

Pantheon Report

Generated at 2017-12-12 03:42:47 (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.

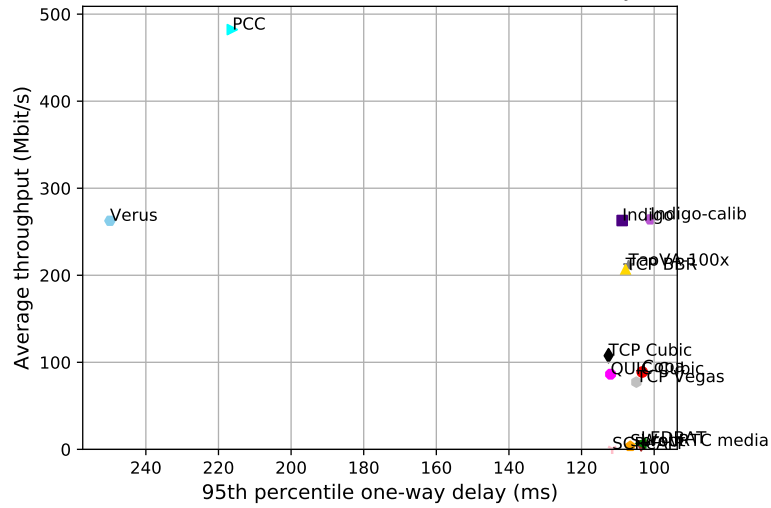
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

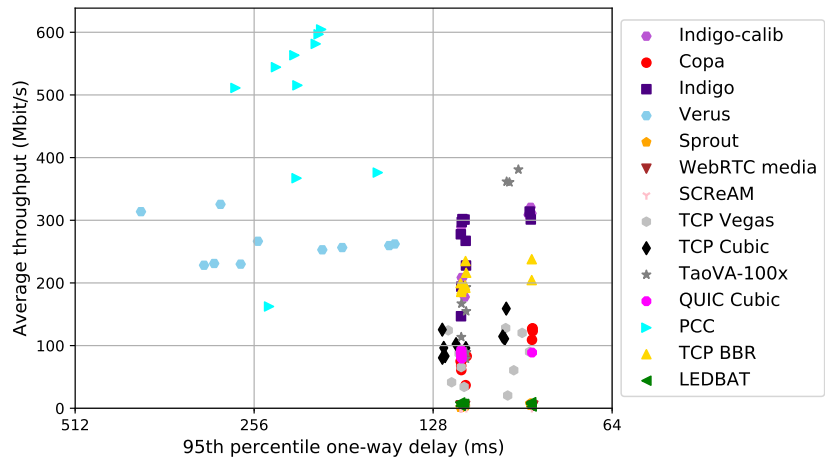
Git summary:

```
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



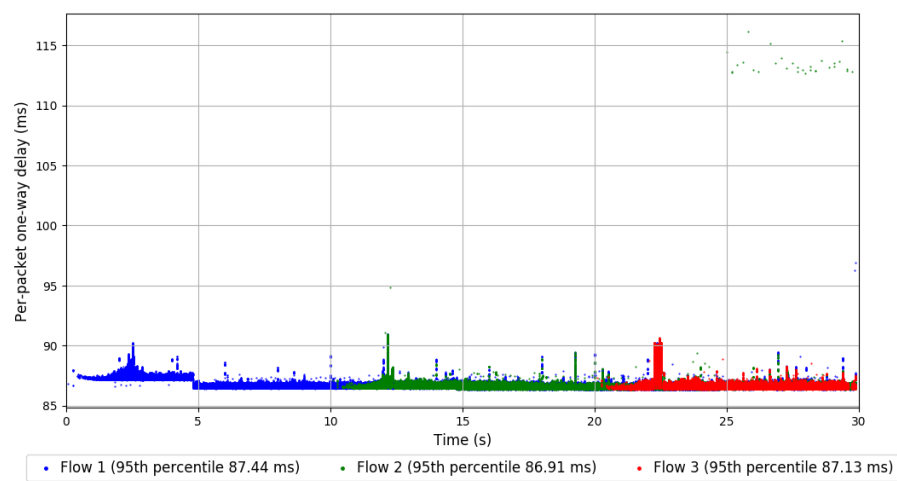
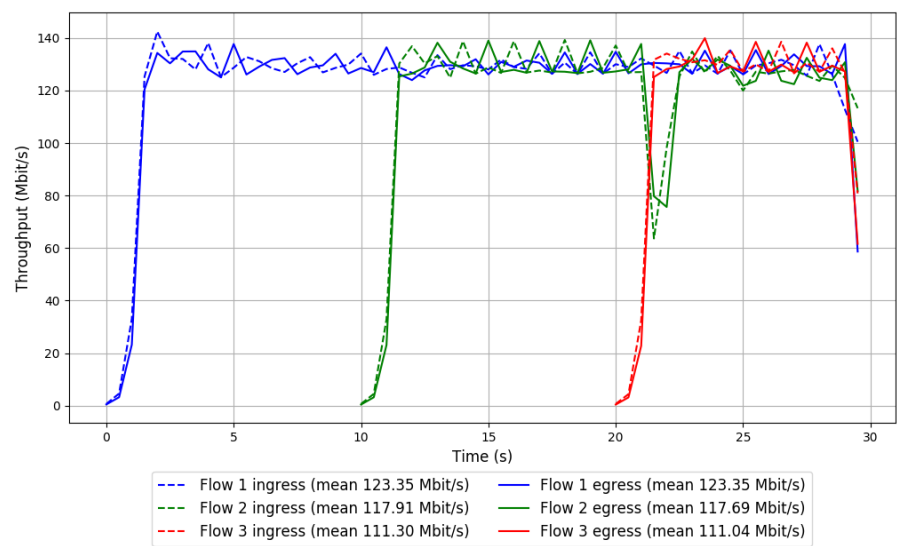
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	9	104.47	104.78	98.96	105.10	104.99	102.58	0.74	1.14	2.45
TCP Cubic	9	56.89	46.89	60.20	111.64	111.71	111.27	0.89	2.08	3.08
LEDBAT	10	4.94	3.71	2.11	426.30	100.96	100.71	1.18	1.90	4.34
PCC	10	375.30	132.91	58.48	202.01	204.36	179.88	2.51	2.19	2.76
QUIC Cubic	10	48.35	47.14	20.94	108.95	106.21	103.22	0.91	1.27	2.75
SCReAM	9	0.24	0.20	0.21	253.99	102.39	98.77	0.51	1.24	1.72
WebRTC media	10	2.14	1.32	0.50	101.01	97.91	105.83	0.85	1.23	3.12
Sprout	10	1.82	1.78	1.84	106.54	109.20	106.35	0.67	1.73	2.83
TaoVA-100x	9	152.08	68.82	75.76	103.47	108.36	109.00	0.52	0.43	3.18
TCP Vegas	10	37.17	34.34	56.11	348.05	99.95	99.65	0.64	1.08	2.05
Verus	10	159.93	124.25	61.22	227.22	239.91	205.75	2.70	6.51	5.24
Copa	10	47.93	48.19	36.45	103.32	102.89	103.30	0.67	0.84	2.92
Indigo	10	140.26	128.81	127.24	108.70	103.96	103.17	0.54	0.77	2.09
Indigo-calib	10	144.98	113.83	135.95	100.97	101.39	95.36	0.63	0.87	2.41

```
Run 1: Statistics of TCP BBR

Start at: 2017-12-11 22:38:05
End at: 2017-12-11 22:38:35

# Below is generated by plot.py at 2017-12-12 02:54:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.88 Mbit/s
95th percentile per-packet one-way delay: 87.370 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 123.35 Mbit/s
95th percentile per-packet one-way delay: 87.438 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 117.69 Mbit/s
95th percentile per-packet one-way delay: 86.907 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 111.04 Mbit/s
95th percentile per-packet one-way delay: 87.130 ms
Loss rate: 1.98%
```


Run 1: Report of TCP BBR — Data Link

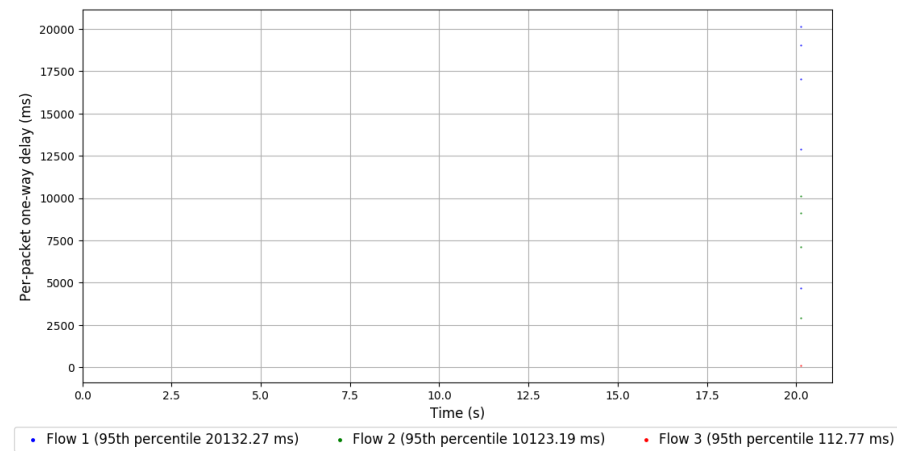
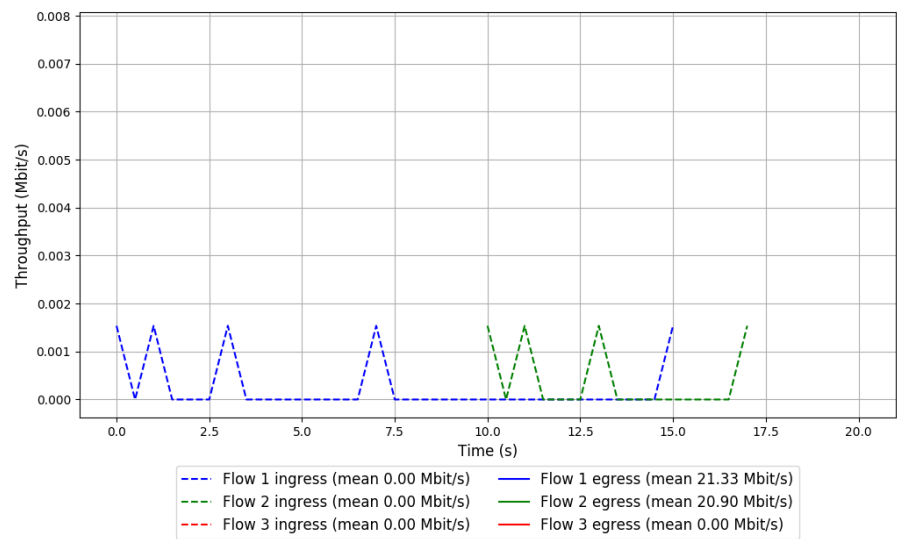


Run 2: Statistics of TCP BBR

Start at: 2017-12-11 22:51:23

End at: 2017-12-11 22:51:53

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-11 23:04:18

End at: 2017-12-11 23:04:48

Below is generated by plot.py at 2017-12-12 02:54:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.95 Mbit/s

95th percentile per-packet one-way delay: 112.900 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 118.04 Mbit/s

95th percentile per-packet one-way delay: 112.960 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 120.29 Mbit/s

95th percentile per-packet one-way delay: 87.545 ms

Loss rate: 0.93%

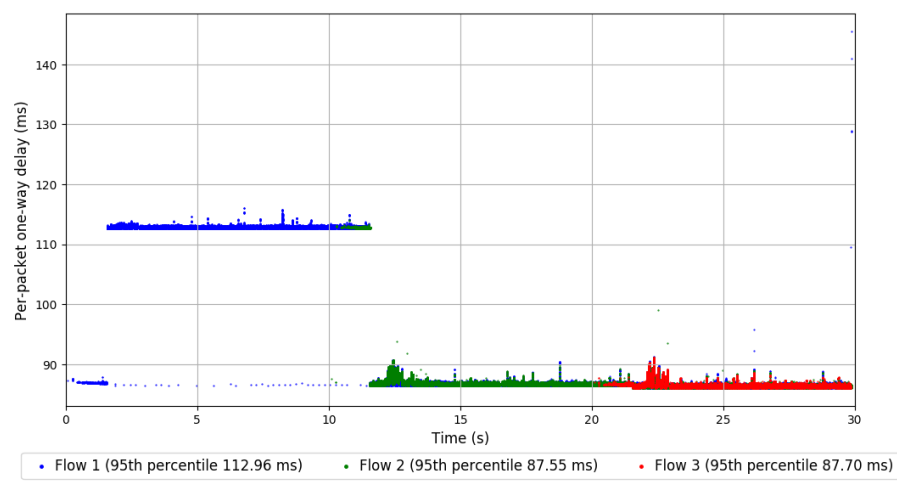
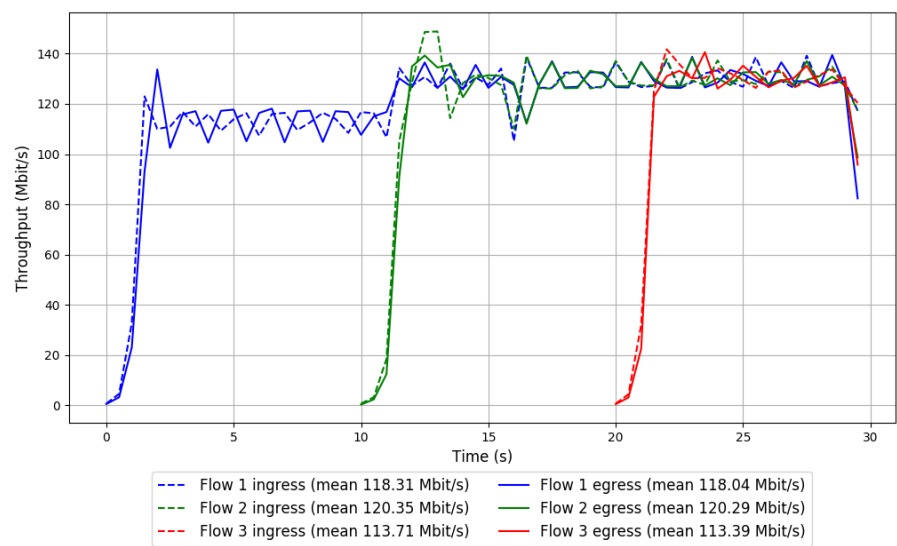
-- Flow 3:

Average throughput: 113.39 Mbit/s

95th percentile per-packet one-way delay: 87.697 ms

Loss rate: 2.12%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2017-12-11 23:17:07

End at: 2017-12-11 23:17:37

Below is generated by plot.py at 2017-12-12 02:54:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 204.51 Mbit/s

95th percentile per-packet one-way delay: 87.378 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 101.84 Mbit/s

95th percentile per-packet one-way delay: 87.295 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 100.09 Mbit/s

95th percentile per-packet one-way delay: 87.334 ms

Loss rate: 1.16%

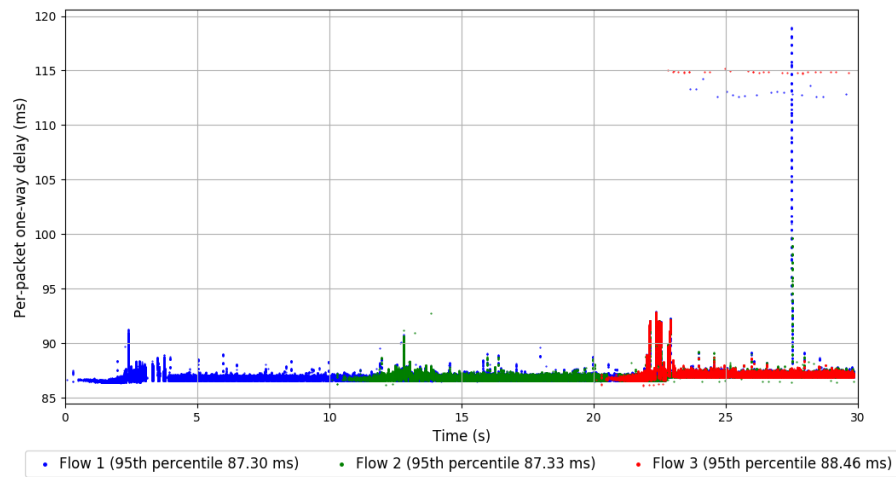
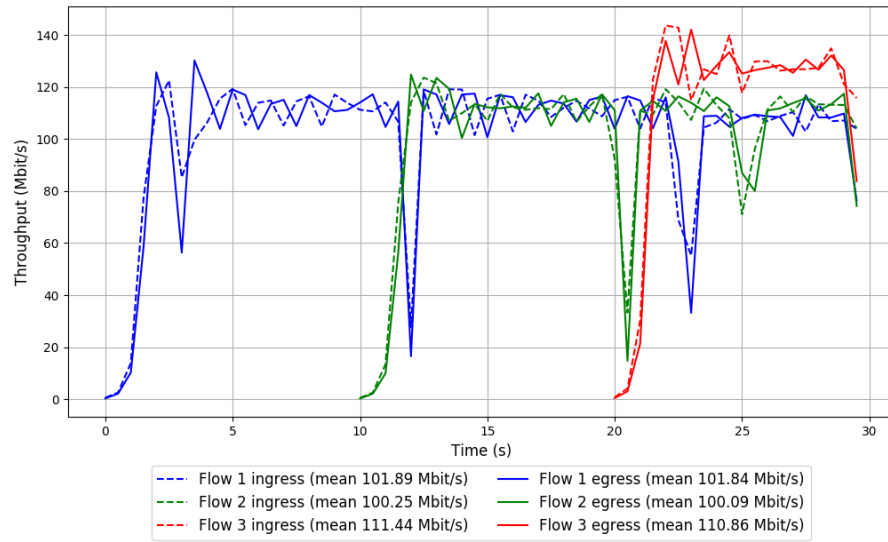
-- Flow 3:

Average throughput: 110.86 Mbit/s

95th percentile per-packet one-way delay: 88.456 ms

Loss rate: 2.28%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2017-12-11 23:30:03

End at: 2017-12-11 23:30:33

Below is generated by plot.py at 2017-12-12 02:54:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 196.09 Mbit/s

95th percentile per-packet one-way delay: 113.130 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 97.06 Mbit/s

95th percentile per-packet one-way delay: 112.971 ms

Loss rate: 0.90%

-- Flow 2:

Average throughput: 101.30 Mbit/s

95th percentile per-packet one-way delay: 113.012 ms

Loss rate: 1.12%

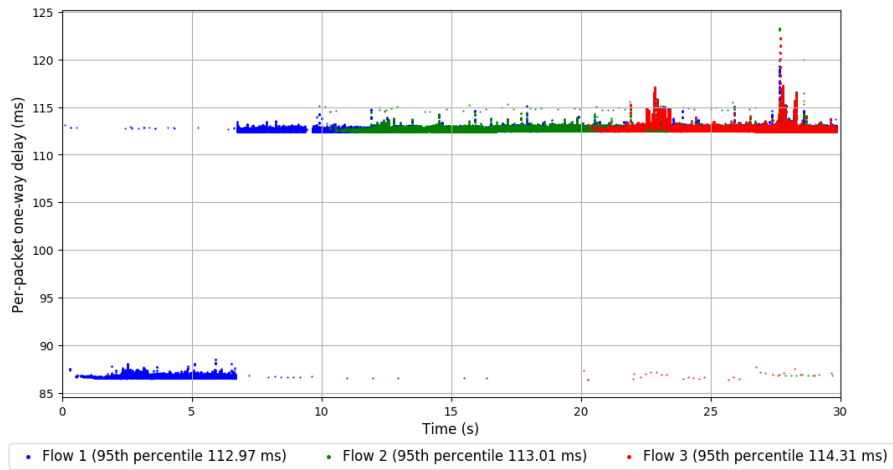
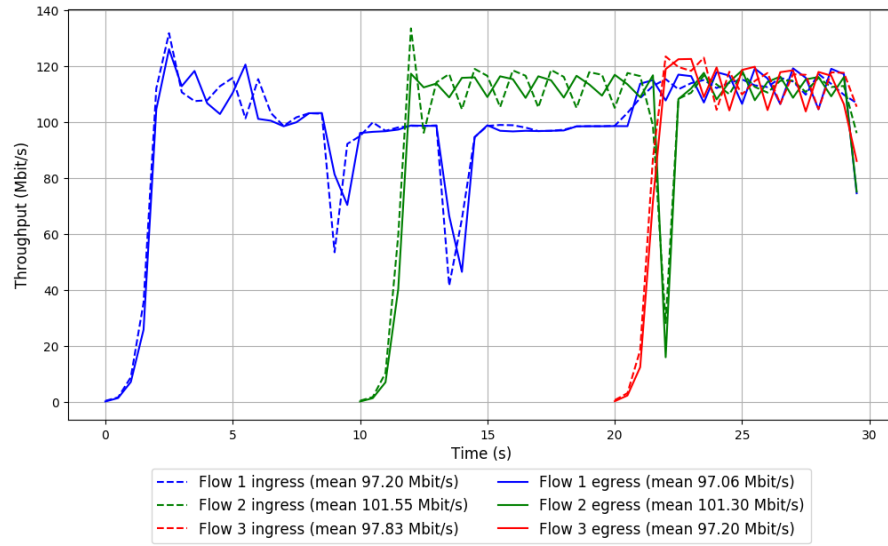
-- Flow 3:

Average throughput: 97.20 Mbit/s

95th percentile per-packet one-way delay: 114.312 ms

Loss rate: 2.65%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2017-12-11 23:42:52

End at: 2017-12-11 23:43:22

Below is generated by plot.py at 2017-12-12 02:54:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 185.68 Mbit/s

95th percentile per-packet one-way delay: 114.836 ms

Loss rate: 1.28%

-- Flow 1:

Average throughput: 93.05 Mbit/s

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

Loss rate: 0.79%

-- Flow 2:

Average throughput: 98.85 Mbit/s

95th percentile per-packet one-way delay: 114.815 ms

Loss rate: 1.26%

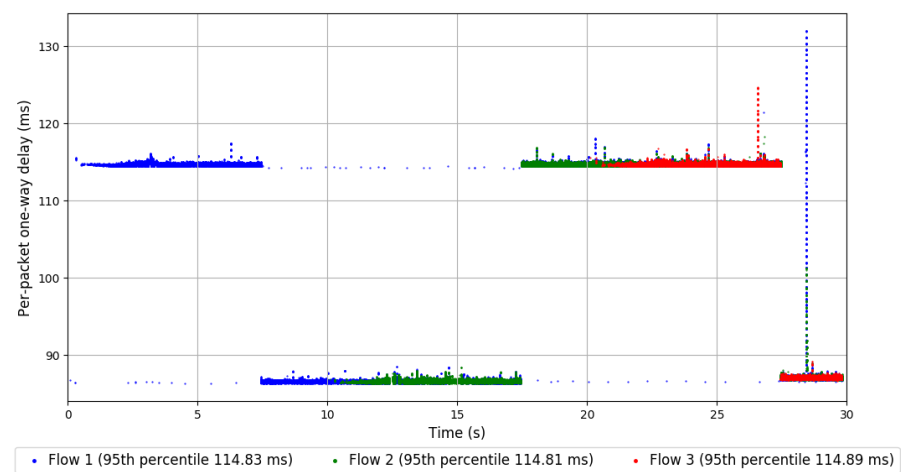
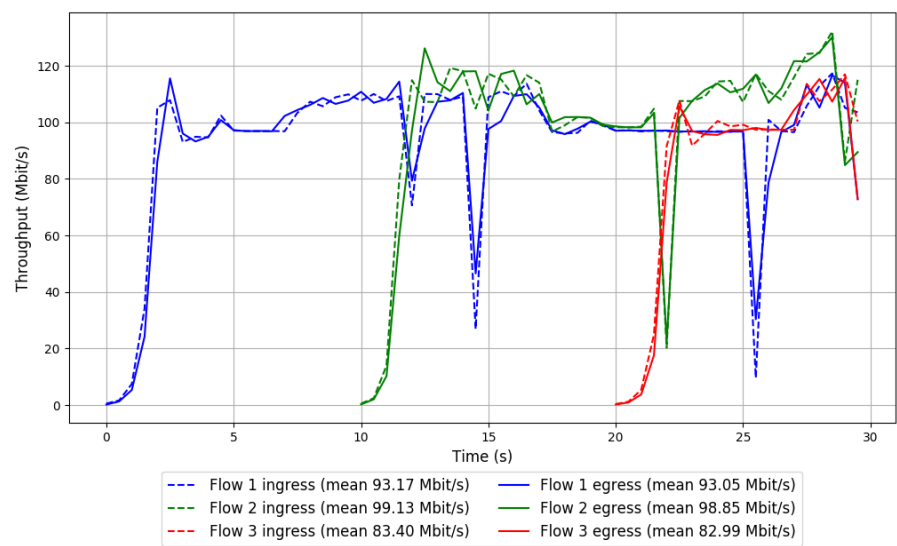
-- Flow 3:

Average throughput: 82.99 Mbit/s

95th percentile per-packet one-way delay: 114.894 ms

Loss rate: 2.96%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2017-12-11 23:55:54

End at: 2017-12-11 23:56:24

Below is generated by plot.py at 2017-12-12 02:54:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.51 Mbit/s

95th percentile per-packet one-way delay: 114.650 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 93.92 Mbit/s

95th percentile per-packet one-way delay: 114.618 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 104.52 Mbit/s

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

Loss rate: 1.21%

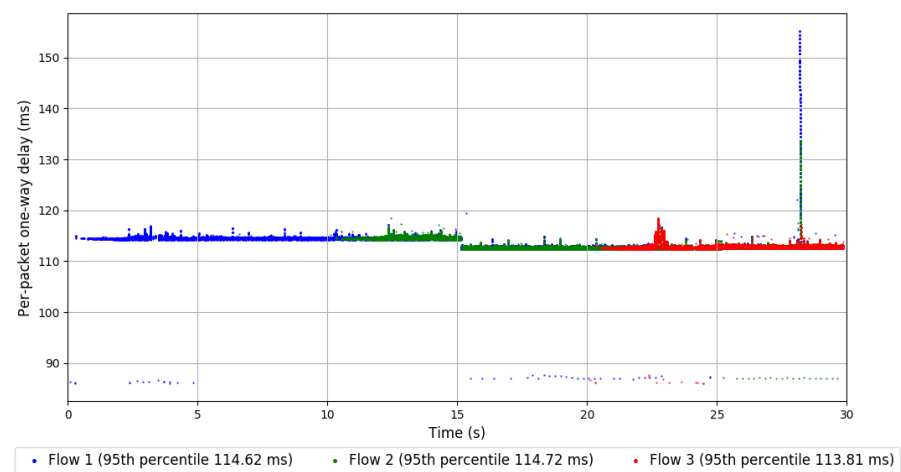
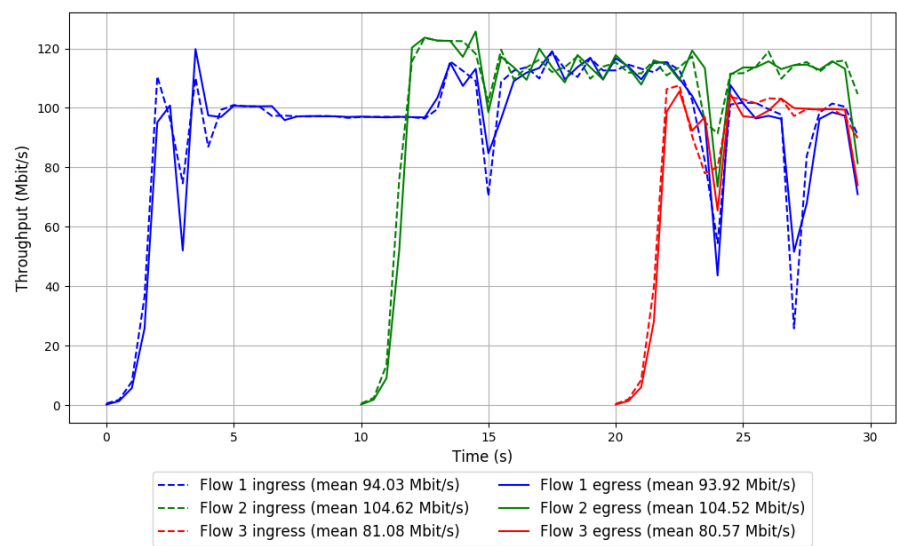
-- Flow 3:

Average throughput: 80.57 Mbit/s

95th percentile per-packet one-way delay: 113.813 ms

Loss rate: 2.63%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2017-12-12 00:08:49

End at: 2017-12-12 00:09:19

Below is generated by plot.py at 2017-12-12 02:54:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 199.63 Mbit/s

95th percentile per-packet one-way delay: 115.100 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 100.67 Mbit/s

95th percentile per-packet one-way delay: 115.006 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 102.55 Mbit/s

95th percentile per-packet one-way delay: 115.070 ms

Loss rate: 1.27%

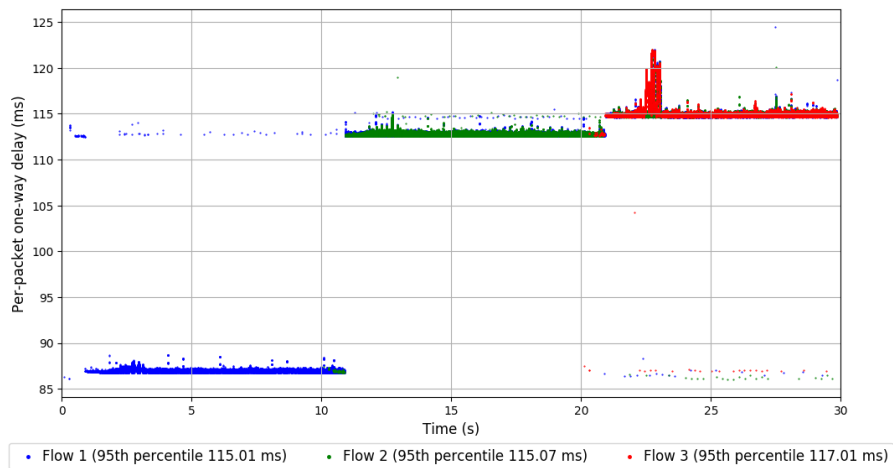
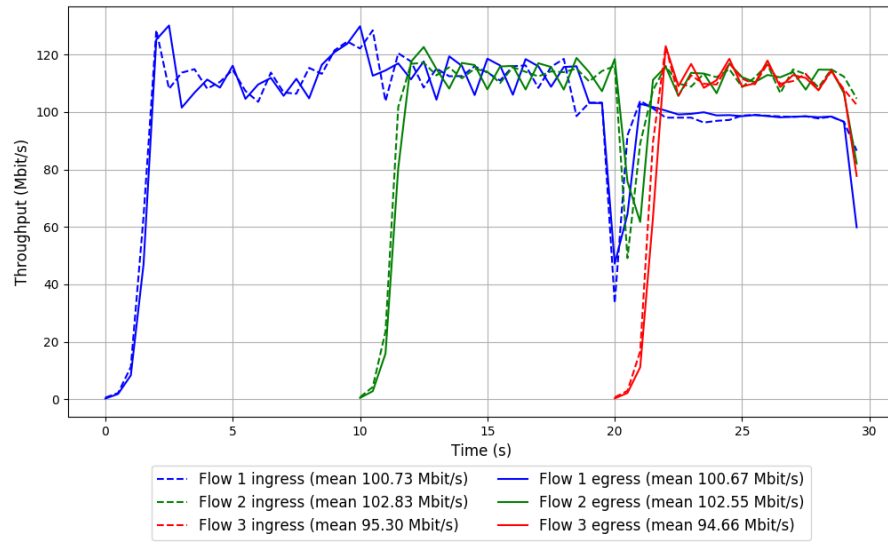
-- Flow 3:

Average throughput: 94.66 Mbit/s

95th percentile per-packet one-way delay: 117.013 ms

Loss rate: 2.68%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2017-12-12 00:21:53

End at: 2017-12-12 00:22:23

Below is generated by plot.py at 2017-12-12 02:54:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 192.25 Mbit/s

95th percentile per-packet one-way delay: 112.972 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 92.32 Mbit/s

95th percentile per-packet one-way delay: 113.063 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 96.61 Mbit/s

95th percentile per-packet one-way delay: 112.855 ms

Loss rate: 1.26%

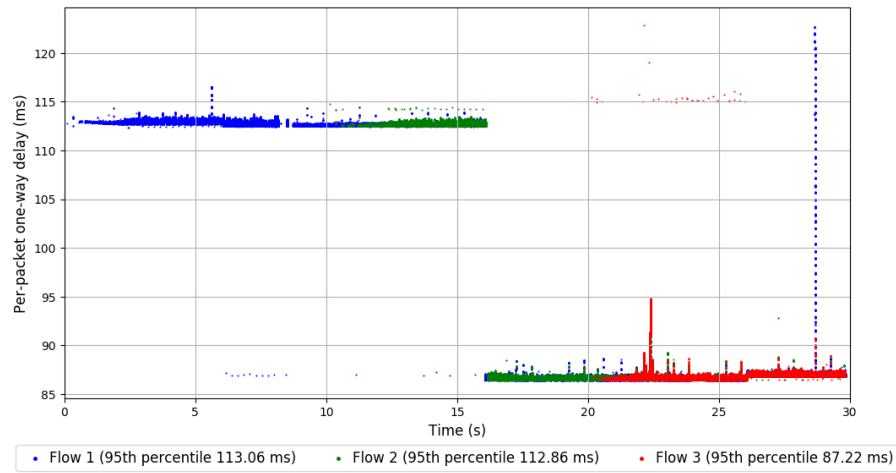
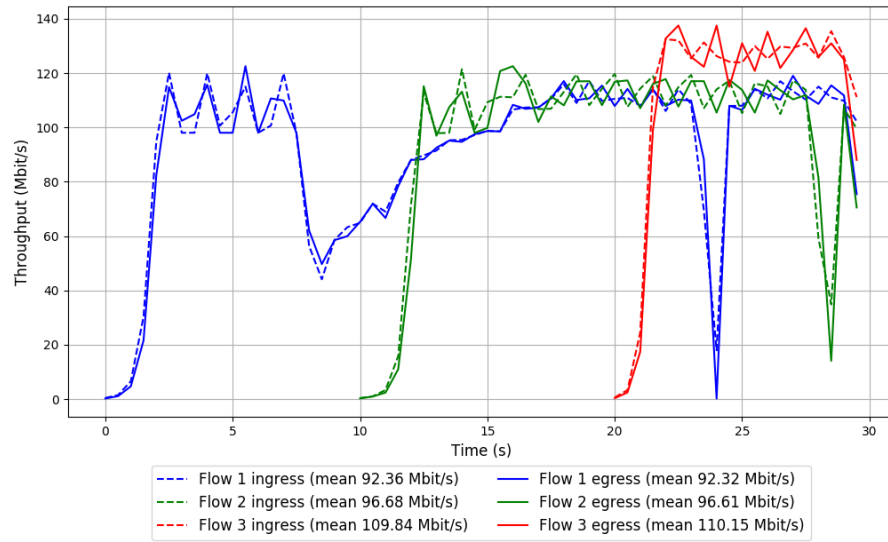
-- Flow 3:

Average throughput: 110.15 Mbit/s

95th percentile per-packet one-way delay: 87.220 ms

Loss rate: 2.20%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2017-12-12 00:34:51

End at: 2017-12-12 00:35:21

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 216.30 Mbit/s

95th percentile per-packet one-way delay: 112.618 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 119.97 Mbit/s

95th percentile per-packet one-way delay: 87.758 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 101.15 Mbit/s

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

Loss rate: 1.07%

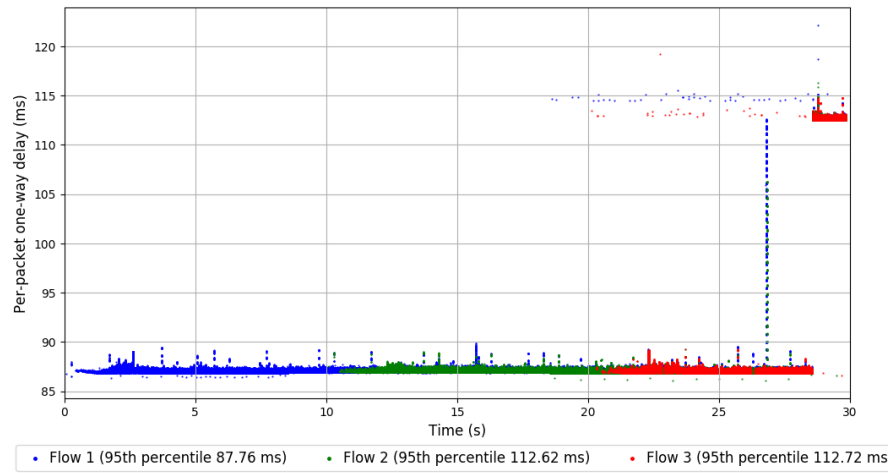
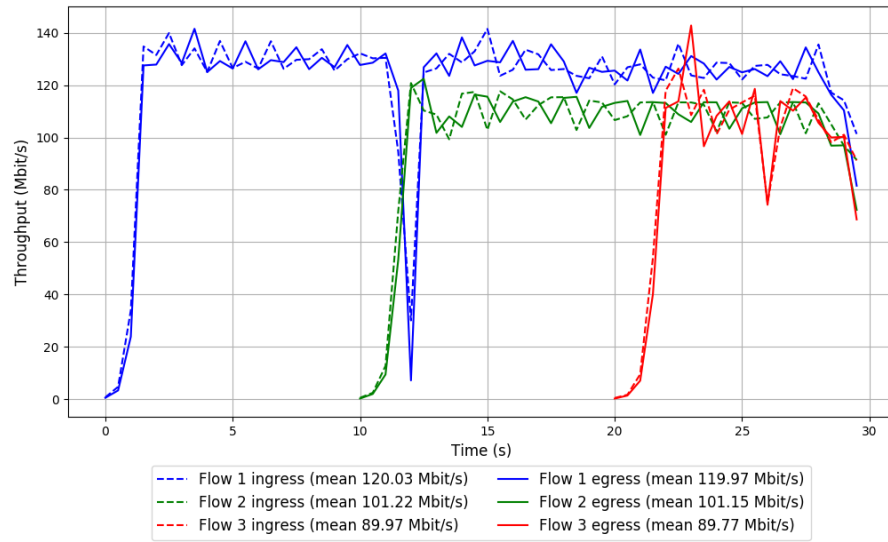
-- Flow 3:

Average throughput: 89.77 Mbit/s

95th percentile per-packet one-way delay: 112.723 ms

Loss rate: 2.51%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2017-12-11 22:33:12

End at: 2017-12-11 22:33:42

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 159.02 Mbit/s

95th percentile per-packet one-way delay: 96.423 ms

Loss rate: 0.85%

-- Flow 1:

Average throughput: 92.50 Mbit/s

95th percentile per-packet one-way delay: 95.969 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 69.00 Mbit/s

95th percentile per-packet one-way delay: 97.077 ms

Loss rate: 1.15%

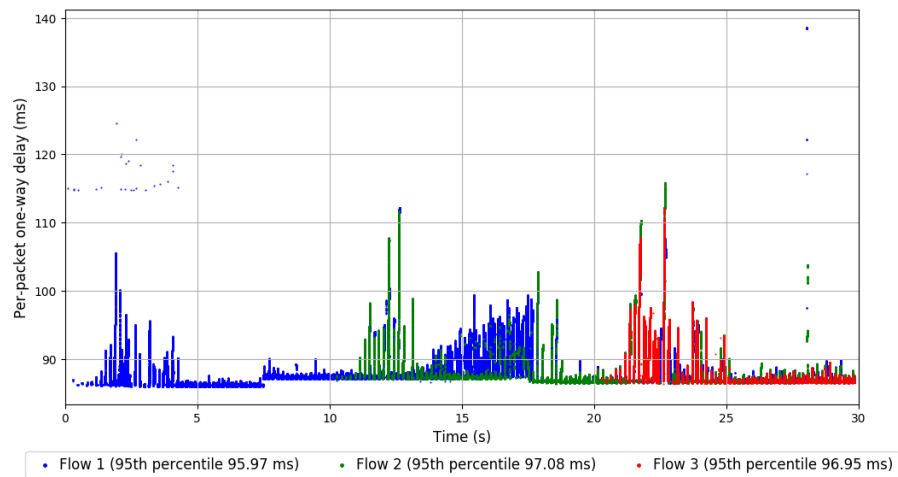
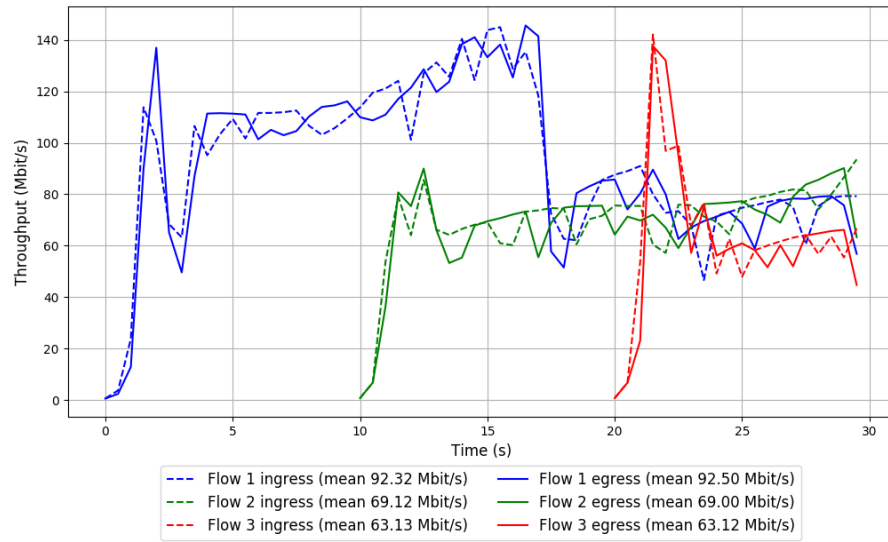
-- Flow 3:

Average throughput: 63.12 Mbit/s

95th percentile per-packet one-way delay: 96.948 ms

Loss rate: 1.79%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-11 22:46:24

End at: 2017-12-11 22:46:54

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 110.92 Mbit/s

95th percentile per-packet one-way delay: 97.019 ms

Loss rate: 0.66%

-- Flow 1:

Average throughput: 34.13 Mbit/s

95th percentile per-packet one-way delay: 91.705 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 59.20 Mbit/s

95th percentile per-packet one-way delay: 95.307 ms

Loss rate: 0.58%

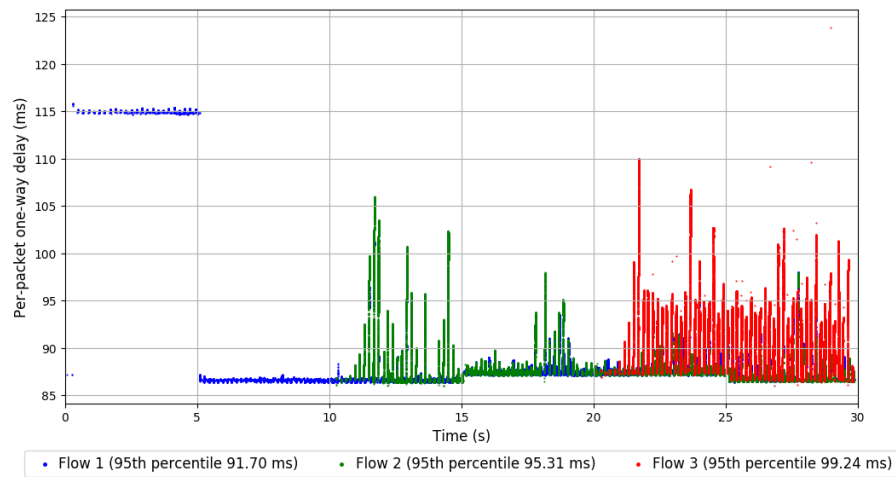
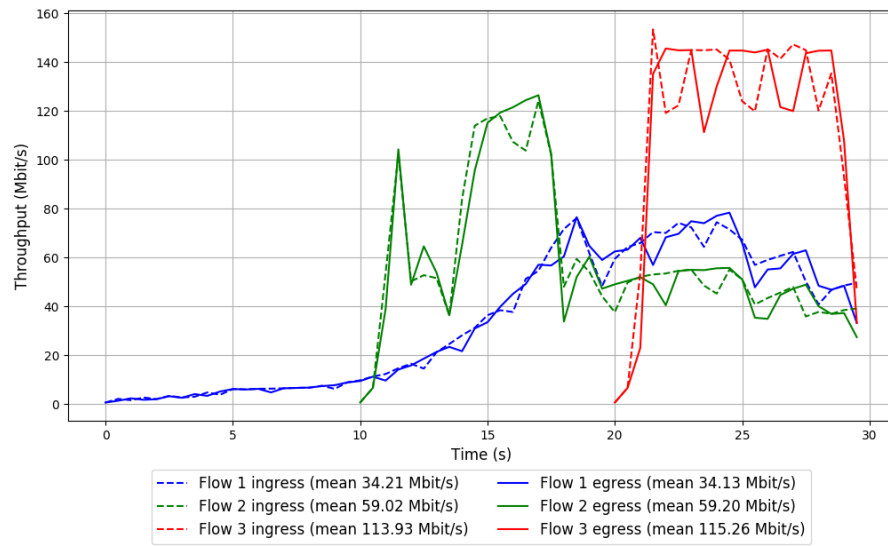
-- Flow 3:

Average throughput: 115.26 Mbit/s

95th percentile per-packet one-way delay: 99.238 ms

Loss rate: 0.61%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2017-12-11 22:59:24

End at: 2017-12-11 22:59:54

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.56 Mbit/s

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

Loss rate: 0.97%

-- Flow 1:

Average throughput: 78.67 Mbit/s

95th percentile per-packet one-way delay: 96.718 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 3.89 Mbit/s

95th percentile per-packet one-way delay: 92.322 ms

Loss rate: 4.88%

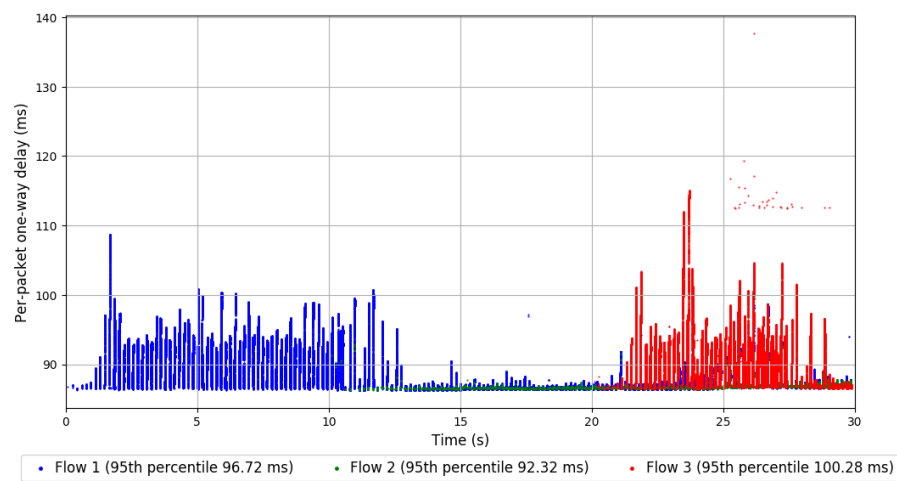
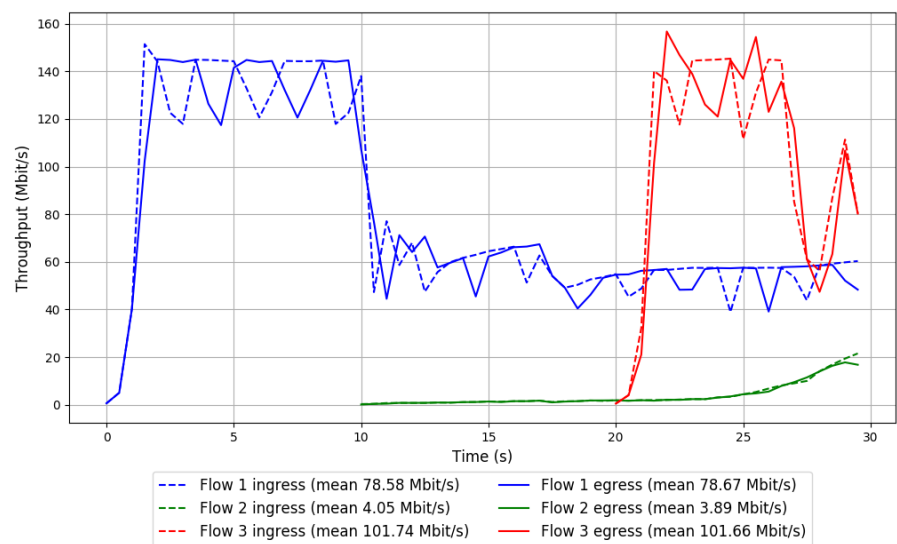
-- Flow 3:

Average throughput: 101.66 Mbit/s

95th percentile per-packet one-way delay: 100.279 ms

Loss rate: 1.83%

Run 3: Report of TCP Cubic — Data Link

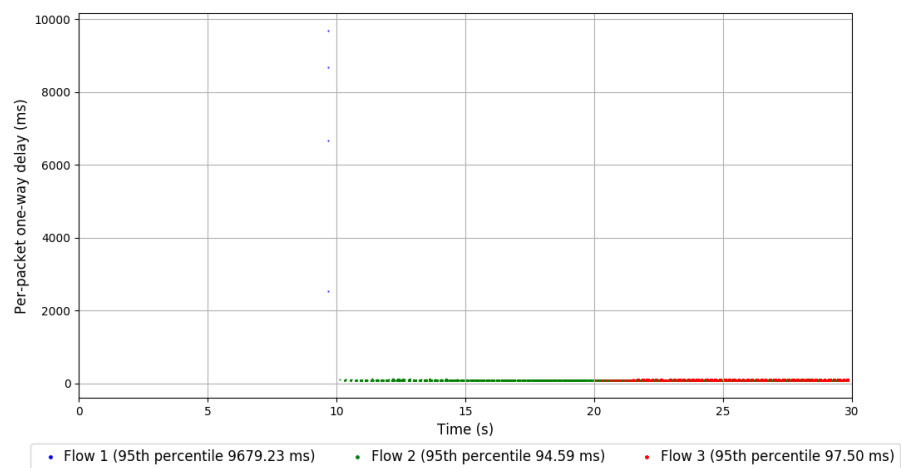
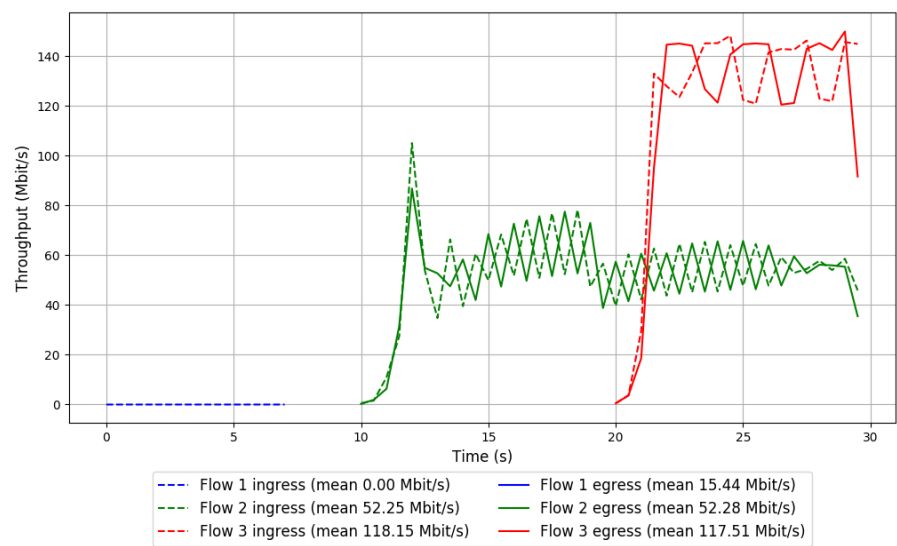


Run 4: Statistics of TCP Cubic

Start at: 2017-12-11 23:12:13

End at: 2017-12-11 23:12:43

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-11 23:25:00

End at: 2017-12-11 23:25:30

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.06 Mbit/s

95th percentile per-packet one-way delay: 112.771 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 64.01 Mbit/s

95th percentile per-packet one-way delay: 112.794 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 24.57 Mbit/s

95th percentile per-packet one-way delay: 112.850 ms

Loss rate: 2.04%

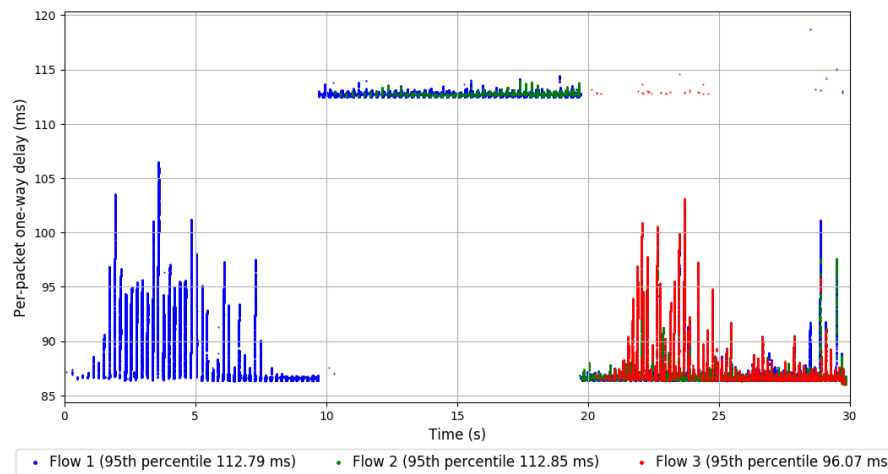
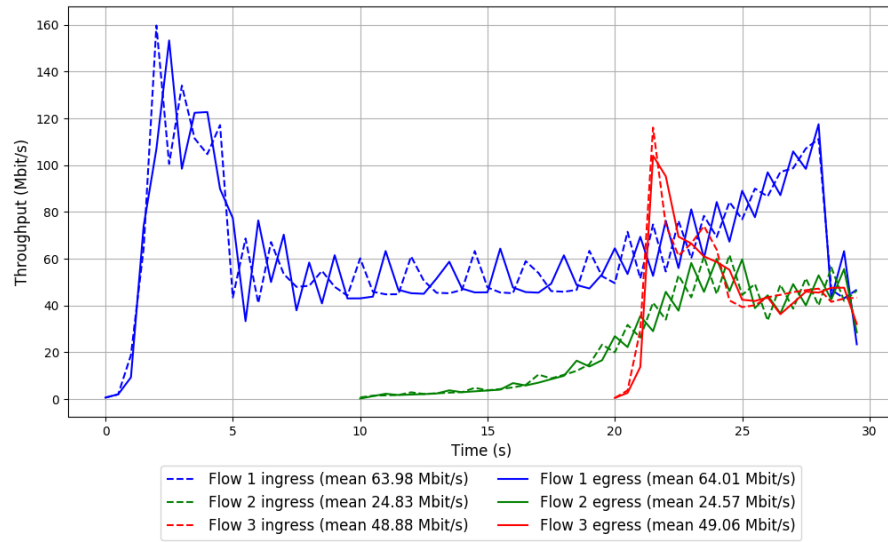
-- Flow 3:

Average throughput: 49.06 Mbit/s

95th percentile per-packet one-way delay: 96.073 ms

Loss rate: 1.66%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2017-12-11 23:37:47

End at: 2017-12-11 23:38:17

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.41 Mbit/s

95th percentile per-packet one-way delay: 123.529 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 47.65 Mbit/s

95th percentile per-packet one-way delay: 123.291 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 73.99 Mbit/s

95th percentile per-packet one-way delay: 121.356 ms

Loss rate: 1.16%

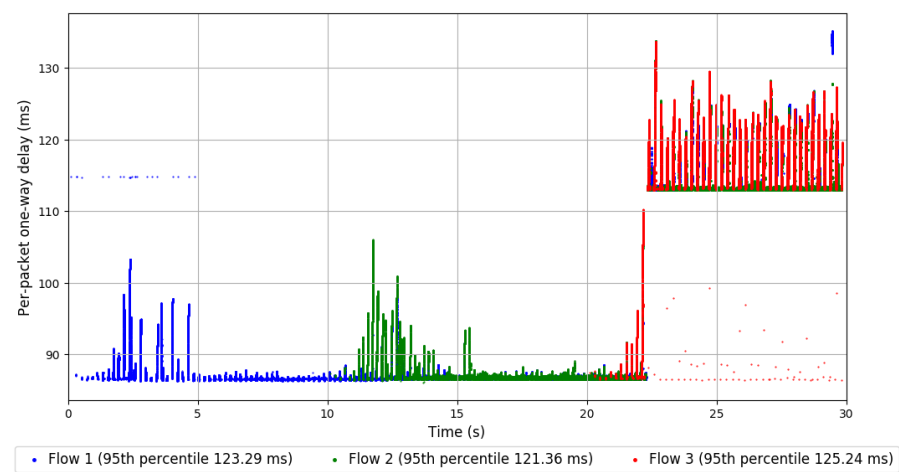
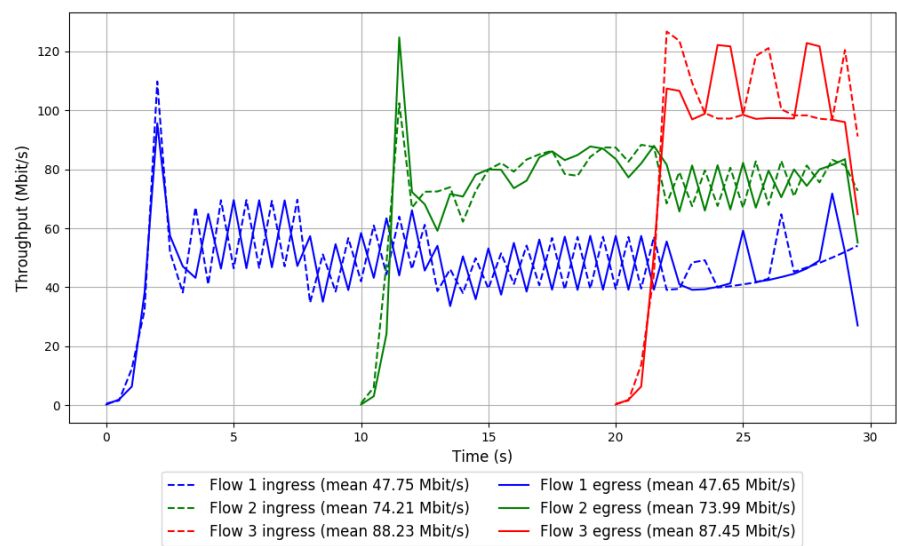
-- Flow 3:

Average throughput: 87.45 Mbit/s

95th percentile per-packet one-way delay: 125.237 ms

Loss rate: 2.90%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-11 23:50:59

End at: 2017-12-11 23:51:29

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.49 Mbit/s

95th percentile per-packet one-way delay: 123.486 ms

Loss rate: 2.09%

-- Flow 1:

Average throughput: 57.67 Mbit/s

95th percentile per-packet one-way delay: 123.439 ms

Loss rate: 1.37%

-- Flow 2:

Average throughput: 32.13 Mbit/s

95th percentile per-packet one-way delay: 123.860 ms

Loss rate: 3.56%

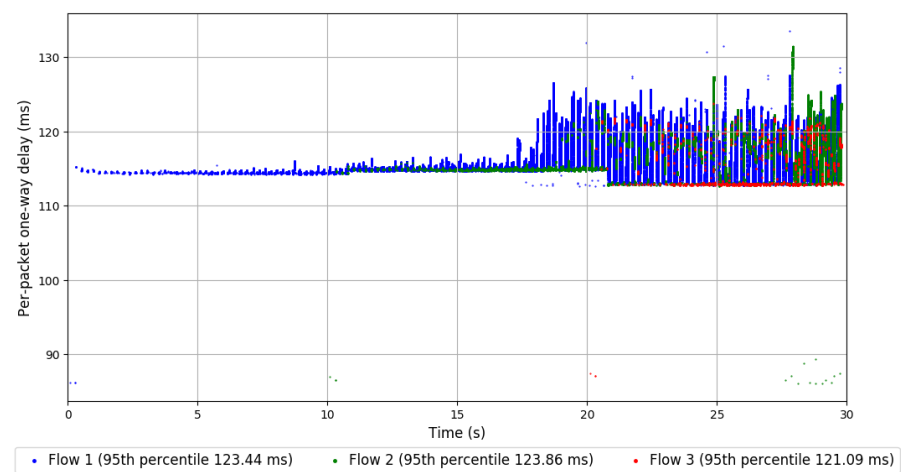
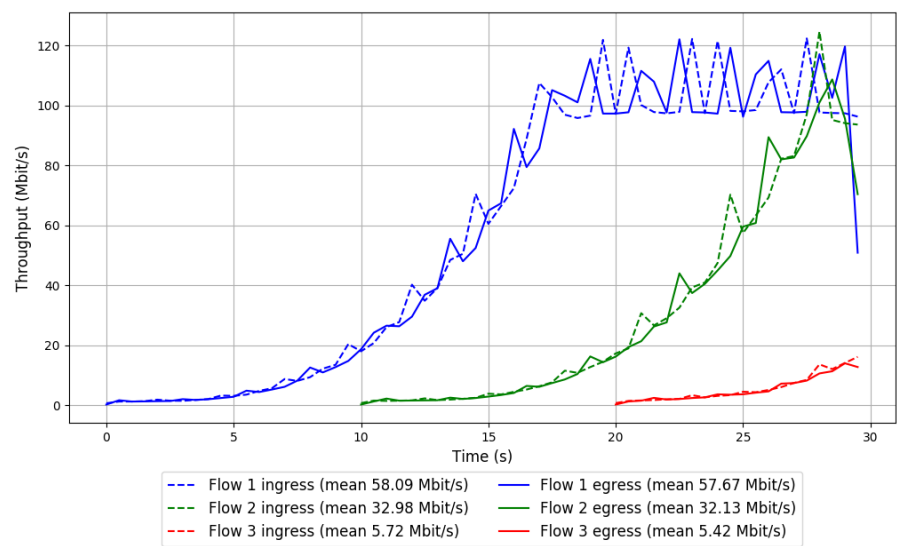
-- Flow 3:

Average throughput: 5.42 Mbit/s

95th percentile per-packet one-way delay: 121.090 ms

Loss rate: 7.30%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2017-12-12 00:03:42

End at: 2017-12-12 00:04:12

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.35 Mbit/s

95th percentile per-packet one-way delay: 117.115 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 53.79 Mbit/s

95th percentile per-packet one-way delay: 119.258 ms

Loss rate: 1.48%

-- Flow 2:

Average throughput: 70.42 Mbit/s

95th percentile per-packet one-way delay: 114.787 ms

Loss rate: 1.33%

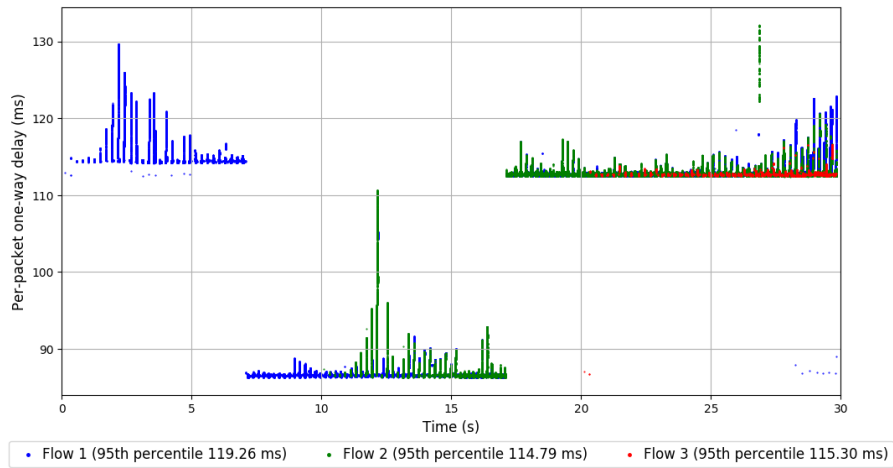
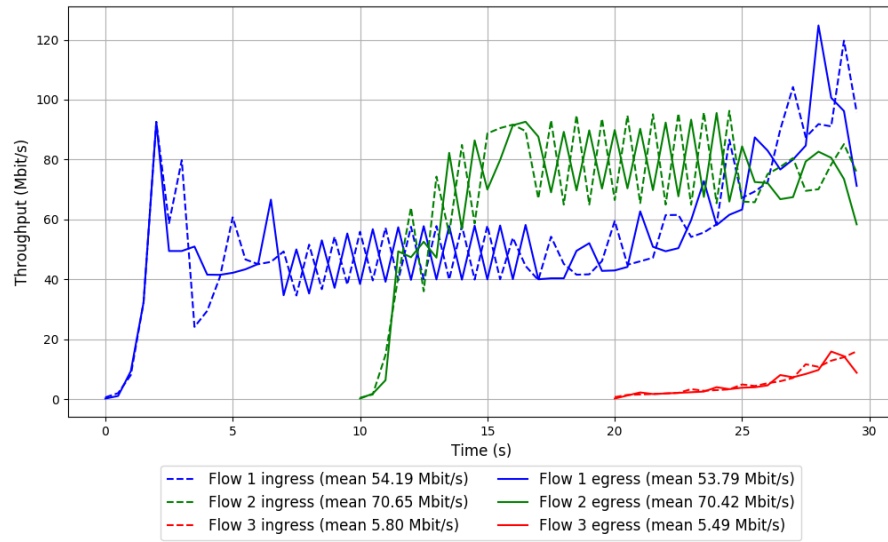
-- Flow 3:

Average throughput: 5.49 Mbit/s

95th percentile per-packet one-way delay: 115.297 ms

Loss rate: 7.17%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2017-12-12 00:16:50

End at: 2017-12-12 00:17:20

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.35 Mbit/s

95th percentile per-packet one-way delay: 122.844 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 52.44 Mbit/s

95th percentile per-packet one-way delay: 122.656 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 46.48 Mbit/s

95th percentile per-packet one-way delay: 122.177 ms

Loss rate: 1.37%

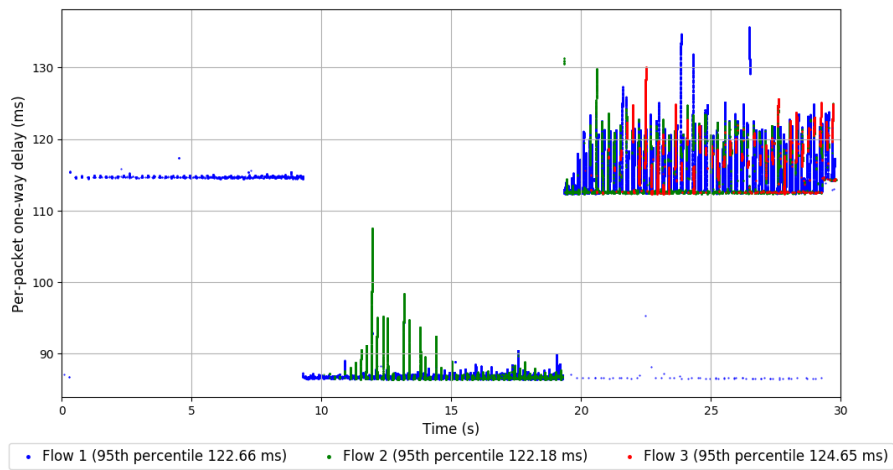
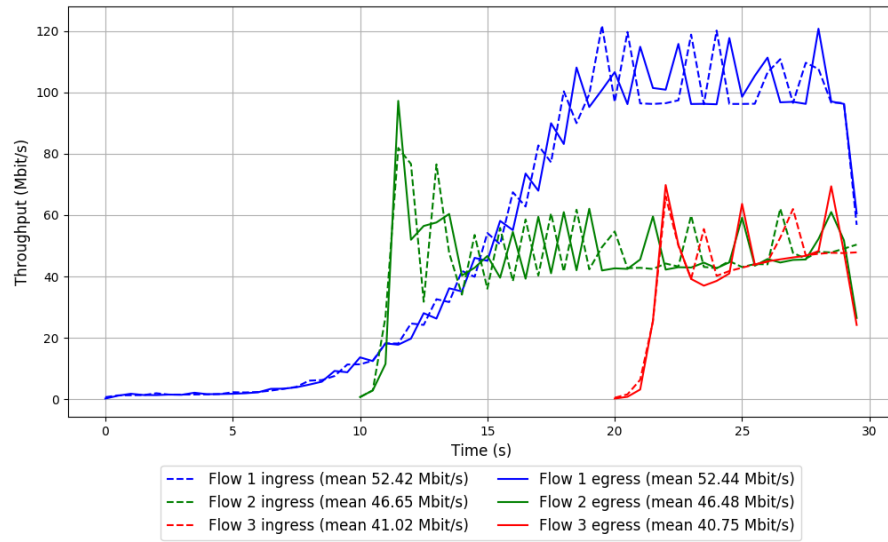
-- Flow 3:

Average throughput: 40.75 Mbit/s

95th percentile per-packet one-way delay: 124.651 ms

Loss rate: 2.96%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-12 00:29:44

End at: 2017-12-12 00:30:14

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.21 Mbit/s

95th percentile per-packet one-way delay: 122.198 ms

Loss rate: 1.74%

-- Flow 1:

Average throughput: 31.18 Mbit/s

95th percentile per-packet one-way delay: 118.897 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 42.37 Mbit/s

95th percentile per-packet one-way delay: 125.670 ms

Loss rate: 2.63%

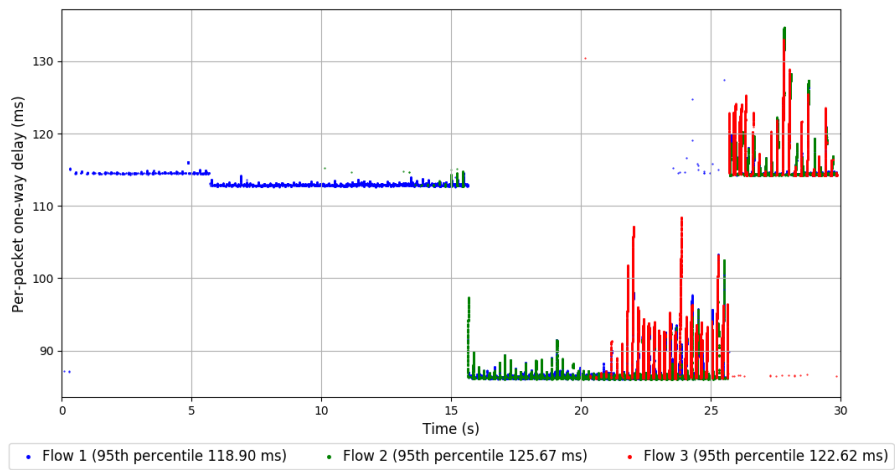
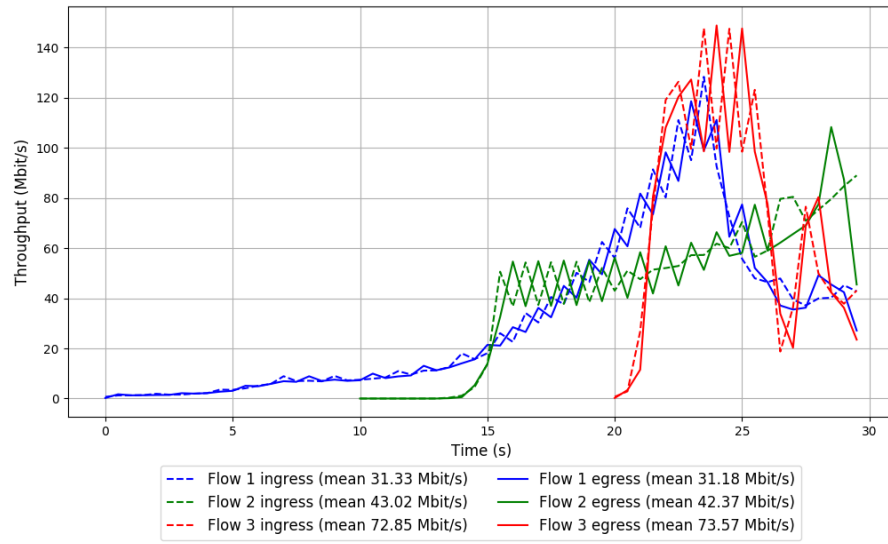
-- Flow 3:

Average throughput: 73.57 Mbit/s

95th percentile per-packet one-way delay: 122.619 ms

Loss rate: 1.47%

Run 10: Report of TCP Cubic — Data Link

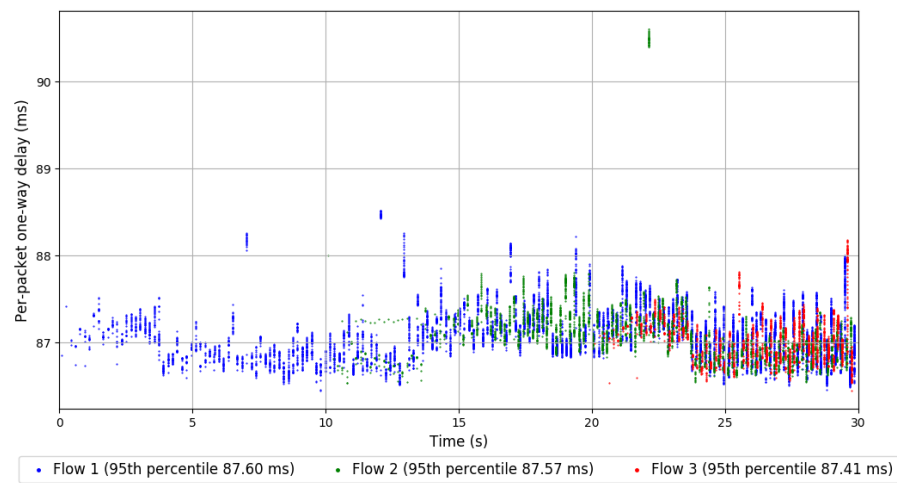
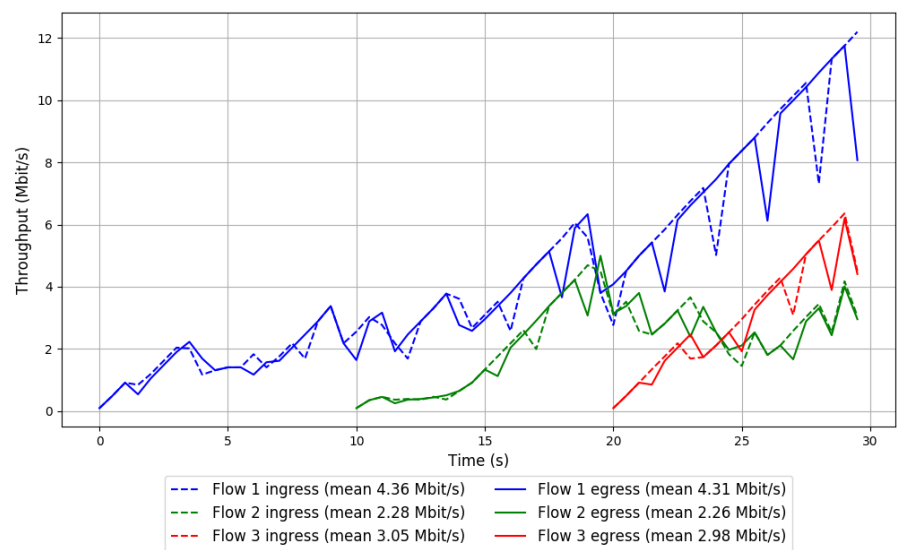


