

Pantheon Report

Generated at 2018-03-01 17:29:10 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

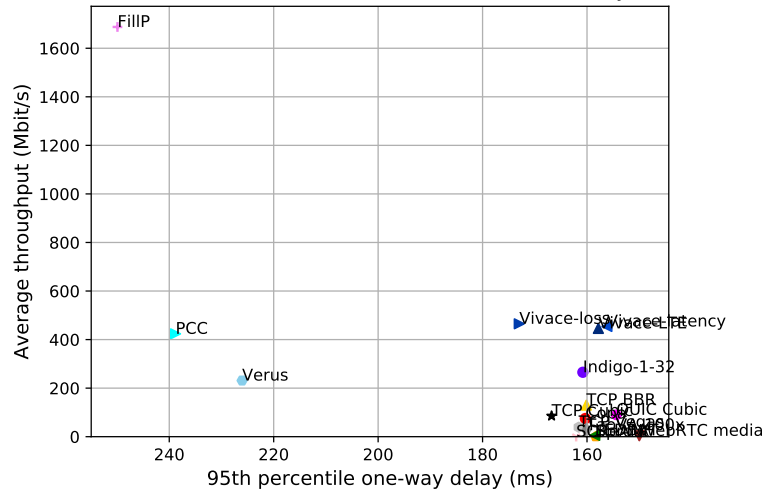
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

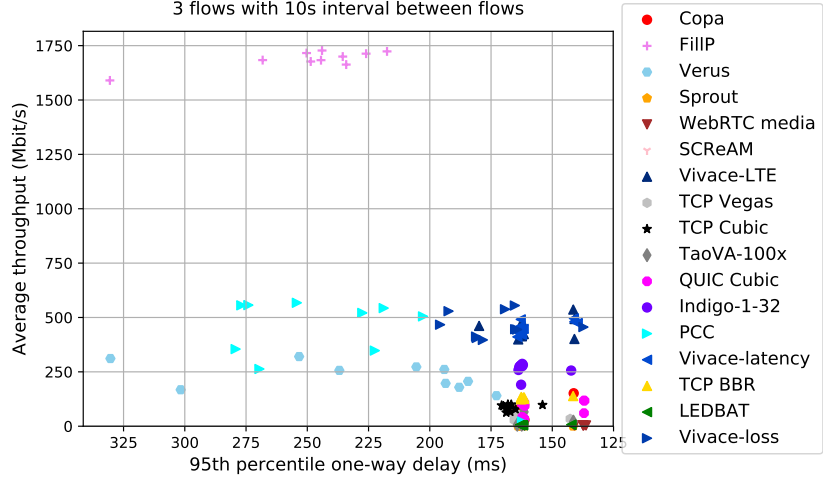
Git summary:

```
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	67.75	64.38	58.84	160.11	160.10	160.14	0.08	0.13	0.30
TCP Cubic	10	49.01	41.08	28.18	166.55	166.53	165.09	0.06	0.01	1.31
LEDBAT	10	3.42	2.29	1.17	158.56	158.43	158.30	0.03	0.56	0.00
PCC	10	304.76	143.89	70.83	236.50	230.97	228.67	1.24	1.26	1.40
QUIC Cubic	10	40.00	51.92	48.62	149.07	147.13	151.83	0.03	0.04	0.24
SCReAM	10	0.21	0.21	0.22	150.24	151.93	144.04	0.04	0.00	0.06
WebRTC media	10	2.00	1.23	0.41	147.38	139.97	157.83	0.01	0.03	0.01
Sprout	10	0.25	0.29	0.32	158.06	158.33	157.99	0.00	0.05	0.16
TaoVA-100x	10	23.90	7.46	34.66	159.89	160.08	160.09	0.06	0.04	0.16
TCP Vegas	10	17.67	23.90	16.62	160.84	161.77	161.91	0.00	0.02	0.85
Verus	10	148.06	106.85	40.05	203.48	231.56	239.69	0.51	2.31	3.17
Copa	10	45.75	33.75	21.82	160.11	160.14	159.86	0.06	0.09	0.31
FillP	10	883.46	842.63	736.50	249.90	227.82	257.59	2.32	3.60	6.19
Indigo-1-32	10	137.39	131.96	127.17	160.44	160.91	162.46	0.07	0.08	0.29
Vivace-latency	10	296.33	180.60	114.59	154.59	150.69	149.31	0.04	0.12	0.18
Vivace-loss	10	274.84	218.40	137.22	181.21	171.06	150.08	0.11	0.21	0.13
Vivace-LTE	10	276.15	188.20	137.09	152.63	153.06	168.84	0.04	0.06	0.07

Run 1: Statistics of TCP BBR

Start at: 2018-03-01 10:34:28

End at: 2018-03-01 10:34:58

Below is generated by plot.py at 2018-03-01 15:49:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.68 Mbit/s

95th percentile per-packet one-way delay: 141.487 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 72.26 Mbit/s

95th percentile per-packet one-way delay: 141.489 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 68.70 Mbit/s

95th percentile per-packet one-way delay: 141.484 ms

Loss rate: 0.03%

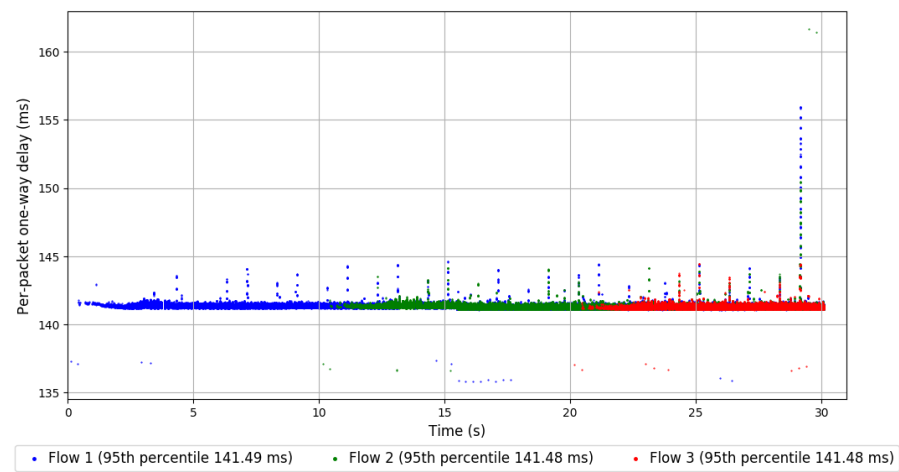
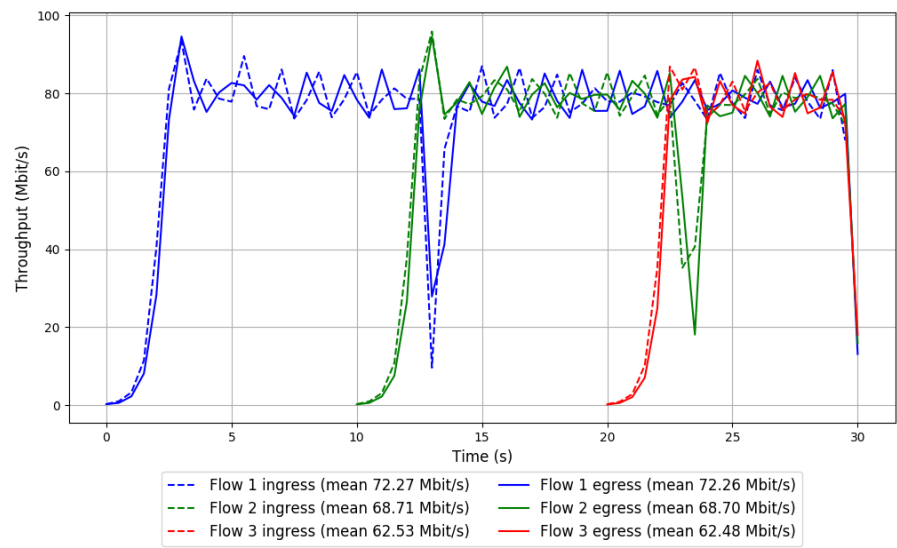
-- Flow 3:

Average throughput: 62.48 Mbit/s

95th percentile per-packet one-way delay: 141.482 ms

Loss rate: 0.09%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-03-01 10:54:15

End at: 2018-03-01 10:54:45

Below is generated by plot.py at 2018-03-01 15:49:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 123.62 Mbit/s

95th percentile per-packet one-way delay: 162.690 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 62.93 Mbit/s

95th percentile per-packet one-way delay: 162.664 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 62.67 Mbit/s

95th percentile per-packet one-way delay: 162.696 ms

Loss rate: 0.20%

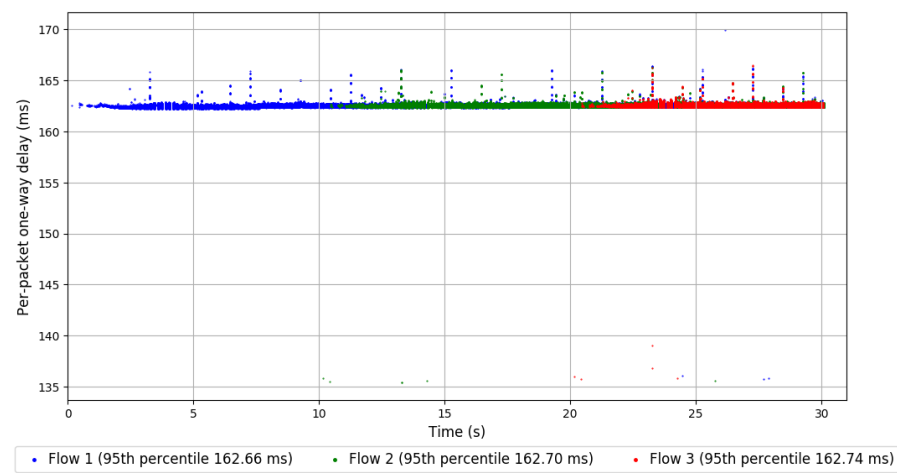
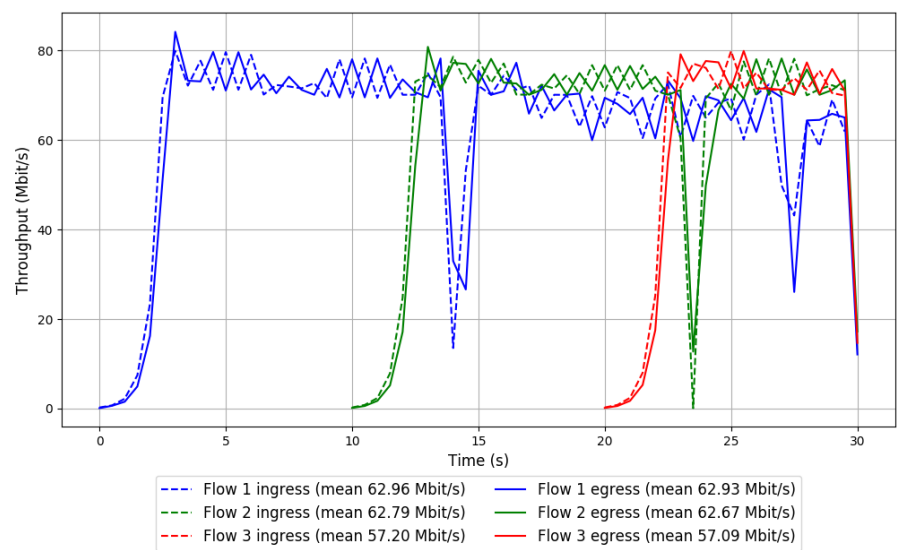
-- Flow 3:

Average throughput: 57.09 Mbit/s

95th percentile per-packet one-way delay: 162.738 ms

Loss rate: 0.44%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-03-01 11:13:59

End at: 2018-03-01 11:14:29

Below is generated by plot.py at 2018-03-01 15:49:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 130.19 Mbit/s

95th percentile per-packet one-way delay: 162.629 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 66.34 Mbit/s

95th percentile per-packet one-way delay: 162.554 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 67.84 Mbit/s

95th percentile per-packet one-way delay: 162.683 ms

Loss rate: 0.00%

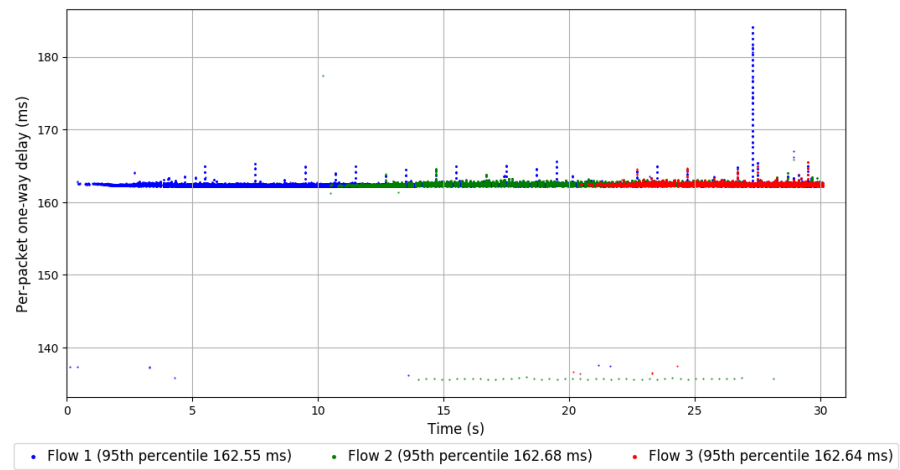
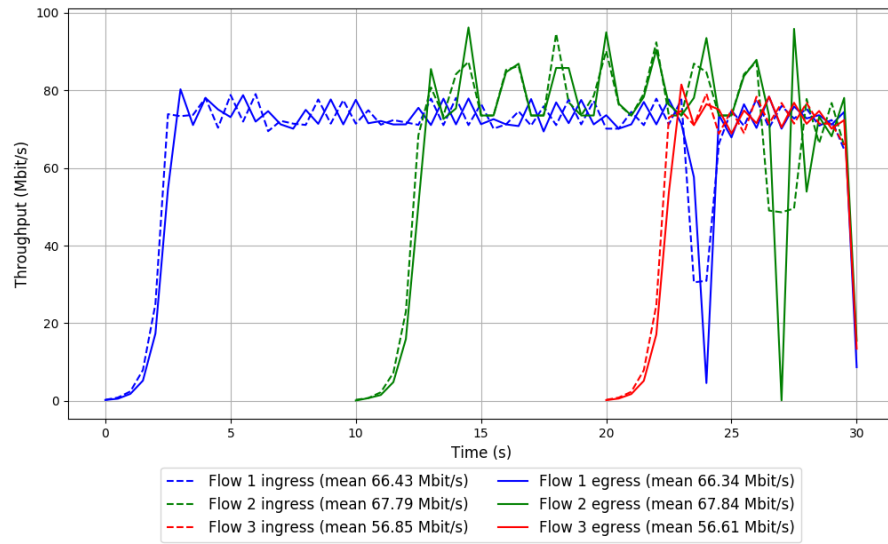
-- Flow 3:

Average throughput: 56.61 Mbit/s

95th percentile per-packet one-way delay: 162.638 ms

Loss rate: 0.42%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-03-01 11:33:49

End at: 2018-03-01 11:34:19

Below is generated by plot.py at 2018-03-01 15:49:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 125.27 Mbit/s

95th percentile per-packet one-way delay: 161.510 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 66.47 Mbit/s

95th percentile per-packet one-way delay: 161.516 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.56 Mbit/s

95th percentile per-packet one-way delay: 161.488 ms

Loss rate: 0.00%

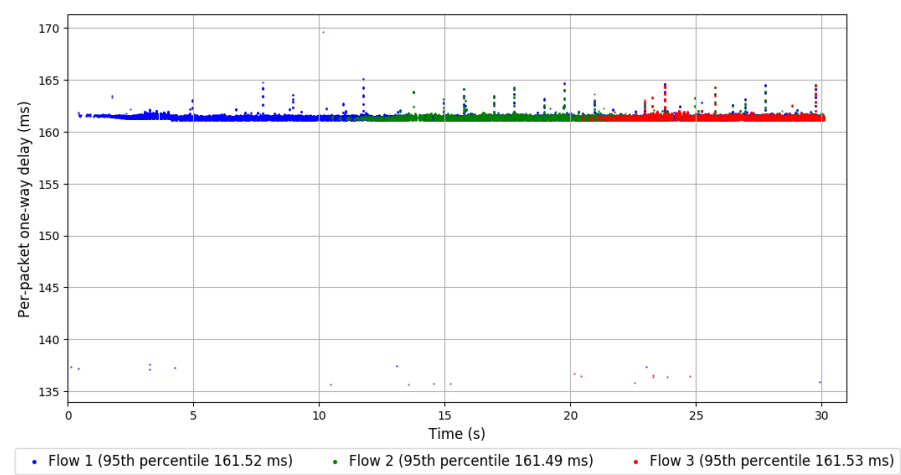
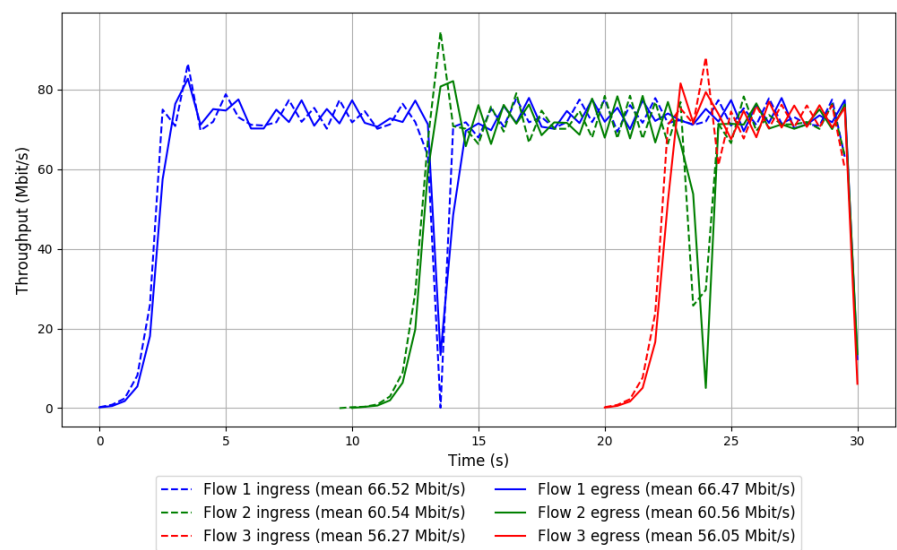
-- Flow 3:

Average throughput: 56.05 Mbit/s

95th percentile per-packet one-way delay: 161.532 ms

Loss rate: 0.43%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-03-01 11:53:34

End at: 2018-03-01 11:54:04

Below is generated by plot.py at 2018-03-01 15:49:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.34 Mbit/s

95th percentile per-packet one-way delay: 162.674 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 72.28 Mbit/s

95th percentile per-packet one-way delay: 162.687 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 62.93 Mbit/s

95th percentile per-packet one-way delay: 162.584 ms

Loss rate: 0.19%

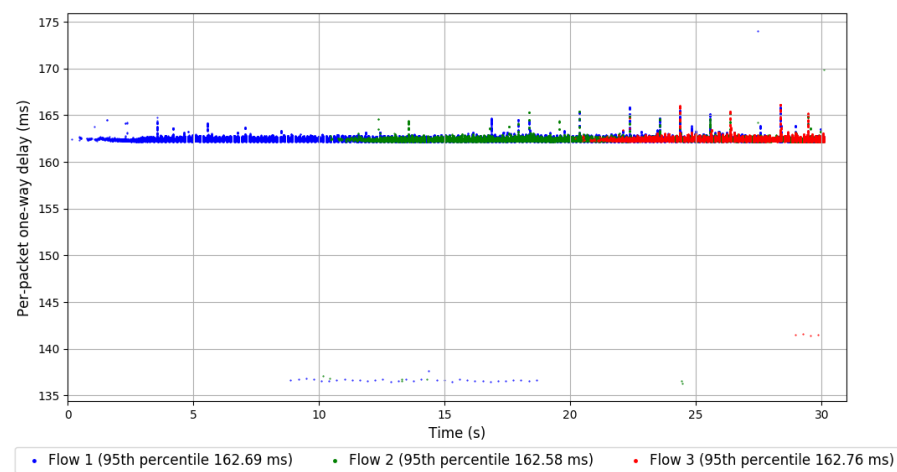
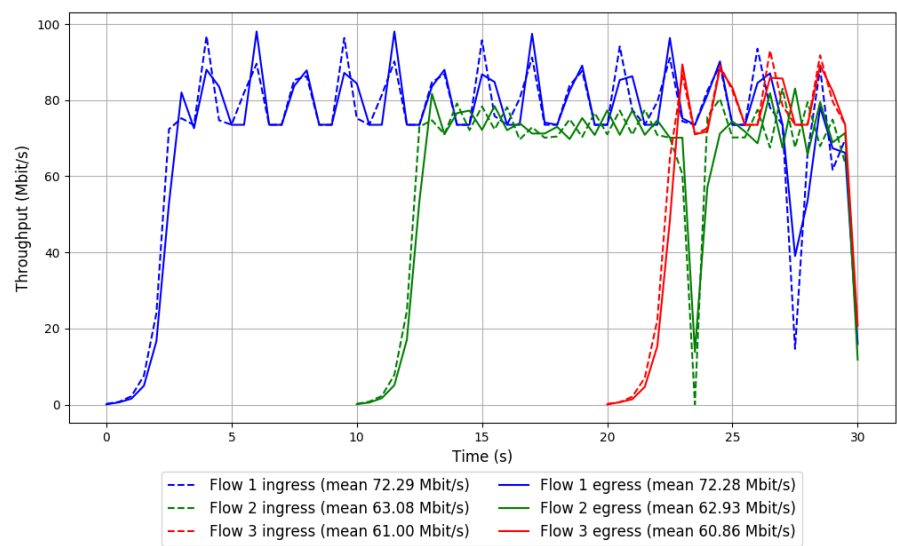
-- Flow 3:

Average throughput: 60.86 Mbit/s

95th percentile per-packet one-way delay: 162.760 ms

Loss rate: 0.31%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-03-01 12:13:22

End at: 2018-03-01 12:13:52

Below is generated by plot.py at 2018-03-01 15:49:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.08 Mbit/s

95th percentile per-packet one-way delay: 162.742 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 67.39 Mbit/s

95th percentile per-packet one-way delay: 162.772 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 62.18 Mbit/s

95th percentile per-packet one-way delay: 162.611 ms

Loss rate: 0.20%

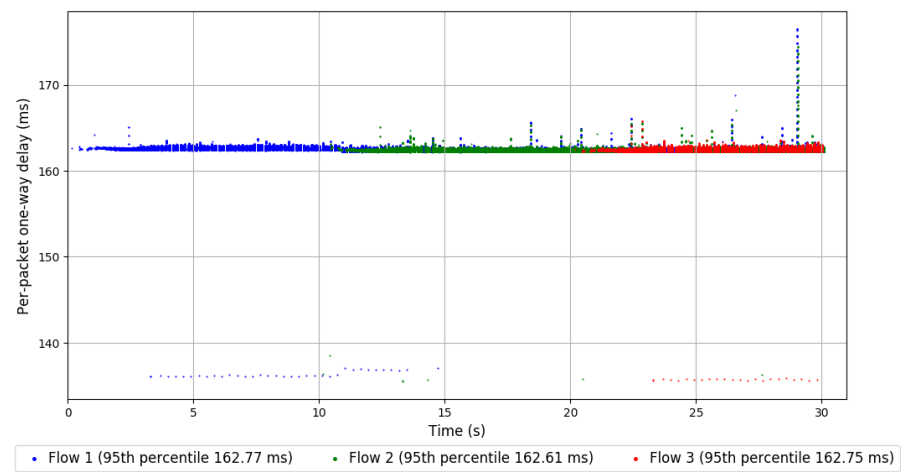
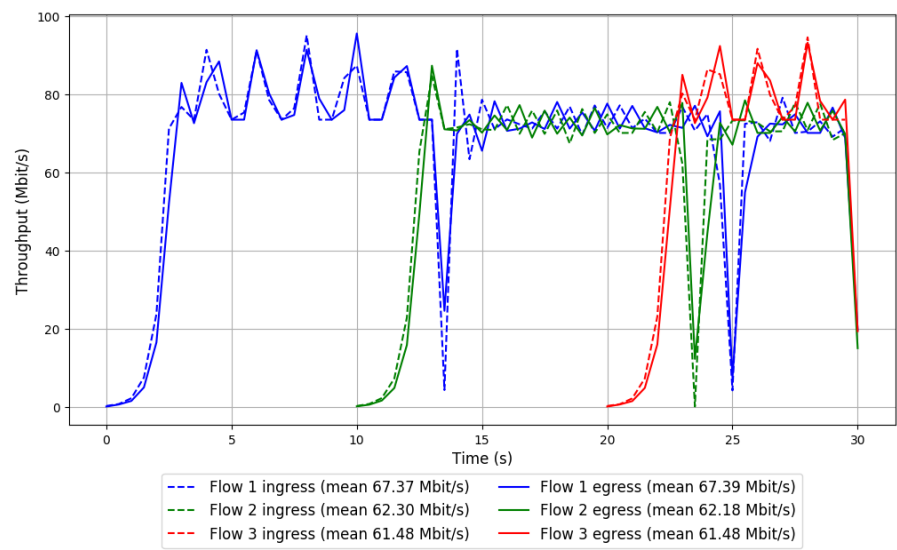
-- Flow 3:

Average throughput: 61.48 Mbit/s

95th percentile per-packet one-way delay: 162.751 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-03-01 12:32:57

End at: 2018-03-01 12:33:27

Below is generated by plot.py at 2018-03-01 15:49:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.22 Mbit/s

95th percentile per-packet one-way delay: 162.575 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 65.21 Mbit/s

95th percentile per-packet one-way delay: 162.561 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.16 Mbit/s

95th percentile per-packet one-way delay: 162.568 ms

Loss rate: 0.20%

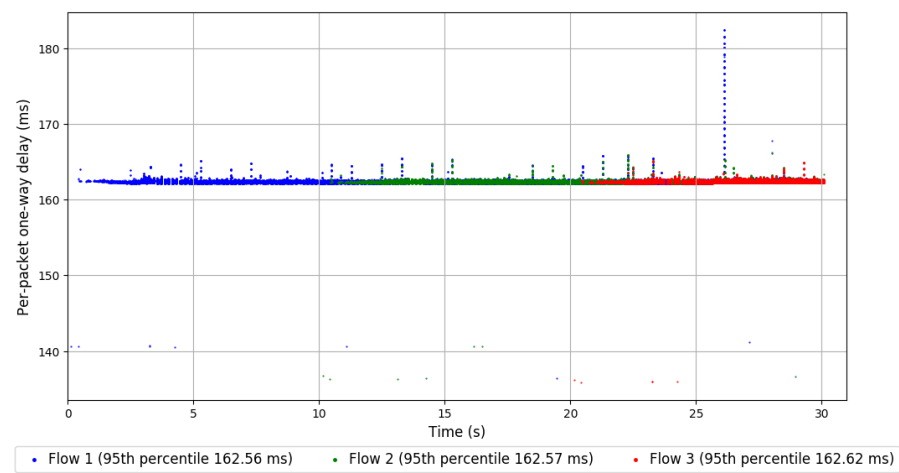
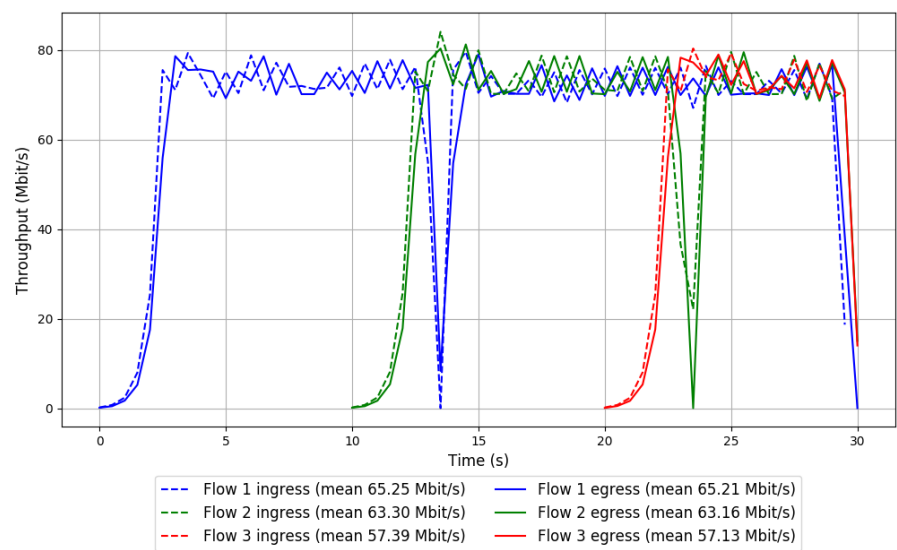
-- Flow 3:

Average throughput: 57.13 Mbit/s

95th percentile per-packet one-way delay: 162.622 ms

Loss rate: 0.44%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-03-01 12:52:51

End at: 2018-03-01 12:53:21

Below is generated by plot.py at 2018-03-01 15:49:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.95 Mbit/s

95th percentile per-packet one-way delay: 161.759 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 67.93 Mbit/s

95th percentile per-packet one-way delay: 161.747 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 65.71 Mbit/s

95th percentile per-packet one-way delay: 161.773 ms

Loss rate: 0.18%

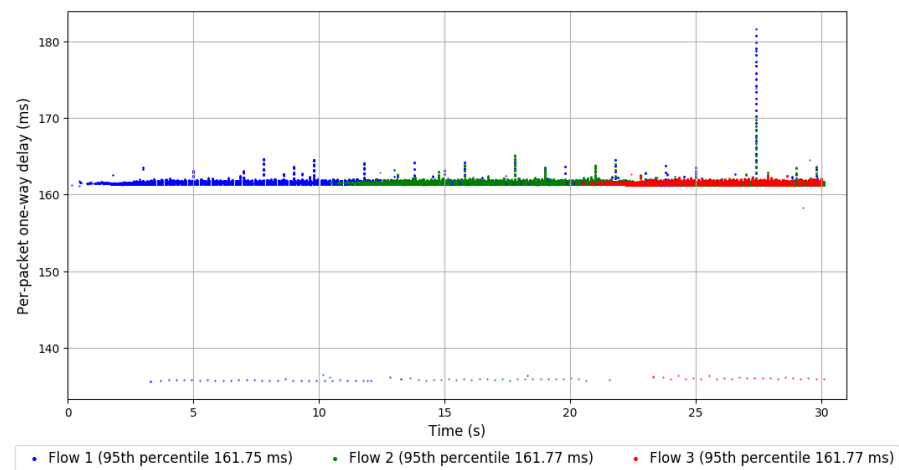
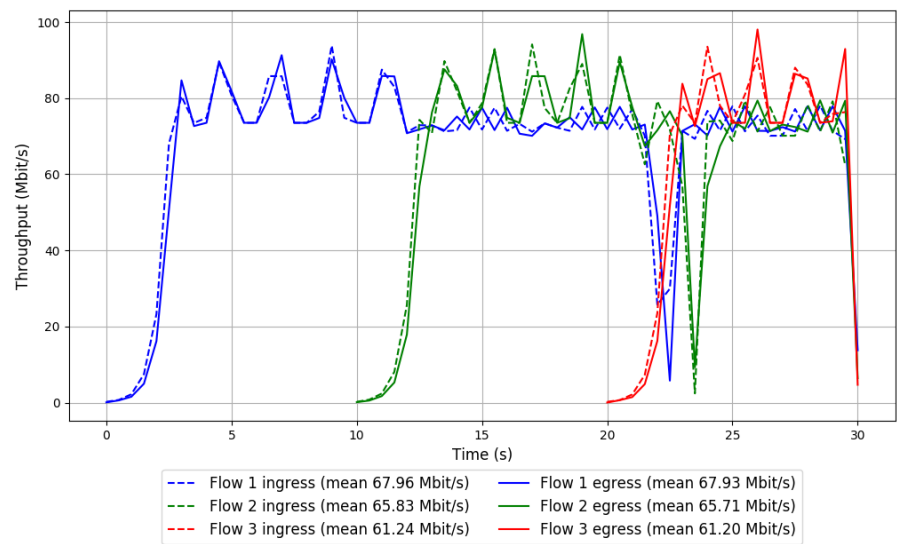
-- Flow 3:

Average throughput: 61.20 Mbit/s

95th percentile per-packet one-way delay: 161.770 ms

Loss rate: 0.42%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-03-01 13:12:35

End at: 2018-03-01 13:13:05

Below is generated by plot.py at 2018-03-01 15:52:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.26 Mbit/s

95th percentile per-packet one-way delay: 161.609 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 68.34 Mbit/s

95th percentile per-packet one-way delay: 161.641 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 63.20 Mbit/s

95th percentile per-packet one-way delay: 161.544 ms

Loss rate: 0.09%

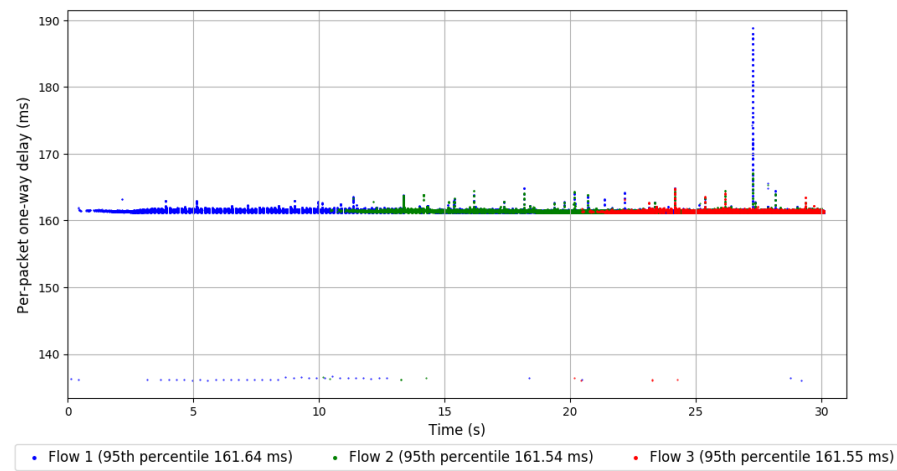
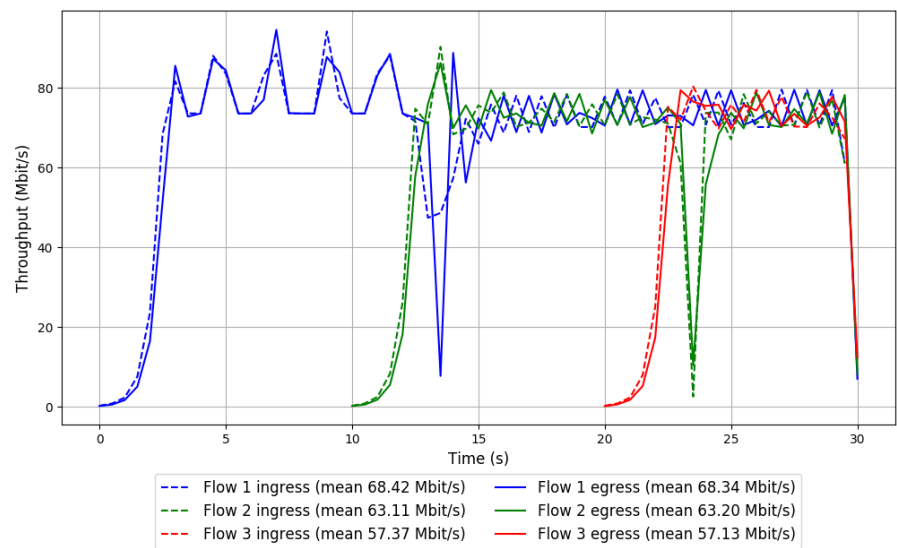
-- Flow 3:

Average throughput: 57.13 Mbit/s

95th percentile per-packet one-way delay: 161.551 ms

Loss rate: 0.41%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-03-01 13:32:19

End at: 2018-03-01 13:32:49

Below is generated by plot.py at 2018-03-01 15:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.23 Mbit/s

95th percentile per-packet one-way delay: 161.513 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 68.39 Mbit/s

95th percentile per-packet one-way delay: 161.477 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 66.81 Mbit/s

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

Loss rate: 0.19%

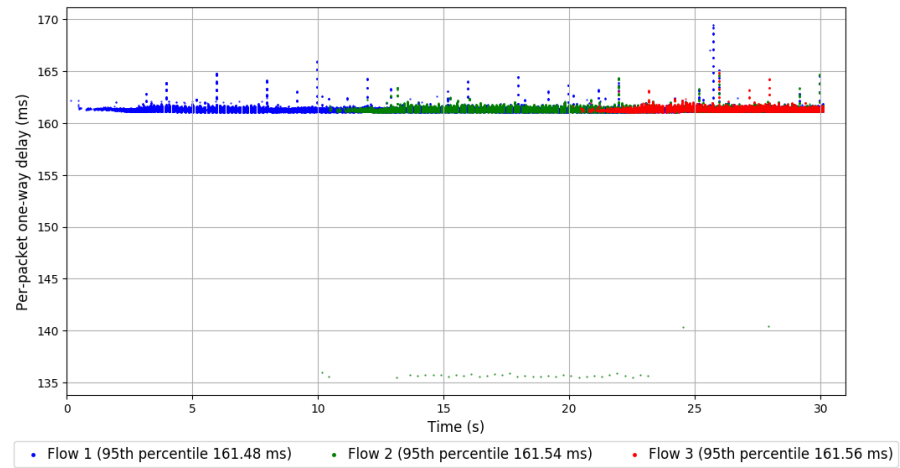
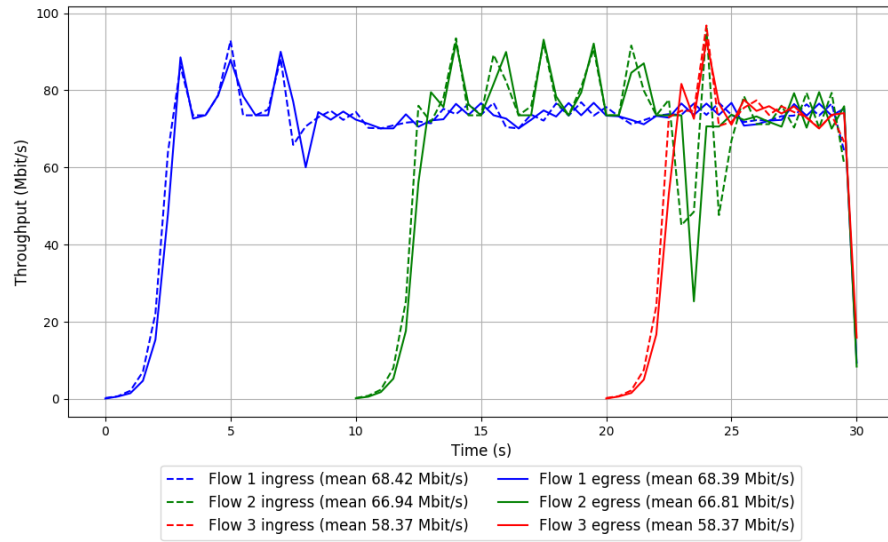
-- Flow 3:

Average throughput: 58.37 Mbit/s

95th percentile per-packet one-way delay: 161.555 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-03-01 10:28:23

End at: 2018-03-01 10:28:53

Below is generated by plot.py at 2018-03-01 15:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.88 Mbit/s

95th percentile per-packet one-way delay: 153.989 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 49.79 Mbit/s

95th percentile per-packet one-way delay: 152.222 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.74 Mbit/s

95th percentile per-packet one-way delay: 156.131 ms

Loss rate: 0.00%

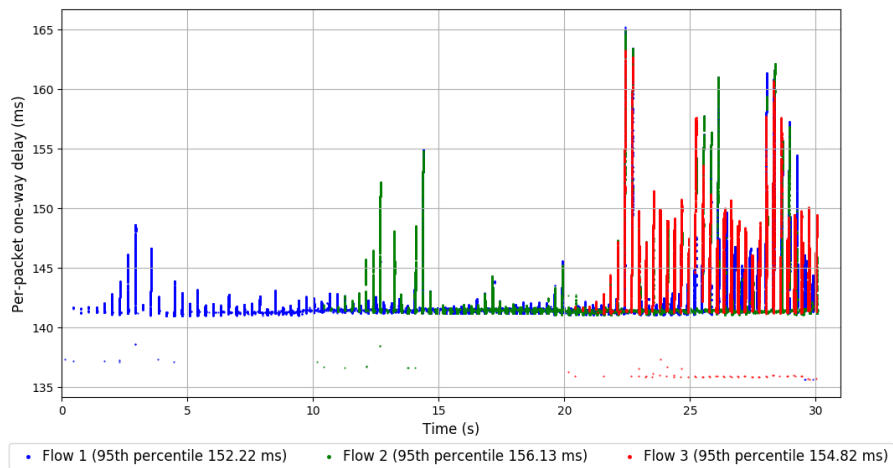
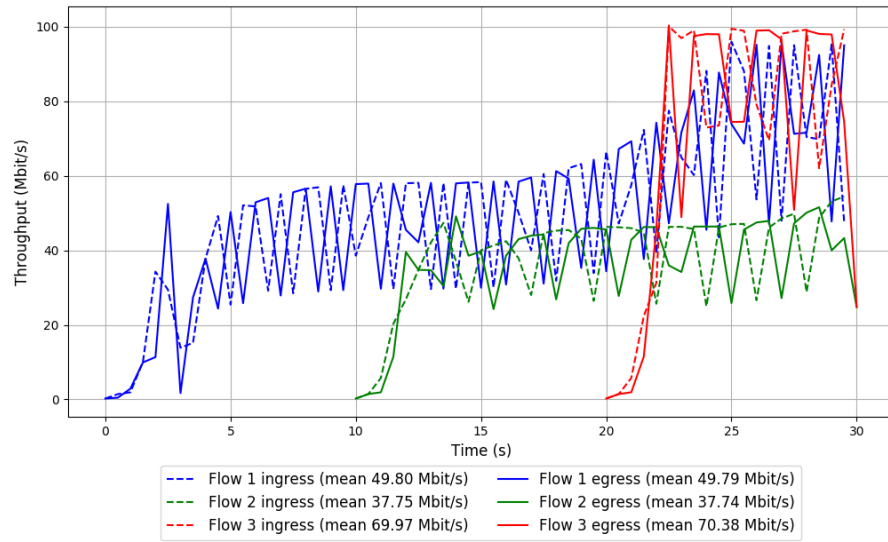
-- Flow 3:

Average throughput: 70.38 Mbit/s

95th percentile per-packet one-way delay: 154.821 ms

Loss rate: 0.00%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-03-01 10:48:37

End at: 2018-03-01 10:49:07

Below is generated by plot.py at 2018-03-01 15:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.31 Mbit/s

95th percentile per-packet one-way delay: 168.574 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 169.116 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.78 Mbit/s

95th percentile per-packet one-way delay: 165.449 ms

Loss rate: 0.02%

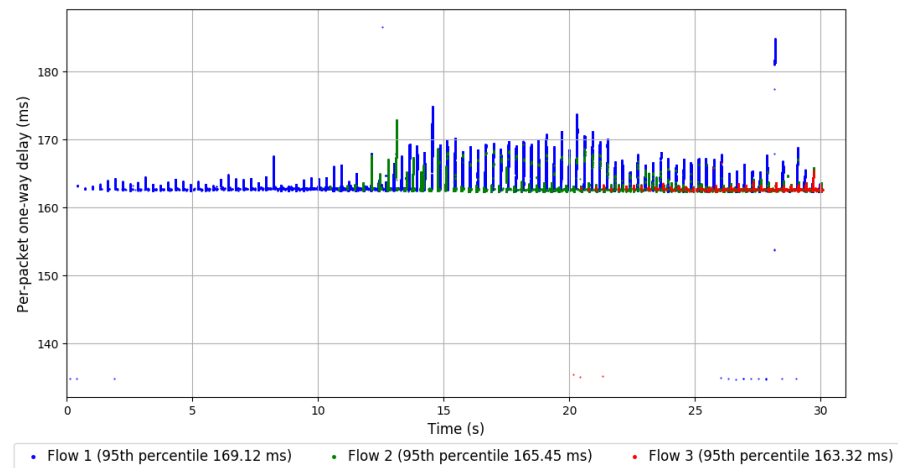
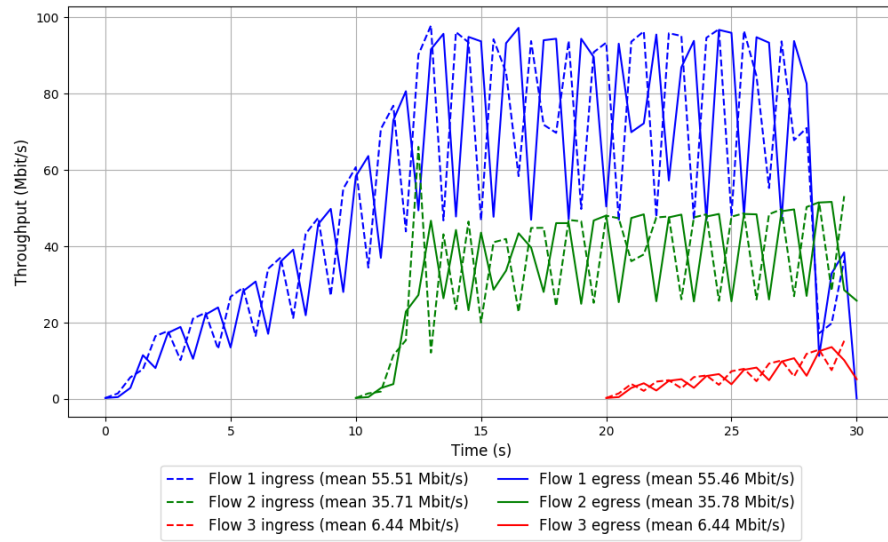
-- Flow 3:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 163.322 ms

Loss rate: 0.19%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-03-01 11:08:00

End at: 2018-03-01 11:08:30

Below is generated by plot.py at 2018-03-01 15:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.81 Mbit/s

95th percentile per-packet one-way delay: 166.734 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.62 Mbit/s

95th percentile per-packet one-way delay: 167.579 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 46.21 Mbit/s

95th percentile per-packet one-way delay: 164.709 ms

Loss rate: 0.00%

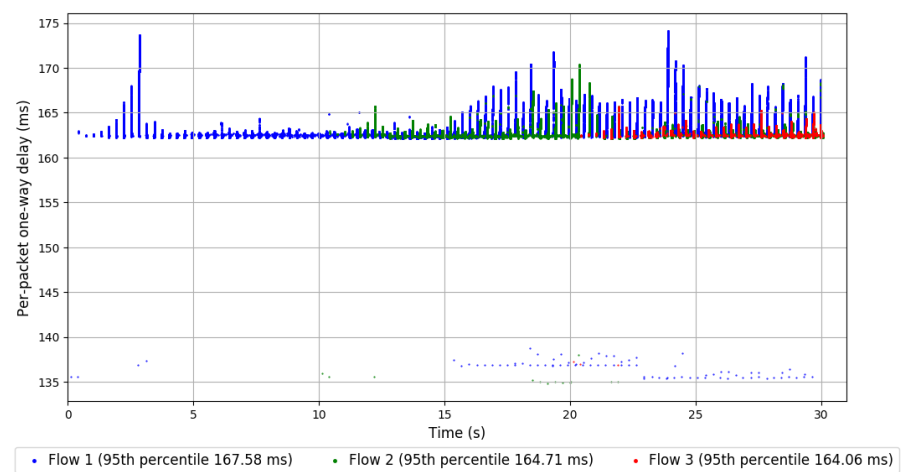
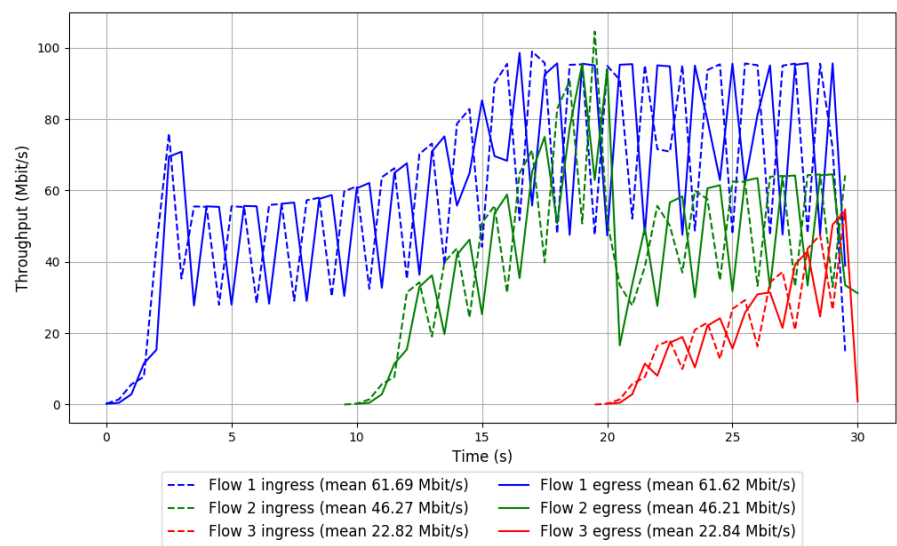
-- Flow 3:

Average throughput: 22.84 Mbit/s

95th percentile per-packet one-way delay: 164.063 ms

Loss rate: 0.01%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-03-01 11:27:50

End at: 2018-03-01 11:28:20

Below is generated by plot.py at 2018-03-01 15:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.17 Mbit/s

95th percentile per-packet one-way delay: 167.159 ms

Loss rate: 0.32%

-- Flow 1:

Average throughput: 41.10 Mbit/s

95th percentile per-packet one-way delay: 167.731 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 37.23 Mbit/s

95th percentile per-packet one-way delay: 165.047 ms

Loss rate: 0.07%

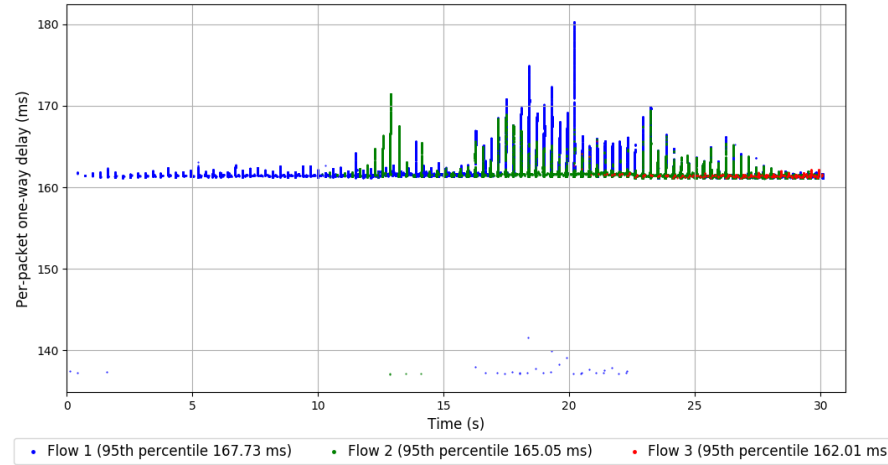
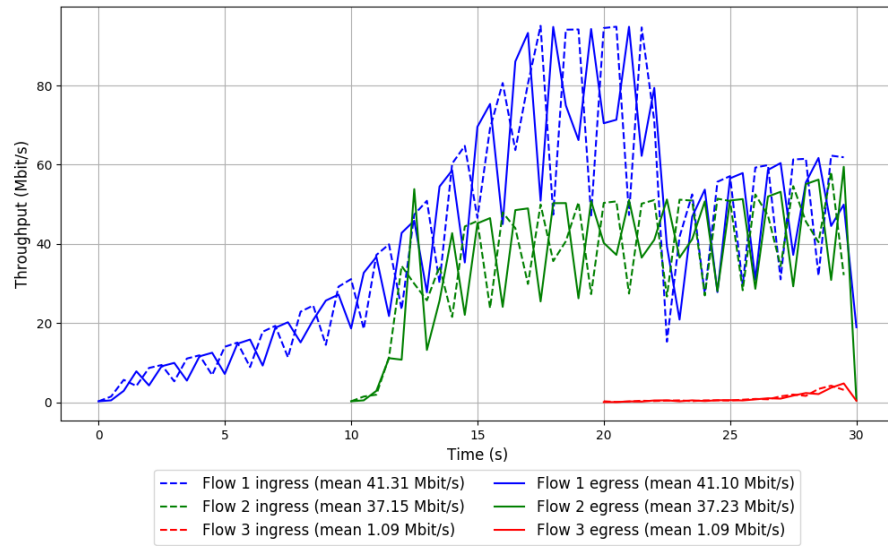
-- Flow 3:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 162.007 ms

Loss rate: 1.22%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-03-01 11:47:45

End at: 2018-03-01 11:48:15

Below is generated by plot.py at 2018-03-01 15:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.51 Mbit/s

95th percentile per-packet one-way delay: 170.681 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 59.76 Mbit/s

95th percentile per-packet one-way delay: 169.296 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 53.76 Mbit/s

95th percentile per-packet one-way delay: 172.538 ms

Loss rate: 0.01%

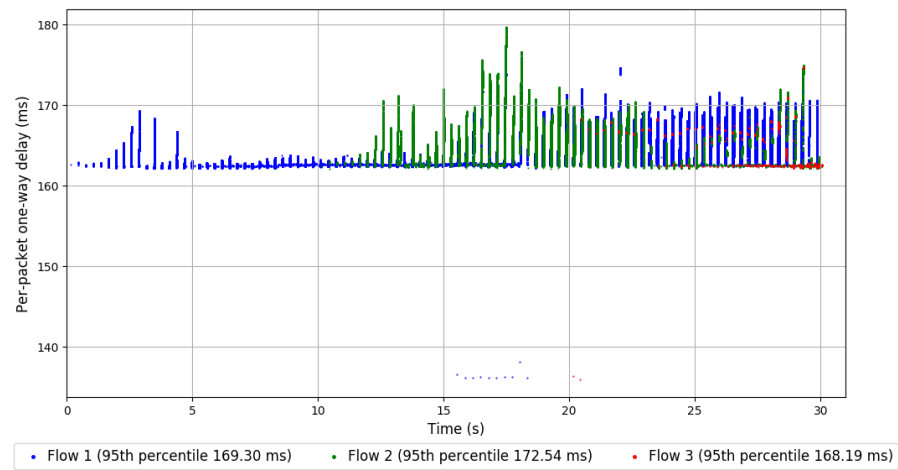
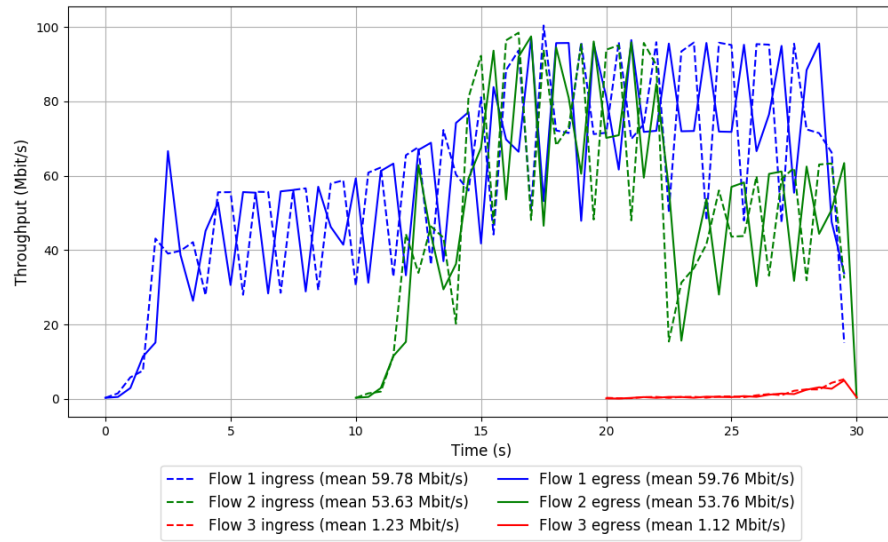
-- Flow 3:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 168.185 ms

Loss rate: 9.26%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-03-01 12:07:30

End at: 2018-03-01 12:08:00

Below is generated by plot.py at 2018-03-01 15:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.93 Mbit/s

95th percentile per-packet one-way delay: 168.874 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 43.91 Mbit/s

95th percentile per-packet one-way delay: 168.777 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.59 Mbit/s

95th percentile per-packet one-way delay: 169.191 ms

Loss rate: 0.00%

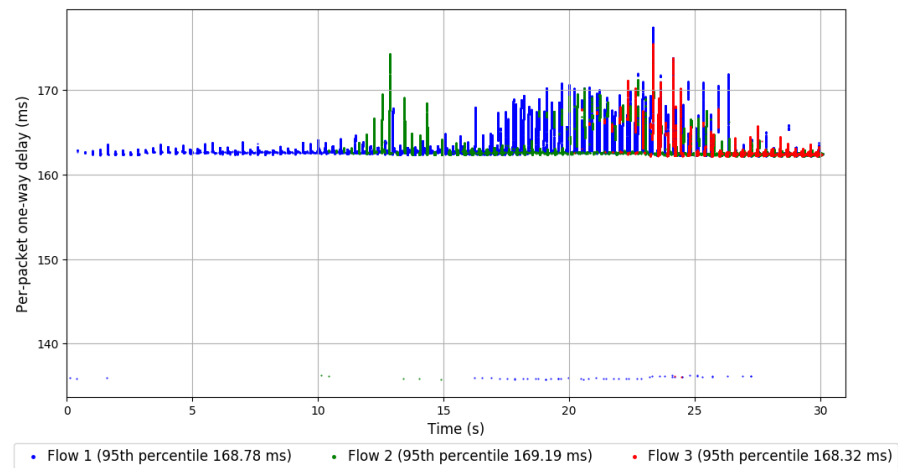
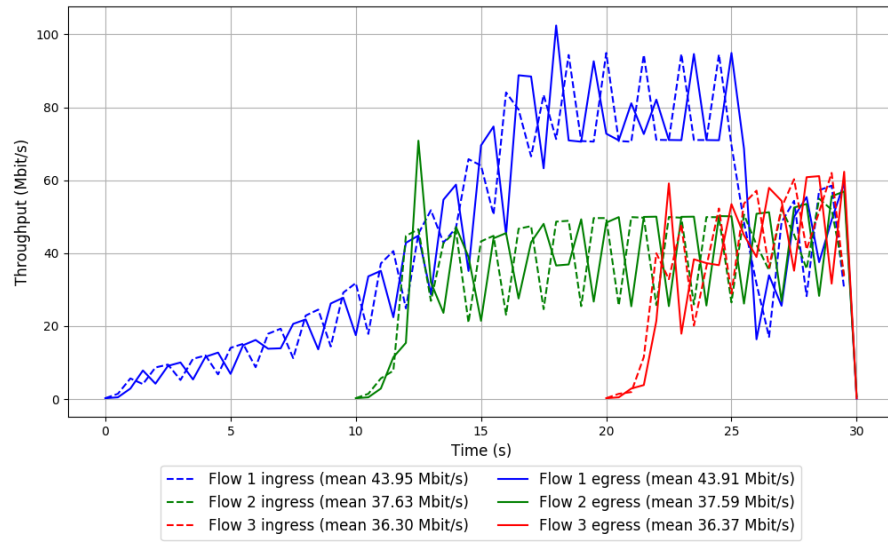
-- Flow 3:

Average throughput: 36.37 Mbit/s

95th percentile per-packet one-way delay: 168.325 ms

Loss rate: 0.23%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-03-01 12:27:04

End at: 2018-03-01 12:27:34

Below is generated by plot.py at 2018-03-01 15:52:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.90 Mbit/s

95th percentile per-packet one-way delay: 165.017 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 37.74 Mbit/s

95th percentile per-packet one-way delay: 163.980 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 38.17 Mbit/s

95th percentile per-packet one-way delay: 166.283 ms

Loss rate: 0.01%

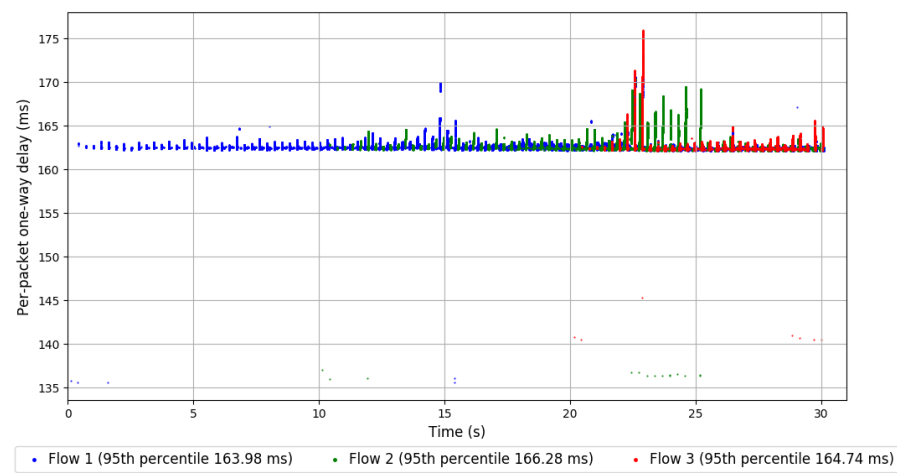
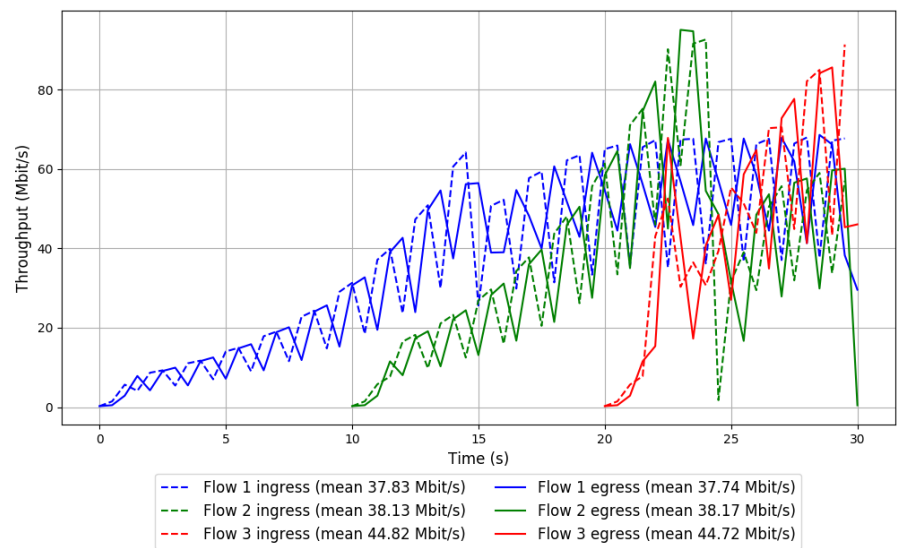
-- Flow 3:

Average throughput: 44.72 Mbit/s

95th percentile per-packet one-way delay: 164.742 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-03-01 12:46:44

End at: 2018-03-01 12:47:14

Below is generated by plot.py at 2018-03-01 15:52:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.41 Mbit/s

95th percentile per-packet one-way delay: 169.938 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 39.36 Mbit/s

95th percentile per-packet one-way delay: 169.339 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 47.93 Mbit/s

95th percentile per-packet one-way delay: 170.472 ms

Loss rate: 0.00%

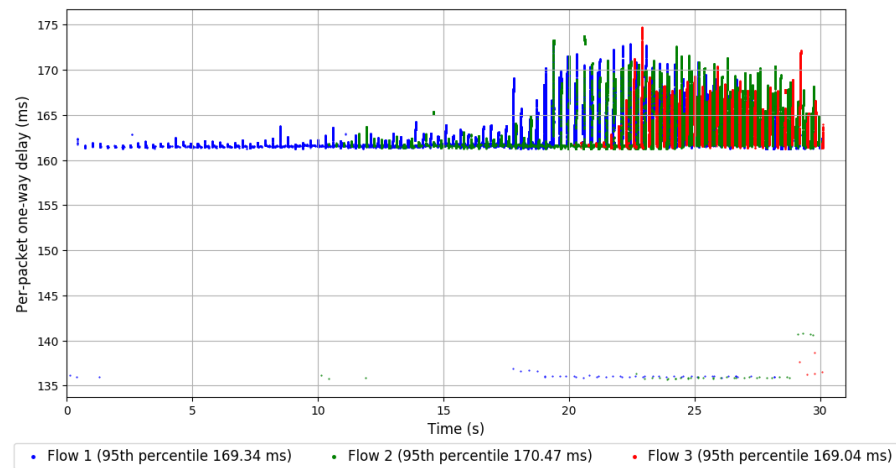
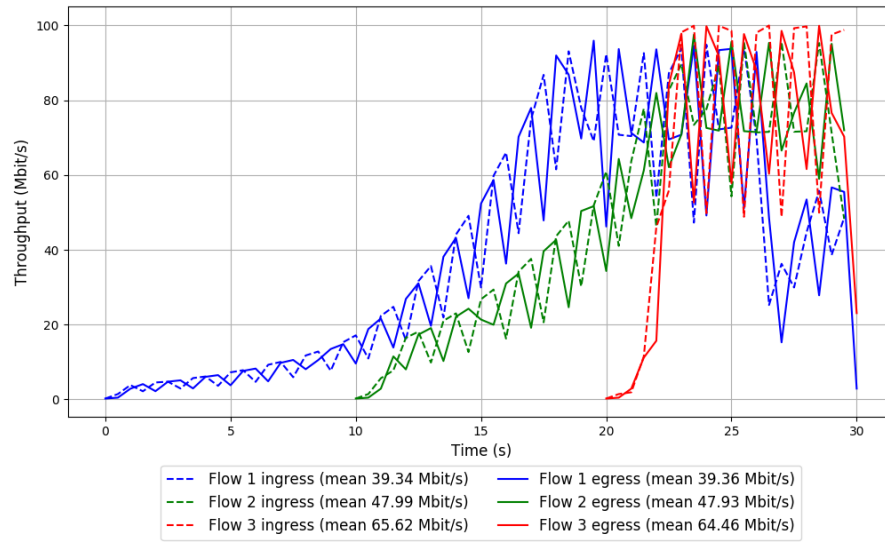
-- Flow 3:

Average throughput: 64.46 Mbit/s

95th percentile per-packet one-way delay: 169.042 ms

Loss rate: 2.02%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-03-01 13:06:37

End at: 2018-03-01 13:07:07

Below is generated by plot.py at 2018-03-01 15:53:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 100.39 Mbit/s

95th percentile per-packet one-way delay: 168.122 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 57.22 Mbit/s

95th percentile per-packet one-way delay: 168.578 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.36 Mbit/s

95th percentile per-packet one-way delay: 167.200 ms

Loss rate: 0.00%

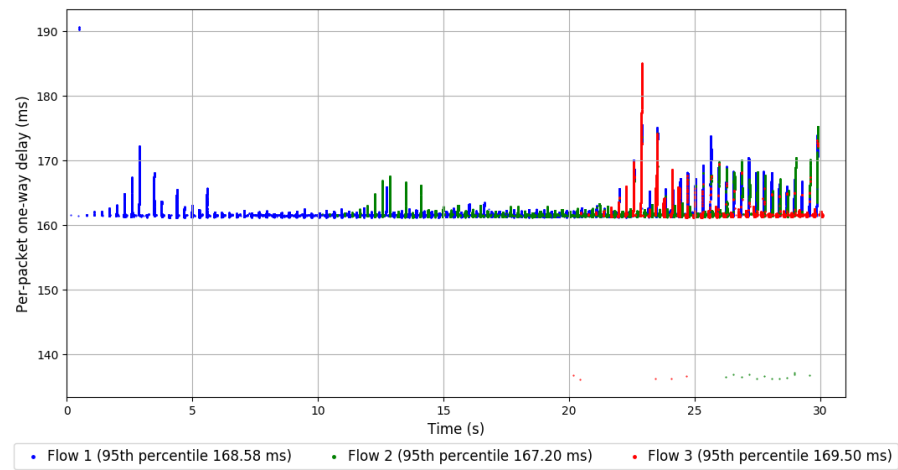
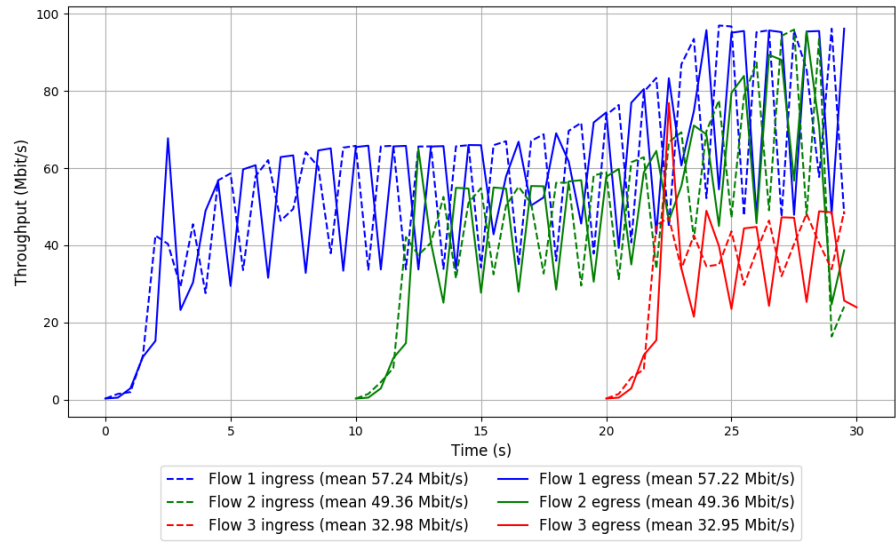
-- Flow 3:

Average throughput: 32.95 Mbit/s

95th percentile per-packet one-way delay: 169.495 ms

Loss rate: 0.02%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-03-01 13:26:19

End at: 2018-03-01 13:26:49

Below is generated by plot.py at 2018-03-01 15:53:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.47 Mbit/s

95th percentile per-packet one-way delay: 168.771 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 44.12 Mbit/s

95th percentile per-packet one-way delay: 168.883 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 27.00 Mbit/s

95th percentile per-packet one-way delay: 168.239 ms

Loss rate: 0.00%

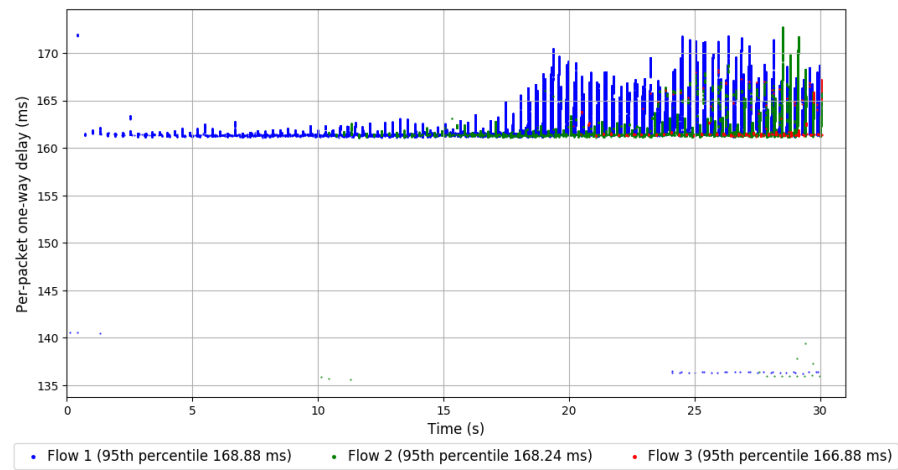
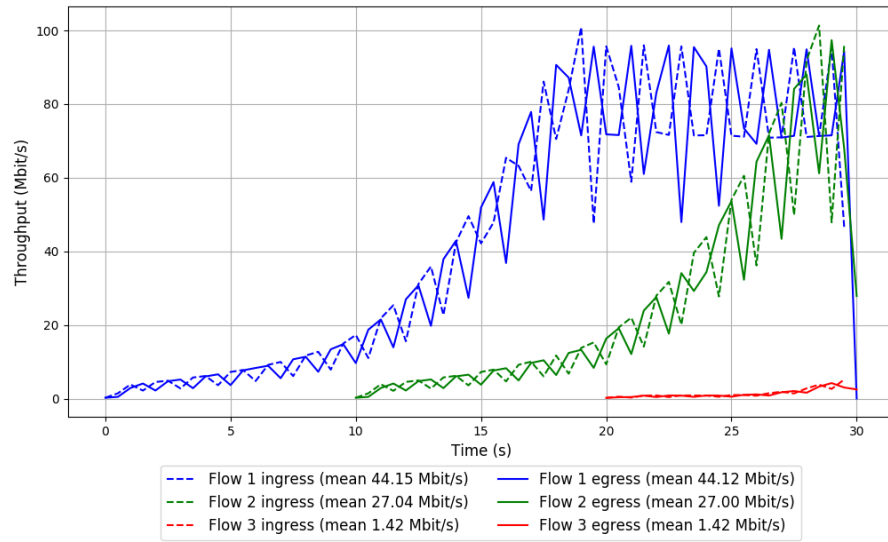
-- Flow 3:

Average throughput: 1.42 Mbit/s

95th percentile per-packet one-way delay: 166.879 ms

Loss rate: 0.17%

Run 10: Report of TCP Cubic — Data Link

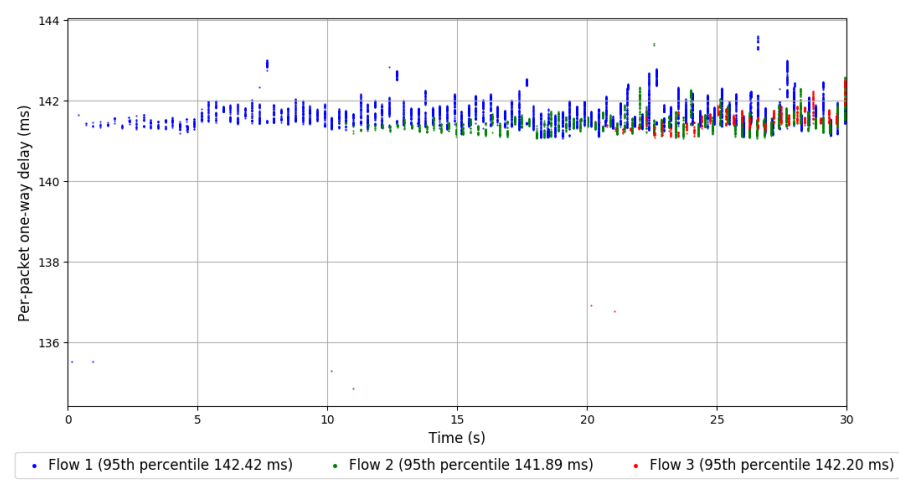
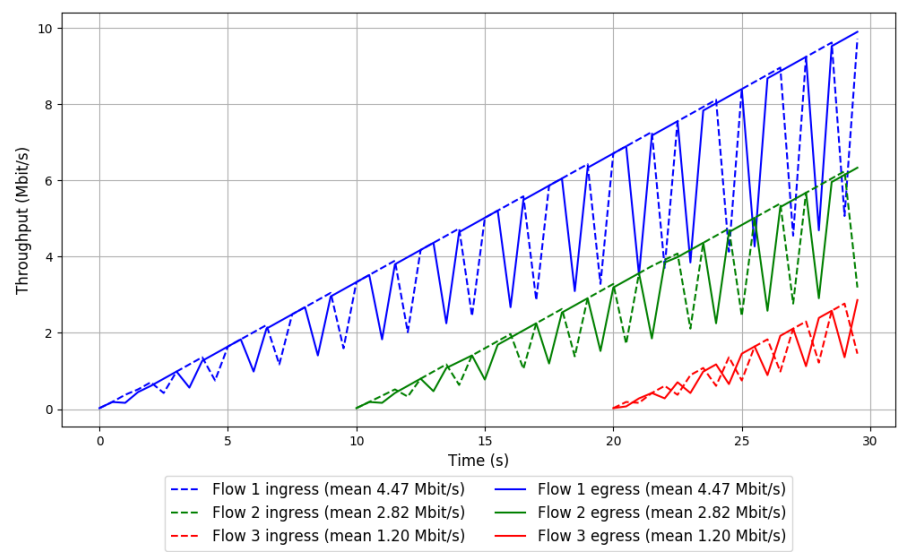


