

Pantheon Report

Generated at 2017-11-17 04:46:07 (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.

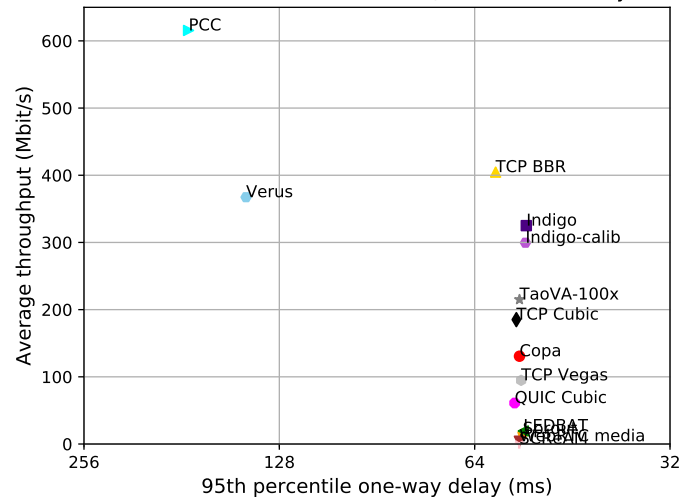
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

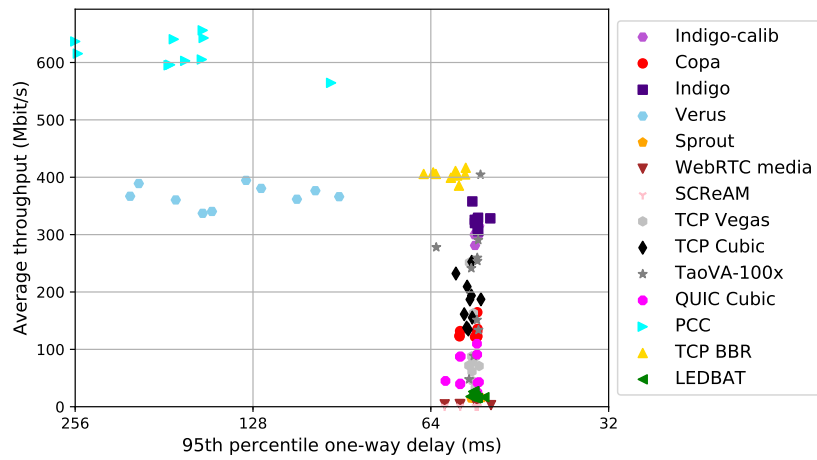
Git summary:

```
branch: indigos @ f54f2953f2a9765c9ffa988d13de5a9471790eb0
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fabb936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
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



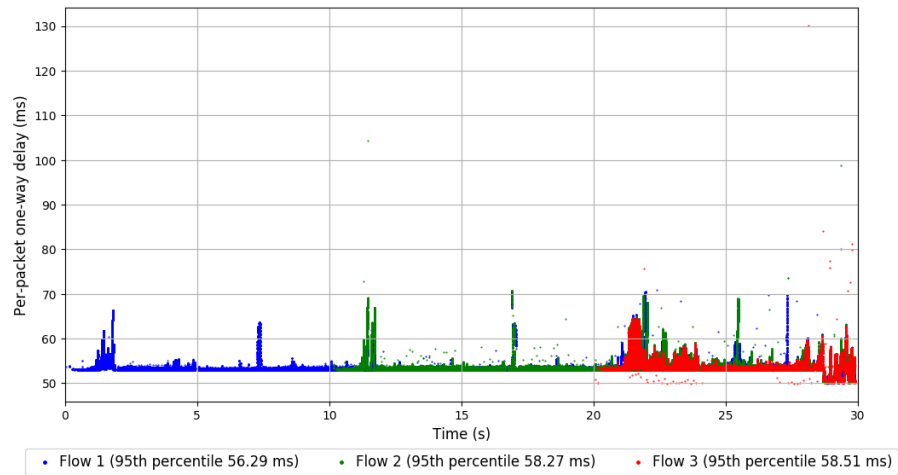
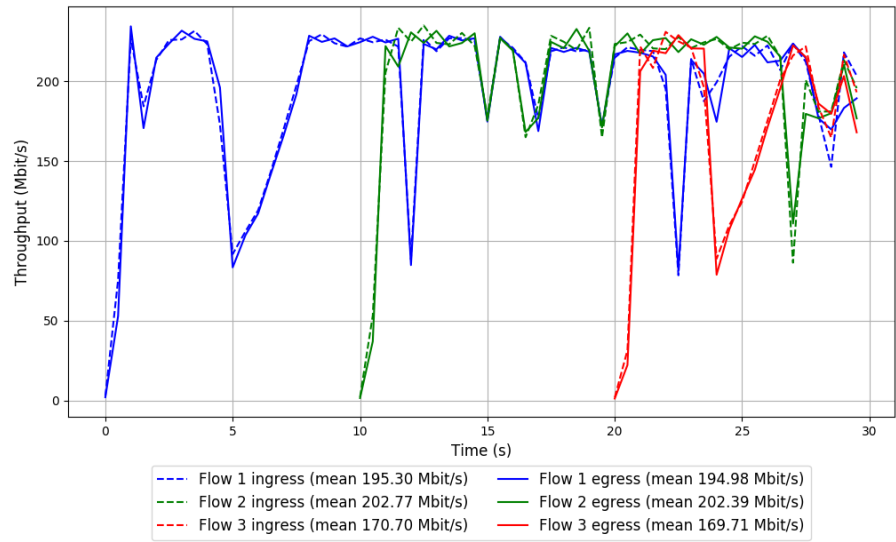
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	207.37	203.56	188.50	58.10	59.67	61.36	0.41	0.61	1.29
TCP Cubic	10	95.97	90.06	89.12	55.22	54.85	55.40	0.46	0.73	1.14
LEDBAT	10	9.90	10.99	6.72	53.91	53.68	53.63	0.90	0.94	2.11
PCC	10	557.52	71.01	33.57	177.51	150.61	142.38	2.53	1.87	3.00
QUIC Cubic	10	64.72	42.89	36.59	52.92	54.71	52.55	0.18	0.86	1.11
SCReAM	9	0.21	0.21	0.21	51.90	54.33	52.42	0.24	0.47	1.11
WebRTC media	10	2.12	1.43	0.61	52.61	53.51	52.51	0.44	0.63	1.58
Sprout	10	7.74	7.69	7.39	53.96	53.78	53.30	0.52	0.47	1.21
TaoVA-100x	10	113.78	111.25	106.84	53.52	55.74	53.30	0.64	0.79	1.66
TCP Vegas	10	44.39	47.32	57.63	53.31	54.50	55.16	0.58	0.58	0.99
Verus	10	219.87	165.24	118.98	131.38	155.34	115.50	0.84	1.43	2.13
Copa	10	75.98	66.00	44.52	54.10	53.89	54.51	0.30	0.69	1.72
Indigo	10	175.01	161.09	129.42	53.18	53.41	53.21	0.32	0.51	1.03
Indigo-calib	5	152.95	148.43	149.25	53.29	53.52	53.01	0.28	0.40	1.06

```
Run 1: Statistics of TCP BBR

Start at: 2017-11-16 23:40:57
End at: 2017-11-16 23:41:27

# Below is generated by plot.py at 2017-11-17 03:49:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 385.32 Mbit/s
95th percentile per-packet one-way delay: 57.350 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 194.98 Mbit/s
95th percentile per-packet one-way delay: 56.293 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 202.39 Mbit/s
95th percentile per-packet one-way delay: 58.266 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 169.71 Mbit/s
95th percentile per-packet one-way delay: 58.510 ms
Loss rate: 1.41%
```


Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-16 23:52:49

End at: 2017-11-16 23:53:19

Below is generated by plot.py at 2017-11-17 03:50:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 408.53 Mbit/s

95th percentile per-packet one-way delay: 63.412 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 207.39 Mbit/s

95th percentile per-packet one-way delay: 62.426 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 205.04 Mbit/s

95th percentile per-packet one-way delay: 63.242 ms

Loss rate: 0.56%

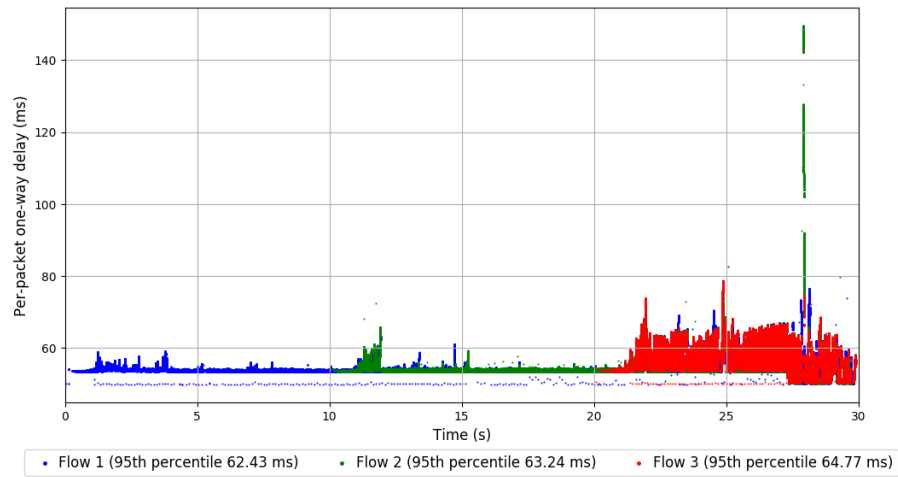
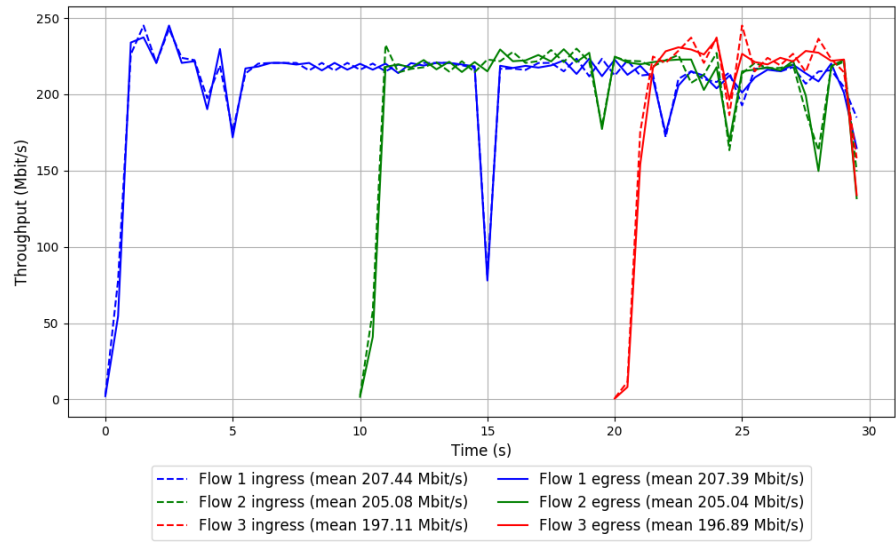
-- Flow 3:

Average throughput: 196.89 Mbit/s

95th percentile per-packet one-way delay: 64.772 ms

Loss rate: 1.15%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-17 00:04:42

End at: 2017-11-17 00:05:12

Below is generated by plot.py at 2017-11-17 03:50:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 404.89 Mbit/s

95th percentile per-packet one-way delay: 55.980 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 209.07 Mbit/s

95th percentile per-packet one-way delay: 55.300 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 201.56 Mbit/s

95th percentile per-packet one-way delay: 56.059 ms

Loss rate: 0.60%

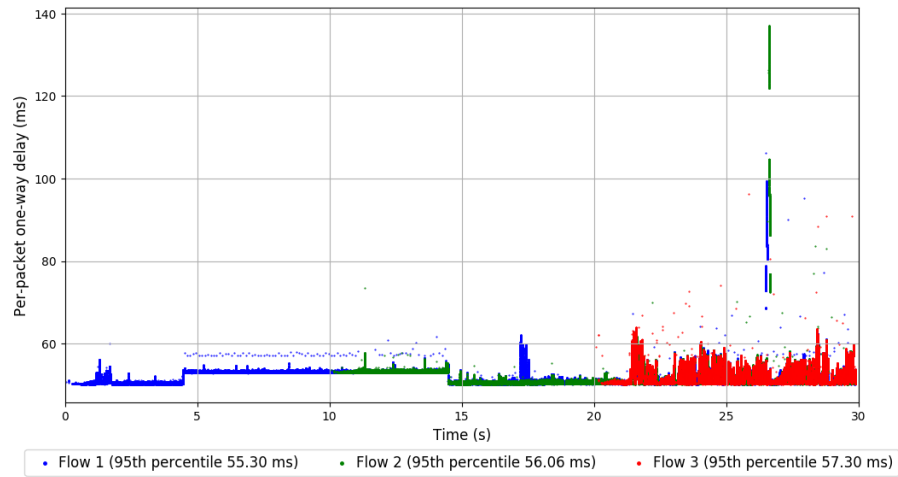
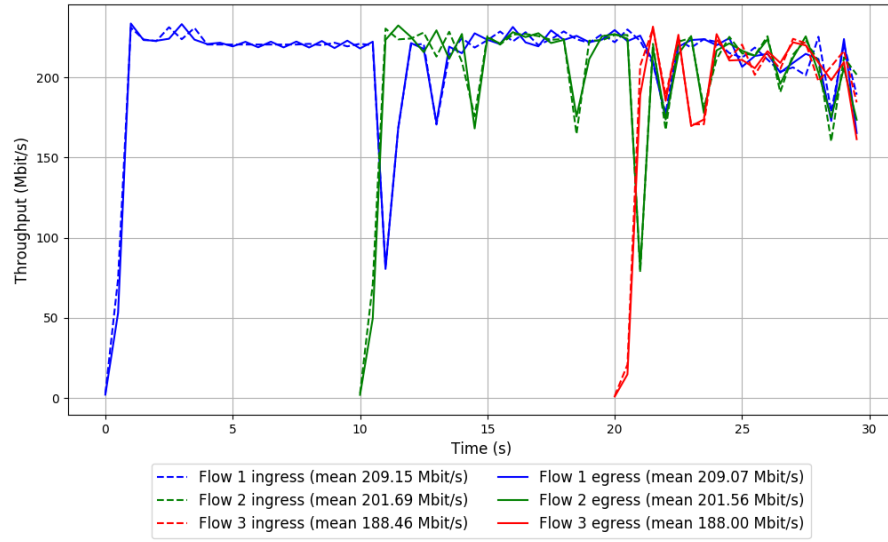
-- Flow 3:

Average throughput: 188.00 Mbit/s

95th percentile per-packet one-way delay: 57.298 ms

Loss rate: 1.38%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-11-17 00:16:45

End at: 2017-11-17 00:17:15

Below is generated by plot.py at 2017-11-17 03:50:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 402.96 Mbit/s

95th percentile per-packet one-way delay: 57.754 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 211.20 Mbit/s

95th percentile per-packet one-way delay: 57.009 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 199.58 Mbit/s

95th percentile per-packet one-way delay: 57.551 ms

Loss rate: 0.59%

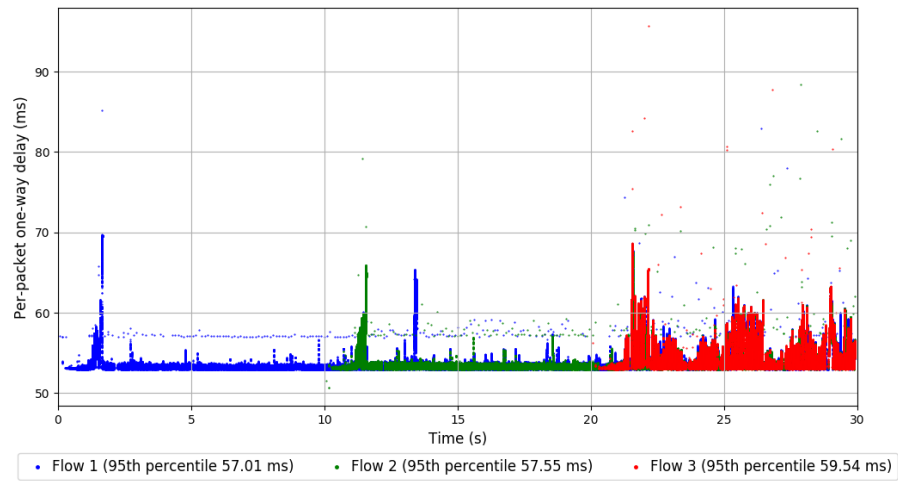
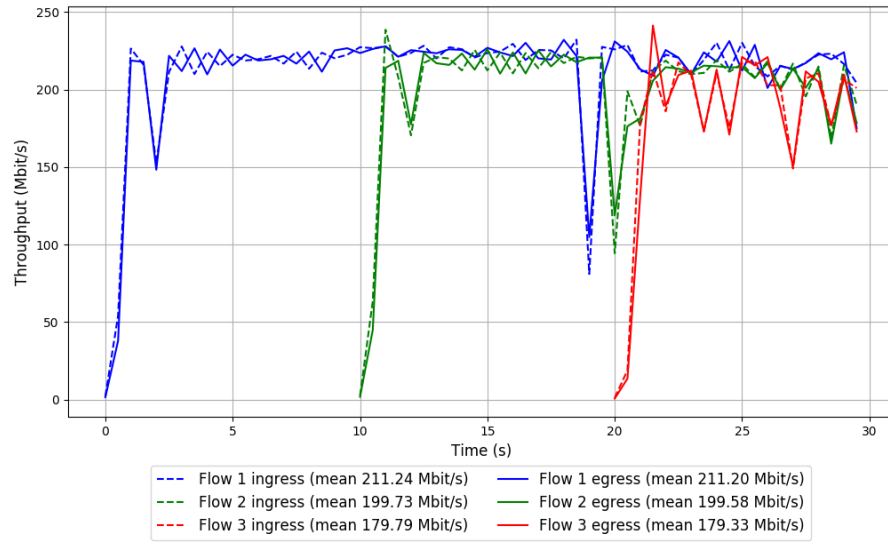
-- Flow 3:

Average throughput: 179.33 Mbit/s

95th percentile per-packet one-way delay: 59.538 ms

Loss rate: 1.36%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-17 00:29:03

End at: 2017-11-17 00:29:33

Below is generated by plot.py at 2017-11-17 03:50:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 407.04 Mbit/s

95th percentile per-packet one-way delay: 57.908 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 213.28 Mbit/s

95th percentile per-packet one-way delay: 56.759 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 196.43 Mbit/s

95th percentile per-packet one-way delay: 58.140 ms

Loss rate: 0.57%

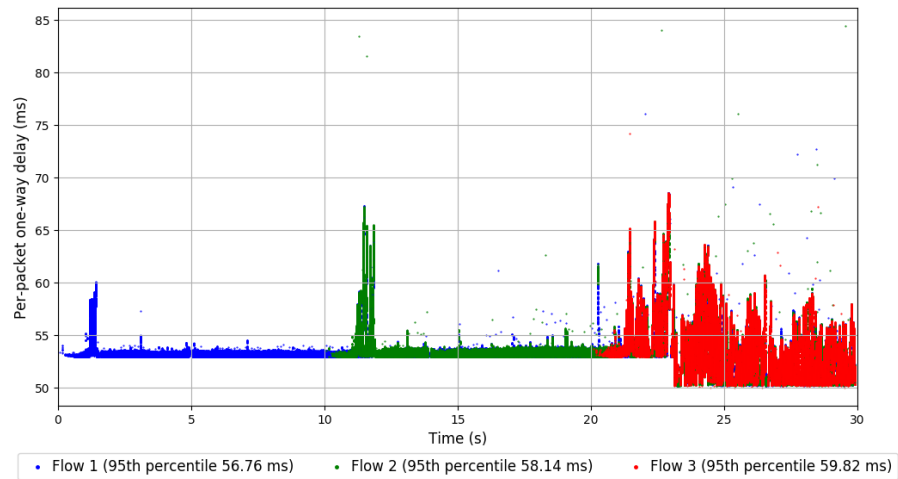
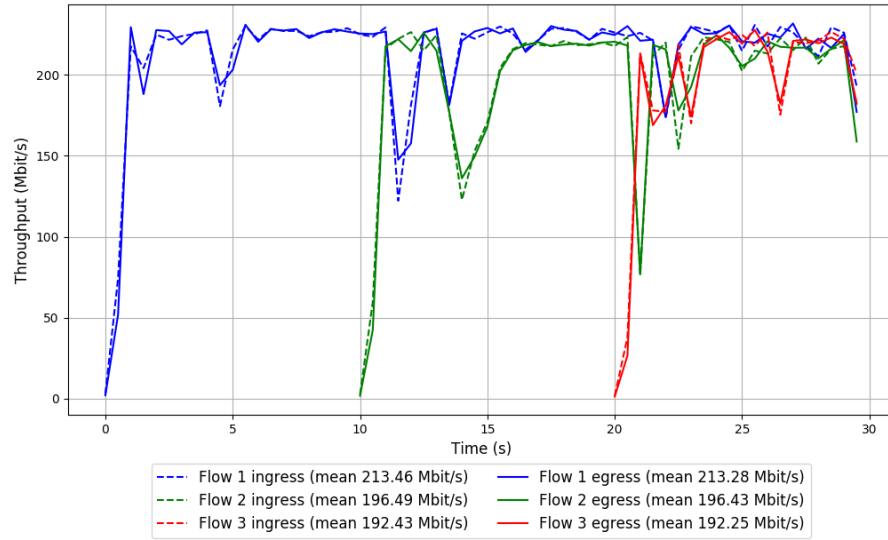
-- Flow 3:

Average throughput: 192.25 Mbit/s

95th percentile per-packet one-way delay: 59.821 ms

Loss rate: 1.19%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-17 00:41:06

End at: 2017-11-17 00:41:36

Below is generated by plot.py at 2017-11-17 03:50:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 410.92 Mbit/s

95th percentile per-packet one-way delay: 58.130 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 209.22 Mbit/s

95th percentile per-packet one-way delay: 56.601 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 204.89 Mbit/s

95th percentile per-packet one-way delay: 58.711 ms

Loss rate: 0.57%

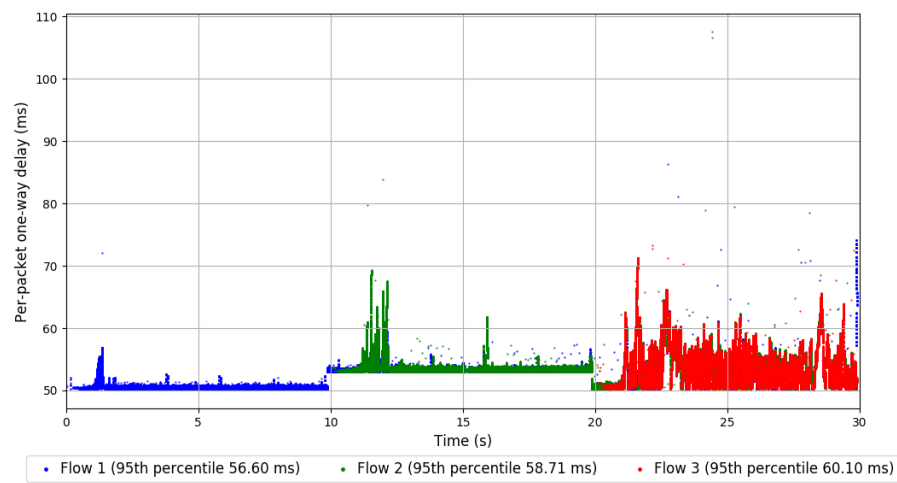
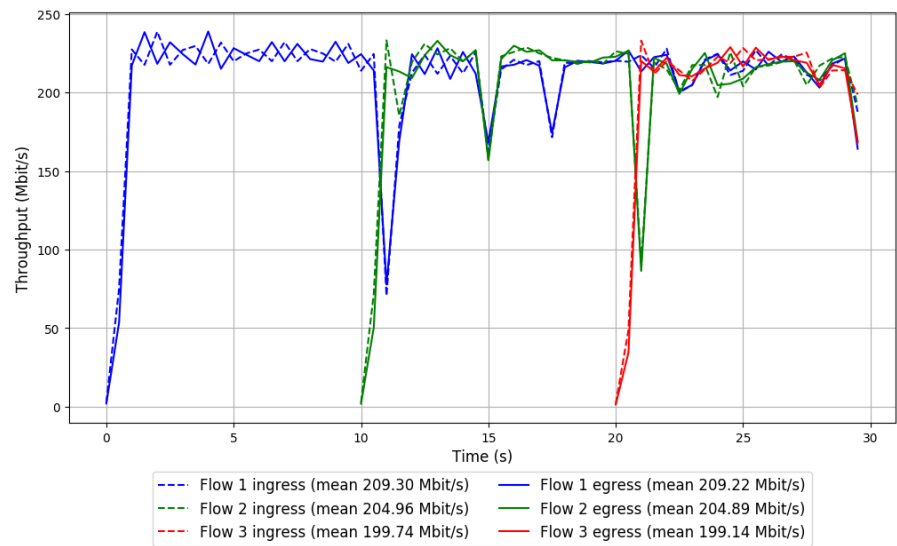
-- Flow 3:

Average throughput: 199.14 Mbit/s

95th percentile per-packet one-way delay: 60.104 ms

Loss rate: 1.34%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-17 00:53:42

End at: 2017-11-17 00:54:12

Below is generated by plot.py at 2017-11-17 03:50:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 405.73 Mbit/s

95th percentile per-packet one-way delay: 65.808 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 207.72 Mbit/s

95th percentile per-packet one-way delay: 63.140 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 206.54 Mbit/s

95th percentile per-packet one-way delay: 65.785 ms

Loss rate: 0.77%

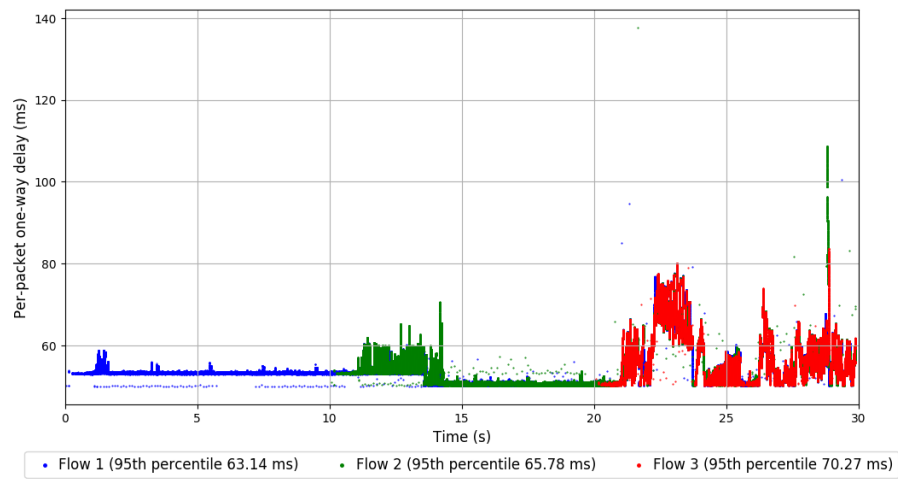
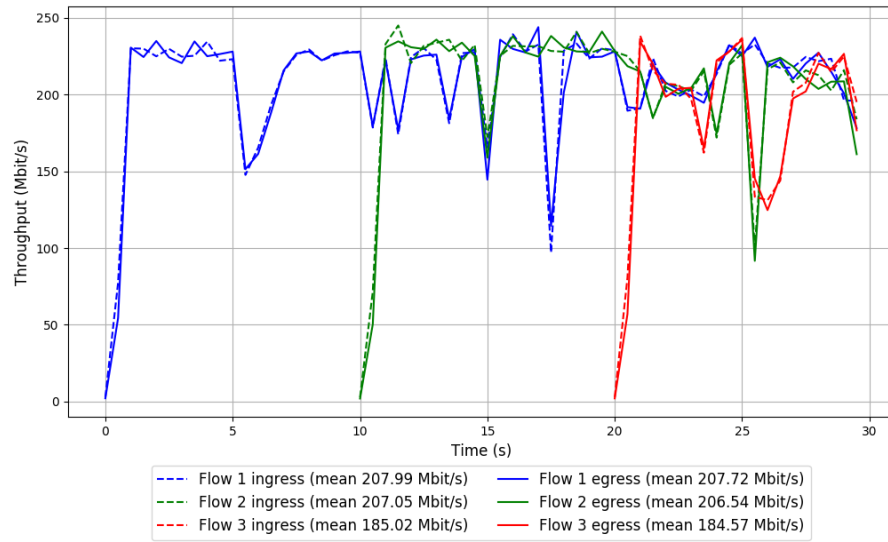
-- Flow 3:

Average throughput: 184.57 Mbit/s

95th percentile per-packet one-way delay: 70.274 ms

Loss rate: 1.31%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-17 01:06:04

End at: 2017-11-17 01:06:34

Below is generated by plot.py at 2017-11-17 03:50:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 399.08 Mbit/s

95th percentile per-packet one-way delay: 59.192 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 202.68 Mbit/s

95th percentile per-packet one-way delay: 58.532 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 201.04 Mbit/s

95th percentile per-packet one-way delay: 59.032 ms

Loss rate: 0.61%

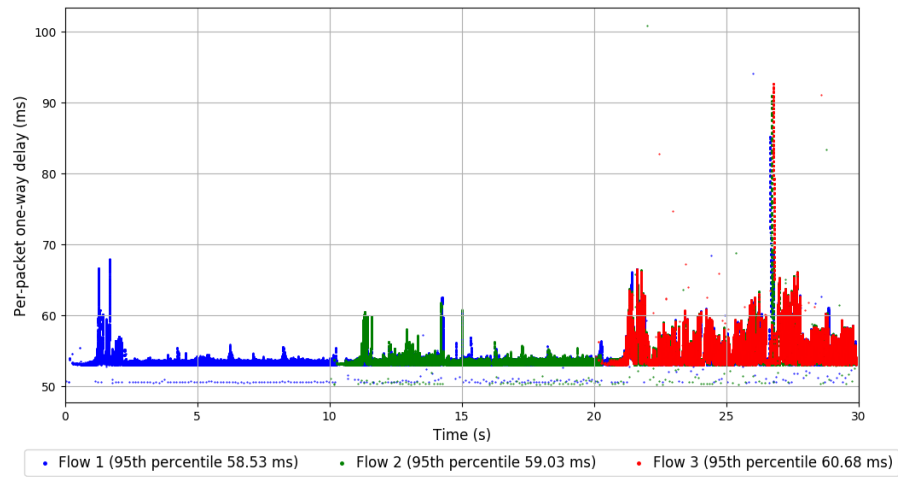
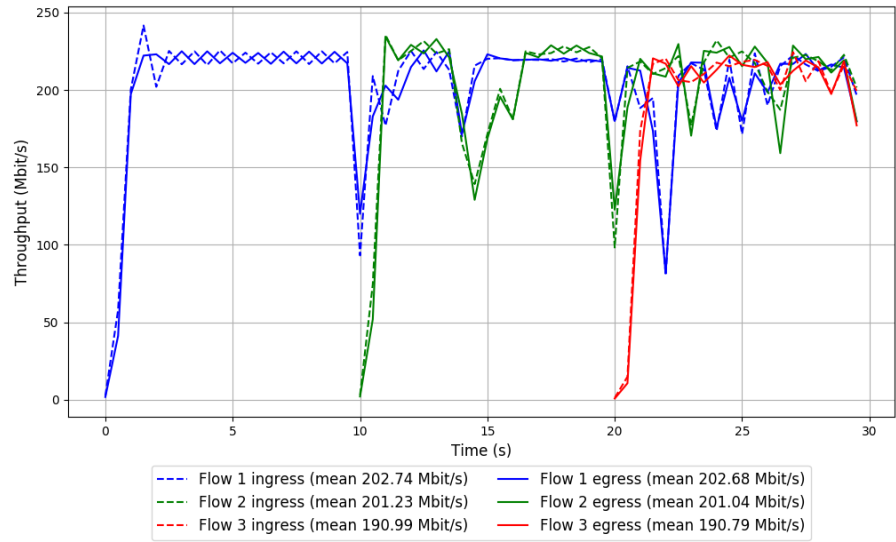
-- Flow 3:

Average throughput: 190.79 Mbit/s

95th percentile per-packet one-way delay: 60.678 ms

Loss rate: 1.16%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-17 01:18:13

End at: 2017-11-17 01:18:43

Below is generated by plot.py at 2017-11-17 03:56:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 416.52 Mbit/s

95th percentile per-packet one-way delay: 55.862 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 211.13 Mbit/s

95th percentile per-packet one-way delay: 54.859 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 211.76 Mbit/s

95th percentile per-packet one-way delay: 56.826 ms

Loss rate: 0.60%

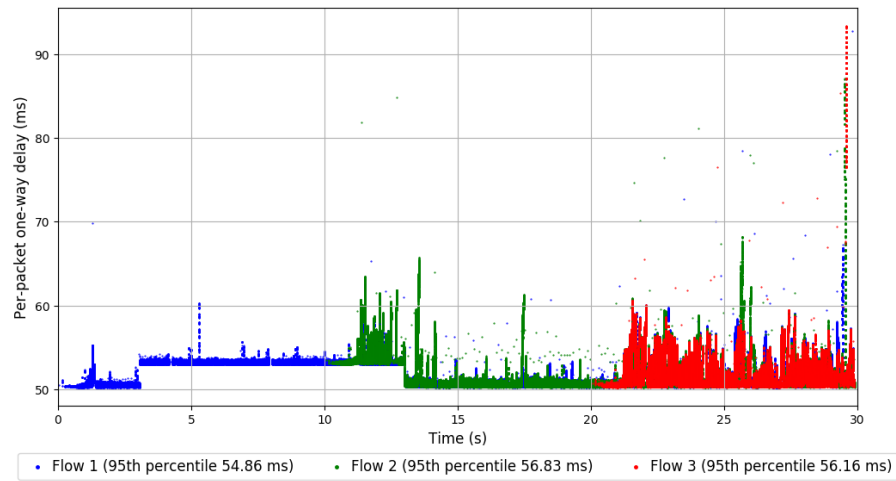
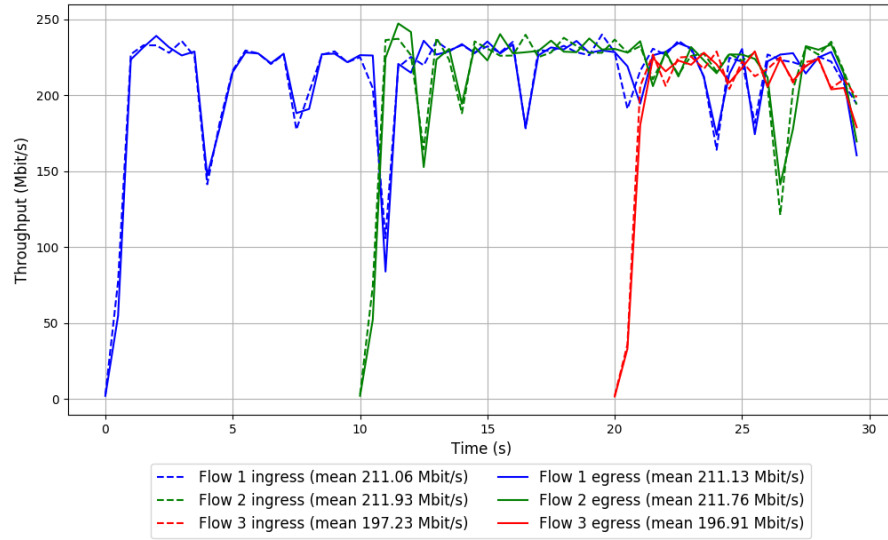
-- Flow 3:

Average throughput: 196.91 Mbit/s

95th percentile per-packet one-way delay: 56.161 ms

Loss rate: 1.27%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-17 01:30:01

End at: 2017-11-17 01:30:31

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 405.73 Mbit/s

95th percentile per-packet one-way delay: 62.751 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 207.06 Mbit/s

95th percentile per-packet one-way delay: 60.090 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 206.37 Mbit/s

95th percentile per-packet one-way delay: 63.061 ms

Loss rate: 0.50%

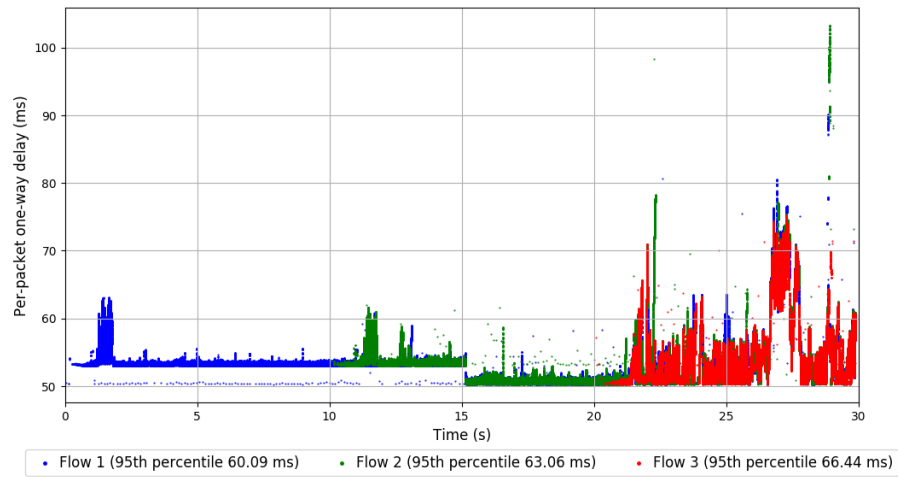
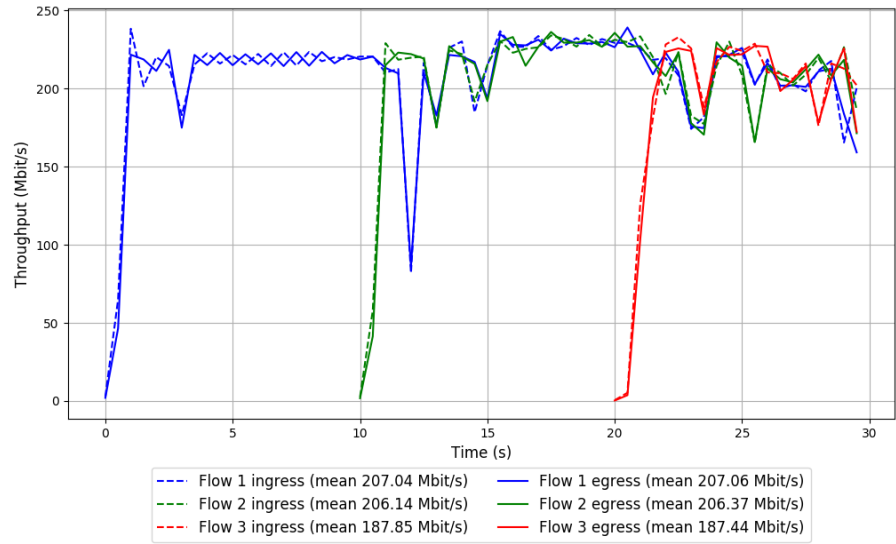
-- Flow 3:

Average throughput: 187.44 Mbit/s

95th percentile per-packet one-way delay: 66.435 ms

Loss rate: 1.38%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-16 23:34:51

End at: 2017-11-16 23:35:21

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.59 Mbit/s

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

Loss rate: 0.61%

-- Flow 1:

Average throughput: 129.82 Mbit/s

95th percentile per-packet one-way delay: 55.714 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 132.34 Mbit/s

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

Loss rate: 0.68%

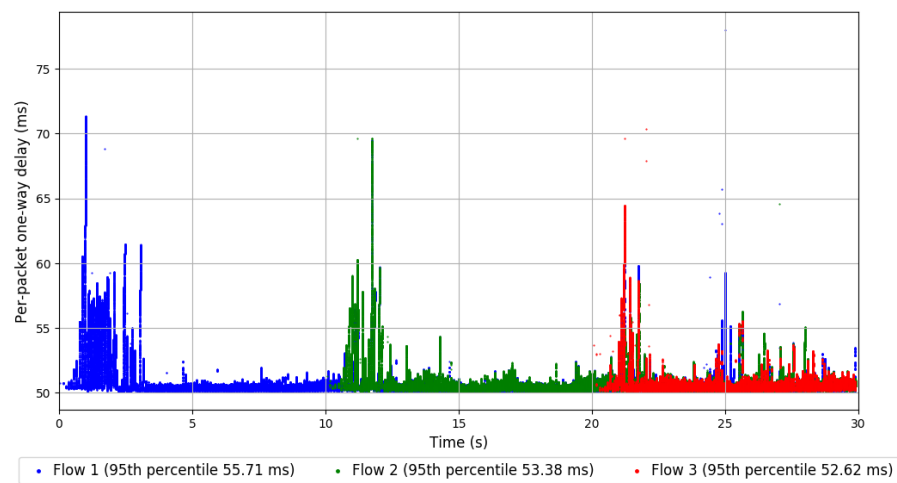
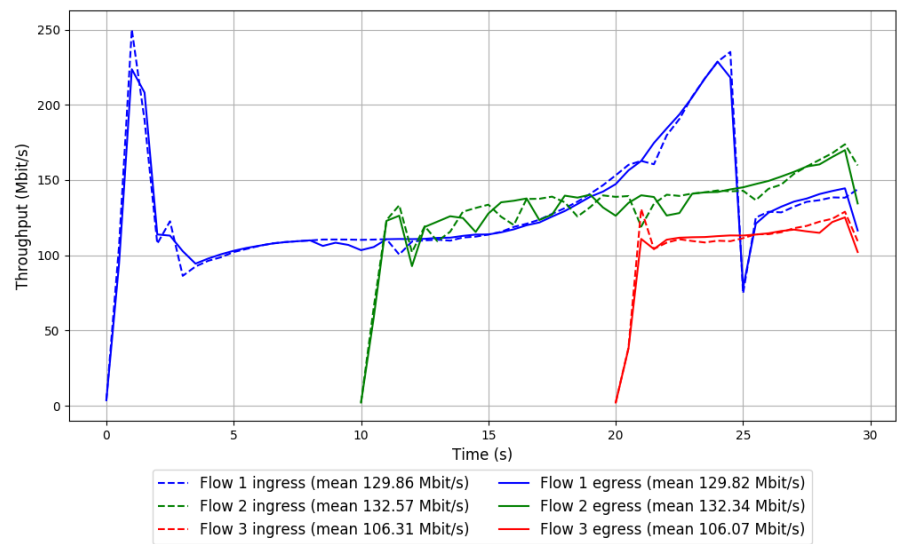
-- Flow 3:

Average throughput: 106.07 Mbit/s

95th percentile per-packet one-way delay: 52.624 ms

Loss rate: 1.28%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-16 23:46:51

End at: 2017-11-16 23:47:21

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.91 Mbit/s

95th percentile per-packet one-way delay: 55.668 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 100.21 Mbit/s

95th percentile per-packet one-way delay: 55.506 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 17.12 Mbit/s

95th percentile per-packet one-way delay: 54.446 ms

Loss rate: 2.69%

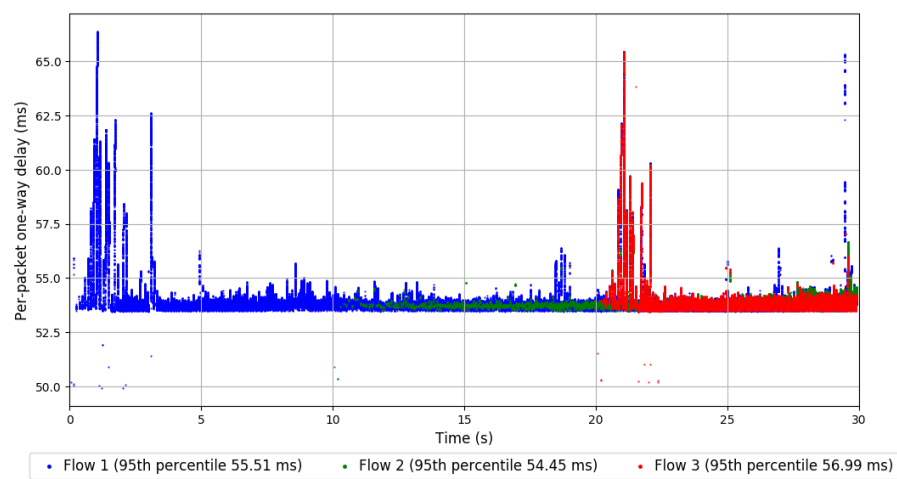
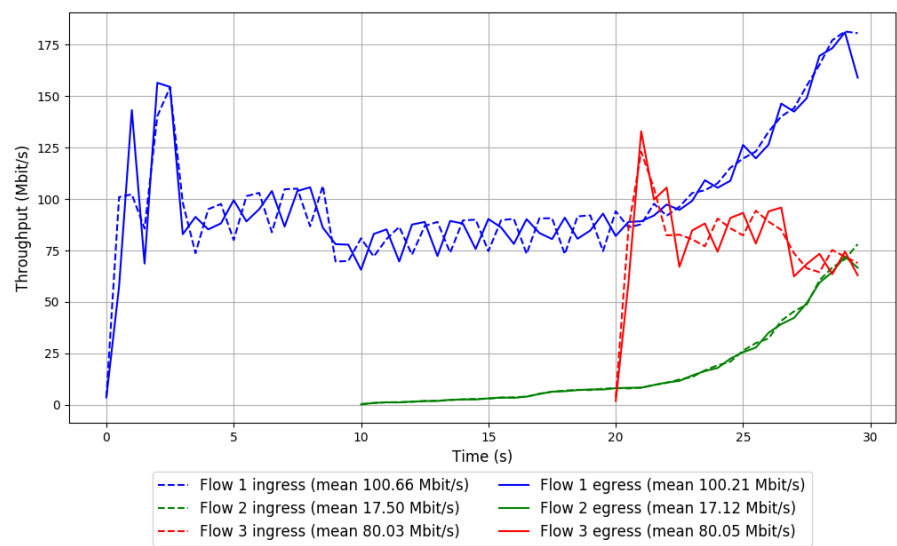
-- Flow 3:

Average throughput: 80.05 Mbit/s

95th percentile per-packet one-way delay: 56.992 ms

Loss rate: 1.04%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-16 23:58:45

End at: 2017-11-16 23:59:15

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.37 Mbit/s

95th percentile per-packet one-way delay: 54.455 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 83.58 Mbit/s

95th percentile per-packet one-way delay: 54.234 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 91.78 Mbit/s

95th percentile per-packet one-way delay: 55.039 ms

Loss rate: 0.34%

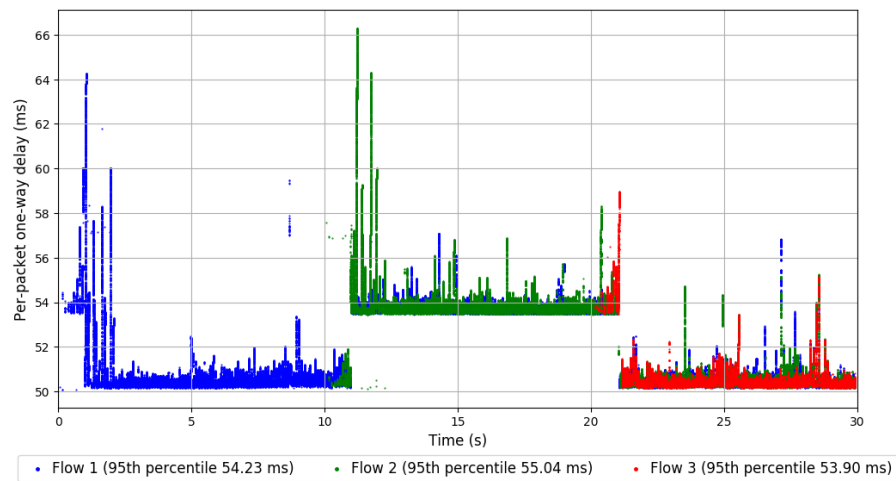
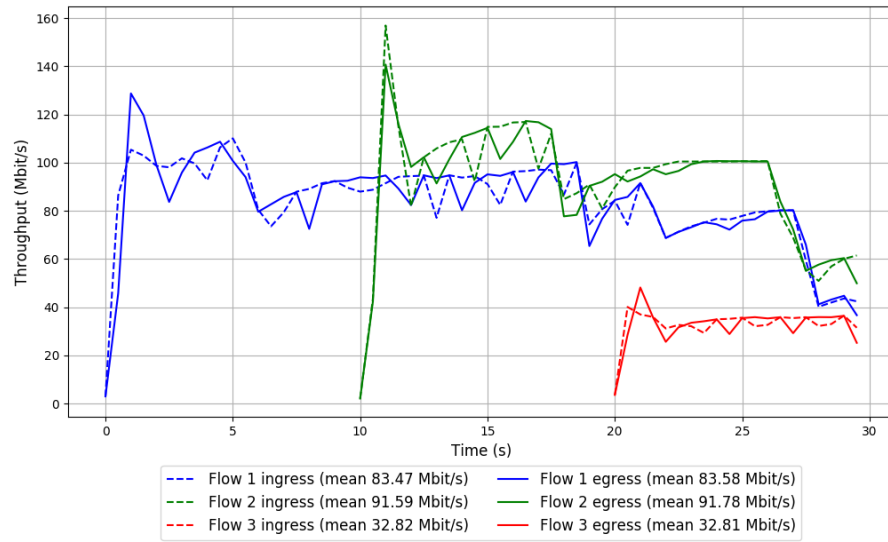
-- Flow 3:

Average throughput: 32.81 Mbit/s

95th percentile per-packet one-way delay: 53.901 ms

Loss rate: 1.10%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-17 00:10:45

End at: 2017-11-17 00:11:15

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 193.67 Mbit/s

95th percentile per-packet one-way delay: 54.634 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 126.93 Mbit/s

95th percentile per-packet one-way delay: 54.725 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 89.65 Mbit/s

95th percentile per-packet one-way delay: 54.667 ms

Loss rate: 0.54%

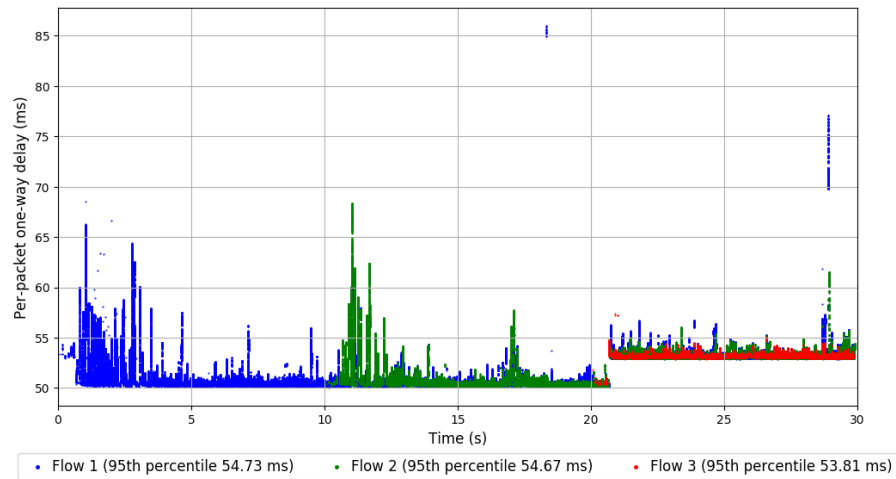
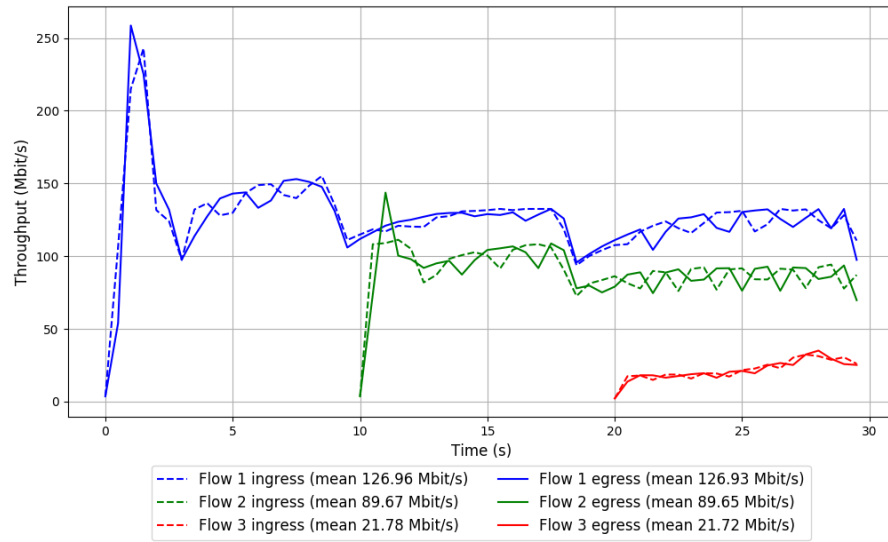
-- Flow 3:

Average throughput: 21.72 Mbit/s

95th percentile per-packet one-way delay: 53.813 ms

Loss rate: 1.59%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-17 00:22:49

End at: 2017-11-17 00:23:19

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 209.35 Mbit/s

95th percentile per-packet one-way delay: 55.545 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 115.83 Mbit/s

95th percentile per-packet one-way delay: 54.793 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 86.06 Mbit/s

95th percentile per-packet one-way delay: 55.495 ms

Loss rate: 0.66%

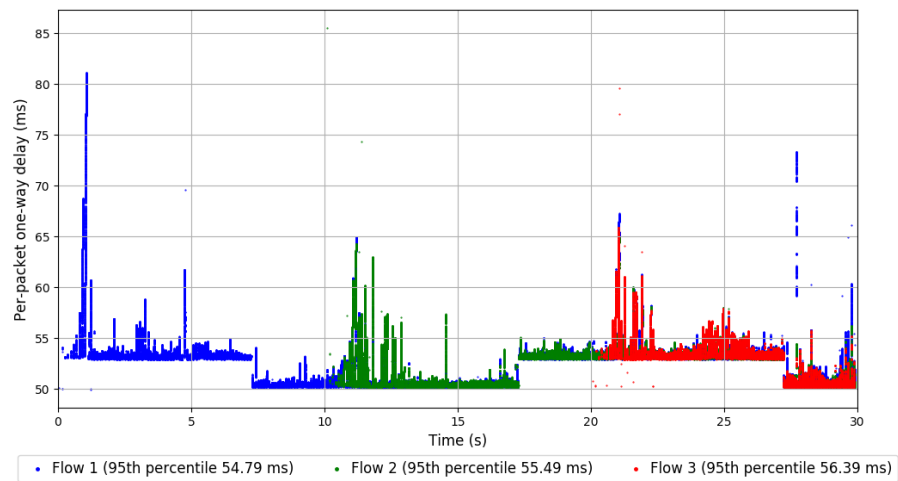
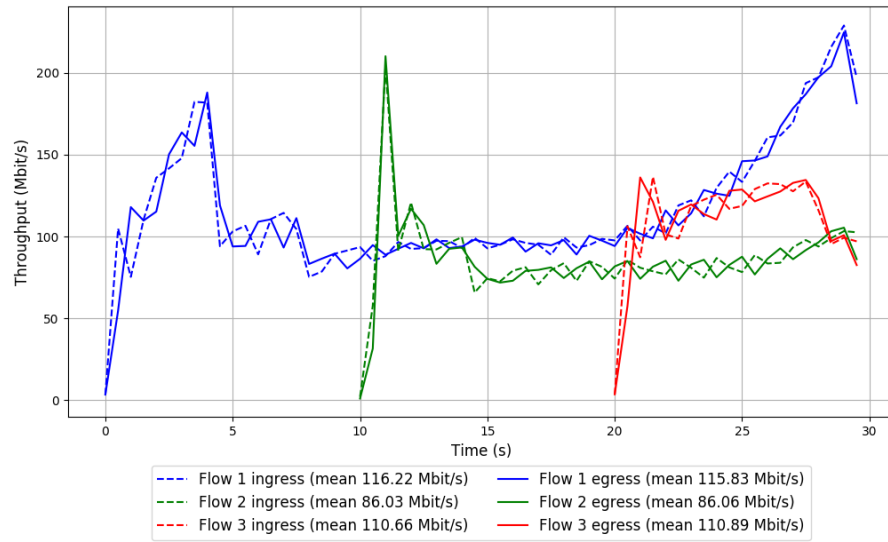
-- Flow 3:

Average throughput: 110.89 Mbit/s

95th percentile per-packet one-way delay: 56.386 ms

Loss rate: 0.96%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-17 00:35:06

End at: 2017-11-17 00:35:36

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 187.23 Mbit/s

95th percentile per-packet one-way delay: 52.643 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 91.32 Mbit/s

95th percentile per-packet one-way delay: 51.823 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 88.44 Mbit/s

95th percentile per-packet one-way delay: 54.611 ms

Loss rate: 0.65%

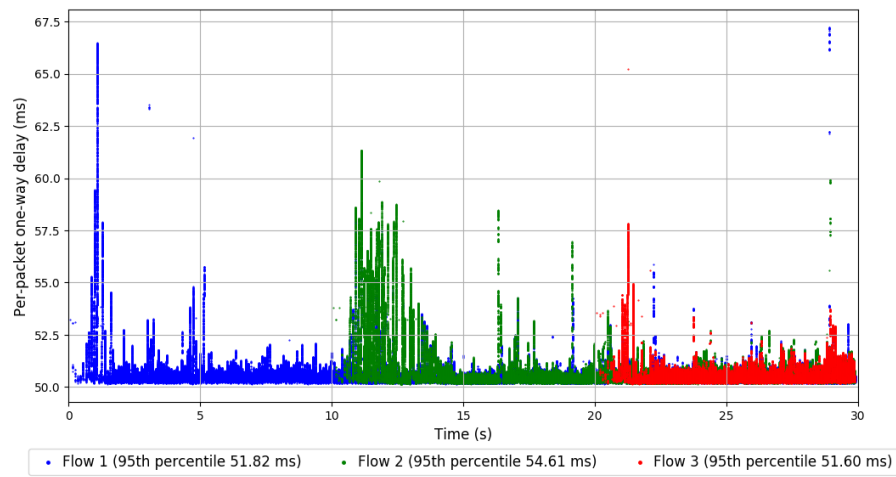
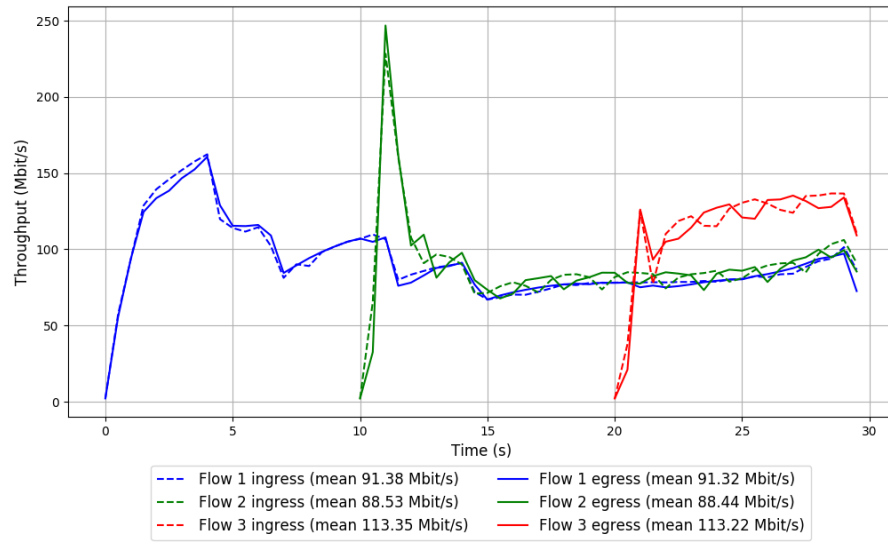
-- Flow 3:

Average throughput: 113.22 Mbit/s

95th percentile per-packet one-way delay: 51.605 ms

Loss rate: 1.22%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-17 00:47:34

End at: 2017-11-17 00:48:04

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.17 Mbit/s

95th percentile per-packet one-way delay: 58.039 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 122.71 Mbit/s

95th percentile per-packet one-way delay: 57.540 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 114.71 Mbit/s

95th percentile per-packet one-way delay: 57.025 ms

Loss rate: 0.52%

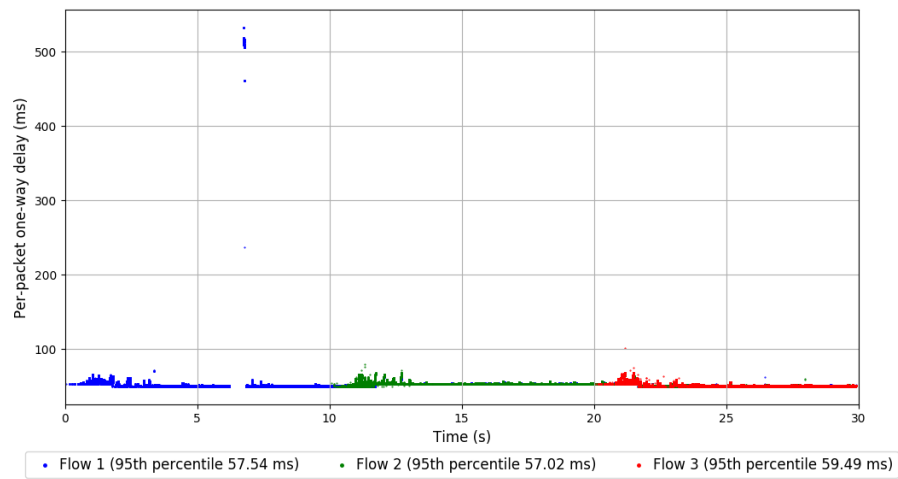
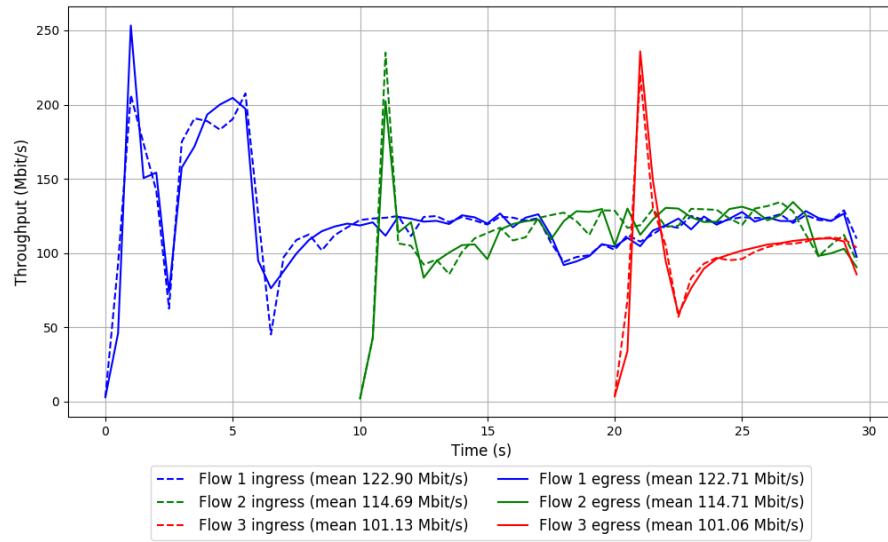
-- Flow 3:

Average throughput: 101.06 Mbit/s

95th percentile per-packet one-way delay: 59.490 ms

Loss rate: 1.11%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-17 00:59:57

End at: 2017-11-17 01:00:27

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 161.26 Mbit/s

95th percentile per-packet one-way delay: 56.186 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 61.29 Mbit/s

95th percentile per-packet one-way delay: 56.144 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 95.05 Mbit/s

95th percentile per-packet one-way delay: 54.536 ms

Loss rate: 0.27%

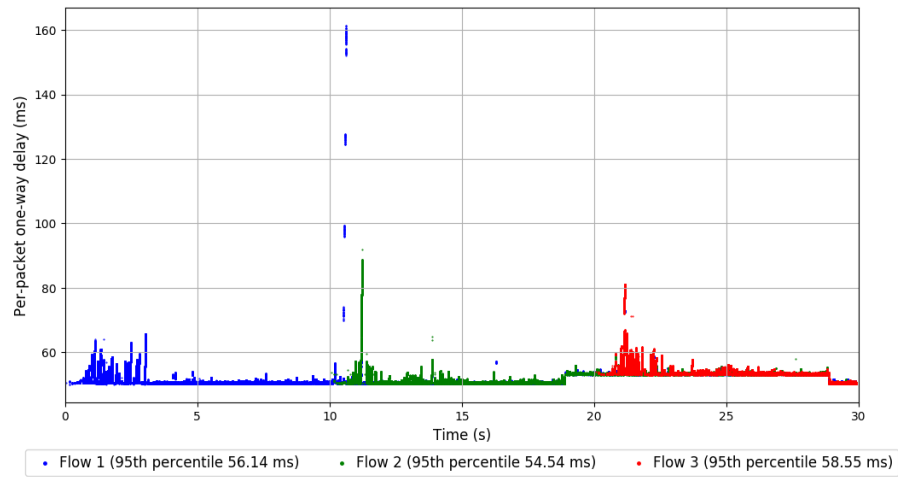
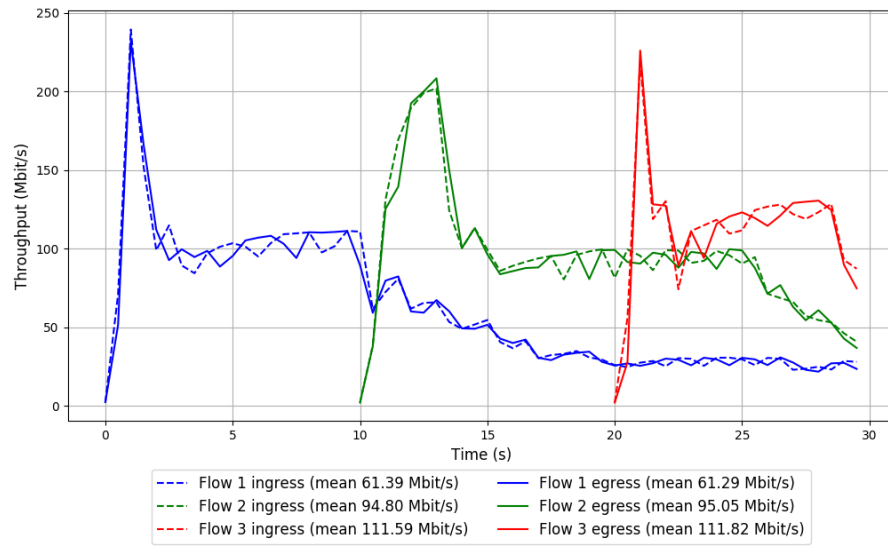
-- Flow 3:

Average throughput: 111.82 Mbit/s

95th percentile per-packet one-way delay: 58.548 ms

Loss rate: 0.88%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-17 01:12:13

End at: 2017-11-17 01:12:43

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.89 Mbit/s

95th percentile per-packet one-way delay: 54.953 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 80.98 Mbit/s

95th percentile per-packet one-way delay: 54.507 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 102.75 Mbit/s

95th percentile per-packet one-way delay: 55.848 ms

Loss rate: 0.48%

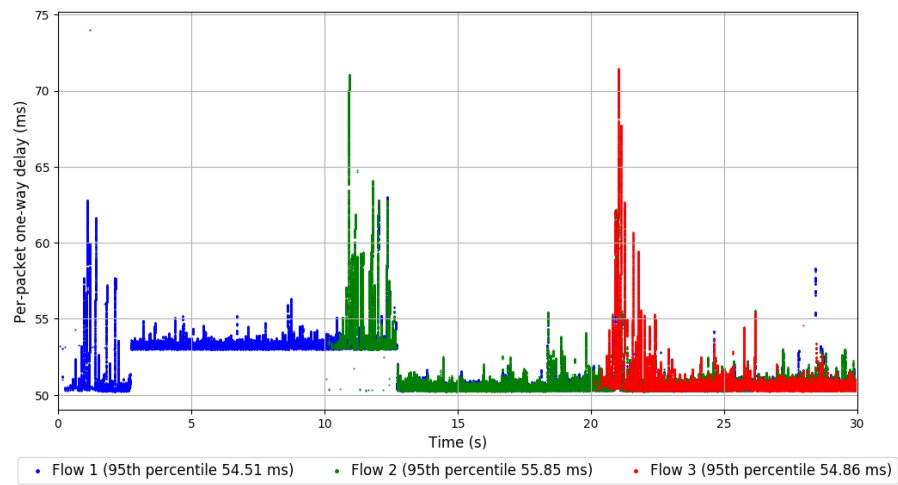
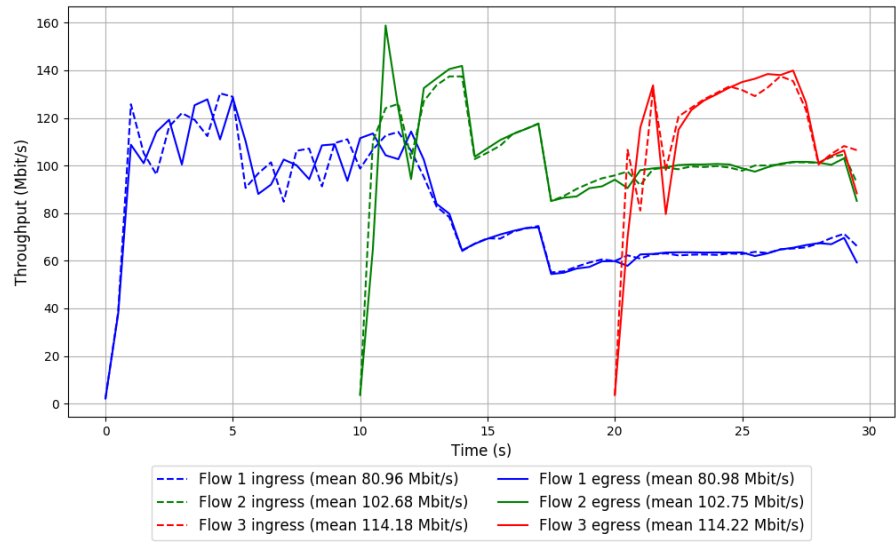
-- Flow 3:

Average throughput: 114.22 Mbit/s

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

Loss rate: 0.99%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-17 01:23:58

End at: 2017-11-17 01:24:28

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.67 Mbit/s

95th percentile per-packet one-way delay: 55.292 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 47.06 Mbit/s

95th percentile per-packet one-way delay: 57.185 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 82.70 Mbit/s

95th percentile per-packet one-way delay: 53.490 ms

Loss rate: 0.52%

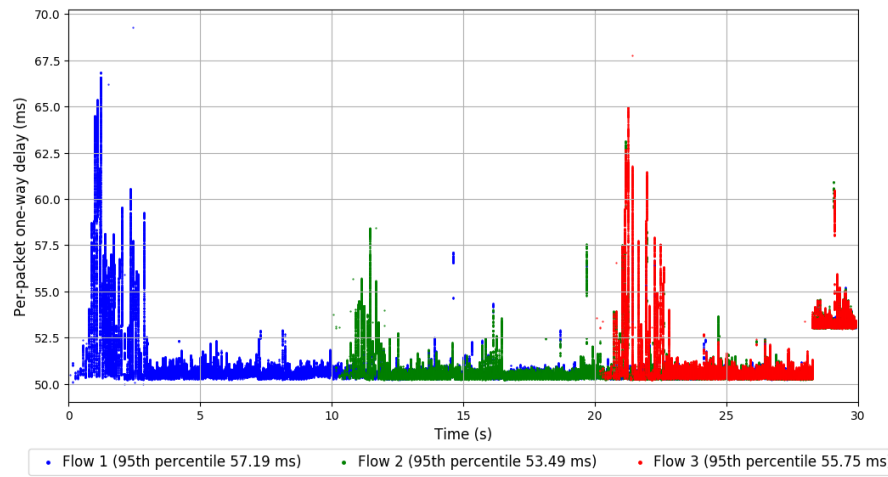
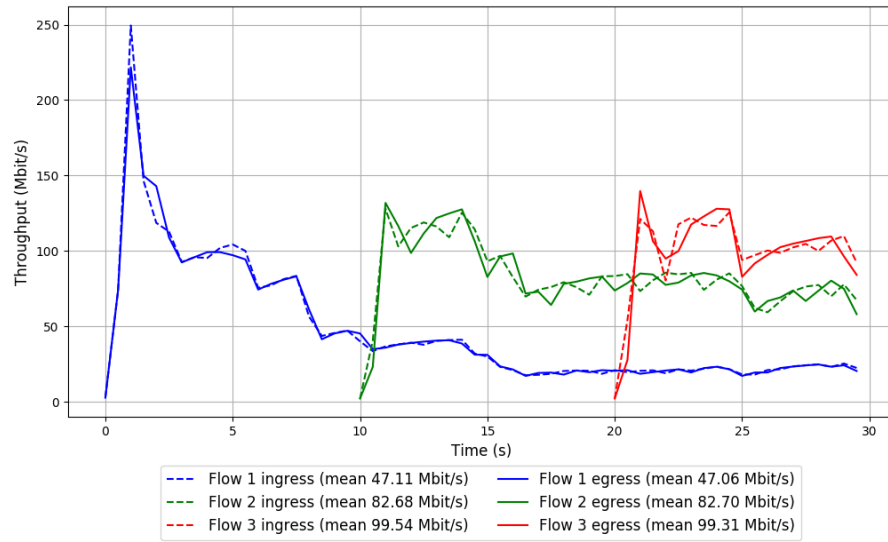
-- Flow 3:

Average throughput: 99.31 Mbit/s

95th percentile per-packet one-way delay: 55.746 ms

Loss rate: 1.27%

Run 10: Report of TCP Cubic — Data Link

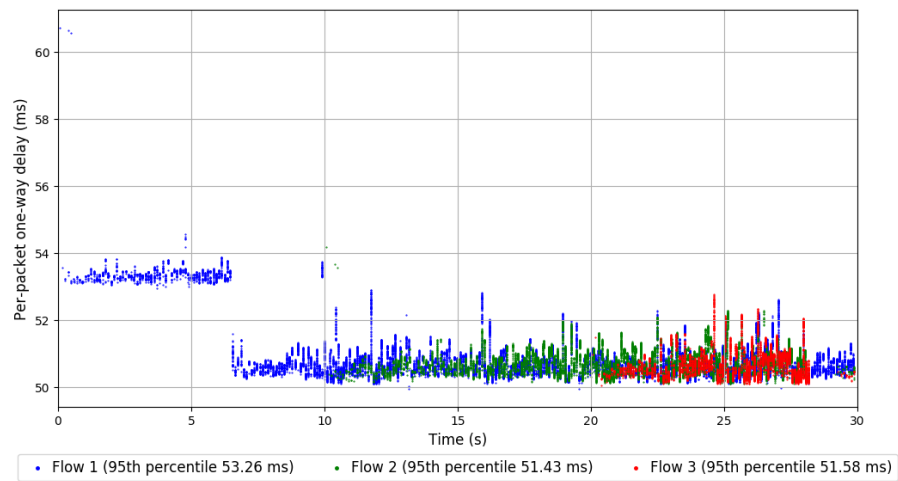
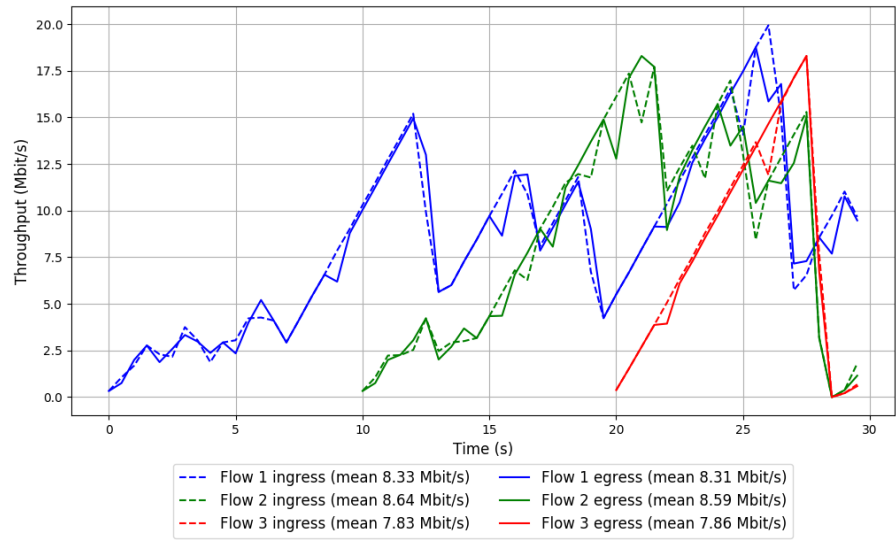


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-16 23:42:00
End at: 2017-11-16 23:42:30

# Below is generated by plot.py at 2017-11-17 03:56:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.59 Mbit/s
95th percentile per-packet one-way delay: 51.943 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 8.31 Mbit/s
95th percentile per-packet one-way delay: 53.255 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 51.431 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 51.579 ms
Loss rate: 0.67%
```


