

Pantheon Report

Generated at 2018-01-18 11:31:09 (UTC).

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

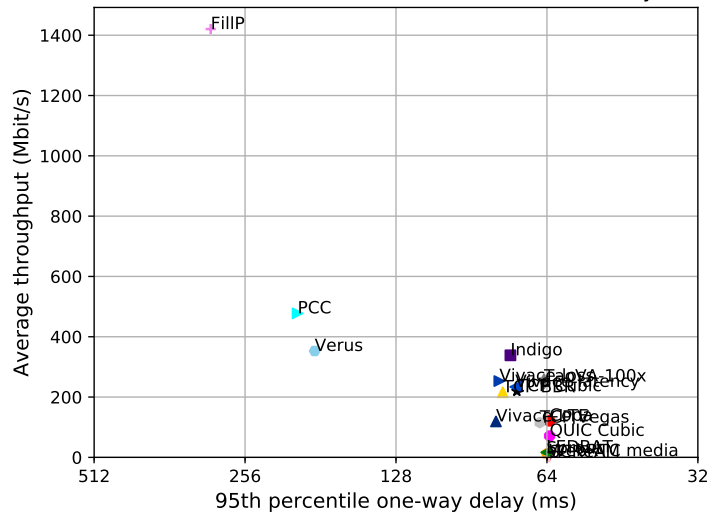
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

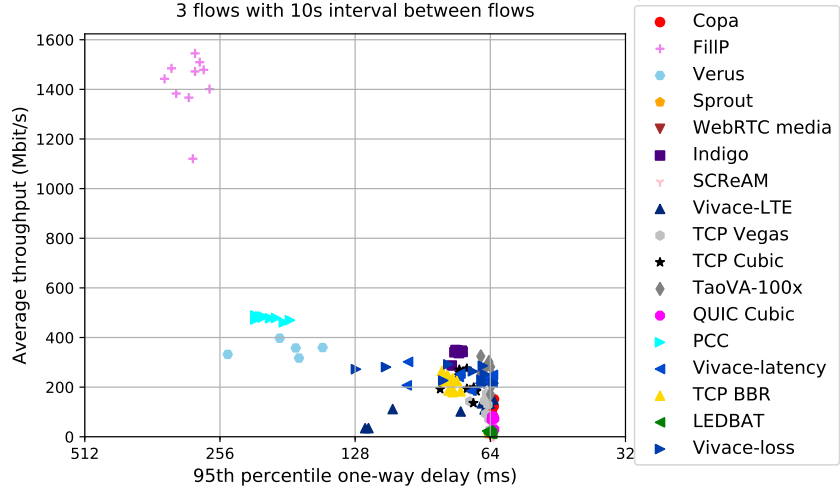
Git summary:

```
branch: master @ 54510ce29f849c716ac5c8199ca1604b6abdfbc3
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 423cbca3e8ea1d599e7b5cf725835e8a2b6bfac6
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



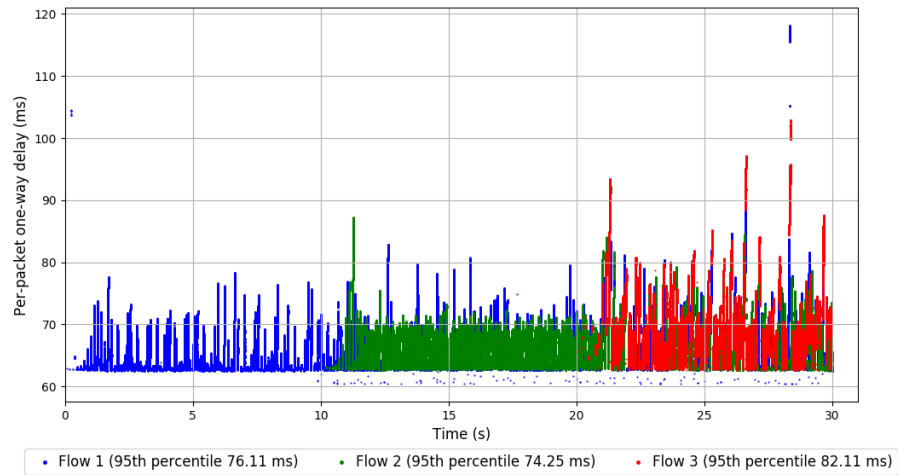
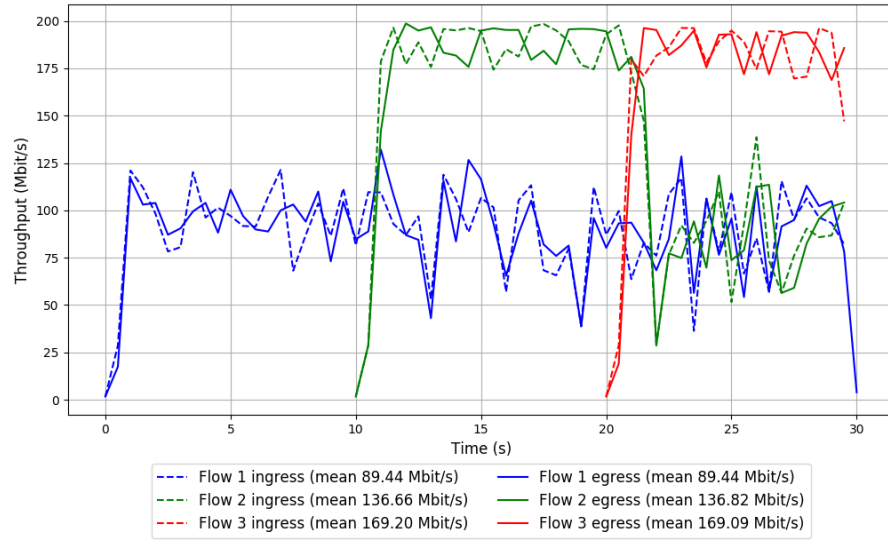
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	97.48	109.48	137.95	76.92	77.89	80.51	0.09	0.09	0.04
TCP Cubic	10	106.34	111.88	117.15	71.74	73.24	75.07	0.00	0.01	0.06
LEDBAT	10	9.44	7.94	5.53	64.29	64.14	63.99	0.21	0.39	0.35
PCC	10	452.75	30.30	14.10	201.37	194.86	186.62	1.52	1.22	1.37
QUIC Cubic	9	42.52	33.84	19.28	63.18	62.88	62.46	0.00	0.00	0.00
SCReAM	10	0.22	0.22	0.22	63.30	63.11	63.19	0.00	0.00	0.00
WebRTC media	10	2.21	1.39	0.54	63.24	63.37	63.33	0.00	0.00	0.00
Sprout	10	6.42	6.35	5.94	64.16	64.16	64.07	0.42	0.35	0.23
TaoVA-100x	10	134.96	148.24	76.16	64.11	65.47	65.78	0.01	0.00	0.00
TCP Vegas	10	51.42	54.01	84.59	65.65	65.44	66.92	0.13	0.27	0.23
Verus	5	212.17	145.16	109.19	181.72	208.61	203.85	1.20	1.81	2.52
Copa	8	73.56	93.48	89.83	63.25	2235.52	984.36	0.01	0.00	0.00
FillP	10	743.47	677.57	682.68	291.65	302.43	278.99	9.30	11.11	14.01
Indigo	10	175.78	173.77	146.95	74.15	75.97	78.28	0.04	0.04	0.07
Vivace-latency	10	133.20	115.54	72.22	79.92	68.00	72.88	0.00	0.00	0.01
Vivace-loss	10	159.93	105.85	69.08	85.83	65.14	64.24	0.01	0.01	0.00
Vivace-LTE	10	51.80	63.74	75.33	79.38	87.79	83.14	0.00	0.00	0.00

```
Run 1: Statistics of TCP BBR

Start at: 2018-01-18 04:38:26
End at: 2018-01-18 04:38:56

# Below is generated by plot.py at 2018-01-18 09:44:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 236.09 Mbit/s
95th percentile per-packet one-way delay: 77.636 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 89.44 Mbit/s
95th percentile per-packet one-way delay: 76.108 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 136.82 Mbit/s
95th percentile per-packet one-way delay: 74.248 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 169.09 Mbit/s
95th percentile per-packet one-way delay: 82.111 ms
Loss rate: 0.00%
```

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-01-18 04:55:12

End at: 2018-01-18 04:55:42

Below is generated by plot.py at 2018-01-18 09:44:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 188.66 Mbit/s

95th percentile per-packet one-way delay: 77.442 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 101.20 Mbit/s

95th percentile per-packet one-way delay: 77.681 ms

Loss rate: 0.19%

-- Flow 2:

Average throughput: 86.43 Mbit/s

95th percentile per-packet one-way delay: 77.752 ms

Loss rate: 0.00%

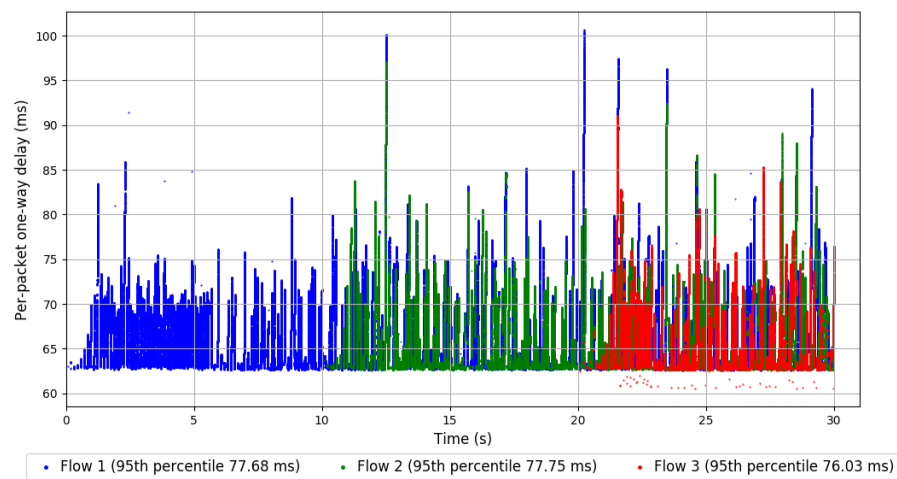
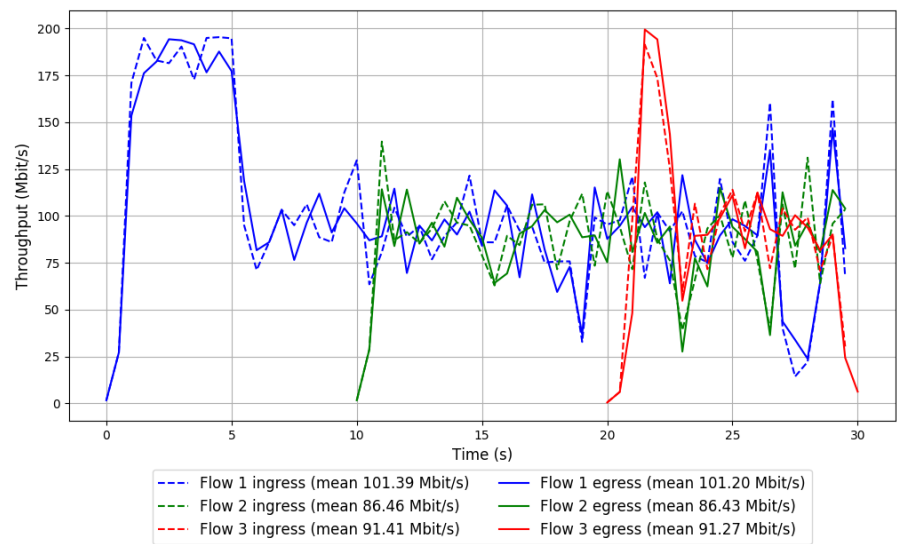
-- Flow 3:

Average throughput: 91.27 Mbit/s

95th percentile per-packet one-way delay: 76.025 ms

Loss rate: 0.01%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-18 05:12:25

End at: 2018-01-18 05:12:55

Below is generated by plot.py at 2018-01-18 09:44:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 182.86 Mbit/s

95th percentile per-packet one-way delay: 74.530 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 85.68 Mbit/s

95th percentile per-packet one-way delay: 73.703 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 95.43 Mbit/s

95th percentile per-packet one-way delay: 74.952 ms

Loss rate: 0.64%

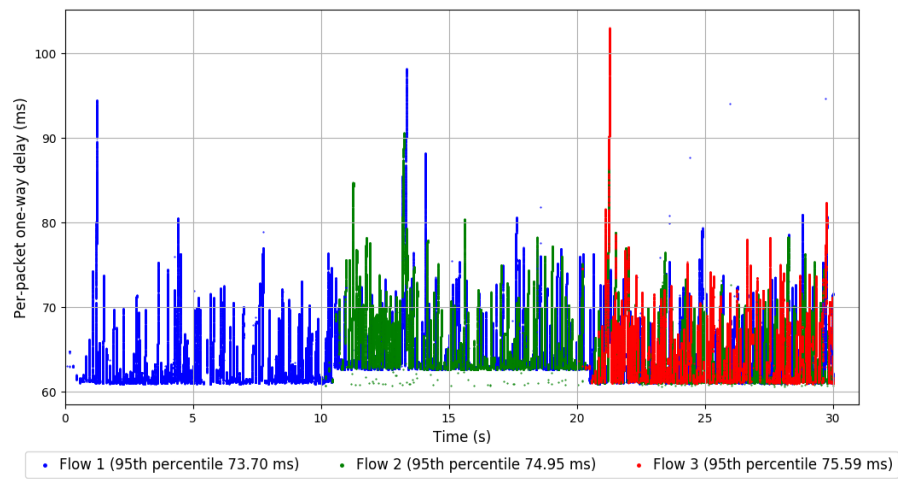
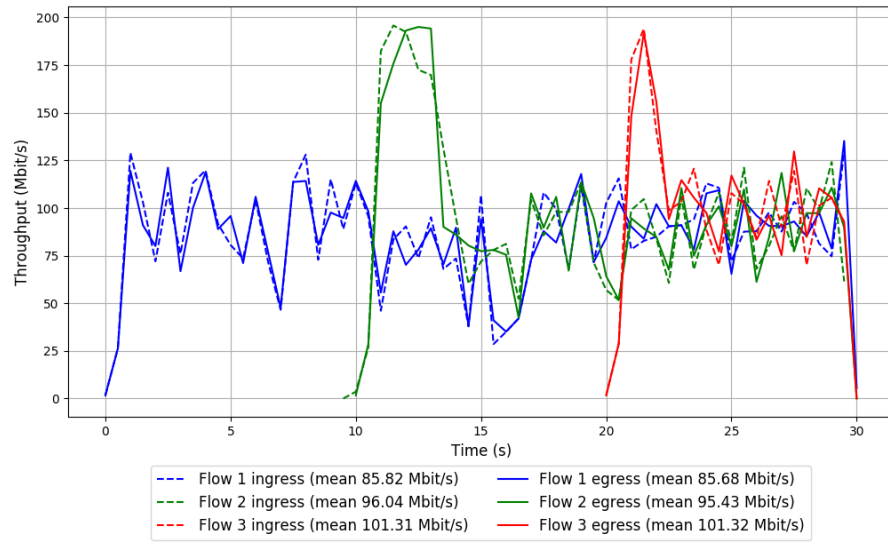
-- Flow 3:

Average throughput: 101.32 Mbit/s

95th percentile per-packet one-way delay: 75.592 ms

Loss rate: 0.01%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-01-18 05:29:36

End at: 2018-01-18 05:30:06

Below is generated by plot.py at 2018-01-18 09:44:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 224.87 Mbit/s

95th percentile per-packet one-way delay: 75.969 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 104.31 Mbit/s

95th percentile per-packet one-way delay: 76.231 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 96.44 Mbit/s

95th percentile per-packet one-way delay: 75.480 ms

Loss rate: 0.04%

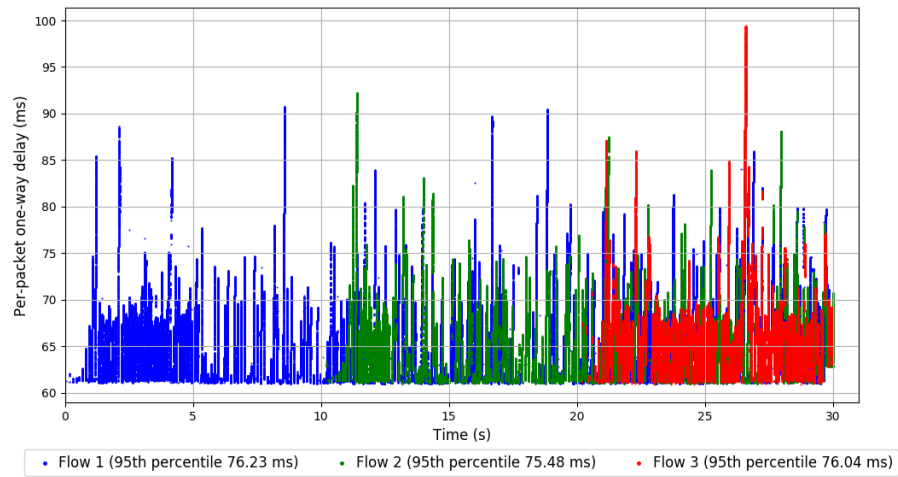
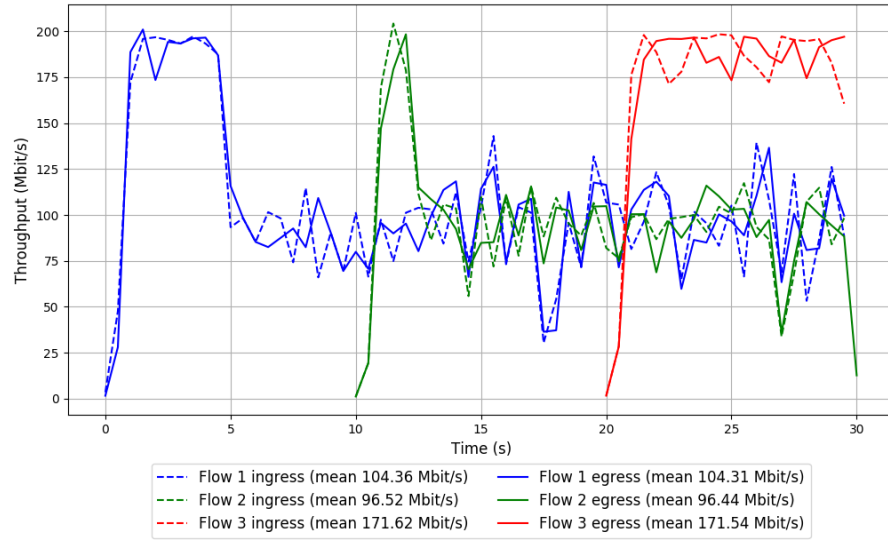
-- Flow 3:

Average throughput: 171.54 Mbit/s

95th percentile per-packet one-way delay: 76.044 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-18 05:46:53

End at: 2018-01-18 05:47:23

Below is generated by plot.py at 2018-01-18 09:44:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 224.52 Mbit/s

95th percentile per-packet one-way delay: 81.474 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 89.62 Mbit/s

95th percentile per-packet one-way delay: 78.907 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 118.79 Mbit/s

95th percentile per-packet one-way delay: 79.719 ms

Loss rate: 0.00%

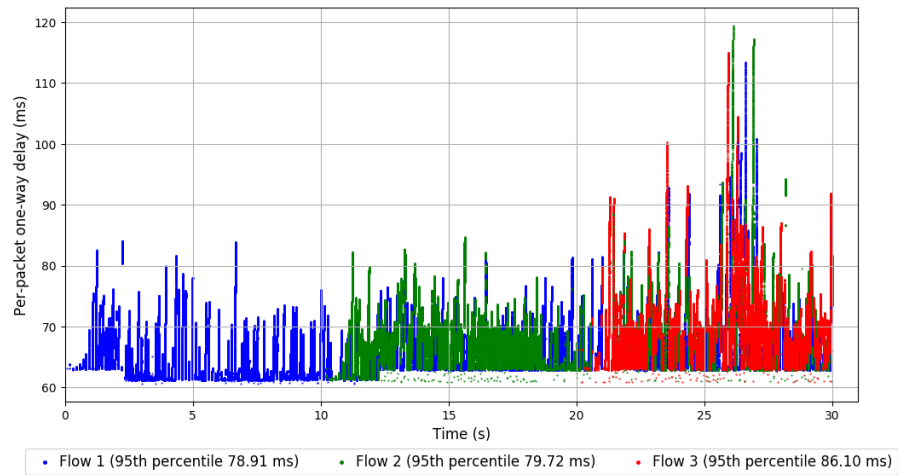
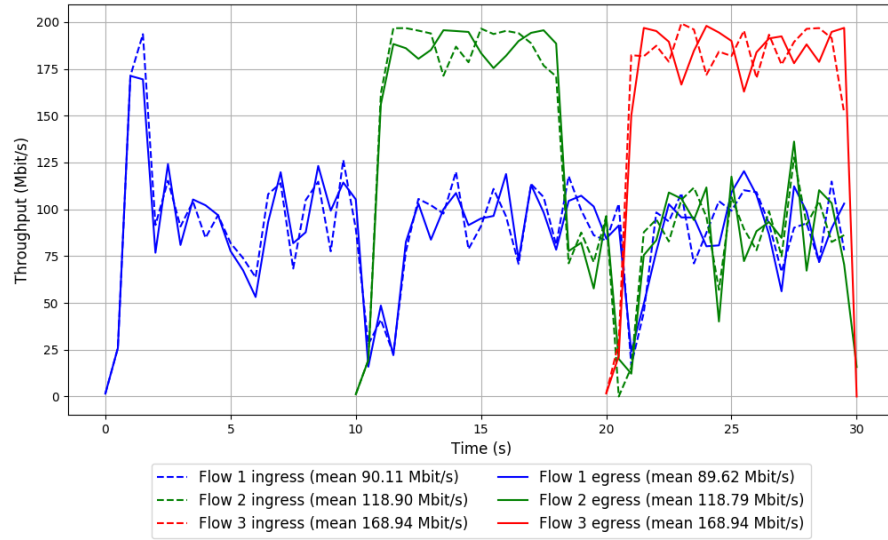
-- Flow 3:

Average throughput: 168.94 Mbit/s

95th percentile per-packet one-way delay: 86.102 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-18 06:04:07

End at: 2018-01-18 06:04:37

Below is generated by plot.py at 2018-01-18 09:44:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 221.79 Mbit/s

95th percentile per-packet one-way delay: 78.280 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 83.99 Mbit/s

95th percentile per-packet one-way delay: 75.276 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 124.08 Mbit/s

95th percentile per-packet one-way delay: 75.746 ms

Loss rate: 0.03%

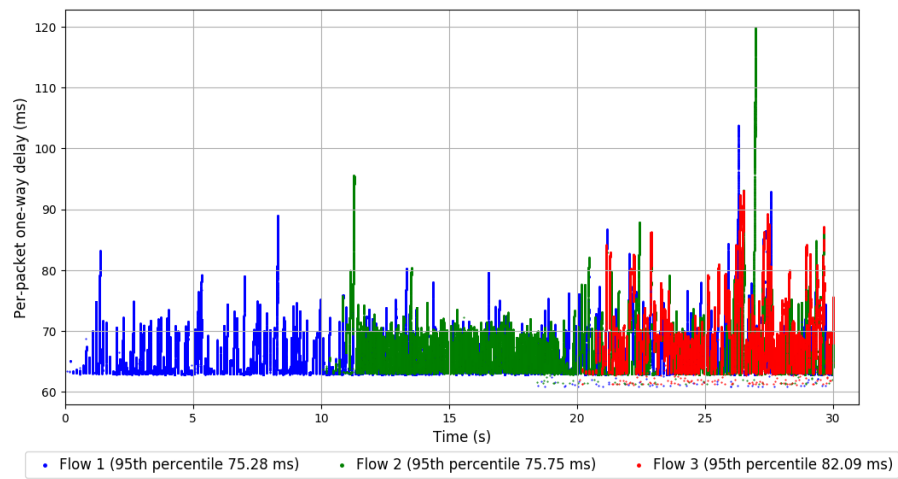
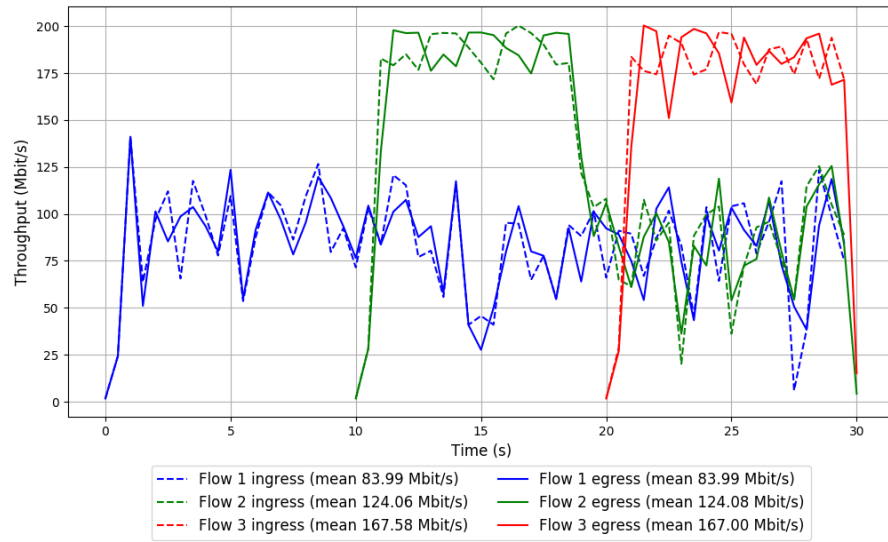
-- Flow 3:

Average throughput: 167.00 Mbit/s

95th percentile per-packet one-way delay: 82.090 ms

Loss rate: 0.31%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-18 06:21:15

End at: 2018-01-18 06:21:45

Below is generated by plot.py at 2018-01-18 09:44:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 247.91 Mbit/s

95th percentile per-packet one-way delay: 79.703 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 120.65 Mbit/s

95th percentile per-packet one-way delay: 77.839 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 107.82 Mbit/s

95th percentile per-packet one-way delay: 79.274 ms

Loss rate: 0.00%

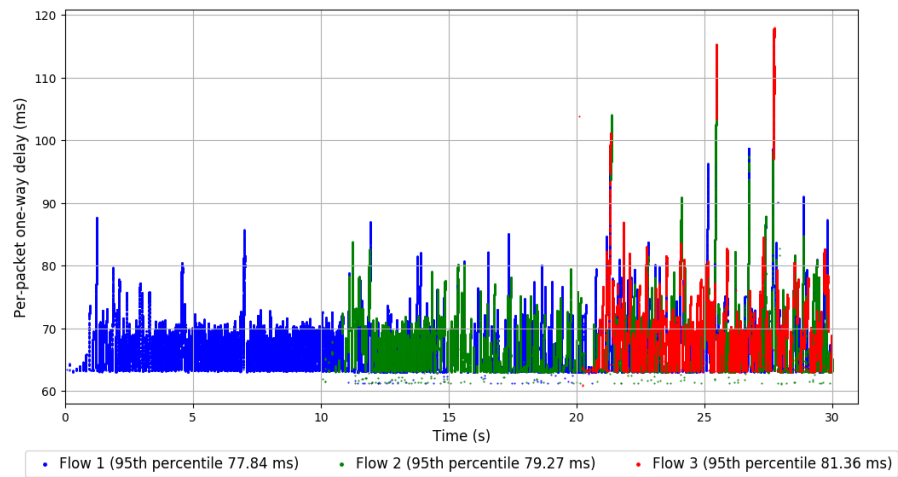
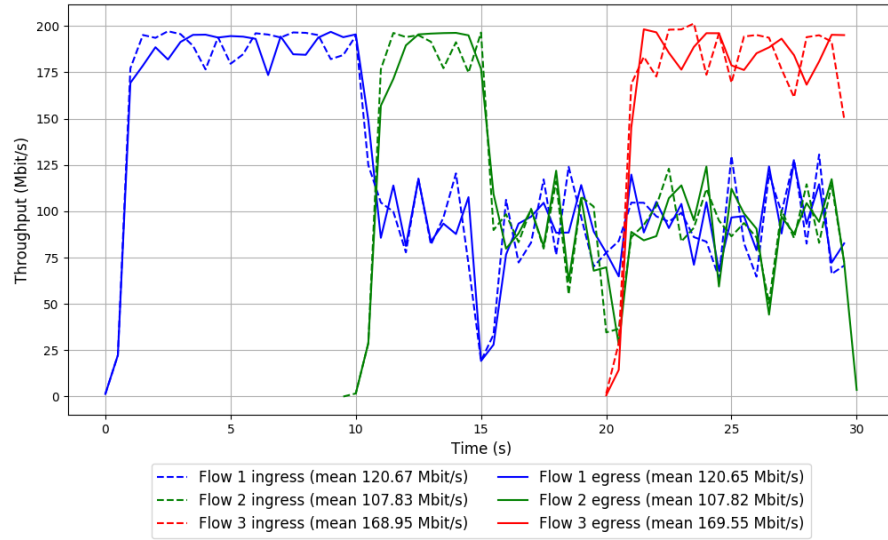
-- Flow 3:

Average throughput: 169.55 Mbit/s

95th percentile per-packet one-way delay: 81.365 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-18 06:38:30

End at: 2018-01-18 06:39:00

Below is generated by plot.py at 2018-01-18 09:44:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.51 Mbit/s

95th percentile per-packet one-way delay: 79.241 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 88.47 Mbit/s

95th percentile per-packet one-way delay: 77.961 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 103.89 Mbit/s

95th percentile per-packet one-way delay: 80.041 ms

Loss rate: 0.00%

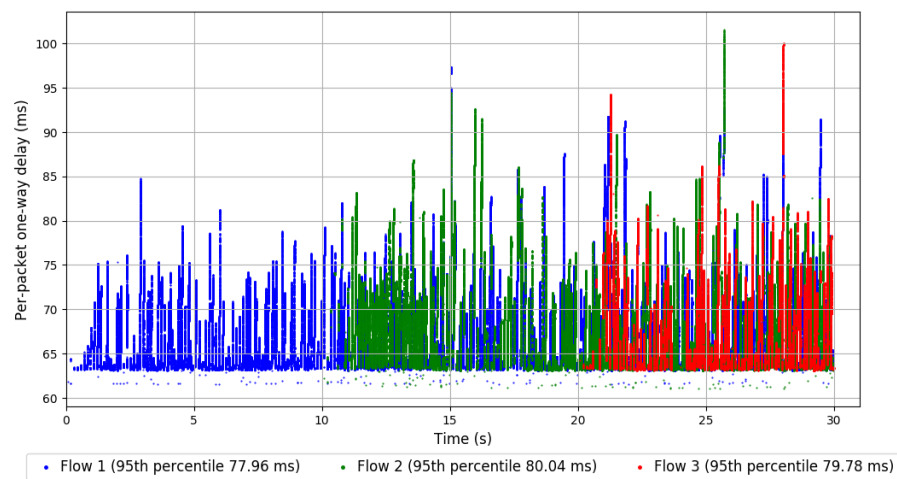
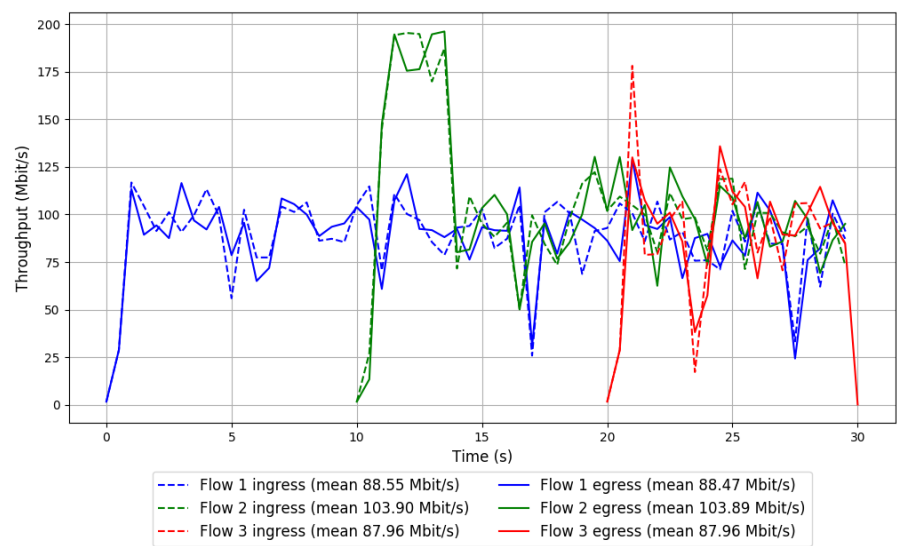
-- Flow 3:

Average throughput: 87.96 Mbit/s

95th percentile per-packet one-way delay: 79.775 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-18 06:55:42

End at: 2018-01-18 06:56:12

Below is generated by plot.py at 2018-01-18 09:48:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 265.19 Mbit/s

95th percentile per-packet one-way delay: 81.988 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 119.30 Mbit/s

95th percentile per-packet one-way delay: 79.792 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 135.96 Mbit/s

95th percentile per-packet one-way delay: 82.049 ms

Loss rate: 0.00%

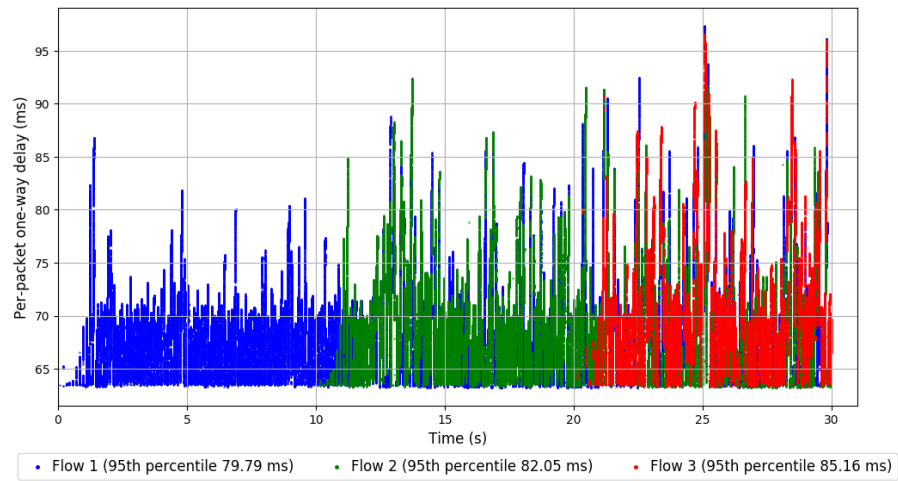
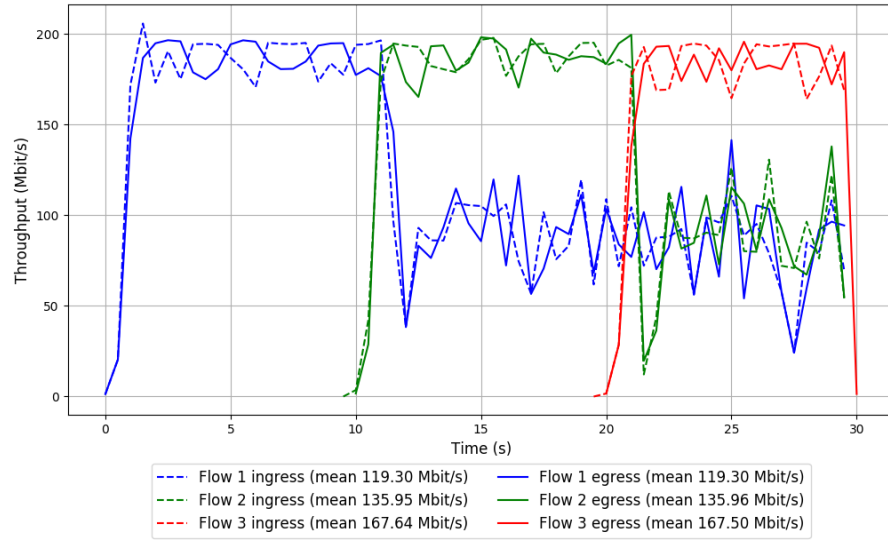
-- Flow 3:

Average throughput: 167.50 Mbit/s

95th percentile per-packet one-way delay: 85.159 ms

Loss rate: 0.05%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-18 07:12:36

End at: 2018-01-18 07:13:06

Below is generated by plot.py at 2018-01-18 09:48:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 179.70 Mbit/s

95th percentile per-packet one-way delay: 77.663 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 92.13 Mbit/s

95th percentile per-packet one-way delay: 75.691 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 89.16 Mbit/s

95th percentile per-packet one-way delay: 79.689 ms

Loss rate: 0.22%

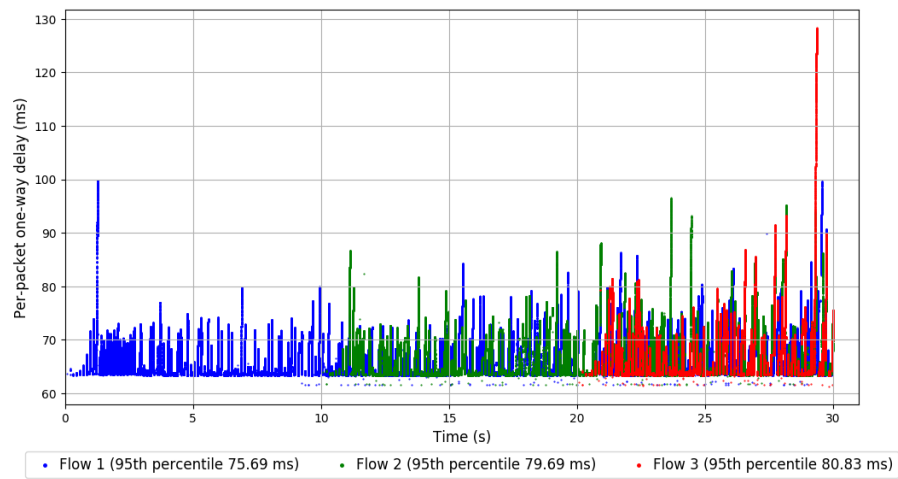
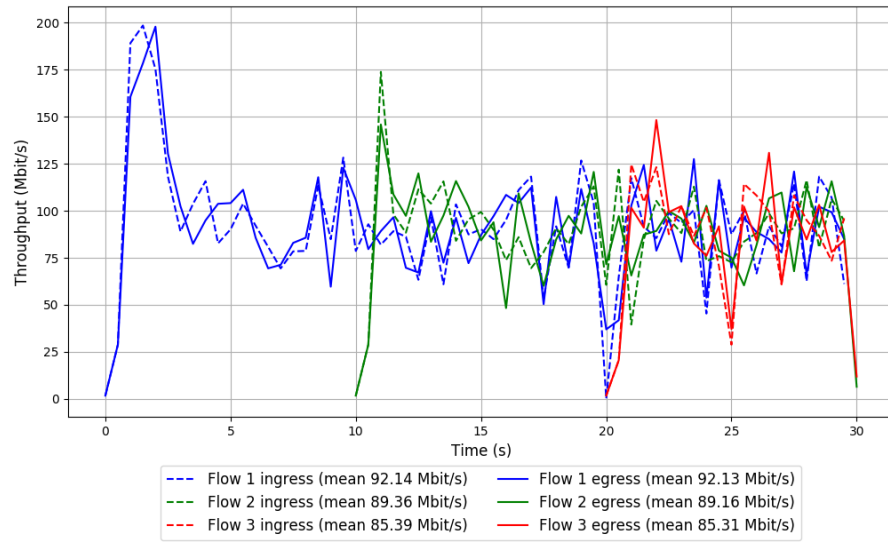
-- Flow 3:

Average throughput: 85.31 Mbit/s

95th percentile per-packet one-way delay: 80.825 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-18 04:50:05

End at: 2018-01-18 04:50:35

Below is generated by plot.py at 2018-01-18 09:48:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 193.41 Mbit/s

95th percentile per-packet one-way delay: 72.185 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 150.61 Mbit/s

95th percentile per-packet one-way delay: 72.213 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 20.26 Mbit/s

95th percentile per-packet one-way delay: 67.933 ms

Loss rate: 0.03%

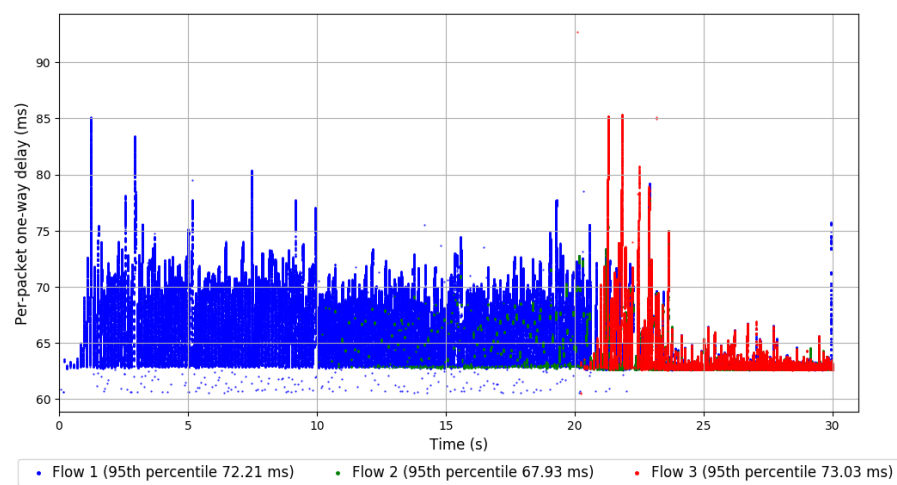
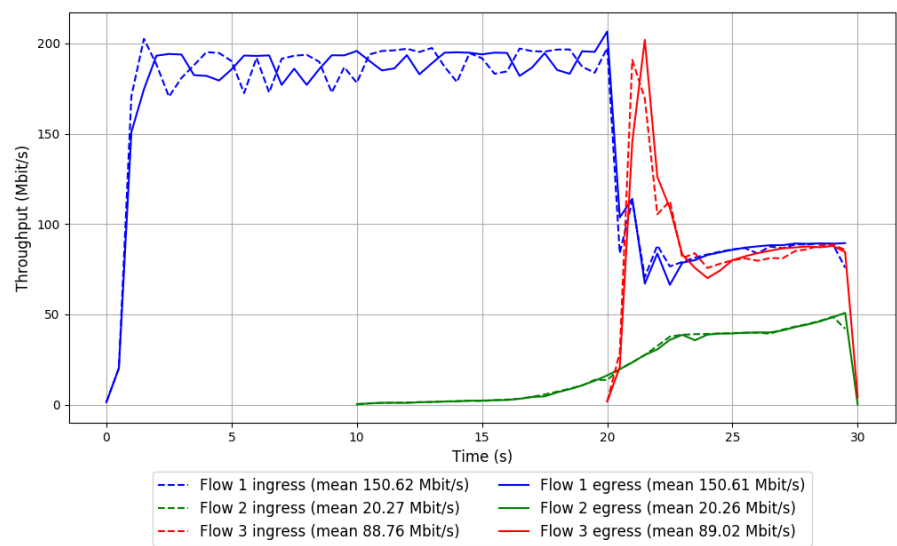
-- Flow 3:

Average throughput: 89.02 Mbit/s

95th percentile per-packet one-way delay: 73.028 ms

Loss rate: 0.01%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-01-18 05:06:53

End at: 2018-01-18 05:07:23

Below is generated by plot.py at 2018-01-18 09:48:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 257.65 Mbit/s

95th percentile per-packet one-way delay: 74.923 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 89.13 Mbit/s

95th percentile per-packet one-way delay: 73.598 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 178.85 Mbit/s

95th percentile per-packet one-way delay: 72.809 ms

Loss rate: 0.00%

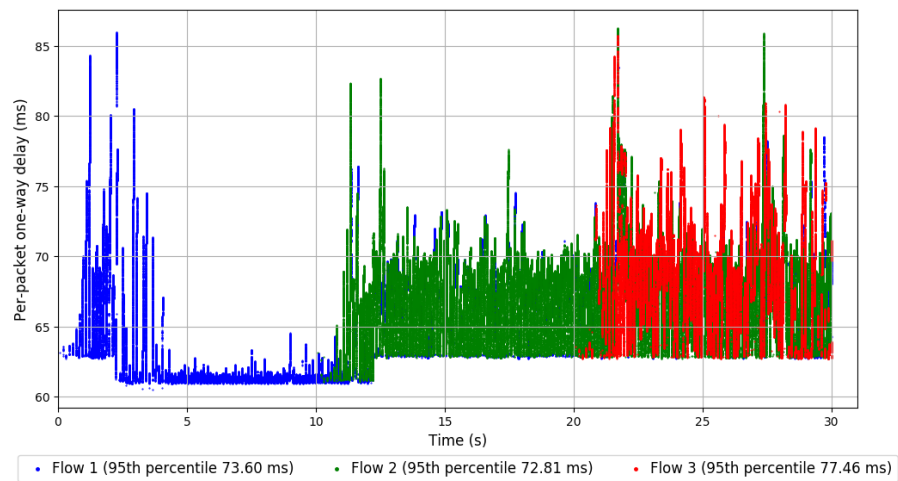
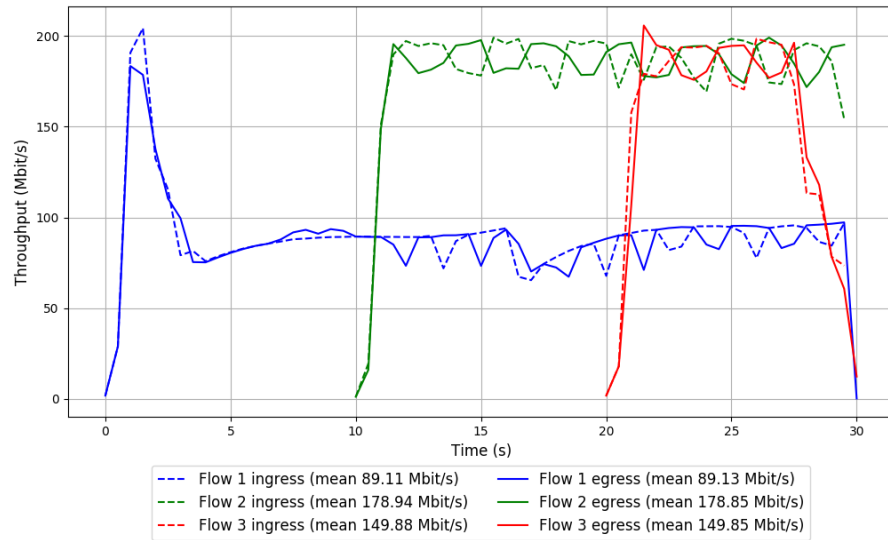
-- Flow 3:

Average throughput: 149.85 Mbit/s

95th percentile per-packet one-way delay: 77.457 ms

Loss rate: 0.02%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-18 05:24:11

End at: 2018-01-18 05:24:41

Below is generated by plot.py at 2018-01-18 09:48:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 183.60 Mbit/s

95th percentile per-packet one-way delay: 68.726 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 90.49 Mbit/s

95th percentile per-packet one-way delay: 68.268 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 90.90 Mbit/s

95th percentile per-packet one-way delay: 68.550 ms

Loss rate: 0.00%

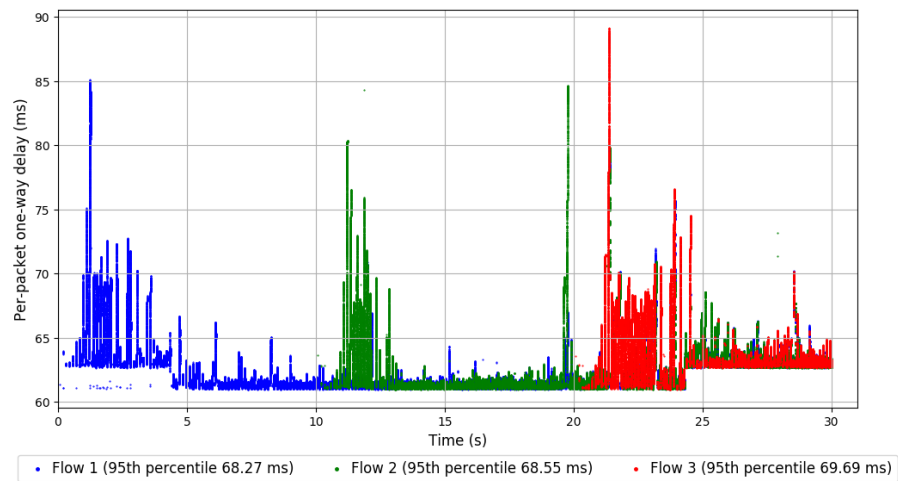
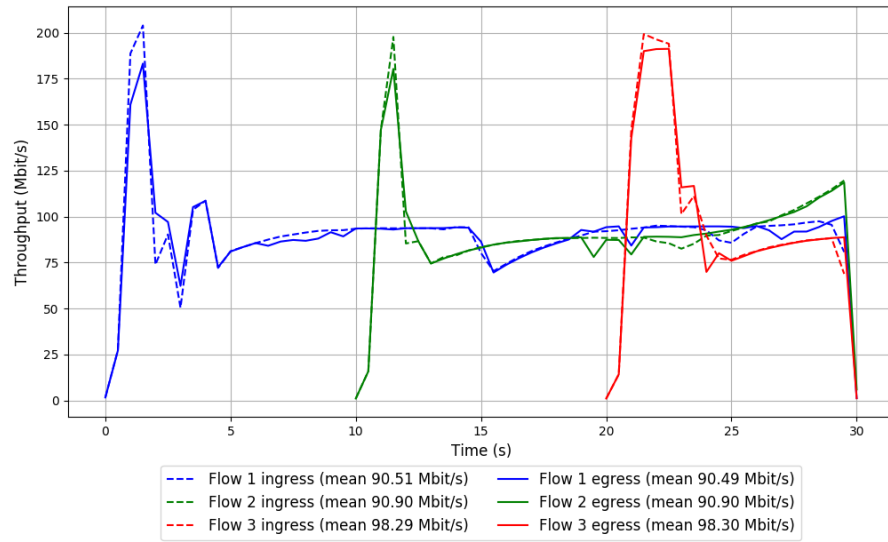
-- Flow 3:

Average throughput: 98.30 Mbit/s

95th percentile per-packet one-way delay: 69.691 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-01-18 05:41:15

End at: 2018-01-18 05:41:45

Below is generated by plot.py at 2018-01-18 09:48:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 192.24 Mbit/s

95th percentile per-packet one-way delay: 82.773 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 108.52 Mbit/s

95th percentile per-packet one-way delay: 71.678 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.82 Mbit/s

95th percentile per-packet one-way delay: 93.848 ms

Loss rate: 0.01%

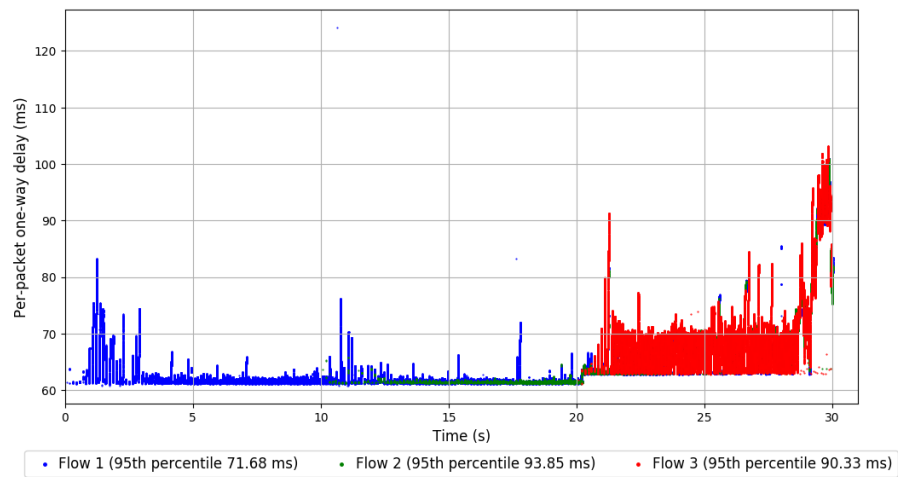
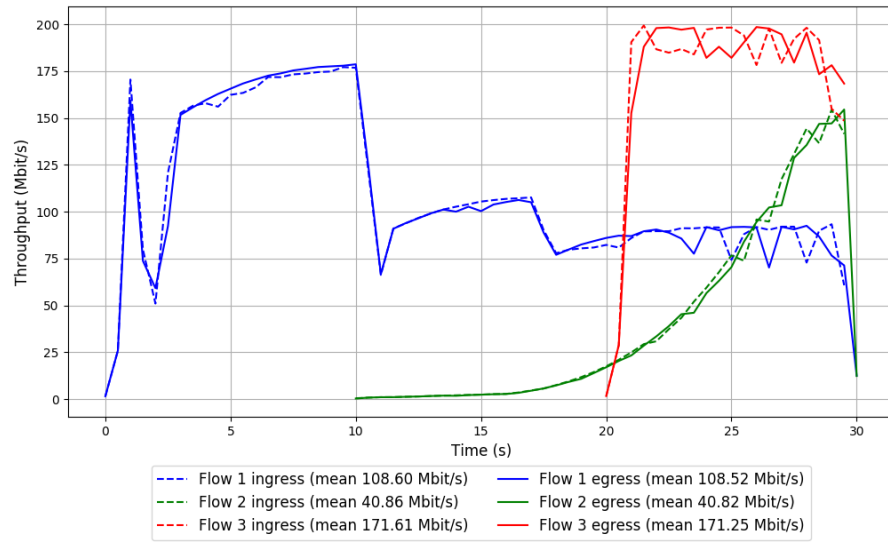
-- Flow 3:

Average throughput: 171.25 Mbit/s

95th percentile per-packet one-way delay: 90.329 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-01-18 05:58:35

End at: 2018-01-18 05:59:05

Below is generated by plot.py at 2018-01-18 09:48:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 247.00 Mbit/s

95th percentile per-packet one-way delay: 75.080 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 76.29 Mbit/s

95th percentile per-packet one-way delay: 70.638 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 178.95 Mbit/s

95th percentile per-packet one-way delay: 75.366 ms

Loss rate: 0.00%

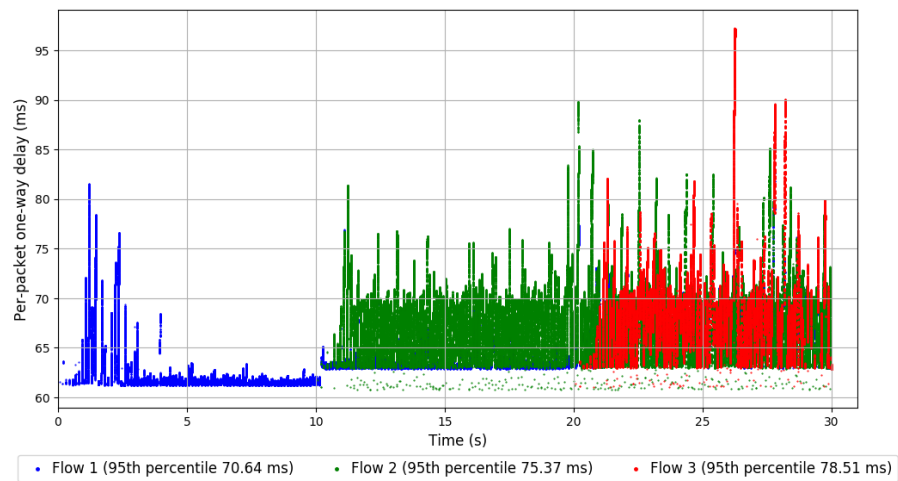
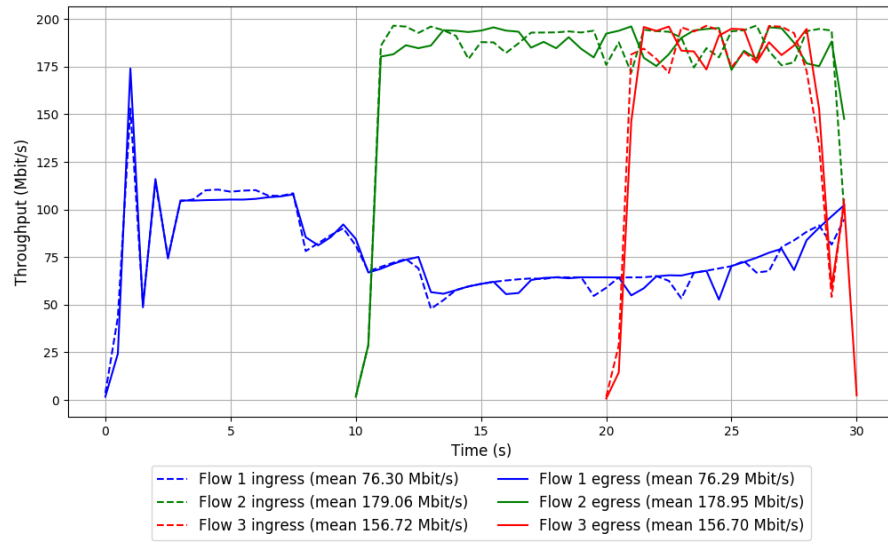
-- Flow 3:

Average throughput: 156.70 Mbit/s

95th percentile per-packet one-way delay: 78.513 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-01-18 06:15:56

End at: 2018-01-18 06:16:26

Below is generated by plot.py at 2018-01-18 09:48:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 198.42 Mbit/s

95th percentile per-packet one-way delay: 69.706 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 118.31 Mbit/s

95th percentile per-packet one-way delay: 70.525 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 118.57 Mbit/s

95th percentile per-packet one-way delay: 66.982 ms

Loss rate: 0.00%

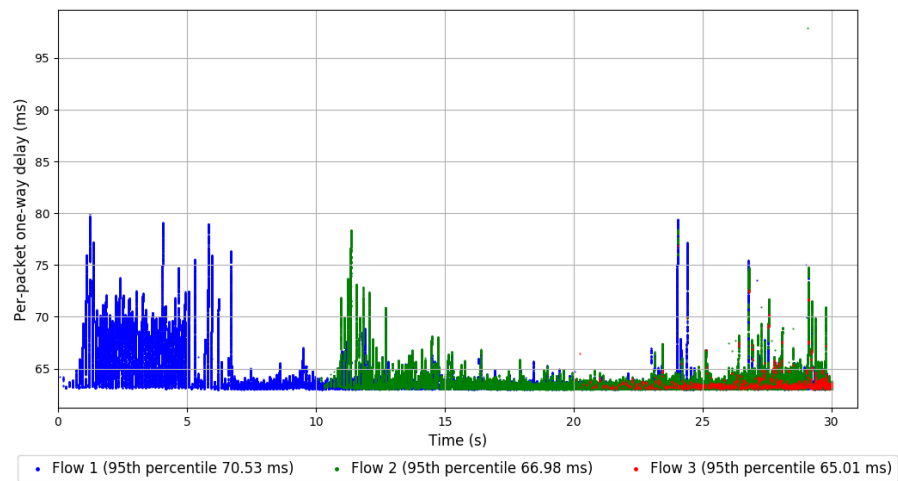
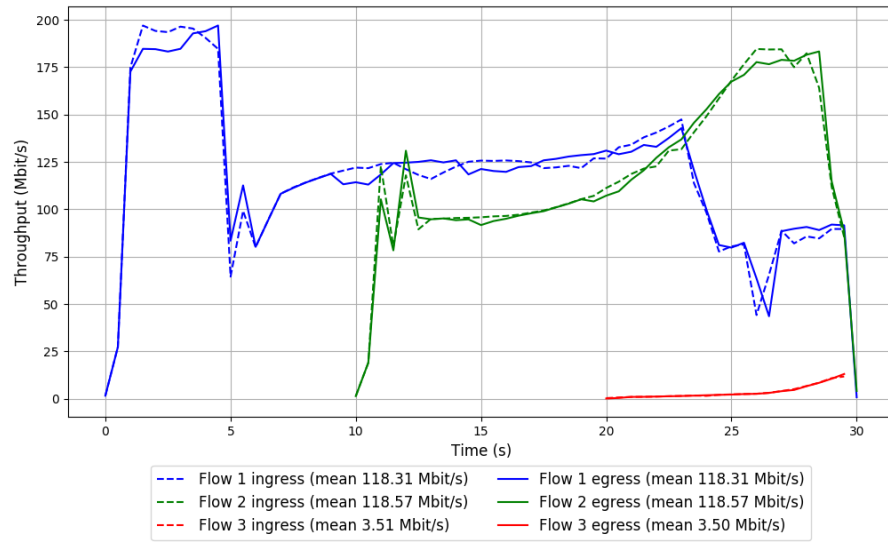
-- Flow 3:

Average throughput: 3.50 Mbit/s

95th percentile per-packet one-way delay: 65.010 ms

Loss rate: 0.31%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-01-18 06:32:59

End at: 2018-01-18 06:33:29

Below is generated by plot.py at 2018-01-18 09:51:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 270.46 Mbit/s

95th percentile per-packet one-way delay: 75.001 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 122.37 Mbit/s

95th percentile per-packet one-way delay: 74.834 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.02 Mbit/s

95th percentile per-packet one-way delay: 75.103 ms

Loss rate: 0.00%

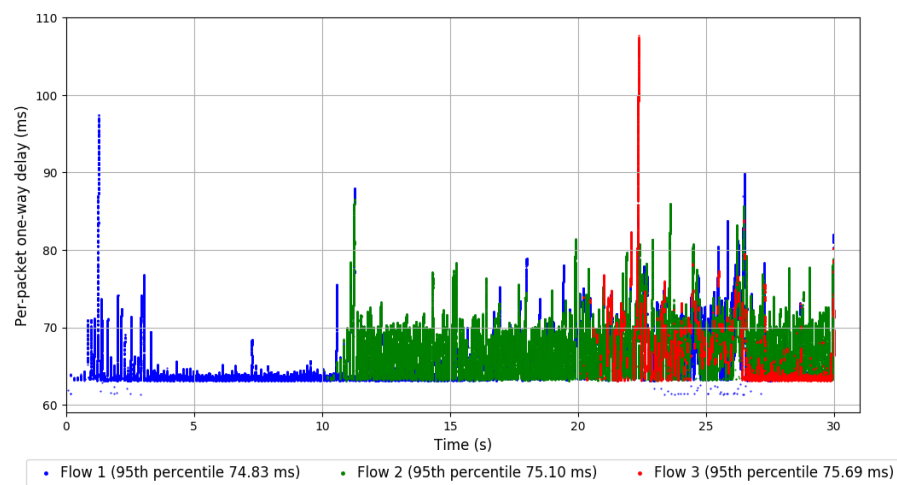
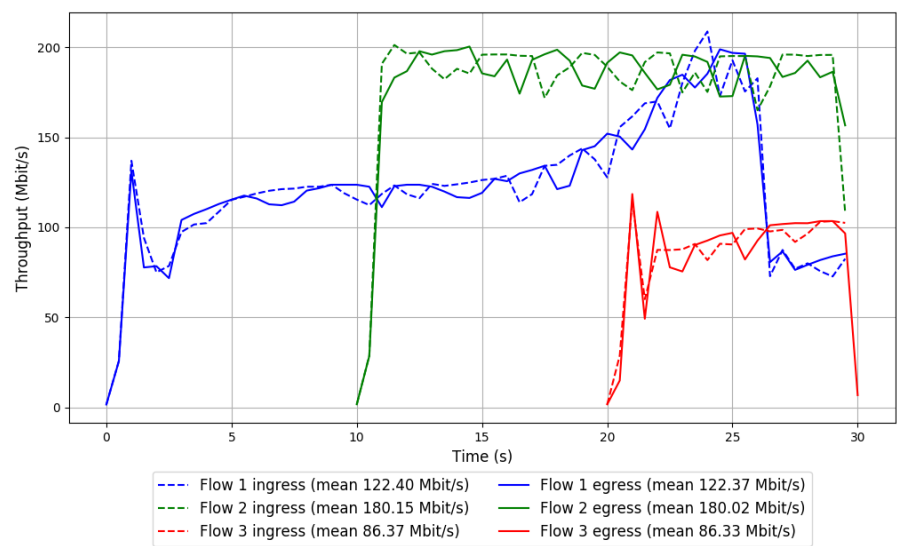
-- Flow 3:

Average throughput: 86.33 Mbit/s

95th percentile per-packet one-way delay: 75.691 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-01-18 06:50:14

End at: 2018-01-18 06:50:44

Below is generated by plot.py at 2018-01-18 09:51:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 241.50 Mbit/s

95th percentile per-packet one-way delay: 74.479 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 98.41 Mbit/s

95th percentile per-packet one-way delay: 73.159 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 136.12 Mbit/s

95th percentile per-packet one-way delay: 75.658 ms

Loss rate: 0.01%

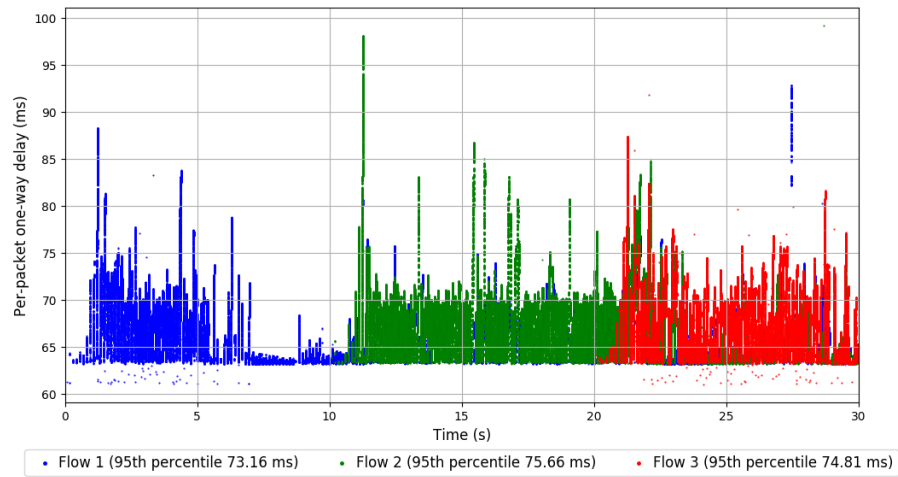
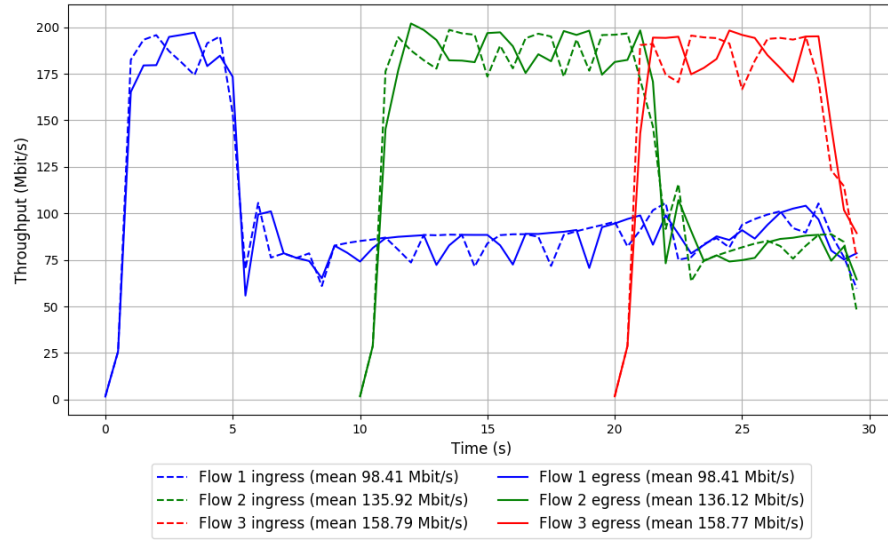
-- Flow 3:

Average throughput: 158.77 Mbit/s

95th percentile per-packet one-way delay: 74.811 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-01-18 07:07:12

End at: 2018-01-18 07:07:42

Below is generated by plot.py at 2018-01-18 09:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.50 Mbit/s

95th percentile per-packet one-way delay: 72.200 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 129.70 Mbit/s

95th percentile per-packet one-way delay: 72.913 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 132.79 Mbit/s

95th percentile per-packet one-way delay: 70.865 ms

Loss rate: 0.00%

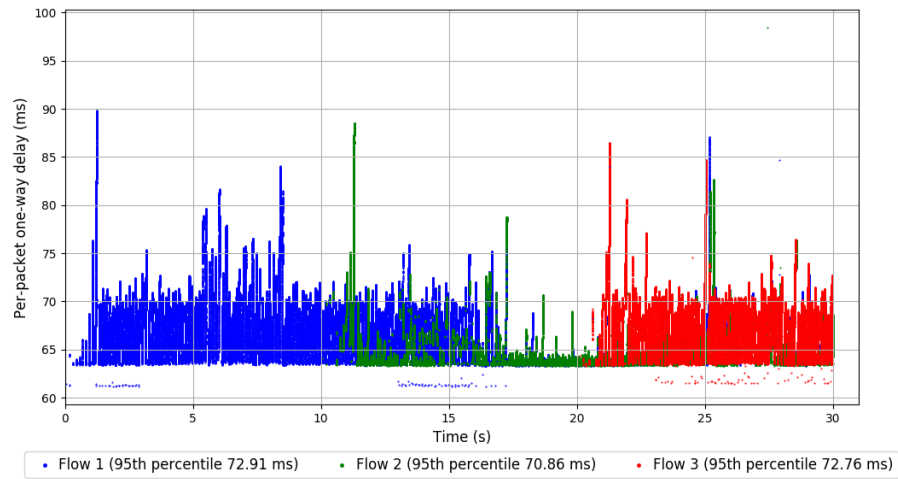
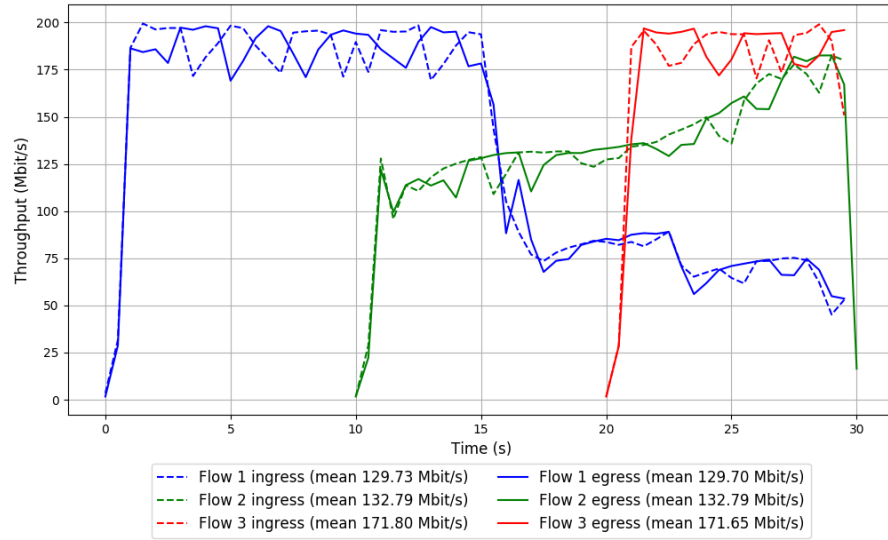
-- Flow 3:

Average throughput: 171.65 Mbit/s

95th percentile per-packet one-way delay: 72.757 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-01-18 07:24:20

End at: 2018-01-18 07:24:50

Below is generated by plot.py at 2018-01-18 09:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.80 Mbit/s

95th percentile per-packet one-way delay: 69.794 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 79.61 Mbit/s

95th percentile per-packet one-way delay: 69.578 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 41.52 Mbit/s

95th percentile per-packet one-way delay: 65.264 ms

Loss rate: 0.00%

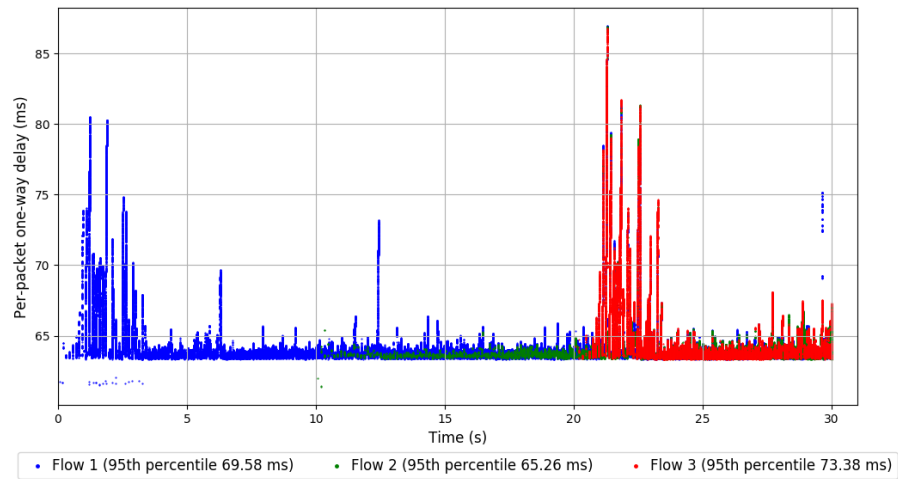
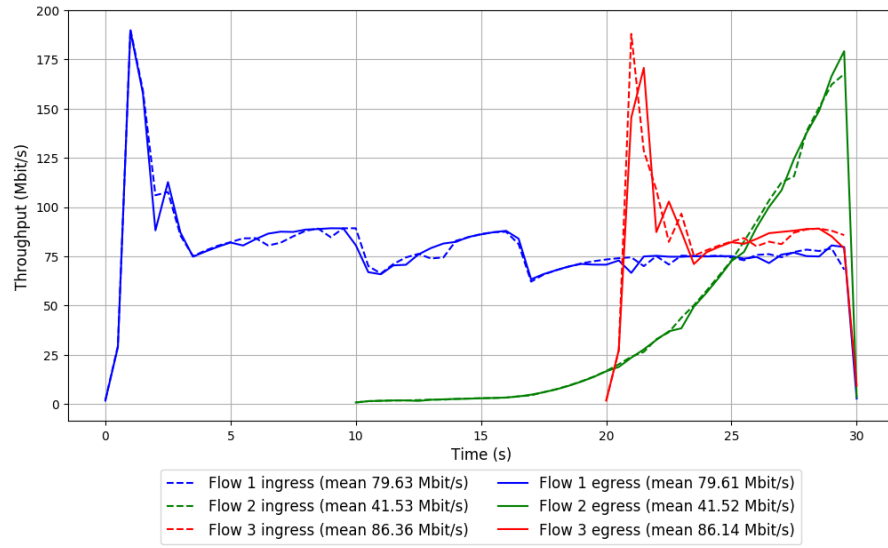
-- Flow 3:

Average throughput: 86.14 Mbit/s

95th percentile per-packet one-way delay: 73.383 ms

Loss rate: 0.28%

Run 10: Report of TCP Cubic — Data Link

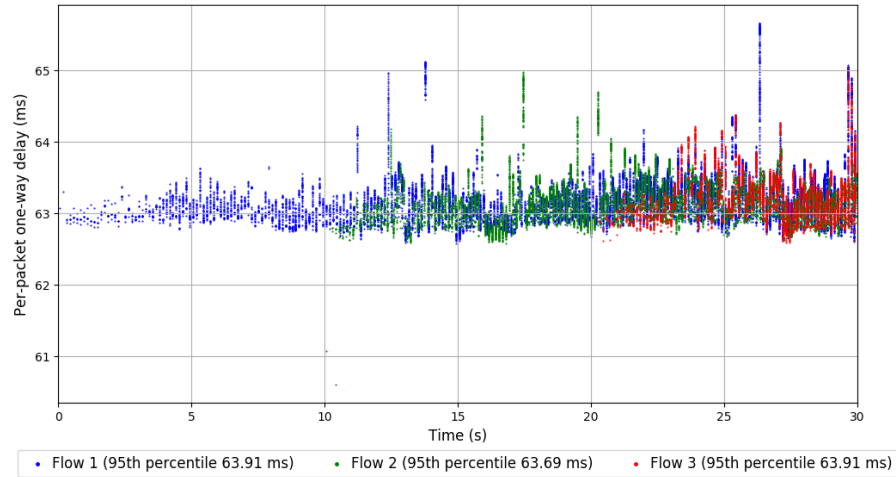
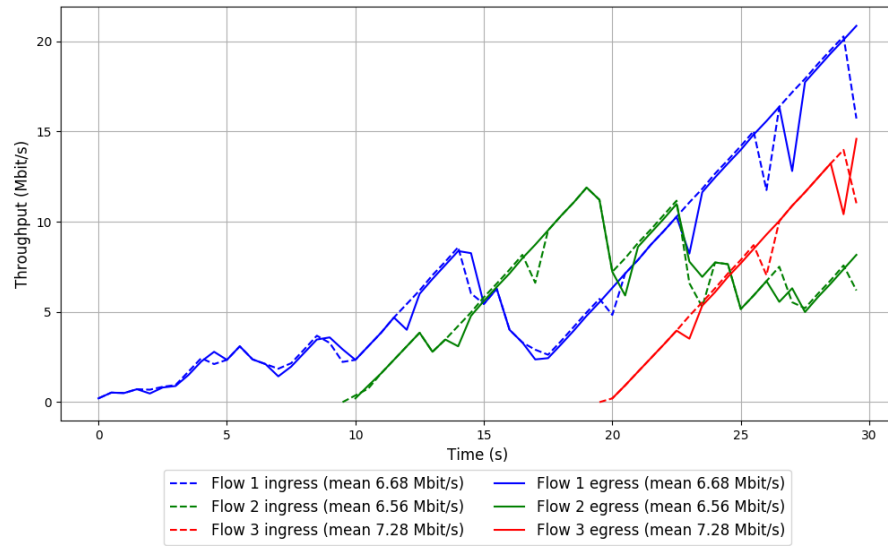


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-18 04:51:38
End at: 2018-01-18 04:52:08

# Below is generated by plot.py at 2018-01-18 09:52:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.43 Mbit/s
95th percentile per-packet one-way delay: 63.831 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 63.906 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.56 Mbit/s
95th percentile per-packet one-way delay: 63.685 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 63.907 ms
Loss rate: 0.00%
```

