

Pantheon Report

Generated at 2017-11-21 18:25:08 (UTC).

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

Repeated the test of 14 congestion control schemes 10 times.

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

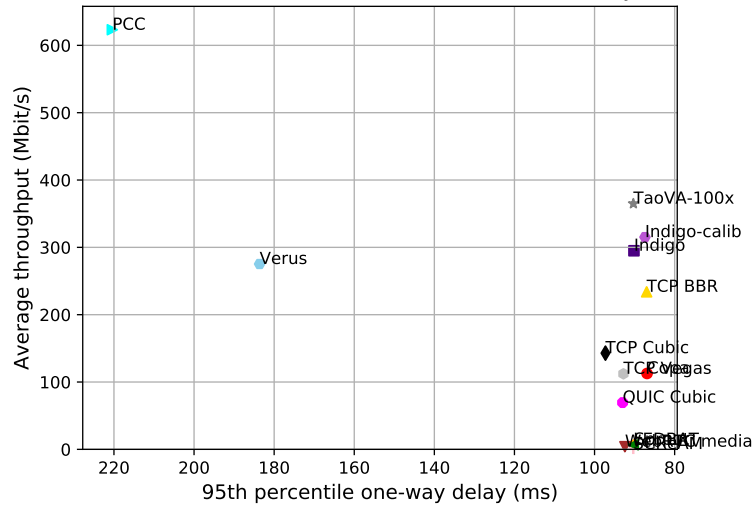
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

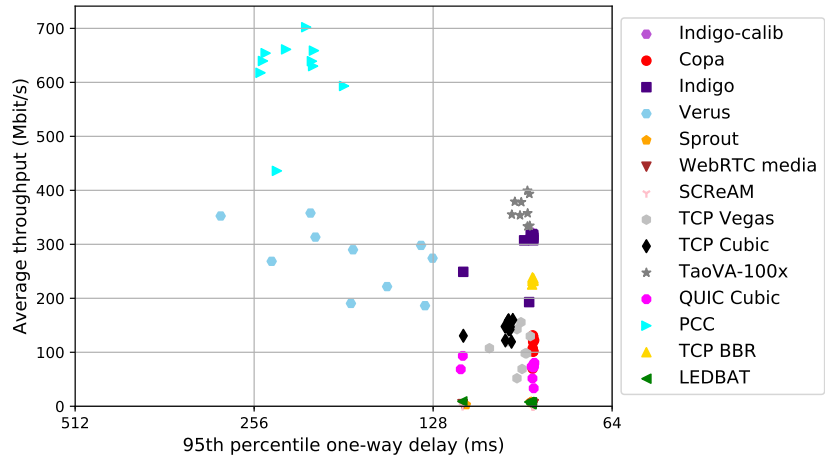
Git summary:

```
branch: indigos @ e3a57ad5ac5cfcaca0e3f983c8dd4cc3509e0262
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/genericCC @ b5b7c38e8391001927dc41c6cfa2627d03dde737
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 @ 03455460fd1a8ffbdad86fab936fdca204b80db
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eae30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	9	119.86	117.10	111.04	87.04	86.89	86.97	0.61	0.91	2.06
TCP Cubic	10	72.18	75.79	62.56	96.77	96.98	96.45	0.48	0.95	2.04
LEDBAT	10	3.52	3.78	2.37	90.35	90.30	90.30	1.17	1.32	3.04
PCC	10	431.52	254.29	70.75	498.51	187.14	177.75	4.85	3.46	4.47
QUIC Cubic	9	40.76	34.49	18.00	89.75	92.86	89.95	0.70	1.04	5.48
SCReAM	8	0.22	0.22	0.22	90.24	86.91	86.84	0.58	0.85	1.50
WebRTC media	10	2.14	1.31	0.51	89.61	89.61	92.21	0.73	1.16	2.54
Sprout	10	3.78	3.55	2.59	90.14	90.04	92.66	0.93	1.43	2.71
TaoVA-100x	9	196.10	199.20	148.90	89.70	89.51	99.33	0.58	0.91	3.58
TCP Vegas	10	44.84	71.48	60.87	92.53	94.19	92.12	0.54	0.76	1.84
Verus	10	173.61	109.41	92.25	171.53	166.22	196.07	2.66	2.22	4.26
Copa	10	61.79	57.77	49.85	89.54	86.86	86.93	0.48	0.98	3.03
Indigo	10	148.78	152.01	141.47	92.54	90.51	89.84	0.58	0.80	2.06
Indigo-calib	10	168.57	157.62	131.27	87.33	87.87	86.97	0.56	0.87	2.11

Run 1: Statistics of TCP BBR

Start at: 2017-11-21 12:48:12

End at: 2017-11-21 12:48:42

Below is generated by plot.py at 2017-11-21 17:19:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 233.39 Mbit/s

95th percentile per-packet one-way delay: 86.816 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 119.74 Mbit/s

95th percentile per-packet one-way delay: 86.826 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 116.57 Mbit/s

95th percentile per-packet one-way delay: 86.785 ms

Loss rate: 0.40%

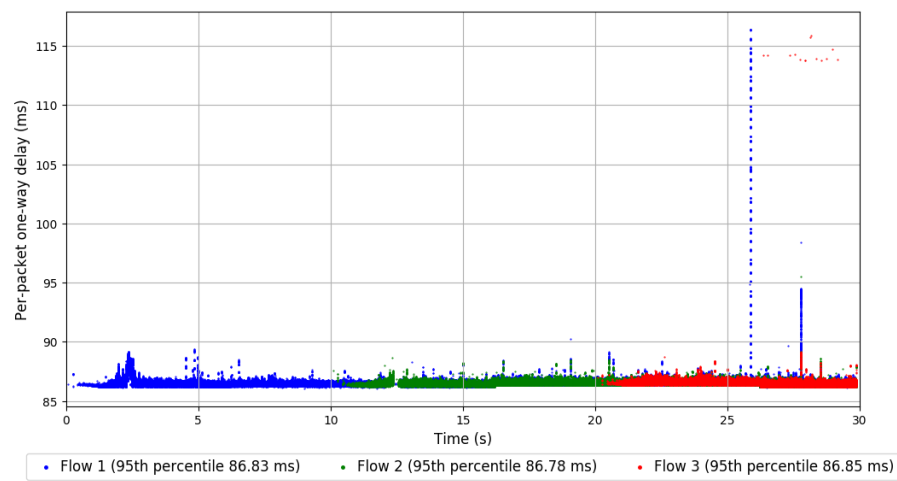
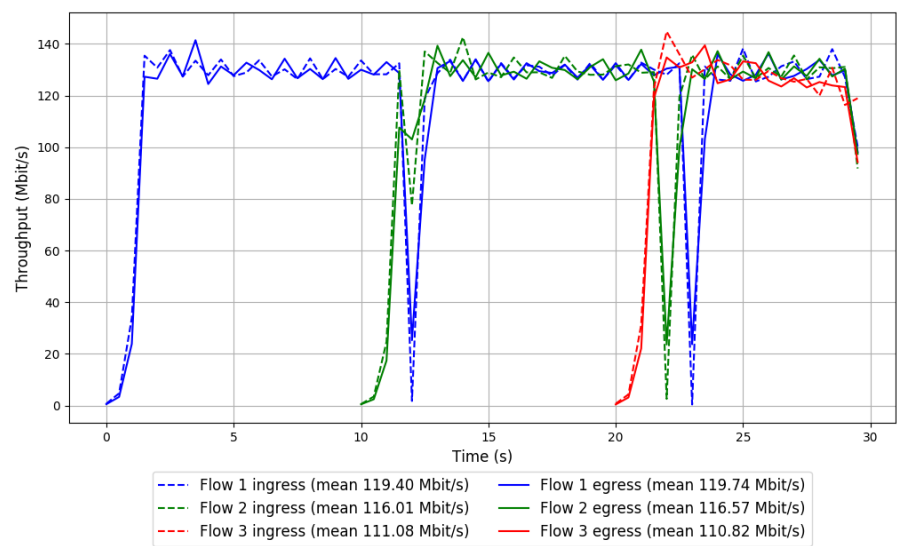
-- Flow 3:

Average throughput: 110.82 Mbit/s

95th percentile per-packet one-way delay: 86.850 ms

Loss rate: 1.98%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-11-21 13:01:31

End at: 2017-11-21 13:02:01

Below is generated by plot.py at 2017-11-21 17:19:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 225.51 Mbit/s

95th percentile per-packet one-way delay: 87.250 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 117.01 Mbit/s

95th percentile per-packet one-way delay: 87.277 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 109.06 Mbit/s

95th percentile per-packet one-way delay: 87.196 ms

Loss rate: 1.04%

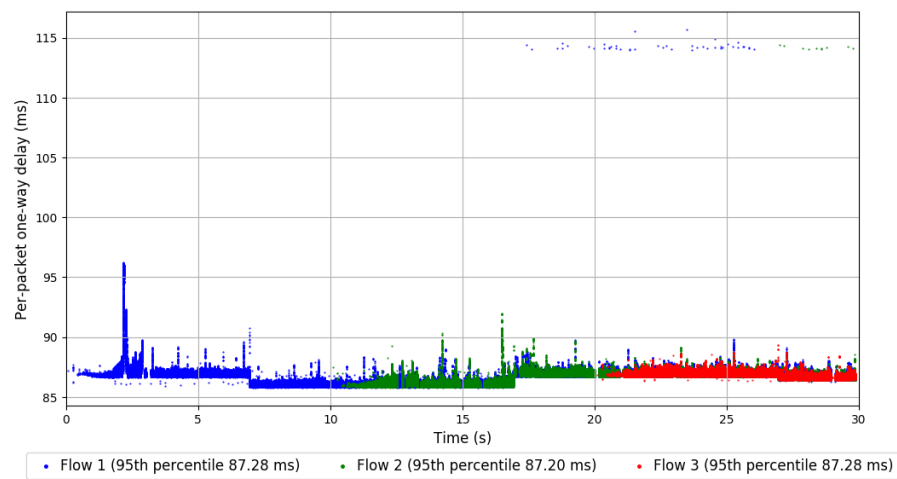
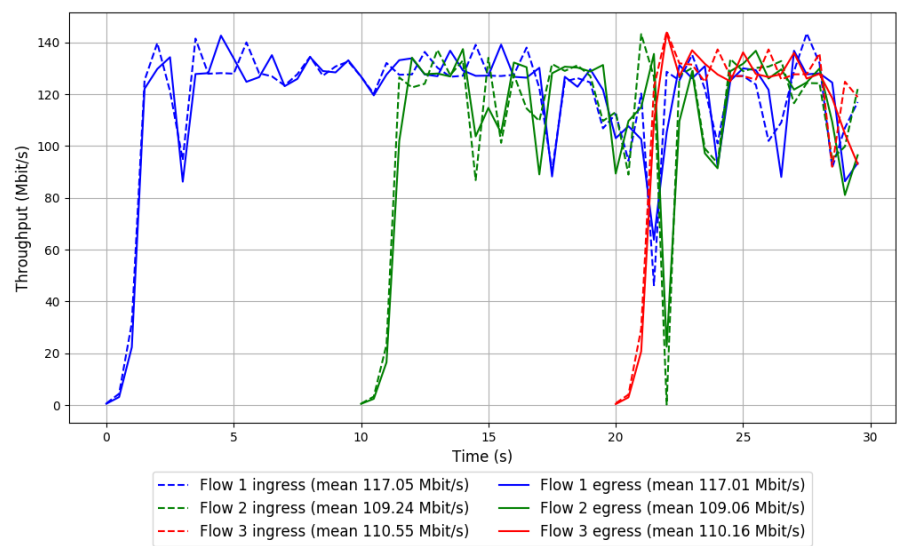
-- Flow 3:

Average throughput: 110.16 Mbit/s

95th percentile per-packet one-way delay: 87.277 ms

Loss rate: 2.10%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-11-21 13:14:58

End at: 2017-11-21 13:15:28

Below is generated by plot.py at 2017-11-21 17:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.36 Mbit/s

95th percentile per-packet one-way delay: 87.094 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 121.91 Mbit/s

95th percentile per-packet one-way delay: 87.241 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 118.72 Mbit/s

95th percentile per-packet one-way delay: 86.768 ms

Loss rate: 0.93%

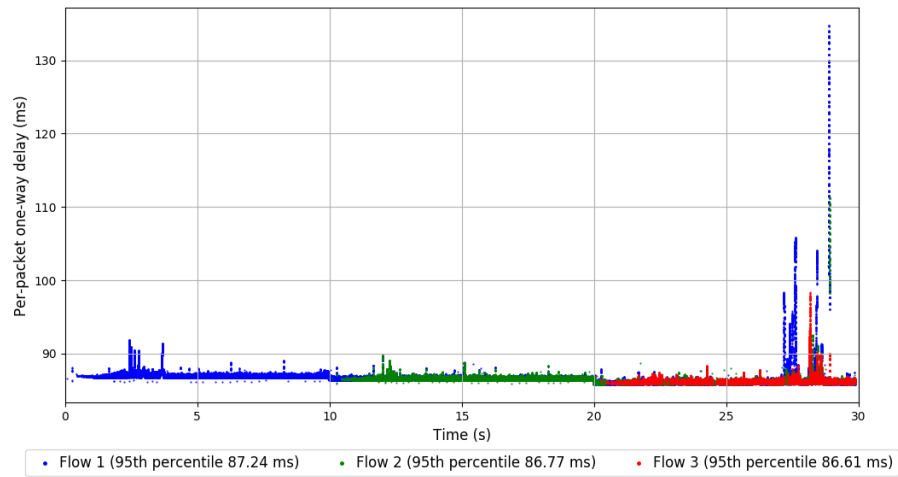
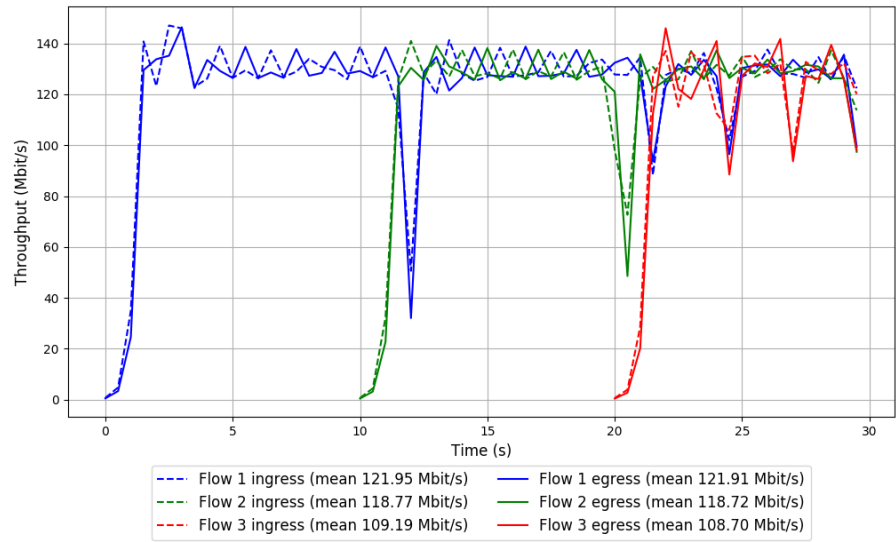
-- Flow 3:

Average throughput: 108.70 Mbit/s

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

Loss rate: 2.12%

Run 3: Report of TCP BBR — Data Link

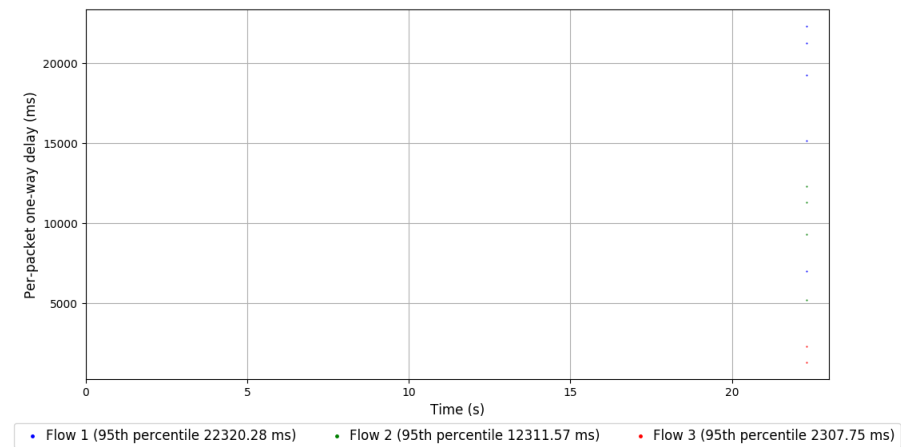
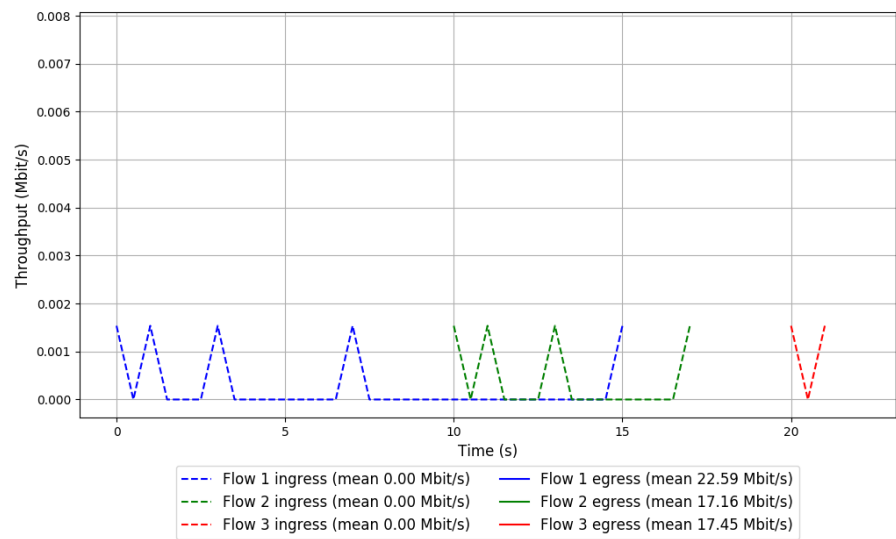


Run 4: Statistics of TCP BBR

Start at: 2017-11-21 13:28:34

End at: 2017-11-21 13:29:04

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-11-21 13:41:39

End at: 2017-11-21 13:42:09

Below is generated by plot.py at 2017-11-21 17:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.44 Mbit/s

95th percentile per-packet one-way delay: 87.137 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 120.38 Mbit/s

95th percentile per-packet one-way delay: 87.150 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 114.16 Mbit/s

95th percentile per-packet one-way delay: 86.875 ms

Loss rate: 1.10%

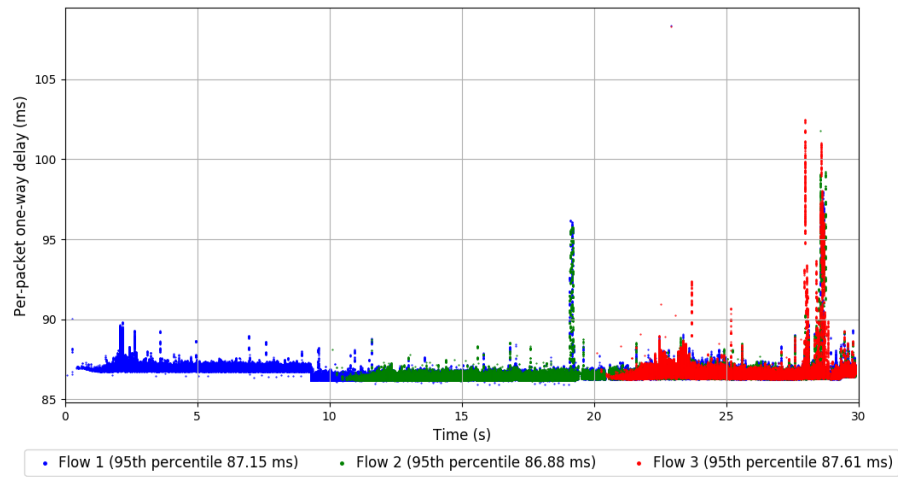
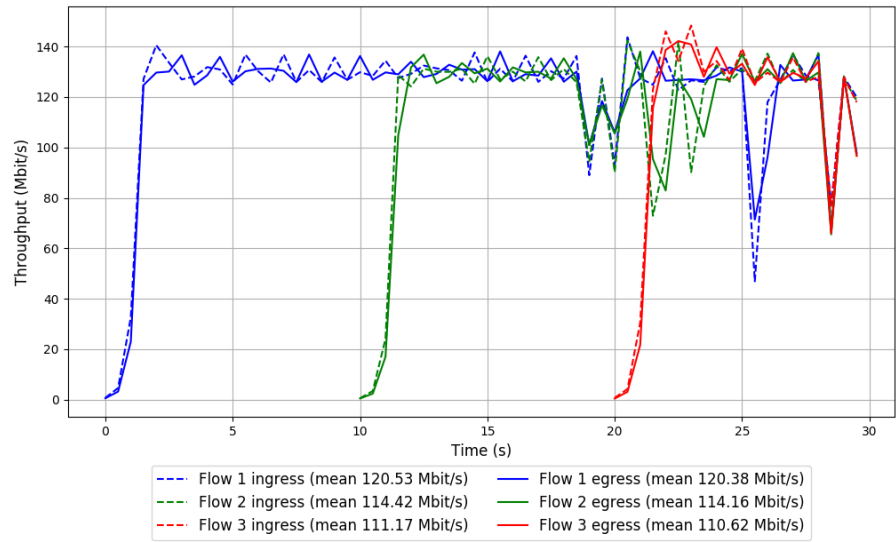
-- Flow 3:

Average throughput: 110.62 Mbit/s

95th percentile per-packet one-way delay: 87.606 ms

Loss rate: 2.25%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-11-21 13:55:19

End at: 2017-11-21 13:55:50

Below is generated by plot.py at 2017-11-21 17:19:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.62 Mbit/s

95th percentile per-packet one-way delay: 86.892 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 120.38 Mbit/s

95th percentile per-packet one-way delay: 86.931 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 118.33 Mbit/s

95th percentile per-packet one-way delay: 86.841 ms

Loss rate: 0.94%

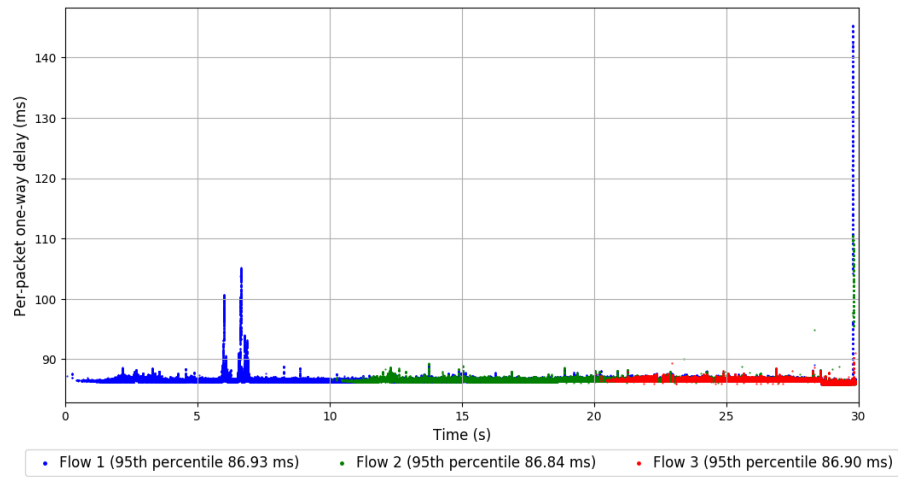
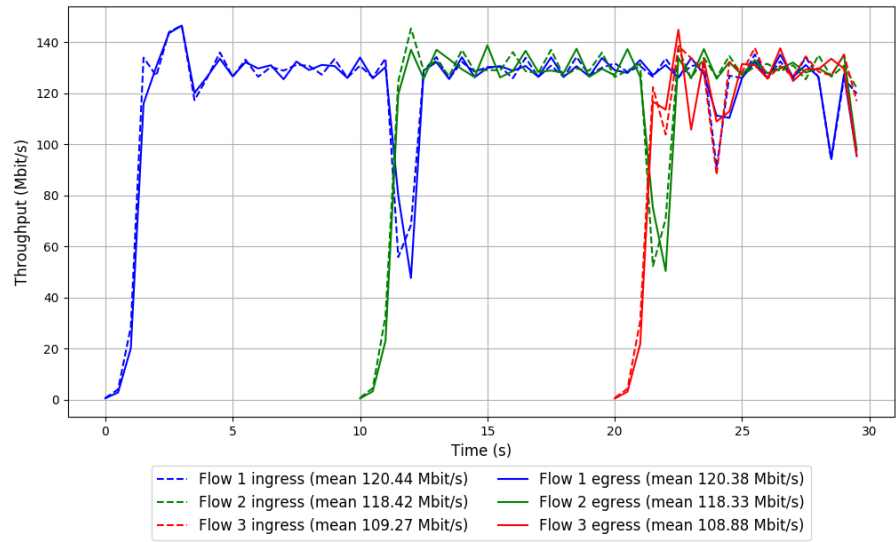
-- Flow 3:

Average throughput: 108.88 Mbit/s

95th percentile per-packet one-way delay: 86.898 ms

Loss rate: 2.06%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-11-21 14:08:45

End at: 2017-11-21 14:09:15

Below is generated by plot.py at 2017-11-21 17:19:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 235.26 Mbit/s

95th percentile per-packet one-way delay: 86.962 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 119.29 Mbit/s

95th percentile per-packet one-way delay: 87.069 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 120.00 Mbit/s

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

Loss rate: 0.92%

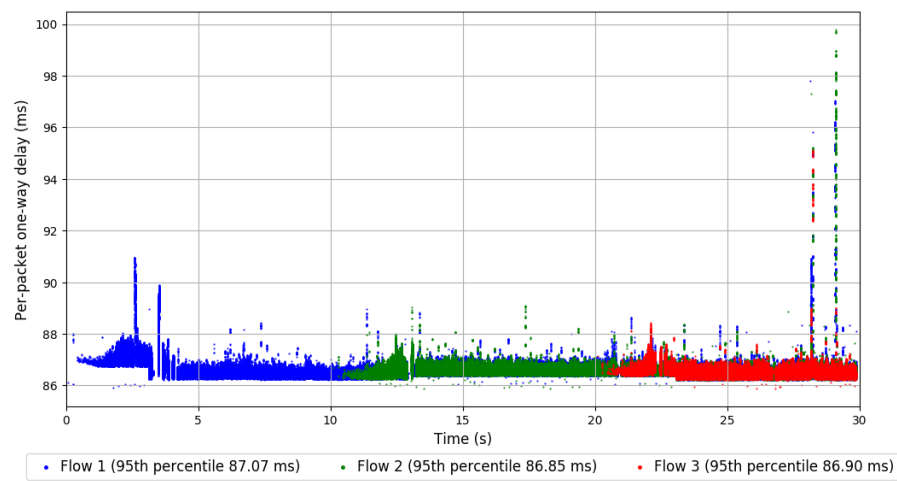
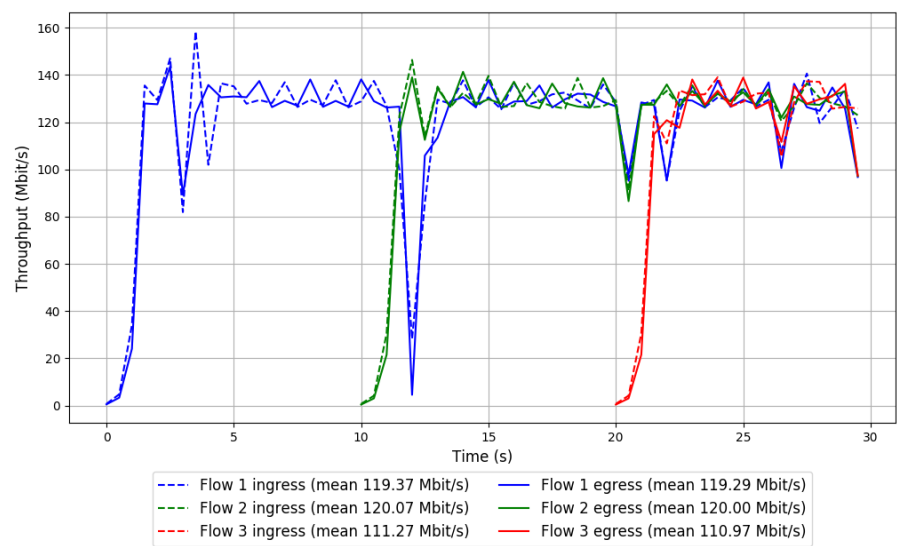
-- Flow 3:

Average throughput: 110.97 Mbit/s

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

Loss rate: 2.01%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-11-21 14:22:09

End at: 2017-11-21 14:22:39

Below is generated by plot.py at 2017-11-21 17:19:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 238.82 Mbit/s

95th percentile per-packet one-way delay: 87.117 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 122.17 Mbit/s

95th percentile per-packet one-way delay: 87.170 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 120.46 Mbit/s

95th percentile per-packet one-way delay: 87.071 ms

Loss rate: 0.92%

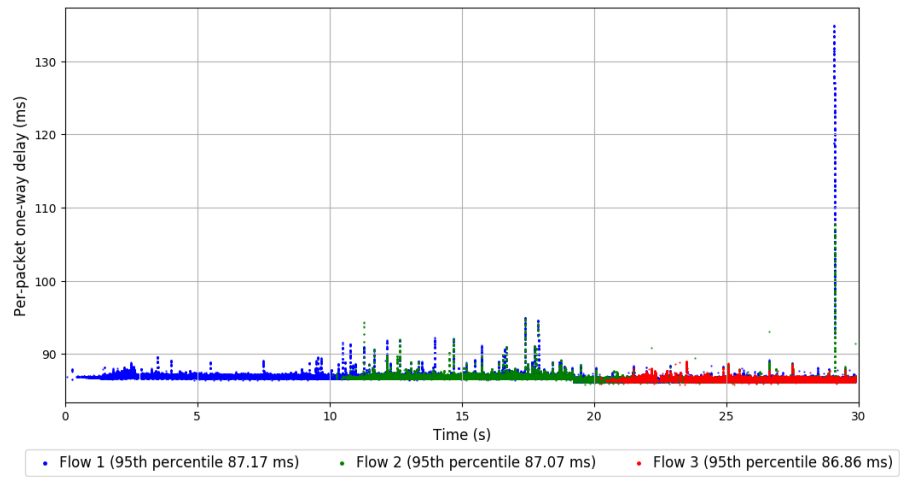
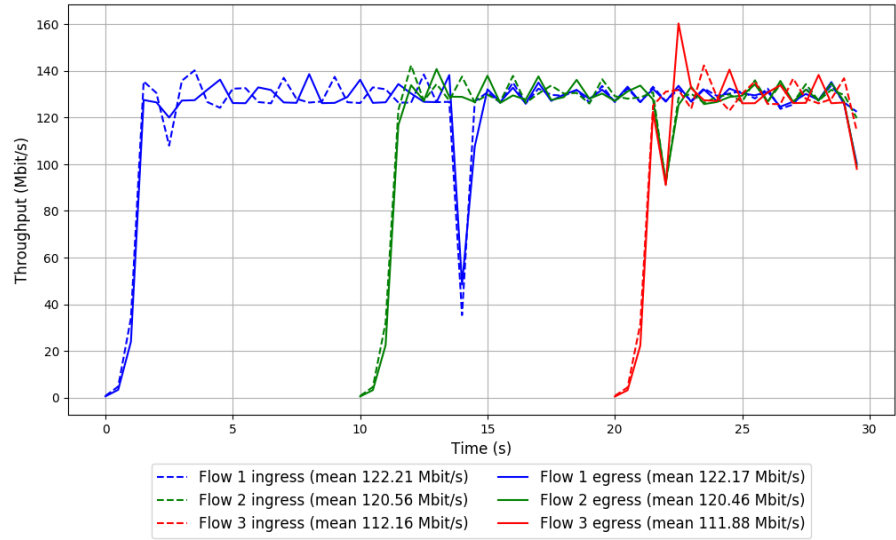
-- Flow 3:

Average throughput: 111.88 Mbit/s

95th percentile per-packet one-way delay: 86.865 ms

Loss rate: 1.99%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-11-21 14:35:39

End at: 2017-11-21 14:36:09

Below is generated by plot.py at 2017-11-21 17:19:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 232.19 Mbit/s

95th percentile per-packet one-way delay: 86.847 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 117.03 Mbit/s

95th percentile per-packet one-way delay: 86.825 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 117.37 Mbit/s

95th percentile per-packet one-way delay: 86.867 ms

Loss rate: 0.98%

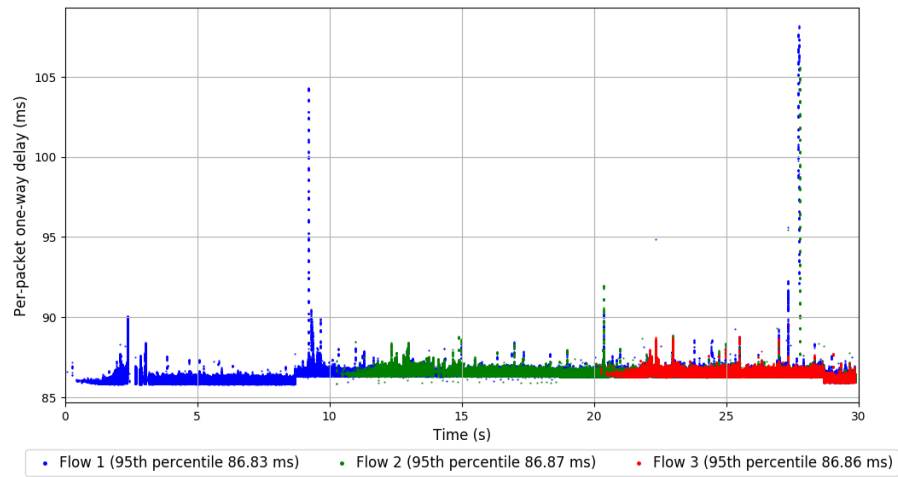
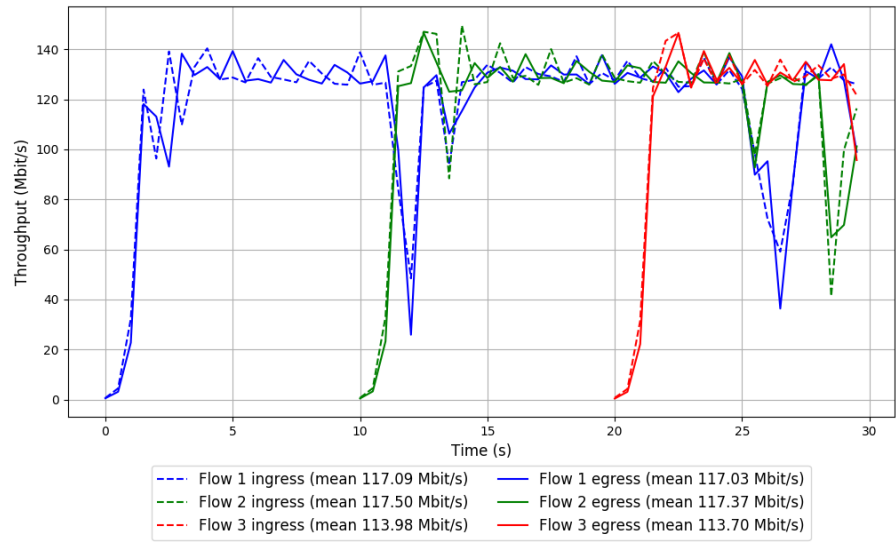
-- Flow 3:

Average throughput: 113.70 Mbit/s

95th percentile per-packet one-way delay: 86.865 ms

Loss rate: 2.07%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-11-21 14:49:08

End at: 2017-11-21 14:49:38

Below is generated by plot.py at 2017-11-21 17:24:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 237.17 Mbit/s

95th percentile per-packet one-way delay: 86.803 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 120.81 Mbit/s

95th percentile per-packet one-way delay: 86.827 ms

Loss rate: 0.64%

-- Flow 2:

Average throughput: 119.19 Mbit/s

95th percentile per-packet one-way delay: 86.760 ms

Loss rate: 0.94%

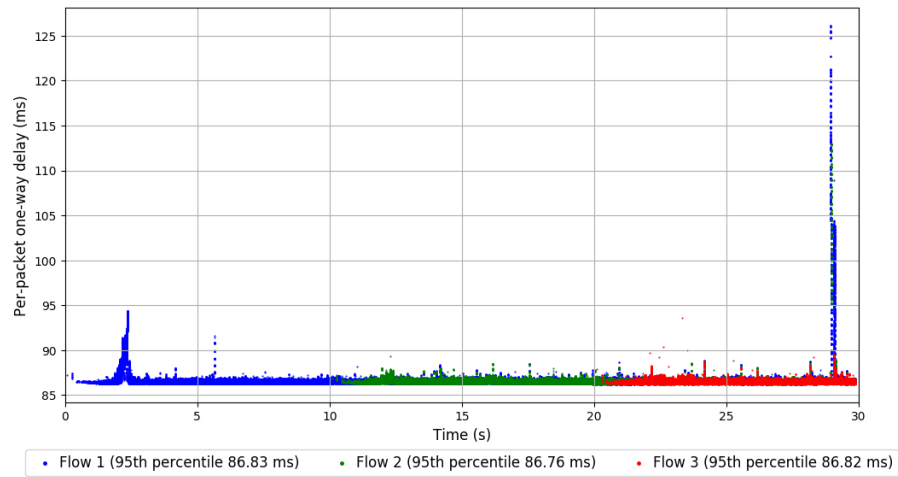
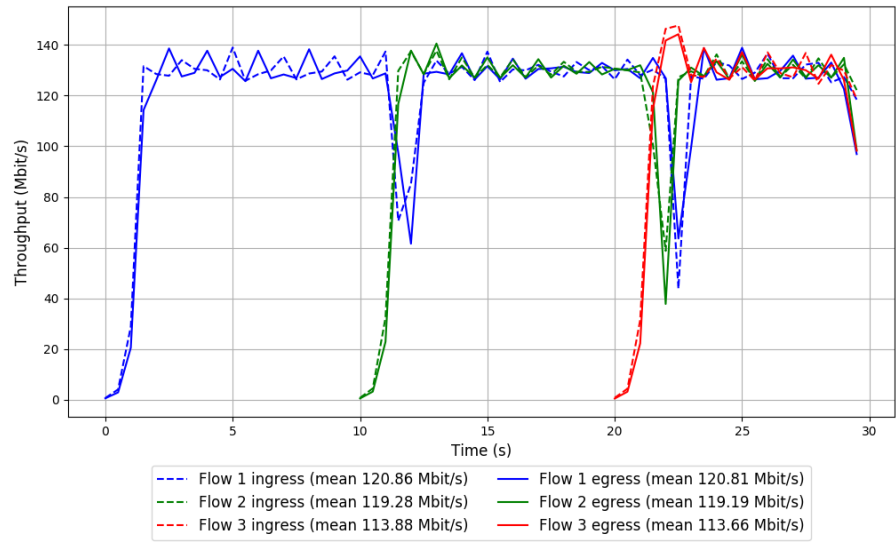
-- Flow 3:

Average throughput: 113.66 Mbit/s

95th percentile per-packet one-way delay: 86.819 ms

Loss rate: 1.96%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-11-21 12:54:10

End at: 2017-11-21 12:54:40

Below is generated by plot.py at 2017-11-21 17:24:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 157.86 Mbit/s

95th percentile per-packet one-way delay: 95.739 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 57.40 Mbit/s

95th percentile per-packet one-way delay: 95.751 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 92.38 Mbit/s

95th percentile per-packet one-way delay: 95.911 ms

Loss rate: 0.61%

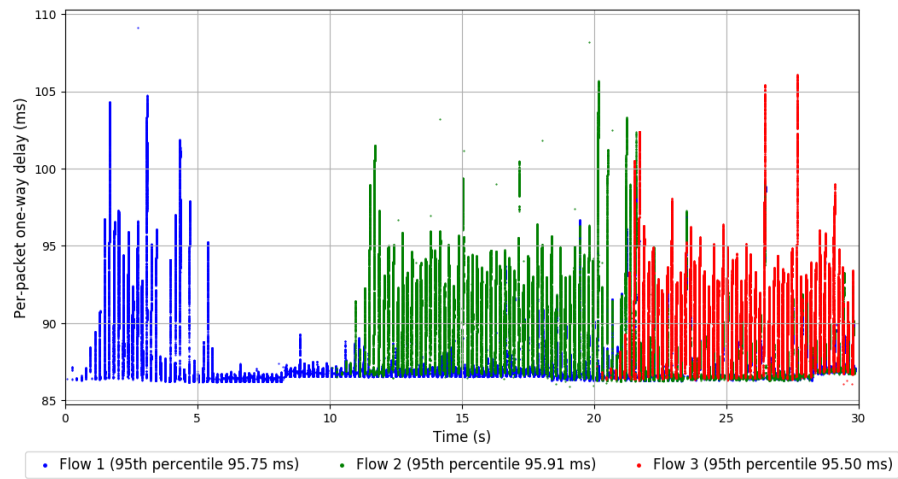
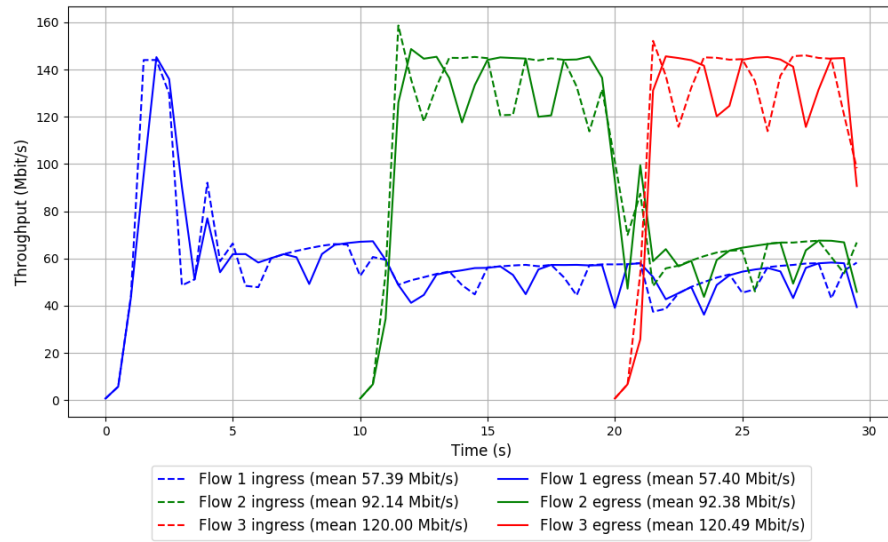
-- Flow 3:

Average throughput: 120.49 Mbit/s

95th percentile per-packet one-way delay: 95.503 ms

Loss rate: 1.33%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-11-21 13:07:31

End at: 2017-11-21 13:08:01

Below is generated by plot.py at 2017-11-21 17:24:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.74 Mbit/s

95th percentile per-packet one-way delay: 95.568 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 74.66 Mbit/s

95th percentile per-packet one-way delay: 93.433 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 60.49 Mbit/s

95th percentile per-packet one-way delay: 95.275 ms

Loss rate: 0.87%

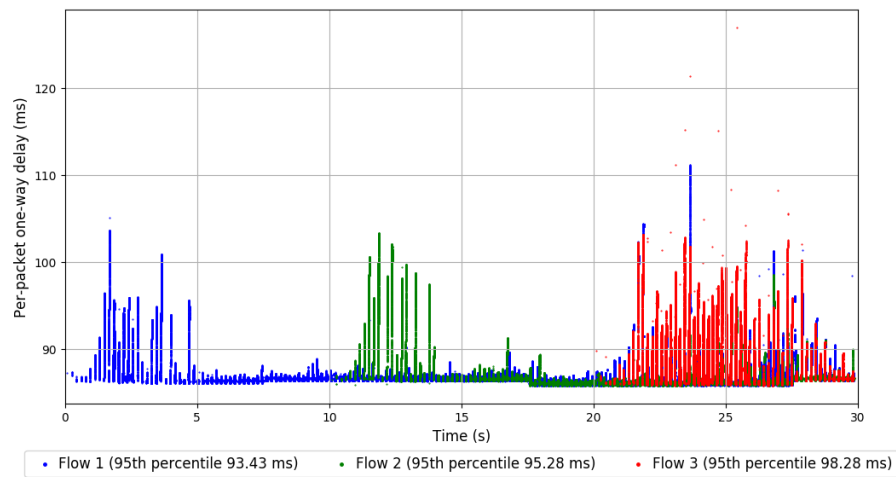
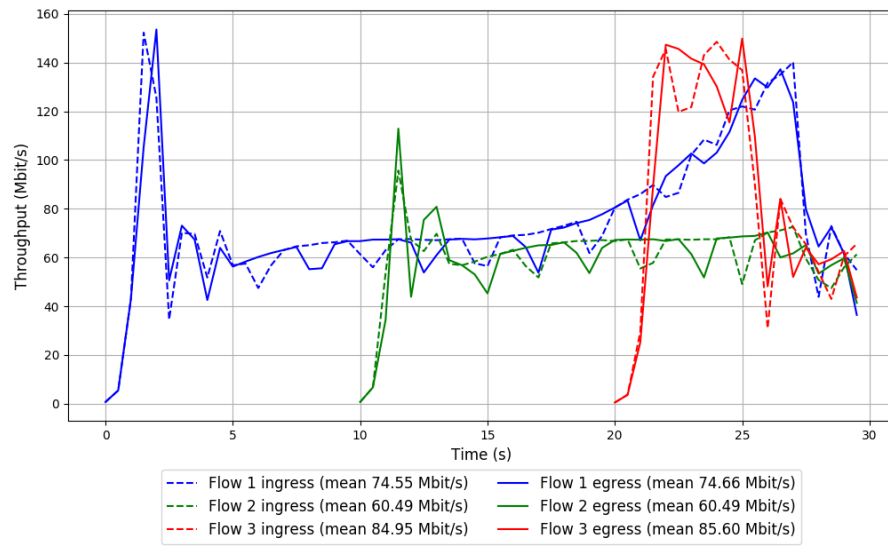
-- Flow 3:

Average throughput: 85.60 Mbit/s

95th percentile per-packet one-way delay: 98.277 ms

Loss rate: 1.31%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-11-21 13:21:00

End at: 2017-11-21 13:21:30

Below is generated by plot.py at 2017-11-21 17:24:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.54 Mbit/s

95th percentile per-packet one-way delay: 113.861 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 62.28 Mbit/s

95th percentile per-packet one-way delay: 113.827 ms

Loss rate: 0.55%

-- Flow 2:

Average throughput: 75.30 Mbit/s

95th percentile per-packet one-way delay: 113.826 ms

Loss rate: 1.01%

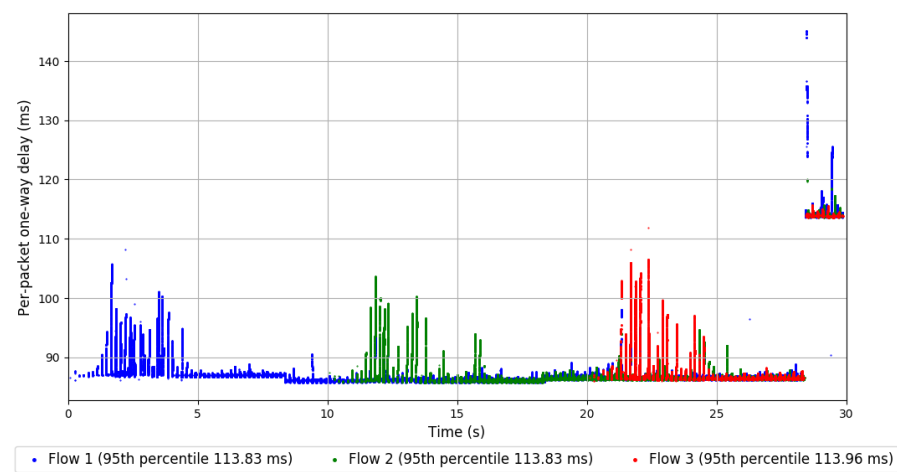
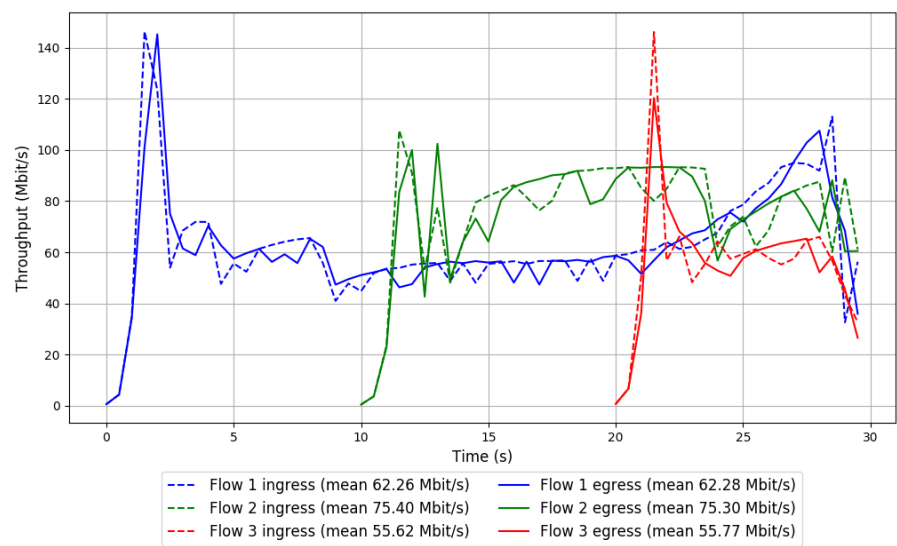
-- Flow 3:

Average throughput: 55.77 Mbit/s

95th percentile per-packet one-way delay: 113.963 ms

Loss rate: 1.48%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2017-11-21 13:34:13

End at: 2017-11-21 13:34:43

Below is generated by plot.py at 2017-11-21 17:24:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.03 Mbit/s

95th percentile per-packet one-way delay: 94.908 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 69.76 Mbit/s

95th percentile per-packet one-way delay: 95.101 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 83.83 Mbit/s

95th percentile per-packet one-way delay: 94.702 ms

Loss rate: 0.88%

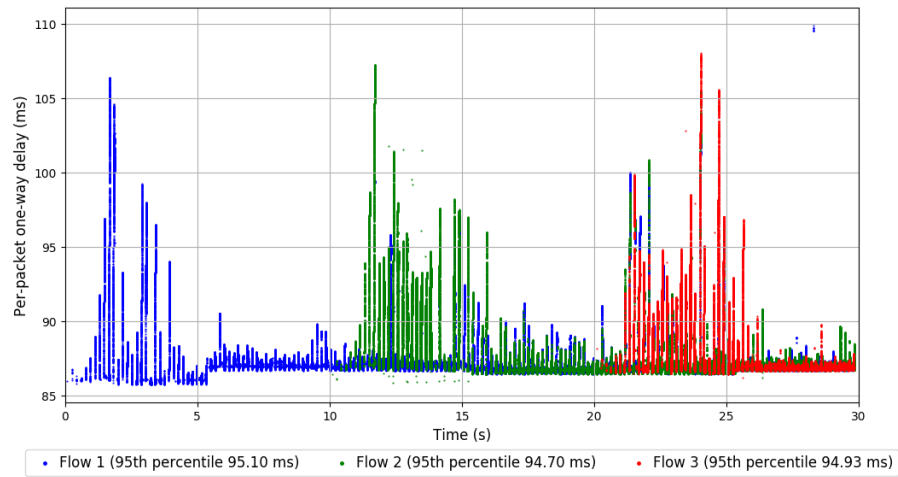
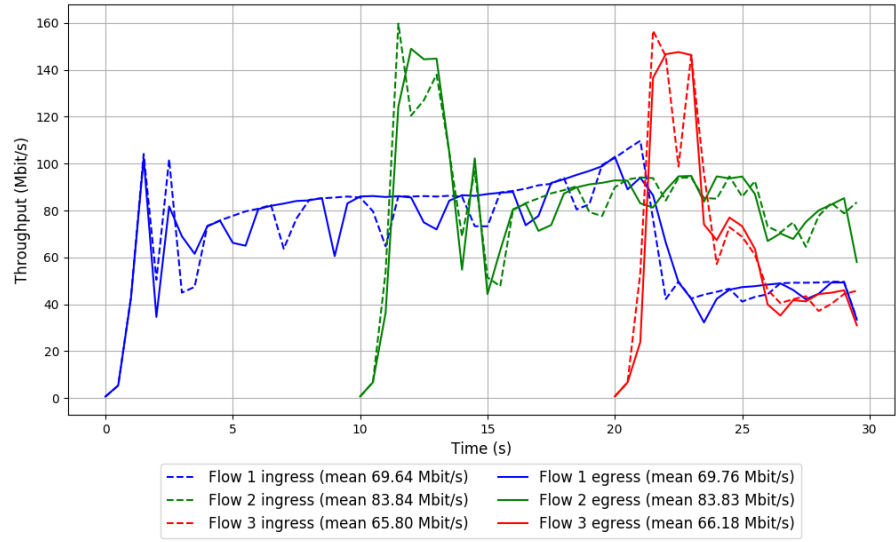
-- Flow 3:

Average throughput: 66.18 Mbit/s

95th percentile per-packet one-way delay: 94.930 ms

Loss rate: 1.20%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-11-21 13:47:53

End at: 2017-11-21 13:48:23

Below is generated by plot.py at 2017-11-21 17:24:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.12 Mbit/s

95th percentile per-packet one-way delay: 95.005 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 79.21 Mbit/s

95th percentile per-packet one-way delay: 94.962 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 64.93 Mbit/s

95th percentile per-packet one-way delay: 94.970 ms

Loss rate: 1.01%

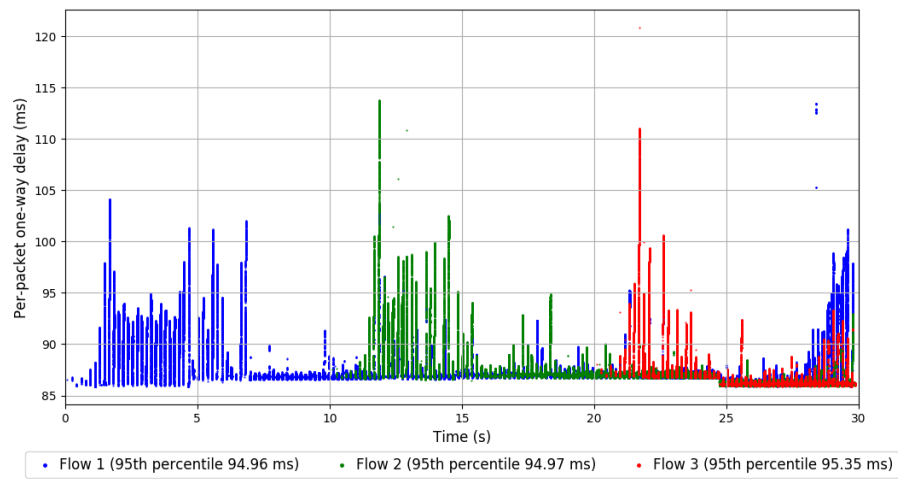
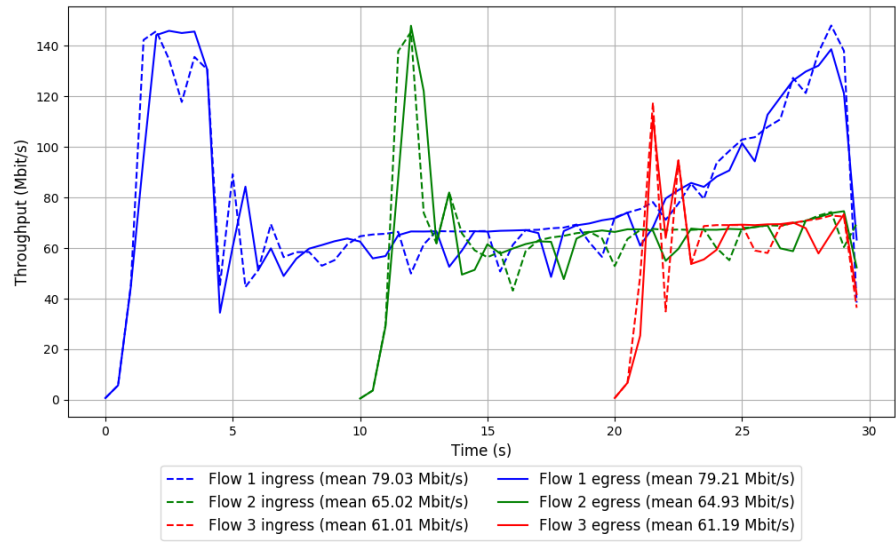
-- Flow 3:

Average throughput: 61.19 Mbit/s

95th percentile per-packet one-way delay: 95.349 ms

Loss rate: 1.47%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-11-21 14:01:20

End at: 2017-11-21 14:01:50

Below is generated by plot.py at 2017-11-21 17:24:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.92 Mbit/s

95th percentile per-packet one-way delay: 96.747 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 53.41 Mbit/s

95th percentile per-packet one-way delay: 93.350 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 88.61 Mbit/s

95th percentile per-packet one-way delay: 99.381 ms

Loss rate: 0.65%

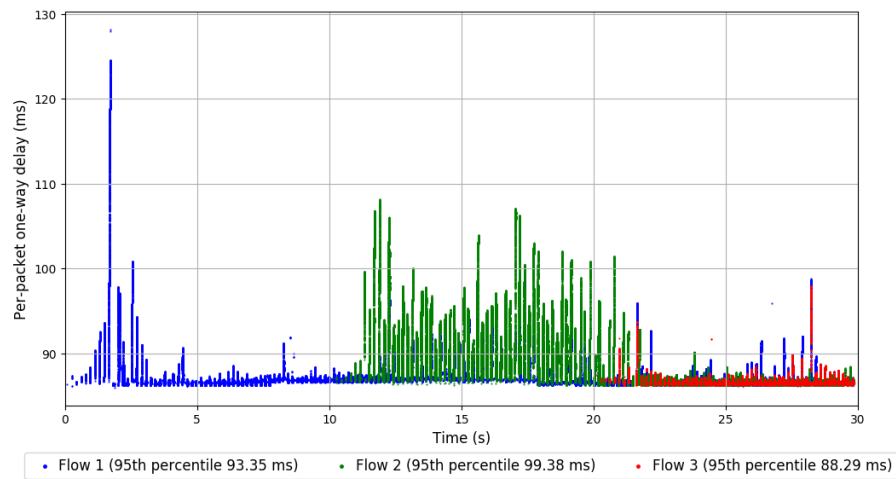
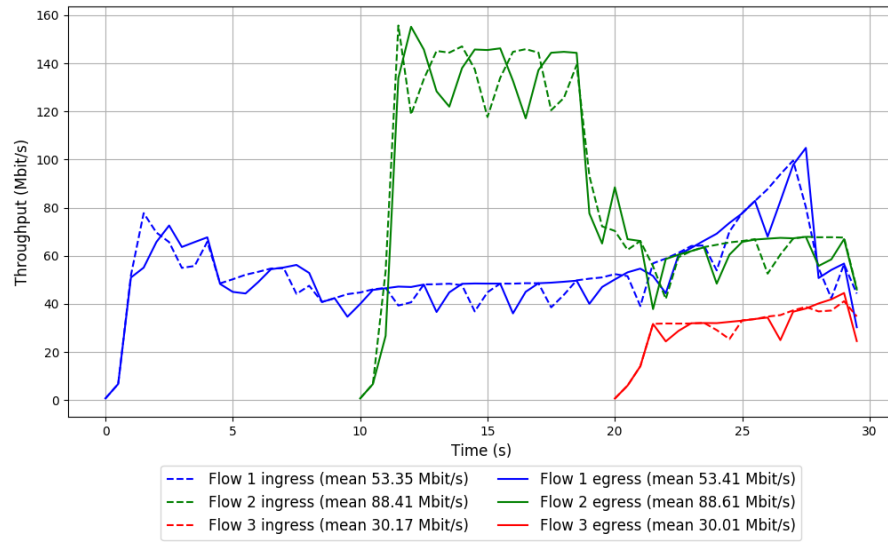
-- Flow 3:

Average throughput: 30.01 Mbit/s

95th percentile per-packet one-way delay: 88.286 ms

Loss rate: 1.92%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-11-21 14:14:43

End at: 2017-11-21 14:15:13

Below is generated by plot.py at 2017-11-21 17:24:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.37 Mbit/s

95th percentile per-packet one-way delay: 95.574 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 92.35 Mbit/s

95th percentile per-packet one-way delay: 95.650 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 68.48 Mbit/s

95th percentile per-packet one-way delay: 94.959 ms

Loss rate: 0.91%

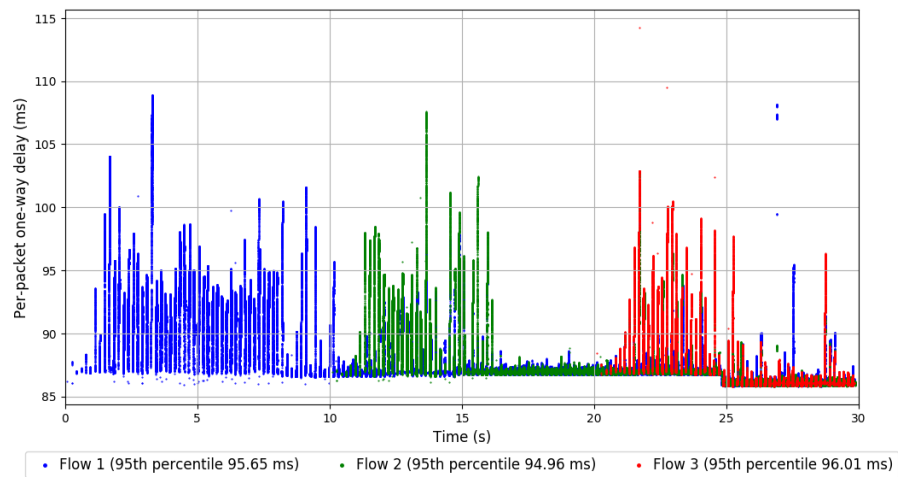
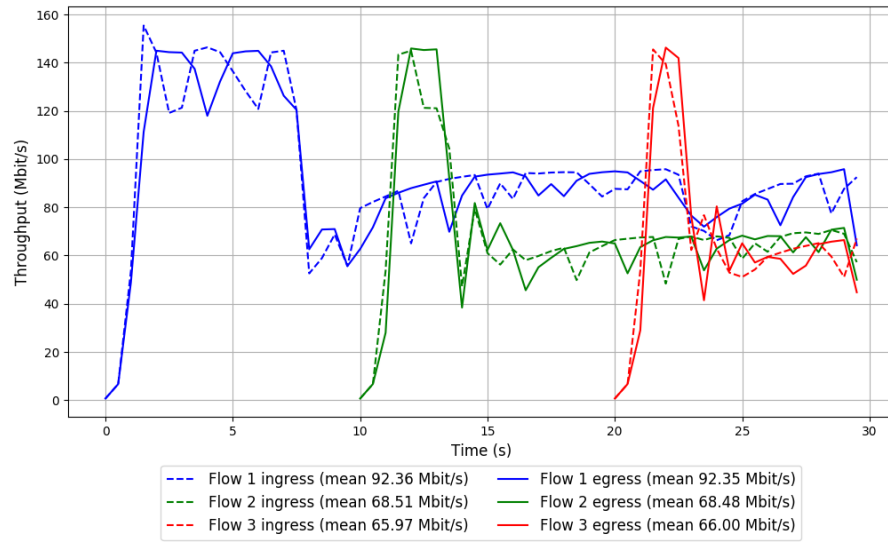
-- Flow 3:

Average throughput: 66.00 Mbit/s

95th percentile per-packet one-way delay: 96.014 ms

Loss rate: 1.71%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-11-21 14:28:08

End at: 2017-11-21 14:28:38

Below is generated by plot.py at 2017-11-21 17:24:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.48 Mbit/s

95th percentile per-packet one-way delay: 94.488 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 76.06 Mbit/s

95th percentile per-packet one-way delay: 94.718 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 64.07 Mbit/s

95th percentile per-packet one-way delay: 93.545 ms

Loss rate: 1.08%

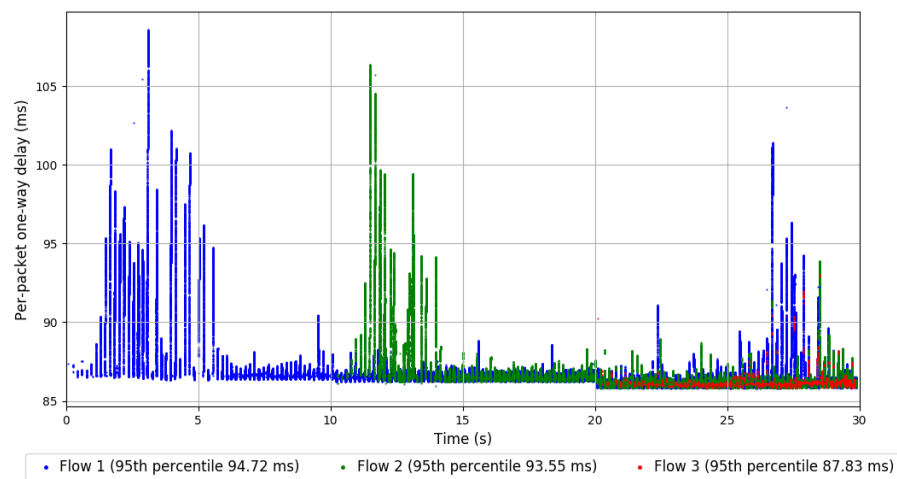
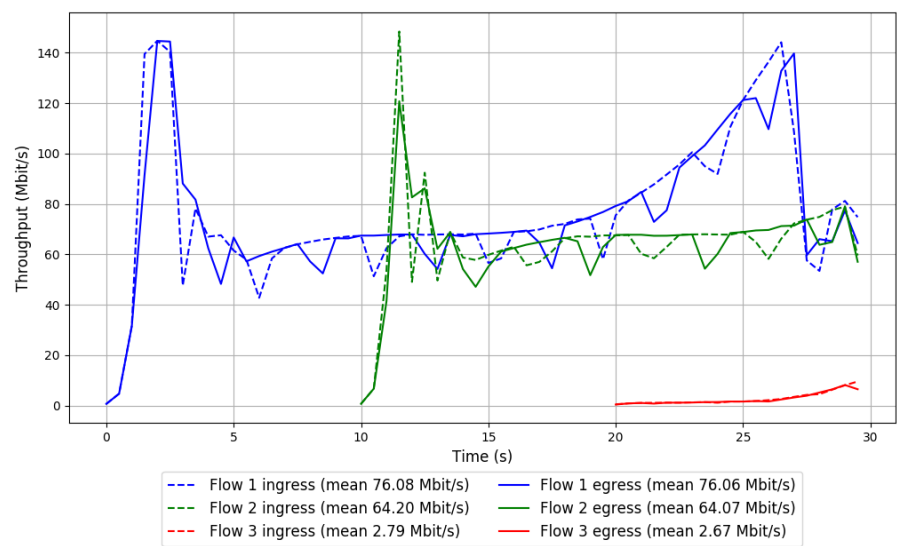
-- Flow 3:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 87.828 ms

Loss rate: 6.65%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-11-21 14:41:36

End at: 2017-11-21 14:42:06

Below is generated by plot.py at 2017-11-21 17:25:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.92 Mbit/s

95th percentile per-packet one-way delay: 94.011 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 82.31 Mbit/s

95th percentile per-packet one-way delay: 94.516 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 88.10 Mbit/s

95th percentile per-packet one-way delay: 93.061 ms

Loss rate: 1.33%

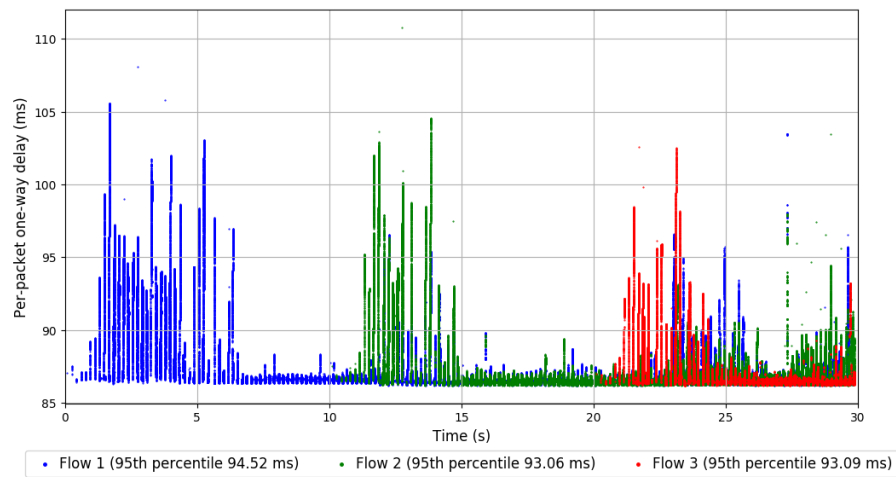
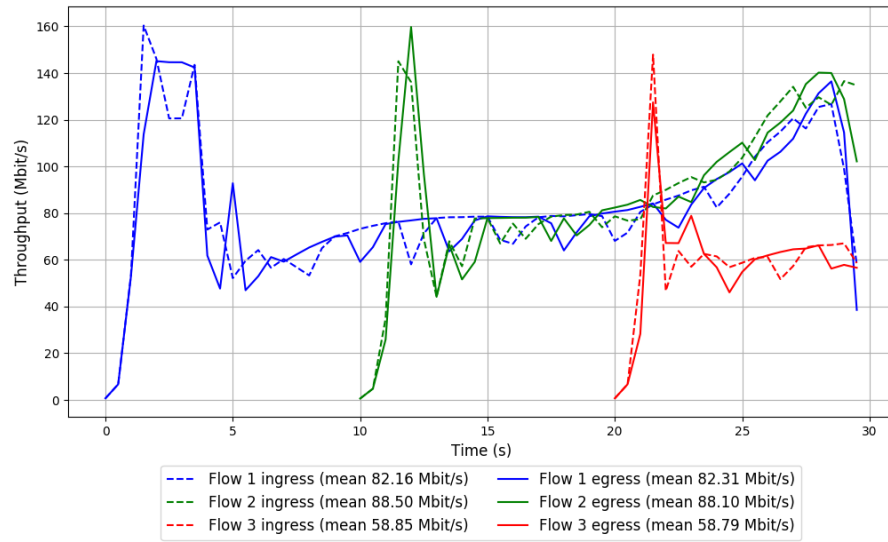
-- Flow 3:

Average throughput: 58.79 Mbit/s

95th percentile per-packet one-way delay: 93.093 ms

Loss rate: 1.91%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-11-21 14:55:04

End at: 2017-11-21 14:55:34

Below is generated by plot.py at 2017-11-21 17:25:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 147.78 Mbit/s

95th percentile per-packet one-way delay: 96.882 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 74.39 Mbit/s

95th percentile per-packet one-way delay: 96.371 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 71.73 Mbit/s

95th percentile per-packet one-way delay: 94.213 ms

Loss rate: 1.12%

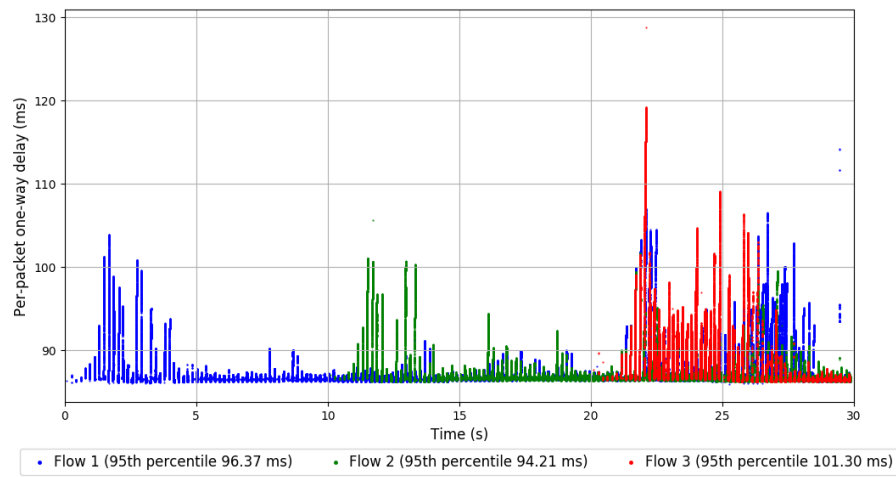
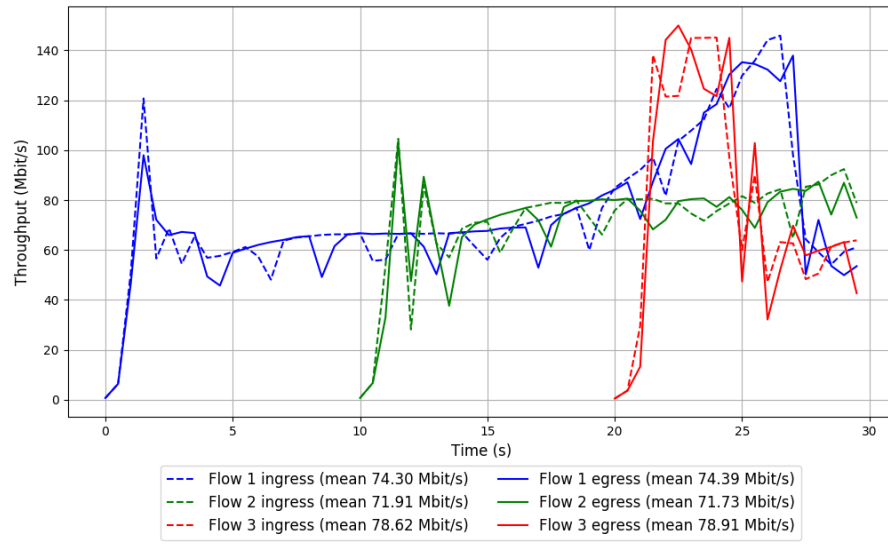
-- Flow 3:

Average throughput: 78.91 Mbit/s

95th percentile per-packet one-way delay: 101.297 ms

Loss rate: 1.40%

Run 10: Report of TCP Cubic — Data Link

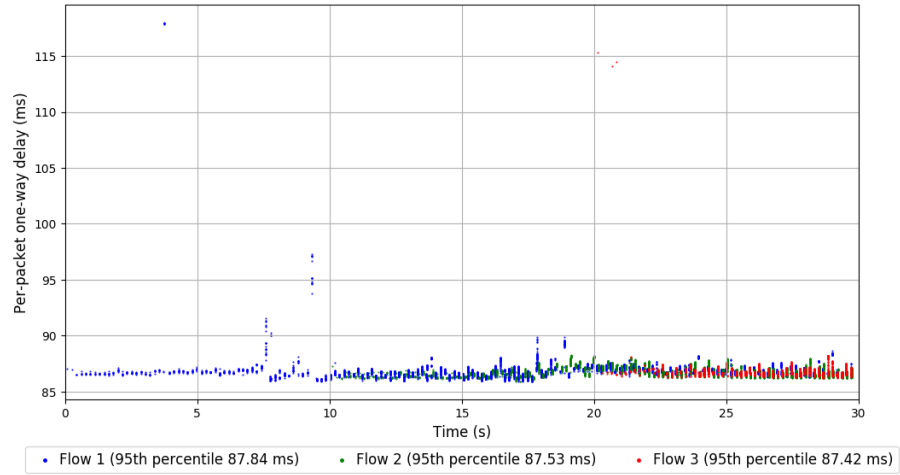
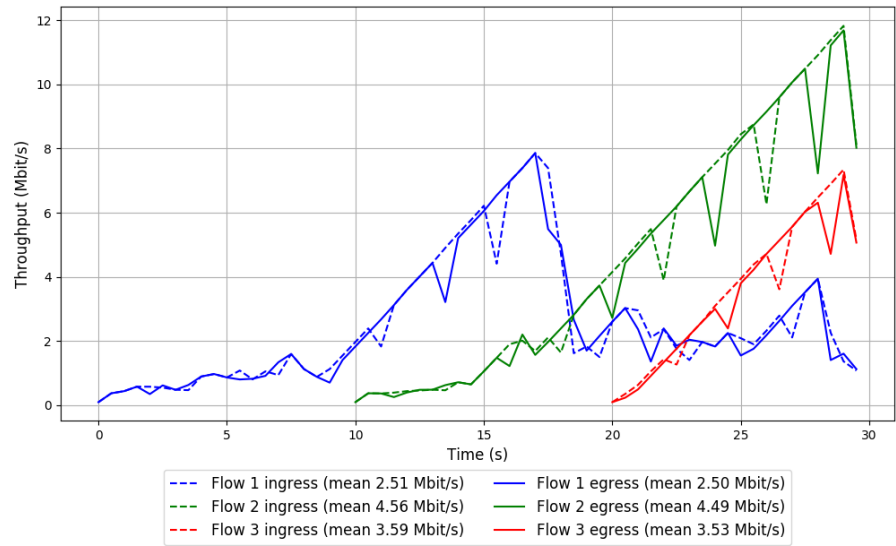