Run 1: Report of LEDBAT — Data Link

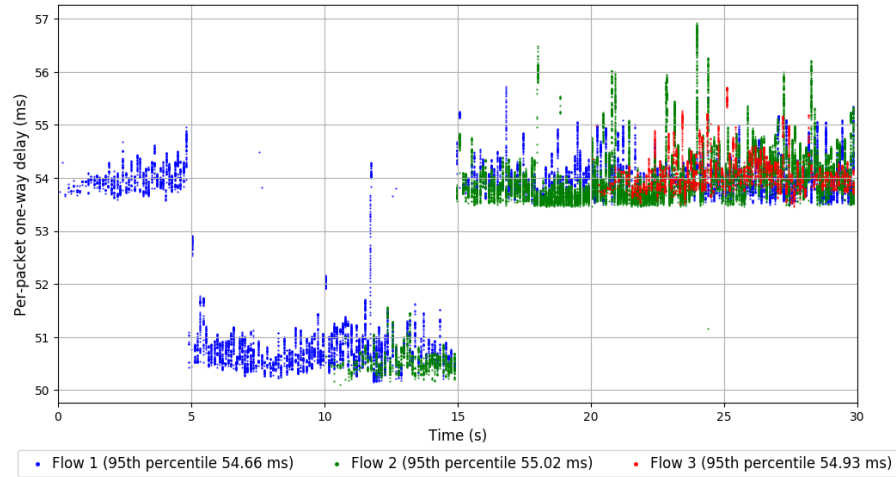
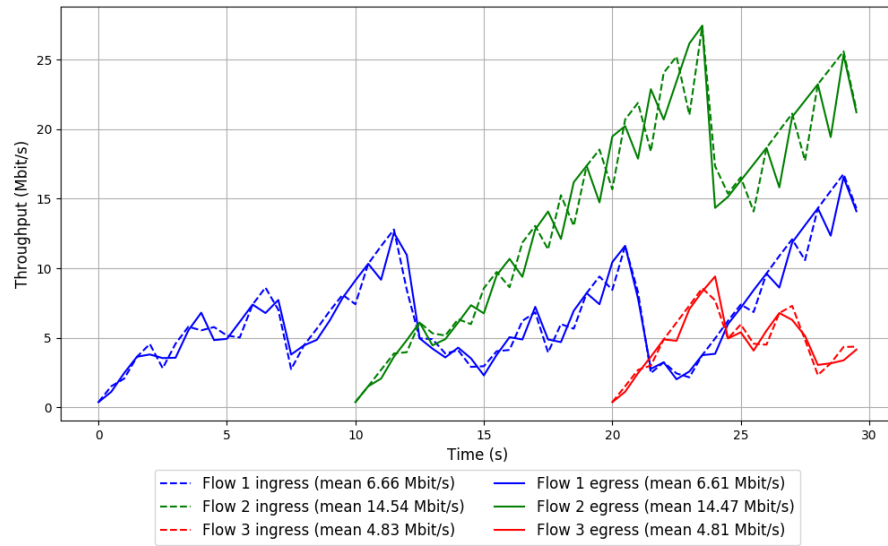


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-16 23:53:51
End at: 2017-11-16 23:54:21

# Below is generated by plot.py at 2017-11-17 03:56:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.80 Mbit/s
95th percentile per-packet one-way delay: 54.836 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 6.61 Mbit/s
95th percentile per-packet one-way delay: 54.659 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 14.47 Mbit/s
95th percentile per-packet one-way delay: 55.023 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 4.81 Mbit/s
95th percentile per-packet one-way delay: 54.928 ms
Loss rate: 1.38%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-17 00:05:45

End at: 2017-11-17 00:06:15

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.18 Mbit/s

95th percentile per-packet one-way delay: 54.124 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 7.15 Mbit/s

95th percentile per-packet one-way delay: 54.081 ms

Loss rate: 0.97%

-- Flow 2:

Average throughput: 8.63 Mbit/s

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

Loss rate: 0.43%

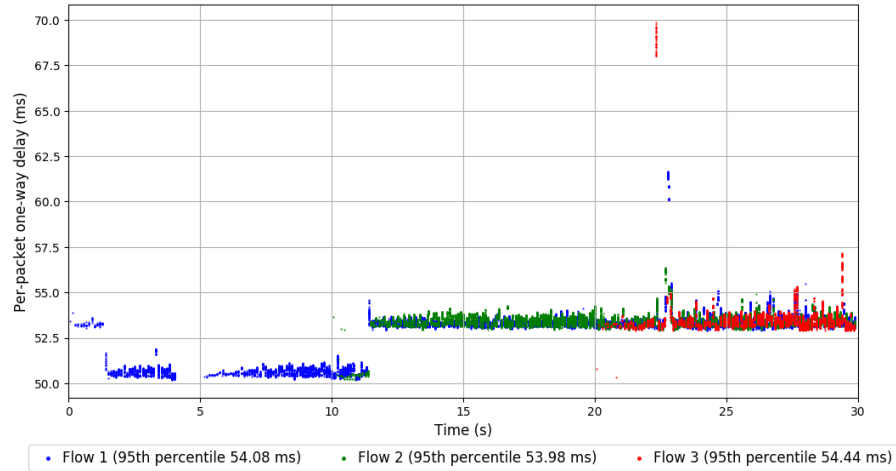
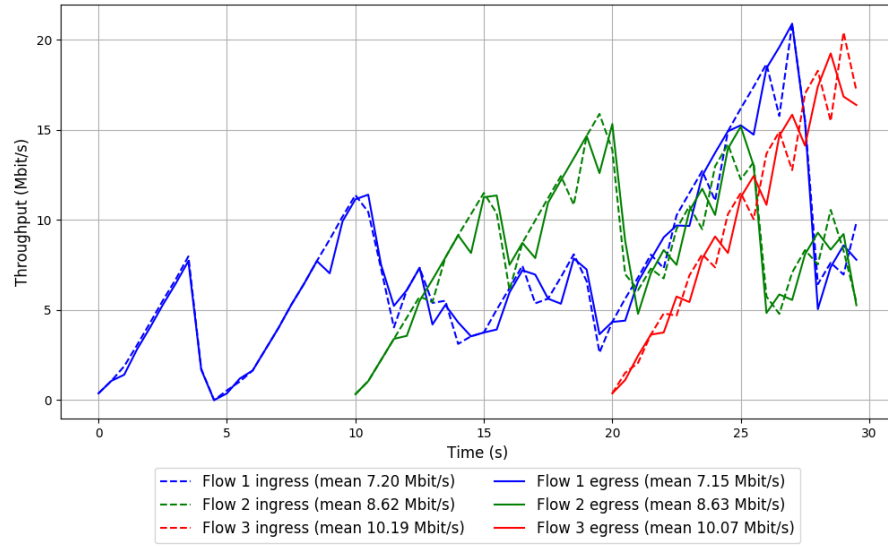
-- Flow 3:

Average throughput: 10.07 Mbit/s

95th percentile per-packet one-way delay: 54.440 ms

Loss rate: 2.17%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-17 00:17:48

End at: 2017-11-17 00:18:18

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 14.69 Mbit/s

95th percentile per-packet one-way delay: 53.610 ms

Loss rate: 1.34%

-- Flow 1:

Average throughput: 8.47 Mbit/s

95th percentile per-packet one-way delay: 53.678 ms

Loss rate: 1.39%

-- Flow 2:

Average throughput: 6.36 Mbit/s

95th percentile per-packet one-way delay: 53.542 ms

Loss rate: 1.13%

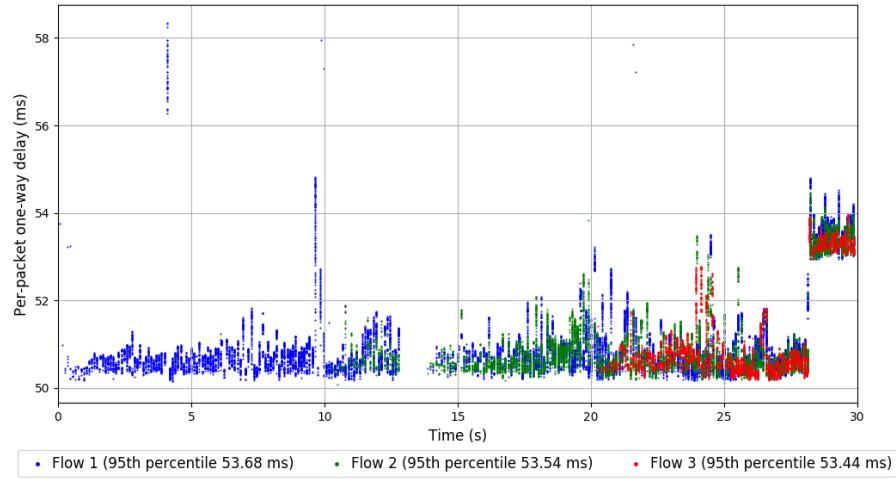
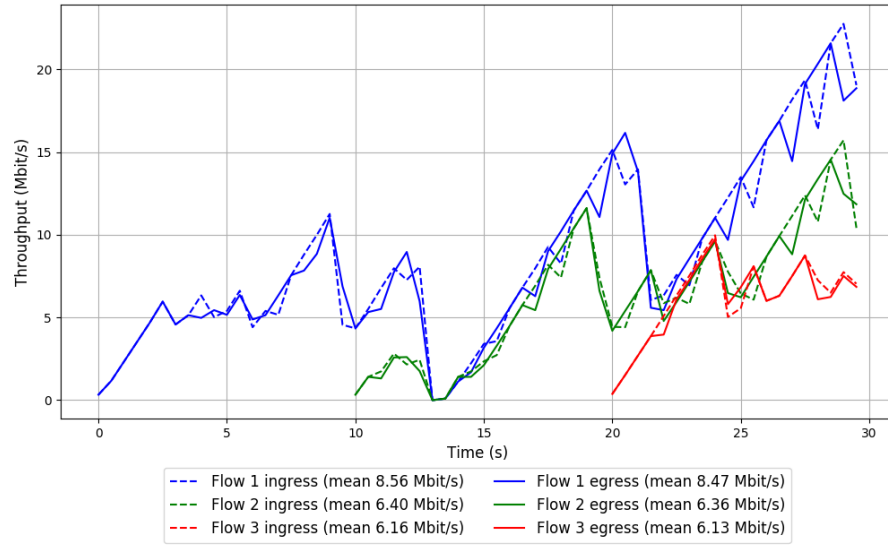
-- Flow 3:

Average throughput: 6.13 Mbit/s

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

Loss rate: 1.54%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-17 00:30:05

End at: 2017-11-17 00:30:35

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.38 Mbit/s

95th percentile per-packet one-way delay: 53.318 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 7.70 Mbit/s

95th percentile per-packet one-way delay: 53.508 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 9.50 Mbit/s

95th percentile per-packet one-way delay: 51.623 ms

Loss rate: 2.08%

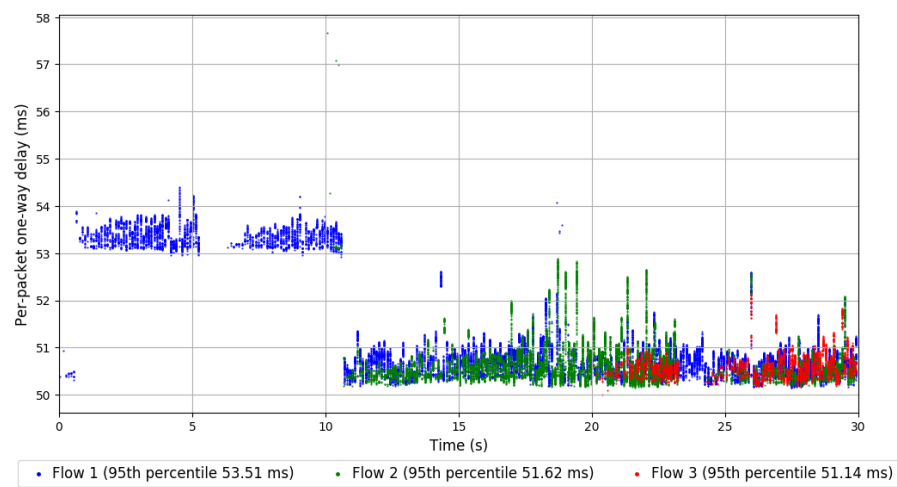
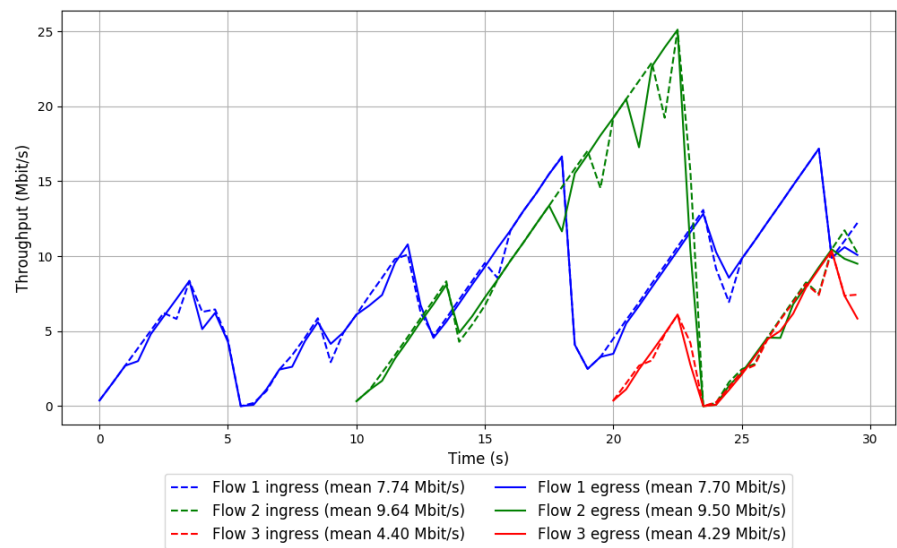
-- Flow 3:

Average throughput: 4.29 Mbit/s

95th percentile per-packet one-way delay: 51.140 ms

Loss rate: 3.50%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-17 00:42:09

End at: 2017-11-17 00:42:39

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 18.32 Mbit/s

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

Loss rate: 1.00%

-- Flow 1:

Average throughput: 11.05 Mbit/s

95th percentile per-packet one-way delay: 53.803 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 8.15 Mbit/s

95th percentile per-packet one-way delay: 53.606 ms

Loss rate: 0.85%

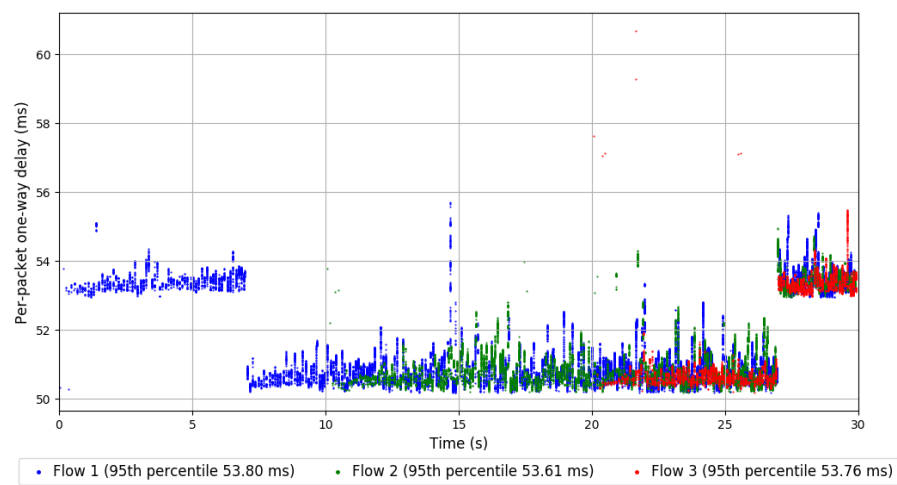
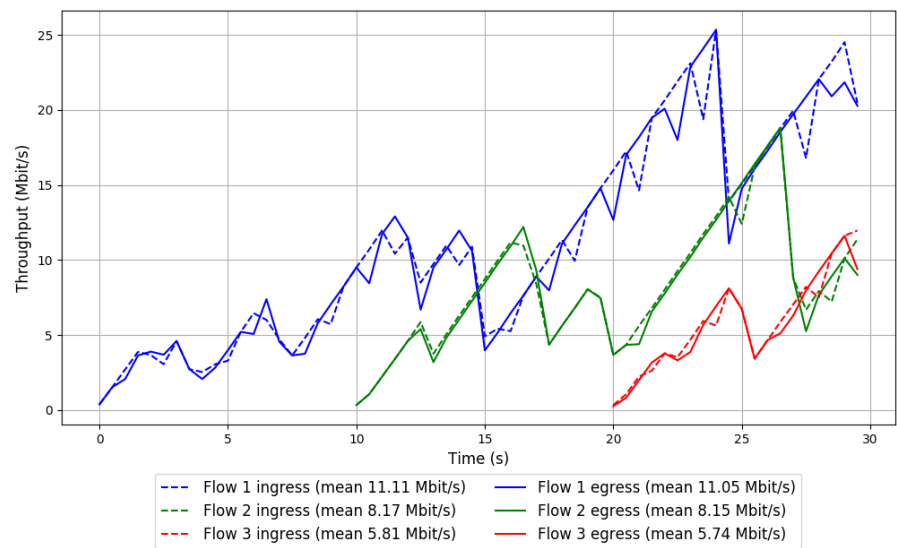
-- Flow 3:

Average throughput: 5.74 Mbit/s

95th percentile per-packet one-way delay: 53.755 ms

Loss rate: 2.28%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-17 00:54:45

End at: 2017-11-17 00:55:15

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 27.11 Mbit/s

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

Loss rate: 0.76%

-- Flow 1:

Average throughput: 15.33 Mbit/s

95th percentile per-packet one-way delay: 53.982 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 14.39 Mbit/s

95th percentile per-packet one-way delay: 54.004 ms

Loss rate: 0.49%

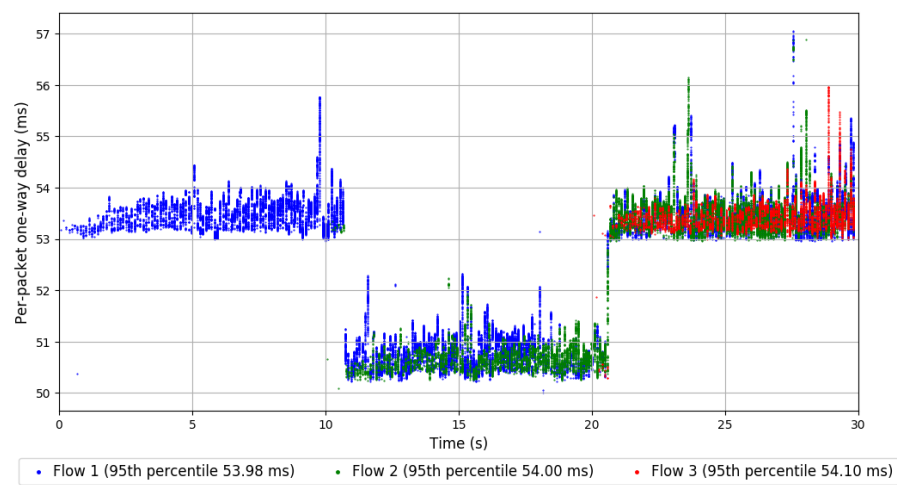
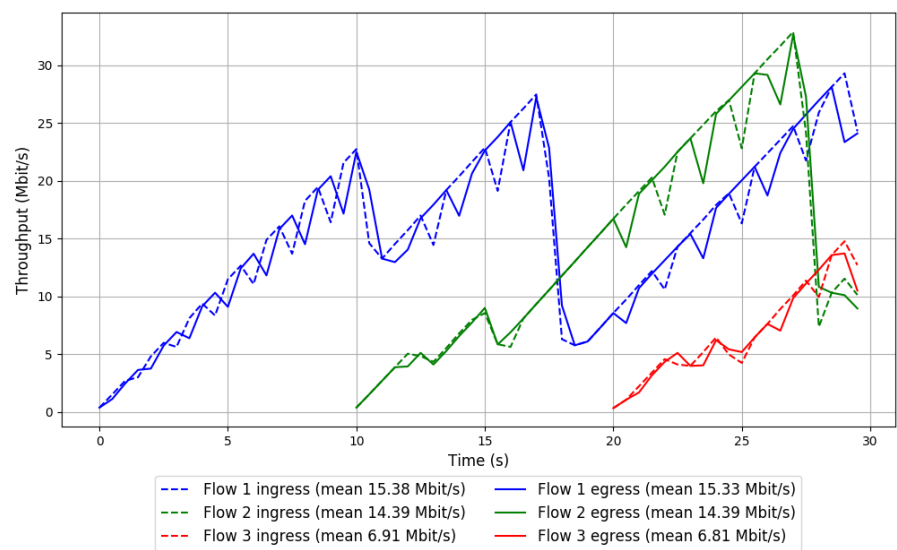
-- Flow 3:

Average throughput: 6.81 Mbit/s

95th percentile per-packet one-way delay: 54.101 ms

Loss rate: 2.40%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-17 01:07:06

End at: 2017-11-17 01:07:36

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.59 Mbit/s

95th percentile per-packet one-way delay: 54.050 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 14.72 Mbit/s

95th percentile per-packet one-way delay: 53.927 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 10.93 Mbit/s

95th percentile per-packet one-way delay: 54.270 ms

Loss rate: 0.97%

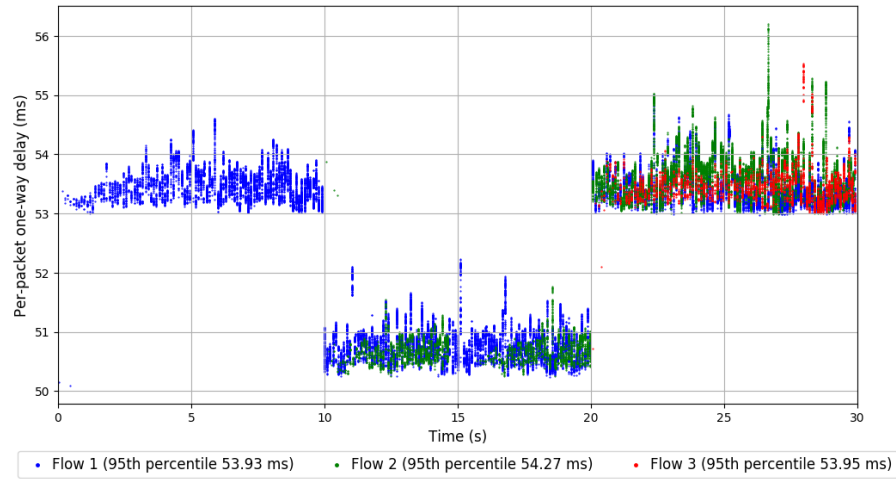
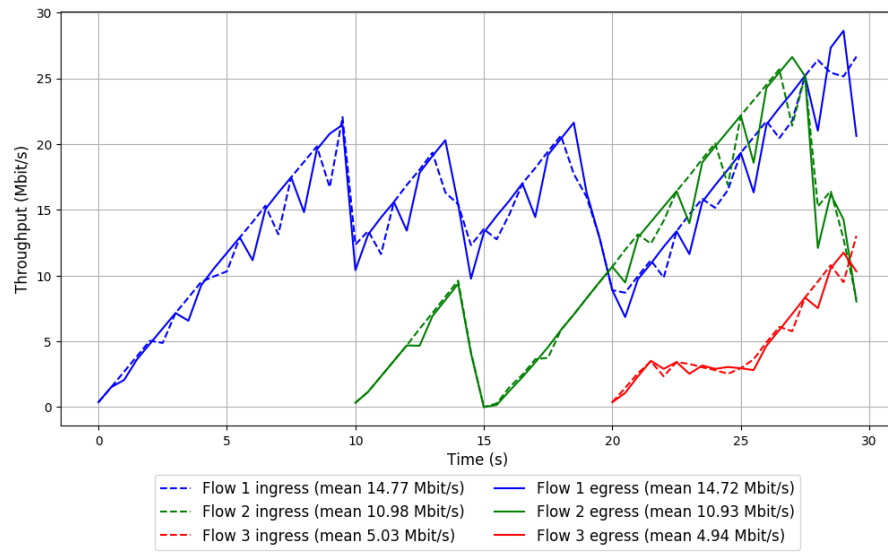
-- Flow 3:

Average throughput: 4.94 Mbit/s

95th percentile per-packet one-way delay: 53.952 ms

Loss rate: 2.70%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-17 01:19:16

End at: 2017-11-17 01:19:46

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 17.88 Mbit/s

95th percentile per-packet one-way delay: 54.621 ms

Loss rate: 1.23%

-- Flow 1:

Average throughput: 6.69 Mbit/s

95th percentile per-packet one-way delay: 54.120 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 11.70 Mbit/s

95th percentile per-packet one-way delay: 54.822 ms

Loss rate: 0.84%

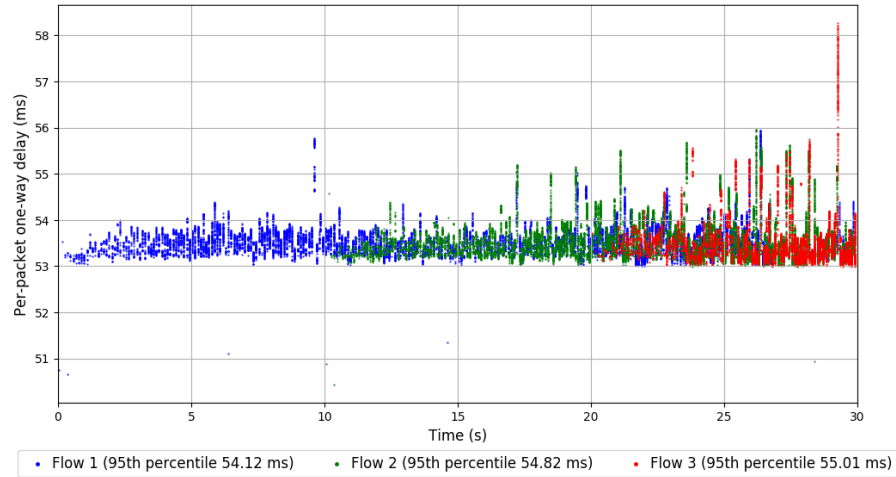
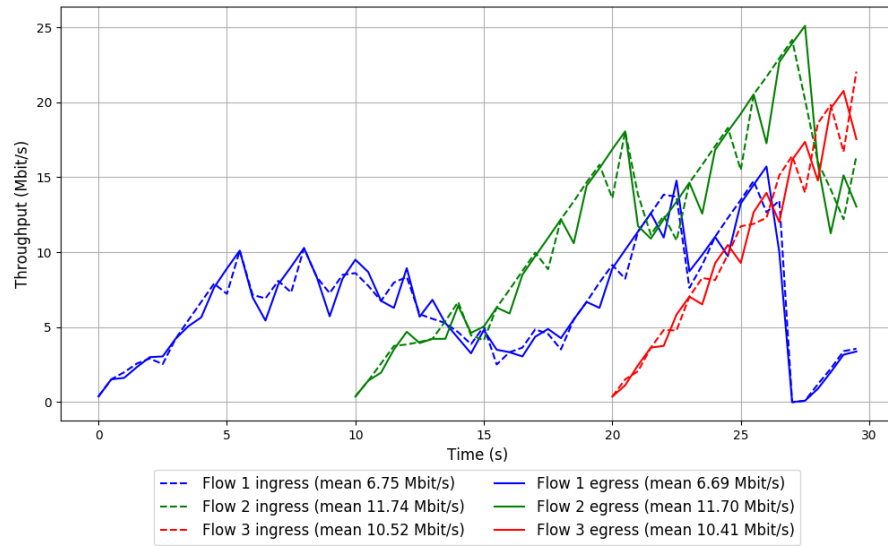
-- Flow 3:

Average throughput: 10.41 Mbit/s

95th percentile per-packet one-way delay: 55.011 ms

Loss rate: 2.15%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-11-17 01:31:04

End at: 2017-11-17 01:31:34

Below is generated by plot.py at 2017-11-17 03:56:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 26.42 Mbit/s

95th percentile per-packet one-way delay: 54.282 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 13.02 Mbit/s

95th percentile per-packet one-way delay: 54.118 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 17.21 Mbit/s

95th percentile per-packet one-way delay: 54.454 ms

Loss rate: 0.50%

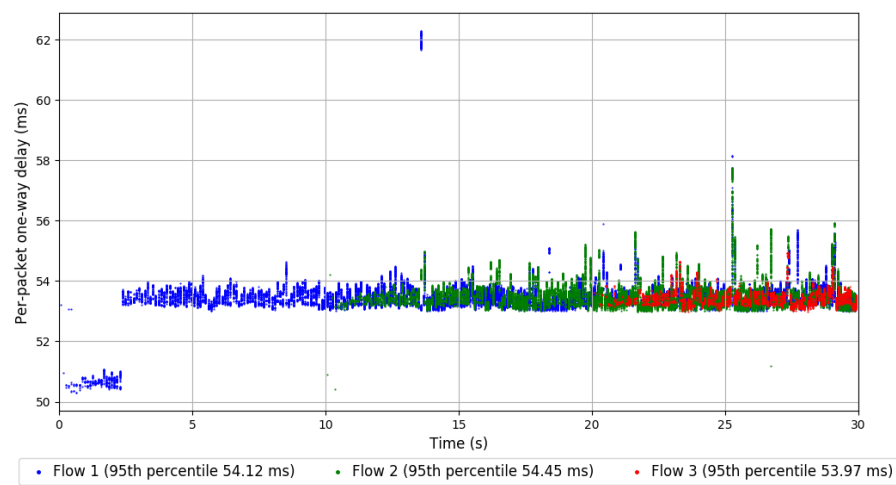
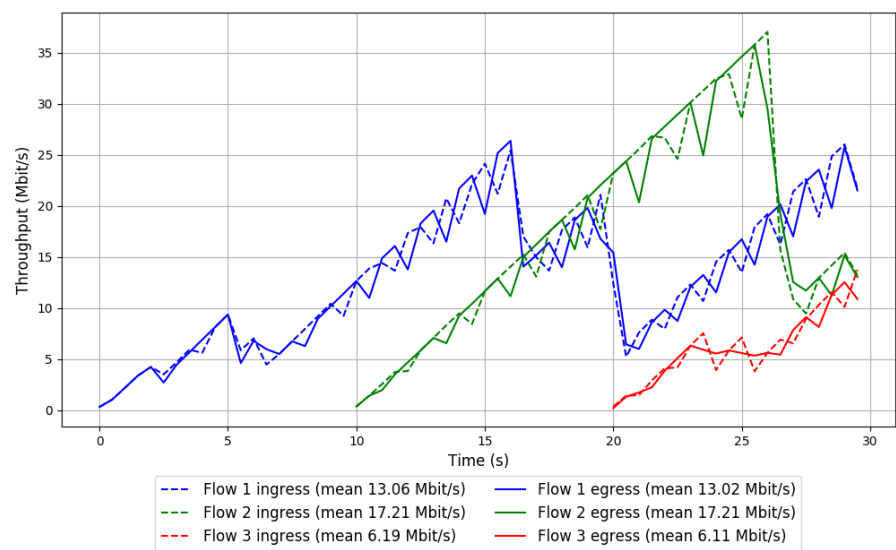
-- Flow 3:

Average throughput: 6.11 Mbit/s

95th percentile per-packet one-way delay: 53.970 ms

Loss rate: 2.33%

Run 10: Report of LEDBAT — Data Link

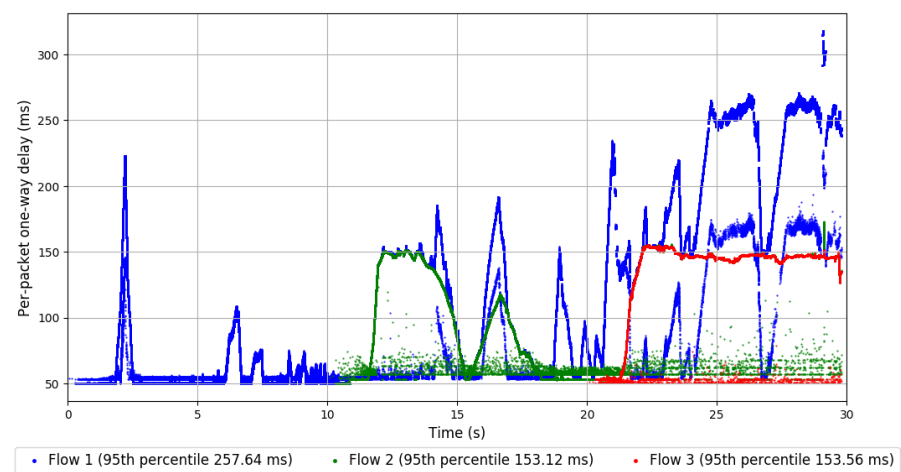
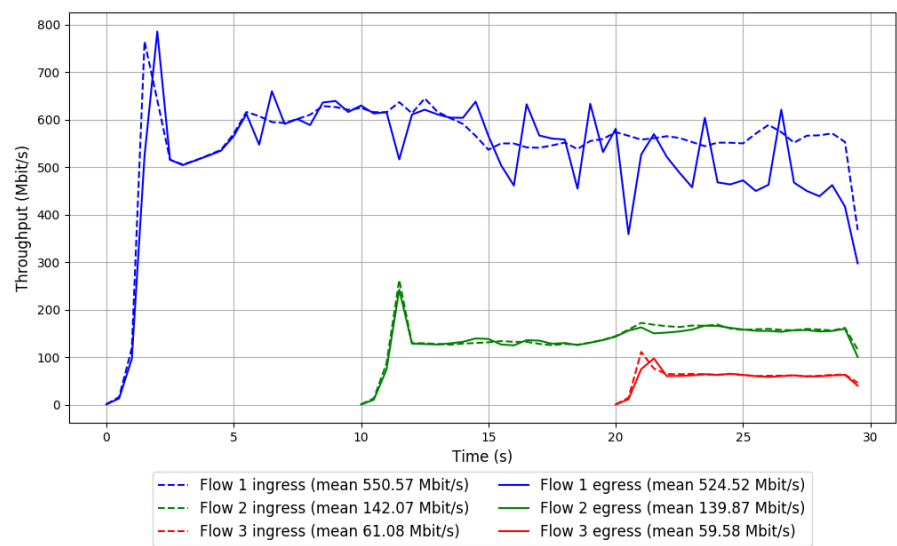


```
Run 1: Statistics of PCC

Start at: 2017-11-16 23:35:45
End at: 2017-11-16 23:36:15

# Below is generated by plot.py at 2017-11-17 04:06:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 636.68 Mbit/s
95th percentile per-packet one-way delay: 255.884 ms
Loss rate: 4.61%
-- Flow 1:
Average throughput: 524.52 Mbit/s
95th percentile per-packet one-way delay: 257.637 ms
Loss rate: 5.08%
-- Flow 2:
Average throughput: 139.87 Mbit/s
95th percentile per-packet one-way delay: 153.125 ms
Loss rate: 2.08%
-- Flow 3:
Average throughput: 59.58 Mbit/s
95th percentile per-packet one-way delay: 153.559 ms
Loss rate: 3.51%
```