```
Run 1: Statistics of LEDBAT

Start at: 2018-03-01 10:21:23
End at: 2018-03-01 10:21:53

# Below is generated by plot.py at 2018-03-01 15:53:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.73 Mbit/s
95th percentile per-packet one-way delay: 142.274 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 142.423 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.82 Mbit/s
95th percentile per-packet one-way delay: 141.888 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.20 Mbit/s
95th percentile per-packet one-way delay: 142.198 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

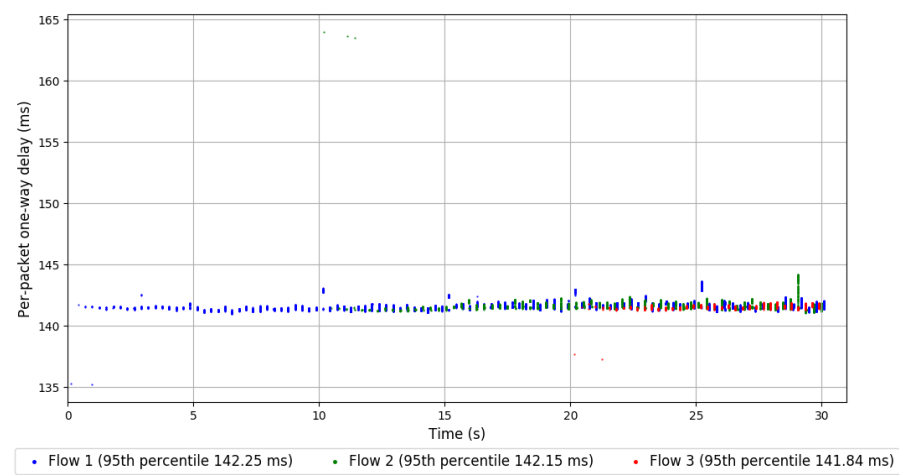
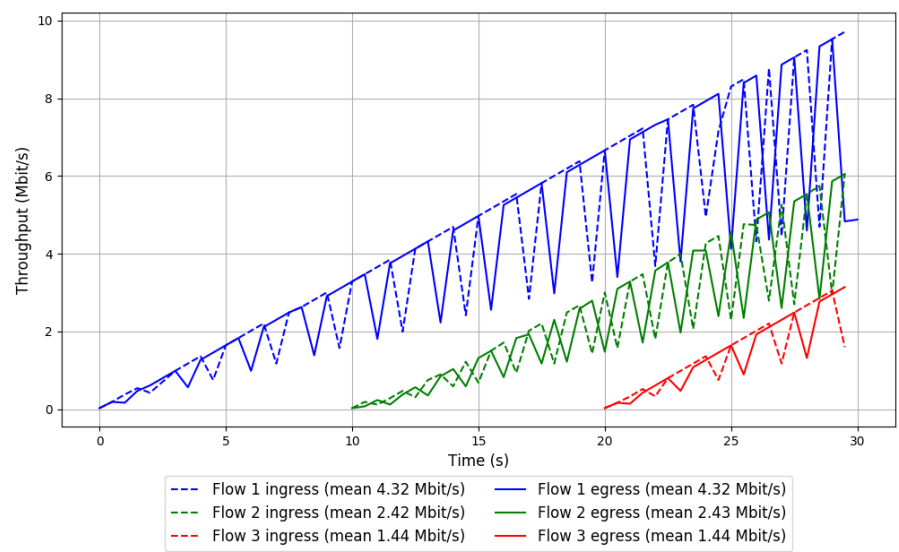


```
Run 2: Statistics of LEDBAT

Start at: 2018-03-01 10:41:28
End at: 2018-03-01 10:41:58

# Below is generated by plot.py at 2018-03-01 15:53:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 142.184 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 142.249 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.43 Mbit/s
95th percentile per-packet one-way delay: 142.146 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 141.842 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-03-01 11:01:14

End at: 2018-03-01 11:01:44

Below is generated by plot.py at 2018-03-01 15:53:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 163.099 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.60 Mbit/s

95th percentile per-packet one-way delay: 163.028 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 163.147 ms

Loss rate: 0.00%

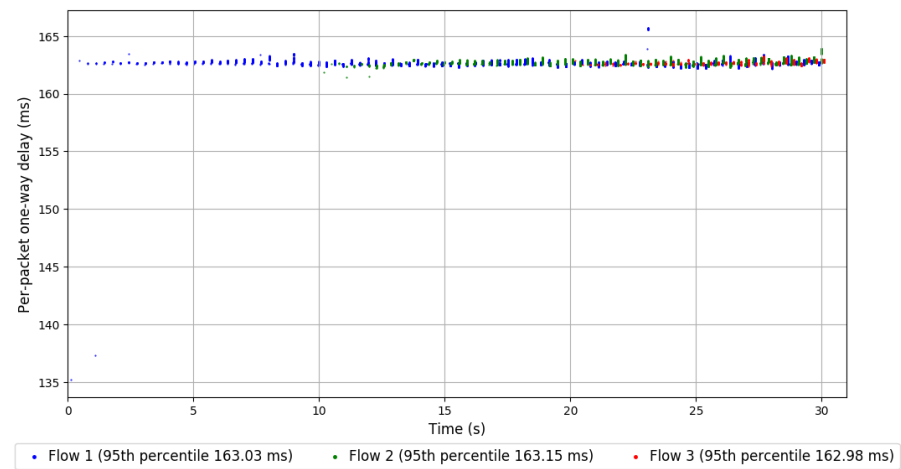
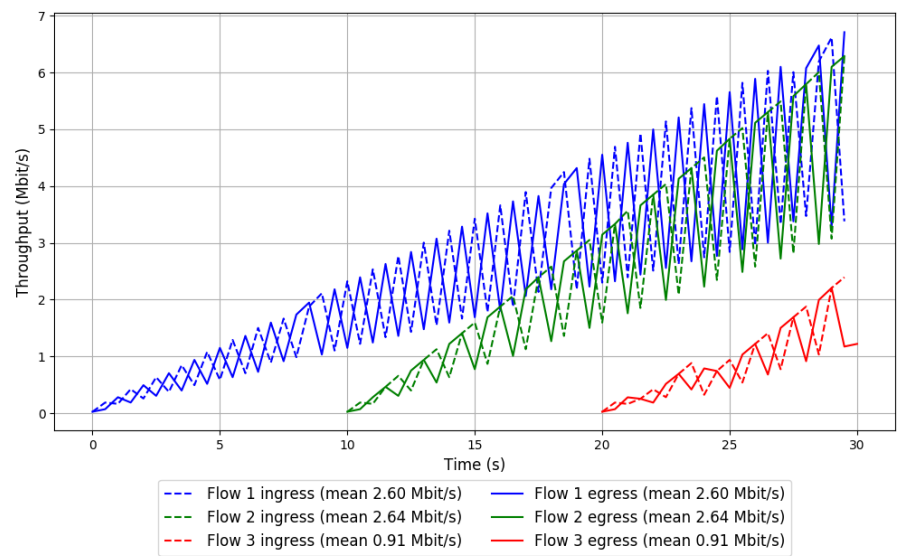
-- Flow 3:

Average throughput: 0.91 Mbit/s

95th percentile per-packet one-way delay: 162.984 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-03-01 11:21:03

End at: 2018-03-01 11:21:33

Below is generated by plot.py at 2018-03-01 15:53:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.82 Mbit/s

95th percentile per-packet one-way delay: 162.298 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.06 Mbit/s

95th percentile per-packet one-way delay: 162.384 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 162.121 ms

Loss rate: 0.00%

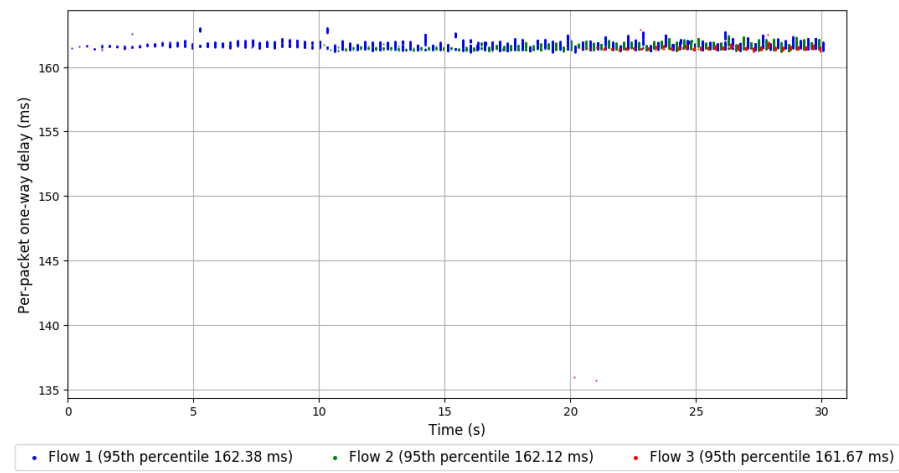
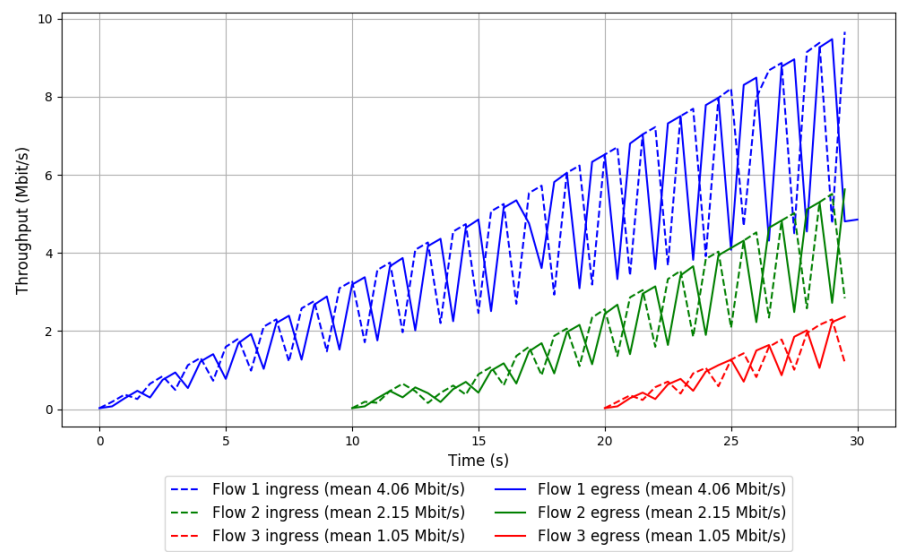
-- Flow 3:

Average throughput: 1.05 Mbit/s

95th percentile per-packet one-way delay: 161.668 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-03-01 11:40:47

End at: 2018-03-01 11:41:17

Below is generated by plot.py at 2018-03-01 15:53:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.87 Mbit/s

95th percentile per-packet one-way delay: 161.936 ms

Loss rate: 0.84%

-- Flow 1:

Average throughput: 3.14 Mbit/s

95th percentile per-packet one-way delay: 162.037 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 161.851 ms

Loss rate: 2.86%

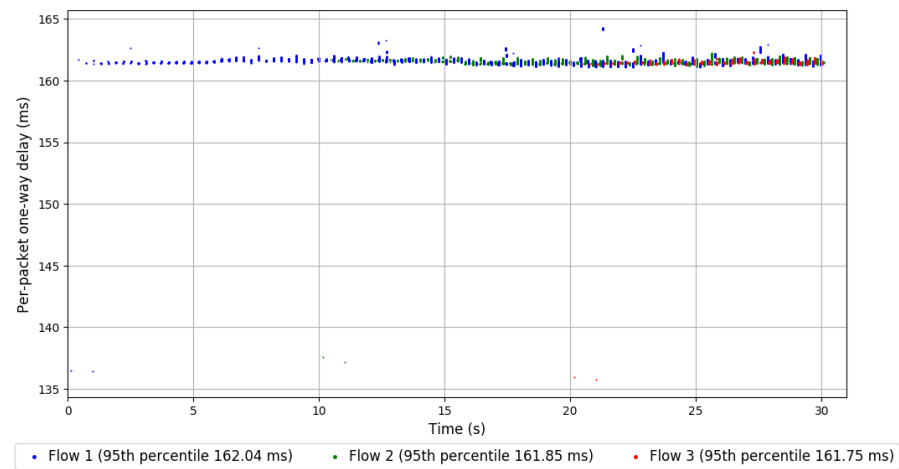
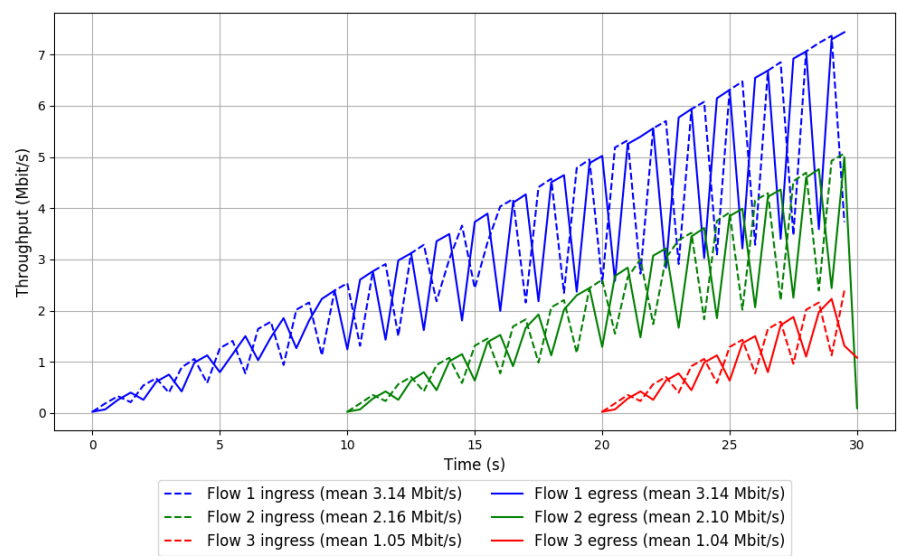
-- Flow 3:

Average throughput: 1.04 Mbit/s

95th percentile per-packet one-way delay: 161.754 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-03-01 12:00:37

End at: 2018-03-01 12:01:07

Below is generated by plot.py at 2018-03-01 15:53:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.87 Mbit/s

95th percentile per-packet one-way delay: 163.215 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.08 Mbit/s

95th percentile per-packet one-way delay: 163.218 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.05 Mbit/s

95th percentile per-packet one-way delay: 163.202 ms

Loss rate: 0.00%

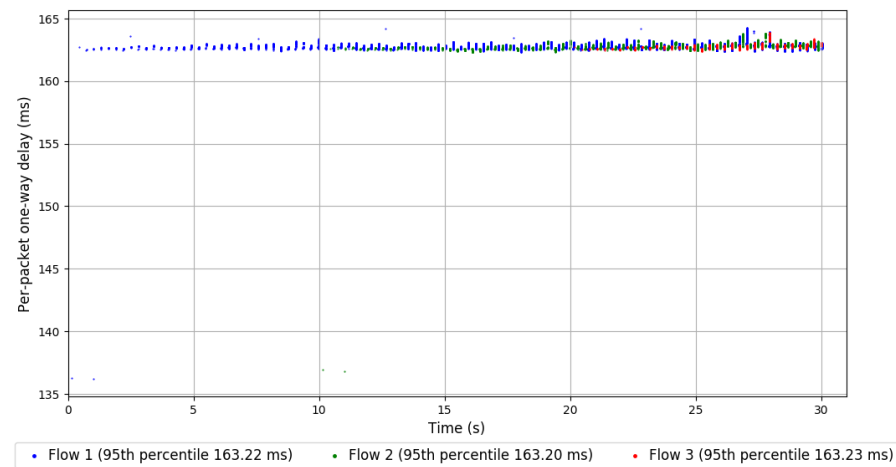
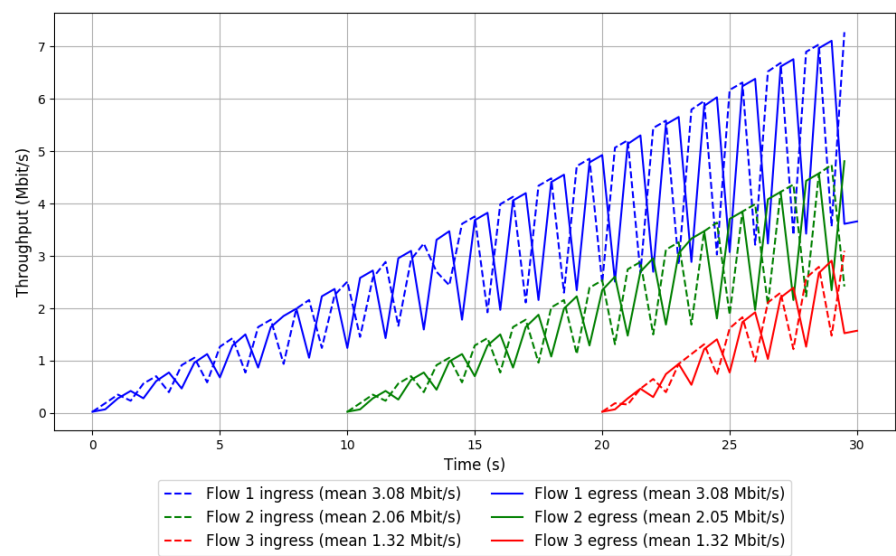
-- Flow 3:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 163.233 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-03-01 12:20:04

End at: 2018-03-01 12:20:34

Below is generated by plot.py at 2018-03-01 15:53:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.96 Mbit/s

95th percentile per-packet one-way delay: 163.013 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.25 Mbit/s

95th percentile per-packet one-way delay: 163.067 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 162.971 ms

Loss rate: 0.00%

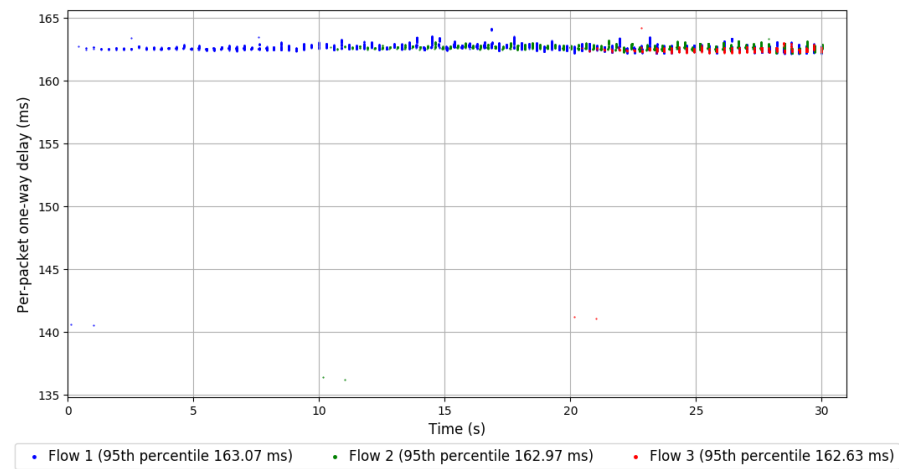
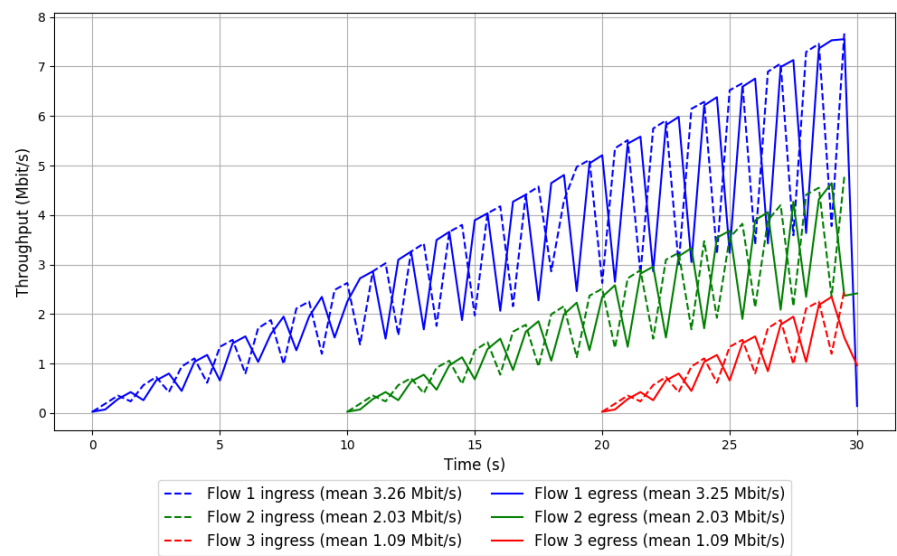
-- Flow 3:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 162.627 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-03-01 12:40:00

End at: 2018-03-01 12:40:30

Below is generated by plot.py at 2018-03-01 15:53:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.13 Mbit/s

95th percentile per-packet one-way delay: 163.201 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 163.239 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 2.57 Mbit/s

95th percentile per-packet one-way delay: 163.096 ms

Loss rate: 0.00%

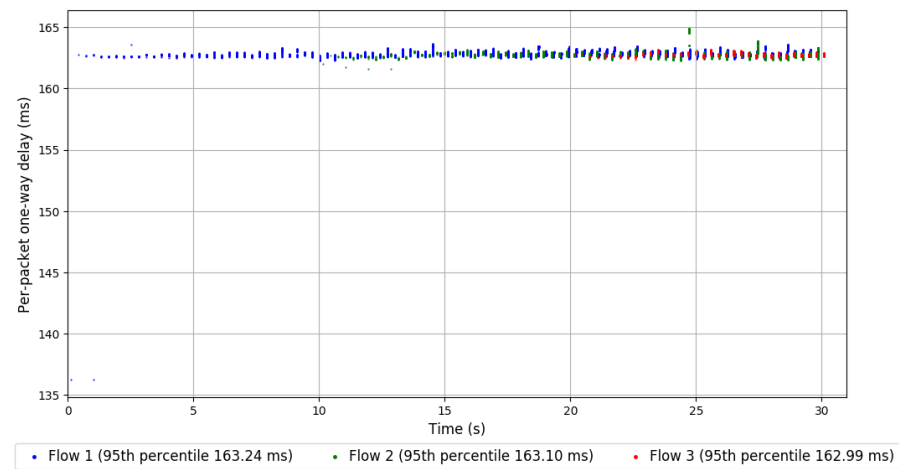
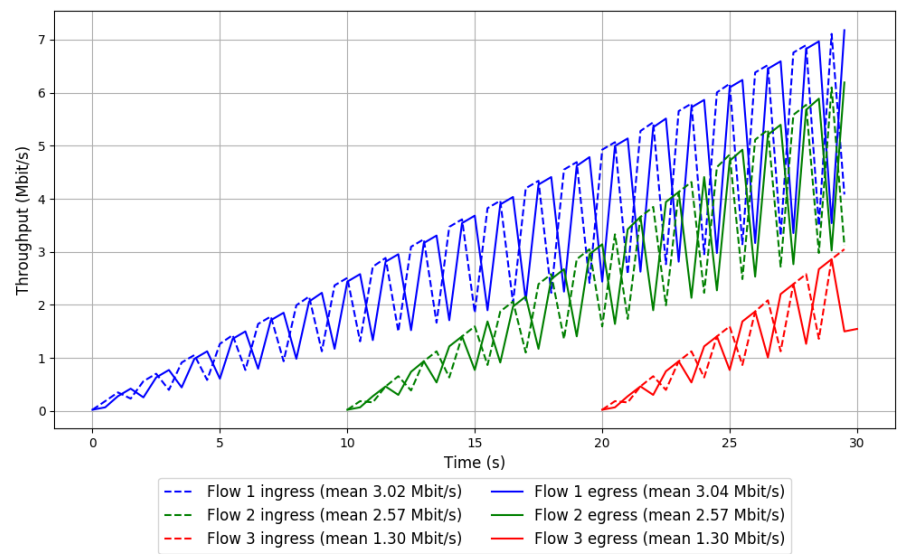
-- Flow 3:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 162.994 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-03-01 12:59:57

End at: 2018-03-01 13:00:27

Below is generated by plot.py at 2018-03-01 15:53:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.94 Mbit/s

95th percentile per-packet one-way delay: 162.033 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.12 Mbit/s

95th percentile per-packet one-way delay: 162.037 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.10 Mbit/s

95th percentile per-packet one-way delay: 162.026 ms

Loss rate: 0.00%

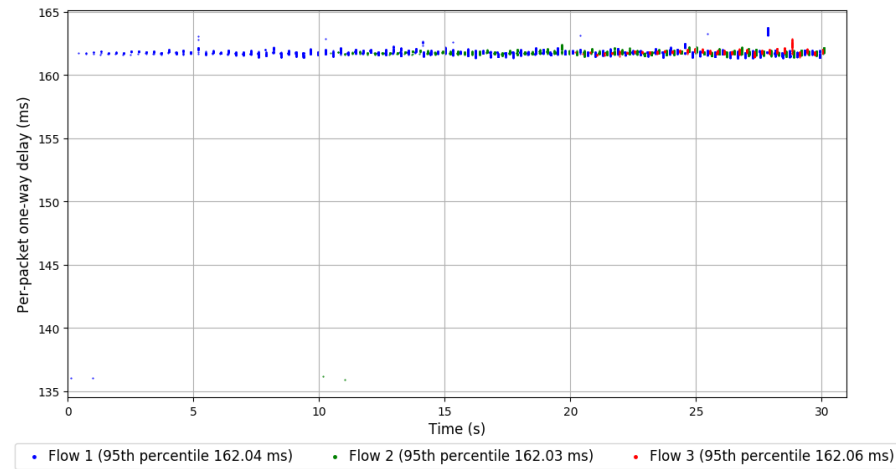
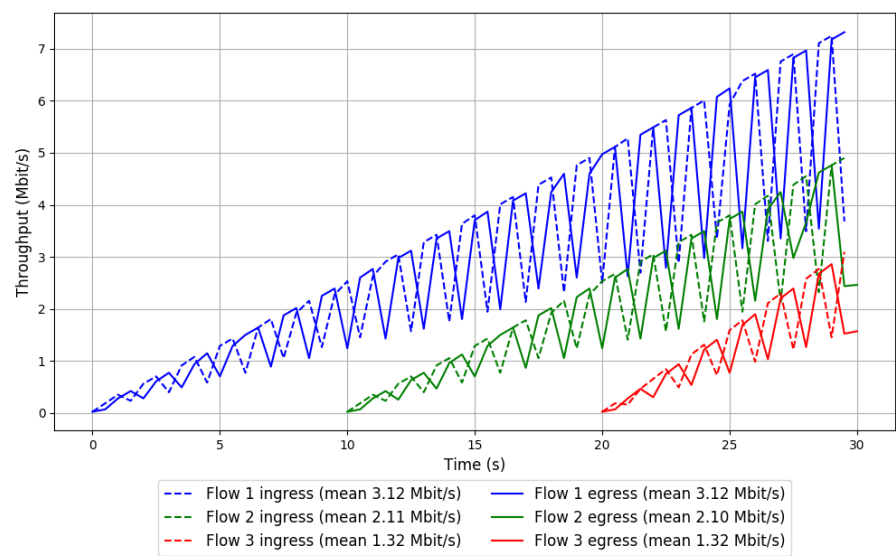
-- Flow 3:

Average throughput: 1.32 Mbit/s

95th percentile per-packet one-way delay: 162.057 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

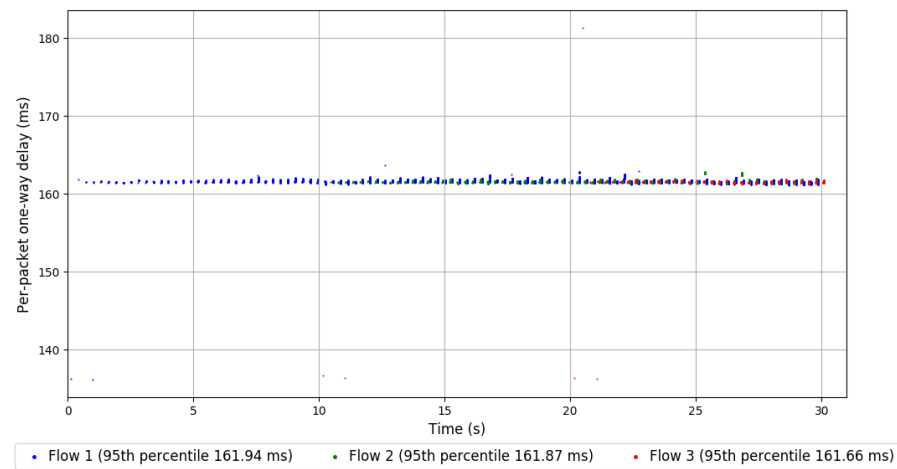
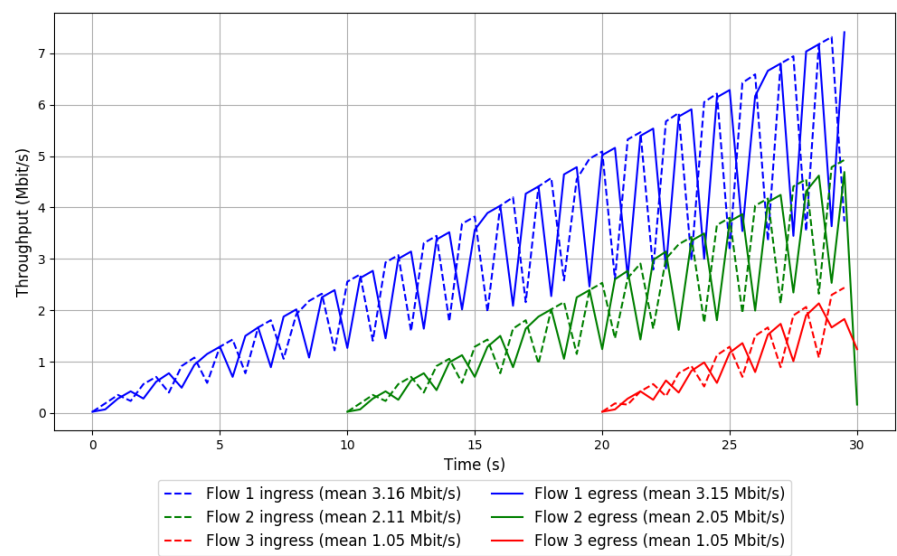


```
Run 10: Statistics of LEDBAT

Start at: 2018-03-01 13:19:27
End at: 2018-03-01 13:19:57

# Below is generated by plot.py at 2018-03-01 15:53:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 161.921 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 161.944 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 161.870 ms
Loss rate: 2.76%
-- Flow 3:
Average throughput: 1.05 Mbit/s
95th percentile per-packet one-way delay: 161.656 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

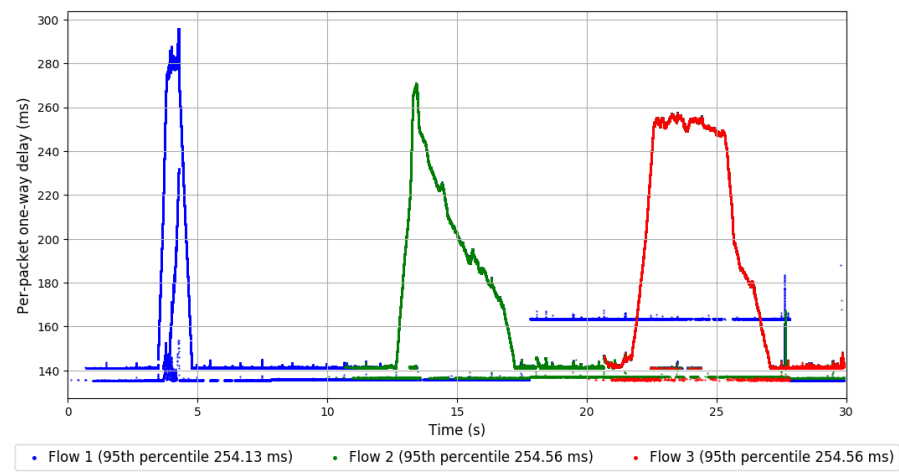
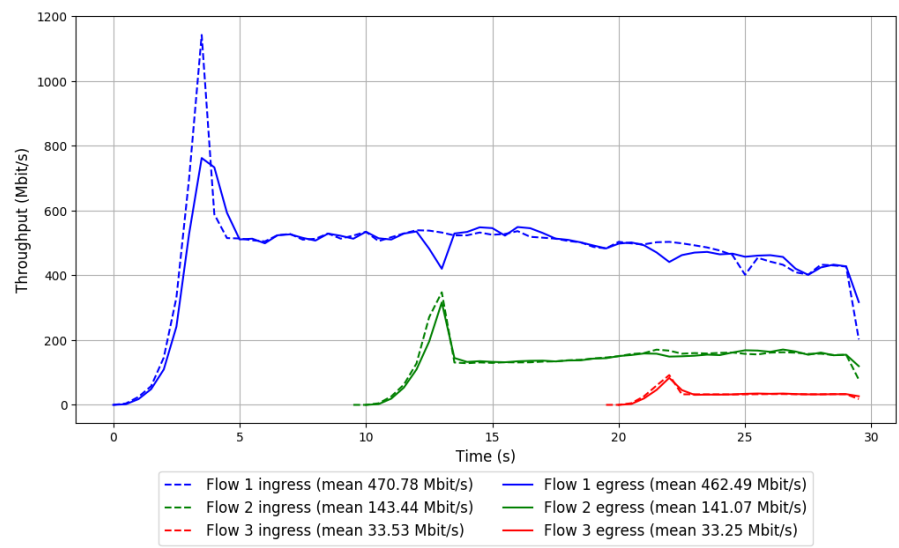


```
Run 1: Statistics of PCC

Start at: 2018-03-01 10:38:35
End at: 2018-03-01 10:39:05

# Below is generated by plot.py at 2018-03-01 16:01:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 567.51 Mbit/s
95th percentile per-packet one-way delay: 254.255 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 462.49 Mbit/s
95th percentile per-packet one-way delay: 254.130 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 141.07 Mbit/s
95th percentile per-packet one-way delay: 254.562 ms
Loss rate: 1.66%
-- Flow 3:
Average throughput: 33.25 Mbit/s
95th percentile per-packet one-way delay: 254.561 ms
Loss rate: 0.84%
```

Run 1: Report of PCC — Data Link

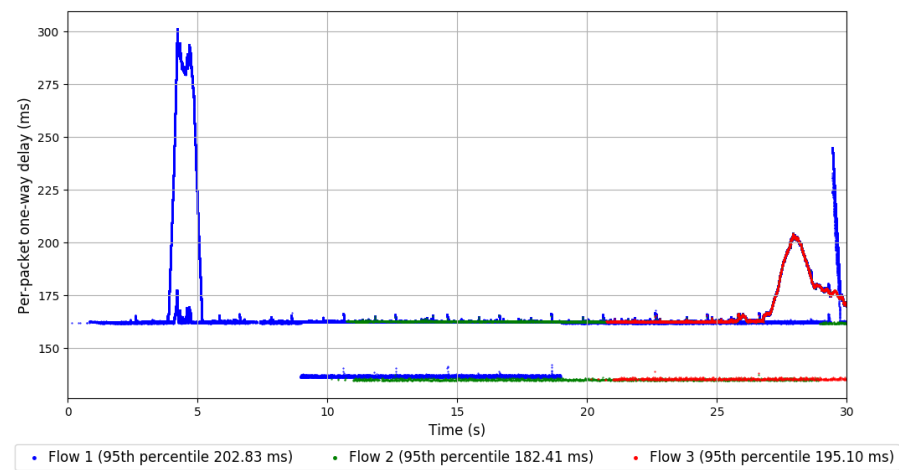
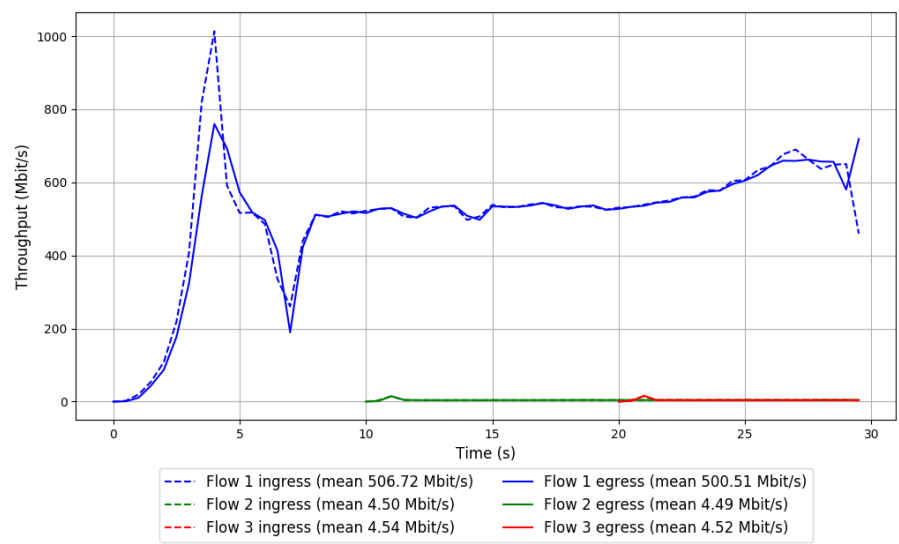


```
Run 2: Statistics of PCC

Start at: 2018-03-01 10:58:24
End at: 2018-03-01 10:58:54

# Below is generated by plot.py at 2018-03-01 16:01:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 504.99 Mbit/s
95th percentile per-packet one-way delay: 202.761 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 500.51 Mbit/s
95th percentile per-packet one-way delay: 202.829 ms
Loss rate: 1.31%
-- Flow 2:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 182.410 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 195.102 ms
Loss rate: 0.30%
```

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-03-01 11:18:11

End at: 2018-03-01 11:18:41

Below is generated by plot.py at 2018-03-01 16:01:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 543.12 Mbit/s

95th percentile per-packet one-way delay: 218.796 ms

Loss rate: 1.17%

-- Flow 1:

Average throughput: 497.05 Mbit/s

95th percentile per-packet one-way delay: 219.865 ms

Loss rate: 1.26%

-- Flow 2:

Average throughput: 67.07 Mbit/s

95th percentile per-packet one-way delay: 212.384 ms

Loss rate: 0.12%

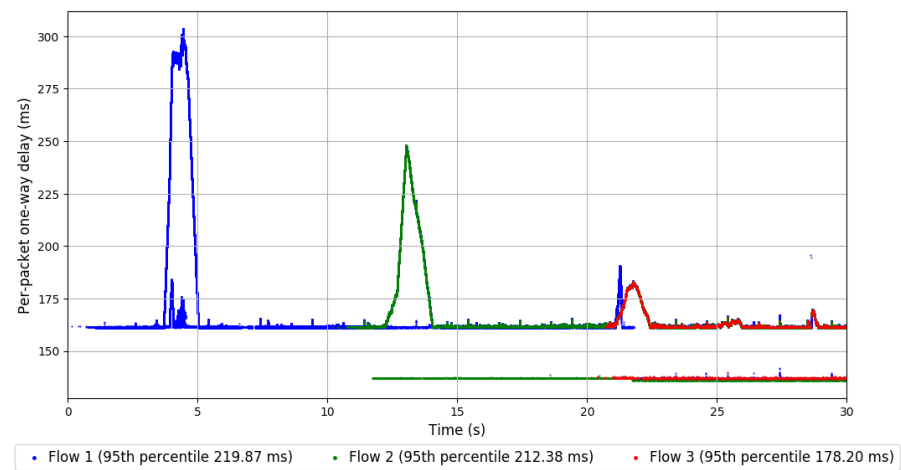
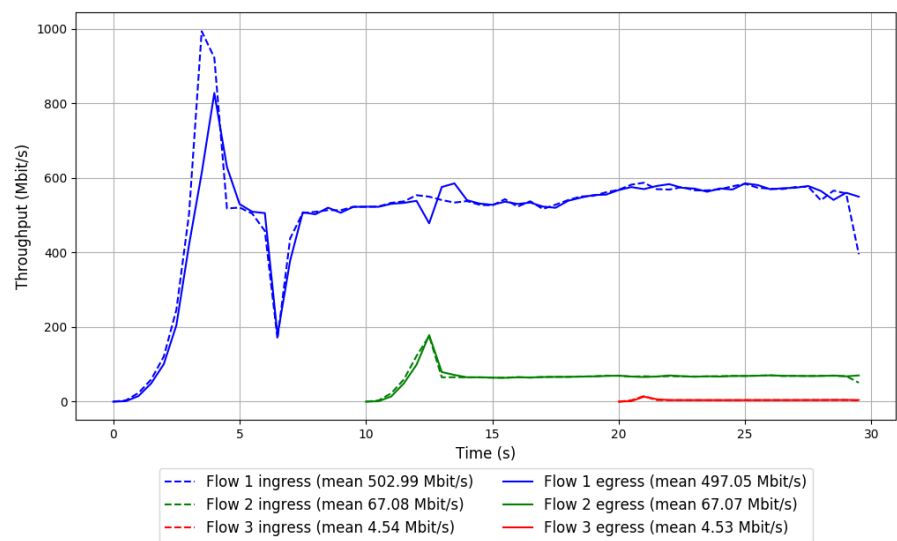
-- Flow 3:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 178.202 ms

Loss rate: 0.21%

Run 3: Report of PCC — Data Link

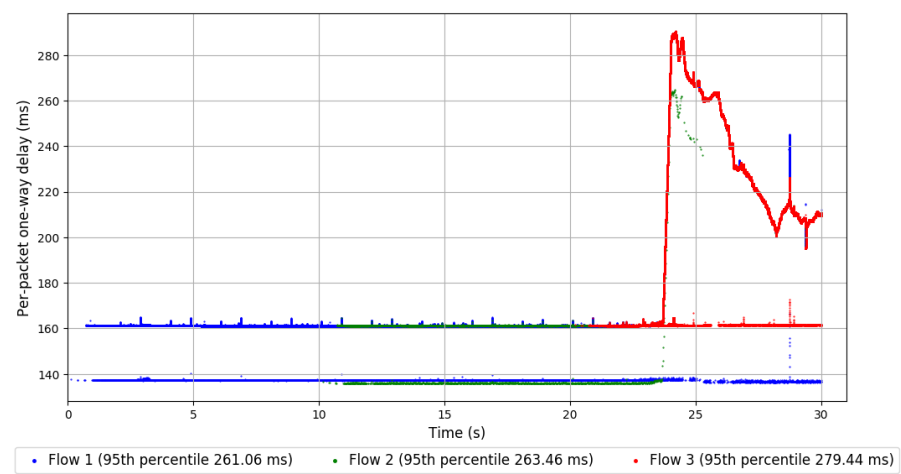
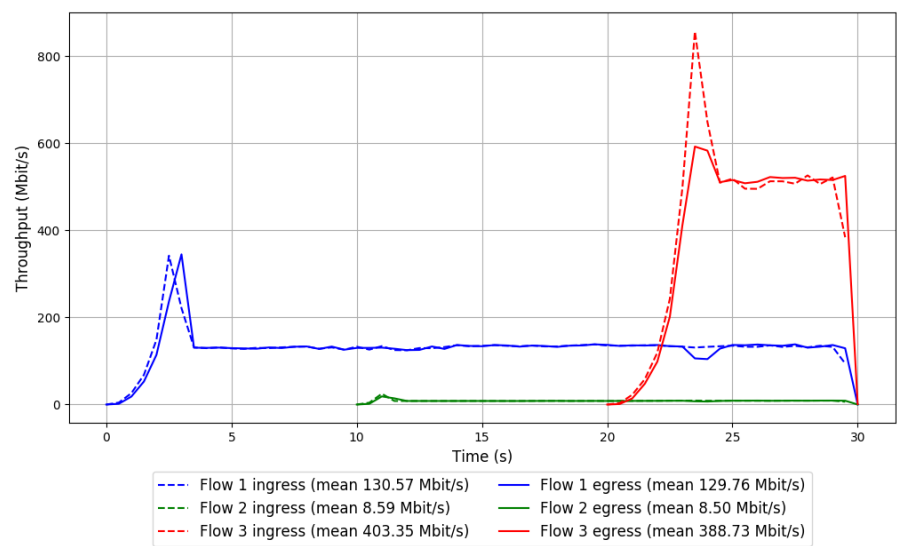


```
Run 4: Statistics of PCC

Start at: 2018-03-01 11:38:08
End at: 2018-03-01 11:38:38

# Below is generated by plot.py at 2018-03-01 16:01:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 263.22 Mbit/s
95th percentile per-packet one-way delay: 269.526 ms
Loss rate: 2.23%
-- Flow 1:
Average throughput: 129.76 Mbit/s
95th percentile per-packet one-way delay: 261.057 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 263.459 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 388.73 Mbit/s
95th percentile per-packet one-way delay: 279.443 ms
Loss rate: 3.86%
```

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-03-01 11:57:45

End at: 2018-03-01 11:58:15

Below is generated by plot.py at 2018-03-01 16:01:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 555.92 Mbit/s

95th percentile per-packet one-way delay: 276.917 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 473.94 Mbit/s

95th percentile per-packet one-way delay: 276.821 ms

Loss rate: 1.84%

-- Flow 2:

Average throughput: 122.22 Mbit/s

95th percentile per-packet one-way delay: 277.297 ms

Loss rate: 1.79%

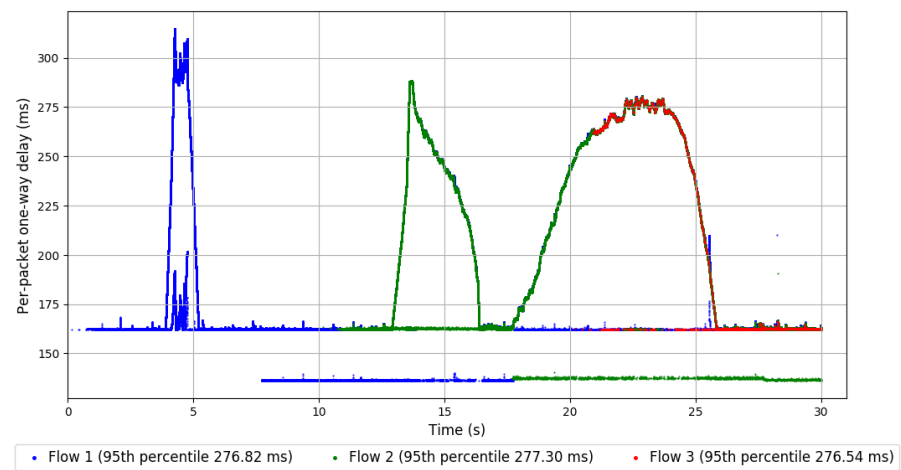
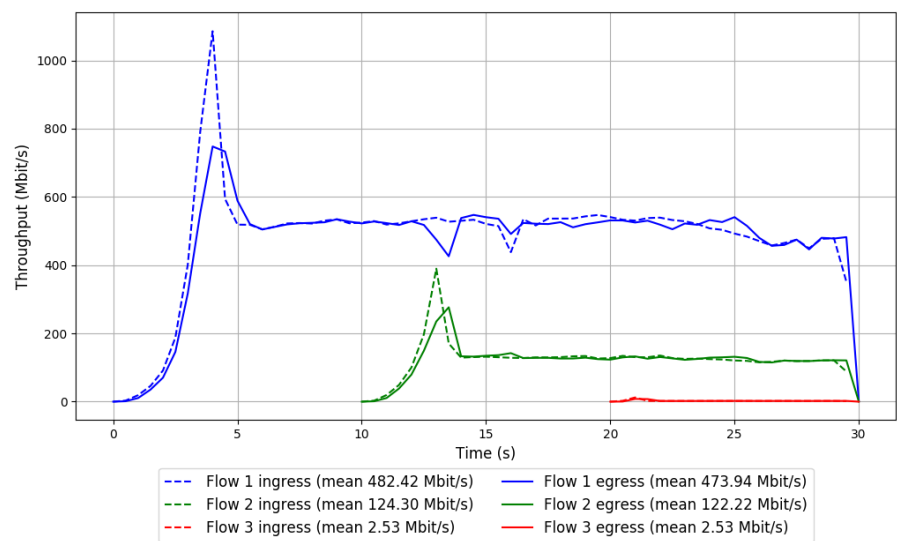
-- Flow 3:

Average throughput: 2.53 Mbit/s

95th percentile per-packet one-way delay: 276.543 ms

Loss rate: 0.46%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-03-01 12:17:34

End at: 2018-03-01 12:18:04

Below is generated by plot.py at 2018-03-01 16:01:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 21.63 Mbit/s

95th percentile per-packet one-way delay: 162.359 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 16.45 Mbit/s

95th percentile per-packet one-way delay: 162.354 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 5.55 Mbit/s

95th percentile per-packet one-way delay: 162.380 ms

Loss rate: 0.14%

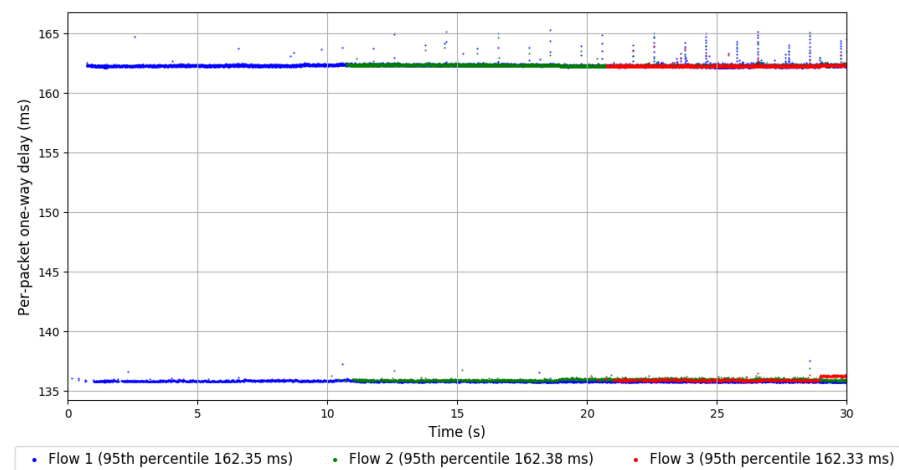
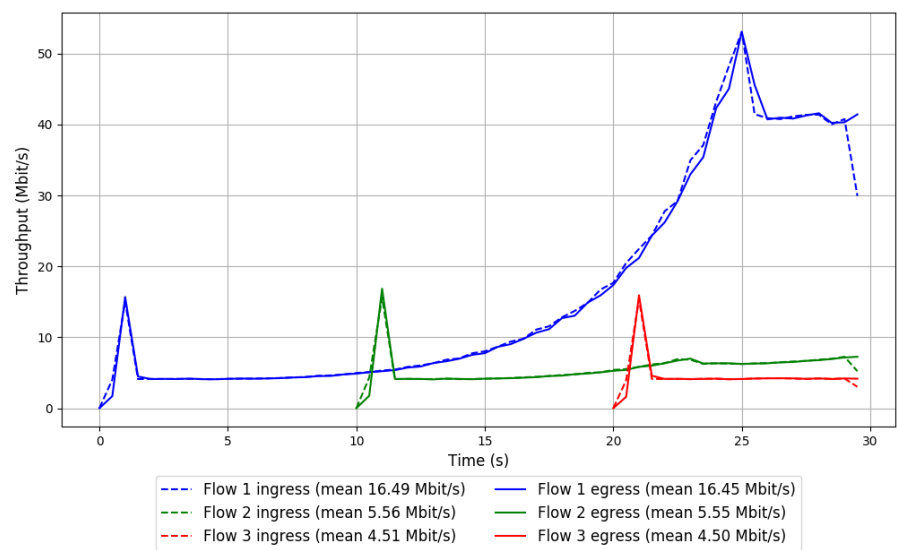
-- Flow 3:

Average throughput: 4.50 Mbit/s

95th percentile per-packet one-way delay: 162.326 ms

Loss rate: 0.22%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-03-01 12:37:16

End at: 2018-03-01 12:37:46

Below is generated by plot.py at 2018-03-01 16:01:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 347.74 Mbit/s

95th percentile per-packet one-way delay: 222.432 ms

Loss rate: 1.63%

-- Flow 1:

Average throughput: 9.13 Mbit/s

95th percentile per-packet one-way delay: 217.854 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 501.53 Mbit/s

95th percentile per-packet one-way delay: 222.515 ms

Loss rate: 1.68%

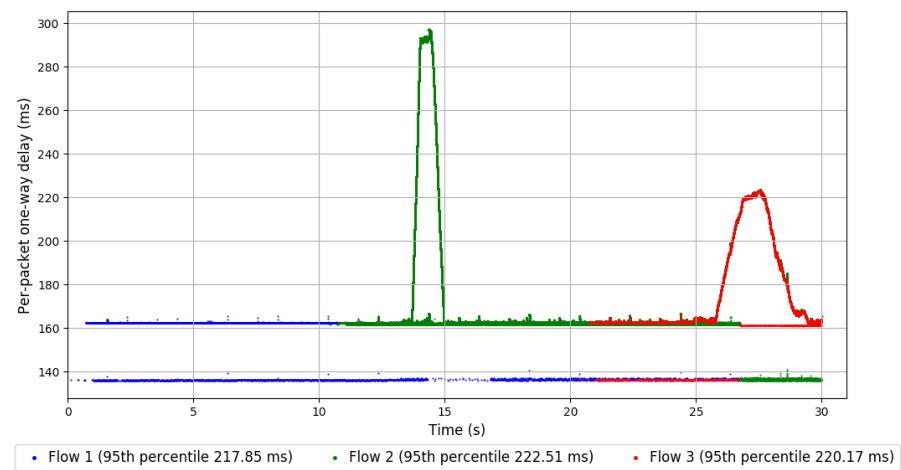
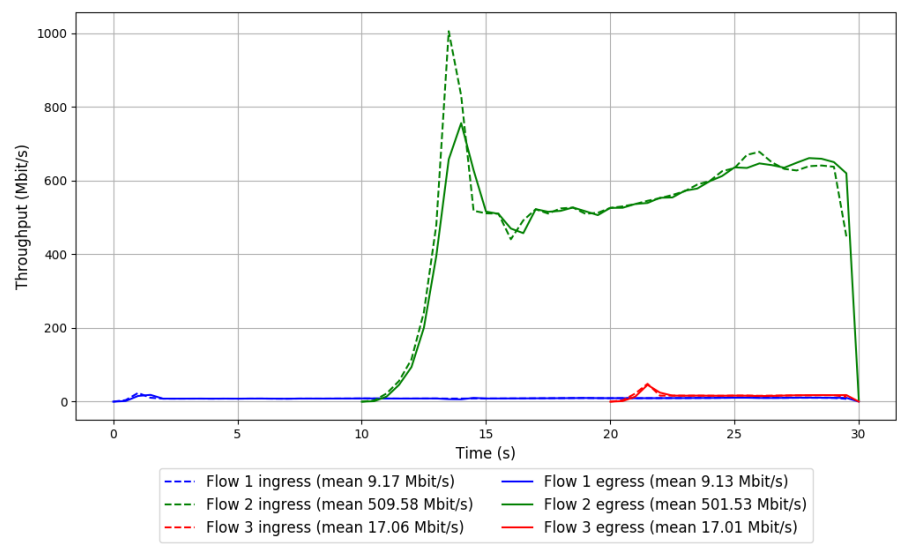
-- Flow 3:

Average throughput: 17.01 Mbit/s

95th percentile per-packet one-way delay: 220.173 ms

Loss rate: 0.24%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-03-01 12:57:03

End at: 2018-03-01 12:57:33

Below is generated by plot.py at 2018-03-01 16:02:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 556.83 Mbit/s

95th percentile per-packet one-way delay: 274.041 ms

Loss rate: 2.29%

-- Flow 1:

Average throughput: 472.57 Mbit/s

95th percentile per-packet one-way delay: 273.986 ms

Loss rate: 2.25%

-- Flow 2:

Average throughput: 122.50 Mbit/s

95th percentile per-packet one-way delay: 274.299 ms

Loss rate: 2.59%

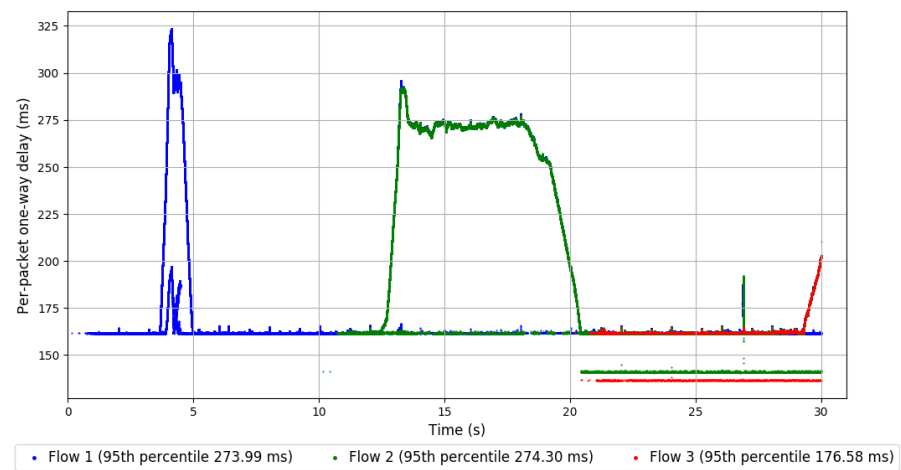
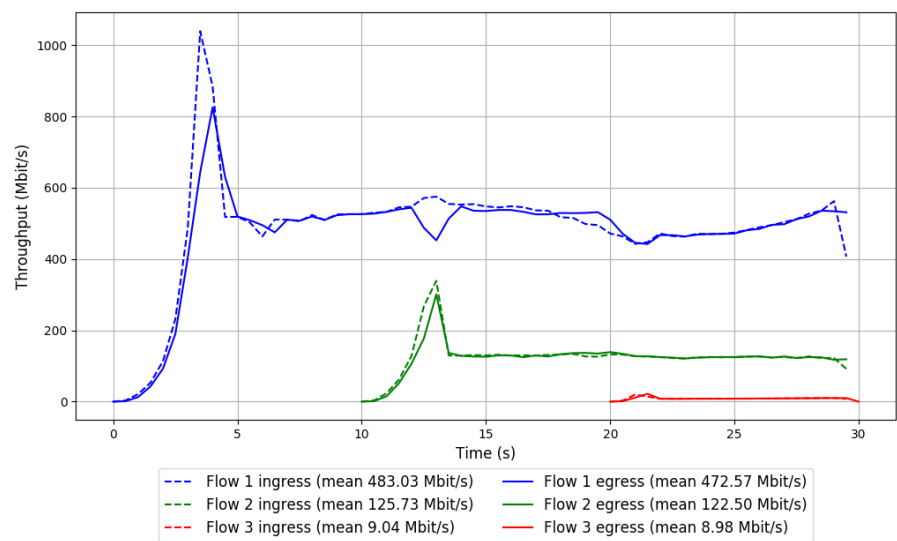
-- Flow 3:

Average throughput: 8.98 Mbit/s

95th percentile per-packet one-way delay: 176.576 ms

Loss rate: 0.80%

Run 8: Report of PCC — Data Link

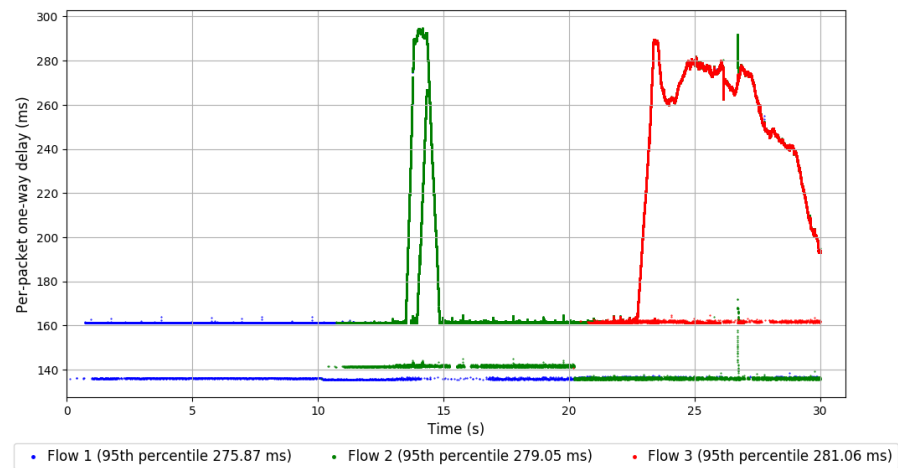
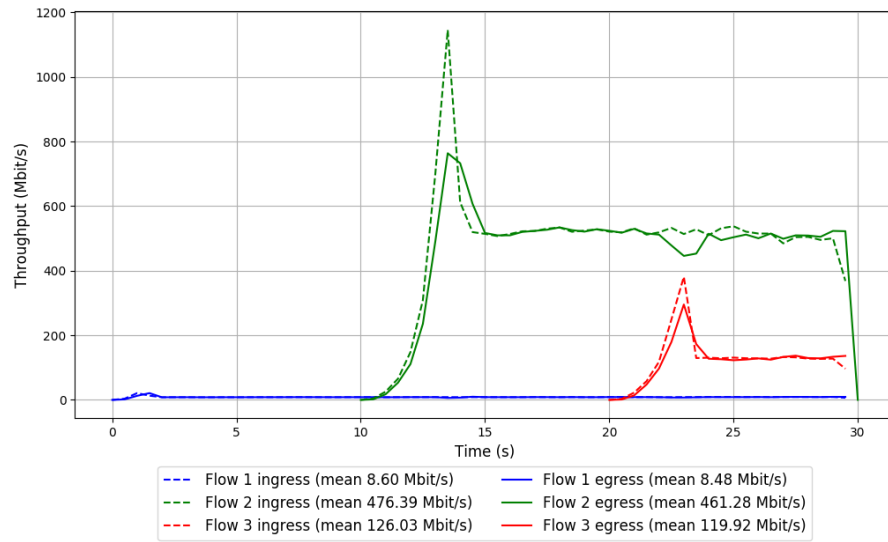


```
Run 9: Statistics of PCC

Start at: 2018-03-01 13:16:43
End at: 2018-03-01 13:17:13

# Below is generated by plot.py at 2018-03-01 16:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 354.66 Mbit/s
95th percentile per-packet one-way delay: 279.239 ms
Loss rate: 3.31%
-- Flow 1:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 275.874 ms
Loss rate: 1.39%
-- Flow 2:
Average throughput: 461.28 Mbit/s
95th percentile per-packet one-way delay: 279.054 ms
Loss rate: 3.16%
-- Flow 3:
Average throughput: 119.92 Mbit/s
95th percentile per-packet one-way delay: 281.060 ms
Loss rate: 4.89%
```

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-03-01 13:36:32

End at: 2018-03-01 13:37:02

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 521.15 Mbit/s

95th percentile per-packet one-way delay: 227.541 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 477.22 Mbit/s

95th percentile per-packet one-way delay: 220.250 ms

Loss rate: 1.34%

-- Flow 2:

Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: 181.388 ms

Loss rate: 0.29%

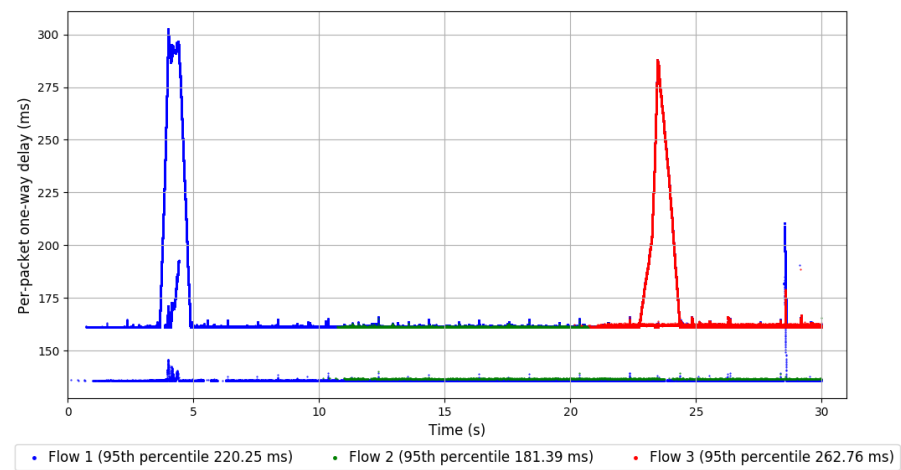
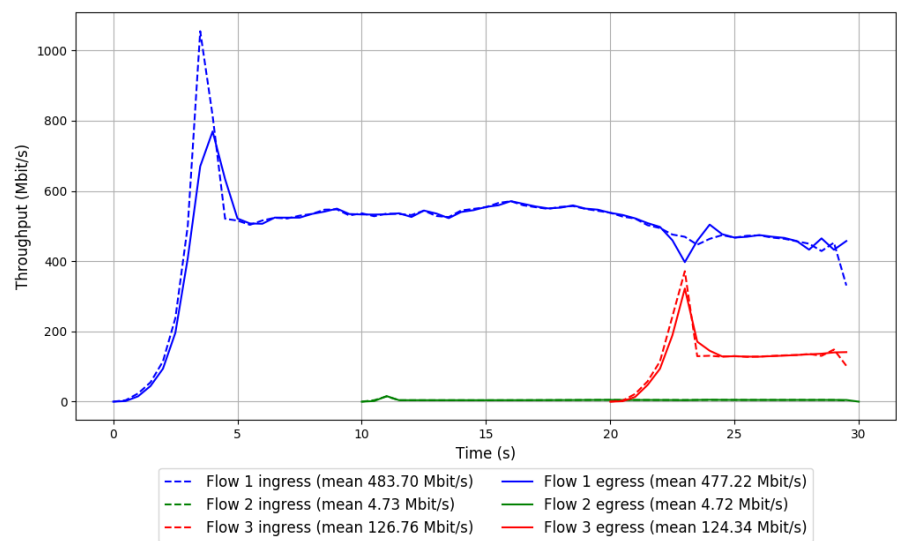
-- Flow 3:

Average throughput: 124.34 Mbit/s

95th percentile per-packet one-way delay: 262.757 ms

Loss rate: 2.15%

Run 10: Report of PCC — Data Link

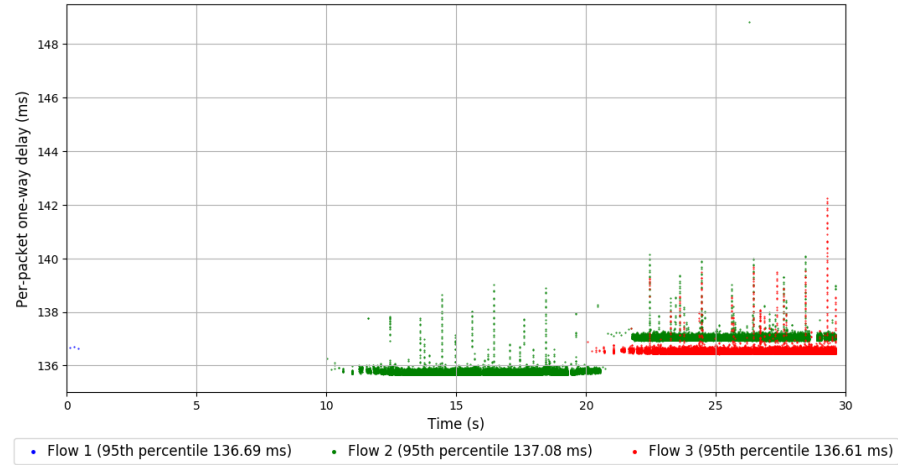
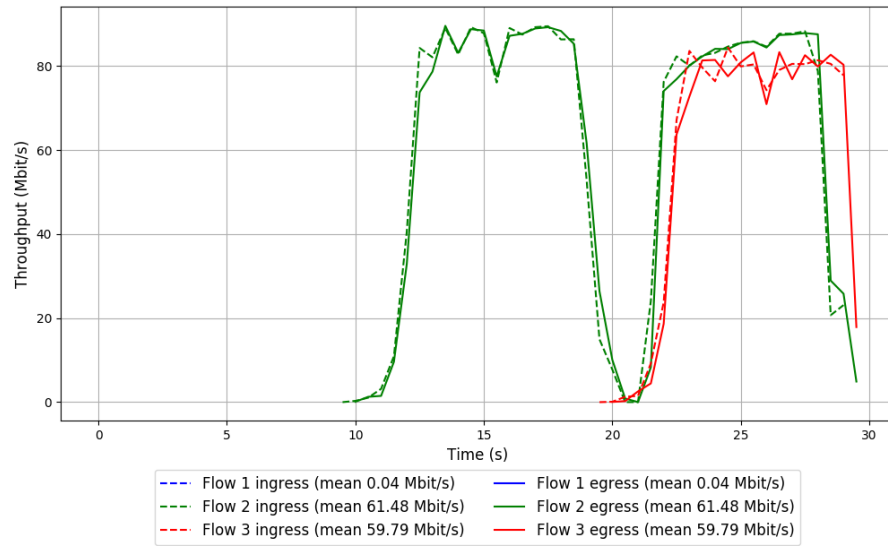


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-03-01 10:37:42
End at: 2018-03-01 10:38:12

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.20 Mbit/s
95th percentile per-packet one-way delay: 137.065 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 136.689 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.48 Mbit/s
95th percentile per-packet one-way delay: 137.081 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.79 Mbit/s
95th percentile per-packet one-way delay: 136.606 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-03-01 10:57:28

