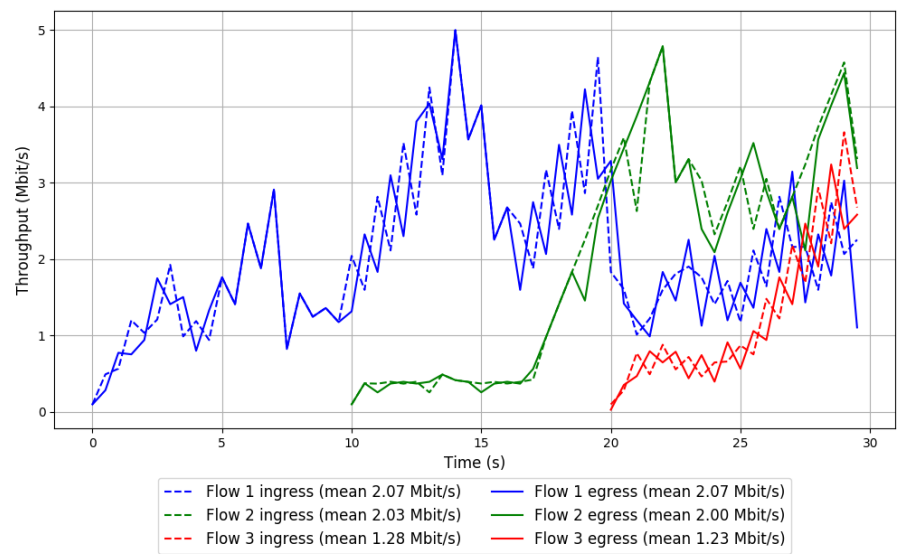
-- Flow 3:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 86.970 ms

Loss rate: 5.40%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-09 14:45:03

End at: 2018-01-09 14:45:33

Below is generated by plot.py at 2018-01-09 17:39:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 87.440 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 5.37 Mbit/s

95th percentile per-packet one-way delay: 87.595 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 87.110 ms

Loss rate: 2.73%

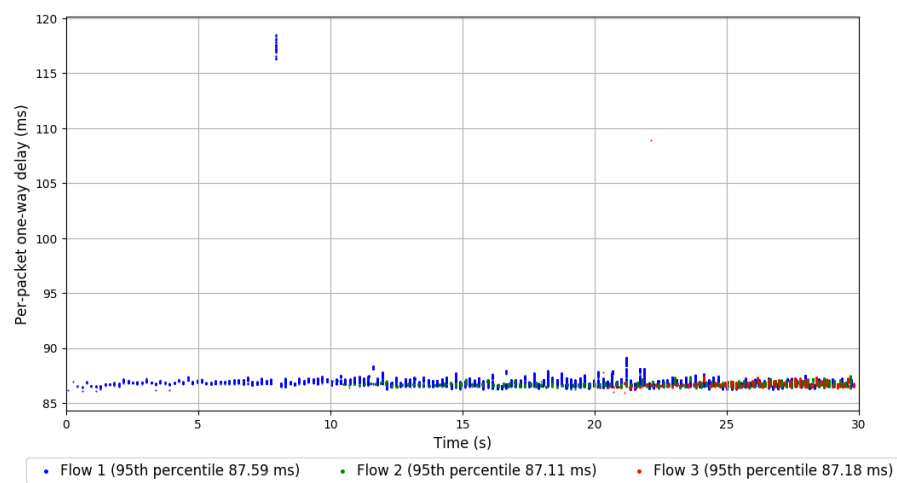
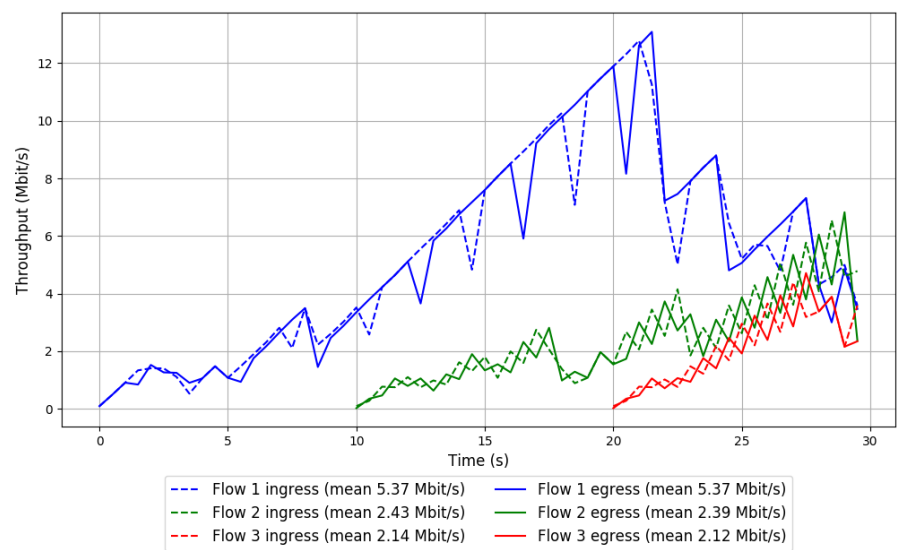
-- Flow 3:

Average throughput: 2.12 Mbit/s

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

Loss rate: 2.94%

Run 10: Report of LEDBAT — Data Link

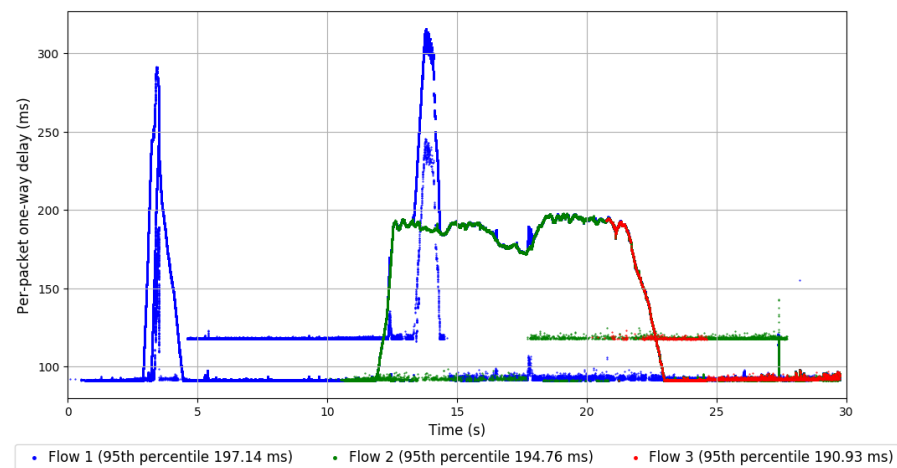
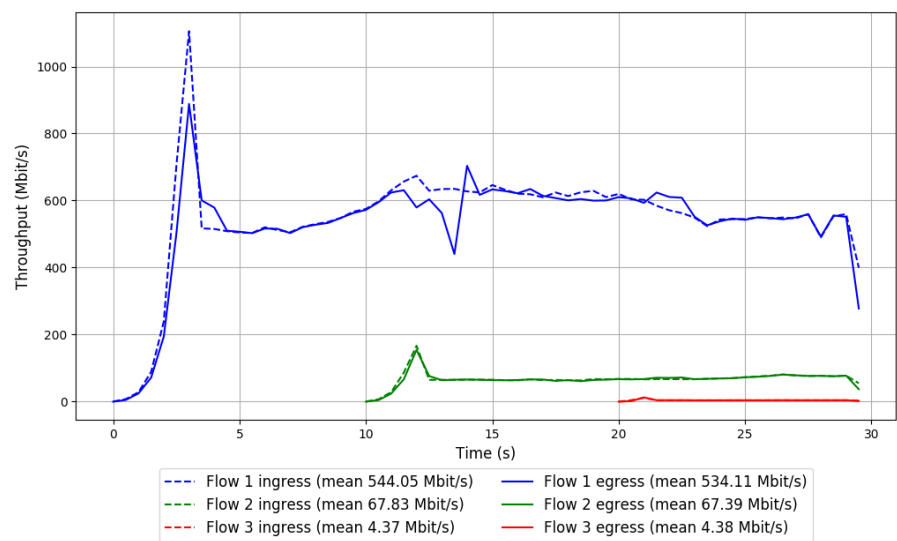


```
Run 1: Statistics of PCC

Start at: 2018-01-09 12:35:40
End at: 2018-01-09 12:36:10

# Below is generated by plot.py at 2018-01-09 17:47:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 580.16 Mbit/s
95th percentile per-packet one-way delay: 196.810 ms
Loss rate: 2.43%
-- Flow 1:
Average throughput: 534.11 Mbit/s
95th percentile per-packet one-way delay: 197.142 ms
Loss rate: 2.49%
-- Flow 2:
Average throughput: 67.39 Mbit/s
95th percentile per-packet one-way delay: 194.759 ms
Loss rate: 1.66%
-- Flow 3:
Average throughput: 4.38 Mbit/s
95th percentile per-packet one-way delay: 190.930 ms
Loss rate: 2.14%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-09 12:51:07

End at: 2018-01-09 12:51:38

Below is generated by plot.py at 2018-01-09 17:47:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 591.68 Mbit/s

95th percentile per-packet one-way delay: 234.102 ms

Loss rate: 4.08%

-- Flow 1:

Average throughput: 565.45 Mbit/s

95th percentile per-packet one-way delay: 232.775 ms

Loss rate: 4.04%

-- Flow 2:

Average throughput: 32.04 Mbit/s

95th percentile per-packet one-way delay: 238.536 ms

Loss rate: 4.31%

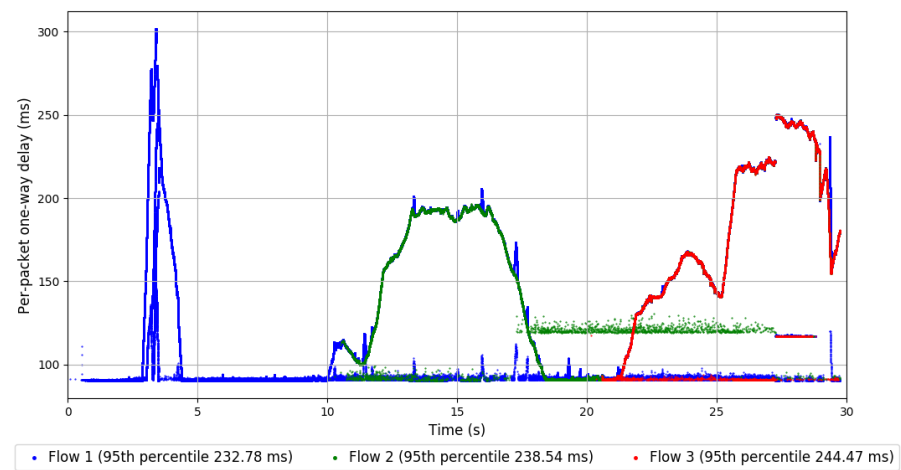
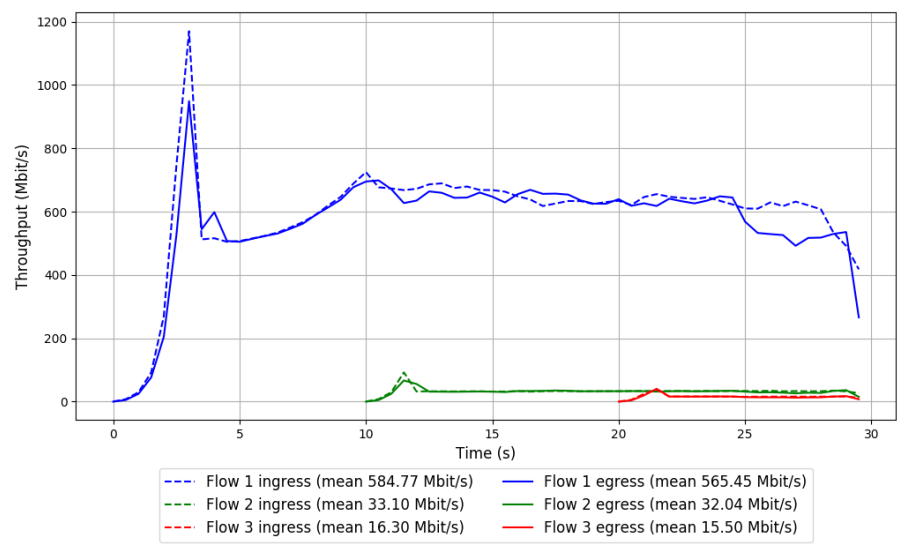
-- Flow 3:

Average throughput: 15.50 Mbit/s

95th percentile per-packet one-way delay: 244.473 ms

Loss rate: 7.29%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-09 13:06:03

End at: 2018-01-09 13:06:33

Below is generated by plot.py at 2018-01-09 17:48:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 564.10 Mbit/s

95th percentile per-packet one-way delay: 205.647 ms

Loss rate: 2.30%

-- Flow 1:

Average throughput: 516.95 Mbit/s

95th percentile per-packet one-way delay: 206.467 ms

Loss rate: 2.40%

-- Flow 2:

Average throughput: 62.98 Mbit/s

95th percentile per-packet one-way delay: 160.948 ms

Loss rate: 1.06%

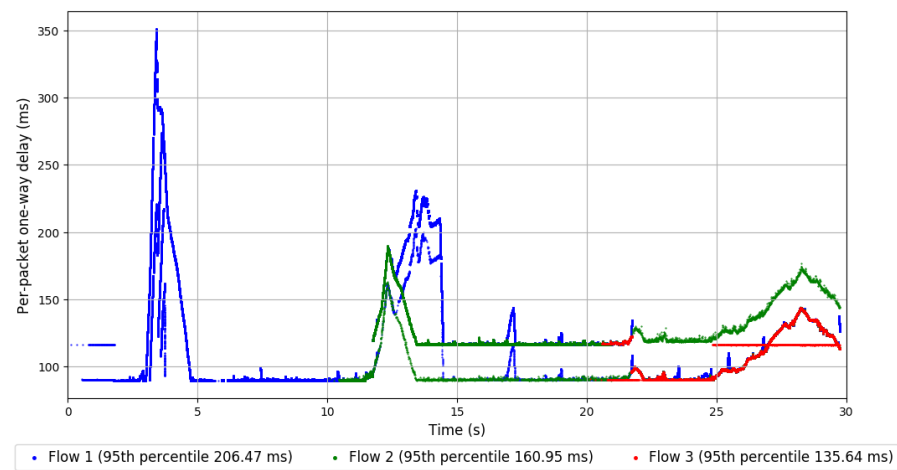
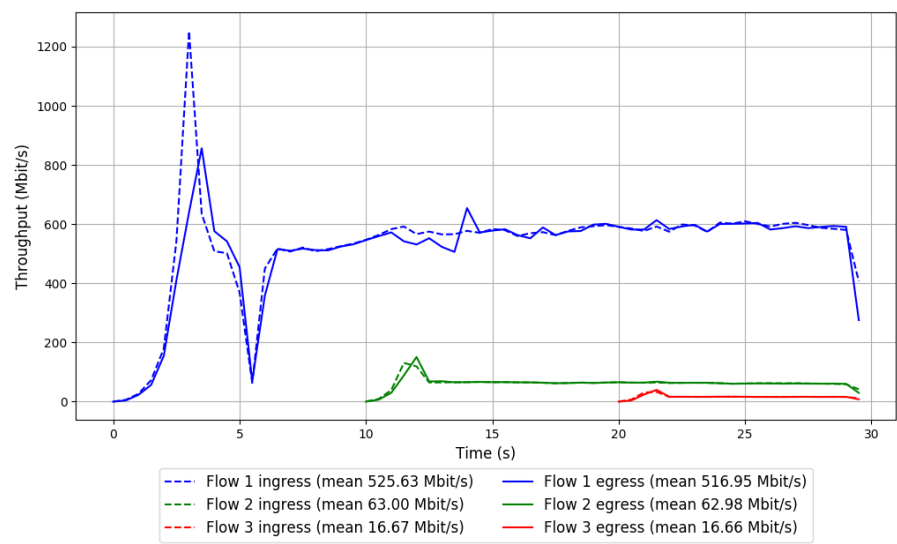
-- Flow 3:

Average throughput: 16.66 Mbit/s

95th percentile per-packet one-way delay: 135.639 ms

Loss rate: 2.13%

Run 3: Report of PCC — Data Link

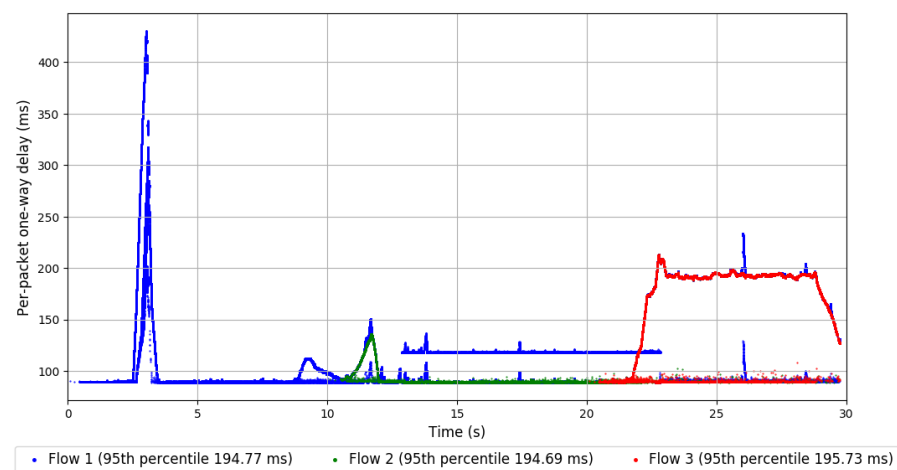
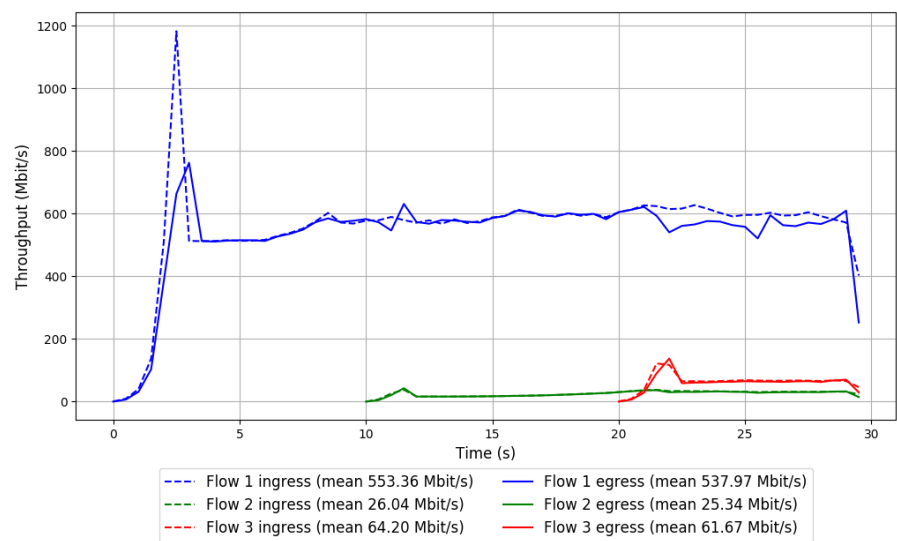


```
Run 4: Statistics of PCC

Start at: 2018-01-09 13:21:22
End at: 2018-01-09 13:21:52

# Below is generated by plot.py at 2018-01-09 17:48:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 574.78 Mbit/s
95th percentile per-packet one-way delay: 194.833 ms
Loss rate: 3.55%
-- Flow 1:
Average throughput: 537.97 Mbit/s
95th percentile per-packet one-way delay: 194.772 ms
Loss rate: 3.46%
-- Flow 2:
Average throughput: 25.34 Mbit/s
95th percentile per-packet one-way delay: 194.687 ms
Loss rate: 3.71%
-- Flow 3:
Average throughput: 61.67 Mbit/s
95th percentile per-packet one-way delay: 195.727 ms
Loss rate: 5.98%
```

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-09 13:36:44

End at: 2018-01-09 13:37:14

Below is generated by plot.py at 2018-01-09 17:48:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 588.66 Mbit/s

95th percentile per-packet one-way delay: 199.654 ms

Loss rate: 2.30%

-- Flow 1:

Average throughput: 487.17 Mbit/s

95th percentile per-packet one-way delay: 208.264 ms

Loss rate: 2.25%

-- Flow 2:

Average throughput: 122.71 Mbit/s

95th percentile per-packet one-way delay: 184.922 ms

Loss rate: 2.38%

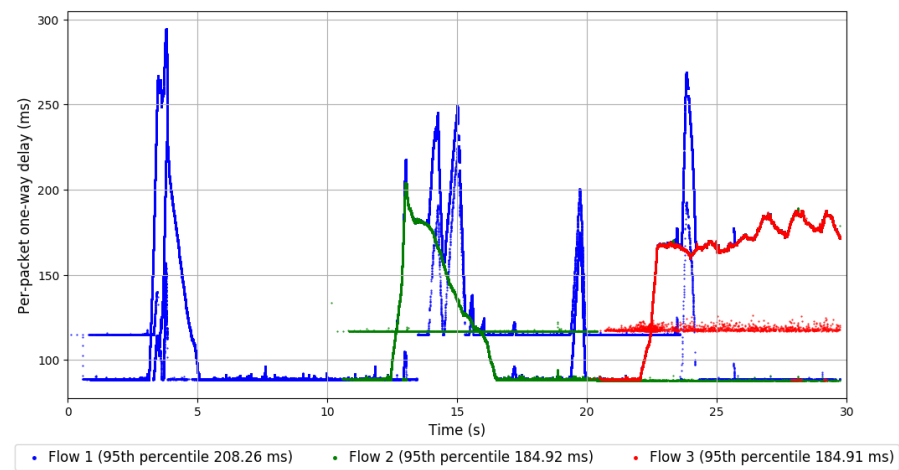
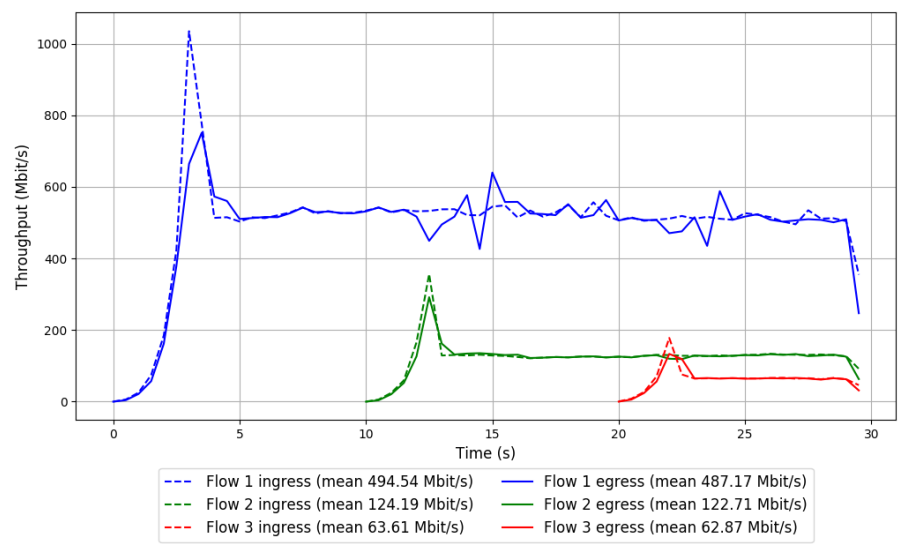
-- Flow 3:

Average throughput: 62.87 Mbit/s

95th percentile per-packet one-way delay: 184.909 ms

Loss rate: 3.21%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-09 13:52:03

End at: 2018-01-09 13:52:33

Below is generated by plot.py at 2018-01-09 17:48:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.42 Mbit/s

95th percentile per-packet one-way delay: 116.392 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 35.81 Mbit/s

95th percentile per-packet one-way delay: 116.405 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 5.84 Mbit/s

95th percentile per-packet one-way delay: 116.319 ms

Loss rate: 1.48%

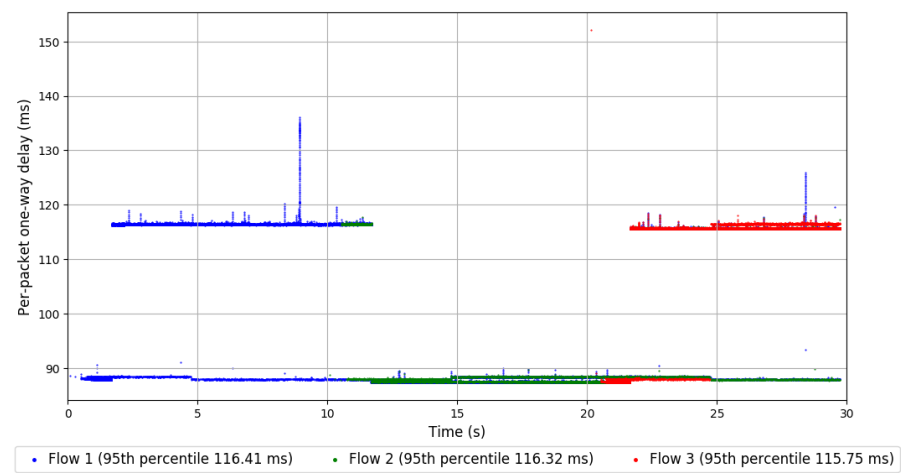
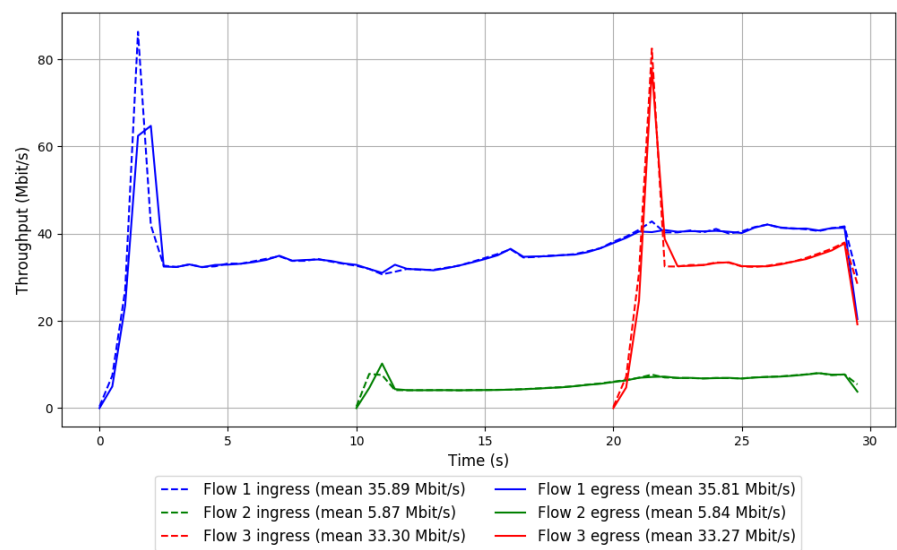
-- Flow 3:

Average throughput: 33.27 Mbit/s

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

Loss rate: 2.79%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-09 14:06:56

End at: 2018-01-09 14:07:26

Below is generated by plot.py at 2018-01-09 17:48:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 586.55 Mbit/s

95th percentile per-packet one-way delay: 198.367 ms

Loss rate: 4.11%

-- Flow 1:

Average throughput: 526.59 Mbit/s

95th percentile per-packet one-way delay: 198.165 ms

Loss rate: 4.00%

-- Flow 2:

Average throughput: 61.62 Mbit/s

95th percentile per-packet one-way delay: 198.247 ms

Loss rate: 3.80%

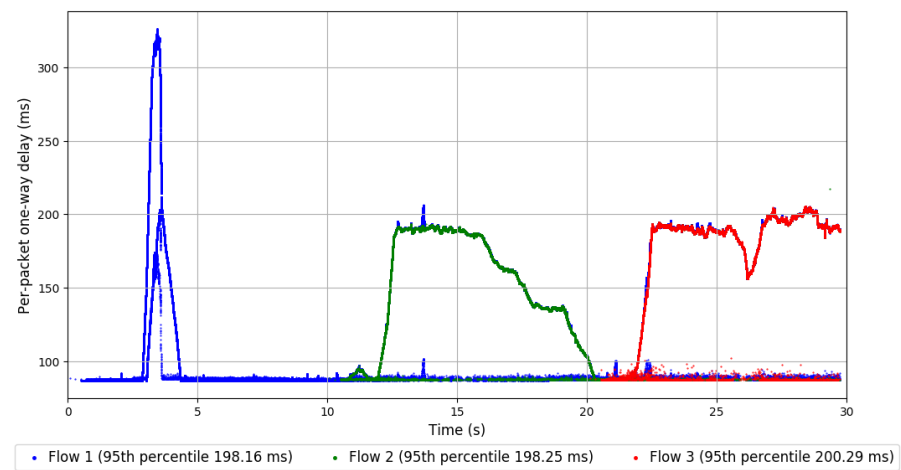
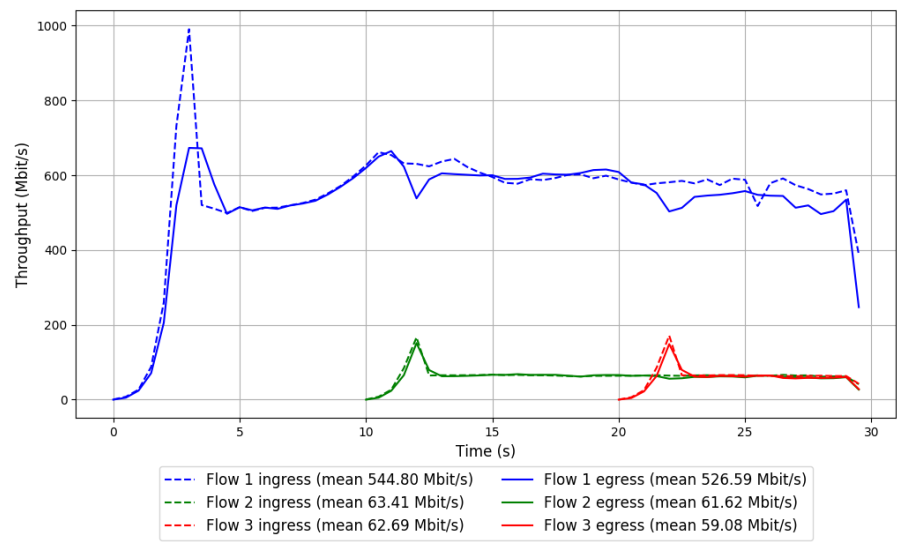
-- Flow 3:

Average throughput: 59.08 Mbit/s

95th percentile per-packet one-way delay: 200.292 ms

Loss rate: 7.69%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-09 14:22:37

End at: 2018-01-09 14:23:07

Below is generated by plot.py at 2018-01-09 17:48:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 585.94 Mbit/s

95th percentile per-packet one-way delay: 192.869 ms

Loss rate: 2.10%

-- Flow 1:

Average throughput: 553.72 Mbit/s

95th percentile per-packet one-way delay: 192.915 ms

Loss rate: 2.09%

-- Flow 2:

Average throughput: 32.93 Mbit/s

95th percentile per-packet one-way delay: 192.021 ms

Loss rate: 1.68%

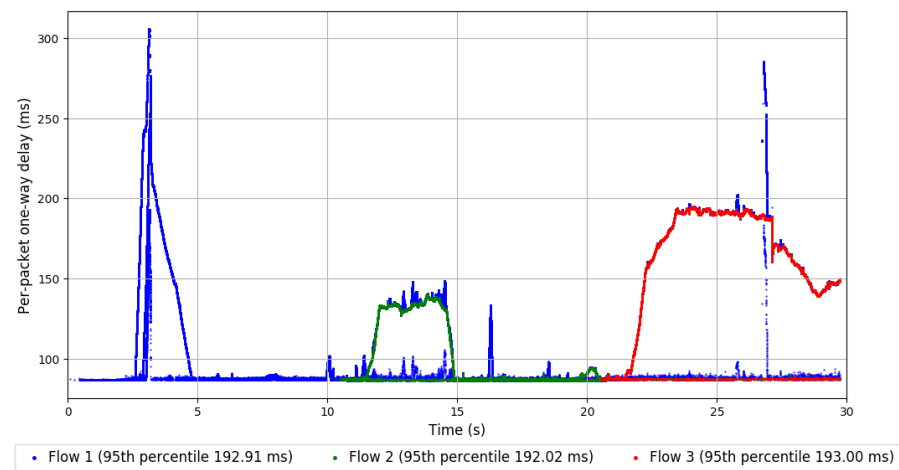
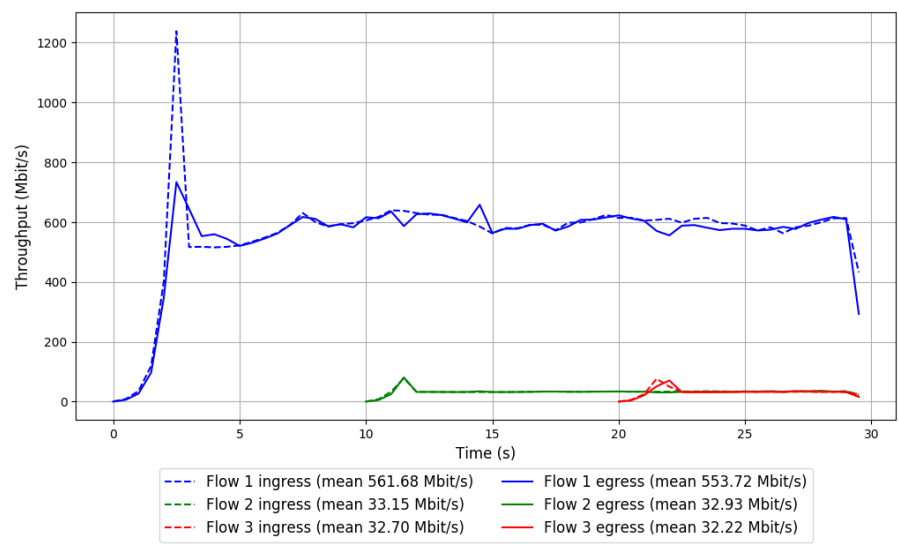
-- Flow 3:

Average throughput: 32.22 Mbit/s

95th percentile per-packet one-way delay: 192.997 ms

Loss rate: 3.48%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

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

End at: 2018-01-09 14:38:45

Below is generated by plot.py at 2018-01-09 17:49:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 586.98 Mbit/s

95th percentile per-packet one-way delay: 188.261 ms

Loss rate: 3.79%

-- Flow 1:

Average throughput: 529.58 Mbit/s

95th percentile per-packet one-way delay: 188.537 ms

Loss rate: 3.50%

-- Flow 2:

Average throughput: 30.81 Mbit/s

95th percentile per-packet one-way delay: 186.693 ms

Loss rate: 3.08%

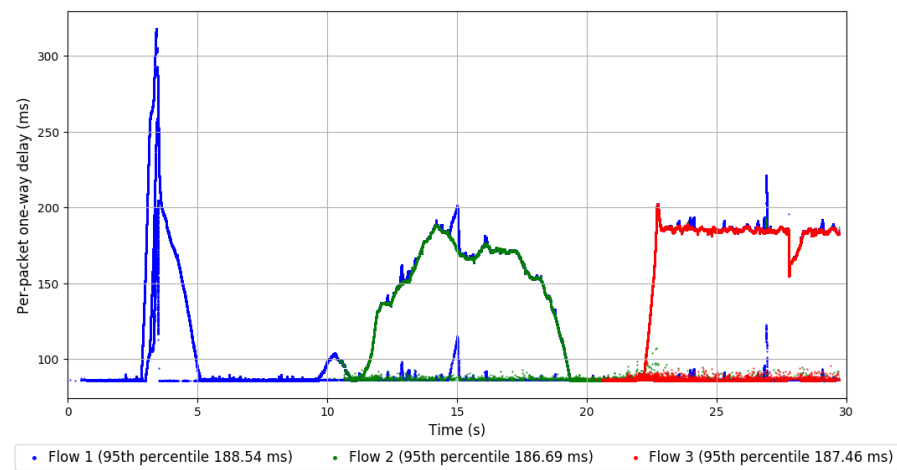
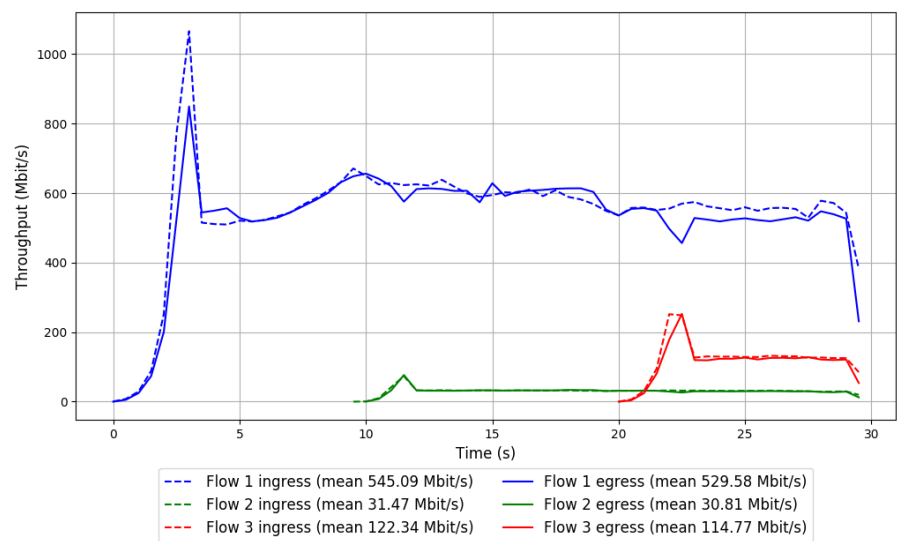
-- Flow 3:

Average throughput: 114.77 Mbit/s

95th percentile per-packet one-way delay: 187.456 ms

Loss rate: 8.12%

Run 9: Report of PCC — Data Link

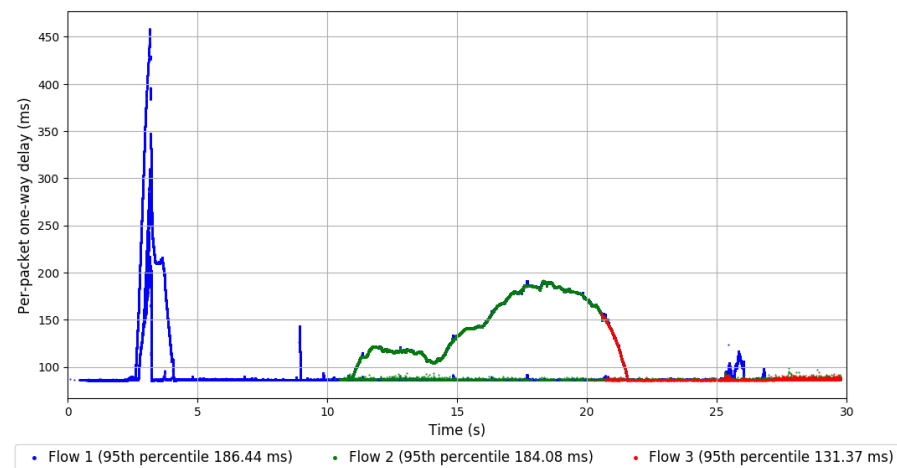
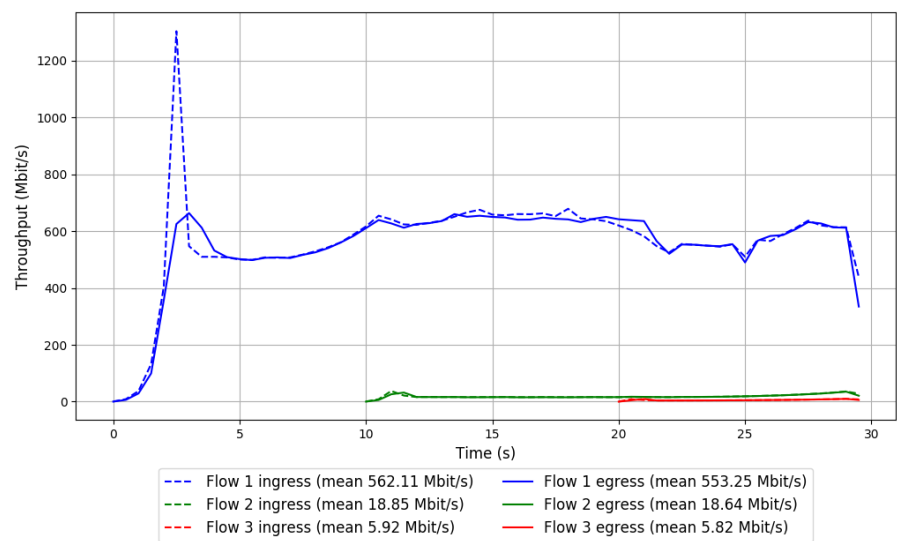