Run 1: Report of PCC — Data Link

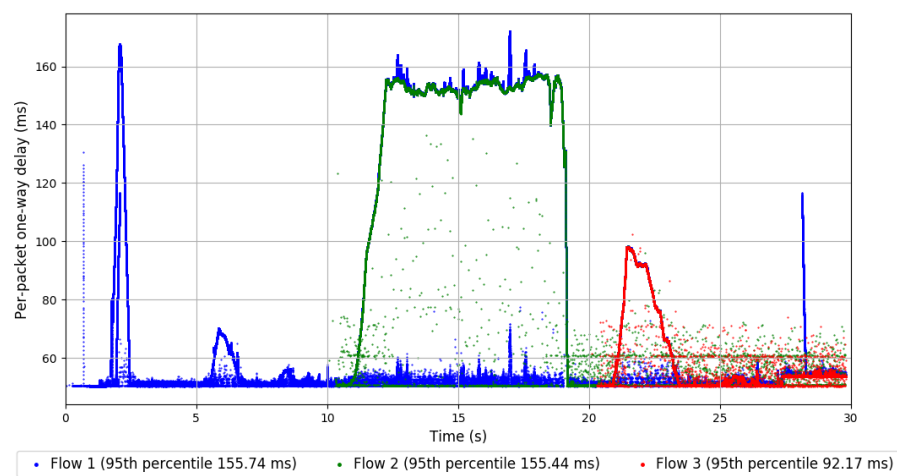
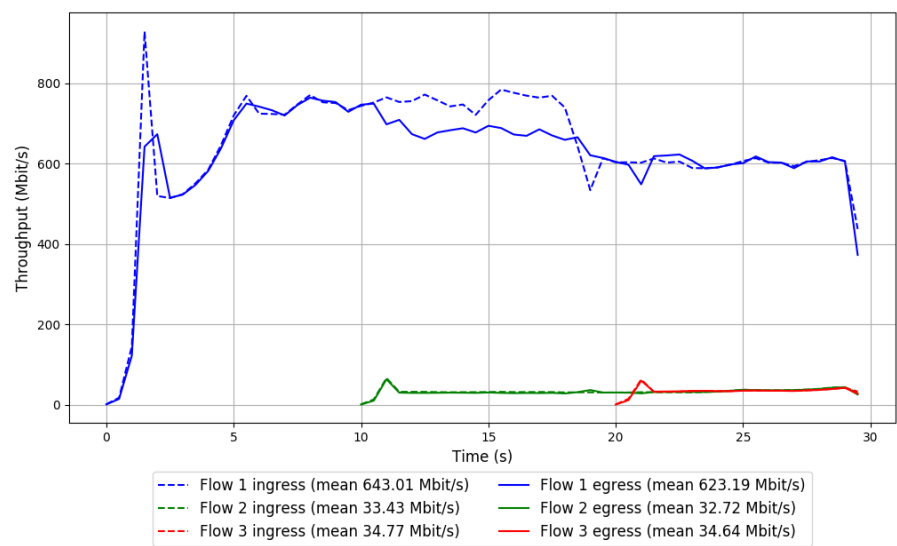


```
Run 2: Statistics of PCC

Start at: 2017-11-16 23:47:39
End at: 2017-11-16 23:48:09

# Below is generated by plot.py at 2017-11-17 04:06:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 656.08 Mbit/s
95th percentile per-packet one-way delay: 155.702 ms
Loss rate: 3.37%
-- Flow 1:
Average throughput: 623.19 Mbit/s
95th percentile per-packet one-way delay: 155.742 ms
Loss rate: 3.42%
-- Flow 2:
Average throughput: 32.72 Mbit/s
95th percentile per-packet one-way delay: 155.443 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 34.64 Mbit/s
95th percentile per-packet one-way delay: 92.168 ms
Loss rate: 1.49%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-16 23:59:33

End at: 2017-11-17 00:00:03

Below is generated by plot.py at 2017-11-17 04:06:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 642.73 Mbit/s

95th percentile per-packet one-way delay: 155.130 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 619.78 Mbit/s

95th percentile per-packet one-way delay: 154.752 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 141.717 ms

Loss rate: 0.78%

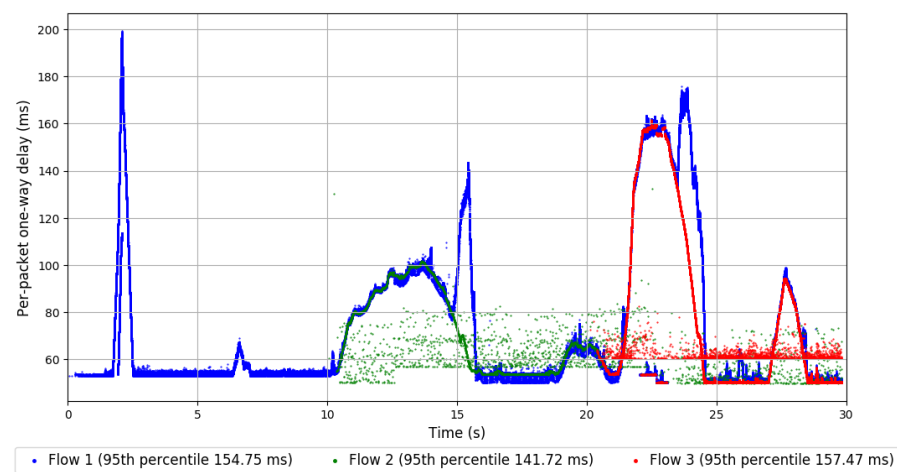
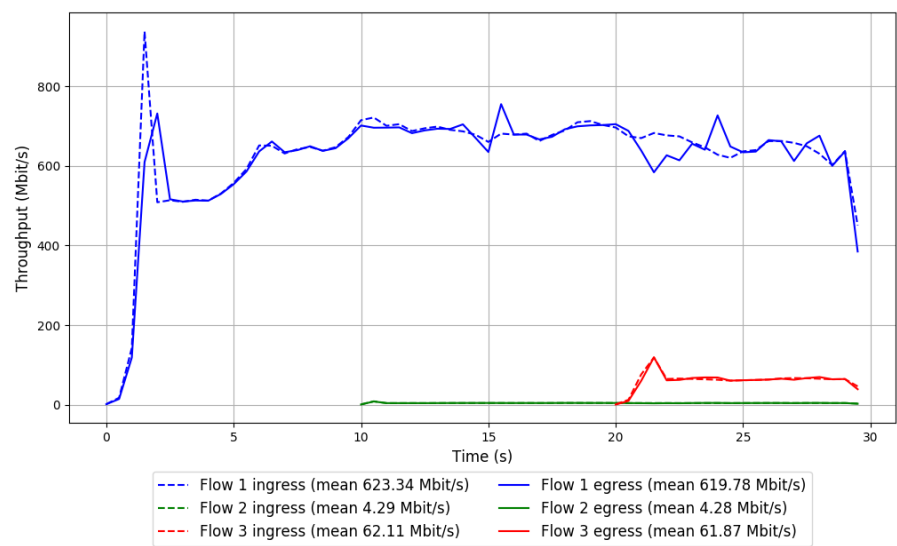
-- Flow 3:

Average throughput: 61.87 Mbit/s

95th percentile per-packet one-way delay: 157.475 ms

Loss rate: 1.66%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-17 00:11:37

End at: 2017-11-17 00:12:07

Below is generated by plot.py at 2017-11-17 04:06:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 564.51 Mbit/s

95th percentile per-packet one-way delay: 94.401 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 541.09 Mbit/s

95th percentile per-packet one-way delay: 94.611 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 4.83 Mbit/s

95th percentile per-packet one-way delay: 82.050 ms

Loss rate: 1.06%

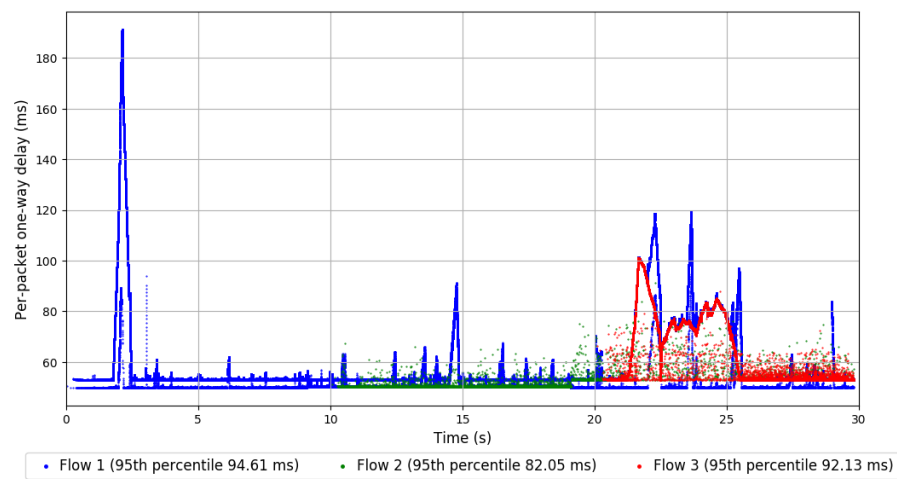
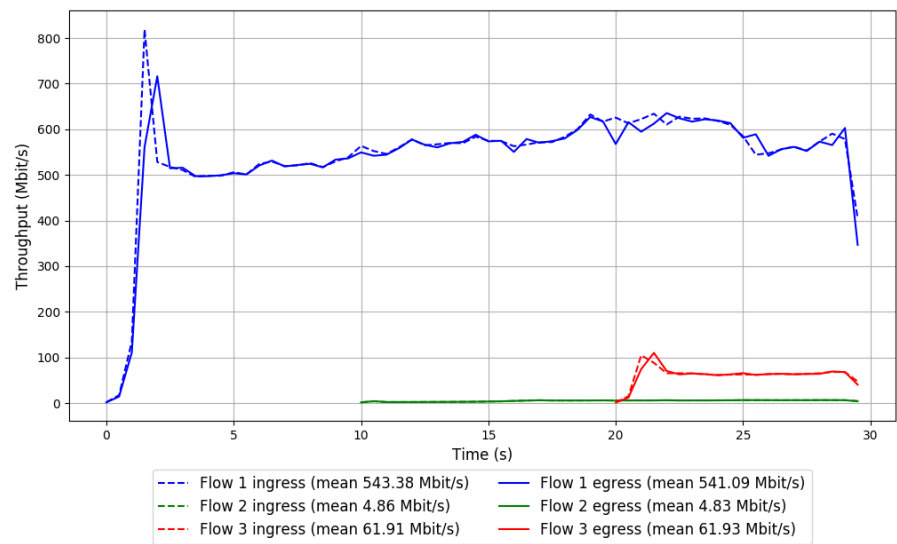
-- Flow 3:

Average throughput: 61.93 Mbit/s

95th percentile per-packet one-way delay: 92.131 ms

Loss rate: 1.16%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-17 00:23:41

End at: 2017-11-17 00:24:11

Below is generated by plot.py at 2017-11-17 04:06:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 595.21 Mbit/s

95th percentile per-packet one-way delay: 177.838 ms

Loss rate: 3.31%

-- Flow 1:

Average throughput: 517.73 Mbit/s

95th percentile per-packet one-way delay: 177.823 ms

Loss rate: 3.17%

-- Flow 2:

Average throughput: 115.71 Mbit/s

95th percentile per-packet one-way delay: 177.881 ms

Loss rate: 4.21%

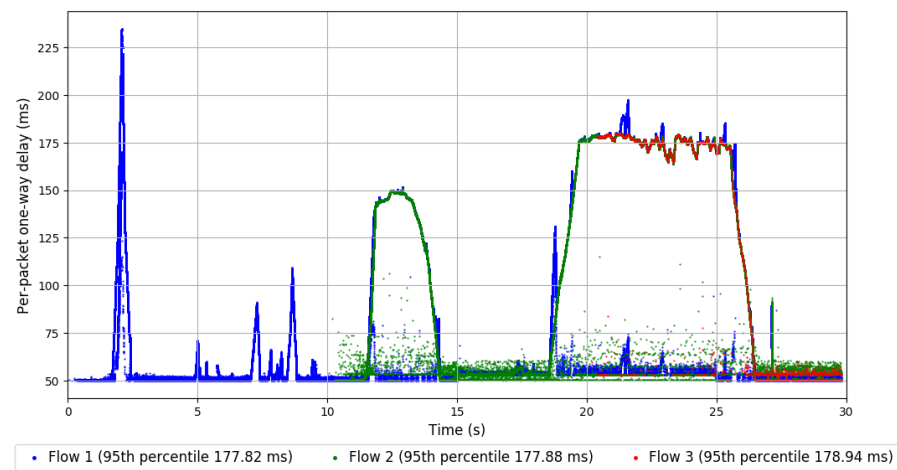
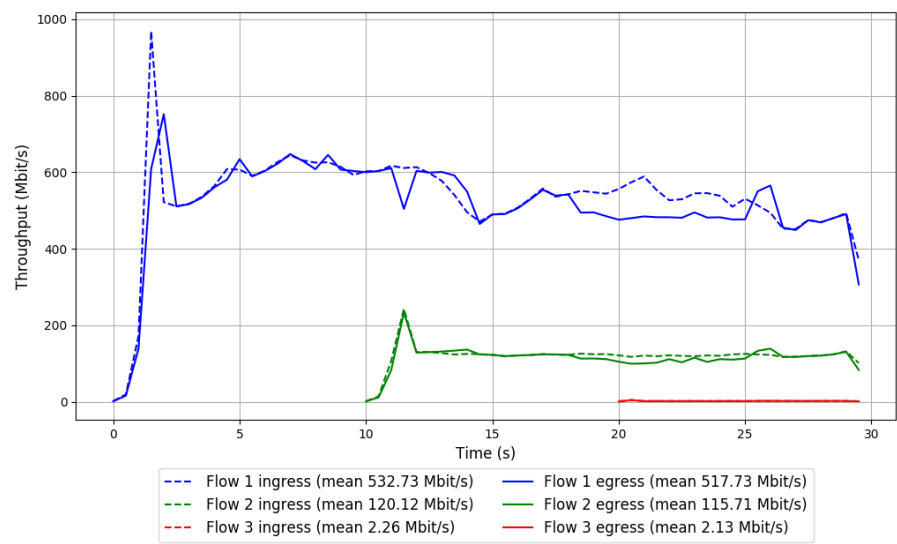
-- Flow 3:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 178.939 ms

Loss rate: 6.77%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-17 00:35:56

End at: 2017-11-17 00:36:26

Below is generated by plot.py at 2017-11-17 04:06:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 596.03 Mbit/s

95th percentile per-packet one-way delay: 176.815 ms

Loss rate: 2.59%

-- Flow 1:

Average throughput: 573.06 Mbit/s

95th percentile per-packet one-way delay: 176.854 ms

Loss rate: 2.61%

-- Flow 2:

Average throughput: 31.99 Mbit/s

95th percentile per-packet one-way delay: 176.426 ms

Loss rate: 1.91%

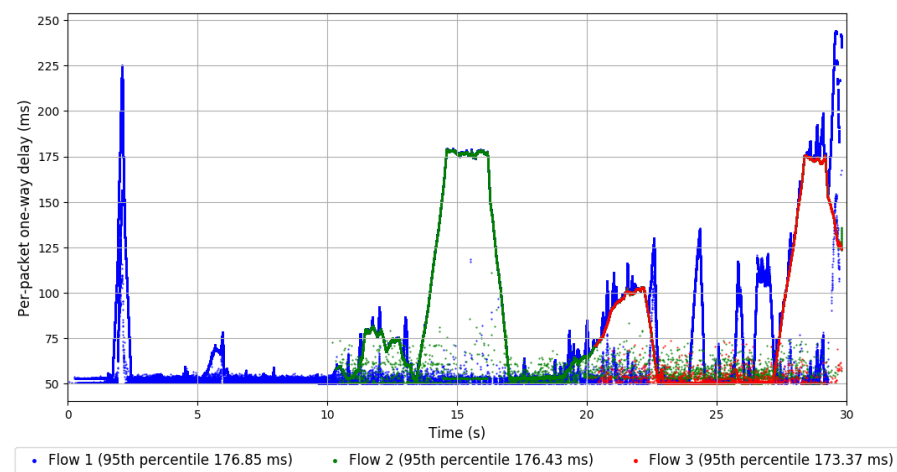
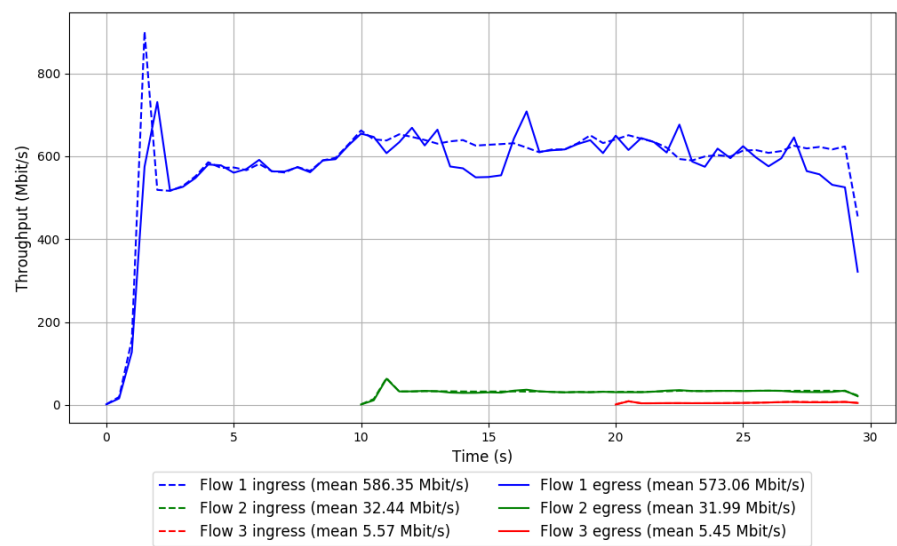
-- Flow 3:

Average throughput: 5.45 Mbit/s

95th percentile per-packet one-way delay: 173.367 ms

Loss rate: 3.20%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-17 00:48:28

End at: 2017-11-17 00:48:58

Below is generated by plot.py at 2017-11-17 04:07:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 640.54 Mbit/s

95th percentile per-packet one-way delay: 174.292 ms

Loss rate: 2.00%

-- Flow 1:

Average throughput: 560.86 Mbit/s

95th percentile per-packet one-way delay: 179.391 ms

Loss rate: 2.04%

-- Flow 2:

Average throughput: 115.68 Mbit/s

95th percentile per-packet one-way delay: 153.420 ms

Loss rate: 1.65%

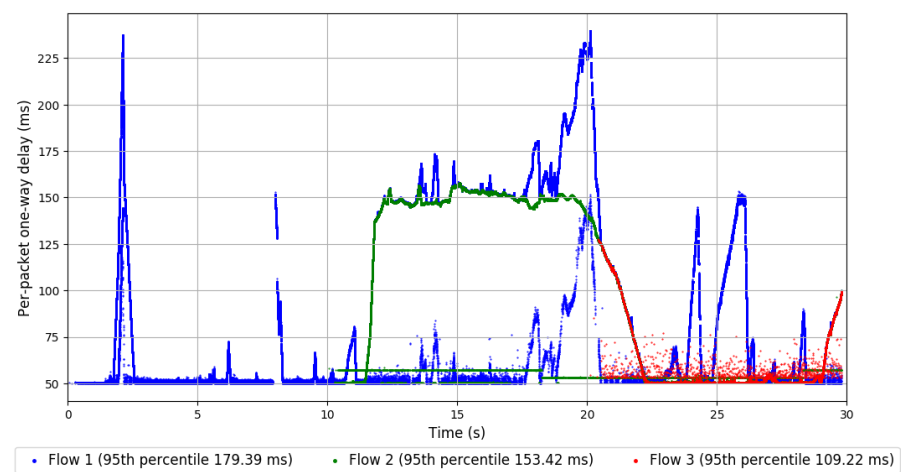
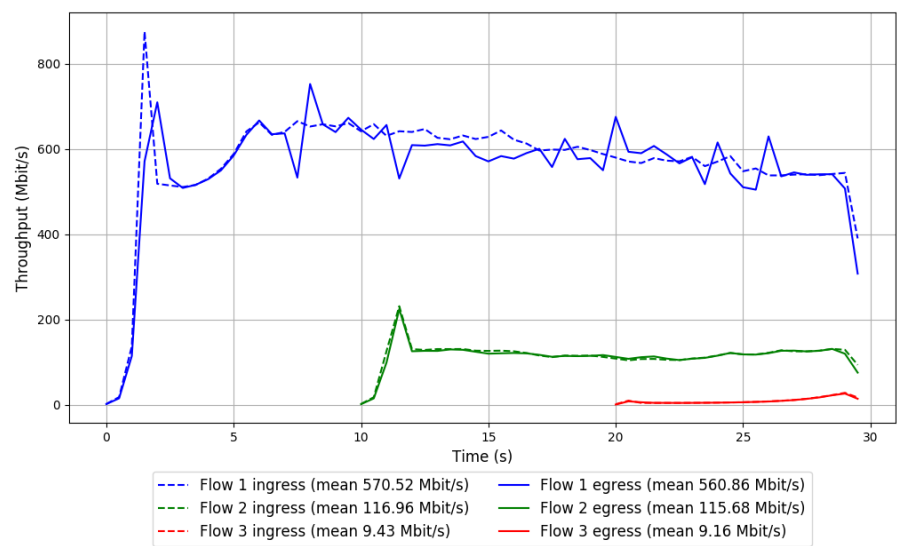
-- Flow 3:

Average throughput: 9.16 Mbit/s

95th percentile per-packet one-way delay: 109.221 ms

Loss rate: 3.91%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-17 01:00:46

End at: 2017-11-17 01:01:16

Below is generated by plot.py at 2017-11-17 04:07:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 615.44 Mbit/s

95th percentile per-packet one-way delay: 253.340 ms

Loss rate: 4.00%

-- Flow 1:

Average throughput: 543.05 Mbit/s

95th percentile per-packet one-way delay: 254.050 ms

Loss rate: 4.27%

-- Flow 2:

Average throughput: 77.51 Mbit/s

95th percentile per-packet one-way delay: 154.576 ms

Loss rate: 1.60%

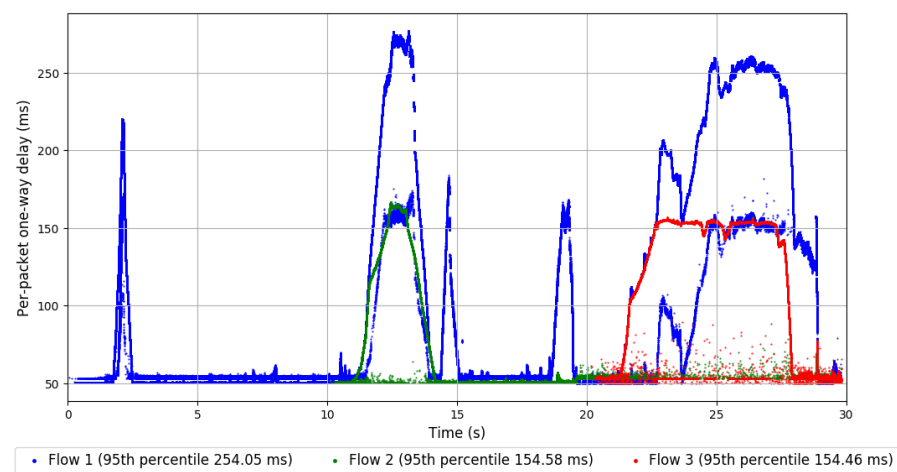
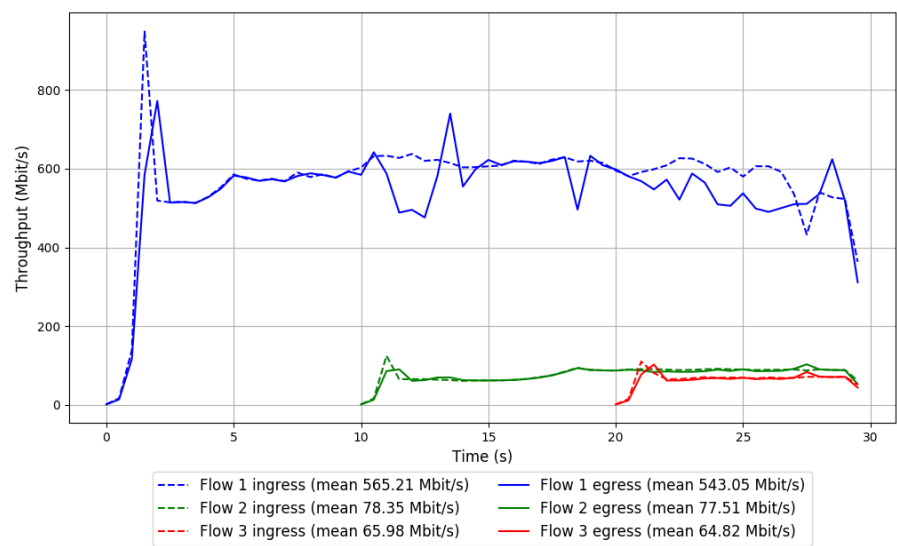
-- Flow 3:

Average throughput: 64.82 Mbit/s

95th percentile per-packet one-way delay: 154.456 ms

Loss rate: 2.76%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-17 01:13:06

End at: 2017-11-17 01:13:36

Below is generated by plot.py at 2017-11-17 04:16:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 602.85 Mbit/s

95th percentile per-packet one-way delay: 166.716 ms

Loss rate: 2.17%

-- Flow 1:

Average throughput: 523.46 Mbit/s

95th percentile per-packet one-way delay: 167.608 ms

Loss rate: 2.21%

-- Flow 2:

Average throughput: 117.65 Mbit/s

95th percentile per-packet one-way delay: 157.781 ms

Loss rate: 1.86%

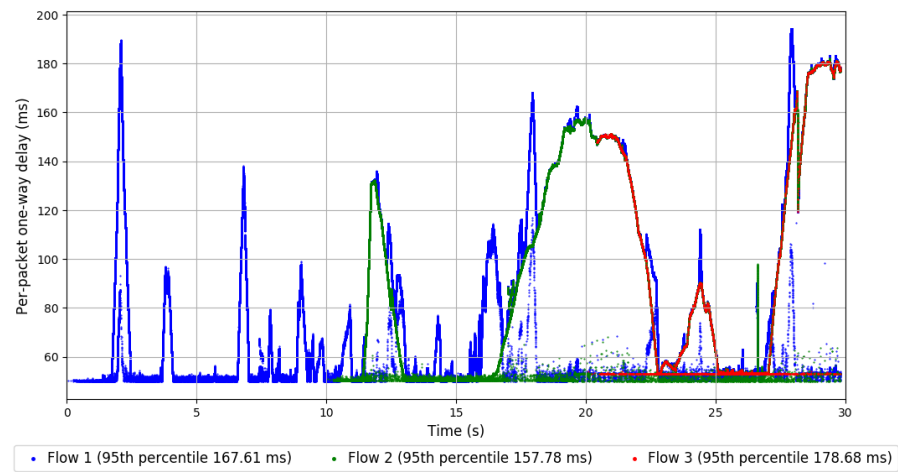
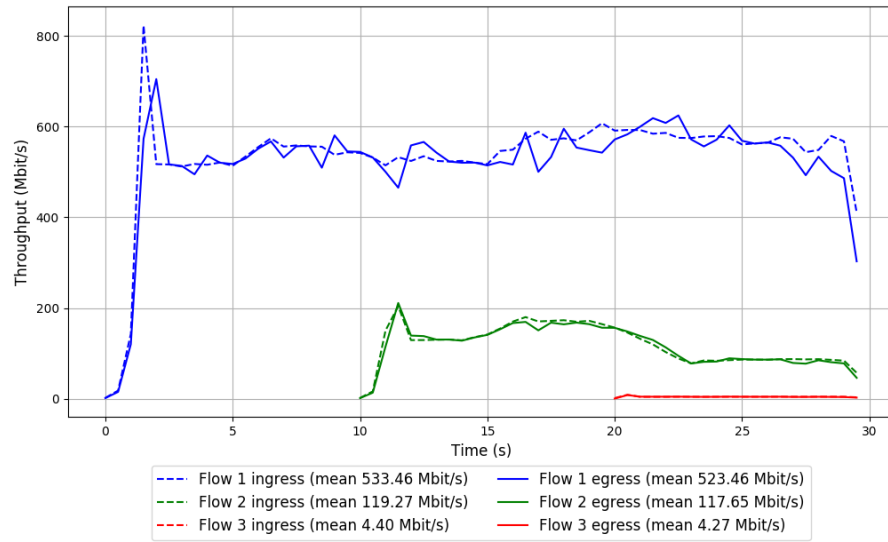
-- Flow 3:

Average throughput: 4.27 Mbit/s

95th percentile per-packet one-way delay: 178.679 ms

Loss rate: 3.90%

Run 9: Report of PCC — Data Link

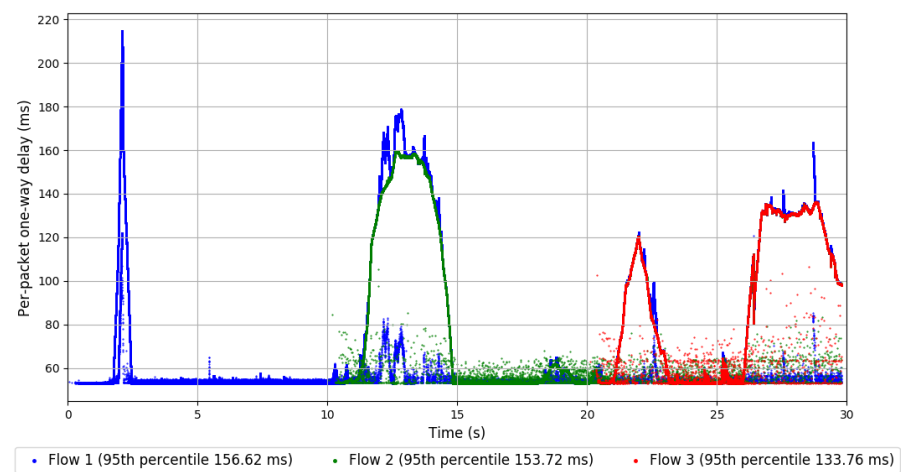
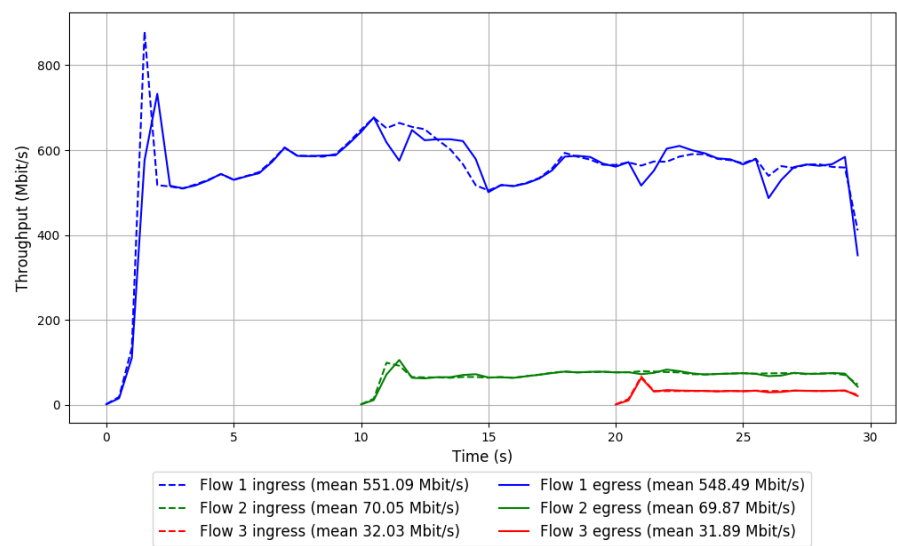


```
Run 10: Statistics of PCC

Start at: 2017-11-17 01:24:45
End at: 2017-11-17 01:25:15

# Below is generated by plot.py at 2017-11-17 04:17:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 605.23 Mbit/s
95th percentile per-packet one-way delay: 156.252 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 548.49 Mbit/s
95th percentile per-packet one-way delay: 156.620 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 69.87 Mbit/s
95th percentile per-packet one-way delay: 153.723 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 31.89 Mbit/s
95th percentile per-packet one-way delay: 133.760 ms
Loss rate: 1.63%
```

Run 10: Report of PCC — Data Link

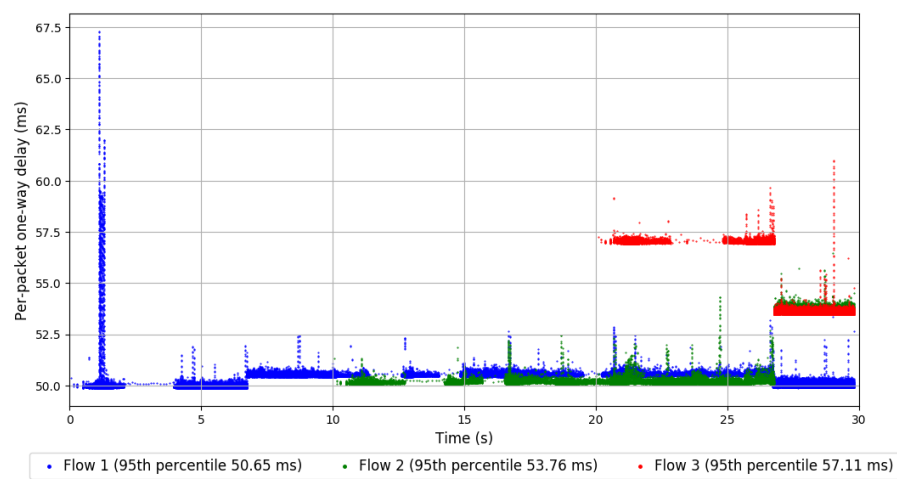
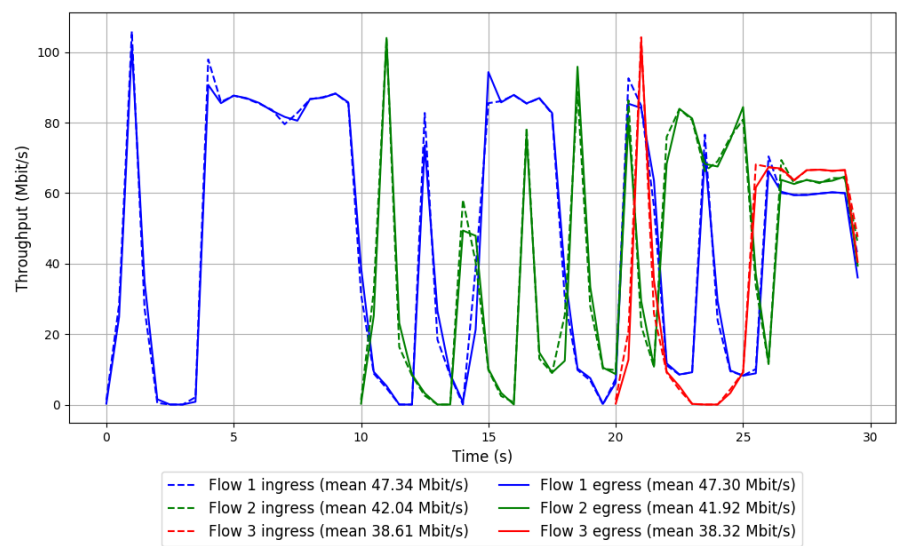


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-16 23:37:59
End at: 2017-11-16 23:38:29

# Below is generated by plot.py at 2017-11-17 04:17:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.62 Mbit/s
95th percentile per-packet one-way delay: 56.966 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 47.30 Mbit/s
95th percentile per-packet one-way delay: 50.650 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 41.92 Mbit/s
95th percentile per-packet one-way delay: 53.759 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 38.32 Mbit/s
95th percentile per-packet one-way delay: 57.109 ms
Loss rate: 1.87%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-11-16 23:49:52

End at: 2017-11-16 23:50:22

Below is generated by plot.py at 2017-11-17 04:17:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 39.25 Mbit/s

95th percentile per-packet one-way delay: 57.087 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 0.20 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.03 Mbit/s

95th percentile per-packet one-way delay: 57.105 ms

Loss rate: 0.96%

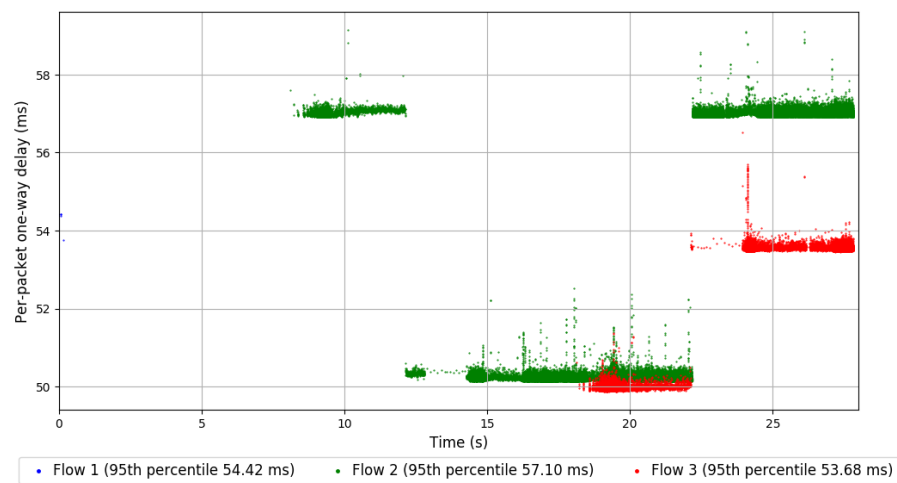
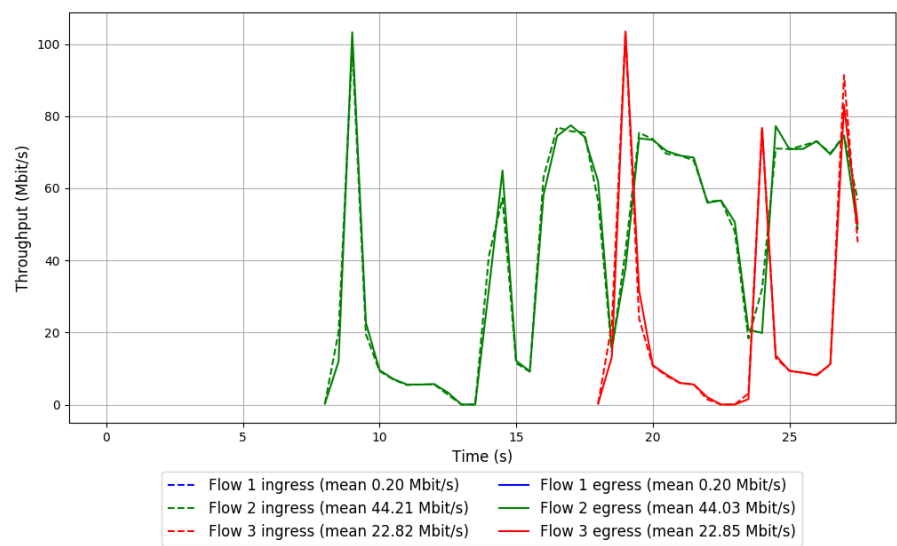
-- Flow 3:

Average throughput: 22.85 Mbit/s

95th percentile per-packet one-way delay: 53.677 ms

Loss rate: 0.94%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-17 00:01:43

End at: 2017-11-17 00:02:13

Below is generated by plot.py at 2017-11-17 04:17:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.44 Mbit/s

95th percentile per-packet one-way delay: 57.046 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 245.33 Mbit/s

95th percentile per-packet one-way delay: 51.110 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.80 Mbit/s

95th percentile per-packet one-way delay: 57.062 ms

Loss rate: 1.17%

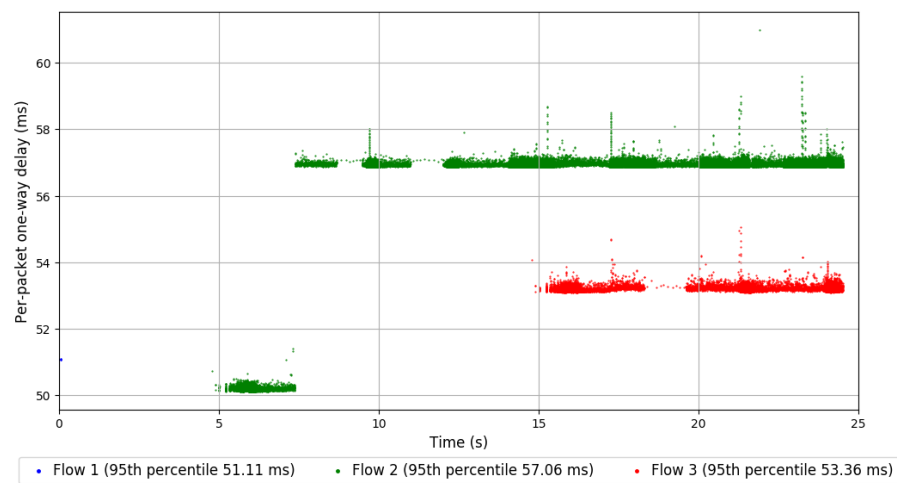
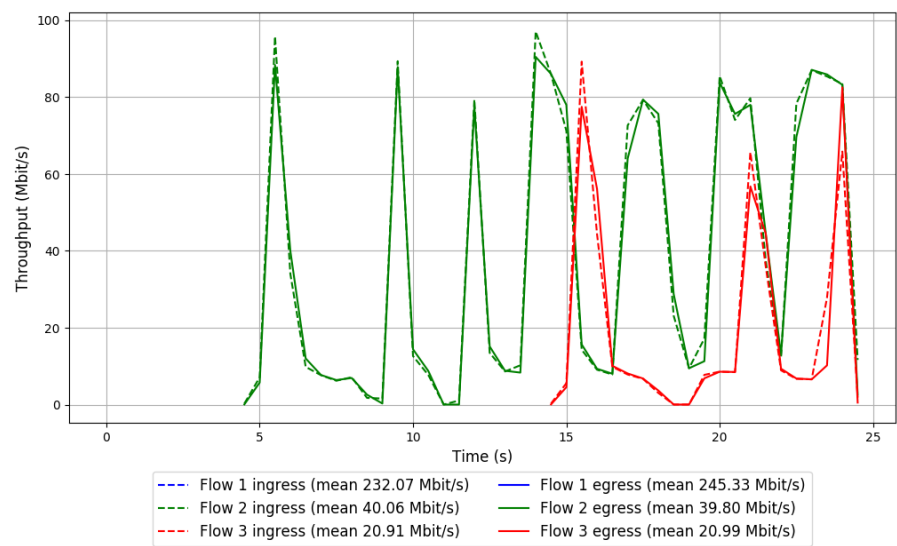
-- Flow 3:

Average throughput: 20.99 Mbit/s

95th percentile per-packet one-way delay: 53.362 ms

Loss rate: 0.72%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-17 00:13:46

End at: 2017-11-17 00:14:16

Below is generated by plot.py at 2017-11-17 04:17:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.96 Mbit/s

95th percentile per-packet one-way delay: 60.450 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 107.37 Mbit/s

95th percentile per-packet one-way delay: 53.751 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.93 Mbit/s

95th percentile per-packet one-way delay: 60.462 ms

Loss rate: 0.93%

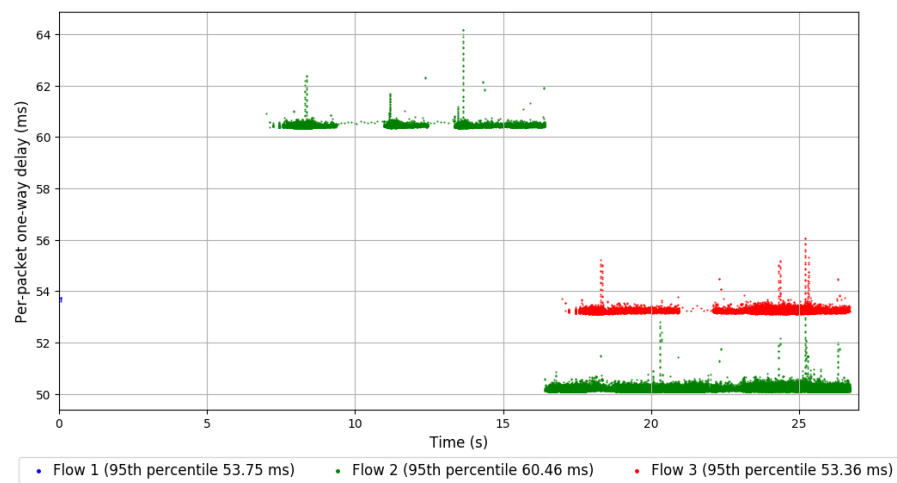
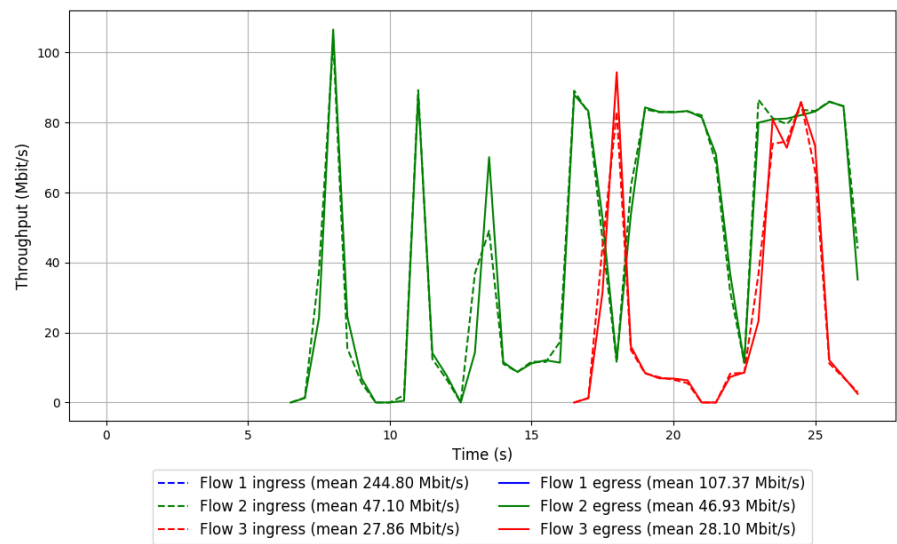
-- Flow 3:

Average throughput: 28.10 Mbit/s

95th percentile per-packet one-way delay: 53.364 ms

Loss rate: 0.22%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-17 00:25:51

End at: 2017-11-17 00:26:21

Below is generated by plot.py at 2017-11-17 04:17:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.32 Mbit/s

95th percentile per-packet one-way delay: 57.143 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 47.50 Mbit/s

95th percentile per-packet one-way delay: 57.167 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 35.58 Mbit/s

95th percentile per-packet one-way delay: 57.150 ms

Loss rate: 1.20%

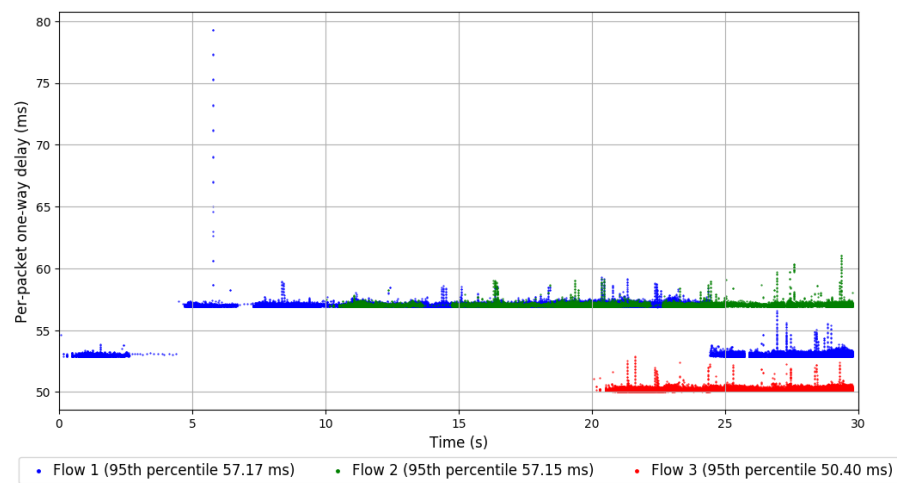
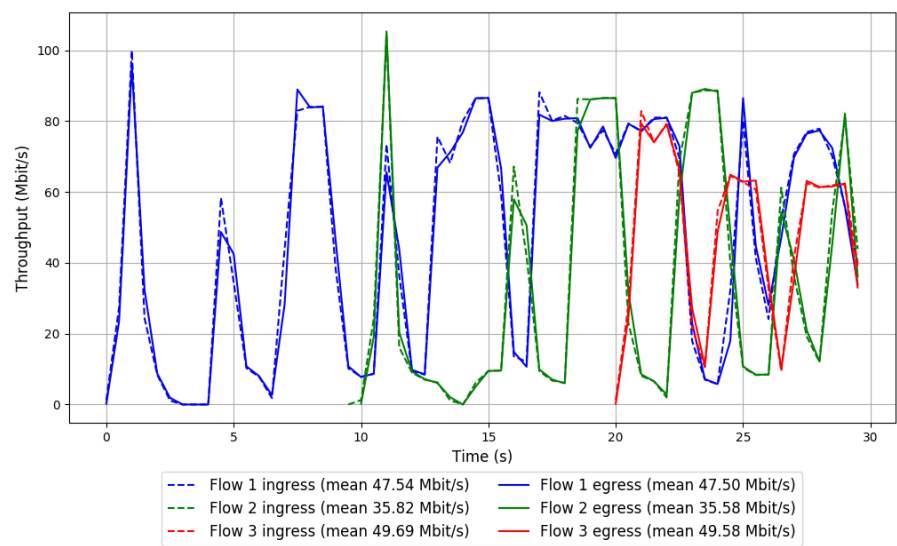
-- Flow 3:

Average throughput: 49.58 Mbit/s

95th percentile per-packet one-way delay: 50.395 ms

Loss rate: 1.26%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-17 00:38:08

End at: 2017-11-17 00:38:38

Below is generated by plot.py at 2017-11-17 04:17:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.76 Mbit/s

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

Loss rate: 1.39%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 53.111 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.80 Mbit/s

95th percentile per-packet one-way delay: 53.366 ms

Loss rate: 0.99%

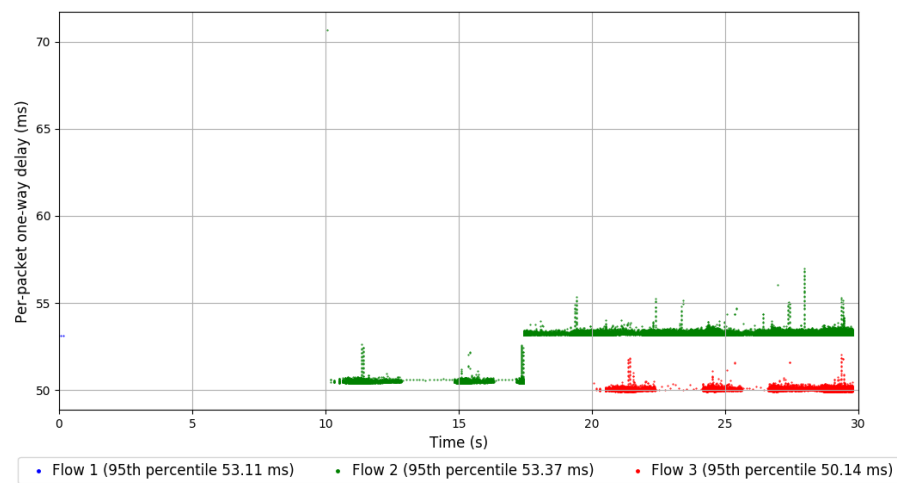
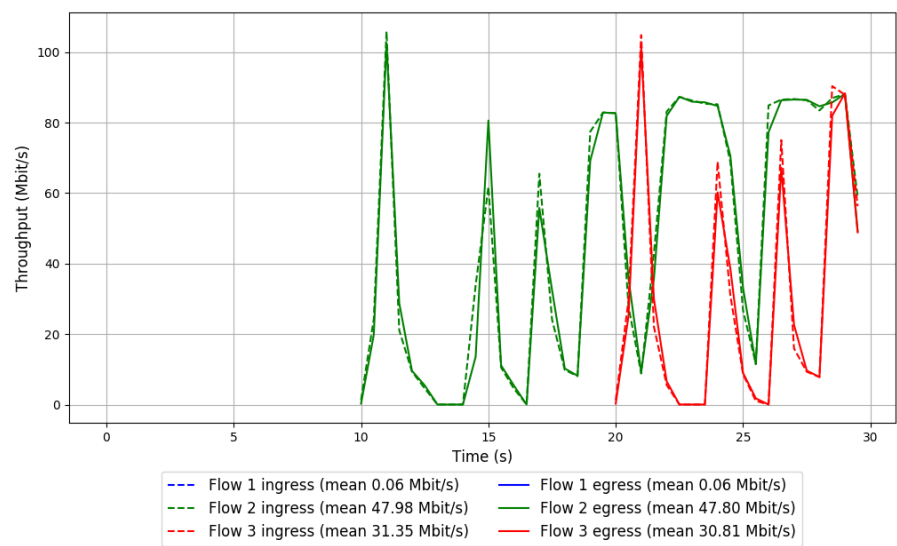
-- Flow 3:

Average throughput: 30.81 Mbit/s

95th percentile per-packet one-way delay: 50.140 ms

Loss rate: 2.63%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-17 00:50:40

End at: 2017-11-17 00:51:10

Below is generated by plot.py at 2017-11-17 04:17:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.68 Mbit/s

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

Loss rate: 0.61%

-- Flow 1:

Average throughput: 48.28 Mbit/s

95th percentile per-packet one-way delay: 56.965 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 61.65 Mbit/s

95th percentile per-packet one-way delay: 53.487 ms

Loss rate: 0.57%

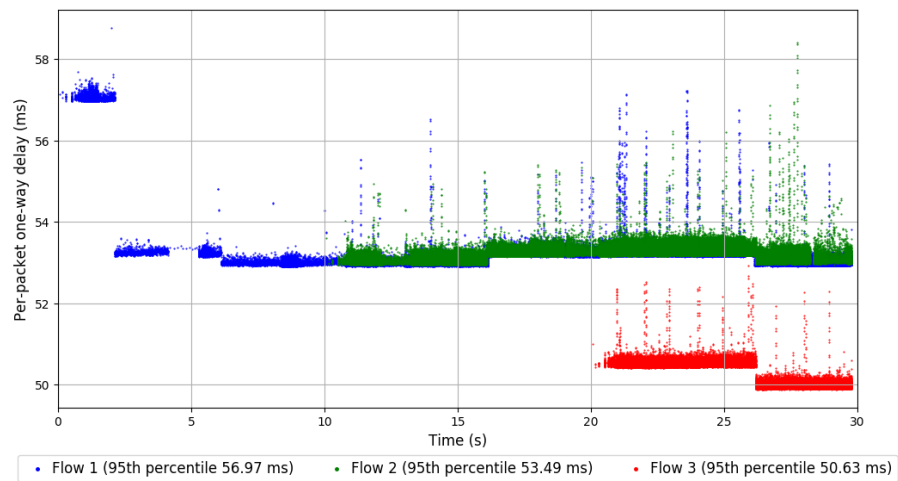
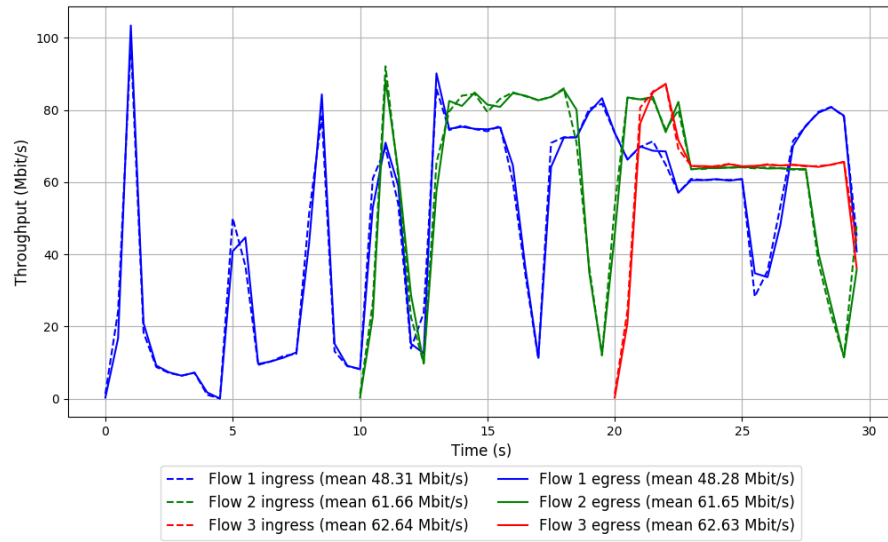
-- Flow 3:

Average throughput: 62.63 Mbit/s

95th percentile per-packet one-way delay: 50.633 ms

Loss rate: 1.08%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-17 01:03:00

End at: 2017-11-17 01:03:30

Below is generated by plot.py at 2017-11-17 04:17:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.04 Mbit/s

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

Loss rate: 0.73%

-- Flow 1:

Average throughput: 43.89 Mbit/s

95th percentile per-packet one-way delay: 50.389 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 38.61 Mbit/s

95th percentile per-packet one-way delay: 53.560 ms

Loss rate: 0.88%

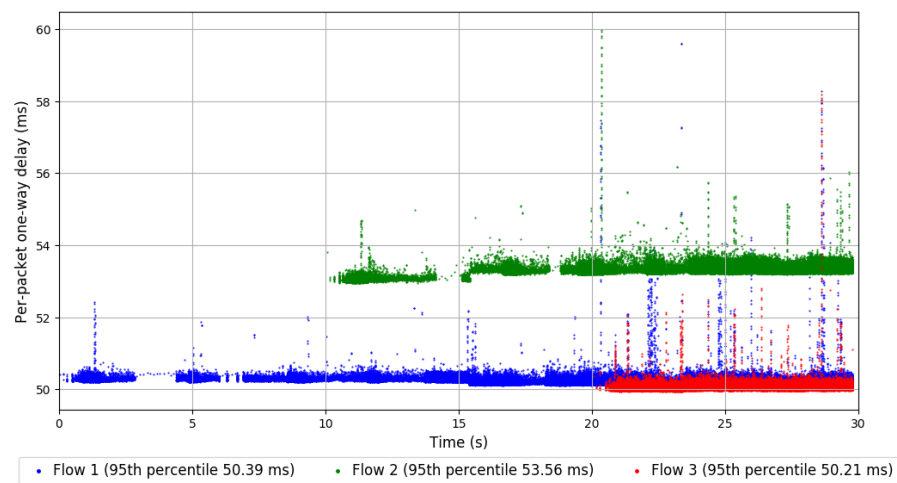
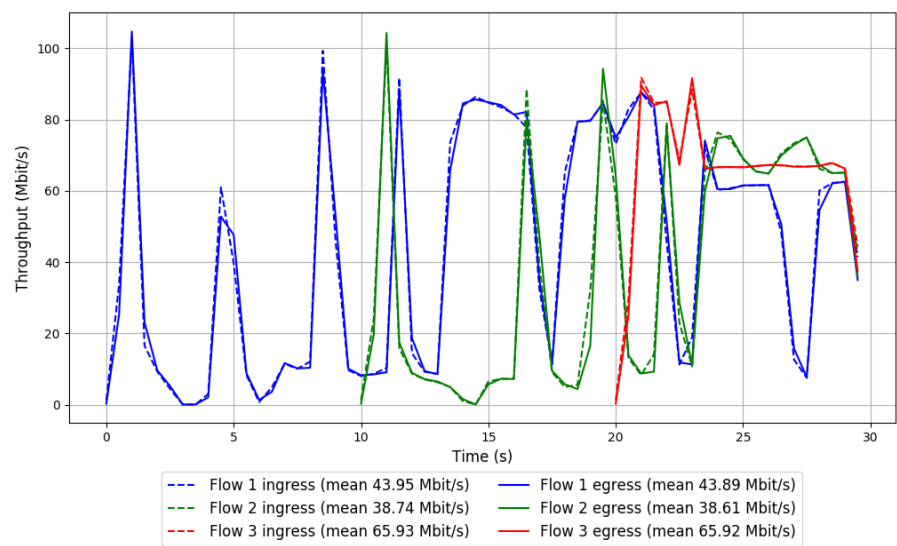
-- Flow 3:

Average throughput: 65.92 Mbit/s

95th percentile per-packet one-way delay: 50.206 ms

Loss rate: 1.06%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-17 01:15:15

End at: 2017-11-17 01:15:45

Below is generated by plot.py at 2017-11-17 04:17:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 25.25 Mbit/s

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

Loss rate: 0.36%

-- Flow 1:

Average throughput: 107.02 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 25.91 Mbit/s

95th percentile per-packet one-way delay: 50.745 ms

Loss rate: 0.18%

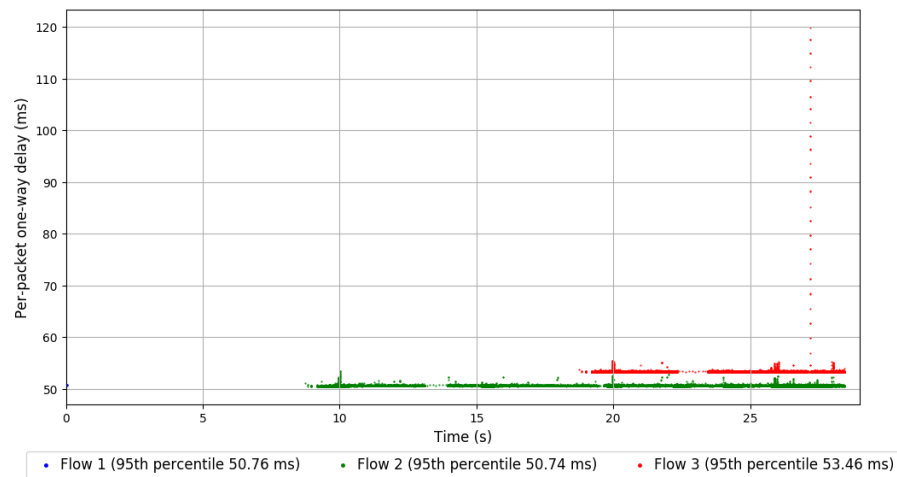
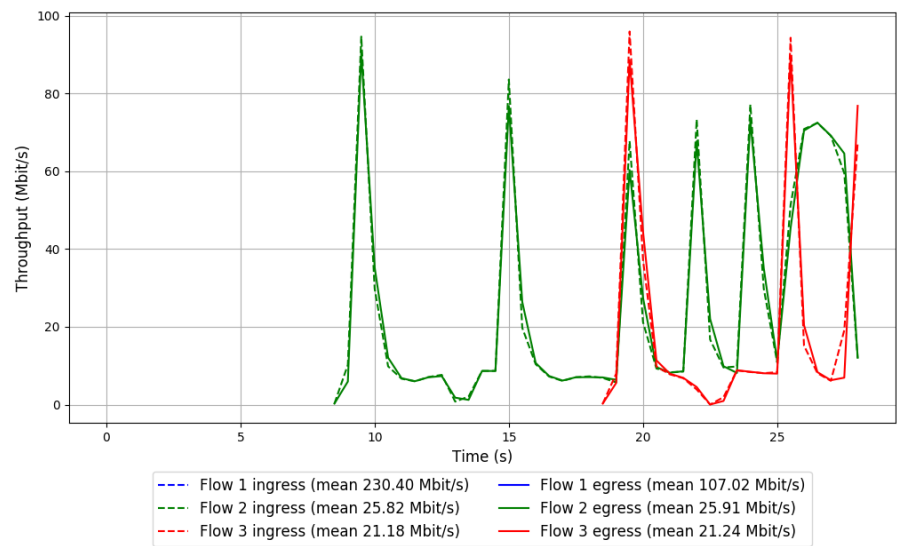
-- Flow 3:

Average throughput: 21.24 Mbit/s

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

Loss rate: 0.80%

Run 9: Report of QUIC Cubic — Data Link

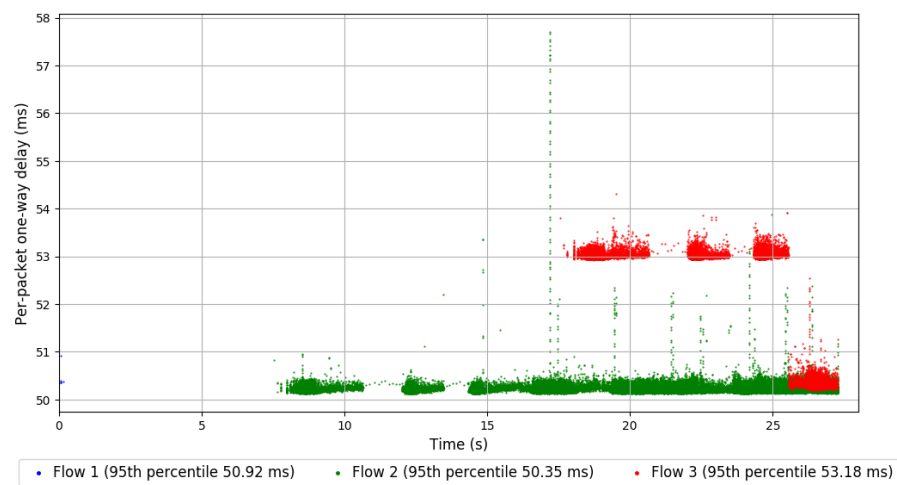
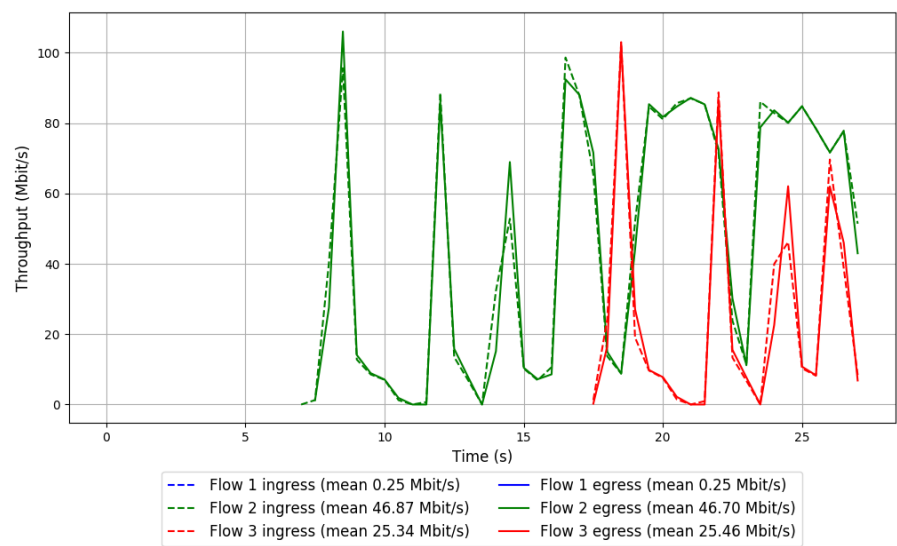


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-11-17 01:26:58
End at: 2017-11-17 01:27:28

# Below is generated by plot.py at 2017-11-17 04:17:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.93 Mbit/s
95th percentile per-packet one-way delay: 53.057 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 50.923 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.70 Mbit/s
95th percentile per-packet one-way delay: 50.354 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 25.46 Mbit/s
95th percentile per-packet one-way delay: 53.181 ms
Loss rate: 0.57%
```

Run 10: Report of QUIC Cubic — Data Link

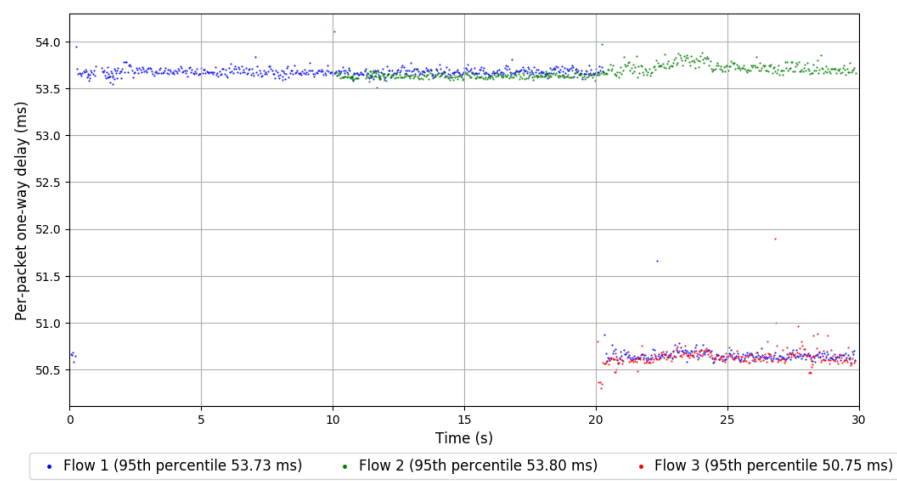
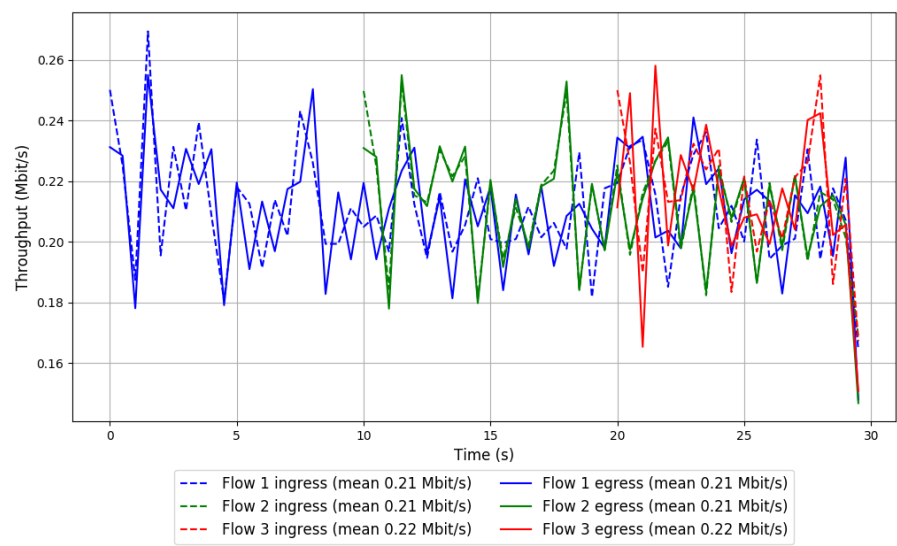


```
Run 1: Statistics of SCReAM

Start at: 2017-11-16 23:39:36
End at: 2017-11-16 23:40:06

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.754 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.729 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.805 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.754 ms
Loss rate: 1.12%
```

