

Pantheon Report

Generated at 2018-02-18 07:26:34 (UTC).

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

Repeated the test of 17 congestion control schemes 10 times.

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

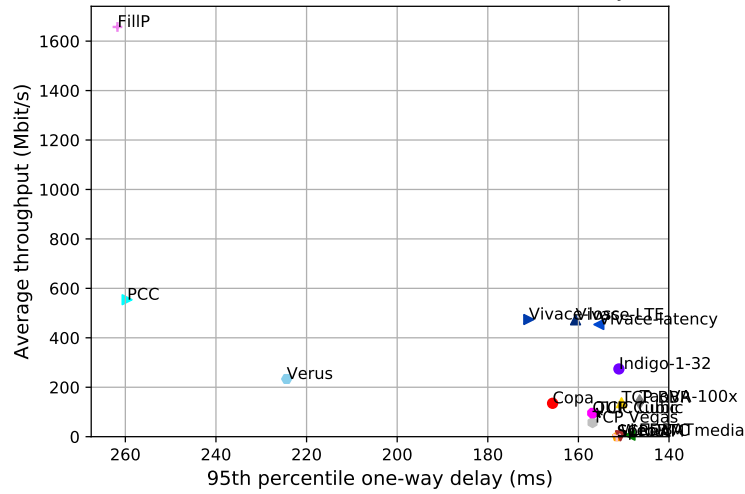
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).

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

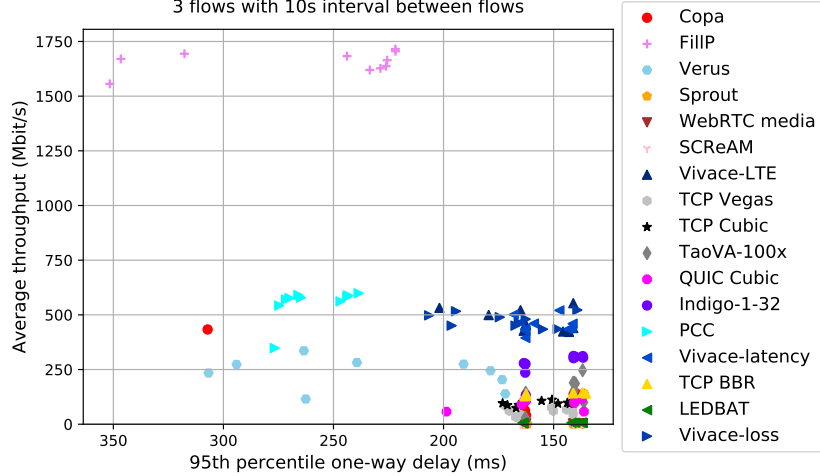
Git summary:

```
branch: master @ cccb2d77344969a7bac1df6edf6c0cfb6c77a6f8
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 8400b8926887fc4cf8c795a1d7ce2c8ac041ec72
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

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



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



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	70.60	69.30	62.67	150.49	147.47	146.91	0.01	0.02	0.00
TCP Cubic	10	50.62	49.45	34.61	155.32	154.98	155.73	0.00	0.00	0.14
LEDBAT	10	4.24	2.17	1.10	148.67	148.06	147.92	0.00	0.00	0.00