```
Run 1: Statistics of LEDBAT

Start at: 2017-12-11 22:34:06
End at: 2017-12-11 22:34:36

# Below is generated by plot.py at 2017-12-12 02:57:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.77 Mbit/s
95th percentile per-packet one-way delay: 87.590 ms
Loss rate: 1.97%
-- Flow 1:
Average throughput: 4.31 Mbit/s
95th percentile per-packet one-way delay: 87.601 ms
Loss rate: 1.64%
-- Flow 2:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 87.573 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 87.412 ms
Loss rate: 3.80%
```


Run 1: Report of LEDBAT — Data Link

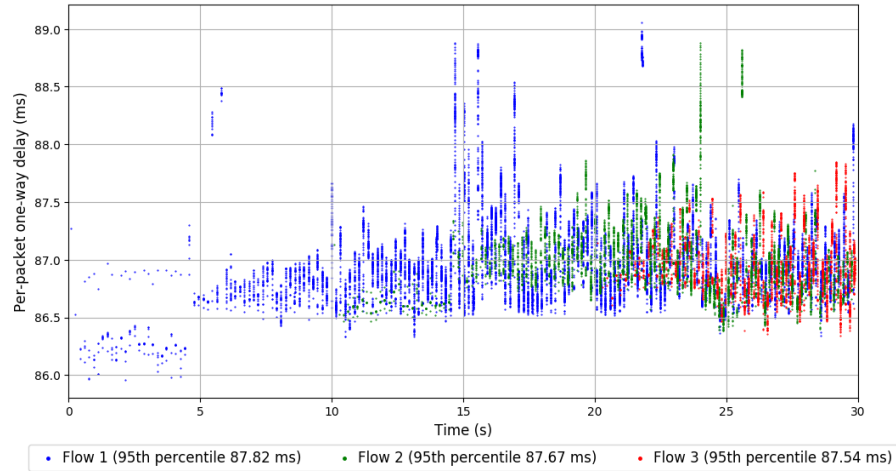
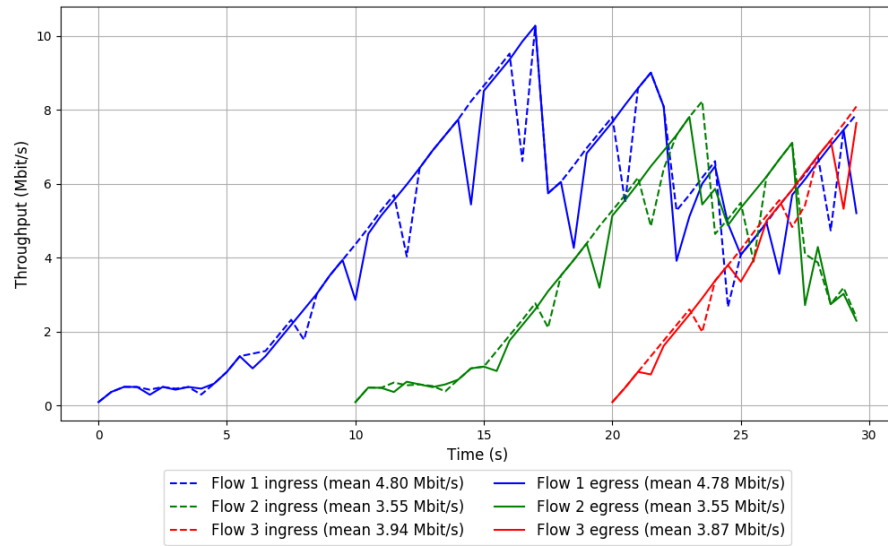


```
Run 2: Statistics of LEDBAT

Start at: 2017-12-11 22:47:15
End at: 2017-12-11 22:47:45

# Below is generated by plot.py at 2017-12-12 02:57:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.38 Mbit/s
95th percentile per-packet one-way delay: 87.703 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 4.78 Mbit/s
95th percentile per-packet one-way delay: 87.820 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 3.55 Mbit/s
95th percentile per-packet one-way delay: 87.668 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 87.537 ms
Loss rate: 3.52%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-11 23:00:16

End at: 2017-12-11 23:00:46

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.75 Mbit/s

95th percentile per-packet one-way delay: 87.549 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 87.458 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 6.75 Mbit/s

95th percentile per-packet one-way delay: 88.033 ms

Loss rate: 1.87%

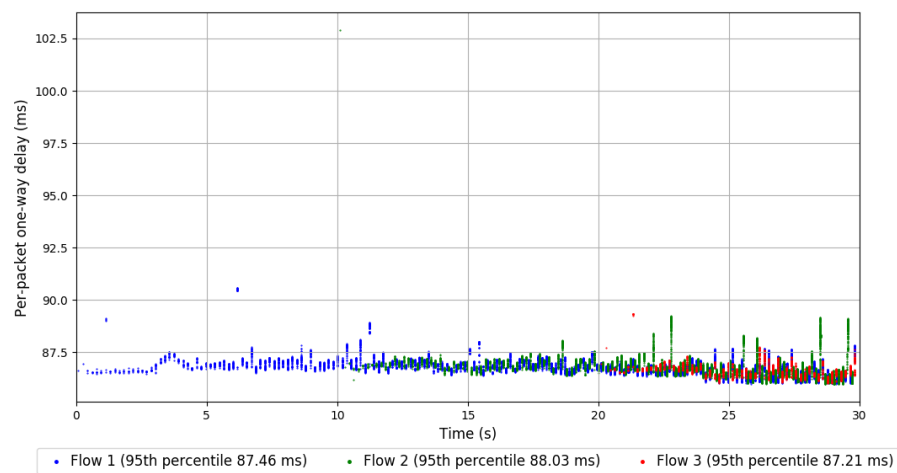
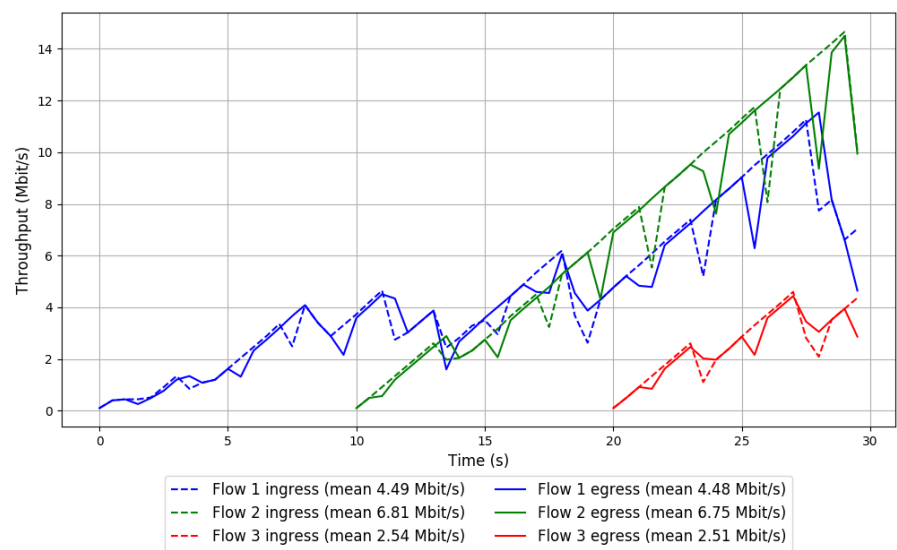
-- Flow 3:

Average throughput: 2.51 Mbit/s

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

Loss rate: 2.99%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-11 23:13:03

End at: 2017-12-11 23:13:33

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.79 Mbit/s

95th percentile per-packet one-way delay: 87.388 ms

Loss rate: 2.47%

-- Flow 1:

Average throughput: 12.33 Mbit/s

95th percentile per-packet one-way delay: 3313.169 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.89 Mbit/s

95th percentile per-packet one-way delay: 87.465 ms

Loss rate: 1.67%

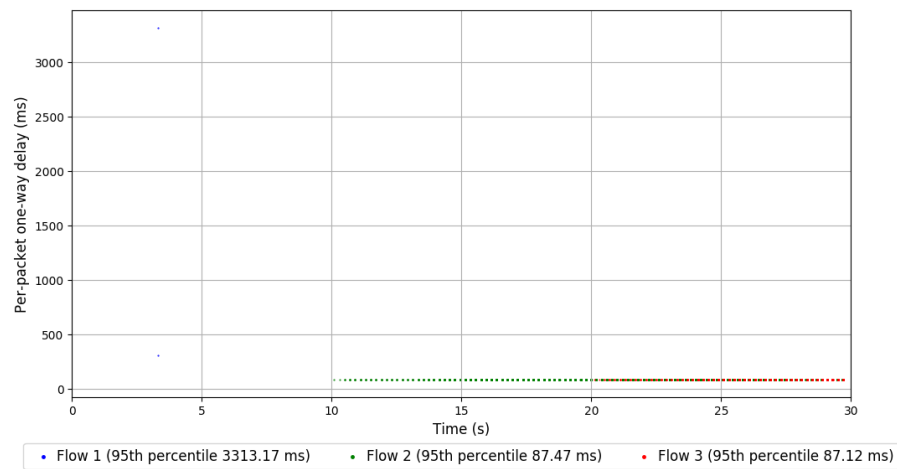
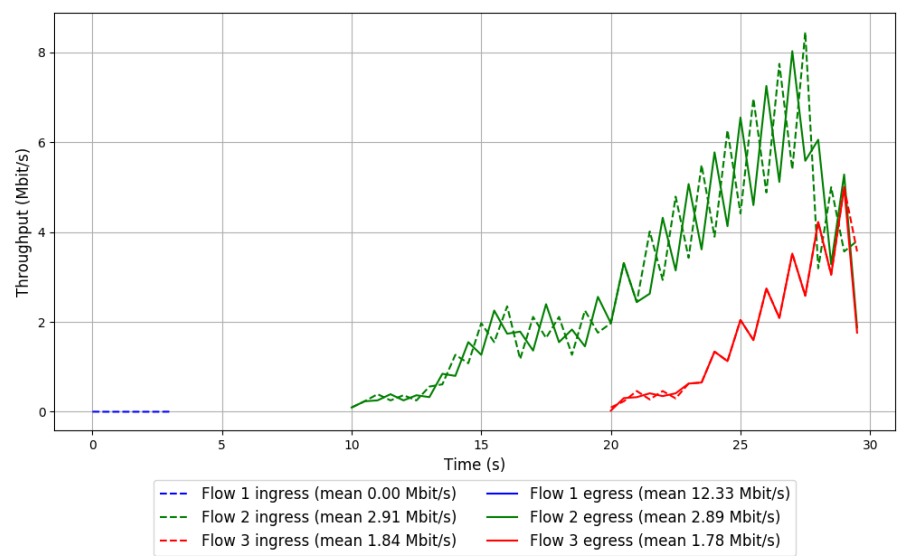
-- Flow 3:

Average throughput: 1.78 Mbit/s

95th percentile per-packet one-way delay: 87.120 ms

Loss rate: 5.02%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-11 23:25:52

End at: 2017-12-11 23:26:22

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.90 Mbit/s

95th percentile per-packet one-way delay: 115.049 ms

Loss rate: 3.15%

-- Flow 1:

Average throughput: 2.25 Mbit/s

95th percentile per-packet one-way delay: 114.878 ms

Loss rate: 2.43%

-- Flow 2:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 115.136 ms

Loss rate: 3.22%

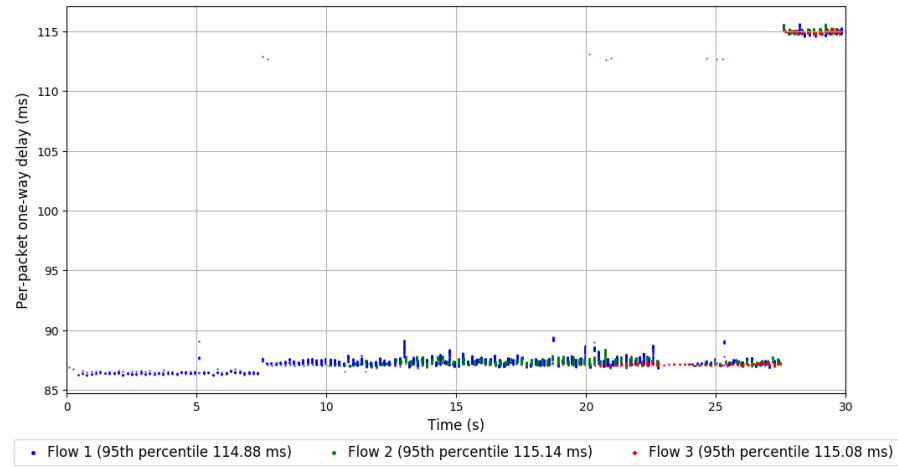
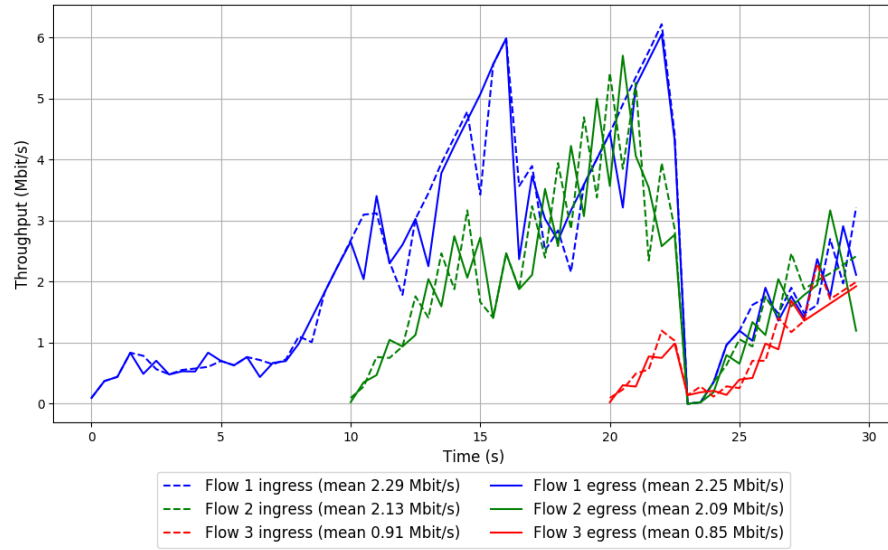
-- Flow 3:

Average throughput: 0.85 Mbit/s

95th percentile per-packet one-way delay: 115.083 ms

Loss rate: 8.39%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-11 23:38:41

End at: 2017-12-11 23:39:11

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.06 Mbit/s

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

Loss rate: 1.22%

-- Flow 1:

Average throughput: 4.88 Mbit/s

95th percentile per-packet one-way delay: 113.805 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 113.687 ms

Loss rate: 0.98%

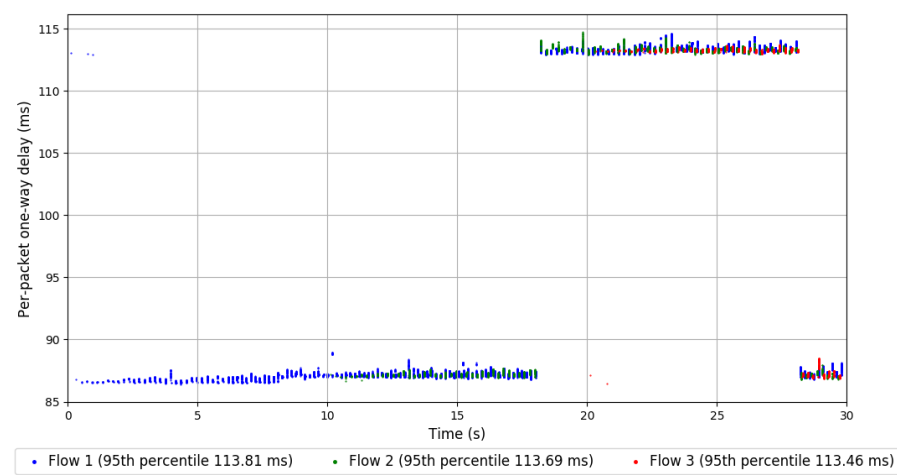
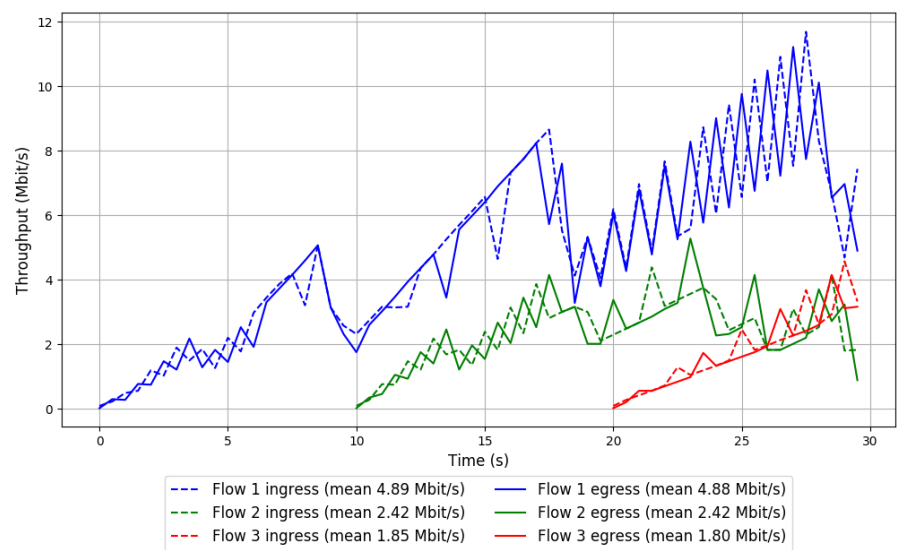
-- Flow 3:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 113.460 ms

Loss rate: 4.65%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-11 23:51:50

End at: 2017-12-11 23:52:20

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.62 Mbit/s

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

Loss rate: 1.46%

-- Flow 1:

Average throughput: 3.62 Mbit/s

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

Loss rate: 0.55%

-- Flow 2:

Average throughput: 3.68 Mbit/s

95th percentile per-packet one-way delay: 113.456 ms

Loss rate: 2.43%

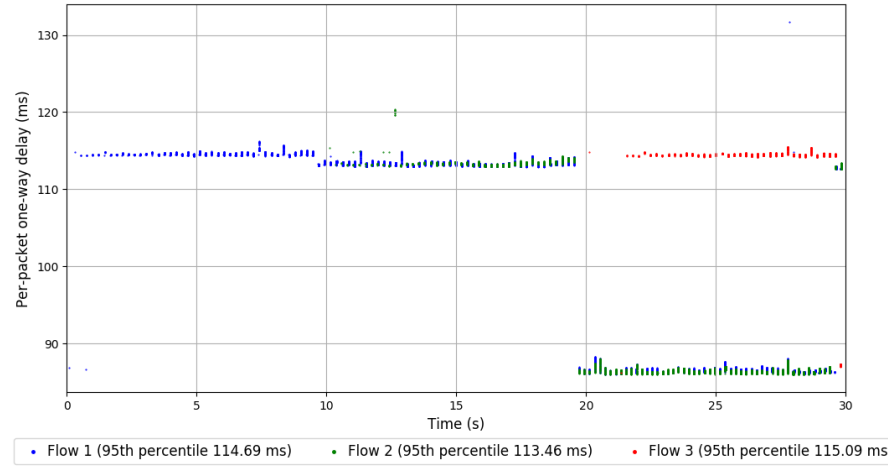
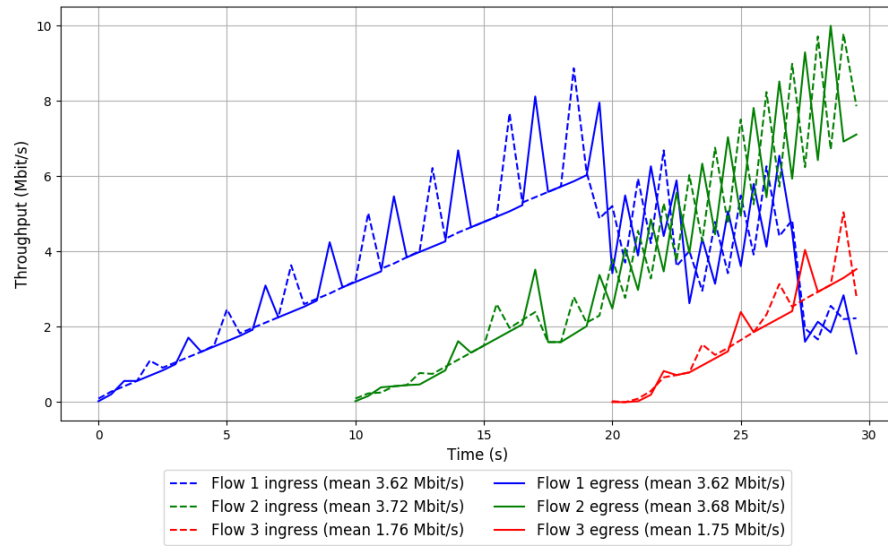
-- Flow 3:

Average throughput: 1.75 Mbit/s

95th percentile per-packet one-way delay: 115.093 ms

Loss rate: 2.99%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-12 00:04:34

End at: 2017-12-12 00:05:04

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.80 Mbit/s

95th percentile per-packet one-way delay: 113.472 ms

Loss rate: 1.68%

-- Flow 1:

Average throughput: 3.79 Mbit/s

95th percentile per-packet one-way delay: 113.529 ms

Loss rate: 1.20%

-- Flow 2:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 113.346 ms

Loss rate: 1.79%

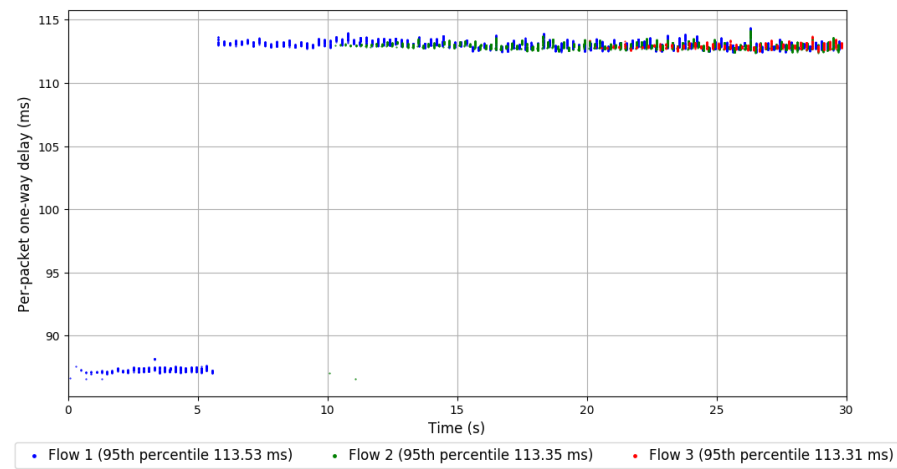
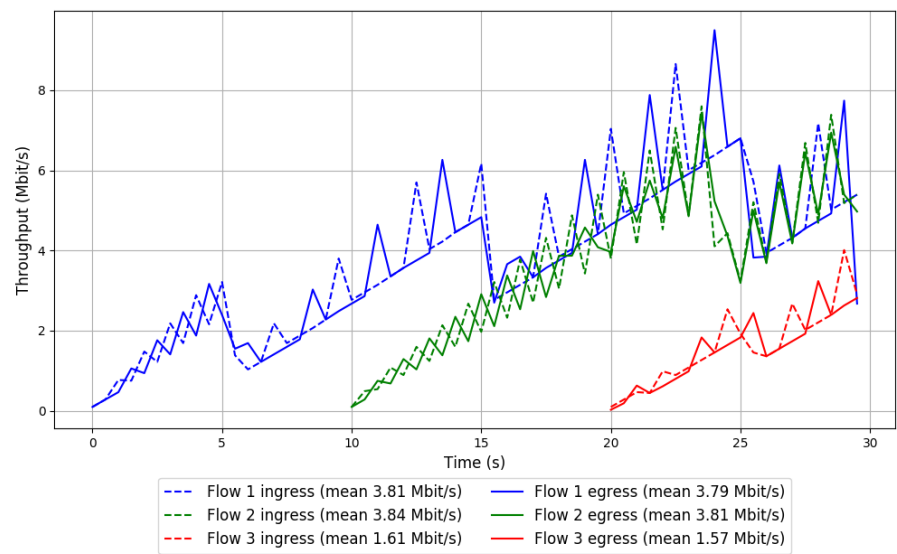
-- Flow 3:

Average throughput: 1.57 Mbit/s

95th percentile per-packet one-way delay: 113.309 ms

Loss rate: 4.62%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-12 00:17:42

End at: 2017-12-12 00:18:12

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.31 Mbit/s

95th percentile per-packet one-way delay: 115.261 ms

Loss rate: 2.00%

-- Flow 1:

Average throughput: 5.24 Mbit/s

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

Loss rate: 1.55%

-- Flow 2:

Average throughput: 4.97 Mbit/s

95th percentile per-packet one-way delay: 115.058 ms

Loss rate: 2.20%

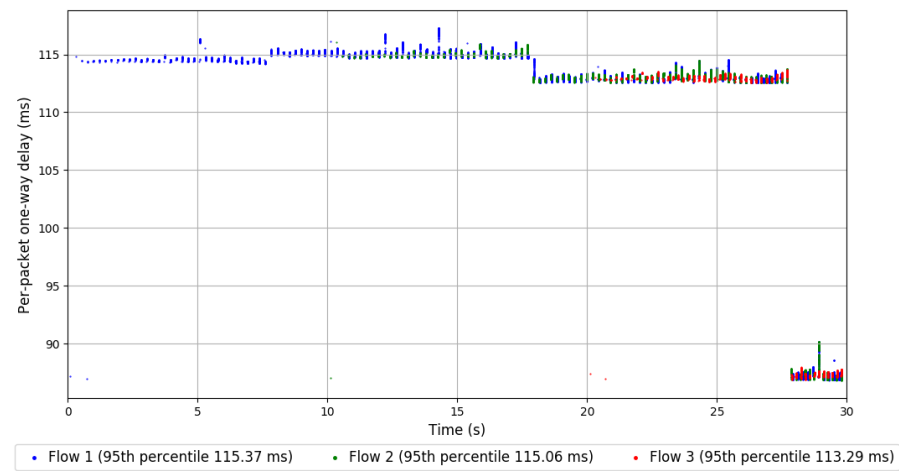
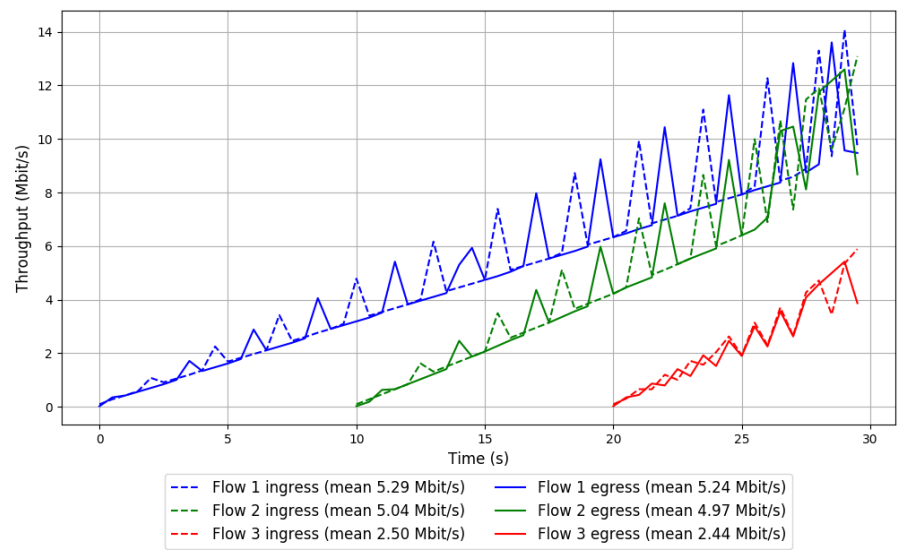
-- Flow 3:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 113.286 ms

Loss rate: 4.10%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-12 00:30:34

End at: 2017-12-12 00:31:04

Below is generated by plot.py at 2017-12-12 02:57:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.27 Mbit/s

95th percentile per-packet one-way delay: 114.575 ms

Loss rate: 2.06%

-- Flow 1:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 114.669 ms

Loss rate: 1.73%

-- Flow 2:

Average throughput: 4.65 Mbit/s

95th percentile per-packet one-way delay: 88.150 ms

Loss rate: 2.27%

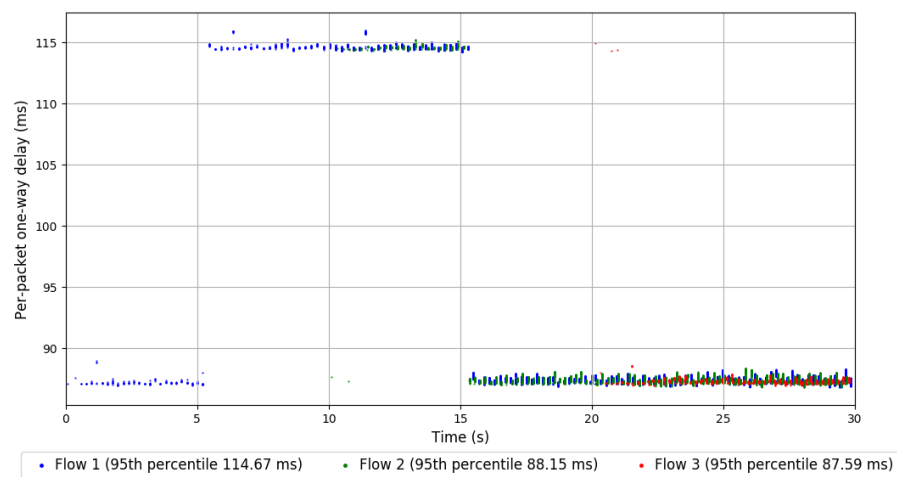
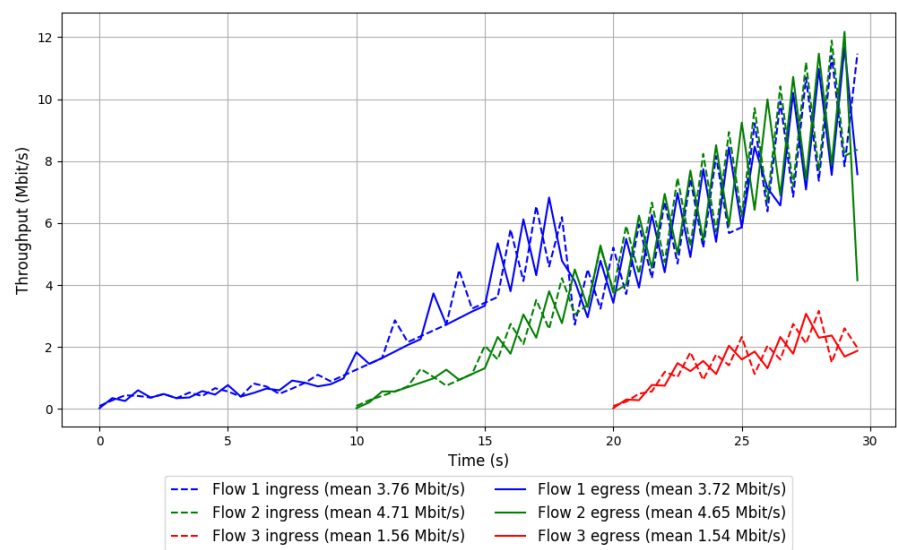
-- Flow 3:

Average throughput: 1.54 Mbit/s

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

Loss rate: 3.28%

Run 10: Report of LEDBAT — Data Link

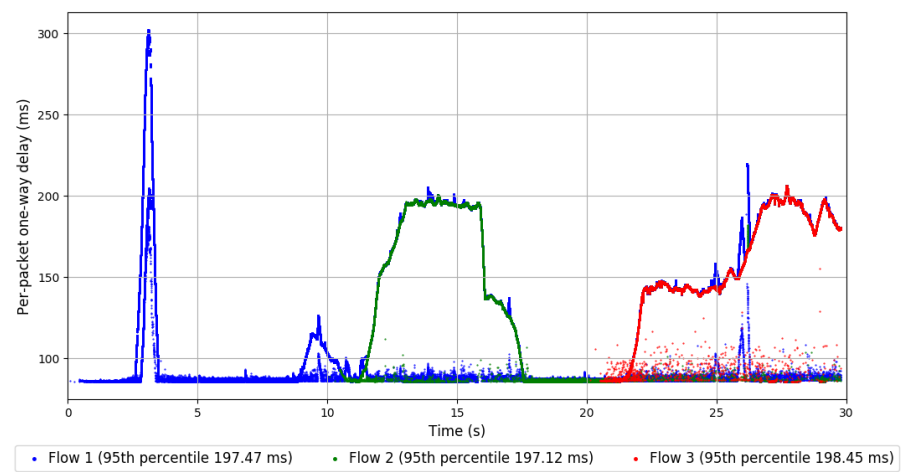
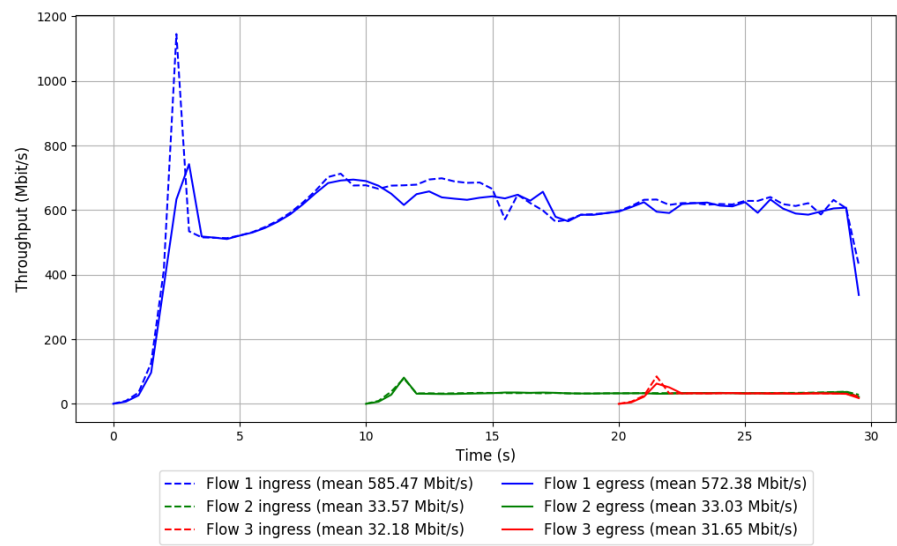


```
Run 1: Statistics of PCC

Start at: 2017-12-11 22:26:42
End at: 2017-12-11 22:27:12

# Below is generated by plot.py at 2017-12-12 03:08:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 604.53 Mbit/s
95th percentile per-packet one-way delay: 197.464 ms
Loss rate: 2.80%
-- Flow 1:
Average throughput: 572.38 Mbit/s
95th percentile per-packet one-way delay: 197.468 ms
Loss rate: 2.80%
-- Flow 2:
Average throughput: 33.03 Mbit/s
95th percentile per-packet one-way delay: 197.119 ms
Loss rate: 2.47%
-- Flow 3:
Average throughput: 31.65 Mbit/s
95th percentile per-packet one-way delay: 198.450 ms
Loss rate: 3.38%
```