End at: 2018-03-01 10:57:58

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.66 Mbit/s

95th percentile per-packet one-way delay: 161.401 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 60.25 Mbit/s

95th percentile per-packet one-way delay: 136.137 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.13 Mbit/s

95th percentile per-packet one-way delay: 161.312 ms

Loss rate: 0.00%

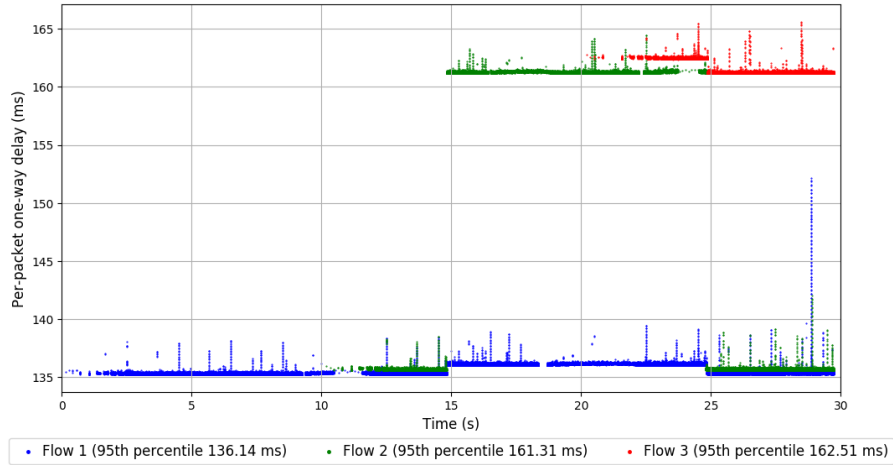
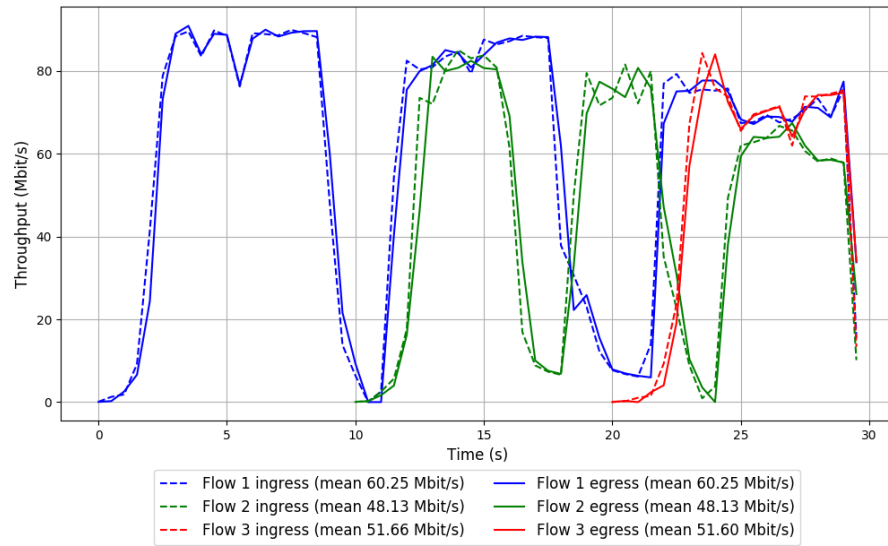
-- Flow 3:

Average throughput: 51.60 Mbit/s

95th percentile per-packet one-way delay: 162.515 ms

Loss rate: 0.39%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-03-01 11:17:15

End at: 2018-03-01 11:17:45

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.89 Mbit/s

95th percentile per-packet one-way delay: 162.177 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 59.68 Mbit/s

95th percentile per-packet one-way delay: 162.204 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 60.53 Mbit/s

95th percentile per-packet one-way delay: 136.825 ms

Loss rate: 0.00%

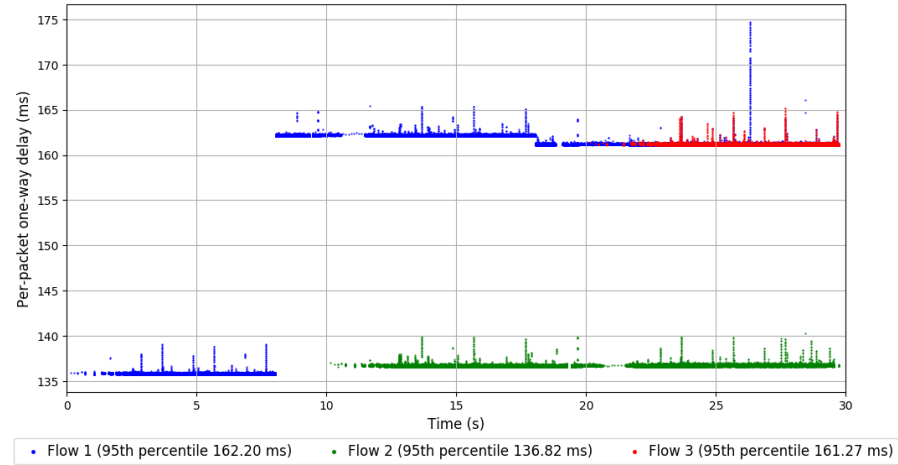
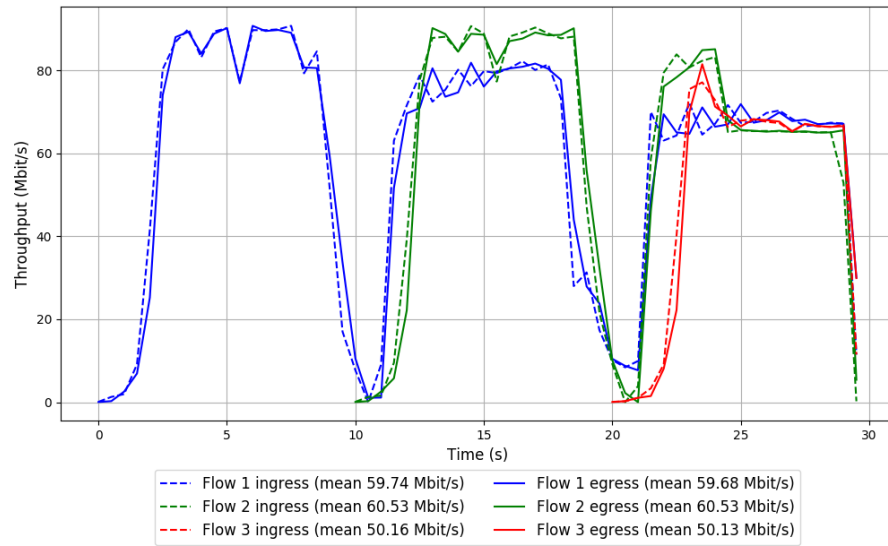
-- Flow 3:

Average throughput: 50.13 Mbit/s

95th percentile per-packet one-way delay: 161.266 ms

Loss rate: 0.34%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-03-01 11:37:11

End at: 2018-03-01 11:37:41

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.07 Mbit/s

95th percentile per-packet one-way delay: 137.096 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.63 Mbit/s

95th percentile per-packet one-way delay: 136.800 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.63 Mbit/s

95th percentile per-packet one-way delay: 137.157 ms

Loss rate: 0.00%

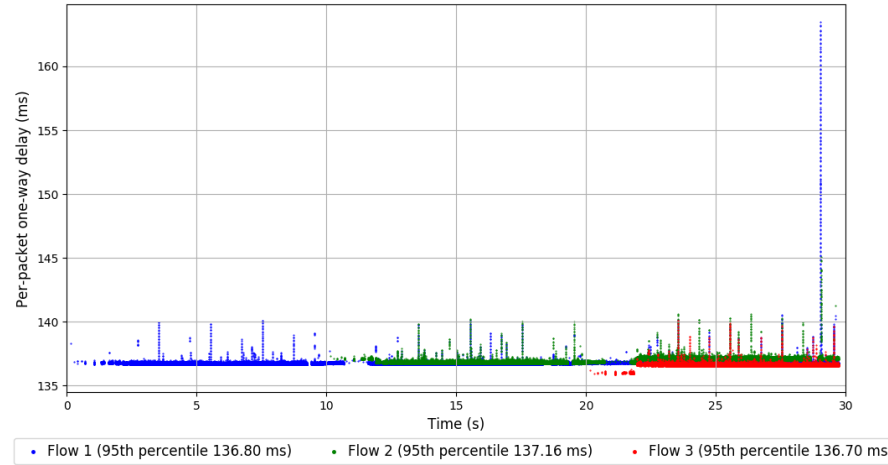
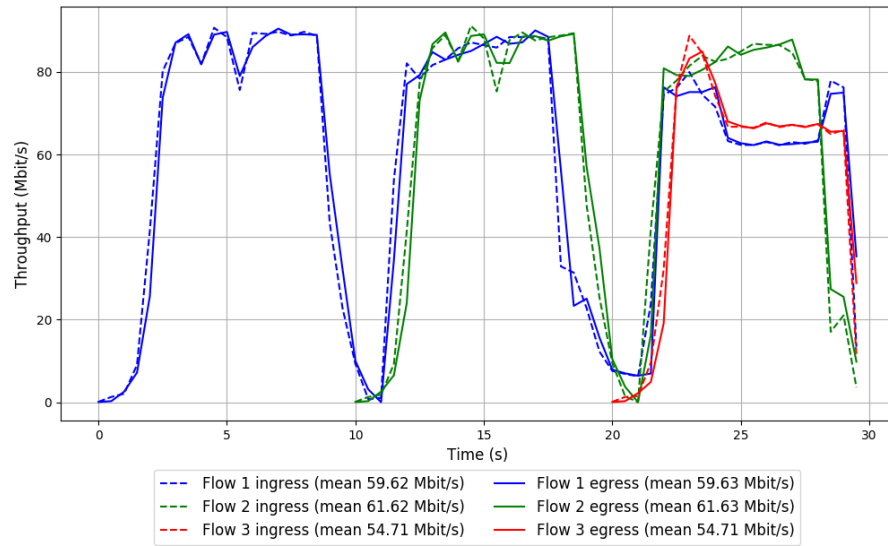
-- Flow 3:

Average throughput: 54.71 Mbit/s

95th percentile per-packet one-way delay: 136.703 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-03-01 11:56:49

End at: 2018-03-01 11:57:19

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 117.53 Mbit/s

95th percentile per-packet one-way delay: 136.838 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.91 Mbit/s

95th percentile per-packet one-way delay: 135.993 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 60.78 Mbit/s

95th percentile per-packet one-way delay: 136.753 ms

Loss rate: 0.00%

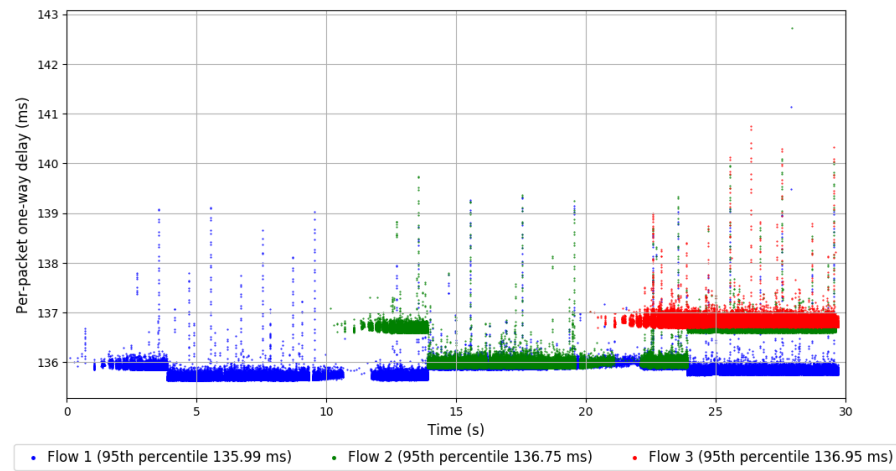
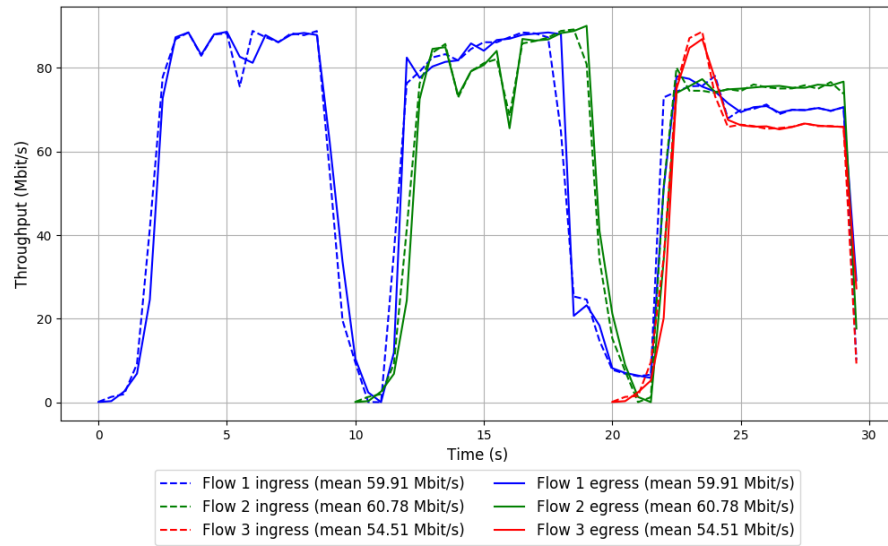
-- Flow 3:

Average throughput: 54.51 Mbit/s

95th percentile per-packet one-way delay: 136.951 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-03-01 12:16:42

End at: 2018-03-01 12:17:12

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.54 Mbit/s

95th percentile per-packet one-way delay: 162.249 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 7.73 Mbit/s

95th percentile per-packet one-way delay: 162.248 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 50.95 Mbit/s

95th percentile per-packet one-way delay: 162.204 ms

Loss rate: 0.18%

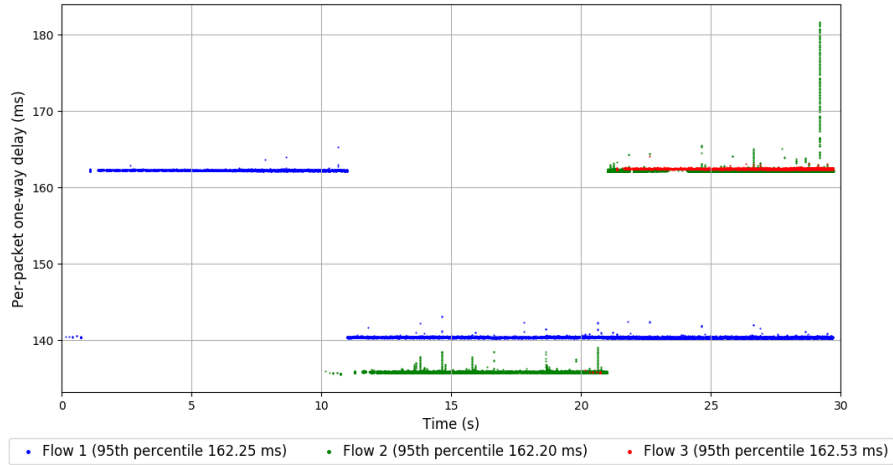
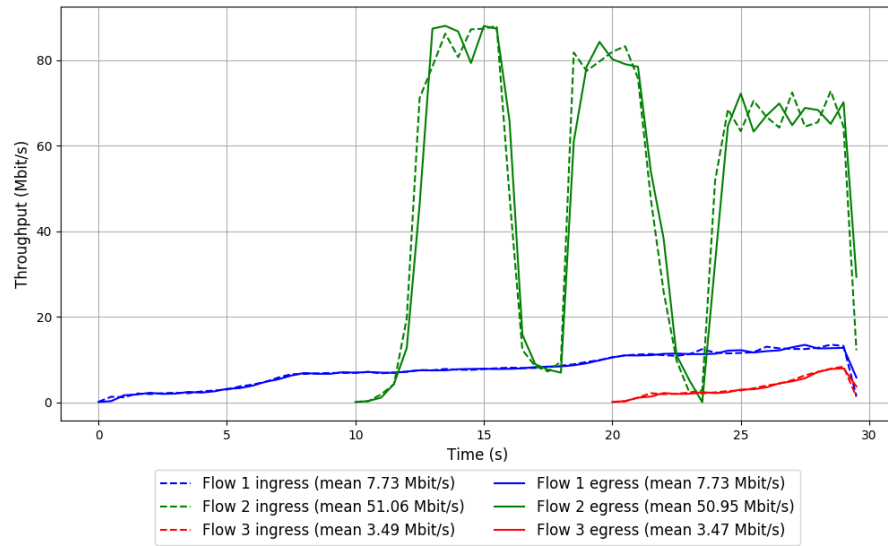
-- Flow 3:

Average throughput: 3.47 Mbit/s

95th percentile per-packet one-way delay: 162.528 ms

Loss rate: 0.51%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-03-01 12:36:20

End at: 2018-03-01 12:36:50

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.53 Mbit/s

95th percentile per-packet one-way delay: 162.370 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 54.02 Mbit/s

95th percentile per-packet one-way delay: 136.455 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.05 Mbit/s

95th percentile per-packet one-way delay: 160.996 ms

Loss rate: 0.00%

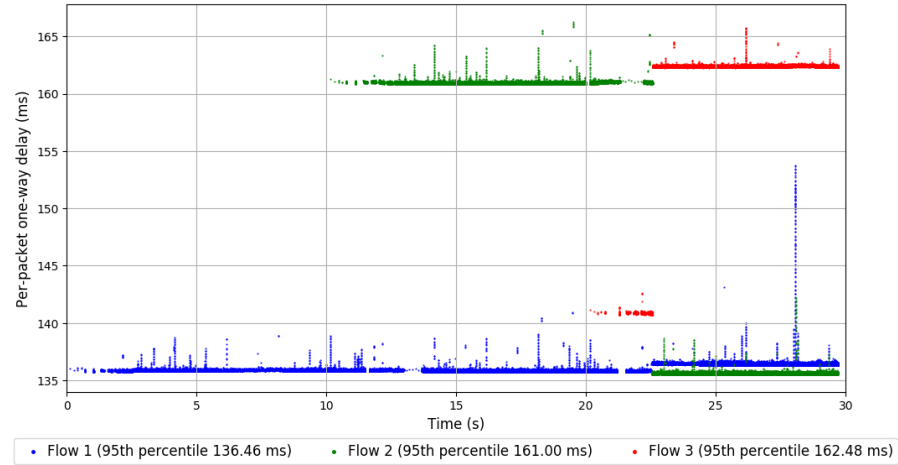
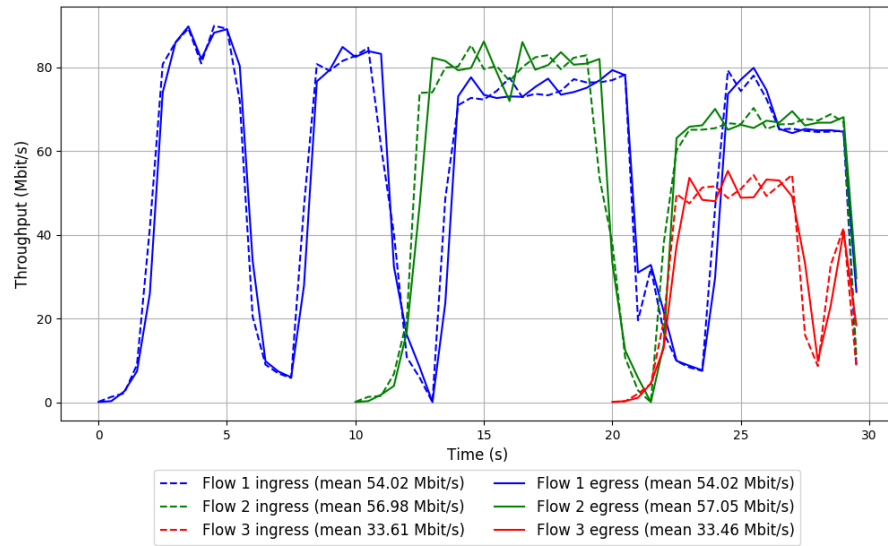
-- Flow 3:

Average throughput: 33.46 Mbit/s

95th percentile per-packet one-way delay: 162.480 ms

Loss rate: 0.48%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-03-01 12:56:11

End at: 2018-03-01 12:56:41

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 34.93 Mbit/s

95th percentile per-packet one-way delay: 161.433 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 9.79 Mbit/s

95th percentile per-packet one-way delay: 161.480 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 161.408 ms

Loss rate: 0.18%

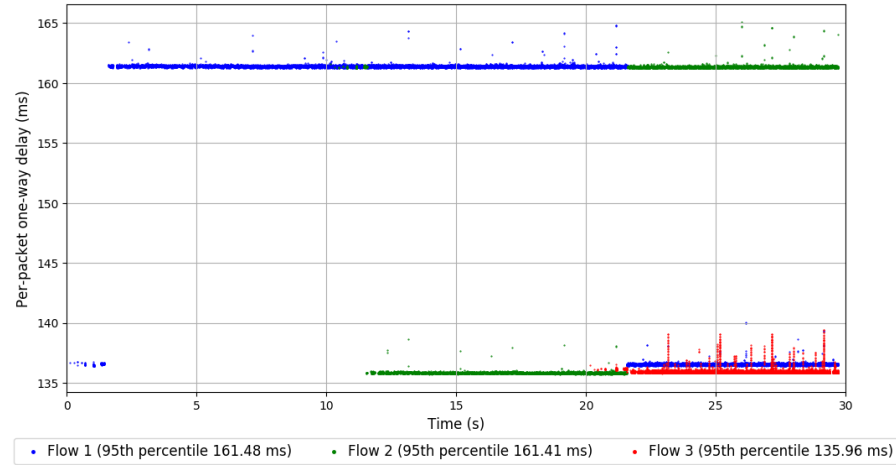
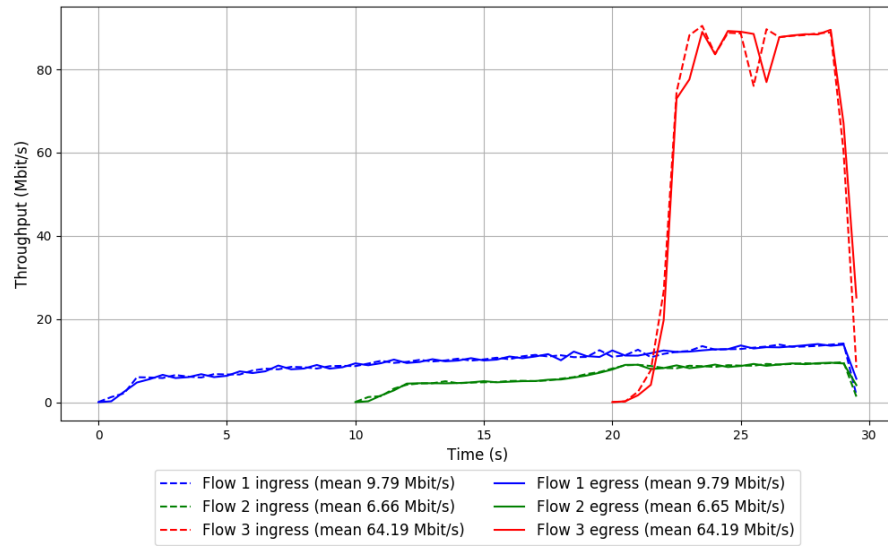
-- Flow 3:

Average throughput: 64.19 Mbit/s

95th percentile per-packet one-way delay: 135.957 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-03-01 13:15:48

End at: 2018-03-01 13:16:18

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.59 Mbit/s

95th percentile per-packet one-way delay: 161.291 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 36.15 Mbit/s

95th percentile per-packet one-way delay: 161.325 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 59.68 Mbit/s

95th percentile per-packet one-way delay: 136.497 ms

Loss rate: 0.00%

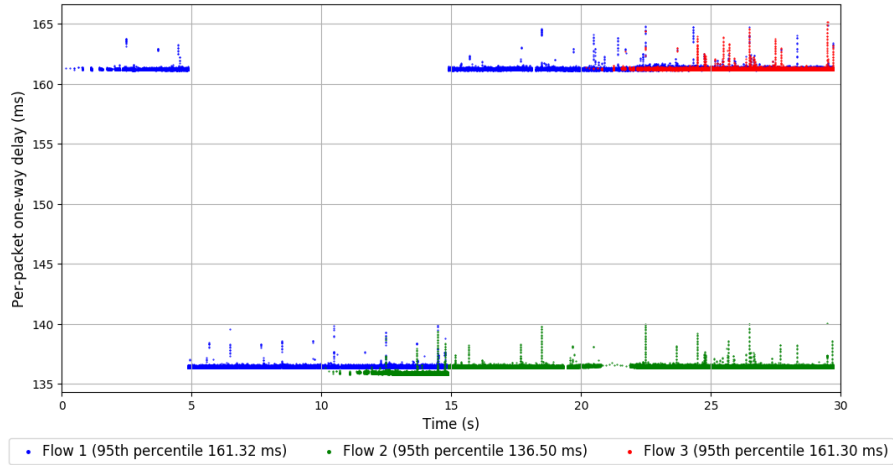
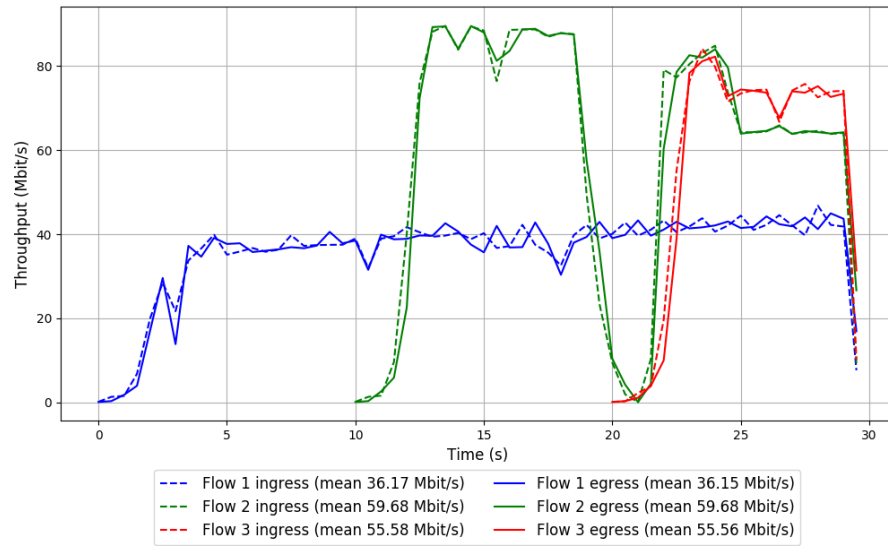
-- Flow 3:

Average throughput: 55.56 Mbit/s

95th percentile per-packet one-way delay: 161.302 ms

Loss rate: 0.33%

Run 9: Report of QUIC Cubic — Data Link

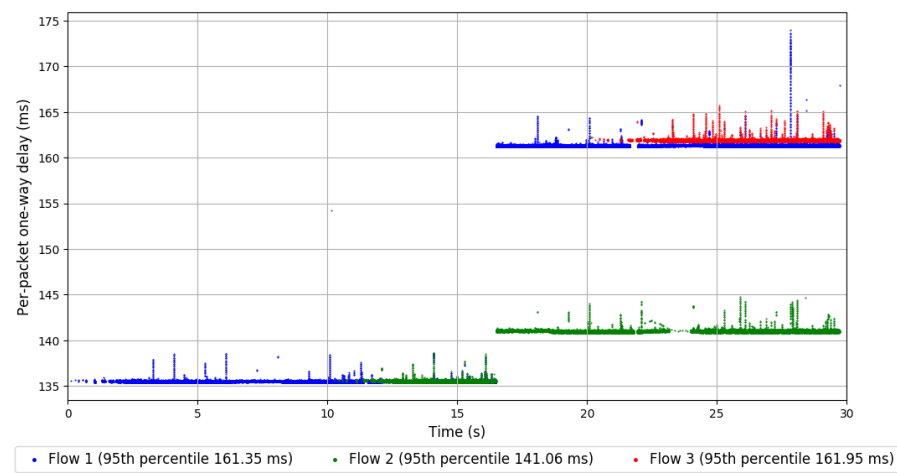
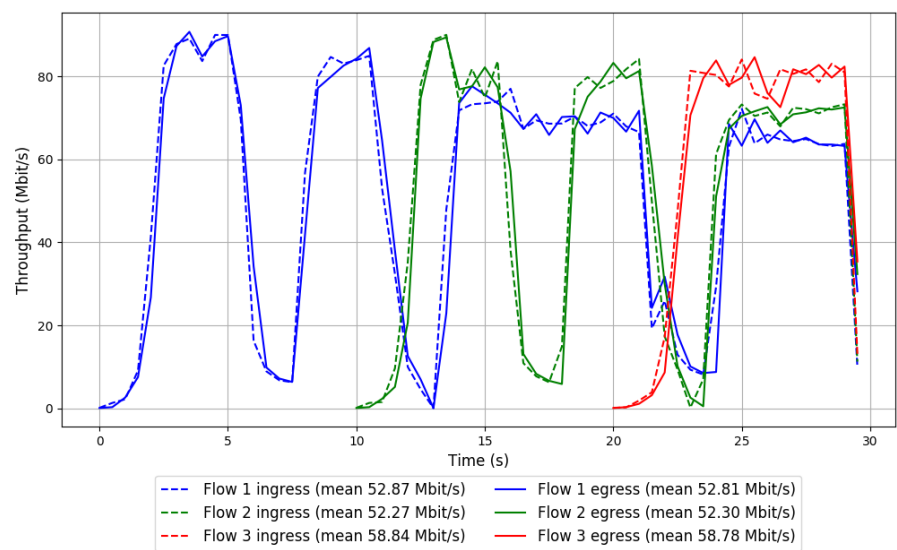


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-03-01 13:35:36
End at: 2018-03-01 13:36:06

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.33 Mbit/s
95th percentile per-packet one-way delay: 161.884 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 52.81 Mbit/s
95th percentile per-packet one-way delay: 161.350 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 52.30 Mbit/s
95th percentile per-packet one-way delay: 141.056 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 58.78 Mbit/s
95th percentile per-packet one-way delay: 161.952 ms
Loss rate: 0.32%
```

Run 10: Report of QUIC Cubic — Data Link

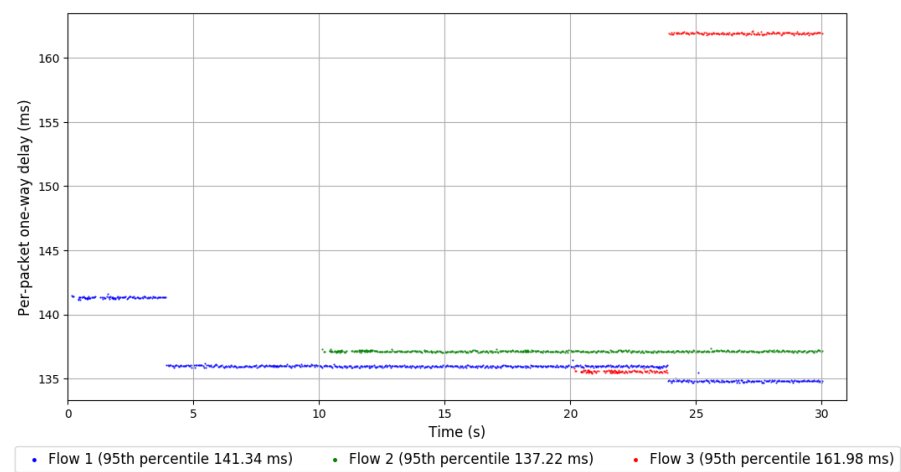
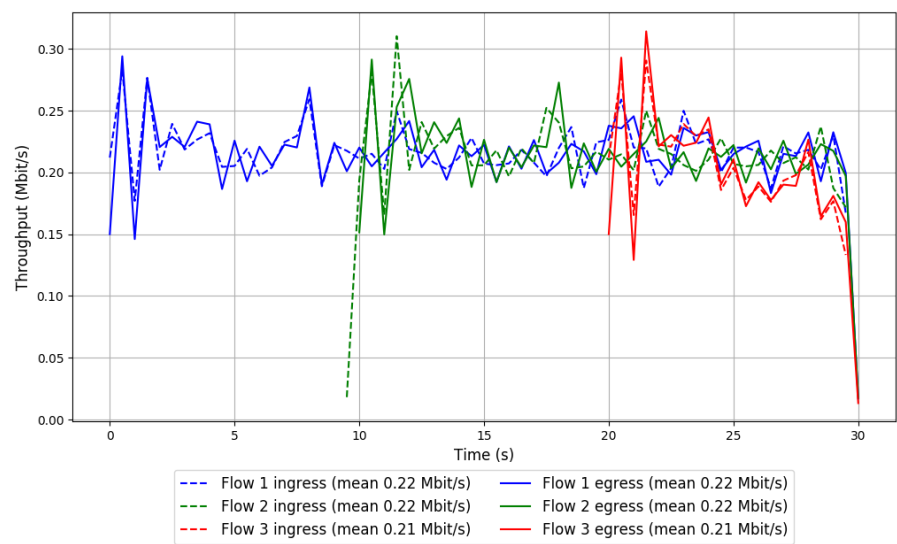


```
Run 1: Statistics of SCReAM

Start at: 2018-03-01 10:39:49
End at: 2018-03-01 10:40:19

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 161.907 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 141.344 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.215 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 161.982 ms
Loss rate: 0.30%
```

Run 1: Report of SReAM — Data Link

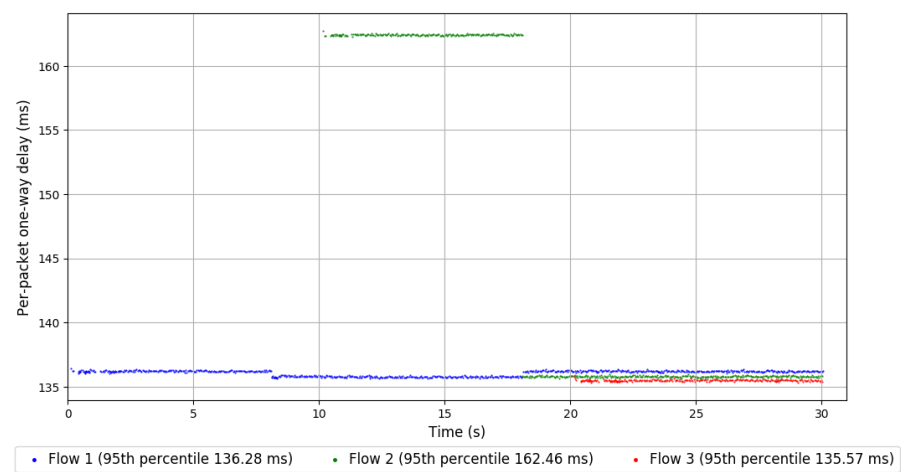
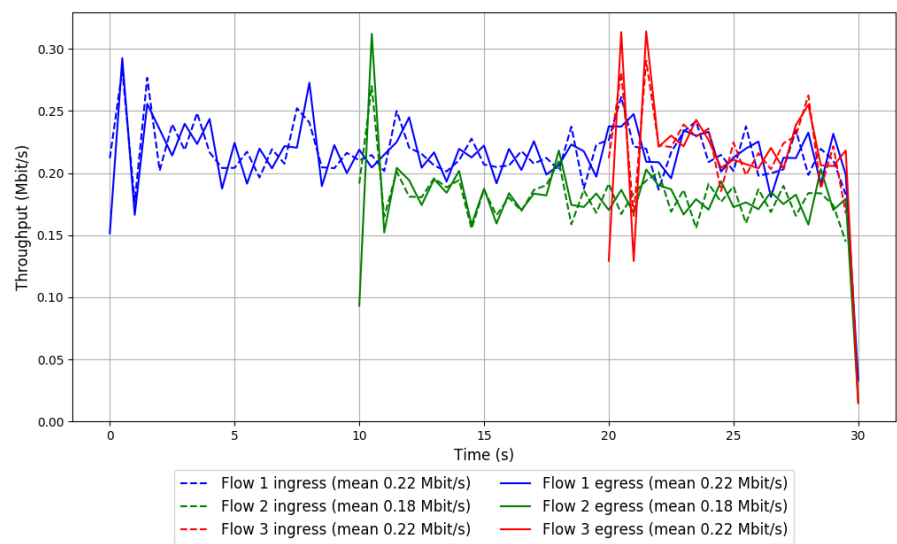


```
Run 2: Statistics of SCReAM

Start at: 2018-03-01 10:59:35
End at: 2018-03-01 11:00:05

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 162.423 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.275 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 162.462 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.569 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-03-01 11:19:24

End at: 2018-03-01 11:19:54

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 162.347 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.055 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 162.376 ms

Loss rate: 0.00%

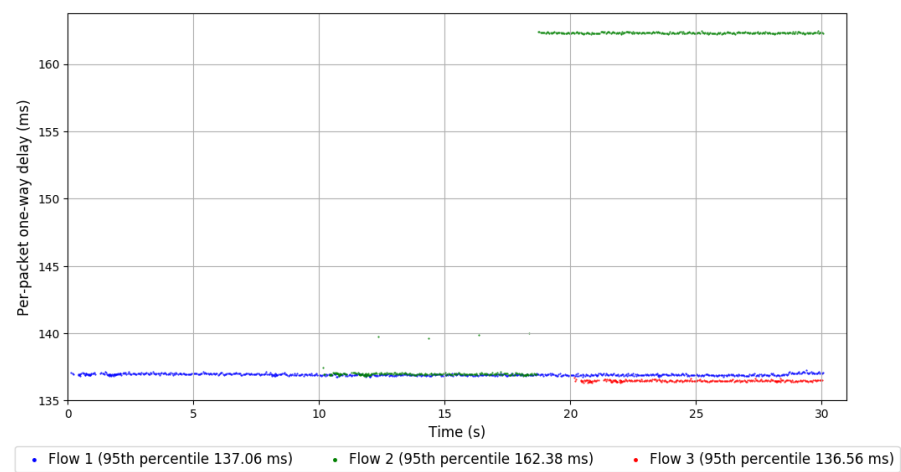
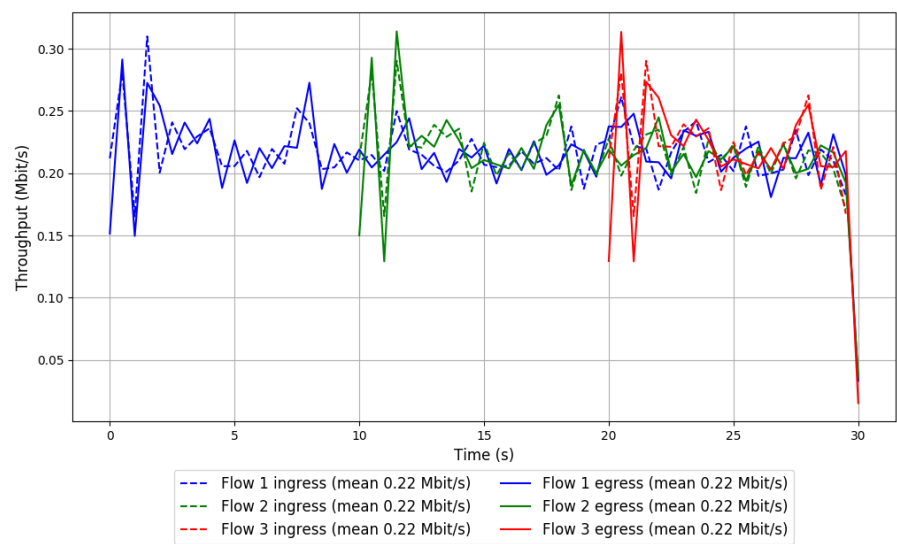
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.559 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

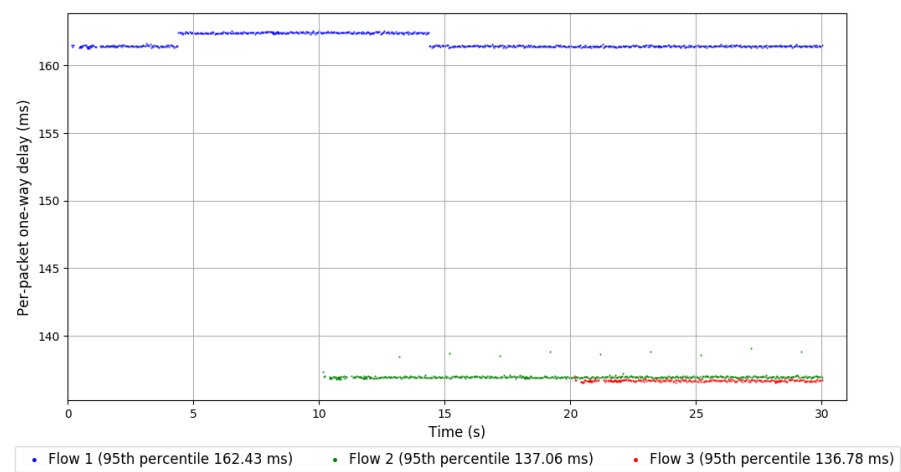
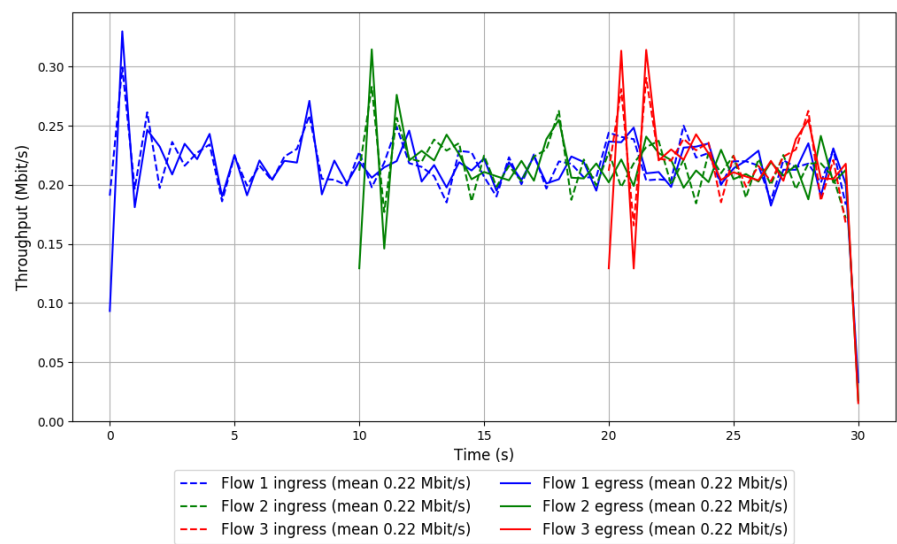


```
Run 4: Statistics of SCReAM

Start at: 2018-03-01 11:39:09
End at: 2018-03-01 11:39:39

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 162.412 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 162.433 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.061 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.785 ms
Loss rate: 0.00%
```

Run 4: Report of SCRaM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-03-01 11:58:58

End at: 2018-03-01 11:59:28

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 162.486 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 162.511 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 137.476 ms

Loss rate: 0.00%

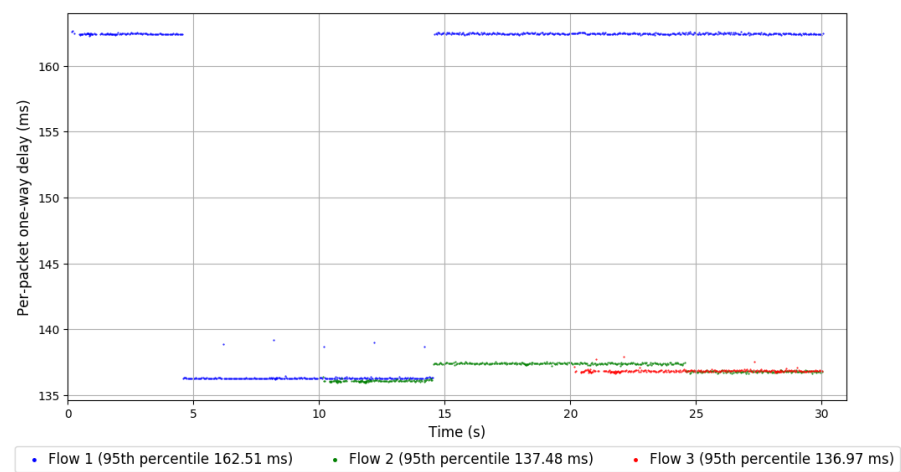
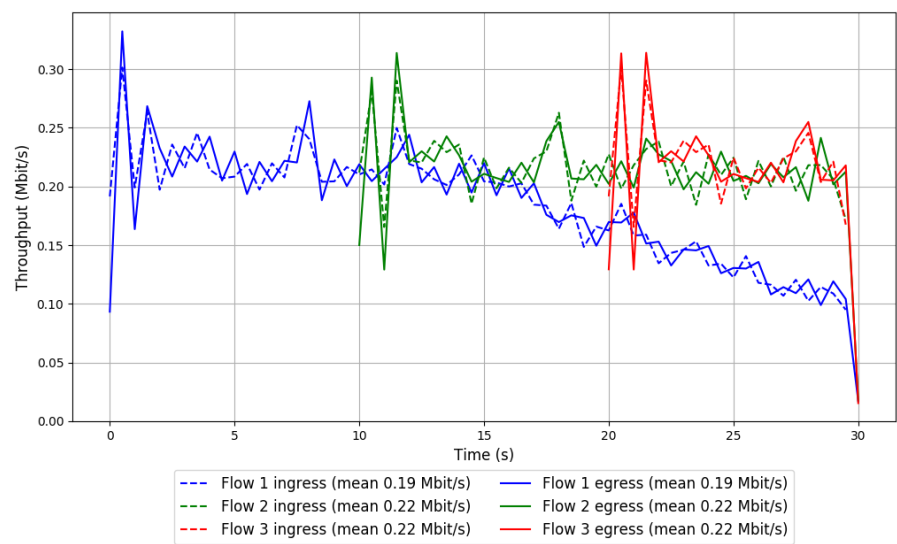
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.966 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-03-01 12:18:25

End at: 2018-03-01 12:18:55

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 162.349 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.026 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 162.391 ms

Loss rate: 0.00%

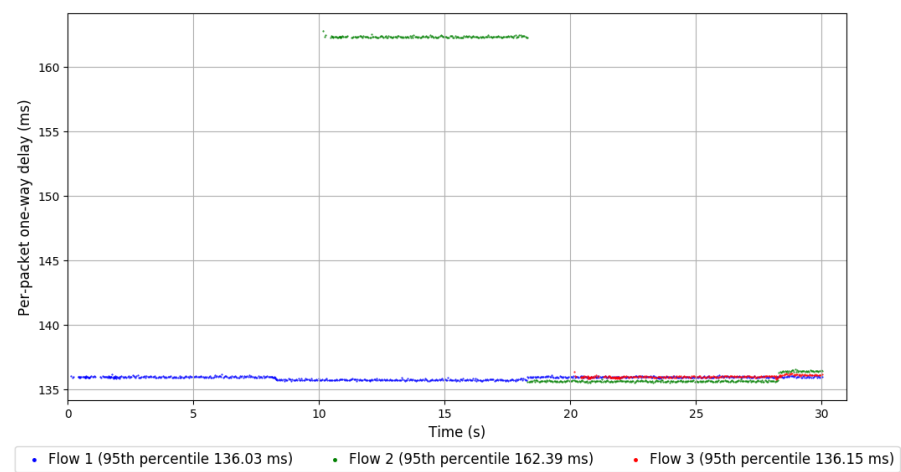
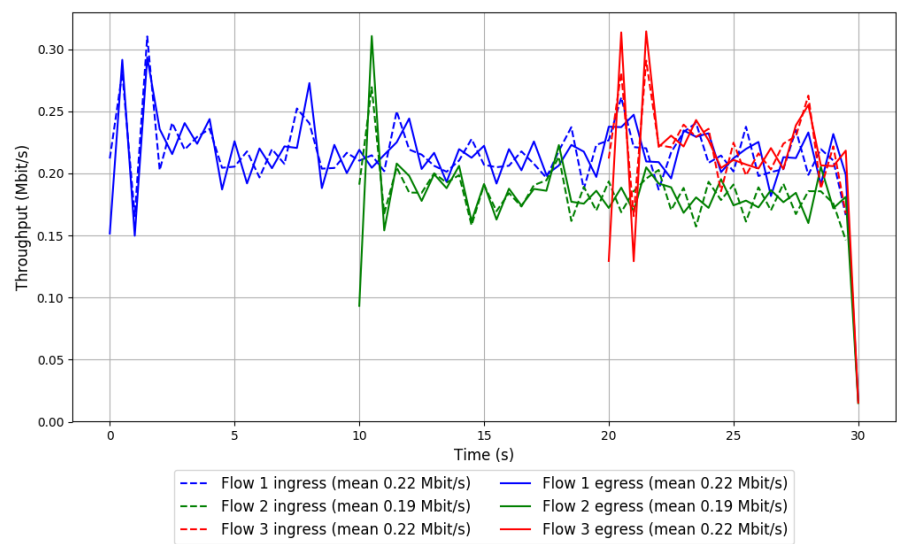
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.150 ms

Loss rate: 0.00%

Run 6: Report of SReAM — Data Link

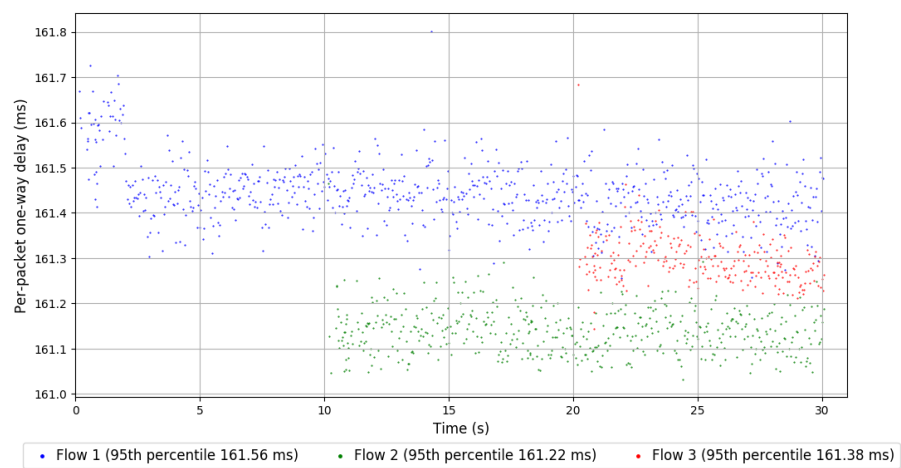
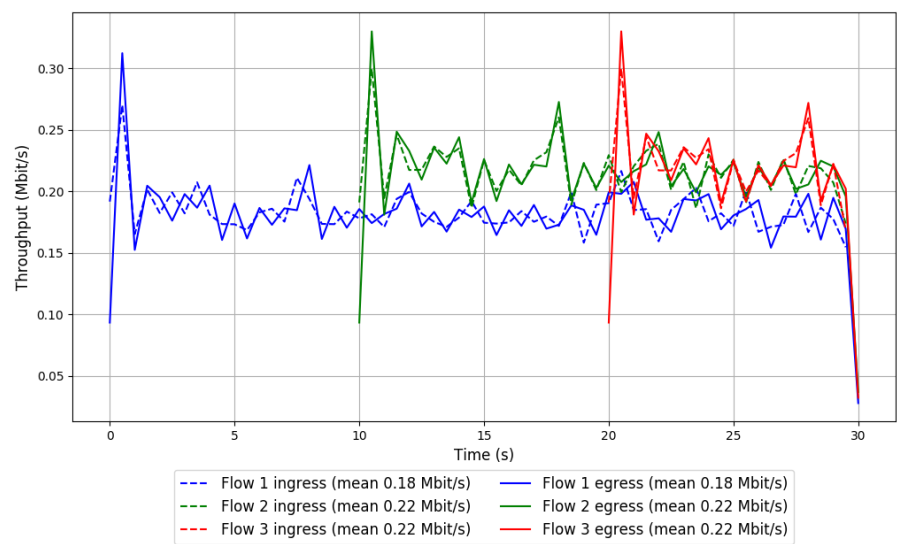


```
Run 7: Statistics of SReAM

Start at: 2018-03-01 12:38:21
End at: 2018-03-01 12:38:51

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 161.522 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 161.565 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 161.224 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 161.380 ms
Loss rate: 0.00%
```

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-03-01 12:58:18

End at: 2018-03-01 12:58:48

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 161.686 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 161.684 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.159 ms

Loss rate: 0.00%

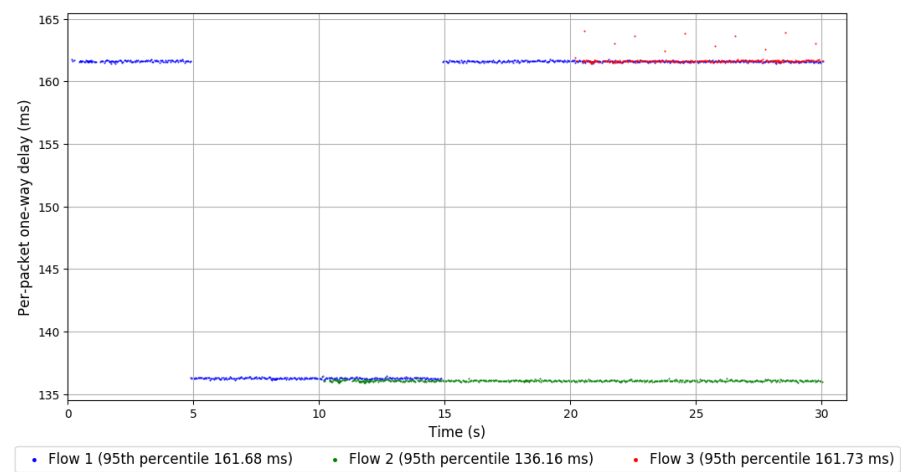
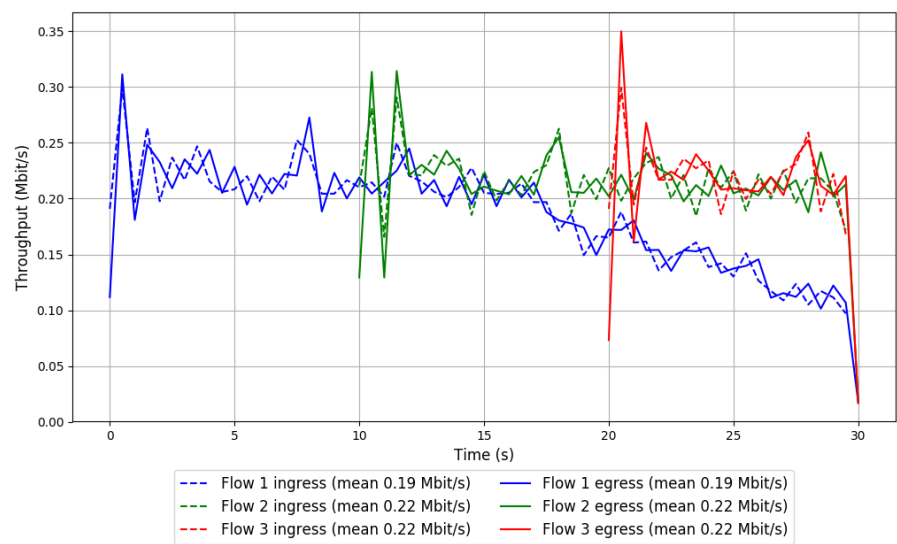
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 161.734 ms

Loss rate: 0.35%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-03-01 13:17:48

End at: 2018-03-01 13:18:18

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 161.463 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 141.249 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 161.494 ms

Loss rate: 0.00%

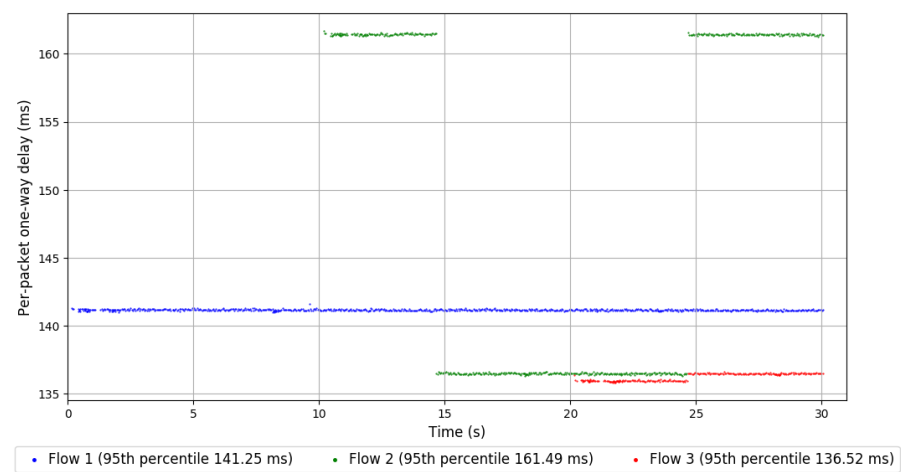
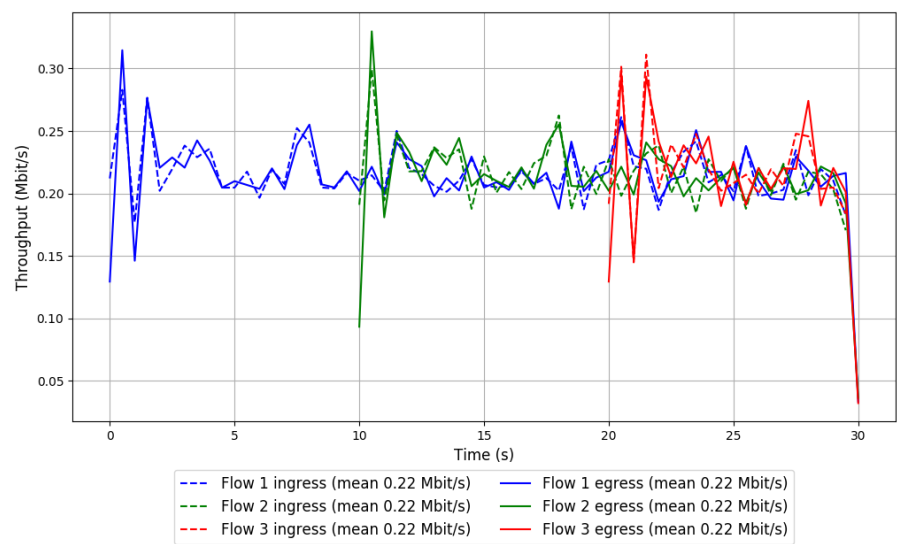
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.521 ms

Loss rate: 0.00%

Run 9: Report of SCRaM — Data Link

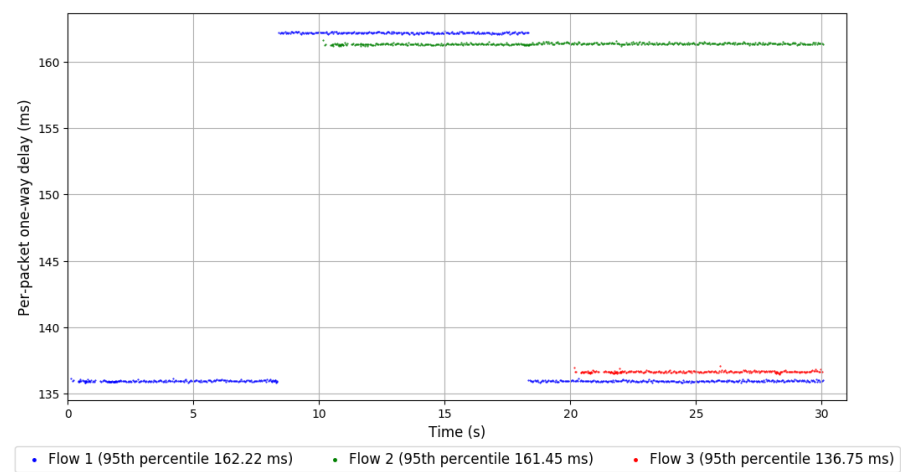
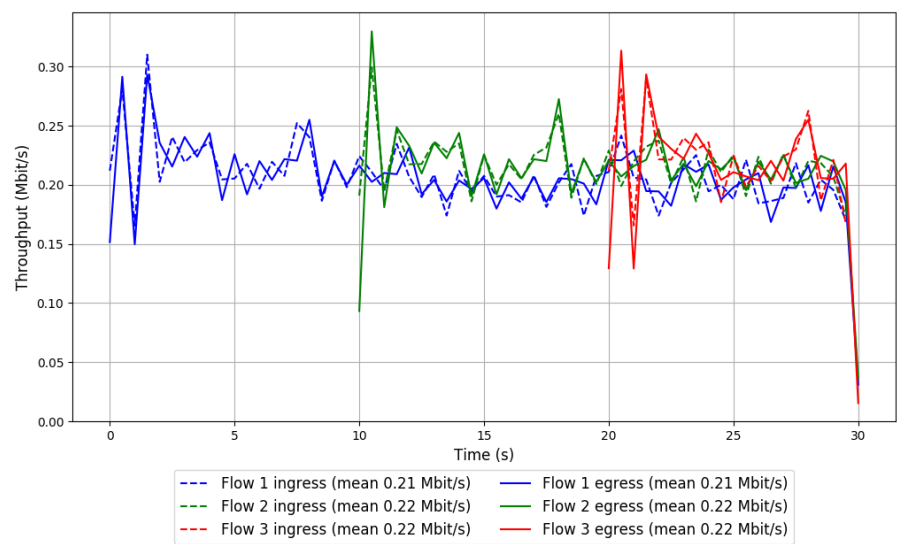


```
Run 10: Statistics of SReAM

Start at: 2018-03-01 13:37:45
End at: 2018-03-01 13:38:15

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 162.190 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 162.215 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 161.453 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.755 ms
Loss rate: 0.00%
```