```
Run 1: Statistics of LEDBAT

Start at: 2017-11-21 12:46:30
End at: 2017-11-21 12:47:00

# Below is generated by plot.py at 2017-11-21 17:25:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 87.553 ms
Loss rate: 1.97%
-- Flow 1:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 87.840 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 87.528 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 87.417 ms
Loss rate: 3.70%
```


Run 1: Report of LEDBAT — Data Link

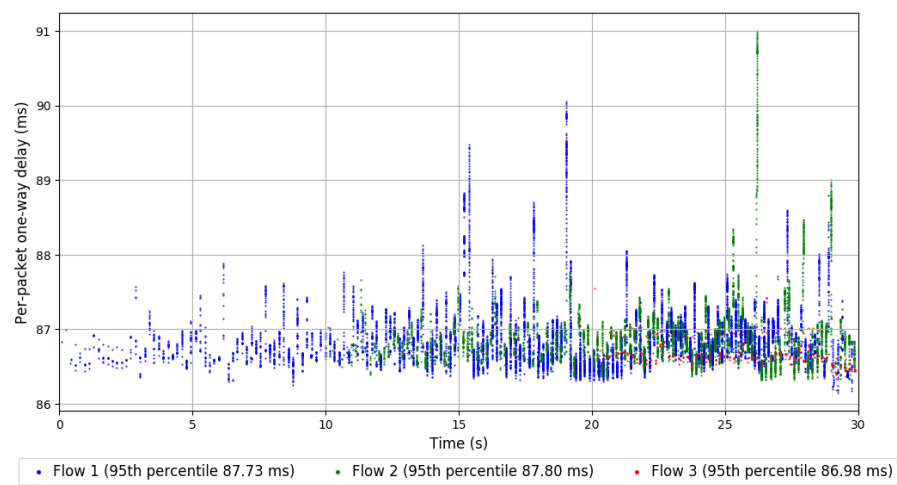
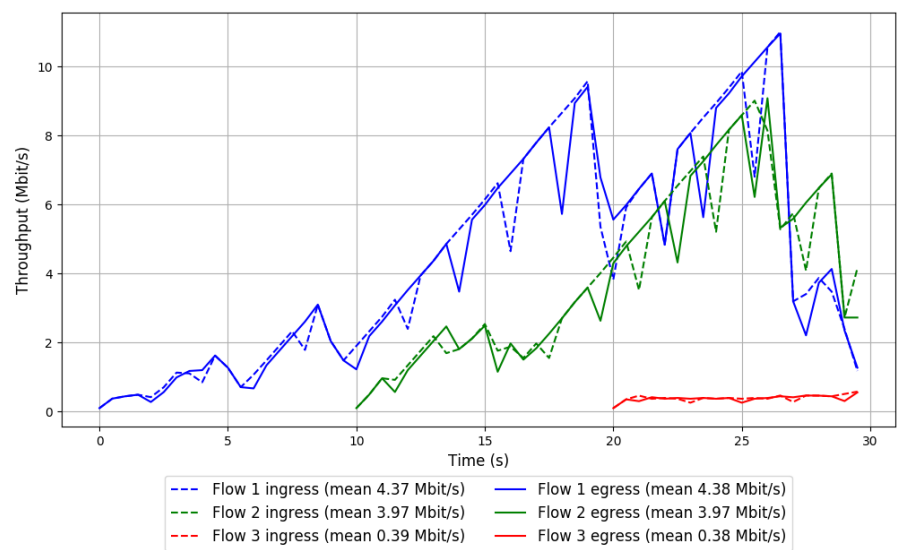


```
Run 2: Statistics of LEDBAT

Start at: 2017-11-21 12:59:19
End at: 2017-11-21 12:59:49

# Below is generated by plot.py at 2017-11-21 17:25:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.12 Mbit/s
95th percentile per-packet one-way delay: 87.724 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 4.38 Mbit/s
95th percentile per-packet one-way delay: 87.733 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 87.800 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 86.980 ms
Loss rate: 2.95%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-11-21 13:12:50

End at: 2017-11-21 13:13:20

Below is generated by plot.py at 2017-11-21 17:25:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.53 Mbit/s

95th percentile per-packet one-way delay: 87.436 ms

Loss rate: 1.67%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 87.277 ms

Loss rate: 1.10%

-- Flow 2:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 87.492 ms

Loss rate: 1.13%

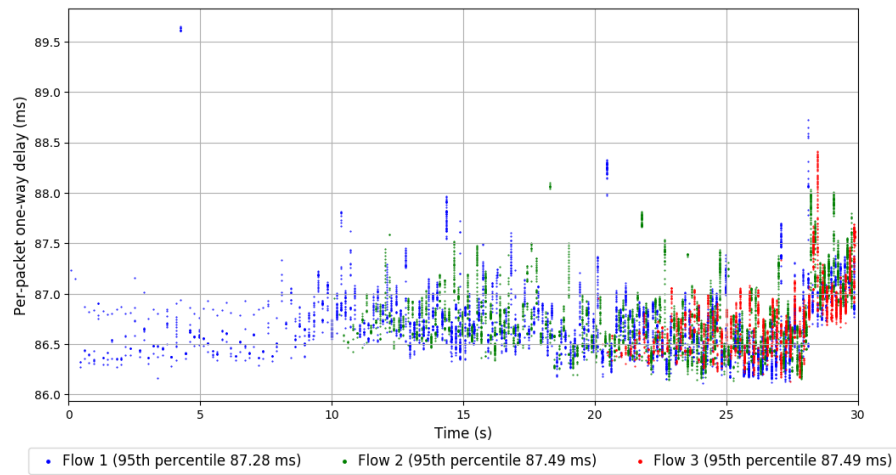
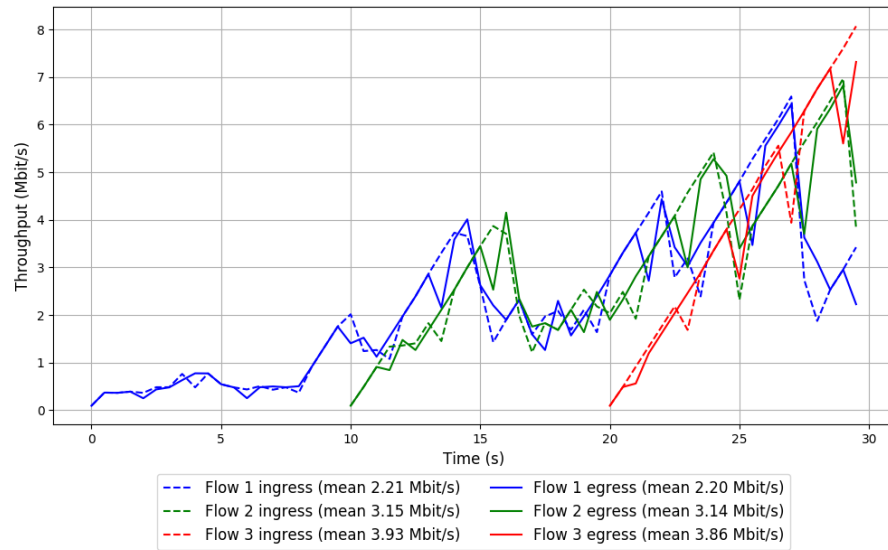
-- Flow 3:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 87.494 ms

Loss rate: 3.52%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-11-21 13:26:22

End at: 2017-11-21 13:26:52

Below is generated by plot.py at 2017-11-21 17:25:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.03 Mbit/s

95th percentile per-packet one-way delay: 114.324 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 114.290 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 5.31 Mbit/s

95th percentile per-packet one-way delay: 114.237 ms

Loss rate: 0.93%

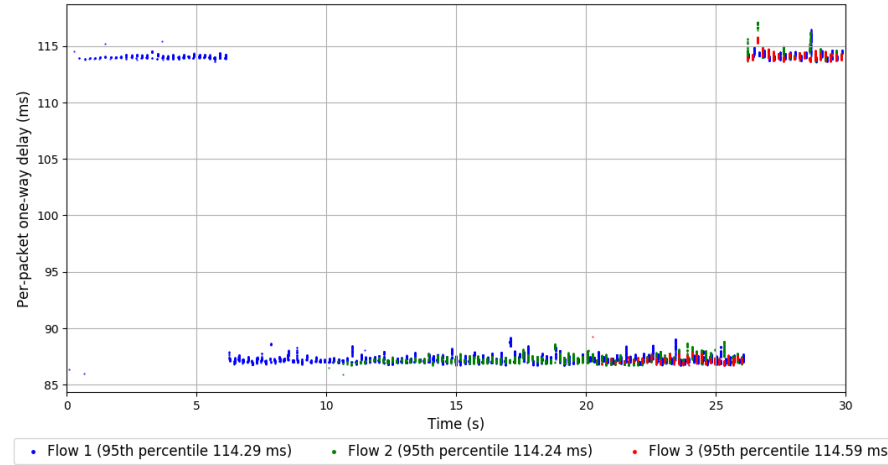
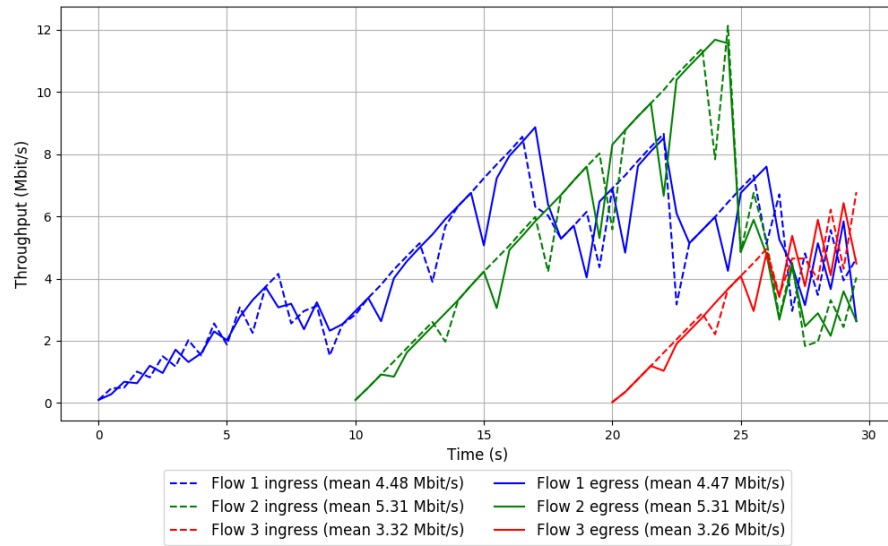
-- Flow 3:

Average throughput: 3.26 Mbit/s

95th percentile per-packet one-way delay: 114.587 ms

Loss rate: 3.55%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-11-21 13:39:35

End at: 2017-11-21 13:40:05

Below is generated by plot.py at 2017-11-21 17:25:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.63 Mbit/s

95th percentile per-packet one-way delay: 87.463 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 1.69 Mbit/s

95th percentile per-packet one-way delay: 87.406 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 87.386 ms

Loss rate: 0.90%

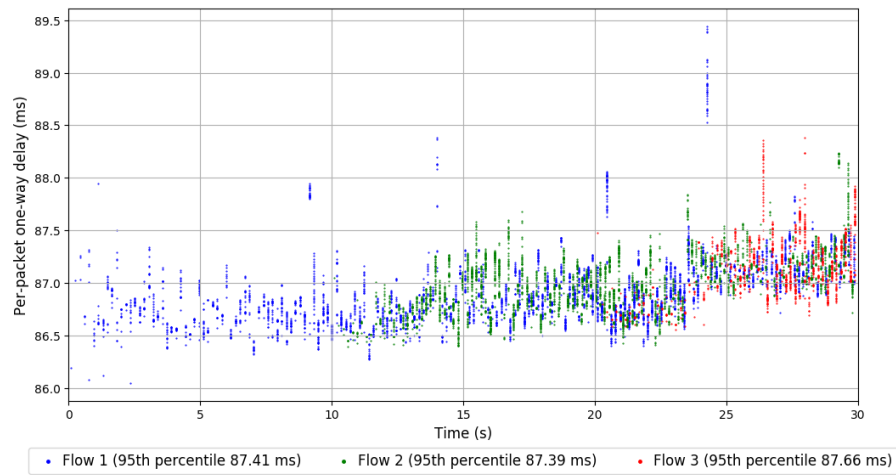
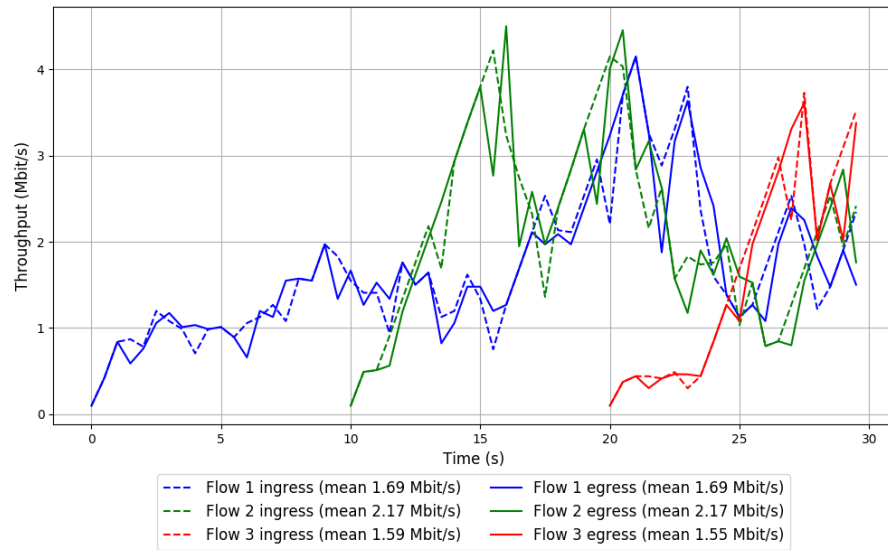
-- Flow 3:

Average throughput: 1.55 Mbit/s

95th percentile per-packet one-way delay: 87.657 ms

Loss rate: 4.22%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-11-21 13:53:11

End at: 2017-11-21 13:53:41

Below is generated by plot.py at 2017-11-21 17:25:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.94 Mbit/s

95th percentile per-packet one-way delay: 88.223 ms

Loss rate: 1.70%

-- Flow 1:

Average throughput: 3.06 Mbit/s

95th percentile per-packet one-way delay: 88.204 ms

Loss rate: 1.48%

-- Flow 2:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 88.292 ms

Loss rate: 1.92%

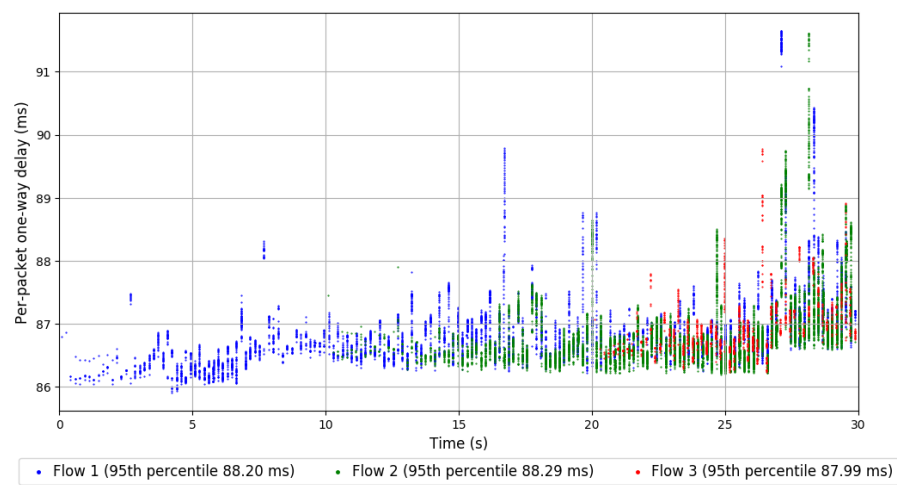
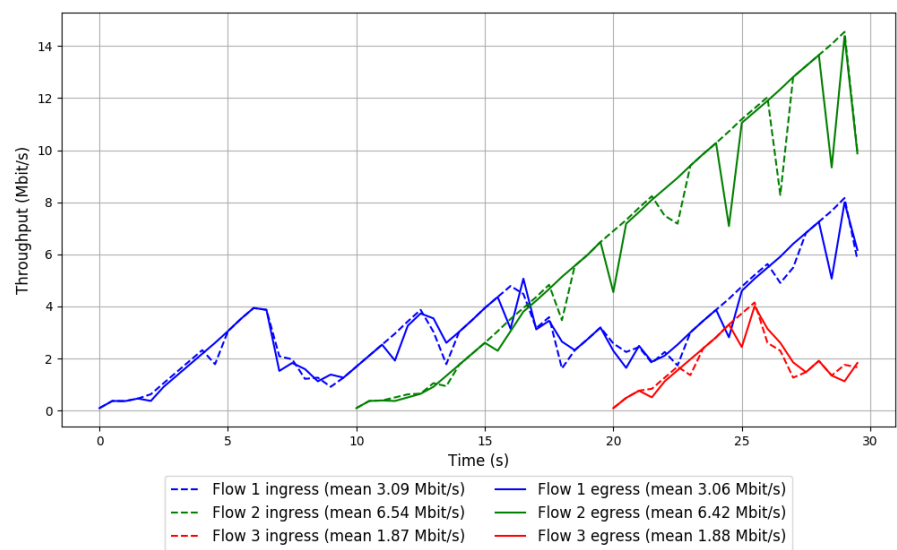
-- Flow 3:

Average throughput: 1.88 Mbit/s

95th percentile per-packet one-way delay: 87.988 ms

Loss rate: 1.26%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-11-21 14:06:40

End at: 2017-11-21 14:07:10

Below is generated by plot.py at 2017-11-21 17:25:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.55 Mbit/s

95th percentile per-packet one-way delay: 87.913 ms

Loss rate: 1.62%

-- Flow 1:

Average throughput: 5.14 Mbit/s

95th percentile per-packet one-way delay: 88.051 ms

Loss rate: 1.53%

-- Flow 2:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 87.807 ms

Loss rate: 2.19%

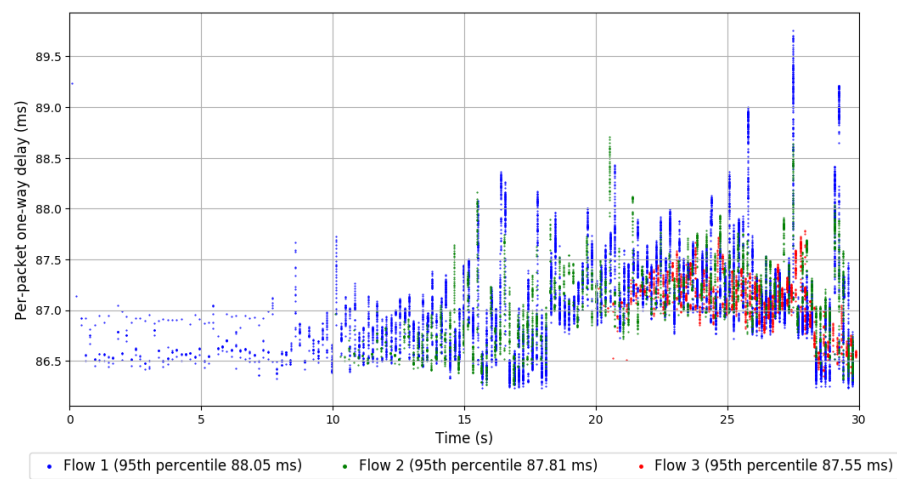
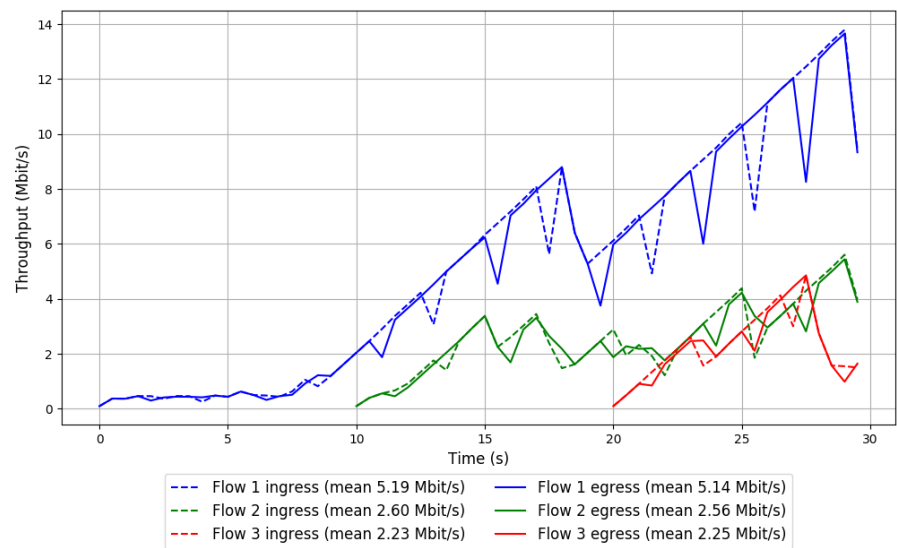
-- Flow 3:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 87.547 ms

Loss rate: 0.95%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-11-21 14:20:06

End at: 2017-11-21 14:20:36

Below is generated by plot.py at 2017-11-21 17:25:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.75 Mbit/s

95th percentile per-packet one-way delay: 88.022 ms

Loss rate: 1.58%

-- Flow 1:

Average throughput: 5.24 Mbit/s

95th percentile per-packet one-way delay: 88.194 ms

Loss rate: 1.56%

-- Flow 2:

Average throughput: 3.30 Mbit/s

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

Loss rate: 0.93%

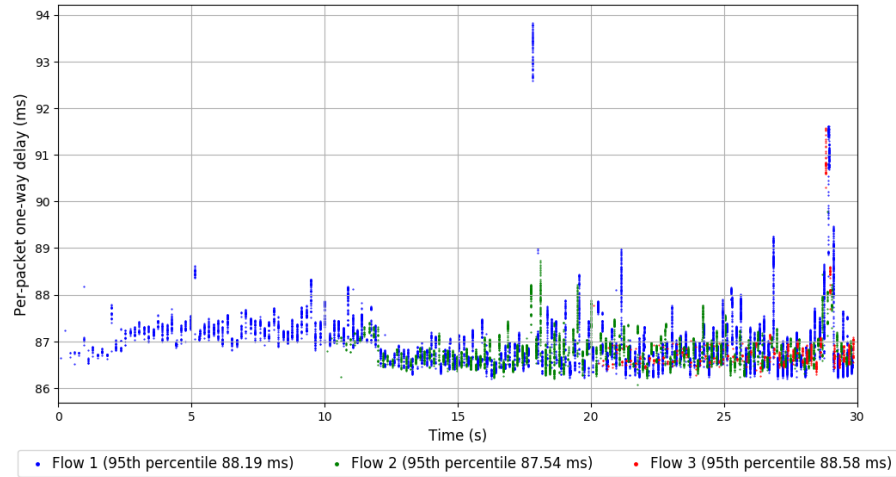
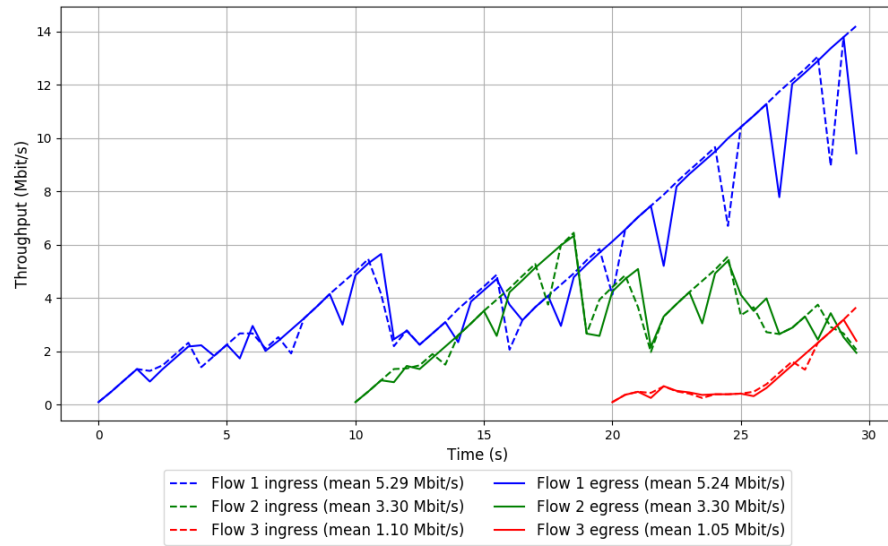
-- Flow 3:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 88.576 ms

Loss rate: 5.83%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-11-21 14:33:29

End at: 2017-11-21 14:33:59

Below is generated by plot.py at 2017-11-21 17:25:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.36 Mbit/s

95th percentile per-packet one-way delay: 87.298 ms

Loss rate: 1.24%

-- Flow 1:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 87.198 ms

Loss rate: 1.44%

-- Flow 2:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 87.471 ms

Loss rate: 0.65%

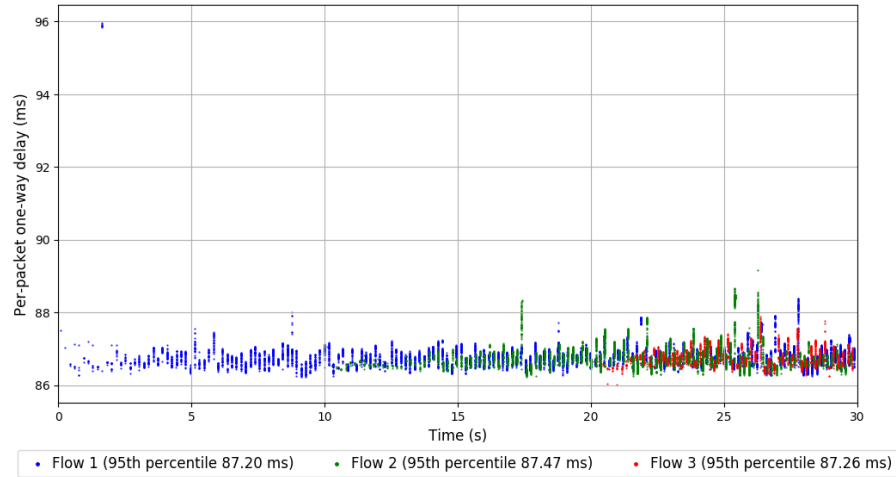
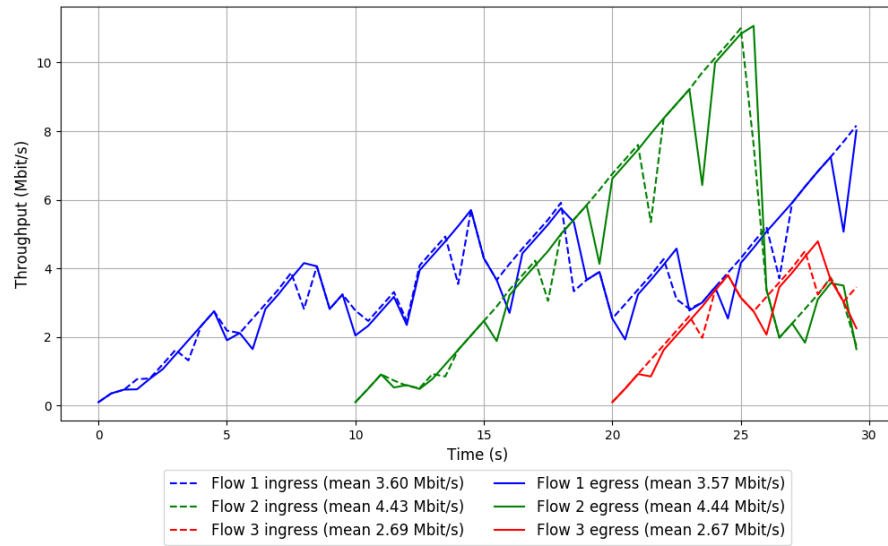
-- Flow 3:

Average throughput: 2.67 Mbit/s

95th percentile per-packet one-way delay: 87.261 ms

Loss rate: 2.34%

Run 9: Report of LEDBAT — Data Link

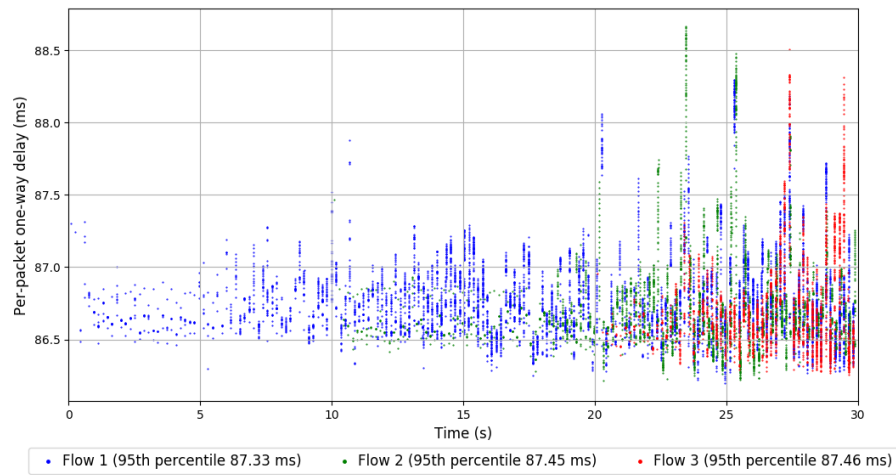
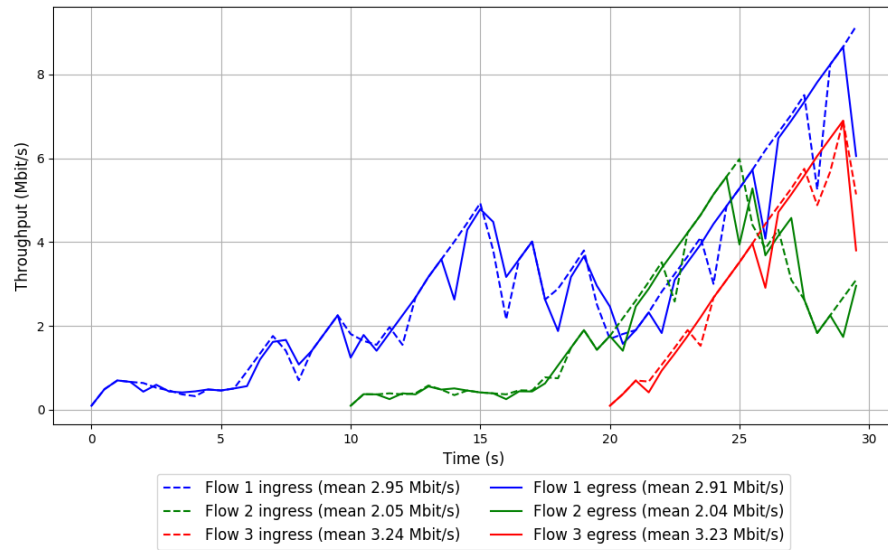


```
Run 10: Statistics of LEDBAT

Start at: 2017-11-21 14:47:01
End at: 2017-11-21 14:47:31

# Below is generated by plot.py at 2017-11-21 17:25:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.31 Mbit/s
95th percentile per-packet one-way delay: 87.385 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 2.91 Mbit/s
95th percentile per-packet one-way delay: 87.328 ms
Loss rate: 1.94%
-- Flow 2:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 87.451 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 87.461 ms
Loss rate: 2.09%
```