Run 1: Report of LEDBAT — Data Link

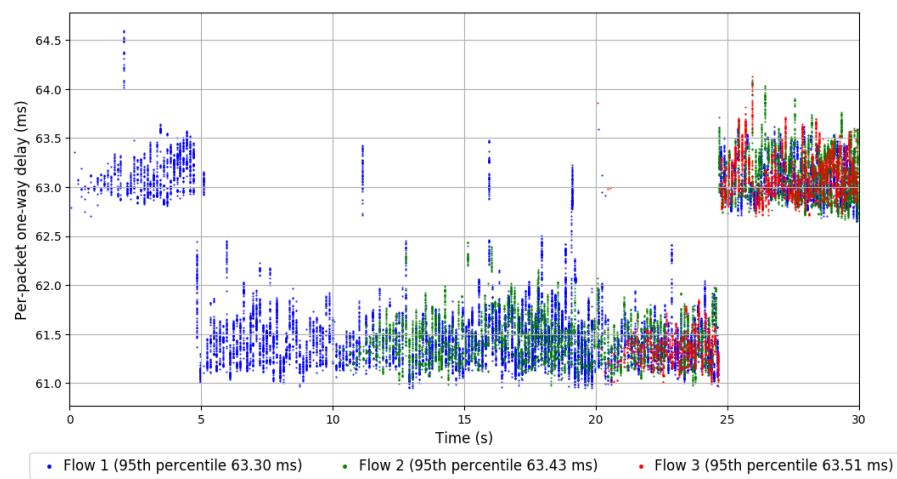
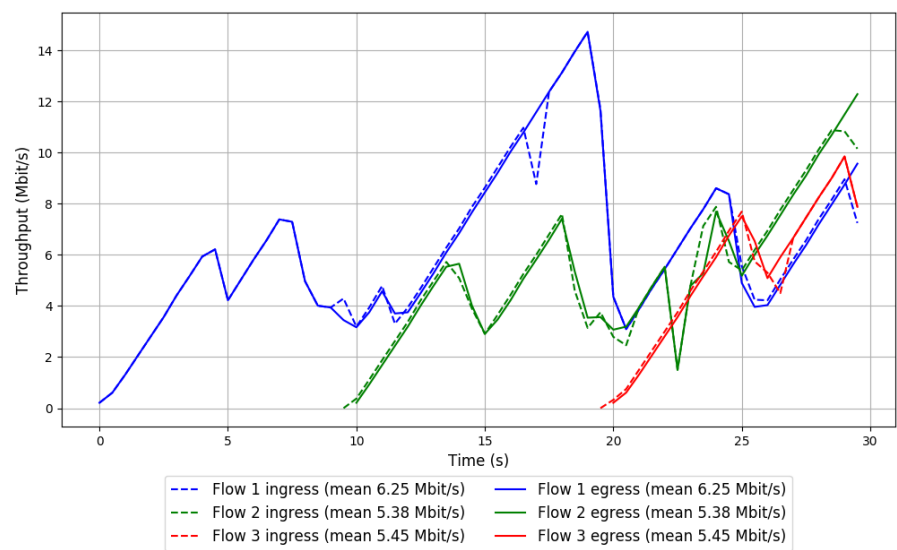


```
Run 2: Statistics of LEDBAT

Start at: 2018-01-18 05:08:31
End at: 2018-01-18 05:09:01

# Below is generated by plot.py at 2018-01-18 09:52:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.61 Mbit/s
95th percentile per-packet one-way delay: 63.385 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 6.25 Mbit/s
95th percentile per-packet one-way delay: 63.300 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 5.38 Mbit/s
95th percentile per-packet one-way delay: 63.432 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 5.45 Mbit/s
95th percentile per-packet one-way delay: 63.506 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-18 05:25:44

End at: 2018-01-18 05:26:14

Below is generated by plot.py at 2018-01-18 09:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 25.80 Mbit/s

95th percentile per-packet one-way delay: 64.350 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.17 Mbit/s

95th percentile per-packet one-way delay: 64.506 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.25 Mbit/s

95th percentile per-packet one-way delay: 64.151 ms

Loss rate: 0.00%

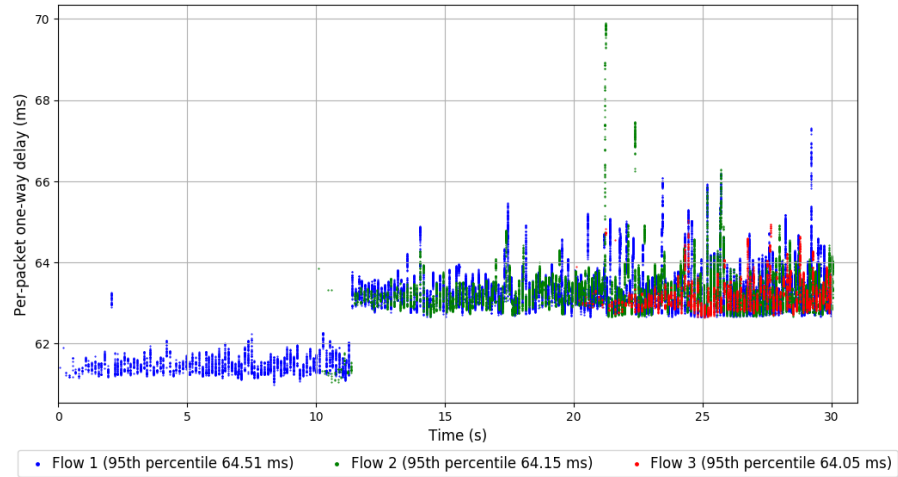
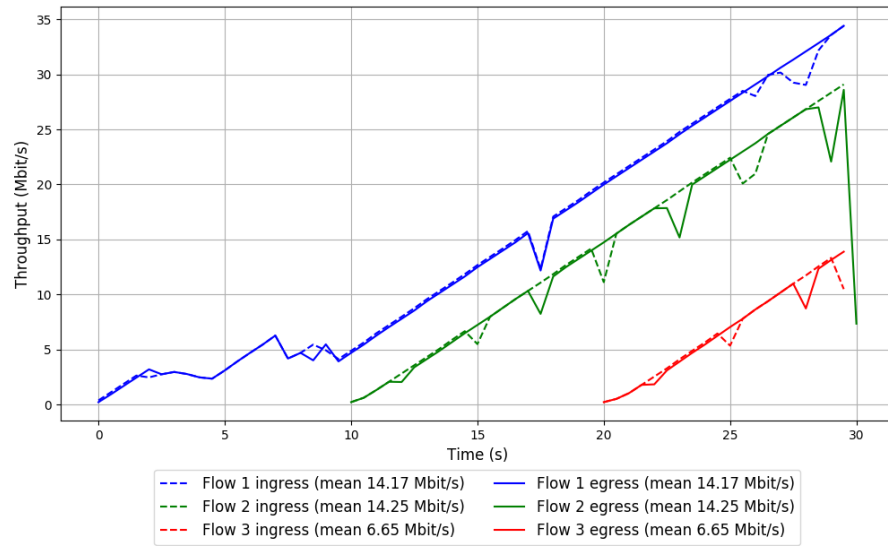
-- Flow 3:

Average throughput: 6.65 Mbit/s

95th percentile per-packet one-way delay: 64.052 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-01-18 05:42:49

End at: 2018-01-18 05:43:19

Below is generated by plot.py at 2018-01-18 09:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 16.55 Mbit/s

95th percentile per-packet one-way delay: 63.812 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 11.15 Mbit/s

95th percentile per-packet one-way delay: 63.860 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 5.40 Mbit/s

95th percentile per-packet one-way delay: 63.768 ms

Loss rate: 0.03%

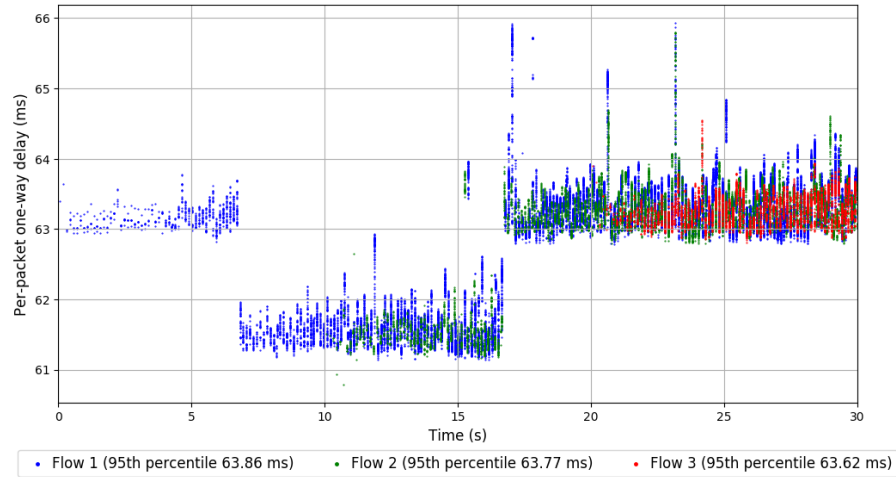
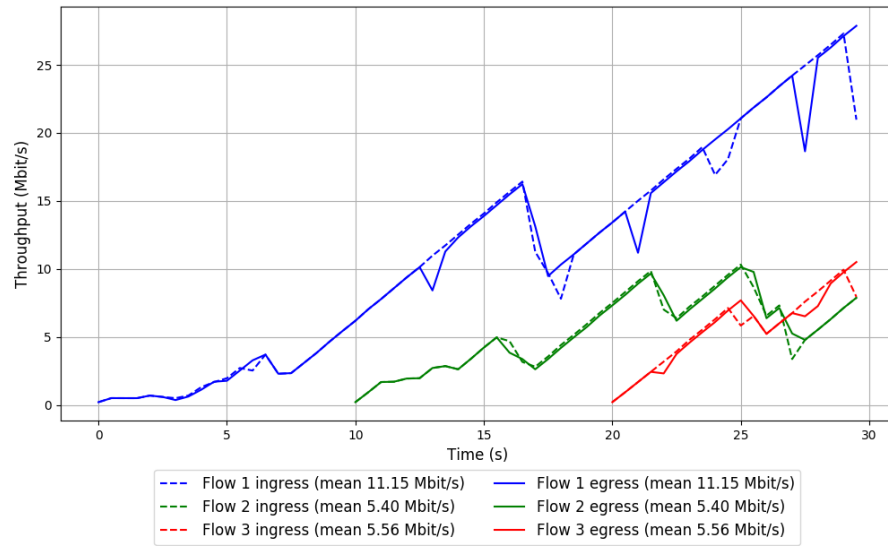
-- Flow 3:

Average throughput: 5.56 Mbit/s

95th percentile per-packet one-way delay: 63.624 ms

Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-18 06:00:12

End at: 2018-01-18 06:00:42

Below is generated by plot.py at 2018-01-18 09:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.49 Mbit/s

95th percentile per-packet one-way delay: 63.775 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 6.75 Mbit/s

95th percentile per-packet one-way delay: 63.920 ms

Loss rate: 0.74%

-- Flow 2:

Average throughput: 4.28 Mbit/s

95th percentile per-packet one-way delay: 63.653 ms

Loss rate: 2.13%

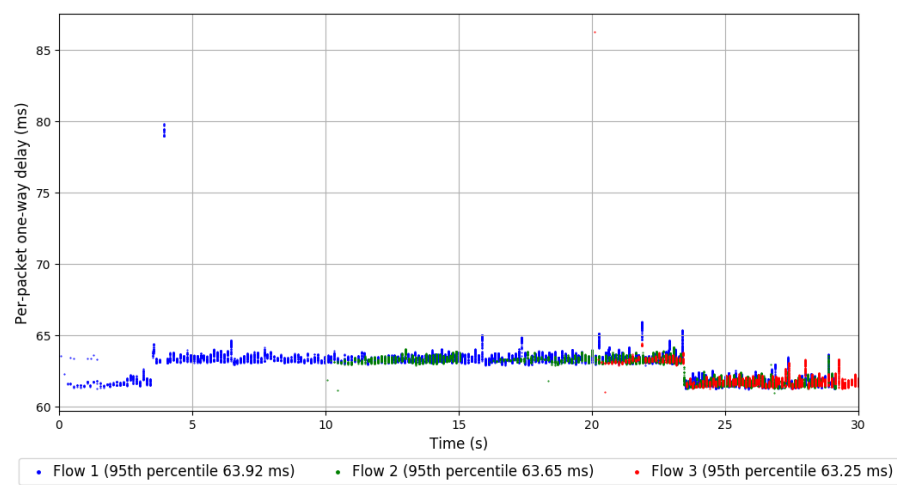
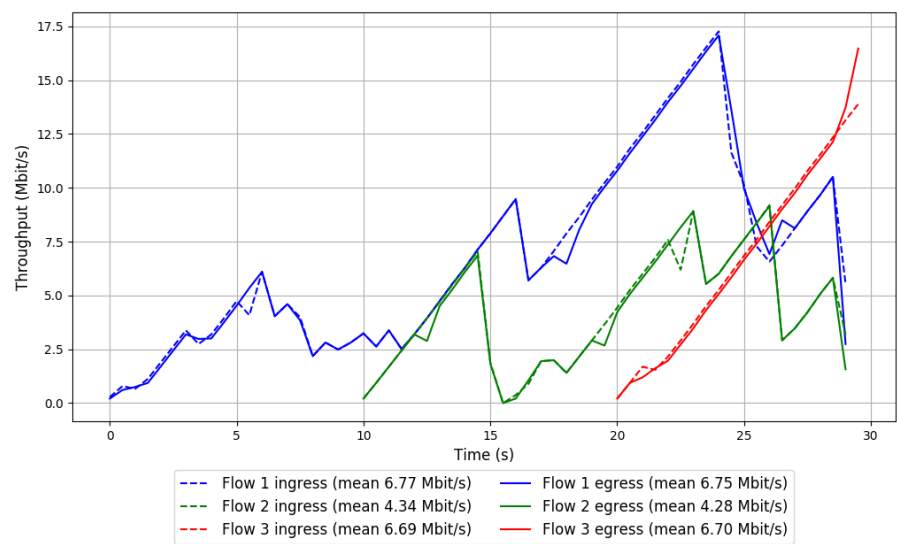
-- Flow 3:

Average throughput: 6.70 Mbit/s

95th percentile per-packet one-way delay: 63.250 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-01-18 06:17:30

End at: 2018-01-18 06:18:00

Below is generated by plot.py at 2018-01-18 09:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 13.93 Mbit/s

95th percentile per-packet one-way delay: 64.444 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 6.79 Mbit/s

95th percentile per-packet one-way delay: 64.542 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 9.03 Mbit/s

95th percentile per-packet one-way delay: 64.399 ms

Loss rate: 0.00%

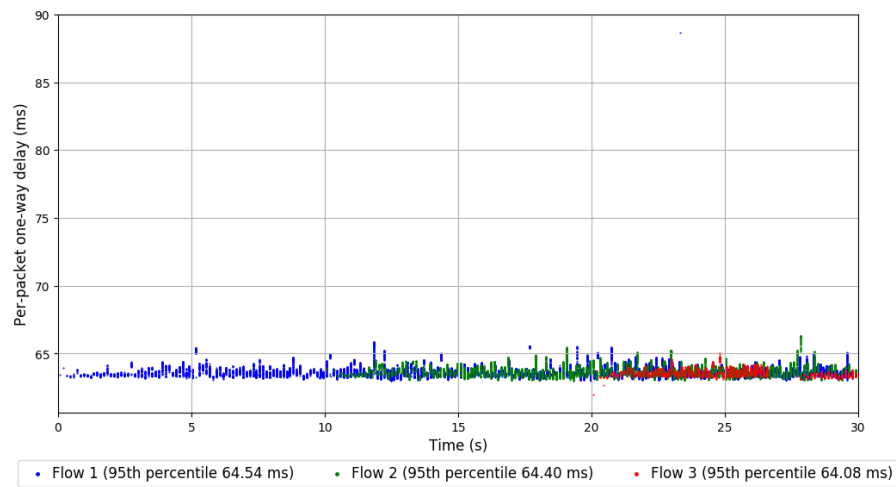
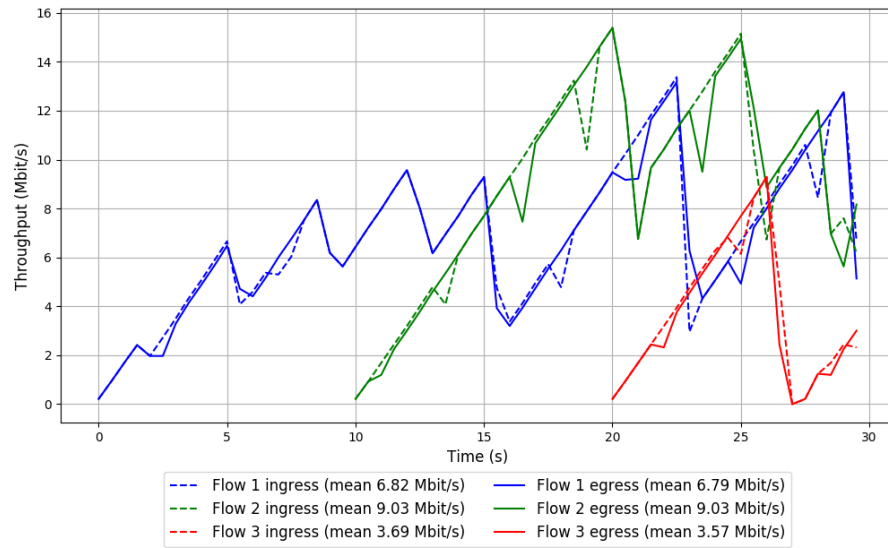
-- Flow 3:

Average throughput: 3.57 Mbit/s

95th percentile per-packet one-way delay: 64.083 ms

Loss rate: 3.43%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-01-18 06:34:36

End at: 2018-01-18 06:35:06

Below is generated by plot.py at 2018-01-18 09:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 10.75 Mbit/s

95th percentile per-packet one-way delay: 64.238 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 5.83 Mbit/s

95th percentile per-packet one-way delay: 64.301 ms

Loss rate: 0.52%

-- Flow 2:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 64.148 ms

Loss rate: 1.61%

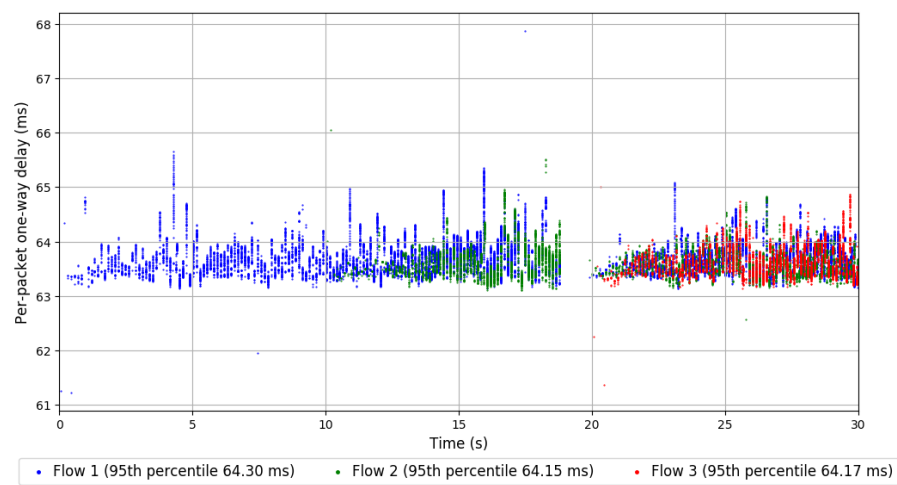
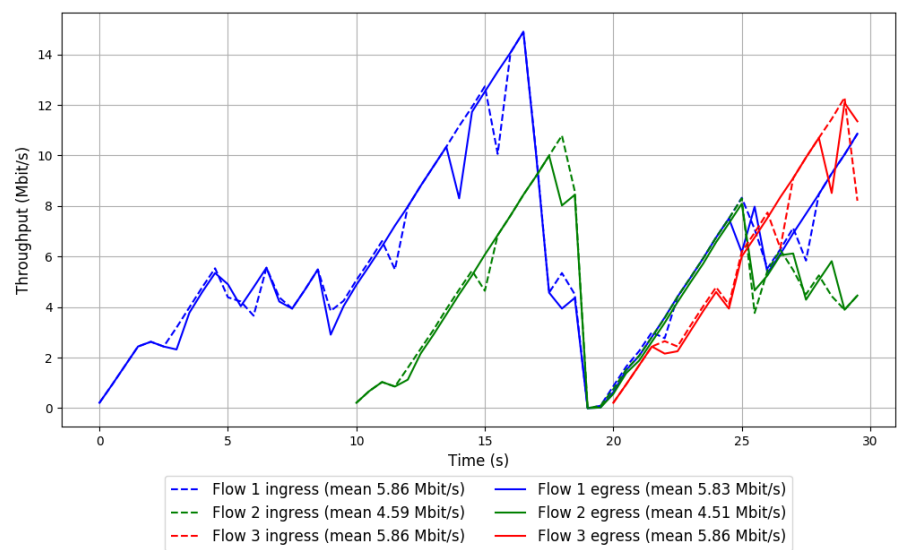
-- Flow 3:

Average throughput: 5.86 Mbit/s

95th percentile per-packet one-way delay: 64.172 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-01-18 06:51:50

End at: 2018-01-18 06:52:20

Below is generated by plot.py at 2018-01-18 09:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 23.59 Mbit/s

95th percentile per-packet one-way delay: 65.054 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.33 Mbit/s

95th percentile per-packet one-way delay: 65.244 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 11.76 Mbit/s

95th percentile per-packet one-way delay: 64.706 ms

Loss rate: 0.00%

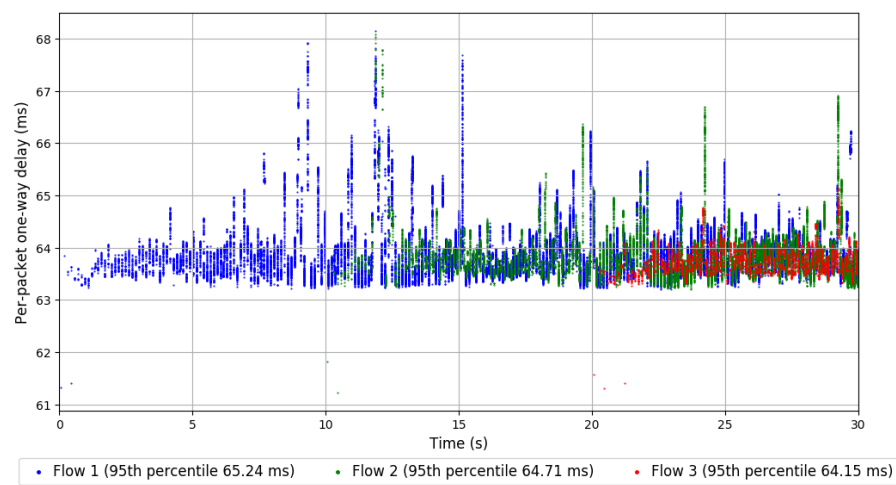
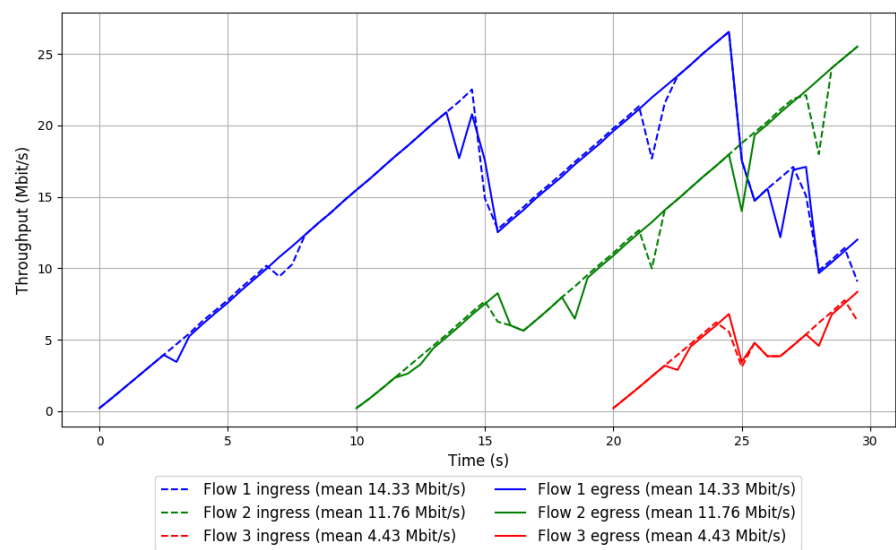
-- Flow 3:

Average throughput: 4.43 Mbit/s

95th percentile per-packet one-way delay: 64.147 ms

Loss rate: 0.05%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-01-18 07:08:51

End at: 2018-01-18 07:09:21

Below is generated by plot.py at 2018-01-18 09:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 15.81 Mbit/s

95th percentile per-packet one-way delay: 64.509 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 8.88 Mbit/s

95th percentile per-packet one-way delay: 64.568 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 8.00 Mbit/s

95th percentile per-packet one-way delay: 64.477 ms

Loss rate: 0.03%

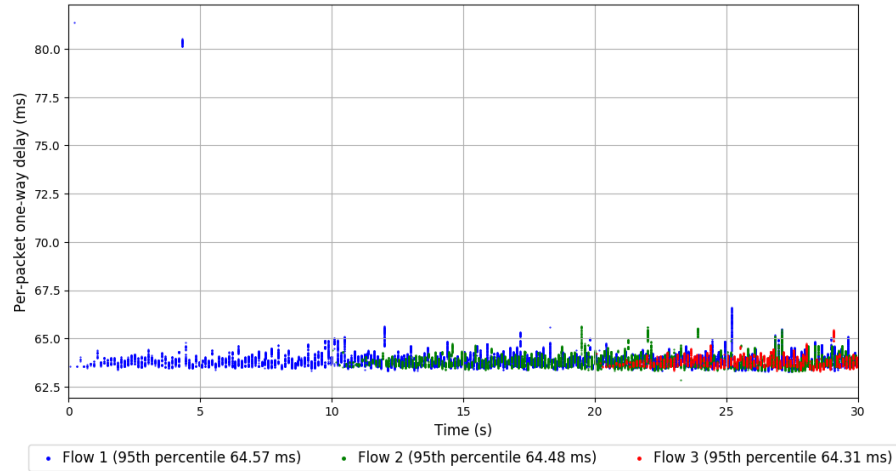
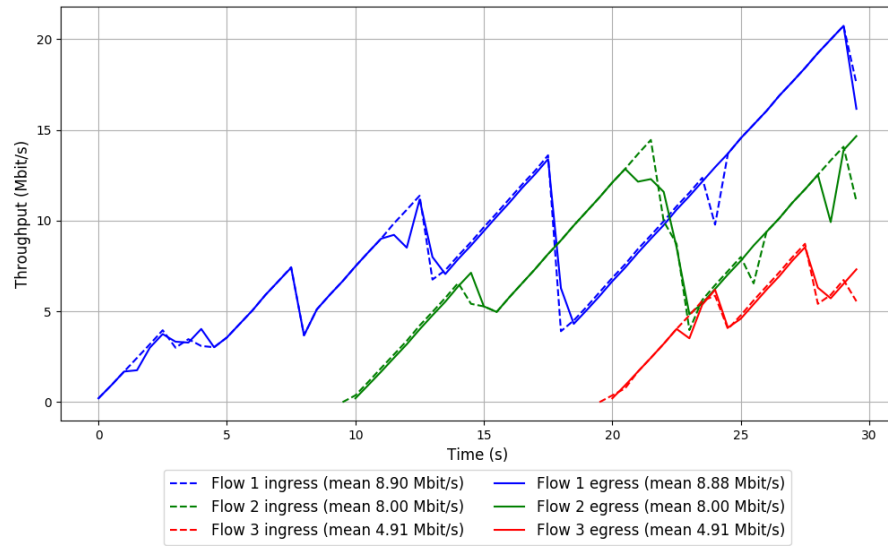
-- Flow 3:

Average throughput: 4.91 Mbit/s

95th percentile per-packet one-way delay: 64.309 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-01-18 07:25:50

End at: 2018-01-18 07:26:20

Below is generated by plot.py at 2018-01-18 09:52:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 21.87 Mbit/s

95th percentile per-packet one-way delay: 64.801 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 13.53 Mbit/s

95th percentile per-packet one-way delay: 64.707 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 10.19 Mbit/s

95th percentile per-packet one-way delay: 64.998 ms

Loss rate: 0.05%

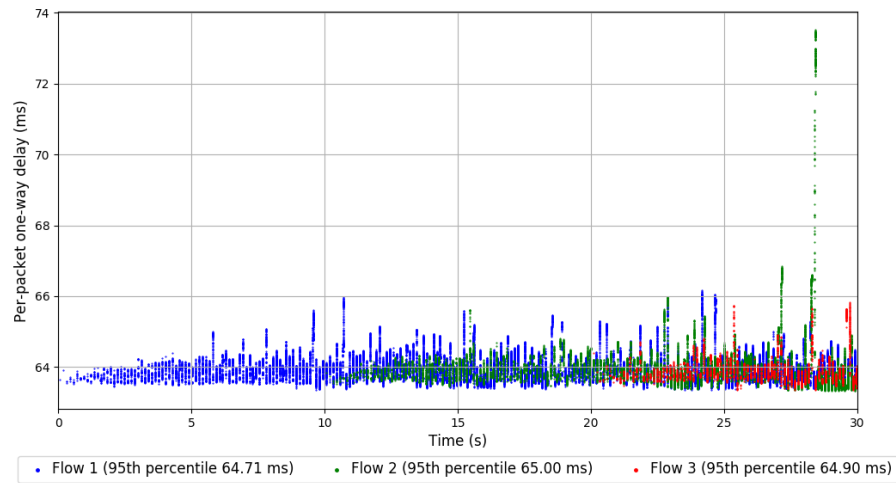
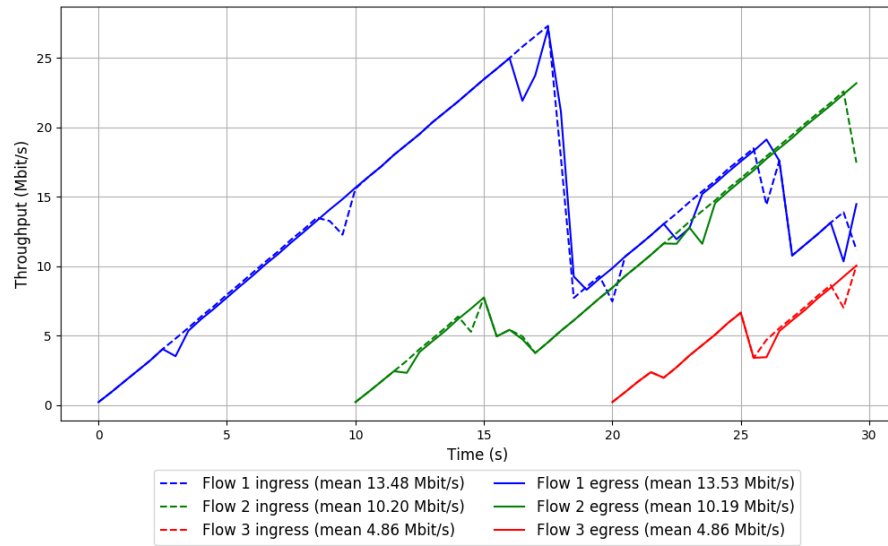
-- Flow 3:

Average throughput: 4.86 Mbit/s

95th percentile per-packet one-way delay: 64.900 ms

Loss rate: 0.02%

Run 10: Report of LEDBAT — Data Link

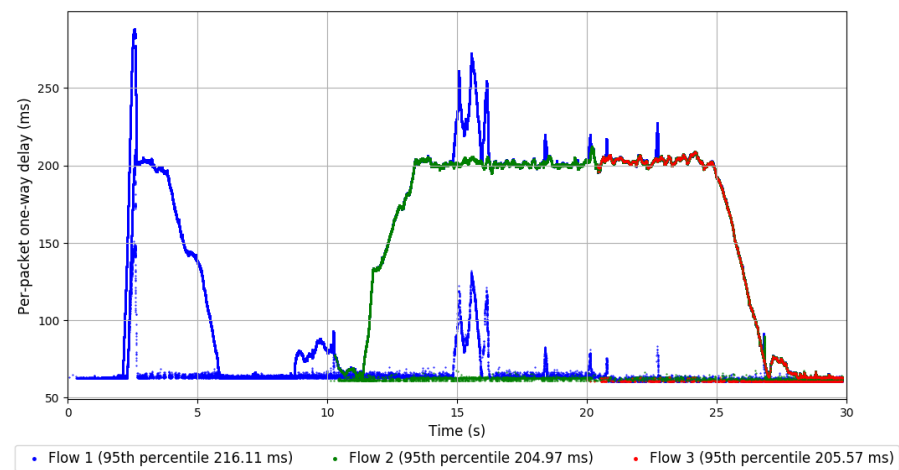
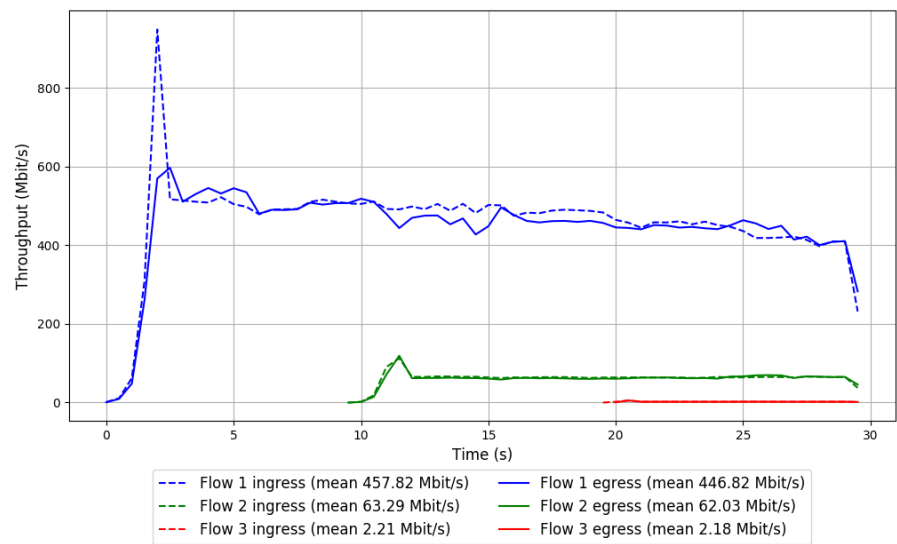


```
Run 1: Statistics of PCC

Start at: 2018-01-18 04:46:14
End at: 2018-01-18 04:46:45

# Below is generated by plot.py at 2018-01-18 09:57:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 488.87 Mbit/s
95th percentile per-packet one-way delay: 213.430 ms
Loss rate: 2.37%
-- Flow 1:
Average throughput: 446.82 Mbit/s
95th percentile per-packet one-way delay: 216.107 ms
Loss rate: 2.40%
-- Flow 2:
Average throughput: 62.03 Mbit/s
95th percentile per-packet one-way delay: 204.970 ms
Loss rate: 2.01%
-- Flow 3:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 205.567 ms
Loss rate: 1.38%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-18 05:03:01

End at: 2018-01-18 05:03:31

Below is generated by plot.py at 2018-01-18 09:57:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 477.40 Mbit/s

95th percentile per-packet one-way delay: 197.916 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 473.90 Mbit/s

95th percentile per-packet one-way delay: 197.978 ms

Loss rate: 0.75%

-- Flow 2:

Average throughput: 4.15 Mbit/s

95th percentile per-packet one-way delay: 159.575 ms

Loss rate: 0.29%

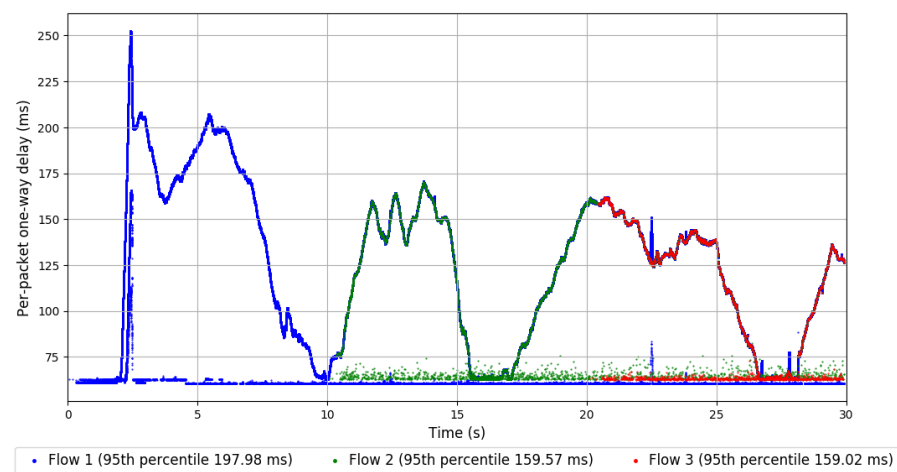
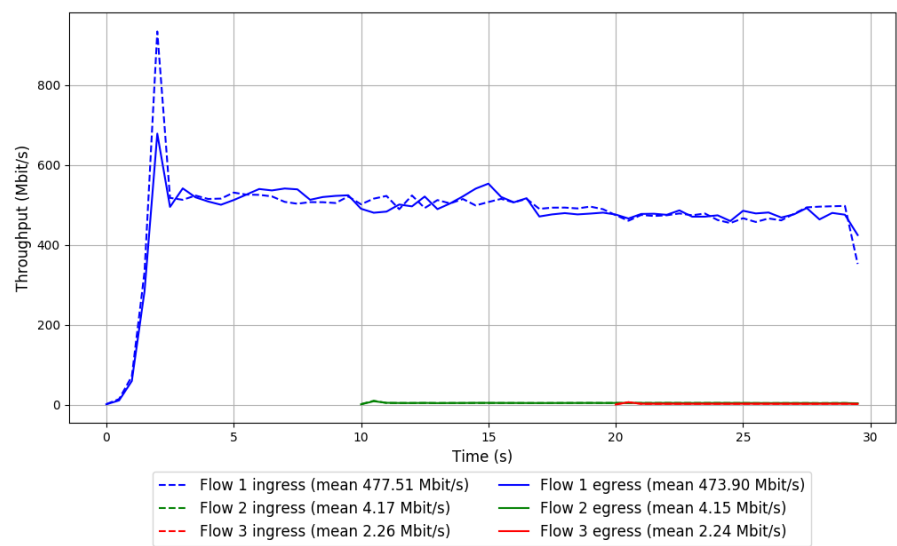
-- Flow 3:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 159.017 ms

Loss rate: 0.60%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-18 05:20:19

End at: 2018-01-18 05:20:49

Below is generated by plot.py at 2018-01-18 09:57:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 460.81 Mbit/s

95th percentile per-packet one-way delay: 184.507 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 448.80 Mbit/s

95th percentile per-packet one-way delay: 184.519 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 16.78 Mbit/s

95th percentile per-packet one-way delay: 184.116 ms

Loss rate: 0.12%

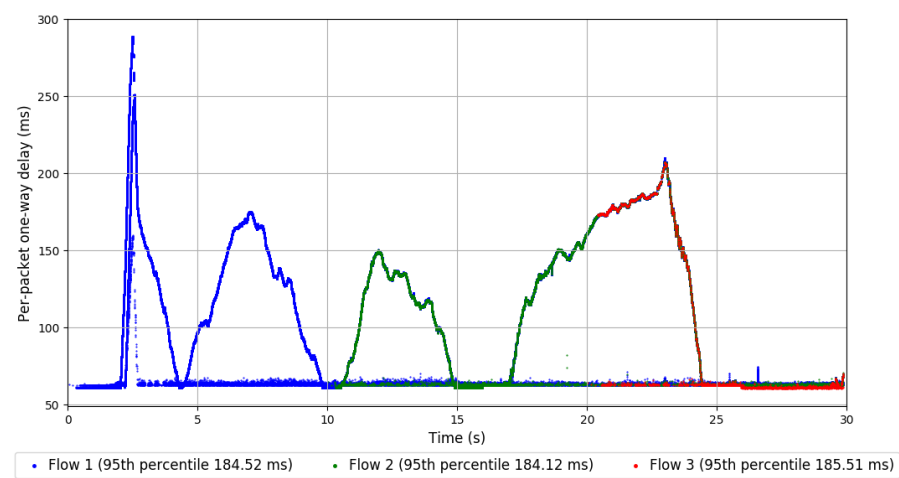
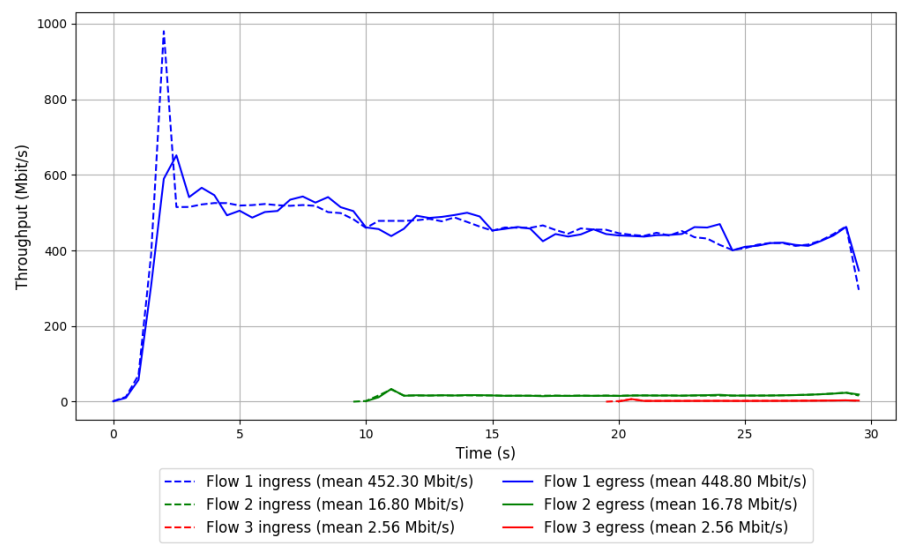
-- Flow 3:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 185.511 ms

Loss rate: 0.10%

Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-01-18 05:37:18

End at: 2018-01-18 05:37:48

Below is generated by plot.py at 2018-01-18 09:57:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 484.87 Mbit/s

95th percentile per-packet one-way delay: 205.216 ms

Loss rate: 2.40%

-- Flow 1:

Average throughput: 443.75 Mbit/s

95th percentile per-packet one-way delay: 205.229 ms

Loss rate: 2.41%

-- Flow 2:

Average throughput: 60.82 Mbit/s

95th percentile per-packet one-way delay: 205.091 ms

Loss rate: 2.32%

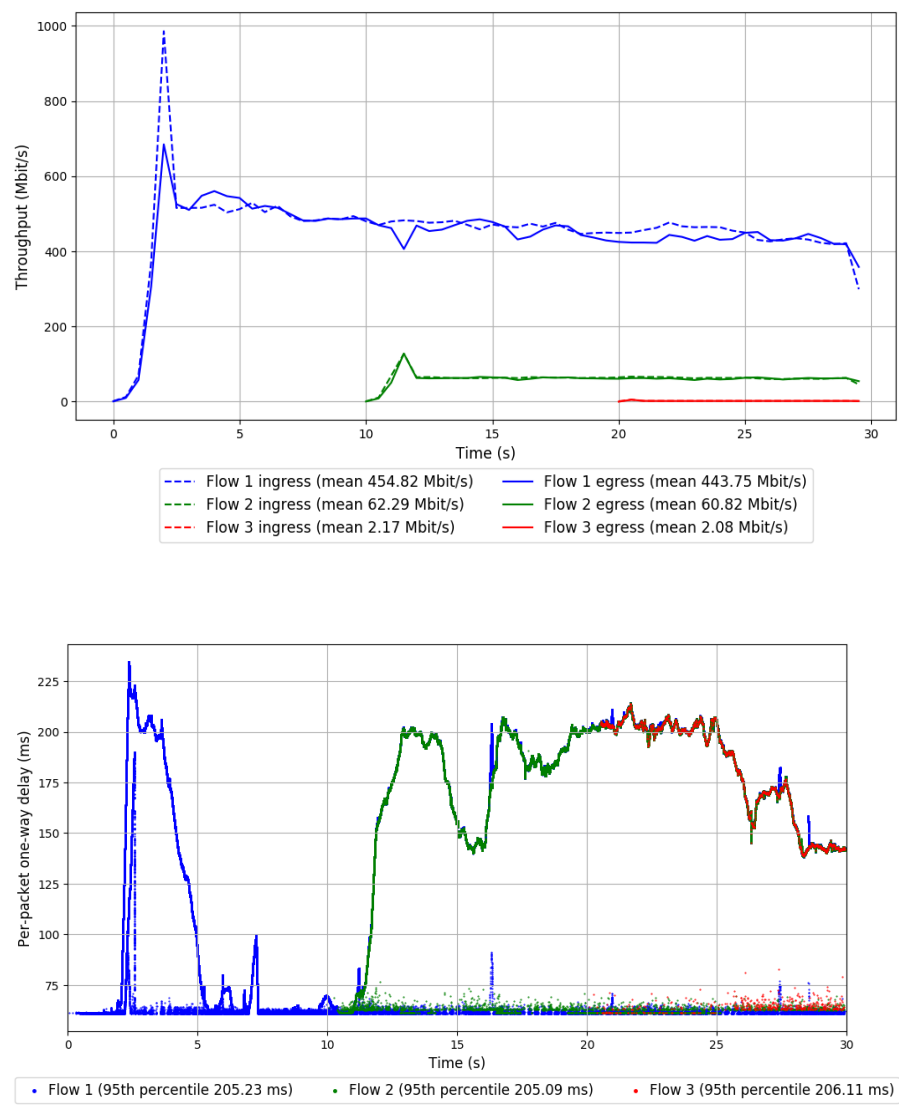
-- Flow 3:

Average throughput: 2.08 Mbit/s

95th percentile per-packet one-way delay: 206.114 ms

Loss rate: 4.33%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-18 05:54:42

End at: 2018-01-18 05:55:12

Below is generated by plot.py at 2018-01-18 09:58:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 472.34 Mbit/s

95th percentile per-packet one-way delay: 213.596 ms

Loss rate: 2.71%

-- Flow 1:

Average throughput: 432.08 Mbit/s

95th percentile per-packet one-way delay: 213.542 ms

Loss rate: 2.73%

-- Flow 2:

Average throughput: 59.53 Mbit/s

95th percentile per-packet one-way delay: 214.140 ms

Loss rate: 2.60%

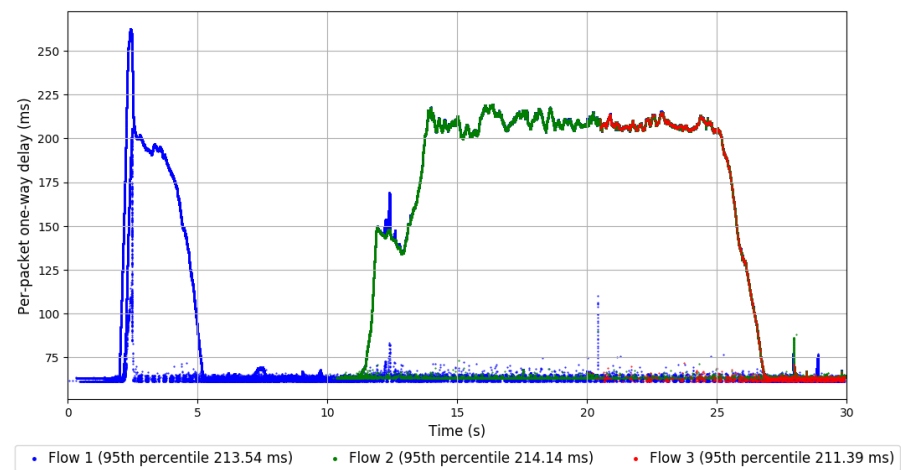
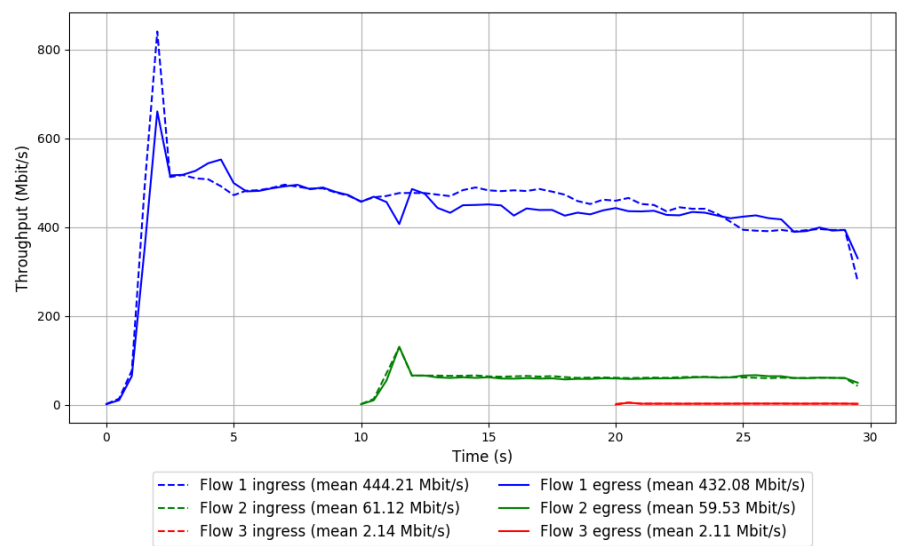
-- Flow 3:

Average throughput: 2.11 Mbit/s

95th percentile per-packet one-way delay: 211.387 ms

Loss rate: 1.54%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-18 06:12:00

End at: 2018-01-18 06:12:30

Below is generated by plot.py at 2018-01-18 09:59:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 477.10 Mbit/s

95th percentile per-packet one-way delay: 211.862 ms

Loss rate: 1.94%

-- Flow 1:

Average throughput: 453.73 Mbit/s

95th percentile per-packet one-way delay: 211.690 ms

Loss rate: 1.87%

-- Flow 2:

Average throughput: 6.15 Mbit/s

95th percentile per-packet one-way delay: 212.820 ms

Loss rate: 2.57%

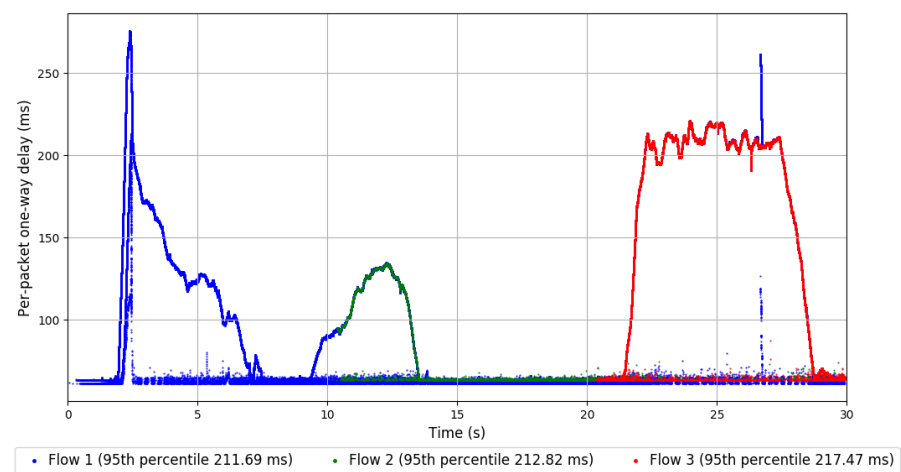
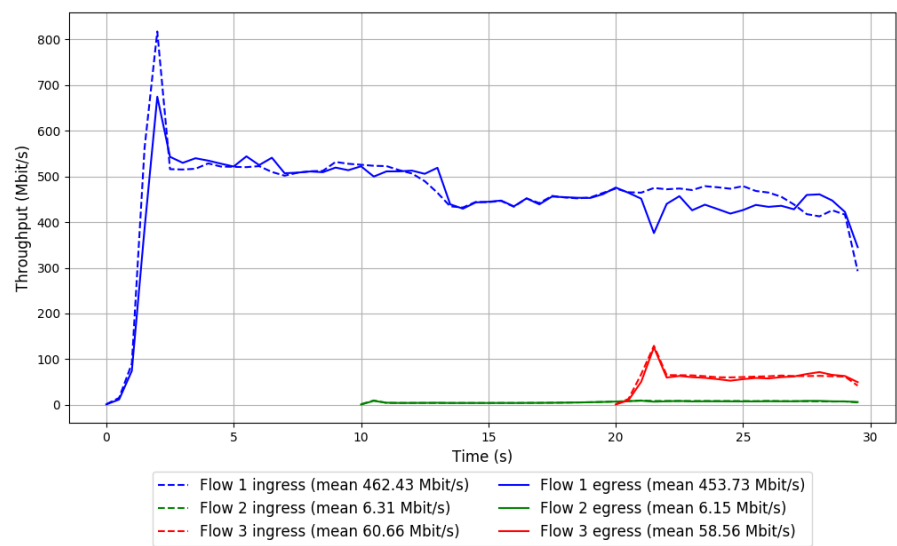
-- Flow 3:

Average throughput: 58.56 Mbit/s

95th percentile per-packet one-way delay: 217.472 ms

Loss rate: 3.44%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-18 06:29:06

End at: 2018-01-18 06:29:36

Below is generated by plot.py at 2018-01-18 10:00:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 485.42 Mbit/s

95th percentile per-packet one-way delay: 208.143 ms

Loss rate: 1.86%

-- Flow 1:

Average throughput: 481.18 Mbit/s

95th percentile per-packet one-way delay: 208.205 ms

Loss rate: 1.87%

-- Flow 2:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 205.728 ms

Loss rate: 0.81%

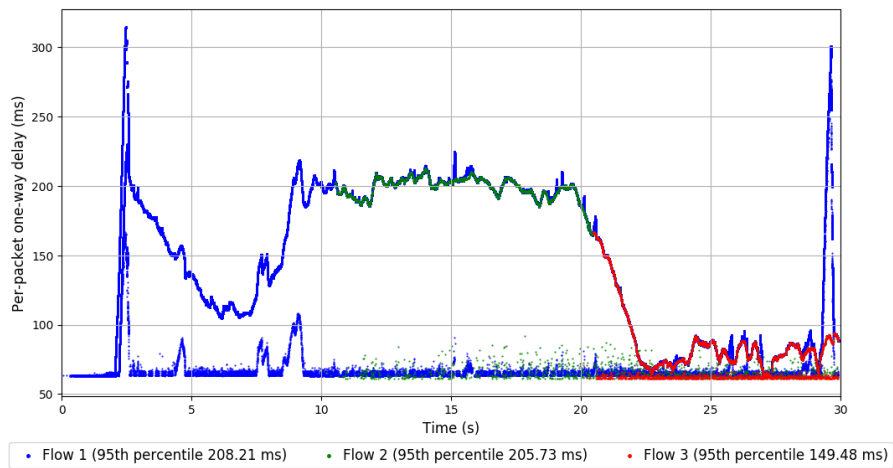
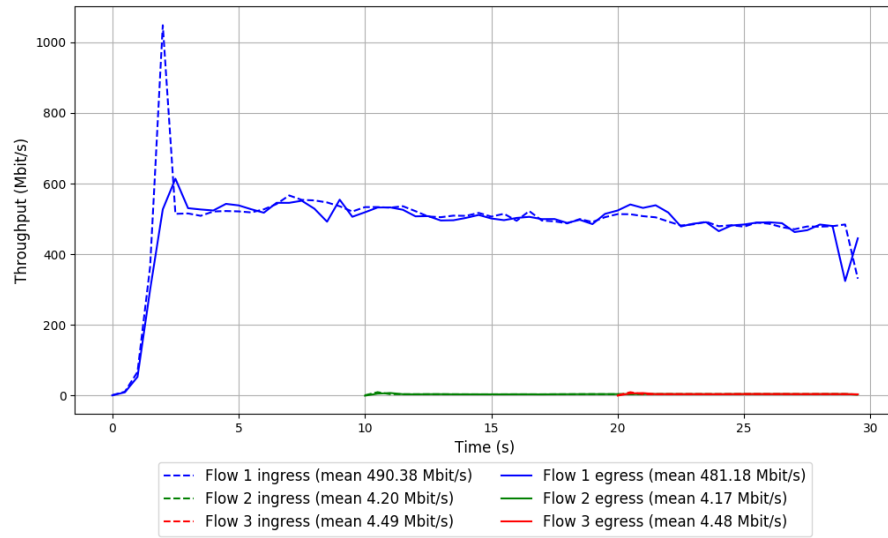
-- Flow 3:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 149.480 ms

Loss rate: 0.24%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-18 06:46:19

End at: 2018-01-18 06:46:49

Below is generated by plot.py at 2018-01-18 10:01:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 478.66 Mbit/s

95th percentile per-packet one-way delay: 192.067 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 465.14 Mbit/s

95th percentile per-packet one-way delay: 191.496 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 4.60 Mbit/s

95th percentile per-packet one-way delay: 189.687 ms

Loss rate: 0.13%

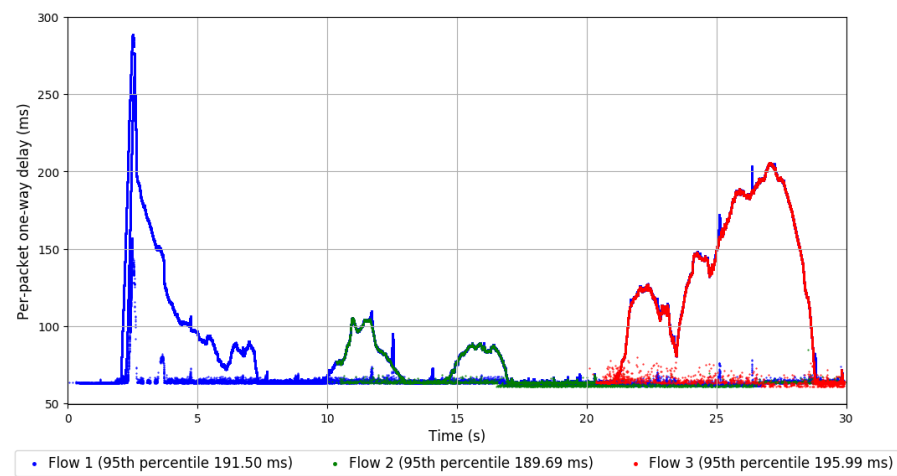
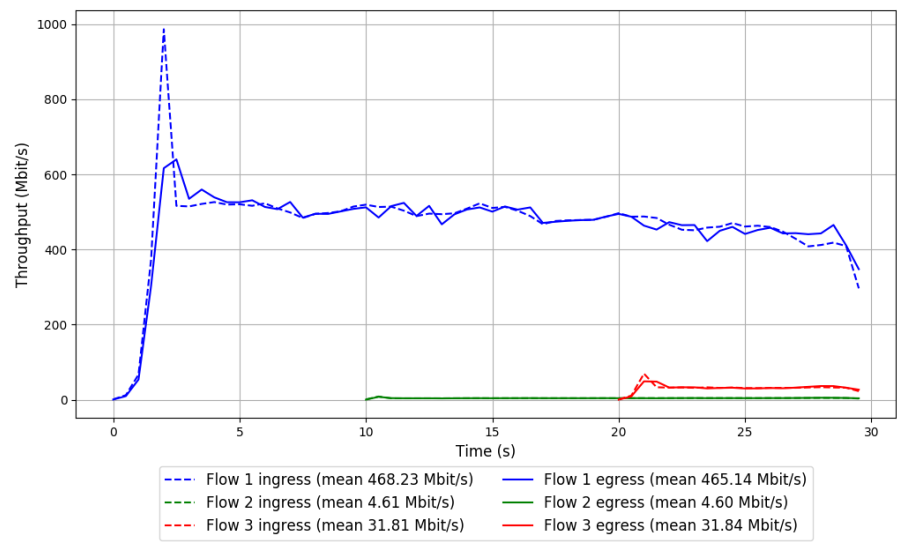
-- Flow 3:

Average throughput: 31.84 Mbit/s

95th percentile per-packet one-way delay: 195.993 ms

Loss rate: 0.02%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-18 07:03:16

End at: 2018-01-18 07:03:46

Below is generated by plot.py at 2018-01-18 10:05:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 469.76 Mbit/s

95th percentile per-packet one-way delay: 178.833 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 452.55 Mbit/s

95th percentile per-packet one-way delay: 179.136 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 9.65 Mbit/s

95th percentile per-packet one-way delay: 172.747 ms

Loss rate: 0.00%

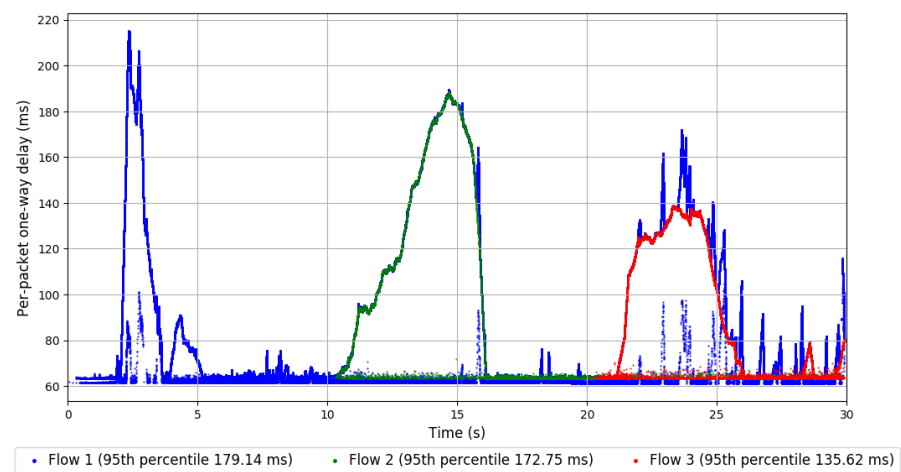
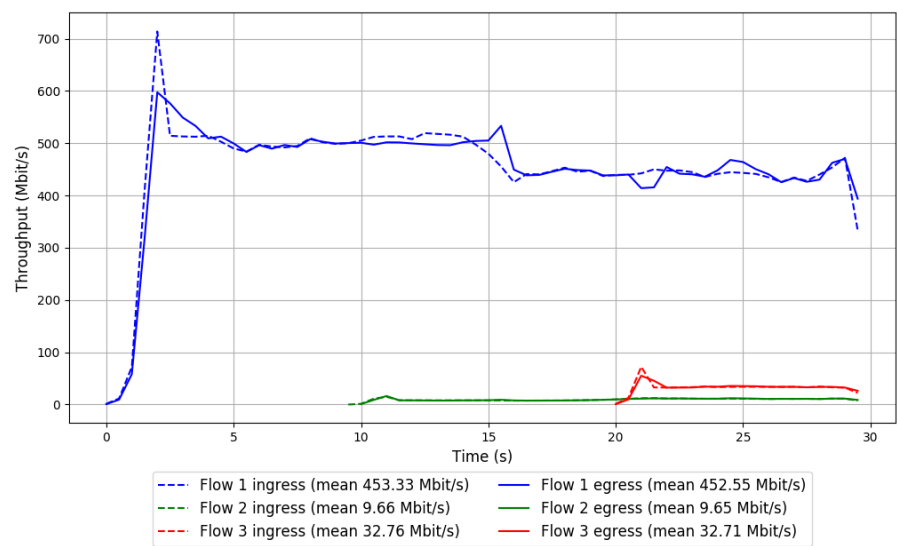
-- Flow 3:

Average throughput: 32.71 Mbit/s

95th percentile per-packet one-way delay: 135.623 ms

Loss rate: 0.00%

Run 9: Report of PCC — Data Link

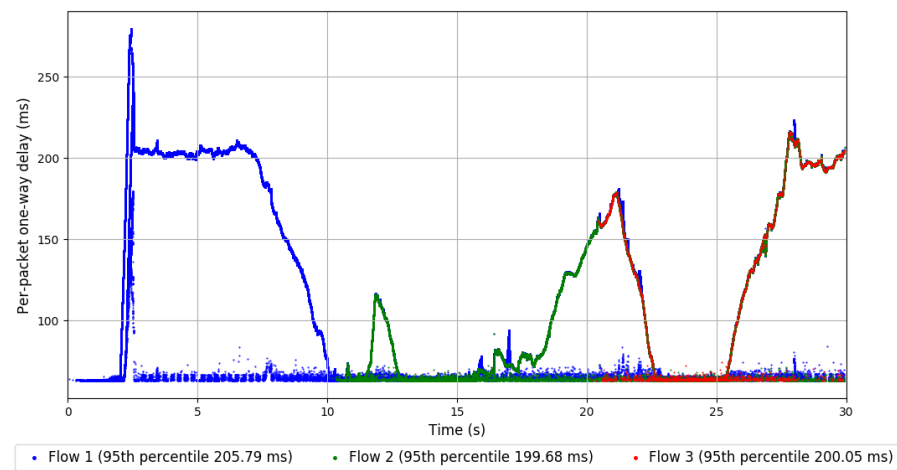
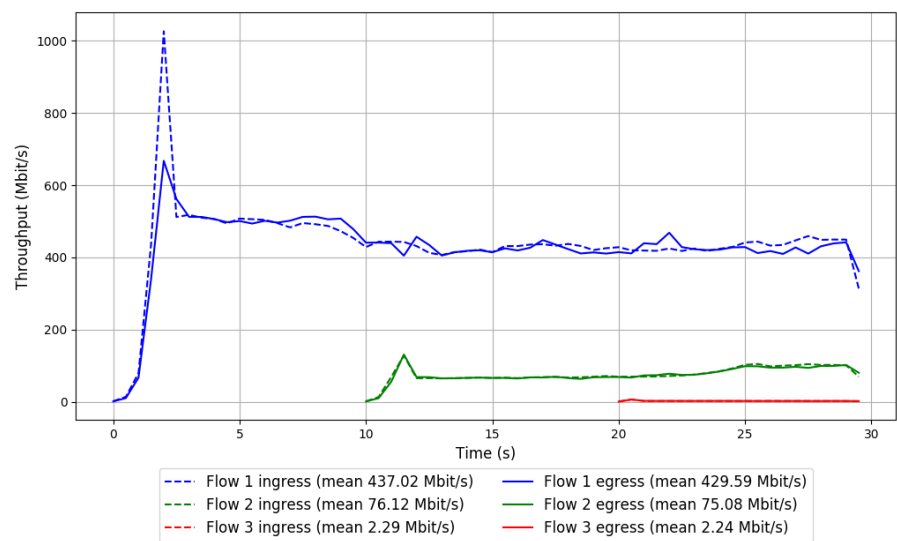


```
Run 10: Statistics of PCC

Start at: 2018-01-18 07:20:25
End at: 2018-01-18 07:20:55

# Below is generated by plot.py at 2018-01-18 10:05:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 480.21 Mbit/s
95th percentile per-packet one-way delay: 205.689 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 429.59 Mbit/s
95th percentile per-packet one-way delay: 205.792 ms
Loss rate: 1.68%
-- Flow 2:
Average throughput: 75.08 Mbit/s
95th percentile per-packet one-way delay: 199.680 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 200.048 ms
Loss rate: 2.03%
```


Run 10: Report of PCC — Data Link

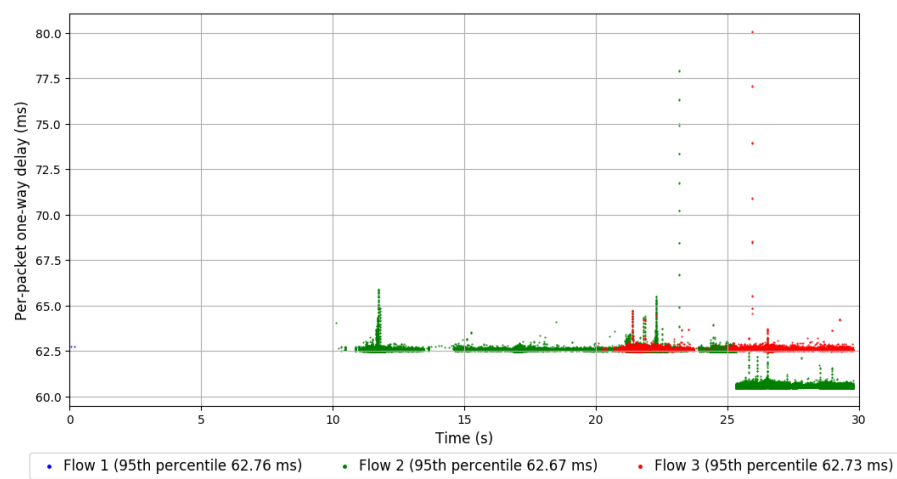
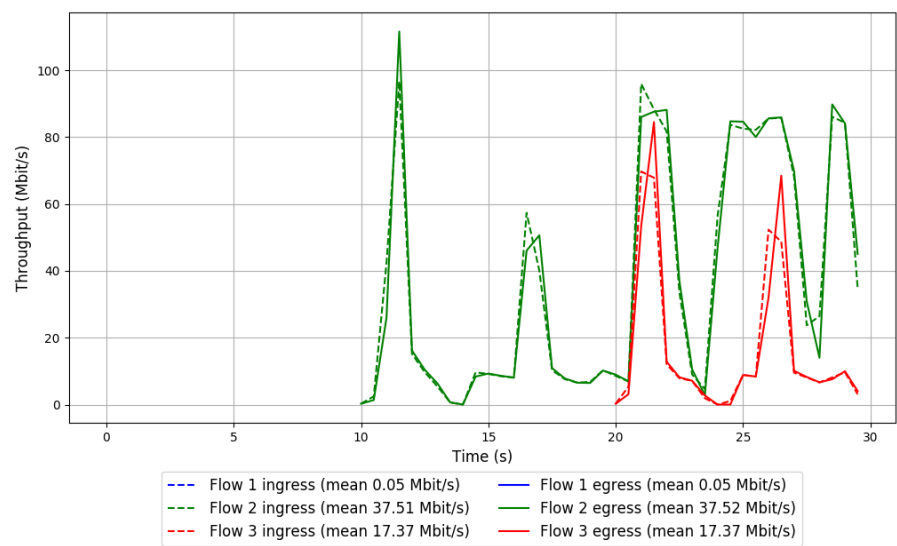


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-18 04:52:20
End at: 2018-01-18 04:52:50