Run 1: Report of PCC — Data Link

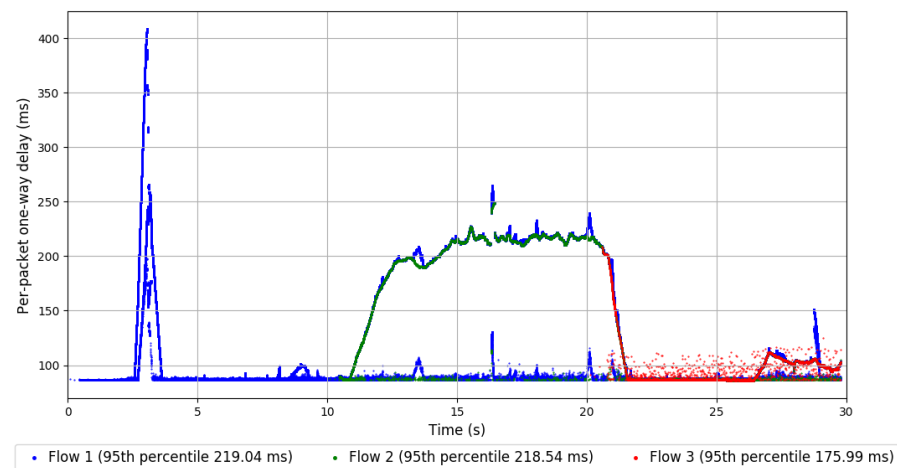
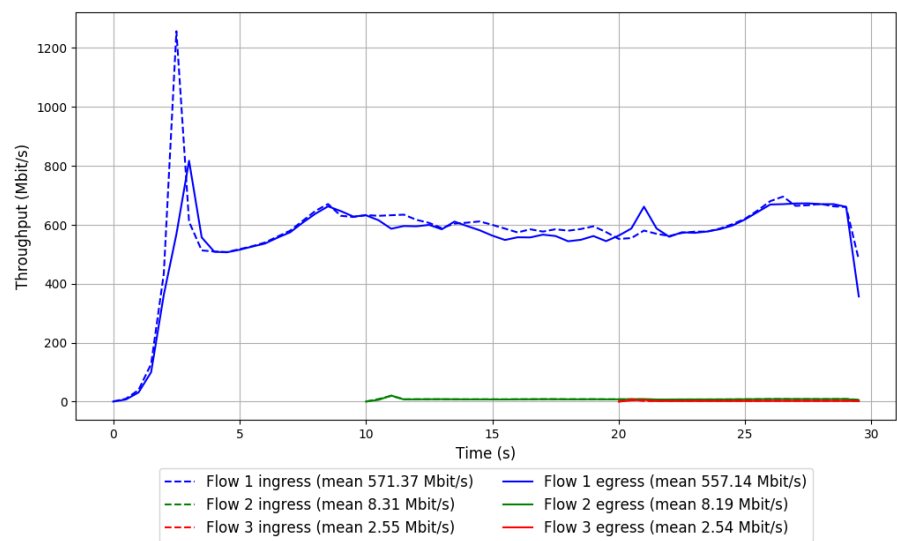


```
Run 2: Statistics of PCC

Start at: 2017-12-11 22:39:54
End at: 2017-12-11 22:40:24

# Below is generated by plot.py at 2017-12-12 03:08:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 563.35 Mbit/s
95th percentile per-packet one-way delay: 219.032 ms
Loss rate: 3.05%
-- Flow 1:
Average throughput: 557.14 Mbit/s
95th percentile per-packet one-way delay: 219.043 ms
Loss rate: 3.06%
-- Flow 2:
Average throughput: 8.19 Mbit/s
95th percentile per-packet one-way delay: 218.537 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 175.985 ms
Loss rate: 2.04%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-11 22:52:57

End at: 2017-12-11 22:53:27

Below is generated by plot.py at 2017-12-12 03:08:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 596.74 Mbit/s

95th percentile per-packet one-way delay: 199.423 ms

Loss rate: 2.04%

-- Flow 1:

Average throughput: 571.32 Mbit/s

95th percentile per-packet one-way delay: 199.590 ms

Loss rate: 2.05%

-- Flow 2:

Average throughput: 34.28 Mbit/s

95th percentile per-packet one-way delay: 197.203 ms

Loss rate: 1.53%

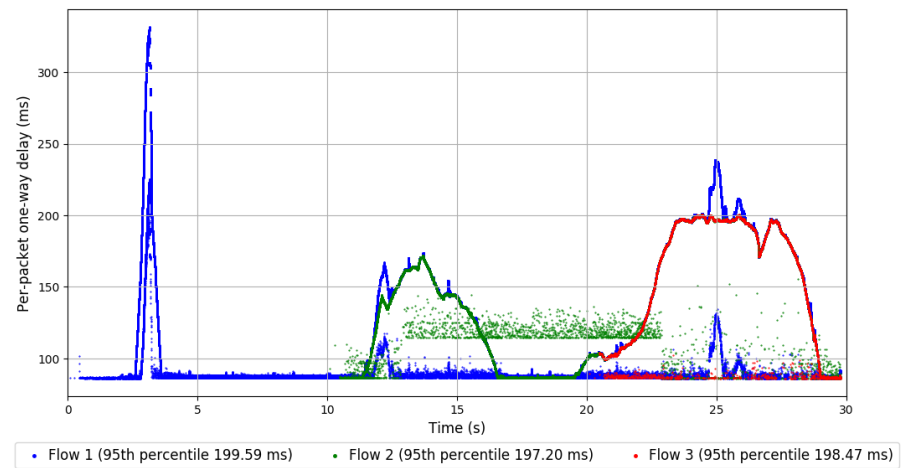
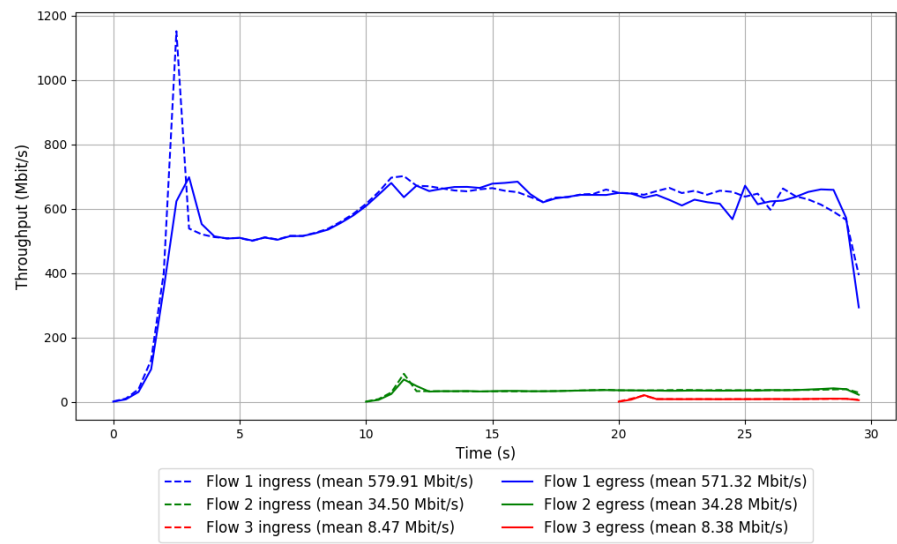
-- Flow 3:

Average throughput: 8.38 Mbit/s

95th percentile per-packet one-way delay: 198.468 ms

Loss rate: 2.75%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-11 23:06:06

End at: 2017-12-11 23:06:36

Below is generated by plot.py at 2017-12-12 03:08:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 515.31 Mbit/s

95th percentile per-packet one-way delay: 216.468 ms

Loss rate: 3.69%

-- Flow 1:

Average throughput: 503.37 Mbit/s

95th percentile per-packet one-way delay: 216.486 ms

Loss rate: 3.71%

-- Flow 2:

Average throughput: 15.93 Mbit/s

95th percentile per-packet one-way delay: 216.108 ms

Loss rate: 2.84%

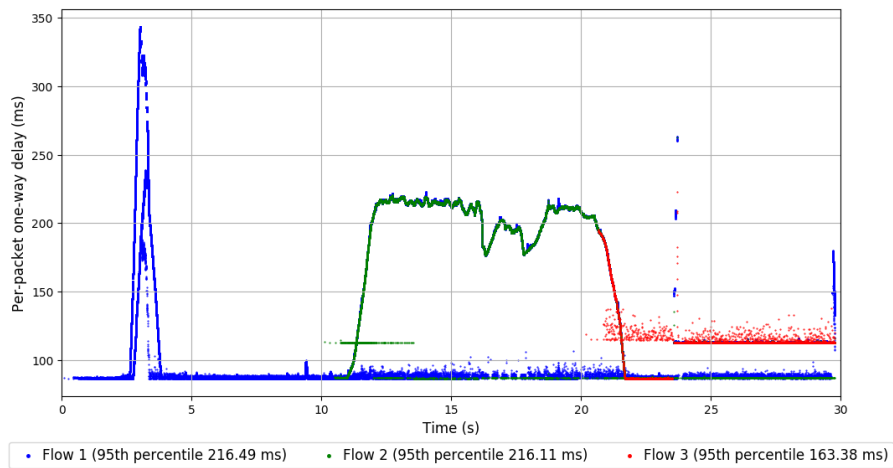
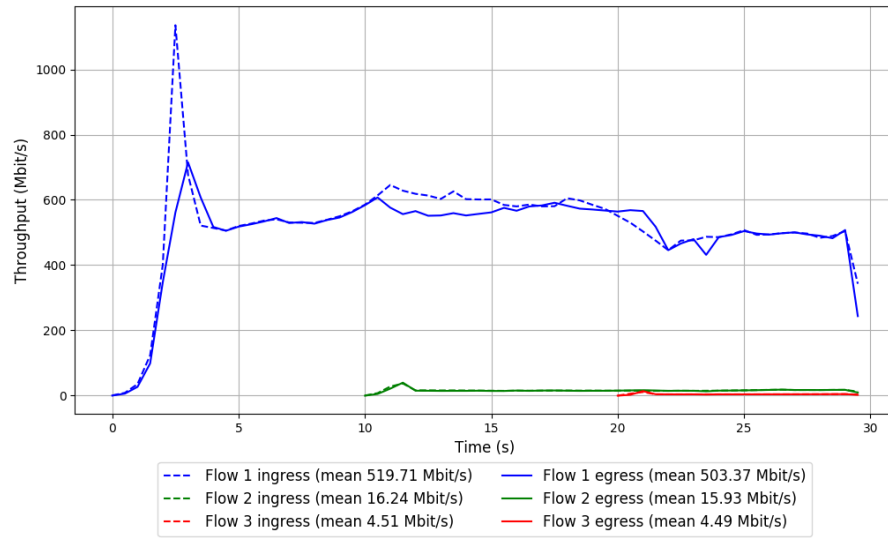
-- Flow 3:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 163.378 ms

Loss rate: 2.53%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2017-12-11 23:18:58

End at: 2017-12-11 23:19:28

Below is generated by plot.py at 2017-12-12 03:08:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 544.29 Mbit/s

95th percentile per-packet one-way delay: 235.243 ms

Loss rate: 2.49%

-- Flow 1:

Average throughput: 537.82 Mbit/s

95th percentile per-packet one-way delay: 235.356 ms

Loss rate: 2.50%

-- Flow 2:

Average throughput: 7.76 Mbit/s

95th percentile per-packet one-way delay: 234.953 ms

Loss rate: 1.41%

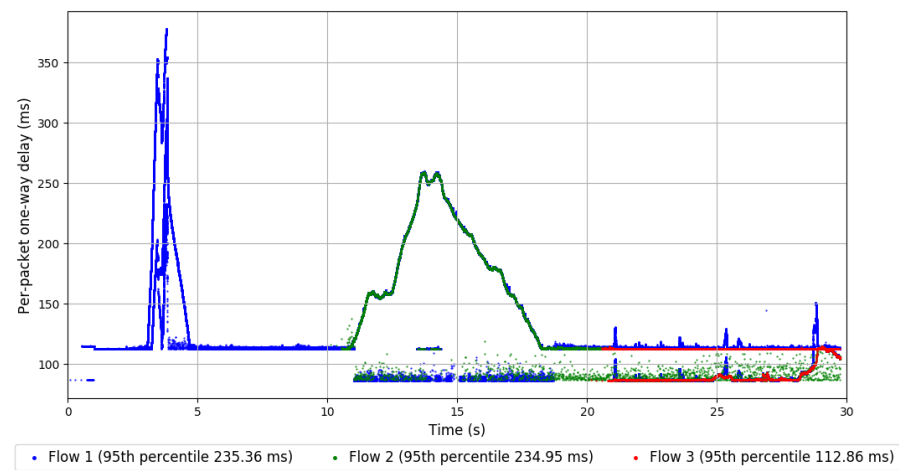
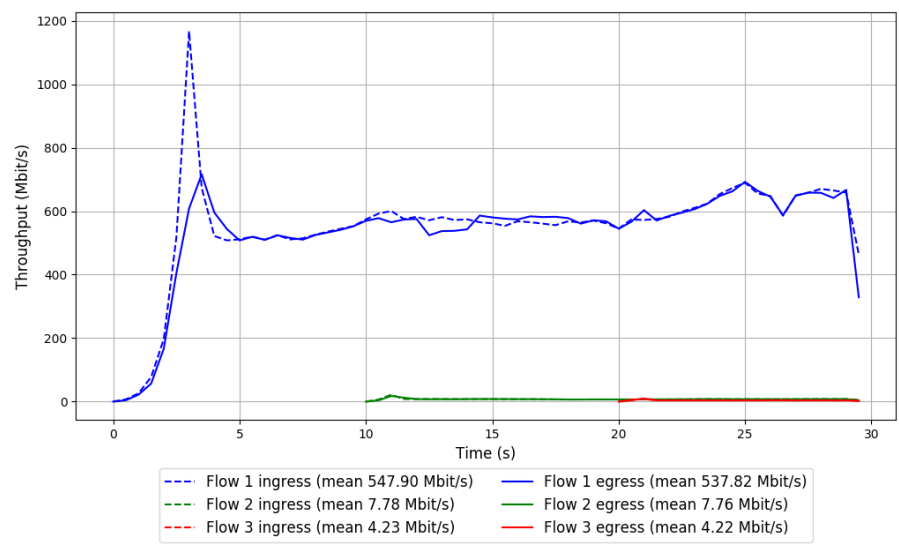
-- Flow 3:

Average throughput: 4.22 Mbit/s

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

Loss rate: 2.23%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-11 23:31:55

End at: 2017-12-11 23:32:25

Below is generated by plot.py at 2017-12-12 03:08:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 162.40 Mbit/s

95th percentile per-packet one-way delay: 241.629 ms

Loss rate: 3.59%

-- Flow 1:

Average throughput: 19.55 Mbit/s

95th percentile per-packet one-way delay: 150.980 ms

Loss rate: 1.40%

-- Flow 2:

Average throughput: 5.37 Mbit/s

95th percentile per-packet one-way delay: 180.090 ms

Loss rate: 1.63%

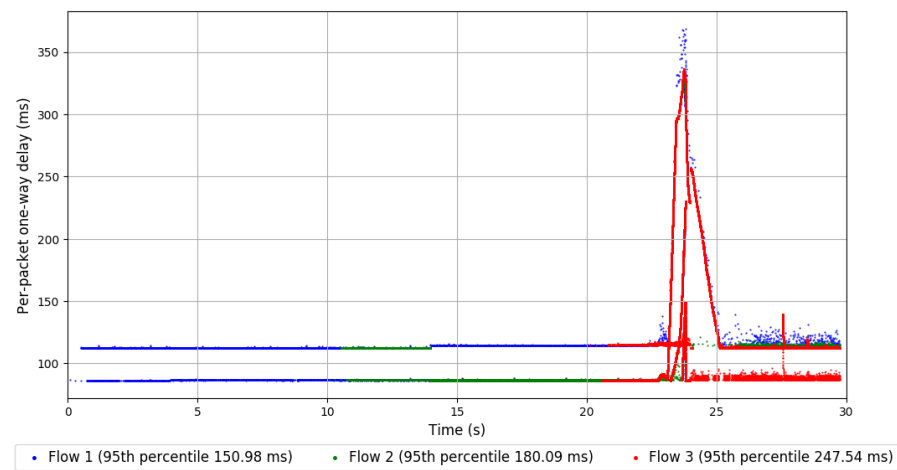
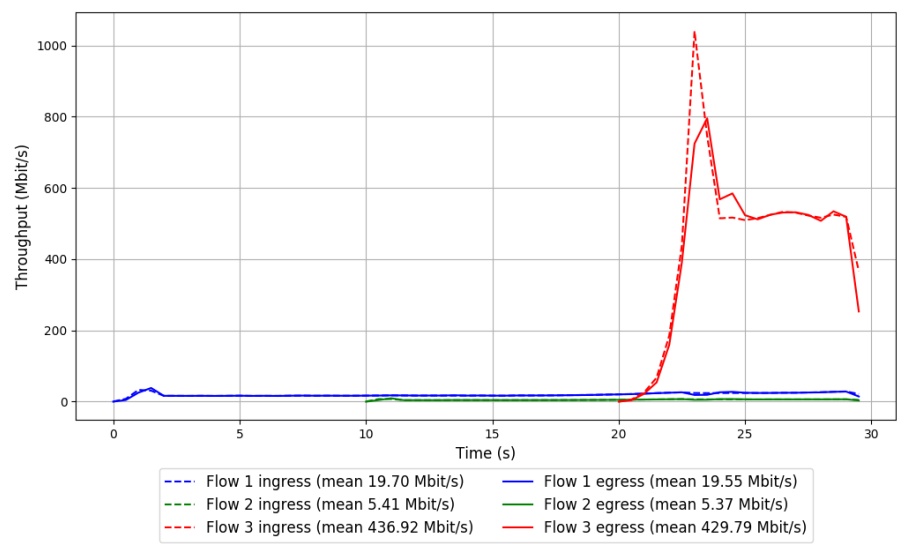
-- Flow 3:

Average throughput: 429.79 Mbit/s

95th percentile per-packet one-way delay: 247.544 ms

Loss rate: 3.93%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-11 23:44:42

End at: 2017-12-11 23:45:12

Below is generated by plot.py at 2017-12-12 03:08:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 367.12 Mbit/s

95th percentile per-packet one-way delay: 217.204 ms

Loss rate: 2.10%

-- Flow 1:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 196.889 ms

Loss rate: 0.96%

-- Flow 2:

Average throughput: 516.18 Mbit/s

95th percentile per-packet one-way delay: 216.355 ms

Loss rate: 2.11%

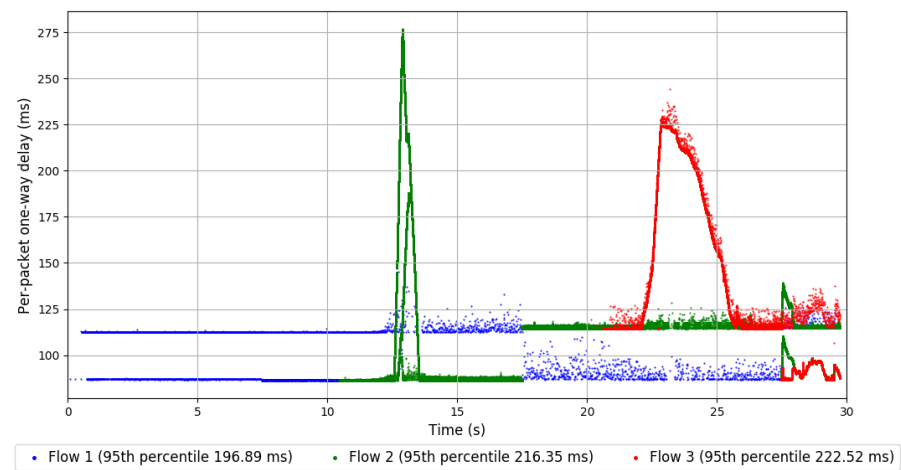
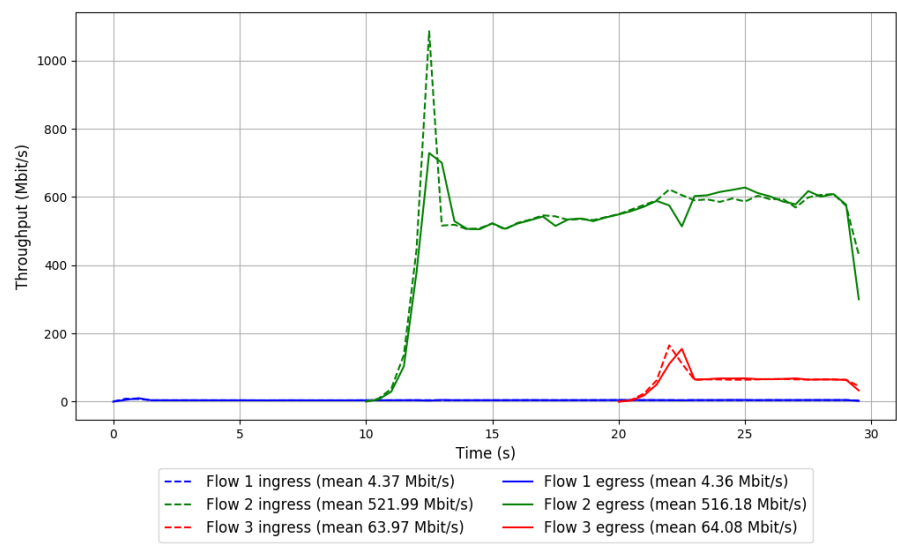
-- Flow 3:

Average throughput: 64.08 Mbit/s

95th percentile per-packet one-way delay: 222.516 ms

Loss rate: 2.19%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-11 23:57:45

End at: 2017-12-11 23:58:15

Below is generated by plot.py at 2017-12-12 03:08:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 376.08 Mbit/s

95th percentile per-packet one-way delay: 158.600 ms

Loss rate: 2.52%

-- Flow 1:

Average throughput: 8.54 Mbit/s

95th percentile per-packet one-way delay: 114.551 ms

Loss rate: 1.35%

-- Flow 2:

Average throughput: 553.12 Mbit/s

95th percentile per-packet one-way delay: 159.776 ms

Loss rate: 2.55%

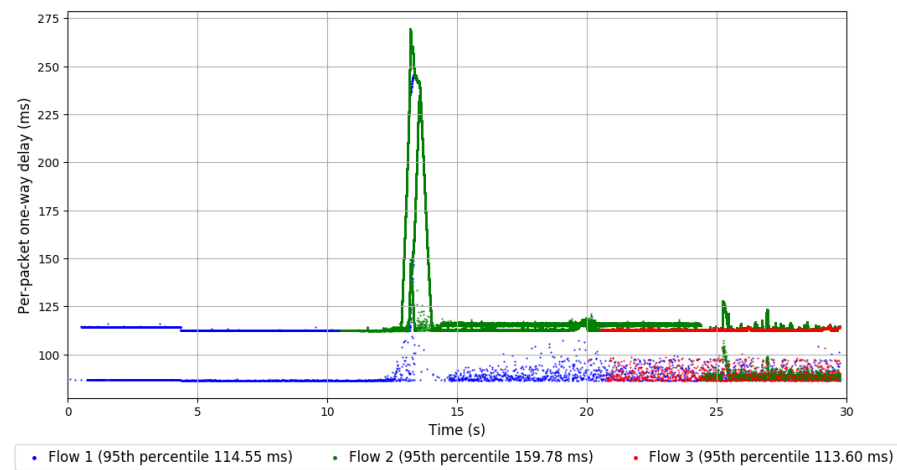
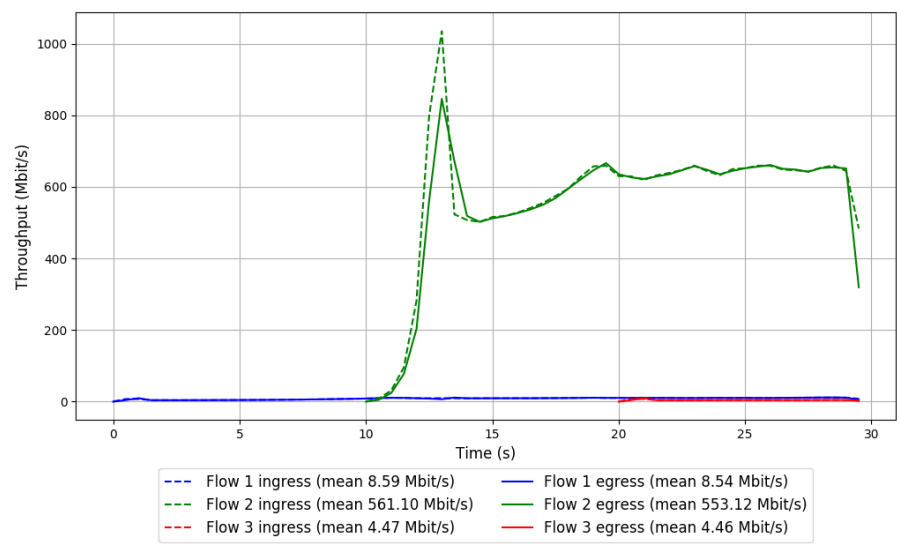
-- Flow 3:

Average throughput: 4.46 Mbit/s

95th percentile per-packet one-way delay: 113.602 ms

Loss rate: 2.28%

Run 8: Report of PCC — Data Link

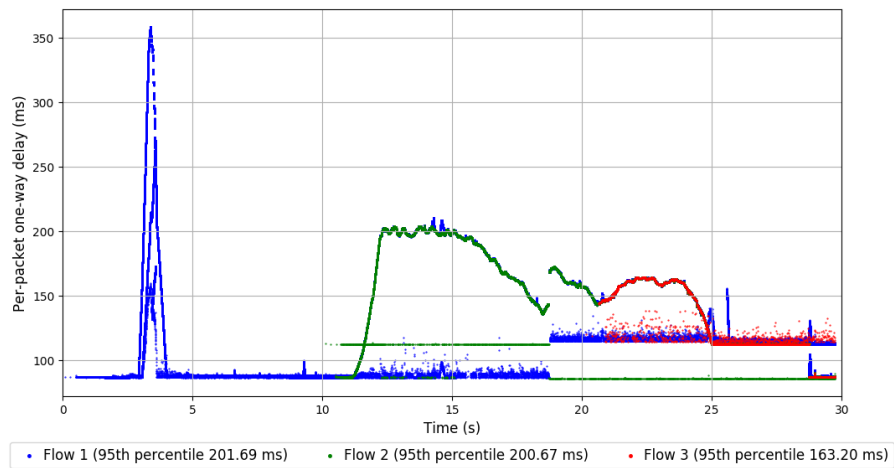
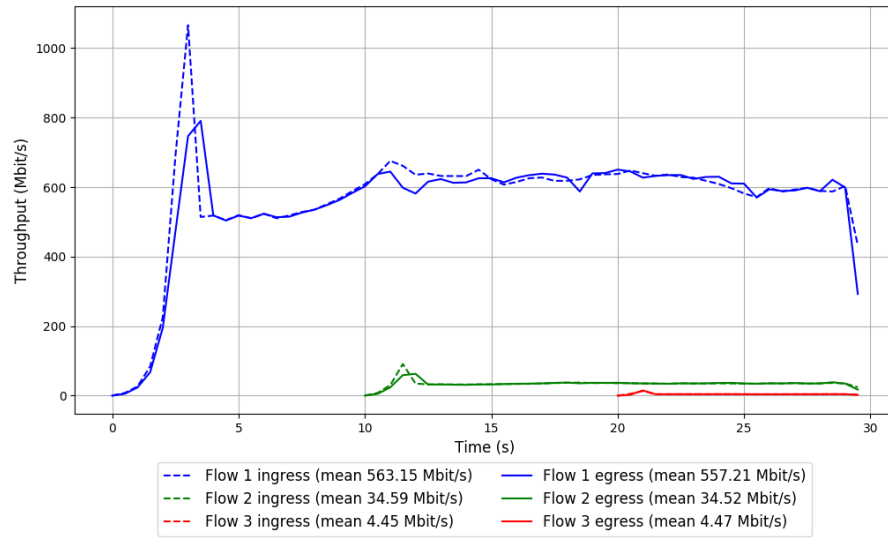


```
Run 9: Statistics of PCC

Start at: 2017-12-12 00:10:41
End at: 2017-12-12 00:11:11

# Below is generated by plot.py at 2017-12-12 03:12:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 581.45 Mbit/s
95th percentile per-packet one-way delay: 201.661 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 557.21 Mbit/s
95th percentile per-packet one-way delay: 201.693 ms
Loss rate: 1.72%
-- Flow 2:
Average throughput: 34.52 Mbit/s
95th percentile per-packet one-way delay: 200.671 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 163.197 ms
Loss rate: 1.97%
```

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-12 00:23:43

End at: 2017-12-12 00:24:13

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 511.17 Mbit/s

95th percentile per-packet one-way delay: 275.196 ms

Loss rate: 5.29%

-- Flow 1:

Average throughput: 421.35 Mbit/s

95th percentile per-packet one-way delay: 288.090 ms

Loss rate: 5.59%

-- Flow 2:

Average throughput: 120.67 Mbit/s

95th percentile per-packet one-way delay: 222.746 ms

Loss rate: 3.79%

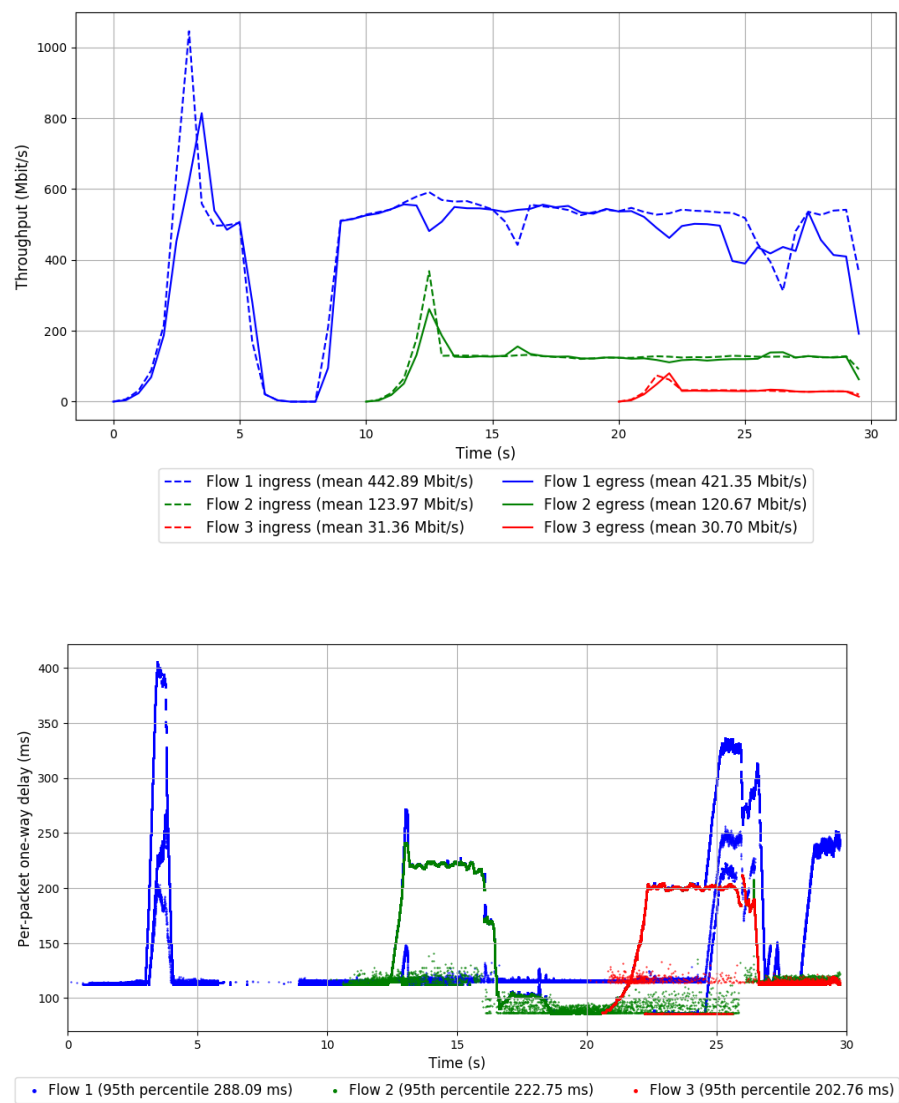
-- Flow 3:

Average throughput: 30.70 Mbit/s

95th percentile per-packet one-way delay: 202.757 ms

Loss rate: 4.35%

Run 10: Report of PCC — Data Link

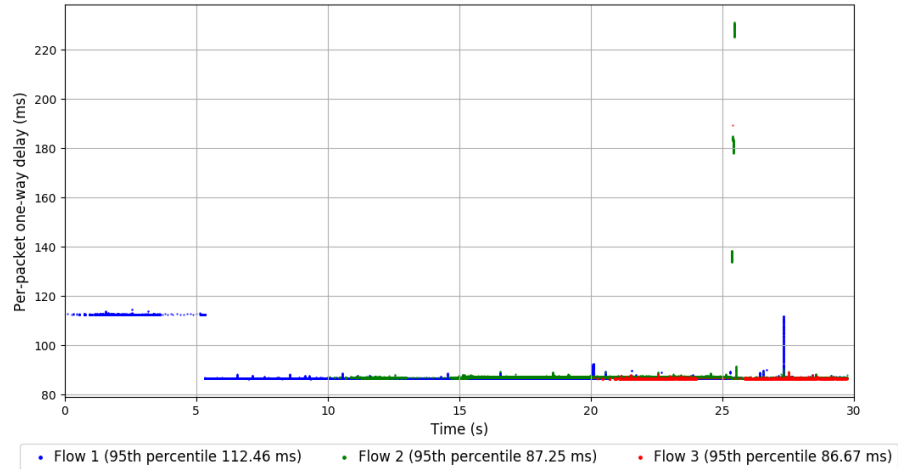
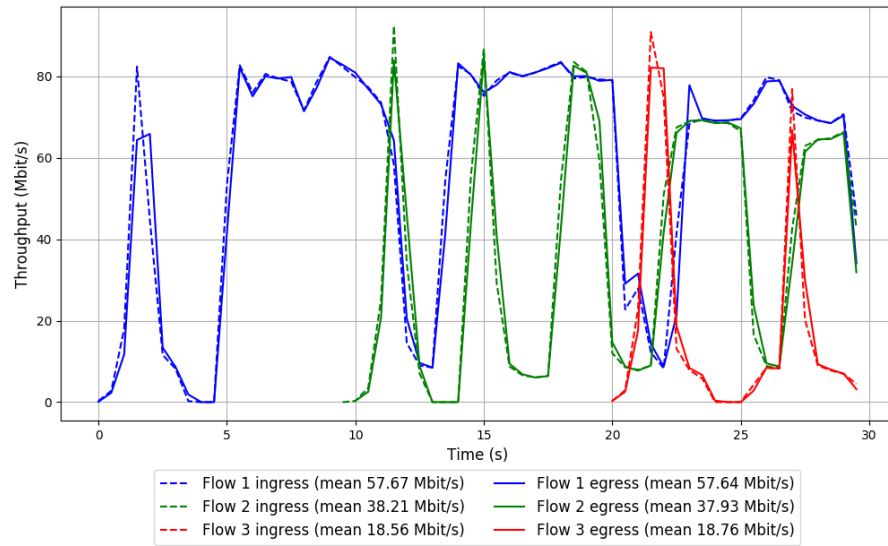


```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-11 22:39:04
End at: 2017-12-11 22:39:34

# Below is generated by plot.py at 2017-12-12 03:14:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.92 Mbit/s
95th percentile per-packet one-way delay: 87.253 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 57.64 Mbit/s
95th percentile per-packet one-way delay: 112.461 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 37.93 Mbit/s
95th percentile per-packet one-way delay: 87.251 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 18.76 Mbit/s
95th percentile per-packet one-way delay: 86.673 ms
Loss rate: 0.67%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-11 22:52:07

End at: 2017-12-11 22:52:37

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.37 Mbit/s

95th percentile per-packet one-way delay: 114.659 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 49.78 Mbit/s

95th percentile per-packet one-way delay: 87.116 ms

Loss rate: 0.67%

-- Flow 2:

Average throughput: 49.78 Mbit/s

95th percentile per-packet one-way delay: 114.640 ms

Loss rate: 1.16%

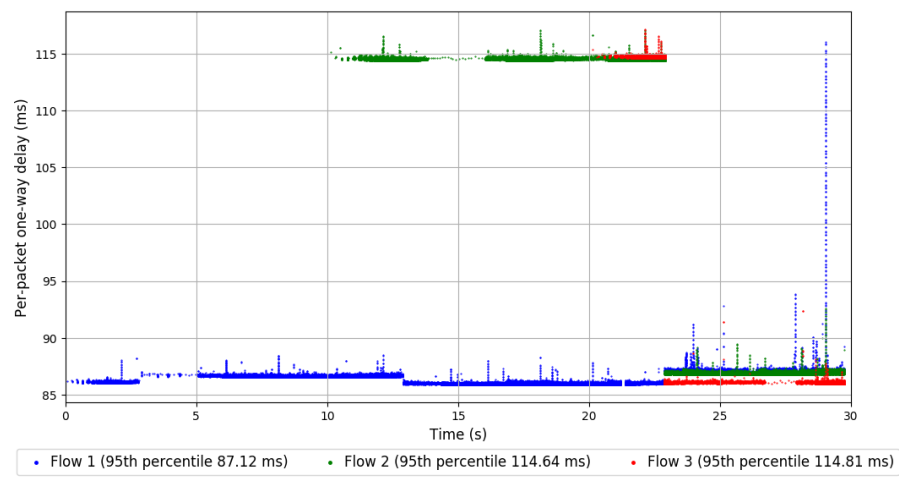
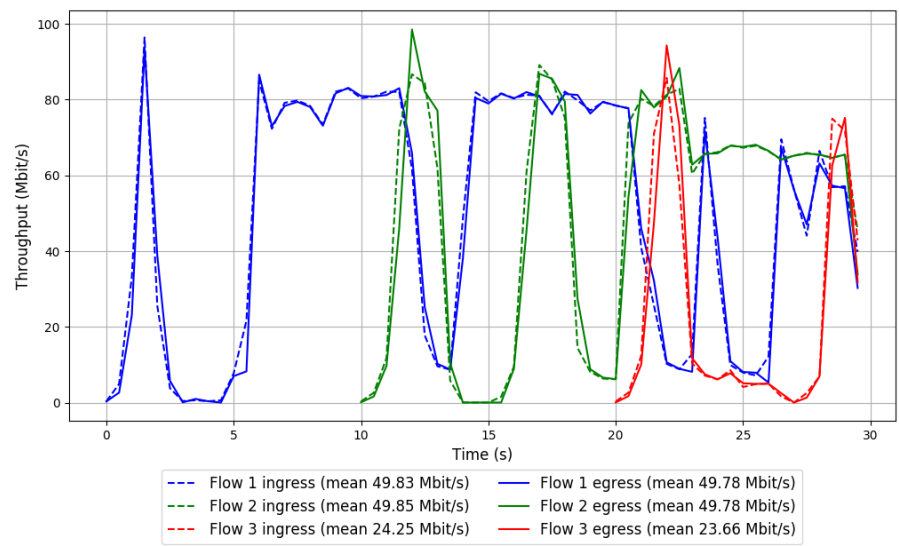
-- Flow 3:

Average throughput: 23.66 Mbit/s

95th percentile per-packet one-way delay: 114.809 ms

Loss rate: 4.45%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-11 23:05:17

End at: 2017-12-11 23:05:47

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.15 Mbit/s

95th percentile per-packet one-way delay: 114.804 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 45.93 Mbit/s

95th percentile per-packet one-way delay: 114.835 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 45.24 Mbit/s

95th percentile per-packet one-way delay: 86.575 ms

Loss rate: 1.28%

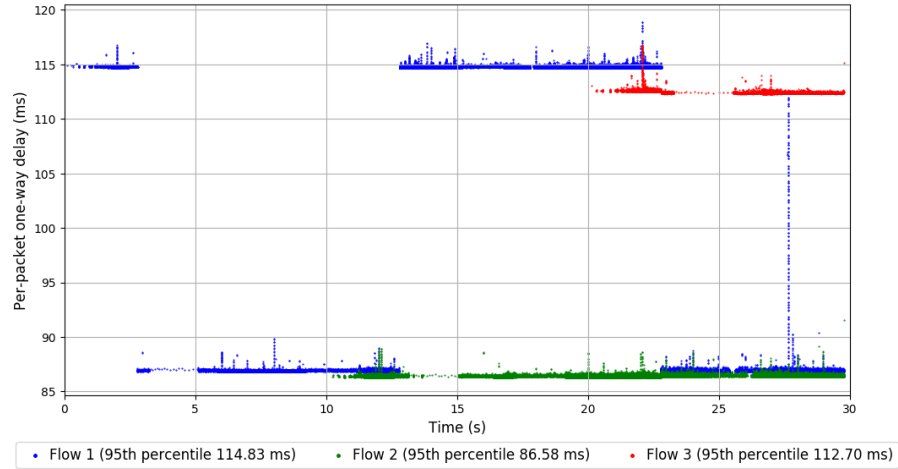
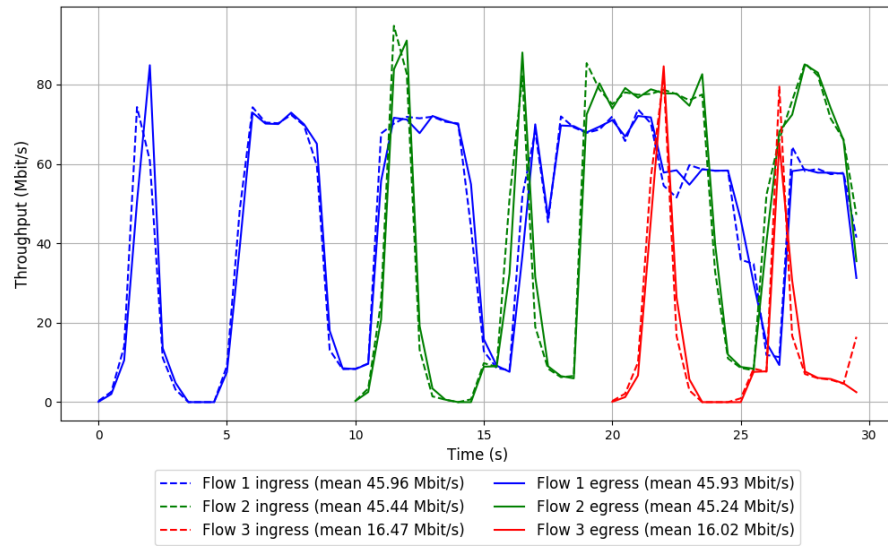
-- Flow 3:

Average throughput: 16.02 Mbit/s

95th percentile per-packet one-way delay: 112.696 ms

Loss rate: 4.64%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-11 23:18:05

End at: 2017-12-11 23:18:35

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.27 Mbit/s

95th percentile per-packet one-way delay: 115.078 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 48.58 Mbit/s

95th percentile per-packet one-way delay: 114.874 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 50.86 Mbit/s

95th percentile per-packet one-way delay: 115.144 ms

Loss rate: 1.58%

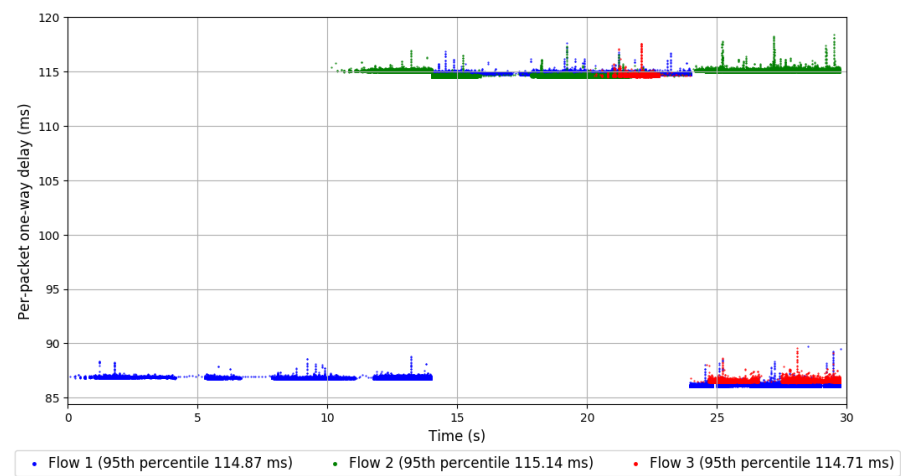
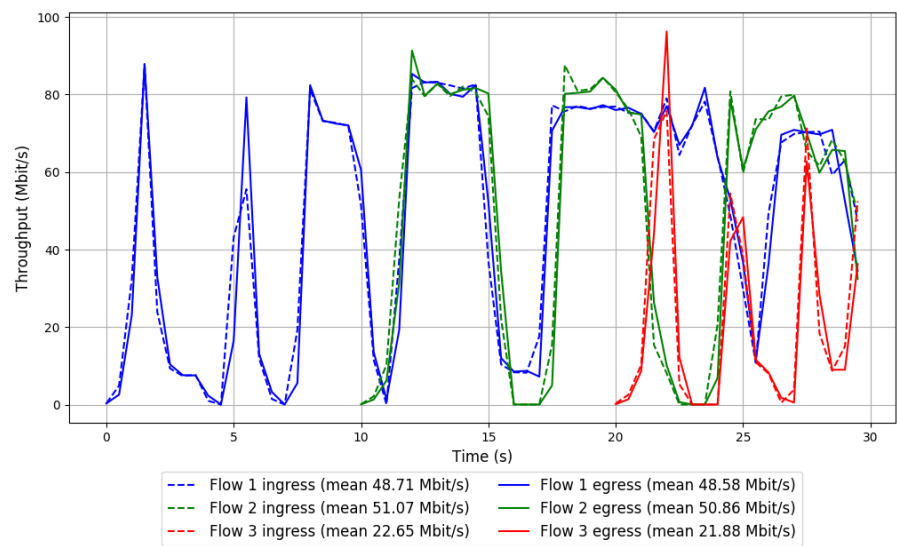
-- Flow 3:

Average throughput: 21.88 Mbit/s

95th percentile per-packet one-way delay: 114.711 ms

Loss rate: 5.36%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-11 23:31:02

End at: 2017-12-11 23:31:32

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.44 Mbit/s

95th percentile per-packet one-way delay: 114.821 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 45.16 Mbit/s

95th percentile per-packet one-way delay: 114.847 ms

Loss rate: 1.02%

-- Flow 2:

Average throughput: 59.93 Mbit/s

95th percentile per-packet one-way delay: 114.800 ms

Loss rate: 0.00%

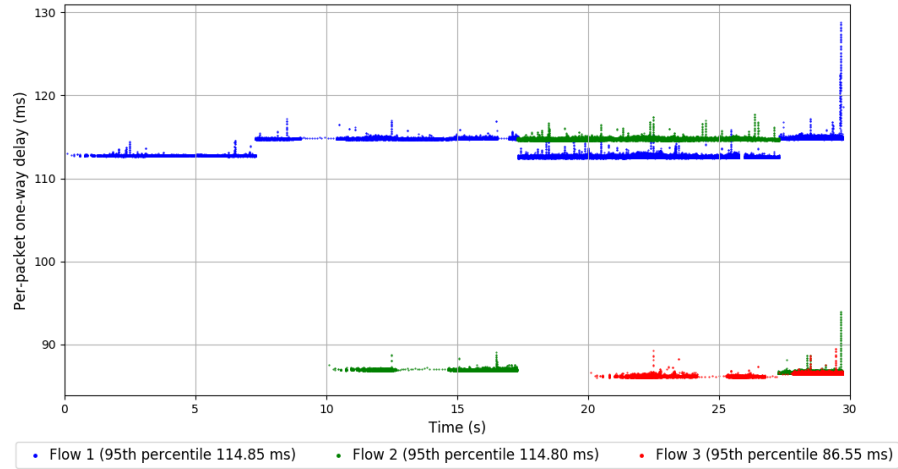
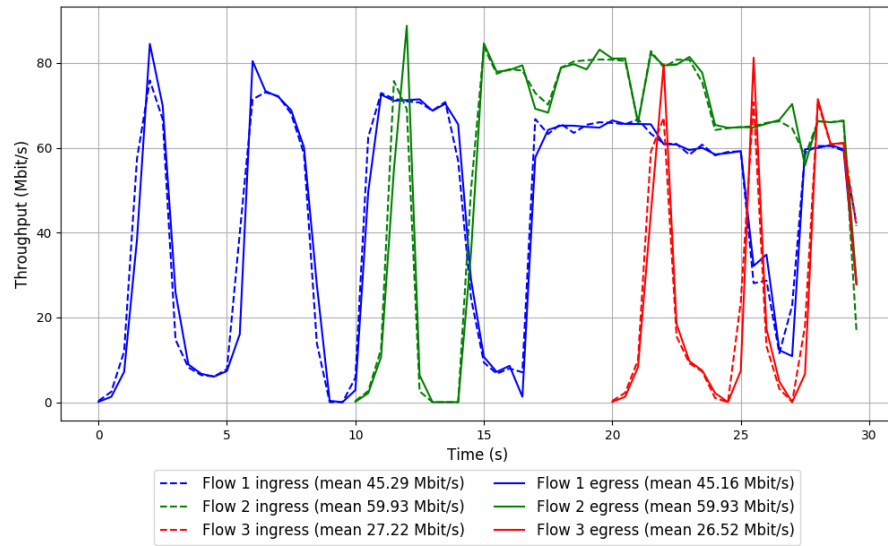
-- Flow 3:

Average throughput: 26.52 Mbit/s

95th percentile per-packet one-way delay: 86.553 ms

Loss rate: 4.55%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-11 23:43:50

End at: 2017-12-11 23:44:20

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.27 Mbit/s

95th percentile per-packet one-way delay: 114.818 ms

Loss rate: 1.16%

-- Flow 1:

Average throughput: 52.48 Mbit/s

95th percentile per-packet one-way delay: 114.684 ms

Loss rate: 0.94%

-- Flow 2:

Average throughput: 35.46 Mbit/s

95th percentile per-packet one-way delay: 114.470 ms

Loss rate: 2.10%

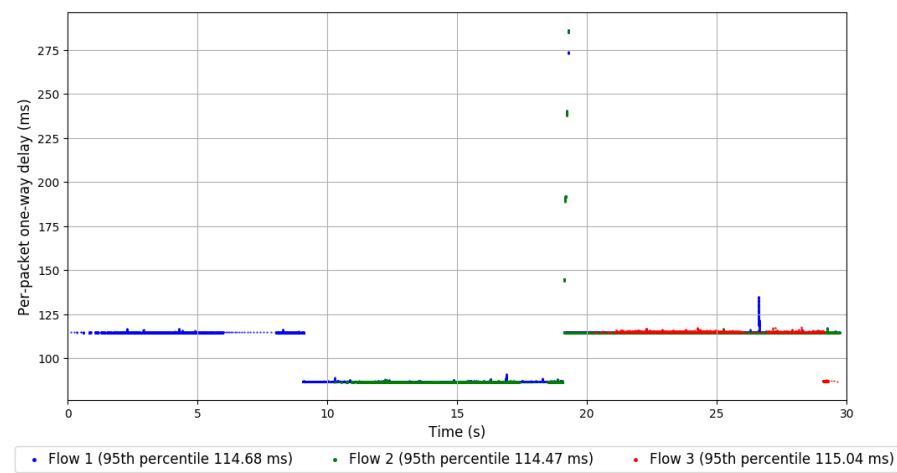
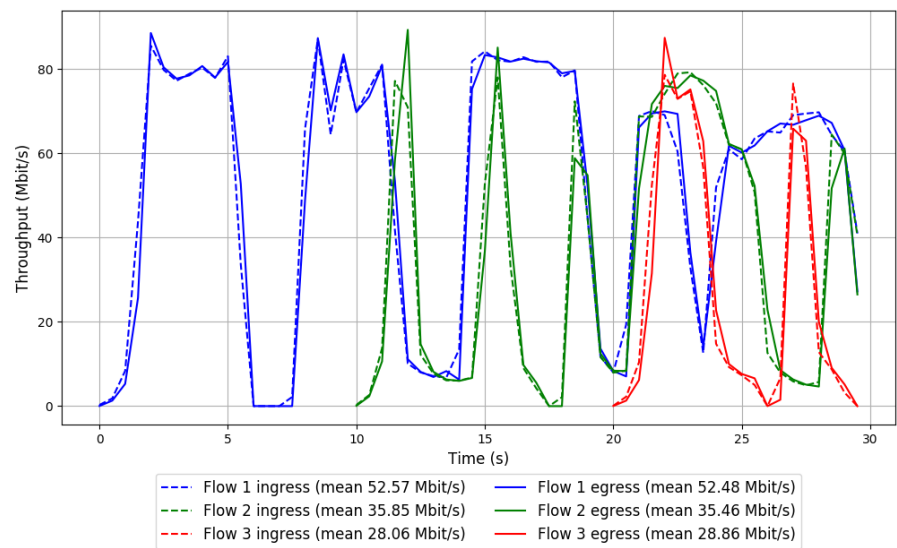
-- Flow 3:

Average throughput: 28.86 Mbit/s

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

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-11 23:56:53

End at: 2017-12-11 23:57:23

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.29 Mbit/s

95th percentile per-packet one-way delay: 114.769 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 42.18 Mbit/s

95th percentile per-packet one-way delay: 86.990 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 58.74 Mbit/s

95th percentile per-packet one-way delay: 114.804 ms

Loss rate: 1.42%

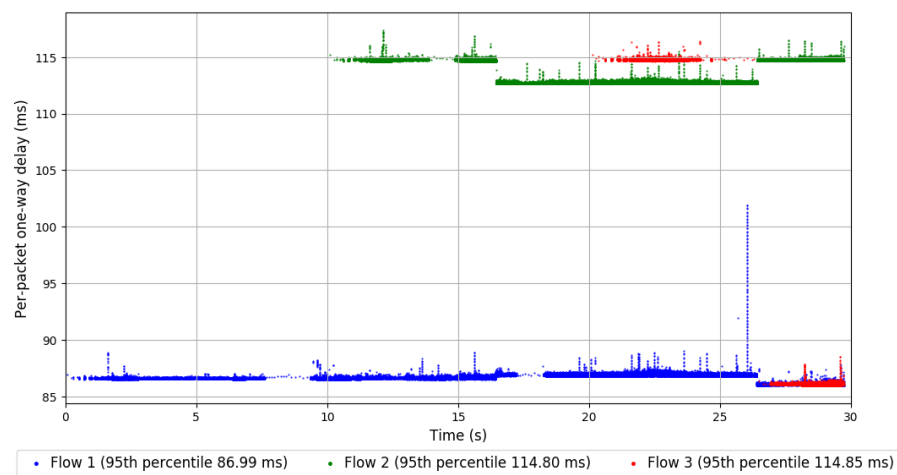
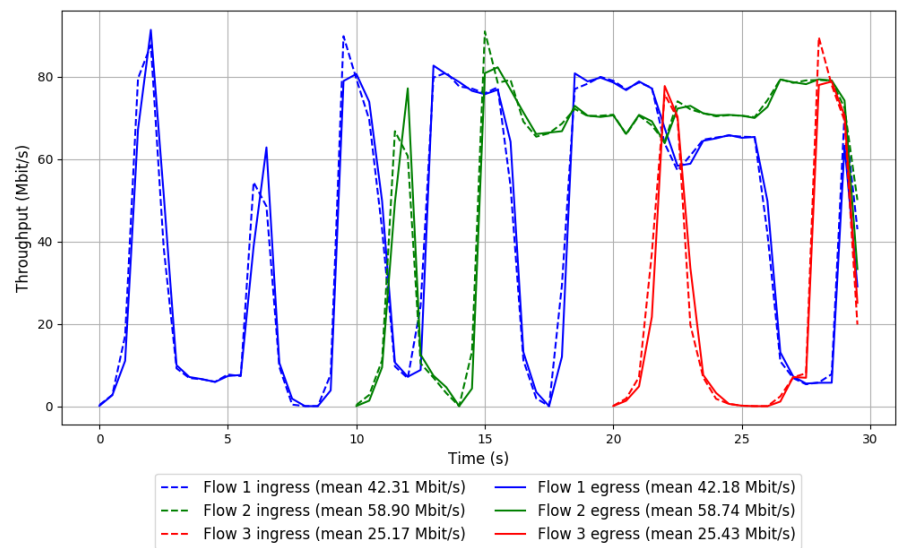
-- Flow 3:

Average throughput: 25.43 Mbit/s

95th percentile per-packet one-way delay: 114.854 ms

Loss rate: 1.31%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-12 00:09:48

End at: 2017-12-12 00:10:18

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.75 Mbit/s

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

Loss rate: 1.31%

-- Flow 1:

Average throughput: 44.61 Mbit/s

95th percentile per-packet one-way delay: 114.880 ms

Loss rate: 1.12%

-- Flow 2:

Average throughput: 51.99 Mbit/s

95th percentile per-packet one-way delay: 86.916 ms

Loss rate: 1.57%

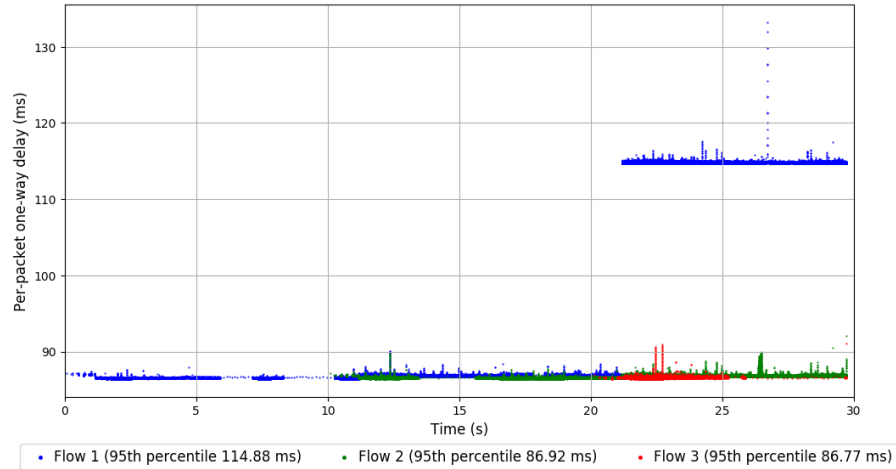
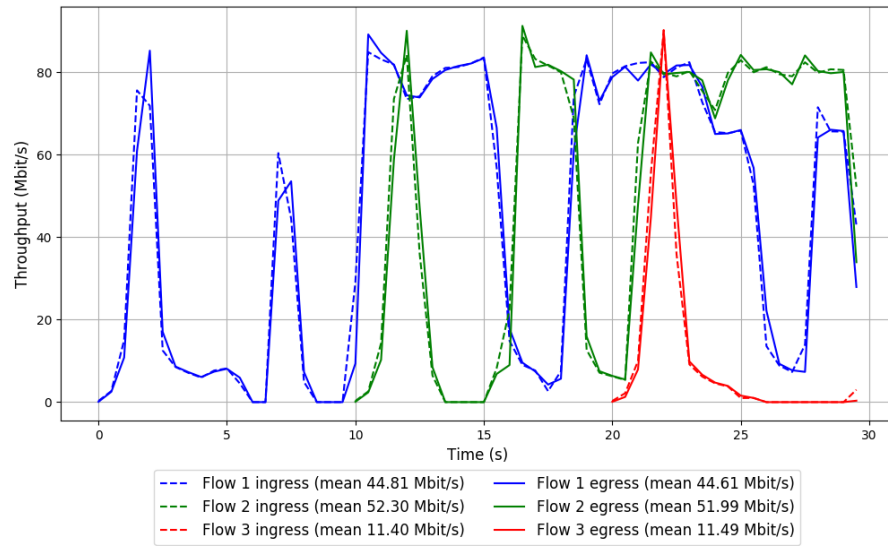
-- Flow 3:

Average throughput: 11.49 Mbit/s

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

Loss rate: 1.19%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-12 00:22:52

End at: 2017-12-12 00:23:22

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.25 Mbit/s

95th percentile per-packet one-way delay: 114.552 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 46.14 Mbit/s

95th percentile per-packet one-way delay: 114.580 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 41.41 Mbit/s

95th percentile per-packet one-way delay: 112.871 ms

Loss rate: 0.17%

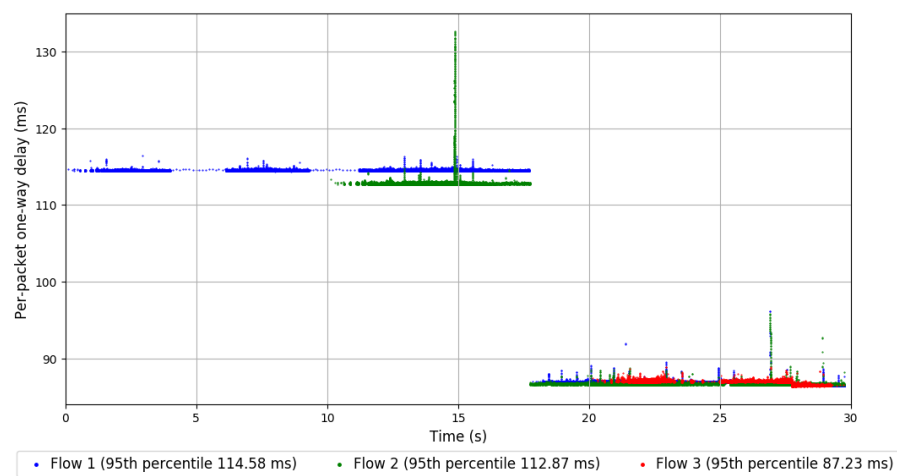
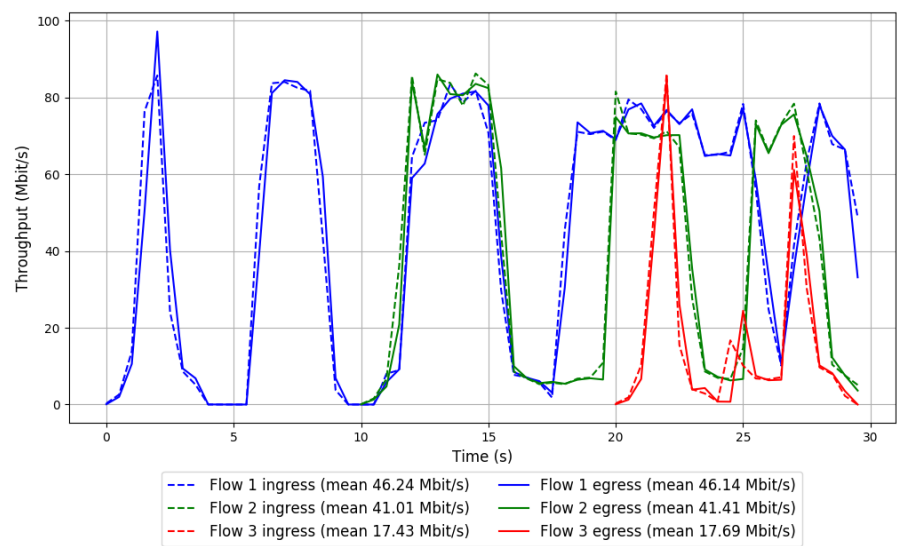
-- Flow 3:

Average throughput: 17.69 Mbit/s

95th percentile per-packet one-way delay: 87.228 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

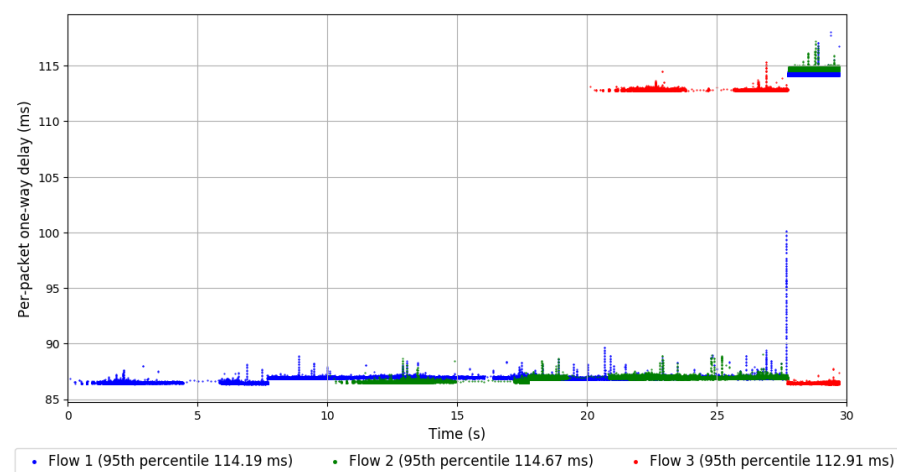
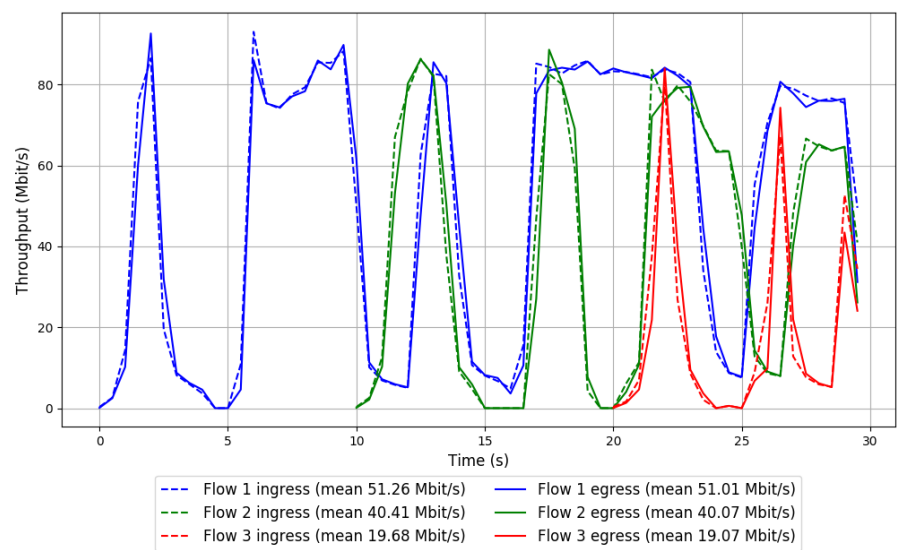


```
Run 10: Statistics of QUIC Cubic

Start at: 2017-12-12 00:35:52
End at: 2017-12-12 00:36:22

# Below is generated by plot.py at 2017-12-12 03:14:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.71 Mbit/s
95th percentile per-packet one-way delay: 114.560 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 51.01 Mbit/s
95th percentile per-packet one-way delay: 114.190 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 40.07 Mbit/s
95th percentile per-packet one-way delay: 114.673 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 19.07 Mbit/s
95th percentile per-packet one-way delay: 112.909 ms
Loss rate: 5.35%
```

Run 10: Report of QUIC Cubic — Data Link

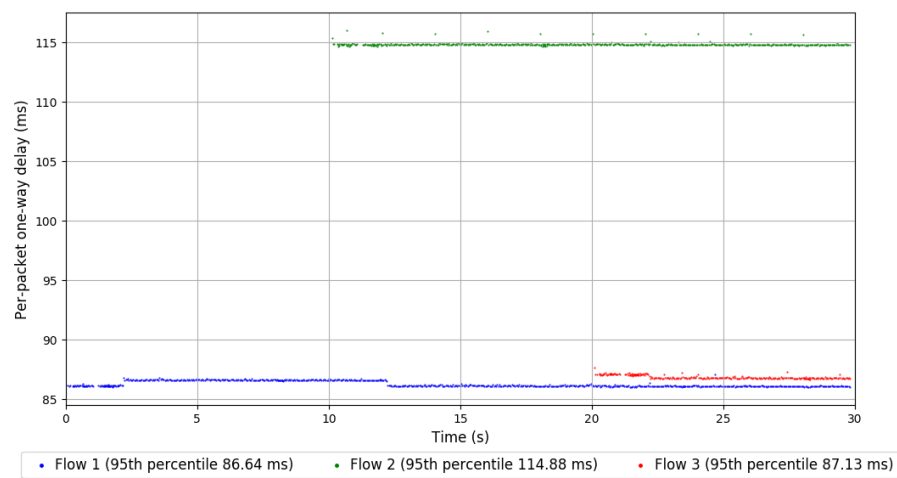
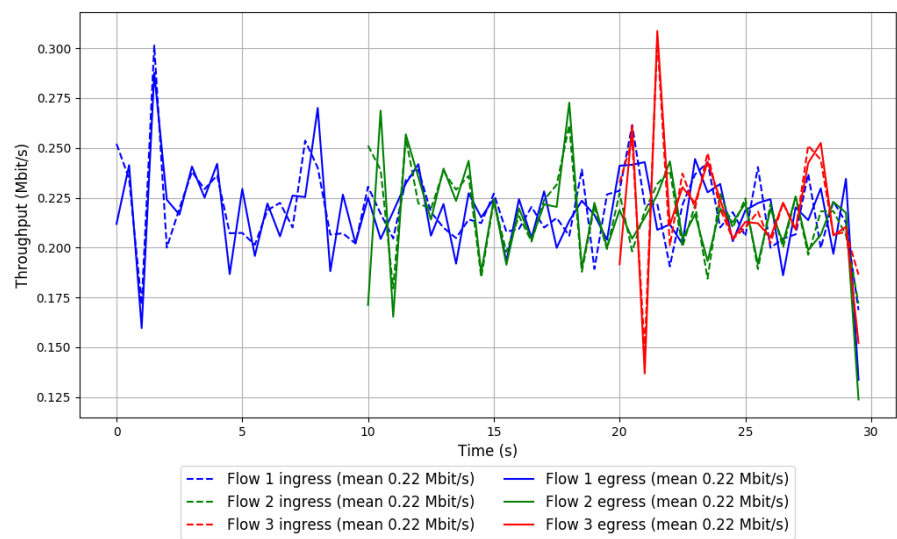


```
Run 1: Statistics of SCReAM

Start at: 2017-12-11 22:31:07
End at: 2017-12-11 22:31:37

# Below is generated by plot.py at 2017-12-12 03:14:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 114.831 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.642 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.882 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.131 ms
Loss rate: 1.50%
```