Run 10: Report of LEDBAT — Data Link

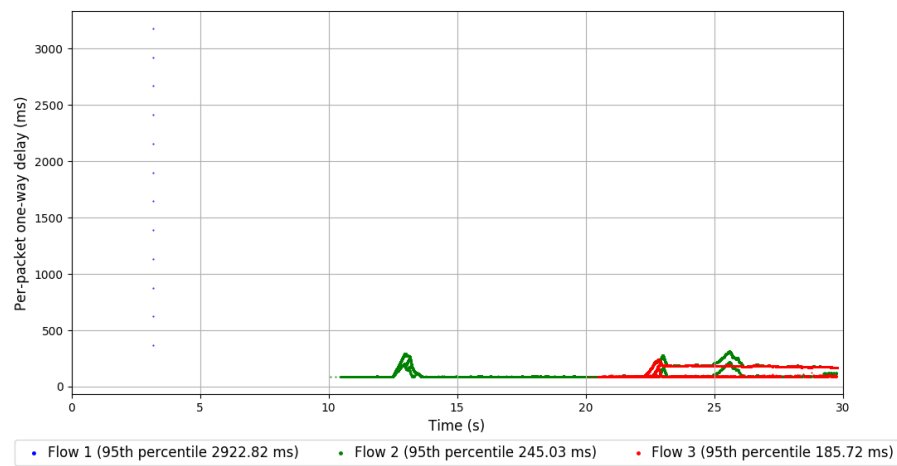
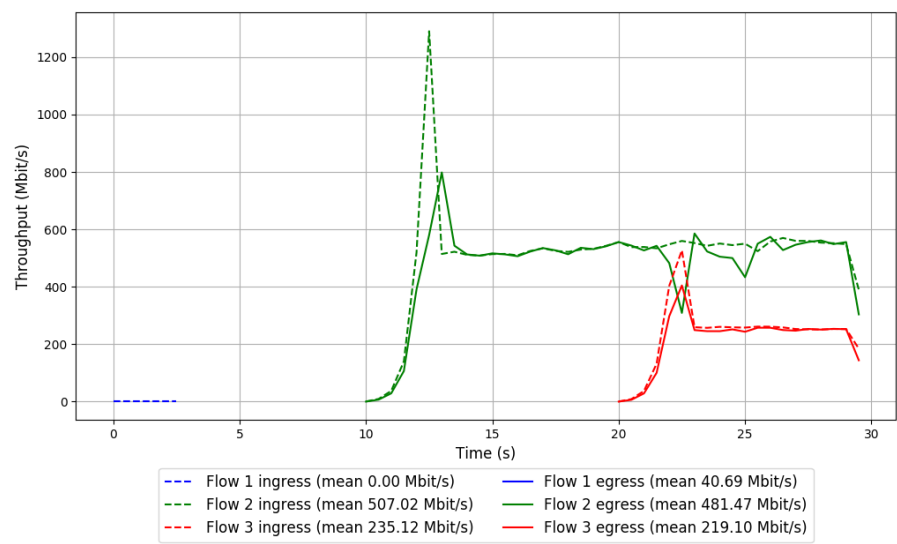


```
Run 1: Statistics of PCC

Start at: 2017-11-21 12:53:09
End at: 2017-11-21 12:53:39

# Below is generated by plot.py at 2017-11-21 17:30:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 436.02 Mbit/s
95th percentile per-packet one-way delay: 234.390 ms
Loss rate: 6.36%
-- Flow 1:
Average throughput: 40.69 Mbit/s
95th percentile per-packet one-way delay: 2922.818 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 481.47 Mbit/s
95th percentile per-packet one-way delay: 245.032 ms
Loss rate: 5.88%
-- Flow 3:
Average throughput: 219.10 Mbit/s
95th percentile per-packet one-way delay: 185.719 ms
Loss rate: 8.46%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-11-21 13:06:18

End at: 2017-11-21 13:06:48

Below is generated by plot.py at 2017-11-21 17:35:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 630.07 Mbit/s

95th percentile per-packet one-way delay: 203.723 ms

Loss rate: 4.61%

-- Flow 1:

Average throughput: 492.11 Mbit/s

95th percentile per-packet one-way delay: 218.269 ms

Loss rate: 5.34%

-- Flow 2:

Average throughput: 141.02 Mbit/s

95th percentile per-packet one-way delay: 146.345 ms

Loss rate: 1.32%

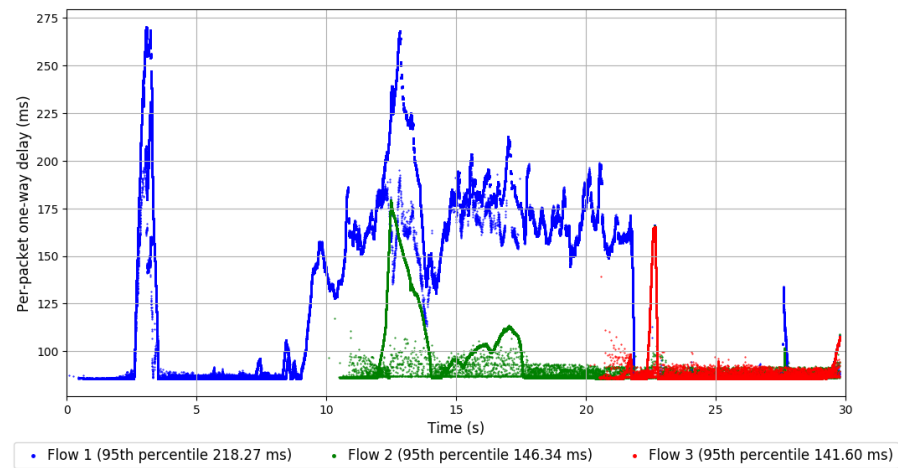
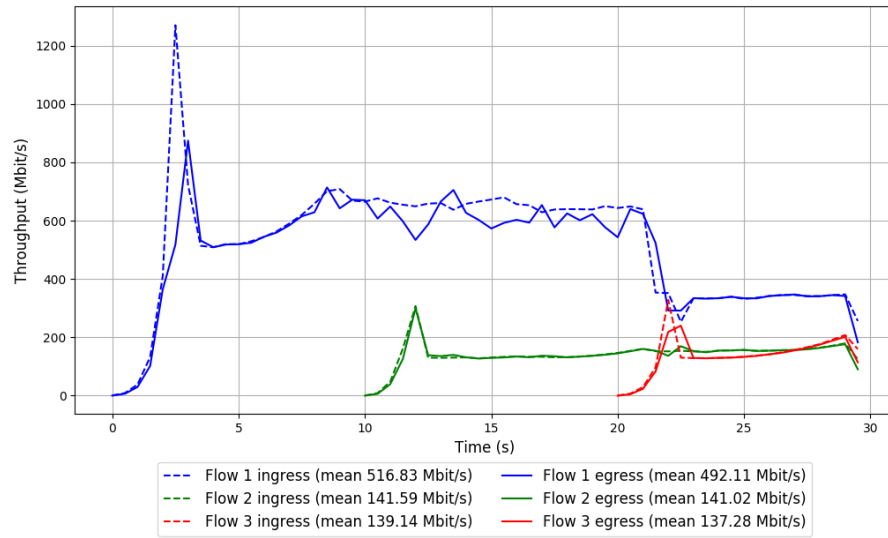
-- Flow 3:

Average throughput: 137.28 Mbit/s

95th percentile per-packet one-way delay: 141.596 ms

Loss rate: 3.15%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-11-21 13:19:46

End at: 2017-11-21 13:20:16

Below is generated by plot.py at 2017-11-21 17:36:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 654.07 Mbit/s

95th percentile per-packet one-way delay: 244.834 ms

Loss rate: 4.12%

-- Flow 1:

Average throughput: 547.41 Mbit/s

95th percentile per-packet one-way delay: 255.413 ms

Loss rate: 4.52%

-- Flow 2:

Average throughput: 130.74 Mbit/s

95th percentile per-packet one-way delay: 176.186 ms

Loss rate: 1.89%

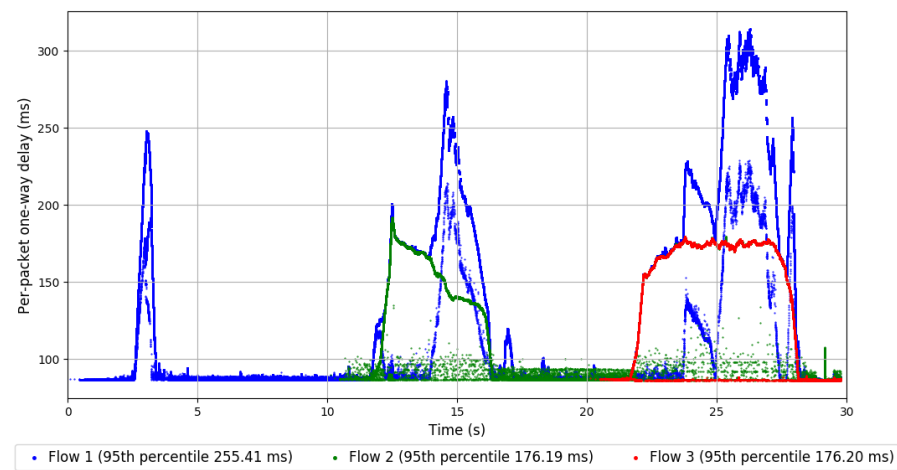
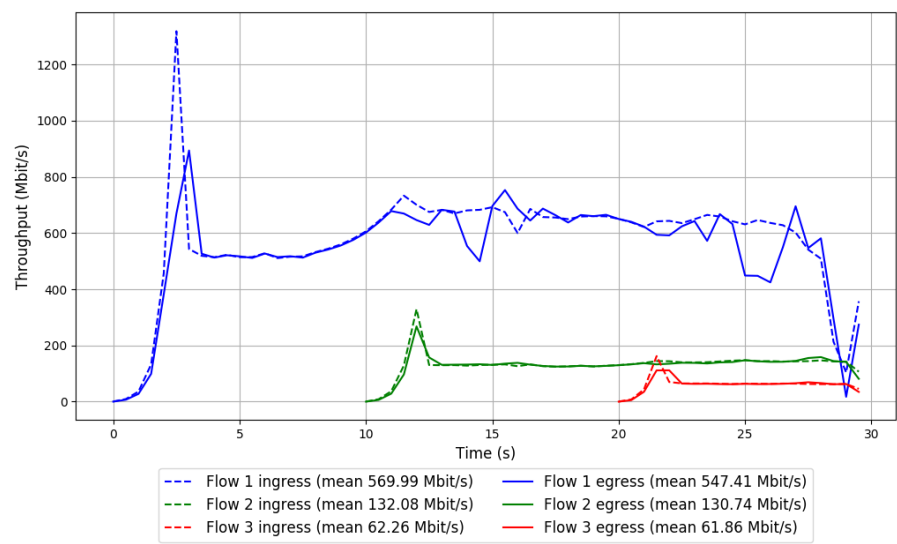
-- Flow 3:

Average throughput: 61.86 Mbit/s

95th percentile per-packet one-way delay: 176.198 ms

Loss rate: 2.39%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-11-21 13:32:58

End at: 2017-11-21 13:33:28

Below is generated by plot.py at 2017-11-21 17:36:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 639.60 Mbit/s

95th percentile per-packet one-way delay: 247.418 ms

Loss rate: 6.78%

-- Flow 1:

Average throughput: 443.35 Mbit/s

95th percentile per-packet one-way delay: 276.527 ms

Loss rate: 7.70%

-- Flow 2:

Average throughput: 266.36 Mbit/s

95th percentile per-packet one-way delay: 185.921 ms

Loss rate: 4.32%

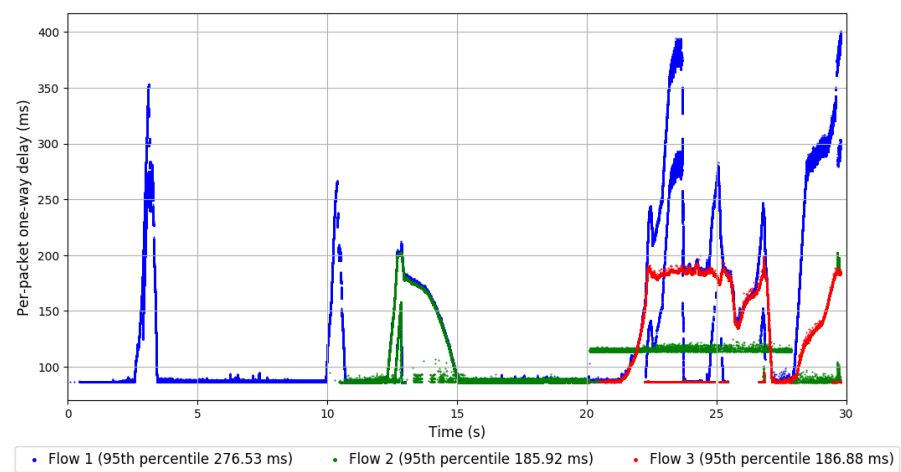
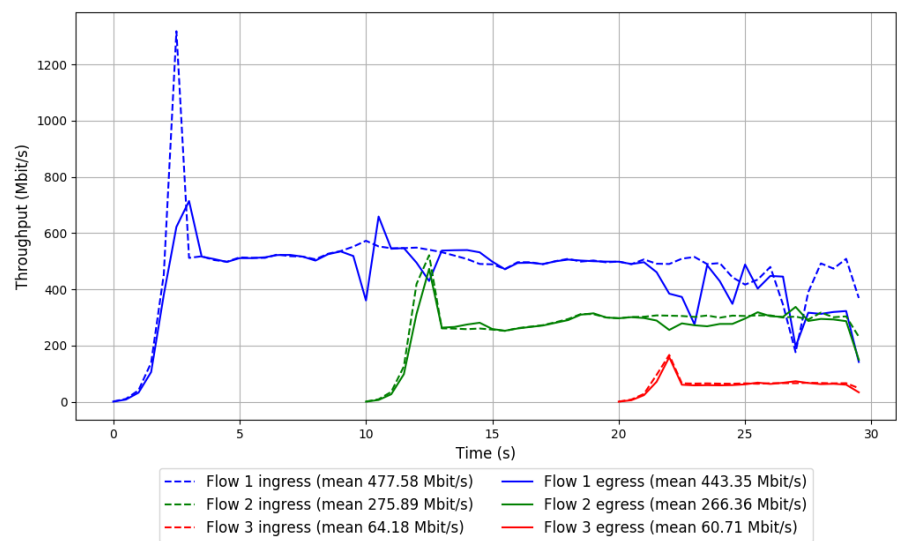
-- Flow 3:

Average throughput: 60.71 Mbit/s

95th percentile per-packet one-way delay: 186.879 ms

Loss rate: 7.09%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-11-21 13:46:40

End at: 2017-11-21 13:47:10

Below is generated by plot.py at 2017-11-21 17:37:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 639.23 Mbit/s

95th percentile per-packet one-way delay: 204.677 ms

Loss rate: 4.87%

-- Flow 1:

Average throughput: 471.38 Mbit/s

95th percentile per-packet one-way delay: 205.074 ms

Loss rate: 4.94%

-- Flow 2:

Average throughput: 238.11 Mbit/s

95th percentile per-packet one-way delay: 204.147 ms

Loss rate: 4.56%

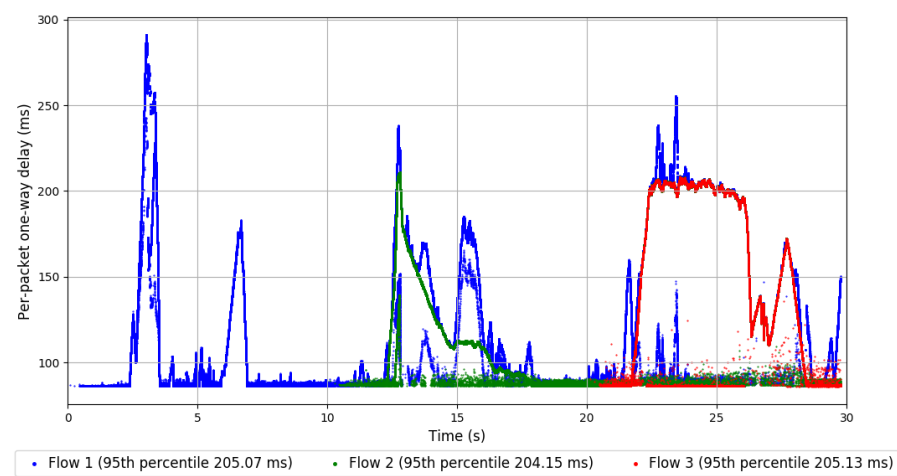
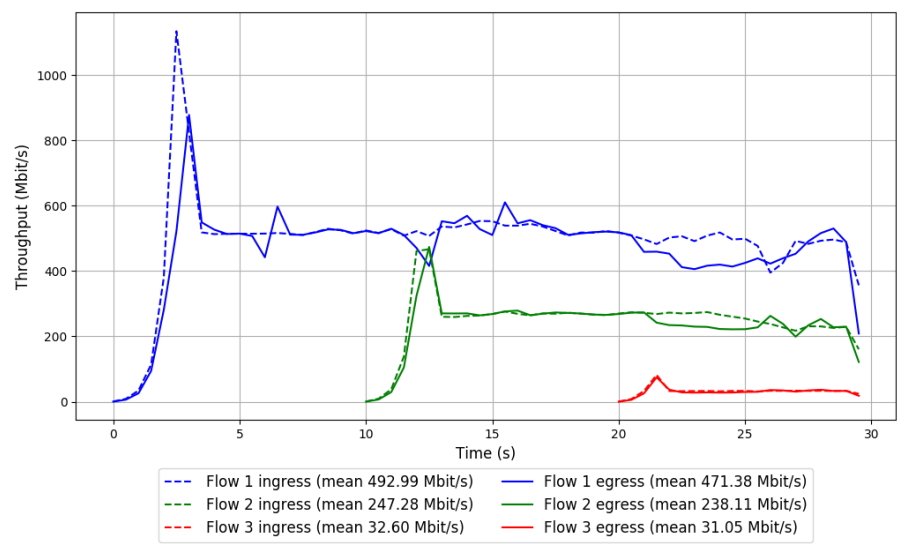
-- Flow 3:

Average throughput: 31.05 Mbit/s

95th percentile per-packet one-way delay: 205.129 ms

Loss rate: 6.43%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-11-21 14:00:02

End at: 2017-11-21 14:00:32

Below is generated by plot.py at 2017-11-21 17:37:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 661.07 Mbit/s

95th percentile per-packet one-way delay: 226.202 ms

Loss rate: 3.85%

-- Flow 1:

Average throughput: 505.85 Mbit/s

95th percentile per-packet one-way delay: 237.395 ms

Loss rate: 4.33%

-- Flow 2:

Average throughput: 232.08 Mbit/s

95th percentile per-packet one-way delay: 180.115 ms

Loss rate: 2.25%

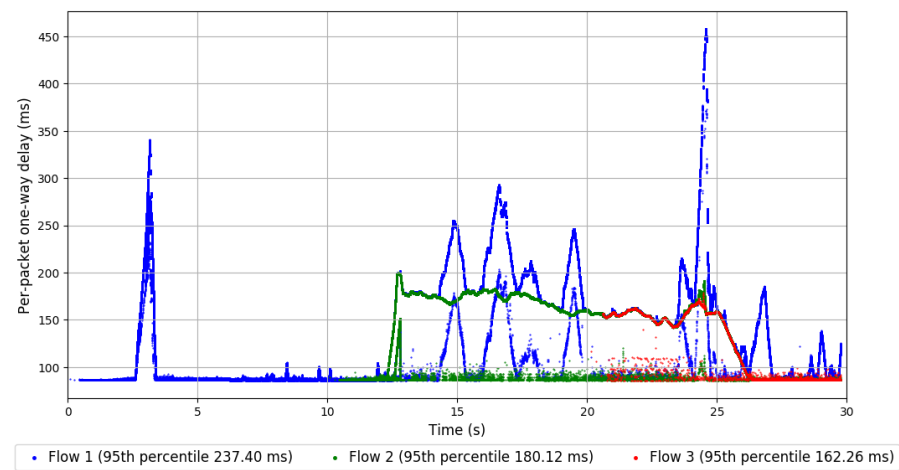
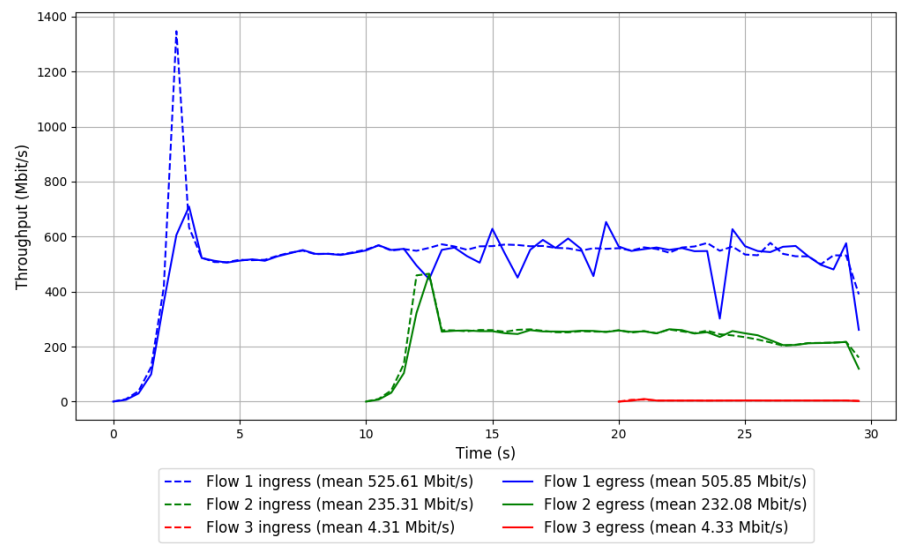
-- Flow 3:

Average throughput: 4.33 Mbit/s

95th percentile per-packet one-way delay: 162.259 ms

Loss rate: 1.71%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-11-21 14:13:28

End at: 2017-11-21 14:13:58

Below is generated by plot.py at 2017-11-21 17:39:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 702.14 Mbit/s

95th percentile per-packet one-way delay: 209.249 ms

Loss rate: 5.86%

-- Flow 1:

Average throughput: 547.42 Mbit/s

95th percentile per-packet one-way delay: 214.615 ms

Loss rate: 5.84%

-- Flow 2:

Average throughput: 231.32 Mbit/s

95th percentile per-packet one-way delay: 181.105 ms

Loss rate: 5.93%

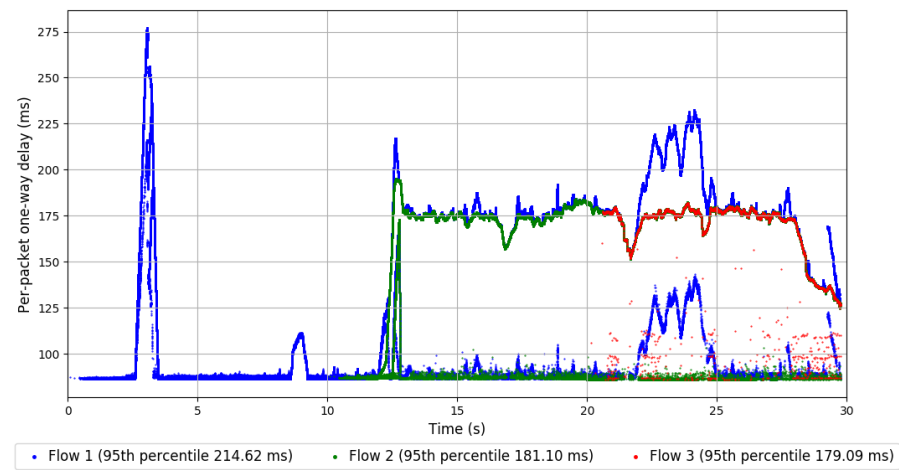
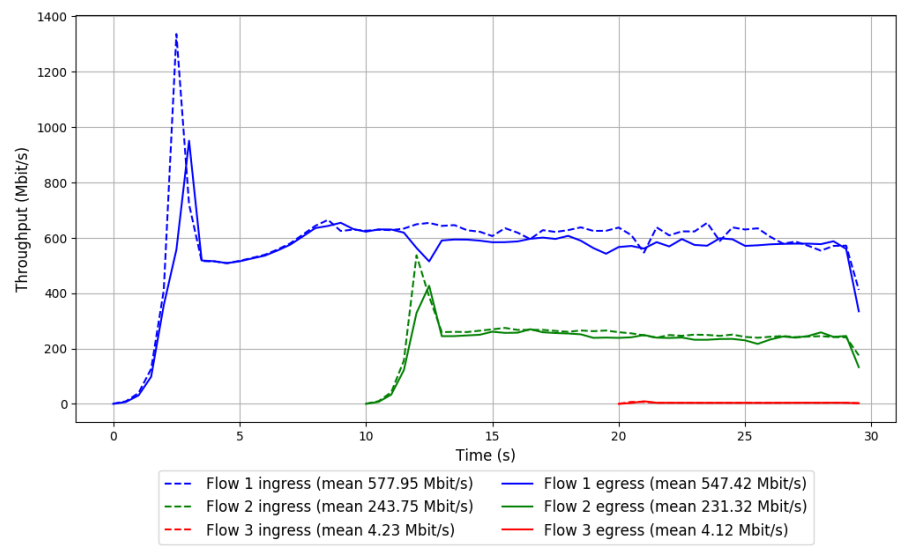
-- Flow 3:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 179.088 ms

Loss rate: 4.60%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-11-21 14:26:54

End at: 2017-11-21 14:27:24

Below is generated by plot.py at 2017-11-21 17:39:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 593.25 Mbit/s

95th percentile per-packet one-way delay: 180.718 ms

Loss rate: 3.13%

-- Flow 1:

Average throughput: 295.87 Mbit/s

95th percentile per-packet one-way delay: 179.373 ms

Loss rate: 2.73%

-- Flow 2:

Average throughput: 417.51 Mbit/s

95th percentile per-packet one-way delay: 193.778 ms

Loss rate: 3.53%

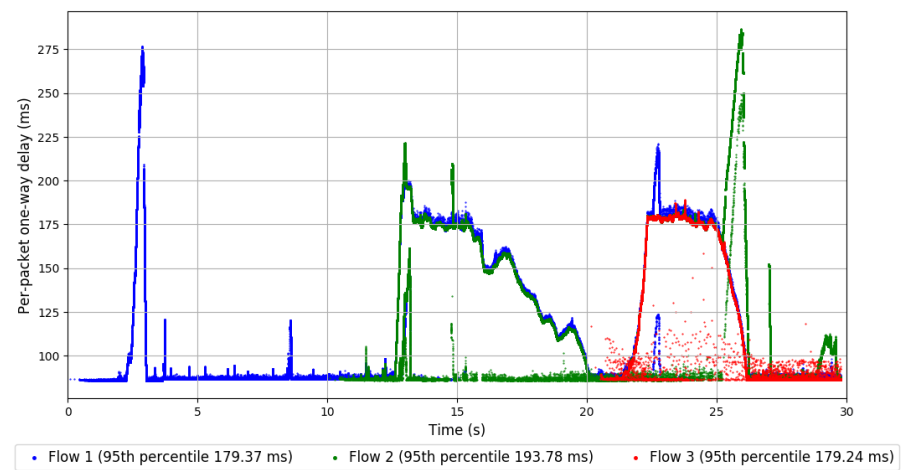
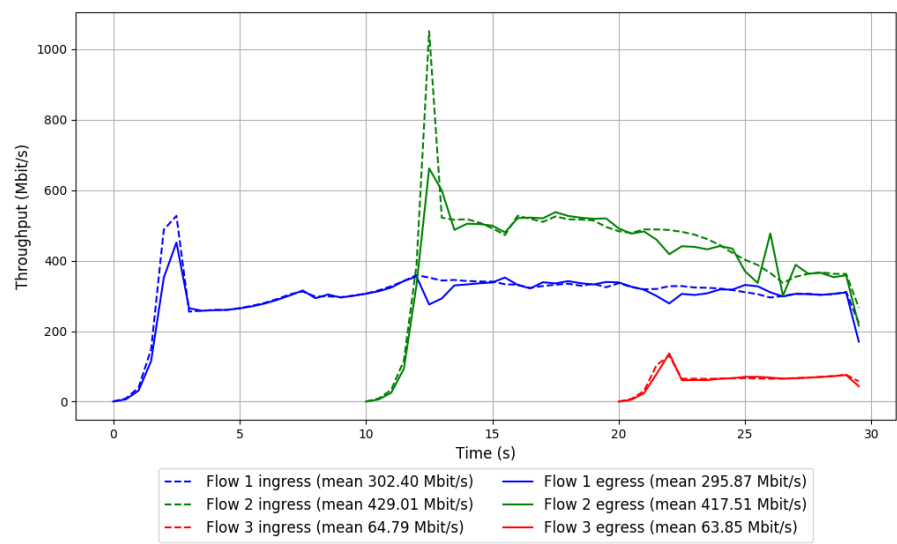
-- Flow 3:

Average throughput: 63.85 Mbit/s

95th percentile per-packet one-way delay: 179.239 ms

Loss rate: 3.50%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-11-21 14:40:24

End at: 2017-11-21 14:40:54

Below is generated by plot.py at 2017-11-21 17:44:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 617.72 Mbit/s

95th percentile per-packet one-way delay: 249.751 ms

Loss rate: 7.35%

-- Flow 1:

Average throughput: 506.18 Mbit/s

95th percentile per-packet one-way delay: 255.262 ms

Loss rate: 8.46%

-- Flow 2:

Average throughput: 142.28 Mbit/s

95th percentile per-packet one-way delay: 179.519 ms

Loss rate: 1.84%

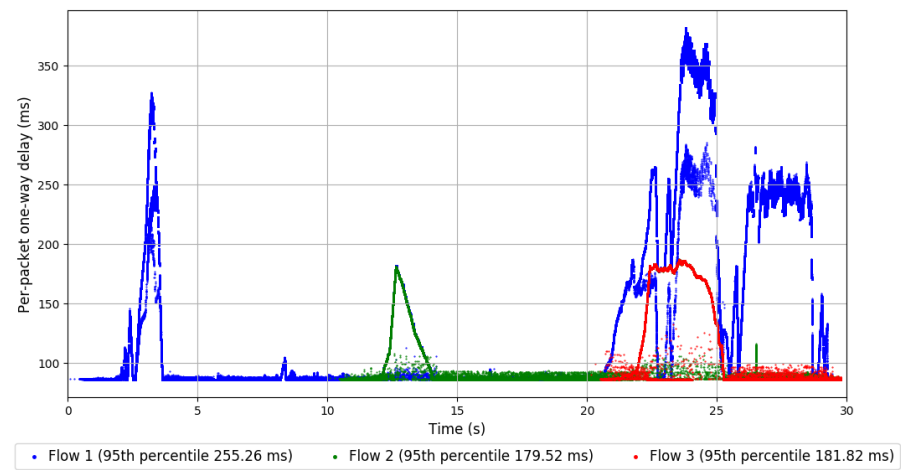
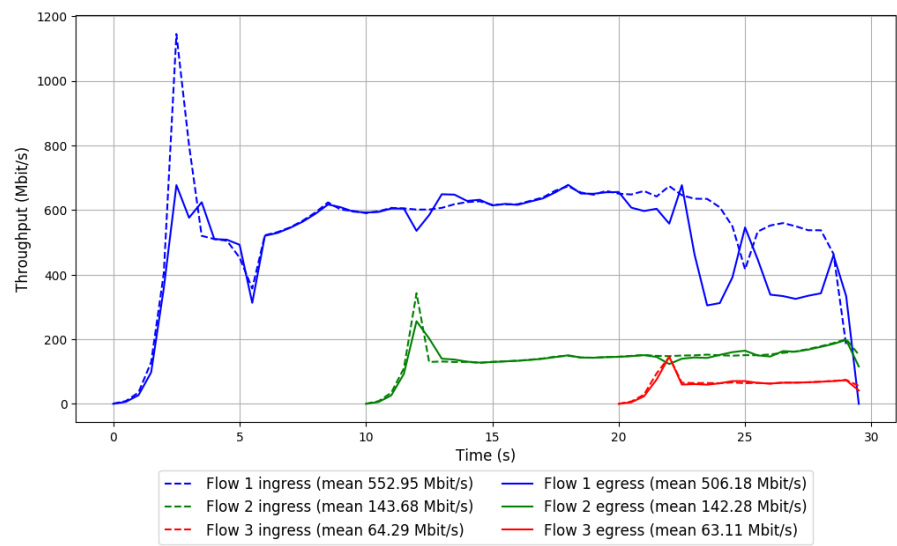
-- Flow 3:

Average throughput: 63.11 Mbit/s

95th percentile per-packet one-way delay: 181.820 ms

Loss rate: 3.61%

Run 9: Report of PCC — Data Link

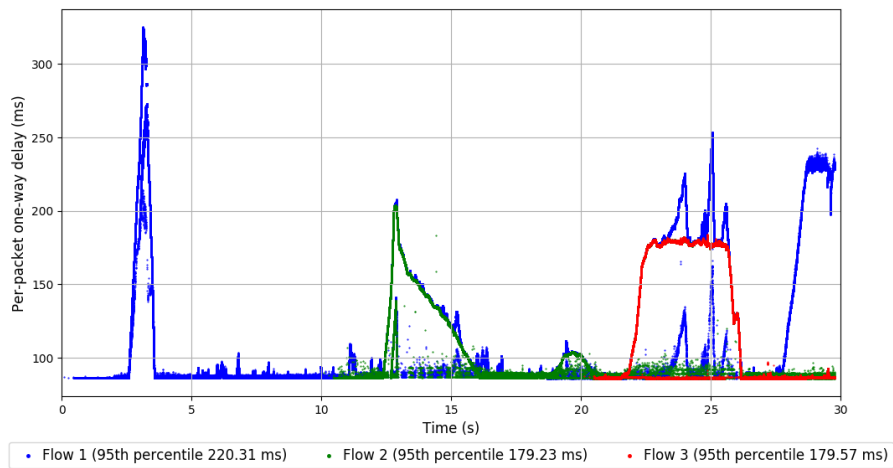
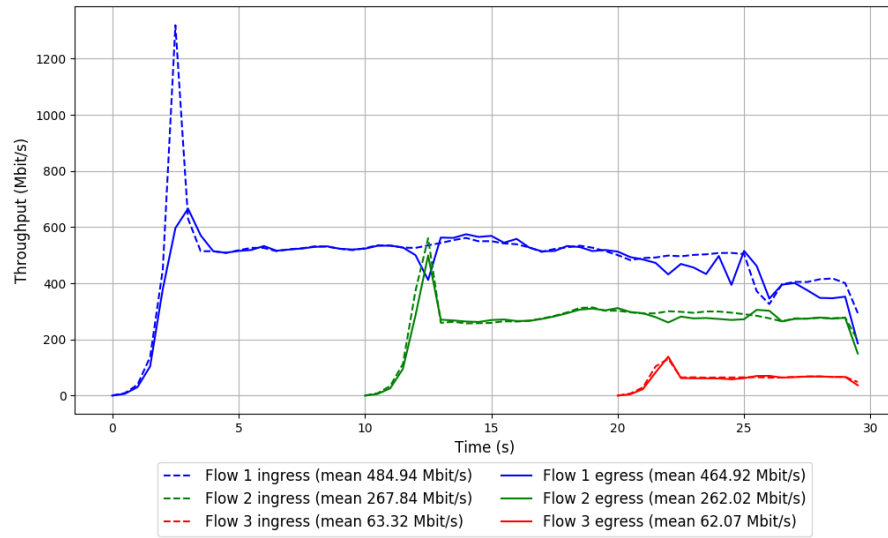


```
Run 10: Statistics of PCC

Start at: 2017-11-21 14:53:49
End at: 2017-11-21 14:54:19

# Below is generated by plot.py at 2017-11-21 17:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 658.76 Mbit/s
95th percentile per-packet one-way delay: 203.088 ms
Loss rate: 4.23%
-- Flow 1:
Average throughput: 464.92 Mbit/s
95th percentile per-packet one-way delay: 220.311 ms
Loss rate: 4.69%
-- Flow 2:
Average throughput: 262.02 Mbit/s
95th percentile per-packet one-way delay: 179.234 ms
Loss rate: 3.05%
-- Flow 3:
Average throughput: 62.07 Mbit/s
95th percentile per-packet one-way delay: 179.568 ms
Loss rate: 3.71%
```

Run 10: Report of PCC — Data Link

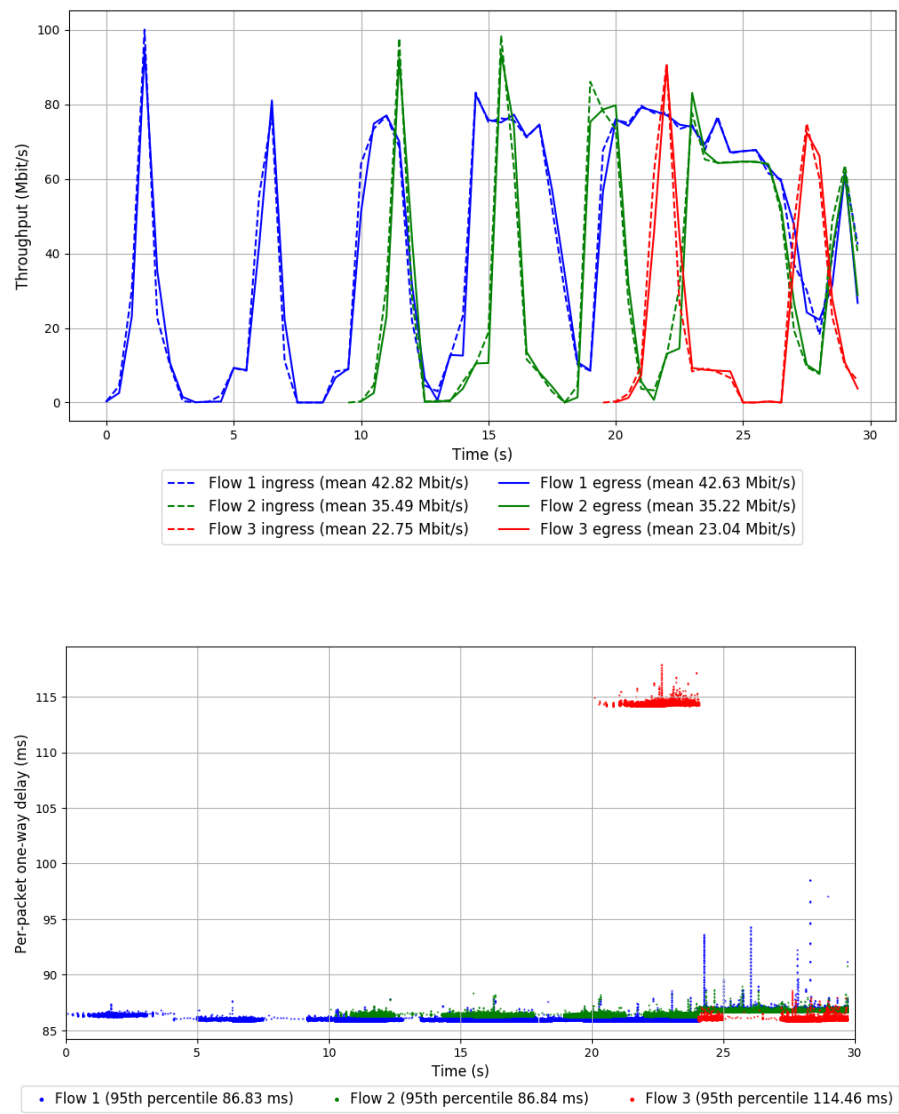


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-11-21 12:50:24
End at: 2017-11-21 12:50:54

# Below is generated by plot.py at 2017-11-21 17:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.46 Mbit/s
95th percentile per-packet one-way delay: 87.401 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 42.63 Mbit/s
95th percentile per-packet one-way delay: 86.827 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 35.22 Mbit/s
95th percentile per-packet one-way delay: 86.836 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 23.04 Mbit/s
95th percentile per-packet one-way delay: 114.461 ms
Loss rate: 0.80%
```


Run 1: Report of QUIC Cubic — Data Link

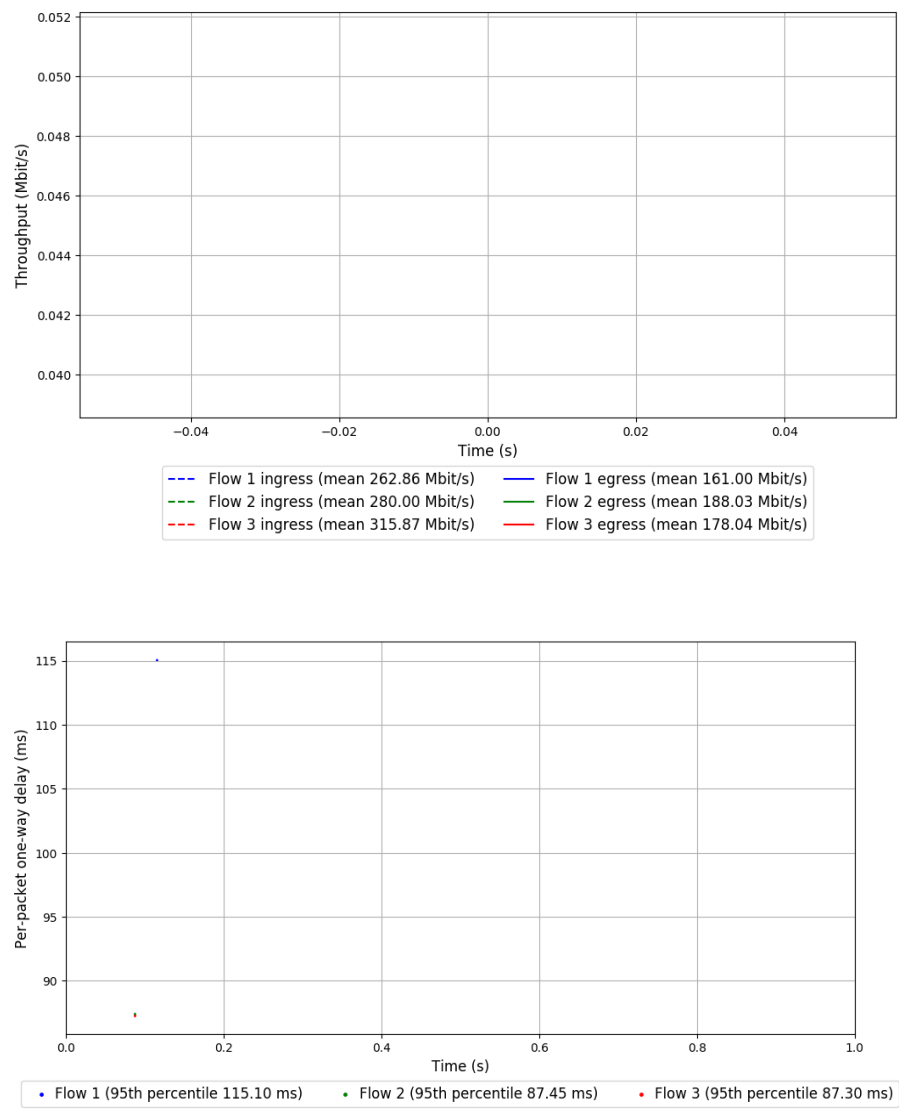


Run 2: Statistics of QUIC Cubic

Start at: 2017-11-21 13:03:40

End at: 2017-11-21 13:04:10

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-11-21 13:17:06

End at: 2017-11-21 13:17:36

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.13 Mbit/s

95th percentile per-packet one-way delay: 86.730 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 40.72 Mbit/s

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

Loss rate: 0.09%

-- Flow 2:

Average throughput: 48.61 Mbit/s

95th percentile per-packet one-way delay: 86.638 ms

Loss rate: 1.13%

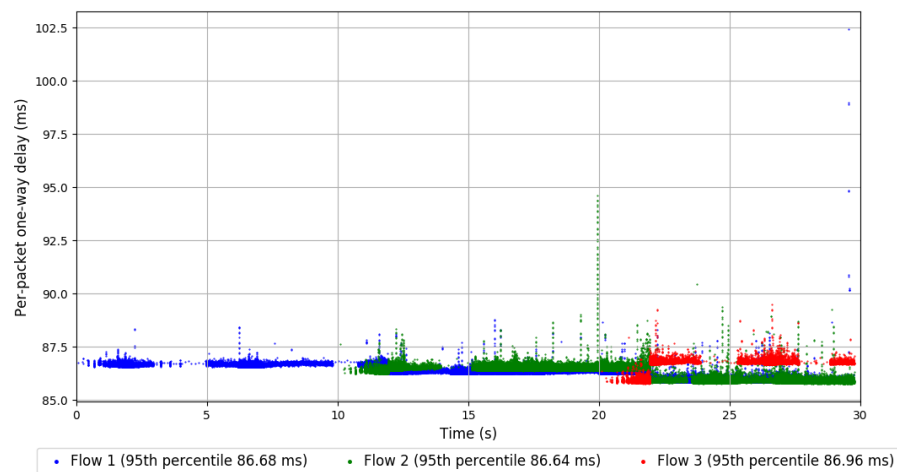
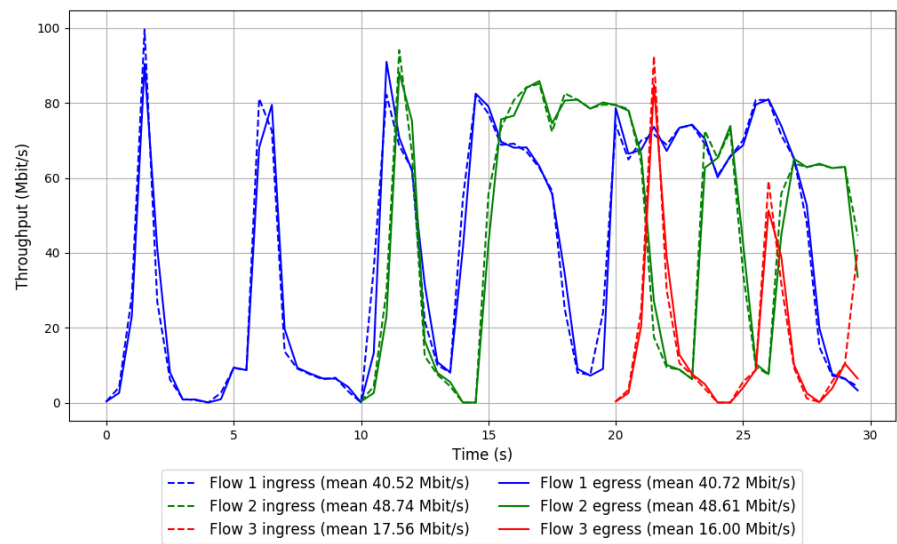
-- Flow 3:

Average throughput: 16.00 Mbit/s

95th percentile per-packet one-way delay: 86.961 ms

Loss rate: 10.50%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-11-21 13:30:16

End at: 2017-11-21 13:30:46

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.36 Mbit/s

95th percentile per-packet one-way delay: 114.097 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 49.57 Mbit/s

95th percentile per-packet one-way delay: 114.172 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 58.22 Mbit/s

95th percentile per-packet one-way delay: 113.841 ms

Loss rate: 1.05%

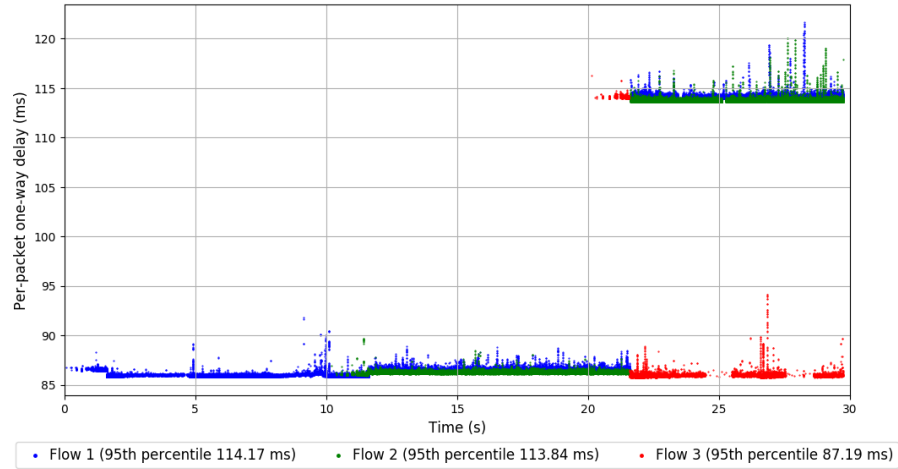
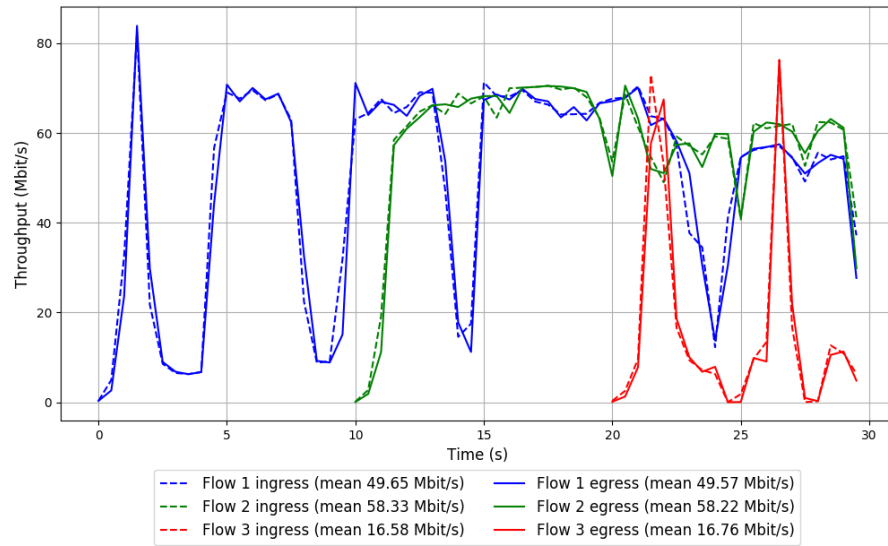
-- Flow 3:

Average throughput: 16.76 Mbit/s

95th percentile per-packet one-way delay: 87.186 ms

Loss rate: 0.99%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-11-21 13:43:49

End at: 2017-11-21 13:44:19

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.35 Mbit/s

95th percentile per-packet one-way delay: 86.624 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 48.16 Mbit/s

95th percentile per-packet one-way delay: 86.644 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 30.89 Mbit/s

95th percentile per-packet one-way delay: 86.551 ms

Loss rate: 0.95%

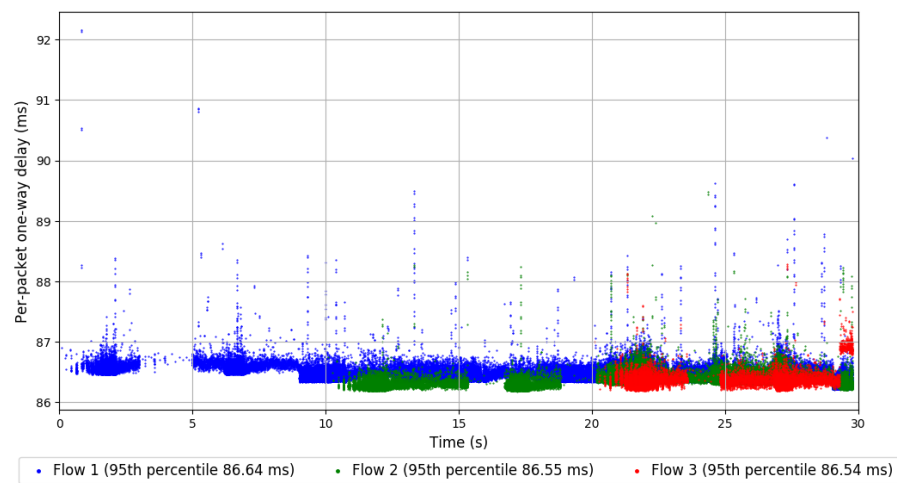
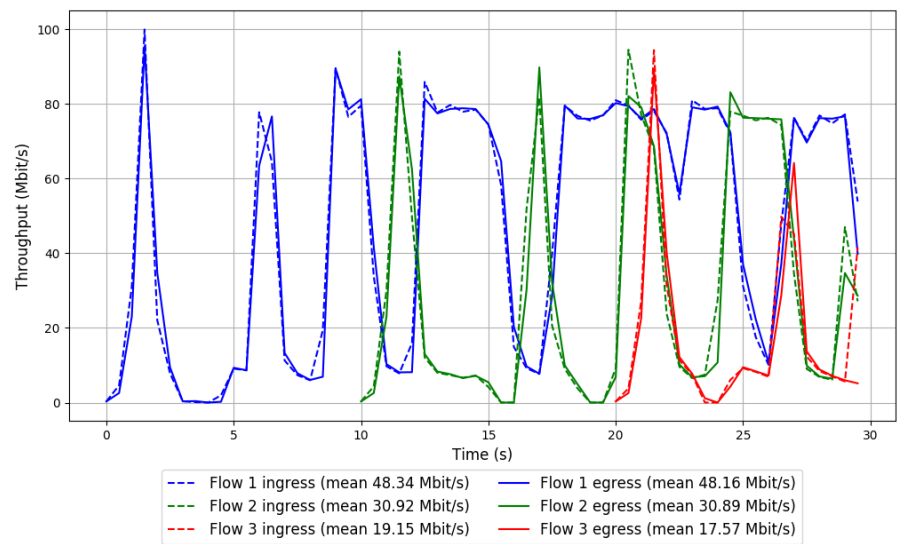
-- Flow 3:

Average throughput: 17.57 Mbit/s

95th percentile per-packet one-way delay: 86.539 ms

Loss rate: 9.90%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-11-21 13:57:31

End at: 2017-11-21 13:58:01

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.63 Mbit/s

95th percentile per-packet one-way delay: 87.122 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 38.46 Mbit/s

95th percentile per-packet one-way delay: 86.802 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 11.80 Mbit/s

95th percentile per-packet one-way delay: 87.324 ms

Loss rate: 1.33%

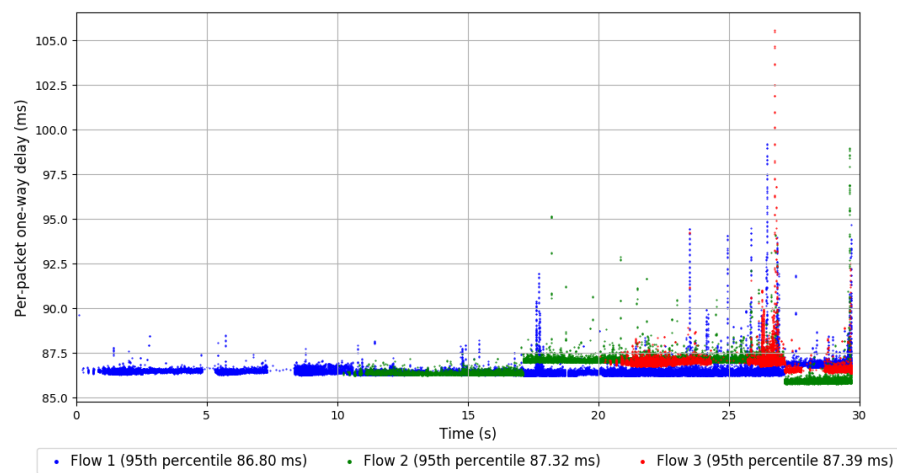
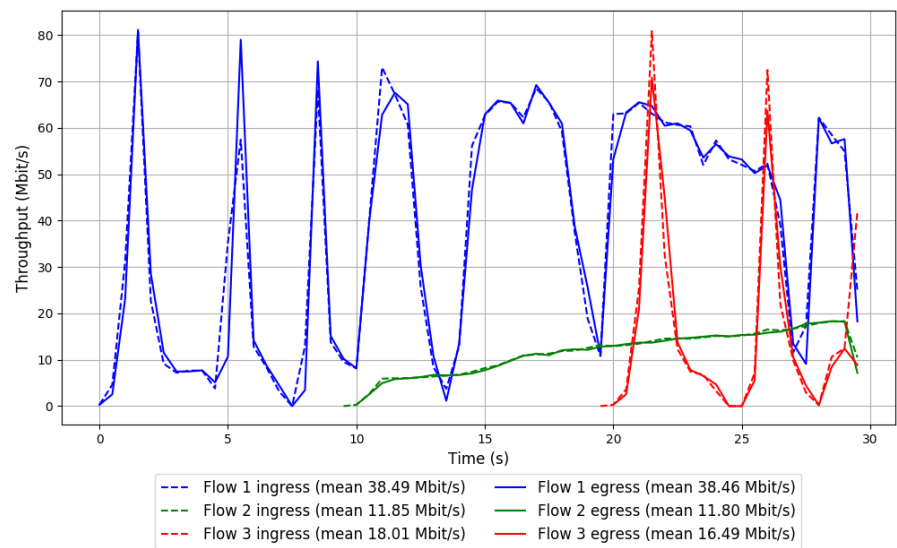
-- Flow 3:

Average throughput: 16.49 Mbit/s

95th percentile per-packet one-way delay: 87.389 ms

Loss rate: 10.04%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-11-21 14:10:53

End at: 2017-11-21 14:11:23

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.48 Mbit/s

95th percentile per-packet one-way delay: 86.488 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 51.57 Mbit/s

95th percentile per-packet one-way delay: 86.510 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 30.86 Mbit/s

95th percentile per-packet one-way delay: 86.444 ms

Loss rate: 0.47%

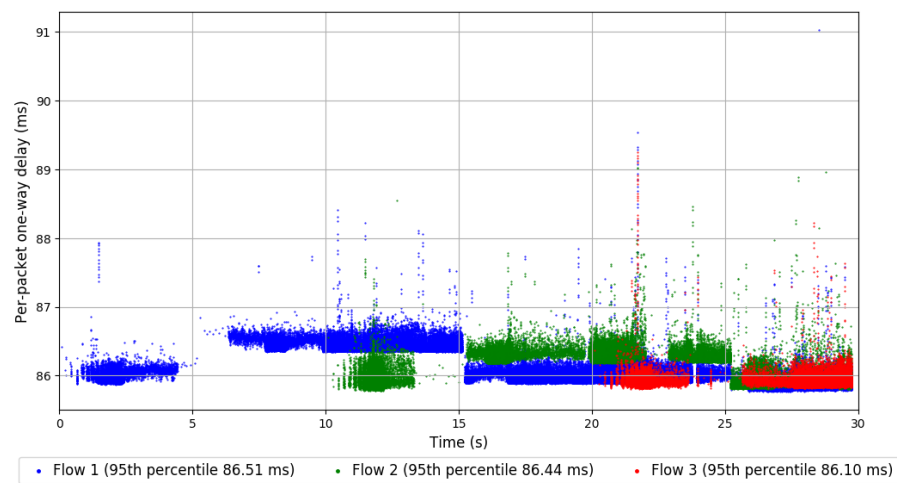
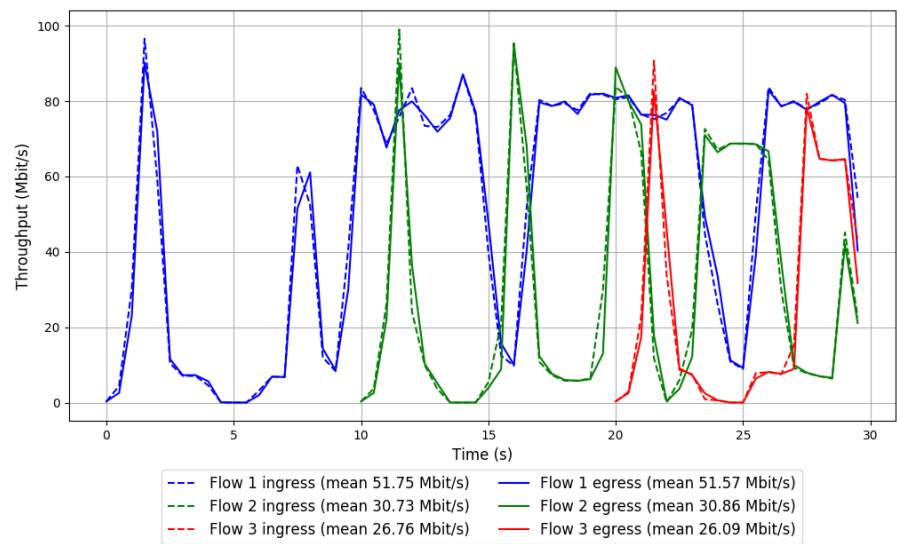
-- Flow 3:

Average throughput: 26.09 Mbit/s

95th percentile per-packet one-way delay: 86.101 ms

Loss rate: 4.25%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-11-21 14:24:17

End at: 2017-11-21 14:24:47

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.48 Mbit/s

95th percentile per-packet one-way delay: 115.015 ms

Loss rate: 1.33%

-- Flow 1:

Average throughput: 44.51 Mbit/s

95th percentile per-packet one-way delay: 86.565 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 24.45 Mbit/s

95th percentile per-packet one-way delay: 115.154 ms

Loss rate: 1.27%

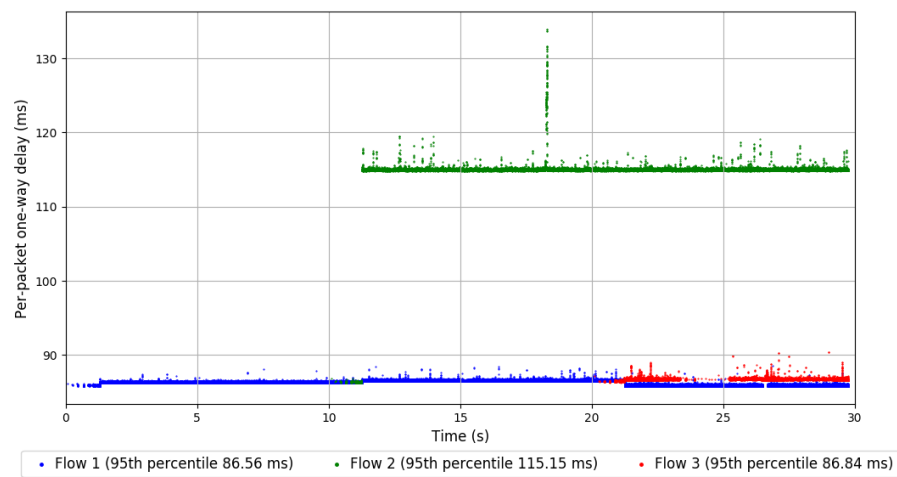
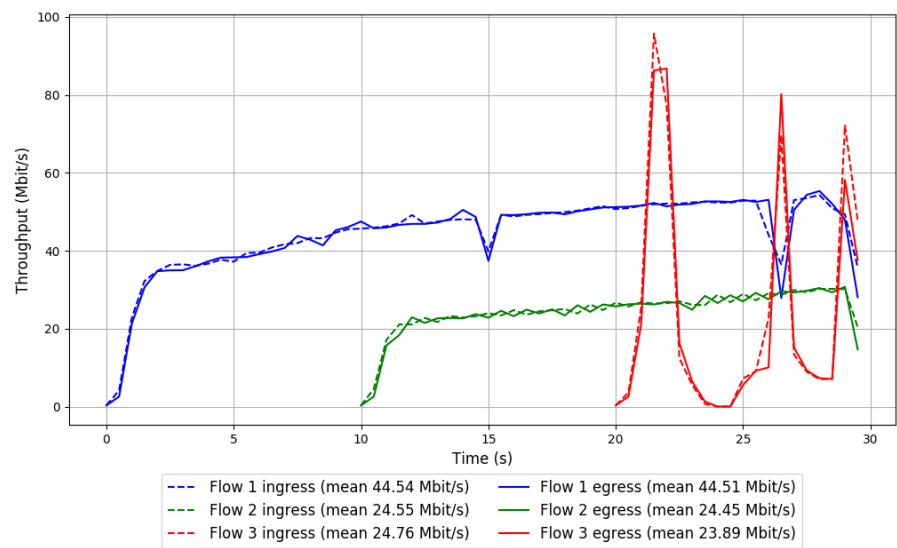
-- Flow 3:

Average throughput: 23.89 Mbit/s

95th percentile per-packet one-way delay: 86.841 ms

Loss rate: 5.21%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-11-21 14:37:47

End at: 2017-11-21 14:38:17

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 33.34 Mbit/s

95th percentile per-packet one-way delay: 86.714 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 10.81 Mbit/s

95th percentile per-packet one-way delay: 86.707 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 32.00 Mbit/s

95th percentile per-packet one-way delay: 86.418 ms

Loss rate: 0.23%

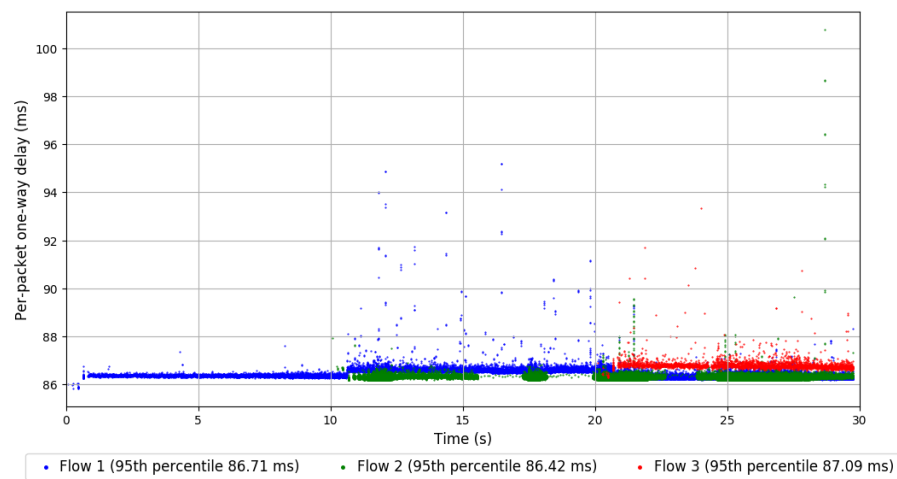
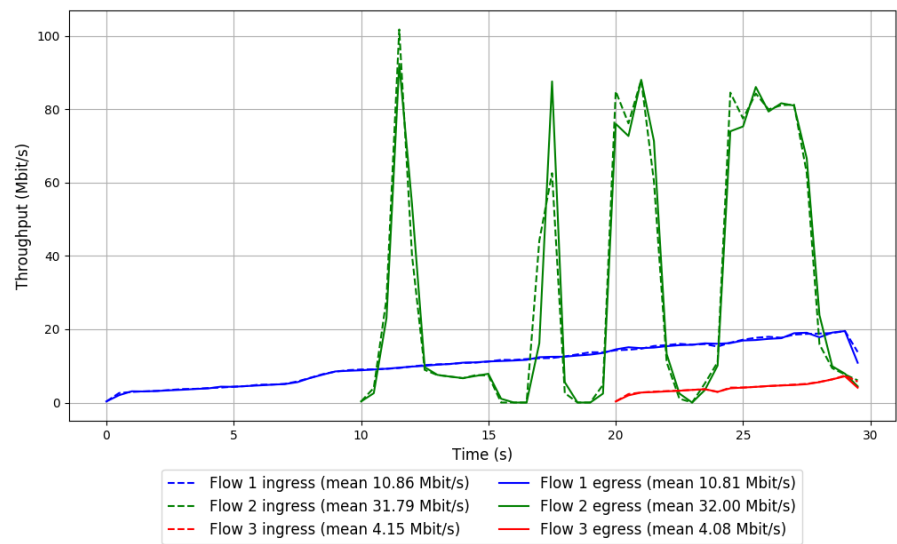
-- Flow 3:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 87.086 ms

Loss rate: 3.61%

Run 9: Report of QUIC Cubic — Data Link

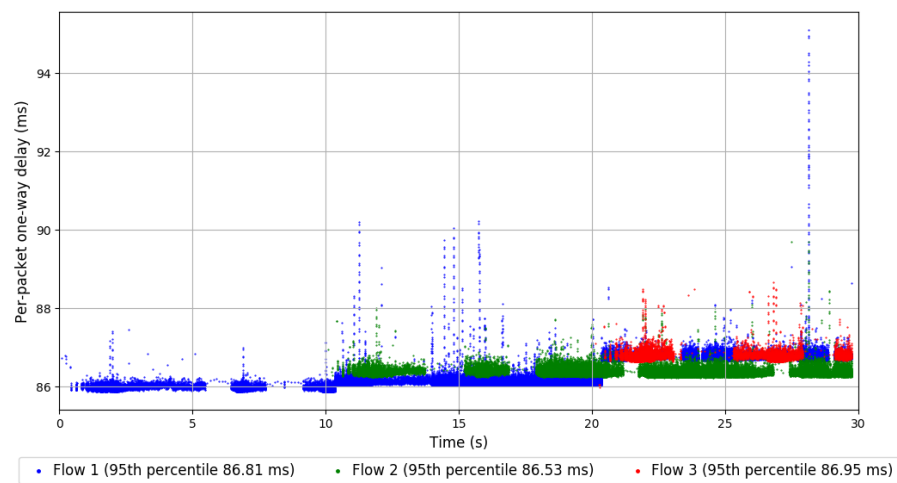
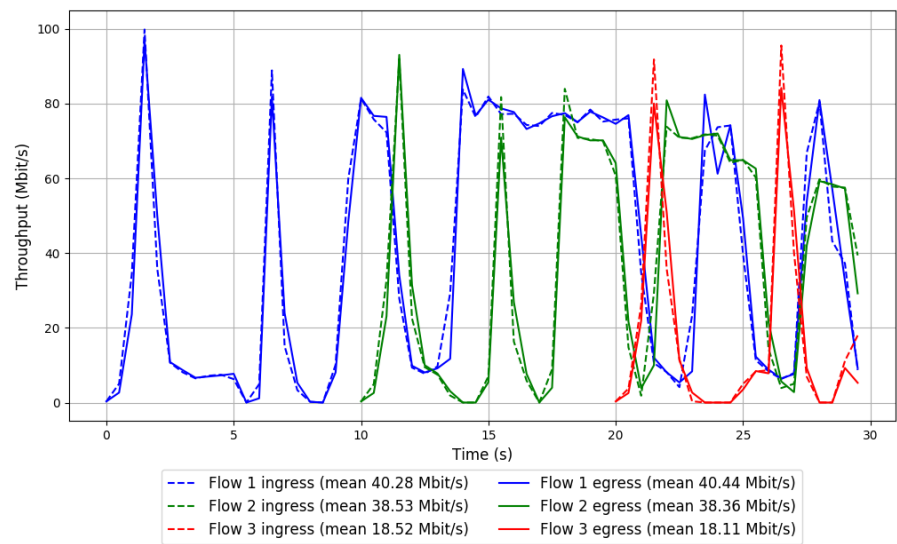


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-11-21 14:51:18
End at: 2017-11-21 14:51:48

# Below is generated by plot.py at 2017-11-21 17:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.74 Mbit/s
95th percentile per-packet one-way delay: 86.807 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 40.44 Mbit/s
95th percentile per-packet one-way delay: 86.812 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 38.36 Mbit/s
95th percentile per-packet one-way delay: 86.530 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 18.11 Mbit/s
95th percentile per-packet one-way delay: 86.951 ms
Loss rate: 4.01%
```

Run 10: Report of QUIC Cubic — Data Link

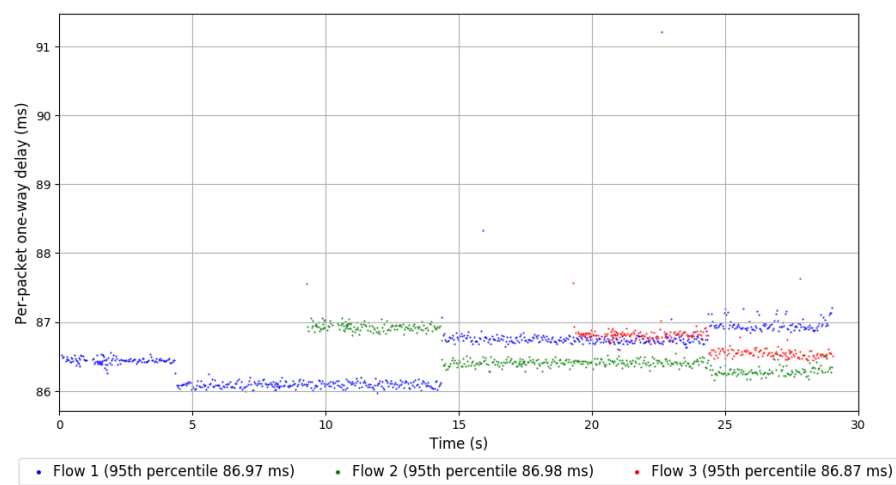
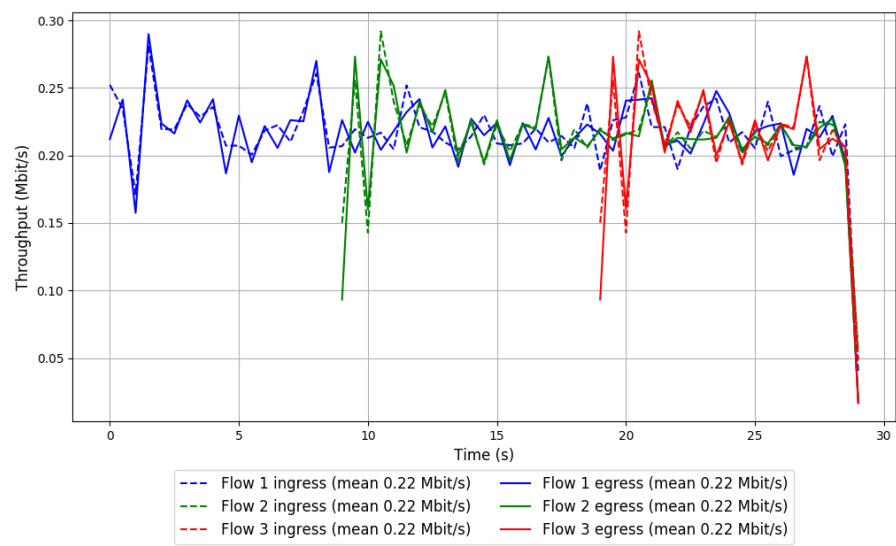