# Below is generated by plot.py at 2018-01-18 10:05:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.49 Mbit/s
95th percentile per-packet one-way delay: 62.692 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.761 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.52 Mbit/s
95th percentile per-packet one-way delay: 62.673 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.37 Mbit/s
95th percentile per-packet one-way delay: 62.733 ms
Loss rate: 0.00%
```

Run 1: Report of QUIC Cubic — Data Link

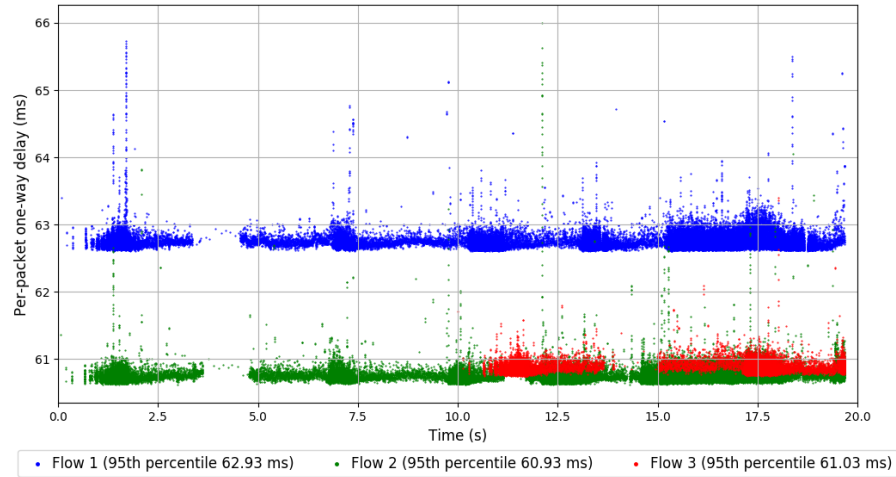
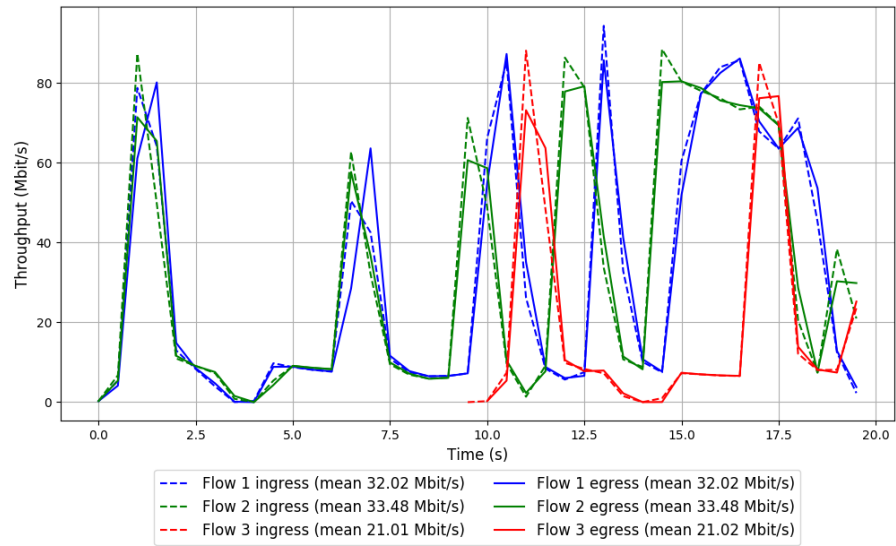


Run 2: Statistics of QUIC Cubic

Start at: 2018-01-18 05:09:12

End at: 2018-01-18 05:09:42

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-18 05:26:27

End at: 2018-01-18 05:26:57

Below is generated by plot.py at 2018-01-18 10:05:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.25 Mbit/s

95th percentile per-packet one-way delay: 62.677 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 47.60 Mbit/s

95th percentile per-packet one-way delay: 62.715 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 28.46 Mbit/s

95th percentile per-packet one-way delay: 61.244 ms

Loss rate: 0.00%

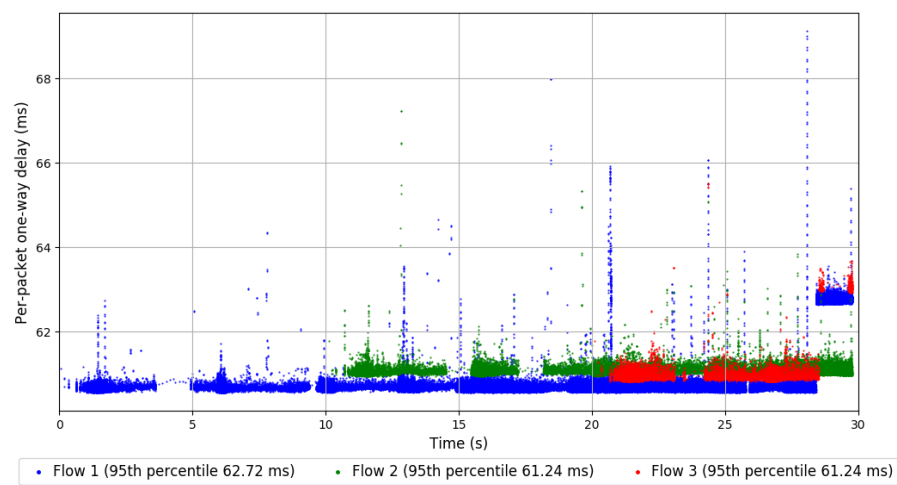
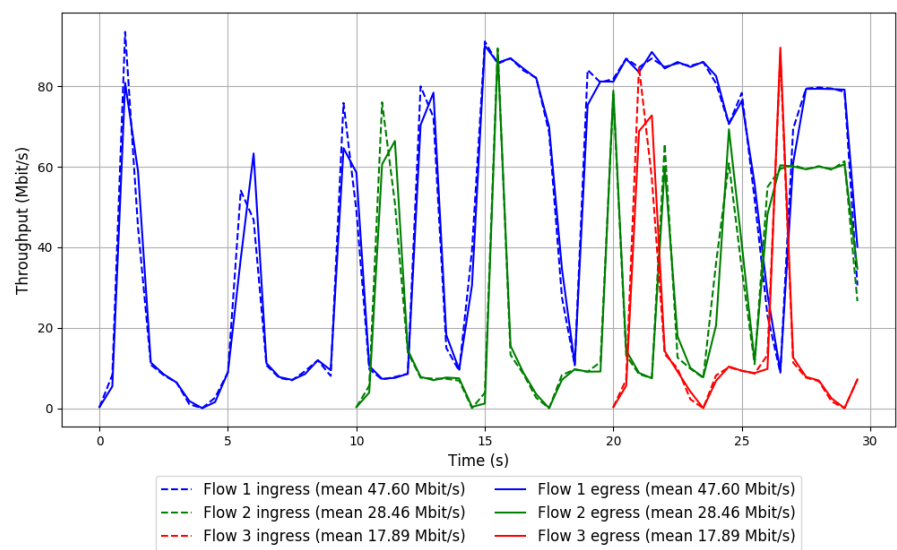
-- Flow 3:

Average throughput: 17.89 Mbit/s

95th percentile per-packet one-way delay: 61.243 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-18 05:43:31

End at: 2018-01-18 05:44:01

Below is generated by plot.py at 2018-01-18 10:05:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.37 Mbit/s

95th percentile per-packet one-way delay: 63.146 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 53.14 Mbit/s

95th percentile per-packet one-way delay: 63.042 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.65 Mbit/s

95th percentile per-packet one-way delay: 63.217 ms

Loss rate: 0.00%

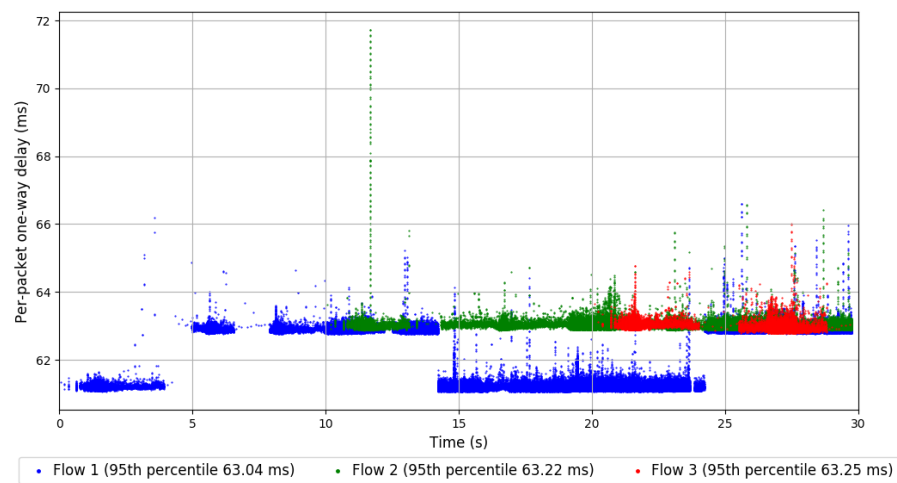
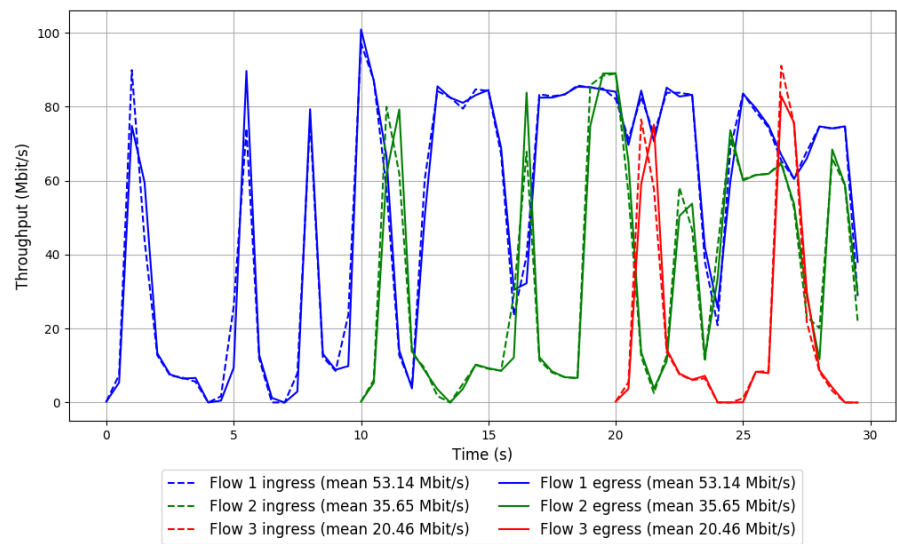
-- Flow 3:

Average throughput: 20.46 Mbit/s

95th percentile per-packet one-way delay: 63.248 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-18 06:00:53

End at: 2018-01-18 06:01:23

Below is generated by plot.py at 2018-01-18 10:05:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.65 Mbit/s

95th percentile per-packet one-way delay: 63.226 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 51.05 Mbit/s

95th percentile per-packet one-way delay: 62.927 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.59 Mbit/s

95th percentile per-packet one-way delay: 63.402 ms

Loss rate: 0.00%

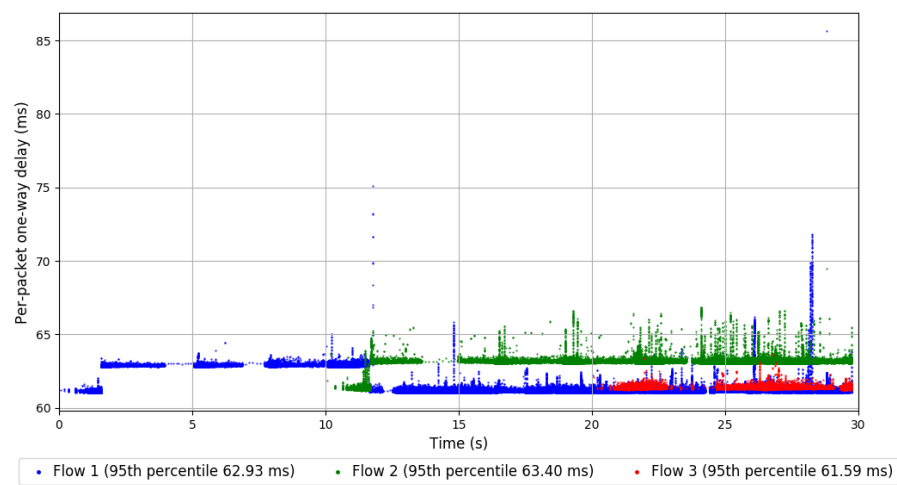
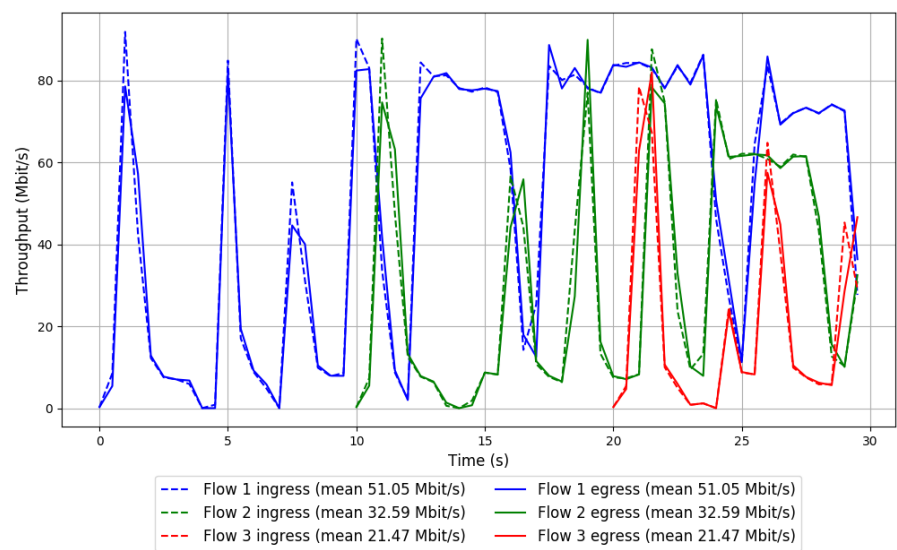
-- Flow 3:

Average throughput: 21.47 Mbit/s

95th percentile per-packet one-way delay: 61.593 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-01-18 06:18:12

End at: 2018-01-18 06:18:42

Below is generated by plot.py at 2018-01-18 10:05:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 75.46 Mbit/s

95th percentile per-packet one-way delay: 63.310 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.13 Mbit/s

95th percentile per-packet one-way delay: 63.316 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.37 Mbit/s

95th percentile per-packet one-way delay: 63.315 ms

Loss rate: 0.00%

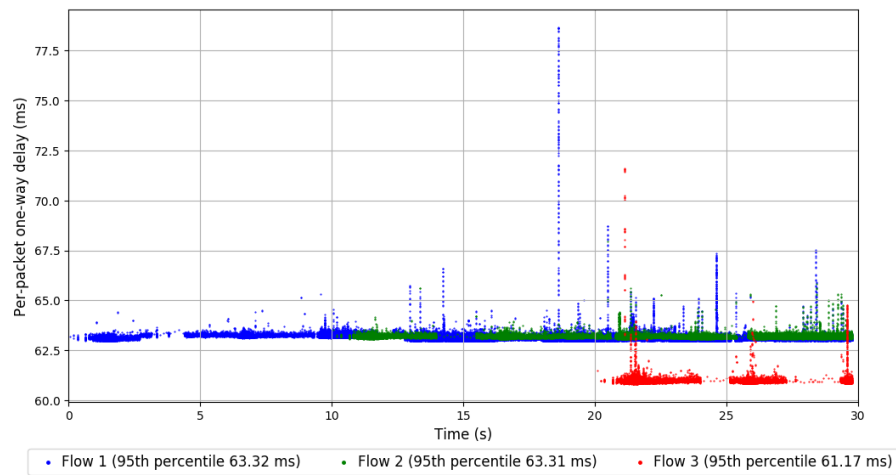
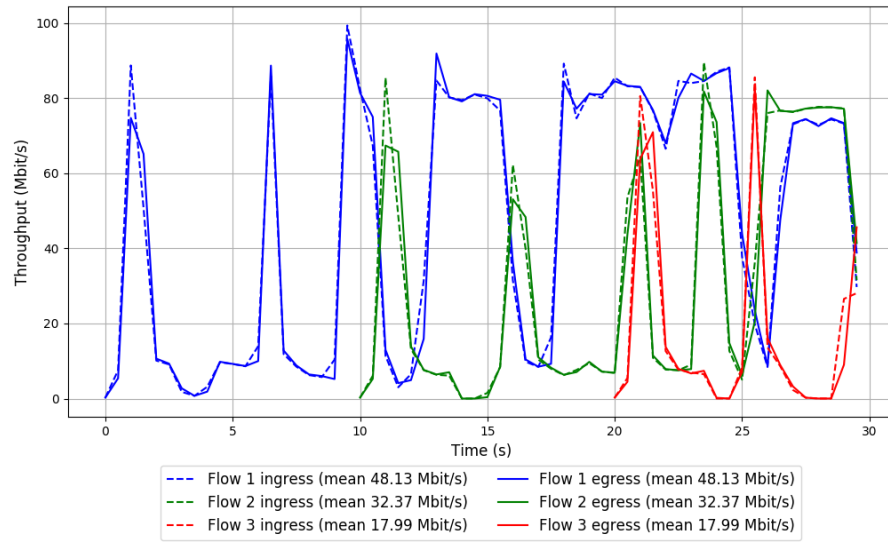
-- Flow 3:

Average throughput: 17.99 Mbit/s

95th percentile per-packet one-way delay: 61.166 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-18 06:35:18

End at: 2018-01-18 06:35:48

Below is generated by plot.py at 2018-01-18 10:05:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.46 Mbit/s

95th percentile per-packet one-way delay: 63.416 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.51 Mbit/s

95th percentile per-packet one-way delay: 63.459 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 35.34 Mbit/s

95th percentile per-packet one-way delay: 61.553 ms

Loss rate: 0.00%

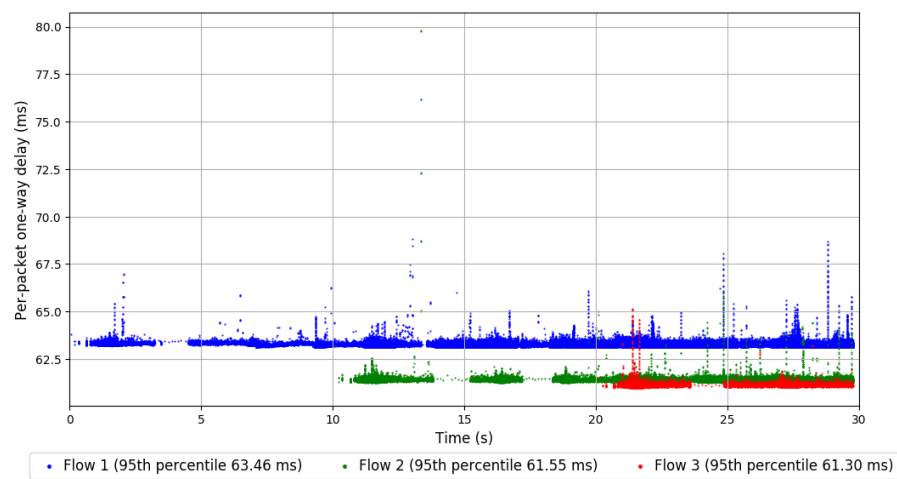
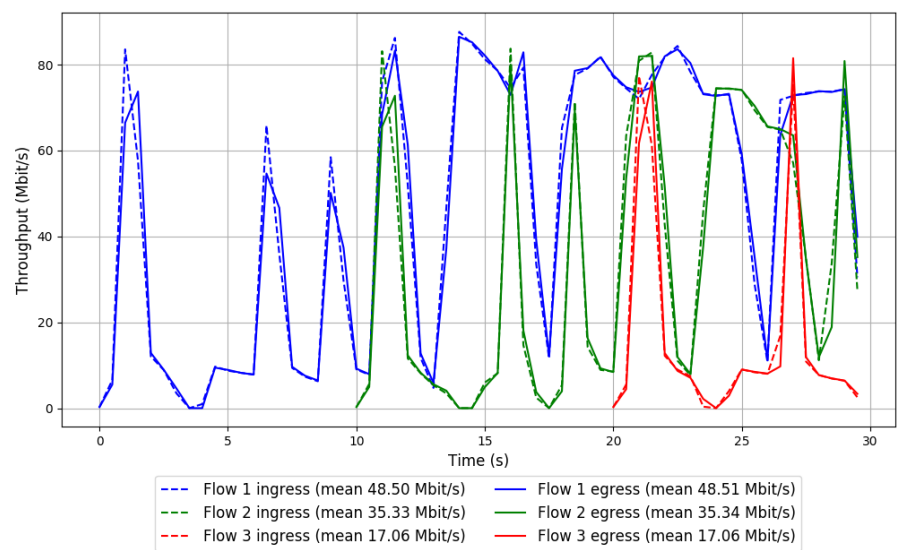
-- Flow 3:

Average throughput: 17.06 Mbit/s

95th percentile per-packet one-way delay: 61.300 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-18 06:52:33

End at: 2018-01-18 06:53:03

Below is generated by plot.py at 2018-01-18 10:05:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.56 Mbit/s

95th percentile per-packet one-way delay: 63.457 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 48.13 Mbit/s

95th percentile per-packet one-way delay: 63.428 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.29 Mbit/s

95th percentile per-packet one-way delay: 63.469 ms

Loss rate: 0.00%

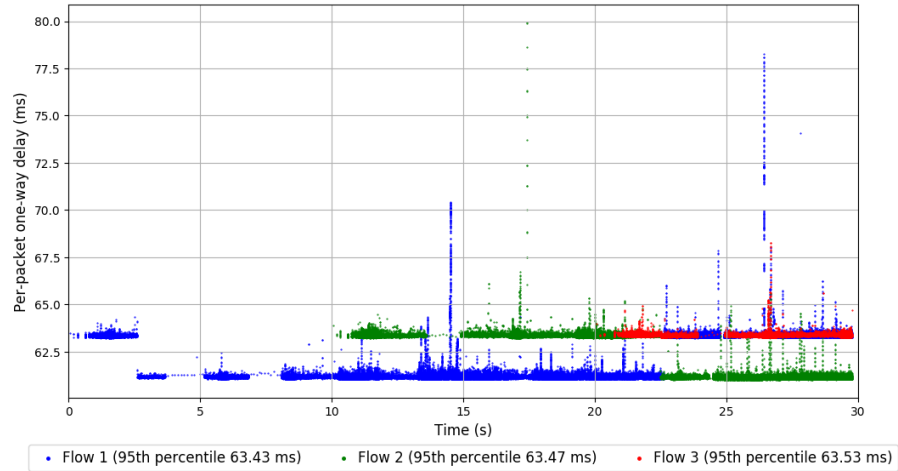
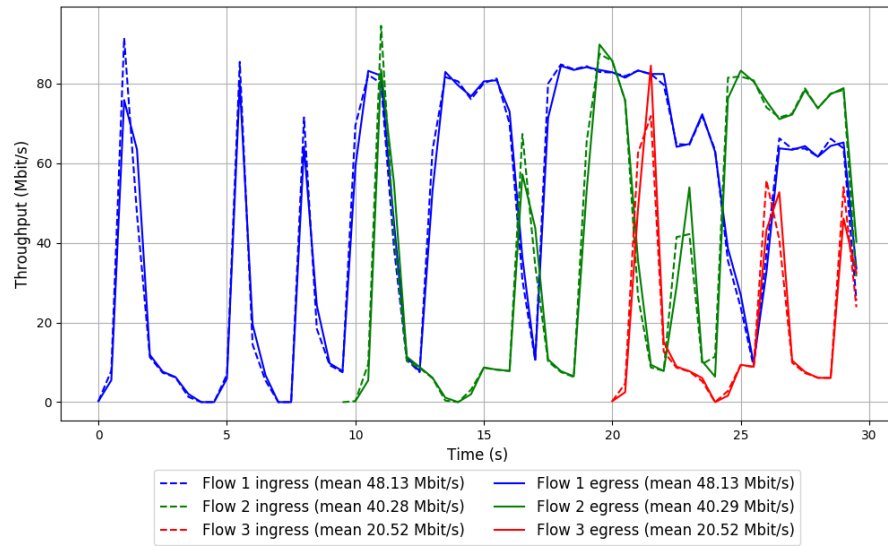
-- Flow 3:

Average throughput: 20.52 Mbit/s

95th percentile per-packet one-way delay: 63.530 ms

Loss rate: 0.02%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-18 07:09:33

End at: 2018-01-18 07:10:03

Below is generated by plot.py at 2018-01-18 10:05:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.67 Mbit/s

95th percentile per-packet one-way delay: 63.474 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 45.23 Mbit/s

95th percentile per-packet one-way delay: 63.444 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 31.41 Mbit/s

95th percentile per-packet one-way delay: 63.501 ms

Loss rate: 0.00%

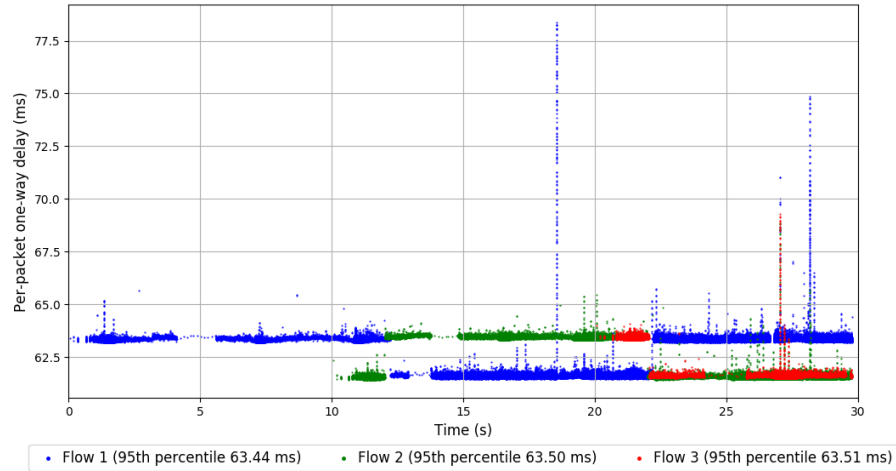
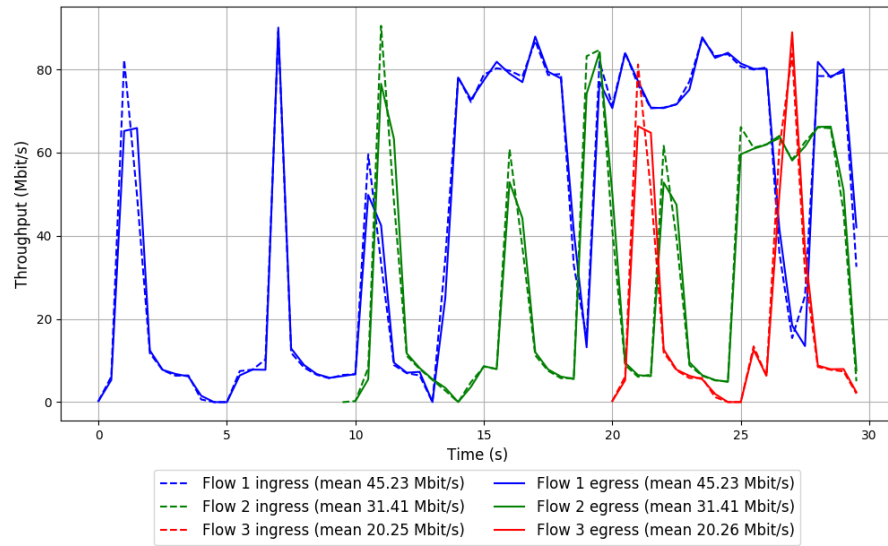
-- Flow 3:

Average throughput: 20.26 Mbit/s

95th percentile per-packet one-way delay: 63.509 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

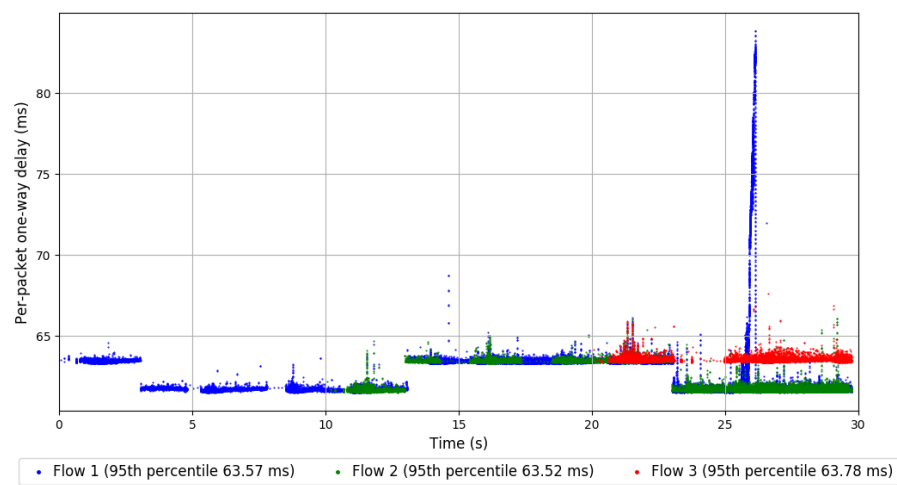
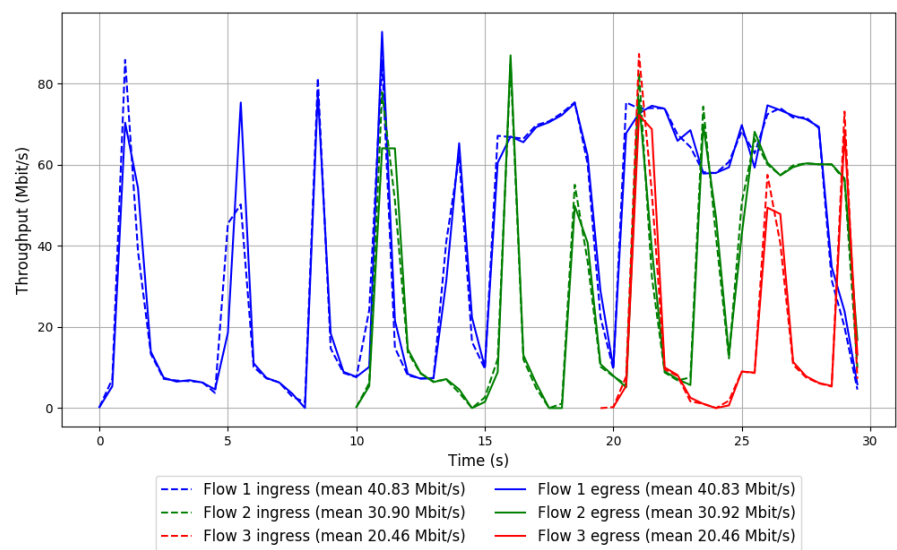


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-18 07:26:32
End at: 2018-01-18 07:27:02

# Below is generated by plot.py at 2018-01-18 10:05:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.00 Mbit/s
95th percentile per-packet one-way delay: 63.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.83 Mbit/s
95th percentile per-packet one-way delay: 63.568 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 30.92 Mbit/s
95th percentile per-packet one-way delay: 63.516 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.46 Mbit/s
95th percentile per-packet one-way delay: 63.780 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

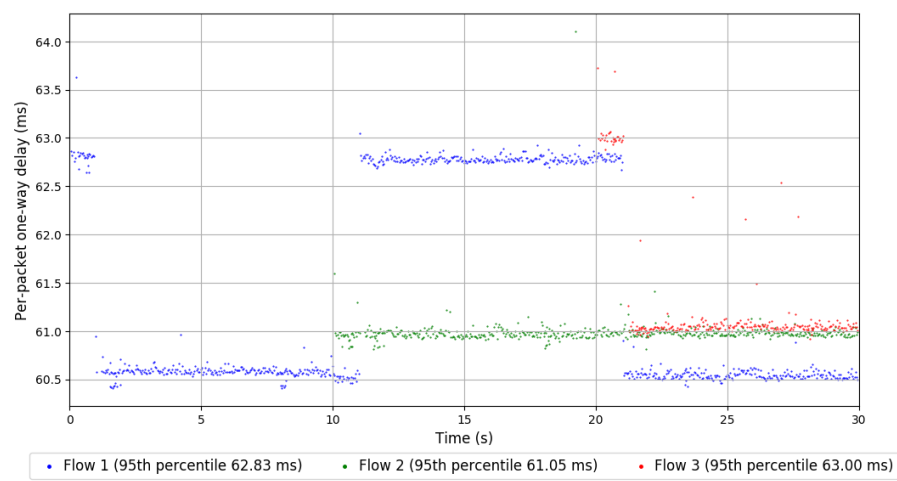
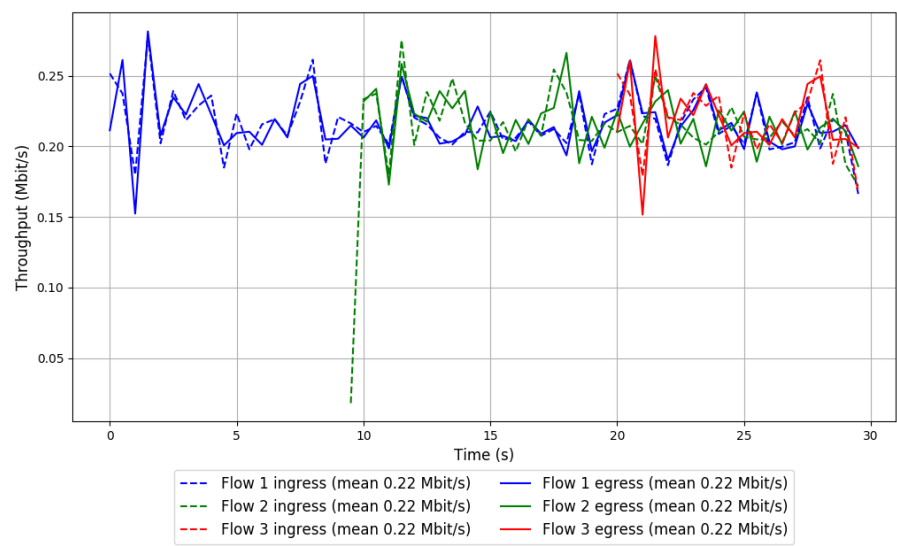


```
Run 1: Statistics of SCReAM

Start at: 2018-01-18 04:49:24
End at: 2018-01-18 04:49:54

# Below is generated by plot.py at 2018-01-18 10:05:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 62.818 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.826 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.049 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.996 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

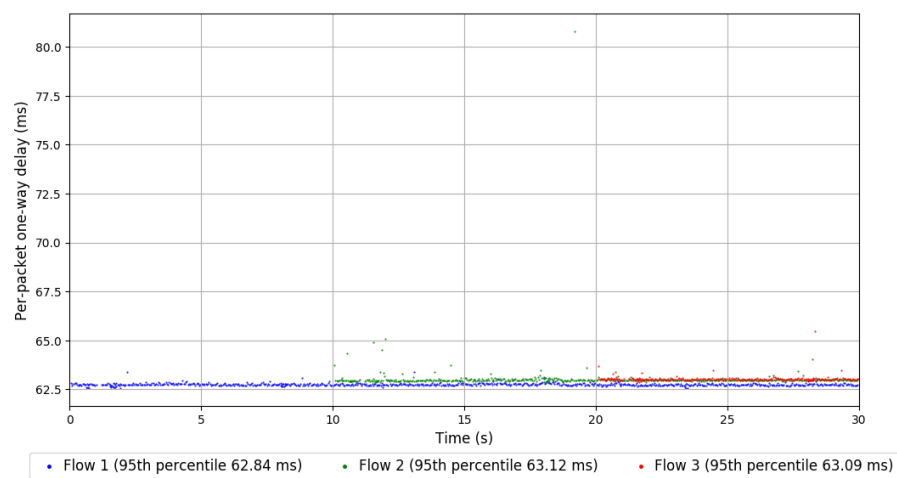
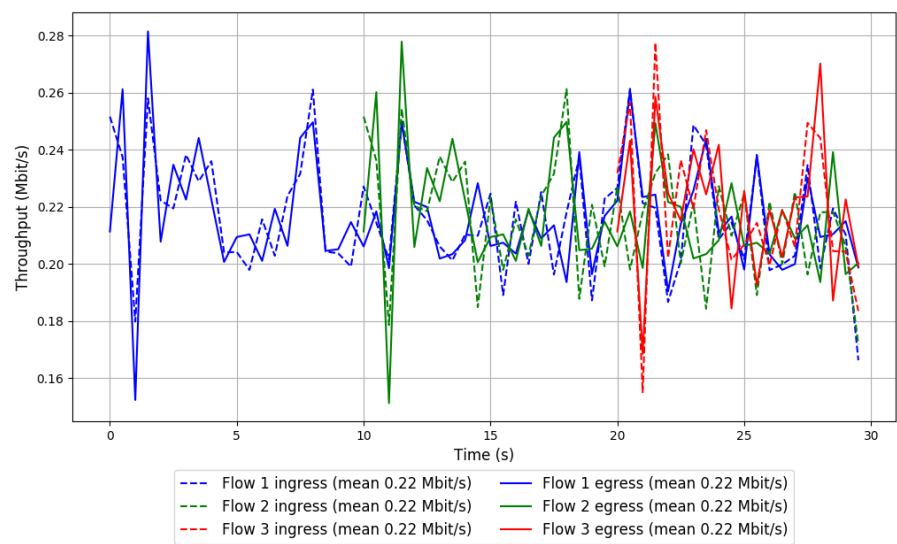


```
Run 2: Statistics of SReAM

Start at: 2018-01-18 05:06:12
End at: 2018-01-18 05:06:42

# Below is generated by plot.py at 2018-01-18 10:05:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.060 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.838 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.115 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.095 ms
Loss rate: 0.00%
```


Run 2: Report of SReAM — Data Link

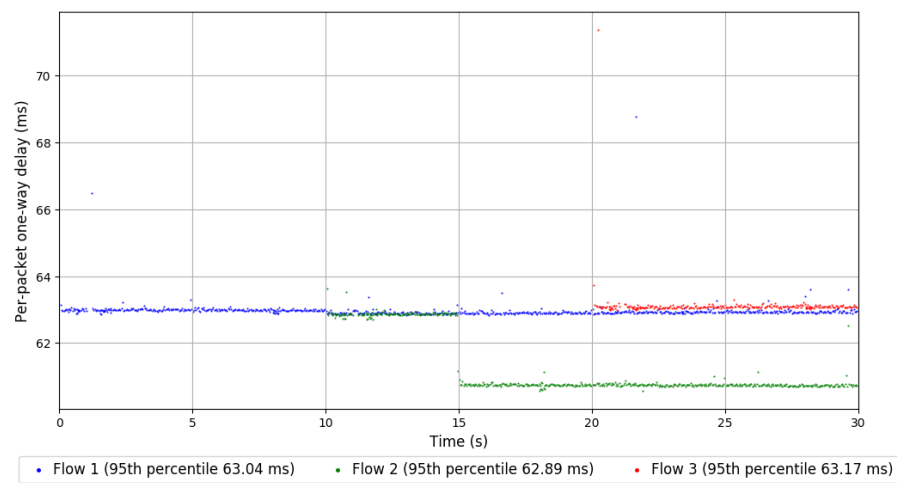
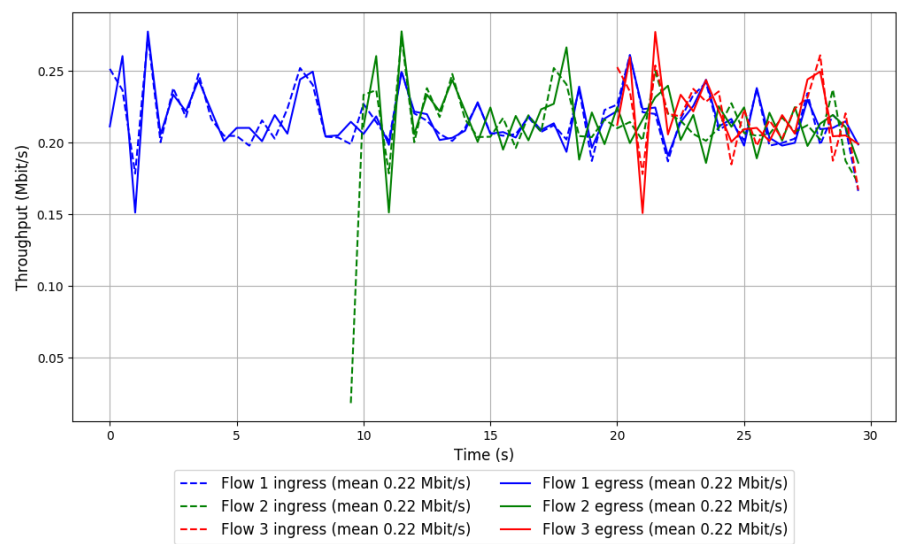


```
Run 3: Statistics of SReAM

Start at: 2018-01-18 05:23:30
End at: 2018-01-18 05:24:00

# Below is generated by plot.py at 2018-01-18 10:05:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.109 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.043 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.891 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.166 ms
Loss rate: 0.00%
```

Run 3: Report of SReAM — Data Link

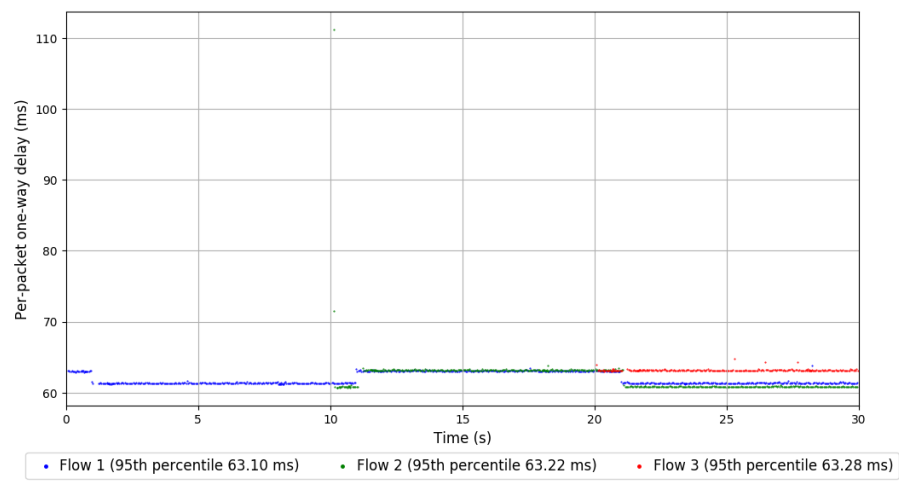
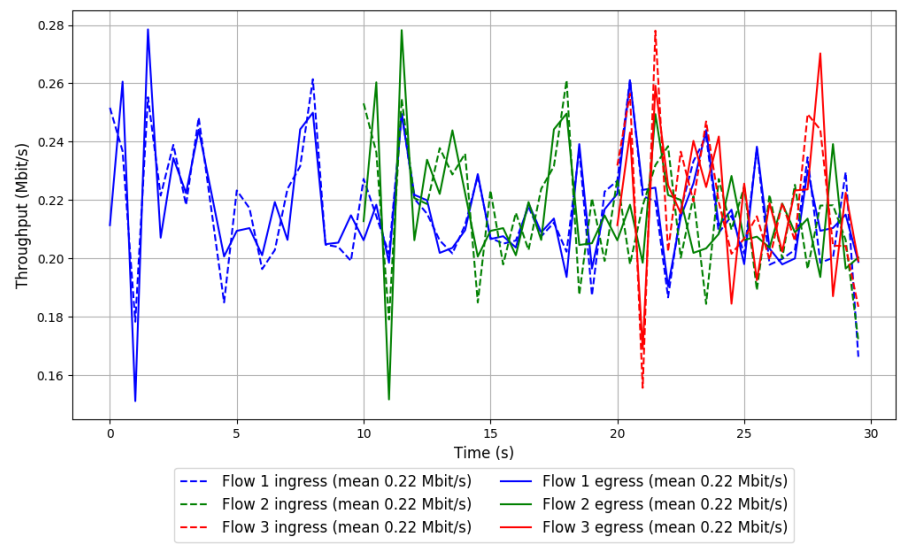


```
Run 4: Statistics of SCReAM

Start at: 2018-01-18 05:40:34
End at: 2018-01-18 05:41:04

# Below is generated by plot.py at 2018-01-18 10:05:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.202 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.097 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.224 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.276 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-01-18 05:57:54

End at: 2018-01-18 05:58:24

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.258 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.279 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.171 ms

Loss rate: 0.00%

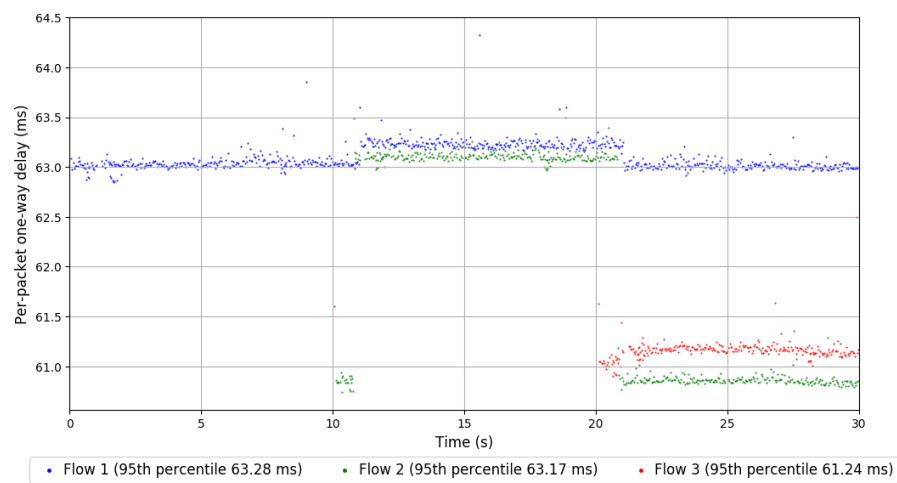
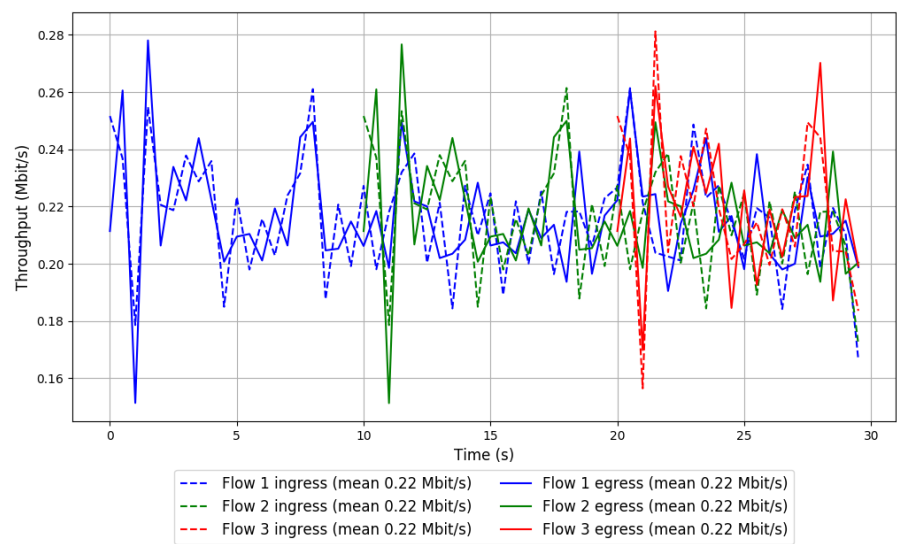
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.244 ms

Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

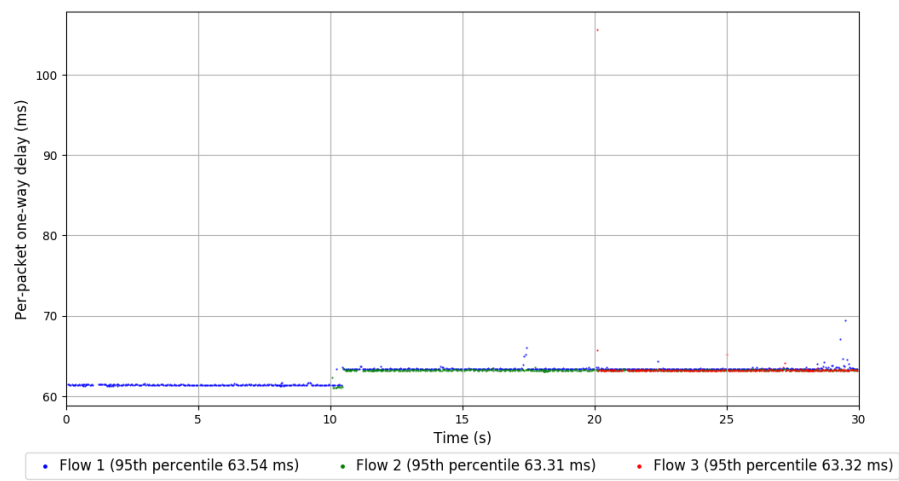
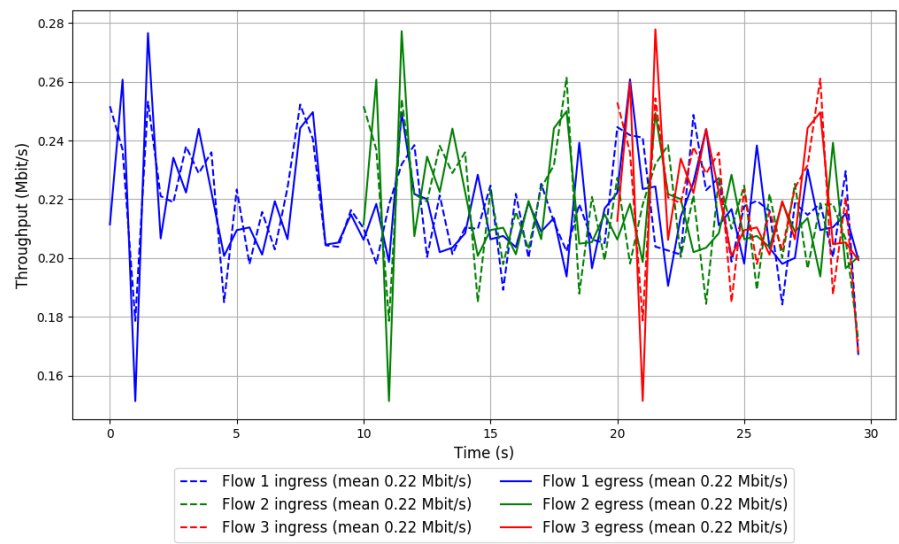


```
Run 6: Statistics of SReAM

Start at: 2018-01-18 06:15:15
End at: 2018-01-18 06:15:45

# Below is generated by plot.py at 2018-01-18 10:05:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.450 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.539 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.315 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.323 ms
Loss rate: 0.00%
```


Run 6: Report of SReAM — Data Link

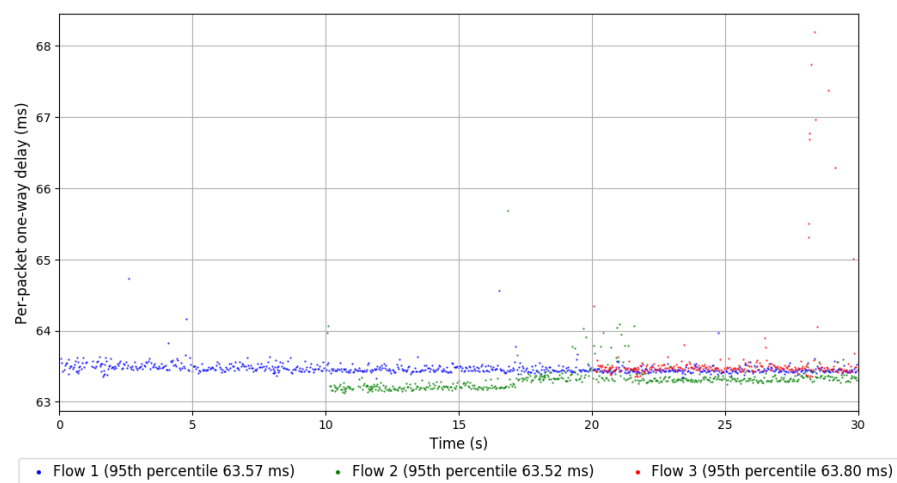
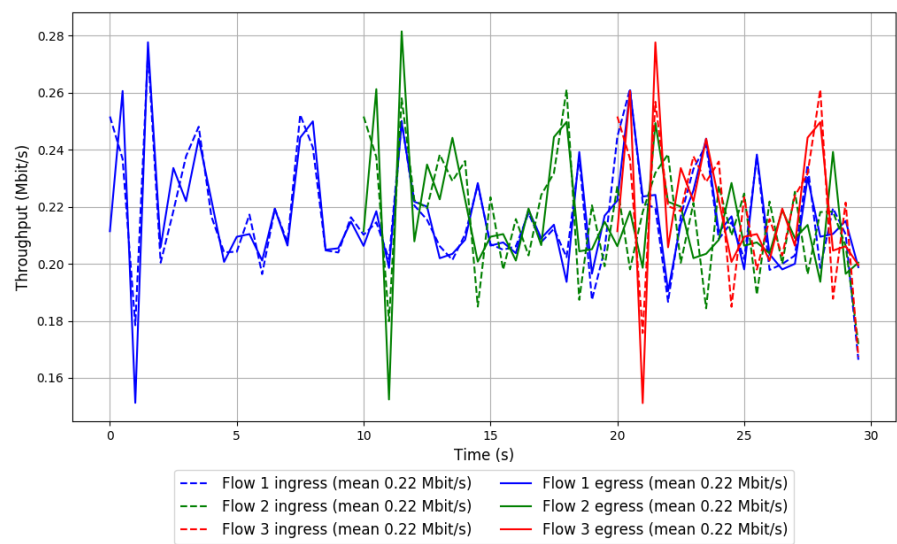


```
Run 7: Statistics of SReAM

Start at: 2018-01-18 06:32:18
End at: 2018-01-18 06:32:48

# Below is generated by plot.py at 2018-01-18 10:05:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.575 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.567 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.525 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.805 ms
Loss rate: 0.00%
```

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-01-18 06:49:33

End at: 2018-01-18 06:50:03

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.600 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.606 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.589 ms

Loss rate: 0.00%

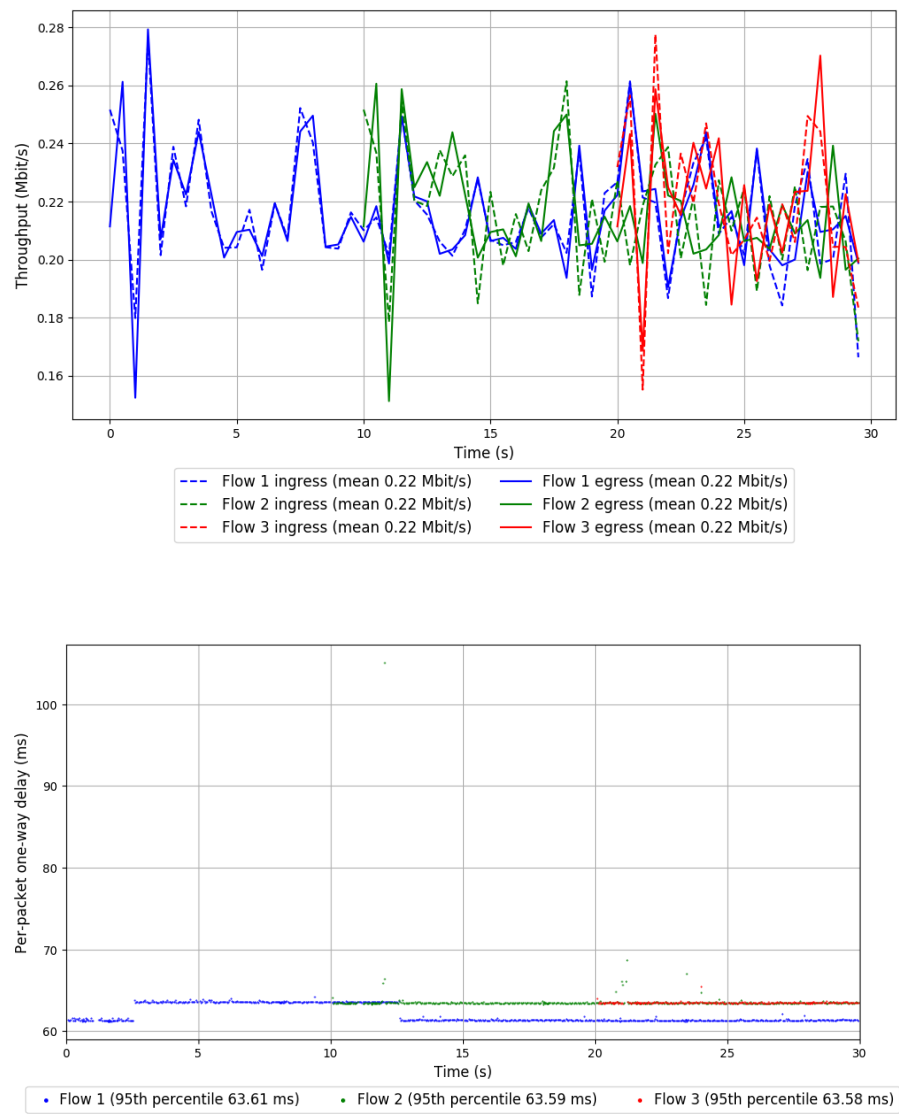
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.575 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-01-18 07:06:32

End at: 2018-01-18 07:07:02

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 63.677 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.688 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.608 ms

Loss rate: 0.00%

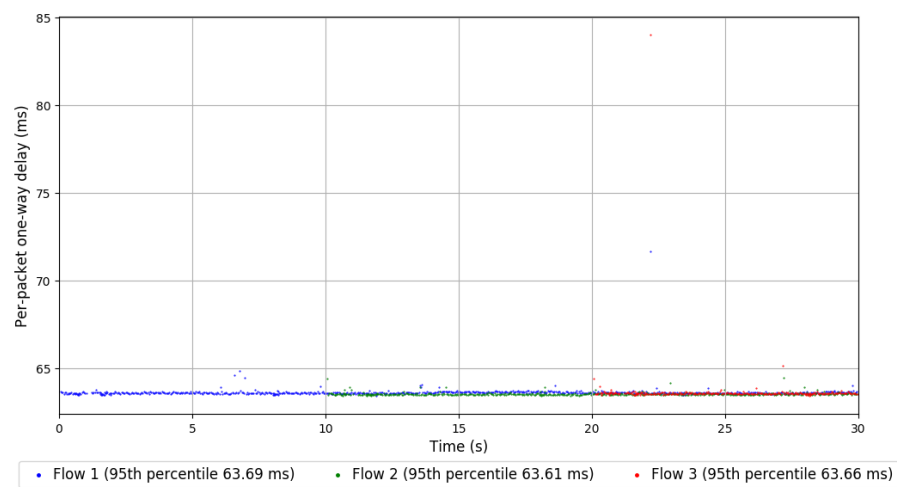
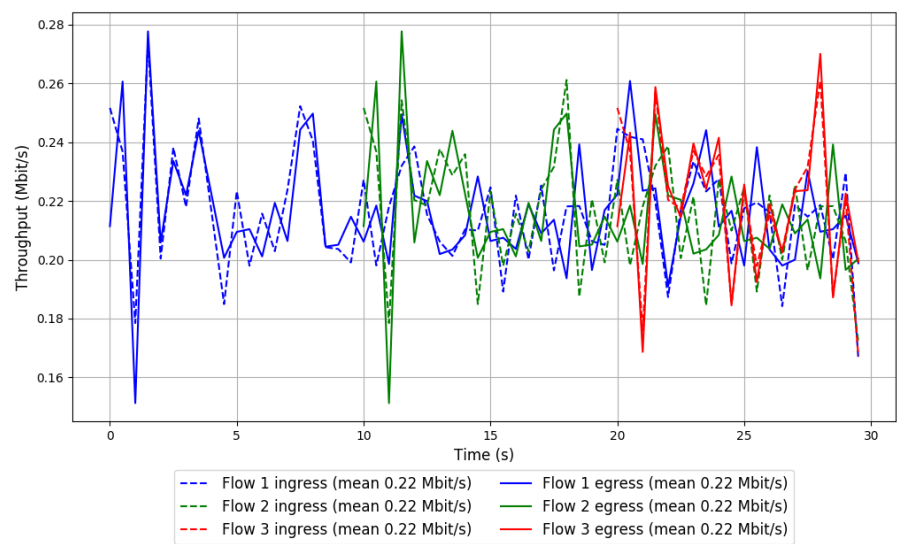
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.660 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

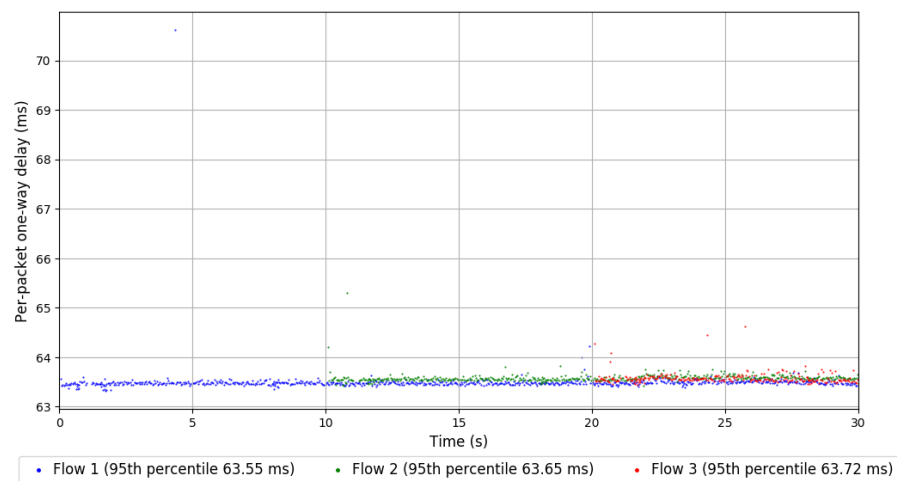
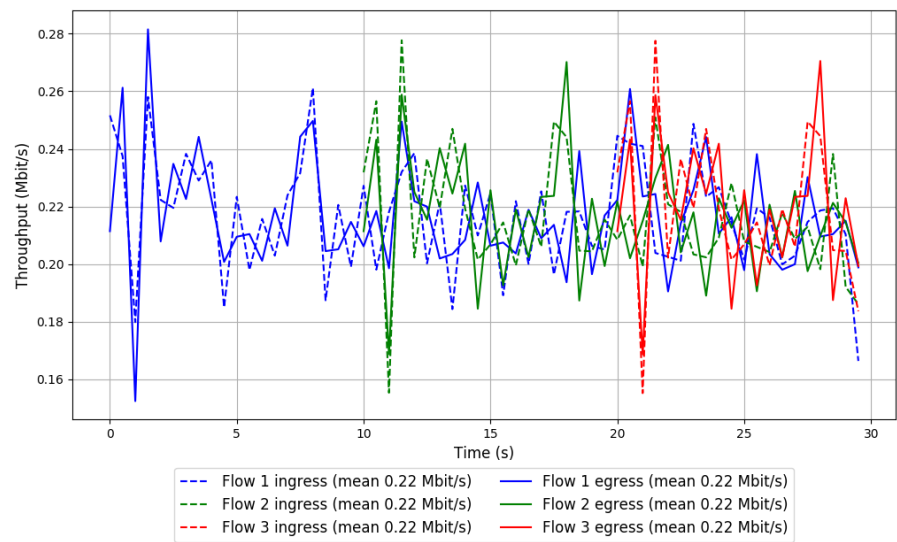


```
Run 10: Statistics of SReAM

Start at: 2018-01-18 07:23:39
End at: 2018-01-18 07:24:09

# Below is generated by plot.py at 2018-01-18 10:05:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.644 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.552 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.651 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.723 ms
Loss rate: 0.00%
```


Run 10: Report of SReAM — Data Link

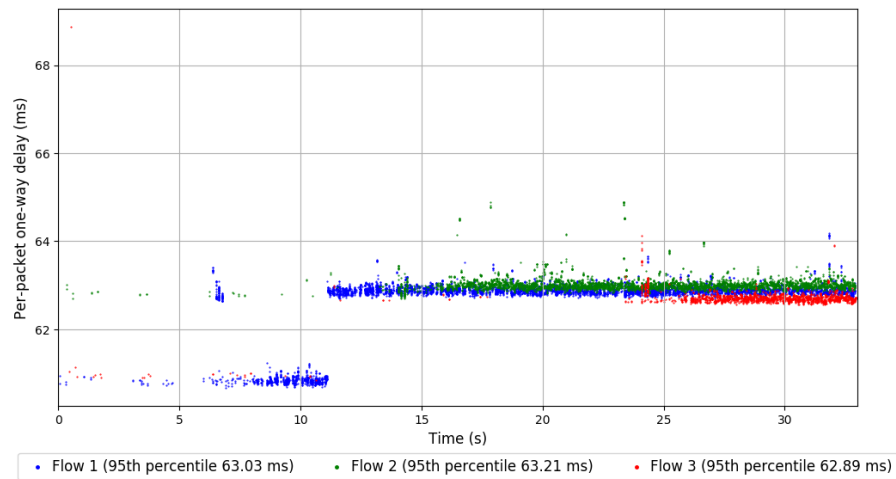
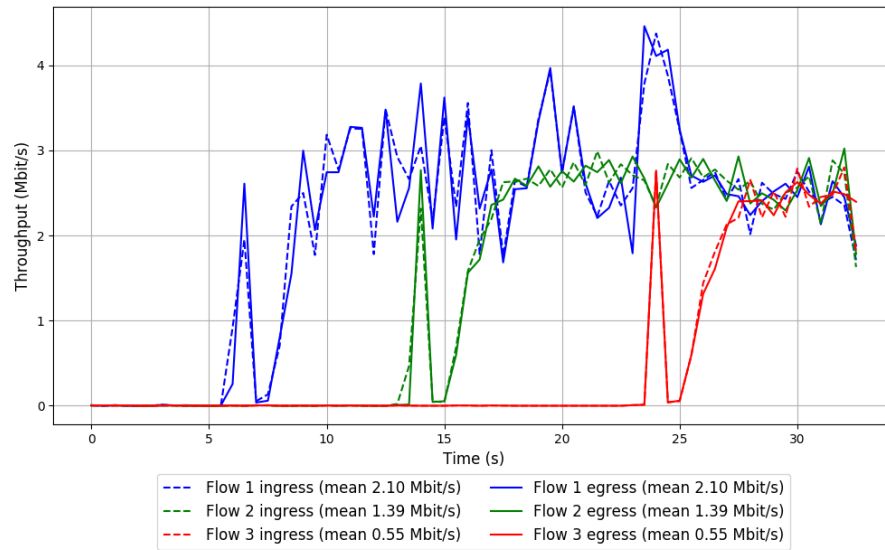