Run 1: Report of SReAM — Data Link

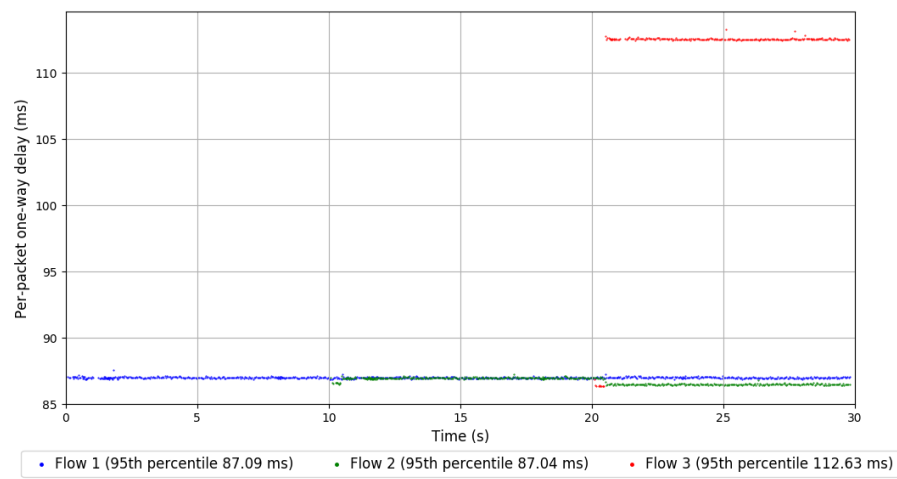
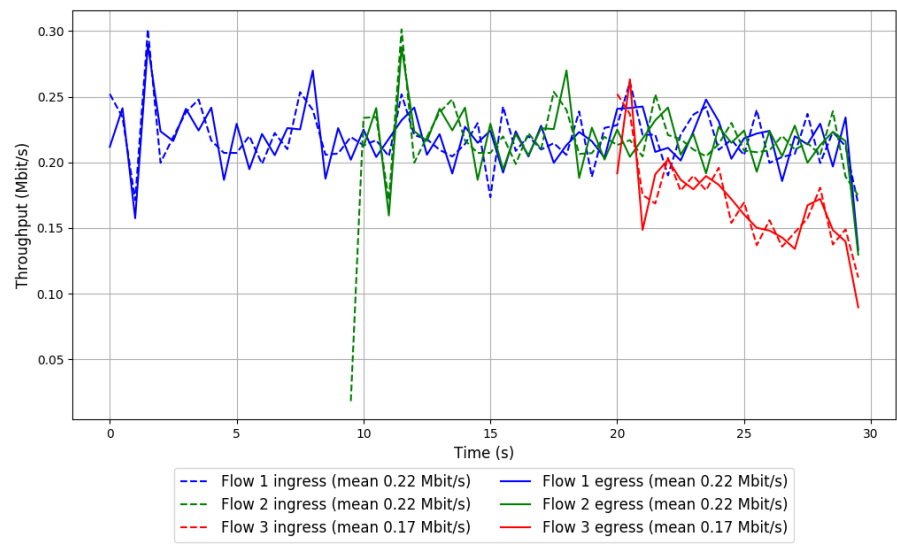


```
Run 2: Statistics of SReAM

Start at: 2017-12-11 22:44:19
End at: 2017-12-11 22:44:49

# Below is generated by plot.py at 2017-12-12 03:14:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 112.563 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.091 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.041 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 112.630 ms
Loss rate: 1.61%
```

Run 2: Report of SReAM — Data Link

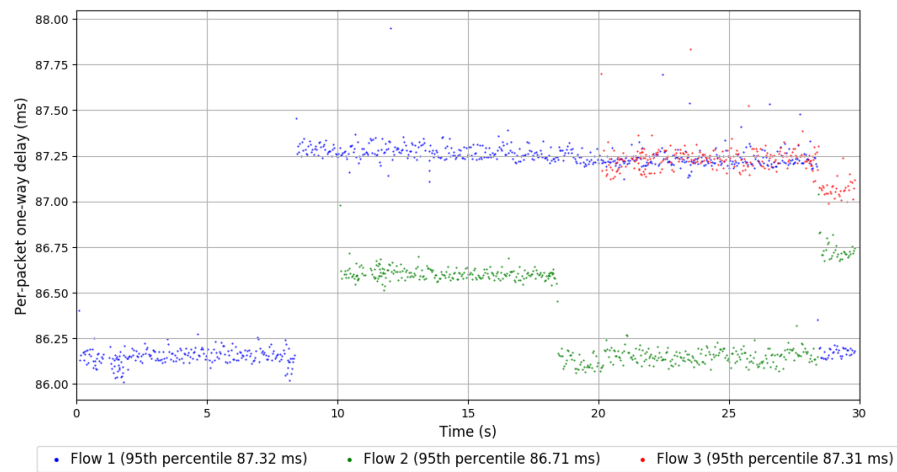
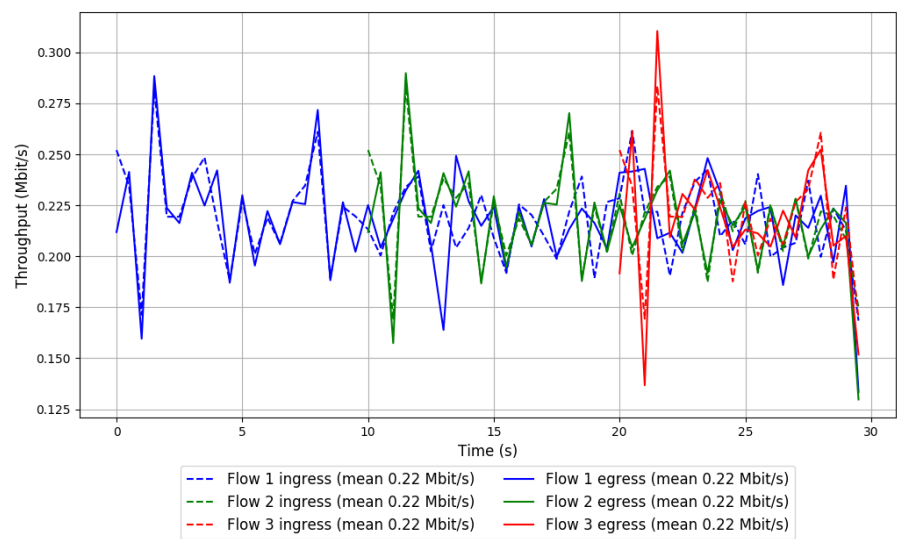


```
Run 3: Statistics of SReAM

Start at: 2017-12-11 22:57:21
End at: 2017-12-11 22:57:51

# Below is generated by plot.py at 2017-12-12 03:14:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 87.306 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.322 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.708 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.307 ms
Loss rate: 1.50%
```


Run 3: Report of SReAM — Data Link

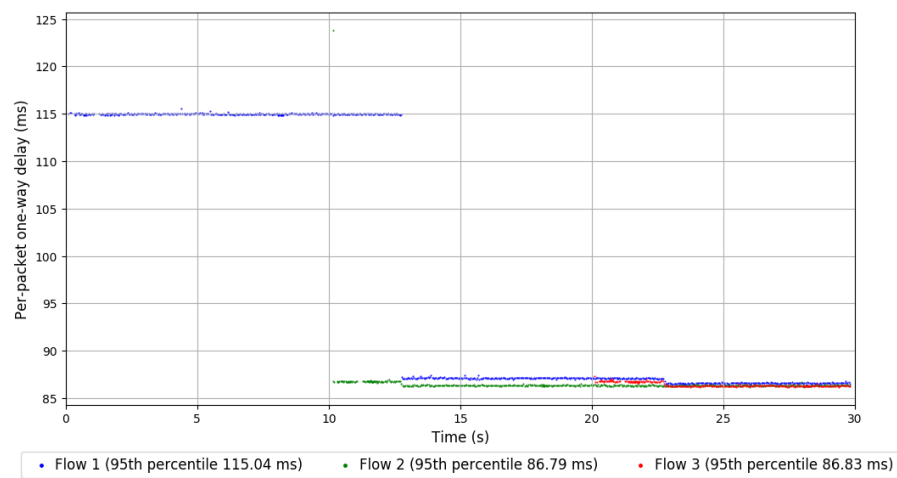
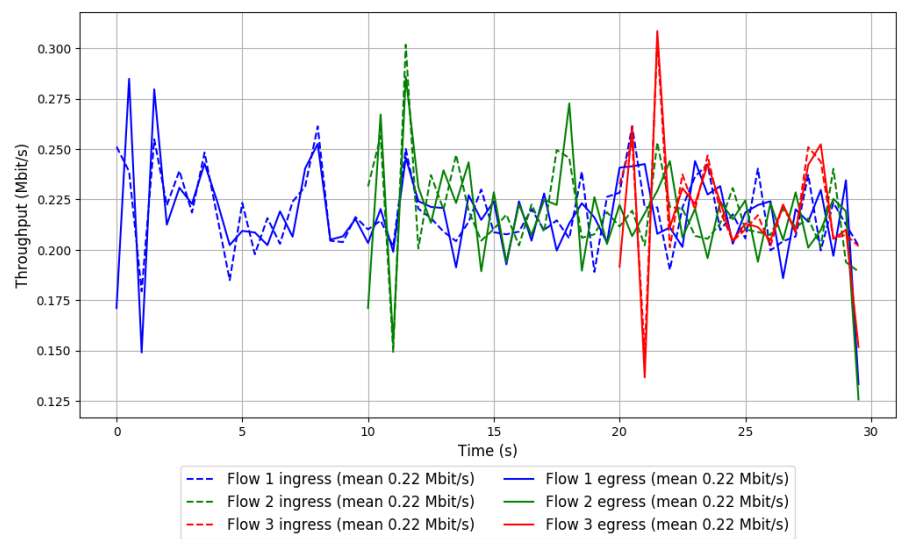


```
Run 4: Statistics of SCReAM

Start at: 2017-12-11 23:10:27
End at: 2017-12-11 23:10:57

# Below is generated by plot.py at 2017-12-12 03:14:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 115.021 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 115.040 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.790 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.825 ms
Loss rate: 1.85%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-11 23:23:20

End at: 2017-12-11 23:23:50

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 114.981 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.995 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.940 ms

Loss rate: 1.06%

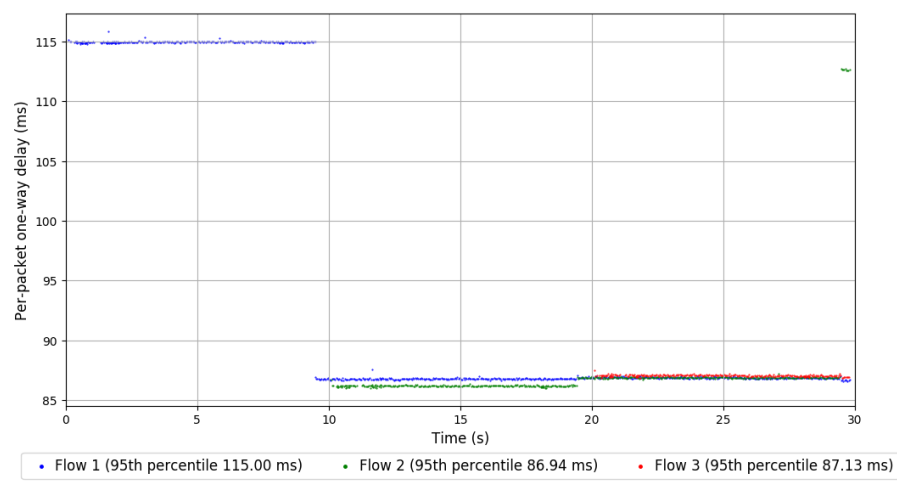
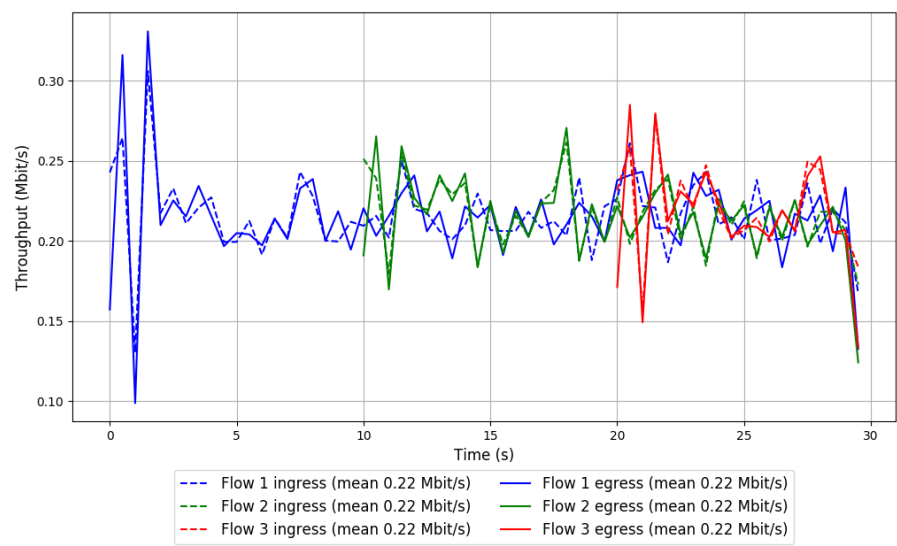
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 87.129 ms

Loss rate: 1.87%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-11 23:36:05

End at: 2017-12-11 23:36:35

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 114.631 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.668 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 114.382 ms

Loss rate: 1.27%

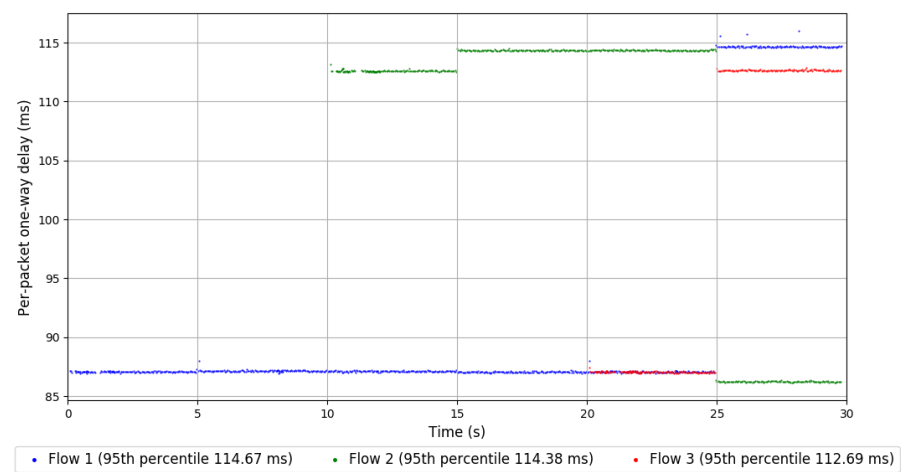
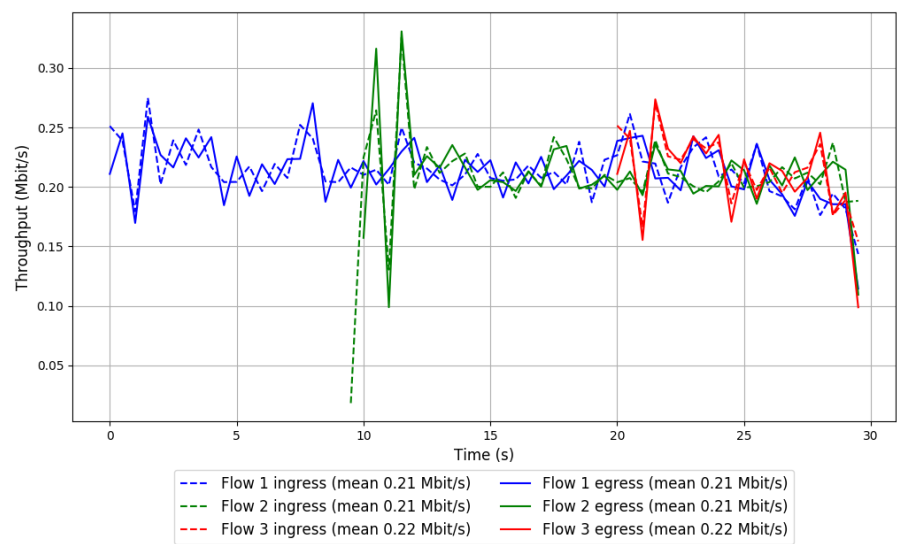
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 2.24%

Run 6: Report of SCReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2017-12-11 23:49:05

End at: 2017-12-11 23:49:35

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 114.874 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 112.700 ms

Loss rate: 0.61%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 114.913 ms

Loss rate: 0.95%

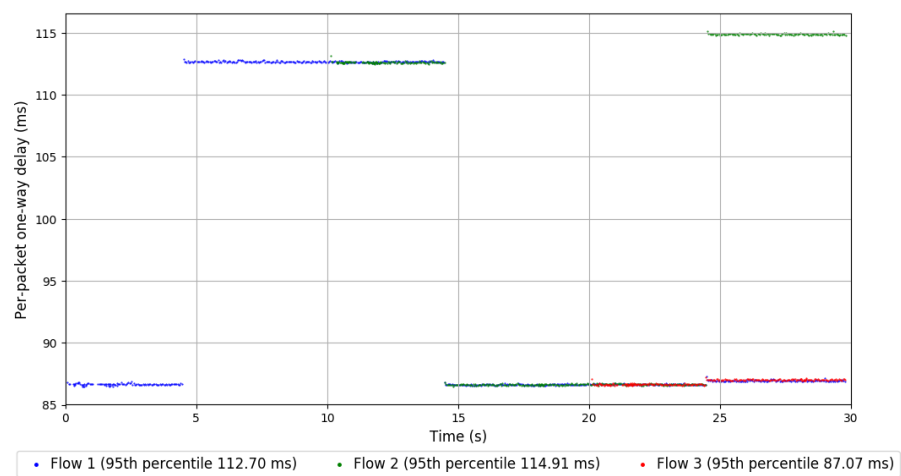
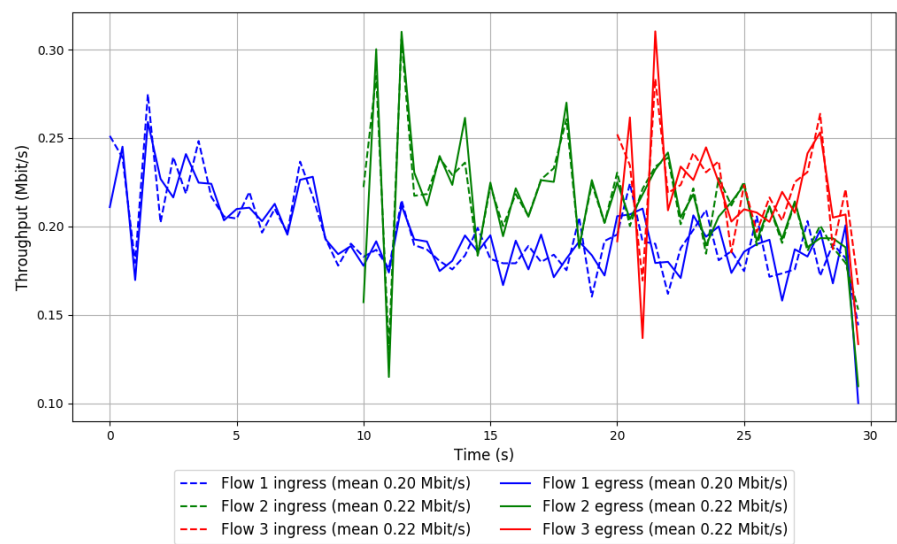
-- Flow 3:

Average throughput: 0.22 Mbit/s

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

Loss rate: 1.84%

Run 7: Report of SCRaM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-12 00:02:01

End at: 2017-12-12 00:02:31

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 114.882 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 114.816 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 114.927 ms

Loss rate: 0.97%

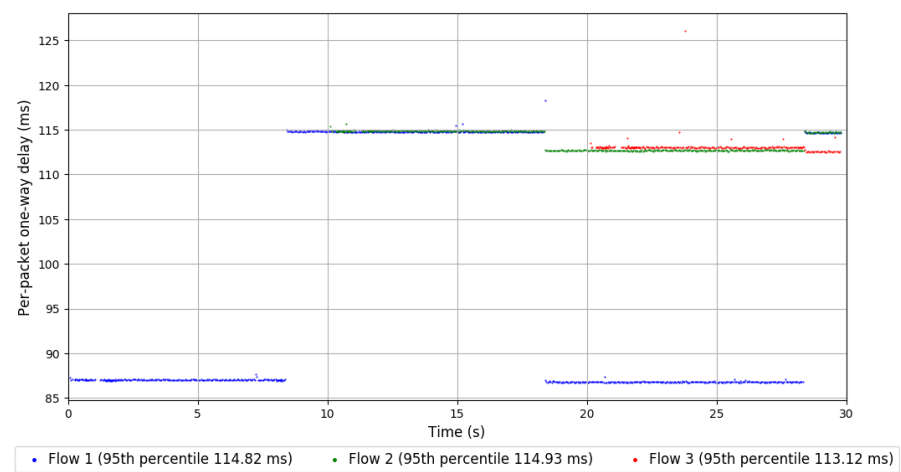
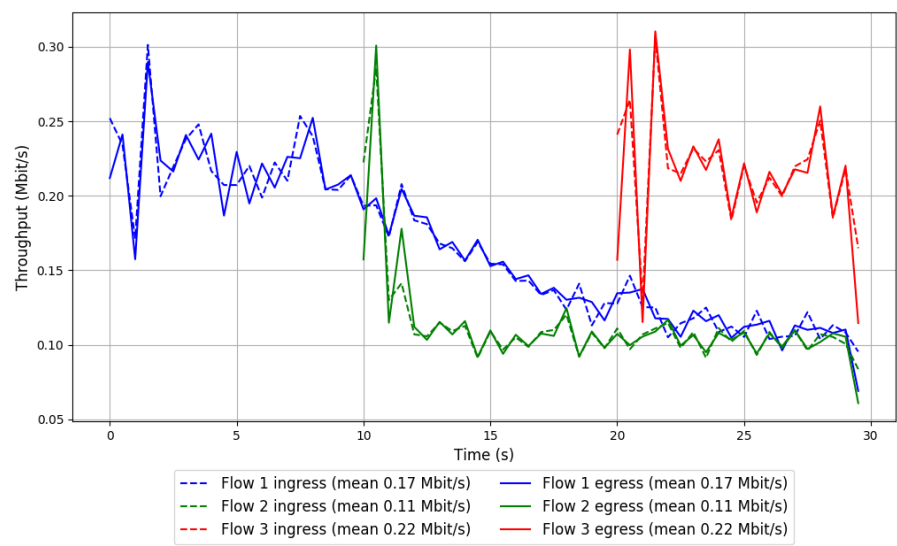
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 113.122 ms

Loss rate: 2.25%

Run 8: Report of SCSReAM — Data Link

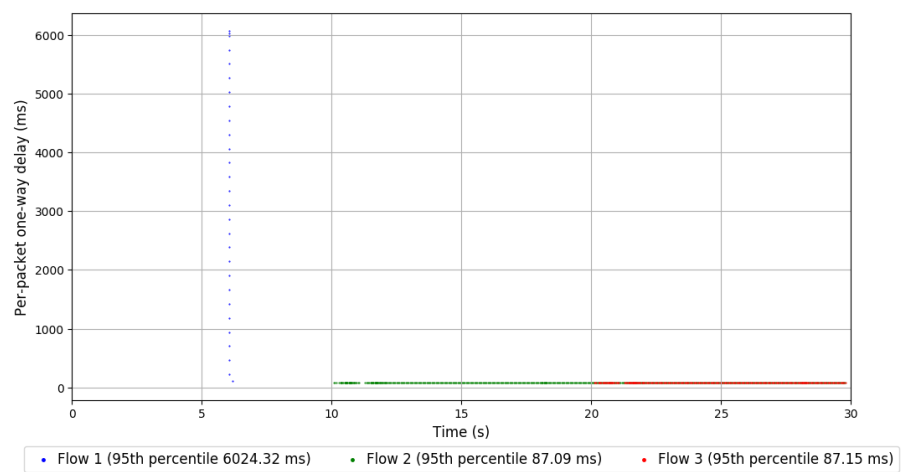
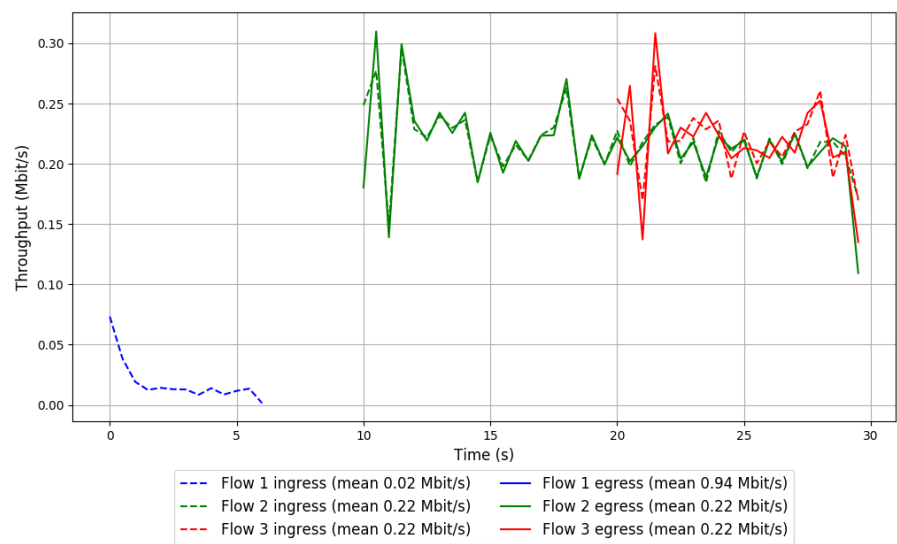


Run 9: Statistics of SReAM

Start at: 2017-12-12 00:15:03

End at: 2017-12-12 00:15:33

Run 9: Report of SReAM — Data Link

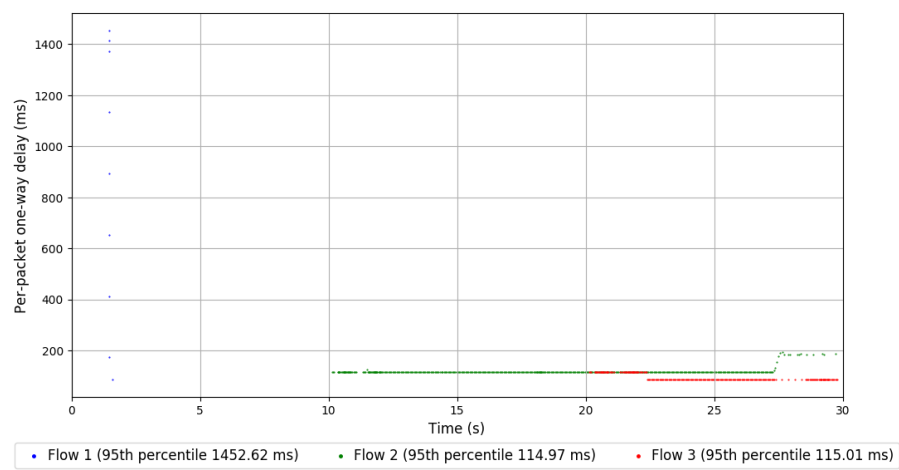
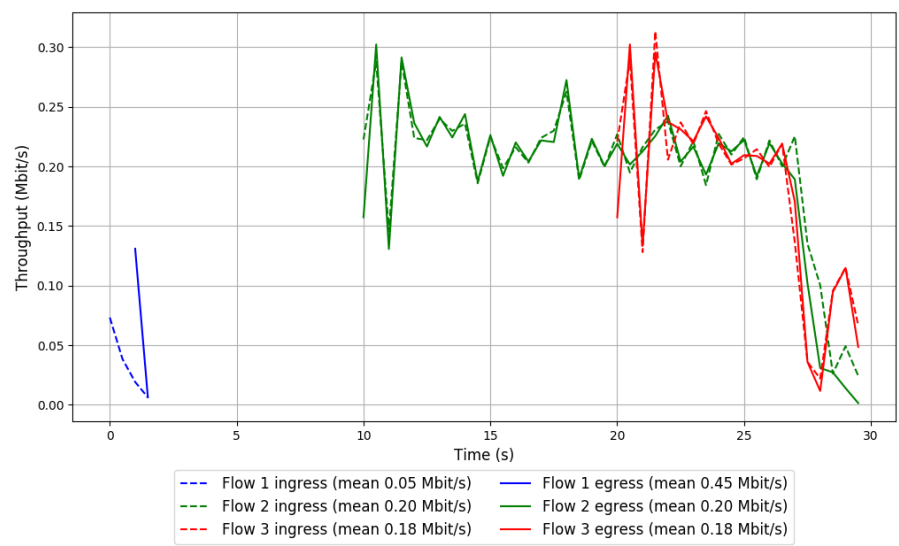


```
Run 10: Statistics of SReAM

Start at: 2017-12-12 00:28:07
End at: 2017-12-12 00:28:37

# Below is generated by plot.py at 2017-12-12 03:14:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 115.018 ms
Loss rate: 2.35%
-- Flow 1:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 1452.618 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 114.966 ms
Loss rate: 3.07%
-- Flow 3:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 115.010 ms
Loss rate: 0.83%
```

Run 10: Report of SCReAM — Data Link

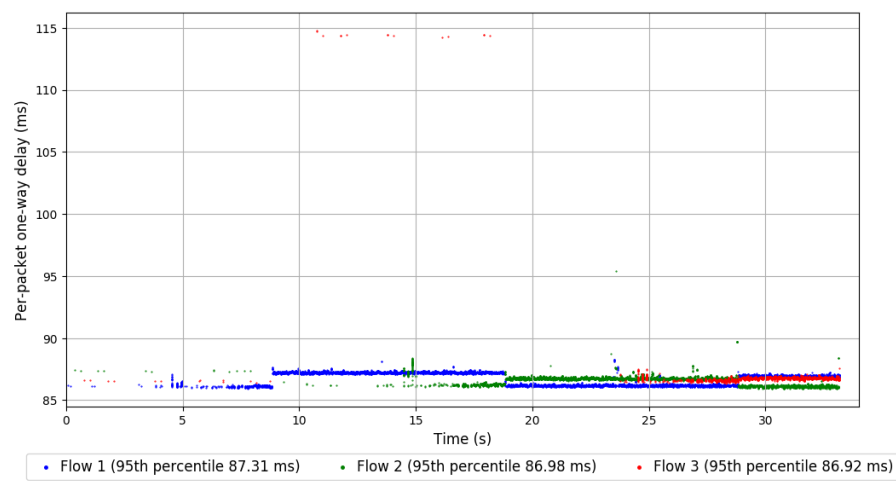
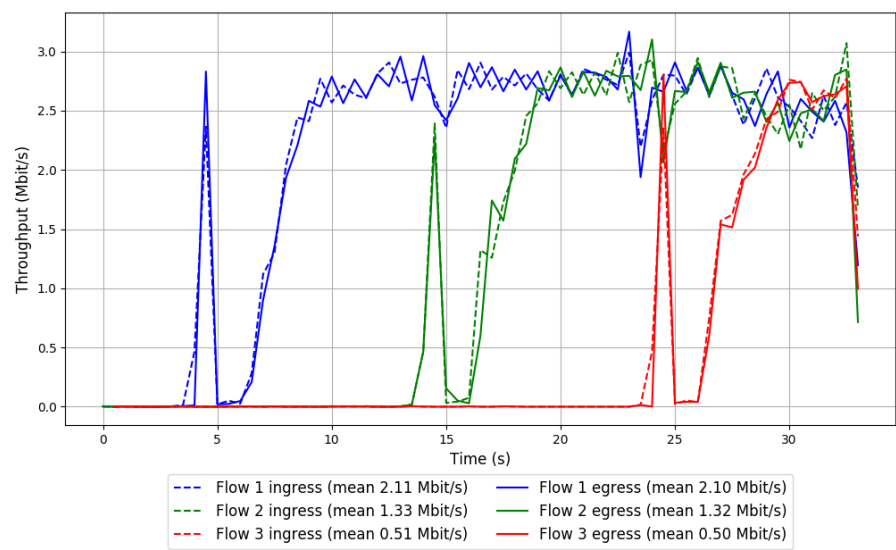


```
Run 1: Statistics of WebRTC media

Start at: 2017-12-11 22:28:44
End at: 2017-12-11 22:29:14

# Below is generated by plot.py at 2017-12-12 03:14:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 87.290 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 87.308 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 86.985 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 86.923 ms
Loss rate: 2.75%
```


Run 1: Report of WebRTC media — Data Link

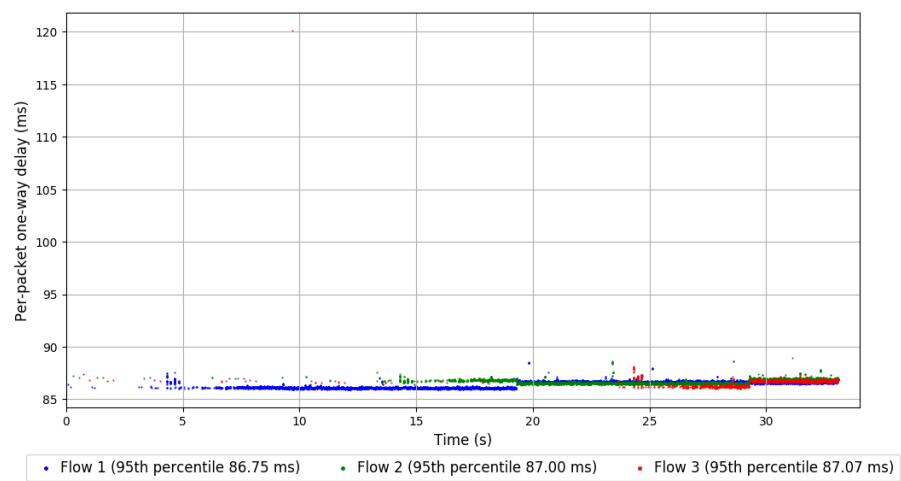
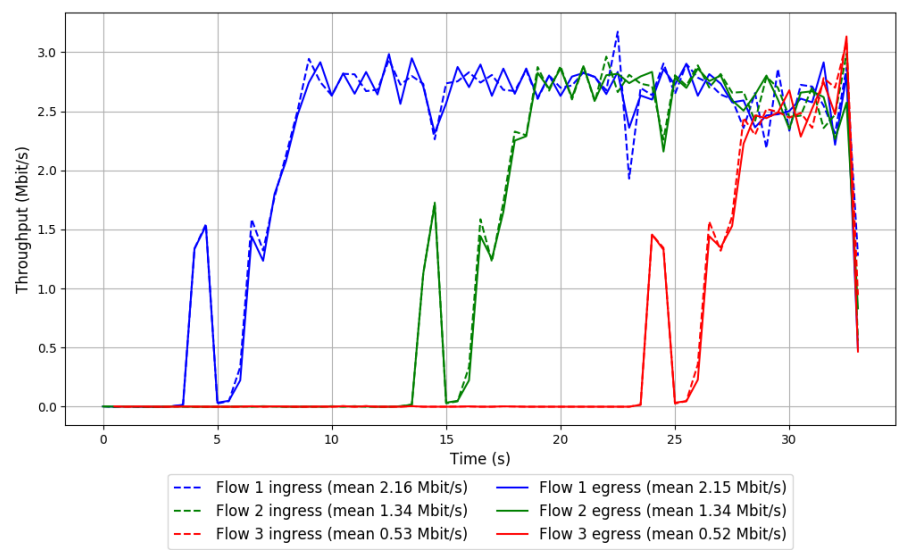


```
Run 2: Statistics of WebRTC media

Start at: 2017-12-11 22:41:53
End at: 2017-12-11 22:42:23

# Below is generated by plot.py at 2017-12-12 03:14:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 86.946 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 86.747 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 87.002 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 87.067 ms
Loss rate: 2.75%
```

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-11 22:54:55

End at: 2017-12-11 22:55:25

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.98 Mbit/s

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

Loss rate: 0.97%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 86.858 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 86.790 ms

Loss rate: 0.67%

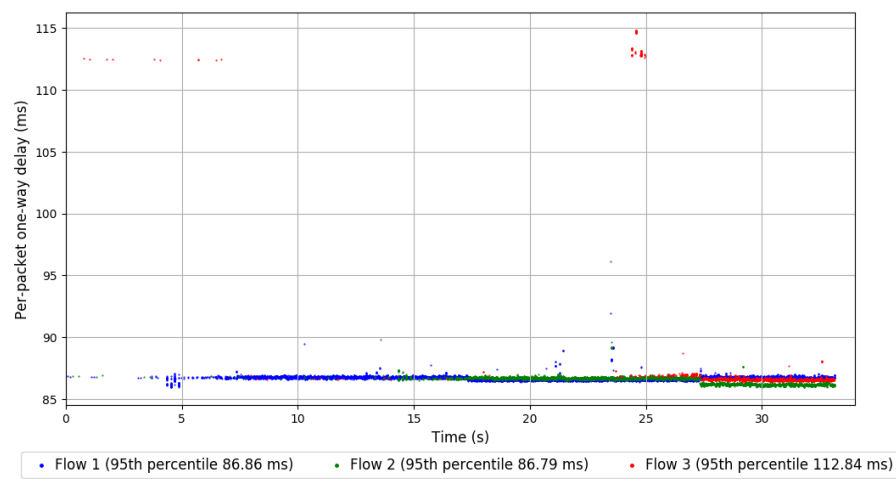
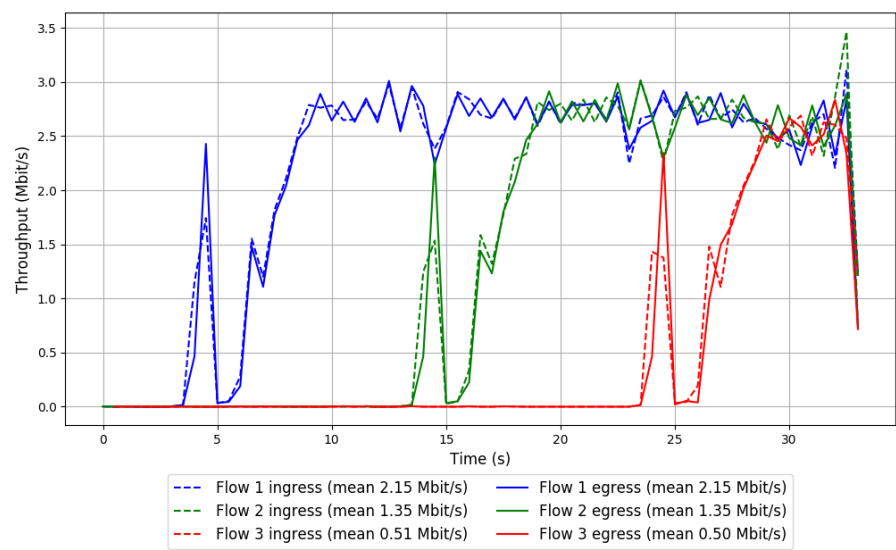
-- Flow 3:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 112.840 ms

Loss rate: 2.96%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-11 23:07:59

End at: 2017-12-11 23:08:29

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.95 Mbit/s

95th percentile per-packet one-way delay: 114.692 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 87.082 ms

Loss rate: 0.69%

-- Flow 2:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 114.744 ms

Loss rate: 1.40%

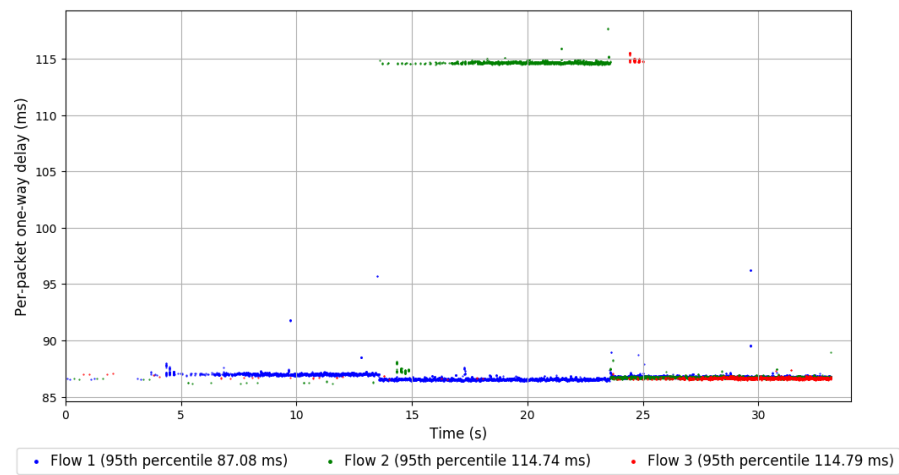
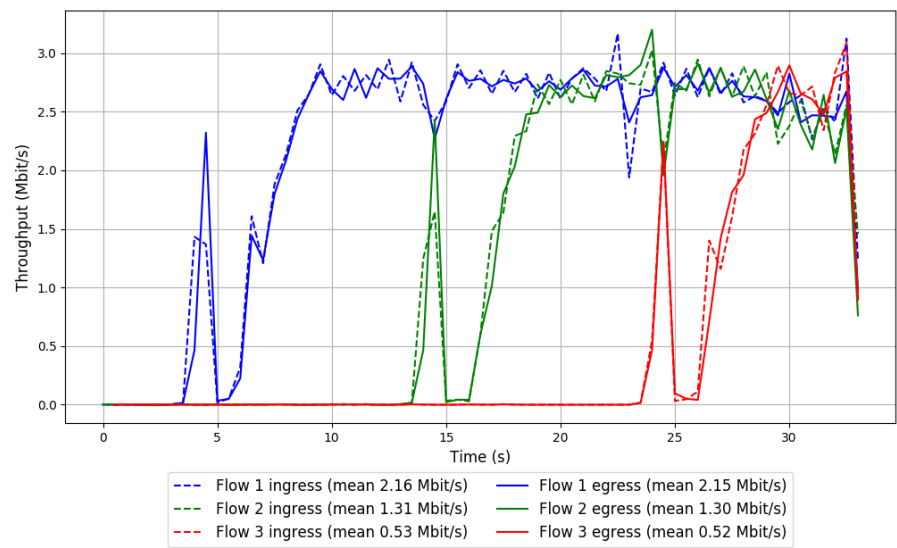
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 114.791 ms

Loss rate: 1.93%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

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

End at: 2017-12-11 23:21:28

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.37 Mbit/s

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

Loss rate: 1.46%

-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 114.976 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 1.48 Mbit/s

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

Loss rate: 1.61%

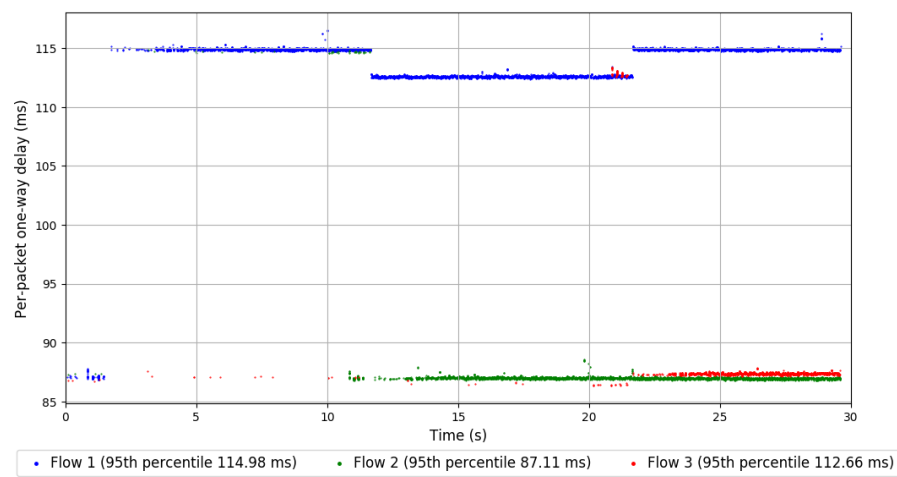
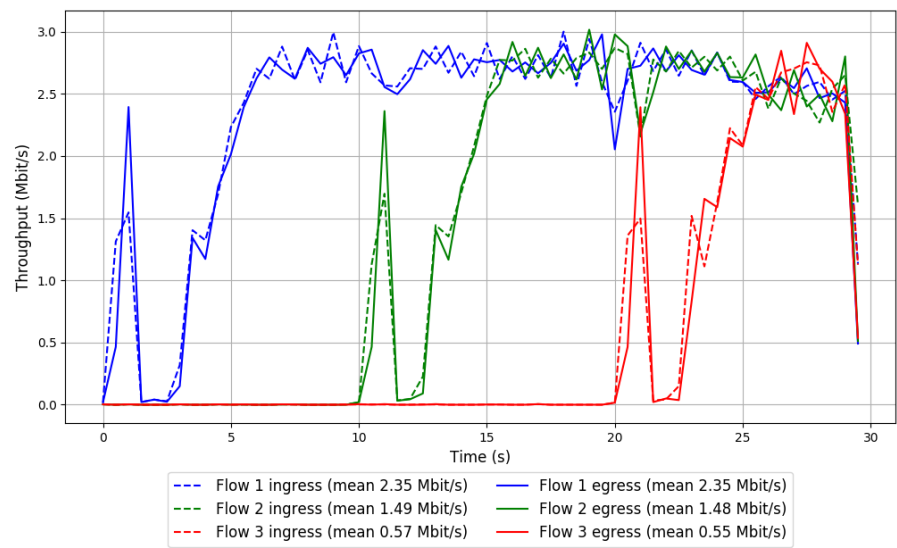
-- Flow 3:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 112.659 ms

Loss rate: 3.29%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-11 23:33:40

End at: 2017-12-11 23:34:10

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

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

Loss rate: 1.36%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 114.965 ms

Loss rate: 1.09%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 114.945 ms

Loss rate: 1.11%

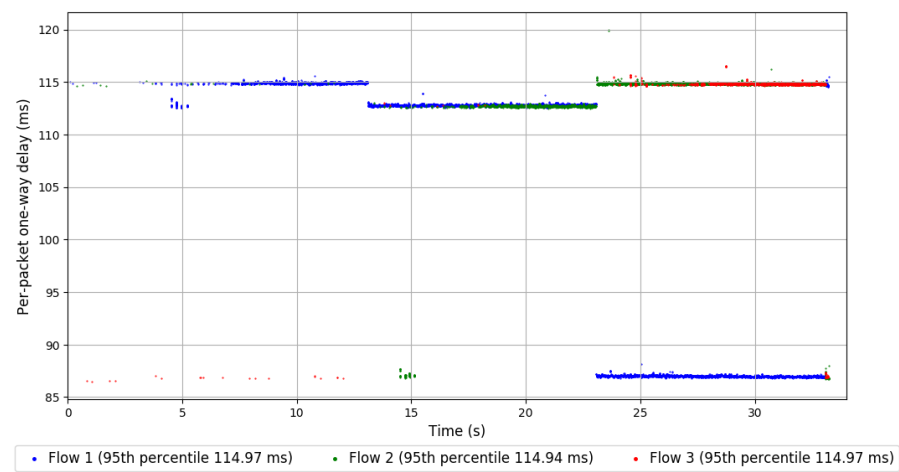
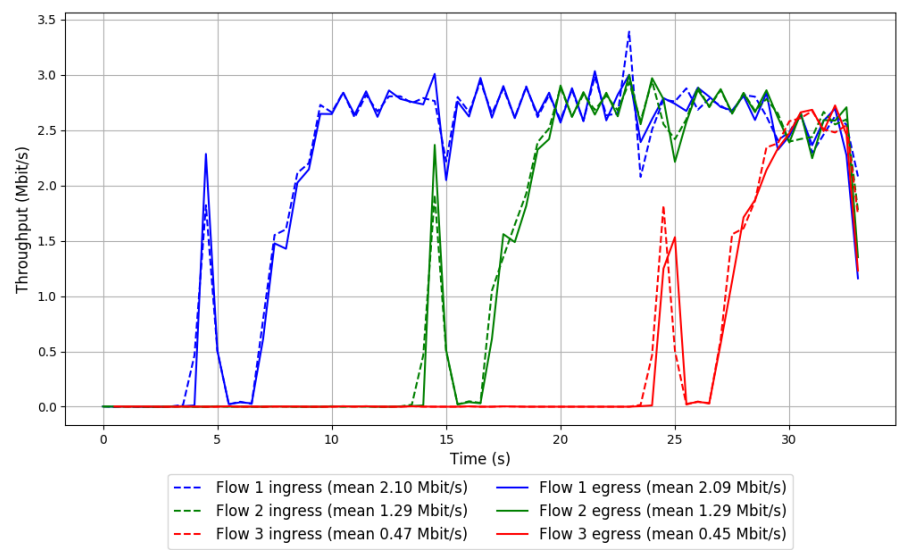
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 114.975 ms

Loss rate: 3.34%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-11 23:46:39

End at: 2017-12-11 23:47:09

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.88 Mbit/s

95th percentile per-packet one-way delay: 115.067 ms

Loss rate: 1.52%

-- Flow 1:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 115.023 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 86.715 ms

Loss rate: 1.46%

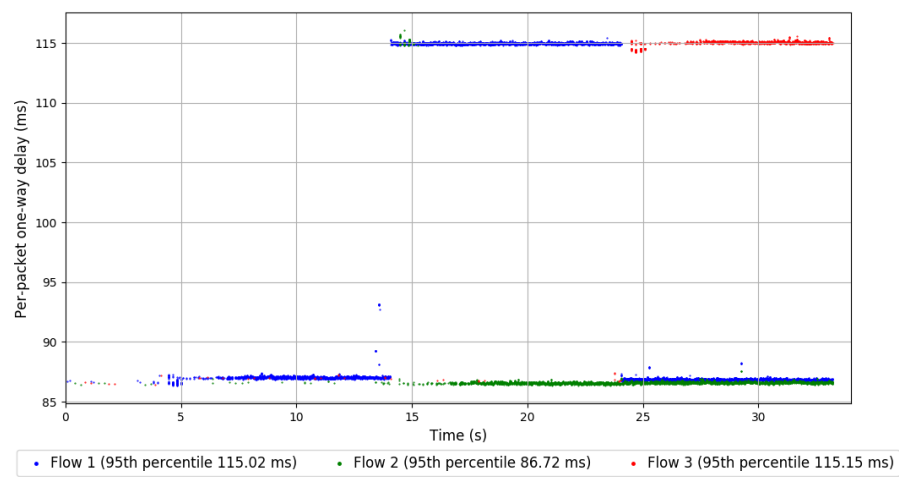
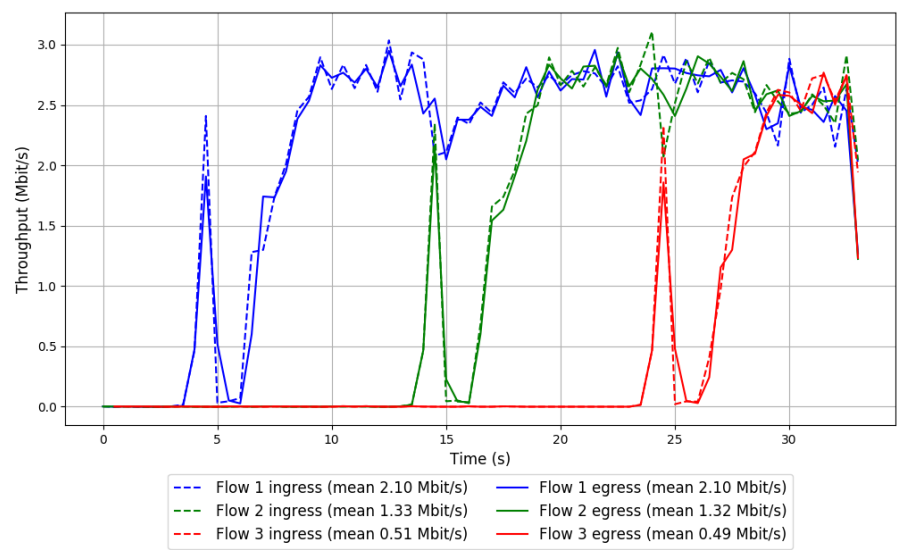
-- Flow 3:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 115.146 ms

Loss rate: 4.36%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-11 23:59:36

End at: 2017-12-12 00:00:06

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.87 Mbit/s

95th percentile per-packet one-way delay: 87.169 ms

Loss rate: 1.35%

-- Flow 1:

Average throughput: 2.13 Mbit/s

95th percentile per-packet one-way delay: 87.058 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 1.29 Mbit/s

95th percentile per-packet one-way delay: 87.220 ms

Loss rate: 1.23%

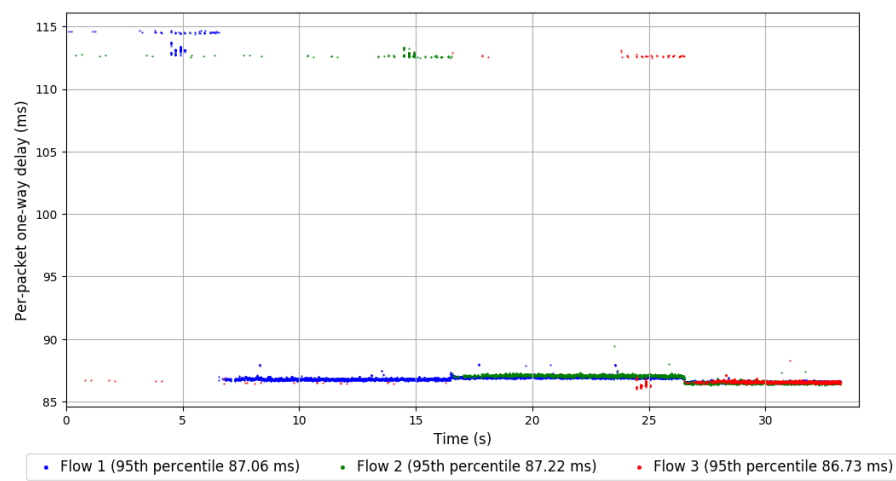
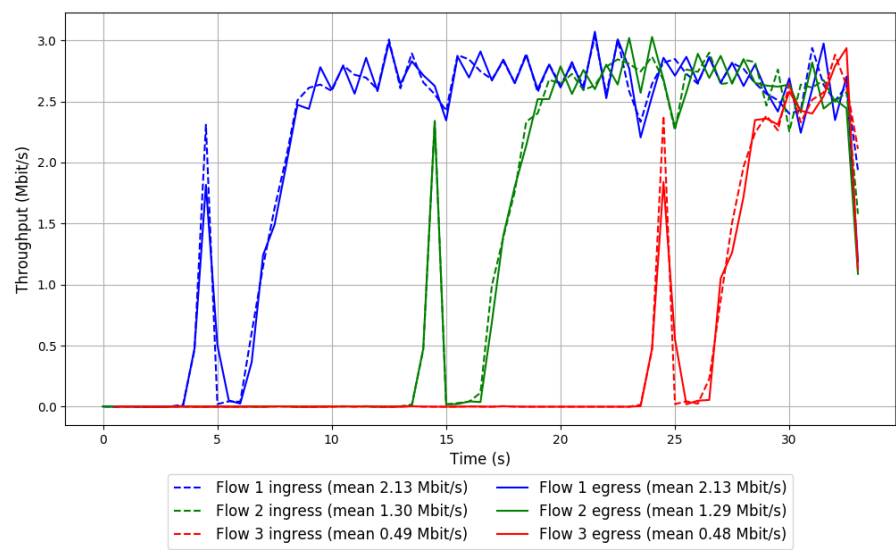
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 86.734 ms

Loss rate: 3.87%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-12 00:12:42

End at: 2017-12-12 00:13:12

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.82 Mbit/s

95th percentile per-packet one-way delay: 113.041 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 115.051 ms

Loss rate: 0.72%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 112.855 ms

Loss rate: 1.26%

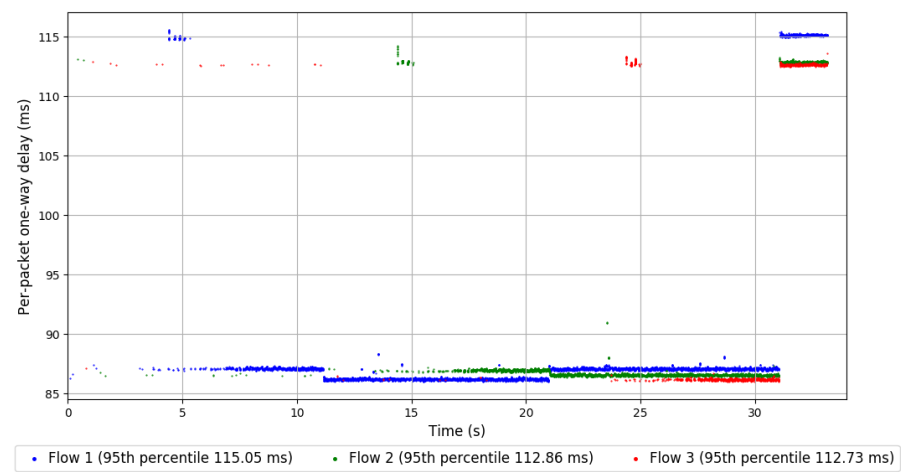
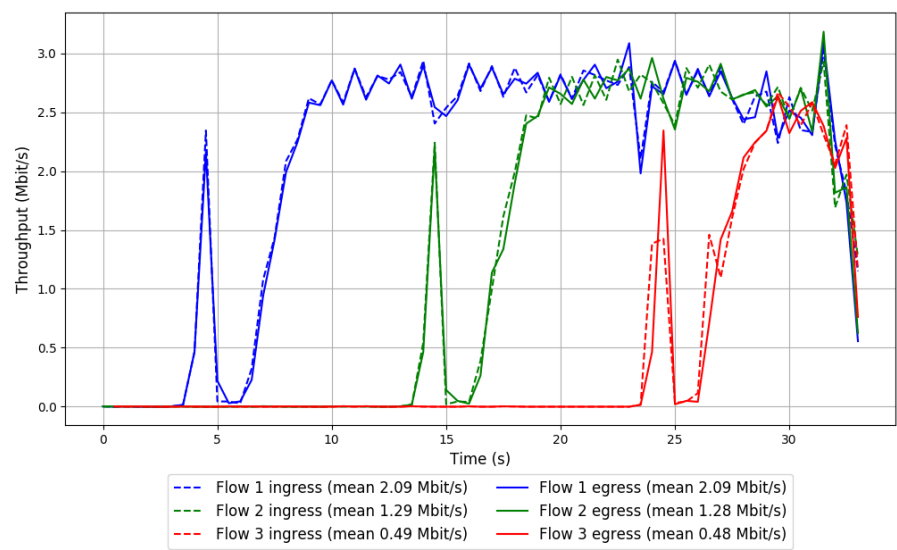
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 112.730 ms

Loss rate: 2.97%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-12 00:25:41

End at: 2017-12-12 00:26:11

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.81 Mbit/s

95th percentile per-packet one-way delay: 114.760 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 115.003 ms

Loss rate: 0.92%

-- Flow 2:

Average throughput: 1.28 Mbit/s

95th percentile per-packet one-way delay: 114.762 ms

Loss rate: 1.30%

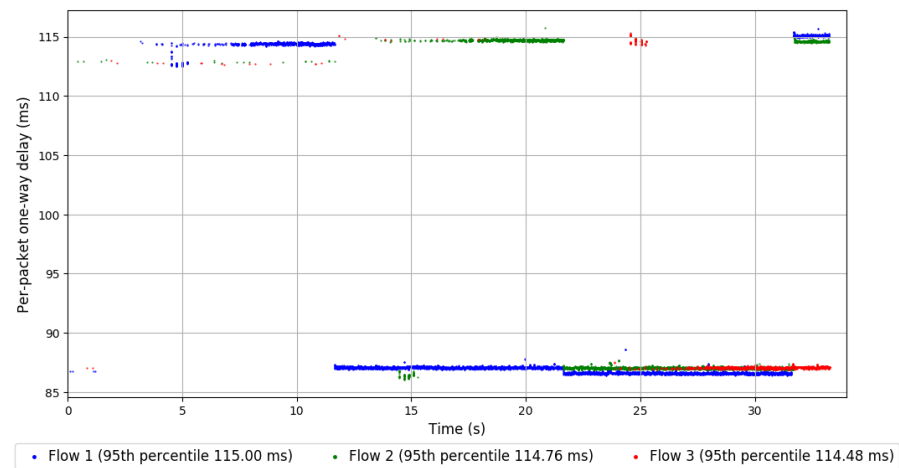
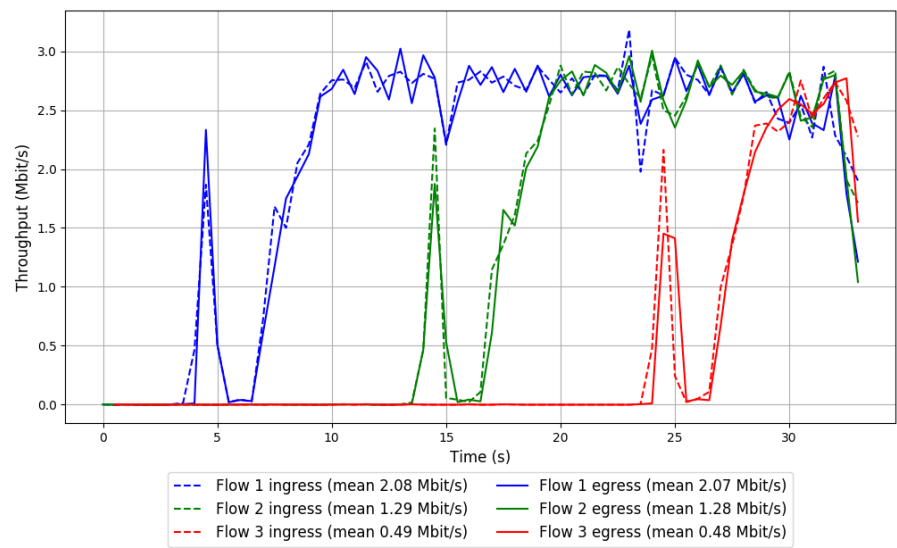
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 114.476 ms

Loss rate: 3.01%

Run 10: Report of WebRTC media — Data Link

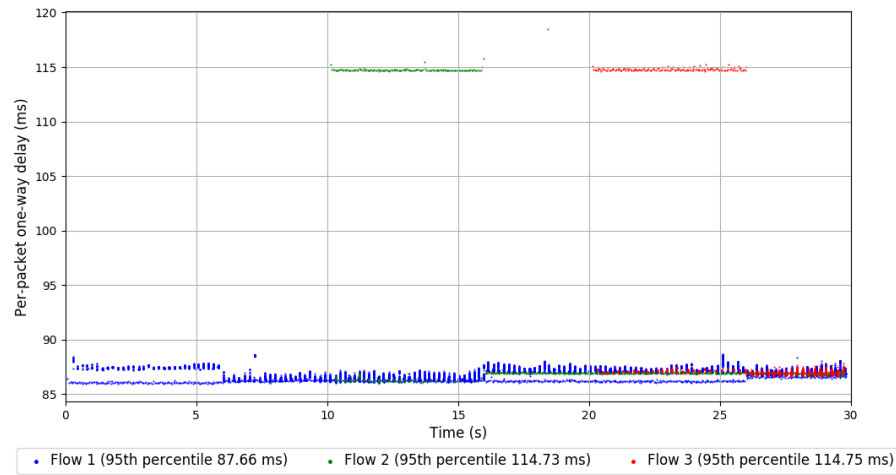
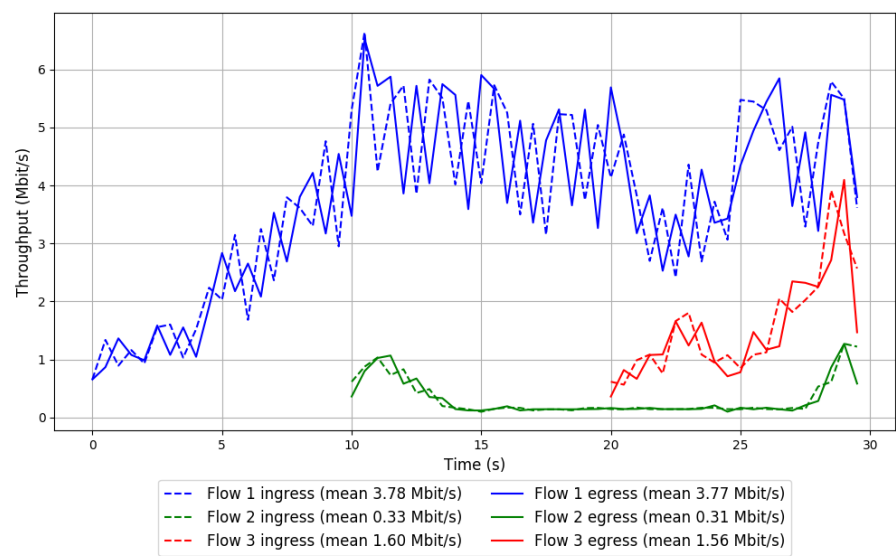


