

Pantheon Report

Generated at 2017-12-21 03:21:58 (UTC).

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

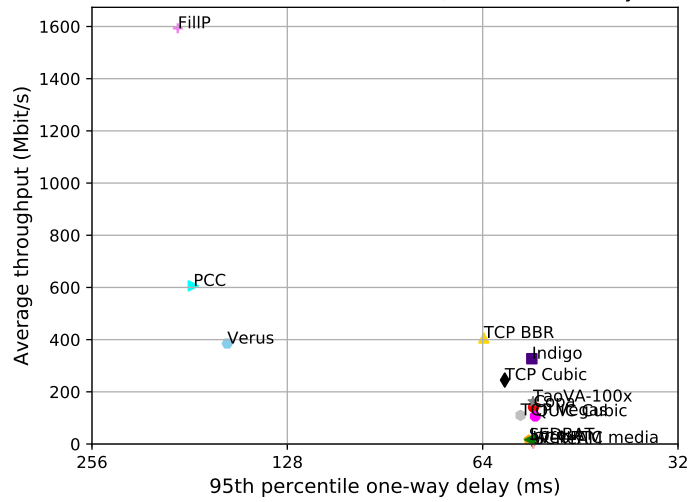
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

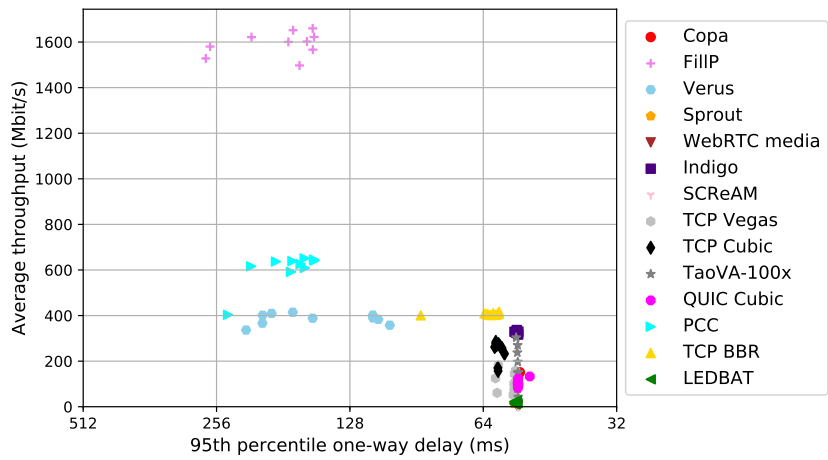
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	208.94	202.19	191.27	60.52	63.89	65.76	0.40	0.58	1.27
TCP Cubic	10	135.55	108.21	114.26	58.52	58.74	59.05	0.46	0.87	1.14
LEDBAT	10	8.69	7.76	7.98	54.10	54.16	54.18	1.74	1.88	2.23
PCC	10	519.27	109.68	41.21	173.41	172.89	157.26	2.52	2.53	3.69
QUIC Cubic	10	53.58	57.60	45.16	52.77	52.75	52.50	0.36	0.67	0.99
SCReAM	5	105.81	0.21	0.22	666.60	52.77	52.77	0.19	0.42	1.11
WebRTC media	10	2.24	1.42	0.58	53.20	52.86	53.47	0.41	0.66	2.96
Sprout	10	7.65	7.58	7.36	54.30	54.33	54.36	0.70	0.85	1.22
TaoVA-100x	10	87.09	64.06	171.95	53.51	53.42	53.89	0.47	0.45	0.98
TCP Vegas	10	51.70	45.87	83.87	54.58	55.87	54.93	0.72	0.70	1.25
Verus	10	245.10	154.81	118.87	152.87	150.20	149.48	1.02	1.87	2.55
Copa	10	77.00	72.36	64.42	53.39	53.39	53.51	0.23	0.46	1.45
FillP	10	830.54	799.18	706.61	161.29	181.24	186.64	7.66	9.10	14.35
Indigo	10	174.75	162.15	137.92	53.58	54.05	53.83	0.33	0.50	1.18

Run 1: Statistics of TCP BBR

Start at: 2017-12-20 21:05:23

End at: 2017-12-20 21:05:54

Below is generated by plot.py at 2017-12-21 01:53:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 410.23 Mbit/s

95th percentile per-packet one-way delay: 60.820 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 209.90 Mbit/s

95th percentile per-packet one-way delay: 59.864 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 203.89 Mbit/s

95th percentile per-packet one-way delay: 60.243 ms

Loss rate: 0.59%

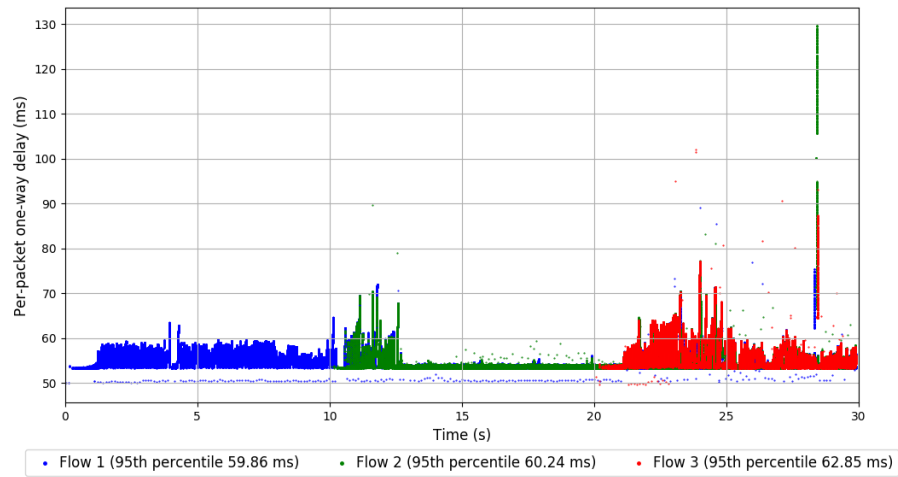
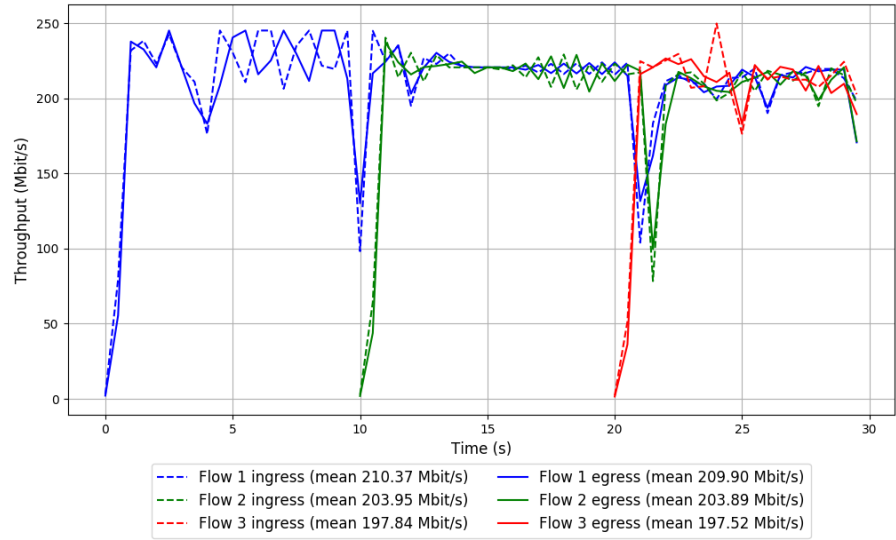
-- Flow 3:

Average throughput: 197.52 Mbit/s

95th percentile per-packet one-way delay: 62.850 ms

Loss rate: 1.21%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-20 21:19:02

End at: 2017-12-20 21:19:32

Below is generated by plot.py at 2017-12-21 01:53:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 406.62 Mbit/s

95th percentile per-packet one-way delay: 62.831 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 207.68 Mbit/s

95th percentile per-packet one-way delay: 61.594 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 200.64 Mbit/s

95th percentile per-packet one-way delay: 62.961 ms

Loss rate: 0.55%

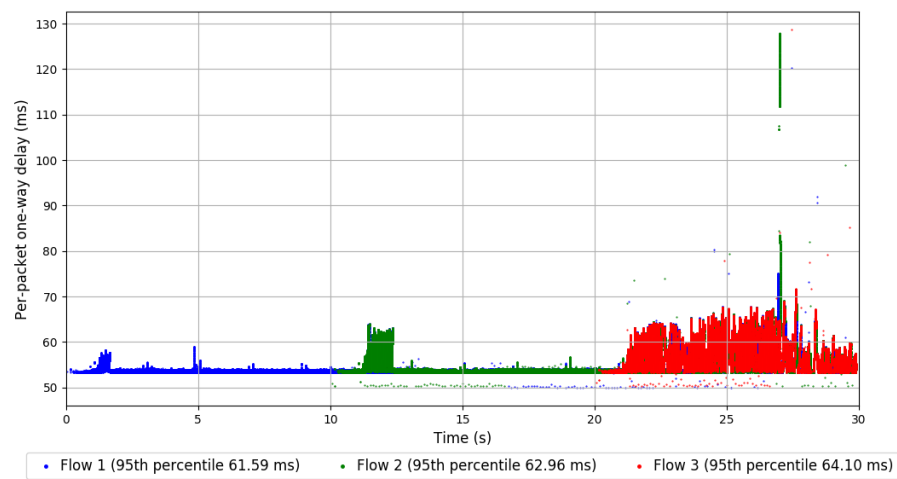
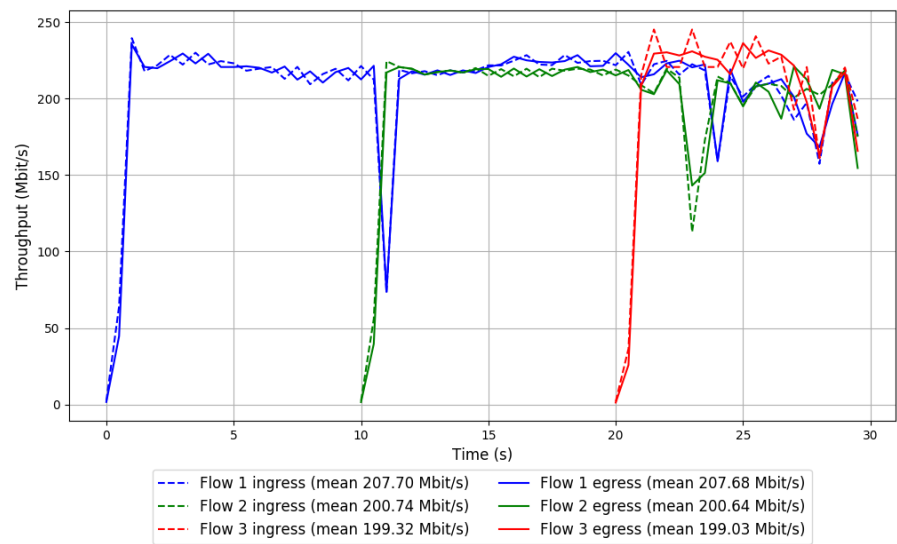
-- Flow 3:

Average throughput: 199.03 Mbit/s

95th percentile per-packet one-way delay: 64.104 ms

Loss rate: 1.16%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-20 21:33:27

End at: 2017-12-20 21:33:57

Below is generated by plot.py at 2017-12-21 01:53:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 403.67 Mbit/s

95th percentile per-packet one-way delay: 59.946 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 213.19 Mbit/s

95th percentile per-packet one-way delay: 58.653 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 199.48 Mbit/s

95th percentile per-packet one-way delay: 59.859 ms

Loss rate: 0.67%

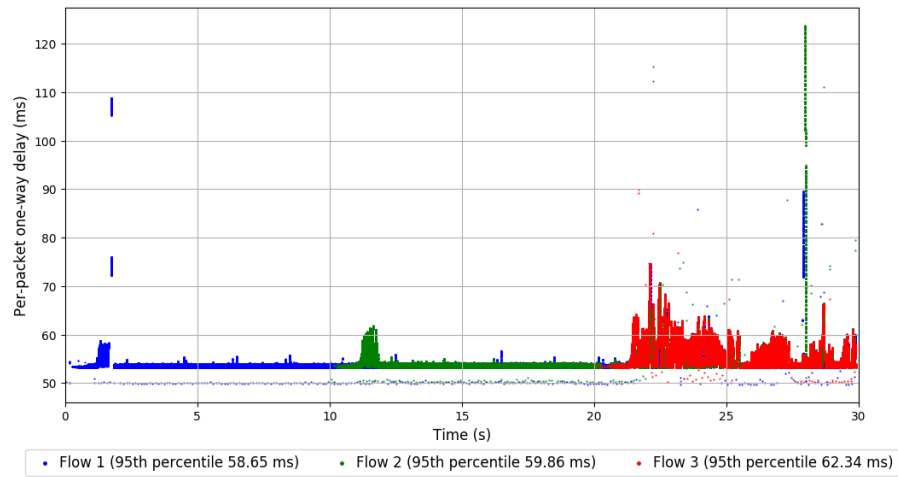
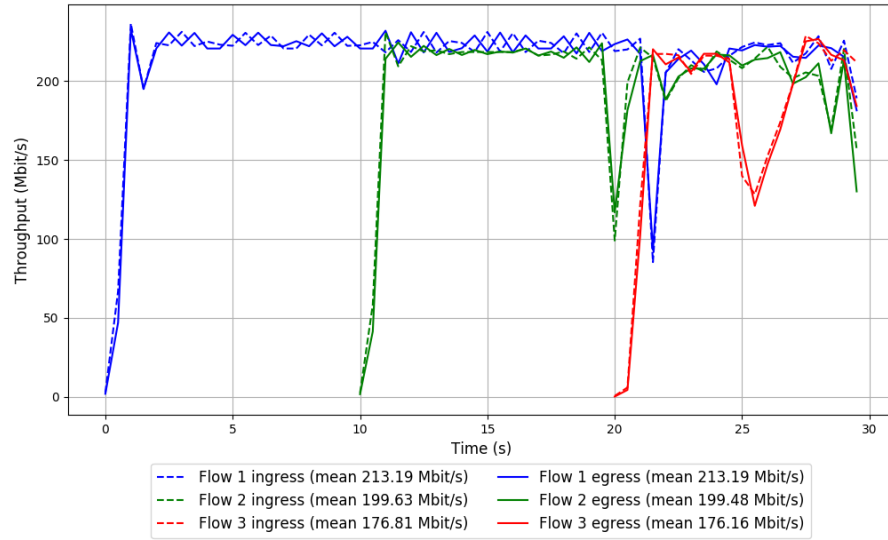
-- Flow 3:

Average throughput: 176.16 Mbit/s

95th percentile per-packet one-way delay: 62.336 ms

Loss rate: 1.51%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-20 21:47:22

End at: 2017-12-20 21:47:52

Below is generated by plot.py at 2017-12-21 01:53:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 403.00 Mbit/s

95th percentile per-packet one-way delay: 59.788 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 207.83 Mbit/s

95th percentile per-packet one-way delay: 58.366 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 201.40 Mbit/s

95th percentile per-packet one-way delay: 60.899 ms

Loss rate: 0.56%

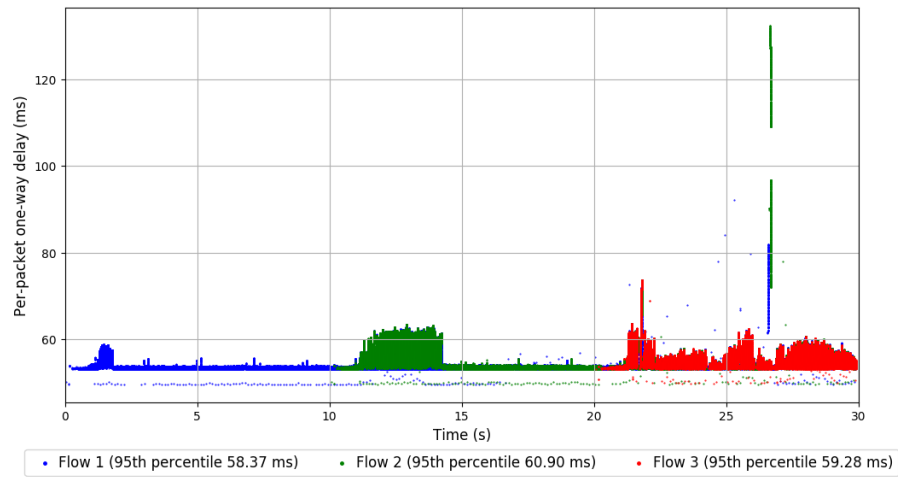
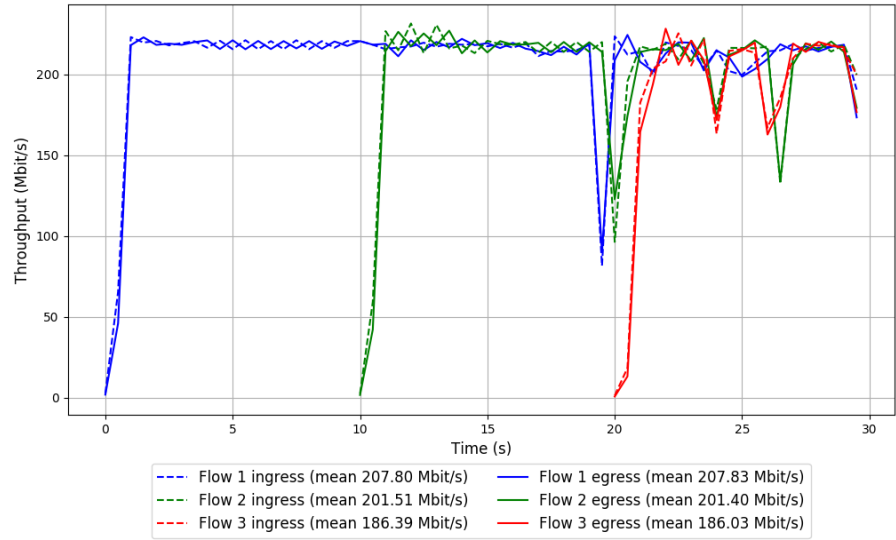
-- Flow 3:

Average throughput: 186.03 Mbit/s

95th percentile per-packet one-way delay: 59.277 ms

Loss rate: 1.23%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-20 22:01:24

End at: 2017-12-20 22:01:54

Below is generated by plot.py at 2017-12-21 01:53:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 409.12 Mbit/s

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

Loss rate: 0.57%

-- Flow 1:

Average throughput: 211.20 Mbit/s

95th percentile per-packet one-way delay: 61.624 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 202.52 Mbit/s

95th percentile per-packet one-way delay: 63.703 ms

Loss rate: 0.56%

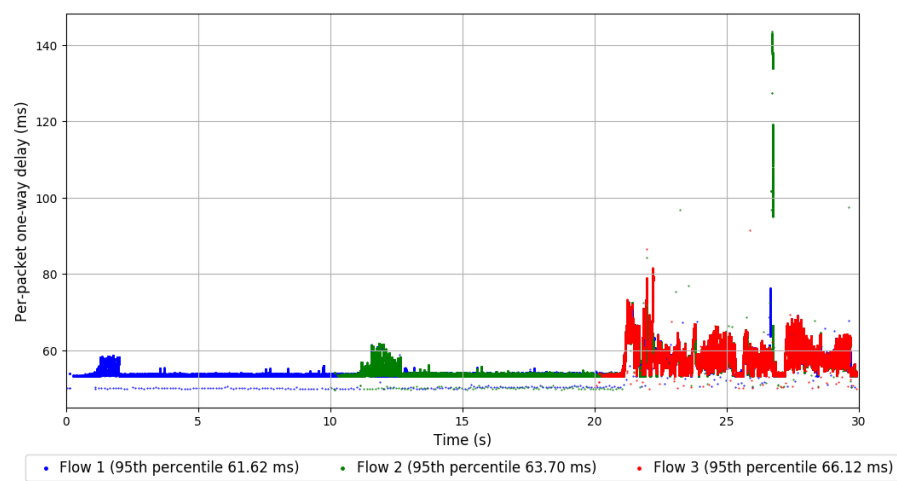
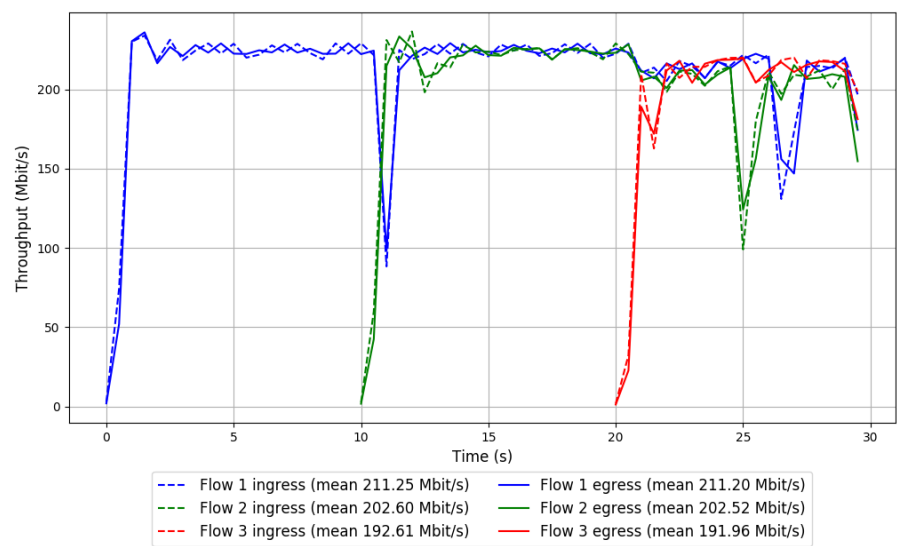
-- Flow 3:

Average throughput: 191.96 Mbit/s

95th percentile per-packet one-way delay: 66.123 ms

Loss rate: 1.24%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-20 22:15:09

End at: 2017-12-20 22:15:39

Below is generated by plot.py at 2017-12-21 01:53:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 417.21 Mbit/s

95th percentile per-packet one-way delay: 58.978 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 211.03 Mbit/s

95th percentile per-packet one-way delay: 58.525 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 212.96 Mbit/s

95th percentile per-packet one-way delay: 58.924 ms

Loss rate: 0.54%

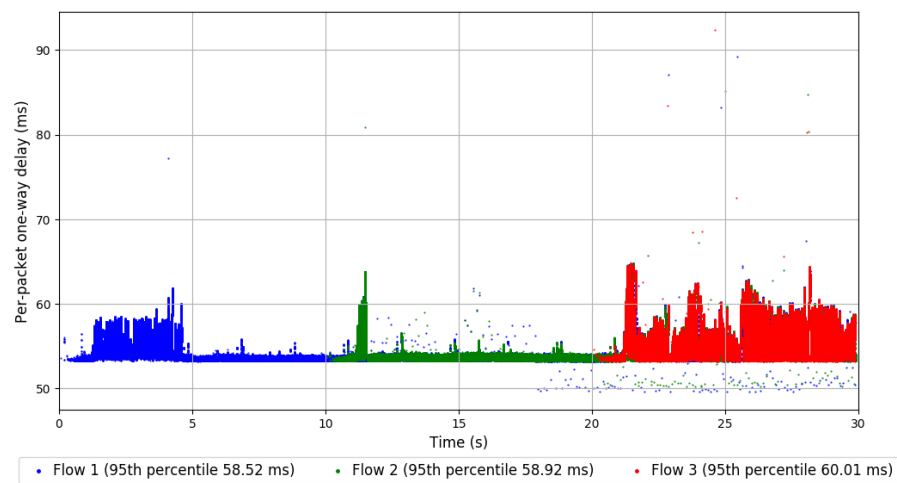
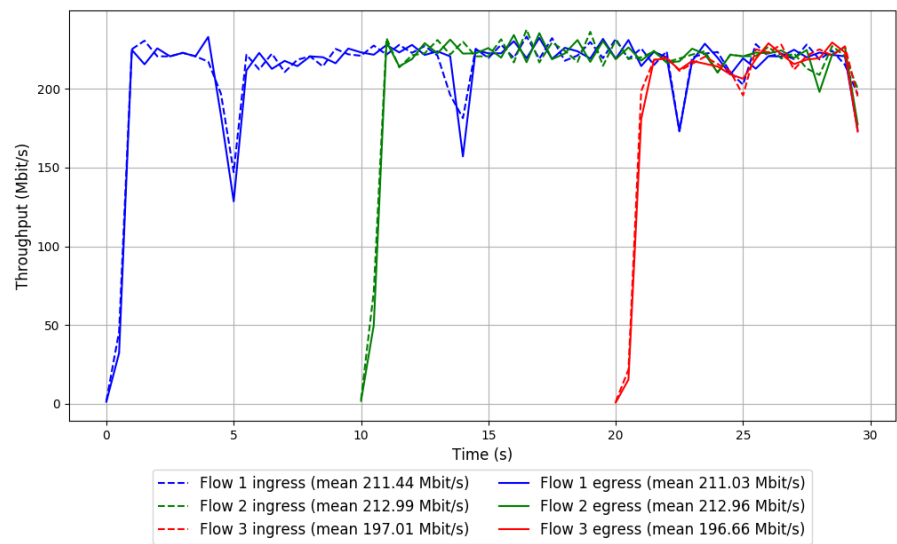
-- Flow 3:

Average throughput: 196.66 Mbit/s

95th percentile per-packet one-way delay: 60.010 ms

Loss rate: 1.26%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-20 22:29:16

End at: 2017-12-20 22:29:46

Below is generated by plot.py at 2017-12-21 01:53:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 403.28 Mbit/s

95th percentile per-packet one-way delay: 62.226 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 206.83 Mbit/s

95th percentile per-packet one-way delay: 60.787 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 196.03 Mbit/s

95th percentile per-packet one-way delay: 62.302 ms

Loss rate: 0.58%

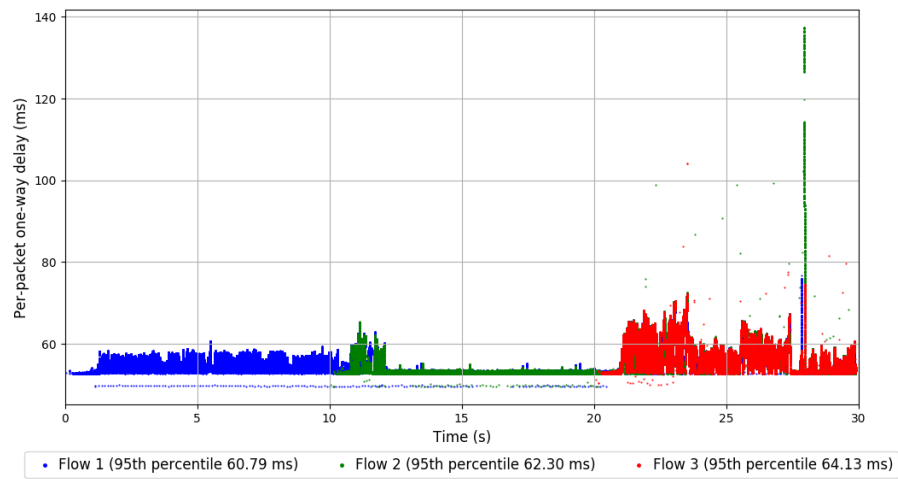
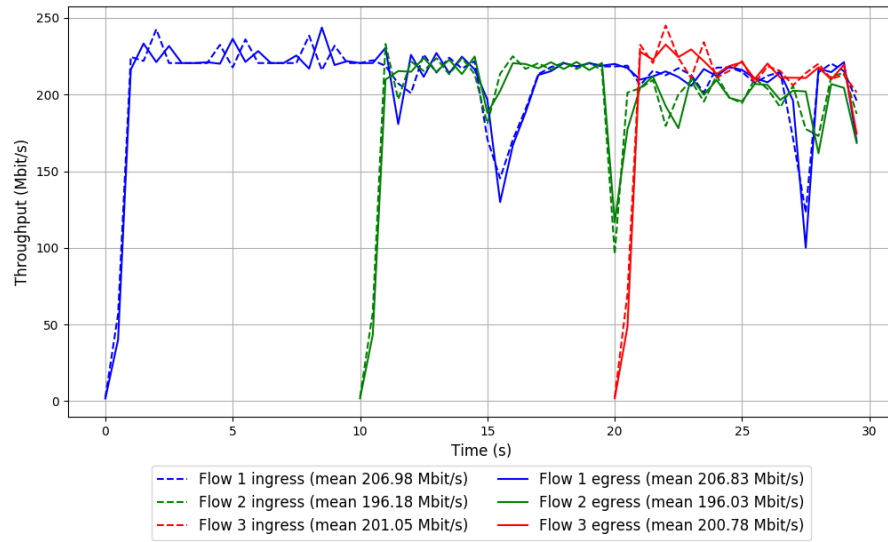
-- Flow 3:

Average throughput: 200.78 Mbit/s

95th percentile per-packet one-way delay: 64.128 ms

Loss rate: 1.16%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-20 22:43:12

End at: 2017-12-20 22:43:42

Below is generated by plot.py at 2017-12-21 01:53:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 406.71 Mbit/s

95th percentile per-packet one-way delay: 59.037 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 210.45 Mbit/s

95th percentile per-packet one-way delay: 57.937 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 202.14 Mbit/s

95th percentile per-packet one-way delay: 59.000 ms

Loss rate: 0.59%

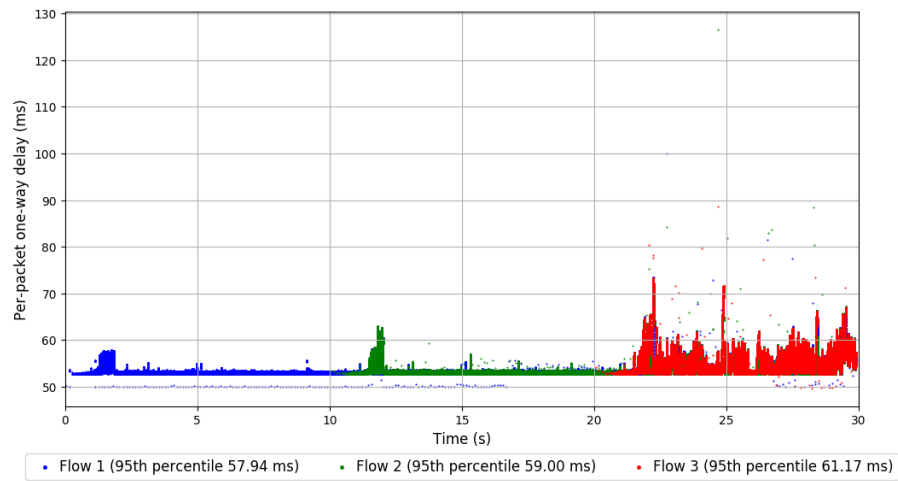
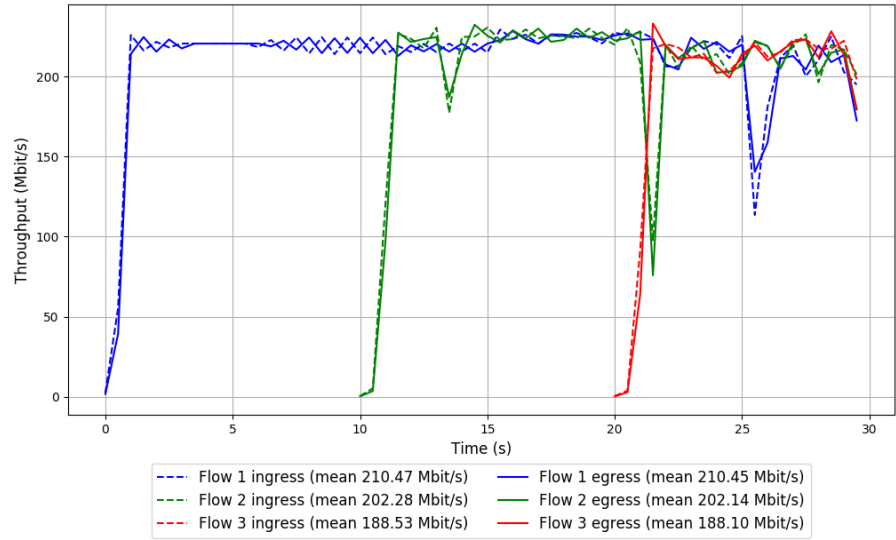
-- Flow 3:

Average throughput: 188.10 Mbit/s

95th percentile per-packet one-way delay: 61.172 ms

Loss rate: 1.28%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-20 22:57:14

End at: 2017-12-20 22:57:44

Below is generated by plot.py at 2017-12-21 02:00:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 400.85 Mbit/s

95th percentile per-packet one-way delay: 88.578 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 207.86 Mbit/s

95th percentile per-packet one-way delay: 67.888 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 200.54 Mbit/s

95th percentile per-packet one-way delay: 88.978 ms

Loss rate: 0.59%

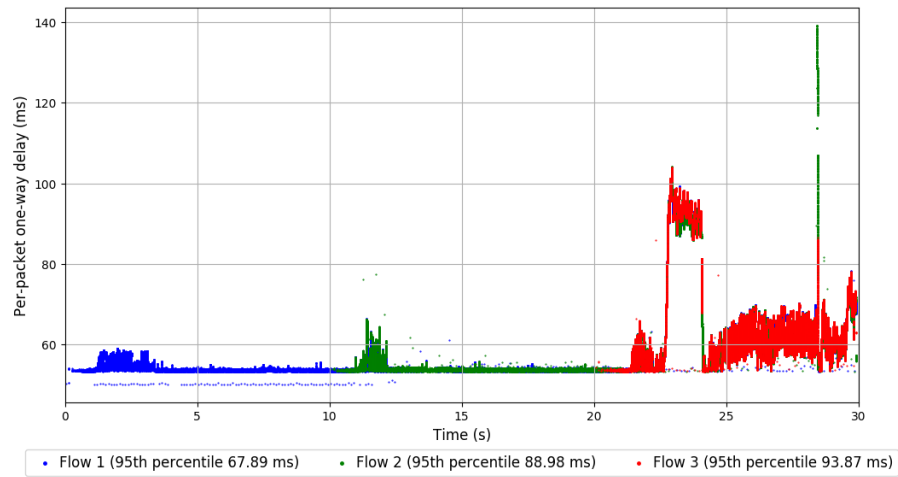
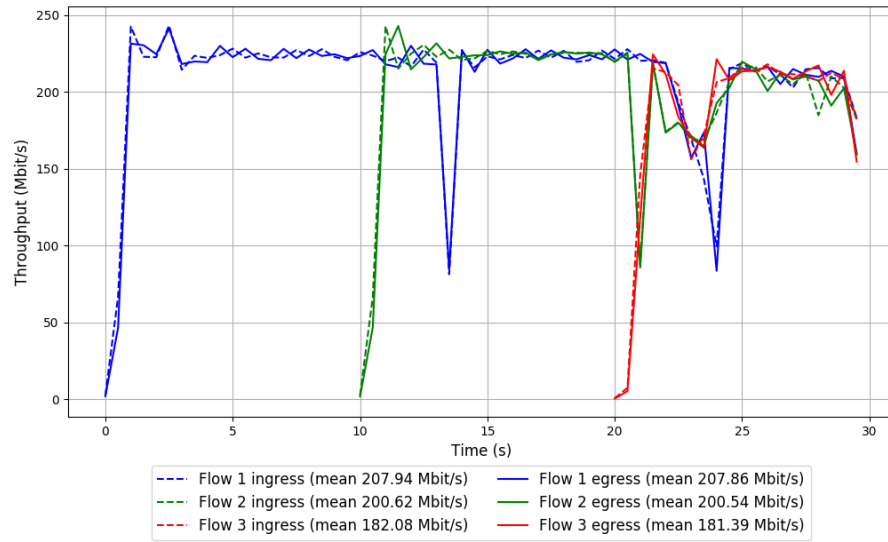
-- Flow 3:

Average throughput: 181.39 Mbit/s

95th percentile per-packet one-way delay: 93.869 ms

Loss rate: 1.45%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-20 23:10:56

End at: 2017-12-20 23:11:26

Below is generated by plot.py at 2017-12-21 02:00:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 402.18 Mbit/s

95th percentile per-packet one-way delay: 61.603 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 203.44 Mbit/s

95th percentile per-packet one-way delay: 59.980 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 202.34 Mbit/s

95th percentile per-packet one-way delay: 62.056 ms

Loss rate: 0.56%

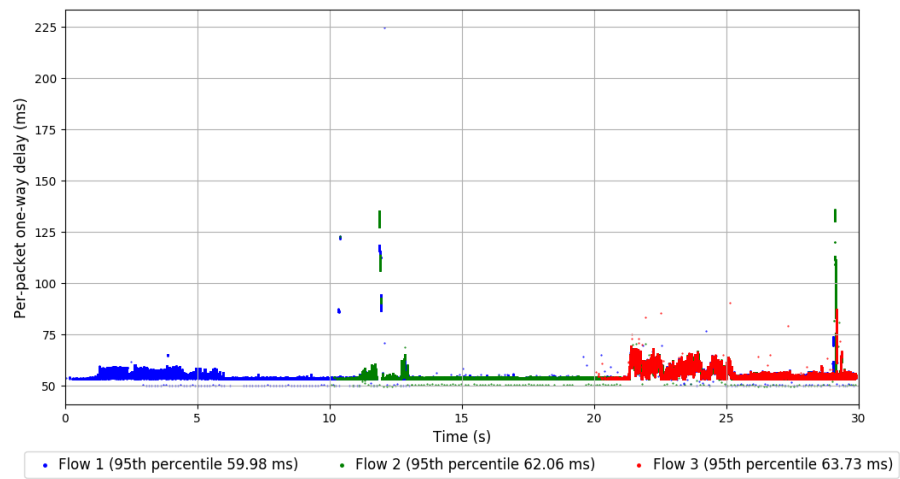
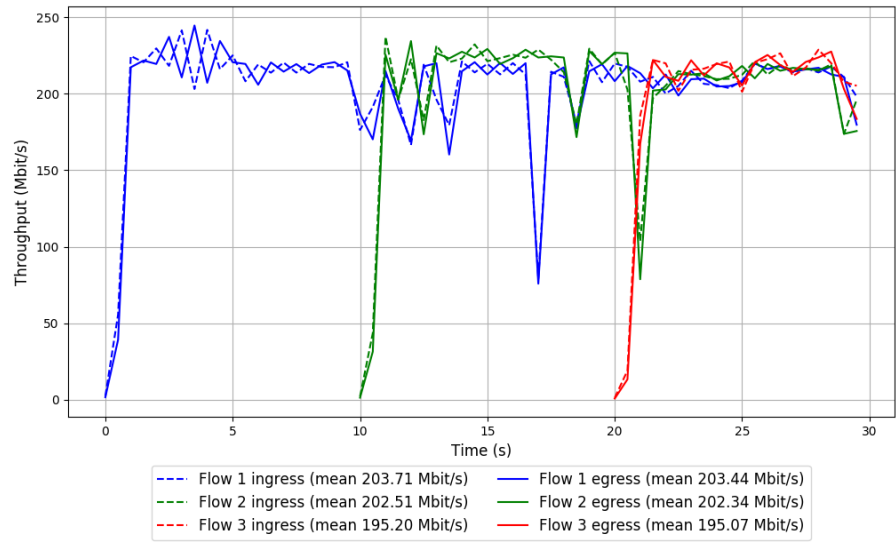
-- Flow 3:

Average throughput: 195.07 Mbit/s

95th percentile per-packet one-way delay: 63.726 ms

Loss rate: 1.19%

Run 10: Report of TCP BBR — Data Link

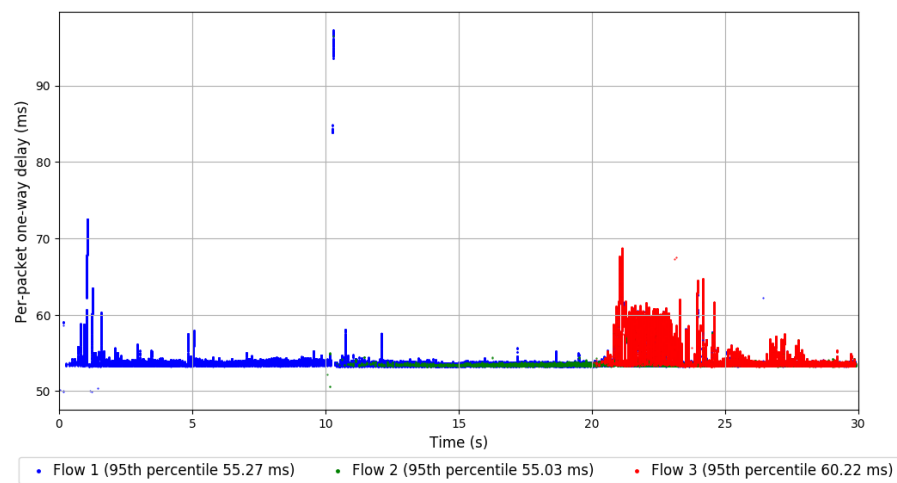
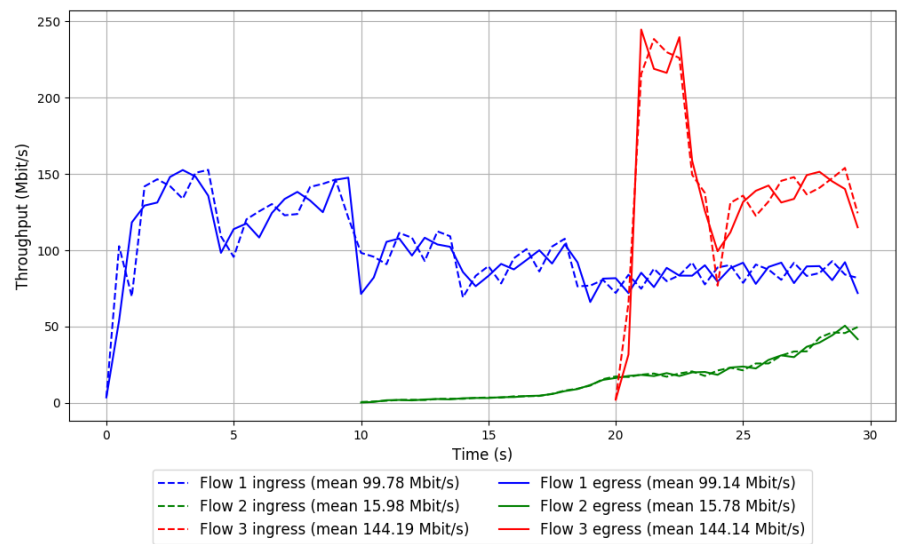


```
Run 1: Statistics of TCP Cubic

Start at: 2017-12-20 21:01:26
End at: 2017-12-20 21:01:56

# Below is generated by plot.py at 2017-12-21 02:00:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 157.01 Mbit/s
95th percentile per-packet one-way delay: 59.254 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 99.14 Mbit/s
95th percentile per-packet one-way delay: 55.275 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 15.78 Mbit/s
95th percentile per-packet one-way delay: 55.034 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 144.14 Mbit/s
95th percentile per-packet one-way delay: 60.223 ms
Loss rate: 1.08%
```

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-20 21:15:11

End at: 2017-12-20 21:15:41

Below is generated by plot.py at 2017-12-21 02:00:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 169.94 Mbit/s

95th percentile per-packet one-way delay: 59.333 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 74.23 Mbit/s

95th percentile per-packet one-way delay: 59.406 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 101.92 Mbit/s

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

Loss rate: 0.70%

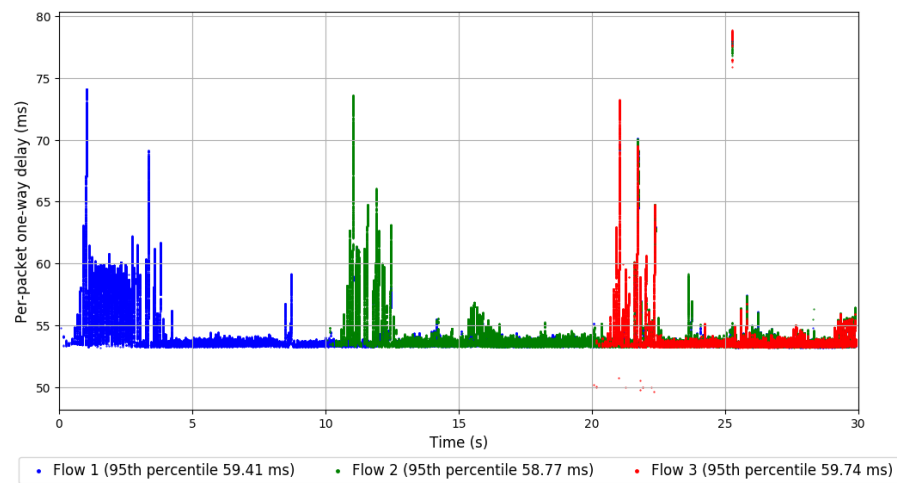
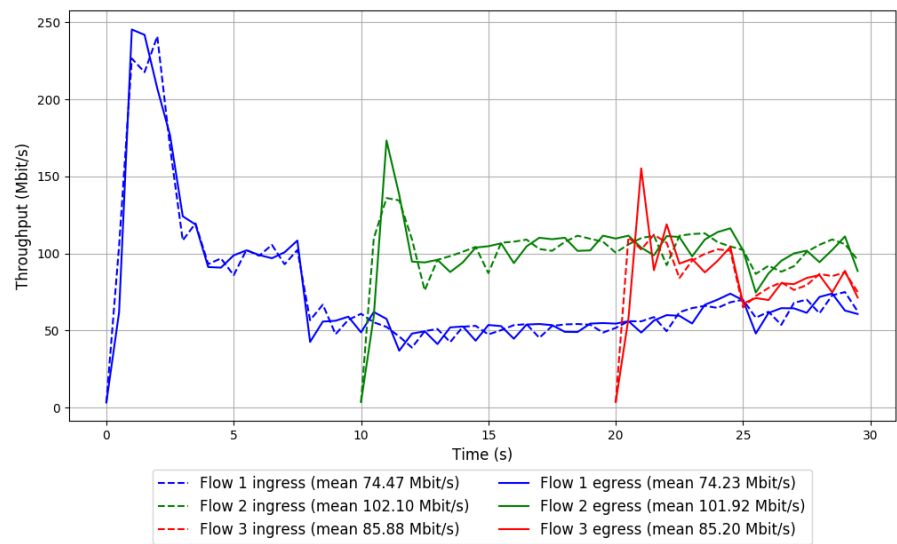
-- Flow 3:

Average throughput: 85.20 Mbit/s

95th percentile per-packet one-way delay: 59.740 ms

Loss rate: 1.79%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-20 21:29:24

End at: 2017-12-20 21:29:54

Below is generated by plot.py at 2017-12-21 02:00:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 264.80 Mbit/s

95th percentile per-packet one-way delay: 58.610 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 192.90 Mbit/s

95th percentile per-packet one-way delay: 58.763 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 57.15 Mbit/s

95th percentile per-packet one-way delay: 56.047 ms

Loss rate: 2.04%

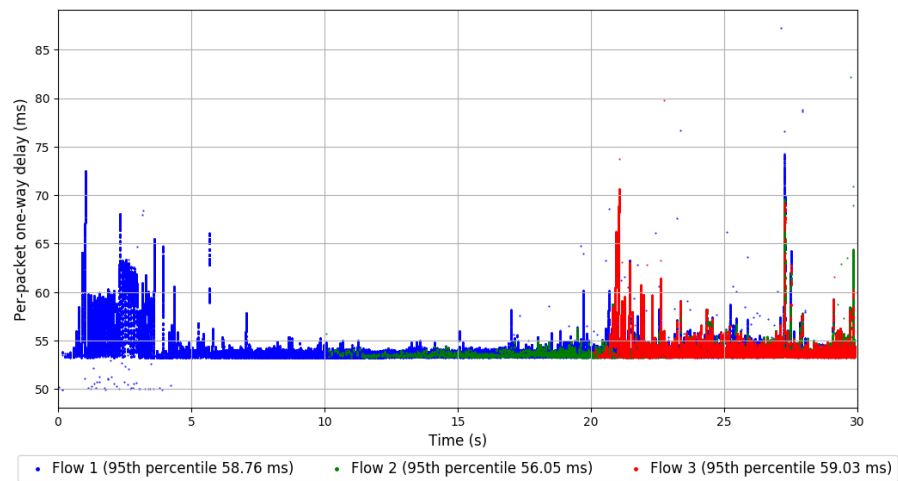
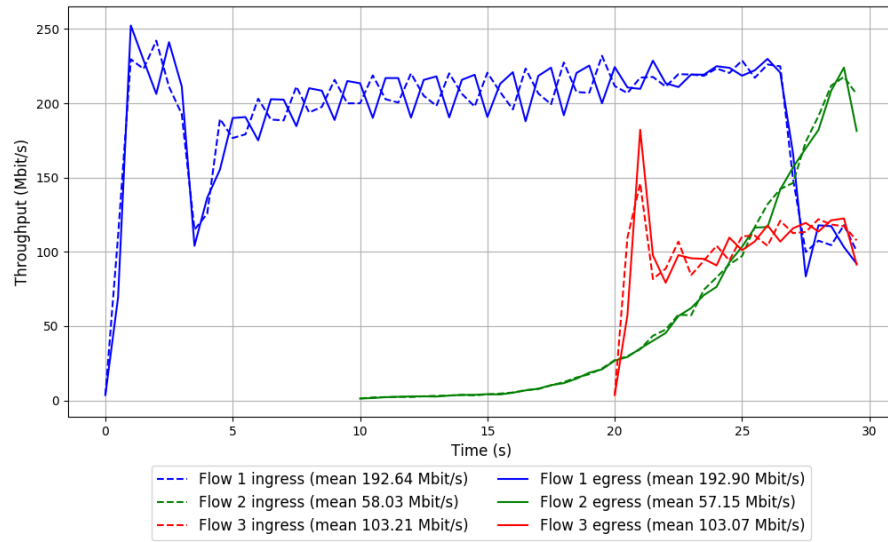
-- Flow 3:

Average throughput: 103.07 Mbit/s

95th percentile per-packet one-way delay: 59.030 ms

Loss rate: 1.20%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-12-20 21:43:18

End at: 2017-12-20 21:43:48

Below is generated by plot.py at 2017-12-21 02:00:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 284.54 Mbit/s

95th percentile per-packet one-way delay: 59.963 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 124.55 Mbit/s

95th percentile per-packet one-way delay: 59.309 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 194.15 Mbit/s

95th percentile per-packet one-way delay: 60.235 ms

Loss rate: 0.58%

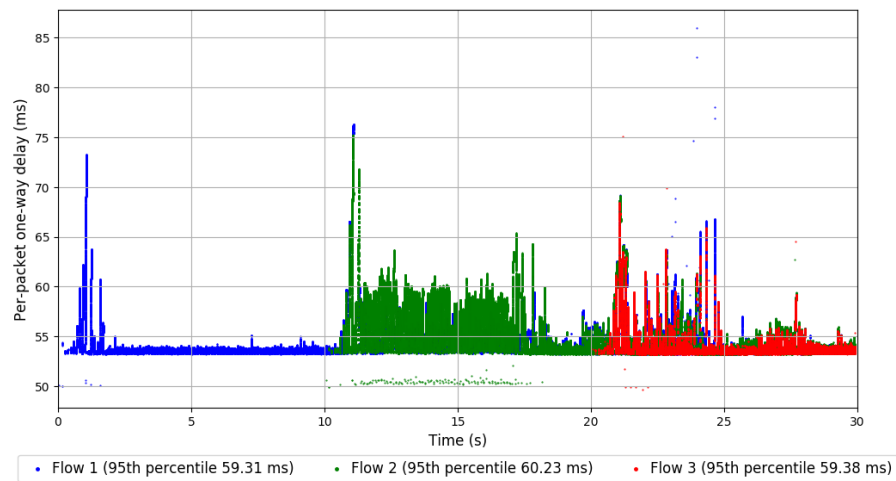
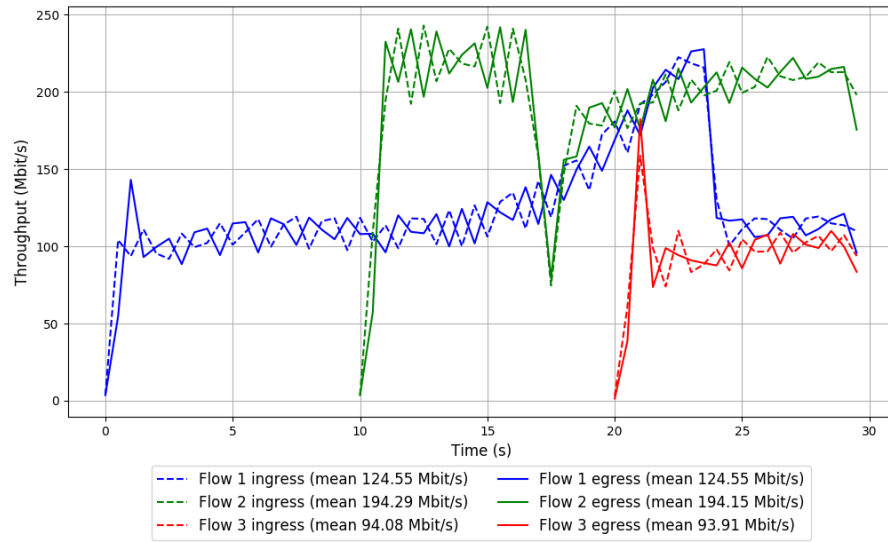
-- Flow 3:

Average throughput: 93.91 Mbit/s

95th percentile per-packet one-way delay: 59.376 ms

Loss rate: 1.19%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-20 21:57:24

End at: 2017-12-20 21:57:54

Below is generated by plot.py at 2017-12-21 02:00:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 269.88 Mbit/s

95th percentile per-packet one-way delay: 59.745 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 165.75 Mbit/s

95th percentile per-packet one-way delay: 59.887 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 108.74 Mbit/s

95th percentile per-packet one-way delay: 59.267 ms

Loss rate: 0.70%

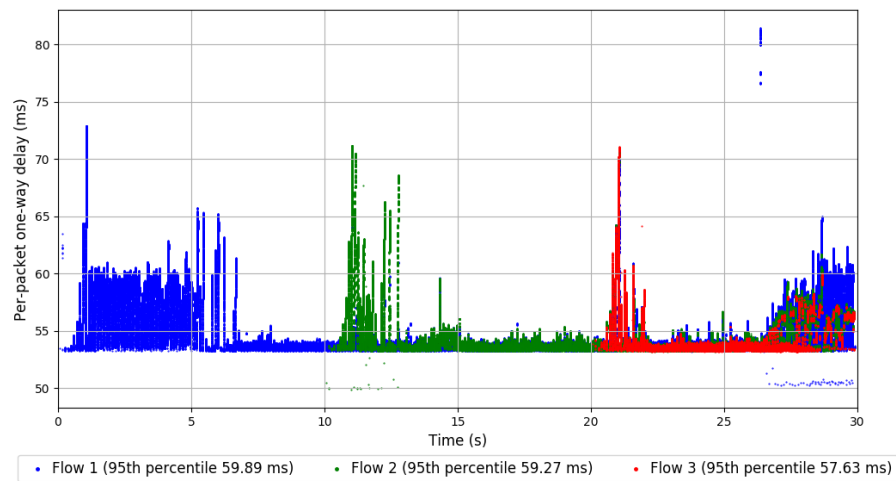
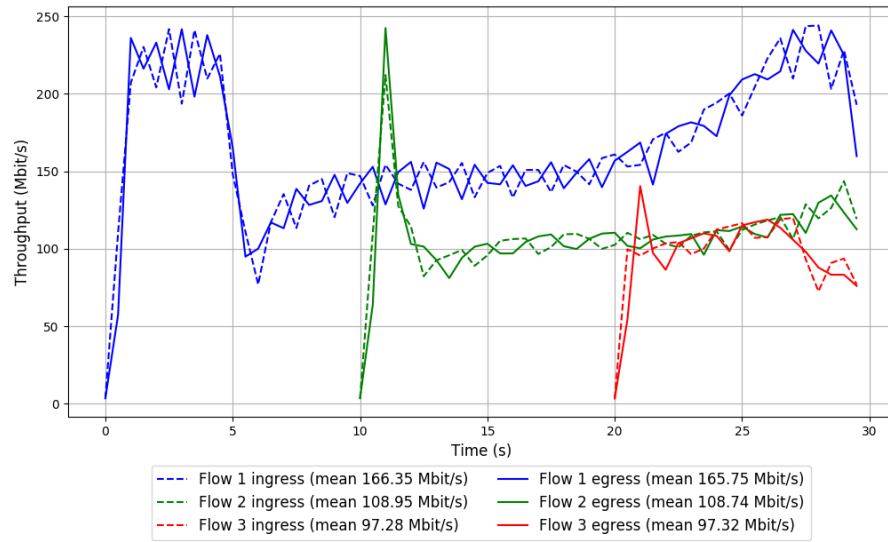
-- Flow 3:

Average throughput: 97.32 Mbit/s

95th percentile per-packet one-way delay: 57.627 ms

Loss rate: 1.01%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-20 22:11:09

End at: 2017-12-20 22:11:39

Below is generated by plot.py at 2017-12-21 02:00:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.58 Mbit/s

95th percentile per-packet one-way delay: 57.313 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 124.14 Mbit/s

95th percentile per-packet one-way delay: 56.320 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 106.88 Mbit/s

95th percentile per-packet one-way delay: 59.160 ms

Loss rate: 0.68%

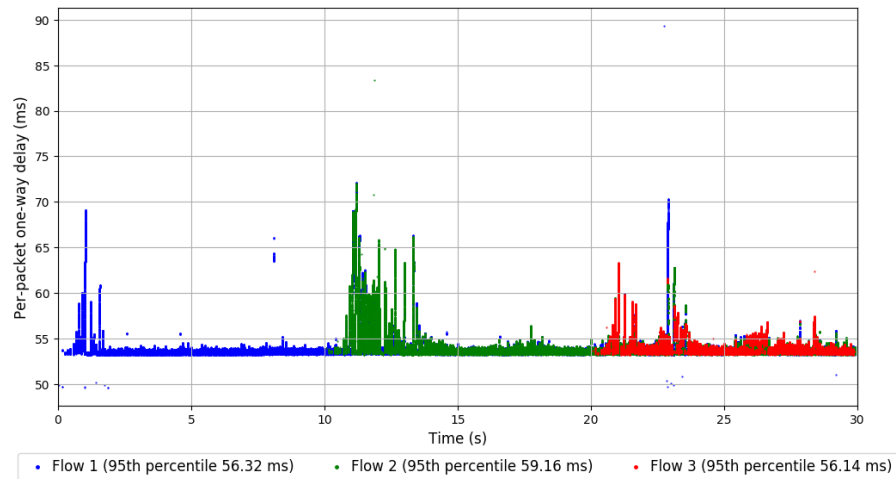
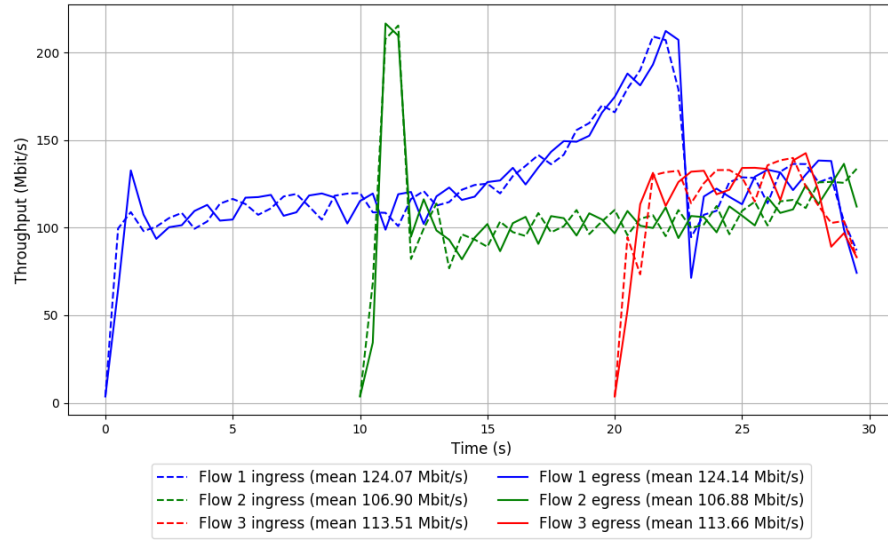
-- Flow 3:

Average throughput: 113.66 Mbit/s

95th percentile per-packet one-way delay: 56.142 ms

Loss rate: 0.92%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-20 22:25:13

End at: 2017-12-20 22:25:43

Below is generated by plot.py at 2017-12-21 02:00:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 257.01 Mbit/s

95th percentile per-packet one-way delay: 58.069 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 136.87 Mbit/s

95th percentile per-packet one-way delay: 57.255 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 122.22 Mbit/s