```
Run 1: Statistics of SCReAM

Start at: 2017-11-21 12:51:13
End at: 2017-11-21 12:51:43

# Below is generated by plot.py at 2017-11-21 17:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.966 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.970 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.980 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.872 ms
Loss rate: 1.50%
```

Run 1: Report of SReAM — Data Link

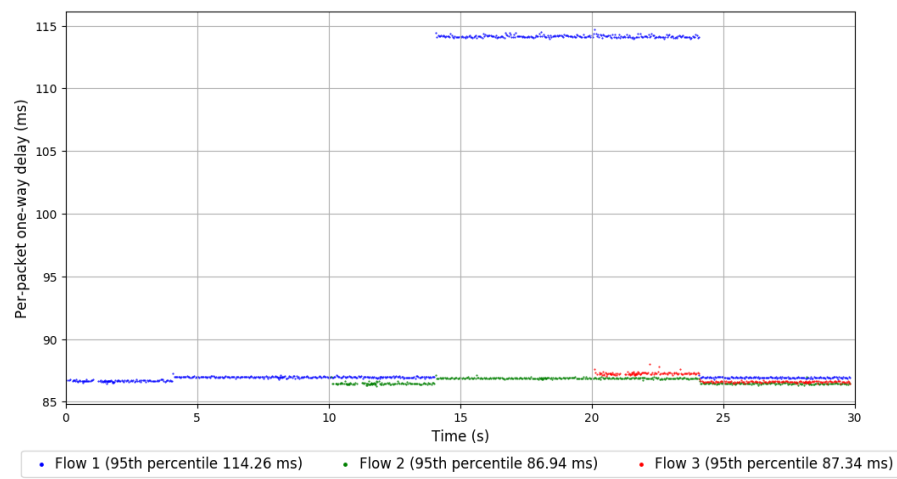
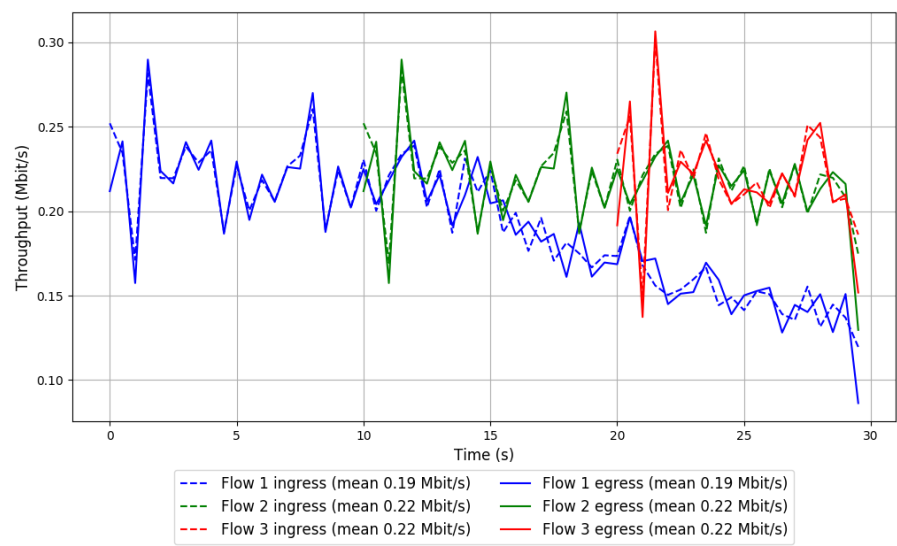


```
Run 2: Statistics of SReAM

Start at: 2017-11-21 13:04:24
End at: 2017-11-21 13:04:54

# Below is generated by plot.py at 2017-11-21 17:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 114.195 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 114.261 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.936 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.337 ms
Loss rate: 1.50%
```

Run 2: Report of SReAM — Data Link

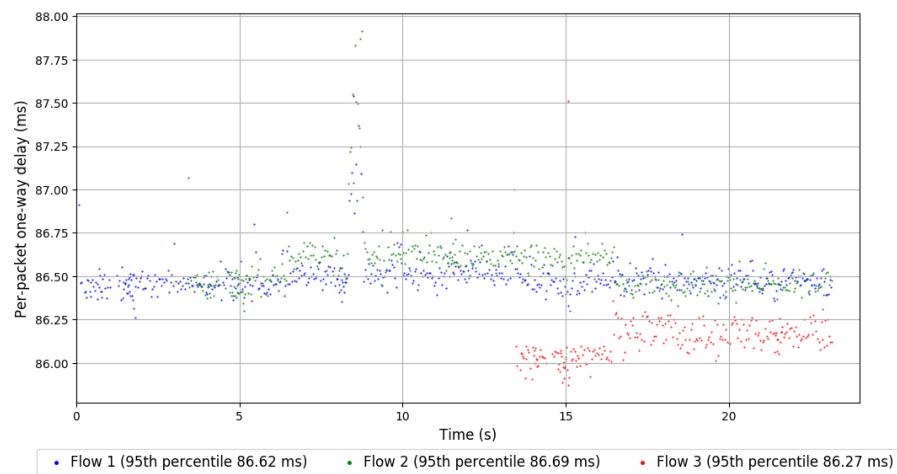
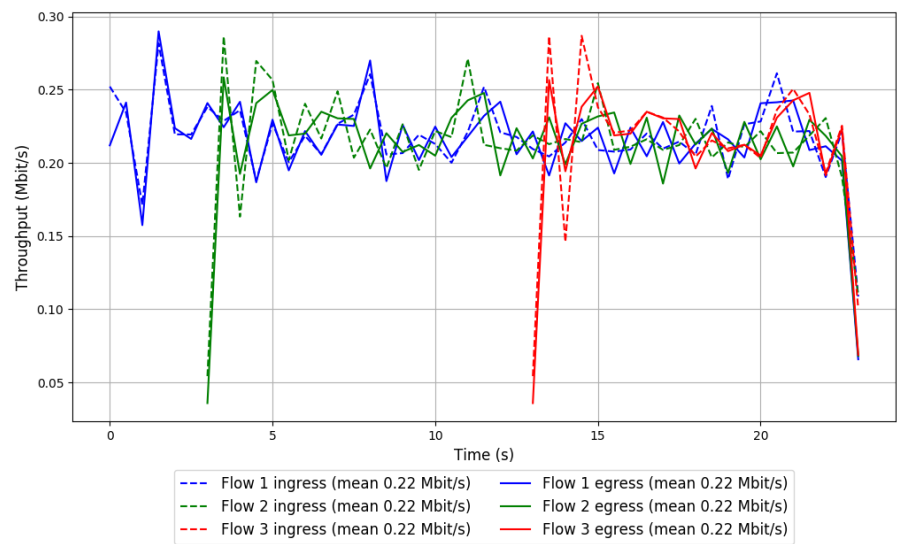


Run 3: Statistics of SReAM

Start at: 2017-11-21 13:17:55

End at: 2017-11-21 13:18:25

Run 3: Report of SReAM — Data Link

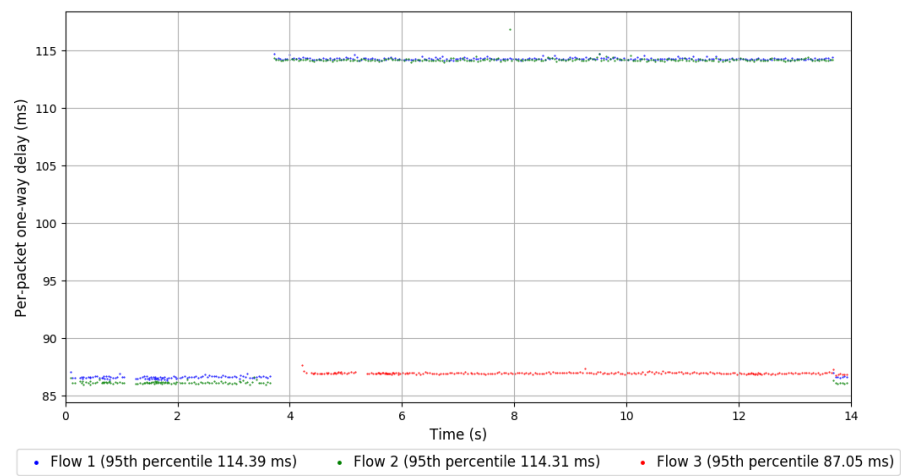
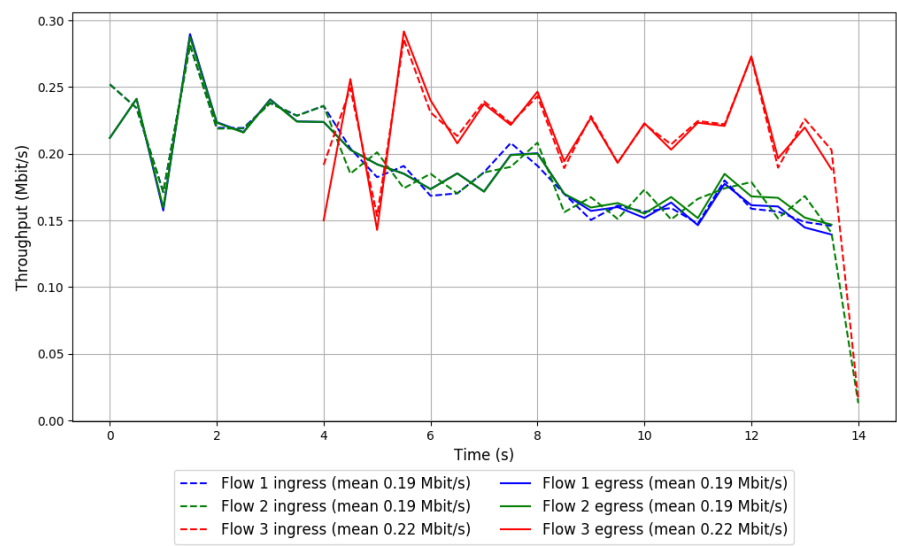


Run 4: Statistics of SReAM

Start at: 2017-11-21 13:31:08

End at: 2017-11-21 13:31:39

Run 4: Report of SReAM — Data Link

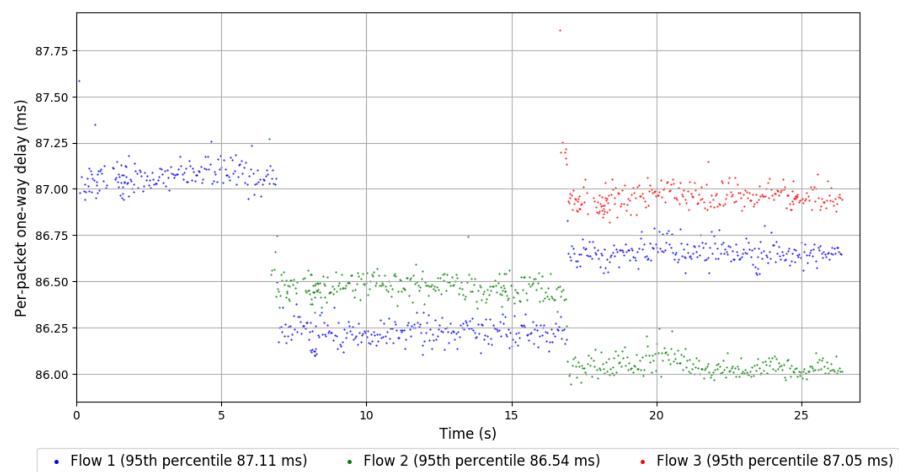
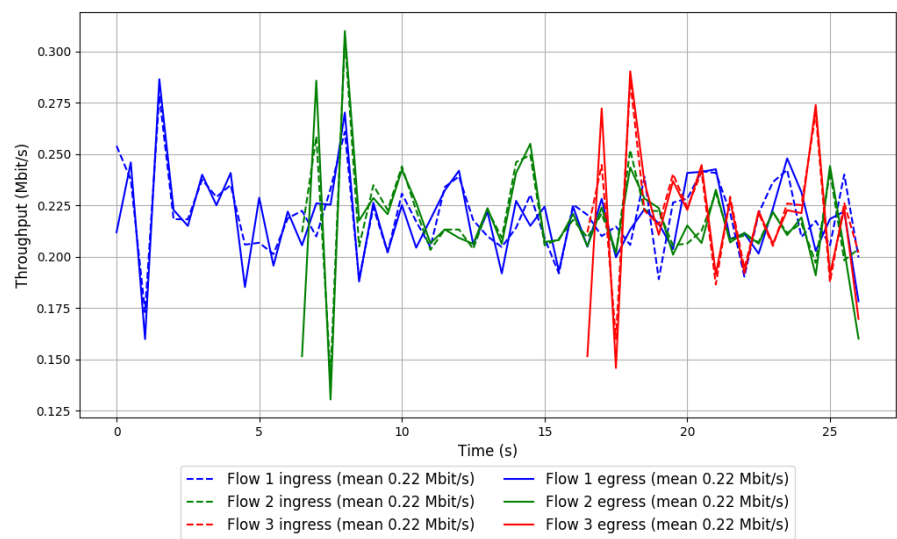


```
Run 5: Statistics of SCReAM

Start at: 2017-11-21 13:44:38
End at: 2017-11-21 13:45:08

# Below is generated by plot.py at 2017-11-21 17:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 87.089 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.113 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.539 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.052 ms
Loss rate: 1.50%
```

Run 5: Report of SCRaM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-11-21 13:58:19

End at: 2017-11-21 13:58:49

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 87.004 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.876 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.034 ms

Loss rate: 0.85%

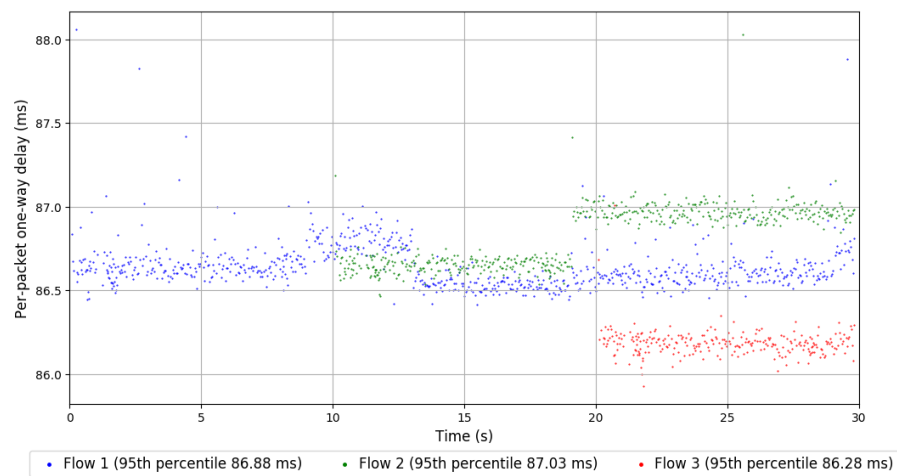
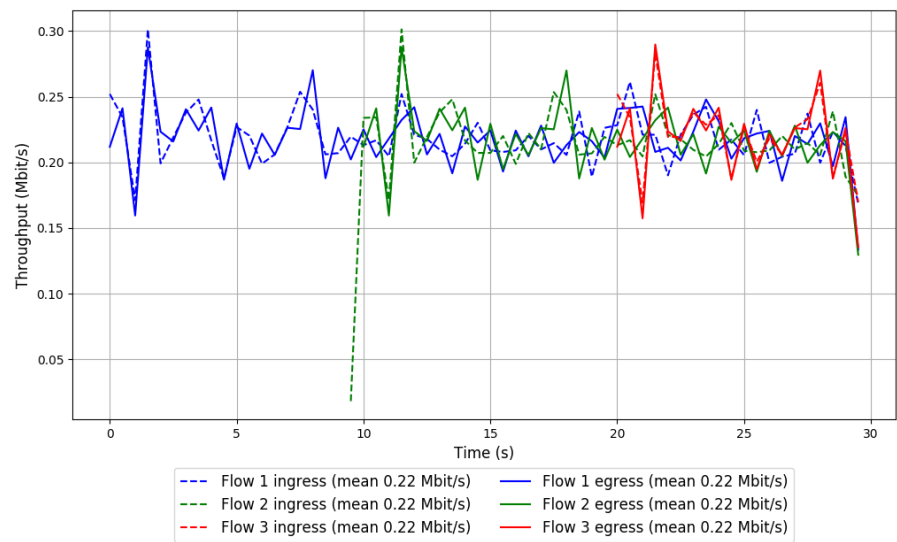
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.283 ms

Loss rate: 1.50%

Run 6: Report of SReAM — Data Link

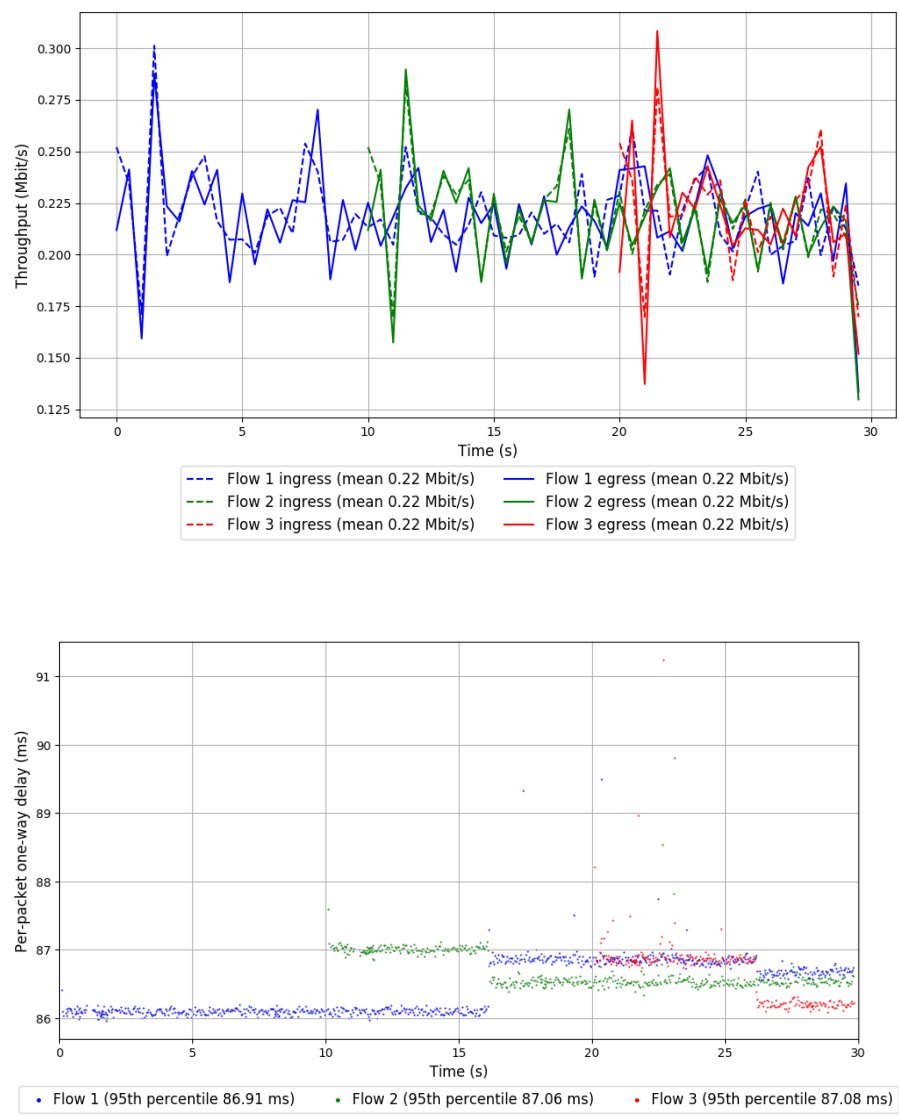


```
Run 7: Statistics of SReAM

Start at: 2017-11-21 14:11:42
End at: 2017-11-21 14:12:12

# Below is generated by plot.py at 2017-11-21 17:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.027 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.910 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.055 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.085 ms
Loss rate: 1.50%
```


Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-11-21 14:25:05

End at: 2017-11-21 14:25:35

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 87.012 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.590 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.137 ms

Loss rate: 0.85%

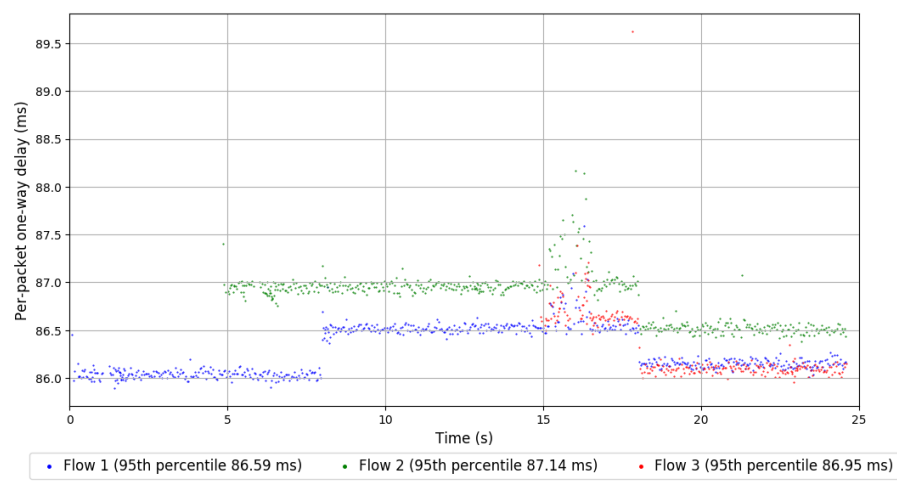
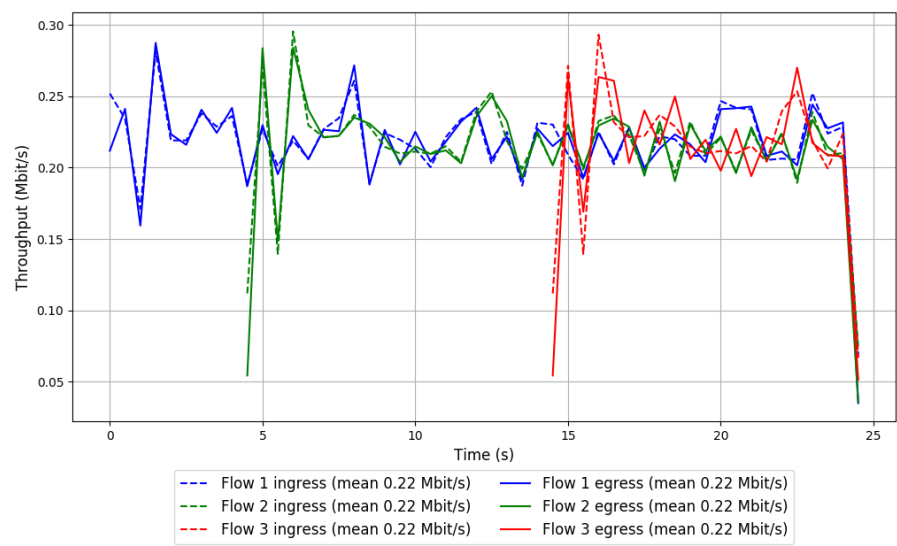
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.948 ms

Loss rate: 1.50%

Run 8: Report of SReAM — Data Link

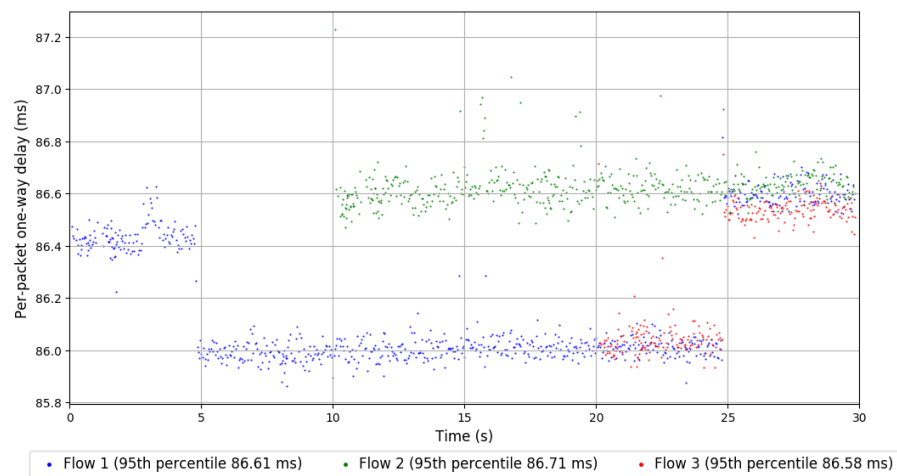
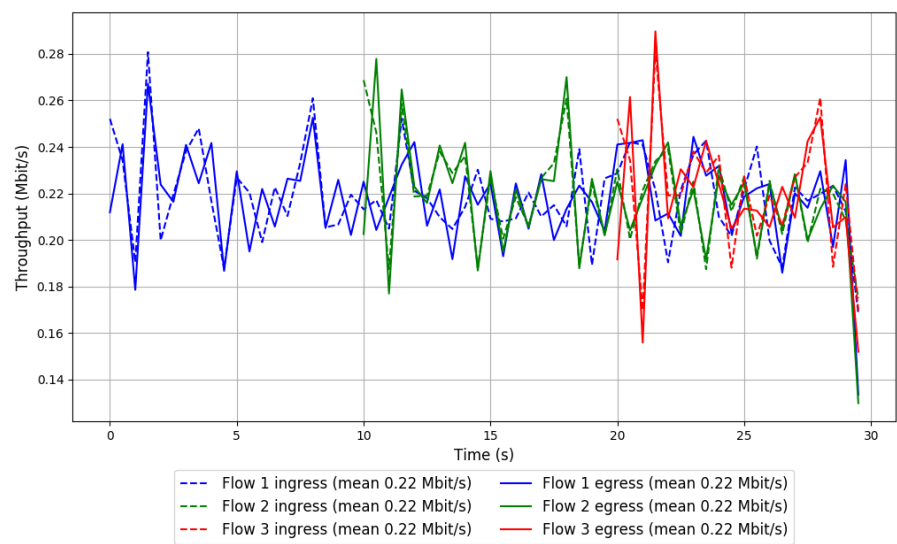


```
Run 9: Statistics of SCReAM

Start at: 2017-11-21 14:38:33
End at: 2017-11-21 14:39:03

# Below is generated by plot.py at 2017-11-21 17:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.670 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.614 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.706 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.583 ms
Loss rate: 1.50%
```

Run 9: Report of SReAM — Data Link

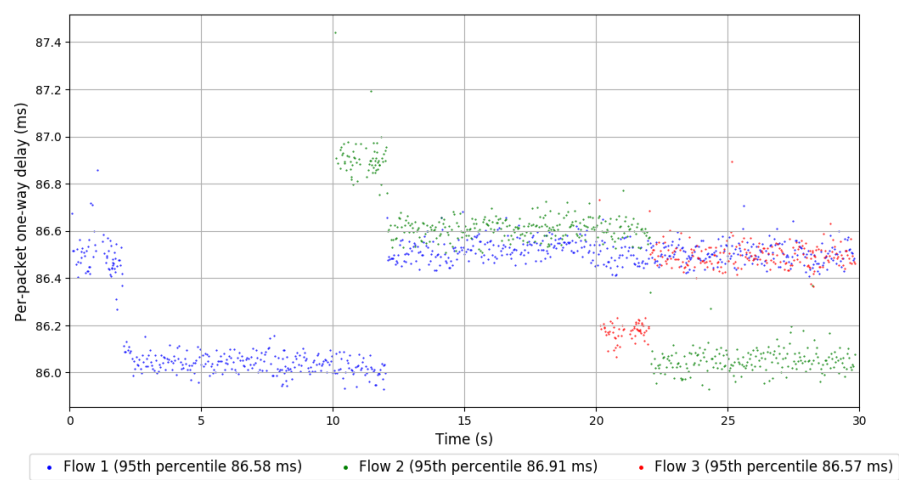
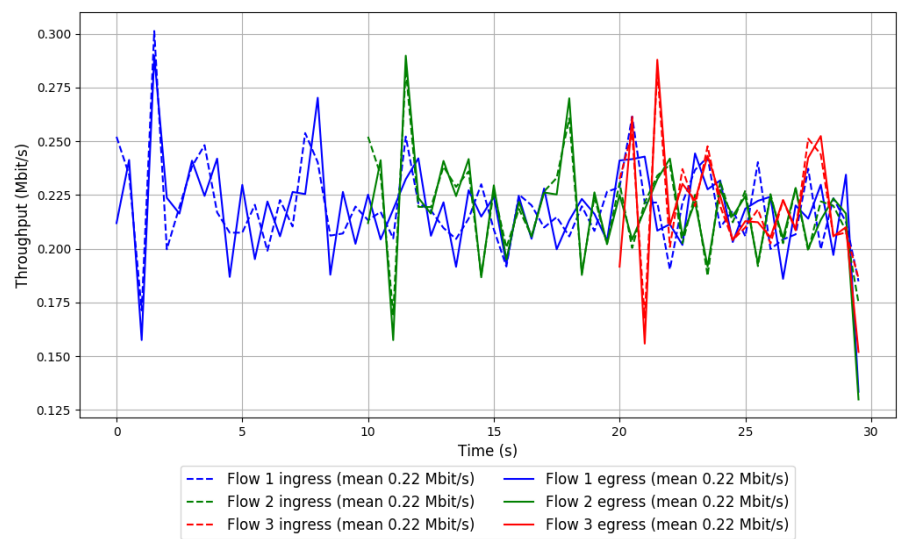


```
Run 10: Statistics of SReAM

Start at: 2017-11-21 14:52:06
End at: 2017-11-21 14:52:36

# Below is generated by plot.py at 2017-11-21 17:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 86.694 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.579 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.909 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.567 ms
Loss rate: 1.50%
```

Run 10: Report of SCReAM — Data Link

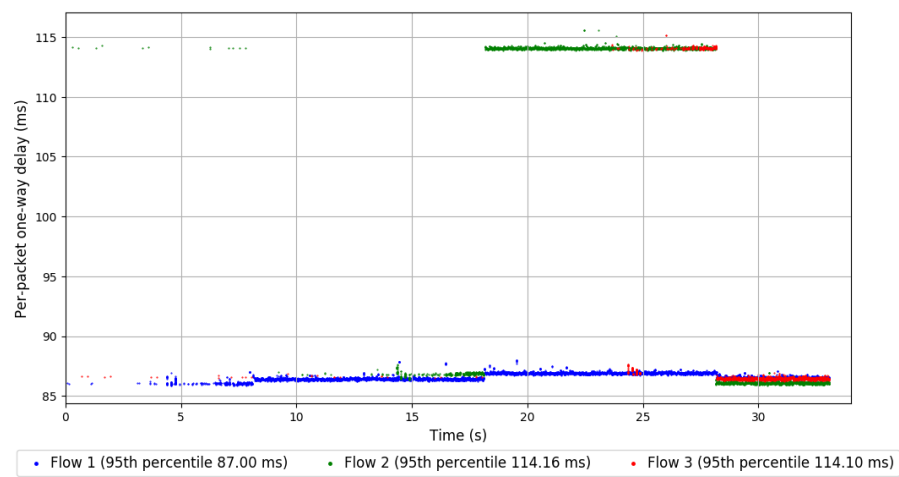
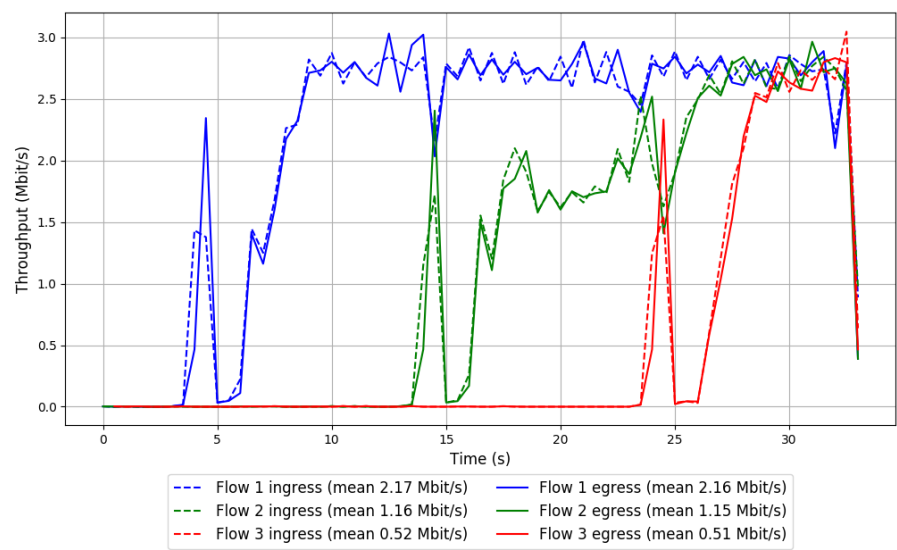


```
Run 1: Statistics of WebRTC media

Start at: 2017-11-21 12:44:33
End at: 2017-11-21 12:45:03

# Below is generated by plot.py at 2017-11-21 17:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 114.103 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 87.000 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 114.155 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 114.104 ms
Loss rate: 2.58%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-11-21 12:57:26

End at: 2017-11-21 12:57:56

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.80 Mbit/s

95th percentile per-packet one-way delay: 87.177 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 87.211 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 1.27 Mbit/s

95th percentile per-packet one-way delay: 87.143 ms

Loss rate: 1.31%

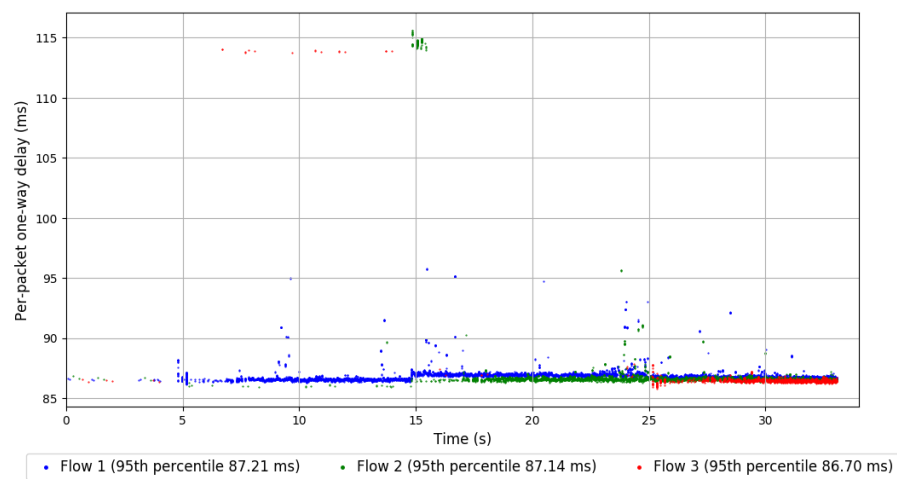
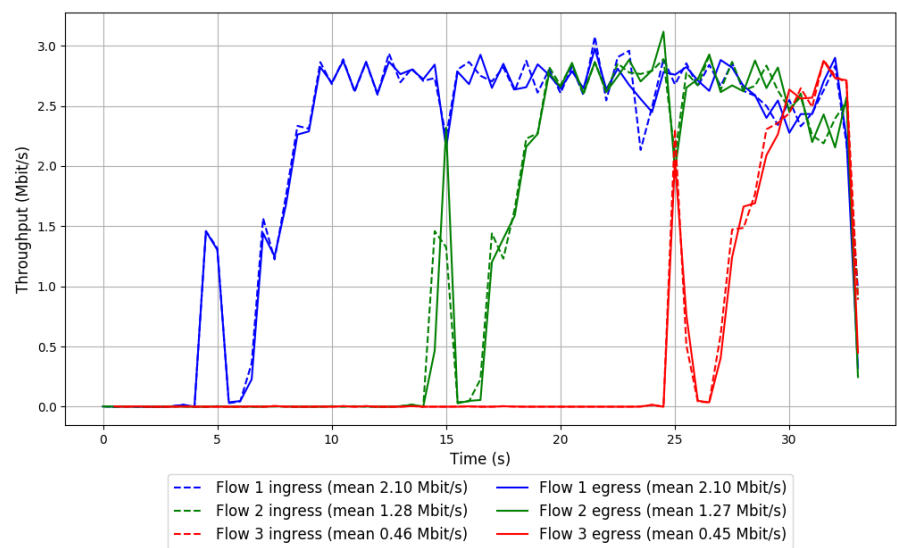
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 86.704 ms

Loss rate: 2.99%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-11-21 13:10:54

End at: 2017-11-21 13:11:24

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 86.803 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 86.688 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 86.860 ms

Loss rate: 1.39%

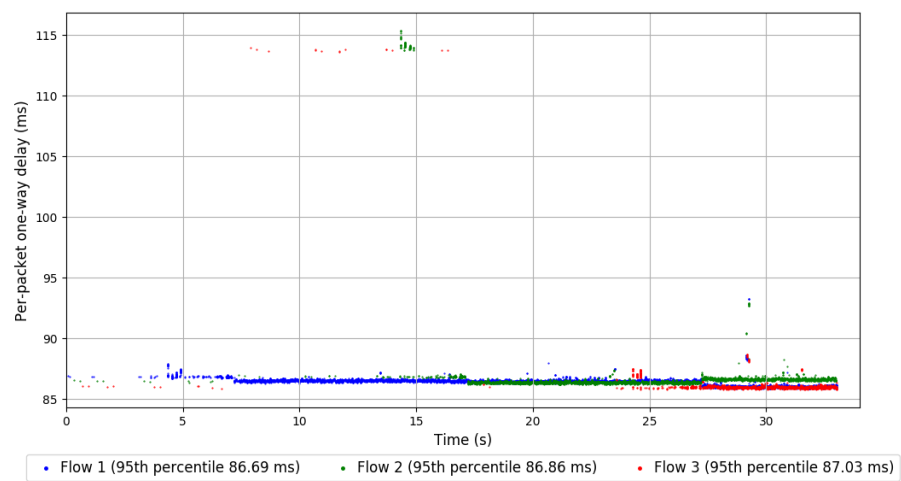
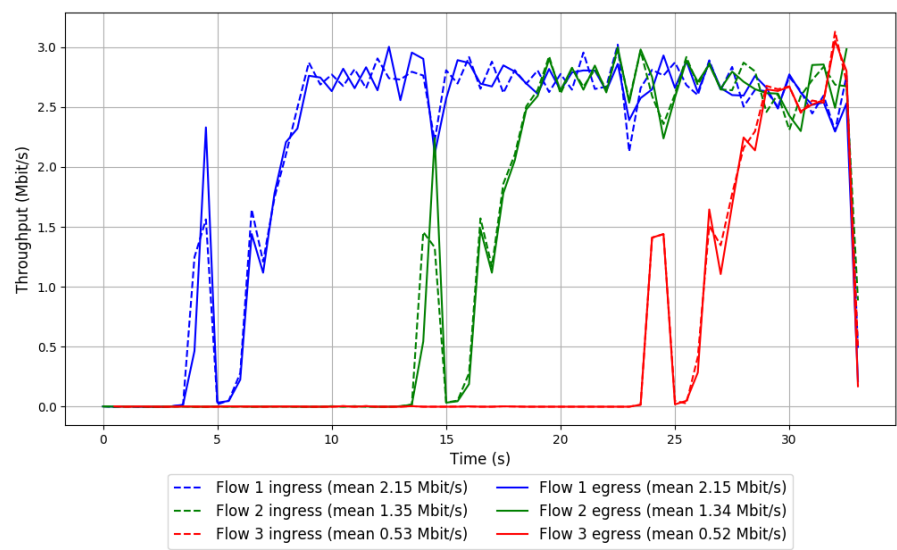
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 87.027 ms

Loss rate: 2.21%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-11-21 13:24:29

End at: 2017-11-21 13:24:59

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 114.205 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 2.06 Mbit/s

95th percentile per-packet one-way delay: 114.246 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 86.861 ms

Loss rate: 1.45%

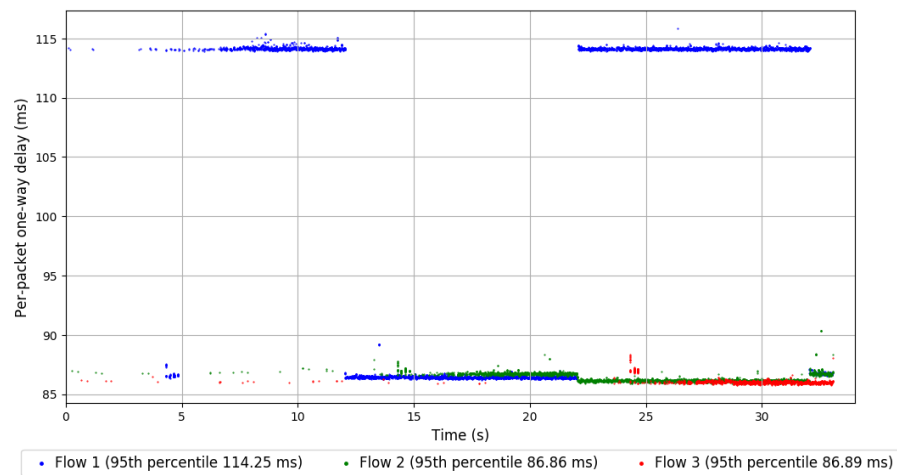
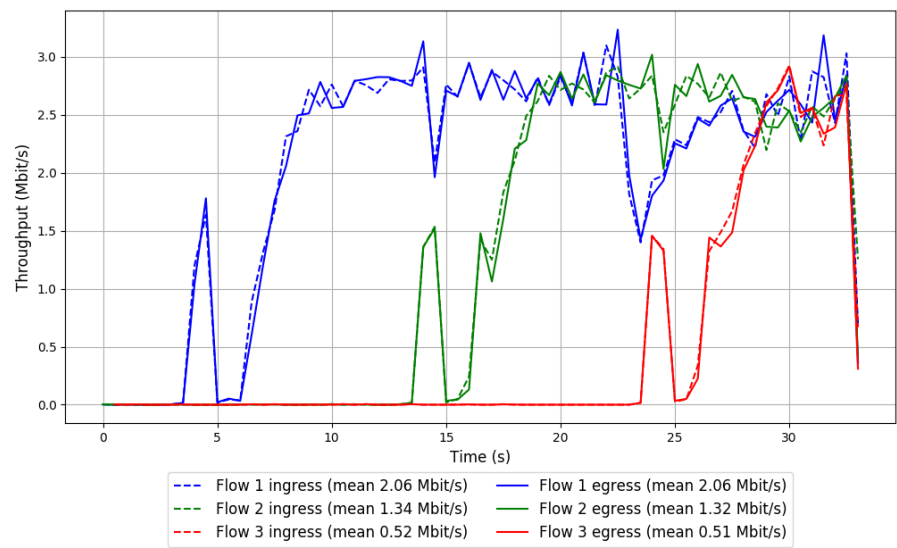
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 86.894 ms

Loss rate: 2.53%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-11-21 13:37:41

End at: 2017-11-21 13:38:11

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 87.128 ms

Loss rate: 0.94%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 86.921 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 87.041 ms

Loss rate: 0.64%

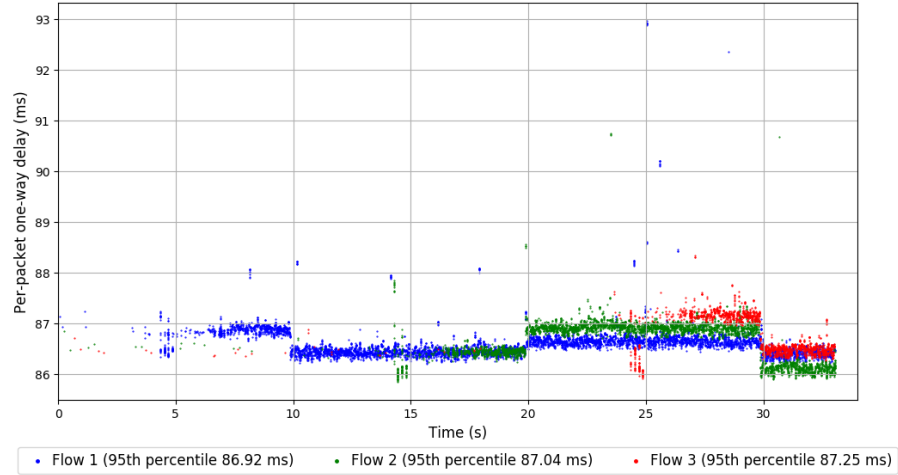
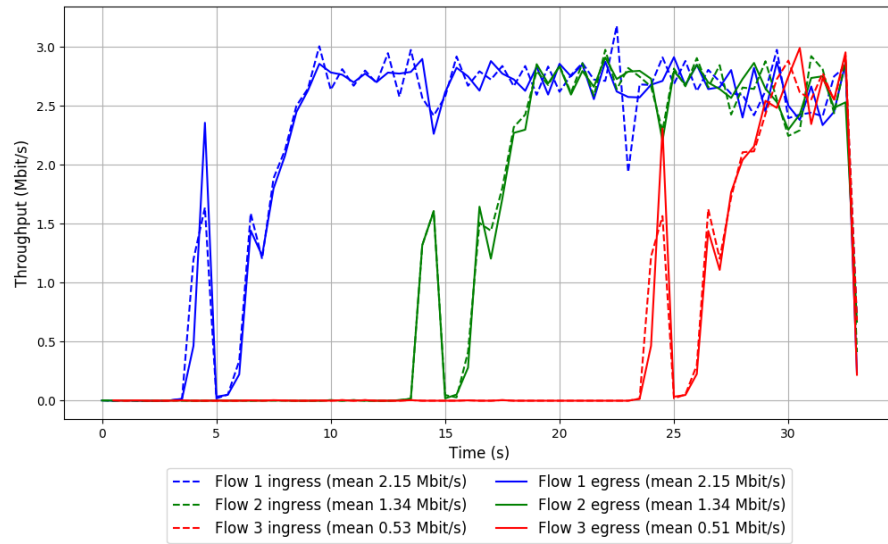
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 87.254 ms

Loss rate: 2.66%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-11-21 13:51:18

End at: 2017-11-21 13:51:48

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 87.252 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 86.511 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 87.323 ms

Loss rate: 1.41%

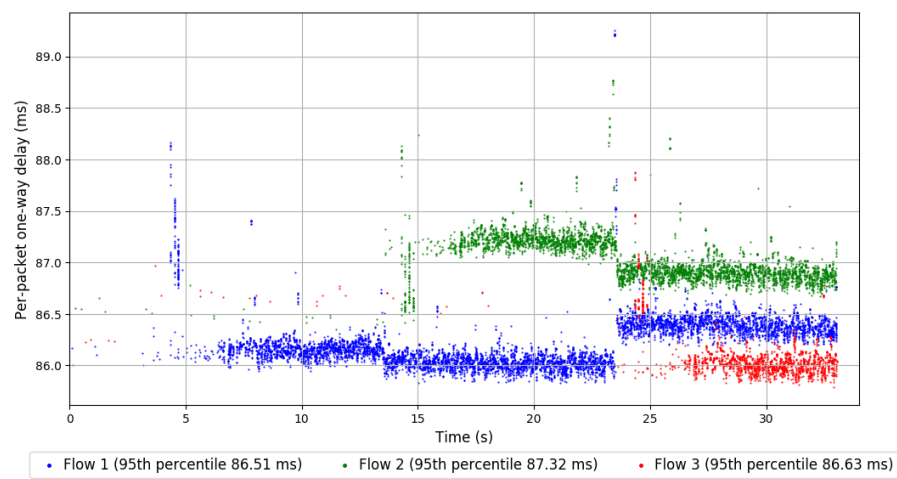
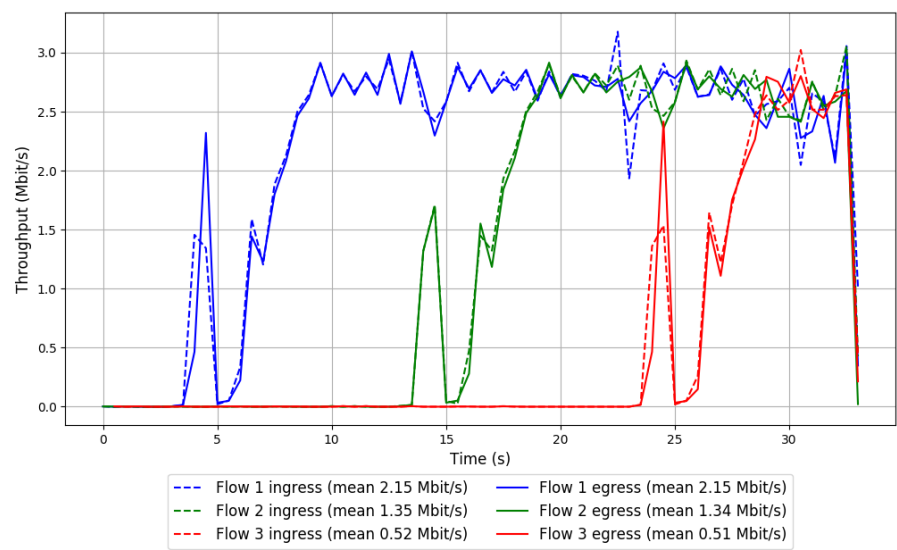
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 86.627 ms

Loss rate: 1.91%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-11-21 14:04:46

End at: 2017-11-21 14:05:16

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 87.034 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 87.035 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 87.036 ms

Loss rate: 1.07%

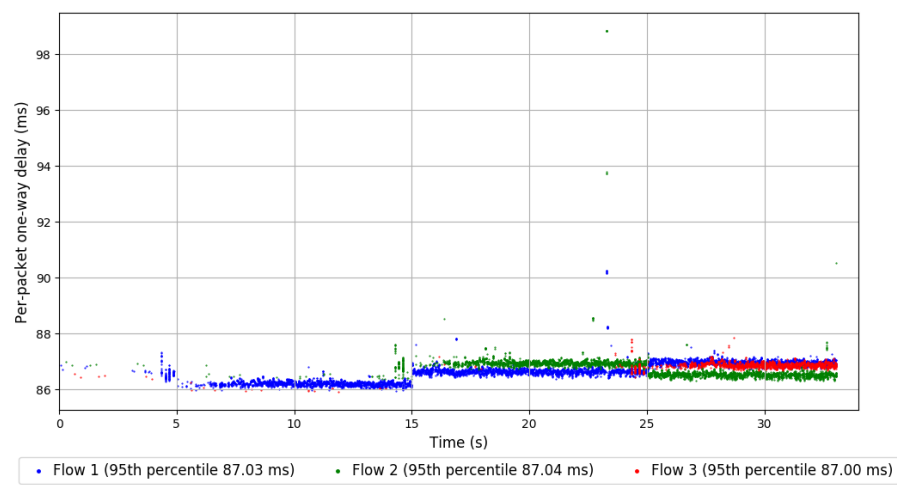
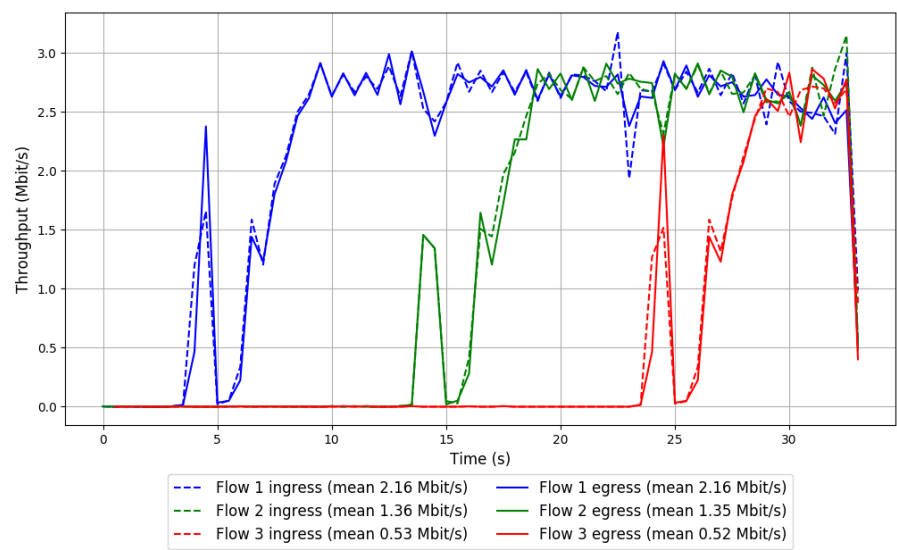
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 87.003 ms

Loss rate: 2.54%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-11-21 14:18:12

End at: 2017-11-21 14:18:42

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 86.950 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 86.945 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 86.736 ms

Loss rate: 1.30%

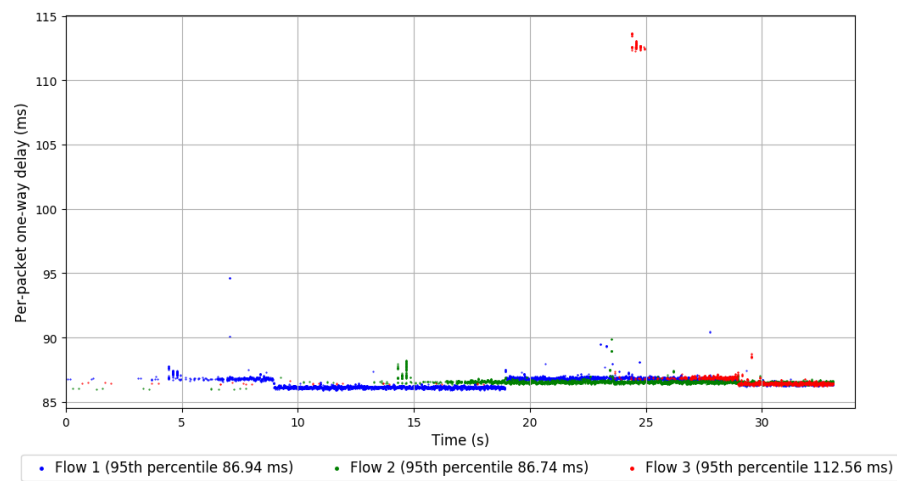
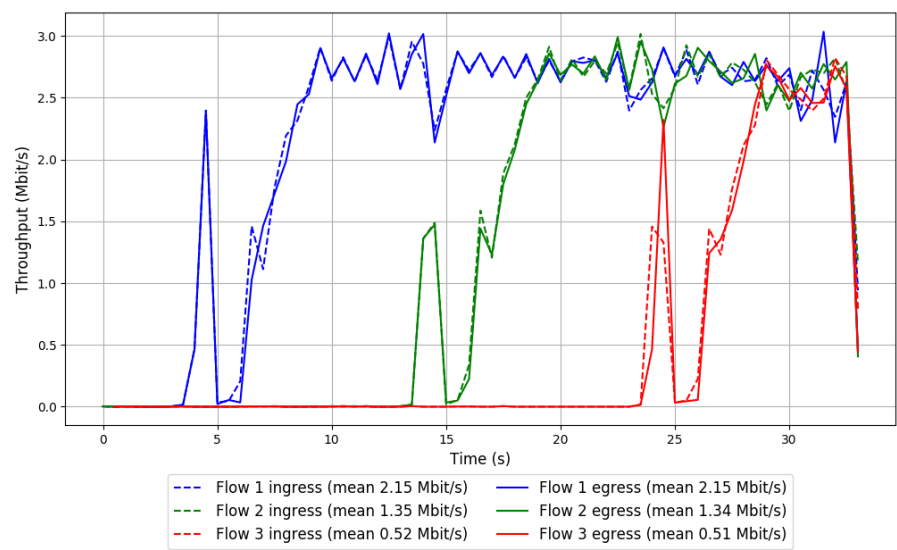
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 112.565 ms

Loss rate: 2.74%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-11-21 14:31:35

End at: 2017-11-21 14:32:05

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 86.832 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 86.862 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 86.276 ms

Loss rate: 0.91%

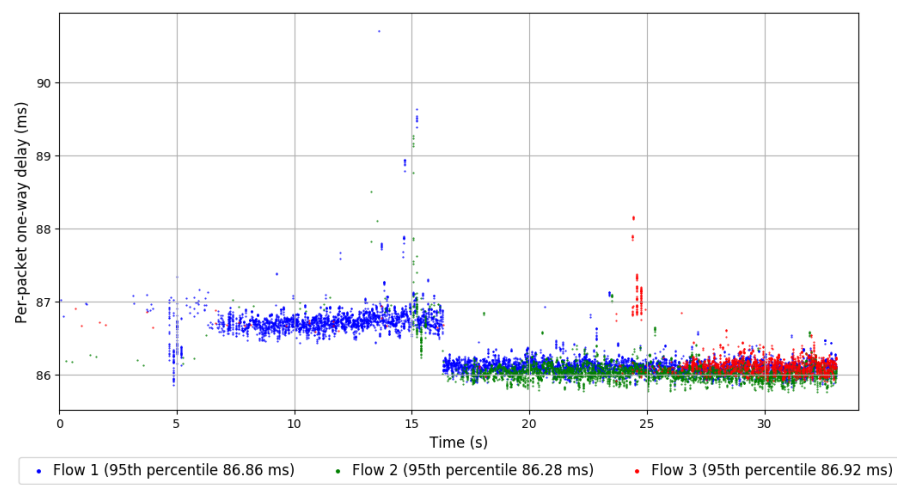
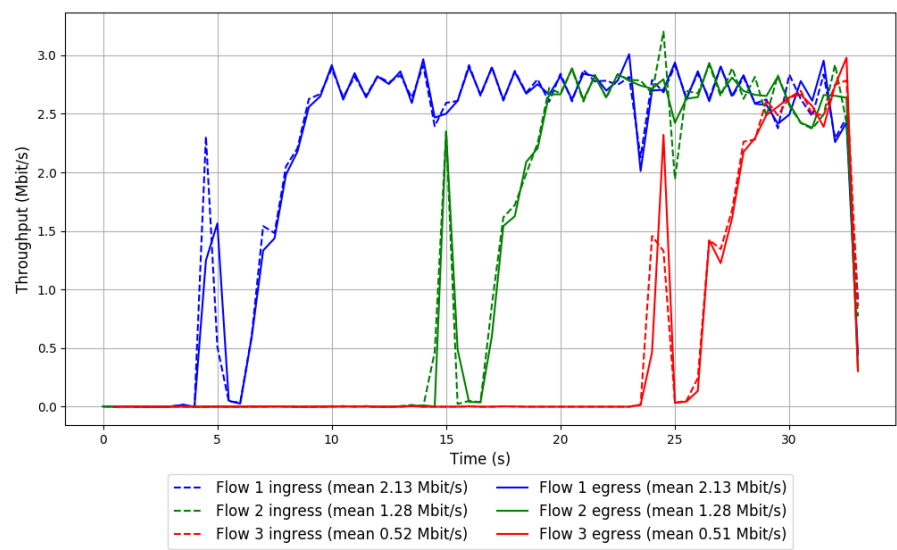
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 86.921 ms

Loss rate: 2.53%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-11-21 14:45:04

End at: 2017-11-21 14:45:34

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.00 Mbit/s

95th percentile per-packet one-way delay: 86.749 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 86.633 ms

Loss rate: 0.83%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 86.641 ms

Loss rate: 0.87%

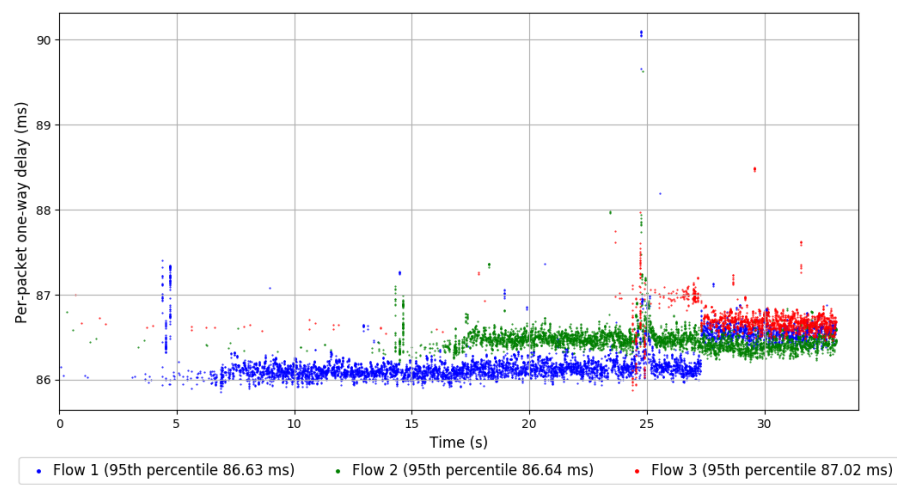
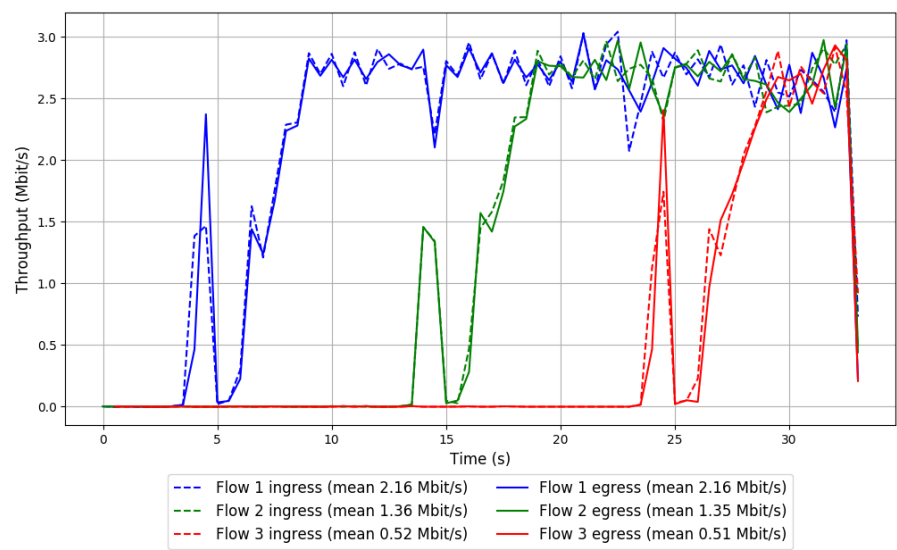
-- Flow 3:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 87.019 ms