```
Run 1: Statistics of Sprout

Start at: 2017-12-11 22:30:23
End at: 2017-12-11 22:30:53

# Below is generated by plot.py at 2017-12-12 03:14:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 87.749 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 87.655 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 114.735 ms
Loss rate: 4.93%
-- Flow 3:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 114.749 ms
Loss rate: 4.40%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-11 22:43:35

End at: 2017-12-11 22:44:05

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.58 Mbit/s

95th percentile per-packet one-way delay: 87.984 ms

Loss rate: 1.20%

-- Flow 1:

Average throughput: 4.18 Mbit/s

95th percentile per-packet one-way delay: 87.874 ms

Loss rate: 0.76%

-- Flow 2:

Average throughput: 3.63 Mbit/s

95th percentile per-packet one-way delay: 88.625 ms

Loss rate: 1.36%

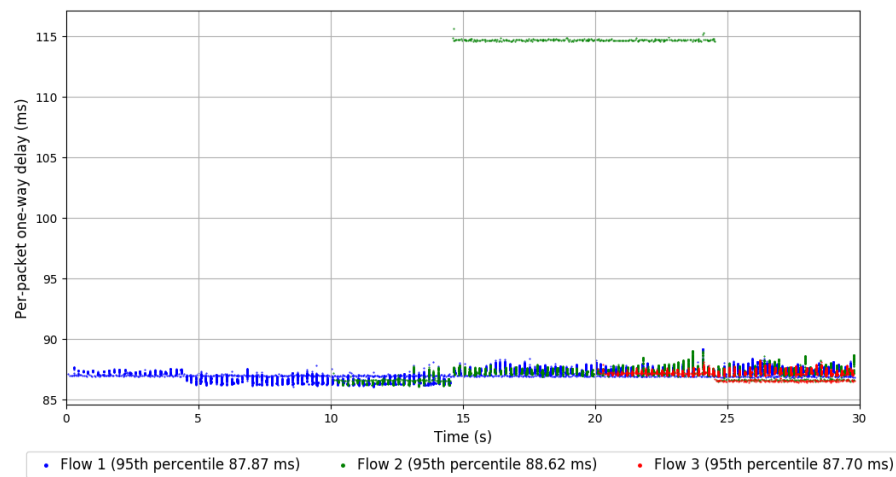
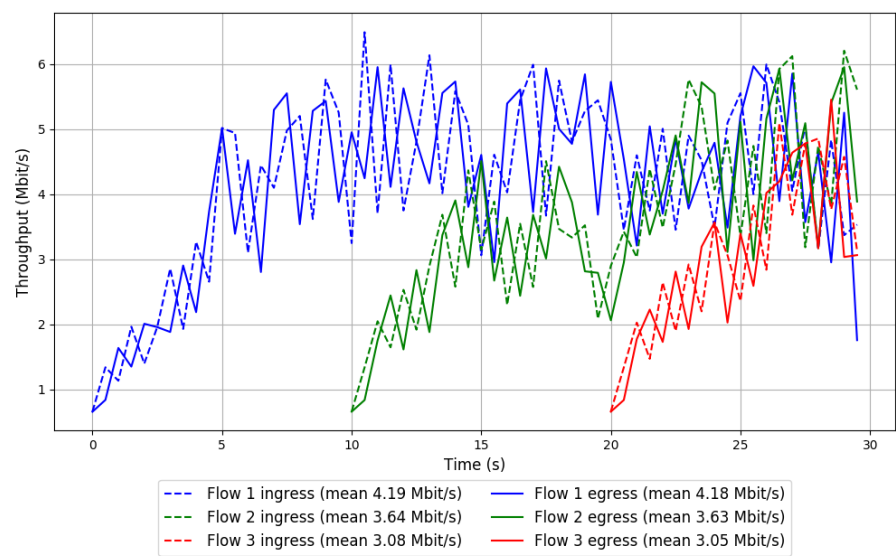
-- Flow 3:

Average throughput: 3.05 Mbit/s

95th percentile per-packet one-way delay: 87.703 ms

Loss rate: 2.65%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-11 22:56:36

End at: 2017-12-11 22:57:06

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 87.578 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 87.550 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 87.676 ms

Loss rate: 1.02%

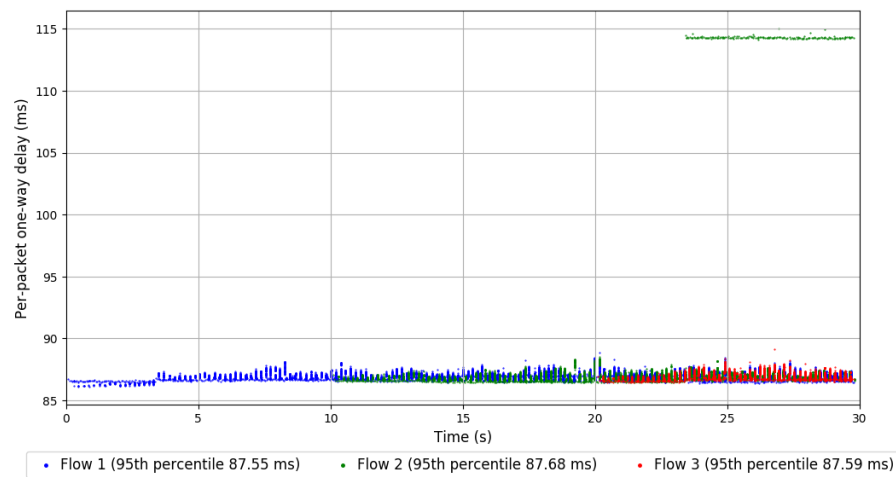
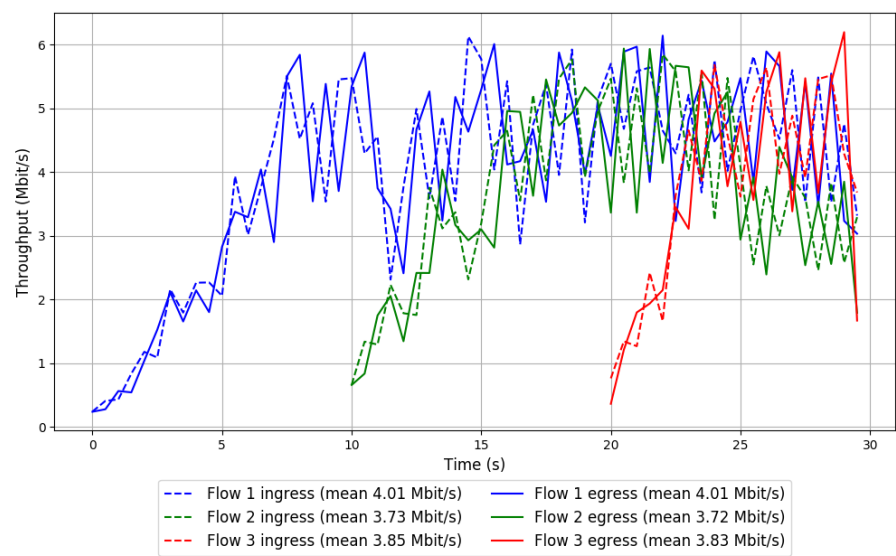
-- Flow 3:

Average throughput: 3.83 Mbit/s

95th percentile per-packet one-way delay: 87.591 ms

Loss rate: 2.65%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-11 23:09:42

End at: 2017-12-11 23:10:12

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.50 Mbit/s

95th percentile per-packet one-way delay: 114.909 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 2.94 Mbit/s

95th percentile per-packet one-way delay: 114.235 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 114.872 ms

Loss rate: 0.36%

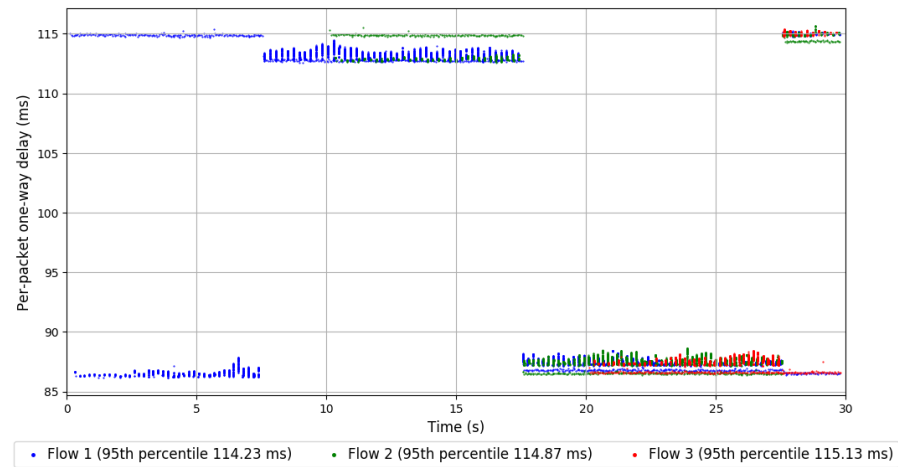
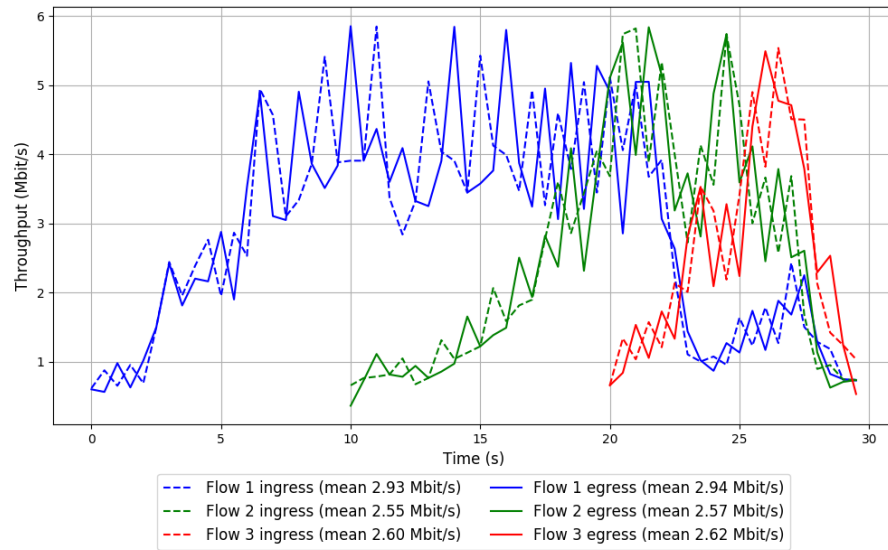
-- Flow 3:

Average throughput: 2.62 Mbit/s

95th percentile per-packet one-way delay: 115.133 ms

Loss rate: 0.98%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-11 23:22:35

End at: 2017-12-11 23:23:05

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 114.662 ms

Loss rate: 2.50%

-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 114.875 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 1.61 Mbit/s

95th percentile per-packet one-way delay: 113.046 ms

Loss rate: 2.51%

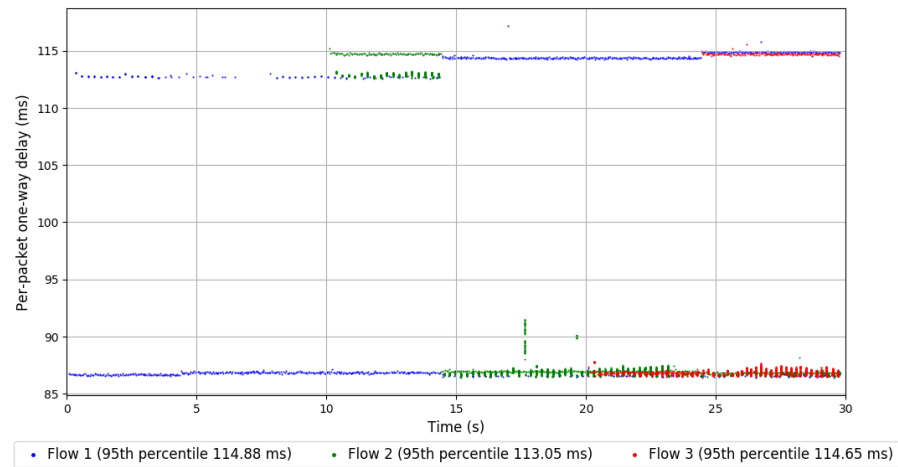
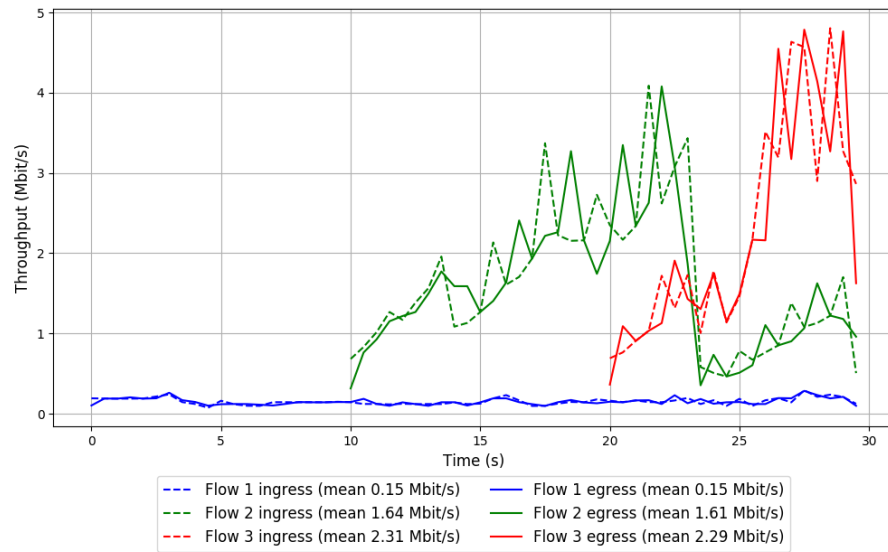
-- Flow 3:

Average throughput: 2.29 Mbit/s

95th percentile per-packet one-way delay: 114.650 ms

Loss rate: 2.82%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2017-12-11 23:35:19

End at: 2017-12-11 23:35:49

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.01 Mbit/s

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

Loss rate: 1.26%

-- Flow 1:

Average throughput: 0.87 Mbit/s

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

Loss rate: 0.40%

-- Flow 2:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 114.778 ms

Loss rate: 1.82%

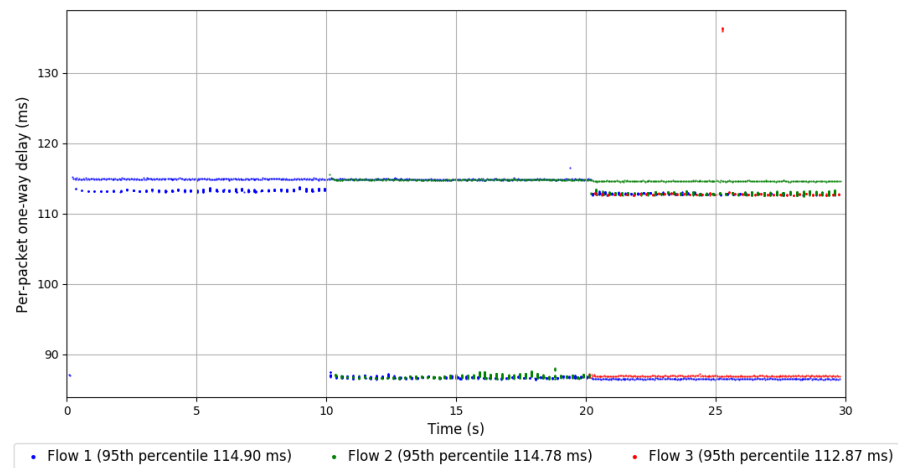
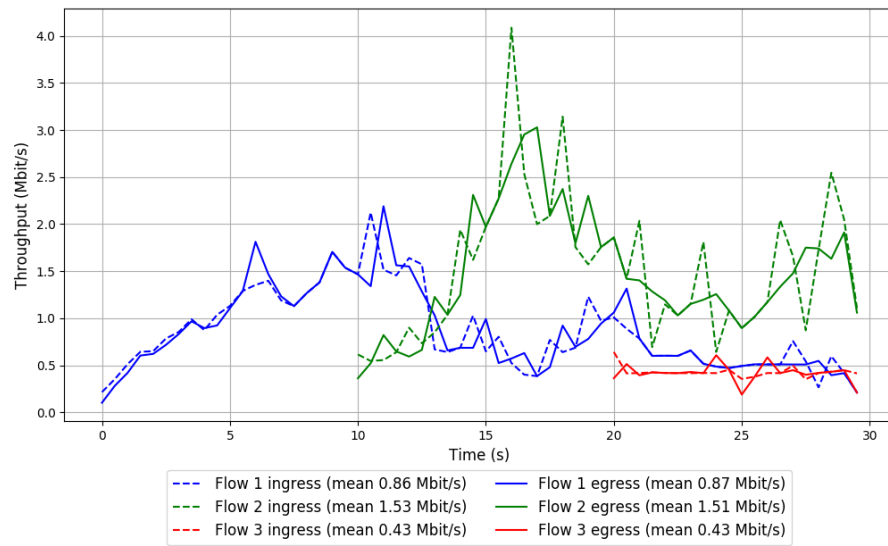
-- Flow 3:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 112.869 ms

Loss rate: 2.41%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-11 23:48:19

End at: 2017-12-11 23:48:49

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.14 Mbit/s

95th percentile per-packet one-way delay: 115.072 ms

Loss rate: 1.80%

-- Flow 1:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 115.078 ms

Loss rate: 1.41%

-- Flow 2:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 115.094 ms

Loss rate: 0.83%

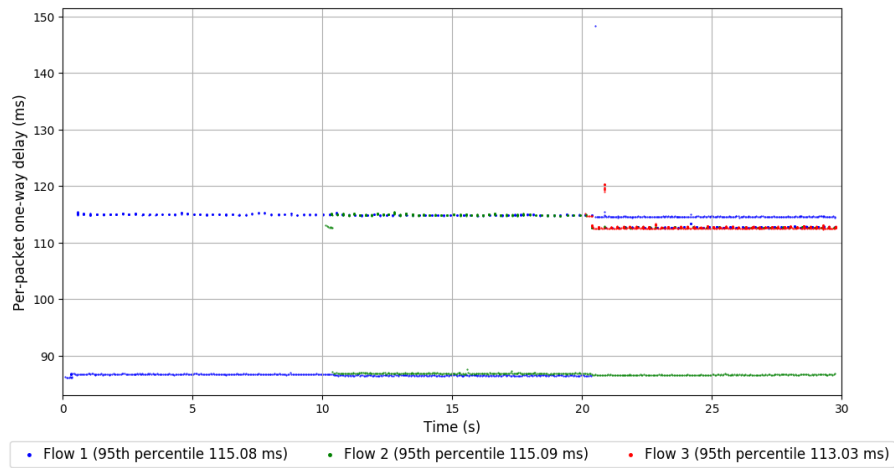
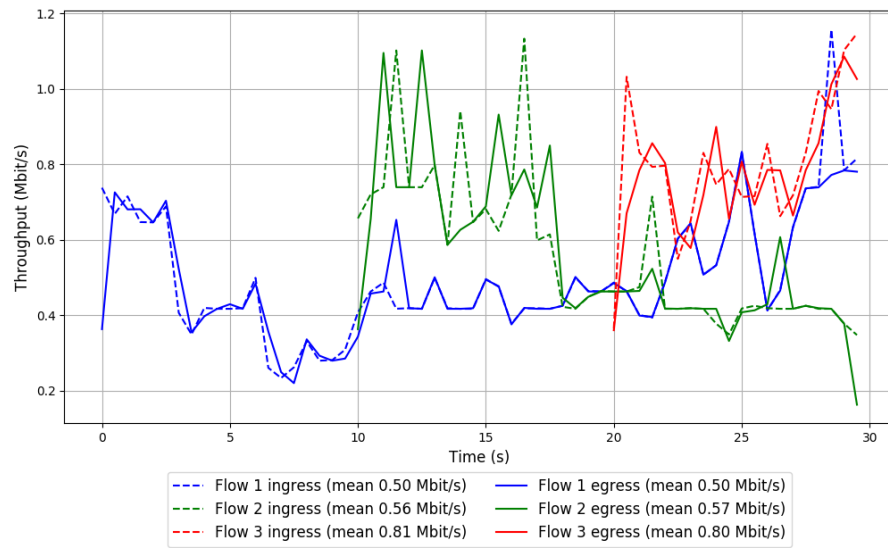
-- Flow 3:

Average throughput: 0.80 Mbit/s

95th percentile per-packet one-way delay: 113.031 ms

Loss rate: 3.88%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-12 00:01:15

End at: 2017-12-12 00:01:45

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.15 Mbit/s

95th percentile per-packet one-way delay: 113.019 ms

Loss rate: 2.06%

-- Flow 1:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 113.152 ms

Loss rate: 1.57%

-- Flow 2:

Average throughput: 2.66 Mbit/s

95th percentile per-packet one-way delay: 113.137 ms

Loss rate: 1.37%

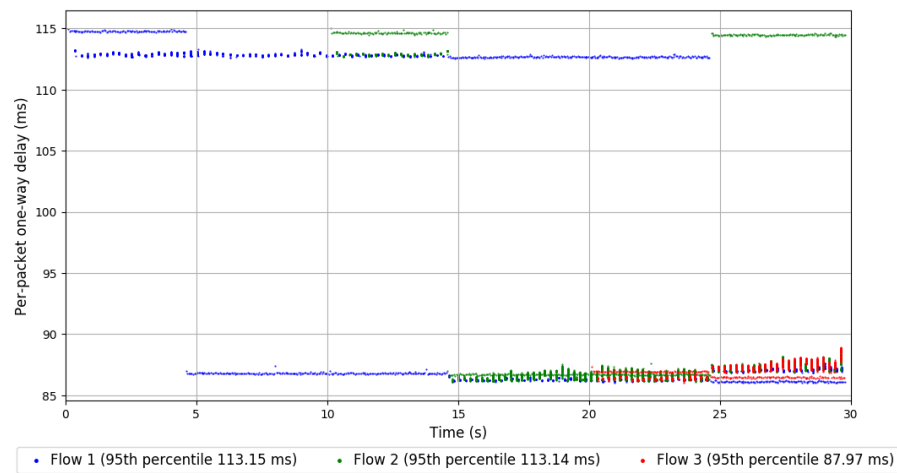
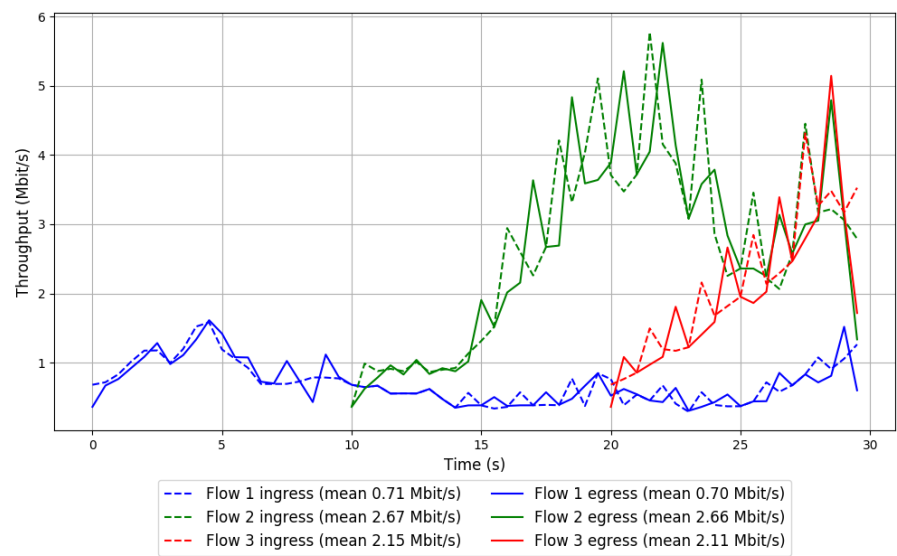
-- Flow 3:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 87.975 ms

Loss rate: 4.26%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-12 00:14:17

End at: 2017-12-12 00:14:47

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 115.109 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 115.089 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 115.066 ms

Loss rate: 2.41%

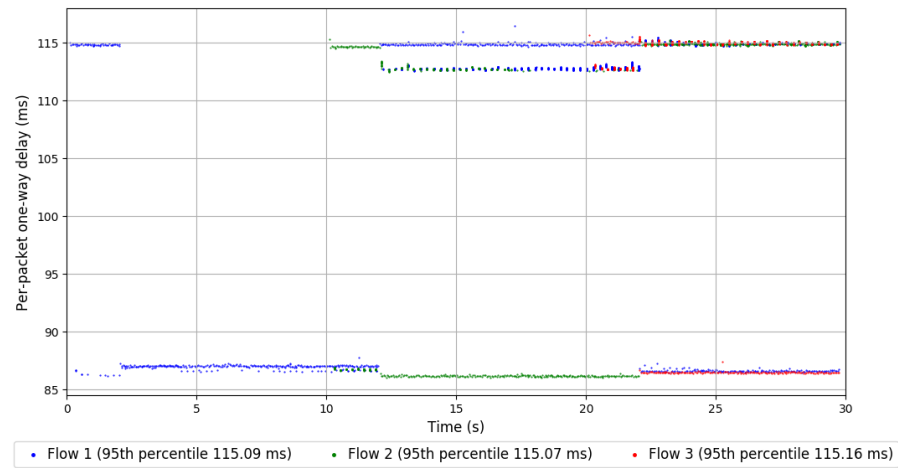
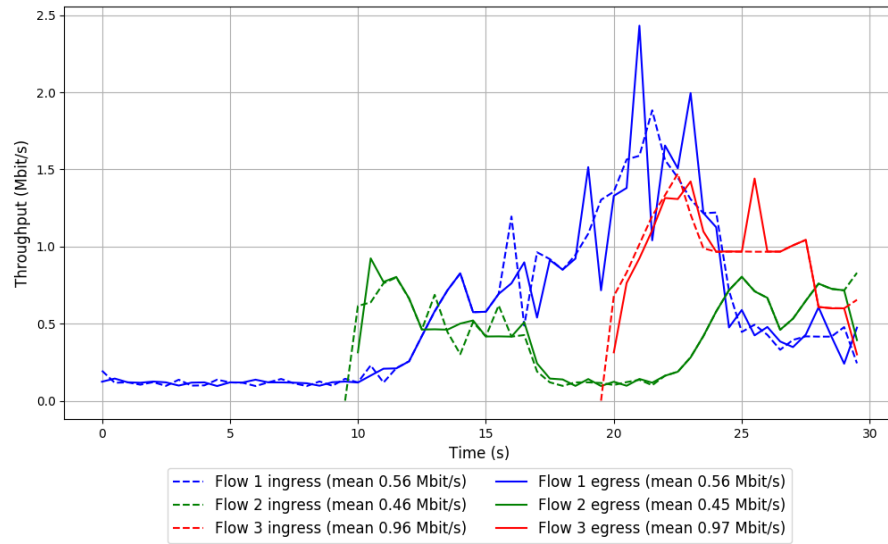
-- Flow 3:

Average throughput: 0.97 Mbit/s

95th percentile per-packet one-way delay: 115.159 ms

Loss rate: 1.87%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-12 00:27:21

End at: 2017-12-12 00:27:51

Below is generated by plot.py at 2017-12-12 03:14:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 114.936 ms

Loss rate: 0.77%

-- Flow 1:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 114.982 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 114.928 ms

Loss rate: 0.65%

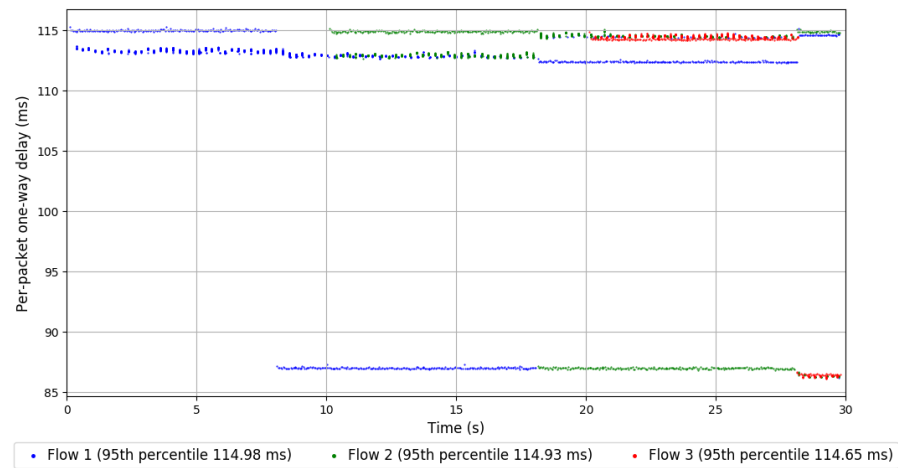
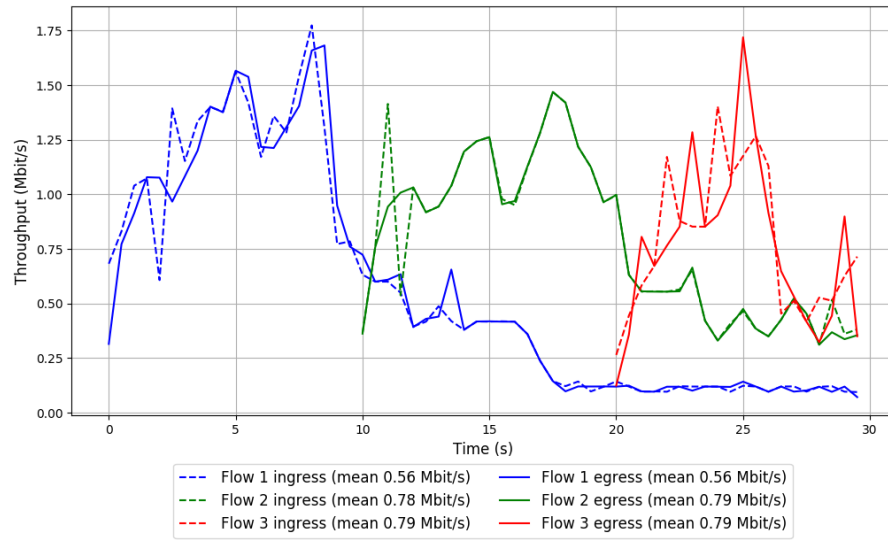
-- Flow 3:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 114.652 ms

Loss rate: 2.37%

Run 10: Report of Sprout — Data Link

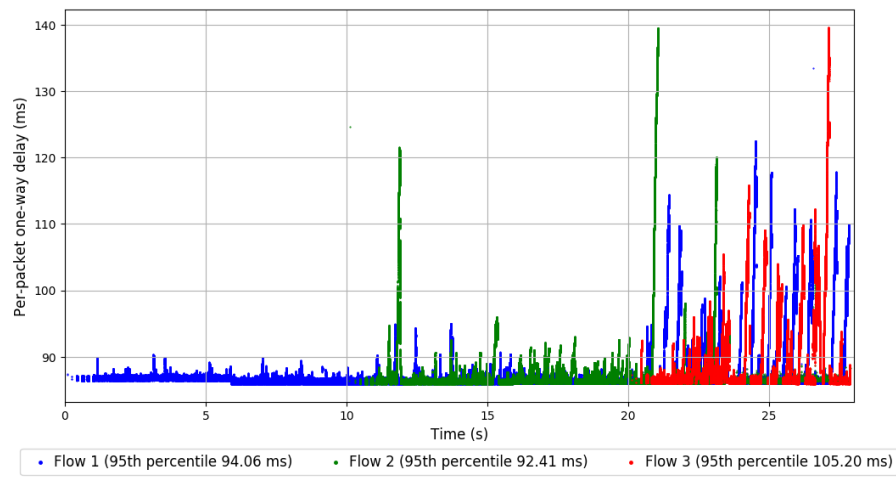
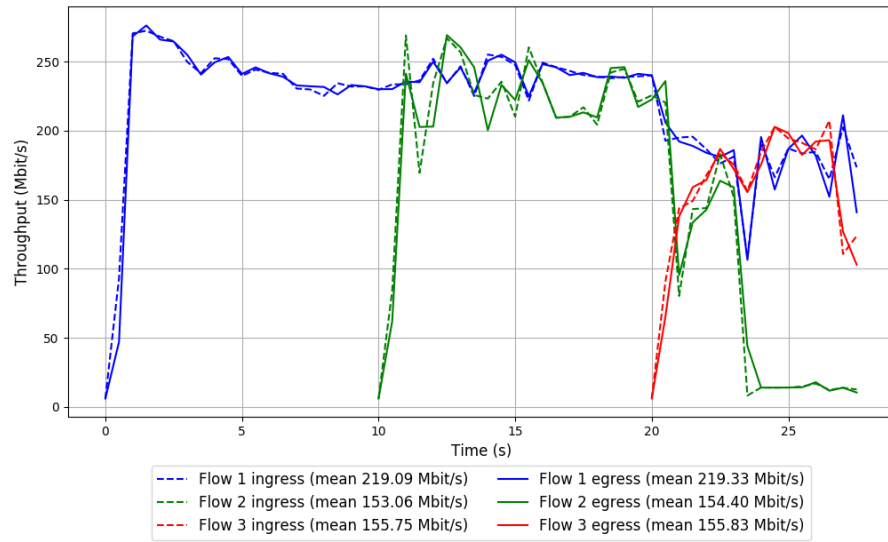


```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-11 22:31:52
End at: 2017-12-11 22:32:22

# Below is generated by plot.py at 2017-12-12 03:22:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.64 Mbit/s
95th percentile per-packet one-way delay: 96.302 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 219.33 Mbit/s
95th percentile per-packet one-way delay: 94.055 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 154.40 Mbit/s
95th percentile per-packet one-way delay: 92.409 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 155.83 Mbit/s
95th percentile per-packet one-way delay: 105.204 ms
Loss rate: 2.15%
```


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

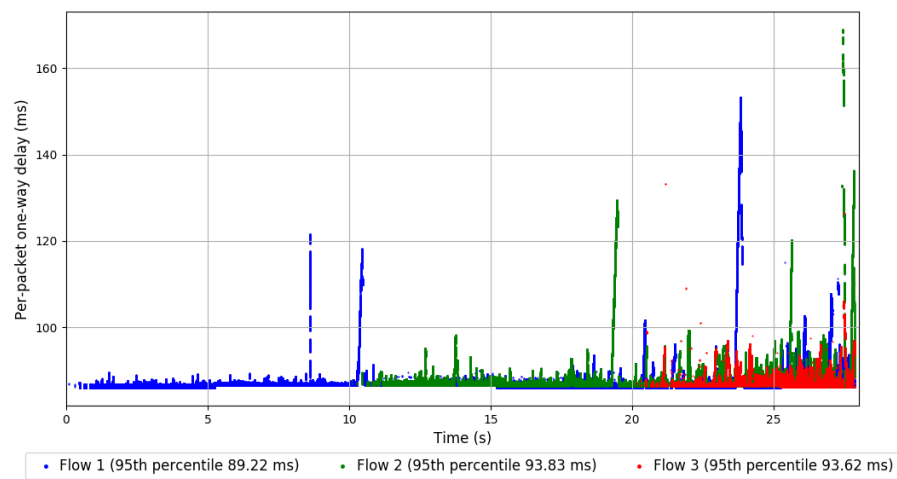
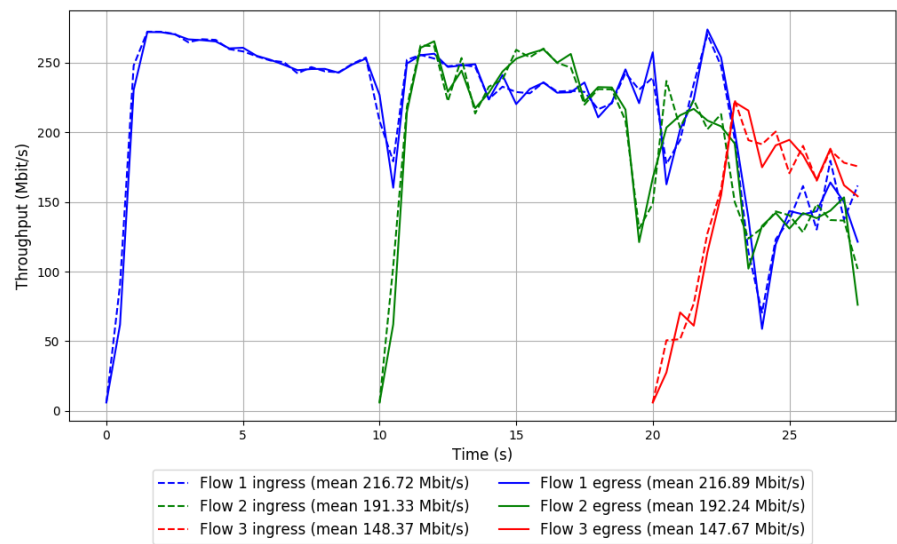


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-11 22:45:02
End at: 2017-12-11 22:45:32

# Below is generated by plot.py at 2017-12-12 03:23:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 380.96 Mbit/s
95th percentile per-packet one-way delay: 92.003 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 216.89 Mbit/s
95th percentile per-packet one-way delay: 89.220 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 192.24 Mbit/s
95th percentile per-packet one-way delay: 93.825 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 147.67 Mbit/s
95th percentile per-packet one-way delay: 93.619 ms
Loss rate: 2.65%
```

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

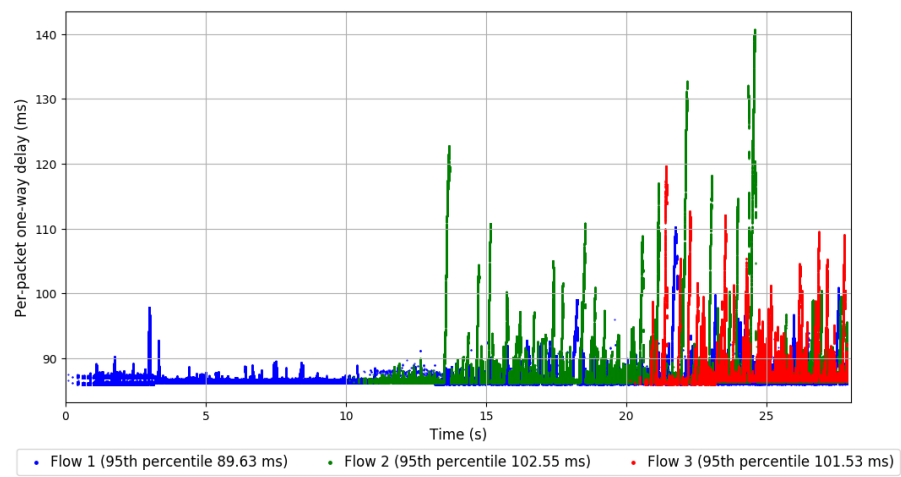
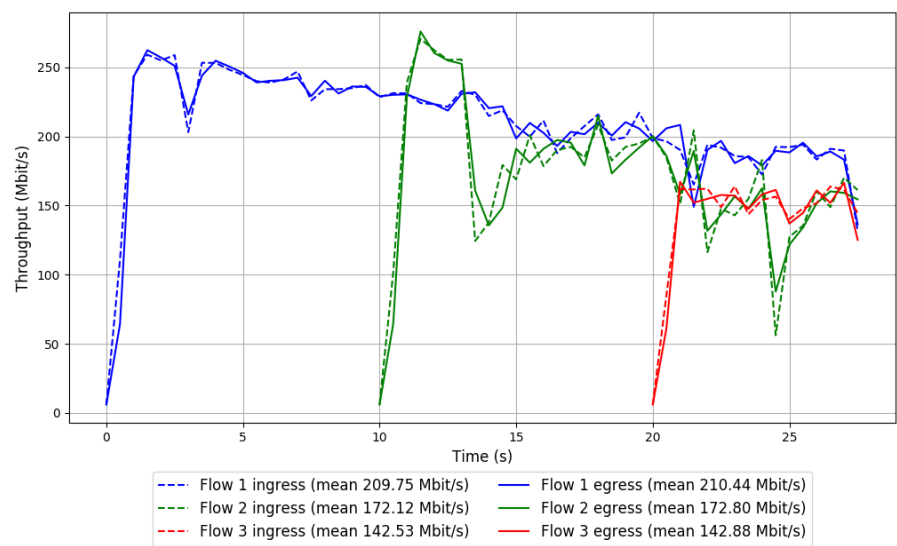


```
Run 3: Statistics of TaoVA-100x

Start at: 2017-12-11 22:58:04
End at: 2017-12-11 22:58:34

# Below is generated by plot.py at 2017-12-12 03:23:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.61 Mbit/s
95th percentile per-packet one-way delay: 95.255 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 210.44 Mbit/s
95th percentile per-packet one-way delay: 89.627 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 172.80 Mbit/s
95th percentile per-packet one-way delay: 102.551 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 142.88 Mbit/s
95th percentile per-packet one-way delay: 101.531 ms
Loss rate: 1.96%
```

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

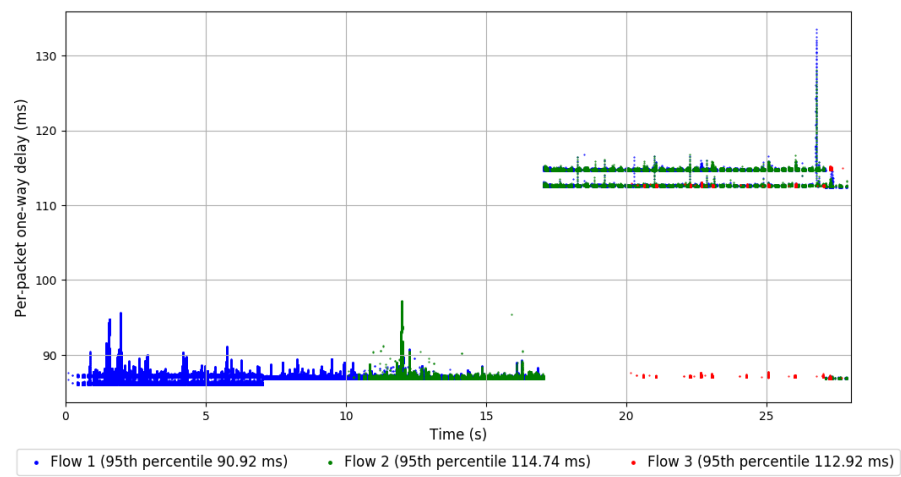
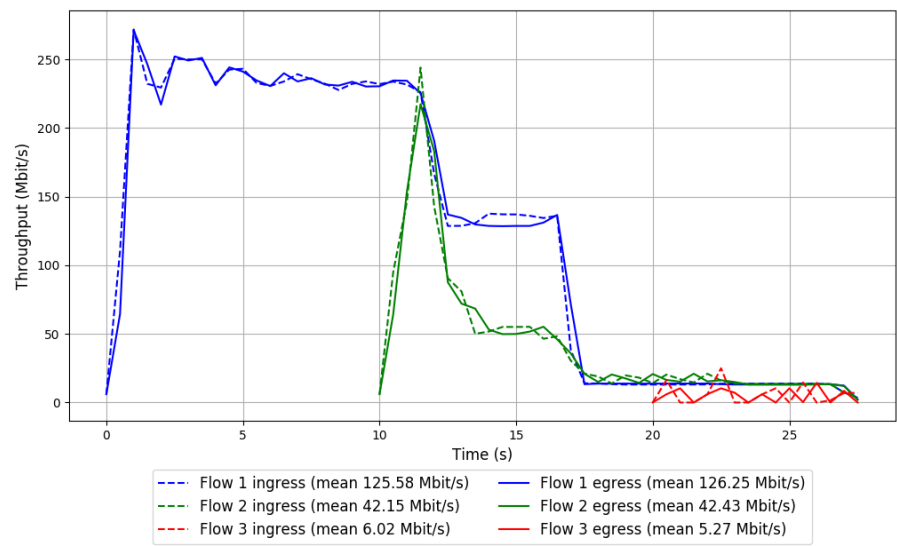


```
Run 4: Statistics of TaoVA-100x

Start at: 2017-12-11 23:11:10
End at: 2017-12-11 23:11:40

# Below is generated by plot.py at 2017-12-12 03:23:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 154.82 Mbit/s
95th percentile per-packet one-way delay: 112.619 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 126.25 Mbit/s
95th percentile per-packet one-way delay: 90.923 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 42.43 Mbit/s
95th percentile per-packet one-way delay: 114.737 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 112.915 ms
Loss rate: 15.37%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-11 23:24:05

End at: 2017-12-11 23:24:35

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.08 Mbit/s

95th percentile per-packet one-way delay: 112.732 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 106.03 Mbit/s

95th percentile per-packet one-way delay: 112.752 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.20 Mbit/s

95th percentile per-packet one-way delay: 114.837 ms

Loss rate: 0.00%

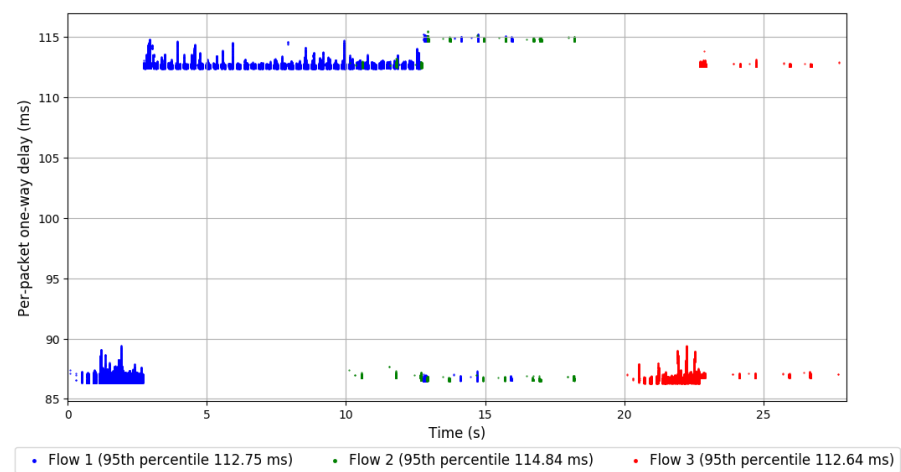
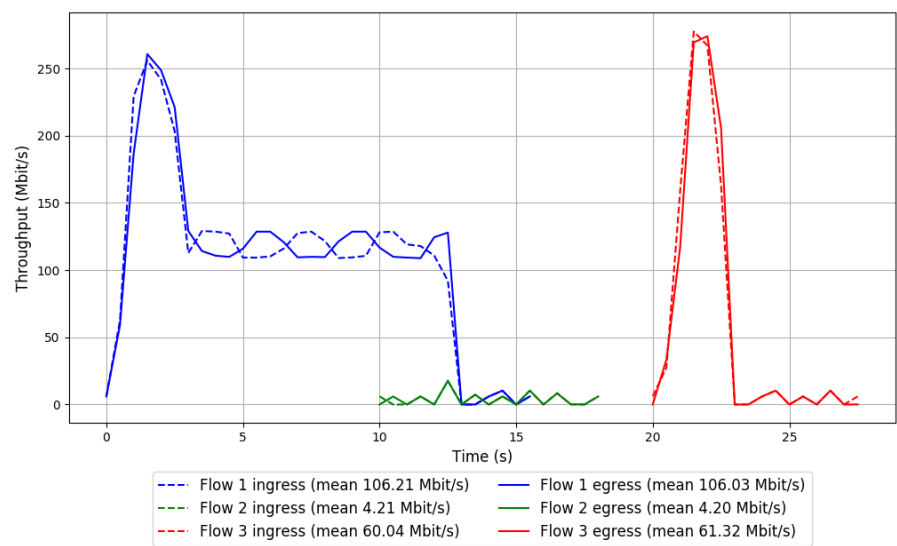
-- Flow 3:

Average throughput: 61.32 Mbit/s

95th percentile per-packet one-way delay: 112.641 ms

Loss rate: 0.64%

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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-11 23:36:49

End at: 2017-12-11 23:37:19

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 113.66 Mbit/s

95th percentile per-packet one-way delay: 114.783 ms

Loss rate: 1.64%

-- Flow 1:

Average throughput: 105.37 Mbit/s

95th percentile per-packet one-way delay: 114.780 ms

Loss rate: 1.75%

-- Flow 2:

Average throughput: 10.45 Mbit/s

95th percentile per-packet one-way delay: 115.170 ms

Loss rate: 0.43%

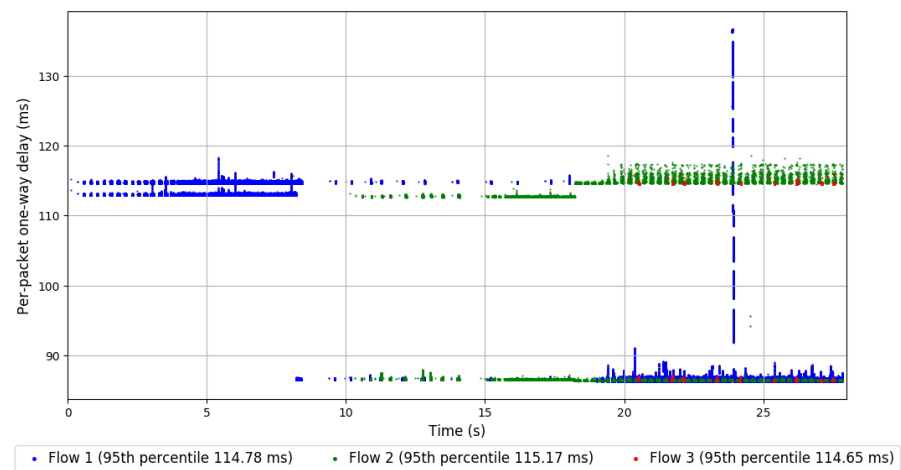
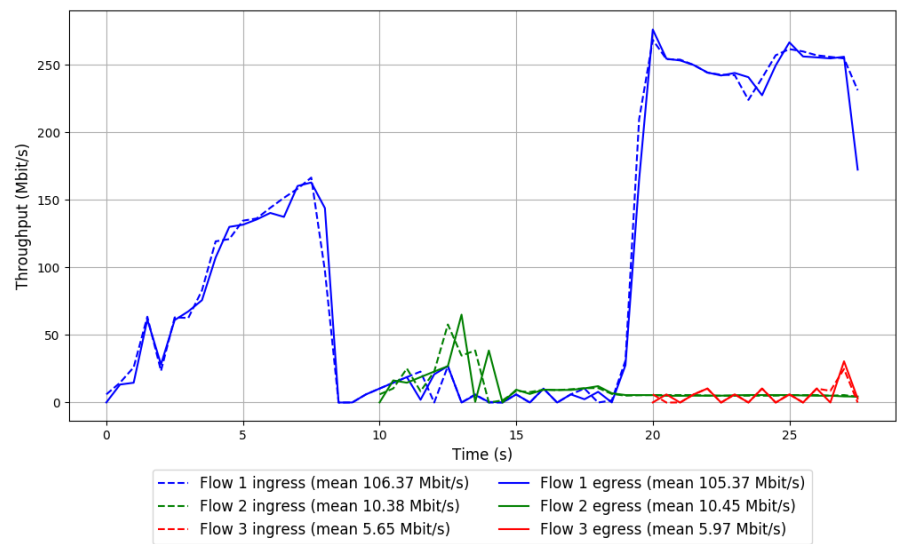
-- Flow 3:

Average throughput: 5.97 Mbit/s

95th percentile per-packet one-way delay: 114.647 ms

Loss rate: 0.03%

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

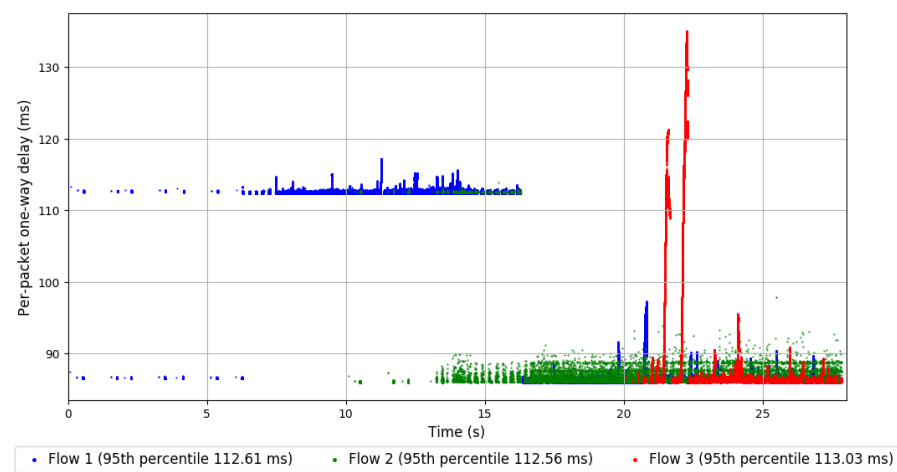
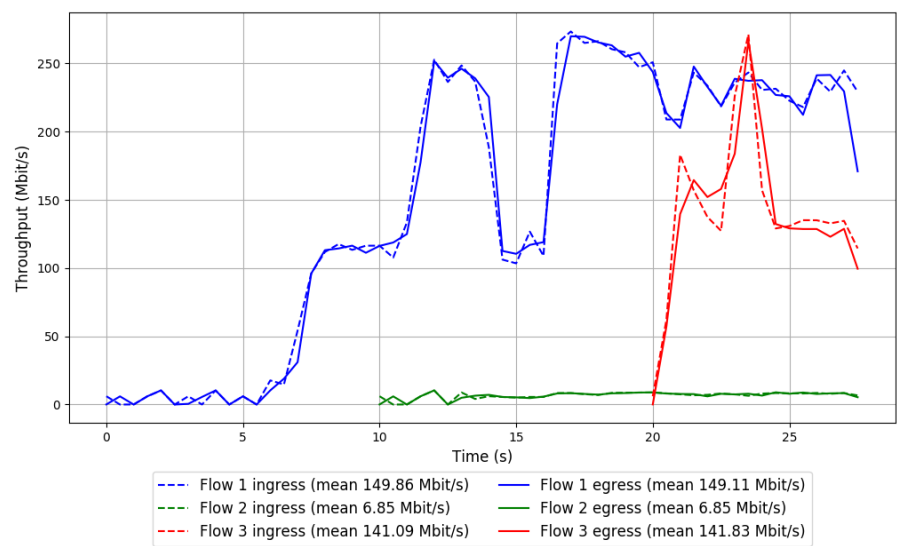


```
Run 7: Statistics of TaoVA-100x

Start at: 2017-12-11 23:49:51
End at: 2017-12-11 23:50:21

# Below is generated by plot.py at 2017-12-12 03:23:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 193.00 Mbit/s
95th percentile per-packet one-way delay: 112.609 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 149.11 Mbit/s
95th percentile per-packet one-way delay: 112.610 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 112.558 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 141.83 Mbit/s
95th percentile per-packet one-way delay: 113.025 ms
Loss rate: 2.03%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-12 00:02:47

End at: 2017-12-12 00:03:17

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.47 Mbit/s

95th percentile per-packet one-way delay: 112.612 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 82.49 Mbit/s

95th percentile per-packet one-way delay: 112.549 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.07 Mbit/s

95th percentile per-packet one-way delay: 114.574 ms

Loss rate: 0.83%

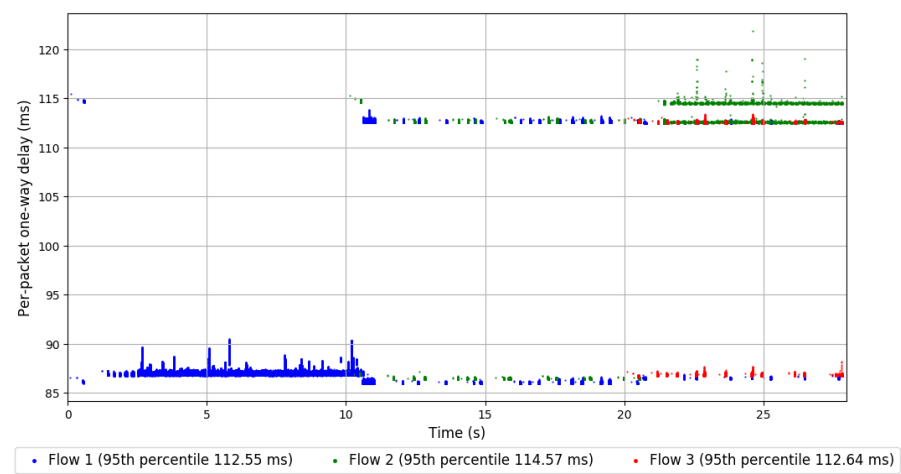
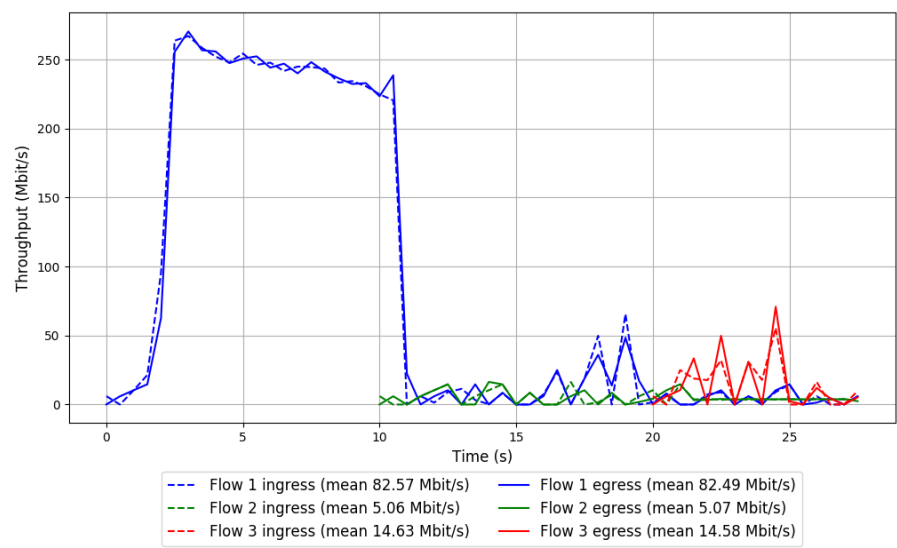
-- Flow 3:

Average throughput: 14.58 Mbit/s

95th percentile per-packet one-way delay: 112.643 ms

Loss rate: 1.96%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-12 00:15:48

End at: 2017-12-12 00:16:18

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 167.04 Mbit/s

95th percentile per-packet one-way delay: 114.710 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 152.80 Mbit/s

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

Loss rate: 0.29%

-- Flow 2:

Average throughput: 30.94 Mbit/s

95th percentile per-packet one-way delay: 114.541 ms

Loss rate: 0.00%

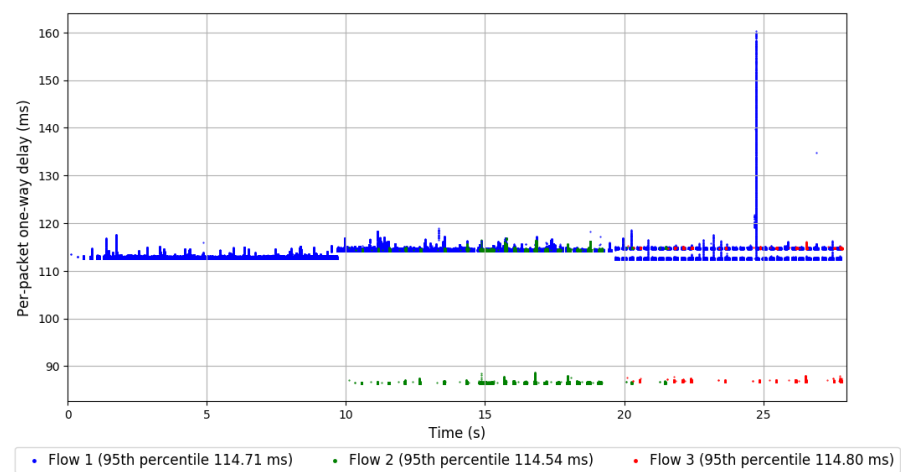
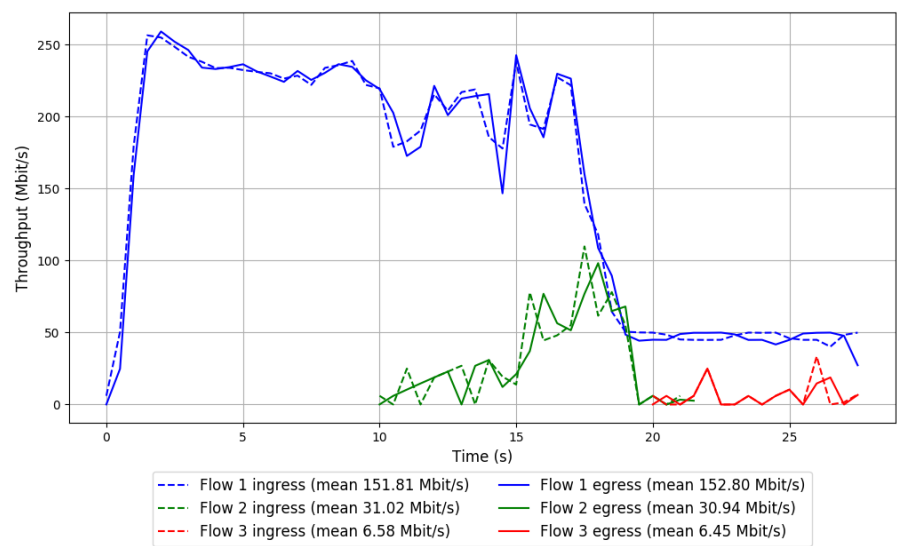
-- Flow 3:

Average throughput: 6.45 Mbit/s

95th percentile per-packet one-way delay: 114.802 ms

Loss rate: 1.84%

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

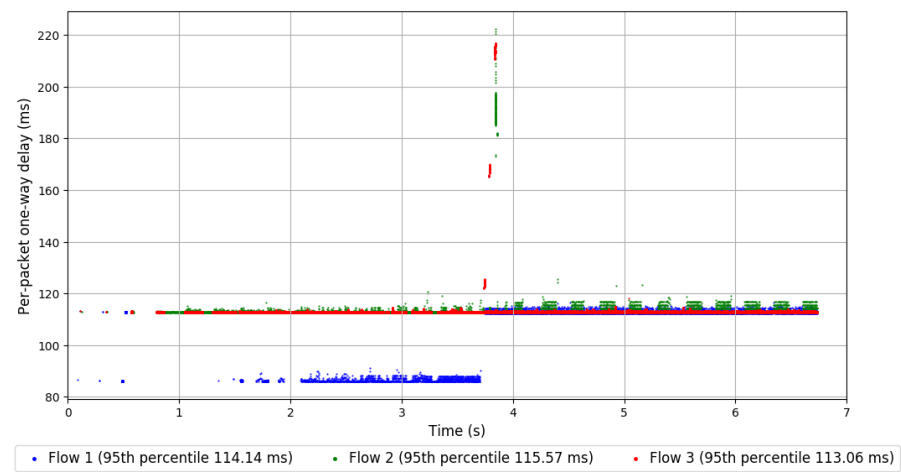
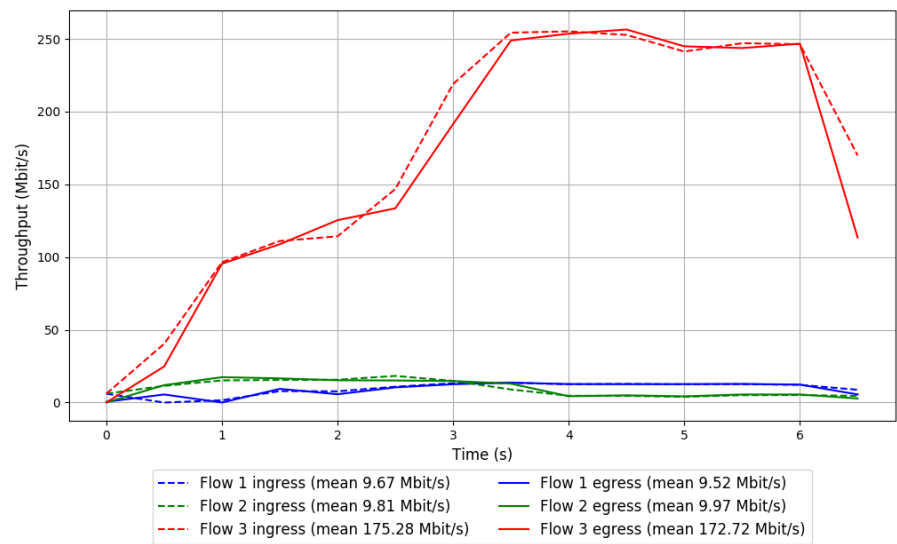


Run 10: Statistics of TaoVA-100x

Start at: 2017-12-12 00:28:53

End at: 2017-12-12 00:29:23

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-11 22:27:52

End at: 2017-12-11 22:28:22

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.91 Mbit/s

95th percentile per-packet one-way delay: 96.651 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 49.99 Mbit/s

95th percentile per-packet one-way delay: 96.666 ms

Loss rate: 0.99%

-- Flow 2:

Average throughput: 58.59 Mbit/s

95th percentile per-packet one-way delay: 98.151 ms

Loss rate: 0.68%

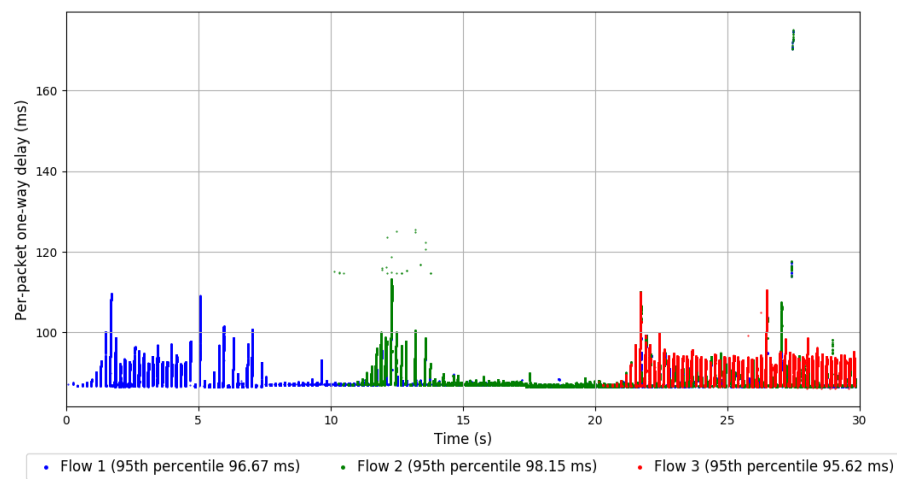
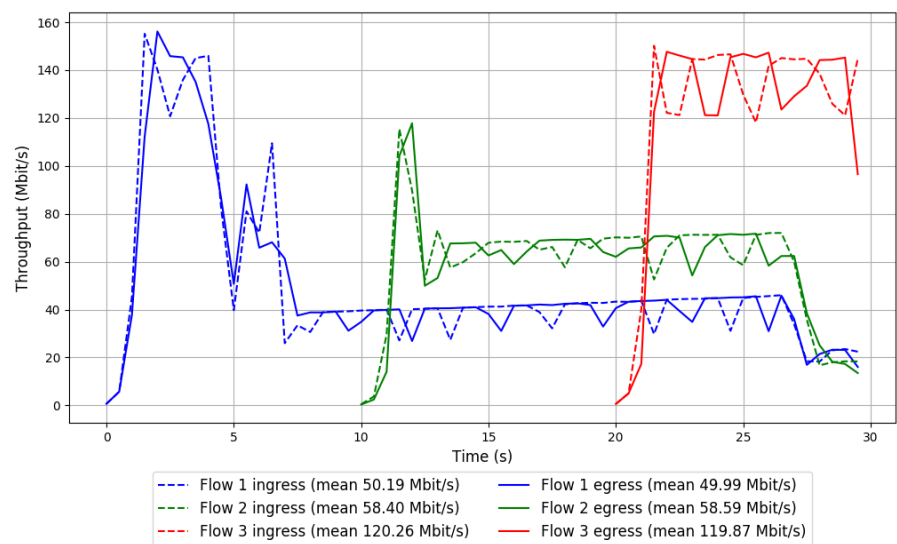
-- Flow 3:

Average throughput: 119.87 Mbit/s

95th percentile per-packet one-way delay: 95.623 ms

Loss rate: 2.03%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-11 22:41:02

End at: 2017-12-11 22:41:32

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.27 Mbit/s

95th percentile per-packet one-way delay: 90.683 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 46.32 Mbit/s

95th percentile per-packet one-way delay: 93.248 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 81.66 Mbit/s

95th percentile per-packet one-way delay: 88.482 ms

Loss rate: 0.47%

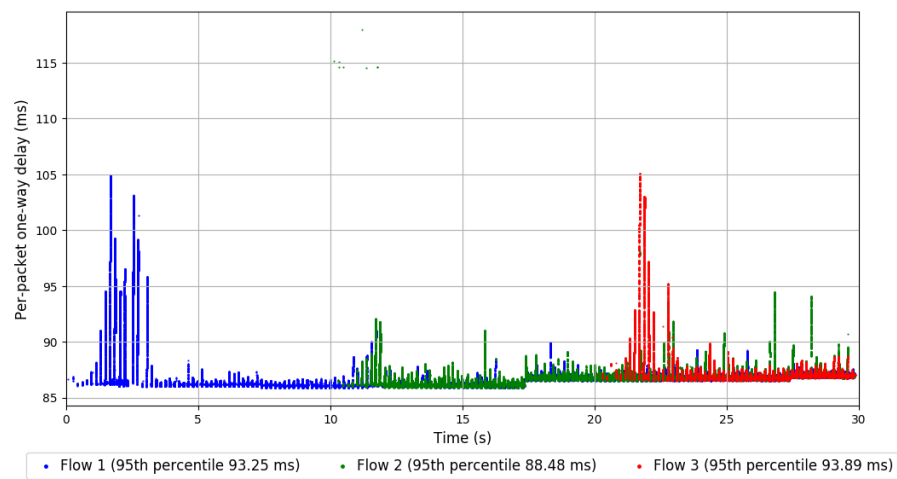
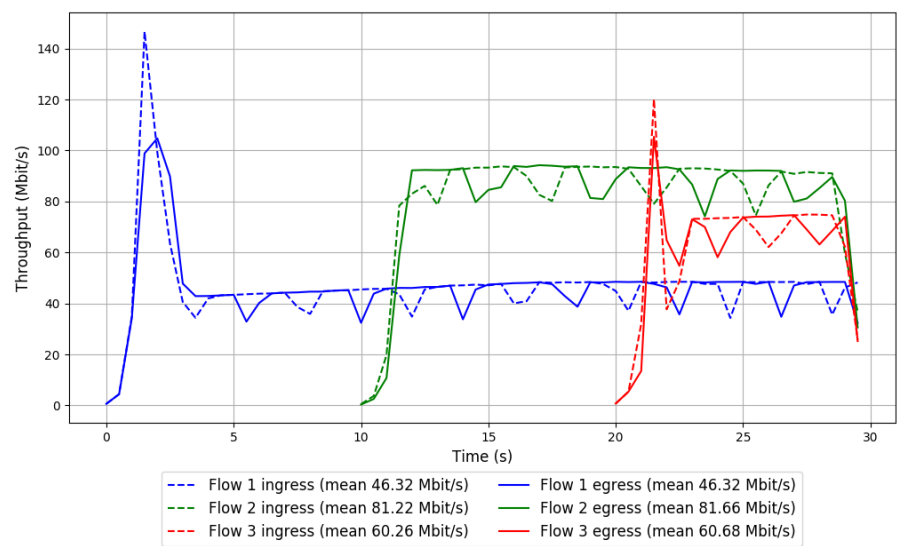
-- Flow 3:

Average throughput: 60.68 Mbit/s

95th percentile per-packet one-way delay: 93.888 ms

Loss rate: 1.06%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2017-12-11 22:54:06

End at: 2017-12-11 22:54:36

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.14 Mbit/s

95th percentile per-packet one-way delay: 88.115 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 16.11 Mbit/s

95th percentile per-packet one-way delay: 87.579 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 72.41 Mbit/s

95th percentile per-packet one-way delay: 87.761 ms

Loss rate: 0.51%

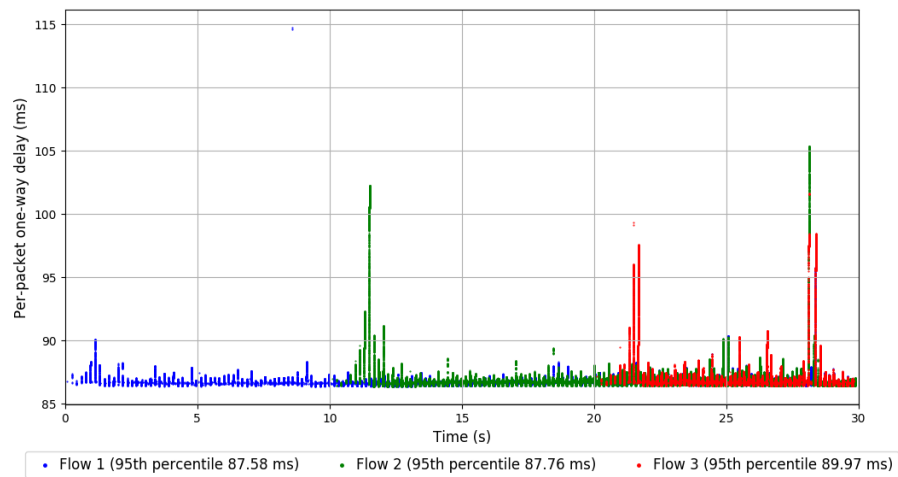
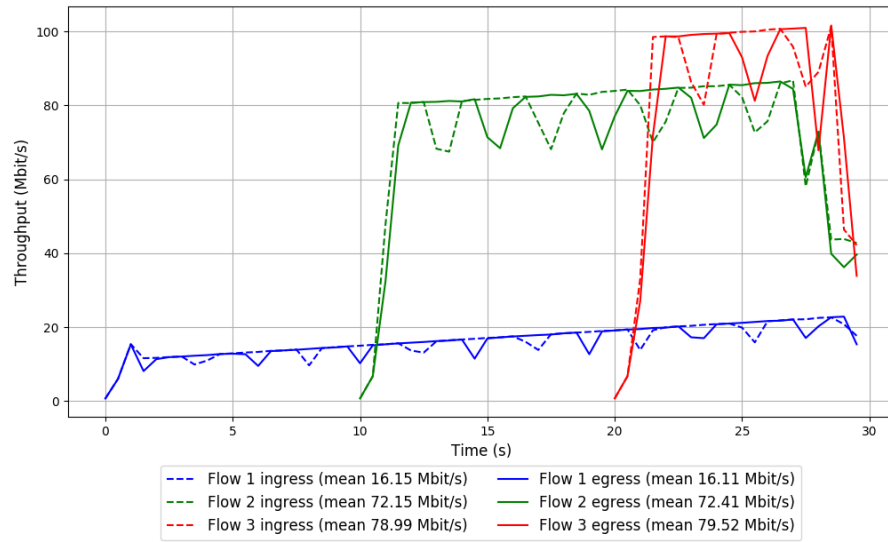
-- Flow 3:

Average throughput: 79.52 Mbit/s

95th percentile per-packet one-way delay: 89.969 ms

Loss rate: 1.10%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2017-12-11 23:07:13

End at: 2017-12-11 23:07:43

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 20.35 Mbit/s

95th percentile per-packet one-way delay: 95.902 ms

Loss rate: 1.84%

-- Flow 1:

Average throughput: 11.73 Mbit/s

95th percentile per-packet one-way delay: 2522.889 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 112.860 ms

Loss rate: 1.81%

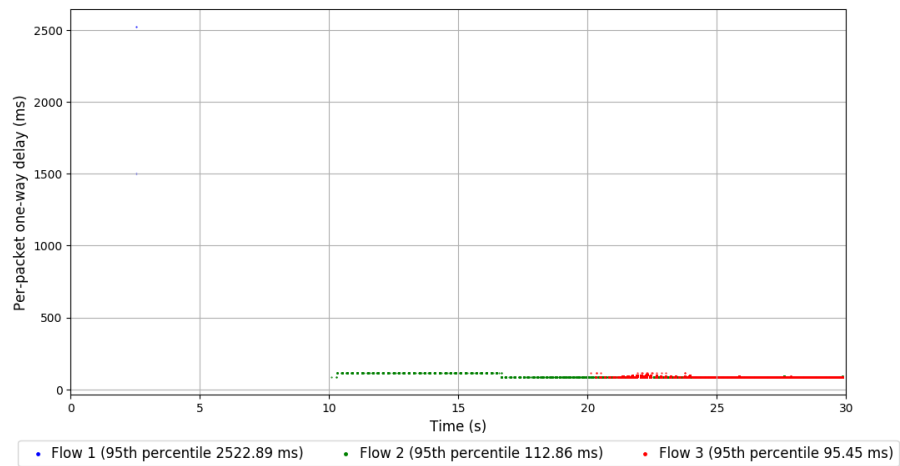
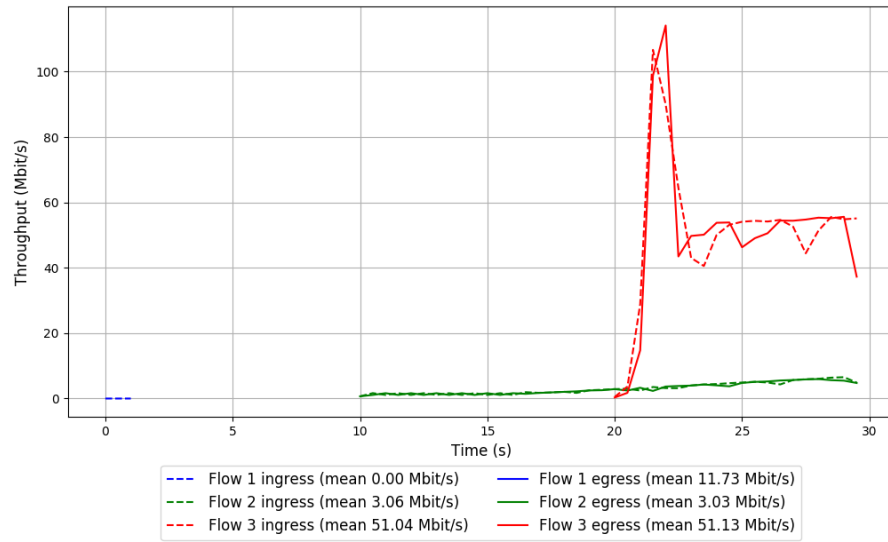
-- Flow 3:

Average throughput: 51.13 Mbit/s

95th percentile per-packet one-way delay: 95.450 ms

Loss rate: 1.84%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2017-12-11 23:20:08

End at: 2017-12-11 23:20:38

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.61 Mbit/s

95th percentile per-packet one-way delay: 93.672 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 32.93 Mbit/s

95th percentile per-packet one-way delay: 96.374 ms

Loss rate: 0.53%

-- Flow 2:

Average throughput: 12.64 Mbit/s

95th percentile per-packet one-way delay: 88.040 ms

Loss rate: 1.87%

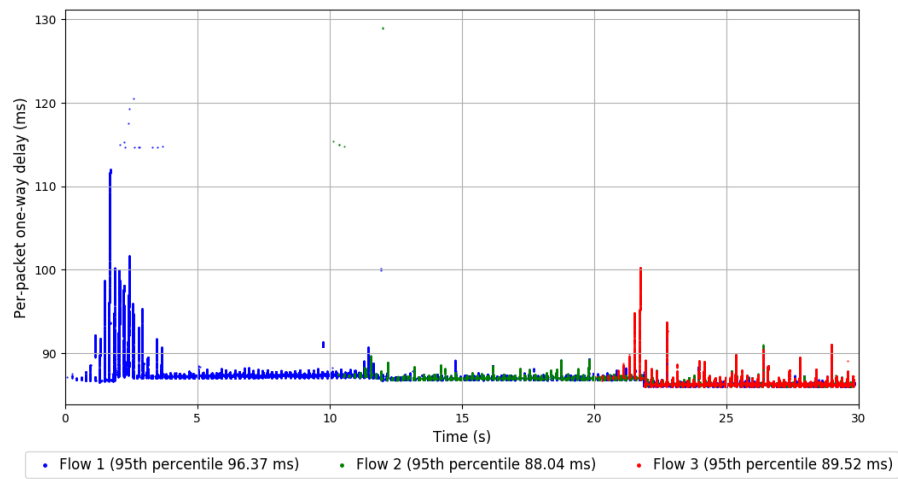
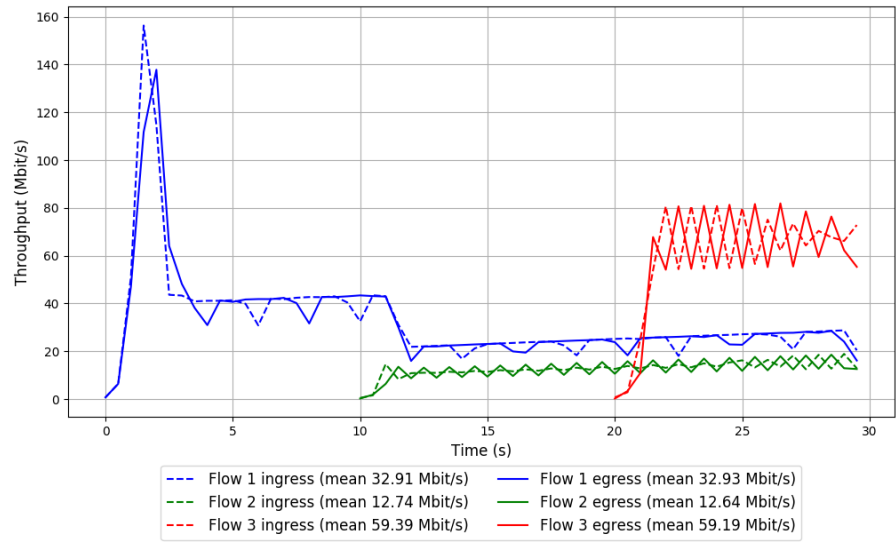
-- Flow 3:

Average throughput: 59.19 Mbit/s

95th percentile per-packet one-way delay: 89.516 ms

Loss rate: 2.37%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2017-12-11 23:32:48

End at: 2017-12-11 23:33:18

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.50 Mbit/s

95th percentile per-packet one-way delay: 115.785 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 60.97 Mbit/s

95th percentile per-packet one-way delay: 116.168 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 3.69 Mbit/s

95th percentile per-packet one-way delay: 86.870 ms

Loss rate: 1.81%

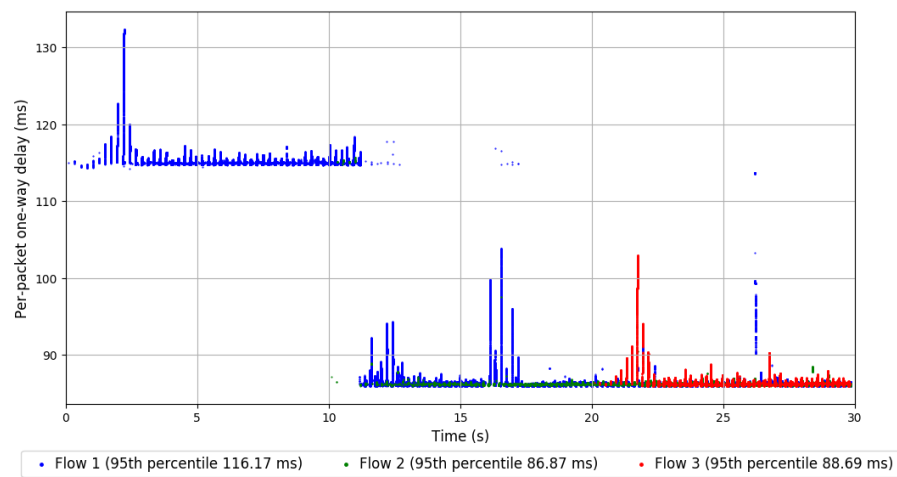
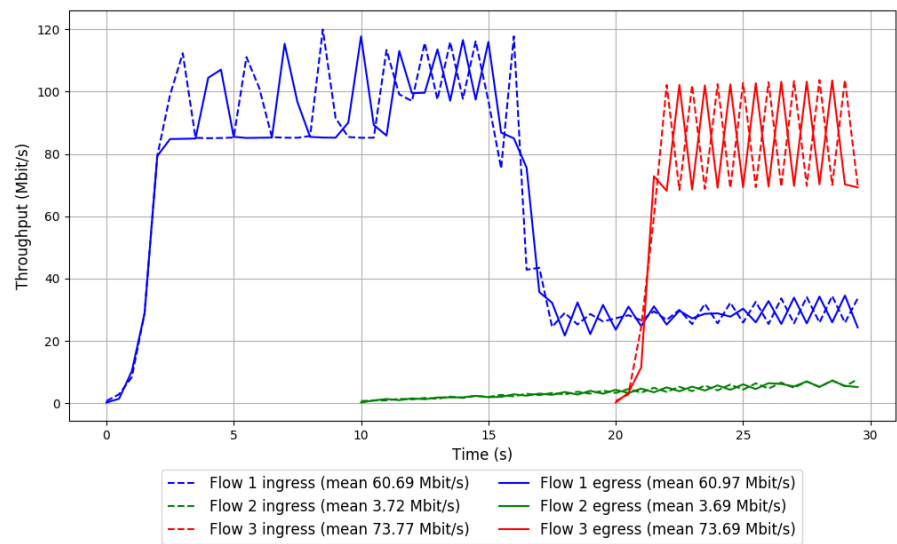
-- Flow 3:

Average throughput: 73.69 Mbit/s

95th percentile per-packet one-way delay: 88.685 ms

Loss rate: 2.37%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2017-12-11 23:45:44

End at: 2017-12-11 23:46:14

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 124.27 Mbit/s

95th percentile per-packet one-way delay: 120.732 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 77.09 Mbit/s

95th percentile per-packet one-way delay: 121.555 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 51.89 Mbit/s

95th percentile per-packet one-way delay: 93.652 ms

Loss rate: 0.91%

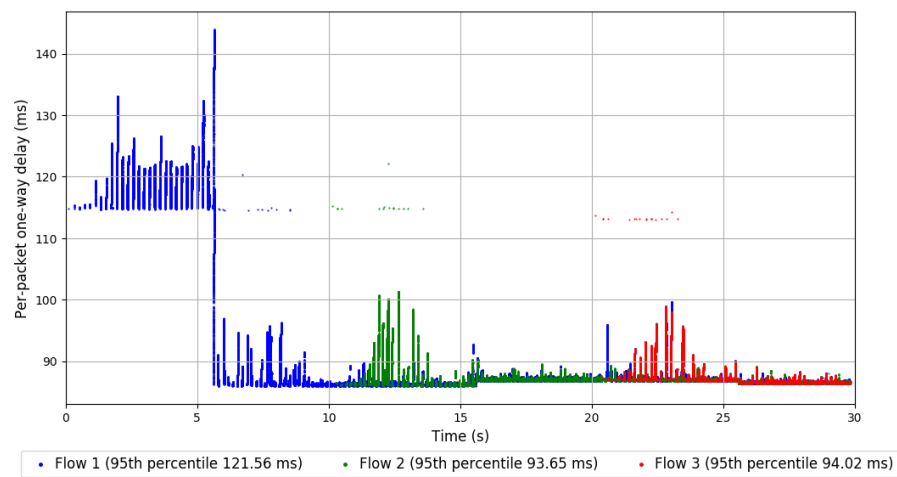
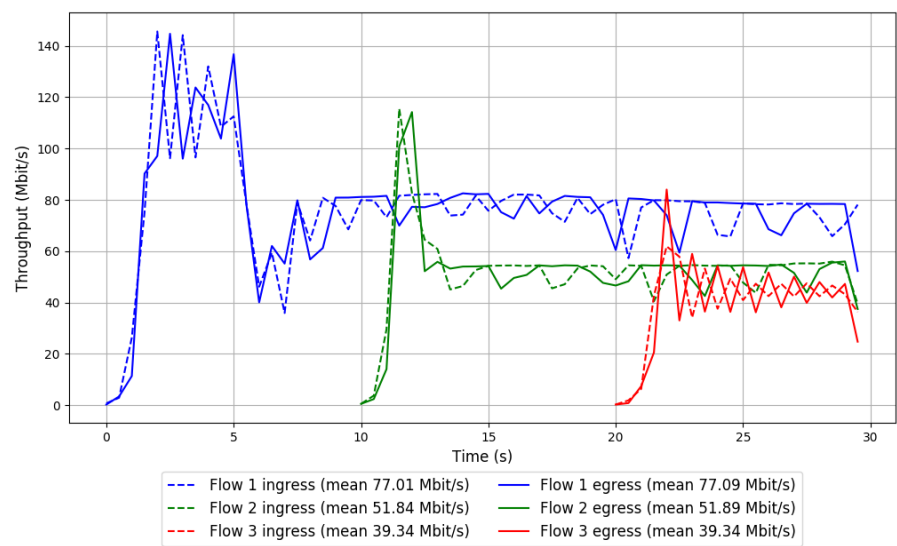
-- Flow 3:

Average throughput: 39.34 Mbit/s

95th percentile per-packet one-way delay: 94.022 ms

Loss rate: 2.30%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2017-12-11 23:58:48

End at: 2017-12-11 23:59:18

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 41.45 Mbit/s

95th percentile per-packet one-way delay: 119.163 ms

Loss rate: 0.92%

-- Flow 1:

Average throughput: 28.11 Mbit/s

95th percentile per-packet one-way delay: 118.299 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 112.755 ms

Loss rate: 0.88%

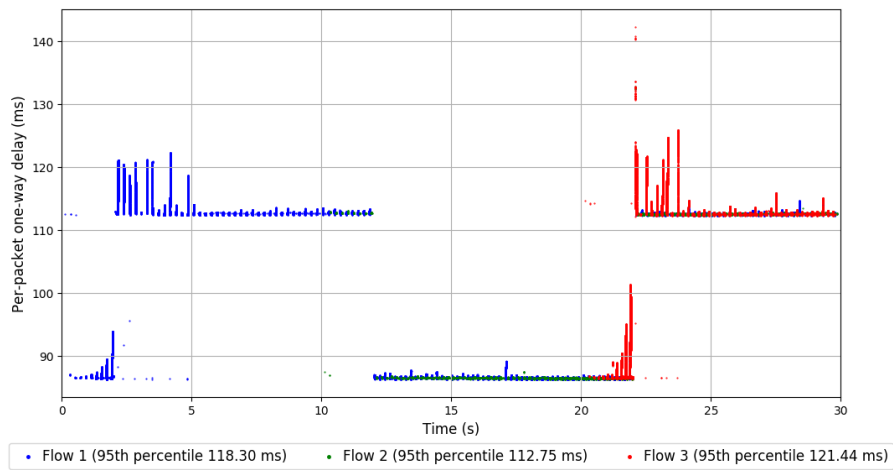
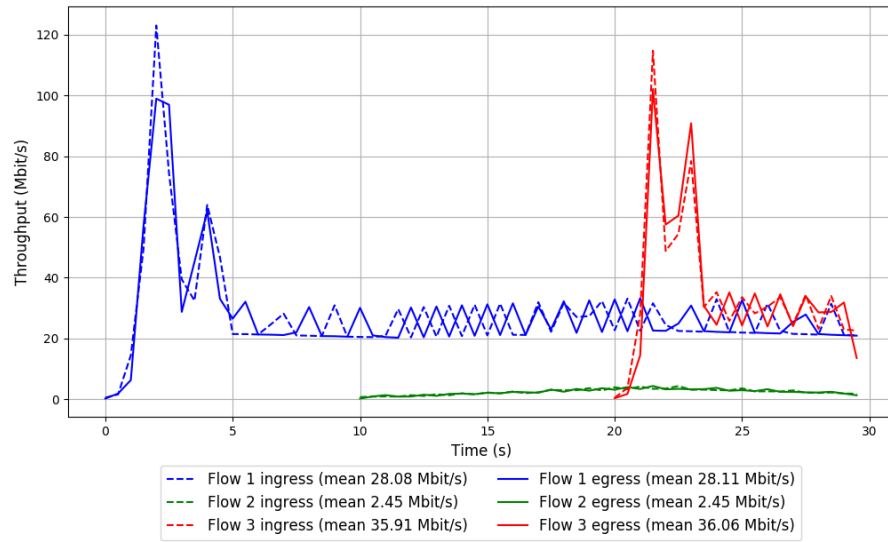
-- Flow 3:

Average throughput: 36.06 Mbit/s

95th percentile per-packet one-way delay: 121.438 ms

Loss rate: 1.63%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-12 00:11:52

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

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.66 Mbit/s

95th percentile per-packet one-way delay: 114.810 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 46.47 Mbit/s

95th percentile per-packet one-way delay: 114.777 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 28.34 Mbit/s

95th percentile per-packet one-way delay: 114.840 ms

Loss rate: 0.72%

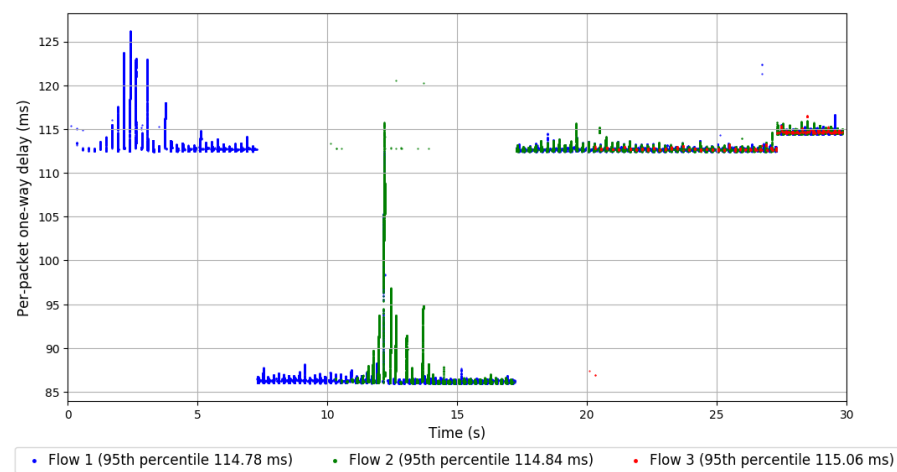
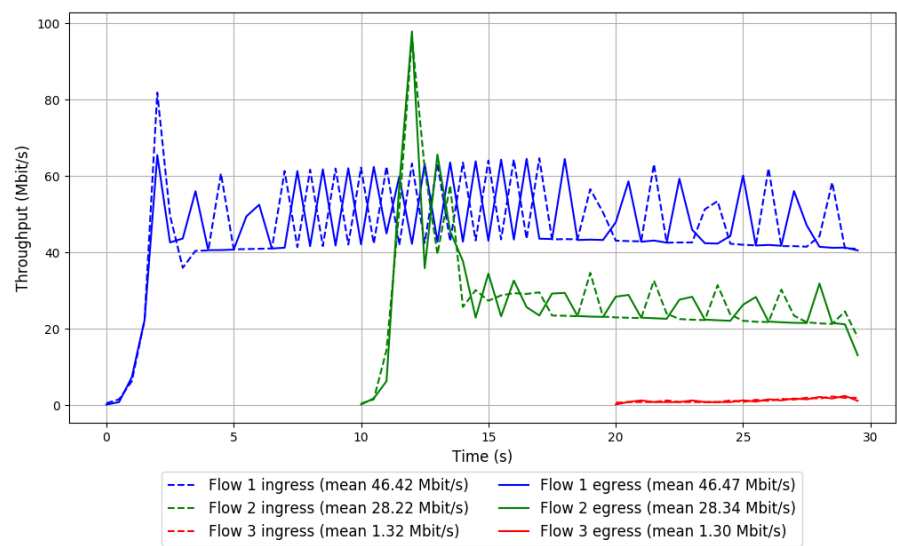
-- Flow 3:

Average throughput: 1.30 Mbit/s

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

Loss rate: 3.76%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-12 00:24:52

End at: 2017-12-12 00:25:22

Below is generated by plot.py at 2017-12-12 03:23:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 34.07 Mbit/s

95th percentile per-packet one-way delay: 113.522 ms

Loss rate: 1.49%

-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 112.914 ms

Loss rate: 1.25%

-- Flow 2:

Average throughput: 28.67 Mbit/s

95th percentile per-packet one-way delay: 116.092 ms

Loss rate: 1.12%

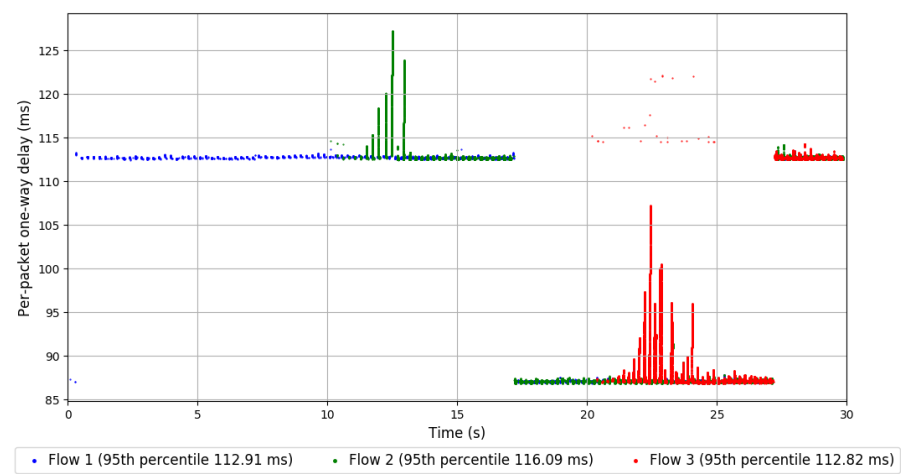
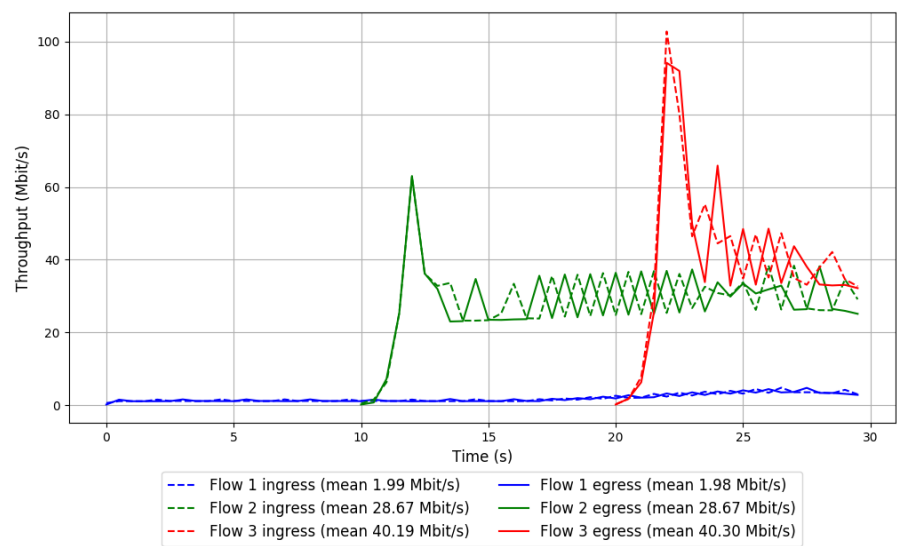
-- Flow 3:

Average throughput: 40.30 Mbit/s

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

Loss rate: 2.05%

Run 10: Report of TCP Vegas — Data Link

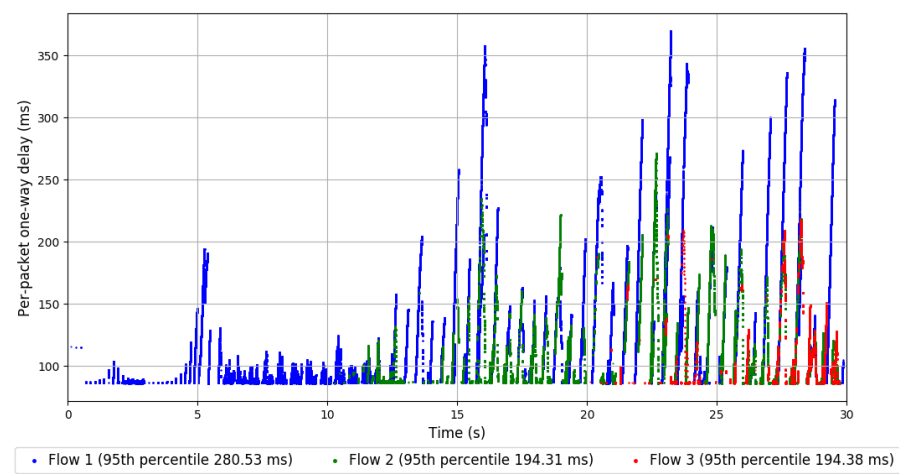
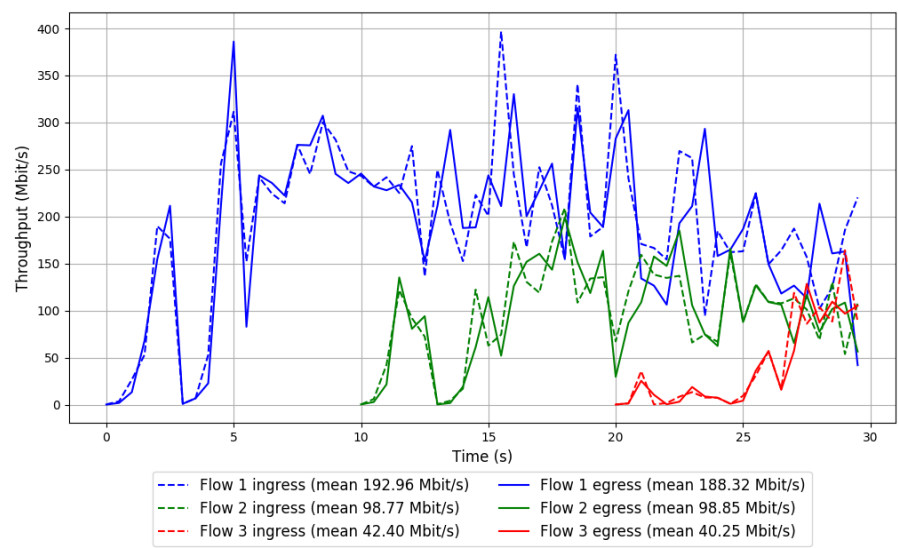