PCC	10	410.48	173.92	84.95	257.46	262.54	248.51	2.96	3.59	4.65
QUIC Cubic	10	47.51	50.31	45.46	156.31	153.47	147.89	0.07	0.11	0.12
SCReAM	10	0.21	0.20	0.21	145.67	150.14	147.79	0.00	0.04	0.03
WebRTC media	10	1.99	1.21	0.40	147.66	147.65	144.88	0.00	0.04	0.22
Sprout	10	0.37	0.41	0.39	150.97	151.73	151.29	0.00	0.01	0.00
TaoVA-100x	10	89.75	70.96	47.51	146.11	149.47	151.01	0.02	0.03	0.47
TCP Vegas	10	29.09	27.27	29.81	156.02	155.56	157.81	0.01	0.02	0.14
Verus	10	151.14	97.23	57.19	223.99	210.62	223.28	1.41	0.48	2.39
Copa	10	92.37	42.52	43.41	165.61	159.42	159.32	3.88	0.62	0.77
FillP	10	871.96	817.33	728.96	245.75	241.57	254.38	2.57	4.57	6.00
Indigo-1-32	10	138.37	148.96	116.14	150.97	148.57	148.98	0.00	0.00	0.01
Vivace-latency	10	282.66	207.19	101.71	152.73	165.63	144.72	0.05	0.17	0.07
Vivace-loss	10	285.72	214.59	139.27	193.82	149.55	178.46	0.36	0.07	0.35
Vivace-LTE	10	293.86	204.74	130.06	158.21	149.94	158.76	0.11	0.05	0.03

Run 1: Statistics of TCP BBR

Start at: 2018-02-18 00:19:38

End at: 2018-02-18 00:20:08