```
Run 1: Statistics of WebRTC media

Start at: 2018-01-18 04:50:57
End at: 2018-01-18 04:51:27

# Below is generated by plot.py at 2018-01-18 10:05:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.01 Mbit/s
95th percentile per-packet one-way delay: 63.111 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 63.032 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 63.209 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 62.892 ms
Loss rate: 0.00%
```

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-18 05:07:49

End at: 2018-01-18 05:08:19

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 63.176 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 63.214 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 62.917 ms

Loss rate: 0.00%

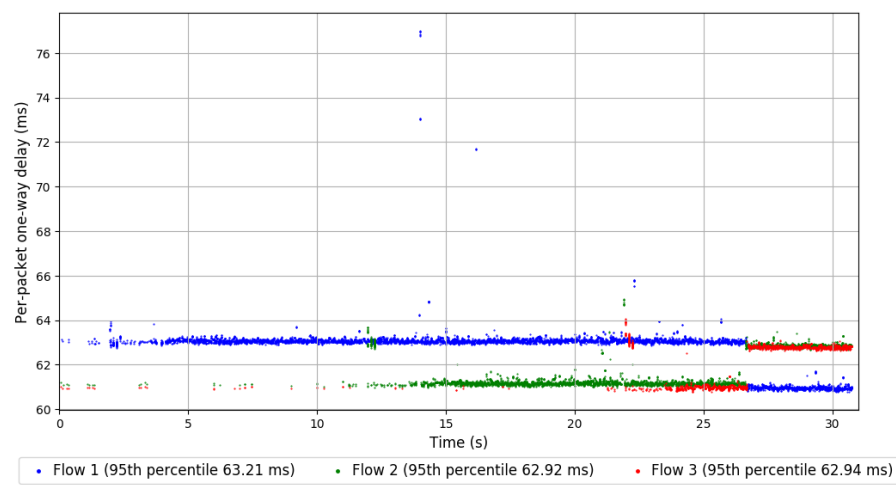
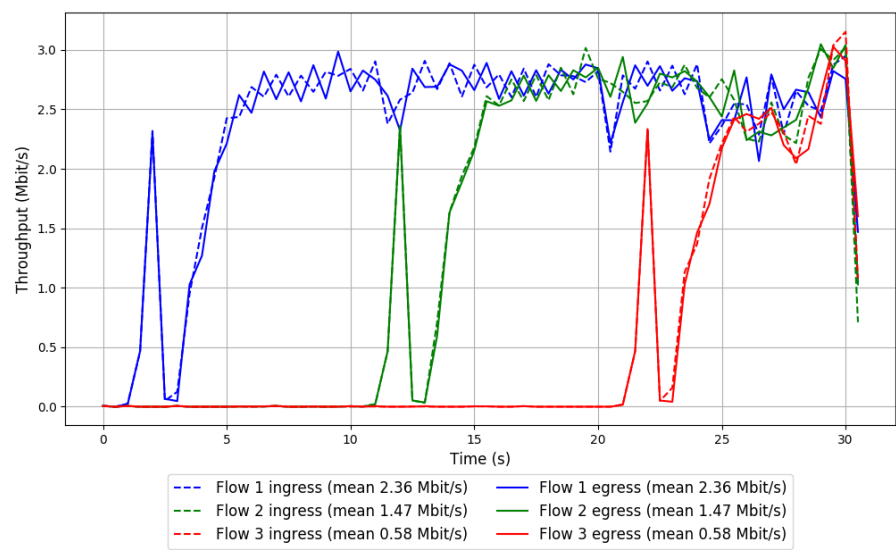
-- Flow 3:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 62.937 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-01-18 05:25:03

End at: 2018-01-18 05:25:33

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.08 Mbit/s

95th percentile per-packet one-way delay: 62.915 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 61.392 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.004 ms

Loss rate: 0.00%

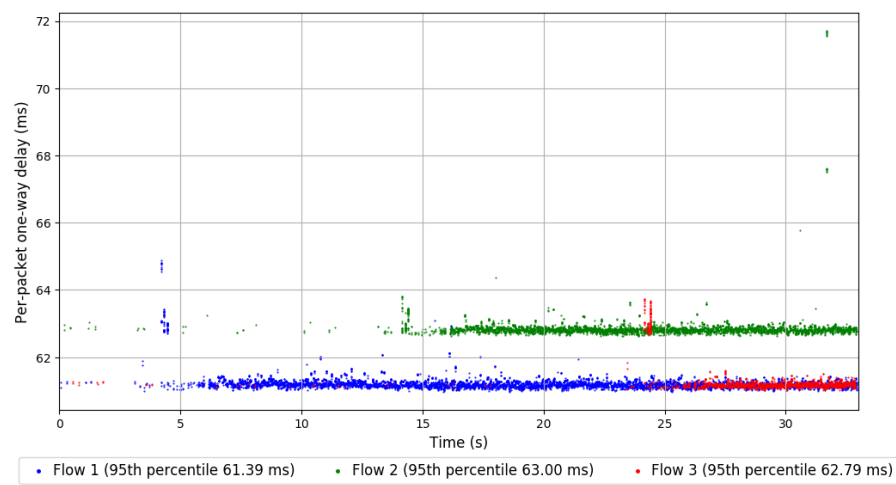
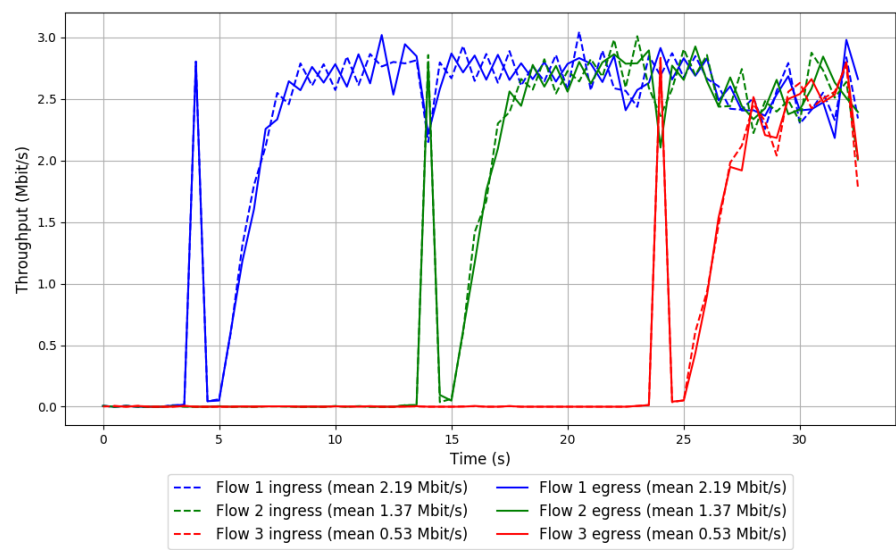
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 62.789 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-01-18 05:42:07

End at: 2018-01-18 05:42:37

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 63.255 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 63.190 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 63.236 ms

Loss rate: 0.00%

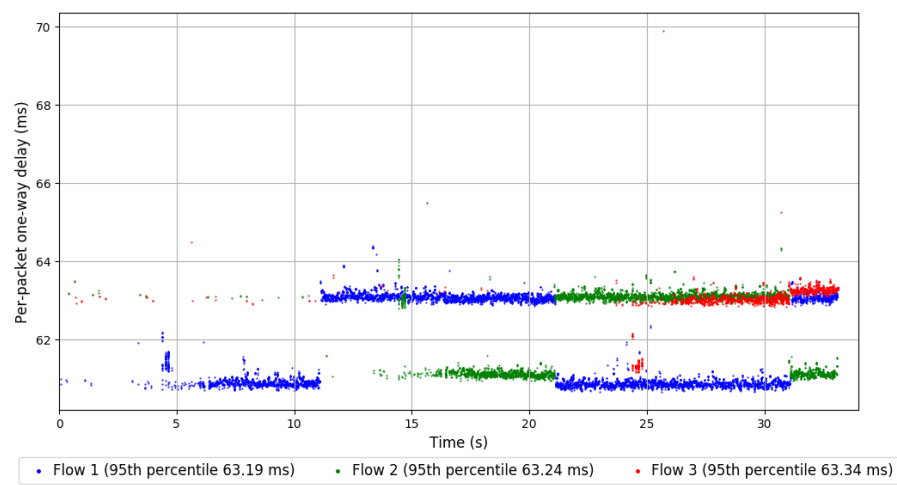
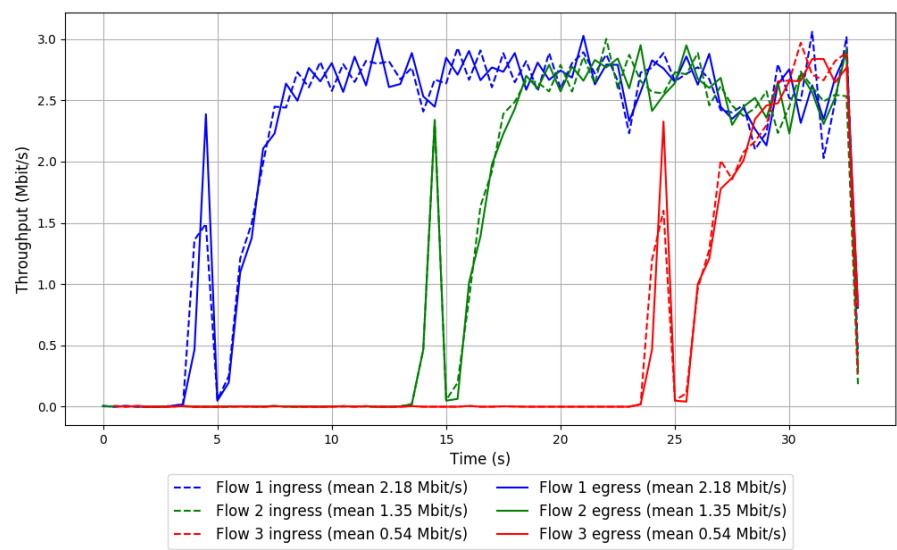
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 63.344 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-18 05:59:31

End at: 2018-01-18 06:00:01

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.07 Mbit/s

95th percentile per-packet one-way delay: 63.399 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.19 Mbit/s

95th percentile per-packet one-way delay: 63.308 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.170 ms

Loss rate: 0.00%

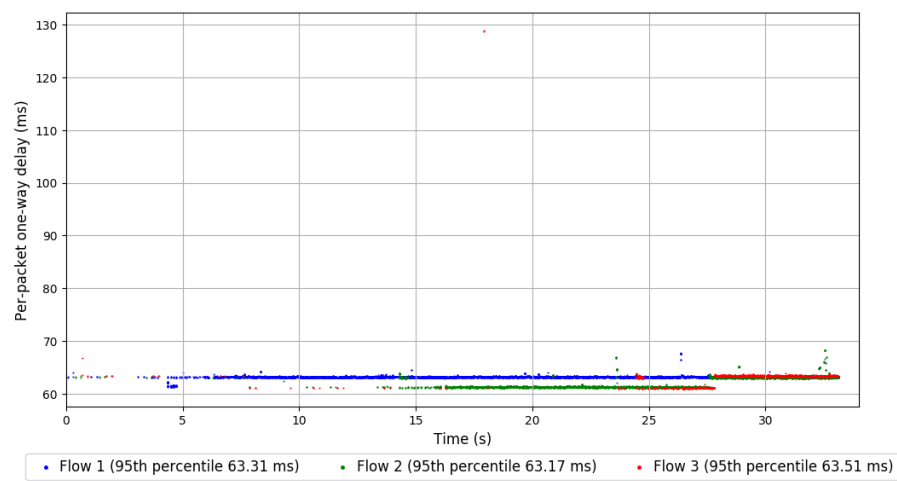
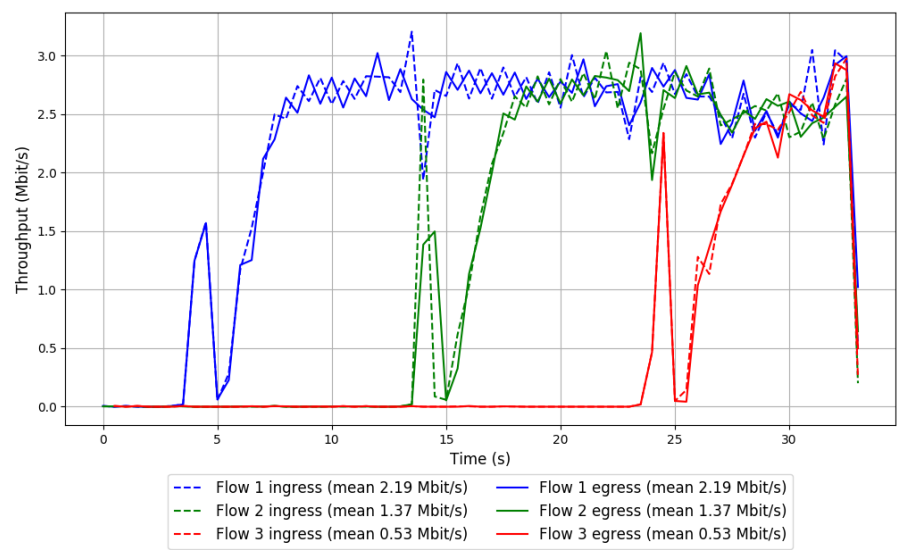
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 63.511 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-18 06:16:49

End at: 2018-01-18 06:17:19

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.05 Mbit/s

95th percentile per-packet one-way delay: 63.495 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.18 Mbit/s

95th percentile per-packet one-way delay: 63.490 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.541 ms

Loss rate: 0.00%

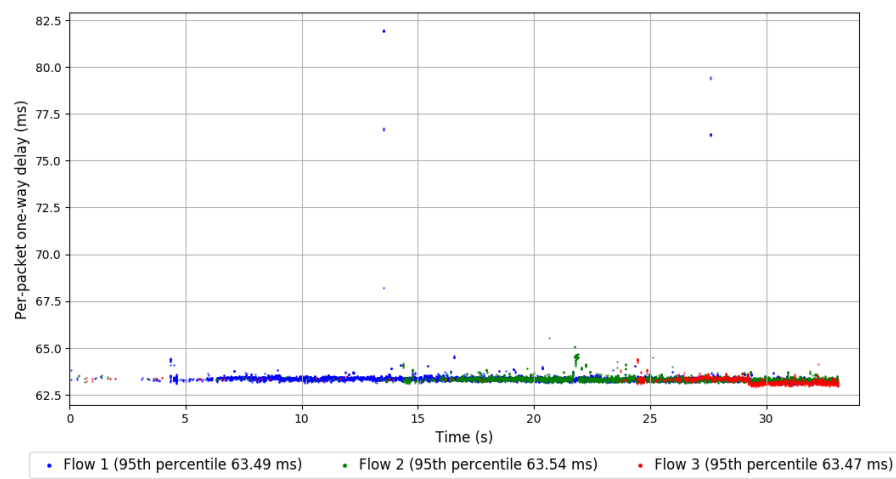
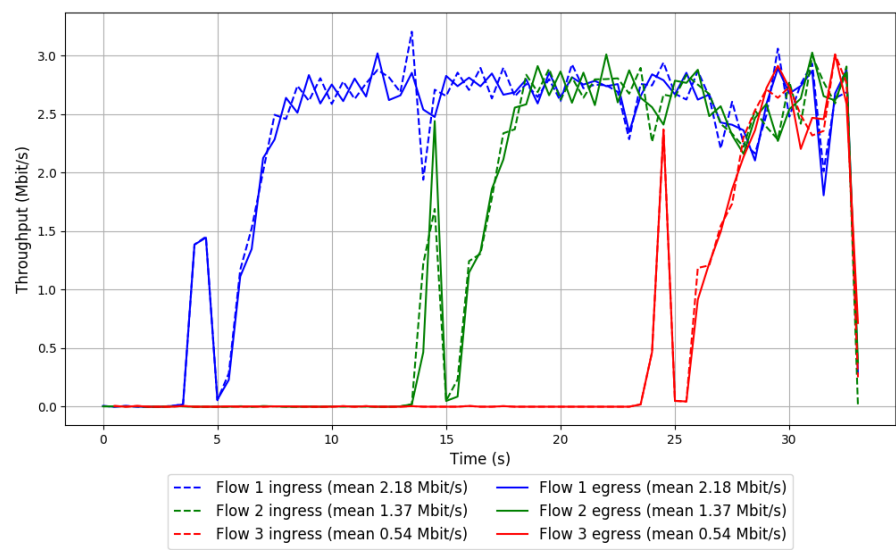
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 63.469 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-01-18 06:33:55

End at: 2018-01-18 06:34:25

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.01 Mbit/s

95th percentile per-packet one-way delay: 63.633 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.16 Mbit/s

95th percentile per-packet one-way delay: 63.685 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.34 Mbit/s

95th percentile per-packet one-way delay: 63.499 ms

Loss rate: 0.02%

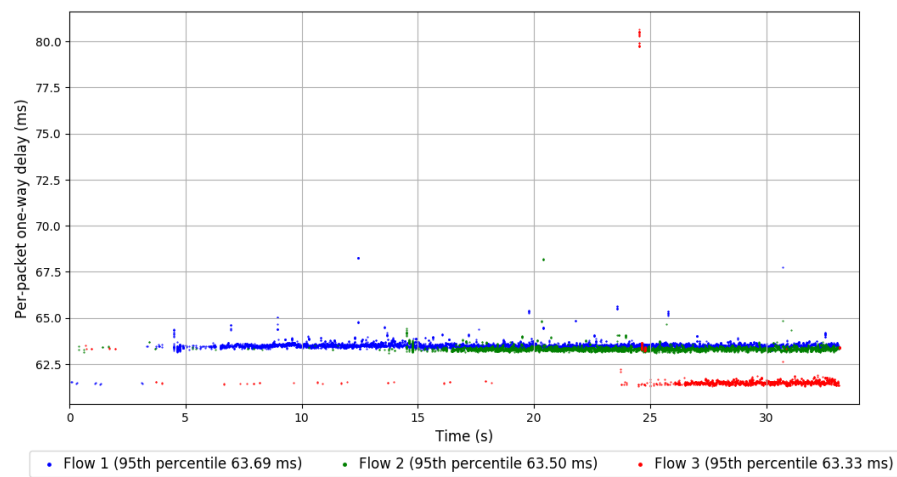
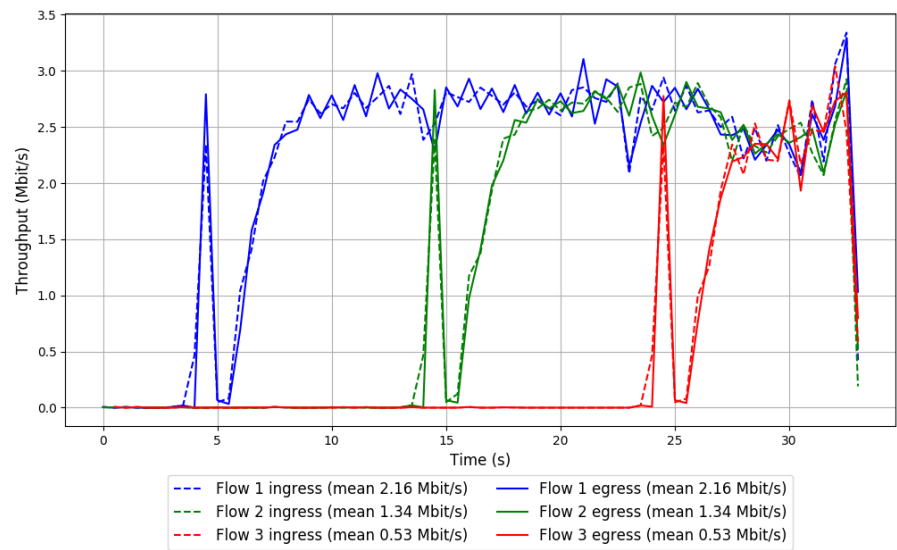
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 63.325 ms

Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-18 06:51:09

End at: 2018-01-18 06:51:39

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.09 Mbit/s

95th percentile per-packet one-way delay: 63.653 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.20 Mbit/s

95th percentile per-packet one-way delay: 63.653 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.37 Mbit/s

95th percentile per-packet one-way delay: 63.681 ms

Loss rate: 0.02%

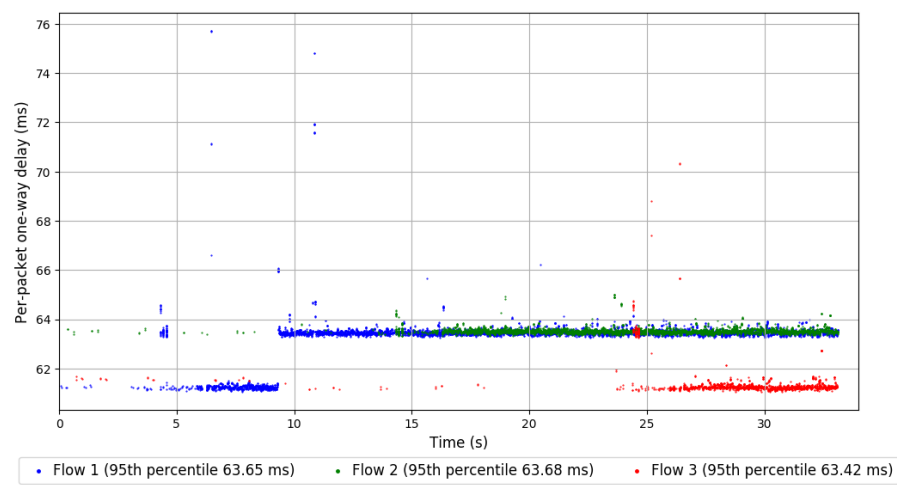
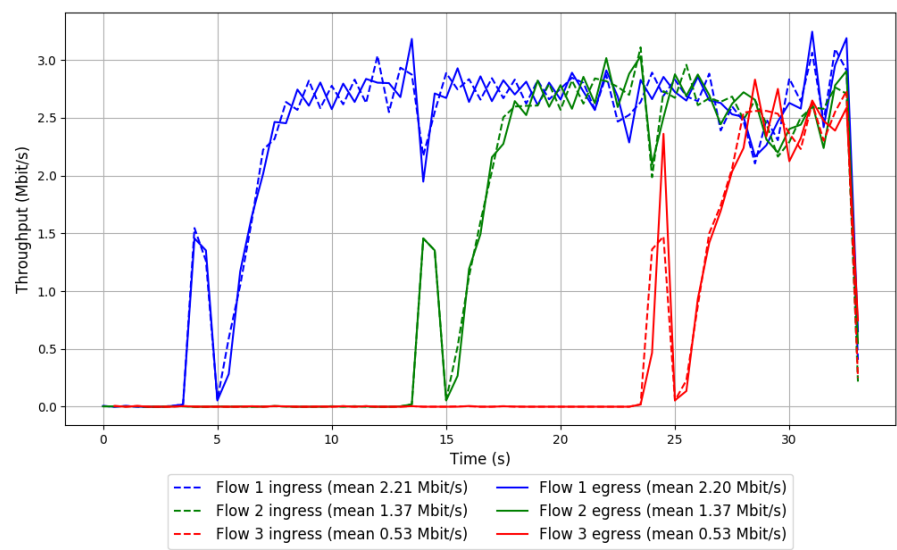
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 63.417 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-18 07:08:10

End at: 2018-01-18 07:08:40

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.40 Mbit/s

95th percentile per-packet one-way delay: 63.710 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 63.689 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.47 Mbit/s

95th percentile per-packet one-way delay: 63.595 ms

Loss rate: 0.00%

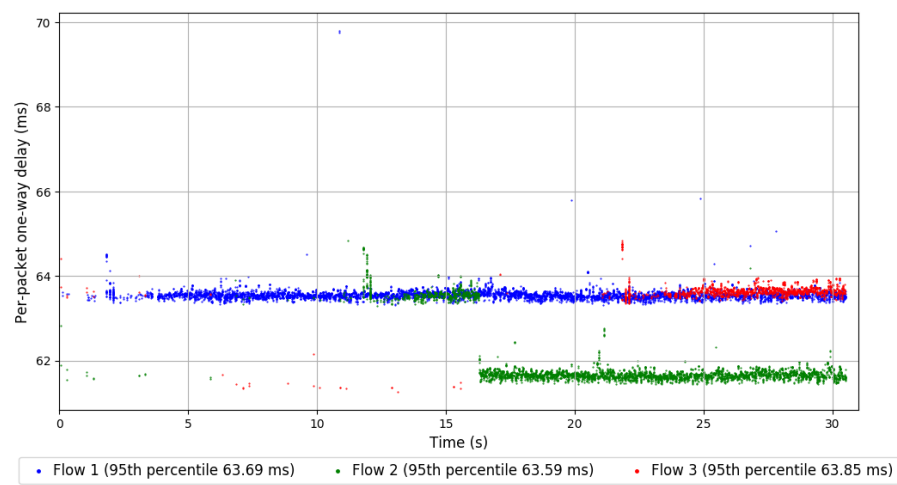
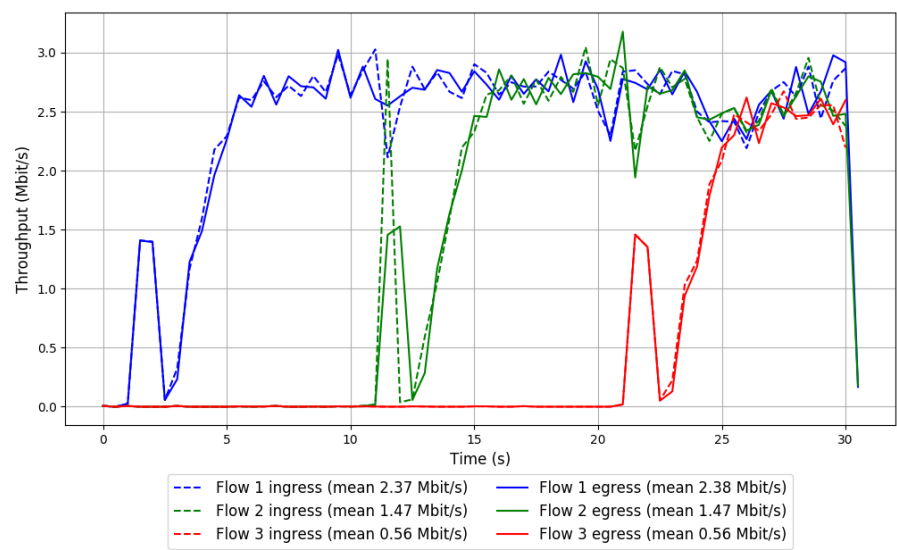
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 63.853 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-18 07:25:09

End at: 2018-01-18 07:25:39

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.03 Mbit/s

95th percentile per-packet one-way delay: 63.783 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.17 Mbit/s

95th percentile per-packet one-way delay: 63.761 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.35 Mbit/s

95th percentile per-packet one-way delay: 63.830 ms

Loss rate: 0.00%

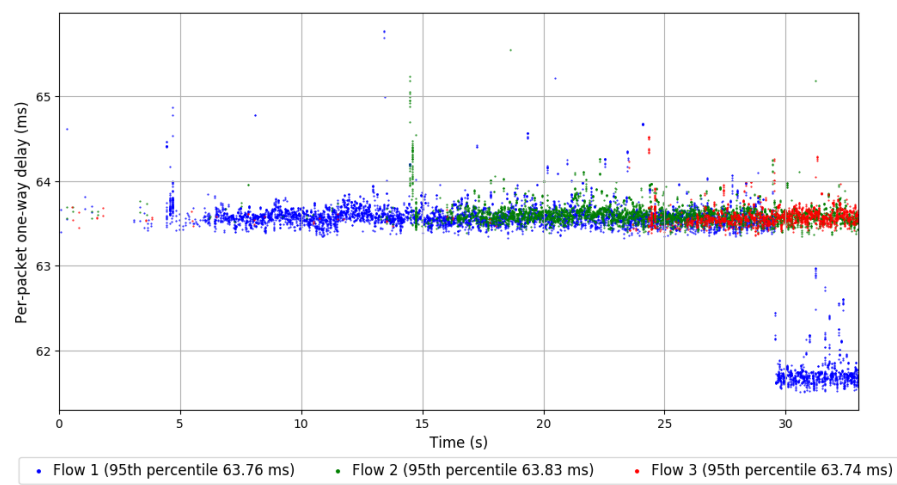
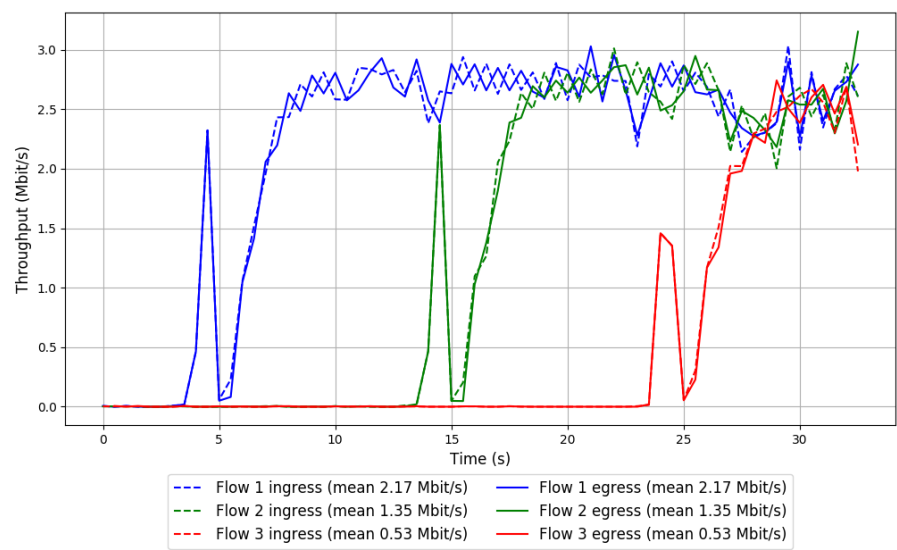
-- Flow 3:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 63.741 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-01-18 04:37:44

End at: 2018-01-18 04:38:14

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.61 Mbit/s

95th percentile per-packet one-way delay: 63.773 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 6.51 Mbit/s

95th percentile per-packet one-way delay: 63.781 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 6.26 Mbit/s

95th percentile per-packet one-way delay: 63.840 ms

Loss rate: 0.00%

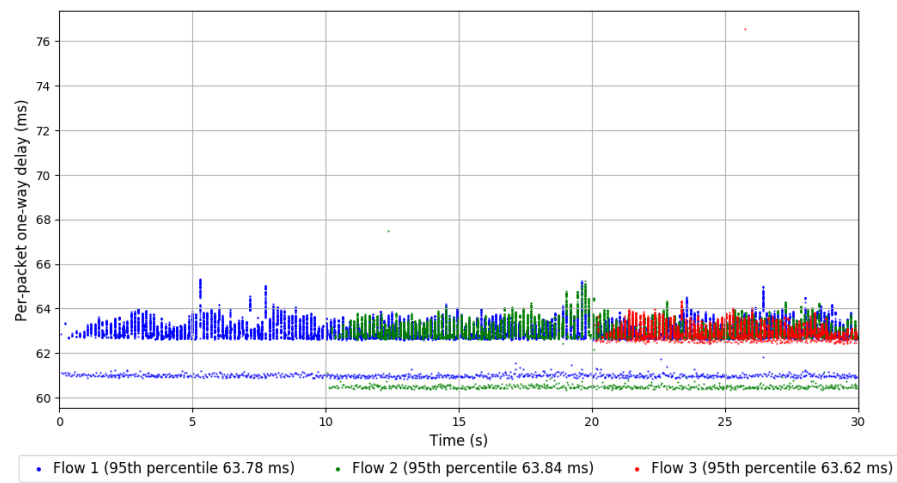
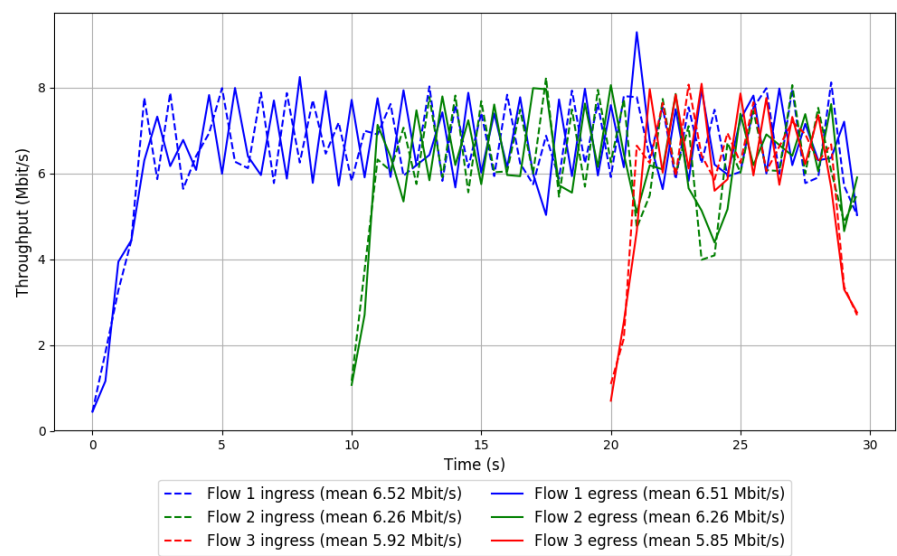
-- Flow 3:

Average throughput: 5.85 Mbit/s

95th percentile per-packet one-way delay: 63.615 ms

Loss rate: 1.20%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-18 04:54:31

End at: 2018-01-18 04:55:01

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.24 Mbit/s

95th percentile per-packet one-way delay: 64.067 ms

Loss rate: 1.19%

-- Flow 1:

Average throughput: 6.24 Mbit/s

95th percentile per-packet one-way delay: 64.076 ms

Loss rate: 1.52%

-- Flow 2:

Average throughput: 6.13 Mbit/s

95th percentile per-packet one-way delay: 64.081 ms

Loss rate: 0.81%

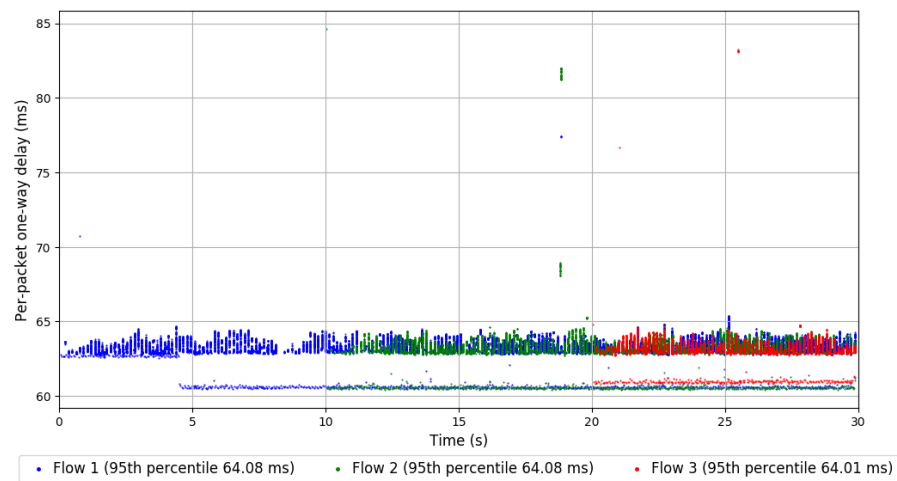
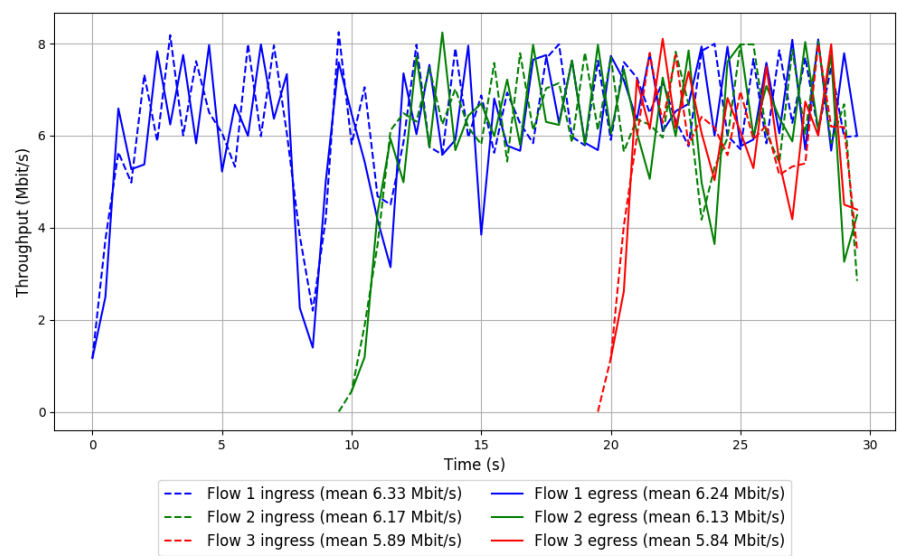
-- Flow 3:

Average throughput: 5.84 Mbit/s

95th percentile per-packet one-way delay: 64.009 ms

Loss rate: 0.88%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-18 05:11:43

End at: 2018-01-18 05:12:13

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.83 Mbit/s

95th percentile per-packet one-way delay: 63.938 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 63.900 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 6.50 Mbit/s

95th percentile per-packet one-way delay: 64.000 ms

Loss rate: 0.33%

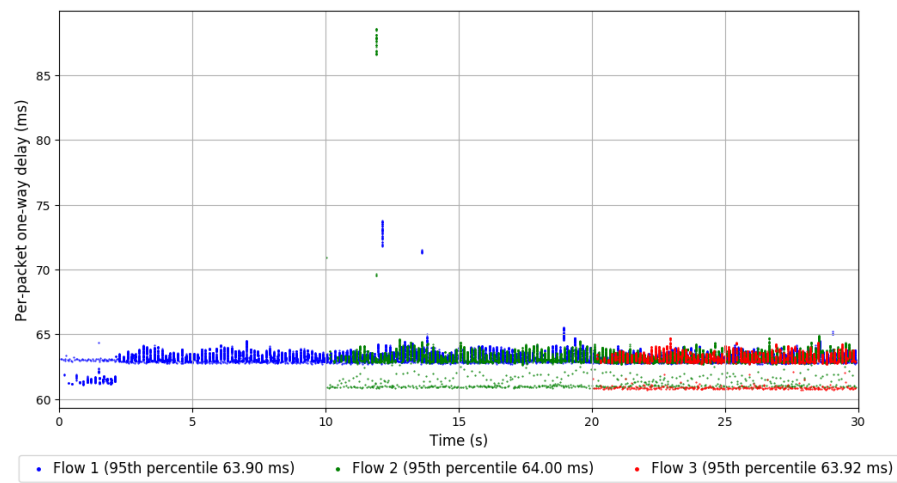
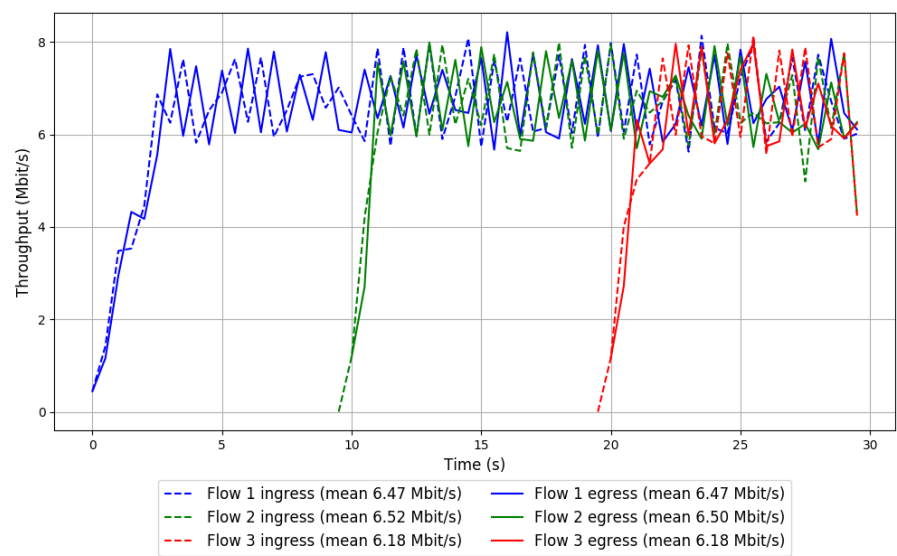
-- Flow 3:

Average throughput: 6.18 Mbit/s

95th percentile per-packet one-way delay: 63.923 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-01-18 05:28:54

End at: 2018-01-18 05:29:24

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.90 Mbit/s

95th percentile per-packet one-way delay: 63.691 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 63.791 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 6.48 Mbit/s

95th percentile per-packet one-way delay: 63.255 ms

Loss rate: 0.00%

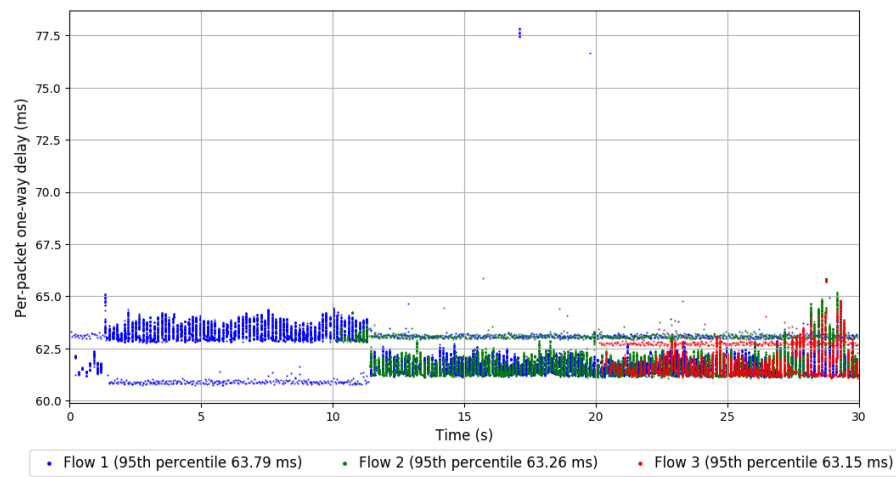
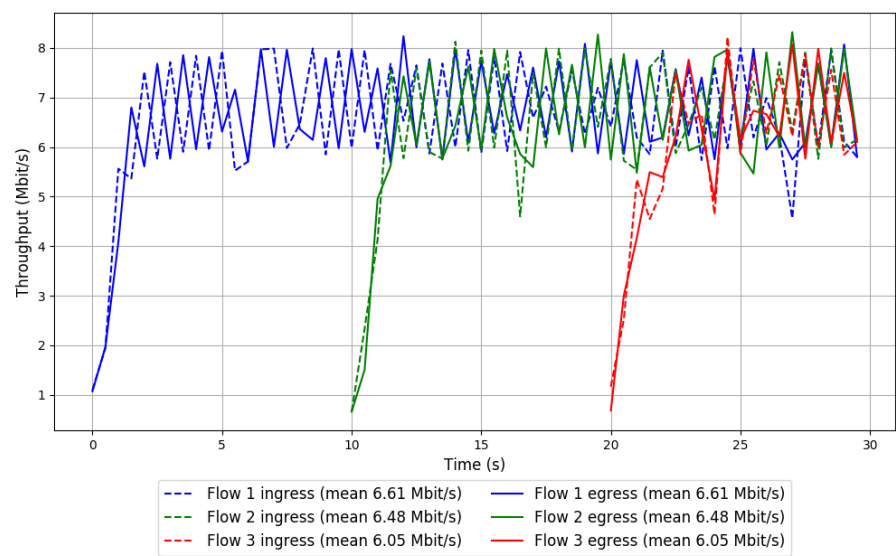
-- Flow 3:

Average throughput: 6.05 Mbit/s

95th percentile per-packet one-way delay: 63.153 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-01-18 05:46:11

End at: 2018-01-18 05:46:41

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.94 Mbit/s

95th percentile per-packet one-way delay: 64.073 ms

Loss rate: 0.23%

-- Flow 1:

Average throughput: 6.61 Mbit/s

95th percentile per-packet one-way delay: 64.037 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 6.56 Mbit/s

95th percentile per-packet one-way delay: 64.110 ms

Loss rate: 0.00%

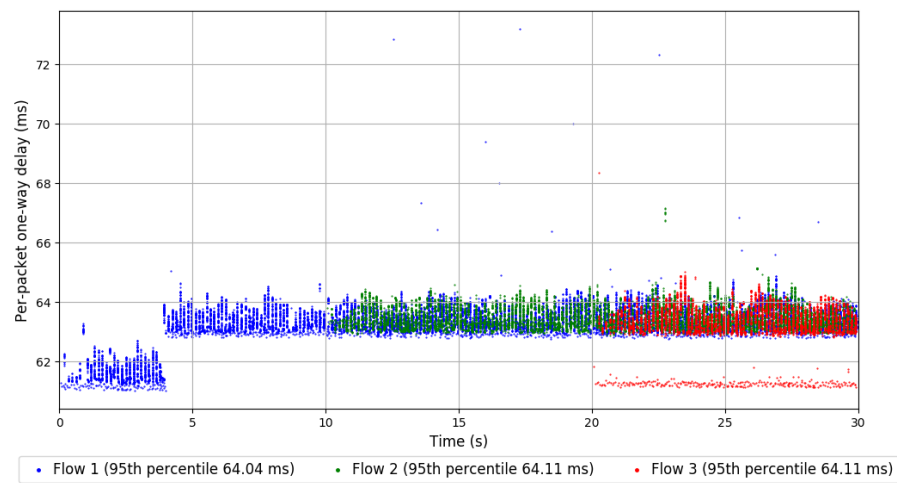
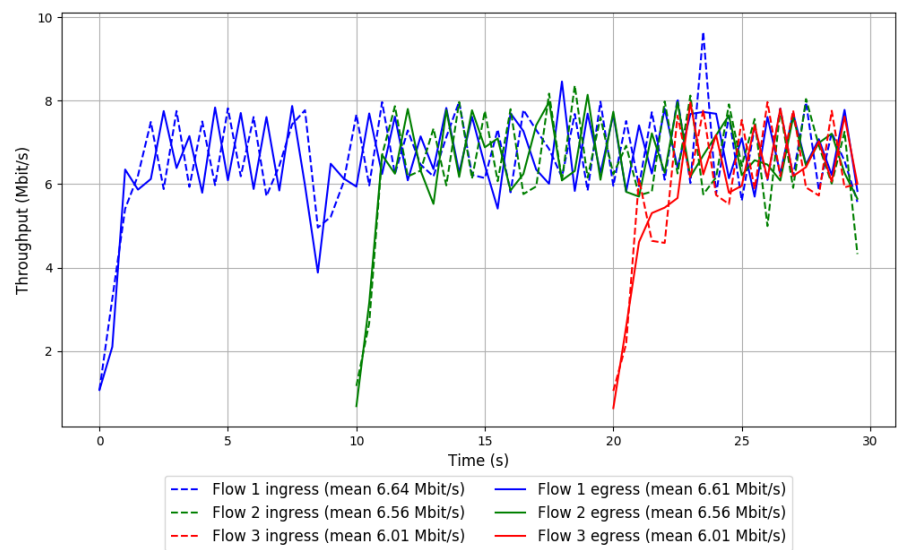
-- Flow 3:

Average throughput: 6.01 Mbit/s

95th percentile per-packet one-way delay: 64.112 ms

Loss rate: 0.04%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-18 06:03:25

End at: 2018-01-18 06:03:55

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.75 Mbit/s

95th percentile per-packet one-way delay: 64.244 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 64.235 ms

Loss rate: 1.04%

-- Flow 2:

Average throughput: 6.49 Mbit/s

95th percentile per-packet one-way delay: 64.215 ms

Loss rate: 0.00%

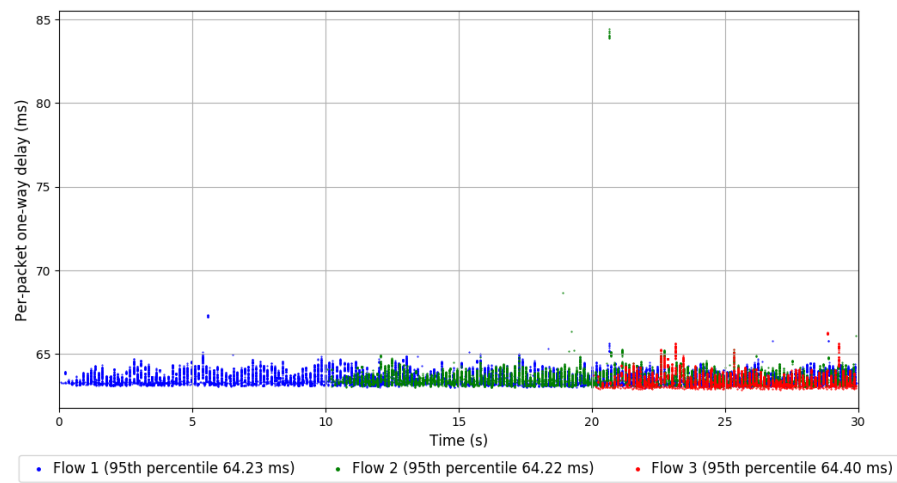
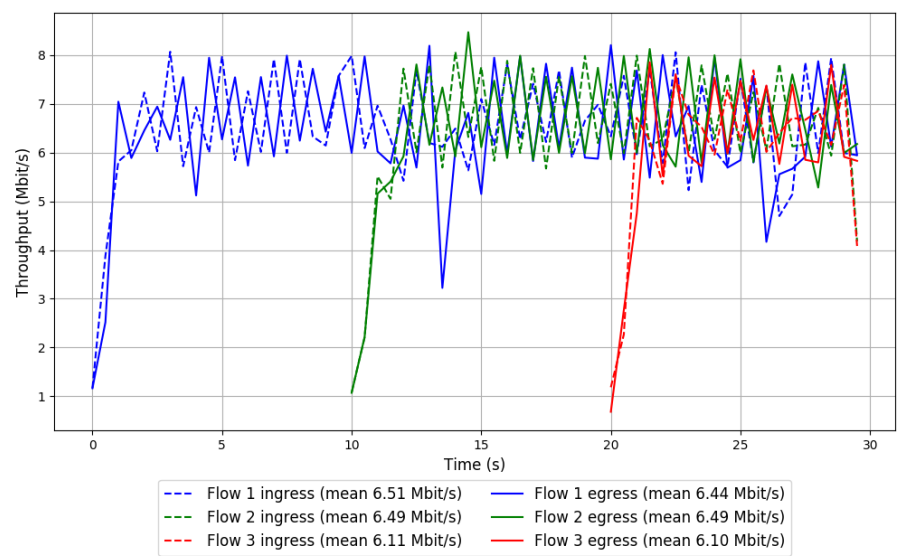
-- Flow 3:

Average throughput: 6.10 Mbit/s

95th percentile per-packet one-way delay: 64.396 ms

Loss rate: 0.22%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-01-18 06:20:33

End at: 2018-01-18 06:21:03

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.40 Mbit/s

95th percentile per-packet one-way delay: 64.365 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 6.33 Mbit/s

95th percentile per-packet one-way delay: 64.256 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 64.507 ms

Loss rate: 0.75%

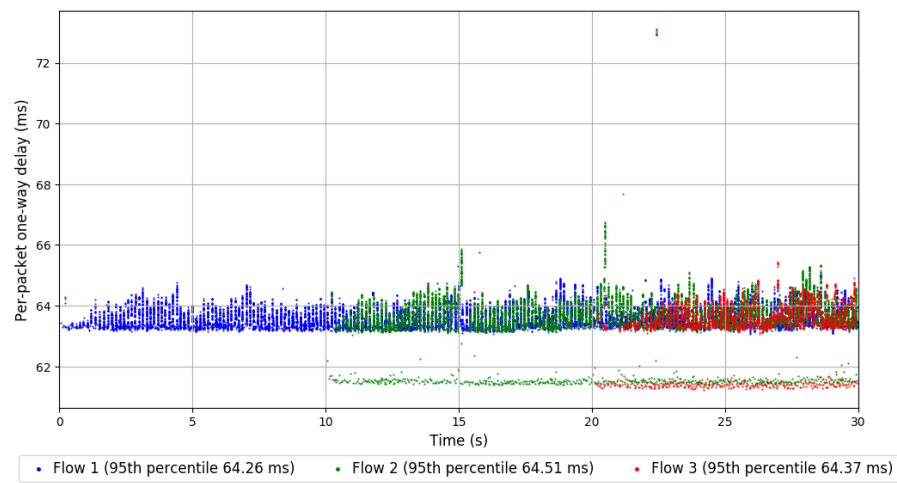
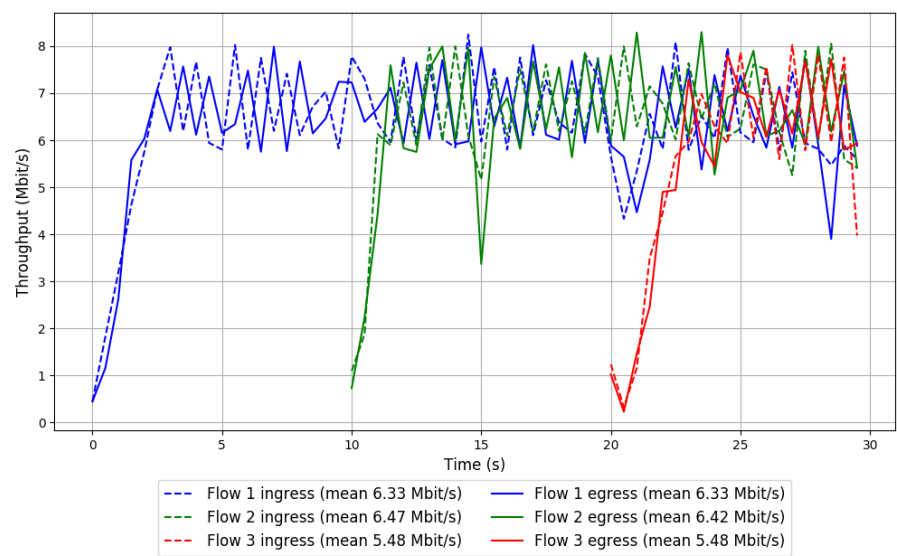
-- Flow 3:

Average throughput: 5.48 Mbit/s

95th percentile per-packet one-way delay: 64.371 ms

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-01-18 06:37:48

End at: 2018-01-18 06:38:18

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.44 Mbit/s

95th percentile per-packet one-way delay: 64.364 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 6.43 Mbit/s

95th percentile per-packet one-way delay: 64.404 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 6.13 Mbit/s

95th percentile per-packet one-way delay: 64.366 ms

Loss rate: 0.79%

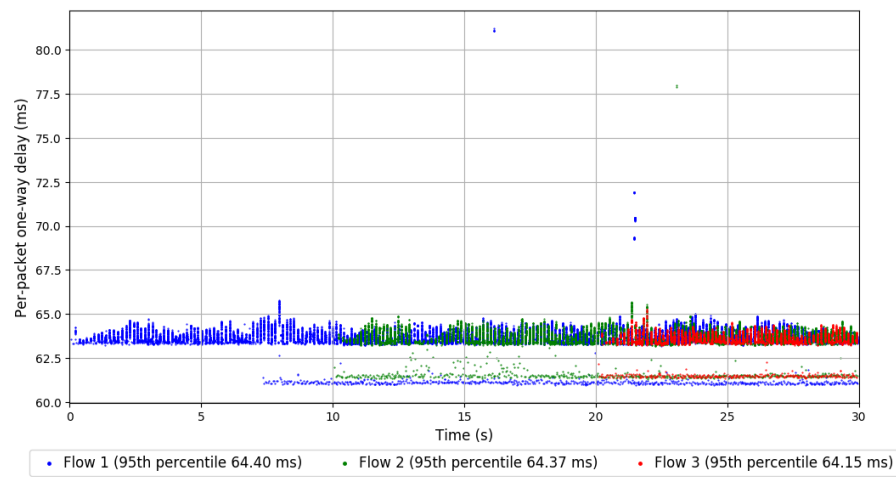
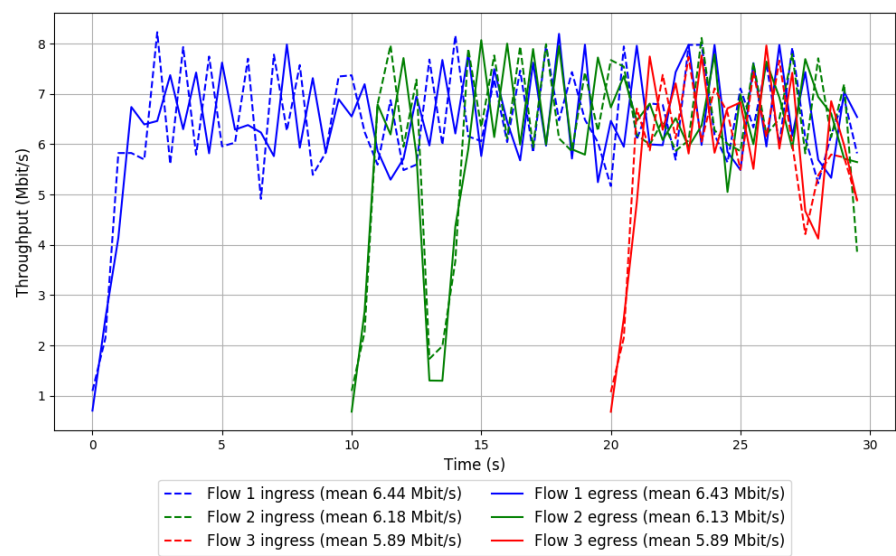
-- Flow 3:

Average throughput: 5.89 Mbit/s

95th percentile per-packet one-way delay: 64.154 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-01-18 06:55:01

End at: 2018-01-18 06:55:31

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.39 Mbit/s

95th percentile per-packet one-way delay: 64.474 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 6.22 Mbit/s

95th percentile per-packet one-way delay: 64.479 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 6.44 Mbit/s

95th percentile per-packet one-way delay: 64.528 ms

Loss rate: 0.15%

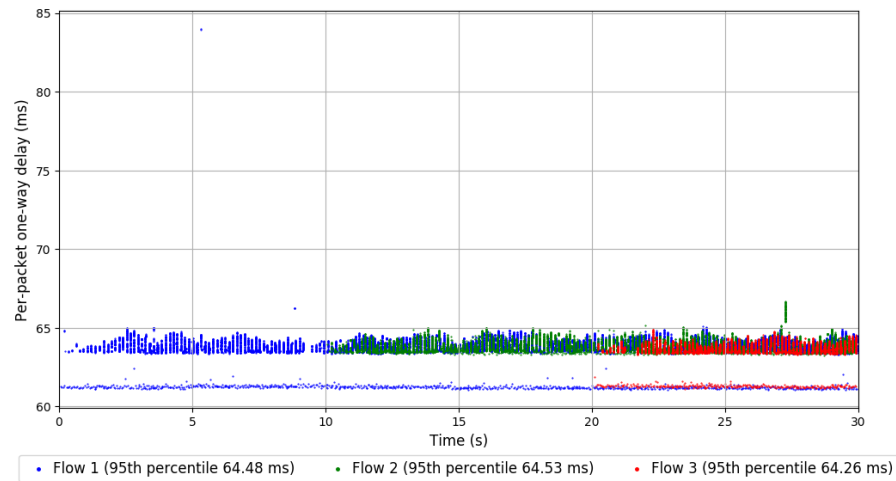
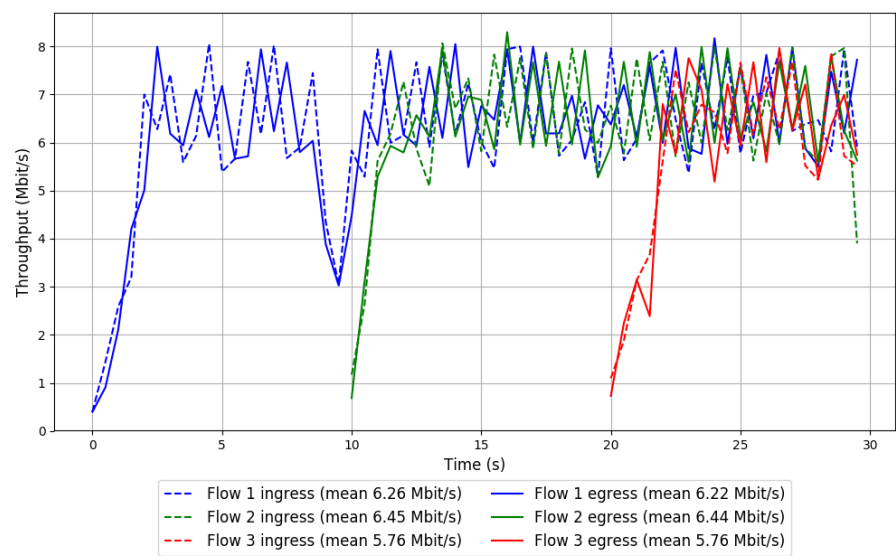
-- Flow 3:

Average throughput: 5.76 Mbit/s

95th percentile per-packet one-way delay: 64.264 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-01-18 07:11:54

End at: 2018-01-18 07:12:24

Below is generated by plot.py at 2018-01-18 10:05:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 12.43 Mbit/s

95th percentile per-packet one-way delay: 64.689 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 6.34 Mbit/s

95th percentile per-packet one-way delay: 64.653 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 6.06 Mbit/s

95th percentile per-packet one-way delay: 64.724 ms

Loss rate: 0.69%

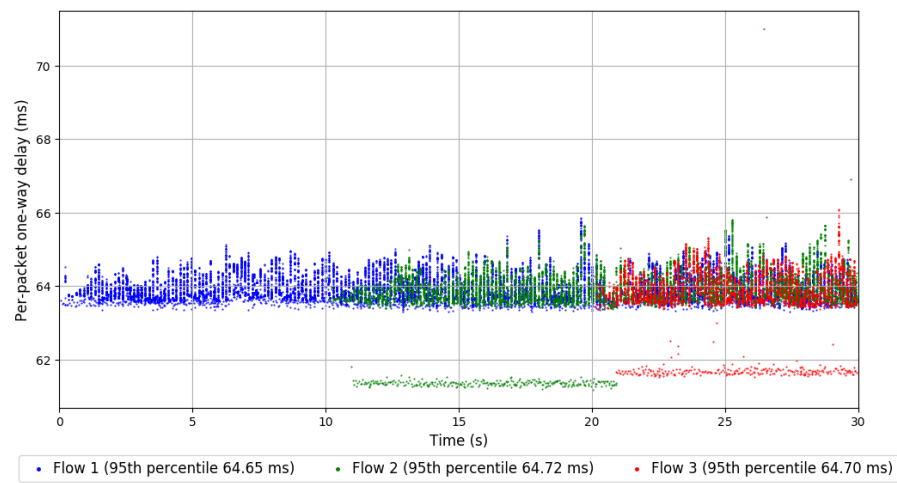
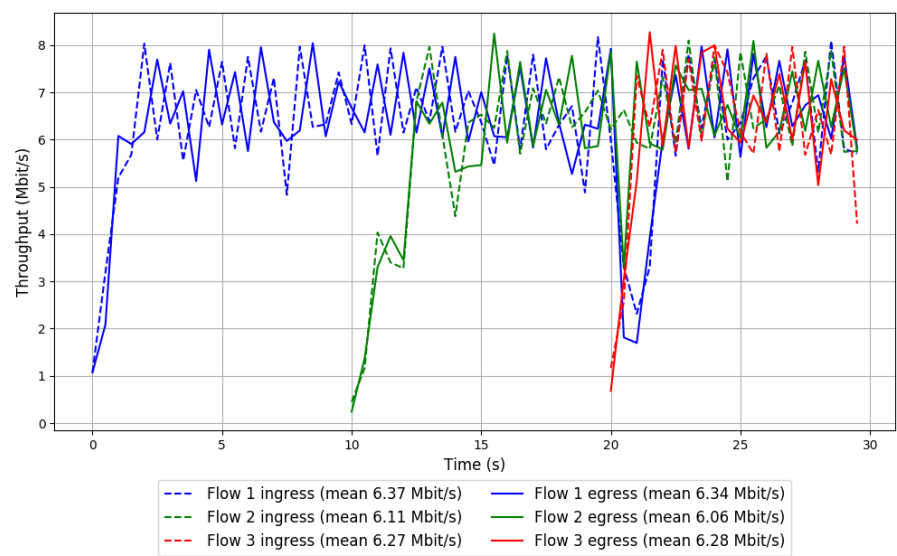
-- Flow 3:

Average throughput: 6.28 Mbit/s

95th percentile per-packet one-way delay: 64.702 ms

Loss rate: 0.00%

Run 10: Report of Sprout — Data Link

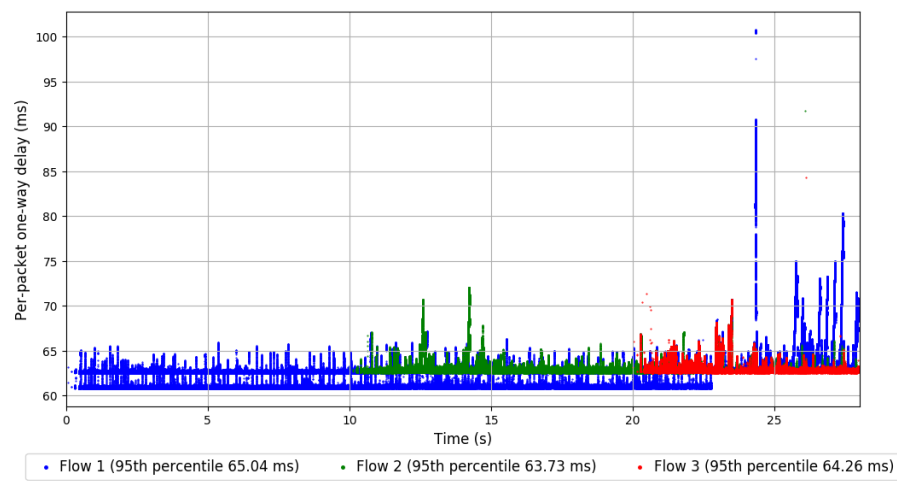
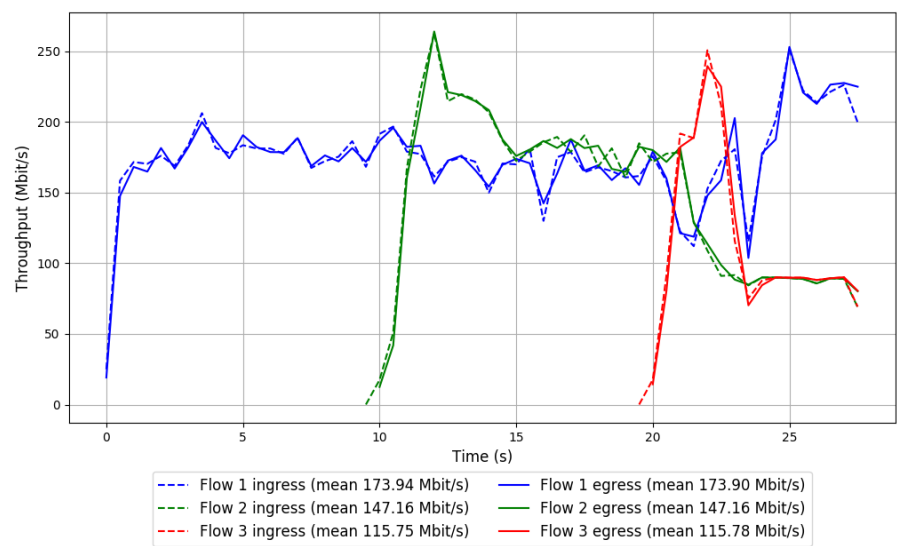


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-18 04:43:10
End at: 2018-01-18 04:43:40

# Below is generated by plot.py at 2018-01-18 10:10:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 301.50 Mbit/s
95th percentile per-packet one-way delay: 64.437 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 173.90 Mbit/s
95th percentile per-packet one-way delay: 65.040 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 147.16 Mbit/s
95th percentile per-packet one-way delay: 63.725 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 115.78 Mbit/s
95th percentile per-packet one-way delay: 64.264 ms
Loss rate: 0.00%
```

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

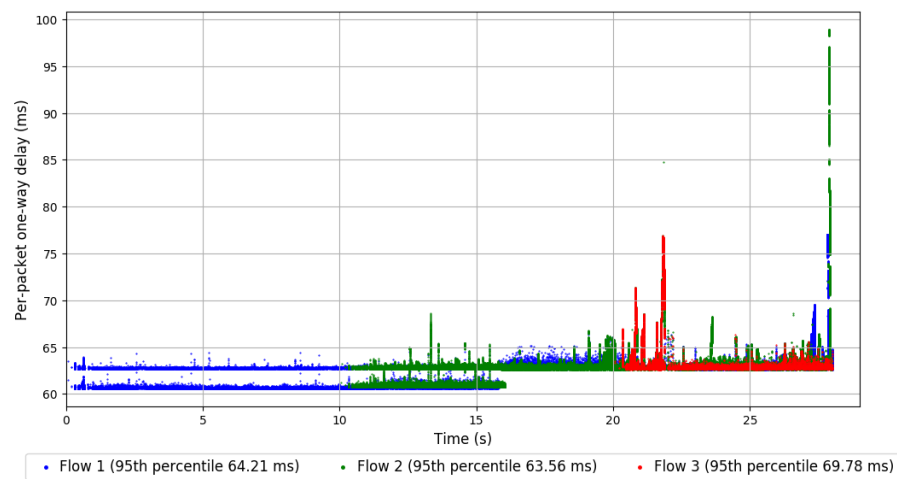
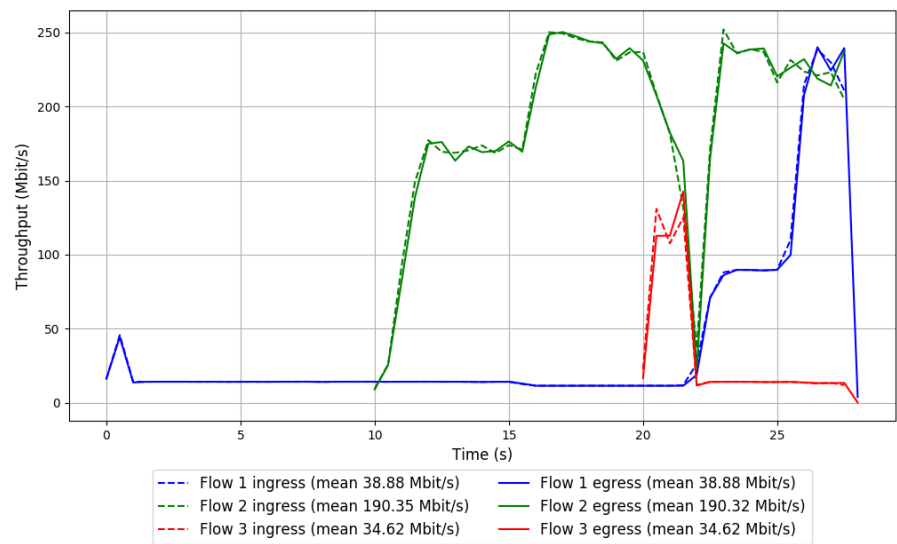


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-18 05:00:07
End at: 2018-01-18 05:00:37

# Below is generated by plot.py at 2018-01-18 10:10:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 170.73 Mbit/s
95th percentile per-packet one-way delay: 63.964 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 38.88 Mbit/s
95th percentile per-packet one-way delay: 64.209 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 190.32 Mbit/s
95th percentile per-packet one-way delay: 63.563 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.62 Mbit/s
95th percentile per-packet one-way delay: 69.780 ms
Loss rate: 0.00%
```

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

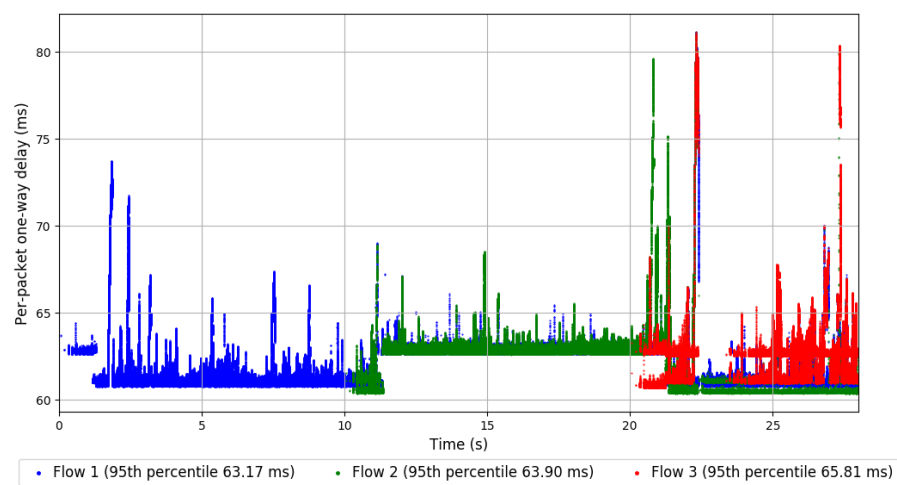
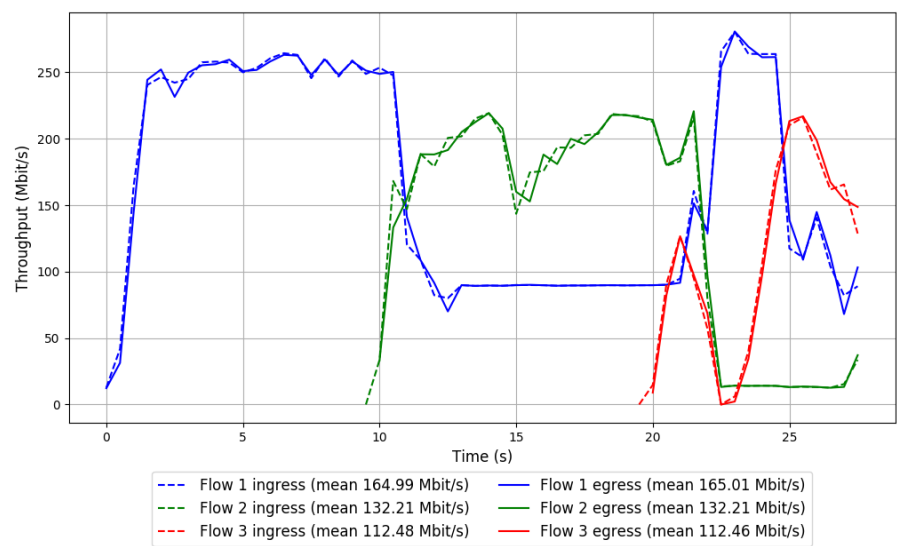


```
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-18 05:17:22
End at: 2018-01-18 05:17:52