Loss rate: 2.70%

Run 10: Report of WebRTC media — Data Link

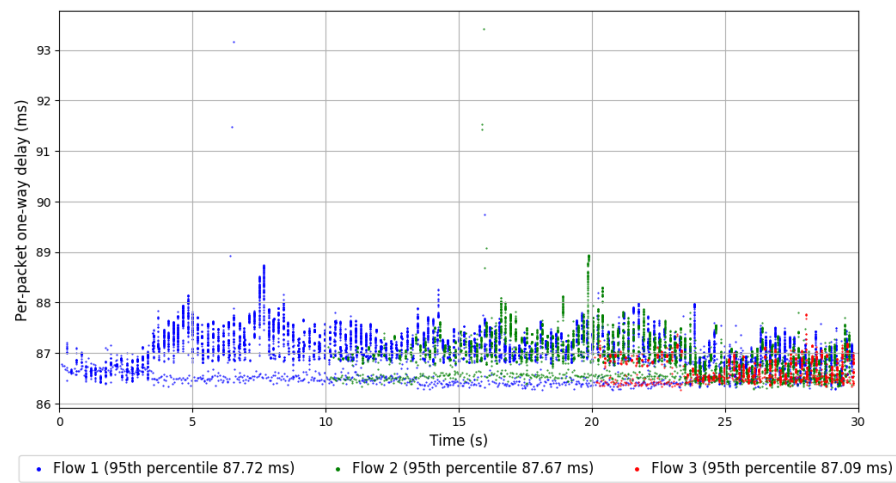
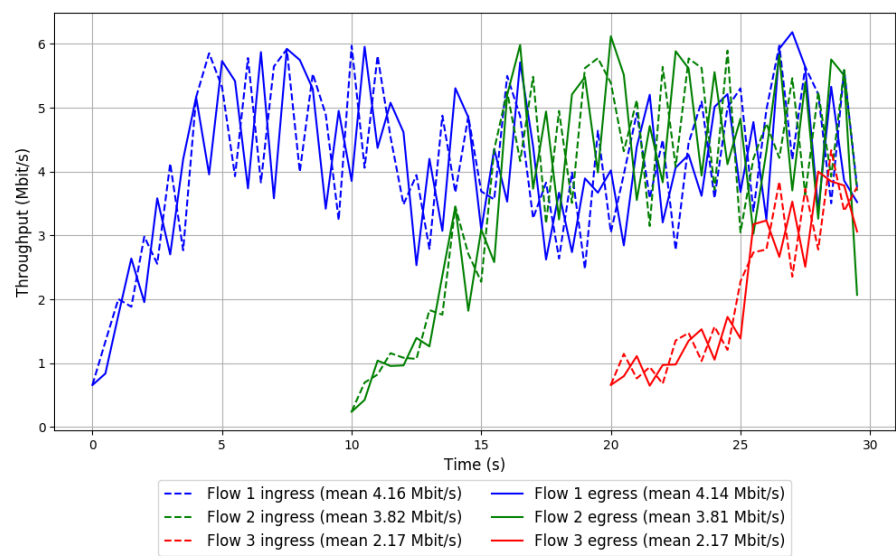


```
Run 1: Statistics of Sprout

Start at: 2017-11-21 12:55:55
End at: 2017-11-21 12:56:25

# Below is generated by plot.py at 2017-11-21 17:49:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 87.692 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 87.720 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 87.673 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 2.17 Mbit/s
95th percentile per-packet one-way delay: 87.093 ms
Loss rate: 1.85%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-11-21 13:09:20

End at: 2017-11-21 13:09:50

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.15 Mbit/s

95th percentile per-packet one-way delay: 87.607 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 87.546 ms

Loss rate: 0.91%

-- Flow 2:

Average throughput: 3.68 Mbit/s

95th percentile per-packet one-way delay: 87.558 ms

Loss rate: 1.53%

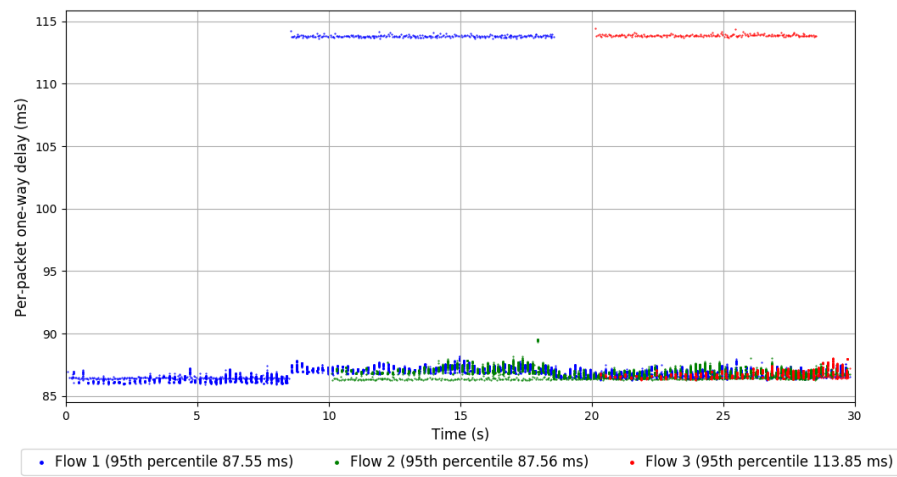
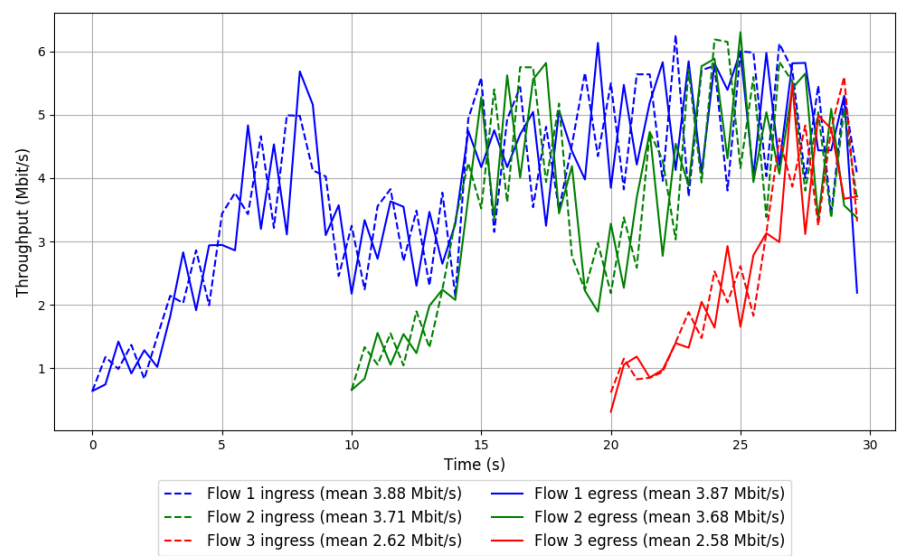
-- Flow 3:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 113.849 ms

Loss rate: 2.97%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-11-21 13:22:51

End at: 2017-11-21 13:23:21

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 87.816 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 87.911 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 87.415 ms

Loss rate: 1.13%

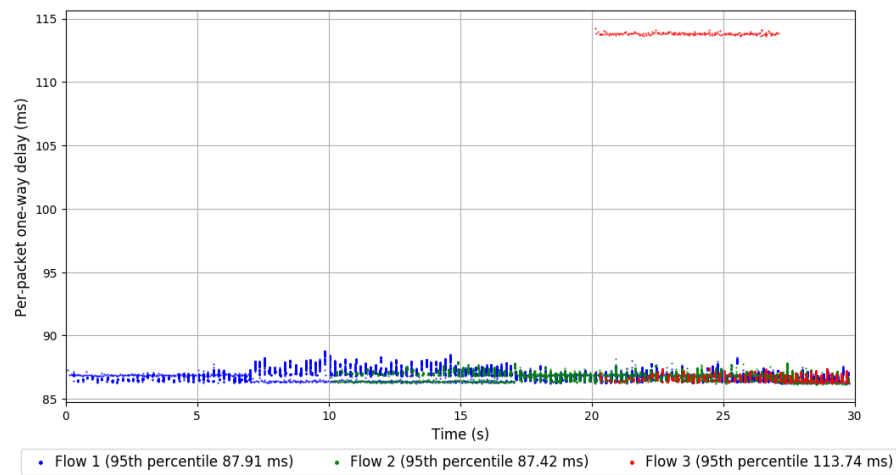
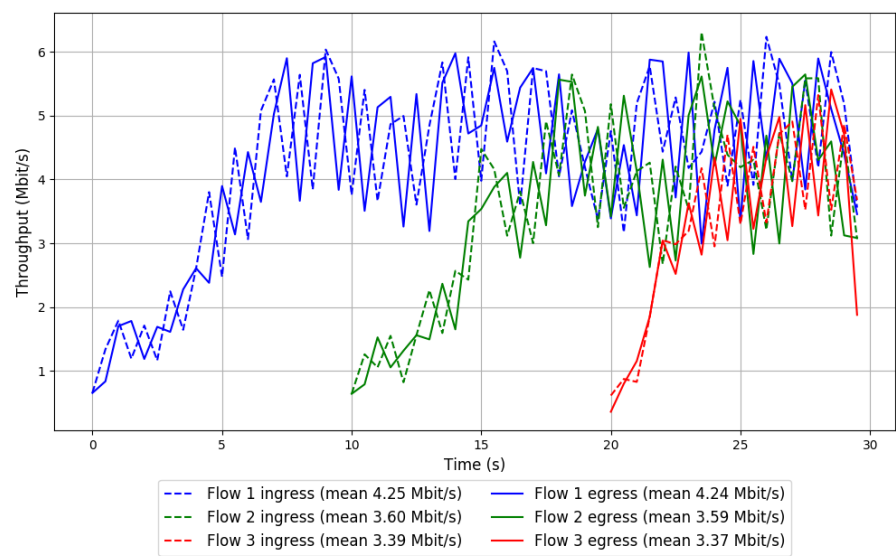
-- Flow 3:

Average throughput: 3.37 Mbit/s

95th percentile per-packet one-way delay: 113.744 ms

Loss rate: 2.92%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-11-21 13:36:04

End at: 2017-11-21 13:36:34

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.43 Mbit/s

95th percentile per-packet one-way delay: 87.587 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 3.94 Mbit/s

95th percentile per-packet one-way delay: 87.614 ms

Loss rate: 1.01%

-- Flow 2:

Average throughput: 3.75 Mbit/s

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

Loss rate: 0.76%

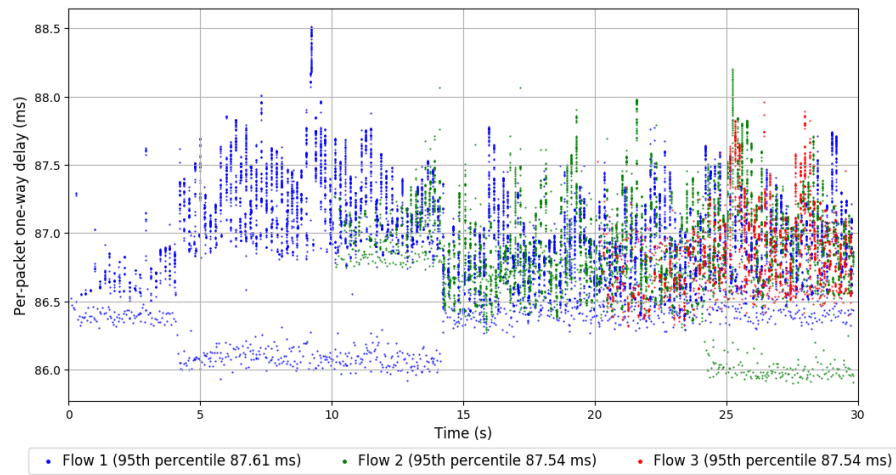
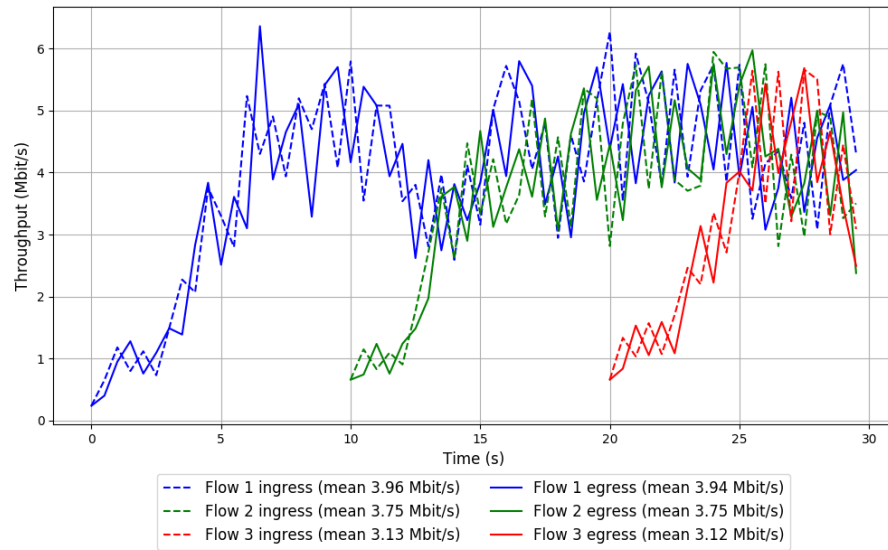
-- Flow 3:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 87.539 ms

Loss rate: 2.58%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-11-21 13:49:45

End at: 2017-11-21 13:50:15

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.56 Mbit/s

95th percentile per-packet one-way delay: 87.695 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 87.747 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 4.02 Mbit/s

95th percentile per-packet one-way delay: 87.655 ms

Loss rate: 1.29%

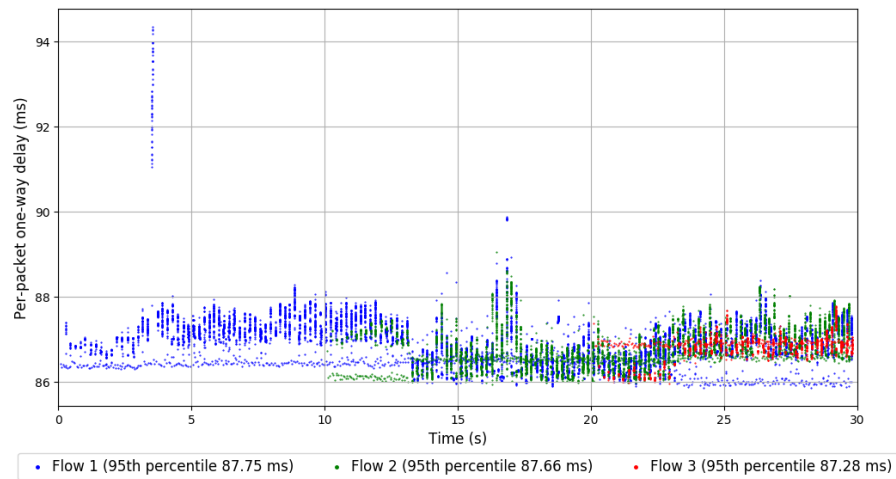
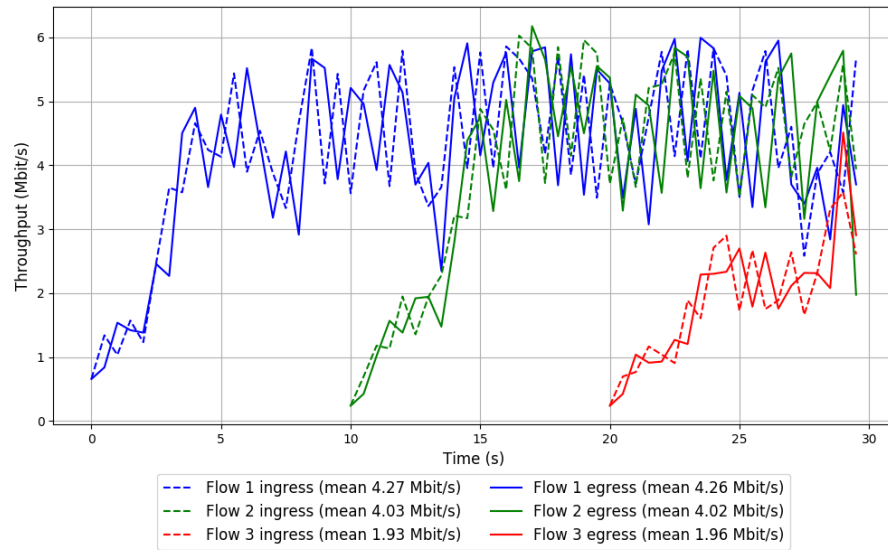
-- Flow 3:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 87.276 ms

Loss rate: 0.01%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-11-21 14:03:09

End at: 2017-11-21 14:03:39

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.84 Mbit/s

95th percentile per-packet one-way delay: 87.436 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 87.466 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 3.98 Mbit/s

95th percentile per-packet one-way delay: 87.402 ms

Loss rate: 0.93%

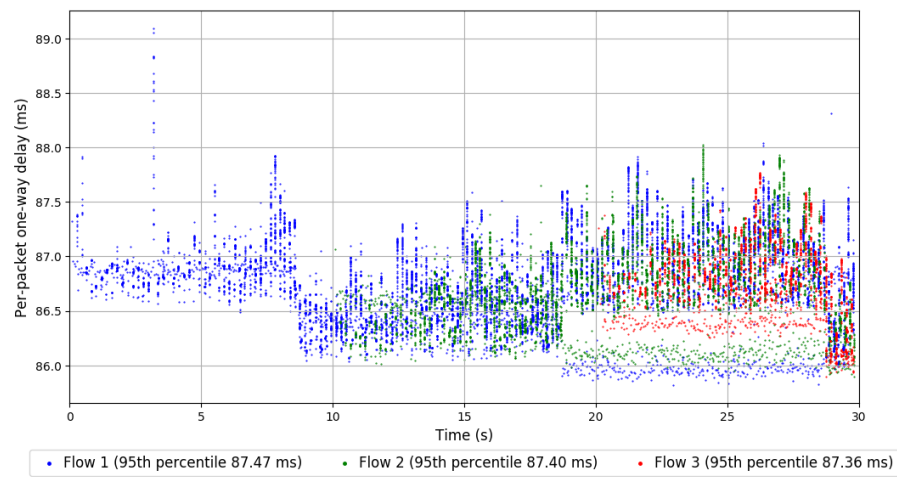
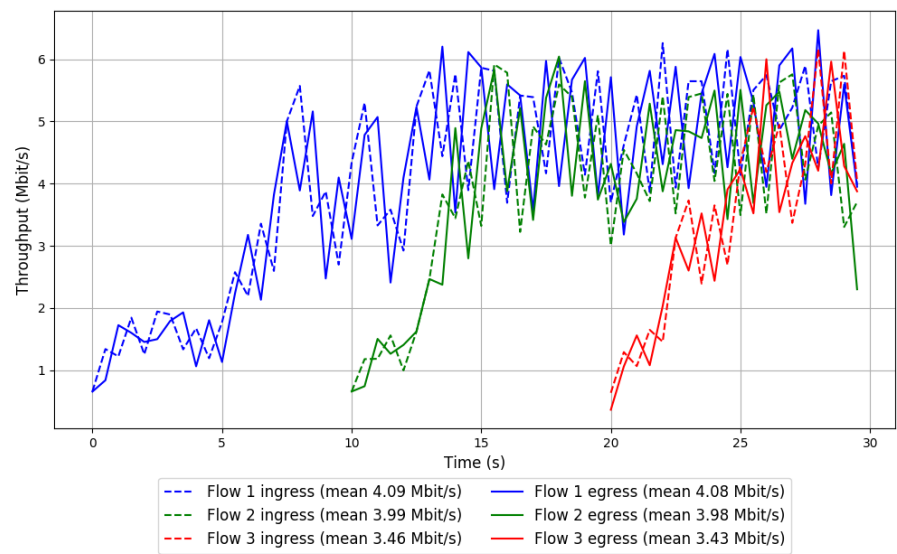
-- Flow 3:

Average throughput: 3.43 Mbit/s

95th percentile per-packet one-way delay: 87.356 ms

Loss rate: 2.96%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-11-21 14:16:37

End at: 2017-11-21 14:17:07

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.36 Mbit/s

95th percentile per-packet one-way delay: 87.475 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 3.49 Mbit/s

95th percentile per-packet one-way delay: 87.513 ms

Loss rate: 0.73%

-- Flow 2:

Average throughput: 3.29 Mbit/s

95th percentile per-packet one-way delay: 87.534 ms

Loss rate: 1.59%

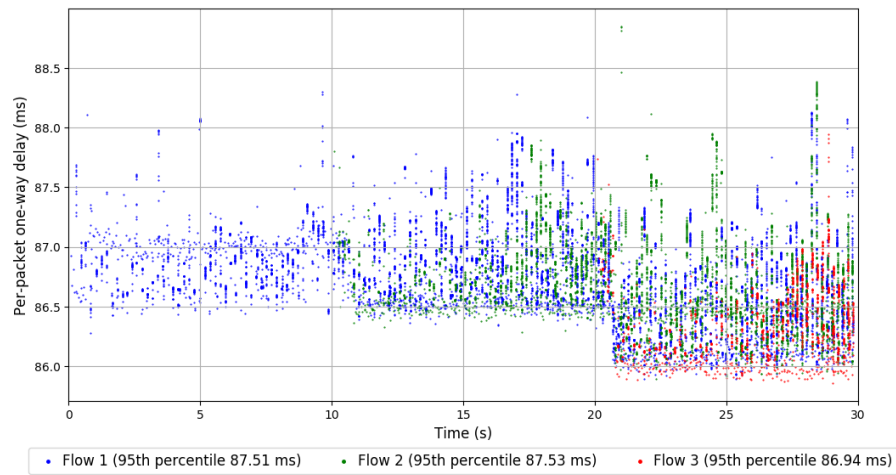
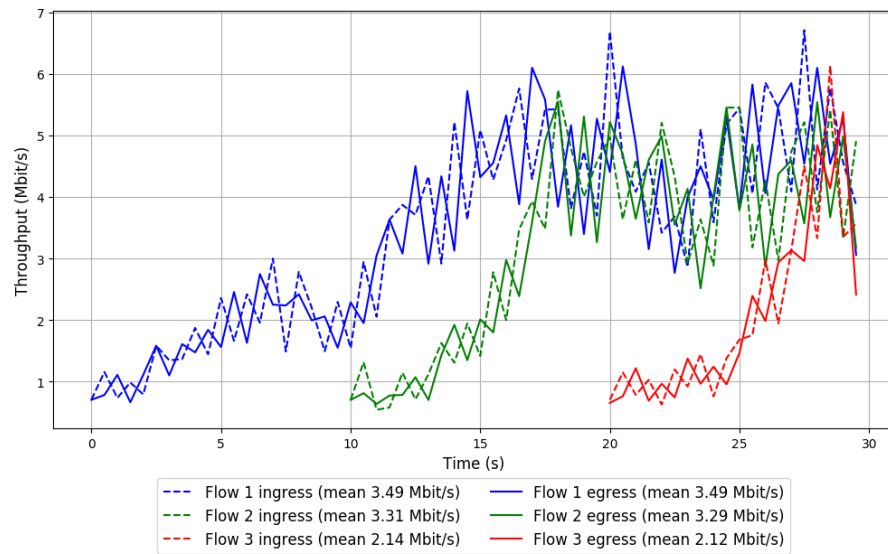
-- Flow 3:

Average throughput: 2.12 Mbit/s

95th percentile per-packet one-way delay: 86.943 ms

Loss rate: 2.73%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-11-21 14:29:58

End at: 2017-11-21 14:30:28

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.58 Mbit/s

95th percentile per-packet one-way delay: 112.672 ms

Loss rate: 2.74%

-- Flow 1:

Average throughput: 1.65 Mbit/s

95th percentile per-packet one-way delay: 112.722 ms

Loss rate: 1.86%

-- Flow 2:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 112.611 ms

Loss rate: 4.26%

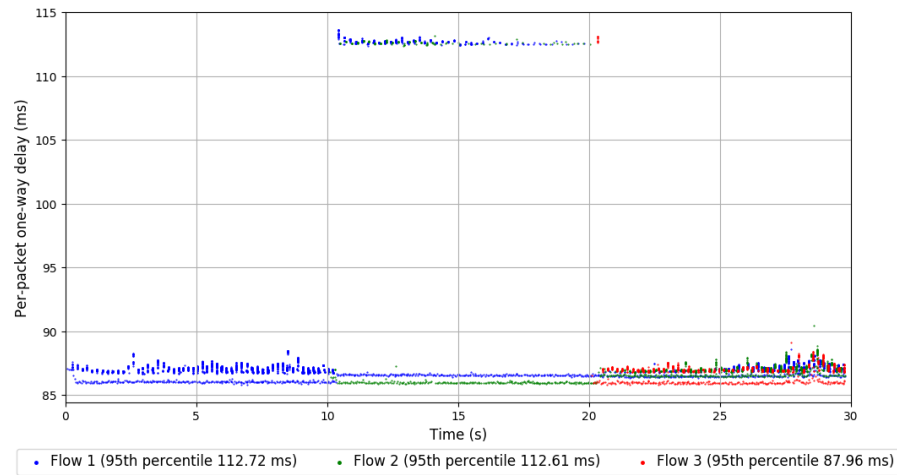
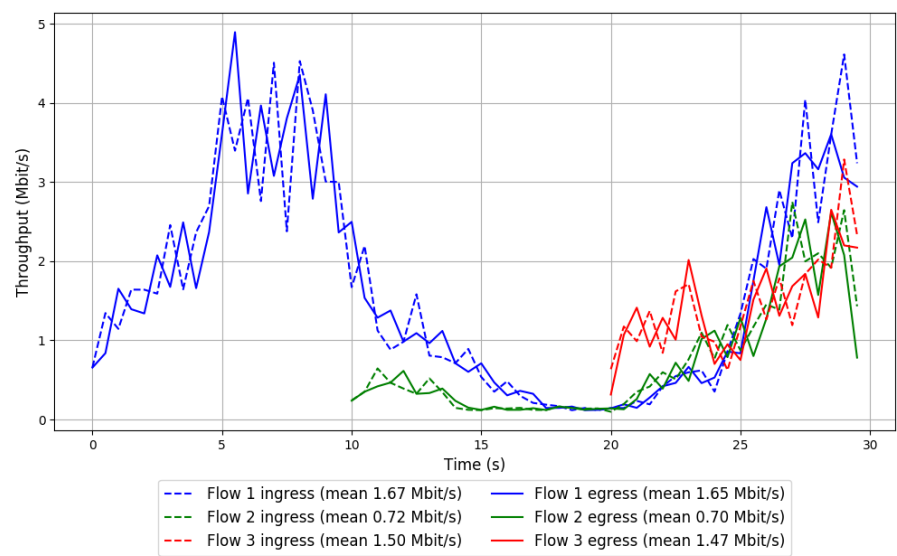
-- Flow 3:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 87.959 ms

Loss rate: 4.22%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-11-21 14:43:26

End at: 2017-11-21 14:43:56

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.35 Mbit/s

95th percentile per-packet one-way delay: 87.453 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 3.86 Mbit/s

95th percentile per-packet one-way delay: 87.519 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 87.358 ms

Loss rate: 0.59%

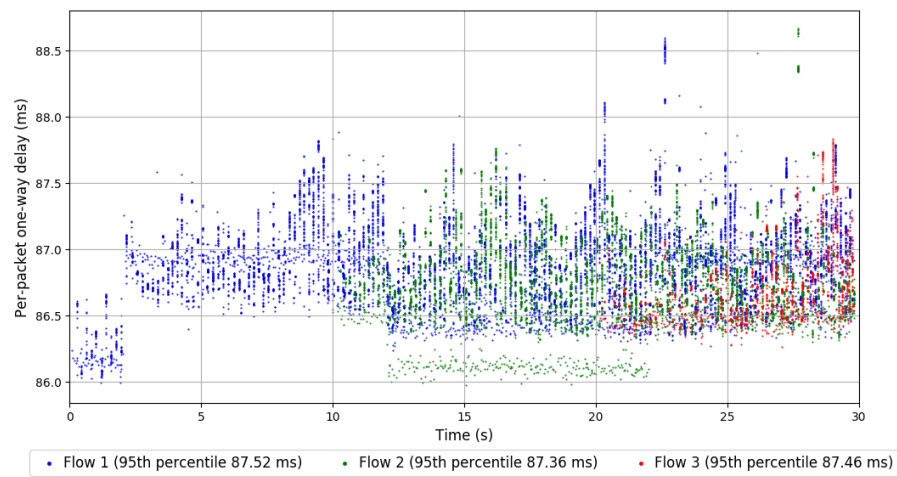
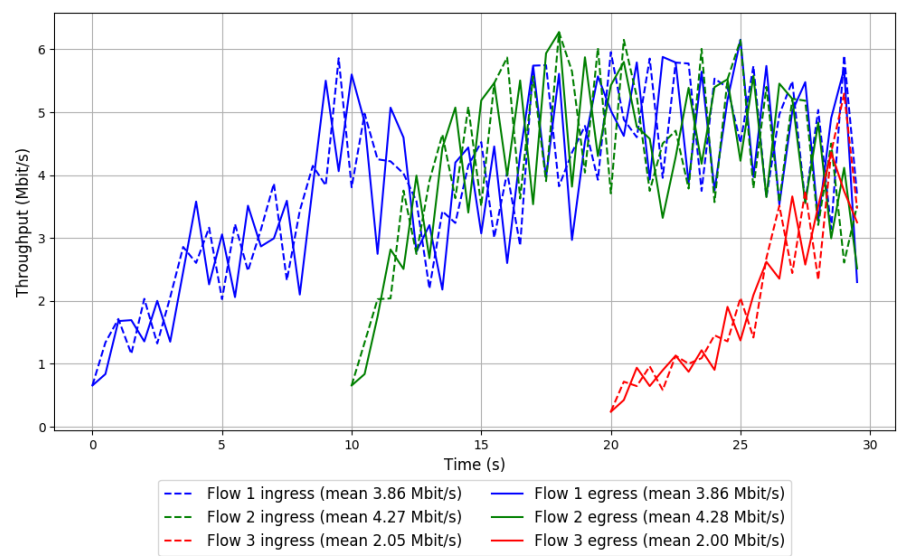
-- Flow 3:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 87.464 ms

Loss rate: 4.38%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-11-21 14:56:55

End at: 2017-11-21 14:57:25

Below is generated by plot.py at 2017-11-21 17:49:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 8.35 Mbit/s

95th percentile per-packet one-way delay: 87.577 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 4.26 Mbit/s

95th percentile per-packet one-way delay: 87.608 ms

Loss rate: 0.81%

-- Flow 2:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 87.617 ms

Loss rate: 0.92%

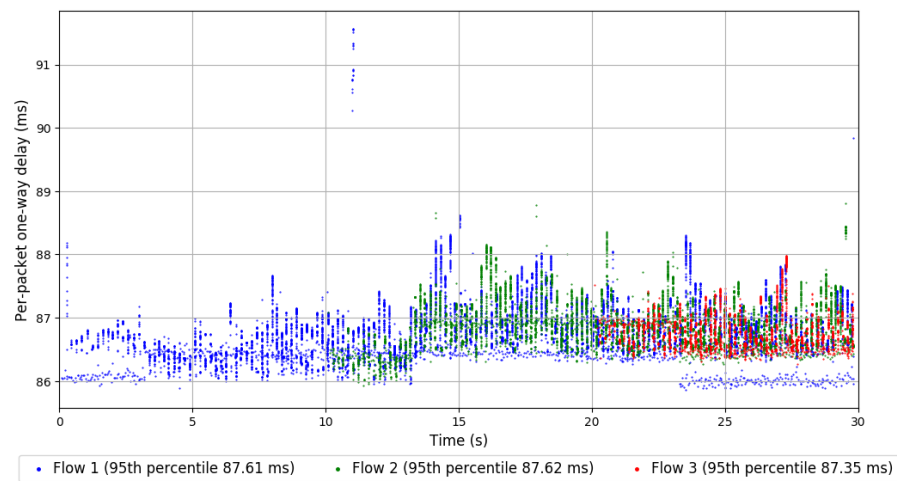
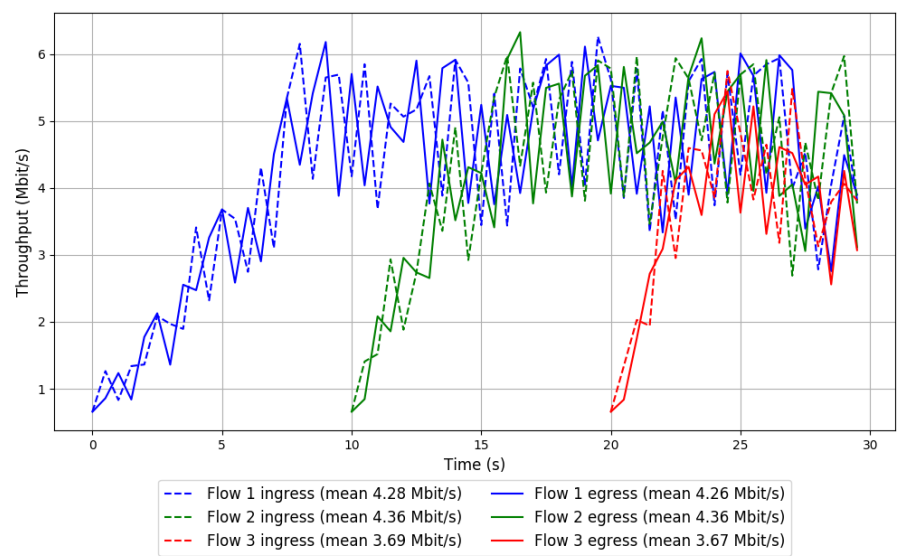
-- Flow 3:

Average throughput: 3.67 Mbit/s

95th percentile per-packet one-way delay: 87.350 ms

Loss rate: 2.45%

Run 10: Report of Sprout — Data Link

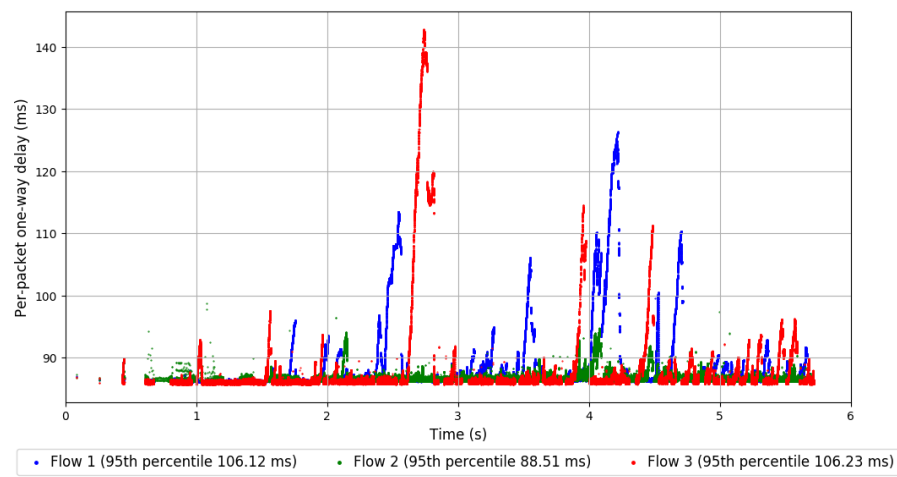
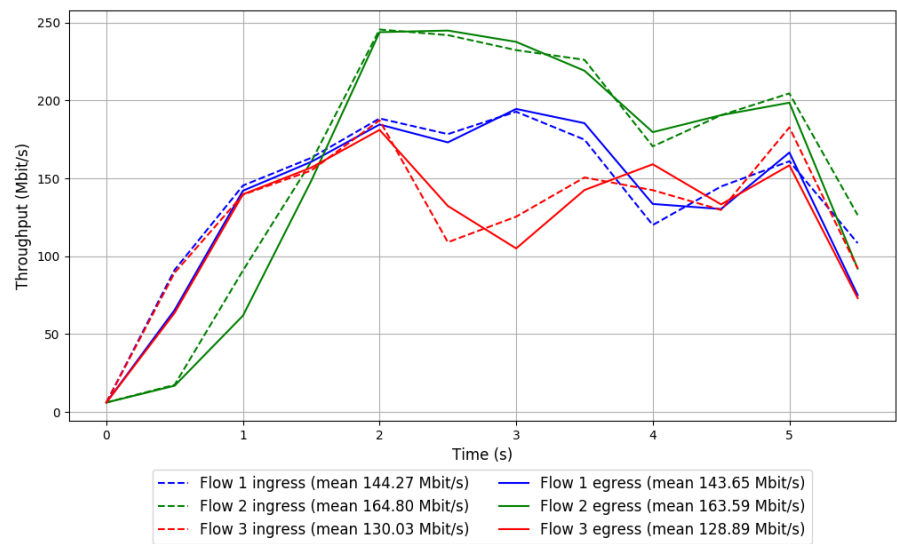


Run 1: Statistics of TaoVA-100x

Start at: 2017-11-21 12:47:15

End at: 2017-11-21 12:47:45

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

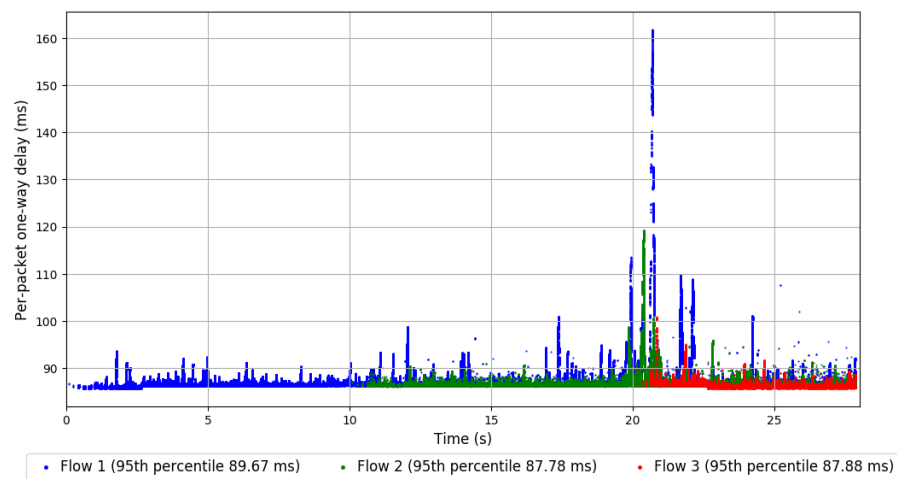
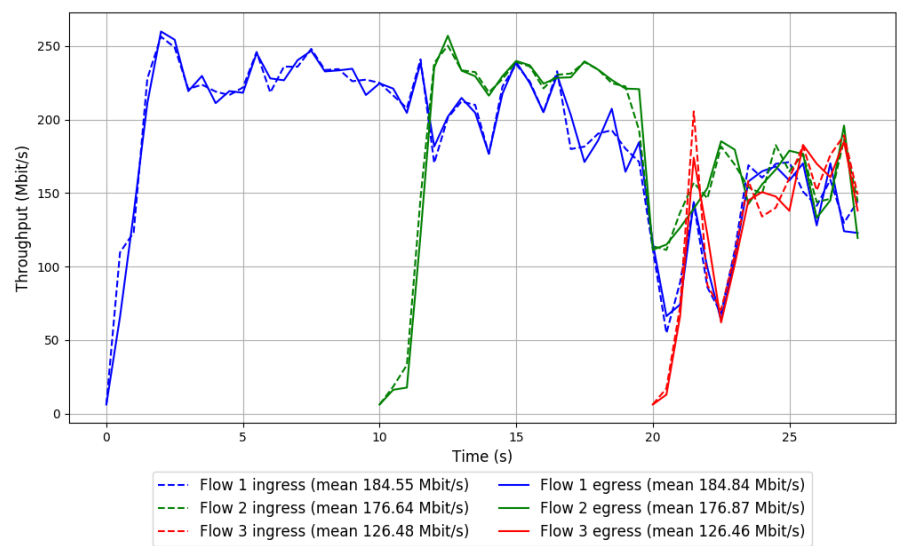


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-11-21 13:00:03
End at: 2017-11-21 13:00:33

# Below is generated by plot.py at 2017-11-21 17:51:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.26 Mbit/s
95th percentile per-packet one-way delay: 88.822 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 184.84 Mbit/s
95th percentile per-packet one-way delay: 89.673 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 176.87 Mbit/s
95th percentile per-packet one-way delay: 87.785 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 126.46 Mbit/s
95th percentile per-packet one-way delay: 87.877 ms
Loss rate: 2.29%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-11-21 13:13:34

End at: 2017-11-21 13:14:04

Below is generated by plot.py at 2017-11-21 17:53:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 393.46 Mbit/s

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

Loss rate: 0.65%

-- Flow 1:

Average throughput: 205.91 Mbit/s

95th percentile per-packet one-way delay: 88.736 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 215.71 Mbit/s

95th percentile per-packet one-way delay: 87.614 ms

Loss rate: 0.69%

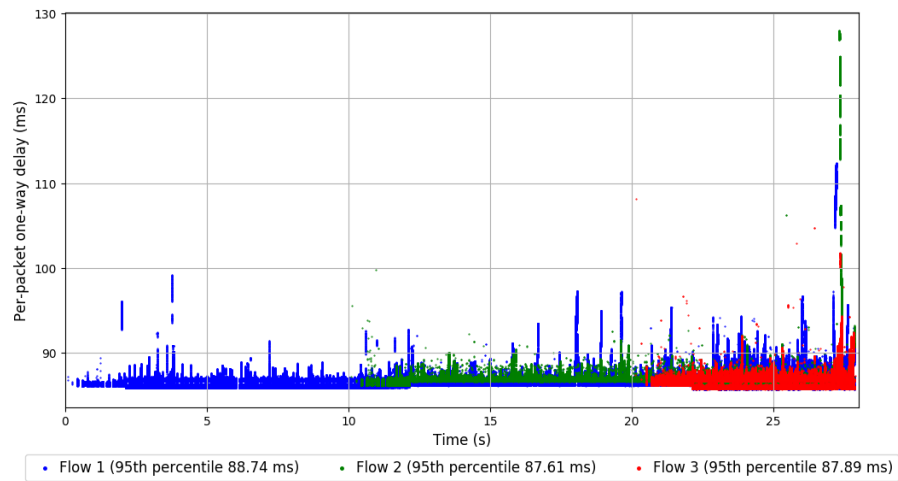
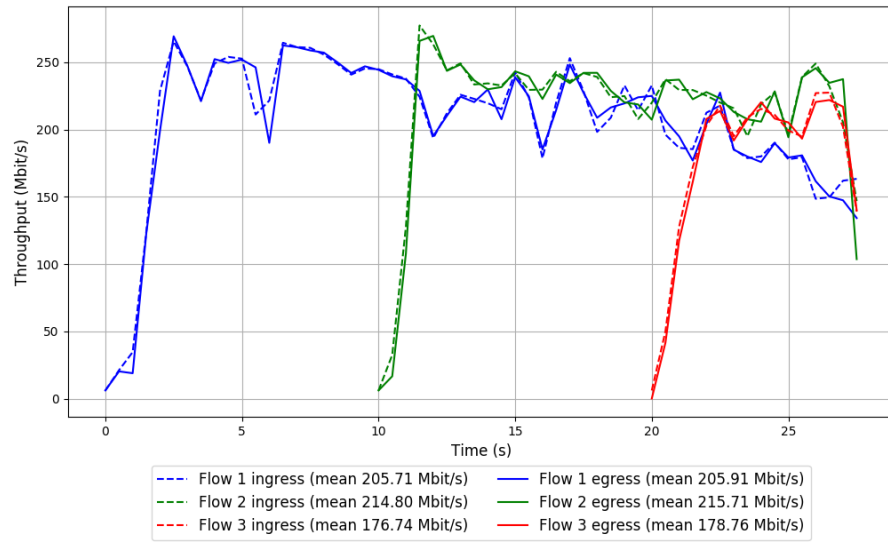
-- Flow 3:

Average throughput: 178.76 Mbit/s

95th percentile per-packet one-way delay: 87.893 ms

Loss rate: 1.04%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-11-21 13:27:06

End at: 2017-11-21 13:27:36

Below is generated by plot.py at 2017-11-21 17:53:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 355.18 Mbit/s

95th percentile per-packet one-way delay: 94.385 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 191.24 Mbit/s

95th percentile per-packet one-way delay: 91.769 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 190.45 Mbit/s

95th percentile per-packet one-way delay: 92.506 ms

Loss rate: 1.24%

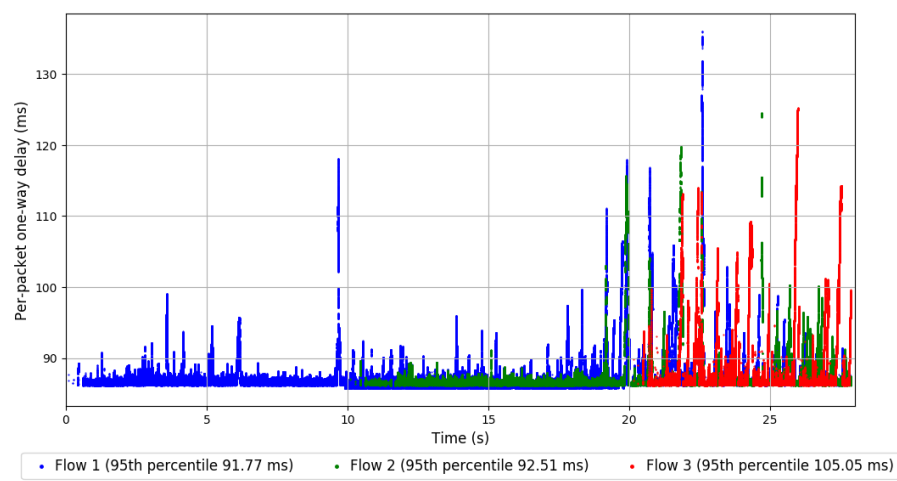
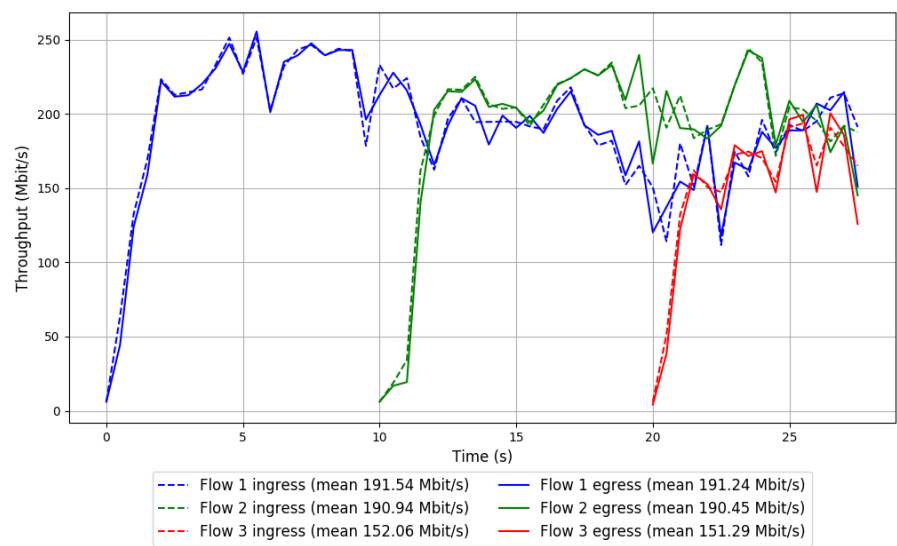
-- Flow 3:

Average throughput: 151.29 Mbit/s

95th percentile per-packet one-way delay: 105.052 ms

Loss rate: 2.70%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-11-21 13:40:18

End at: 2017-11-21 13:40:48

Below is generated by plot.py at 2017-11-21 17:53:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 353.79 Mbit/s

95th percentile per-packet one-way delay: 91.430 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 194.87 Mbit/s

95th percentile per-packet one-way delay: 90.420 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 174.28 Mbit/s

95th percentile per-packet one-way delay: 88.203 ms

Loss rate: 0.90%

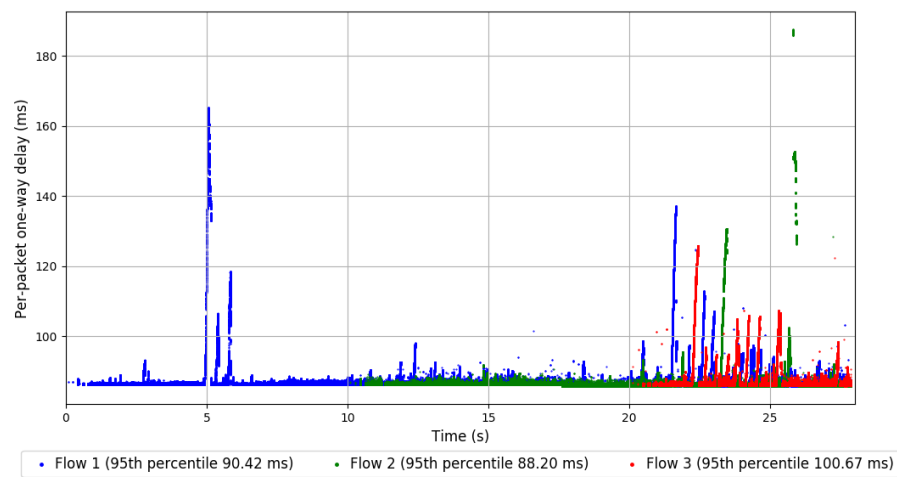
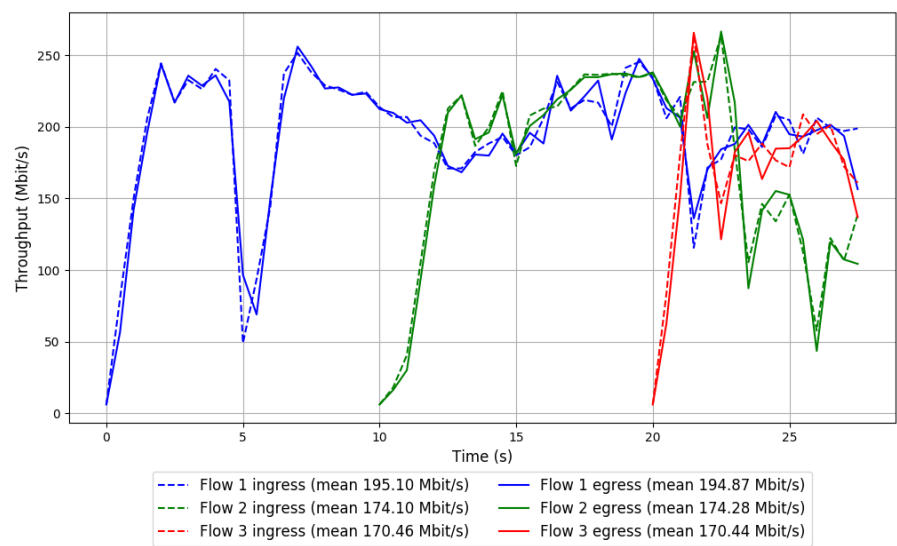
-- Flow 3:

Average throughput: 170.44 Mbit/s

95th percentile per-packet one-way delay: 100.666 ms

Loss rate: 2.19%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-11-21 13:53:56

End at: 2017-11-21 13:54:26

Below is generated by plot.py at 2017-11-21 17:53:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 379.01 Mbit/s

95th percentile per-packet one-way delay: 93.279 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 203.49 Mbit/s

95th percentile per-packet one-way delay: 88.038 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 195.82 Mbit/s

95th percentile per-packet one-way delay: 97.842 ms

Loss rate: 0.85%

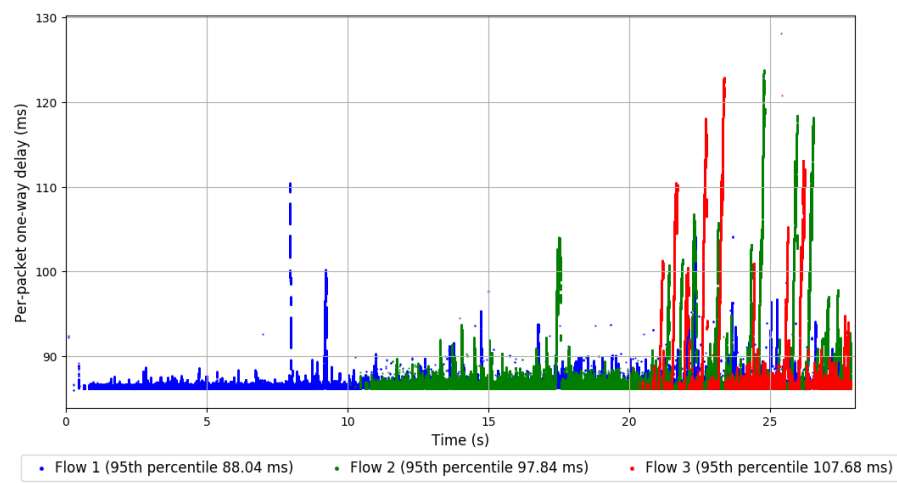
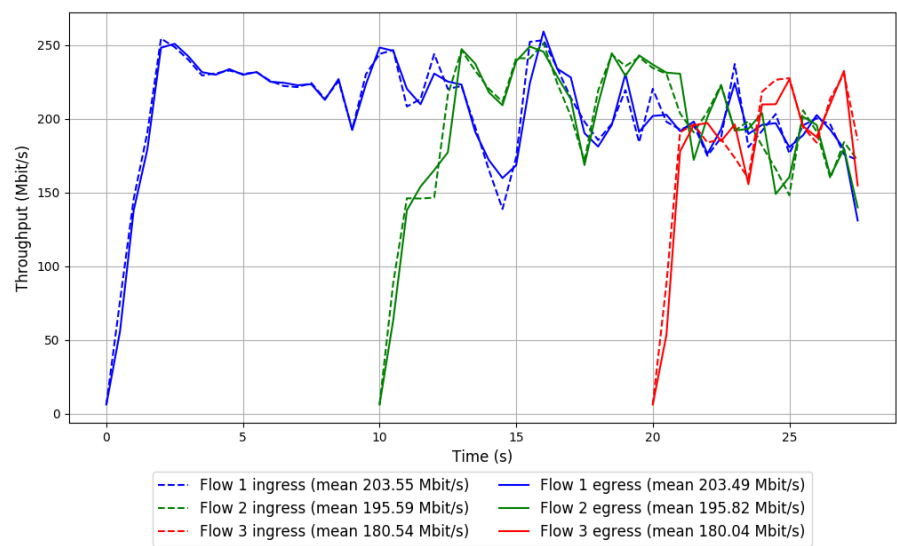
-- Flow 3:

Average throughput: 180.04 Mbit/s

95th percentile per-packet one-way delay: 107.682 ms

Loss rate: 2.48%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-11-21 14:07:24

End at: 2017-11-21 14:07:54

Below is generated by plot.py at 2017-11-21 17:55:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.54 Mbit/s

95th percentile per-packet one-way delay: 88.772 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 161.39 Mbit/s

95th percentile per-packet one-way delay: 89.566 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 226.96 Mbit/s

95th percentile per-packet one-way delay: 86.808 ms

Loss rate: 1.06%

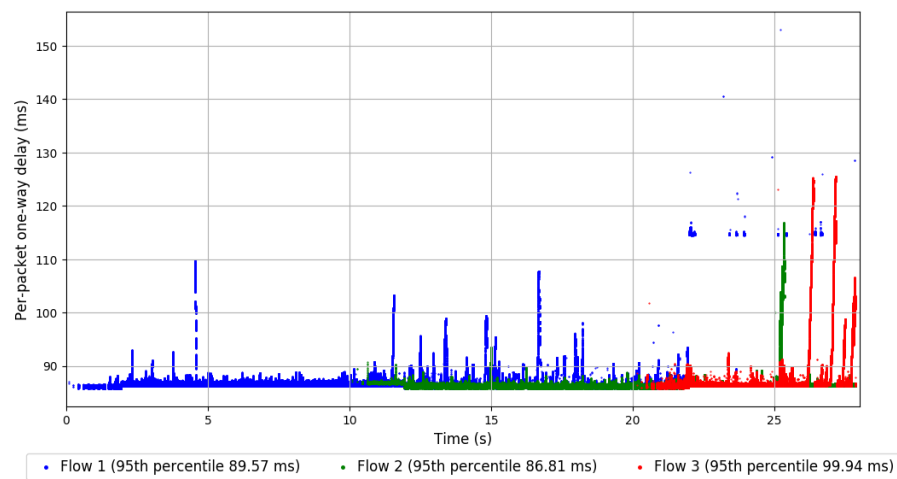
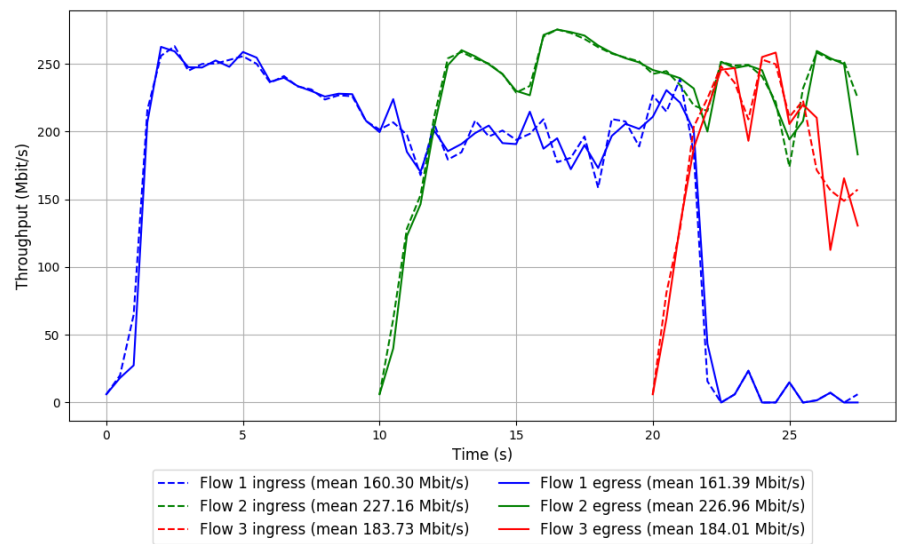
-- Flow 3:

Average throughput: 184.01 Mbit/s

95th percentile per-packet one-way delay: 99.941 ms

Loss rate: 2.05%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-11-21 14:20:51

End at: 2017-11-21 14:21:21

Below is generated by plot.py at 2017-11-21 17:56:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 334.45 Mbit/s

95th percentile per-packet one-way delay: 88.058 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 205.68 Mbit/s

95th percentile per-packet one-way delay: 87.879 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 189.72 Mbit/s

95th percentile per-packet one-way delay: 88.226 ms

Loss rate: 0.86%

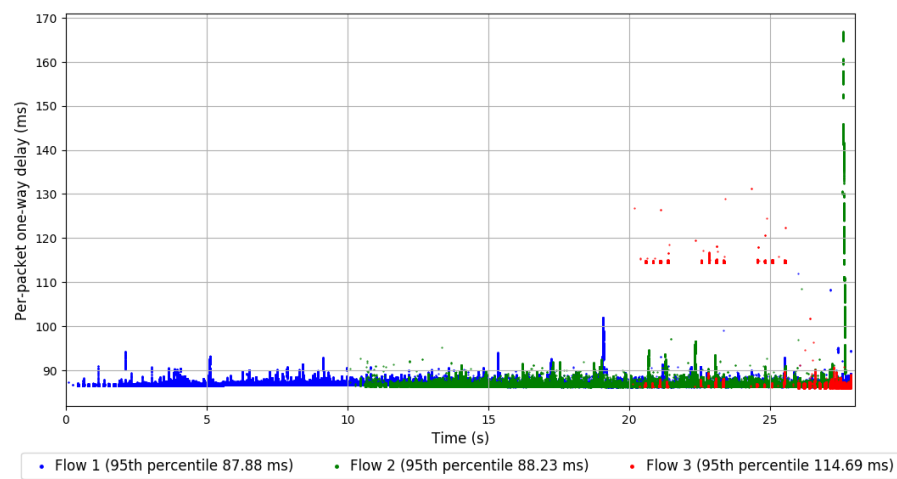
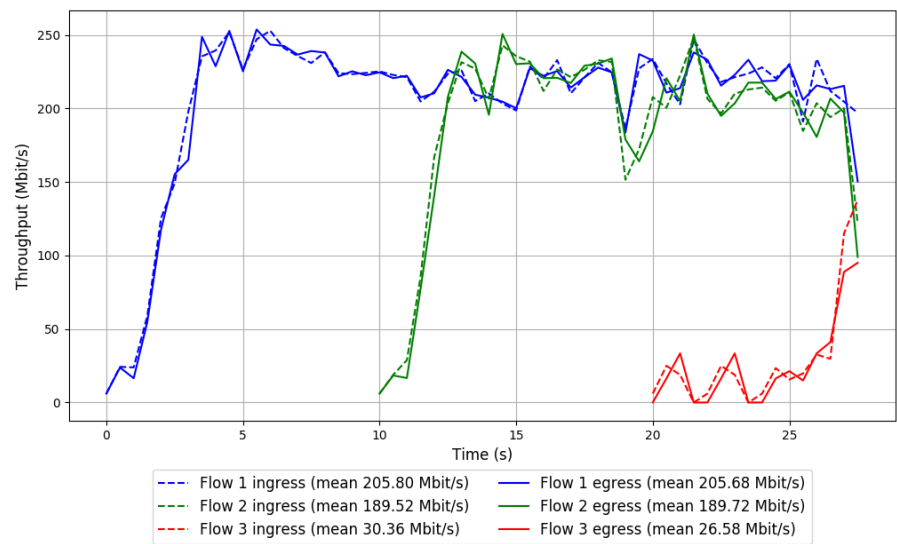
-- Flow 3:

Average throughput: 26.58 Mbit/s

95th percentile per-packet one-way delay: 114.689 ms

Loss rate: 14.37%

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

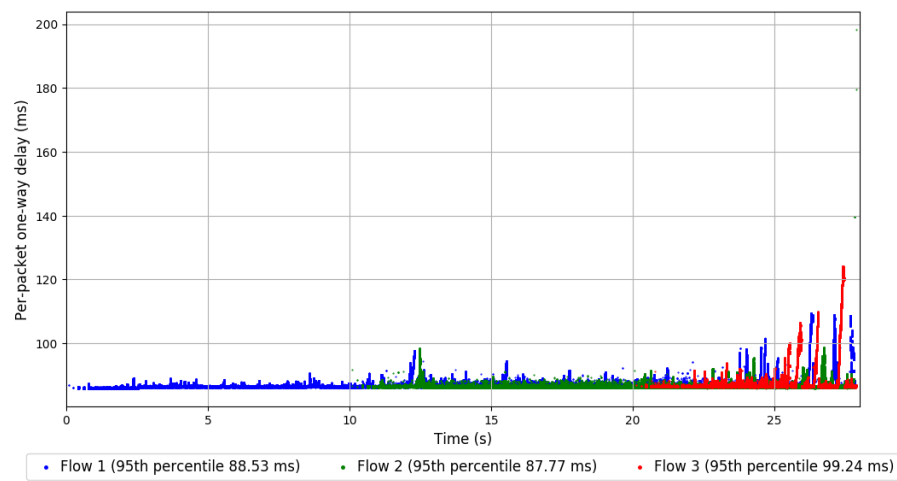
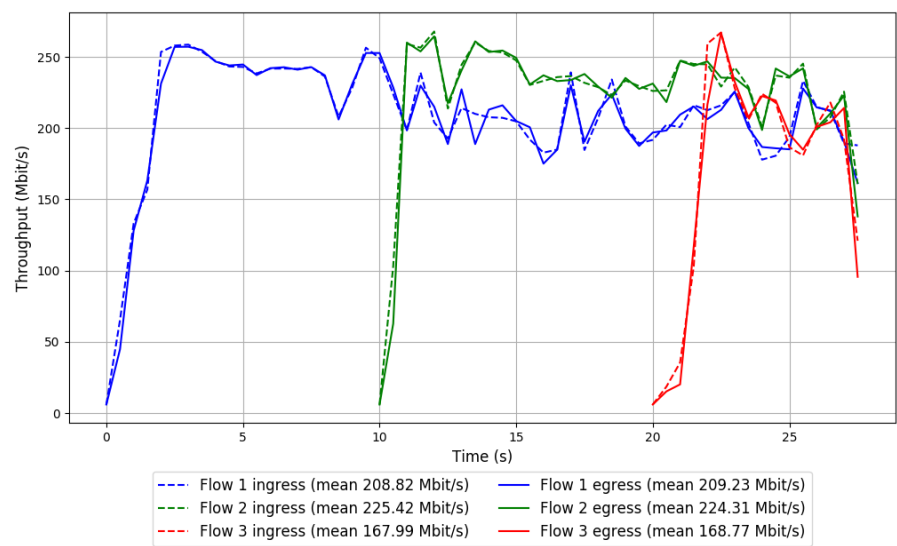