Below is generated by plot.py at 2018-02-18 05:33:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 141.51 Mbit/s

95th percentile per-packet one-way delay: 141.228 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.83 Mbit/s

95th percentile per-packet one-way delay: 141.285 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.49 Mbit/s

95th percentile per-packet one-way delay: 137.026 ms

Loss rate: 0.00%

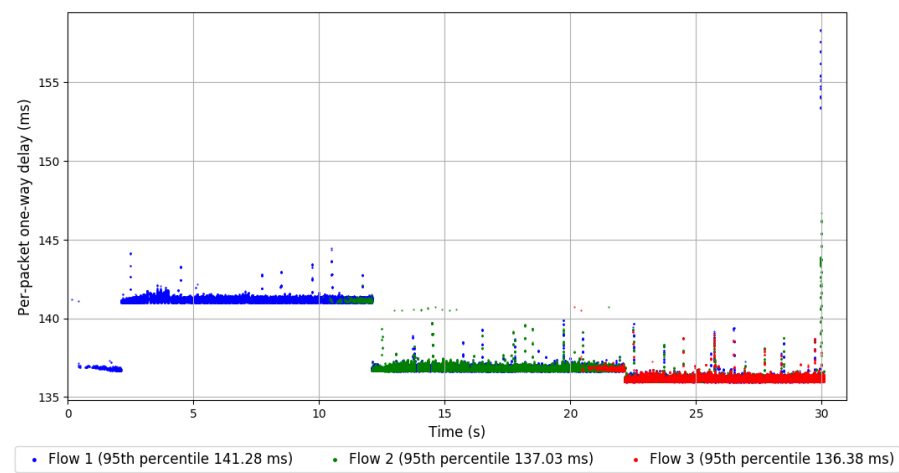
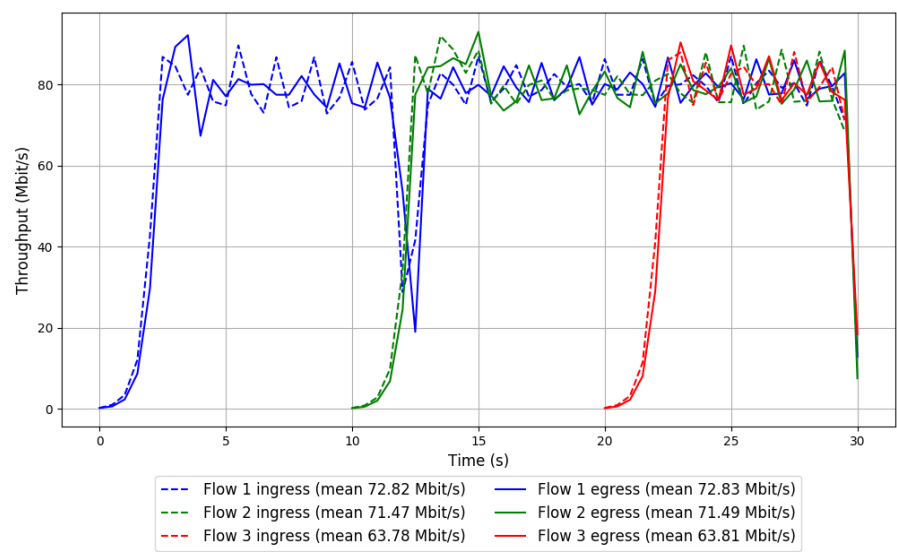
-- Flow 3:

Average throughput: 63.81 Mbit/s

95th percentile per-packet one-way delay: 136.378 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-18 00:40:29

End at: 2018-02-18 00:40:59

Below is generated by plot.py at 2018-02-18 05:33:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.77 Mbit/s

95th percentile per-packet one-way delay: 140.963 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 74.49 Mbit/s

95th percentile per-packet one-way delay: 140.967 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 71.33 Mbit/s