# Below is generated by plot.py at 2018-01-18 10:10:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.85 Mbit/s
95th percentile per-packet one-way delay: 63.894 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 165.01 Mbit/s
95th percentile per-packet one-way delay: 63.167 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 132.21 Mbit/s
95th percentile per-packet one-way delay: 63.904 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 112.46 Mbit/s
95th percentile per-packet one-way delay: 65.806 ms
Loss rate: 0.00%
```

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-01-18 05:34:23

End at: 2018-01-18 05:34:53

Below is generated by plot.py at 2018-01-18 10:10:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 244.31 Mbit/s

95th percentile per-packet one-way delay: 63.198 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 164.41 Mbit/s

95th percentile per-packet one-way delay: 63.291 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 87.62 Mbit/s

95th percentile per-packet one-way delay: 63.098 ms

Loss rate: 0.00%

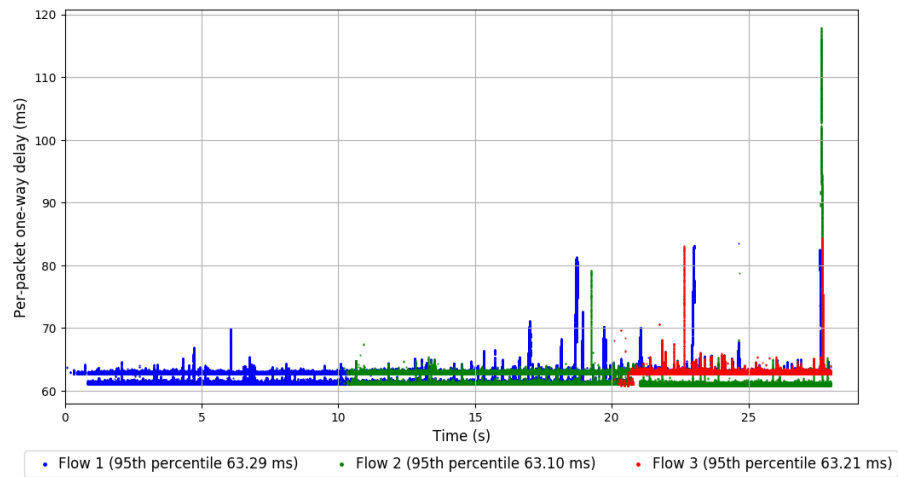
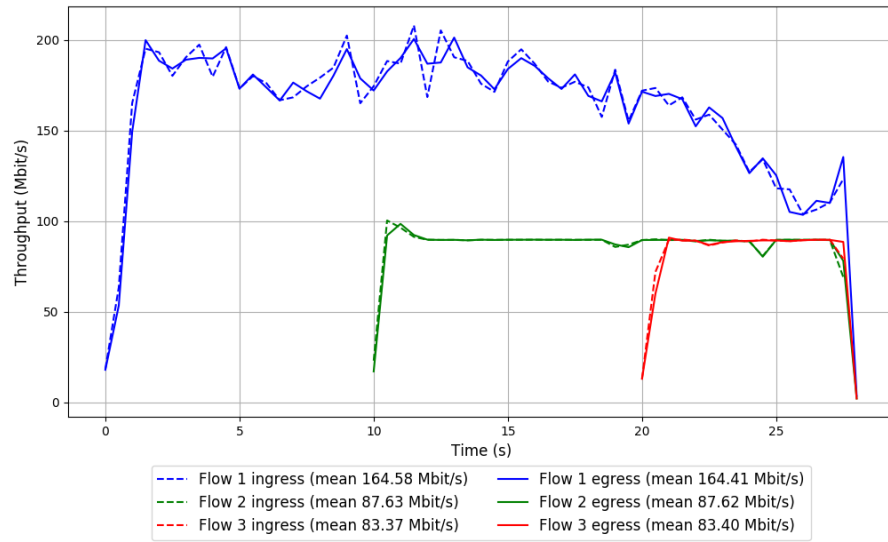
-- Flow 3:

Average throughput: 83.40 Mbit/s

95th percentile per-packet one-way delay: 63.210 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-01-18 05:51:54

End at: 2018-01-18 05:52:24

Below is generated by plot.py at 2018-01-18 10:10:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 238.70 Mbit/s

95th percentile per-packet one-way delay: 63.212 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 117.63 Mbit/s

95th percentile per-packet one-way delay: 63.244 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 119.71 Mbit/s

95th percentile per-packet one-way delay: 63.144 ms

Loss rate: 0.00%

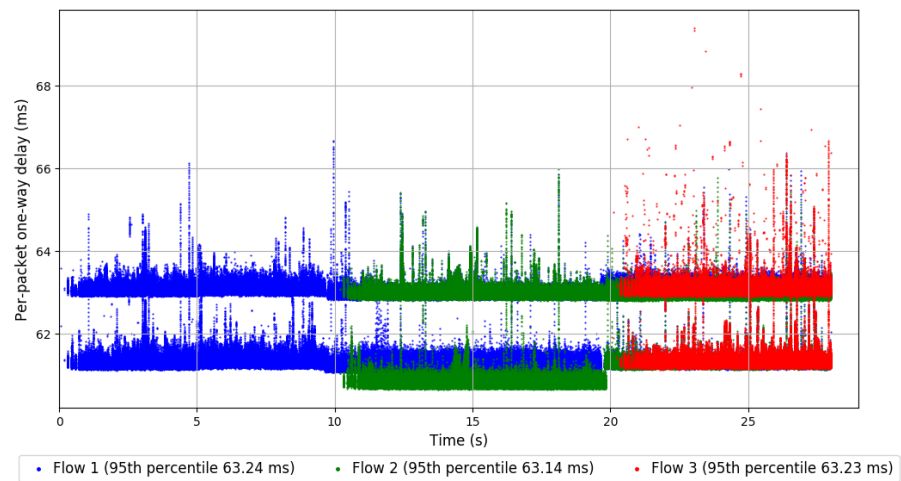
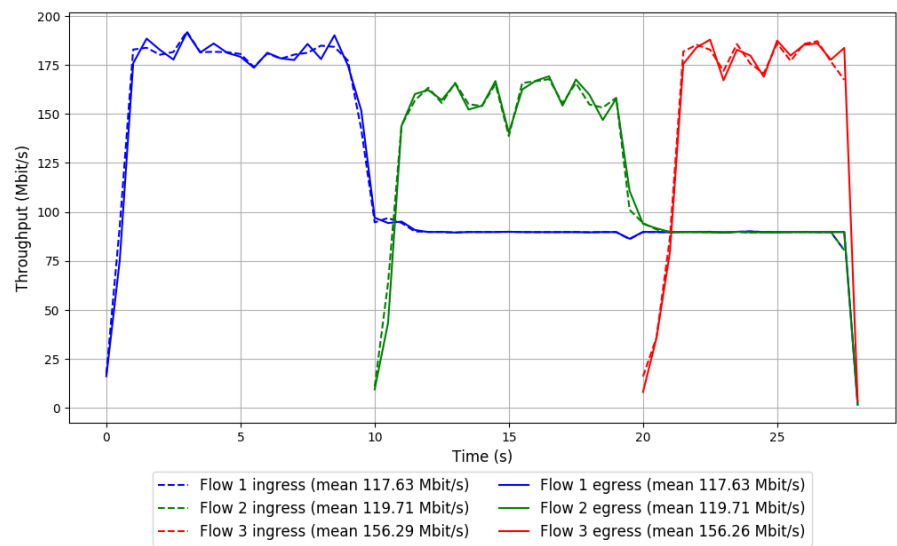
-- Flow 3:

Average throughput: 156.26 Mbit/s

95th percentile per-packet one-way delay: 63.225 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-01-18 06:08:52

End at: 2018-01-18 06:09:22

Below is generated by plot.py at 2018-01-18 10:10:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.40 Mbit/s

95th percentile per-packet one-way delay: 65.904 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 128.04 Mbit/s

95th percentile per-packet one-way delay: 63.360 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 205.38 Mbit/s

95th percentile per-packet one-way delay: 67.277 ms

Loss rate: 0.00%

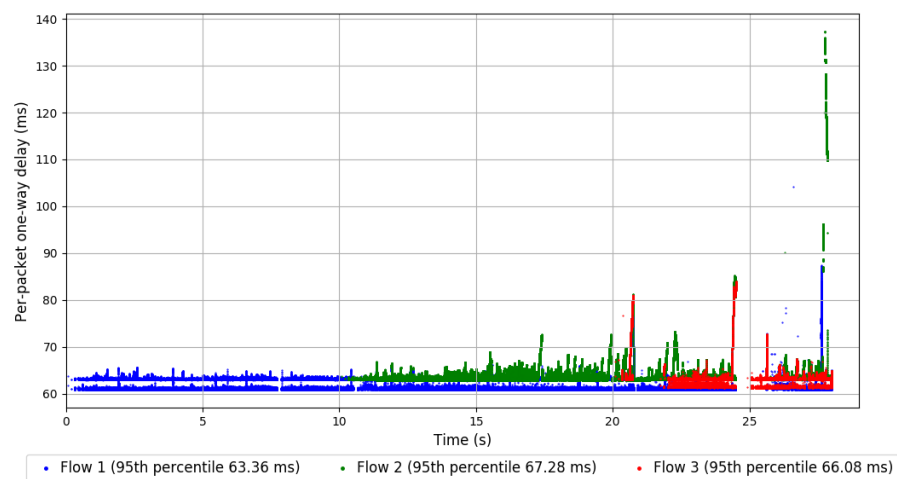
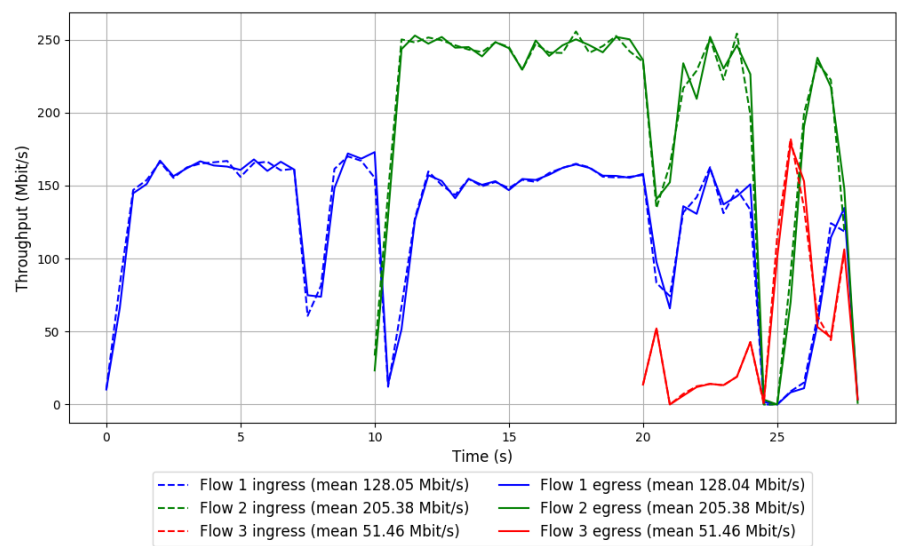
-- Flow 3:

Average throughput: 51.46 Mbit/s

95th percentile per-packet one-way delay: 66.079 ms

Loss rate: 0.00%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-01-18 06:25:56

End at: 2018-01-18 06:26:26

Below is generated by plot.py at 2018-01-18 10:15:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 324.22 Mbit/s

95th percentile per-packet one-way delay: 67.195 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 172.43 Mbit/s

95th percentile per-packet one-way delay: 66.061 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 205.55 Mbit/s

95th percentile per-packet one-way delay: 66.989 ms

Loss rate: 0.00%

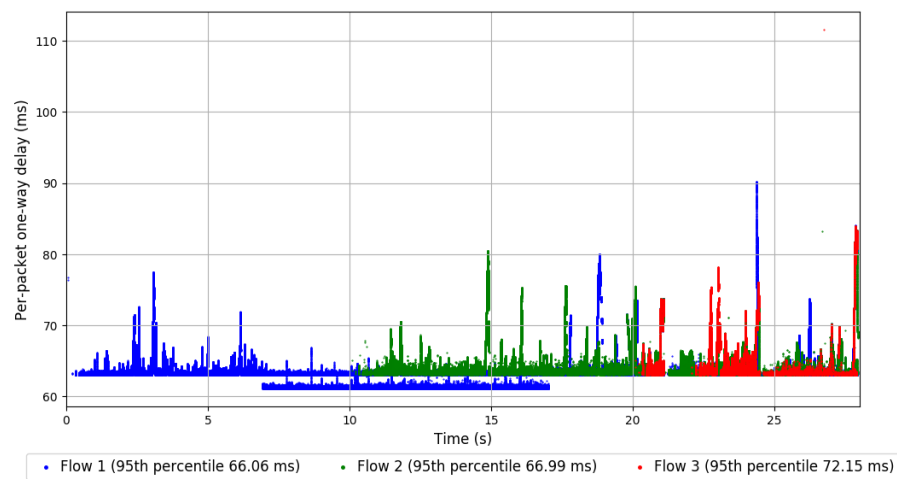
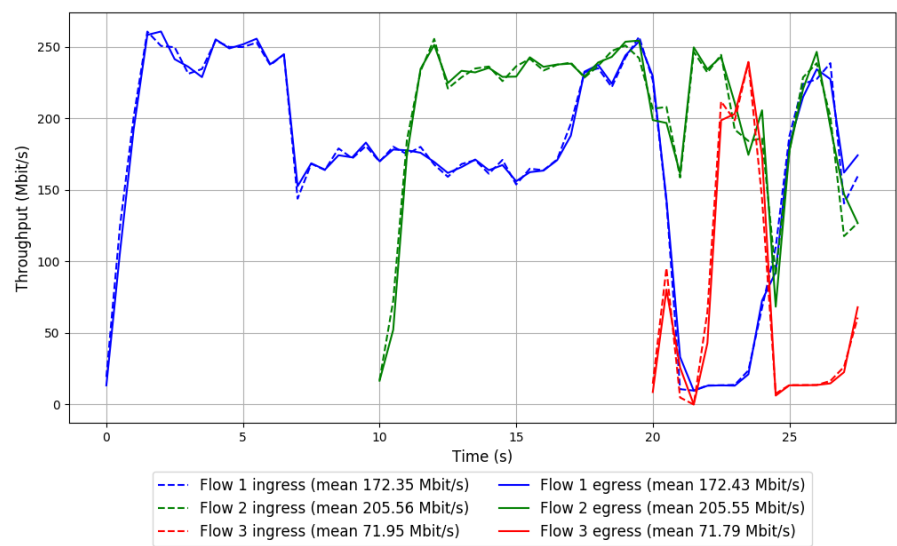
-- Flow 3:

Average throughput: 71.79 Mbit/s

95th percentile per-packet one-way delay: 72.146 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-01-18 06:43:11

End at: 2018-01-18 06:43:41

Below is generated by plot.py at 2018-01-18 10:15:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 221.74 Mbit/s

95th percentile per-packet one-way delay: 66.121 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 69.22 Mbit/s

95th percentile per-packet one-way delay: 64.305 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 189.87 Mbit/s

95th percentile per-packet one-way delay: 67.444 ms

Loss rate: 0.00%

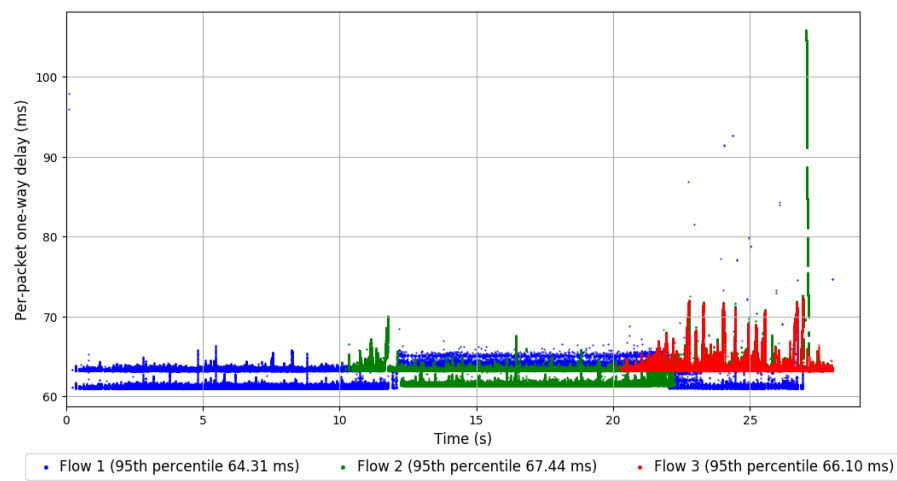
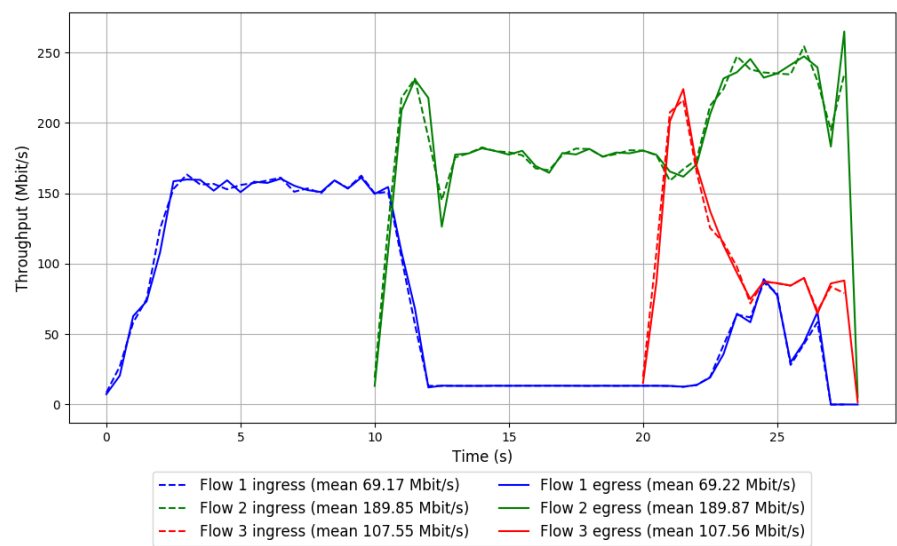
-- Flow 3:

Average throughput: 107.56 Mbit/s

95th percentile per-packet one-way delay: 66.097 ms

Loss rate: 0.01%

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

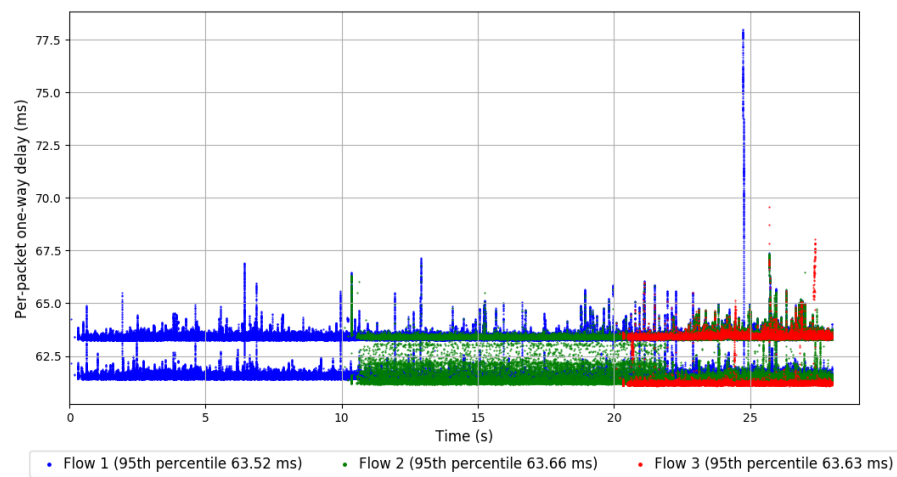
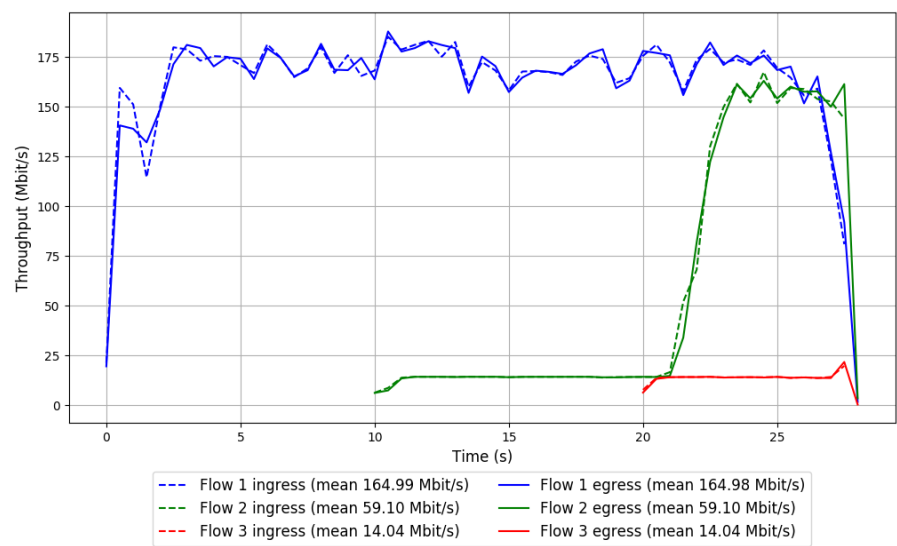


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-18 07:00:16
End at: 2018-01-18 07:00:46

# Below is generated by plot.py at 2018-01-18 10:15:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 206.84 Mbit/s
95th percentile per-packet one-way delay: 63.550 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 164.98 Mbit/s
95th percentile per-packet one-way delay: 63.525 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.10 Mbit/s
95th percentile per-packet one-way delay: 63.655 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.04 Mbit/s
95th percentile per-packet one-way delay: 63.632 ms
Loss rate: 0.00%
```

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

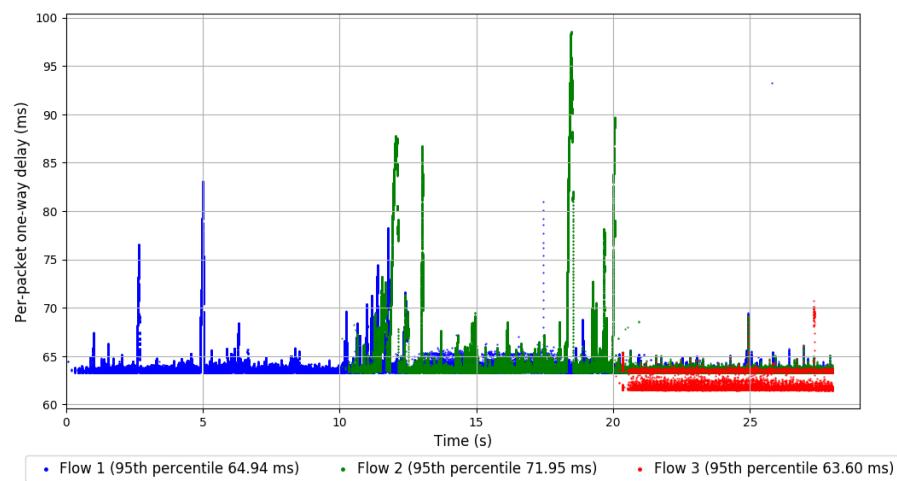
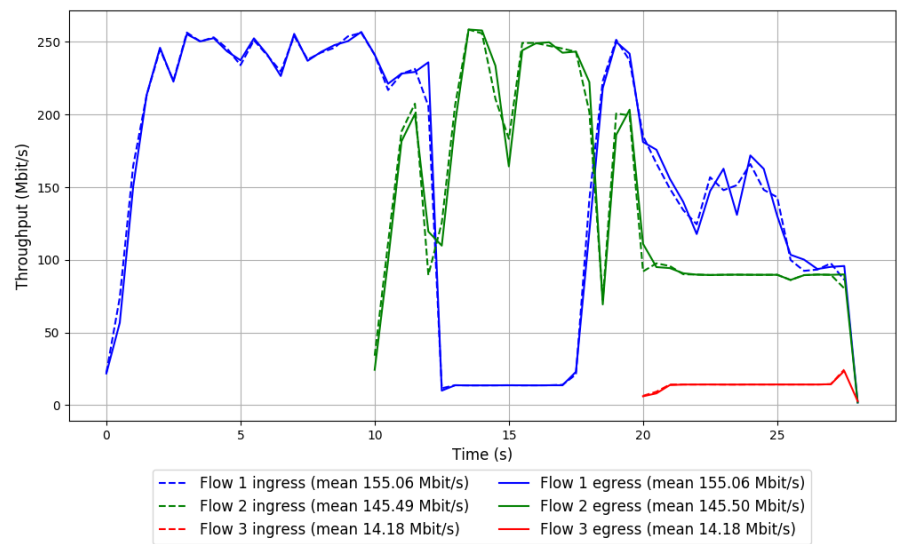


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-18 07:17:23
End at: 2018-01-18 07:17:53

# Below is generated by plot.py at 2018-01-18 10:17:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.46 Mbit/s
95th percentile per-packet one-way delay: 67.150 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 155.06 Mbit/s
95th percentile per-packet one-way delay: 64.942 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 145.50 Mbit/s
95th percentile per-packet one-way delay: 71.950 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.18 Mbit/s
95th percentile per-packet one-way delay: 63.596 ms
Loss rate: 0.00%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-01-18 04:53:03

End at: 2018-01-18 04:53:33

Below is generated by plot.py at 2018-01-18 10:17:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.74 Mbit/s

95th percentile per-packet one-way delay: 64.050 ms

Loss rate: 0.95%

-- Flow 1:

Average throughput: 8.94 Mbit/s

95th percentile per-packet one-way delay: 63.812 ms

Loss rate: 0.79%

-- Flow 2:

Average throughput: 14.55 Mbit/s

95th percentile per-packet one-way delay: 63.689 ms

Loss rate: 0.00%

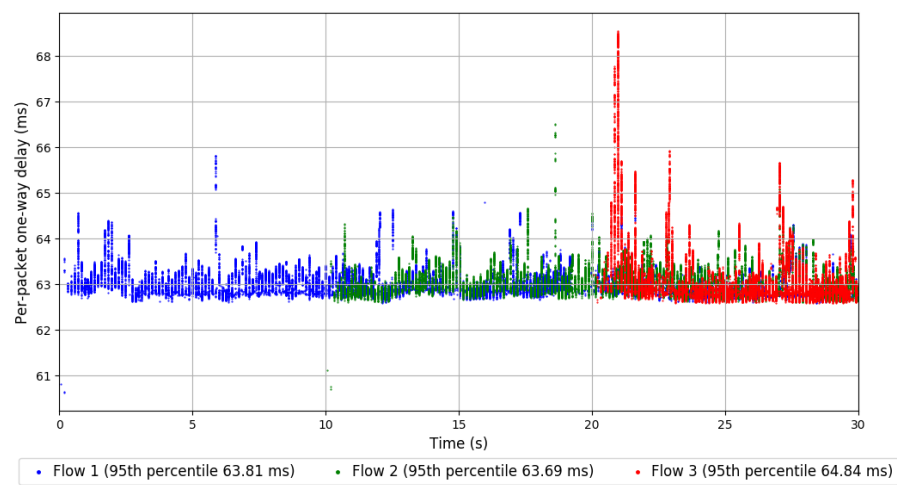
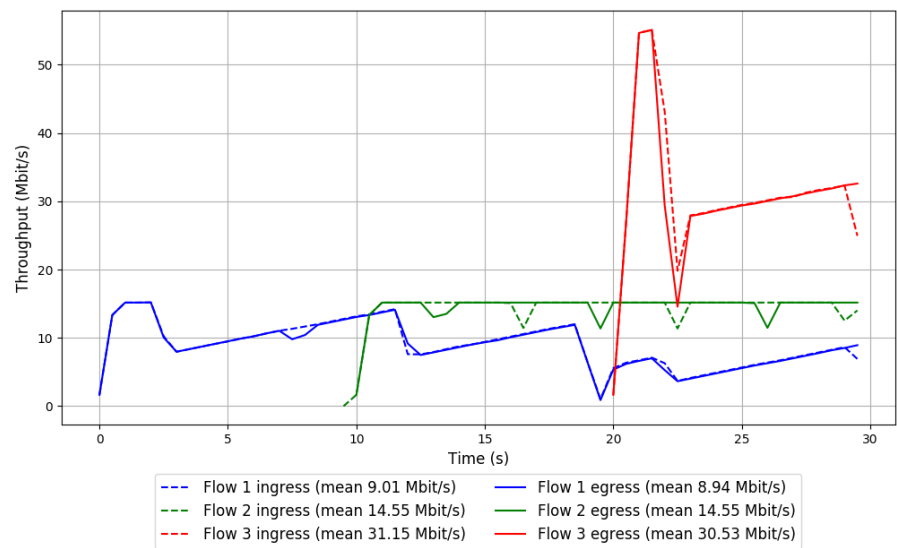
-- Flow 3:

Average throughput: 30.53 Mbit/s

95th percentile per-packet one-way delay: 64.840 ms

Loss rate: 1.99%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-18 05:09:56

End at: 2018-01-18 05:10:26

Below is generated by plot.py at 2018-01-18 10:17:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 190.41 Mbit/s

95th percentile per-packet one-way delay: 70.932 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 61.20 Mbit/s

95th percentile per-packet one-way delay: 69.794 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 144.36 Mbit/s

95th percentile per-packet one-way delay: 69.155 ms

Loss rate: 0.00%

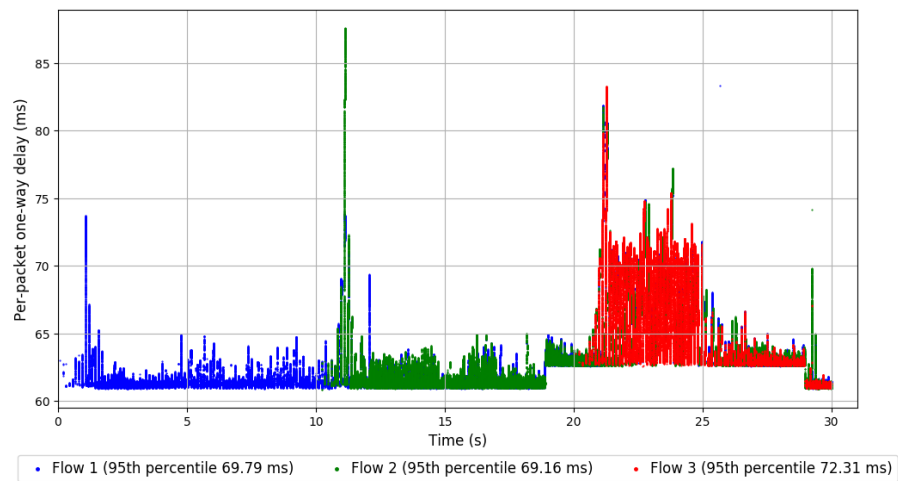
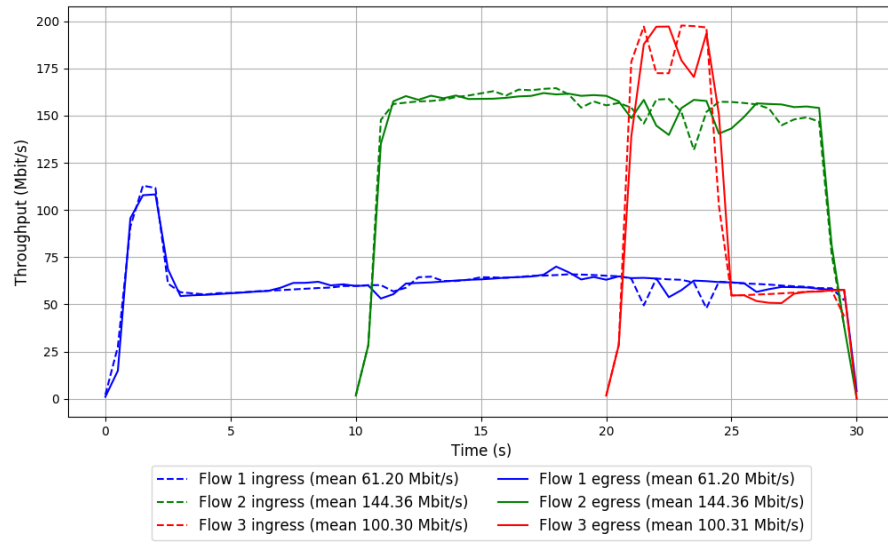
-- Flow 3:

Average throughput: 100.31 Mbit/s

95th percentile per-packet one-way delay: 72.308 ms

Loss rate: 0.02%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-18 05:27:12

End at: 2018-01-18 05:27:42

Below is generated by plot.py at 2018-01-18 10:17:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.21 Mbit/s

95th percentile per-packet one-way delay: 64.489 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 23.76 Mbit/s

95th percentile per-packet one-way delay: 64.118 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 10.62 Mbit/s

95th percentile per-packet one-way delay: 63.444 ms

Loss rate: 0.92%

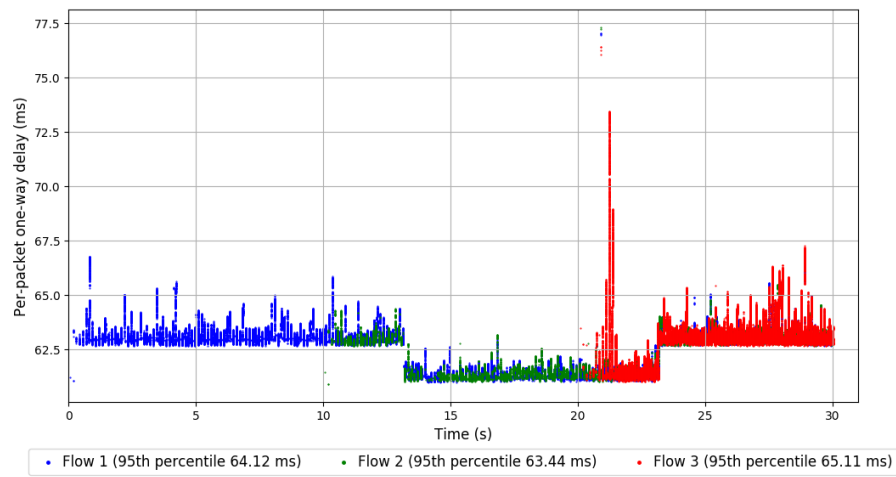
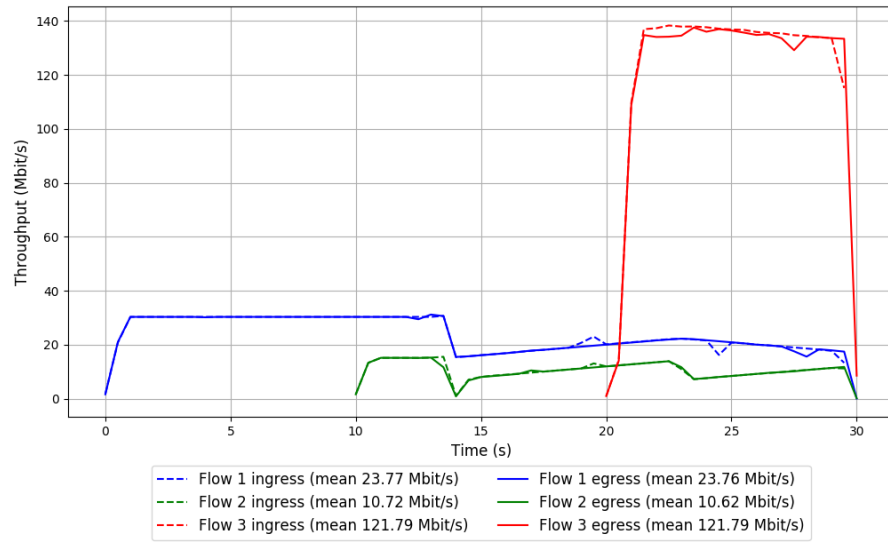
-- Flow 3:

Average throughput: 121.79 Mbit/s

95th percentile per-packet one-way delay: 65.113 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-01-18 05:44:17

End at: 2018-01-18 05:44:47

Below is generated by plot.py at 2018-01-18 10:17:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.70 Mbit/s

95th percentile per-packet one-way delay: 71.115 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 68.49 Mbit/s

95th percentile per-packet one-way delay: 68.392 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 36.49 Mbit/s

95th percentile per-packet one-way delay: 69.522 ms

Loss rate: 0.01%

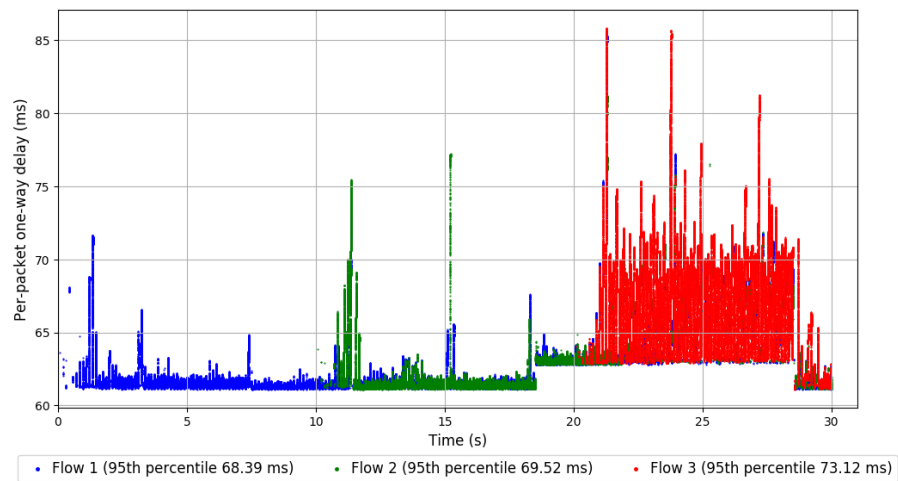
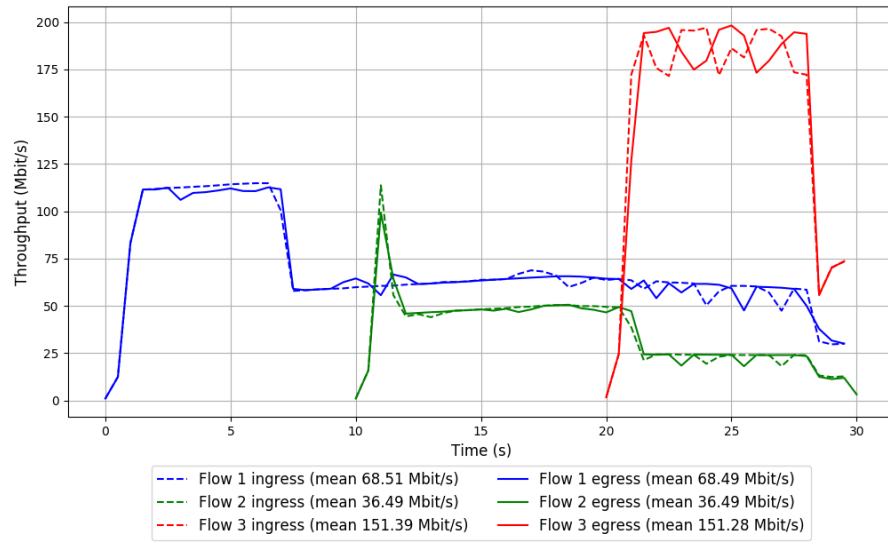
-- Flow 3:

Average throughput: 151.28 Mbit/s

95th percentile per-packet one-way delay: 73.118 ms

Loss rate: 0.08%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-18 06:01:39

End at: 2018-01-18 06:02:09

Below is generated by plot.py at 2018-01-18 10:17:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.36 Mbit/s

95th percentile per-packet one-way delay: 64.806 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 34.06 Mbit/s

95th percentile per-packet one-way delay: 64.612 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 106.26 Mbit/s

95th percentile per-packet one-way delay: 64.674 ms

Loss rate: 0.00%

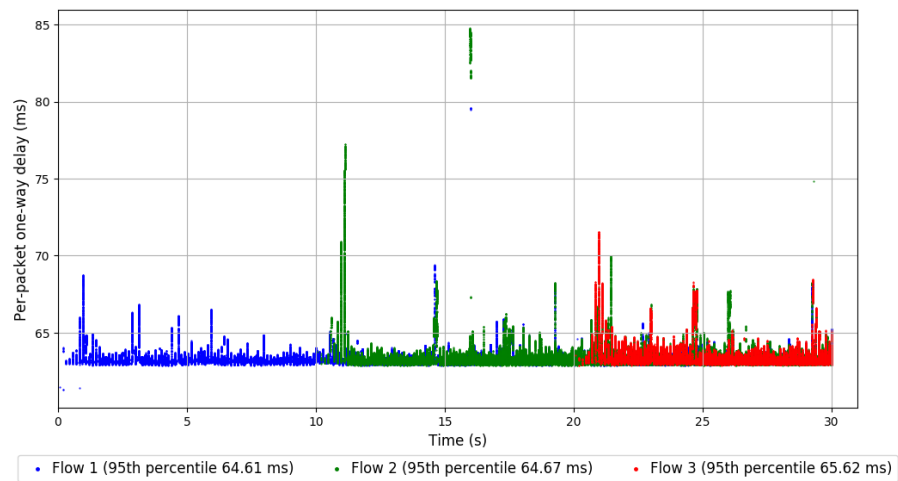
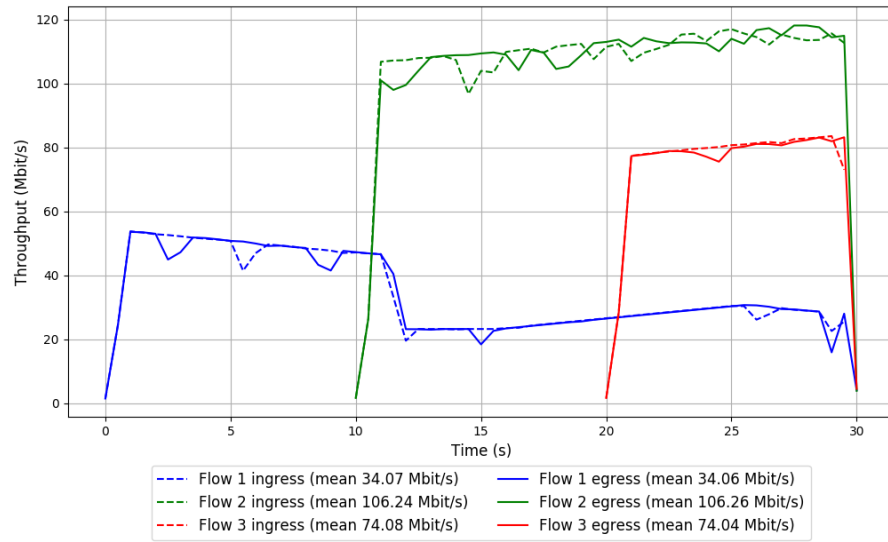
-- Flow 3:

Average throughput: 74.04 Mbit/s

95th percentile per-packet one-way delay: 65.619 ms

Loss rate: 0.05%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-18 06:18:58

End at: 2018-01-18 06:19:28

Below is generated by plot.py at 2018-01-18 10:17:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 27.05 Mbit/s

95th percentile per-packet one-way delay: 64.029 ms

Loss rate: 0.67%

-- Flow 1:

Average throughput: 10.99 Mbit/s

95th percentile per-packet one-way delay: 64.210 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 10.35 Mbit/s

95th percentile per-packet one-way delay: 63.895 ms

Loss rate: 1.73%

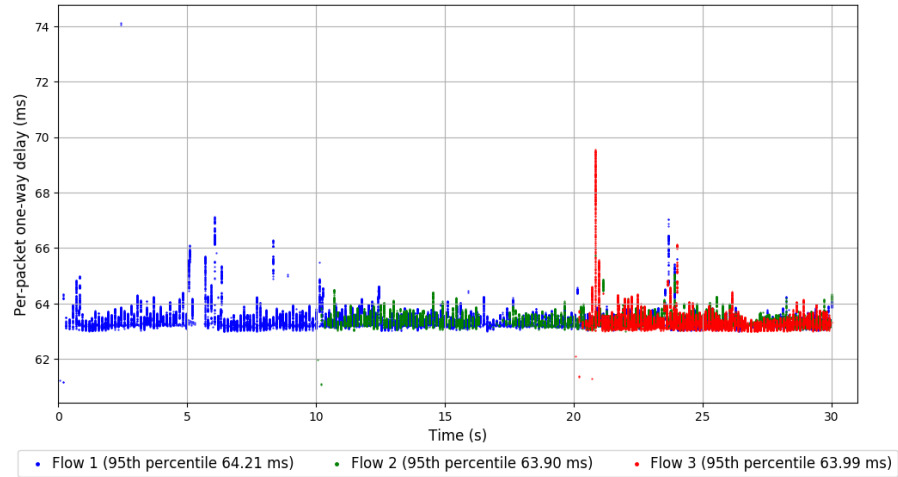
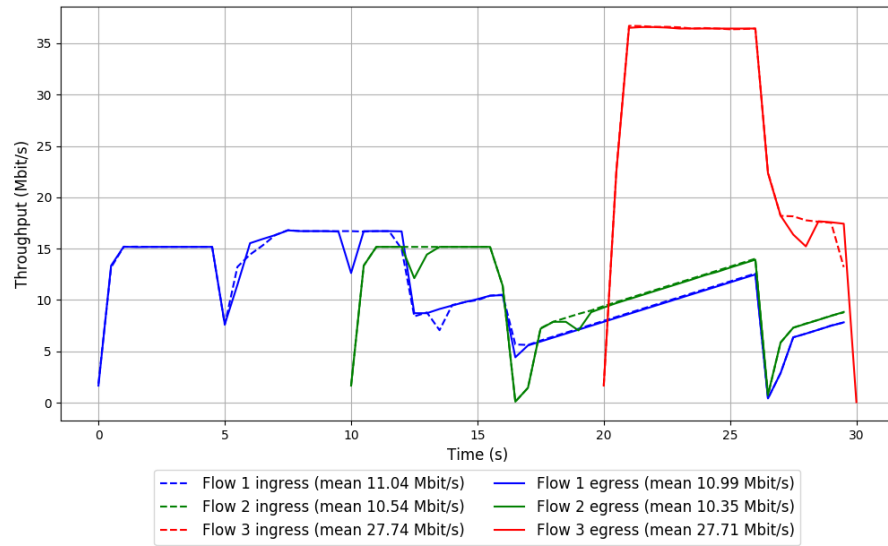
-- Flow 3:

Average throughput: 27.71 Mbit/s

95th percentile per-packet one-way delay: 63.991 ms

Loss rate: 0.10%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-18 06:36:04

End at: 2018-01-18 06:36:34

Below is generated by plot.py at 2018-01-18 10:17:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 144.38 Mbit/s

95th percentile per-packet one-way delay: 65.903 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.40 Mbit/s

95th percentile per-packet one-way delay: 65.836 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.58 Mbit/s

95th percentile per-packet one-way delay: 65.035 ms

Loss rate: 0.00%

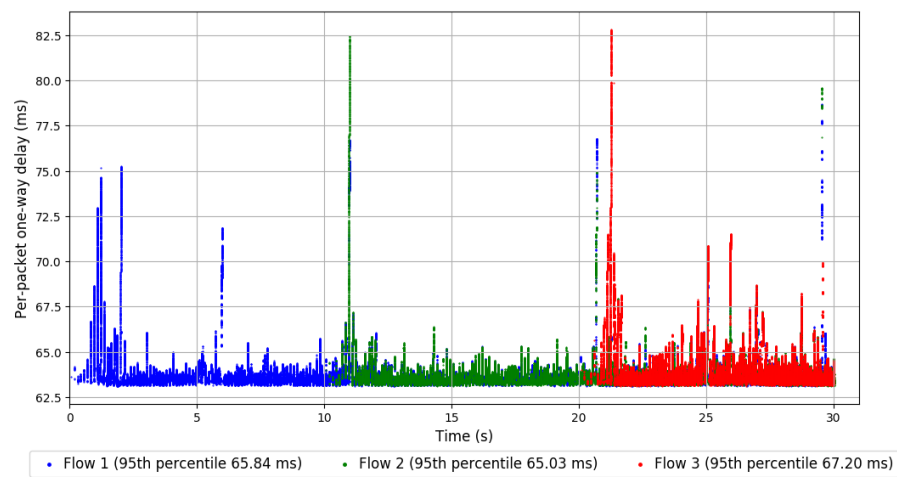
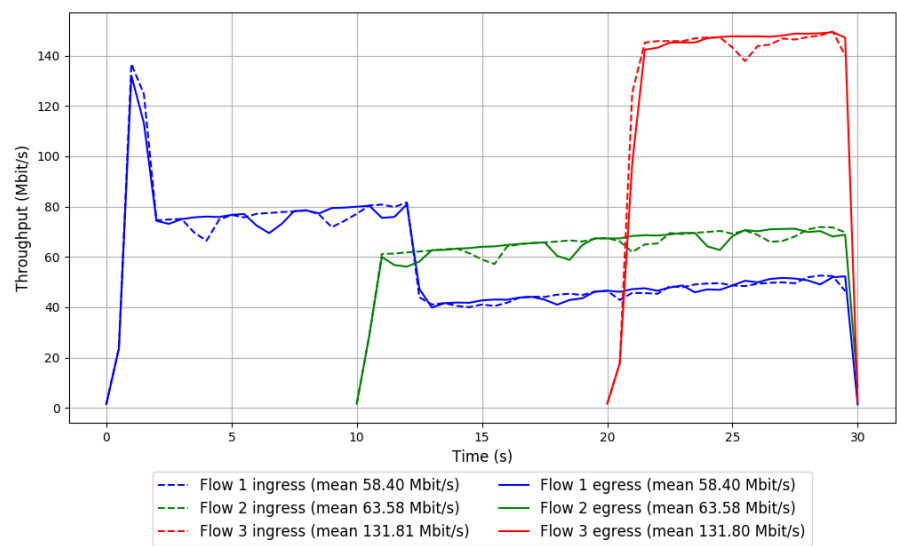
-- Flow 3:

Average throughput: 131.80 Mbit/s

95th percentile per-packet one-way delay: 67.205 ms

Loss rate: 0.00%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-18 06:53:18

End at: 2018-01-18 06:53:48

Below is generated by plot.py at 2018-01-18 10:17:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.69 Mbit/s

95th percentile per-packet one-way delay: 65.500 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.02 Mbit/s

95th percentile per-packet one-way delay: 65.281 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 17.46 Mbit/s

95th percentile per-packet one-way delay: 65.341 ms

Loss rate: 0.00%

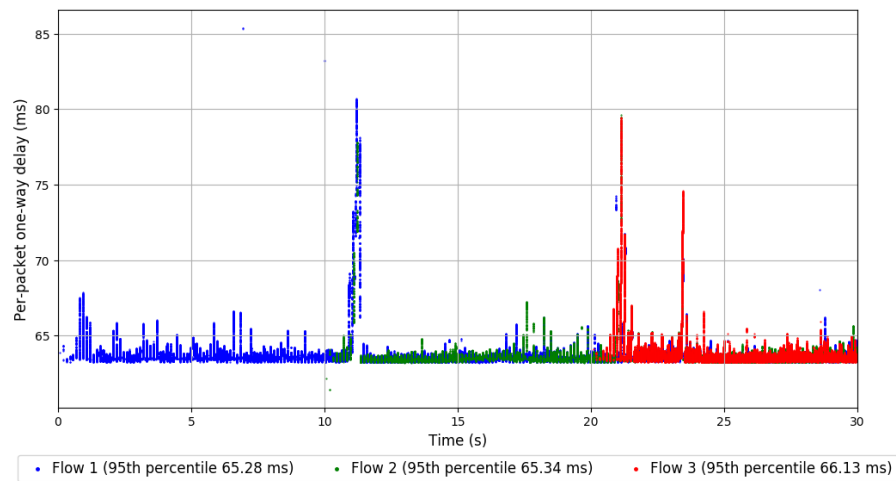
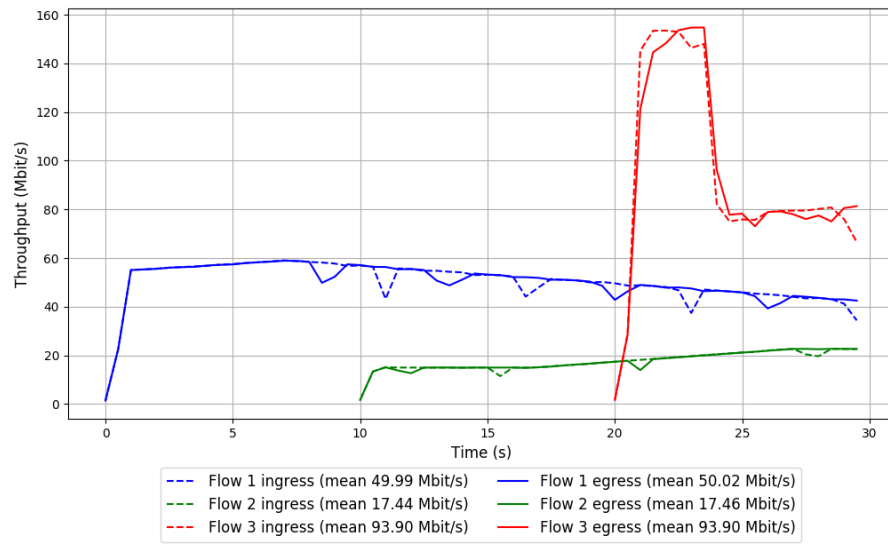
-- Flow 3:

Average throughput: 93.90 Mbit/s

95th percentile per-packet one-way delay: 66.130 ms

Loss rate: 0.01%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-18 07:10:18

End at: 2018-01-18 07:10:48

Below is generated by plot.py at 2018-01-18 10:17:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 174.40 Mbit/s

95th percentile per-packet one-way delay: 65.240 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 88.53 Mbit/s

95th percentile per-packet one-way delay: 65.304 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 121.92 Mbit/s

95th percentile per-packet one-way delay: 65.226 ms

Loss rate: 0.01%

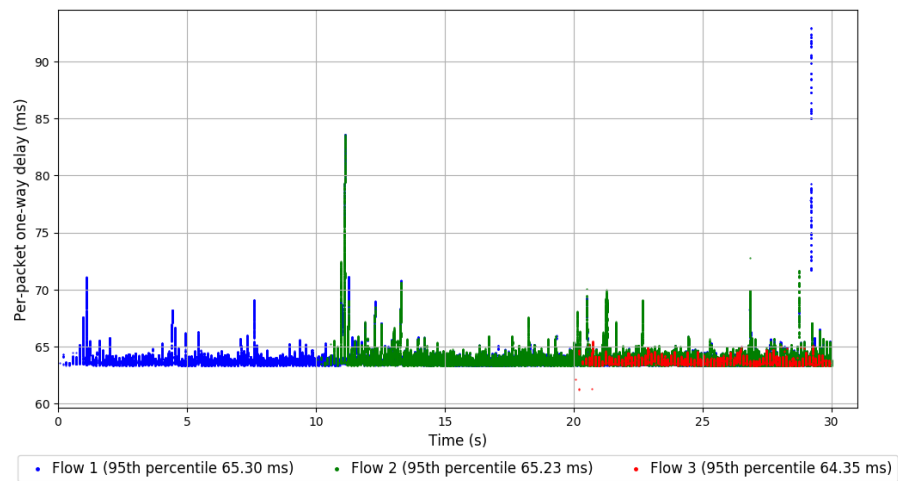
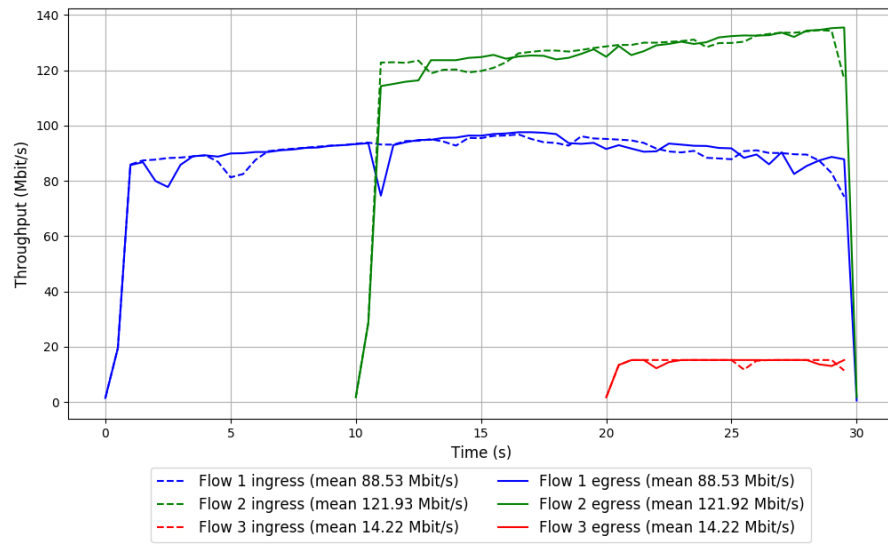
-- Flow 3:

Average throughput: 14.22 Mbit/s

95th percentile per-packet one-way delay: 64.347 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-01-18 07:27:17

End at: 2018-01-18 07:27:47

Below is generated by plot.py at 2018-01-18 10:17:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 152.78 Mbit/s

95th percentile per-packet one-way delay: 65.328 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 109.86 Mbit/s

95th percentile per-packet one-way delay: 65.180 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.55 Mbit/s

95th percentile per-packet one-way delay: 64.439 ms

Loss rate: 0.00%

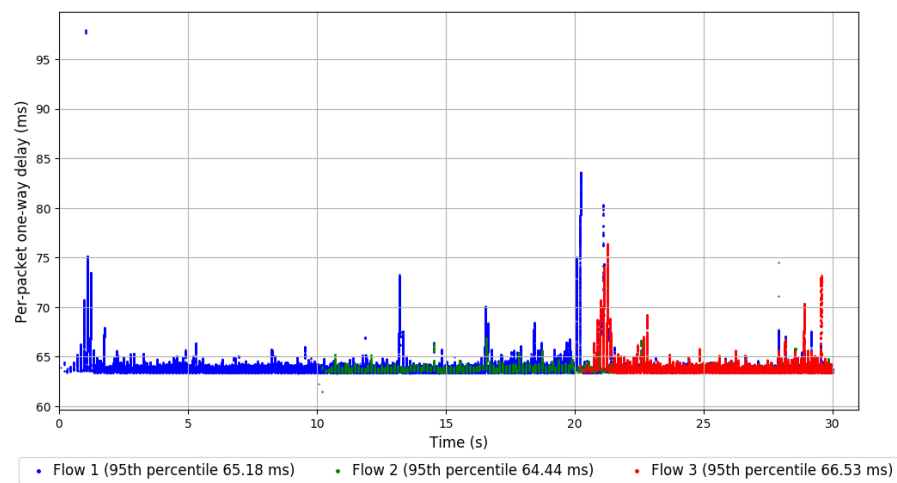
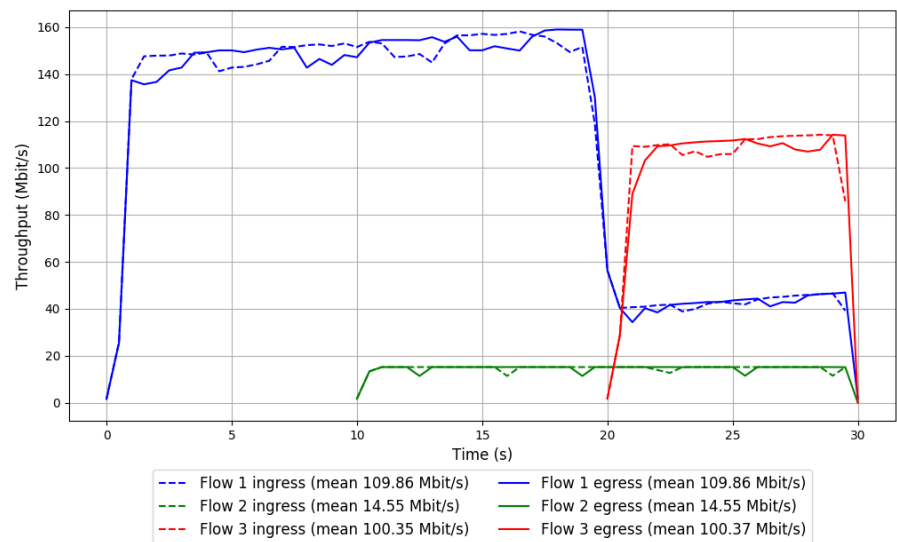
-- Flow 3:

Average throughput: 100.37 Mbit/s

95th percentile per-packet one-way delay: 66.532 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link

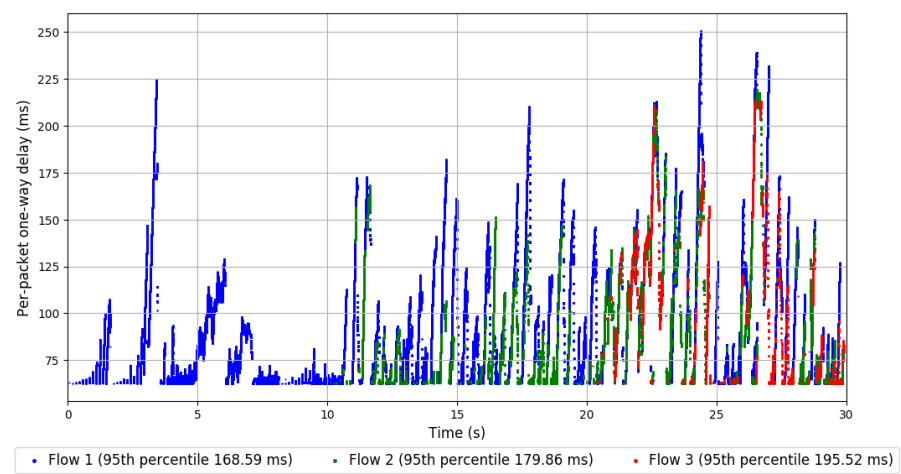
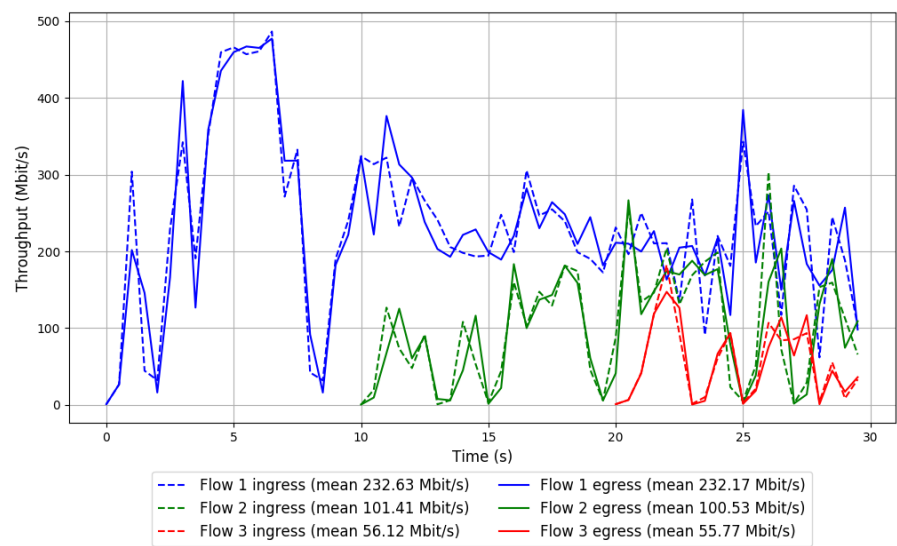


```
Run 1: Statistics of Verus

Start at: 2018-01-18 04:42:07
End at: 2018-01-18 04:42:37

# Below is generated by plot.py at 2018-01-18 10:18:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.17 Mbit/s
95th percentile per-packet one-way delay: 170.697 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 232.17 Mbit/s
95th percentile per-packet one-way delay: 168.589 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 100.53 Mbit/s
95th percentile per-packet one-way delay: 179.857 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 55.77 Mbit/s
95th percentile per-packet one-way delay: 195.518 ms
Loss rate: 0.61%
```

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-18 04:58:59

End at: 2018-01-18 04:59:29

Below is generated by plot.py at 2018-01-18 10:19:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 357.81 Mbit/s

95th percentile per-packet one-way delay: 173.572 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 203.43 Mbit/s

95th percentile per-packet one-way delay: 143.712 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 210.17 Mbit/s

95th percentile per-packet one-way delay: 217.430 ms

Loss rate: 1.18%

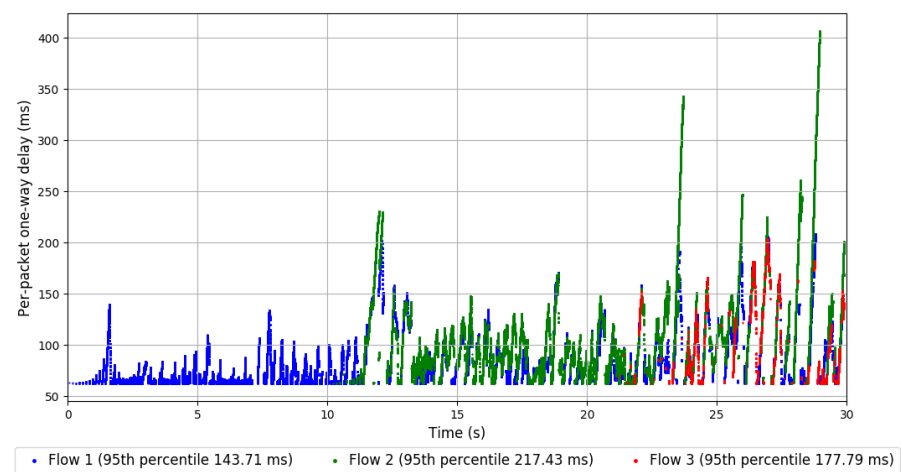
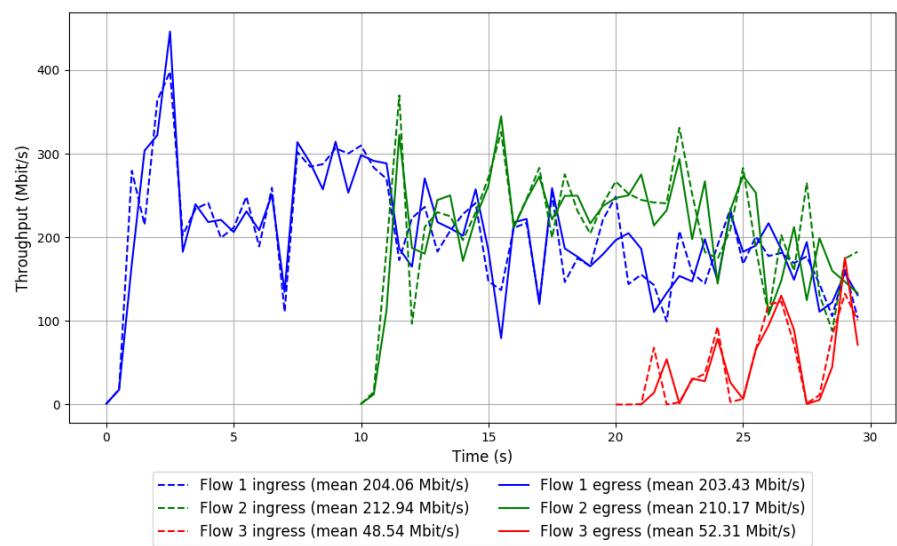
-- Flow 3:

Average throughput: 52.31 Mbit/s

95th percentile per-packet one-way delay: 177.793 ms

Loss rate: 3.27%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-18 05:16:16

End at: 2018-01-18 05:16:46

Below is generated by plot.py at 2018-01-18 10:20:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 397.24 Mbit/s

95th percentile per-packet one-way delay: 188.420 ms

Loss rate: 2.19%

-- Flow 1:

Average throughput: 201.46 Mbit/s

95th percentile per-packet one-way delay: 262.529 ms

Loss rate: 3.31%

-- Flow 2:

Average throughput: 196.57 Mbit/s

95th percentile per-packet one-way delay: 150.596 ms

Loss rate: 0.85%

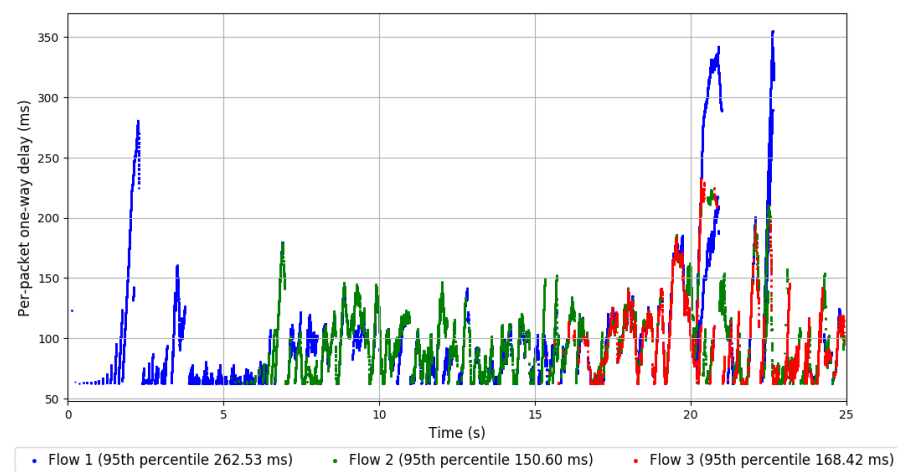
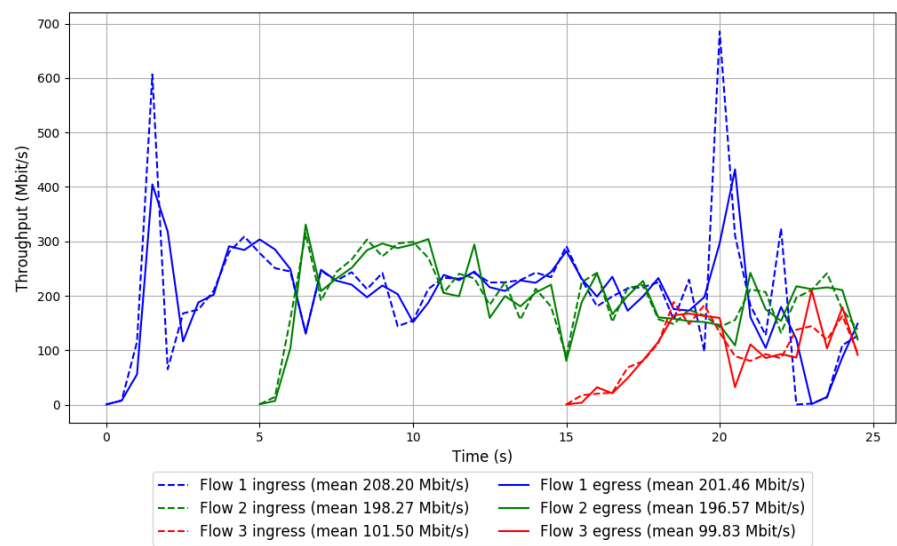
-- Flow 3:

Average throughput: 99.83 Mbit/s

95th percentile per-packet one-way delay: 168.423 ms

Loss rate: 1.64%

Run 3: Report of Verus — Data Link

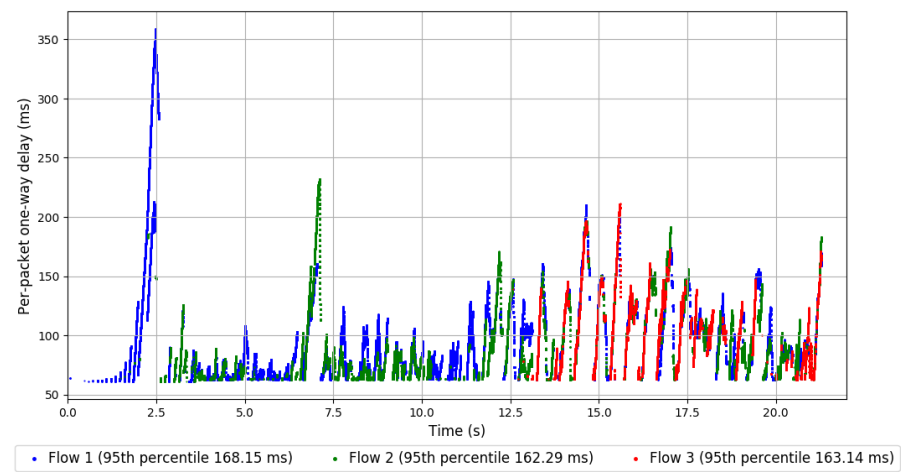
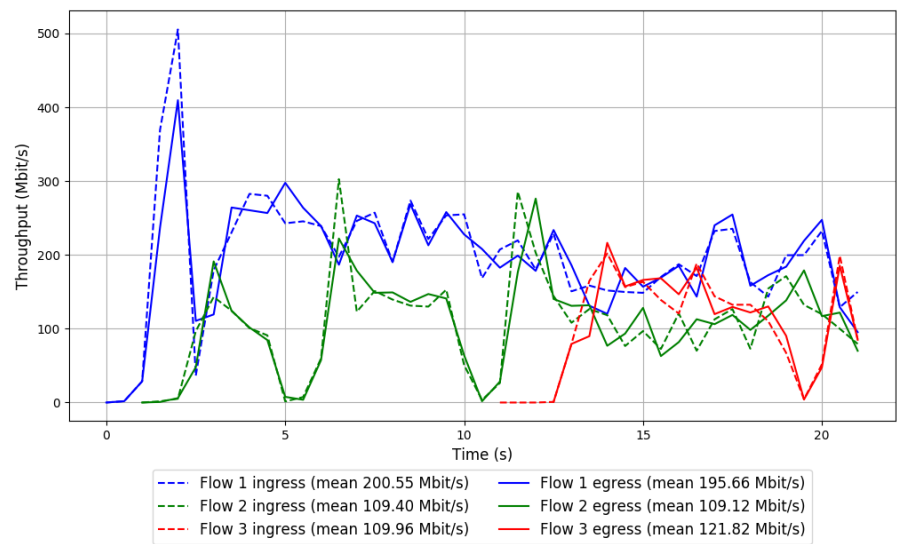


Run 4: Statistics of Verus

Start at: 2018-01-18 05:33:23

End at: 2018-01-18 05:33:53

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-01-18 05:50:48

End at: 2018-01-18 05:51:18

Below is generated by plot.py at 2018-01-18 10:21:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 359.56 Mbit/s

95th percentile per-packet one-way delay: 151.217 ms

Loss rate: 0.96%

-- Flow 1:

Average throughput: 220.71 Mbit/s

95th percentile per-packet one-way delay: 150.595 ms

Loss rate: 1.03%

-- Flow 2:

Average throughput: 120.72 Mbit/s

95th percentile per-packet one-way delay: 131.230 ms

Loss rate: 0.50%

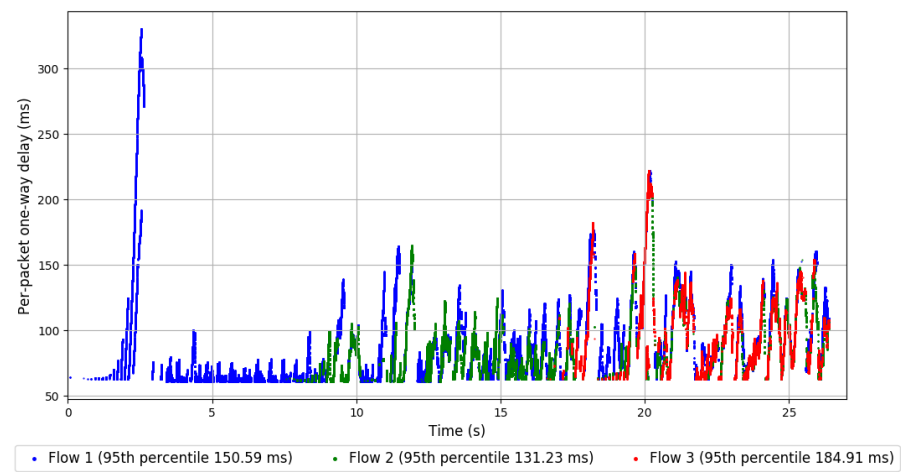
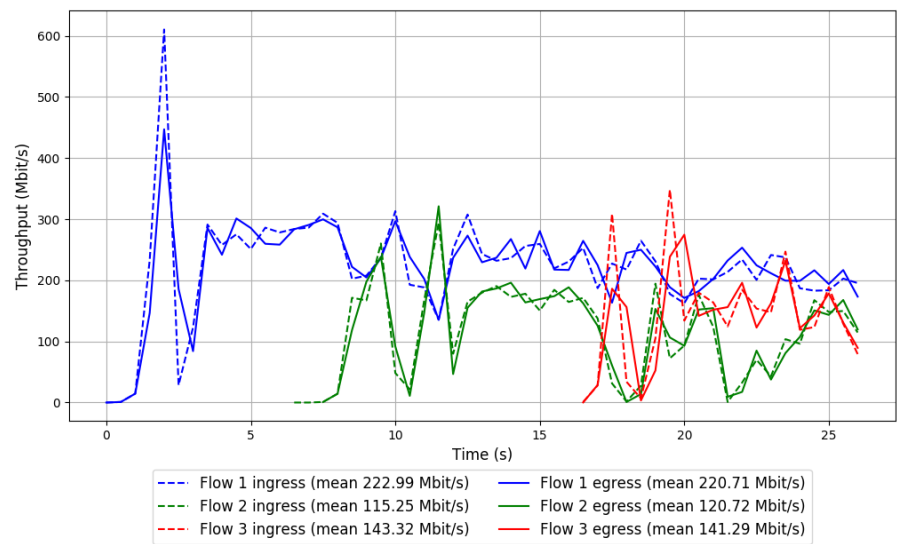
-- Flow 3:

Average throughput: 141.29 Mbit/s

95th percentile per-packet one-way delay: 184.909 ms

Loss rate: 1.43%

Run 5: Report of Verus — Data Link

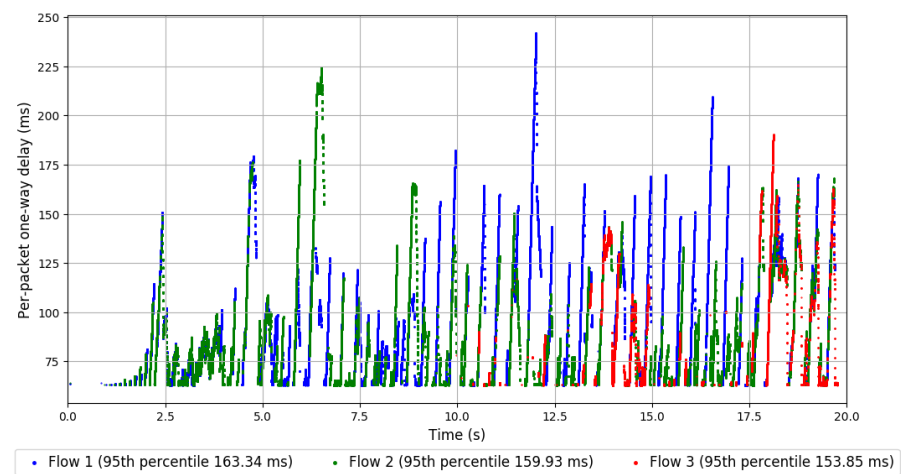
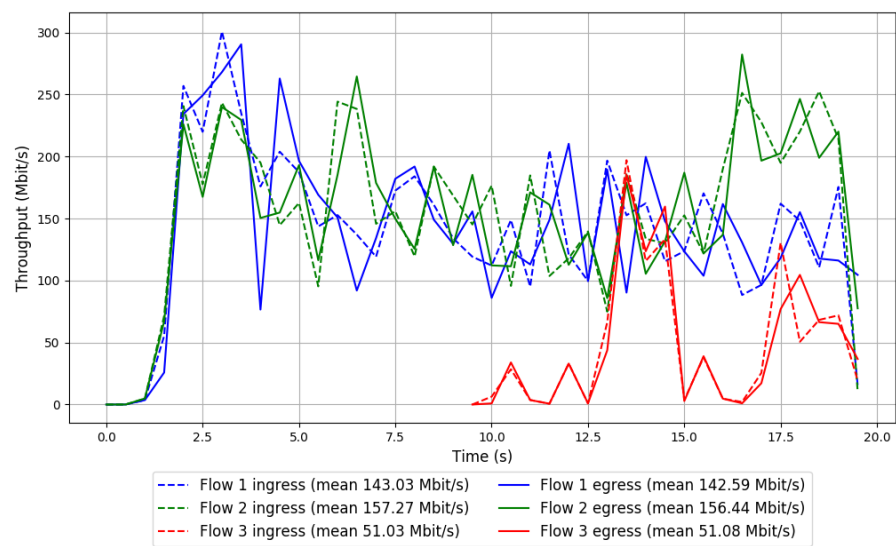


Run 6: Statistics of Verus

Start at: 2018-01-18 06:07:54

End at: 2018-01-18 06:08:24

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-01-18 06:24:51

End at: 2018-01-18 06:25:21

Below is generated by plot.py at 2018-01-18 10:22:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 332.01 Mbit/s

95th percentile per-packet one-way delay: 246.004 ms

Loss rate: 3.11%

-- Flow 1:

Average throughput: 203.07 Mbit/s

95th percentile per-packet one-way delay: 183.170 ms

Loss rate: 1.42%

-- Flow 2:

Average throughput: 97.82 Mbit/s

95th percentile per-packet one-way delay: 363.920 ms

Loss rate: 5.64%

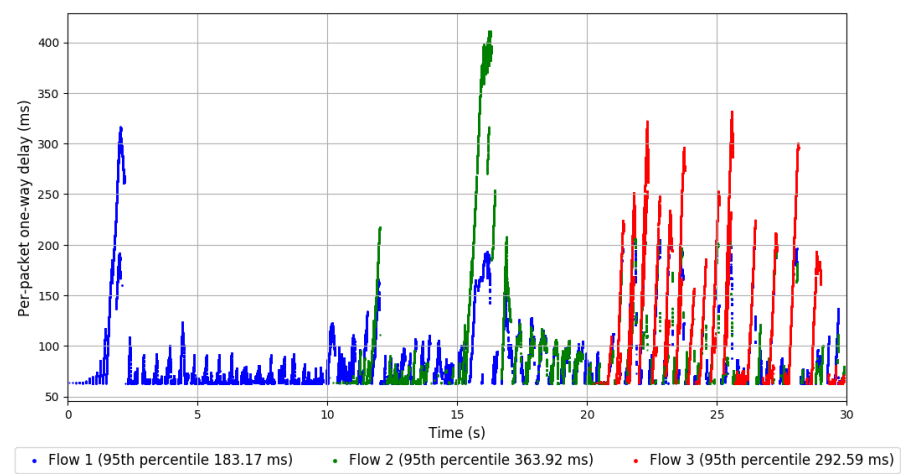
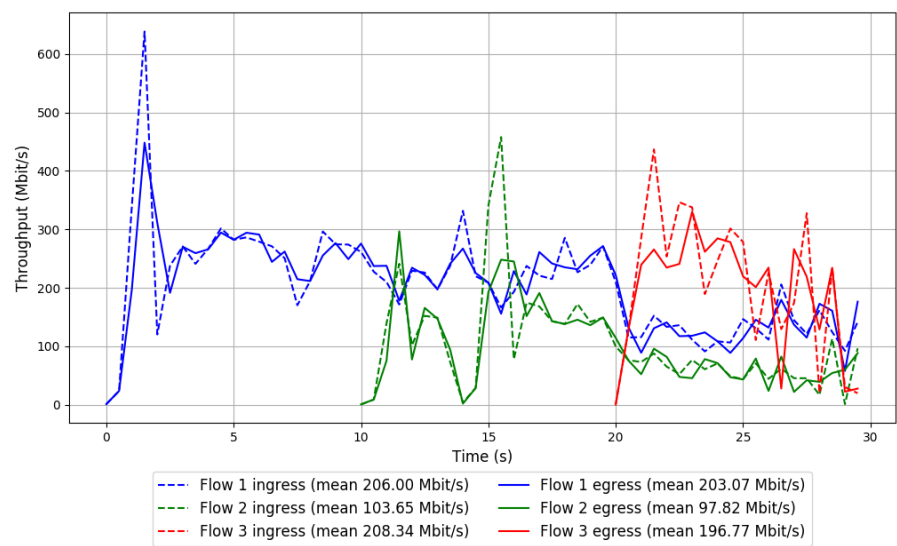
-- Flow 3:

Average throughput: 196.77 Mbit/s

95th percentile per-packet one-way delay: 292.593 ms

Loss rate: 5.66%

Run 7: Report of Verus — Data Link

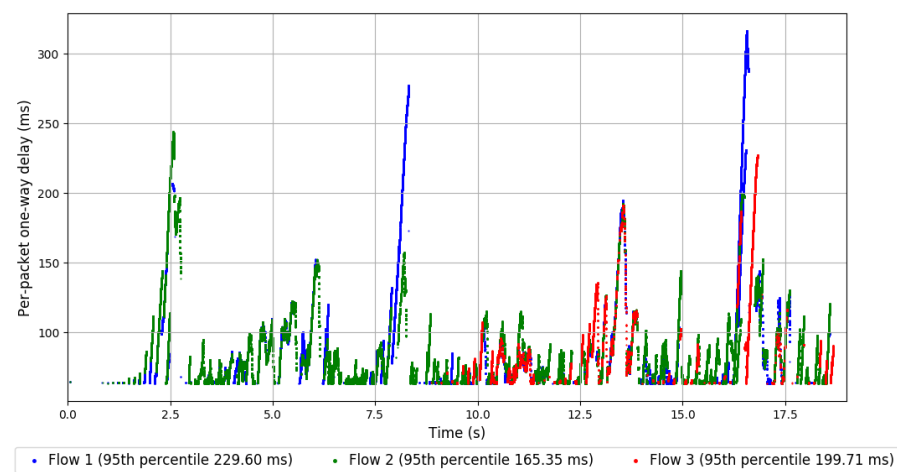
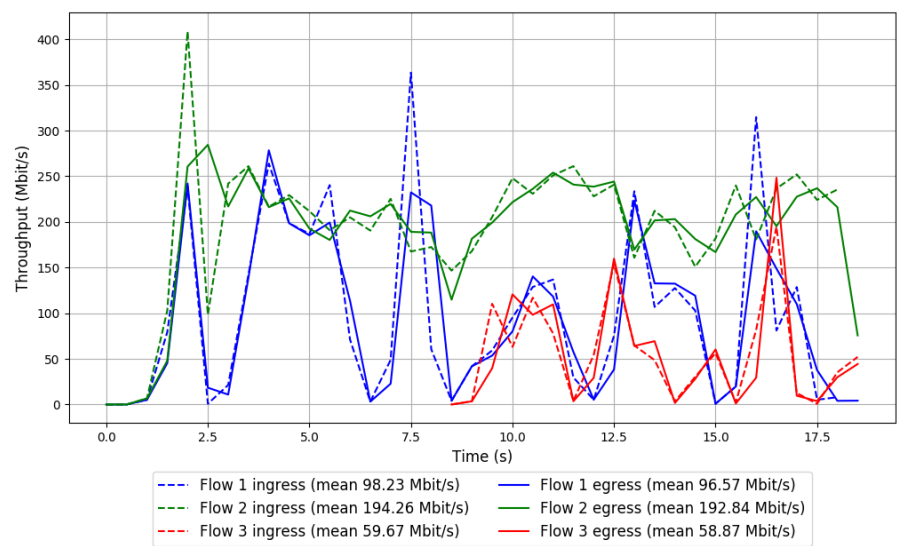


Run 8: Statistics of Verus

Start at: 2018-01-18 06:42:15

End at: 2018-01-18 06:42:45

Run 8: Report of Verus — Data Link

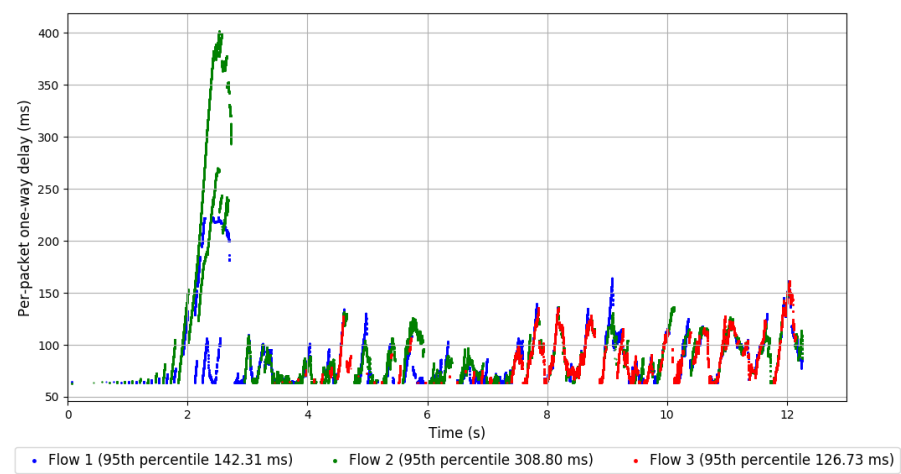
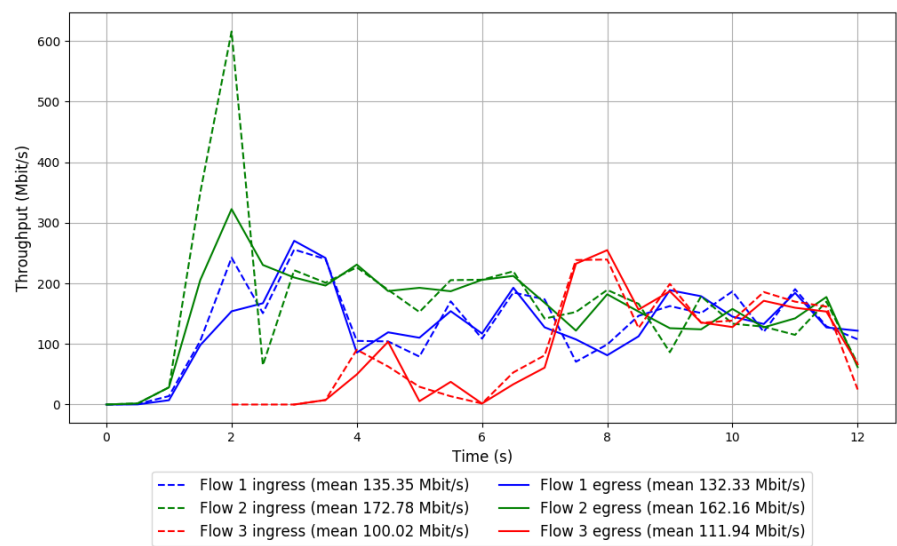


Run 9: Statistics of Verus

Start at: 2018-01-18 06:59:23

End at: 2018-01-18 06:59:53

Run 9: Report of Verus — Data Link

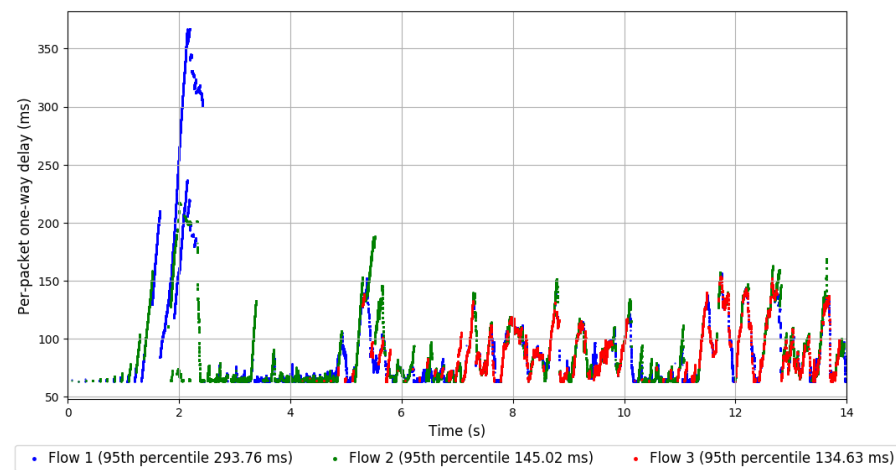
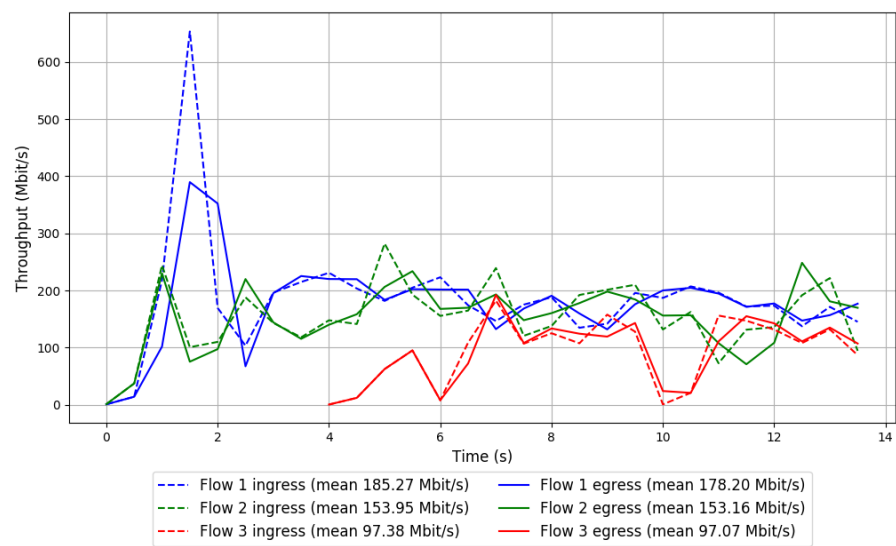


Run 10: Statistics of Verus

Start at: 2018-01-18 07:16:28

End at: 2018-01-18 07:16:58

Run 10: Report of Verus — Data Link

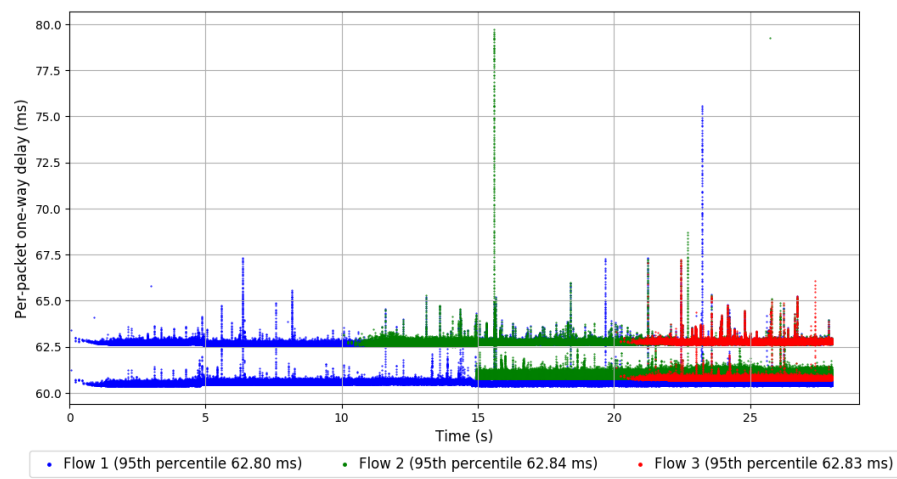
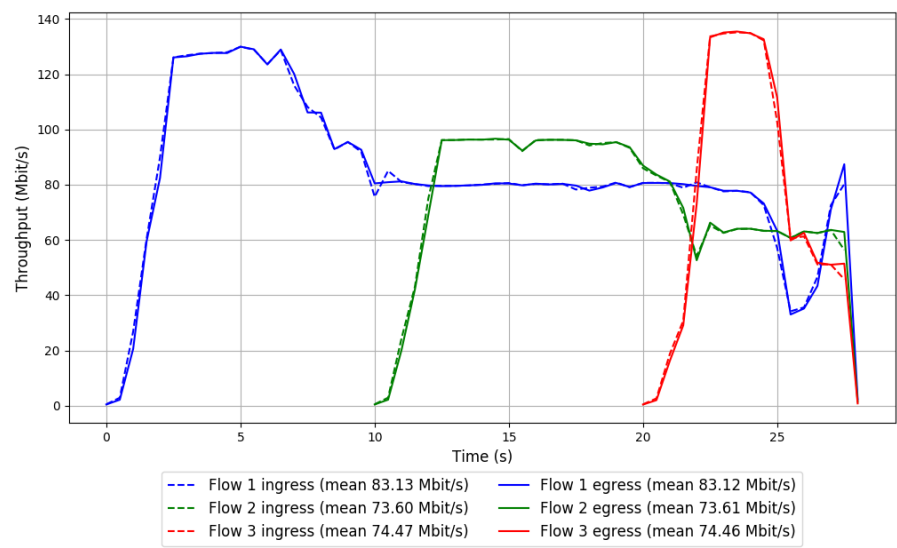


```
Run 1: Statistics of Copa

Start at: 2018-01-18 04:44:18
End at: 2018-01-18 04:44:48

# Below is generated by plot.py at 2018-01-18 10:24:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.50 Mbit/s
95th percentile per-packet one-way delay: 62.816 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 83.12 Mbit/s
95th percentile per-packet one-way delay: 62.798 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 73.61 Mbit/s
95th percentile per-packet one-way delay: 62.835 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 74.46 Mbit/s
95th percentile per-packet one-way delay: 62.830 ms
Loss rate: 0.00%
```

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-18 05:01:04

End at: 2018-01-18 05:01:34

Below is generated by plot.py at 2018-01-18 10:24:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 122.02 Mbit/s

95th percentile per-packet one-way delay: 62.917 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.06 Mbit/s

95th percentile per-packet one-way delay: 62.826 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.95 Mbit/s

95th percentile per-packet one-way delay: 62.949 ms

Loss rate: 0.00%

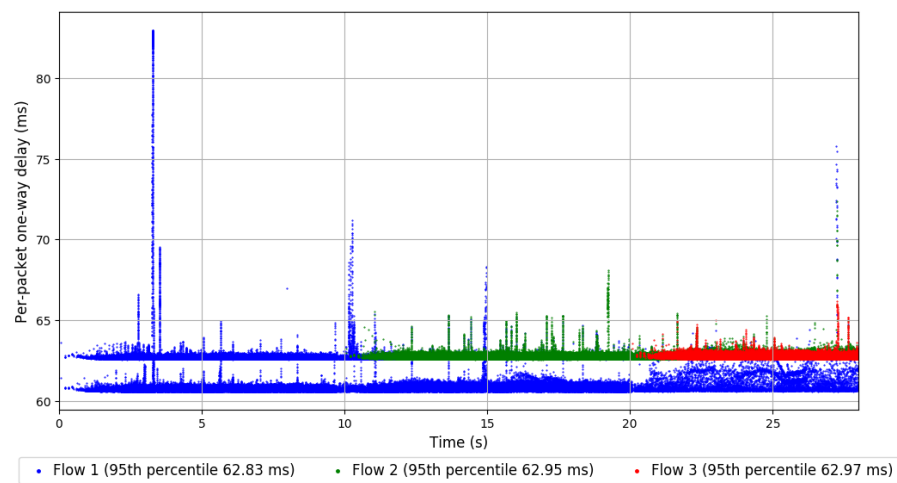
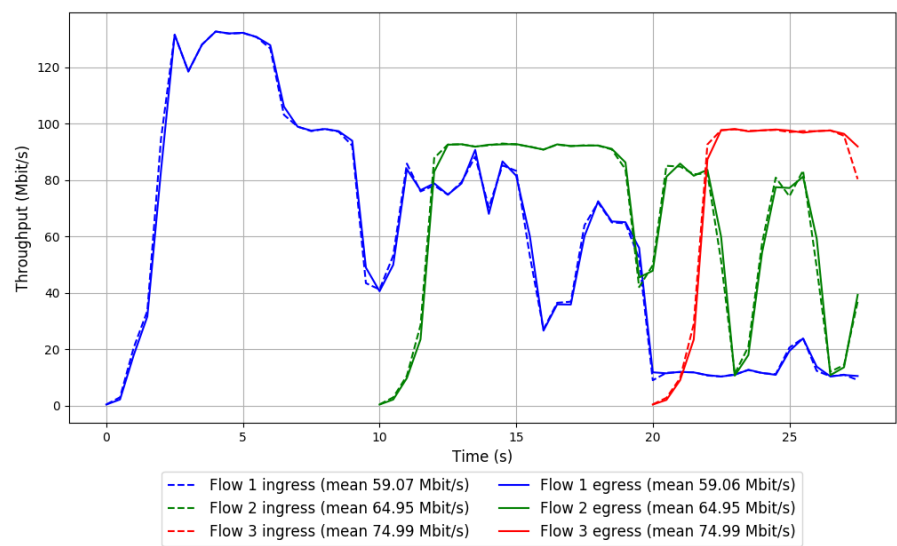
-- Flow 3:

Average throughput: 74.99 Mbit/s

95th percentile per-packet one-way delay: 62.972 ms

Loss rate: 0.00%

Run 2: Report of Copa — Data Link

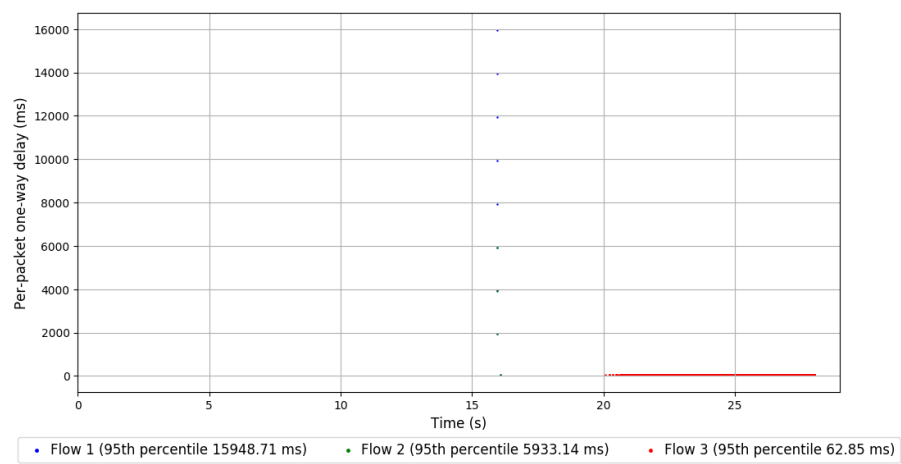
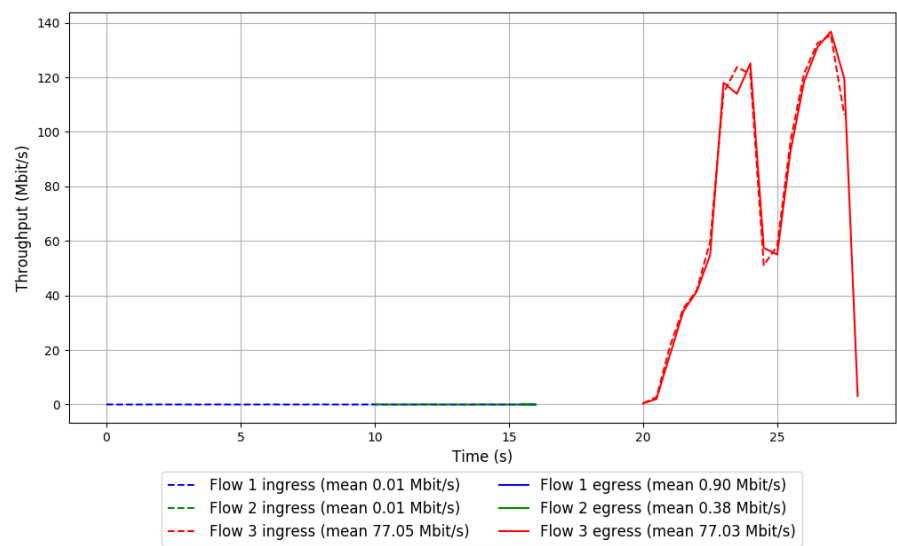


Run 3: Statistics of Copa

Start at: 2018-01-18 05:18:30

End at: 2018-01-18 05:19:00

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-01-18 05:35:26

End at: 2018-01-18 05:35:56

Below is generated by plot.py at 2018-01-18 10:24:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.15 Mbit/s

95th percentile per-packet one-way delay: 62.997 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 81.15 Mbit/s

95th percentile per-packet one-way delay: 62.997 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 346.11 Mbit/s

95th percentile per-packet one-way delay: 17439.931 ms

Loss rate: 0.00%

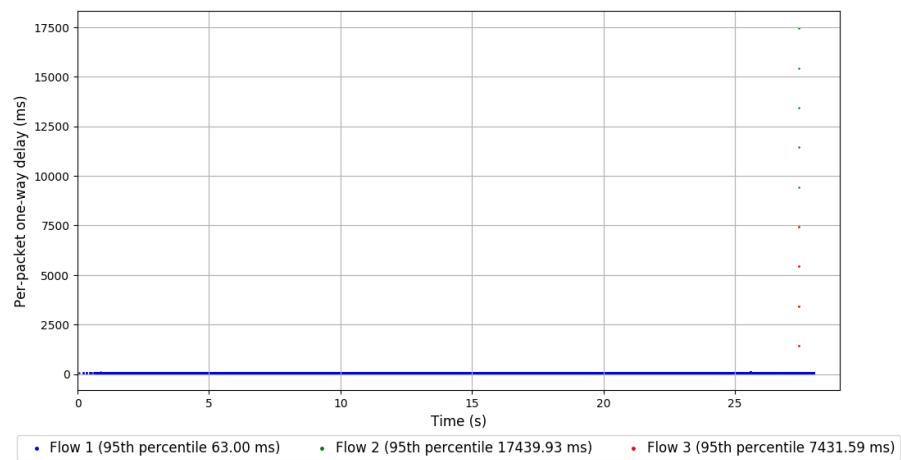
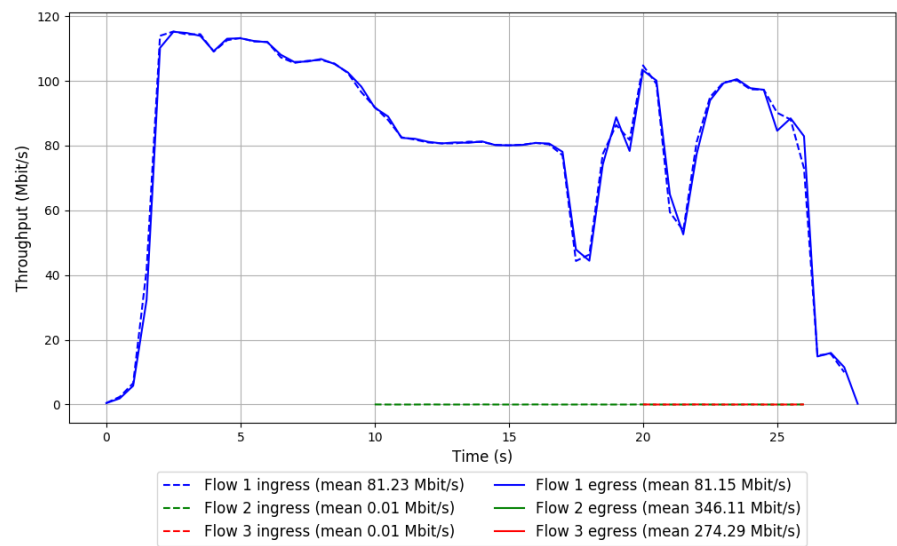
-- Flow 3:

Average throughput: 274.29 Mbit/s

95th percentile per-packet one-way delay: 7431.594 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link

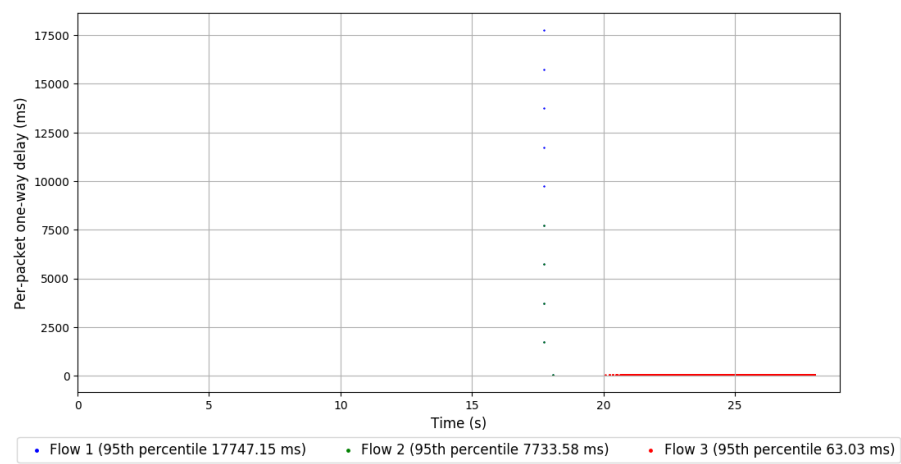
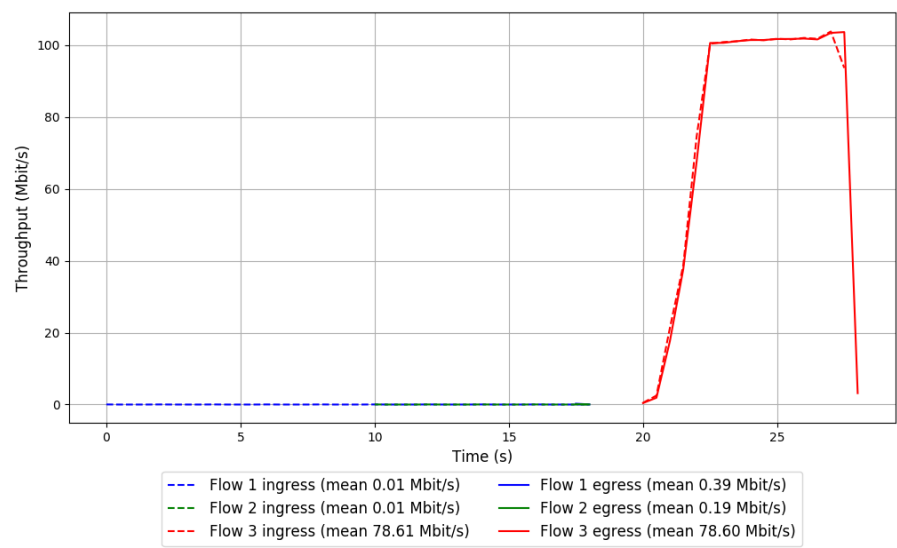


Run 5: Statistics of Copa

Start at: 2018-01-18 05:52:56

End at: 2018-01-18 05:53:26

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-18 06:09:59

End at: 2018-01-18 06:10:29

Below is generated by plot.py at 2018-01-18 10:25:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 126.55 Mbit/s

95th percentile per-packet one-way delay: 63.331 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 75.06 Mbit/s

95th percentile per-packet one-way delay: 63.180 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.62 Mbit/s

95th percentile per-packet one-way delay: 63.461 ms

Loss rate: 0.00%

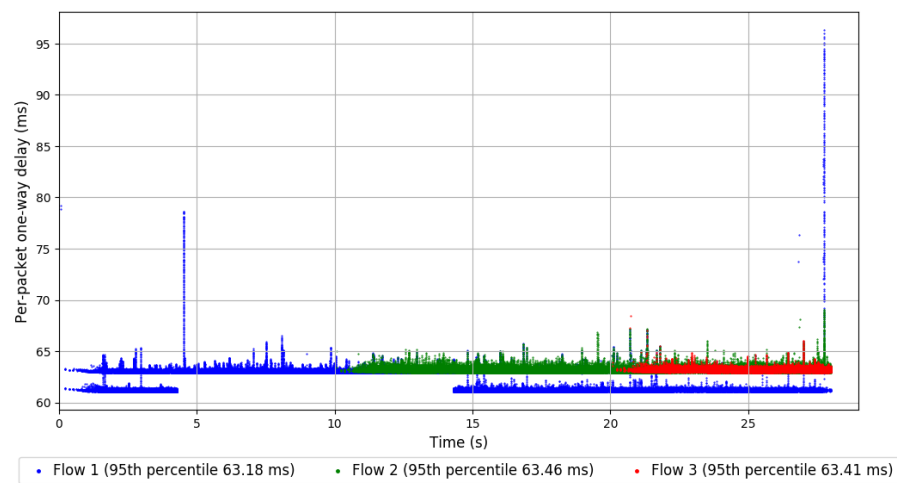
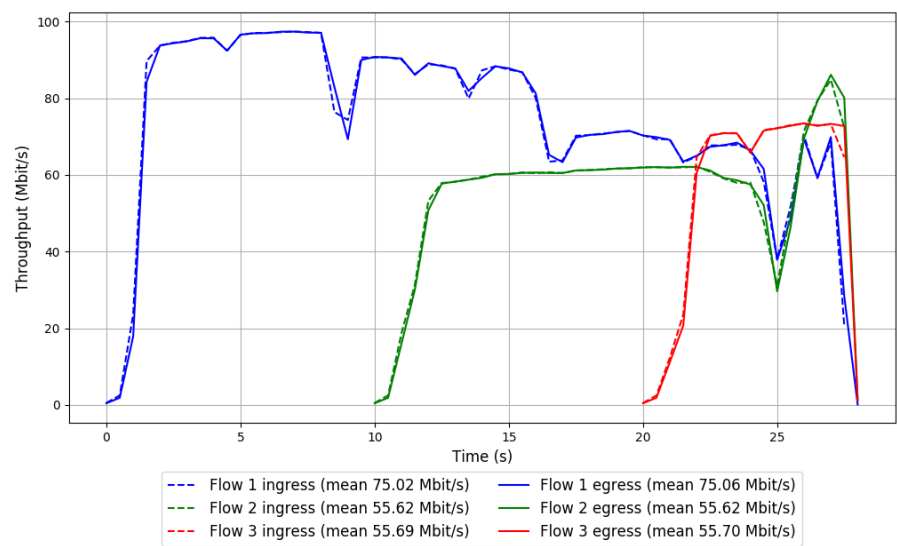
-- Flow 3:

Average throughput: 55.70 Mbit/s

95th percentile per-packet one-way delay: 63.405 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-01-18 06:27:07

End at: 2018-01-18 06:27:37

Below is generated by plot.py at 2018-01-18 10:26:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.65 Mbit/s

95th percentile per-packet one-way delay: 63.403 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 79.04 Mbit/s

95th percentile per-packet one-way delay: 63.373 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.27 Mbit/s

95th percentile per-packet one-way delay: 63.463 ms

Loss rate: 0.00%

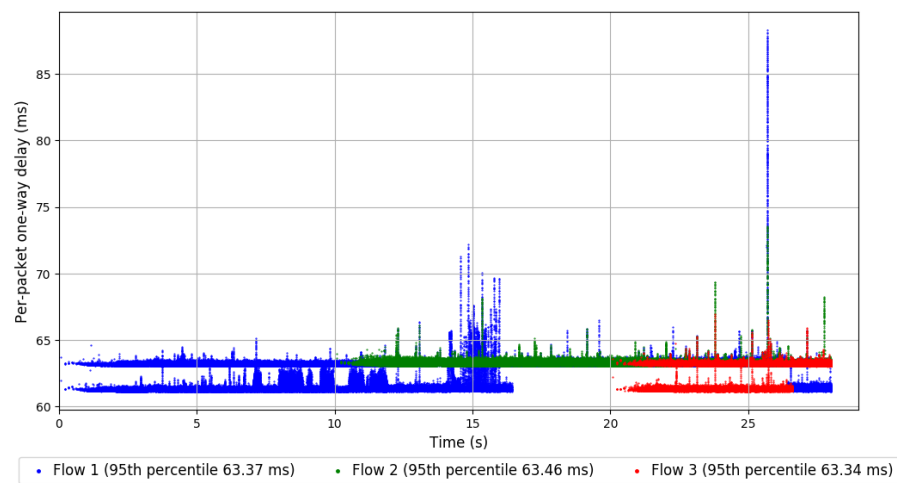
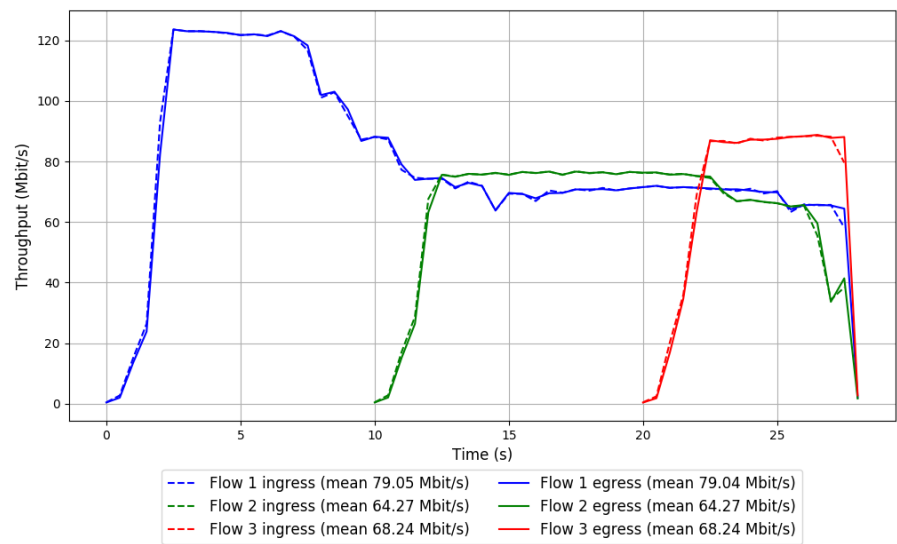
-- Flow 3:

Average throughput: 68.24 Mbit/s

95th percentile per-packet one-way delay: 63.337 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-18 06:44:12

End at: 2018-01-18 06:44:42

Below is generated by plot.py at 2018-01-18 10:26:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 131.48 Mbit/s

95th percentile per-packet one-way delay: 63.600 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 65.32 Mbit/s

95th percentile per-packet one-way delay: 63.679 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 75.66 Mbit/s

95th percentile per-packet one-way delay: 63.540 ms

Loss rate: 0.00%

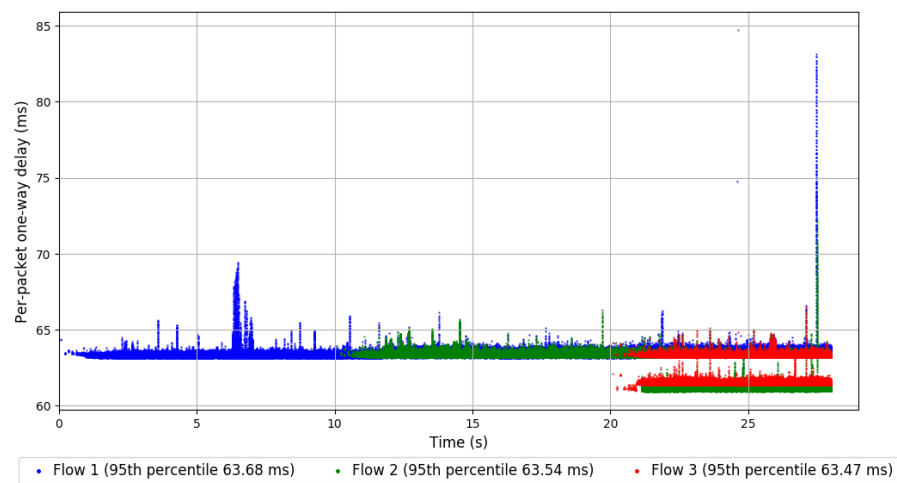
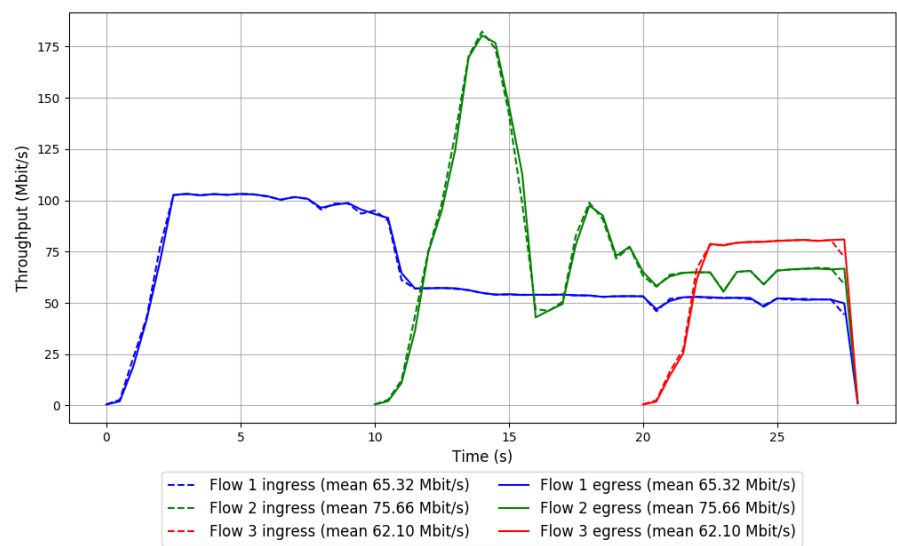
-- Flow 3:

Average throughput: 62.10 Mbit/s

95th percentile per-packet one-way delay: 63.468 ms

Loss rate: 0.00%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-18 07:01:16

End at: 2018-01-18 07:01:46

Below is generated by plot.py at 2018-01-18 10:26:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 120.52 Mbit/s

95th percentile per-packet one-way delay: 63.602 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.86 Mbit/s

95th percentile per-packet one-way delay: 63.599 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.14 Mbit/s

95th percentile per-packet one-way delay: 63.552 ms

Loss rate: 0.00%

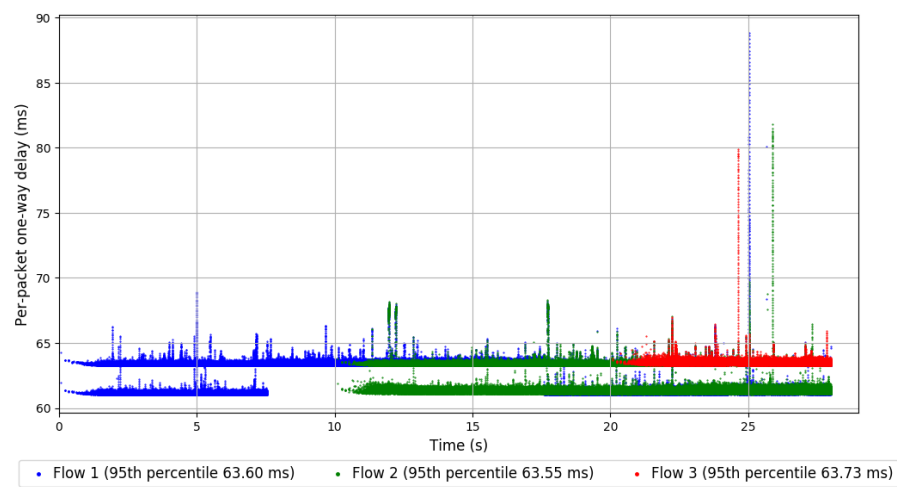
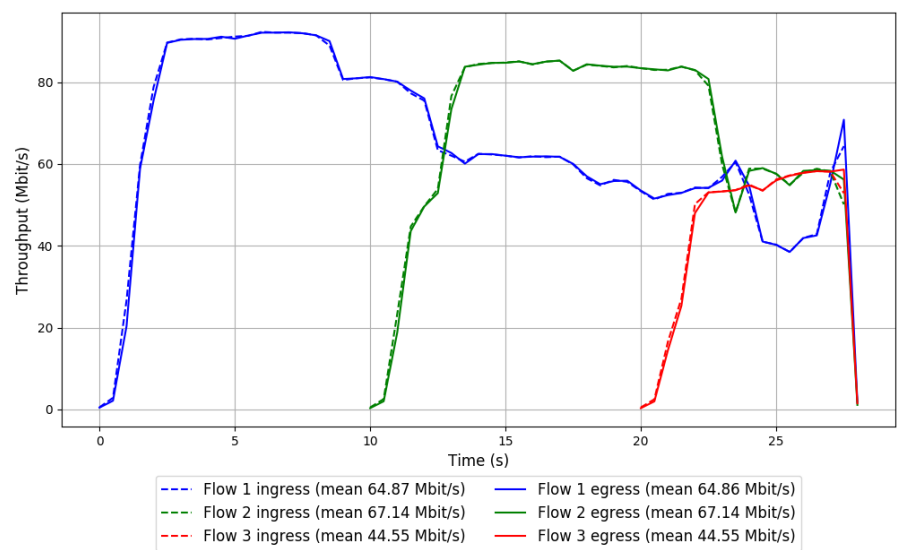
-- Flow 3:

Average throughput: 44.55 Mbit/s

95th percentile per-packet one-way delay: 63.728 ms

Loss rate: 0.02%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-18 07:18:29

End at: 2018-01-18 07:18:59

Below is generated by plot.py at 2018-01-18 10:26:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 99.11 Mbit/s

95th percentile per-packet one-way delay: 63.554 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 80.87 Mbit/s

95th percentile per-packet one-way delay: 63.548 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 64.430 ms

Loss rate: 0.00%

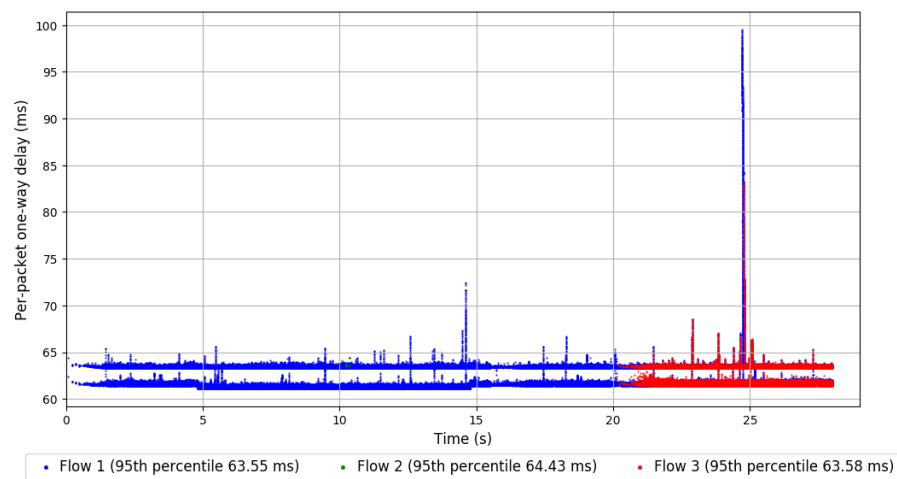
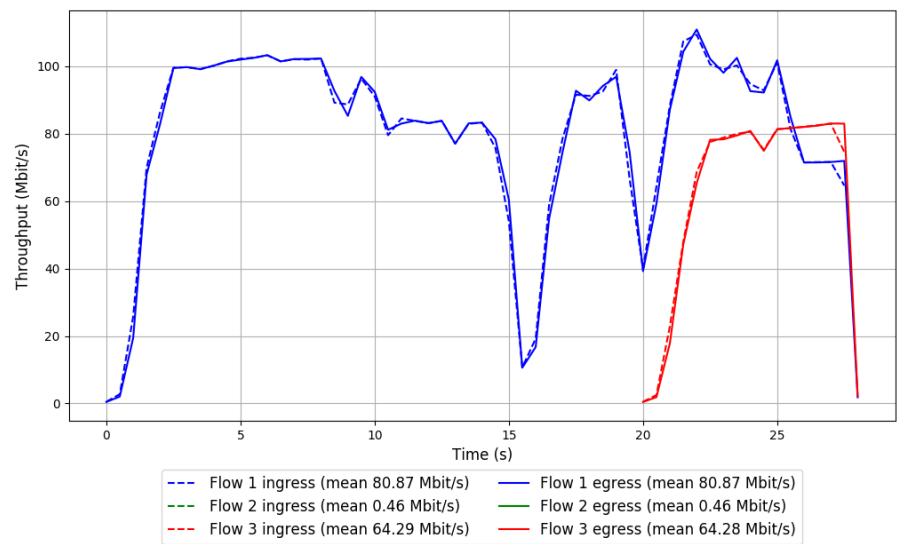
-- Flow 3:

Average throughput: 64.28 Mbit/s

95th percentile per-packet one-way delay: 63.575 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

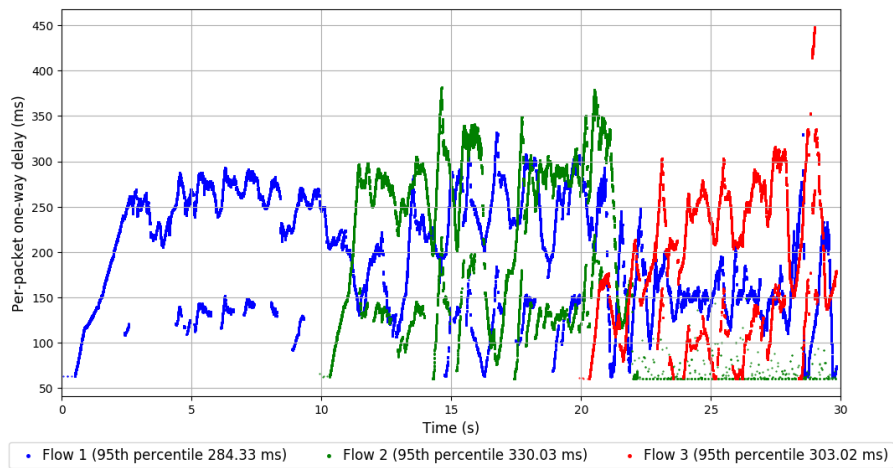
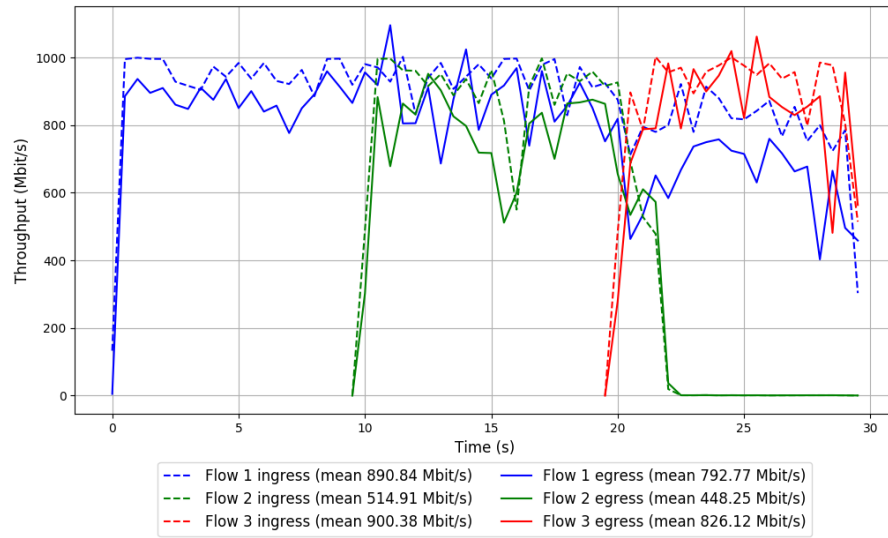


```
Run 1: Statistics of FillP

Start at: 2018-01-18 04:39:22
End at: 2018-01-18 04:39:52

# Below is generated by plot.py at 2018-01-18 10:48:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1366.82 Mbit/s
95th percentile per-packet one-way delay: 300.376 ms
Loss rate: 10.91%
-- Flow 1:
Average throughput: 792.77 Mbit/s
95th percentile per-packet one-way delay: 284.334 ms
Loss rate: 11.01%
-- Flow 2:
Average throughput: 448.25 Mbit/s
95th percentile per-packet one-way delay: 330.033 ms
Loss rate: 12.97%
-- Flow 3:
Average throughput: 826.12 Mbit/s
95th percentile per-packet one-way delay: 303.016 ms
Loss rate: 8.23%
```

Run 1: Report of FillP — Data Link

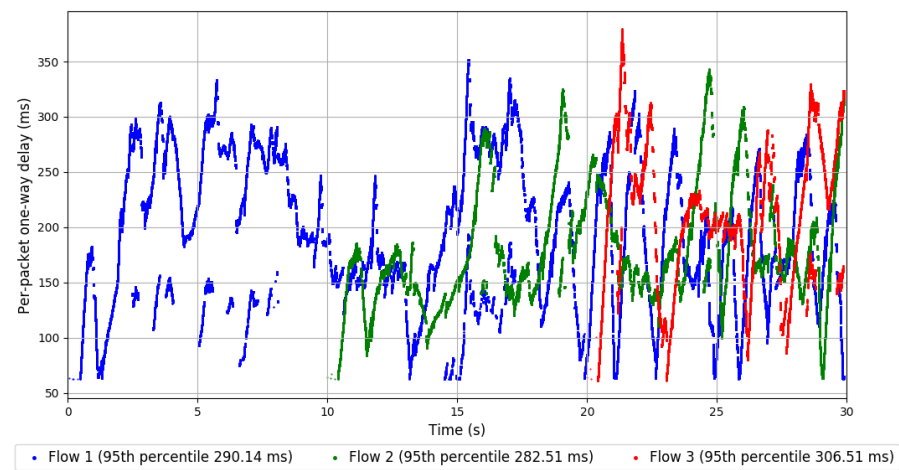
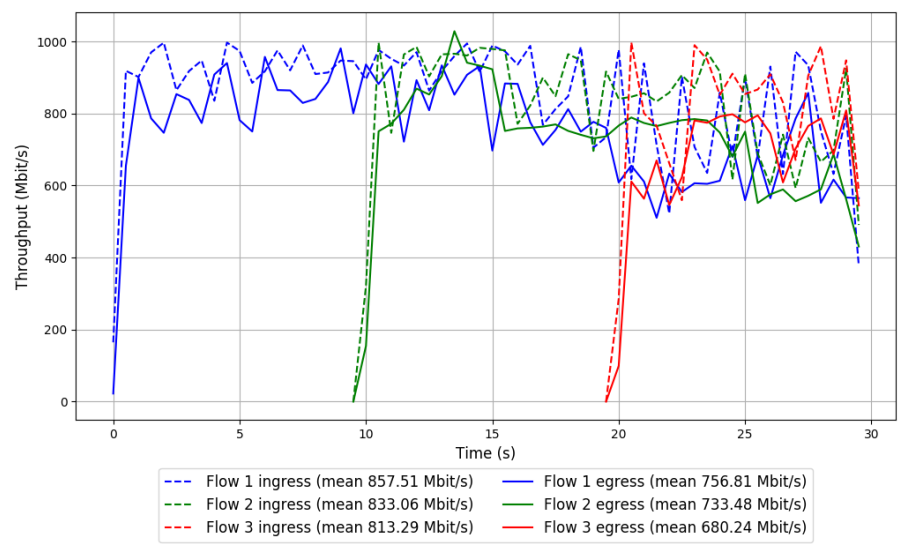


```
Run 2: Statistics of FillP

Start at: 2018-01-18 04:56:06
End at: 2018-01-18 04:56:36

# Below is generated by plot.py at 2018-01-18 10:51:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1472.16 Mbit/s
95th percentile per-packet one-way delay: 290.941 ms
Loss rate: 12.55%
-- Flow 1:
Average throughput: 756.81 Mbit/s
95th percentile per-packet one-way delay: 290.136 ms
Loss rate: 11.74%
-- Flow 2:
Average throughput: 733.48 Mbit/s
95th percentile per-packet one-way delay: 282.508 ms
Loss rate: 11.95%
-- Flow 3:
Average throughput: 680.24 Mbit/s
95th percentile per-packet one-way delay: 306.508 ms
Loss rate: 16.36%
```

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-18 05:13:19

End at: 2018-01-18 05:13:49

Below is generated by plot.py at 2018-01-18 10:52:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 1509.41 Mbit/s

95th percentile per-packet one-way delay: 283.959 ms

Loss rate: 8.80%

-- Flow 1:

Average throughput: 767.97 Mbit/s

95th percentile per-packet one-way delay: 288.828 ms

Loss rate: 7.11%

-- Flow 2:

Average throughput: 818.37 Mbit/s

95th percentile per-packet one-way delay: 268.390 ms

Loss rate: 6.18%

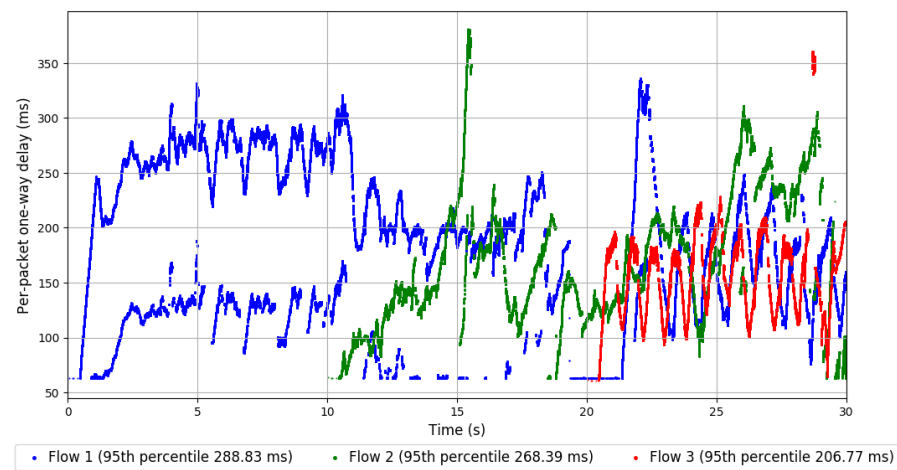
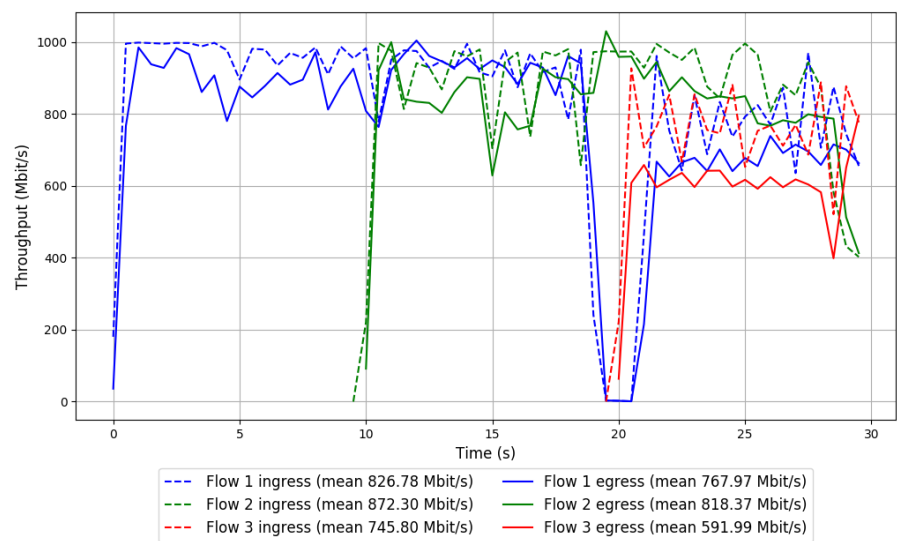
-- Flow 3:

Average throughput: 591.99 Mbit/s

95th percentile per-packet one-way delay: 206.767 ms

Loss rate: 20.61%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-01-18 05:30:31

End at: 2018-01-18 05:31:01

Below is generated by plot.py at 2018-01-18 10:52:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 1442.35 Mbit/s

95th percentile per-packet one-way delay: 340.112 ms

Loss rate: 14.14%

-- Flow 1:

Average throughput: 791.88 Mbit/s

95th percentile per-packet one-way delay: 289.801 ms

Loss rate: 10.24%

-- Flow 2:

Average throughput: 620.63 Mbit/s

95th percentile per-packet one-way delay: 370.058 ms

Loss rate: 20.53%

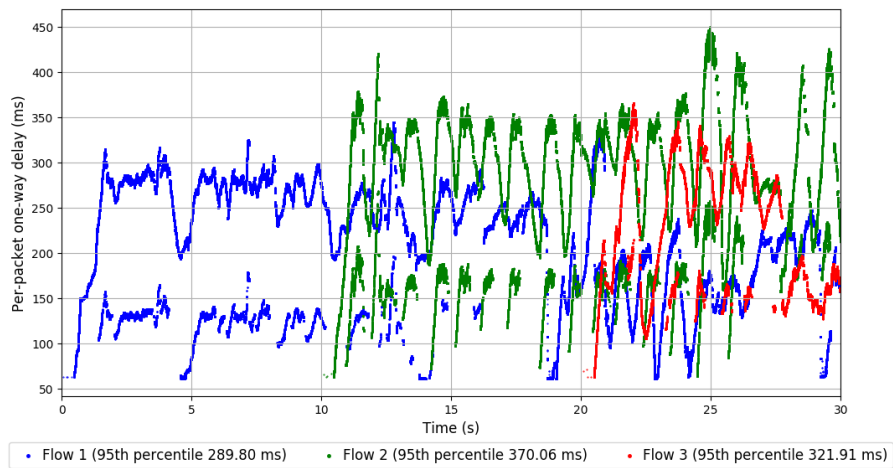
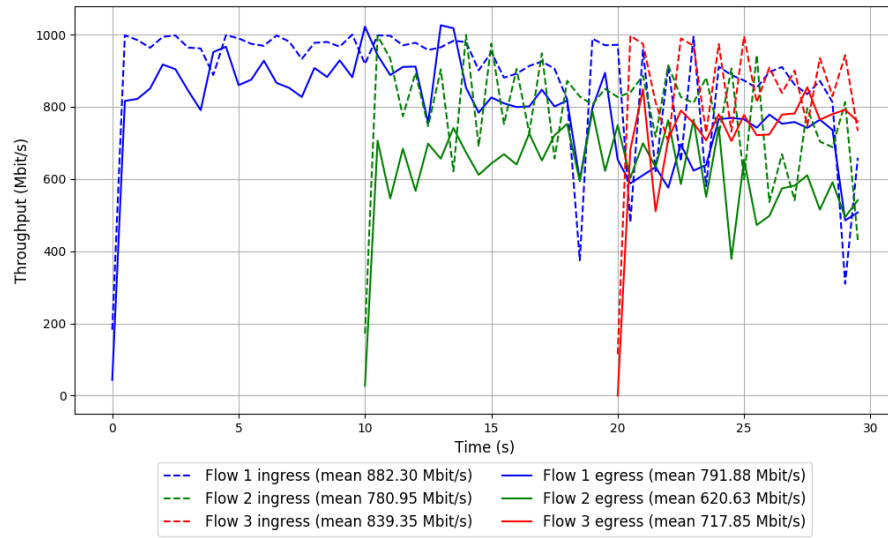
-- Flow 3:

Average throughput: 717.85 Mbit/s

95th percentile per-packet one-way delay: 321.907 ms

Loss rate: 14.54%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-01-18 05:47:49

End at: 2018-01-18 05:48:19

Below is generated by plot.py at 2018-01-18 10:53:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 1484.73 Mbit/s

95th percentile per-packet one-way delay: 328.253 ms

Loss rate: 11.09%

-- Flow 1:

Average throughput: 735.46 Mbit/s

95th percentile per-packet one-way delay: 360.201 ms

Loss rate: 12.77%

-- Flow 2:

Average throughput: 811.64 Mbit/s

95th percentile per-packet one-way delay: 279.959 ms

Loss rate: 6.37%

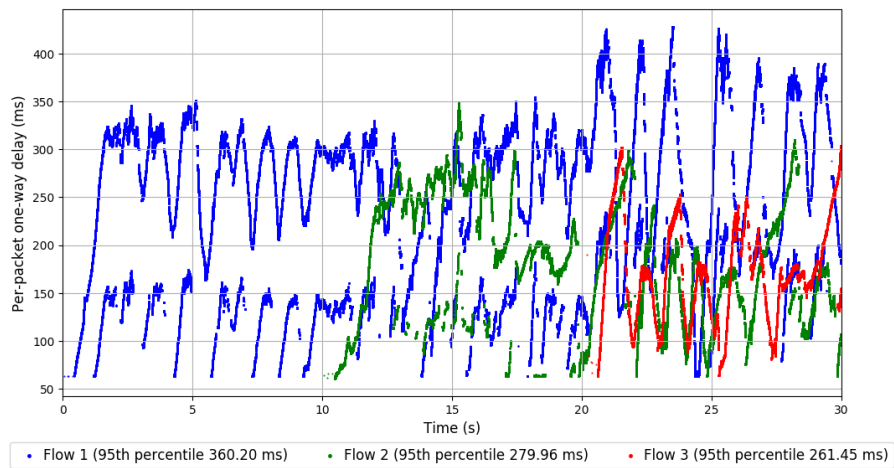
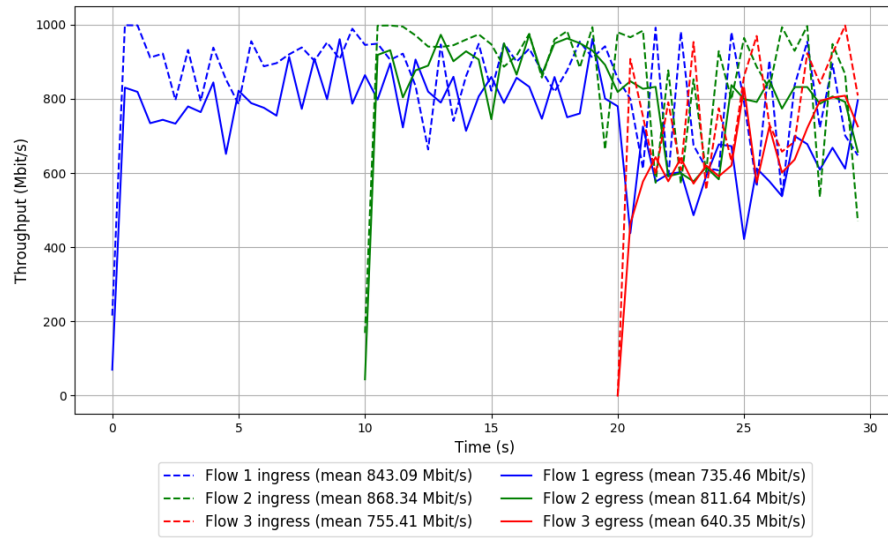
-- Flow 3:

Average throughput: 640.35 Mbit/s

95th percentile per-packet one-way delay: 261.452 ms

Loss rate: 16.31%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-01-18 06:05:03

End at: 2018-01-18 06:05:33

Below is generated by plot.py at 2018-01-18 10:53:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 1478.78 Mbit/s

95th percentile per-packet one-way delay: 278.293 ms

Loss rate: 9.88%

-- Flow 1:

Average throughput: 731.42 Mbit/s

95th percentile per-packet one-way delay: 277.281 ms

Loss rate: 9.57%

-- Flow 2:

Average throughput: 766.56 Mbit/s

95th percentile per-packet one-way delay: 285.344 ms

Loss rate: 9.64%

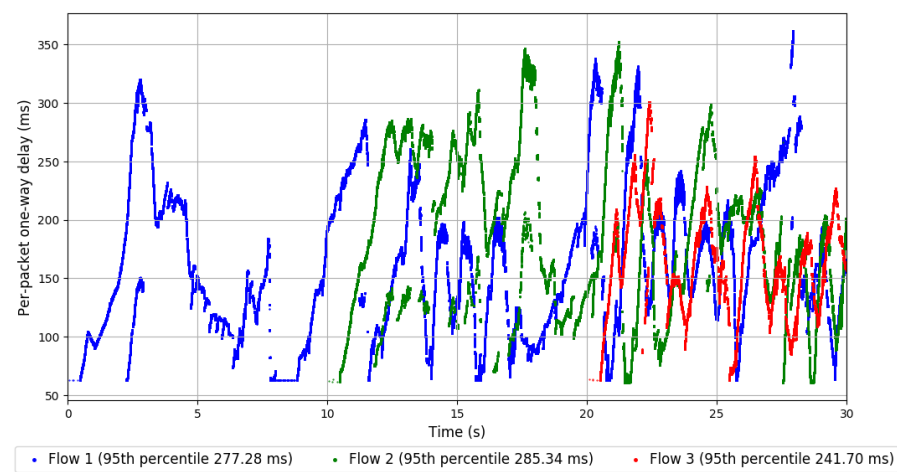
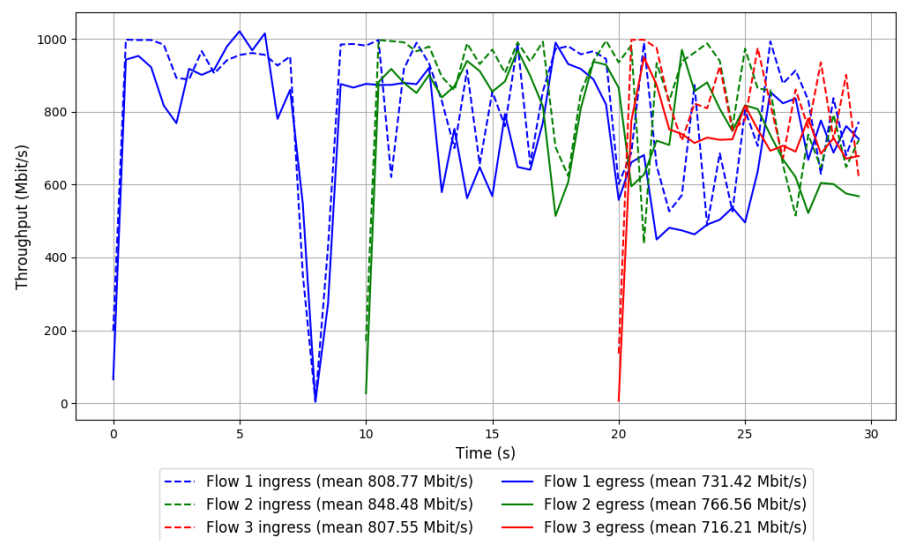
-- Flow 3:

Average throughput: 716.21 Mbit/s

95th percentile per-packet one-way delay: 241.696 ms

Loss rate: 11.31%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-01-18 06:22:12

End at: 2018-01-18 06:22:42

Below is generated by plot.py at 2018-01-18 10:53:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 1120.43 Mbit/s

95th percentile per-packet one-way delay: 294.194 ms

Loss rate: 8.22%

-- Flow 1:

Average throughput: 571.03 Mbit/s

95th percentile per-packet one-way delay: 285.365 ms

Loss rate: 6.20%

-- Flow 2:

Average throughput: 542.23 Mbit/s

95th percentile per-packet one-way delay: 296.542 ms

Loss rate: 8.44%

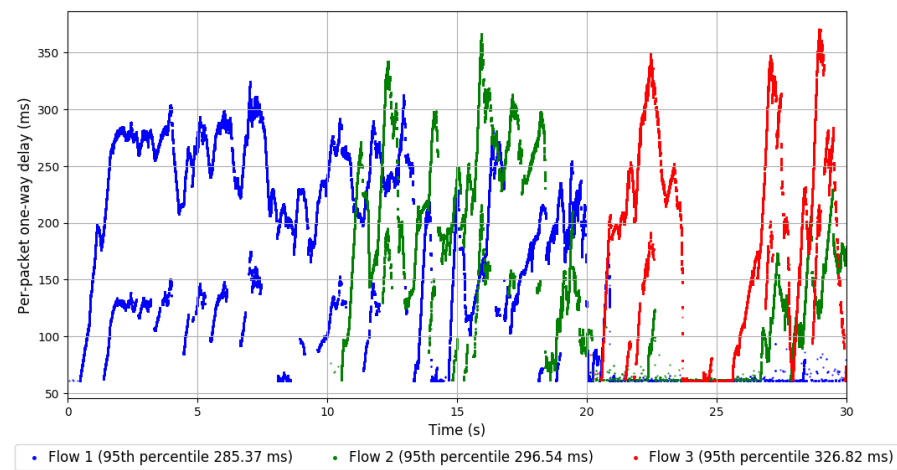
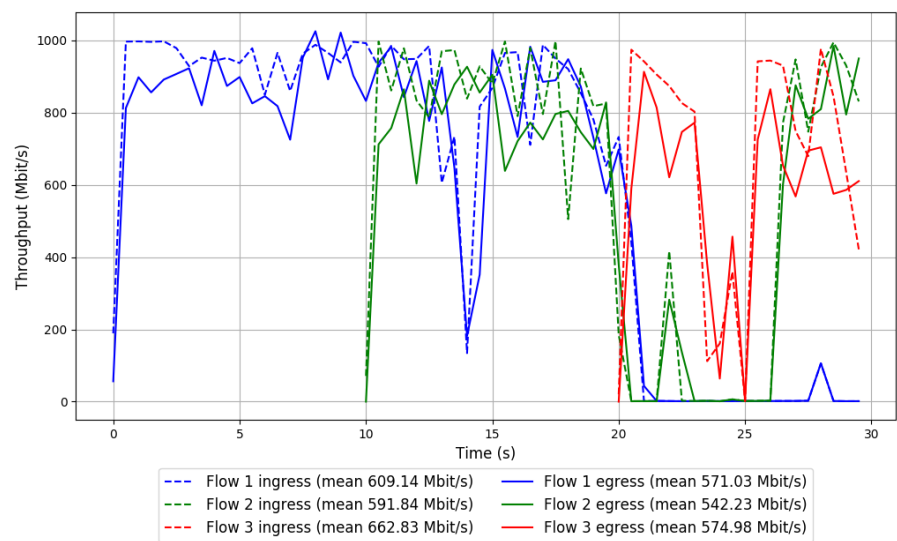
-- Flow 3:

Average throughput: 574.98 Mbit/s

95th percentile per-packet one-way delay: 326.821 ms

Loss rate: 13.42%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-01-18 06:39:24

End at: 2018-01-18 06:39:54

Below is generated by plot.py at 2018-01-18 10:53:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 1383.35 Mbit/s

95th percentile per-packet one-way delay: 320.423 ms

Loss rate: 10.66%

-- Flow 1:

Average throughput: 710.25 Mbit/s

95th percentile per-packet one-way delay: 282.098 ms

Loss rate: 7.51%

-- Flow 2:

Average throughput: 679.20 Mbit/s

95th percentile per-packet one-way delay: 356.128 ms

Loss rate: 14.18%

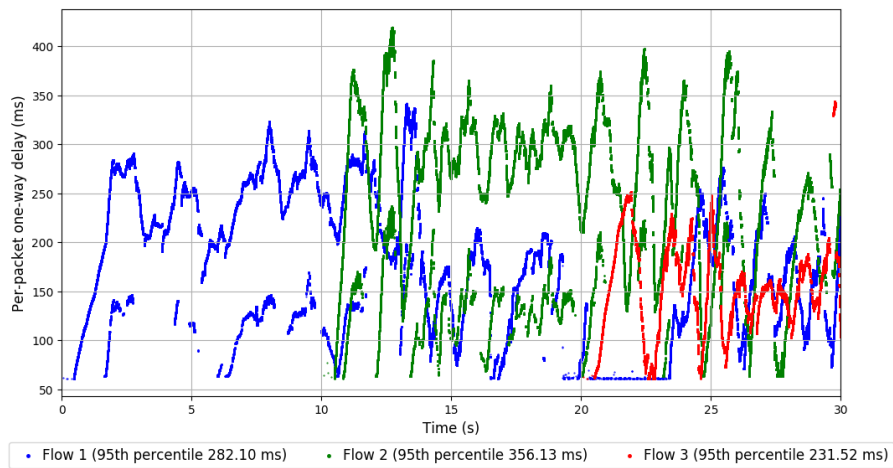
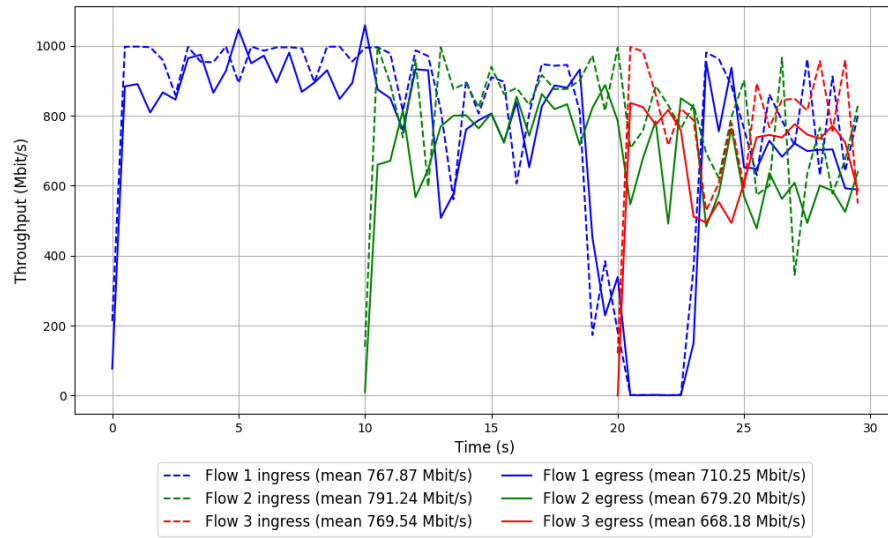
-- Flow 3:

Average throughput: 668.18 Mbit/s

95th percentile per-packet one-way delay: 231.517 ms

Loss rate: 12.87%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-01-18 06:56:40

End at: 2018-01-18 06:57:10

Below is generated by plot.py at 2018-01-18 11:15:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 1401.11 Mbit/s

95th percentile per-packet one-way delay: 270.081 ms

Loss rate: 10.31%

-- Flow 1:

Average throughput: 797.34 Mbit/s

95th percentile per-packet one-way delay: 269.734 ms

Loss rate: 9.06%

-- Flow 2:

Average throughput: 573.81 Mbit/s

95th percentile per-packet one-way delay: 260.304 ms

Loss rate: 9.81%

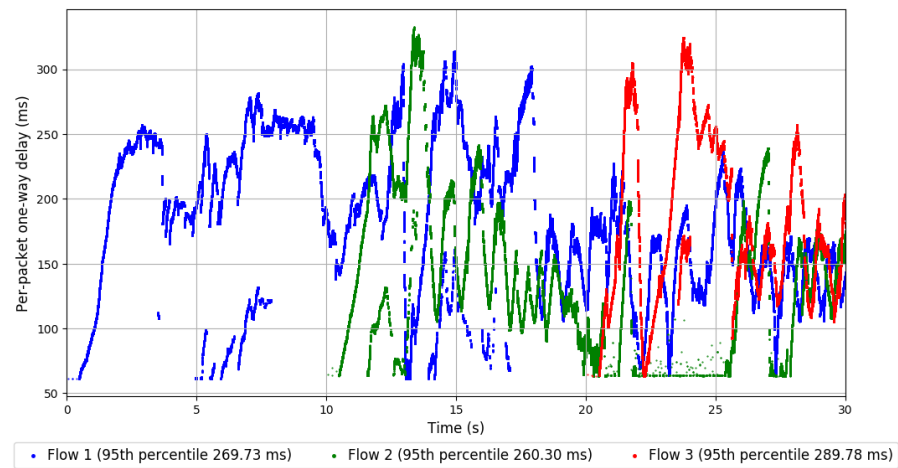
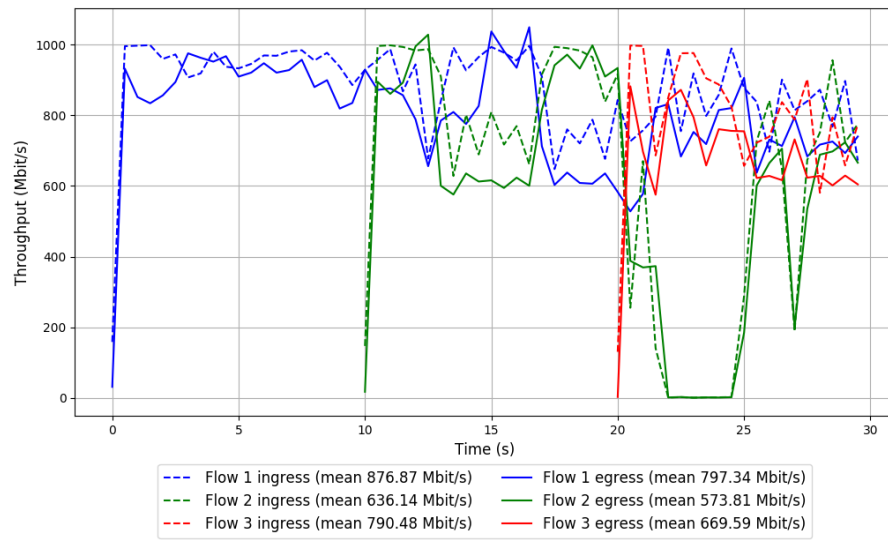
-- Flow 3:

Average throughput: 669.59 Mbit/s

95th percentile per-packet one-way delay: 289.777 ms

Loss rate: 15.31%

Run 9: Report of FillP — Data Link

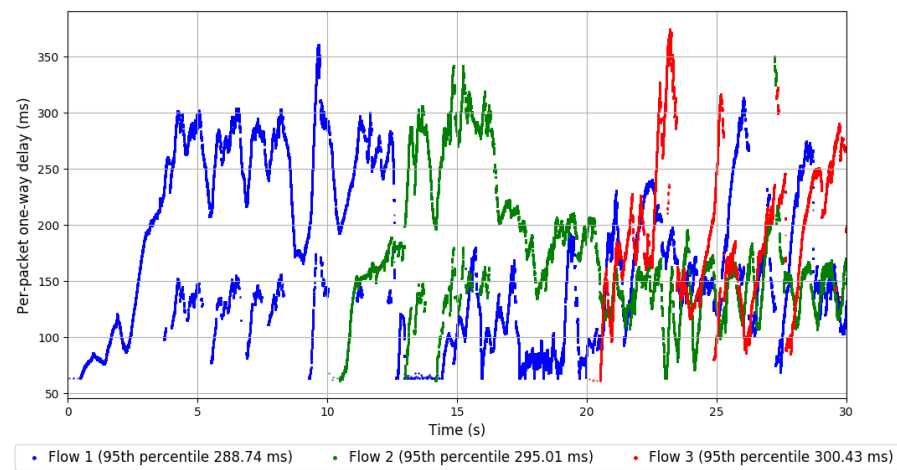
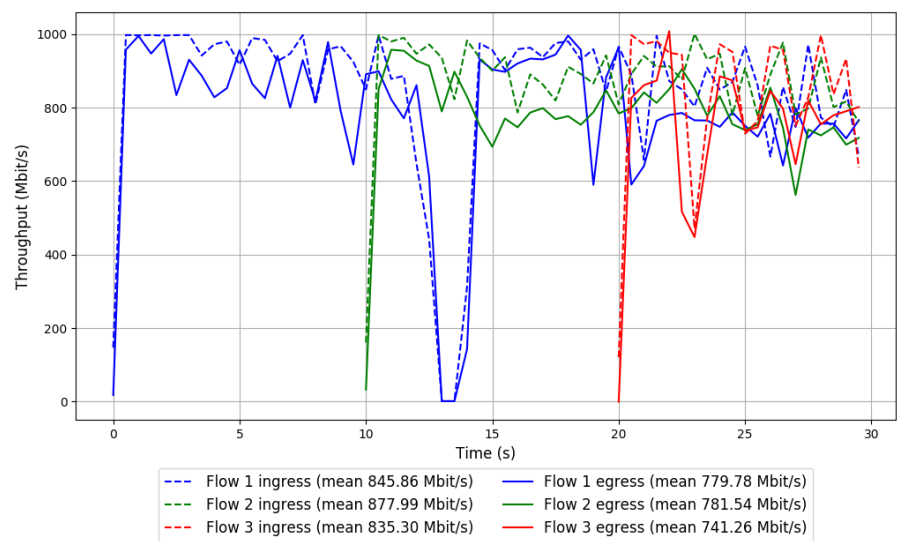


```
Run 10: Statistics of FillP

Start at: 2018-01-18 07:13:30
End at: 2018-01-18 07:14:00

# Below is generated by plot.py at 2018-01-18 11:19:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1545.11 Mbit/s
95th percentile per-packet one-way delay: 290.908 ms
Loss rate: 9.43%
-- Flow 1:
Average throughput: 779.78 Mbit/s
95th percentile per-packet one-way delay: 288.741 ms
Loss rate: 7.77%
-- Flow 2:
Average throughput: 781.54 Mbit/s
95th percentile per-packet one-way delay: 295.010 ms
Loss rate: 11.01%
-- Flow 3:
Average throughput: 741.26 Mbit/s
95th percentile per-packet one-way delay: 300.428 ms
Loss rate: 11.18%
```

Run 10: Report of FillP — Data Link

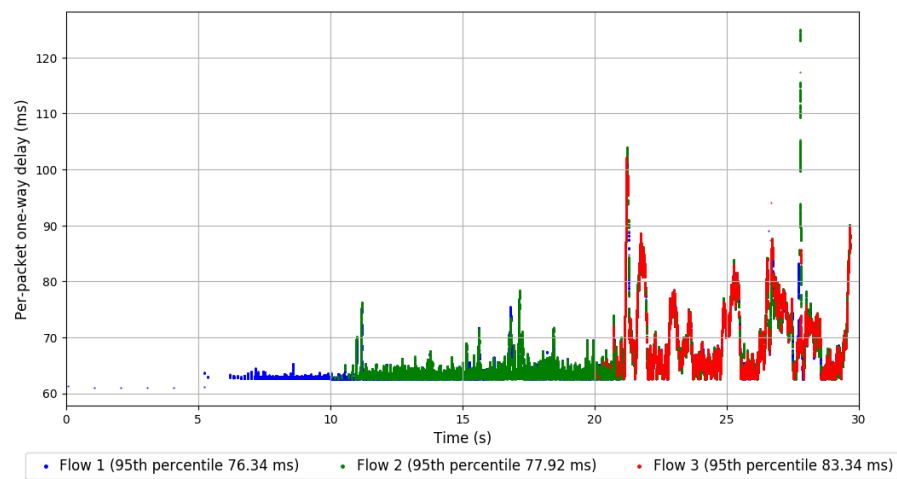
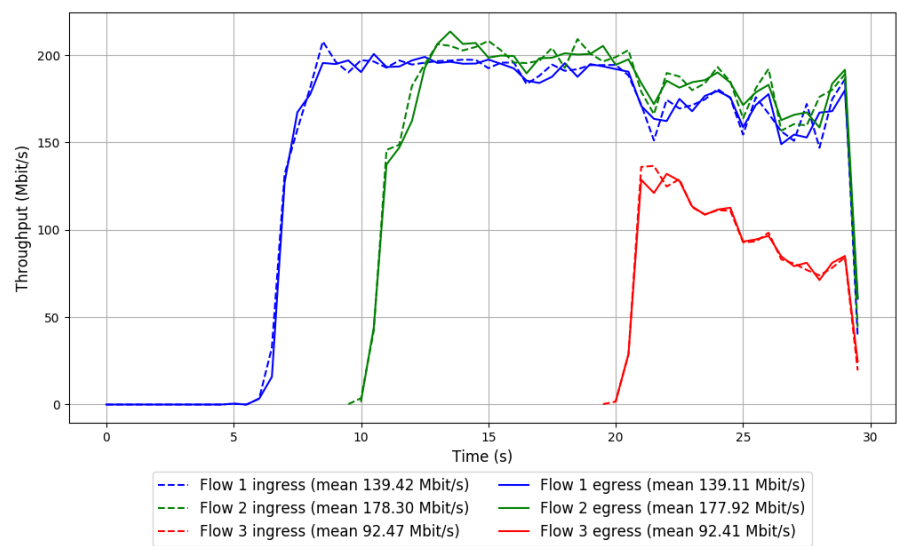


```
Run 1: Statistics of Indigo

Start at: 2018-01-18 04:47:15
End at: 2018-01-18 04:47:45

# Below is generated by plot.py at 2018-01-18 11:19:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.18 Mbit/s
95th percentile per-packet one-way delay: 77.981 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 139.11 Mbit/s
95th percentile per-packet one-way delay: 76.344 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 177.92 Mbit/s
95th percentile per-packet one-way delay: 77.915 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 92.41 Mbit/s
95th percentile per-packet one-way delay: 83.338 ms
Loss rate: 0.23%
```

Run 1: Report of Indigo — Data Link

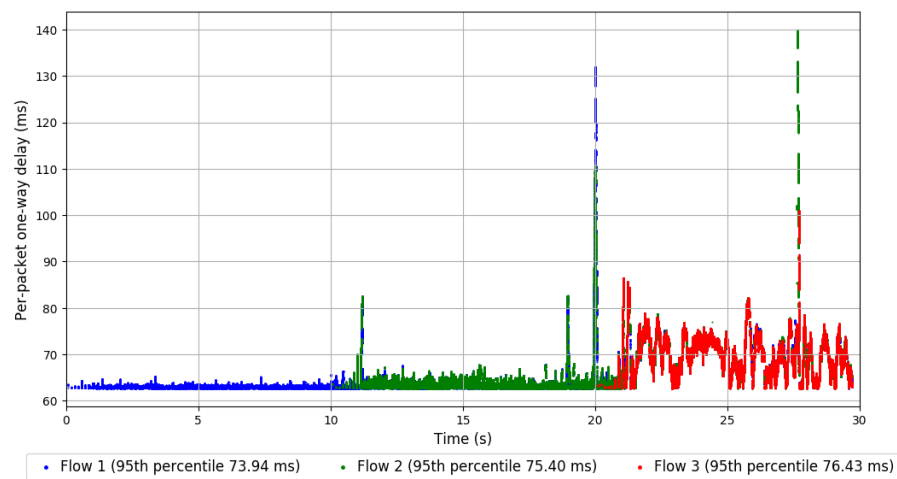
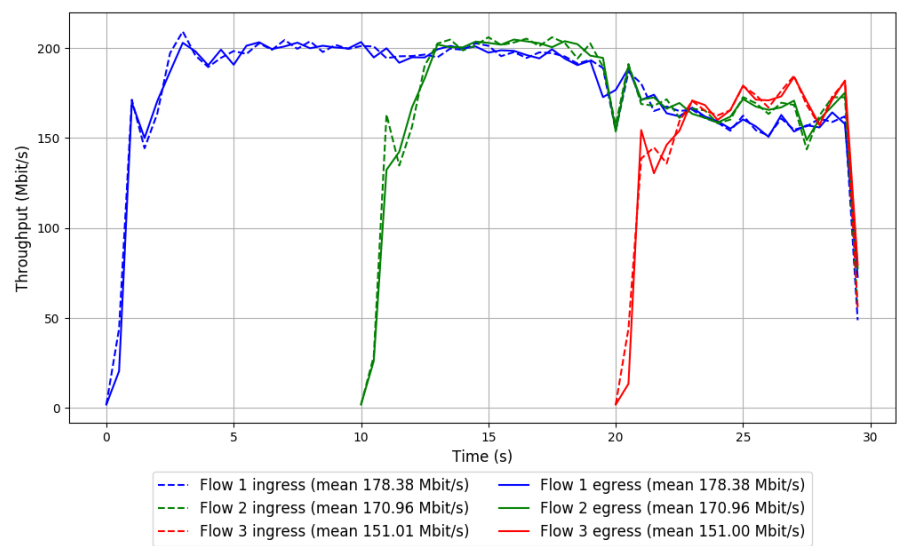


```
Run 2: Statistics of Indigo

Start at: 2018-01-18 05:04:00
End at: 2018-01-18 05:04:30

# Below is generated by plot.py at 2018-01-18 11:19:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 340.58 Mbit/s
95th percentile per-packet one-way delay: 74.966 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 178.38 Mbit/s
95th percentile per-packet one-way delay: 73.942 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 170.96 Mbit/s
95th percentile per-packet one-way delay: 75.402 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 151.00 Mbit/s
95th percentile per-packet one-way delay: 76.427 ms
Loss rate: 0.00%
```


Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-18 05:21:18

End at: 2018-01-18 05:21:48

Below is generated by plot.py at 2018-01-18 11:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 342.02 Mbit/s

95th percentile per-packet one-way delay: 73.765 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 178.45 Mbit/s

95th percentile per-packet one-way delay: 72.320 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 170.17 Mbit/s

95th percentile per-packet one-way delay: 74.073 ms

Loss rate: 0.03%

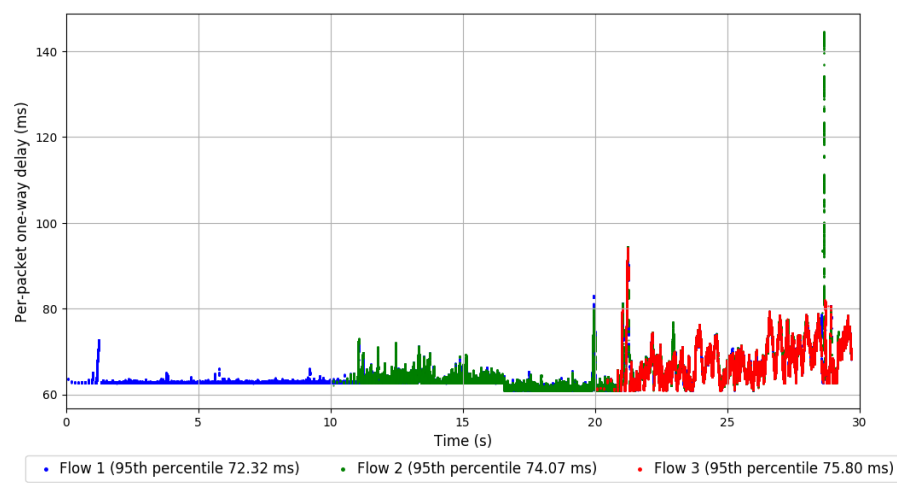
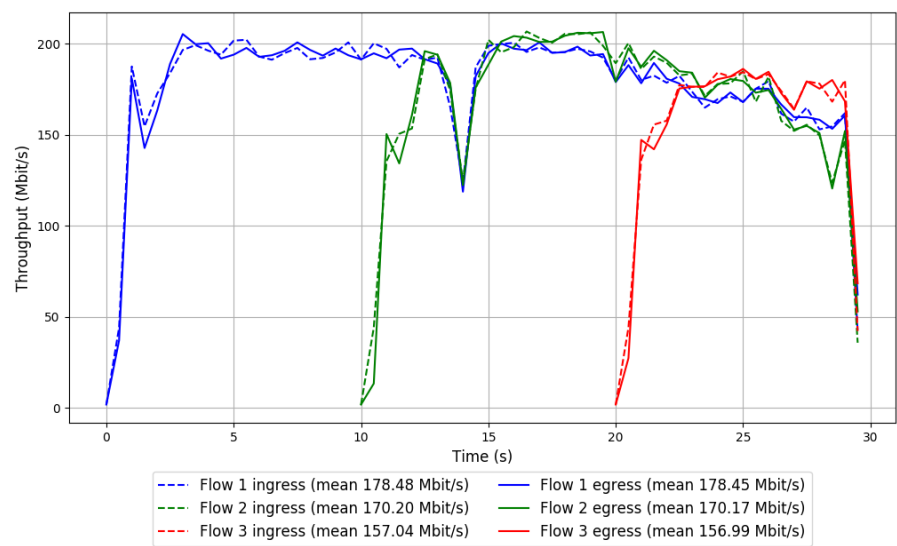
-- Flow 3:

Average throughput: 156.99 Mbit/s

95th percentile per-packet one-way delay: 75.795 ms

Loss rate: 0.05%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2018-01-18 05:38:18

End at: 2018-01-18 05:38:48

Below is generated by plot.py at 2018-01-18 11:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 340.43 Mbit/s

95th percentile per-packet one-way delay: 76.924 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 178.16 Mbit/s

95th percentile per-packet one-way delay: 75.503 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 173.16 Mbit/s

95th percentile per-packet one-way delay: 76.846 ms

Loss rate: 0.03%

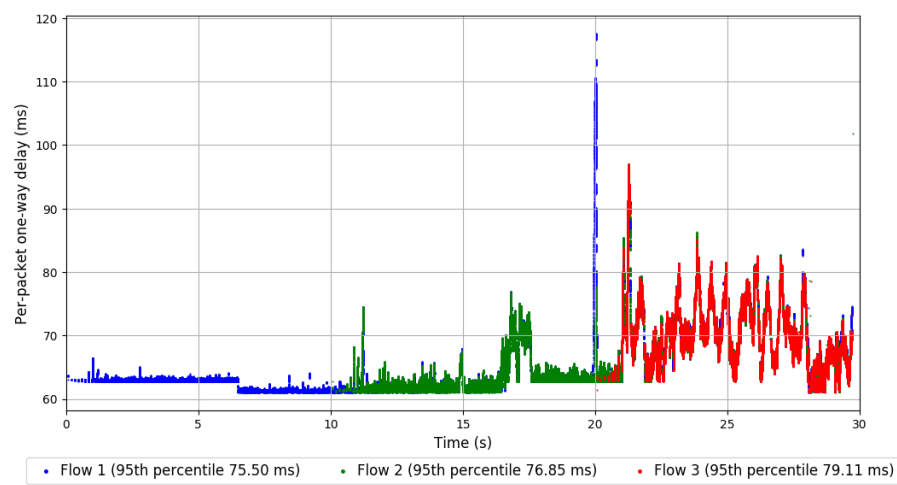
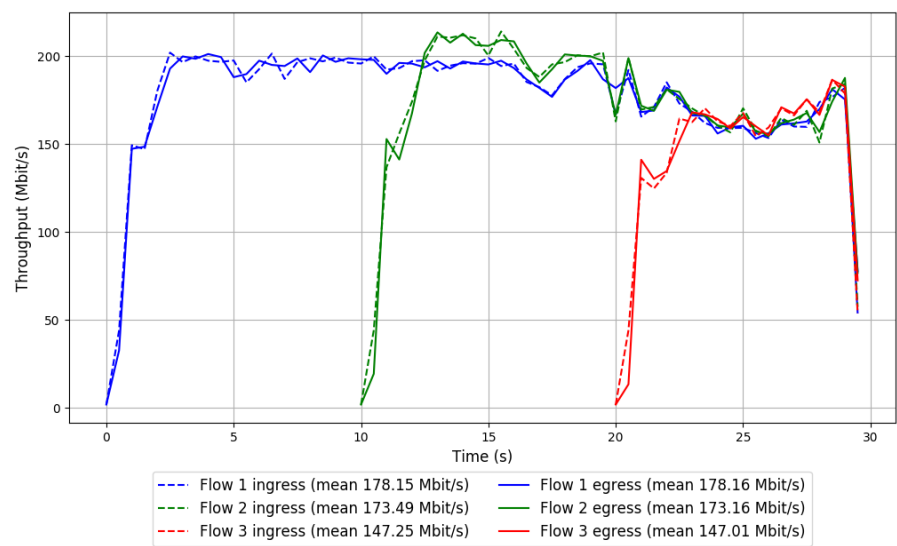
-- Flow 3:

Average throughput: 147.01 Mbit/s

95th percentile per-packet one-way delay: 79.114 ms

Loss rate: 0.11%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-18 05:55:42

End at: 2018-01-18 05:56:12

Below is generated by plot.py at 2018-01-18 11:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 347.14 Mbit/s

95th percentile per-packet one-way delay: 75.701 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 186.94 Mbit/s

95th percentile per-packet one-way delay: 74.314 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 165.38 Mbit/s

95th percentile per-packet one-way delay: 76.798 ms

Loss rate: 0.00%

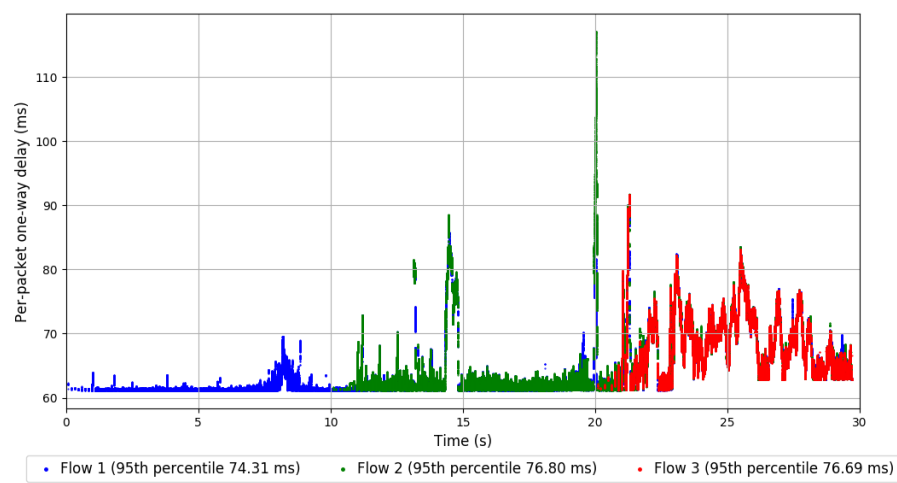
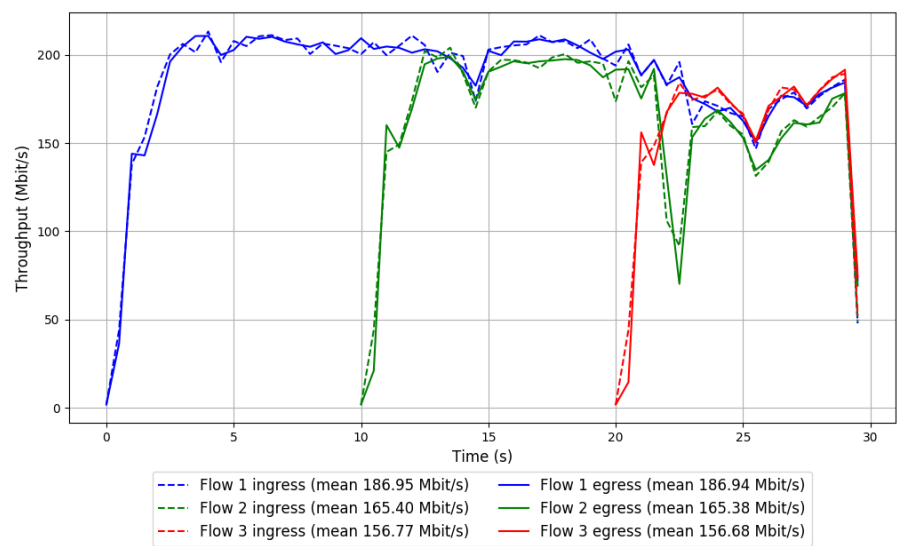
-- Flow 3:

Average throughput: 156.68 Mbit/s

95th percentile per-packet one-way delay: 76.688 ms

Loss rate: 0.04%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-18 06:13:01

End at: 2018-01-18 06:13:31

Below is generated by plot.py at 2018-01-18 11:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 346.99 Mbit/s

95th percentile per-packet one-way delay: 74.081 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 179.58 Mbit/s

95th percentile per-packet one-way delay: 72.892 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 175.29 Mbit/s

95th percentile per-packet one-way delay: 74.114 ms

Loss rate: 0.02%

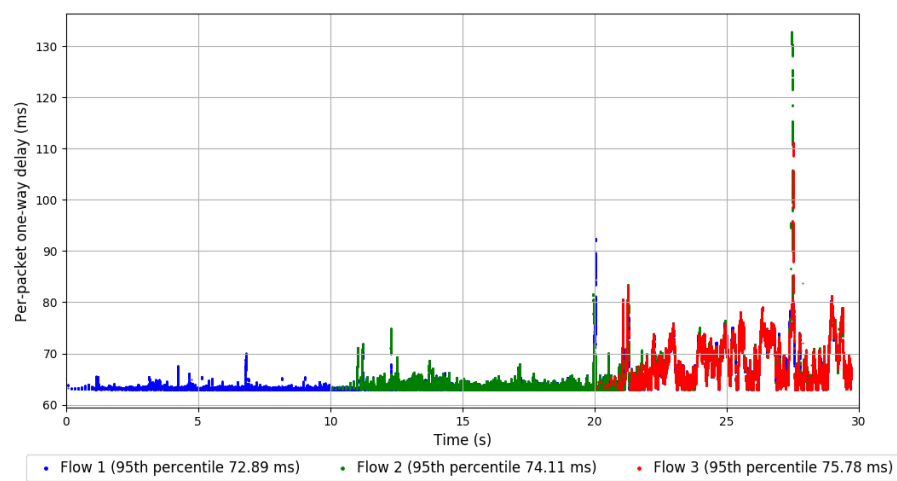
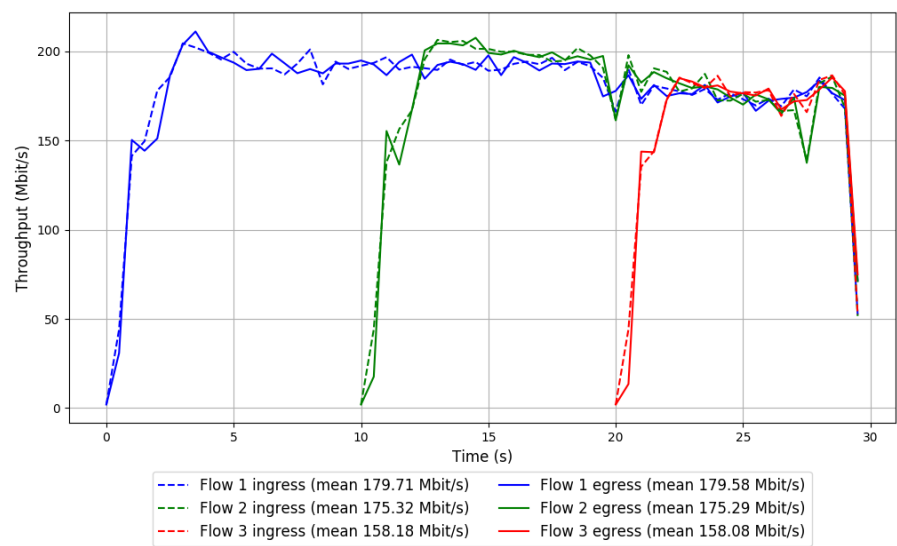
-- Flow 3:

Average throughput: 158.08 Mbit/s

95th percentile per-packet one-way delay: 75.779 ms

Loss rate: 0.08%

Run 6: Report of Indigo — Data Link



Run 7: Statistics of Indigo

Start at: 2018-01-18 06:30:05

End at: 2018-01-18 06:30:35

Below is generated by plot.py at 2018-01-18 11:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 337.24 Mbit/s

95th percentile per-packet one-way delay: 75.218 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 175.67 Mbit/s

95th percentile per-packet one-way delay: 73.725 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 176.14 Mbit/s

95th percentile per-packet one-way delay: 75.110 ms

Loss rate: 0.01%

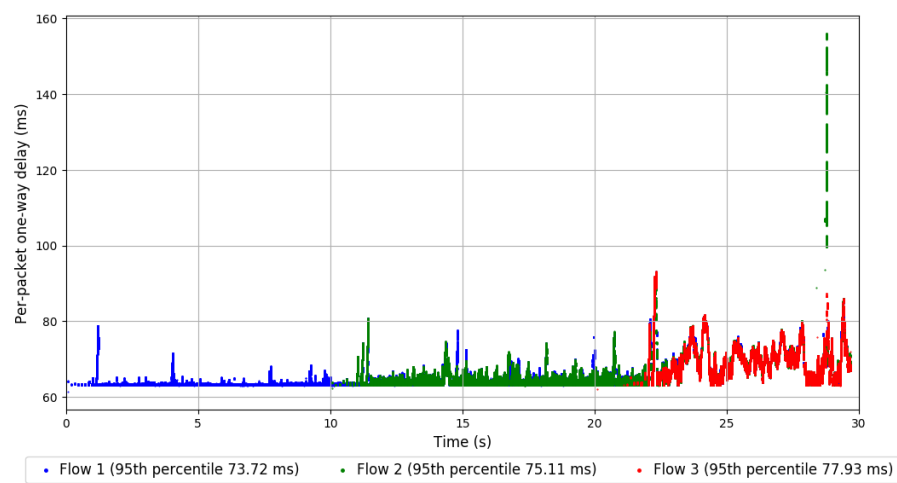
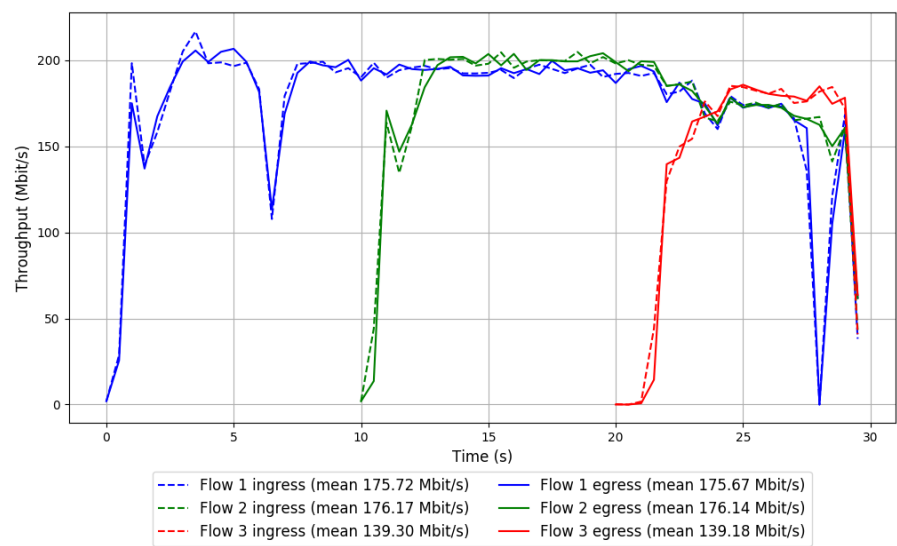
-- Flow 3:

Average throughput: 139.18 Mbit/s

95th percentile per-packet one-way delay: 77.931 ms

Loss rate: 0.05%

Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2018-01-18 06:47:19

End at: 2018-01-18 06:47:49

Below is generated by plot.py at 2018-01-18 11:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 349.61 Mbit/s

95th percentile per-packet one-way delay: 76.509 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 181.57 Mbit/s

95th percentile per-packet one-way delay: 74.357 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 175.90 Mbit/s

95th percentile per-packet one-way delay: 76.781 ms

Loss rate: 0.00%

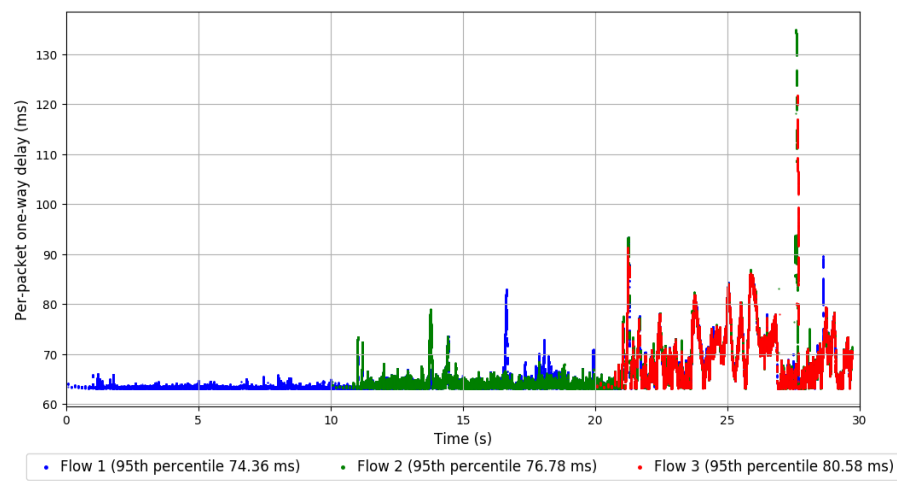
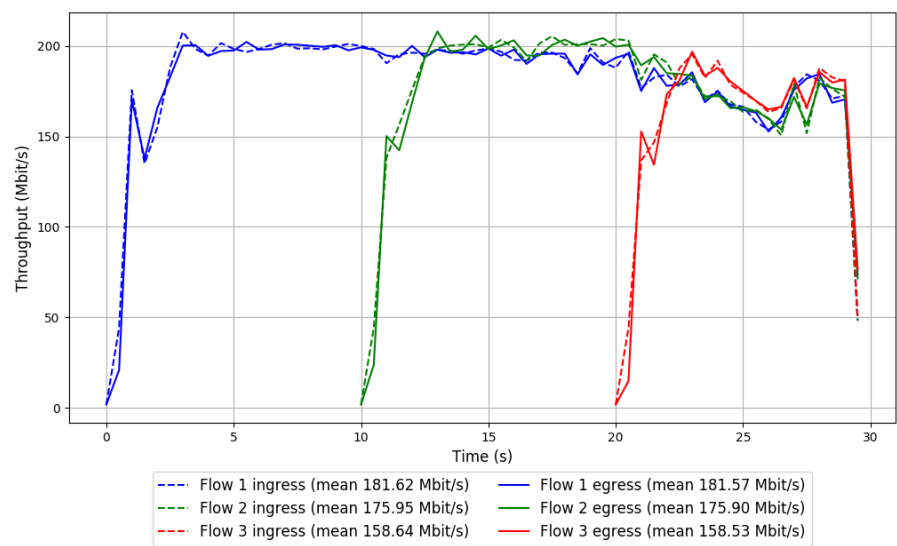
-- Flow 3:

Average throughput: 158.53 Mbit/s

95th percentile per-packet one-way delay: 80.582 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-18 07:04:16

End at: 2018-01-18 07:04:46

Below is generated by plot.py at 2018-01-18 11:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 344.91 Mbit/s

95th percentile per-packet one-way delay: 75.656 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 180.39 Mbit/s

95th percentile per-packet one-way delay: 74.066 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 173.38 Mbit/s

95th percentile per-packet one-way delay: 76.196 ms

Loss rate: 0.00%

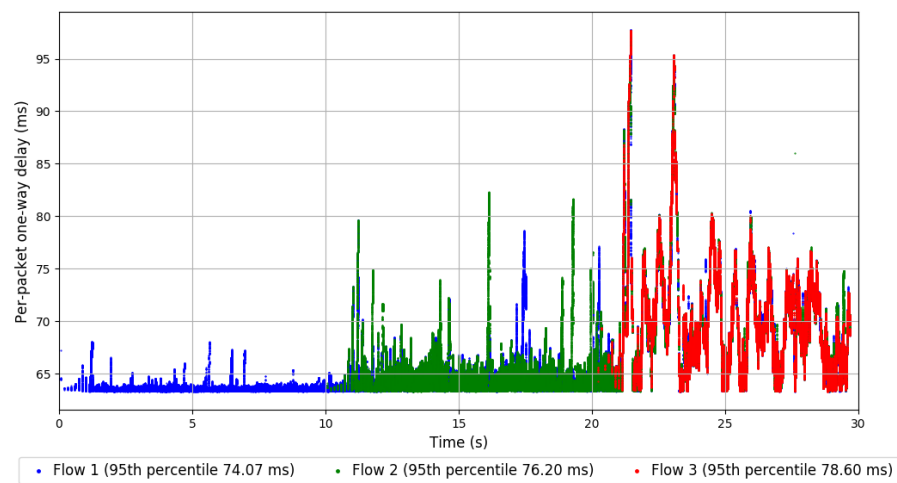
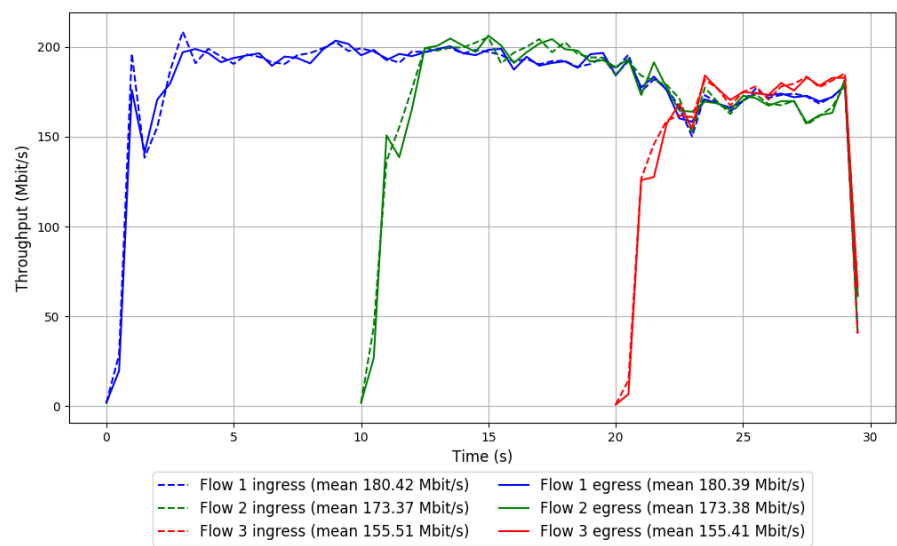
-- Flow 3:

Average throughput: 155.41 Mbit/s

95th percentile per-packet one-way delay: 78.602 ms

Loss rate: 0.04%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-18 07:21:25

End at: 2018-01-18 07:21:55

Below is generated by plot.py at 2018-01-18 11:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 348.16 Mbit/s

95th percentile per-packet one-way delay: 76.042 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 179.55 Mbit/s

95th percentile per-packet one-way delay: 74.075 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 179.41 Mbit/s

95th percentile per-packet one-way delay: 76.514 ms

Loss rate: 0.05%

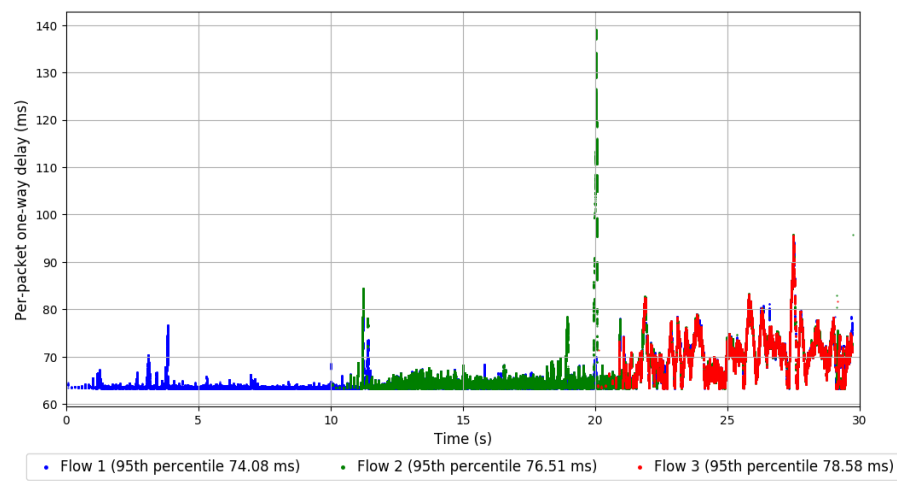
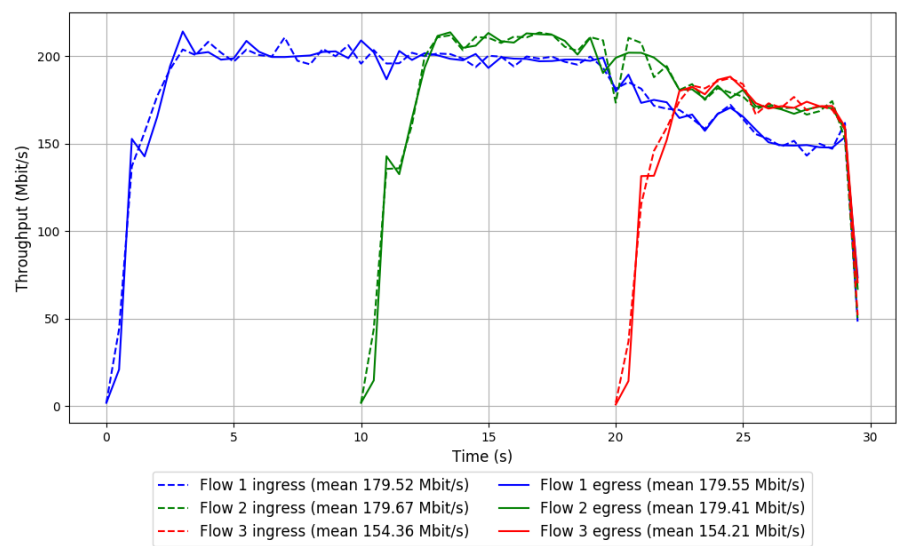
-- Flow 3:

Average throughput: 154.21 Mbit/s

95th percentile per-packet one-way delay: 78.583 ms

Loss rate: 0.11%

Run 10: Report of Indigo — Data Link

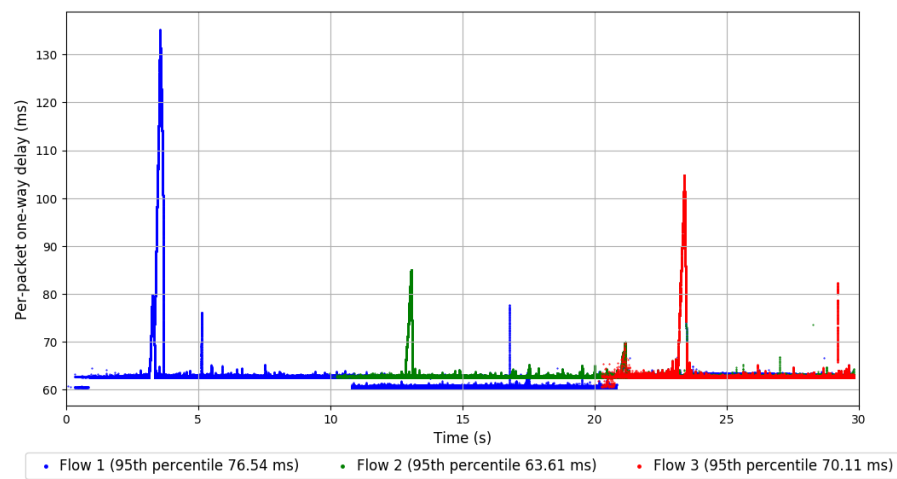
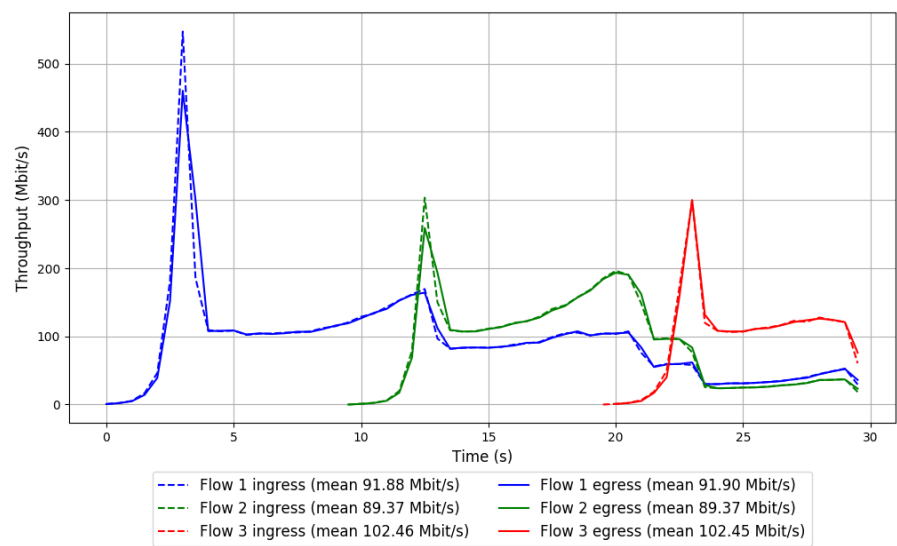


```
Run 1: Statistics of Vivace-latency

Start at: 2018-01-18 04:45:14
End at: 2018-01-18 04:45:44

# Below is generated by plot.py at 2018-01-18 11:19:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 185.24 Mbit/s
95th percentile per-packet one-way delay: 70.522 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 91.90 Mbit/s
95th percentile per-packet one-way delay: 76.540 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 89.37 Mbit/s
95th percentile per-packet one-way delay: 63.608 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 102.45 Mbit/s
95th percentile per-packet one-way delay: 70.107 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-01-18 05:01:57

End at: 2018-01-18 05:02:27

Below is generated by plot.py at 2018-01-18 11:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 216.01 Mbit/s

95th percentile per-packet one-way delay: 67.378 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 91.84 Mbit/s

95th percentile per-packet one-way delay: 63.040 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 157.54 Mbit/s

95th percentile per-packet one-way delay: 73.937 ms

Loss rate: 0.00%

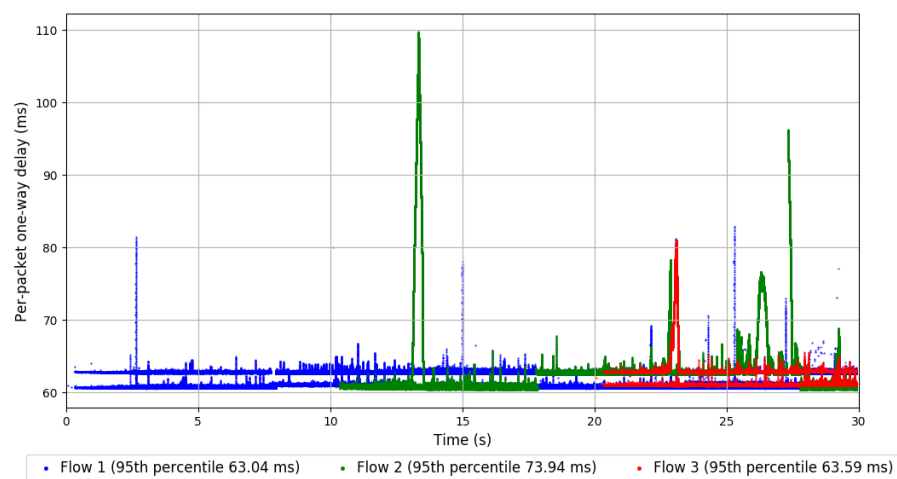
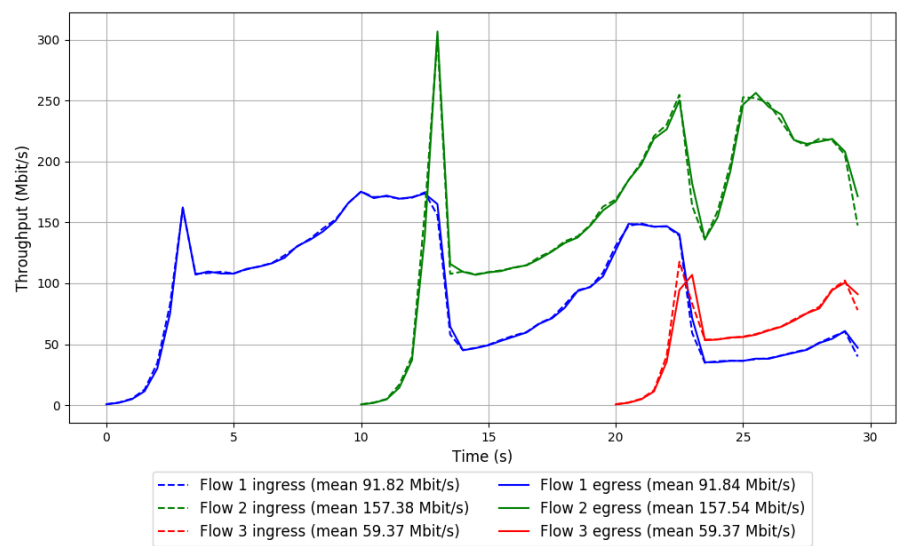
-- Flow 3:

Average throughput: 59.37 Mbit/s

95th percentile per-packet one-way delay: 63.594 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-01-18 05:19:13

End at: 2018-01-18 05:19:43

Below is generated by plot.py at 2018-01-18 11:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 249.72 Mbit/s

95th percentile per-packet one-way delay: 63.137 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 131.20 Mbit/s

95th percentile per-packet one-way delay: 62.923 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 147.88 Mbit/s

95th percentile per-packet one-way delay: 72.881 ms

Loss rate: 0.00%

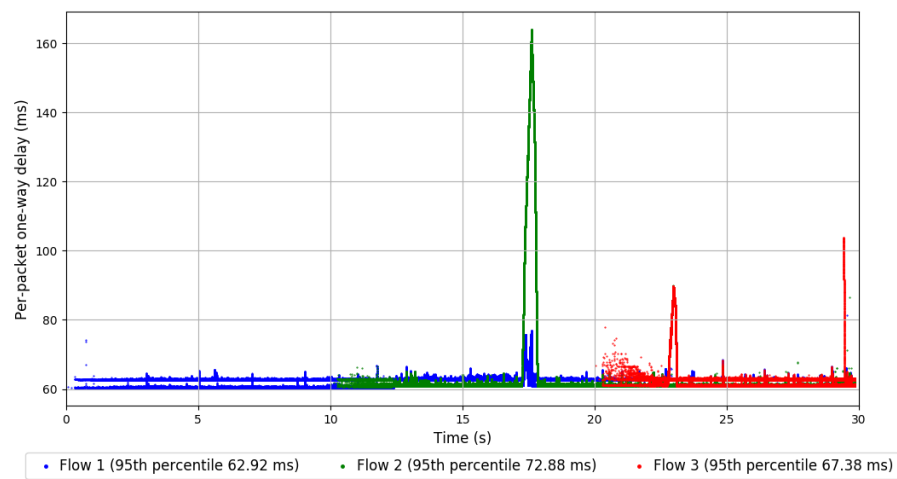
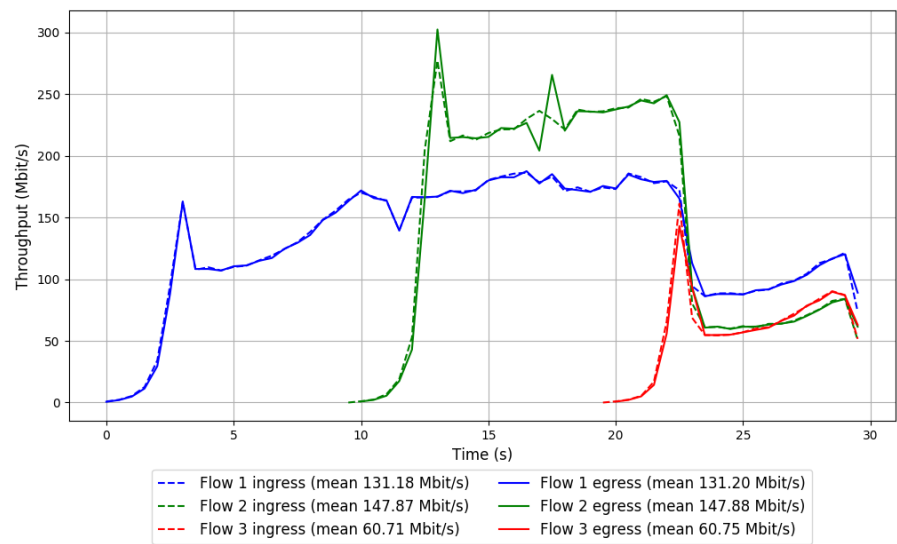
-- Flow 3:

Average throughput: 60.75 Mbit/s

95th percentile per-packet one-way delay: 67.380 ms

Loss rate: 0.00%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-01-18 05:36:15

End at: 2018-01-18 05:36:45

Below is generated by plot.py at 2018-01-18 11:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 217.74 Mbit/s

95th percentile per-packet one-way delay: 63.244 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 121.80 Mbit/s

95th percentile per-packet one-way delay: 63.348 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 116.31 Mbit/s

95th percentile per-packet one-way delay: 63.011 ms

Loss rate: 0.00%

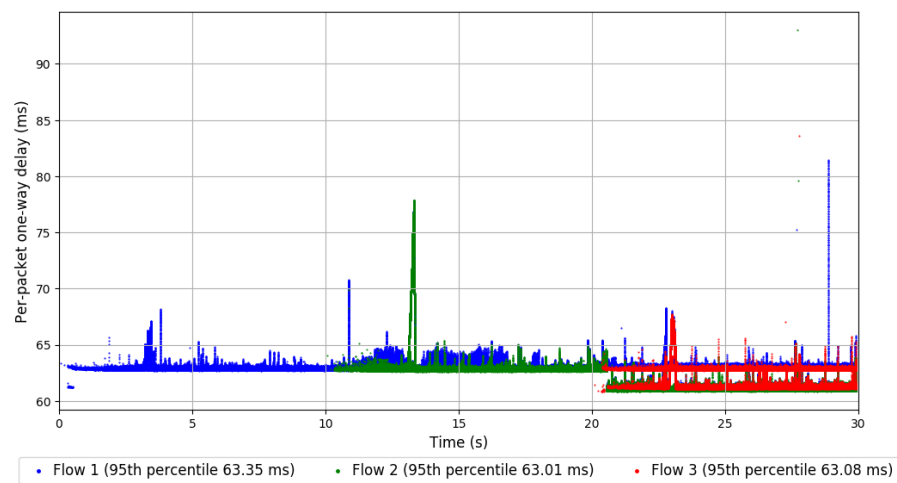
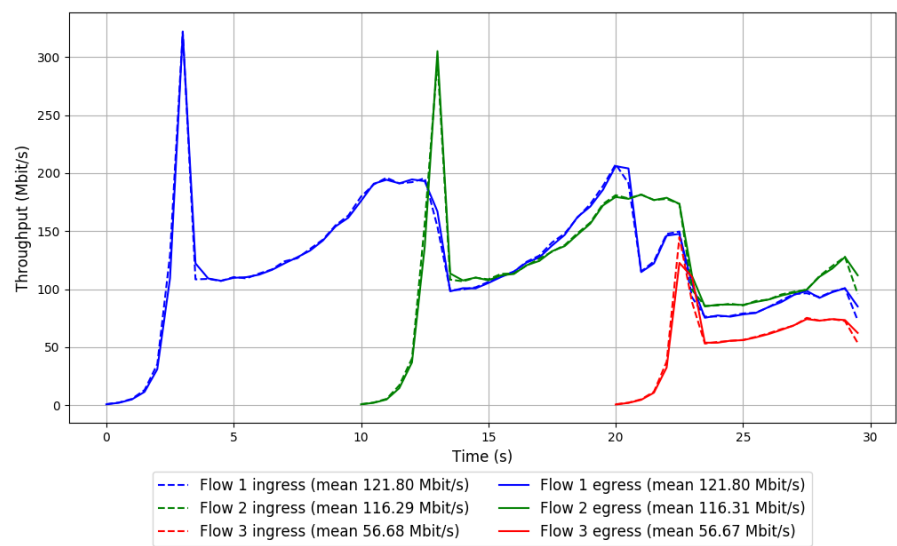
-- Flow 3:

Average throughput: 56.67 Mbit/s

95th percentile per-packet one-way delay: 63.084 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-01-18 05:53:39

End at: 2018-01-18 05:54:09

Below is generated by plot.py at 2018-01-18 11:19:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 207.06 Mbit/s

95th percentile per-packet one-way delay: 98.242 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 131.17 Mbit/s

95th percentile per-packet one-way delay: 108.835 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 78.40 Mbit/s

95th percentile per-packet one-way delay: 63.321 ms

Loss rate: 0.00%

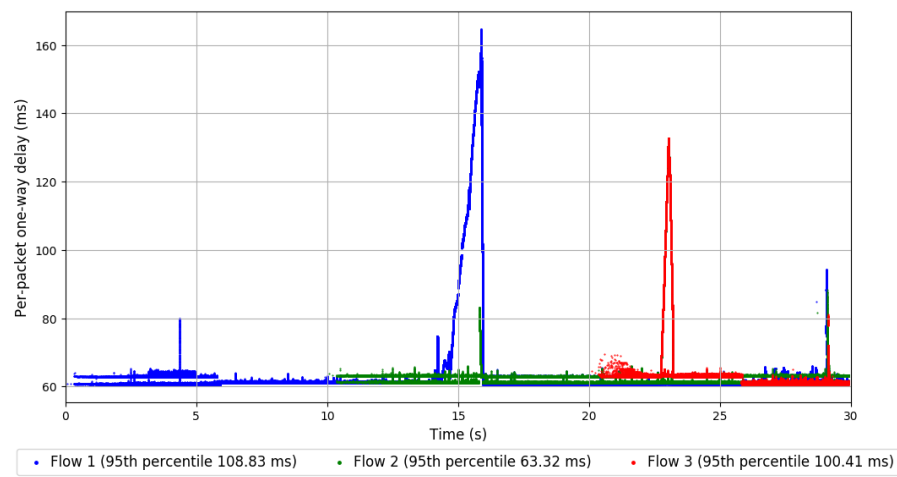
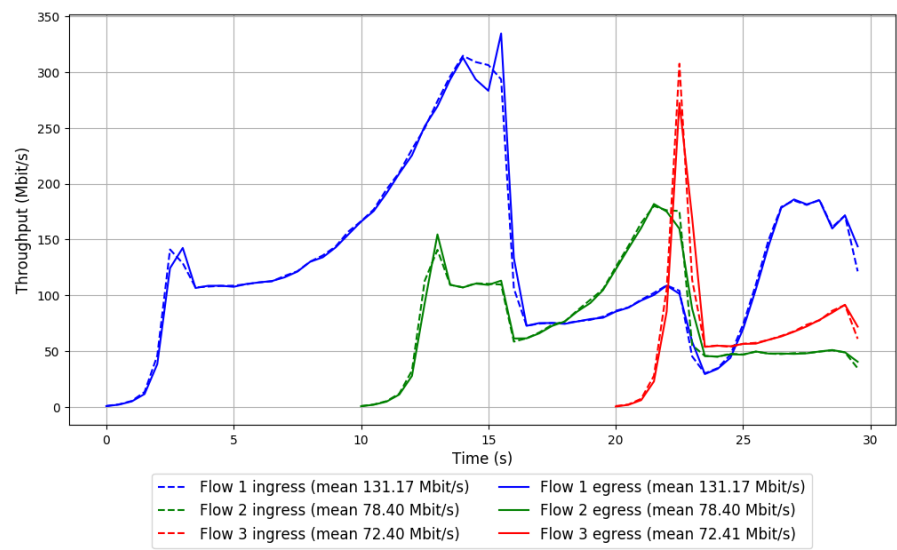
-- Flow 3:

Average throughput: 72.41 Mbit/s

95th percentile per-packet one-way delay: 100.412 ms

Loss rate: 0.02%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-01-18 06:10:52

End at: 2018-01-18 06:11:22

Below is generated by plot.py at 2018-01-18 11:19:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 254.33 Mbit/s

95th percentile per-packet one-way delay: 74.601 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 163.15 Mbit/s

95th percentile per-packet one-way delay: 84.417 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 106.05 Mbit/s

95th percentile per-packet one-way delay: 63.275 ms

Loss rate: 0.00%

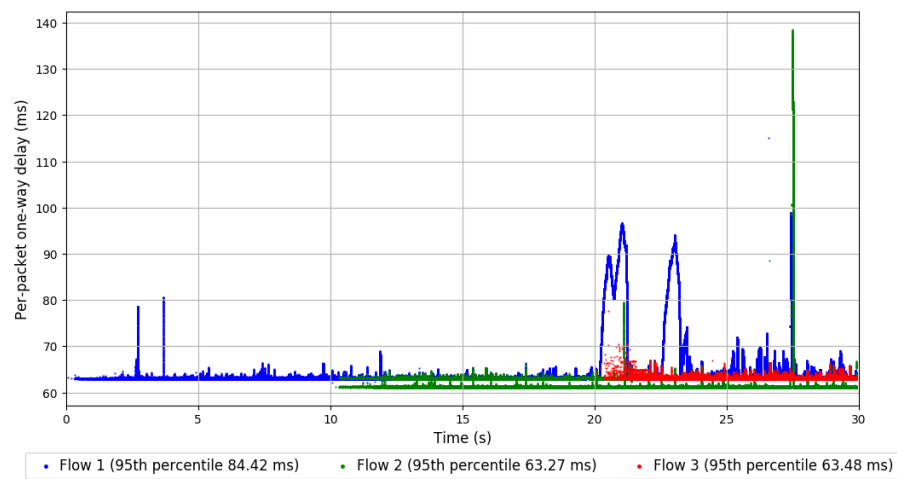
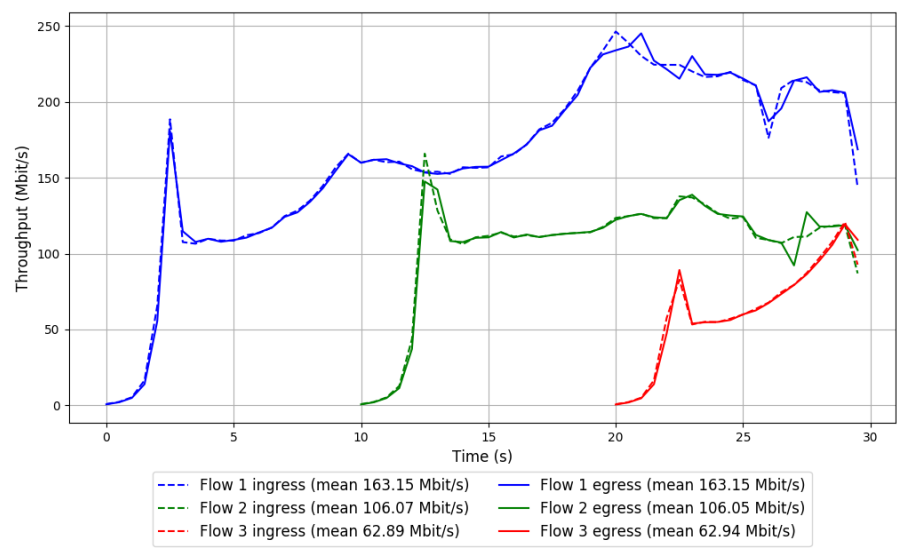
-- Flow 3:

Average throughput: 62.94 Mbit/s

95th percentile per-packet one-way delay: 63.482 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-01-18 06:28:02

End at: 2018-01-18 06:28:32

Below is generated by plot.py at 2018-01-18 11:19:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 229.04 Mbit/s

95th percentile per-packet one-way delay: 66.245 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 144.49 Mbit/s

95th percentile per-packet one-way delay: 65.223 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 93.53 Mbit/s

95th percentile per-packet one-way delay: 71.178 ms

Loss rate: 0.00%

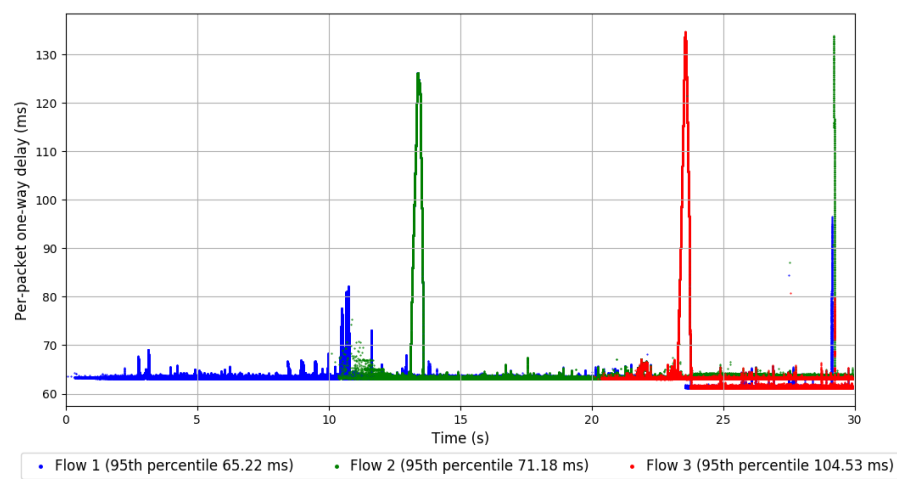
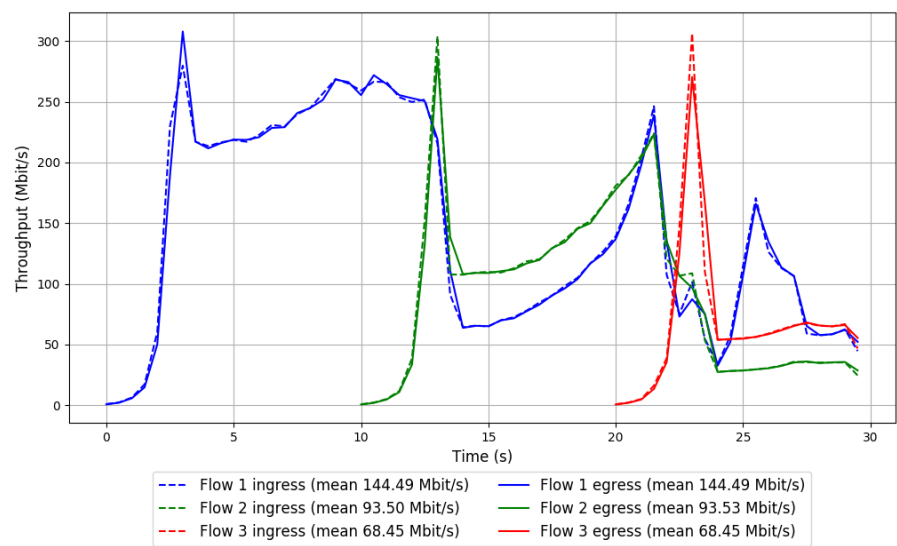
-- Flow 3:

Average throughput: 68.45 Mbit/s

95th percentile per-packet one-way delay: 104.534 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-01-18 06:45:07

End at: 2018-01-18 06:45:37

Below is generated by plot.py at 2018-01-18 11:19:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 301.77 Mbit/s

95th percentile per-packet one-way delay: 97.579 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 188.49 Mbit/s

95th percentile per-packet one-way delay: 135.176 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 142.15 Mbit/s

95th percentile per-packet one-way delay: 64.460 ms

Loss rate: 0.00%

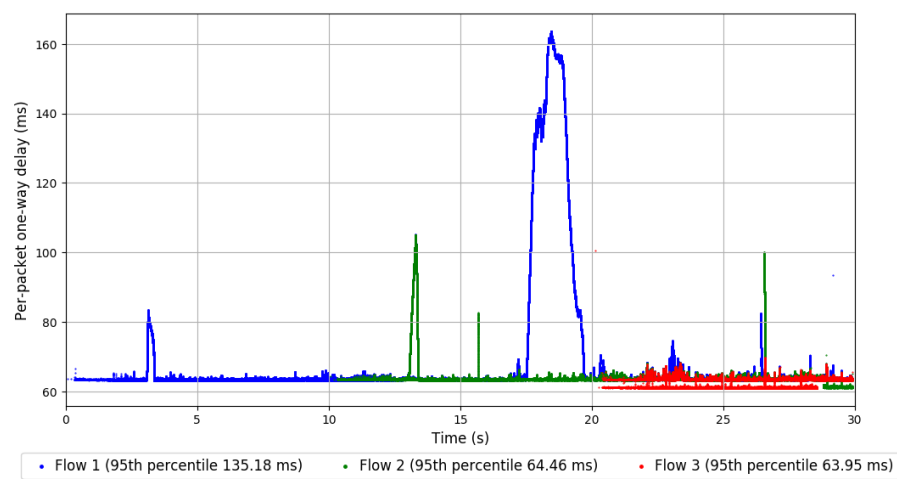
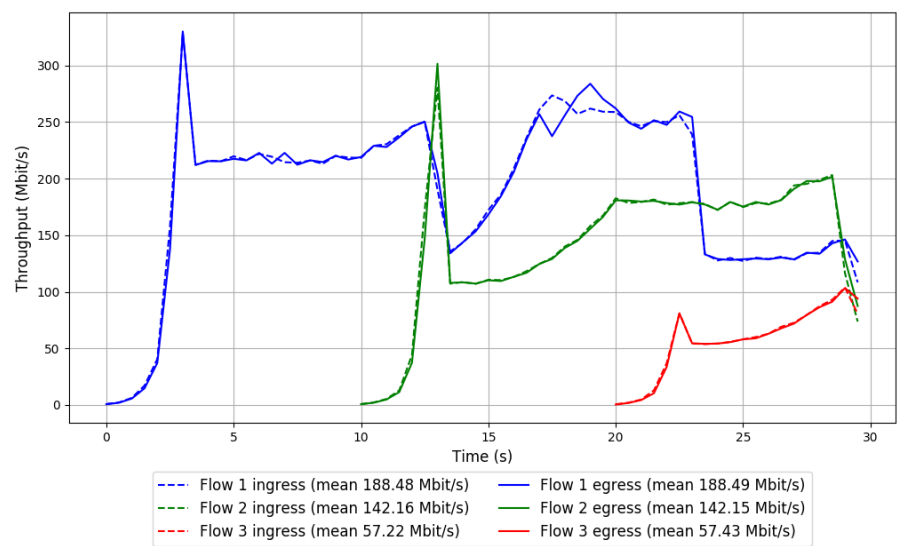
-- Flow 3:

Average throughput: 57.43 Mbit/s

95th percentile per-packet one-way delay: 63.949 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-01-18 07:02:09

End at: 2018-01-18 07:02:39

Below is generated by plot.py at 2018-01-18 11:19:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 240.91 Mbit/s

95th percentile per-packet one-way delay: 75.241 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 113.48 Mbit/s

95th percentile per-packet one-way delay: 75.099 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 150.01 Mbit/s

95th percentile per-packet one-way delay: 80.641 ms

Loss rate: 0.00%

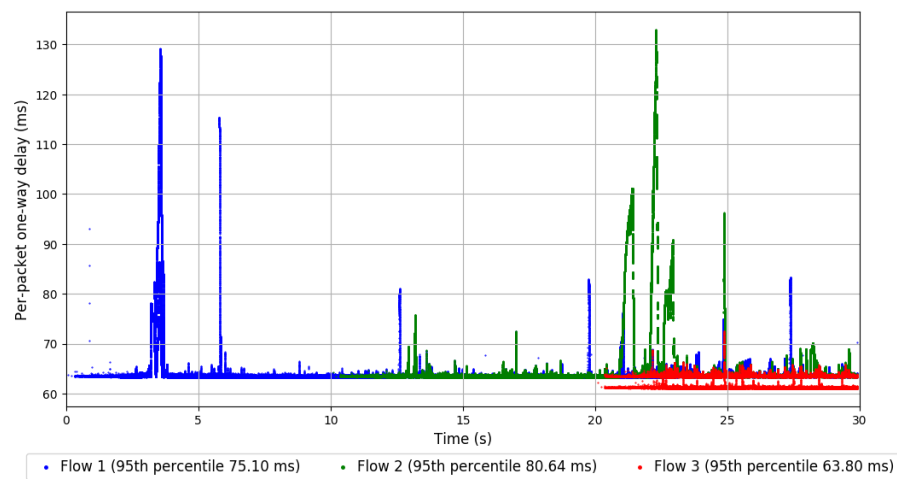
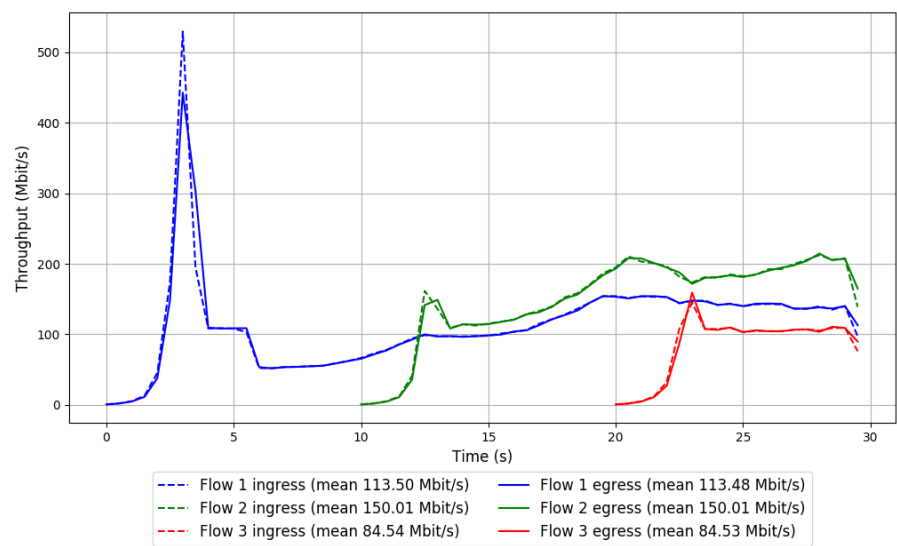
-- Flow 3:

Average throughput: 84.53 Mbit/s

95th percentile per-packet one-way delay: 63.804 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-01-18 07:19:20

End at: 2018-01-18 07:19:50

Below is generated by plot.py at 2018-01-18 11:19:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 235.83 Mbit/s

95th percentile per-packet one-way delay: 64.239 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 154.53 Mbit/s

95th percentile per-packet one-way delay: 64.608 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 74.17 Mbit/s

95th percentile per-packet one-way delay: 63.666 ms

Loss rate: 0.01%

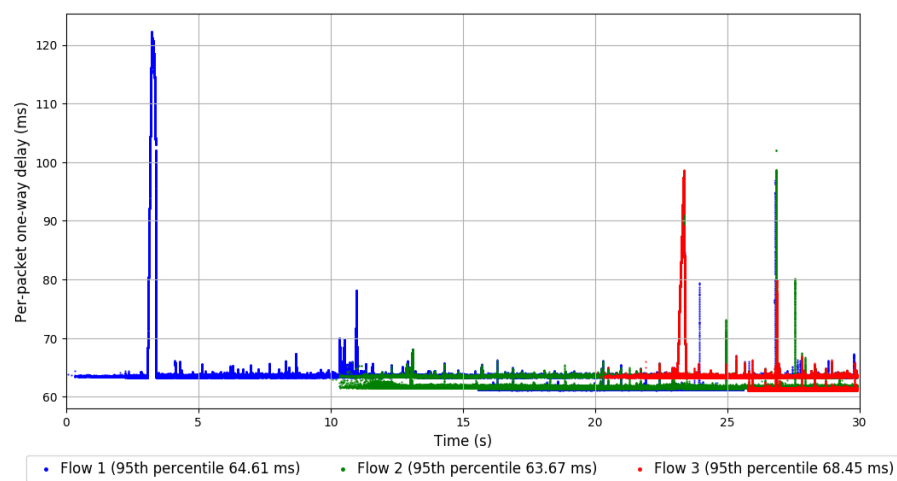
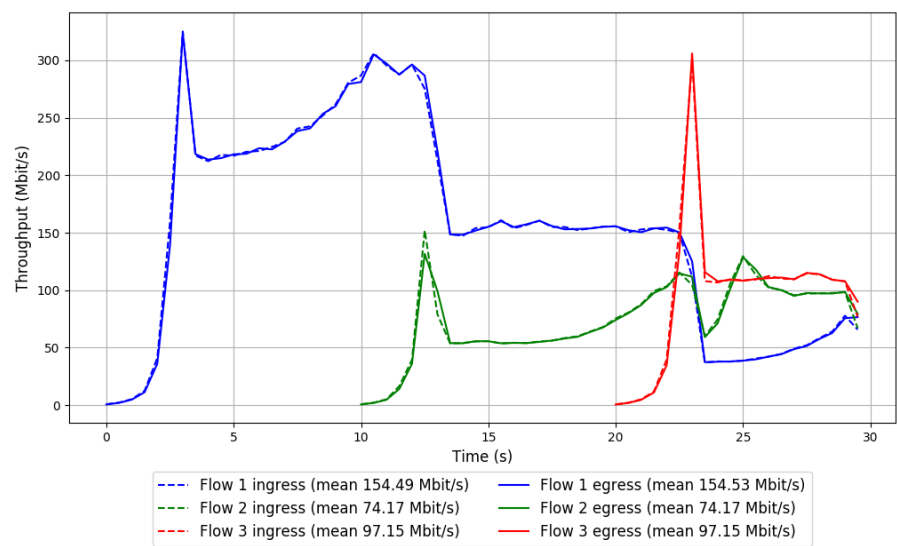
-- Flow 3:

Average throughput: 97.15 Mbit/s

95th percentile per-packet one-way delay: 68.453 ms

Loss rate: 0.03%

Run 10: Report of Vivace-latency — Data Link

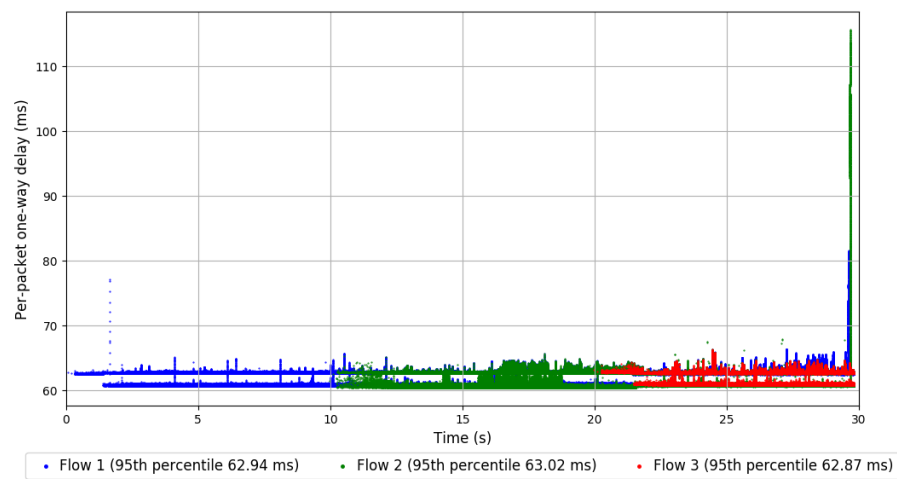
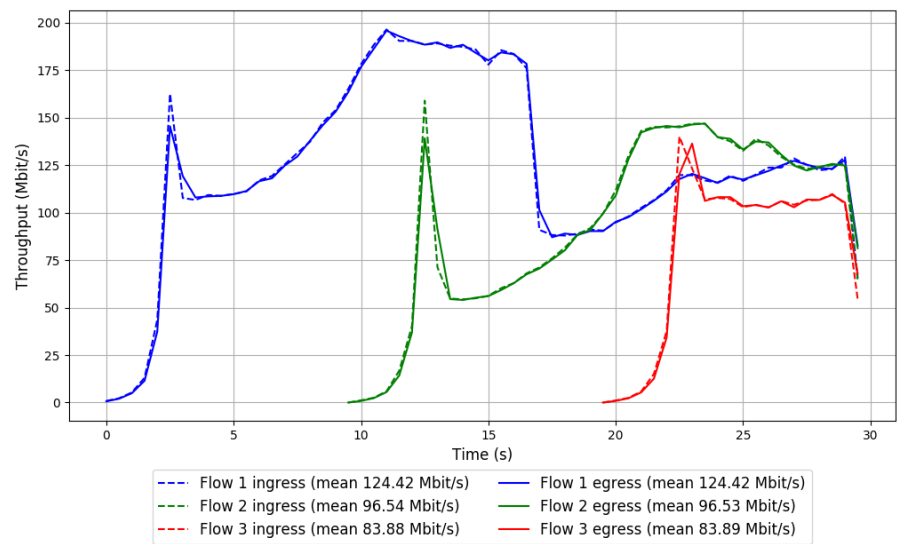