95th percentile per-packet one-way delay: 59.505 ms

Loss rate: 0.48%

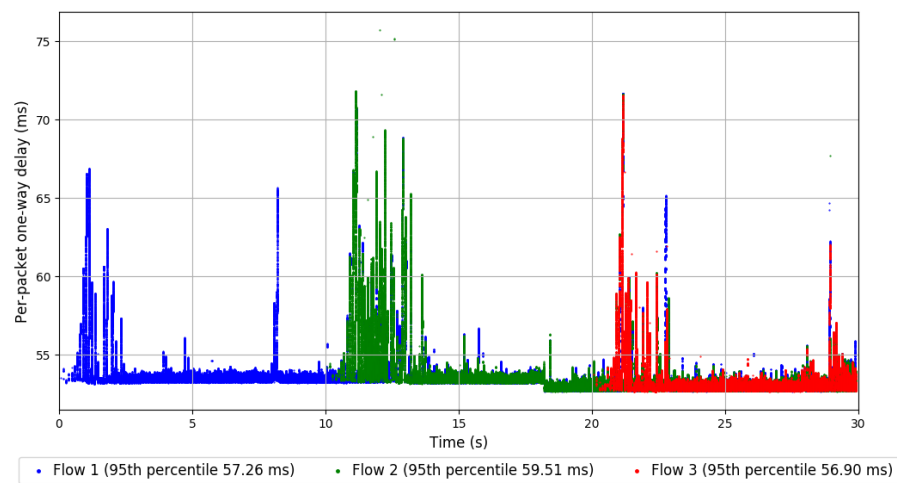
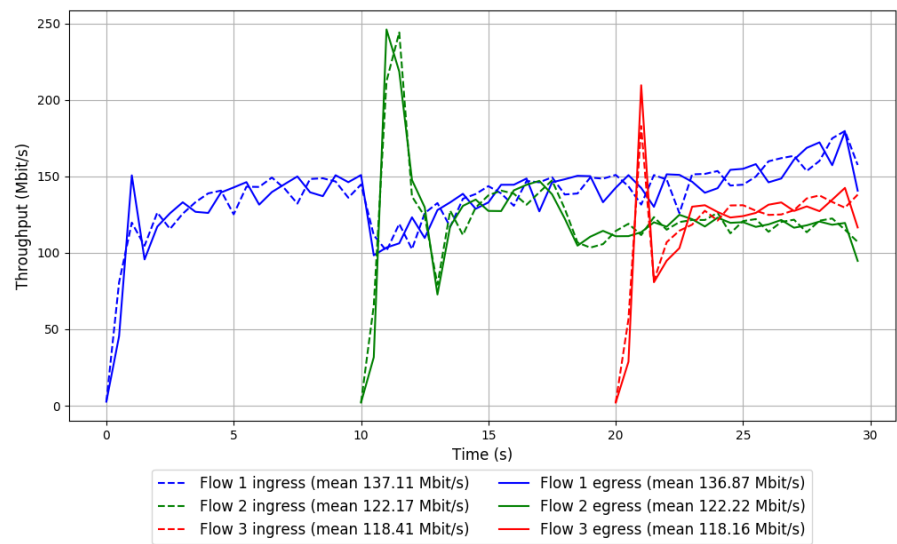
-- Flow 3:

Average throughput: 118.16 Mbit/s

95th percentile per-packet one-way delay: 56.896 ms

Loss rate: 1.25%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-20 22:39:10

End at: 2017-12-20 22:39:40

Below is generated by plot.py at 2017-12-21 02:01:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.77 Mbit/s

95th percentile per-packet one-way delay: 60.007 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 163.38 Mbit/s

95th percentile per-packet one-way delay: 59.735 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 119.57 Mbit/s

95th percentile per-packet one-way delay: 60.468 ms

Loss rate: 0.53%

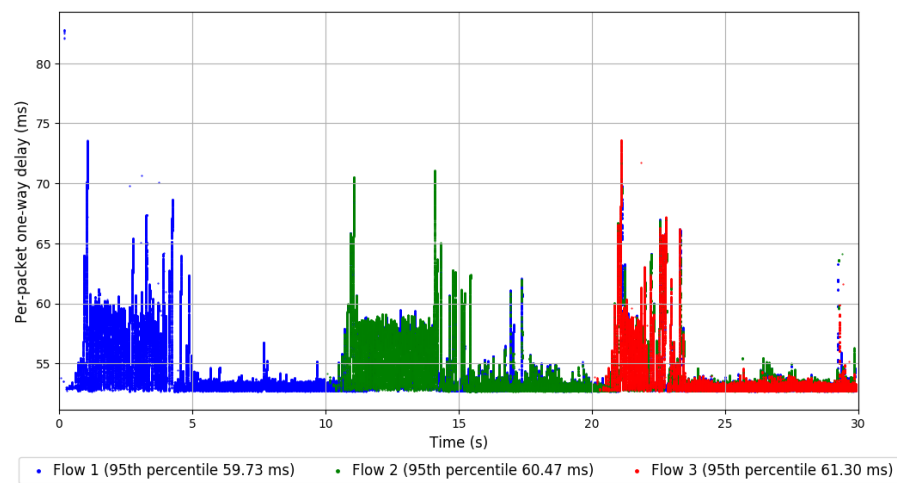
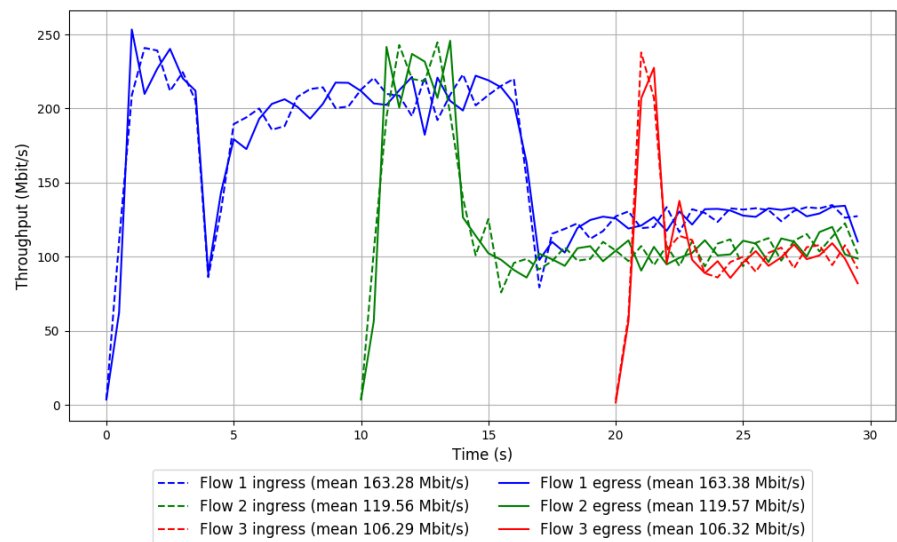
-- Flow 3:

Average throughput: 106.32 Mbit/s

95th percentile per-packet one-way delay: 61.299 ms

Loss rate: 1.05%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-20 22:53:08

End at: 2017-12-20 22:53:38

Below is generated by plot.py at 2017-12-21 02:02:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.72 Mbit/s

95th percentile per-packet one-way delay: 59.123 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 139.49 Mbit/s

95th percentile per-packet one-way delay: 58.940 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 146.36 Mbit/s

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

Loss rate: 0.60%

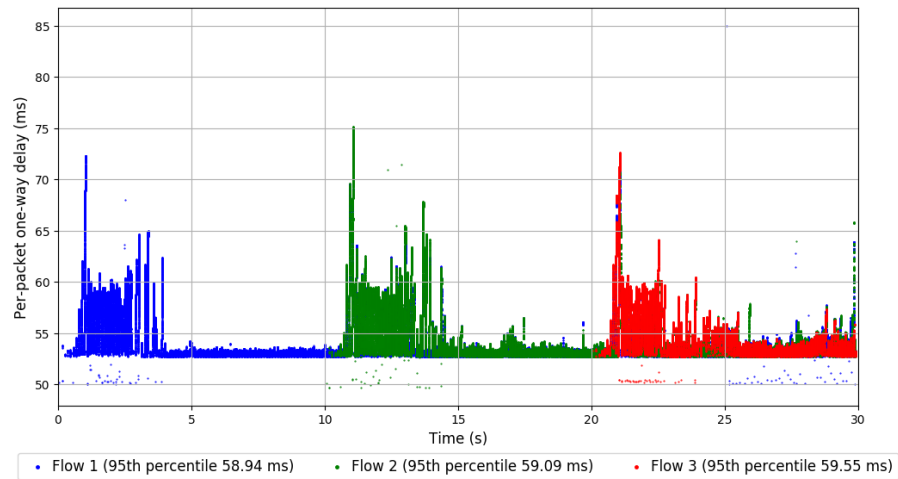
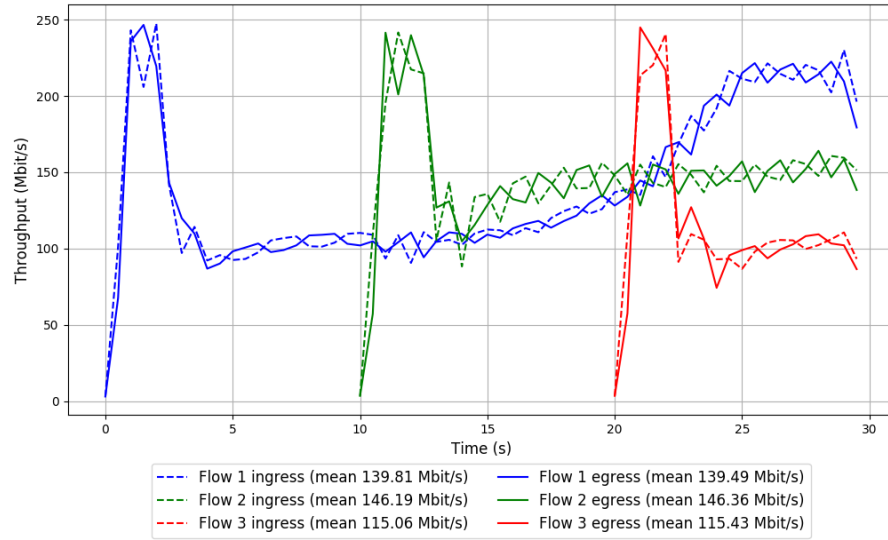
-- Flow 3:

Average throughput: 115.43 Mbit/s

95th percentile per-packet one-way delay: 59.550 ms

Loss rate: 0.97%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-20 23:06:56

End at: 2017-12-20 23:07:26

Below is generated by plot.py at 2017-12-21 02:02:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.04 Mbit/s

95th percentile per-packet one-way delay: 60.324 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 135.00 Mbit/s

95th percentile per-packet one-way delay: 60.280 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 109.34 Mbit/s

95th percentile per-packet one-way delay: 59.793 ms

Loss rate: 0.66%

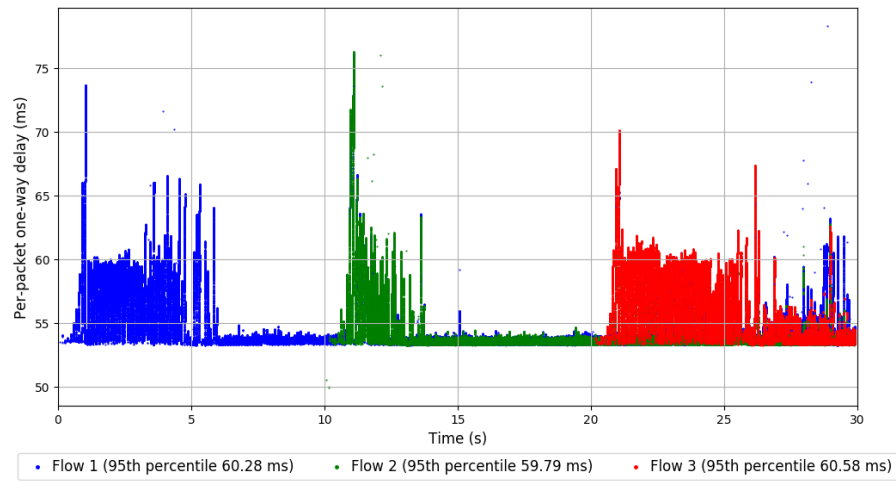
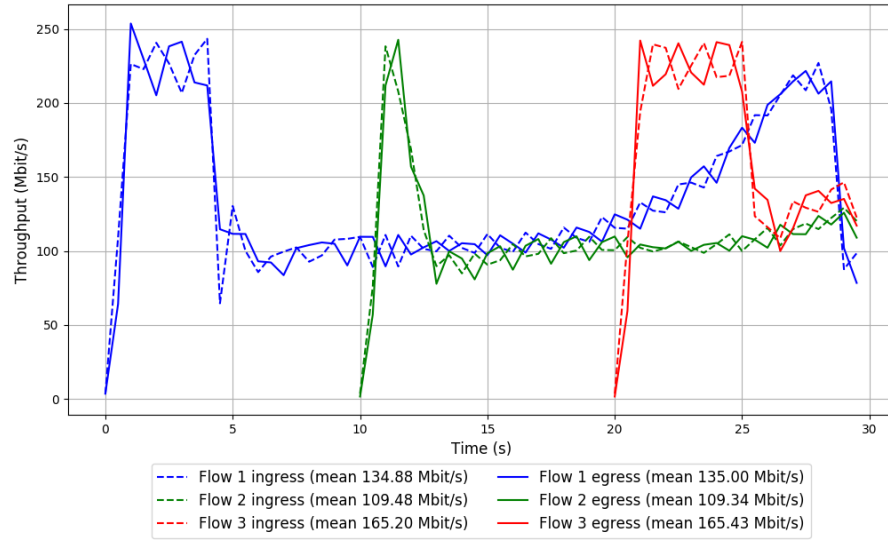
-- Flow 3:

Average throughput: 165.43 Mbit/s

95th percentile per-packet one-way delay: 60.584 ms

Loss rate: 0.92%

Run 10: Report of TCP Cubic — Data Link

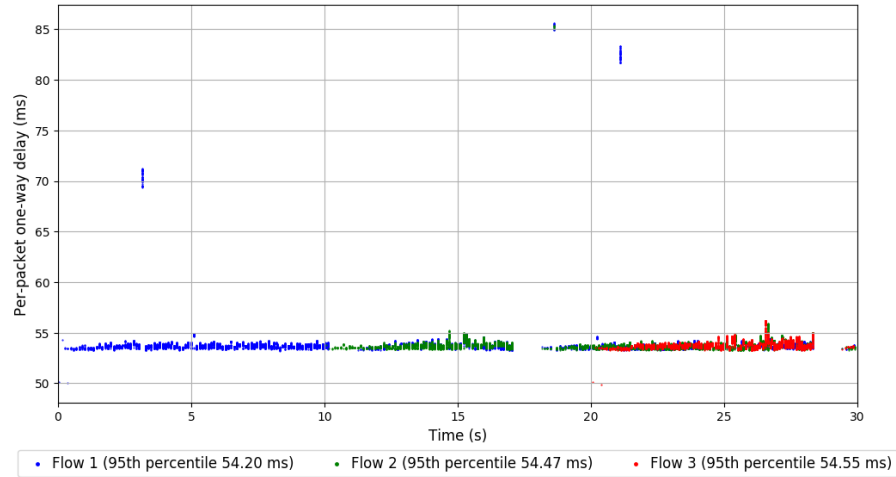
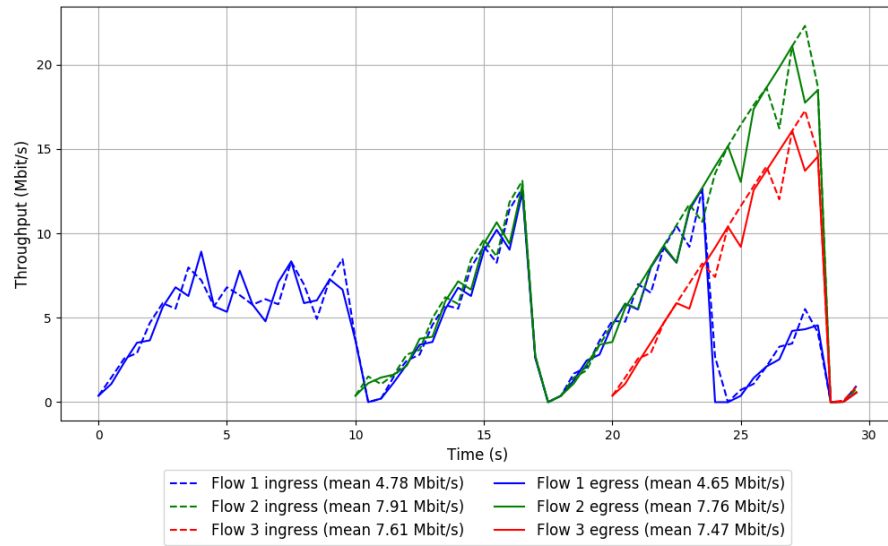


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-20 21:10:18
End at: 2017-12-20 21:10:48

# Below is generated by plot.py at 2017-12-21 02:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.26 Mbit/s
95th percentile per-packet one-way delay: 54.422 ms
Loss rate: 2.70%
-- Flow 1:
Average throughput: 4.65 Mbit/s
95th percentile per-packet one-way delay: 54.195 ms
Loss rate: 2.94%
-- Flow 2:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 54.471 ms
Loss rate: 2.45%
-- Flow 3:
Average throughput: 7.47 Mbit/s
95th percentile per-packet one-way delay: 54.550 ms
Loss rate: 2.78%
```


Run 1: Report of LEDBAT — Data Link

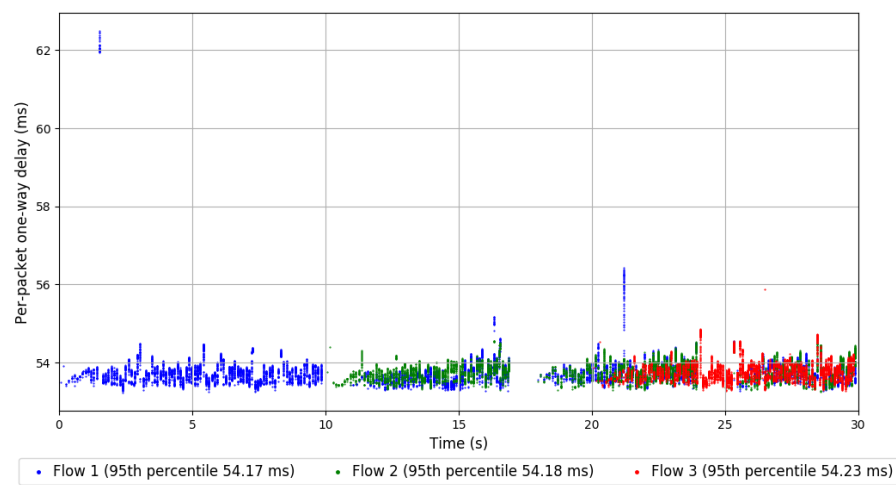
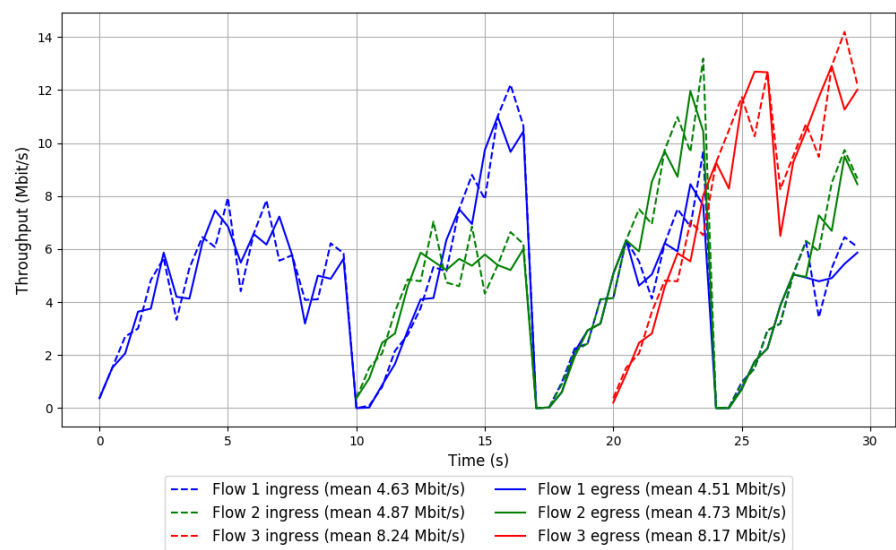


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-20 21:24:13
End at: 2017-12-20 21:24:43

# Below is generated by plot.py at 2017-12-21 02:02:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.32 Mbit/s
95th percentile per-packet one-way delay: 54.187 ms
Loss rate: 2.79%
-- Flow 1:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 54.174 ms
Loss rate: 2.86%
-- Flow 2:
Average throughput: 4.73 Mbit/s
95th percentile per-packet one-way delay: 54.182 ms
Loss rate: 3.41%
-- Flow 3:
Average throughput: 8.17 Mbit/s
95th percentile per-packet one-way delay: 54.233 ms
Loss rate: 1.92%
```

Run 2: Report of LEDBAT — Data Link

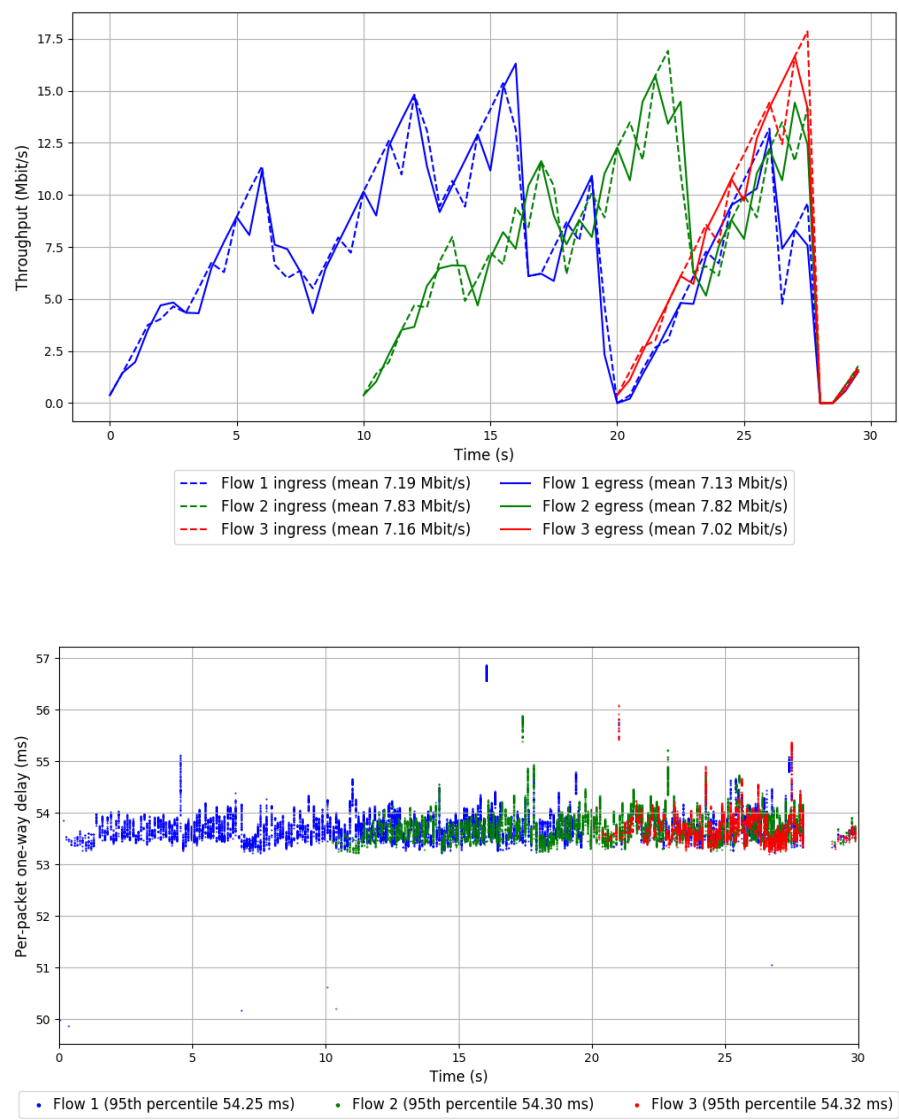


```
Run 3: Statistics of LEDBAT

Start at: 2017-12-20 21:38:30
End at: 2017-12-20 21:39:00

# Below is generated by plot.py at 2017-12-21 02:02:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.62 Mbit/s
95th percentile per-packet one-way delay: 54.275 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 54.254 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 54.301 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 7.02 Mbit/s
95th percentile per-packet one-way delay: 54.317 ms
Loss rate: 2.91%
```

Run 3: Report of LEDBAT — Data Link

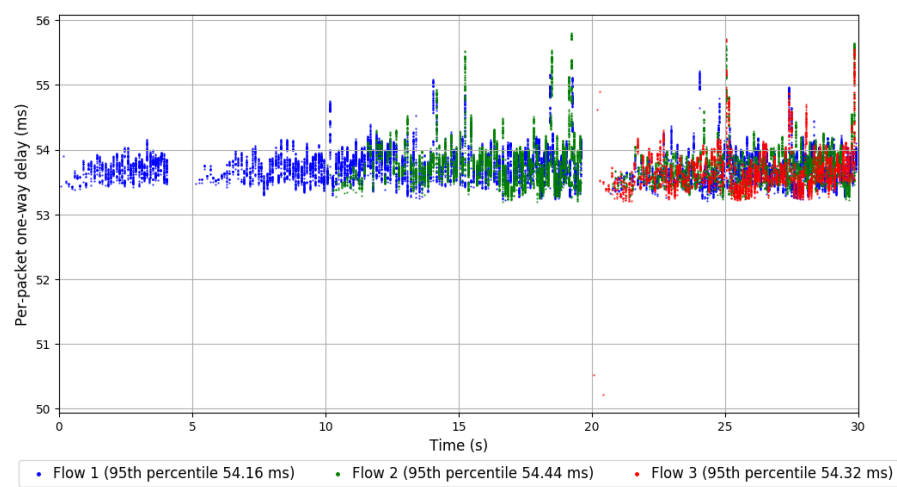
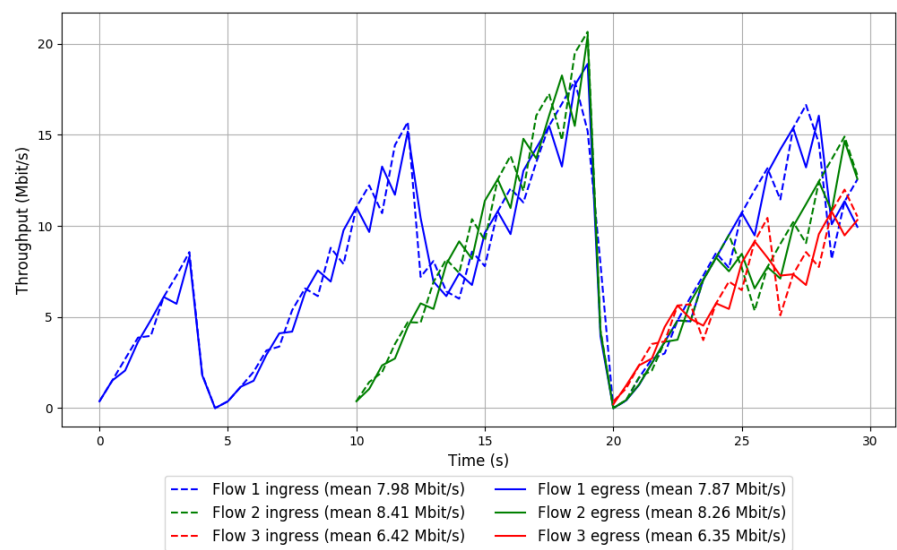


```
Run 4: Statistics of LEDBAT

Start at: 2017-12-20 21:52:31
End at: 2017-12-20 21:53:01

# Below is generated by plot.py at 2017-12-21 02:02:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.43 Mbit/s
95th percentile per-packet one-way delay: 54.301 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 54.155 ms
Loss rate: 1.77%
-- Flow 2:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 54.442 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 6.35 Mbit/s
95th percentile per-packet one-way delay: 54.316 ms
Loss rate: 2.13%
```

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-20 22:06:15

End at: 2017-12-20 22:06:45

Below is generated by plot.py at 2017-12-21 02:02:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.56 Mbit/s

95th percentile per-packet one-way delay: 54.186 ms

Loss rate: 1.41%

-- Flow 1:

Average throughput: 7.19 Mbit/s

95th percentile per-packet one-way delay: 54.122 ms

Loss rate: 1.52%

-- Flow 2:

Average throughput: 9.21 Mbit/s

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

Loss rate: 0.89%

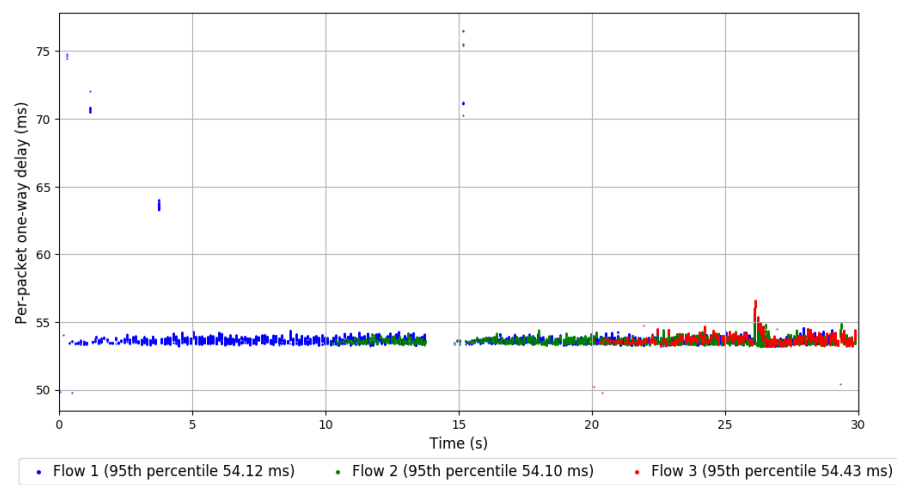
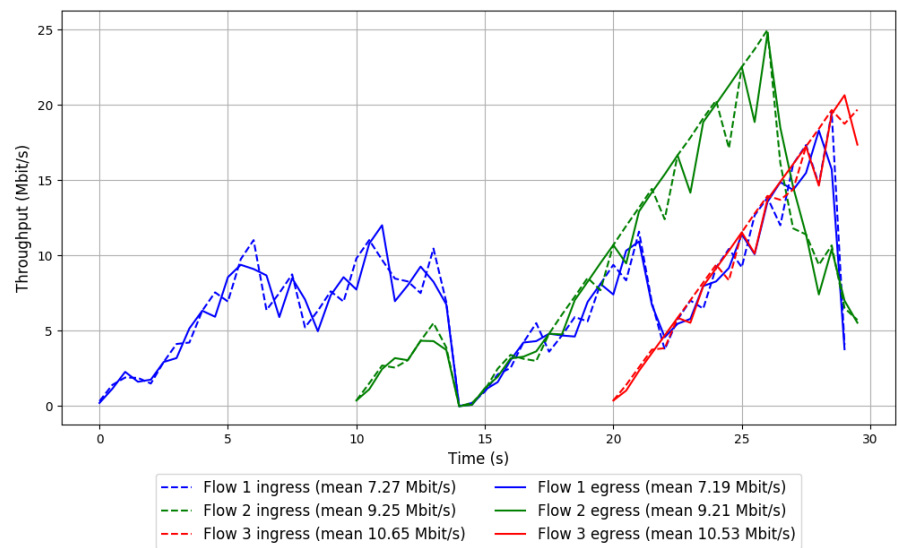
-- Flow 3:

Average throughput: 10.53 Mbit/s

95th percentile per-packet one-way delay: 54.431 ms

Loss rate: 2.11%

Run 5: Report of LEDBAT — Data Link

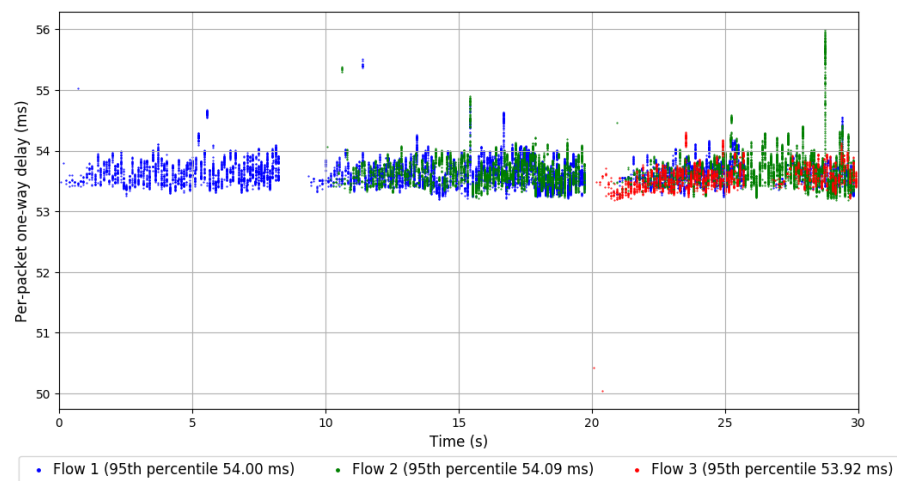
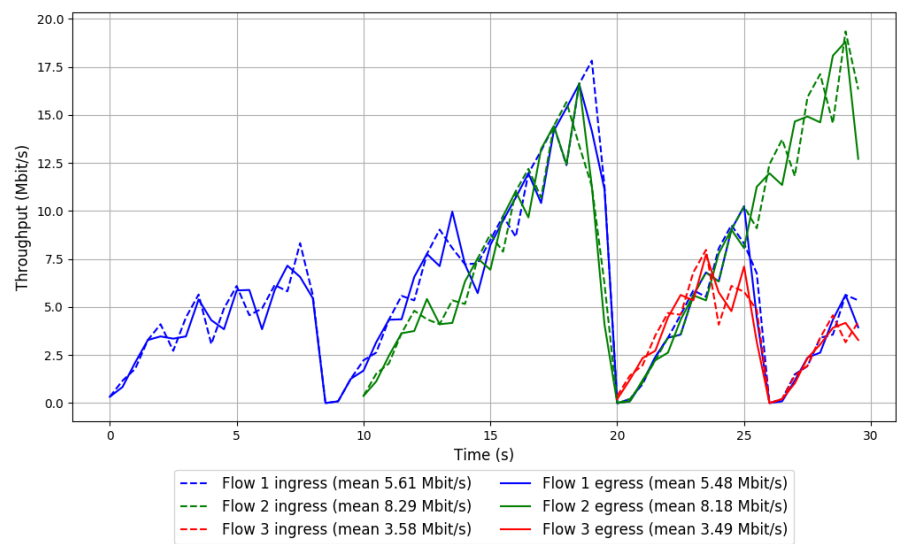


```
Run 6: Statistics of LEDBAT

Start at: 2017-12-20 22:20:24
End at: 2017-12-20 22:20:54

# Below is generated by plot.py at 2017-12-21 02:02:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.02 Mbit/s
95th percentile per-packet one-way delay: 54.030 ms
Loss rate: 2.49%
-- Flow 1:
Average throughput: 5.48 Mbit/s
95th percentile per-packet one-way delay: 54.003 ms
Loss rate: 2.81%
-- Flow 2:
Average throughput: 8.18 Mbit/s
95th percentile per-packet one-way delay: 54.094 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 53.921 ms
Loss rate: 3.66%
```

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-20 22:34:15

End at: 2017-12-20 22:34:45

Below is generated by plot.py at 2017-12-21 02:02:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.53 Mbit/s

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

Loss rate: 1.56%

-- Flow 1:

Average throughput: 8.43 Mbit/s

95th percentile per-packet one-way delay: 53.550 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 5.44 Mbit/s

95th percentile per-packet one-way delay: 53.520 ms

Loss rate: 1.87%

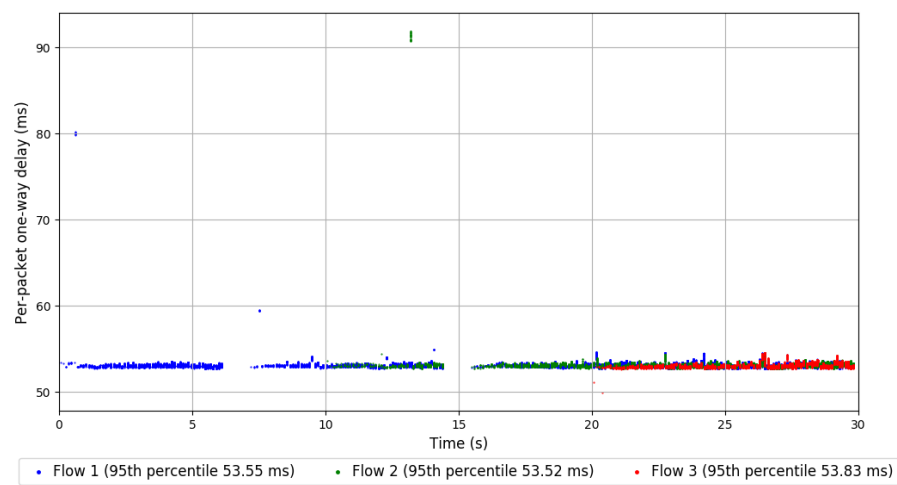
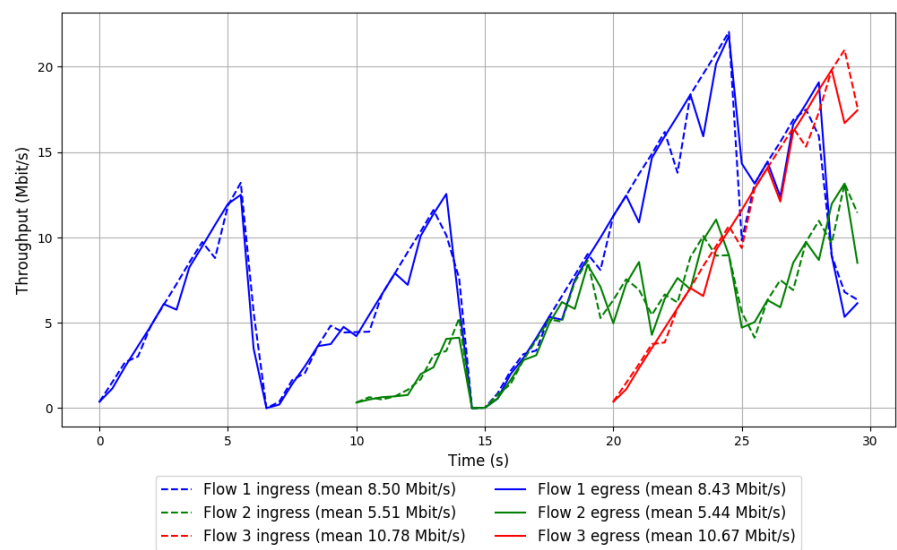
-- Flow 3:

Average throughput: 10.67 Mbit/s

95th percentile per-packet one-way delay: 53.825 ms

Loss rate: 2.11%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-20 22:48:12

End at: 2017-12-20 22:48:42

Below is generated by plot.py at 2017-12-21 02:02:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.85 Mbit/s

95th percentile per-packet one-way delay: 53.790 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 18.82 Mbit/s

95th percentile per-packet one-way delay: 53.777 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 8.15 Mbit/s

95th percentile per-packet one-way delay: 54.028 ms

Loss rate: 2.11%

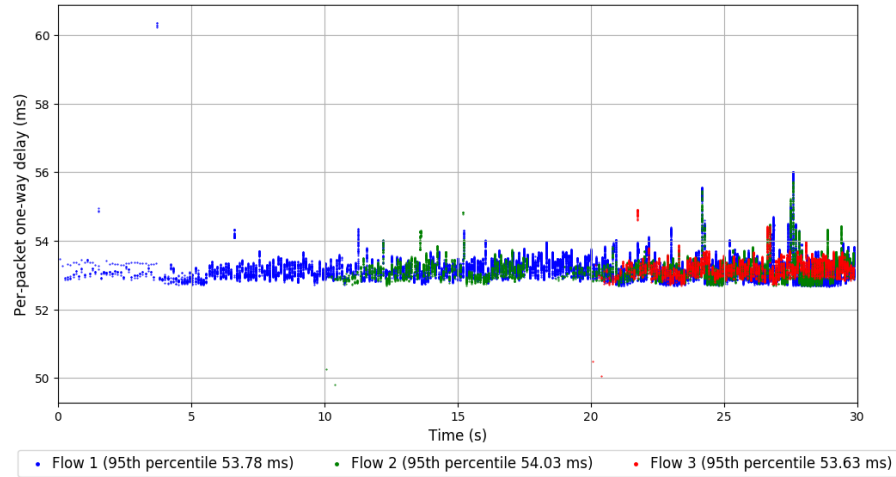
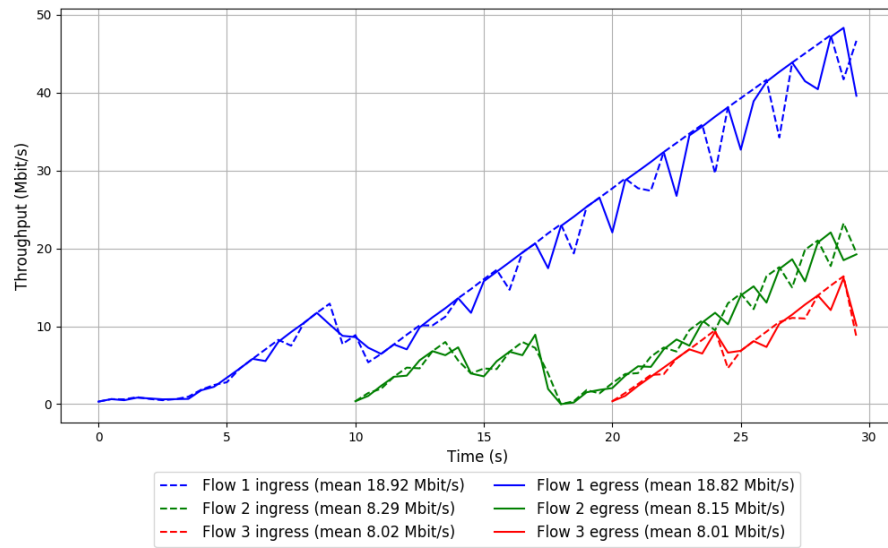
-- Flow 3:

Average throughput: 8.01 Mbit/s

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

Loss rate: 1.20%

Run 8: Report of LEDBAT — Data Link

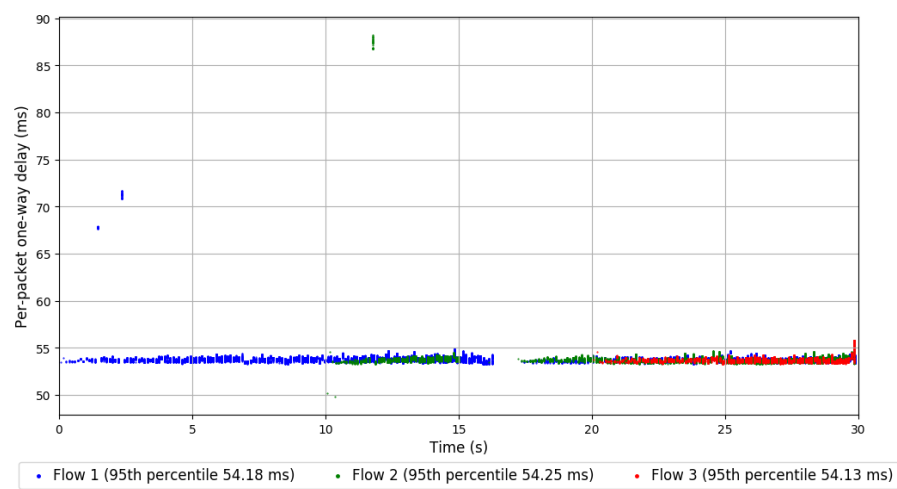
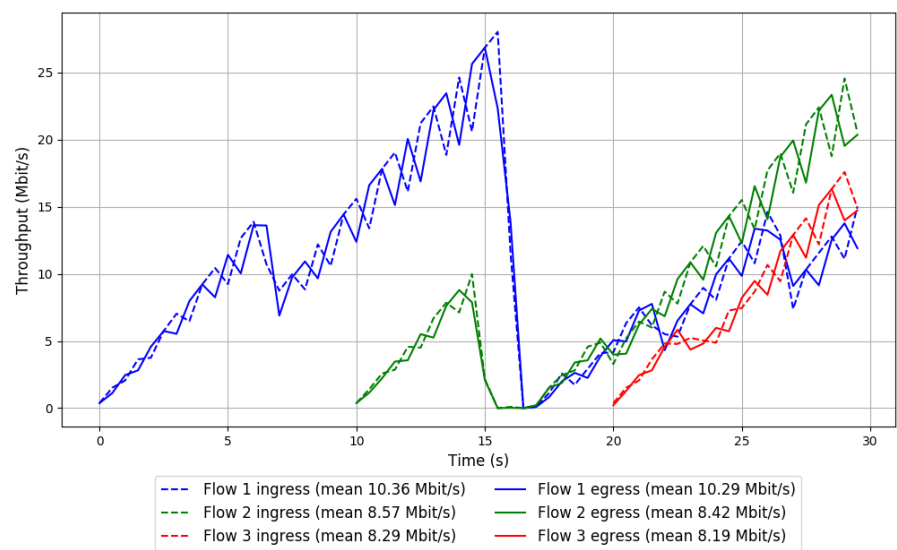


```
Run 9: Statistics of LEDBAT

Start at: 2017-12-20 23:02:07
End at: 2017-12-20 23:02:37

# Below is generated by plot.py at 2017-12-21 02:02:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.56 Mbit/s
95th percentile per-packet one-way delay: 54.190 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 10.29 Mbit/s
95th percentile per-packet one-way delay: 54.181 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 8.42 Mbit/s
95th percentile per-packet one-way delay: 54.251 ms
Loss rate: 2.18%
-- Flow 3:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 54.135 ms
Loss rate: 2.32%
```


Run 9: Report of LEDBAT — Data Link

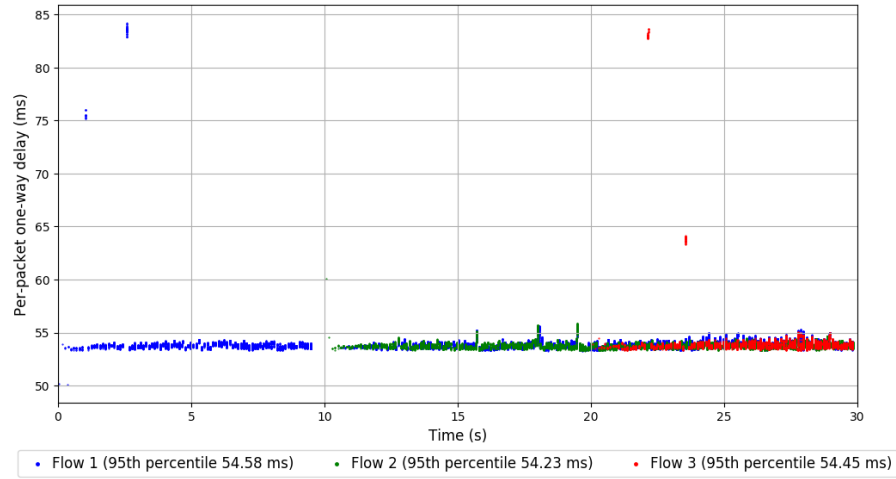
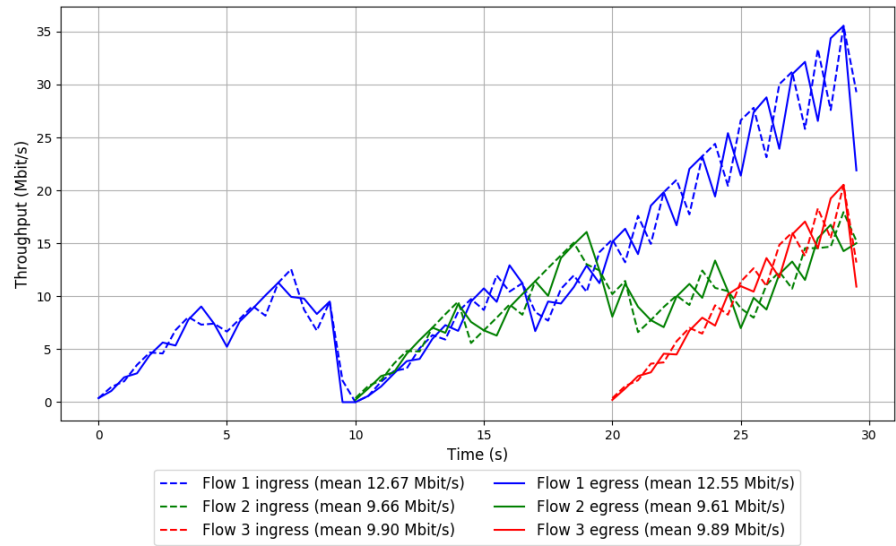


```
Run 10: Statistics of LEDBAT

Start at: 2017-12-20 23:15:45
End at: 2017-12-20 23:16:15

# Below is generated by plot.py at 2017-12-21 02:02:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.16 Mbit/s
95th percentile per-packet one-way delay: 54.501 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 12.55 Mbit/s
95th percentile per-packet one-way delay: 54.576 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 9.61 Mbit/s
95th percentile per-packet one-way delay: 54.225 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 9.89 Mbit/s
95th percentile per-packet one-way delay: 54.451 ms
Loss rate: 1.17%
```