```
Run 9: Statistics of TaoVA-100x

Start at: 2017-11-21 14:34:14
End at: 2017-11-21 14:34:44

# Below is generated by plot.py at 2017-11-21 18:03:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 399.35 Mbit/s
95th percentile per-packet one-way delay: 88.836 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 209.23 Mbit/s
95th percentile per-packet one-way delay: 88.525 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 224.31 Mbit/s
95th percentile per-packet one-way delay: 87.771 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 168.77 Mbit/s
95th percentile per-packet one-way delay: 99.244 ms
Loss rate: 1.74%
```


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

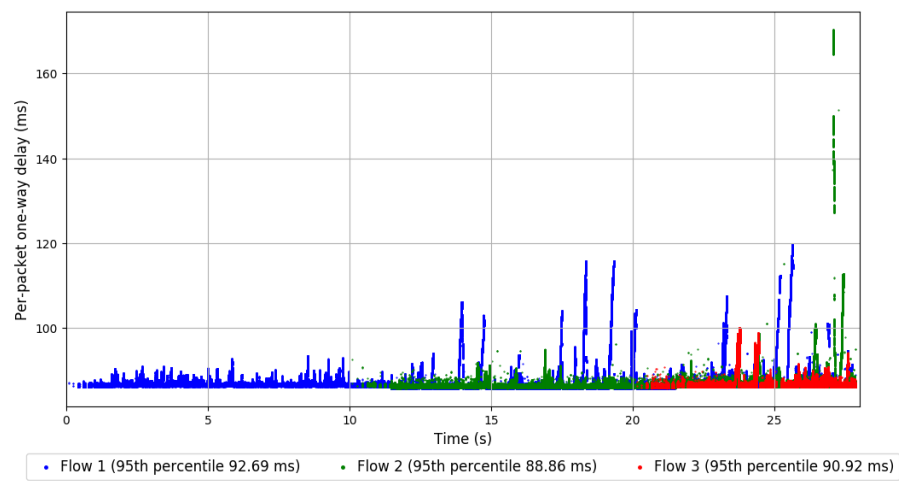
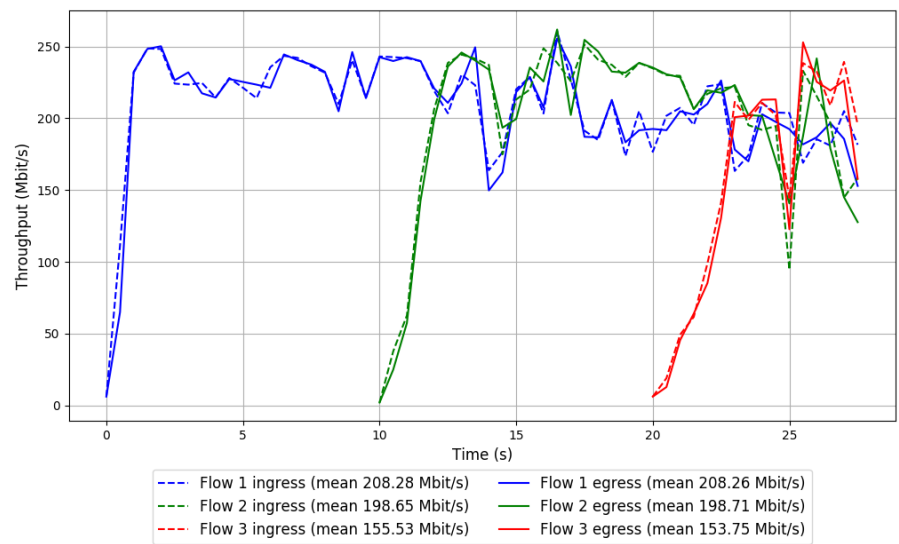


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-11-21 14:47:45
End at: 2017-11-21 14:48:15

# Below is generated by plot.py at 2017-11-21 18:04:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 378.11 Mbit/s
95th percentile per-packet one-way delay: 90.983 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 208.26 Mbit/s
95th percentile per-packet one-way delay: 92.685 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 198.71 Mbit/s
95th percentile per-packet one-way delay: 88.863 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 153.75 Mbit/s
95th percentile per-packet one-way delay: 90.920 ms
Loss rate: 3.33%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-11-21 12:43:42

End at: 2017-11-21 12:44:12

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.28 Mbit/s

95th percentile per-packet one-way delay: 95.815 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 64.62 Mbit/s

95th percentile per-packet one-way delay: 94.737 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 59.36 Mbit/s

95th percentile per-packet one-way delay: 97.901 ms

Loss rate: 0.65%

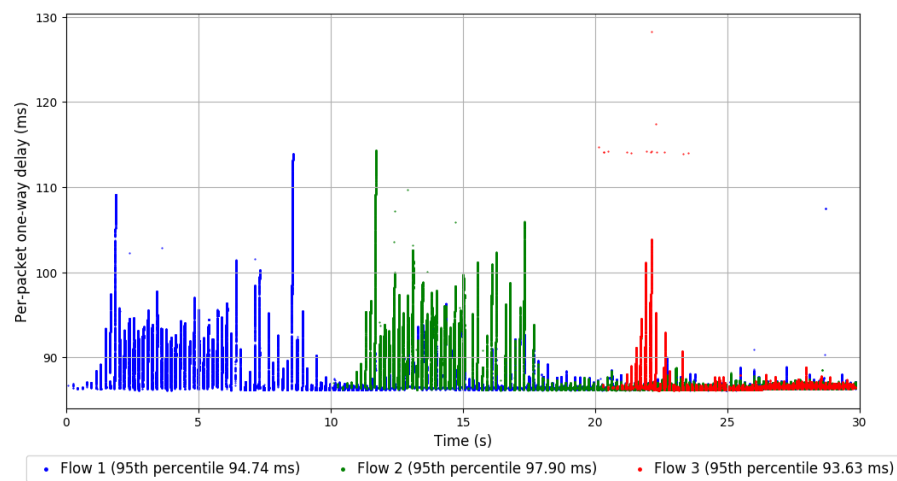
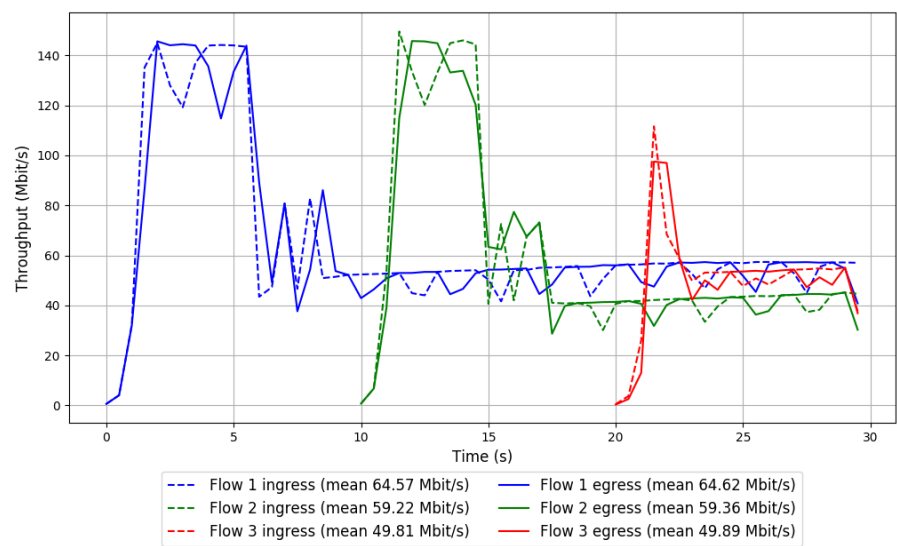
-- Flow 3:

Average throughput: 49.89 Mbit/s

95th percentile per-packet one-way delay: 93.630 ms

Loss rate: 1.87%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-11-21 12:56:39

End at: 2017-11-21 12:57:09

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.84 Mbit/s

95th percentile per-packet one-way delay: 92.515 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 4.46 Mbit/s

95th percentile per-packet one-way delay: 114.177 ms

Loss rate: 1.28%

-- Flow 2:

Average throughput: 47.46 Mbit/s

95th percentile per-packet one-way delay: 93.128 ms

Loss rate: 0.93%

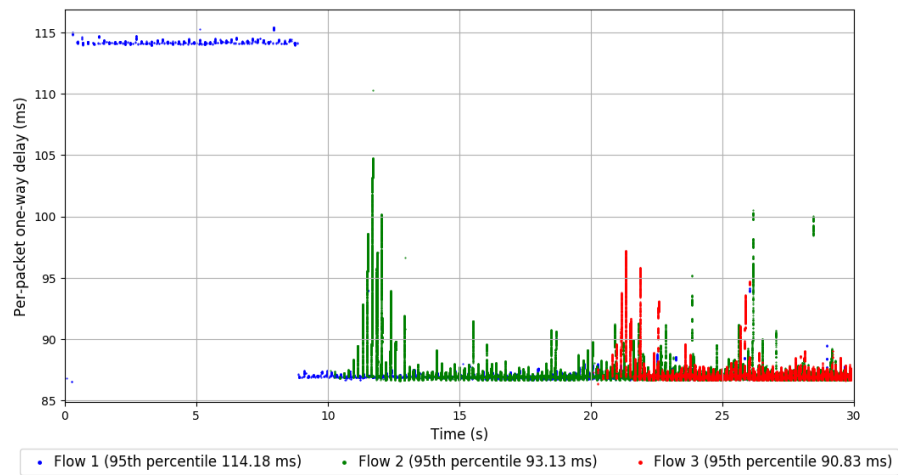
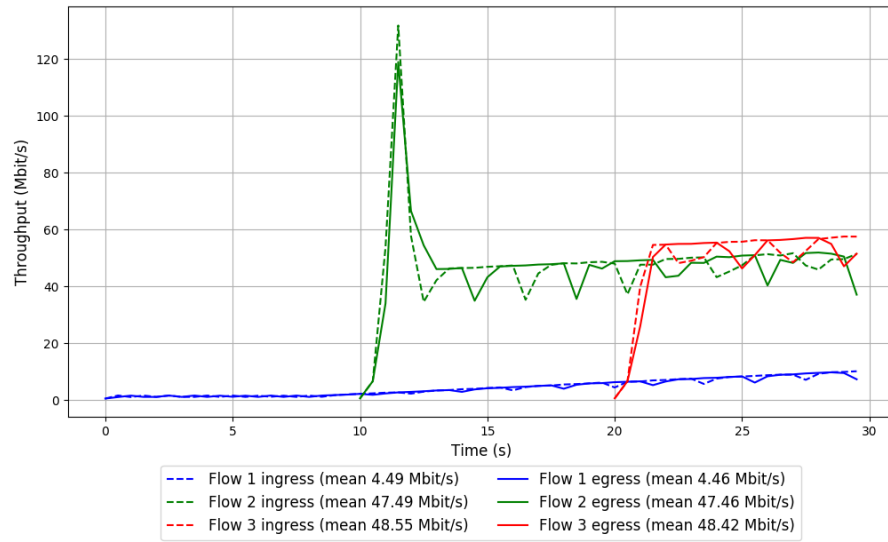
-- Flow 3:

Average throughput: 48.42 Mbit/s

95th percentile per-packet one-way delay: 90.832 ms

Loss rate: 1.99%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-11-21 13:10:04

End at: 2017-11-21 13:10:34

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.01 Mbit/s

95th percentile per-packet one-way delay: 89.610 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 56.06 Mbit/s

95th percentile per-packet one-way delay: 88.005 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 40.42 Mbit/s

95th percentile per-packet one-way delay: 87.926 ms

Loss rate: 0.80%

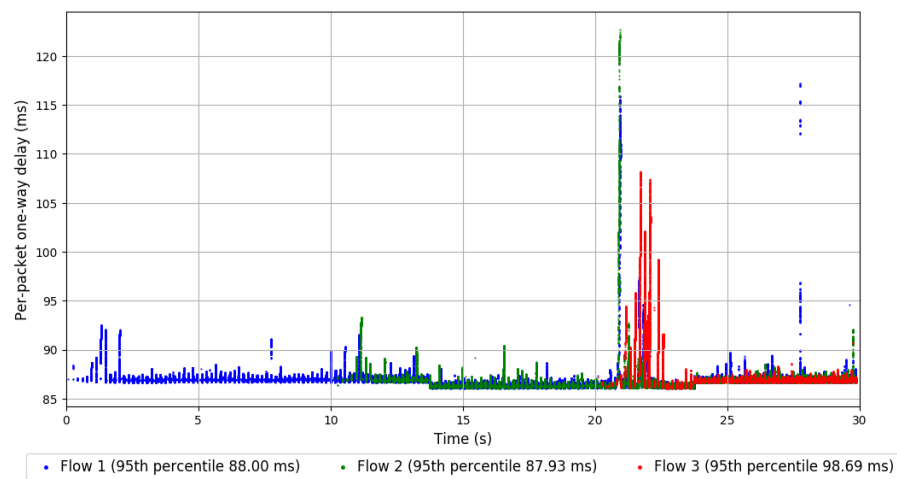
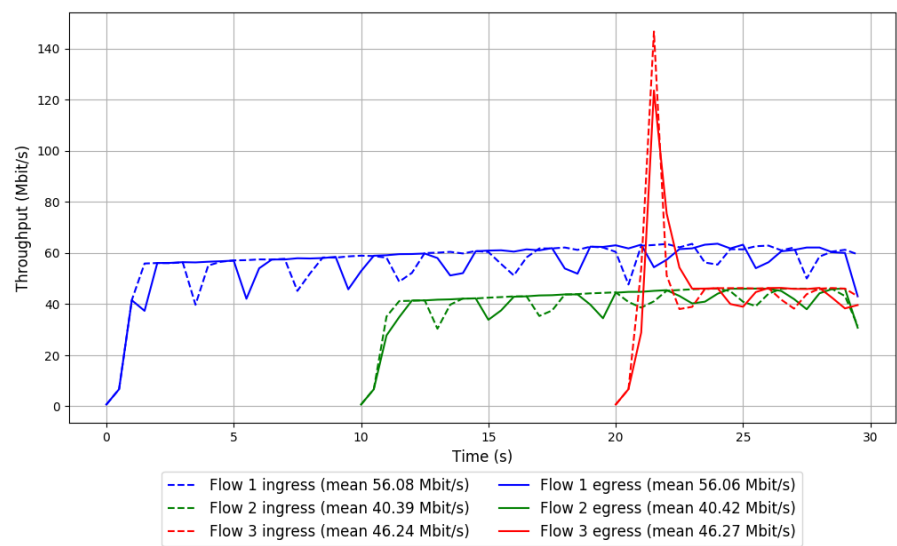
-- Flow 3:

Average throughput: 46.27 Mbit/s

95th percentile per-packet one-way delay: 98.693 ms

Loss rate: 1.68%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-11-21 13:23:36

End at: 2017-11-21 13:24:06

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 155.64 Mbit/s

95th percentile per-packet one-way delay: 91.101 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 87.40 Mbit/s

95th percentile per-packet one-way delay: 89.263 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 55.78 Mbit/s

95th percentile per-packet one-way delay: 95.871 ms

Loss rate: 0.80%

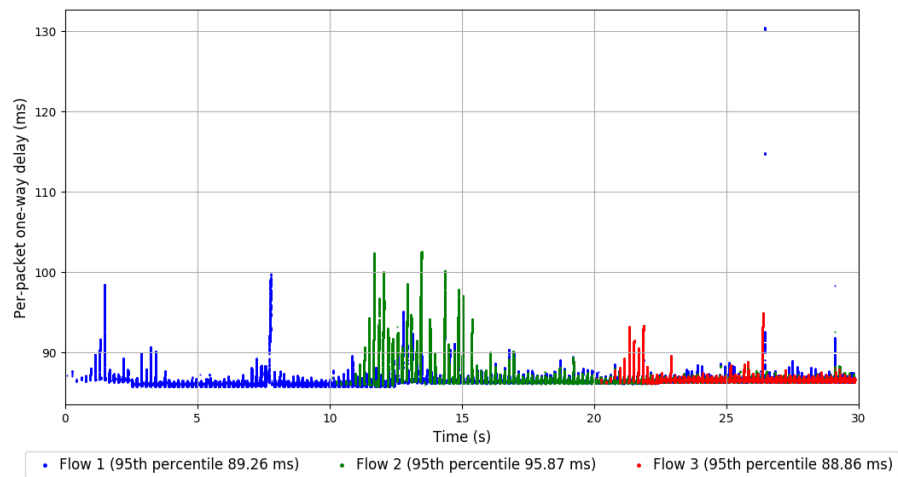
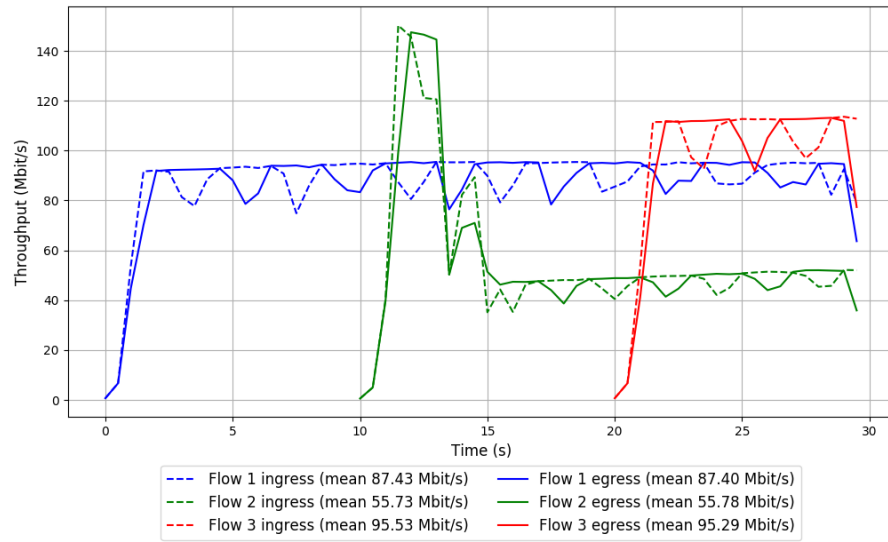
-- Flow 3:

Average throughput: 95.29 Mbit/s

95th percentile per-packet one-way delay: 88.857 ms

Loss rate: 1.99%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-11-21 13:36:48

End at: 2017-11-21 13:37:18

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.69 Mbit/s

95th percentile per-packet one-way delay: 92.497 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 72.20 Mbit/s

95th percentile per-packet one-way delay: 89.934 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 73.60 Mbit/s

95th percentile per-packet one-way delay: 94.488 ms

Loss rate: 0.92%

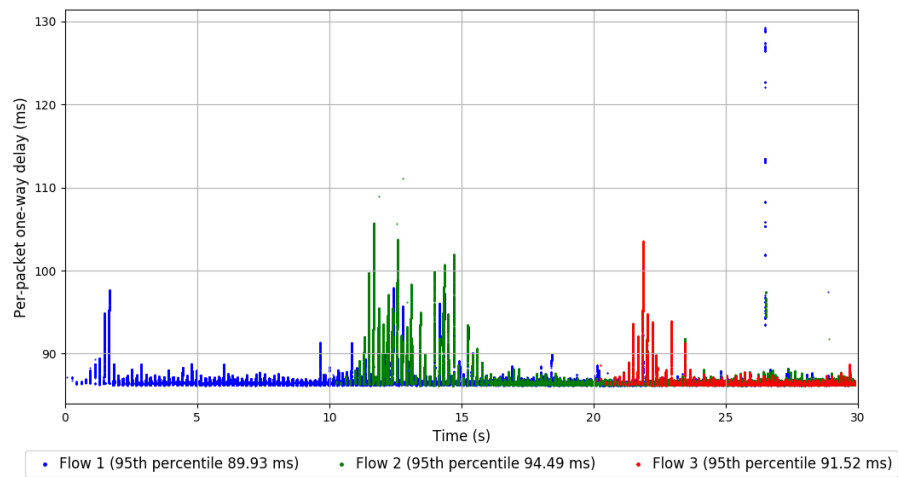
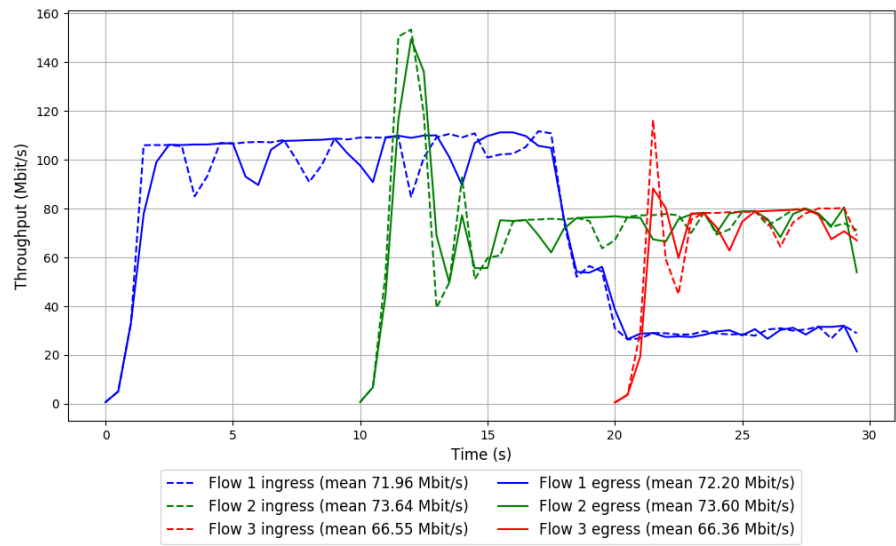
-- Flow 3:

Average throughput: 66.36 Mbit/s

95th percentile per-packet one-way delay: 91.523 ms

Loss rate: 2.03%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-11-21 13:50:30

End at: 2017-11-21 13:51:00

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 69.05 Mbit/s

95th percentile per-packet one-way delay: 90.702 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 24.79 Mbit/s

95th percentile per-packet one-way delay: 87.916 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 46.57 Mbit/s

95th percentile per-packet one-way delay: 93.408 ms

Loss rate: 0.82%

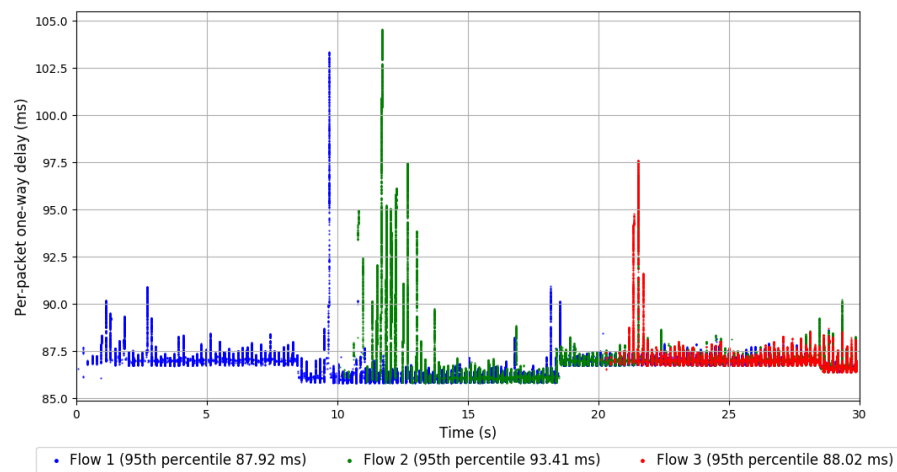
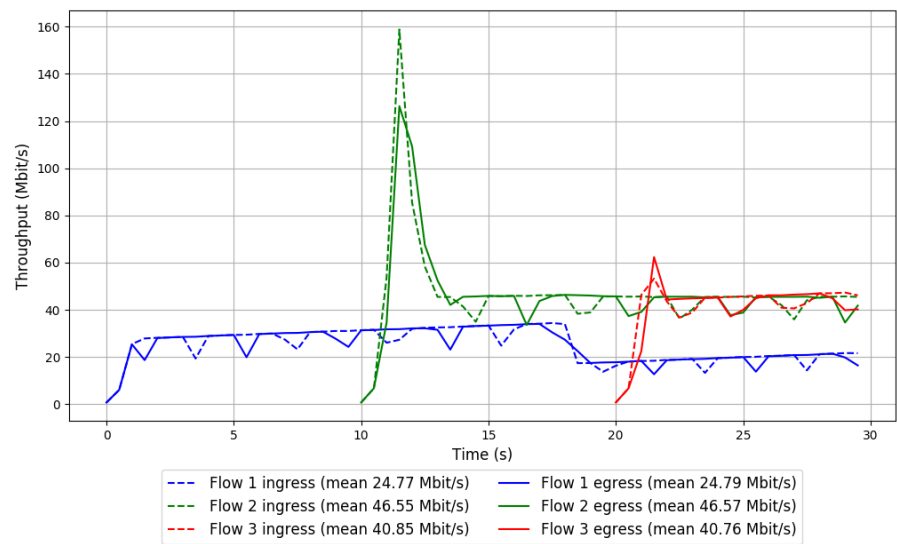
-- Flow 3:

Average throughput: 40.76 Mbit/s

95th percentile per-packet one-way delay: 88.022 ms

Loss rate: 1.95%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-11-21 14:03:54

End at: 2017-11-21 14:04:24

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.85 Mbit/s

95th percentile per-packet one-way delay: 87.858 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 36.11 Mbit/s

95th percentile per-packet one-way delay: 88.024 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 101.98 Mbit/s

95th percentile per-packet one-way delay: 87.523 ms

Loss rate: 0.94%

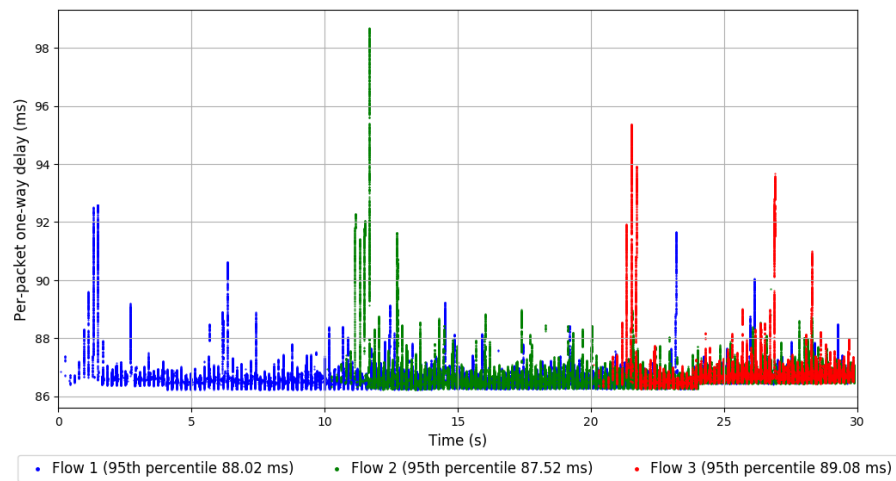
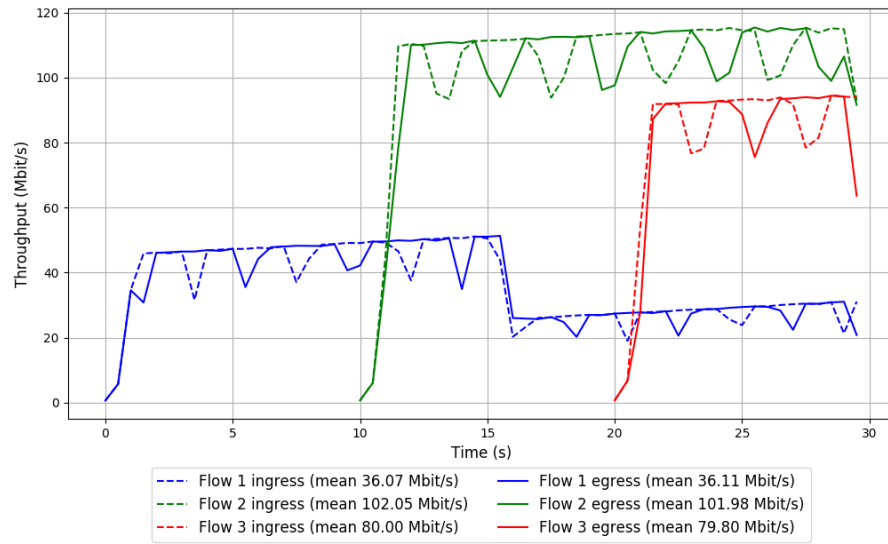
-- Flow 3:

Average throughput: 79.80 Mbit/s

95th percentile per-packet one-way delay: 89.081 ms

Loss rate: 1.99%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-11-21 14:17:22

End at: 2017-11-21 14:17:52

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.92 Mbit/s

95th percentile per-packet one-way delay: 89.121 ms

Loss rate: 1.10%

-- Flow 1:

Average throughput: 19.78 Mbit/s

95th percentile per-packet one-way delay: 88.397 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 84.98 Mbit/s

95th percentile per-packet one-way delay: 88.424 ms

Loss rate: 0.94%

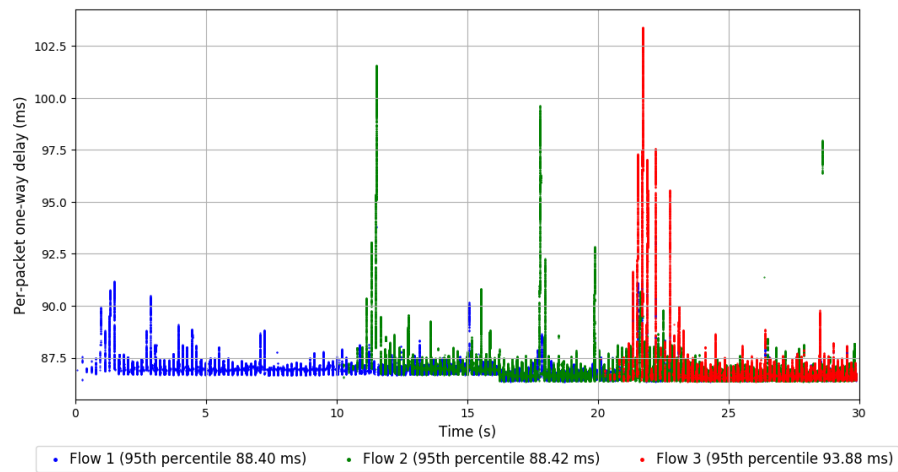
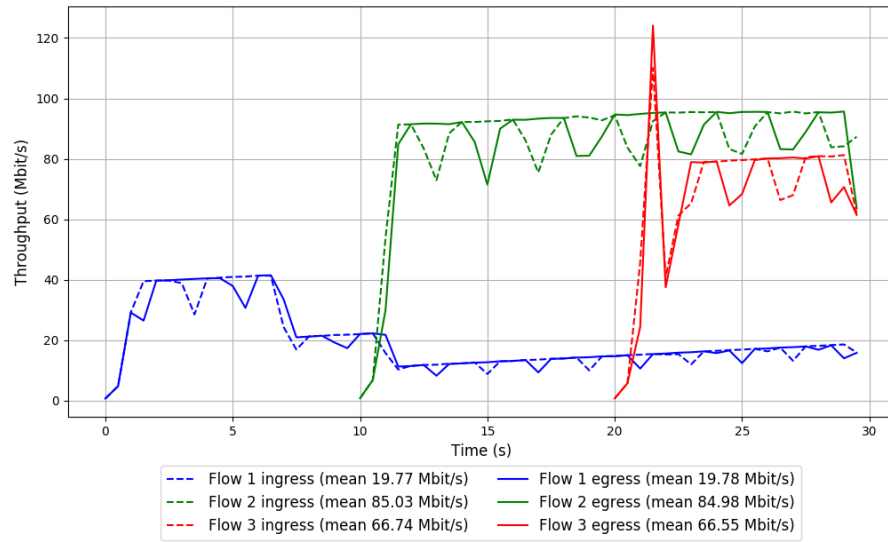
-- Flow 3:

Average throughput: 66.55 Mbit/s

95th percentile per-packet one-way delay: 93.877 ms

Loss rate: 2.03%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-11-21 14:30:42

End at: 2017-11-21 14:31:12

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.52 Mbit/s

95th percentile per-packet one-way delay: 102.924 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 24.43 Mbit/s

95th percentile per-packet one-way delay: 92.184 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 106.60 Mbit/s

95th percentile per-packet one-way delay: 105.418 ms

Loss rate: 0.30%

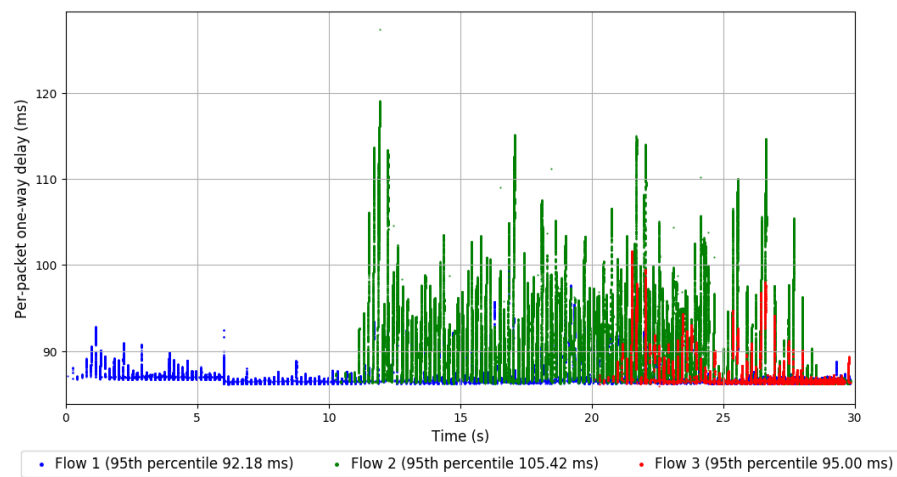
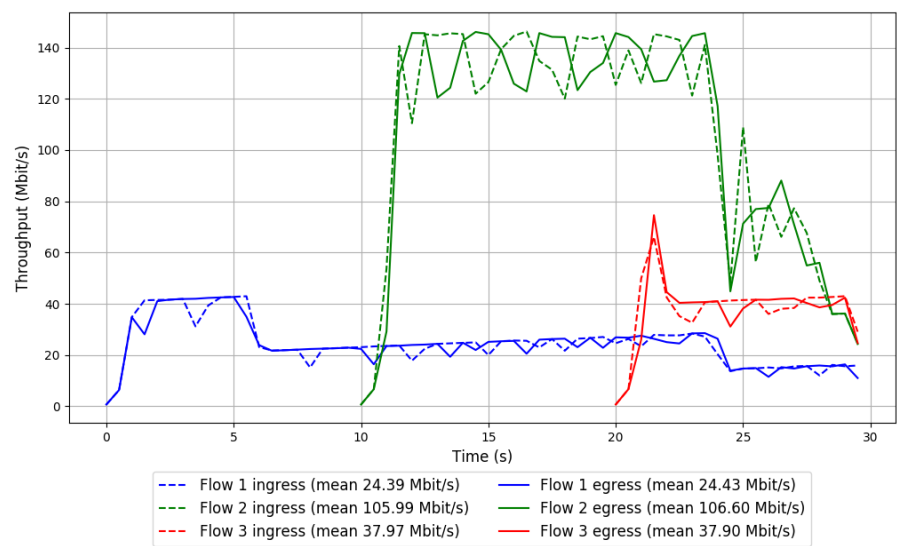
-- Flow 3:

Average throughput: 37.90 Mbit/s

95th percentile per-packet one-way delay: 95.004 ms

Loss rate: 1.92%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-11-21 14:44:11

End at: 2017-11-21 14:44:41

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.05 Mbit/s

95th percentile per-packet one-way delay: 95.773 ms

Loss rate: 0.49%

-- Flow 1:

Average throughput: 58.58 Mbit/s

95th percentile per-packet one-way delay: 92.625 ms

Loss rate: 0.23%

-- Flow 2:

Average throughput: 98.10 Mbit/s

95th percentile per-packet one-way delay: 97.781 ms

Loss rate: 0.51%

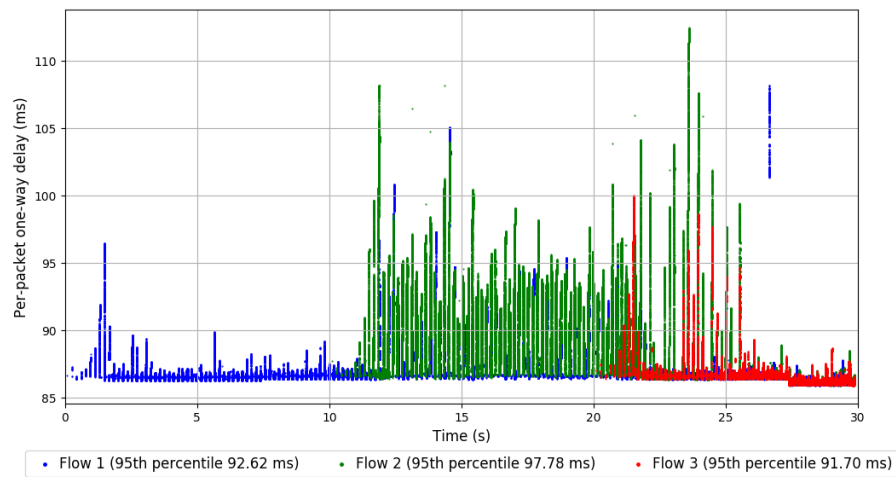
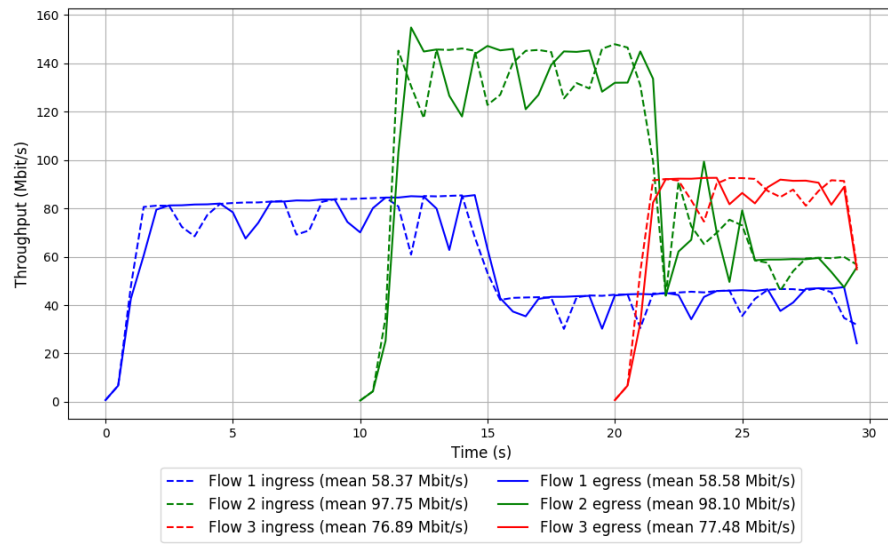
-- Flow 3:

Average throughput: 77.48 Mbit/s

95th percentile per-packet one-way delay: 91.699 ms

Loss rate: 1.00%

Run 10: Report of TCP Vegas — Data Link

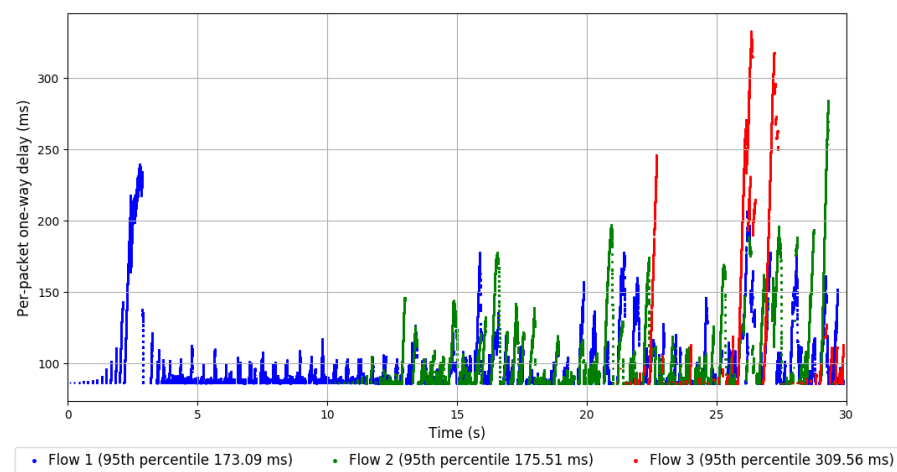
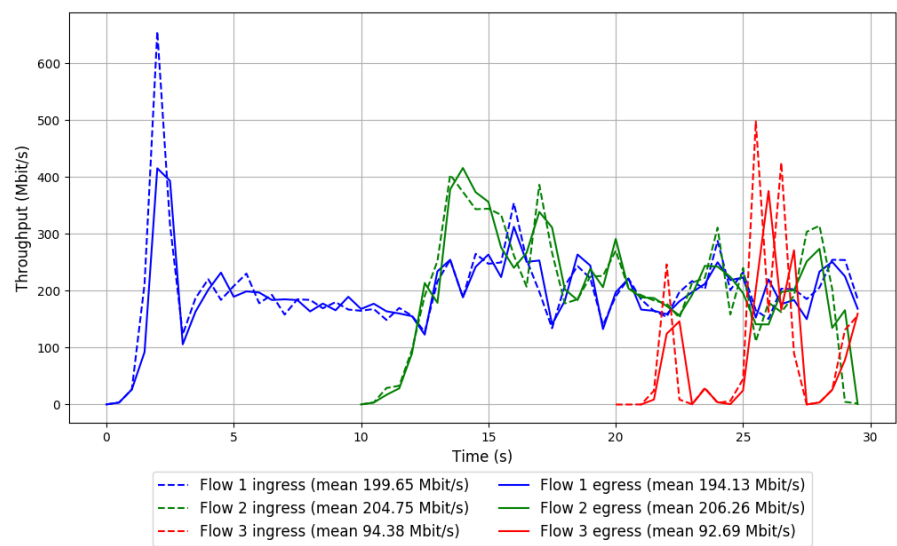


```
Run 1: Statistics of Verus

Start at: 2017-11-21 12:51:56
End at: 2017-11-21 12:52:26

# Below is generated by plot.py at 2017-11-21 18:04:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.87 Mbit/s
95th percentile per-packet one-way delay: 205.808 ms
Loss rate: 2.94%
-- Flow 1:
Average throughput: 194.13 Mbit/s
95th percentile per-packet one-way delay: 173.091 ms
Loss rate: 3.33%
-- Flow 2:
Average throughput: 206.26 Mbit/s
95th percentile per-packet one-way delay: 175.507 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 92.69 Mbit/s
95th percentile per-packet one-way delay: 309.556 ms
Loss rate: 12.66%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-11-21 13:05:08

End at: 2017-11-21 13:05:38

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 313.33 Mbit/s

95th percentile per-packet one-way delay: 201.940 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 197.75 Mbit/s

95th percentile per-packet one-way delay: 160.632 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 137.14 Mbit/s

95th percentile per-packet one-way delay: 240.146 ms

Loss rate: 1.46%

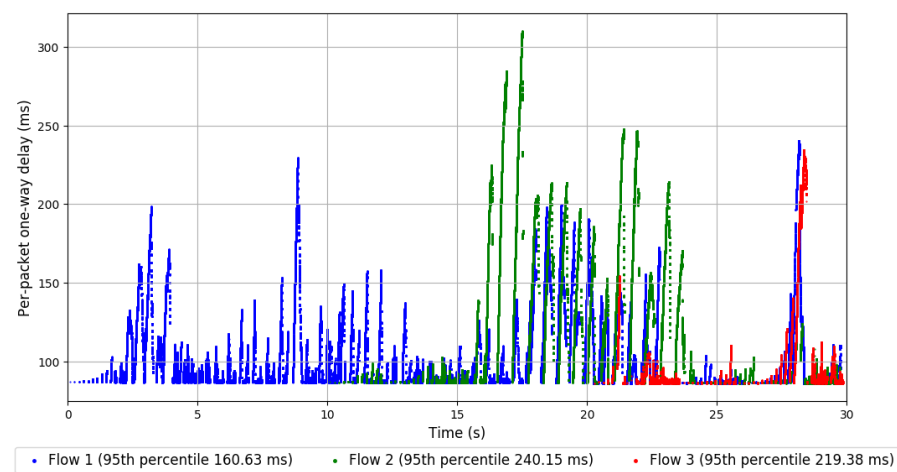
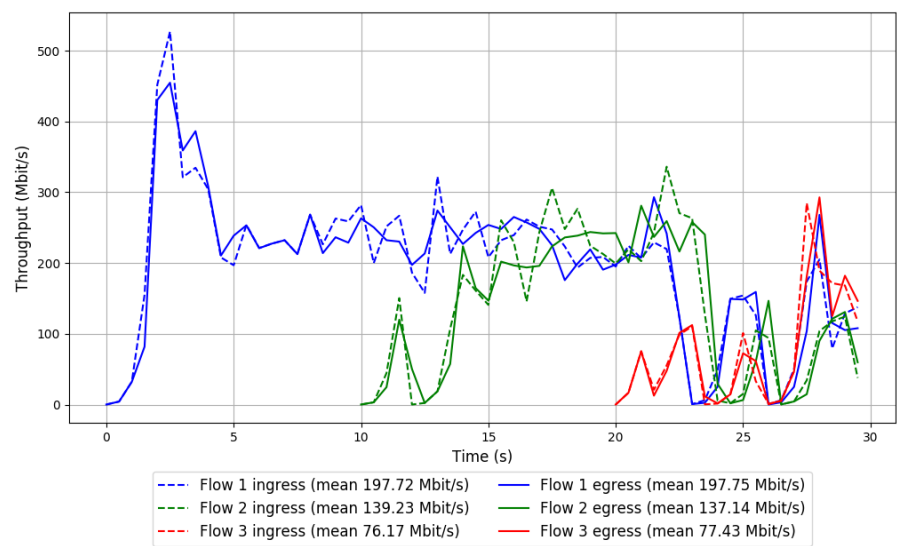
-- Flow 3:

Average throughput: 77.43 Mbit/s

95th percentile per-packet one-way delay: 219.376 ms

Loss rate: 0.25%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-11-21 13:18:38

End at: 2017-11-21 13:19:08

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 298.01 Mbit/s

95th percentile per-packet one-way delay: 134.127 ms

Loss rate: 1.95%

-- Flow 1:

Average throughput: 221.38 Mbit/s

95th percentile per-packet one-way delay: 141.478 ms

Loss rate: 1.92%

-- Flow 2:

Average throughput: 57.38 Mbit/s

95th percentile per-packet one-way delay: 111.625 ms

Loss rate: 2.34%

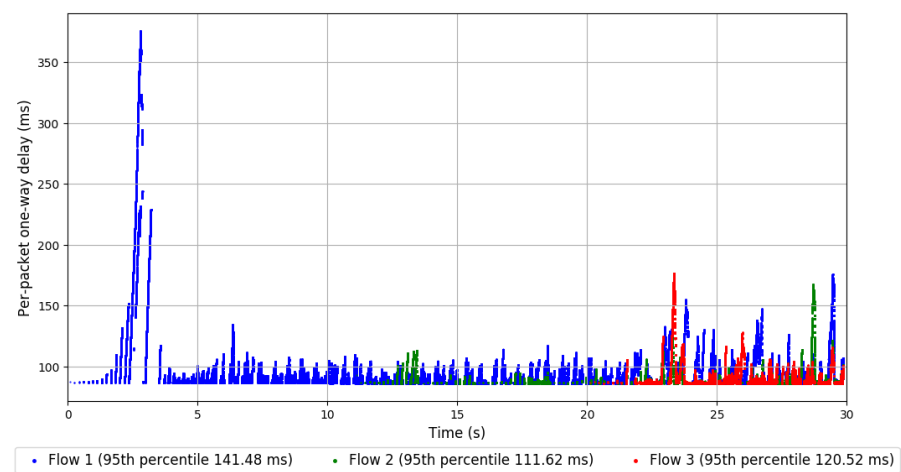
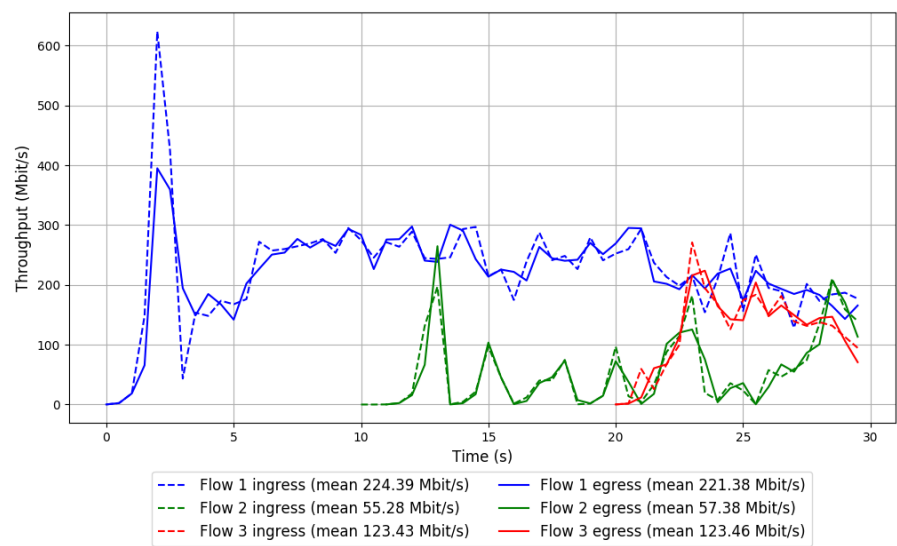
-- Flow 3:

Average throughput: 123.46 Mbit/s

95th percentile per-packet one-way delay: 120.524 ms

Loss rate: 1.71%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-11-21 13:31:52

End at: 2017-11-21 13:32:22

Below is generated by plot.py at 2017-11-21 18:04:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 268.51 Mbit/s

95th percentile per-packet one-way delay: 239.206 ms

Loss rate: 5.77%

-- Flow 1:

Average throughput: 222.38 Mbit/s

95th percentile per-packet one-way delay: 246.955 ms

Loss rate: 6.14%

-- Flow 2:

Average throughput: 31.86 Mbit/s

95th percentile per-packet one-way delay: 149.195 ms

Loss rate: 0.03%

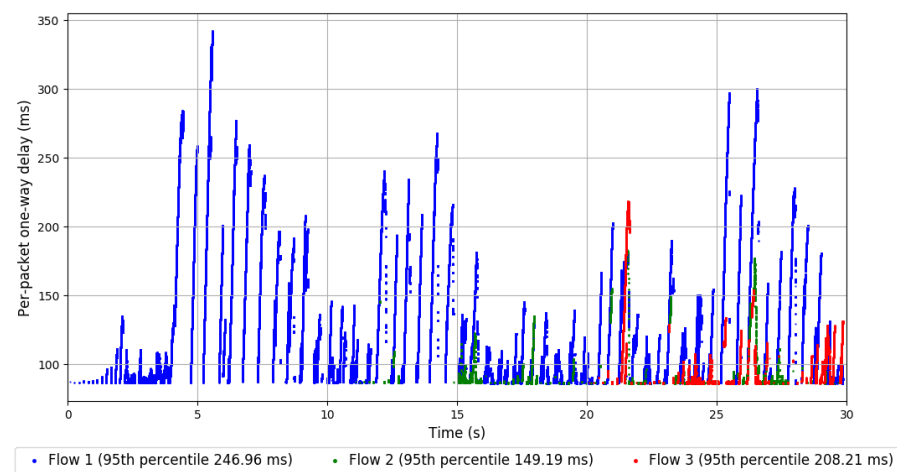
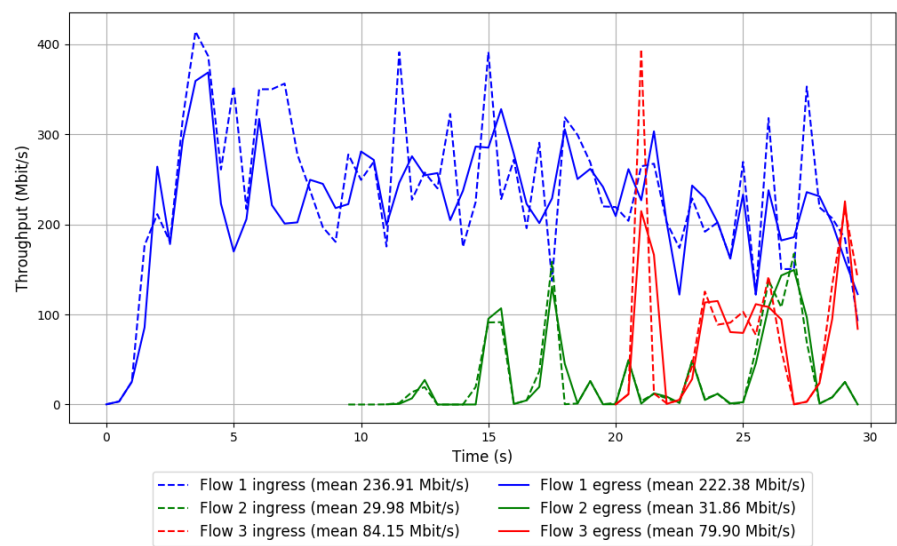
-- Flow 3:

Average throughput: 79.90 Mbit/s

95th percentile per-packet one-way delay: 208.212 ms

Loss rate: 6.72%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-11-21 13:45:21

End at: 2017-11-21 13:45:51

Below is generated by plot.py at 2017-11-21 18:05:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 352.43 Mbit/s

95th percentile per-packet one-way delay: 291.424 ms

Loss rate: 8.61%

-- Flow 1:

Average throughput: 156.75 Mbit/s

95th percentile per-packet one-way delay: 182.139 ms

Loss rate: 3.23%

-- Flow 2:

Average throughput: 217.46 Mbit/s

95th percentile per-packet one-way delay: 304.939 ms

Loss rate: 14.52%

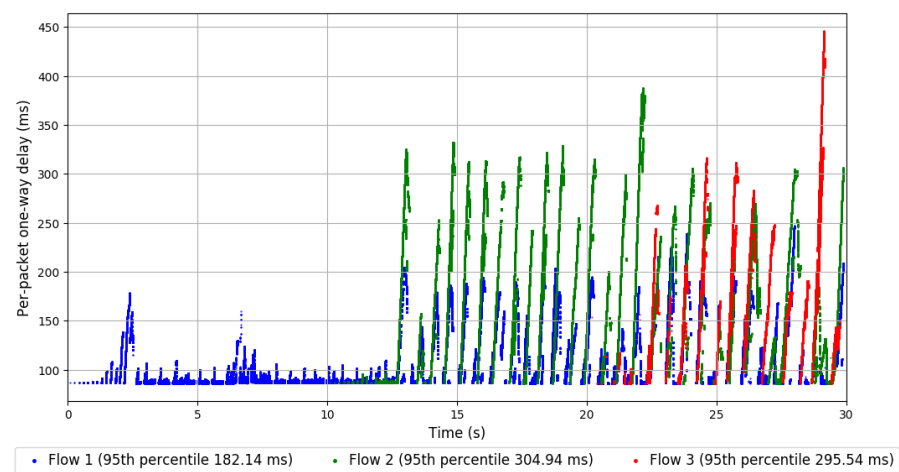
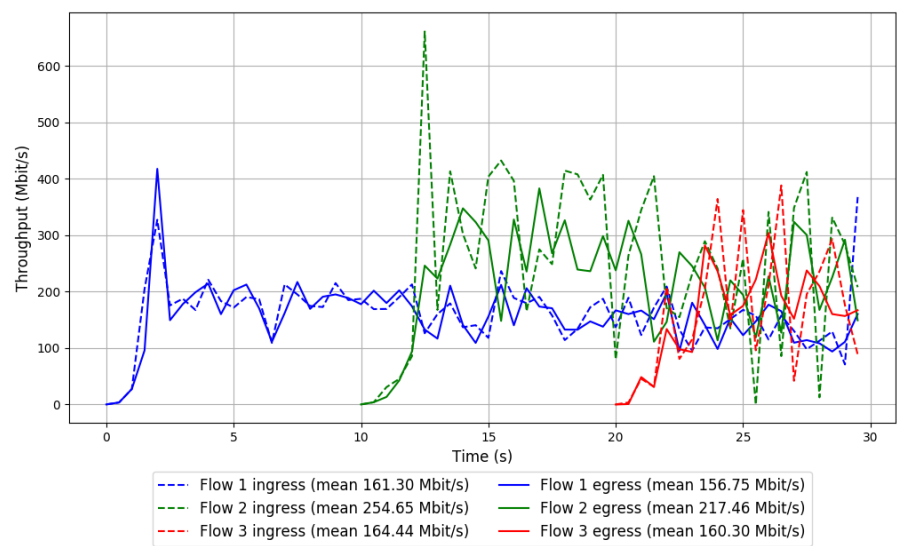
-- Flow 3:

Average throughput: 160.30 Mbit/s

95th percentile per-packet one-way delay: 295.542 ms

Loss rate: 6.27%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-11-21 13:59:02

End at: 2017-11-21 13:59:32

Below is generated by plot.py at 2017-11-21 18:05:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.31 Mbit/s

95th percentile per-packet one-way delay: 132.080 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 112.63 Mbit/s

95th percentile per-packet one-way delay: 143.645 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 74.32 Mbit/s