Run 10: Report of SReAM — Data Link

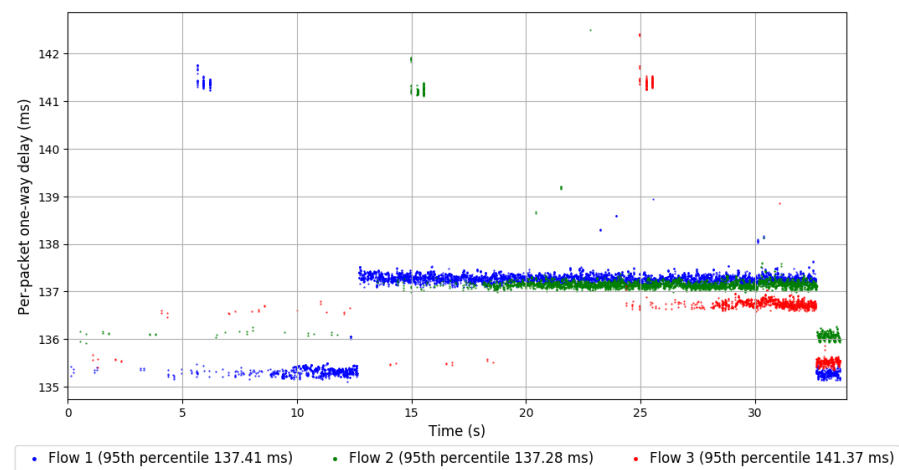
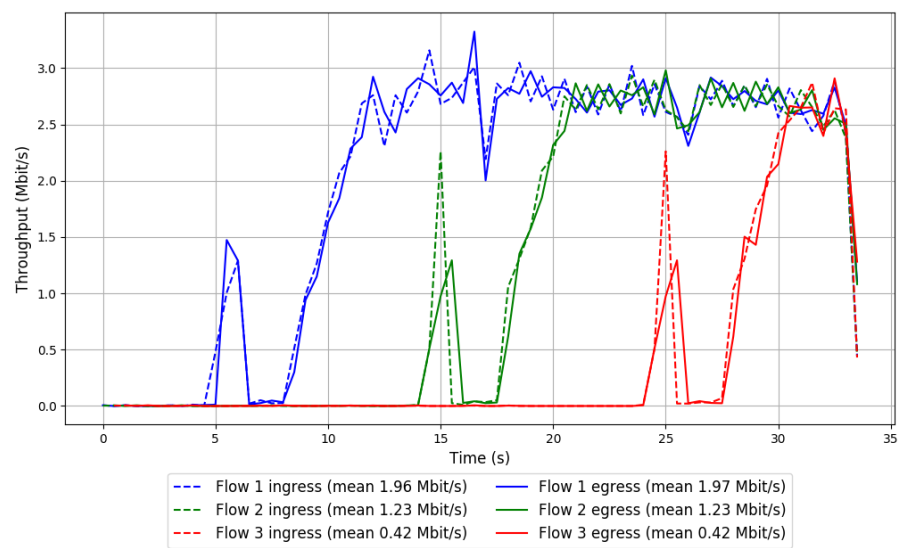


```
Run 1: Statistics of WebRTC media

Start at: 2018-03-01 10:20:34
End at: 2018-03-01 10:21:04

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 137.402 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 137.412 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 137.276 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 141.366 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-03-01 10:40:39

End at: 2018-03-01 10:41:09

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 137.403 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 137.413 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 136.900 ms

Loss rate: 0.00%

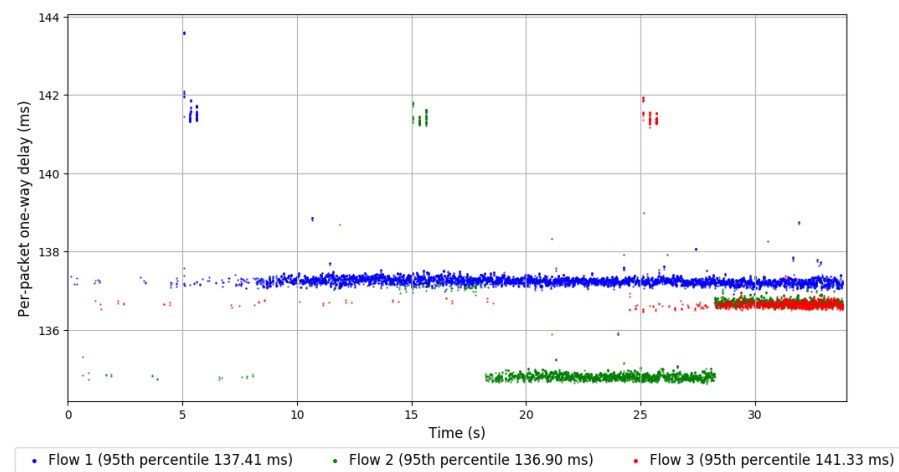
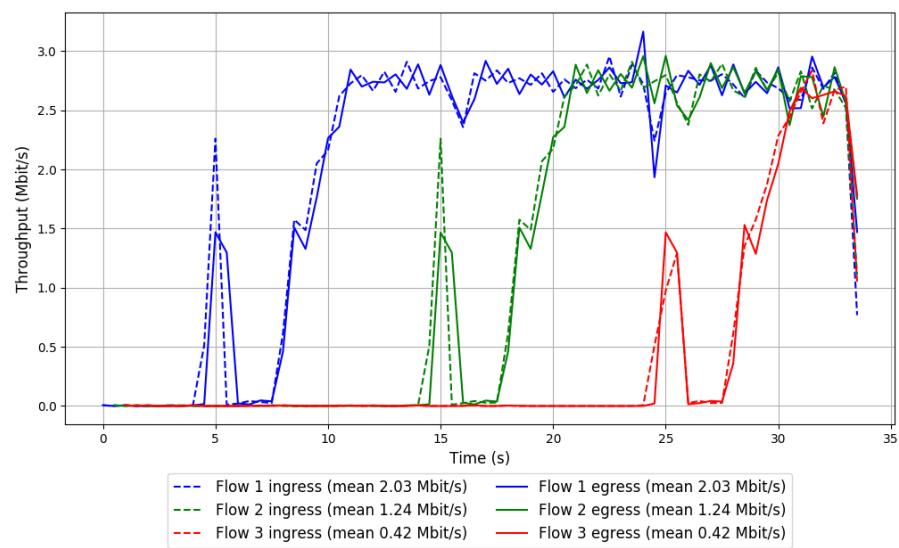
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 141.334 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-03-01 11:00:24

End at: 2018-03-01 11:00:54

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 136.242 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 136.043 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 135.981 ms

Loss rate: 0.00%

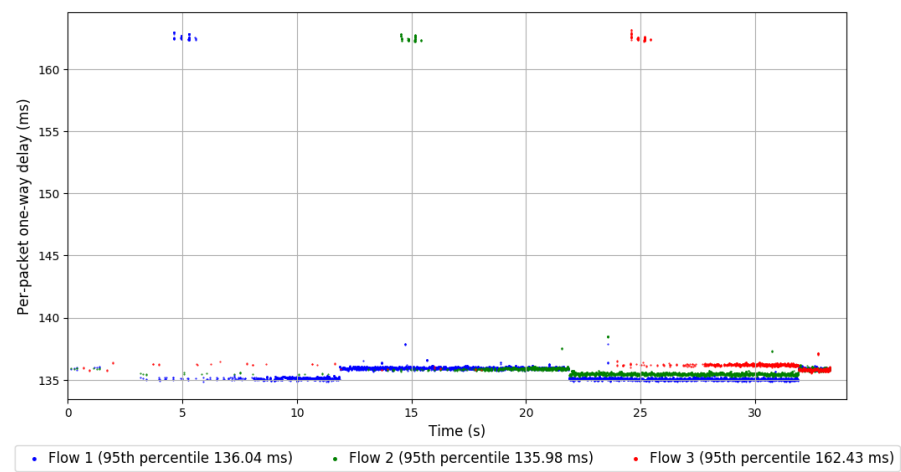
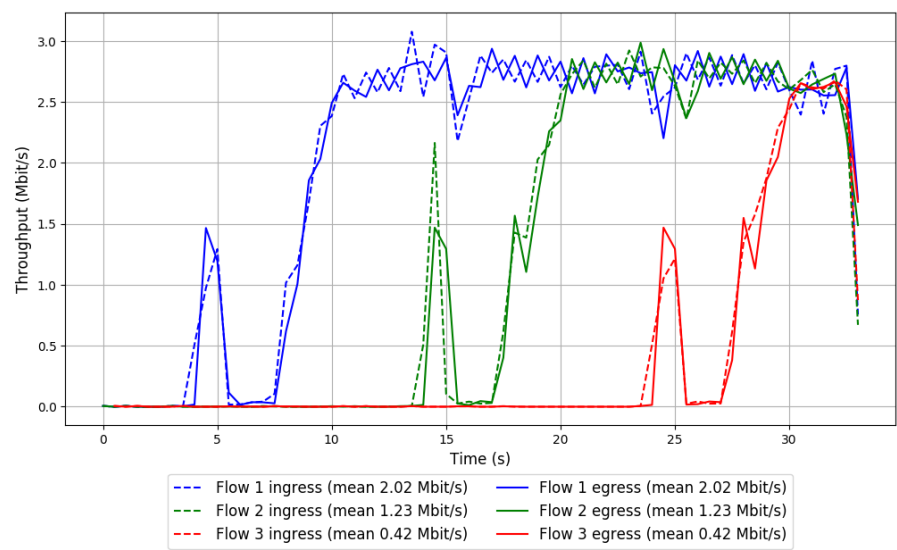
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 162.428 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-03-01 11:20:14

End at: 2018-03-01 11:20:44

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.63 Mbit/s

95th percentile per-packet one-way delay: 137.184 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 135.833 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 137.242 ms

Loss rate: 0.02%

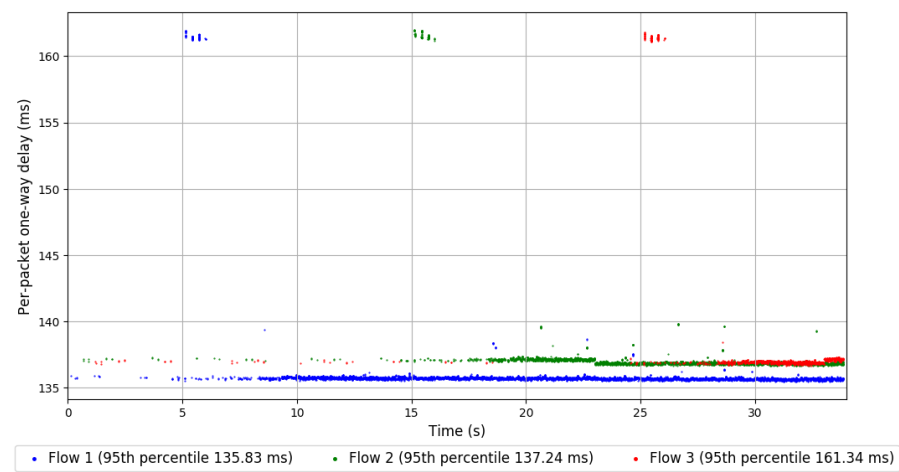
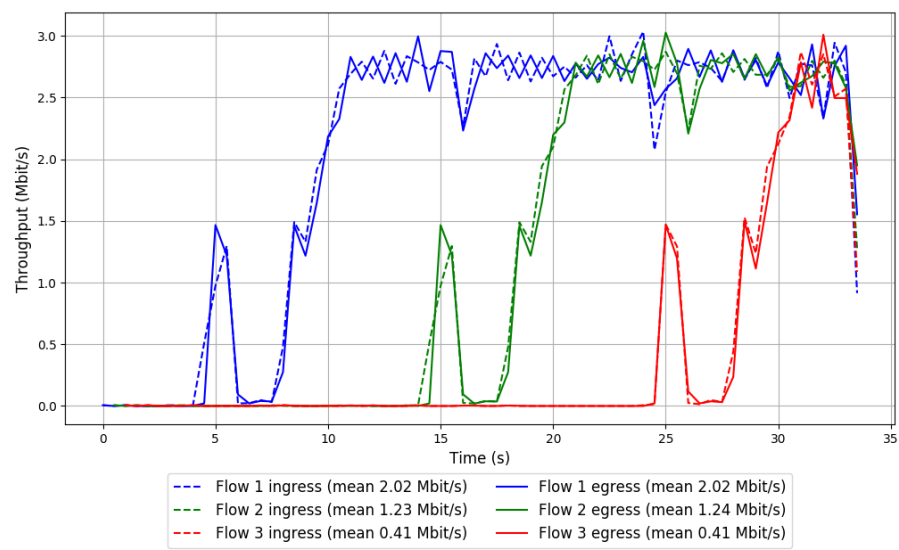
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 161.335 ms

Loss rate: 0.01%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-03-01 11:39:58

End at: 2018-03-01 11:40:28

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 161.608 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 137.065 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 161.656 ms

Loss rate: 0.27%

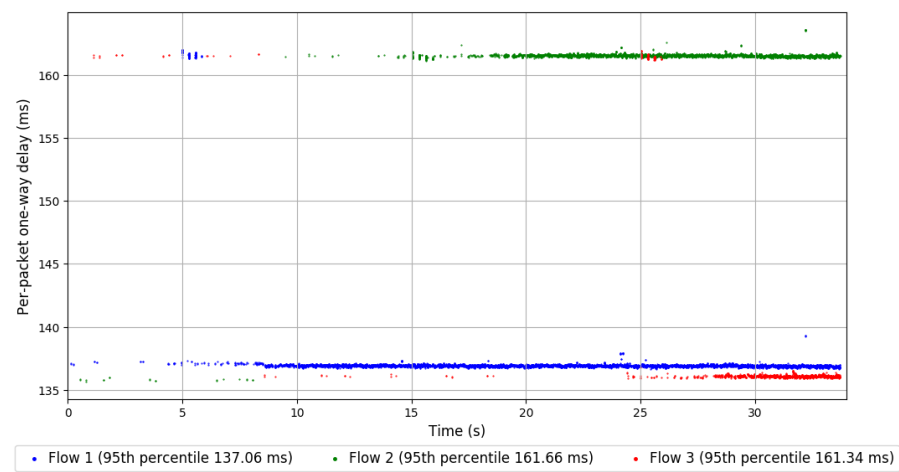
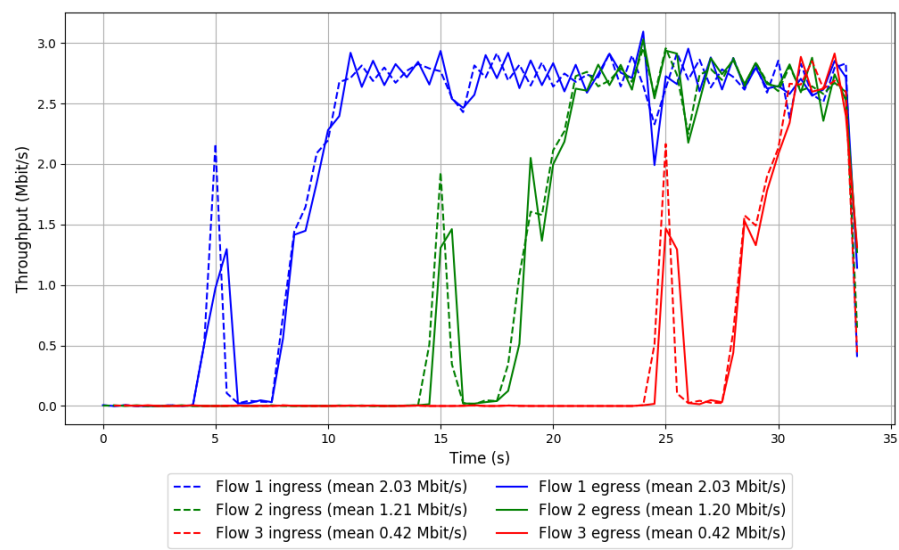
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 161.340 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-03-01 11:59:48

End at: 2018-03-01 12:00:18

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.60 Mbit/s

95th percentile per-packet one-way delay: 162.550 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.00 Mbit/s

95th percentile per-packet one-way delay: 162.564 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 137.247 ms

Loss rate: 0.00%

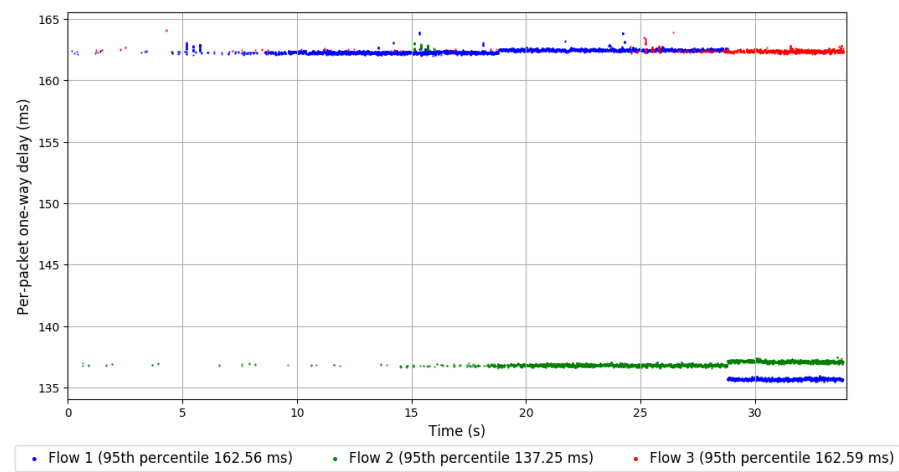
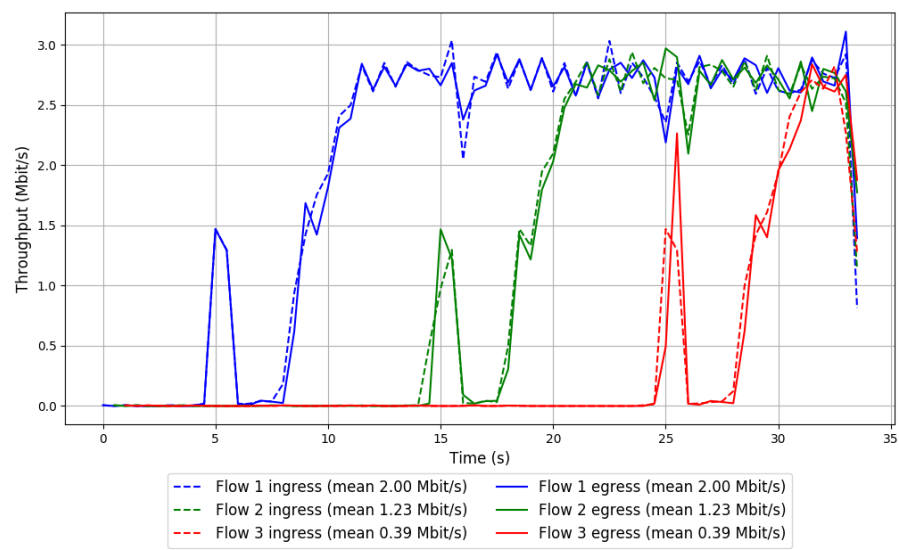
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 162.593 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-03-01 12:19:14

End at: 2018-03-01 12:19:44

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.63 Mbit/s

95th percentile per-packet one-way delay: 140.990 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 141.004 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 140.719 ms

Loss rate: 0.00%

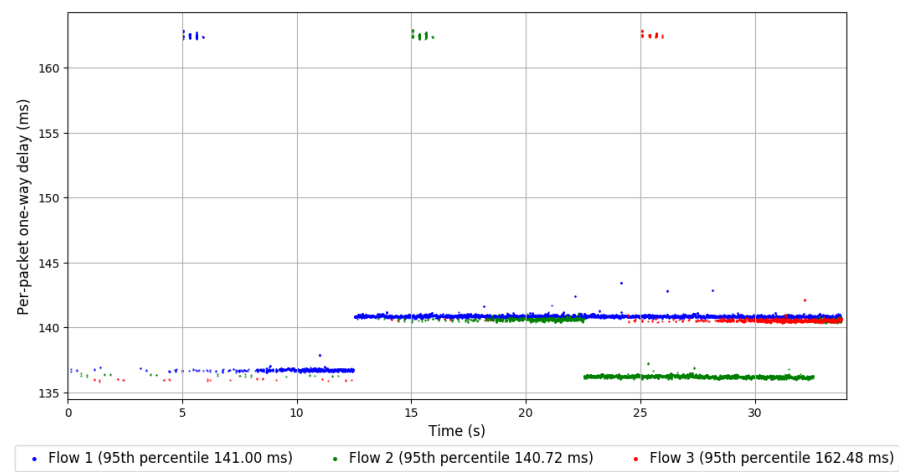
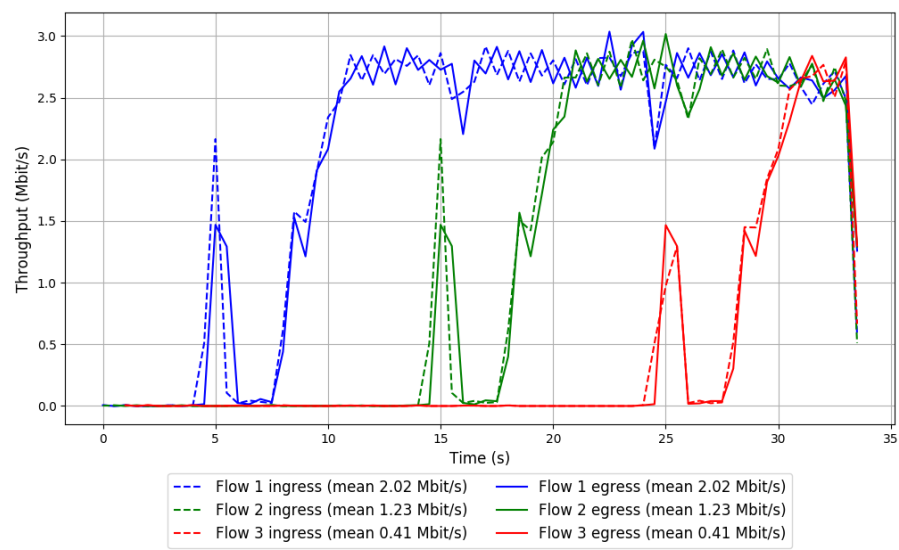
-- Flow 3:

Average throughput: 0.41 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-03-01 12:39:10

End at: 2018-03-01 12:39:41

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 162.430 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 1.98 Mbit/s

95th percentile per-packet one-way delay: 162.455 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 140.744 ms

Loss rate: 0.00%

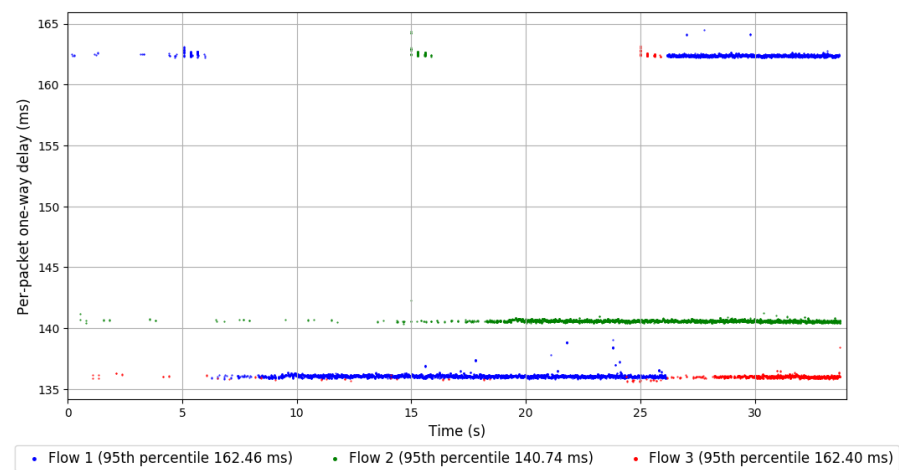
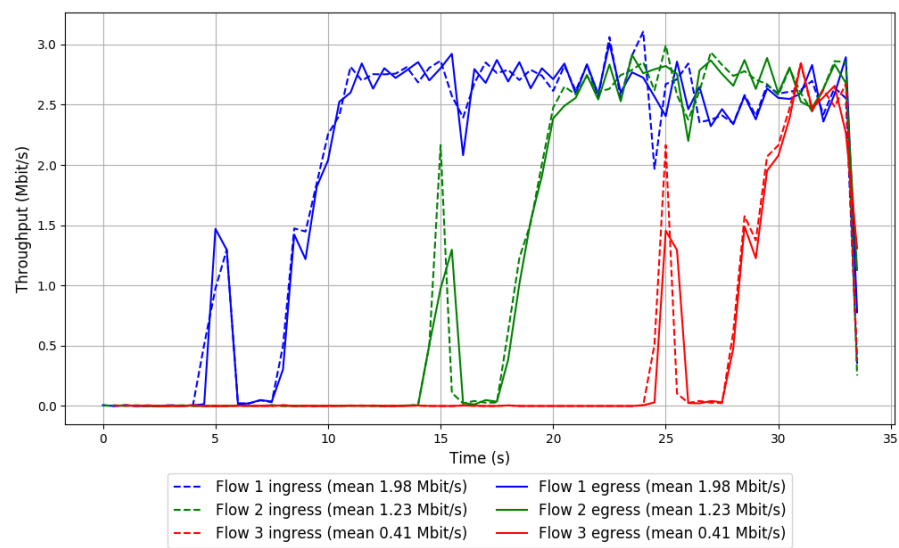
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 162.400 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-03-01 12:59:08

End at: 2018-03-01 12:59:38

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.60 Mbit/s

95th percentile per-packet one-way delay: 161.833 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 161.854 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 136.080 ms

Loss rate: 0.02%

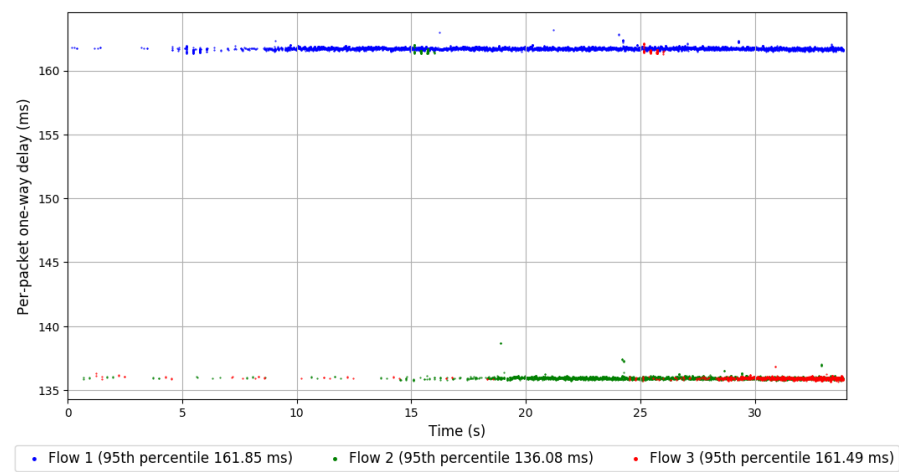
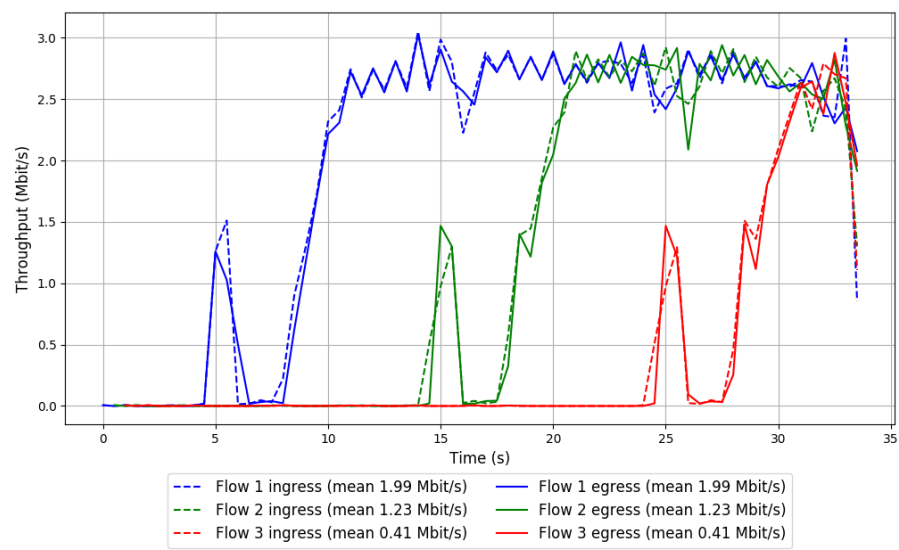
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 161.489 ms

Loss rate: 0.07%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-03-01 13:18:38

End at: 2018-03-01 13:19:08

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.59 Mbit/s

95th percentile per-packet one-way delay: 162.170 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.99 Mbit/s

95th percentile per-packet one-way delay: 162.194 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 135.869 ms

Loss rate: 0.00%

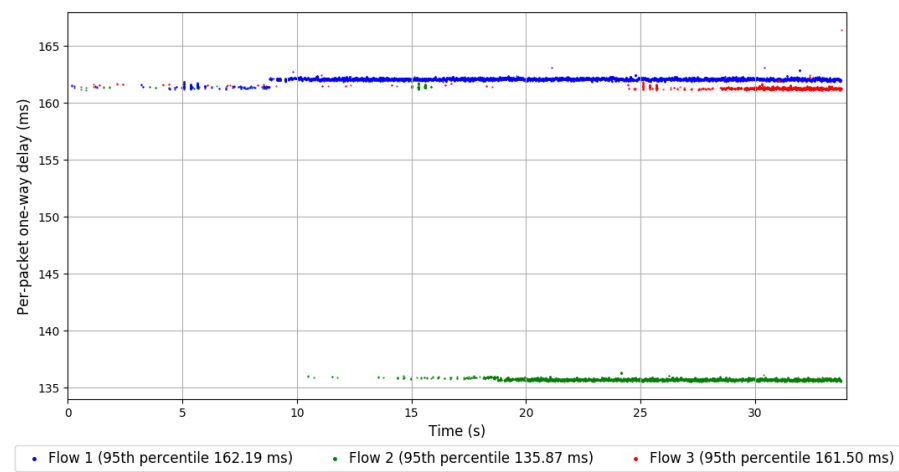
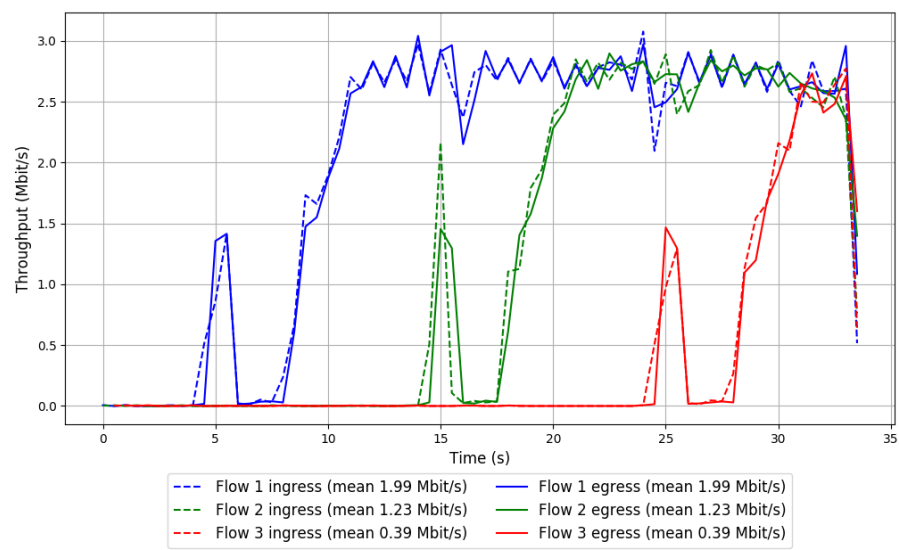
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 161.503 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-03-01 10:23:42

End at: 2018-03-01 10:24:12

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.70 Mbit/s

95th percentile per-packet one-way delay: 141.506 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 141.472 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 141.498 ms

Loss rate: 0.00%

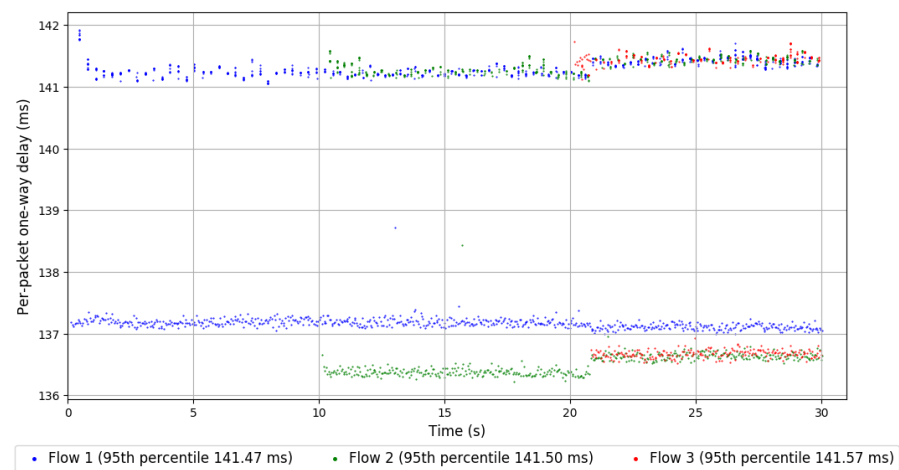
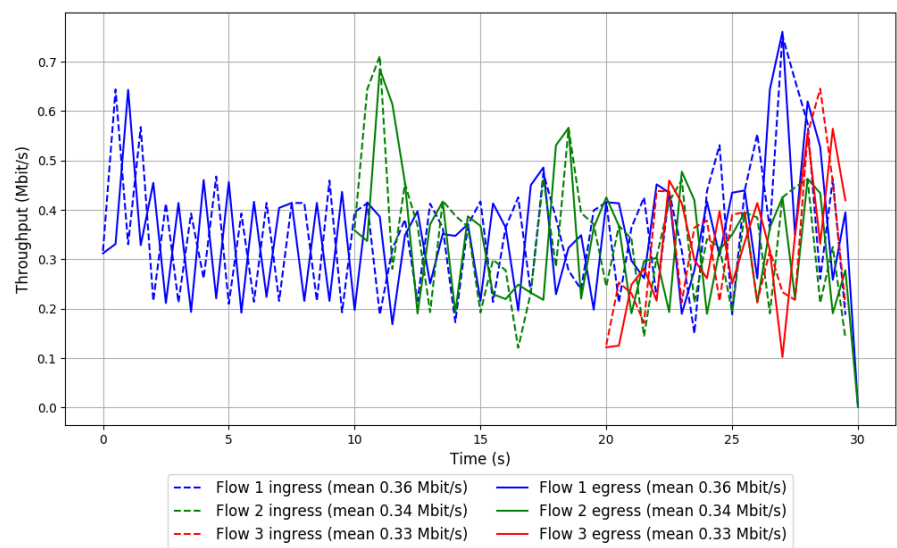
-- Flow 3:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 141.571 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-03-01 10:43:48

End at: 2018-03-01 10:44:18

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 141.399 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 141.359 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 141.408 ms

Loss rate: 0.00%

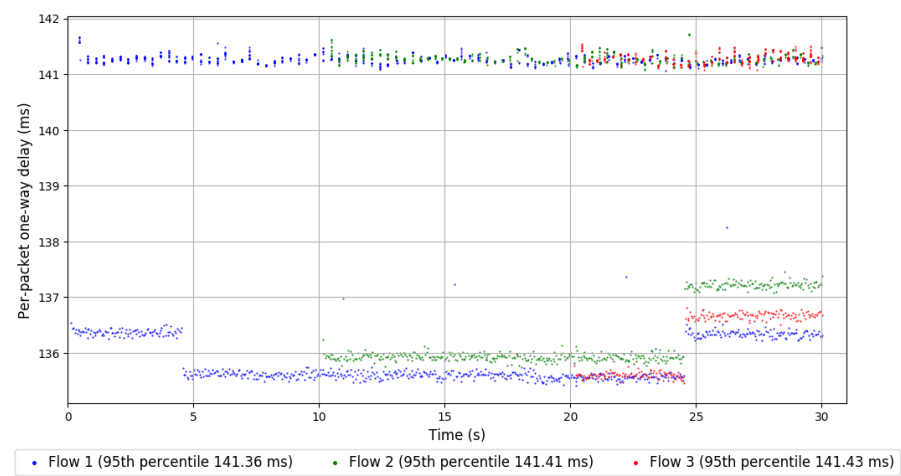
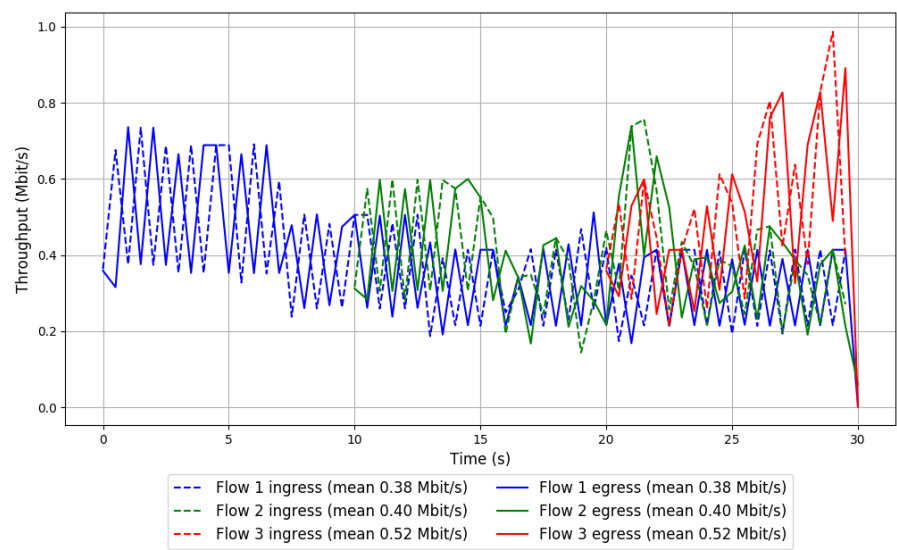
-- Flow 3:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 141.428 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-03-01 11:03:27

End at: 2018-03-01 11:03:57

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 162.648 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 162.652 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 162.625 ms

Loss rate: 0.00%

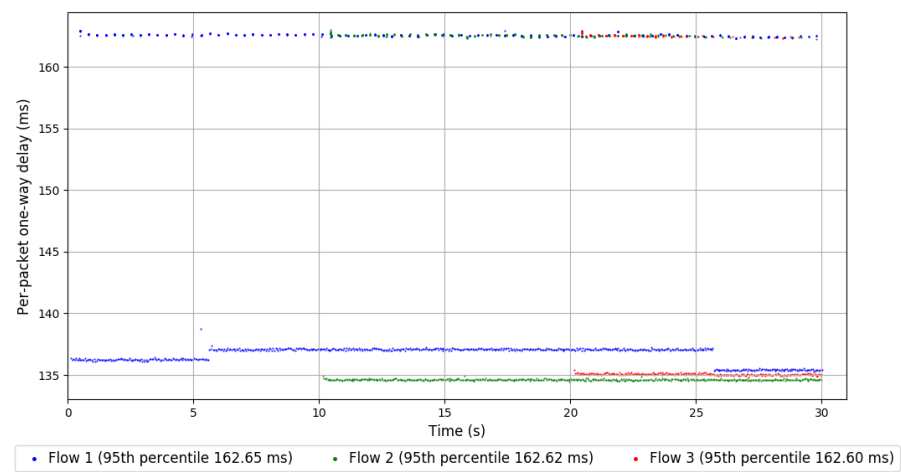
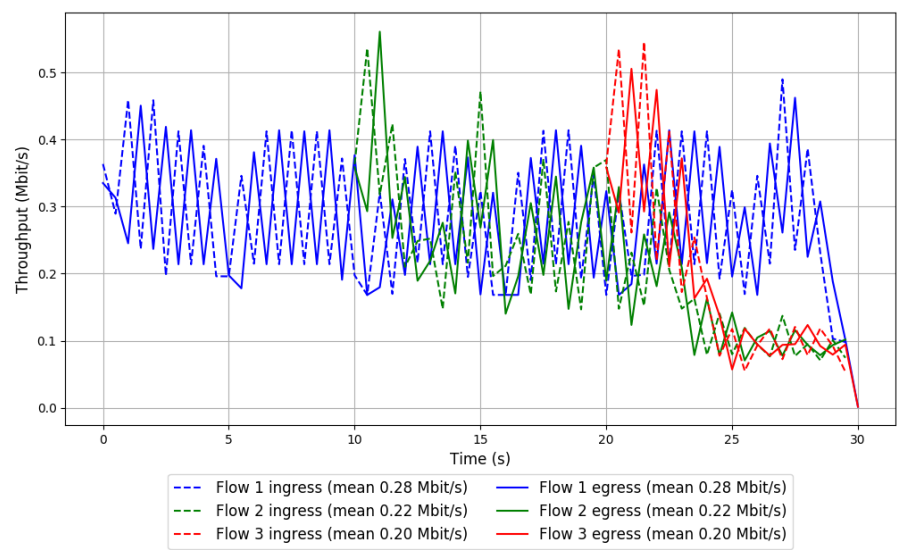
-- Flow 3:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 162.600 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-03-01 11:23:20

End at: 2018-03-01 11:23:50

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 161.633 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 161.498 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 161.517 ms

Loss rate: 0.53%

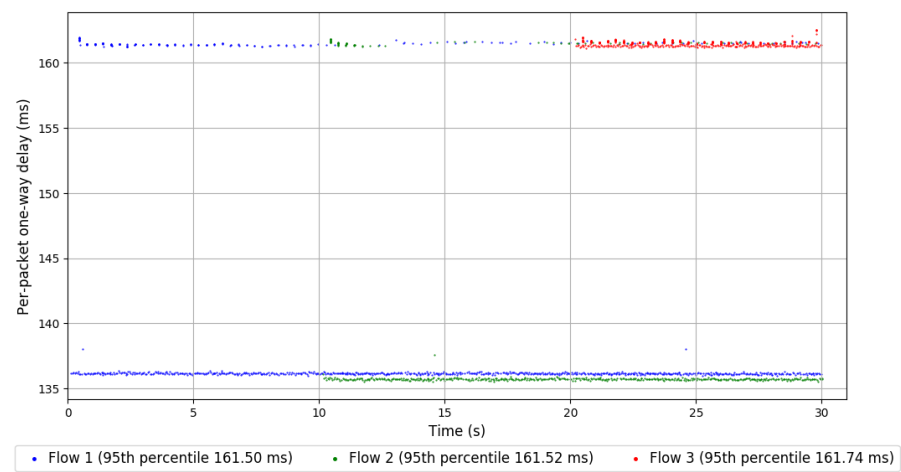
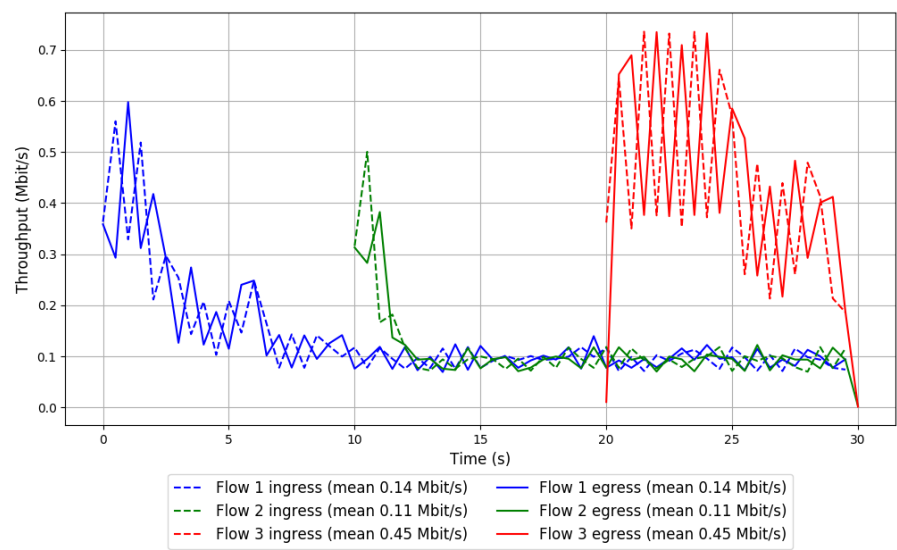
-- Flow 3:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 161.736 ms

Loss rate: 0.02%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-03-01 11:43:06

End at: 2018-03-01 11:43:36

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 162.456 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 162.346 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 162.516 ms

Loss rate: 0.00%

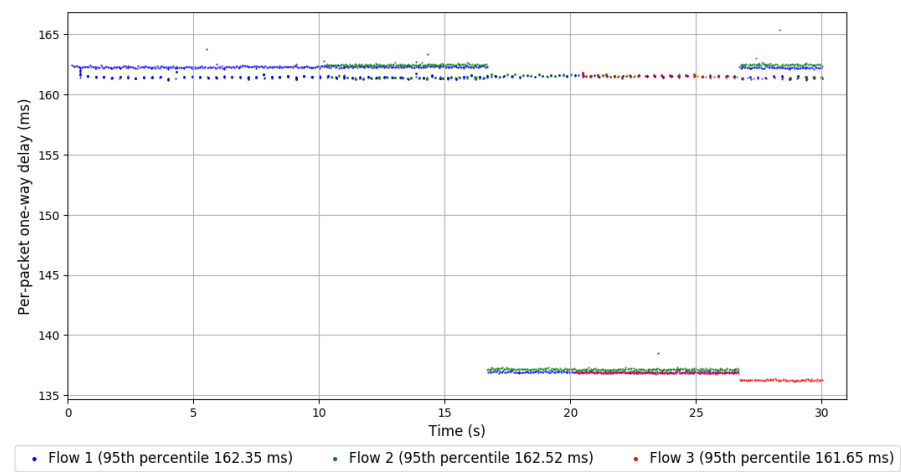
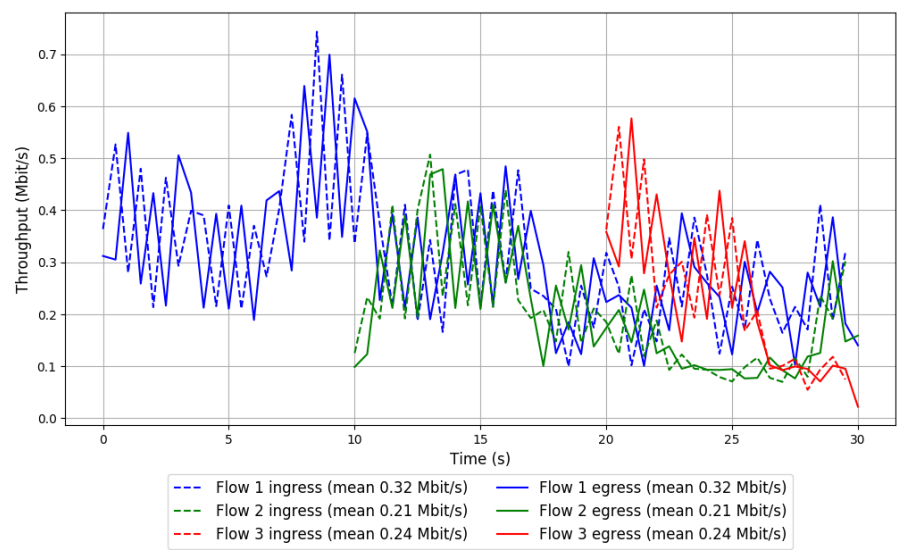
-- Flow 3:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 161.654 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-03-01 12:02:51

End at: 2018-03-01 12:03:21

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 162.697 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 162.724 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 162.668 ms

Loss rate: 0.00%

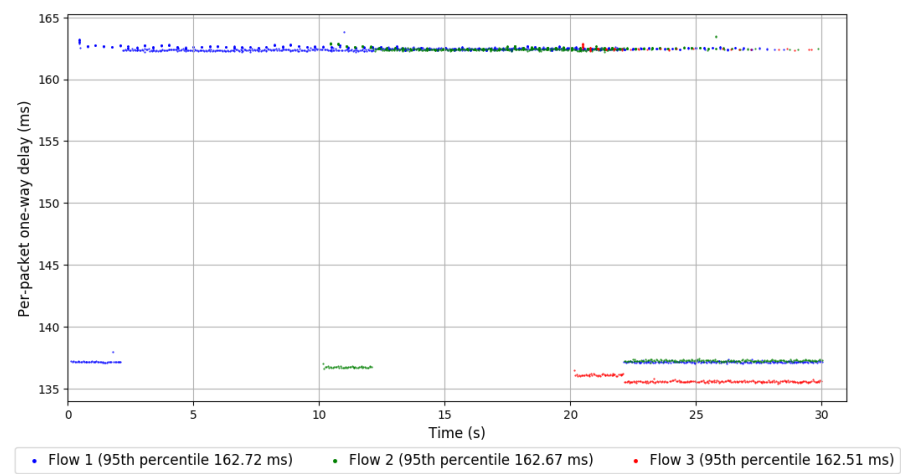
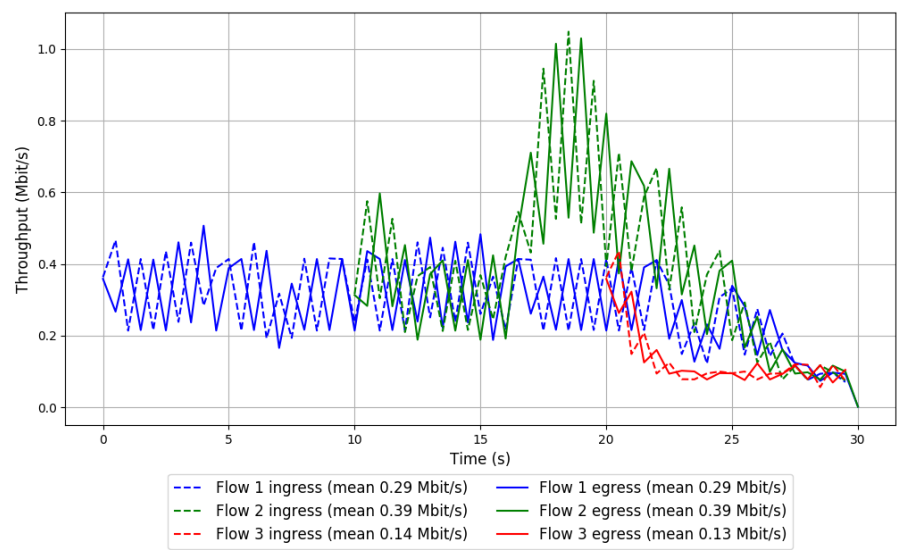
-- Flow 3:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 162.512 ms

Loss rate: 0.90%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-03-01 12:22:23

End at: 2018-03-01 12:22:53

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 162.531 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 162.532 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 162.549 ms

Loss rate: 0.00%

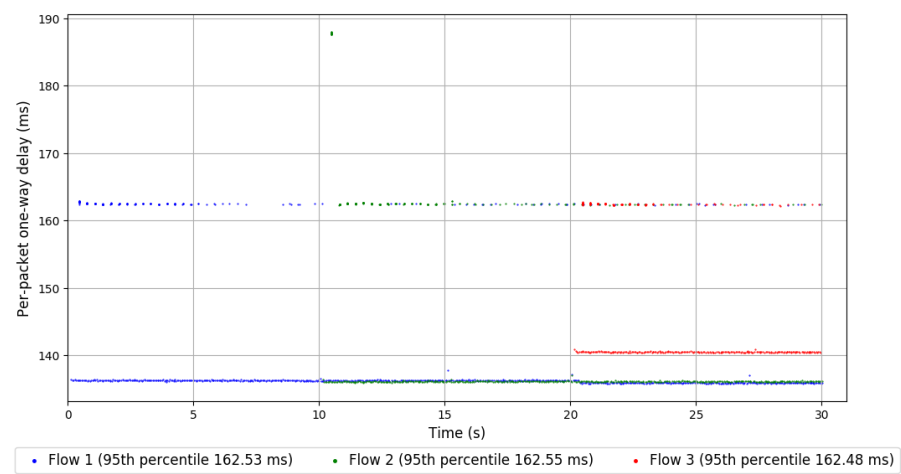
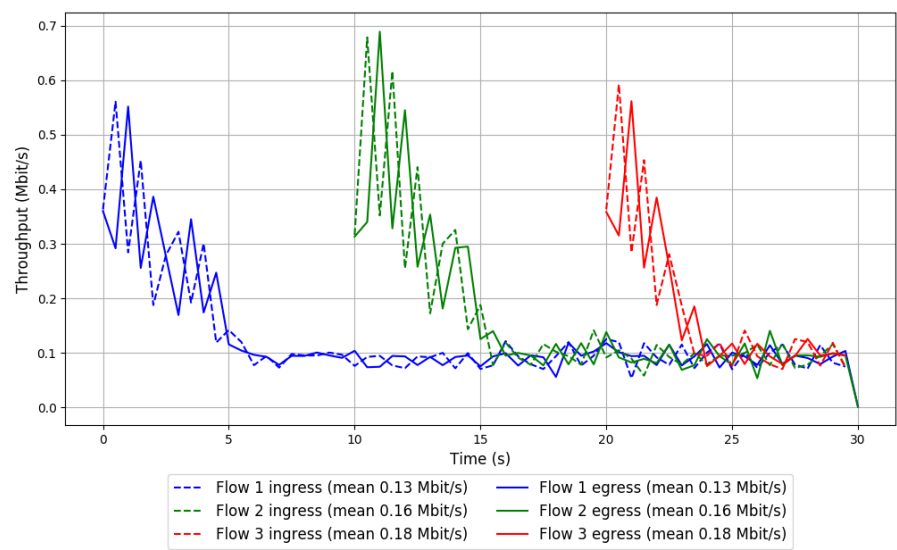
-- Flow 3:

Average throughput: 0.18 Mbit/s

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

Loss rate: 0.66%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-03-01 12:42:16

End at: 2018-03-01 12:42:46

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 162.610 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 162.609 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 162.614 ms

Loss rate: 0.01%

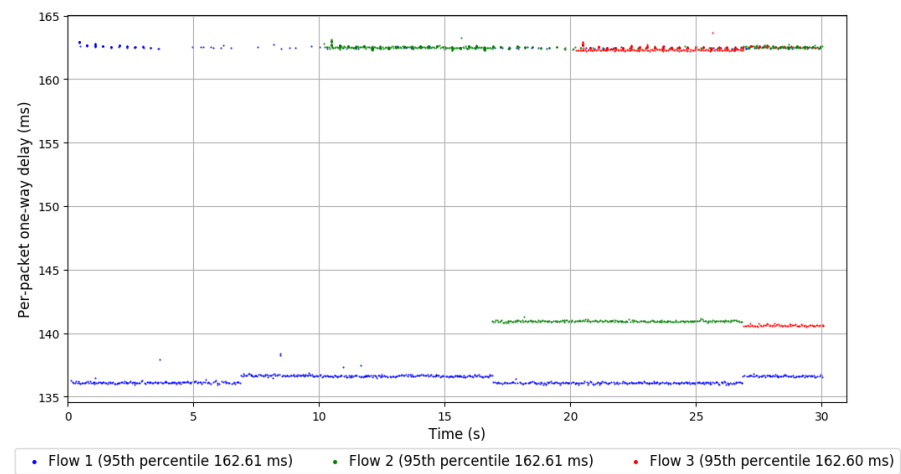
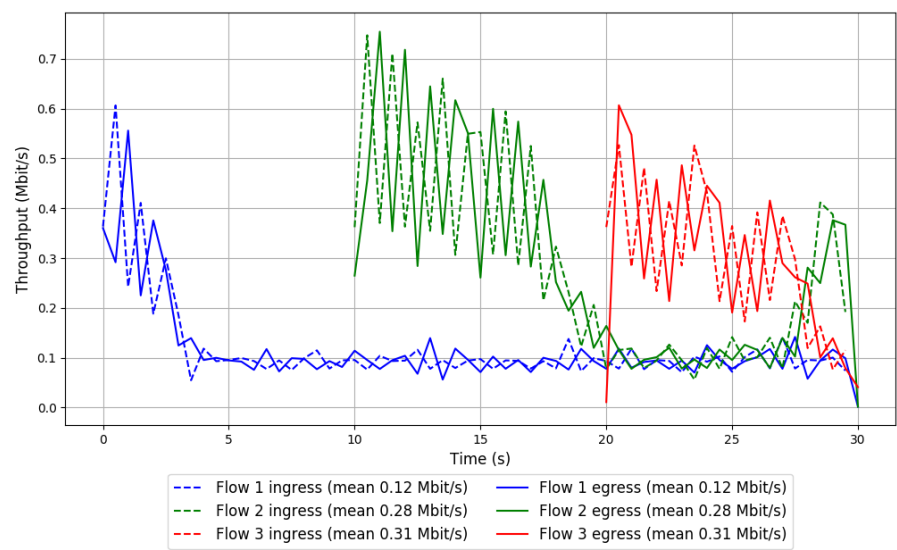
-- Flow 3:

Average throughput: 0.31 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-03-01 13:02:13

End at: 2018-03-01 13:02:43

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.73 Mbit/s

95th percentile per-packet one-way delay: 161.831 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 161.821 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 161.827 ms

Loss rate: 0.00%

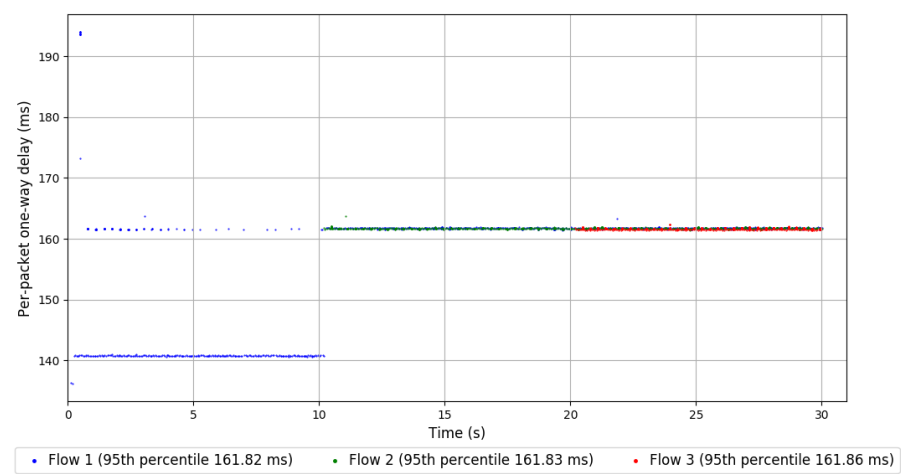
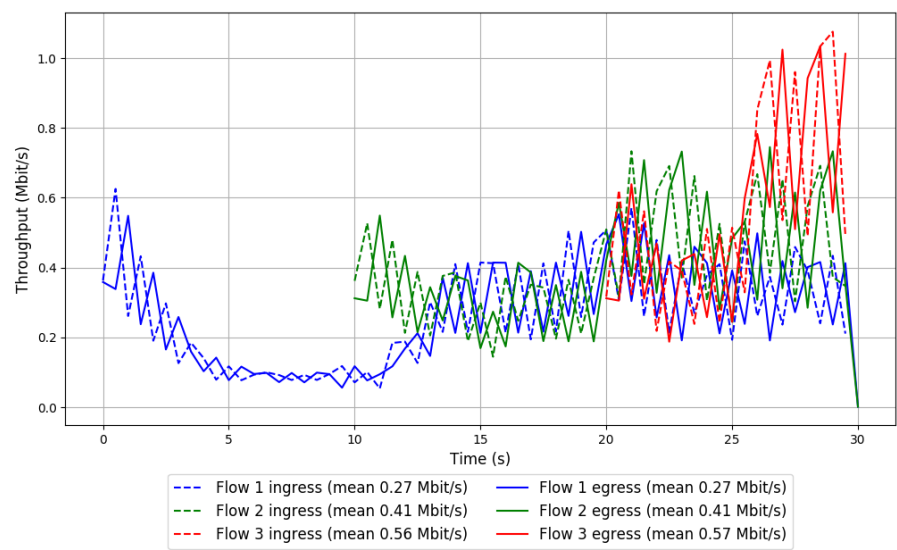
-- Flow 3:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 161.858 ms

Loss rate: 0.01%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-03-01 13:21:42

End at: 2018-03-01 13:22:12

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 164.060 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 161.585 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 164.112 ms

Loss rate: 0.00%

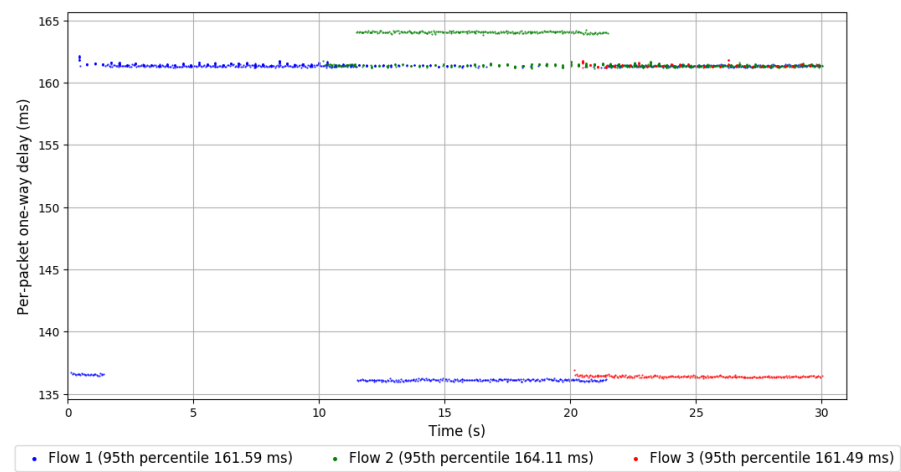
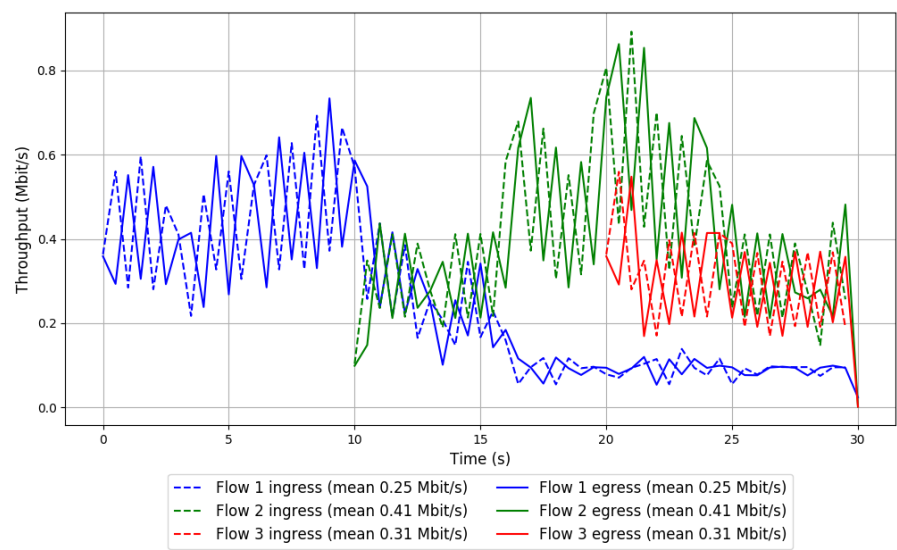
-- Flow 3:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 161.490 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

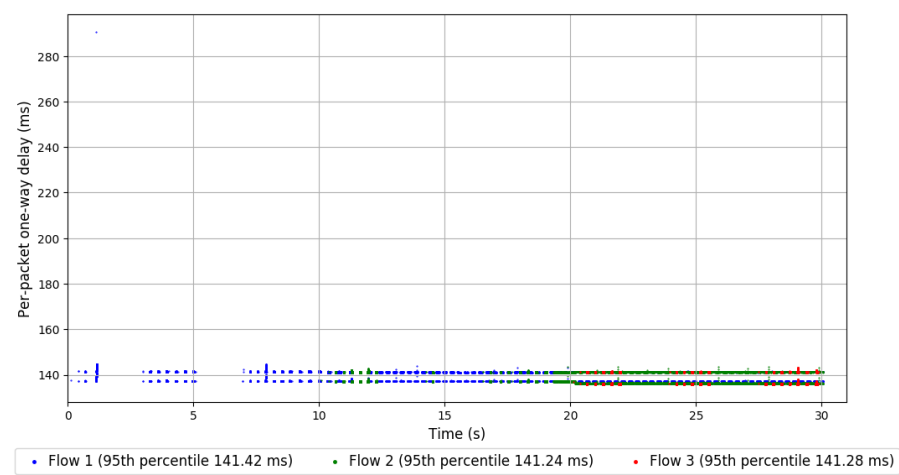
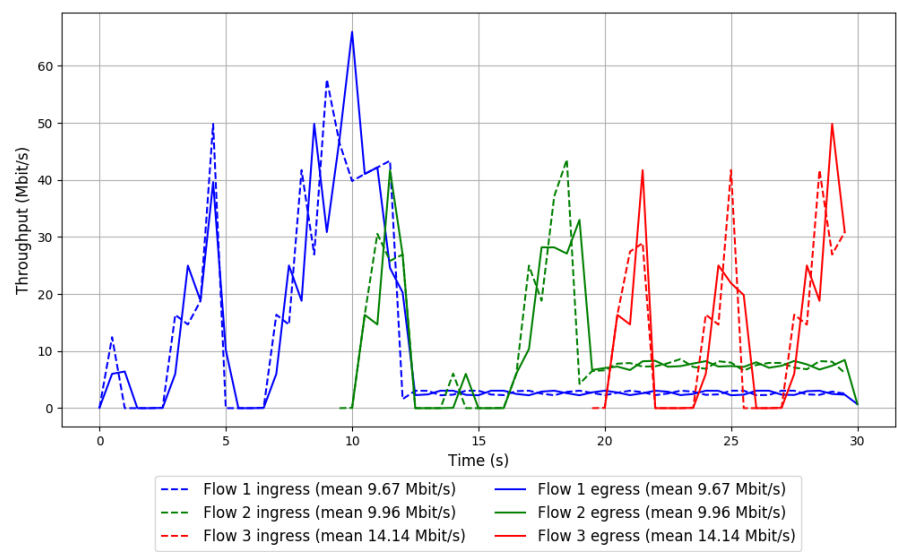


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-03-01 10:32:33
End at: 2018-03-01 10:33:03

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.93 Mbit/s
95th percentile per-packet one-way delay: 141.379 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 9.67 Mbit/s
95th percentile per-packet one-way delay: 141.421 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 9.96 Mbit/s
95th percentile per-packet one-way delay: 141.243 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 14.14 Mbit/s
95th percentile per-packet one-way delay: 141.275 ms
Loss rate: 0.00%
```

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

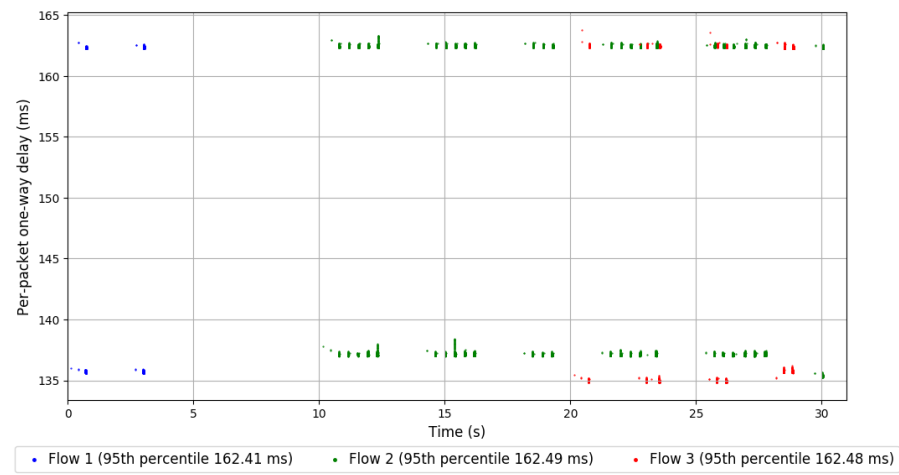
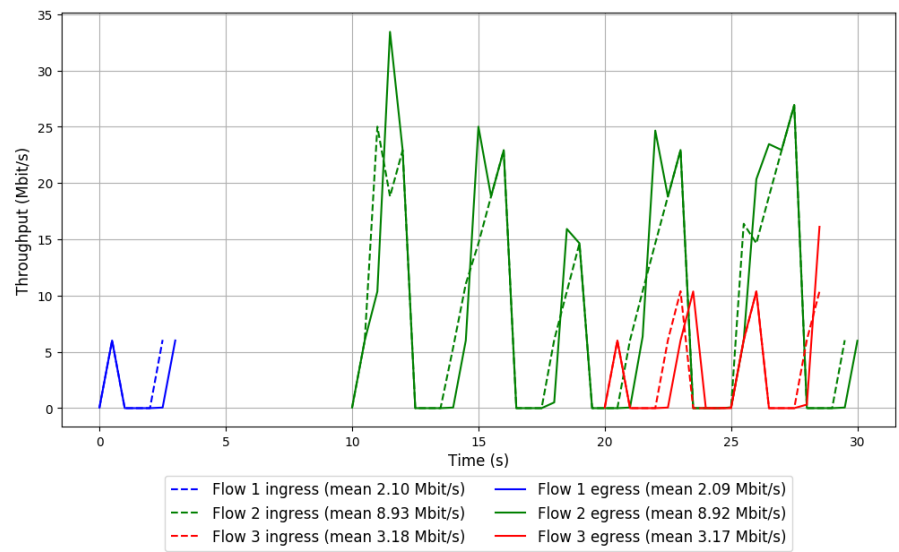


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-03-01 10:52:25
End at: 2018-03-01 10:52:55

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.06 Mbit/s
95th percentile per-packet one-way delay: 162.492 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 162.409 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.92 Mbit/s
95th percentile per-packet one-way delay: 162.494 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.17 Mbit/s
95th percentile per-packet one-way delay: 162.480 ms
Loss rate: 0.00%
```

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

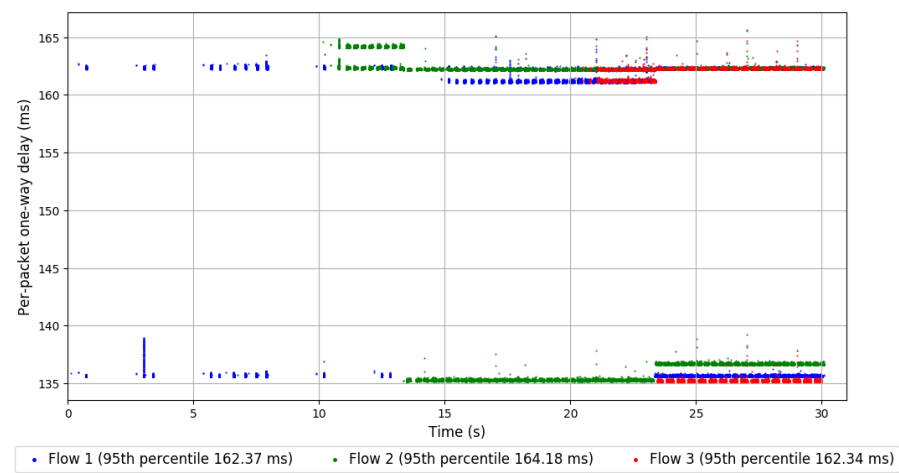
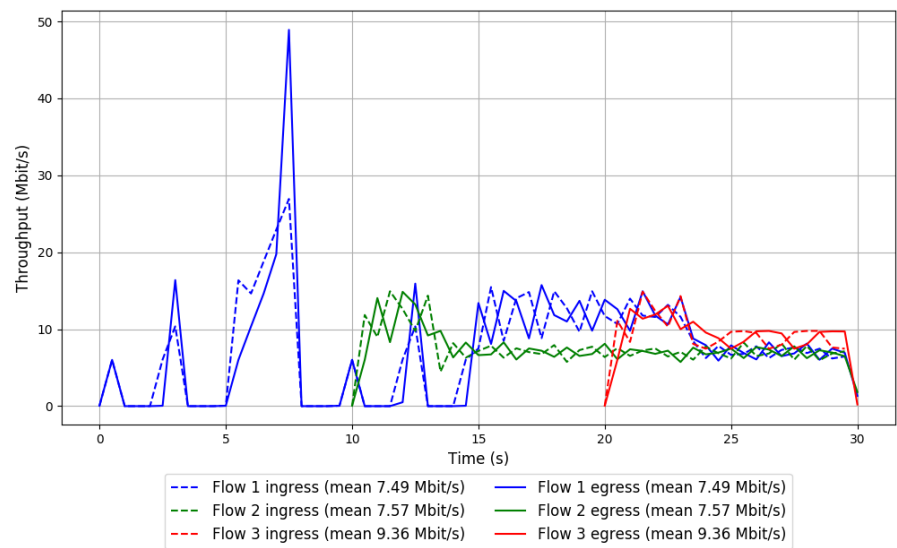


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-03-01 11:12:10
End at: 2018-03-01 11:12:40

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.59 Mbit/s
95th percentile per-packet one-way delay: 162.427 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 162.371 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 7.57 Mbit/s
95th percentile per-packet one-way delay: 164.179 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 9.36 Mbit/s
95th percentile per-packet one-way delay: 162.339 ms
Loss rate: 0.00%
```

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

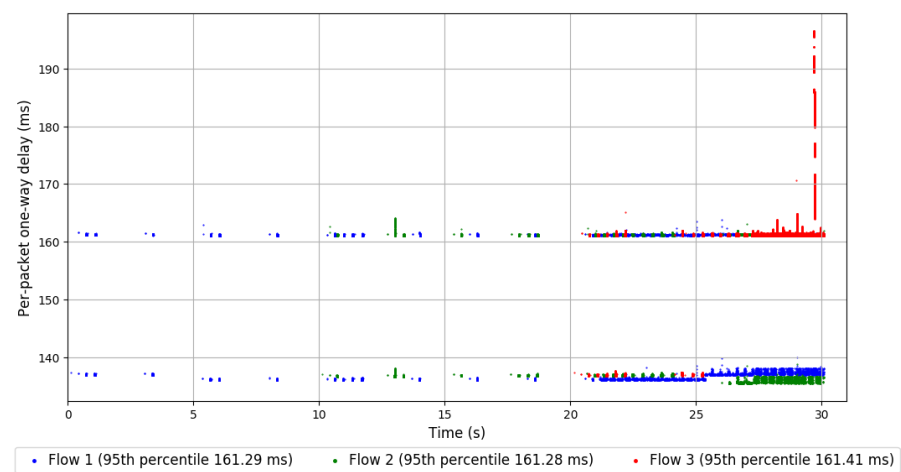
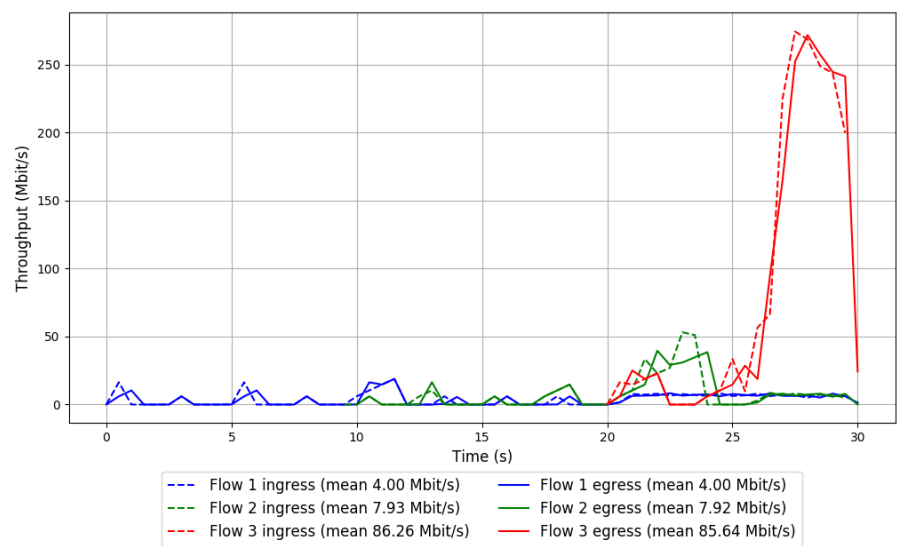


```
Run 4: Statistics of TaoVA-100x

Start at: 2018-03-01 11:31:58
End at: 2018-03-01 11:32:28

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.70 Mbit/s
95th percentile per-packet one-way delay: 161.361 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 4.00 Mbit/s
95th percentile per-packet one-way delay: 161.295 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 7.92 Mbit/s
95th percentile per-packet one-way delay: 161.285 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 85.64 Mbit/s
95th percentile per-packet one-way delay: 161.407 ms
Loss rate: 0.72%
```

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-03-01 11:51:52

End at: 2018-03-01 11:52:22

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.67 Mbit/s

95th percentile per-packet one-way delay: 164.283 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 2.63 Mbit/s

95th percentile per-packet one-way delay: 162.291 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.28 Mbit/s

95th percentile per-packet one-way delay: 162.304 ms

Loss rate: 0.00%

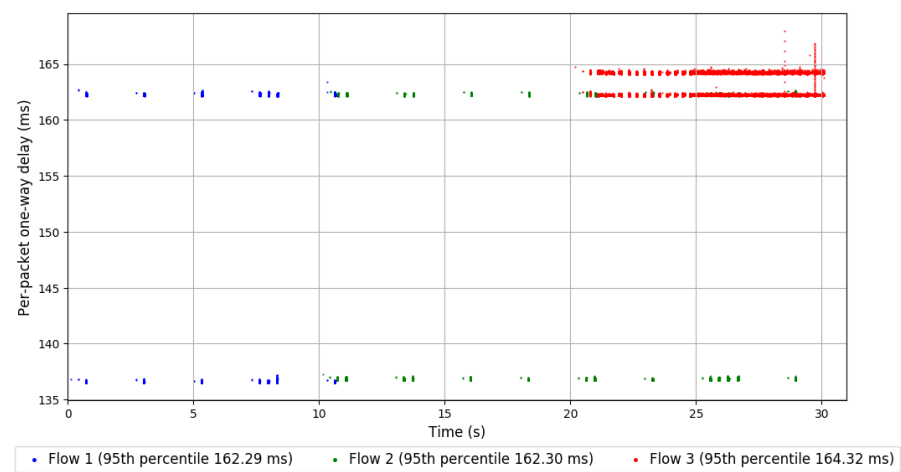
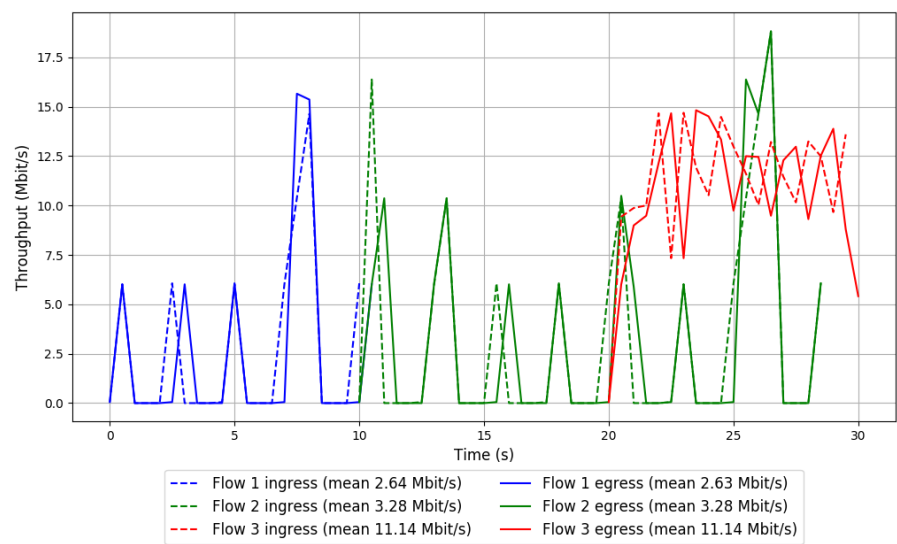
-- Flow 3:

Average throughput: 11.14 Mbit/s

95th percentile per-packet one-way delay: 164.321 ms

Loss rate: 0.32%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-03-01 12:11:37

End at: 2018-03-01 12:12:07

Below is generated by plot.py at 2018-03-01 16:06:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 9.79 Mbit/s

95th percentile per-packet one-way delay: 162.399 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 162.397 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 2.41 Mbit/s

95th percentile per-packet one-way delay: 162.434 ms

Loss rate: 0.00%

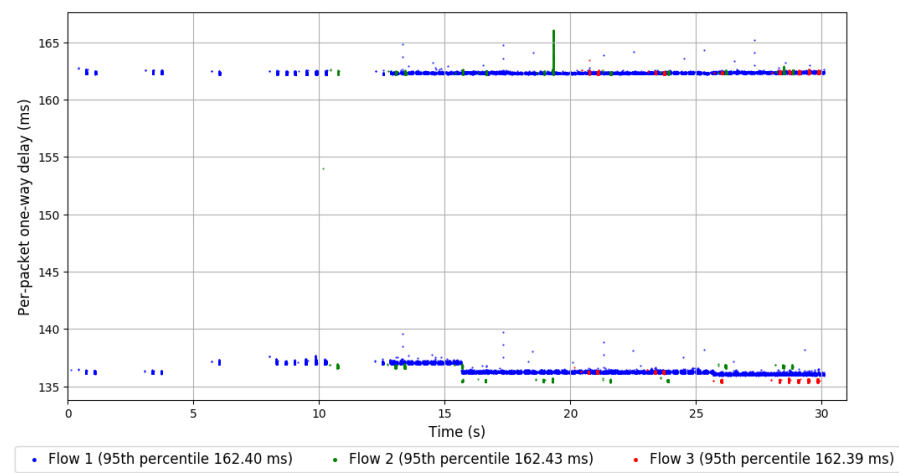
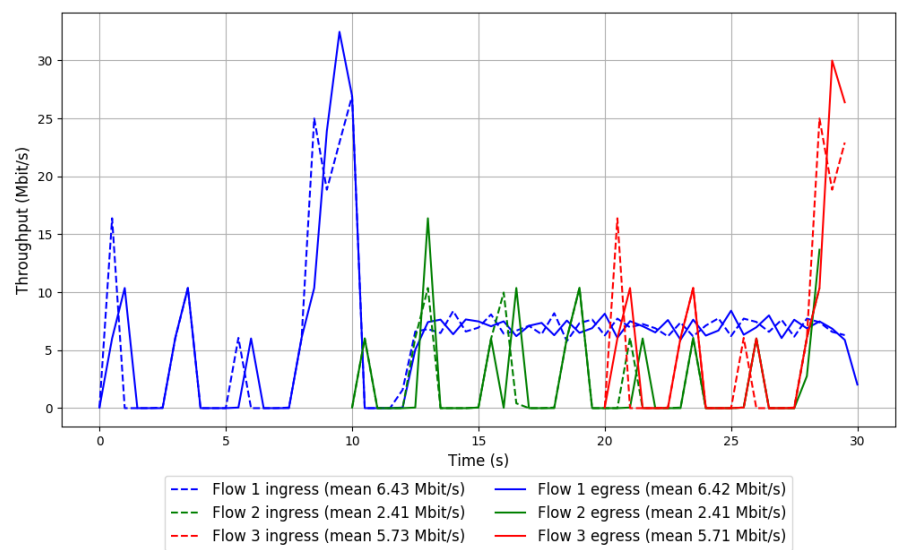
-- Flow 3:

Average throughput: 5.71 Mbit/s

95th percentile per-packet one-way delay: 162.392 ms

Loss rate: 0.00%

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

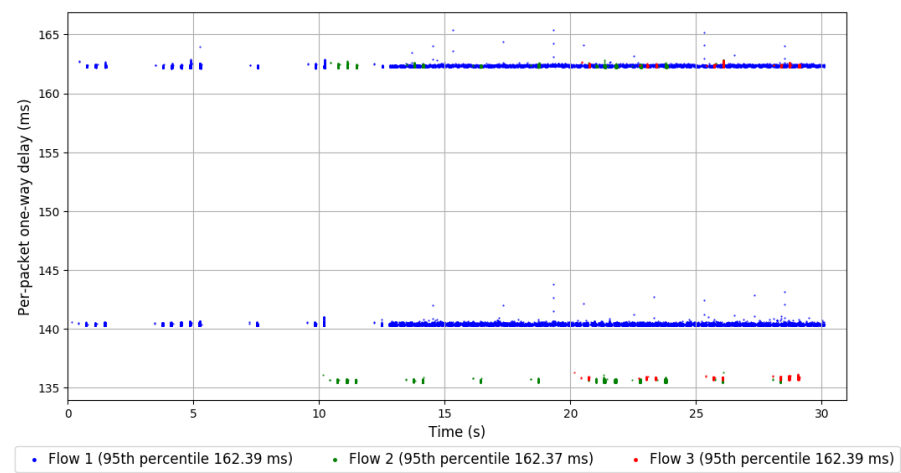
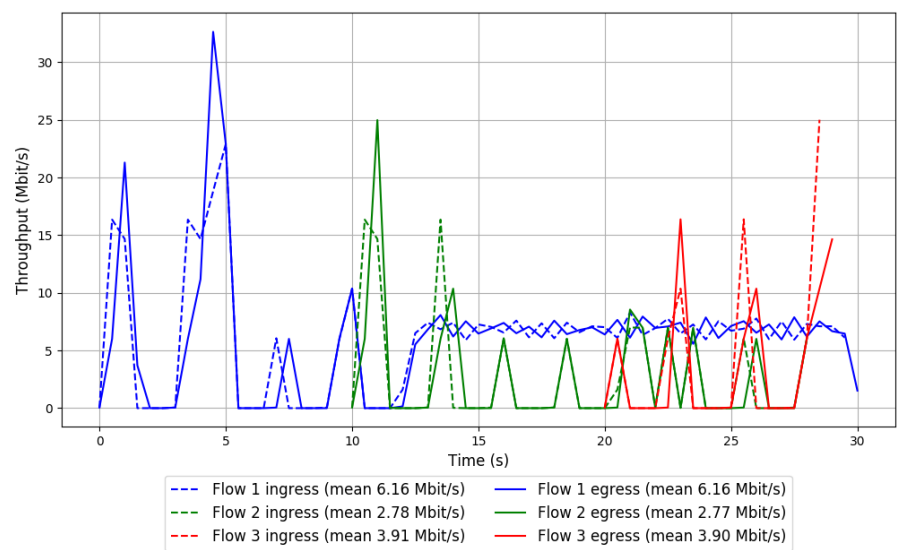


```
Run 7: Statistics of TaoVA-100x

Start at: 2018-03-01 12:31:11
End at: 2018-03-01 12:31:41

# Below is generated by plot.py at 2018-03-01 16:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.02 Mbit/s
95th percentile per-packet one-way delay: 162.391 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 162.394 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 2.77 Mbit/s
95th percentile per-packet one-way delay: 162.368 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 162.387 ms
Loss rate: 0.00%
```

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-03-01 12:50:52

End at: 2018-03-01 12:51:22

Below is generated by plot.py at 2018-03-01 16:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.21 Mbit/s

95th percentile per-packet one-way delay: 161.654 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 12.23 Mbit/s

95th percentile per-packet one-way delay: 161.561 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 12.03 Mbit/s

95th percentile per-packet one-way delay: 161.523 ms

Loss rate: 0.12%

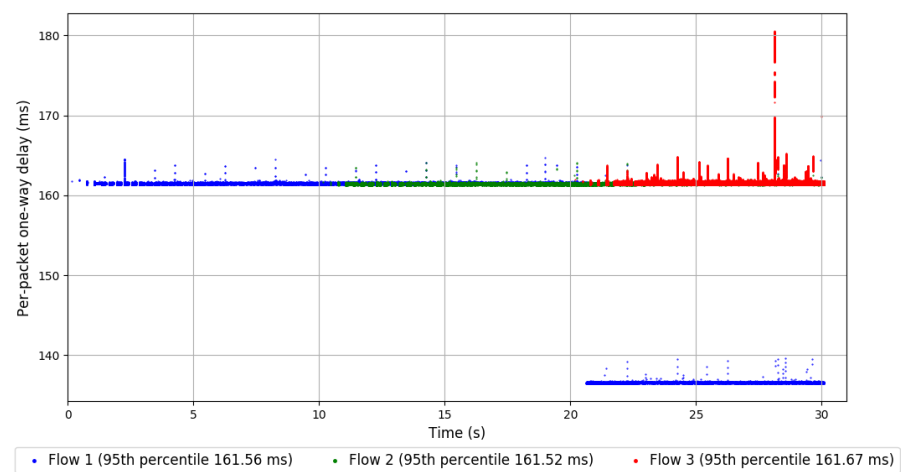
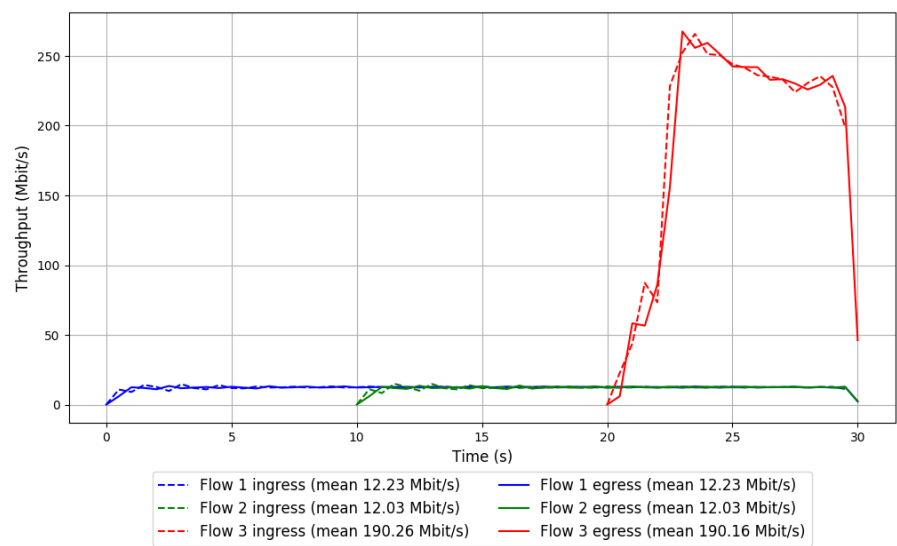
-- Flow 3:

Average throughput: 190.16 Mbit/s

95th percentile per-packet one-way delay: 161.671 ms

Loss rate: 0.31%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-03-01 13:10:45

End at: 2018-03-01 13:11:15

Below is generated by plot.py at 2018-03-01 16:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.82 Mbit/s

95th percentile per-packet one-way delay: 161.456 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 181.06 Mbit/s

95th percentile per-packet one-way delay: 161.462 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.37 Mbit/s

95th percentile per-packet one-way delay: 161.437 ms

Loss rate: 0.00%

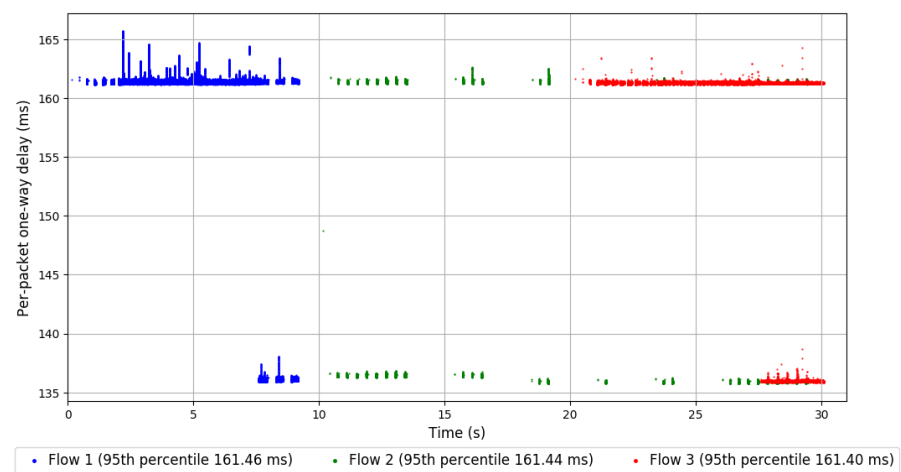
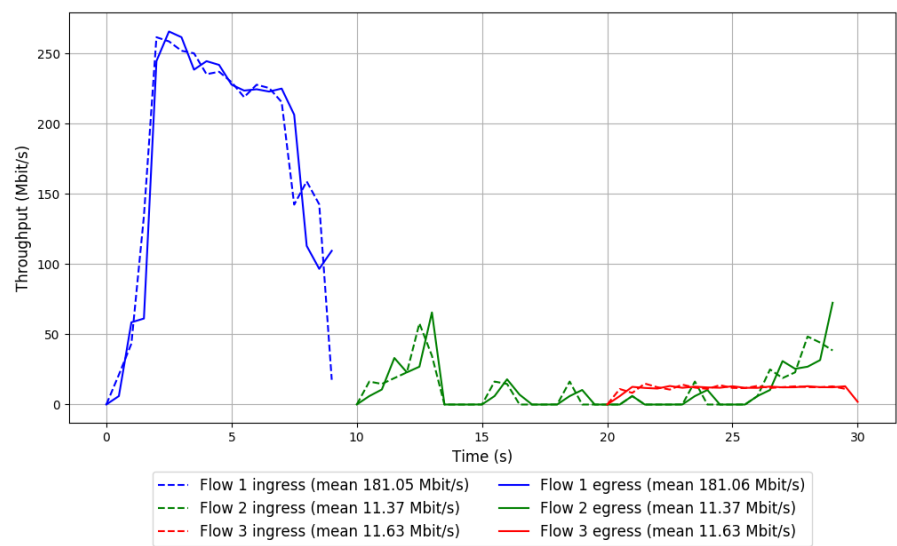
-- Flow 3:

Average throughput: 11.63 Mbit/s

95th percentile per-packet one-way delay: 161.402 ms

Loss rate: 0.23%

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

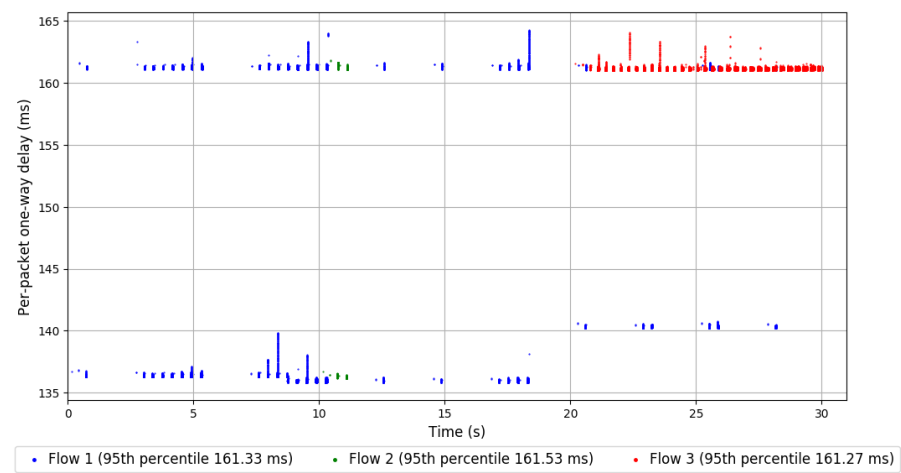
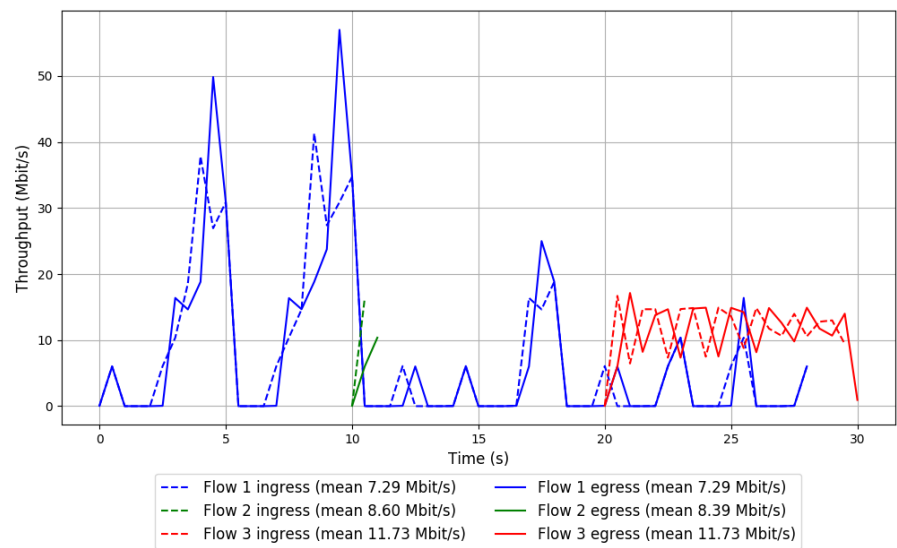


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-03-01 13:30:24
End at: 2018-03-01 13:30:54

# Below is generated by plot.py at 2018-03-01 16:06:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.98 Mbit/s
95th percentile per-packet one-way delay: 161.311 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 161.327 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.39 Mbit/s
95th percentile per-packet one-way delay: 161.534 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.73 Mbit/s
95th percentile per-packet one-way delay: 161.267 ms
Loss rate: 0.00%
```

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

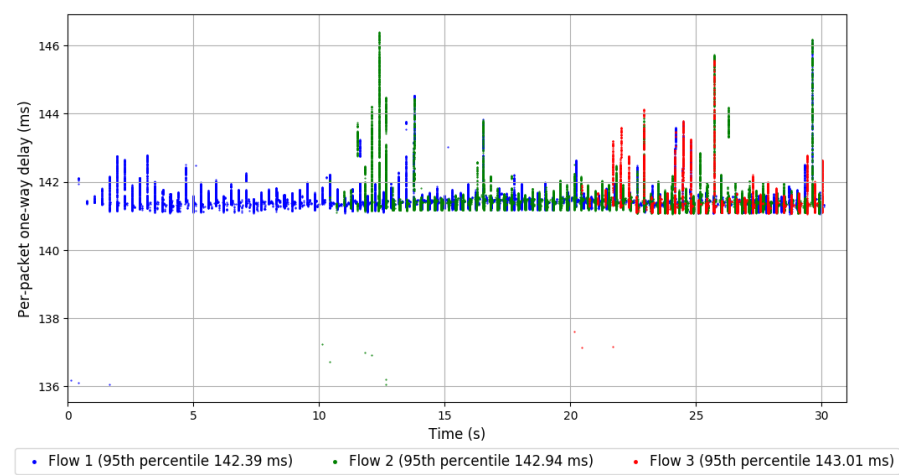
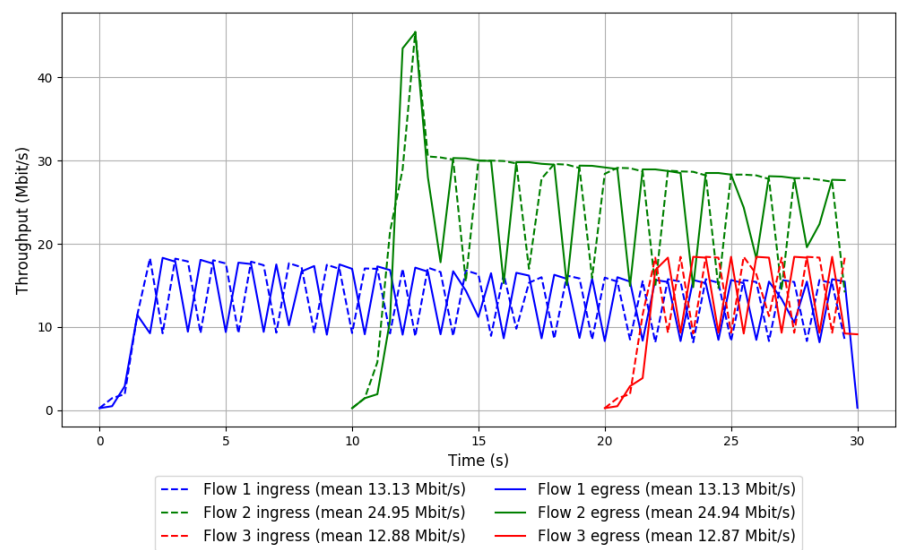


```
Run 1: Statistics of TCP Vegas

Start at: 2018-03-01 10:36:50
End at: 2018-03-01 10:37:20

# Below is generated by plot.py at 2018-03-01 16:06:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.91 Mbit/s
95th percentile per-packet one-way delay: 142.693 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.13 Mbit/s
95th percentile per-packet one-way delay: 142.394 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.94 Mbit/s
95th percentile per-packet one-way delay: 142.943 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.87 Mbit/s
95th percentile per-packet one-way delay: 143.014 ms
Loss rate: 0.00%
```

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-03-01 10:56:36

End at: 2018-03-01 10:57:06

Below is generated by plot.py at 2018-03-01 16:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 34.58 Mbit/s

95th percentile per-packet one-way delay: 164.152 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 14.02 Mbit/s

95th percentile per-packet one-way delay: 163.421 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 20.49 Mbit/s

95th percentile per-packet one-way delay: 164.263 ms

Loss rate: 0.01%

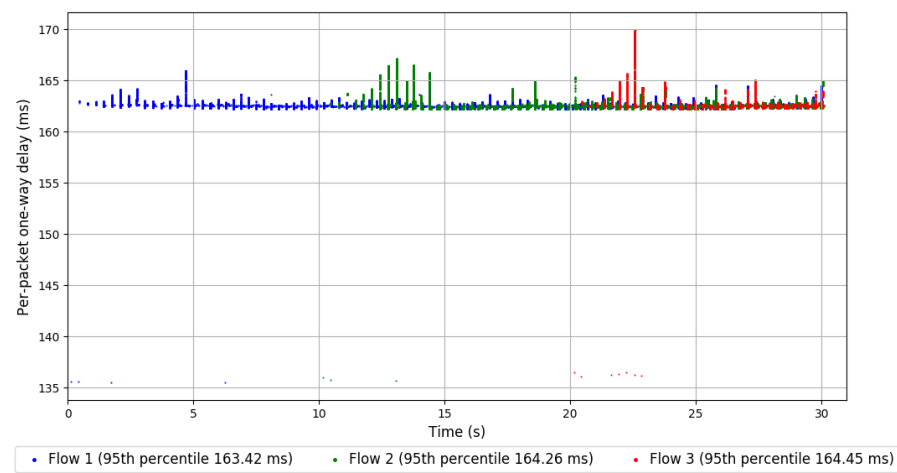
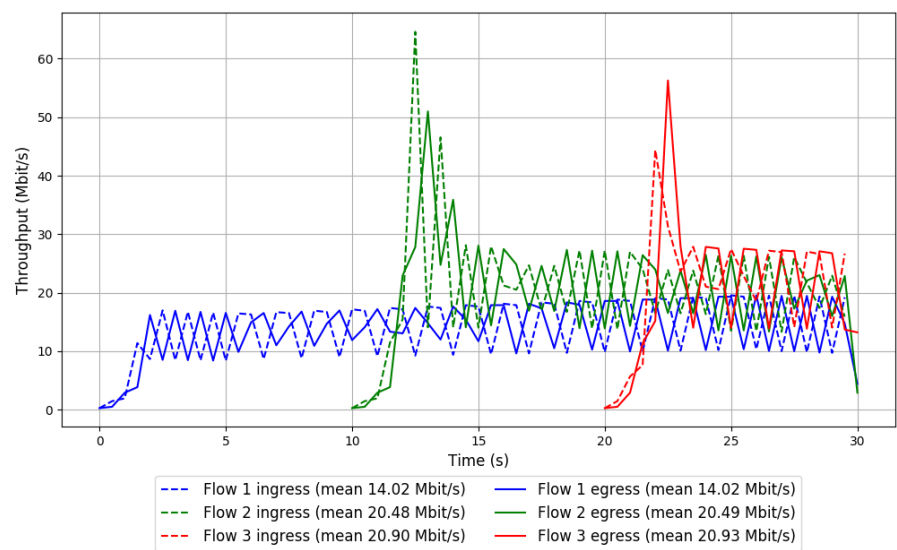
-- Flow 3:

Average throughput: 20.93 Mbit/s

95th percentile per-packet one-way delay: 164.446 ms

Loss rate: 0.01%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-03-01 11:16:23

End at: 2018-03-01 11:16:53

Below is generated by plot.py at 2018-03-01 16:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 46.35 Mbit/s

95th percentile per-packet one-way delay: 162.792 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 18.31 Mbit/s

95th percentile per-packet one-way delay: 162.341 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 24.82 Mbit/s

95th percentile per-packet one-way delay: 163.936 ms

Loss rate: 0.00%

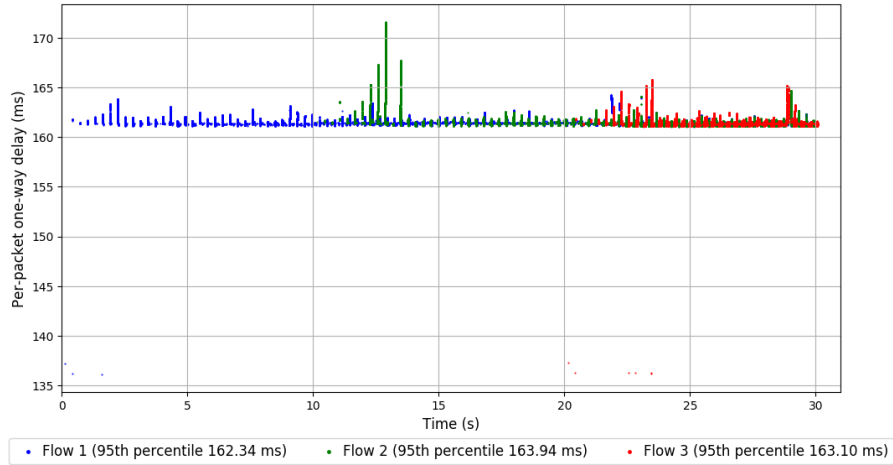
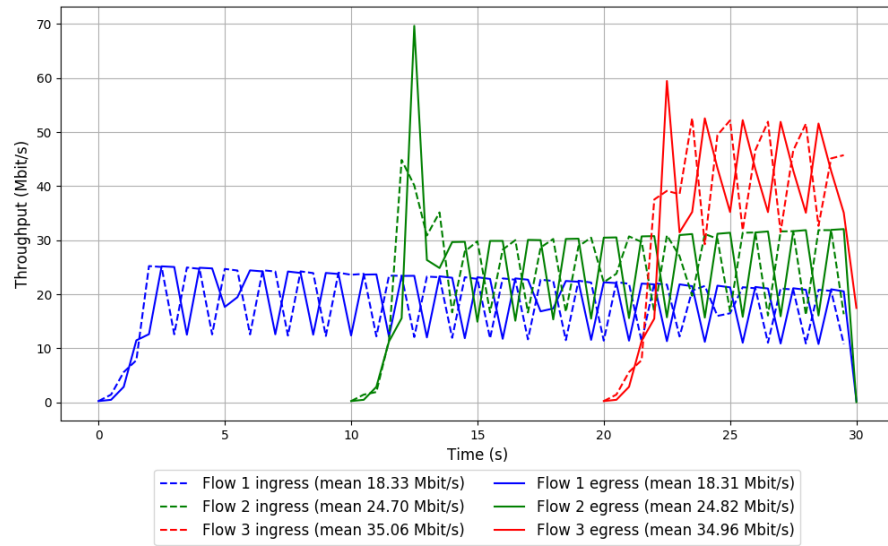
-- Flow 3:

Average throughput: 34.96 Mbit/s

95th percentile per-packet one-way delay: 163.105 ms

Loss rate: 0.32%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-03-01 11:36:20

End at: 2018-03-01 11:36:50

Below is generated by plot.py at 2018-03-01 16:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 21.15 Mbit/s

95th percentile per-packet one-way delay: 162.130 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 11.86 Mbit/s

95th percentile per-packet one-way delay: 162.157 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.89 Mbit/s

95th percentile per-packet one-way delay: 161.800 ms

Loss rate: 0.02%

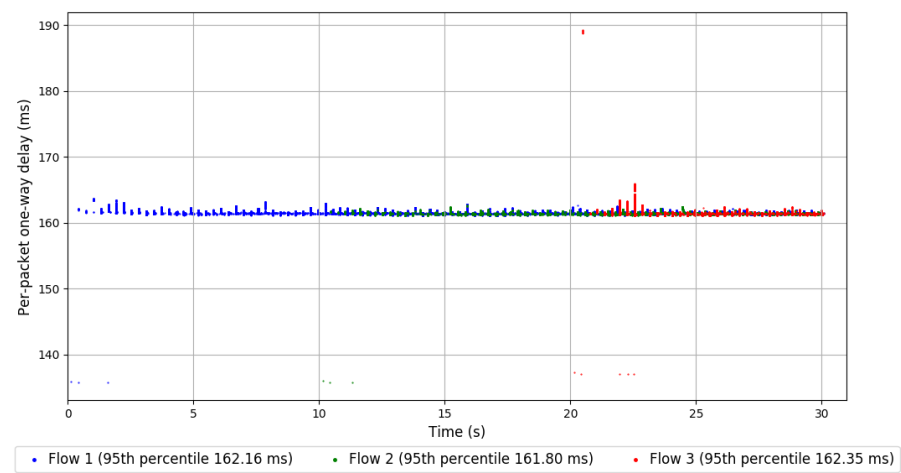
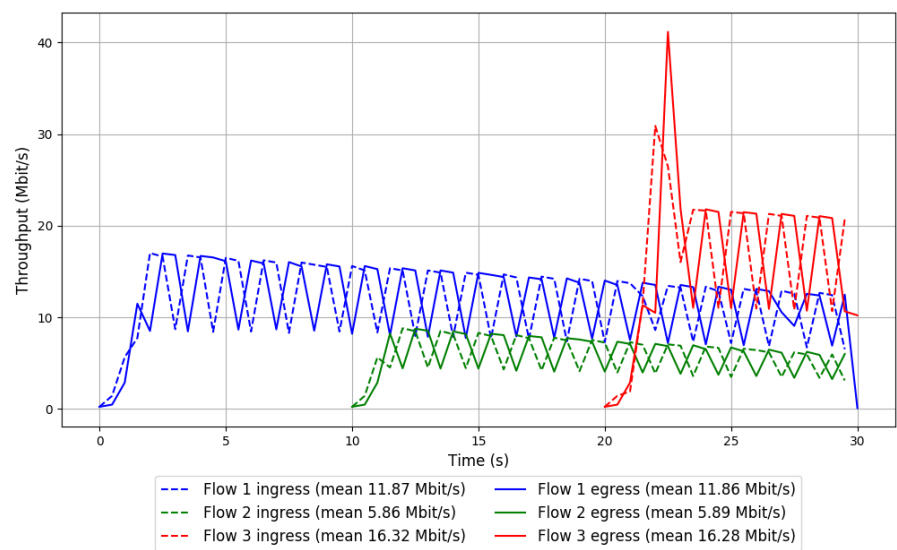
-- Flow 3:

Average throughput: 16.28 Mbit/s

95th percentile per-packet one-way delay: 162.350 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-03-01 11:55:57

End at: 2018-03-01 11:56:27

Below is generated by plot.py at 2018-03-01 16:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.90 Mbit/s

95th percentile per-packet one-way delay: 165.326 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 23.43 Mbit/s

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

Loss rate: 0.01%

-- Flow 2:

Average throughput: 39.78 Mbit/s

95th percentile per-packet one-way delay: 167.015 ms

Loss rate: 0.01%

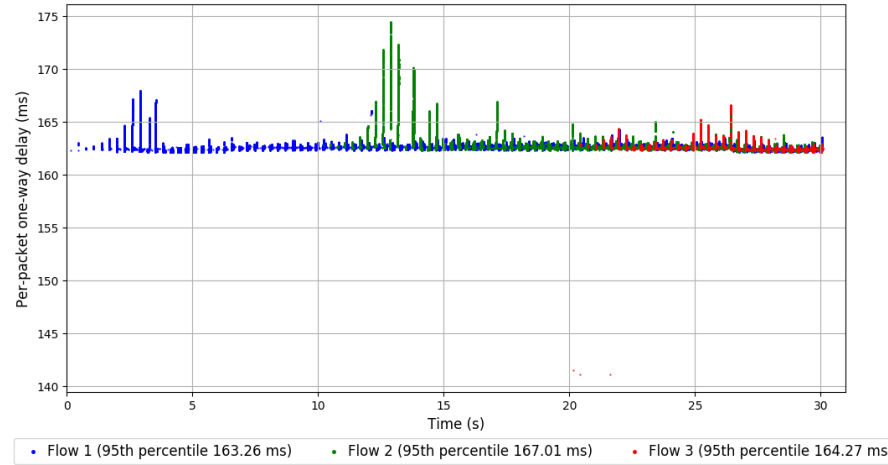
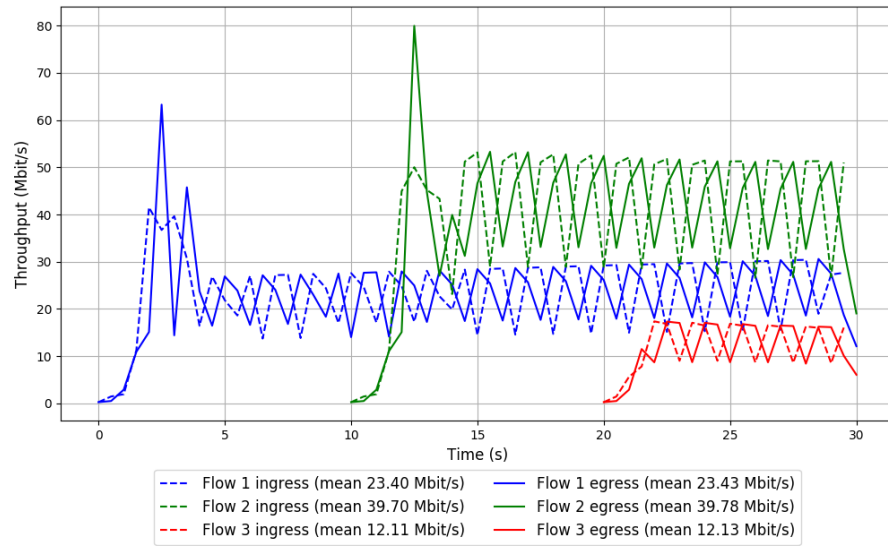
-- Flow 3:

Average throughput: 12.13 Mbit/s

95th percentile per-packet one-way delay: 164.266 ms

Loss rate: 0.02%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-03-01 12:15:50

End at: 2018-03-01 12:16:20

Below is generated by plot.py at 2018-03-01 16:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 35.56 Mbit/s

95th percentile per-packet one-way delay: 163.418 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 18.24 Mbit/s

95th percentile per-packet one-way delay: 163.283 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 22.98 Mbit/s

95th percentile per-packet one-way delay: 164.399 ms

Loss rate: 0.00%

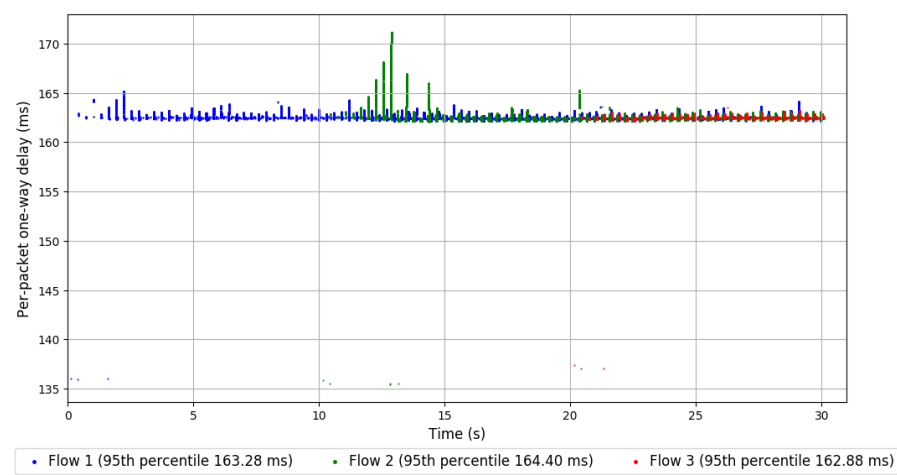
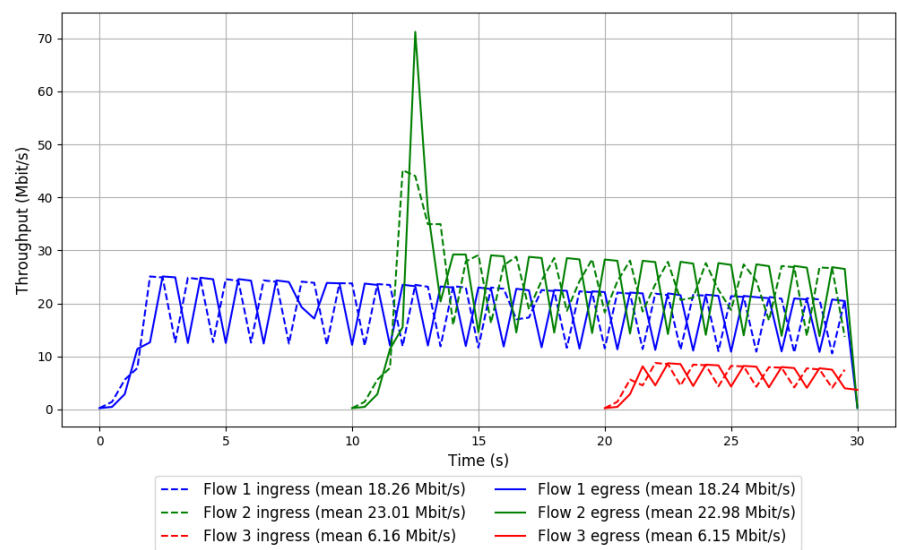
-- Flow 3:

Average throughput: 6.15 Mbit/s

95th percentile per-packet one-way delay: 162.884 ms

Loss rate: 0.00%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-03-01 12:35:28

End at: 2018-03-01 12:35:58

Below is generated by plot.py at 2018-03-01 16:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 42.72 Mbit/s

95th percentile per-packet one-way delay: 163.623 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 23.06 Mbit/s

95th percentile per-packet one-way delay: 164.246 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 29.31 Mbit/s

95th percentile per-packet one-way delay: 163.213 ms

Loss rate: 0.04%

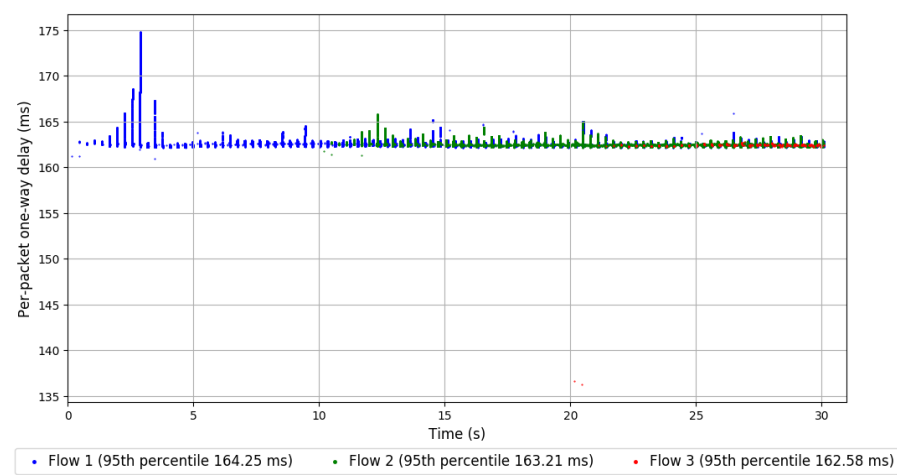
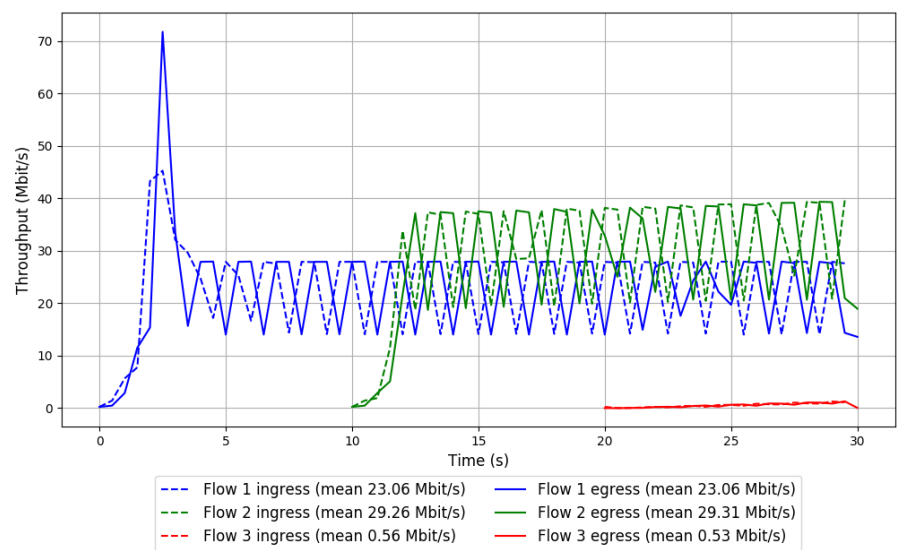
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 162.577 ms

Loss rate: 5.20%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-03-01 12:55:19

End at: 2018-03-01 12:55:49

Below is generated by plot.py at 2018-03-01 16:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.03 Mbit/s

95th percentile per-packet one-way delay: 164.032 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 24.17 Mbit/s

95th percentile per-packet one-way delay: 163.112 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 33.13 Mbit/s

95th percentile per-packet one-way delay: 164.324 ms

Loss rate: 0.00%

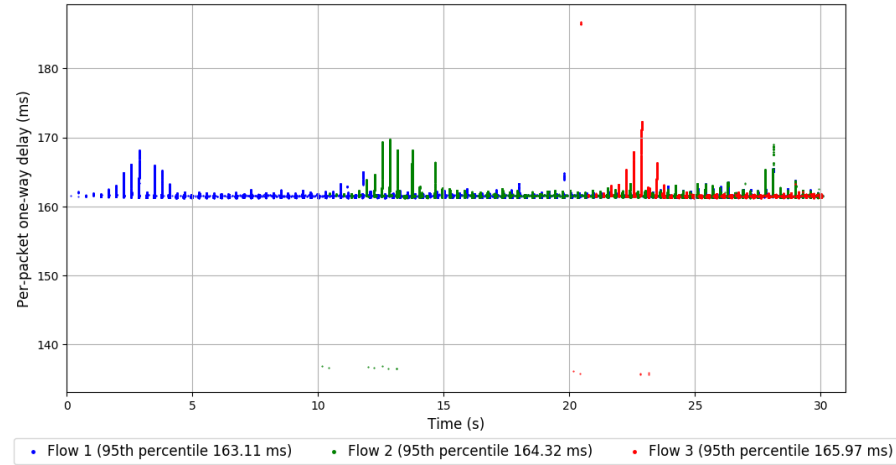
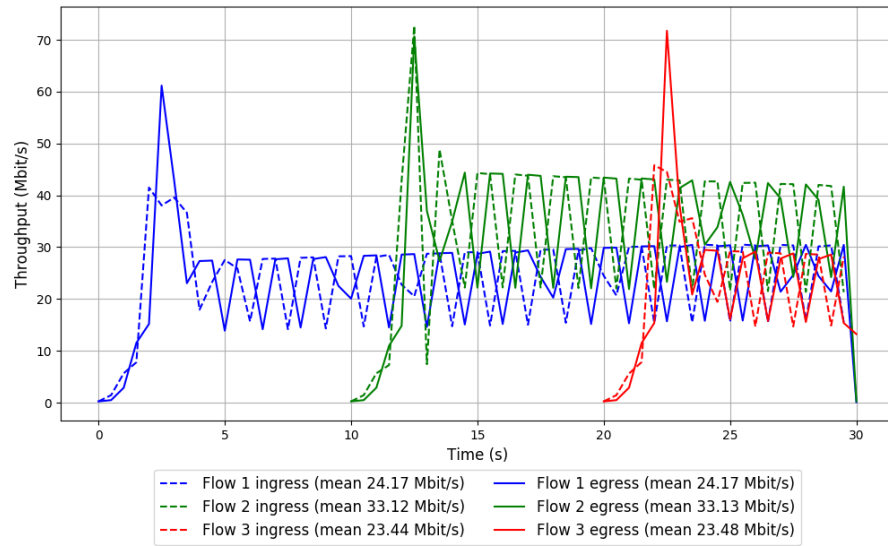
-- Flow 3:

Average throughput: 23.48 Mbit/s

95th percentile per-packet one-way delay: 165.967 ms

Loss rate: 0.01%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-03-01 13:14:57

End at: 2018-03-01 13:15:27

Below is generated by plot.py at 2018-03-01 16:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.46 Mbit/s

95th percentile per-packet one-way delay: 165.541 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 5.31 Mbit/s

95th percentile per-packet one-way delay: 161.880 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 18.46 Mbit/s

95th percentile per-packet one-way delay: 162.743 ms

Loss rate: 0.10%

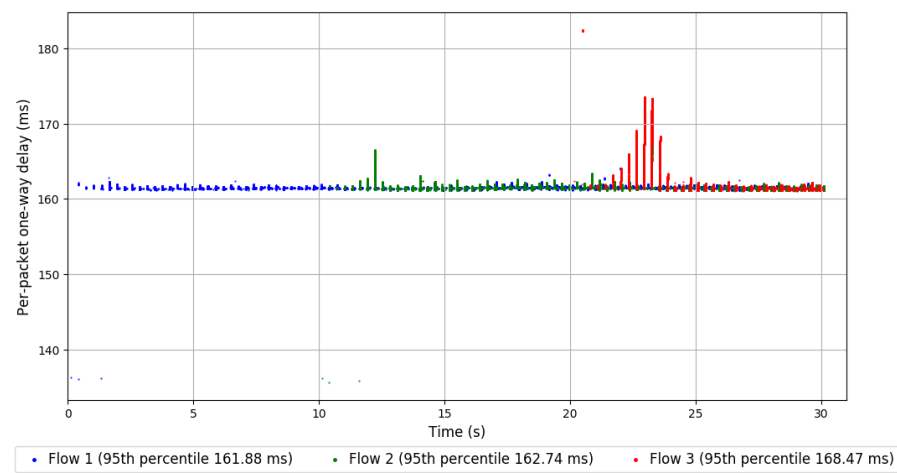
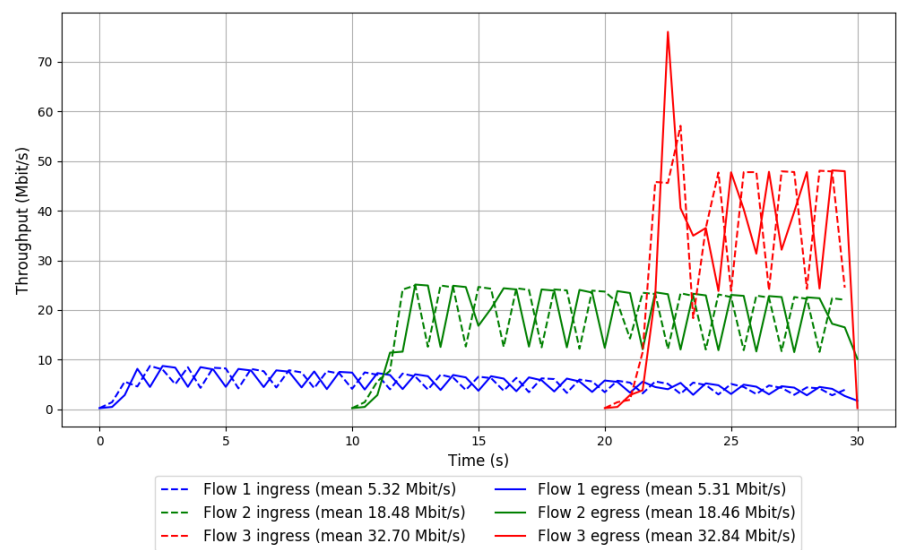
-- Flow 3:

Average throughput: 32.84 Mbit/s

95th percentile per-packet one-way delay: 168.469 ms

Loss rate: 0.01%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-03-01 13:34:44

End at: 2018-03-01 13:35:14

Below is generated by plot.py at 2018-03-01 16:06:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 39.88 Mbit/s

95th percentile per-packet one-way delay: 162.334 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 25.14 Mbit/s

95th percentile per-packet one-way delay: 162.254 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 19.15 Mbit/s

95th percentile per-packet one-way delay: 163.074 ms

Loss rate: 0.02%

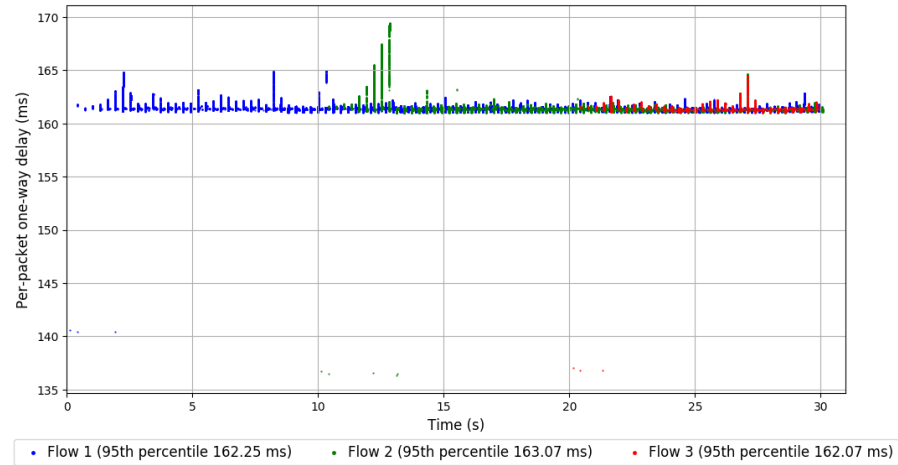
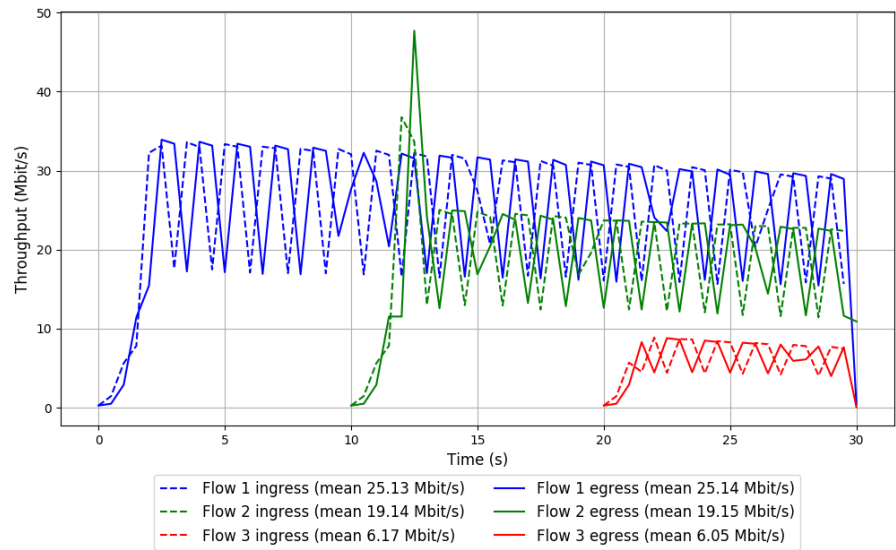
-- Flow 3:

Average throughput: 6.05 Mbit/s

95th percentile per-packet one-way delay: 162.070 ms

Loss rate: 2.89%

Run 10: Report of TCP Vegas — Data Link

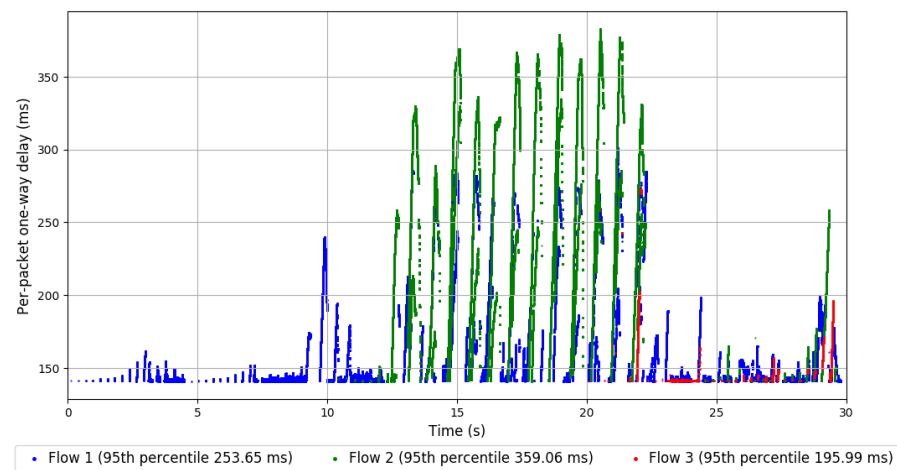
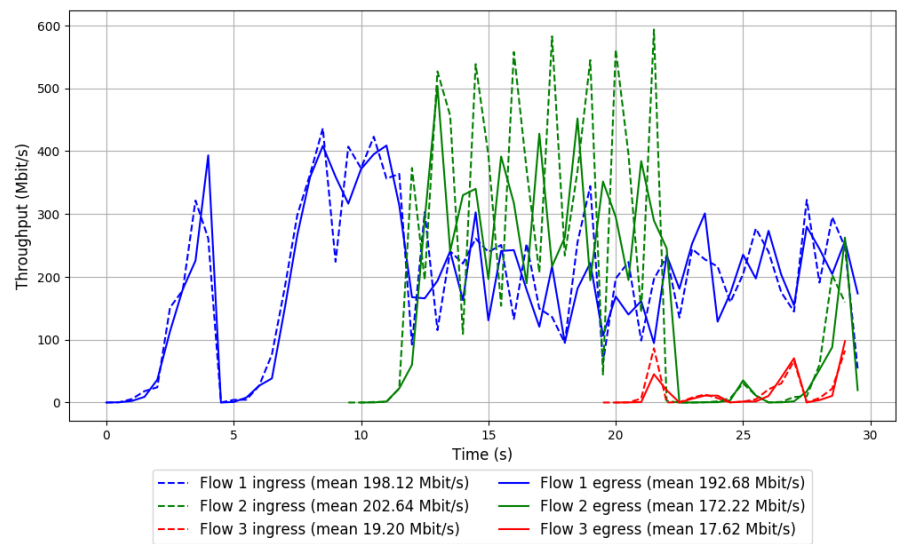