Run 10: Report of LEDBAT — Data Link

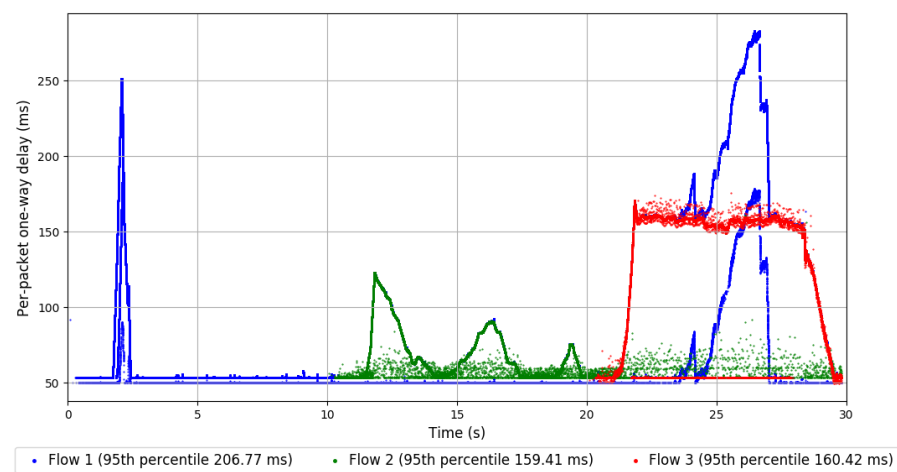
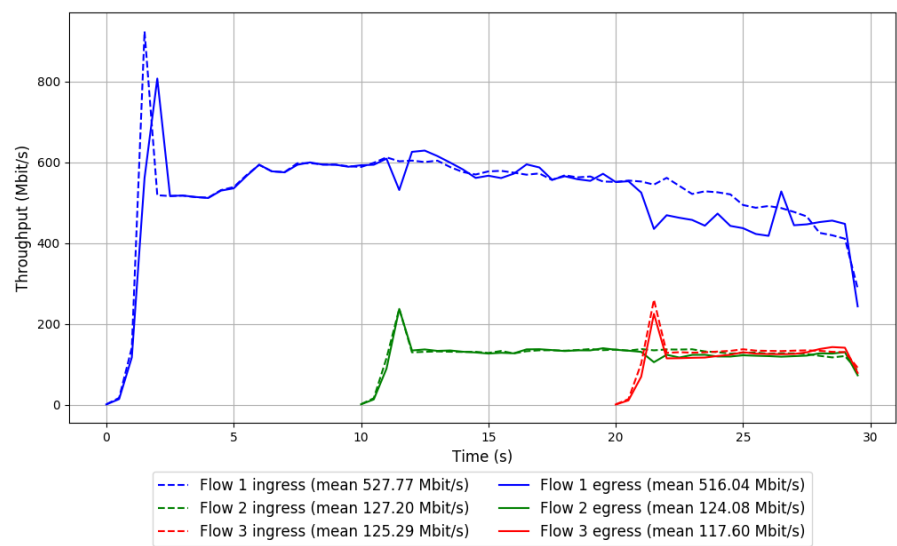


```
Run 1: Statistics of PCC

Start at: 2017-12-20 21:04:19
End at: 2017-12-20 21:04:49

# Below is generated by plot.py at 2017-12-21 02:10:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 636.85 Mbit/s
95th percentile per-packet one-way delay: 188.010 ms
Loss rate: 3.00%
-- Flow 1:
Average throughput: 516.04 Mbit/s
95th percentile per-packet one-way delay: 206.772 ms
Loss rate: 2.69%
-- Flow 2:
Average throughput: 124.08 Mbit/s
95th percentile per-packet one-way delay: 159.406 ms
Loss rate: 2.97%
-- Flow 3:
Average throughput: 117.60 Mbit/s
95th percentile per-packet one-way delay: 160.420 ms
Loss rate: 7.11%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-20 21:18:06

End at: 2017-12-20 21:18:36

Below is generated by plot.py at 2017-12-21 02:10:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 403.36 Mbit/s

95th percentile per-packet one-way delay: 241.157 ms

Loss rate: 5.42%

-- Flow 1:

Average throughput: 116.37 Mbit/s

95th percentile per-packet one-way delay: 160.263 ms

Loss rate: 3.31%

-- Flow 2:

Average throughput: 405.14 Mbit/s

95th percentile per-packet one-way delay: 270.925 ms

Loss rate: 6.15%

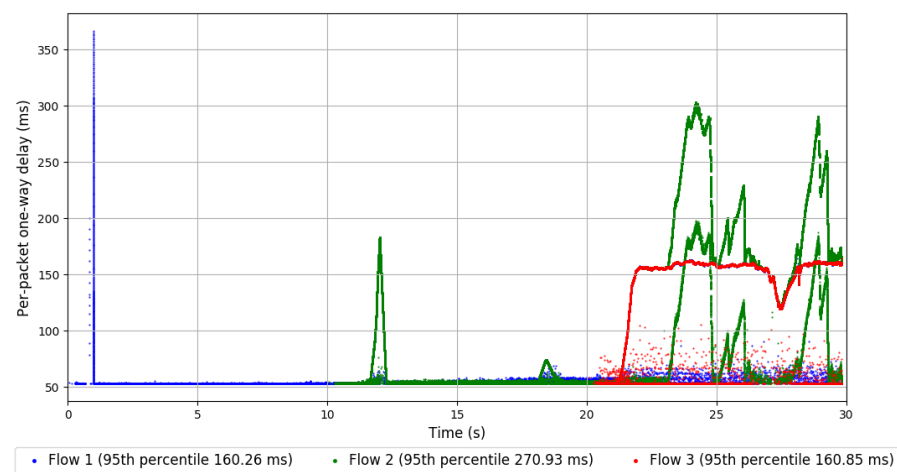
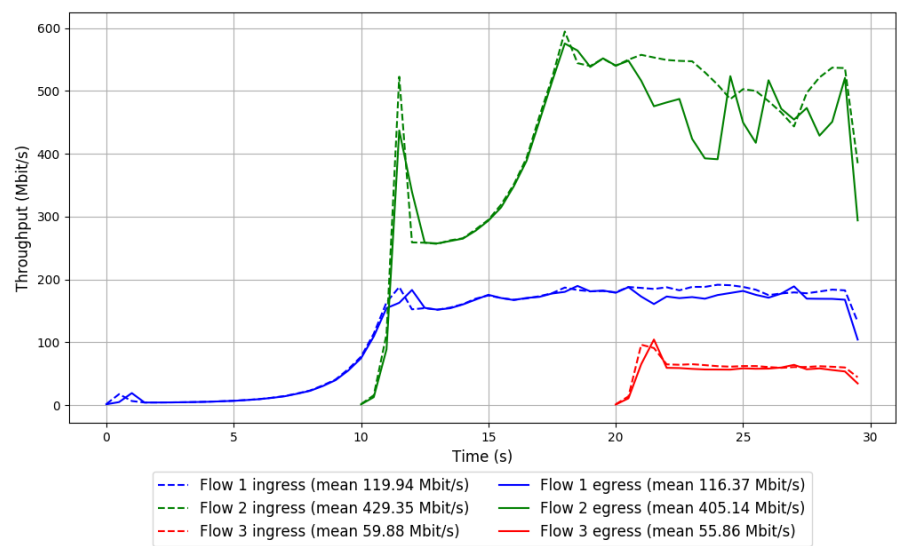
-- Flow 3:

Average throughput: 55.86 Mbit/s

95th percentile per-packet one-way delay: 160.852 ms

Loss rate: 7.75%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-20 21:32:22

End at: 2017-12-20 21:32:52

Below is generated by plot.py at 2017-12-21 02:11:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 638.56 Mbit/s

95th percentile per-packet one-way delay: 172.547 ms

Loss rate: 3.34%

-- Flow 1:

Average throughput: 596.74 Mbit/s

95th percentile per-packet one-way delay: 172.907 ms

Loss rate: 3.36%

-- Flow 2:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 171.406 ms

Loss rate: 2.42%

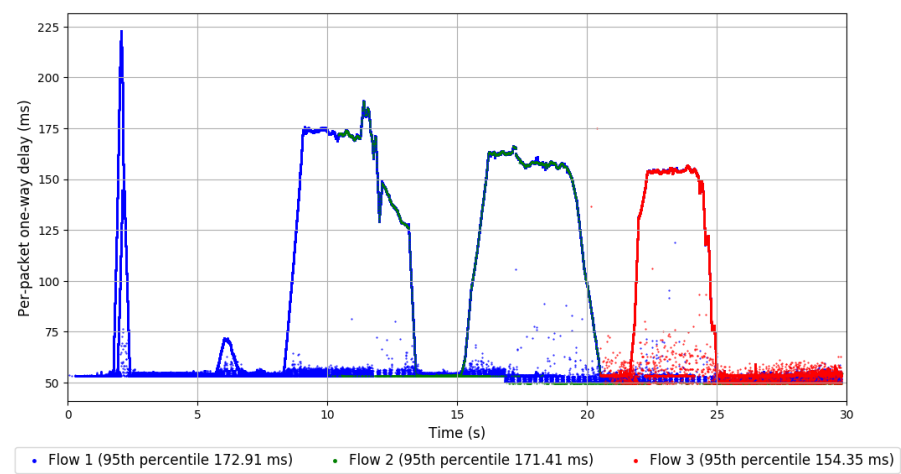
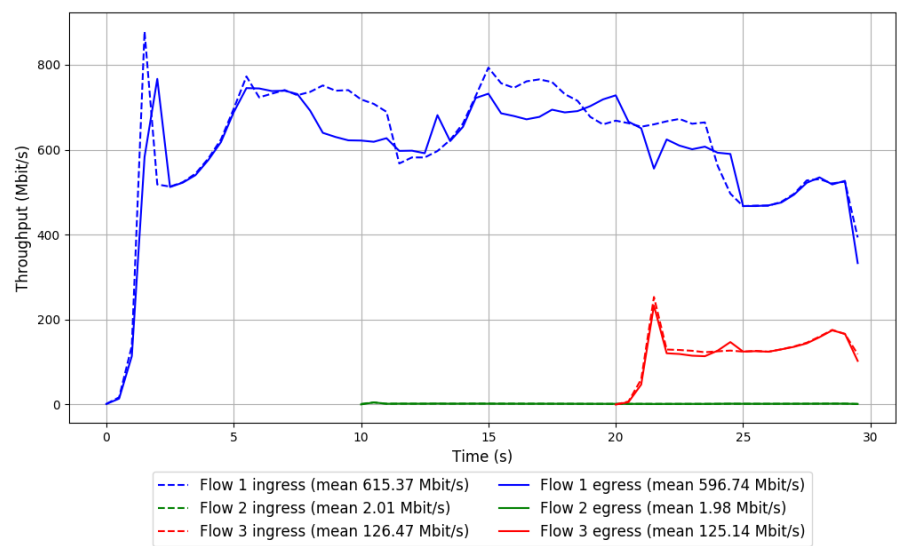
-- Flow 3:

Average throughput: 125.14 Mbit/s

95th percentile per-packet one-way delay: 154.349 ms

Loss rate: 2.93%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-20 21:46:18

End at: 2017-12-20 21:46:48

Below is generated by plot.py at 2017-12-21 02:11:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 650.94 Mbit/s

95th percentile per-packet one-way delay: 161.925 ms

Loss rate: 1.90%

-- Flow 1:

Average throughput: 628.99 Mbit/s

95th percentile per-packet one-way delay: 161.949 ms

Loss rate: 1.91%

-- Flow 2:

Average throughput: 31.81 Mbit/s

95th percentile per-packet one-way delay: 161.084 ms

Loss rate: 1.34%

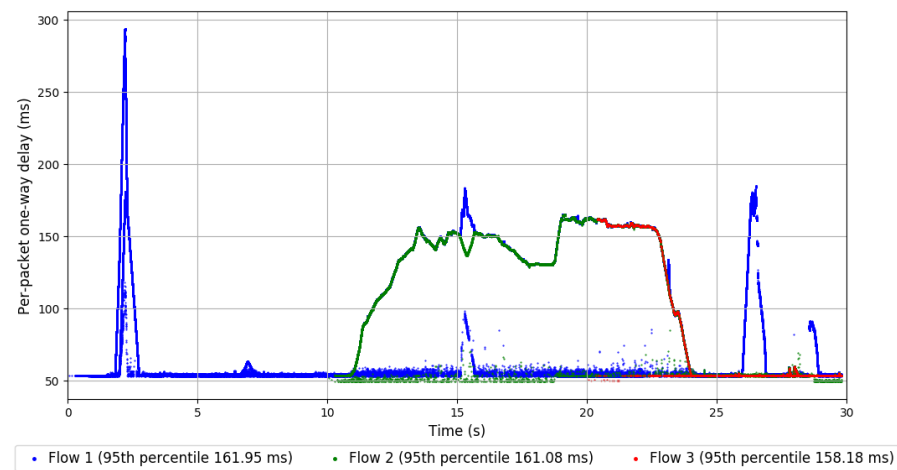
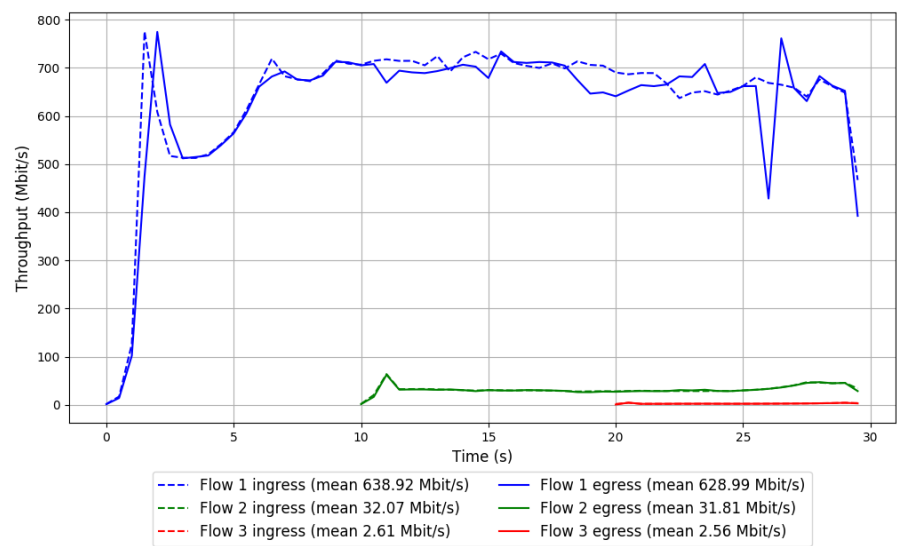
-- Flow 3:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 158.183 ms

Loss rate: 3.08%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-20 22:00:21

End at: 2017-12-20 22:00:51

Below is generated by plot.py at 2017-12-21 02:11:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 615.95 Mbit/s

95th percentile per-packet one-way delay: 213.849 ms

Loss rate: 1.74%

-- Flow 1:

Average throughput: 509.75 Mbit/s

95th percentile per-packet one-way delay: 223.446 ms

Loss rate: 1.78%

-- Flow 2:

Average throughput: 122.61 Mbit/s

95th percentile per-packet one-way delay: 155.968 ms

Loss rate: 1.35%

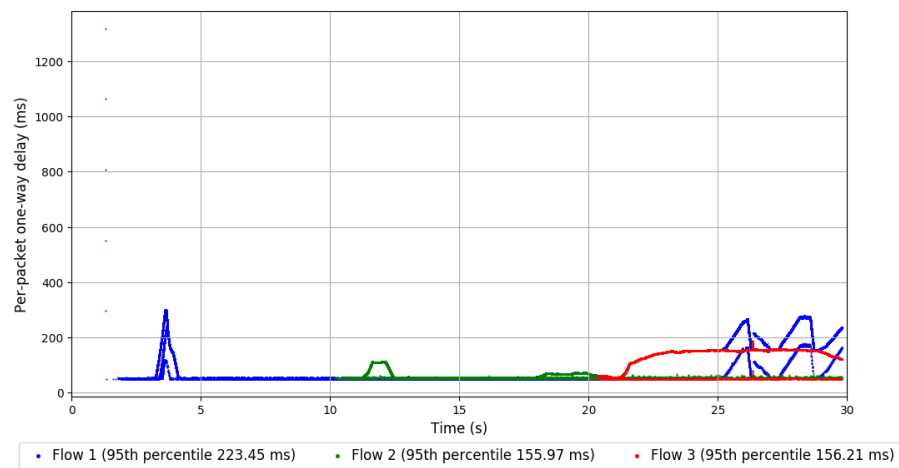
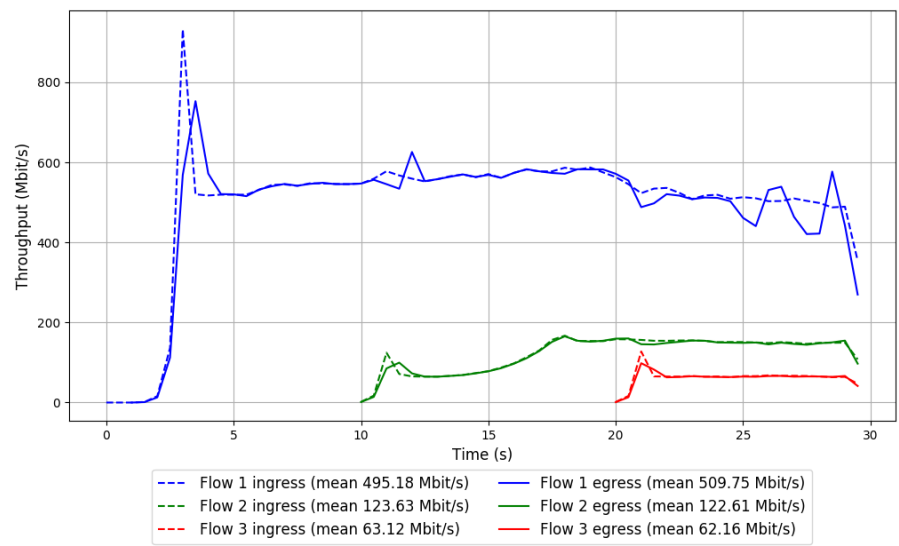
-- Flow 3:

Average throughput: 62.16 Mbit/s

95th percentile per-packet one-way delay: 156.206 ms

Loss rate: 2.53%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-20 22:14:05

End at: 2017-12-20 22:14:35

Below is generated by plot.py at 2017-12-21 02:11:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 608.87 Mbit/s

95th percentile per-packet one-way delay: 161.792 ms

Loss rate: 2.51%

-- Flow 1:

Average throughput: 502.90 Mbit/s

95th percentile per-packet one-way delay: 161.384 ms

Loss rate: 2.66%

-- Flow 2:

Average throughput: 157.75 Mbit/s

95th percentile per-packet one-way delay: 162.478 ms

Loss rate: 1.78%

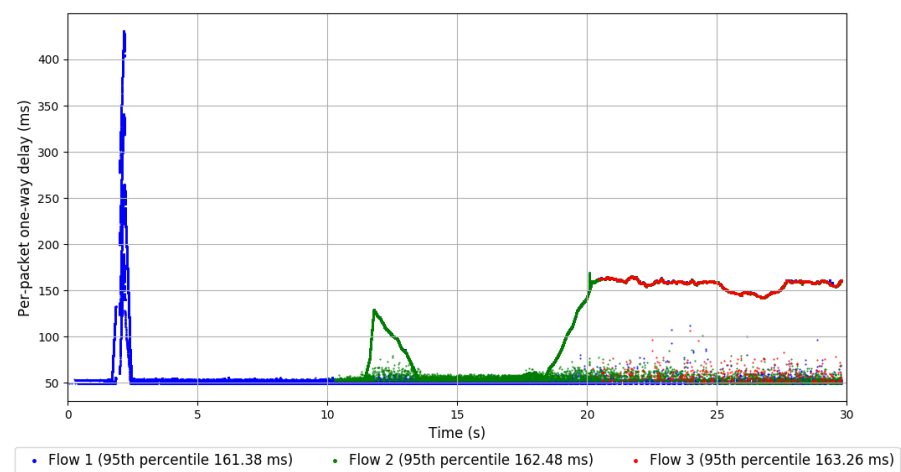
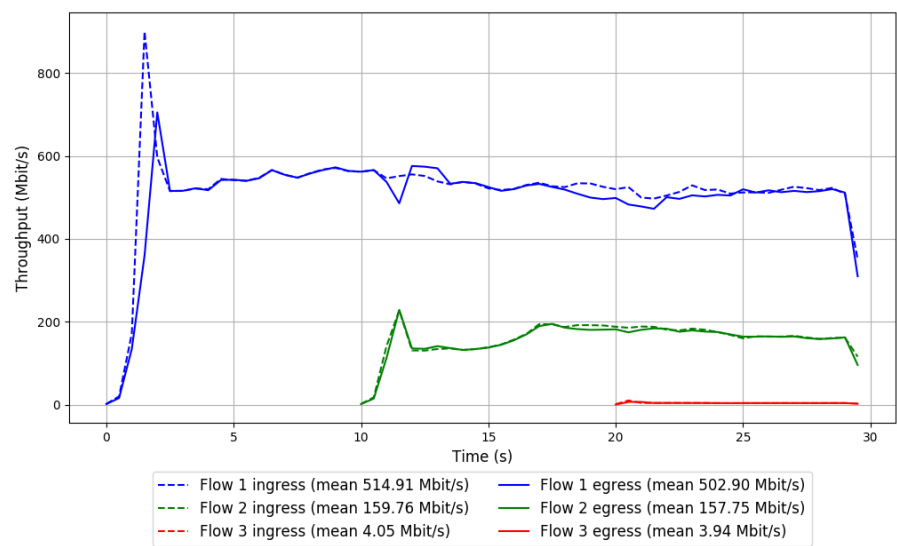
-- Flow 3:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 163.264 ms

Loss rate: 3.83%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-20 22:28:11

End at: 2017-12-20 22:28:41

Below is generated by plot.py at 2017-12-21 02:13:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 641.46 Mbit/s

95th percentile per-packet one-way delay: 153.768 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 597.42 Mbit/s

95th percentile per-packet one-way delay: 153.765 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 63.93 Mbit/s

95th percentile per-packet one-way delay: 153.884 ms

Loss rate: 0.81%

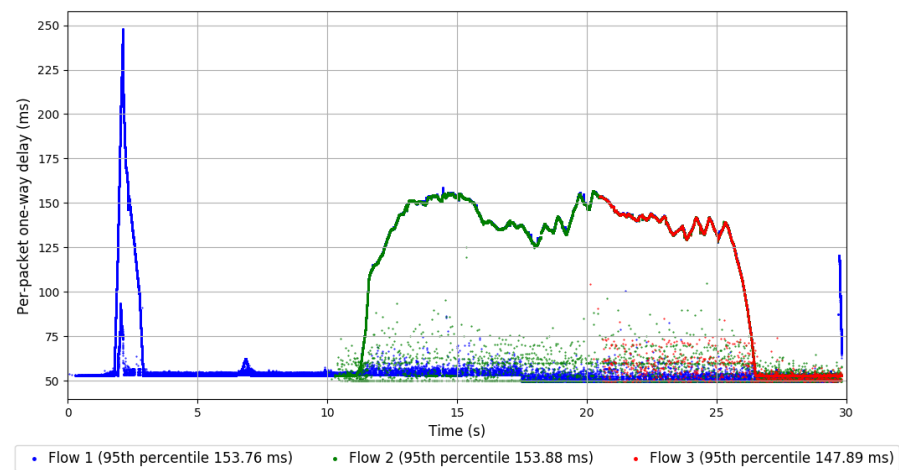
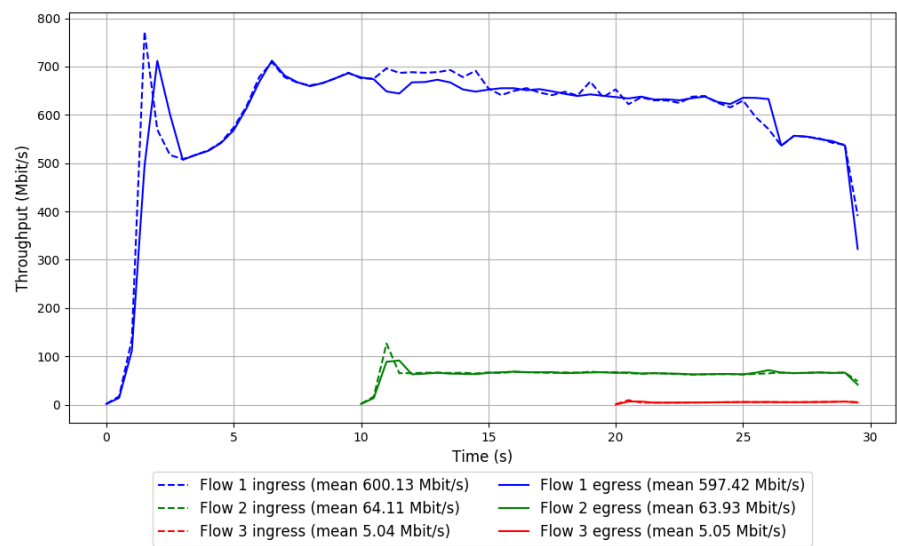
-- Flow 3:

Average throughput: 5.05 Mbit/s

95th percentile per-packet one-way delay: 147.886 ms

Loss rate: 1.50%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-20 22:42:08

End at: 2017-12-20 22:42:38

Below is generated by plot.py at 2017-12-21 02:13:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 625.70 Mbit/s

95th percentile per-packet one-way delay: 165.395 ms

Loss rate: 1.72%

-- Flow 1:

Average throughput: 609.36 Mbit/s

95th percentile per-packet one-way delay: 165.421 ms

Loss rate: 1.70%

-- Flow 2:

Average throughput: 8.19 Mbit/s

95th percentile per-packet one-way delay: 165.733 ms

Loss rate: 1.65%

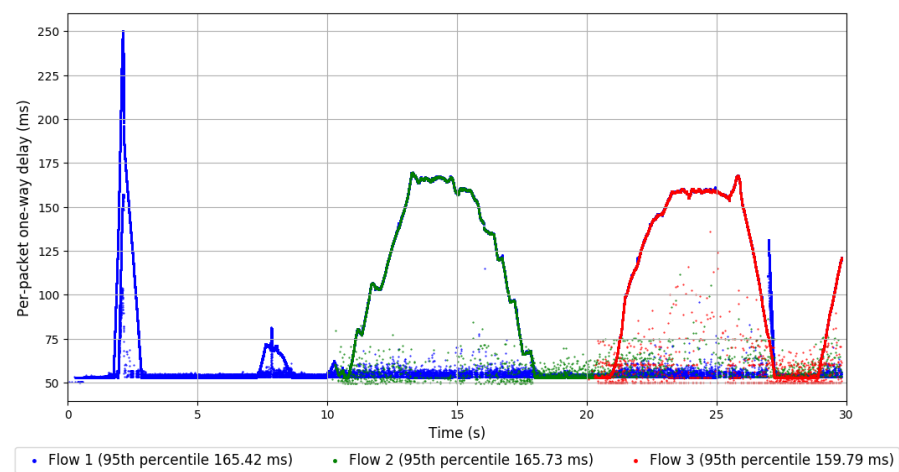
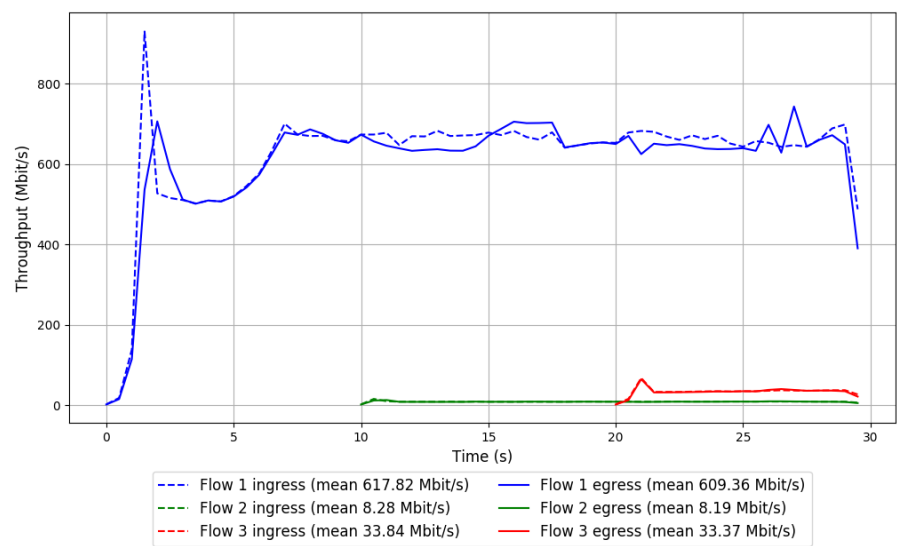
-- Flow 3:

Average throughput: 33.37 Mbit/s

95th percentile per-packet one-way delay: 159.794 ms

Loss rate: 2.41%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-20 22:56:08

End at: 2017-12-20 22:56:38

Below is generated by plot.py at 2017-12-21 02:19:17

Datalink statistics

-- Total of 3 flows:

Average throughput: 645.76 Mbit/s

95th percentile per-packet one-way delay: 154.288 ms

Loss rate: 2.34%

-- Flow 1:

Average throughput: 562.59 Mbit/s

95th percentile per-packet one-way delay: 154.263 ms

Loss rate: 2.31%

-- Flow 2:

Average throughput: 123.28 Mbit/s

95th percentile per-packet one-way delay: 154.544 ms

Loss rate: 2.50%

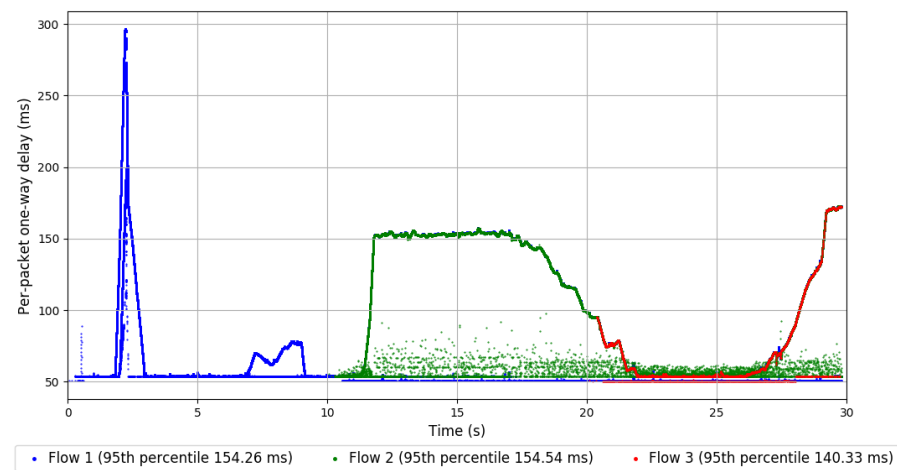
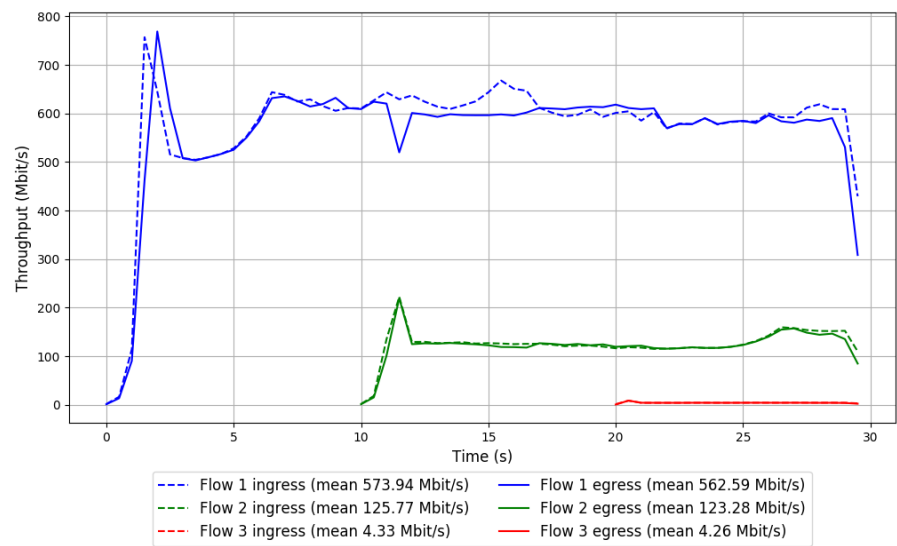
-- Flow 3:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 140.328 ms

Loss rate: 2.72%

Run 9: Report of PCC — Data Link

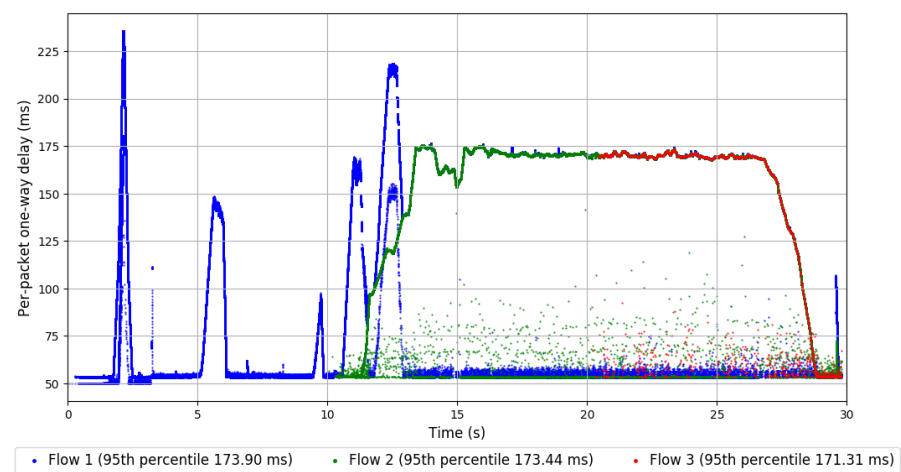
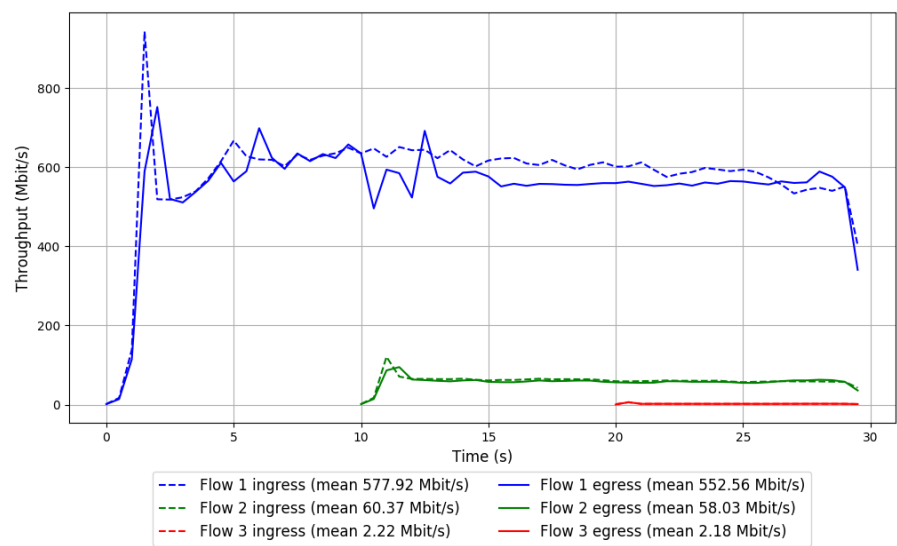


```
Run 10: Statistics of PCC

Start at: 2017-12-20 23:09:53
End at: 2017-12-20 23:10:23

# Below is generated by plot.py at 2017-12-21 02:21:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 591.68 Mbit/s
95th percentile per-packet one-way delay: 173.844 ms
Loss rate: 4.70%
-- Flow 1:
Average throughput: 552.56 Mbit/s
95th percentile per-packet one-way delay: 173.899 ms
Loss rate: 4.72%
-- Flow 2:
Average throughput: 58.03 Mbit/s
95th percentile per-packet one-way delay: 173.437 ms
Loss rate: 4.38%
-- Flow 3:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 171.309 ms
Loss rate: 3.06%
```

Run 10: Report of PCC — Data Link

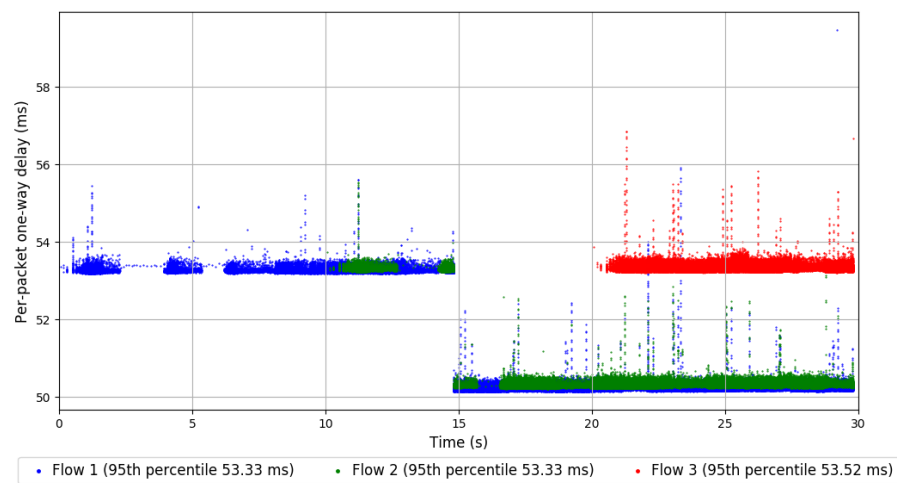
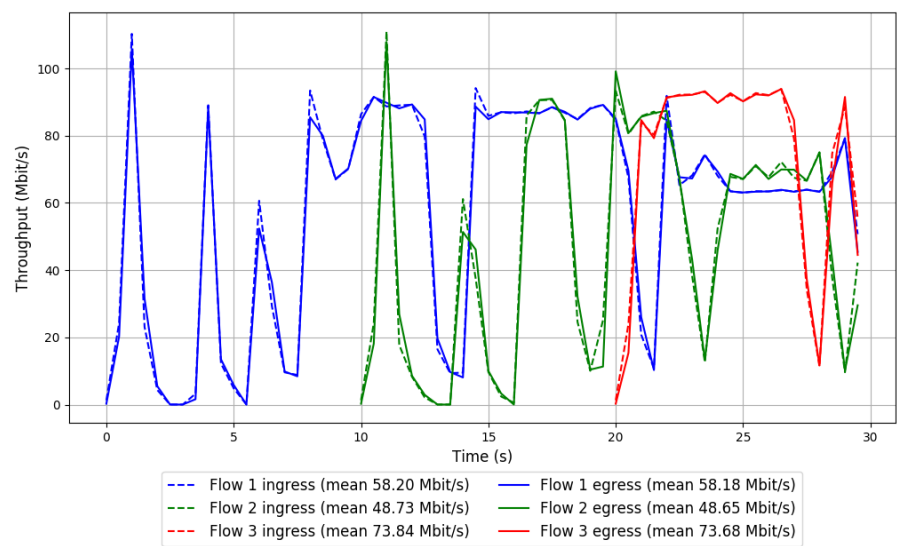


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-20 21:14:24
End at: 2017-12-20 21:14:54

# Below is generated by plot.py at 2017-12-21 02:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 114.55 Mbit/s
95th percentile per-packet one-way delay: 53.421 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 58.18 Mbit/s
95th percentile per-packet one-way delay: 53.325 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 48.65 Mbit/s
95th percentile per-packet one-way delay: 53.329 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 73.68 Mbit/s
95th percentile per-packet one-way delay: 53.515 ms
Loss rate: 1.24%
```


Run 1: Report of QUIC Cubic — Data Link

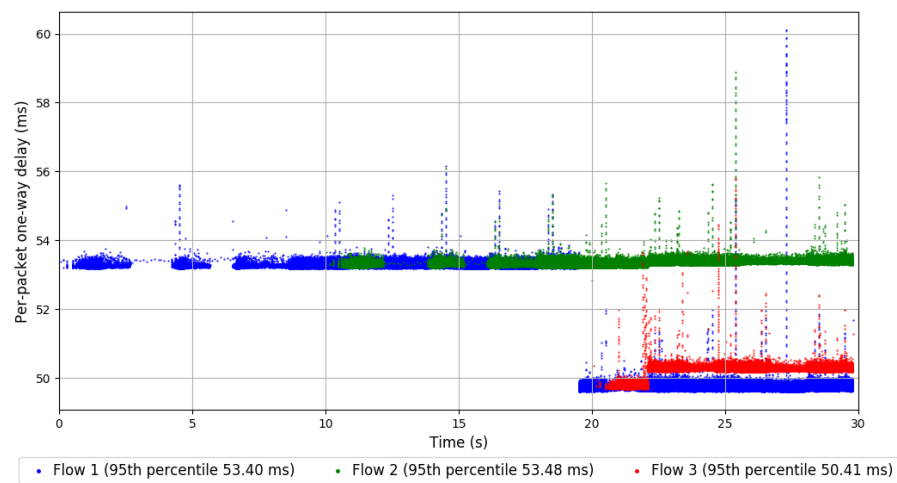
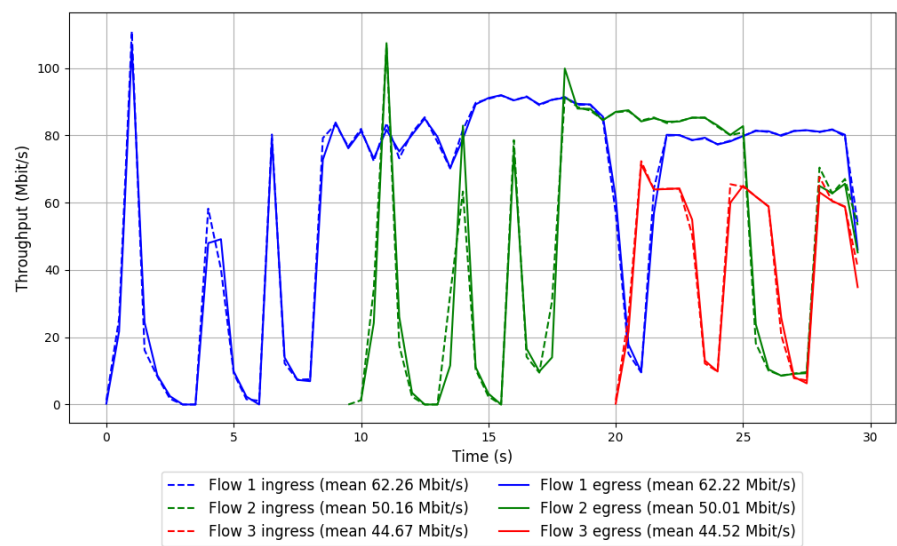


```
Run 2: Statistics of QUIC Cubic

Start at: 2017-12-20 21:28:37
End at: 2017-12-20 21:29:07

# Below is generated by plot.py at 2017-12-21 02:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 109.98 Mbit/s
95th percentile per-packet one-way delay: 53.435 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 62.22 Mbit/s
95th percentile per-packet one-way delay: 53.399 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 50.01 Mbit/s
95th percentile per-packet one-way delay: 53.484 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 44.52 Mbit/s
95th percentile per-packet one-way delay: 50.405 ms
Loss rate: 1.35%
```

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-20 21:42:32

End at: 2017-12-20 21:43:02

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 104.95 Mbit/s

95th percentile per-packet one-way delay: 53.507 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 39.38 Mbit/s

95th percentile per-packet one-way delay: 53.502 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 70.08 Mbit/s

95th percentile per-packet one-way delay: 53.527 ms

Loss rate: 0.63%

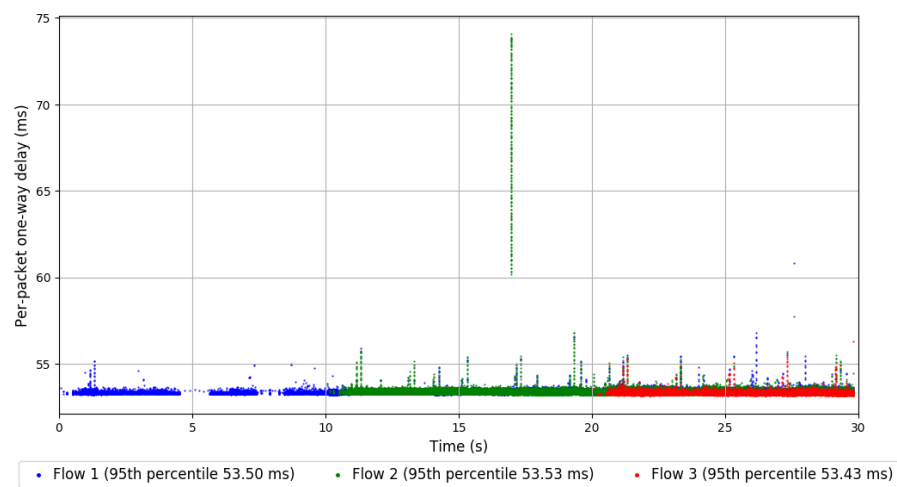
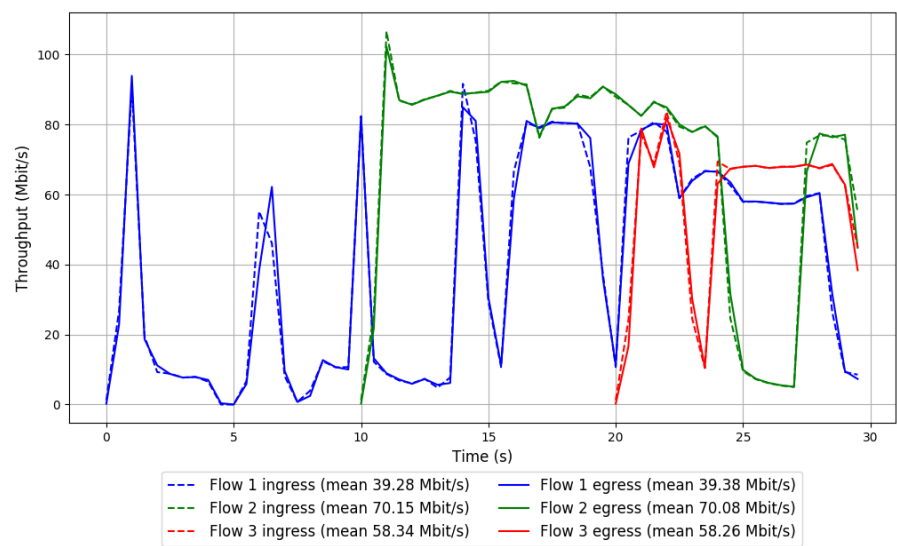
-- Flow 3:

Average throughput: 58.26 Mbit/s

95th percentile per-packet one-way delay: 53.427 ms

Loss rate: 1.16%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-20 21:56:38

End at: 2017-12-20 21:57:08

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.39 Mbit/s

95th percentile per-packet one-way delay: 53.372 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 47.00 Mbit/s

95th percentile per-packet one-way delay: 53.393 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 46.61 Mbit/s

95th percentile per-packet one-way delay: 50.303 ms

Loss rate: 0.74%

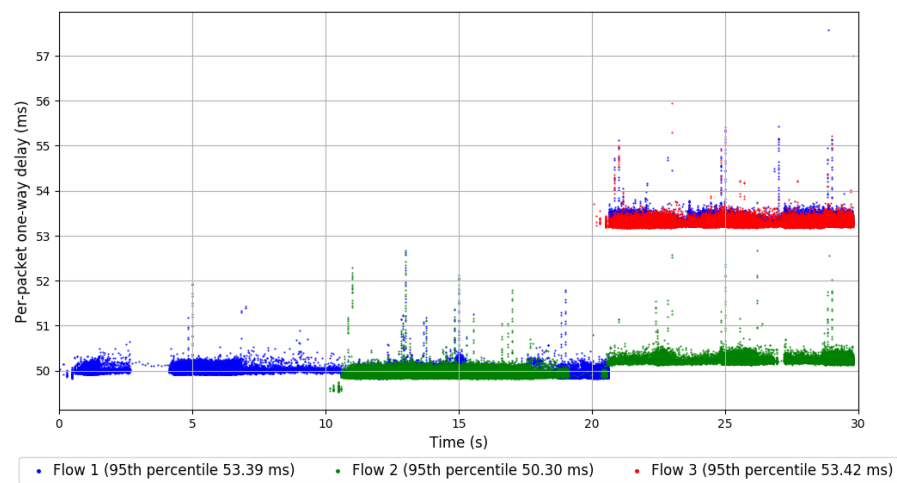
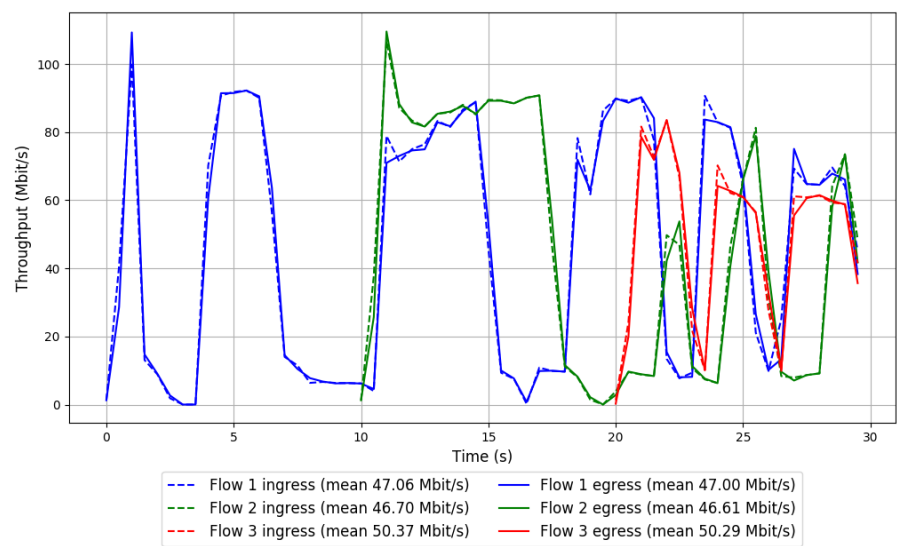
-- Flow 3:

Average throughput: 50.29 Mbit/s

95th percentile per-packet one-way delay: 53.416 ms

Loss rate: 1.22%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-20 22:10:21

End at: 2017-12-20 22:10:51

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.11 Mbit/s

95th percentile per-packet one-way delay: 53.427 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 68.24 Mbit/s

95th percentile per-packet one-way delay: 53.463 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 71.70 Mbit/s

95th percentile per-packet one-way delay: 53.345 ms

Loss rate: 0.58%

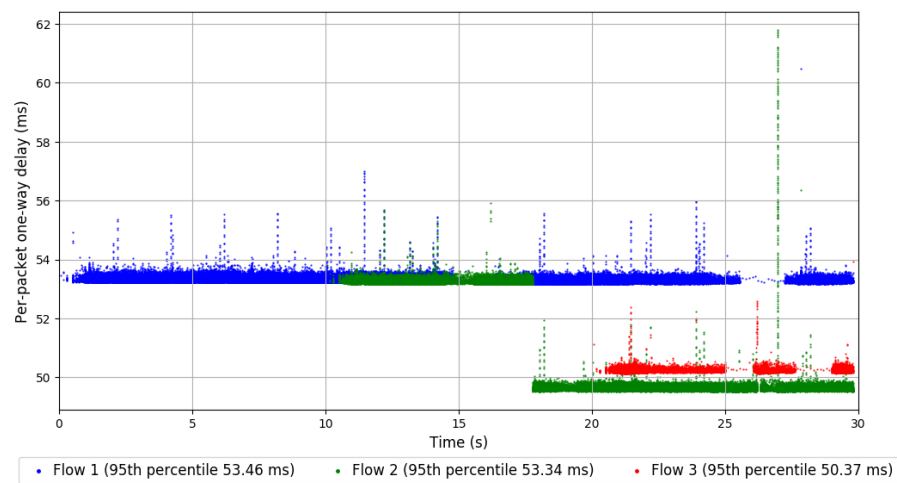
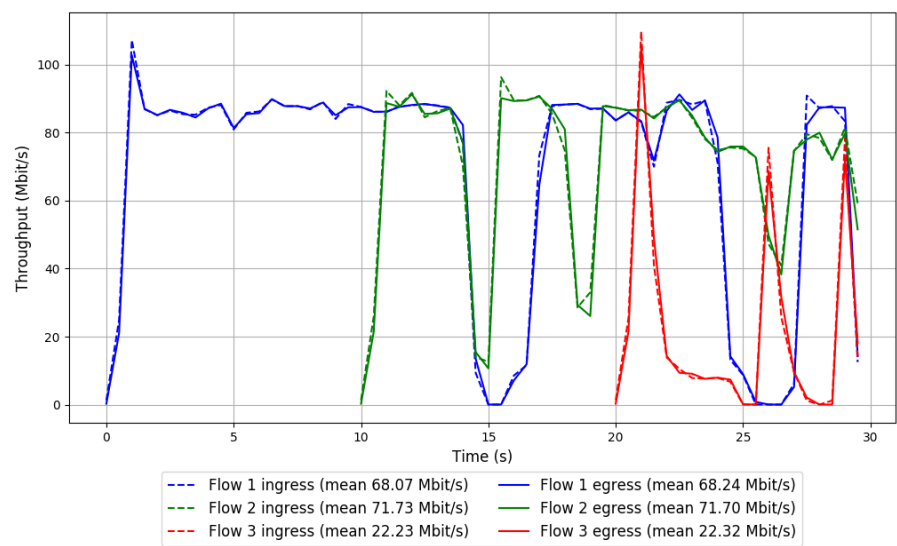
-- Flow 3:

Average throughput: 22.32 Mbit/s

95th percentile per-packet one-way delay: 50.373 ms

Loss rate: 0.58%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-20 22:24:27

End at: 2017-12-20 22:24:57

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.96 Mbit/s

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

Loss rate: 0.42%

-- Flow 1:

Average throughput: 53.61 Mbit/s

95th percentile per-packet one-way delay: 50.156 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 59.76 Mbit/s

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

Loss rate: 0.53%

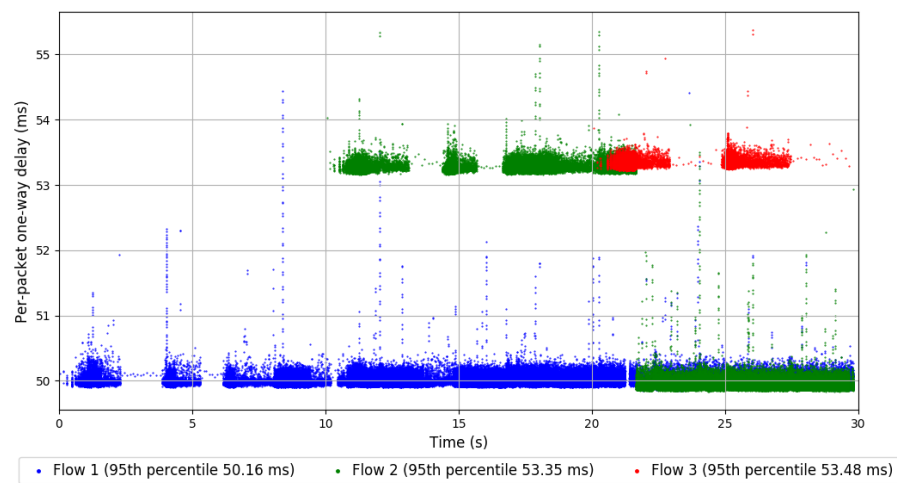
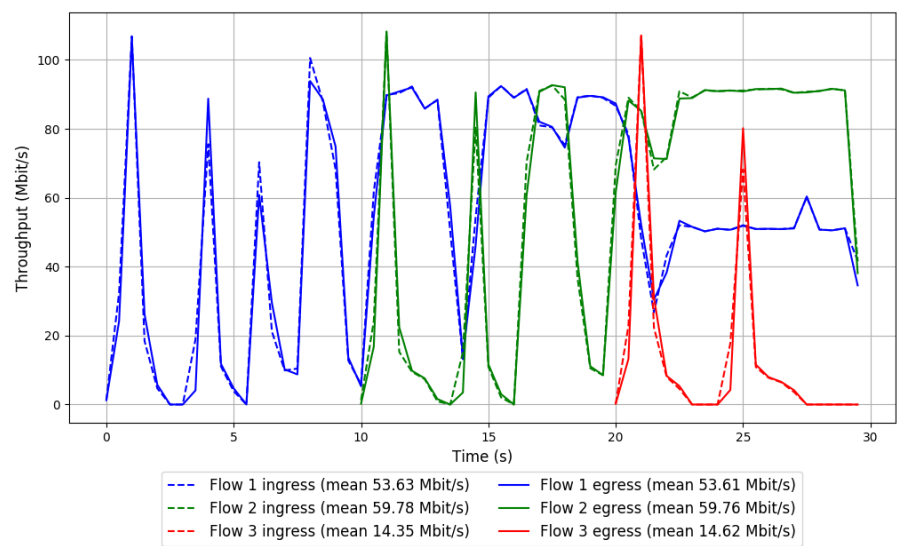
-- Flow 3:

Average throughput: 14.62 Mbit/s

95th percentile per-packet one-way delay: 53.476 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-20 22:38:25

End at: 2017-12-20 22:38:55

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.81 Mbit/s

95th percentile per-packet one-way delay: 53.460 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 45.70 Mbit/s

95th percentile per-packet one-way delay: 53.492 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 44.48 Mbit/s

95th percentile per-packet one-way delay: 53.349 ms

Loss rate: 0.80%

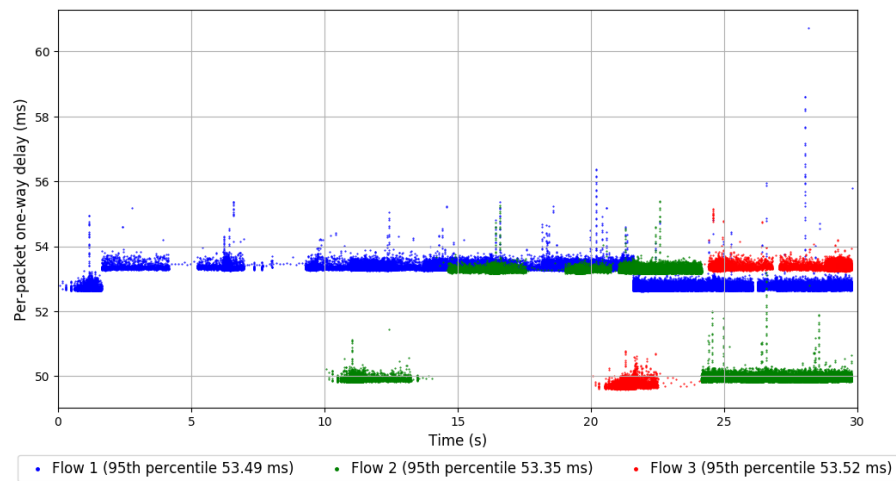
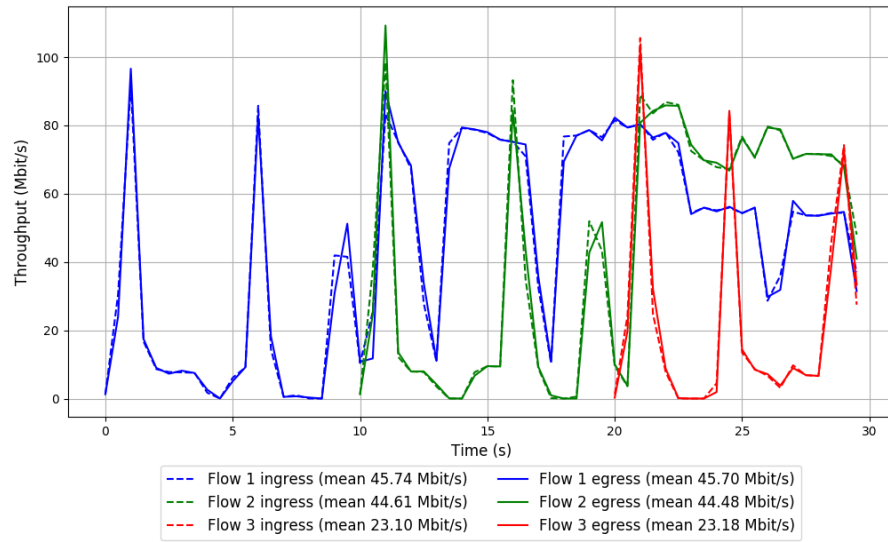
-- Flow 3:

Average throughput: 23.18 Mbit/s

95th percentile per-packet one-way delay: 53.517 ms

Loss rate: 0.72%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-20 22:52:20

End at: 2017-12-20 22:52:50

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.92 Mbit/s

95th percentile per-packet one-way delay: 50.259 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 64.10 Mbit/s

95th percentile per-packet one-way delay: 50.033 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 73.76 Mbit/s

95th percentile per-packet one-way delay: 53.270 ms

Loss rate: 0.57%

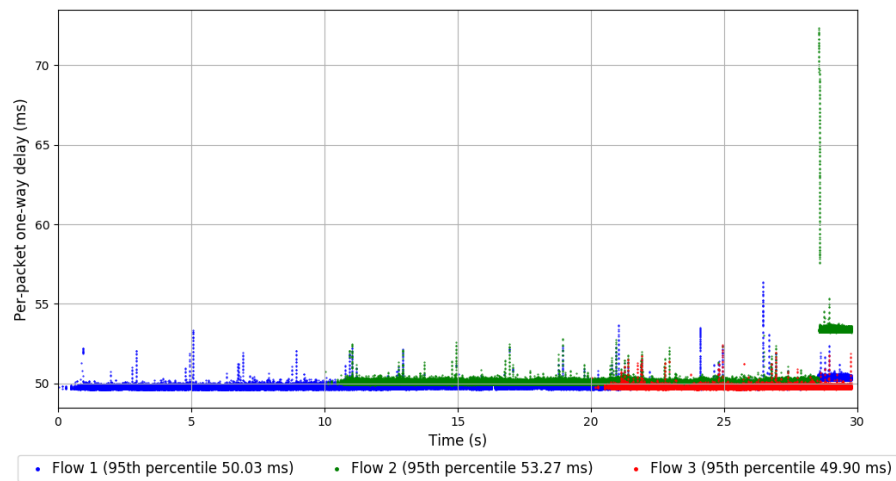
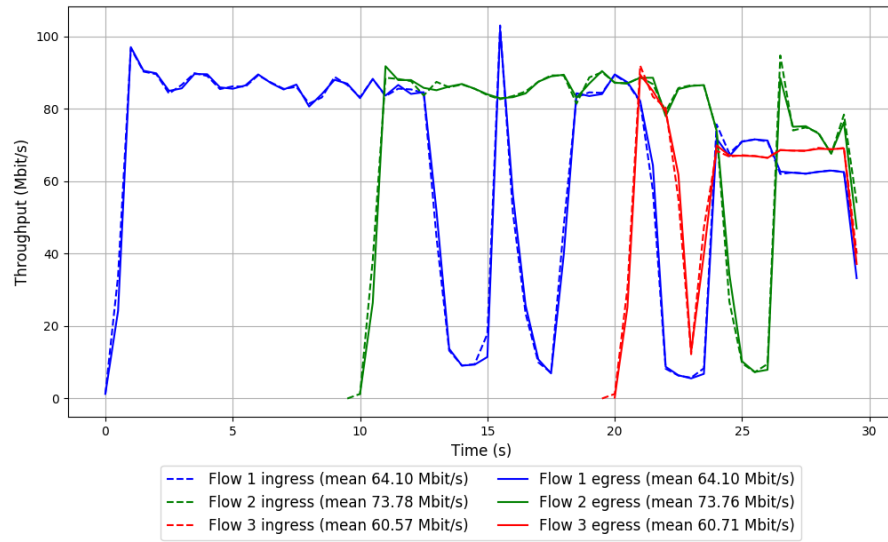
-- Flow 3:

Average throughput: 60.71 Mbit/s

95th percentile per-packet one-way delay: 49.895 ms

Loss rate: 0.82%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-20 23:06:10

End at: 2017-12-20 23:06:40

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 103.60 Mbit/s

95th percentile per-packet one-way delay: 53.443 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 56.24 Mbit/s

95th percentile per-packet one-way delay: 53.474 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 40.44 Mbit/s

95th percentile per-packet one-way delay: 49.977 ms

Loss rate: 0.80%

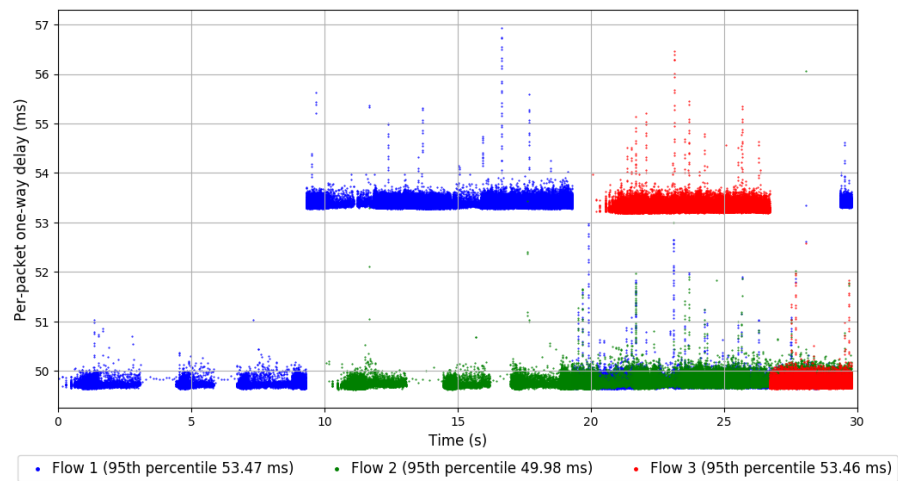
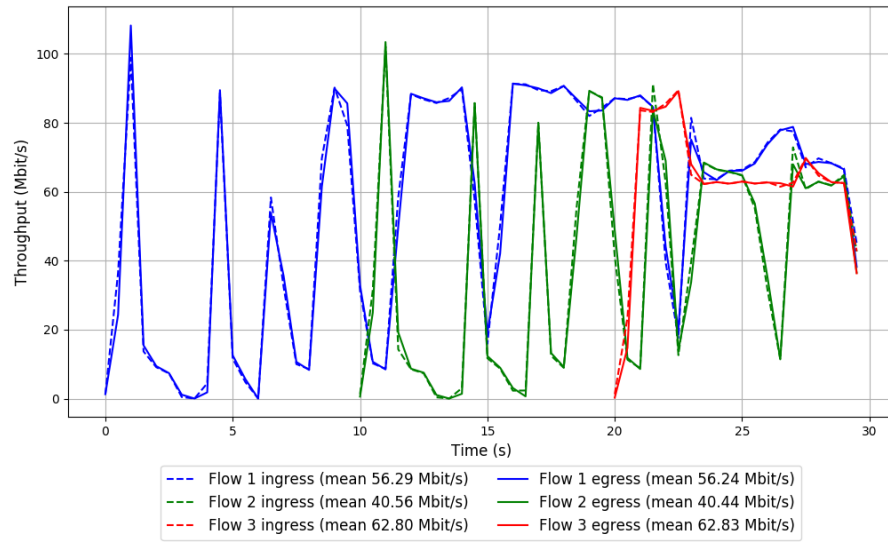
-- Flow 3:

Average throughput: 62.83 Mbit/s

95th percentile per-packet one-way delay: 53.462 ms

Loss rate: 1.03%

Run 9: Report of QUIC Cubic — Data Link

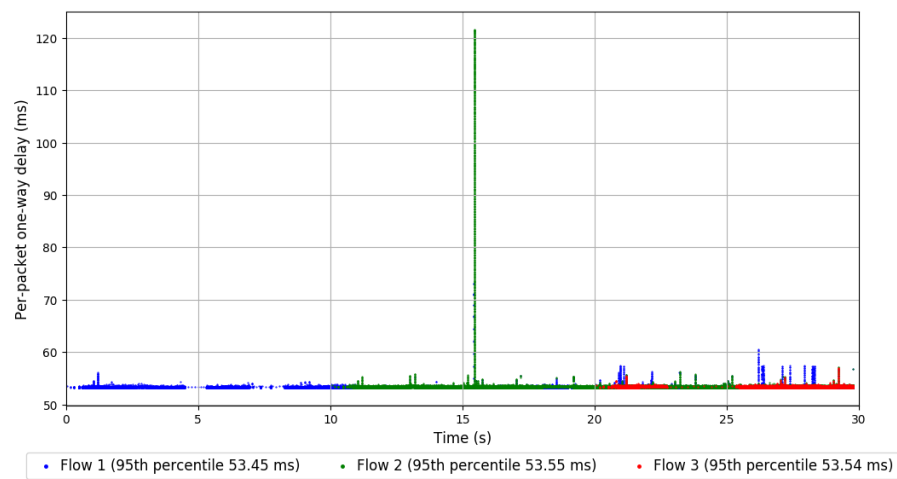
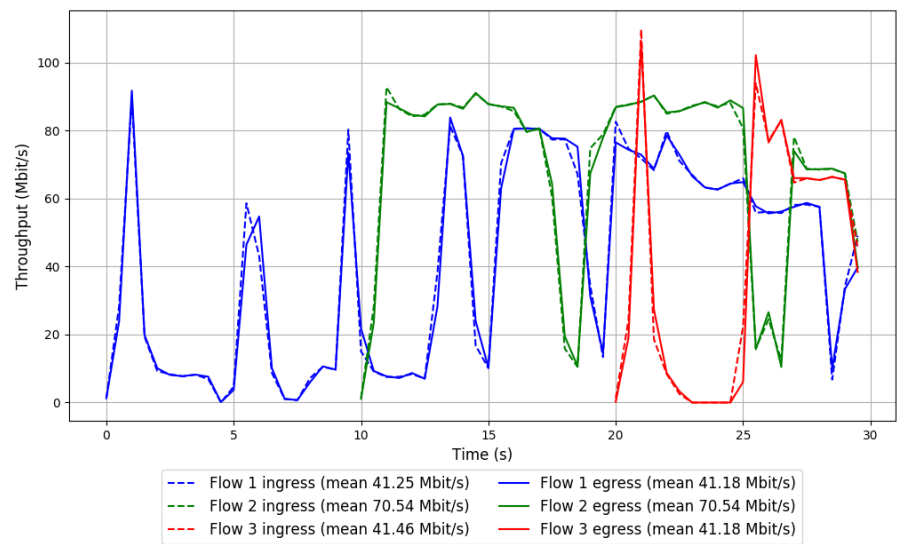


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-20 23:19:52
End at: 2017-12-20 23:20:22

# Below is generated by plot.py at 2017-12-21 02:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 101.45 Mbit/s
95th percentile per-packet one-way delay: 53.520 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 41.18 Mbit/s
95th percentile per-packet one-way delay: 53.454 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 70.54 Mbit/s
95th percentile per-packet one-way delay: 53.551 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 41.18 Mbit/s
95th percentile per-packet one-way delay: 53.536 ms
Loss rate: 1.76%
```

Run 10: Report of QUIC Cubic — Data Link

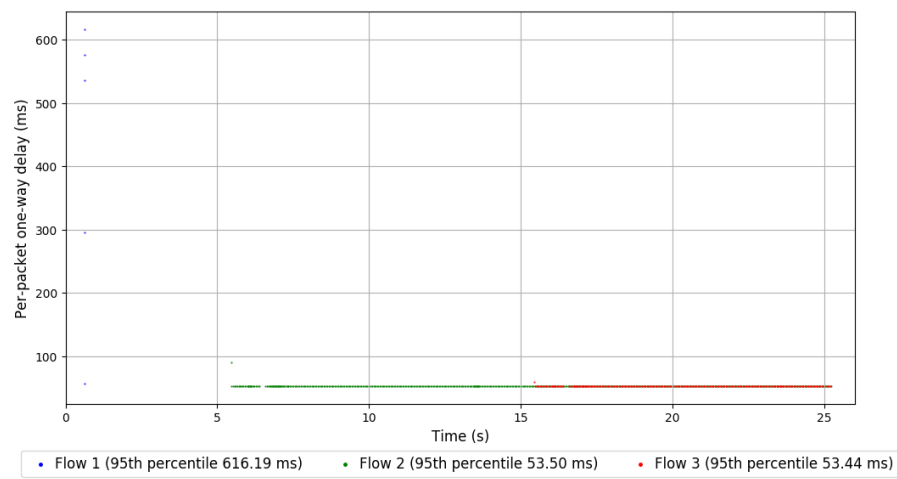
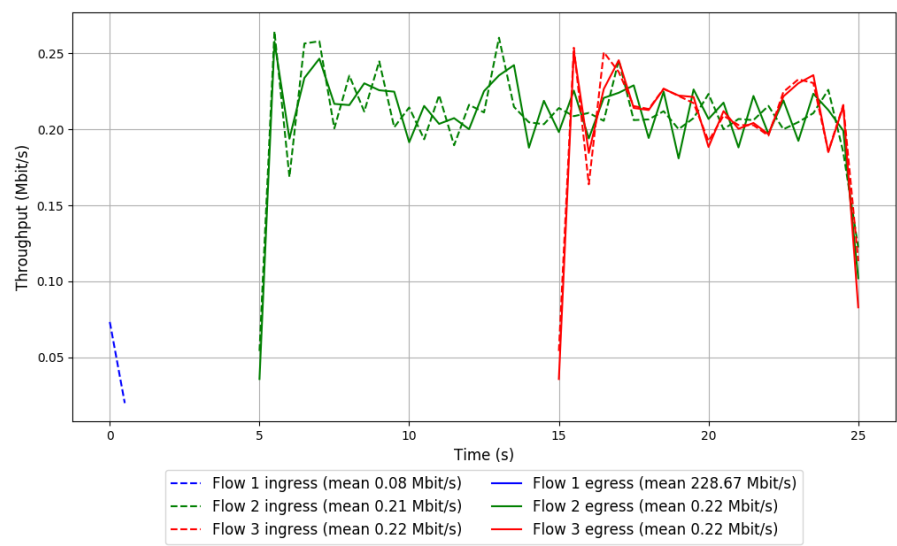