```
Run 10: Statistics of PCC

Start at: 2018-01-09 14:53:31
End at: 2018-01-09 14:54:01

# Below is generated by plot.py at 2018-01-09 17:57:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 567.48 Mbit/s
95th percentile per-packet one-way delay: 186.361 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 553.25 Mbit/s
95th percentile per-packet one-way delay: 186.441 ms
Loss rate: 2.15%
-- Flow 2:
Average throughput: 18.64 Mbit/s
95th percentile per-packet one-way delay: 184.084 ms
Loss rate: 2.00%
-- Flow 3:
Average throughput: 5.82 Mbit/s
95th percentile per-packet one-way delay: 131.374 ms
Loss rate: 3.36%
```

Run 10: Report of PCC — Data Link

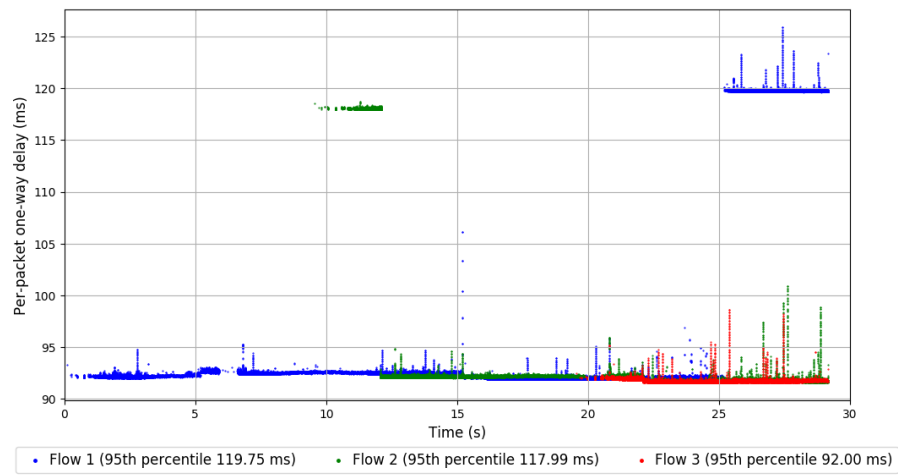
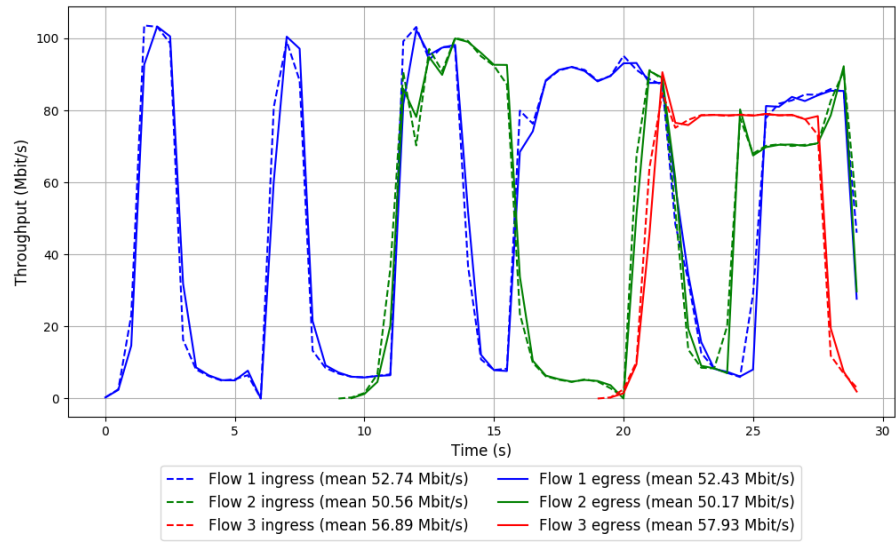


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-09 12:28:22
End at: 2018-01-09 12:28:52

# Below is generated by plot.py at 2018-01-09 17:57:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.41 Mbit/s
95th percentile per-packet one-way delay: 119.716 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 52.43 Mbit/s
95th percentile per-packet one-way delay: 119.752 ms
Loss rate: 1.27%
-- Flow 2:
Average throughput: 50.17 Mbit/s
95th percentile per-packet one-way delay: 117.990 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 57.93 Mbit/s
95th percentile per-packet one-way delay: 91.999 ms
Loss rate: 0.19%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-09 12:43:26

End at: 2018-01-09 12:43:56

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.11 Mbit/s

95th percentile per-packet one-way delay: 91.494 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 55.37 Mbit/s

95th percentile per-packet one-way delay: 91.378 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 54.45 Mbit/s

95th percentile per-packet one-way delay: 91.127 ms

Loss rate: 1.48%

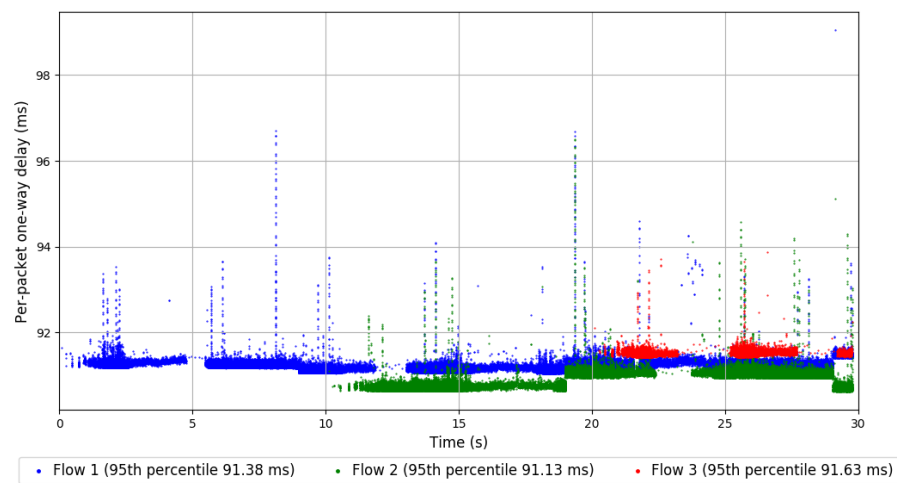
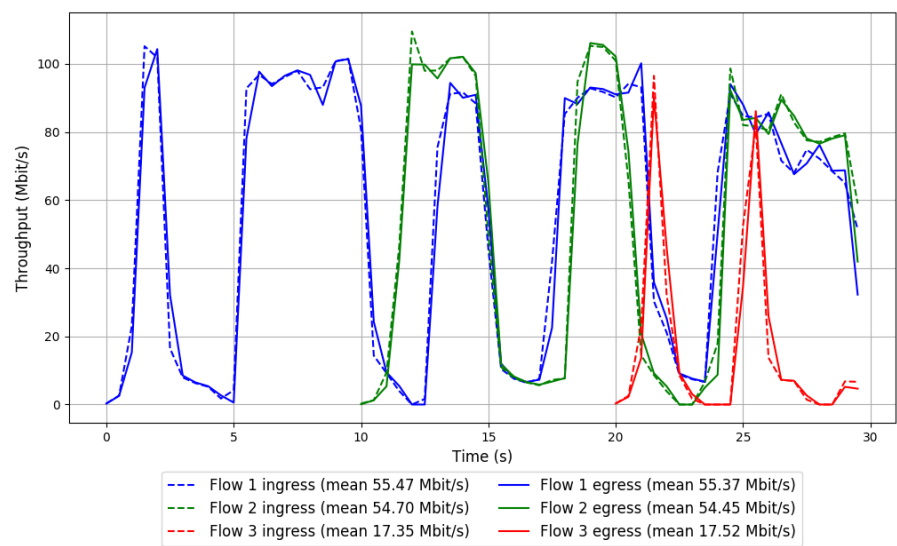
-- Flow 3:

Average throughput: 17.52 Mbit/s

95th percentile per-packet one-way delay: 91.633 ms

Loss rate: 1.07%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-09 12:58:54

End at: 2018-01-09 12:59:24

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.00 Mbit/s

95th percentile per-packet one-way delay: 116.902 ms

Loss rate: 1.68%

-- Flow 1:

Average throughput: 54.28 Mbit/s

95th percentile per-packet one-way delay: 116.936 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 62.71 Mbit/s

95th percentile per-packet one-way delay: 90.893 ms

Loss rate: 1.73%

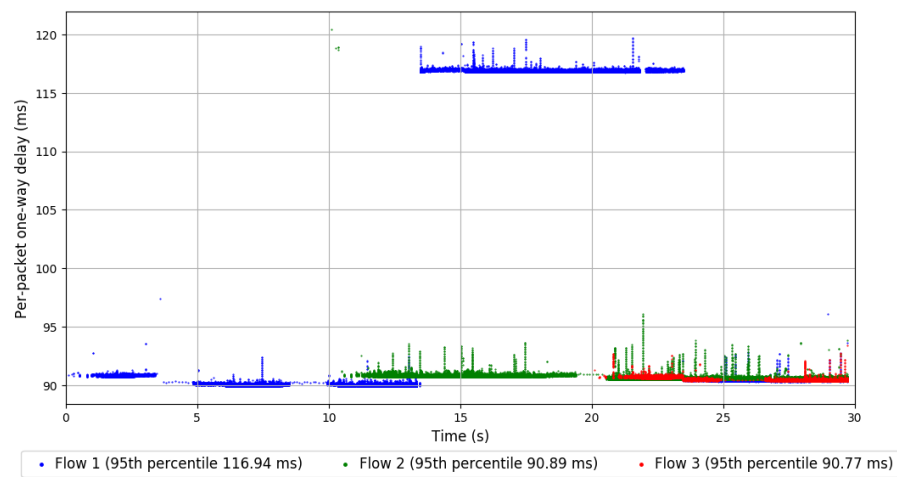
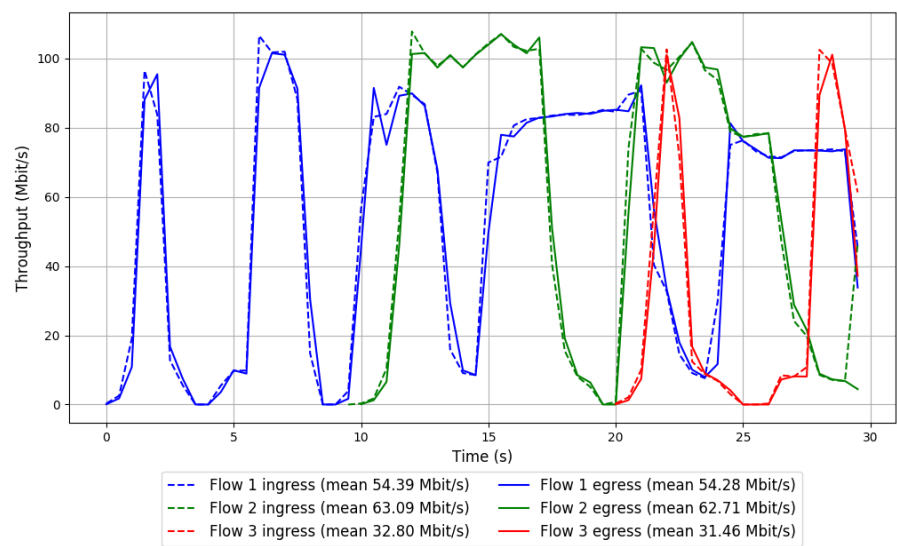
-- Flow 3:

Average throughput: 31.46 Mbit/s

95th percentile per-packet one-way delay: 90.768 ms

Loss rate: 6.02%

Run 3: Report of QUIC Cubic — Data Link

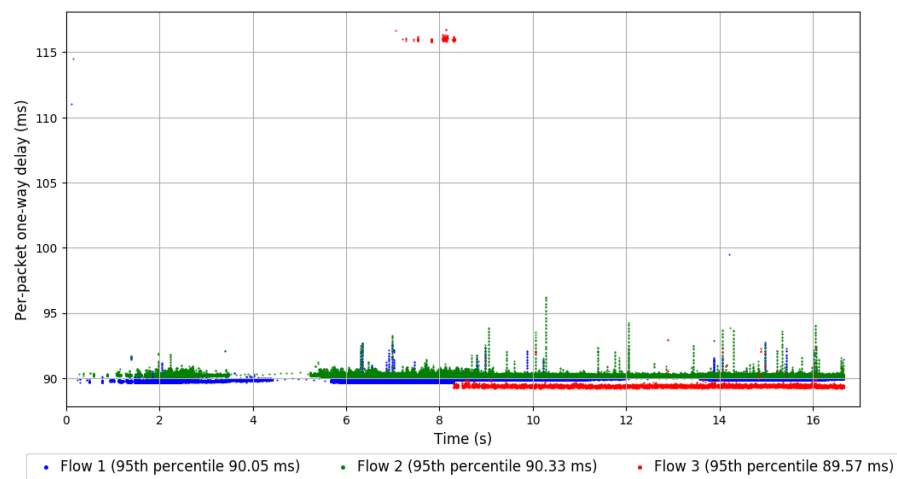
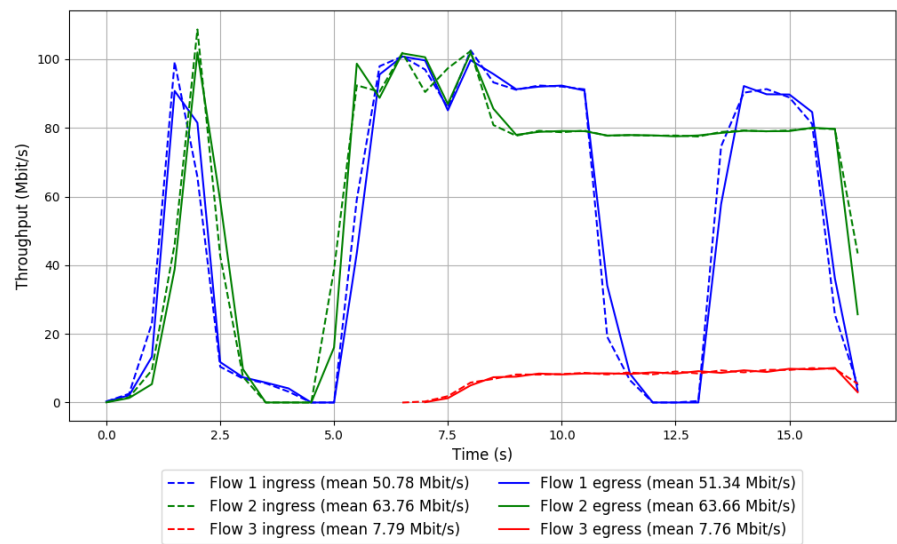


Run 4: Statistics of QUIC Cubic

Start at: 2018-01-09 13:13:43

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

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-09 13:29:20

End at: 2018-01-09 13:29:50

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.01 Mbit/s

95th percentile per-packet one-way delay: 89.156 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 57.30 Mbit/s

95th percentile per-packet one-way delay: 89.166 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 54.63 Mbit/s

95th percentile per-packet one-way delay: 88.869 ms

Loss rate: 1.44%

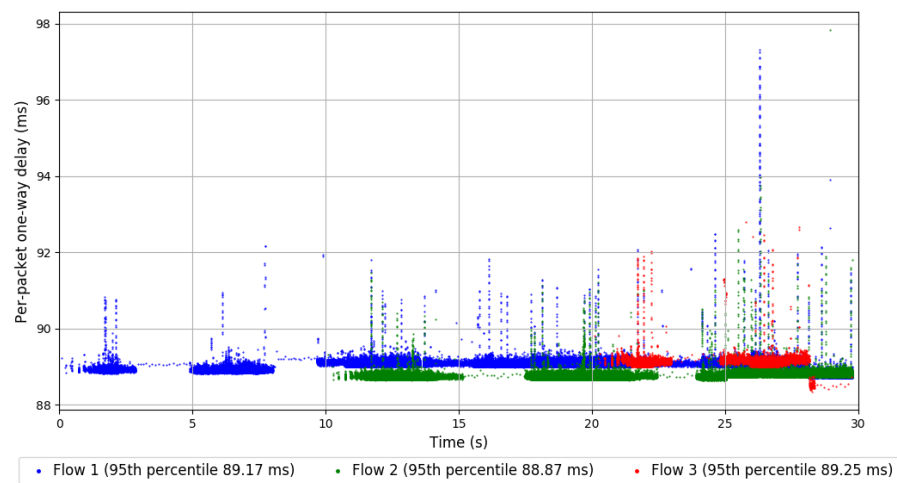
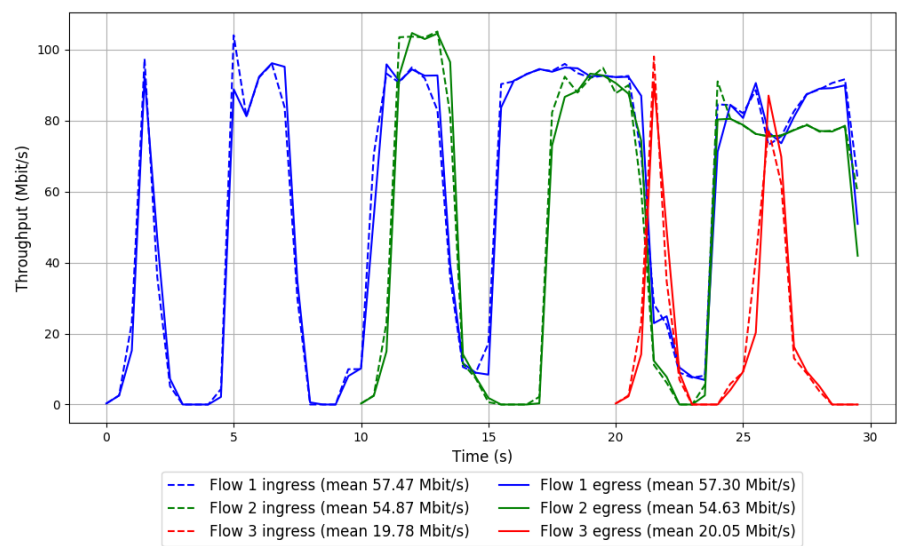
-- Flow 3:

Average throughput: 20.05 Mbit/s

95th percentile per-packet one-way delay: 89.247 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

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 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.23 Mbit/s

95th percentile per-packet one-way delay: 116.298 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 58.54 Mbit/s

95th percentile per-packet one-way delay: 116.331 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 57.66 Mbit/s

95th percentile per-packet one-way delay: 88.257 ms

Loss rate: 0.44%

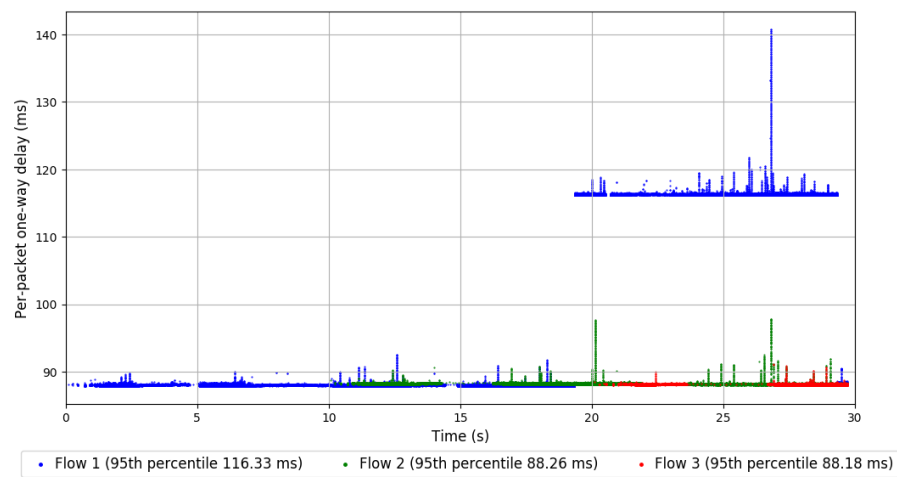
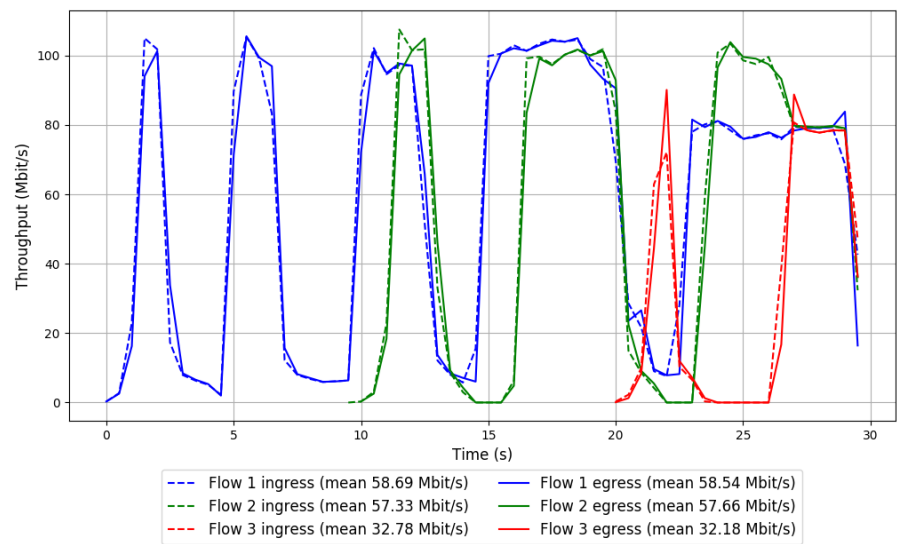
-- Flow 3:

Average throughput: 32.18 Mbit/s

95th percentile per-packet one-way delay: 88.182 ms

Loss rate: 3.86%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-09 13:59:27

End at: 2018-01-09 13:59:57

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.88 Mbit/s

95th percentile per-packet one-way delay: 115.685 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 65.16 Mbit/s

95th percentile per-packet one-way delay: 115.695 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 87.869 ms

Loss rate: 1.72%

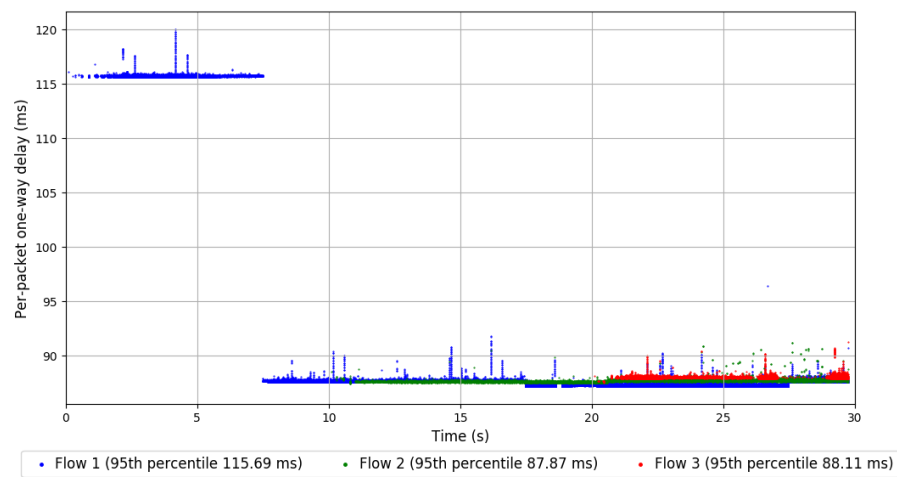
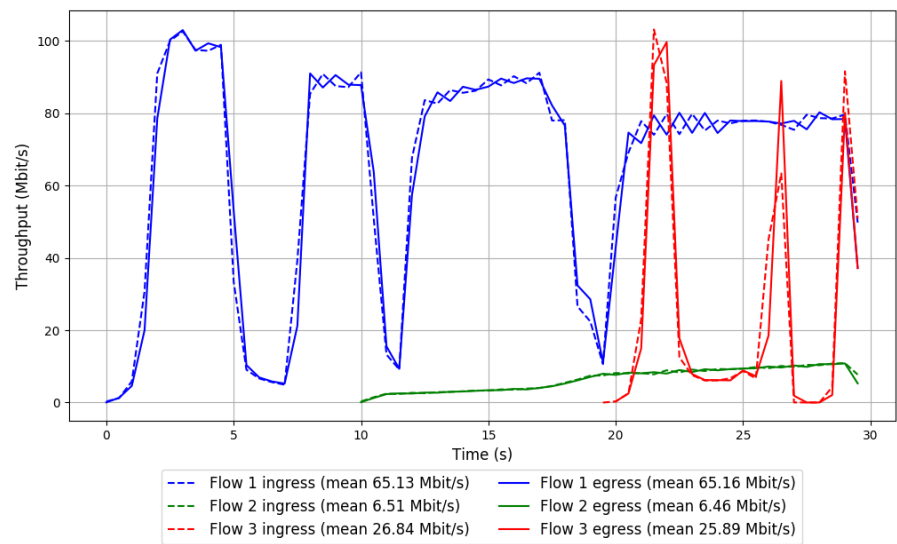
-- Flow 3:

Average throughput: 25.89 Mbit/s

95th percentile per-packet one-way delay: 88.114 ms

Loss rate: 5.21%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

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

End at: 2018-01-09 14:15:25

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.23 Mbit/s

95th percentile per-packet one-way delay: 115.405 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 61.13 Mbit/s

95th percentile per-packet one-way delay: 115.434 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 59.77 Mbit/s

95th percentile per-packet one-way delay: 87.203 ms

Loss rate: 0.74%

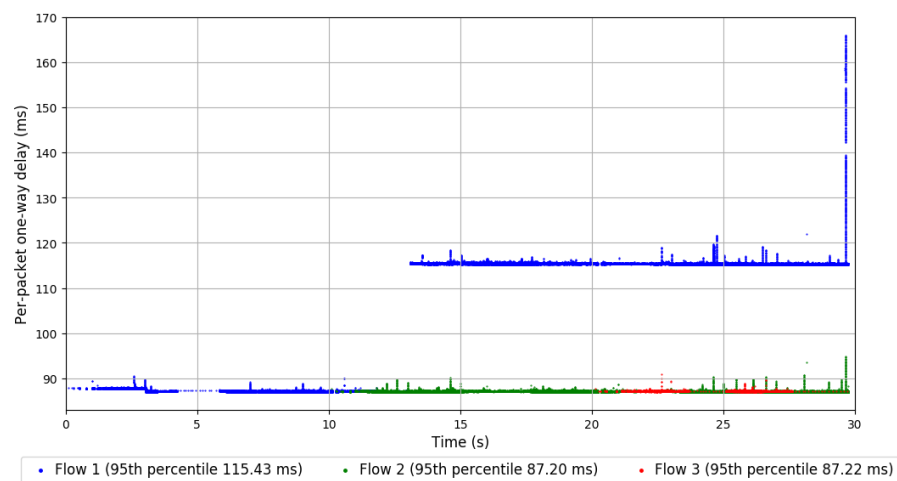
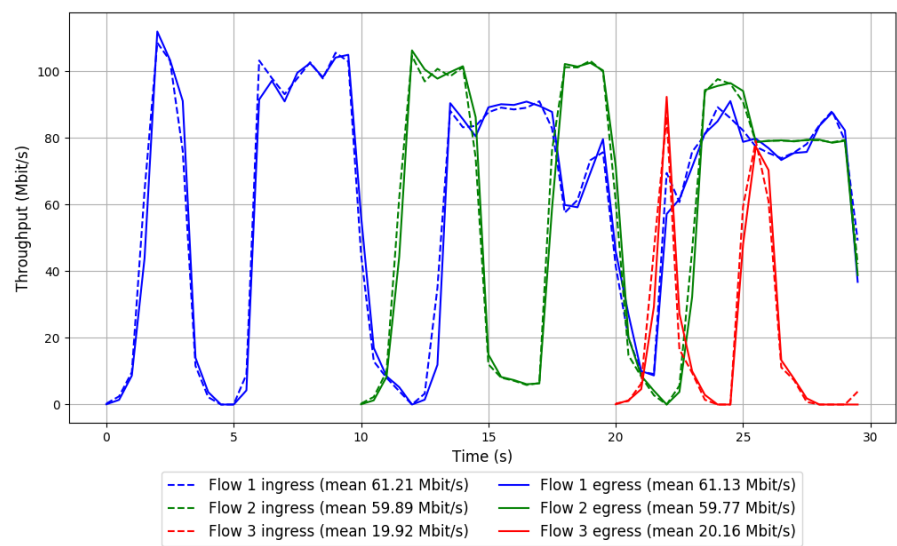
-- Flow 3:

Average throughput: 20.16 Mbit/s

95th percentile per-packet one-way delay: 87.225 ms

Loss rate: 0.99%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-09 14:30:37

End at: 2018-01-09 14:31:07

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 112.26 Mbit/s

95th percentile per-packet one-way delay: 86.947 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 62.08 Mbit/s

95th percentile per-packet one-way delay: 86.726 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 57.97 Mbit/s

95th percentile per-packet one-way delay: 87.005 ms

Loss rate: 1.37%

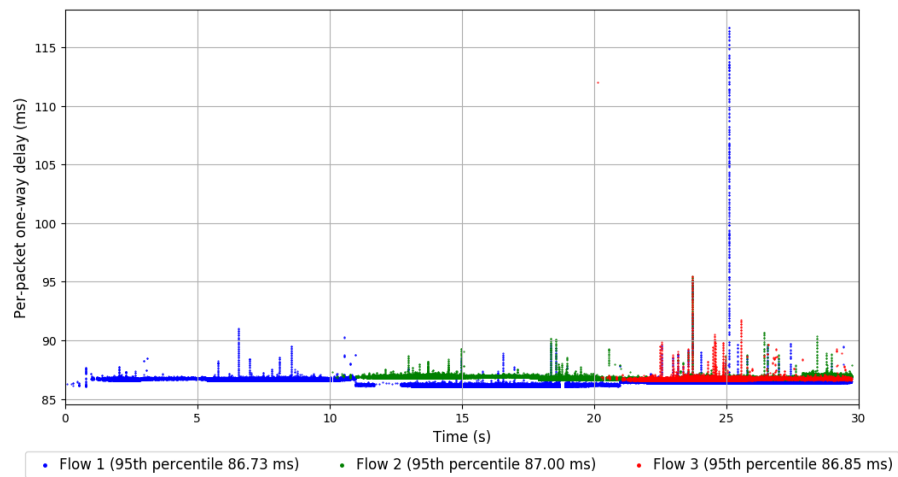
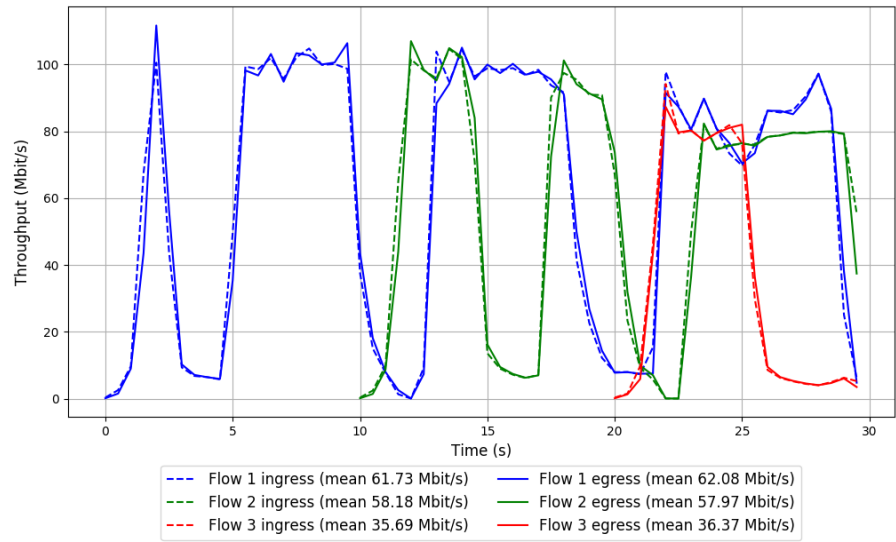
-- Flow 3:

Average throughput: 36.37 Mbit/s

95th percentile per-packet one-way delay: 86.853 ms

Loss rate: 0.42%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-01-09 14:45:49

End at: 2018-01-09 14:46:19

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.66 Mbit/s

95th percentile per-packet one-way delay: 86.754 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 55.05 Mbit/s

95th percentile per-packet one-way delay: 86.781 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 51.83 Mbit/s

95th percentile per-packet one-way delay: 86.351 ms

Loss rate: 1.59%

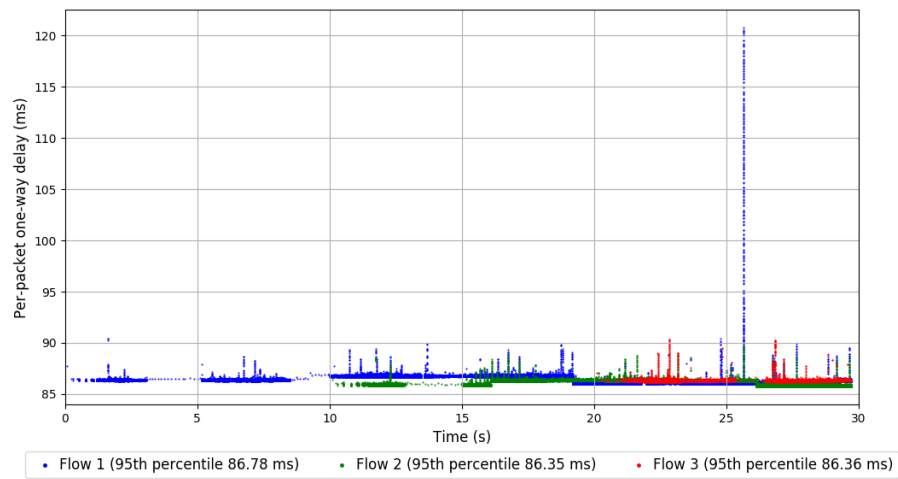
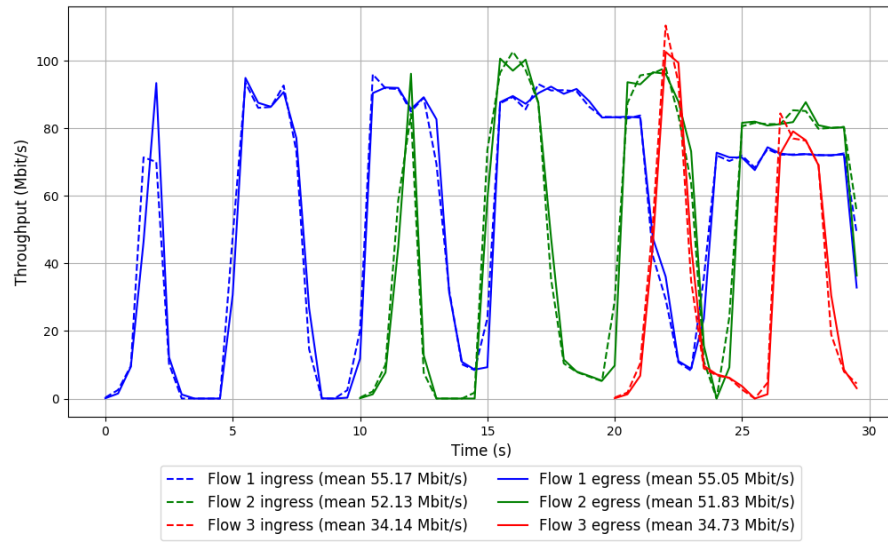
-- Flow 3:

Average throughput: 34.73 Mbit/s

95th percentile per-packet one-way delay: 86.362 ms

Loss rate: 0.38%

Run 10: Report of QUIC Cubic — Data Link

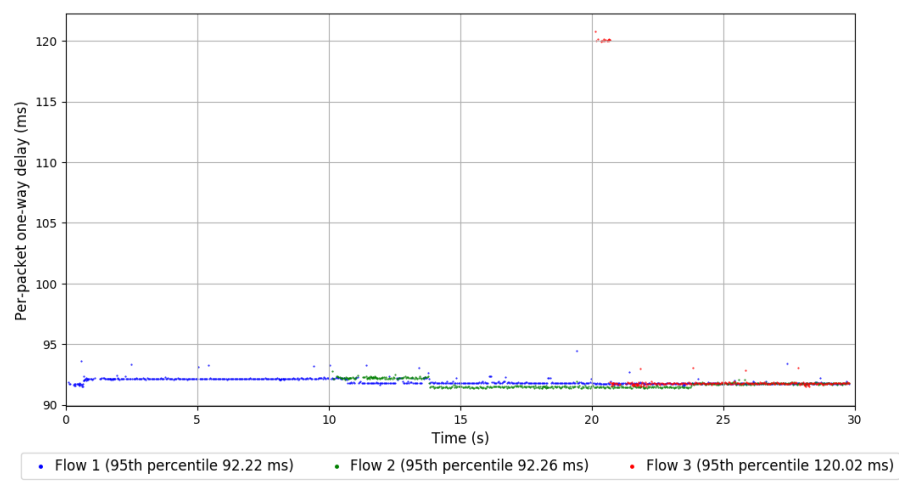
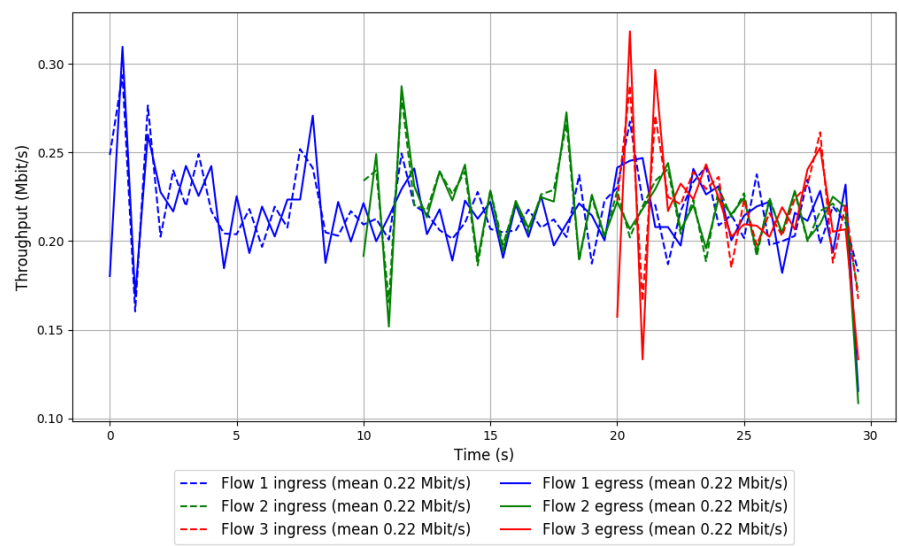


```
Run 1: Statistics of SCReAM

Start at: 2018-01-09 12:34:54
End at: 2018-01-09 12:35:24

# Below is generated by plot.py at 2018-01-09 17:57:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 92.254 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.216 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 92.263 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 120.021 ms
Loss rate: 1.86%
```

Run 1: Report of SReAM — Data Link

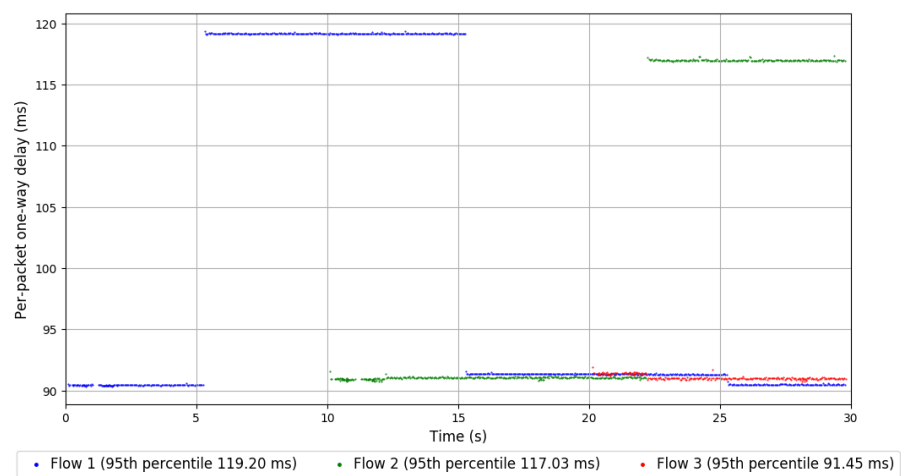
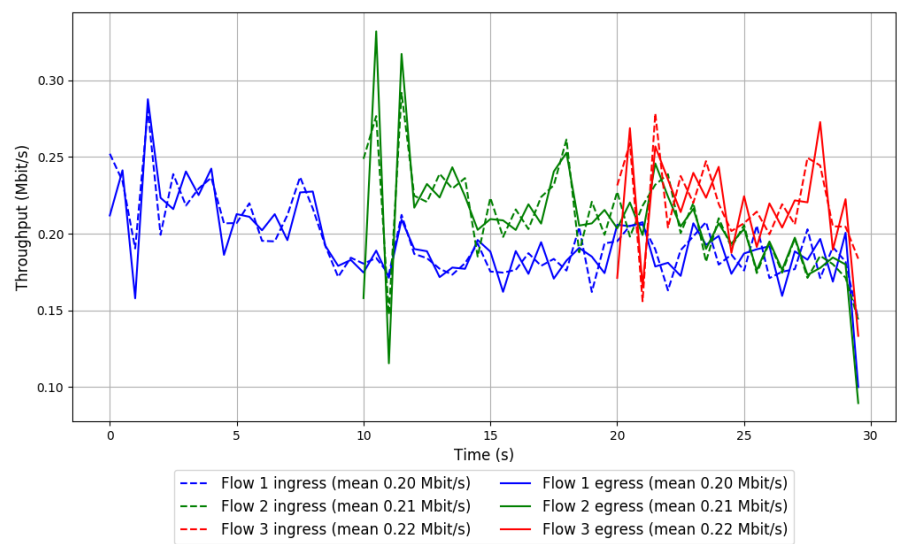


```
Run 2: Statistics of SReAM

Start at: 2018-01-09 12:50:23
End at: 2018-01-09 12:50:53

# Below is generated by plot.py at 2018-01-09 17:57:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 119.181 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 119.200 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 117.034 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.451 ms
Loss rate: 1.87%
```

Run 2: Report of SReAM — Data Link

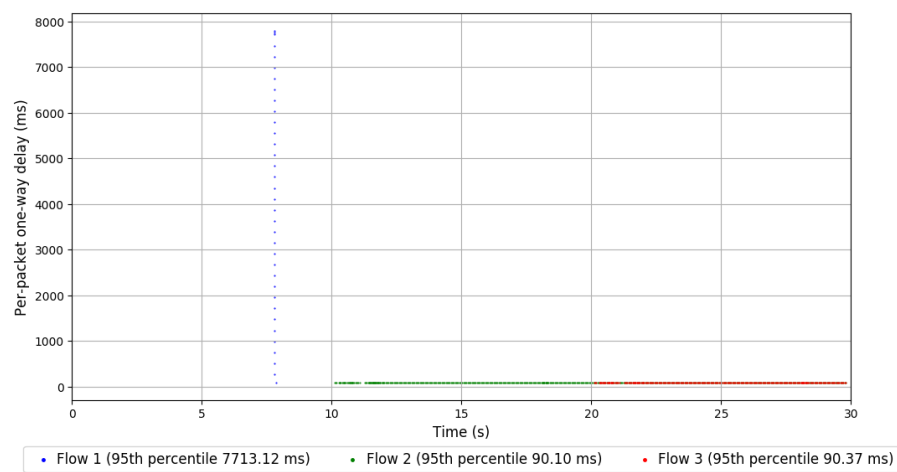
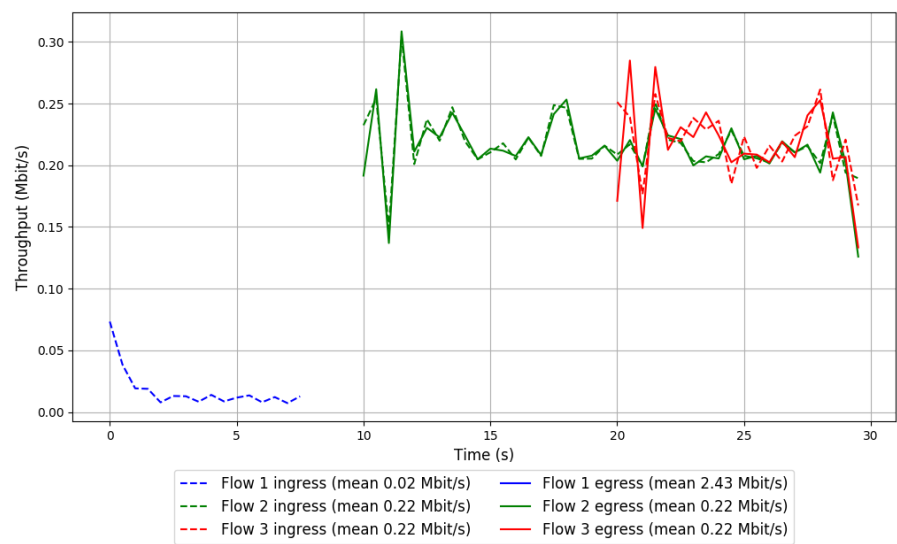


Run 3: Statistics of SReAM

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

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

Run 3: Report of SReAM — Data Link

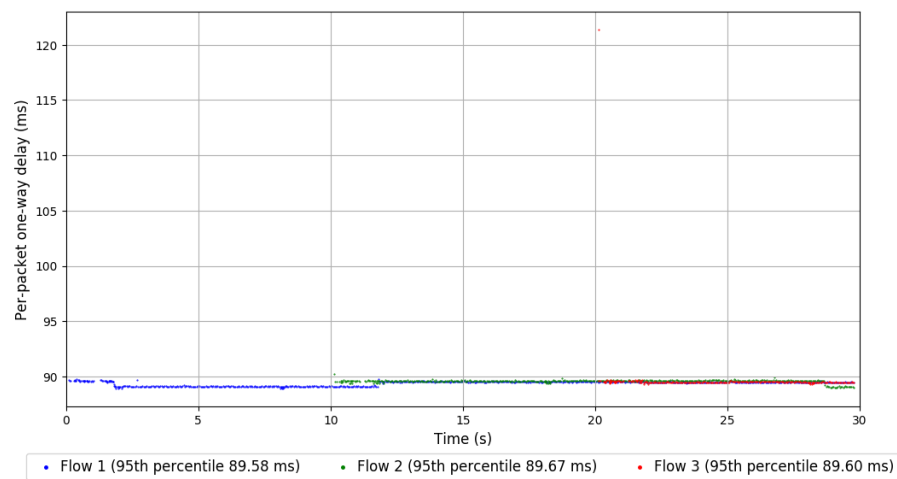
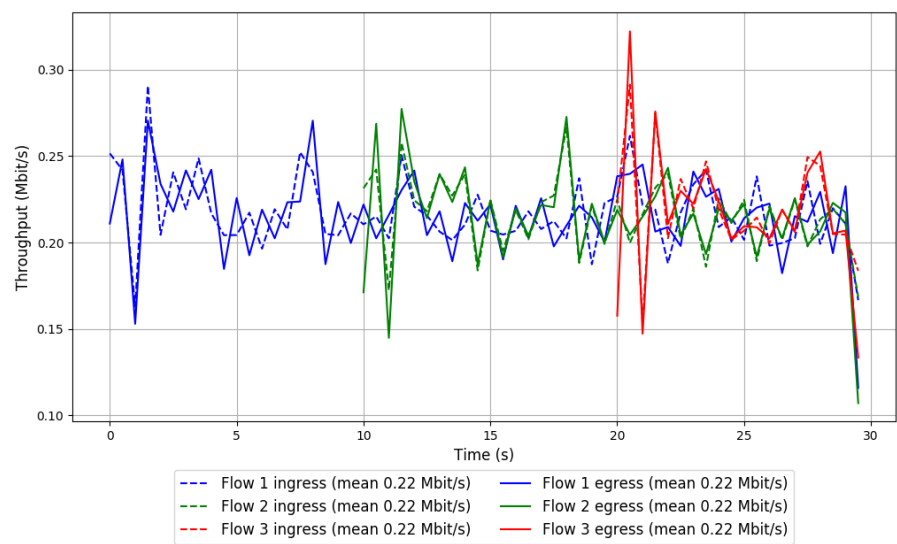


```
Run 4: Statistics of SCReAM

Start at: 2018-01-09 13:20:36
End at: 2018-01-09 13:21:06

# Below is generated by plot.py at 2018-01-09 17:57:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 89.645 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.579 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.667 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.597 ms
Loss rate: 1.86%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-01-09 13:35:59

End at: 2018-01-09 13:36:29

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 117.130 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 117.153 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.904 ms

Loss rate: 1.06%

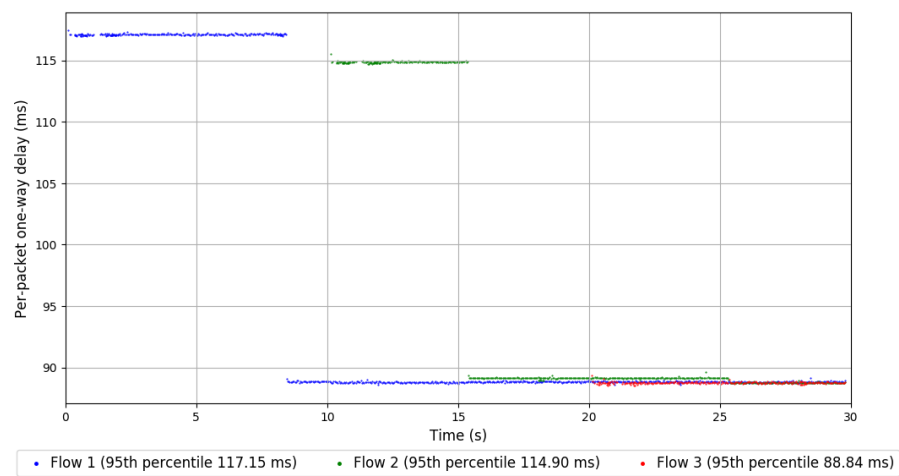
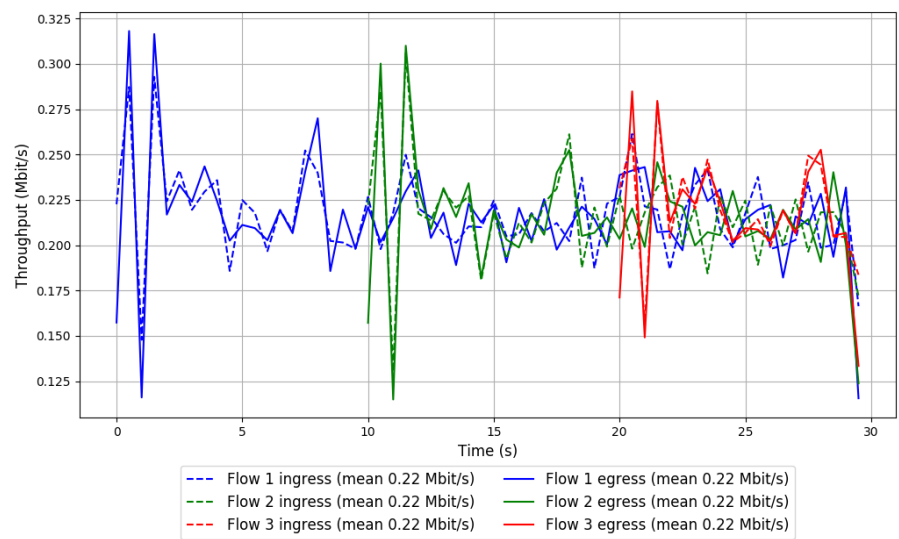
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.844 ms

Loss rate: 1.87%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-01-09 13:51:18

End at: 2018-01-09 13:51:48

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

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

Loss rate: 0.99%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.609 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 115.886 ms

Loss rate: 1.06%

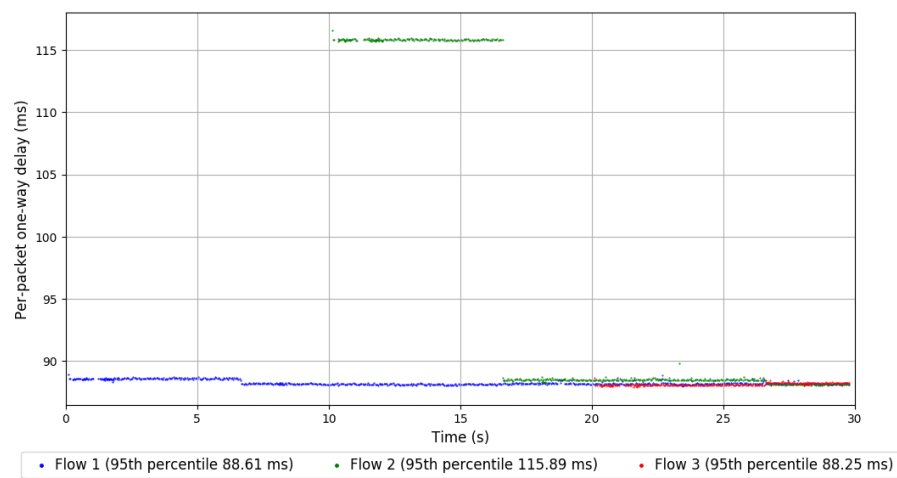
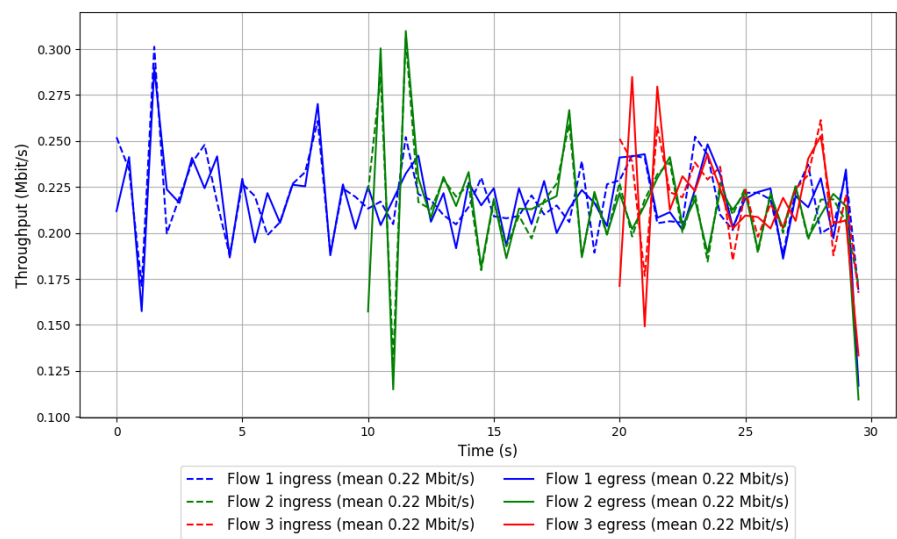
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 88.252 ms

Loss rate: 1.87%

Run 6: Report of SCRaM — Data Link



Run 7: Statistics of SReAM

Start at: 2018-01-09 14:06:11

End at: 2018-01-09 14:06:41

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.732 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.748 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.710 ms