Run 1: Report of SReAM — Data Link

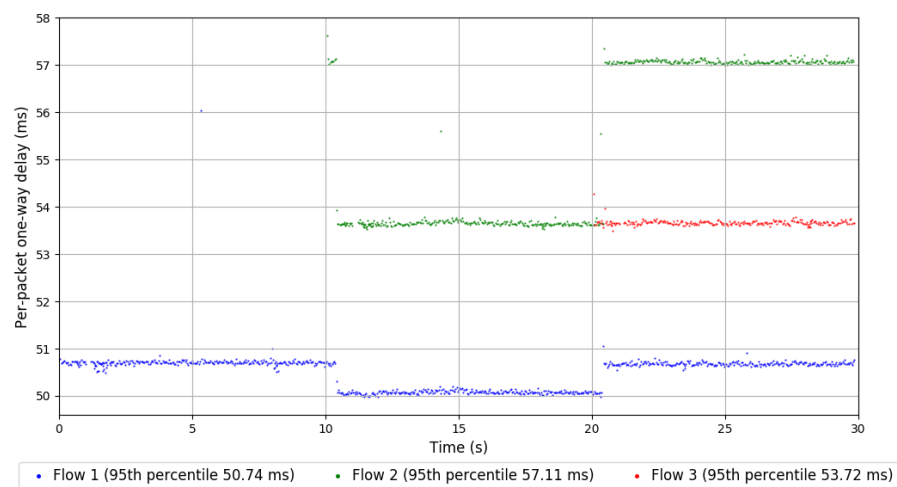
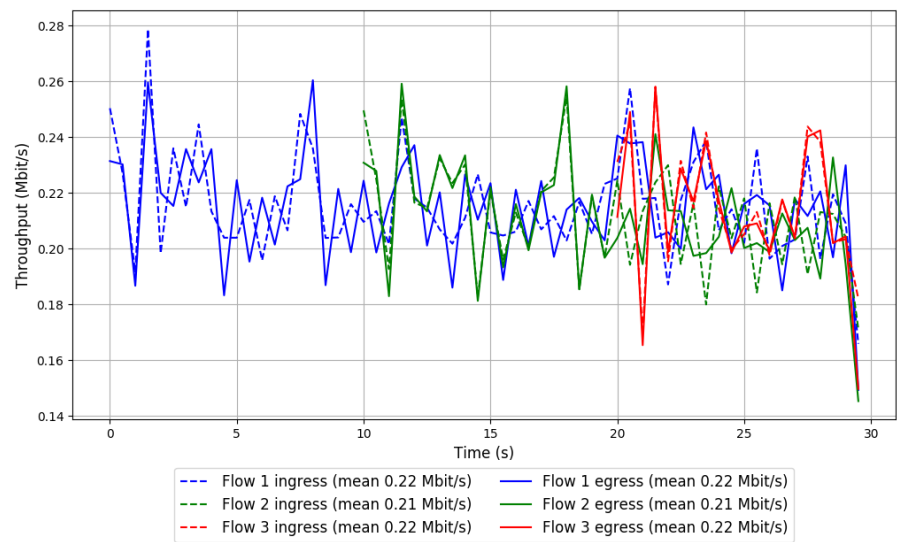


```
Run 2: Statistics of SCReAM

Start at: 2017-11-16 23:51:26
End at: 2017-11-16 23:51:56

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 57.077 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.739 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 57.109 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.718 ms
Loss rate: 1.11%
```

Run 2: Report of SReAM — Data Link

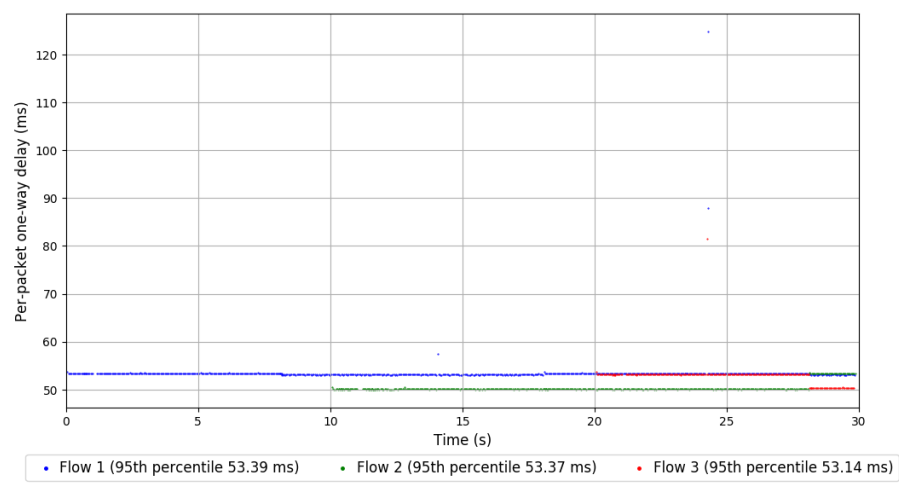
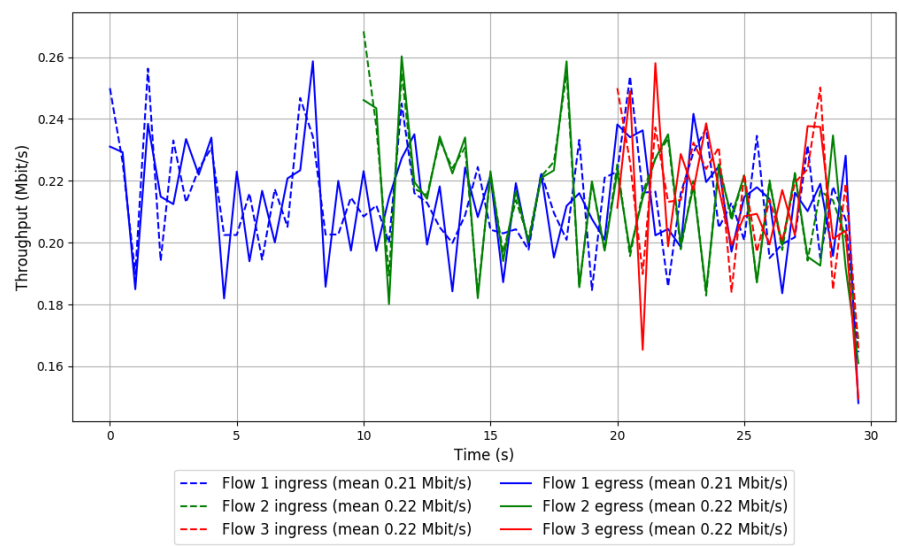


```
Run 3: Statistics of SCReAM

Start at: 2017-11-17 00:03:18
End at: 2017-11-17 00:03:48

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.383 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.393 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.369 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.144 ms
Loss rate: 1.11%
```


Run 3: Report of SReAM — Data Link

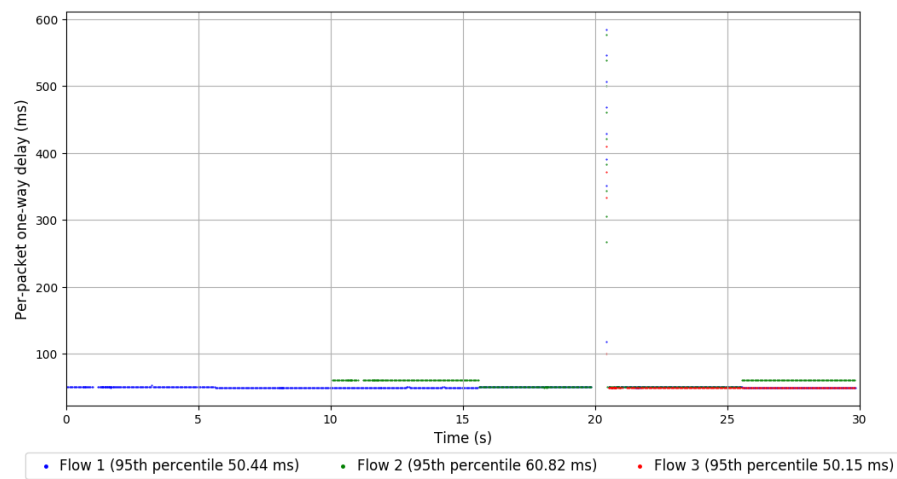
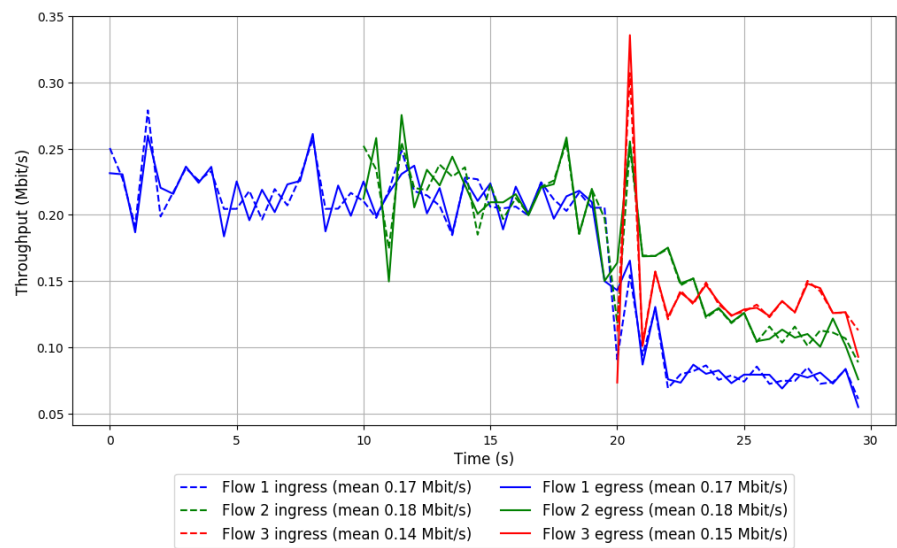


```
Run 4: Statistics of SCReAM

Start at: 2017-11-17 00:15:20
End at: 2017-11-17 00:15:50

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 60.648 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 50.443 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 60.823 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 50.146 ms
Loss rate: 1.07%
```

Run 4: Report of SReAM — Data Link

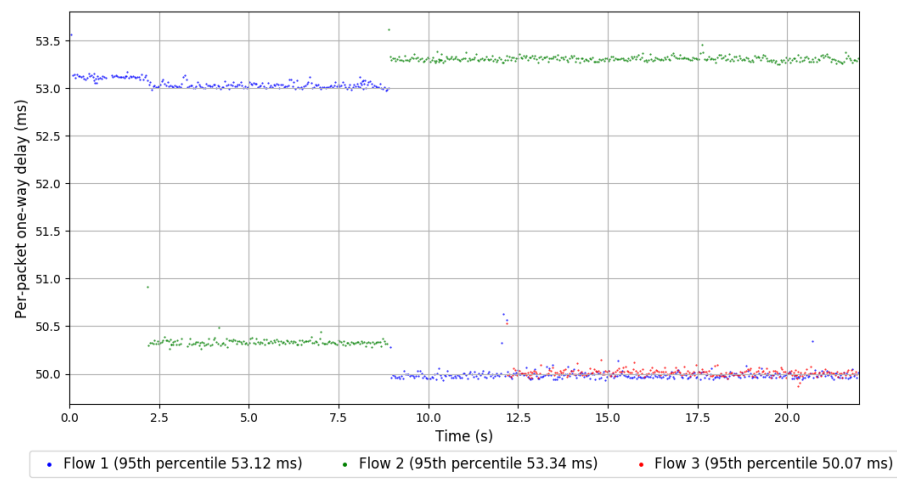
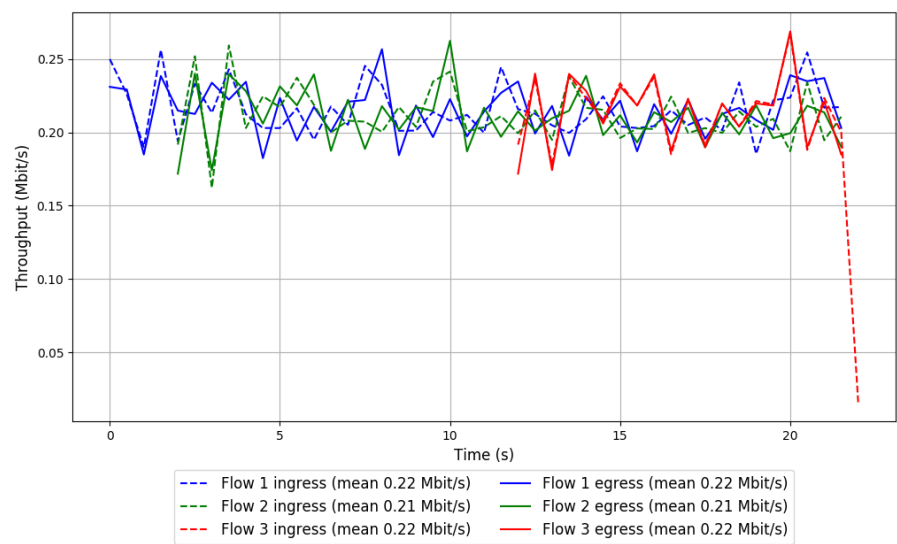


Run 5: Statistics of SReAM

Start at: 2017-11-17 00:27:29

End at: 2017-11-17 00:27:59

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-17 00:39:42

End at: 2017-11-17 00:40:12

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.304 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.672 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.175 ms

Loss rate: 0.42%

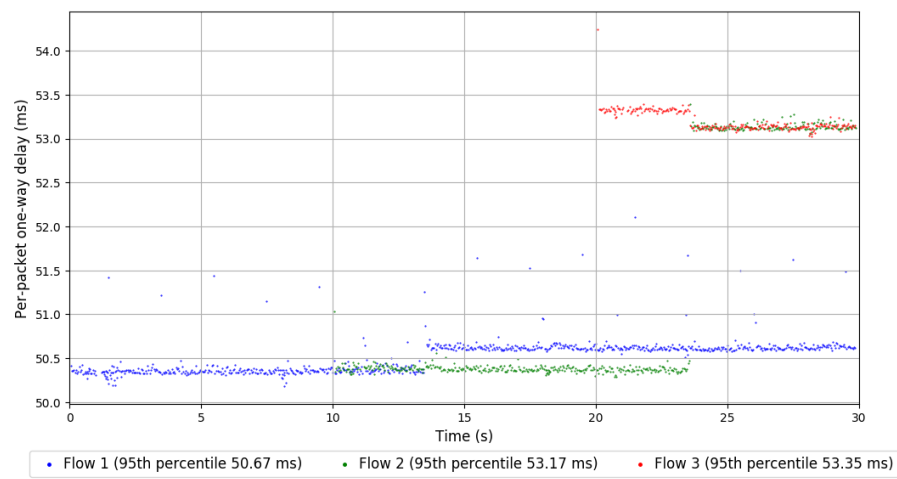
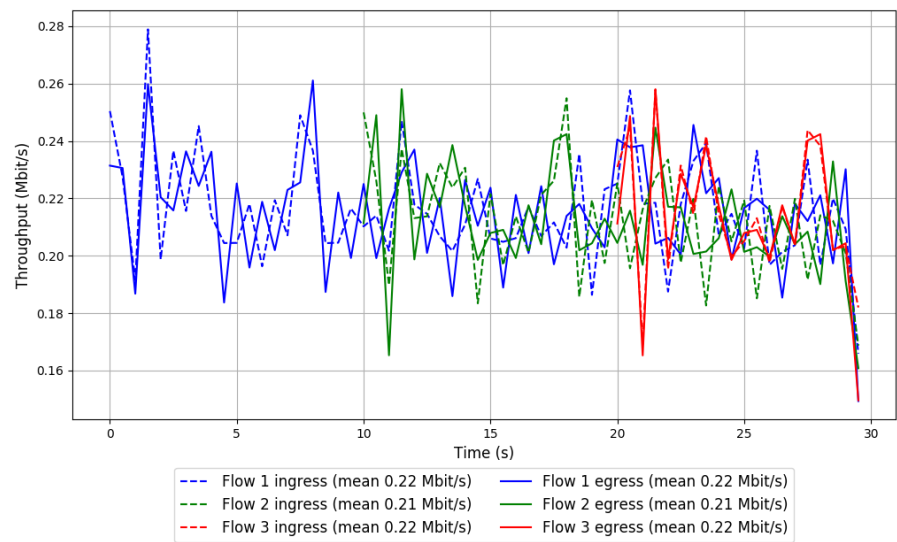
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 53.348 ms

Loss rate: 1.11%

Run 6: Report of SReAM — Data Link

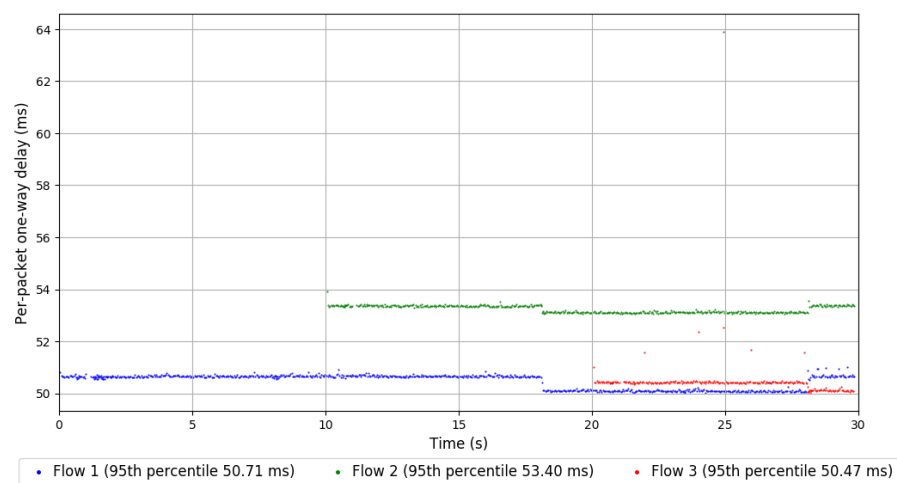
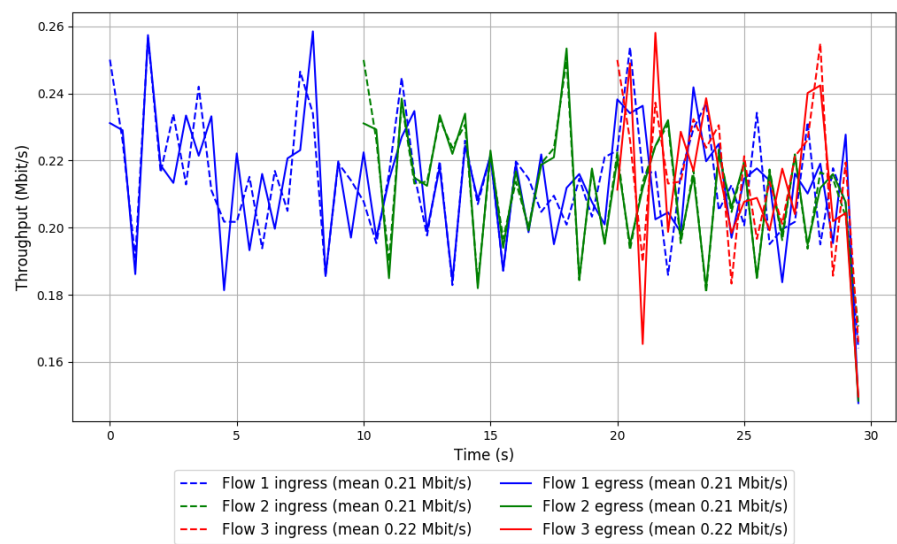


```
Run 7: Statistics of SReAM

Start at: 2017-11-17 00:52:18
End at: 2017-11-17 00:52:48

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.378 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.710 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.402 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.467 ms
Loss rate: 1.11%
```


Run 7: Report of SReAM — Data Link

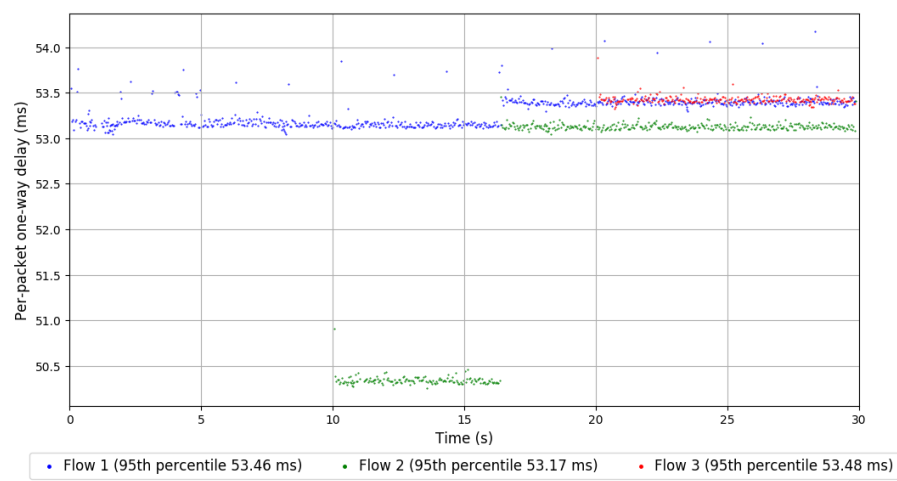
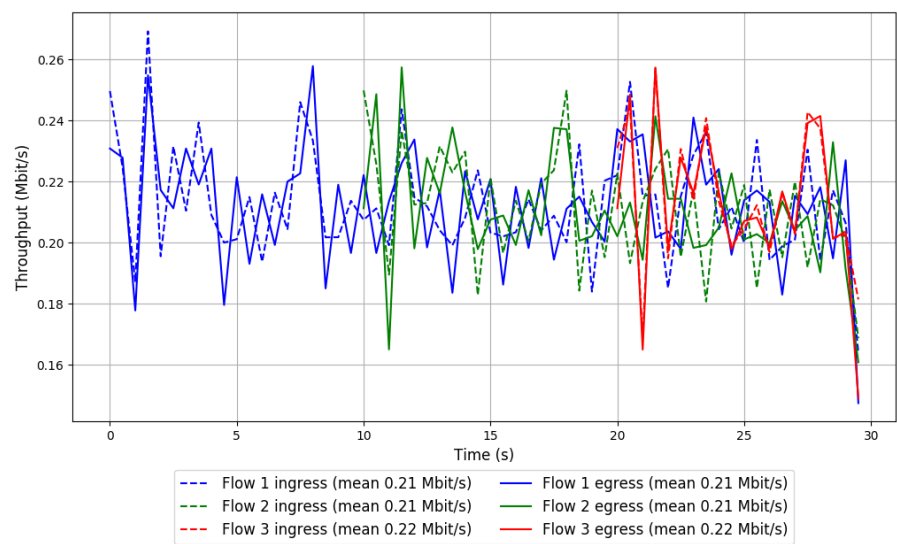


```
Run 8: Statistics of SCReAM

Start at: 2017-11-17 01:04:40
End at: 2017-11-17 01:05:10

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.456 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.460 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.174 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.485 ms
Loss rate: 1.11%
```

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2017-11-17 01:16:51

End at: 2017-11-17 01:17:21

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 53.418 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 50.664 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 53.448 ms

Loss rate: 0.62%

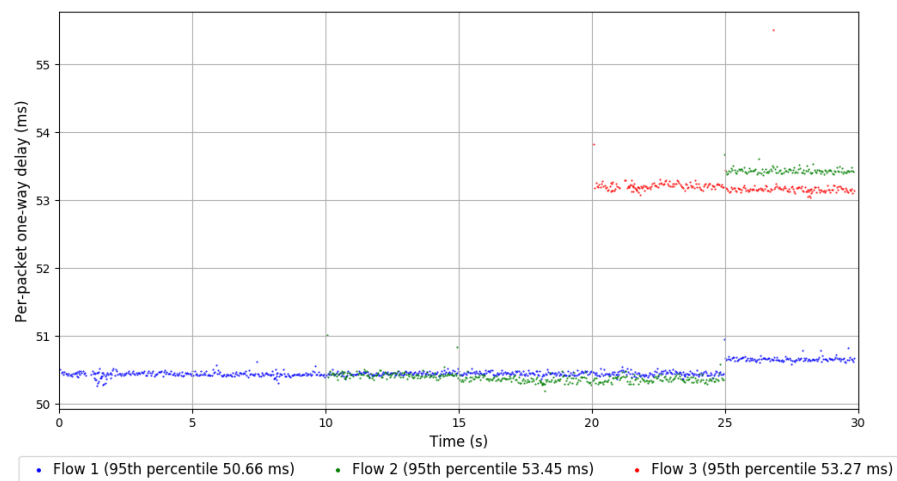
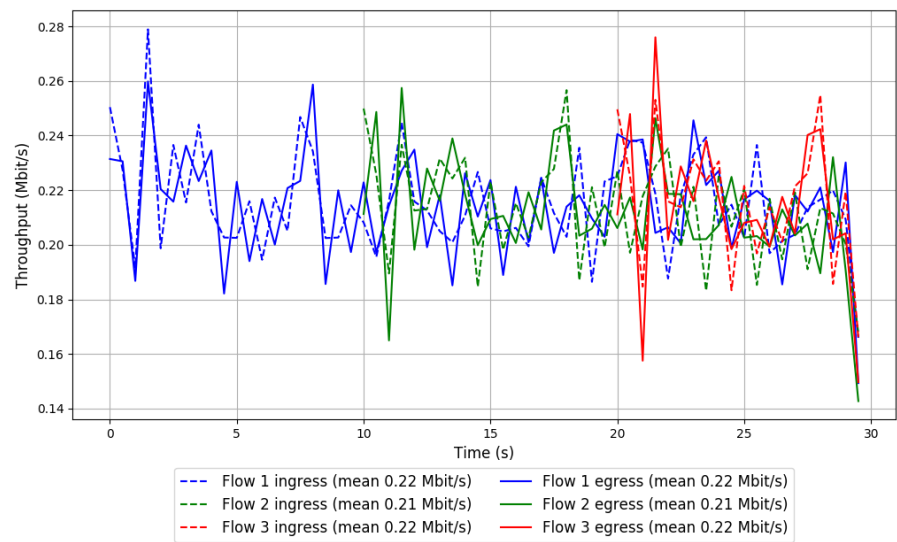
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 1.11%

Run 9: Report of SReAM — Data Link

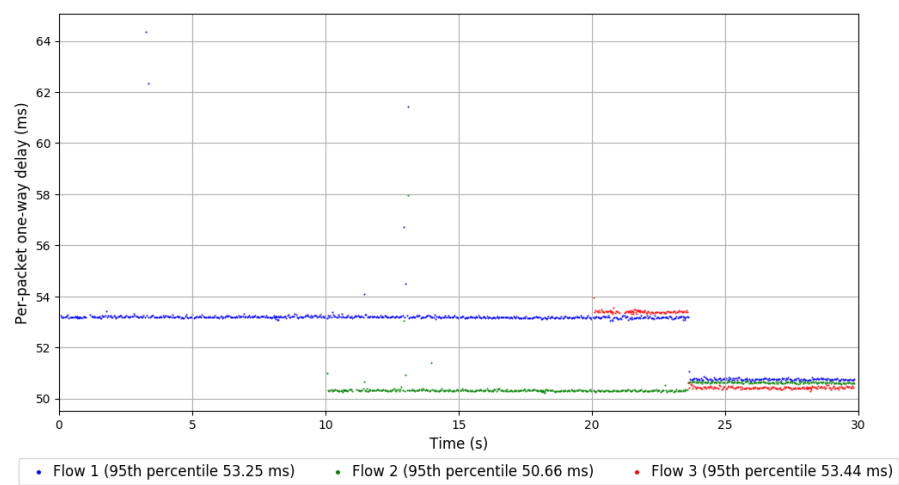
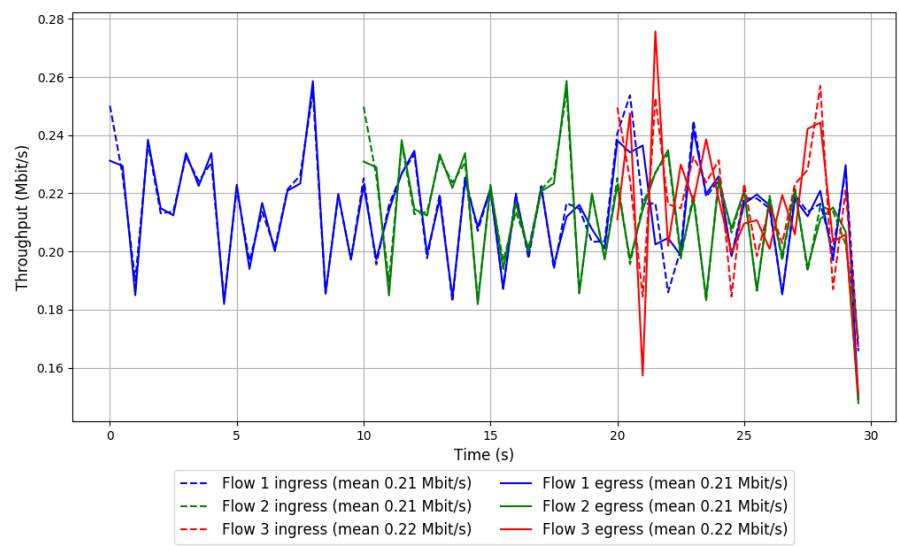


```
Run 10: Statistics of SCReAM

Start at: 2017-11-17 01:28:32
End at: 2017-11-17 01:29:02

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.380 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.252 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.660 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.438 ms
Loss rate: 1.11%
```

Run 10: Report of SCReAM — Data Link

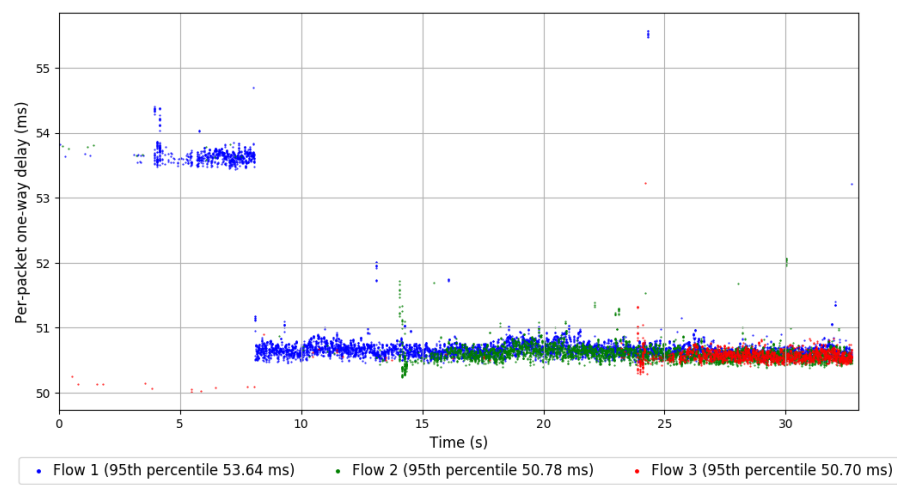
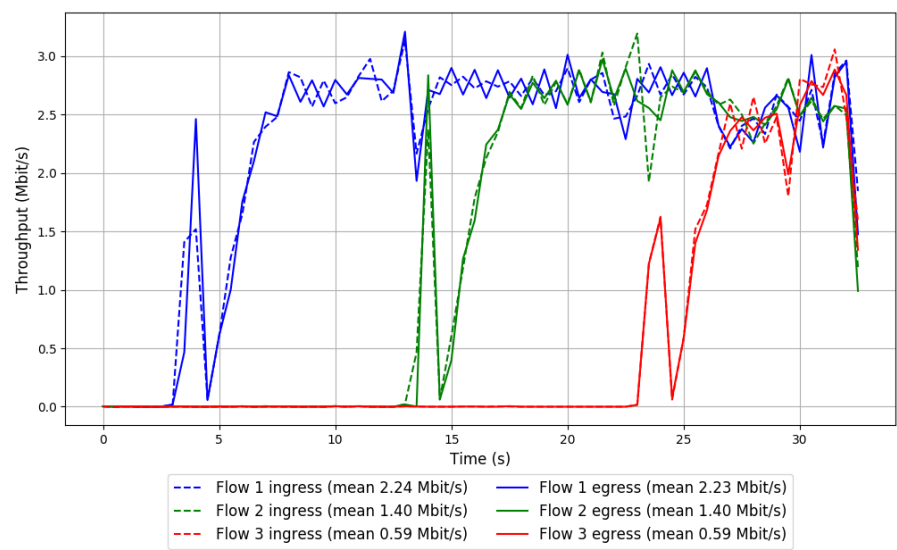


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-16 23:46:11
End at: 2017-11-16 23:46:41

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 53.502 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 53.638 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 50.778 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 50.704 ms
Loss rate: 1.29%
```


Run 1: Report of WebRTC media — Data Link

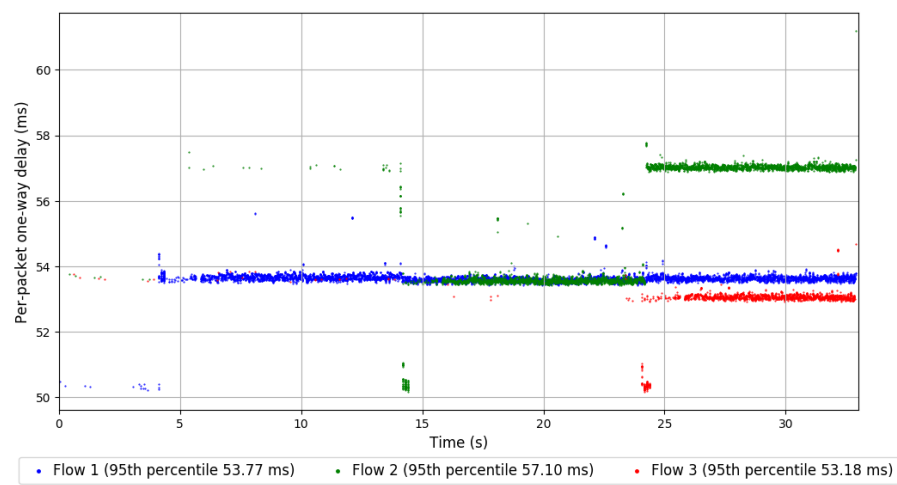
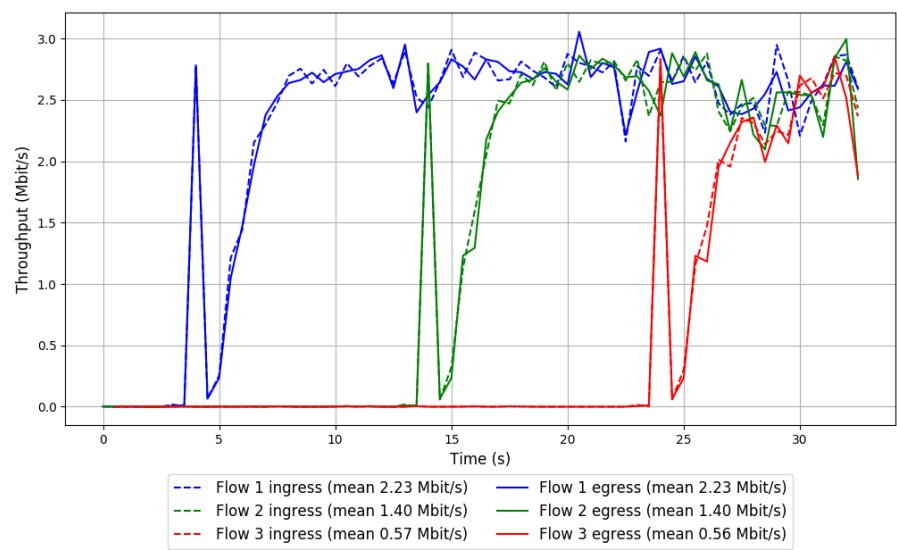


```
Run 2: Statistics of WebRTC media

Start at: 2017-11-16 23:58:05
End at: 2017-11-16 23:58:35

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 57.055 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 53.768 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 57.105 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 53.183 ms
Loss rate: 2.19%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-17 00:10:05

End at: 2017-11-17 00:10:35

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.77 Mbit/s

95th percentile per-packet one-way delay: 57.170 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 53.438 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 57.226 ms

Loss rate: 0.56%

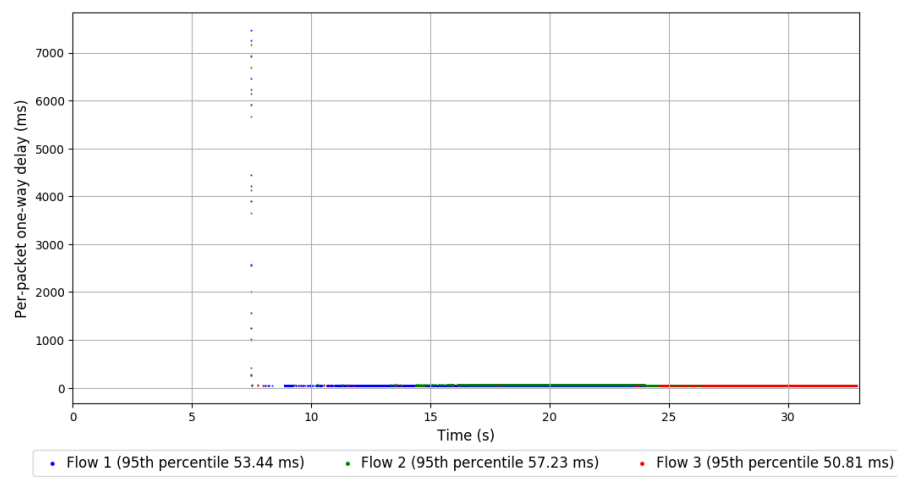
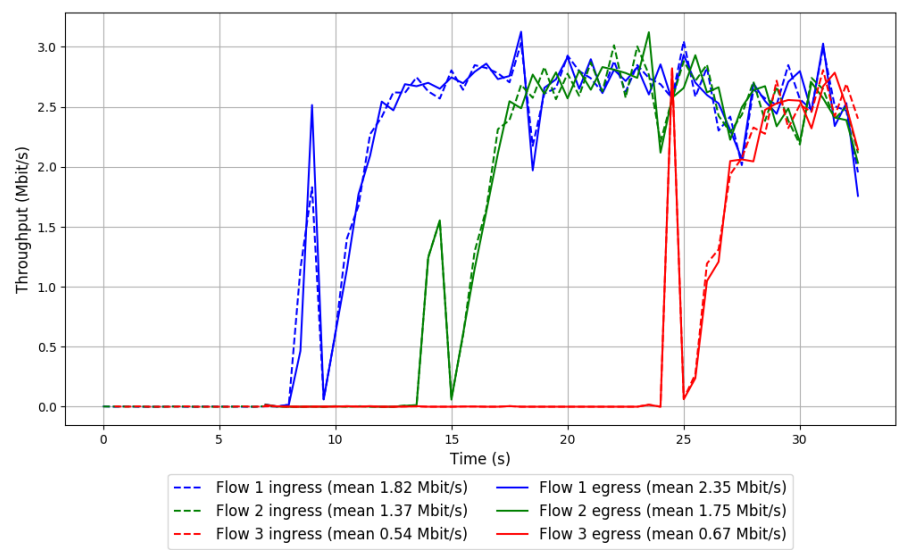
-- Flow 3:

Average throughput: 0.67 Mbit/s

95th percentile per-packet one-way delay: 50.815 ms

Loss rate: 1.56%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-17 00:22:08

End at: 2017-11-17 00:22:38

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 53.498 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 1.89 Mbit/s

95th percentile per-packet one-way delay: 53.485 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 1.40 Mbit/s

95th percentile per-packet one-way delay: 53.538 ms

Loss rate: 0.56%

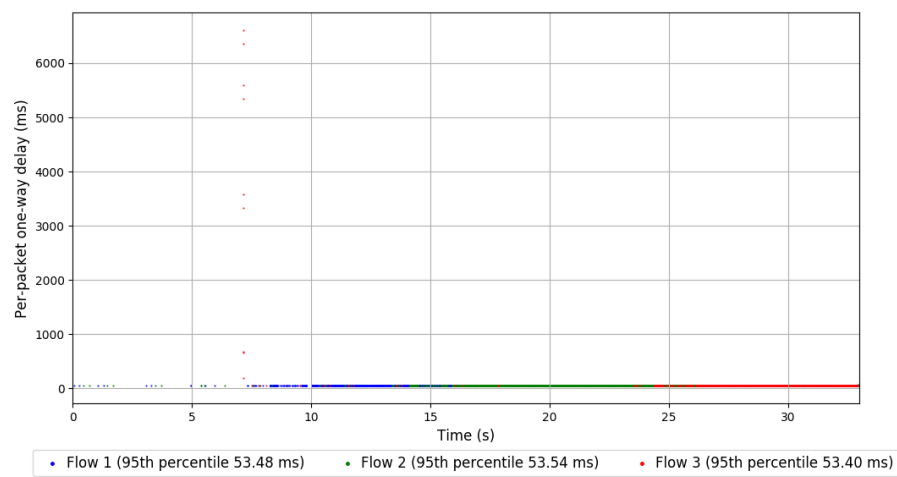
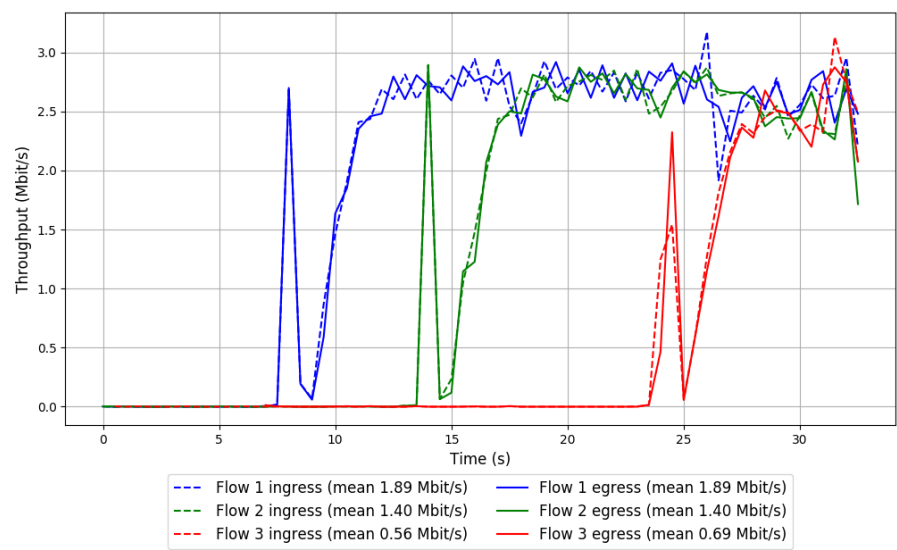
-- Flow 3:

Average throughput: 0.69 Mbit/s

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

Loss rate: 1.87%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-17 00:34:25

End at: 2017-11-17 00:34:55

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.78 Mbit/s

95th percentile per-packet one-way delay: 50.612 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 50.409 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 50.646 ms

Loss rate: 0.91%

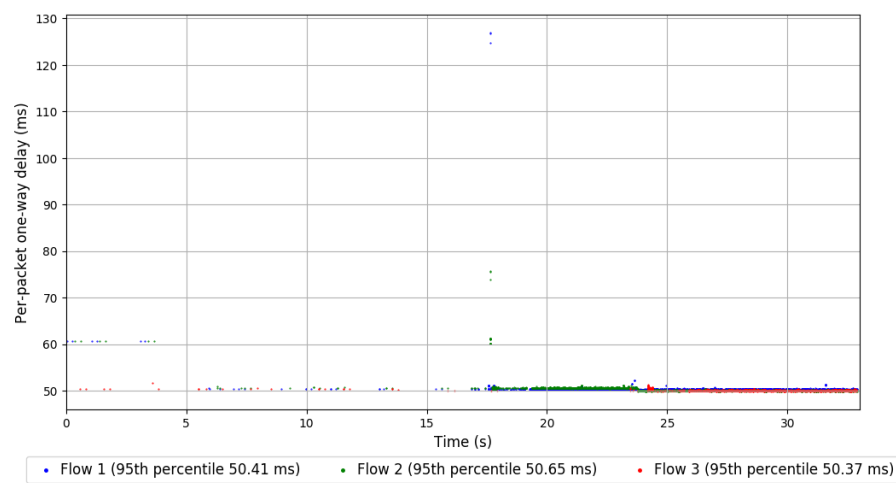
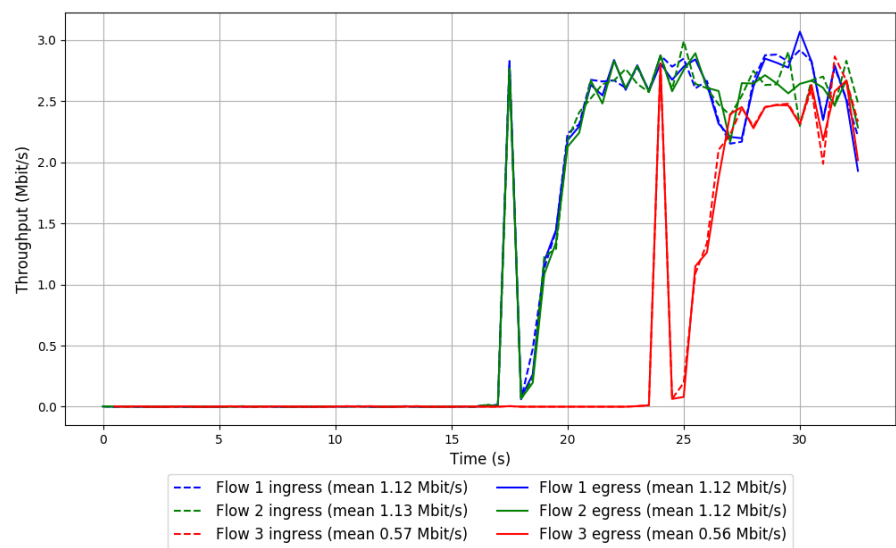
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 50.372 ms

Loss rate: 1.64%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-17 00:46:54

End at: 2017-11-17 00:47:24

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 60.622 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 53.442 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 1.39 Mbit/s

95th percentile per-packet one-way delay: 60.677 ms

Loss rate: 0.73%

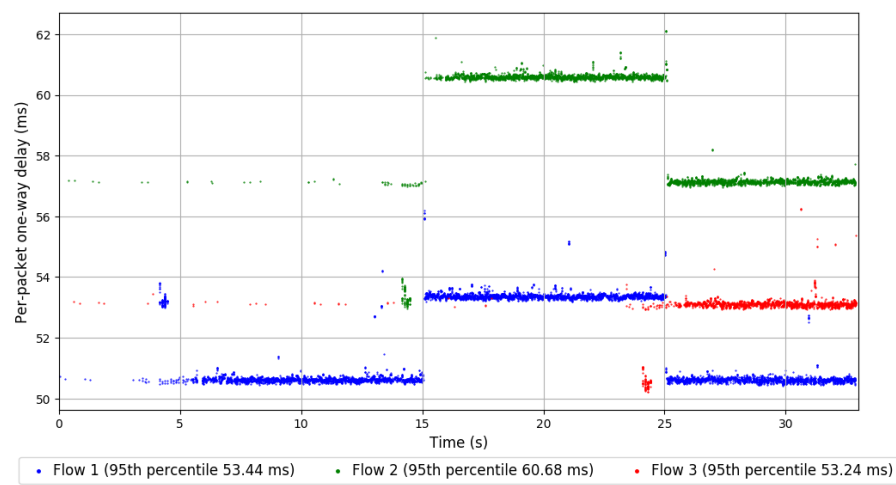
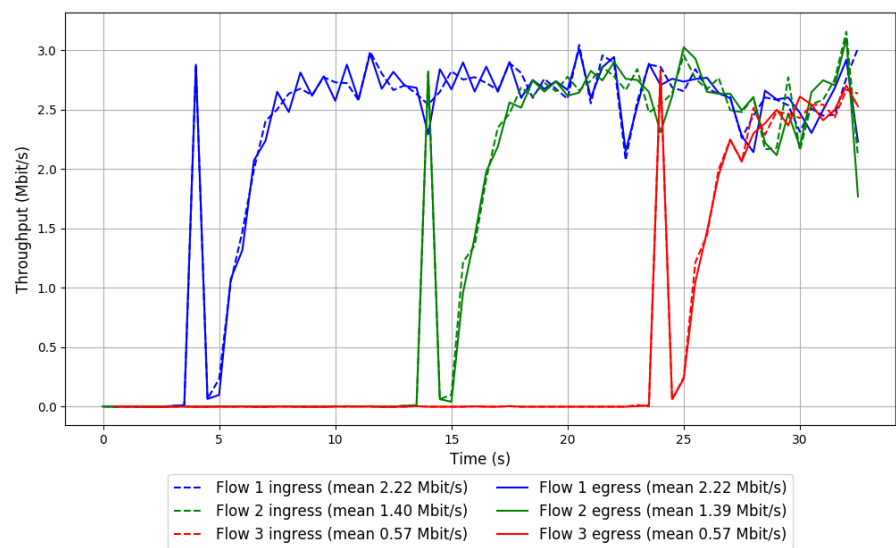
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 53.238 ms

Loss rate: 0.95%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-17 00:59:17

End at: 2017-11-17 00:59:47

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 53.399 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 50.715 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 1.41 Mbit/s

95th percentile per-packet one-way delay: 50.828 ms

Loss rate: 0.35%

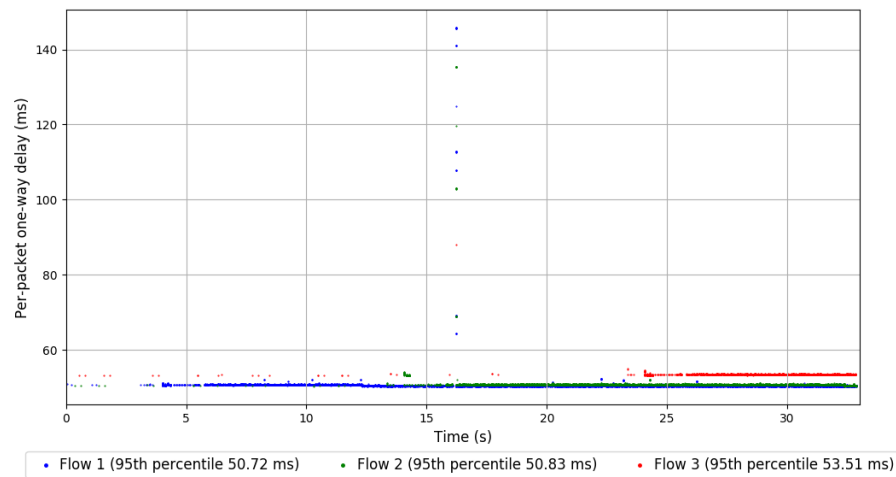
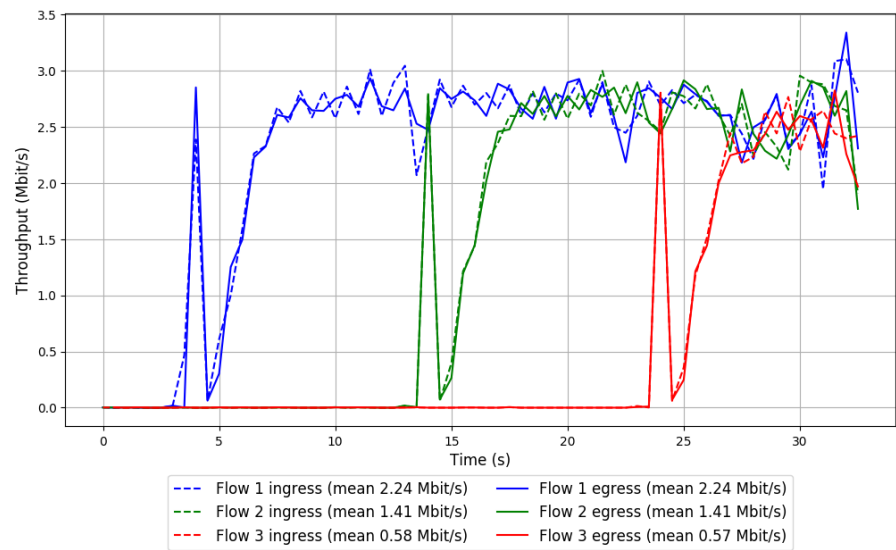
-- Flow 3:

Average throughput: 0.57 Mbit/s

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

Loss rate: 1.98%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-17 01:11:33

End at: 2017-11-17 01:12:03

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 53.412 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 53.188 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 1.46 Mbit/s

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

Loss rate: 0.60%

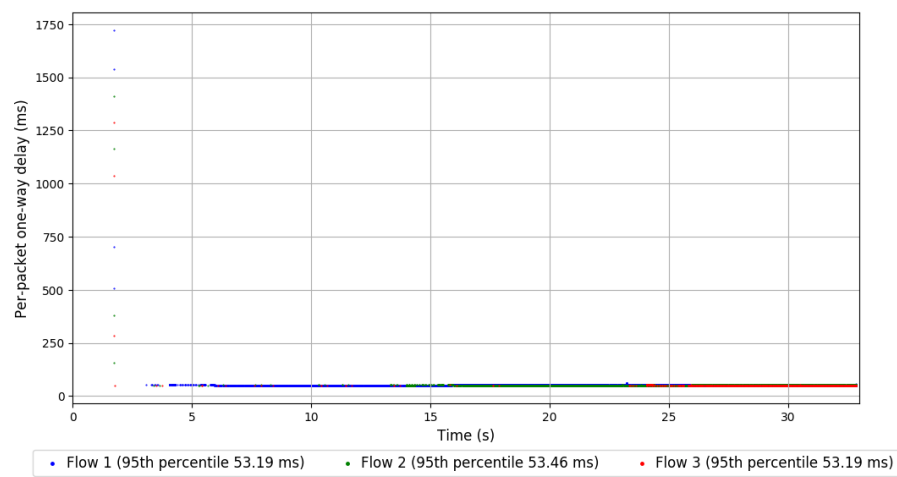
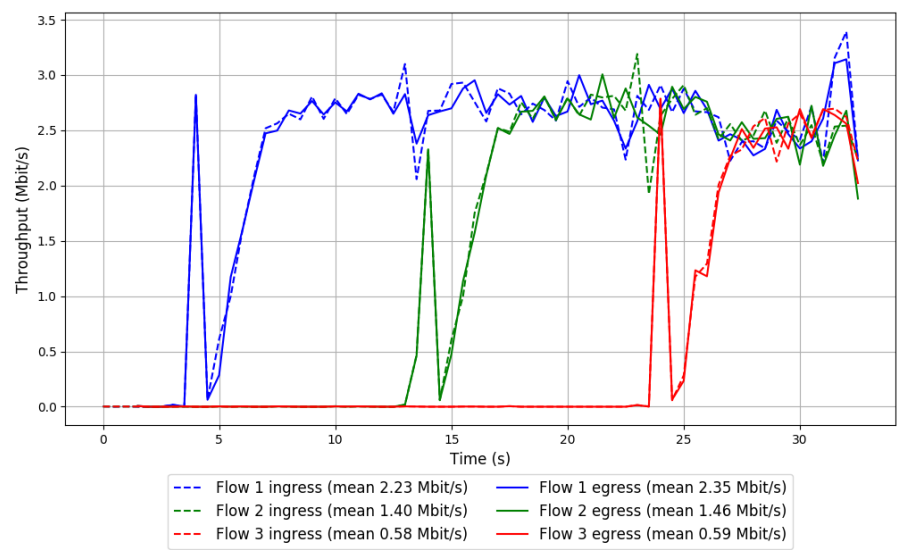
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 53.185 ms

Loss rate: 1.37%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-17 01:23:18

End at: 2017-11-17 01:23:48

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 53.442 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 53.472 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 50.247 ms

Loss rate: 0.77%

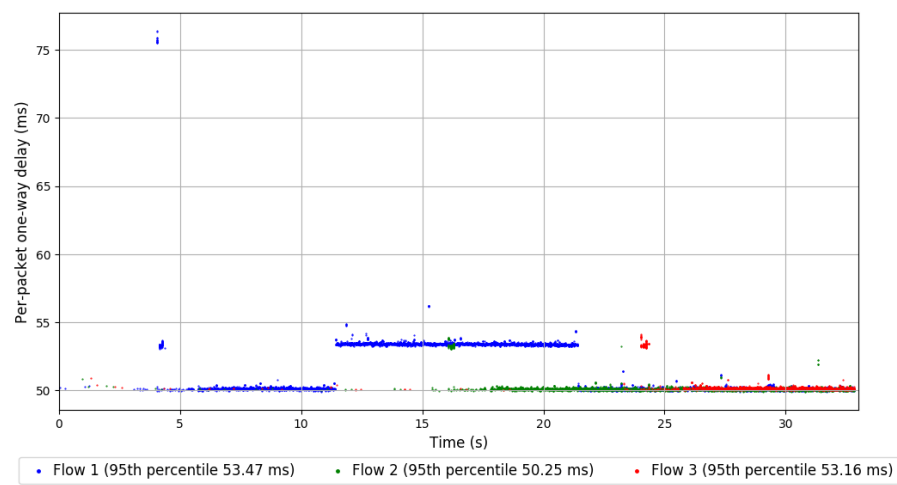
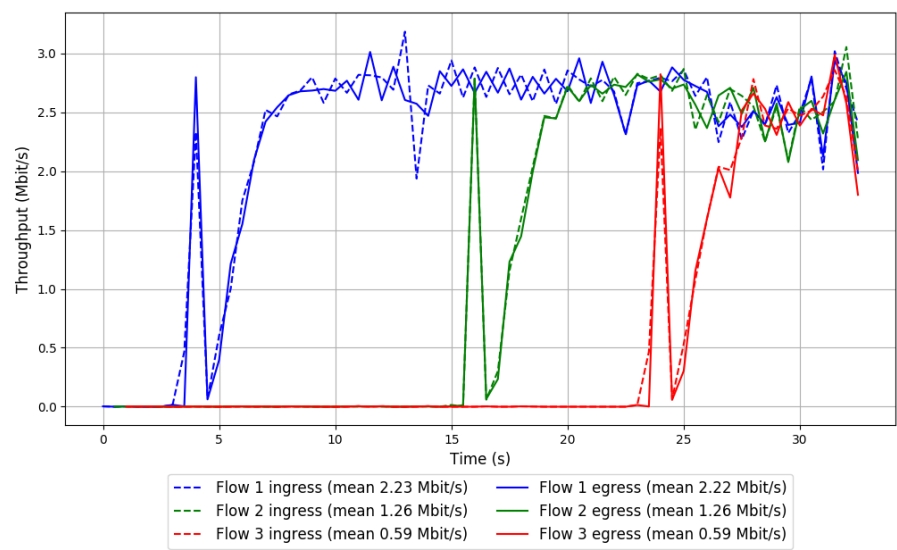
-- Flow 3:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 53.163 ms

Loss rate: 1.36%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-17 01:35:30

End at: 2017-11-17 01:36:00

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.79 Mbit/s

95th percentile per-packet one-way delay: 53.396 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 50.580 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 1.72 Mbit/s

95th percentile per-packet one-way delay: 50.606 ms

Loss rate: 0.58%

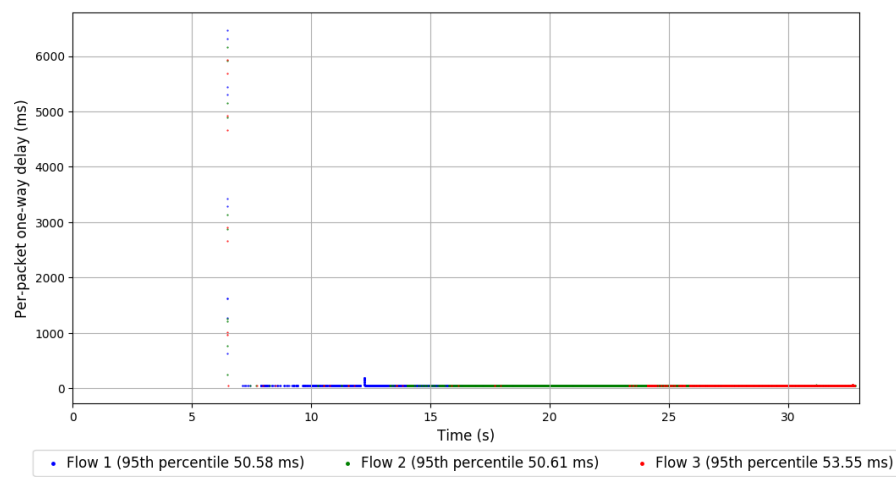
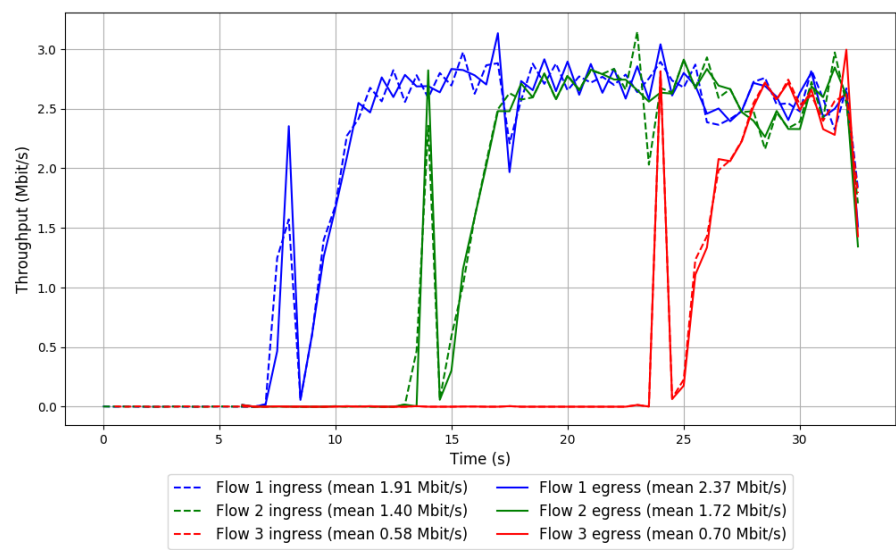
-- Flow 3:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 53.549 ms