95th percentile per-packet one-way delay: 140.996 ms

Loss rate: 0.00%

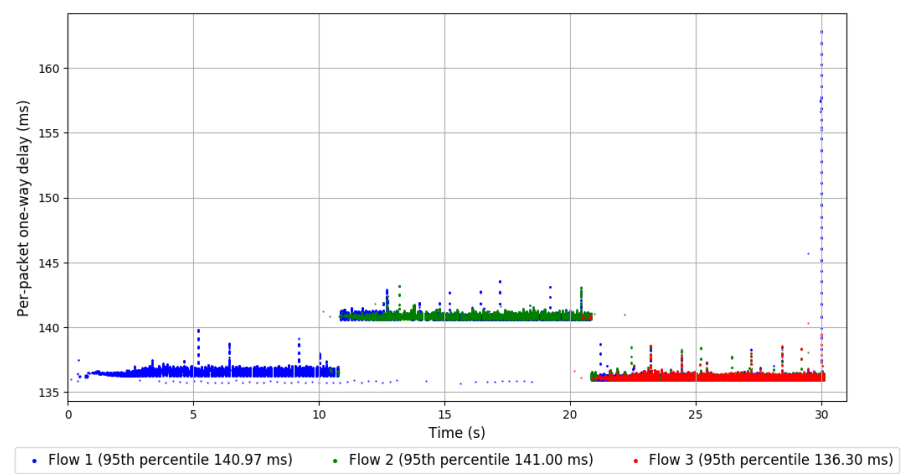
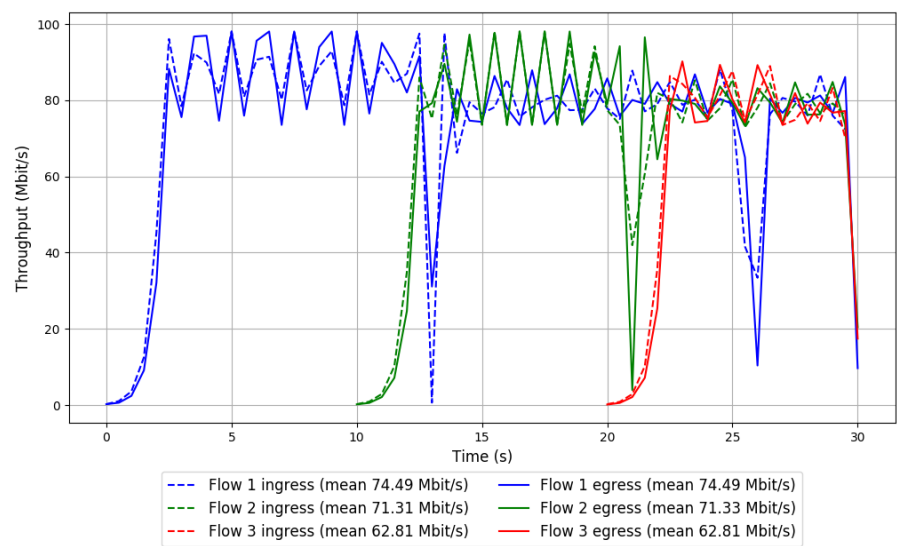
-- Flow 3:

Average throughput: 62.81 Mbit/s

95th percentile per-packet one-way delay: 136.297 ms

Loss rate: 0.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-18 01:01:00

End at: 2018-02-18 01:01:30

Below is generated by plot.py at 2018-02-18 05:33:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.44 Mbit/s

95th percentile per-packet one-way delay: 135.328 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.33 Mbit/s

95th percentile per-packet one-way delay: 135.322 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.26 Mbit/s

95th percentile per-packet one-way delay: 135.341 ms

Loss rate: 0.00%

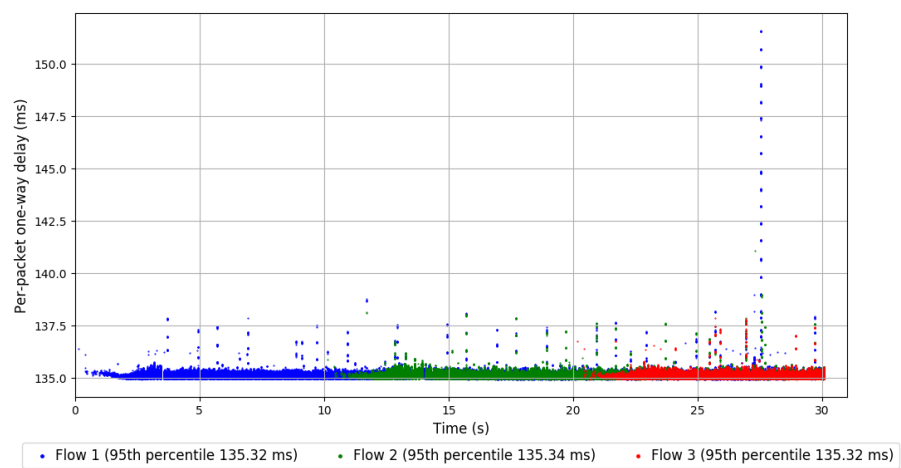
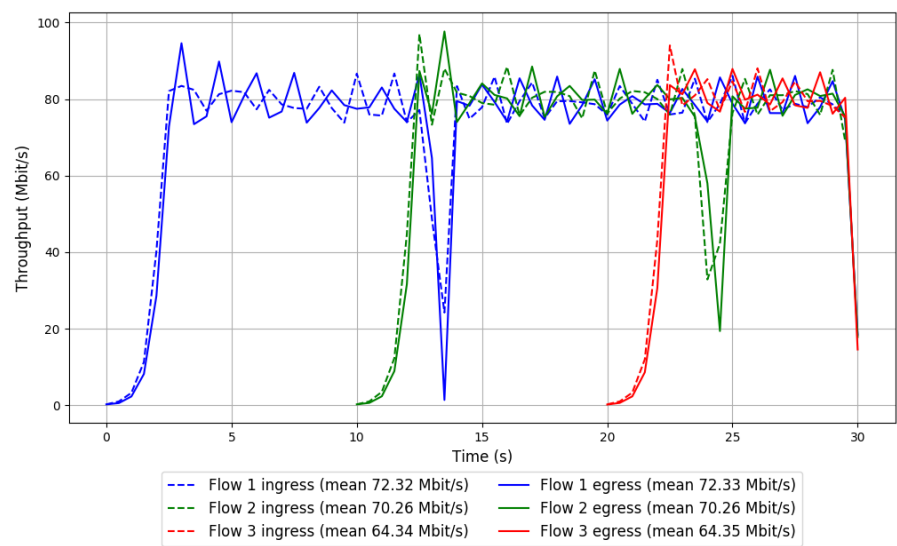
-- Flow 3:

Average throughput: 64.35 Mbit/s

95th percentile per-packet one-way delay: 135.316 ms