```
Run 1: Statistics of SReAM

Start at: 2017-12-20 21:08:50
End at: 2017-12-20 21:09:20

# Below is generated by plot.py at 2017-12-21 02:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 53.500 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 228.67 Mbit/s
95th percentile per-packet one-way delay: 616.188 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.502 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.437 ms
Loss rate: 1.11%
```

Run 1: Report of SReAM — Data Link

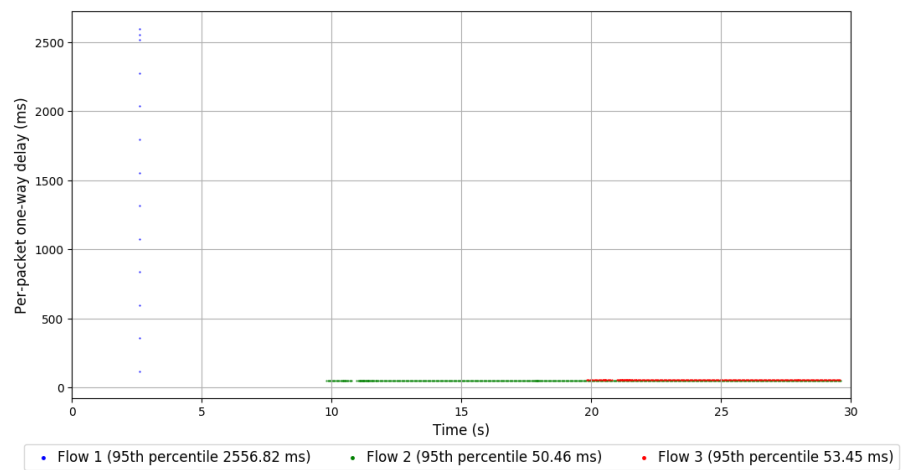
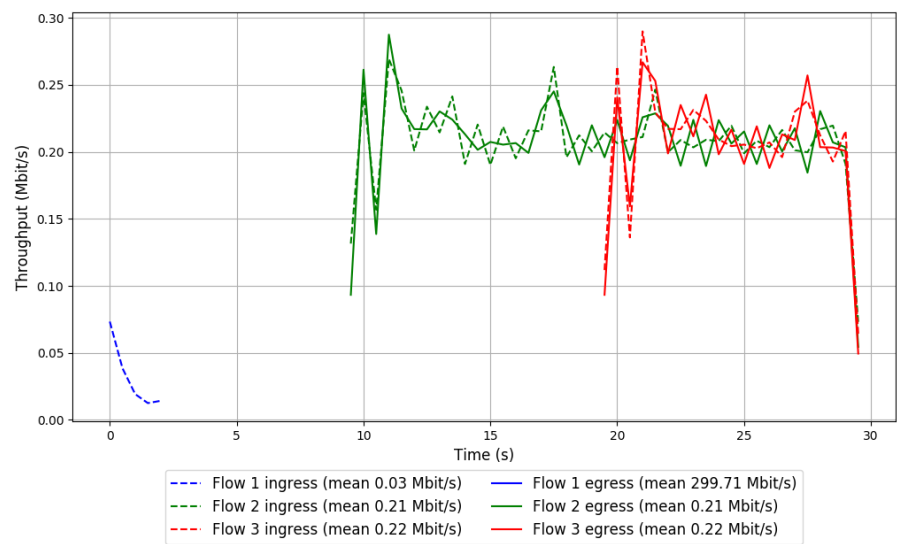


```
Run 2: Statistics of SReAM

Start at: 2017-12-20 21:22:29
End at: 2017-12-20 21:22:59

# Below is generated by plot.py at 2017-12-21 02:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 53.427 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 299.71 Mbit/s
95th percentile per-packet one-way delay: 2556.815 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.457 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.445 ms
Loss rate: 1.10%
```

Run 2: Report of SReAM — Data Link

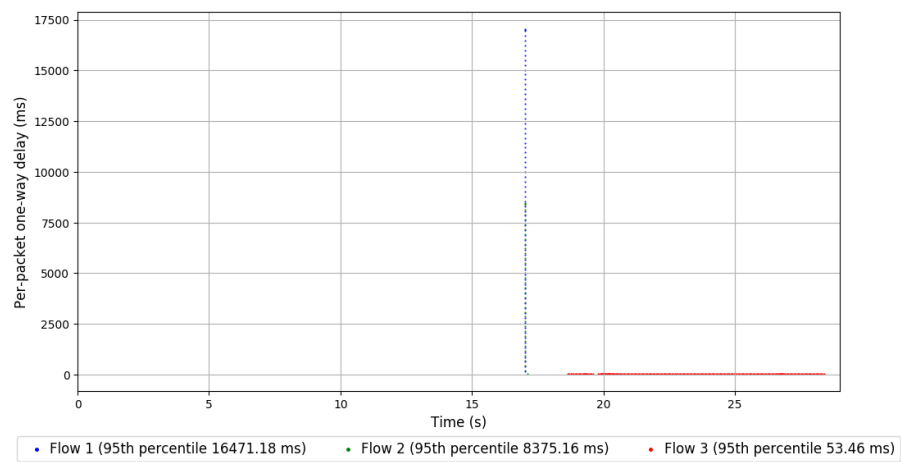
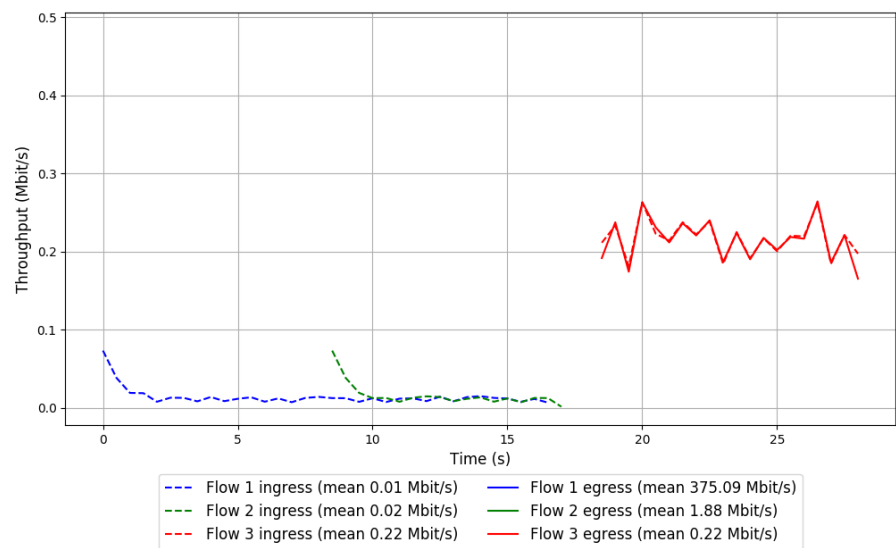


Run 3: Statistics of SReAM

Start at: 2017-12-20 21:36:54

End at: 2017-12-20 21:37:24

Run 3: Report of SReAM — Data Link

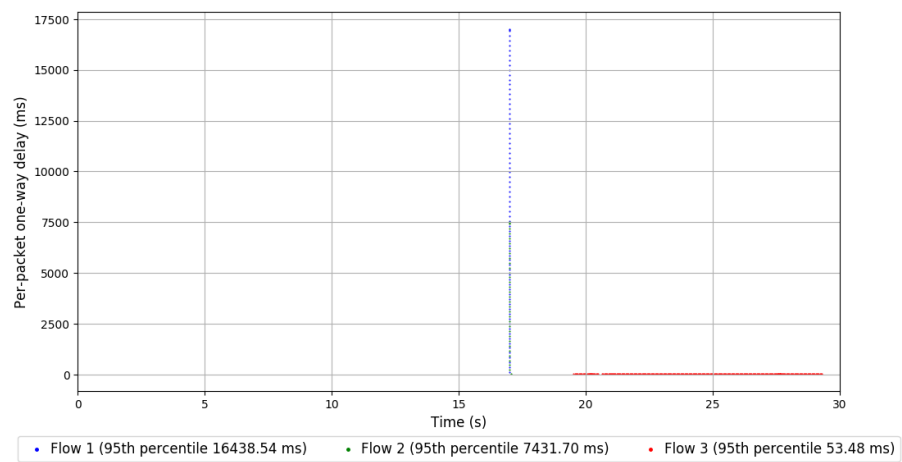
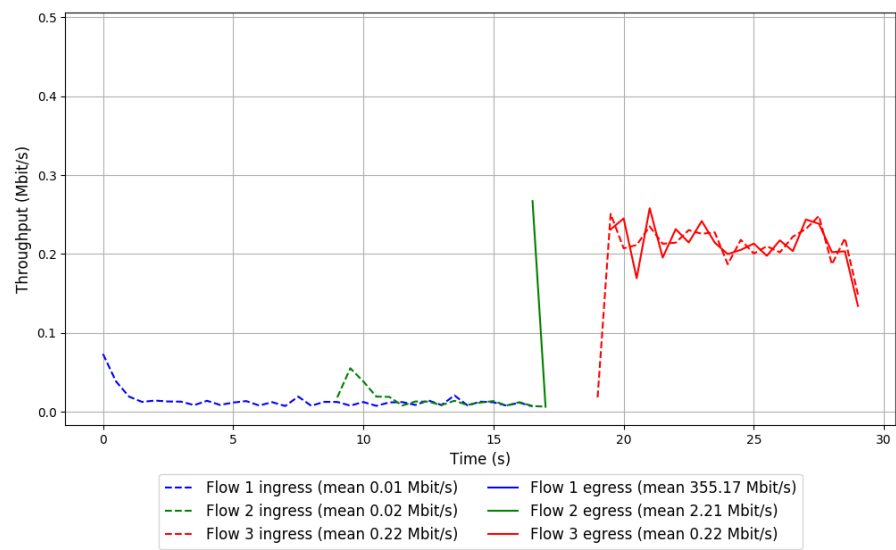


Run 4: Statistics of SReAM

Start at: 2017-12-20 21:50:51

End at: 2017-12-20 21:51:21

Run 4: Report of SReAM — Data Link

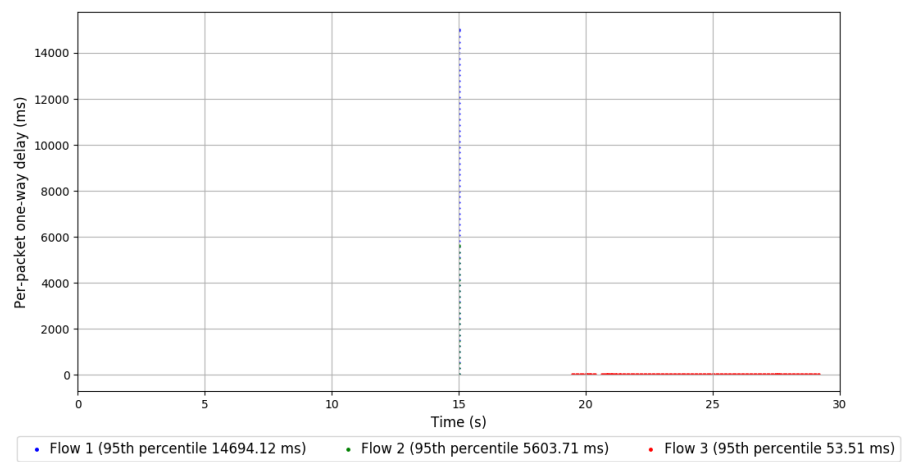
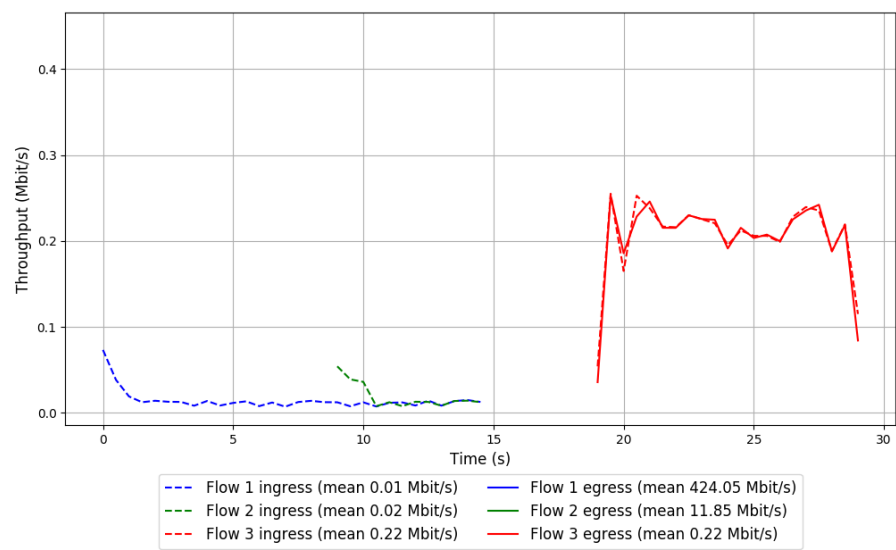


Run 5: Statistics of SReAM

Start at: 2017-12-20 22:04:52

End at: 2017-12-20 22:05:22

Run 5: Report of SReAM — Data Link

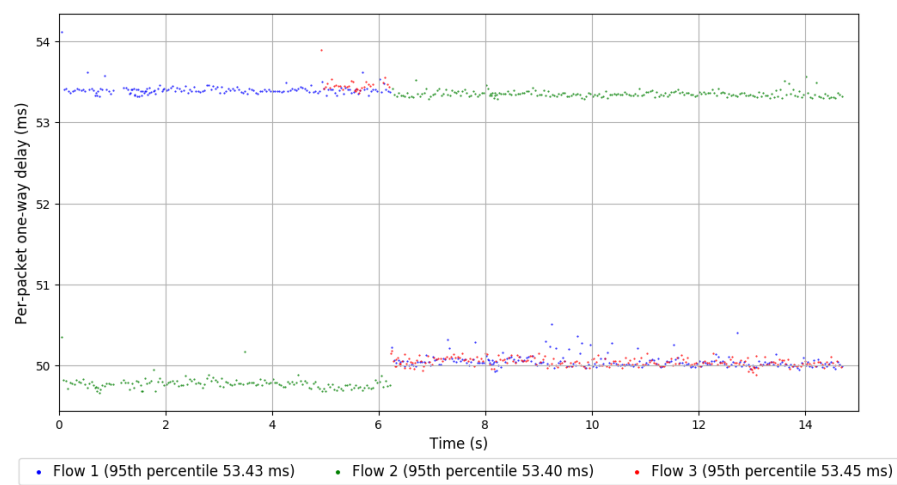
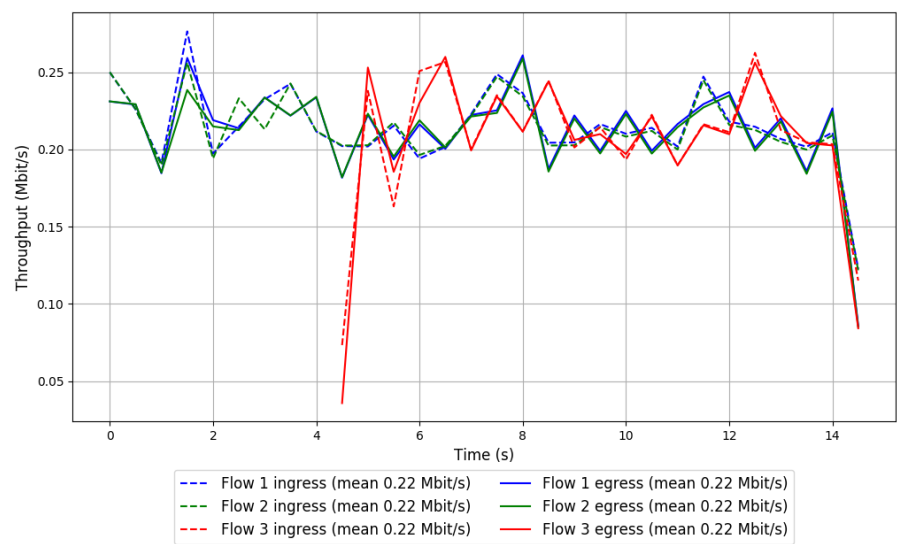


Run 6: Statistics of SReAM

Start at: 2017-12-20 22:18:38

End at: 2017-12-20 22:19:08

Run 6: Report of SReAM — Data Link

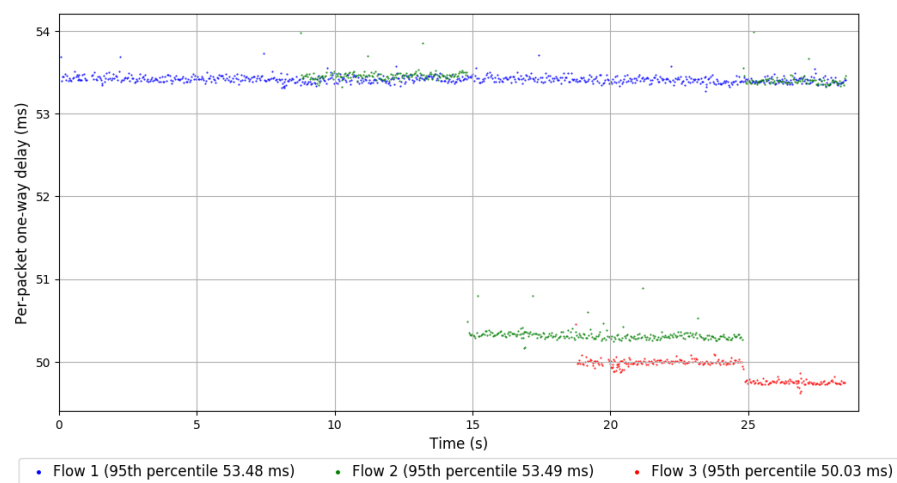
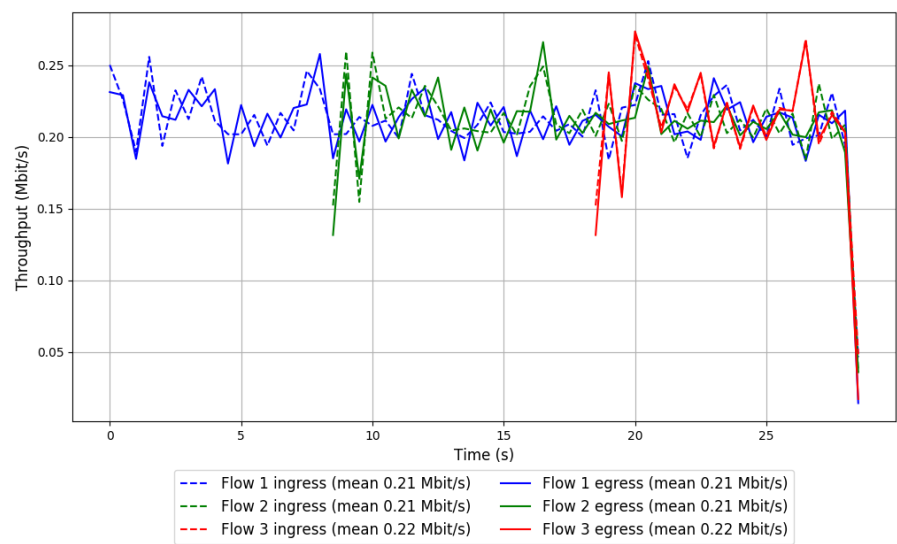


```
Run 7: Statistics of SCReAM

Start at: 2017-12-20 22:32:43
End at: 2017-12-20 22:33:13

# Below is generated by plot.py at 2017-12-21 02:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 53.482 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.480 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.494 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.034 ms
Loss rate: 1.11%
```


Run 7: Report of SCSReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2017-12-20 22:46:39

End at: 2017-12-20 22:47:09

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 53.134 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 52.959 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 52.907 ms

Loss rate: 0.43%

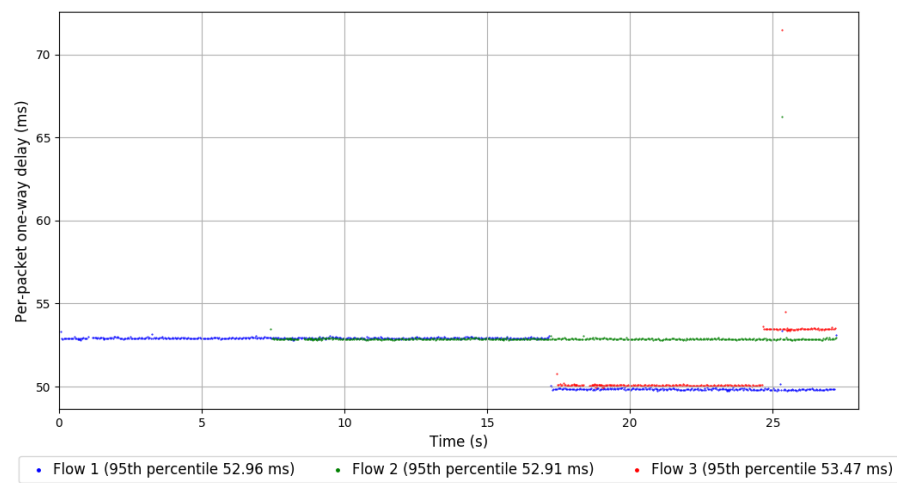
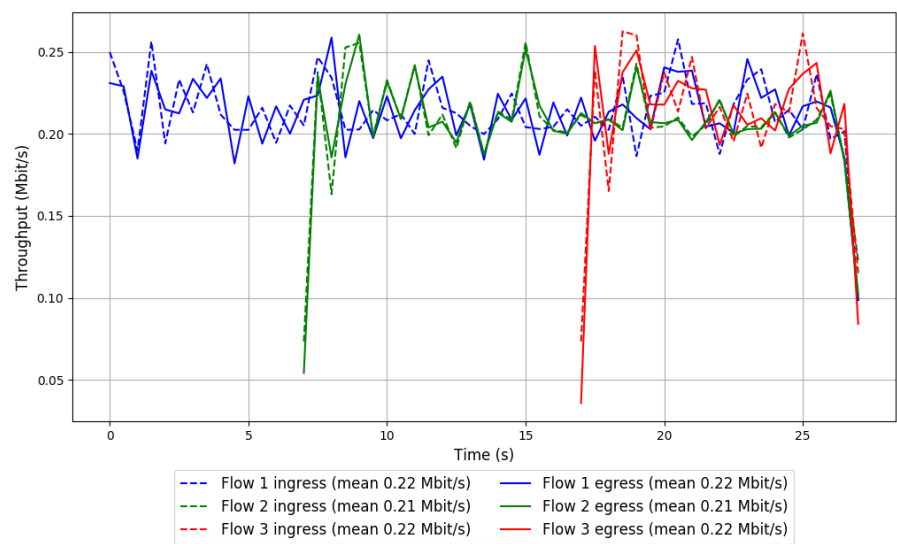
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.467 ms

Loss rate: 1.10%

Run 8: Report of SReAM — Data Link

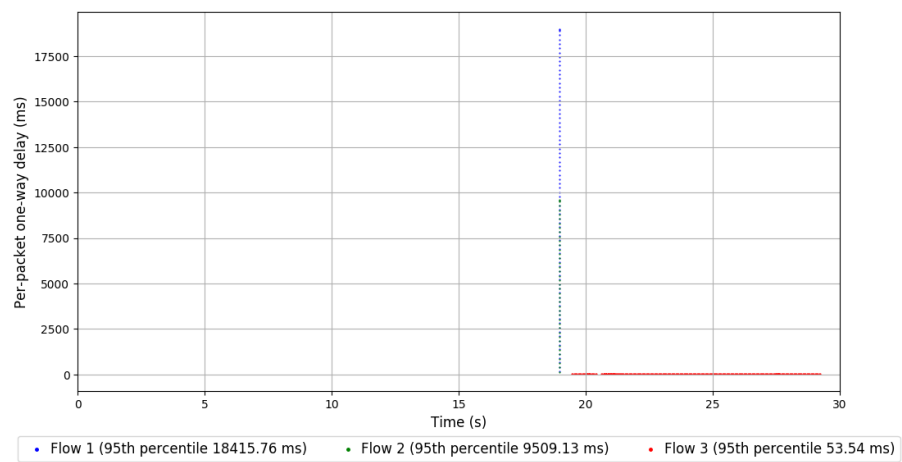
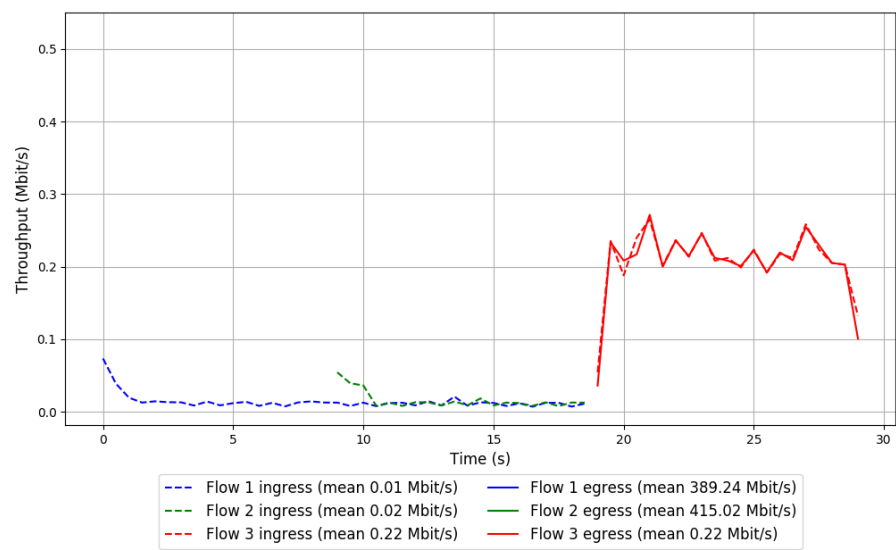


Run 9: Statistics of SReAM

Start at: 2017-12-20 23:00:41

End at: 2017-12-20 23:01:11

Run 9: Report of SReAM — Data Link

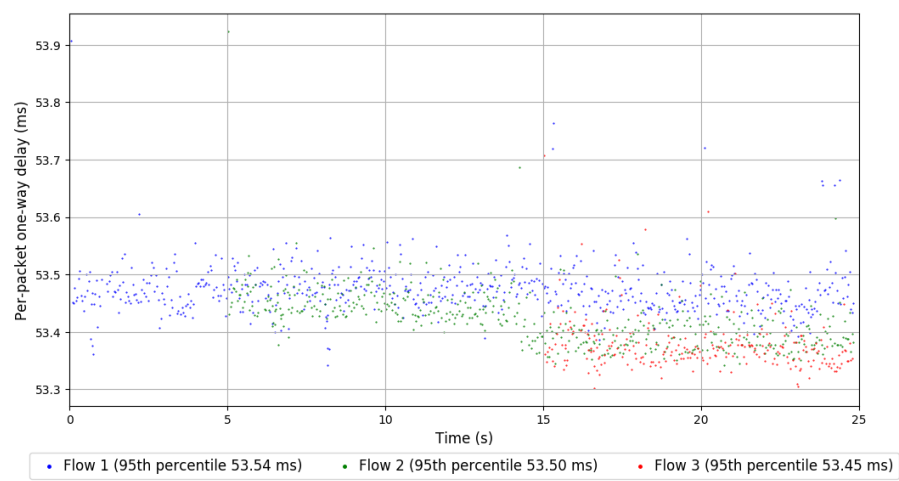
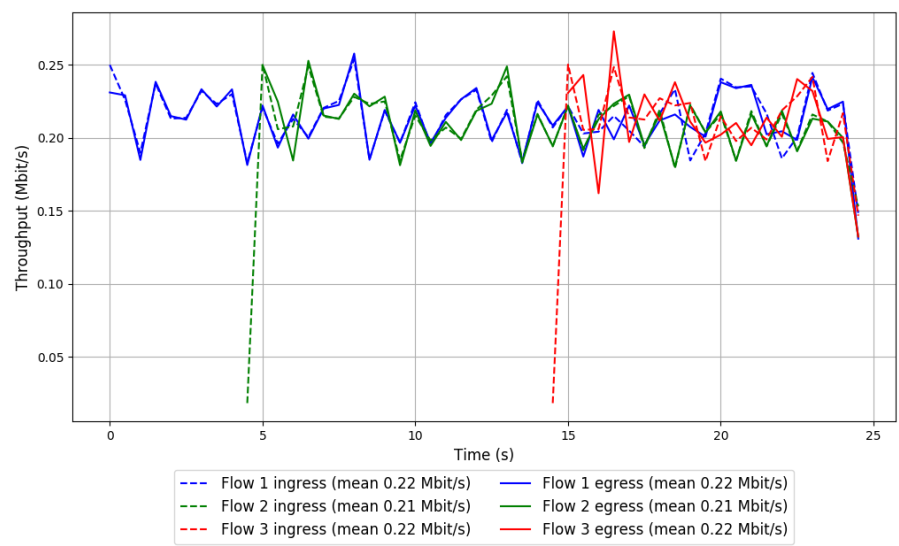


```
Run 10: Statistics of SCReAM

Start at: 2017-12-20 23:14:20
End at: 2017-12-20 23:14:50

# Below is generated by plot.py at 2017-12-21 02:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 53.521 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.536 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.497 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.448 ms
Loss rate: 1.11%
```

Run 10: Report of SCReAM — Data Link

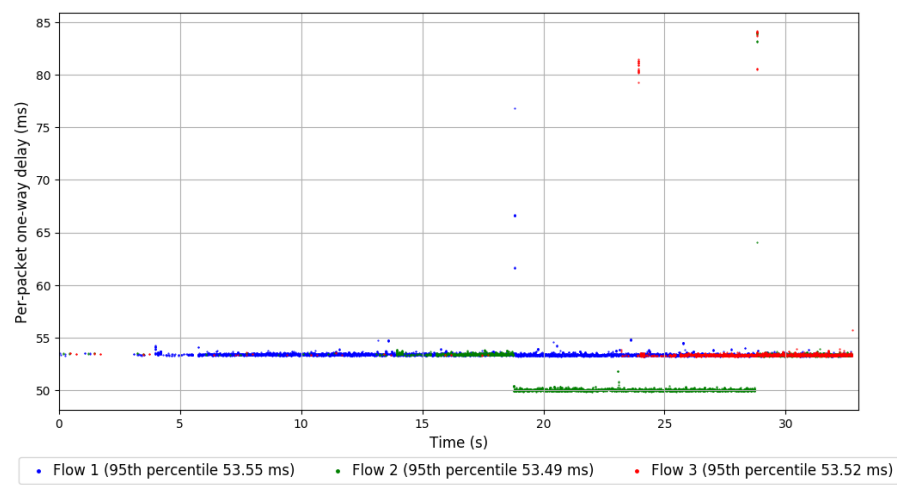
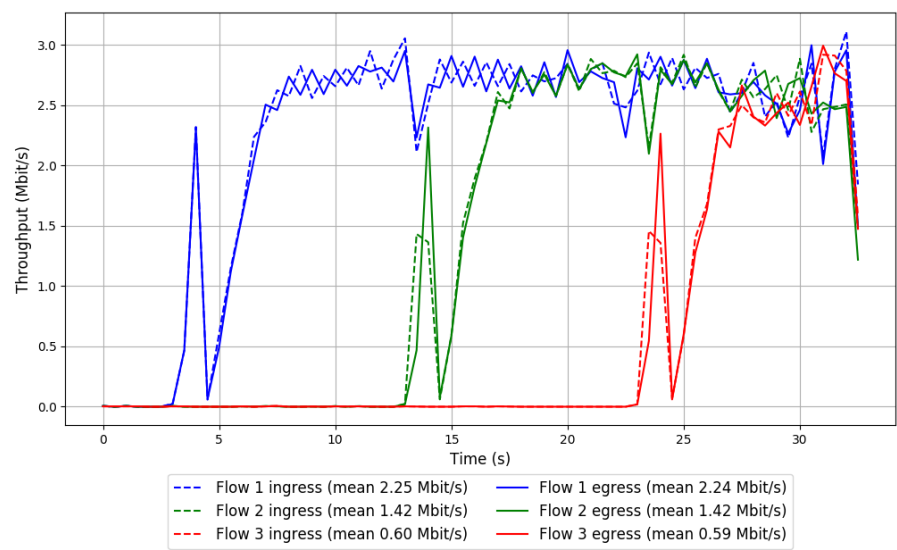


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-20 21:12:50
End at: 2017-12-20 21:13:20

# Below is generated by plot.py at 2017-12-21 02:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.24 Mbit/s
95th percentile per-packet one-way delay: 53.527 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 53.549 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 53.489 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 53.519 ms
Loss rate: 1.27%
```


Run 1: Report of WebRTC media — Data Link

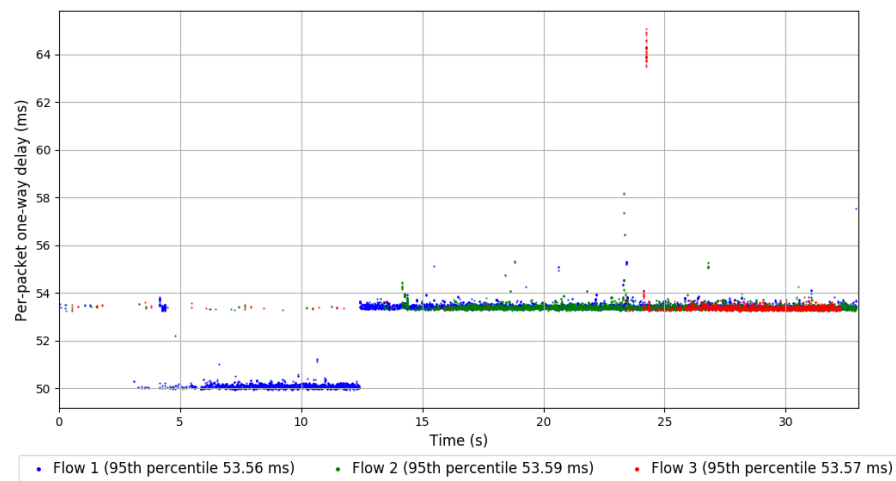
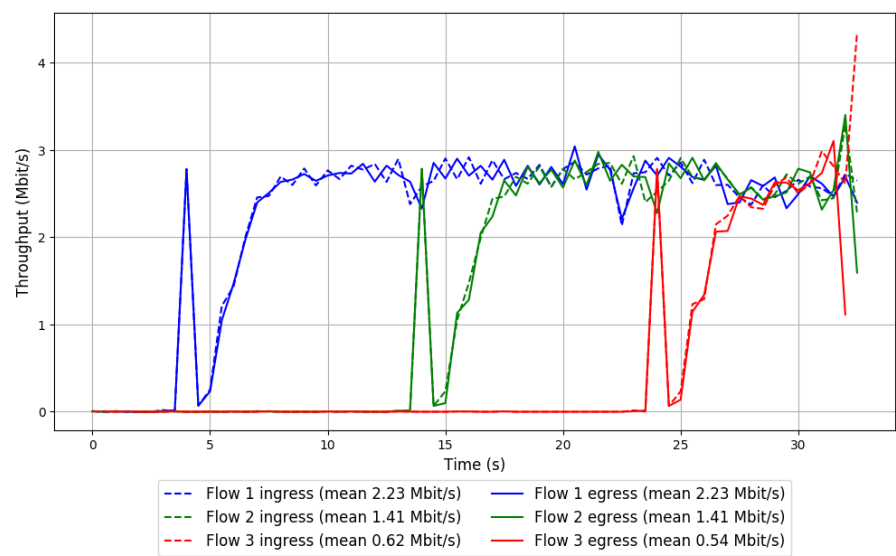


```
Run 2: Statistics of WebRTC media

Start at: 2017-12-20 21:26:50
End at: 2017-12-20 21:27:20

# Below is generated by plot.py at 2017-12-21 02:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 53.574 ms
Loss rate: 2.63%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 53.563 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 53.592 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 53.574 ms
Loss rate: 14.96%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-20 21:40:59

End at: 2017-12-20 21:41:29

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 53.525 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 53.579 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 1.43 Mbit/s

95th percentile per-packet one-way delay: 49.988 ms

Loss rate: 0.68%

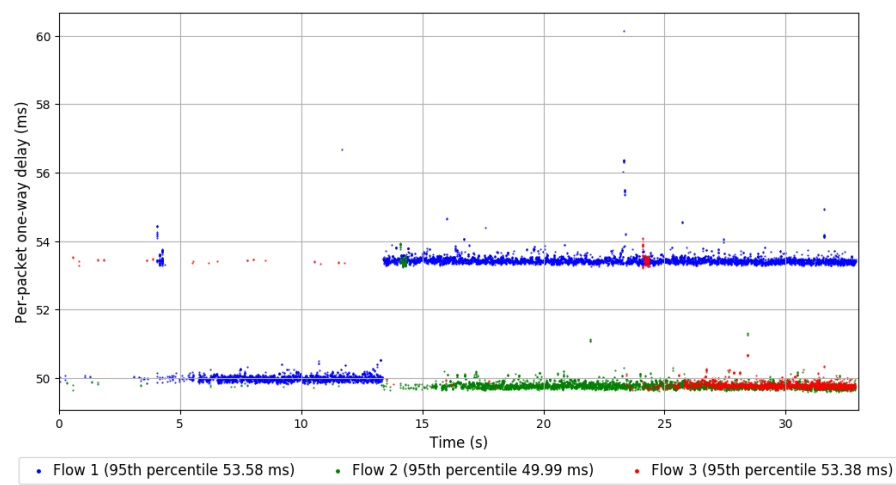
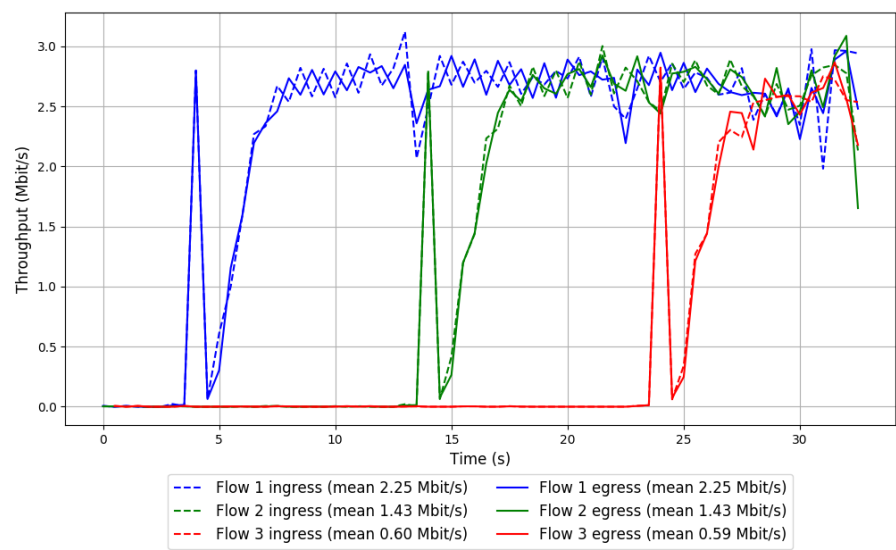
-- Flow 3:

Average throughput: 0.59 Mbit/s

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

Loss rate: 1.50%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-20 21:55:04

End at: 2017-12-20 21:55:34

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 53.480 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 53.515 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 53.452 ms

Loss rate: 0.46%

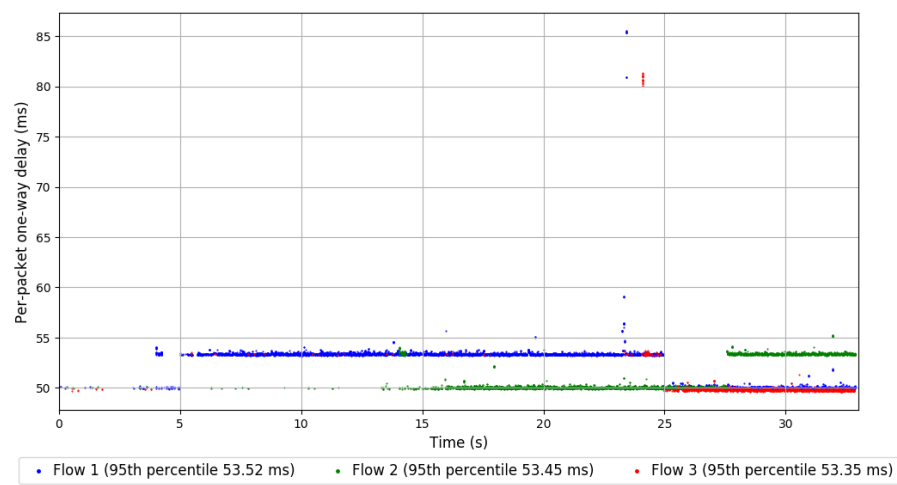
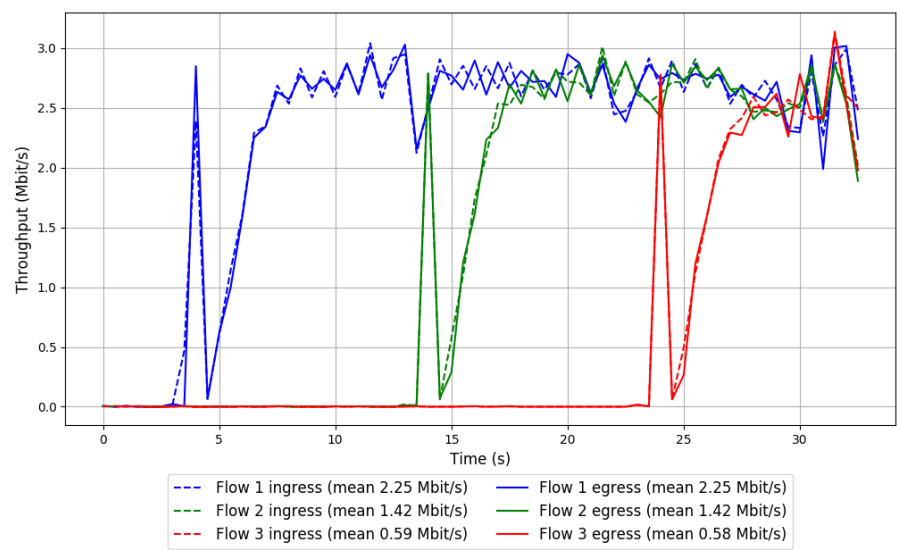
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.354 ms

Loss rate: 2.16%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-20 22:08:49

End at: 2017-12-20 22:09:19

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 53.501 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 53.506 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.467 ms

Loss rate: 0.73%

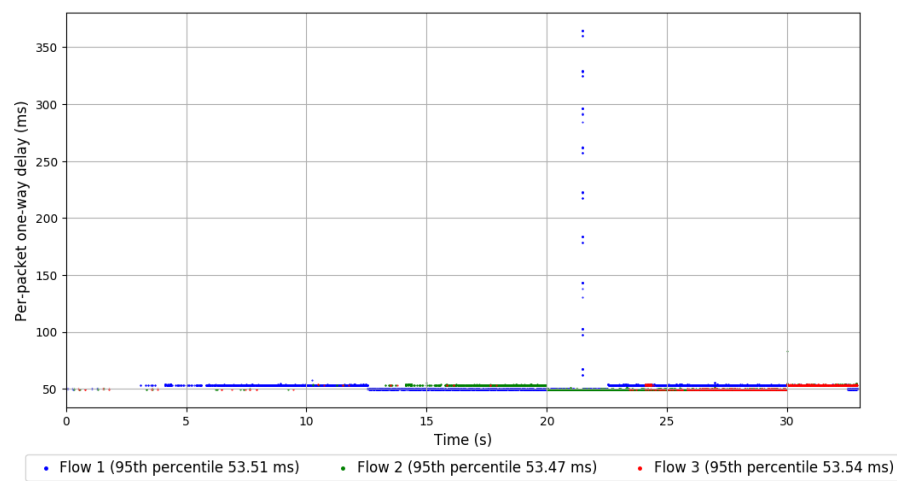
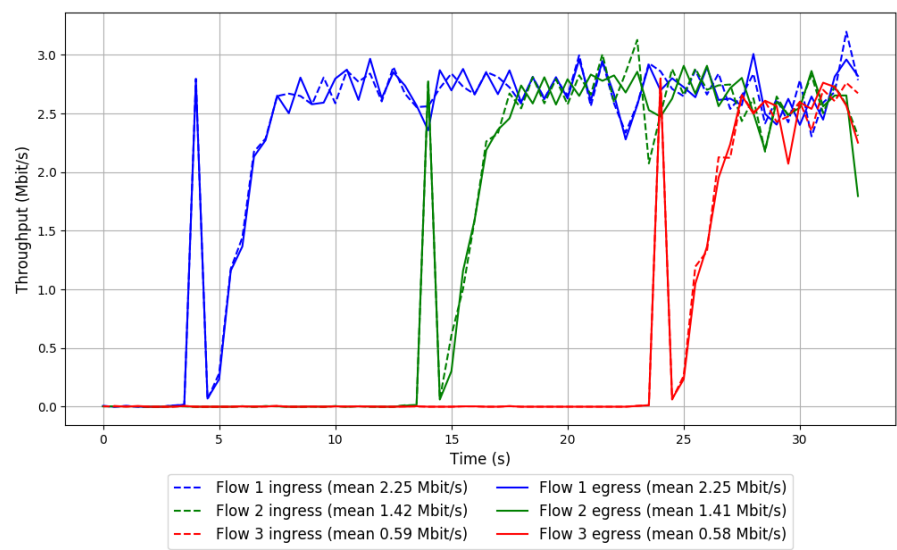
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.539 ms

Loss rate: 1.92%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-20 22:22:56

End at: 2017-12-20 22:23:26

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 53.440 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.178 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 53.533 ms

Loss rate: 0.65%

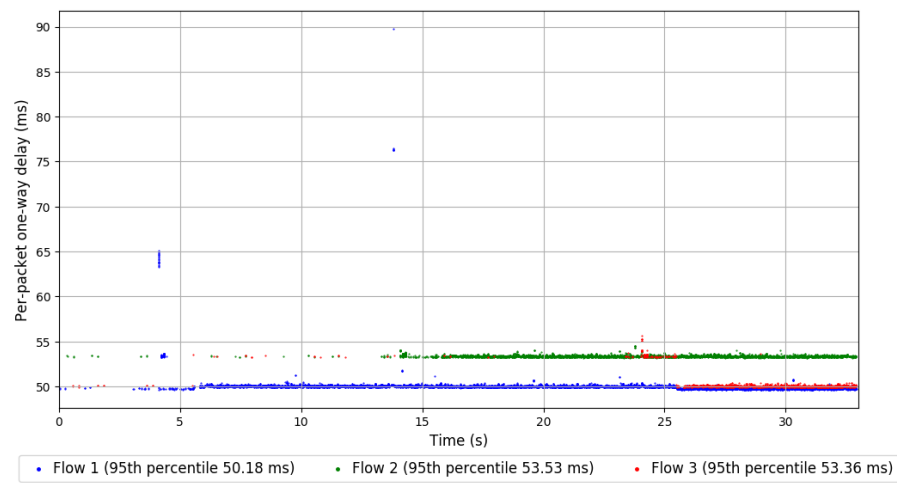
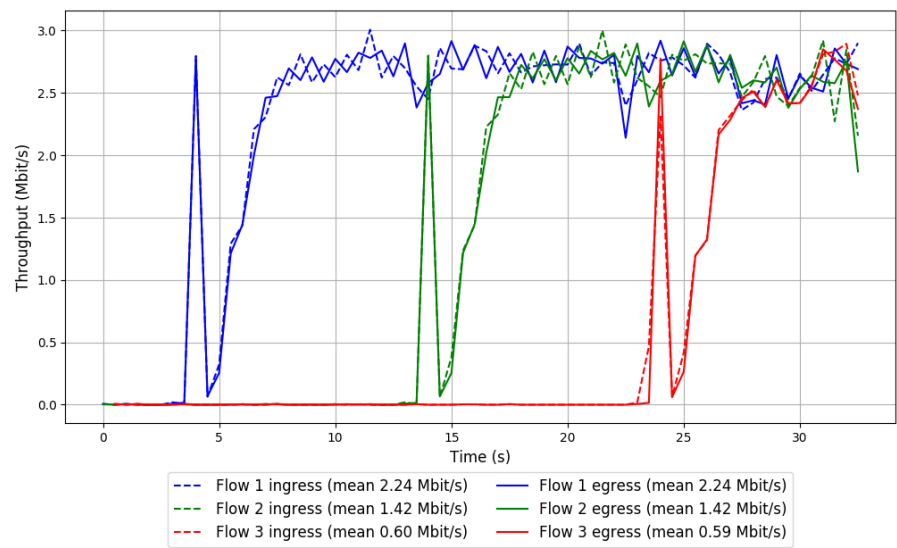
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 53.360 ms

Loss rate: 1.49%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-20 22:36:51

End at: 2017-12-20 22:37:21

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.22 Mbit/s

95th percentile per-packet one-way delay: 53.503 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 53.550 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 50.436 ms

Loss rate: 0.75%

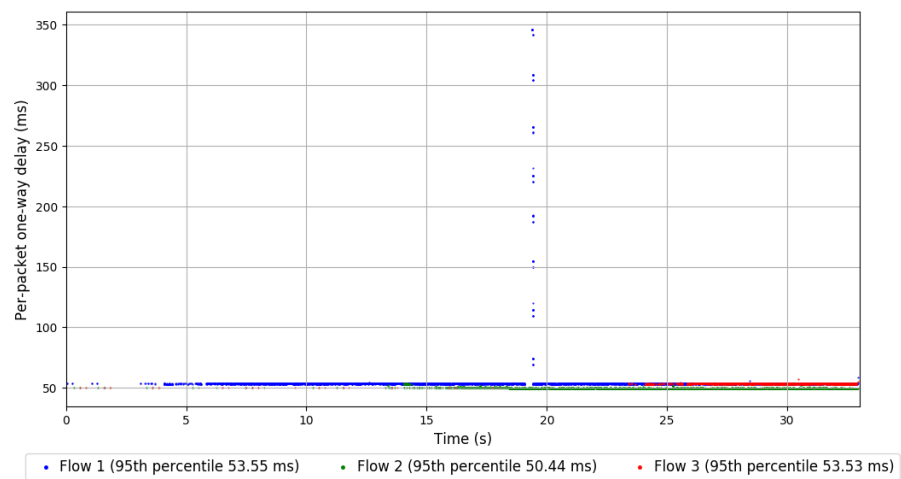
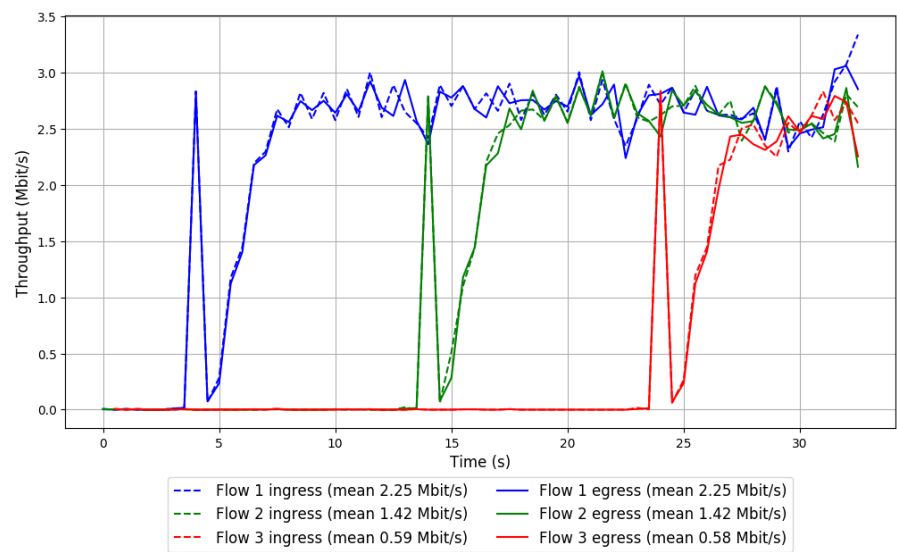
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 53.528 ms

Loss rate: 1.41%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-20 22:50:49

End at: 2017-12-20 22:51:19

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.23 Mbit/s

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

Loss rate: 0.67%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 53.452 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.476 ms

Loss rate: 0.62%

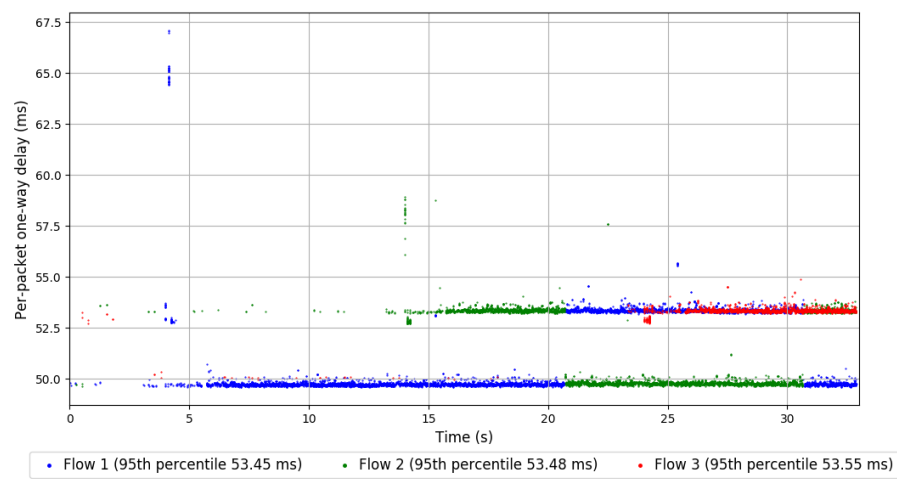
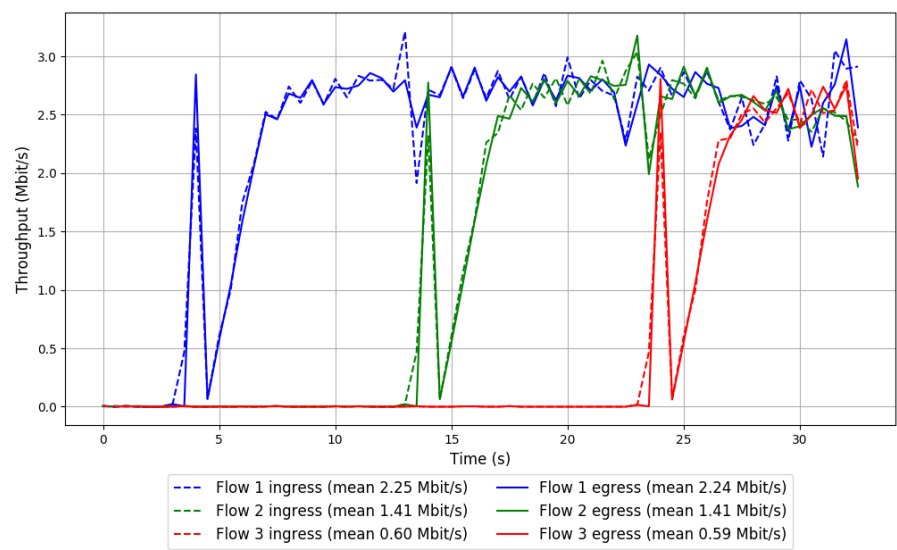
-- Flow 3:

Average throughput: 0.59 Mbit/s

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

Loss rate: 1.30%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-20 23:04:38

End at: 2017-12-20 23:05:08

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.21 Mbit/s

95th percentile per-packet one-way delay: 53.602 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 2.24 Mbit/s

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

Loss rate: 0.32%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 53.586 ms

Loss rate: 0.71%

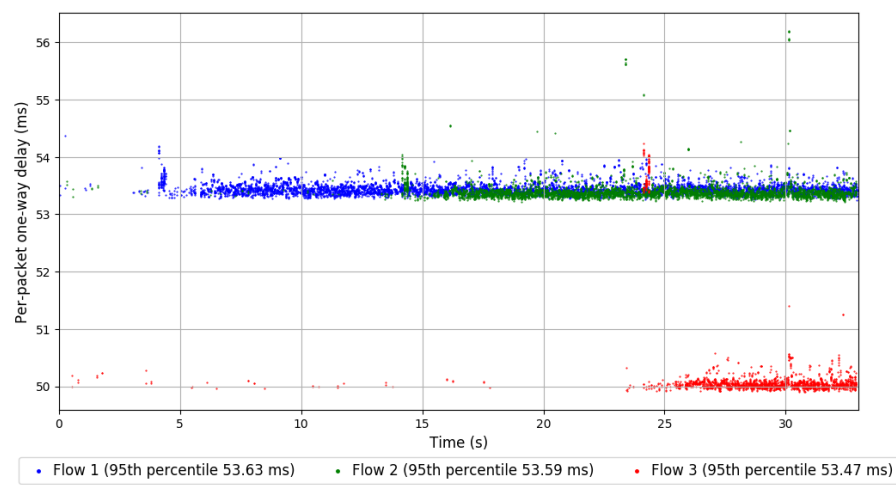
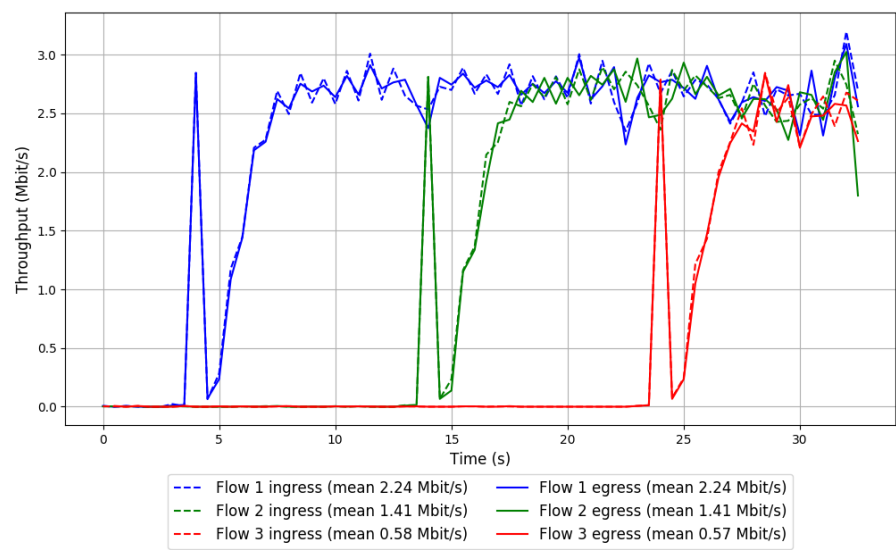
-- Flow 3:

Average throughput: 0.57 Mbit/s

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

Loss rate: 1.72%

Run 9: Report of WebRTC media — Data Link

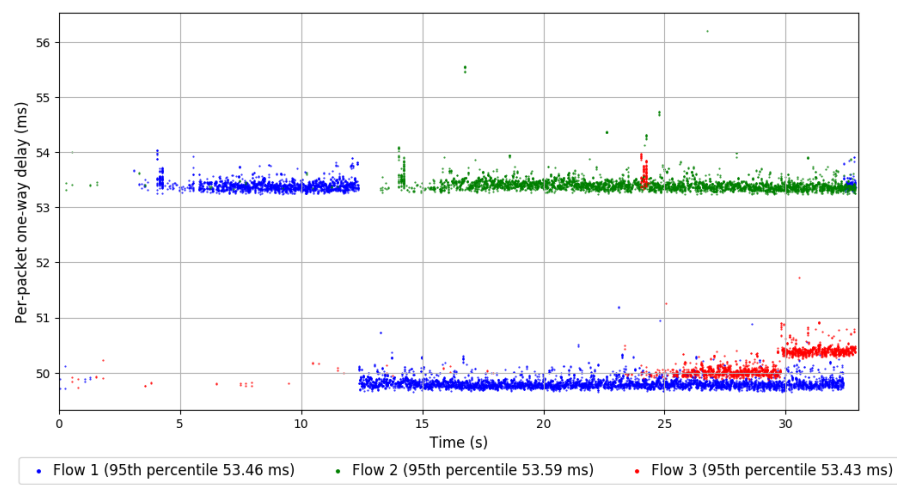
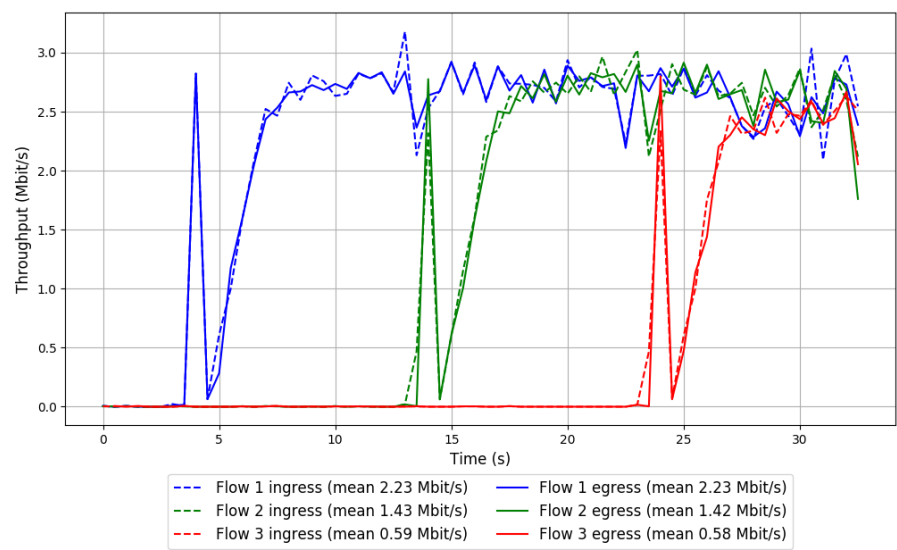