Loss rate: 1.58%

Run 10: Report of WebRTC media — Data Link

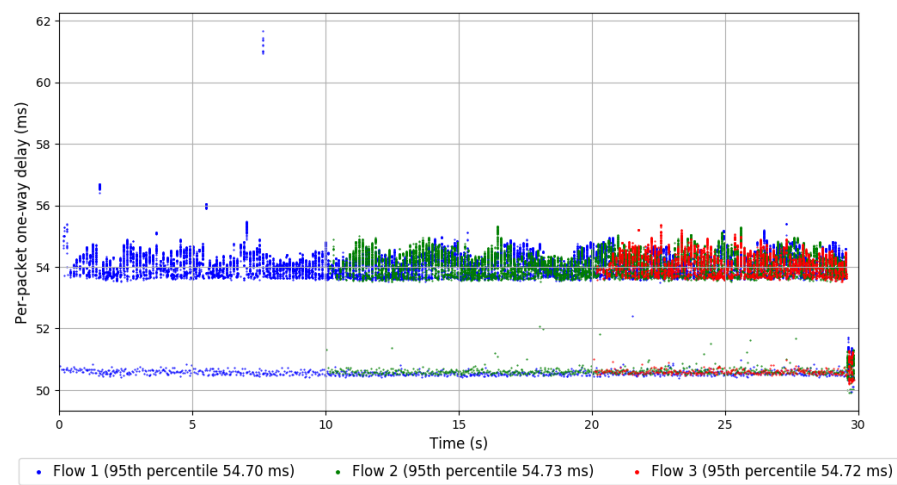
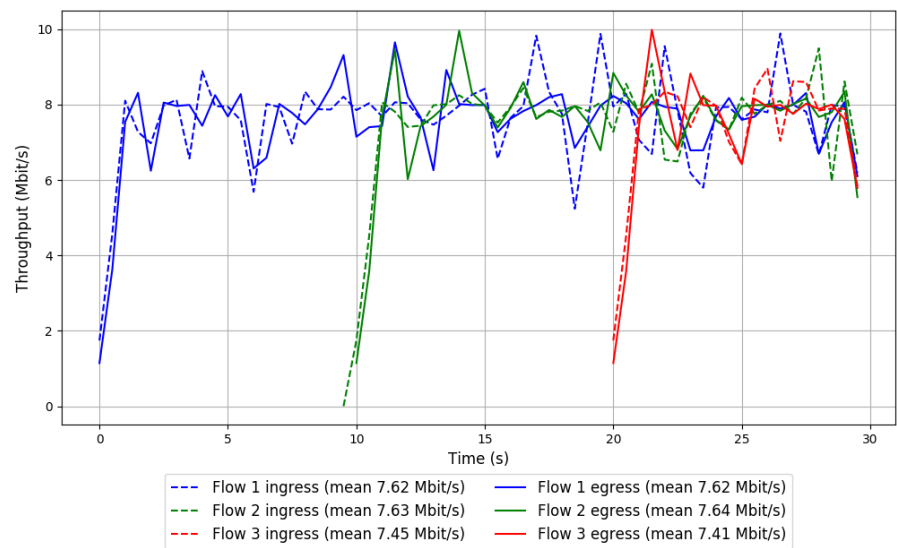


```
Run 1: Statistics of Sprout

Start at: 2017-11-16 23:44:26
End at: 2017-11-16 23:44:56

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.11 Mbit/s
95th percentile per-packet one-way delay: 54.715 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 54.701 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 54.733 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 7.41 Mbit/s
95th percentile per-packet one-way delay: 54.721 ms
Loss rate: 1.32%
```

Run 1: Report of Sprout — Data Link

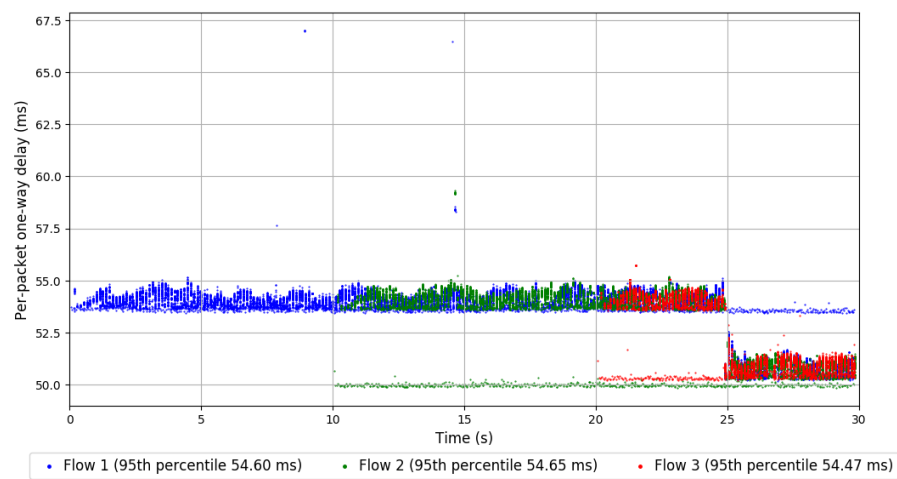
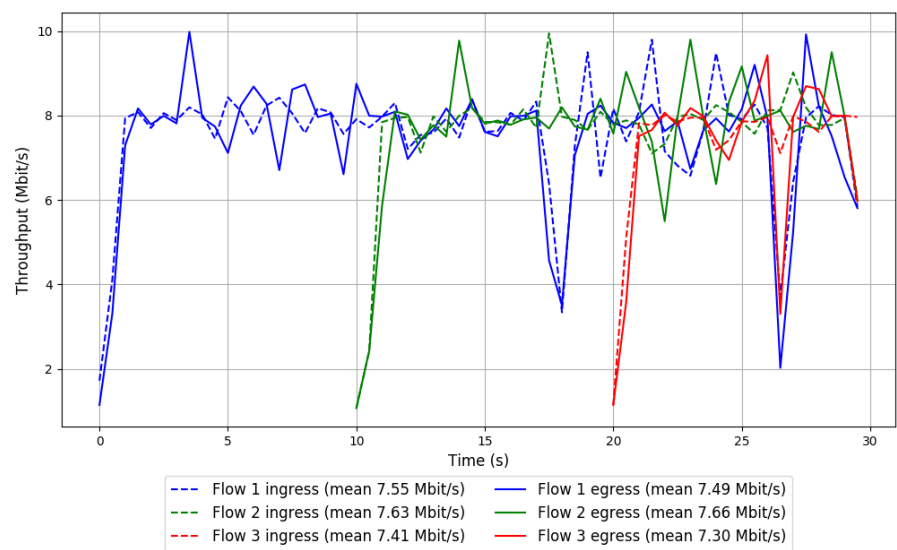


```
Run 2: Statistics of Sprout

Start at: 2017-11-16 23:56:21
End at: 2017-11-16 23:56:51

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.96 Mbit/s
95th percentile per-packet one-way delay: 54.604 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 54.603 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 54.646 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 7.30 Mbit/s
95th percentile per-packet one-way delay: 54.474 ms
Loss rate: 2.71%
```

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-17 00:08:22

End at: 2017-11-17 00:08:52

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.12 Mbit/s

95th percentile per-packet one-way delay: 53.955 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 7.65 Mbit/s

95th percentile per-packet one-way delay: 53.891 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 7.68 Mbit/s

95th percentile per-packet one-way delay: 54.034 ms

Loss rate: 0.39%

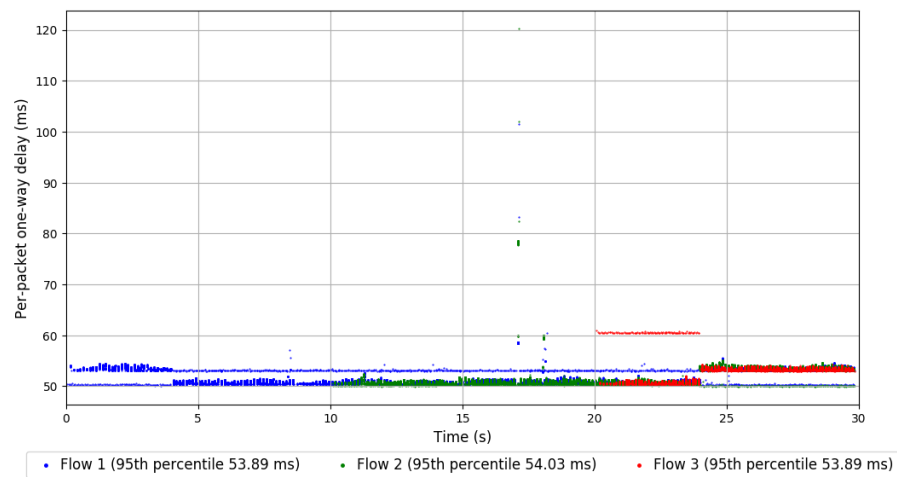
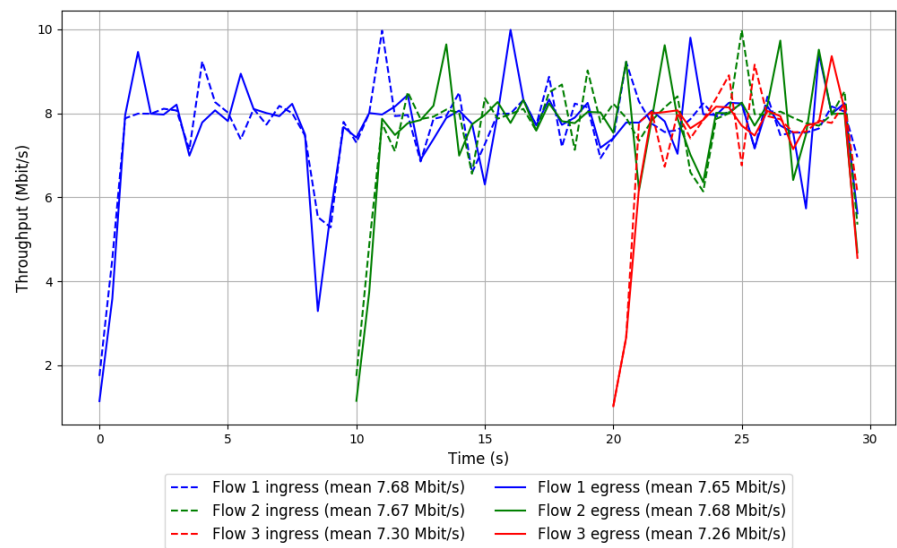
-- Flow 3:

Average throughput: 7.26 Mbit/s

95th percentile per-packet one-way delay: 53.890 ms

Loss rate: 1.34%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-17 00:20:24

End at: 2017-11-17 00:20:54

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.28 Mbit/s

95th percentile per-packet one-way delay: 53.955 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 54.008 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 53.876 ms

Loss rate: 0.38%

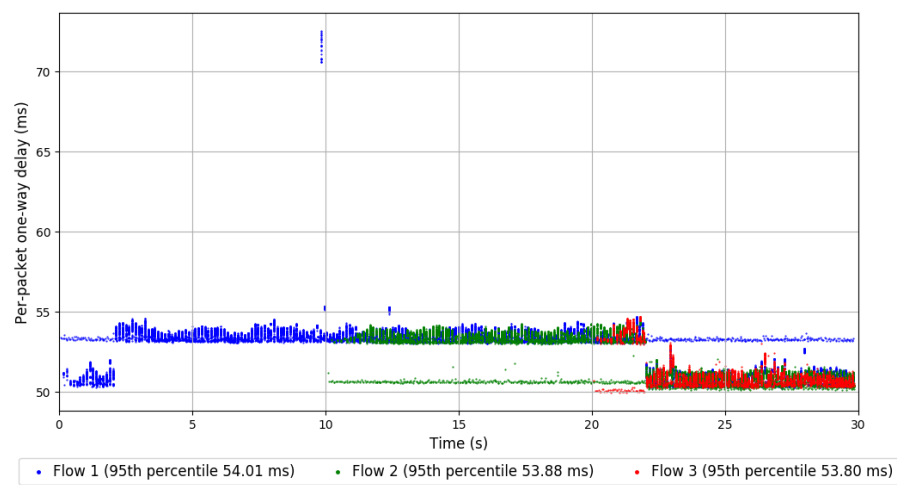
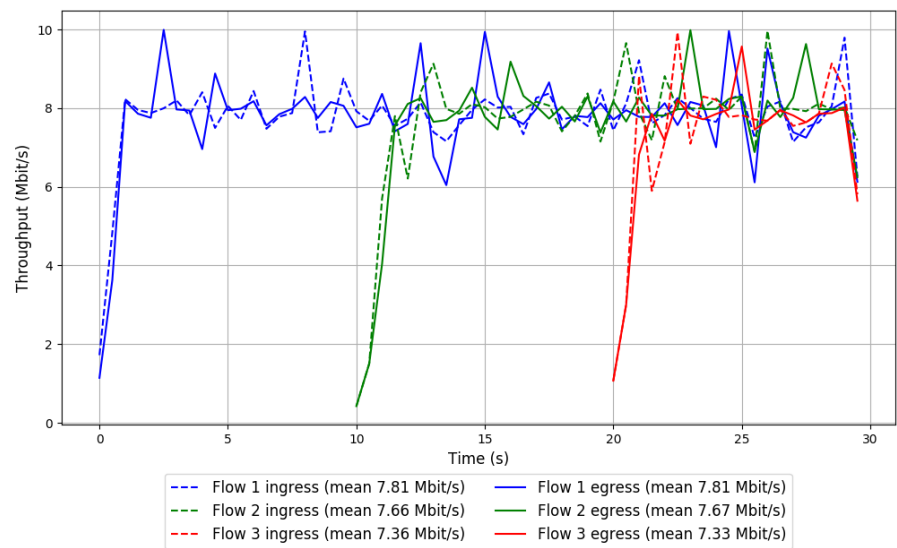
-- Flow 3:

Average throughput: 7.33 Mbit/s

95th percentile per-packet one-way delay: 53.802 ms

Loss rate: 1.29%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-17 00:32:41

End at: 2017-11-17 00:33:11

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.50 Mbit/s

95th percentile per-packet one-way delay: 53.705 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 7.88 Mbit/s

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

Loss rate: 0.41%

-- Flow 2:

Average throughput: 7.71 Mbit/s

95th percentile per-packet one-way delay: 51.603 ms

Loss rate: 0.60%

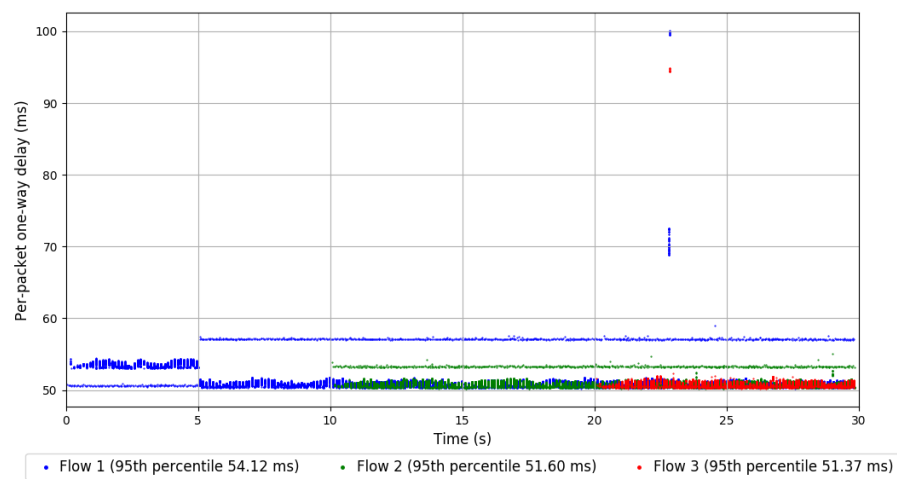
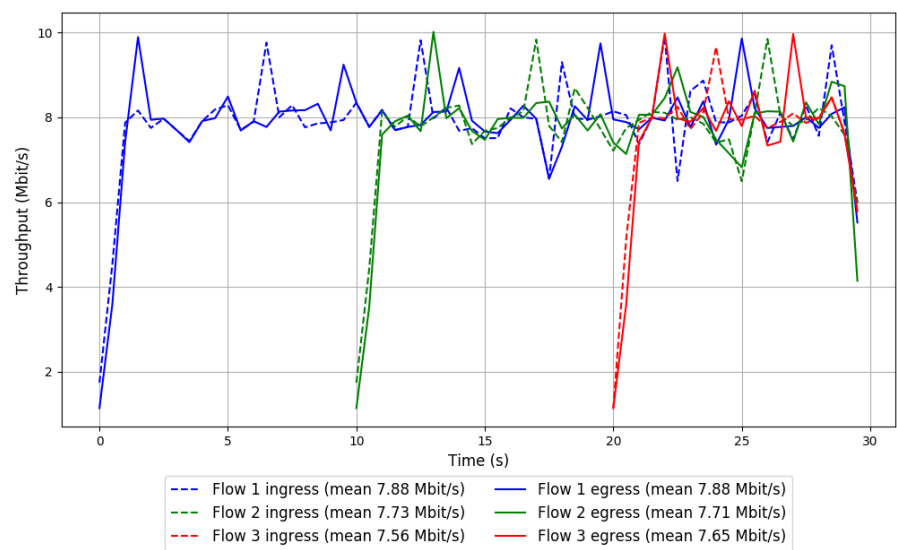
-- Flow 3:

Average throughput: 7.65 Mbit/s

95th percentile per-packet one-way delay: 51.367 ms

Loss rate: 0.02%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-17 00:45:10

End at: 2017-11-17 00:45:40

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.50 Mbit/s

95th percentile per-packet one-way delay: 52.420 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 52.046 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 7.89 Mbit/s

95th percentile per-packet one-way delay: 52.503 ms

Loss rate: 0.64%

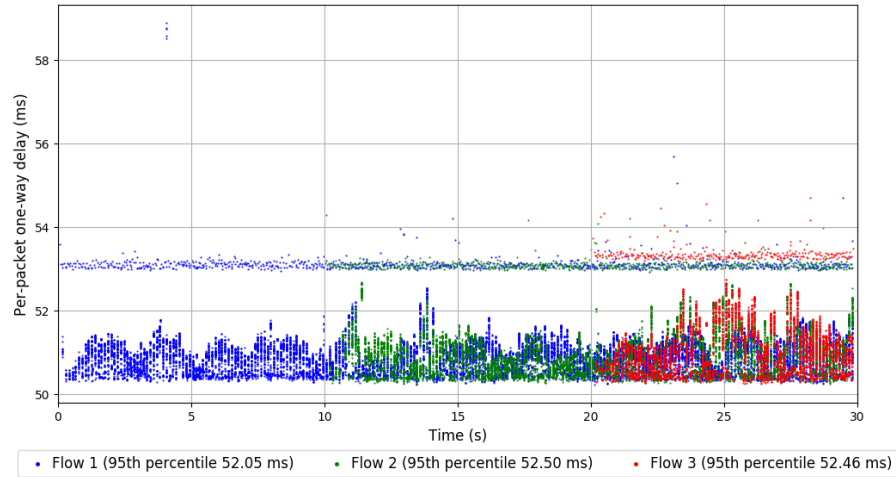
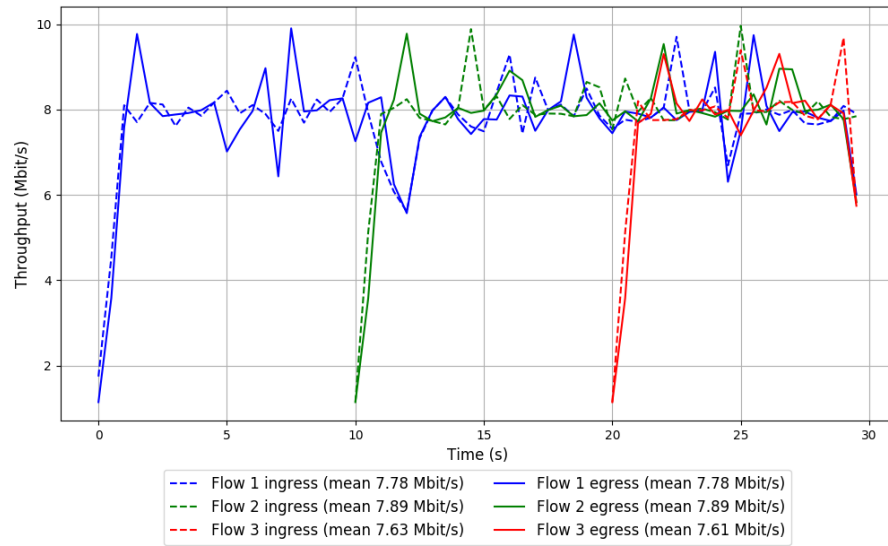
-- Flow 3:

Average throughput: 7.61 Mbit/s

95th percentile per-packet one-way delay: 52.464 ms

Loss rate: 1.19%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-17 00:57:33

End at: 2017-11-17 00:58:03

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.34 Mbit/s

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

Loss rate: 0.35%

-- Flow 1:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 54.092 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 7.80 Mbit/s

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

Loss rate: 0.30%

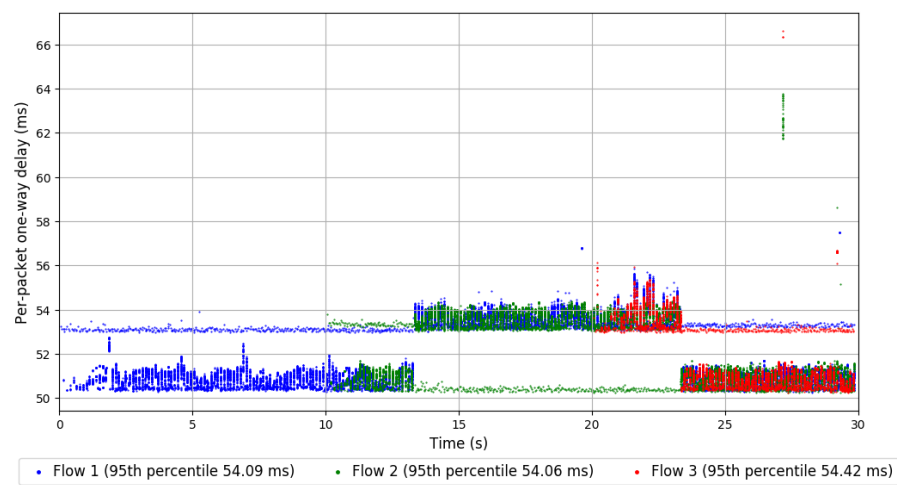
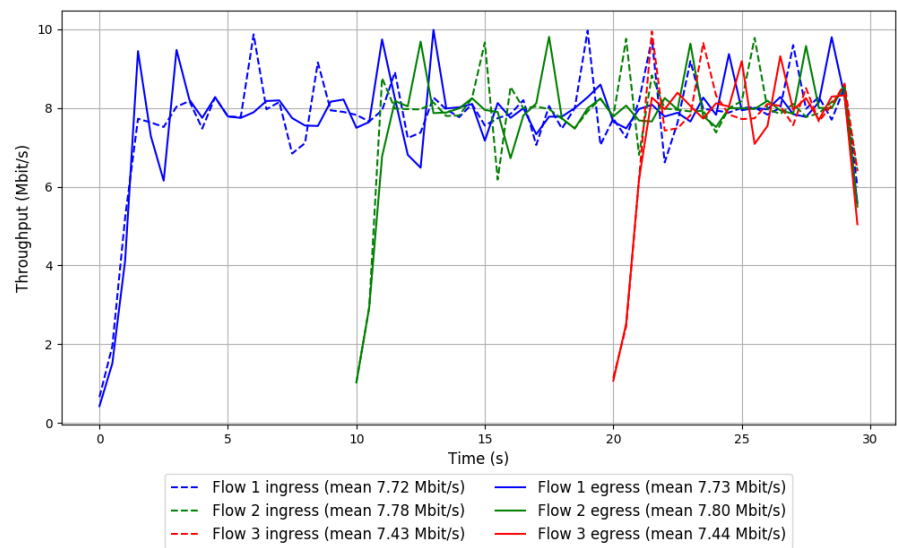
-- Flow 3:

Average throughput: 7.44 Mbit/s

95th percentile per-packet one-way delay: 54.423 ms

Loss rate: 1.12%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-17 01:09:50

End at: 2017-11-17 01:10:20

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.15 Mbit/s

95th percentile per-packet one-way delay: 54.180 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 7.83 Mbit/s

95th percentile per-packet one-way delay: 54.177 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 54.091 ms

Loss rate: 0.71%

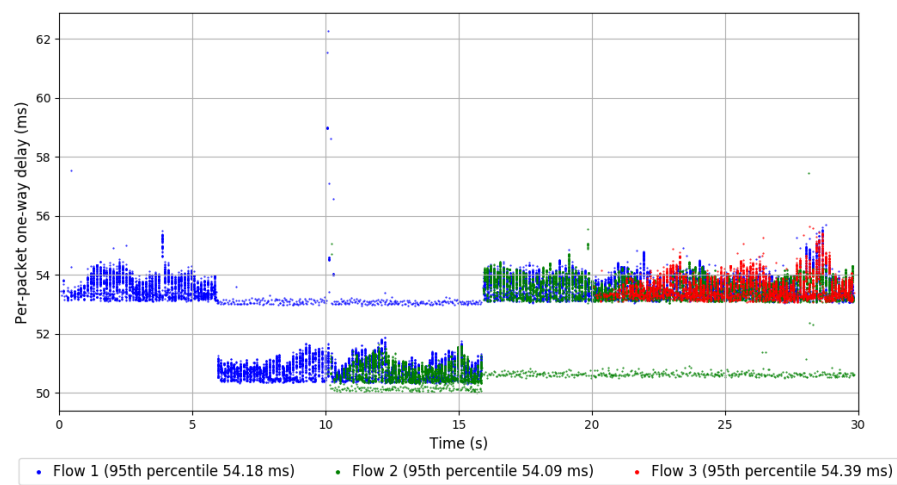
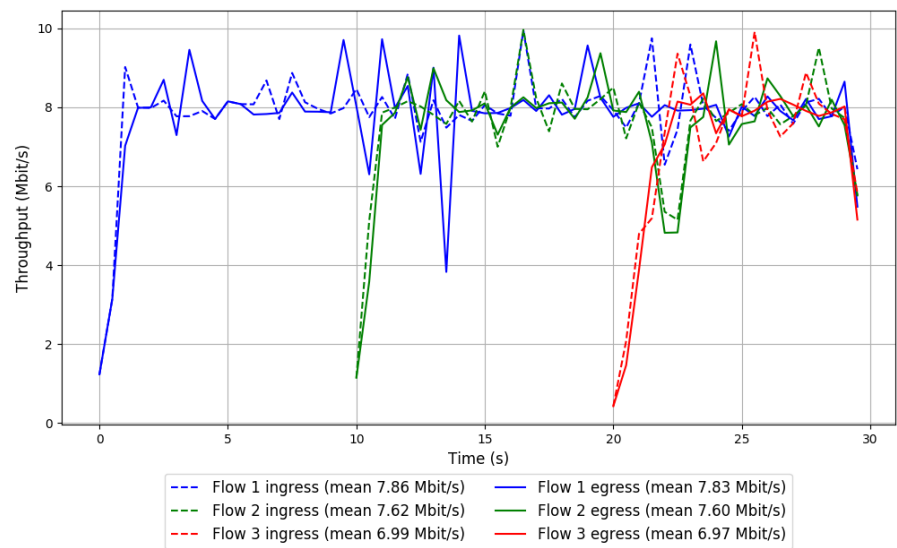
-- Flow 3:

Average throughput: 6.97 Mbit/s

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

Loss rate: 1.41%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-17 01:21:35

End at: 2017-11-17 01:22:05

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.44 Mbit/s

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

Loss rate: 0.38%

-- Flow 1:

Average throughput: 7.85 Mbit/s

95th percentile per-packet one-way delay: 54.020 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 54.087 ms

Loss rate: 0.37%

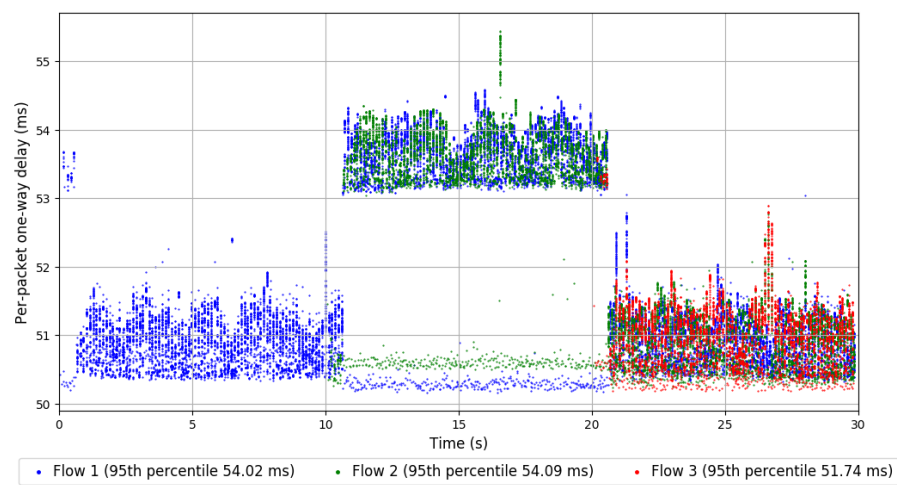
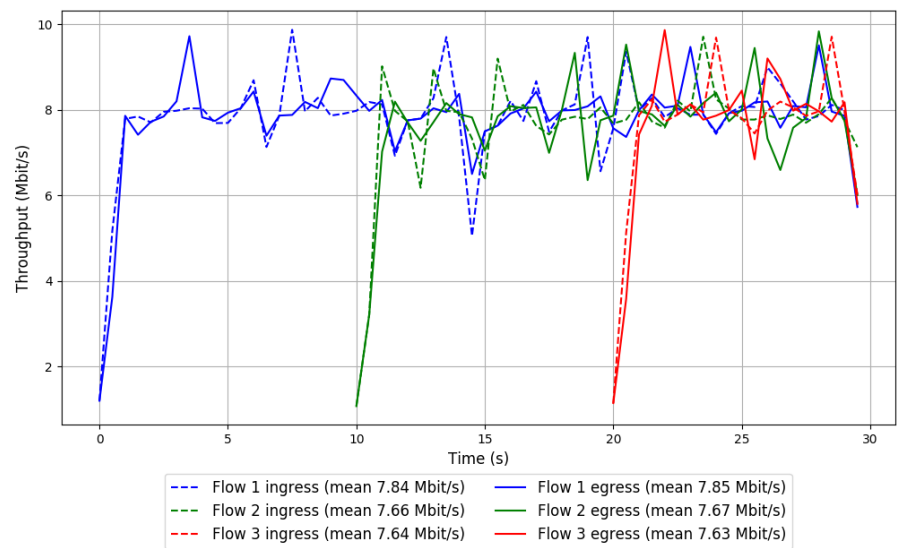
-- Flow 3:

Average throughput: 7.63 Mbit/s

95th percentile per-packet one-way delay: 51.736 ms

Loss rate: 1.33%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-17 01:33:46

End at: 2017-11-17 01:34:16

Below is generated by plot.py at 2017-11-17 04:17:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.17 Mbit/s

95th percentile per-packet one-way delay: 54.022 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 7.78 Mbit/s

95th percentile per-packet one-way delay: 53.986 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 7.54 Mbit/s

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

Loss rate: 0.61%

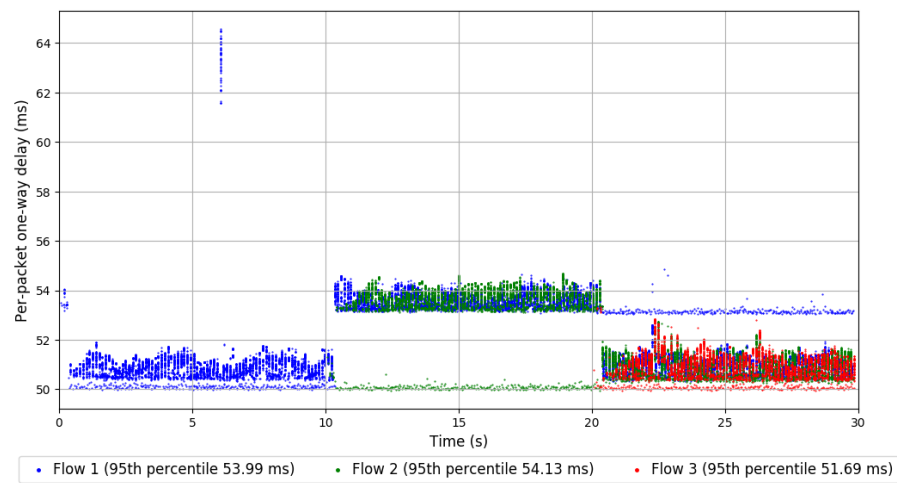
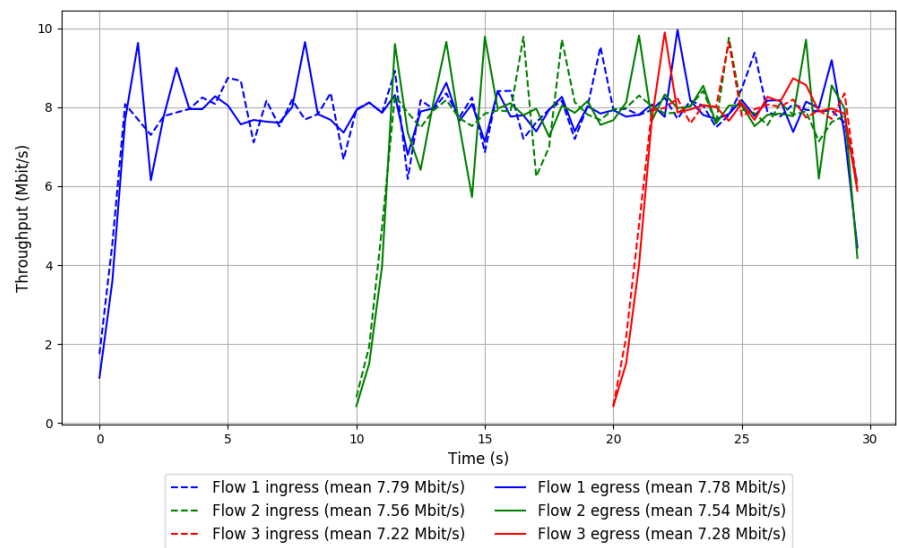
-- Flow 3:

Average throughput: 7.28 Mbit/s

95th percentile per-packet one-way delay: 51.690 ms

Loss rate: 0.41%

Run 10: Report of Sprout — Data Link

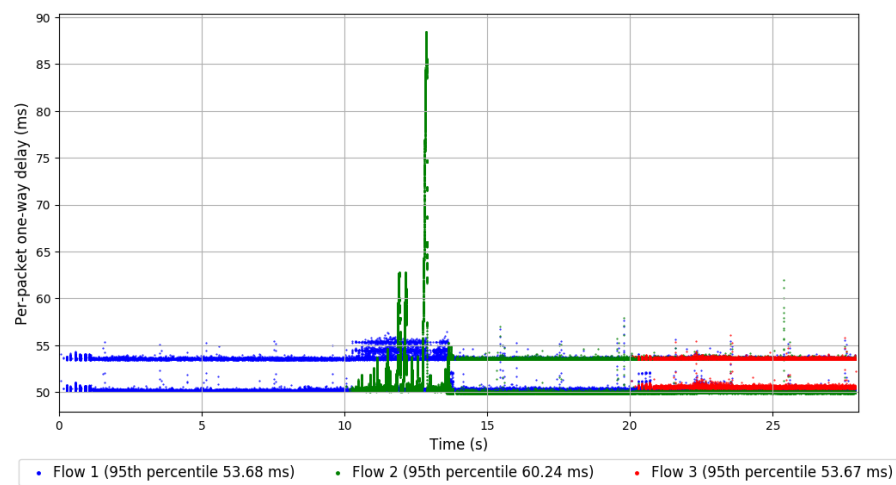
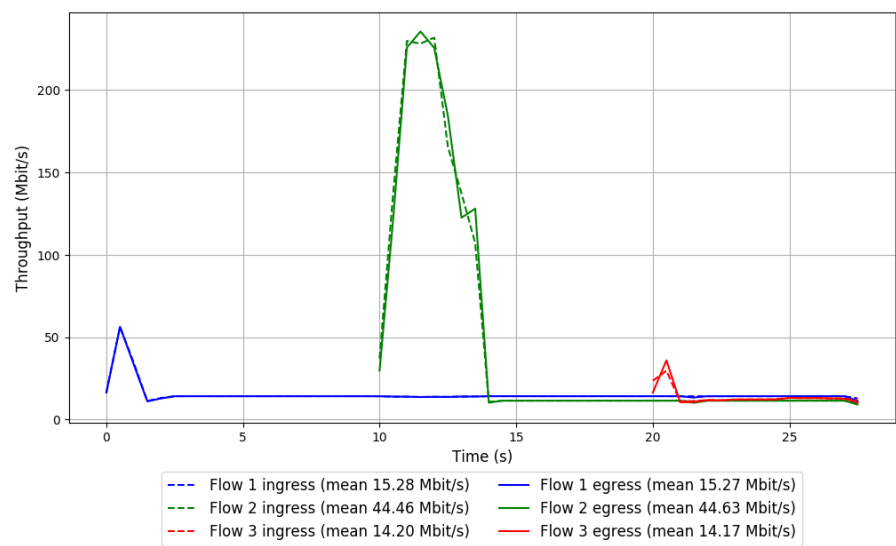


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-11-16 23:42:40
End at: 2017-11-16 23:43:10