Loss rate: 1.06%

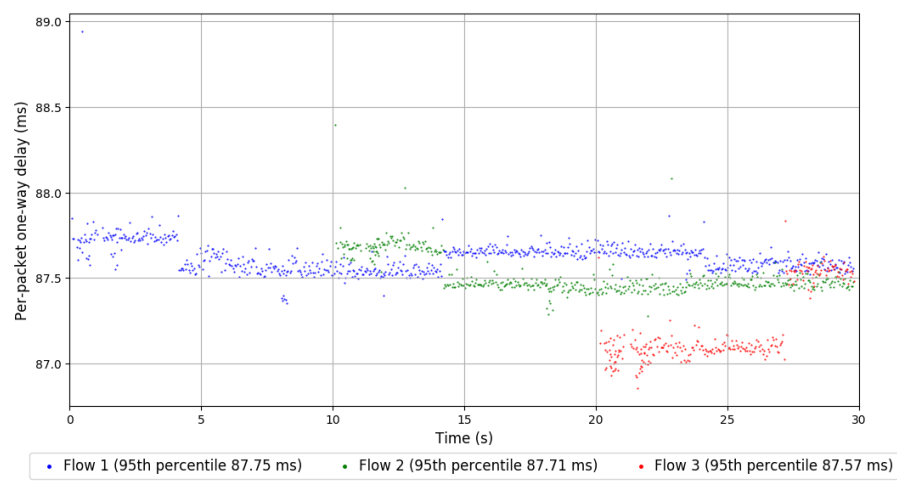
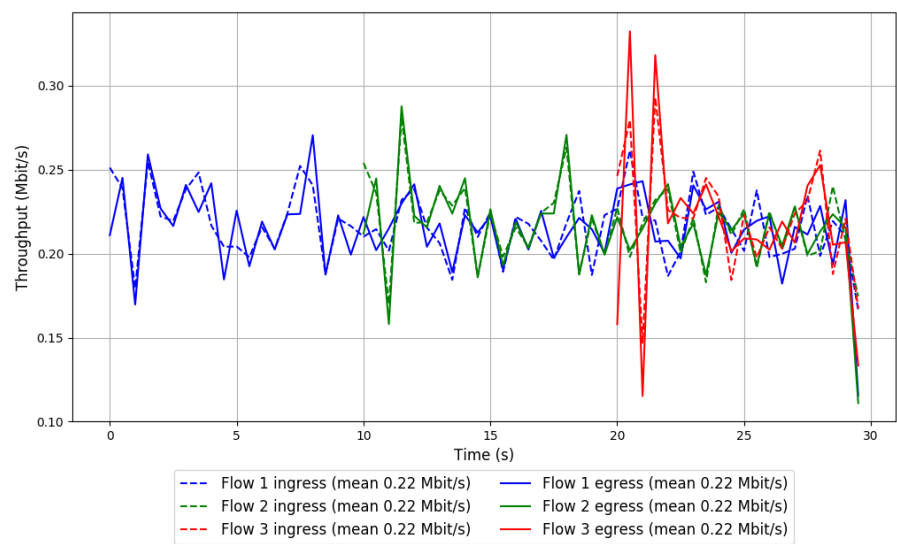
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.572 ms

Loss rate: 1.85%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-01-09 14:21:52

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

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.269 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.266 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.957 ms

Loss rate: 1.05%

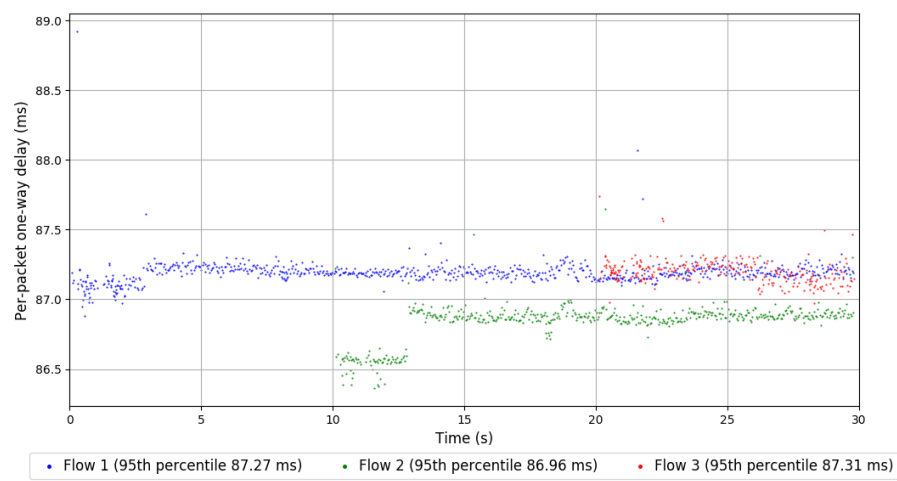
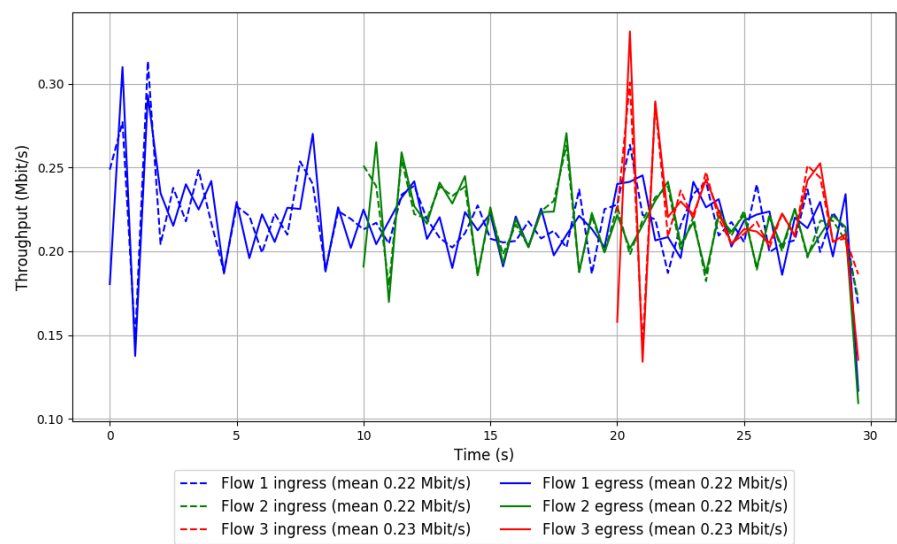
-- Flow 3:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 87.309 ms

Loss rate: 1.87%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-01-09 14:37:30

End at: 2018-01-09 14:38:00

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 87.010 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.903 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 87.033 ms

Loss rate: 1.06%

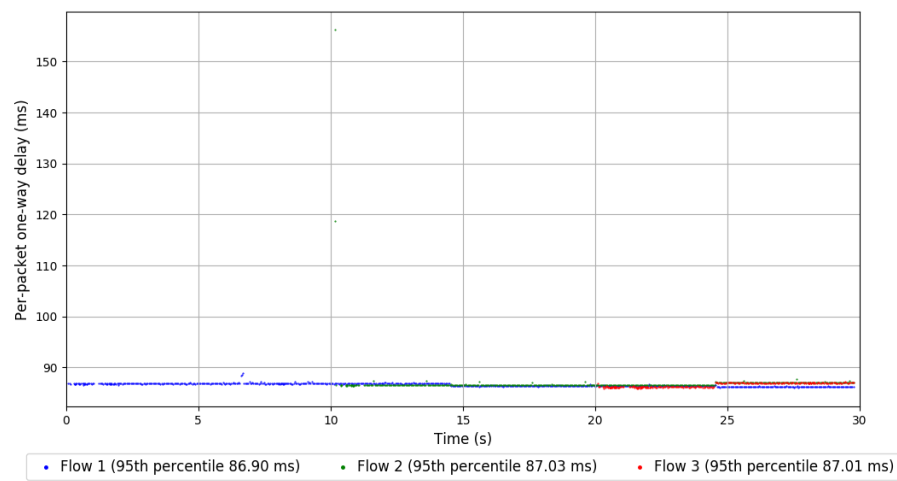
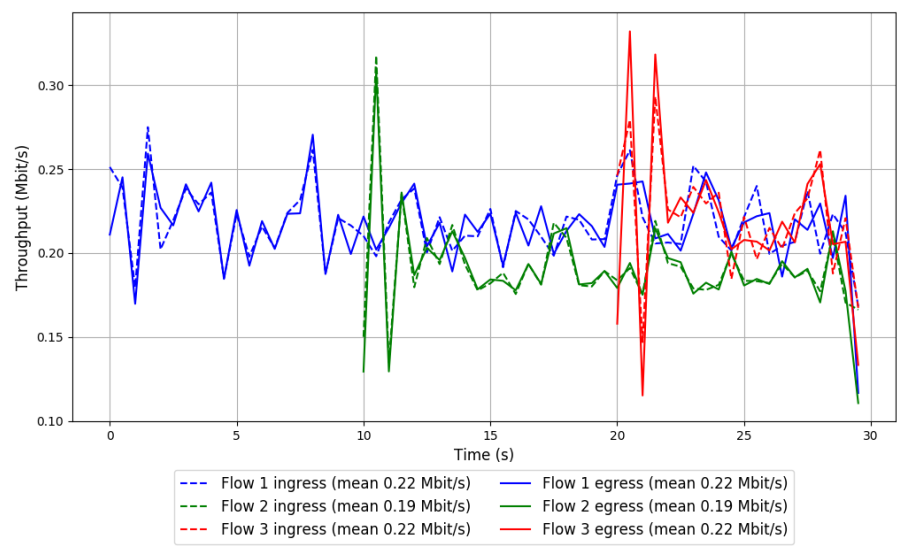
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.010 ms

Loss rate: 1.85%

Run 9: Report of SReAM — Data Link

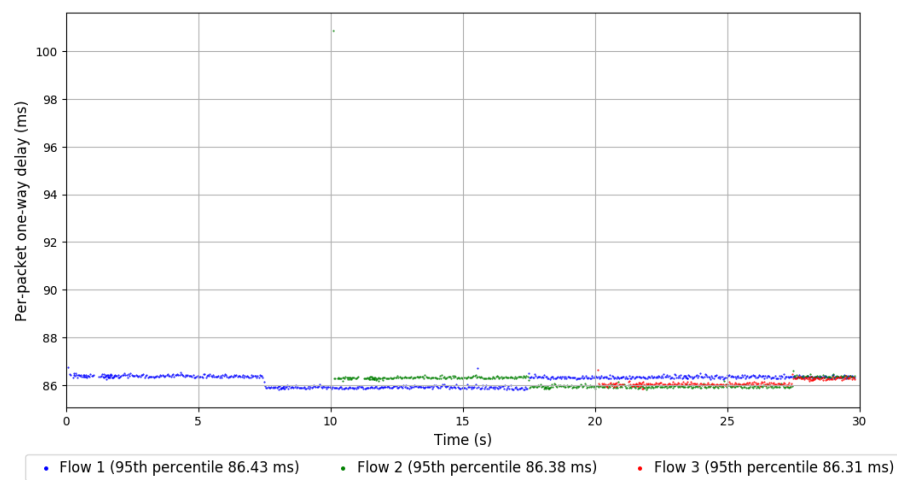
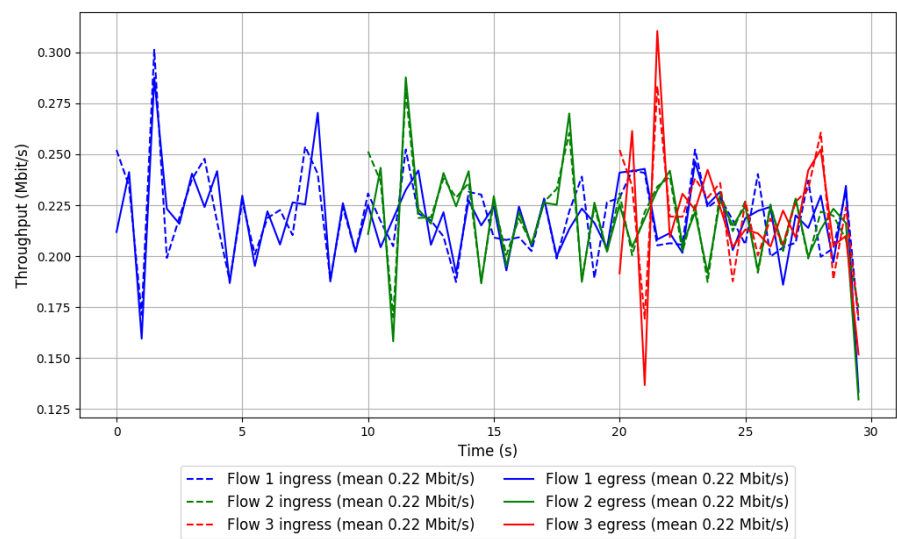


```
Run 10: Statistics of SReAM

Start at: 2018-01-09 14:52:47
End at: 2018-01-09 14:53:17

# Below is generated by plot.py at 2018-01-09 17:57:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.416 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.431 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.376 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.311 ms
Loss rate: 1.50%
```

Run 10: Report of SReAM — Data Link

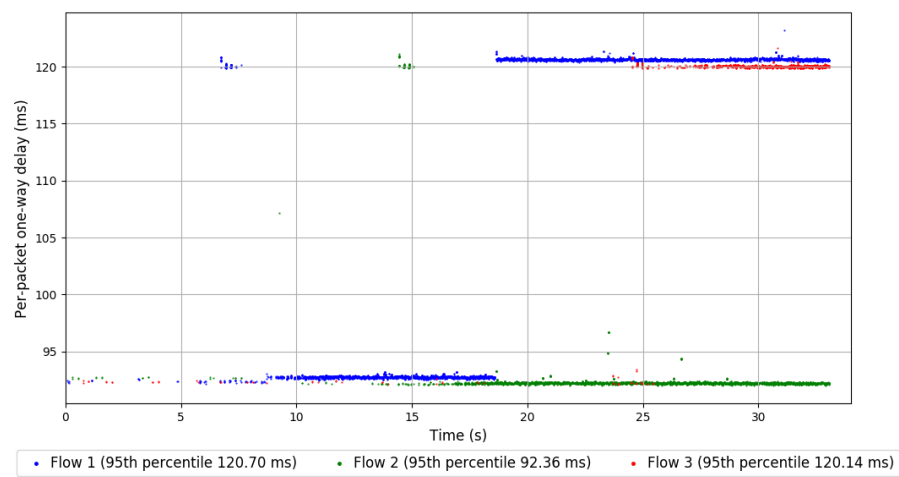
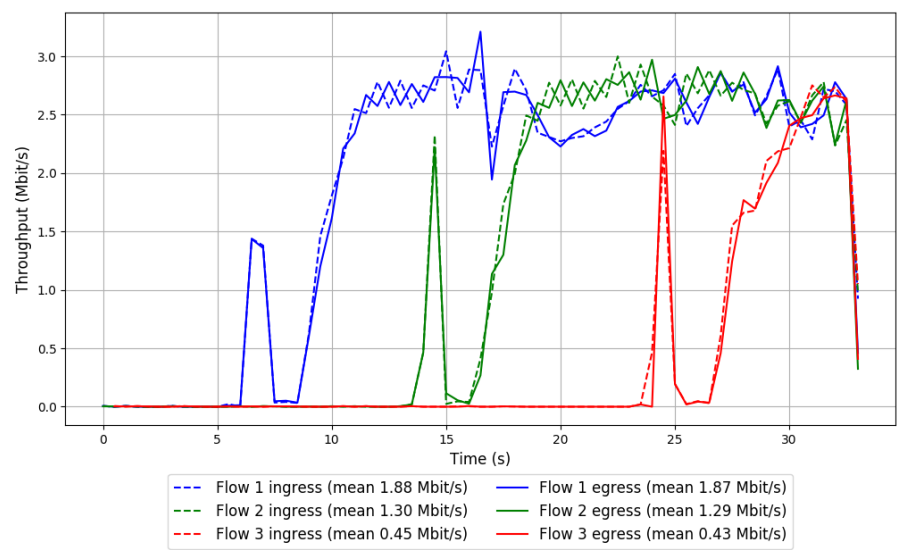


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-09 12:25:53
End at: 2018-01-09 12:26:23

# Below is generated by plot.py at 2018-01-09 17:57:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 120.678 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 120.705 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 92.362 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 120.141 ms
Loss rate: 4.72%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-09 12:40:54

End at: 2018-01-09 12:41:24

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 119.670 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 119.692 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 91.551 ms

Loss rate: 1.53%

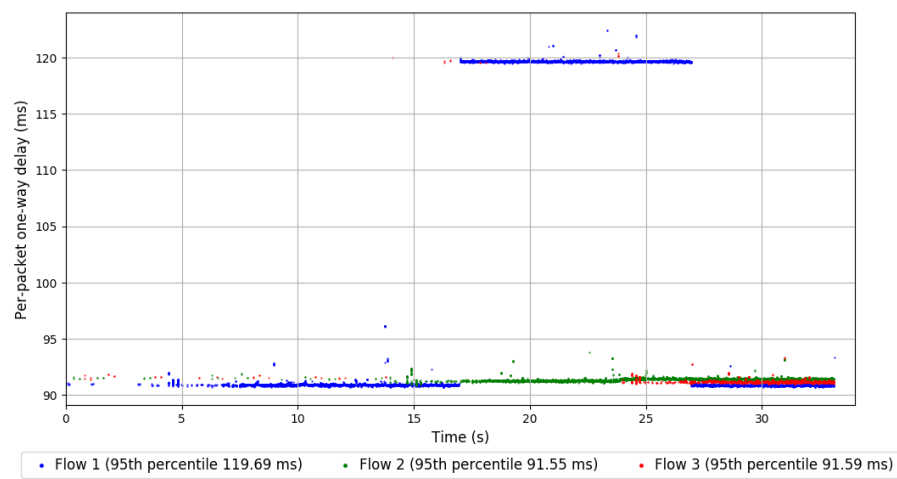
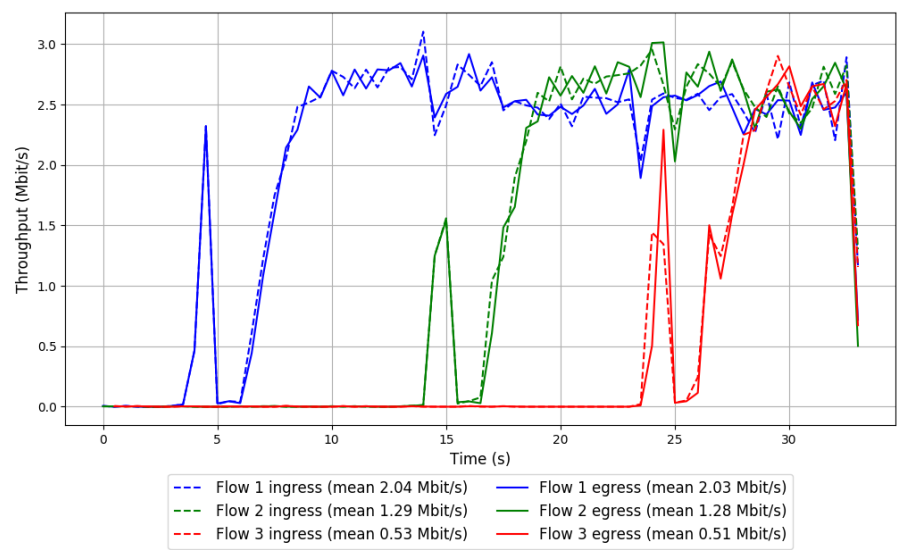
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 91.593 ms

Loss rate: 2.75%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-09 12:56:23

End at: 2018-01-09 12:56:53

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.75 Mbit/s

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

Loss rate: 1.35%

-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 118.960 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 118.761 ms

Loss rate: 1.53%

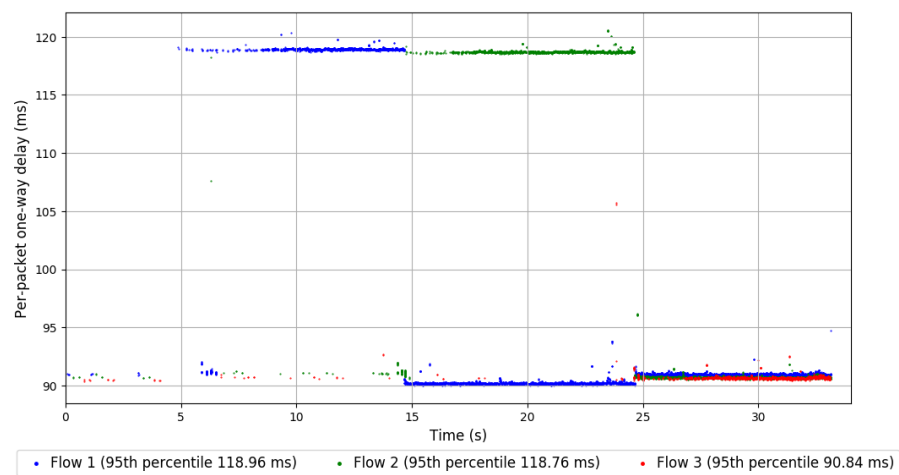
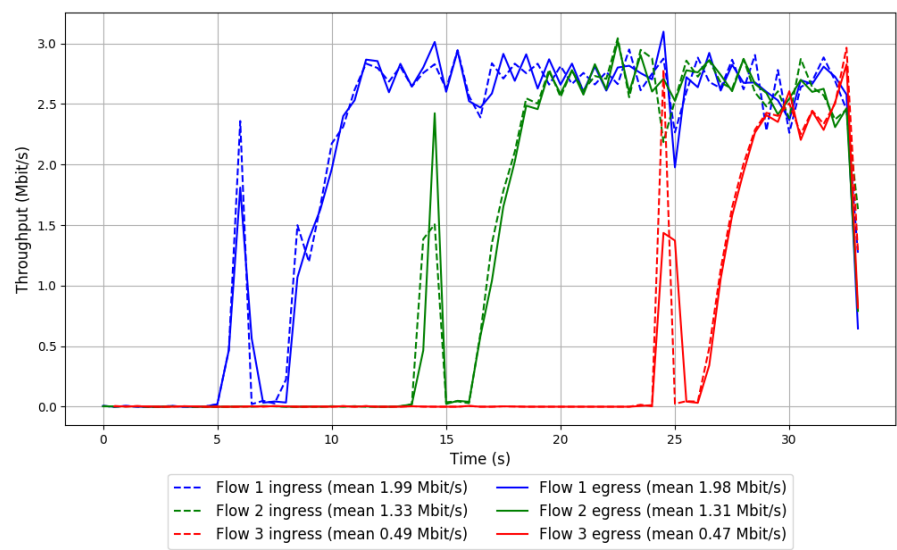
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 90.843 ms

Loss rate: 3.34%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-09 13:11:12

End at: 2018-01-09 13:11:42

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 90.514 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 90.376 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 90.551 ms

Loss rate: 1.18%

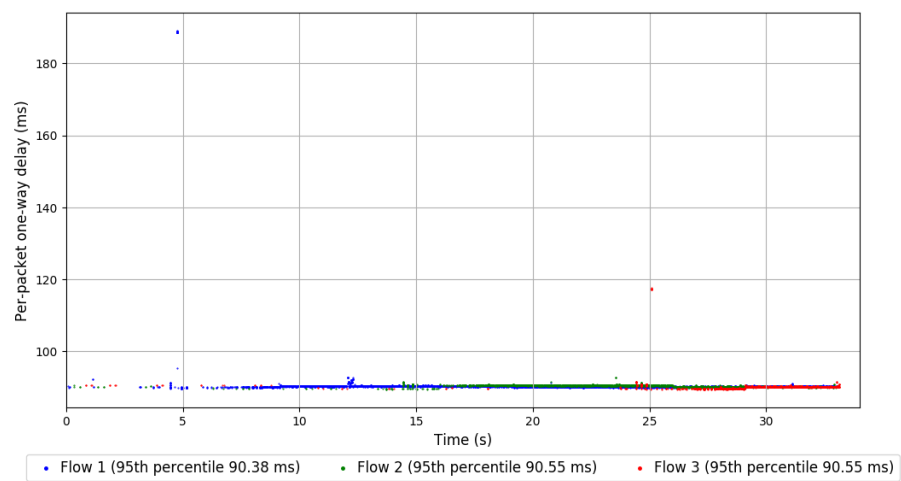
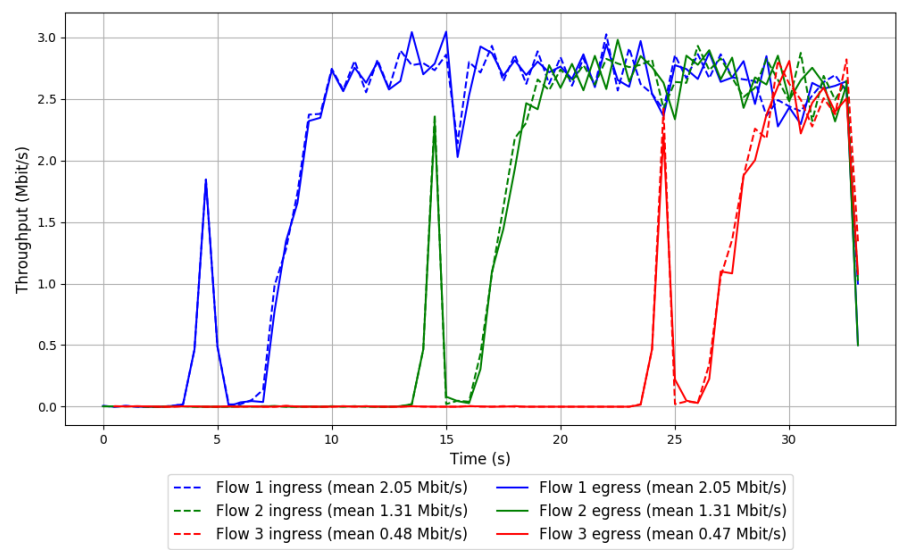
-- Flow 3:

Average throughput: 0.47 Mbit/s

95th percentile per-packet one-way delay: 90.545 ms

Loss rate: 3.16%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-09 13:26:48

End at: 2018-01-09 13:27:18

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 117.028 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 89.736 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 89.658 ms

Loss rate: 1.71%

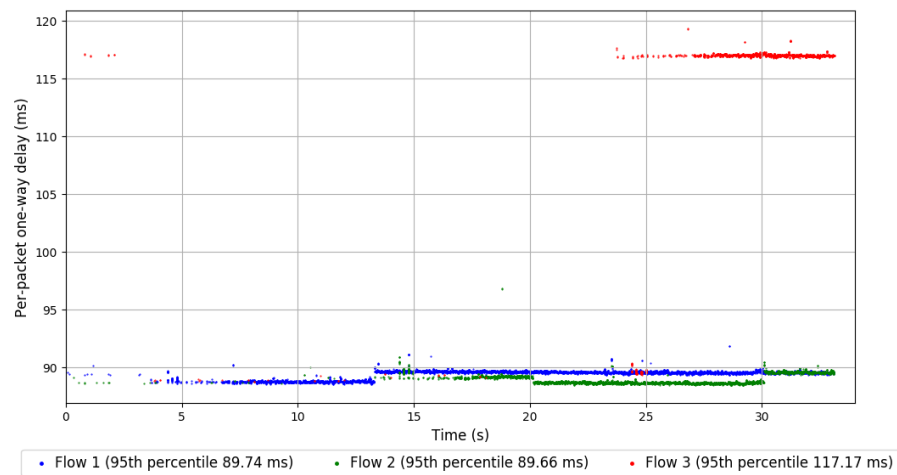
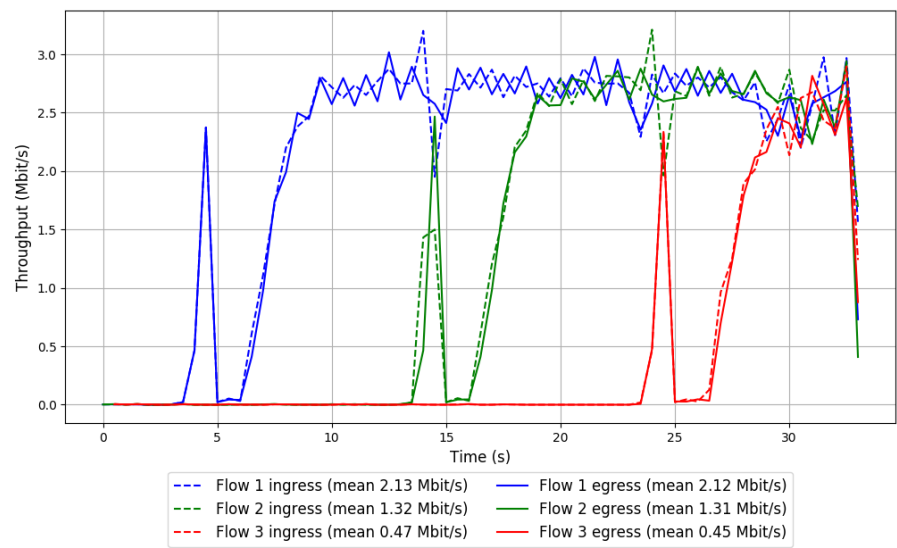
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 117.171 ms

Loss rate: 4.06%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

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

End at: 2018-01-09 13:42:37

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.46 Mbit/s

95th percentile per-packet one-way delay: 88.891 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 88.907 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 88.829 ms

Loss rate: 1.03%

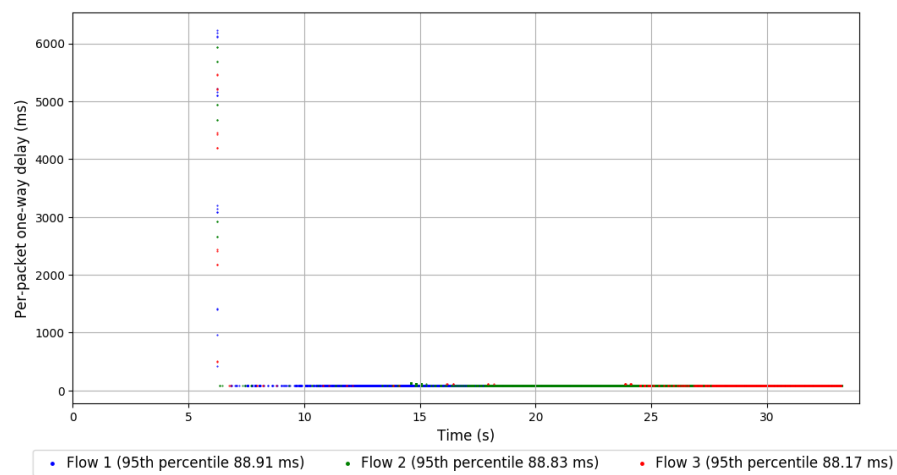
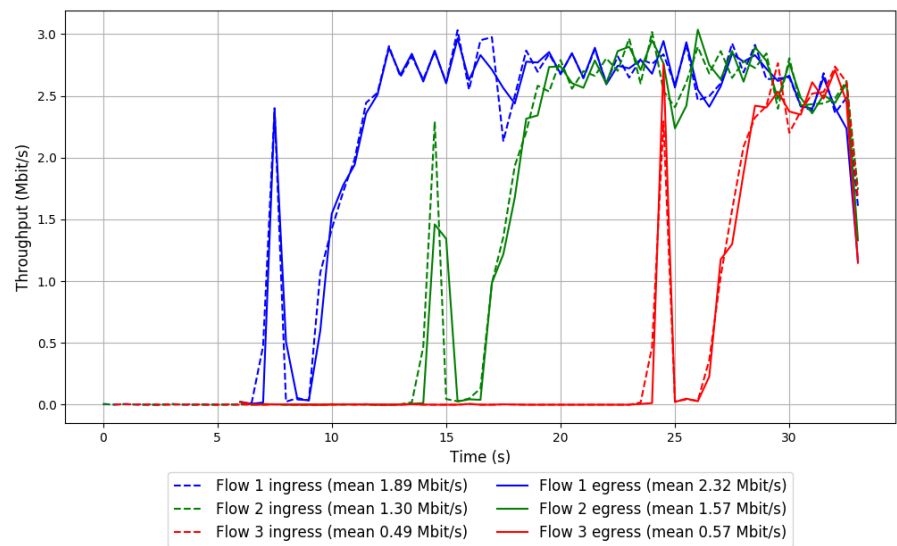
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 88.166 ms

Loss rate: 3.60%

Run 6: Report of WebRTC media — Data Link

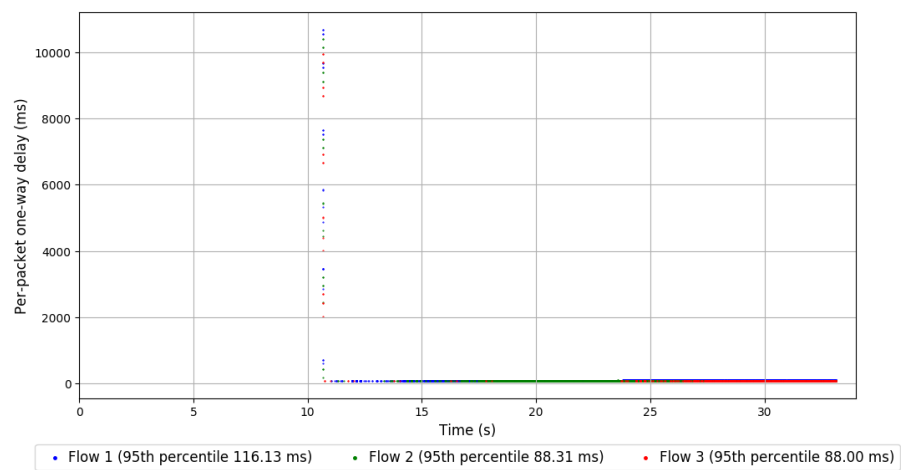
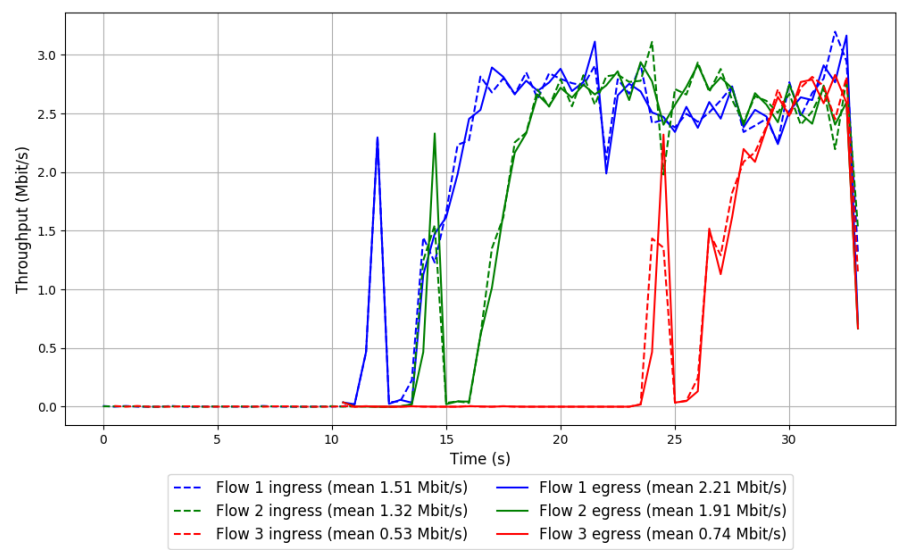


Run 7: Statistics of WebRTC media

Start at: 2018-01-09 13:56:57

End at: 2018-01-09 13:57:27

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-09 14:12:25

End at: 2018-01-09 14:12:55

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 113.527 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 113.555 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 1.31 Mbit/s

95th percentile per-packet one-way delay: 87.520 ms

Loss rate: 1.17%

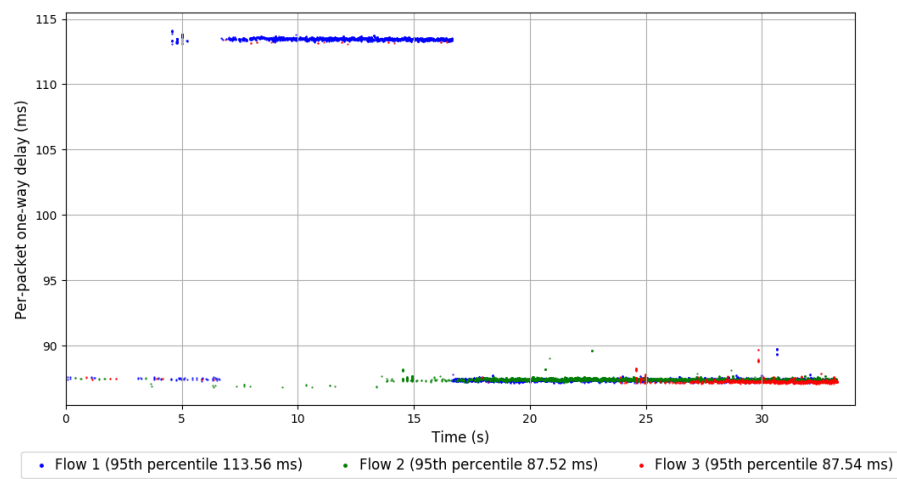
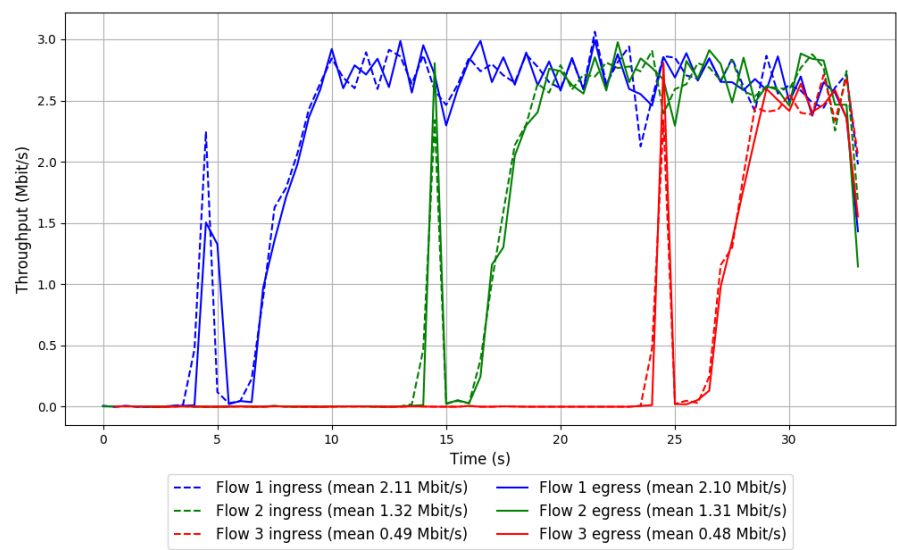
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 87.537 ms

Loss rate: 3.22%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

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

End at: 2018-01-09 14:28:34

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 87.544 ms

Loss rate: 1.40%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 87.136 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 87.598 ms

Loss rate: 1.39%

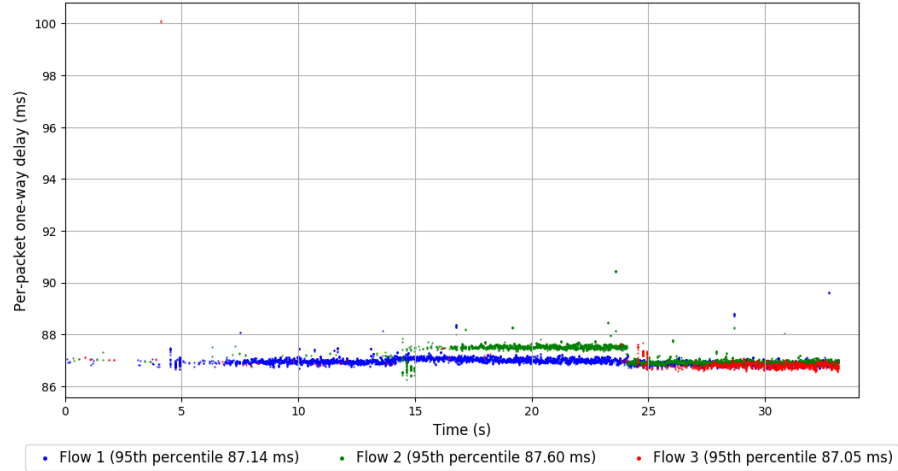
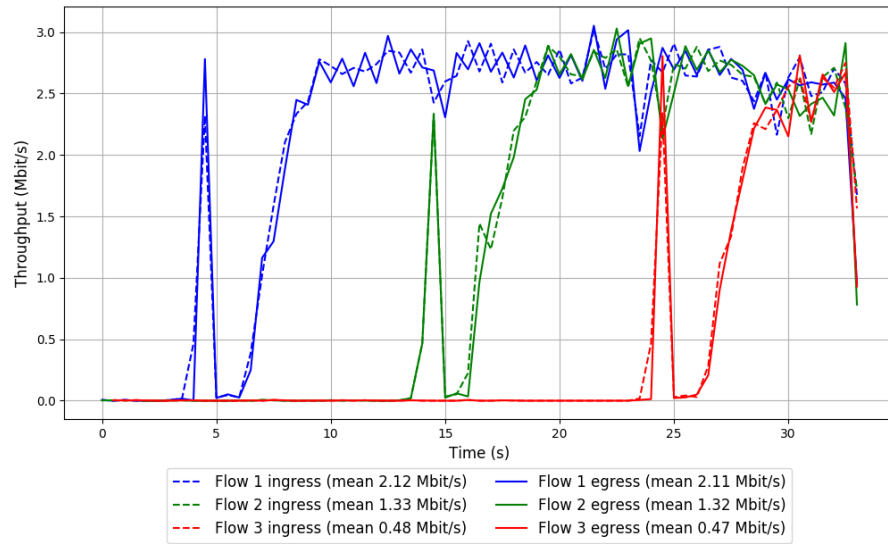
-- Flow 3:

Average throughput: 0.47 Mbit/s

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

Loss rate: 3.73%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-09 14:43:18

End at: 2018-01-09 14:43:48

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 86.919 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 86.848 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 1.33 Mbit/s

95th percentile per-packet one-way delay: 86.977 ms

Loss rate: 1.29%

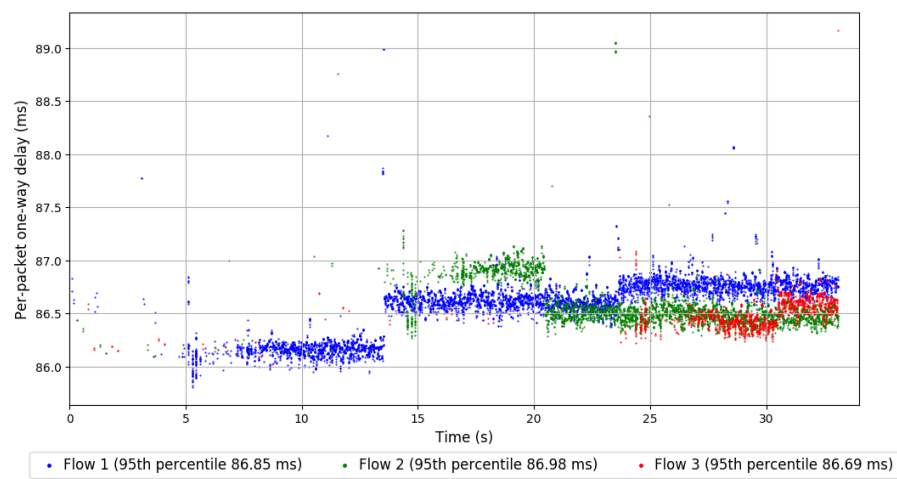
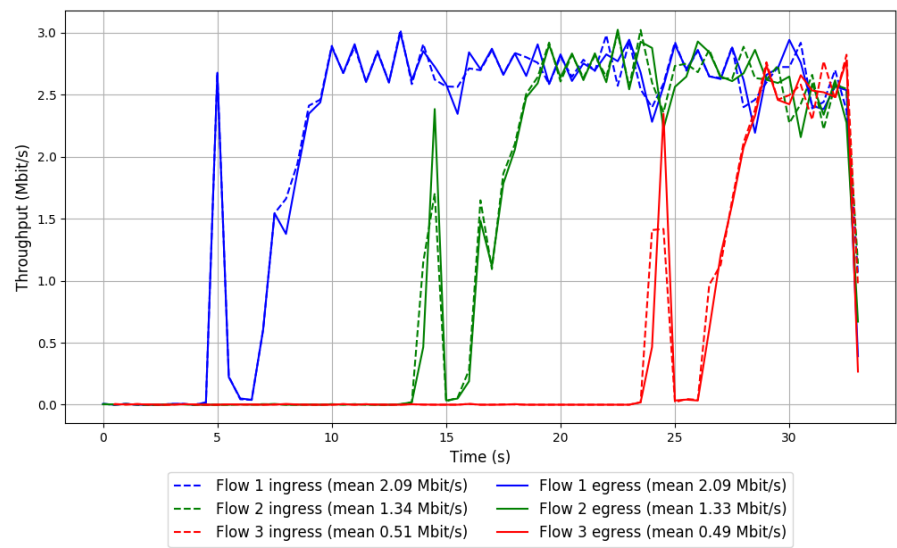
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 86.692 ms