```
Run 1: Statistics of Vivace-loss

Start at: 2018-01-18 04:41:04
End at: 2018-01-18 04:41:34

# Below is generated by plot.py at 2018-01-18 11:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 216.52 Mbit/s
95th percentile per-packet one-way delay: 62.953 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 124.42 Mbit/s
95th percentile per-packet one-way delay: 62.944 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 63.015 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 83.89 Mbit/s
95th percentile per-packet one-way delay: 62.869 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-loss — Data Link

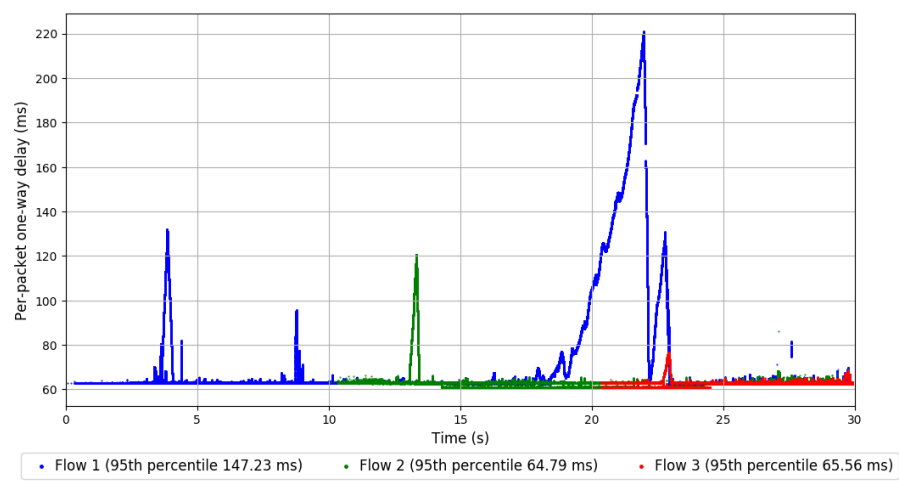
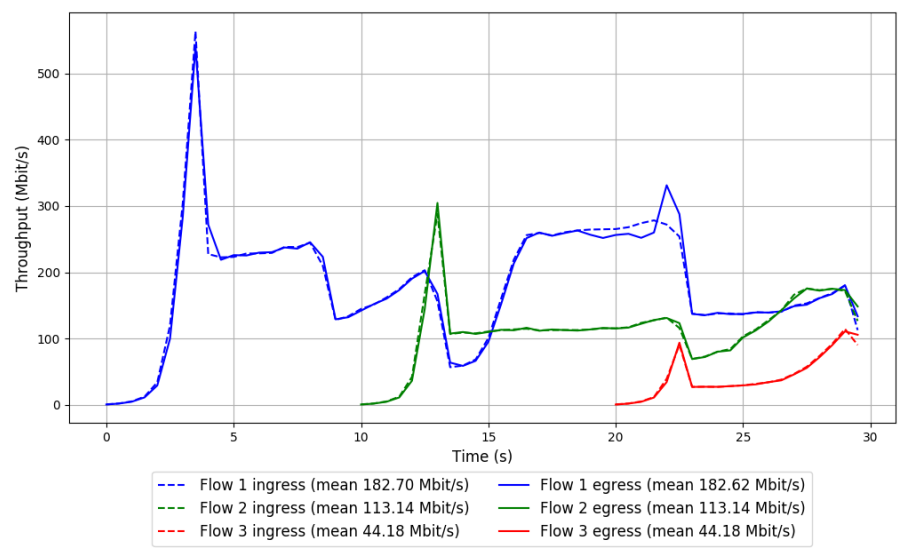


```
Run 2: Statistics of Vivace-loss

Start at: 2018-01-18 04:57:51
End at: 2018-01-18 04:58:21

# Below is generated by plot.py at 2018-01-18 11:21:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 272.34 Mbit/s
95th percentile per-packet one-way delay: 127.470 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 182.62 Mbit/s
95th percentile per-packet one-way delay: 147.233 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 113.14 Mbit/s
95th percentile per-packet one-way delay: 64.787 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 44.18 Mbit/s
95th percentile per-packet one-way delay: 65.558 ms
Loss rate: 0.00%
```


Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-01-18 05:15:05

End at: 2018-01-18 05:15:35

Below is generated by plot.py at 2018-01-18 11:22:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 291.84 Mbit/s

95th percentile per-packet one-way delay: 79.387 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 215.39 Mbit/s

95th percentile per-packet one-way delay: 84.780 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 83.28 Mbit/s

95th percentile per-packet one-way delay: 63.180 ms

Loss rate: 0.00%

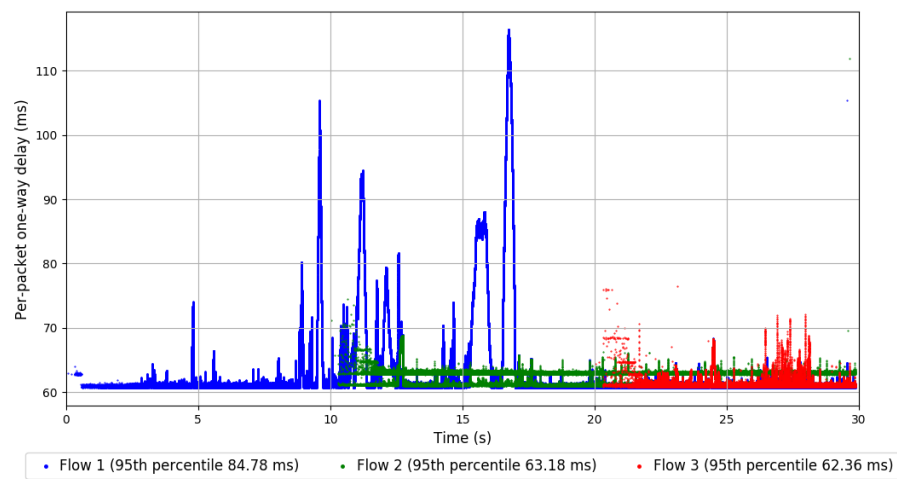
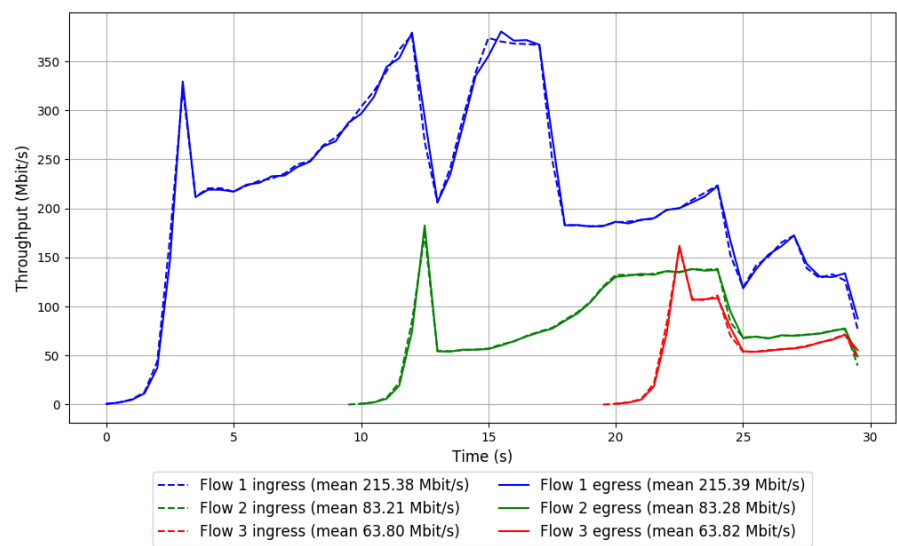
-- Flow 3:

Average throughput: 63.82 Mbit/s

95th percentile per-packet one-way delay: 62.362 ms

Loss rate: 0.00%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-01-18 05:32:19

End at: 2018-01-18 05:32:49

Below is generated by plot.py at 2018-01-18 11:22:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 226.61 Mbit/s

95th percentile per-packet one-way delay: 81.471 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 136.88 Mbit/s

95th percentile per-packet one-way delay: 98.856 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 85.22 Mbit/s

95th percentile per-packet one-way delay: 70.326 ms

Loss rate: 0.01%

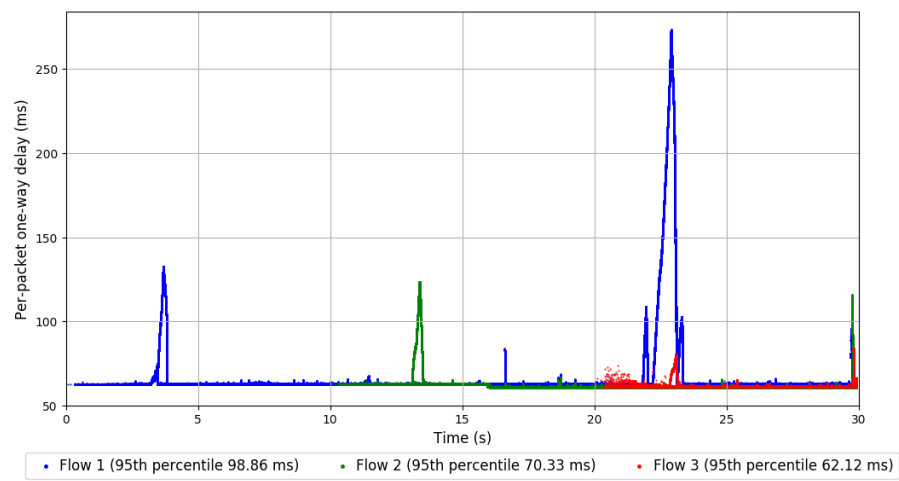
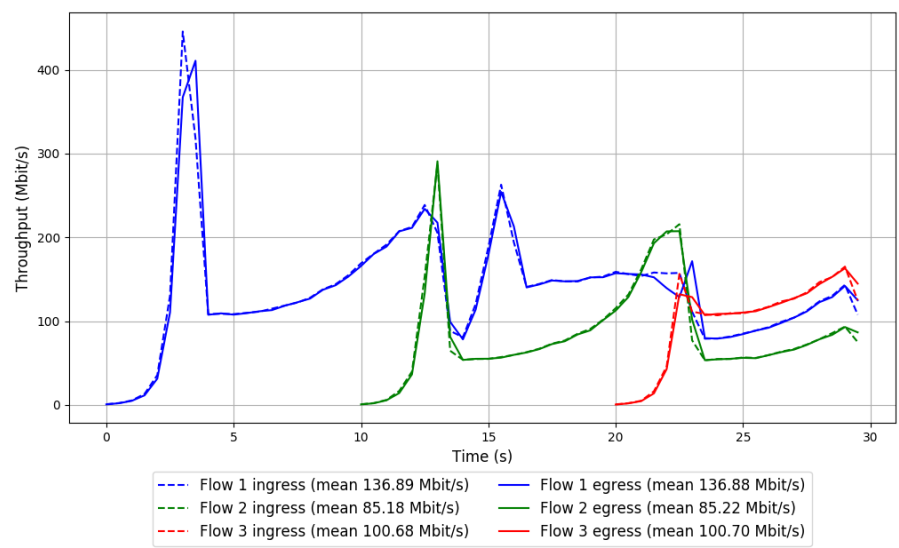
-- Flow 3:

Average throughput: 100.70 Mbit/s

95th percentile per-packet one-way delay: 62.116 ms

Loss rate: 0.02%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-01-18 05:49:38

End at: 2018-01-18 05:50:08

Below is generated by plot.py at 2018-01-18 11:26:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 286.09 Mbit/s

95th percentile per-packet one-way delay: 66.504 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 170.65 Mbit/s

95th percentile per-packet one-way delay: 66.989 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 147.55 Mbit/s

95th percentile per-packet one-way delay: 66.649 ms

Loss rate: 0.00%

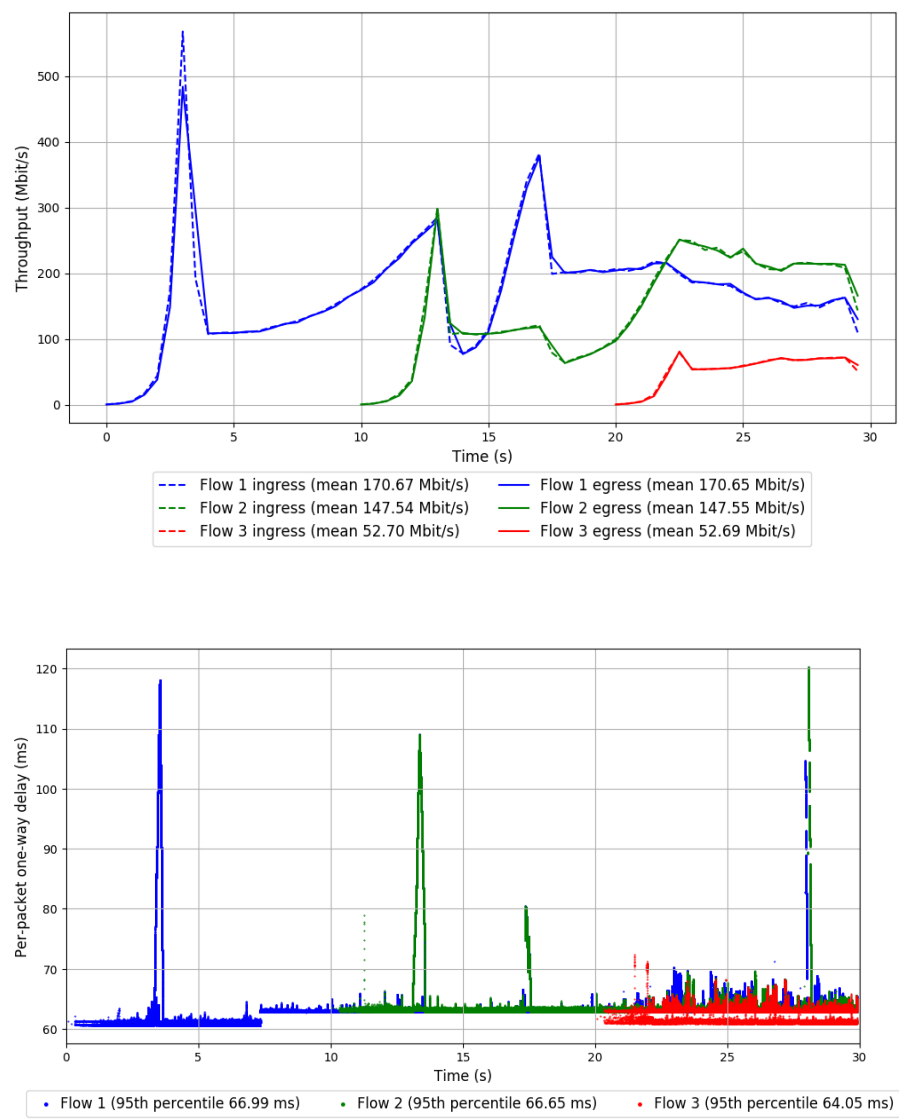
-- Flow 3:

Average throughput: 52.69 Mbit/s

95th percentile per-packet one-way delay: 64.046 ms

Loss rate: 0.00%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-01-18 06:06:49

End at: 2018-01-18 06:07:19

Below is generated by plot.py at 2018-01-18 11:26:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 229.36 Mbit/s

95th percentile per-packet one-way delay: 66.975 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 125.80 Mbit/s

95th percentile per-packet one-way delay: 68.457 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 124.06 Mbit/s

95th percentile per-packet one-way delay: 64.536 ms

Loss rate: 0.11%

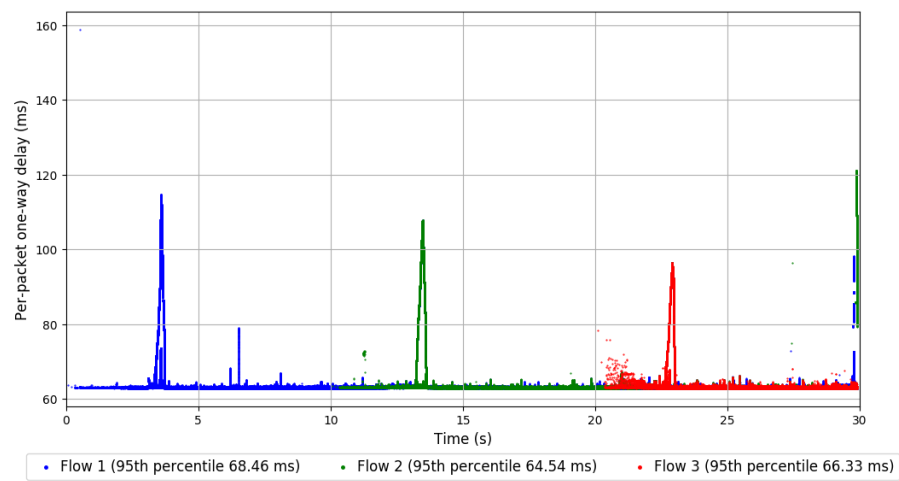
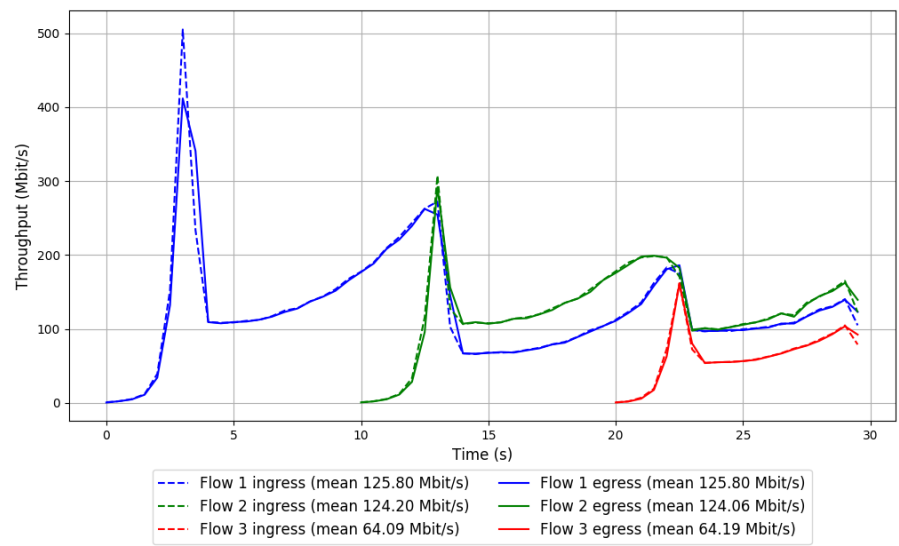
-- Flow 3:

Average throughput: 64.19 Mbit/s

95th percentile per-packet one-way delay: 66.332 ms

Loss rate: 0.00%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-01-18 06:23:44

End at: 2018-01-18 06:24:14

Below is generated by plot.py at 2018-01-18 11:26:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 252.26 Mbit/s

95th percentile per-packet one-way delay: 65.839 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 160.02 Mbit/s

95th percentile per-packet one-way delay: 66.372 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 108.03 Mbit/s

95th percentile per-packet one-way delay: 65.402 ms

Loss rate: 0.00%

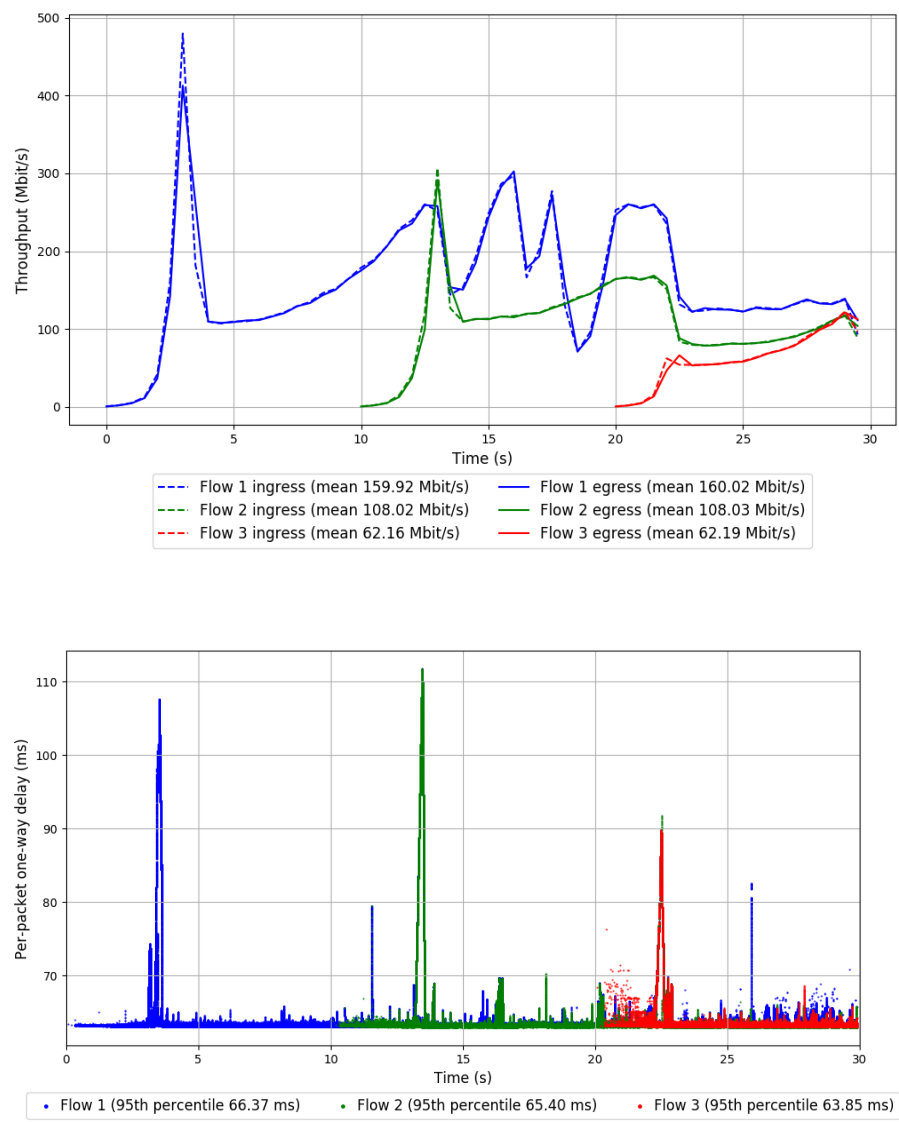
-- Flow 3:

Average throughput: 62.19 Mbit/s

95th percentile per-packet one-way delay: 63.854 ms

Loss rate: 0.00%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-01-18 06:41:08

End at: 2018-01-18 06:41:38

Below is generated by plot.py at 2018-01-18 11:27:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 263.68 Mbit/s

95th percentile per-packet one-way delay: 69.988 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 169.38 Mbit/s

95th percentile per-packet one-way delay: 72.034 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 128.21 Mbit/s

95th percentile per-packet one-way delay: 65.448 ms

Loss rate: 0.00%

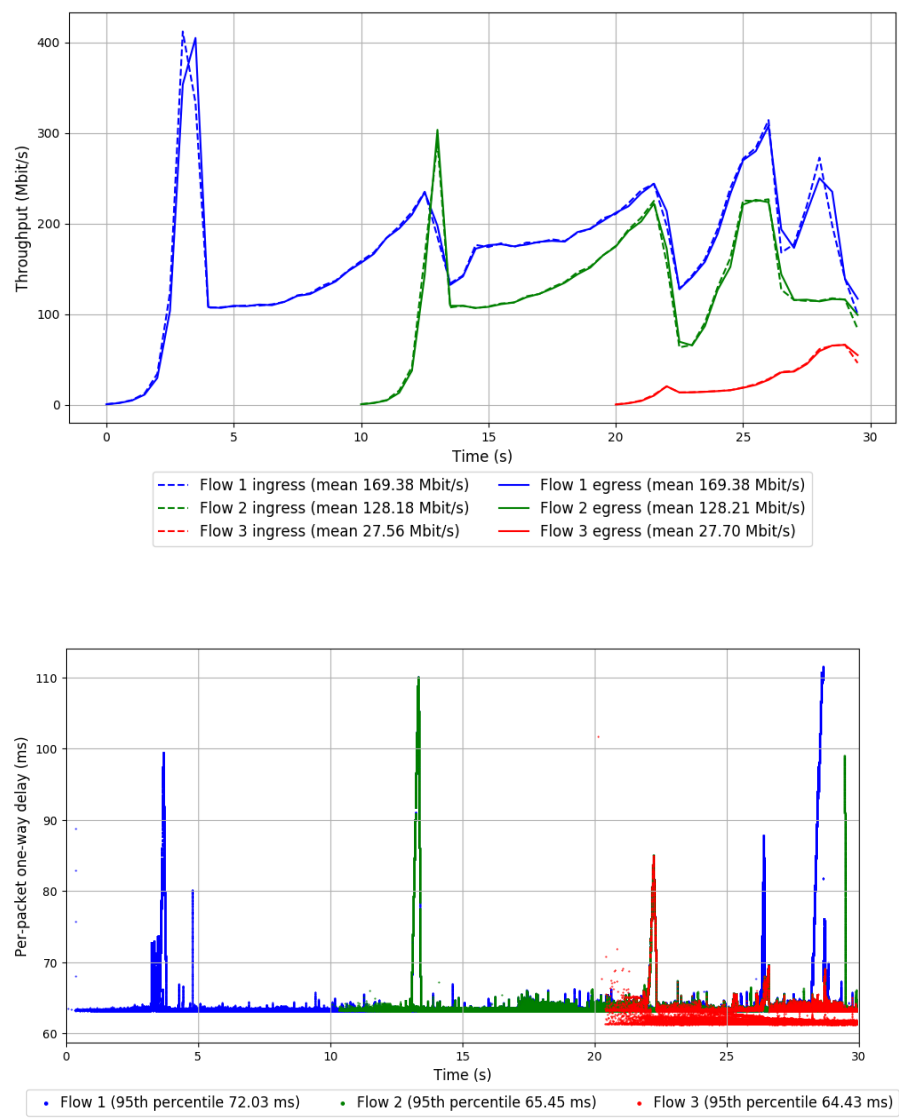
-- Flow 3:

Average throughput: 27.70 Mbit/s

95th percentile per-packet one-way delay: 64.432 ms

Loss rate: 0.00%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-01-18 06:58:21

End at: 2018-01-18 06:58:51

Below is generated by plot.py at 2018-01-18 11:27:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 211.01 Mbit/s

95th percentile per-packet one-way delay: 66.605 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 114.58 Mbit/s

95th percentile per-packet one-way delay: 69.729 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 92.16 Mbit/s

95th percentile per-packet one-way delay: 63.945 ms

Loss rate: 0.00%

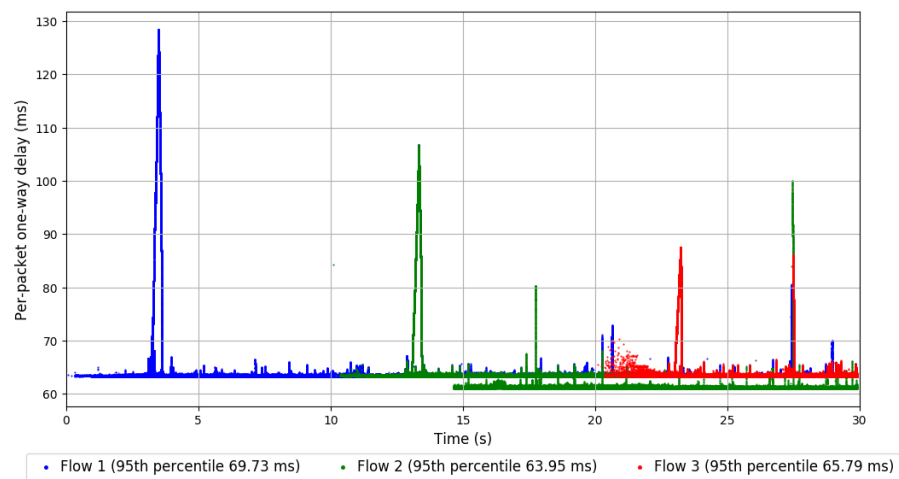
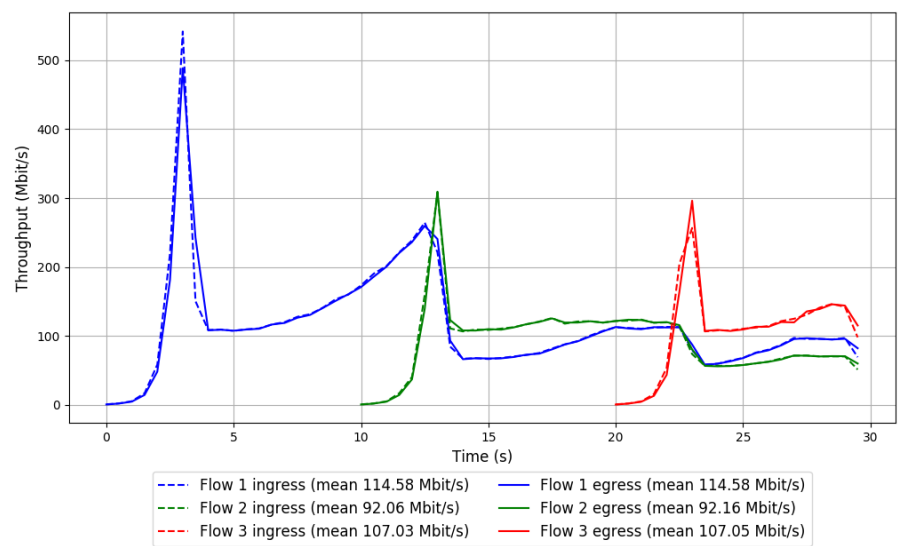
-- Flow 3:

Average throughput: 107.05 Mbit/s

95th percentile per-packet one-way delay: 65.790 ms

Loss rate: 0.00%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-01-18 07:15:18

End at: 2018-01-18 07:15:48

Below is generated by plot.py at 2018-01-18 11:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 280.76 Mbit/s

95th percentile per-packet one-way delay: 109.245 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 199.60 Mbit/s

95th percentile per-packet one-way delay: 120.890 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 80.28 Mbit/s

95th percentile per-packet one-way delay: 64.089 ms

Loss rate: 0.00%

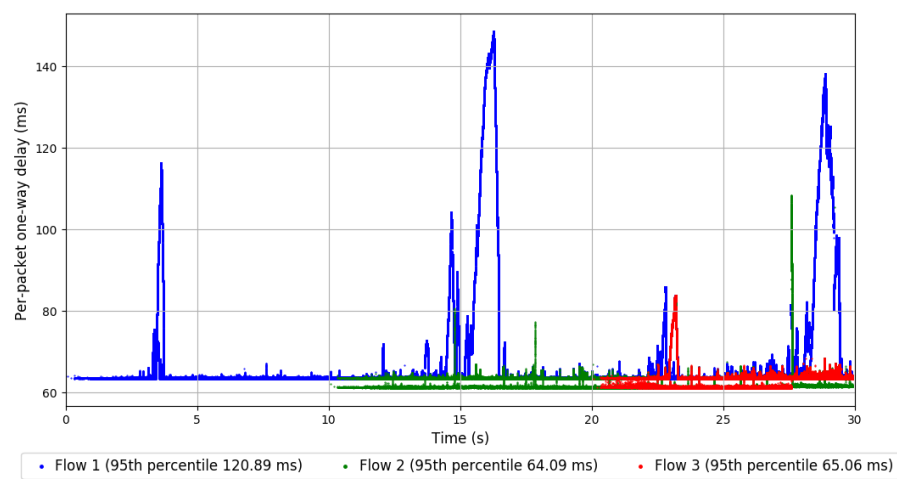
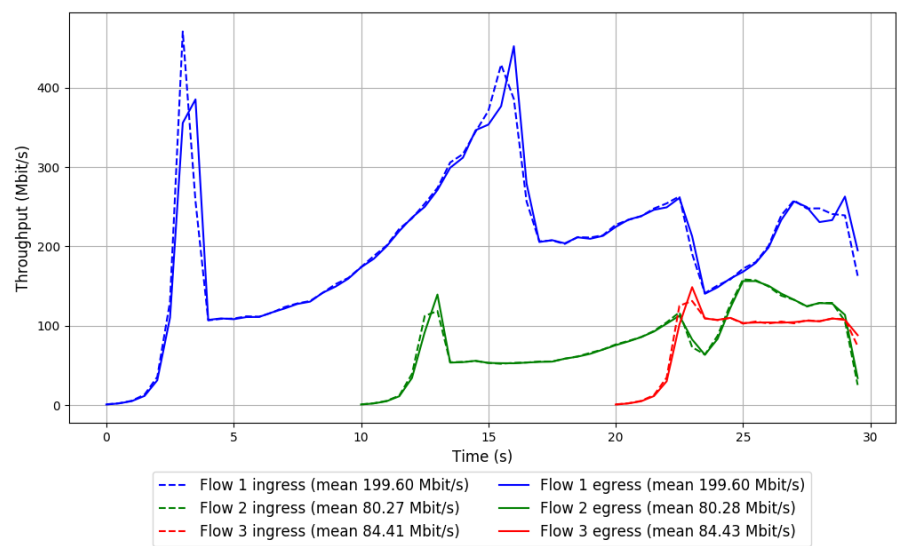
-- Flow 3:

Average throughput: 84.43 Mbit/s

95th percentile per-packet one-way delay: 65.064 ms

Loss rate: 0.00%

Run 10: Report of Vivace-loss — Data Link

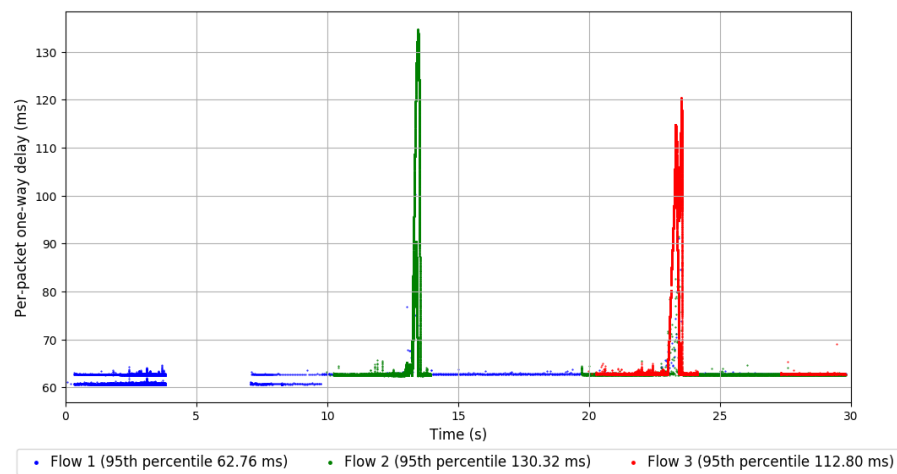
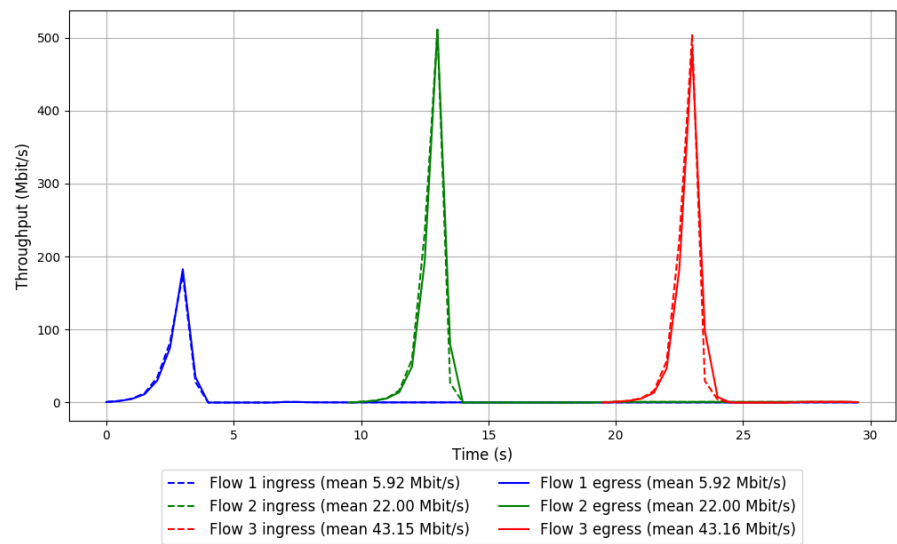


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-01-18 04:53:45
End at: 2018-01-18 04:54:15

# Below is generated by plot.py at 2018-01-18 11:30:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.83 Mbit/s
95th percentile per-packet one-way delay: 119.559 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 62.763 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.00 Mbit/s
95th percentile per-packet one-way delay: 130.317 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.16 Mbit/s
95th percentile per-packet one-way delay: 112.798 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-01-18 05:10:49

End at: 2018-01-18 05:11:19

Below is generated by plot.py at 2018-01-18 11:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 110.11 Mbit/s

95th percentile per-packet one-way delay: 65.884 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 92.05 Mbit/s

95th percentile per-packet one-way delay: 62.522 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.40 Mbit/s

95th percentile per-packet one-way delay: 119.409 ms

Loss rate: 0.00%

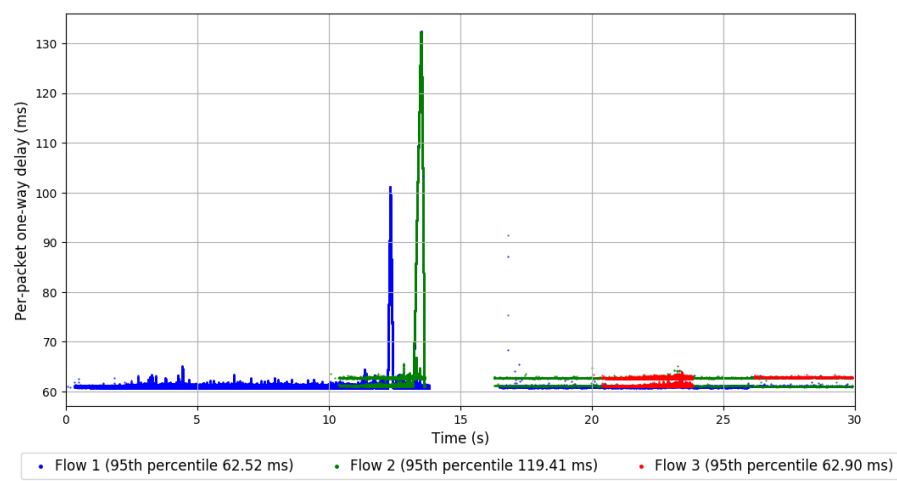
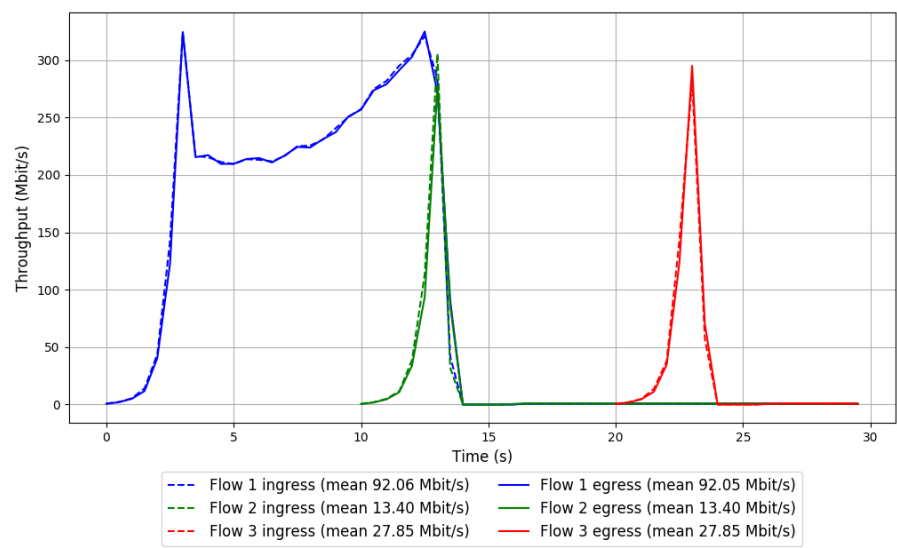
-- Flow 3:

Average throughput: 27.85 Mbit/s

95th percentile per-packet one-way delay: 62.900 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-01-18 05:27:57

End at: 2018-01-18 05:28:27

Below is generated by plot.py at 2018-01-18 11:30:49

Datalink statistics

-- Total of 3 flows:

Average throughput: 149.48 Mbit/s

95th percentile per-packet one-way delay: 62.989 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.46 Mbit/s

95th percentile per-packet one-way delay: 95.864 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 124.47 Mbit/s

95th percentile per-packet one-way delay: 62.833 ms

Loss rate: 0.00%

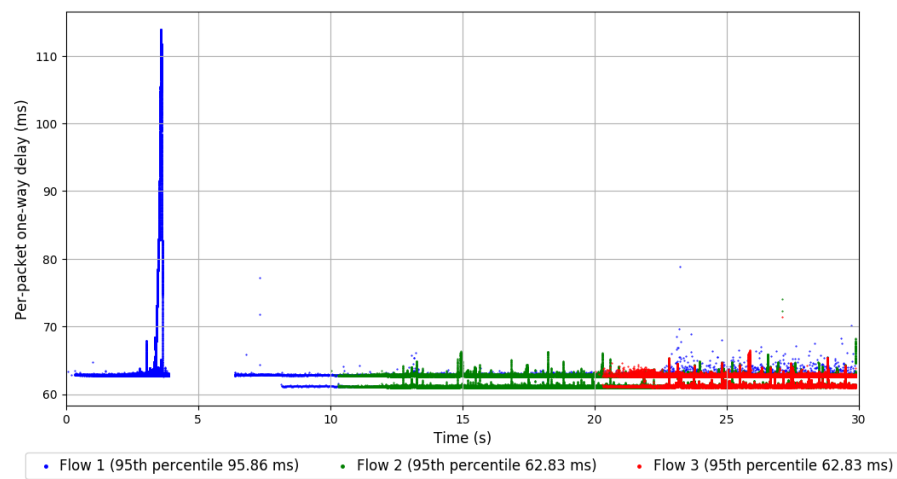
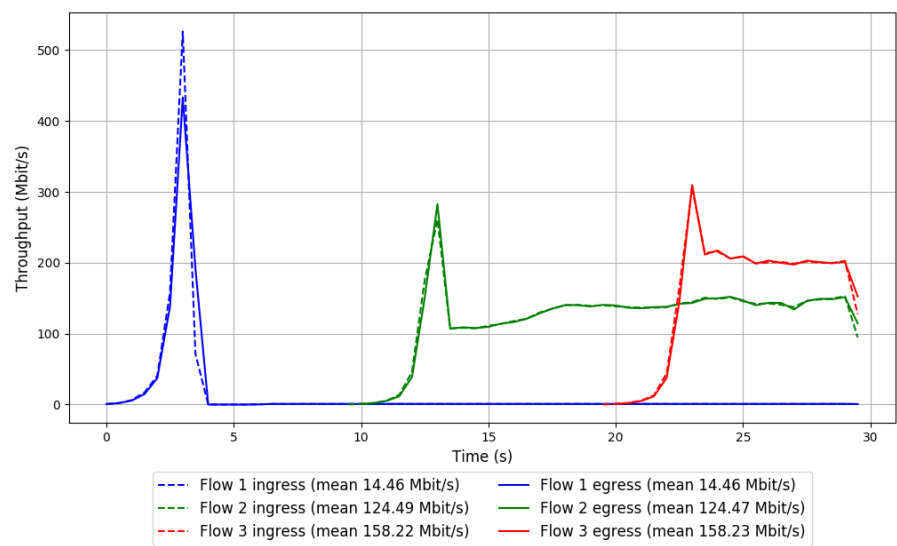
-- Flow 3:

Average throughput: 158.23 Mbit/s

95th percentile per-packet one-way delay: 62.828 ms

Loss rate: 0.00%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-01-18 05:45:06

End at: 2018-01-18 05:45:36

Below is generated by plot.py at 2018-01-18 11:31:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.04 Mbit/s

95th percentile per-packet one-way delay: 63.210 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 148.43 Mbit/s

95th percentile per-packet one-way delay: 63.223 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 97.65 Mbit/s

95th percentile per-packet one-way delay: 63.117 ms

Loss rate: 0.00%

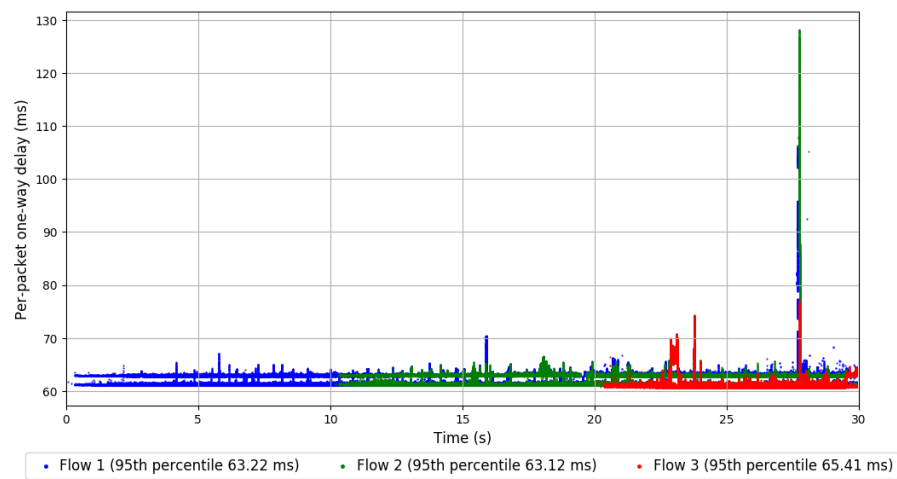
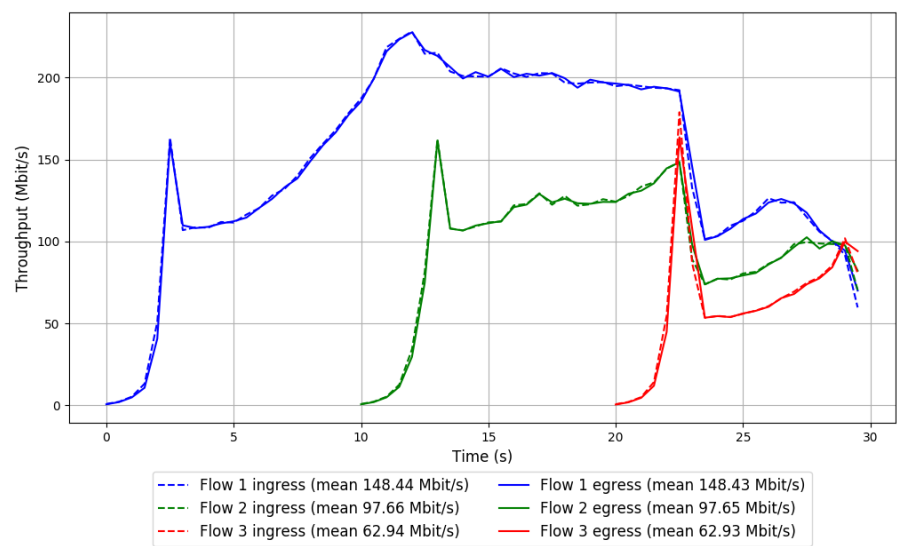
-- Flow 3:

Average throughput: 62.93 Mbit/s

95th percentile per-packet one-way delay: 65.412 ms

Loss rate: 0.00%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-01-18 06:02:28

End at: 2018-01-18 06:02:58

Below is generated by plot.py at 2018-01-18 11:31:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 134.74 Mbit/s

95th percentile per-packet one-way delay: 66.815 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.38 Mbit/s

95th percentile per-packet one-way delay: 115.532 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 135.06 Mbit/s

95th percentile per-packet one-way delay: 63.123 ms

Loss rate: 0.00%

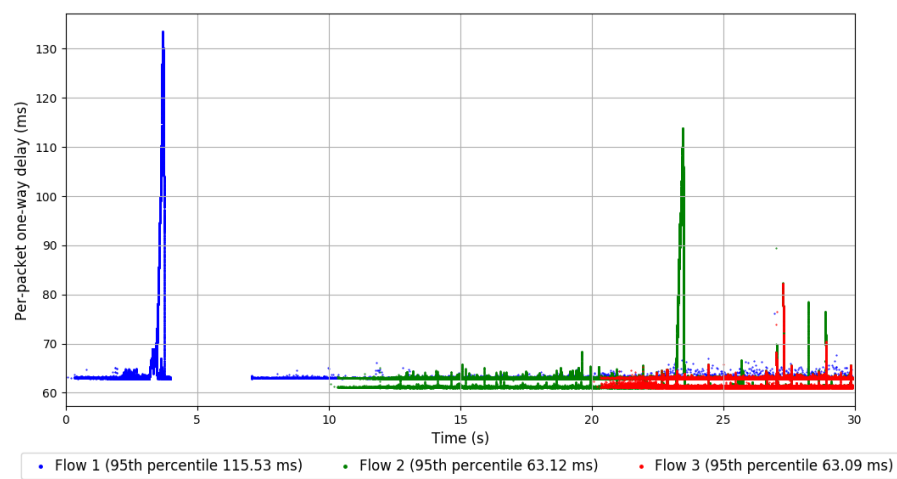
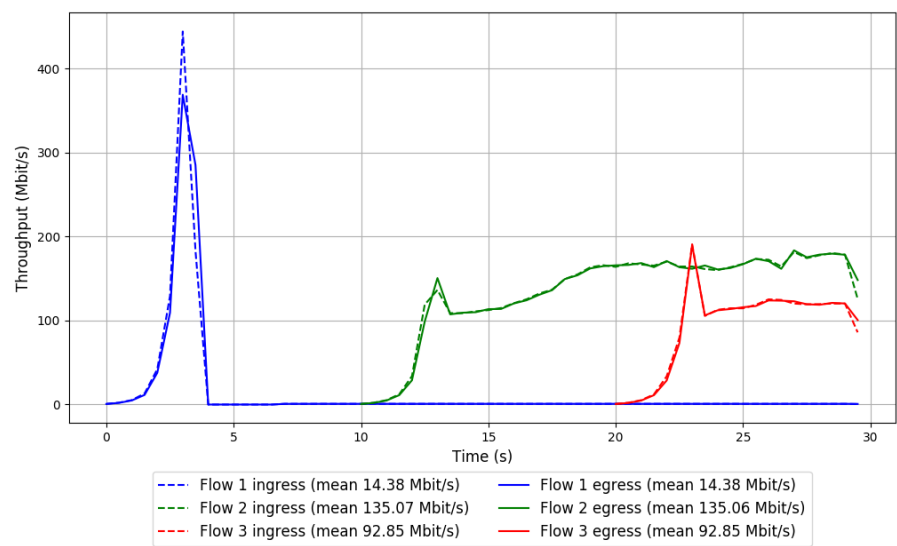
-- Flow 3:

Average throughput: 92.85 Mbit/s

95th percentile per-packet one-way delay: 63.090 ms

Loss rate: 0.00%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-01-18 06:19:40

End at: 2018-01-18 06:20:10

Below is generated by plot.py at 2018-01-18 11:31:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 101.88 Mbit/s

95th percentile per-packet one-way delay: 74.502 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 14.38 Mbit/s

95th percentile per-packet one-way delay: 97.994 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 96.30 Mbit/s

95th percentile per-packet one-way delay: 63.296 ms

Loss rate: 0.00%

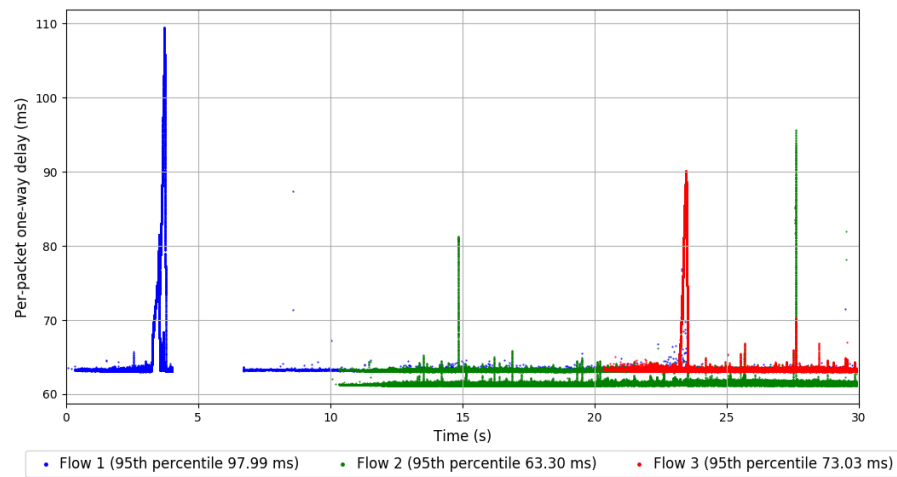
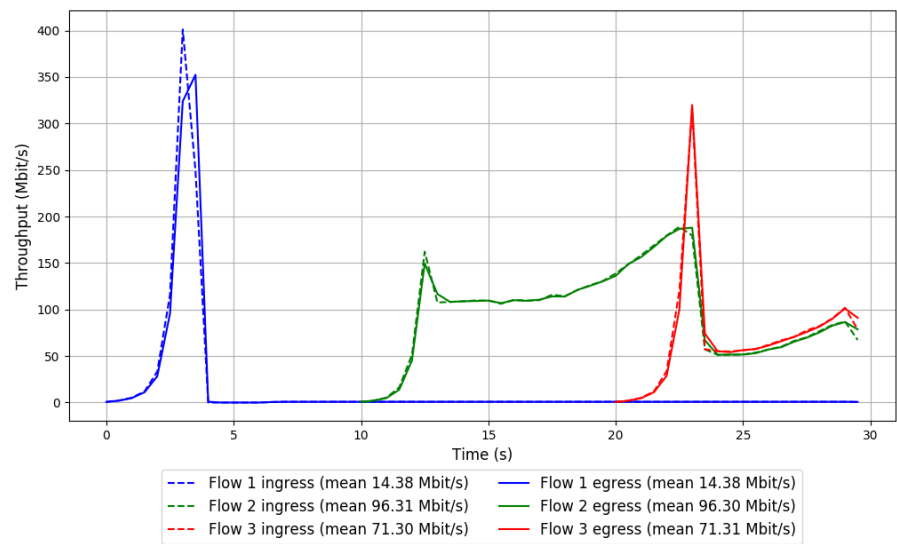
-- Flow 3:

Average throughput: 71.31 Mbit/s

95th percentile per-packet one-way delay: 73.033 ms

Loss rate: 0.00%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-01-18 06:36:53

End at: 2018-01-18 06:37:23

Below is generated by plot.py at 2018-01-18 11:31:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.98 Mbit/s

95th percentile per-packet one-way delay: 64.171 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.44 Mbit/s

95th percentile per-packet one-way delay: 63.484 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 104.42 Mbit/s

95th percentile per-packet one-way delay: 63.672 ms

Loss rate: 0.00%

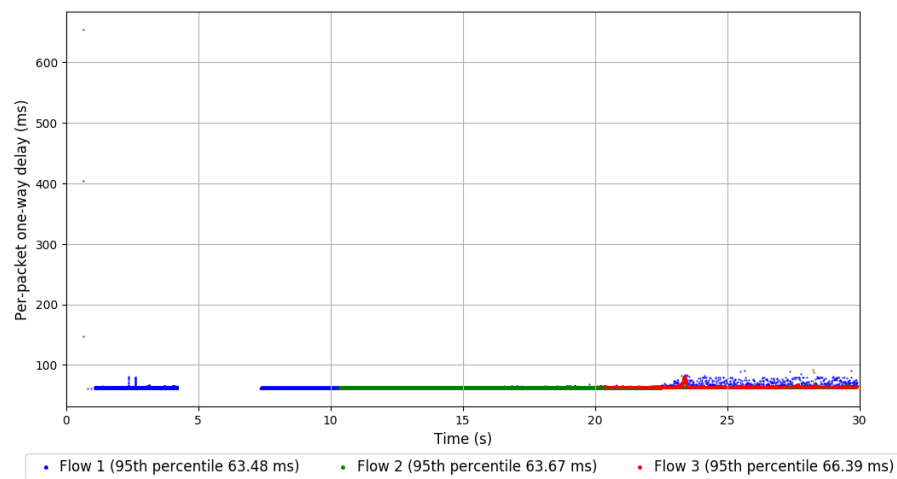
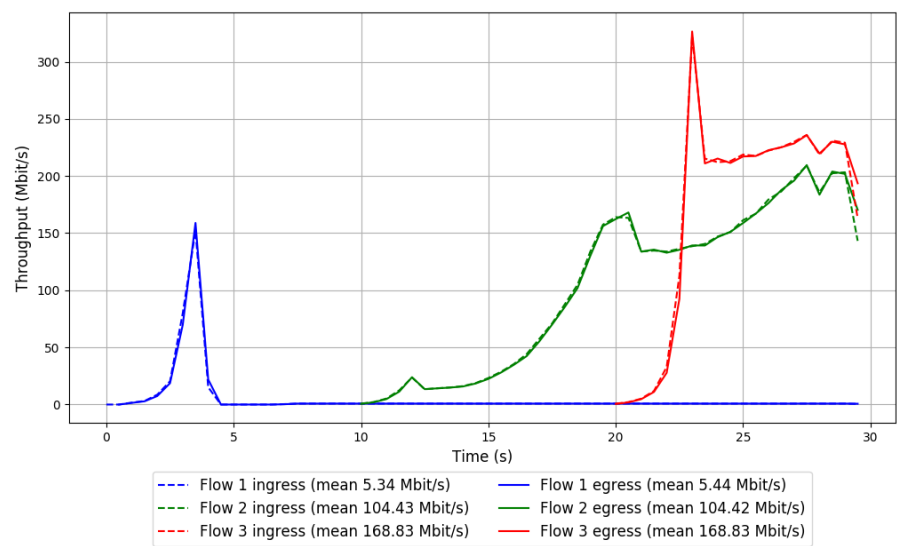
-- Flow 3:

Average throughput: 168.83 Mbit/s

95th percentile per-packet one-way delay: 66.390 ms

Loss rate: 0.00%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-01-18 06:54:04

End at: 2018-01-18 06:54:34

Below is generated by plot.py at 2018-01-18 11:31:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 148.11 Mbit/s

95th percentile per-packet one-way delay: 64.563 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 128.68 Mbit/s

95th percentile per-packet one-way delay: 63.750 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 7.81 Mbit/s

95th percentile per-packet one-way delay: 63.562 ms

Loss rate: 0.00%

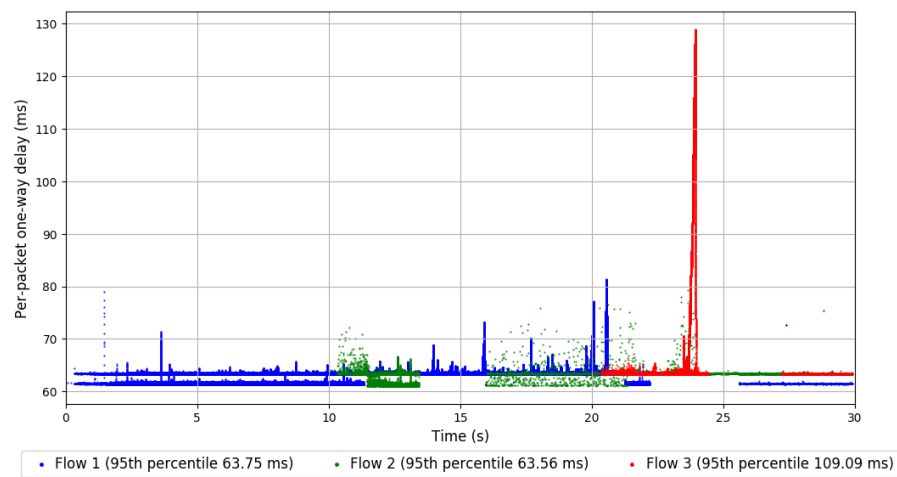
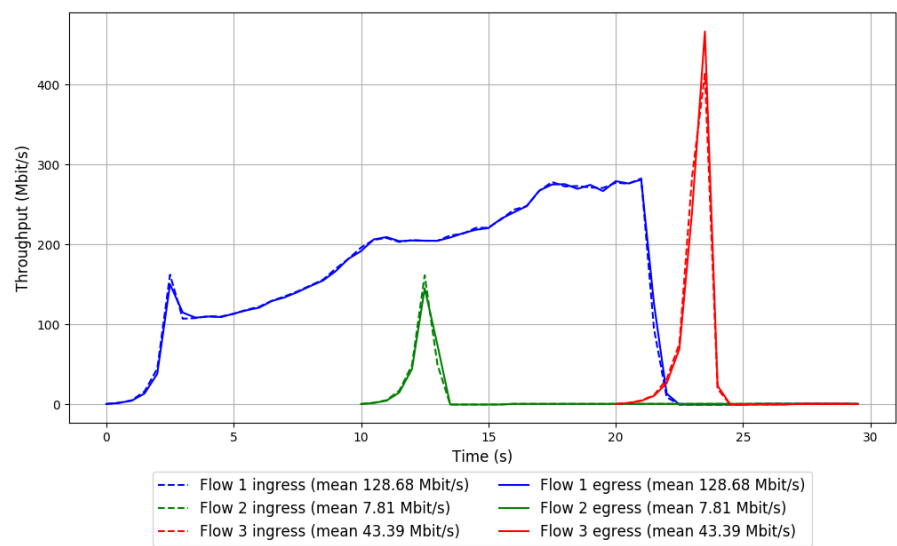
-- Flow 3:

Average throughput: 43.39 Mbit/s

95th percentile per-packet one-way delay: 109.094 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-01-18 07:11:09

End at: 2018-01-18 07:11:39

Below is generated by plot.py at 2018-01-18 11:31:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 34.65 Mbit/s

95th percentile per-packet one-way delay: 121.595 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.59 Mbit/s

95th percentile per-packet one-way delay: 63.567 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.75 Mbit/s

95th percentile per-packet one-way delay: 122.031 ms

Loss rate: 0.00%

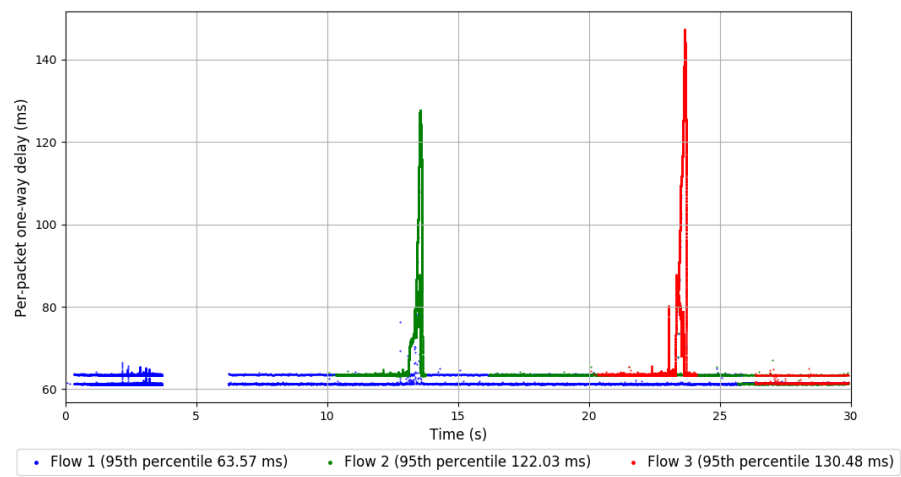
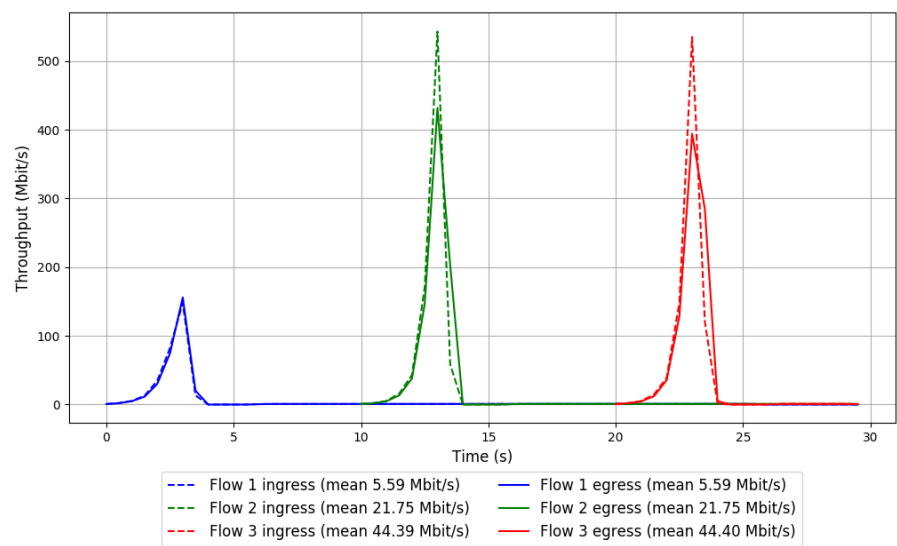
-- Flow 3:

Average throughput: 44.40 Mbit/s

95th percentile per-packet one-way delay: 130.478 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-01-18 07:28:07

End at: 2018-01-18 07:28:37

Below is generated by plot.py at 2018-01-18 11:31:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.54 Mbit/s

95th percentile per-packet one-way delay: 105.589 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 88.62 Mbit/s

95th percentile per-packet one-way delay: 105.143 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 14.56 Mbit/s

95th percentile per-packet one-way delay: 126.566 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 40.32 Mbit/s

95th percentile per-packet one-way delay: 85.339 ms

Loss rate: 0.00%

Run 10: Report of Vivace-LTE — Data Link