```
Run 1: Statistics of Verus

Start at: 2018-03-01 10:27:08
End at: 2018-03-01 10:27:38

# Below is generated by plot.py at 2018-03-01 16:11:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.26 Mbit/s
95th percentile per-packet one-way delay: 330.360 ms
Loss rate: 7.65%
-- Flow 1:
Average throughput: 192.68 Mbit/s
95th percentile per-packet one-way delay: 253.647 ms
Loss rate: 2.75%
-- Flow 2:
Average throughput: 172.22 Mbit/s
95th percentile per-packet one-way delay: 359.055 ms
Loss rate: 14.97%
-- Flow 3:
Average throughput: 17.62 Mbit/s
95th percentile per-packet one-way delay: 195.990 ms
Loss rate: 7.67%
```

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-03-01 10:47:21

End at: 2018-03-01 10:47:51

Below is generated by plot.py at 2018-03-01 16:11:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 320.27 Mbit/s

95th percentile per-packet one-way delay: 253.329 ms

Loss rate: 1.91%

-- Flow 1:

Average throughput: 226.81 Mbit/s

95th percentile per-packet one-way delay: 234.553 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 127.56 Mbit/s

95th percentile per-packet one-way delay: 308.977 ms

Loss rate: 4.63%

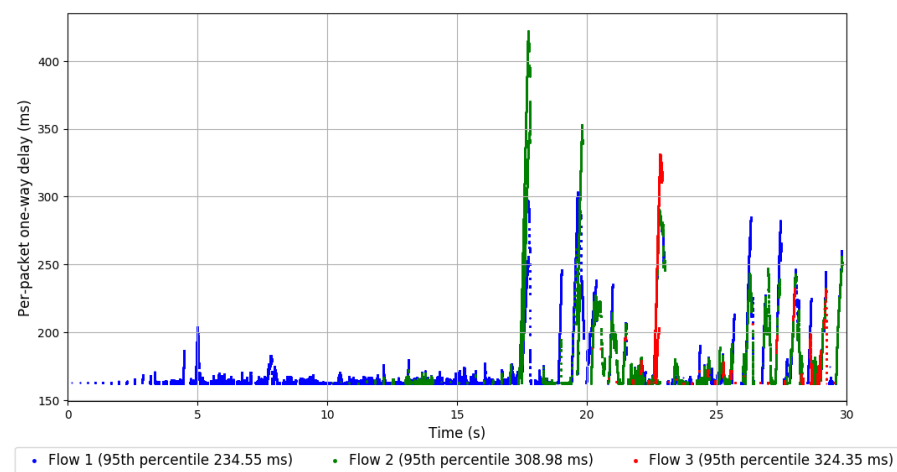
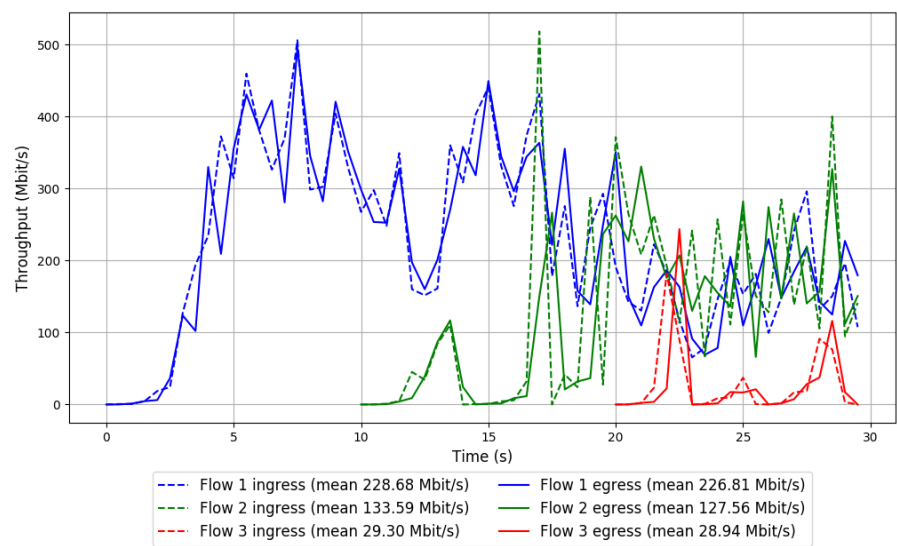
-- Flow 3:

Average throughput: 28.94 Mbit/s

95th percentile per-packet one-way delay: 324.348 ms

Loss rate: 4.58%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-03-01 11:06:55

End at: 2018-03-01 11:07:25

Below is generated by plot.py at 2018-03-01 16:11:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 178.98 Mbit/s

95th percentile per-packet one-way delay: 187.990 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 77.78 Mbit/s

95th percentile per-packet one-way delay: 177.734 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 123.87 Mbit/s

95th percentile per-packet one-way delay: 190.529 ms

Loss rate: 0.05%

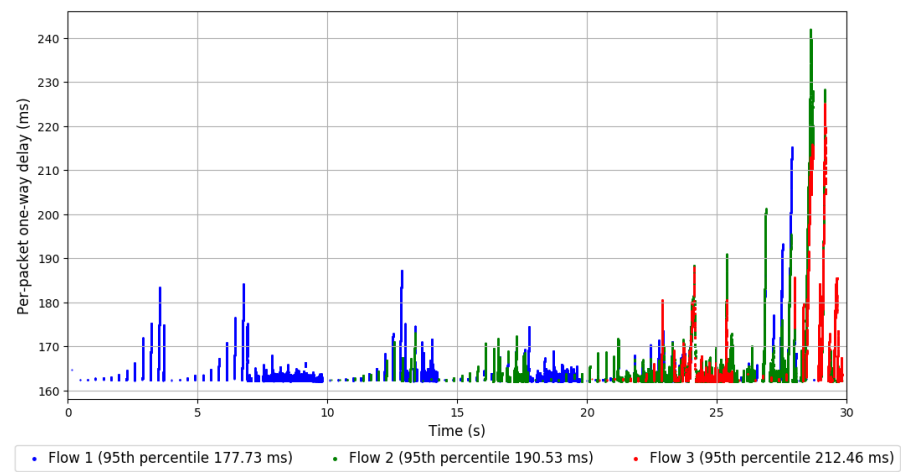
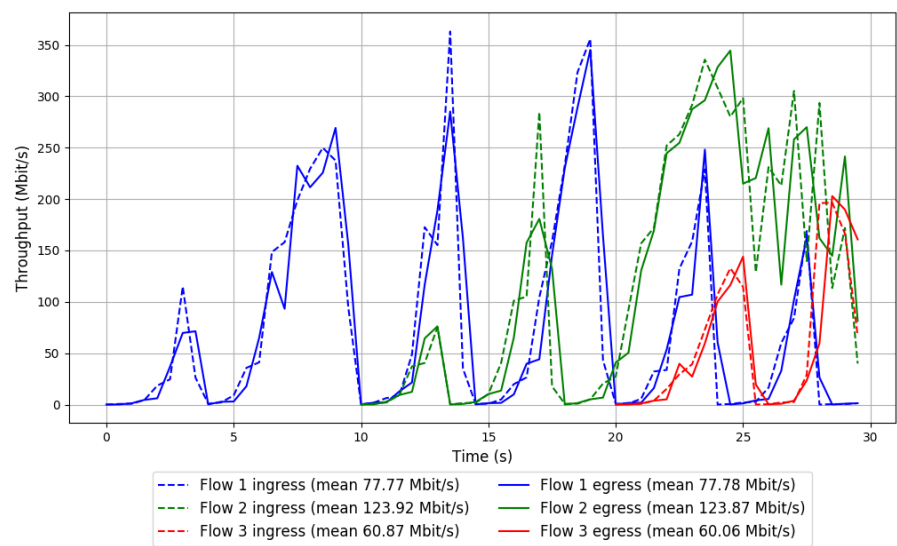
-- Flow 3:

Average throughput: 60.06 Mbit/s

95th percentile per-packet one-way delay: 212.460 ms

Loss rate: 1.55%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-03-01 11:26:45

End at: 2018-03-01 11:27:15

Below is generated by plot.py at 2018-03-01 16:11:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 206.30 Mbit/s

95th percentile per-packet one-way delay: 184.377 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 173.61 Mbit/s

95th percentile per-packet one-way delay: 186.581 ms

Loss rate: 0.80%

-- Flow 2:

Average throughput: 28.62 Mbit/s

95th percentile per-packet one-way delay: 178.710 ms

Loss rate: 0.00%

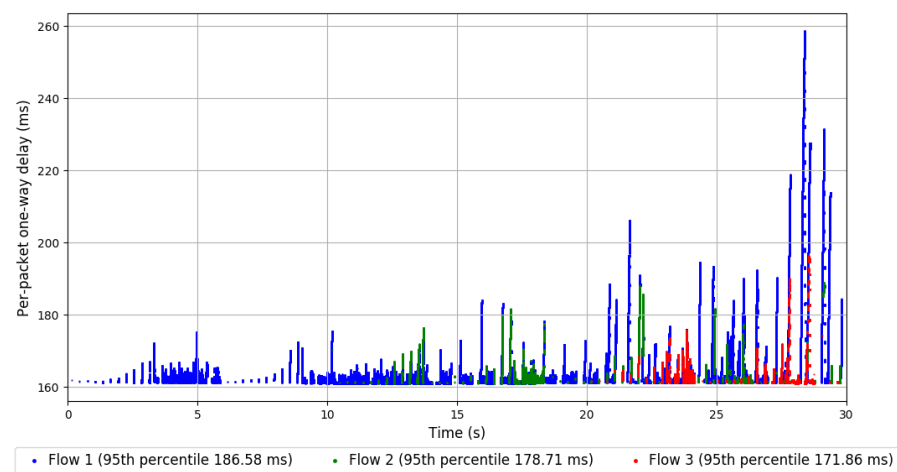
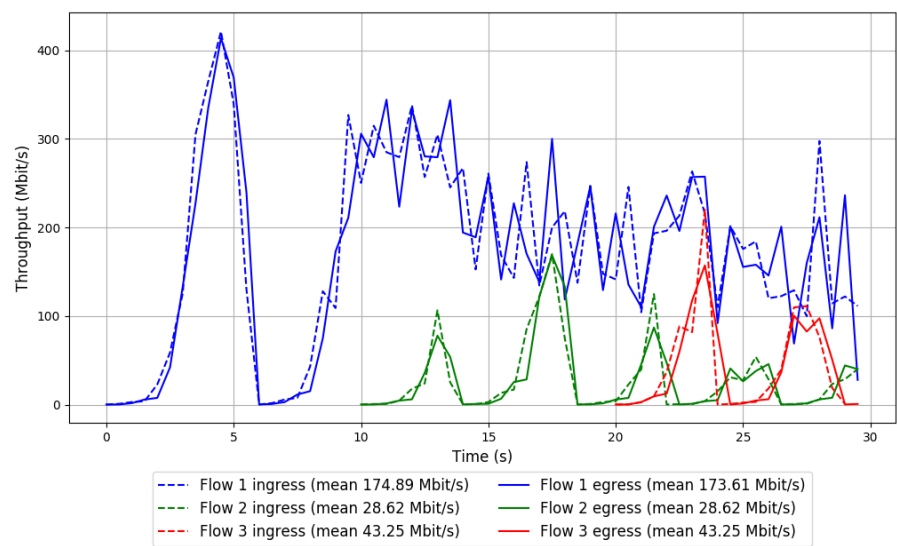
-- Flow 3:

Average throughput: 43.25 Mbit/s

95th percentile per-packet one-way delay: 171.857 ms

Loss rate: 0.00%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-03-01 11:46:33

End at: 2018-03-01 11:47:03

Below is generated by plot.py at 2018-03-01 16:11:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.66 Mbit/s

95th percentile per-packet one-way delay: 205.487 ms

Loss rate: 0.69%

-- Flow 1:

Average throughput: 196.55 Mbit/s

95th percentile per-packet one-way delay: 196.758 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 106.67 Mbit/s

95th percentile per-packet one-way delay: 224.183 ms

Loss rate: 1.43%

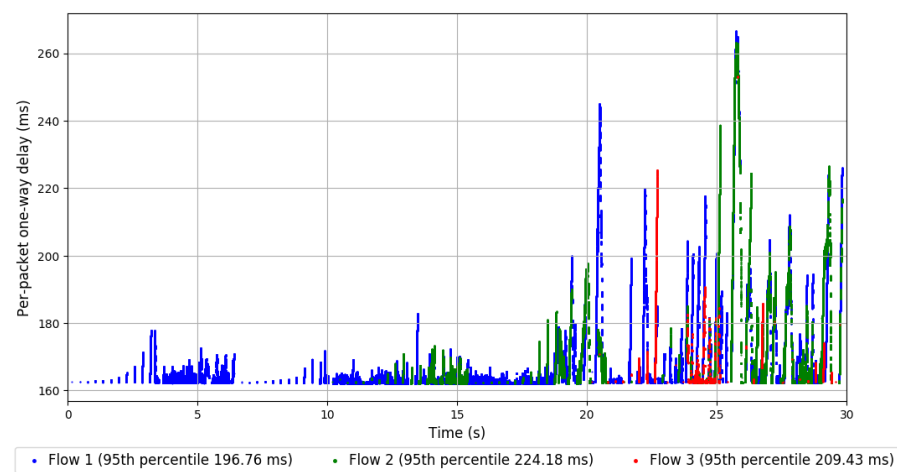
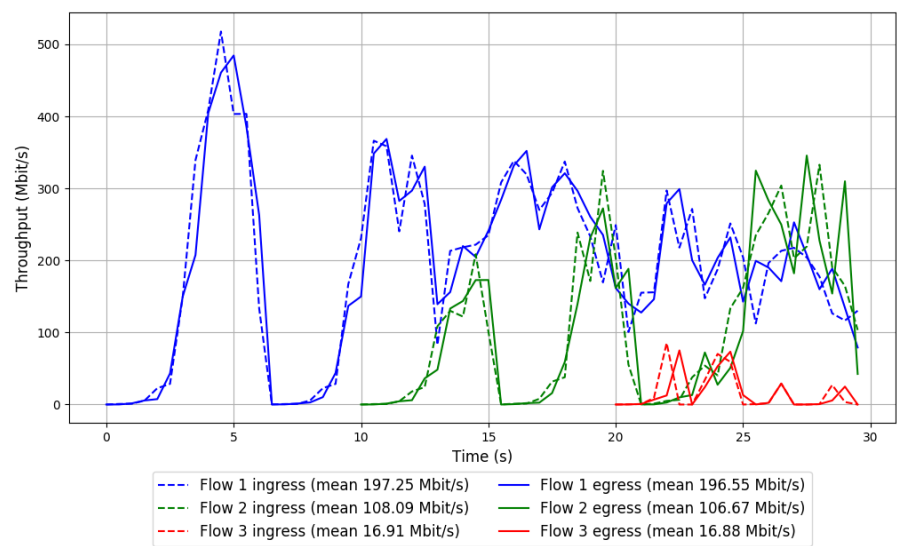
-- Flow 3:

Average throughput: 16.88 Mbit/s

95th percentile per-packet one-way delay: 209.432 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-03-01 12:06:25

End at: 2018-03-01 12:06:55

Below is generated by plot.py at 2018-03-01 16:11:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 197.08 Mbit/s

95th percentile per-packet one-way delay: 193.536 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 132.22 Mbit/s

95th percentile per-packet one-way delay: 192.424 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 76.81 Mbit/s

95th percentile per-packet one-way delay: 190.430 ms

Loss rate: 0.36%

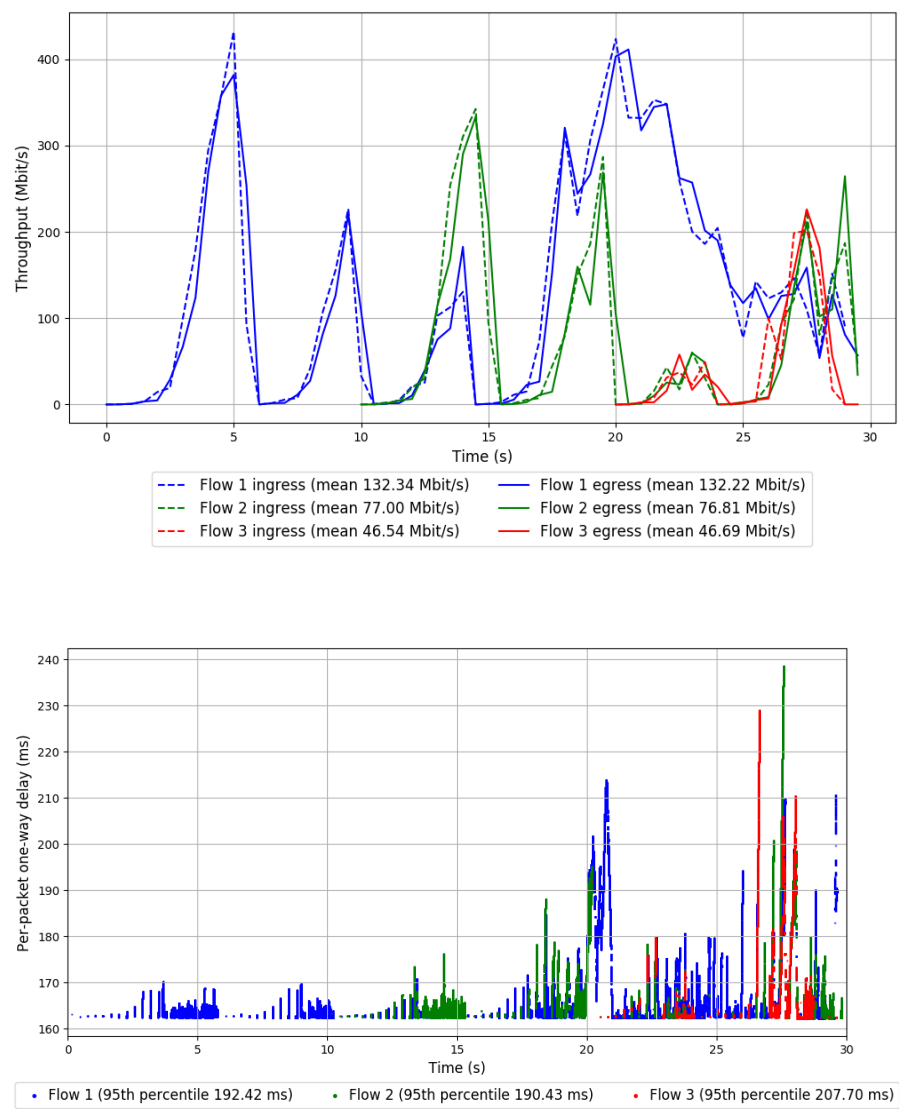
-- Flow 3:

Average throughput: 46.69 Mbit/s

95th percentile per-packet one-way delay: 207.697 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-03-01 12:25:52

End at: 2018-03-01 12:26:22

Below is generated by plot.py at 2018-03-01 16:11:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 261.03 Mbit/s

95th percentile per-packet one-way delay: 194.077 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 137.95 Mbit/s

95th percentile per-packet one-way delay: 192.863 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 163.56 Mbit/s

95th percentile per-packet one-way delay: 190.723 ms

Loss rate: 0.06%

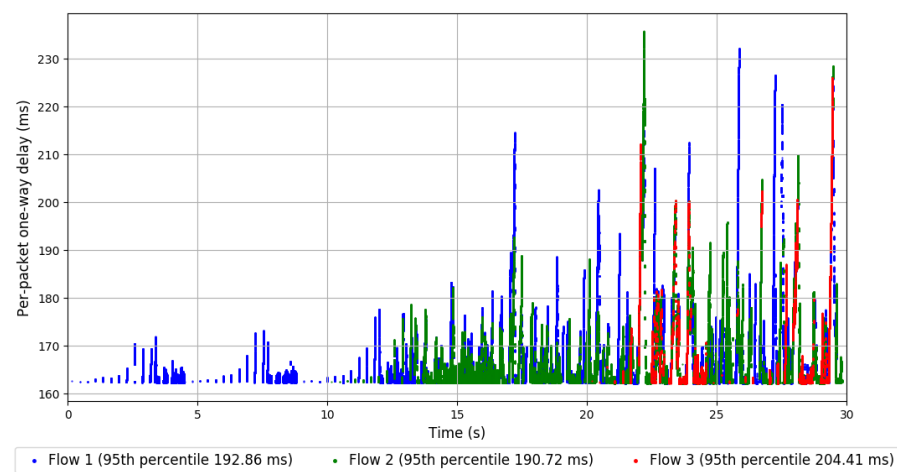
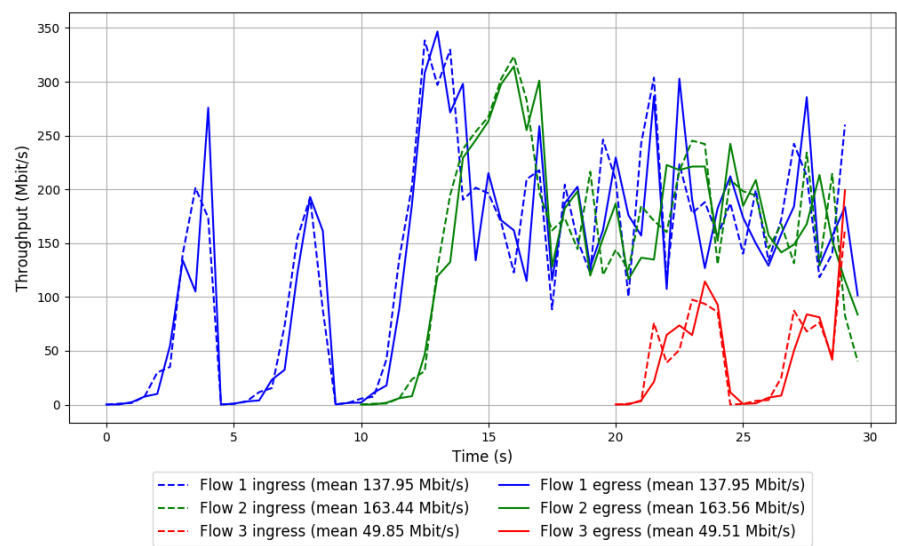
-- Flow 3:

Average throughput: 49.51 Mbit/s

95th percentile per-packet one-way delay: 204.413 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-03-01 12:45:41

End at: 2018-03-01 12:46:11

Below is generated by plot.py at 2018-03-01 16:11:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 167.71 Mbit/s

95th percentile per-packet one-way delay: 301.685 ms

Loss rate: 2.67%

-- Flow 1:

Average throughput: 73.37 Mbit/s

95th percentile per-packet one-way delay: 188.990 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 121.23 Mbit/s

95th percentile per-packet one-way delay: 300.644 ms

Loss rate: 1.55%

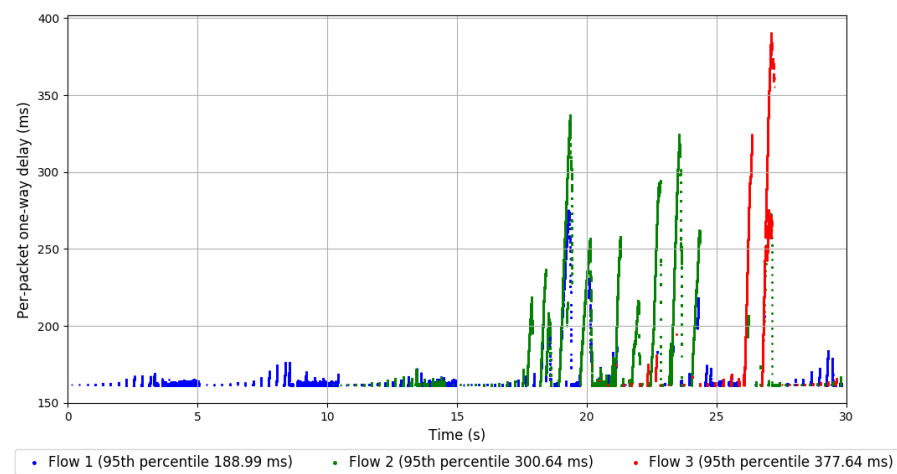
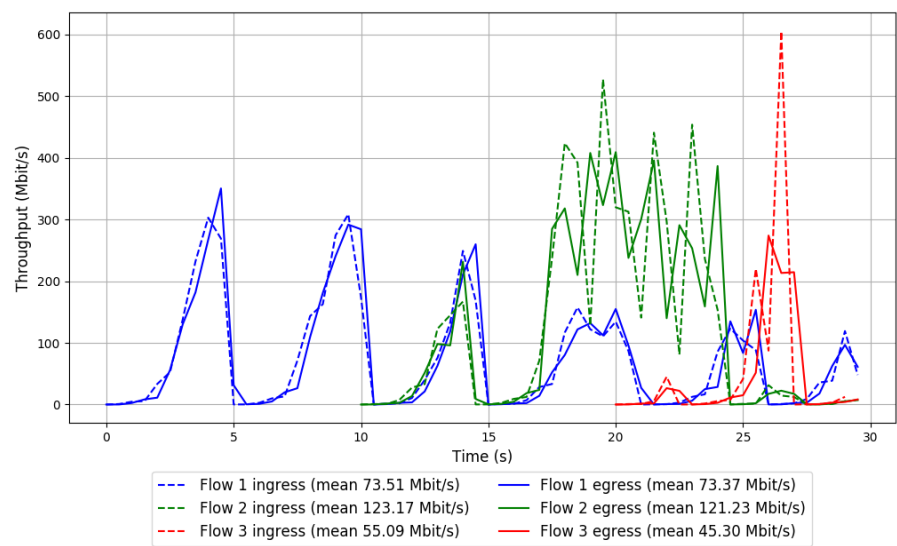
-- Flow 3:

Average throughput: 45.30 Mbit/s

95th percentile per-packet one-way delay: 377.644 ms

Loss rate: 17.85%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-03-01 13:05:36

End at: 2018-03-01 13:06:06

Below is generated by plot.py at 2018-03-01 16:11:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.42 Mbit/s

95th percentile per-packet one-way delay: 172.784 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 86.43 Mbit/s

95th percentile per-packet one-way delay: 172.506 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.38 Mbit/s

95th percentile per-packet one-way delay: 174.590 ms

Loss rate: 0.00%

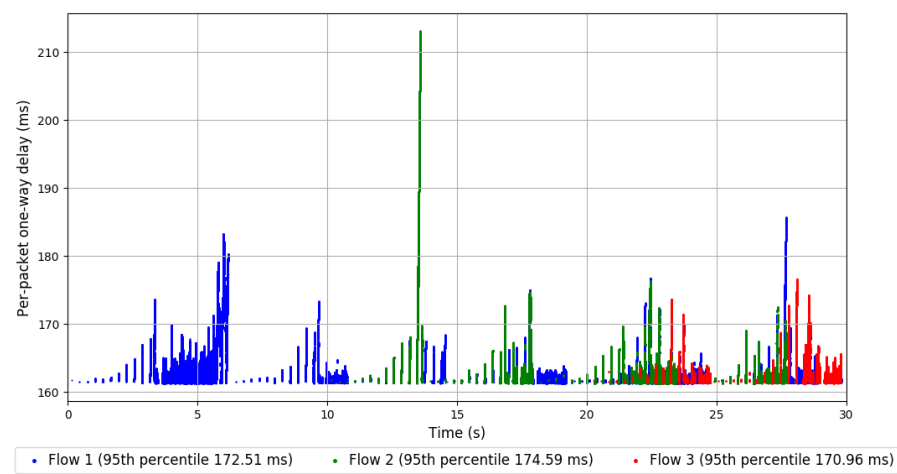
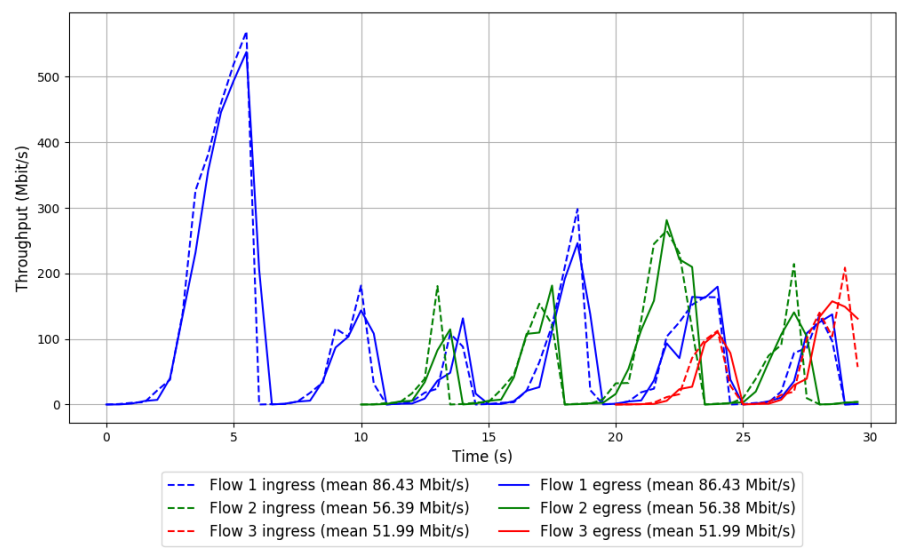
-- Flow 3:

Average throughput: 51.99 Mbit/s

95th percentile per-packet one-way delay: 170.963 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-03-01 13:25:10

End at: 2018-03-01 13:25:40

Below is generated by plot.py at 2018-03-01 16:14:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 256.79 Mbit/s

95th percentile per-packet one-way delay: 236.917 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 183.18 Mbit/s

95th percentile per-packet one-way delay: 238.710 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 91.62 Mbit/s

95th percentile per-packet one-way delay: 197.720 ms

Loss rate: 0.00%

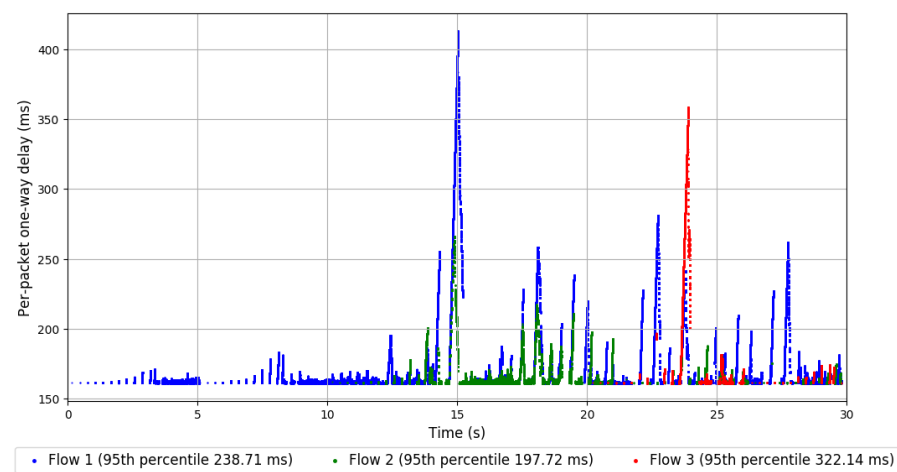
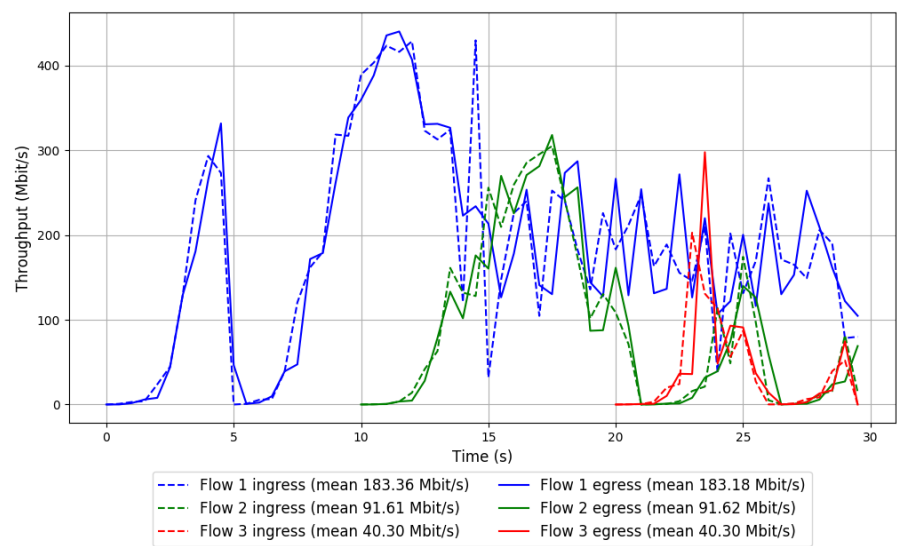
-- Flow 3:

Average throughput: 40.30 Mbit/s

95th percentile per-packet one-way delay: 322.139 ms

Loss rate: 0.00%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-03-01 10:33:24

End at: 2018-03-01 10:33:54

Below is generated by plot.py at 2018-03-01 16:14:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 151.56 Mbit/s

95th percentile per-packet one-way delay: 141.264 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 92.97 Mbit/s

95th percentile per-packet one-way delay: 141.274 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 62.87 Mbit/s

95th percentile per-packet one-way delay: 141.191 ms

Loss rate: 0.03%

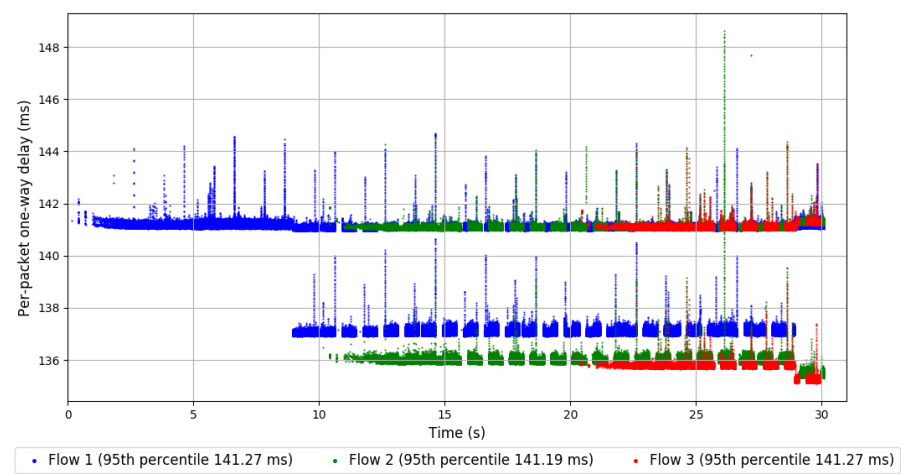
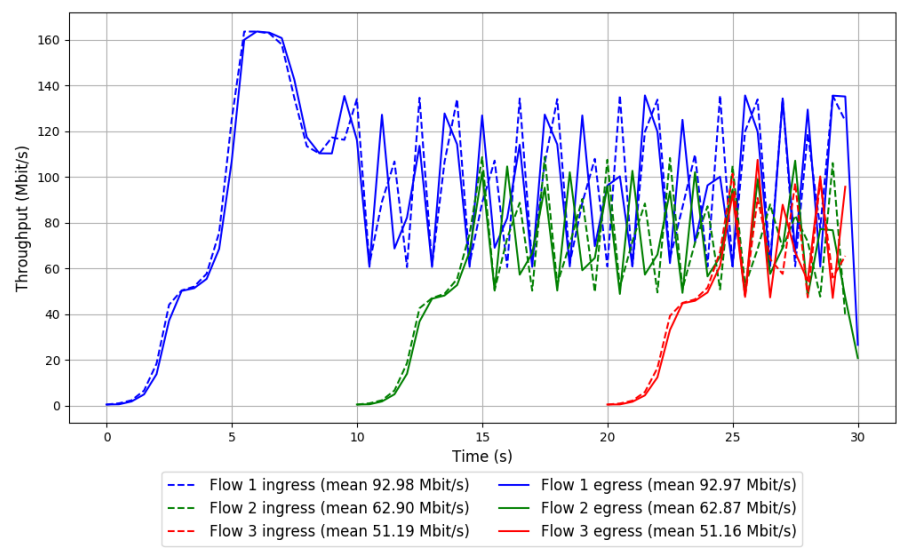
-- Flow 3:

Average throughput: 51.16 Mbit/s

95th percentile per-packet one-way delay: 141.267 ms

Loss rate: 0.00%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-03-01 10:53:14

End at: 2018-03-01 10:53:44

Below is generated by plot.py at 2018-03-01 16:14:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.13 Mbit/s

95th percentile per-packet one-way delay: 162.472 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 77.78 Mbit/s

95th percentile per-packet one-way delay: 162.459 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 13.06 Mbit/s

95th percentile per-packet one-way delay: 162.511 ms

Loss rate: 0.21%

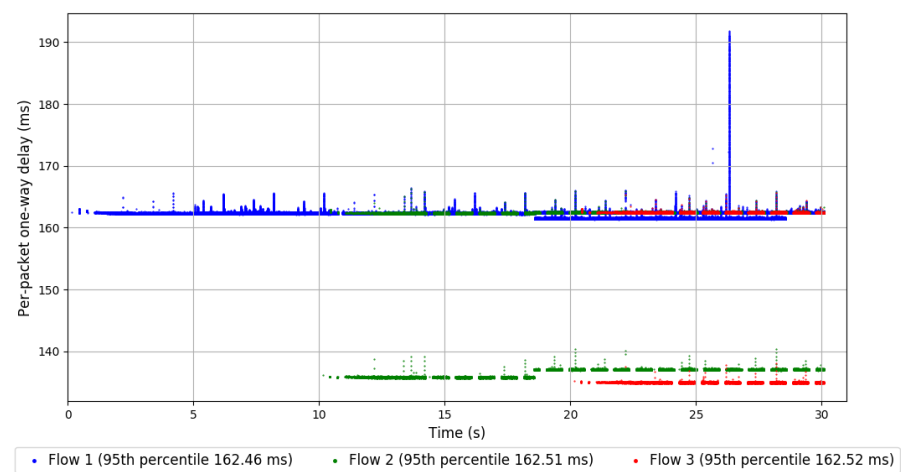
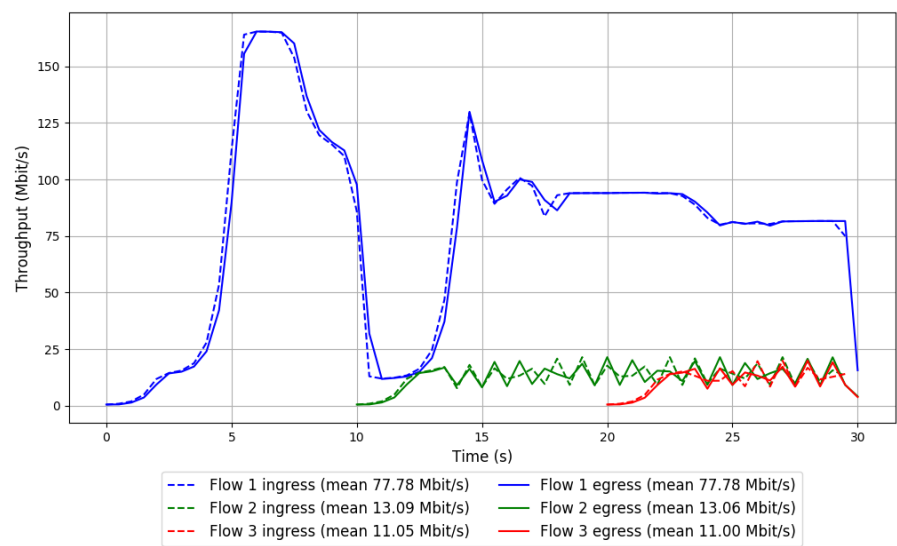
-- Flow 3:

Average throughput: 11.00 Mbit/s

95th percentile per-packet one-way delay: 162.518 ms

Loss rate: 0.44%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-03-01 11:13:01

End at: 2018-03-01 11:13:31

Below is generated by plot.py at 2018-03-01 16:14:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.28 Mbit/s

95th percentile per-packet one-way delay: 164.231 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 38.01 Mbit/s

95th percentile per-packet one-way delay: 164.268 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 48.25 Mbit/s

95th percentile per-packet one-way delay: 162.353 ms

Loss rate: 0.06%

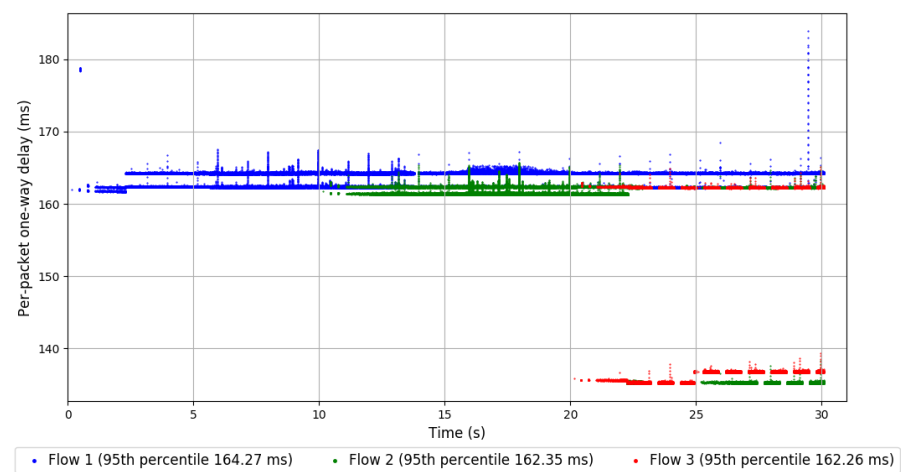
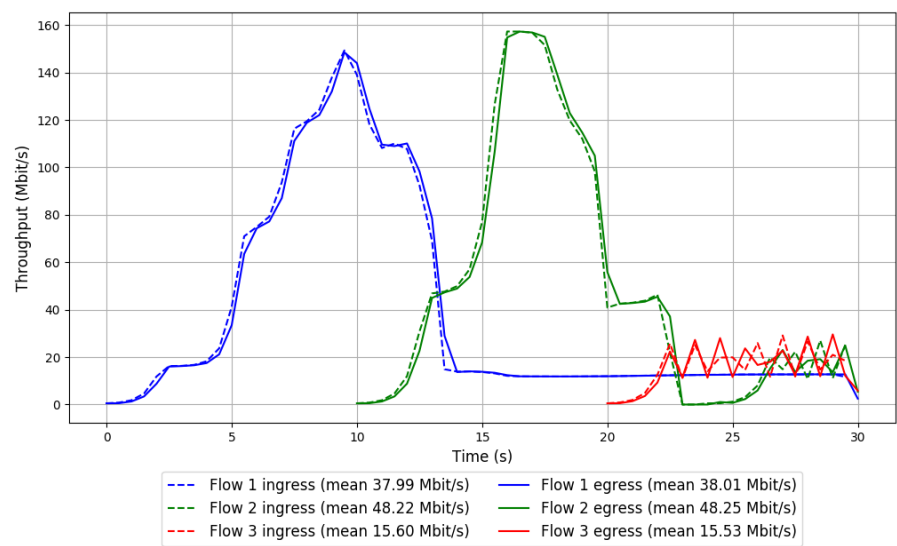
-- Flow 3:

Average throughput: 15.53 Mbit/s

95th percentile per-packet one-way delay: 162.264 ms

Loss rate: 0.44%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-03-01 11:32:51

End at: 2018-03-01 11:33:21

Below is generated by plot.py at 2018-03-01 16:14:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.56 Mbit/s

95th percentile per-packet one-way delay: 163.168 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 41.48 Mbit/s

95th percentile per-packet one-way delay: 161.342 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 49.40 Mbit/s

95th percentile per-packet one-way delay: 163.207 ms

Loss rate: 0.04%

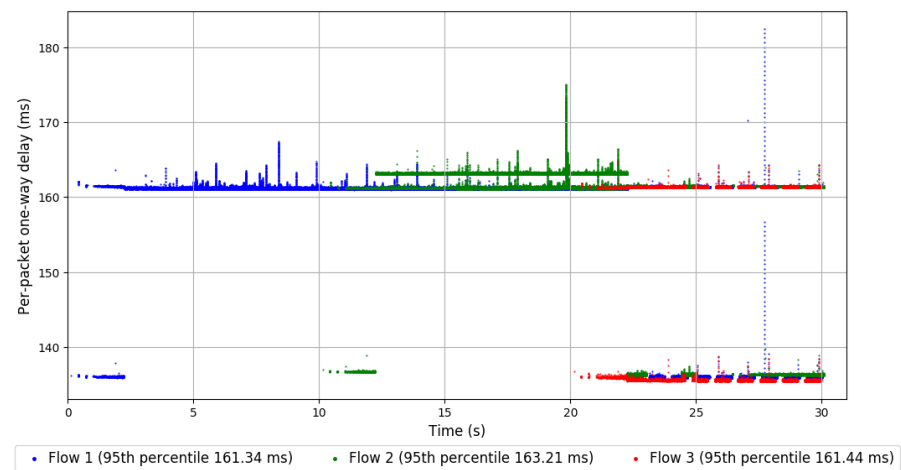
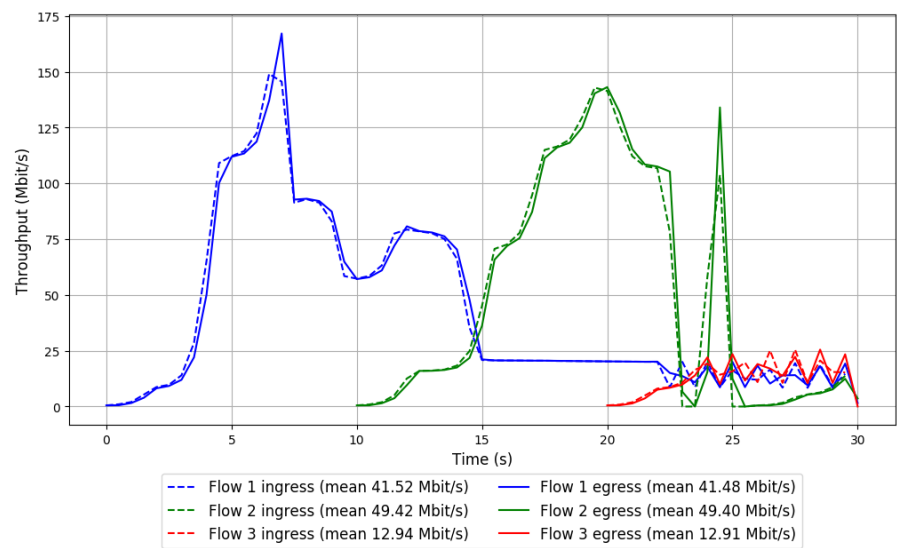
-- Flow 3:

Average throughput: 12.91 Mbit/s

95th percentile per-packet one-way delay: 161.445 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-03-01 11:52:42

End at: 2018-03-01 11:53:12

Below is generated by plot.py at 2018-03-01 16:14:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.19 Mbit/s

95th percentile per-packet one-way delay: 162.307 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 15.48 Mbit/s

95th percentile per-packet one-way delay: 162.306 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 14.45 Mbit/s

95th percentile per-packet one-way delay: 162.312 ms

Loss rate: 0.19%

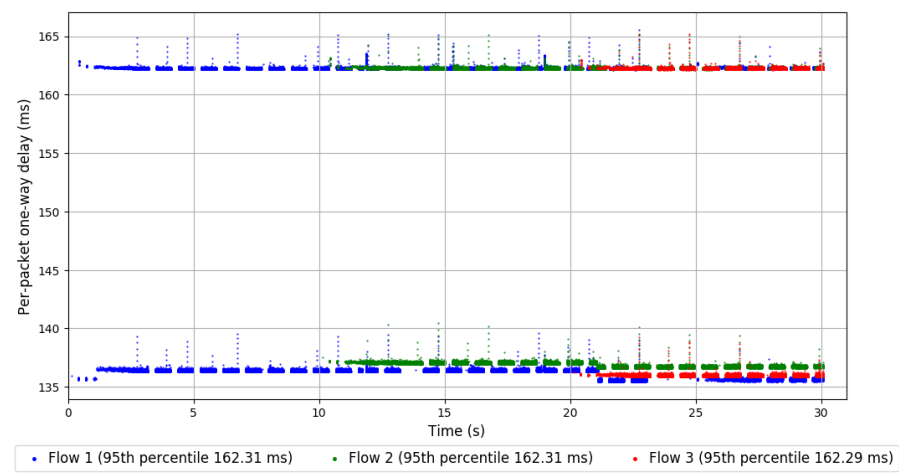
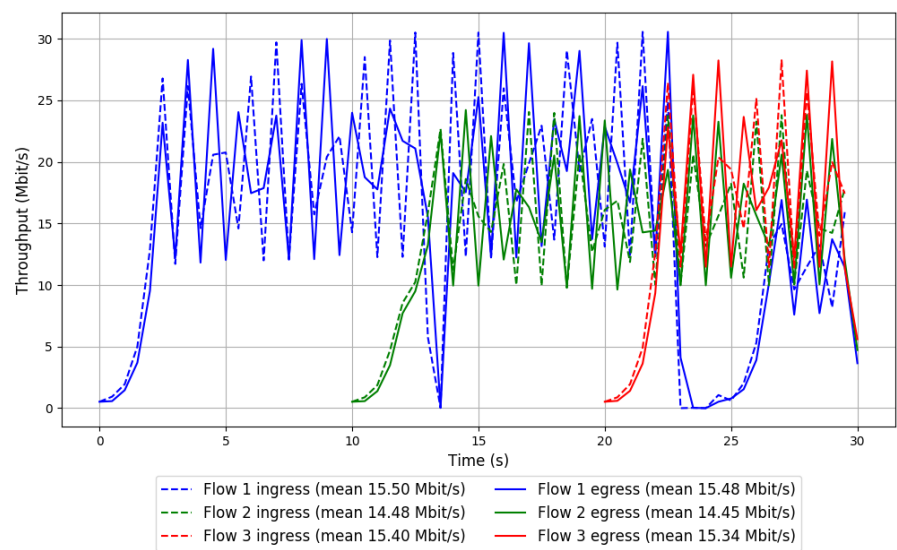
-- Flow 3:

Average throughput: 15.34 Mbit/s

95th percentile per-packet one-way delay: 162.295 ms

Loss rate: 0.43%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-03-01 12:12:28

End at: 2018-03-01 12:12:58

Below is generated by plot.py at 2018-03-01 16:14:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.23 Mbit/s

95th percentile per-packet one-way delay: 162.386 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 21.62 Mbit/s

95th percentile per-packet one-way delay: 162.420 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 14.41 Mbit/s

95th percentile per-packet one-way delay: 162.364 ms

Loss rate: 0.12%

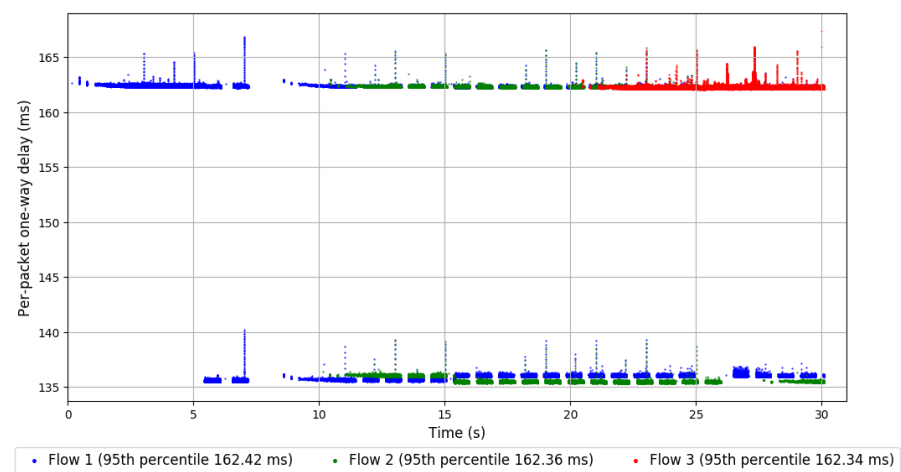
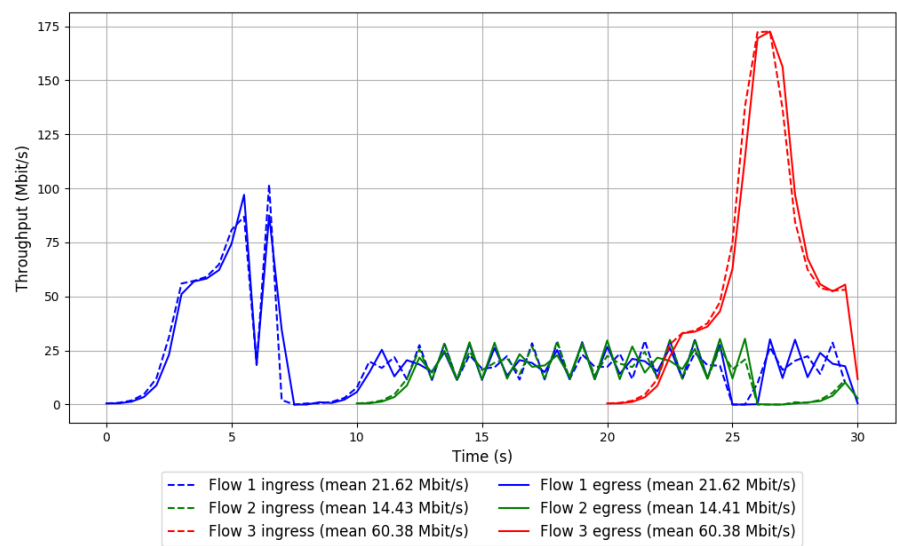
-- Flow 3:

Average throughput: 60.38 Mbit/s

95th percentile per-packet one-way delay: 162.340 ms

Loss rate: 0.26%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-03-01 12:32:02

End at: 2018-03-01 12:32:32

Below is generated by plot.py at 2018-03-01 16:14:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.27 Mbit/s

95th percentile per-packet one-way delay: 162.315 ms

Loss rate: 0.20%

-- Flow 1:

Average throughput: 14.63 Mbit/s

95th percentile per-packet one-way delay: 162.311 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 14.63 Mbit/s

95th percentile per-packet one-way delay: 162.314 ms

Loss rate: 0.21%

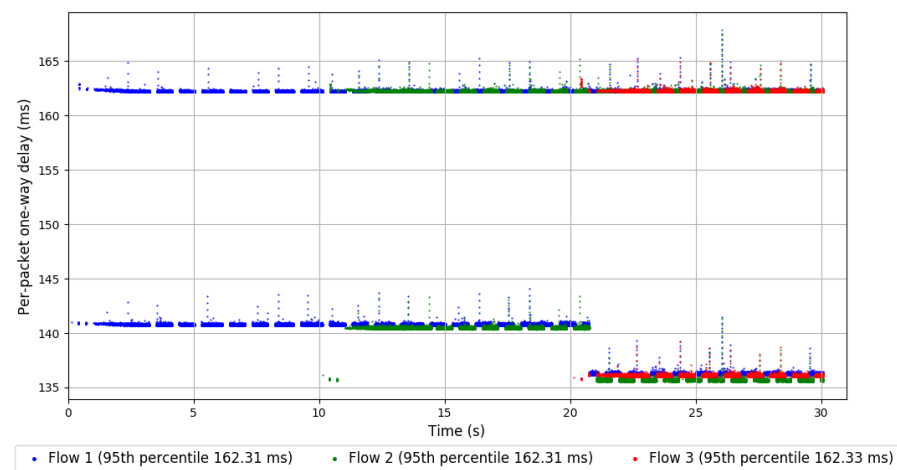
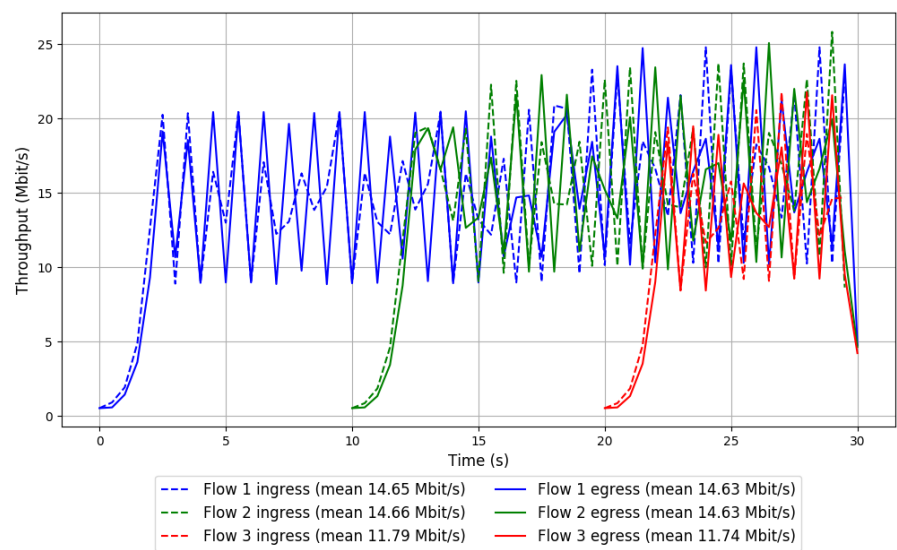
-- Flow 3:

Average throughput: 11.74 Mbit/s

95th percentile per-packet one-way delay: 162.331 ms

Loss rate: 0.43%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-03-01 12:51:50

End at: 2018-03-01 12:52:20

Below is generated by plot.py at 2018-03-01 16:15:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.12 Mbit/s

95th percentile per-packet one-way delay: 161.525 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 57.40 Mbit/s

95th percentile per-packet one-way delay: 161.504 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 52.74 Mbit/s

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

Loss rate: 0.06%

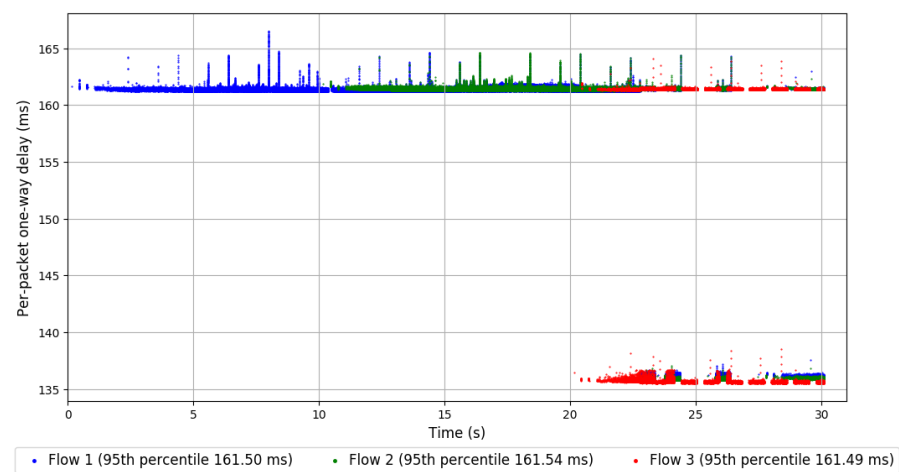
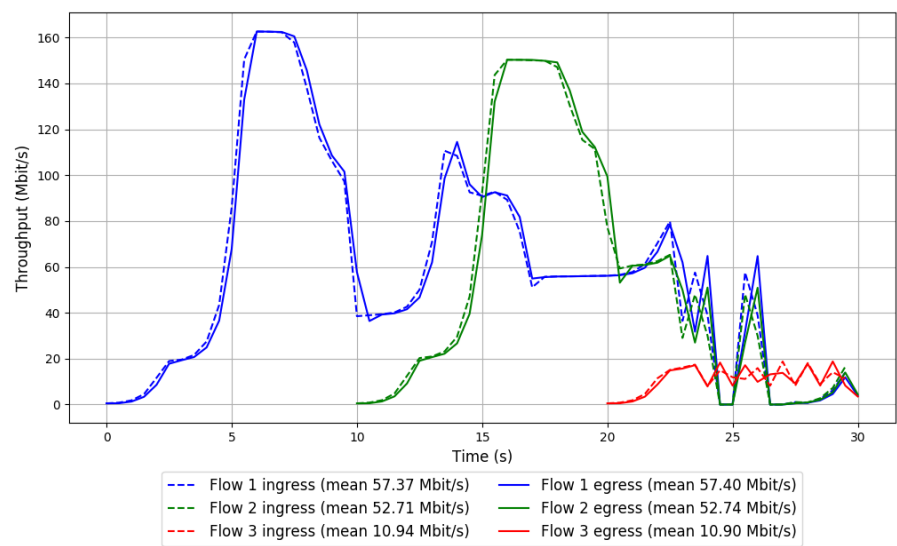
-- Flow 3:

Average throughput: 10.90 Mbit/s

95th percentile per-packet one-way delay: 161.488 ms

Loss rate: 0.40%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-03-01 13:11:42

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

Below is generated by plot.py at 2018-03-01 16:15:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 29.25 Mbit/s

95th percentile per-packet one-way delay: 161.365 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 15.87 Mbit/s

95th percentile per-packet one-way delay: 161.367 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 12.35 Mbit/s

95th percentile per-packet one-way delay: 161.361 ms

Loss rate: 0.00%

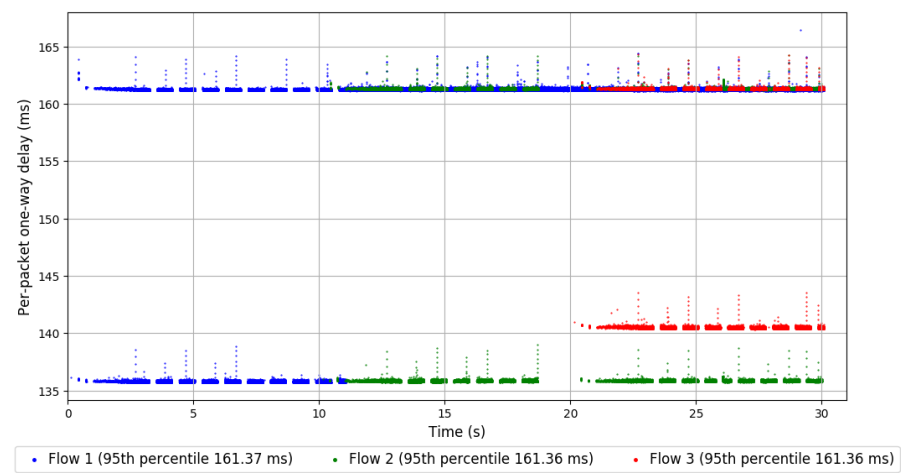
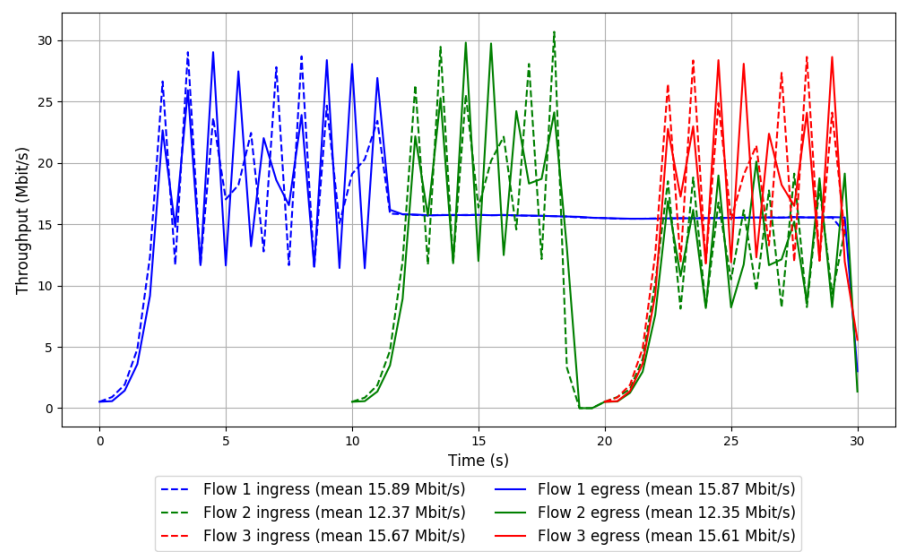
-- Flow 3:

Average throughput: 15.61 Mbit/s

95th percentile per-packet one-way delay: 161.359 ms

Loss rate: 0.41%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-03-01 13:31:15

End at: 2018-03-01 13:31:45

Below is generated by plot.py at 2018-03-01 16:16:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 118.69 Mbit/s

95th percentile per-packet one-way delay: 162.118 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 82.26 Mbit/s

95th percentile per-packet one-way delay: 161.872 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.36 Mbit/s

95th percentile per-packet one-way delay: 162.248 ms

Loss rate: 0.00%

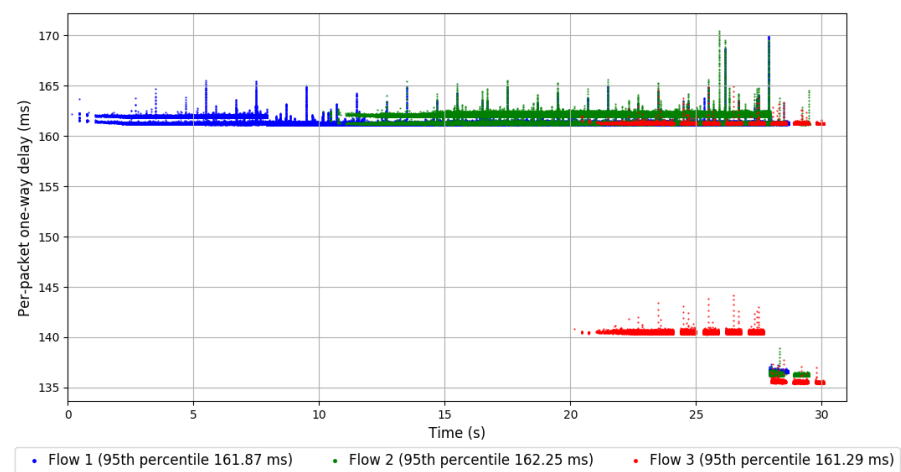
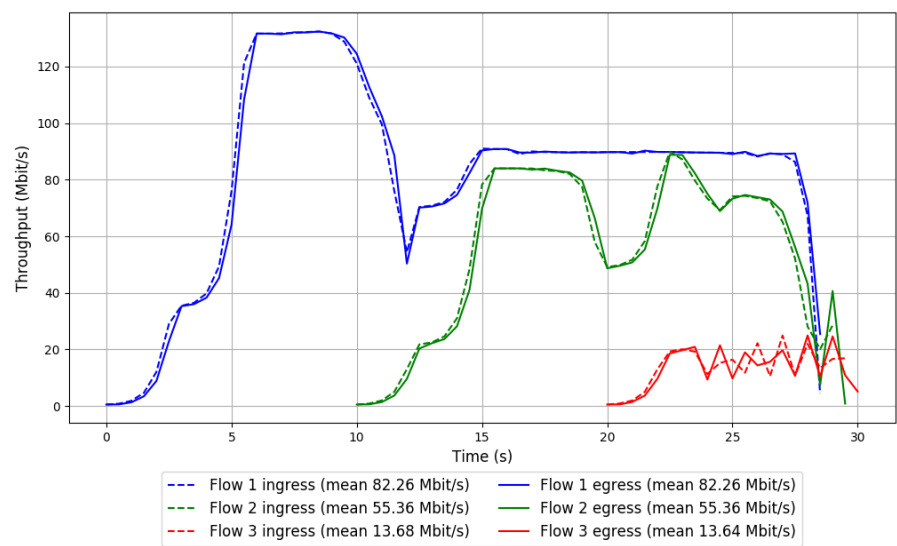
-- Flow 3:

Average throughput: 13.64 Mbit/s

95th percentile per-packet one-way delay: 161.295 ms

Loss rate: 0.33%

Run 10: Report of Copa — Data Link

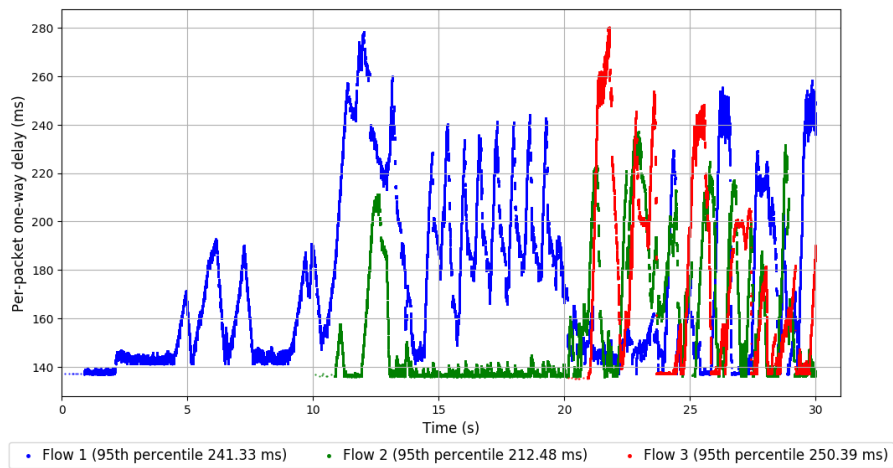
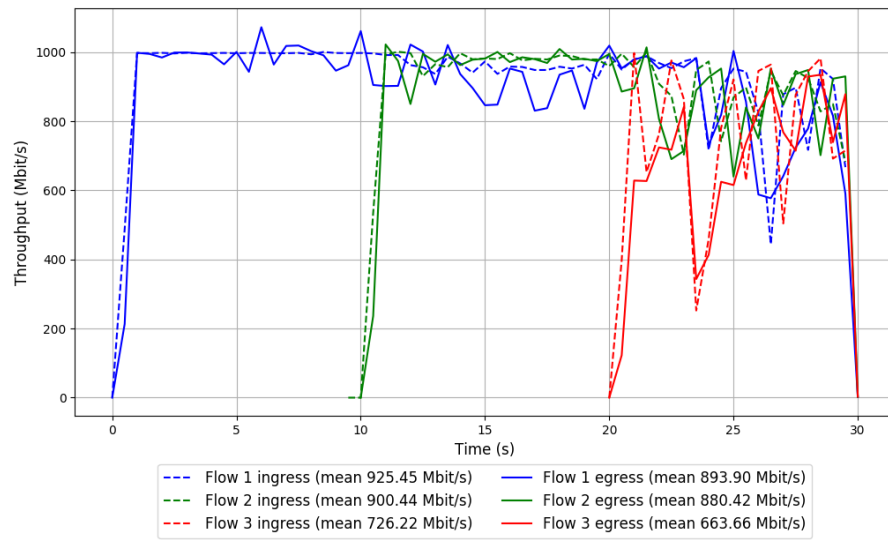


```
Run 1: Statistics of FillP

Start at: 2018-03-01 10:30:31
End at: 2018-03-01 10:31:01

# Below is generated by plot.py at 2018-03-01 16:43:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1699.73 Mbit/s
95th percentile per-packet one-way delay: 235.528 ms
Loss rate: 3.71%
-- Flow 1:
Average throughput: 893.90 Mbit/s
95th percentile per-packet one-way delay: 241.334 ms
Loss rate: 3.41%
-- Flow 2:
Average throughput: 880.42 Mbit/s
95th percentile per-packet one-way delay: 212.483 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 663.66 Mbit/s
95th percentile per-packet one-way delay: 250.394 ms
Loss rate: 8.60%
```

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-03-01 10:50:24

End at: 2018-03-01 10:50:54

Below is generated by plot.py at 2018-03-01 16:43:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 1662.93 Mbit/s

95th percentile per-packet one-way delay: 234.117 ms

Loss rate: 3.80%

-- Flow 1:

Average throughput: 843.98 Mbit/s

95th percentile per-packet one-way delay: 243.274 ms

Loss rate: 3.08%

-- Flow 2:

Average throughput: 883.91 Mbit/s

95th percentile per-packet one-way delay: 202.780 ms

Loss rate: 0.40%

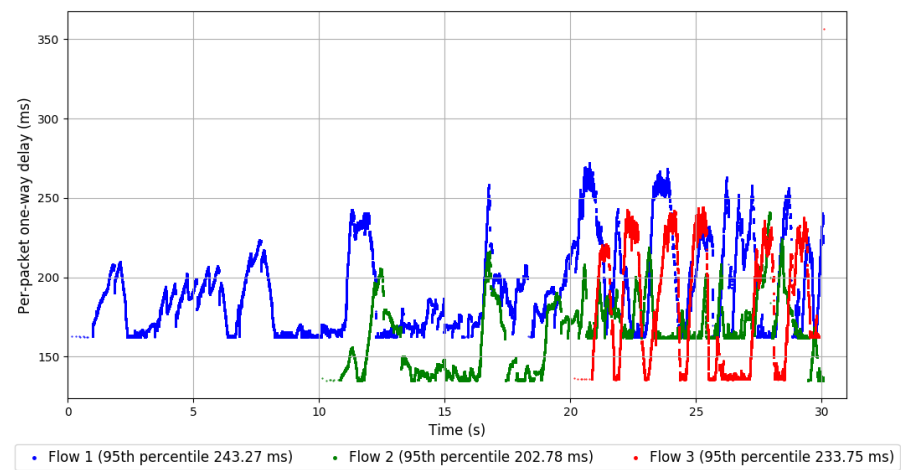
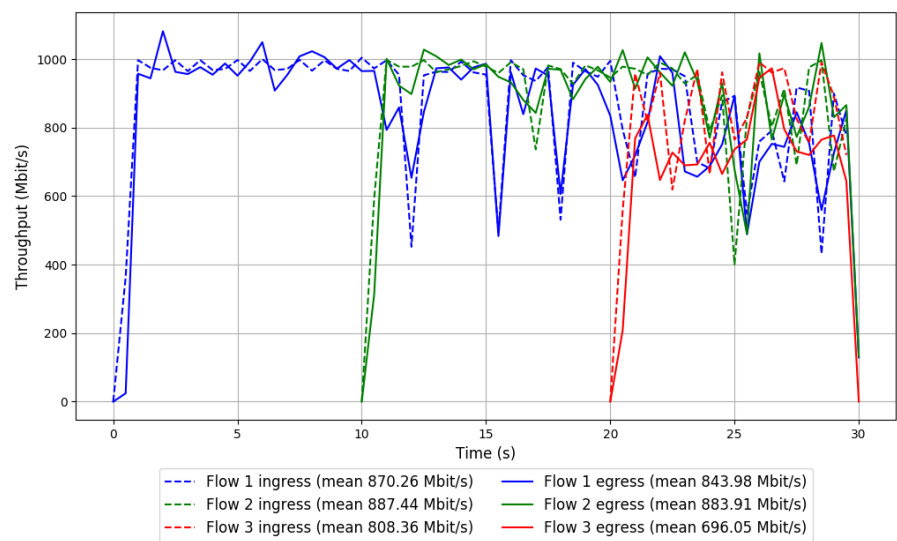
-- Flow 3:

Average throughput: 696.05 Mbit/s

95th percentile per-packet one-way delay: 233.754 ms

Loss rate: 13.64%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-03-01 11:10:07

End at: 2018-03-01 11:10:37

Below is generated by plot.py at 2018-03-01 16:43:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 1683.52 Mbit/s

95th percentile per-packet one-way delay: 268.221 ms

Loss rate: 3.23%

-- Flow 1:

Average throughput: 861.35 Mbit/s

95th percentile per-packet one-way delay: 277.971 ms

Loss rate: 3.89%

-- Flow 2:

Average throughput: 865.68 Mbit/s

95th percentile per-packet one-way delay: 215.599 ms

Loss rate: 2.26%

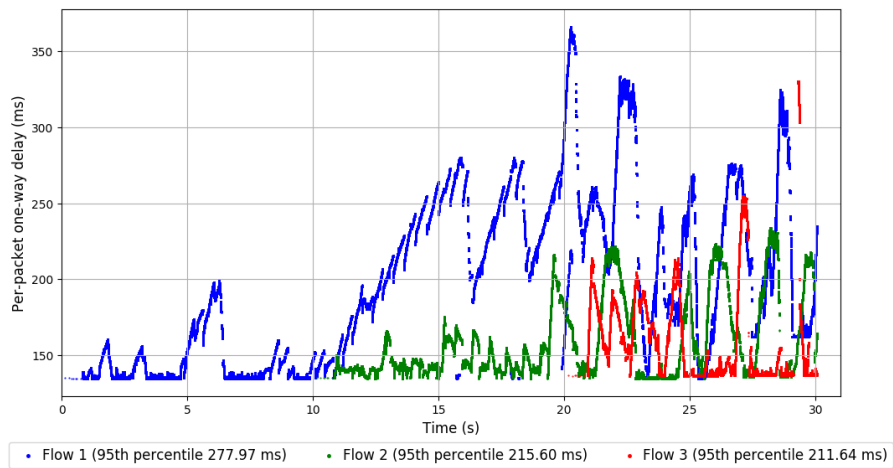
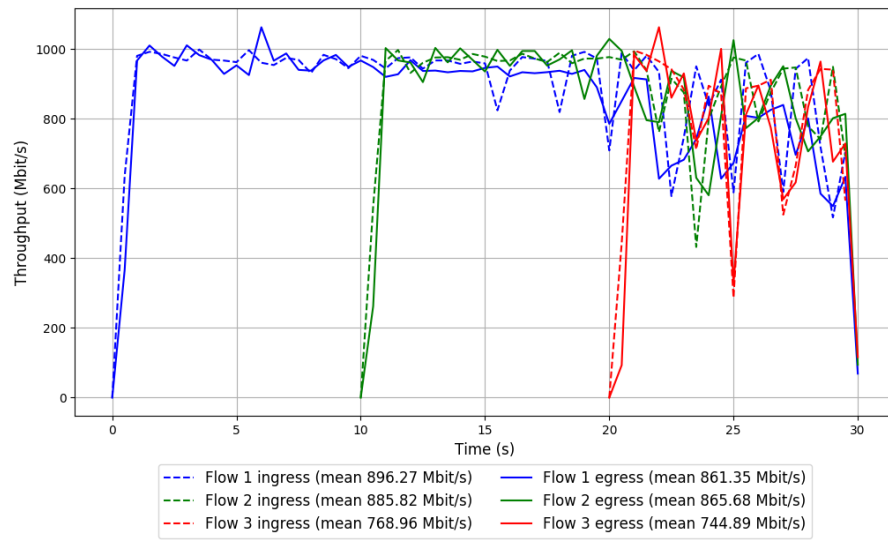
-- Flow 3:

Average throughput: 744.89 Mbit/s

95th percentile per-packet one-way delay: 211.639 ms

Loss rate: 3.12%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-03-01 11:29:54

End at: 2018-03-01 11:30:24

Below is generated by plot.py at 2018-03-01 16:44:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 1713.10 Mbit/s

95th percentile per-packet one-way delay: 225.999 ms

Loss rate: 2.14%

-- Flow 1:

Average throughput: 896.49 Mbit/s

95th percentile per-packet one-way delay: 210.840 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 860.64 Mbit/s

95th percentile per-packet one-way delay: 210.683 ms

Loss rate: 2.84%

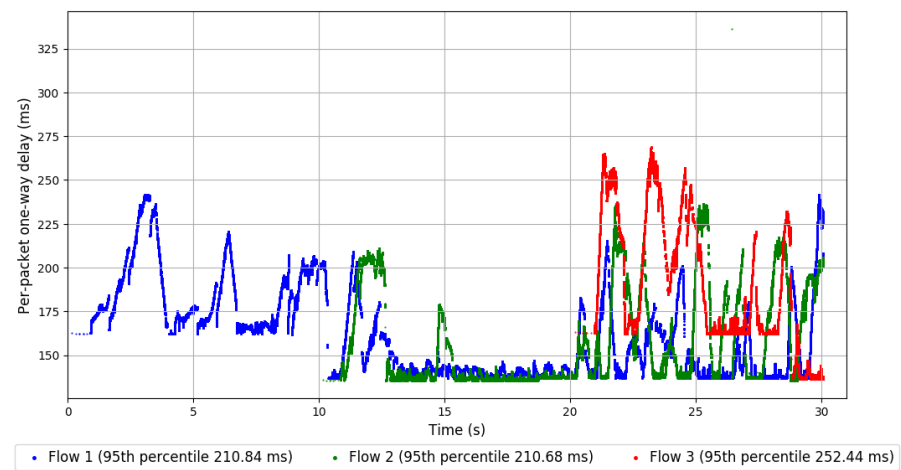
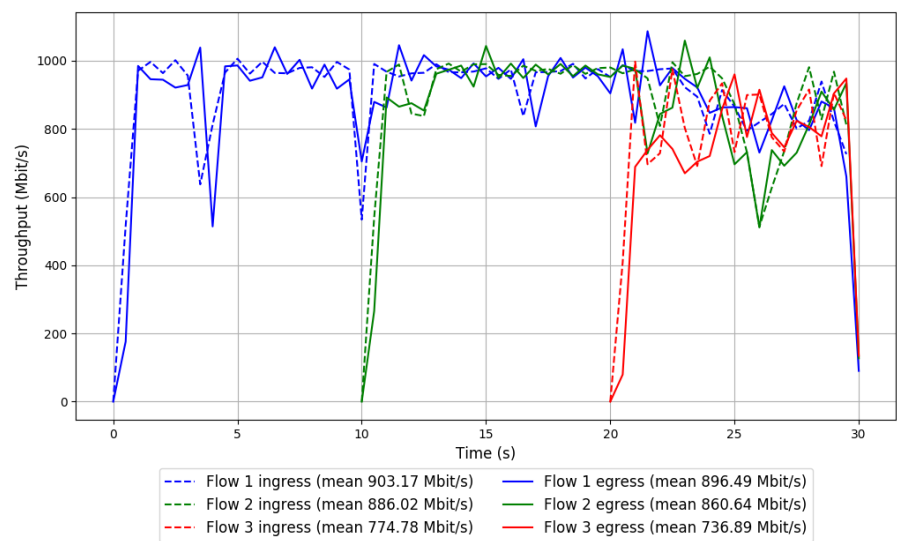
-- Flow 3:

Average throughput: 736.89 Mbit/s

95th percentile per-packet one-way delay: 252.444 ms

Loss rate: 5.14%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-03-01 11:49:52

End at: 2018-03-01 11:50:22

Below is generated by plot.py at 2018-03-01 16:44:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 1590.04 Mbit/s

95th percentile per-packet one-way delay: 330.577 ms

Loss rate: 3.67%

-- Flow 1:

Average throughput: 812.94 Mbit/s

95th percentile per-packet one-way delay: 365.772 ms

Loss rate: 3.81%

-- Flow 2:

Average throughput: 810.38 Mbit/s

95th percentile per-packet one-way delay: 219.480 ms

Loss rate: 4.12%

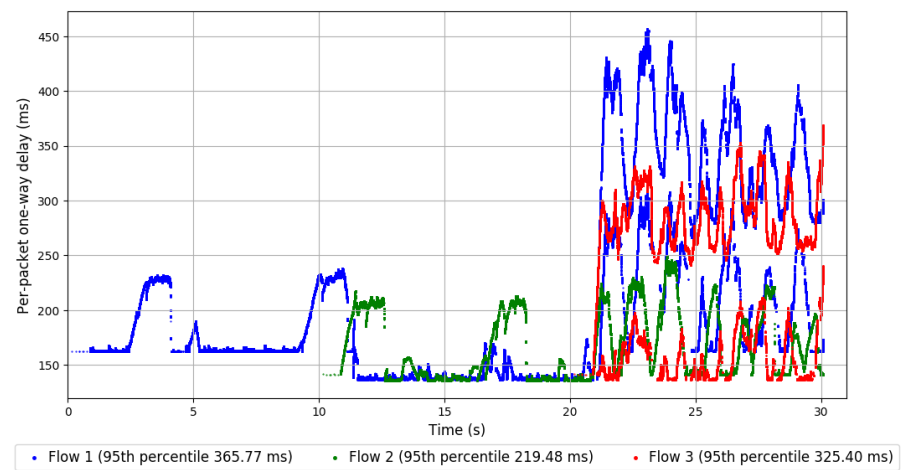
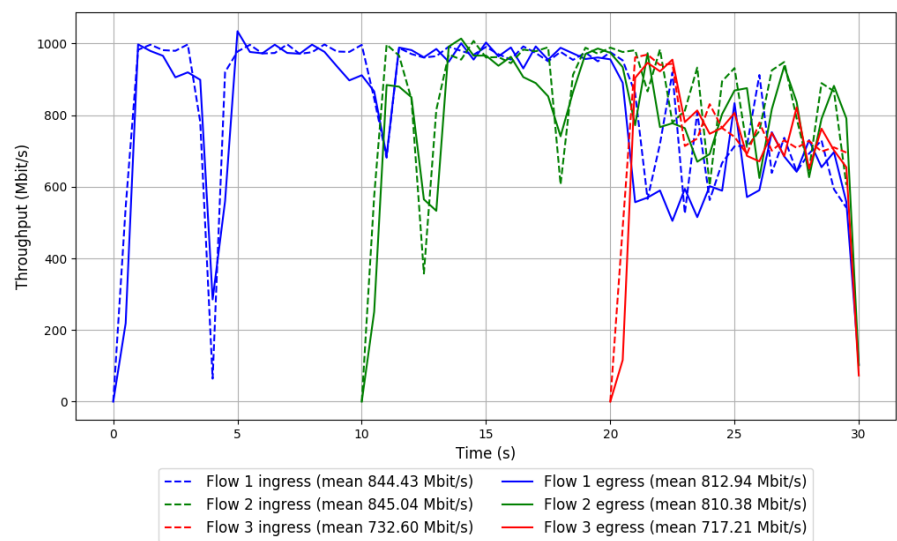
-- Flow 3:

Average throughput: 717.21 Mbit/s

95th percentile per-packet one-way delay: 325.402 ms

Loss rate: 2.15%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-03-01 12:09:34

End at: 2018-03-01 12:10:04

Below is generated by plot.py at 2018-03-01 16:45:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 1727.60 Mbit/s

95th percentile per-packet one-way delay: 243.985 ms

Loss rate: 2.46%

-- Flow 1:

Average throughput: 919.41 Mbit/s

95th percentile per-packet one-way delay: 241.420 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 860.52 Mbit/s

95th percentile per-packet one-way delay: 236.605 ms

Loss rate: 2.68%

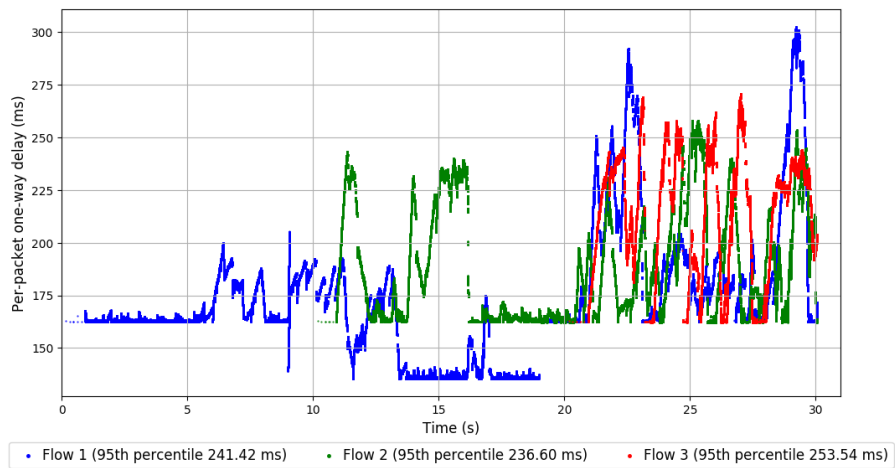
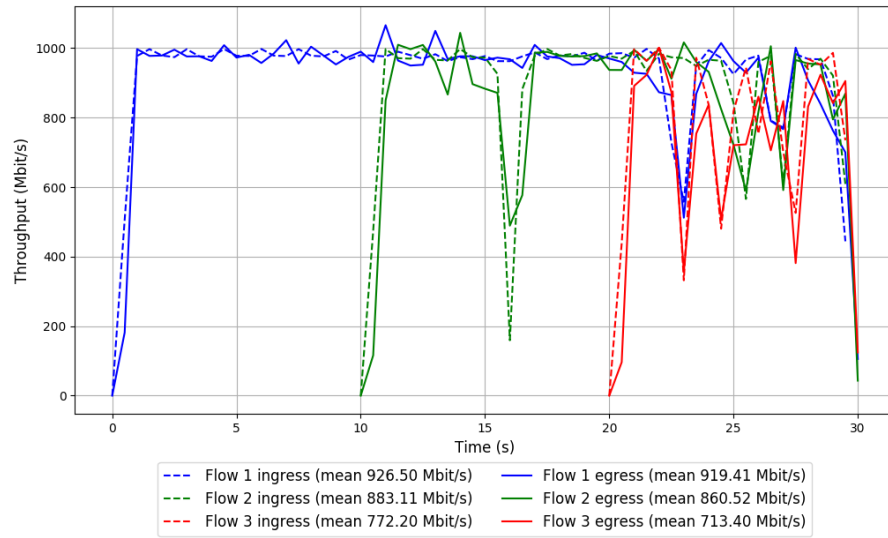
-- Flow 3:

Average throughput: 713.40 Mbit/s

95th percentile per-packet one-way delay: 253.544 ms

Loss rate: 7.84%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-03-01 12:29:09

End at: 2018-03-01 12:29:39

Below is generated by plot.py at 2018-03-01 16:46:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 1683.18 Mbit/s

95th percentile per-packet one-way delay: 244.403 ms

Loss rate: 4.28%

-- Flow 1:

Average throughput: 897.47 Mbit/s

95th percentile per-packet one-way delay: 214.846 ms

Loss rate: 2.62%

-- Flow 2:

Average throughput: 823.00 Mbit/s

95th percentile per-packet one-way delay: 266.382 ms

Loss rate: 5.19%

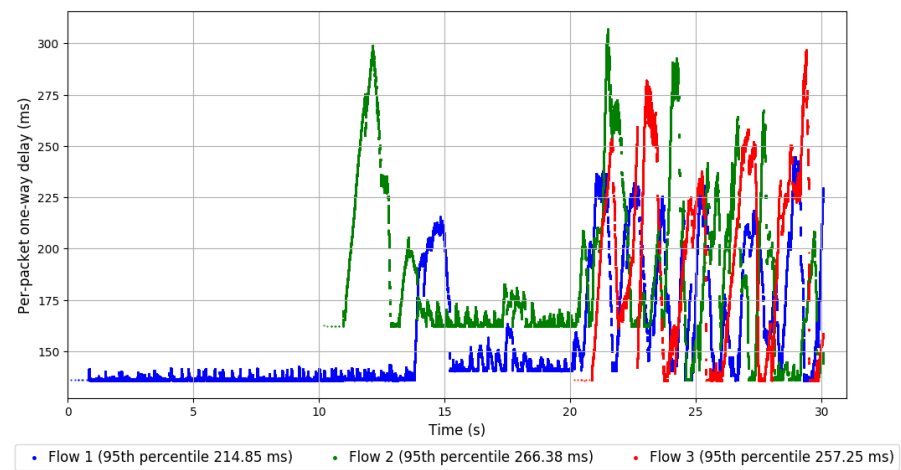
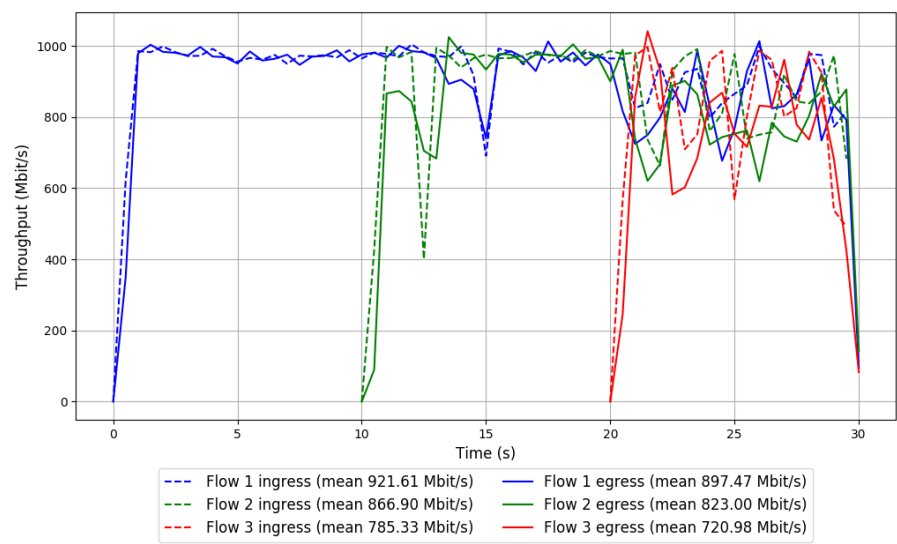
-- Flow 3:

Average throughput: 720.98 Mbit/s

95th percentile per-packet one-way delay: 257.250 ms

Loss rate: 8.18%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-03-01 12:48:50

End at: 2018-03-01 12:49:20

Below is generated by plot.py at 2018-03-01 16:48:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 1723.56 Mbit/s

95th percentile per-packet one-way delay: 217.454 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 905.65 Mbit/s

95th percentile per-packet one-way delay: 201.233 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 814.59 Mbit/s

95th percentile per-packet one-way delay: 241.664 ms

Loss rate: 3.03%

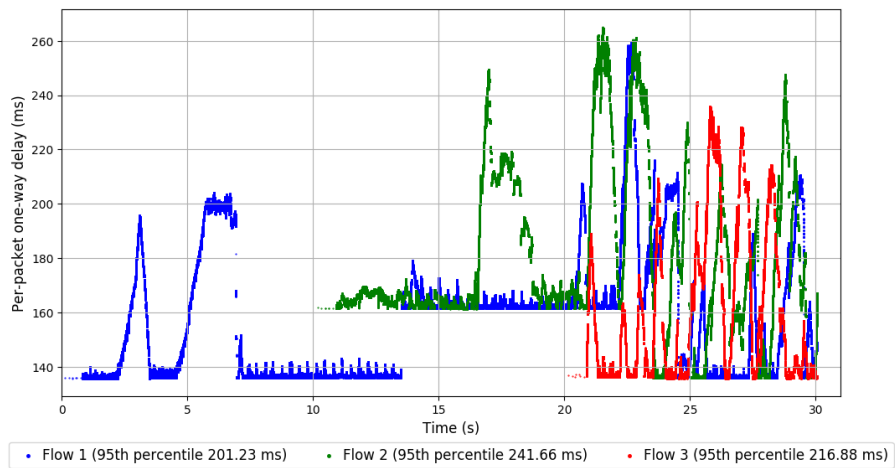
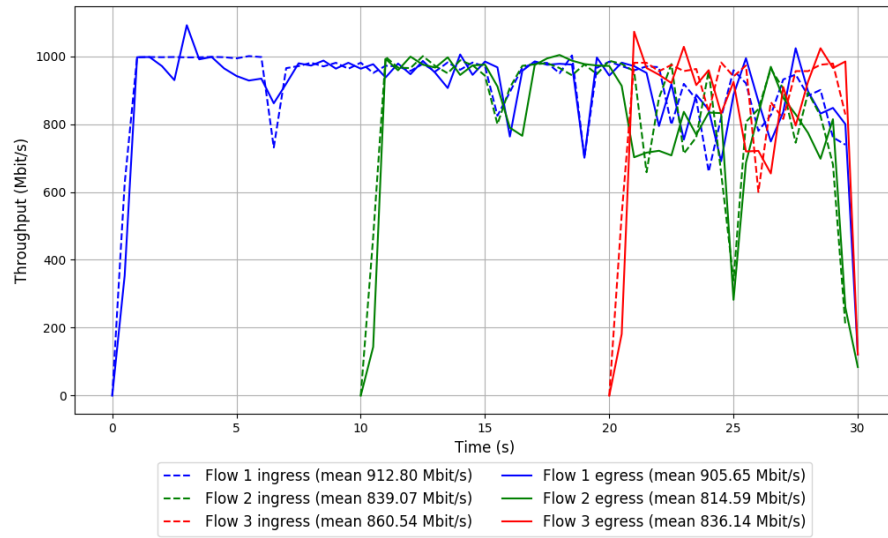
-- Flow 3:

Average throughput: 836.14 Mbit/s

95th percentile per-packet one-way delay: 216.876 ms

Loss rate: 2.84%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-03-01 13:08:42

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

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 1715.90 Mbit/s

95th percentile per-packet one-way delay: 250.293 ms

Loss rate: 3.45%

-- Flow 1:

Average throughput: 909.12 Mbit/s

95th percentile per-packet one-way delay: 262.588 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 831.93 Mbit/s

95th percentile per-packet one-way delay: 224.698 ms

Loss rate: 6.21%

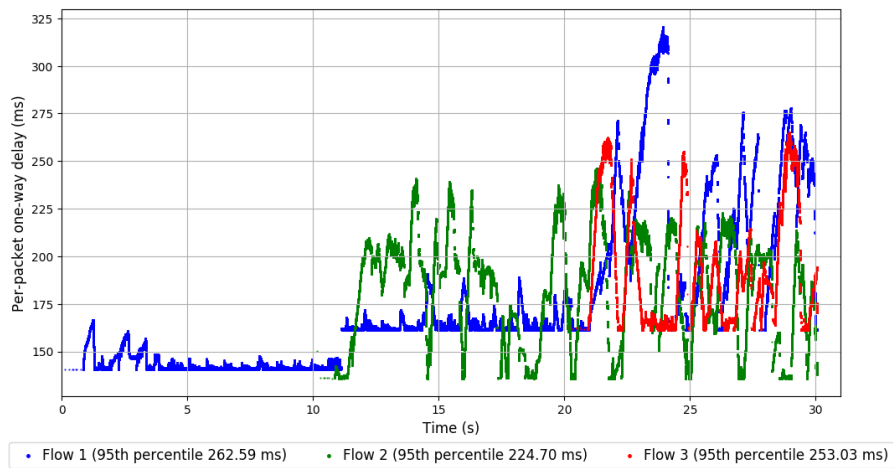
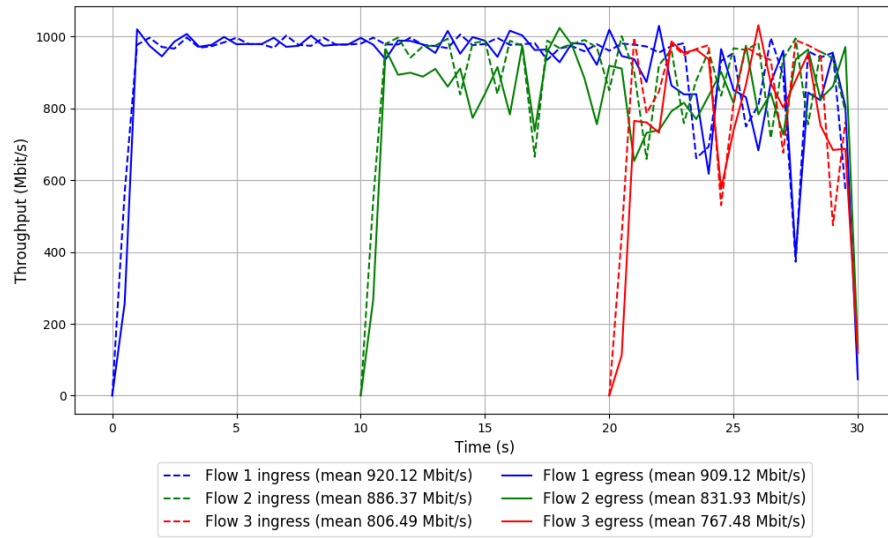
-- Flow 3:

Average throughput: 767.48 Mbit/s

95th percentile per-packet one-way delay: 253.035 ms

Loss rate: 5.09%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-03-01 13:28:23

End at: 2018-03-01 13:28:53

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 1677.05 Mbit/s

95th percentile per-packet one-way delay: 248.597 ms

Loss rate: 4.48%

-- Flow 1:

Average throughput: 894.25 Mbit/s

95th percentile per-packet one-way delay: 239.754 ms

Loss rate: 2.69%

-- Flow 2:

Average throughput: 795.26 Mbit/s

95th percentile per-packet one-way delay: 247.851 ms

Loss rate: 7.01%

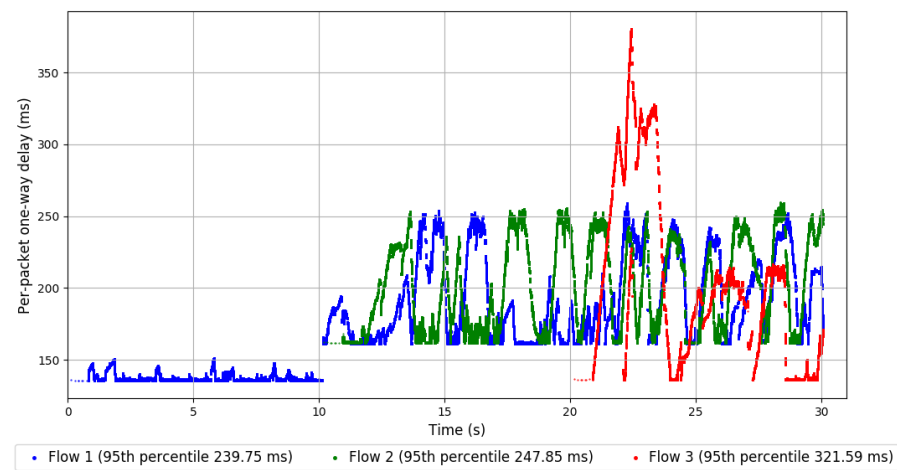
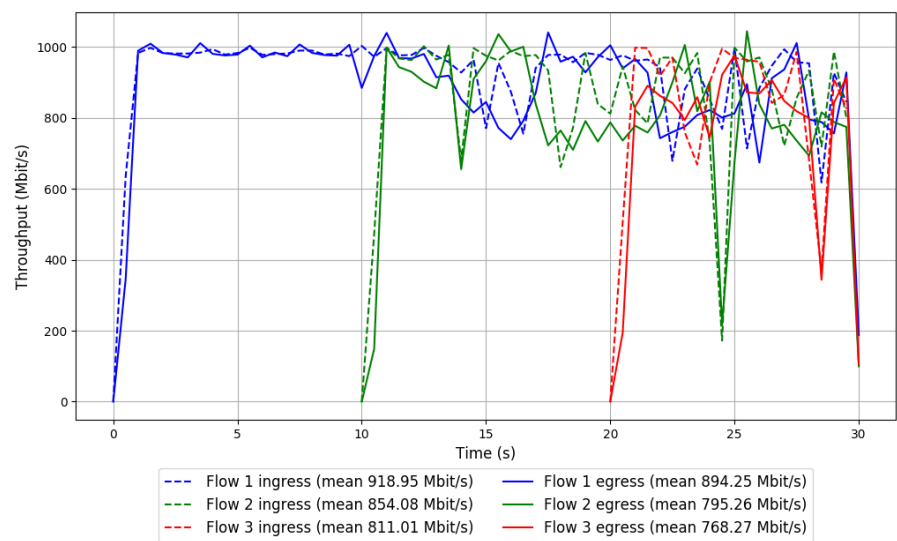
-- Flow 3:

Average throughput: 768.27 Mbit/s

95th percentile per-packet one-way delay: 321.594 ms

Loss rate: 5.27%

Run 10: Report of FillP — Data Link

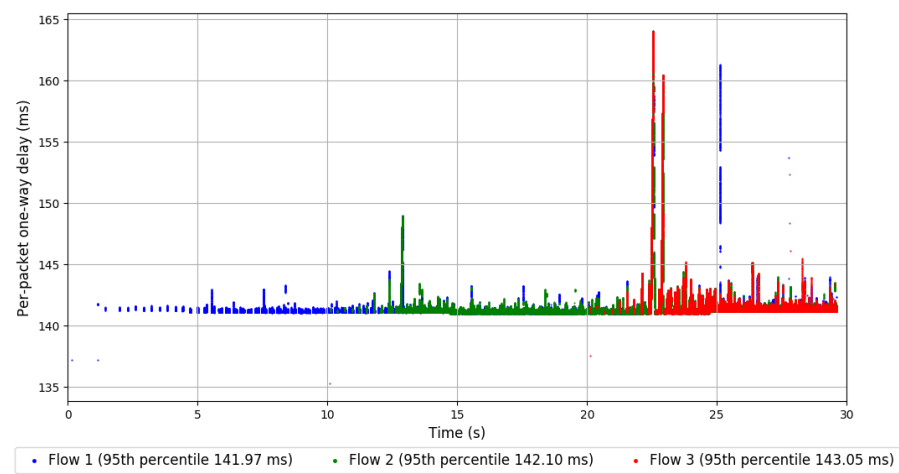
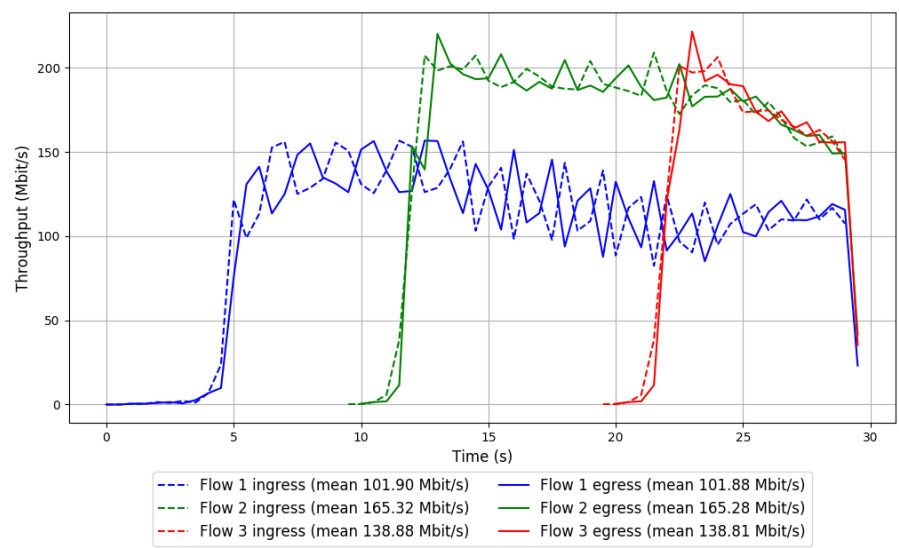


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-03-01 10:25:58
End at: 2018-03-01 10:26:28

# Below is generated by plot.py at 2018-03-01 17:15:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 256.05 Mbit/s
95th percentile per-packet one-way delay: 142.297 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 101.88 Mbit/s
95th percentile per-packet one-way delay: 141.967 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 165.28 Mbit/s
95th percentile per-packet one-way delay: 142.103 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 138.81 Mbit/s
95th percentile per-packet one-way delay: 143.046 ms
Loss rate: 0.04%
```