Loss rate: 0.00%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-18 01:21:47

End at: 2018-02-18 01:22:17

Below is generated by plot.py at 2018-02-18 05:33:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.20 Mbit/s

95th percentile per-packet one-way delay: 136.584 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.61 Mbit/s

95th percentile per-packet one-way delay: 136.535 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.90 Mbit/s

95th percentile per-packet one-way delay: 136.638 ms

Loss rate: 0.00%

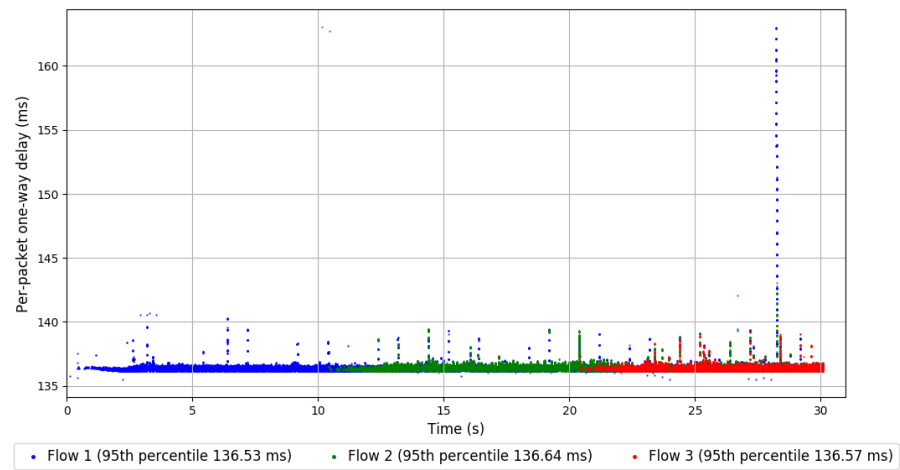
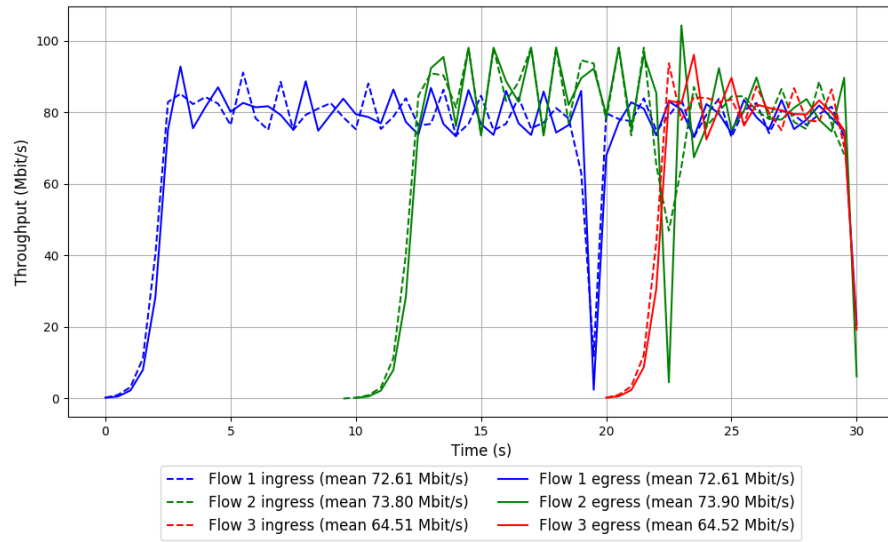
-- Flow 3:

Average throughput: 64.52 Mbit/s

95th percentile per-packet one-way delay: 136.567 ms

Loss rate: 0.00%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-18 01:42:18

End at: 2018-02-18 01:42:48

Below is generated by plot.py at 2018-02-18 05:33:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.63 Mbit/s

95th percentile per-packet one-way delay: 136.981 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.49 Mbit/s