Loss rate: 3.57%

Run 10: Report of WebRTC media — Data Link

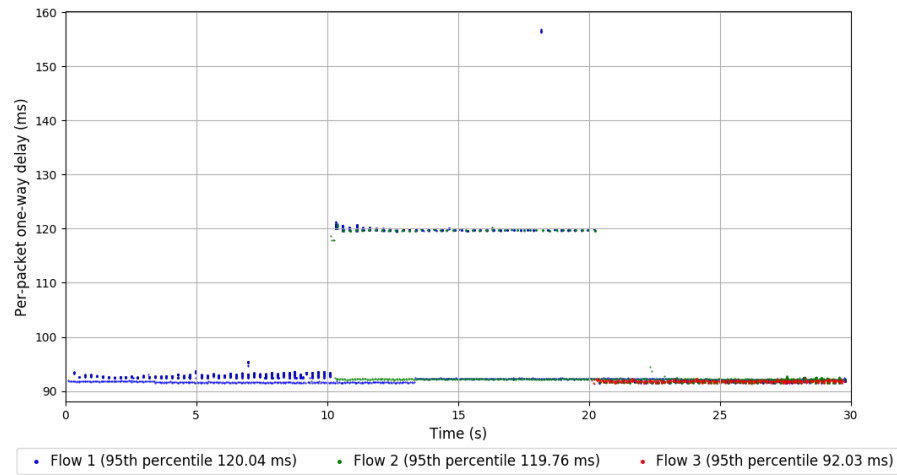
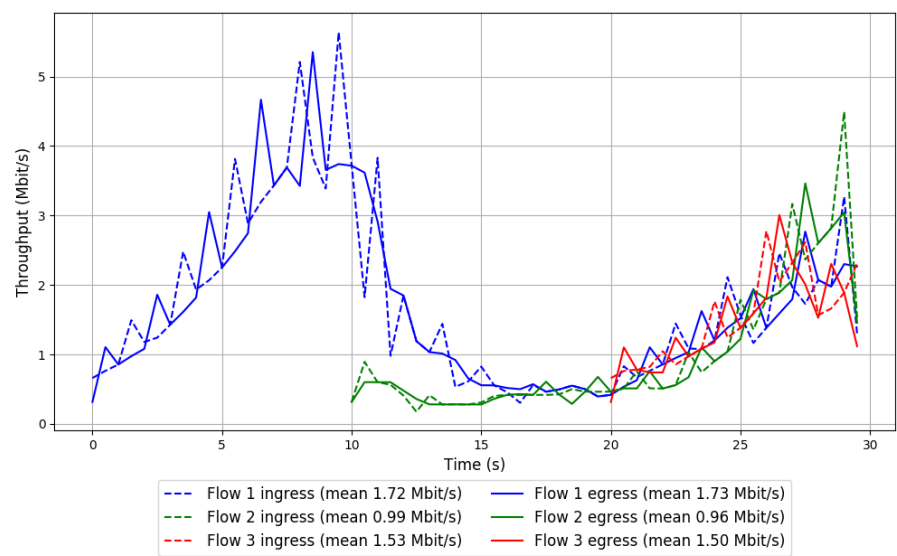


```
Run 1: Statistics of Sprout

Start at: 2018-01-09 12:32:15
End at: 2018-01-09 12:32:45

# Below is generated by plot.py at 2018-01-09 17:57:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: 119.887 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 120.039 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 119.761 ms
Loss rate: 3.88%
-- Flow 3:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 92.029 ms
Loss rate: 3.96%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-09 12:47:27

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

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 119.299 ms

Loss rate: 2.04%

-- Flow 1:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 119.323 ms

Loss rate: 1.57%

-- Flow 2:

Average throughput: 2.77 Mbit/s

95th percentile per-packet one-way delay: 94.744 ms

Loss rate: 1.49%

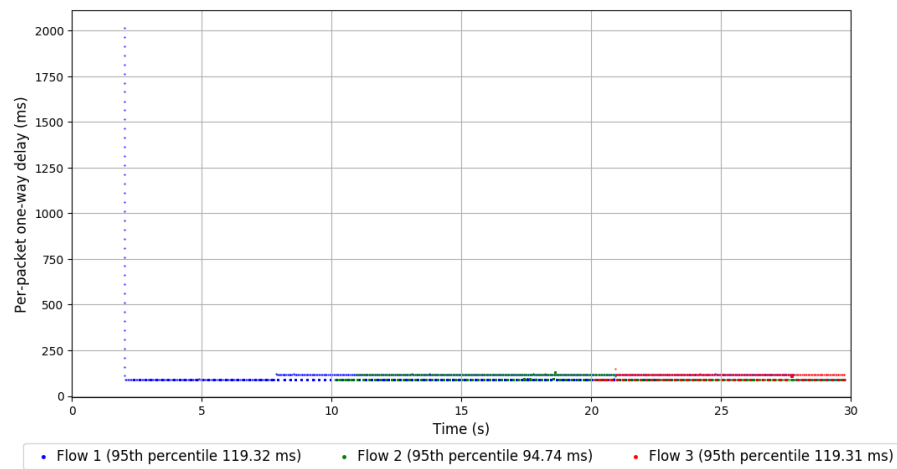
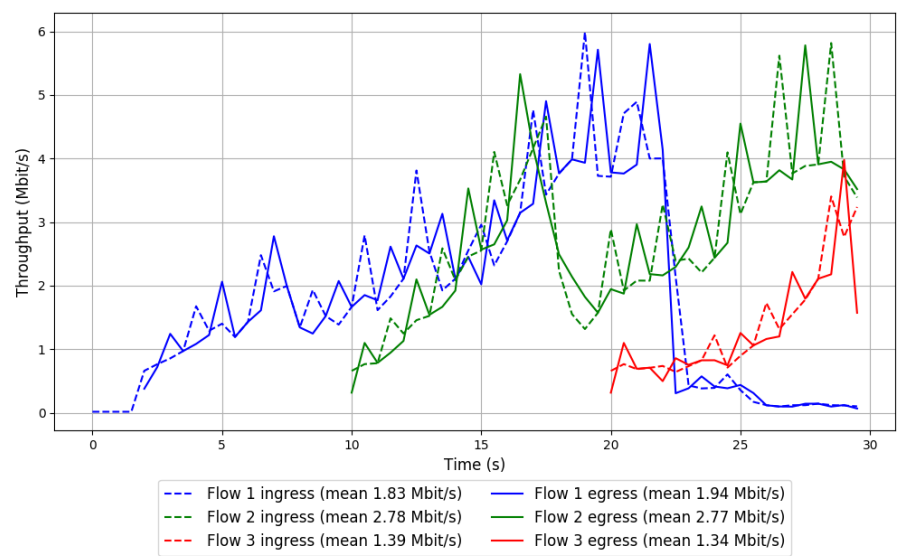
-- Flow 3:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 119.307 ms

Loss rate: 6.12%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-09 13:02:42

End at: 2018-01-09 13:03:12

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 91.201 ms

Loss rate: 3.59%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 91.118 ms

Loss rate: 3.53%

-- Flow 2:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 91.211 ms

Loss rate: 3.13%

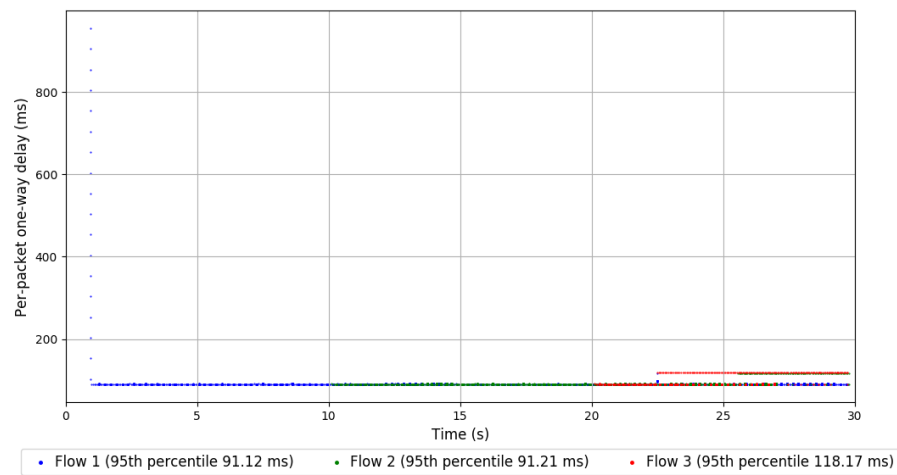
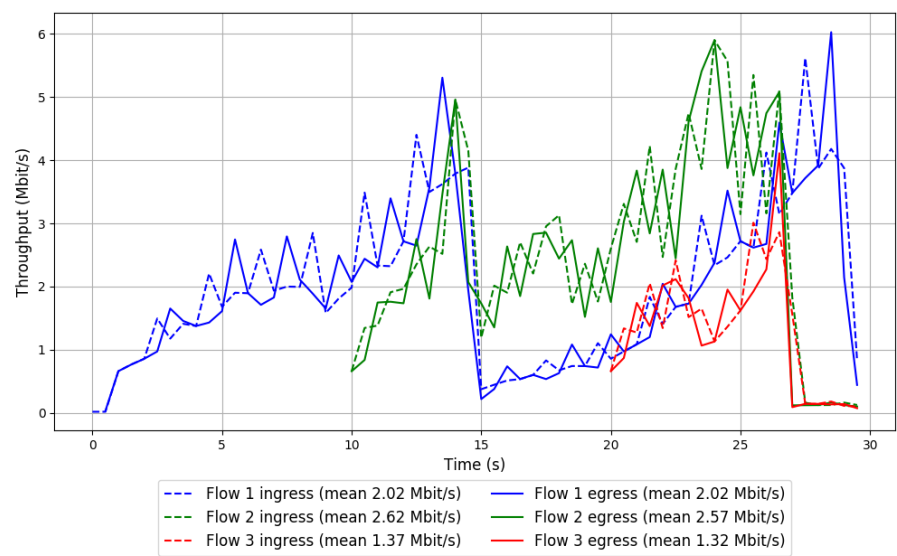
-- Flow 3:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 118.165 ms

Loss rate: 5.65%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-09 13:17:40

End at: 2018-01-09 13:18:10

Below is generated by plot.py at 2018-01-09 17:57:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 117.117 ms

Loss rate: 2.46%

-- Flow 1:

Average throughput: 0.75 Mbit/s

95th percentile per-packet one-way delay: 116.476 ms

Loss rate: 1.27%

-- Flow 2:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 116.531 ms

Loss rate: 2.08%

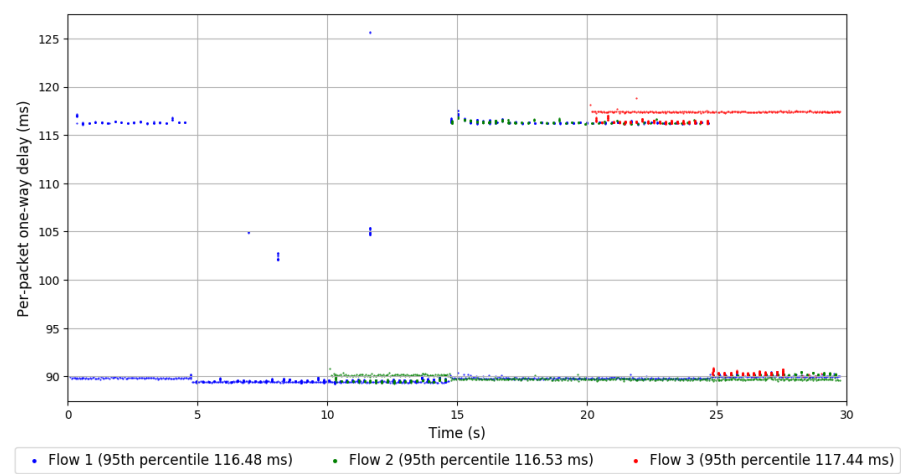
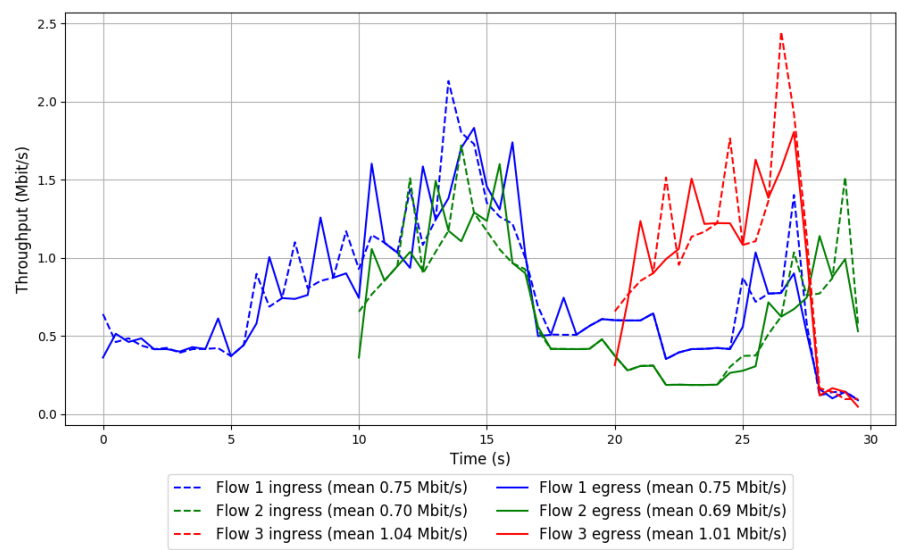
-- Flow 3:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 117.435 ms

Loss rate: 5.55%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-09 13:33:20

End at: 2018-01-09 13:33:50

Below is generated by plot.py at 2018-01-09 17:57:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.49 Mbit/s

95th percentile per-packet one-way delay: 90.083 ms

Loss rate: 2.38%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 114.779 ms

Loss rate: 2.62%

-- Flow 2:

Average throughput: 3.64 Mbit/s

95th percentile per-packet one-way delay: 90.262 ms

Loss rate: 1.42%

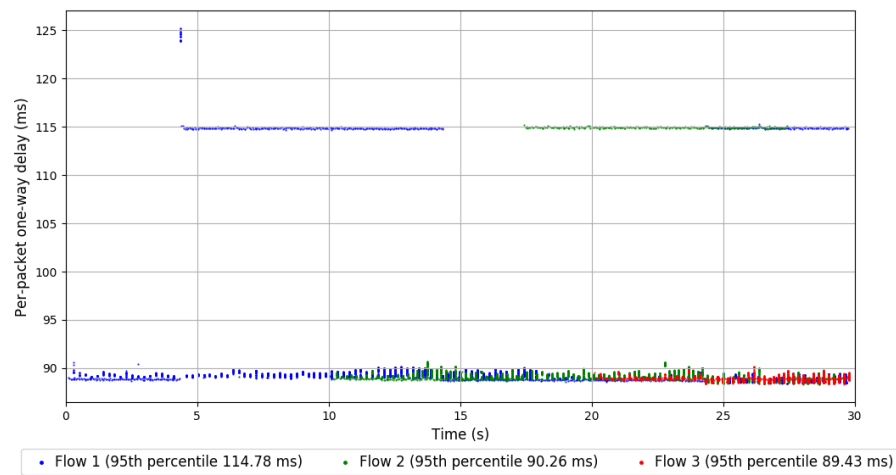
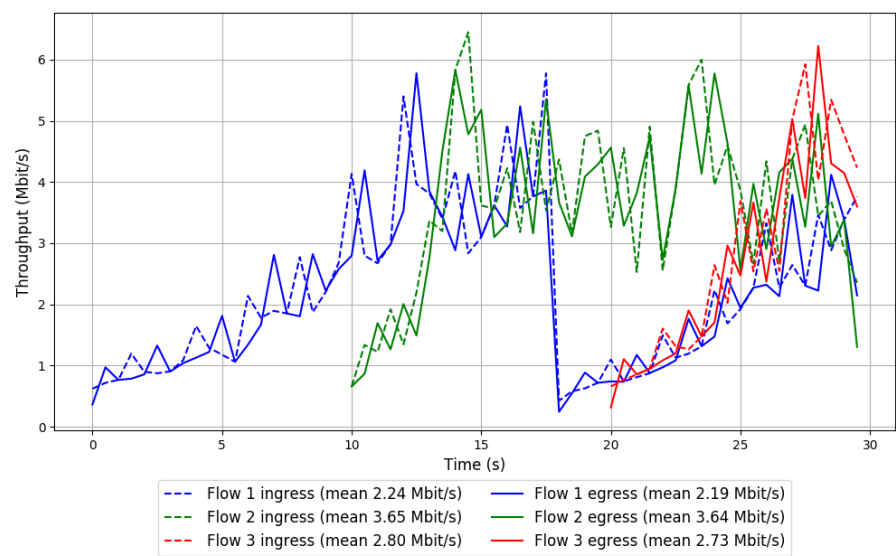
-- Flow 3:

Average throughput: 2.73 Mbit/s

95th percentile per-packet one-way delay: 89.426 ms

Loss rate: 4.35%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-09 13:48:33

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

Below is generated by plot.py at 2018-01-09 17:57:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.07 Mbit/s

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

Loss rate: 0.32%

-- Flow 1:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 114.731 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 114.958 ms

Loss rate: 0.26%

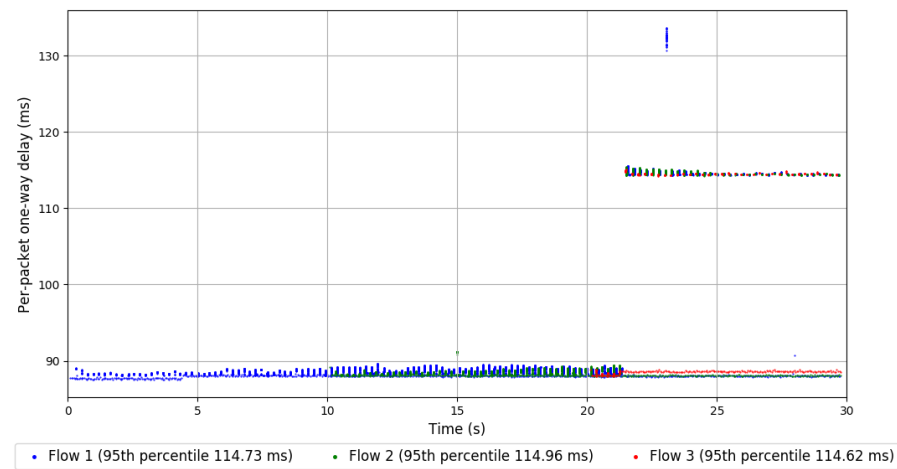
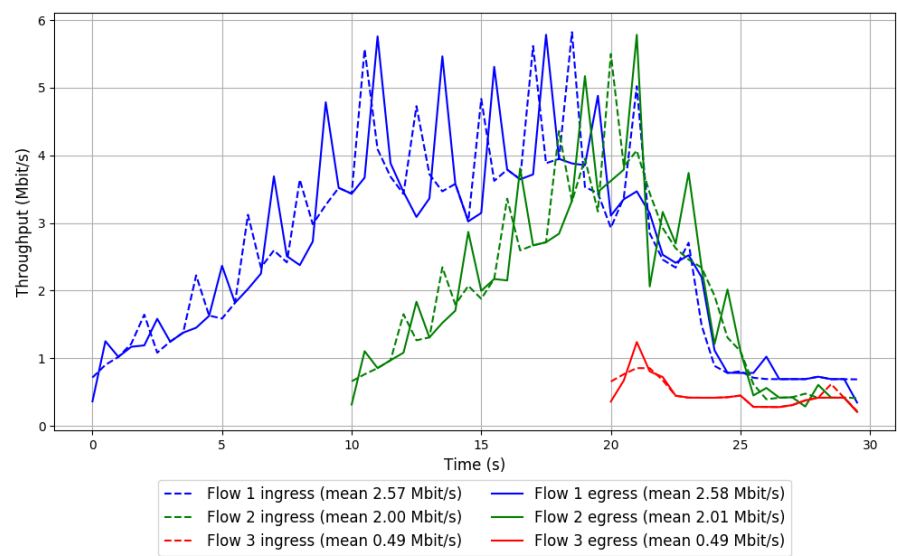
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 114.620 ms

Loss rate: 2.23%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-09 14:03:27

End at: 2018-01-09 14:03:57

Below is generated by plot.py at 2018-01-09 17:57:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 116.451 ms

Loss rate: 1.59%

-- Flow 1:

Average throughput: 1.21 Mbit/s

95th percentile per-packet one-way delay: 116.451 ms

Loss rate: 0.32%

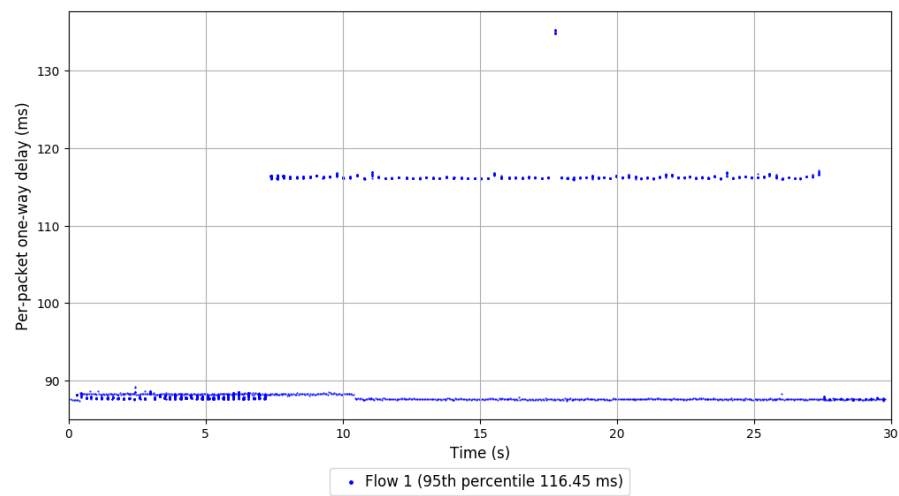
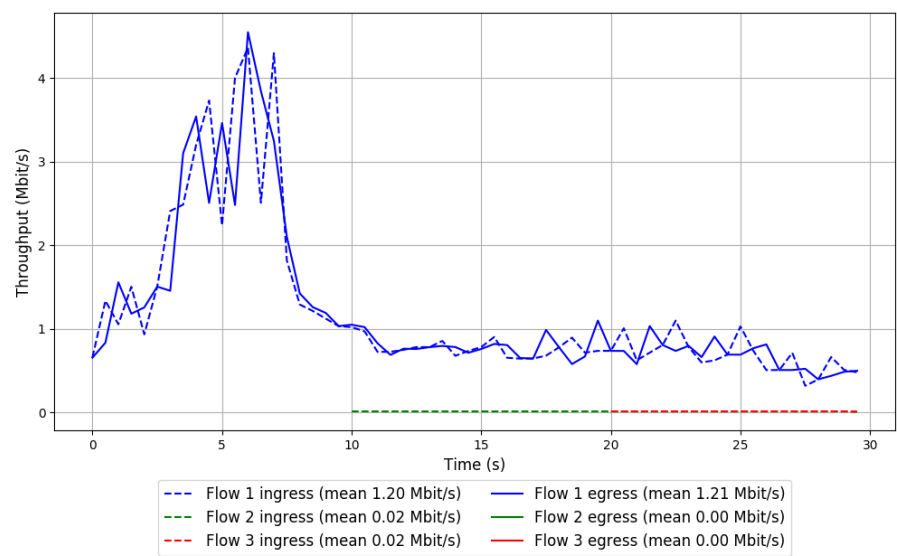
-- Flow 2:

Average throughput: 0.00 Mbit/s

-- Flow 3:

Average throughput: 0.00 Mbit/s

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-09 14:18:59

End at: 2018-01-09 14:19:29

Below is generated by plot.py at 2018-01-09 17:57:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.85 Mbit/s

95th percentile per-packet one-way delay: 88.127 ms

Loss rate: 1.38%

-- Flow 1:

Average throughput: 2.61 Mbit/s

95th percentile per-packet one-way delay: 88.299 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 1.92 Mbit/s

95th percentile per-packet one-way delay: 88.074 ms

Loss rate: 3.18%

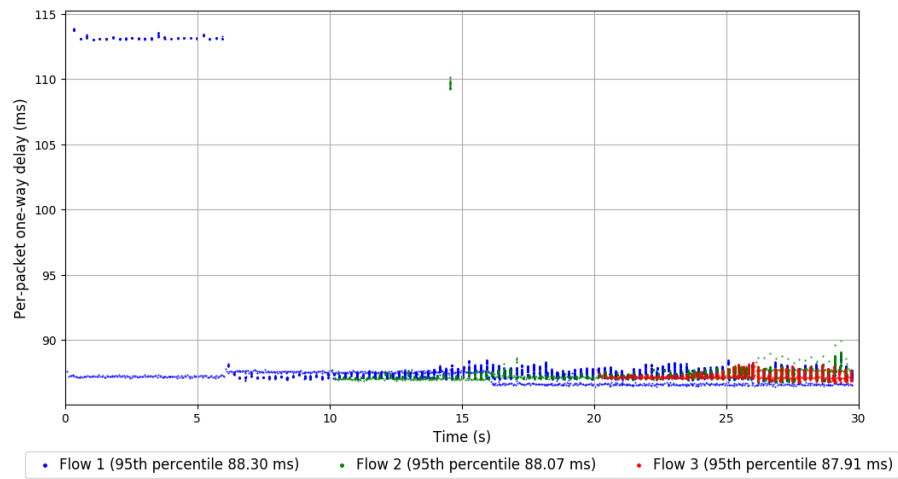
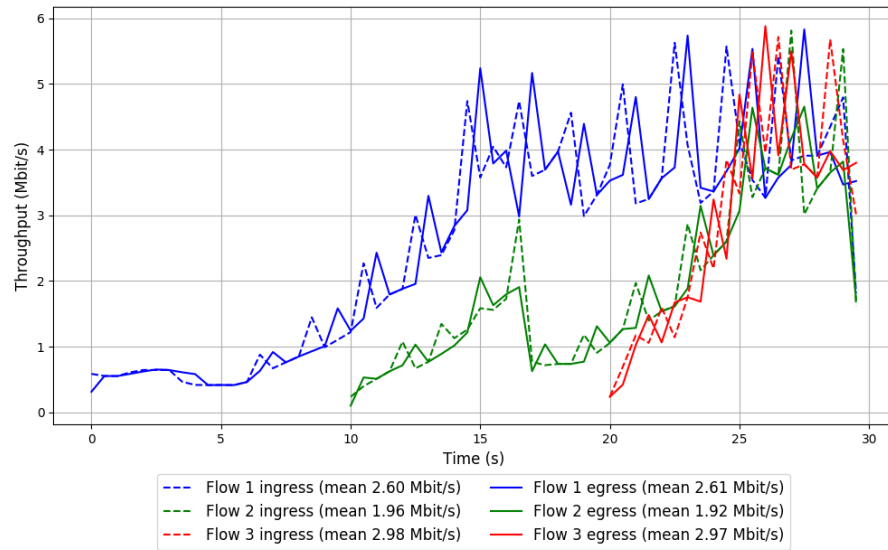
-- Flow 3:

Average throughput: 2.97 Mbit/s

95th percentile per-packet one-way delay: 87.912 ms

Loss rate: 2.33%

Run 8: Report of Sprout — Data Link

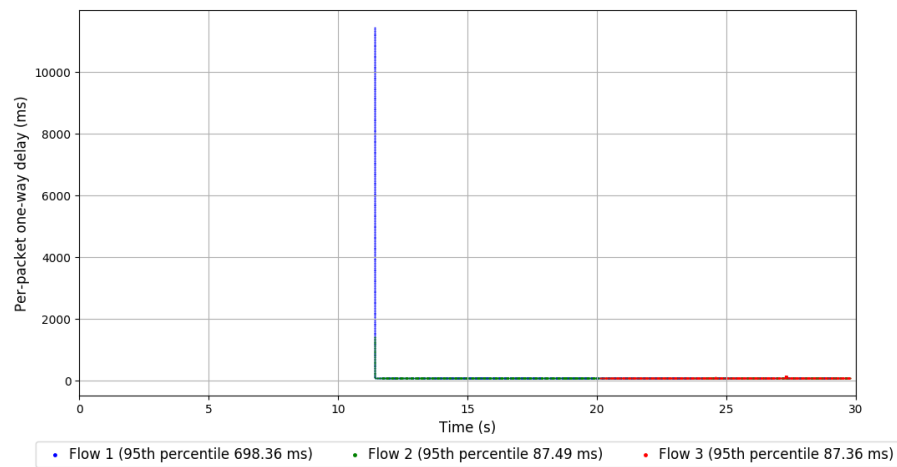
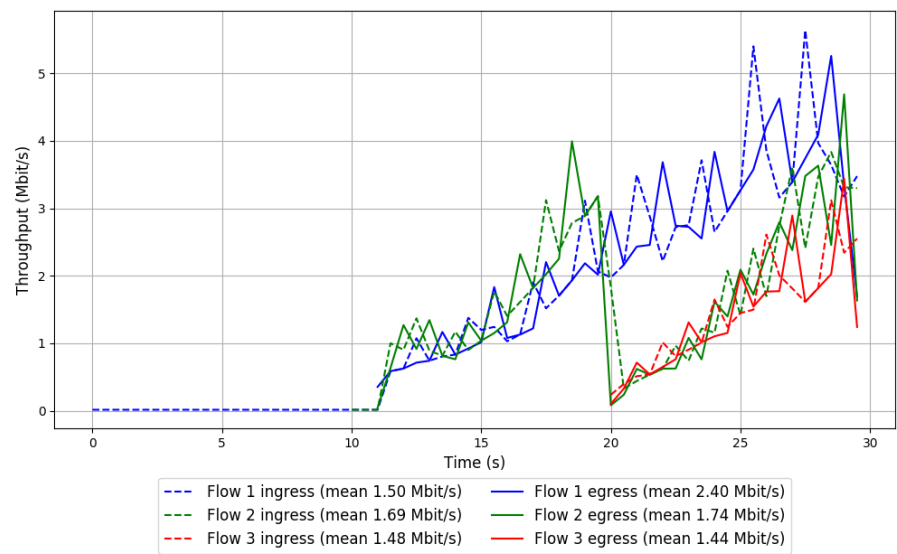


Run 9: Statistics of Sprout

Start at: 2018-01-09 14:34:40

End at: 2018-01-09 14:35:10

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-09 14:49:45

End at: 2018-01-09 14:50:15

Below is generated by plot.py at 2018-01-09 17:57:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.75 Mbit/s

95th percentile per-packet one-way delay: 87.452 ms

Loss rate: 3.54%

-- Flow 1:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 87.451 ms

Loss rate: 2.75%

-- Flow 2:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 87.301 ms

Loss rate: 5.07%

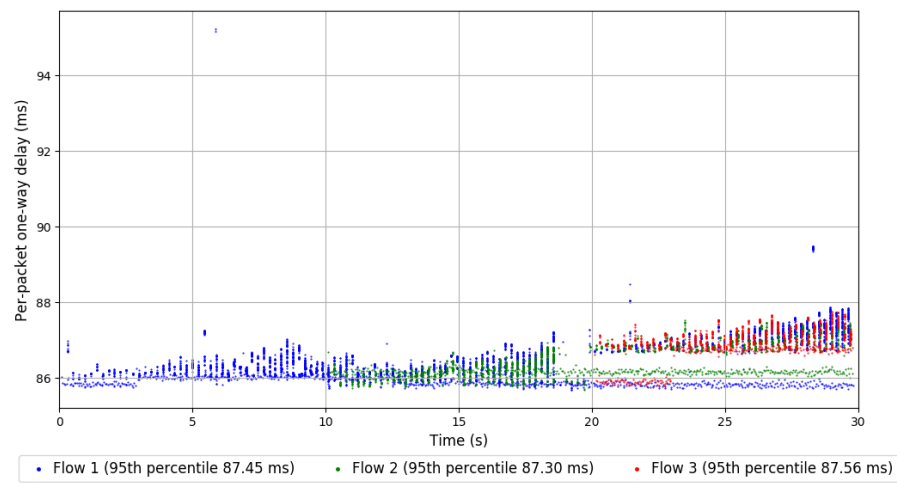
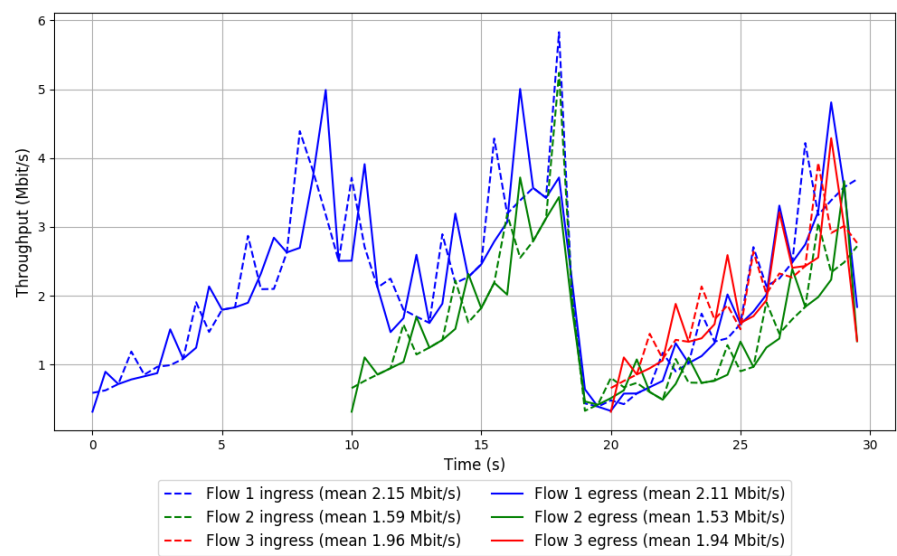
-- Flow 3:

Average throughput: 1.94 Mbit/s

95th percentile per-packet one-way delay: 87.557 ms

Loss rate: 3.66%

Run 10: Report of Sprout — Data Link

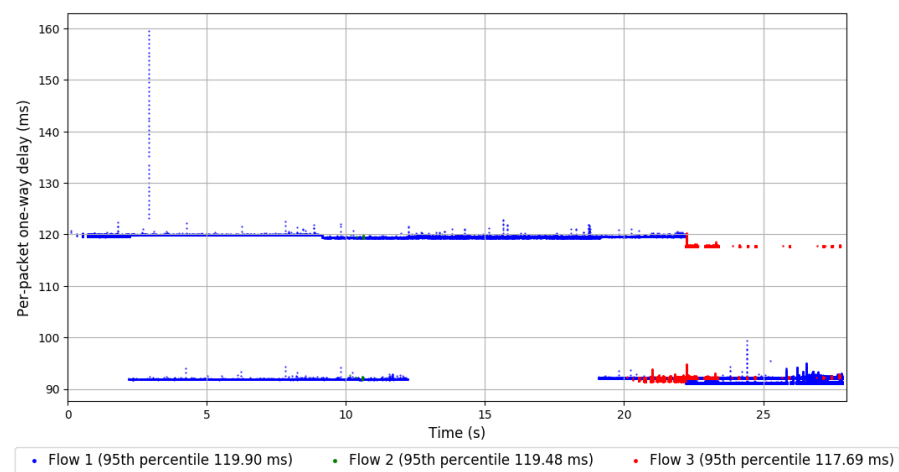
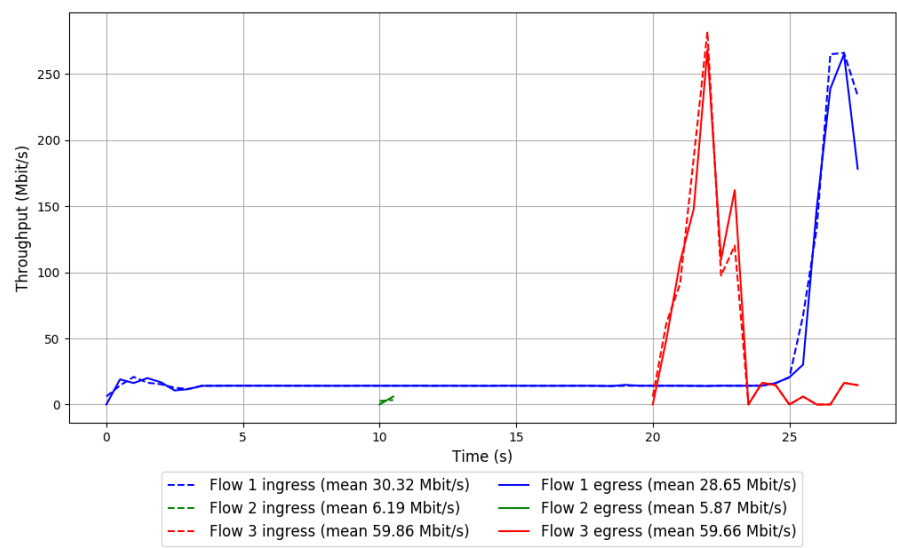


```
Run 1: Statistics of TaoVA-100x

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

# Below is generated by plot.py at 2018-01-09 17:57:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.25 Mbit/s
95th percentile per-packet one-way delay: 119.871 ms
Loss rate: 4.07%
-- Flow 1:
Average throughput: 28.65 Mbit/s
95th percentile per-packet one-way delay: 119.903 ms
Loss rate: 6.29%
-- Flow 2:
Average throughput: 5.87 Mbit/s
95th percentile per-packet one-way delay: 119.479 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.66 Mbit/s
95th percentile per-packet one-way delay: 117.691 ms
Loss rate: 0.00%
```


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

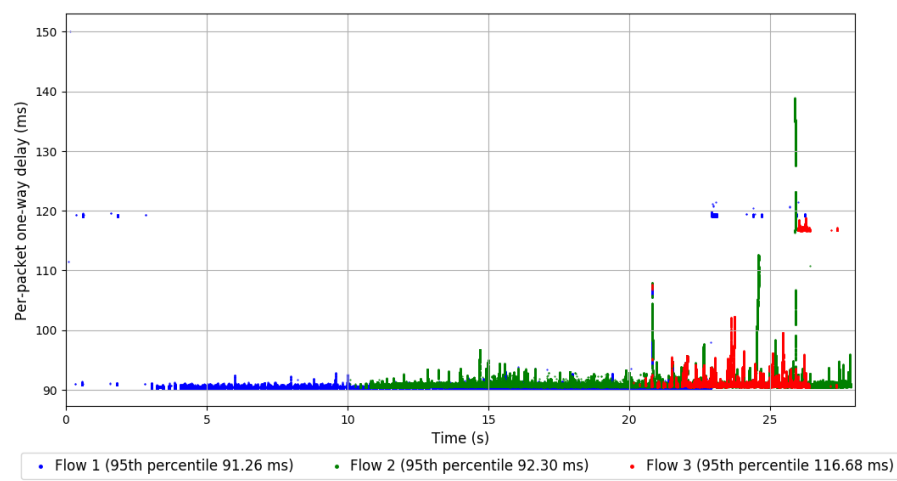
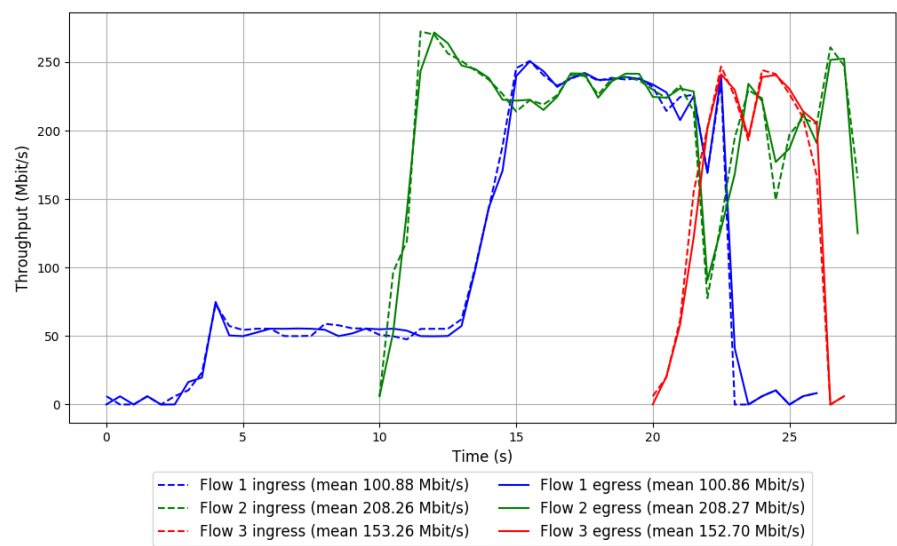


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-09 12:49:10
End at: 2018-01-09 12:49:40

# Below is generated by plot.py at 2018-01-09 17:58:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 267.95 Mbit/s
95th percentile per-packet one-way delay: 92.592 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 100.86 Mbit/s
95th percentile per-packet one-way delay: 91.258 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 208.27 Mbit/s
95th percentile per-packet one-way delay: 92.300 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 152.70 Mbit/s
95th percentile per-packet one-way delay: 116.684 ms
Loss rate: 0.00%
```

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

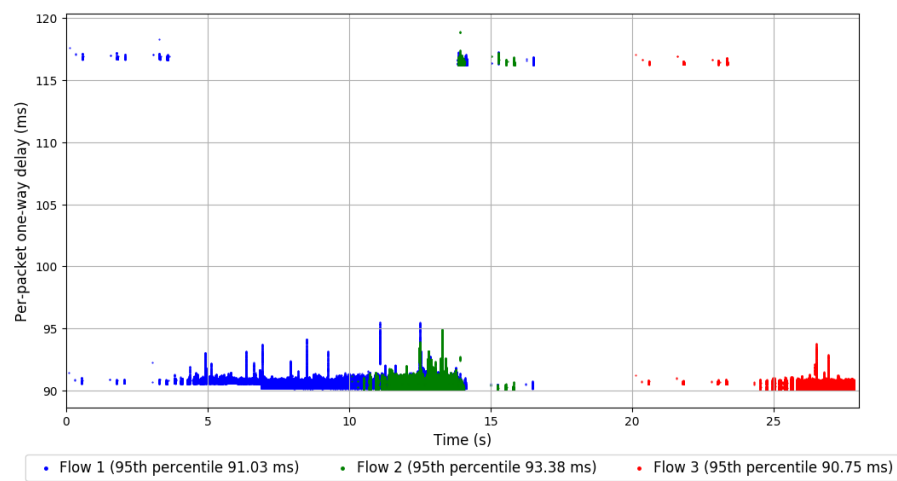
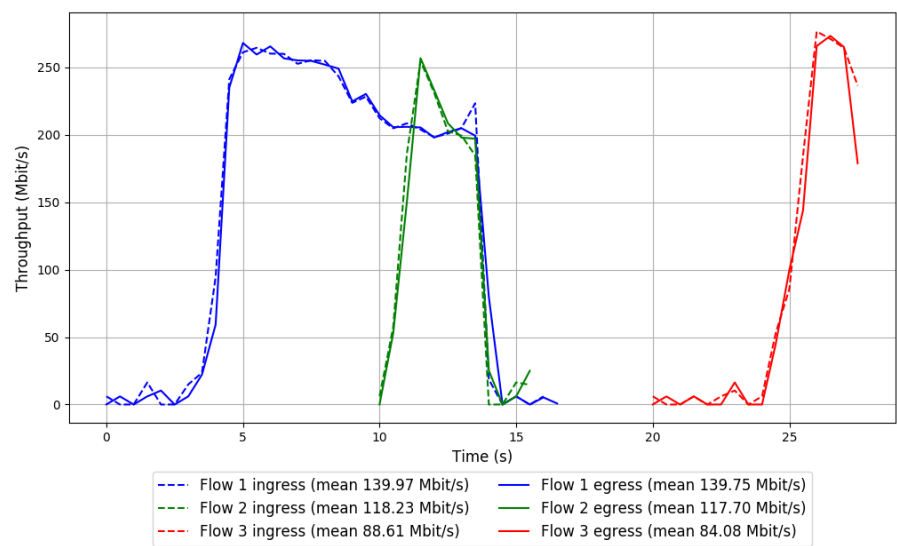


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-09 13:04:19
End at: 2018-01-09 13:04:49