```
Run 1: Statistics of Verus

Start at: 2017-12-11 22:35:59
End at: 2017-12-11 22:36:29

# Below is generated by plot.py at 2017-12-12 03:24:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 266.51 Mbit/s
95th percentile per-packet one-way delay: 252.295 ms
Loss rate: 2.72%
-- Flow 1:
Average throughput: 188.32 Mbit/s
95th percentile per-packet one-way delay: 280.534 ms
Loss rate: 2.80%
-- Flow 2:
Average throughput: 98.85 Mbit/s
95th percentile per-packet one-way delay: 194.310 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 40.25 Mbit/s
95th percentile per-packet one-way delay: 194.380 ms
Loss rate: 7.69%
```


Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-11 22:49:08

End at: 2017-12-11 22:49:38

Below is generated by plot.py at 2017-12-12 03:24:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 259.61 Mbit/s

95th percentile per-packet one-way delay: 151.749 ms

Loss rate: 3.71%

-- Flow 1:

Average throughput: 177.79 Mbit/s

95th percentile per-packet one-way delay: 167.825 ms

Loss rate: 3.28%

-- Flow 2:

Average throughput: 66.53 Mbit/s

95th percentile per-packet one-way delay: 135.691 ms

Loss rate: 7.31%

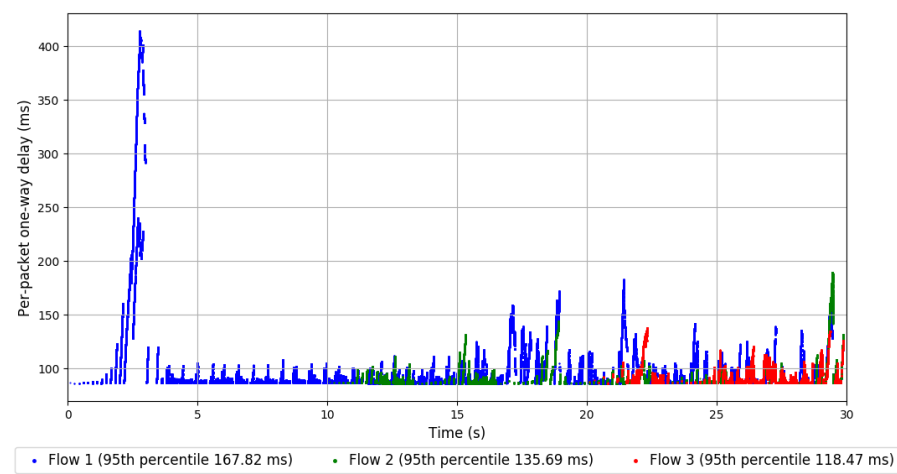
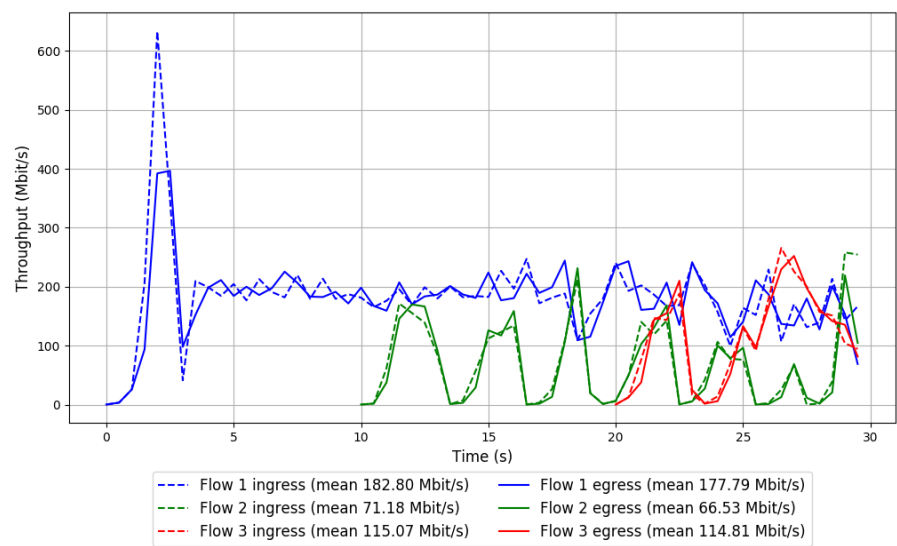
-- Flow 3:

Average throughput: 114.81 Mbit/s

95th percentile per-packet one-way delay: 118.475 ms

Loss rate: 1.29%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-11 23:02:10

End at: 2017-12-11 23:02:40

Below is generated by plot.py at 2017-12-12 03:24:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 231.04 Mbit/s

95th percentile per-packet one-way delay: 298.836 ms

Loss rate: 2.92%

-- Flow 1:

Average throughput: 77.66 Mbit/s

95th percentile per-packet one-way delay: 208.672 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 209.51 Mbit/s

95th percentile per-packet one-way delay: 318.526 ms

Loss rate: 4.49%

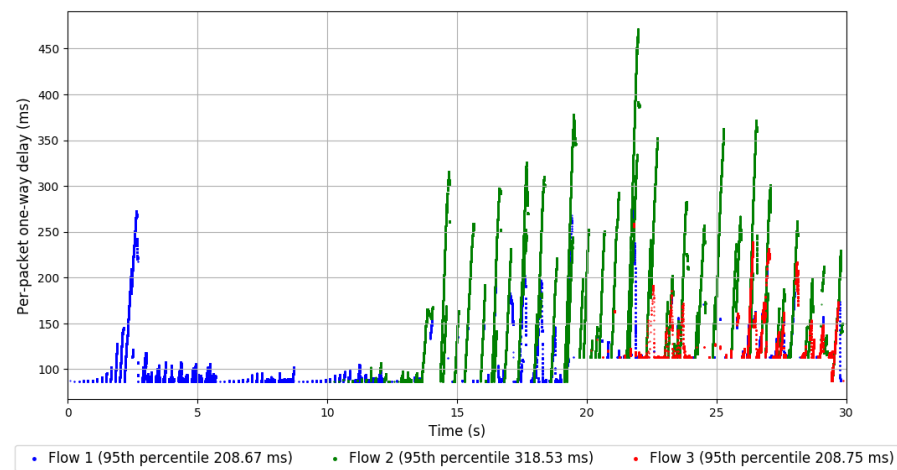
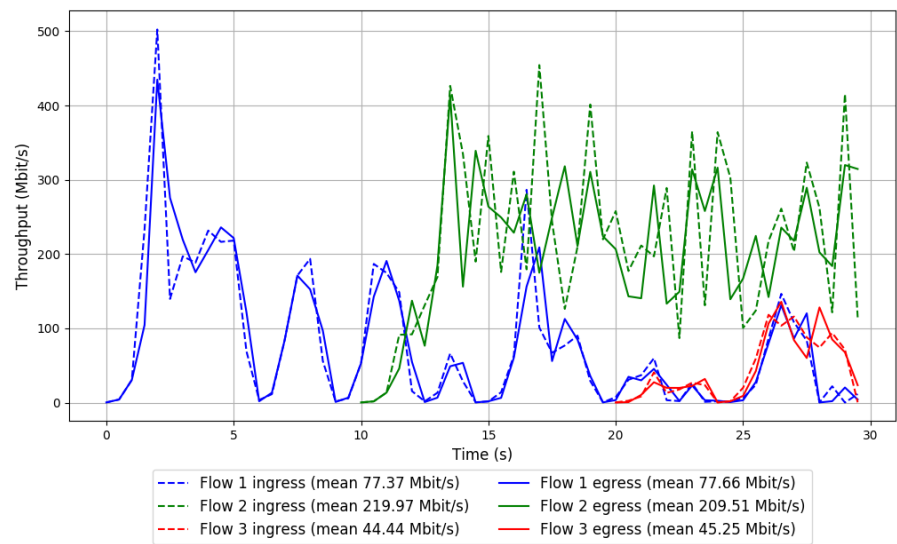
-- Flow 3:

Average throughput: 45.25 Mbit/s

95th percentile per-packet one-way delay: 208.748 ms

Loss rate: 0.32%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-11 23:15:01

End at: 2017-12-11 23:15:31

Below is generated by plot.py at 2017-12-12 03:25:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 262.17 Mbit/s

95th percentile per-packet one-way delay: 148.528 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 157.43 Mbit/s

95th percentile per-packet one-way delay: 157.334 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 95.12 Mbit/s

95th percentile per-packet one-way delay: 131.904 ms

Loss rate: 0.00%

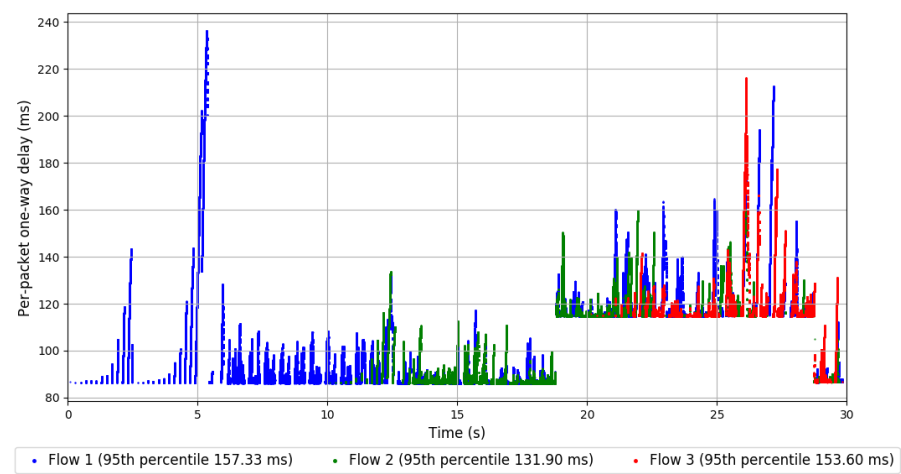
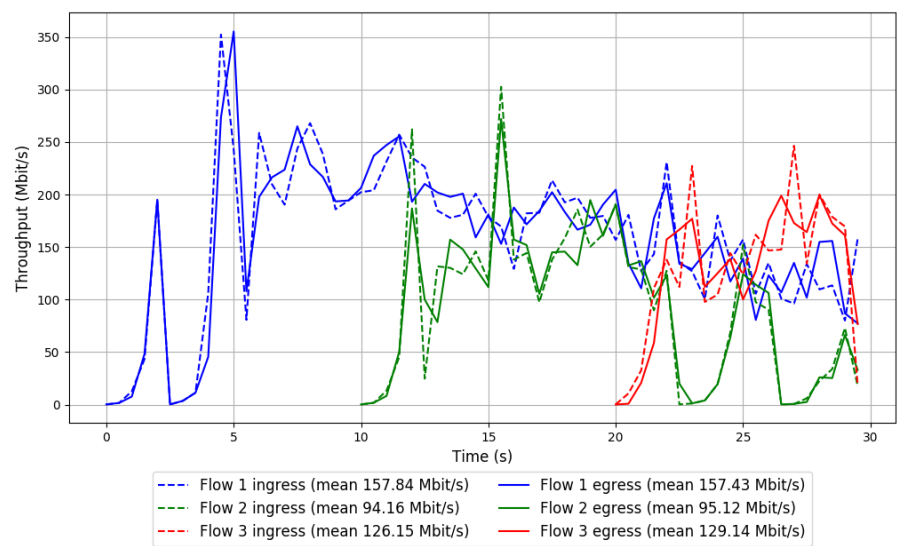
-- Flow 3:

Average throughput: 129.14 Mbit/s

95th percentile per-packet one-way delay: 153.604 ms

Loss rate: 0.01%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-11 23:27:40

End at: 2017-12-11 23:28:10

Below is generated by plot.py at 2017-12-12 03:26:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 325.41 Mbit/s

95th percentile per-packet one-way delay: 291.612 ms

Loss rate: 5.58%

-- Flow 1:

Average throughput: 160.69 Mbit/s

95th percentile per-packet one-way delay: 229.530 ms

Loss rate: 2.82%

-- Flow 2:

Average throughput: 192.32 Mbit/s

95th percentile per-packet one-way delay: 316.134 ms

Loss rate: 6.09%

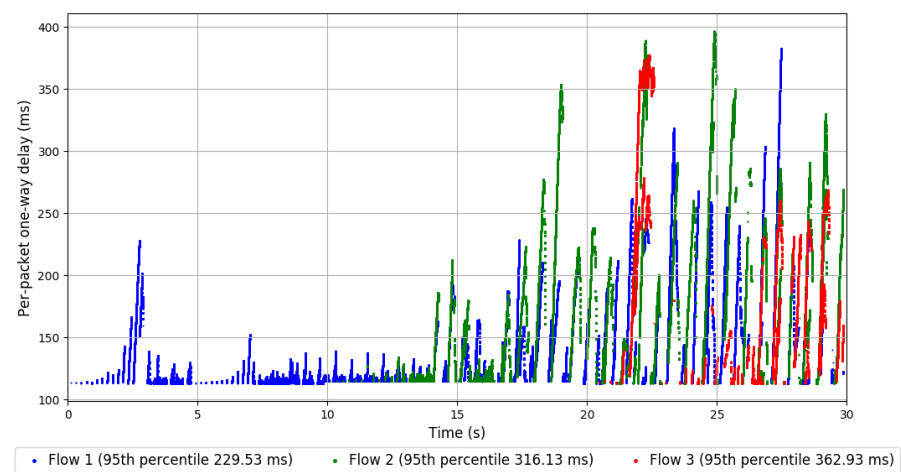
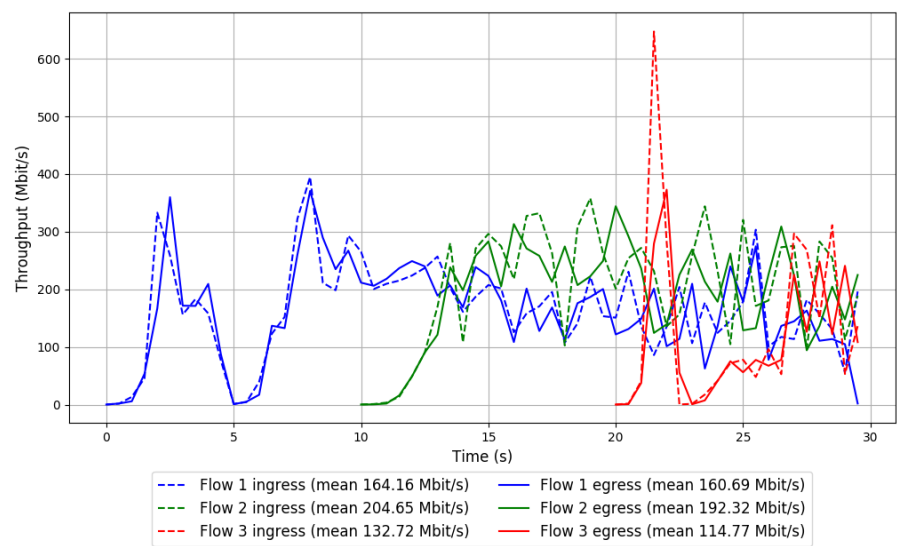
-- Flow 3:

Average throughput: 114.77 Mbit/s

95th percentile per-packet one-way delay: 362.927 ms

Loss rate: 14.42%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-11 23:40:32

End at: 2017-12-11 23:41:02

Below is generated by plot.py at 2017-12-12 03:26:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 256.45 Mbit/s

95th percentile per-packet one-way delay: 182.014 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 199.49 Mbit/s

95th percentile per-packet one-way delay: 194.072 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 62.49 Mbit/s

95th percentile per-packet one-way delay: 126.166 ms

Loss rate: 2.21%

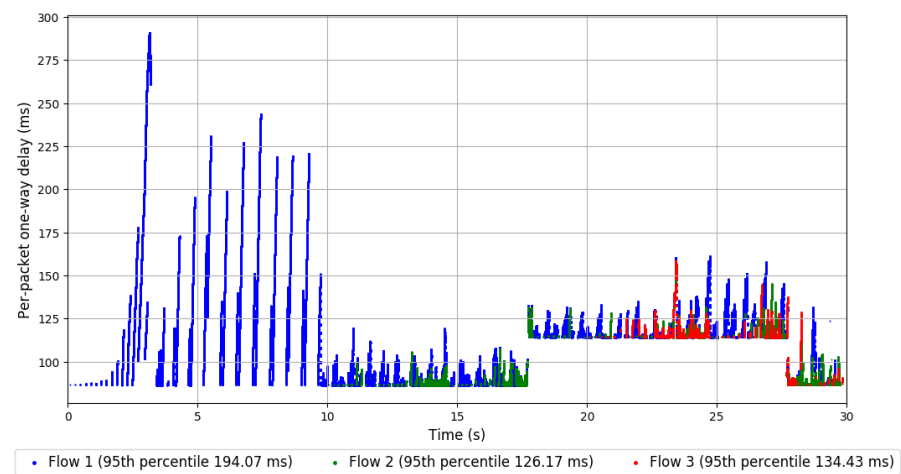
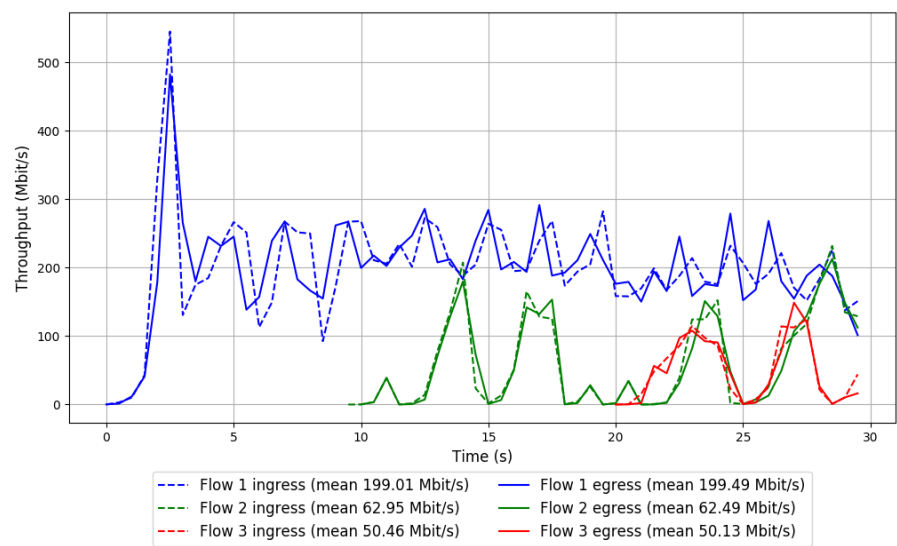
-- Flow 3:

Average throughput: 50.13 Mbit/s

95th percentile per-packet one-way delay: 134.433 ms

Loss rate: 2.78%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-11 23:53:40

End at: 2017-12-11 23:54:10

Below is generated by plot.py at 2017-12-12 03:26:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 228.23 Mbit/s

95th percentile per-packet one-way delay: 310.825 ms

Loss rate: 6.28%

-- Flow 1:

Average throughput: 191.23 Mbit/s

95th percentile per-packet one-way delay: 315.629 ms

Loss rate: 7.04%

-- Flow 2:

Average throughput: 34.06 Mbit/s

95th percentile per-packet one-way delay: 181.713 ms

Loss rate: 1.34%

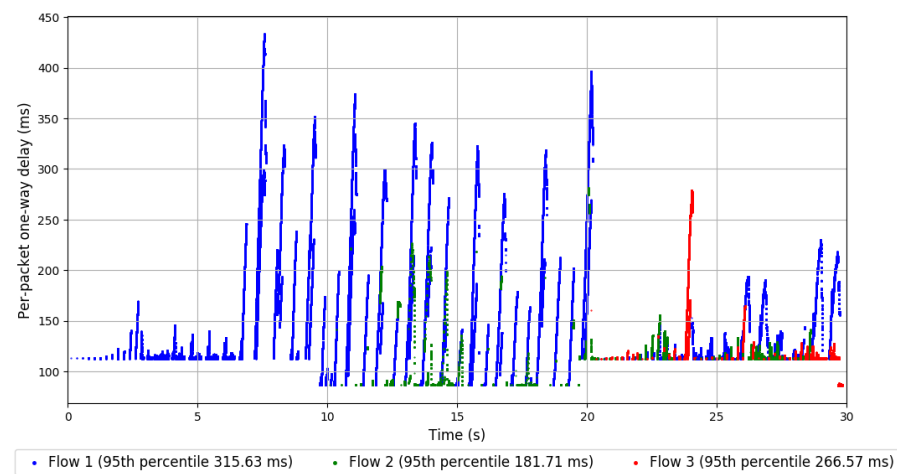
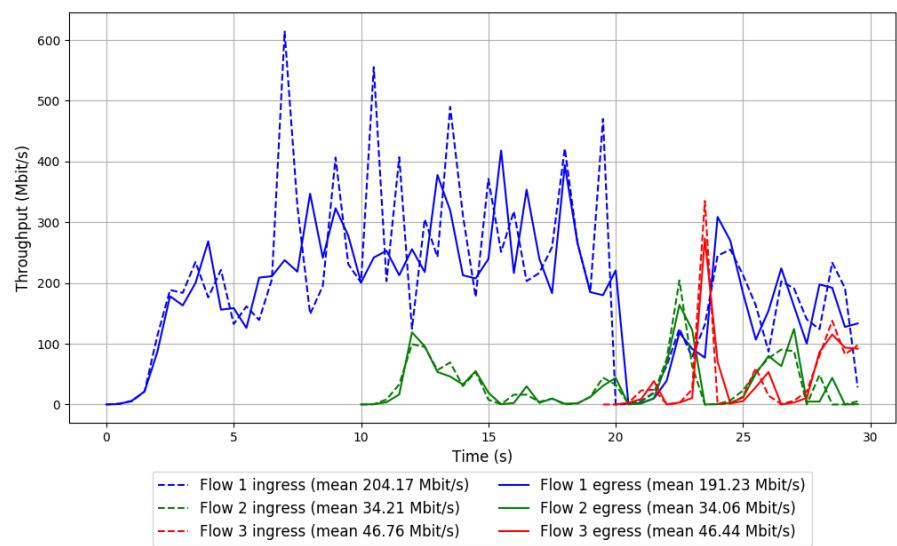
-- Flow 3:

Average throughput: 46.44 Mbit/s

95th percentile per-packet one-way delay: 266.571 ms

Loss rate: 3.40%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-12 00:06:30

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

Below is generated by plot.py at 2017-12-12 03:27:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.87 Mbit/s

95th percentile per-packet one-way delay: 196.610 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 137.86 Mbit/s

95th percentile per-packet one-way delay: 152.742 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 161.87 Mbit/s

95th percentile per-packet one-way delay: 251.211 ms

Loss rate: 0.30%

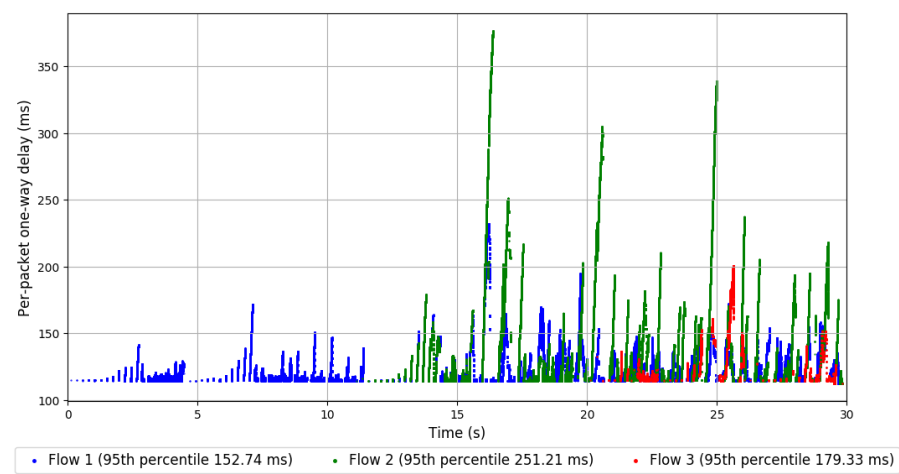
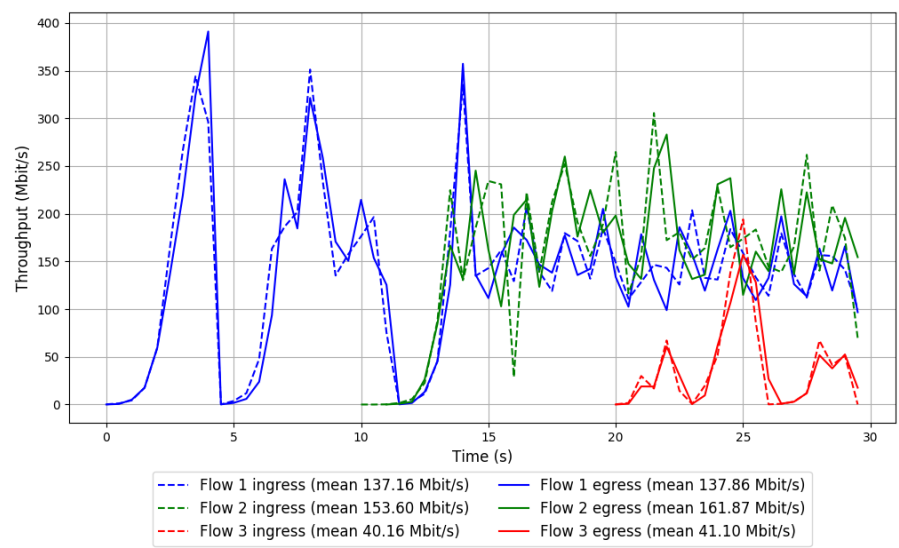
-- Flow 3:

Average throughput: 41.10 Mbit/s

95th percentile per-packet one-way delay: 179.331 ms

Loss rate: 0.02%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-12 00:19:30

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

Below is generated by plot.py at 2017-12-12 03:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 313.73 Mbit/s

95th percentile per-packet one-way delay: 396.763 ms

Loss rate: 21.30%

-- Flow 1:

Average throughput: 191.21 Mbit/s

95th percentile per-packet one-way delay: 346.357 ms

Loss rate: 7.11%

-- Flow 2:

Average throughput: 164.61 Mbit/s

95th percentile per-packet one-way delay: 436.194 ms

Loss rate: 36.62%

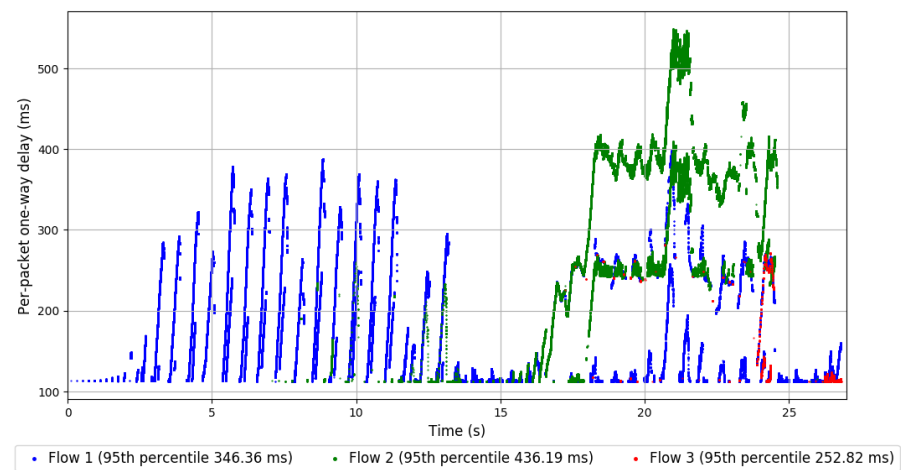
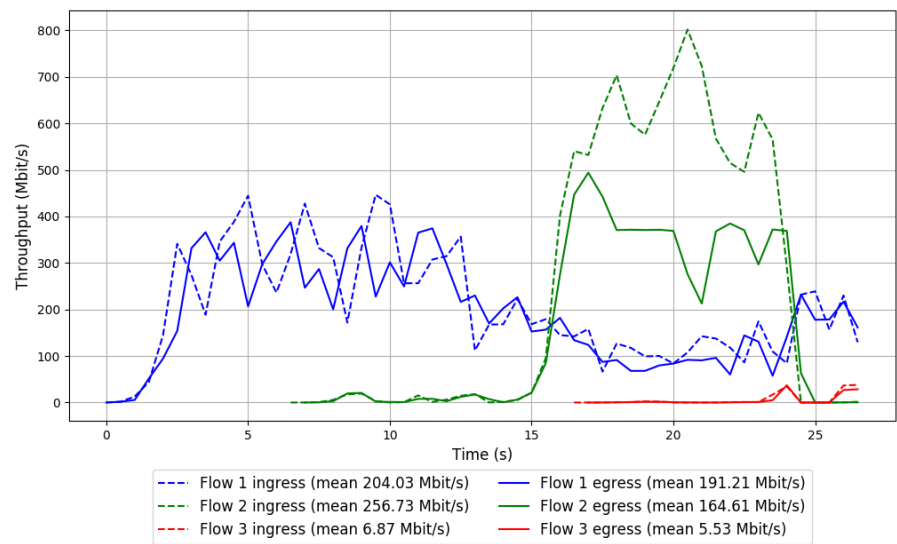
-- Flow 3:

Average throughput: 5.53 Mbit/s

95th percentile per-packet one-way delay: 252.825 ms

Loss rate: 22.28%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-12 00:32:32

End at: 2017-12-12 00:33:02

Below is generated by plot.py at 2017-12-12 03:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 229.99 Mbit/s

95th percentile per-packet one-way delay: 269.691 ms

Loss rate: 3.15%

-- Flow 1:

Average throughput: 117.65 Mbit/s

95th percentile per-packet one-way delay: 219.475 ms

Loss rate: 1.32%

-- Flow 2:

Average throughput: 157.11 Mbit/s

95th percentile per-packet one-way delay: 307.245 ms

Loss rate: 5.35%

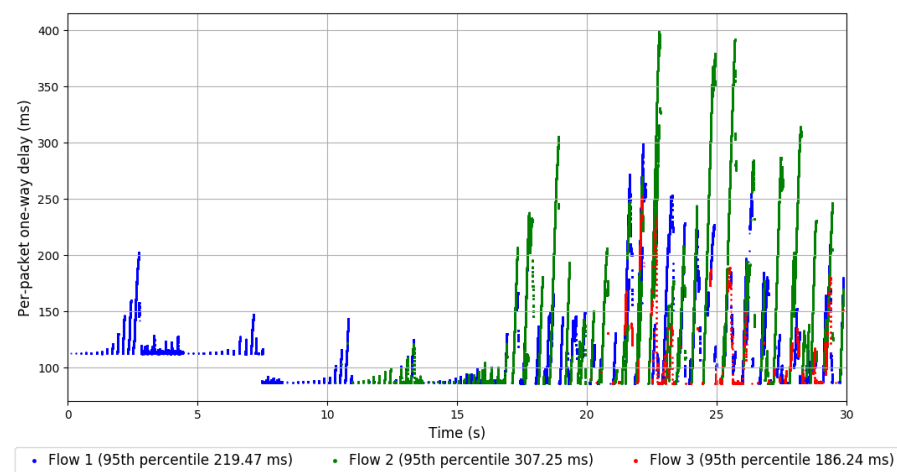
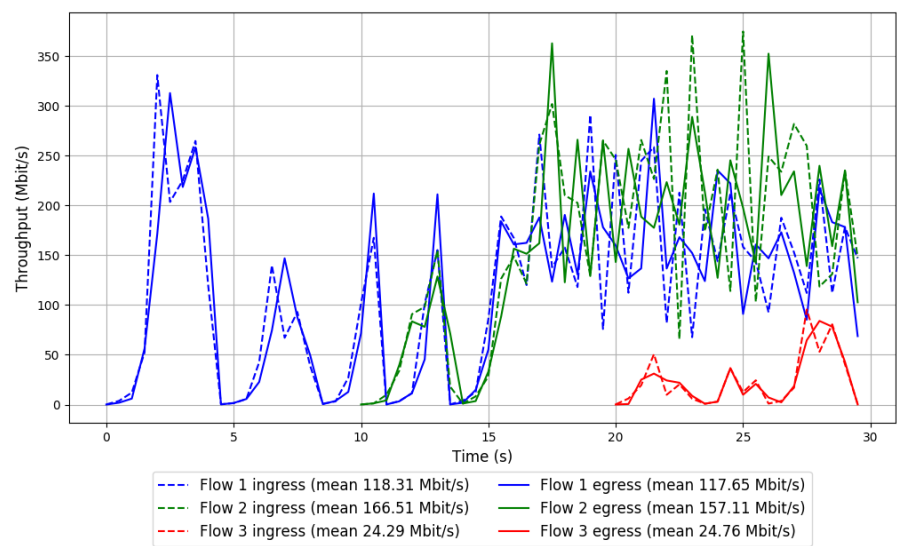
-- Flow 3:

Average throughput: 24.76 Mbit/s

95th percentile per-packet one-way delay: 186.241 ms

Loss rate: 0.18%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-11 22:29:28

End at: 2017-12-11 22:29:58

Below is generated by plot.py at 2017-12-12 03:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.22 Mbit/s

95th percentile per-packet one-way delay: 87.287 ms

Loss rate: 0.82%

-- Flow 1:

Average throughput: 77.94 Mbit/s

95th percentile per-packet one-way delay: 87.281 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 41.75 Mbit/s

95th percentile per-packet one-way delay: 114.648 ms

Loss rate: 1.12%

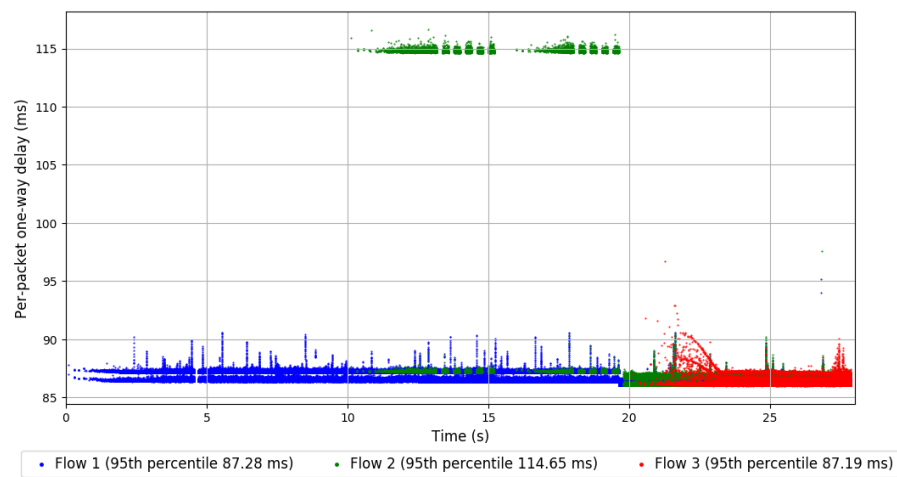
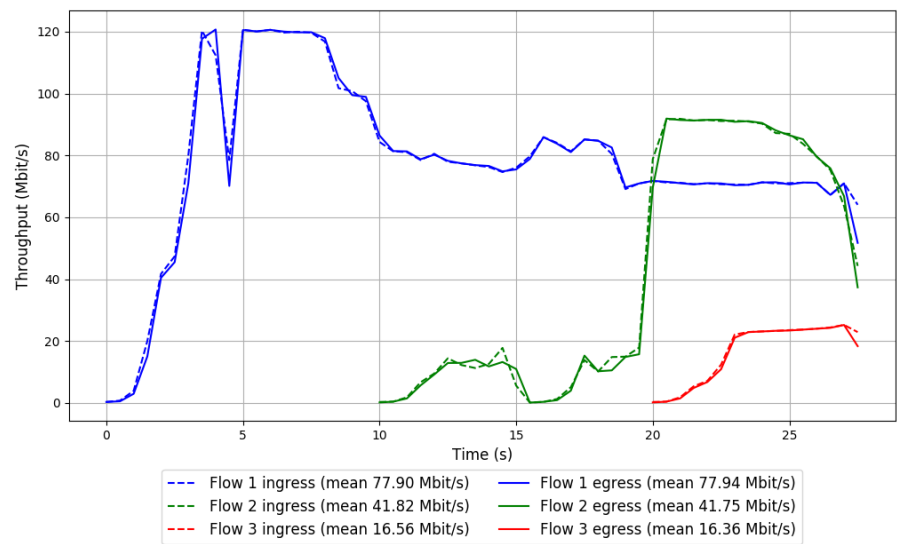
-- Flow 3:

Average throughput: 16.36 Mbit/s

95th percentile per-packet one-way delay: 87.188 ms

Loss rate: 3.37%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-11 22:42:37

End at: 2017-12-11 22:43:07

Below is generated by plot.py at 2017-12-12 03:30:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.58 Mbit/s

95th percentile per-packet one-way delay: 87.079 ms

Loss rate: 0.89%

-- Flow 1:

Average throughput: 67.66 Mbit/s

95th percentile per-packet one-way delay: 87.093 ms

Loss rate: 0.27%

-- Flow 2:

Average throughput: 67.00 Mbit/s

95th percentile per-packet one-way delay: 87.068 ms

Loss rate: 0.84%

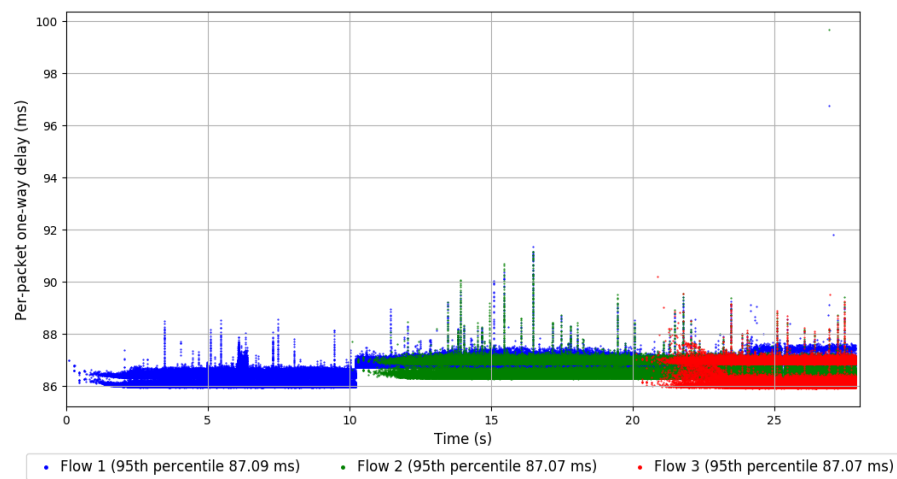
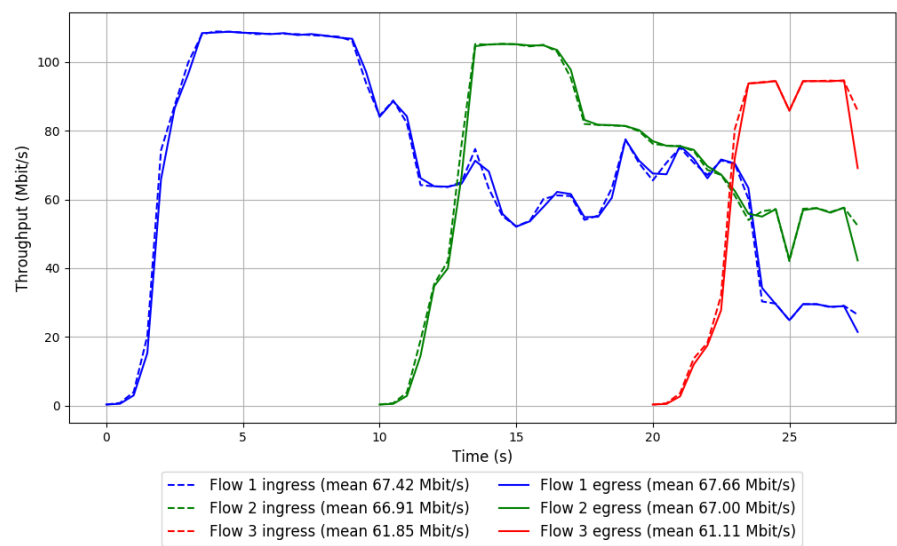
-- Flow 3:

Average throughput: 61.11 Mbit/s

95th percentile per-packet one-way delay: 87.067 ms

Loss rate: 3.36%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-11 22:55:39

End at: 2017-12-11 22:56:09

Below is generated by plot.py at 2017-12-12 03:30:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.15 Mbit/s

95th percentile per-packet one-way delay: 87.048 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 76.47 Mbit/s

95th percentile per-packet one-way delay: 87.070 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 49.75 Mbit/s

95th percentile per-packet one-way delay: 87.011 ms

Loss rate: 1.24%

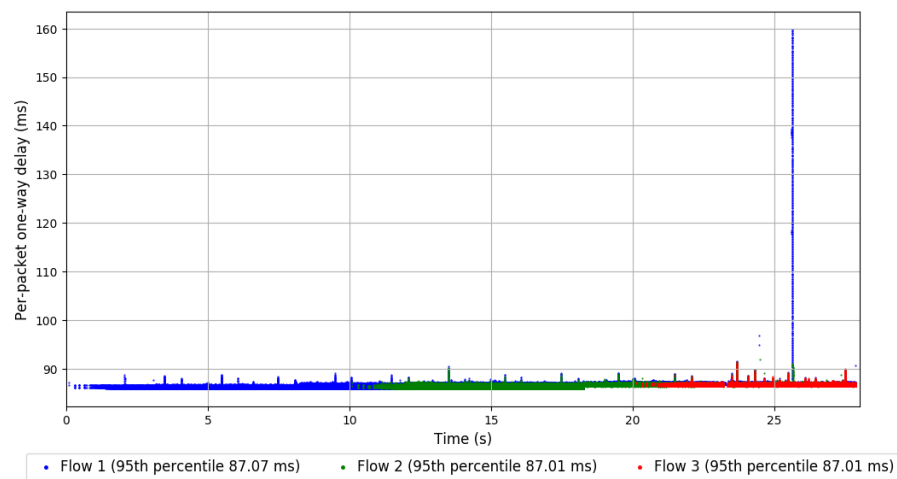
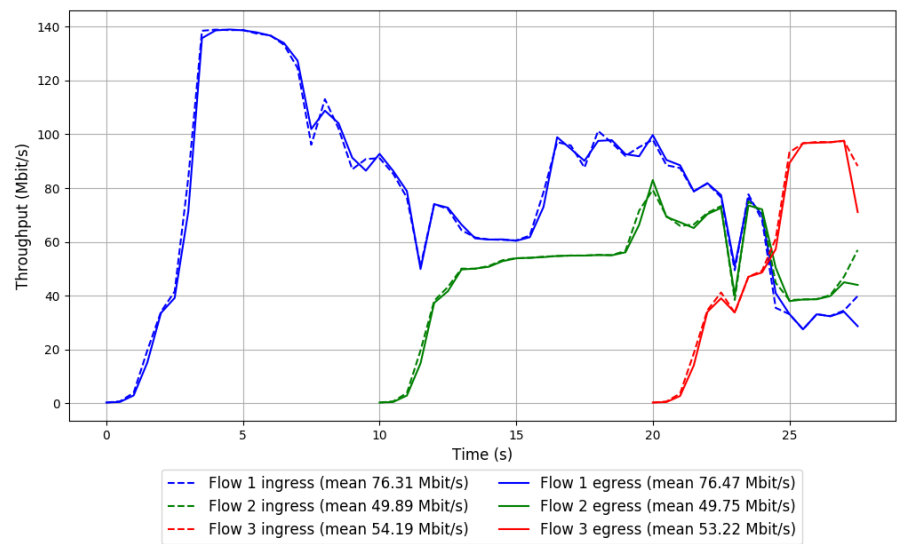
-- Flow 3:

Average throughput: 53.22 Mbit/s

95th percentile per-packet one-way delay: 87.011 ms

Loss rate: 3.95%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-11 23:08:44

End at: 2017-12-11 23:09:14

Below is generated by plot.py at 2017-12-12 03:31:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.79 Mbit/s

95th percentile per-packet one-way delay: 87.224 ms

Loss rate: 1.01%

-- Flow 1:

Average throughput: 72.82 Mbit/s

95th percentile per-packet one-way delay: 87.145 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 63.07 Mbit/s

95th percentile per-packet one-way delay: 87.227 ms

Loss rate: 1.40%

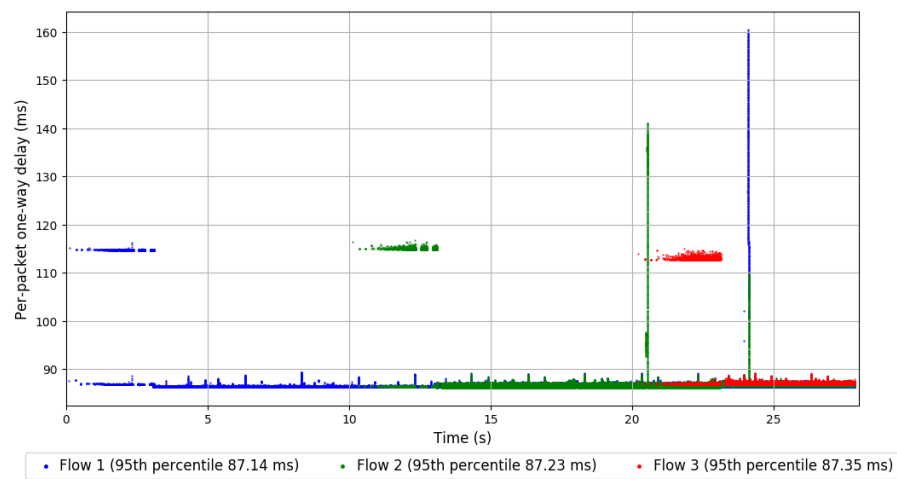
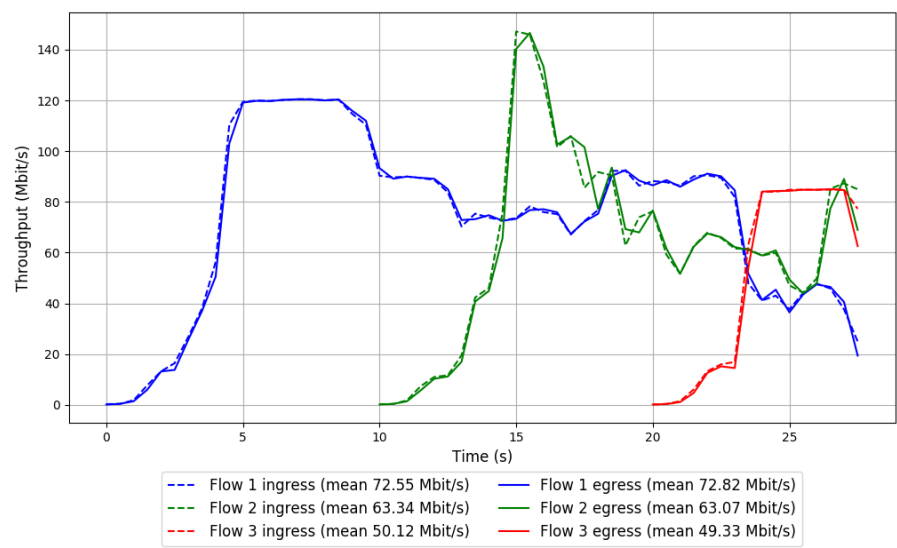
-- Flow 3:

Average throughput: 49.33 Mbit/s

95th percentile per-packet one-way delay: 87.354 ms

Loss rate: 3.76%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-11 23:21:43

End at: 2017-12-11 23:22:13

Below is generated by plot.py at 2017-12-12 03:31:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.90 Mbit/s

95th percentile per-packet one-way delay: 114.771 ms

Loss rate: 1.18%

-- Flow 1:

Average throughput: 8.39 Mbit/s

95th percentile per-packet one-way delay: 114.808 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 61.60 Mbit/s

95th percentile per-packet one-way delay: 114.771 ms

Loss rate: 0.25%

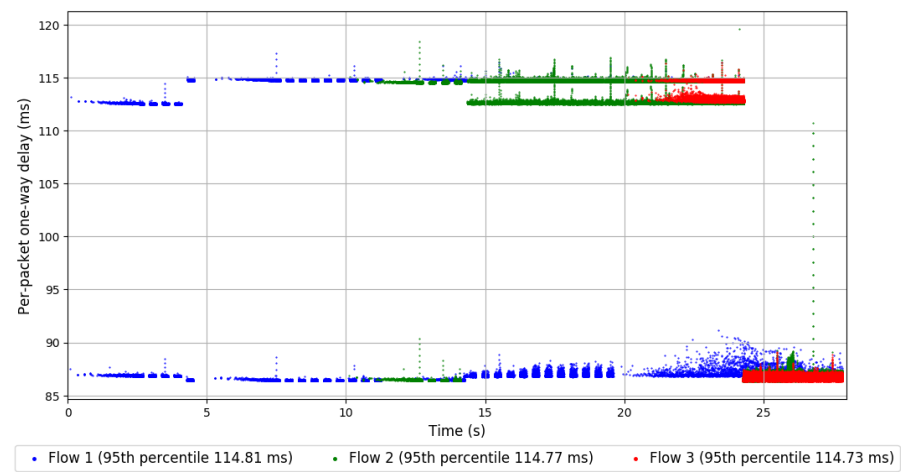
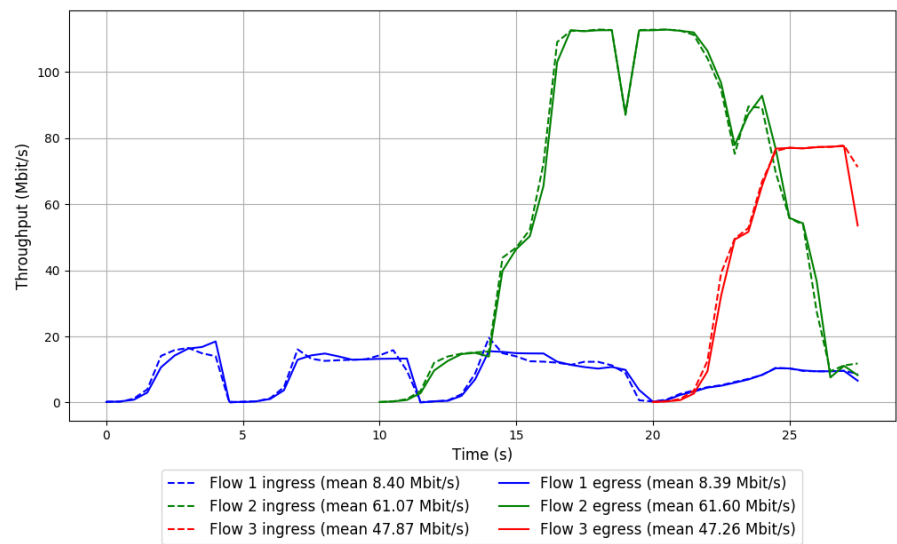
-- Flow 3:

Average throughput: 47.26 Mbit/s

95th percentile per-packet one-way delay: 114.726 ms

Loss rate: 4.11%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-11 23:34:25

End at: 2017-12-11 23:34:55

Below is generated by plot.py at 2017-12-12 03:31:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.67 Mbit/s

95th percentile per-packet one-way delay: 114.373 ms

Loss rate: 1.15%

-- Flow 1:

Average throughput: 36.71 Mbit/s

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

Loss rate: 0.10%

-- Flow 2:

Average throughput: 60.40 Mbit/s

95th percentile per-packet one-way delay: 112.951 ms

Loss rate: 2.02%

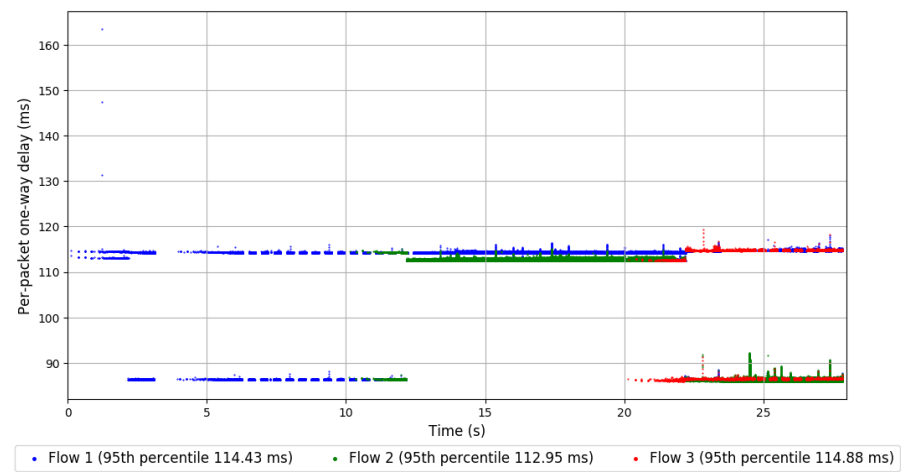
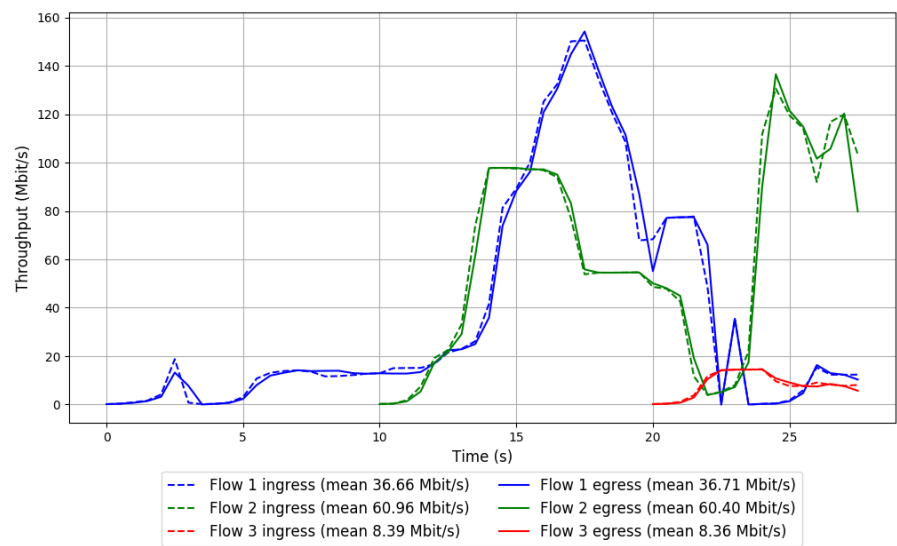
-- Flow 3:

Average throughput: 8.36 Mbit/s

95th percentile per-packet one-way delay: 114.876 ms

Loss rate: 2.88%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-11 23:47:25

End at: 2017-12-11 23:47:55

Below is generated by plot.py at 2017-12-12 03:31:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.13 Mbit/s

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

Loss rate: 0.19%

-- Flow 1:

Average throughput: 40.29 Mbit/s

95th percentile per-packet one-way delay: 112.455 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 61.80 Mbit/s

95th percentile per-packet one-way delay: 87.116 ms

Loss rate: 0.15%

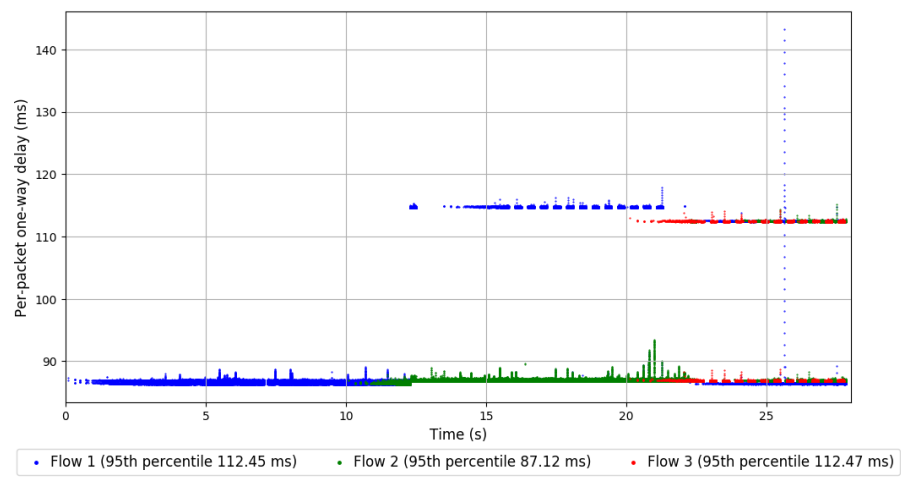
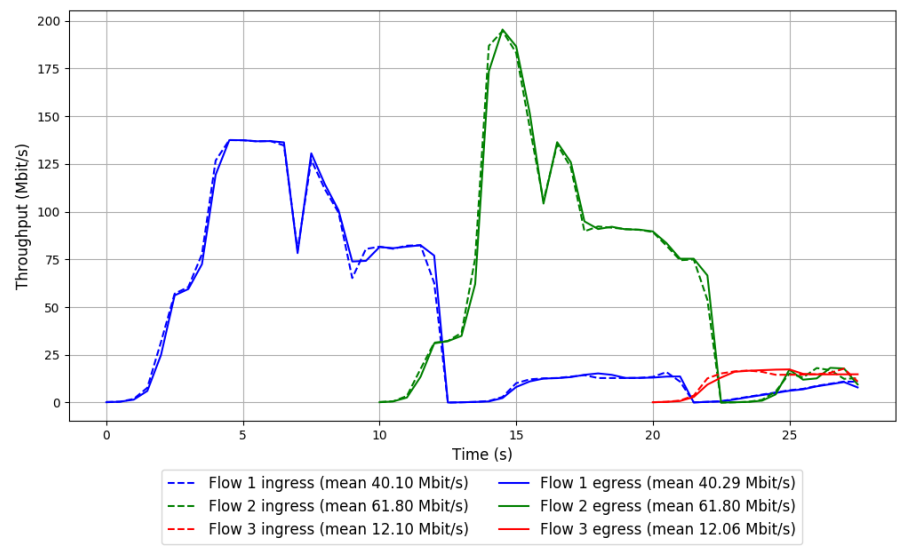
-- Flow 3:

Average throughput: 12.06 Mbit/s

95th percentile per-packet one-way delay: 112.473 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

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

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

Below is generated by plot.py at 2017-12-12 03:31:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 67.96 Mbit/s

95th percentile per-packet one-way delay: 114.828 ms

Loss rate: 0.78%

-- Flow 1:

Average throughput: 45.31 Mbit/s

95th percentile per-packet one-way delay: 114.828 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.53 Mbit/s

95th percentile per-packet one-way delay: 112.557 ms

Loss rate: 1.02%

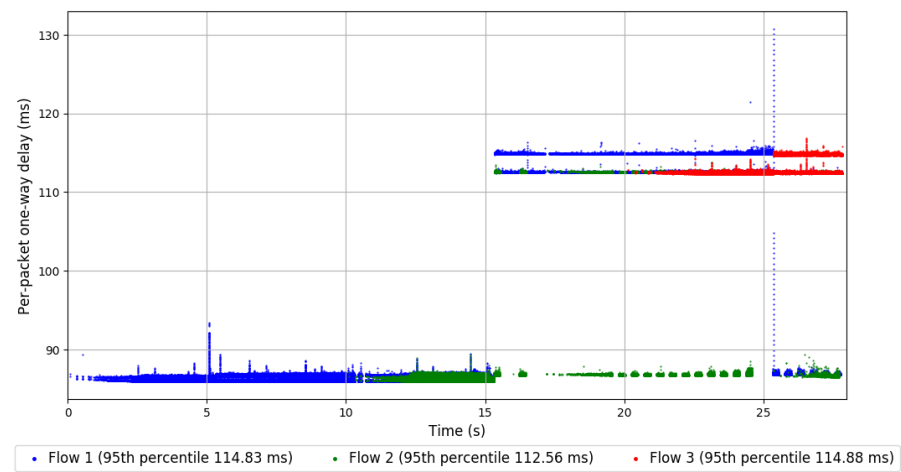
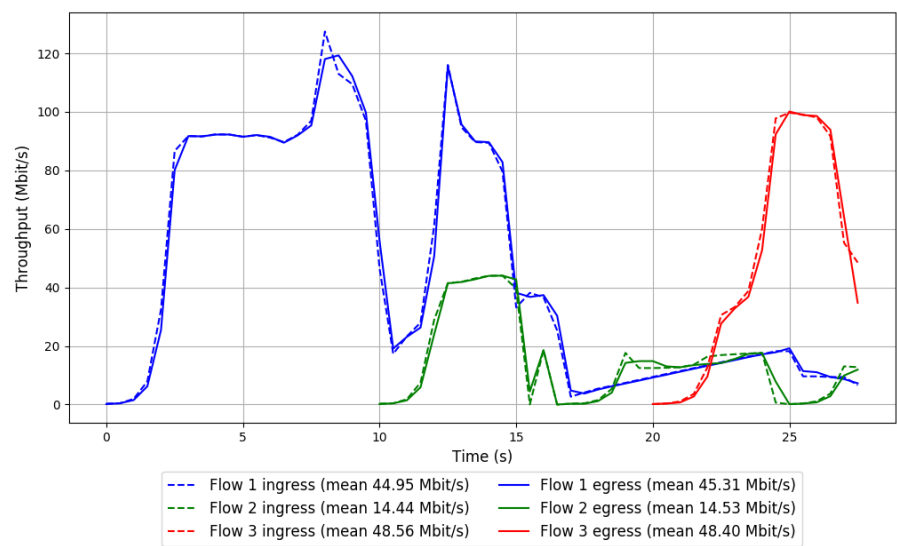
-- Flow 3:

Average throughput: 48.40 Mbit/s

95th percentile per-packet one-way delay: 114.875 ms

Loss rate: 3.17%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-12 00:13:28

End at: 2017-12-12 00:13:58

Below is generated by plot.py at 2017-12-12 03:31:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 36.86 Mbit/s

95th percentile per-packet one-way delay: 112.866 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 27.16 Mbit/s

95th percentile per-packet one-way delay: 112.870 ms

Loss rate: 2.26%

-- Flow 2:

Average throughput: 11.48 Mbit/s

95th percentile per-packet one-way delay: 112.840 ms

Loss rate: 0.03%

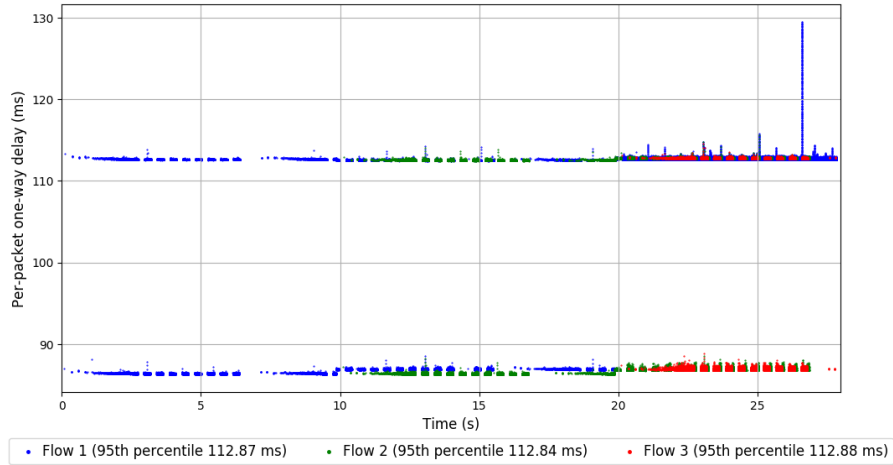
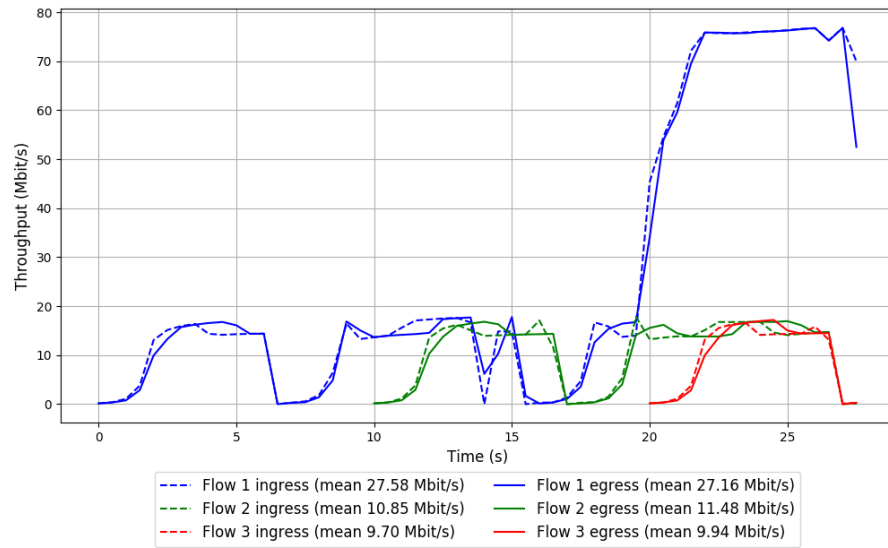
-- Flow 3:

Average throughput: 9.94 Mbit/s

95th percentile per-packet one-way delay: 112.878 ms

Loss rate: 0.07%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-12 00:26:27

End at: 2017-12-12 00:26:57

Below is generated by plot.py at 2017-12-12 03:31:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.11 Mbit/s

95th percentile per-packet one-way delay: 115.084 ms

Loss rate: 1.82%

-- Flow 1:

Average throughput: 26.54 Mbit/s

95th percentile per-packet one-way delay: 115.227 ms

Loss rate: 1.83%

-- Flow 2:

Average throughput: 50.56 Mbit/s

95th percentile per-packet one-way delay: 112.737 ms

Loss rate: 0.37%

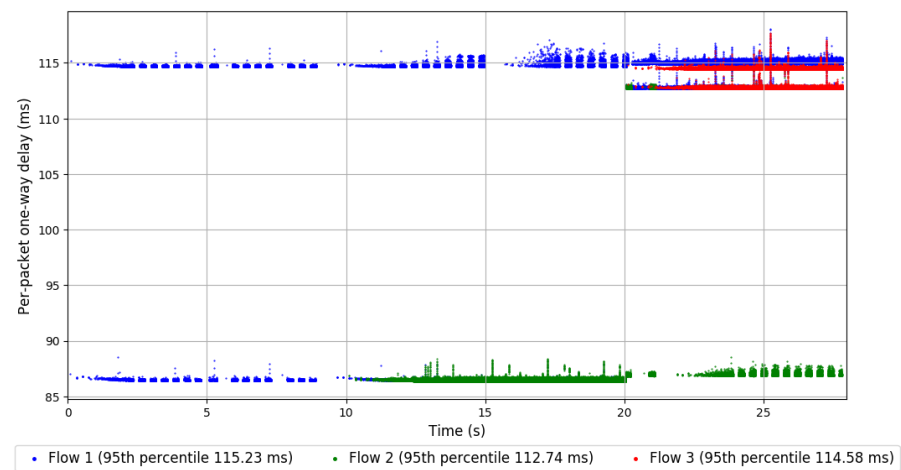
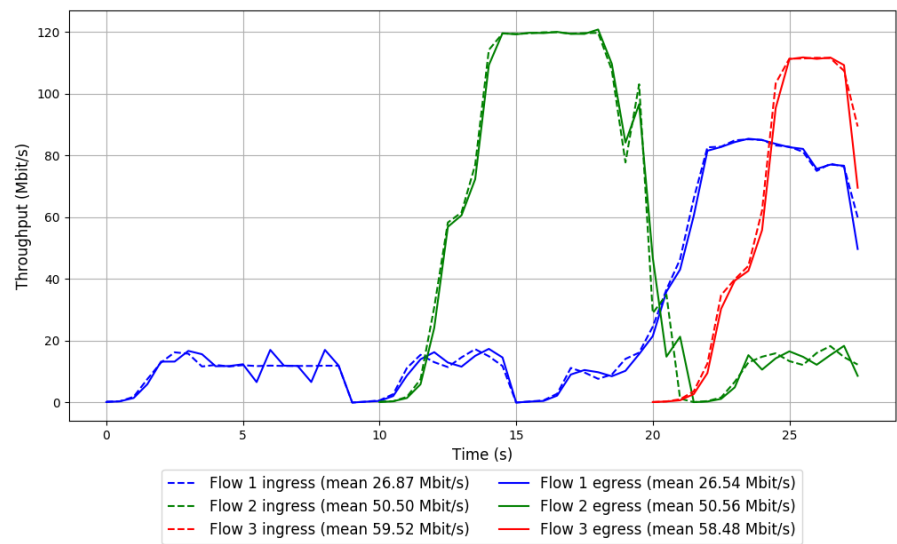
-- Flow 3:

Average throughput: 58.48 Mbit/s

95th percentile per-packet one-way delay: 114.580 ms

Loss rate: 4.56%

Run 10: Report of Copa — Data Link

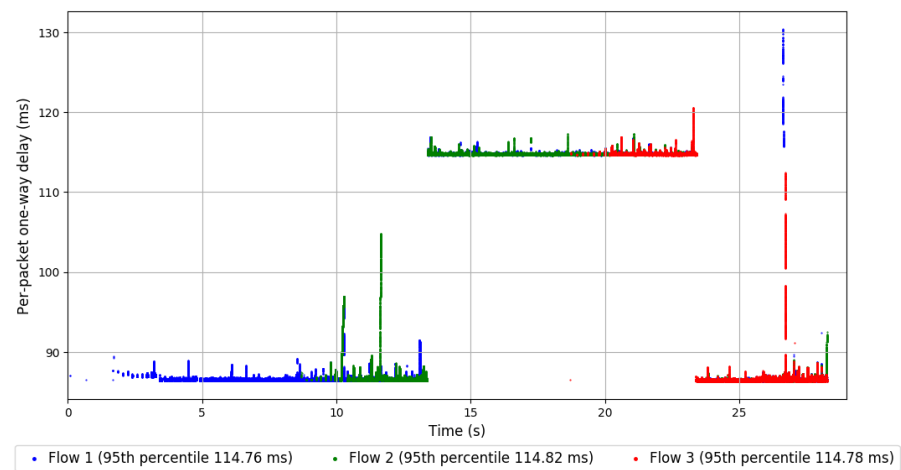
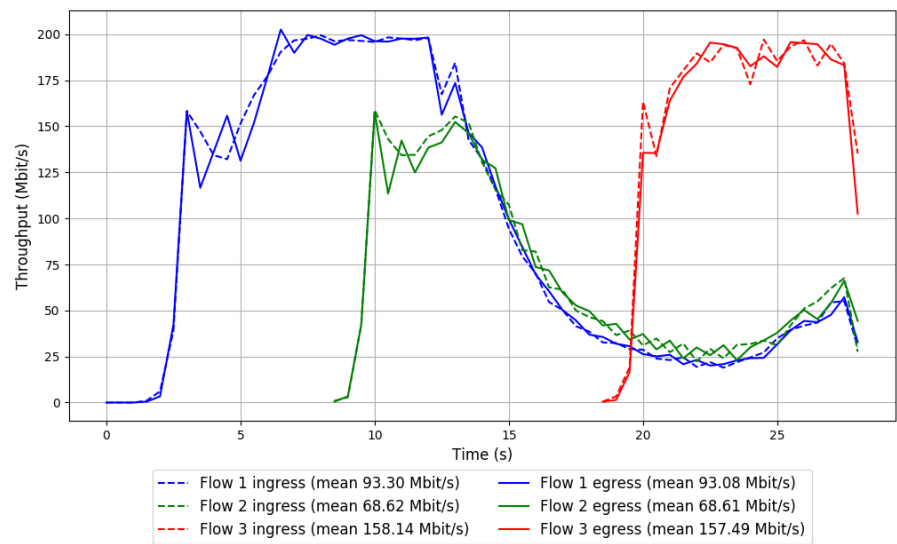


```
Run 1: Statistics of Indigo

Start at: 2017-12-11 22:37:05
End at: 2017-12-11 22:37:35

# Below is generated by plot.py at 2017-12-12 03:33:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 194.07 Mbit/s
95th percentile per-packet one-way delay: 114.784 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 93.08 Mbit/s
95th percentile per-packet one-way delay: 114.758 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 68.61 Mbit/s
95th percentile per-packet one-way delay: 114.824 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 157.49 Mbit/s
95th percentile per-packet one-way delay: 114.785 ms
Loss rate: 2.20%
```


Run 1: Report of Indigo — Data Link

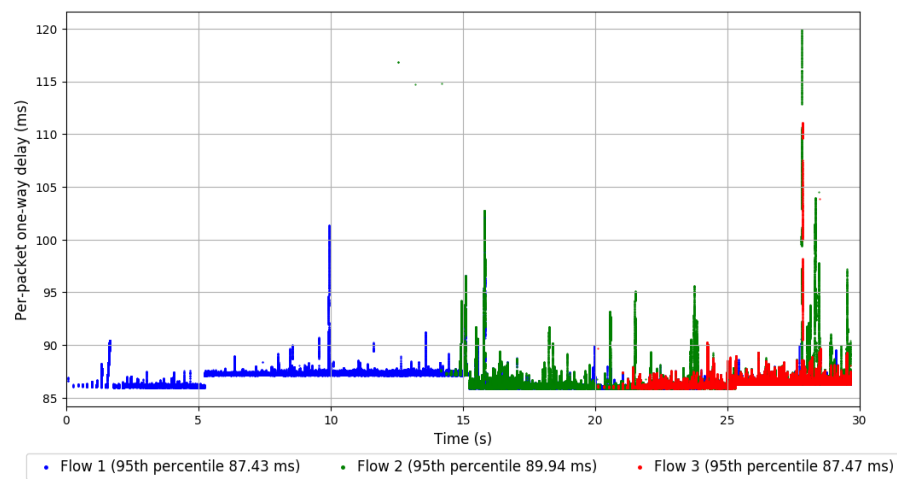
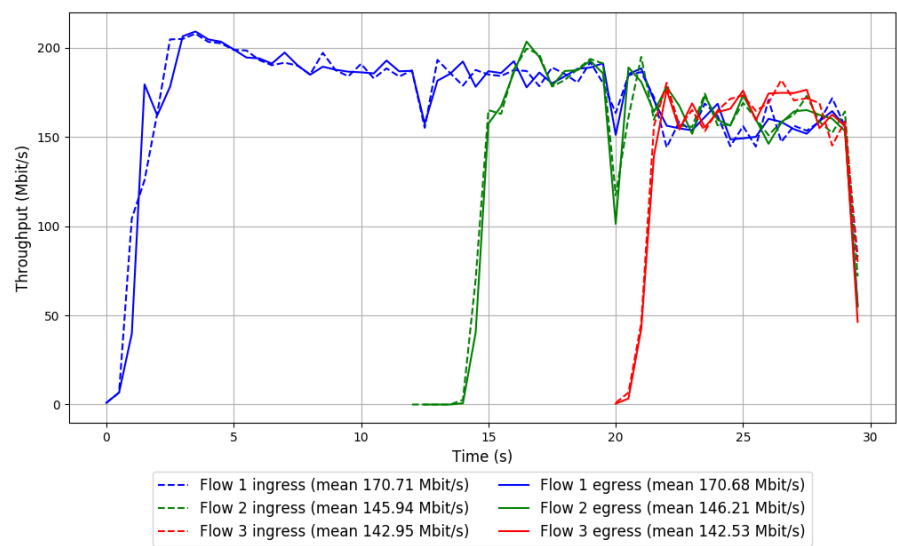