95th percentile per-packet one-way delay: 136.972 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 73.70 Mbit/s

95th percentile per-packet one-way delay: 137.024 ms

Loss rate: 0.00%

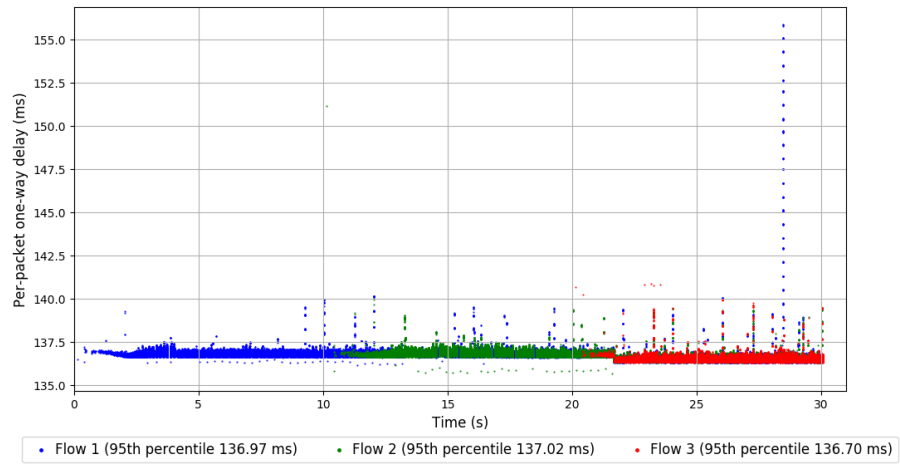
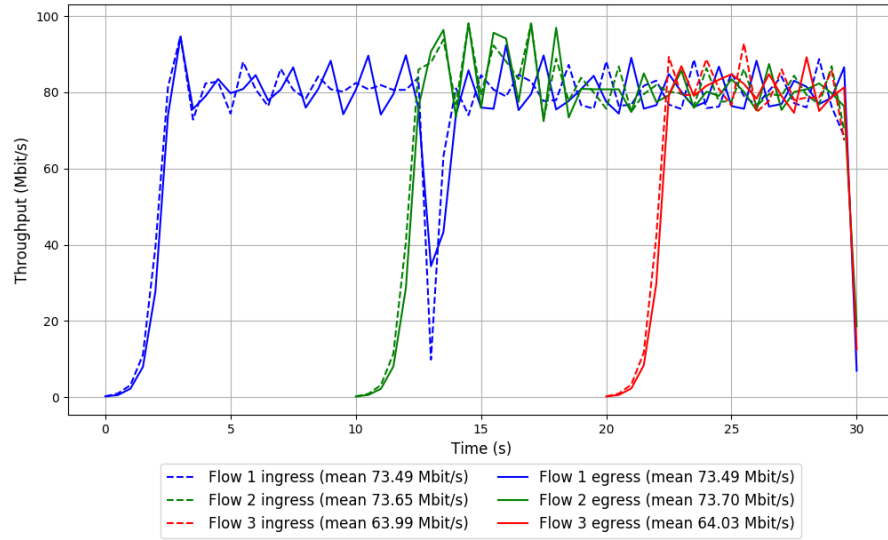
-- Flow 3:

Average throughput: 64.03 Mbit/s

95th percentile per-packet one-way delay: 136.702 ms

Loss rate: 0.00%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-18 02:02:54

End at: 2018-02-18 02:03:24

Below is generated by plot.py at 2018-02-18 05:33:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 140.19 Mbit/s

95th percentile per-packet one-way delay: 162.435 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.01 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.40 Mbit/s

95th percentile per-packet one-way delay: 136.386 ms

Loss rate: 0.00%

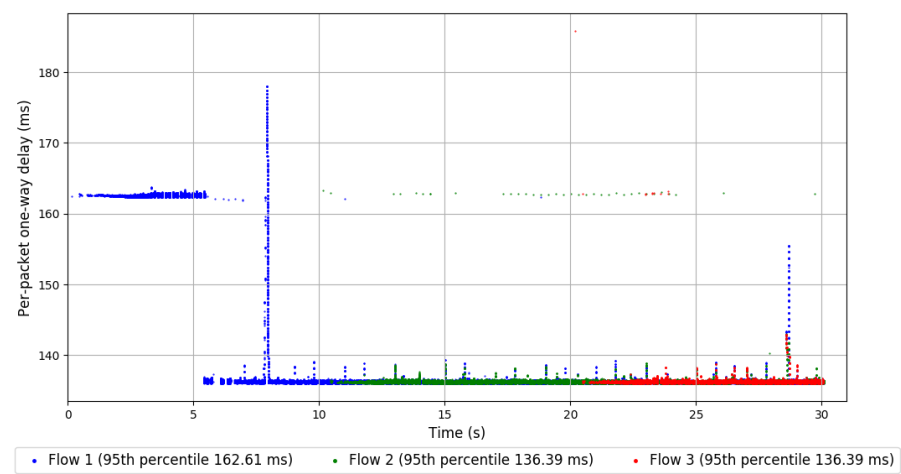
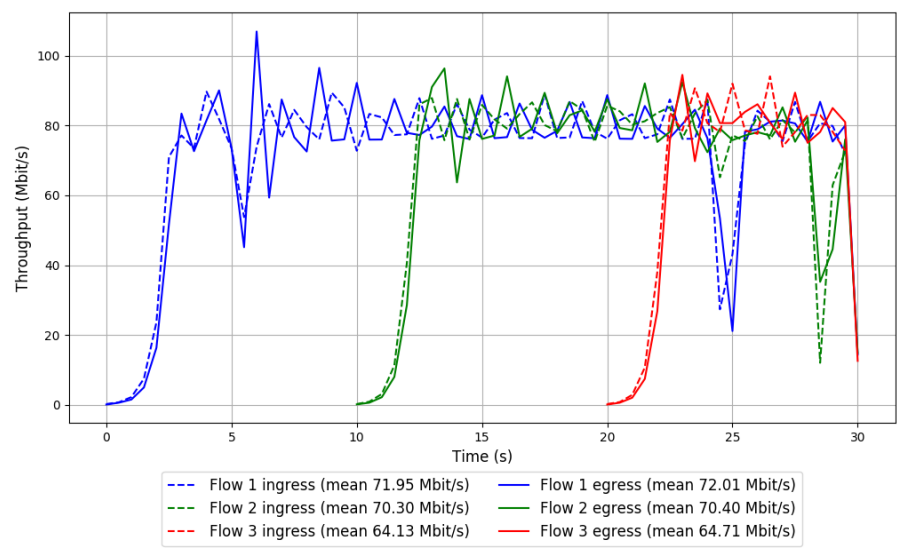
-- Flow 3:

Average throughput: 64.71 Mbit/s