# Below is generated by plot.py at 2018-01-09 17:58:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.48 Mbit/s
95th percentile per-packet one-way delay: 91.105 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 139.75 Mbit/s
95th percentile per-packet one-way delay: 91.028 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 117.70 Mbit/s
95th percentile per-packet one-way delay: 93.384 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 84.08 Mbit/s
95th percentile per-packet one-way delay: 90.749 ms
Loss rate: 7.53%
```

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

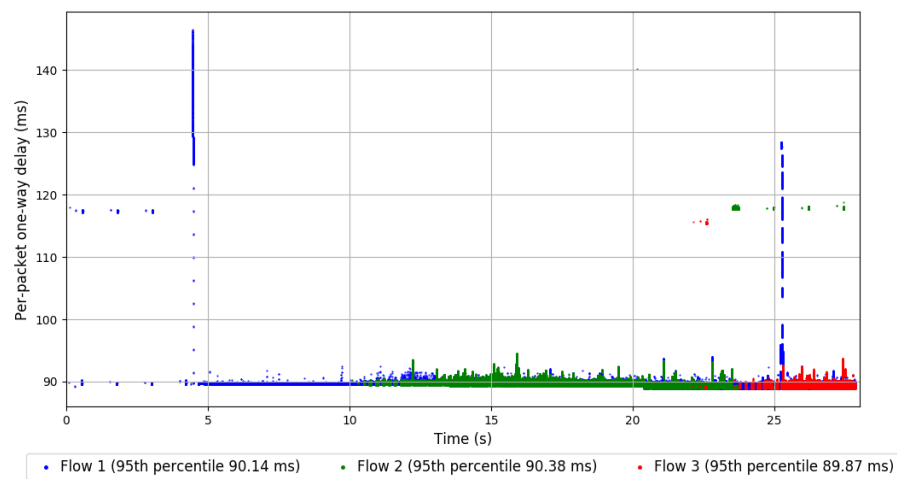
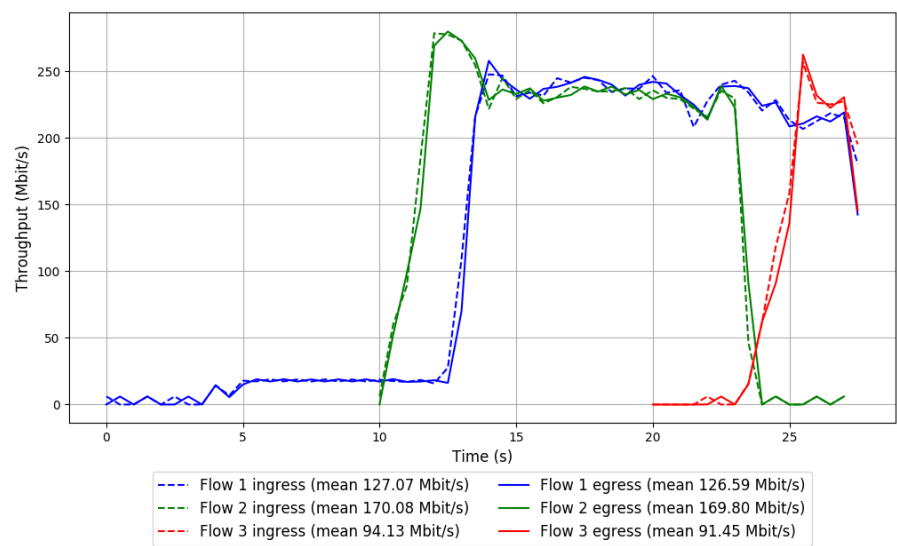


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-09 13:19:22
End at: 2018-01-09 13:19:52

# Below is generated by plot.py at 2018-01-09 17:58:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 258.01 Mbit/s
95th percentile per-packet one-way delay: 90.220 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 126.59 Mbit/s
95th percentile per-packet one-way delay: 90.142 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 169.80 Mbit/s
95th percentile per-packet one-way delay: 90.381 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 91.45 Mbit/s
95th percentile per-packet one-way delay: 89.874 ms
Loss rate: 5.87%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-09 13:35:07

End at: 2018-01-09 13:35:37

Below is generated by plot.py at 2018-01-09 17:58:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.42 Mbit/s

95th percentile per-packet one-way delay: 114.812 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 7.81 Mbit/s

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

Loss rate: 15.51%

-- Flow 2:

Average throughput: 112.87 Mbit/s

95th percentile per-packet one-way delay: 89.583 ms

Loss rate: 0.35%

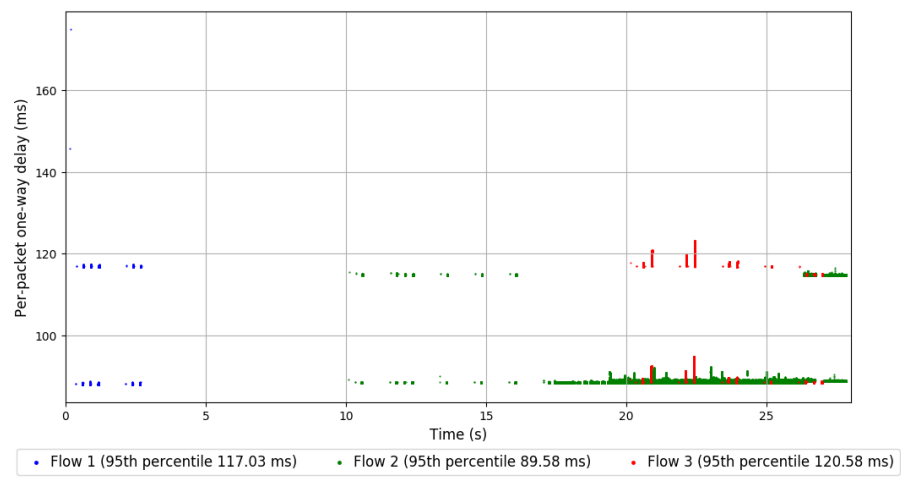
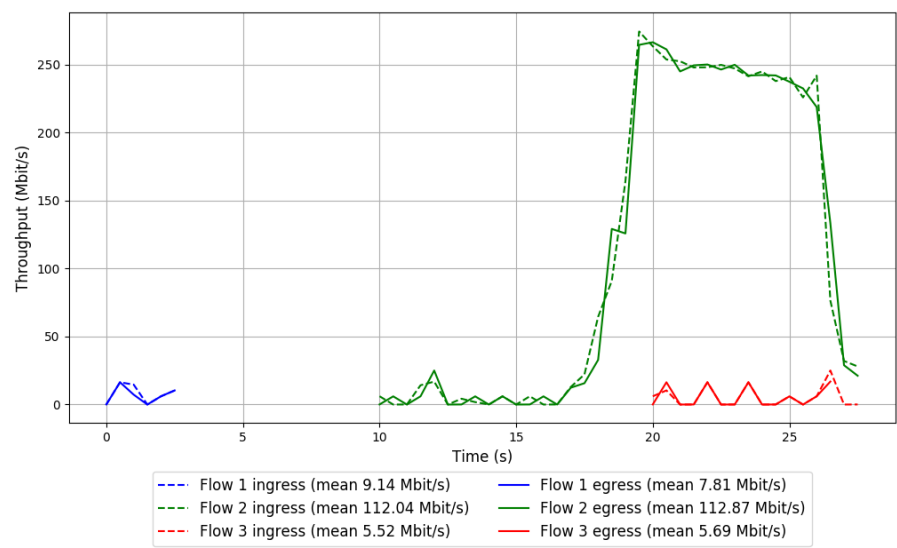
-- Flow 3:

Average throughput: 5.69 Mbit/s

95th percentile per-packet one-way delay: 120.582 ms

Loss rate: 9.44%

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



Run 6: Statistics of TaoVA-100x

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

End at: 2018-01-09 13:50:43

Below is generated by plot.py at 2018-01-09 17:58:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 196.00 Mbit/s

95th percentile per-packet one-way delay: 89.112 ms

Loss rate: 1.75%

-- Flow 1:

Average throughput: 129.51 Mbit/s

95th percentile per-packet one-way delay: 88.903 ms

Loss rate: 1.36%

-- Flow 2:

Average throughput: 62.56 Mbit/s

95th percentile per-packet one-way delay: 114.435 ms

Loss rate: 0.03%

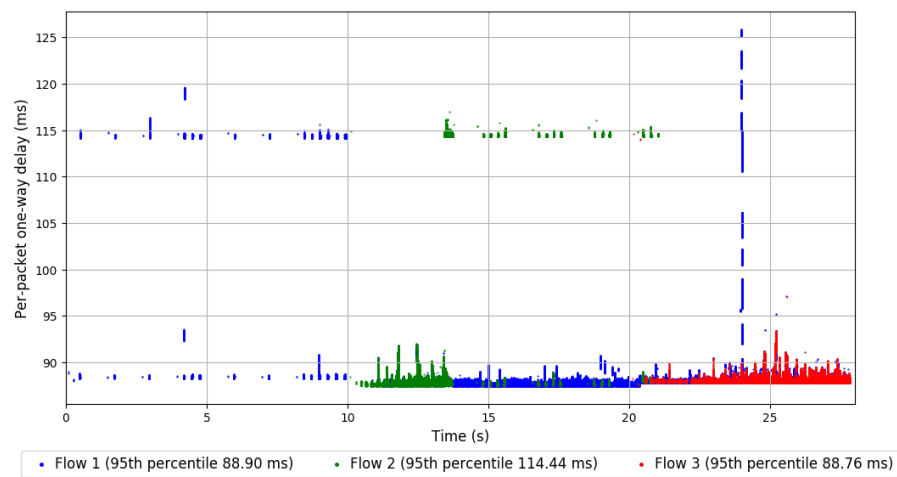
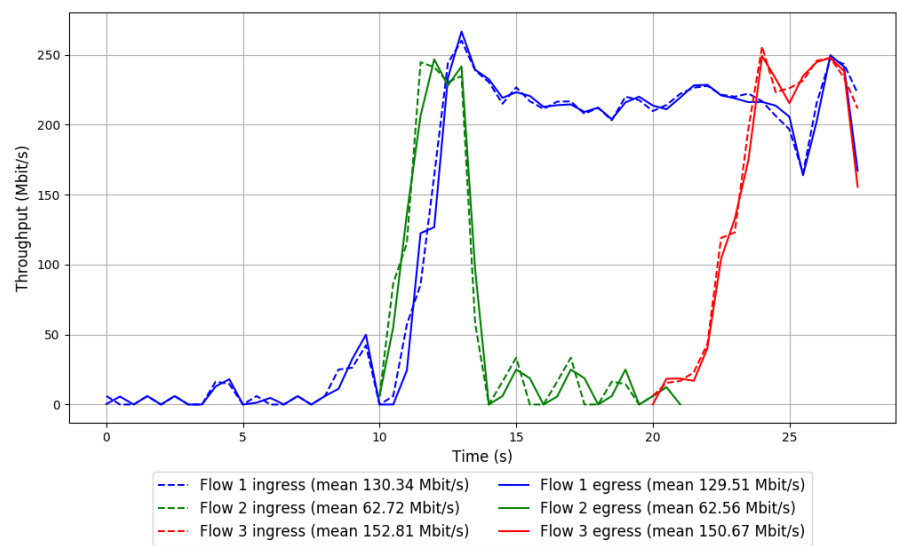
-- Flow 3:

Average throughput: 150.67 Mbit/s

95th percentile per-packet one-way delay: 88.762 ms

Loss rate: 3.92%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-09 14:05:06

End at: 2018-01-09 14:05:36

Below is generated by plot.py at 2018-01-09 17:58:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.85 Mbit/s

95th percentile per-packet one-way delay: 88.357 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 129.91 Mbit/s

95th percentile per-packet one-way delay: 87.939 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 128.33 Mbit/s

95th percentile per-packet one-way delay: 113.302 ms

Loss rate: 0.00%

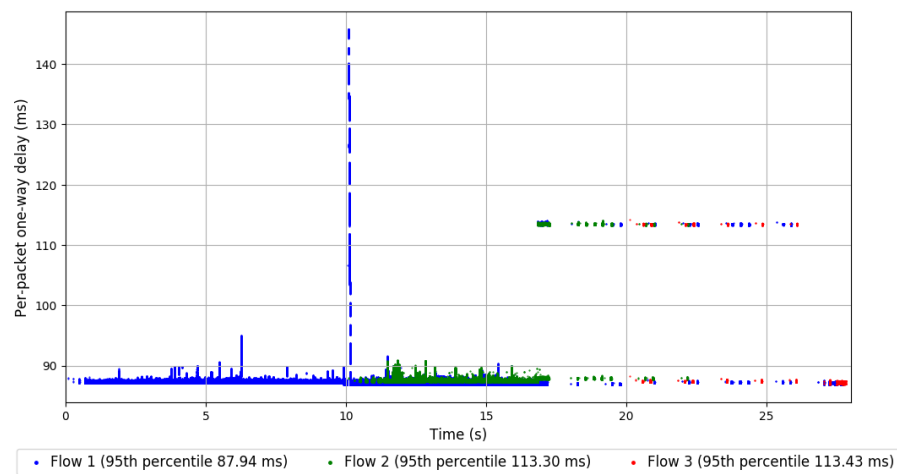
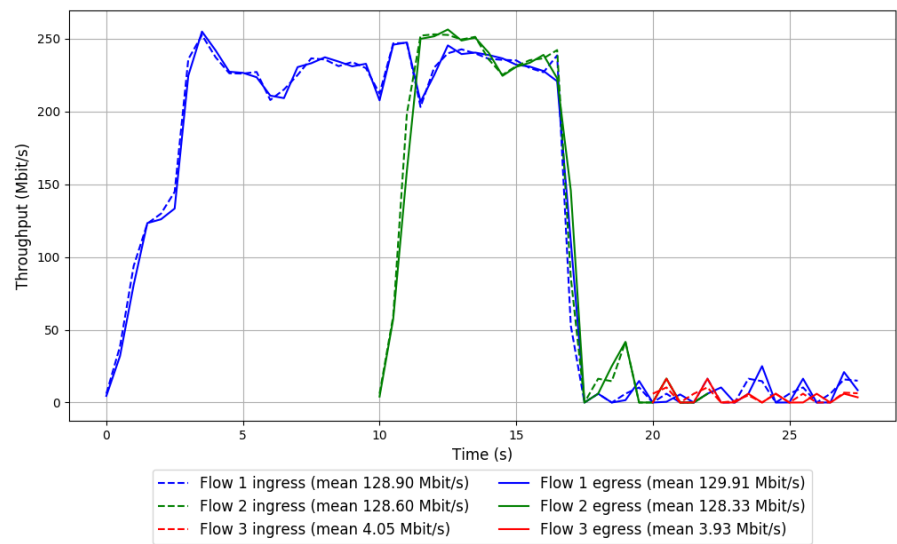
-- Flow 3:

Average throughput: 3.93 Mbit/s

95th percentile per-packet one-way delay: 113.428 ms

Loss rate: 5.52%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-09 14:20:44

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

Below is generated by plot.py at 2018-01-09 17:58:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 220.25 Mbit/s

95th percentile per-packet one-way delay: 87.311 ms

Loss rate: 1.54%

-- Flow 1:

Average throughput: 182.63 Mbit/s

95th percentile per-packet one-way delay: 87.187 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 12.75 Mbit/s

95th percentile per-packet one-way delay: 112.908 ms

Loss rate: 0.00%

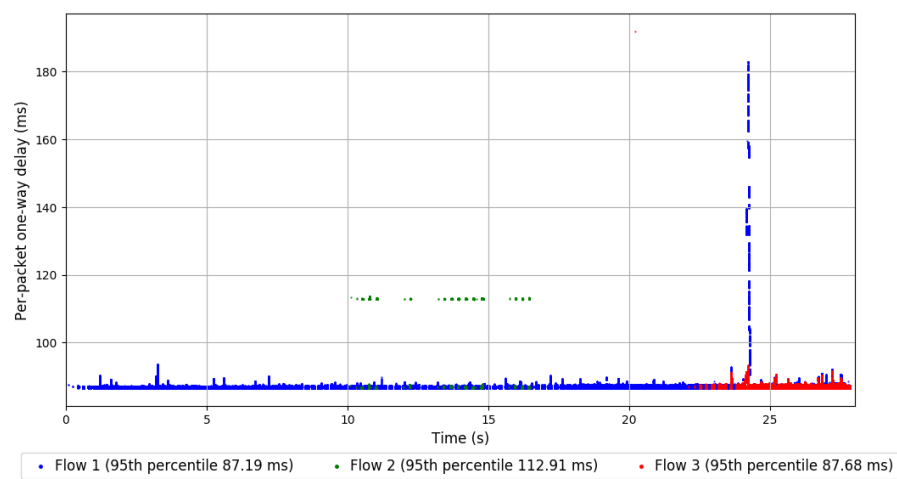
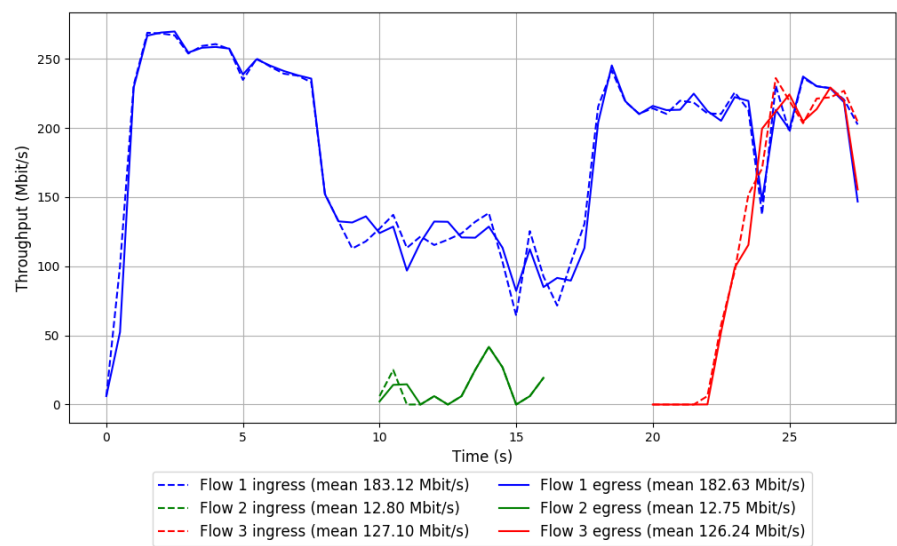
-- Flow 3:

Average throughput: 126.24 Mbit/s

95th percentile per-packet one-way delay: 87.682 ms

Loss rate: 4.50%

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

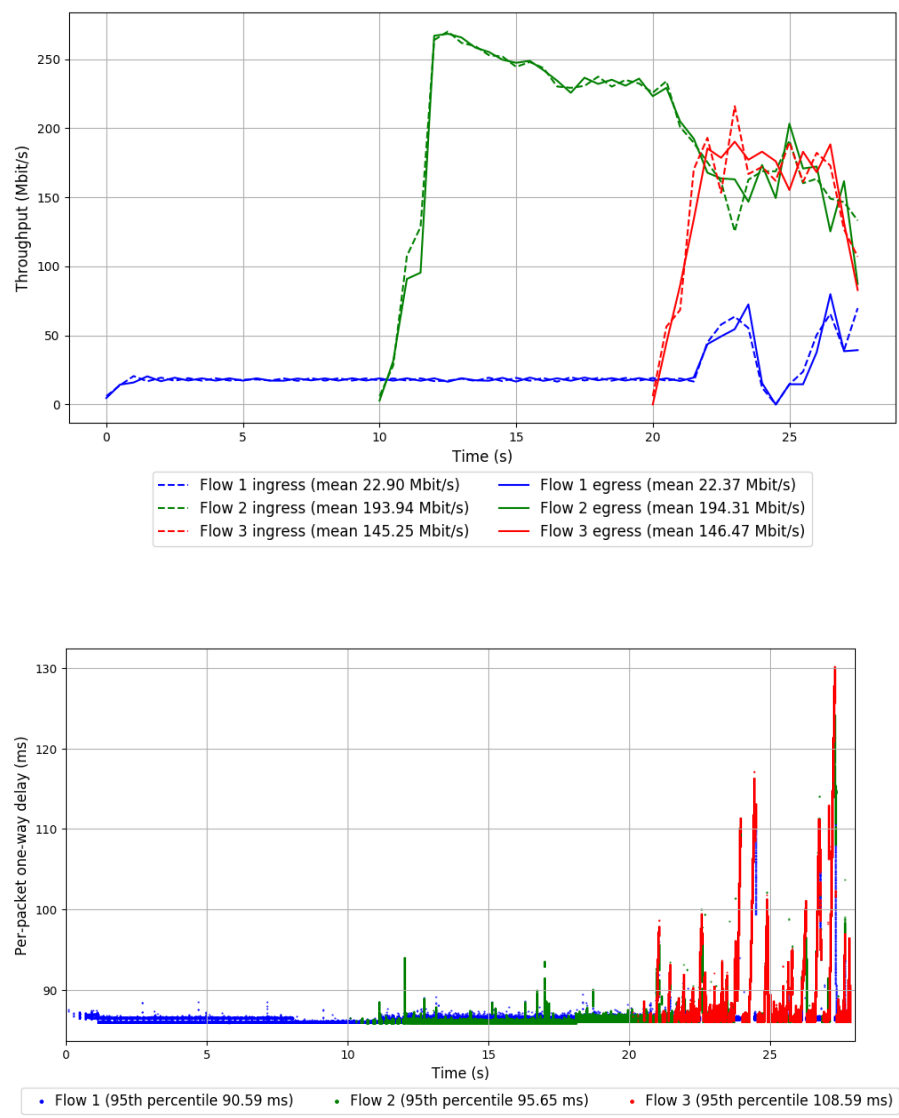


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-09 14:36:25
End at: 2018-01-09 14:36:55

# Below is generated by plot.py at 2018-01-09 17:59:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 187.27 Mbit/s
95th percentile per-packet one-way delay: 98.543 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 22.37 Mbit/s
95th percentile per-packet one-way delay: 90.587 ms
Loss rate: 3.00%
-- Flow 2:
Average throughput: 194.31 Mbit/s
95th percentile per-packet one-way delay: 95.651 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 146.47 Mbit/s
95th percentile per-packet one-way delay: 108.592 ms
Loss rate: 1.70%
```


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

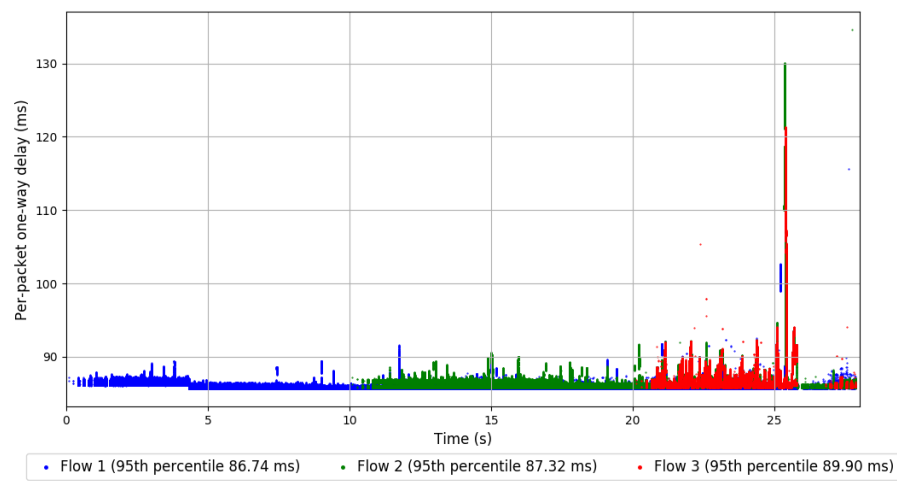
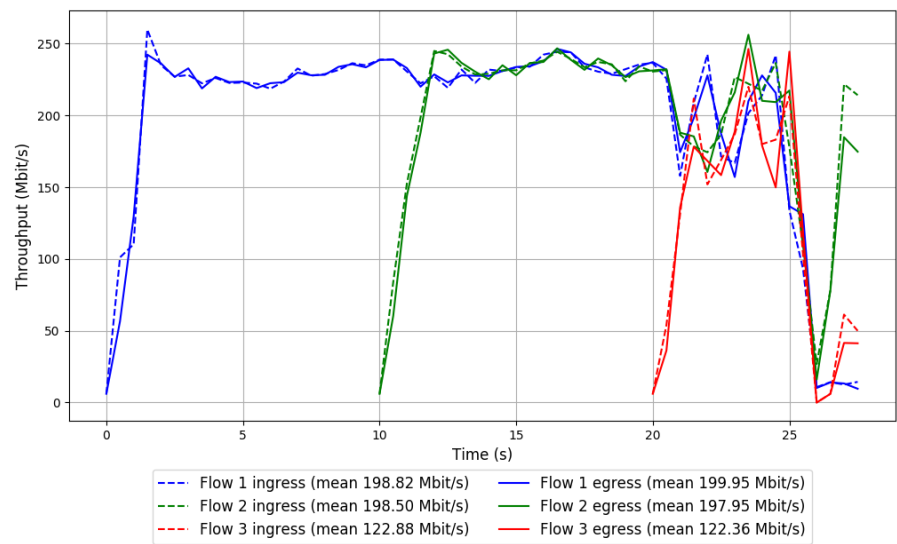


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-09 14:51:29
End at: 2018-01-09 14:51:59

# Below is generated by plot.py at 2018-01-09 18:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.73 Mbit/s
95th percentile per-packet one-way delay: 87.186 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 199.95 Mbit/s
95th percentile per-packet one-way delay: 86.741 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 197.95 Mbit/s
95th percentile per-packet one-way delay: 87.320 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 122.36 Mbit/s
95th percentile per-packet one-way delay: 89.901 ms
Loss rate: 1.49%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-09 12:29:14

End at: 2018-01-09 12:29:44

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.00 Mbit/s

95th percentile per-packet one-way delay: 101.477 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 39.97 Mbit/s

95th percentile per-packet one-way delay: 101.410 ms

Loss rate: 1.38%

-- Flow 2:

Average throughput: 56.68 Mbit/s

95th percentile per-packet one-way delay: 101.680 ms

Loss rate: 0.28%

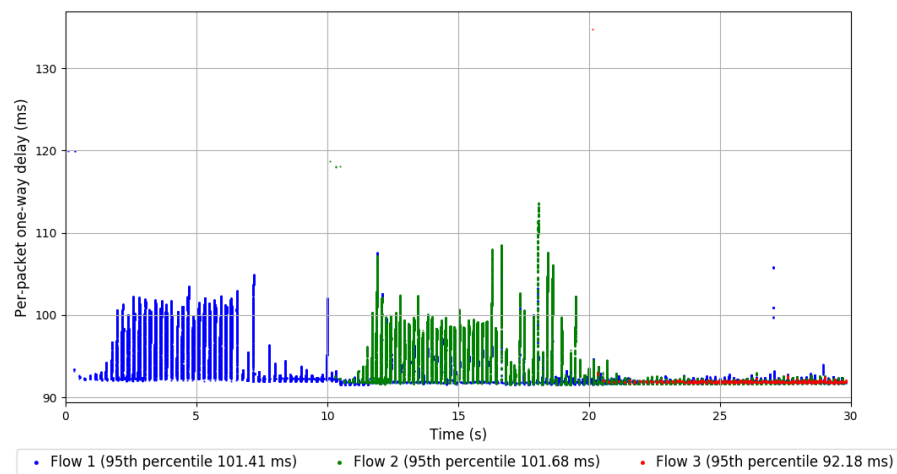
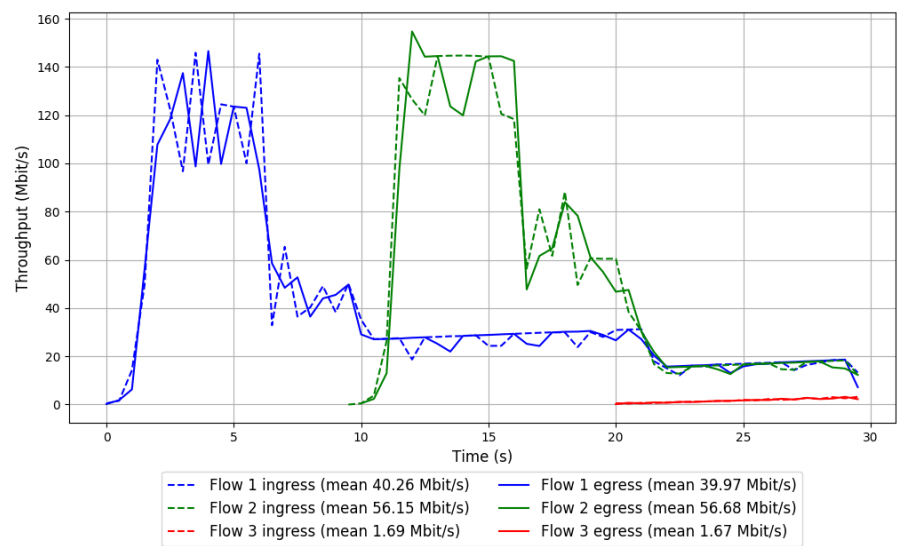
-- Flow 3:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 92.179 ms

Loss rate: 3.86%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

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 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.99 Mbit/s

95th percentile per-packet one-way delay: 98.661 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 89.89 Mbit/s

95th percentile per-packet one-way delay: 98.854 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 36.12 Mbit/s

95th percentile per-packet one-way delay: 94.174 ms

Loss rate: 3.22%

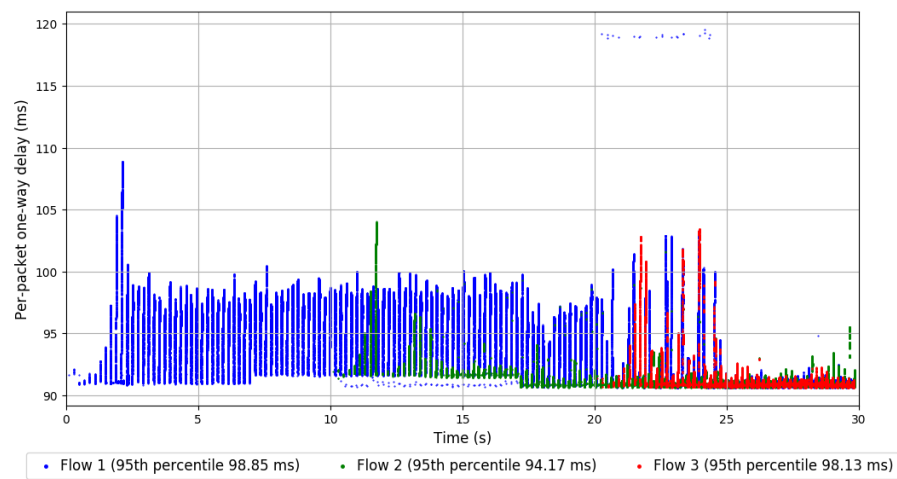
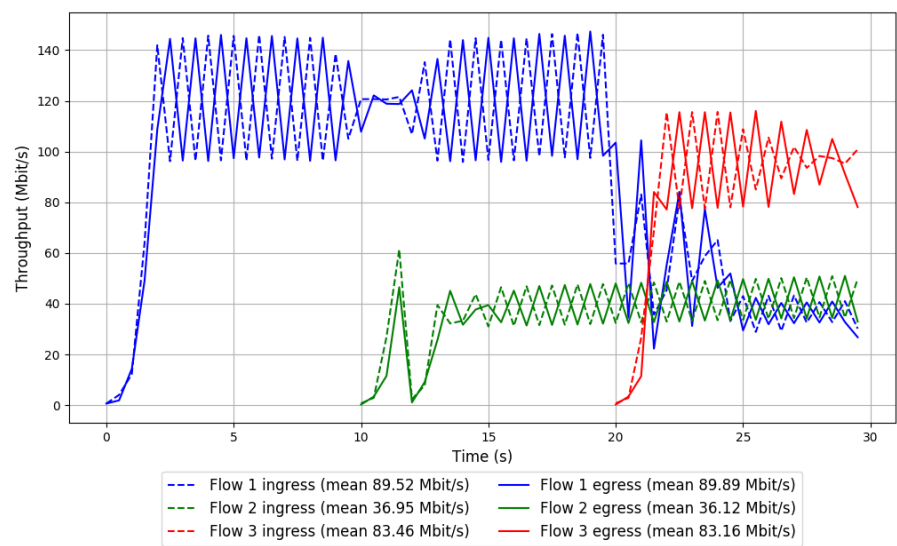
-- Flow 3:

Average throughput: 83.16 Mbit/s

95th percentile per-packet one-way delay: 98.134 ms

Loss rate: 2.38%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-09 12:59:46

End at: 2018-01-09 13:00:16

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 33.72 Mbit/s

95th percentile per-packet one-way delay: 119.529 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 29.51 Mbit/s

95th percentile per-packet one-way delay: 119.573 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 119.086 ms

Loss rate: 2.33%

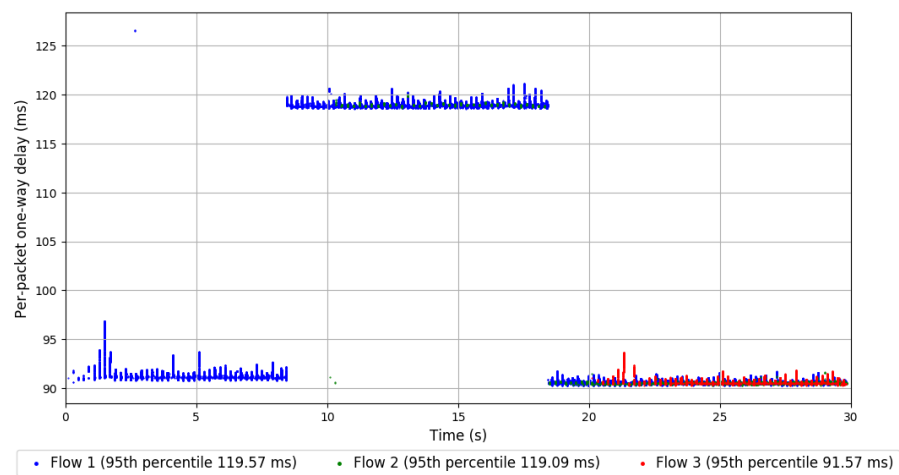
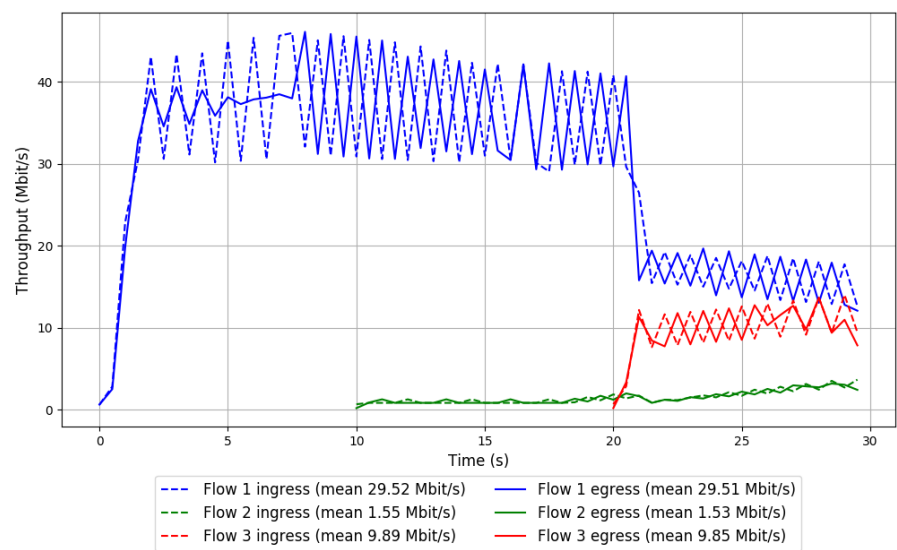
-- Flow 3:

Average throughput: 9.85 Mbit/s

95th percentile per-packet one-way delay: 91.572 ms

Loss rate: 2.42%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-09 13:14:34

End at: 2018-01-09 13:15:04

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.72 Mbit/s

95th percentile per-packet one-way delay: 93.276 ms

Loss rate: 1.45%

-- Flow 1:

Average throughput: 6.80 Mbit/s

95th percentile per-packet one-way delay: 91.646 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 37.48 Mbit/s

95th percentile per-packet one-way delay: 96.006 ms

Loss rate: 0.90%

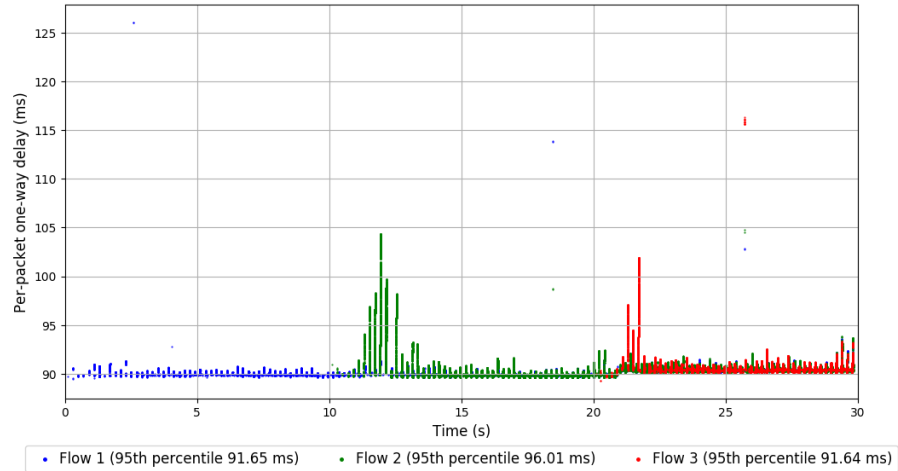
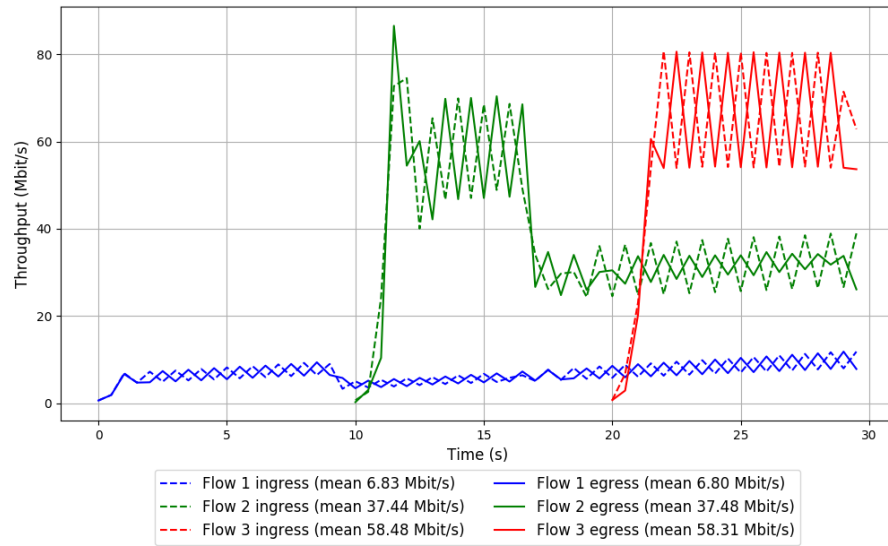
-- Flow 3:

Average throughput: 58.31 Mbit/s

95th percentile per-packet one-way delay: 91.638 ms

Loss rate: 2.31%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

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

End at: 2018-01-09 13:30:43

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.67 Mbit/s

95th percentile per-packet one-way delay: 93.978 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 27.52 Mbit/s

95th percentile per-packet one-way delay: 96.085 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 91.73 Mbit/s

95th percentile per-packet one-way delay: 90.862 ms

Loss rate: 1.11%

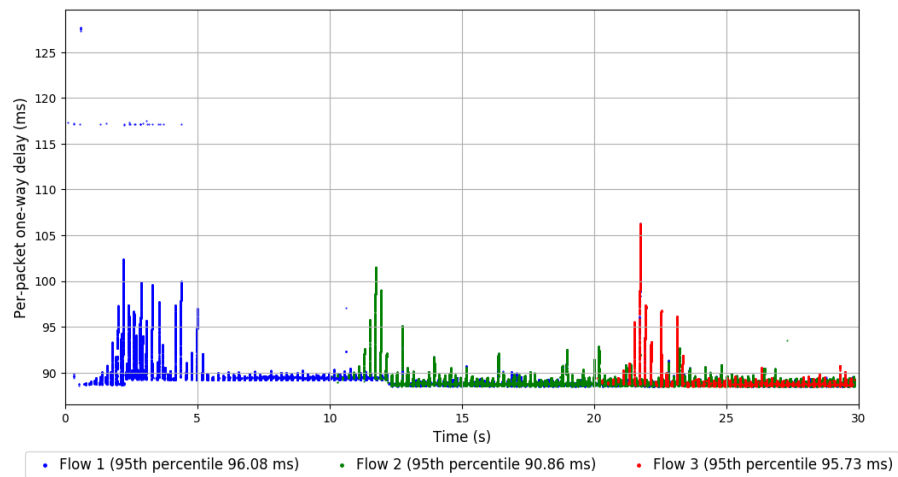
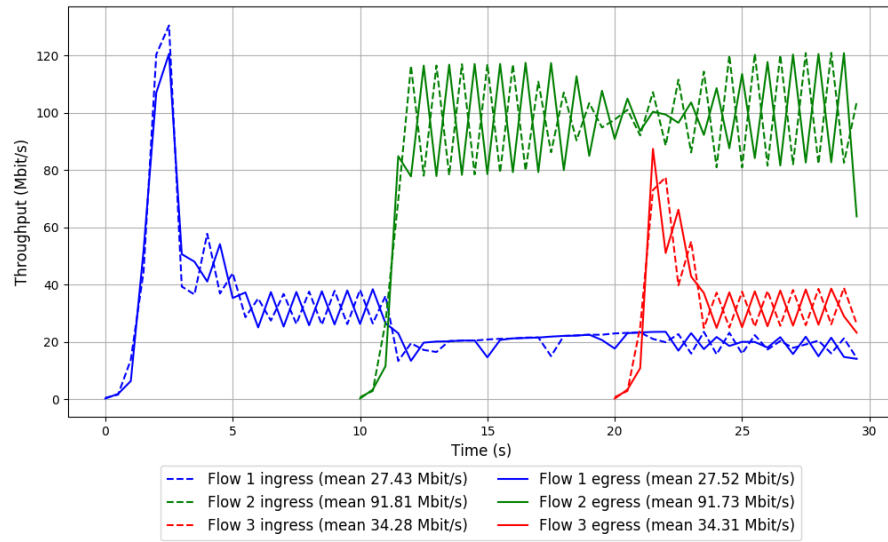
-- Flow 3:

Average throughput: 34.31 Mbit/s

95th percentile per-packet one-way delay: 95.730 ms

Loss rate: 1.92%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-09 13:45:28

End at: 2018-01-09 13:45:58

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.61 Mbit/s

95th percentile per-packet one-way delay: 116.604 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 70.42 Mbit/s

95th percentile per-packet one-way delay: 100.929 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 61.51 Mbit/s

95th percentile per-packet one-way delay: 116.569 ms

Loss rate: 0.42%

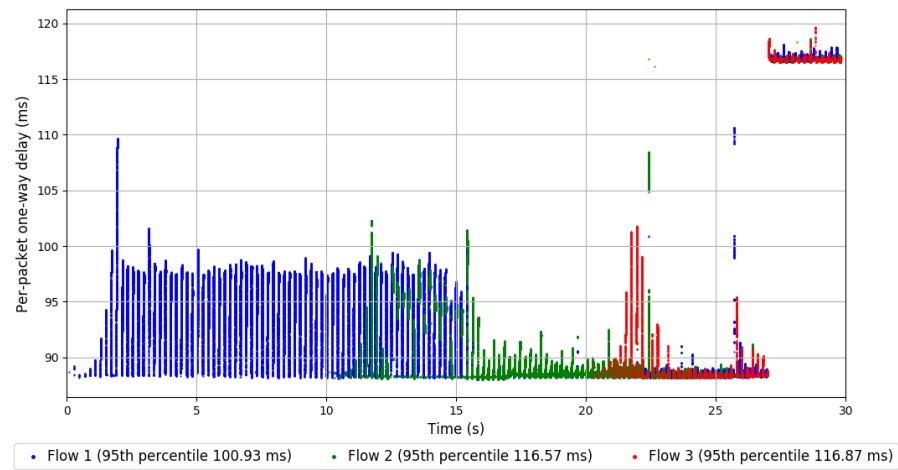
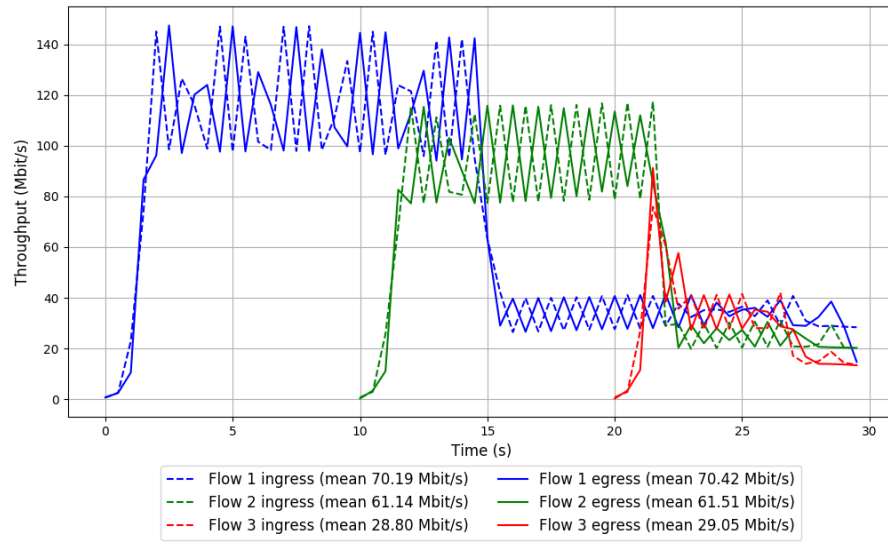
-- Flow 3:

Average throughput: 29.05 Mbit/s

95th percentile per-packet one-way delay: 116.869 ms

Loss rate: 1.19%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-09 14:00:18

End at: 2018-01-09 14:00:48

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.85 Mbit/s

95th percentile per-packet one-way delay: 116.495 ms

Loss rate: 2.50%

-- Flow 1:

Average throughput: 12.82 Mbit/s

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

Loss rate: 2.51%

-- Flow 2:

Average throughput: 1.02 Mbit/s

95th percentile per-packet one-way delay: 116.438 ms

Loss rate: 1.88%

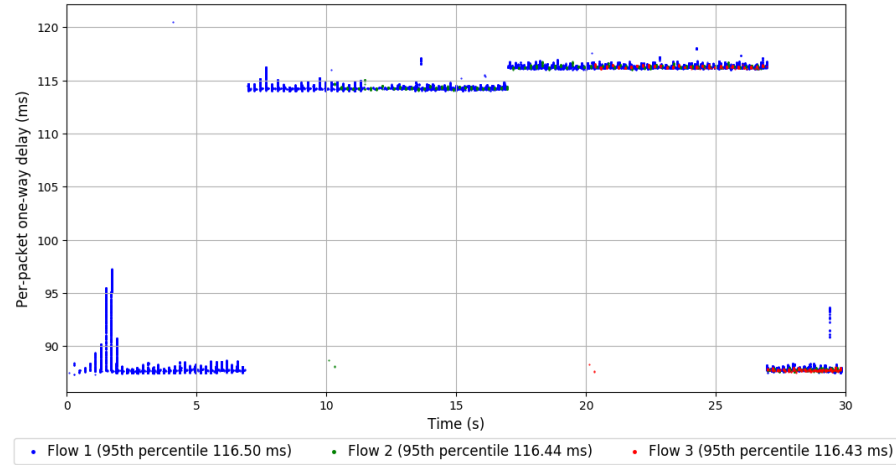
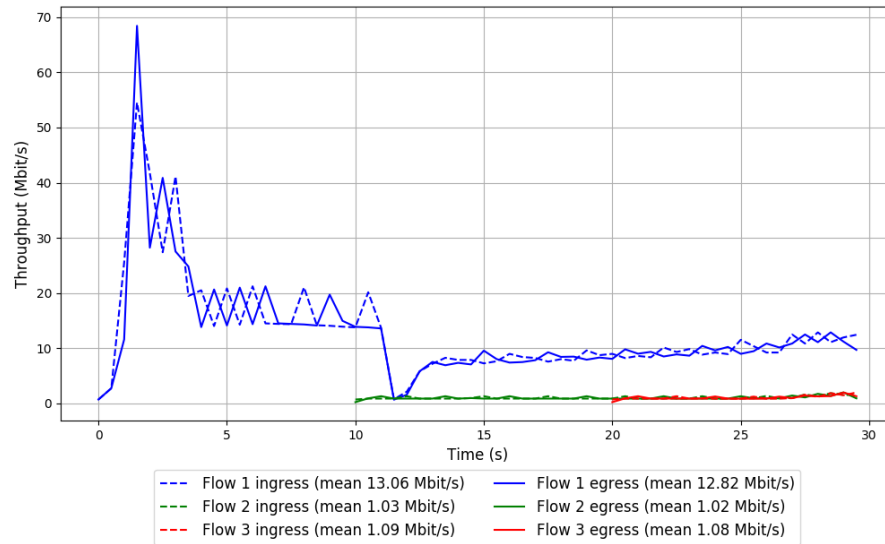
-- Flow 3:

Average throughput: 1.08 Mbit/s

95th percentile per-packet one-way delay: 116.434 ms

Loss rate: 3.55%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-09 14:15:48

End at: 2018-01-09 14:16:18

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.89 Mbit/s

95th percentile per-packet one-way delay: 96.486 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 40.98 Mbit/s

95th percentile per-packet one-way delay: 92.185 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 60.36 Mbit/s

95th percentile per-packet one-way delay: 97.588 ms

Loss rate: 1.31%

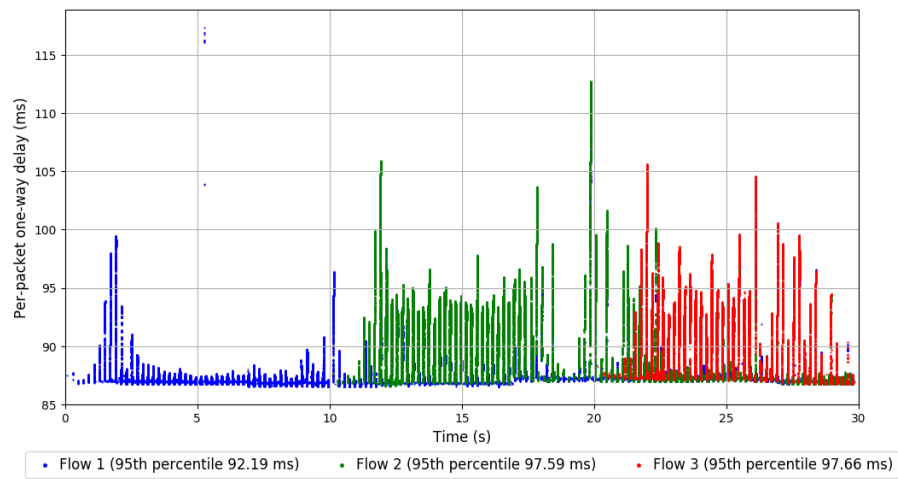
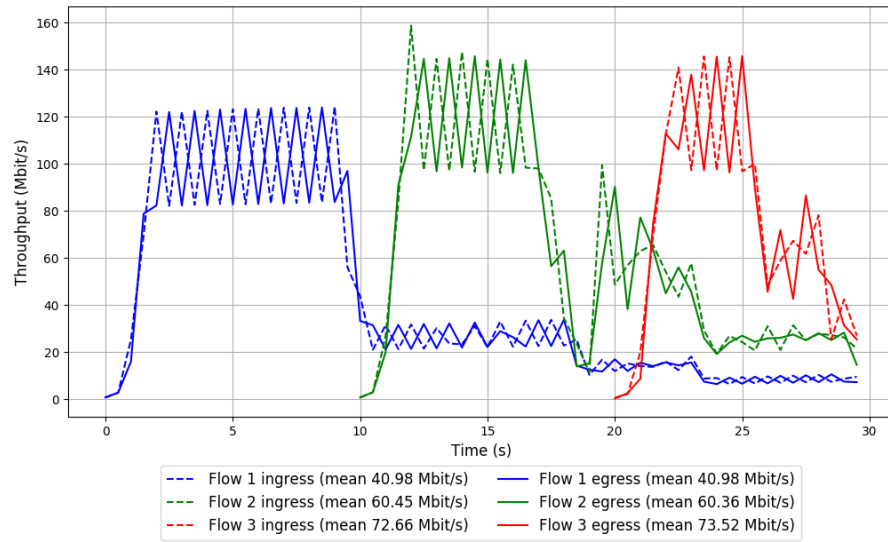
-- Flow 3:

Average throughput: 73.52 Mbit/s

95th percentile per-packet one-way delay: 97.662 ms

Loss rate: 0.89%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-09 14:31:30

End at: 2018-01-09 14:32:00

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.23 Mbit/s

95th percentile per-packet one-way delay: 89.753 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 53.45 Mbit/s

95th percentile per-packet one-way delay: 89.170 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 65.76 Mbit/s

95th percentile per-packet one-way delay: 90.341 ms

Loss rate: 0.61%

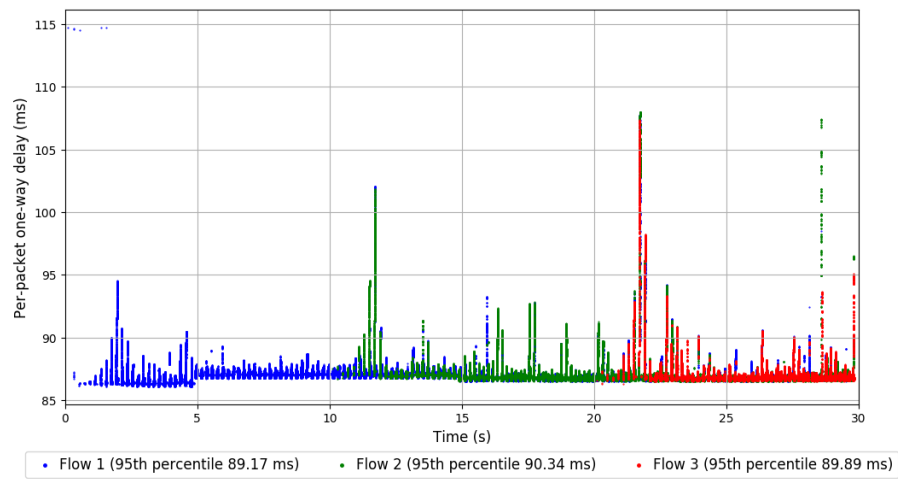
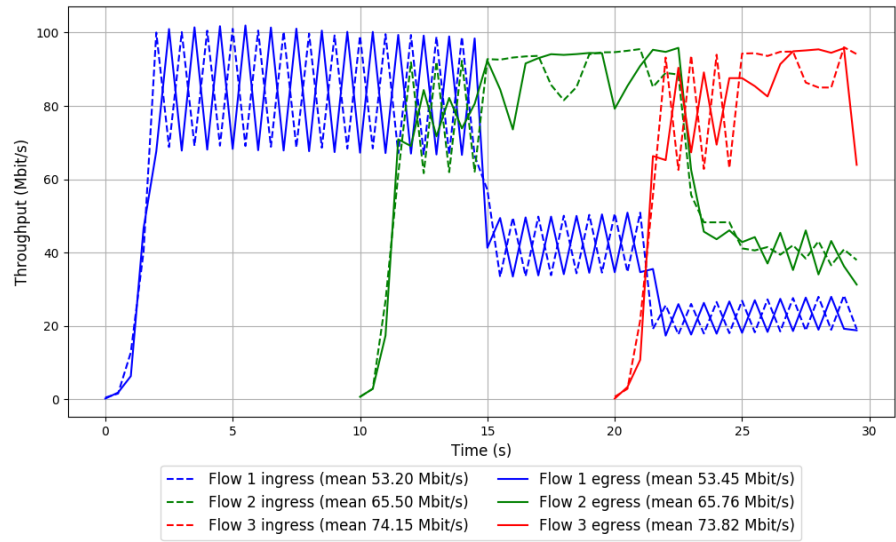
-- Flow 3:

Average throughput: 73.82 Mbit/s

95th percentile per-packet one-way delay: 89.886 ms

Loss rate: 2.18%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-09 14:46:41

End at: 2018-01-09 14:47:11

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.17 Mbit/s

95th percentile per-packet one-way delay: 87.923 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 57.38 Mbit/s

95th percentile per-packet one-way delay: 87.740 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 86.997 ms

Loss rate: 2.59%

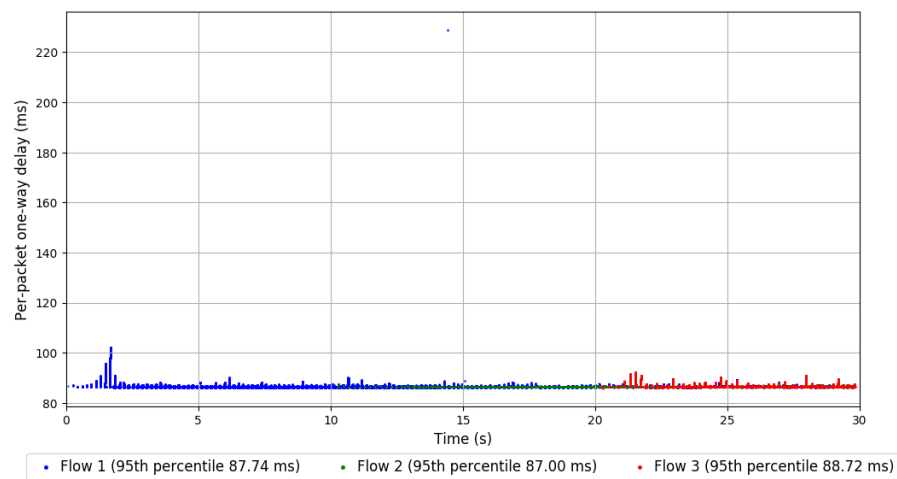
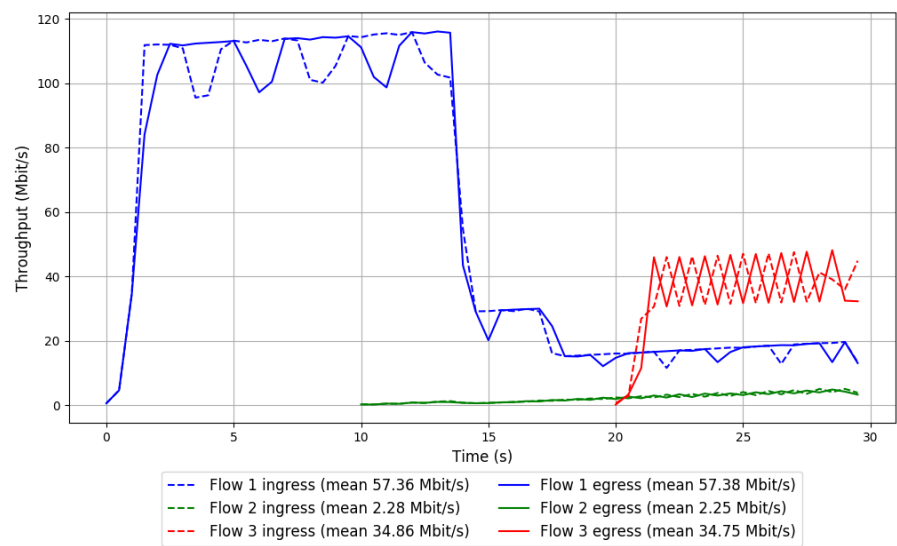
-- Flow 3:

Average throughput: 34.75 Mbit/s

95th percentile per-packet one-way delay: 88.719 ms

Loss rate: 2.35%

Run 10: Report of TCP Vegas — Data Link

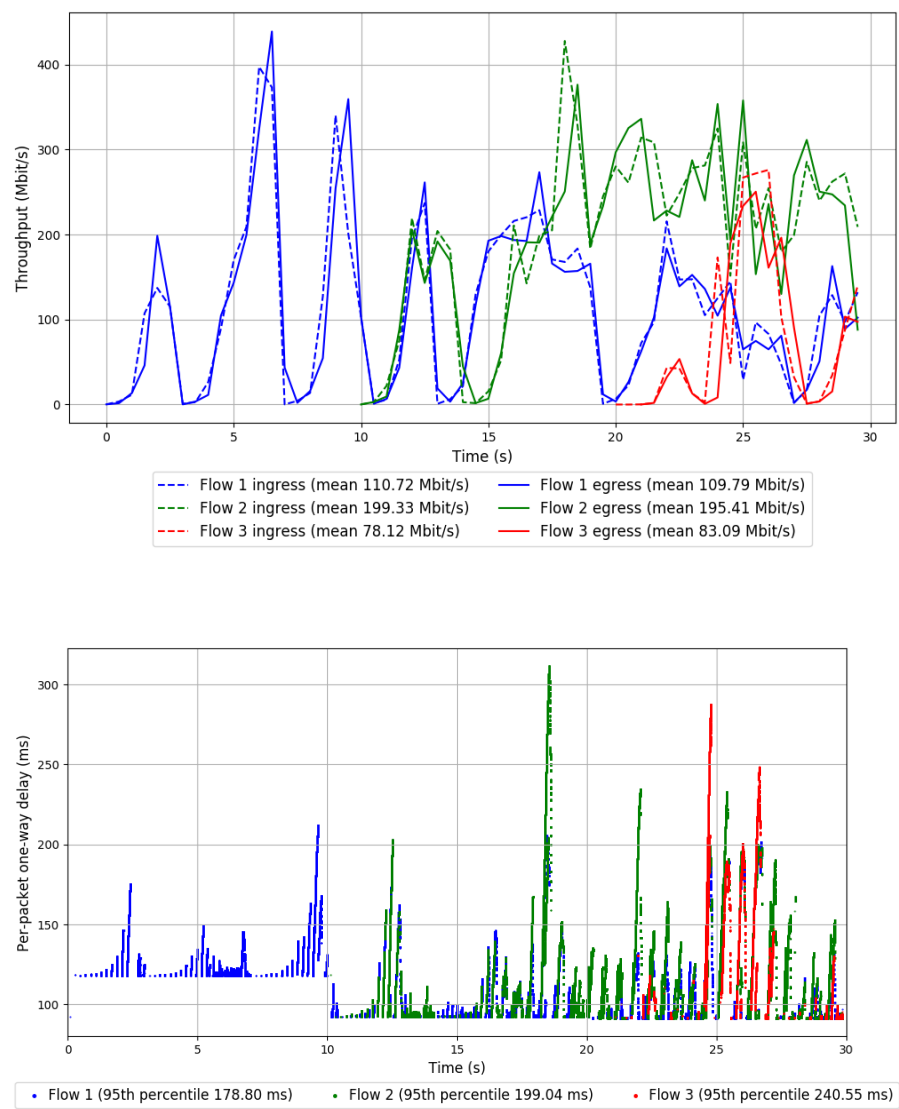


```
Run 1: Statistics of Verus

Start at: 2018-01-09 12:30:05
End at: 2018-01-09 12:30:35

# Below is generated by plot.py at 2018-01-09 18:04:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 263.66 Mbit/s
95th percentile per-packet one-way delay: 196.130 ms
Loss rate: 2.55%
-- Flow 1:
Average throughput: 109.79 Mbit/s
95th percentile per-packet one-way delay: 178.798 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 195.41 Mbit/s
95th percentile per-packet one-way delay: 199.041 ms
Loss rate: 3.09%
-- Flow 3:
Average throughput: 83.09 Mbit/s
95th percentile per-packet one-way delay: 240.552 ms
Loss rate: 5.81%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

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

End at: 2018-01-09 12:45:42

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.76 Mbit/s

95th percentile per-packet one-way delay: 176.085 ms

Loss rate: 2.26%

-- Flow 1:

Average throughput: 222.82 Mbit/s

95th percentile per-packet one-way delay: 147.828 ms

Loss rate: 1.64%

-- Flow 2:

Average throughput: 78.37 Mbit/s

95th percentile per-packet one-way delay: 138.148 ms

Loss rate: 1.04%

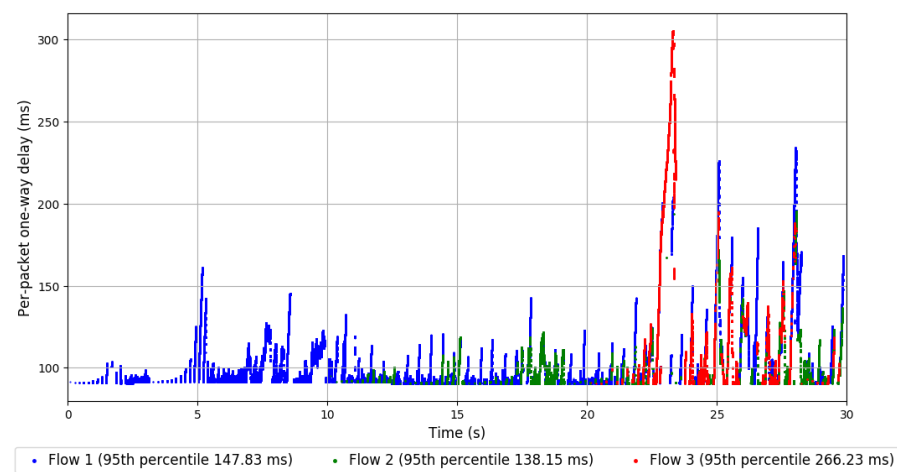
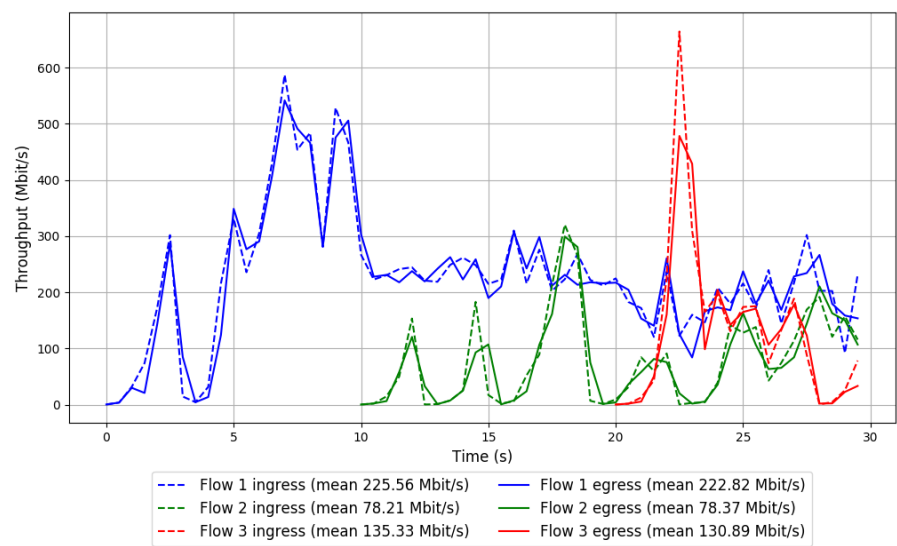
-- Flow 3:

Average throughput: 130.89 Mbit/s

95th percentile per-packet one-way delay: 266.231 ms

Loss rate: 6.77%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-09 13:00:34

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

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 247.36 Mbit/s

95th percentile per-packet one-way delay: 155.145 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 184.69 Mbit/s

95th percentile per-packet one-way delay: 161.285 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 89.74 Mbit/s

95th percentile per-packet one-way delay: 148.599 ms

Loss rate: 0.45%

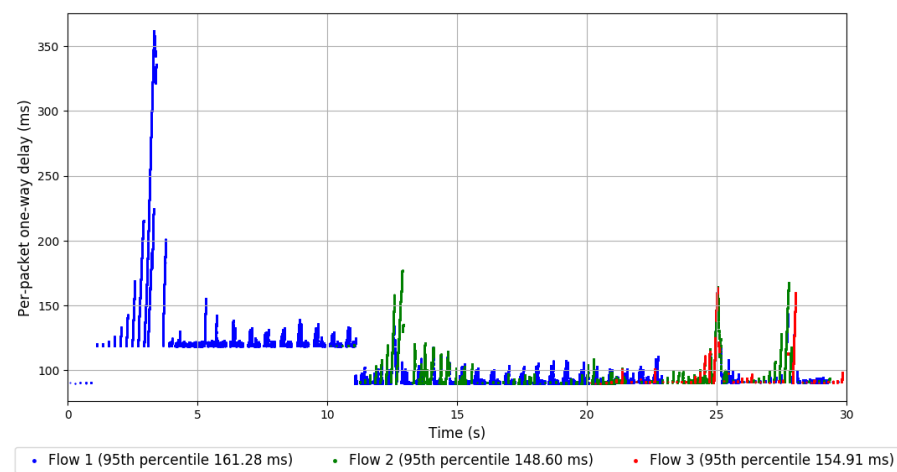
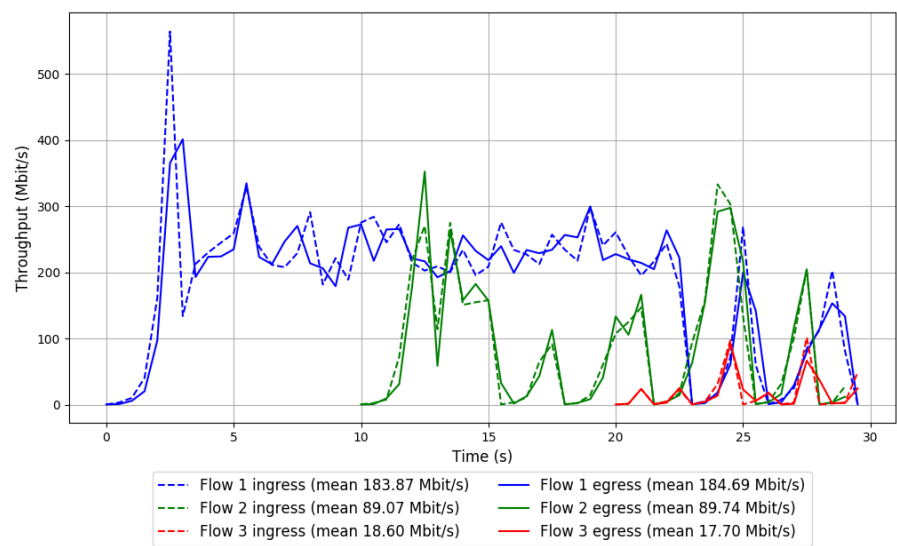
-- Flow 3:

Average throughput: 17.70 Mbit/s

95th percentile per-packet one-way delay: 154.906 ms

Loss rate: 6.66%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-01-09 13:15:23

End at: 2018-01-09 13:15:53

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 263.91 Mbit/s

95th percentile per-packet one-way delay: 212.343 ms

Loss rate: 5.49%

-- Flow 1:

Average throughput: 137.25 Mbit/s

95th percentile per-packet one-way delay: 211.129 ms

Loss rate: 3.75%

-- Flow 2:

Average throughput: 76.95 Mbit/s

95th percentile per-packet one-way delay: 285.384 ms

Loss rate: 13.60%

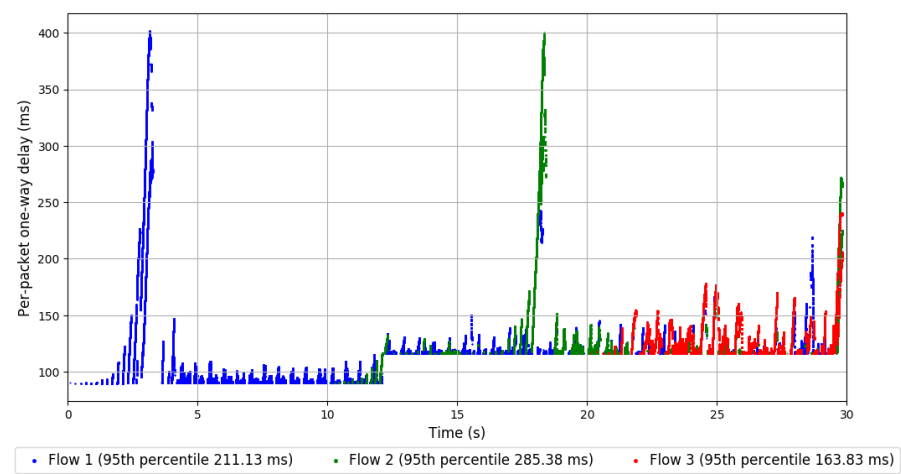
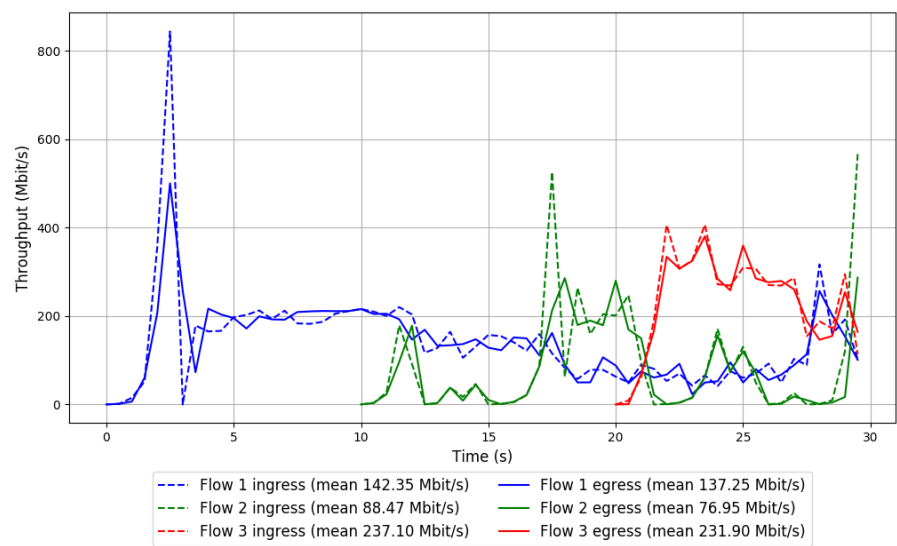
-- Flow 3:

Average throughput: 231.90 Mbit/s

95th percentile per-packet one-way delay: 163.831 ms

Loss rate: 2.51%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-09 13:31:05

End at: 2018-01-09 13:31:35

Below is generated by plot.py at 2018-01-09 18:04:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 201.39 Mbit/s

95th percentile per-packet one-way delay: 166.744 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 90.76 Mbit/s

95th percentile per-packet one-way delay: 228.450 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 159.89 Mbit/s

95th percentile per-packet one-way delay: 143.690 ms

Loss rate: 0.80%

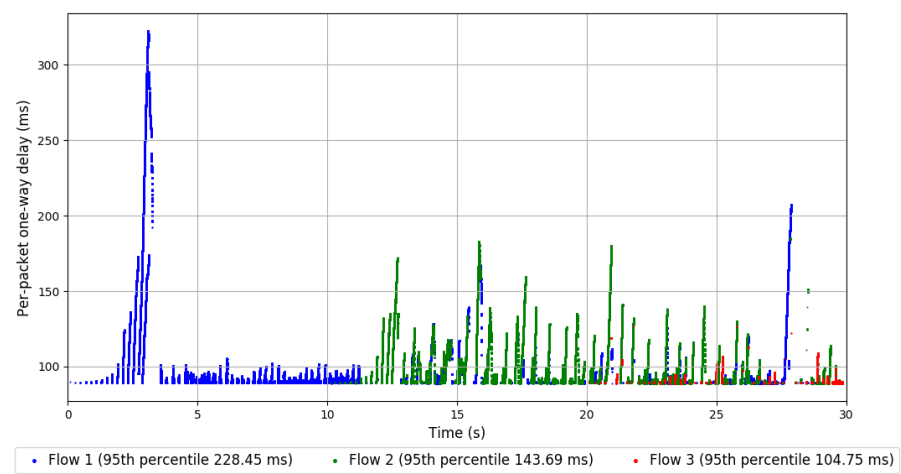
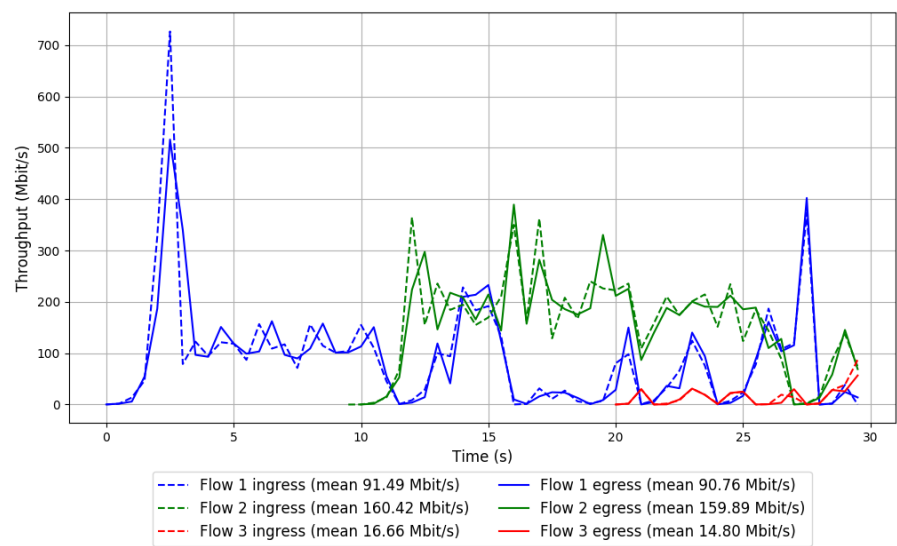
-- Flow 3:

Average throughput: 14.80 Mbit/s

95th percentile per-packet one-way delay: 104.750 ms

Loss rate: 13.04%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-09 13:46:21

End at: 2018-01-09 13:46:51

Below is generated by plot.py at 2018-01-09 18:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 325.67 Mbit/s

95th percentile per-packet one-way delay: 196.840 ms

Loss rate: 2.90%

-- Flow 1:

Average throughput: 143.70 Mbit/s

95th percentile per-packet one-way delay: 209.709 ms

Loss rate: 5.15%

-- Flow 2:

Average throughput: 229.31 Mbit/s

95th percentile per-packet one-way delay: 189.661 ms

Loss rate: 1.22%

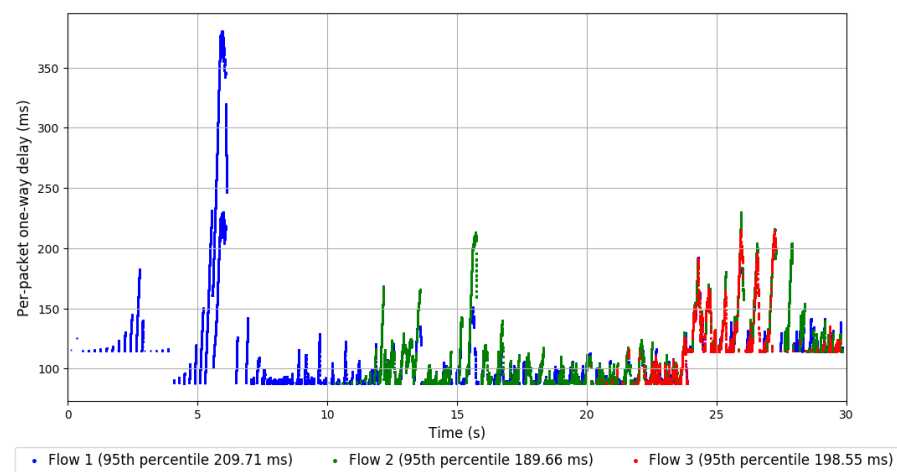
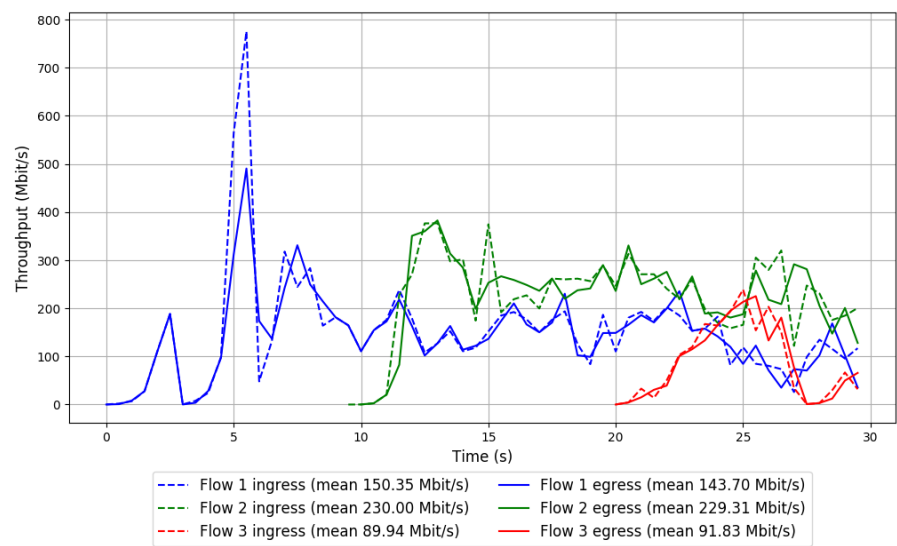
-- Flow 3:

Average throughput: 91.83 Mbit/s

95th percentile per-packet one-way delay: 198.548 ms

Loss rate: 0.15%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

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

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

Below is generated by plot.py at 2018-01-09 18:05:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 287.87 Mbit/s

95th percentile per-packet one-way delay: 187.786 ms

Loss rate: 1.64%

-- Flow 1:

Average throughput: 171.08 Mbit/s

95th percentile per-packet one-way delay: 169.602 ms

Loss rate: 1.54%

-- Flow 2:

Average throughput: 161.75 Mbit/s

95th percentile per-packet one-way delay: 208.804 ms

Loss rate: 1.60%

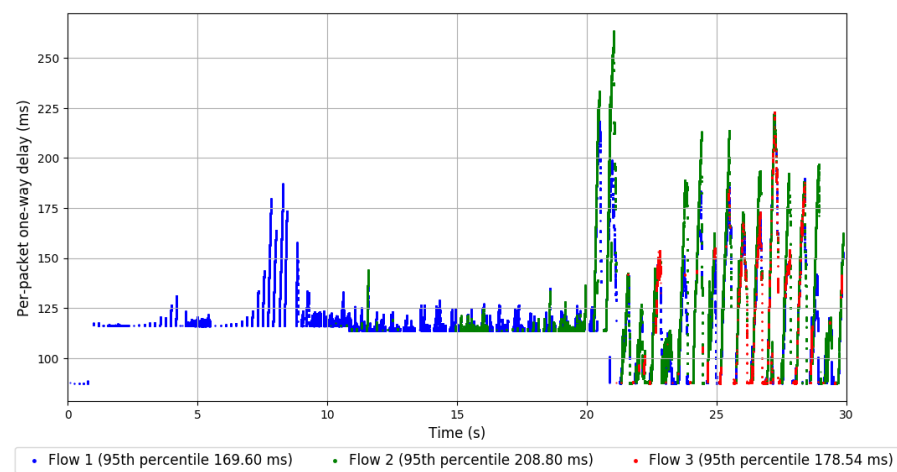
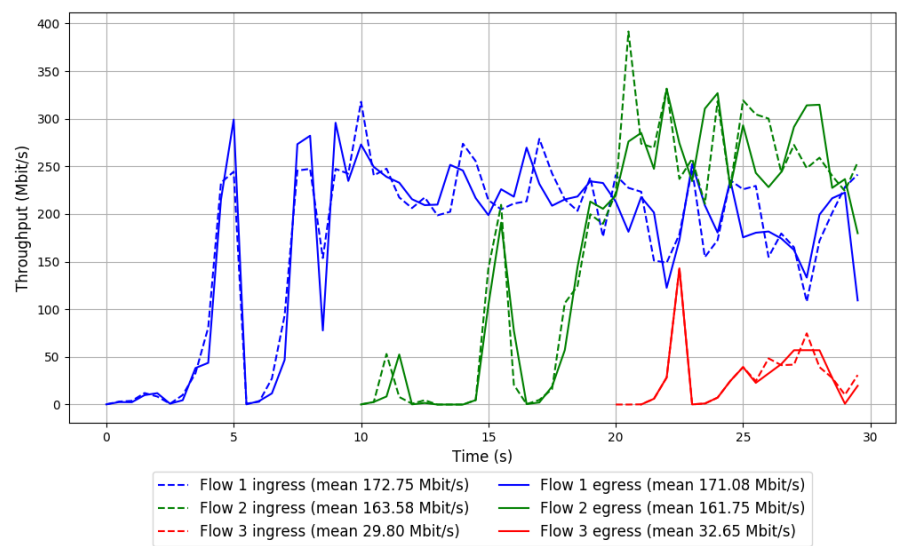
-- Flow 3:

Average throughput: 32.65 Mbit/s

95th percentile per-packet one-way delay: 178.536 ms

Loss rate: 3.76%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-09 14:16:41

End at: 2018-01-09 14:17:11

Below is generated by plot.py at 2018-01-09 18:07:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 239.27 Mbit/s

95th percentile per-packet one-way delay: 150.629 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 117.41 Mbit/s

95th percentile per-packet one-way delay: 148.425 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 137.05 Mbit/s

95th percentile per-packet one-way delay: 158.329 ms

Loss rate: 1.09%

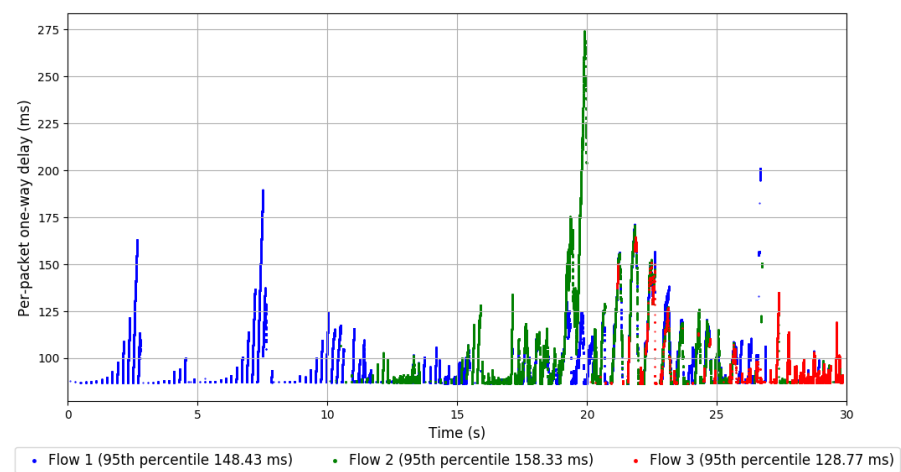
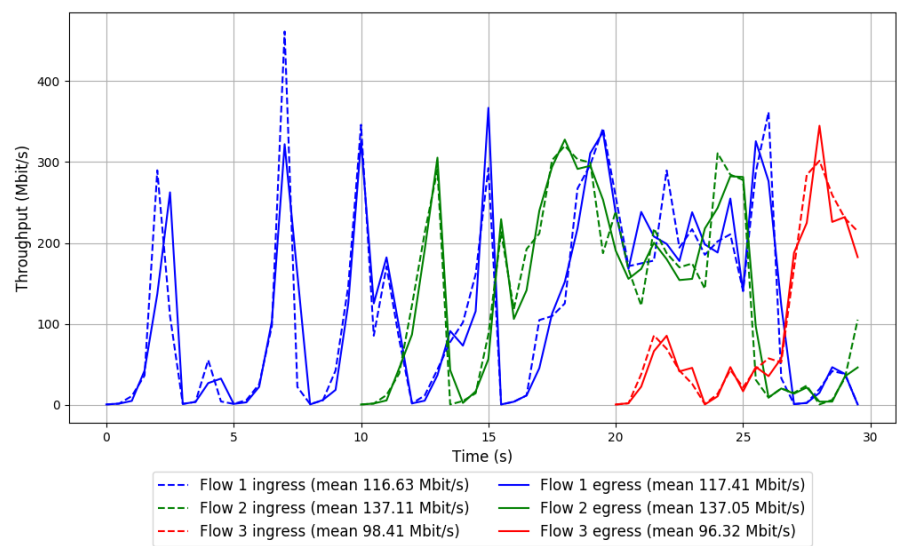
-- Flow 3:

Average throughput: 96.32 Mbit/s

95th percentile per-packet one-way delay: 128.770 ms

Loss rate: 4.09%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-09 14:32:23

End at: 2018-01-09 14:32:53

Below is generated by plot.py at 2018-01-09 18:07:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 250.86 Mbit/s

95th percentile per-packet one-way delay: 179.192 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 197.19 Mbit/s

95th percentile per-packet one-way delay: 184.850 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 43.94 Mbit/s

95th percentile per-packet one-way delay: 141.527 ms

Loss rate: 1.68%

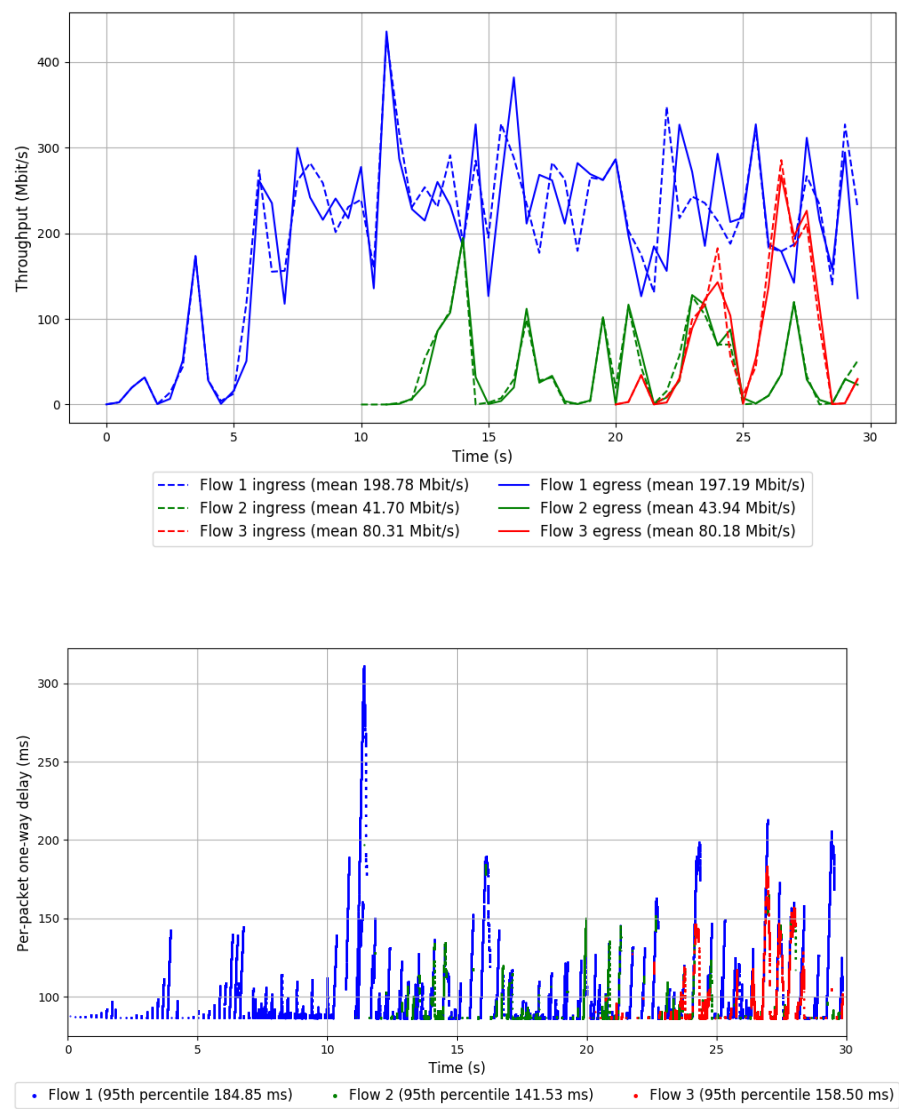
-- Flow 3:

Average throughput: 80.18 Mbit/s

95th percentile per-packet one-way delay: 158.495 ms

Loss rate: 0.01%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-09 14:47:31

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

Below is generated by plot.py at 2018-01-09 18:09:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.04 Mbit/s

95th percentile per-packet one-way delay: 164.732 ms

Loss rate: 3.11%

-- Flow 1:

Average throughput: 208.60 Mbit/s

95th percentile per-packet one-way delay: 158.323 ms

Loss rate: 3.38%

-- Flow 2:

Average throughput: 173.63 Mbit/s

95th percentile per-packet one-way delay: 171.893 ms

Loss rate: 2.30%

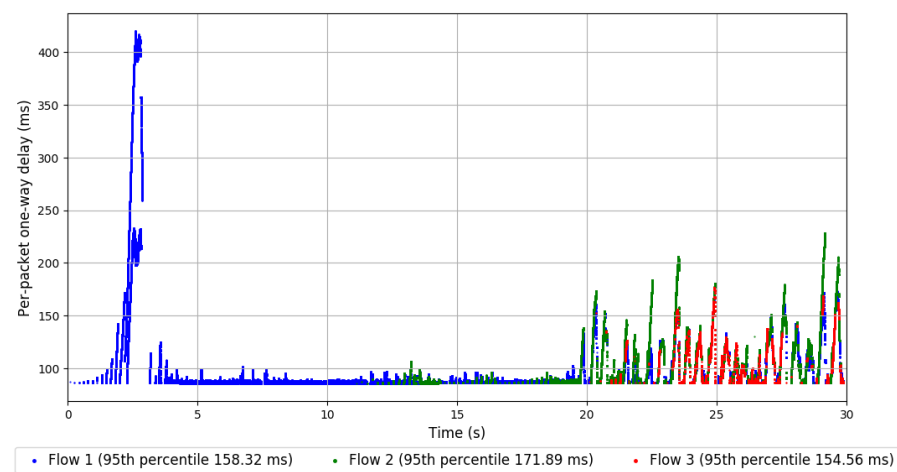
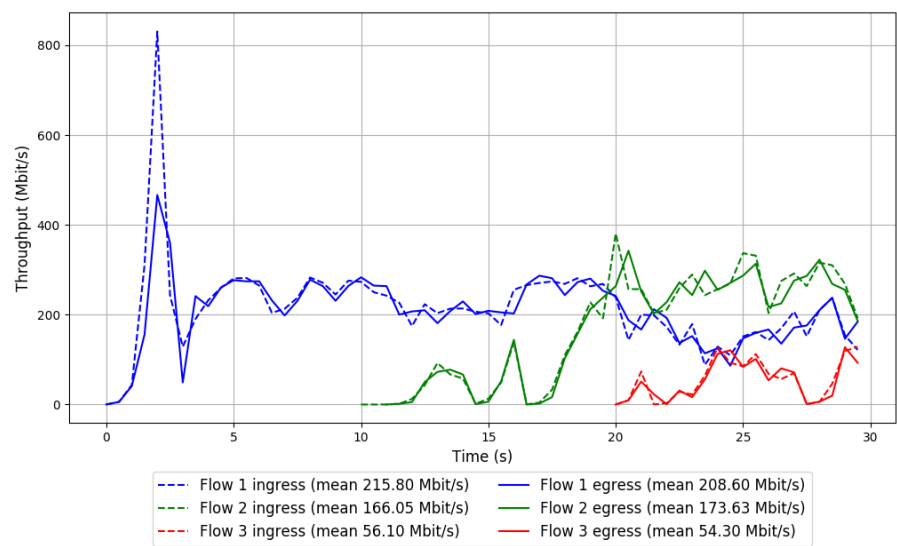
-- Flow 3:

Average throughput: 54.30 Mbit/s

95th percentile per-packet one-way delay: 154.563 ms

Loss rate: 4.85%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

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

End at: 2018-01-09 12:33:31

Below is generated by plot.py at 2018-01-09 18:09:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.49 Mbit/s

95th percentile per-packet one-way delay: 92.444 ms

Loss rate: 2.36%

-- Flow 1:

Average throughput: 57.14 Mbit/s

95th percentile per-packet one-way delay: 92.349 ms

Loss rate: 1.31%

-- Flow 2:

Average throughput: 31.00 Mbit/s

95th percentile per-packet one-way delay: 119.442 ms

Loss rate: 3.54%

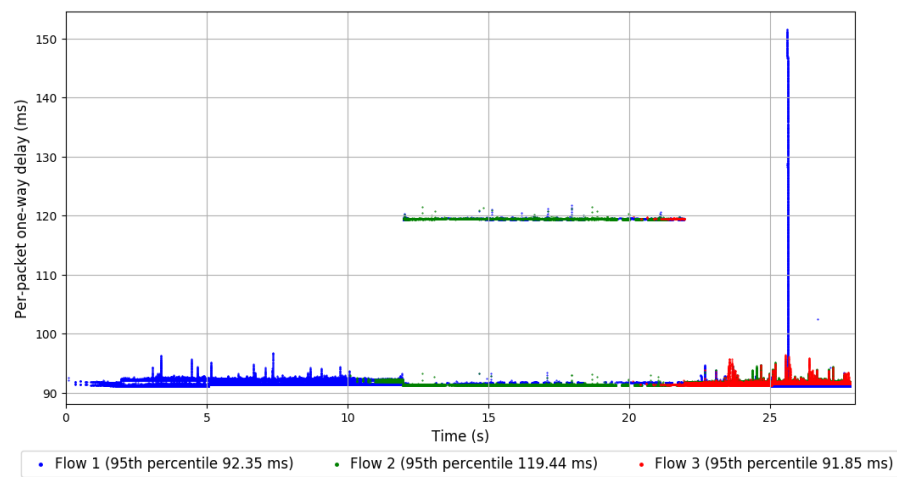
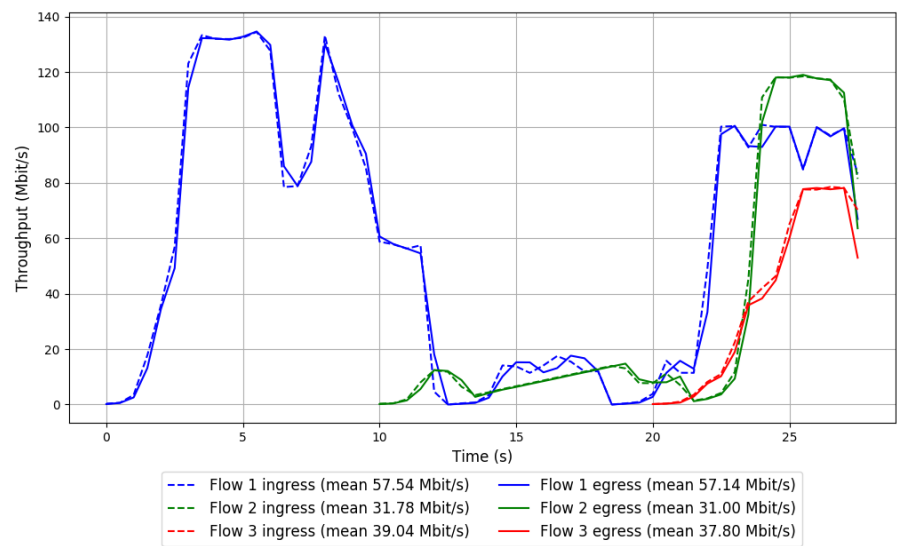
-- Flow 3:

Average throughput: 37.80 Mbit/s

95th percentile per-packet one-way delay: 91.849 ms

Loss rate: 5.63%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

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

End at: 2018-01-09 12:48:42

Below is generated by plot.py at 2018-01-09 18:09:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.86 Mbit/s

95th percentile per-packet one-way delay: 91.463 ms

Loss rate: 1.58%

-- Flow 1:

Average throughput: 51.52 Mbit/s

95th percentile per-packet one-way delay: 92.037 ms

Loss rate: 1.42%

-- Flow 2:

Average throughput: 61.92 Mbit/s

95th percentile per-packet one-way delay: 91.427 ms

Loss rate: 0.77%

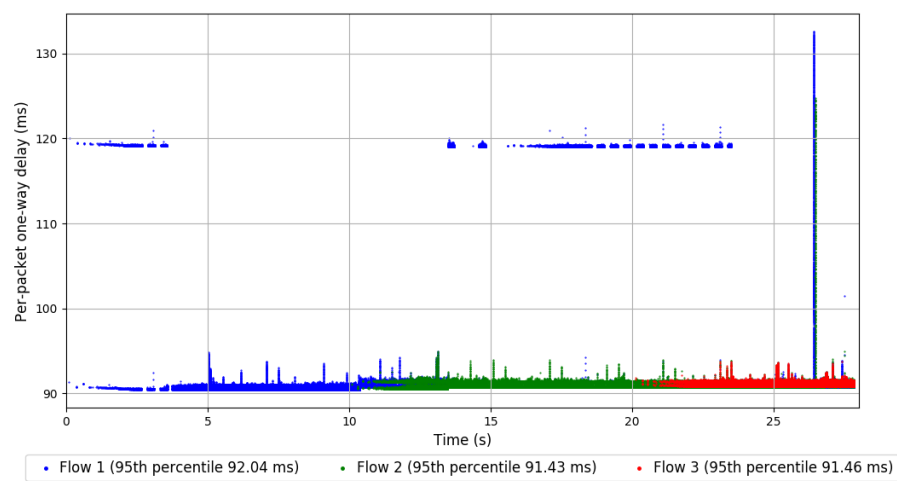
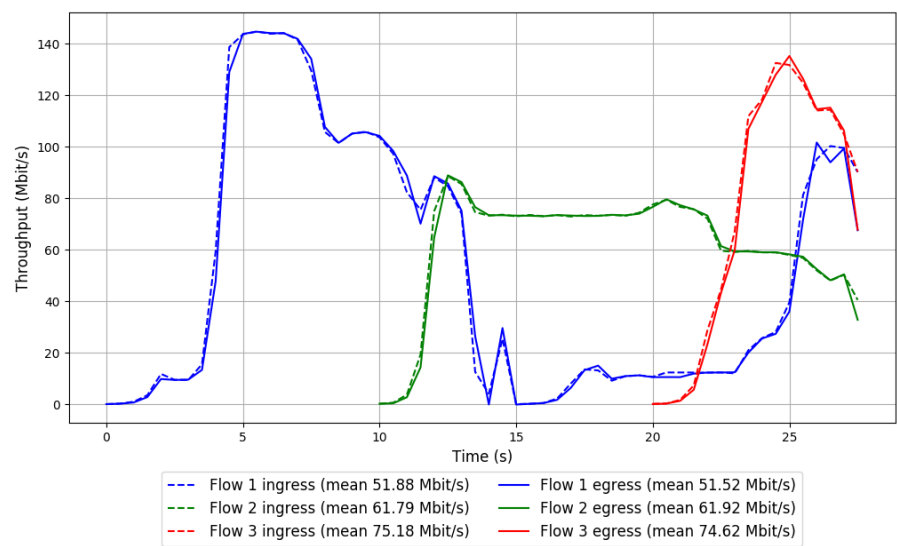
-- Flow 3:

Average throughput: 74.62 Mbit/s

95th percentile per-packet one-way delay: 91.456 ms

Loss rate: 3.45%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-09 13:03:28

End at: 2018-01-09 13:03:58

Below is generated by plot.py at 2018-01-09 18:09:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.93 Mbit/s

95th percentile per-packet one-way delay: 116.780 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 22.48 Mbit/s

95th percentile per-packet one-way delay: 118.506 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 49.11 Mbit/s

95th percentile per-packet one-way delay: 116.757 ms

Loss rate: 0.51%

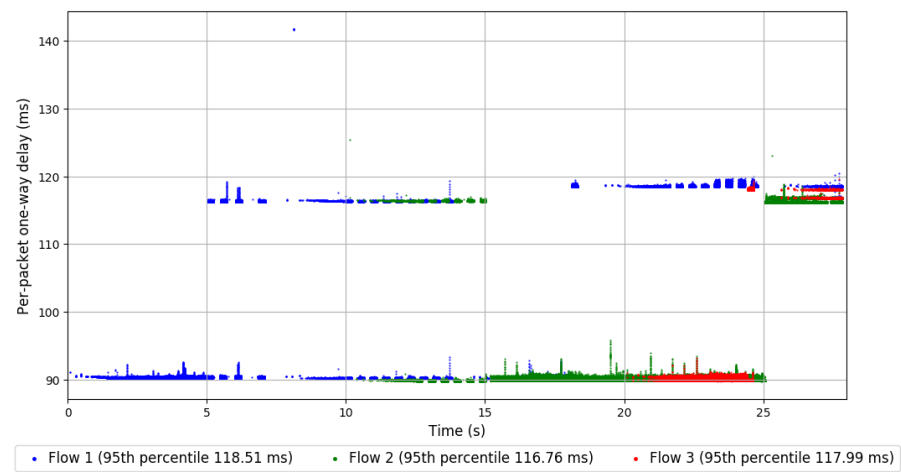
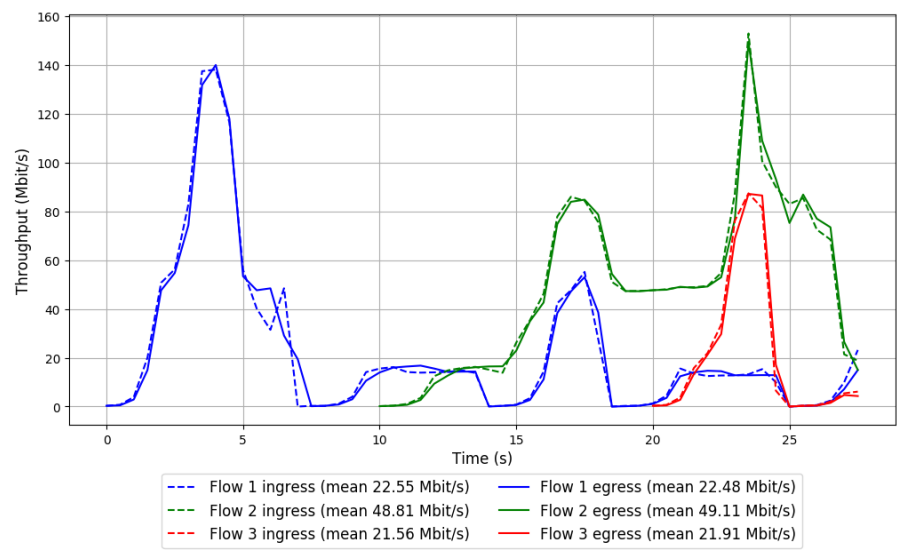
-- Flow 3:

Average throughput: 21.91 Mbit/s

95th percentile per-packet one-way delay: 117.993 ms

Loss rate: 0.95%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-09 13:18:25

End at: 2018-01-09 13:18:55

Below is generated by plot.py at 2018-01-09 18:09:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.21 Mbit/s

95th percentile per-packet one-way delay: 89.994 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 73.50 Mbit/s

95th percentile per-packet one-way delay: 89.981 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 44.30 Mbit/s

95th percentile per-packet one-way delay: 90.046 ms

Loss rate: 2.41%

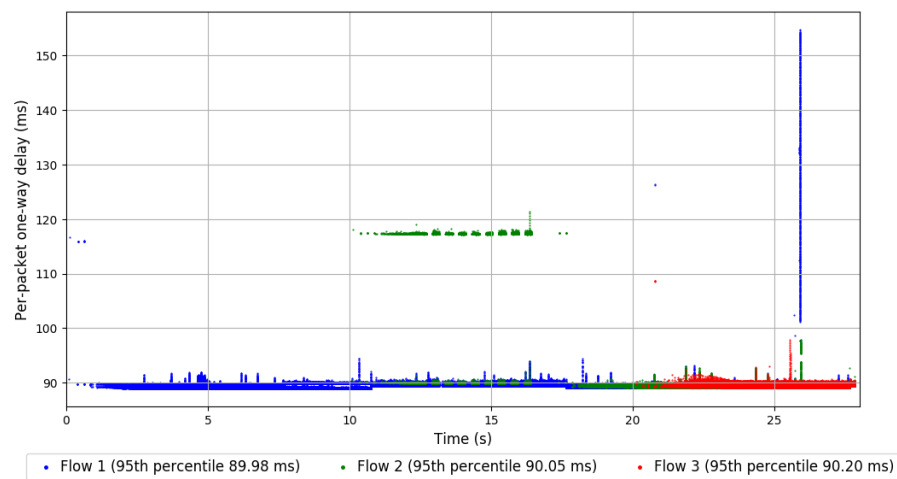
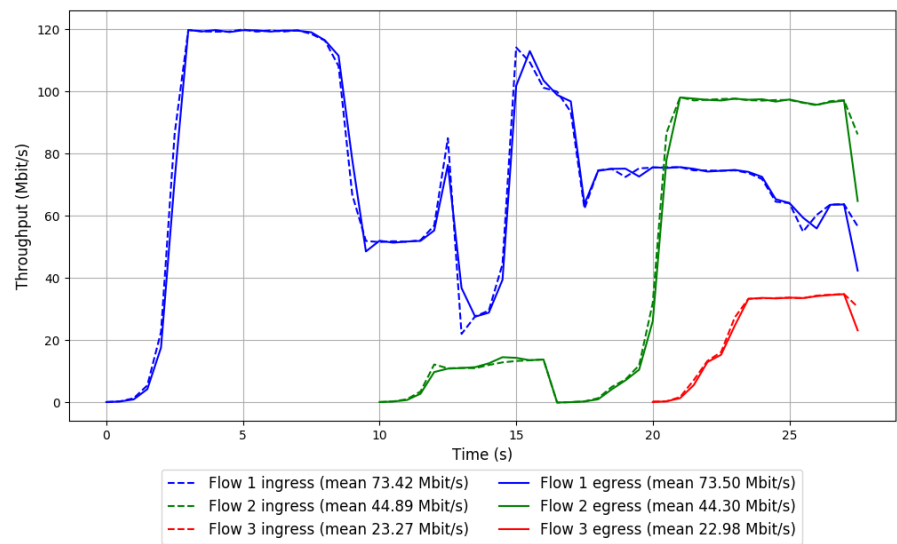
-- Flow 3:

Average throughput: 22.98 Mbit/s

95th percentile per-packet one-way delay: 90.199 ms

Loss rate: 3.74%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-09 13:34:07

End at: 2018-01-09 13:34:37

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.35 Mbit/s

95th percentile per-packet one-way delay: 89.072 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 75.66 Mbit/s

95th percentile per-packet one-way delay: 89.106 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 67.27 Mbit/s

95th percentile per-packet one-way delay: 88.811 ms

Loss rate: 0.00%

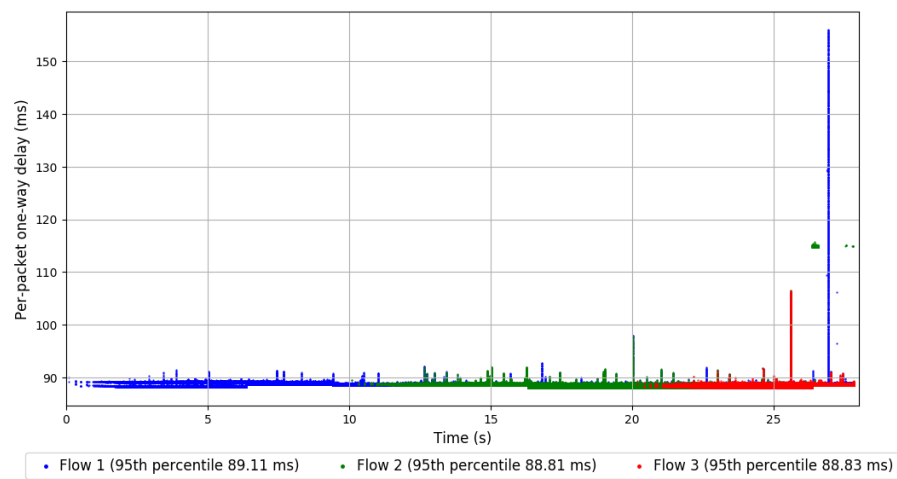
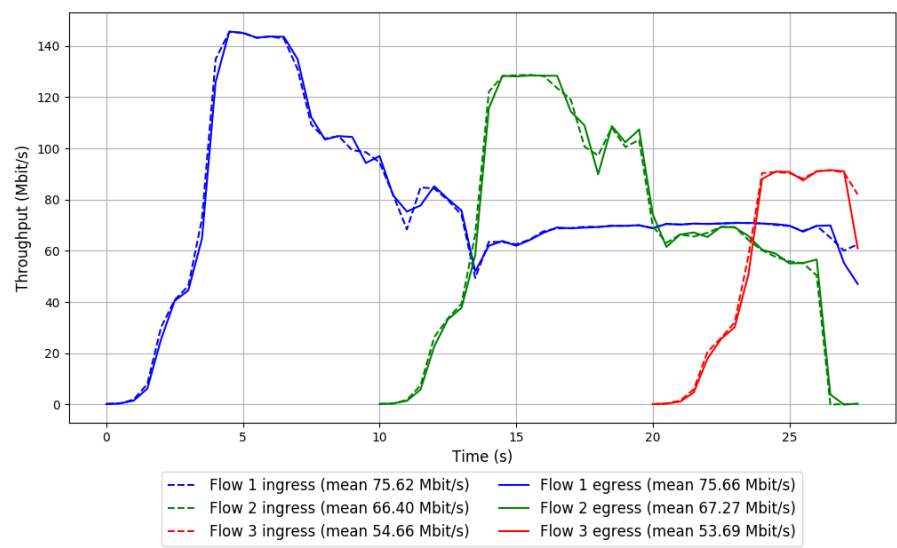
-- Flow 3:

Average throughput: 53.69 Mbit/s

95th percentile per-packet one-way delay: 88.830 ms

Loss rate: 4.28%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-09 13:49:19

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

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.67 Mbit/s

95th percentile per-packet one-way delay: 116.194 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 40.97 Mbit/s

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

Loss rate: 0.41%

-- Flow 2:

Average throughput: 54.73 Mbit/s

95th percentile per-packet one-way delay: 116.298 ms

Loss rate: 0.31%

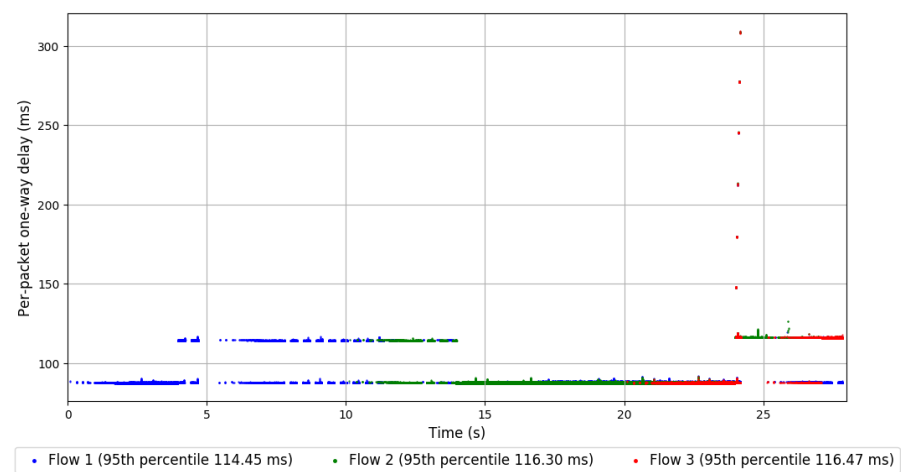
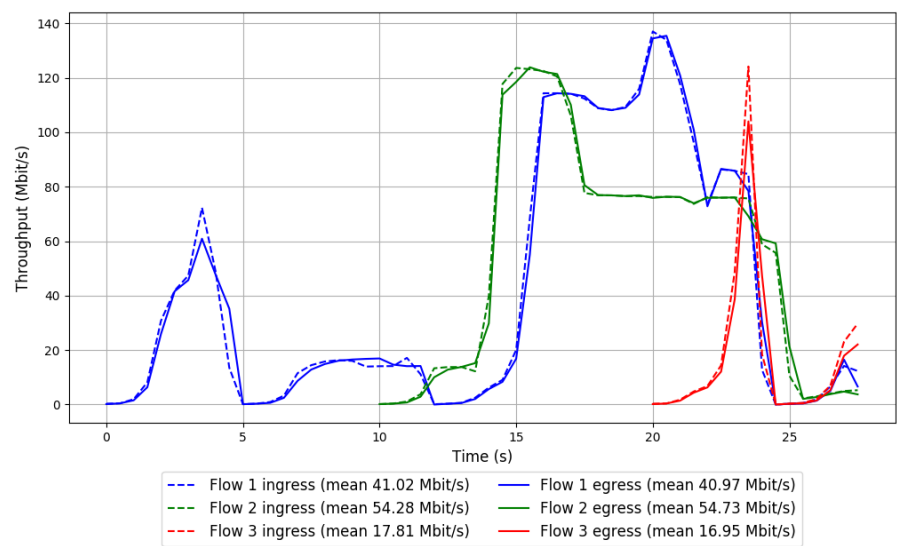
-- Flow 3:

Average throughput: 16.95 Mbit/s

95th percentile per-packet one-way delay: 116.471 ms

Loss rate: 7.21%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-09 14:04:13

End at: 2018-01-09 14:04:43

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.48 Mbit/s

95th percentile per-packet one-way delay: 115.852 ms

Loss rate: 2.03%

-- Flow 1:

Average throughput: 49.40 Mbit/s

95th percentile per-packet one-way delay: 90.236 ms

Loss rate: 1.47%

-- Flow 2:

Average throughput: 7.57 Mbit/s

95th percentile per-packet one-way delay: 116.018 ms

Loss rate: 3.20%

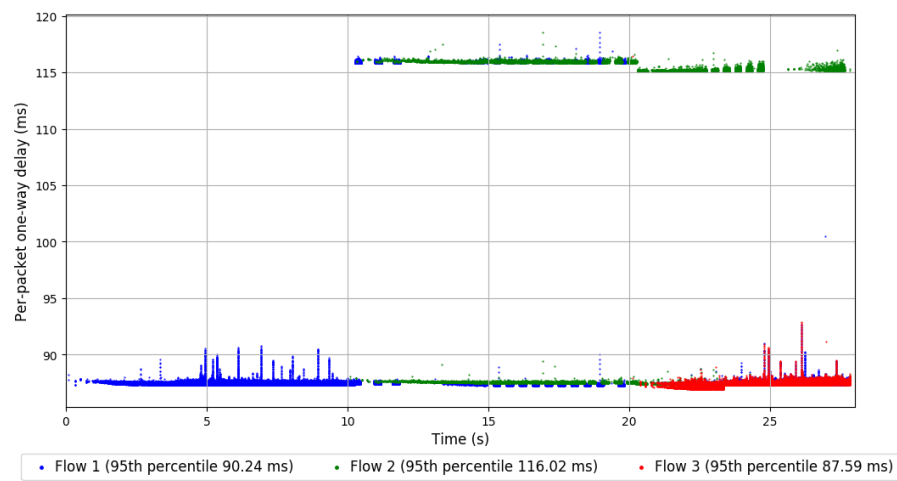
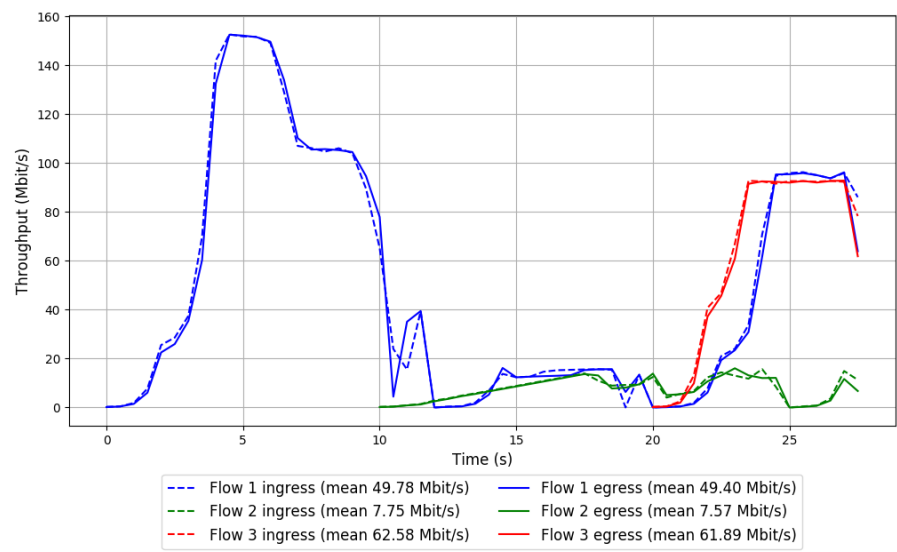
-- Flow 3:

Average throughput: 61.89 Mbit/s

95th percentile per-packet one-way delay: 87.590 ms

Loss rate: 3.27%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-09 14:19:44

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

Below is generated by plot.py at 2018-01-09 18:10:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.11 Mbit/s

95th percentile per-packet one-way delay: 87.172 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 75.42 Mbit/s

95th percentile per-packet one-way delay: 87.151 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 60.82 Mbit/s

95th percentile per-packet one-way delay: 87.210 ms

Loss rate: 1.23%

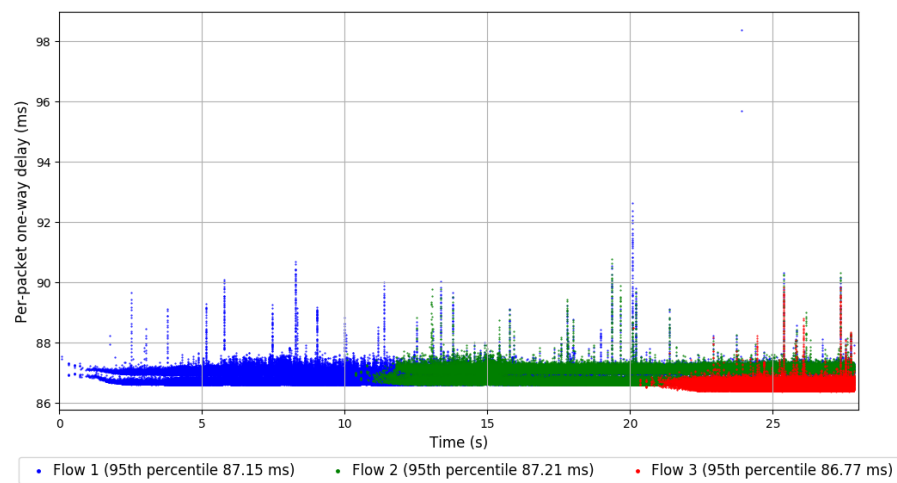
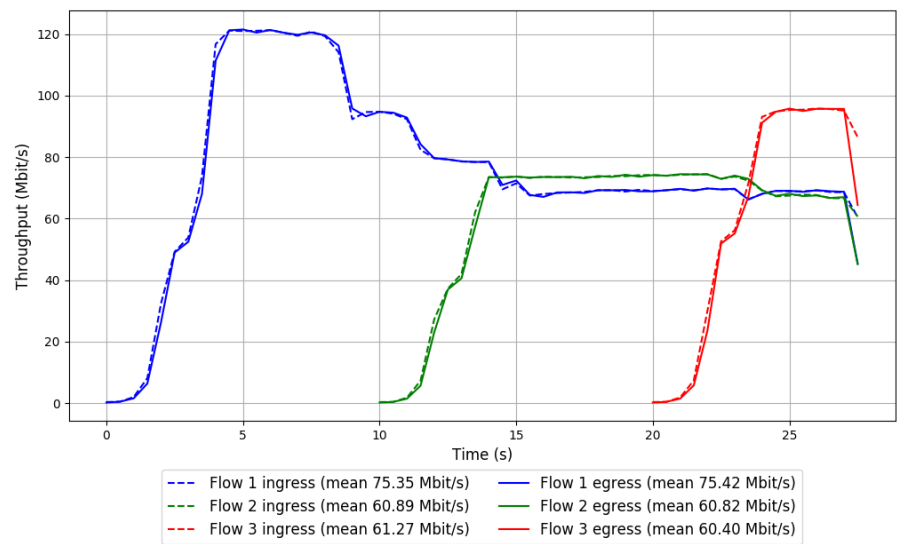
-- Flow 3:

Average throughput: 60.40 Mbit/s

95th percentile per-packet one-way delay: 86.767 ms

Loss rate: 3.93%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-09 14:35:26

End at: 2018-01-09 14:35:56

Below is generated by plot.py at 2018-01-09 18:10:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.42 Mbit/s

95th percentile per-packet one-way delay: 86.906 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 51.97 Mbit/s

95th percentile per-packet one-way delay: 86.765 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 76.83 Mbit/s

95th percentile per-packet one-way delay: 86.959 ms

Loss rate: 0.43%

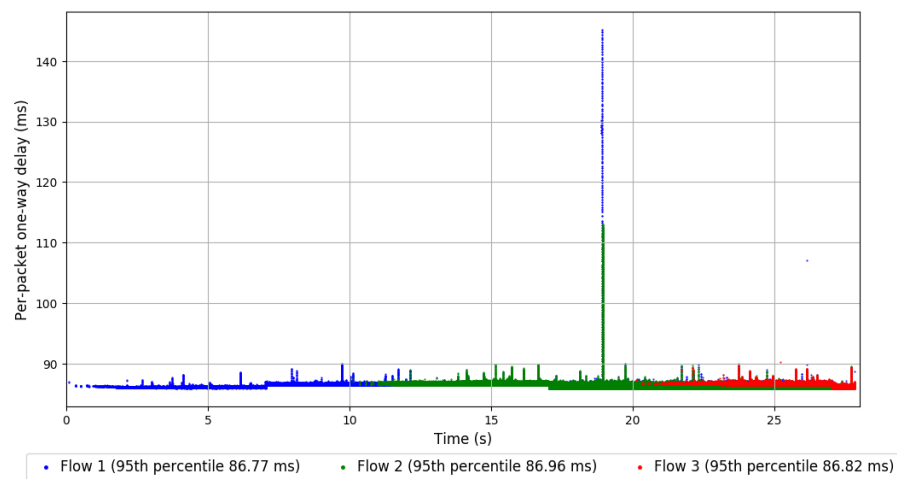
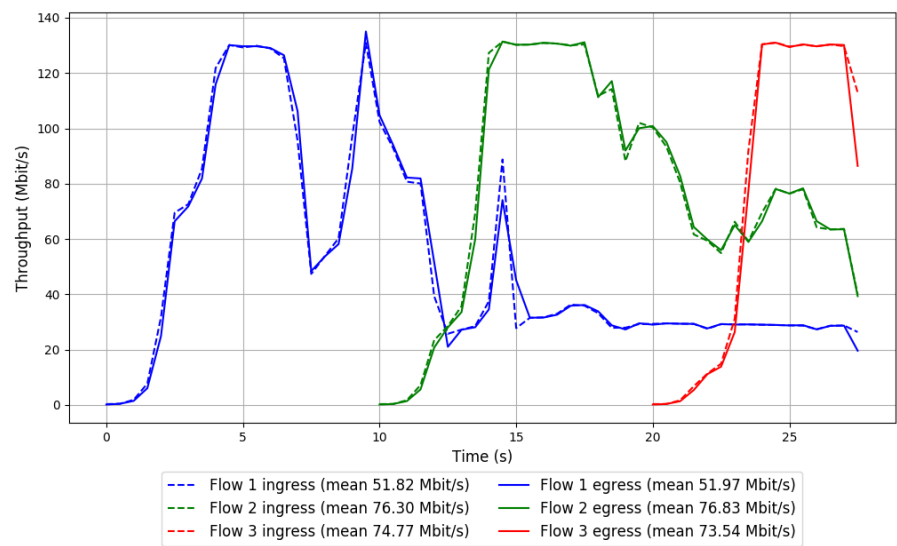
-- Flow 3:

Average throughput: 73.54 Mbit/s

95th percentile per-packet one-way delay: 86.817 ms

Loss rate: 4.13%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-09 14:50:29

End at: 2018-01-09 14:50:59

Below is generated by plot.py at 2018-01-09 18:11:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.45 Mbit/s

95th percentile per-packet one-way delay: 86.607 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 81.33 Mbit/s

95th percentile per-packet one-way delay: 86.504 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 73.31 Mbit/s

95th percentile per-packet one-way delay: 86.424 ms

Loss rate: 1.15%

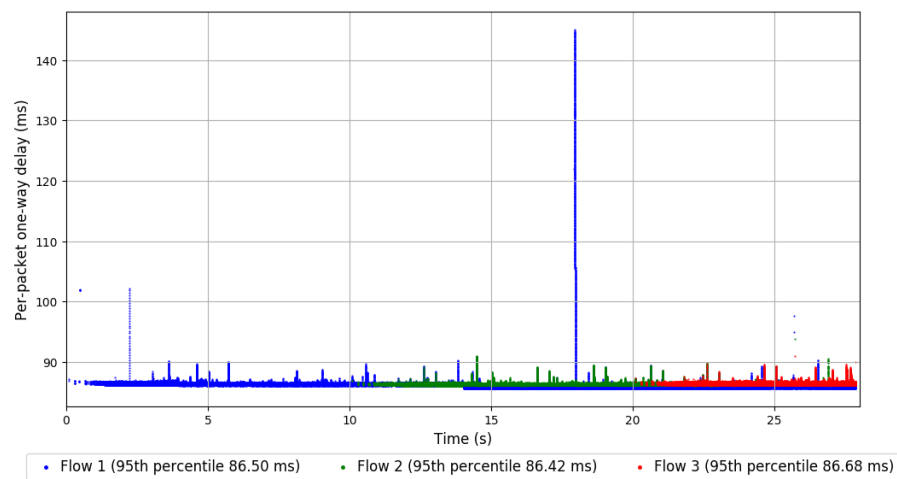
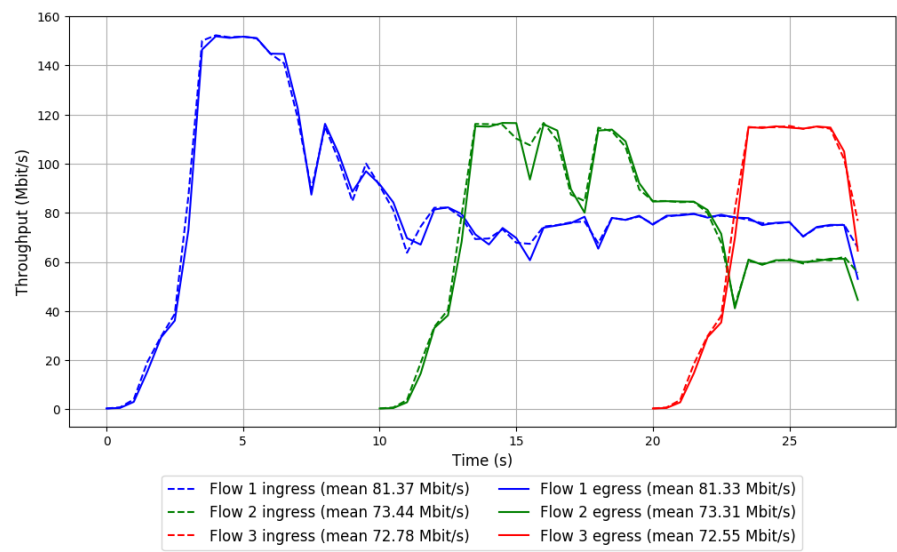
-- Flow 3:

Average throughput: 72.55 Mbit/s

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

Loss rate: 2.46%

Run 10: Report of Copa — Data Link

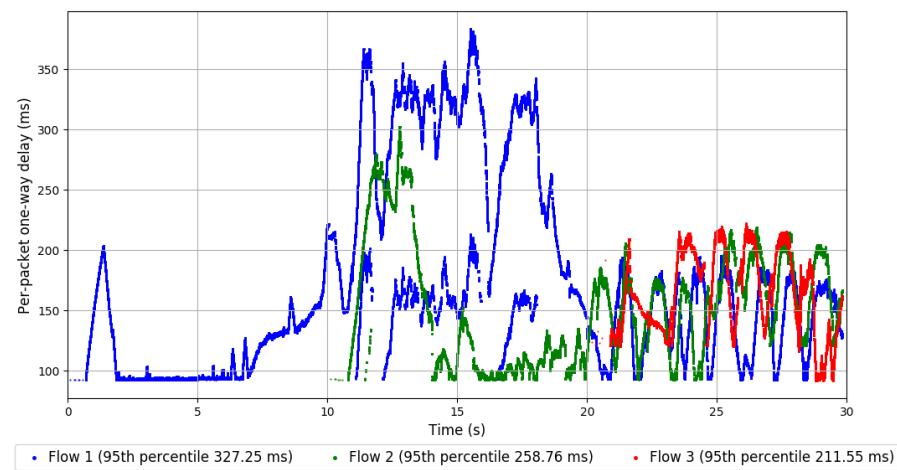
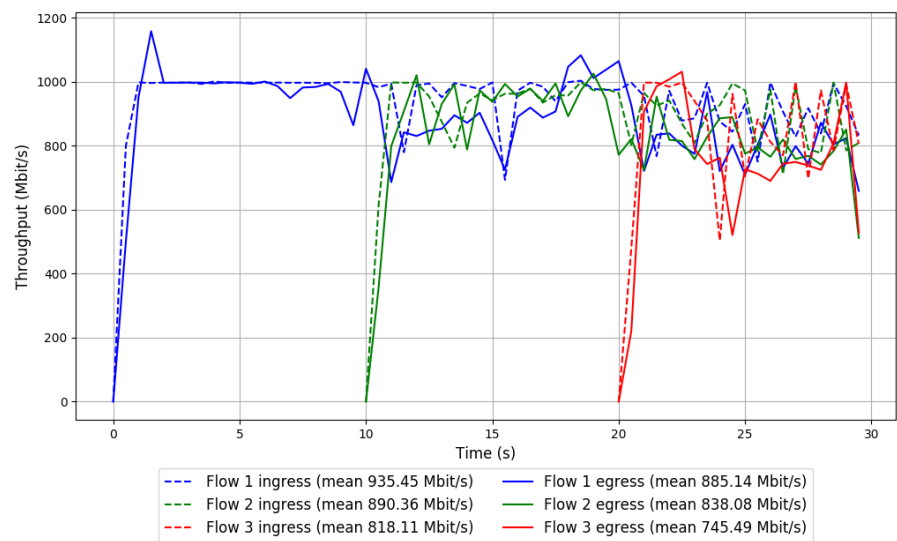