Run 1: Report of Indigo-1-32 — Data Link

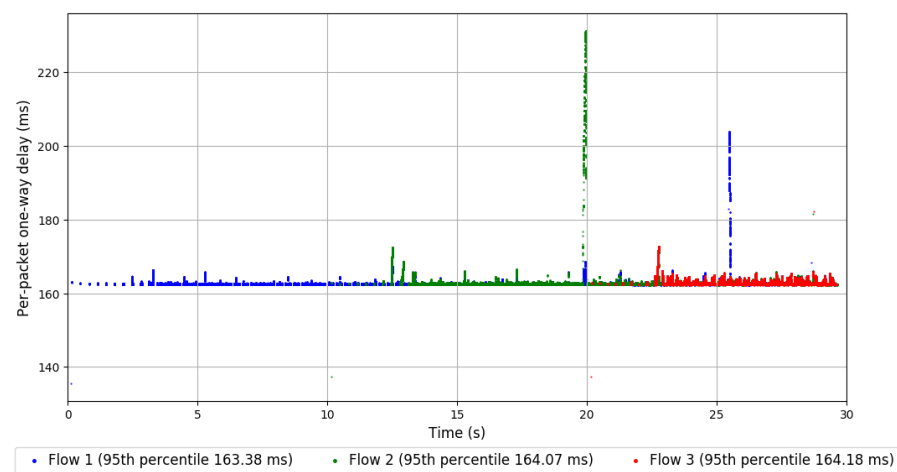
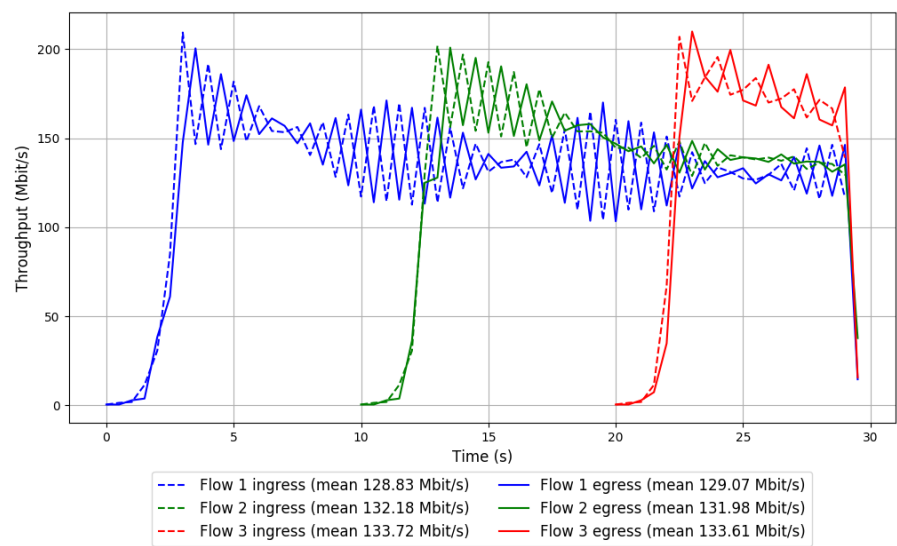


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-03-01 10:46:11
End at: 2018-03-01 10:46:41

# Below is generated by plot.py at 2018-03-01 17:15:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 258.63 Mbit/s
95th percentile per-packet one-way delay: 163.797 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 129.07 Mbit/s
95th percentile per-packet one-way delay: 163.384 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 131.98 Mbit/s
95th percentile per-packet one-way delay: 164.073 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 133.61 Mbit/s
95th percentile per-packet one-way delay: 164.181 ms
Loss rate: 0.39%
```

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-03-01 11:05:51

End at: 2018-03-01 11:06:21

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.79 Mbit/s

95th percentile per-packet one-way delay: 162.728 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 124.83 Mbit/s

95th percentile per-packet one-way delay: 162.516 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 33.36 Mbit/s

95th percentile per-packet one-way delay: 162.876 ms

Loss rate: 0.00%

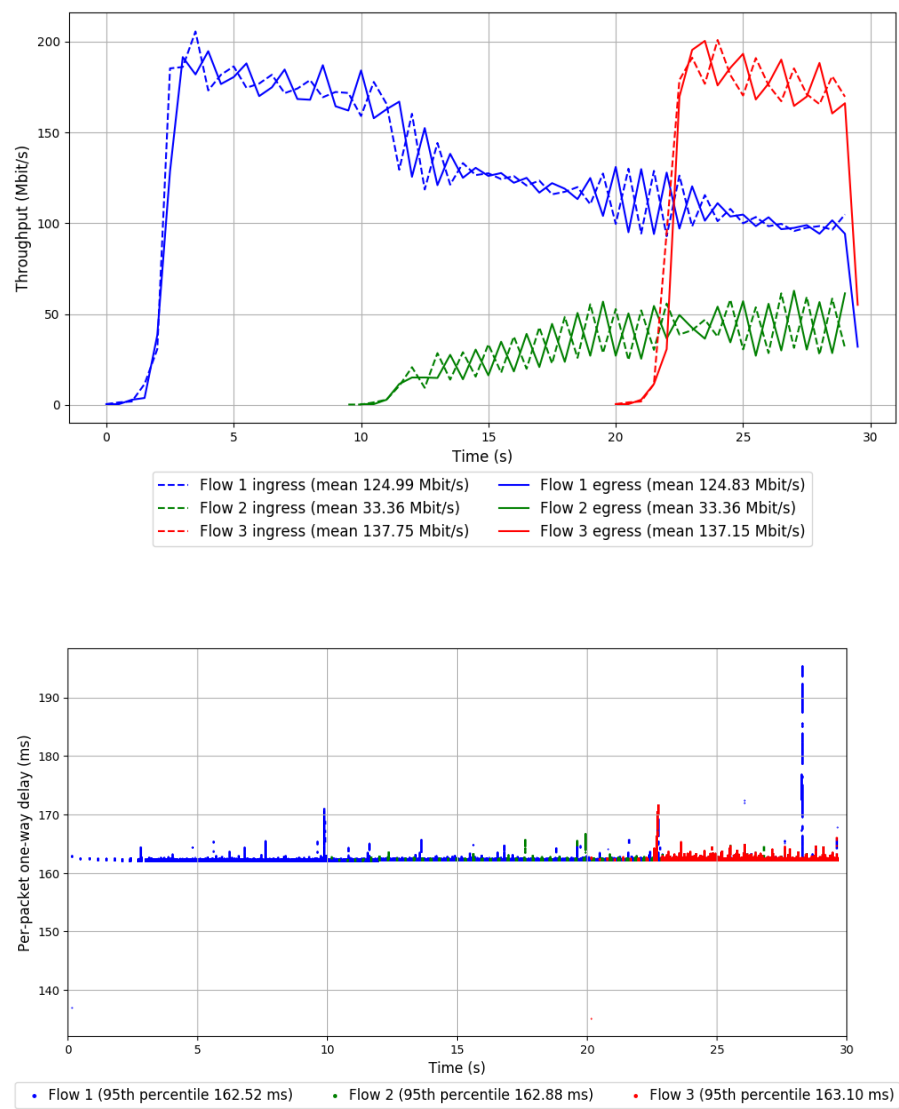
-- Flow 3:

Average throughput: 137.15 Mbit/s

95th percentile per-packet one-way delay: 163.104 ms

Loss rate: 0.42%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-03-01 11:25:32

End at: 2018-03-01 11:26:02

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 282.04 Mbit/s

95th percentile per-packet one-way delay: 162.005 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 151.22 Mbit/s

95th percentile per-packet one-way delay: 161.670 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 138.63 Mbit/s

95th percentile per-packet one-way delay: 162.077 ms

Loss rate: 0.14%

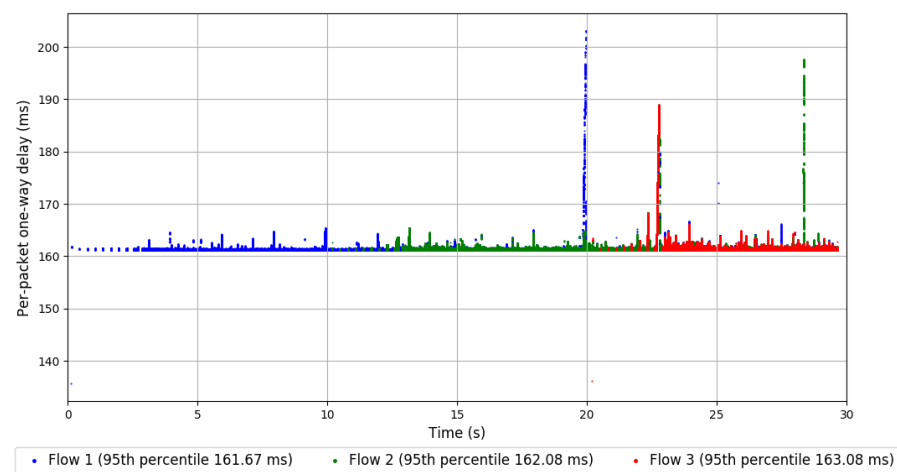
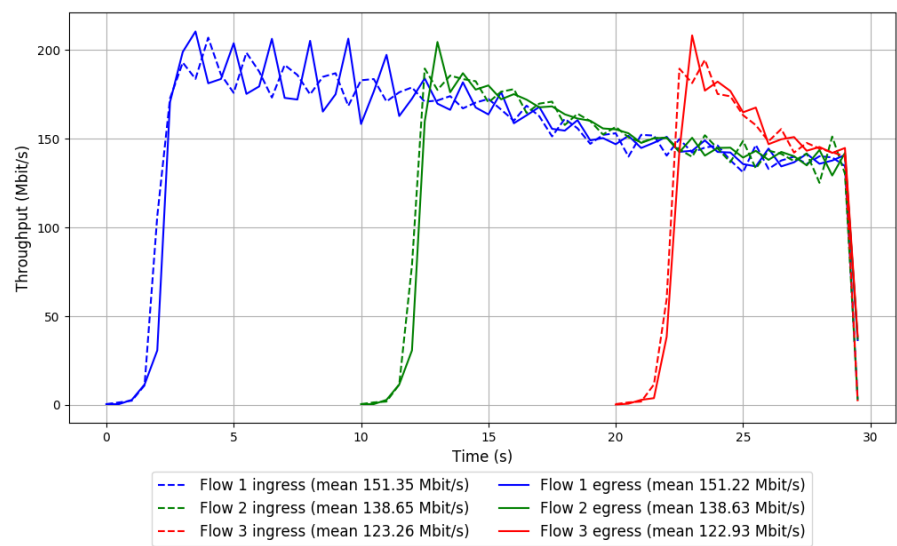
-- Flow 3:

Average throughput: 122.93 Mbit/s

95th percentile per-packet one-way delay: 163.083 ms

Loss rate: 0.25%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-03-01 11:45:21

End at: 2018-03-01 11:45:51

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 272.68 Mbit/s

95th percentile per-packet one-way delay: 163.464 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 141.52 Mbit/s

95th percentile per-packet one-way delay: 162.990 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 135.16 Mbit/s

95th percentile per-packet one-way delay: 163.617 ms

Loss rate: 0.14%

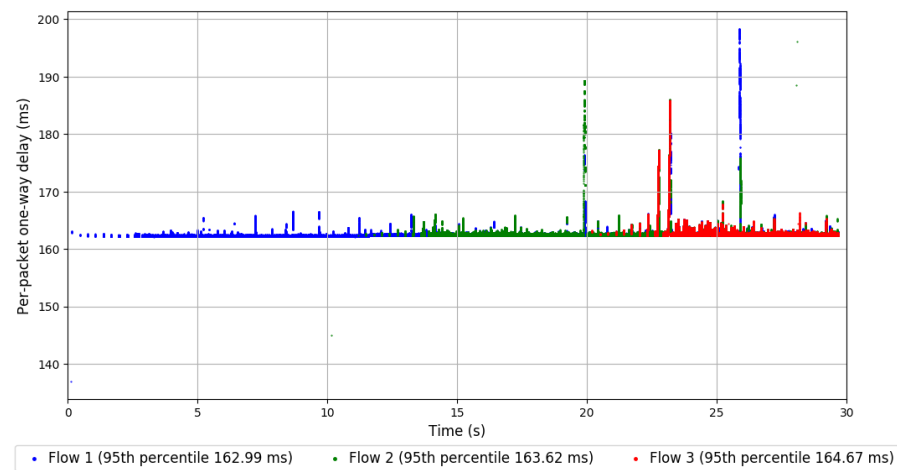
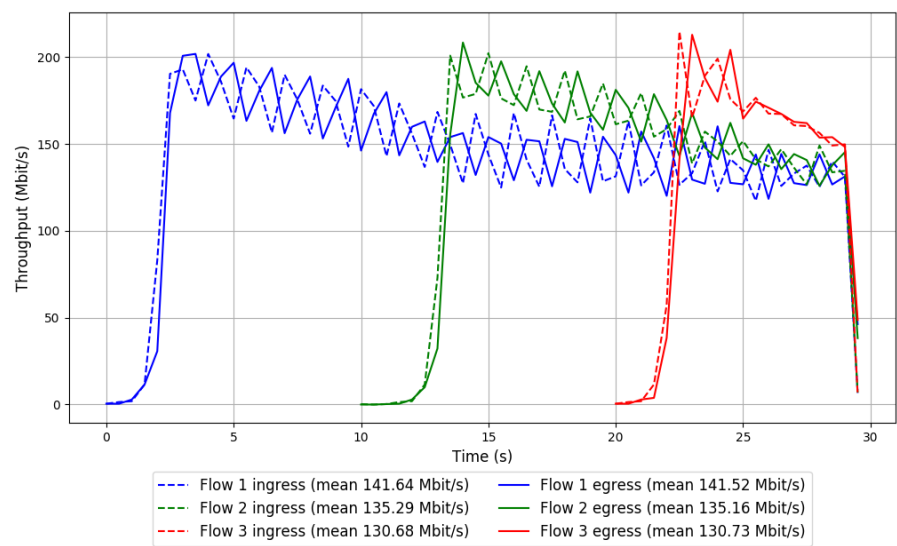
-- Flow 3:

Average throughput: 130.73 Mbit/s

95th percentile per-packet one-way delay: 164.670 ms

Loss rate: 0.24%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-03-01 12:05:12

End at: 2018-03-01 12:05:42

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 277.50 Mbit/s

95th percentile per-packet one-way delay: 163.071 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 146.16 Mbit/s

95th percentile per-packet one-way delay: 162.749 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 137.74 Mbit/s

95th percentile per-packet one-way delay: 163.110 ms

Loss rate: 0.09%

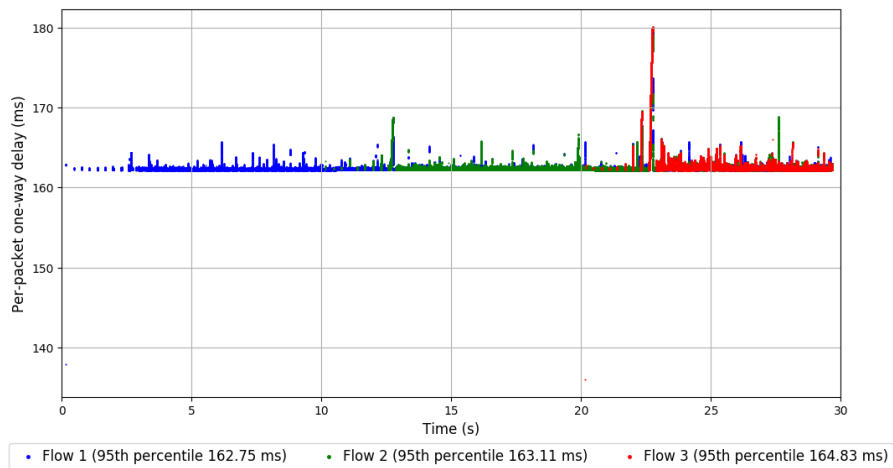
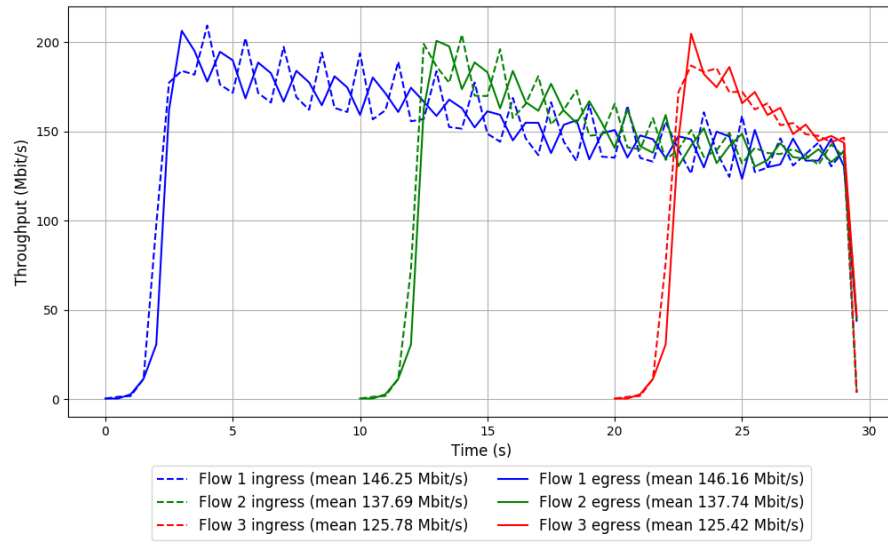
-- Flow 3:

Average throughput: 125.42 Mbit/s

95th percentile per-packet one-way delay: 164.828 ms

Loss rate: 0.26%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-03-01 12:24:40

End at: 2018-03-01 12:25:10

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 273.90 Mbit/s

95th percentile per-packet one-way delay: 163.182 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 143.19 Mbit/s

95th percentile per-packet one-way delay: 162.824 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 145.78 Mbit/s

95th percentile per-packet one-way delay: 163.370 ms

Loss rate: 0.06%

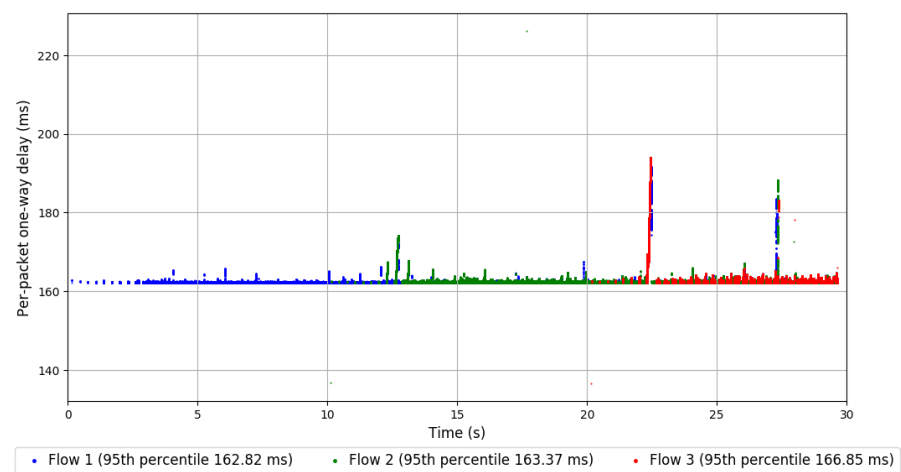
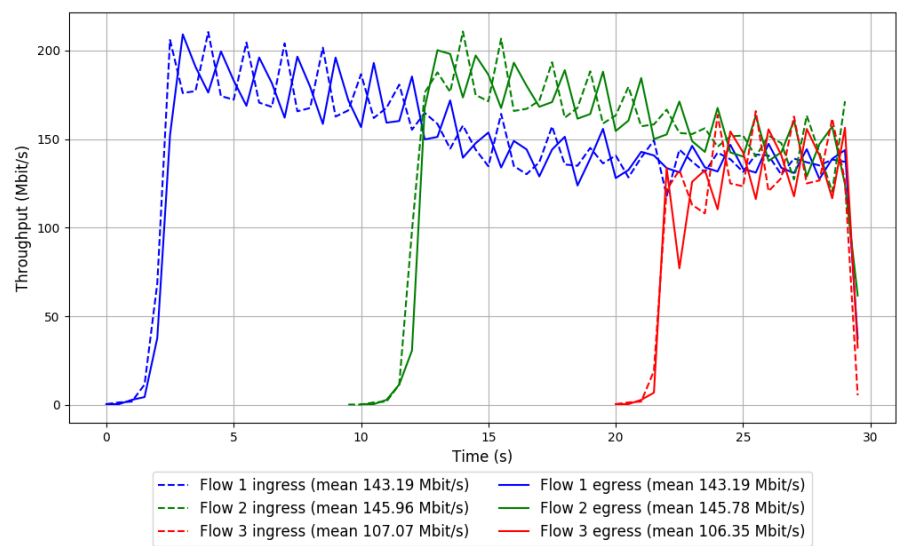
-- Flow 3:

Average throughput: 106.35 Mbit/s

95th percentile per-packet one-way delay: 166.852 ms

Loss rate: 0.64%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-03-01 12:44:28

End at: 2018-03-01 12:44:58

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 279.28 Mbit/s

95th percentile per-packet one-way delay: 162.878 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 146.76 Mbit/s

95th percentile per-packet one-way delay: 162.642 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 139.28 Mbit/s

95th percentile per-packet one-way delay: 163.106 ms

Loss rate: 0.15%

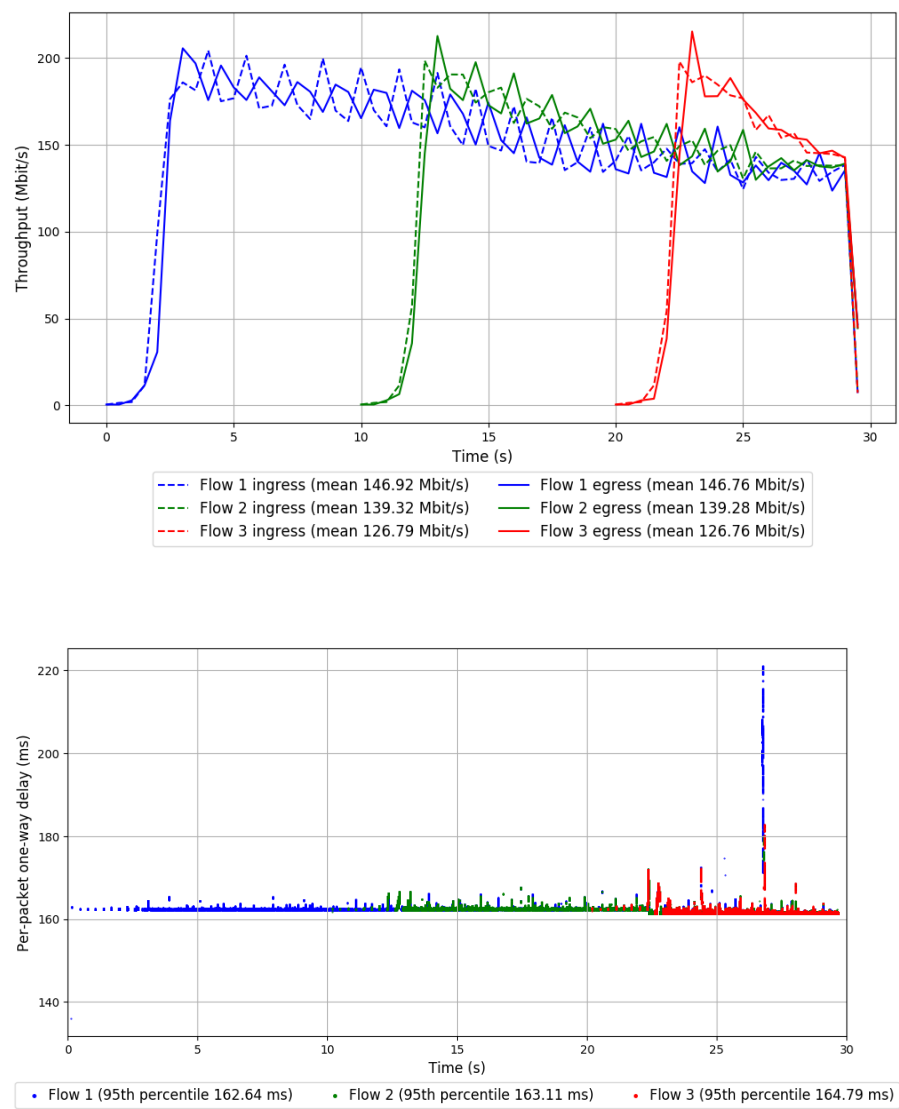
-- Flow 3:

Average throughput: 126.76 Mbit/s

95th percentile per-packet one-way delay: 164.791 ms

Loss rate: 0.30%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-03-01 13:04:24

End at: 2018-03-01 13:04:54

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 276.03 Mbit/s

95th percentile per-packet one-way delay: 162.275 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 143.86 Mbit/s

95th percentile per-packet one-way delay: 161.920 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 139.29 Mbit/s

95th percentile per-packet one-way delay: 162.405 ms

Loss rate: 0.13%

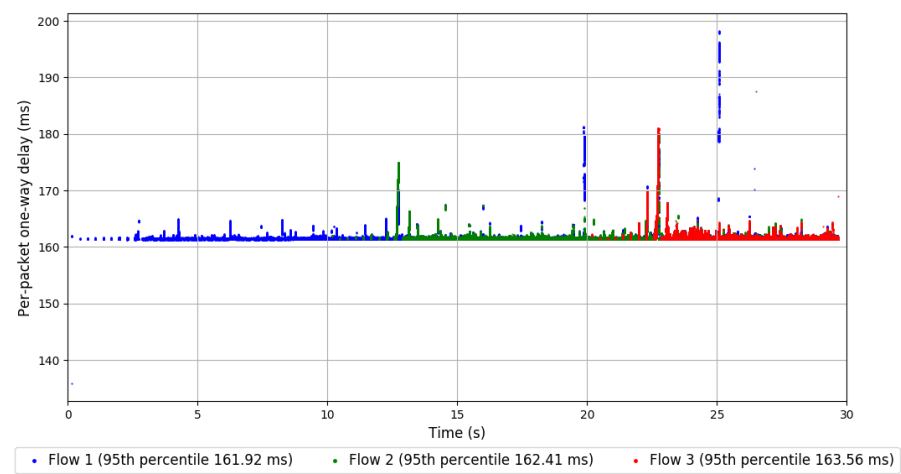
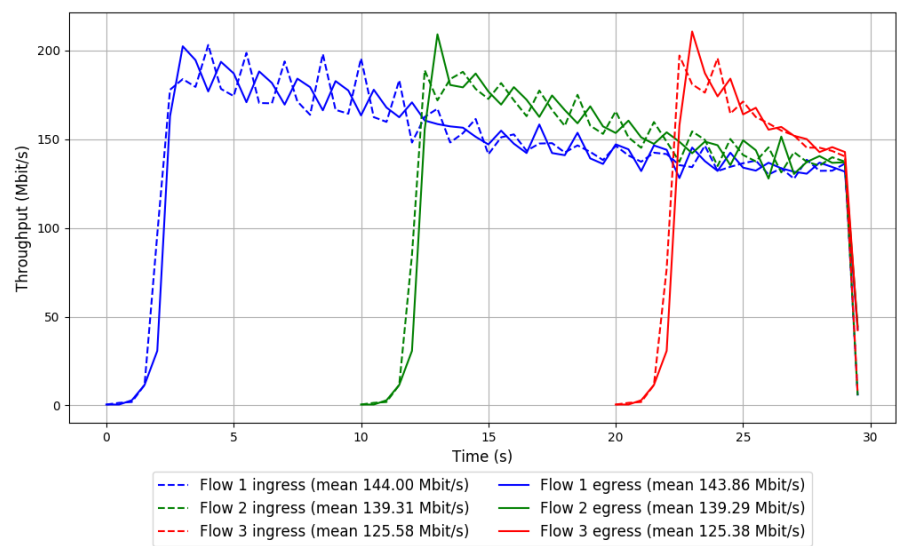
-- Flow 3:

Average throughput: 125.38 Mbit/s

95th percentile per-packet one-way delay: 163.561 ms

Loss rate: 0.33%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-03-01 13:23:57

End at: 2018-03-01 13:24:27

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.70 Mbit/s

95th percentile per-packet one-way delay: 162.267 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 145.44 Mbit/s

95th percentile per-packet one-way delay: 161.769 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 153.10 Mbit/s

95th percentile per-packet one-way delay: 162.405 ms

Loss rate: 0.00%

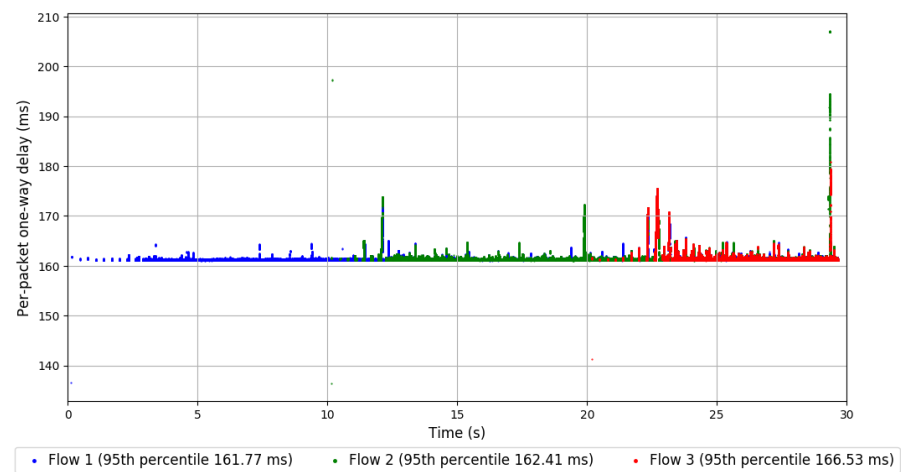
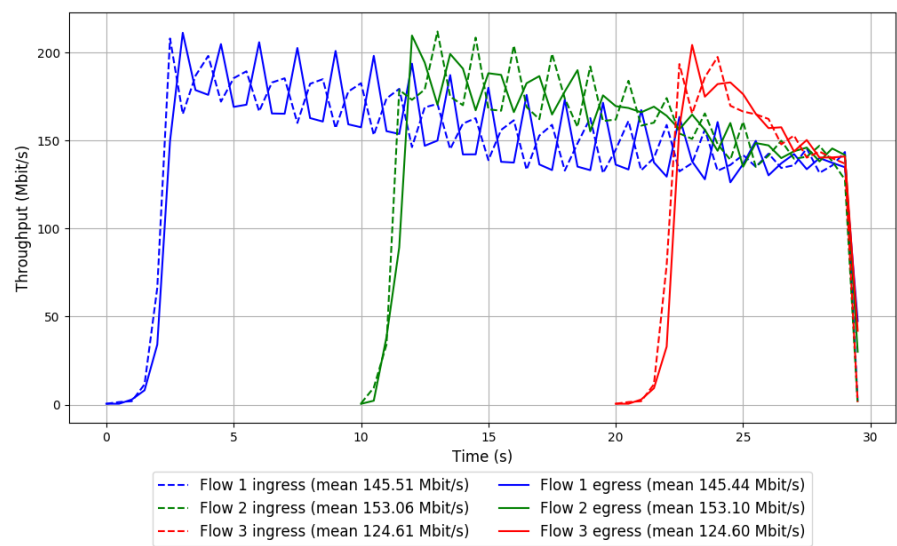
-- Flow 3:

Average throughput: 124.60 Mbit/s

95th percentile per-packet one-way delay: 166.530 ms

Loss rate: 0.06%

Run 10: Report of Indigo-1-32 — Data Link

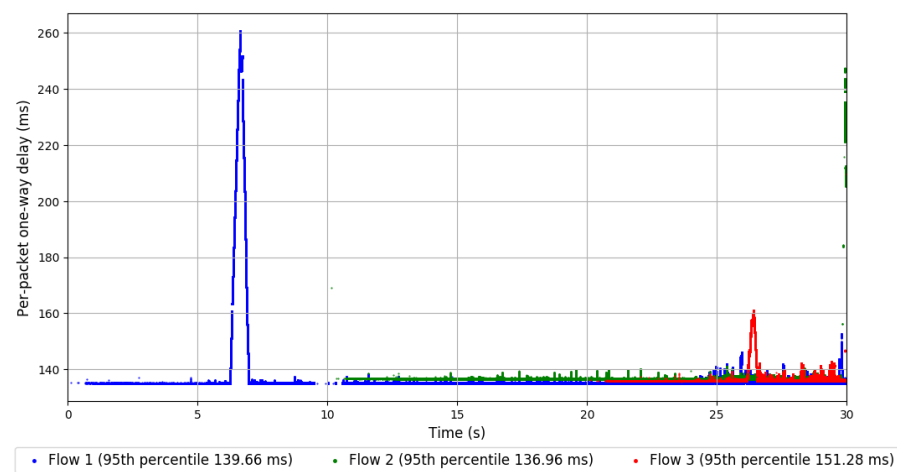
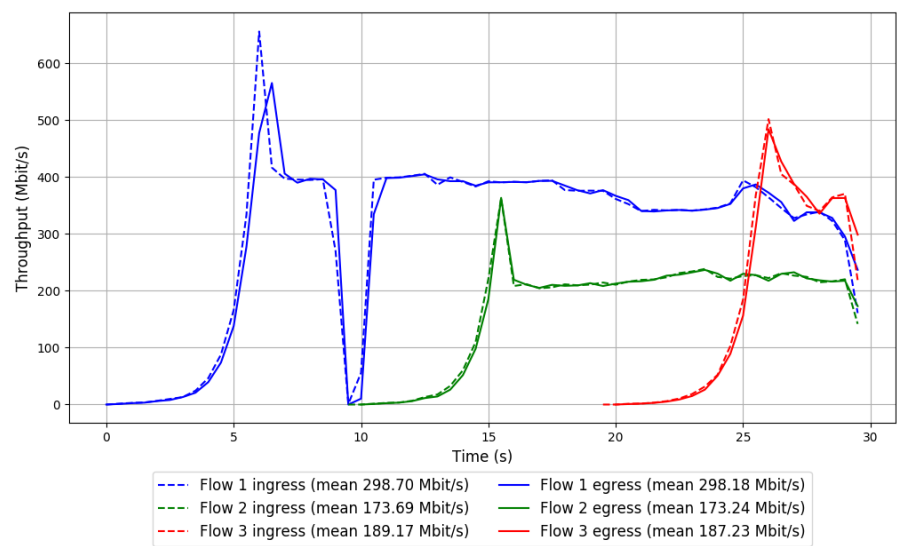


```
Run 1: Statistics of Vivace-latency

Start at: 2018-03-01 10:22:13
End at: 2018-03-01 10:22:43

# Below is generated by plot.py at 2018-03-01 17:15:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 474.59 Mbit/s
95th percentile per-packet one-way delay: 139.623 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 298.18 Mbit/s
95th percentile per-packet one-way delay: 139.664 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 173.24 Mbit/s
95th percentile per-packet one-way delay: 136.956 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 187.23 Mbit/s
95th percentile per-packet one-way delay: 151.277 ms
Loss rate: 0.66%
```

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-03-01 10:42:17

End at: 2018-03-01 10:42:47

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 495.63 Mbit/s

95th percentile per-packet one-way delay: 141.208 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 306.33 Mbit/s

95th percentile per-packet one-way delay: 141.314 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 227.38 Mbit/s

95th percentile per-packet one-way delay: 138.053 ms

Loss rate: 0.00%

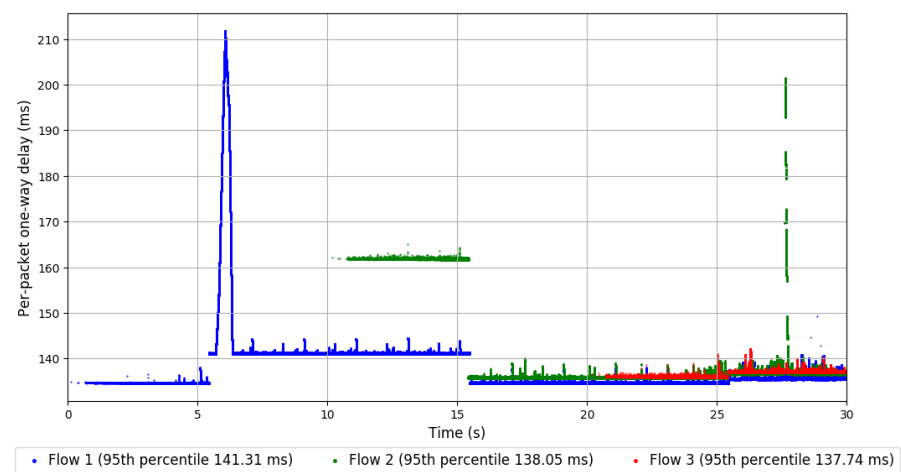
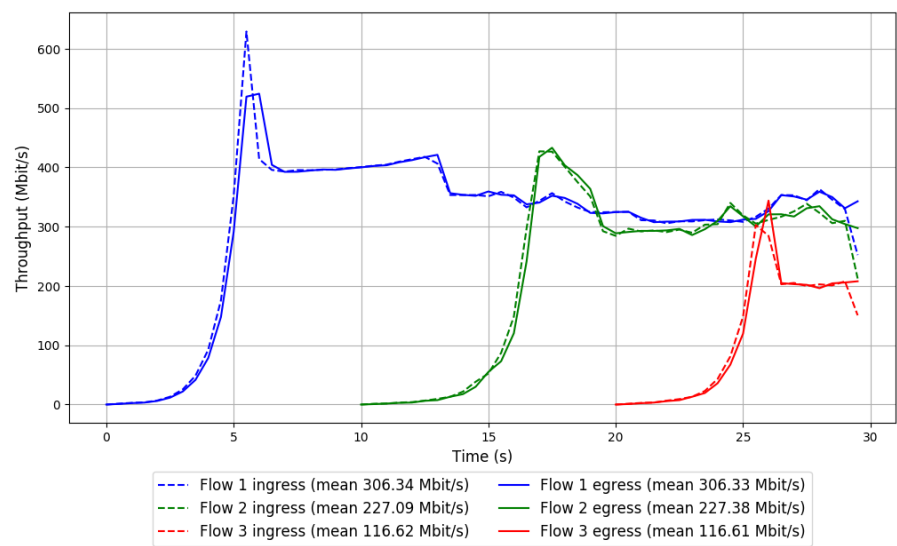
-- Flow 3:

Average throughput: 116.61 Mbit/s

95th percentile per-packet one-way delay: 137.744 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-03-01 11:02:03

End at: 2018-03-01 11:02:33

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 410.89 Mbit/s

95th percentile per-packet one-way delay: 164.266 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 277.39 Mbit/s

95th percentile per-packet one-way delay: 161.634 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 165.88 Mbit/s

95th percentile per-packet one-way delay: 164.347 ms

Loss rate: 0.19%

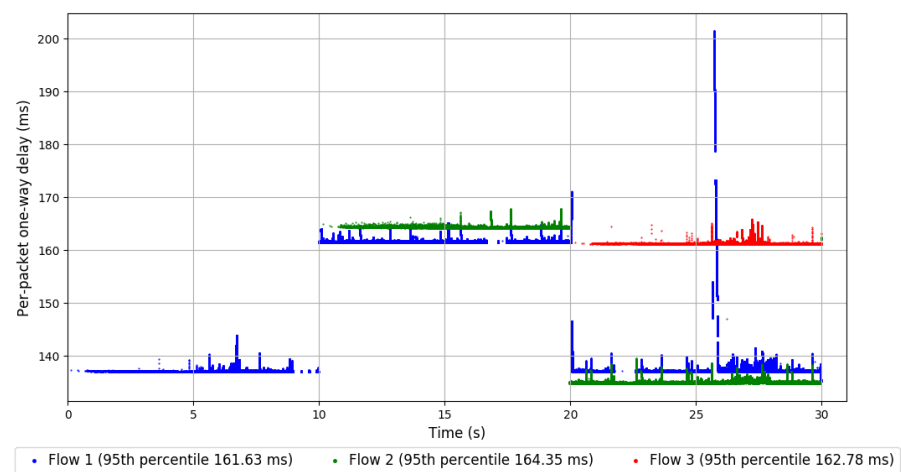
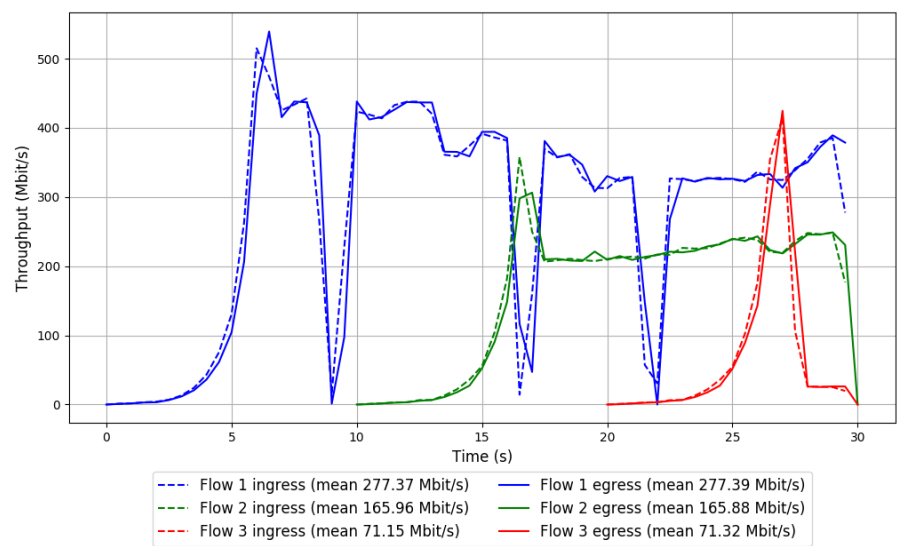
-- Flow 3:

Average throughput: 71.32 Mbit/s

95th percentile per-packet one-way delay: 162.779 ms

Loss rate: 0.09%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-03-01 11:21:52

End at: 2018-03-01 11:22:22

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 459.15 Mbit/s

95th percentile per-packet one-way delay: 162.992 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 299.69 Mbit/s

95th percentile per-packet one-way delay: 165.280 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 174.60 Mbit/s

95th percentile per-packet one-way delay: 162.498 ms

Loss rate: 0.16%

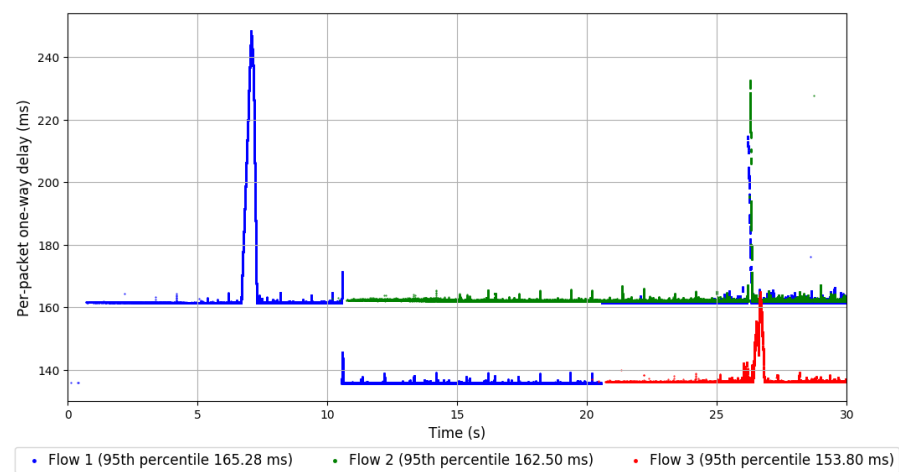
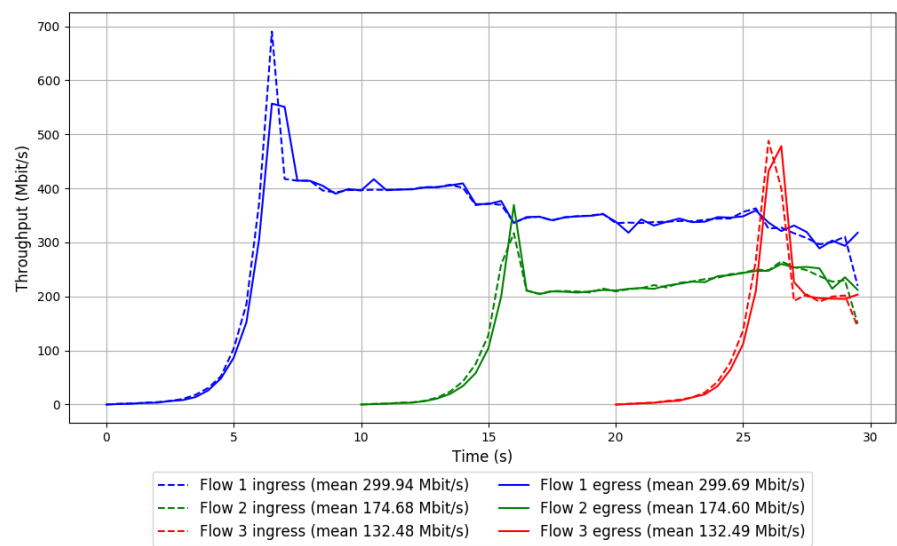
-- Flow 3:

Average throughput: 132.49 Mbit/s

95th percentile per-packet one-way delay: 153.804 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-03-01 11:41:37

End at: 2018-03-01 11:42:07

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 491.28 Mbit/s

95th percentile per-packet one-way delay: 162.894 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 290.01 Mbit/s

95th percentile per-packet one-way delay: 164.855 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 264.24 Mbit/s

95th percentile per-packet one-way delay: 162.305 ms

Loss rate: 0.13%

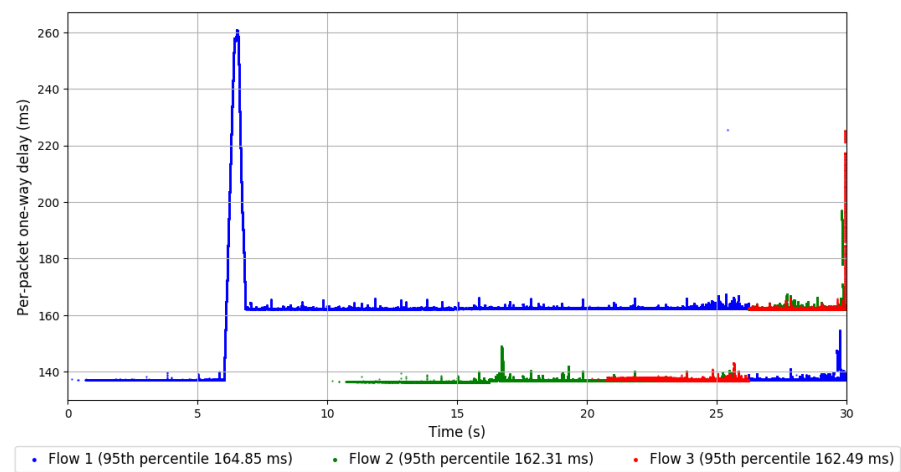
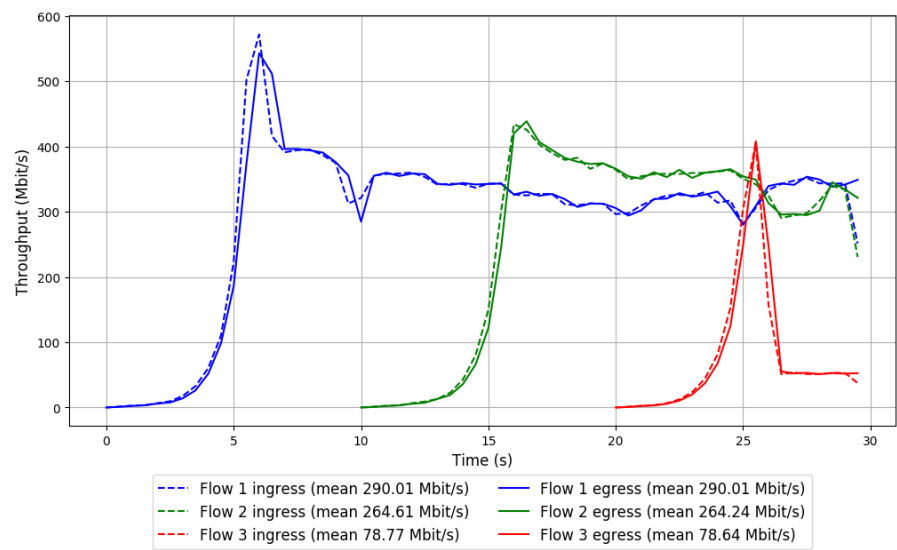
-- Flow 3:

Average throughput: 78.64 Mbit/s

95th percentile per-packet one-way delay: 162.489 ms

Loss rate: 0.16%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-03-01 12:01:27

End at: 2018-03-01 12:01:57

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 420.56 Mbit/s

95th percentile per-packet one-way delay: 162.434 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 295.08 Mbit/s

95th percentile per-packet one-way delay: 142.286 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 154.03 Mbit/s

95th percentile per-packet one-way delay: 162.701 ms

Loss rate: 0.10%

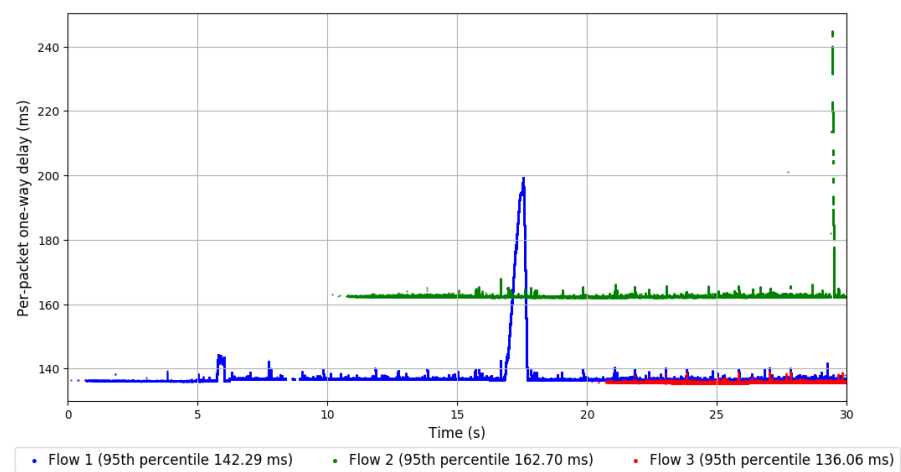
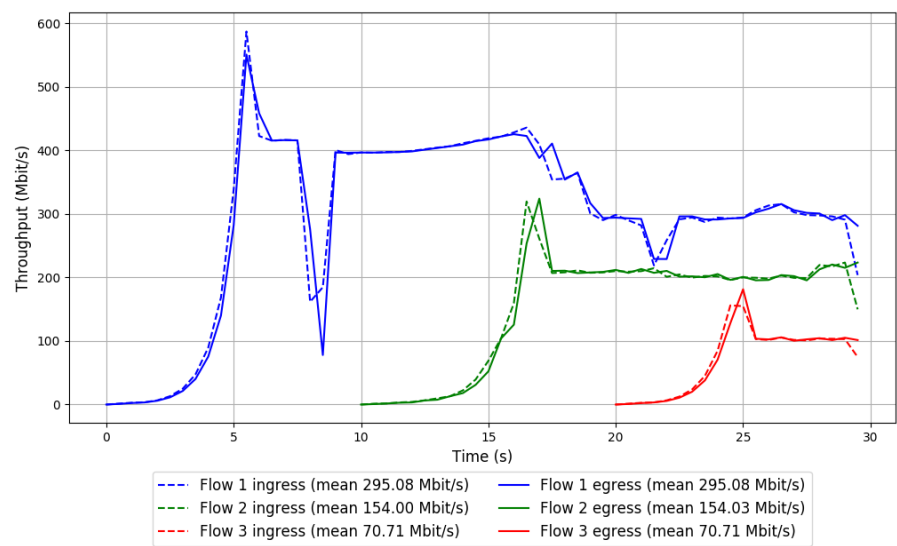
-- Flow 3:

Average throughput: 70.71 Mbit/s

95th percentile per-packet one-way delay: 136.057 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-03-01 12:20:53

End at: 2018-03-01 12:21:23

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 480.54 Mbit/s

95th percentile per-packet one-way delay: 141.013 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 324.07 Mbit/s

95th percentile per-packet one-way delay: 140.004 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.48 Mbit/s

95th percentile per-packet one-way delay: 140.925 ms

Loss rate: 0.00%

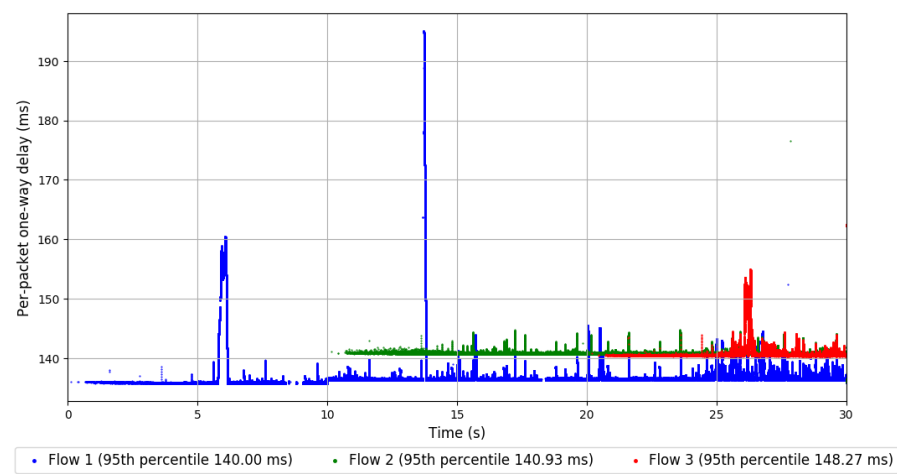
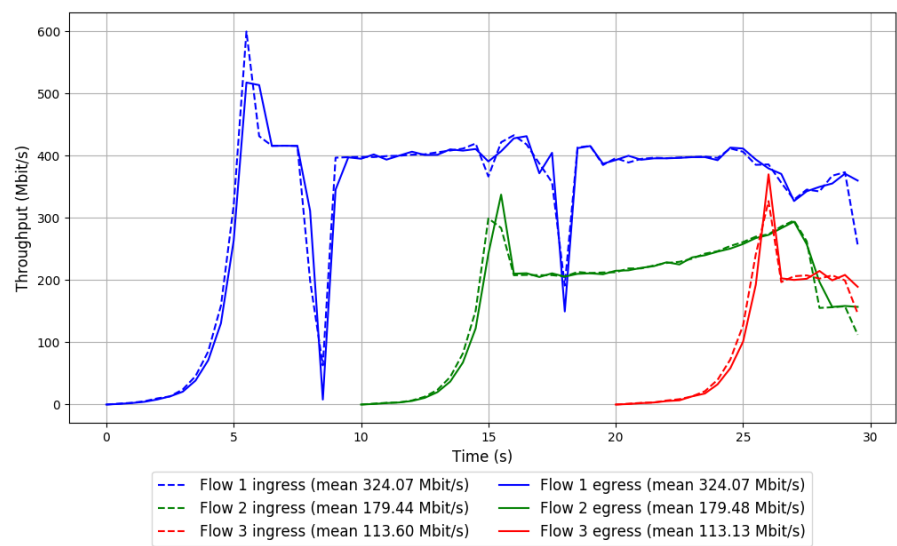
-- Flow 3:

Average throughput: 113.13 Mbit/s

95th percentile per-packet one-way delay: 148.270 ms

Loss rate: 0.46%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-03-01 12:40:49

End at: 2018-03-01 12:41:19

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 447.57 Mbit/s

95th percentile per-packet one-way delay: 161.696 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 284.52 Mbit/s

95th percentile per-packet one-way delay: 162.282 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 184.00 Mbit/s

95th percentile per-packet one-way delay: 136.329 ms

Loss rate: 0.00%

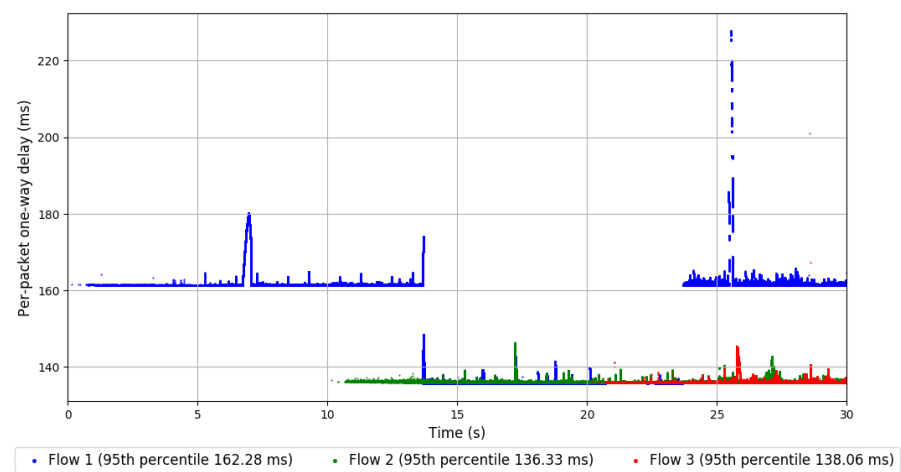
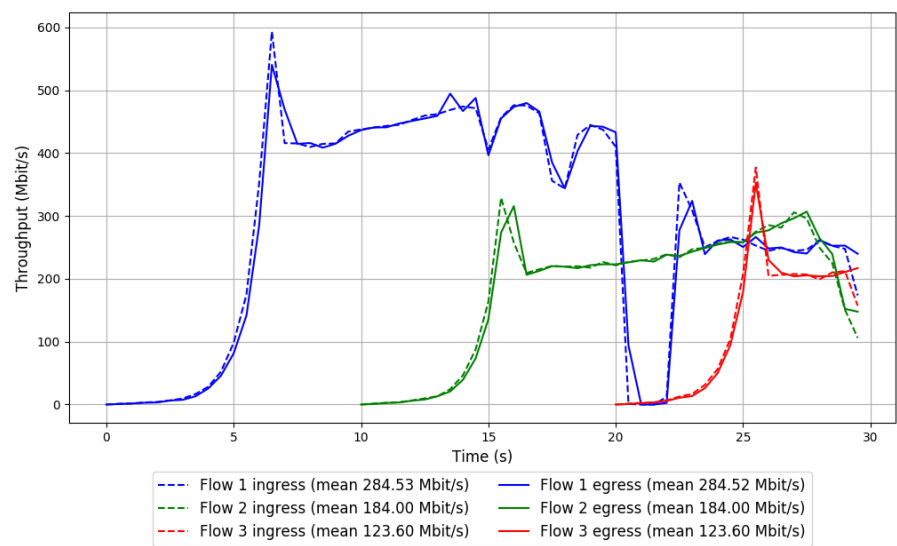
-- Flow 3:

Average throughput: 123.60 Mbit/s

95th percentile per-packet one-way delay: 138.056 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-03-01 13:00:46

End at: 2018-03-01 13:01:16

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 426.25 Mbit/s

95th percentile per-packet one-way delay: 163.238 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 296.96 Mbit/s

95th percentile per-packet one-way delay: 163.605 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 102.53 Mbit/s

95th percentile per-packet one-way delay: 161.770 ms

Loss rate: 0.21%

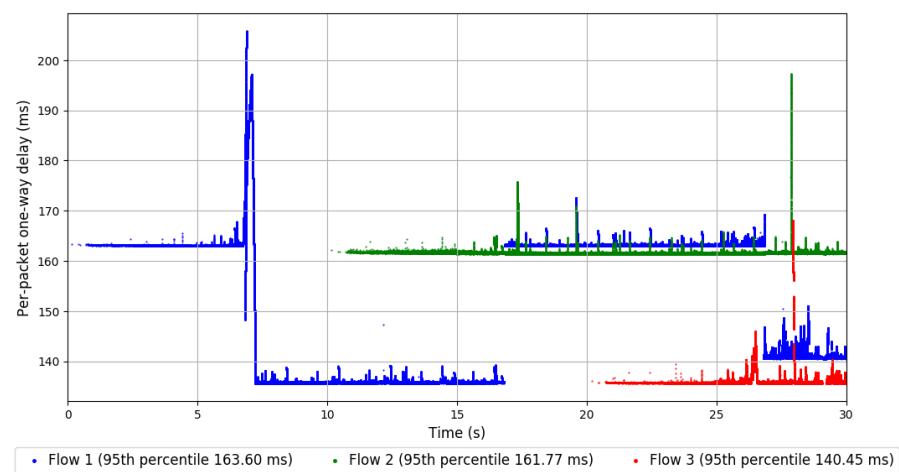
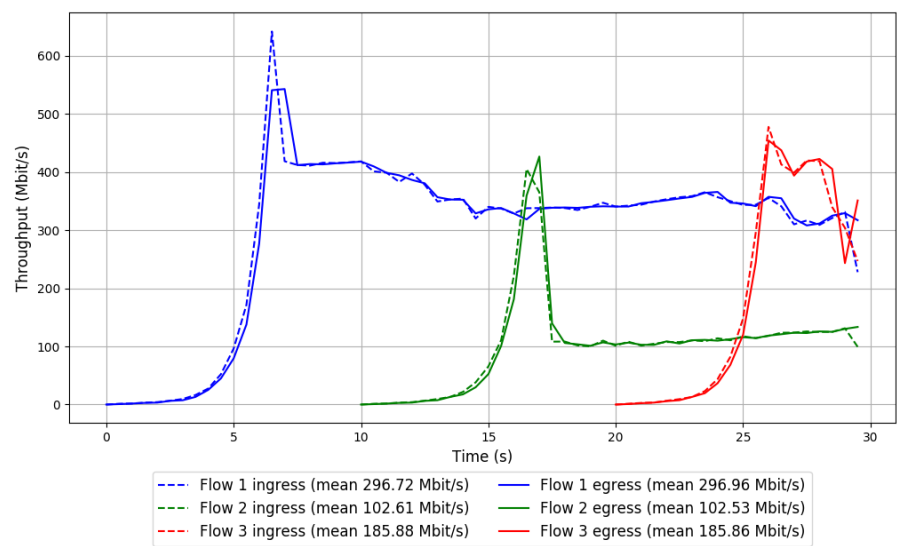
-- Flow 3:

Average throughput: 185.86 Mbit/s

95th percentile per-packet one-way delay: 140.449 ms

Loss rate: 0.02%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-03-01 13:20:17

End at: 2018-03-01 13:20:47

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 432.97 Mbit/s

95th percentile per-packet one-way delay: 162.544 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 291.10 Mbit/s

95th percentile per-packet one-way delay: 164.939 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 180.58 Mbit/s

95th percentile per-packet one-way delay: 140.971 ms

Loss rate: 0.00%

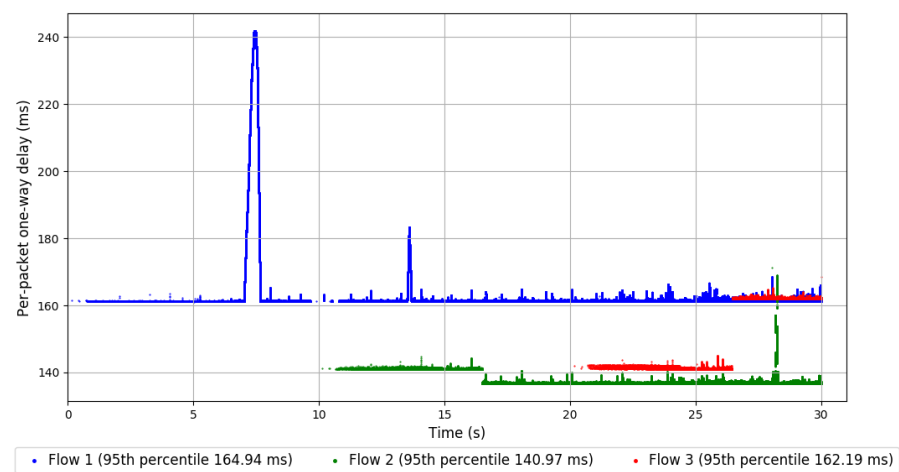
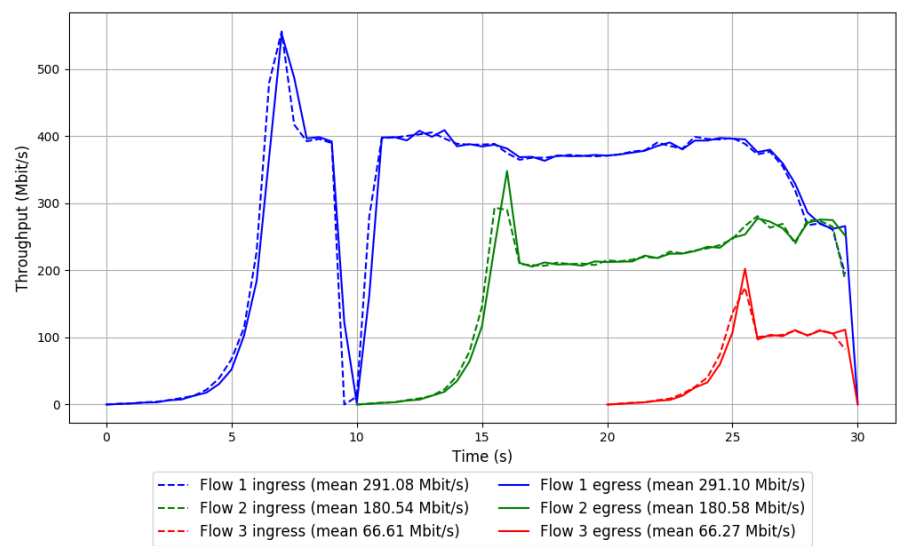
-- Flow 3:

Average throughput: 66.27 Mbit/s

95th percentile per-packet one-way delay: 162.191 ms

Loss rate: 0.44%

Run 10: Report of Vivace-latency — Data Link

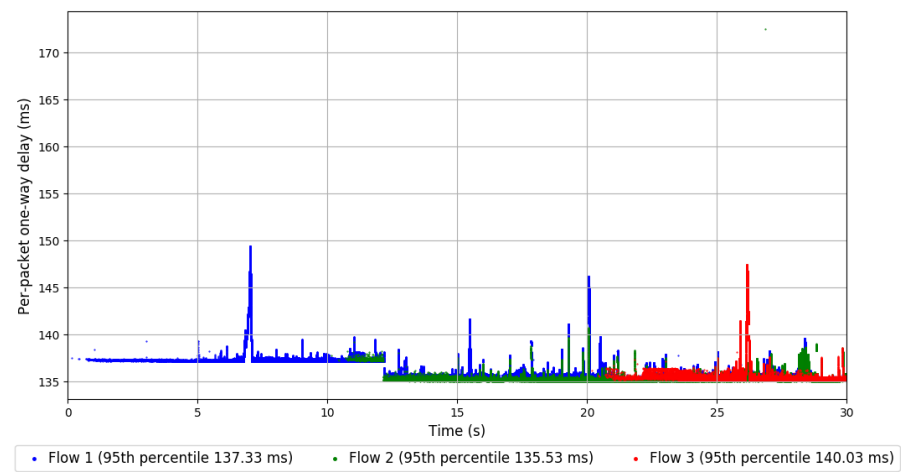
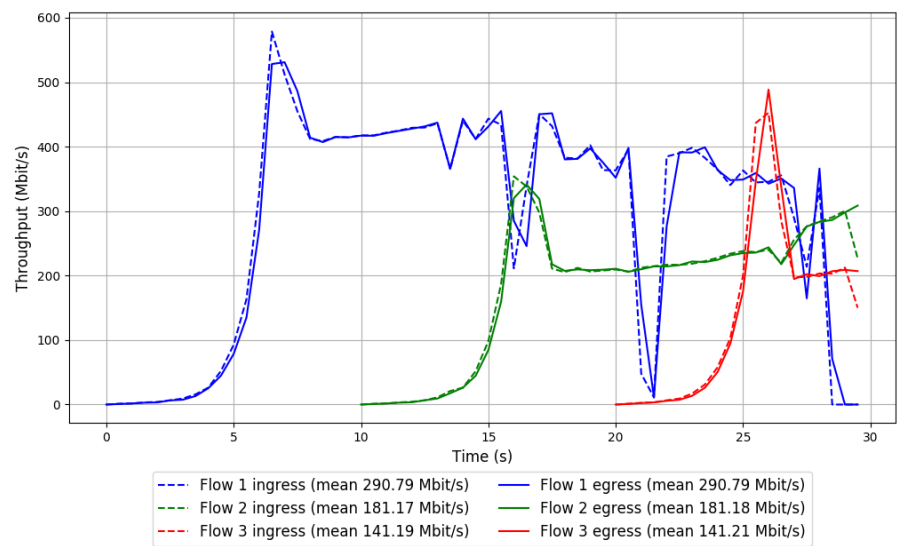