95th percentile per-packet one-way delay: 110.160 ms

Loss rate: 1.07%

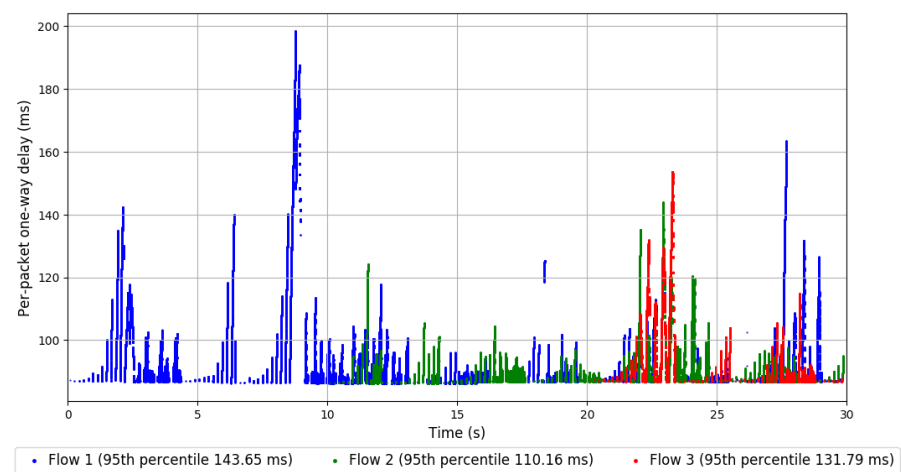
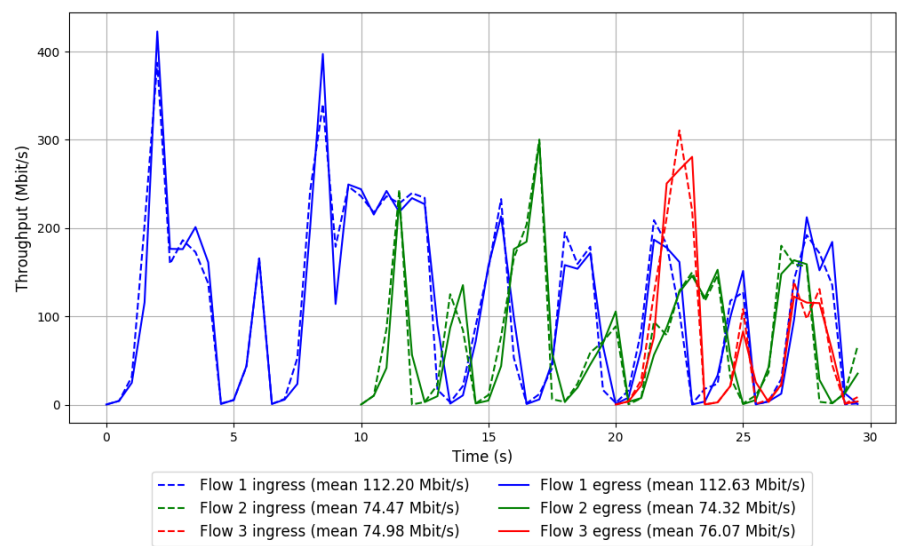
-- Flow 3:

Average throughput: 76.07 Mbit/s

95th percentile per-packet one-way delay: 131.793 ms

Loss rate: 0.34%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-11-21 14:12:25

End at: 2017-11-21 14:12:55

Below is generated by plot.py at 2017-11-21 18:07:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 221.68 Mbit/s

95th percentile per-packet one-way delay: 152.979 ms

Loss rate: 3.06%

-- Flow 1:

Average throughput: 170.62 Mbit/s

95th percentile per-packet one-way delay: 172.535 ms

Loss rate: 3.49%

-- Flow 2:

Average throughput: 53.65 Mbit/s

95th percentile per-packet one-way delay: 131.285 ms

Loss rate: 0.10%

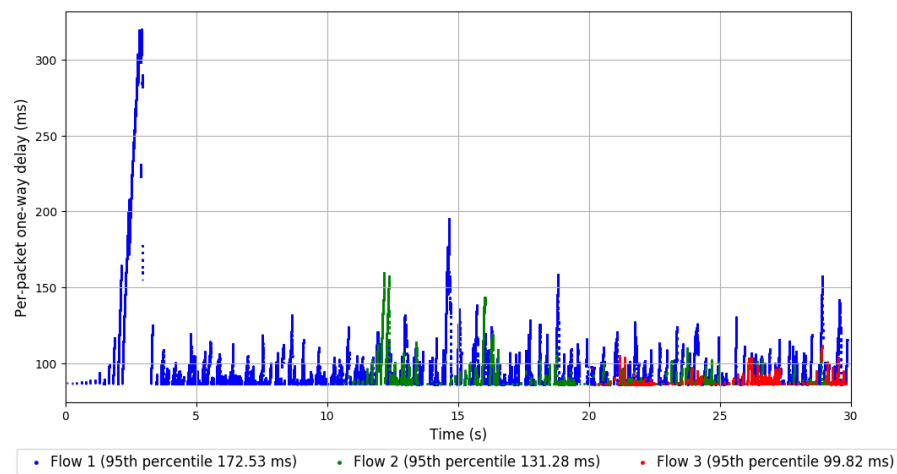
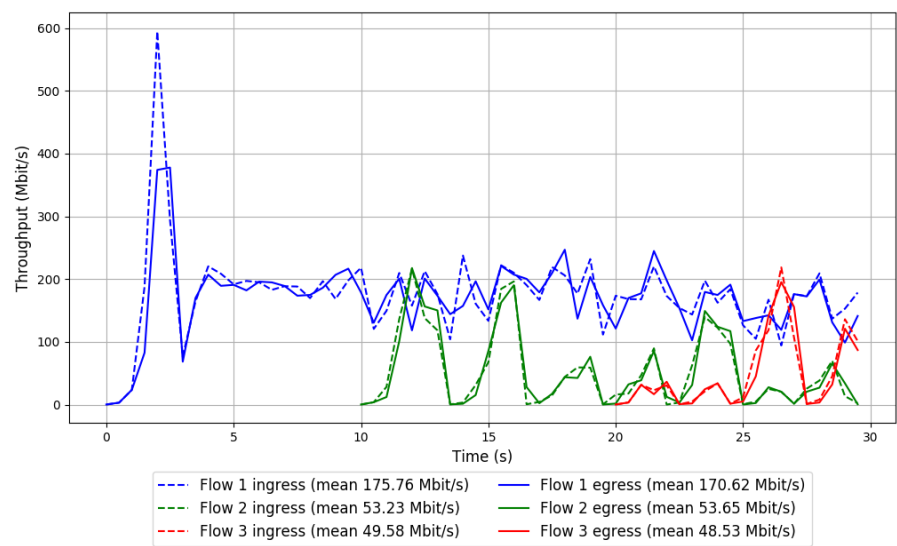
-- Flow 3:

Average throughput: 48.53 Mbit/s

95th percentile per-packet one-way delay: 99.822 ms

Loss rate: 4.77%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-11-21 14:25:48

End at: 2017-11-21 14:26:18

Below is generated by plot.py at 2017-11-21 18:08:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.26 Mbit/s

95th percentile per-packet one-way delay: 128.277 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 175.80 Mbit/s

95th percentile per-packet one-way delay: 121.759 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 106.52 Mbit/s

95th percentile per-packet one-way delay: 118.082 ms

Loss rate: 0.85%

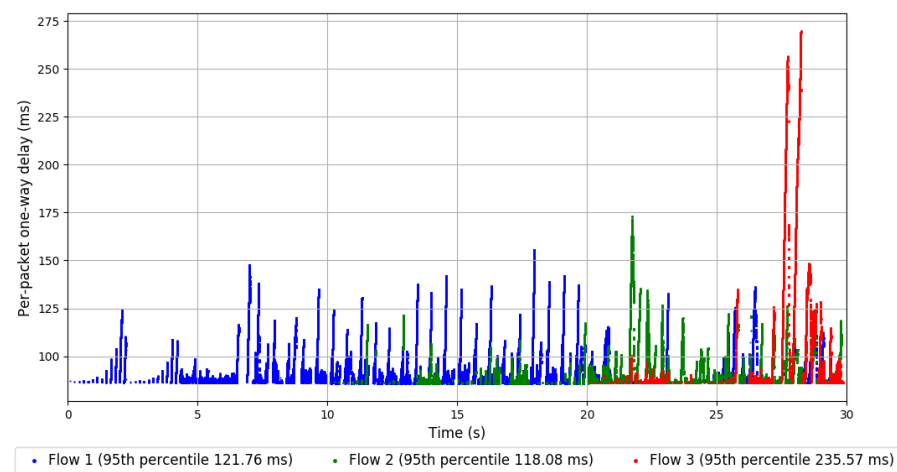
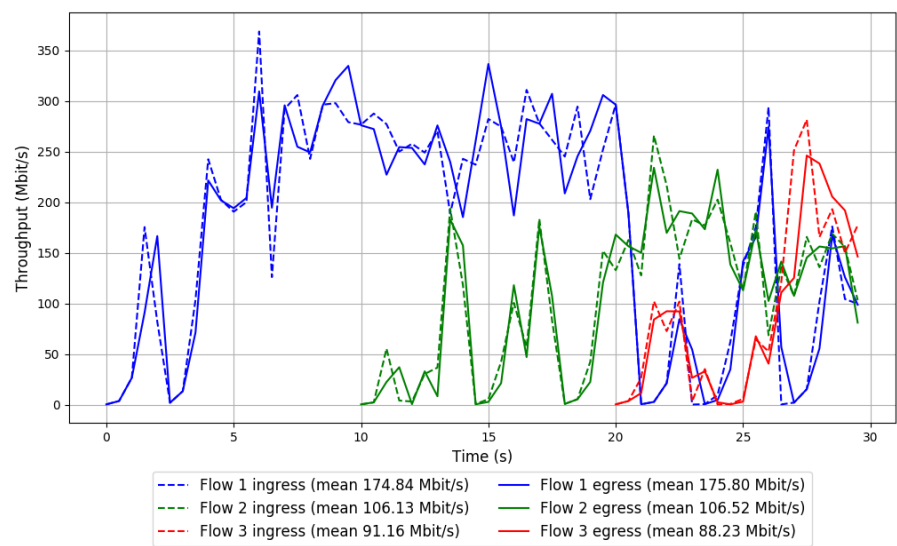
-- Flow 3:

Average throughput: 88.23 Mbit/s

95th percentile per-packet one-way delay: 235.568 ms

Loss rate: 4.86%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-11-21 14:39:17

End at: 2017-11-21 14:39:47

Below is generated by plot.py at 2017-11-21 18:08:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.89 Mbit/s

95th percentile per-packet one-way delay: 174.561 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 163.38 Mbit/s

95th percentile per-packet one-way delay: 161.541 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 134.15 Mbit/s

95th percentile per-packet one-way delay: 189.337 ms

Loss rate: 0.86%

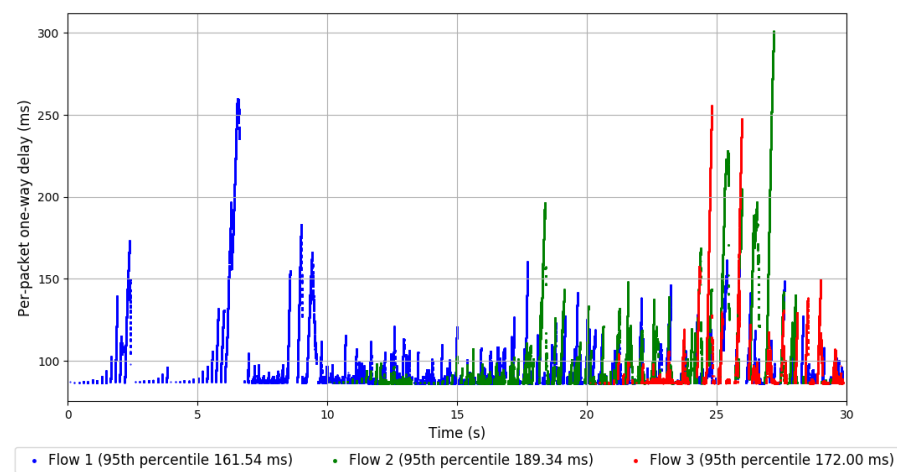
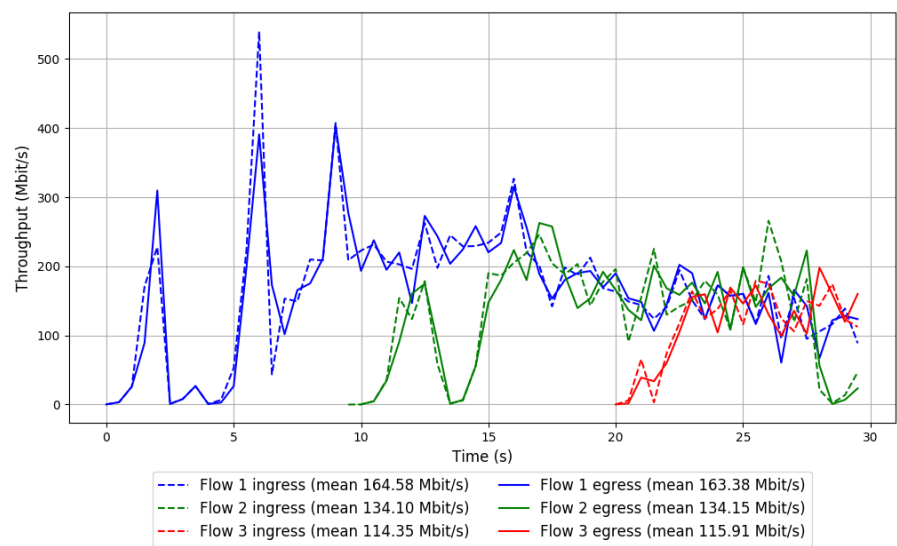
-- Flow 3:

Average throughput: 115.91 Mbit/s

95th percentile per-packet one-way delay: 171.997 ms

Loss rate: 0.42%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-11-21 14:52:49

End at: 2017-11-21 14:53:19

Below is generated by plot.py at 2017-11-21 18:08:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.49 Mbit/s

95th percentile per-packet one-way delay: 175.975 ms

Loss rate: 4.74%

-- Flow 1:

Average throughput: 121.23 Mbit/s

95th percentile per-packet one-way delay: 211.506 ms

Loss rate: 6.28%

-- Flow 2:

Average throughput: 75.38 Mbit/s

95th percentile per-packet one-way delay: 131.966 ms

Loss rate: 0.86%

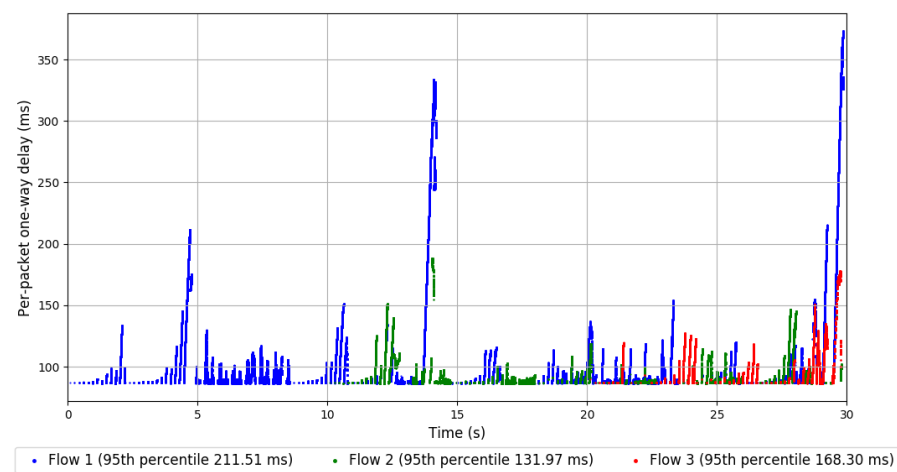
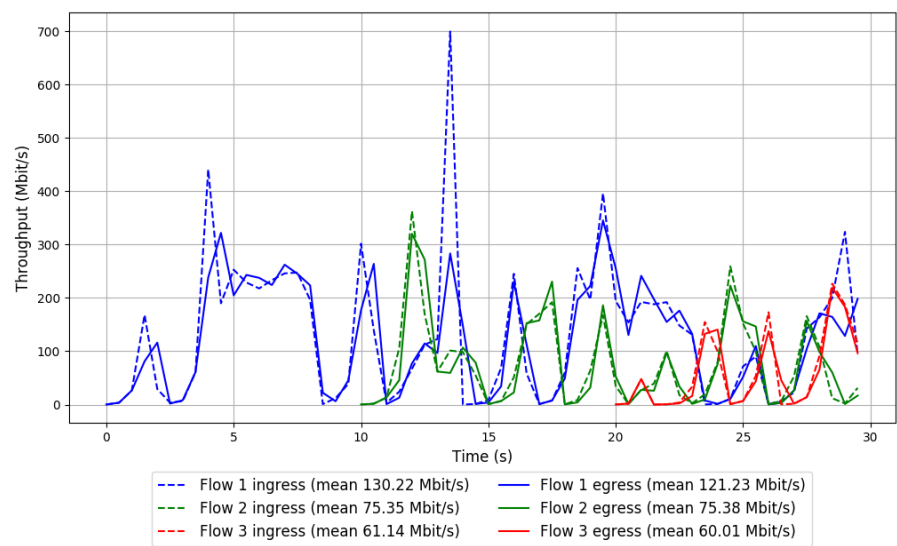
-- Flow 3:

Average throughput: 60.01 Mbit/s

95th percentile per-packet one-way delay: 168.300 ms

Loss rate: 4.60%

Run 10: Report of Verus — Data Link

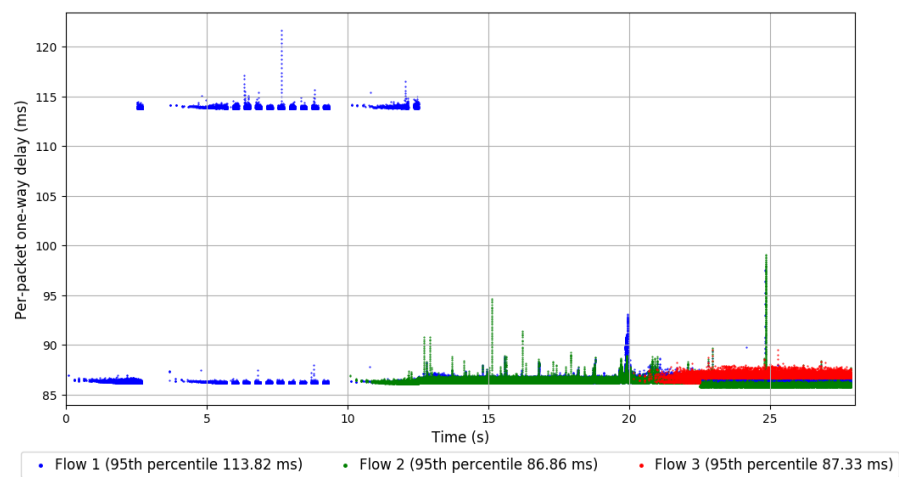
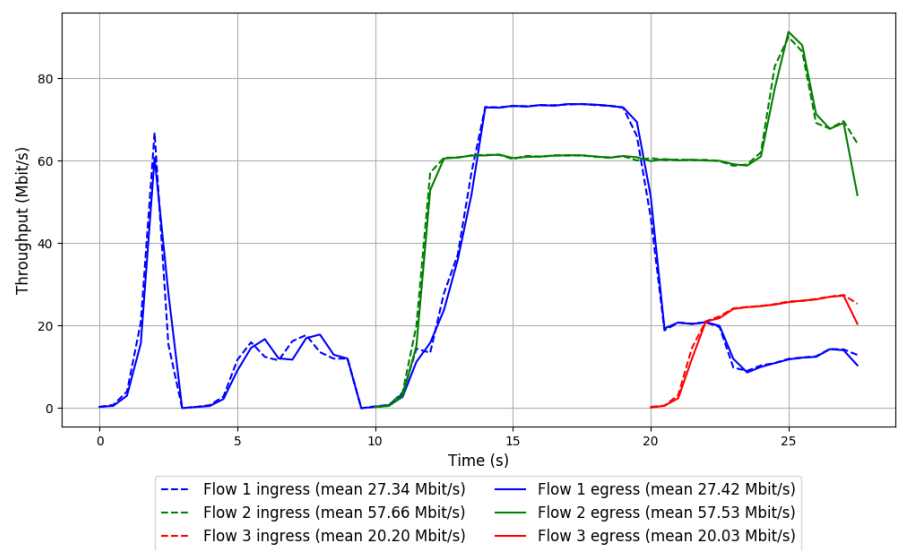


```
Run 1: Statistics of Copa

Start at: 2017-11-21 12:55:04
End at: 2017-11-21 12:55:34

# Below is generated by plot.py at 2017-11-21 18:08:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.78 Mbit/s
95th percentile per-packet one-way delay: 87.066 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 27.42 Mbit/s
95th percentile per-packet one-way delay: 113.820 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 57.53 Mbit/s
95th percentile per-packet one-way delay: 86.864 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 20.03 Mbit/s
95th percentile per-packet one-way delay: 87.333 ms
Loss rate: 3.04%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-11-21 13:08:24

End at: 2017-11-21 13:08:54

Below is generated by plot.py at 2017-11-21 18:08:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.14 Mbit/s

95th percentile per-packet one-way delay: 86.835 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 51.88 Mbit/s

95th percentile per-packet one-way delay: 86.792 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 55.90 Mbit/s

95th percentile per-packet one-way delay: 86.831 ms

Loss rate: 1.61%

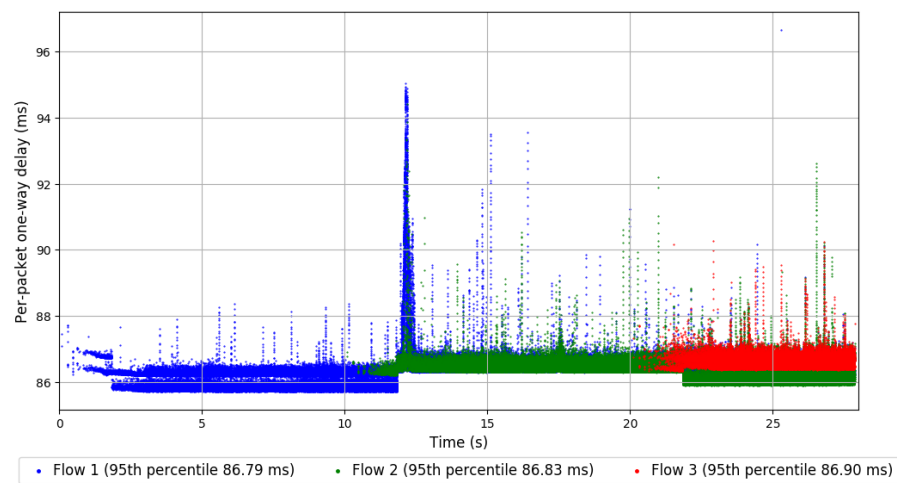
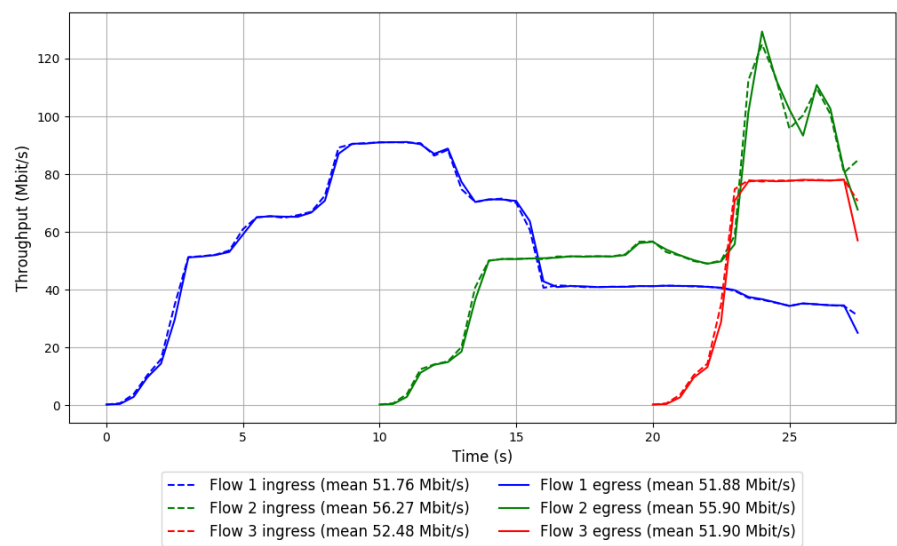
-- Flow 3:

Average throughput: 51.90 Mbit/s

95th percentile per-packet one-way delay: 86.896 ms

Loss rate: 3.27%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-11-21 13:21:53

End at: 2017-11-21 13:22:23

Below is generated by plot.py at 2017-11-21 18:08:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.15 Mbit/s

95th percentile per-packet one-way delay: 86.866 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 73.23 Mbit/s

95th percentile per-packet one-way delay: 86.884 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 58.44 Mbit/s

95th percentile per-packet one-way delay: 86.795 ms

Loss rate: 1.18%

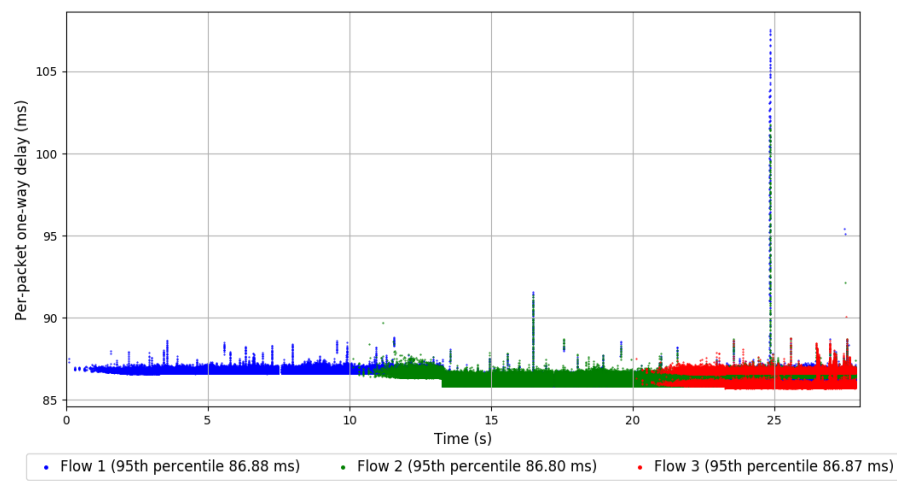
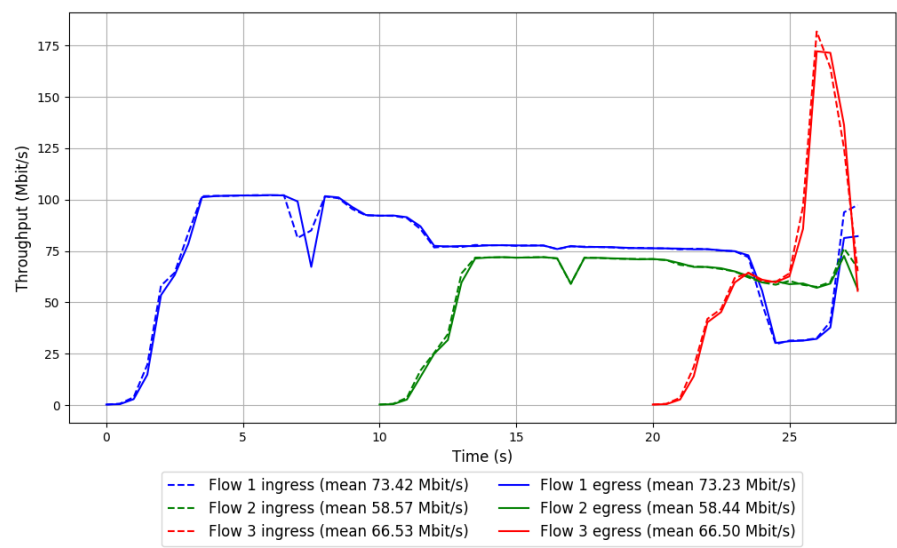
-- Flow 3:

Average throughput: 66.50 Mbit/s

95th percentile per-packet one-way delay: 86.874 ms

Loss rate: 2.22%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-11-21 13:35:06

End at: 2017-11-21 13:35:36

Below is generated by plot.py at 2017-11-21 18:09:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.25 Mbit/s

95th percentile per-packet one-way delay: 86.564 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 72.83 Mbit/s

95th percentile per-packet one-way delay: 86.510 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 54.52 Mbit/s

95th percentile per-packet one-way delay: 86.614 ms

Loss rate: 1.14%

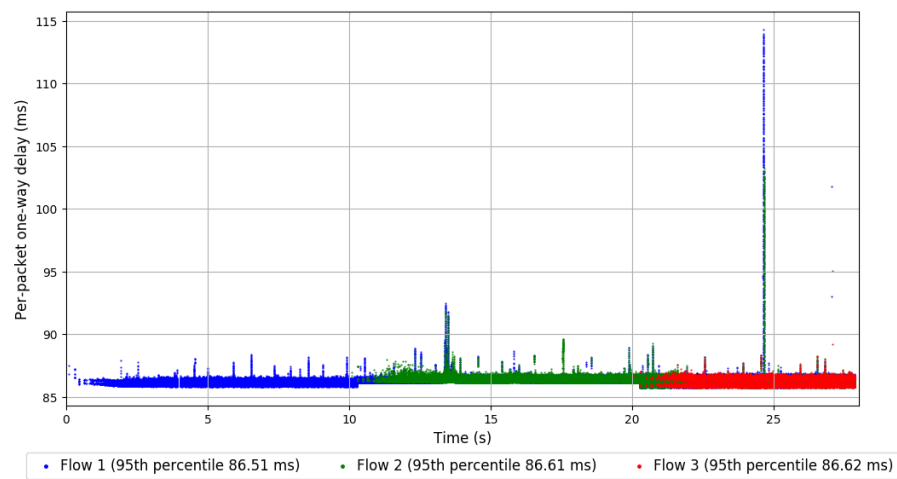
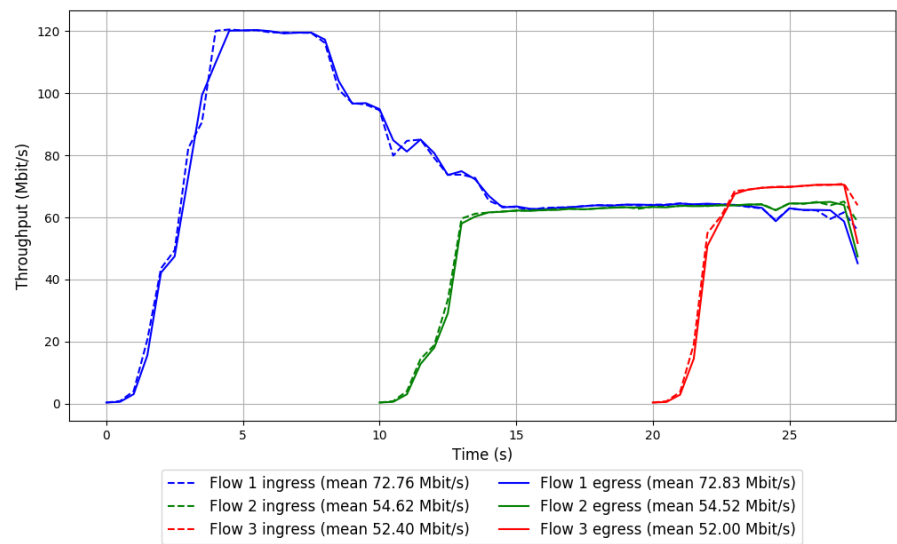
-- Flow 3:

Average throughput: 52.00 Mbit/s

95th percentile per-packet one-way delay: 86.619 ms

Loss rate: 2.94%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-11-21 13:48:47

End at: 2017-11-21 13:49:17

Below is generated by plot.py at 2017-11-21 18:10:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.32 Mbit/s

95th percentile per-packet one-way delay: 87.017 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 73.31 Mbit/s

95th percentile per-packet one-way delay: 86.897 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 59.55 Mbit/s

95th percentile per-packet one-way delay: 87.144 ms

Loss rate: 0.49%

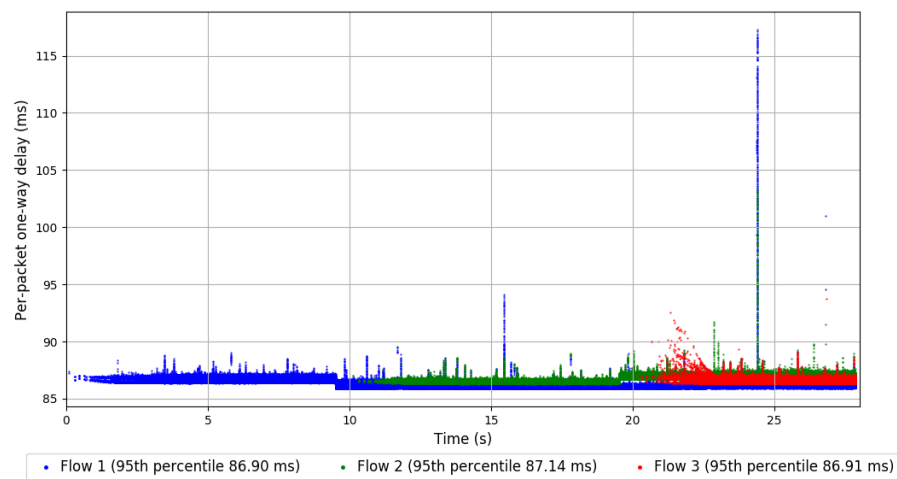
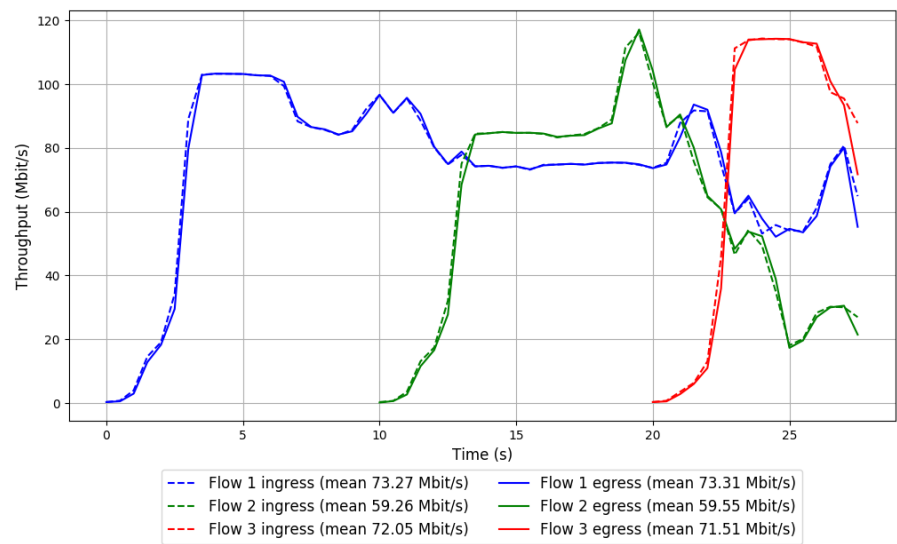
-- Flow 3:

Average throughput: 71.51 Mbit/s

95th percentile per-packet one-way delay: 86.914 ms

Loss rate: 2.92%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-11-21 14:02:12

End at: 2017-11-21 14:02:42

Below is generated by plot.py at 2017-11-21 18:10:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 121.77 Mbit/s

95th percentile per-packet one-way delay: 86.839 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 73.87 Mbit/s

95th percentile per-packet one-way delay: 86.820 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 63.25 Mbit/s

95th percentile per-packet one-way delay: 86.820 ms

Loss rate: 0.73%

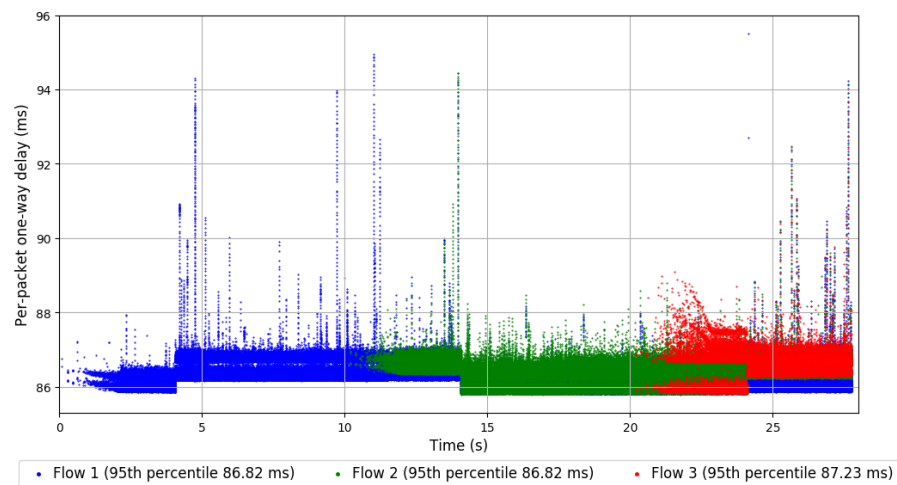
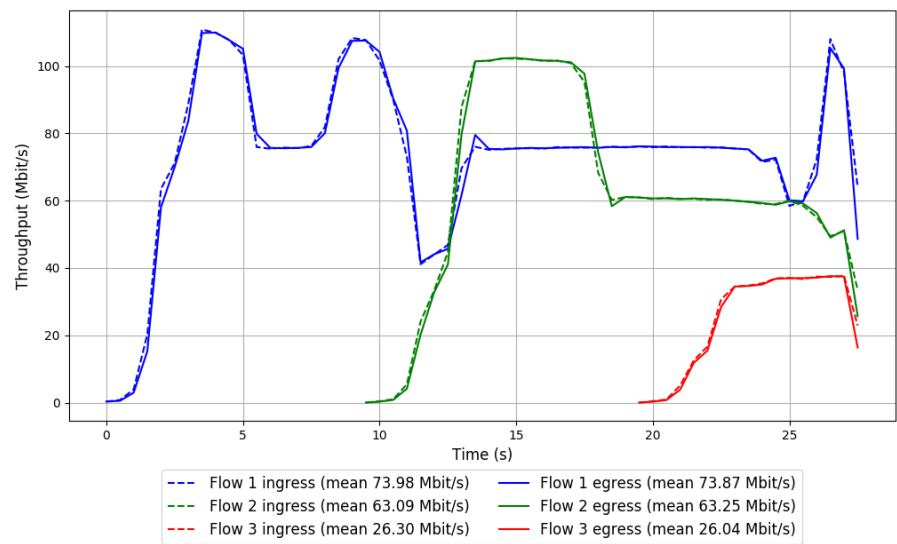
-- Flow 3:

Average throughput: 26.04 Mbit/s

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

Loss rate: 3.13%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-11-21 14:15:38

End at: 2017-11-21 14:16:08

Below is generated by plot.py at 2017-11-21 18:10:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 107.33 Mbit/s

95th percentile per-packet one-way delay: 87.044 ms

Loss rate: 0.74%

-- Flow 1:

Average throughput: 58.89 Mbit/s

95th percentile per-packet one-way delay: 87.008 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 57.33 Mbit/s

95th percentile per-packet one-way delay: 87.106 ms

Loss rate: 0.51%

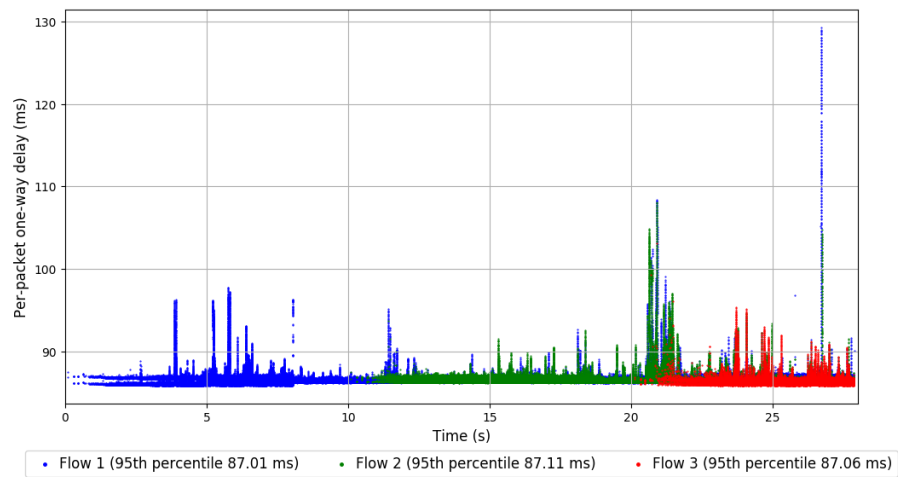
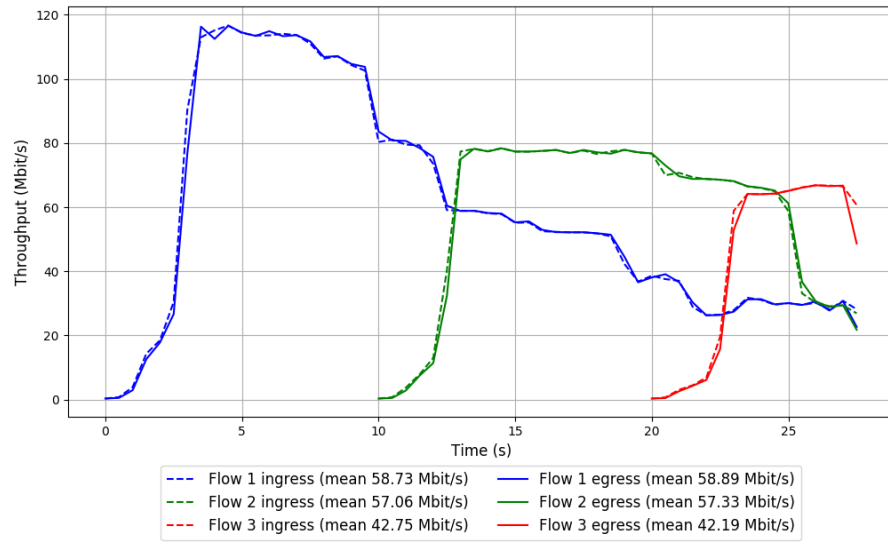
-- Flow 3:

Average throughput: 42.19 Mbit/s

95th percentile per-packet one-way delay: 87.062 ms

Loss rate: 3.45%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2017-11-21 14:29:00

End at: 2017-11-21 14:29:30

Below is generated by plot.py at 2017-11-21 18:11:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.84 Mbit/s

95th percentile per-packet one-way delay: 86.902 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 72.03 Mbit/s

95th percentile per-packet one-way delay: 86.803 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 56.73 Mbit/s

95th percentile per-packet one-way delay: 87.027 ms

Loss rate: 0.96%

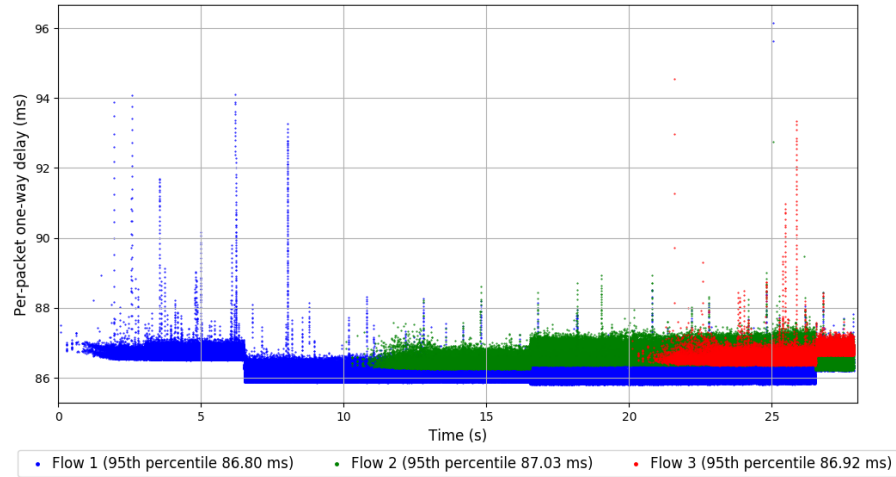
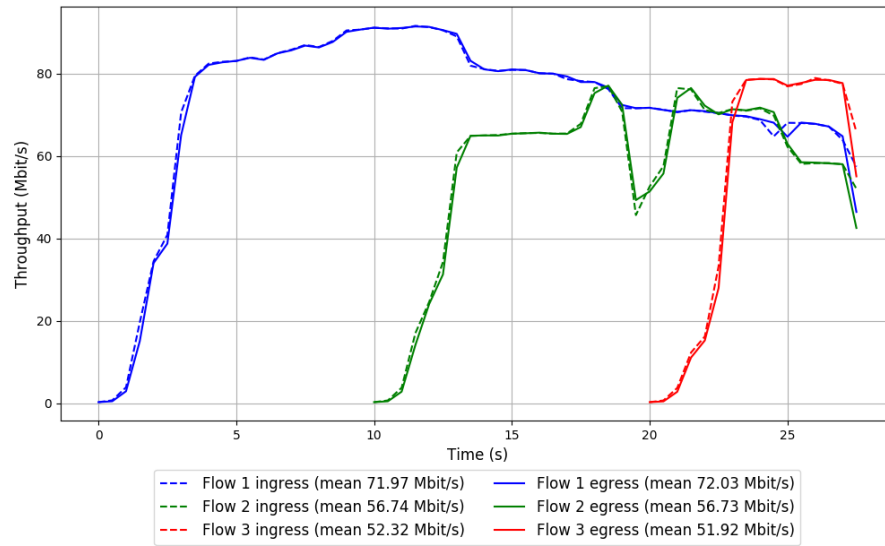
-- Flow 3:

Average throughput: 51.92 Mbit/s

95th percentile per-packet one-way delay: 86.918 ms

Loss rate: 2.91%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-11-21 14:42:31

End at: 2017-11-21 14:43:01

Below is generated by plot.py at 2017-11-21 18:11:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.04 Mbit/s

95th percentile per-packet one-way delay: 86.869 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 50.95 Mbit/s

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

Loss rate: 0.27%

-- Flow 2:

Average throughput: 54.10 Mbit/s

95th percentile per-packet one-way delay: 86.532 ms

Loss rate: 1.25%

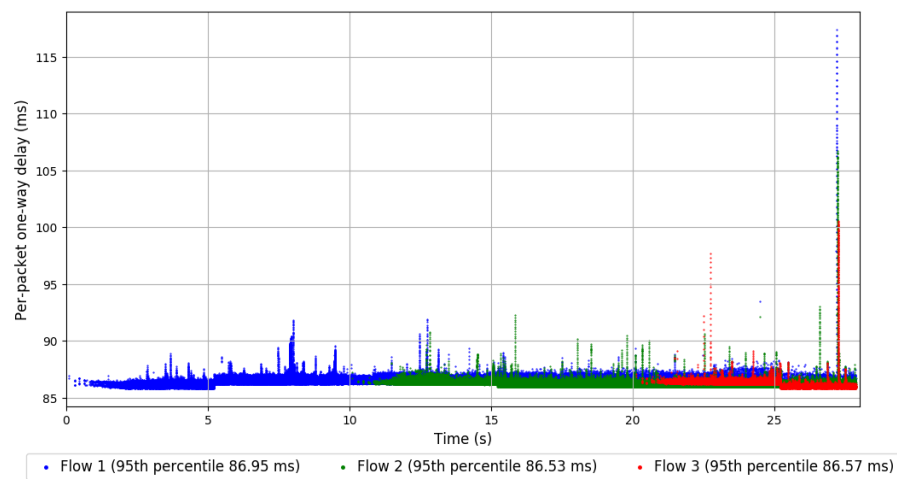
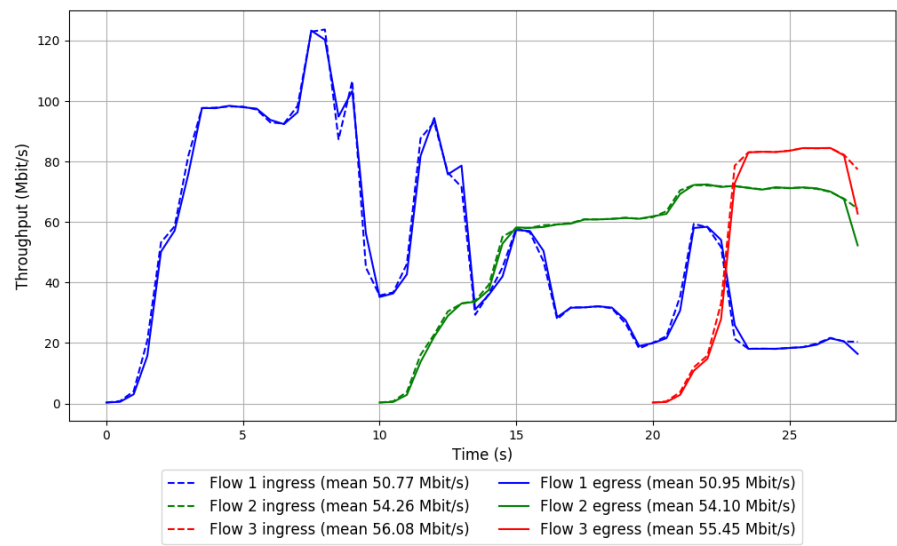
-- Flow 3:

Average throughput: 55.45 Mbit/s

95th percentile per-packet one-way delay: 86.568 ms

Loss rate: 3.29%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-11-21 14:55:57

End at: 2017-11-21 14:56:27

Below is generated by plot.py at 2017-11-21 18:12:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 119.17 Mbit/s

95th percentile per-packet one-way delay: 86.883 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 63.53 Mbit/s

95th percentile per-packet one-way delay: 86.873 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 60.33 Mbit/s

95th percentile per-packet one-way delay: 86.873 ms

Loss rate: 0.78%

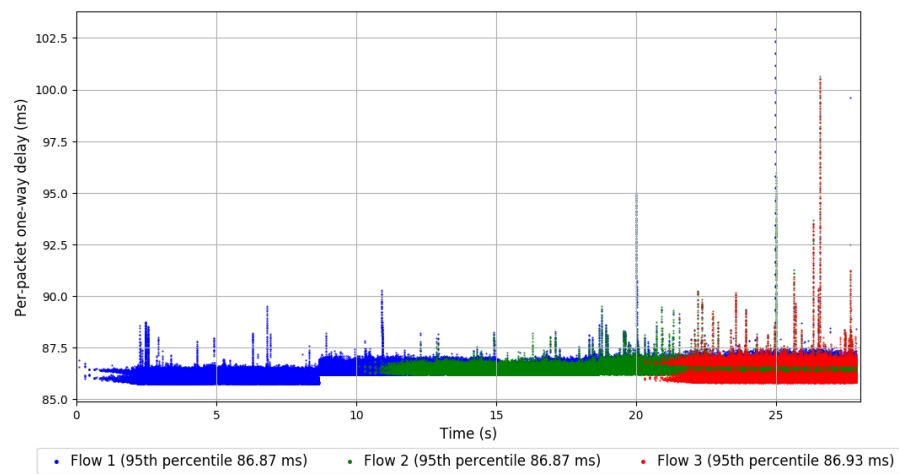
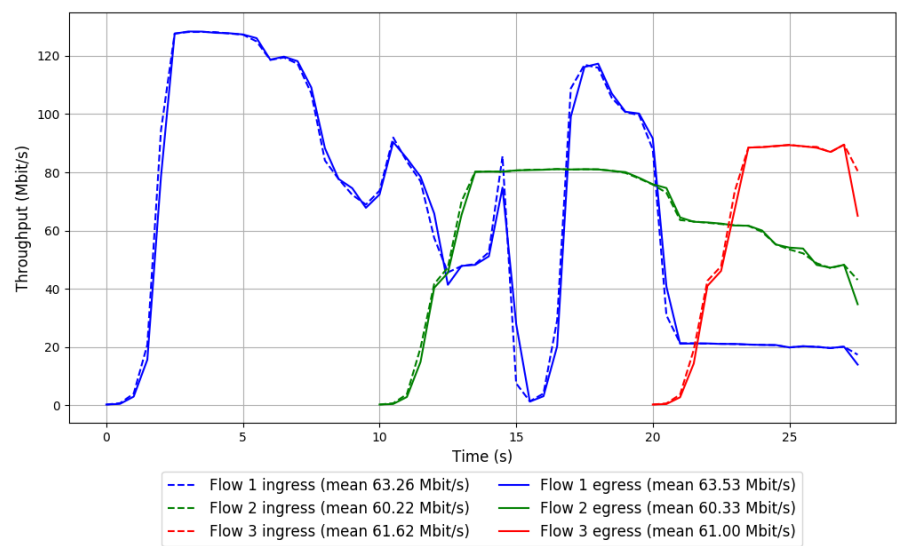
-- Flow 3:

Average throughput: 61.00 Mbit/s

95th percentile per-packet one-way delay: 86.928 ms

Loss rate: 3.17%

Run 10: Report of Copa — Data Link

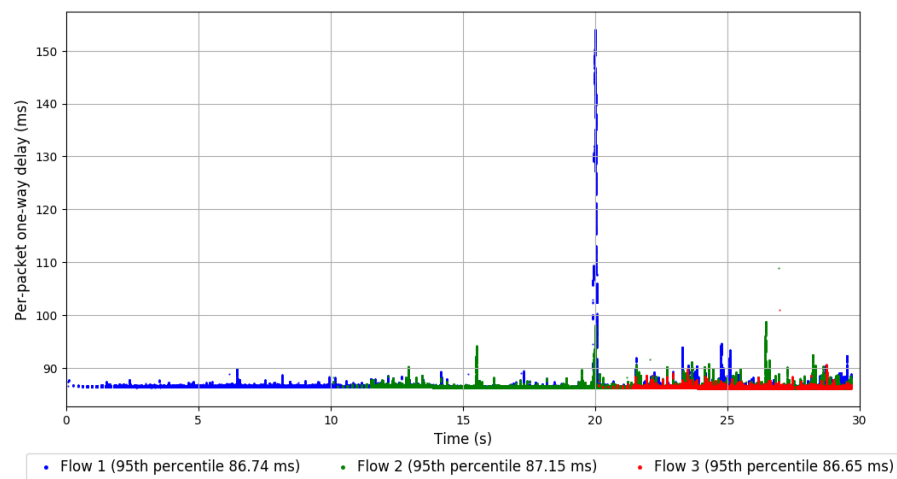
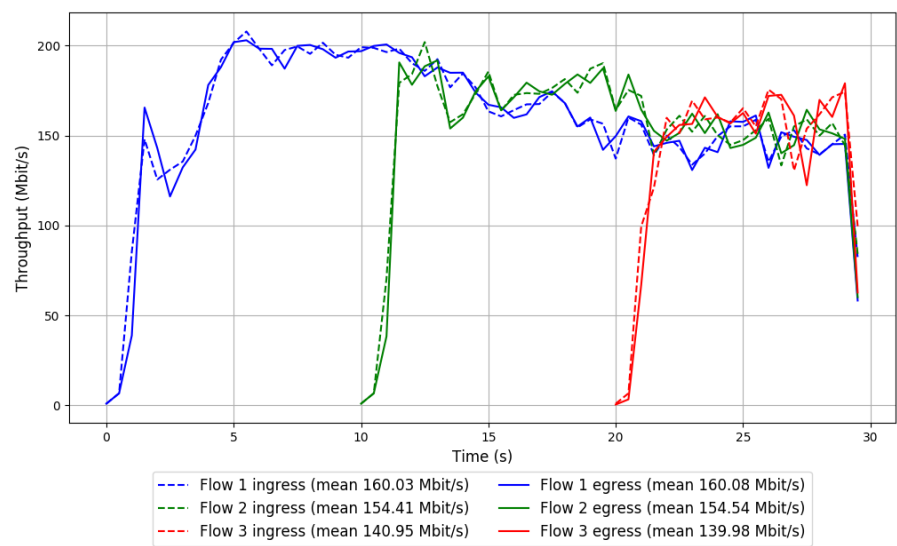


```
Run 1: Statistics of Indigo

Start at: 2017-11-21 12:49:14
End at: 2017-11-21 12:49:44

# Below is generated by plot.py at 2017-11-21 18:14:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.53 Mbit/s
95th percentile per-packet one-way delay: 86.827 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 160.08 Mbit/s
95th percentile per-packet one-way delay: 86.740 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 154.54 Mbit/s
95th percentile per-packet one-way delay: 87.148 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 139.98 Mbit/s
95th percentile per-packet one-way delay: 86.647 ms
Loss rate: 2.44%
```


Run 1: Report of Indigo — Data Link

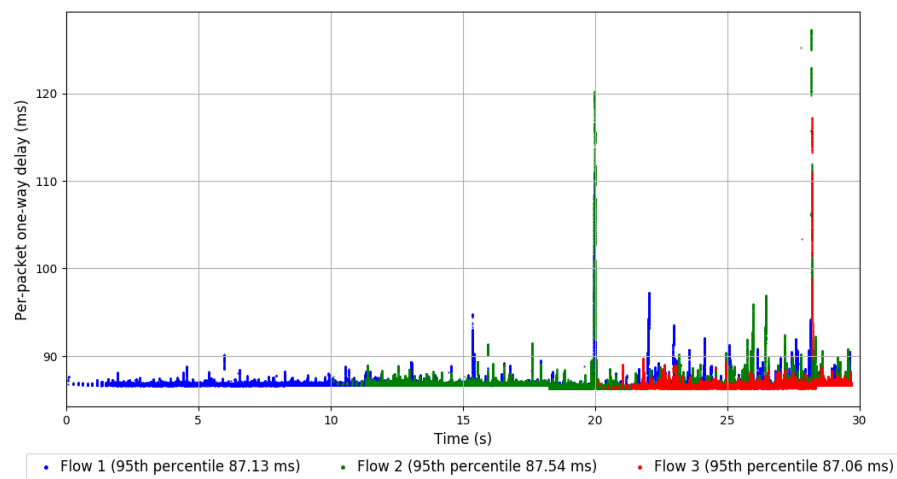
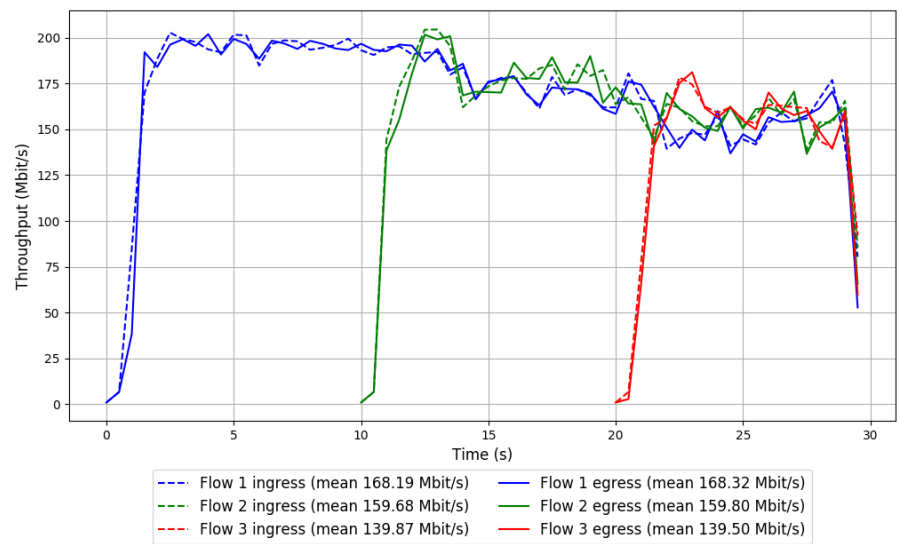


```
Run 2: Statistics of Indigo

Start at: 2017-11-21 13:02:30
End at: 2017-11-21 13:03:00

# Below is generated by plot.py at 2017-11-21 18:15:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 319.09 Mbit/s
95th percentile per-packet one-way delay: 87.232 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 168.32 Mbit/s
95th percentile per-packet one-way delay: 87.127 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 159.80 Mbit/s
95th percentile per-packet one-way delay: 87.542 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 139.50 Mbit/s
95th percentile per-packet one-way delay: 87.057 ms
Loss rate: 2.10%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-11-21 13:15:59

End at: 2017-11-21 13:16:29

Below is generated by plot.py at 2017-11-21 18:15:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 249.02 Mbit/s

95th percentile per-packet one-way delay: 113.909 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 131.45 Mbit/s

95th percentile per-packet one-way delay: 113.835 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 101.47 Mbit/s