95th percentile per-packet one-way delay: 136.390 ms

Loss rate: 0.00%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-18 02:23:15

End at: 2018-02-18 02:23:45

Below is generated by plot.py at 2018-02-18 05:33:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.93 Mbit/s

95th percentile per-packet one-way delay: 162.640 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 68.69 Mbit/s

95th percentile per-packet one-way delay: 162.598 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 61.99 Mbit/s

95th percentile per-packet one-way delay: 162.704 ms

Loss rate: 0.00%

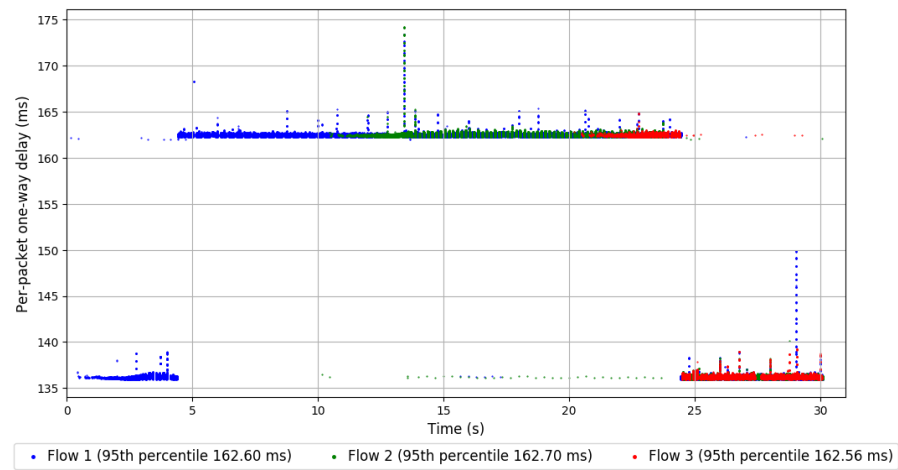
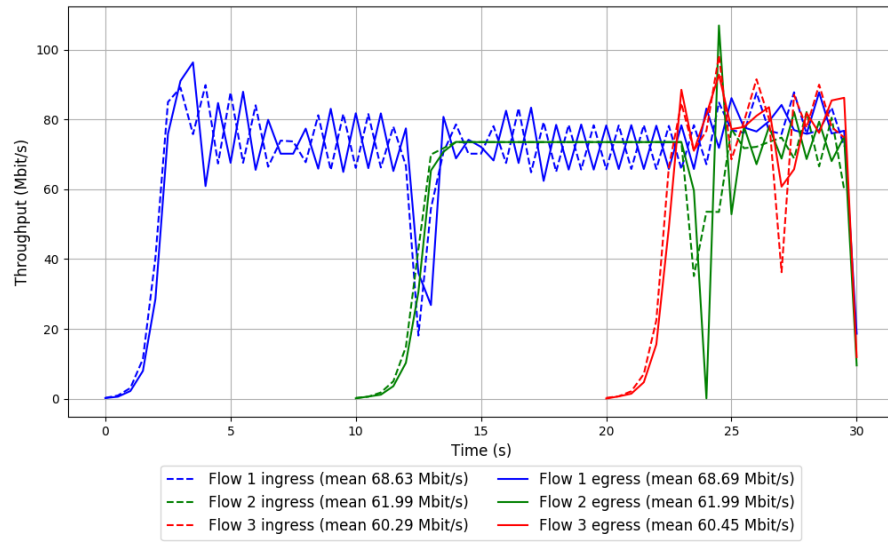
-- Flow 3:

Average throughput: 60.45 Mbit/s

95th percentile per-packet one-way delay: 162.557 ms

Loss rate: 0.00%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-18 02:43:56

End at: 2018-02-18 02:44:26

Below is generated by plot.py at 2018-02-18 05:33:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 127.51 Mbit/s