```
Run 2: Statistics of Indigo

Start at: 2017-12-11 22:50:14
End at: 2017-12-11 22:50:44

# Below is generated by plot.py at 2017-12-12 03:36:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 301.26 Mbit/s
95th percentile per-packet one-way delay: 87.690 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 170.68 Mbit/s
95th percentile per-packet one-way delay: 87.434 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 146.21 Mbit/s
95th percentile per-packet one-way delay: 89.935 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 142.53 Mbit/s
95th percentile per-packet one-way delay: 87.474 ms
Loss rate: 2.07%
```

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-11 23:03:13

End at: 2017-12-11 23:03:43

Below is generated by plot.py at 2017-12-12 03:36:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 227.79 Mbit/s

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

Loss rate: 0.47%

-- Flow 1:

Average throughput: 88.54 Mbit/s

95th percentile per-packet one-way delay: 112.696 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 155.72 Mbit/s

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

Loss rate: 0.40%

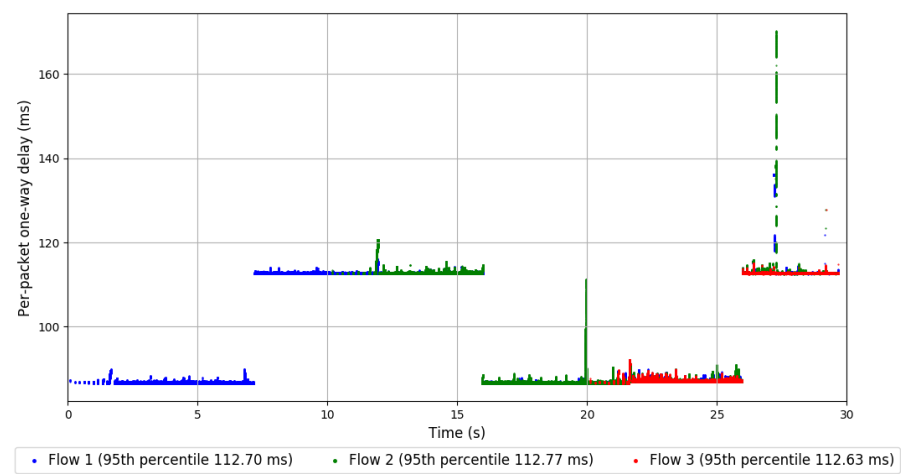
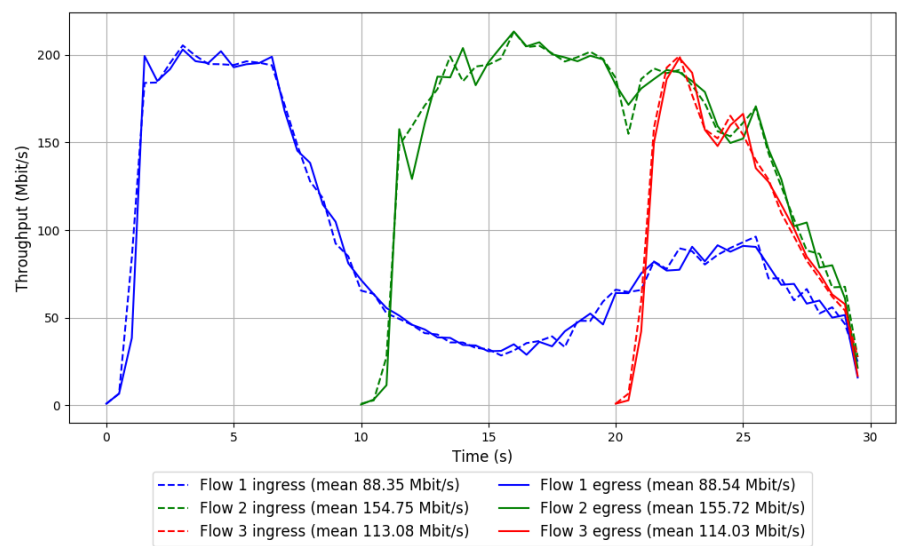
-- Flow 3:

Average throughput: 114.03 Mbit/s

95th percentile per-packet one-way delay: 112.628 ms

Loss rate: 0.93%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2017-12-11 23:16:09

End at: 2017-12-11 23:16:39

Below is generated by plot.py at 2017-12-12 03:36:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 146.86 Mbit/s

95th percentile per-packet one-way delay: 114.900 ms

Loss rate: 1.27%

-- Flow 1:

Average throughput: 107.10 Mbit/s

95th percentile per-packet one-way delay: 114.919 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 46.74 Mbit/s

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

Loss rate: 0.00%

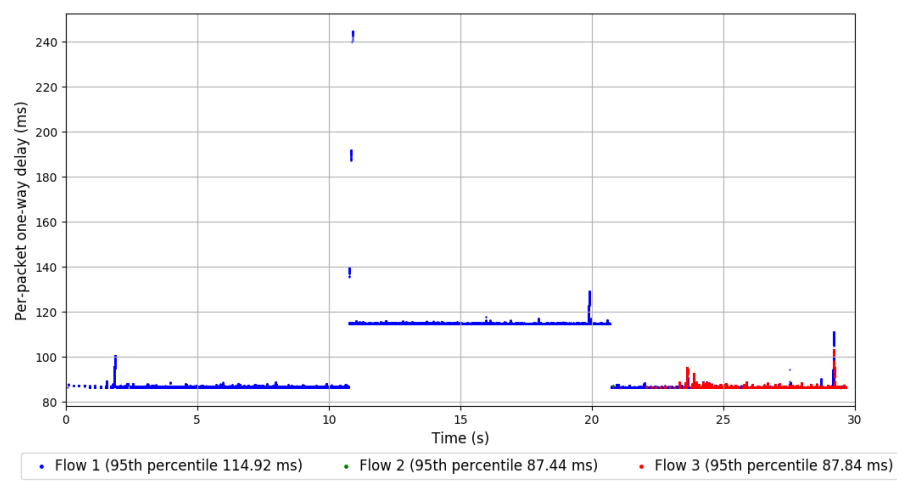
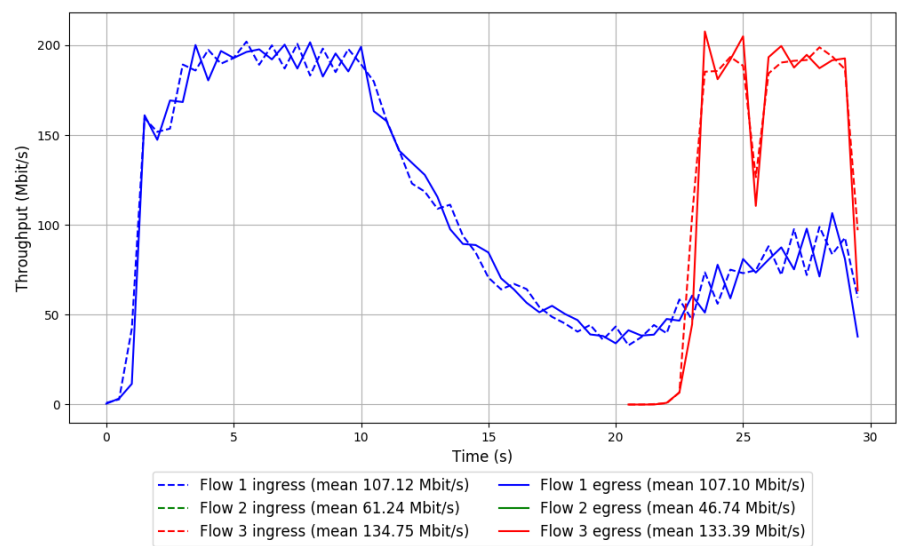
-- Flow 3:

Average throughput: 133.39 Mbit/s

95th percentile per-packet one-way delay: 87.845 ms

Loss rate: 2.78%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-11 23:28:53

End at: 2017-12-11 23:29:23

Below is generated by plot.py at 2017-12-12 03:36:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.68 Mbit/s

95th percentile per-packet one-way delay: 114.976 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 144.00 Mbit/s

95th percentile per-packet one-way delay: 115.028 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 139.55 Mbit/s

95th percentile per-packet one-way delay: 114.964 ms

Loss rate: 0.62%

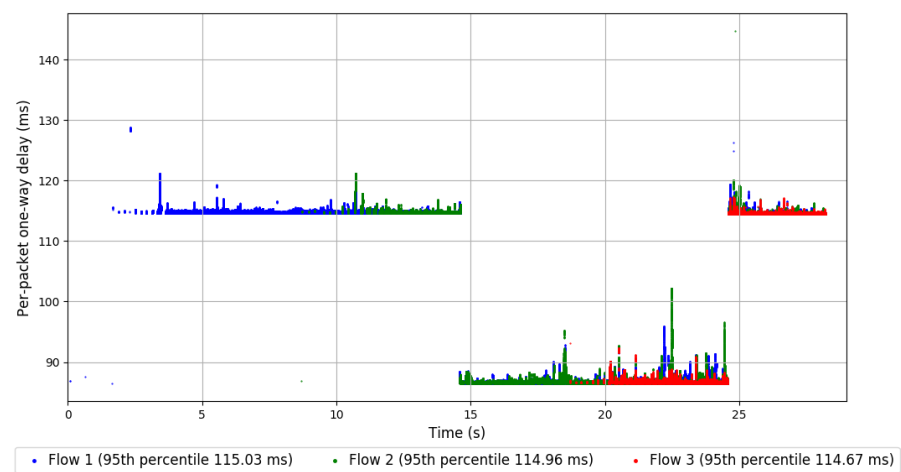
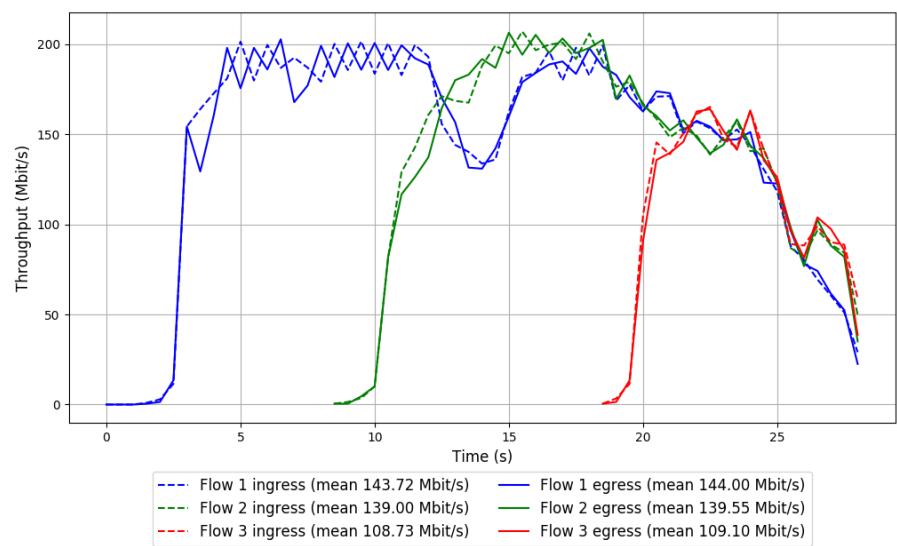
-- Flow 3:

Average throughput: 109.10 Mbit/s

95th percentile per-packet one-way delay: 114.669 ms

Loss rate: 1.77%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-11 23:41:39

End at: 2017-12-11 23:42:09

Below is generated by plot.py at 2017-12-12 03:36:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 313.92 Mbit/s

95th percentile per-packet one-way delay: 88.067 ms

Loss rate: 1.05%

-- Flow 1:

Average throughput: 164.89 Mbit/s

95th percentile per-packet one-way delay: 87.460 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 161.59 Mbit/s

95th percentile per-packet one-way delay: 89.064 ms

Loss rate: 1.06%

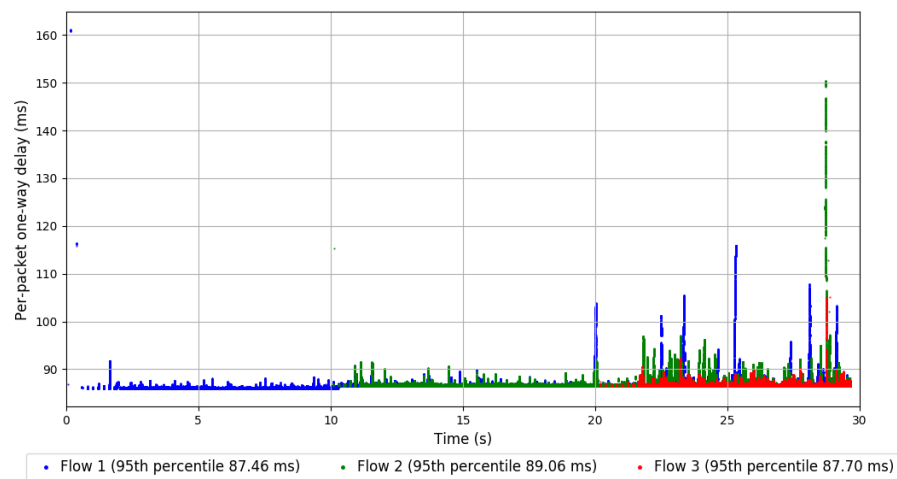
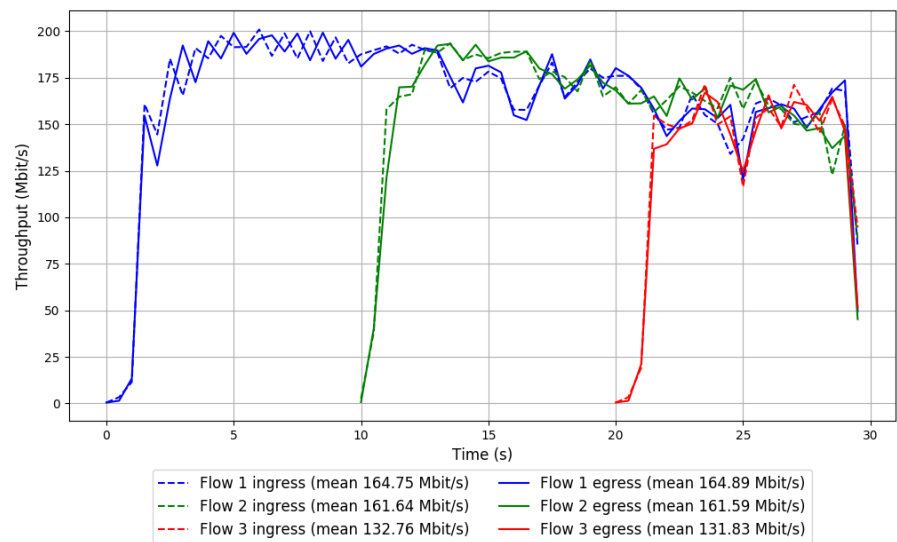
-- Flow 3:

Average throughput: 131.83 Mbit/s

95th percentile per-packet one-way delay: 87.697 ms

Loss rate: 2.75%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2017-12-11 23:54:45

End at: 2017-12-11 23:55:15

Below is generated by plot.py at 2017-12-12 03:36:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 267.17 Mbit/s

95th percentile per-packet one-way delay: 112.847 ms

Loss rate: 0.38%

-- Flow 1:

Average throughput: 150.36 Mbit/s

95th percentile per-packet one-way delay: 112.829 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 129.19 Mbit/s

95th percentile per-packet one-way delay: 113.063 ms

Loss rate: 0.44%

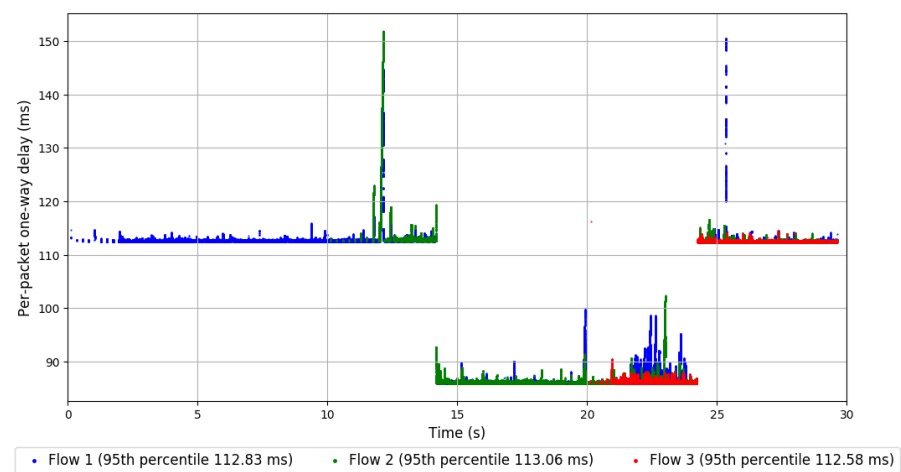
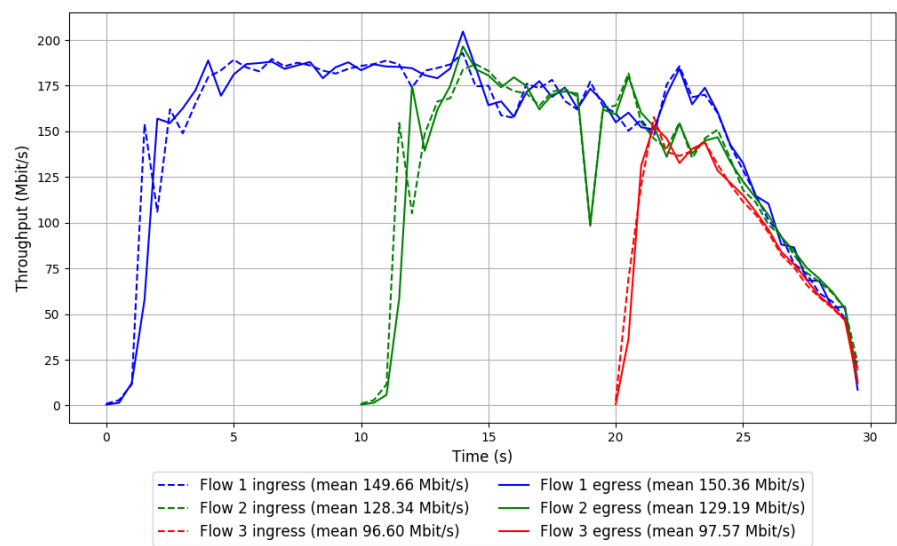
-- Flow 3:

Average throughput: 97.57 Mbit/s

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

Loss rate: 1.06%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-12 00:07:37

End at: 2017-12-12 00:08:07

Below is generated by plot.py at 2017-12-12 03:37:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.10 Mbit/s

95th percentile per-packet one-way delay: 113.332 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 158.47 Mbit/s

95th percentile per-packet one-way delay: 112.988 ms

Loss rate: 0.78%

-- Flow 2:

Average throughput: 149.03 Mbit/s

95th percentile per-packet one-way delay: 113.915 ms

Loss rate: 1.15%

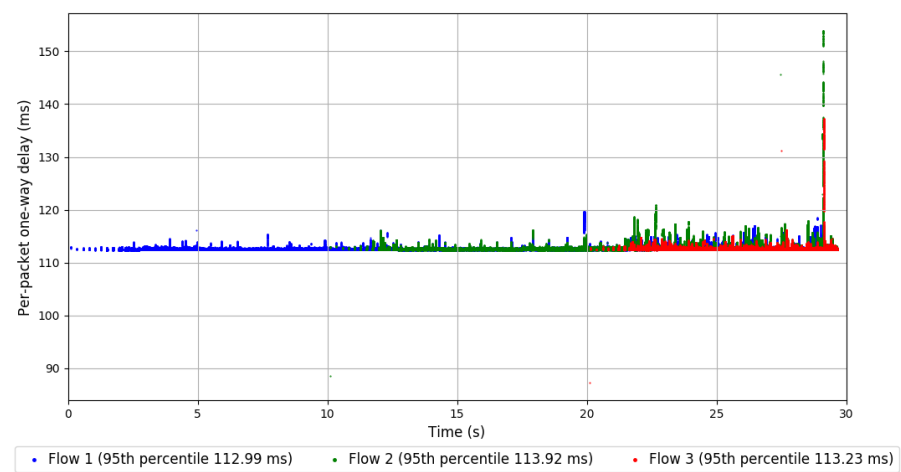
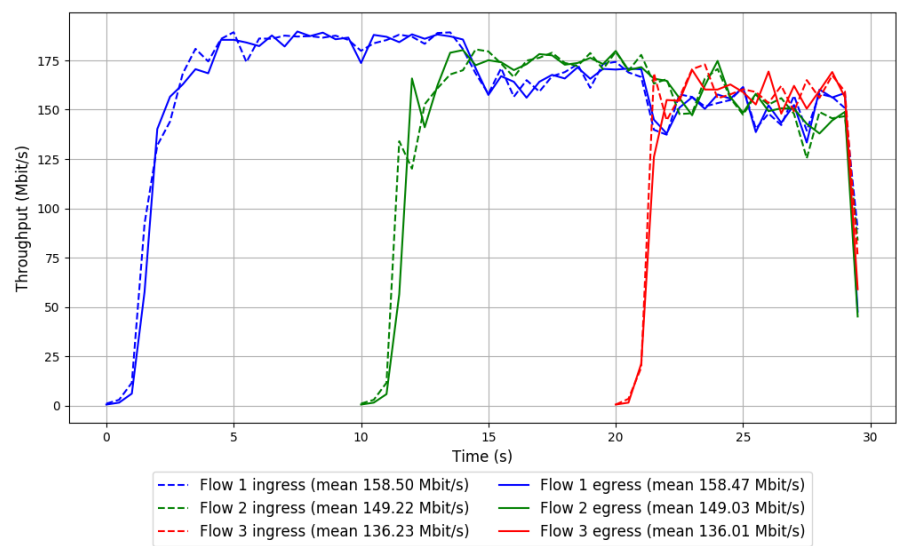
-- Flow 3:

Average throughput: 136.01 Mbit/s

95th percentile per-packet one-way delay: 113.230 ms

Loss rate: 2.23%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

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

End at: 2017-12-12 00:21:11

Below is generated by plot.py at 2017-12-12 03:38:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 297.17 Mbit/s

95th percentile per-packet one-way delay: 114.571 ms

Loss rate: 1.00%

-- Flow 1:

Average throughput: 159.79 Mbit/s

95th percentile per-packet one-way delay: 114.592 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 148.63 Mbit/s

95th percentile per-packet one-way delay: 113.838 ms

Loss rate: 0.99%

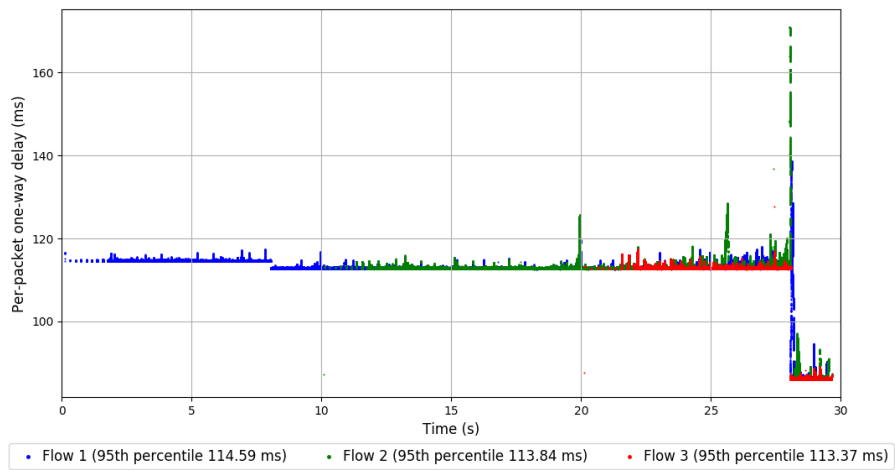
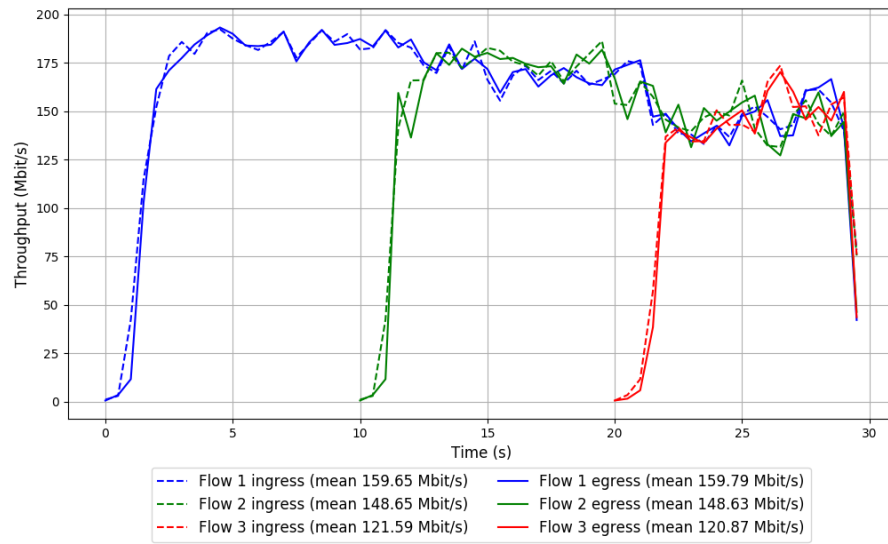
-- Flow 3:

Average throughput: 120.87 Mbit/s

95th percentile per-packet one-way delay: 113.369 ms

Loss rate: 2.54%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-12 00:33:39

End at: 2017-12-12 00:34:09

Below is generated by plot.py at 2017-12-12 03:39:12

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.87 Mbit/s

95th percentile per-packet one-way delay: 114.274 ms

Loss rate: 1.02%

-- Flow 1:

Average throughput: 165.66 Mbit/s

95th percentile per-packet one-way delay: 114.302 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 142.86 Mbit/s

95th percentile per-packet one-way delay: 89.811 ms

Loss rate: 1.12%

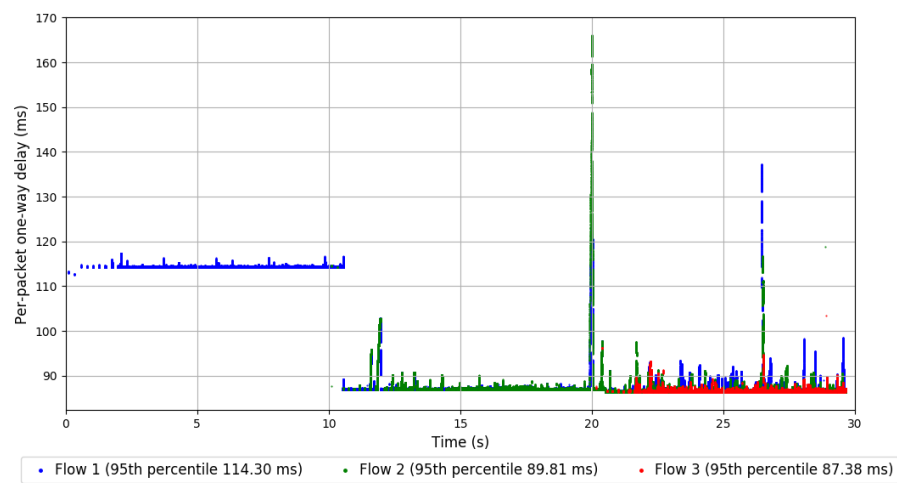
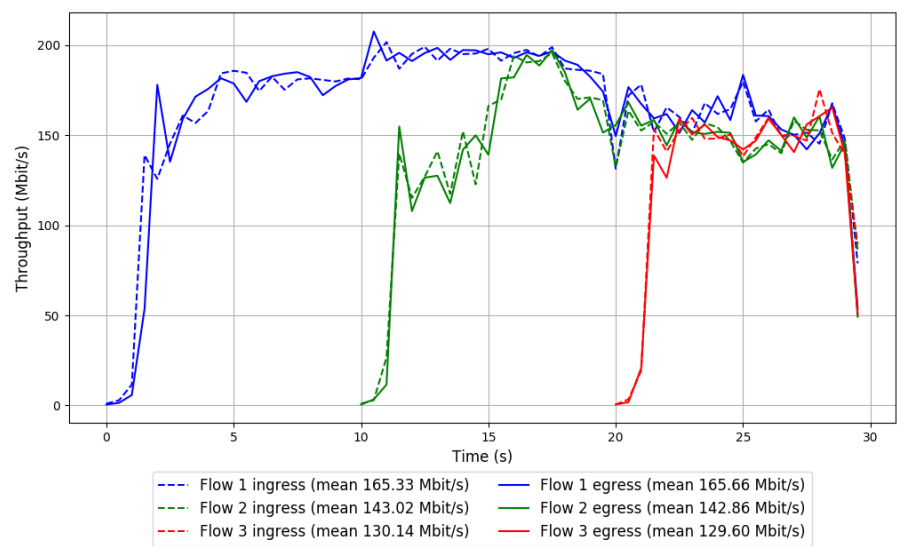
-- Flow 3:

Average throughput: 129.60 Mbit/s

95th percentile per-packet one-way delay: 87.378 ms

Loss rate: 2.53%

Run 10: Report of Indigo — Data Link

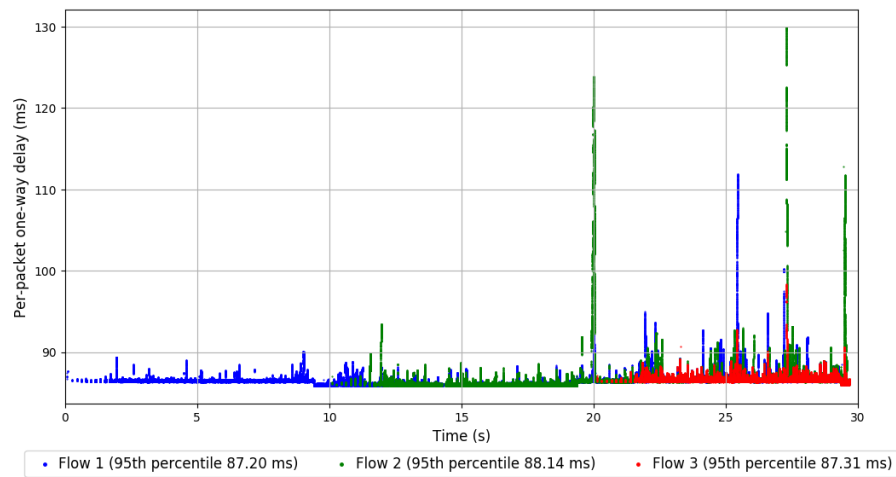
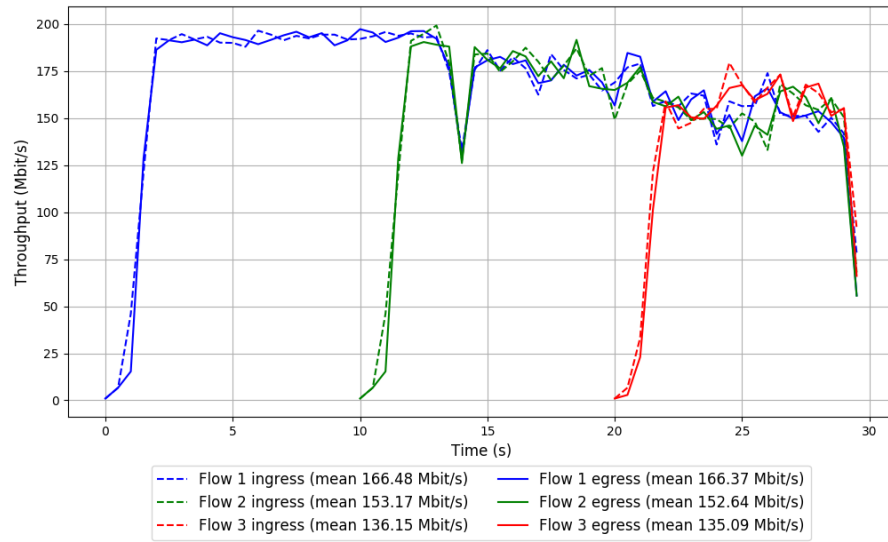


```
Run 1: Statistics of Indigo-calib

Start at: 2017-12-11 22:34:50
End at: 2017-12-11 22:35:20

# Below is generated by plot.py at 2017-12-12 03:40:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.01 Mbit/s
95th percentile per-packet one-way delay: 87.437 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 166.37 Mbit/s
95th percentile per-packet one-way delay: 87.198 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 152.64 Mbit/s
95th percentile per-packet one-way delay: 88.135 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 135.09 Mbit/s
95th percentile per-packet one-way delay: 87.307 ms
Loss rate: 2.55%
```

Run 1: Report of Indigo-calib — Data Link

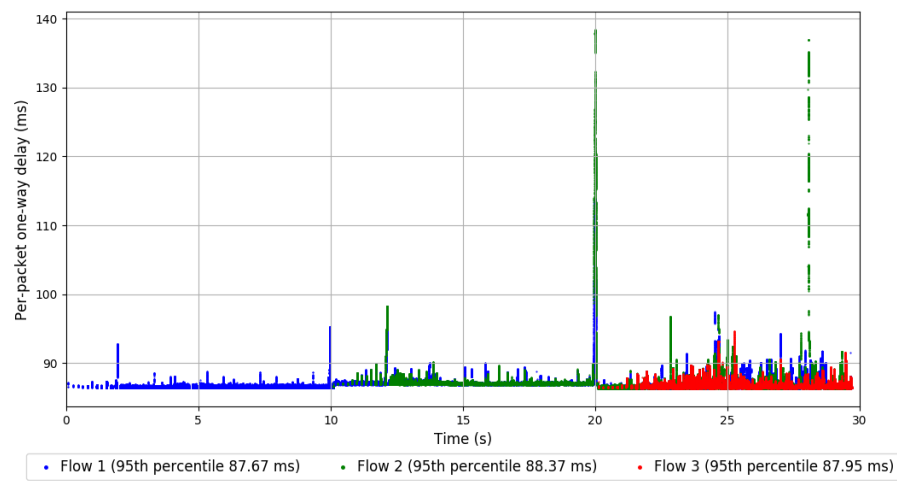
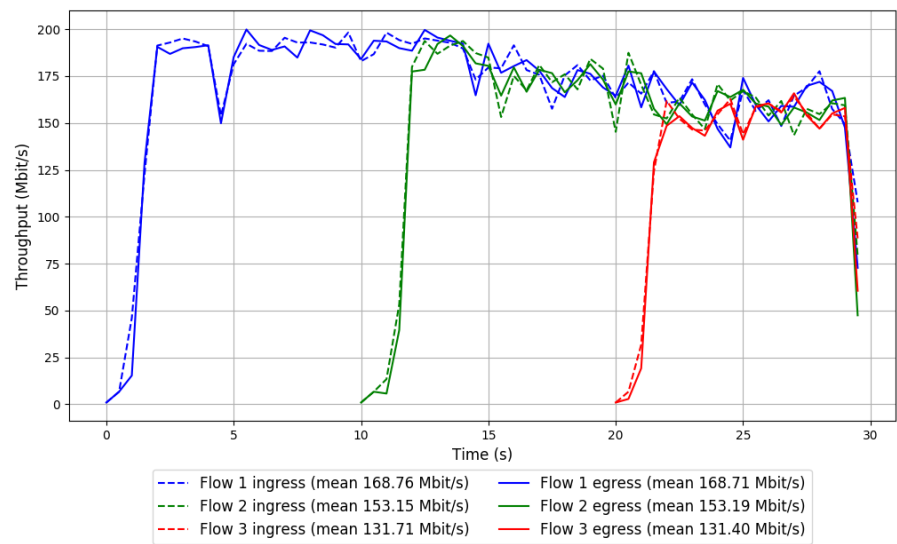


```
Run 2: Statistics of Indigo-calib

Start at: 2017-12-11 22:47:59
End at: 2017-12-11 22:48:29

# Below is generated by plot.py at 2017-12-12 03:41:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.54 Mbit/s
95th percentile per-packet one-way delay: 87.936 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 168.71 Mbit/s
95th percentile per-packet one-way delay: 87.665 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 153.19 Mbit/s
95th percentile per-packet one-way delay: 88.366 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 131.40 Mbit/s
95th percentile per-packet one-way delay: 87.946 ms
Loss rate: 1.99%
```

Run 2: Report of Indigo-calib — Data Link

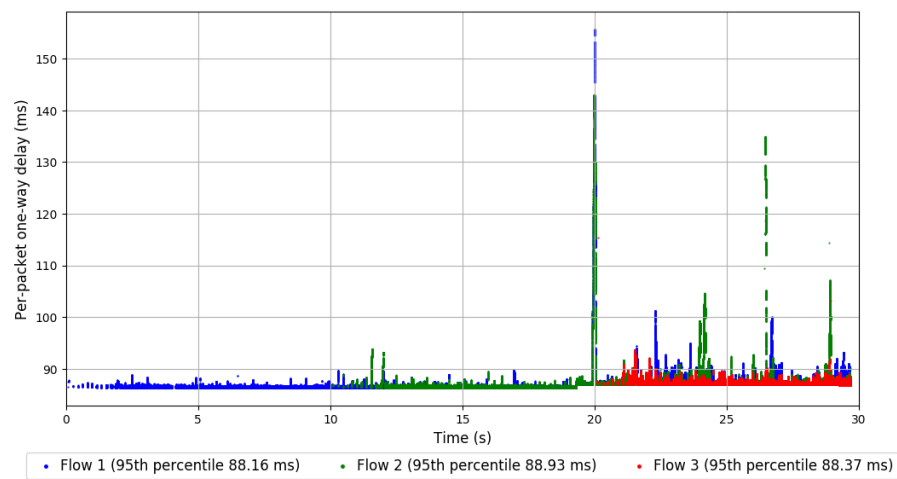
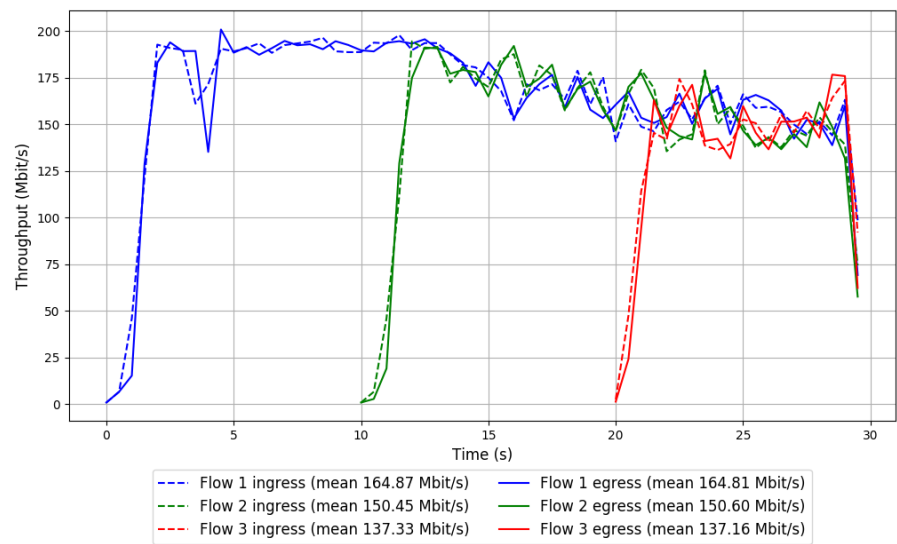


```
Run 3: Statistics of Indigo-calib

Start at: 2017-12-11 23:01:00
End at: 2017-12-11 23:01:30

# Below is generated by plot.py at 2017-12-12 03:41:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 308.77 Mbit/s
95th percentile per-packet one-way delay: 88.445 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 164.81 Mbit/s
95th percentile per-packet one-way delay: 88.163 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 150.60 Mbit/s
95th percentile per-packet one-way delay: 88.930 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 137.16 Mbit/s
95th percentile per-packet one-way delay: 88.371 ms
Loss rate: 1.90%
```


Run 3: Report of Indigo-calib — Data Link

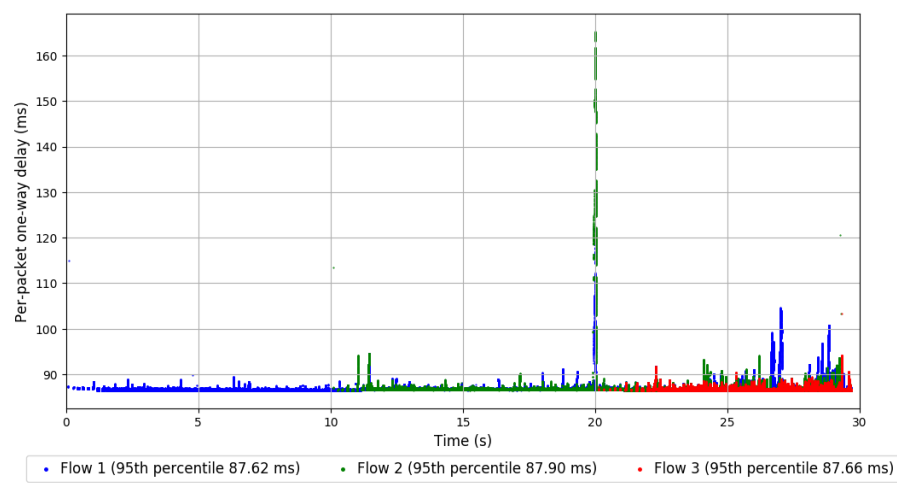
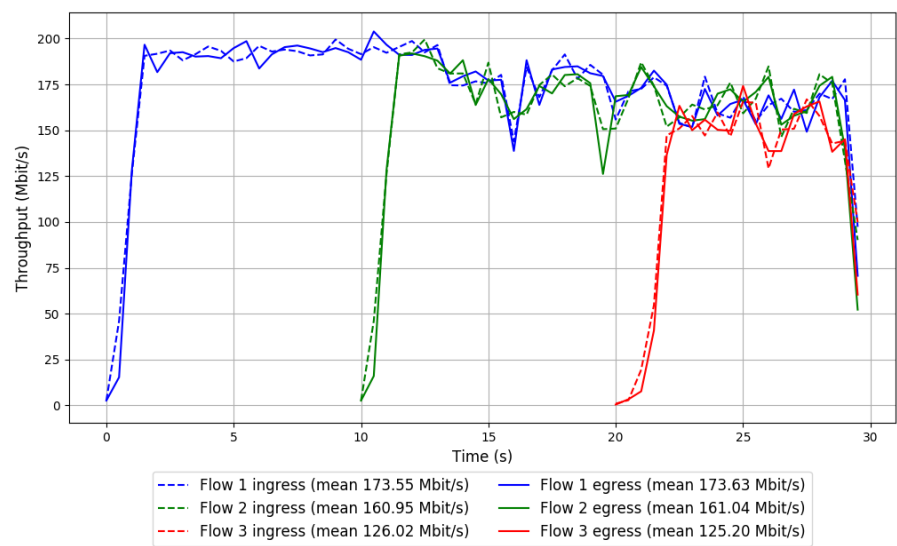


```
Run 4: Statistics of Indigo-calib

Start at: 2017-12-11 23:13:48
End at: 2017-12-11 23:14:18

# Below is generated by plot.py at 2017-12-12 03:41:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.69 Mbit/s
95th percentile per-packet one-way delay: 87.731 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 173.63 Mbit/s
95th percentile per-packet one-way delay: 87.617 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 161.04 Mbit/s
95th percentile per-packet one-way delay: 87.896 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 125.20 Mbit/s
95th percentile per-packet one-way delay: 87.662 ms
Loss rate: 2.67%
```

Run 4: Report of Indigo-calib — Data Link

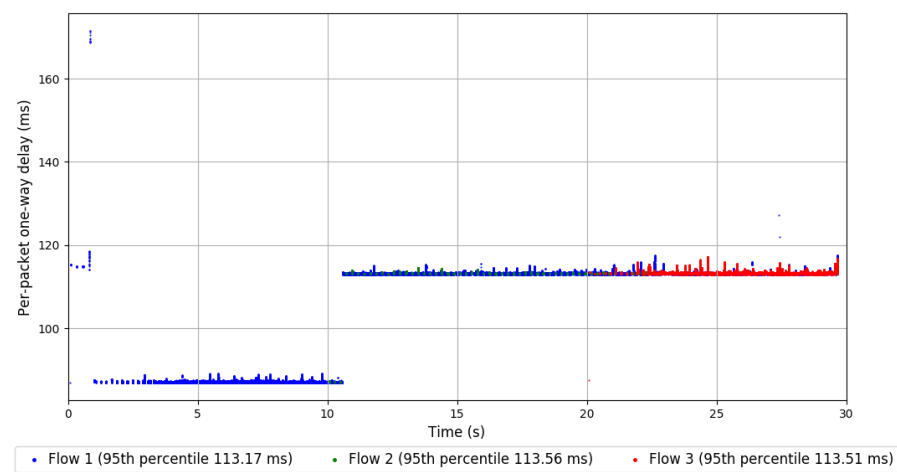
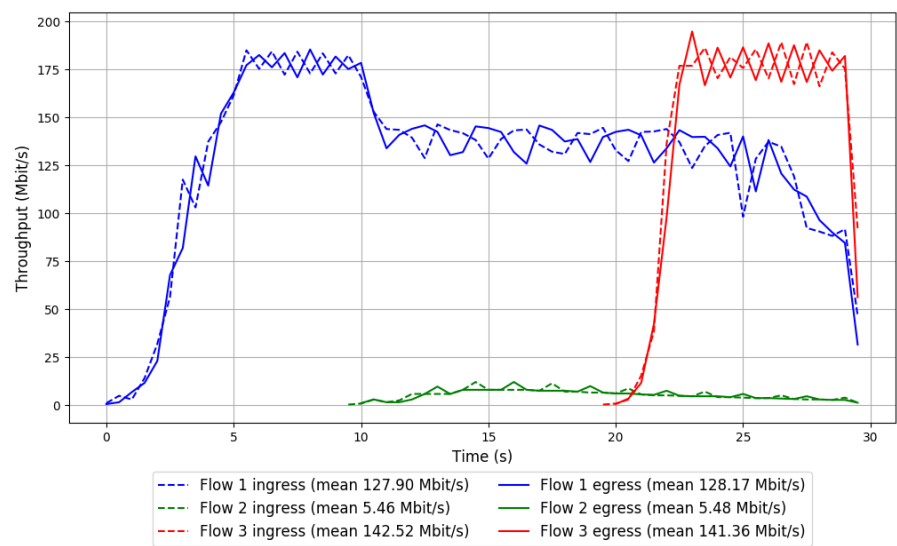


```
Run 5: Statistics of Indigo-calib

Start at: 2017-12-11 23:26:39
End at: 2017-12-11 23:27:09

# Below is generated by plot.py at 2017-12-12 03:41:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 177.59 Mbit/s
95th percentile per-packet one-way delay: 113.249 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 128.17 Mbit/s
95th percentile per-packet one-way delay: 113.173 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 5.48 Mbit/s
95th percentile per-packet one-way delay: 113.559 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 141.36 Mbit/s
95th percentile per-packet one-way delay: 113.511 ms
Loss rate: 2.60%
```

Run 5: Report of Indigo-calib — Data Link



Run 6: Statistics of Indigo-calib

Start at: 2017-12-11 23:39:28

End at: 2017-12-11 23:39:58

Below is generated by plot.py at 2017-12-12 03:41:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 207.39 Mbit/s

95th percentile per-packet one-way delay: 114.359 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 147.82 Mbit/s

95th percentile per-packet one-way delay: 114.365 ms

Loss rate: 0.71%

-- Flow 2:

Average throughput: 14.45 Mbit/s

95th percentile per-packet one-way delay: 114.726 ms

Loss rate: 1.04%

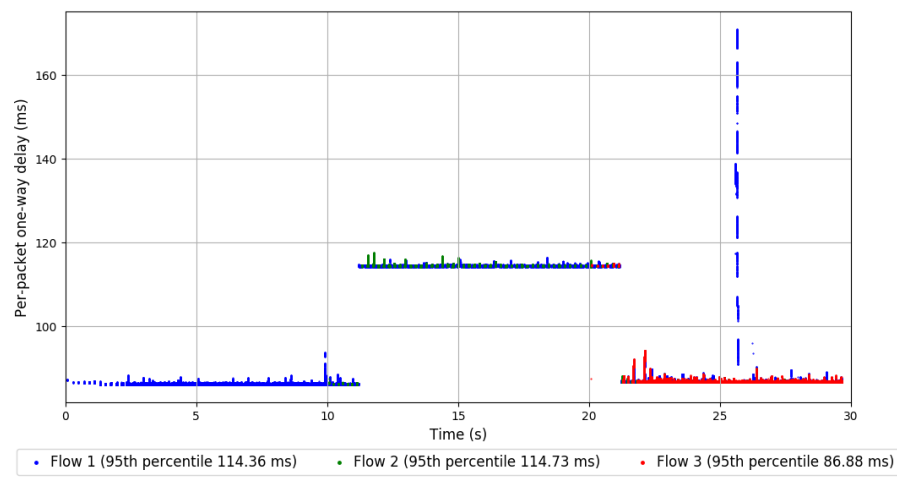
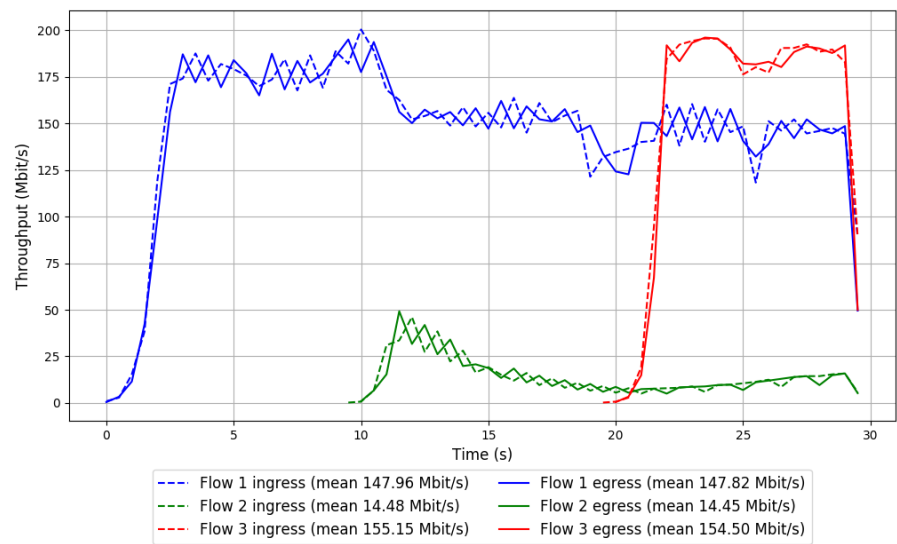
-- Flow 3:

Average throughput: 154.50 Mbit/s

95th percentile per-packet one-way delay: 86.878 ms

Loss rate: 2.17%

Run 6: Report of Indigo-calib — Data Link

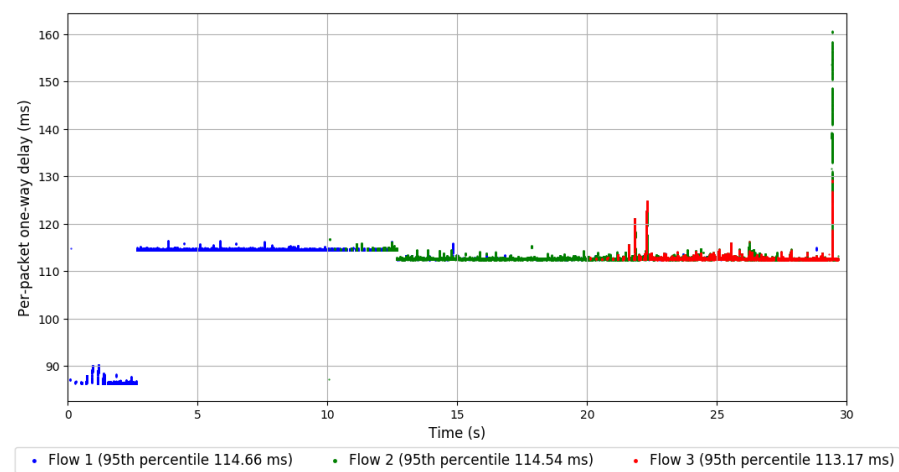
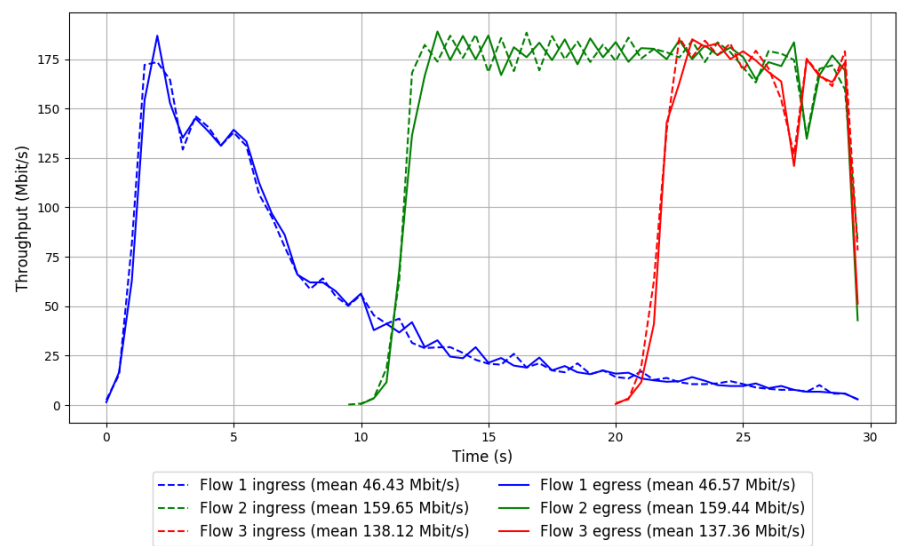


```
Run 7: Statistics of Indigo-calib

Start at: 2017-12-11 23:52:37
End at: 2017-12-11 23:53:07

# Below is generated by plot.py at 2017-12-12 03:42:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 196.35 Mbit/s
95th percentile per-packet one-way delay: 114.613 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 46.57 Mbit/s
95th percentile per-packet one-way delay: 114.662 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 159.44 Mbit/s
95th percentile per-packet one-way delay: 114.536 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 137.36 Mbit/s
95th percentile per-packet one-way delay: 113.168 ms
Loss rate: 2.59%
```


Run 7: Report of Indigo-calib — Data Link



Run 8: Statistics of Indigo-calib

Start at: 2017-12-12 00:05:20

End at: 2017-12-12 00:05:50

Below is generated by plot.py at 2017-12-12 03:42:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 289.12 Mbit/s

95th percentile per-packet one-way delay: 114.810 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 149.10 Mbit/s

95th percentile per-packet one-way delay: 114.815 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 146.83 Mbit/s

95th percentile per-packet one-way delay: 114.854 ms

Loss rate: 1.01%

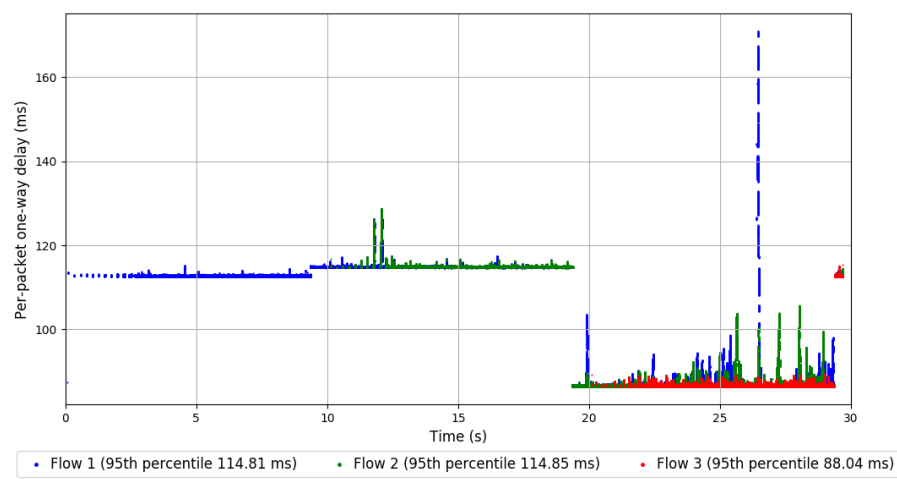
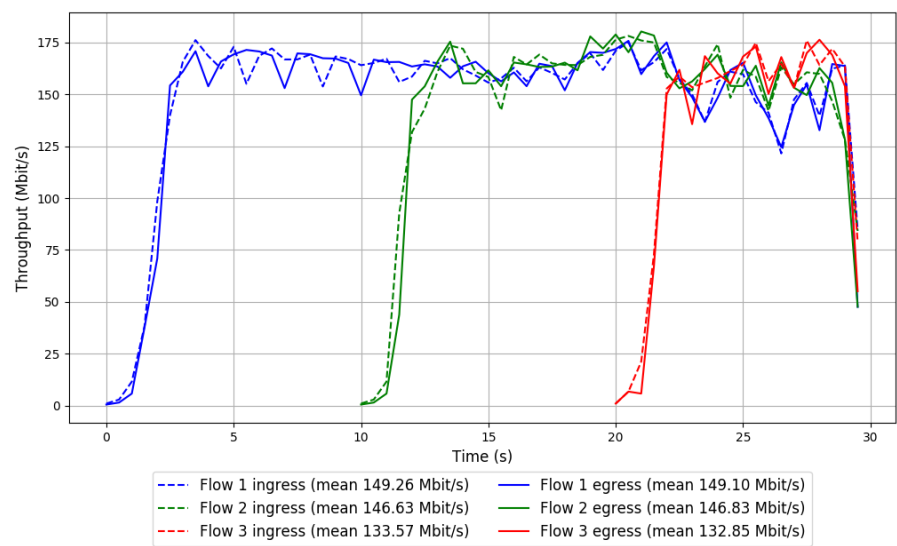
-- Flow 3:

Average throughput: 132.85 Mbit/s

95th percentile per-packet one-way delay: 88.036 ms

Loss rate: 2.31%

Run 8: Report of Indigo-calib — Data Link

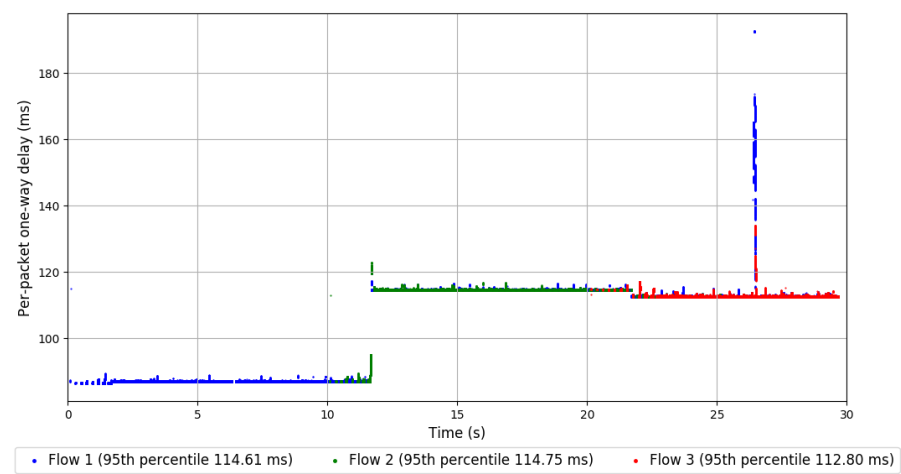
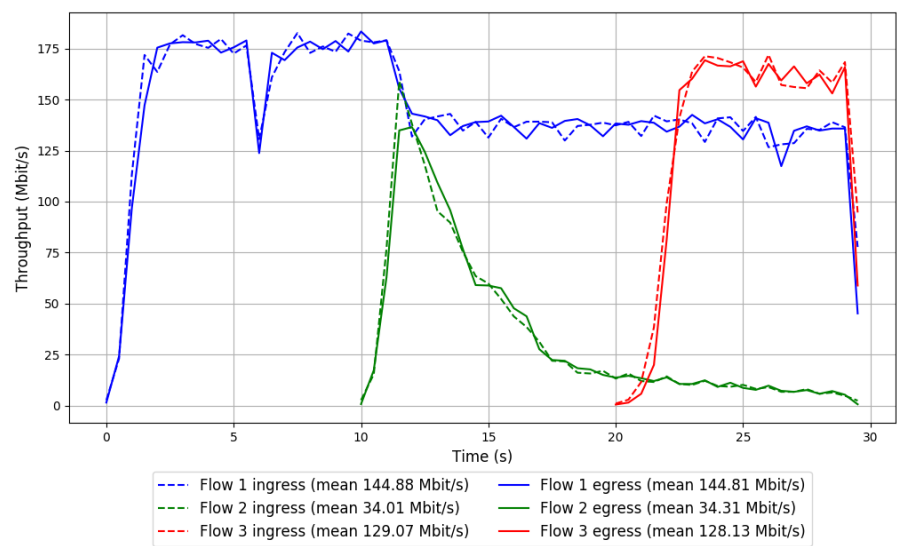


```
Run 9: Statistics of Indigo-calib

Start at: 2017-12-12 00:18:28
End at: 2017-12-12 00:18:58

# Below is generated by plot.py at 2017-12-12 03:42:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.66 Mbit/s
95th percentile per-packet one-way delay: 114.614 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 144.81 Mbit/s
95th percentile per-packet one-way delay: 114.607 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 34.31 Mbit/s
95th percentile per-packet one-way delay: 114.749 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 128.13 Mbit/s
95th percentile per-packet one-way delay: 112.803 ms
Loss rate: 3.03%
```

Run 9: Report of Indigo-calib — Data Link



Run 10: Statistics of Indigo-calib

Start at: 2017-12-12 00:31:21

End at: 2017-12-12 00:31:51

Below is generated by plot.py at 2017-12-12 03:42:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 309.85 Mbit/s

95th percentile per-packet one-way delay: 87.763 ms

Loss rate: 1.03%

-- Flow 1:

Average throughput: 159.85 Mbit/s

95th percentile per-packet one-way delay: 87.396 ms

Loss rate: 0.68%

-- Flow 2:

Average throughput: 160.27 Mbit/s

95th percentile per-packet one-way delay: 88.174 ms

Loss rate: 1.01%

-- Flow 3:

Average throughput: 136.43 Mbit/s

95th percentile per-packet one-way delay: 87.940 ms

Loss rate: 2.30%

Run 10: Report of Indigo-calib — Data Link