95th percentile per-packet one-way delay: 113.944 ms

Loss rate: 0.25%

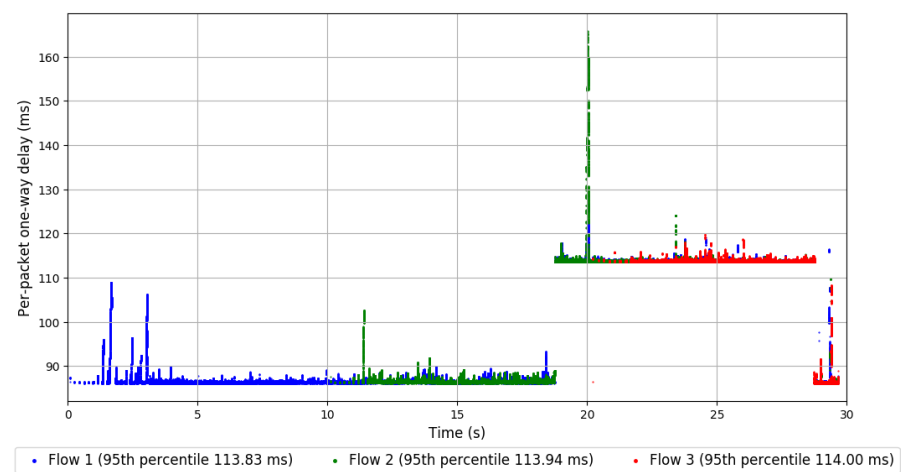
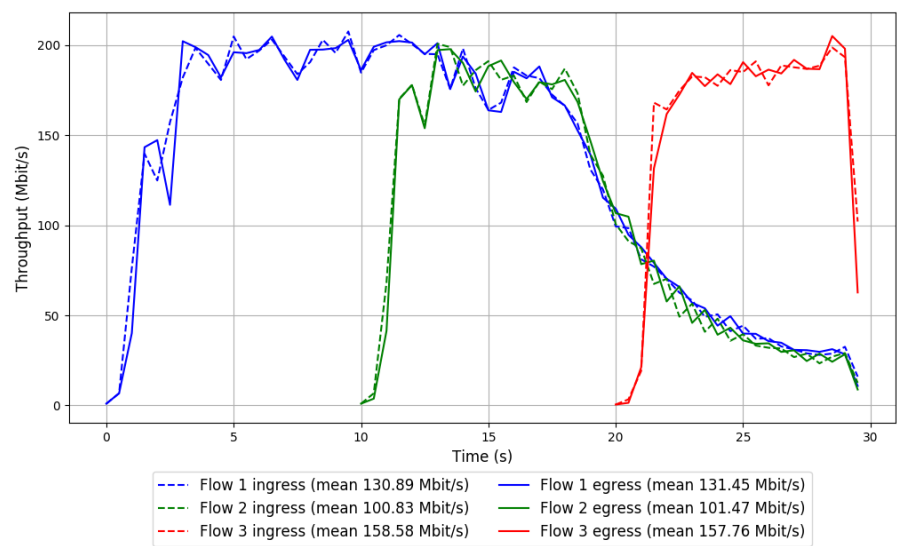
-- Flow 3:

Average throughput: 157.76 Mbit/s

95th percentile per-packet one-way delay: 113.997 ms

Loss rate: 2.29%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-11-21 13:29:17

End at: 2017-11-21 13:29:47

Below is generated by plot.py at 2017-11-21 18:15:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 192.95 Mbit/s

95th percentile per-packet one-way delay: 88.250 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 33.55 Mbit/s

95th percentile per-packet one-way delay: 113.778 ms

Loss rate: 1.42%

-- Flow 2:

Average throughput: 166.48 Mbit/s

95th percentile per-packet one-way delay: 86.816 ms

Loss rate: 0.84%

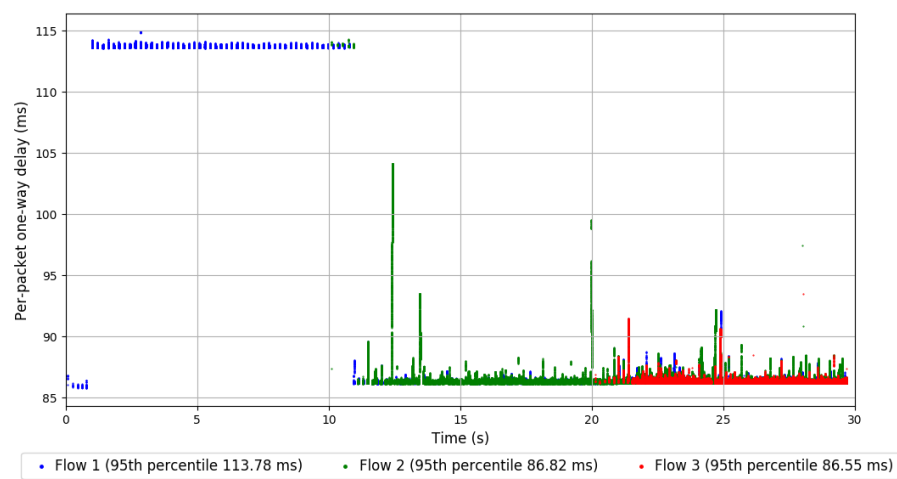
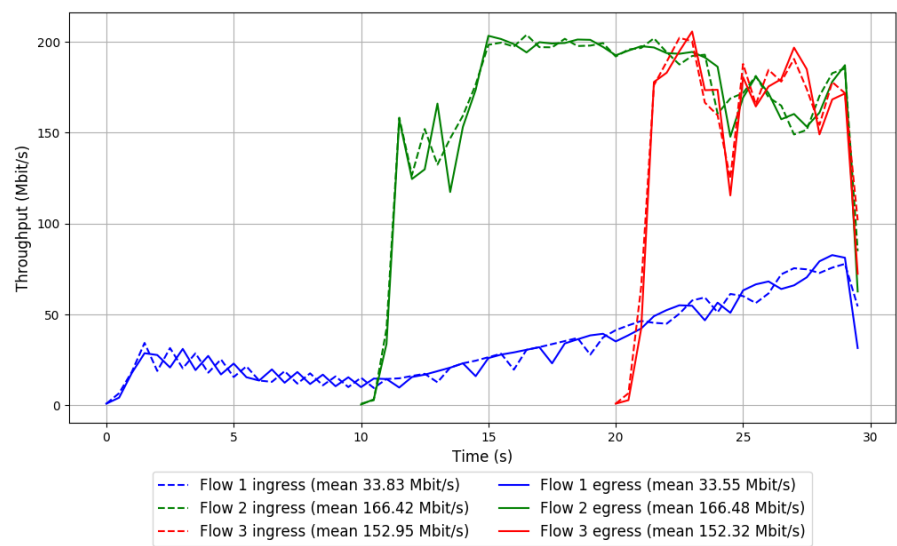
-- Flow 3:

Average throughput: 152.32 Mbit/s

95th percentile per-packet one-way delay: 86.554 ms

Loss rate: 2.18%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-11-21 13:42:38

End at: 2017-11-21 13:43:08

Below is generated by plot.py at 2017-11-21 18:16:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 307.38 Mbit/s

95th percentile per-packet one-way delay: 89.986 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 162.32 Mbit/s

95th percentile per-packet one-way delay: 88.840 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 156.63 Mbit/s

95th percentile per-packet one-way delay: 92.001 ms

Loss rate: 0.88%

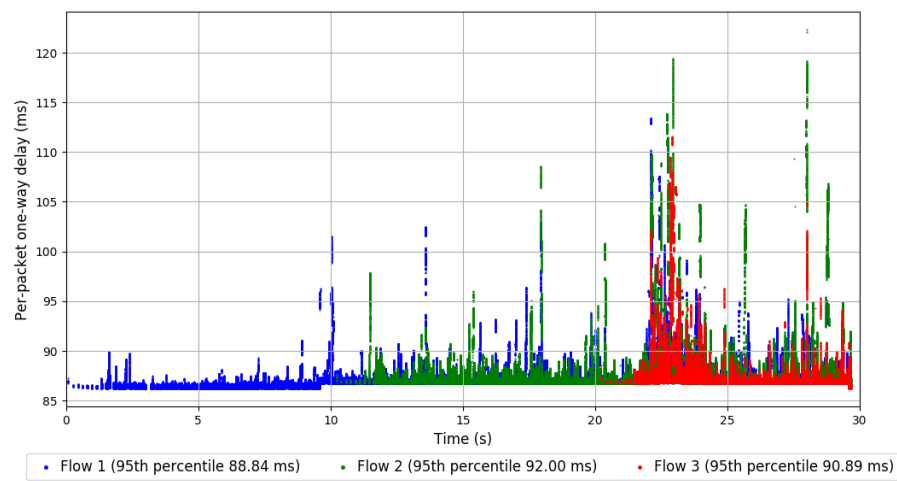
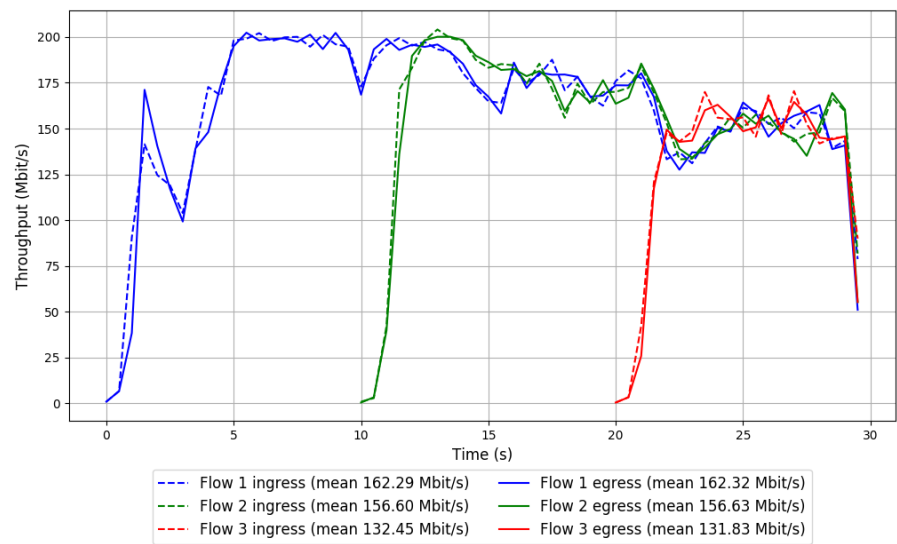
-- Flow 3:

Average throughput: 131.83 Mbit/s

95th percentile per-packet one-way delay: 90.888 ms

Loss rate: 2.28%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-11-21 13:56:19

End at: 2017-11-21 13:56:49

Below is generated by plot.py at 2017-11-21 18:17:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 312.21 Mbit/s

95th percentile per-packet one-way delay: 86.816 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 164.13 Mbit/s

95th percentile per-packet one-way delay: 86.629 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 156.99 Mbit/s

95th percentile per-packet one-way delay: 87.727 ms

Loss rate: 0.98%

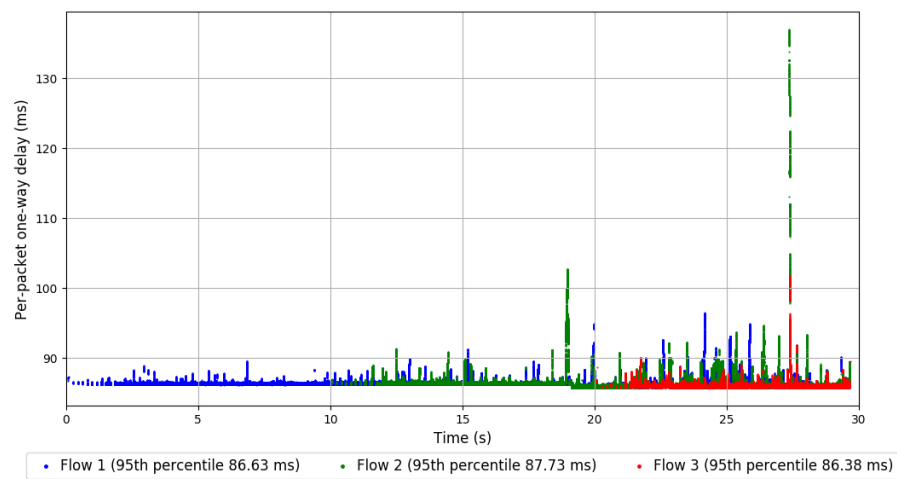
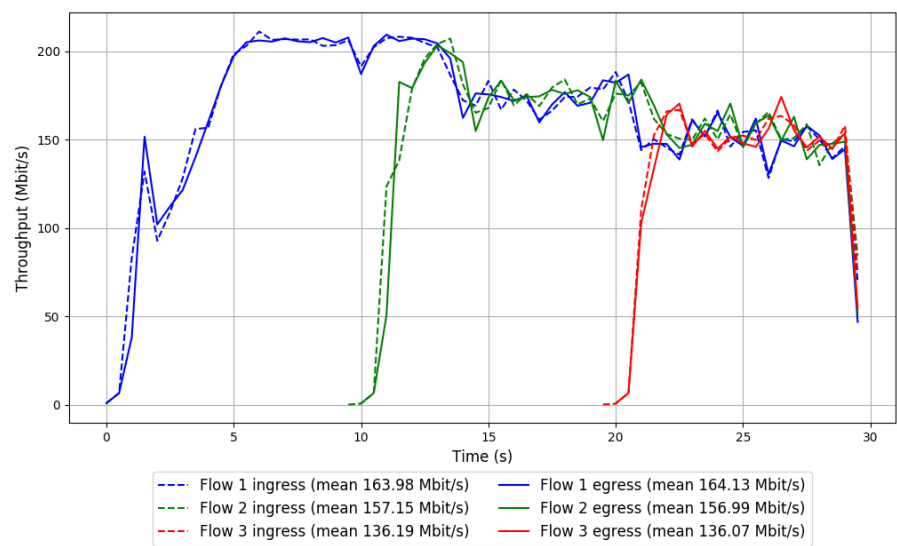
-- Flow 3:

Average throughput: 136.07 Mbit/s

95th percentile per-packet one-way delay: 86.376 ms

Loss rate: 1.84%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-11-21 14:09:44

End at: 2017-11-21 14:10:14

Below is generated by plot.py at 2017-11-21 18:17:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.62 Mbit/s

95th percentile per-packet one-way delay: 87.072 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 165.72 Mbit/s

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

Loss rate: 0.48%

-- Flow 2:

Average throughput: 152.27 Mbit/s

95th percentile per-packet one-way delay: 87.257 ms

Loss rate: 0.82%

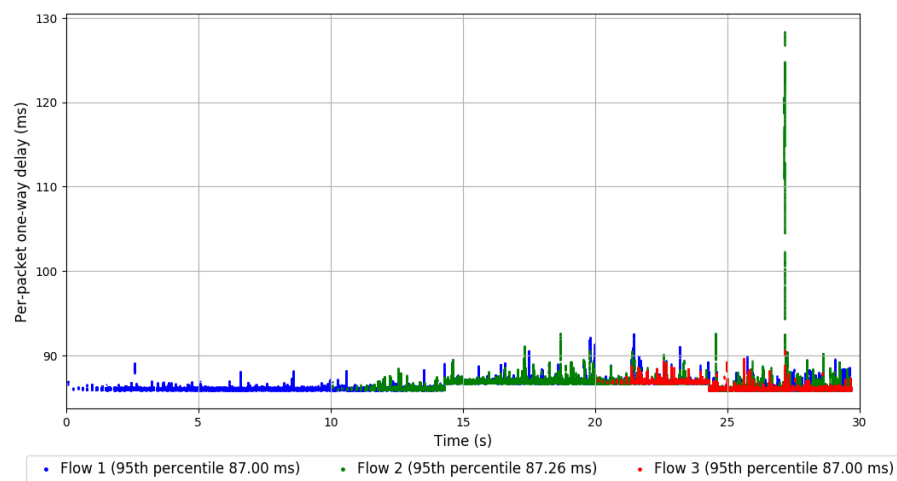
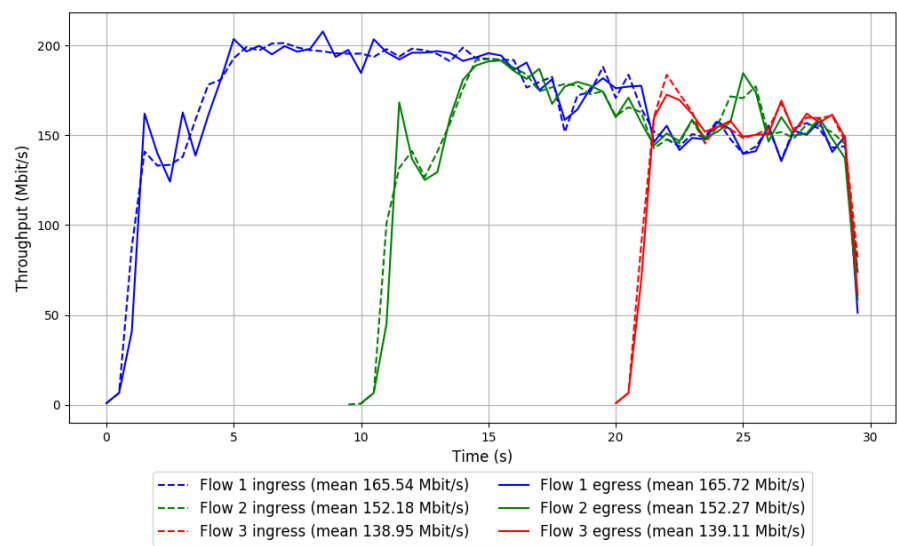
-- Flow 3:

Average throughput: 139.11 Mbit/s

95th percentile per-packet one-way delay: 86.995 ms

Loss rate: 1.66%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-11-21 14:23:08

End at: 2017-11-21 14:23:38

Below is generated by plot.py at 2017-11-21 18:19:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 315.34 Mbit/s

95th percentile per-packet one-way delay: 86.941 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 168.24 Mbit/s

95th percentile per-packet one-way delay: 86.864 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 154.30 Mbit/s

95th percentile per-packet one-way delay: 87.173 ms

Loss rate: 0.86%

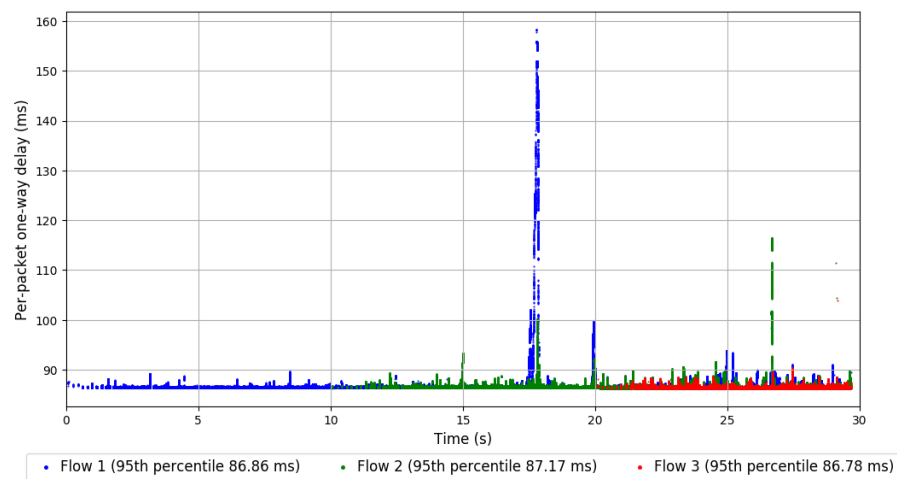
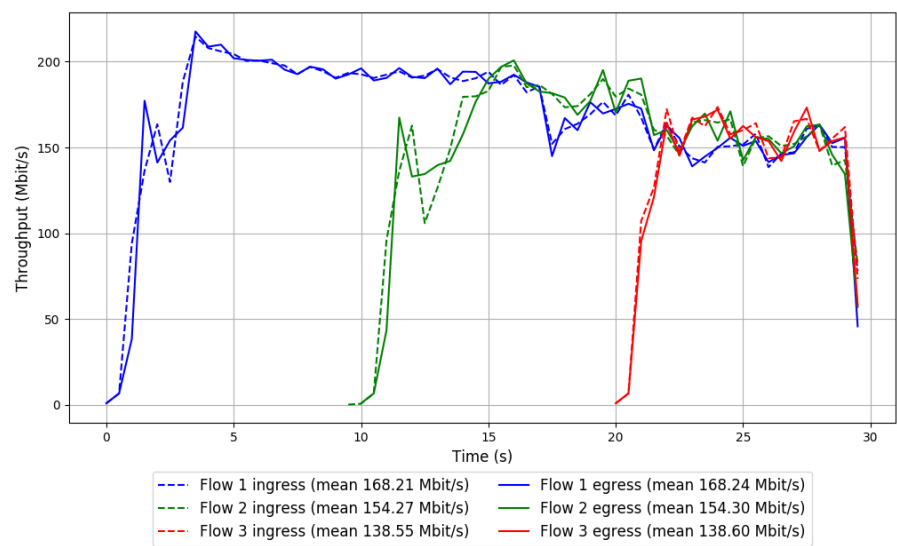
-- Flow 3:

Average throughput: 138.60 Mbit/s

95th percentile per-packet one-way delay: 86.775 ms

Loss rate: 1.74%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-11-21 14:36:38

End at: 2017-11-21 14:37:08

Below is generated by plot.py at 2017-11-21 18:20:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.42 Mbit/s

95th percentile per-packet one-way delay: 86.877 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 167.04 Mbit/s

95th percentile per-packet one-way delay: 86.743 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 158.22 Mbit/s

95th percentile per-packet one-way delay: 87.589 ms

Loss rate: 0.90%

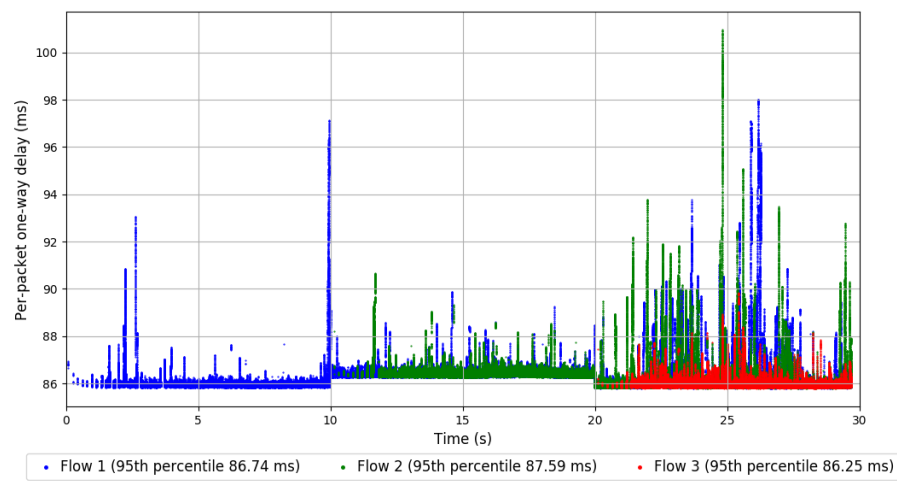
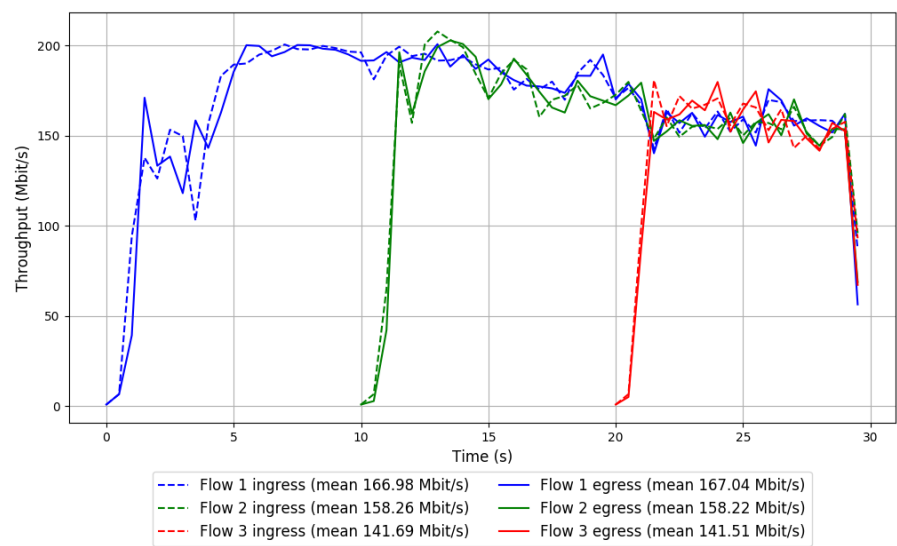
-- Flow 3:

Average throughput: 141.51 Mbit/s

95th percentile per-packet one-way delay: 86.249 ms

Loss rate: 1.90%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-11-21 14:50:08

End at: 2017-11-21 14:50:38

Below is generated by plot.py at 2017-11-21 18:20:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.95 Mbit/s

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

Loss rate: 0.87%

-- Flow 1:

Average throughput: 166.98 Mbit/s

95th percentile per-packet one-way delay: 87.813 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 159.43 Mbit/s

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

Loss rate: 0.84%

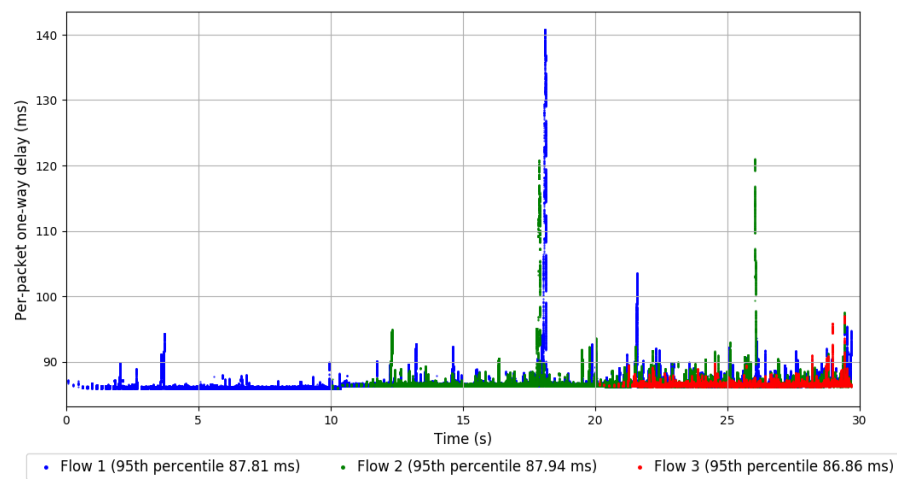
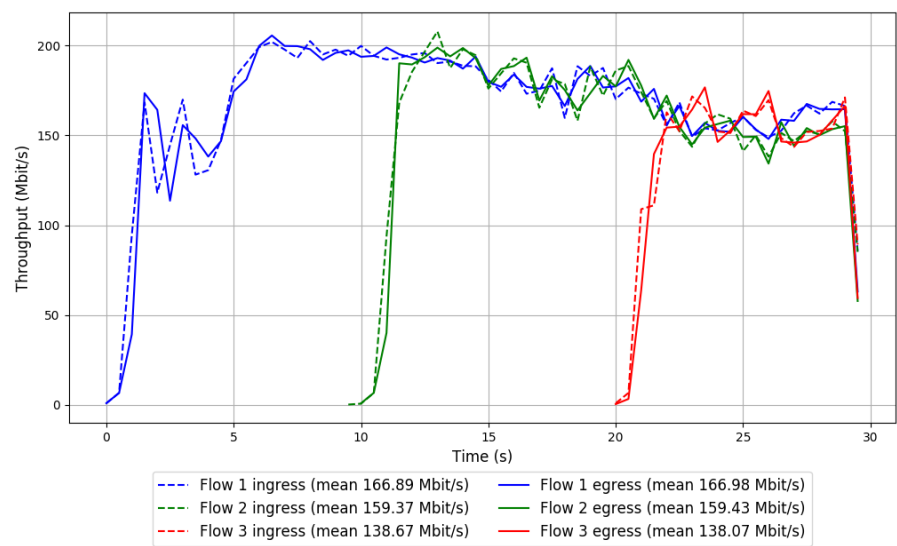
-- Flow 3:

Average throughput: 138.07 Mbit/s

95th percentile per-packet one-way delay: 86.860 ms

Loss rate: 2.21%

Run 10: Report of Indigo — Data Link

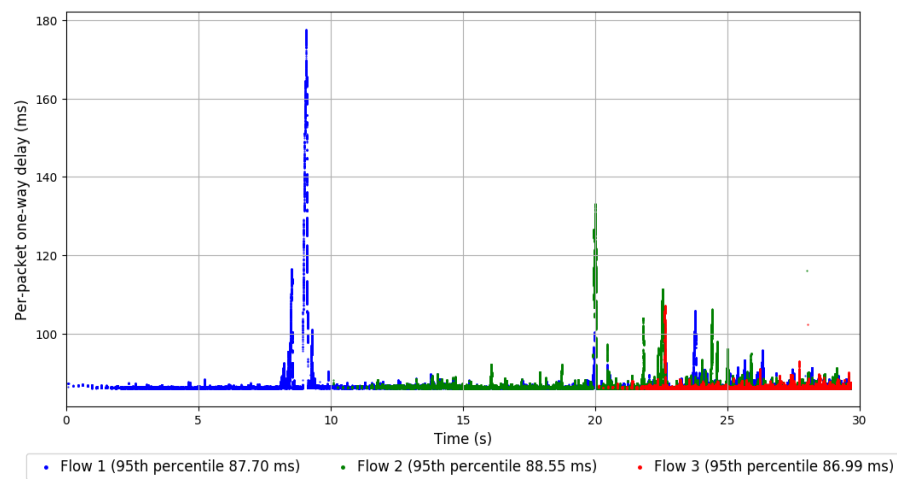
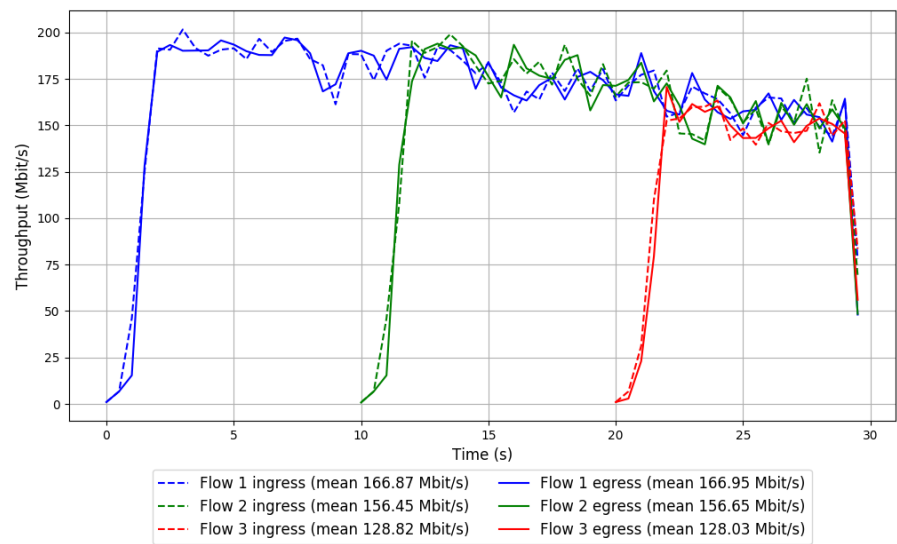


```
Run 1: Statistics of Indigo-calib

Start at: 2017-11-21 12:45:17
End at: 2017-11-21 12:45:47

# Below is generated by plot.py at 2017-11-21 18:21:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.83 Mbit/s
95th percentile per-packet one-way delay: 87.846 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 166.95 Mbit/s
95th percentile per-packet one-way delay: 87.697 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 156.65 Mbit/s
95th percentile per-packet one-way delay: 88.549 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 128.03 Mbit/s
95th percentile per-packet one-way delay: 86.991 ms
Loss rate: 2.41%
```

Run 1: Report of Indigo-calib — Data Link

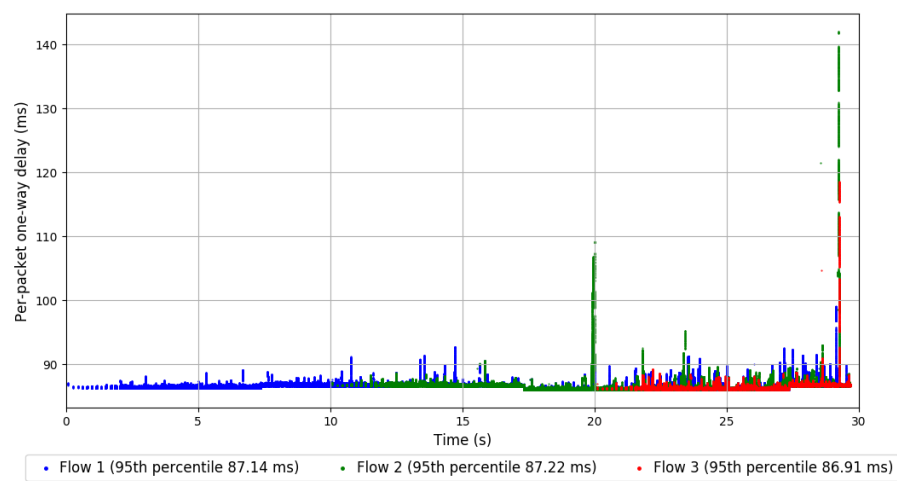
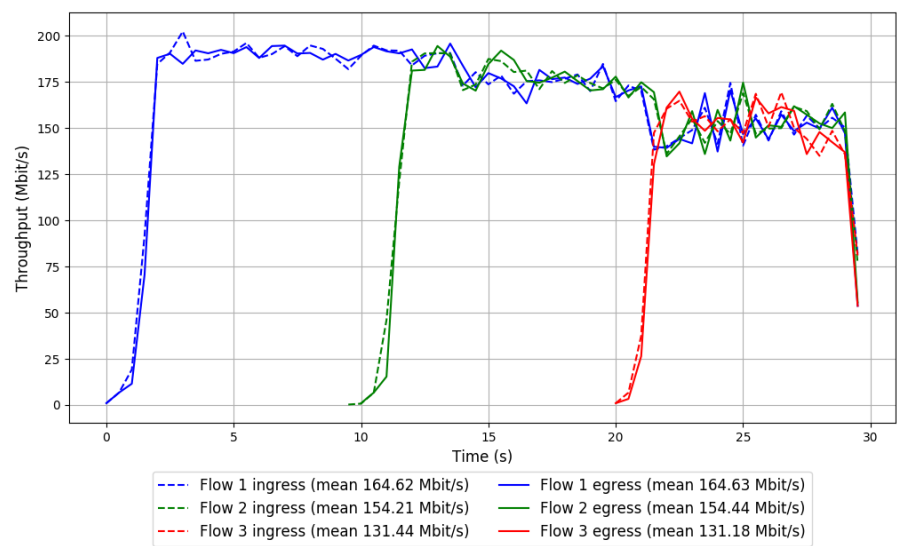


```
Run 2: Statistics of Indigo-calib

Start at: 2017-11-21 12:58:11
End at: 2017-11-21 12:58:41

# Below is generated by plot.py at 2017-11-21 18:21:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.34 Mbit/s
95th percentile per-packet one-way delay: 87.132 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 164.63 Mbit/s
95th percentile per-packet one-way delay: 87.141 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 154.44 Mbit/s
95th percentile per-packet one-way delay: 87.222 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 131.18 Mbit/s
95th percentile per-packet one-way delay: 86.908 ms
Loss rate: 2.00%
```

Run 2: Report of Indigo-calib — Data Link

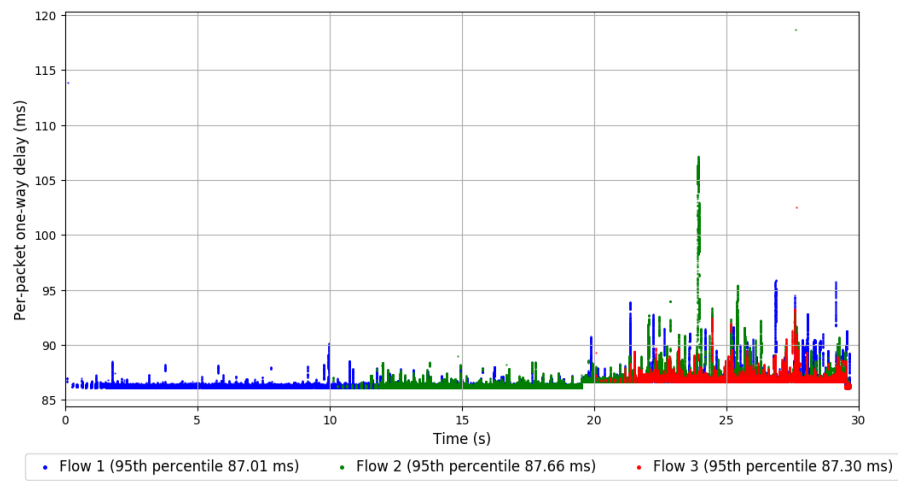
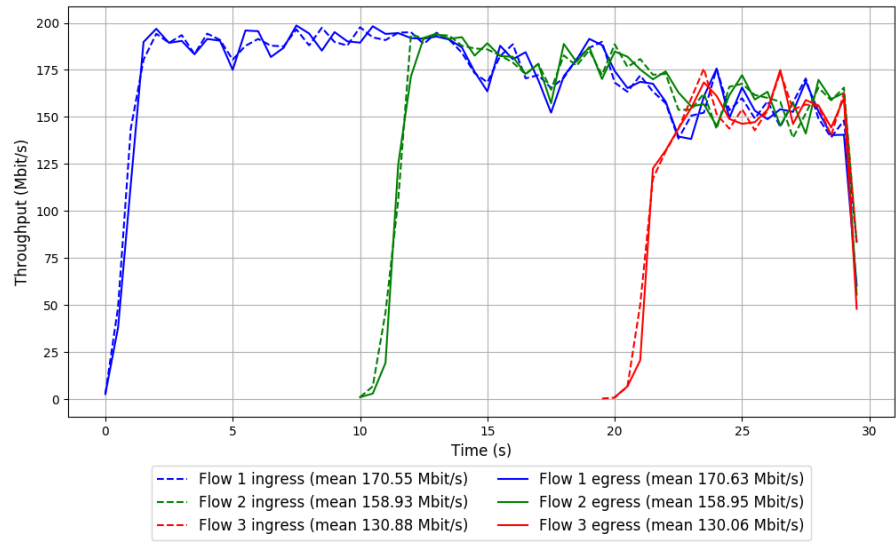


```
Run 3: Statistics of Indigo-calib

Start at: 2017-11-21 13:11:38
End at: 2017-11-21 13:12:08

# Below is generated by plot.py at 2017-11-21 18:22:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.84 Mbit/s
95th percentile per-packet one-way delay: 87.212 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 170.63 Mbit/s
95th percentile per-packet one-way delay: 87.012 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 158.95 Mbit/s
95th percentile per-packet one-way delay: 87.657 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 130.06 Mbit/s
95th percentile per-packet one-way delay: 87.301 ms
Loss rate: 2.40%
```


Run 3: Report of Indigo-calib — Data Link



Run 4: Statistics of Indigo-calib

Start at: 2017-11-21 13:25:13

End at: 2017-11-21 13:25:43

Below is generated by plot.py at 2017-11-21 18:23:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 310.44 Mbit/s

95th percentile per-packet one-way delay: 87.374 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 168.59 Mbit/s

95th percentile per-packet one-way delay: 87.556 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 154.46 Mbit/s

95th percentile per-packet one-way delay: 87.418 ms

Loss rate: 0.80%

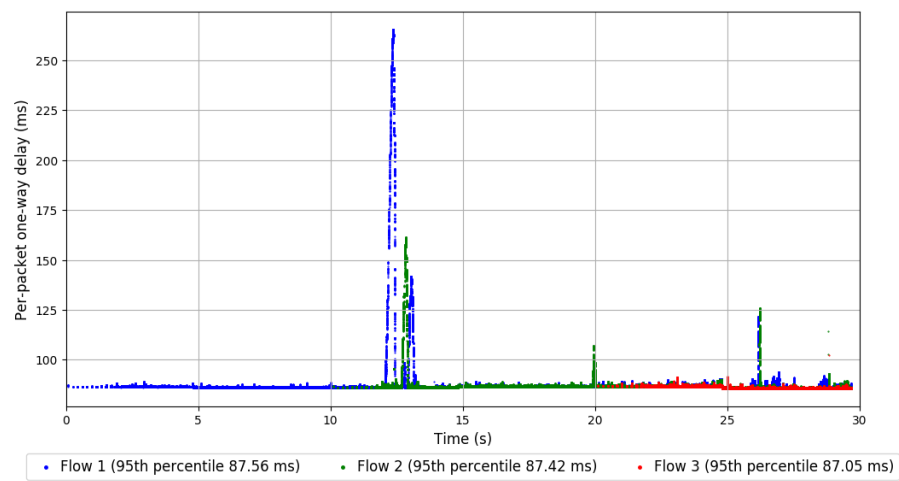
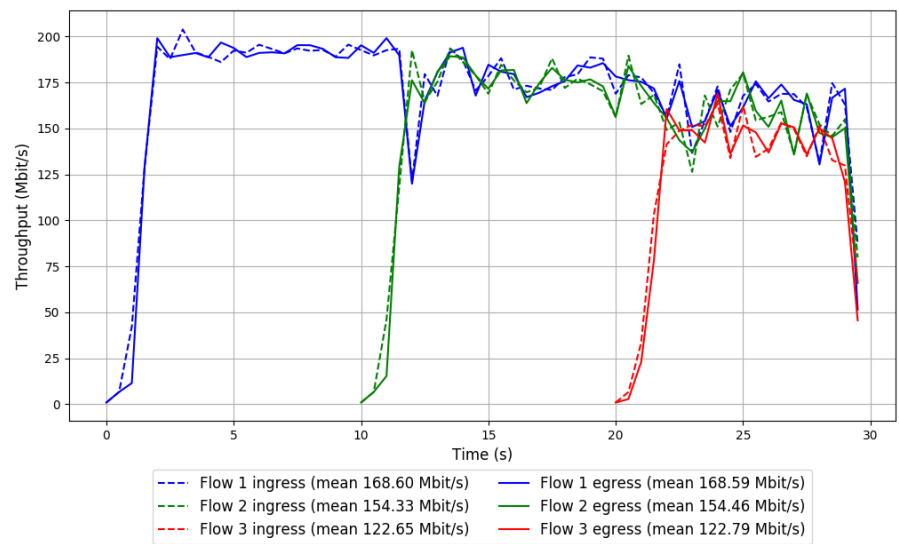
-- Flow 3:

Average throughput: 122.79 Mbit/s

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

Loss rate: 1.71%

Run 4: Report of Indigo-calib — Data Link



Run 5: Statistics of Indigo-calib

Start at: 2017-11-21 13:38:25

End at: 2017-11-21 13:38:55

Below is generated by plot.py at 2017-11-21 18:23:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 316.87 Mbit/s

95th percentile per-packet one-way delay: 86.798 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 169.39 Mbit/s

95th percentile per-packet one-way delay: 86.777 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 157.63 Mbit/s

95th percentile per-packet one-way delay: 86.978 ms

Loss rate: 1.04%

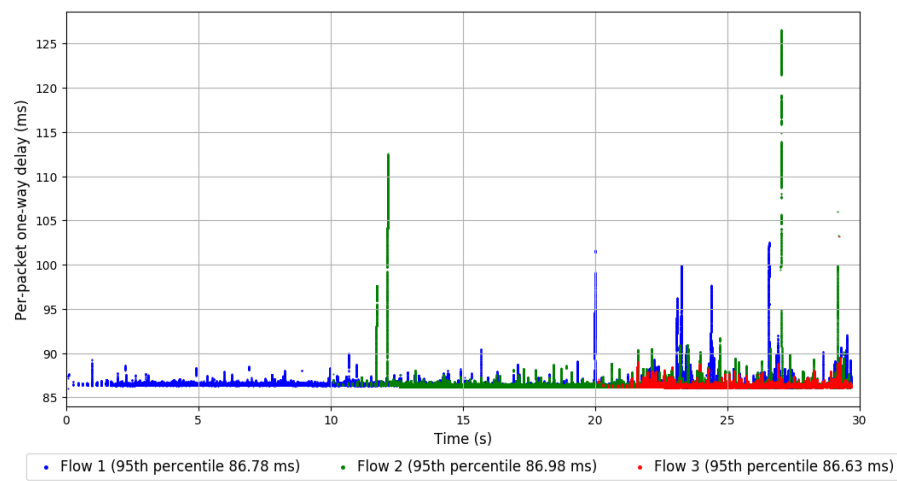
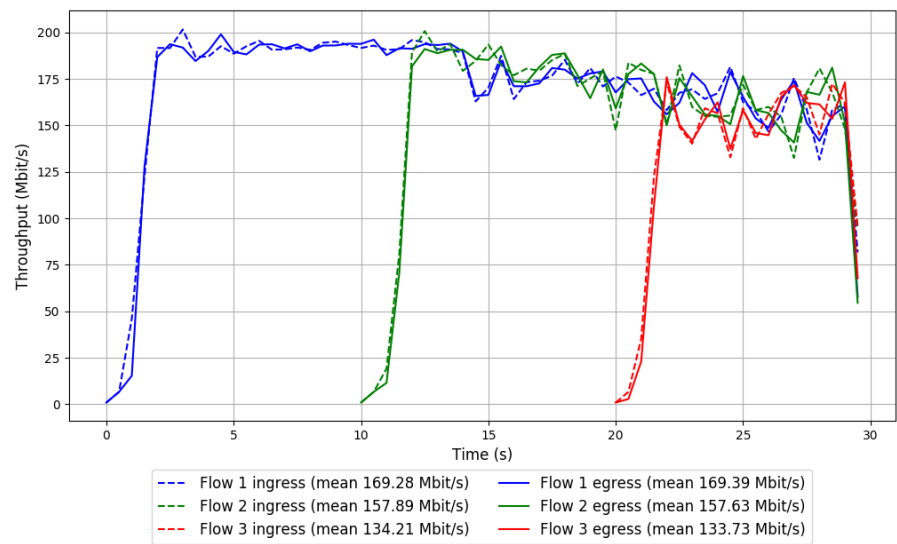
-- Flow 3:

Average throughput: 133.73 Mbit/s

95th percentile per-packet one-way delay: 86.626 ms

Loss rate: 2.11%

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-11-21 13:52:02

End at: 2017-11-21 13:52:32

Below is generated by plot.py at 2017-11-21 18:24:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 313.05 Mbit/s

95th percentile per-packet one-way delay: 87.610 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 166.68 Mbit/s

95th percentile per-packet one-way delay: 87.263 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 156.46 Mbit/s

95th percentile per-packet one-way delay: 88.663 ms

Loss rate: 0.94%

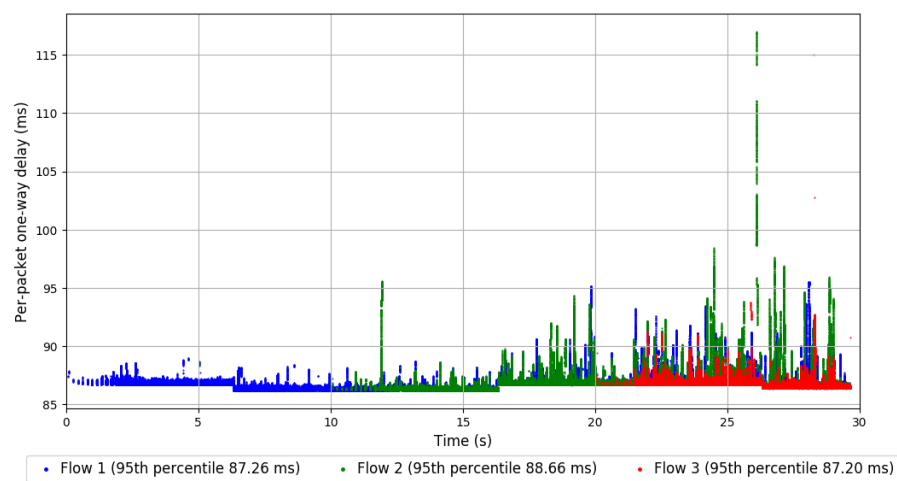
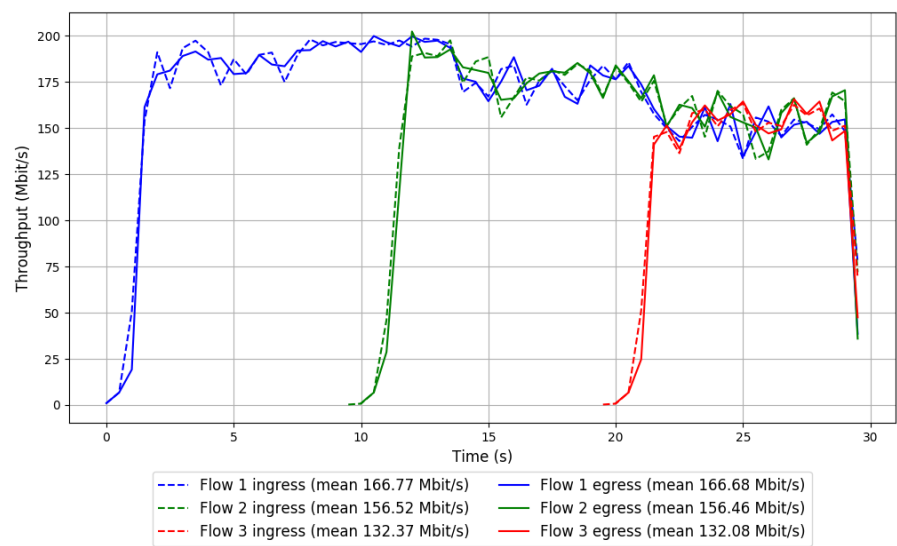
-- Flow 3:

Average throughput: 132.08 Mbit/s

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

Loss rate: 1.97%

Run 6: Report of Indigo-calib — Data Link



Run 7: Statistics of Indigo-calib

Start at: 2017-11-21 14:05:30

End at: 2017-11-21 14:06:00

Below is generated by plot.py at 2017-11-21 18:24:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 322.50 Mbit/s

95th percentile per-packet one-way delay: 87.596 ms

Loss rate: 0.90%

-- Flow 1:

Average throughput: 171.36 Mbit/s

95th percentile per-packet one-way delay: 87.534 ms

Loss rate: 0.63%

-- Flow 2:

Average throughput: 162.55 Mbit/s

95th percentile per-packet one-way delay: 87.872 ms

Loss rate: 0.81%

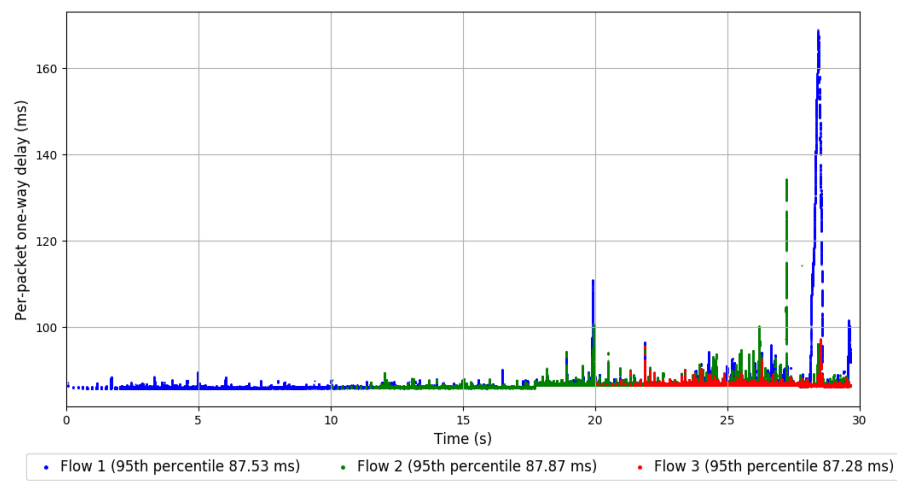
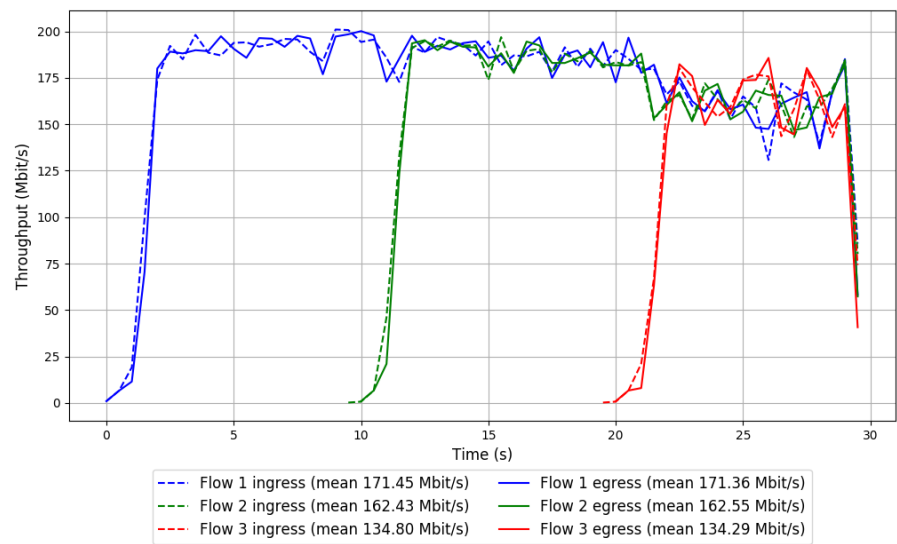
-- Flow 3:

Average throughput: 134.29 Mbit/s

95th percentile per-packet one-way delay: 87.283 ms

Loss rate: 2.17%

Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-11-21 14:18:56

End at: 2017-11-21 14:19:26

Below is generated by plot.py at 2017-11-21 18:24:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 317.30 Mbit/s

95th percentile per-packet one-way delay: 87.532 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 170.97 Mbit/s

95th percentile per-packet one-way delay: 87.622 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 158.60 Mbit/s

95th percentile per-packet one-way delay: 87.686 ms

Loss rate: 0.96%

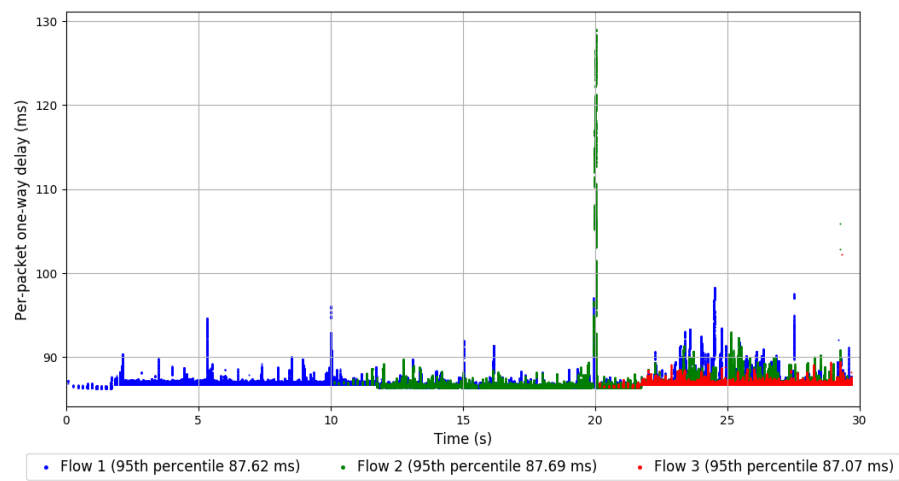
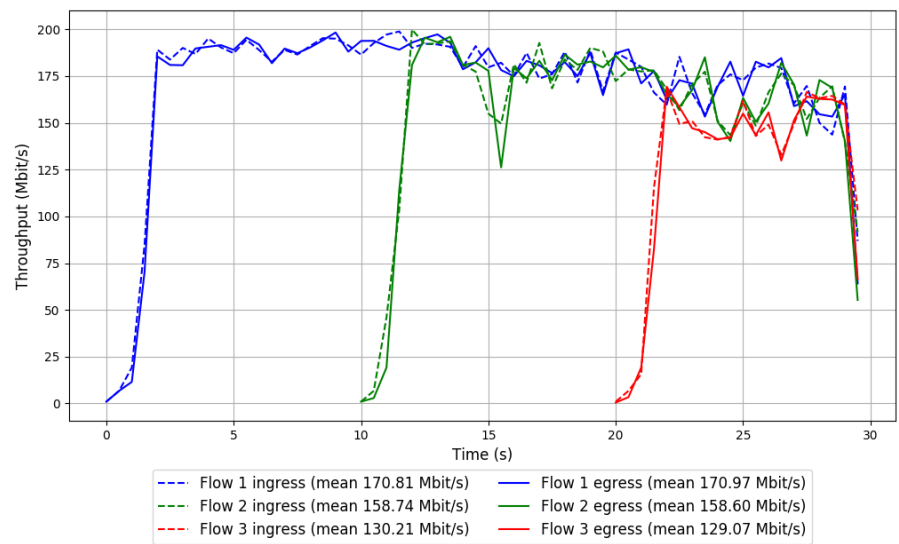
-- Flow 3:

Average throughput: 129.07 Mbit/s

95th percentile per-packet one-way delay: 87.071 ms

Loss rate: 2.64%

Run 8: Report of Indigo-calib — Data Link



Run 9: Statistics of Indigo-calib

Start at: 2017-11-21 14:32:19

End at: 2017-11-21 14:32:49

Below is generated by plot.py at 2017-11-21 18:25:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 318.19 Mbit/s

95th percentile per-packet one-way delay: 87.038 ms

Loss rate: 0.83%

-- Flow 1:

Average throughput: 168.13 Mbit/s

95th percentile per-packet one-way delay: 86.830 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 160.36 Mbit/s

95th percentile per-packet one-way delay: 87.545 ms

Loss rate: 0.81%

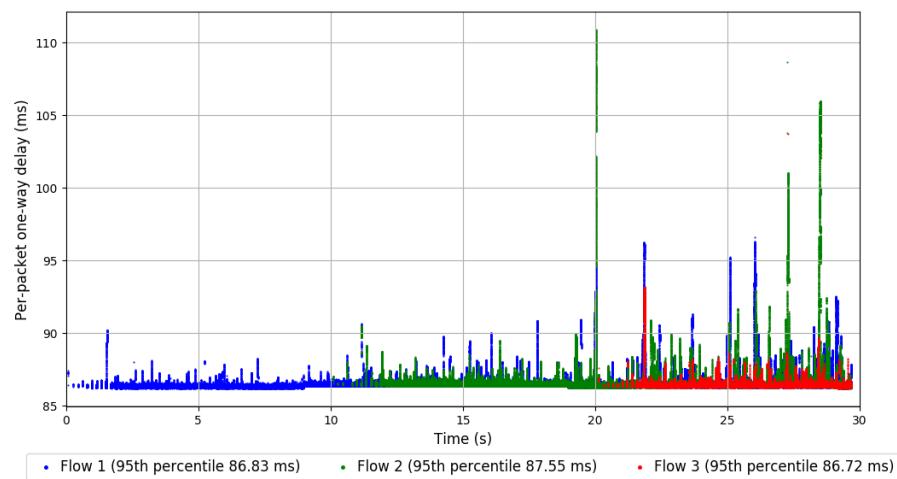
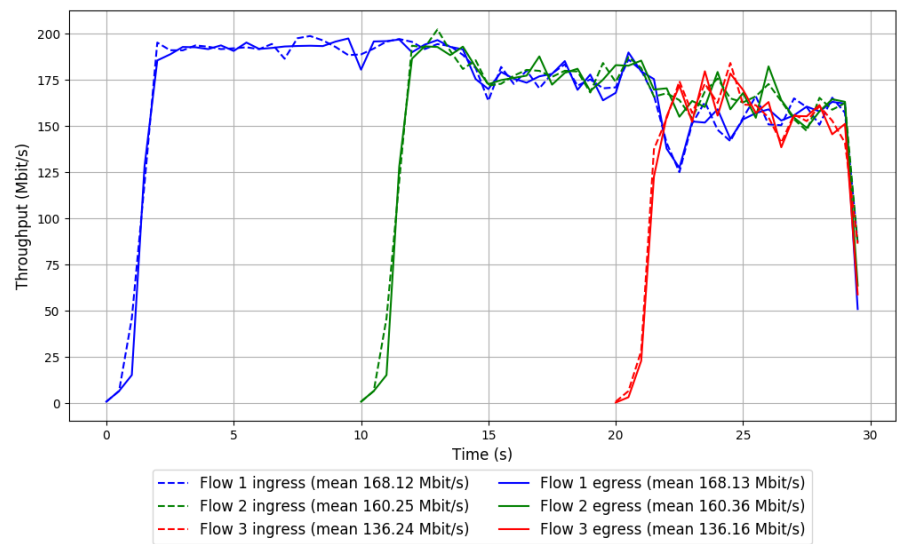
-- Flow 3:

Average throughput: 136.16 Mbit/s

95th percentile per-packet one-way delay: 86.723 ms

Loss rate: 1.83%

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-11-21 14:45:48

End at: 2017-11-21 14:46:18

Below is generated by plot.py at 2017-11-21 18:25:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 314.71 Mbit/s

95th percentile per-packet one-way delay: 87.981 ms

Loss rate: 0.86%

-- Flow 1:

Average throughput: 168.34 Mbit/s

95th percentile per-packet one-way delay: 87.829 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 156.09 Mbit/s

95th percentile per-packet one-way delay: 89.086 ms

Loss rate: 0.96%

-- Flow 3:

Average throughput: 135.32 Mbit/s

95th percentile per-packet one-way delay: 86.522 ms

Loss rate: 1.85%

Run 10: Report of Indigo-calib — Data Link