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.84 Mbit/s
95th percentile per-packet one-way delay: 55.133 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 15.27 Mbit/s
95th percentile per-packet one-way delay: 53.677 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 44.63 Mbit/s
95th percentile per-packet one-way delay: 60.236 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 14.17 Mbit/s
95th percentile per-packet one-way delay: 53.671 ms
Loss rate: 1.53%
```


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

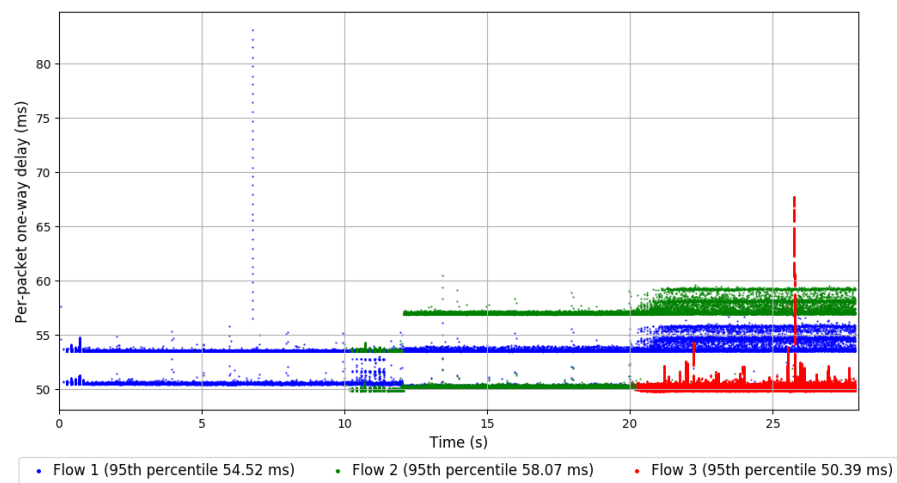
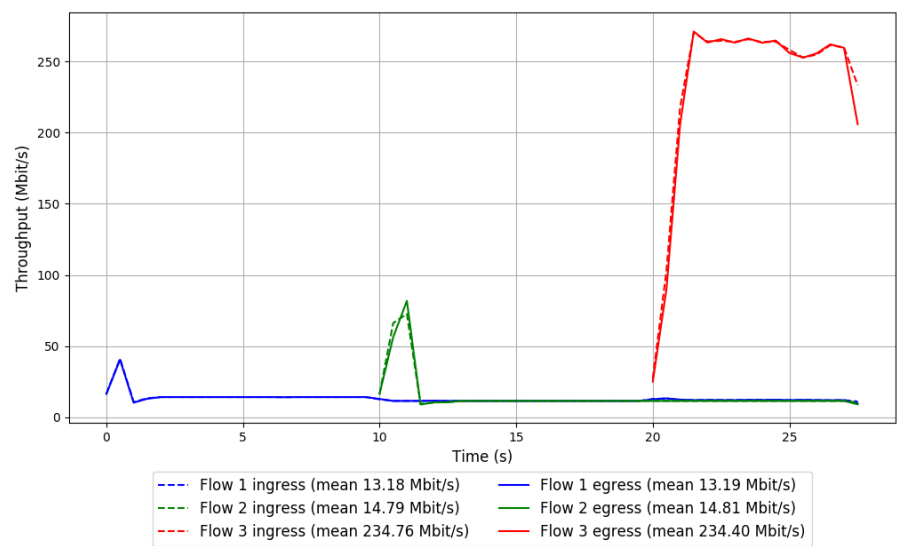


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-16 23:54:32
End at: 2017-11-16 23:55:02

# Below is generated by plot.py at 2017-11-17 04:17:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.57 Mbit/s
95th percentile per-packet one-way delay: 54.127 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 13.19 Mbit/s
95th percentile per-packet one-way delay: 54.521 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 14.81 Mbit/s
95th percentile per-packet one-way delay: 58.072 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 234.40 Mbit/s
95th percentile per-packet one-way delay: 50.393 ms
Loss rate: 1.46%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-17 00:06:25

End at: 2017-11-17 00:06:55

Below is generated by plot.py at 2017-11-17 04:17:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.02 Mbit/s

95th percentile per-packet one-way delay: 62.659 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 95.18 Mbit/s

95th percentile per-packet one-way delay: 53.139 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 203.07 Mbit/s

95th percentile per-packet one-way delay: 67.212 ms

Loss rate: 0.51%

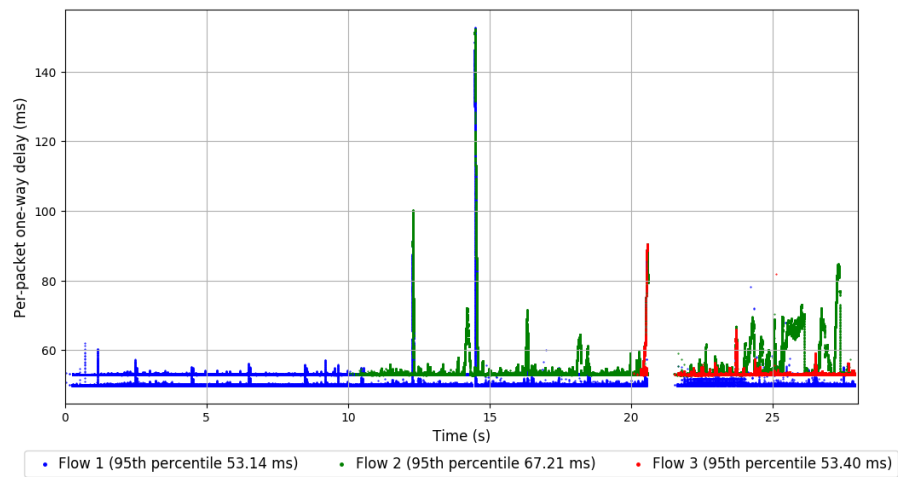
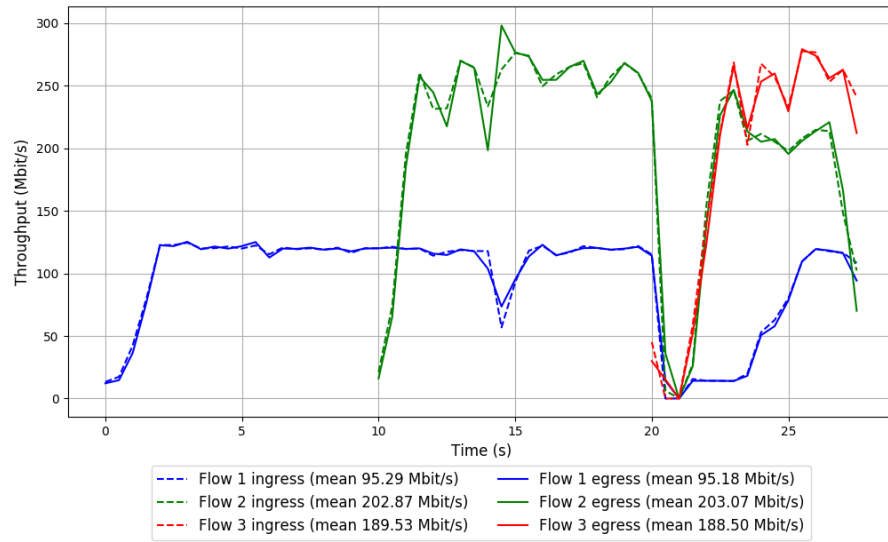
-- Flow 3:

Average throughput: 188.50 Mbit/s

95th percentile per-packet one-way delay: 53.401 ms

Loss rate: 1.90%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-17 00:18:29

End at: 2017-11-17 00:18:59

Below is generated by plot.py at 2017-11-17 04:17:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 241.51 Mbit/s

95th percentile per-packet one-way delay: 54.656 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 87.49 Mbit/s

95th percentile per-packet one-way delay: 56.996 ms

Loss rate: 1.53%

-- Flow 2:

Average throughput: 208.03 Mbit/s

95th percentile per-packet one-way delay: 53.121 ms

Loss rate: 0.34%

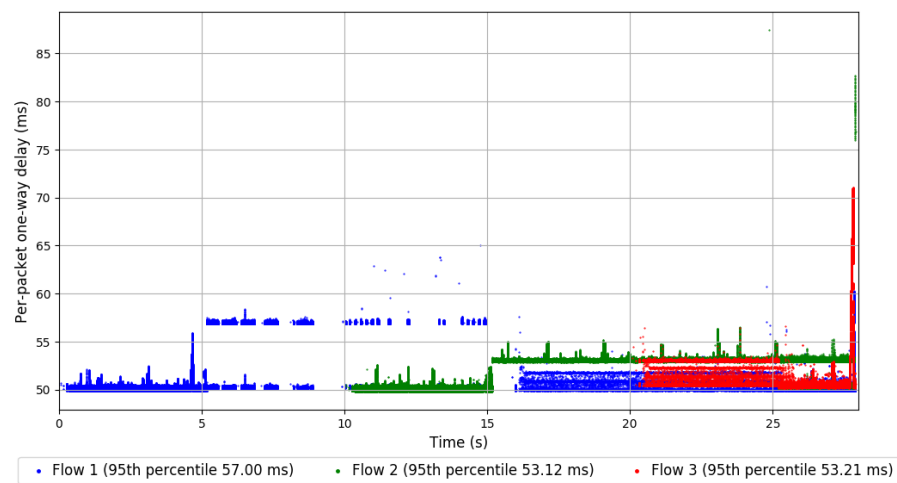
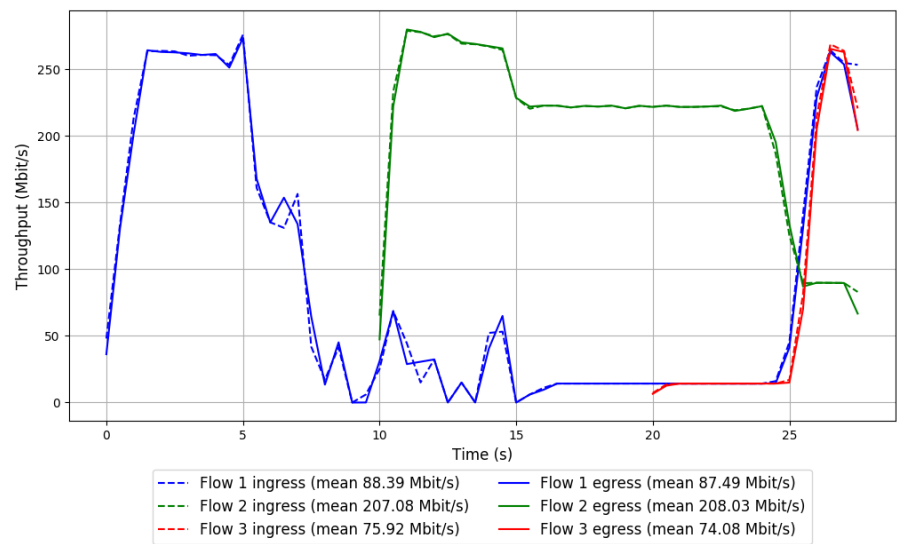
-- Flow 3:

Average throughput: 74.08 Mbit/s

95th percentile per-packet one-way delay: 53.207 ms

Loss rate: 3.72%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-17 00:30:46

End at: 2017-11-17 00:31:16

Below is generated by plot.py at 2017-11-17 04:17:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 133.86 Mbit/s

95th percentile per-packet one-way delay: 53.149 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 38.11 Mbit/s

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

Loss rate: 1.68%

-- Flow 2:

Average throughput: 50.21 Mbit/s

95th percentile per-packet one-way delay: 53.141 ms

Loss rate: 0.00%

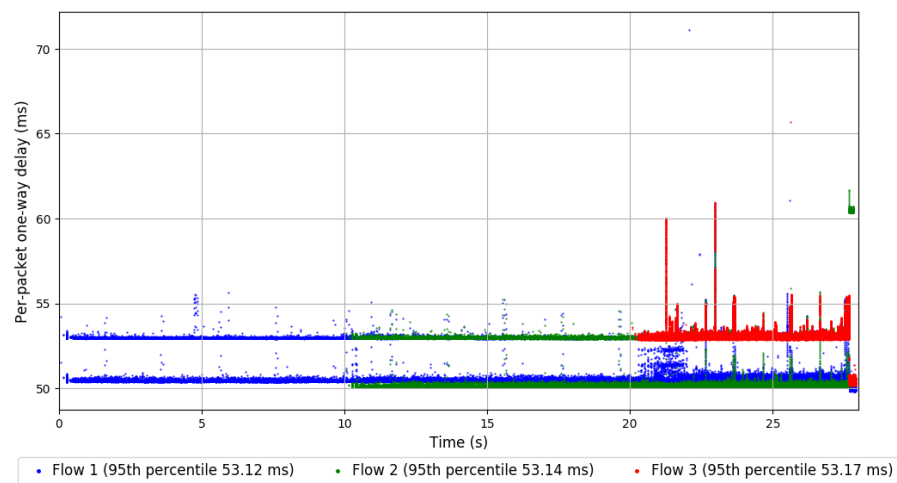
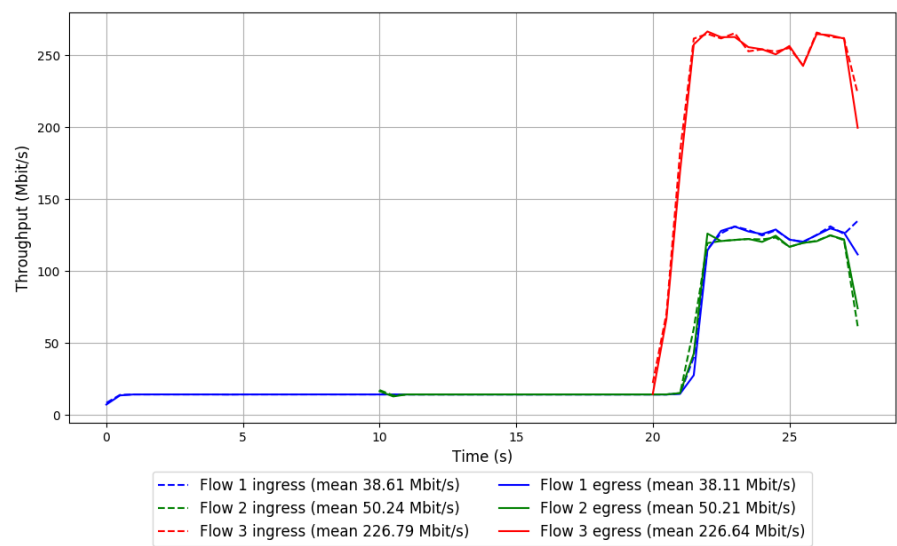
-- Flow 3:

Average throughput: 226.64 Mbit/s

95th percentile per-packet one-way delay: 53.170 ms

Loss rate: 1.43%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-17 00:42:50

End at: 2017-11-17 00:43:20

Below is generated by plot.py at 2017-11-17 04:22:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 404.54 Mbit/s

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

Loss rate: 0.46%

-- Flow 1:

Average throughput: 247.87 Mbit/s

95th percentile per-packet one-way delay: 52.348 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 240.27 Mbit/s

95th percentile per-packet one-way delay: 52.776 ms

Loss rate: 0.53%

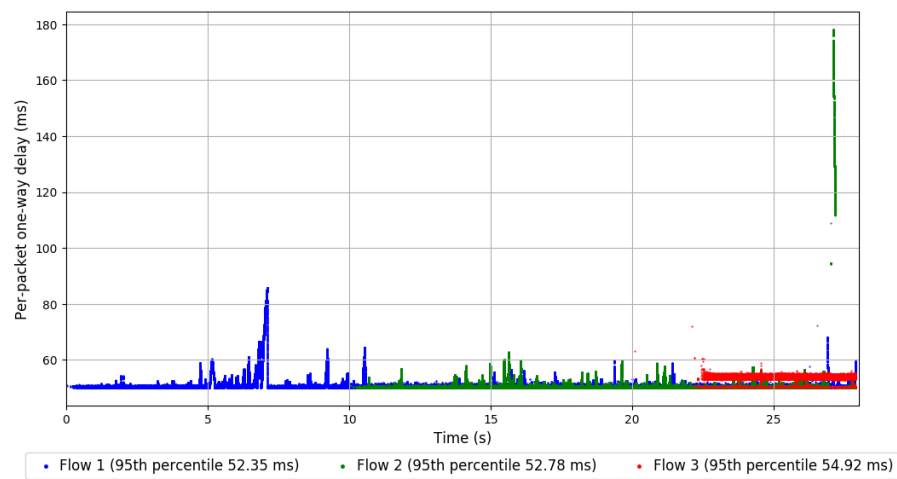
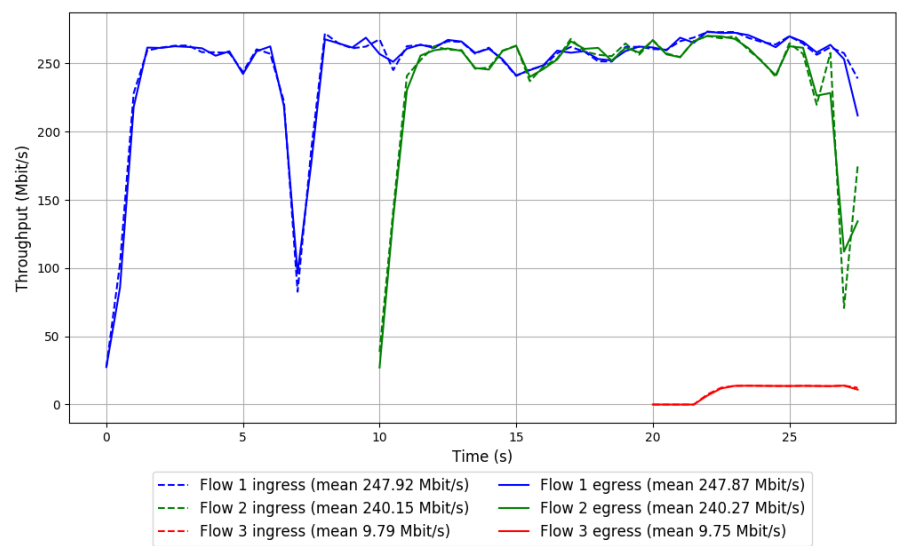
-- Flow 3:

Average throughput: 9.75 Mbit/s

95th percentile per-packet one-way delay: 54.916 ms

Loss rate: 1.81%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-17 00:55:27

End at: 2017-11-17 00:55:57

Below is generated by plot.py at 2017-11-17 04:22:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 254.14 Mbit/s

95th percentile per-packet one-way delay: 53.381 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 228.58 Mbit/s

95th percentile per-packet one-way delay: 53.237 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 34.40 Mbit/s

95th percentile per-packet one-way delay: 54.176 ms

Loss rate: 4.24%

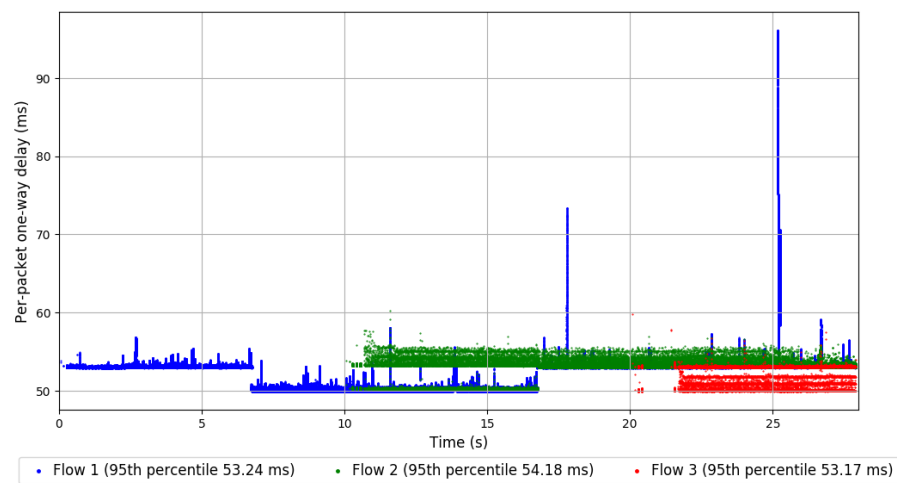
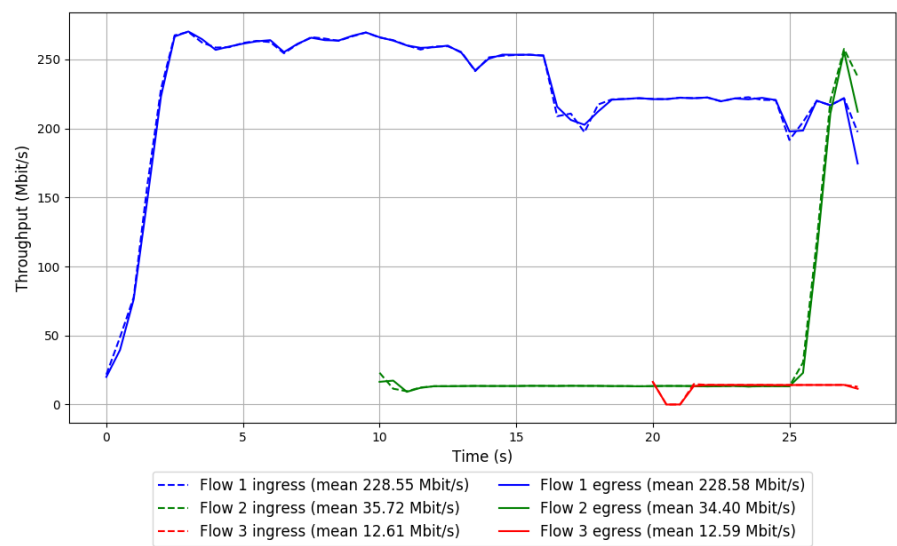
-- Flow 3:

Average throughput: 12.59 Mbit/s

95th percentile per-packet one-way delay: 53.174 ms

Loss rate: 1.48%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-17 01:07:48

End at: 2017-11-17 01:08:18

Below is generated by plot.py at 2017-11-17 04:22:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 290.63 Mbit/s

95th percentile per-packet one-way delay: 53.200 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 148.76 Mbit/s

95th percentile per-packet one-way delay: 51.294 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 132.76 Mbit/s

95th percentile per-packet one-way delay: 53.132 ms

Loss rate: 0.40%

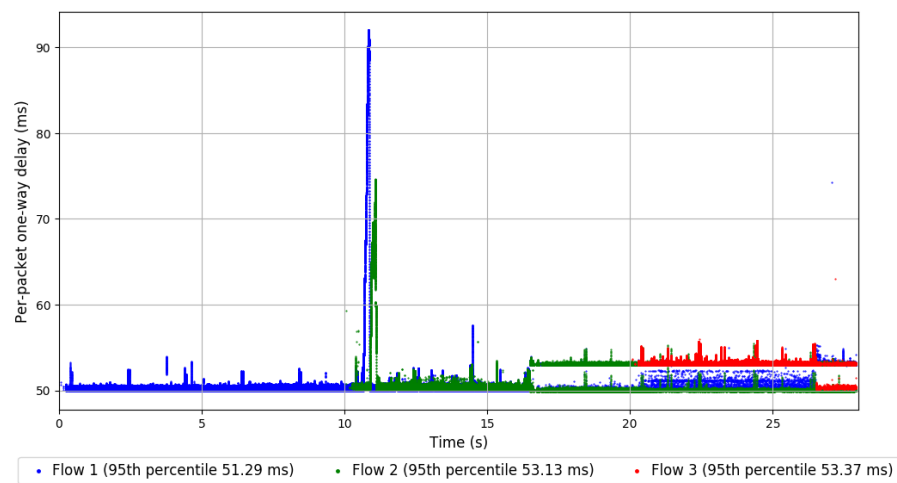
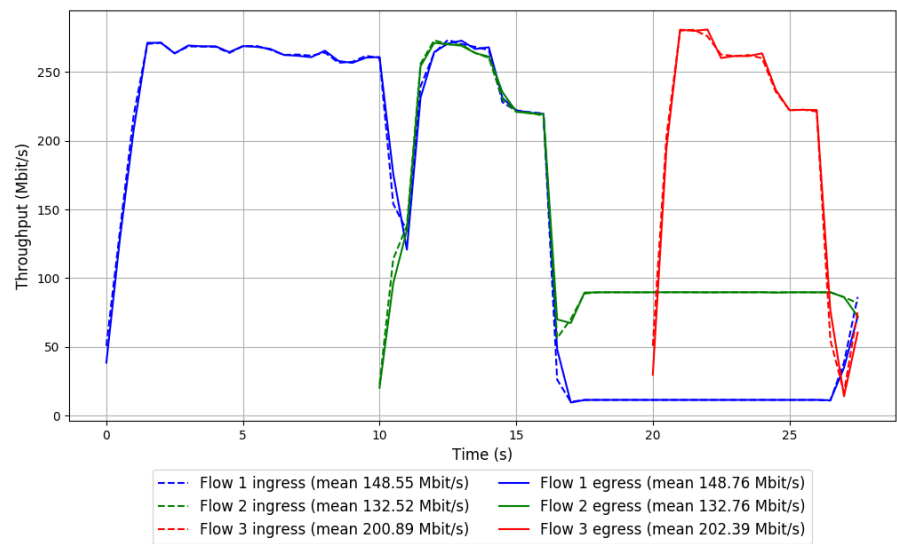
-- Flow 3:

Average throughput: 202.39 Mbit/s

95th percentile per-packet one-way delay: 53.365 ms

Loss rate: 0.60%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-11-17 01:19:57

End at: 2017-11-17 01:20:27

Below is generated by plot.py at 2017-11-17 04:22:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.39 Mbit/s

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

Loss rate: 0.48%

-- Flow 1:

Average throughput: 75.33 Mbit/s

95th percentile per-packet one-way delay: 53.792 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 113.00 Mbit/s

95th percentile per-packet one-way delay: 51.993 ms

Loss rate: 0.47%

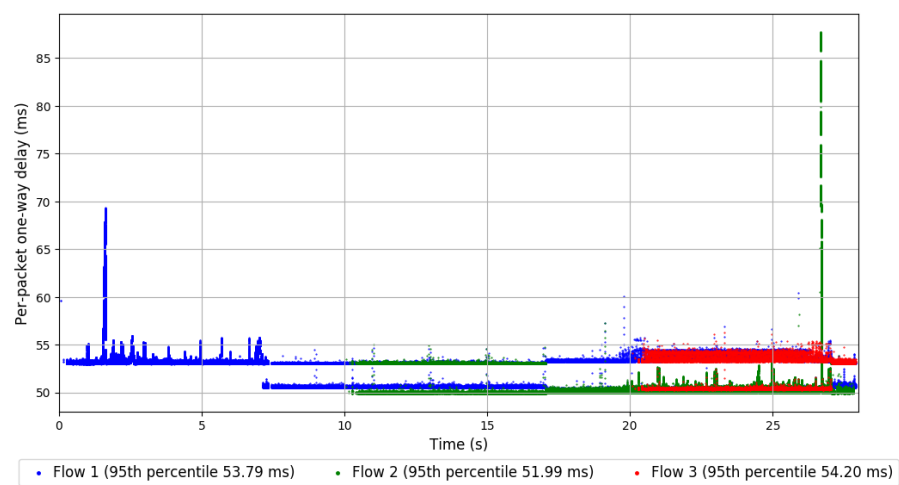
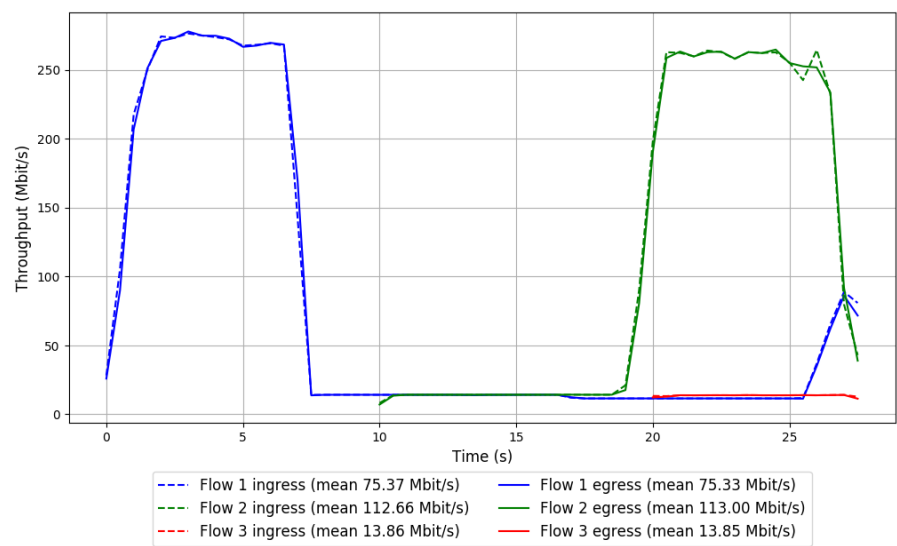
-- Flow 3:

Average throughput: 13.85 Mbit/s

95th percentile per-packet one-way delay: 54.204 ms

Loss rate: 1.33%

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

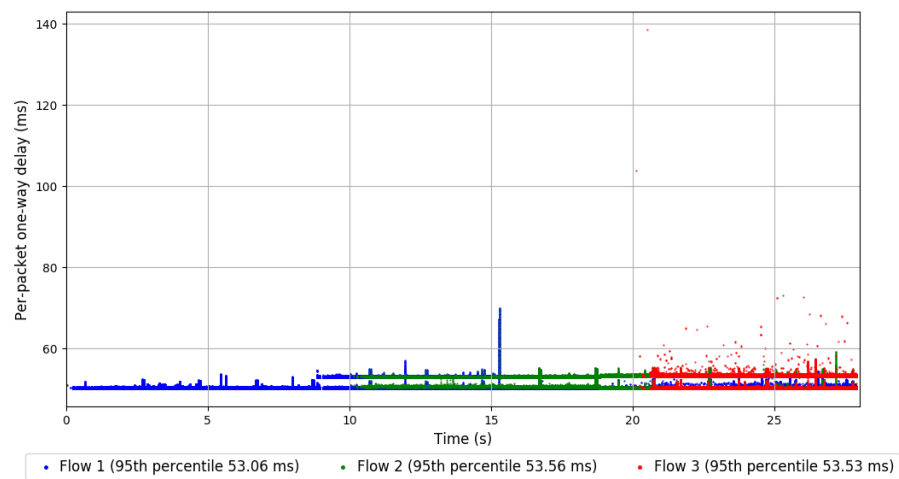
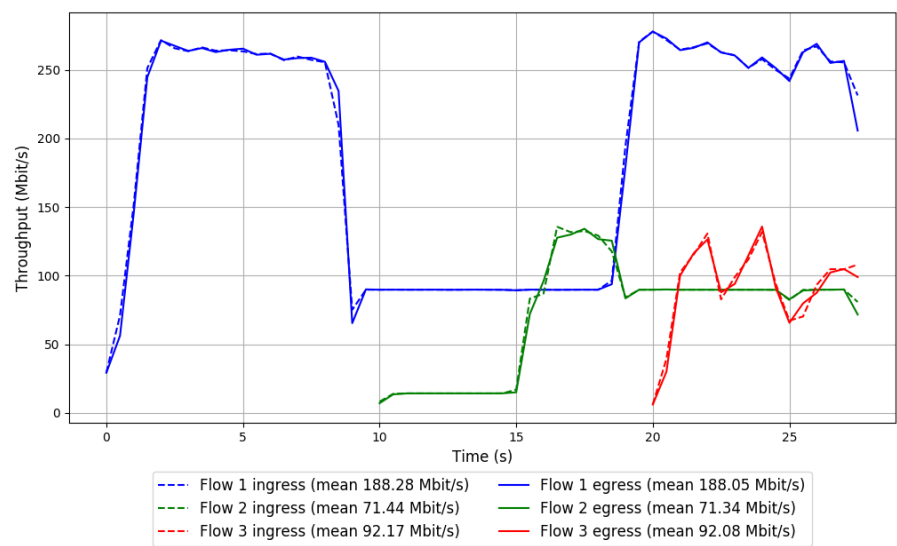


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-17 01:31:45
End at: 2017-11-17 01:32:15

# Below is generated by plot.py at 2017-11-17 04:24:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 259.62 Mbit/s
95th percentile per-packet one-way delay: 53.396 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 188.05 Mbit/s
95th percentile per-packet one-way delay: 53.064 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 71.34 Mbit/s
95th percentile per-packet one-way delay: 53.557 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 92.08 Mbit/s
95th percentile per-packet one-way delay: 53.529 ms
Loss rate: 1.37%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-16 23:40:15

End at: 2017-11-16 23:40:45

Below is generated by plot.py at 2017-11-17 04:24:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 32.04 Mbit/s

95th percentile per-packet one-way delay: 53.833 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 10.16 Mbit/s

95th percentile per-packet one-way delay: 53.783 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 23.02 Mbit/s

95th percentile per-packet one-way delay: 53.746 ms

Loss rate: 0.47%

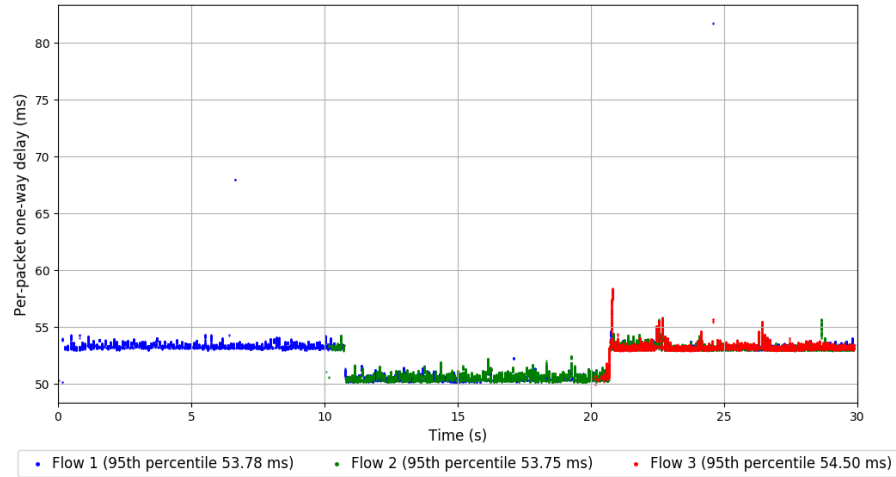
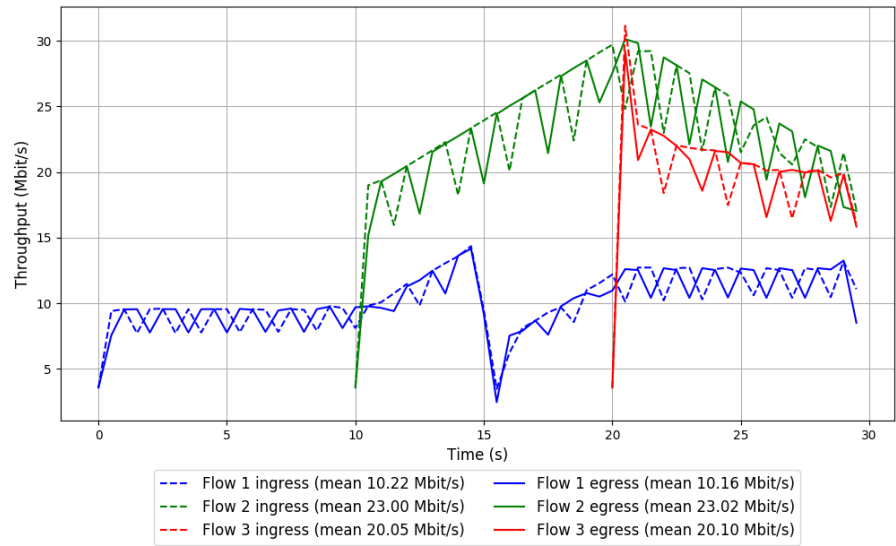
-- Flow 3:

Average throughput: 20.10 Mbit/s

95th percentile per-packet one-way delay: 54.499 ms

Loss rate: 1.04%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-16 23:52:05

End at: 2017-11-16 23:52:35

Below is generated by plot.py at 2017-11-17 04:24:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.49 Mbit/s

95th percentile per-packet one-way delay: 54.513 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 23.55 Mbit/s

95th percentile per-packet one-way delay: 54.007 ms

Loss rate: 1.27%

-- Flow 2:

Average throughput: 35.73 Mbit/s

95th percentile per-packet one-way delay: 55.186 ms

Loss rate: 0.44%

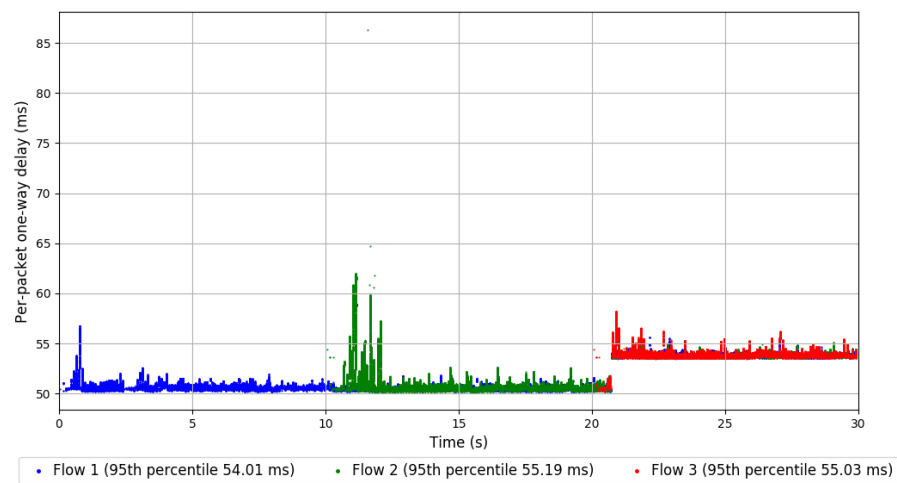
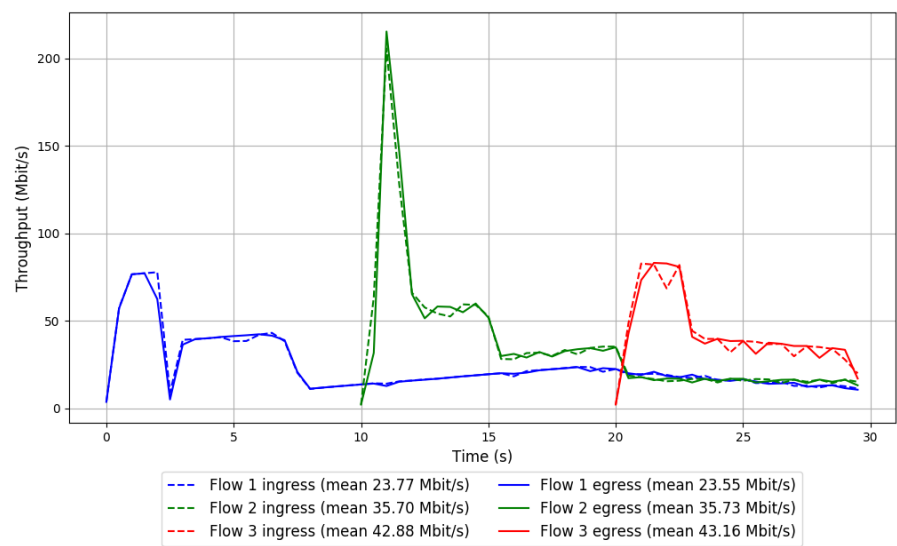
-- Flow 3:

Average throughput: 43.16 Mbit/s

95th percentile per-packet one-way delay: 55.033 ms

Loss rate: 0.45%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-17 00:03:57

End at: 2017-11-17 00:04:27

Below is generated by plot.py at 2017-11-17 04:24:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 70.96 Mbit/s

95th percentile per-packet one-way delay: 53.020 ms

Loss rate: 0.80%

-- Flow 1:

Average throughput: 54.95 Mbit/s

95th percentile per-packet one-way delay: 51.751 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 8.44 Mbit/s

95th percentile per-packet one-way delay: 53.180 ms

Loss rate: 0.92%

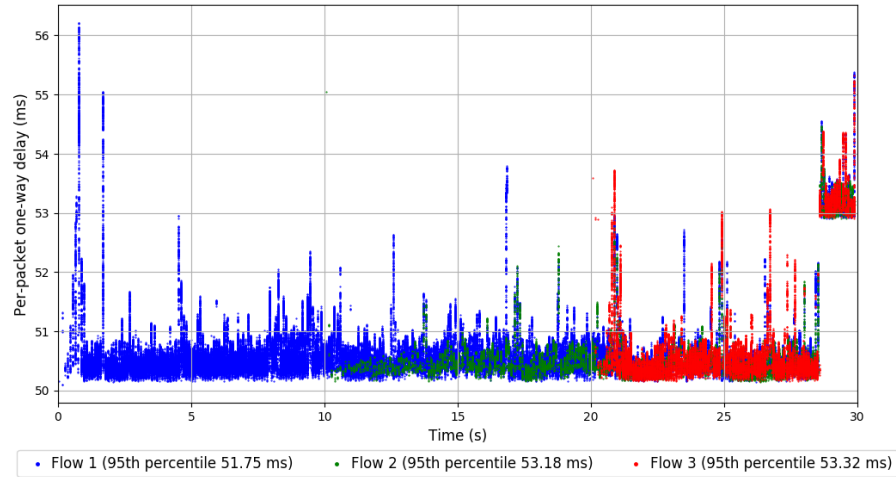
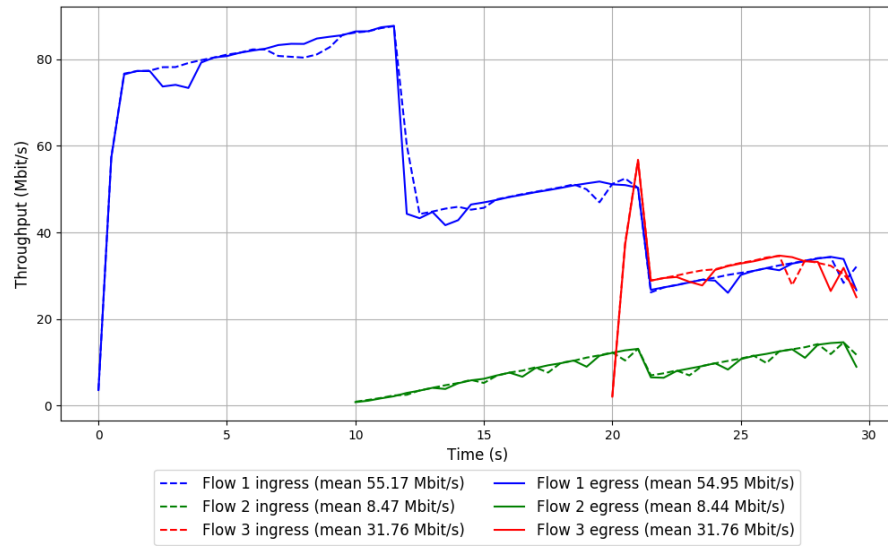
-- Flow 3:

Average throughput: 31.76 Mbit/s

95th percentile per-packet one-way delay: 53.318 ms

Loss rate: 1.07%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-17 00:16:00

End at: 2017-11-17 00:16:30

Below is generated by plot.py at 2017-11-17 04:24:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.04 Mbit/s

95th percentile per-packet one-way delay: 54.292 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 36.73 Mbit/s

95th percentile per-packet one-way delay: 54.501 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 25.90 Mbit/s

95th percentile per-packet one-way delay: 53.643 ms

Loss rate: 1.50%

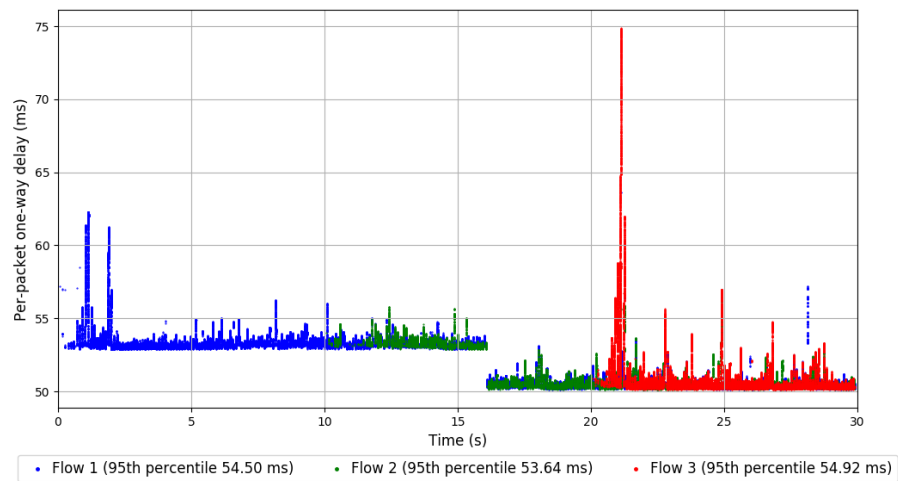
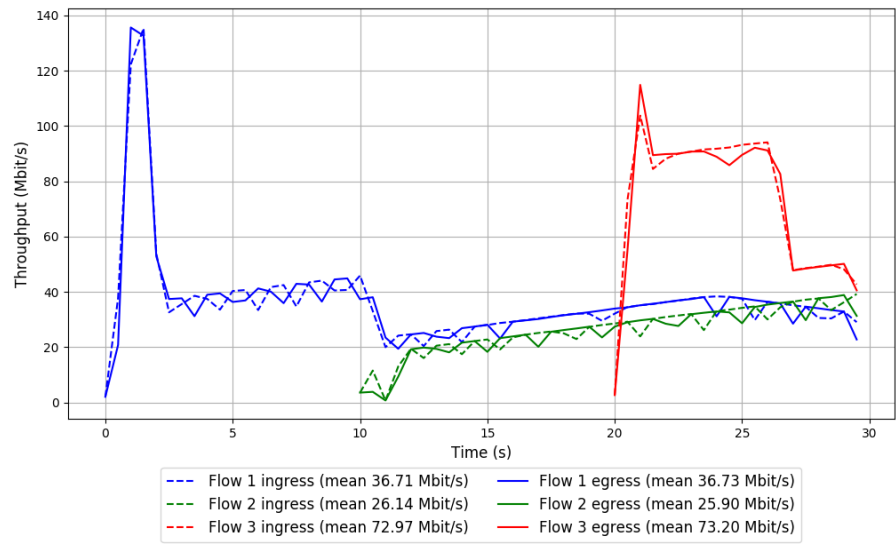
-- Flow 3:

Average throughput: 73.20 Mbit/s

95th percentile per-packet one-way delay: 54.925 ms

Loss rate: 0.71%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-17 00:28:09

End at: 2017-11-17 00:28:39

Below is generated by plot.py at 2017-11-17 04:24:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 251.29 Mbit/s

95th percentile per-packet one-way delay: 55.061 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 146.93 Mbit/s

95th percentile per-packet one-way delay: 53.032 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 120.91 Mbit/s

95th percentile per-packet one-way delay: 55.243 ms

Loss rate: 0.53%

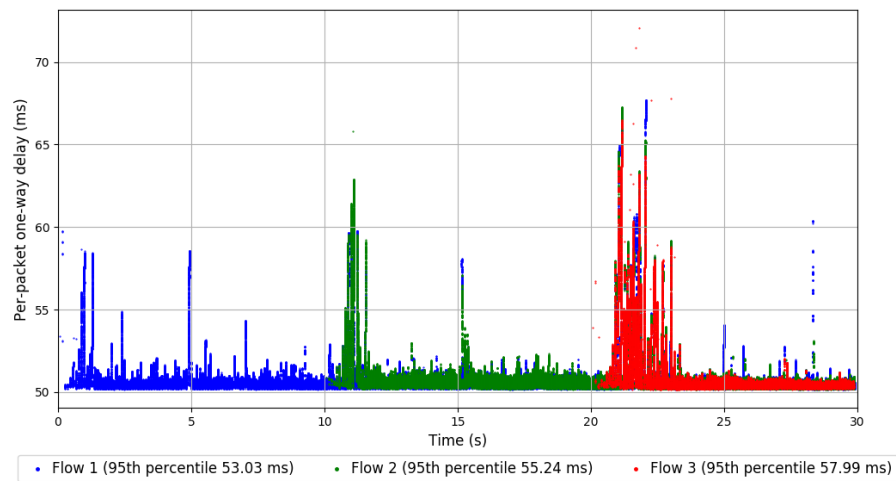
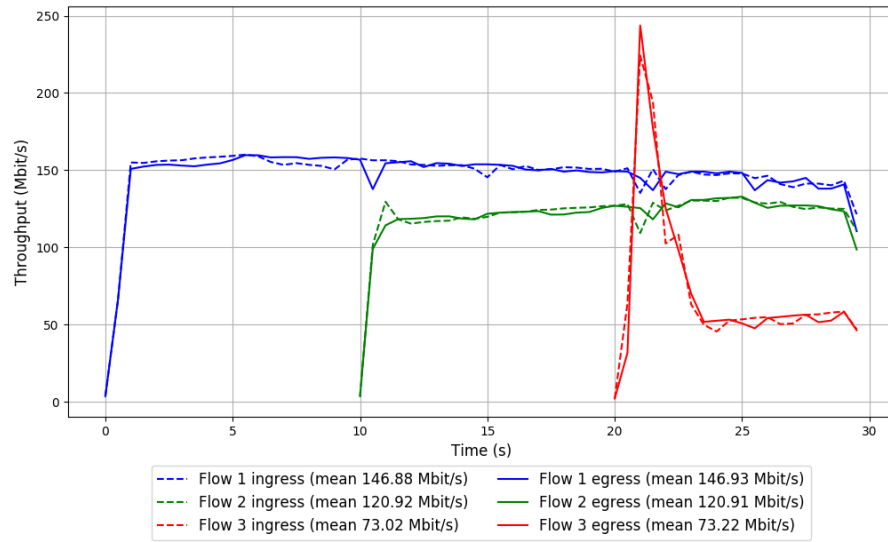
-- Flow 3:

Average throughput: 73.22 Mbit/s

95th percentile per-packet one-way delay: 57.989 ms

Loss rate: 0.82%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-17 00:40:22

End at: 2017-11-17 00:40:52

Below is generated by plot.py at 2017-11-17 04:24:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.91 Mbit/s

95th percentile per-packet one-way delay: 55.182 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 20.18 Mbit/s

95th percentile per-packet one-way delay: 53.456 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 37.20 Mbit/s

95th percentile per-packet one-way delay: 54.162 ms

Loss rate: 0.34%

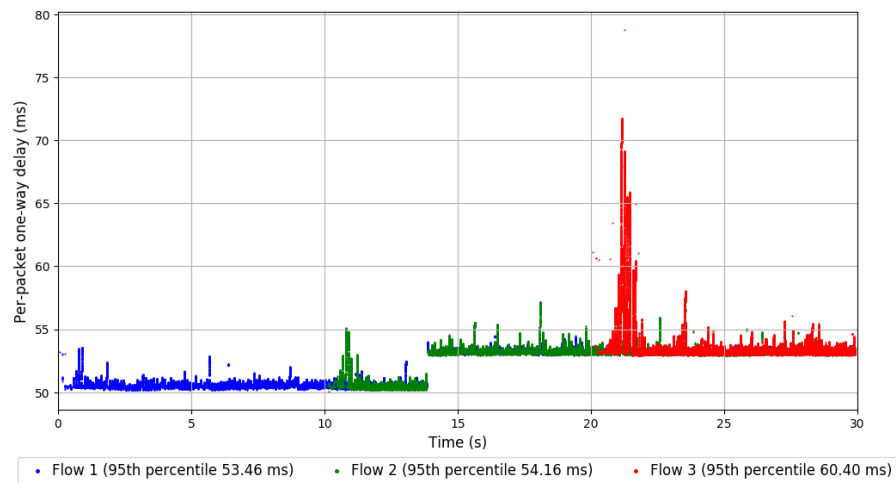
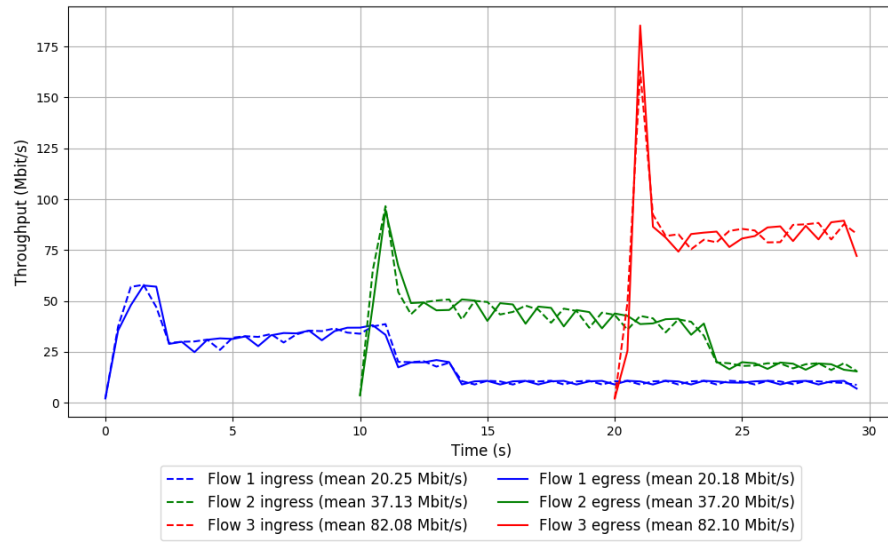
-- Flow 3:

Average throughput: 82.10 Mbit/s

95th percentile per-packet one-way delay: 60.395 ms

Loss rate: 1.10%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-17 00:52:57

End at: 2017-11-17 00:53:27

Below is generated by plot.py at 2017-11-17 04:24:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.82 Mbit/s

95th percentile per-packet one-way delay: 54.557 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 12.46 Mbit/s

95th percentile per-packet one-way delay: 51.181 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 47.70 Mbit/s

95th percentile per-packet one-way delay: 56.084 ms

Loss rate: 0.22%

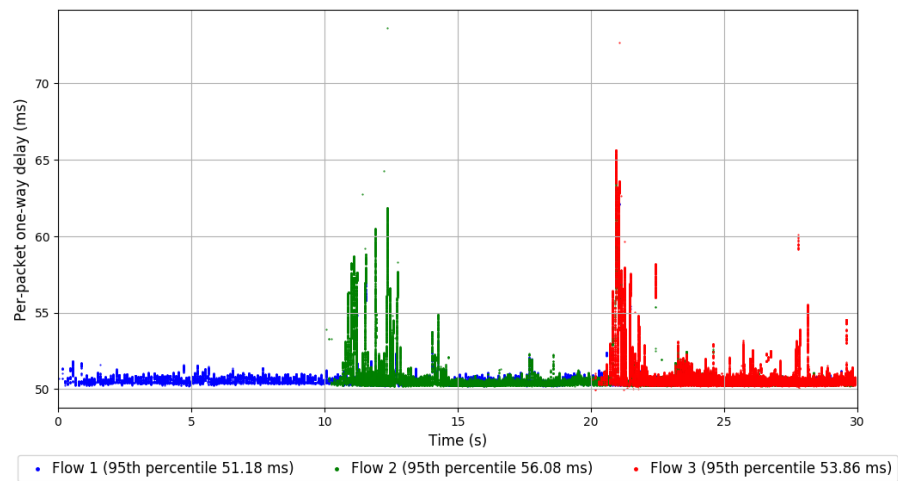
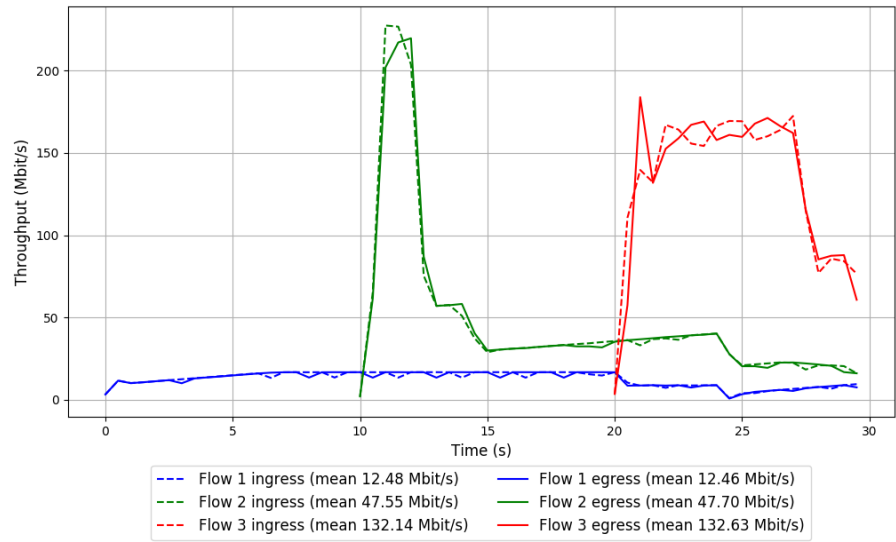
-- Flow 3:

Average throughput: 132.63 Mbit/s

95th percentile per-packet one-way delay: 53.856 ms

Loss rate: 0.68%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-17 01:05:19

End at: 2017-11-17 01:05:49

Below is generated by plot.py at 2017-11-17 04:24:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.91 Mbit/s

95th percentile per-packet one-way delay: 53.830 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 26.63 Mbit/s

95th percentile per-packet one-way delay: 53.481 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 88.53 Mbit/s

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

Loss rate: 0.55%

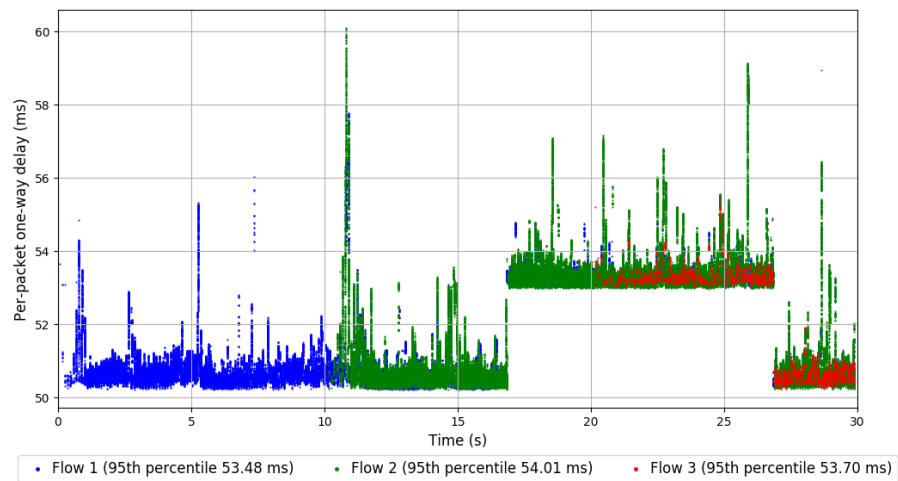
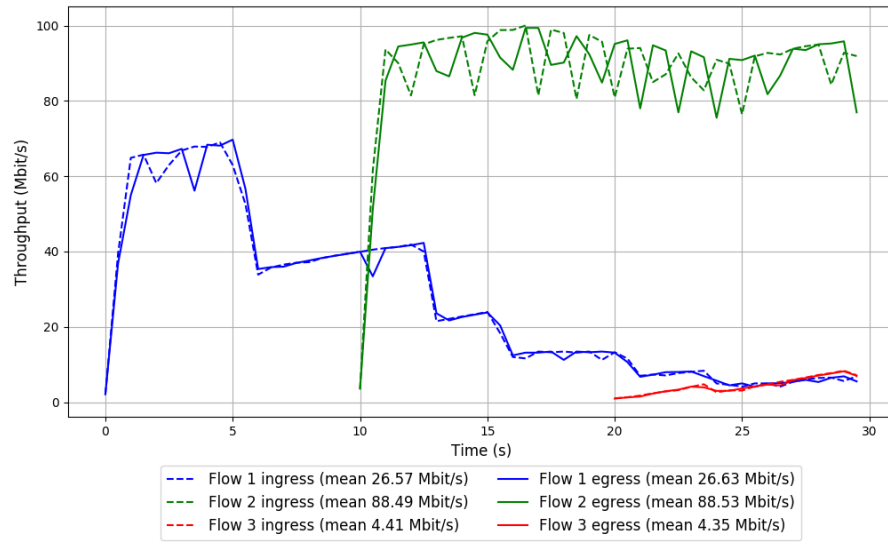
-- Flow 3:

Average throughput: 4.35 Mbit/s

95th percentile per-packet one-way delay: 53.696 ms

Loss rate: 2.25%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-17 01:17:31

End at: 2017-11-17 01:18:01

Below is generated by plot.py at 2017-11-17 04:24:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.29 Mbit/s

95th percentile per-packet one-way delay: 54.259 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 10.76 Mbit/s

95th percentile per-packet one-way delay: 53.620 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 45.98 Mbit/s

95th percentile per-packet one-way delay: 55.466 ms

Loss rate: 0.26%

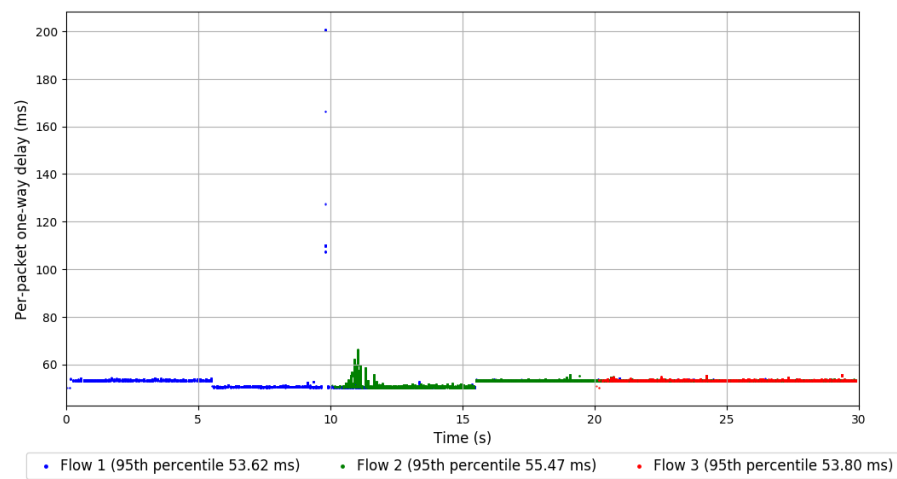
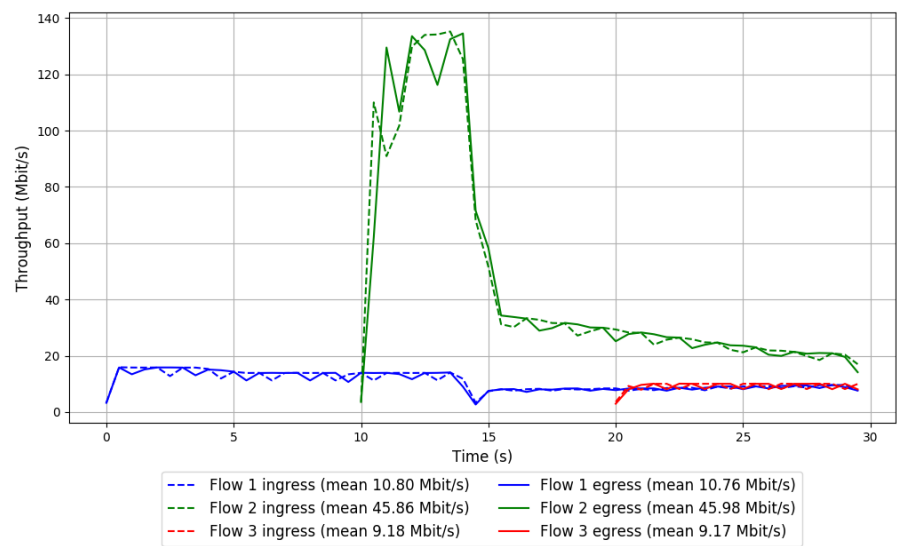
-- Flow 3:

Average throughput: 9.17 Mbit/s

95th percentile per-packet one-way delay: 53.795 ms

Loss rate: 1.11%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-17 01:29:12

End at: 2017-11-17 01:29:42

Below is generated by plot.py at 2017-11-17 04:24:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 163.02 Mbit/s

95th percentile per-packet one-way delay: 54.216 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 101.58 Mbit/s

95th percentile per-packet one-way delay: 54.248 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 39.75 Mbit/s

95th percentile per-packet one-way delay: 54.289 ms

Loss rate: 0.53%

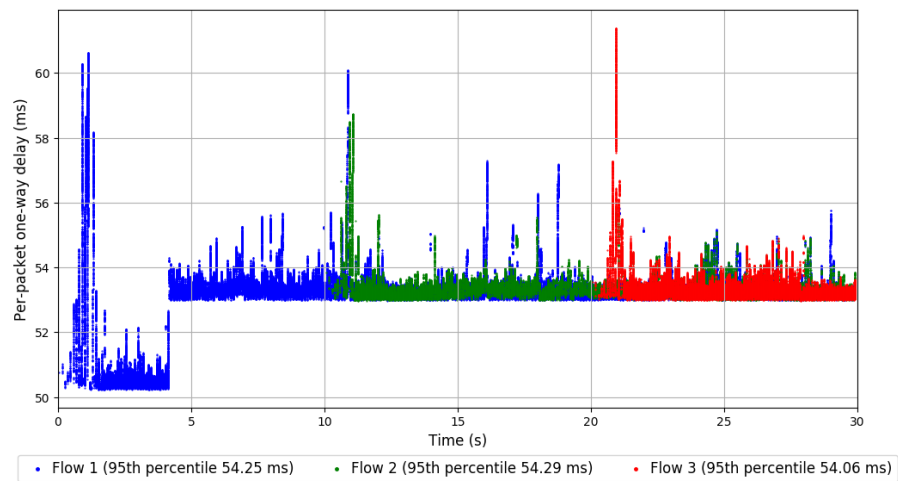
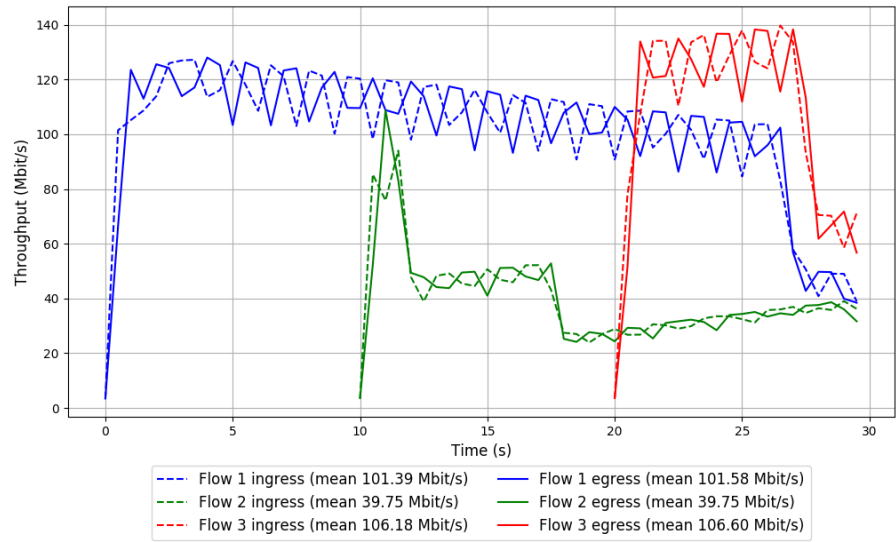
-- Flow 3:

Average throughput: 106.60 Mbit/s

95th percentile per-packet one-way delay: 54.065 ms

Loss rate: 0.69%

Run 10: Report of TCP Vegas — Data Link

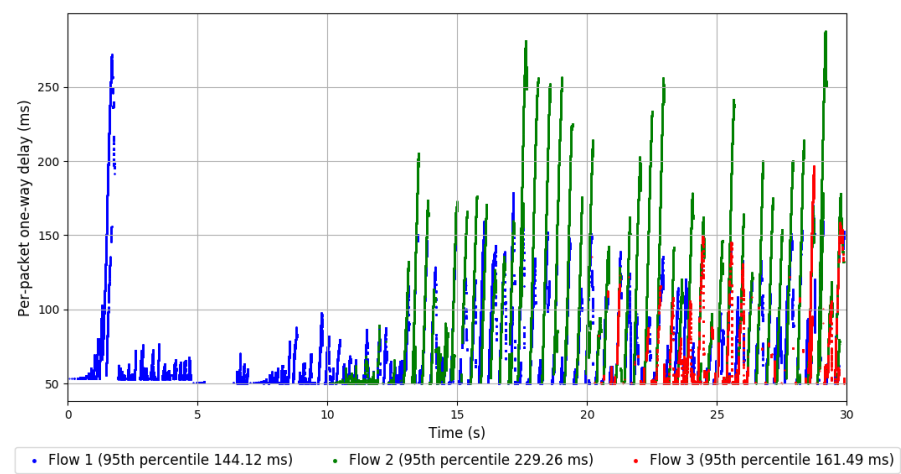
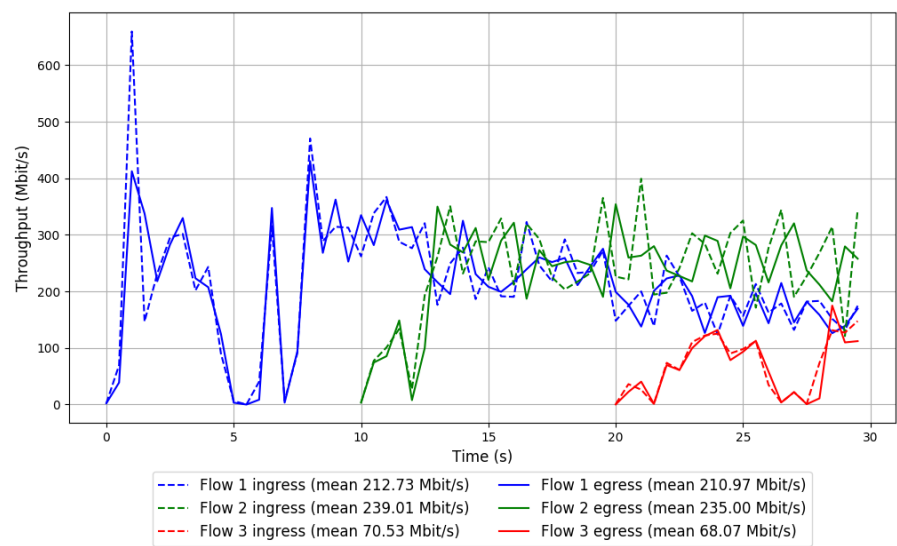


```
Run 1: Statistics of Verus

Start at: 2017-11-16 23:36:51
End at: 2017-11-16 23:37:21

# Below is generated by plot.py at 2017-11-17 04:26:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 389.03 Mbit/s
95th percentile per-packet one-way delay: 199.779 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 210.97 Mbit/s
95th percentile per-packet one-way delay: 144.123 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 235.00 Mbit/s
95th percentile per-packet one-way delay: 229.265 ms
Loss rate: 2.36%
-- Flow 3:
Average throughput: 68.07 Mbit/s
95th percentile per-packet one-way delay: 161.488 ms
Loss rate: 5.34%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-16 23:48:45

End at: 2017-11-16 23:49:15

Below is generated by plot.py at 2017-11-17 04:26:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 376.55 Mbit/s

95th percentile per-packet one-way delay: 100.378 ms

Loss rate: 1.53%

-- Flow 1:

Average throughput: 199.30 Mbit/s

95th percentile per-packet one-way delay: 95.613 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 183.52 Mbit/s

95th percentile per-packet one-way delay: 235.408 ms

Loss rate: 2.83%

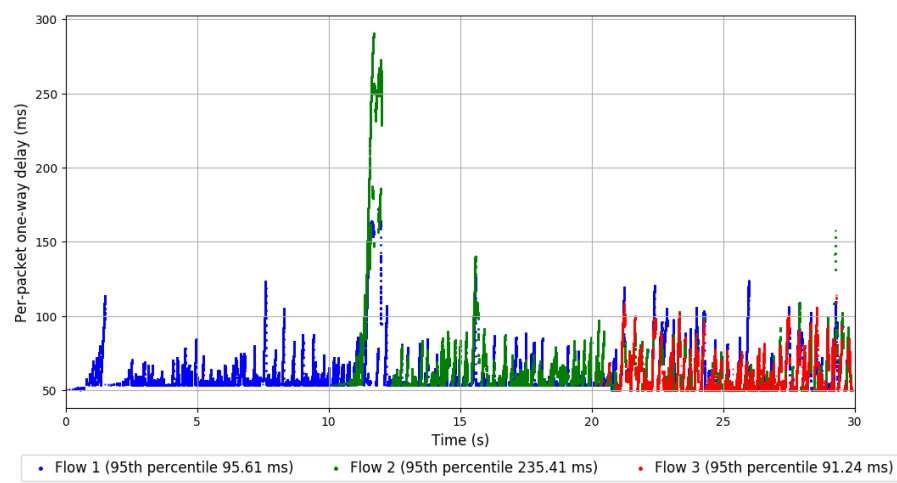
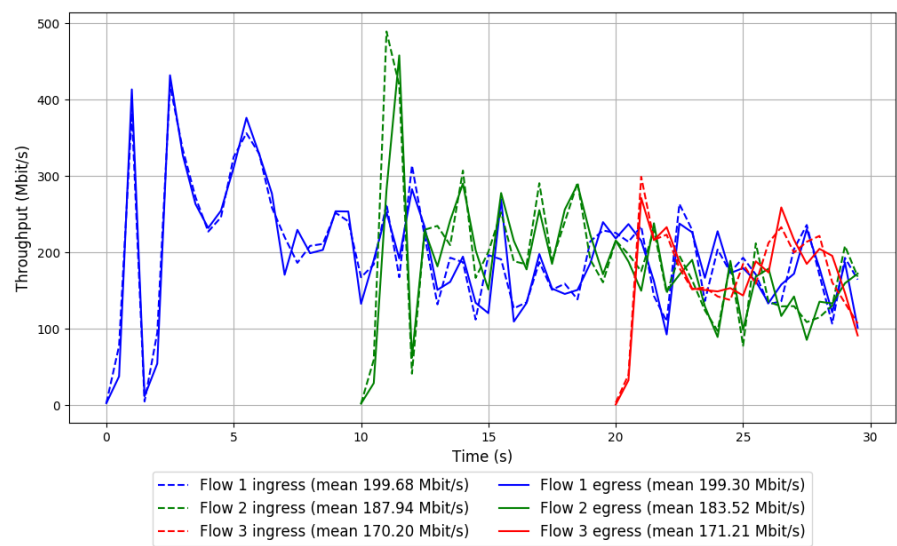
-- Flow 3:

Average throughput: 171.21 Mbit/s

95th percentile per-packet one-way delay: 91.236 ms

Loss rate: 0.64%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-17 00:00:39

End at: 2017-11-17 00:01:09

Below is generated by plot.py at 2017-11-17 04:26:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.40 Mbit/s

95th percentile per-packet one-way delay: 150.202 ms

Loss rate: 0.88%

-- Flow 1:

Average throughput: 157.26 Mbit/s

95th percentile per-packet one-way delay: 93.246 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 199.83 Mbit/s

95th percentile per-packet one-way delay: 179.515 ms

Loss rate: 1.37%

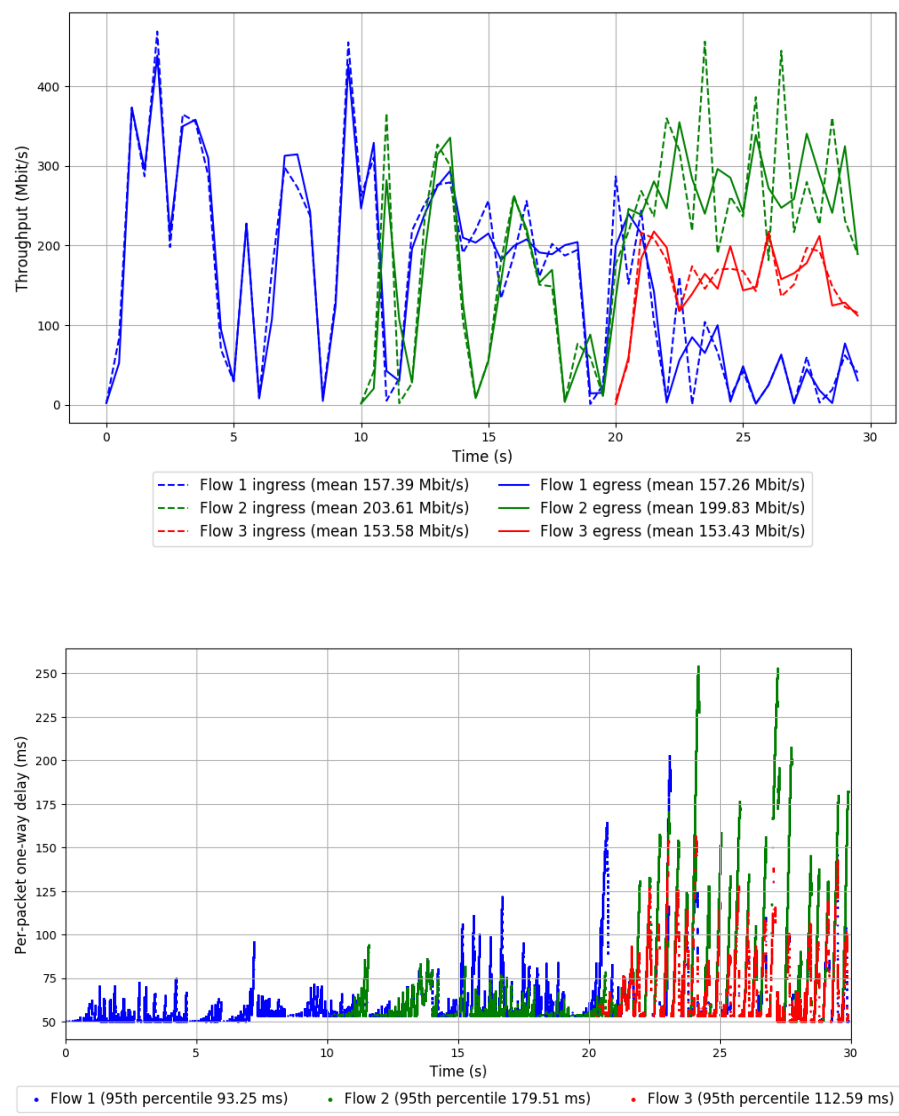
-- Flow 3:

Average throughput: 153.43 Mbit/s

95th percentile per-packet one-way delay: 112.587 ms

Loss rate: 1.01%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-17 00:12:39

End at: 2017-11-17 00:13:09

Below is generated by plot.py at 2017-11-17 04:27:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 380.57 Mbit/s

95th percentile per-packet one-way delay: 123.992 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 254.32 Mbit/s

95th percentile per-packet one-way delay: 128.931 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 111.19 Mbit/s

95th percentile per-packet one-way delay: 119.735 ms

Loss rate: 0.28%

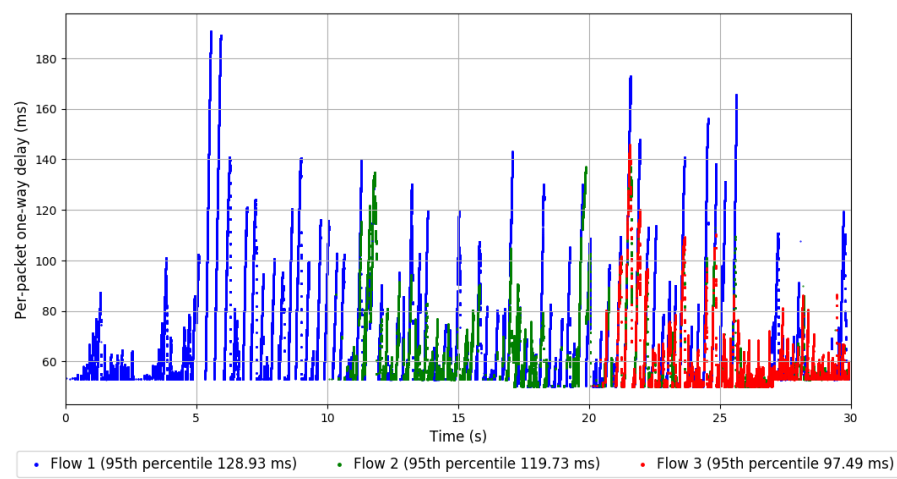
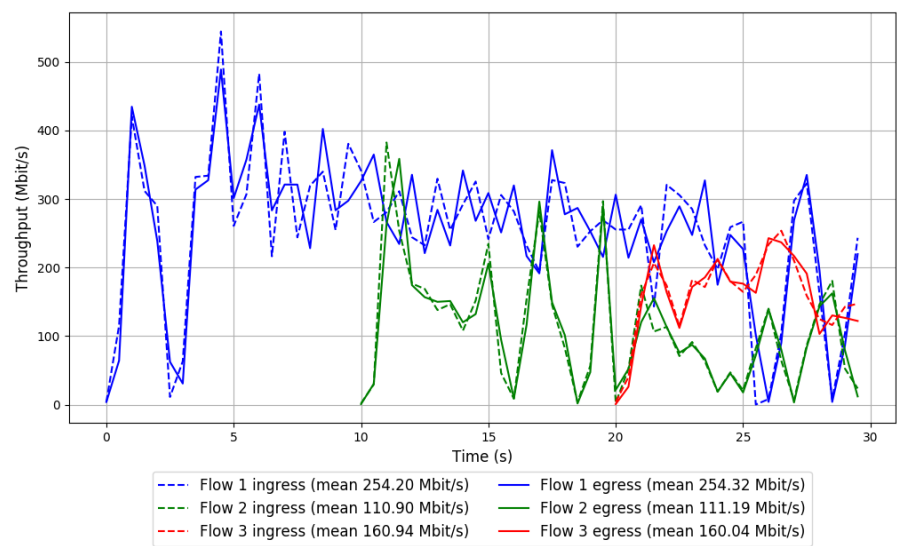
-- Flow 3:

Average throughput: 160.04 Mbit/s

95th percentile per-packet one-way delay: 97.488 ms

Loss rate: 1.55%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-17 00:24:45

End at: 2017-11-17 00:25:15

Below is generated by plot.py at 2017-11-17 04:28:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 361.68 Mbit/s

95th percentile per-packet one-way delay: 107.859 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 197.65 Mbit/s

95th percentile per-packet one-way delay: 109.673 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 179.30 Mbit/s