```
Run 1: Statistics of FillP

Start at: 2018-01-09 12:23:50
End at: 2018-01-09 12:24:20

# Below is generated by plot.py at 2018-01-09 18:36:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1682.54 Mbit/s
95th percentile per-packet one-way delay: 315.987 ms
Loss rate: 7.03%
-- Flow 1:
Average throughput: 885.14 Mbit/s
95th percentile per-packet one-way delay: 327.248 ms
Loss rate: 6.01%
-- Flow 2:
Average throughput: 838.08 Mbit/s
95th percentile per-packet one-way delay: 258.757 ms
Loss rate: 6.81%
-- Flow 3:
Average throughput: 745.49 Mbit/s
95th percentile per-packet one-way delay: 211.554 ms
Loss rate: 11.01%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-01-09 12:38:49

End at: 2018-01-09 12:39:19

Below is generated by plot.py at 2018-01-09 18:37:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 1733.71 Mbit/s

95th percentile per-packet one-way delay: 182.438 ms

Loss rate: 5.98%

-- Flow 1:

Average throughput: 872.03 Mbit/s

95th percentile per-packet one-way delay: 177.396 ms

Loss rate: 6.27%

-- Flow 2:

Average throughput: 895.90 Mbit/s

95th percentile per-packet one-way delay: 194.711 ms

Loss rate: 3.95%

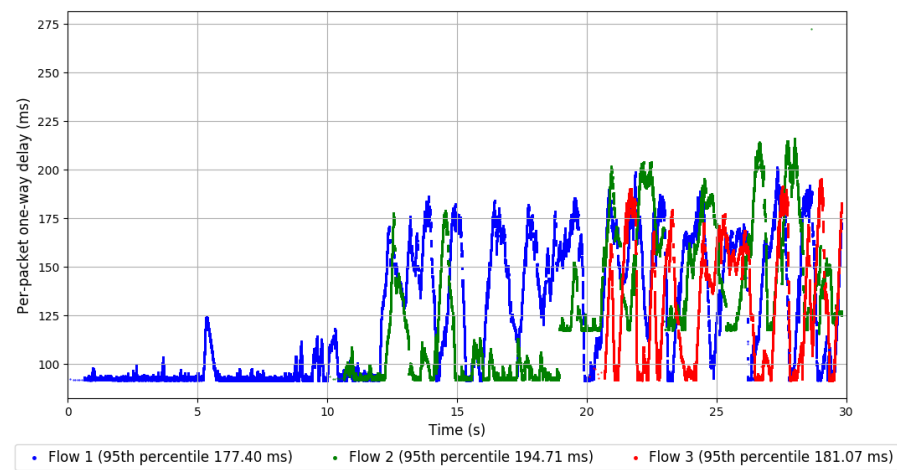
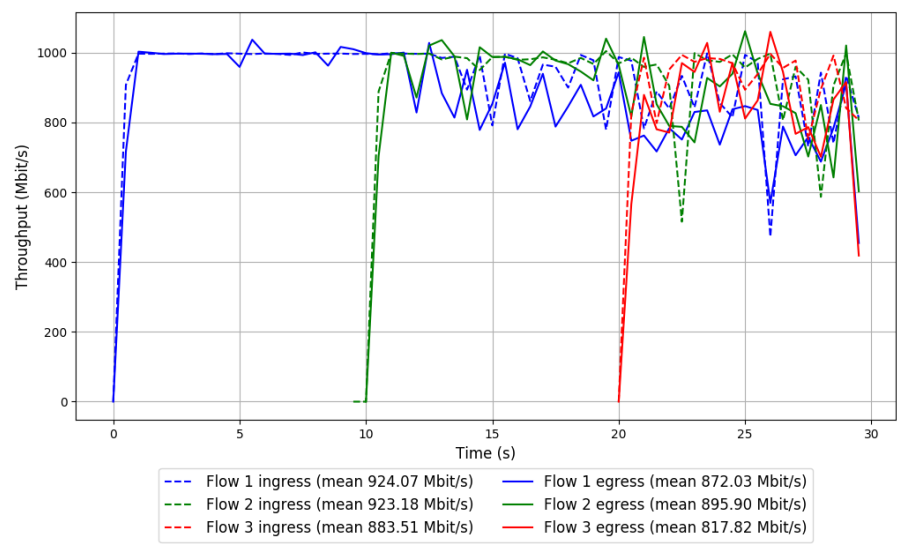
-- Flow 3:

Average throughput: 817.82 Mbit/s

95th percentile per-packet one-way delay: 181.070 ms

Loss rate: 9.36%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-09 12:54:23

End at: 2018-01-09 12:54:53

Below is generated by plot.py at 2018-01-09 18:37:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 1702.15 Mbit/s

95th percentile per-packet one-way delay: 194.880 ms

Loss rate: 6.46%

-- Flow 1:

Average throughput: 893.94 Mbit/s

95th percentile per-packet one-way delay: 173.442 ms

Loss rate: 5.13%

-- Flow 2:

Average throughput: 817.07 Mbit/s

95th percentile per-packet one-way delay: 201.356 ms

Loss rate: 7.68%

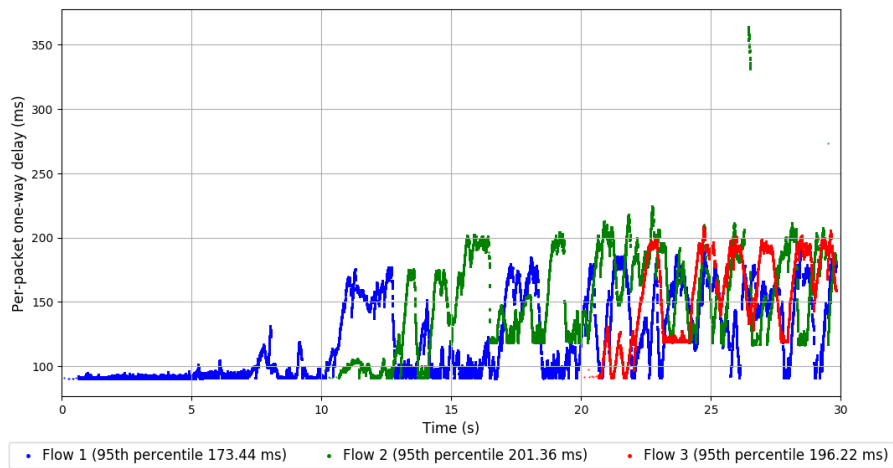
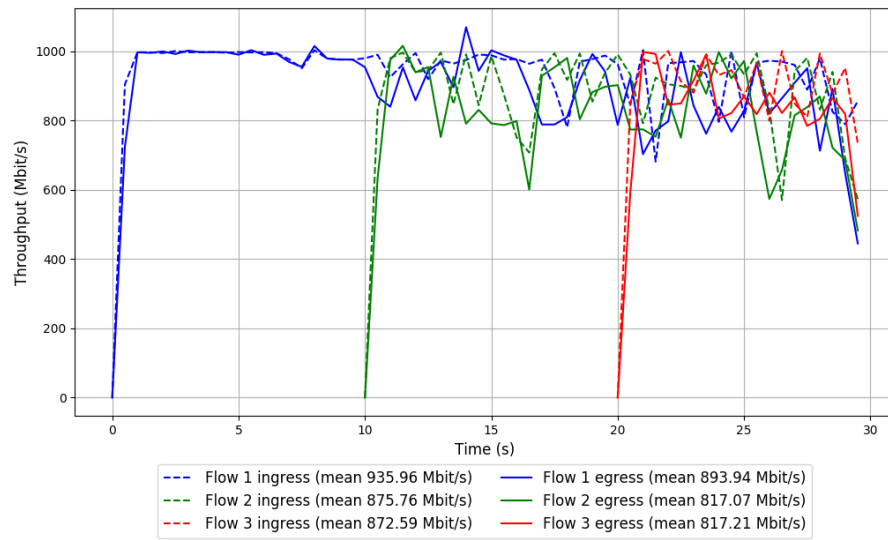
-- Flow 3:

Average throughput: 817.21 Mbit/s

95th percentile per-packet one-way delay: 196.217 ms

Loss rate: 8.28%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

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

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

Below is generated by plot.py at 2018-01-09 18:37:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 1410.28 Mbit/s

95th percentile per-packet one-way delay: 293.054 ms

Loss rate: 7.04%

-- Flow 1:

Average throughput: 866.37 Mbit/s

95th percentile per-packet one-way delay: 298.451 ms

Loss rate: 5.65%

-- Flow 2:

Average throughput: 455.43 Mbit/s

95th percentile per-packet one-way delay: 174.859 ms

Loss rate: 4.13%

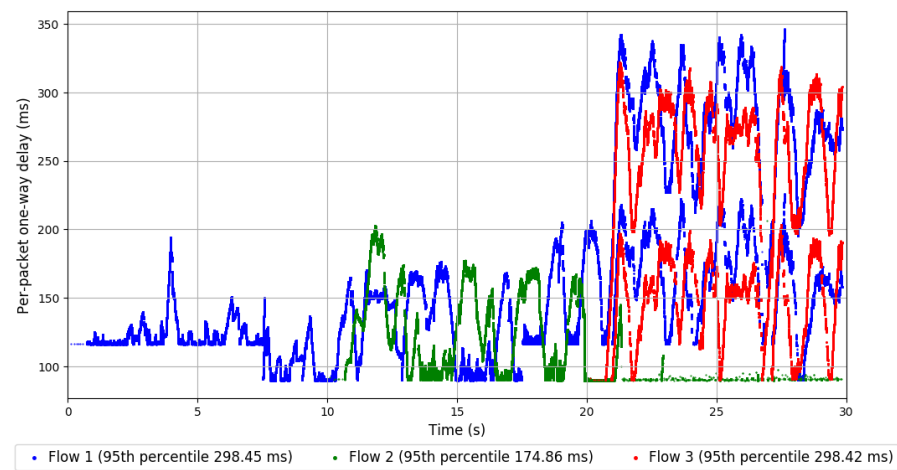
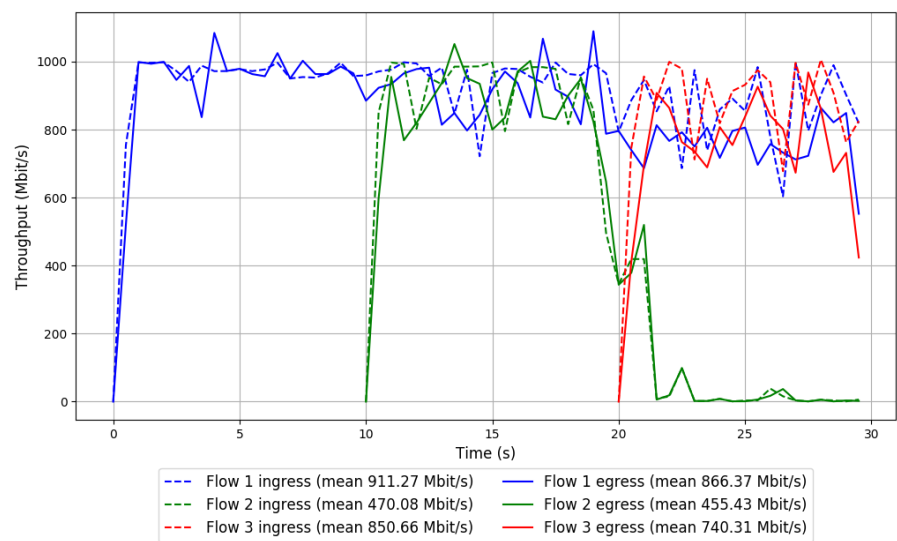
-- Flow 3:

Average throughput: 740.31 Mbit/s

95th percentile per-packet one-way delay: 298.418 ms

Loss rate: 14.76%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-09 13:24:38

End at: 2018-01-09 13:25:08

Below is generated by plot.py at 2018-01-09 18:37:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 1676.07 Mbit/s

95th percentile per-packet one-way delay: 290.967 ms

Loss rate: 7.90%

-- Flow 1:

Average throughput: 890.18 Mbit/s

95th percentile per-packet one-way delay: 285.626 ms

Loss rate: 5.60%

-- Flow 2:

Average throughput: 772.95 Mbit/s

95th percentile per-packet one-way delay: 309.516 ms

Loss rate: 11.35%

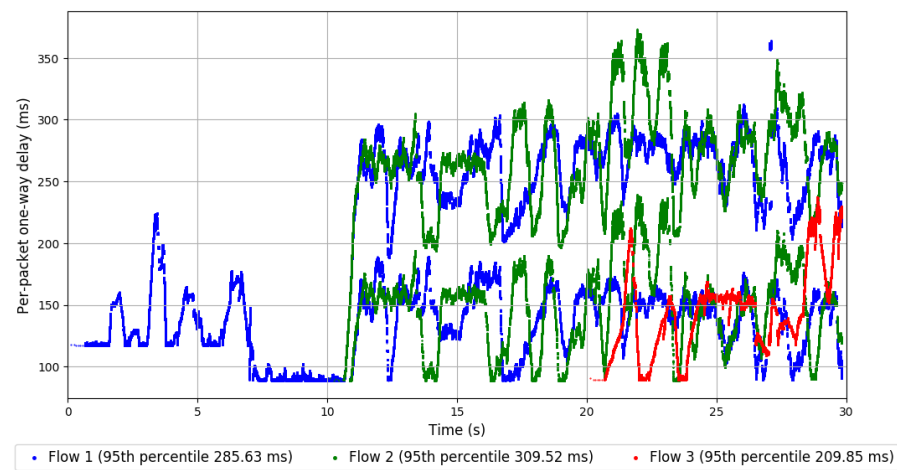
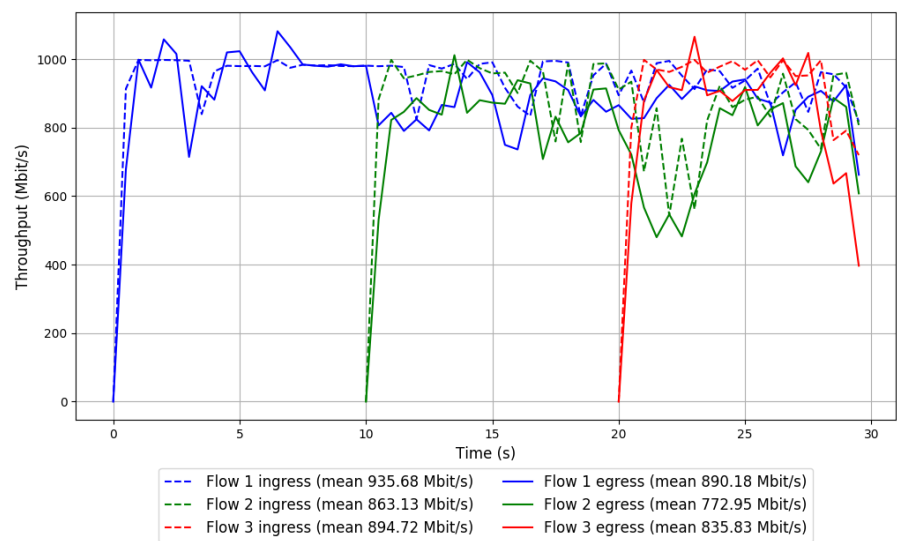
-- Flow 3:

Average throughput: 835.83 Mbit/s

95th percentile per-packet one-way delay: 209.855 ms

Loss rate: 8.50%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-09 13:40:02

End at: 2018-01-09 13:40:32

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 1761.53 Mbit/s

95th percentile per-packet one-way delay: 166.185 ms

Loss rate: 5.18%

-- Flow 1:

Average throughput: 907.79 Mbit/s

95th percentile per-packet one-way delay: 162.941 ms

Loss rate: 3.49%

-- Flow 2:

Average throughput: 858.16 Mbit/s

95th percentile per-packet one-way delay: 167.690 ms

Loss rate: 6.97%

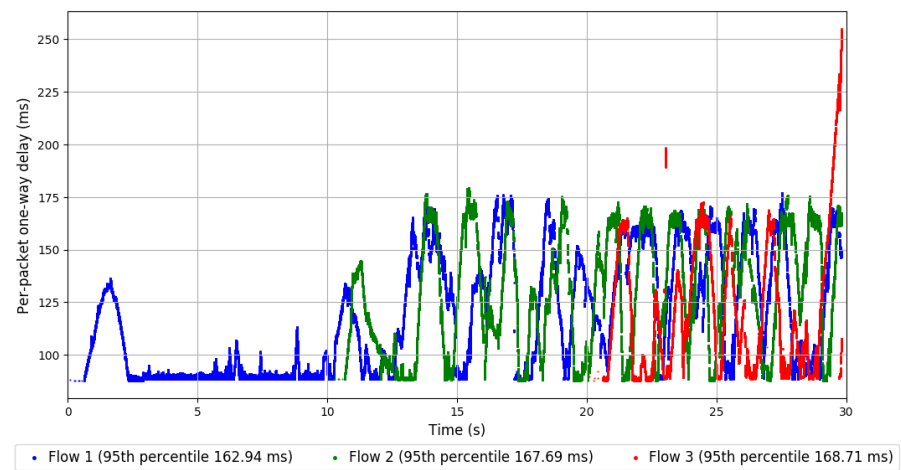
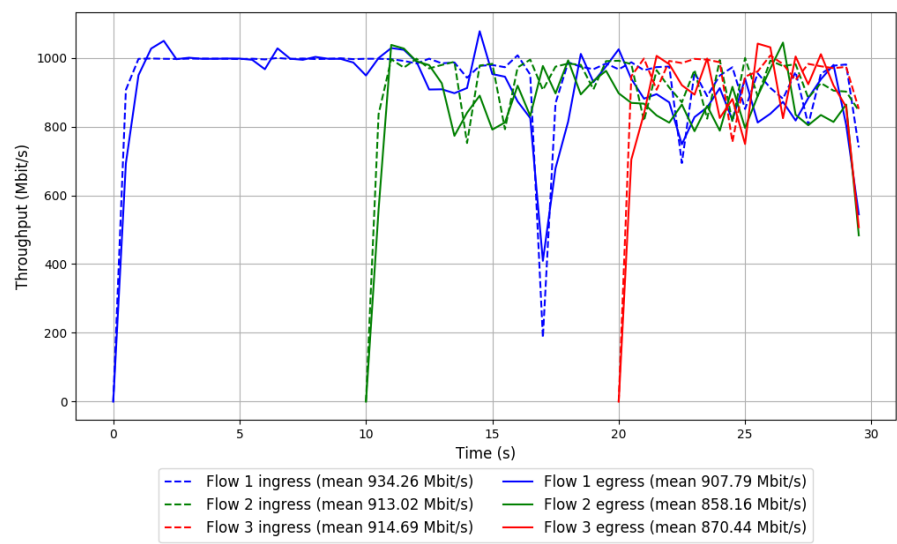
-- Flow 3:

Average throughput: 870.44 Mbit/s

95th percentile per-packet one-way delay: 168.709 ms

Loss rate: 6.79%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

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

End at: 2018-01-09 13:55:24

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

Datalink statistics

-- Total of 3 flows:

Average throughput: 1739.60 Mbit/s

95th percentile per-packet one-way delay: 173.900 ms

Loss rate: 6.32%

-- Flow 1:

Average throughput: 922.80 Mbit/s

95th percentile per-packet one-way delay: 161.088 ms

Loss rate: 3.92%

-- Flow 2:

Average throughput: 869.87 Mbit/s

95th percentile per-packet one-way delay: 171.000 ms

Loss rate: 6.47%

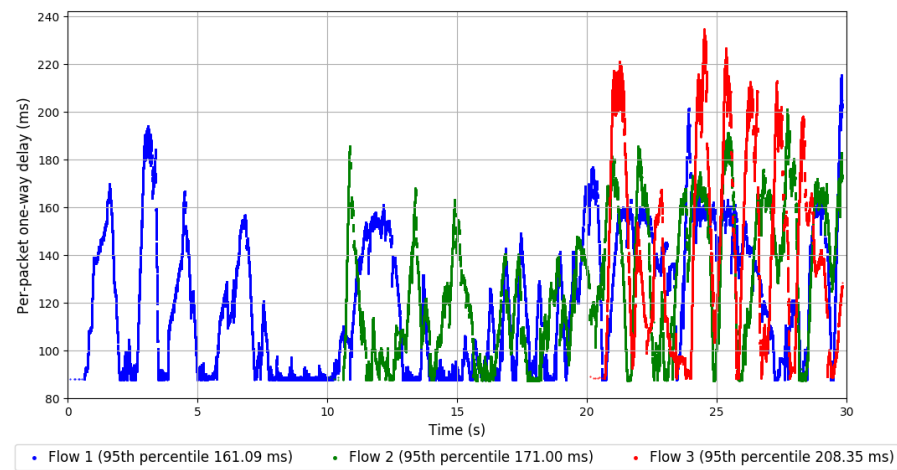
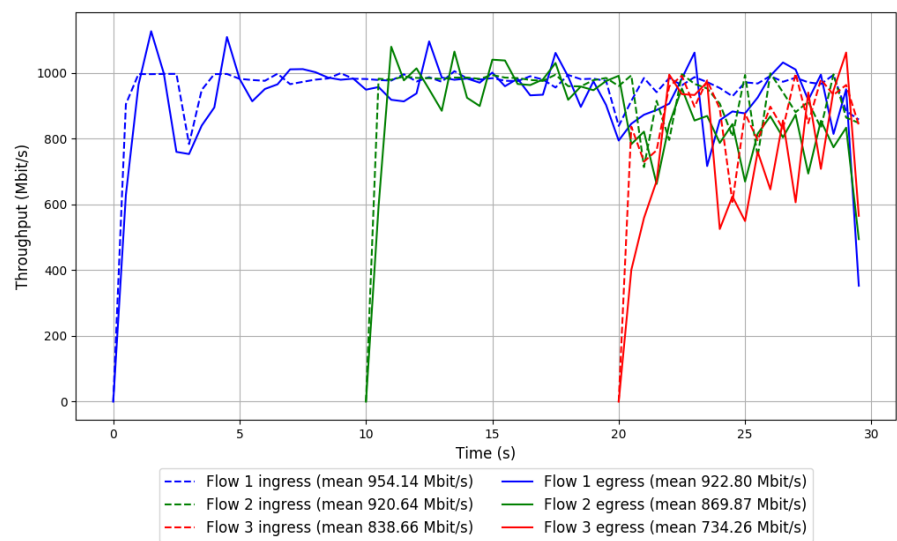
-- Flow 3:

Average throughput: 734.26 Mbit/s

95th percentile per-packet one-way delay: 208.355 ms

Loss rate: 14.21%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-09 14:10:16

End at: 2018-01-09 14:10:46

Below is generated by plot.py at 2018-01-09 18:41:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 1719.15 Mbit/s

95th percentile per-packet one-way delay: 296.501 ms

Loss rate: 6.81%

-- Flow 1:

Average throughput: 893.06 Mbit/s

95th percentile per-packet one-way delay: 299.822 ms

Loss rate: 5.10%

-- Flow 2:

Average throughput: 832.51 Mbit/s

95th percentile per-packet one-way delay: 173.572 ms

Loss rate: 8.39%

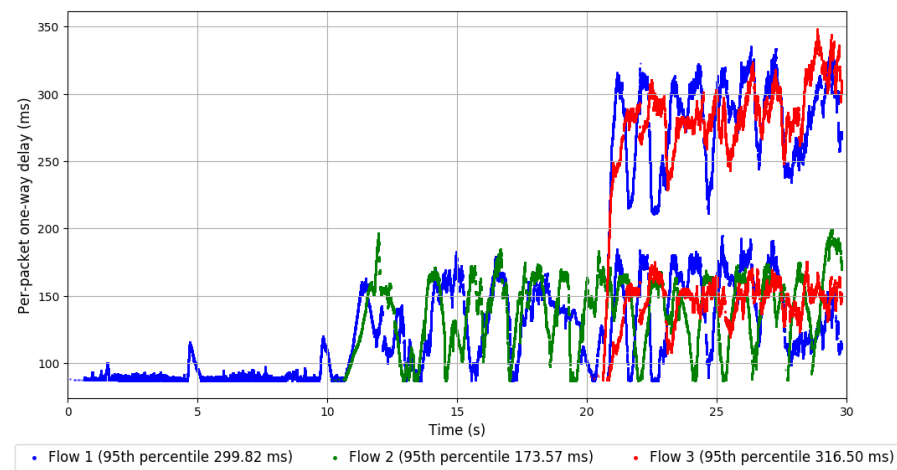
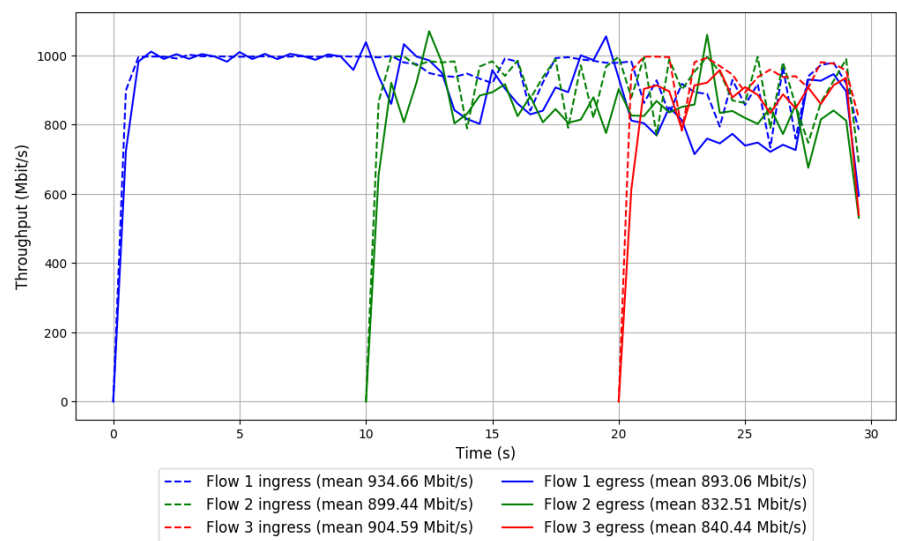
-- Flow 3:

Average throughput: 840.44 Mbit/s

95th percentile per-packet one-way delay: 316.501 ms

Loss rate: 9.03%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-09 14:25:55

End at: 2018-01-09 14:26:25

Below is generated by plot.py at 2018-01-09 18:49:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 1725.90 Mbit/s

95th percentile per-packet one-way delay: 228.634 ms

Loss rate: 5.48%

-- Flow 1:

Average throughput: 899.11 Mbit/s

95th percentile per-packet one-way delay: 266.544 ms

Loss rate: 4.09%

-- Flow 2:

Average throughput: 836.17 Mbit/s

95th percentile per-packet one-way delay: 185.989 ms

Loss rate: 7.10%

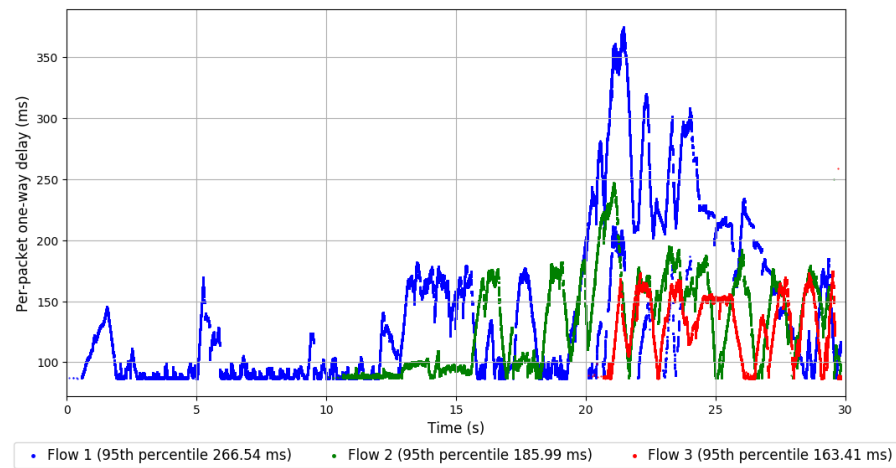
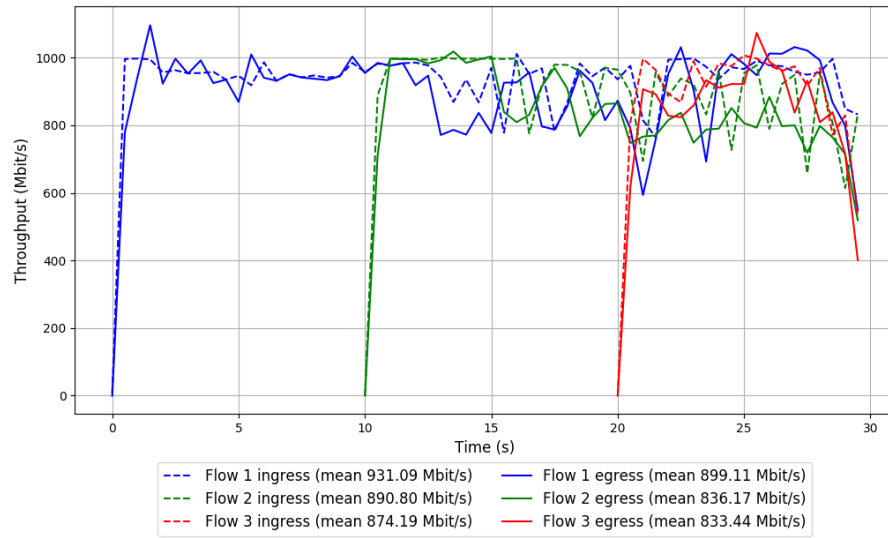
-- Flow 3:

Average throughput: 833.44 Mbit/s

95th percentile per-packet one-way delay: 163.410 ms

Loss rate: 6.66%

Run 9: Report of FillP — Data Link

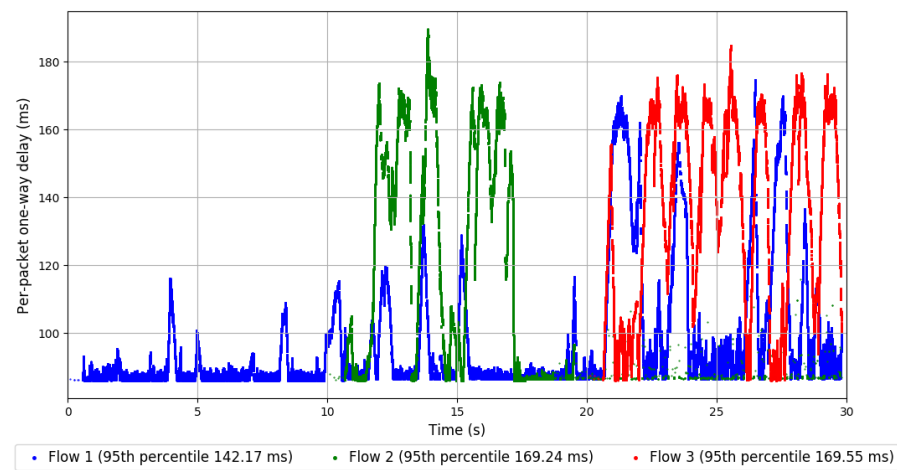
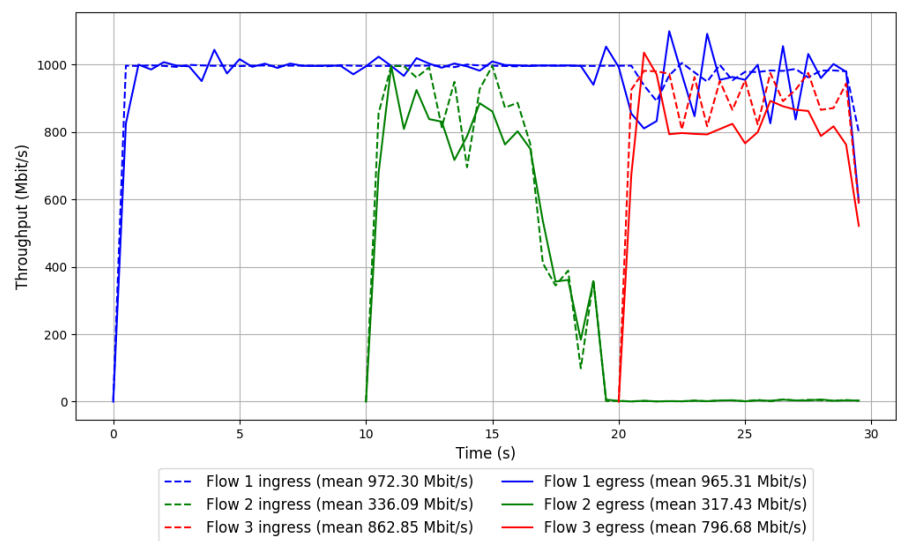


```
Run 10: Statistics of FillP

Start at: 2018-01-09 14:41:27
End at: 2018-01-09 14:41:57

# Below is generated by plot.py at 2018-01-09 18:49:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1435.63 Mbit/s
95th percentile per-packet one-way delay: 165.497 ms
Loss rate: 3.74%
-- Flow 1:
Average throughput: 965.31 Mbit/s
95th percentile per-packet one-way delay: 142.169 ms
Loss rate: 1.39%
-- Flow 2:
Average throughput: 317.43 Mbit/s
95th percentile per-packet one-way delay: 169.244 ms
Loss rate: 6.51%
-- Flow 3:
Average throughput: 796.68 Mbit/s
95th percentile per-packet one-way delay: 169.549 ms
Loss rate: 9.56%
```

Run 10: Report of FillP — Data Link

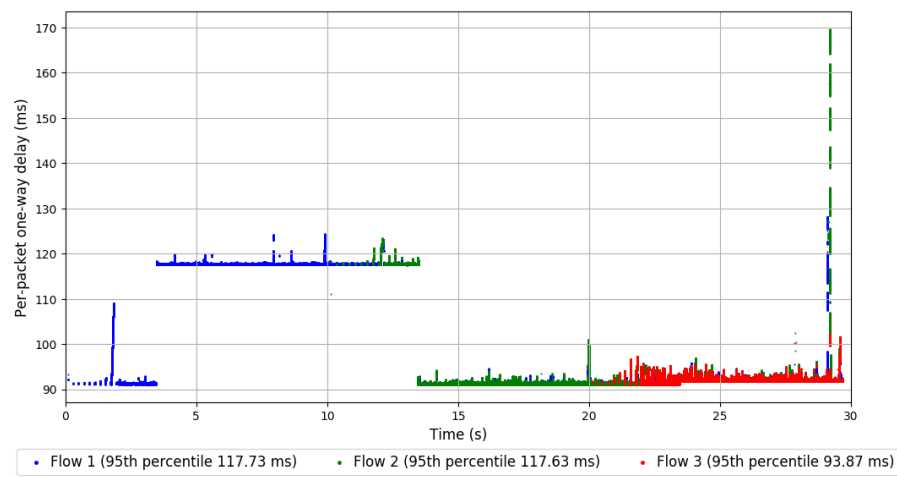
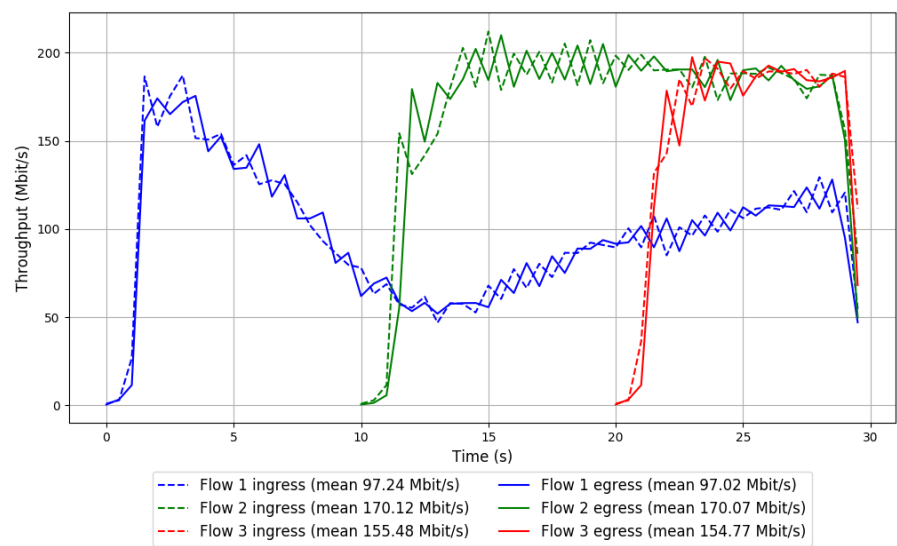


```
Run 1: Statistics of Indigo

Start at: 2018-01-09 12:36:51
End at: 2018-01-09 12:37:21

# Below is generated by plot.py at 2018-01-09 18:49:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 259.11 Mbit/s
95th percentile per-packet one-way delay: 117.679 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 117.727 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 170.07 Mbit/s
95th percentile per-packet one-way delay: 117.630 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 154.77 Mbit/s
95th percentile per-packet one-way delay: 93.867 ms
Loss rate: 2.52%
```

Run 1: Report of Indigo — Data Link

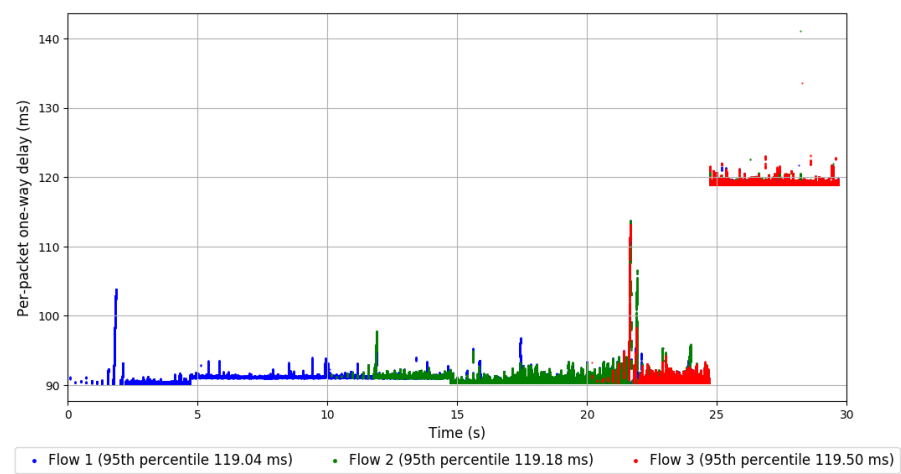
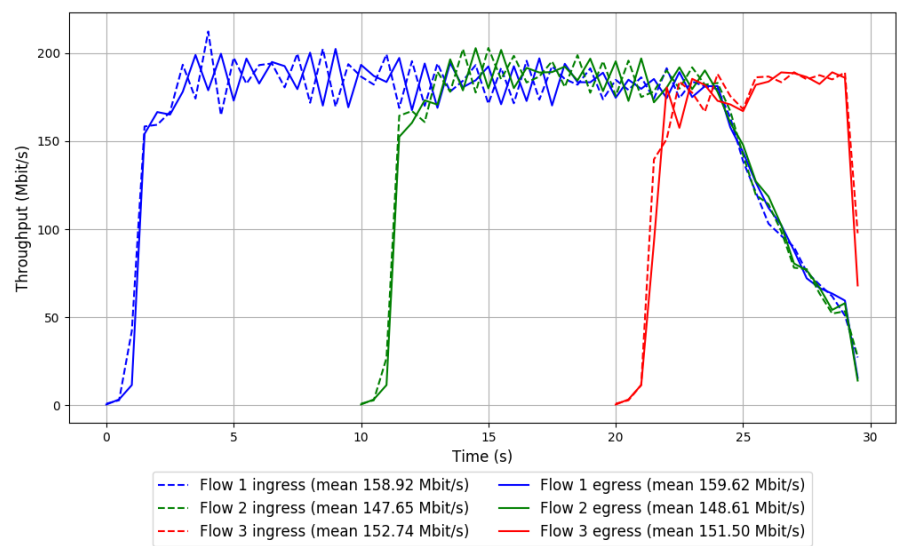


```
Run 2: Statistics of Indigo

Start at: 2018-01-09 12:52:20
End at: 2018-01-09 12:52:50

# Below is generated by plot.py at 2018-01-09 18:49:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 306.19 Mbit/s
95th percentile per-packet one-way delay: 119.207 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 159.62 Mbit/s
95th percentile per-packet one-way delay: 119.039 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 148.61 Mbit/s
95th percentile per-packet one-way delay: 119.181 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 151.50 Mbit/s
95th percentile per-packet one-way delay: 119.501 ms
Loss rate: 2.59%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

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

End at: 2018-01-09 13:07:43

Below is generated by plot.py at 2018-01-09 18:49:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.84 Mbit/s

95th percentile per-packet one-way delay: 91.472 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 175.61 Mbit/s

95th percentile per-packet one-way delay: 91.088 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 124.38 Mbit/s

95th percentile per-packet one-way delay: 92.580 ms

Loss rate: 0.19%

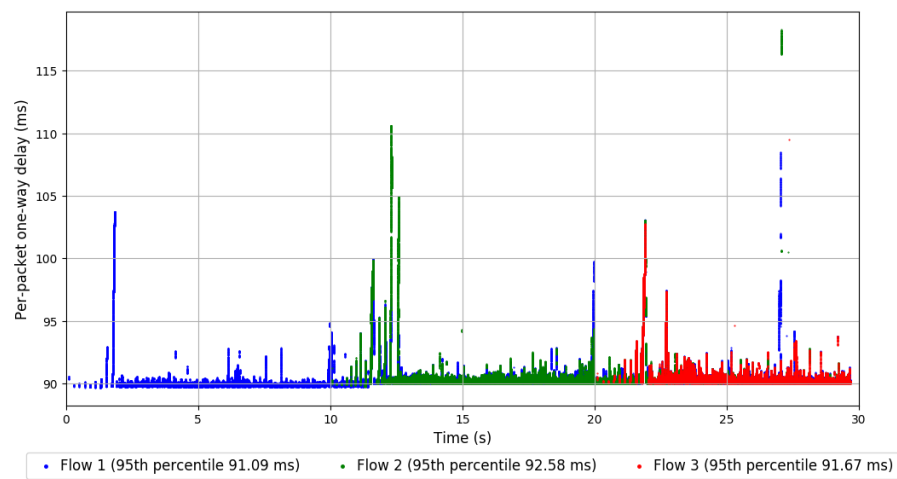
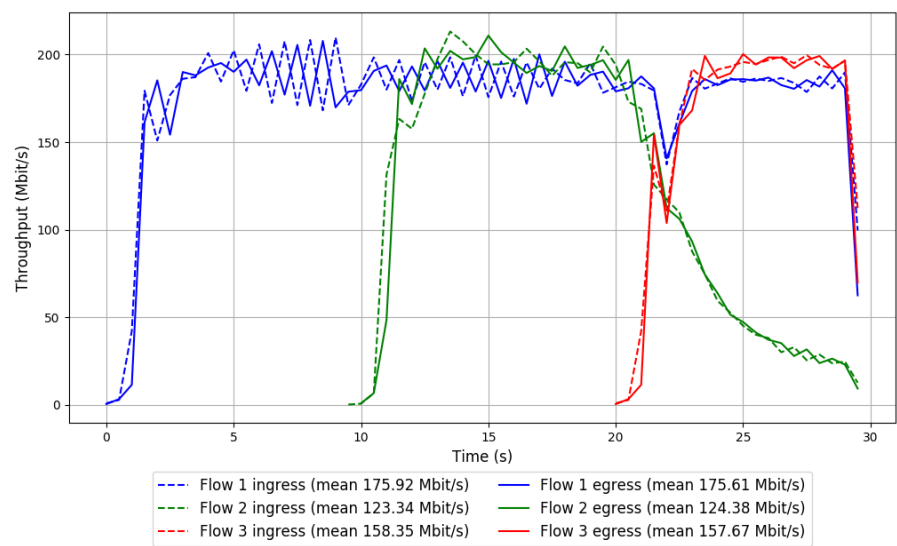
-- Flow 3:

Average throughput: 157.67 Mbit/s

95th percentile per-packet one-way delay: 91.668 ms

Loss rate: 2.49%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-09 13:22:33

End at: 2018-01-09 13:23:03

Below is generated by plot.py at 2018-01-09 18:49:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 248.31 Mbit/s

95th percentile per-packet one-way delay: 115.587 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 146.92 Mbit/s

95th percentile per-packet one-way delay: 115.477 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 132.15 Mbit/s

95th percentile per-packet one-way delay: 115.558 ms

Loss rate: 0.31%

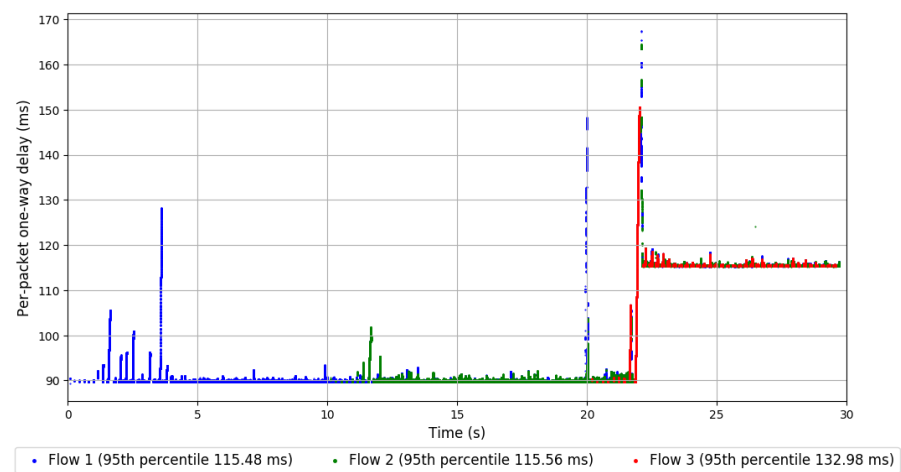
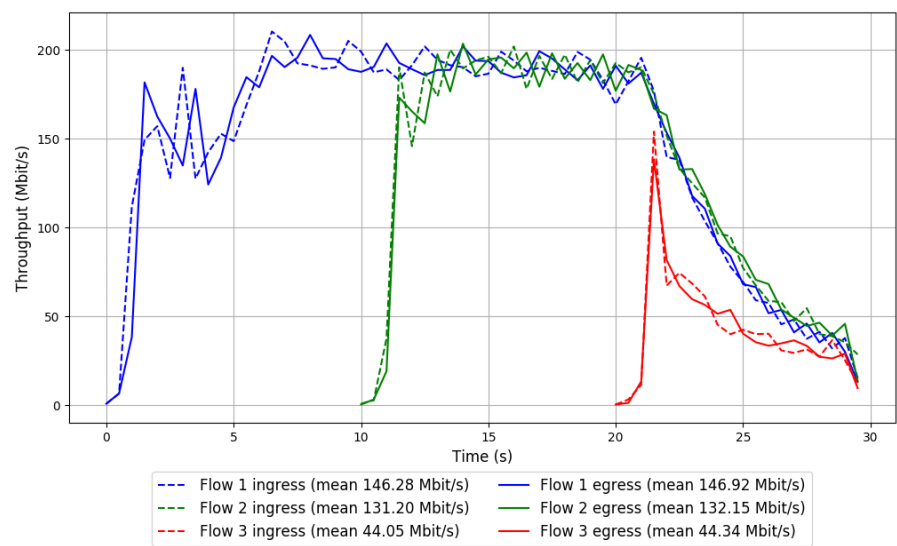
-- Flow 3:

Average throughput: 44.34 Mbit/s

95th percentile per-packet one-way delay: 132.976 ms

Loss rate: 1.47%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-09 13:37:57

End at: 2018-01-09 13:38:27

Below is generated by plot.py at 2018-01-09 18:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 319.81 Mbit/s

95th percentile per-packet one-way delay: 117.034 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 163.74 Mbit/s

95th percentile per-packet one-way delay: 117.143 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 172.81 Mbit/s

95th percentile per-packet one-way delay: 115.201 ms

Loss rate: 0.92%

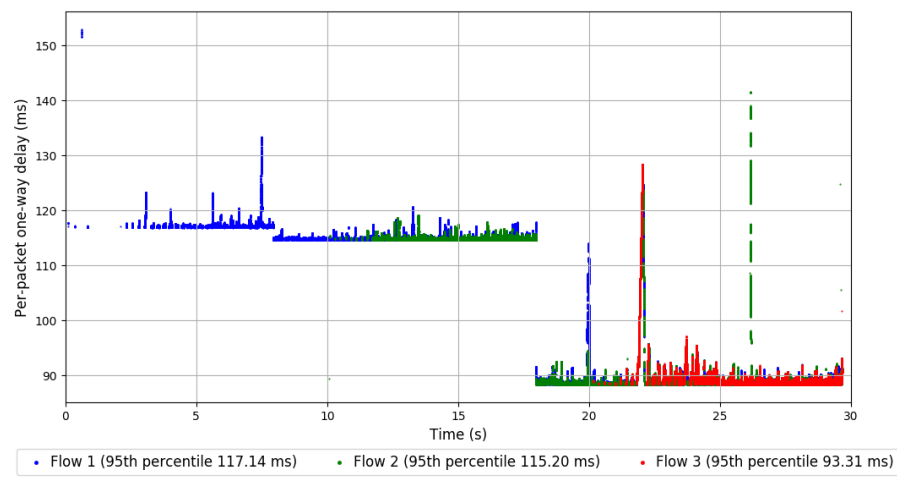
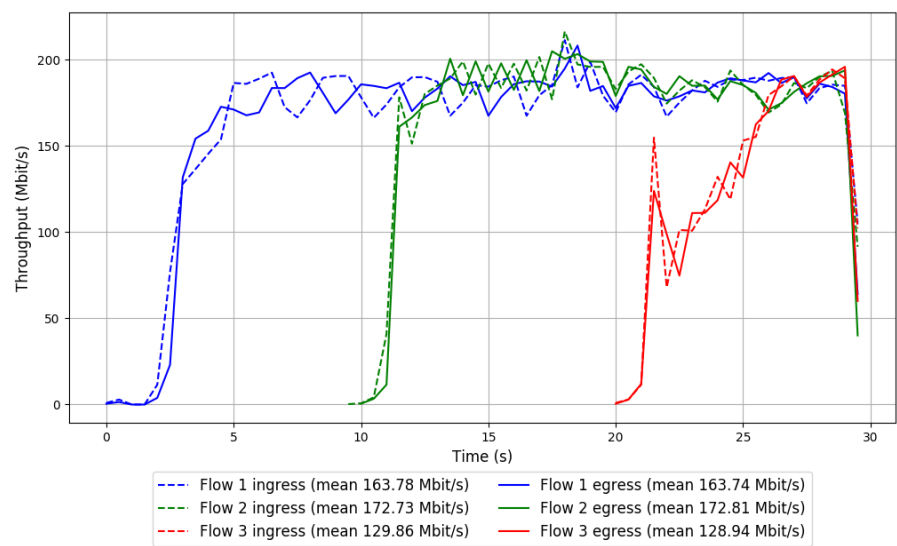
-- Flow 3:

Average throughput: 128.94 Mbit/s

95th percentile per-packet one-way delay: 93.311 ms

Loss rate: 2.81%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-09 13:52:51

End at: 2018-01-09 13:53:21

Below is generated by plot.py at 2018-01-09 18:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 339.17 Mbit/s

95th percentile per-packet one-way delay: 92.474 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 175.53 Mbit/s

95th percentile per-packet one-way delay: 94.290 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 175.66 Mbit/s

95th percentile per-packet one-way delay: 91.056 ms

Loss rate: 1.07%

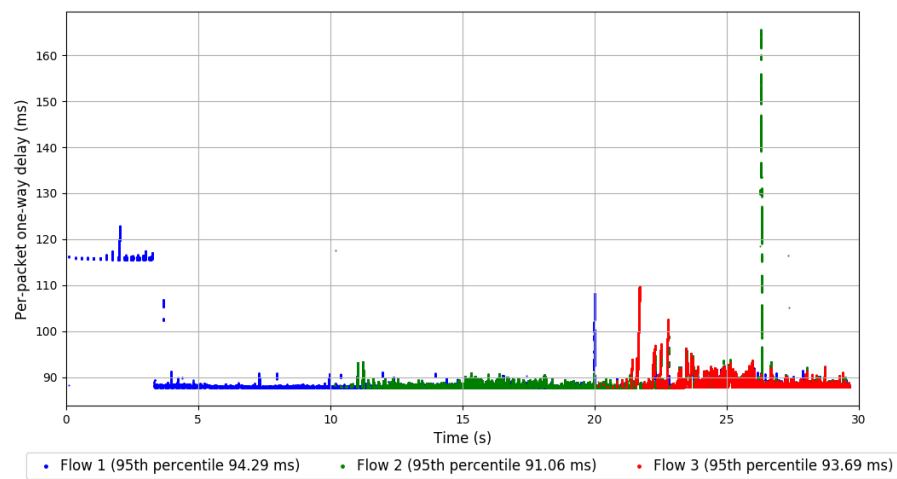
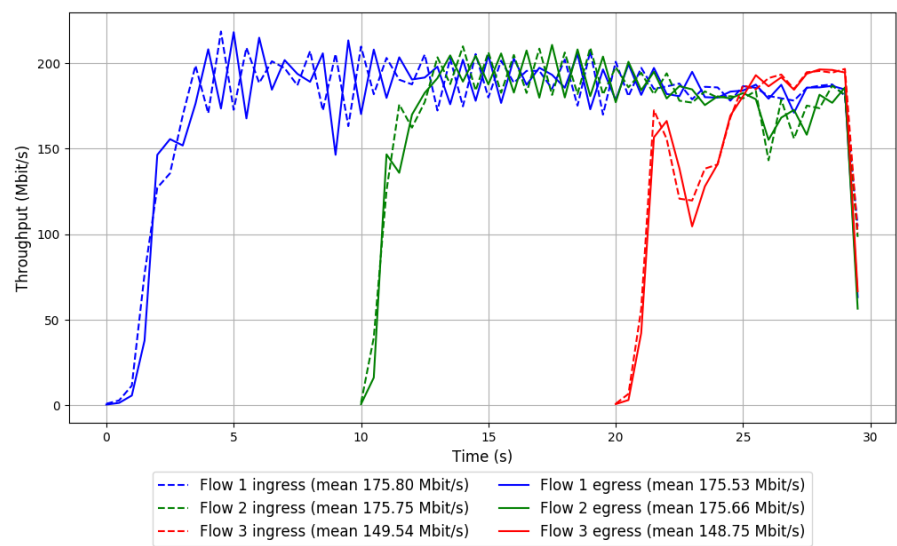
-- Flow 3:

Average throughput: 148.75 Mbit/s

95th percentile per-packet one-way delay: 93.685 ms

Loss rate: 2.38%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

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

End at: 2018-01-09 14:08:38

Below is generated by plot.py at 2018-01-09 18:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 339.14 Mbit/s

95th percentile per-packet one-way delay: 91.461 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 175.69 Mbit/s

95th percentile per-packet one-way delay: 90.631 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 171.26 Mbit/s

95th percentile per-packet one-way delay: 91.466 ms

Loss rate: 1.04%

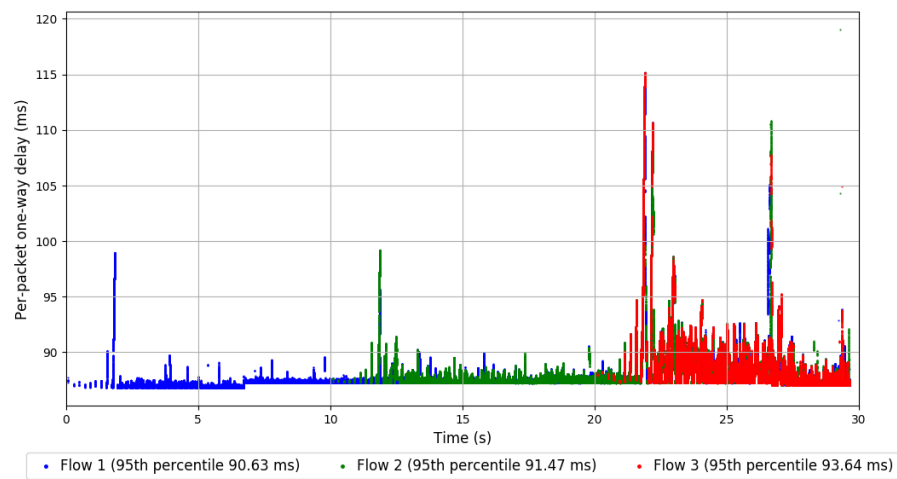
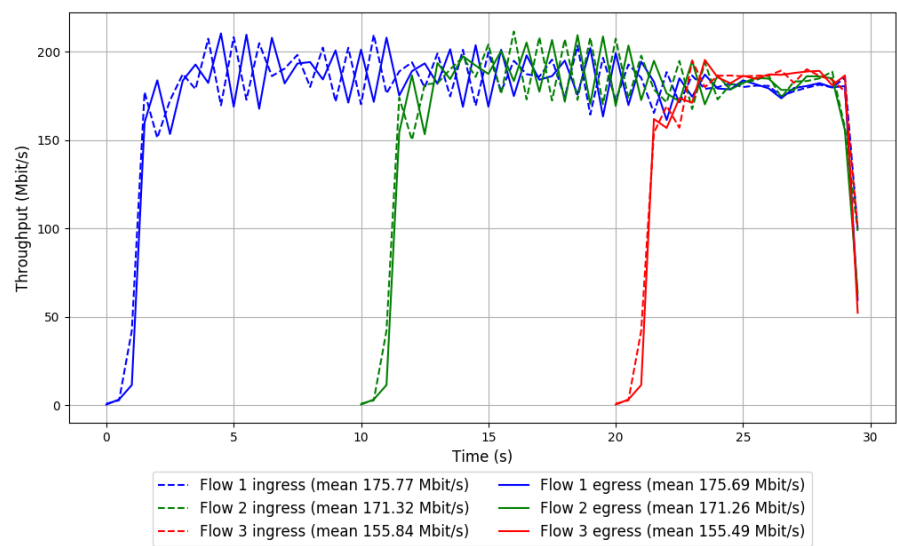
-- Flow 3:

Average throughput: 155.49 Mbit/s

95th percentile per-packet one-way delay: 93.638 ms

Loss rate: 2.30%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-09 14:23:48

End at: 2018-01-09 14:24:18

Below is generated by plot.py at 2018-01-09 18:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 343.70 Mbit/s

95th percentile per-packet one-way delay: 90.173 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 182.59 Mbit/s

95th percentile per-packet one-way delay: 88.918 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 168.18 Mbit/s

95th percentile per-packet one-way delay: 92.537 ms

Loss rate: 1.25%

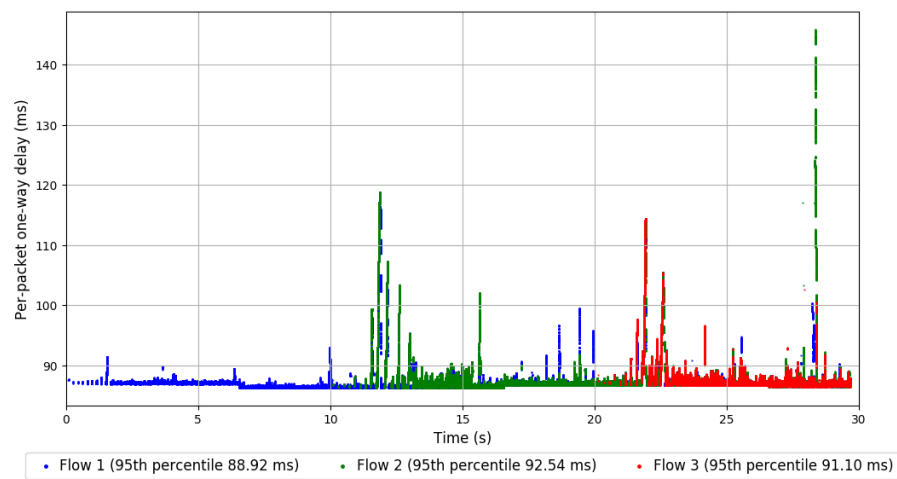
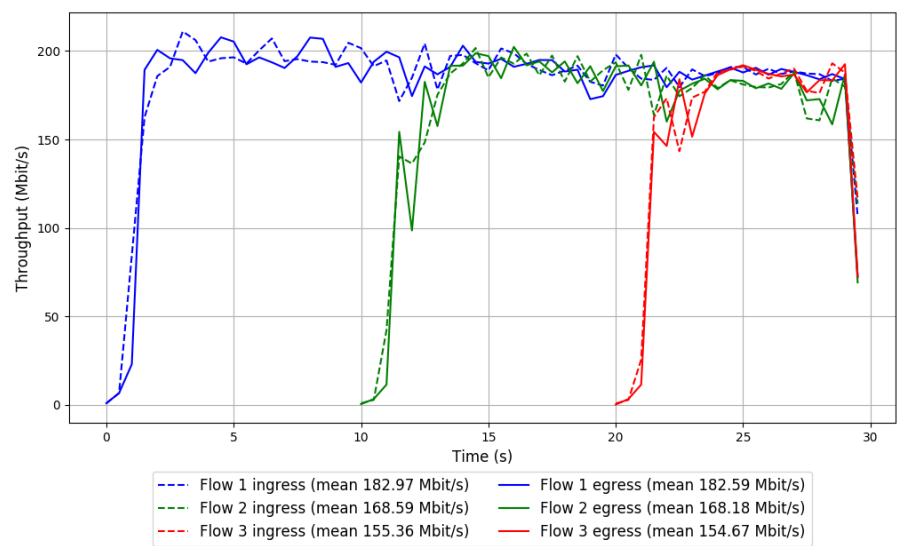
-- Flow 3:

Average throughput: 154.67 Mbit/s

95th percentile per-packet one-way delay: 91.103 ms

Loss rate: 2.53%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-09 14:39:27

End at: 2018-01-09 14:39:57

Below is generated by plot.py at 2018-01-09 18:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 248.45 Mbit/s

95th percentile per-packet one-way delay: 88.008 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 78.66 Mbit/s

95th percentile per-packet one-way delay: 89.206 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 175.25 Mbit/s

95th percentile per-packet one-way delay: 87.309 ms

Loss rate: 0.95%

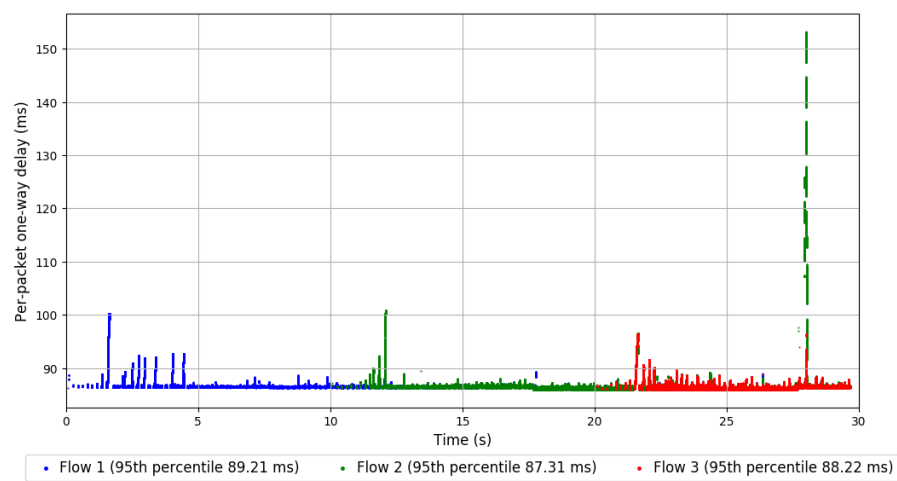
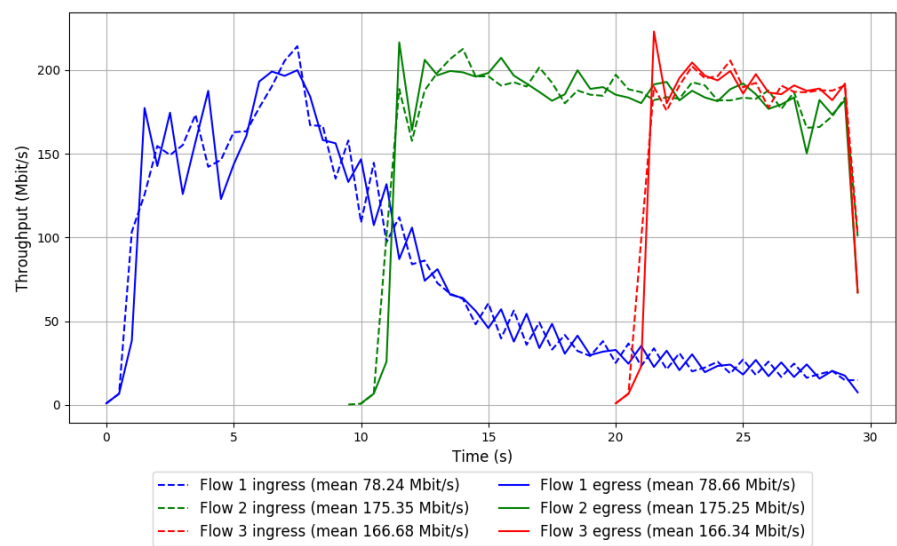
-- Flow 3:

Average throughput: 166.34 Mbit/s

95th percentile per-packet one-way delay: 88.224 ms

Loss rate: 2.06%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-09 14:54:38

End at: 2018-01-09 14:55:08

Below is generated by plot.py at 2018-01-09 18:49:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 348.80 Mbit/s

95th percentile per-packet one-way delay: 90.801 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 178.45 Mbit/s

95th percentile per-packet one-way delay: 90.028 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 177.42 Mbit/s

95th percentile per-packet one-way delay: 90.868 ms

Loss rate: 0.57%

-- Flow 3:

Average throughput: 163.17 Mbit/s

95th percentile per-packet one-way delay: 92.868 ms

Loss rate: 2.01%

Run 10: Report of Indigo — Data Link