```
Run 10: Statistics of WebRTC media

Start at: 2017-12-20 23:18:20
End at: 2017-12-20 23:18:50

# Below is generated by plot.py at 2017-12-21 02:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 53.521 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 53.457 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 53.588 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 53.433 ms
Loss rate: 1.86%
```

Run 10: Report of WebRTC media — Data Link

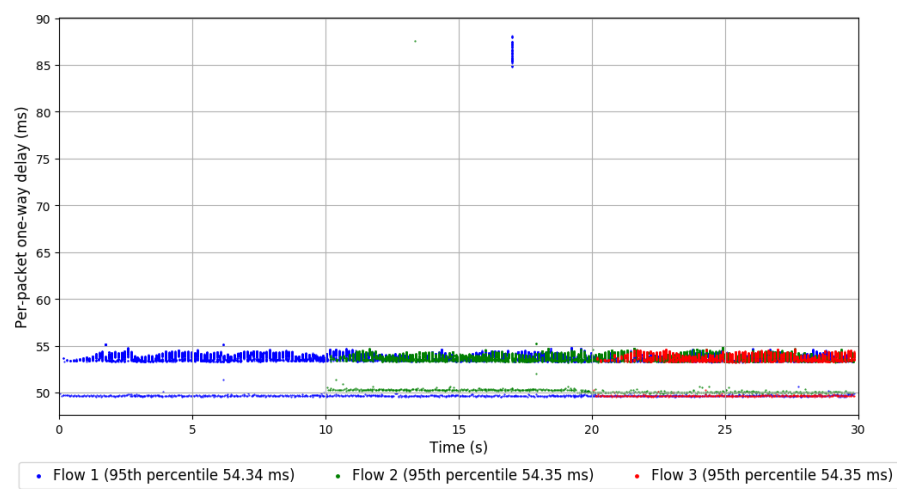
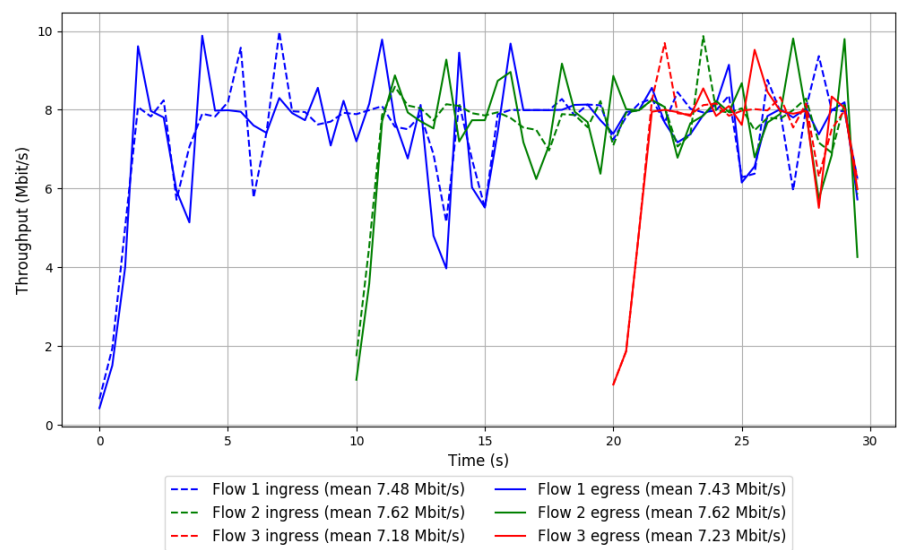


```
Run 1: Statistics of Sprout

Start at: 2017-12-20 21:08:09
End at: 2017-12-20 21:08:39

# Below is generated by plot.py at 2017-12-21 02:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.85 Mbit/s
95th percentile per-packet one-way delay: 54.345 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 7.43 Mbit/s
95th percentile per-packet one-way delay: 54.341 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 54.346 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 54.354 ms
Loss rate: 0.24%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-20 21:21:49

End at: 2017-12-20 21:22:19

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.34 Mbit/s

95th percentile per-packet one-way delay: 54.420 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 54.395 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 54.421 ms

Loss rate: 0.05%

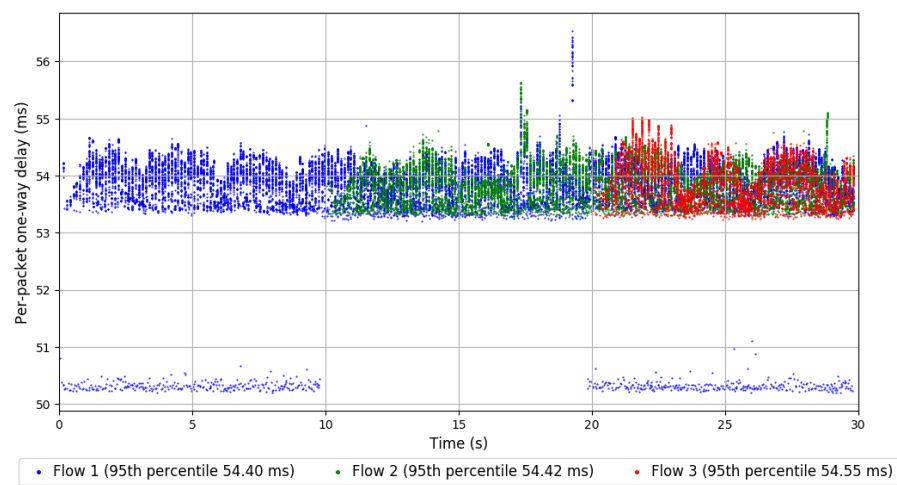
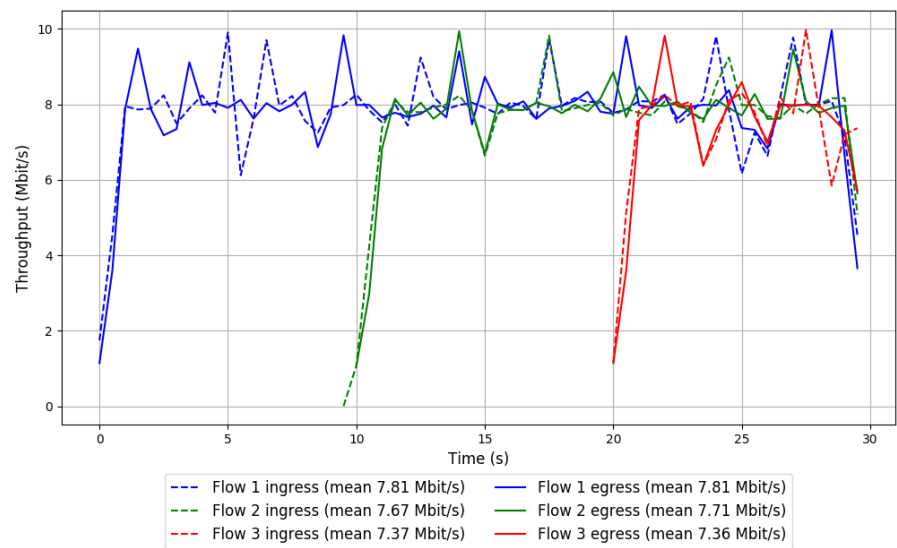
-- Flow 3:

Average throughput: 7.36 Mbit/s

95th percentile per-packet one-way delay: 54.552 ms

Loss rate: 1.14%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-20 21:36:14

End at: 2017-12-20 21:36:44

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.29 Mbit/s

95th percentile per-packet one-way delay: 54.462 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 7.77 Mbit/s

95th percentile per-packet one-way delay: 54.364 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 54.599 ms

Loss rate: 1.28%

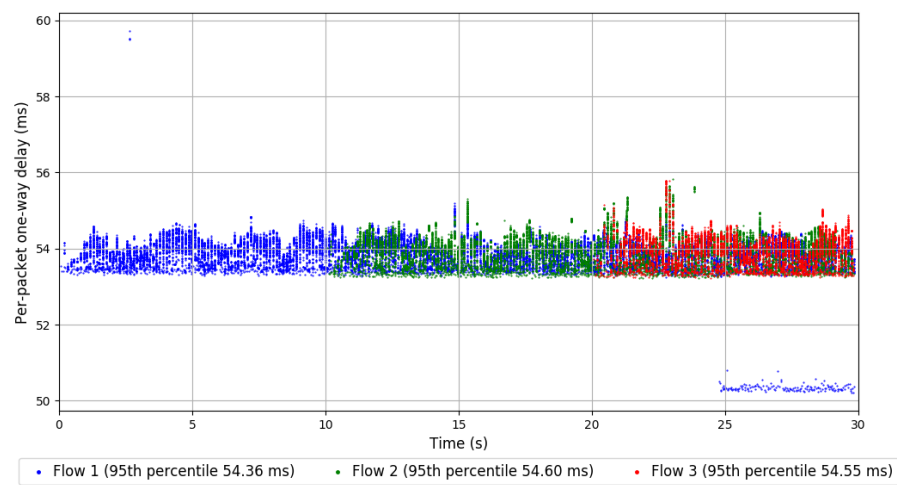
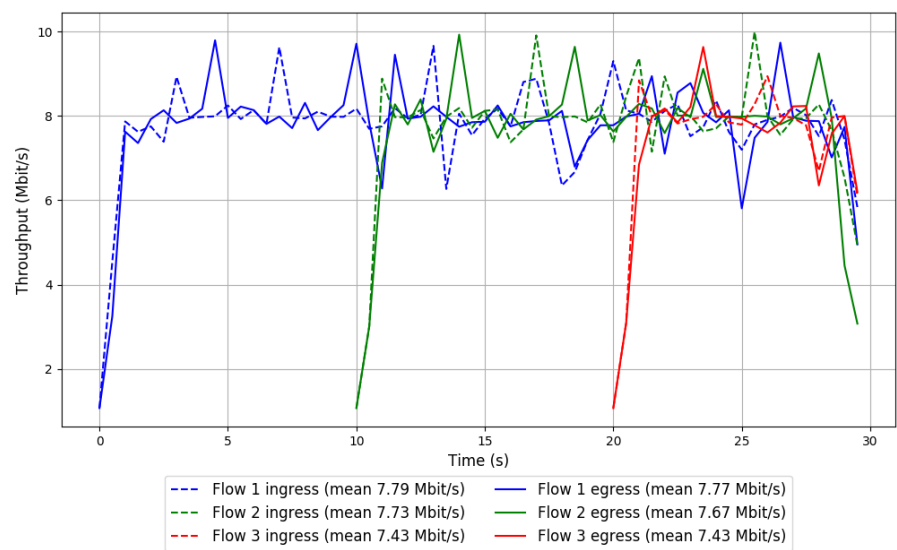
-- Flow 3:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 54.555 ms

Loss rate: 1.30%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-20 21:50:10

End at: 2017-12-20 21:50:40

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.98 Mbit/s

95th percentile per-packet one-way delay: 54.392 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 54.414 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 7.38 Mbit/s

95th percentile per-packet one-way delay: 54.407 ms

Loss rate: 1.50%

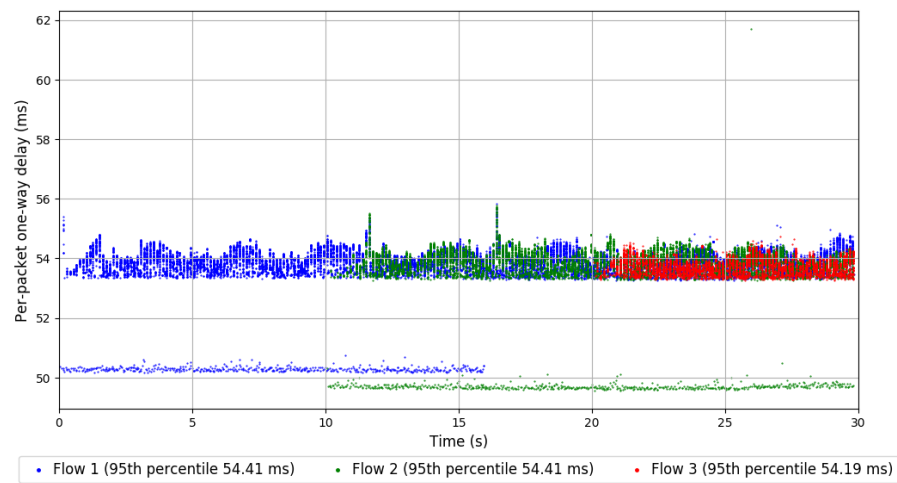
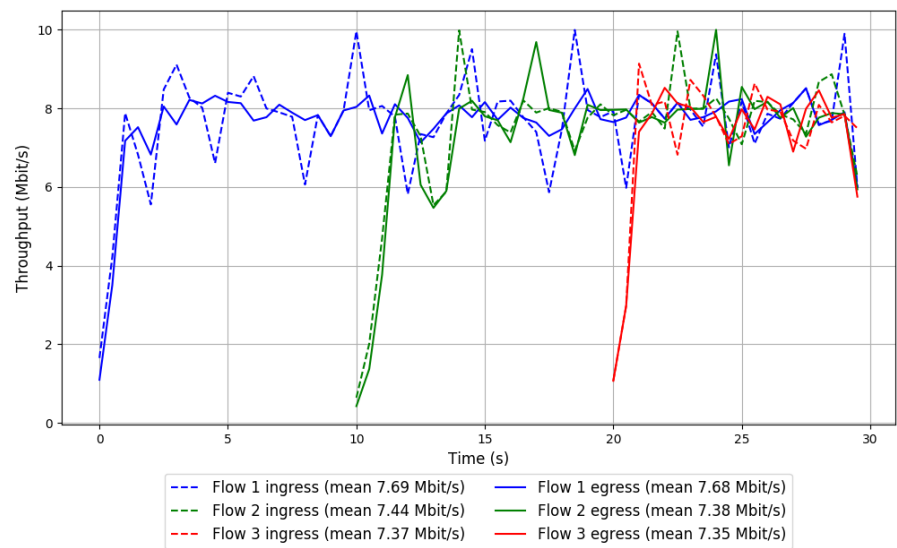
-- Flow 3:

Average throughput: 7.35 Mbit/s

95th percentile per-packet one-way delay: 54.191 ms

Loss rate: 1.37%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-20 22:04:12

End at: 2017-12-20 22:04:42

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.03 Mbit/s

95th percentile per-packet one-way delay: 54.374 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 54.325 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 7.59 Mbit/s

95th percentile per-packet one-way delay: 54.437 ms

Loss rate: 1.18%

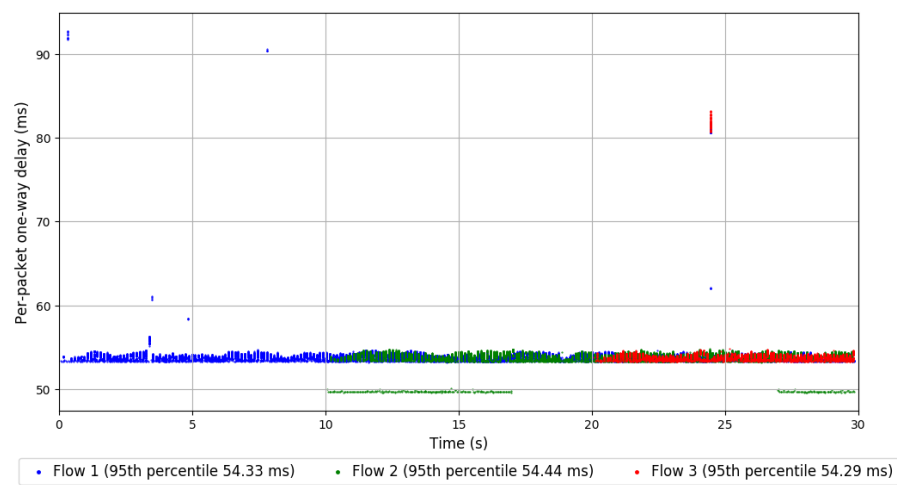
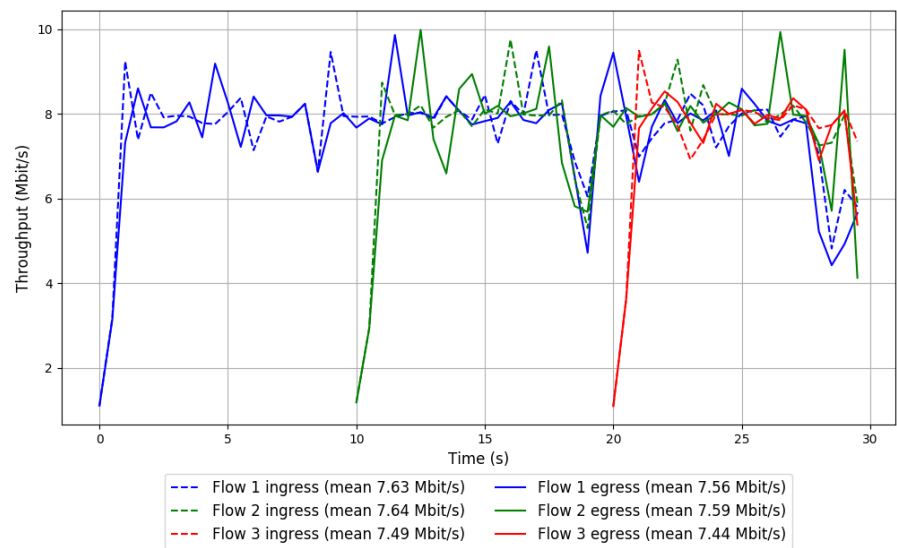
-- Flow 3:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 54.293 ms

Loss rate: 1.85%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-20 22:17:57

End at: 2017-12-20 22:18:27

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.64 Mbit/s

95th percentile per-packet one-way delay: 54.395 ms

Loss rate: 1.43%

-- Flow 1:

Average throughput: 7.41 Mbit/s

95th percentile per-packet one-way delay: 54.390 ms

Loss rate: 1.46%

-- Flow 2:

Average throughput: 7.21 Mbit/s

95th percentile per-packet one-way delay: 54.436 ms

Loss rate: 1.55%

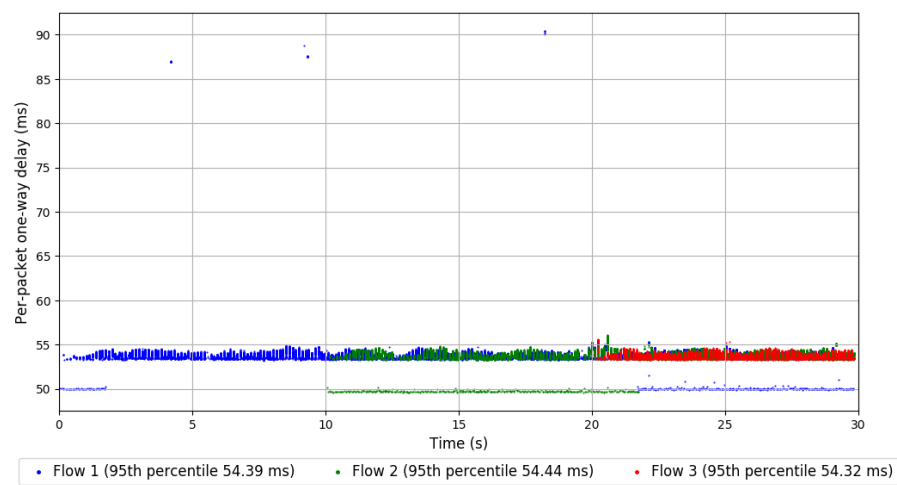
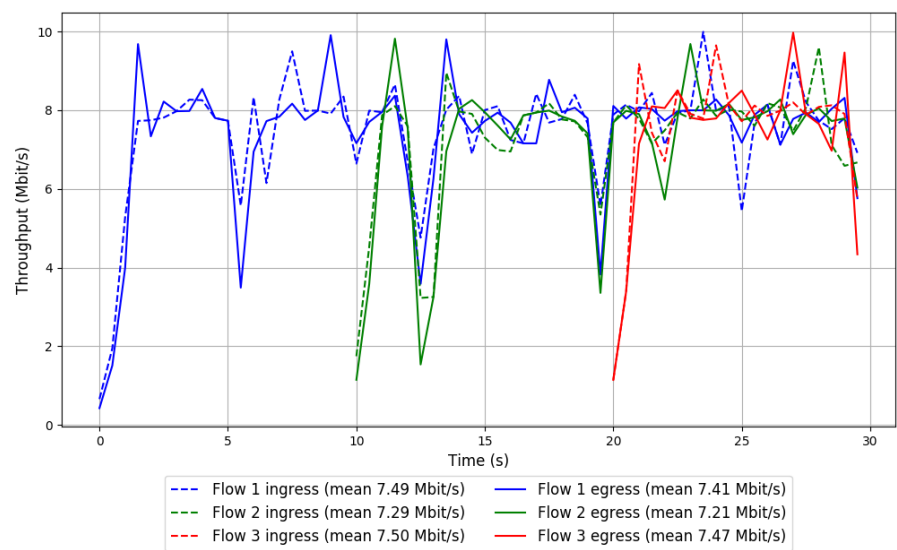
-- Flow 3:

Average throughput: 7.47 Mbit/s

95th percentile per-packet one-way delay: 54.316 ms

Loss rate: 1.11%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-20 22:32:03

End at: 2017-12-20 22:32:33

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.37 Mbit/s

95th percentile per-packet one-way delay: 53.944 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 53.923 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 53.818 ms

Loss rate: 0.62%

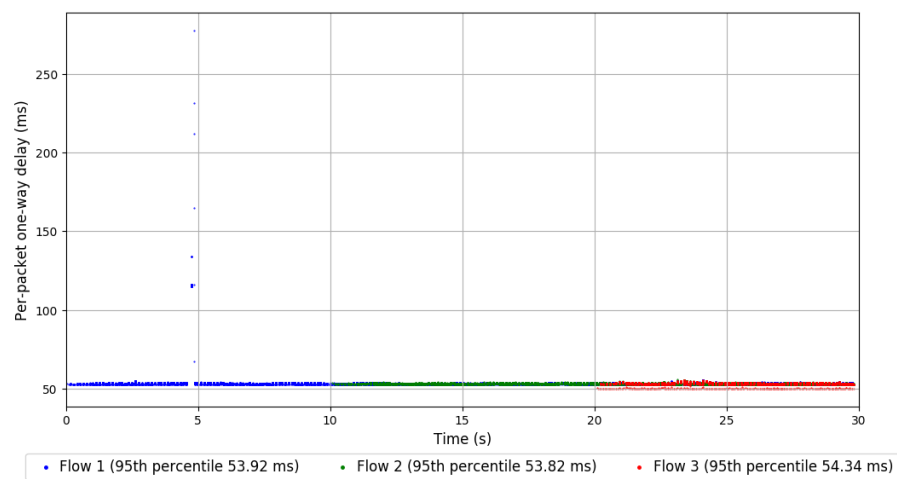
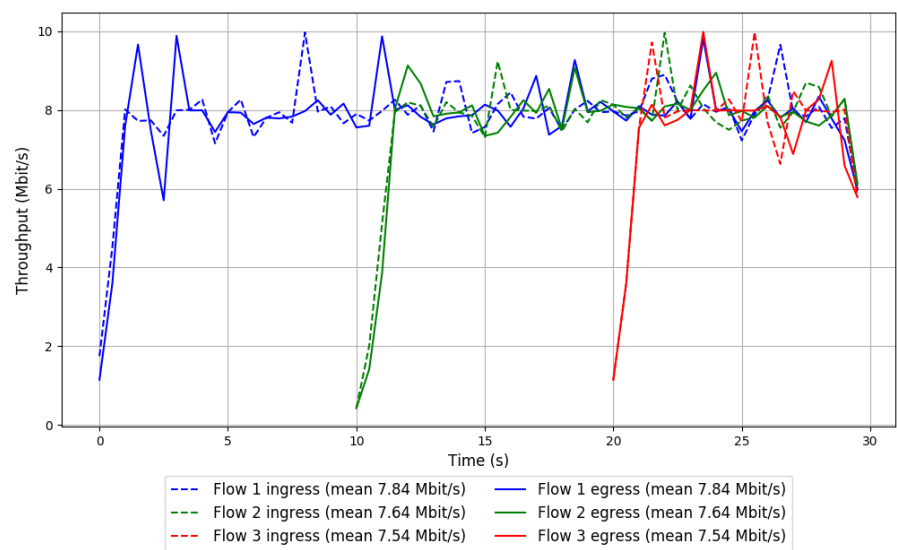
-- Flow 3:

Average throughput: 7.54 Mbit/s

95th percentile per-packet one-way delay: 54.342 ms

Loss rate: 1.25%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-20 22:45:59

End at: 2017-12-20 22:46:29

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.14 Mbit/s

95th percentile per-packet one-way delay: 53.904 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 7.69 Mbit/s

95th percentile per-packet one-way delay: 53.850 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 53.925 ms

Loss rate: 0.38%

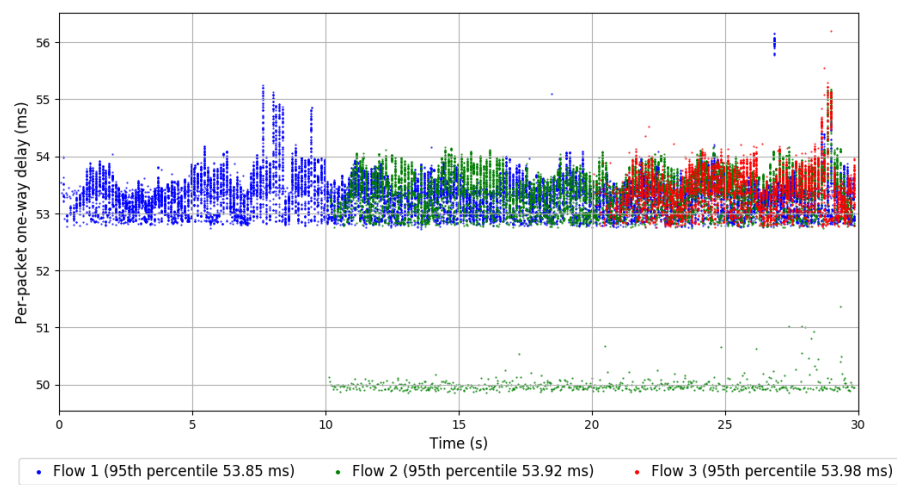
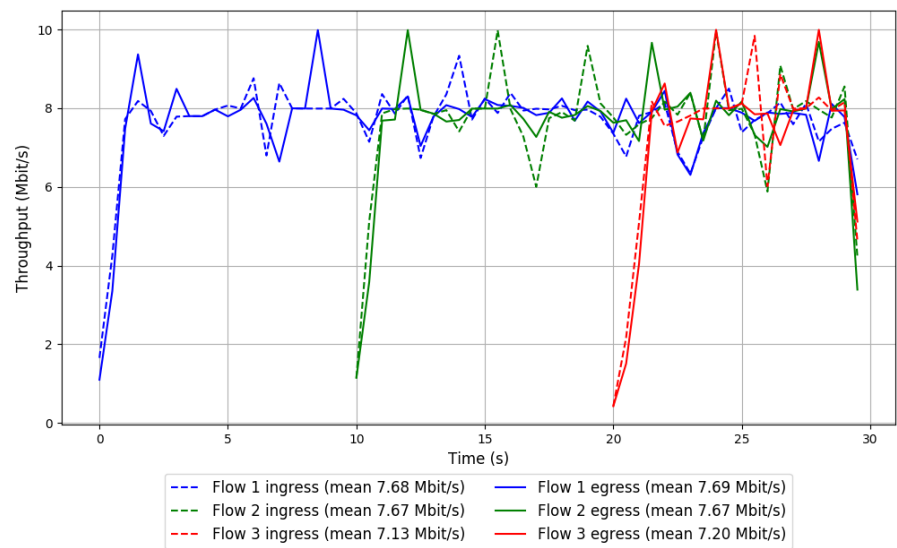
-- Flow 3:

Average throughput: 7.20 Mbit/s

95th percentile per-packet one-way delay: 53.985 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-20 23:00:00

End at: 2017-12-20 23:00:30

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.28 Mbit/s

95th percentile per-packet one-way delay: 54.442 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 54.496 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 54.374 ms

Loss rate: 0.00%

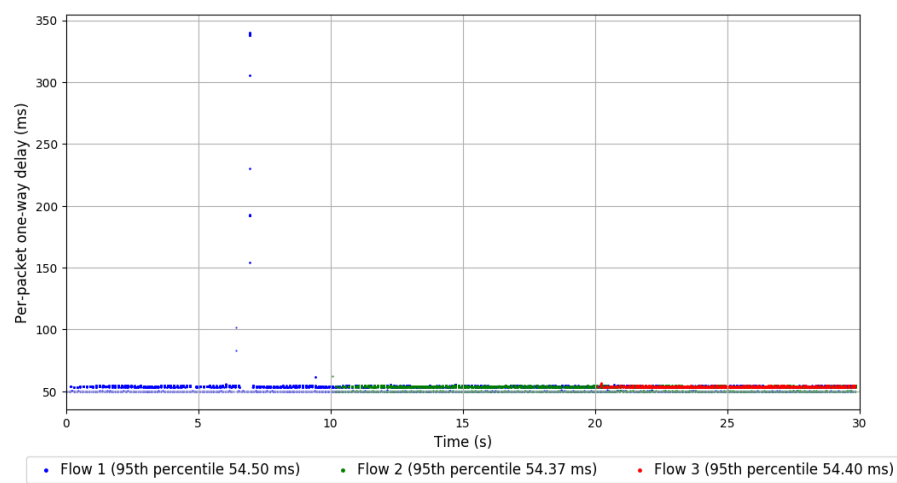
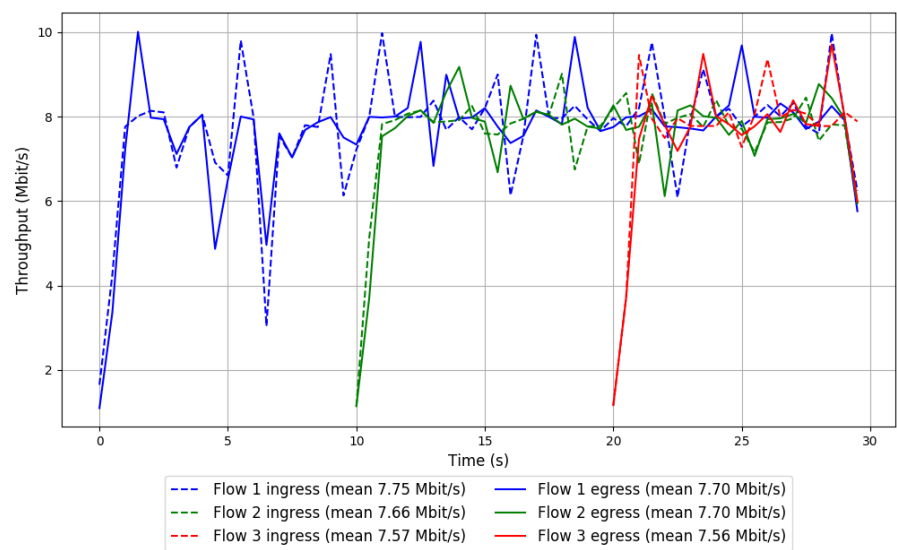
-- Flow 3:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 54.395 ms

Loss rate: 1.34%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-20 23:13:40

End at: 2017-12-20 23:14:10

Below is generated by plot.py at 2017-12-21 02:21:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.96 Mbit/s

95th percentile per-packet one-way delay: 54.537 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 7.62 Mbit/s

95th percentile per-packet one-way delay: 54.508 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 54.581 ms

Loss rate: 1.31%

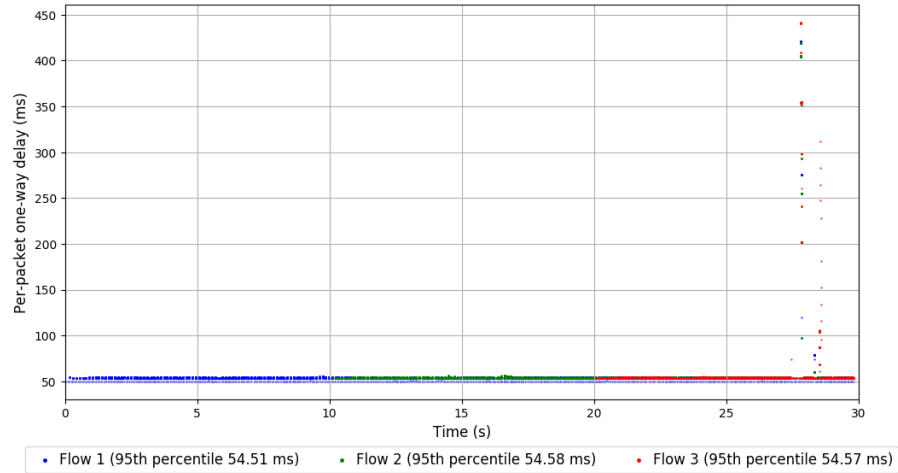
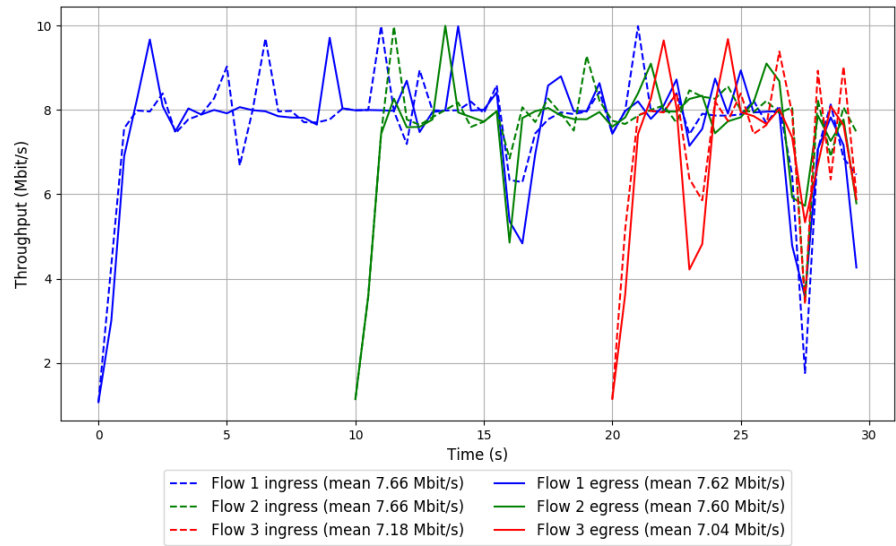
-- Flow 3:

Average throughput: 7.04 Mbit/s

95th percentile per-packet one-way delay: 54.573 ms

Loss rate: 2.57%

Run 10: Report of Sprout — Data Link

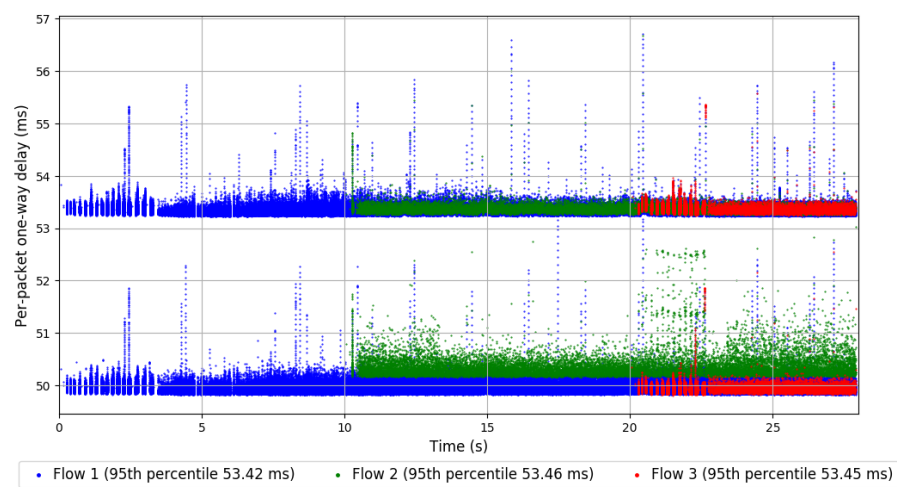
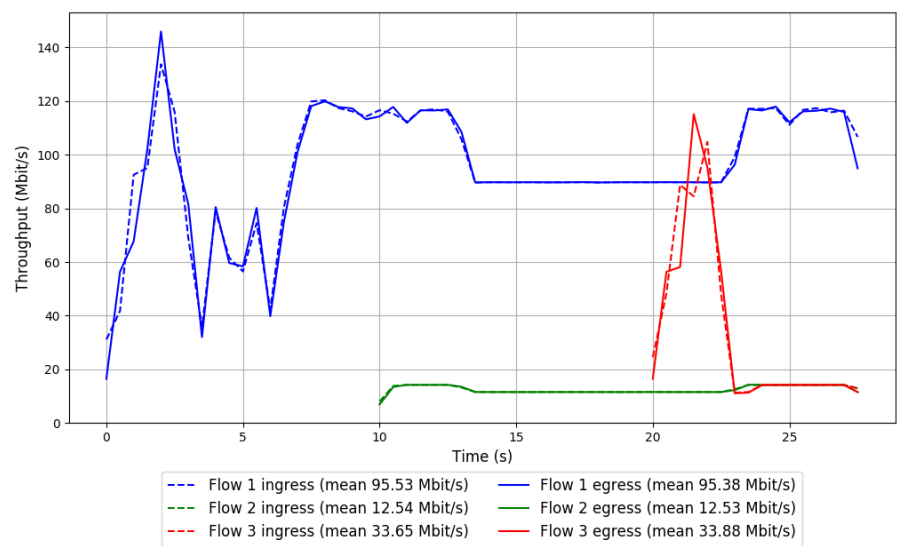


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-20 21:09:29
End at: 2017-12-20 21:09:59

# Below is generated by plot.py at 2017-12-21 02:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 112.93 Mbit/s
95th percentile per-packet one-way delay: 53.430 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 95.38 Mbit/s
95th percentile per-packet one-way delay: 53.425 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 12.53 Mbit/s
95th percentile per-packet one-way delay: 53.457 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 33.88 Mbit/s
95th percentile per-packet one-way delay: 53.447 ms
Loss rate: 0.55%
```


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

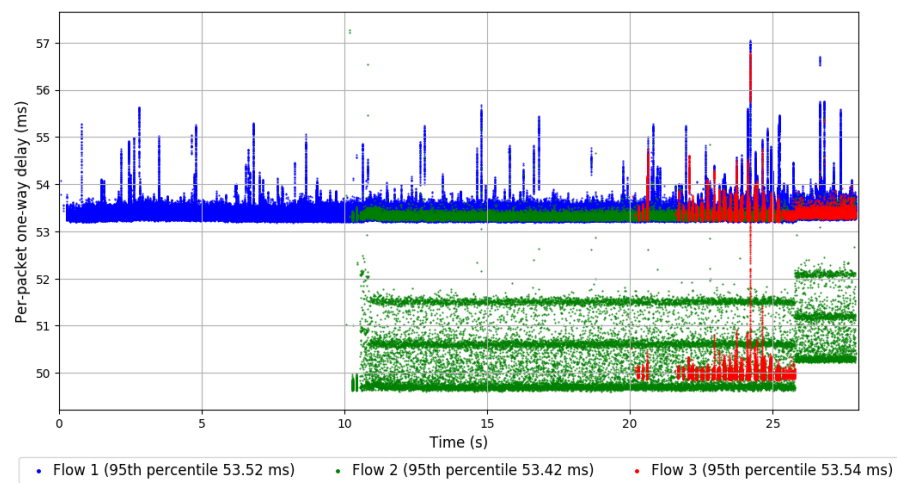
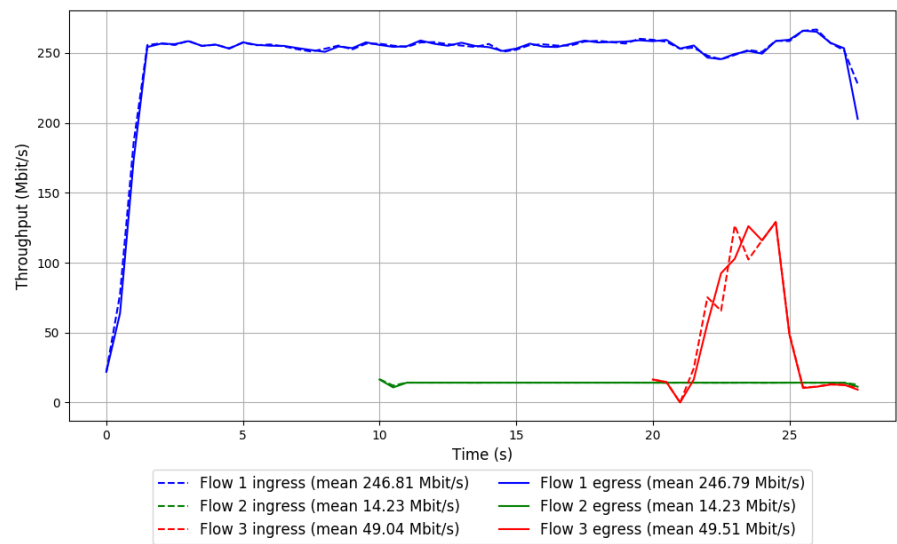


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-20 21:23:09
End at: 2017-12-20 21:23:39

# Below is generated by plot.py at 2017-12-21 02:24:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 269.82 Mbit/s
95th percentile per-packet one-way delay: 53.521 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 246.79 Mbit/s
95th percentile per-packet one-way delay: 53.522 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 14.23 Mbit/s
95th percentile per-packet one-way delay: 53.417 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 49.51 Mbit/s
95th percentile per-packet one-way delay: 53.538 ms
Loss rate: 0.31%
```

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

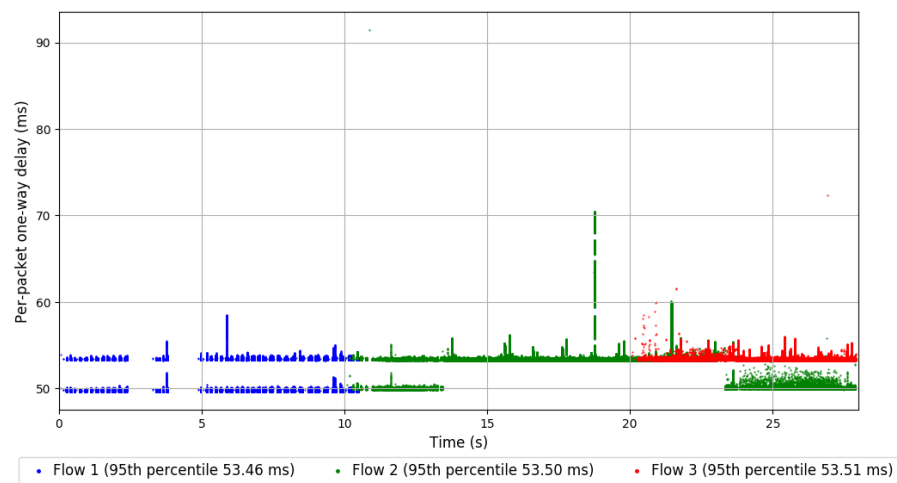
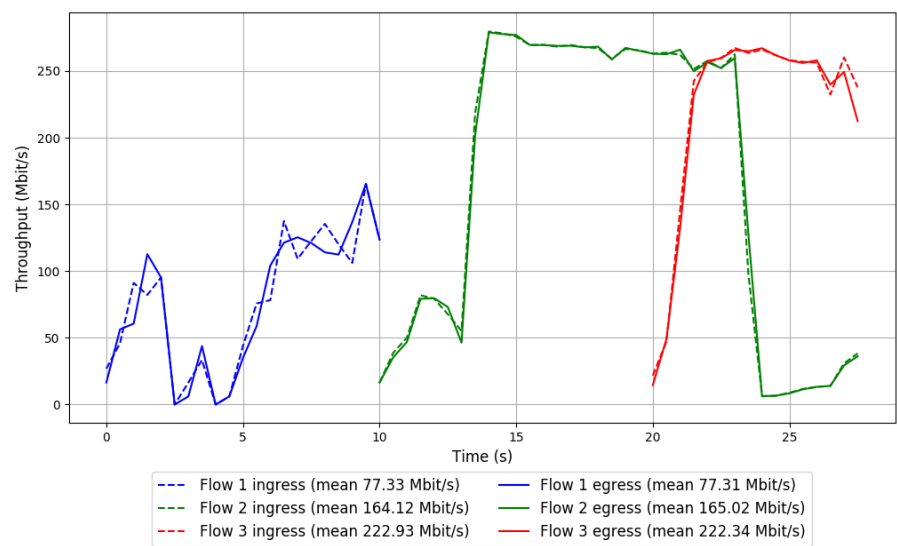


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-20 21:37:34
End at: 2017-12-20 21:38:04

# Below is generated by plot.py at 2017-12-21 02:24:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 196.95 Mbit/s
95th percentile per-packet one-way delay: 53.503 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 77.31 Mbit/s
95th percentile per-packet one-way delay: 53.463 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 165.02 Mbit/s
95th percentile per-packet one-way delay: 53.504 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 222.34 Mbit/s
95th percentile per-packet one-way delay: 53.514 ms
Loss rate: 1.57%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-20 21:51:30

End at: 2017-12-20 21:52:00

Below is generated by plot.py at 2017-12-21 02:24:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 237.62 Mbit/s

95th percentile per-packet one-way delay: 53.624 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 27.51 Mbit/s

95th percentile per-packet one-way delay: 53.400 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 227.58 Mbit/s

95th percentile per-packet one-way delay: 53.728 ms

Loss rate: 0.73%

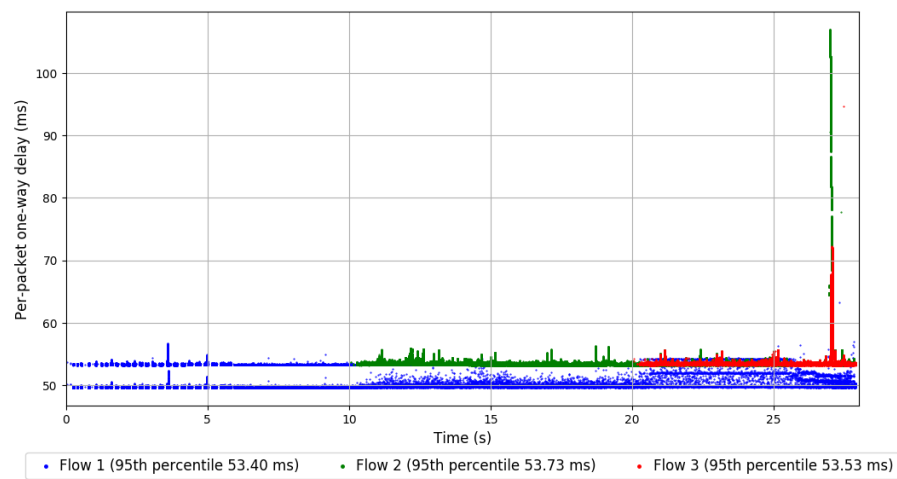
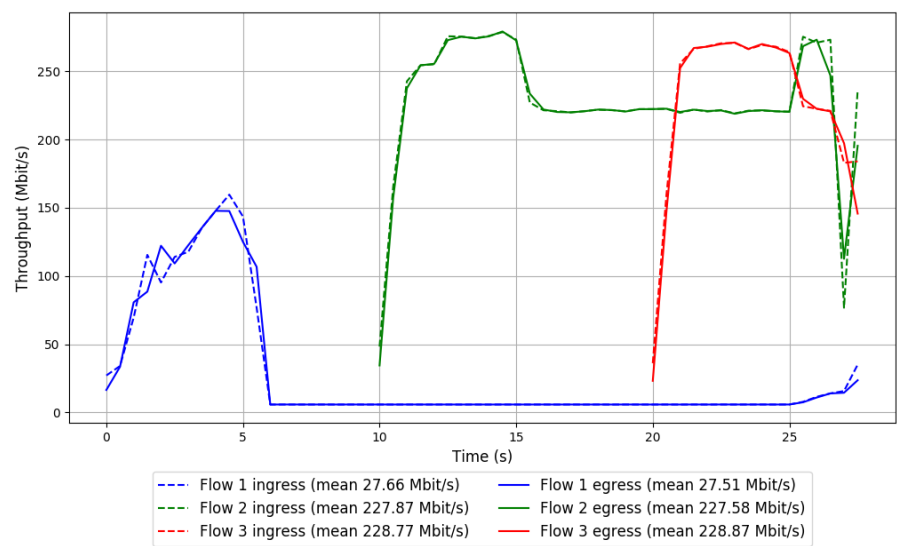
-- Flow 3:

Average throughput: 228.87 Mbit/s

95th percentile per-packet one-way delay: 53.531 ms

Loss rate: 1.33%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-20 22:05:32

End at: 2017-12-20 22:06:02

Below is generated by plot.py at 2017-12-21 02:24:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.49 Mbit/s

95th percentile per-packet one-way delay: 53.392 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 25.13 Mbit/s

95th percentile per-packet one-way delay: 53.374 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 13.86 Mbit/s

95th percentile per-packet one-way delay: 53.392 ms

Loss rate: 0.61%

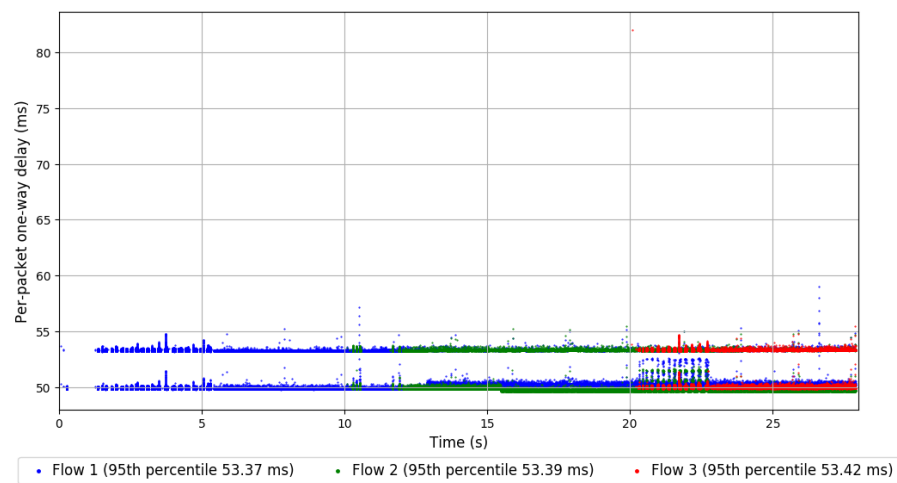
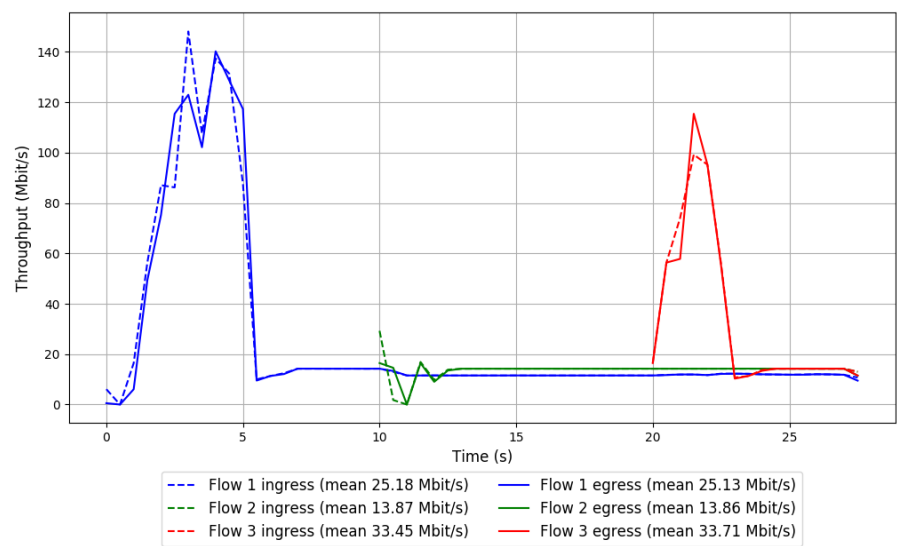
-- Flow 3:

Average throughput: 33.71 Mbit/s

95th percentile per-packet one-way delay: 53.421 ms

Loss rate: 0.57%

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

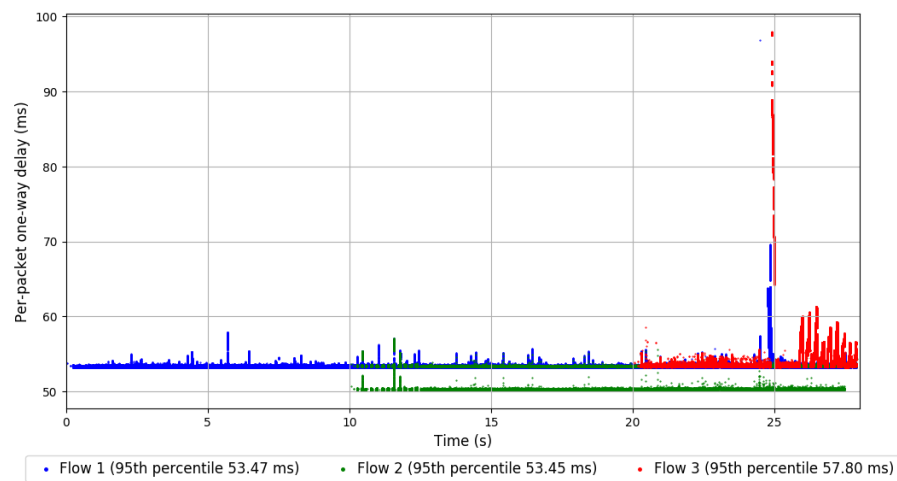
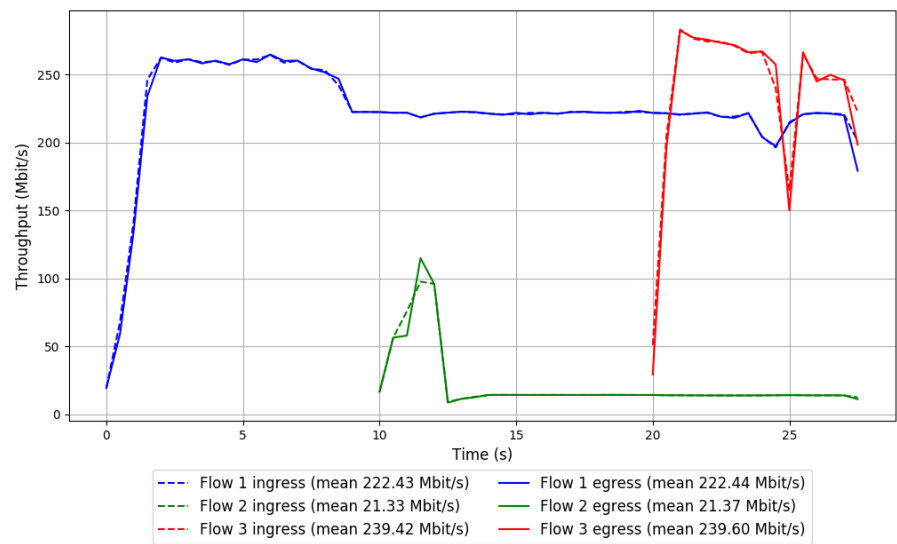


```
Run 6: Statistics of TaoVA-100x

Start at: 2017-12-20 22:19:17
End at: 2017-12-20 22:19:47

# Below is generated by plot.py at 2017-12-21 02:25:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 303.48 Mbit/s
95th percentile per-packet one-way delay: 53.928 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 222.44 Mbit/s
95th percentile per-packet one-way delay: 53.474 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 21.37 Mbit/s
95th percentile per-packet one-way delay: 53.454 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 239.60 Mbit/s
95th percentile per-packet one-way delay: 57.801 ms
Loss rate: 1.25%
```

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

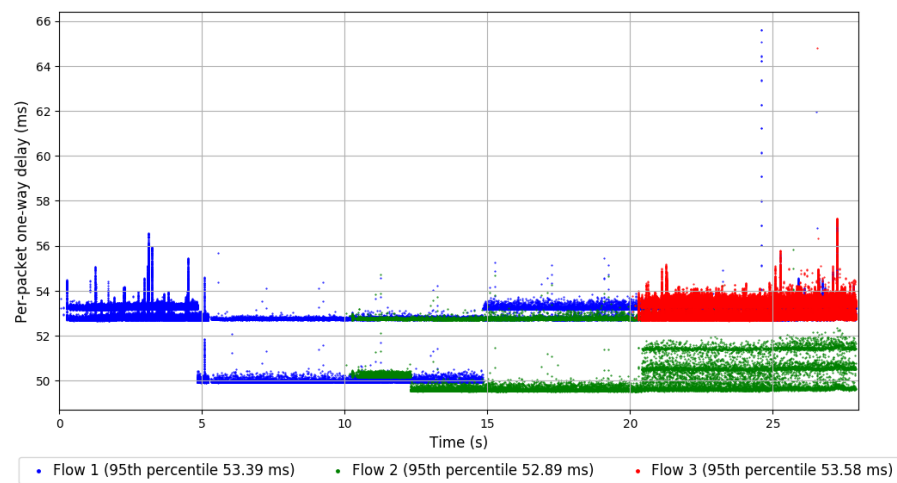
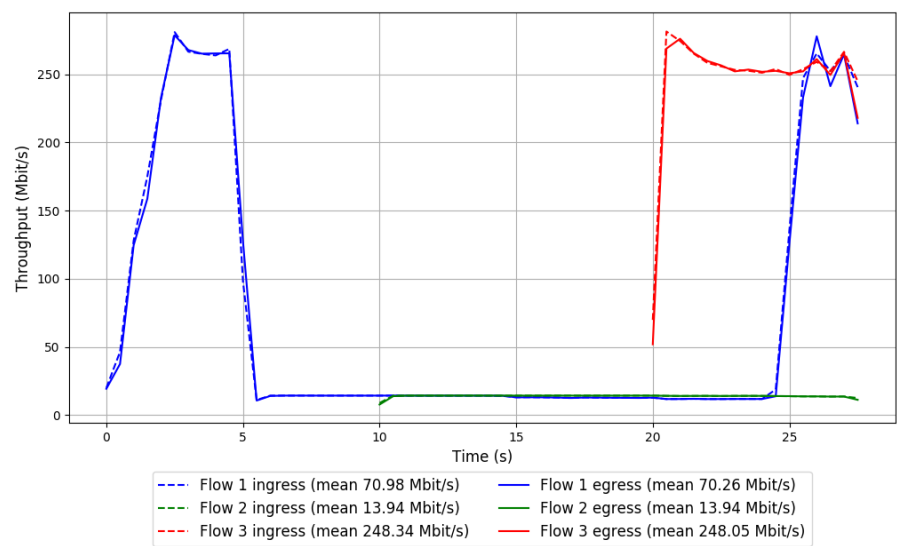


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-12-20 22:33:22
End at: 2017-12-20 22:33:52

# Below is generated by plot.py at 2017-12-21 02:25:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 148.95 Mbit/s
95th percentile per-packet one-way delay: 53.518 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 70.26 Mbit/s
95th percentile per-packet one-way delay: 53.391 ms
Loss rate: 1.38%
-- Flow 2:
Average throughput: 13.94 Mbit/s
95th percentile per-packet one-way delay: 52.888 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 248.05 Mbit/s
95th percentile per-packet one-way delay: 53.581 ms
Loss rate: 1.42%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-20 22:47:19

End at: 2017-12-20 22:47:49

Below is generated by plot.py at 2017-12-21 02:25:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.85 Mbit/s

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

Loss rate: 0.88%

-- Flow 1:

Average throughput: 14.44 Mbit/s

95th percentile per-packet one-way delay: 54.019 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 113.93 Mbit/s

95th percentile per-packet one-way delay: 53.384 ms

Loss rate: 0.60%

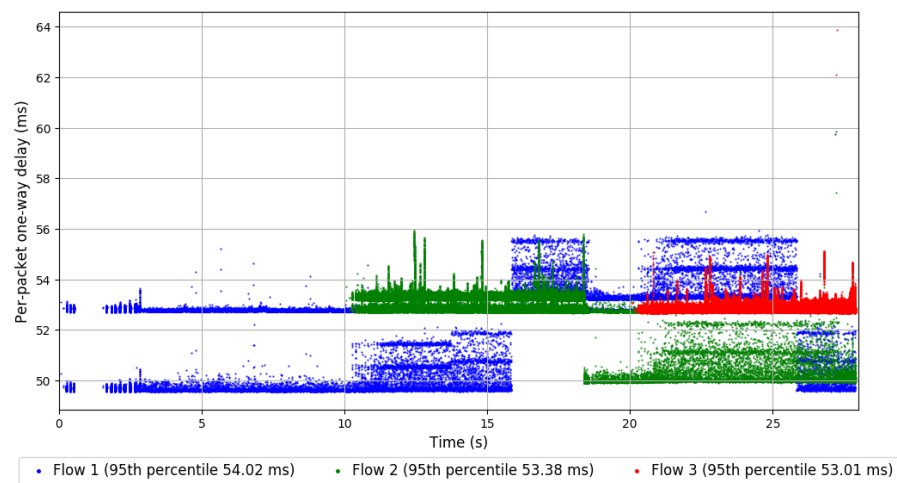
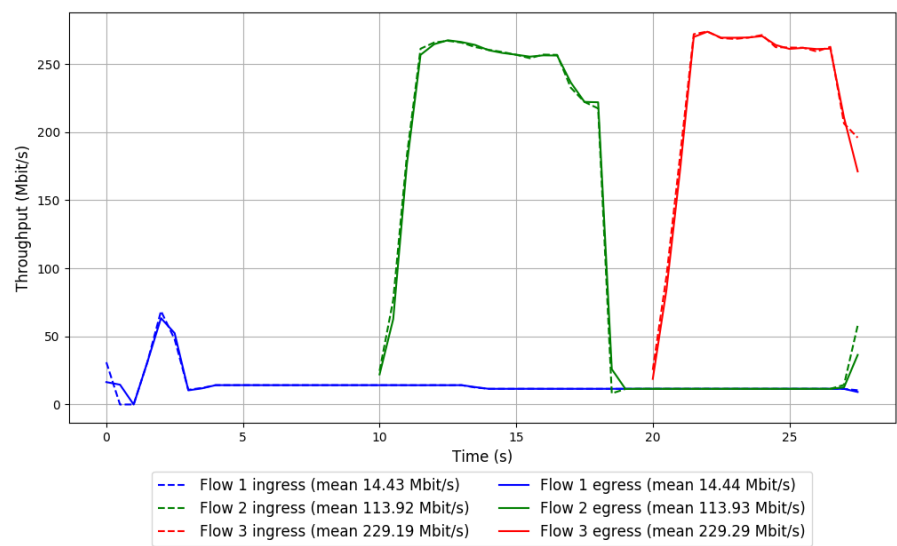
-- Flow 3:

Average throughput: 229.29 Mbit/s

95th percentile per-packet one-way delay: 53.008 ms

Loss rate: 1.32%

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

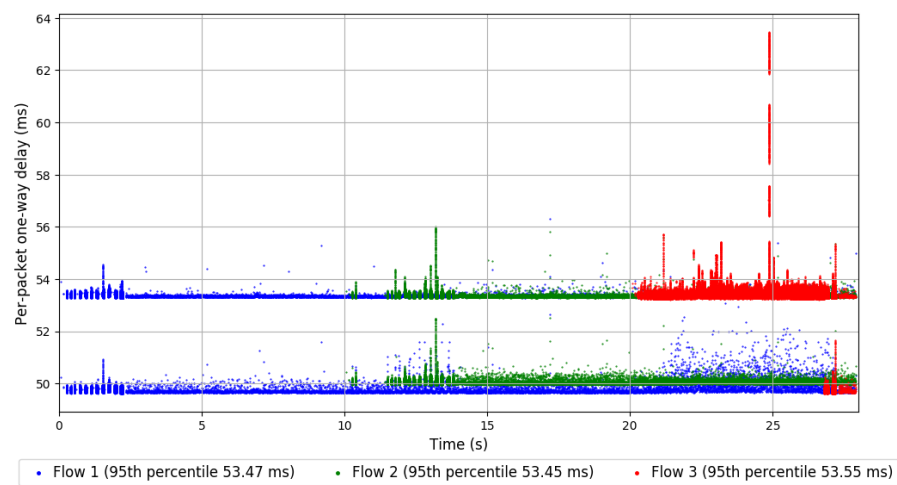
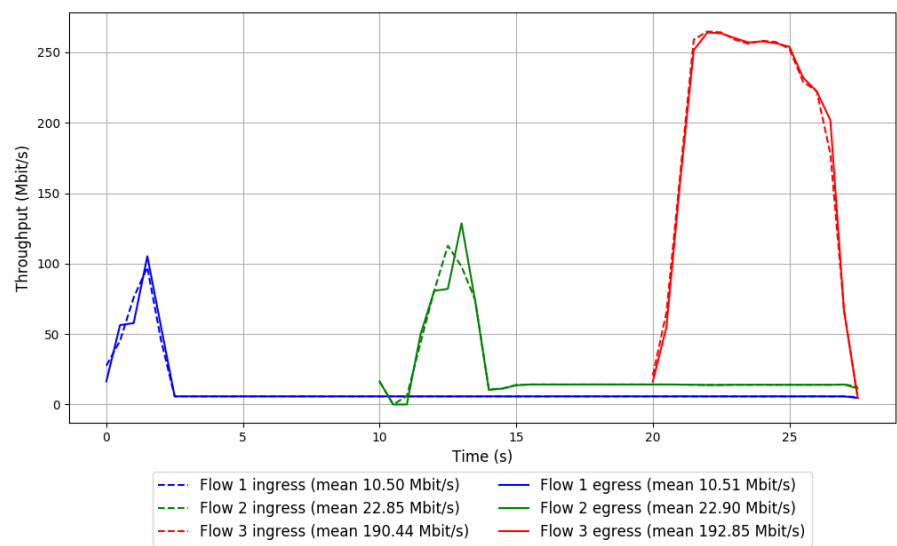


```
Run 9: Statistics of TaoVA-100x

Start at: 2017-12-20 23:01:20
End at: 2017-12-20 23:01:50

# Below is generated by plot.py at 2017-12-21 02:25:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.41 Mbit/s
95th percentile per-packet one-way delay: 53.519 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 10.51 Mbit/s
95th percentile per-packet one-way delay: 53.465 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 22.90 Mbit/s
95th percentile per-packet one-way delay: 53.455 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 192.85 Mbit/s
95th percentile per-packet one-way delay: 53.546 ms
Loss rate: 0.04%
```


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

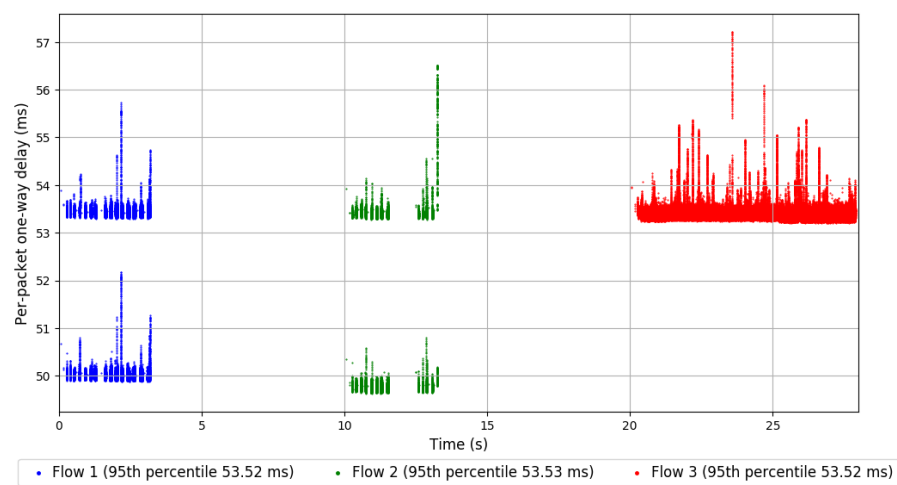
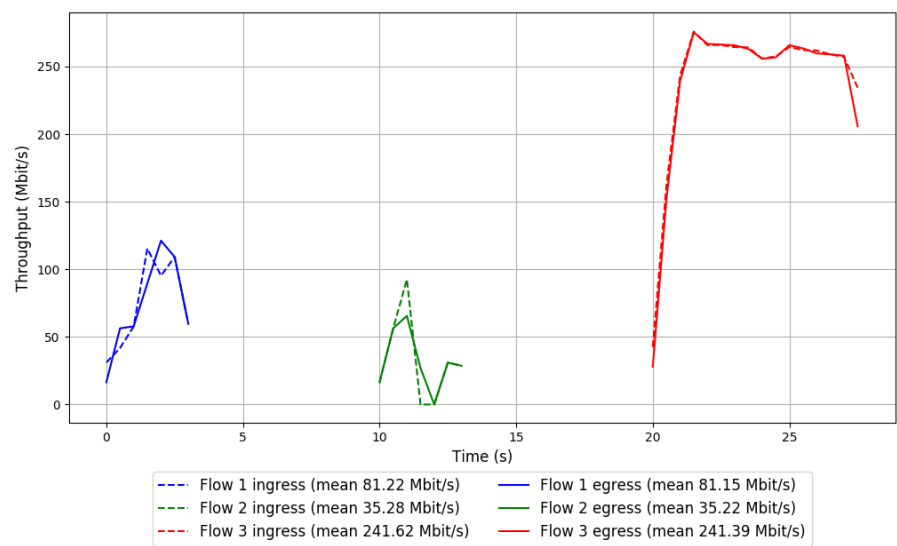


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-20 23:14:59
End at: 2017-12-20 23:15:29

# Below is generated by plot.py at 2017-12-21 02:25:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.07 Mbit/s
95th percentile per-packet one-way delay: 53.520 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 81.15 Mbit/s
95th percentile per-packet one-way delay: 53.520 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.22 Mbit/s
95th percentile per-packet one-way delay: 53.528 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 241.39 Mbit/s
95th percentile per-packet one-way delay: 53.520 ms
Loss rate: 1.46%
```

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

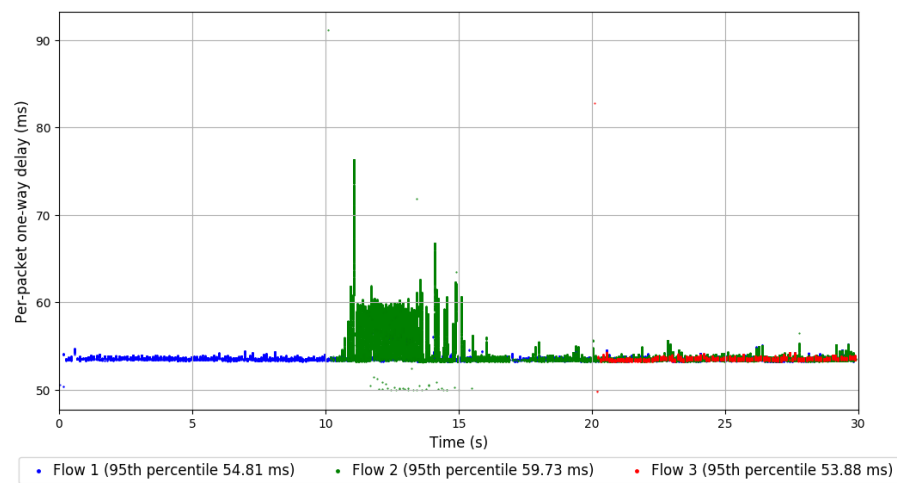
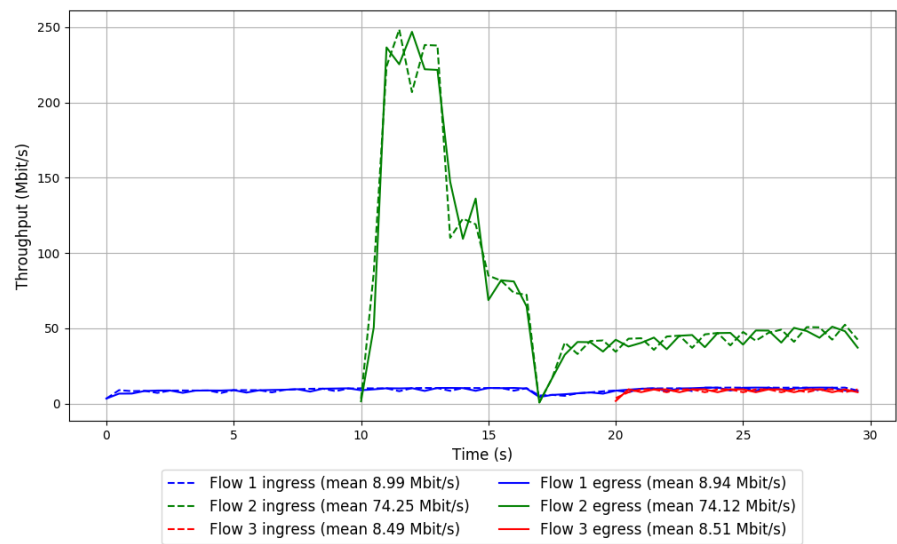


```
Run 1: Statistics of TCP Vegas

Start at: 2017-12-20 21:12:07
End at: 2017-12-20 21:12:37

# Below is generated by plot.py at 2017-12-21 02:25:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.90 Mbit/s
95th percentile per-packet one-way delay: 59.554 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 8.94 Mbit/s
95th percentile per-packet one-way delay: 54.813 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 74.12 Mbit/s
95th percentile per-packet one-way delay: 59.735 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 53.880 ms
Loss rate: 1.11%
```

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-20 21:26:02

End at: 2017-12-20 21:26:32

Below is generated by plot.py at 2017-12-21 02:25:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.93 Mbit/s

95th percentile per-packet one-way delay: 54.432 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 134.87 Mbit/s

95th percentile per-packet one-way delay: 54.442 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 9.34 Mbit/s

95th percentile per-packet one-way delay: 54.012 ms

Loss rate: 0.87%

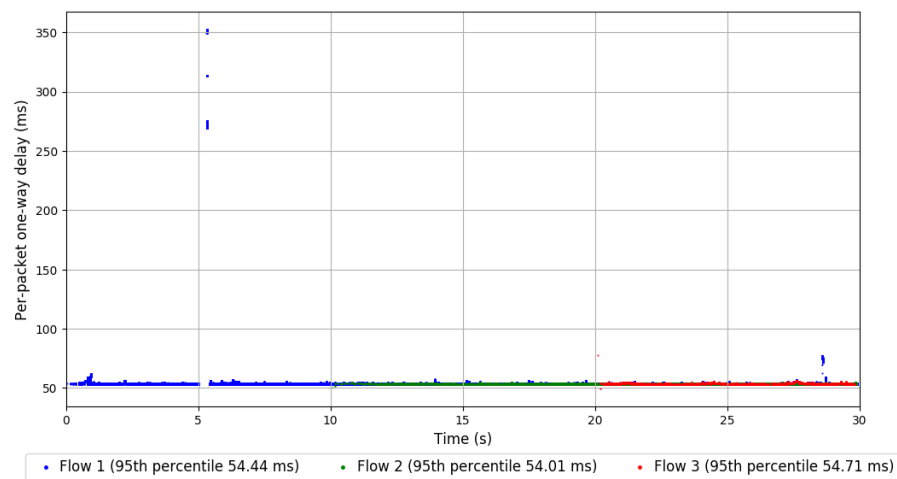
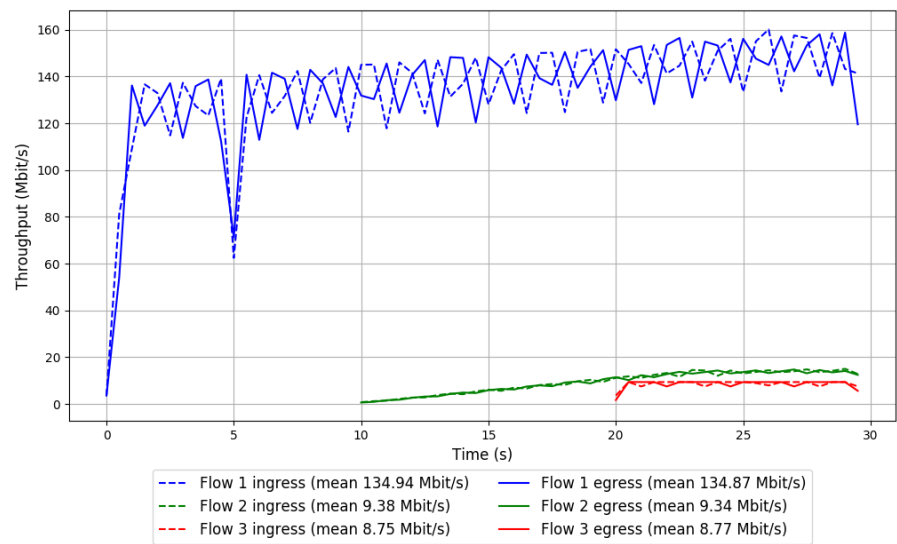
-- Flow 3:

Average throughput: 8.77 Mbit/s

95th percentile per-packet one-way delay: 54.708 ms

Loss rate: 1.09%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-20 21:40:16

End at: 2017-12-20 21:40:46

Below is generated by plot.py at 2017-12-21 02:25:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.00 Mbit/s

95th percentile per-packet one-way delay: 54.765 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 54.001 ms

Loss rate: 0.93%

-- Flow 2:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 54.029 ms

Loss rate: 1.19%

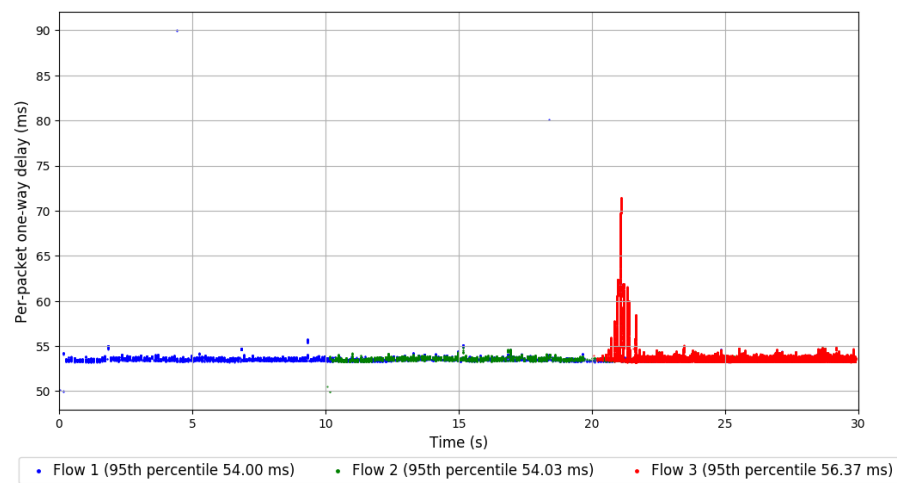
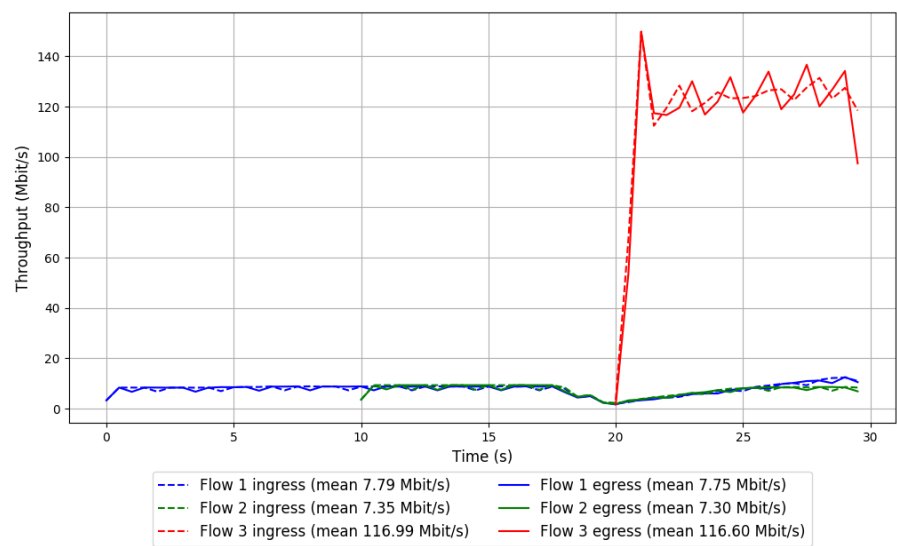
-- Flow 3:

Average throughput: 116.60 Mbit/s

95th percentile per-packet one-way delay: 56.371 ms

Loss rate: 1.18%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-20 21:54:21

End at: 2017-12-20 21:54:51

Below is generated by plot.py at 2017-12-21 02:25:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.55 Mbit/s

95th percentile per-packet one-way delay: 54.563 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 11.12 Mbit/s

95th percentile per-packet one-way delay: 54.456 ms

Loss rate: 1.27%

-- Flow 2:

Average throughput: 7.66 Mbit/s

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

Loss rate: 1.19%

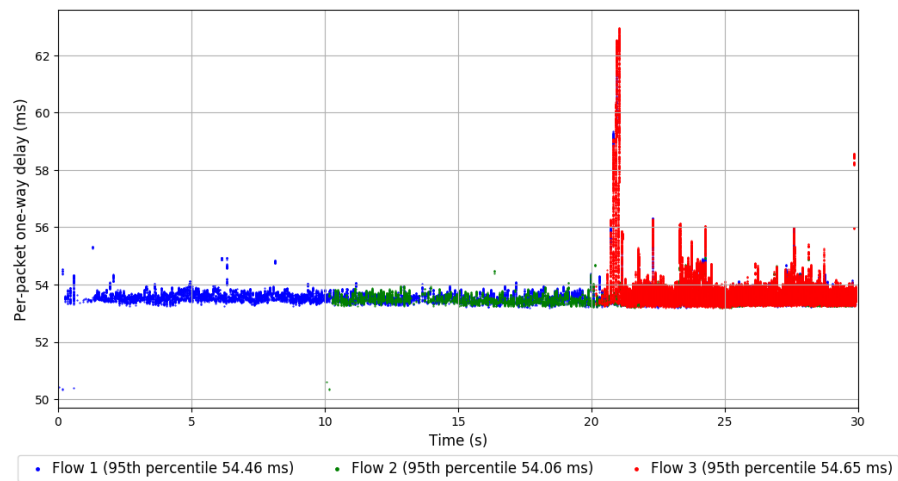
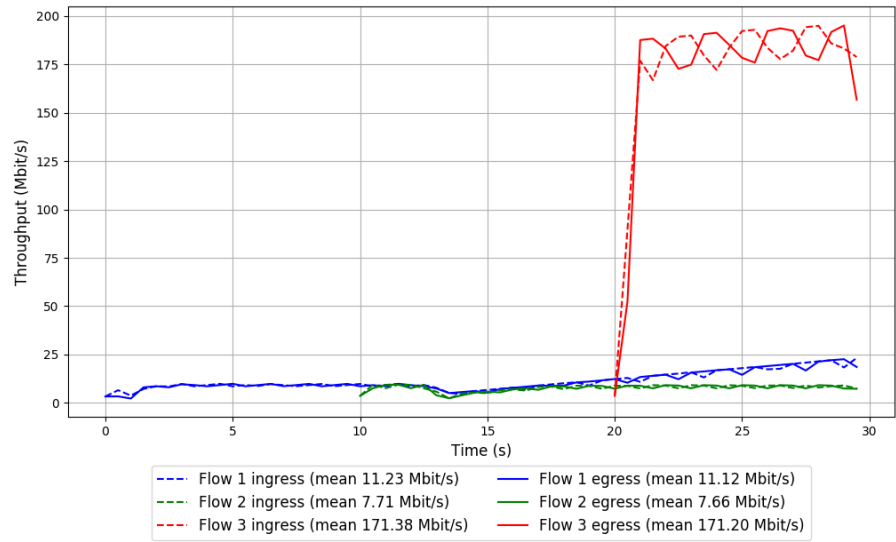
-- Flow 3:

Average throughput: 171.20 Mbit/s

95th percentile per-packet one-way delay: 54.648 ms

Loss rate: 1.15%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-20 22:07:59

End at: 2017-12-20 22:08:29

Below is generated by plot.py at 2017-12-21 02:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 181.08 Mbit/s

95th percentile per-packet one-way delay: 59.160 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 79.17 Mbit/s

95th percentile per-packet one-way delay: 54.331 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 83.72 Mbit/s

95th percentile per-packet one-way delay: 60.523 ms

Loss rate: 0.29%

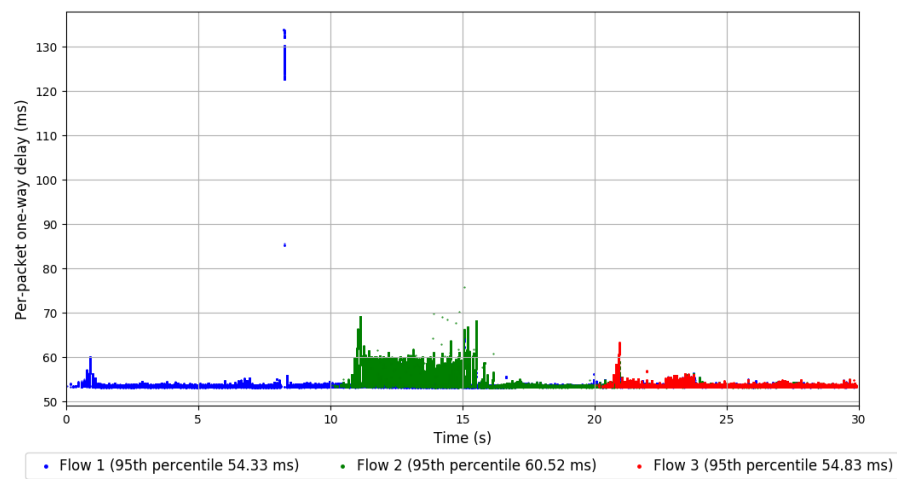
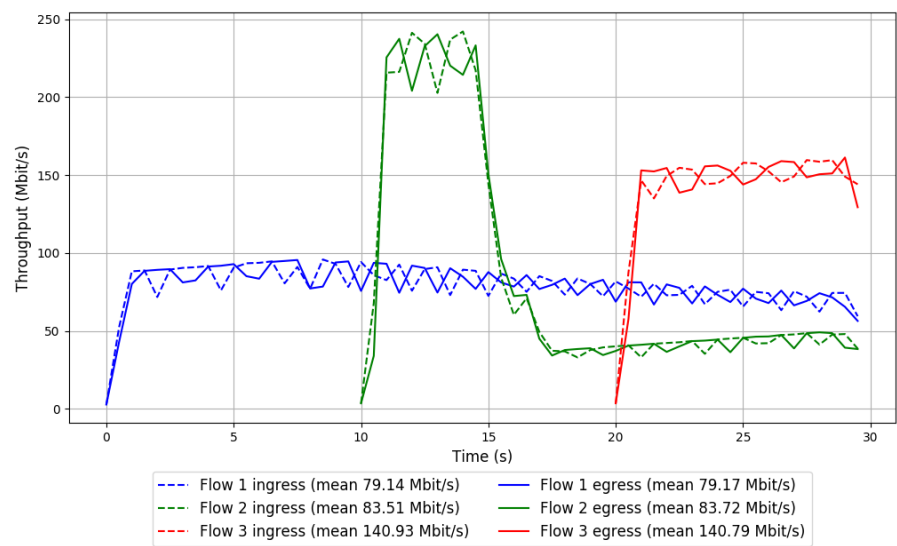
-- Flow 3:

Average throughput: 140.79 Mbit/s

95th percentile per-packet one-way delay: 54.828 ms

Loss rate: 1.15%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-20 22:22:12

End at: 2017-12-20 22:22:42

Below is generated by plot.py at 2017-12-21 02:26:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.44 Mbit/s

95th percentile per-packet one-way delay: 54.154 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 49.24 Mbit/s

95th percentile per-packet one-way delay: 54.033 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 7.49 Mbit/s

95th percentile per-packet one-way delay: 53.780 ms

Loss rate: 0.51%

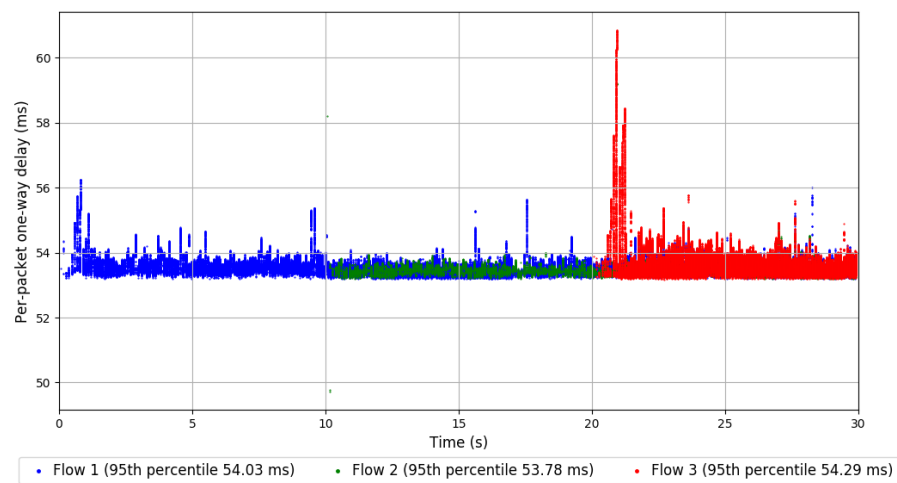
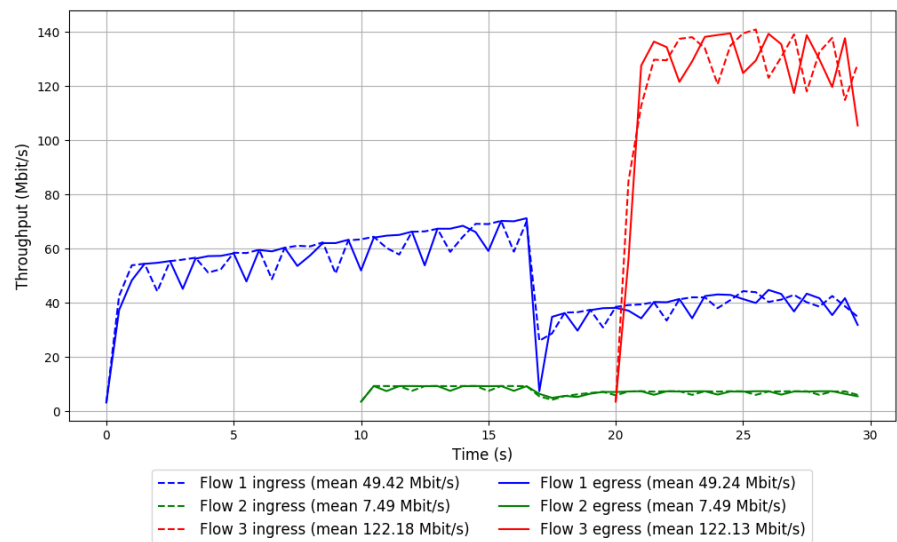
-- Flow 3:

Average throughput: 122.13 Mbit/s

95th percentile per-packet one-way delay: 54.293 ms

Loss rate: 1.12%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-20 22:36:04

End at: 2017-12-20 22:36:34

Below is generated by plot.py at 2017-12-21 02:26:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.84 Mbit/s

95th percentile per-packet one-way delay: 60.054 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 14.88 Mbit/s

95th percentile per-packet one-way delay: 56.927 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 163.41 Mbit/s

95th percentile per-packet one-way delay: 60.181 ms

Loss rate: 0.33%

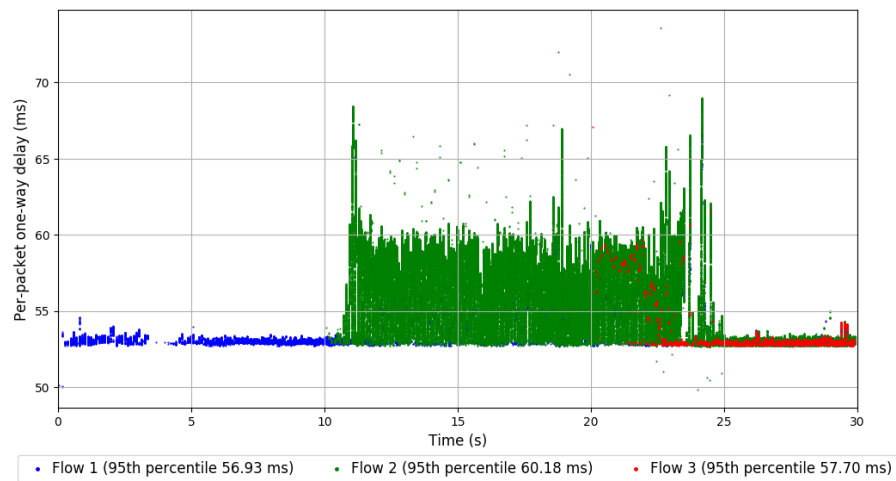
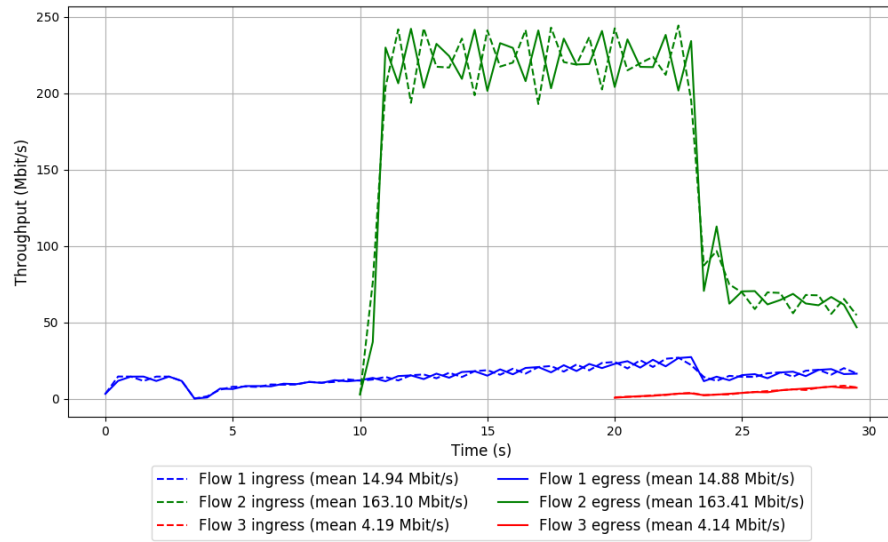
-- Flow 3:

Average throughput: 4.14 Mbit/s

95th percentile per-packet one-way delay: 57.702 ms

Loss rate: 2.36%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-20 22:50:00

End at: 2017-12-20 22:50:30

Below is generated by plot.py at 2017-12-21 02:26:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 158.63 Mbit/s

95th percentile per-packet one-way delay: 54.108 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 88.86 Mbit/s

95th percentile per-packet one-way delay: 54.106 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 78.00 Mbit/s

95th percentile per-packet one-way delay: 54.119 ms

Loss rate: 0.31%

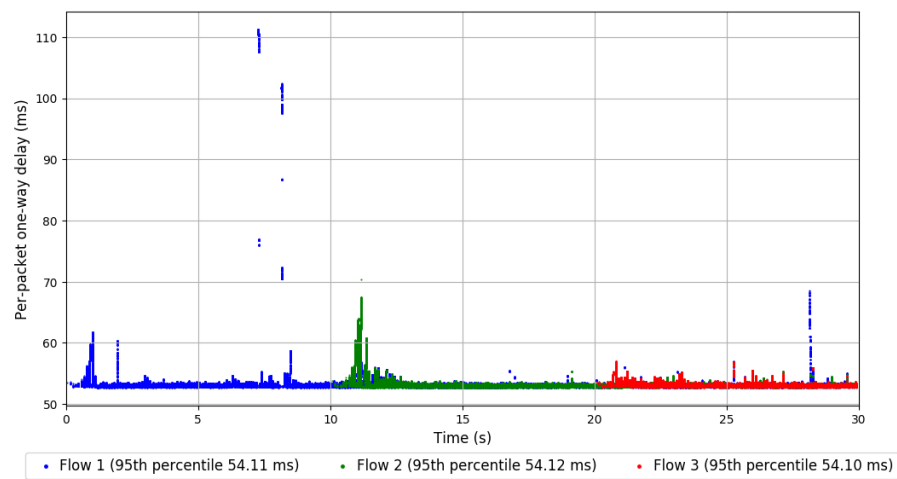
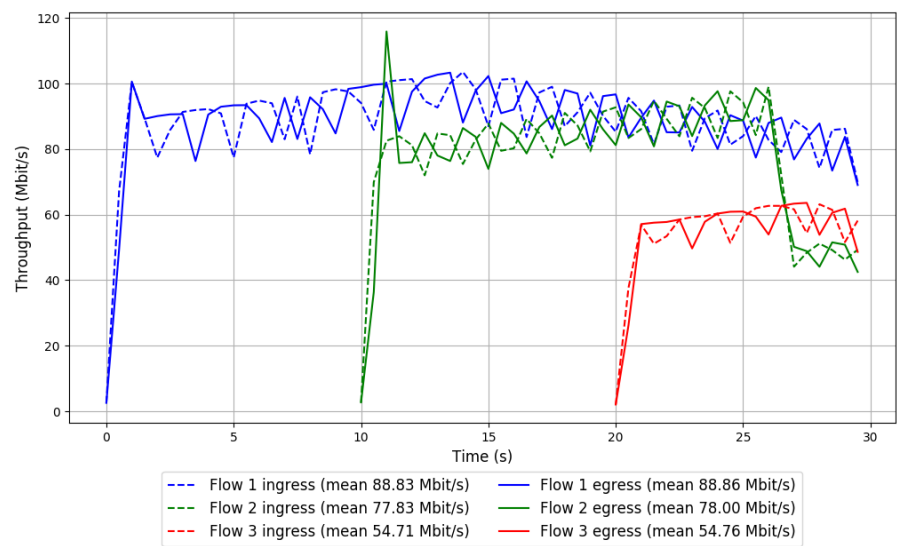
-- Flow 3:

Average throughput: 54.76 Mbit/s

95th percentile per-packet one-way delay: 54.102 ms

Loss rate: 0.97%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-20 23:03:53

End at: 2017-12-20 23:04:23

Below is generated by plot.py at 2017-12-21 02:26:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.75 Mbit/s

95th percentile per-packet one-way delay: 54.570 ms

Loss rate: 1.06%

-- Flow 1:

Average throughput: 71.83 Mbit/s

95th percentile per-packet one-way delay: 54.572 ms

Loss rate: 1.05%

-- Flow 2:

Average throughput: 8.45 Mbit/s

95th percentile per-packet one-way delay: 53.999 ms

Loss rate: 0.56%

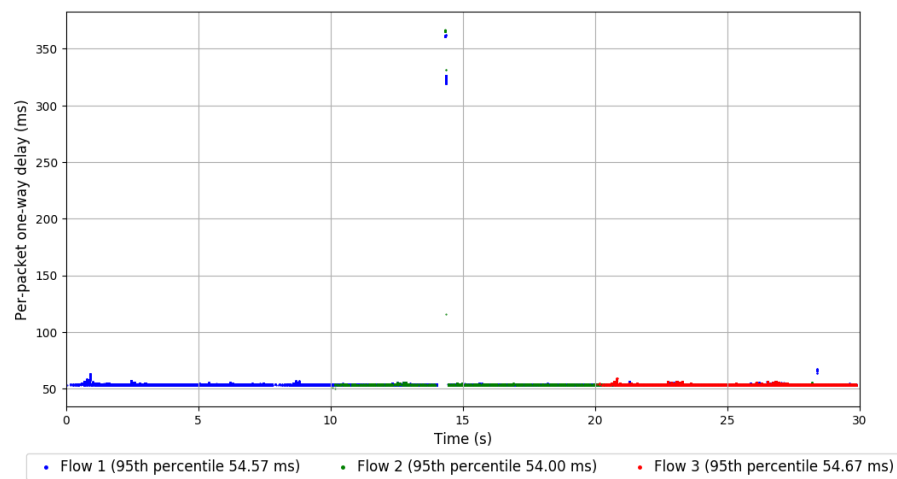
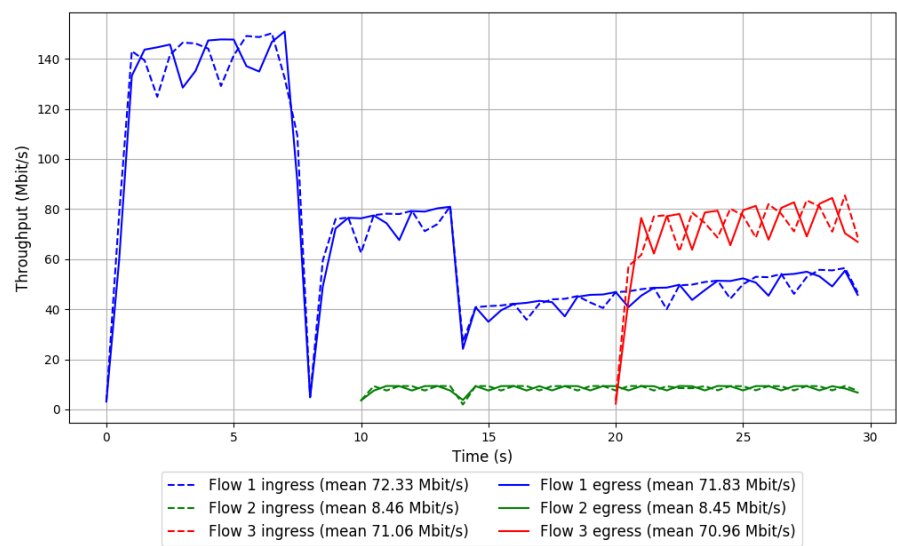
-- Flow 3:

Average throughput: 70.96 Mbit/s

95th percentile per-packet one-way delay: 54.671 ms

Loss rate: 1.22%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-20 23:17:34

End at: 2017-12-20 23:18:04

Below is generated by plot.py at 2017-12-21 02:26:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.54 Mbit/s

95th percentile per-packet one-way delay: 54.152 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 50.39 Mbit/s

95th percentile per-packet one-way delay: 54.140 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 19.21 Mbit/s

95th percentile per-packet one-way delay: 54.223 ms

Loss rate: 0.82%

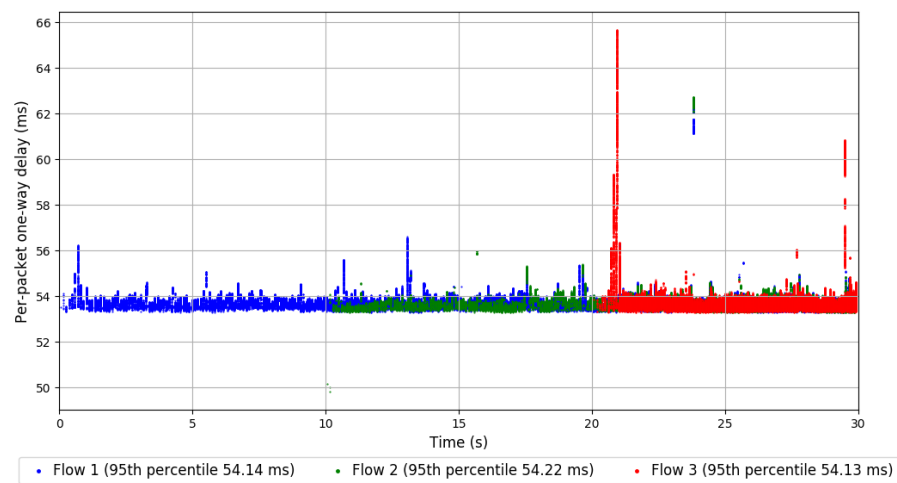
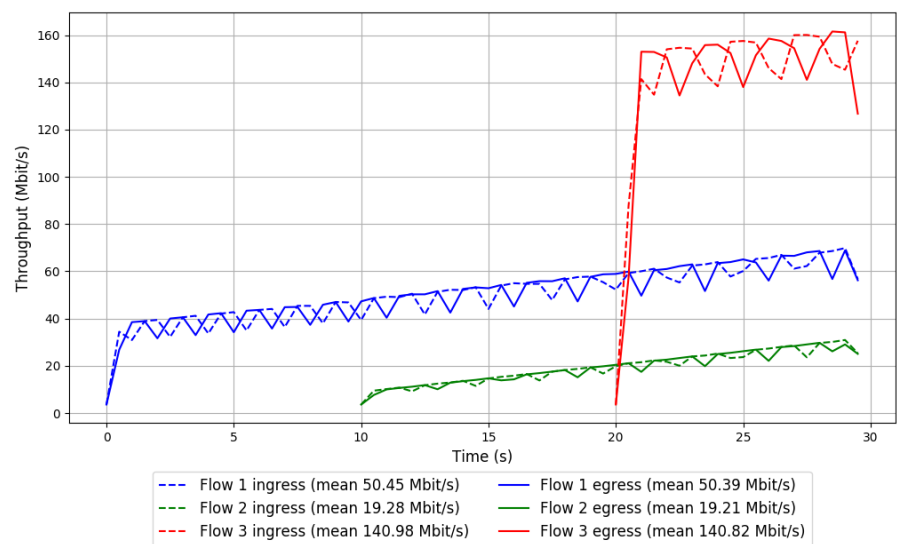
-- Flow 3:

Average throughput: 140.82 Mbit/s

95th percentile per-packet one-way delay: 54.129 ms

Loss rate: 1.16%

Run 10: Report of TCP Vegas — Data Link

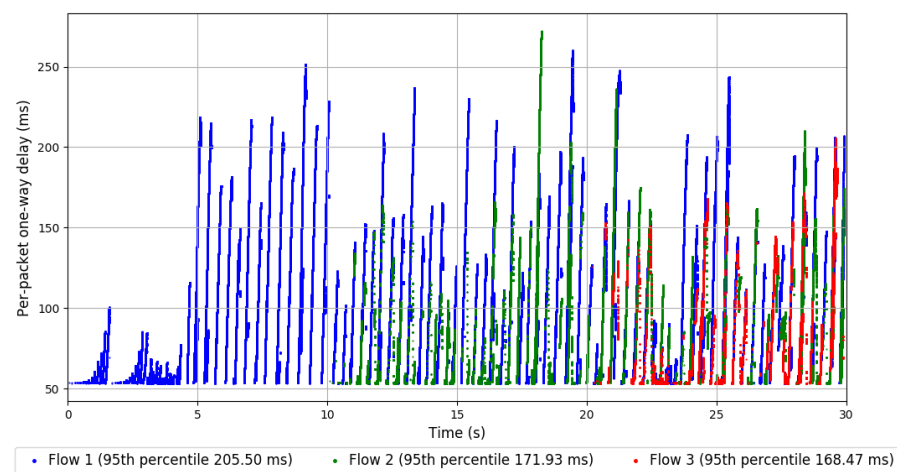
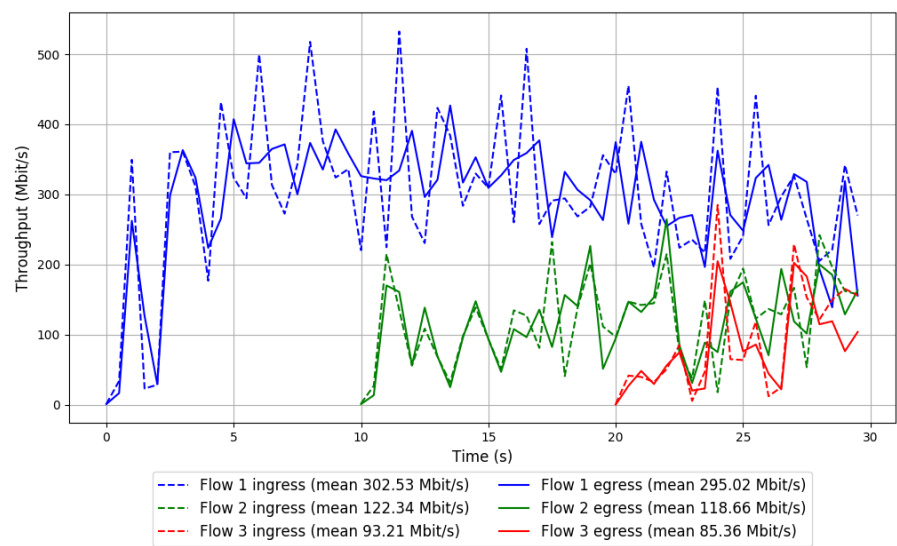


```
Run 1: Statistics of Verus

Start at: 2017-12-20 21:10:59
End at: 2017-12-20 21:11:29

# Below is generated by plot.py at 2017-12-21 02:31:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 401.55 Mbit/s
95th percentile per-packet one-way delay: 201.489 ms
Loss rate: 2.95%
-- Flow 1:
Average throughput: 295.02 Mbit/s
95th percentile per-packet one-way delay: 205.502 ms
Loss rate: 2.30%
-- Flow 2:
Average throughput: 118.66 Mbit/s
95th percentile per-packet one-way delay: 171.931 ms
Loss rate: 2.55%
-- Flow 3:
Average throughput: 85.36 Mbit/s
95th percentile per-packet one-way delay: 168.473 ms
Loss rate: 10.31%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-20 21:24:53

End at: 2017-12-20 21:25:23

Below is generated by plot.py at 2017-12-21 02:31:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 402.07 Mbit/s

95th percentile per-packet one-way delay: 113.623 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 246.45 Mbit/s

95th percentile per-packet one-way delay: 112.116 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 165.89 Mbit/s

95th percentile per-packet one-way delay: 111.023 ms

Loss rate: 0.59%

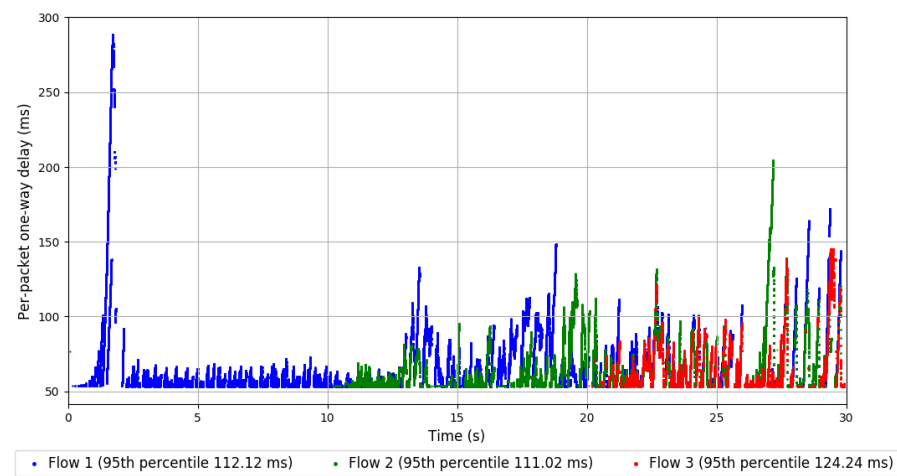
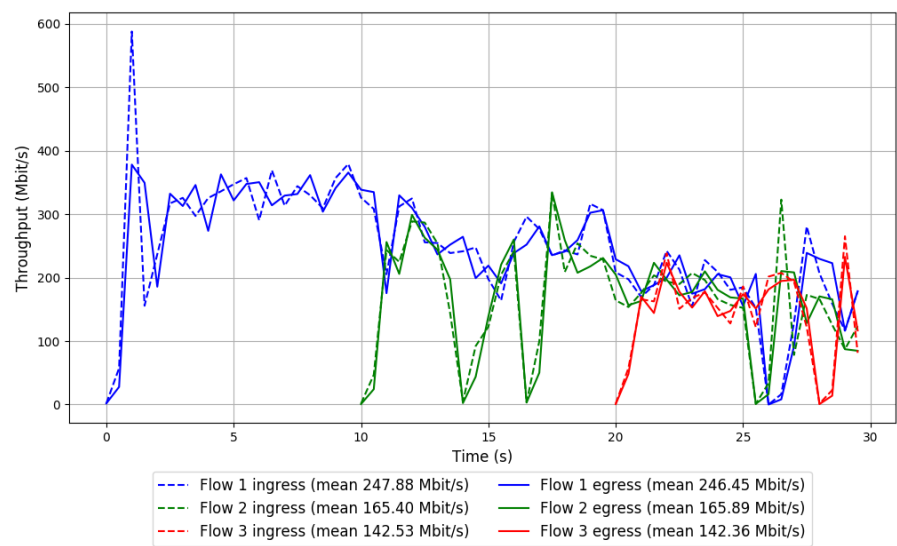
-- Flow 3:

Average throughput: 142.36 Mbit/s

95th percentile per-packet one-way delay: 124.236 ms

Loss rate: 0.29%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-20 21:39:11

End at: 2017-12-20 21:39:41

Below is generated by plot.py at 2017-12-21 02:31:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.76 Mbit/s

95th percentile per-packet one-way delay: 104.031 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 173.45 Mbit/s

95th percentile per-packet one-way delay: 102.737 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 224.74 Mbit/s

95th percentile per-packet one-way delay: 121.178 ms

Loss rate: 1.21%

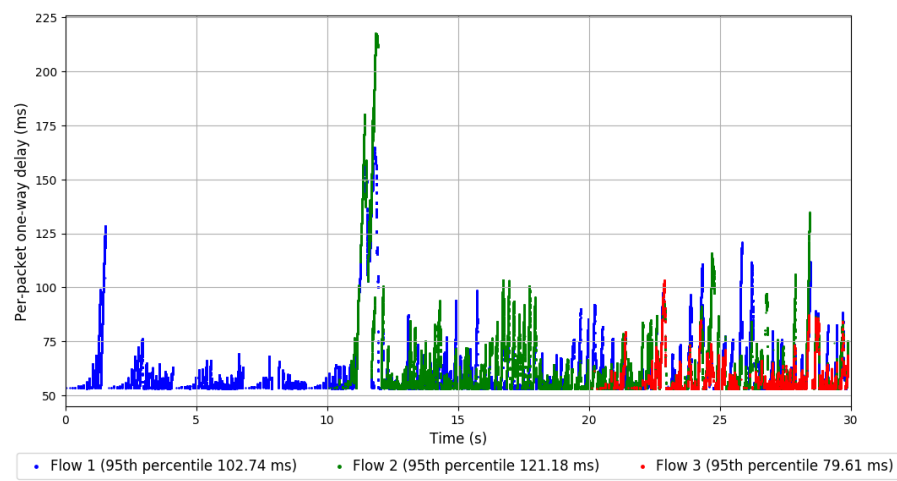
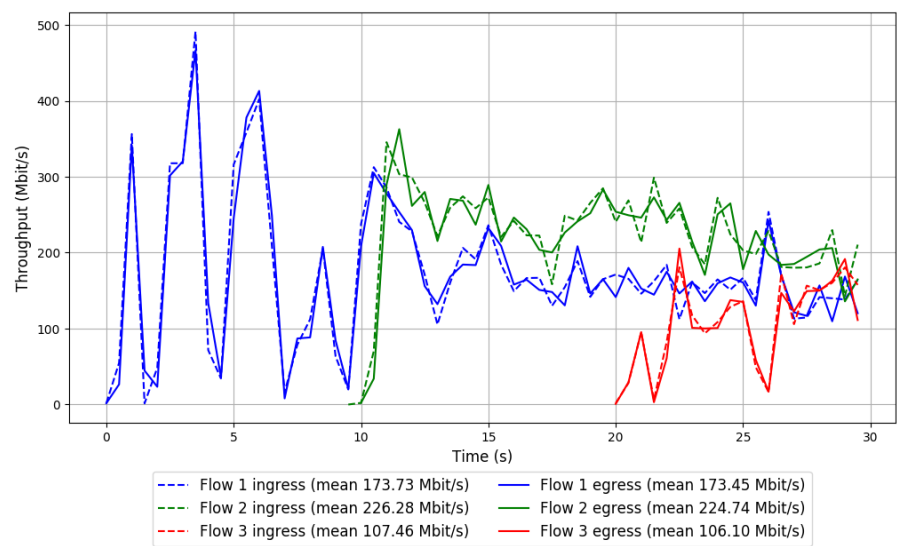
-- Flow 3:

Average throughput: 106.10 Mbit/s

95th percentile per-packet one-way delay: 79.606 ms

Loss rate: 2.31%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-20 21:53:12

End at: 2017-12-20 21:53:42

Below is generated by plot.py at 2017-12-21 02:33:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 414.64 Mbit/s

95th percentile per-packet one-way delay: 172.244 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 248.24 Mbit/s

95th percentile per-packet one-way delay: 131.365 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 215.50 Mbit/s

95th percentile per-packet one-way delay: 182.692 ms

Loss rate: 1.45%

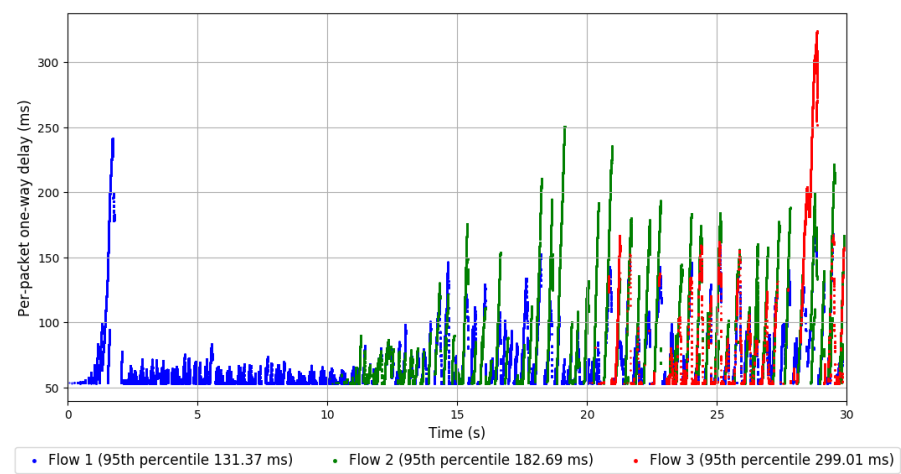
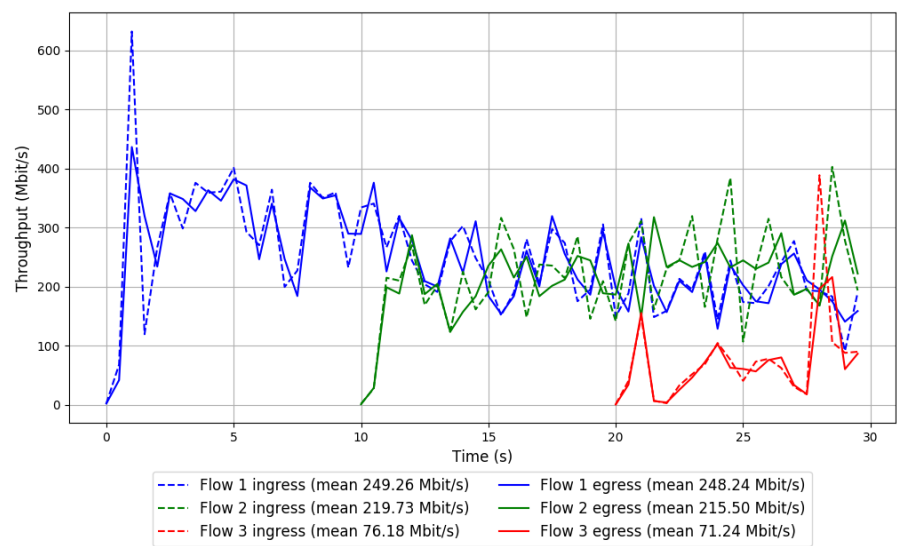
-- Flow 3:

Average throughput: 71.24 Mbit/s

95th percentile per-packet one-way delay: 299.007 ms

Loss rate: 7.65%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-20 22:06:55

End at: 2017-12-20 22:07:25

Below is generated by plot.py at 2017-12-21 02:33:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 336.52 Mbit/s

95th percentile per-packet one-way delay: 219.529 ms

Loss rate: 3.06%

-- Flow 1:

Average throughput: 222.87 Mbit/s

95th percentile per-packet one-way delay: 226.300 ms

Loss rate: 2.37%

-- Flow 2:

Average throughput: 107.33 Mbit/s

95th percentile per-packet one-way delay: 203.448 ms

Loss rate: 5.23%

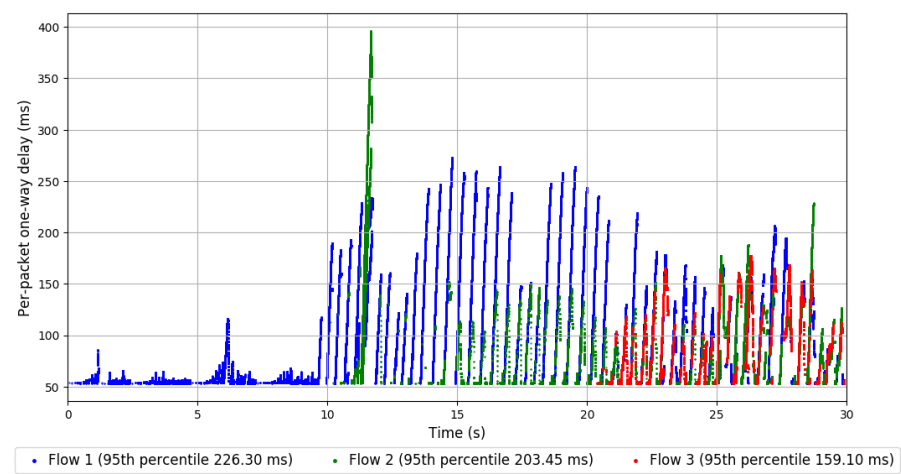
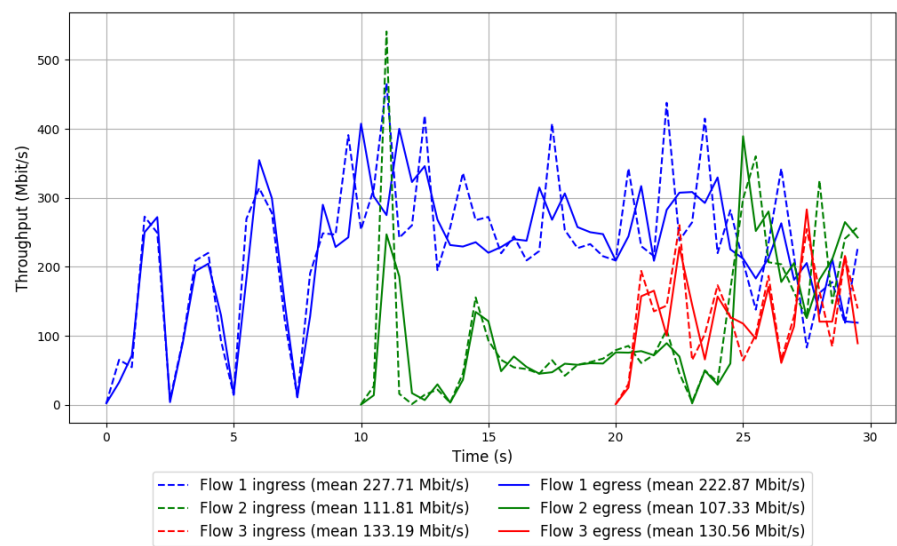
-- Flow 3:

Average throughput: 130.56 Mbit/s

95th percentile per-packet one-way delay: 159.096 ms

Loss rate: 2.99%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-20 22:21:04

End at: 2017-12-20 22:21:34

Below is generated by plot.py at 2017-12-21 02:33:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 388.34 Mbit/s

95th percentile per-packet one-way delay: 155.338 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 290.91 Mbit/s

95th percentile per-packet one-way delay: 165.118 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 96.58 Mbit/s

95th percentile per-packet one-way delay: 112.576 ms

Loss rate: 0.83%

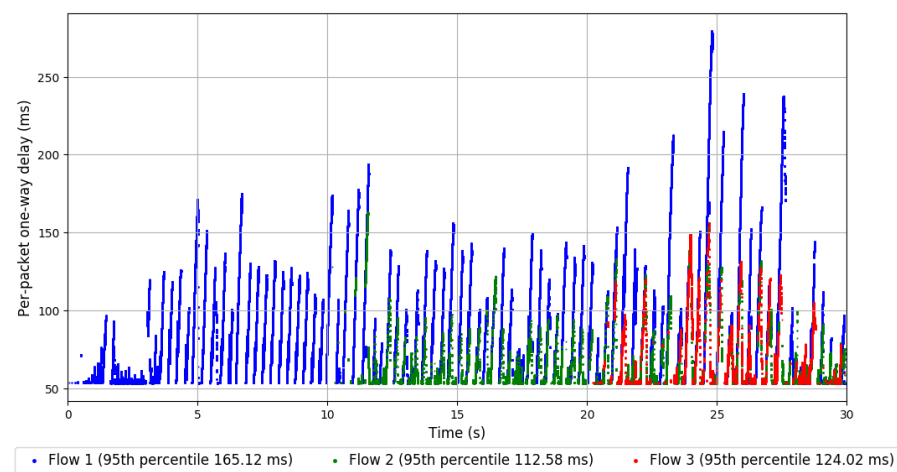
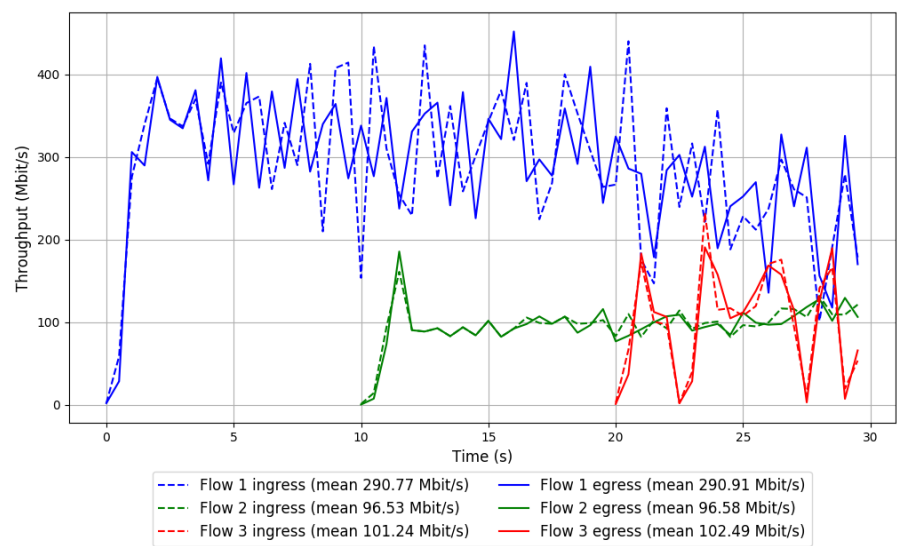
-- Flow 3:

Average throughput: 102.49 Mbit/s

95th percentile per-packet one-way delay: 124.018 ms

Loss rate: 0.02%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-20 22:34:56

End at: 2017-12-20 22:35:26

Below is generated by plot.py at 2017-12-21 02:33:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 409.53 Mbit/s

95th percentile per-packet one-way delay: 192.304 ms

Loss rate: 2.65%

-- Flow 1:

Average throughput: 236.90 Mbit/s

95th percentile per-packet one-way delay: 144.696 ms

Loss rate: 1.43%

-- Flow 2:

Average throughput: 214.89 Mbit/s

95th percentile per-packet one-way delay: 252.232 ms

Loss rate: 5.24%

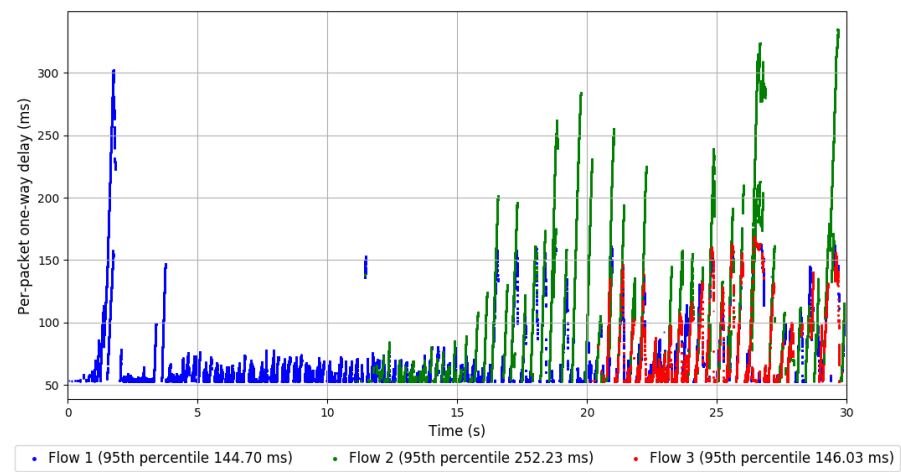
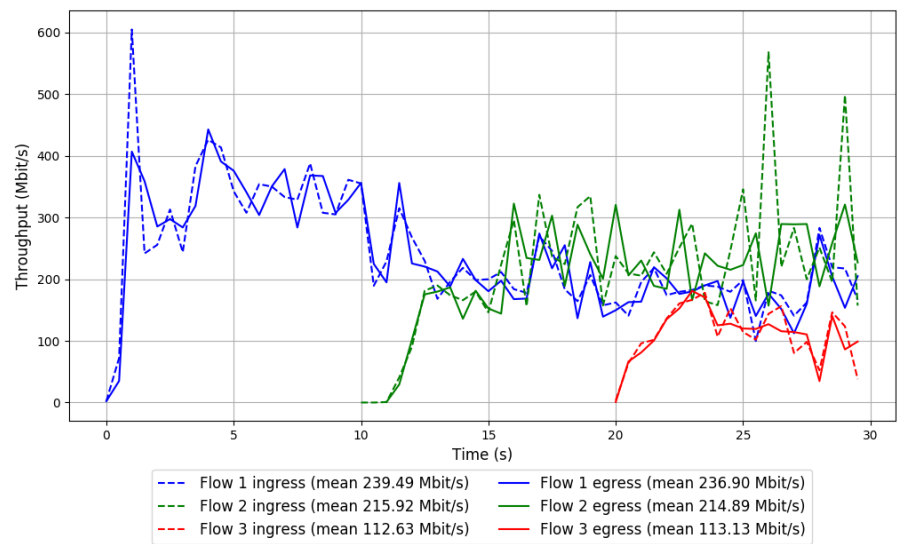
-- Flow 3:

Average throughput: 113.13 Mbit/s

95th percentile per-packet one-way delay: 146.026 ms

Loss rate: 0.61%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-20 22:48:54

End at: 2017-12-20 22:49:24

Below is generated by plot.py at 2017-12-21 02:33:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 383.33 Mbit/s

95th percentile per-packet one-way delay: 110.429 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 216.02 Mbit/s

95th percentile per-packet one-way delay: 107.622 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 190.80 Mbit/s

95th percentile per-packet one-way delay: 106.958 ms

Loss rate: 1.02%

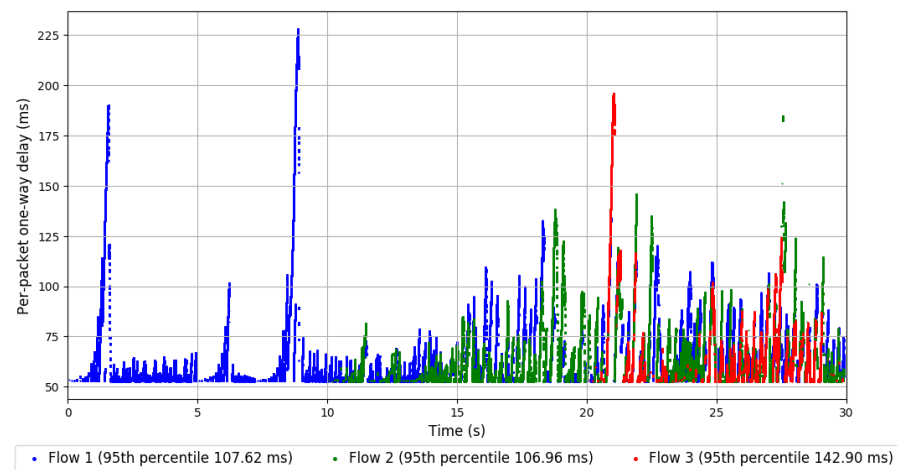
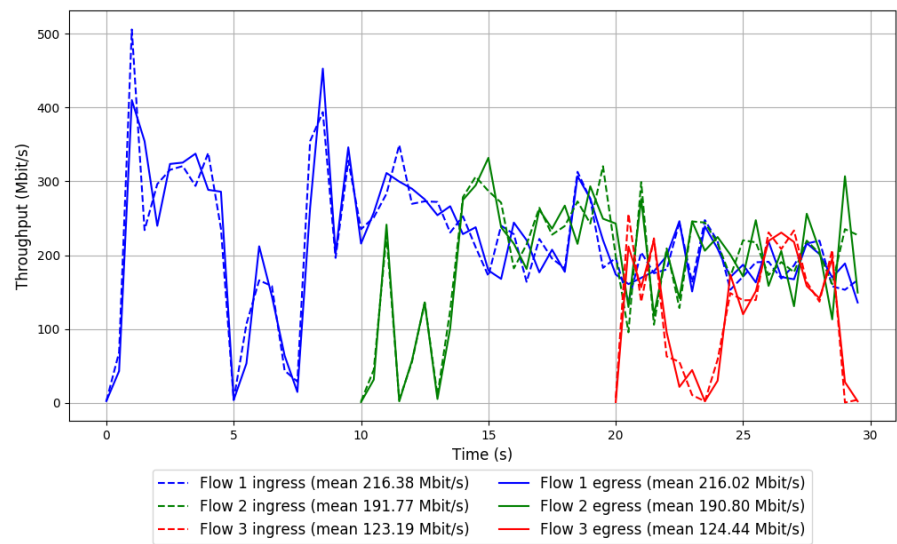
-- Flow 3:

Average throughput: 124.44 Mbit/s

95th percentile per-packet one-way delay: 142.898 ms

Loss rate: 0.09%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-20 23:02:48

End at: 2017-12-20 23:03:18

Below is generated by plot.py at 2017-12-21 02:37:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 366.67 Mbit/s

95th percentile per-packet one-way delay: 201.699 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 271.96 Mbit/s

95th percentile per-packet one-way delay: 215.176 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 87.30 Mbit/s

95th percentile per-packet one-way delay: 139.090 ms

Loss rate: 0.32%

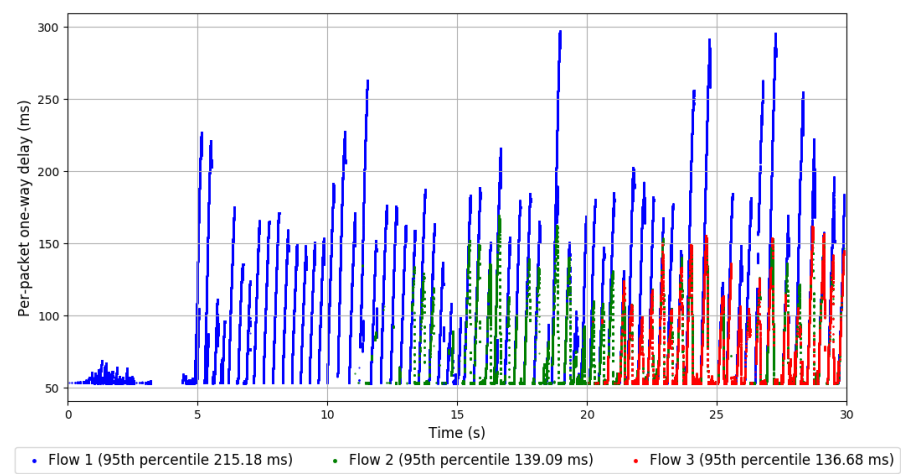
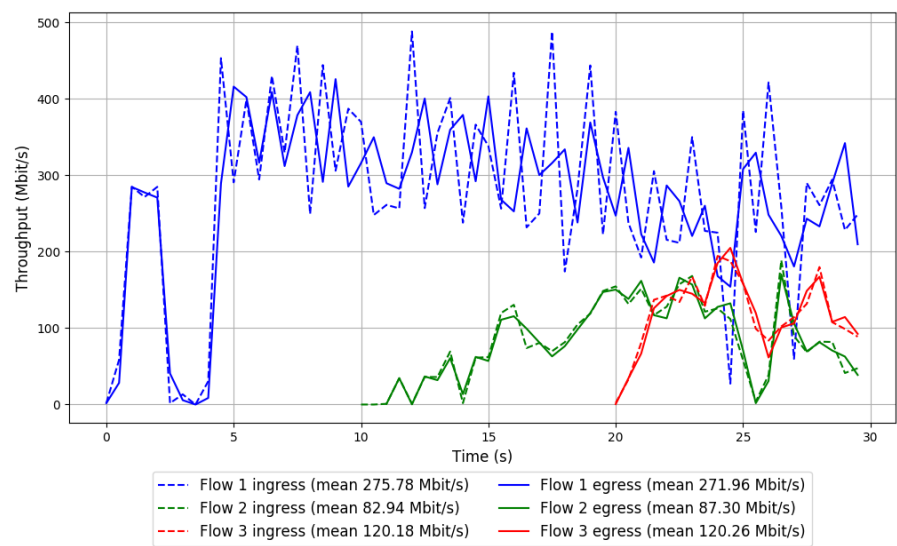
-- Flow 3:

Average throughput: 120.26 Mbit/s

95th percentile per-packet one-way delay: 136.675 ms

Loss rate: 0.32%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-20 23:16:26

End at: 2017-12-20 23:16:56

Below is generated by plot.py at 2017-12-21 02:38:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 389.47 Mbit/s

95th percentile per-packet one-way delay: 113.531 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 249.13 Mbit/s

95th percentile per-packet one-way delay: 118.098 ms

Loss rate: 1.23%

-- Flow 2:

Average throughput: 126.40 Mbit/s

95th percentile per-packet one-way delay: 100.832 ms

Loss rate: 0.23%

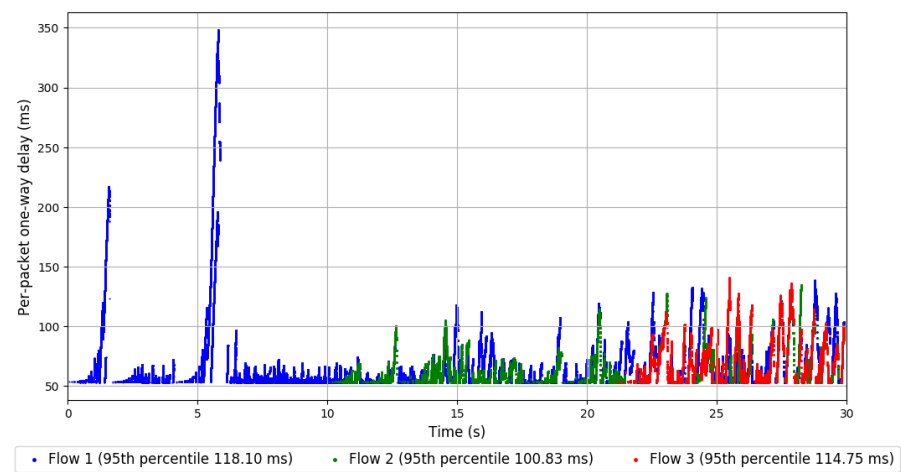
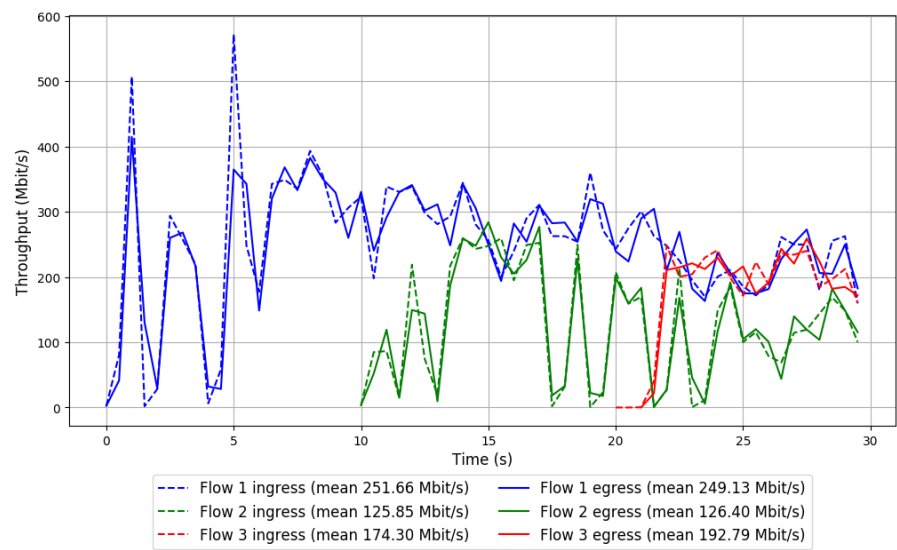
-- Flow 3:

Average throughput: 192.79 Mbit/s

95th percentile per-packet one-way delay: 114.747 ms

Loss rate: 0.90%

Run 10: Report of Verus — Data Link

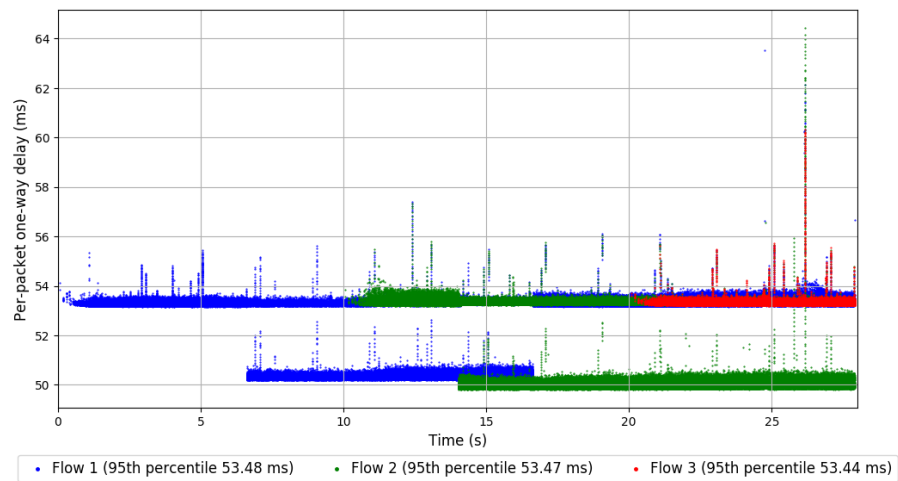
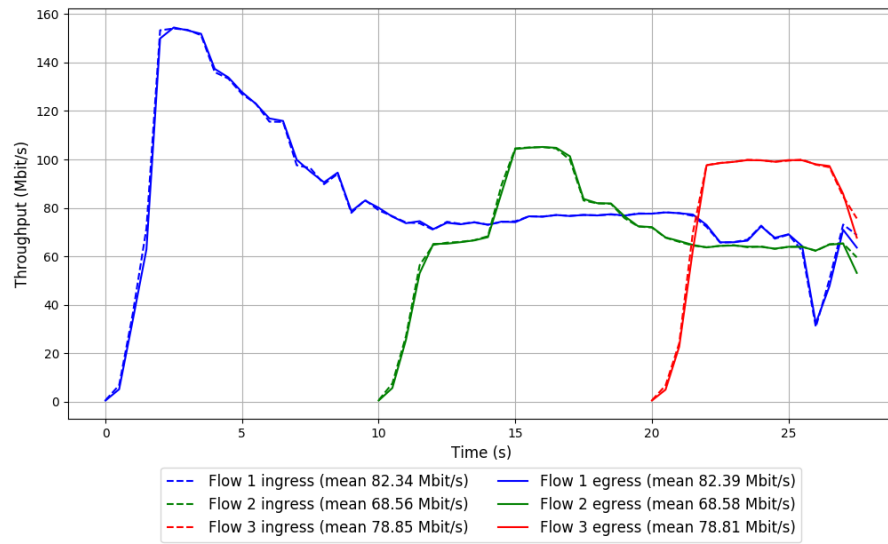


```
Run 1: Statistics of Copa

Start at: 2017-12-20 21:13:30
End at: 2017-12-20 21:14:00

# Below is generated by plot.py at 2017-12-21 02:38:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 148.44 Mbit/s
95th percentile per-packet one-way delay: 53.468 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 82.39 Mbit/s
95th percentile per-packet one-way delay: 53.478 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 68.58 Mbit/s
95th percentile per-packet one-way delay: 53.469 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 78.81 Mbit/s
95th percentile per-packet one-way delay: 53.442 ms
Loss rate: 1.36%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-20 21:27:36

End at: 2017-12-20 21:28:06

Below is generated by plot.py at 2017-12-21 02:38:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.21 Mbit/s

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

Loss rate: 0.56%

-- Flow 1:

Average throughput: 82.30 Mbit/s

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

Loss rate: 0.31%

-- Flow 2:

Average throughput: 68.60 Mbit/s

95th percentile per-packet one-way delay: 53.471 ms

Loss rate: 0.49%

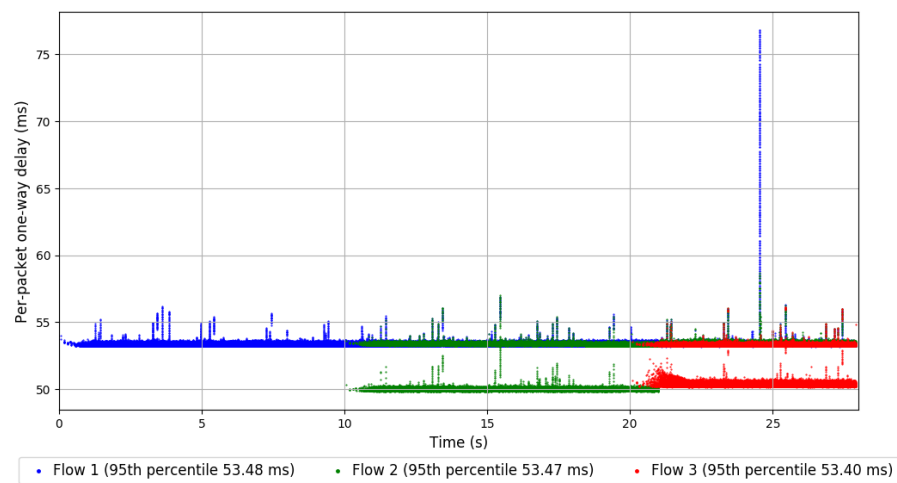
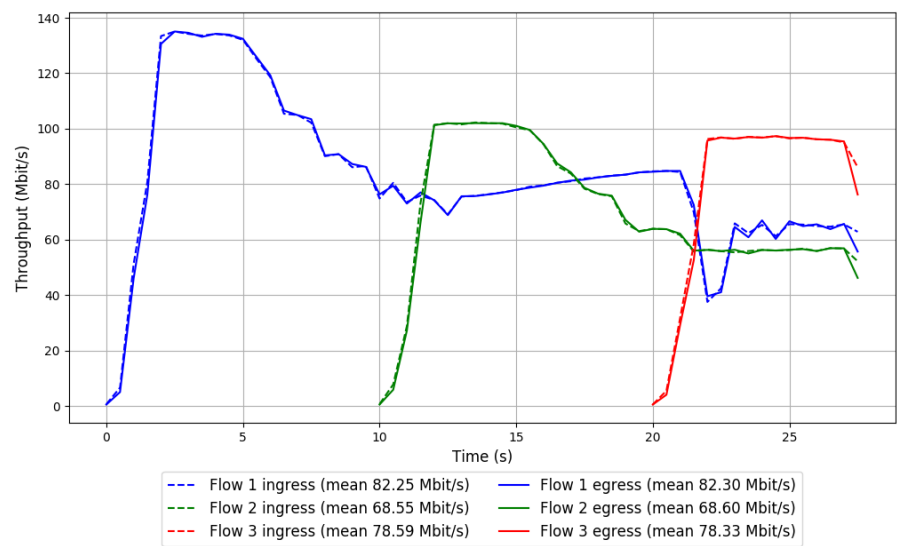
-- Flow 3:

Average throughput: 78.33 Mbit/s

95th percentile per-packet one-way delay: 53.400 ms

Loss rate: 1.59%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-20 21:41:39

End at: 2017-12-20 21:42:09

Below is generated by plot.py at 2017-12-21 02:38:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.51 Mbit/s

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

Loss rate: 0.23%

-- Flow 1:

Average throughput: 88.24 Mbit/s

95th percentile per-packet one-way delay: 53.417 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 67.17 Mbit/s

95th percentile per-packet one-way delay: 53.444 ms

Loss rate: 0.09%

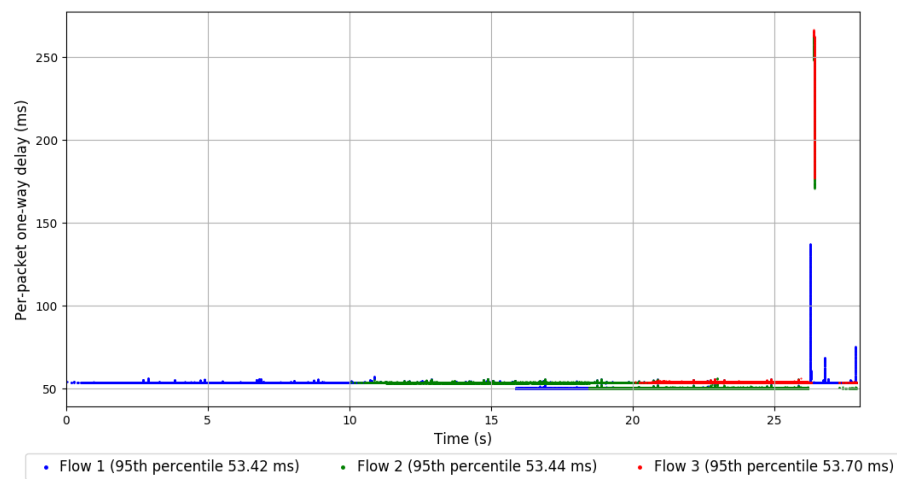
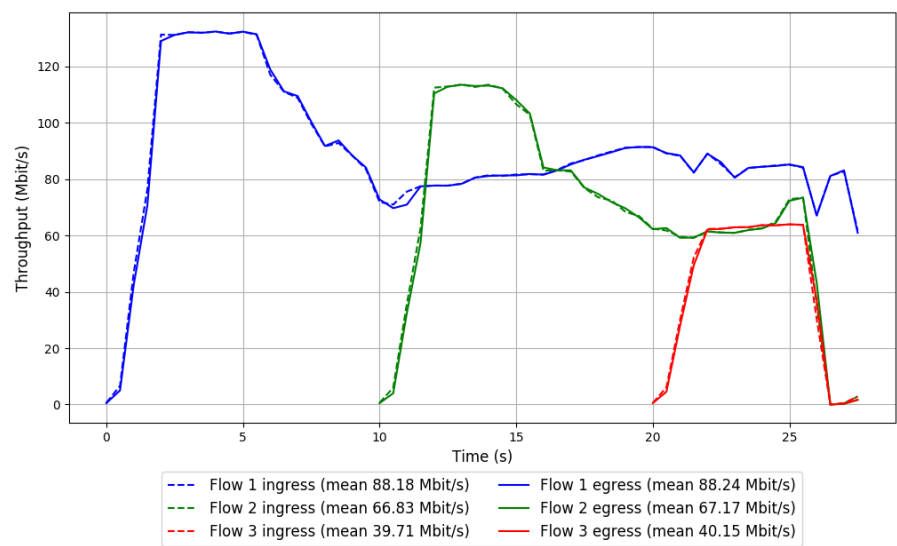
-- Flow 3:

Average throughput: 40.15 Mbit/s

95th percentile per-packet one-way delay: 53.697 ms

Loss rate: 0.22%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-20 21:55:44

End at: 2017-12-20 21:56:14

Below is generated by plot.py at 2017-12-21 02:38:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.06 Mbit/s

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

Loss rate: 0.56%

-- Flow 1:

Average throughput: 82.16 Mbit/s

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

Loss rate: 0.33%

-- Flow 2:

Average throughput: 80.47 Mbit/s

95th percentile per-packet one-way delay: 53.427 ms

Loss rate: 0.56%

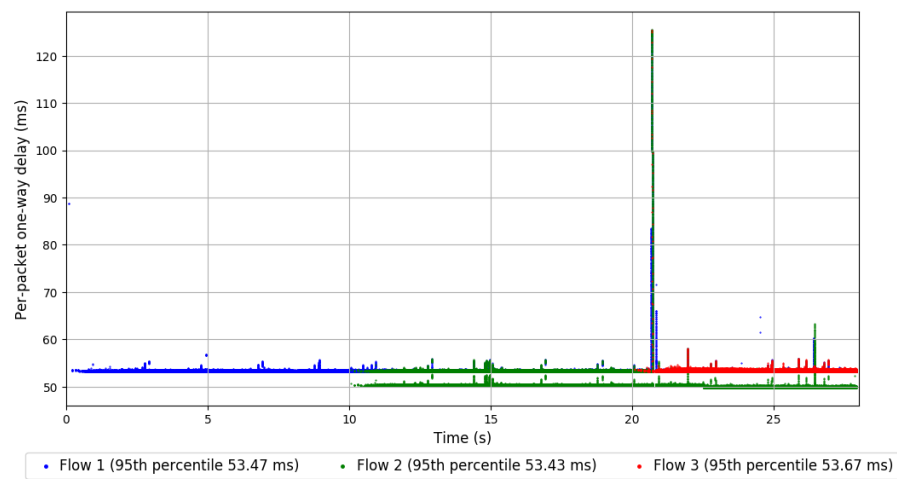
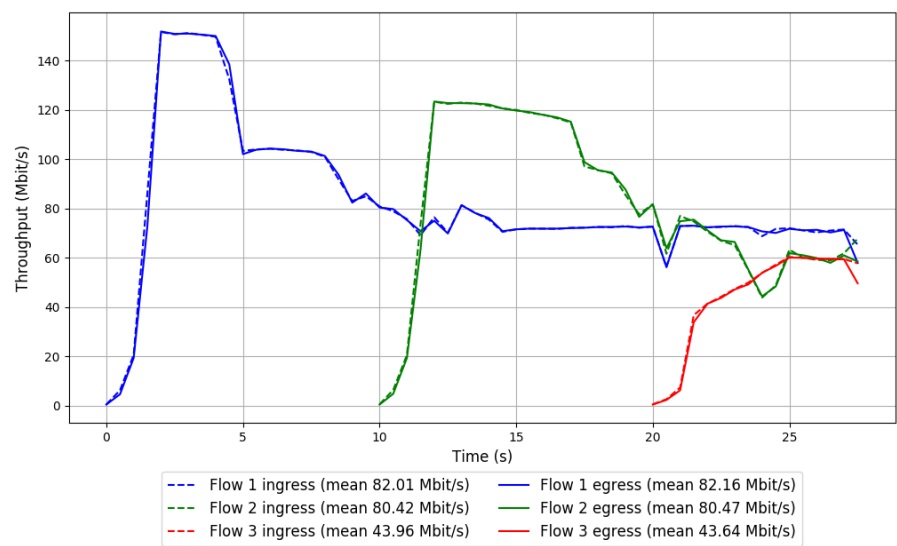
-- Flow 3:

Average throughput: 43.64 Mbit/s

95th percentile per-packet one-way delay: 53.667 ms

Loss rate: 2.08%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-20 22:09:29

End at: 2017-12-20 22:09:59

Below is generated by plot.py at 2017-12-21 02:38:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.90 Mbit/s

95th percentile per-packet one-way delay: 53.511 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 57.82 Mbit/s

95th percentile per-packet one-way delay: 53.413 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 76.06 Mbit/s

95th percentile per-packet one-way delay: 53.550 ms

Loss rate: 0.61%

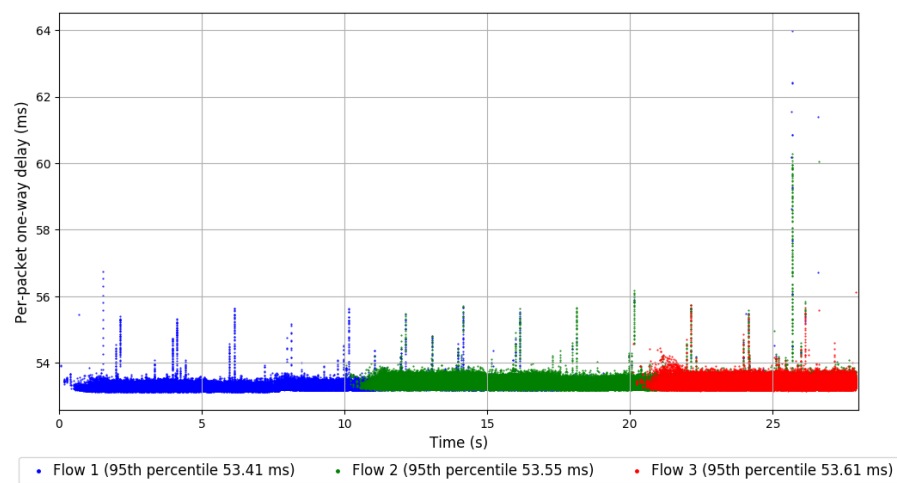
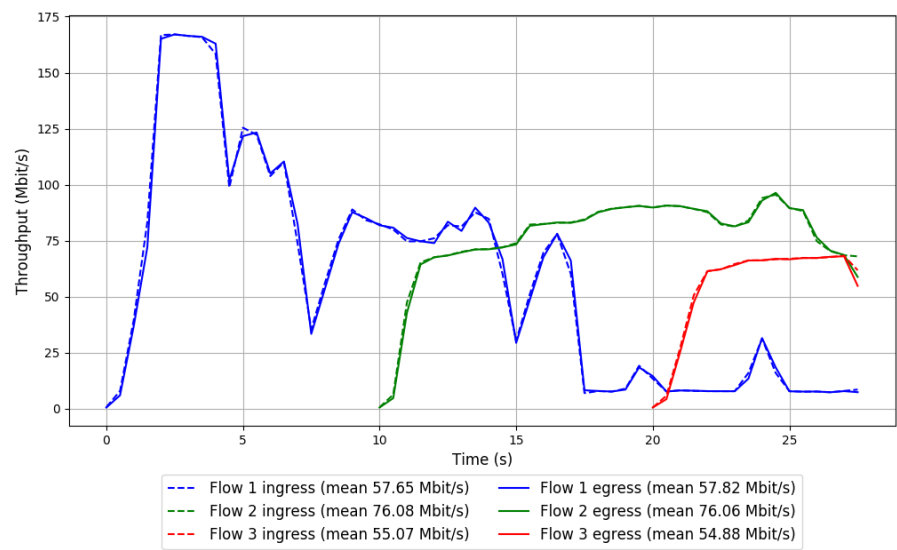
-- Flow 3:

Average throughput: 54.88 Mbit/s

95th percentile per-packet one-way delay: 53.613 ms

Loss rate: 1.64%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-20 22:23:36

End at: 2017-12-20 22:24:06

Below is generated by plot.py at 2017-12-21 02:38:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.41 Mbit/s

95th percentile per-packet one-way delay: 53.499 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 61.51 Mbit/s

95th percentile per-packet one-way delay: 53.397 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 71.30 Mbit/s

95th percentile per-packet one-way delay: 53.611 ms

Loss rate: 0.87%

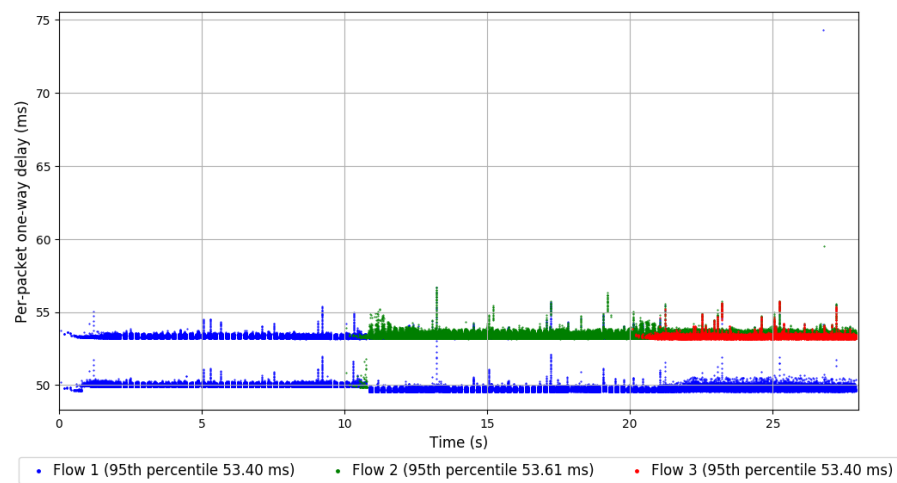
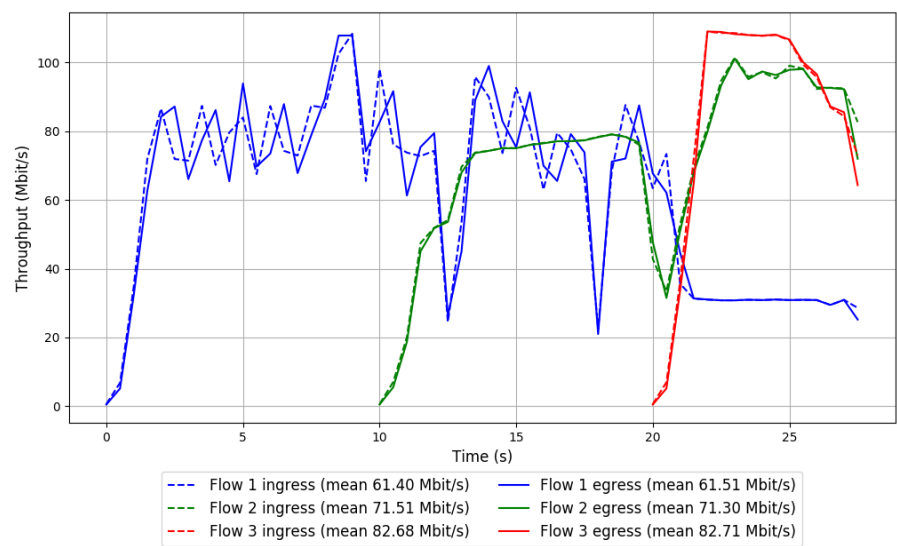
-- Flow 3:

Average throughput: 82.71 Mbit/s

95th percentile per-packet one-way delay: 53.403 ms

Loss rate: 1.30%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-20 22:37:31

End at: 2017-12-20 22:38:01

Below is generated by plot.py at 2017-12-21 02:40:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.26 Mbit/s

95th percentile per-packet one-way delay: 52.913 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 80.73 Mbit/s

95th percentile per-packet one-way delay: 52.928 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 74.88 Mbit/s

95th percentile per-packet one-way delay: 52.888 ms

Loss rate: 0.49%

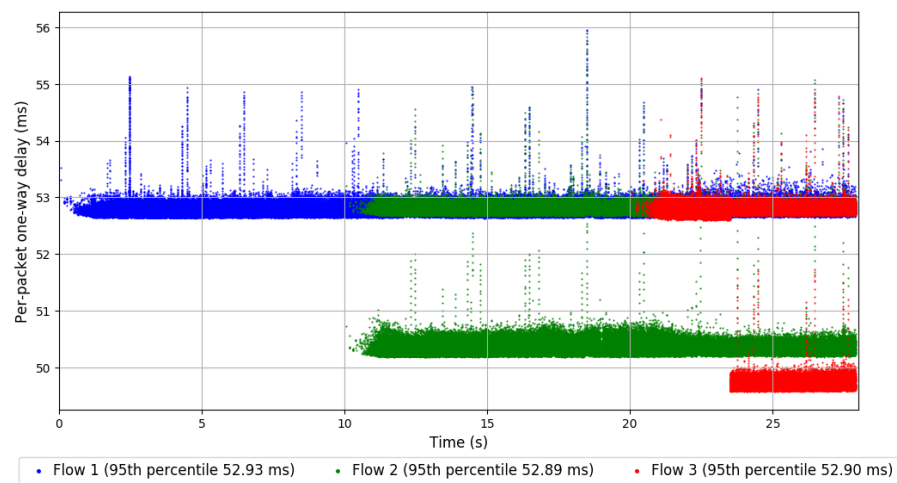
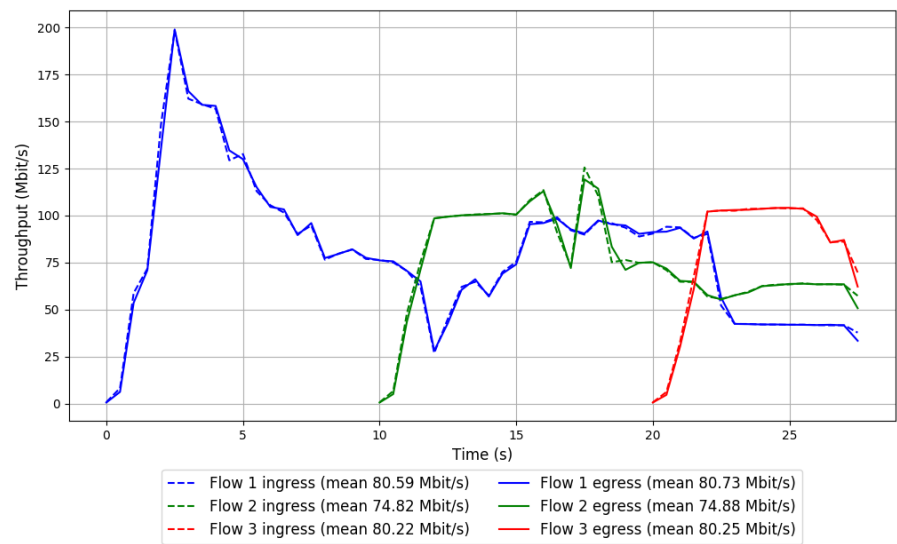
-- Flow 3:

Average throughput: 80.25 Mbit/s

95th percentile per-packet one-way delay: 52.897 ms

Loss rate: 1.26%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-12-20 22:51:29

End at: 2017-12-20 22:51:59

Below is generated by plot.py at 2017-12-21 02:40:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.83 Mbit/s

95th percentile per-packet one-way delay: 53.415 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 72.78 Mbit/s

95th percentile per-packet one-way delay: 53.416 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 59.70 Mbit/s

95th percentile per-packet one-way delay: 53.036 ms

Loss rate: 0.21%

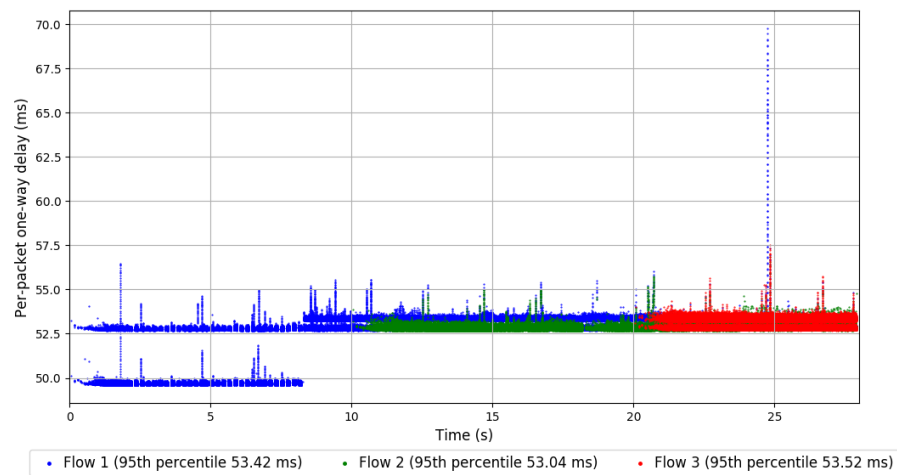
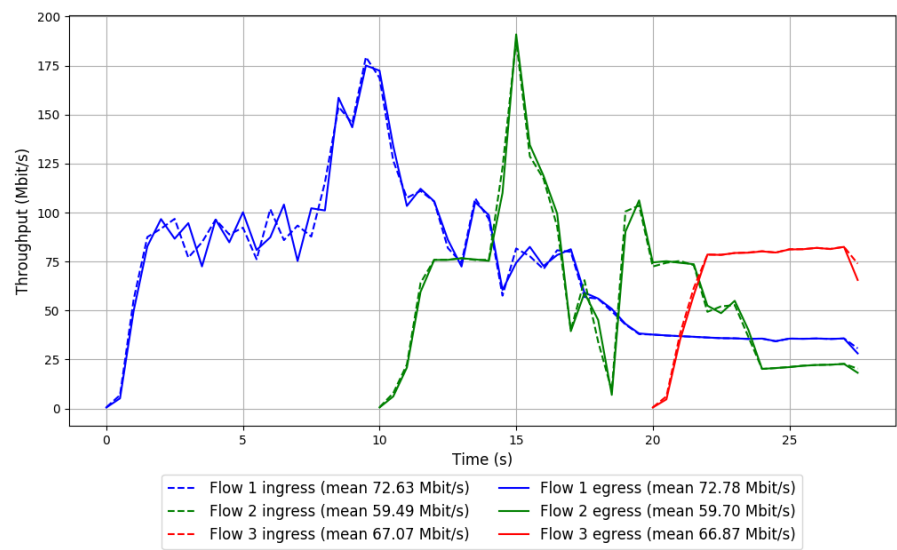
-- Flow 3:

Average throughput: 66.87 Mbit/s

95th percentile per-packet one-way delay: 53.518 ms

Loss rate: 1.61%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-20 23:05:19

End at: 2017-12-20 23:05:49

Below is generated by plot.py at 2017-12-21 02:40:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 145.71 Mbit/s

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

Loss rate: 0.27%

-- Flow 1:

Average throughput: 78.58 Mbit/s

95th percentile per-packet one-way delay: 53.439 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 89.01 Mbit/s

95th percentile per-packet one-way delay: 53.497 ms

Loss rate: 0.19%

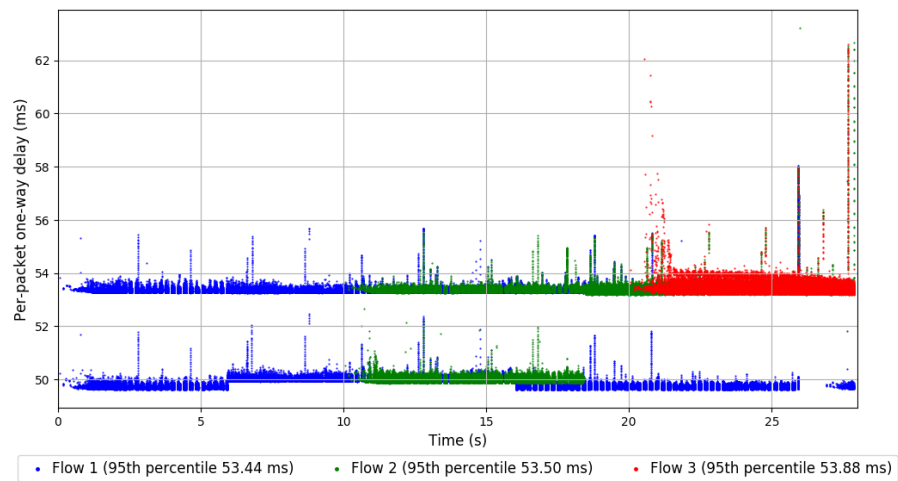
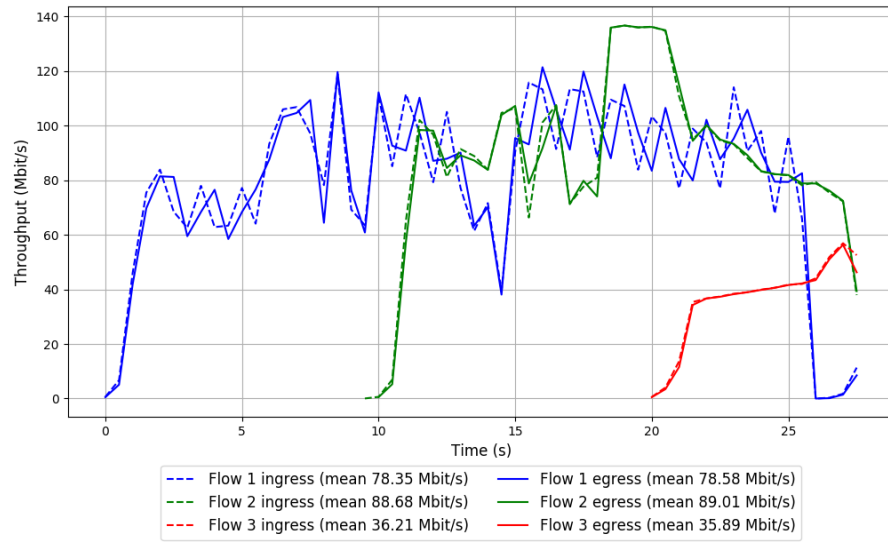
-- Flow 3:

Average throughput: 35.89 Mbit/s

95th percentile per-packet one-way delay: 53.880 ms

Loss rate: 2.19%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-20 23:18:59

End at: 2017-12-20 23:19:29

Below is generated by plot.py at 2017-12-21 02:41:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.22 Mbit/s

95th percentile per-packet one-way delay: 53.525 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 83.52 Mbit/s

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

Loss rate: 0.34%

-- Flow 2:

Average throughput: 67.85 Mbit/s

95th percentile per-packet one-way delay: 53.537 ms

Loss rate: 0.56%

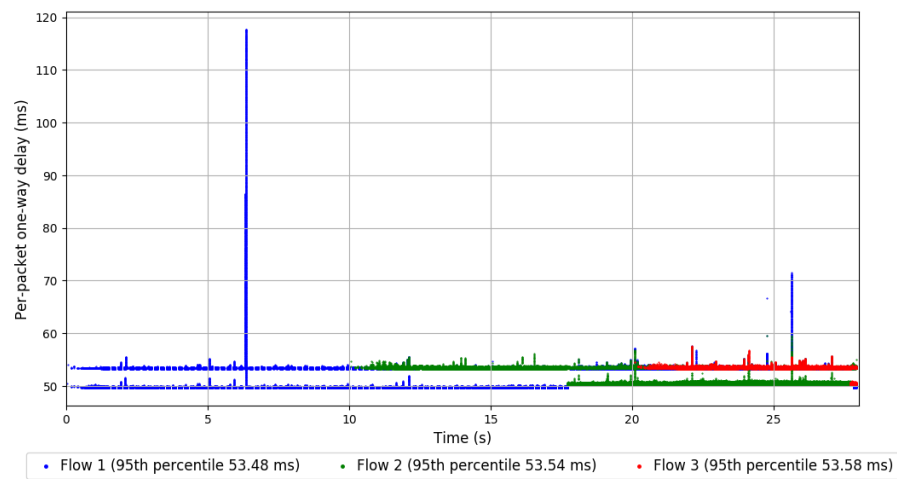
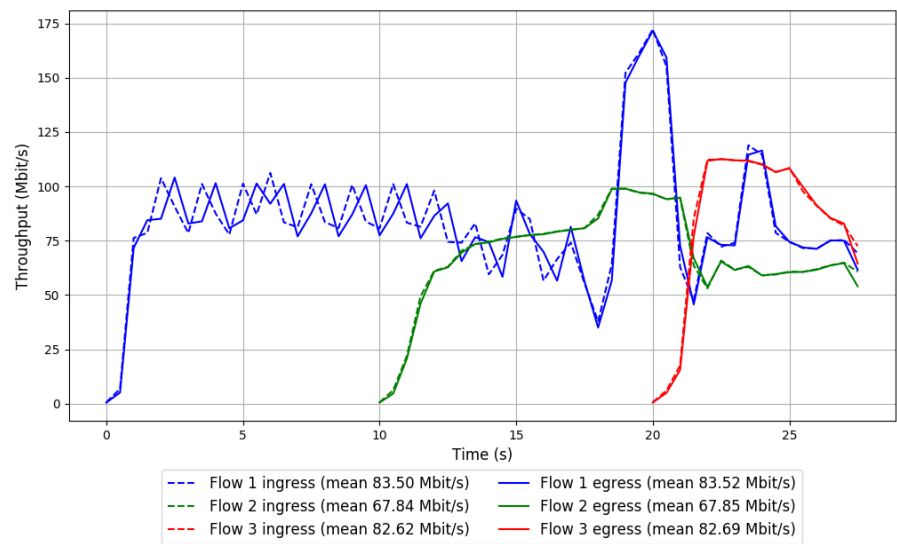
-- Flow 3:

Average throughput: 82.69 Mbit/s

95th percentile per-packet one-way delay: 53.584 ms

Loss rate: 1.24%

Run 10: Report of Copa — Data Link

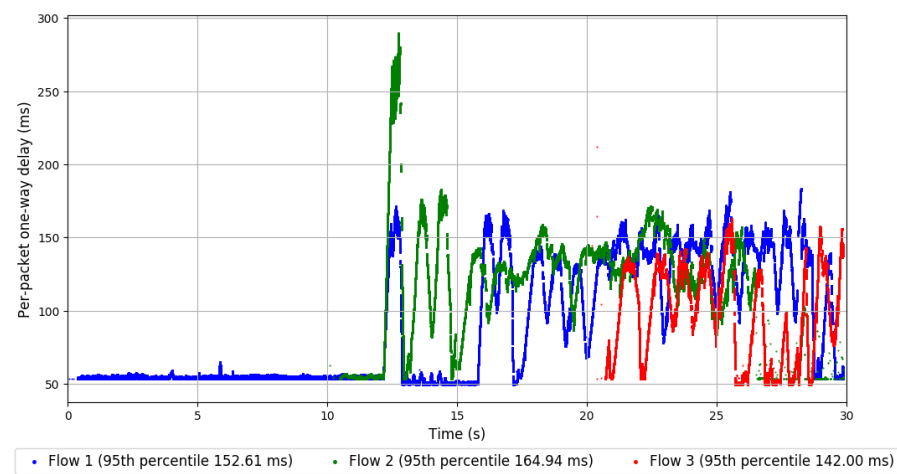
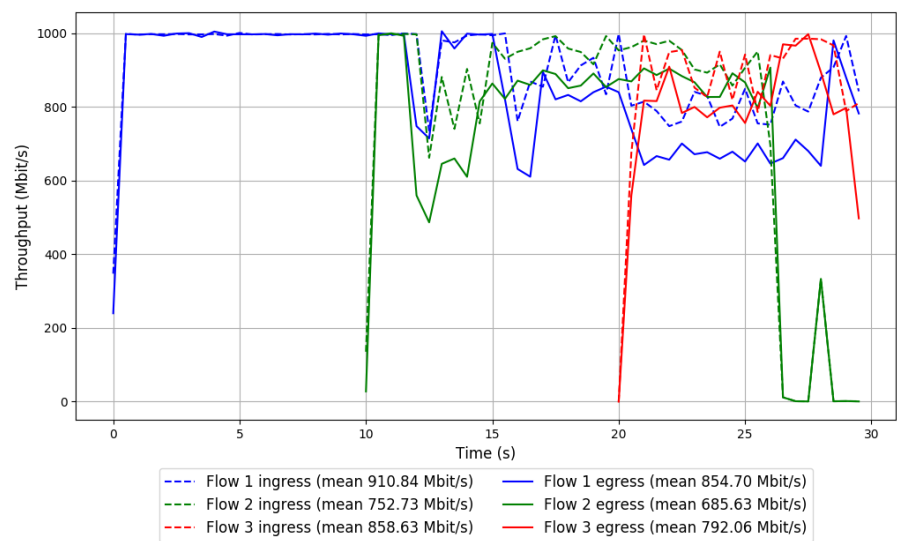


```
Run 1: Statistics of FillP

Start at: 2017-12-20 21:06:26
End at: 2017-12-20 21:06:56

# Below is generated by plot.py at 2017-12-21 03:07:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1566.68 Mbit/s
95th percentile per-packet one-way delay: 155.201 ms
Loss rate: 7.89%
-- Flow 1:
Average throughput: 854.70 Mbit/s
95th percentile per-packet one-way delay: 152.613 ms
Loss rate: 6.49%
-- Flow 2:
Average throughput: 685.63 Mbit/s
95th percentile per-packet one-way delay: 164.937 ms
Loss rate: 9.47%
-- Flow 3:
Average throughput: 792.06 Mbit/s
95th percentile per-packet one-way delay: 142.002 ms
Loss rate: 9.58%
```


Run 1: Report of FillP — Data Link

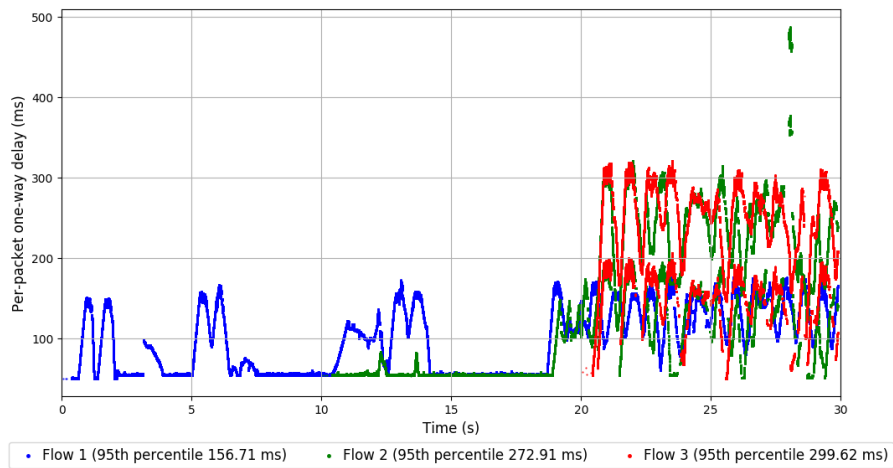
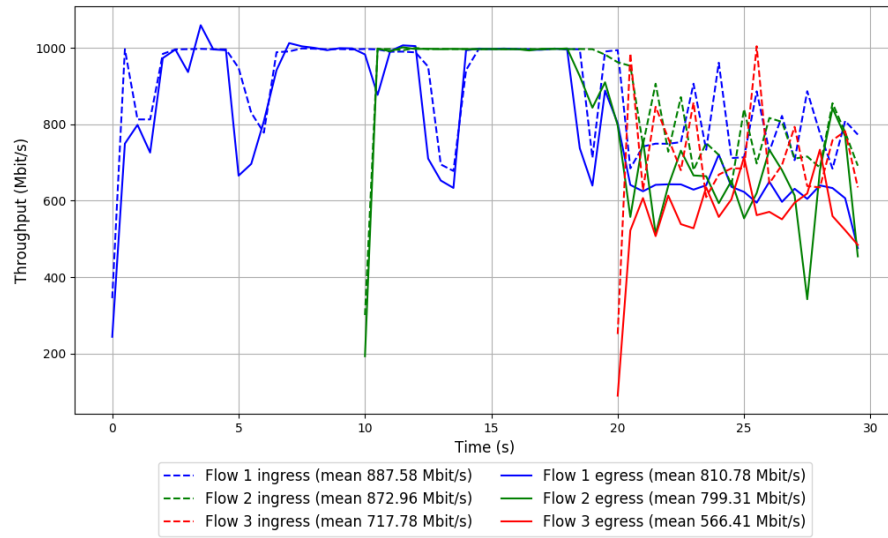


```
Run 2: Statistics of FillP

Start at: 2017-12-20 21:20:04
End at: 2017-12-20 21:20:34

# Below is generated by plot.py at 2017-12-21 03:07:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1528.18 Mbit/s
95th percentile per-packet one-way delay: 270.684 ms
Loss rate: 10.76%
-- Flow 1:
Average throughput: 810.78 Mbit/s
95th percentile per-packet one-way delay: 156.713 ms
Loss rate: 8.97%
-- Flow 2:
Average throughput: 799.31 Mbit/s
95th percentile per-packet one-way delay: 272.910 ms
Loss rate: 8.93%
-- Flow 3:
Average throughput: 566.41 Mbit/s
95th percentile per-packet one-way delay: 299.620 ms
Loss rate: 21.97%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2017-12-20 21:34:29

End at: 2017-12-20 21:34:59

Below is generated by plot.py at 2017-12-21 03:08:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 1622.24 Mbit/s

95th percentile per-packet one-way delay: 154.218 ms

Loss rate: 8.92%

-- Flow 1:

Average throughput: 861.12 Mbit/s

95th percentile per-packet one-way delay: 145.255 ms

Loss rate: 6.82%

-- Flow 2:

Average throughput: 833.64 Mbit/s

95th percentile per-packet one-way delay: 144.414 ms

Loss rate: 8.24%

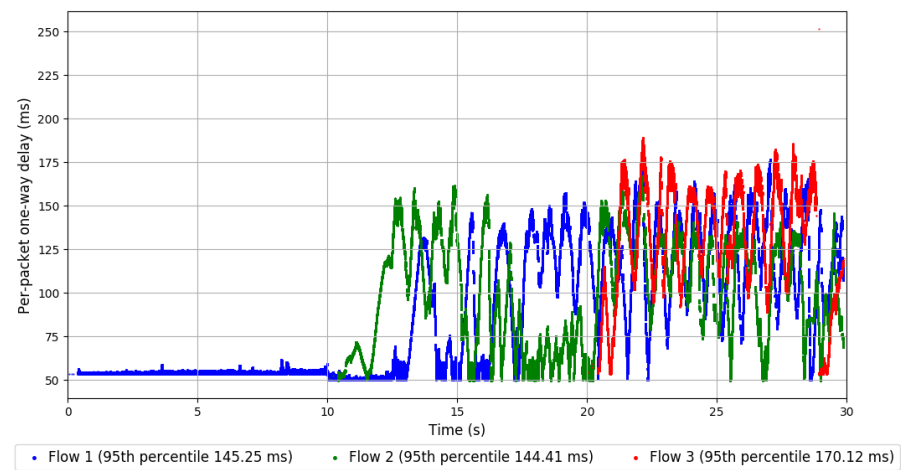
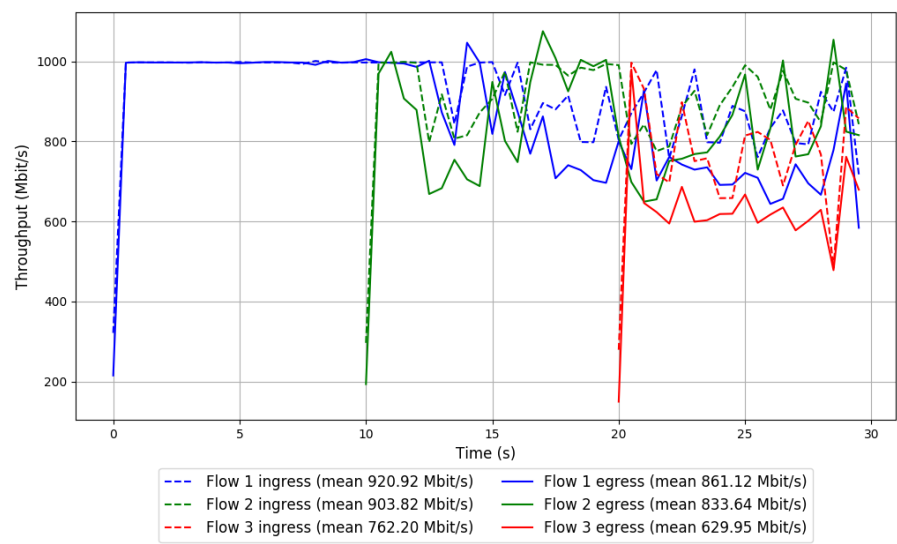
-- Flow 3:

Average throughput: 629.95 Mbit/s

95th percentile per-packet one-way delay: 170.123 ms

Loss rate: 18.22%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2017-12-20 21:48:24

End at: 2017-12-20 21:48:54

Below is generated by plot.py at 2017-12-21 03:09:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 1651.88 Mbit/s

95th percentile per-packet one-way delay: 171.939 ms

Loss rate: 7.97%

-- Flow 1:

Average throughput: 871.48 Mbit/s

95th percentile per-packet one-way delay: 157.542 ms

Loss rate: 6.39%

-- Flow 2:

Average throughput: 827.19 Mbit/s

95th percentile per-packet one-way delay: 180.155 ms

Loss rate: 7.57%

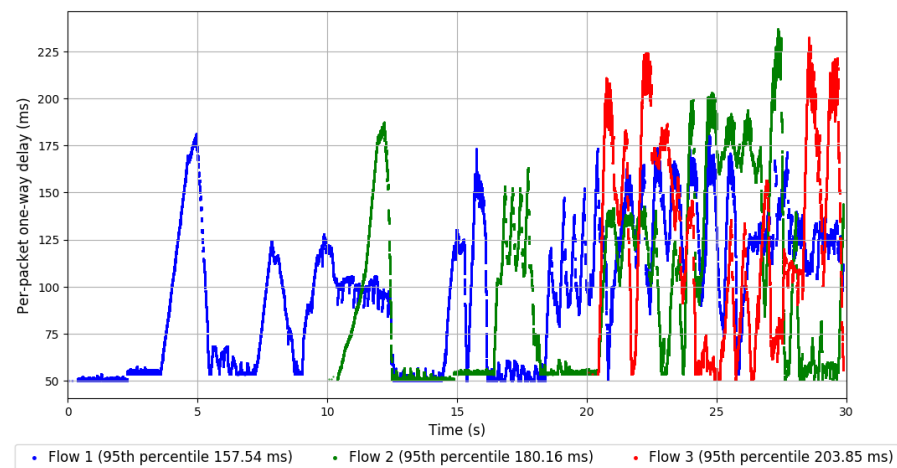
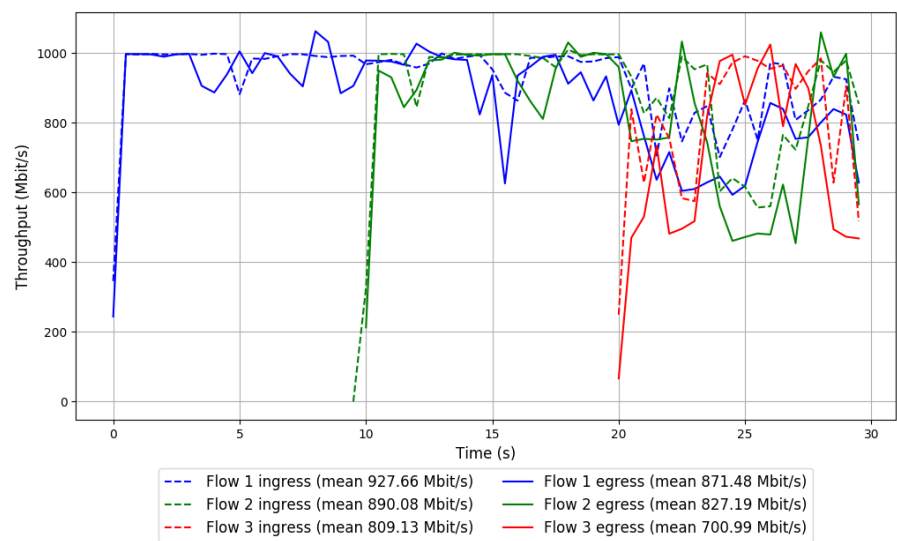
-- Flow 3:

Average throughput: 700.99 Mbit/s

95th percentile per-packet one-way delay: 203.852 ms

Loss rate: 14.34%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2017-12-20 22:02:26

End at: 2017-12-20 22:02:56

Below is generated by plot.py at 2017-12-21 03:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 1660.12 Mbit/s

95th percentile per-packet one-way delay: 155.333 ms

Loss rate: 8.02%

-- Flow 1:

Average throughput: 857.84 Mbit/s

95th percentile per-packet one-way delay: 157.624 ms

Loss rate: 6.52%

-- Flow 2:

Average throughput: 862.78 Mbit/s

95th percentile per-packet one-way delay: 144.185 ms

Loss rate: 7.16%

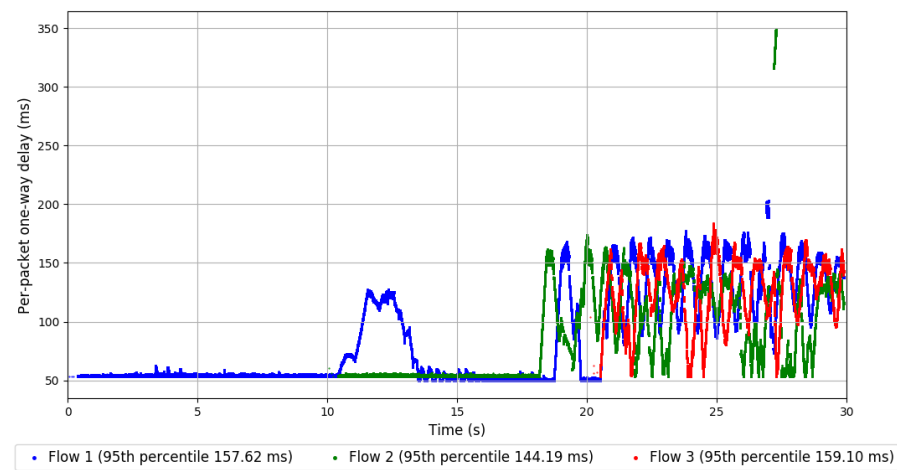
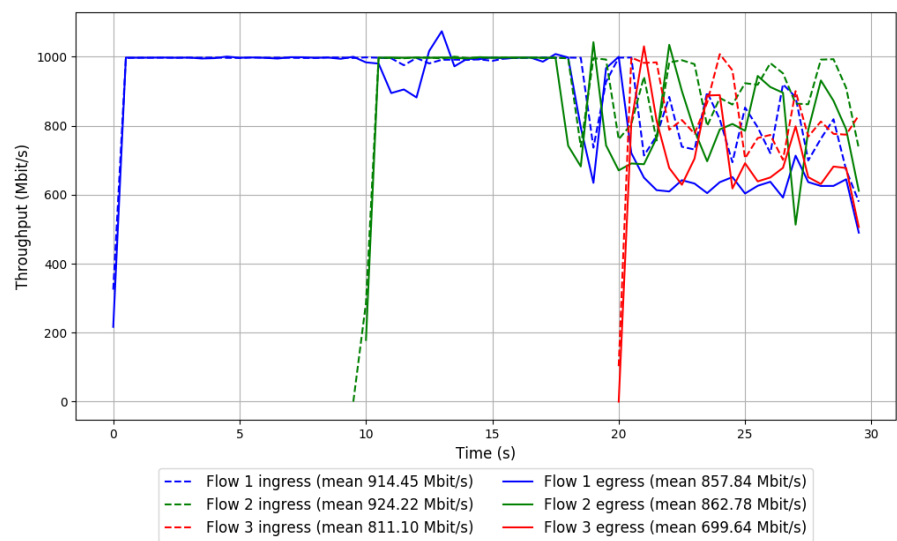
-- Flow 3:

Average throughput: 699.64 Mbit/s

95th percentile per-packet one-way delay: 159.098 ms

Loss rate: 15.08%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2017-12-20 22:16:11

End at: 2017-12-20 22:16:41

Below is generated by plot.py at 2017-12-21 03:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 1621.50 Mbit/s

95th percentile per-packet one-way delay: 213.470 ms

Loss rate: 9.55%

-- Flow 1:

Average throughput: 843.49 Mbit/s

95th percentile per-packet one-way delay: 153.398 ms

Loss rate: 7.60%

-- Flow 2:

Average throughput: 809.65 Mbit/s

95th percentile per-packet one-way delay: 261.588 ms

Loss rate: 10.41%

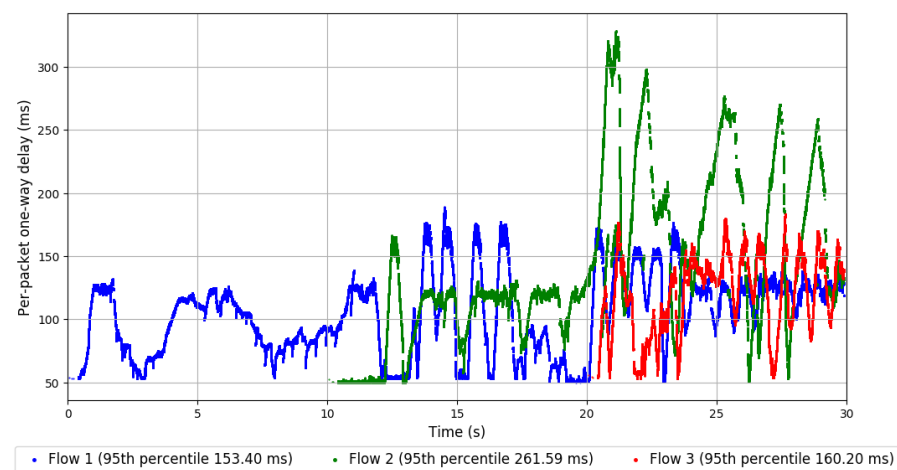
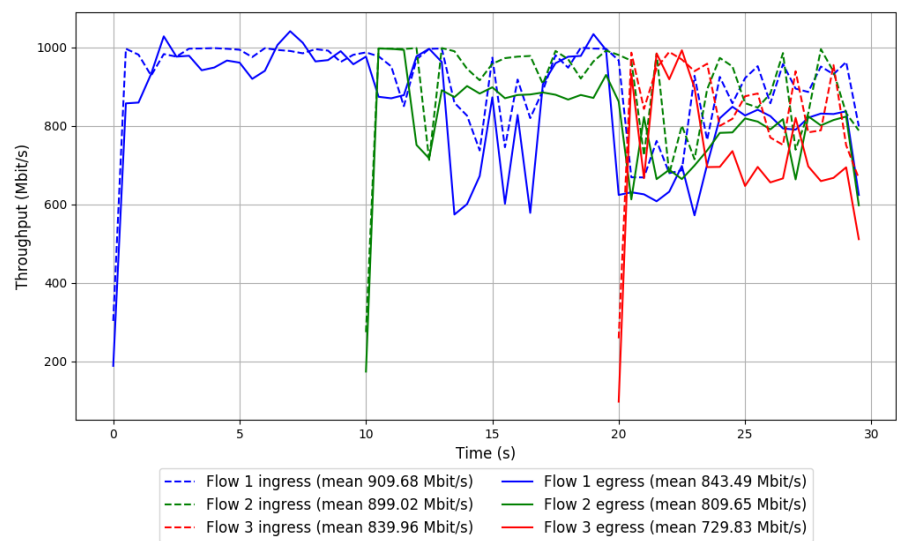
-- Flow 3:

Average throughput: 729.83 Mbit/s

95th percentile per-packet one-way delay: 160.197 ms

Loss rate: 14.06%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2017-12-20 22:30:18

End at: 2017-12-20 22:30:48

Below is generated by plot.py at 2017-12-21 03:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 1602.39 Mbit/s

95th percentile per-packet one-way delay: 160.013 ms

Loss rate: 9.56%

-- Flow 1:

Average throughput: 846.58 Mbit/s

95th percentile per-packet one-way delay: 158.265 ms

Loss rate: 7.66%

-- Flow 2:

Average throughput: 794.70 Mbit/s

95th percentile per-packet one-way delay: 162.580 ms

Loss rate: 10.07%

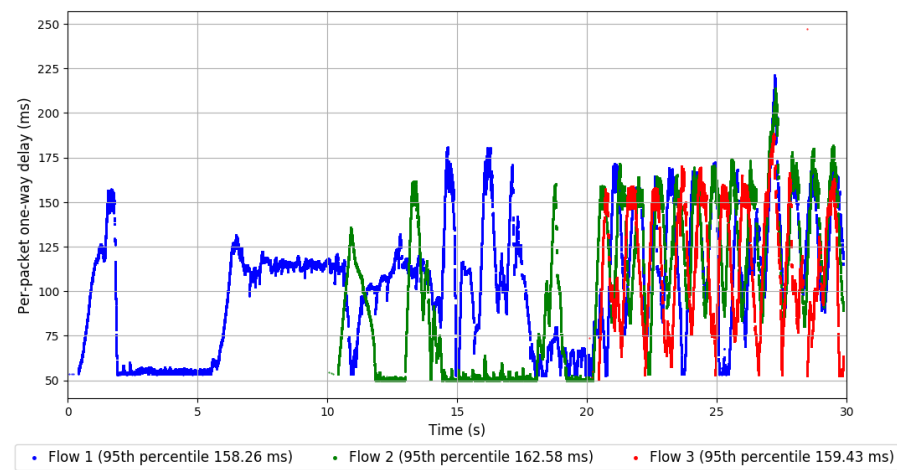
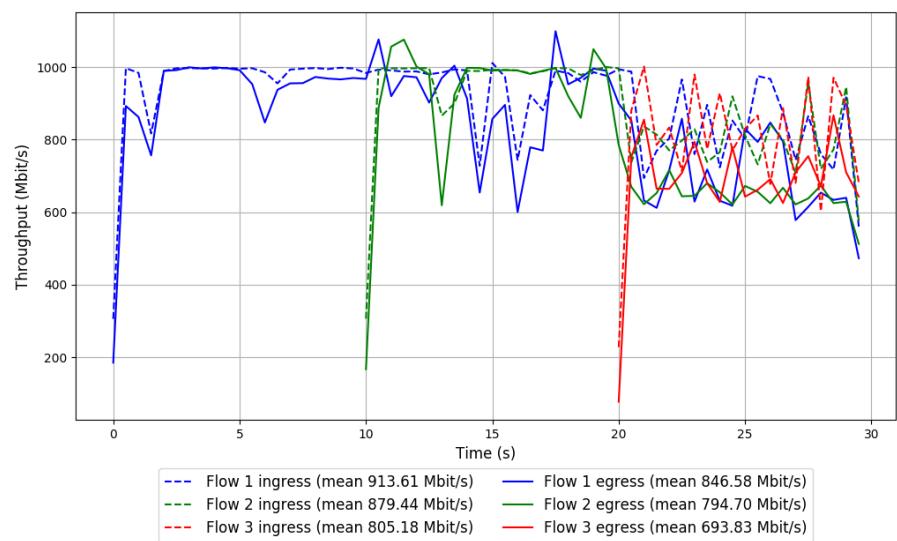
-- Flow 3:

Average throughput: 693.83 Mbit/s

95th percentile per-packet one-way delay: 159.433 ms

Loss rate: 14.92%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2017-12-20 22:44:14

End at: 2017-12-20 22:44:44

Below is generated by plot.py at 2017-12-21 03:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 1580.23 Mbit/s

95th percentile per-packet one-way delay: 264.703 ms

Loss rate: 10.50%

-- Flow 1:

Average throughput: 816.36 Mbit/s

95th percentile per-packet one-way delay: 159.712 ms

Loss rate: 8.80%

-- Flow 2:

Average throughput: 770.86 Mbit/s

95th percentile per-packet one-way delay: 165.204 ms

Loss rate: 11.41%

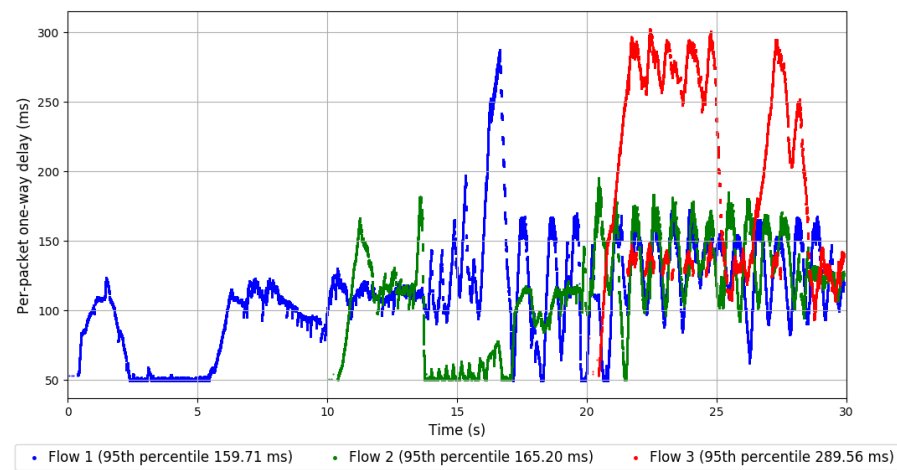
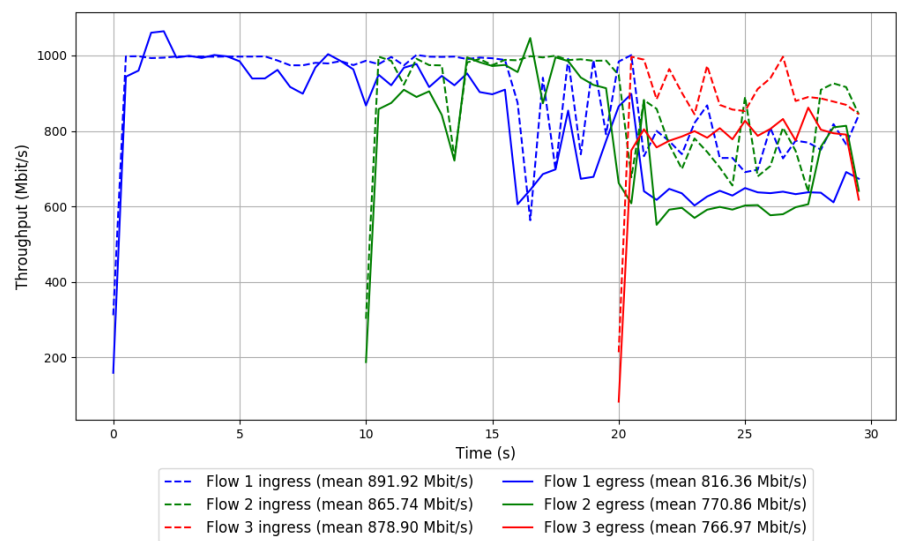
-- Flow 3:

Average throughput: 766.97 Mbit/s

95th percentile per-packet one-way delay: 289.559 ms

Loss rate: 13.91%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2017-12-20 22:58:15

End at: 2017-12-20 22:58:45

Below is generated by plot.py at 2017-12-21 03:21:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 1600.62 Mbit/s

95th percentile per-packet one-way delay: 176.263 ms

Loss rate: 9.45%

-- Flow 1:

Average throughput: 816.23 Mbit/s

95th percentile per-packet one-way delay: 211.494 ms

Loss rate: 8.67%

-- Flow 2:

Average throughput: 809.07 Mbit/s

95th percentile per-packet one-way delay: 137.631 ms

Loss rate: 9.27%

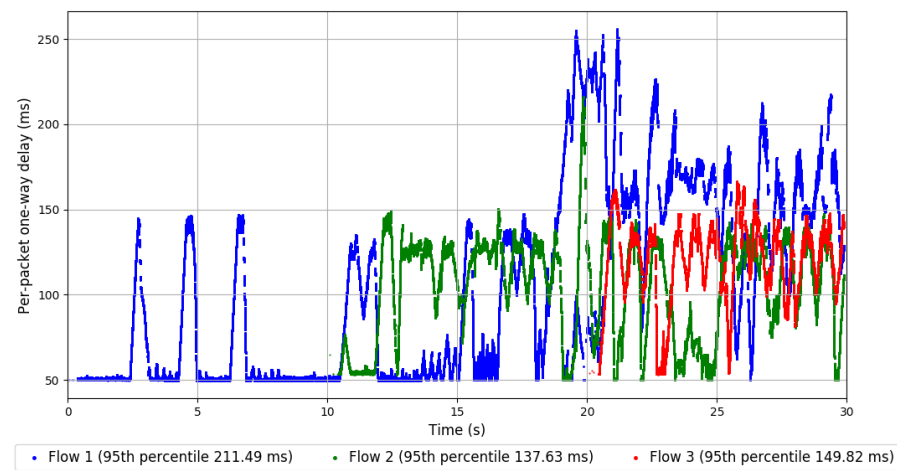
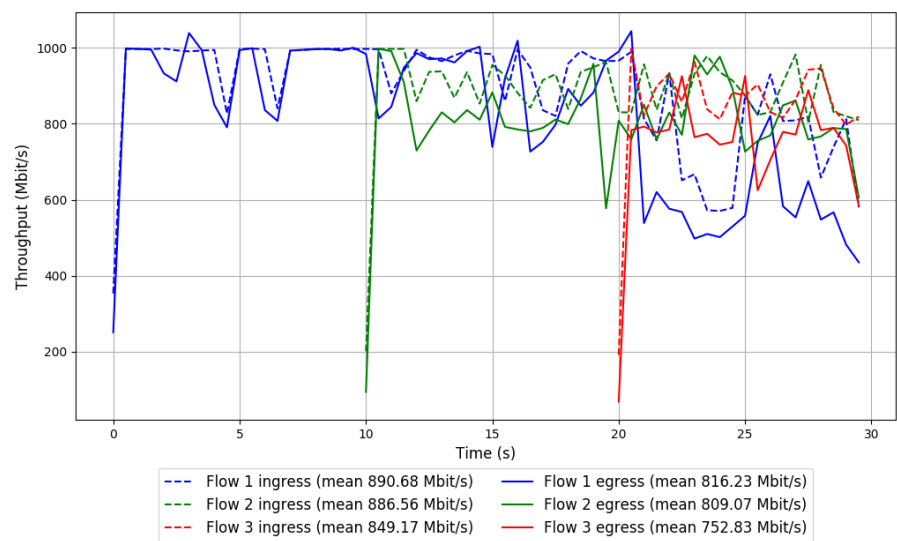
-- Flow 3:

Average throughput: 752.83 Mbit/s

95th percentile per-packet one-way delay: 149.816 ms

Loss rate: 12.28%

Run 9: Report of FillP — Data Link

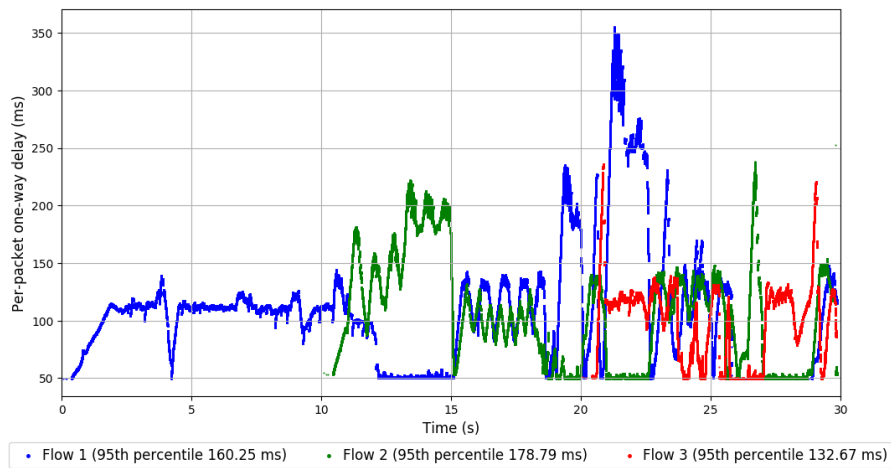
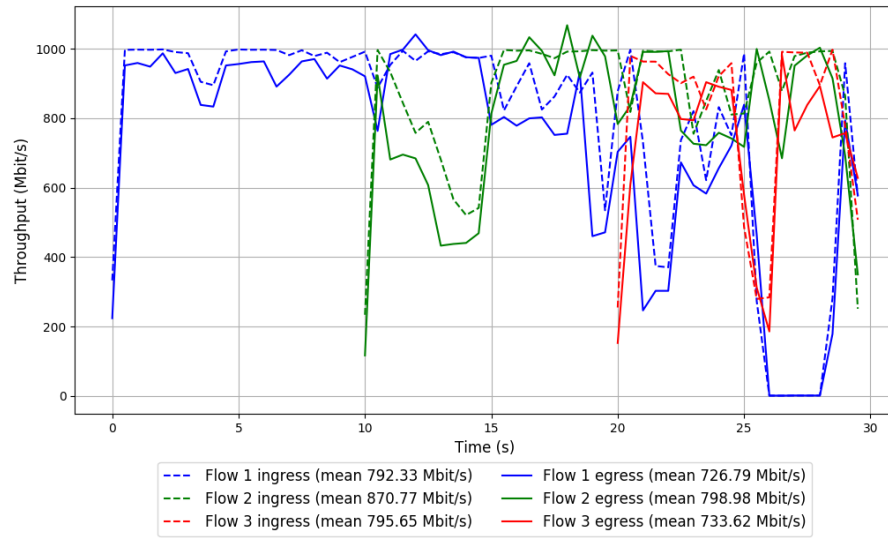


```
Run 10: Statistics of FillP

Start at: 2017-12-20 23:11:58
End at: 2017-12-20 23:12:28

# Below is generated by plot.py at 2017-12-21 03:21:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1497.37 Mbit/s
95th percentile per-packet one-way delay: 166.331 ms
Loss rate: 8.66%
-- Flow 1:
Average throughput: 726.79 Mbit/s
95th percentile per-packet one-way delay: 160.246 ms
Loss rate: 8.64%
-- Flow 2:
Average throughput: 798.98 Mbit/s
95th percentile per-packet one-way delay: 178.794 ms
Loss rate: 8.45%
-- Flow 3:
Average throughput: 733.62 Mbit/s
95th percentile per-packet one-way delay: 132.673 ms
Loss rate: 9.19%
```

Run 10: Report of FillP — Data Link

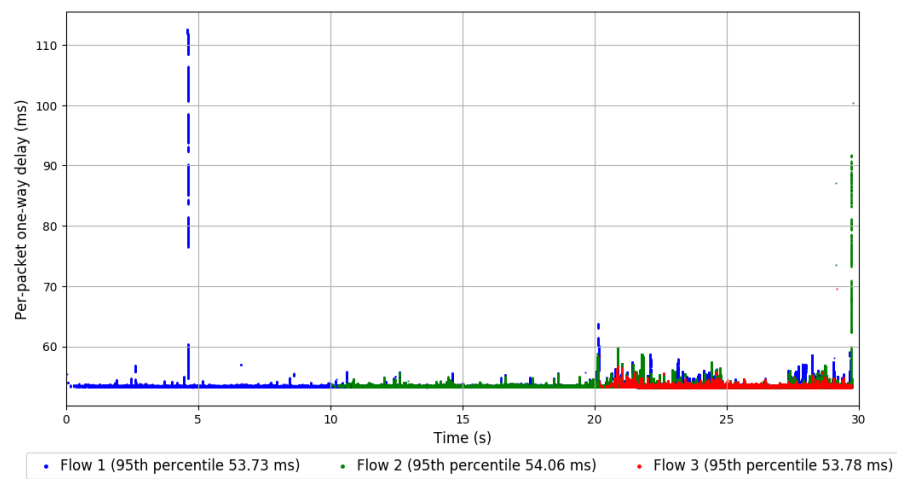
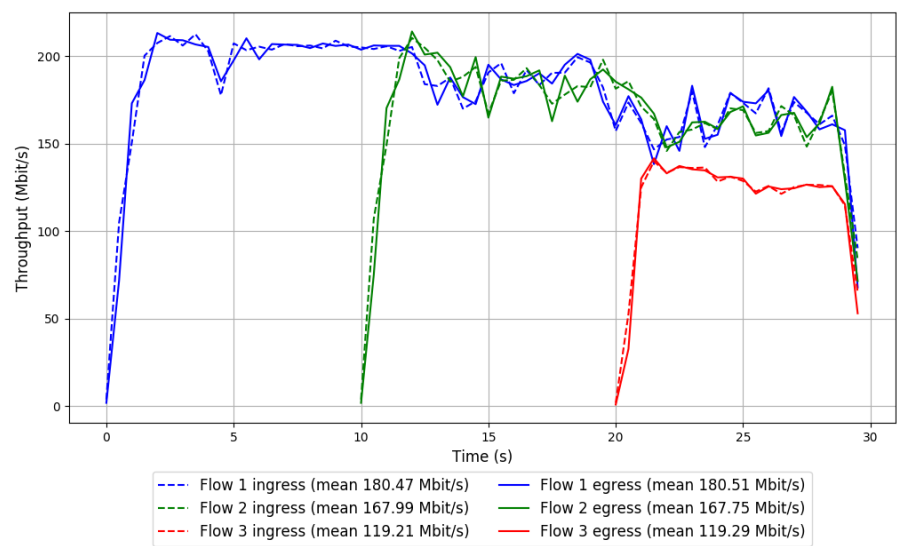


```
Run 1: Statistics of Indigo

Start at: 2017-12-20 21:02:15
End at: 2017-12-20 21:02:45

# Below is generated by plot.py at 2017-12-21 03:21:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.86 Mbit/s
95th percentile per-packet one-way delay: 53.844 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 180.51 Mbit/s
95th percentile per-packet one-way delay: 53.733 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 167.75 Mbit/s
95th percentile per-packet one-way delay: 54.058 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 119.29 Mbit/s
95th percentile per-packet one-way delay: 53.785 ms
Loss rate: 1.07%
```

Run 1: Report of Indigo — Data Link

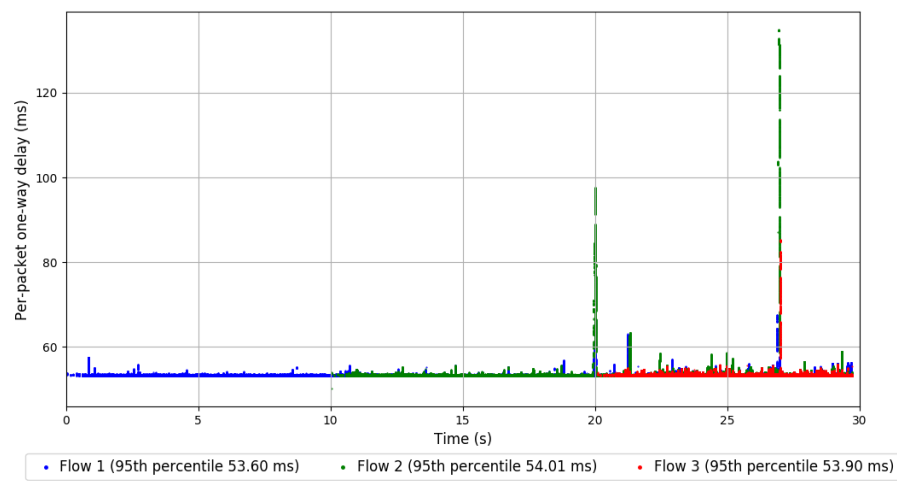
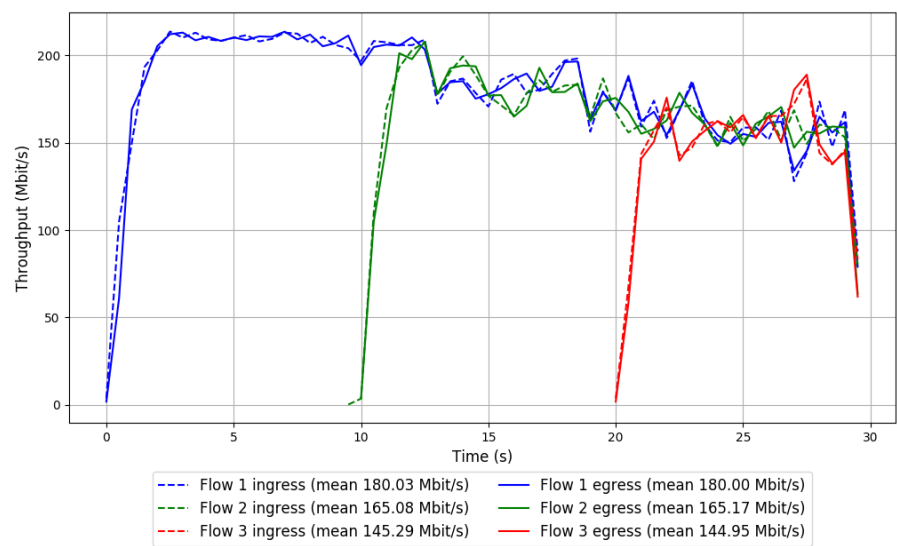


```
Run 2: Statistics of Indigo

Start at: 2017-12-20 21:16:00
End at: 2017-12-20 21:16:30

# Below is generated by plot.py at 2017-12-21 03:21:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 336.57 Mbit/s
95th percentile per-packet one-way delay: 53.772 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 180.00 Mbit/s
95th percentile per-packet one-way delay: 53.603 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 165.17 Mbit/s
95th percentile per-packet one-way delay: 54.014 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 144.95 Mbit/s
95th percentile per-packet one-way delay: 53.898 ms
Loss rate: 1.30%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-20 21:30:19

End at: 2017-12-20 21:30:49

Below is generated by plot.py at 2017-12-21 03:21:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.46 Mbit/s

95th percentile per-packet one-way delay: 53.785 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 177.85 Mbit/s

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

Loss rate: 0.34%

-- Flow 2:

Average throughput: 163.03 Mbit/s

95th percentile per-packet one-way delay: 53.892 ms

Loss rate: 0.53%

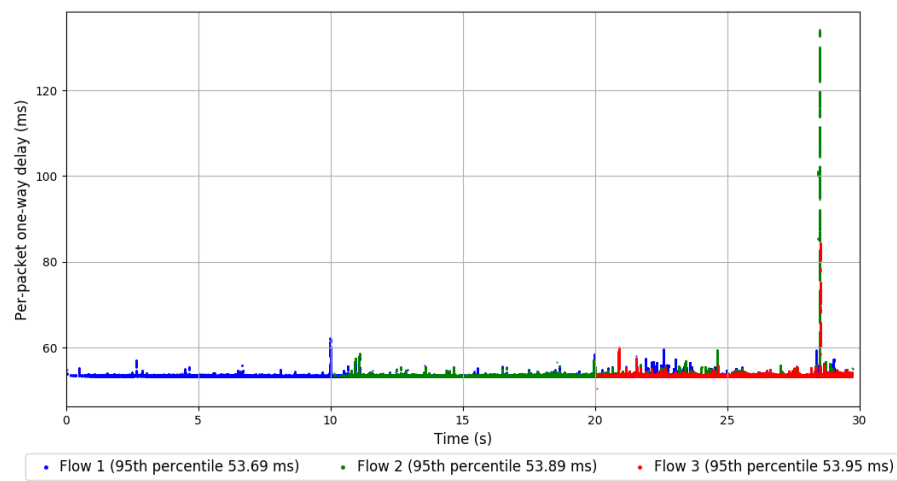
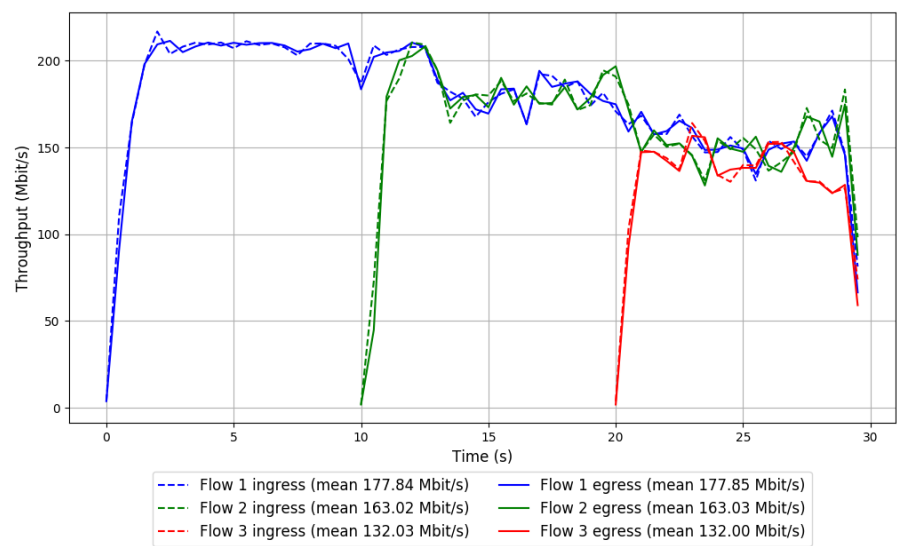
-- Flow 3:

Average throughput: 132.00 Mbit/s

95th percentile per-packet one-way delay: 53.951 ms

Loss rate: 1.06%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-20 21:44:14

End at: 2017-12-20 21:44:44

Below is generated by plot.py at 2017-12-21 03:21:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 324.33 Mbit/s

95th percentile per-packet one-way delay: 53.906 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 172.71 Mbit/s

95th percentile per-packet one-way delay: 53.747 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 157.82 Mbit/s

95th percentile per-packet one-way delay: 54.272 ms

Loss rate: 0.43%

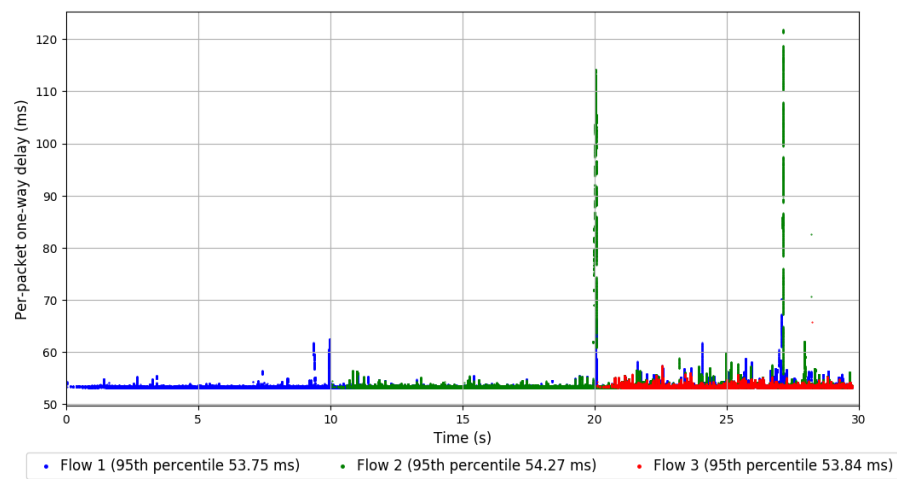
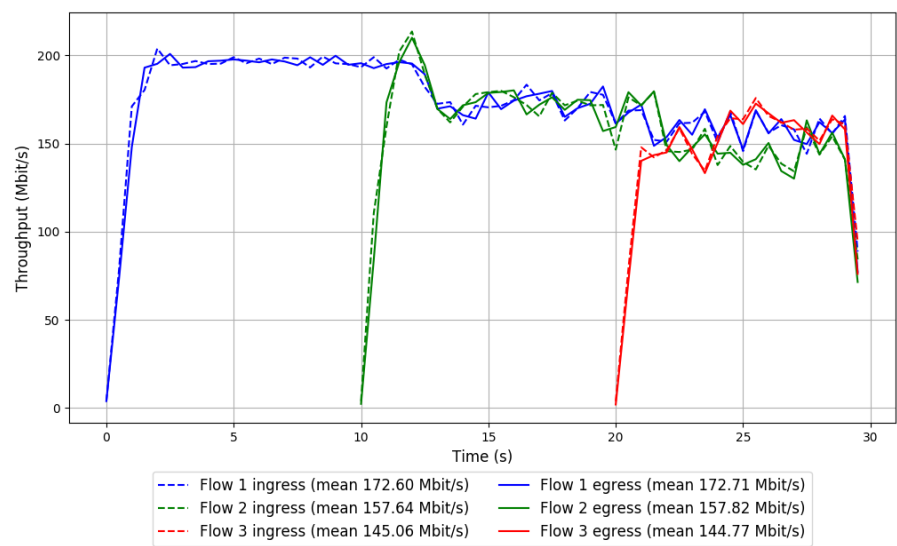
-- Flow 3:

Average throughput: 144.77 Mbit/s

95th percentile per-packet one-way delay: 53.845 ms

Loss rate: 1.30%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-20 21:58:19

End at: 2017-12-20 21:58:49

Below is generated by plot.py at 2017-12-21 03:21:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 323.91 Mbit/s

95th percentile per-packet one-way delay: 53.778 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 170.53 Mbit/s

95th percentile per-packet one-way delay: 53.654 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 162.38 Mbit/s

95th percentile per-packet one-way delay: 53.983 ms

Loss rate: 0.63%

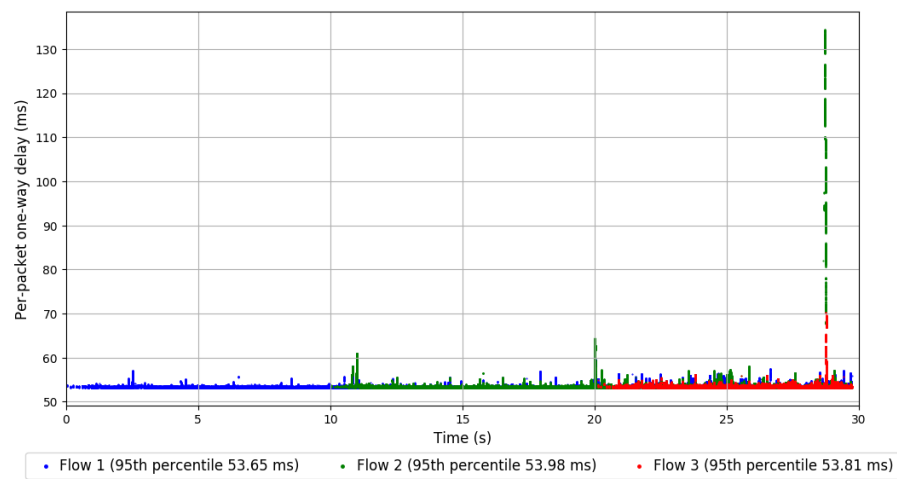
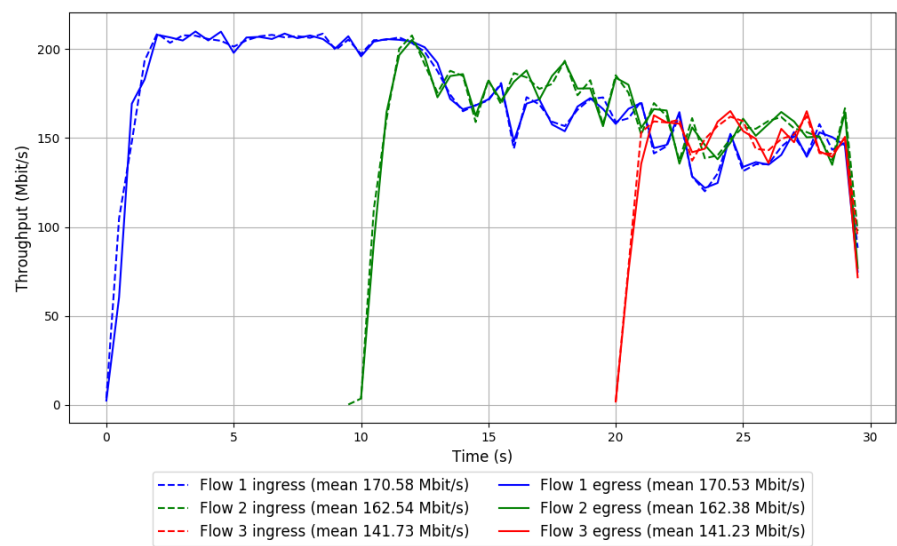
-- Flow 3:

Average throughput: 141.23 Mbit/s

95th percentile per-packet one-way delay: 53.809 ms

Loss rate: 1.45%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-20 22:12:02

End at: 2017-12-20 22:12:32

Below is generated by plot.py at 2017-12-21 03:21:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.35 Mbit/s

95th percentile per-packet one-way delay: 53.883 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 174.25 Mbit/s

95th percentile per-packet one-way delay: 53.777 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 162.35 Mbit/s

95th percentile per-packet one-way delay: 54.013 ms

Loss rate: 0.51%

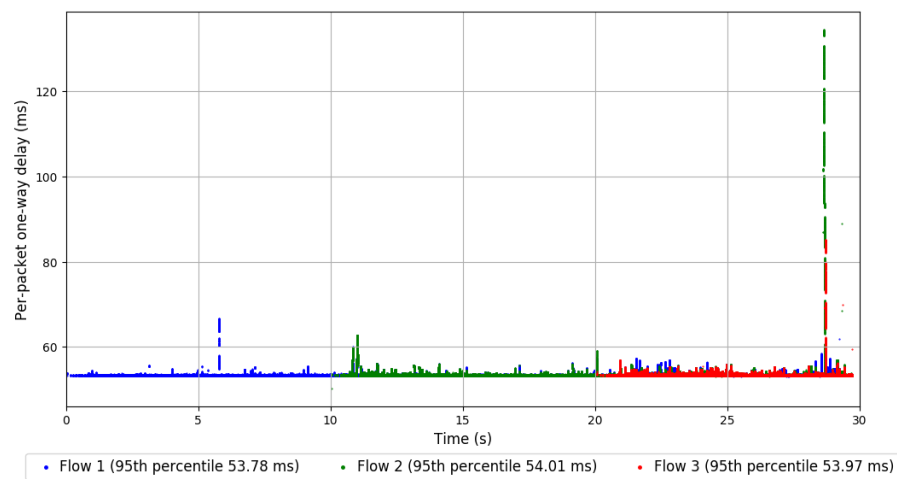
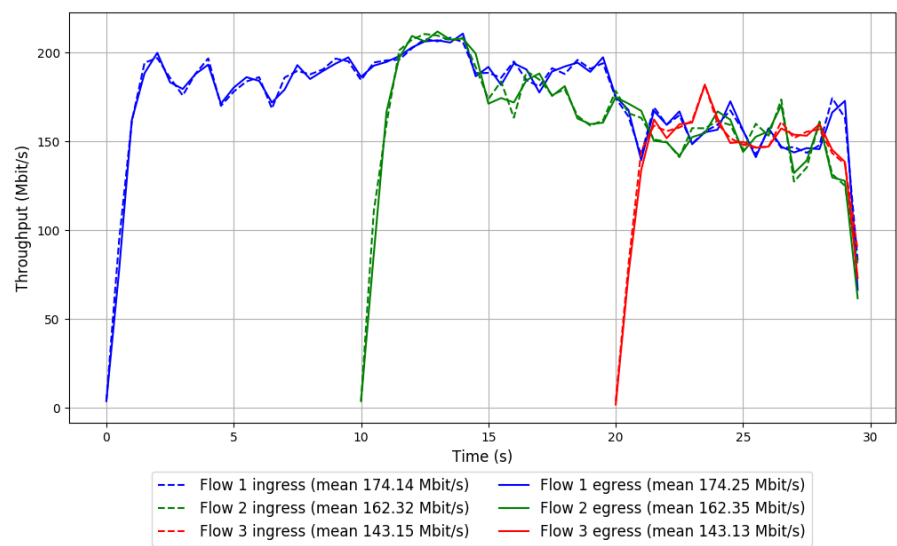
-- Flow 3:

Average throughput: 143.13 Mbit/s

95th percentile per-packet one-way delay: 53.968 ms

Loss rate: 1.08%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-20 22:26:07

End at: 2017-12-20 22:26:37

Below is generated by plot.py at 2017-12-21 03:21:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.44 Mbit/s

95th percentile per-packet one-way delay: 53.389 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 163.02 Mbit/s

95th percentile per-packet one-way delay: 53.053 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 162.97 Mbit/s

95th percentile per-packet one-way delay: 54.194 ms

Loss rate: 0.54%

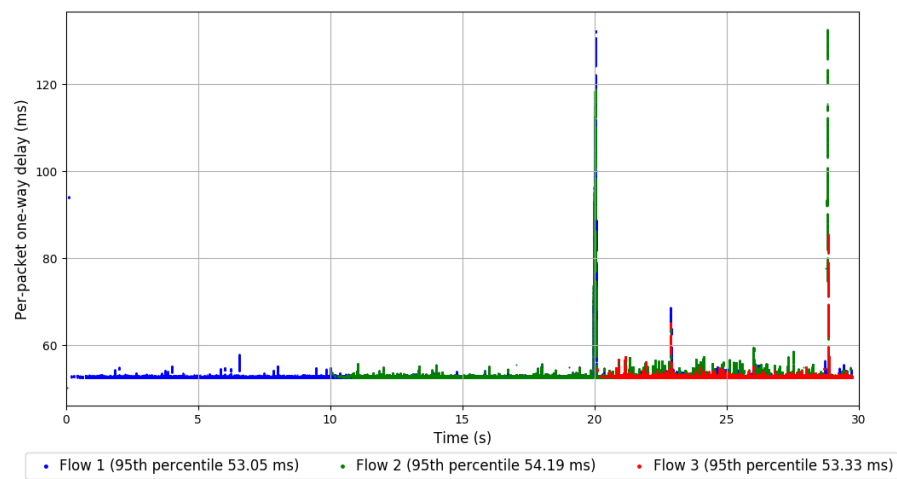
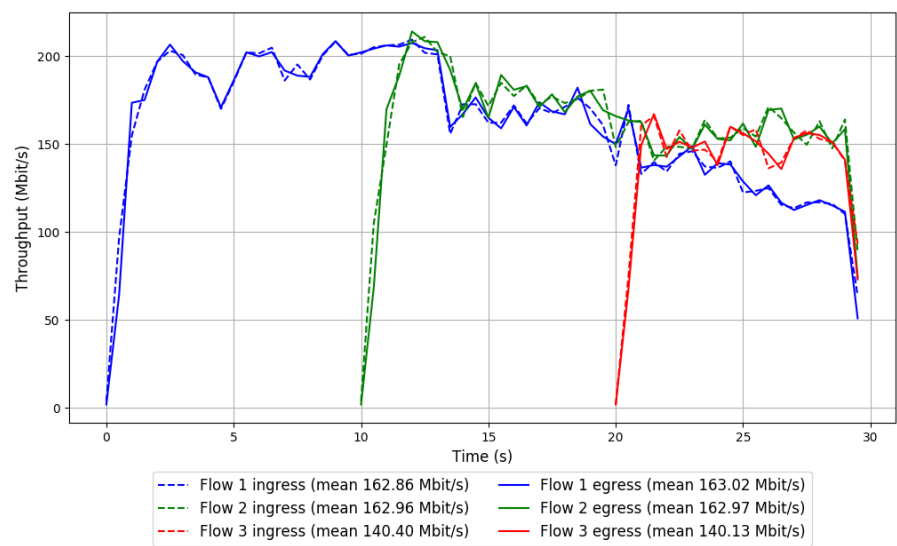
-- Flow 3:

Average throughput: 140.13 Mbit/s

95th percentile per-packet one-way delay: 53.327 ms

Loss rate: 1.31%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-20 22:40:05

End at: 2017-12-20 22:40:35

Below is generated by plot.py at 2017-12-21 03:21:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 329.78 Mbit/s

95th percentile per-packet one-way delay: 53.336 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 176.71 Mbit/s

95th percentile per-packet one-way delay: 53.171 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 163.16 Mbit/s

95th percentile per-packet one-way delay: 53.535 ms

Loss rate: 0.55%

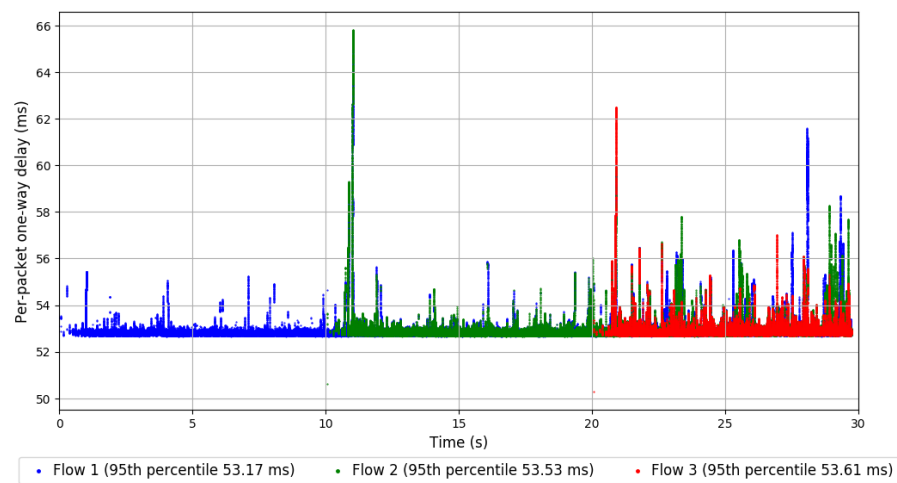
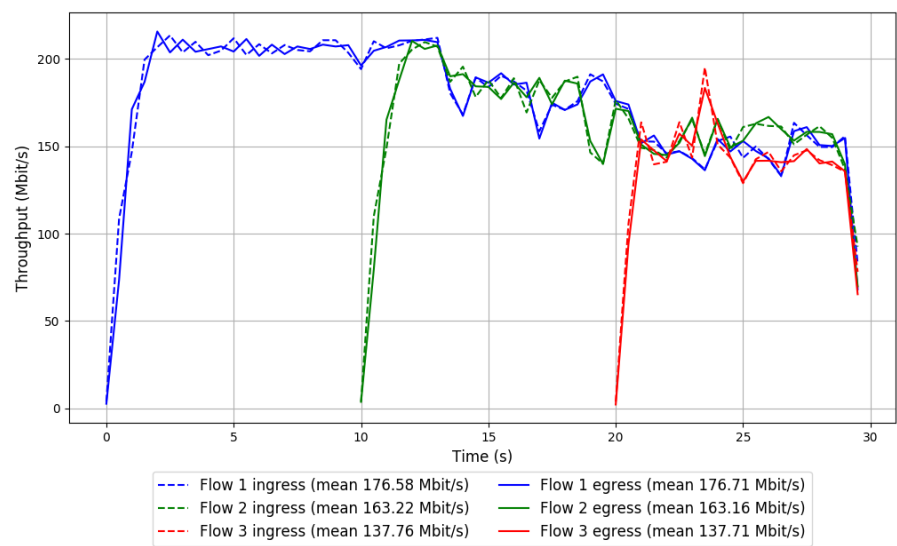
-- Flow 3:

Average throughput: 137.71 Mbit/s

95th percentile per-packet one-way delay: 53.608 ms

Loss rate: 1.07%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-20 22:54:04

End at: 2017-12-20 22:54:34

Below is generated by plot.py at 2017-12-21 03:21:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.31 Mbit/s

95th percentile per-packet one-way delay: 53.431 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 175.34 Mbit/s

95th percentile per-packet one-way delay: 53.277 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 158.40 Mbit/s

95th percentile per-packet one-way delay: 53.664 ms

Loss rate: 0.46%

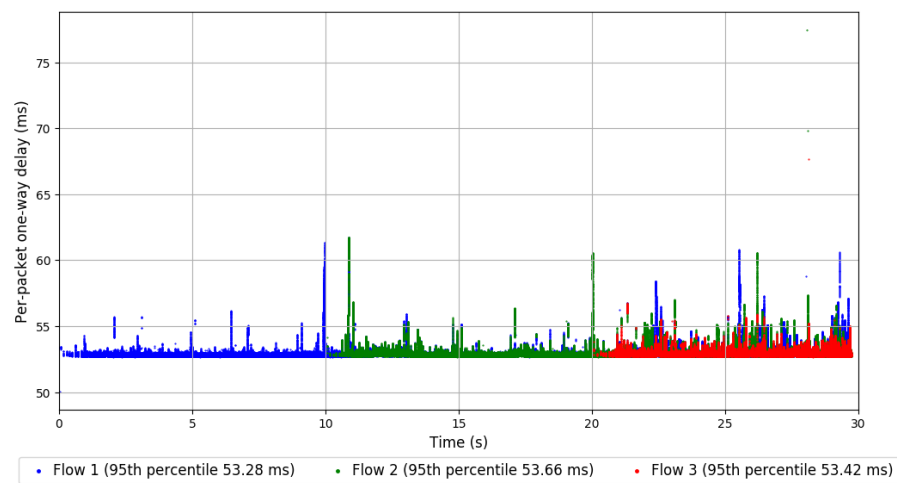
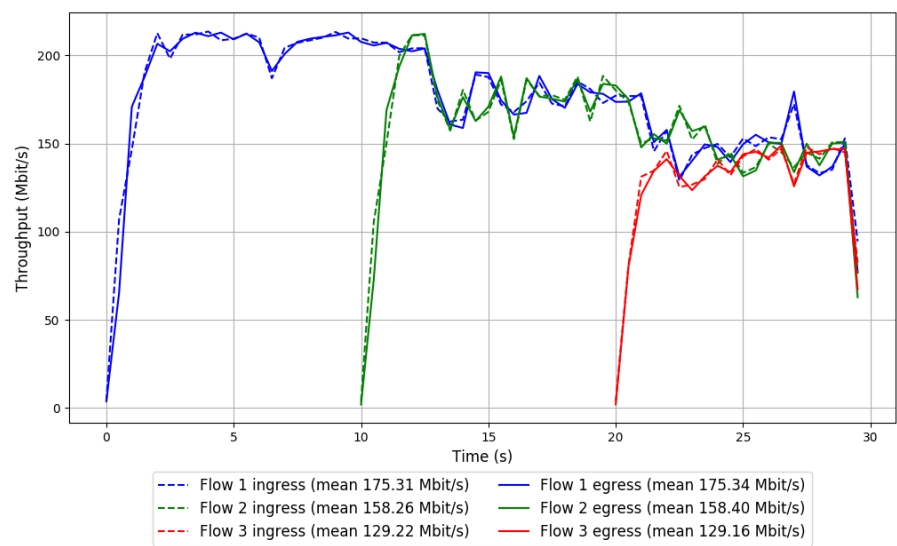
-- Flow 3:

Average throughput: 129.16 Mbit/s

95th percentile per-packet one-way delay: 53.425 ms

Loss rate: 1.16%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-20 23:07:51

End at: 2017-12-20 23:08:21

Below is generated by plot.py at 2017-12-21 03:21:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.95 Mbit/s

95th percentile per-packet one-way delay: 54.431 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 176.58 Mbit/s

95th percentile per-packet one-way delay: 54.085 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 158.44 Mbit/s

95th percentile per-packet one-way delay: 54.923 ms

Loss rate: 0.45%

-- Flow 3:

Average throughput: 146.86 Mbit/s

95th percentile per-packet one-way delay: 54.686 ms

Loss rate: 1.00%

Run 10: Report of Indigo — Data Link