95th percentile per-packet one-way delay: 106.498 ms

Loss rate: 0.46%

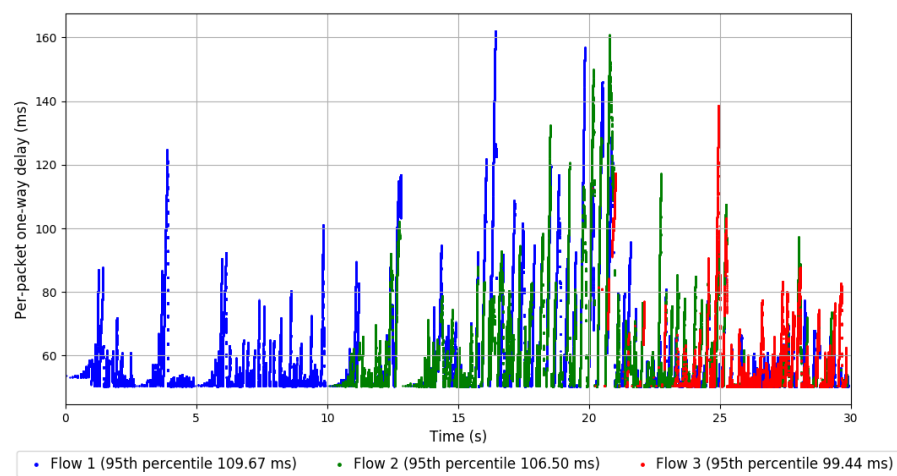
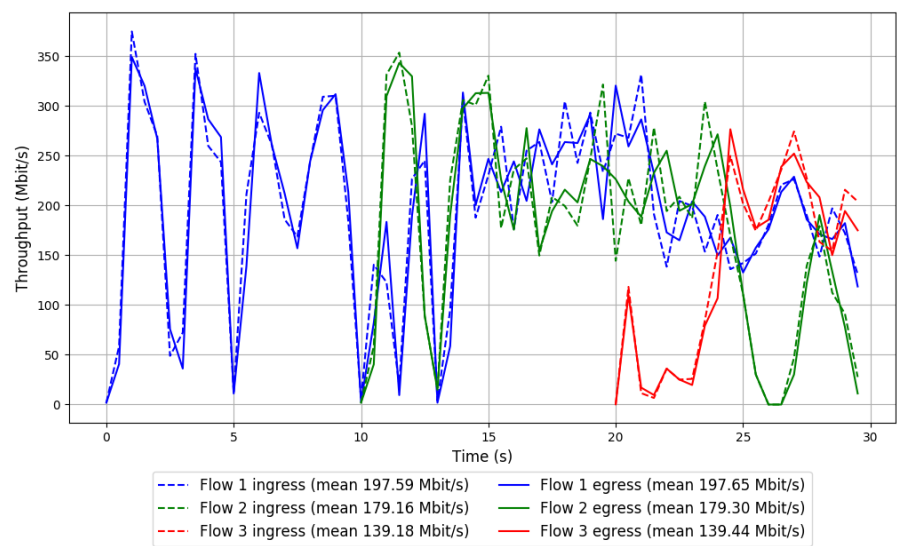
-- Flow 3:

Average throughput: 139.44 Mbit/s

95th percentile per-packet one-way delay: 99.439 ms

Loss rate: 2.35%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-17 00:37:01

End at: 2017-11-17 00:37:31

Below is generated by plot.py at 2017-11-17 04:28:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 366.12 Mbit/s

95th percentile per-packet one-way delay: 91.486 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 187.44 Mbit/s

95th percentile per-packet one-way delay: 87.420 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 202.72 Mbit/s

95th percentile per-packet one-way delay: 94.154 ms

Loss rate: 0.42%

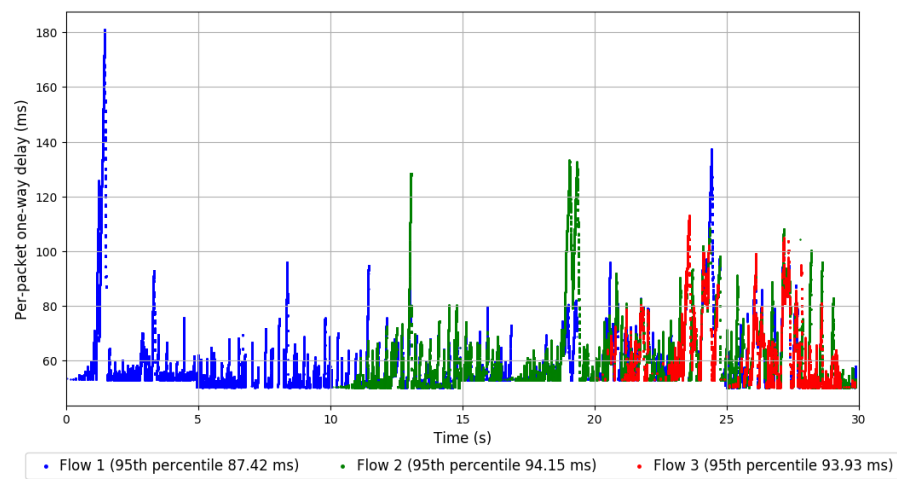
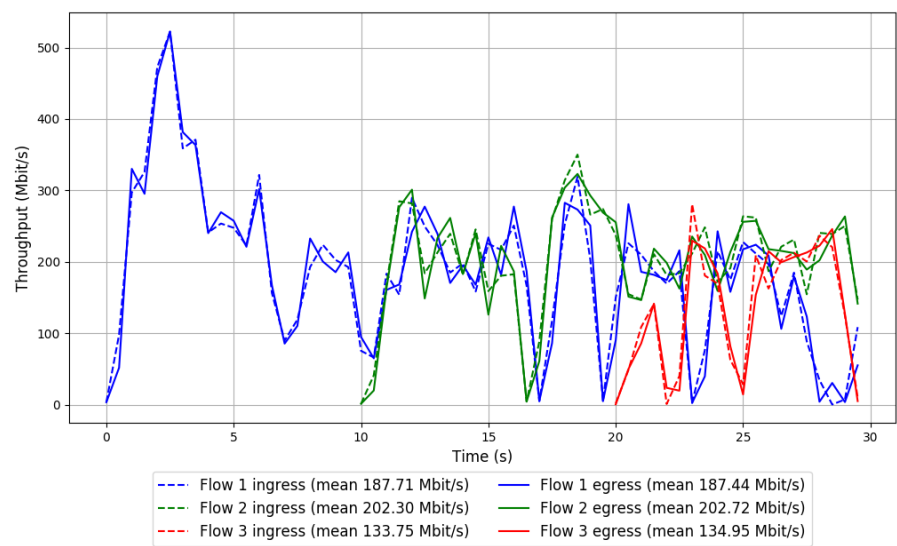
-- Flow 3:

Average throughput: 134.95 Mbit/s

95th percentile per-packet one-way delay: 93.929 ms

Loss rate: 0.20%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-17 00:49:33

End at: 2017-11-17 00:50:03

Below is generated by plot.py at 2017-11-17 04:28:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 360.45 Mbit/s

95th percentile per-packet one-way delay: 172.956 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 274.80 Mbit/s

95th percentile per-packet one-way delay: 184.123 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 104.03 Mbit/s

95th percentile per-packet one-way delay: 137.793 ms

Loss rate: 1.24%

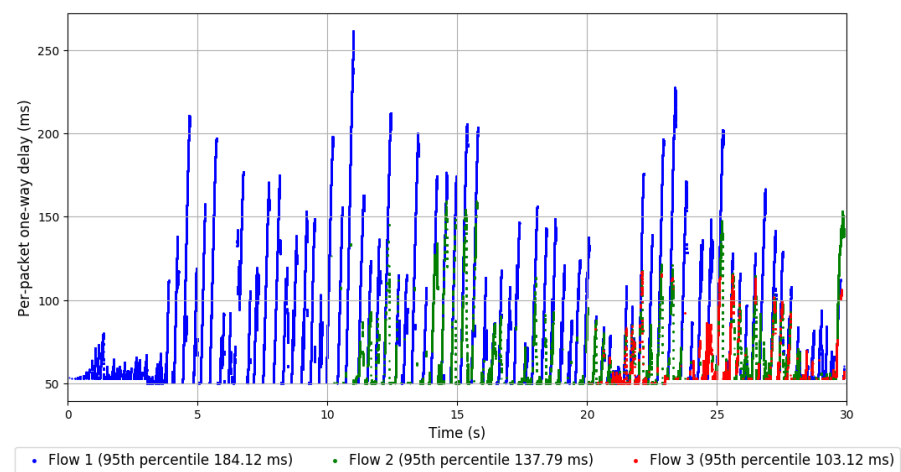
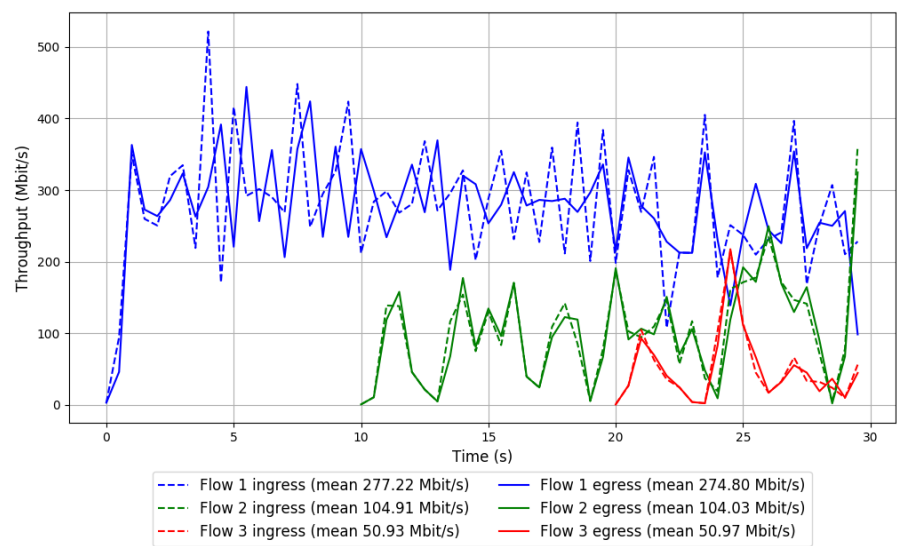
-- Flow 3:

Average throughput: 50.97 Mbit/s

95th percentile per-packet one-way delay: 103.123 ms

Loss rate: 1.15%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-17 01:01:51

End at: 2017-11-17 01:02:21

Below is generated by plot.py at 2017-11-17 04:31:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 394.54 Mbit/s

95th percentile per-packet one-way delay: 131.489 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 274.16 Mbit/s

95th percentile per-packet one-way delay: 139.720 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 125.86 Mbit/s

95th percentile per-packet one-way delay: 111.588 ms

Loss rate: 0.77%

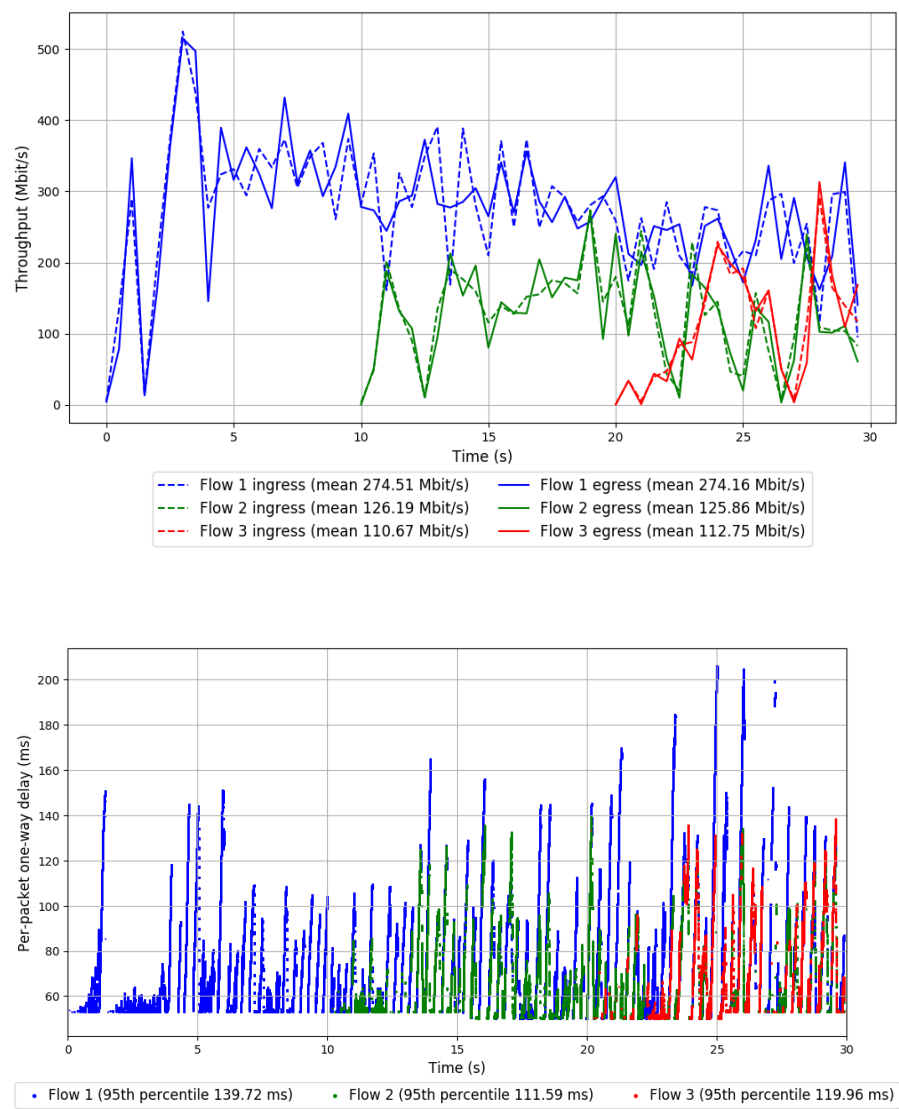
-- Flow 3:

Average throughput: 112.75 Mbit/s

95th percentile per-packet one-way delay: 119.956 ms

Loss rate: 0.01%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-17 01:14:11

End at: 2017-11-17 01:14:41

Below is generated by plot.py at 2017-11-17 04:31:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.13 Mbit/s

95th percentile per-packet one-way delay: 155.736 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 237.62 Mbit/s

95th percentile per-packet one-way delay: 168.339 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 96.25 Mbit/s

95th percentile per-packet one-way delay: 110.442 ms

Loss rate: 0.51%

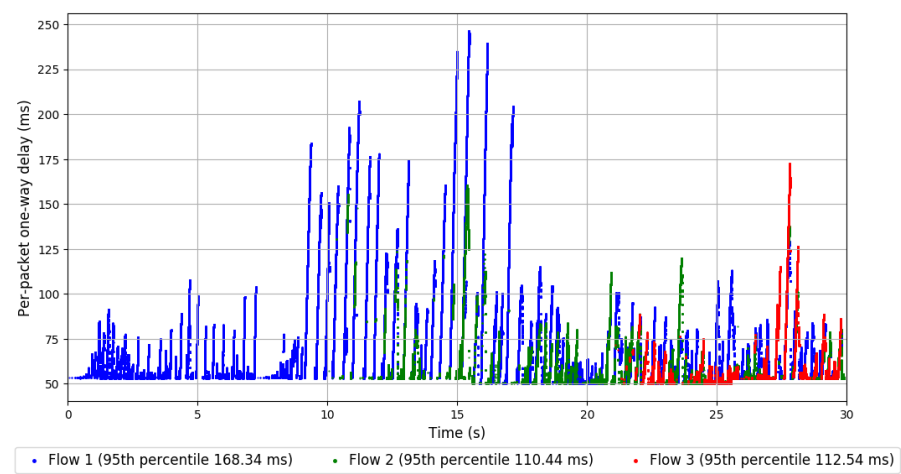
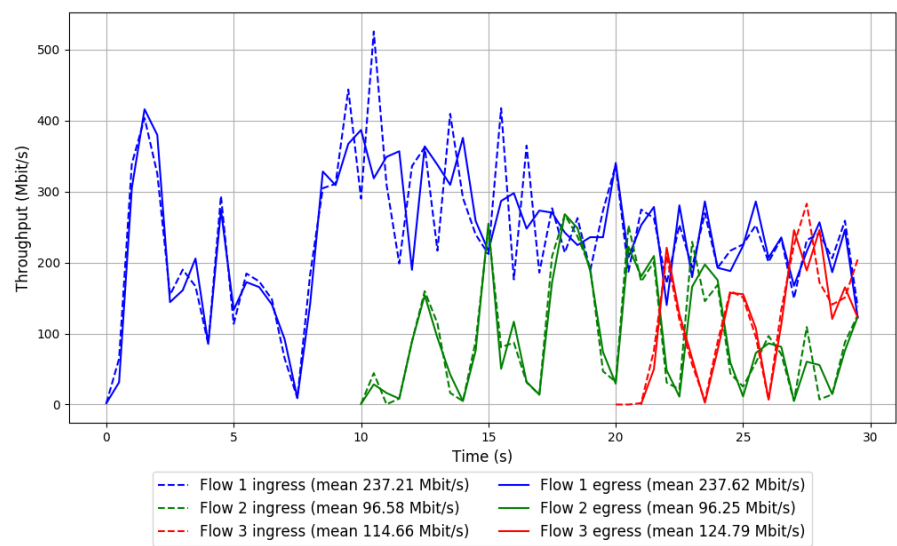
-- Flow 3:

Average throughput: 124.79 Mbit/s

95th percentile per-packet one-way delay: 112.538 ms

Loss rate: 4.71%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-17 01:25:49

End at: 2017-11-17 01:26:19

Below is generated by plot.py at 2017-11-17 04:32:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 366.88 Mbit/s

95th percentile per-packet one-way delay: 206.615 ms

Loss rate: 3.42%

-- Flow 1:

Average throughput: 205.22 Mbit/s

95th percentile per-packet one-way delay: 162.599 ms

Loss rate: 2.90%

-- Flow 2:

Average throughput: 214.73 Mbit/s

95th percentile per-packet one-way delay: 229.019 ms

Loss rate: 4.01%

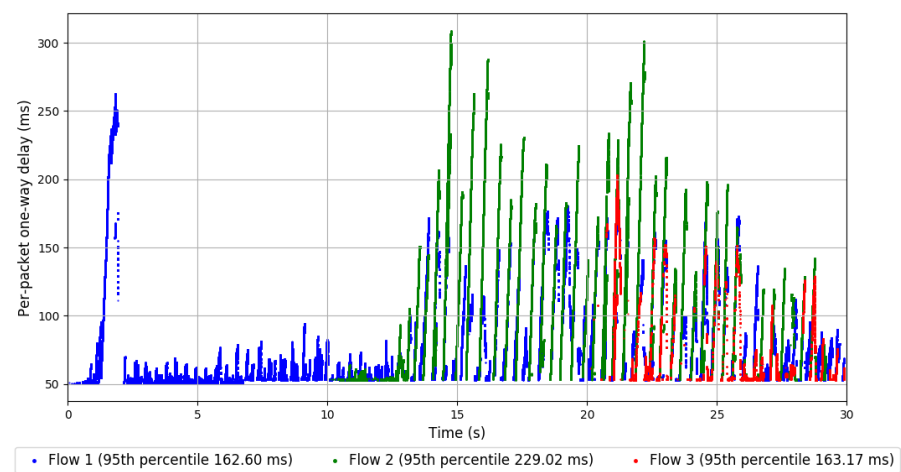
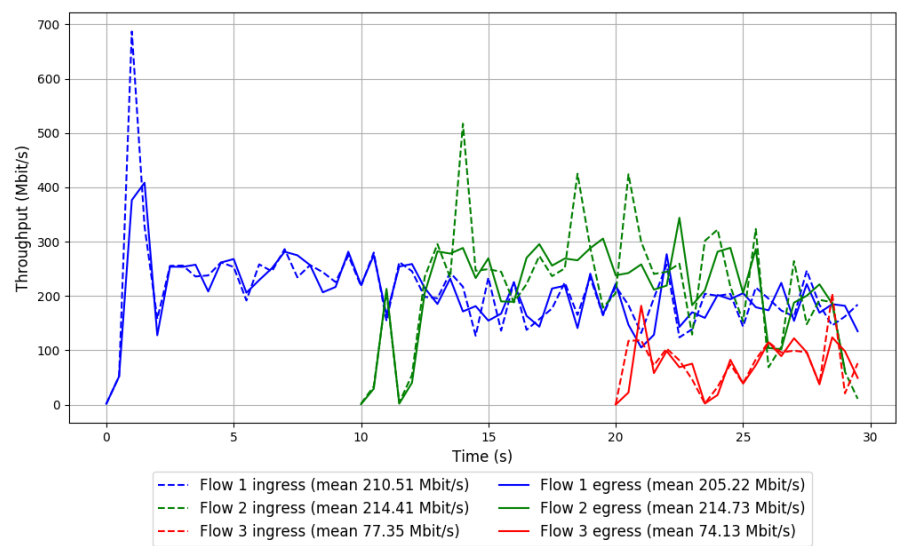
-- Flow 3:

Average throughput: 74.13 Mbit/s

95th percentile per-packet one-way delay: 163.166 ms

Loss rate: 4.35%

Run 10: Report of Verus — Data Link

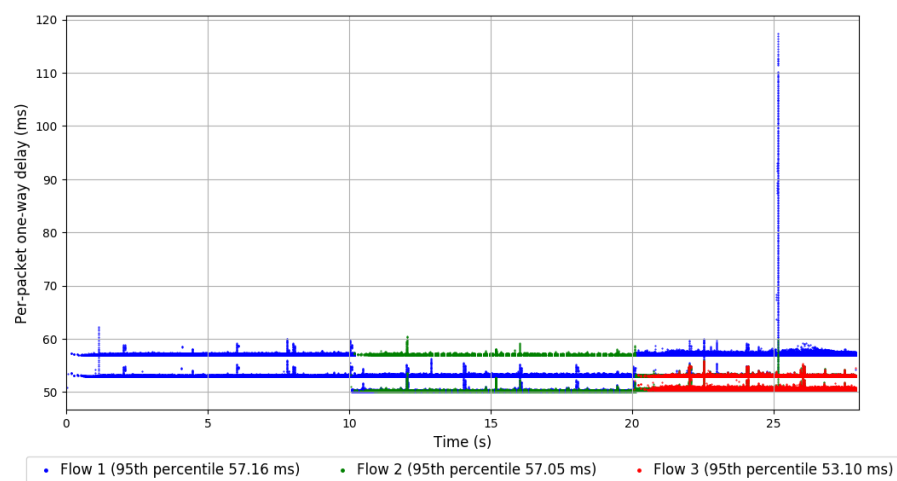
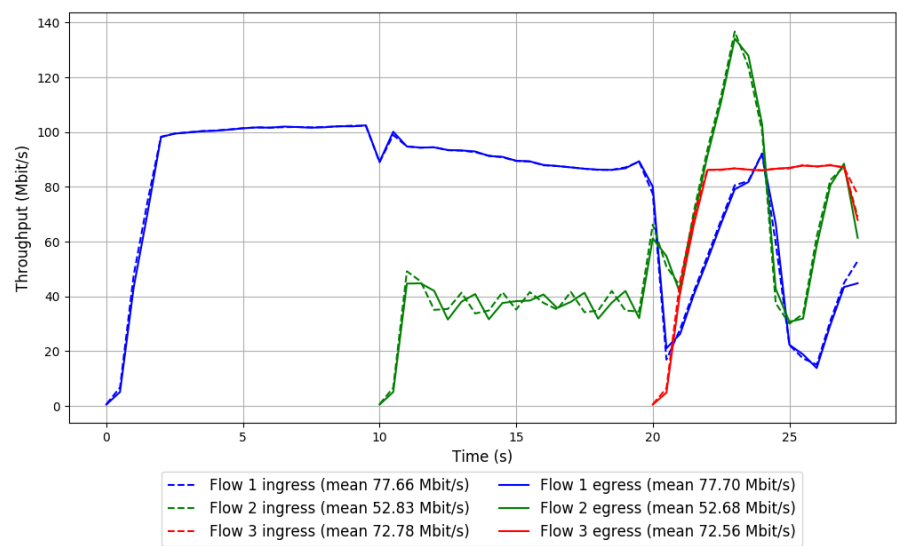


```
Run 1: Statistics of Copa

Start at: 2017-11-16 23:38:44
End at: 2017-11-16 23:39:14

# Below is generated by plot.py at 2017-11-17 04:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 131.85 Mbit/s
95th percentile per-packet one-way delay: 57.103 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 77.70 Mbit/s
95th percentile per-packet one-way delay: 57.158 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 52.68 Mbit/s
95th percentile per-packet one-way delay: 57.052 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 72.56 Mbit/s
95th percentile per-packet one-way delay: 53.099 ms
Loss rate: 1.60%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-16 23:50:34

End at: 2017-11-16 23:51:04

Below is generated by plot.py at 2017-11-17 04:32:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.86 Mbit/s

95th percentile per-packet one-way delay: 53.871 ms

Loss rate: 0.45%

-- Flow 1:

Average throughput: 70.83 Mbit/s

95th percentile per-packet one-way delay: 53.812 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 69.47 Mbit/s

95th percentile per-packet one-way delay: 53.704 ms

Loss rate: 0.48%

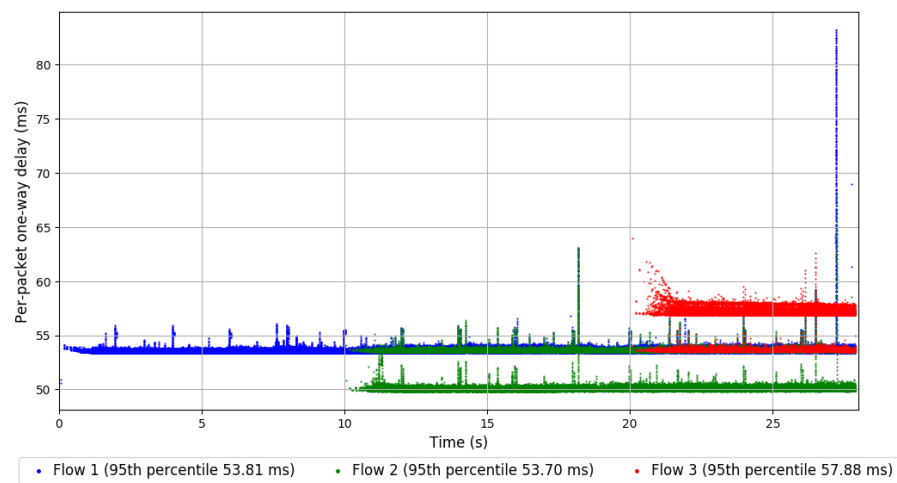
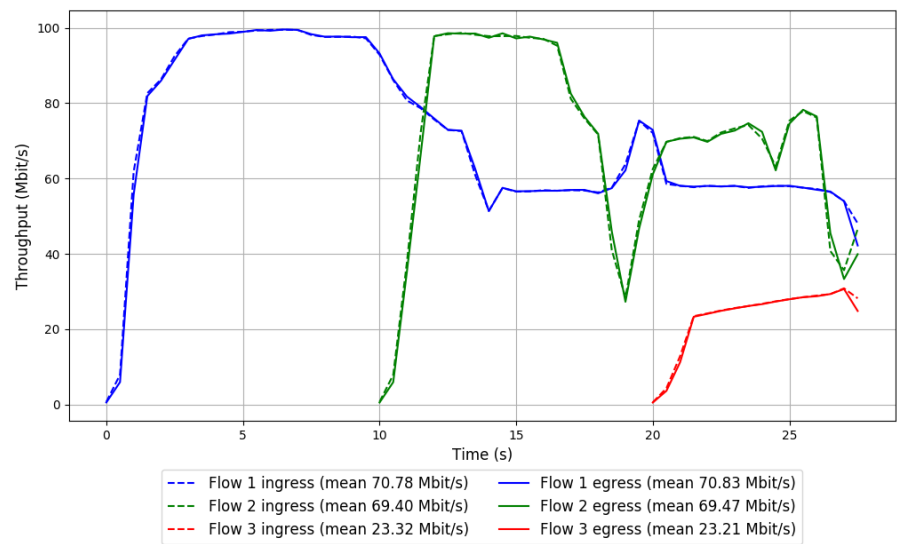
-- Flow 3:

Average throughput: 23.21 Mbit/s

95th percentile per-packet one-way delay: 57.878 ms

Loss rate: 1.82%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-17 00:02:25

End at: 2017-11-17 00:02:55

Below is generated by plot.py at 2017-11-17 04:32:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.94 Mbit/s

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

Loss rate: 0.59%

-- Flow 1:

Average throughput: 70.00 Mbit/s

95th percentile per-packet one-way delay: 57.300 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 61.54 Mbit/s

95th percentile per-packet one-way delay: 53.135 ms

Loss rate: 0.65%

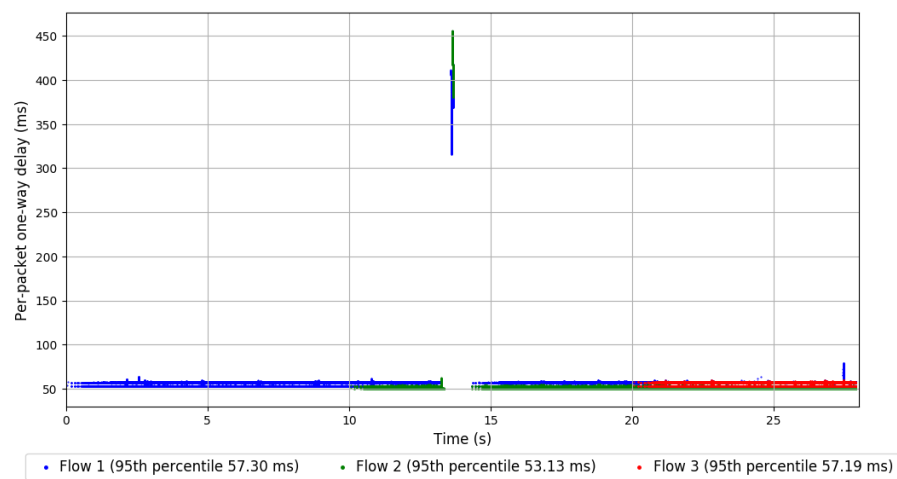
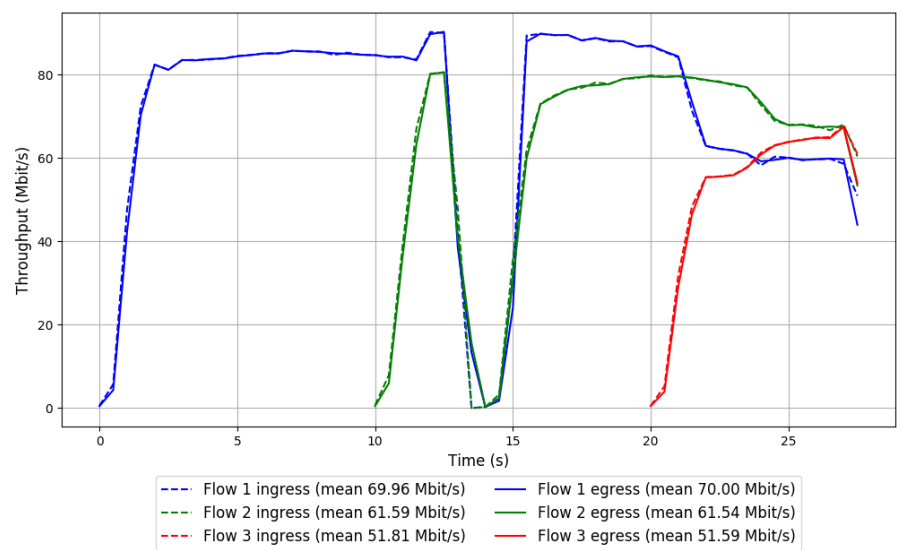
-- Flow 3:

Average throughput: 51.59 Mbit/s

95th percentile per-packet one-way delay: 57.189 ms

Loss rate: 1.74%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-17 00:14:29

End at: 2017-11-17 00:14:59

Below is generated by plot.py at 2017-11-17 04:32:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.67 Mbit/s

95th percentile per-packet one-way delay: 57.217 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 74.42 Mbit/s

95th percentile per-packet one-way delay: 53.145 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 54.93 Mbit/s

95th percentile per-packet one-way delay: 57.310 ms

Loss rate: 0.96%

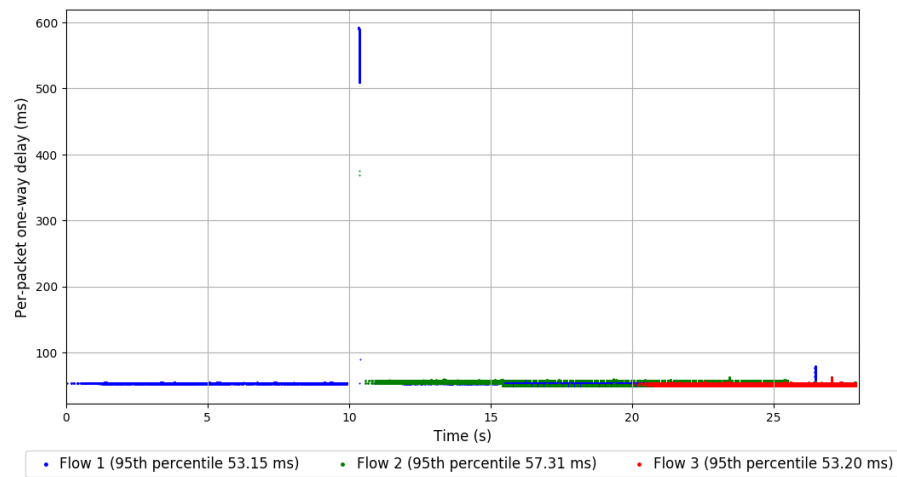
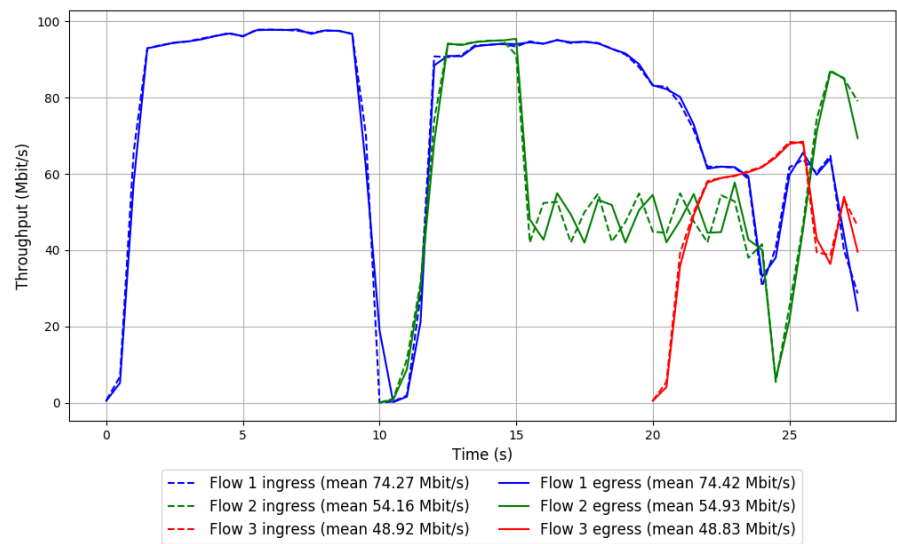
-- Flow 3:

Average throughput: 48.83 Mbit/s

95th percentile per-packet one-way delay: 53.200 ms

Loss rate: 1.52%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-17 00:26:36

End at: 2017-11-17 00:27:06

Below is generated by plot.py at 2017-11-17 04:32:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.34 Mbit/s

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

Loss rate: 0.70%

-- Flow 1:

Average throughput: 76.75 Mbit/s

95th percentile per-packet one-way delay: 53.099 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 49.19 Mbit/s

95th percentile per-packet one-way delay: 53.673 ms

Loss rate: 0.94%

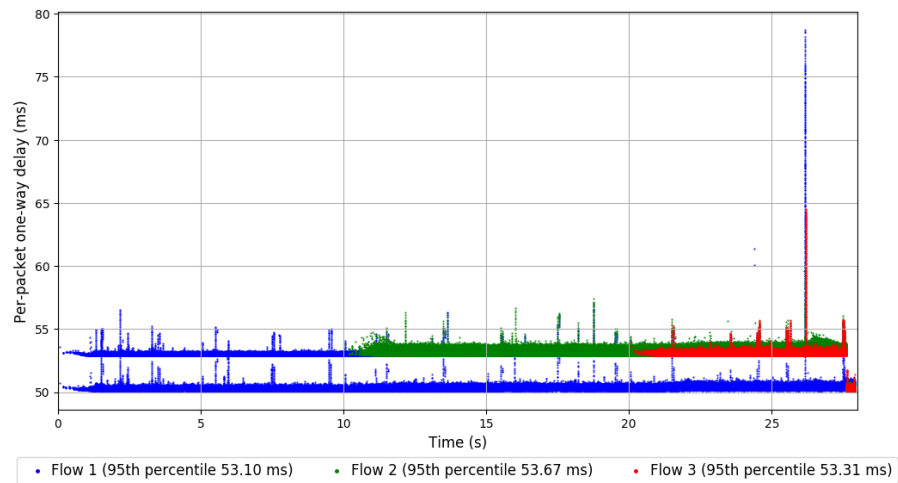
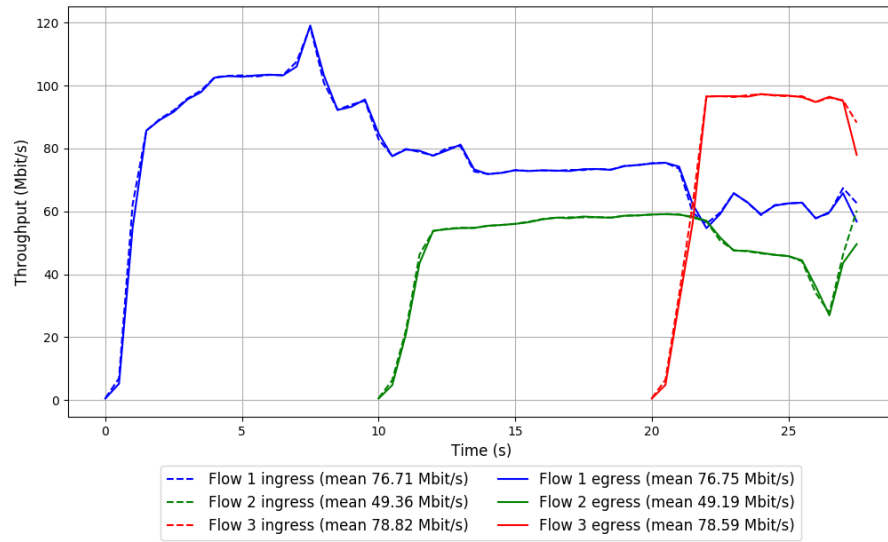
-- Flow 3:

Average throughput: 78.59 Mbit/s

95th percentile per-packet one-way delay: 53.306 ms

Loss rate: 1.63%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-17 00:38:51

End at: 2017-11-17 00:39:21

Below is generated by plot.py at 2017-11-17 04:34:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.62 Mbit/s

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

Loss rate: 0.51%

-- Flow 1:

Average throughput: 64.82 Mbit/s

95th percentile per-packet one-way delay: 53.306 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 74.49 Mbit/s

95th percentile per-packet one-way delay: 50.412 ms

Loss rate: 0.52%

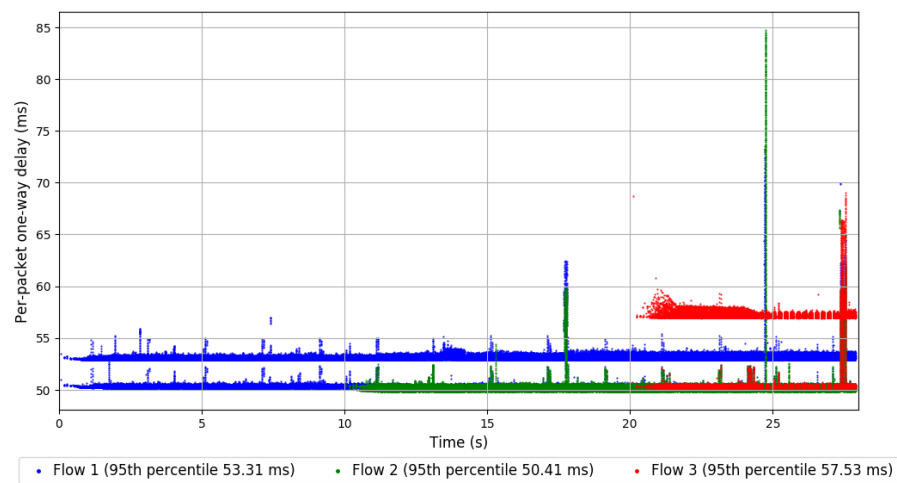
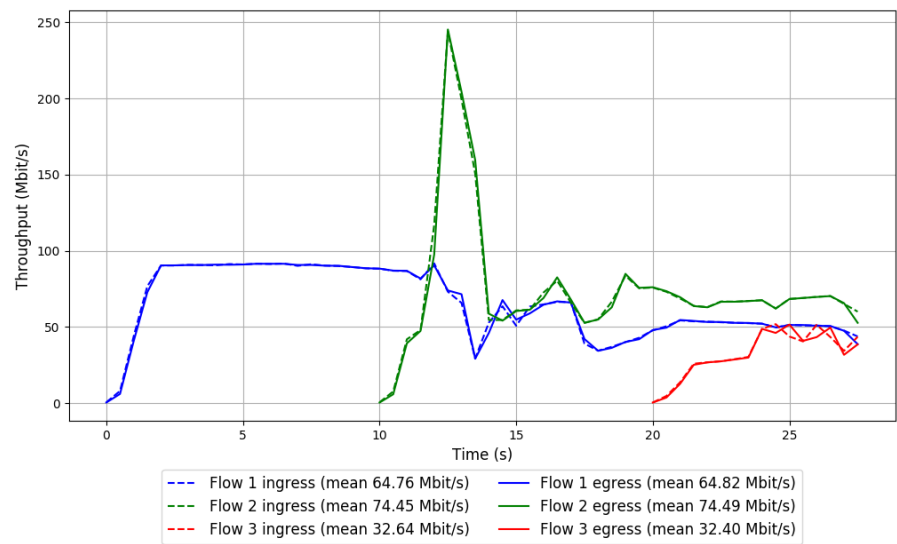
-- Flow 3:

Average throughput: 32.40 Mbit/s

95th percentile per-packet one-way delay: 57.533 ms

Loss rate: 2.01%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-17 00:51:26

End at: 2017-11-17 00:51:56

Below is generated by plot.py at 2017-11-17 04:34:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.88 Mbit/s

95th percentile per-packet one-way delay: 53.378 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 69.68 Mbit/s

95th percentile per-packet one-way delay: 53.409 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 74.06 Mbit/s

95th percentile per-packet one-way delay: 53.323 ms

Loss rate: 0.68%

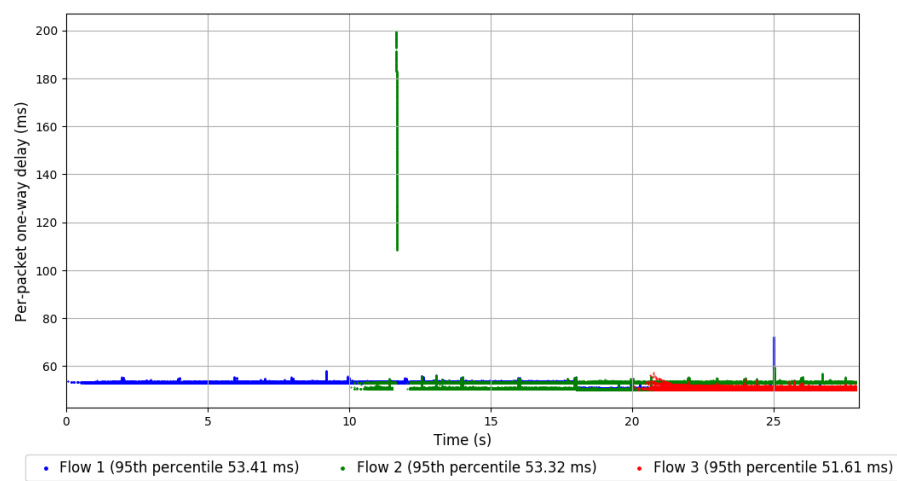
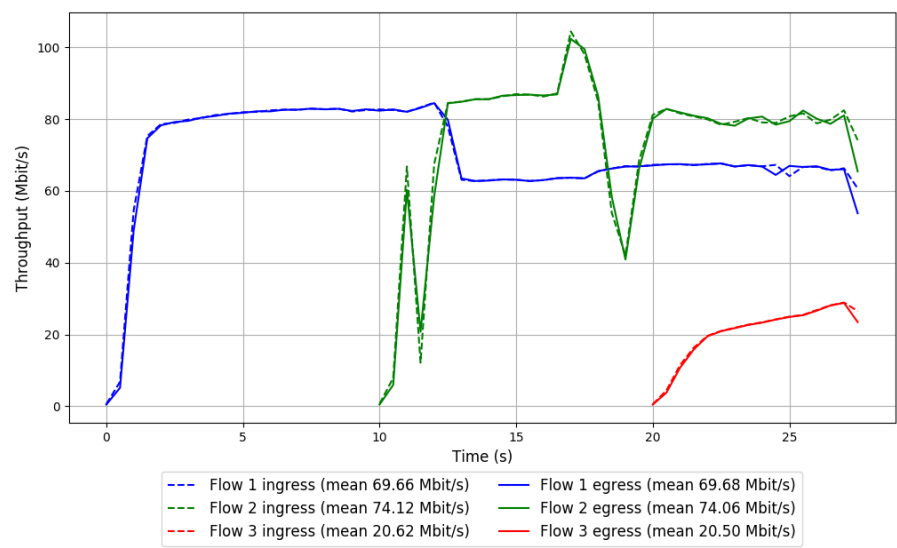
-- Flow 3:

Average throughput: 20.50 Mbit/s

95th percentile per-packet one-way delay: 51.614 ms

Loss rate: 1.84%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-17 01:03:46

End at: 2017-11-17 01:04:16

Below is generated by plot.py at 2017-11-17 04:35:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.70 Mbit/s

95th percentile per-packet one-way delay: 53.341 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 84.80 Mbit/s

95th percentile per-packet one-way delay: 53.143 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 69.46 Mbit/s

95th percentile per-packet one-way delay: 53.426 ms

Loss rate: 0.58%

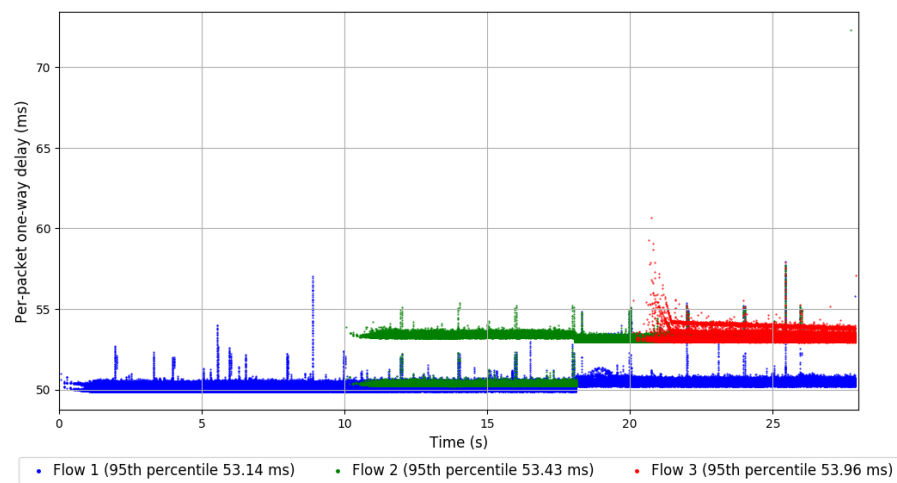
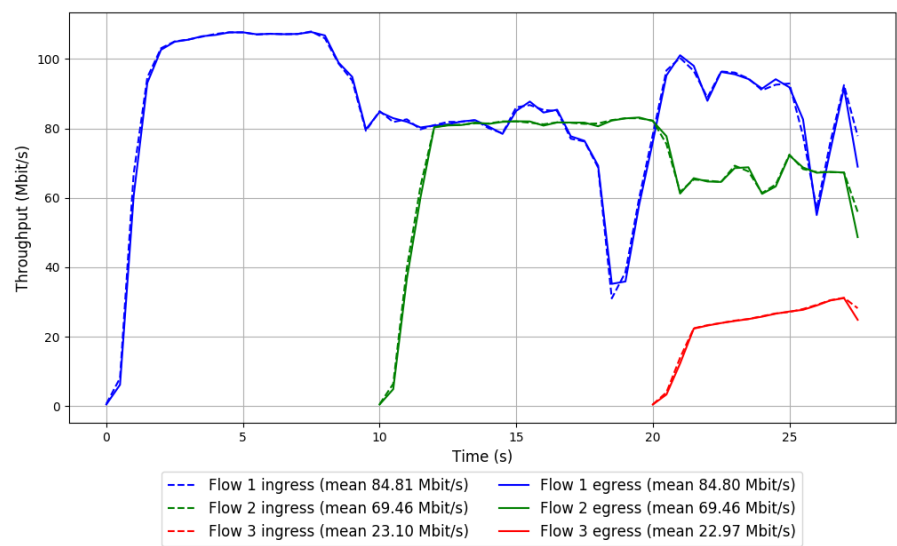
-- Flow 3:

Average throughput: 22.97 Mbit/s

95th percentile per-packet one-way delay: 53.960 ms

Loss rate: 1.83%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-17 01:15:56

End at: 2017-11-17 01:16:26

Below is generated by plot.py at 2017-11-17 04:36:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 164.65 Mbit/s

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

Loss rate: 0.53%

-- Flow 1:

Average throughput: 93.27 Mbit/s

95th percentile per-packet one-way delay: 53.146 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 80.27 Mbit/s

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

Loss rate: 0.72%

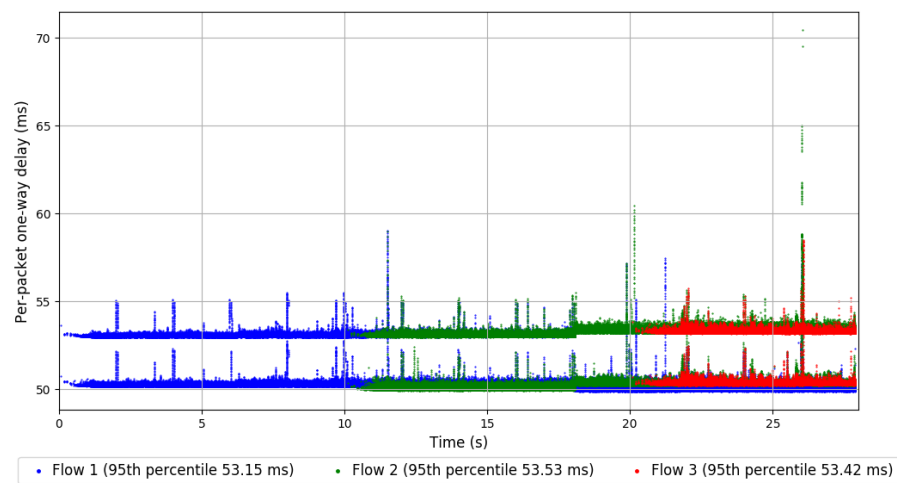
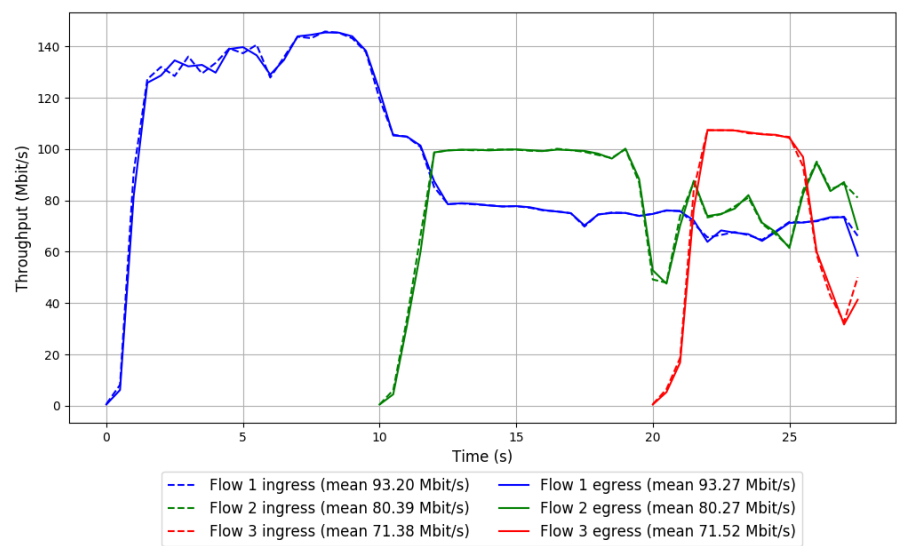
-- Flow 3:

Average throughput: 71.52 Mbit/s

95th percentile per-packet one-way delay: 53.422 ms

Loss rate: 1.12%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-17 01:27:40

End at: 2017-11-17 01:28:10

Below is generated by plot.py at 2017-11-17 04:36:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.27 Mbit/s

95th percentile per-packet one-way delay: 53.481 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 77.52 Mbit/s

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

Loss rate: 0.27%

-- Flow 2:

Average throughput: 73.88 Mbit/s

95th percentile per-packet one-way delay: 53.331 ms

Loss rate: 0.48%

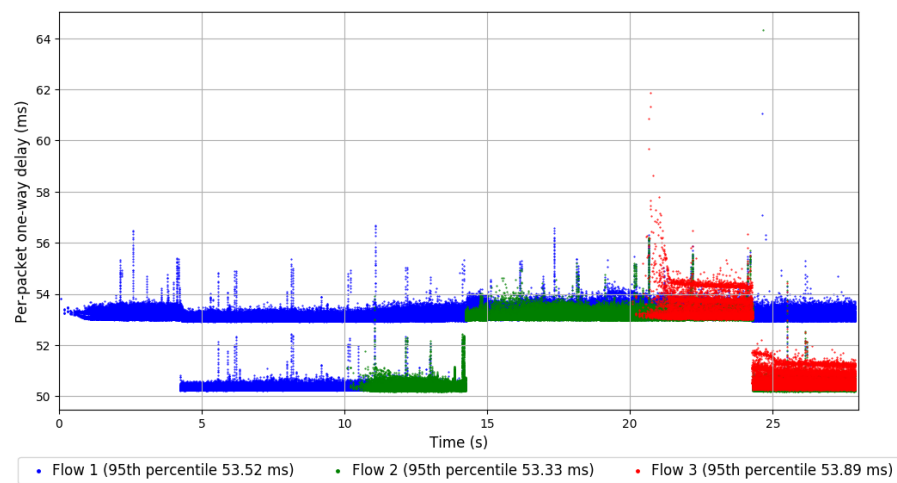
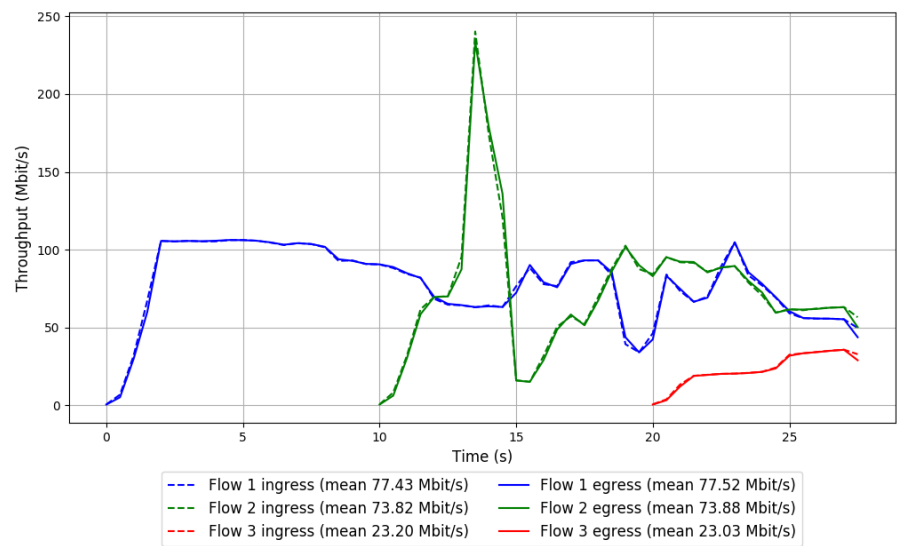
-- Flow 3:

Average throughput: 23.03 Mbit/s

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

Loss rate: 2.05%

Run 10: Report of Copa — Data Link

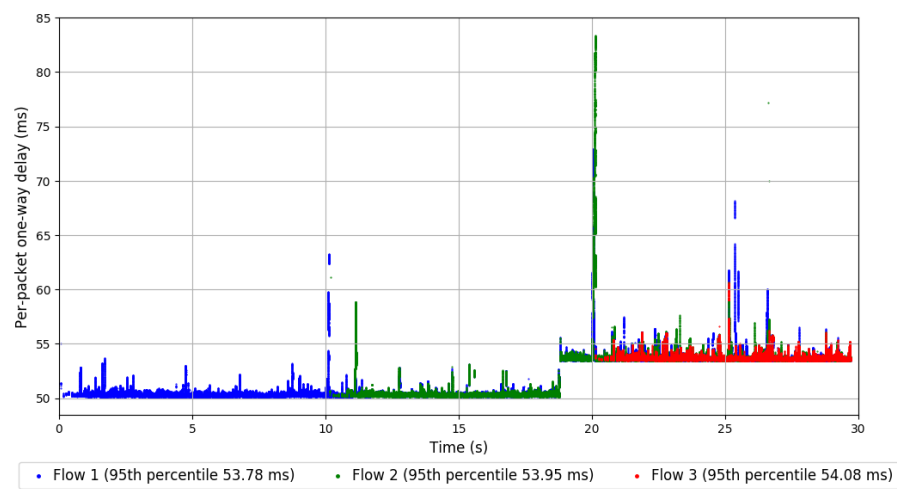
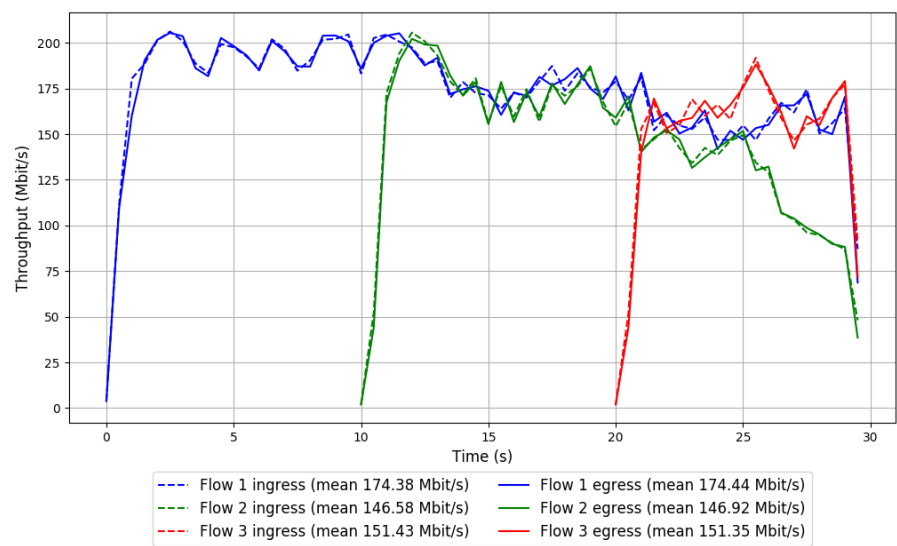