```
Run 1: Statistics of Vivace-loss

Start at: 2018-03-01 10:24:31
End at: 2018-03-01 10:25:01

# Below is generated by plot.py at 2018-03-01 17:15:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 455.88 Mbit/s
95th percentile per-packet one-way delay: 137.280 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 290.79 Mbit/s
95th percentile per-packet one-way delay: 137.327 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 181.18 Mbit/s
95th percentile per-packet one-way delay: 135.527 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 141.21 Mbit/s
95th percentile per-packet one-way delay: 140.030 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-03-01 10:44:37

End at: 2018-03-01 10:45:07

Below is generated by plot.py at 2018-03-01 17:15:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 537.80 Mbit/s

95th percentile per-packet one-way delay: 169.292 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 300.68 Mbit/s

95th percentile per-packet one-way delay: 193.790 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 263.11 Mbit/s

95th percentile per-packet one-way delay: 139.551 ms

Loss rate: 0.00%

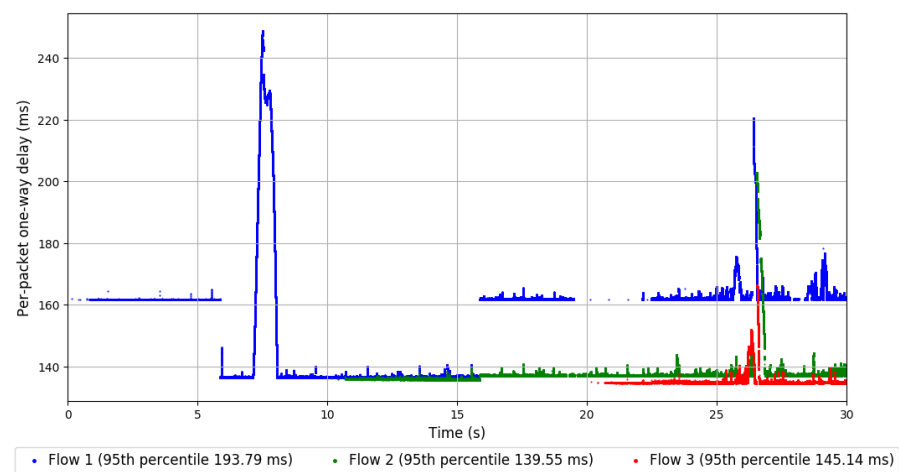
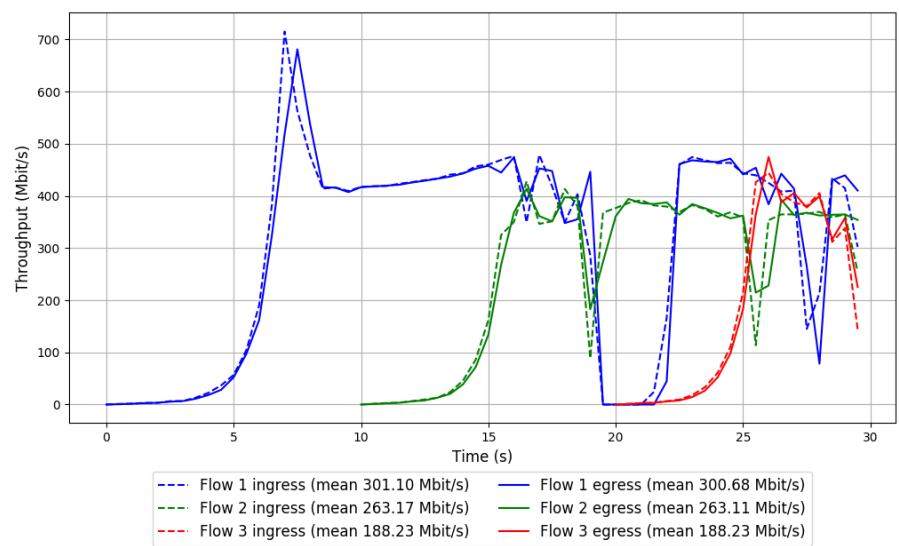
-- Flow 3:

Average throughput: 188.23 Mbit/s

95th percentile per-packet one-way delay: 145.139 ms

Loss rate: 0.00%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-03-01 11:04:16

End at: 2018-03-01 11:04:46

Below is generated by plot.py at 2018-03-01 17:17:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 554.97 Mbit/s

95th percentile per-packet one-way delay: 165.272 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 332.77 Mbit/s

95th percentile per-packet one-way delay: 174.065 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 282.47 Mbit/s

95th percentile per-packet one-way delay: 136.764 ms

Loss rate: 0.00%

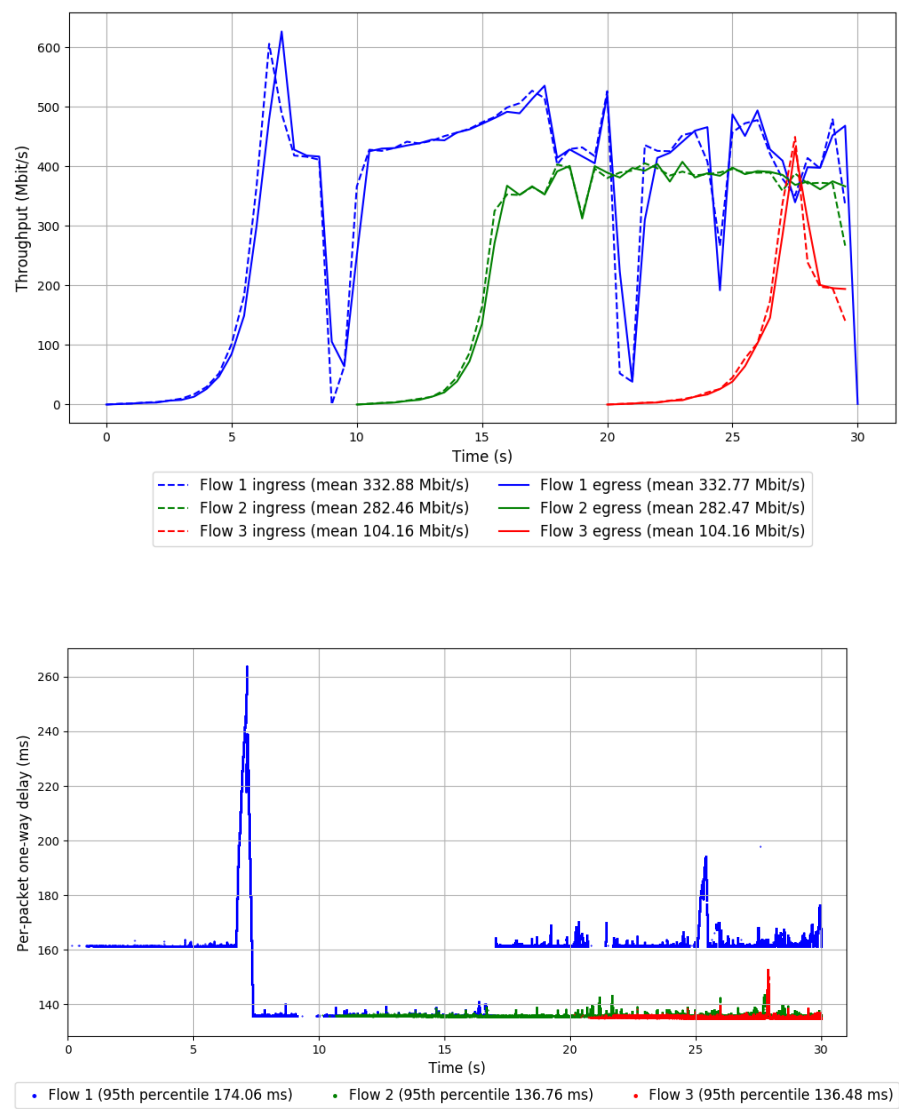
-- Flow 3:

Average throughput: 104.16 Mbit/s

95th percentile per-packet one-way delay: 136.478 ms

Loss rate: 0.00%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-03-01 11:24:09

End at: 2018-03-01 11:24:39

Below is generated by plot.py at 2018-03-01 17:17:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 412.21 Mbit/s

95th percentile per-packet one-way delay: 181.099 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 240.26 Mbit/s

95th percentile per-packet one-way delay: 193.133 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.93 Mbit/s

95th percentile per-packet one-way delay: 162.417 ms

Loss rate: 0.00%

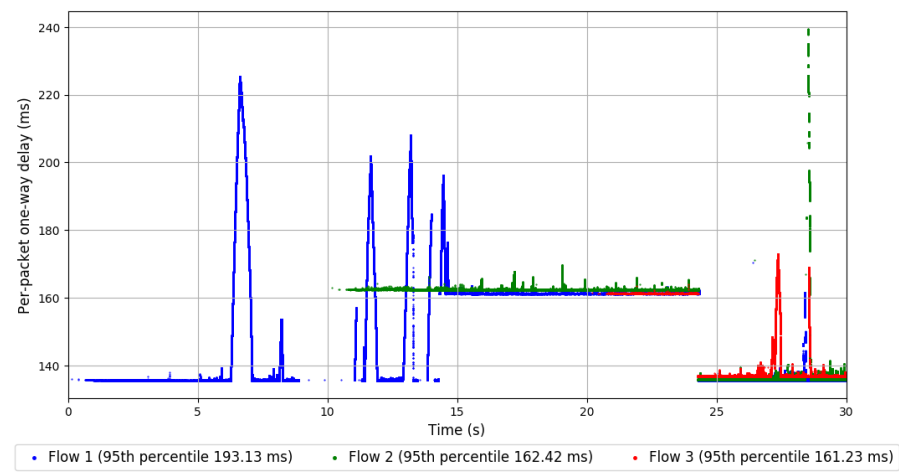
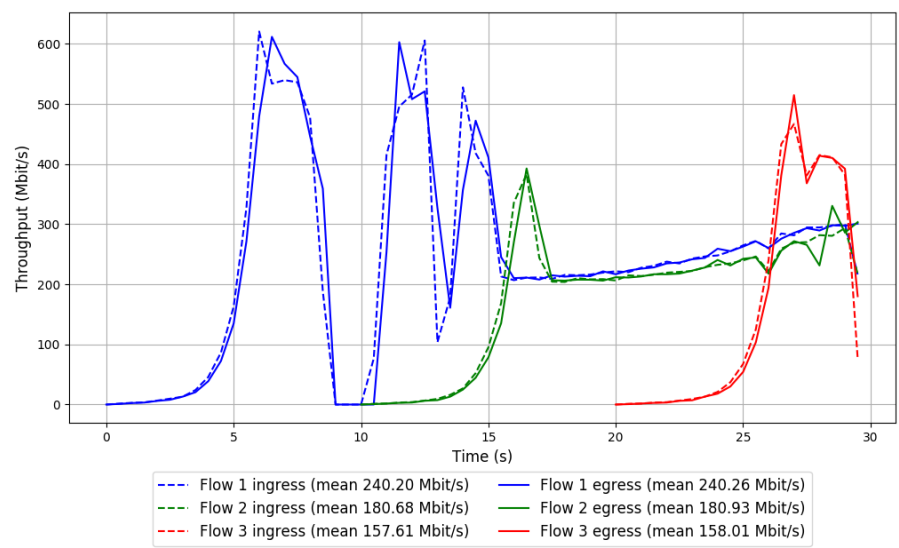
-- Flow 3:

Average throughput: 158.01 Mbit/s

95th percentile per-packet one-way delay: 161.234 ms

Loss rate: 0.00%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-03-01 11:43:55

End at: 2018-03-01 11:44:25

Below is generated by plot.py at 2018-03-01 17:17:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 446.05 Mbit/s

95th percentile per-packet one-way delay: 165.149 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 260.44 Mbit/s

95th percentile per-packet one-way delay: 170.041 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 183.10 Mbit/s

95th percentile per-packet one-way delay: 161.382 ms

Loss rate: 0.20%

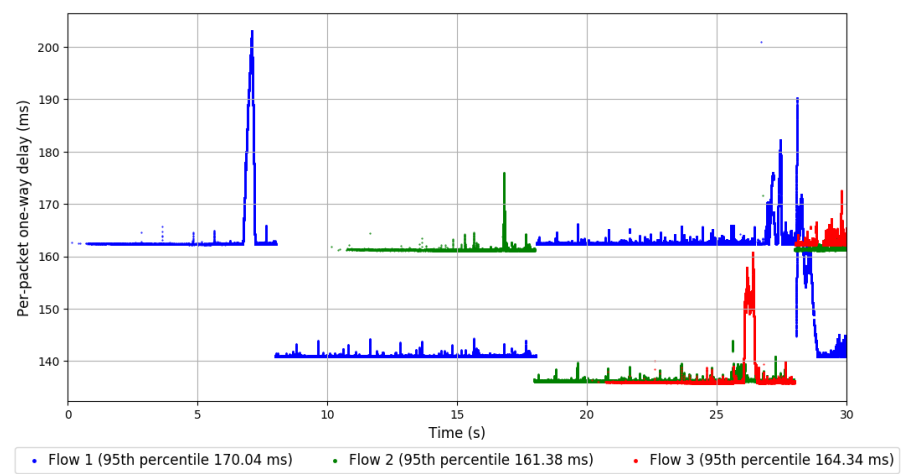
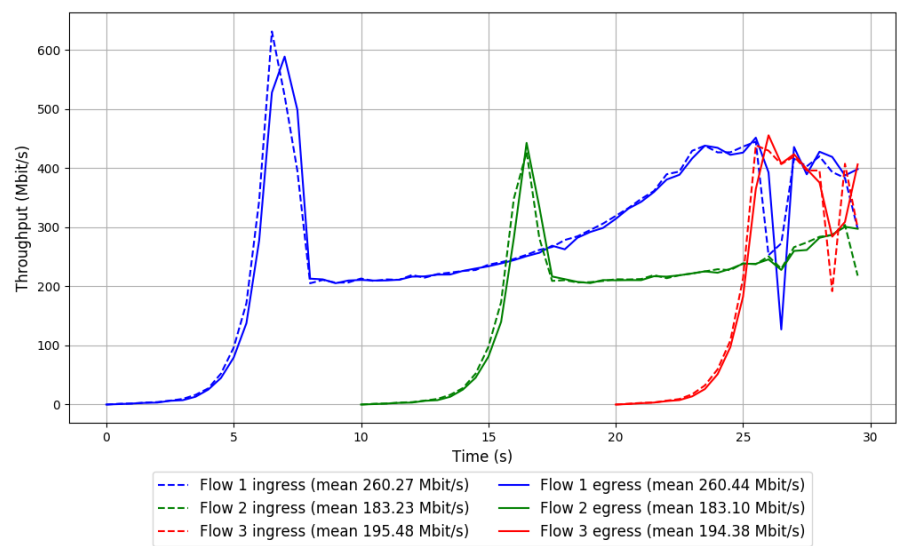
-- Flow 3:

Average throughput: 194.38 Mbit/s

95th percentile per-packet one-way delay: 164.342 ms

Loss rate: 0.60%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-03-01 12:03:39

End at: 2018-03-01 12:04:10

Below is generated by plot.py at 2018-03-01 17:17:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 528.95 Mbit/s

95th percentile per-packet one-way delay: 192.334 ms

Loss rate: 0.19%

-- Flow 1:

Average throughput: 319.82 Mbit/s

95th percentile per-packet one-way delay: 204.372 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 275.05 Mbit/s

95th percentile per-packet one-way delay: 162.475 ms

Loss rate: 0.00%

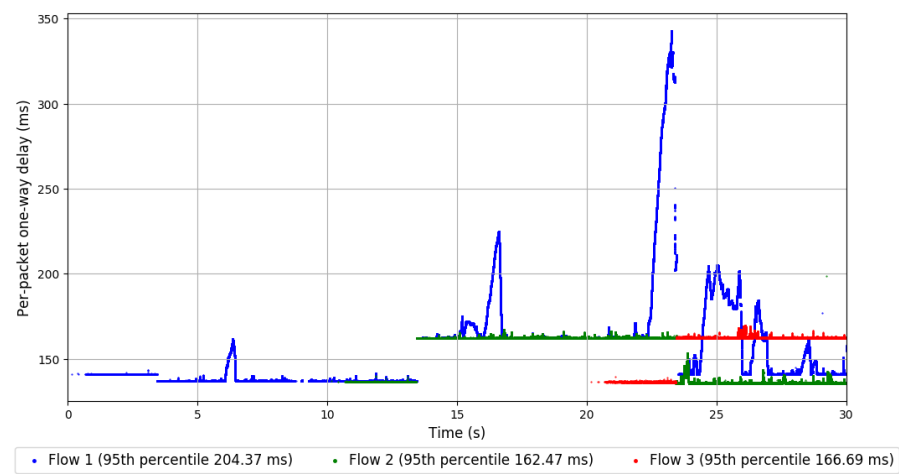
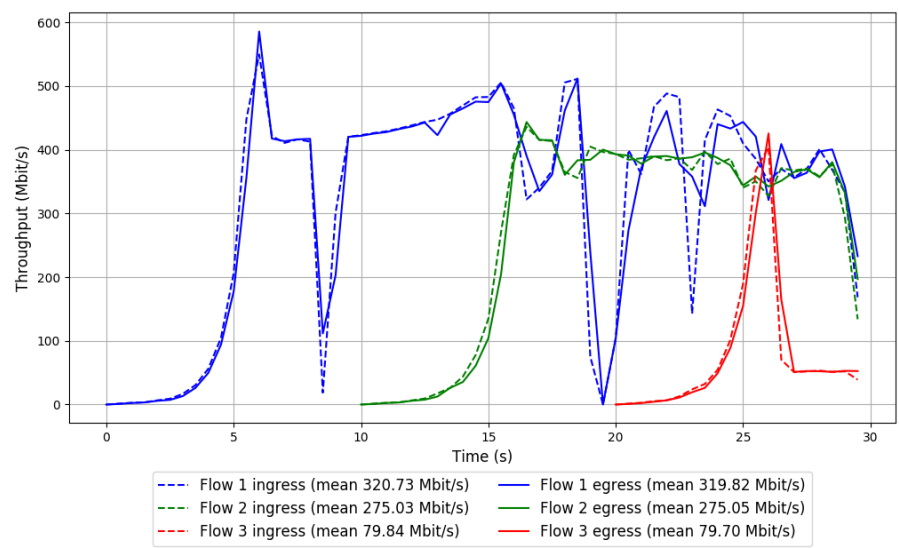
-- Flow 3:

Average throughput: 79.70 Mbit/s

95th percentile per-packet one-way delay: 166.692 ms

Loss rate: 0.17%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-03-01 12:23:12

End at: 2018-03-01 12:23:42

Below is generated by plot.py at 2018-03-01 17:19:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 466.83 Mbit/s

95th percentile per-packet one-way delay: 195.795 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 284.42 Mbit/s

95th percentile per-packet one-way delay: 213.428 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 227.15 Mbit/s

95th percentile per-packet one-way delay: 138.259 ms

Loss rate: 0.00%

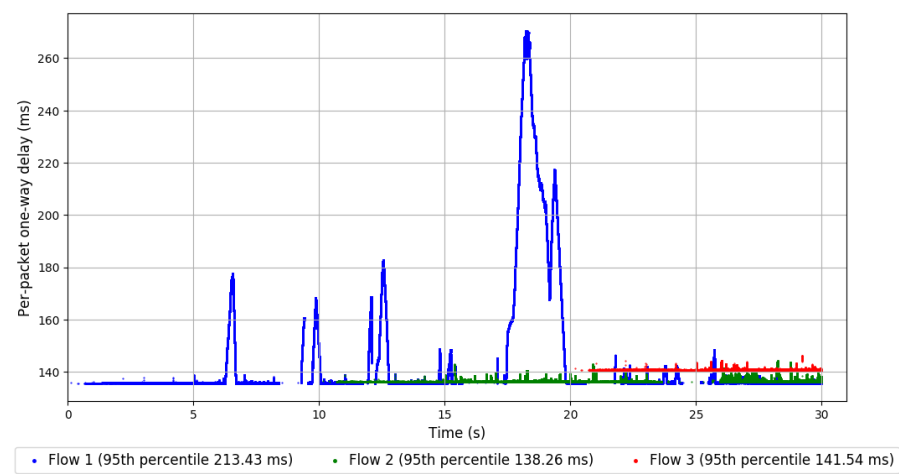
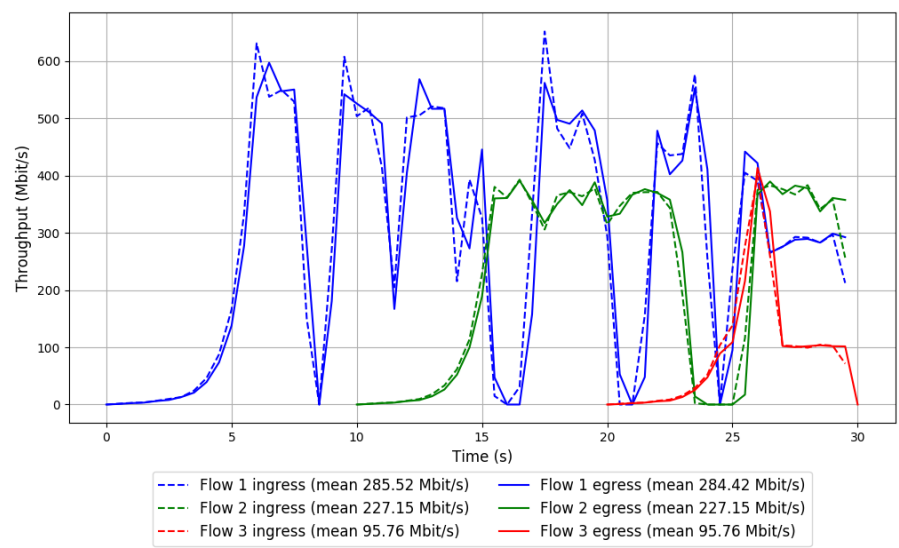
-- Flow 3:

Average throughput: 95.76 Mbit/s

95th percentile per-packet one-way delay: 141.539 ms

Loss rate: 0.00%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-03-01 12:43:05

End at: 2018-03-01 12:43:35

Below is generated by plot.py at 2018-03-01 17:20:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 396.76 Mbit/s

95th percentile per-packet one-way delay: 178.329 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 123.45 Mbit/s

95th percentile per-packet one-way delay: 201.012 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 314.06 Mbit/s

95th percentile per-packet one-way delay: 176.297 ms

Loss rate: 0.71%

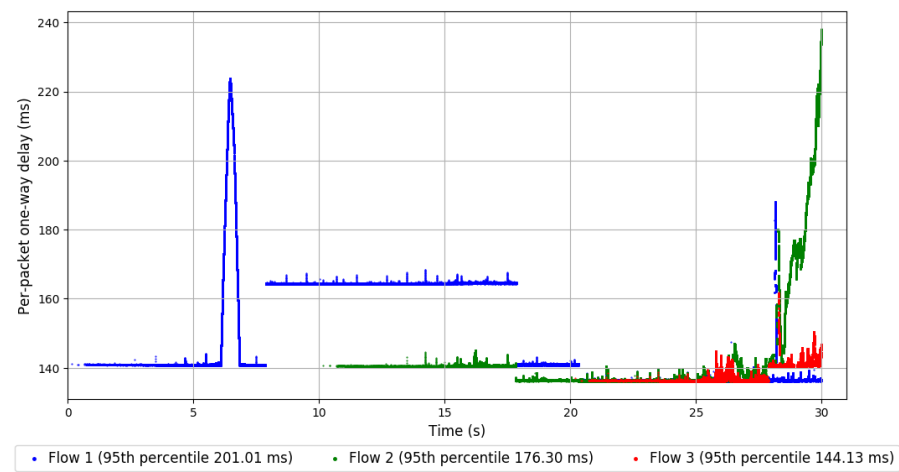
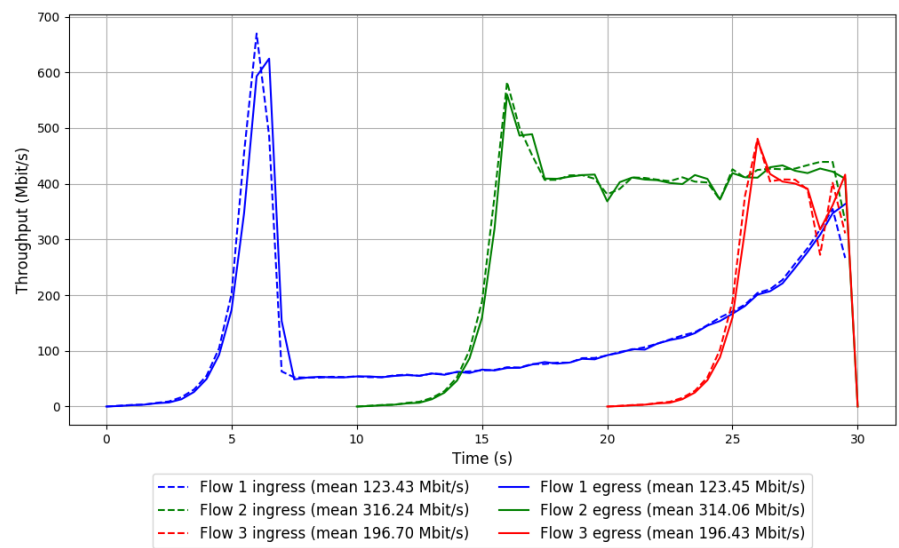
-- Flow 3:

Average throughput: 196.43 Mbit/s

95th percentile per-packet one-way delay: 144.133 ms

Loss rate: 0.13%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

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

End at: 2018-03-01 13:03:31

Below is generated by plot.py at 2018-03-01 17:21:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 405.78 Mbit/s

95th percentile per-packet one-way delay: 180.821 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 299.04 Mbit/s

95th percentile per-packet one-way delay: 162.683 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 93.95 Mbit/s

95th percentile per-packet one-way delay: 259.593 ms

Loss rate: 0.97%

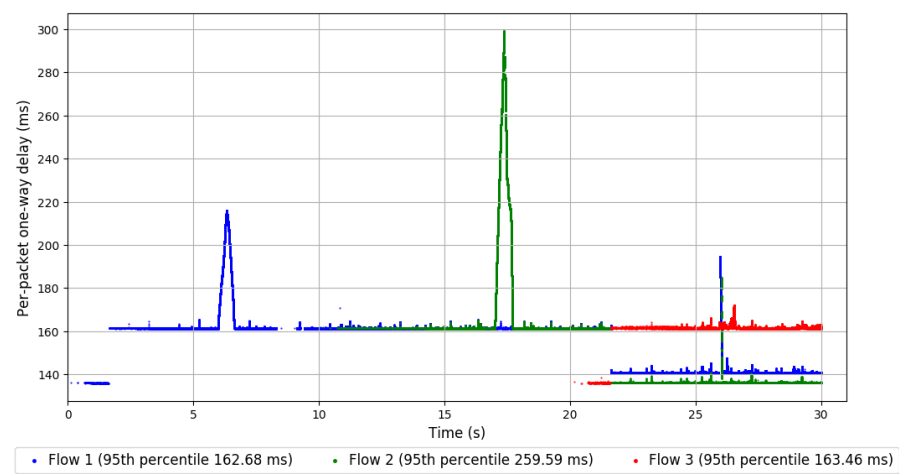
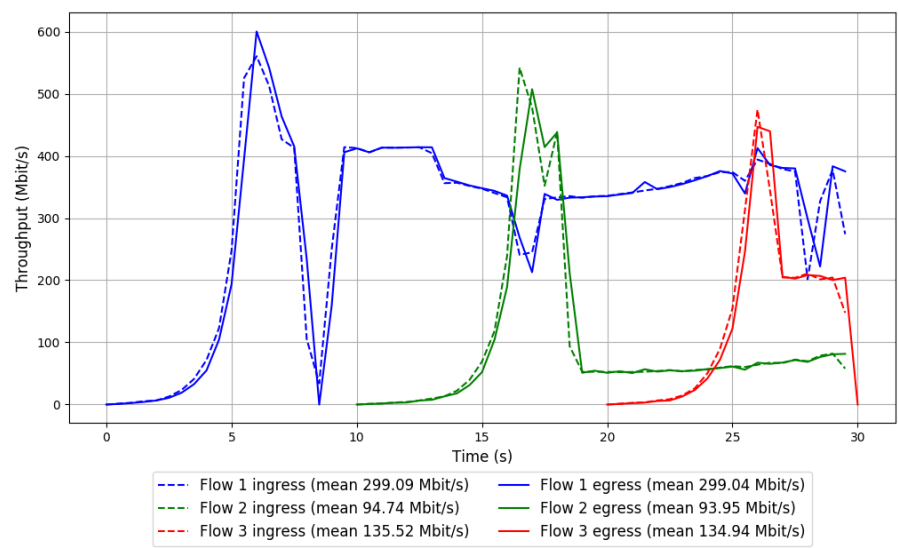
-- Flow 3:

Average throughput: 134.94 Mbit/s

95th percentile per-packet one-way delay: 163.461 ms

Loss rate: 0.41%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-03-01 13:22:31

End at: 2018-03-01 13:23:01

Below is generated by plot.py at 2018-03-01 17:23:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 444.52 Mbit/s

95th percentile per-packet one-way delay: 164.355 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 296.75 Mbit/s

95th percentile per-packet one-way delay: 162.222 ms

Loss rate: 0.12%

-- Flow 2:

Average throughput: 182.98 Mbit/s

95th percentile per-packet one-way delay: 238.292 ms

Loss rate: 0.21%

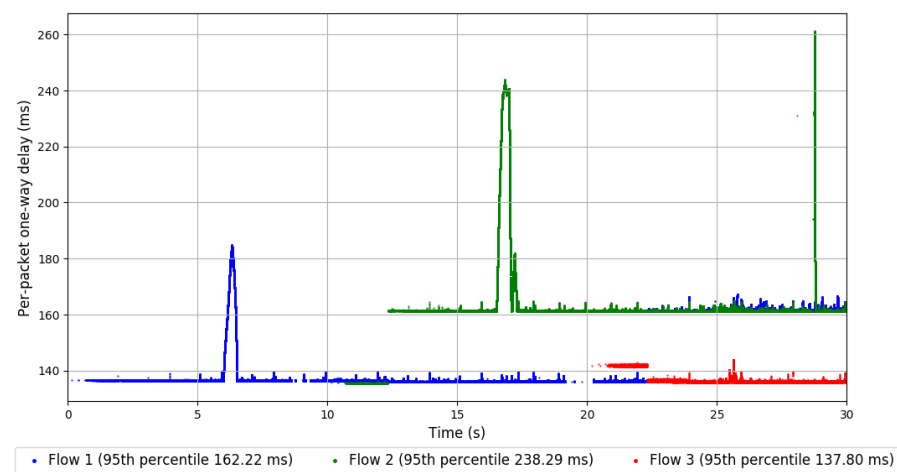
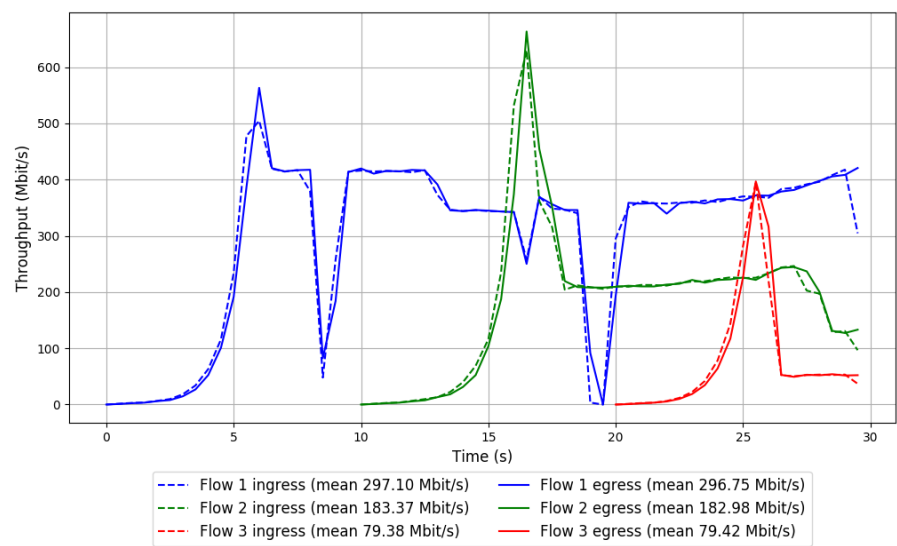
-- Flow 3:

Average throughput: 79.42 Mbit/s

95th percentile per-packet one-way delay: 137.800 ms

Loss rate: 0.00%

Run 10: Report of Vivace-loss — Data Link

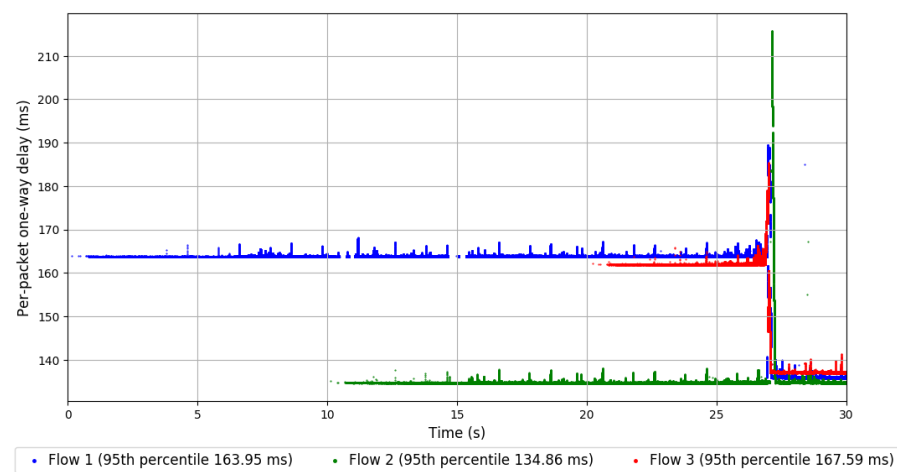
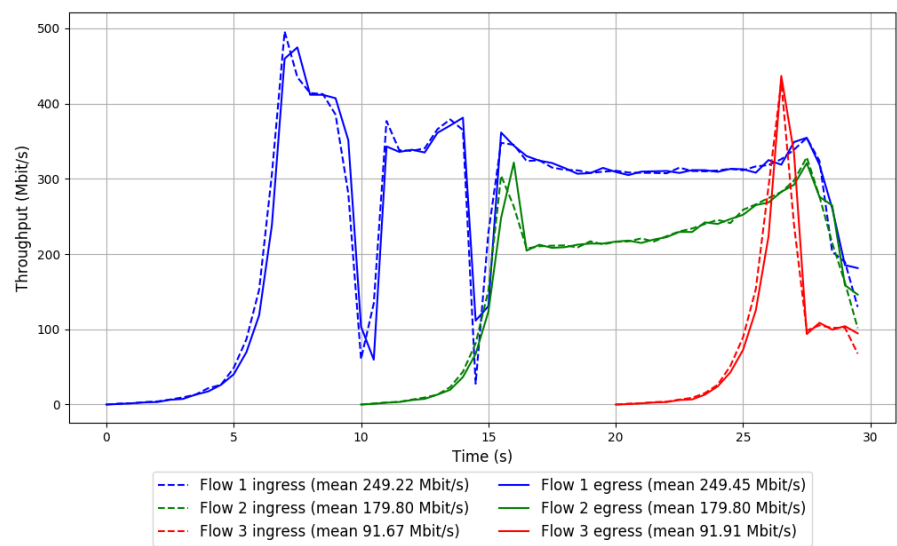


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-03-01 10:35:26
End at: 2018-03-01 10:35:56

# Below is generated by plot.py at 2018-03-01 17:23:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 399.17 Mbit/s
95th percentile per-packet one-way delay: 163.904 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 249.45 Mbit/s
95th percentile per-packet one-way delay: 163.949 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 179.80 Mbit/s
95th percentile per-packet one-way delay: 134.860 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 91.91 Mbit/s
95th percentile per-packet one-way delay: 167.595 ms
Loss rate: 0.01%
```

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-03-01 10:55:12

End at: 2018-03-01 10:55:42

Below is generated by plot.py at 2018-03-01 17:23:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 413.49 Mbit/s

95th percentile per-packet one-way delay: 162.404 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 256.12 Mbit/s

95th percentile per-packet one-way delay: 162.466 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 157.73 Mbit/s

95th percentile per-packet one-way delay: 161.582 ms

Loss rate: 0.00%

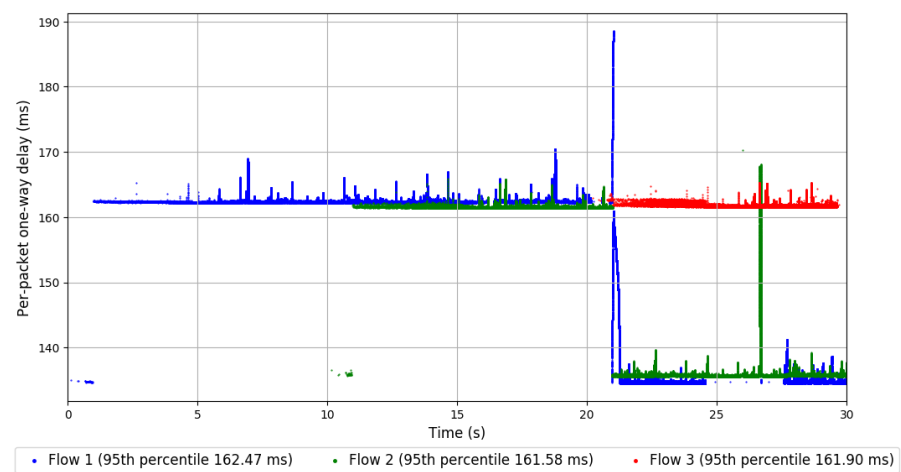
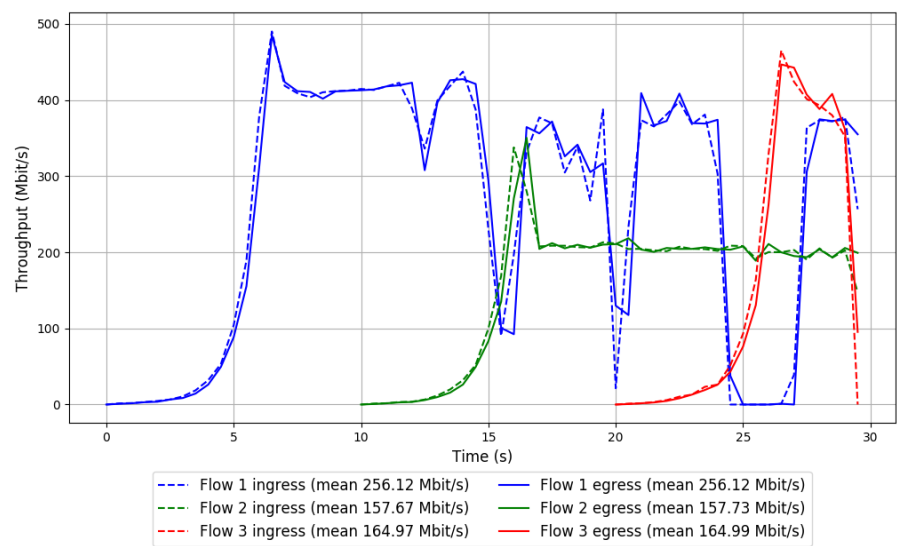
-- Flow 3:

Average throughput: 164.99 Mbit/s

95th percentile per-packet one-way delay: 161.904 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-03-01 11:14:57

End at: 2018-03-01 11:15:27

Below is generated by plot.py at 2018-03-01 17:25:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 423.70 Mbit/s

95th percentile per-packet one-way delay: 161.625 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 276.40 Mbit/s

95th percentile per-packet one-way delay: 172.674 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 159.59 Mbit/s

95th percentile per-packet one-way delay: 161.172 ms

Loss rate: 0.00%

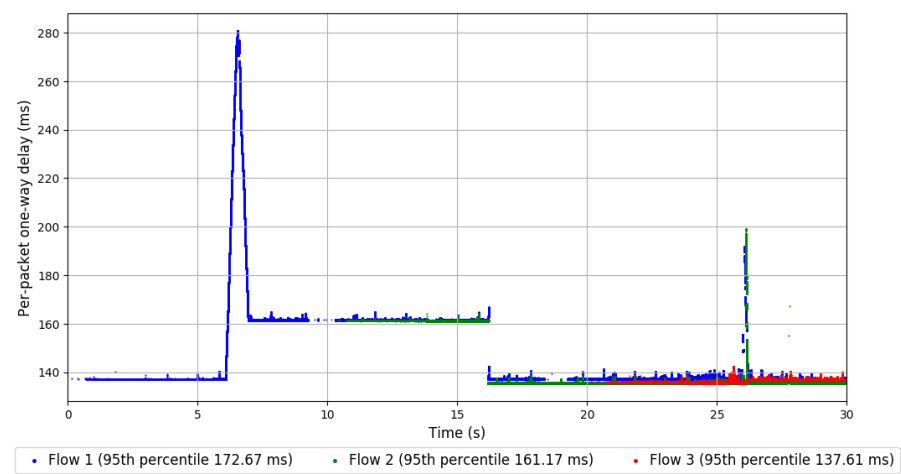
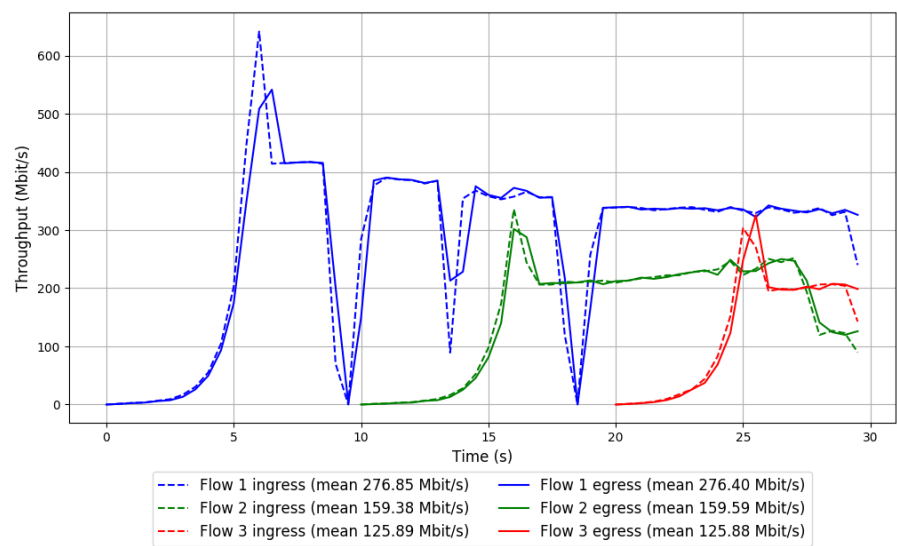
-- Flow 3:

Average throughput: 125.88 Mbit/s

95th percentile per-packet one-way delay: 137.614 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-03-01 11:34:46

End at: 2018-03-01 11:35:16

Below is generated by plot.py at 2018-03-01 17:27:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 536.46 Mbit/s

95th percentile per-packet one-way delay: 141.429 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 283.82 Mbit/s

95th percentile per-packet one-way delay: 141.331 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 310.93 Mbit/s

95th percentile per-packet one-way delay: 168.052 ms

Loss rate: 0.41%

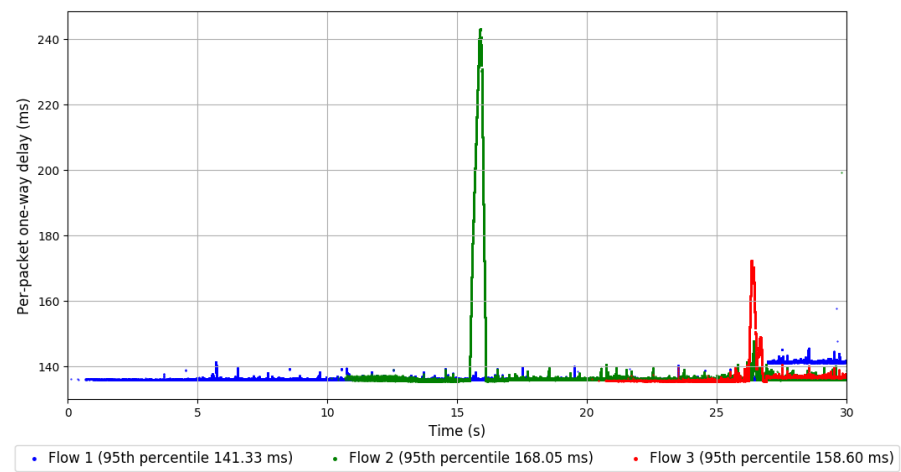
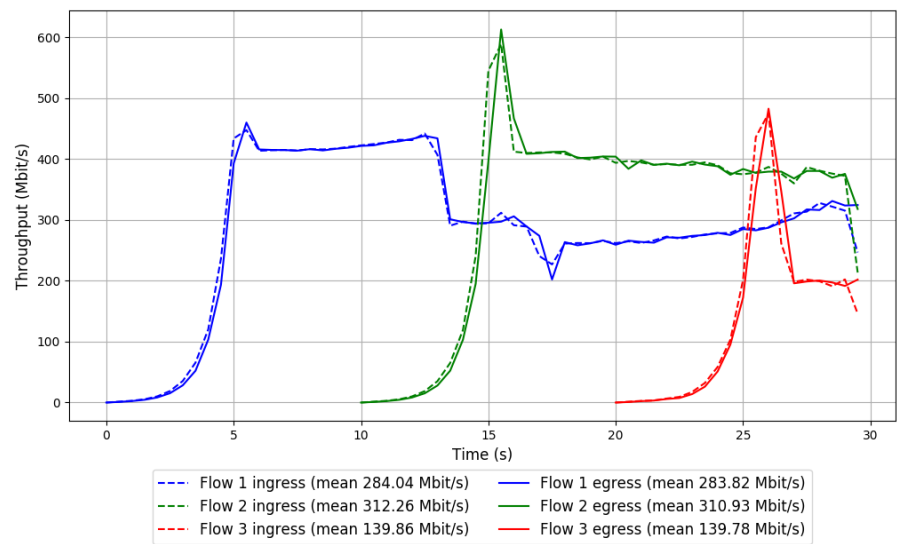
-- Flow 3:

Average throughput: 139.78 Mbit/s

95th percentile per-packet one-way delay: 158.597 ms

Loss rate: 0.05%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-03-01 11:54:31

End at: 2018-03-01 11:55:01

Below is generated by plot.py at 2018-03-01 17:27:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 418.35 Mbit/s

95th percentile per-packet one-way delay: 162.363 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 252.35 Mbit/s

95th percentile per-packet one-way delay: 137.911 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 183.08 Mbit/s

95th percentile per-packet one-way delay: 162.521 ms

Loss rate: 0.10%

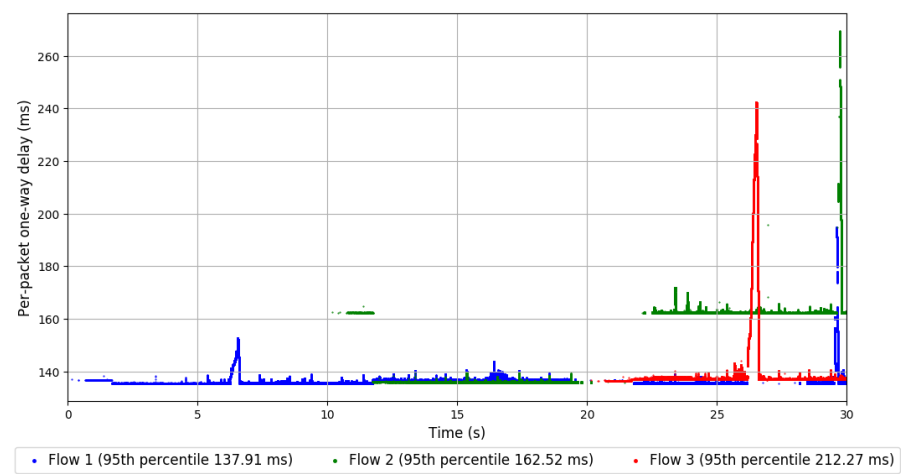
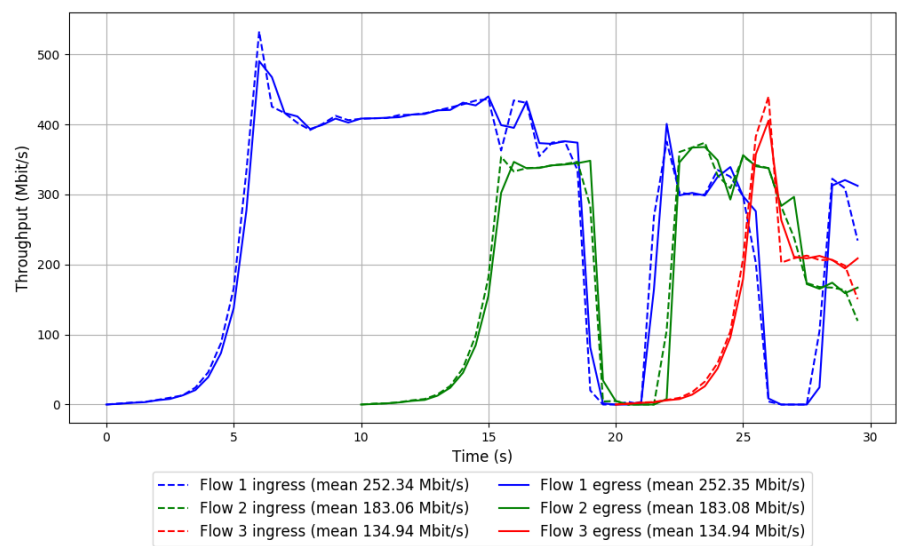
-- Flow 3:

Average throughput: 134.94 Mbit/s

95th percentile per-packet one-way delay: 212.268 ms

Loss rate: 0.00%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-03-01 12:14:19

End at: 2018-03-01 12:14:49

Below is generated by plot.py at 2018-03-01 17:28:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 481.10 Mbit/s

95th percentile per-packet one-way delay: 162.285 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 326.33 Mbit/s

95th percentile per-packet one-way delay: 138.484 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 176.01 Mbit/s

95th percentile per-packet one-way delay: 162.278 ms

Loss rate: 0.00%

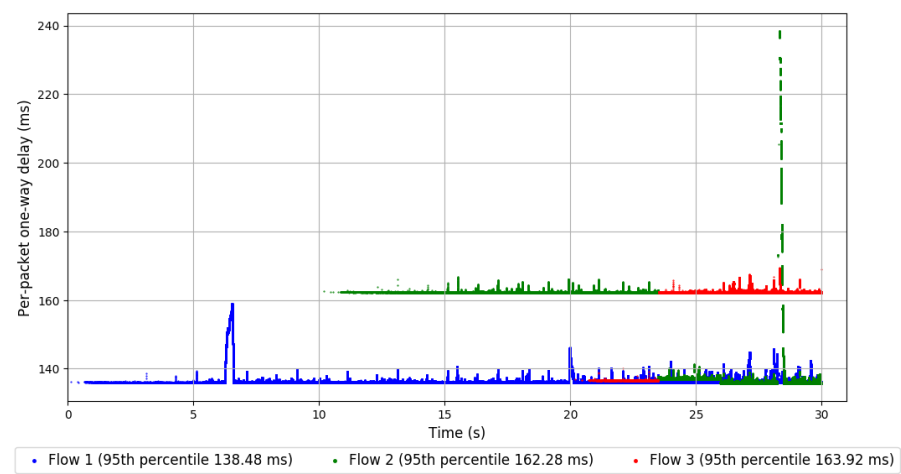
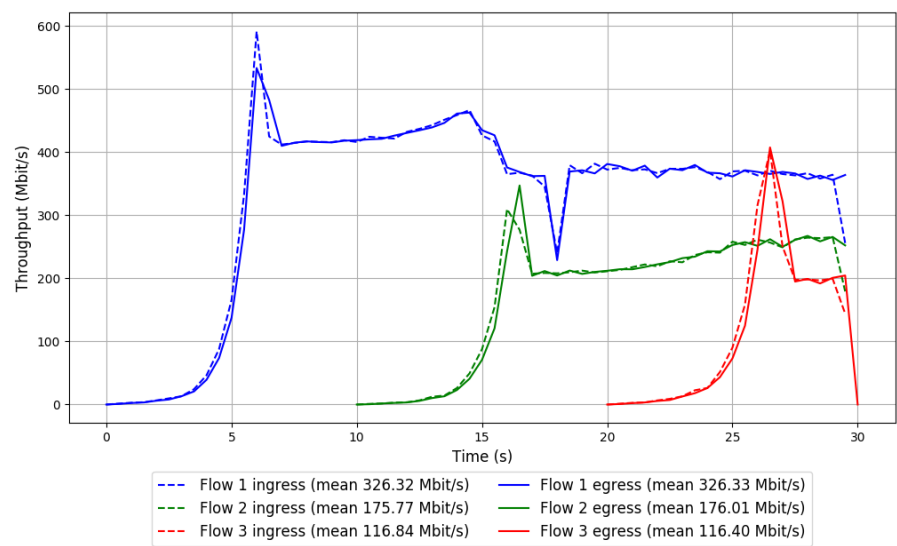
-- Flow 3:

Average throughput: 116.40 Mbit/s

95th percentile per-packet one-way delay: 163.924 ms

Loss rate: 0.25%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-03-01 12:34:00

End at: 2018-03-01 12:34:30

Below is generated by plot.py at 2018-03-01 17:28:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 432.78 Mbit/s

95th percentile per-packet one-way delay: 162.464 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 277.57 Mbit/s

95th percentile per-packet one-way delay: 162.327 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 178.53 Mbit/s

95th percentile per-packet one-way delay: 140.998 ms

Loss rate: 0.00%

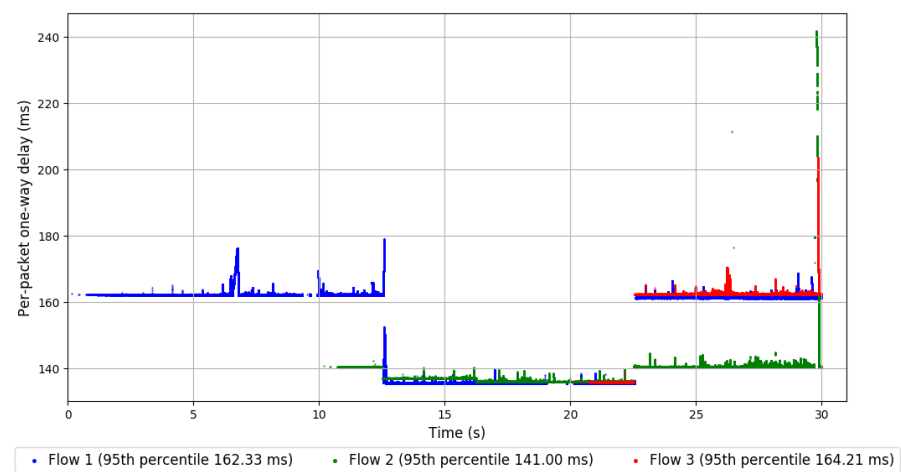
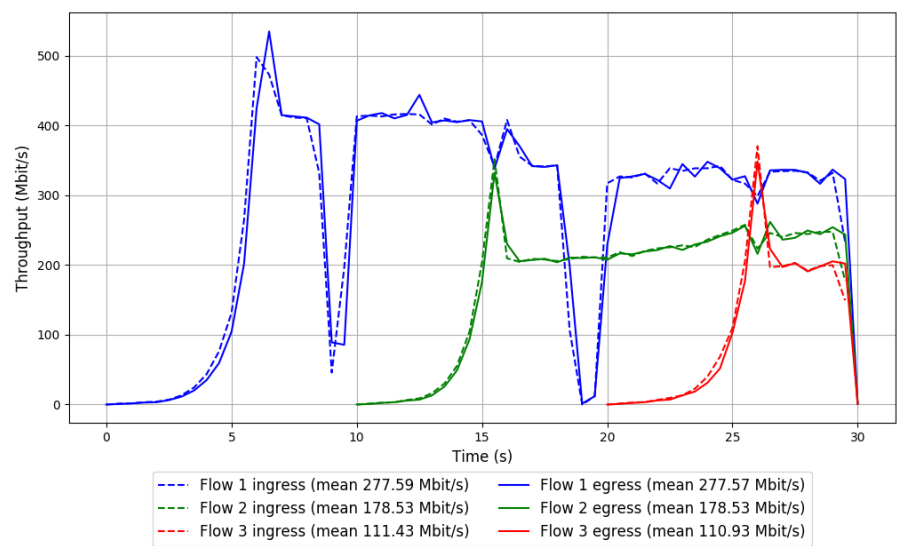
-- Flow 3:

Average throughput: 110.93 Mbit/s

95th percentile per-packet one-way delay: 164.210 ms

Loss rate: 0.40%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-03-01 12:53:48

End at: 2018-03-01 12:54:18

Below is generated by plot.py at 2018-03-01 17:29:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 492.92 Mbit/s

95th percentile per-packet one-way delay: 140.930 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 302.59 Mbit/s

95th percentile per-packet one-way delay: 141.831 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 187.00 Mbit/s

95th percentile per-packet one-way delay: 136.924 ms

Loss rate: 0.02%

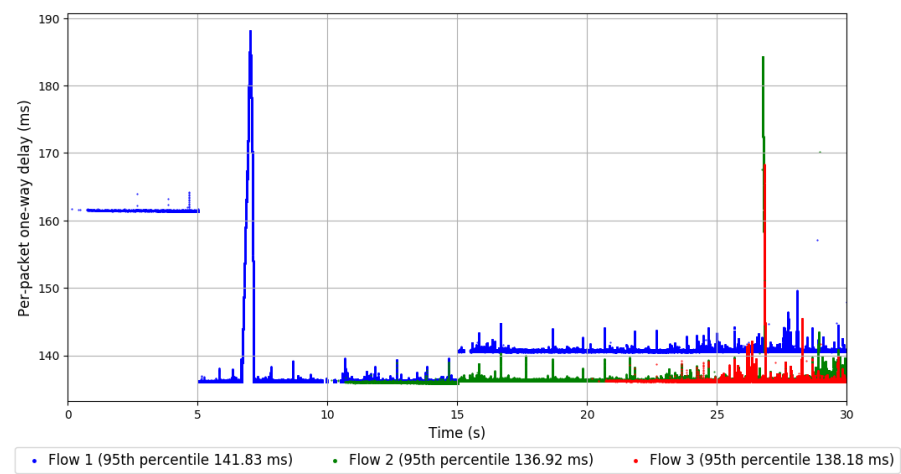
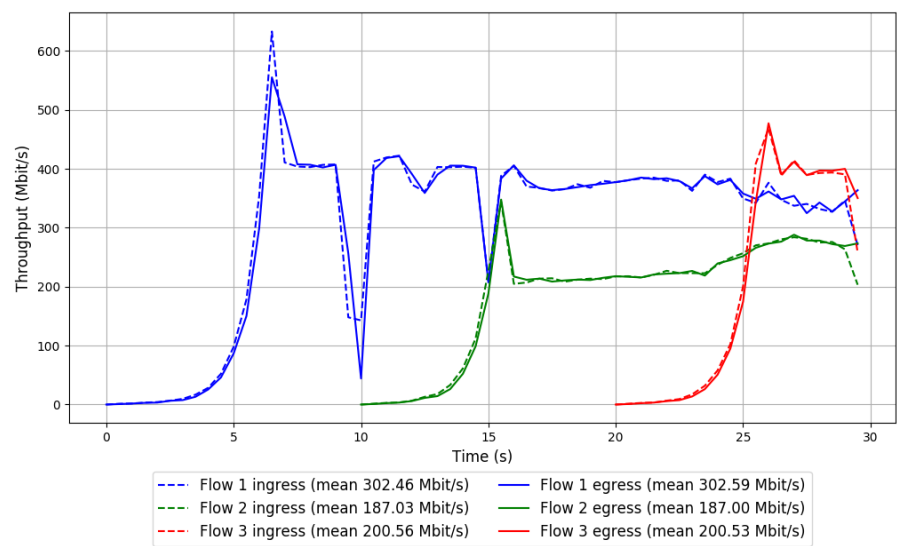
-- Flow 3:

Average throughput: 200.53 Mbit/s

95th percentile per-packet one-way delay: 138.179 ms

Loss rate: 0.03%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-03-01 13:13:31

End at: 2018-03-01 13:14:01

Below is generated by plot.py at 2018-03-01 17:29:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 401.24 Mbit/s

95th percentile per-packet one-way delay: 140.962 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 242.01 Mbit/s

95th percentile per-packet one-way delay: 141.046 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 176.78 Mbit/s

95th percentile per-packet one-way delay: 140.988 ms

Loss rate: 0.04%

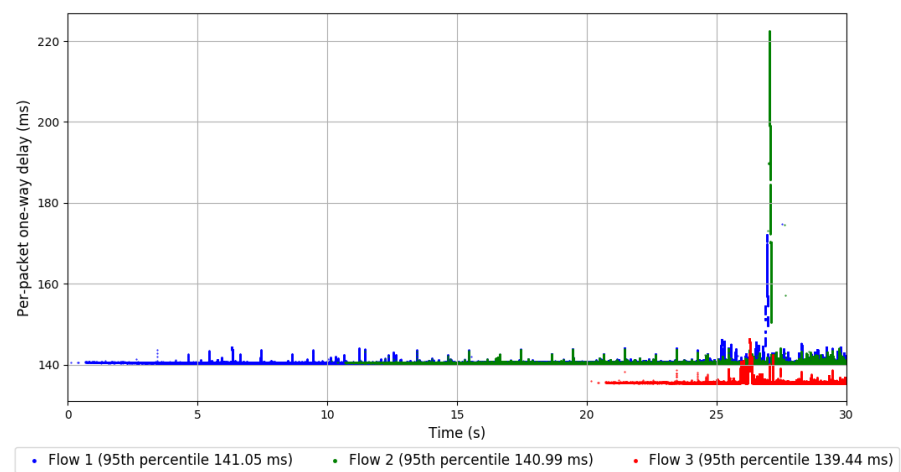
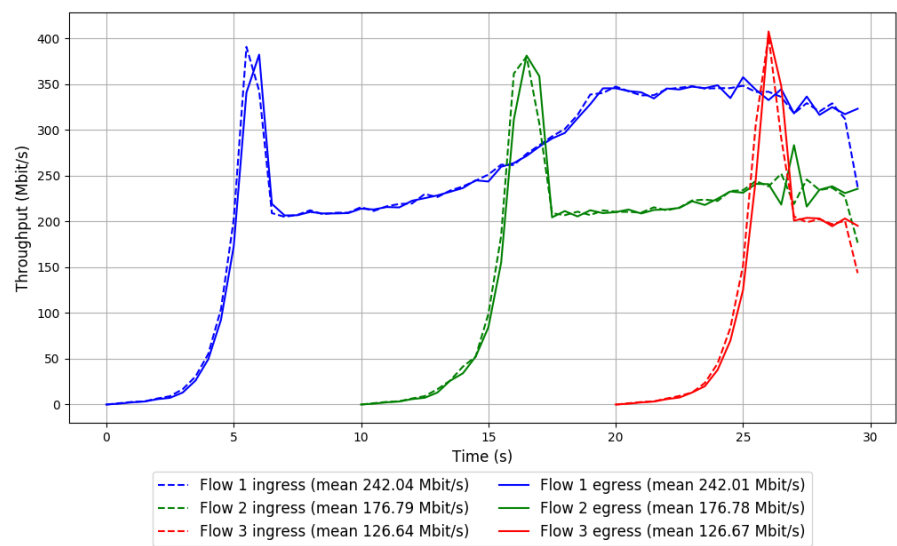
-- Flow 3:

Average throughput: 126.67 Mbit/s

95th percentile per-packet one-way delay: 139.438 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-03-01 13:33:16

End at: 2018-03-01 13:33:46

Below is generated by plot.py at 2018-03-01 17:29:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 461.36 Mbit/s

95th percentile per-packet one-way delay: 179.866 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 294.88 Mbit/s

95th percentile per-packet one-way delay: 164.238 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 172.55 Mbit/s

95th percentile per-packet one-way delay: 161.212 ms

Loss rate: 0.01%

-- Flow 3:

Average throughput: 158.82 Mbit/s

95th percentile per-packet one-way delay: 244.636 ms

Loss rate: 0.00%

Run 10: Report of Vivace-LTE — Data Link