```
Run 1: Statistics of Indigo

Start at: 2017-11-16 23:45:07
End at: 2017-11-16 23:45:37

# Below is generated by plot.py at 2017-11-17 04:37:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.07 Mbit/s
95th percentile per-packet one-way delay: 53.888 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 174.44 Mbit/s
95th percentile per-packet one-way delay: 53.777 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 146.92 Mbit/s
95th percentile per-packet one-way delay: 53.955 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 151.35 Mbit/s
95th percentile per-packet one-way delay: 54.075 ms
Loss rate: 1.17%
```


Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-11-16 23:57:02

End at: 2017-11-16 23:57:32

Below is generated by plot.py at 2017-11-17 04:38:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 325.78 Mbit/s

95th percentile per-packet one-way delay: 53.930 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 176.36 Mbit/s

95th percentile per-packet one-way delay: 53.824 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 158.34 Mbit/s

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

Loss rate: 0.65%

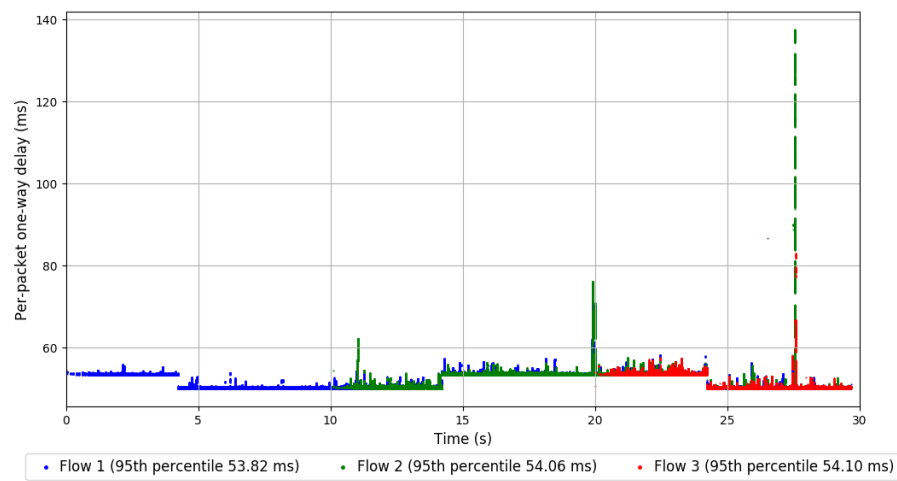
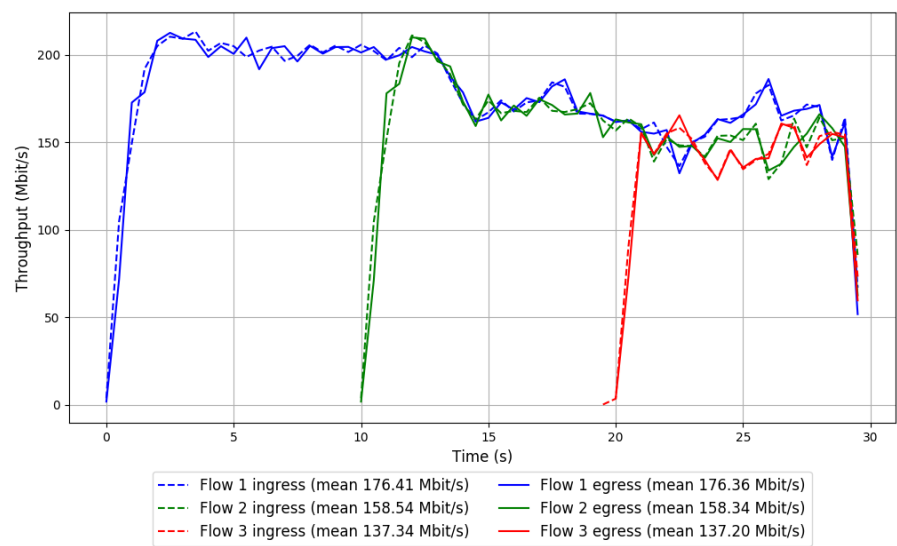
-- Flow 3:

Average throughput: 137.20 Mbit/s

95th percentile per-packet one-way delay: 54.101 ms

Loss rate: 1.19%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-17 00:09:03

End at: 2017-11-17 00:09:33

Below is generated by plot.py at 2017-11-17 04:38:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 306.02 Mbit/s

95th percentile per-packet one-way delay: 53.203 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 164.50 Mbit/s

95th percentile per-packet one-way delay: 53.142 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 154.61 Mbit/s

95th percentile per-packet one-way delay: 53.330 ms

Loss rate: 0.56%

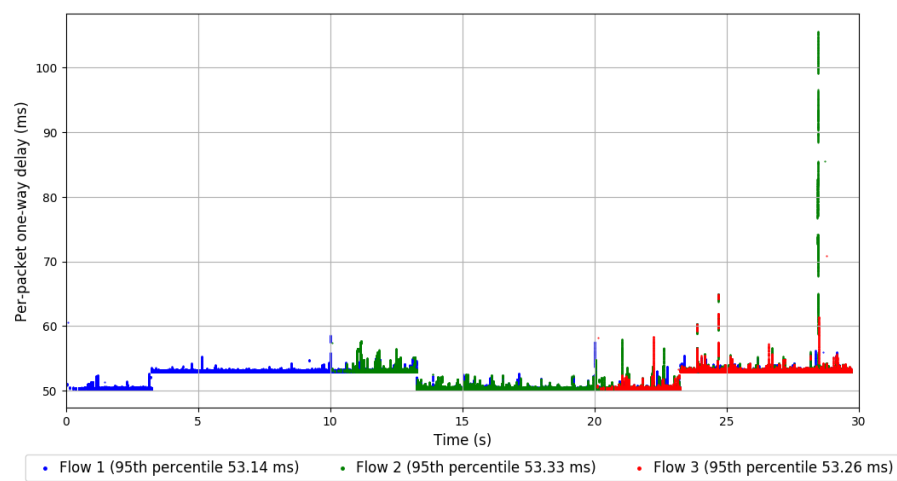
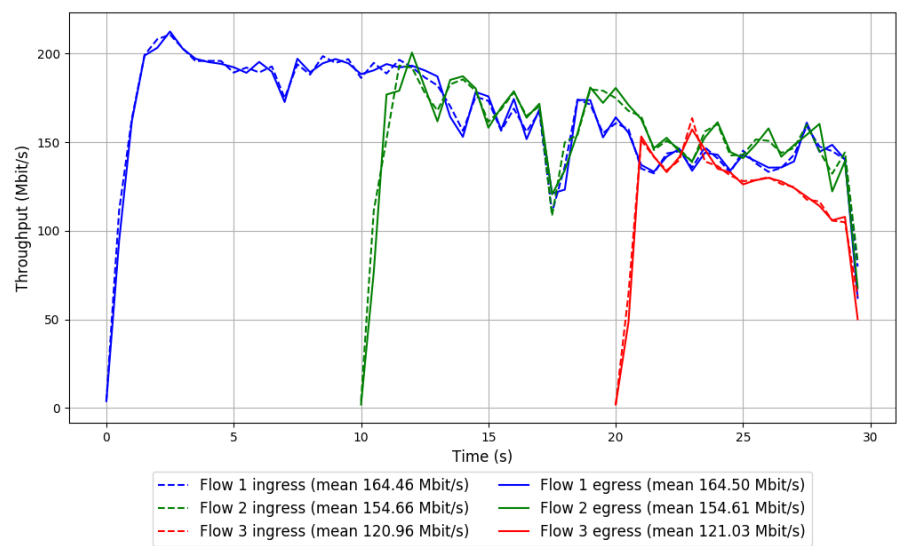
-- Flow 3:

Average throughput: 121.03 Mbit/s

95th percentile per-packet one-way delay: 53.263 ms

Loss rate: 1.02%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-17 00:21:04

End at: 2017-11-17 00:21:34

Below is generated by plot.py at 2017-11-17 04:40:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 326.21 Mbit/s

95th percentile per-packet one-way delay: 53.323 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 176.60 Mbit/s

95th percentile per-packet one-way delay: 53.202 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 163.33 Mbit/s

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

Loss rate: 0.29%

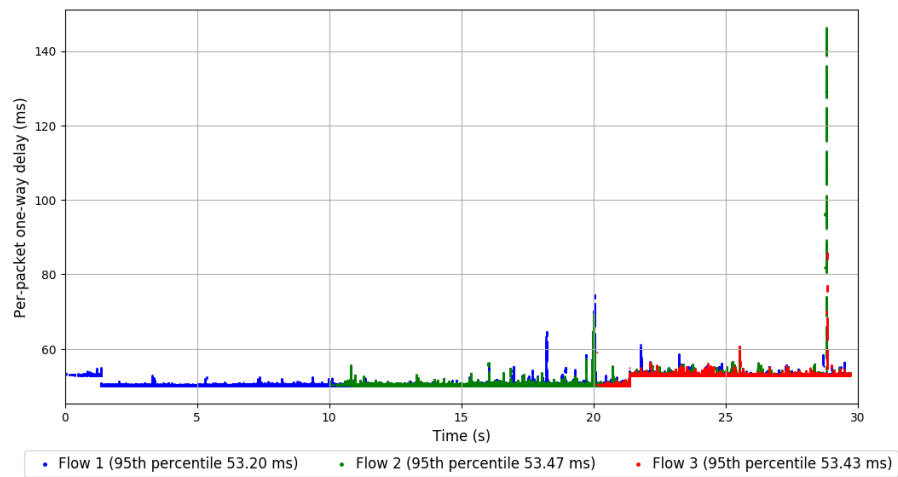
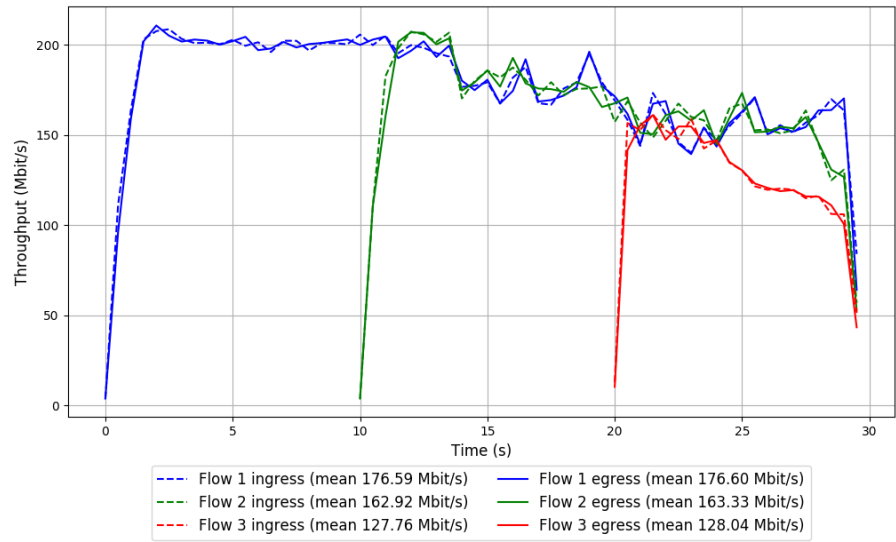
-- Flow 3:

Average throughput: 128.04 Mbit/s

95th percentile per-packet one-way delay: 53.429 ms

Loss rate: 0.86%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-17 00:33:22

End at: 2017-11-17 00:33:52

Below is generated by plot.py at 2017-11-17 04:40:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 328.35 Mbit/s

95th percentile per-packet one-way delay: 50.756 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 175.29 Mbit/s

95th percentile per-packet one-way delay: 50.660 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 163.51 Mbit/s

95th percentile per-packet one-way delay: 50.850 ms

Loss rate: 0.53%

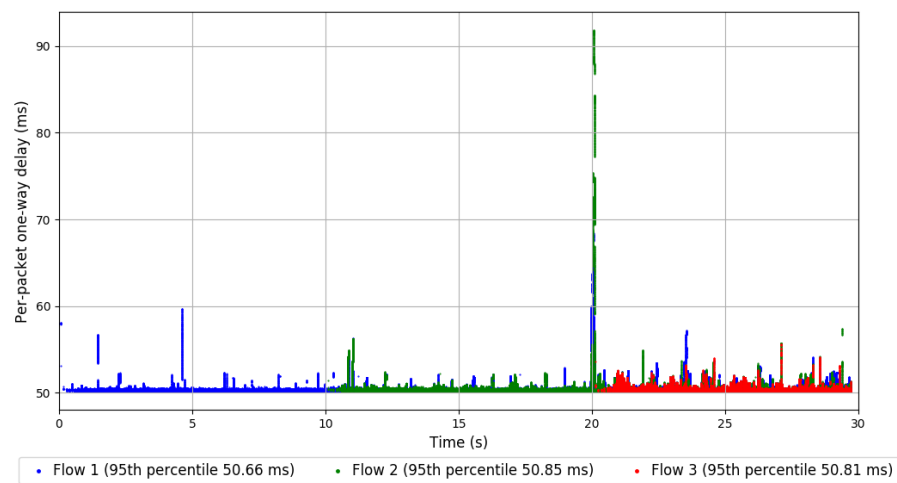
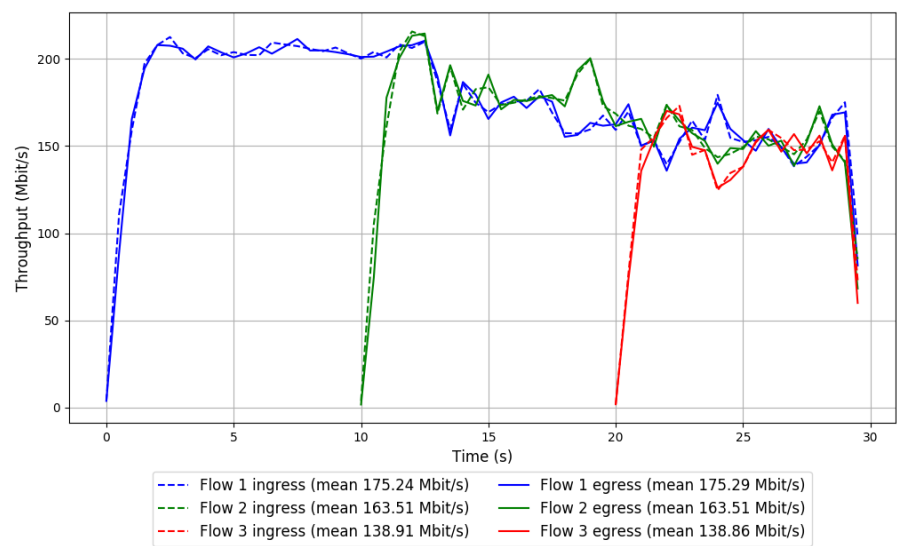
-- Flow 3:

Average throughput: 138.86 Mbit/s

95th percentile per-packet one-way delay: 50.808 ms

Loss rate: 1.12%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-17 00:45:50

End at: 2017-11-17 00:46:20

Below is generated by plot.py at 2017-11-17 04:40:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.84 Mbit/s

95th percentile per-packet one-way delay: 54.439 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 182.67 Mbit/s

95th percentile per-packet one-way delay: 54.234 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 170.05 Mbit/s

95th percentile per-packet one-way delay: 54.603 ms

Loss rate: 0.60%

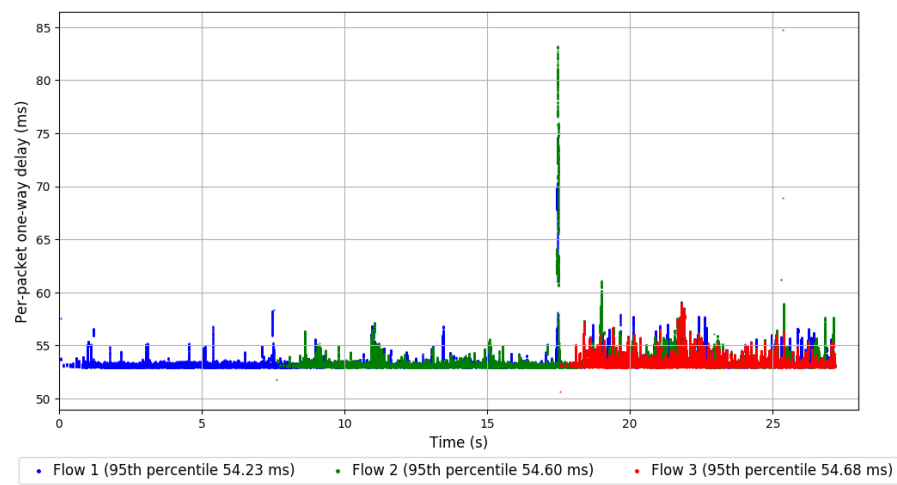
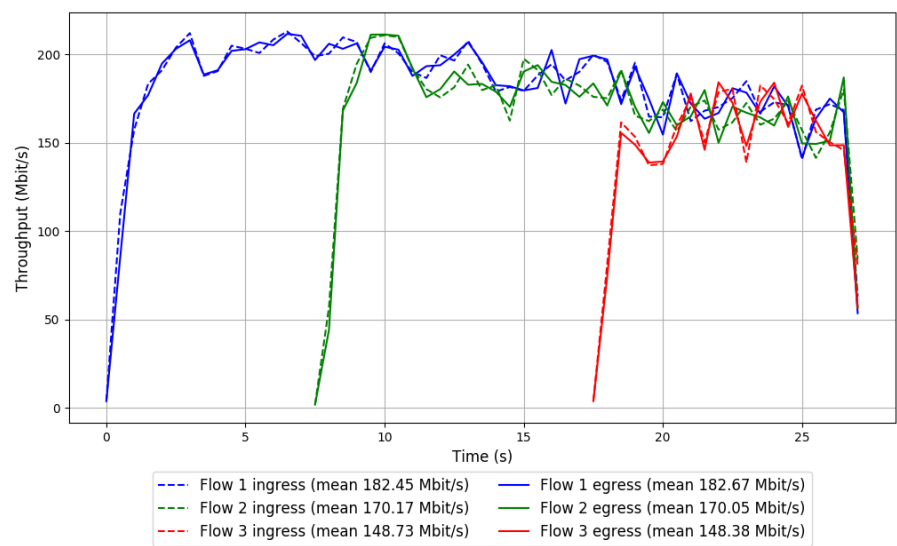
-- Flow 3:

Average throughput: 148.38 Mbit/s

95th percentile per-packet one-way delay: 54.676 ms

Loss rate: 1.31%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-17 00:58:13

End at: 2017-11-17 00:58:43

Below is generated by plot.py at 2017-11-17 04:41:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 325.79 Mbit/s

95th percentile per-packet one-way delay: 53.420 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 179.55 Mbit/s

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

Loss rate: 0.30%

-- Flow 2:

Average throughput: 167.42 Mbit/s

95th percentile per-packet one-way delay: 53.686 ms

Loss rate: 0.61%

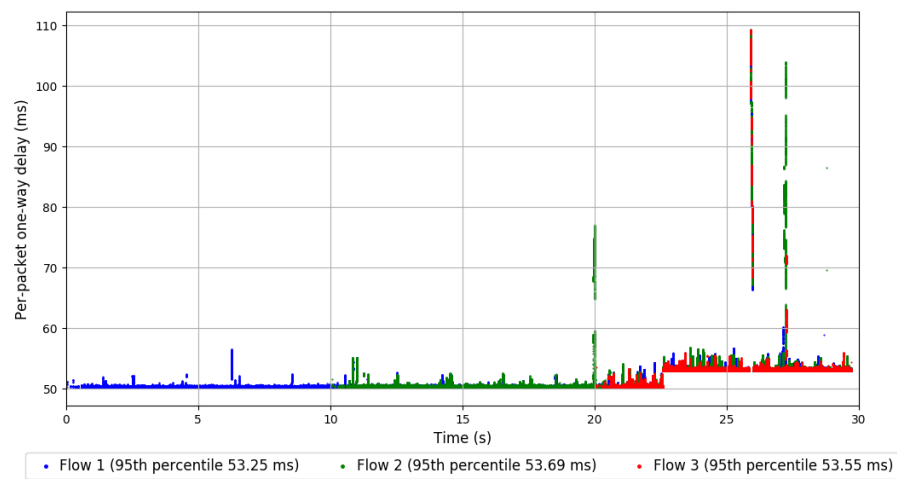
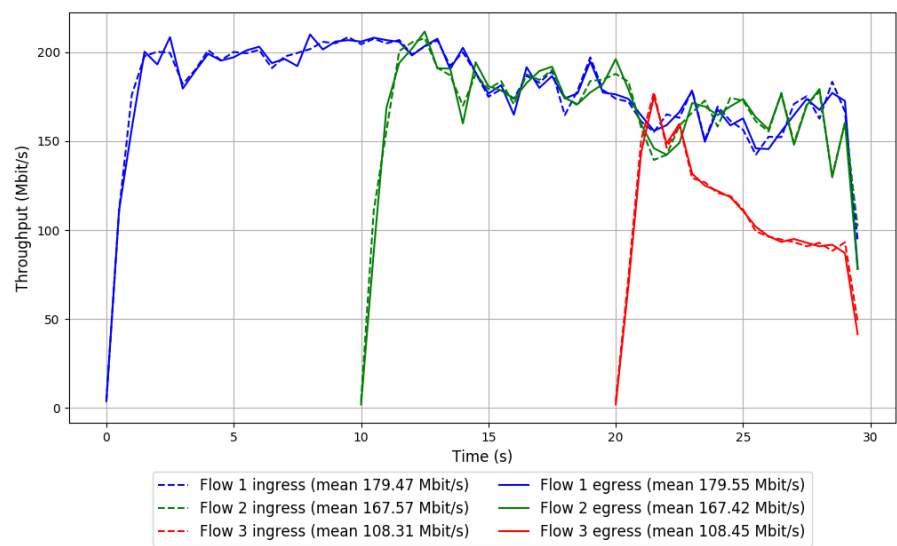
-- Flow 3:

Average throughput: 108.45 Mbit/s

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

Loss rate: 0.93%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-17 01:10:31

End at: 2017-11-17 01:11:01

Below is generated by plot.py at 2017-11-17 04:42:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.26 Mbit/s

95th percentile per-packet one-way delay: 53.325 ms

Loss rate: 0.46%

-- Flow 1:

Average throughput: 173.26 Mbit/s

95th percentile per-packet one-way delay: 53.257 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 162.49 Mbit/s

95th percentile per-packet one-way delay: 53.448 ms

Loss rate: 0.50%

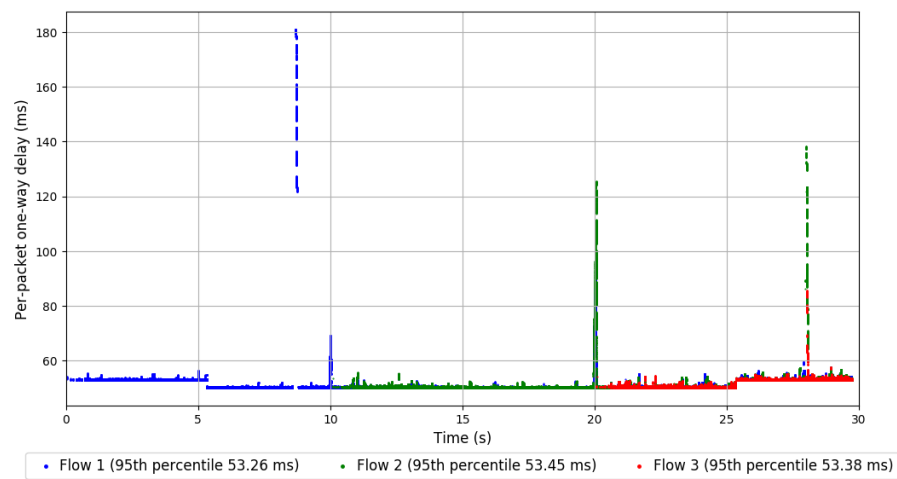
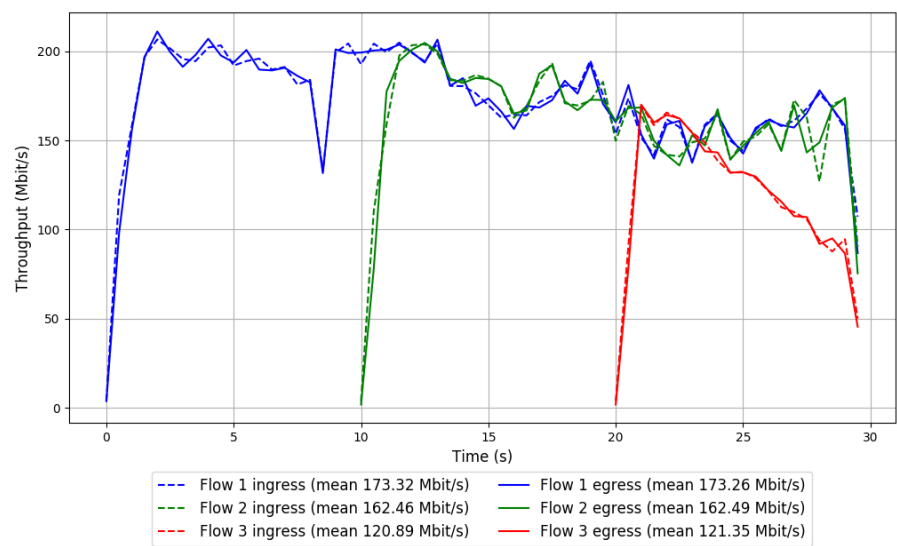
-- Flow 3:

Average throughput: 121.35 Mbit/s

95th percentile per-packet one-way delay: 53.385 ms

Loss rate: 0.77%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-17 01:22:16

End at: 2017-11-17 01:22:46

Below is generated by plot.py at 2017-11-17 04:43:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 310.54 Mbit/s

95th percentile per-packet one-way delay: 53.340 ms

Loss rate: 0.35%

-- Flow 1:

Average throughput: 170.84 Mbit/s

95th percentile per-packet one-way delay: 53.239 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 160.37 Mbit/s

95th percentile per-packet one-way delay: 53.406 ms

Loss rate: 0.36%

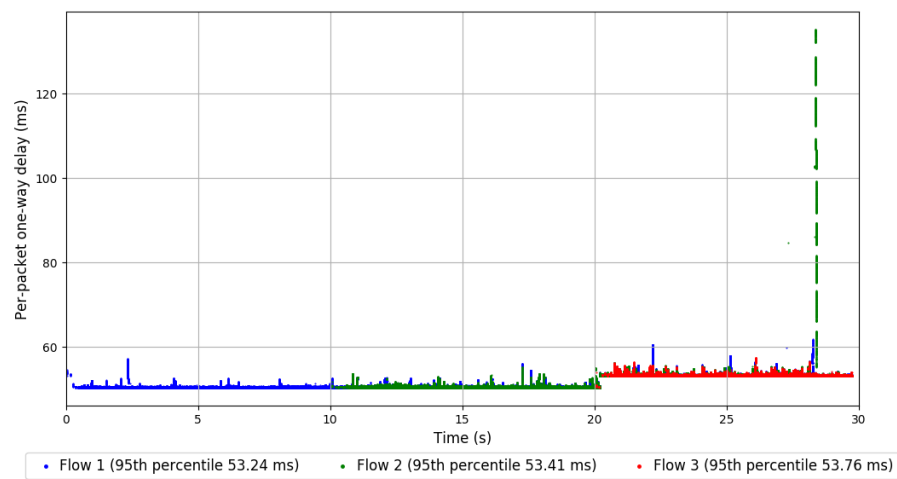
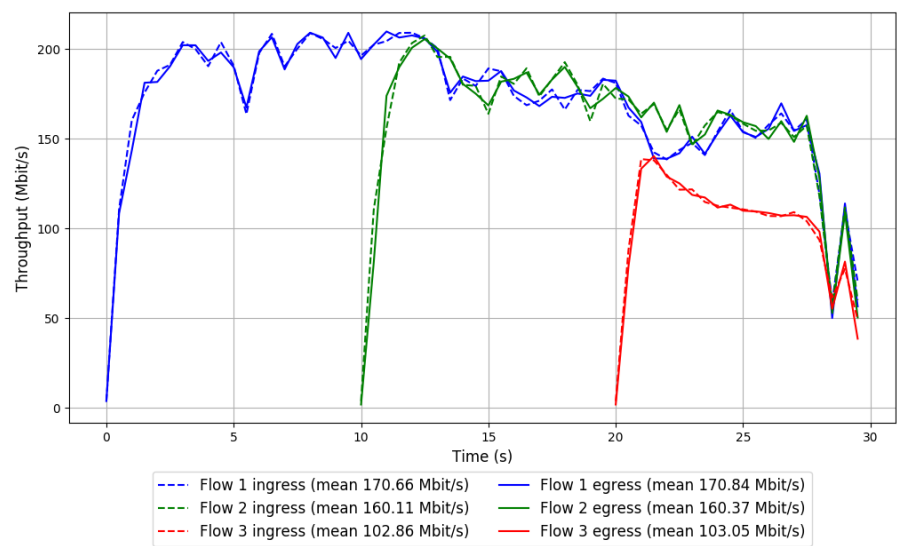
-- Flow 3:

Average throughput: 103.05 Mbit/s

95th percentile per-packet one-way delay: 53.758 ms

Loss rate: 0.87%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-17 01:34:26

End at: 2017-11-17 01:34:56

Below is generated by plot.py at 2017-11-17 04:43:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 329.39 Mbit/s

95th percentile per-packet one-way delay: 53.235 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 176.55 Mbit/s

95th percentile per-packet one-way delay: 53.226 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 163.89 Mbit/s

95th percentile per-packet one-way delay: 53.306 ms

Loss rate: 0.65%

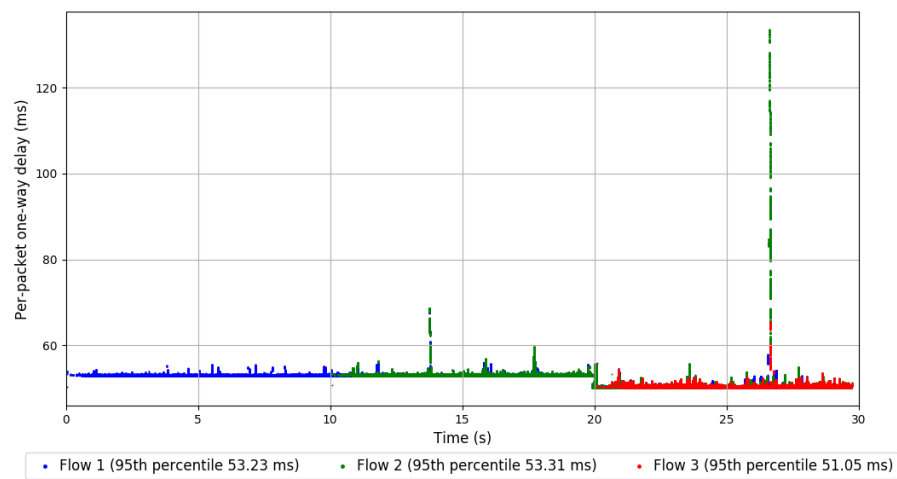
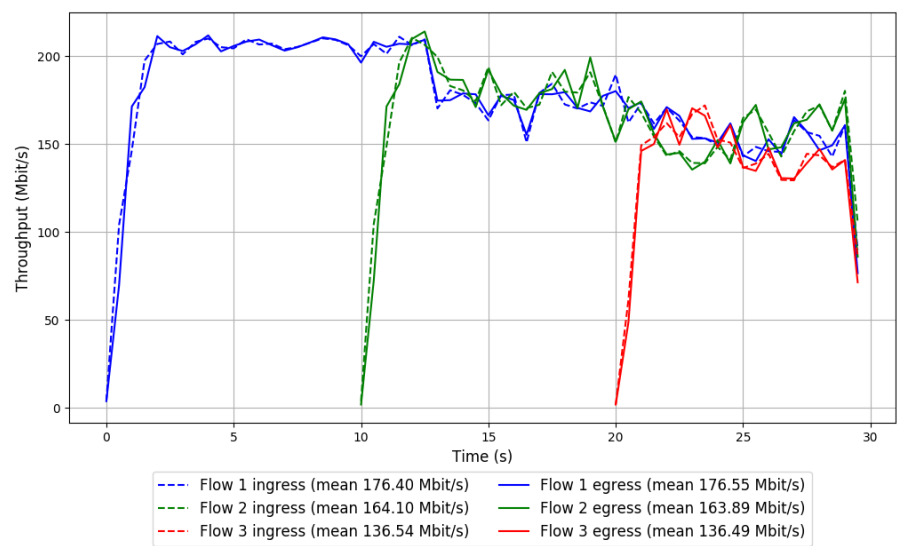
-- Flow 3:

Average throughput: 136.49 Mbit/s

95th percentile per-packet one-way delay: 51.046 ms

Loss rate: 1.11%

Run 10: Report of Indigo — Data Link

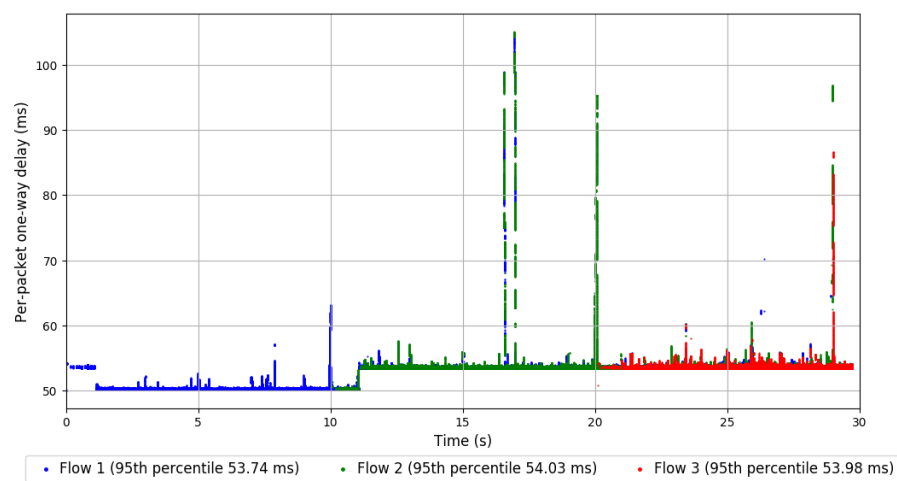
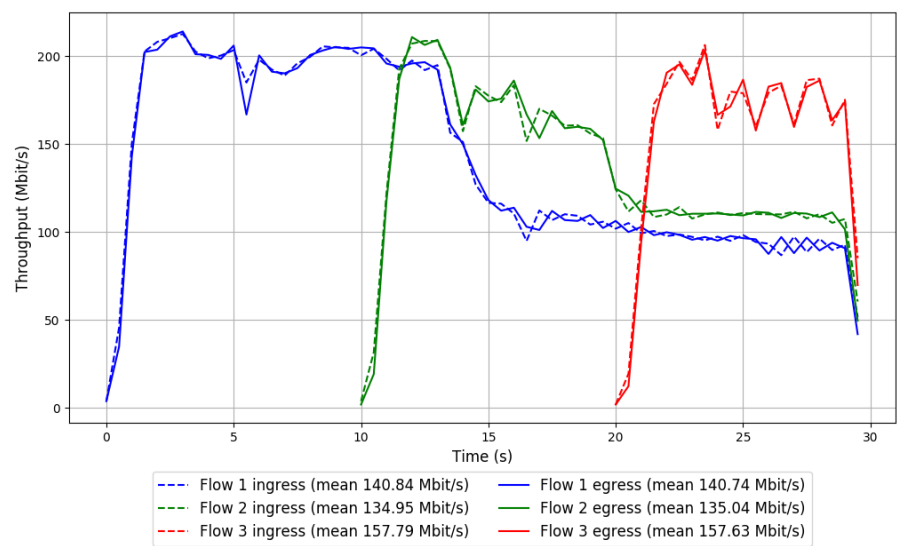


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-16 23:43:25
End at: 2017-11-16 23:43:55

# Below is generated by plot.py at 2017-11-17 04:43:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.11 Mbit/s
95th percentile per-packet one-way delay: 53.873 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 140.74 Mbit/s
95th percentile per-packet one-way delay: 53.739 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 135.04 Mbit/s
95th percentile per-packet one-way delay: 54.027 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 157.63 Mbit/s
95th percentile per-packet one-way delay: 53.984 ms
Loss rate: 1.15%
```

Run 1: Report of Indigo-calib — Data Link

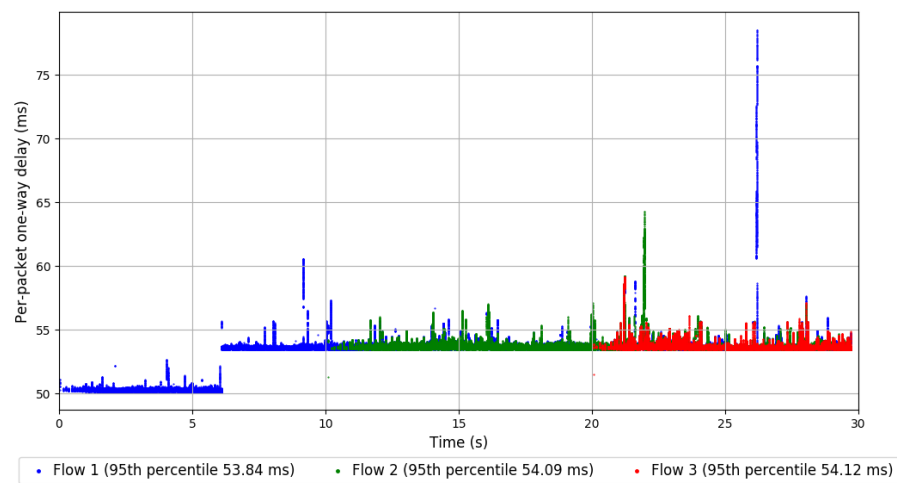
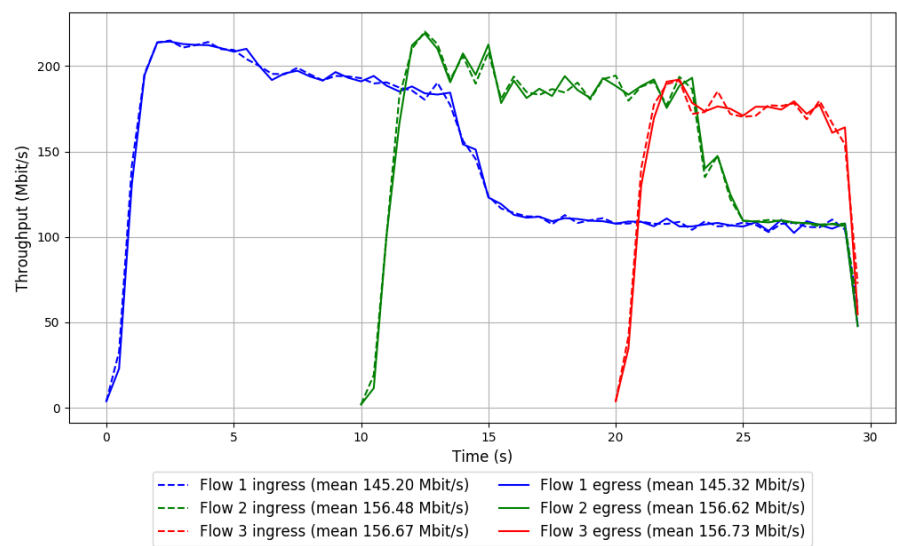


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-16 23:55:20
End at: 2017-11-16 23:55:50

# Below is generated by plot.py at 2017-11-17 04:44:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 299.88 Mbit/s
95th percentile per-packet one-way delay: 53.965 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 145.32 Mbit/s
95th percentile per-packet one-way delay: 53.836 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 156.62 Mbit/s
95th percentile per-packet one-way delay: 54.093 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 156.73 Mbit/s
95th percentile per-packet one-way delay: 54.125 ms
Loss rate: 0.99%
```

Run 2: Report of Indigo-calib — Data Link

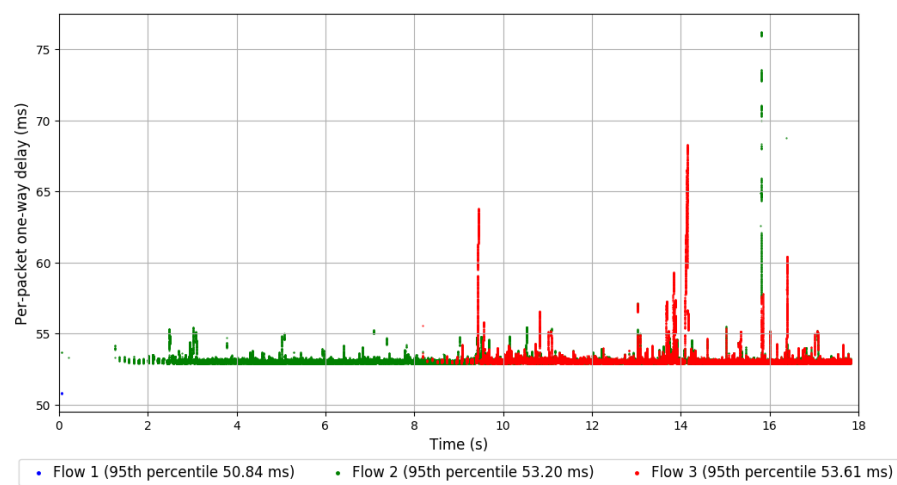
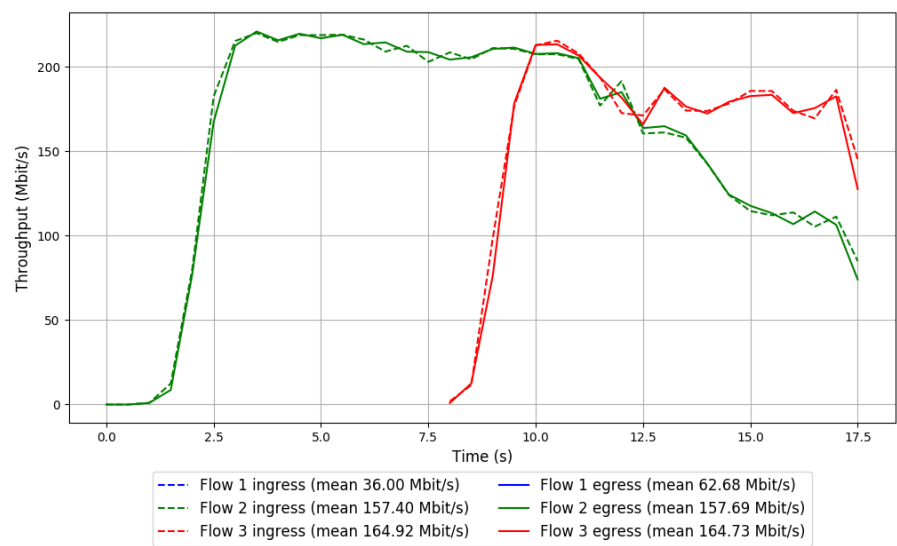


Run 3: Statistics of Indigo-calib

Start at: 2017-11-17 00:07:31

End at: 2017-11-17 00:08:01

Run 3: Report of Indigo-calib — Data Link

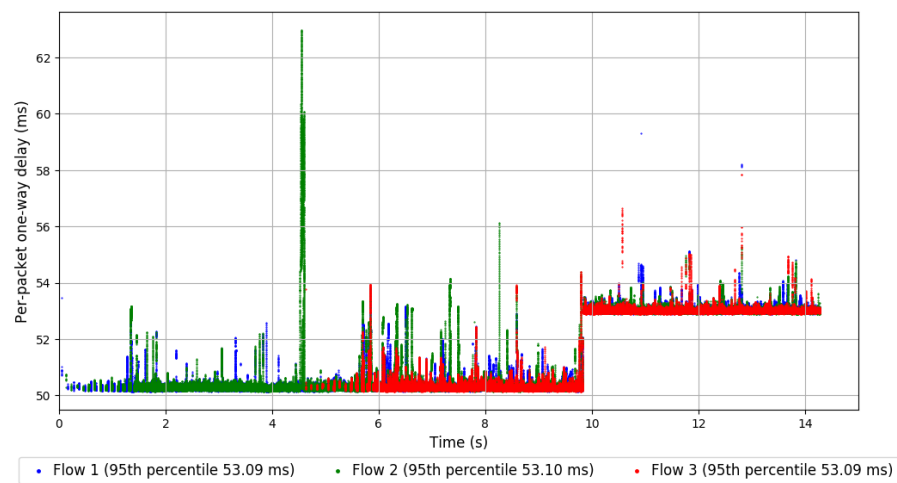
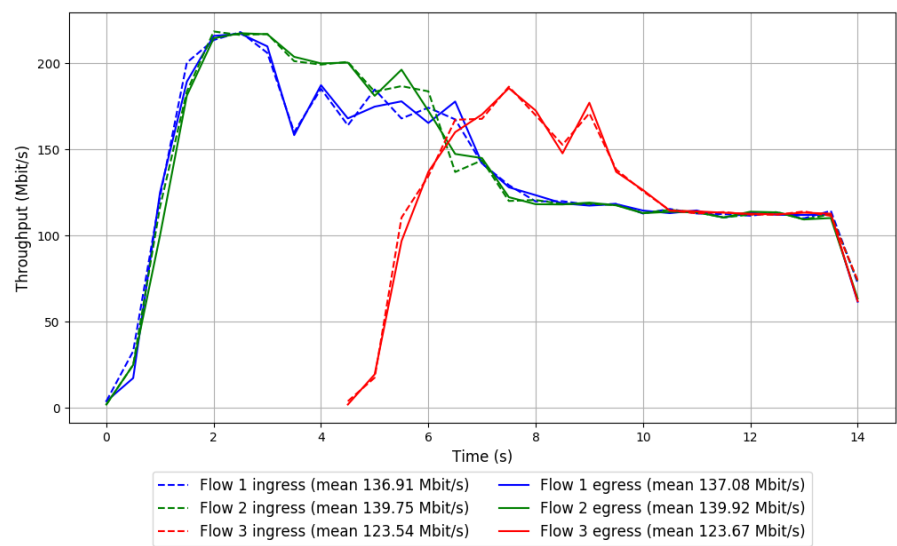


Run 4: Statistics of Indigo-calib

Start at: 2017-11-17 00:19:31

End at: 2017-11-17 00:20:01

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-17 00:31:38

End at: 2017-11-17 00:32:08

Below is generated by plot.py at 2017-11-17 04:45:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.48 Mbit/s

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

Loss rate: 0.37%

-- Flow 1:

Average throughput: 164.97 Mbit/s

95th percentile per-packet one-way delay: 52.502 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 150.49 Mbit/s

95th percentile per-packet one-way delay: 53.002 ms

Loss rate: 0.38%

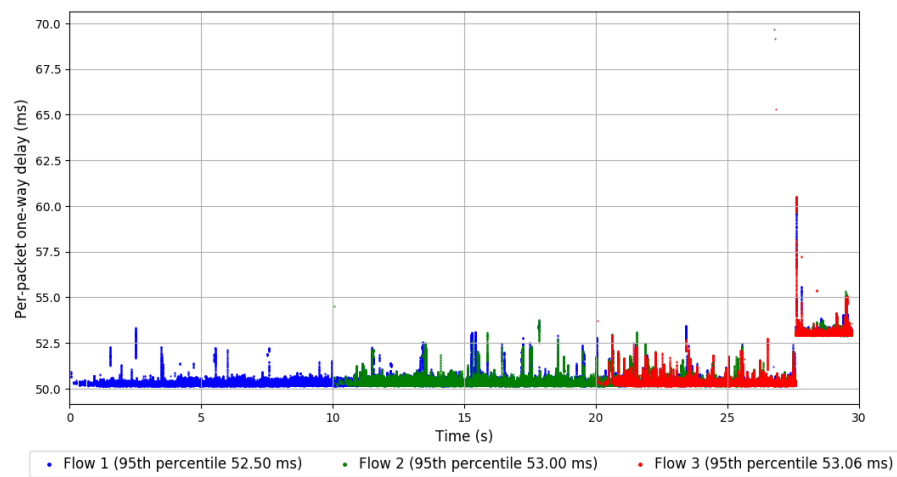
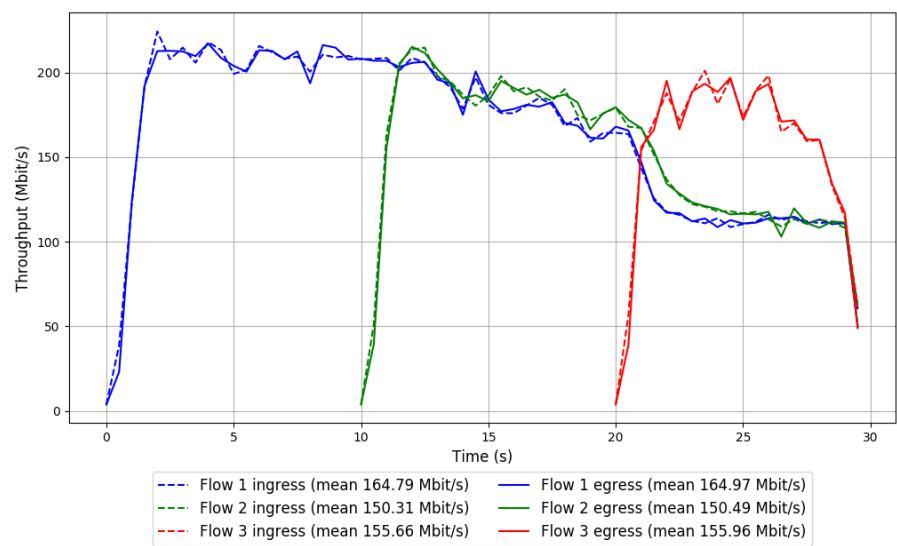
-- Flow 3:

Average throughput: 155.96 Mbit/s

95th percentile per-packet one-way delay: 53.060 ms

Loss rate: 0.80%

Run 5: Report of Indigo-calib — Data Link

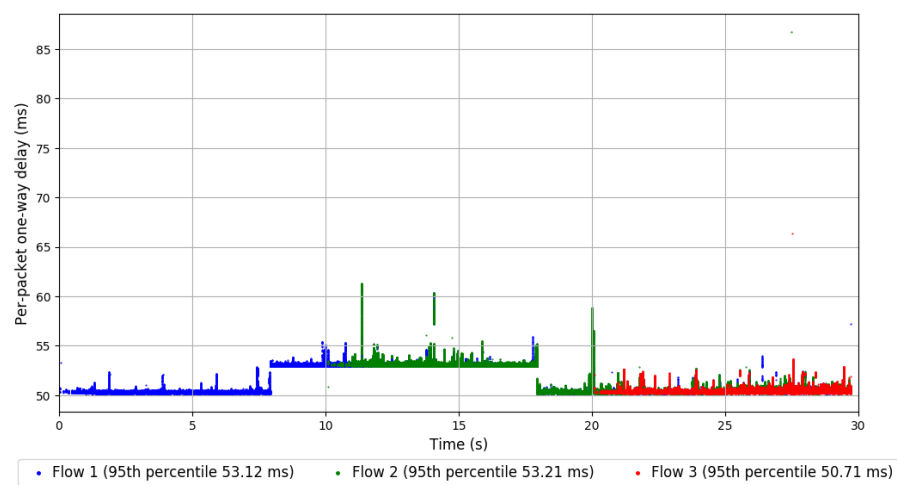
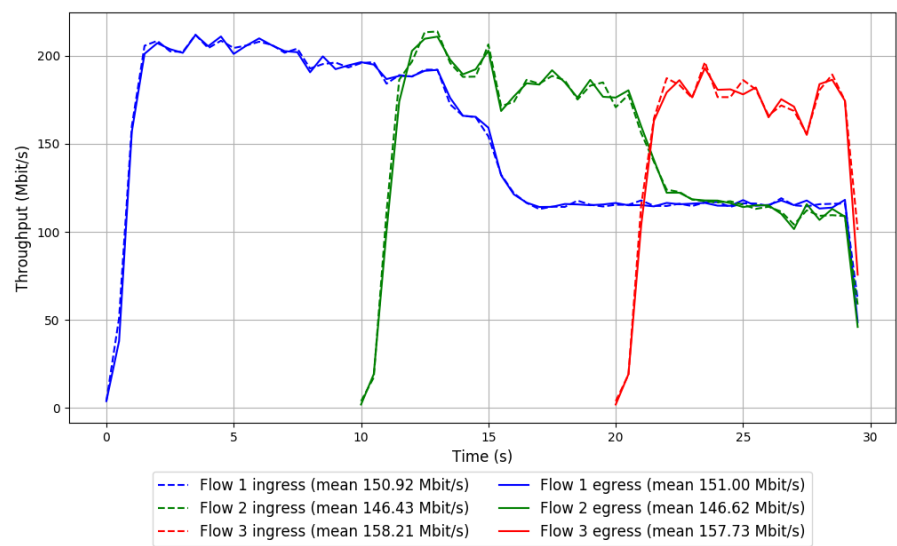


```
Run 6: Statistics of Indigo-calib

Start at: 2017-11-17 00:44:08
End at: 2017-11-17 00:44:38

# Below is generated by plot.py at 2017-11-17 04:45:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 299.00 Mbit/s
95th percentile per-packet one-way delay: 53.132 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 151.00 Mbit/s
95th percentile per-packet one-way delay: 53.115 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 146.62 Mbit/s
95th percentile per-packet one-way delay: 53.207 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 157.73 Mbit/s
95th percentile per-packet one-way delay: 50.707 ms
Loss rate: 1.35%
```

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-17 00:56:31

End at: 2017-11-17 00:57:01

Below is generated by plot.py at 2017-11-17 04:46:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 302.48 Mbit/s

95th percentile per-packet one-way delay: 53.249 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 162.70 Mbit/s

95th percentile per-packet one-way delay: 53.256 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 153.38 Mbit/s

95th percentile per-packet one-way delay: 53.255 ms

Loss rate: 0.38%

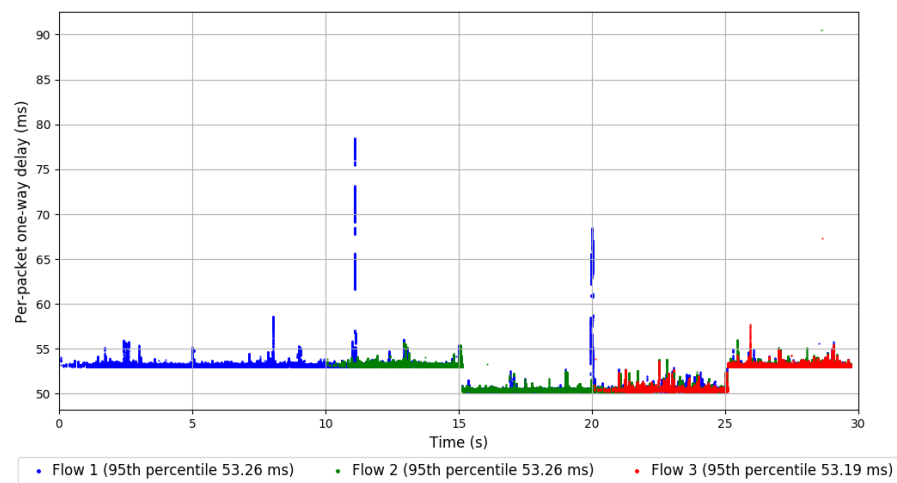
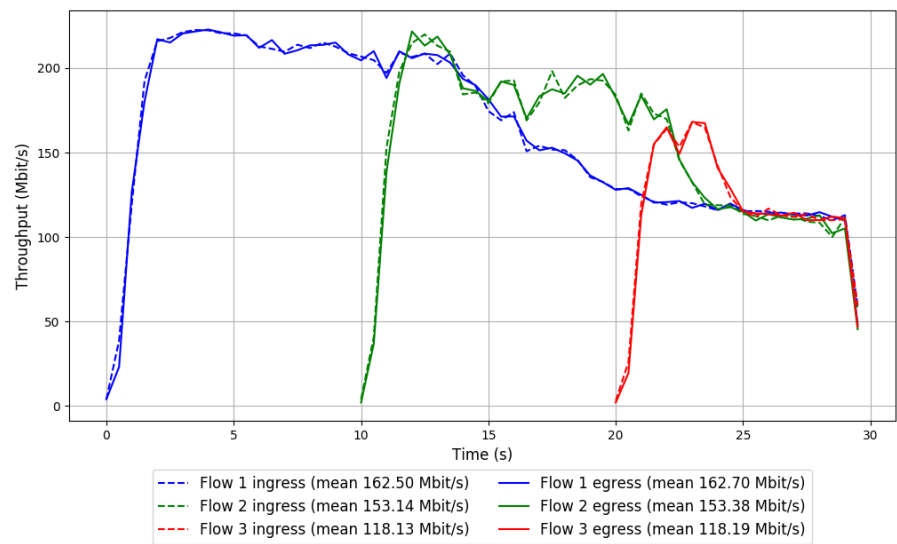
-- Flow 3:

Average throughput: 118.19 Mbit/s

95th percentile per-packet one-way delay: 53.191 ms

Loss rate: 1.03%

Run 7: Report of Indigo-calib — Data Link

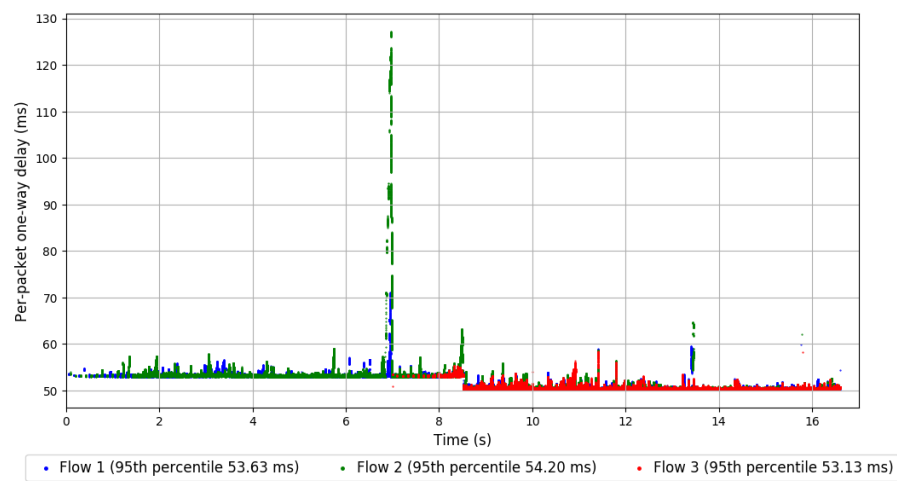
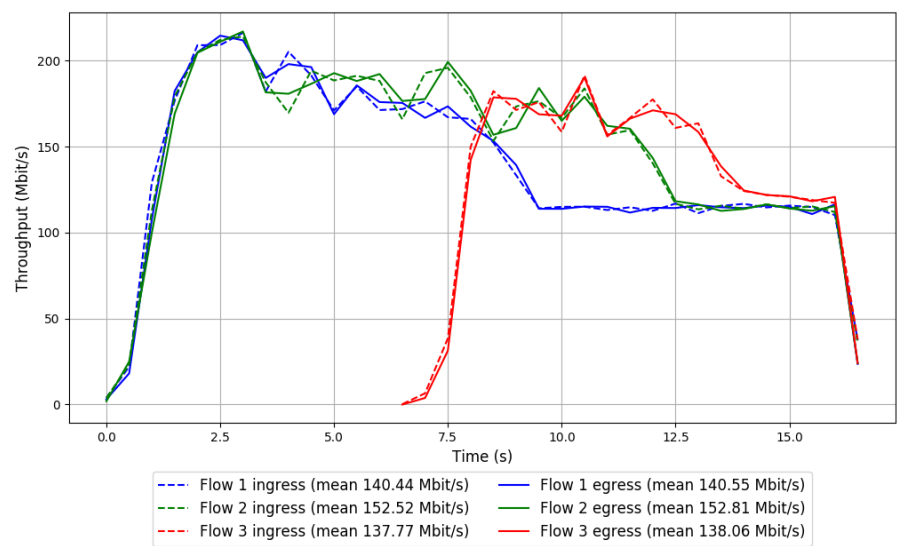


Run 8: Statistics of Indigo-calib

Start at: 2017-11-17 01:08:54

End at: 2017-11-17 01:09:24

Run 8: Report of Indigo-calib — Data Link

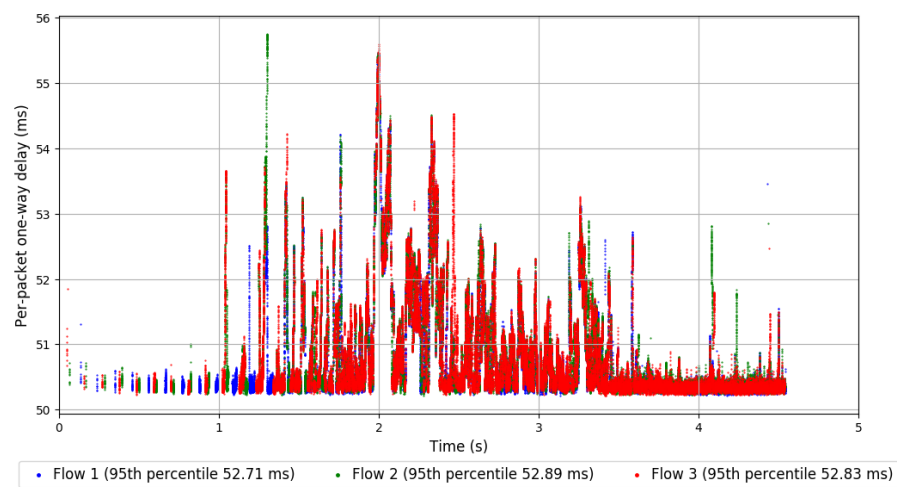
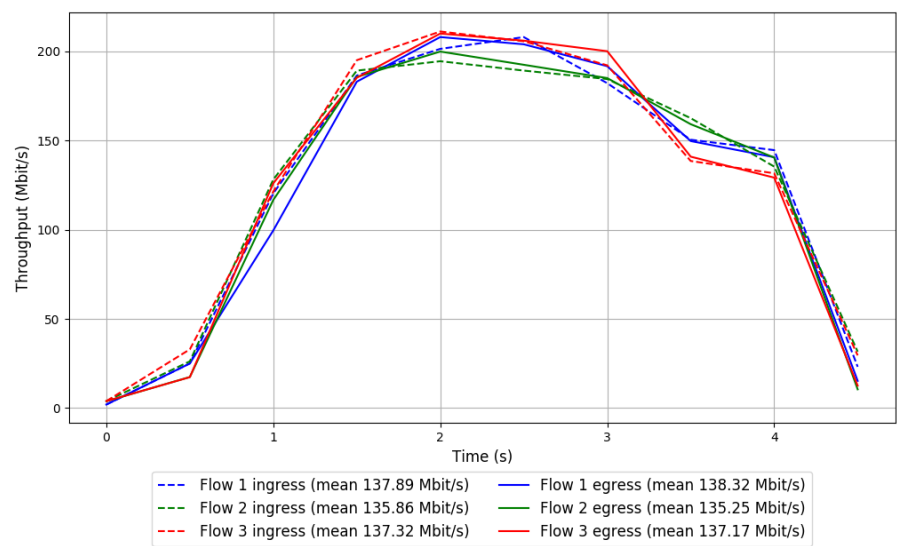


Run 9: Statistics of Indigo-calib

Start at: 2017-11-17 01:20:51

End at: 2017-11-17 01:21:21

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-17 01:32:50

End at: 2017-11-17 01:33:20

Run 10: Report of Indigo-calib — Data Link