95th percentile per-packet one-way delay: 163.159 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 63.63 Mbit/s

95th percentile per-packet one-way delay: 163.193 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 66.15 Mbit/s

95th percentile per-packet one-way delay: 163.070 ms

Loss rate: 0.00%

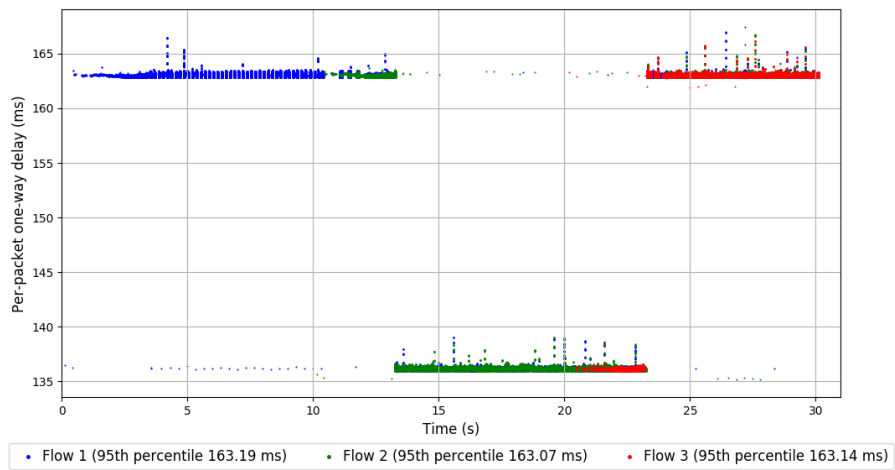
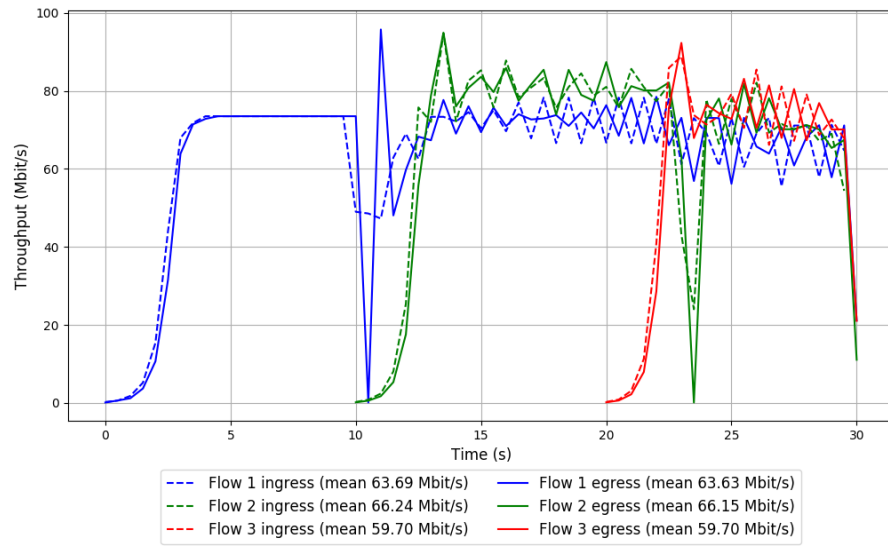
-- Flow 3:

Average throughput: 59.70 Mbit/s

95th percentile per-packet one-way delay: 163.141 ms

Loss rate: 0.00%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-18 03:04:24

End at: 2018-02-18 03:04:54

Below is generated by plot.py at 2018-02-18 05:35:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 129.89 Mbit/s

95th percentile per-packet one-way delay: 162.999 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 64.18 Mbit/s

95th percentile per-packet one-way delay: 162.894 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.38 Mbit/s

95th percentile per-packet one-way delay: 163.035 ms

Loss rate: 0.00%

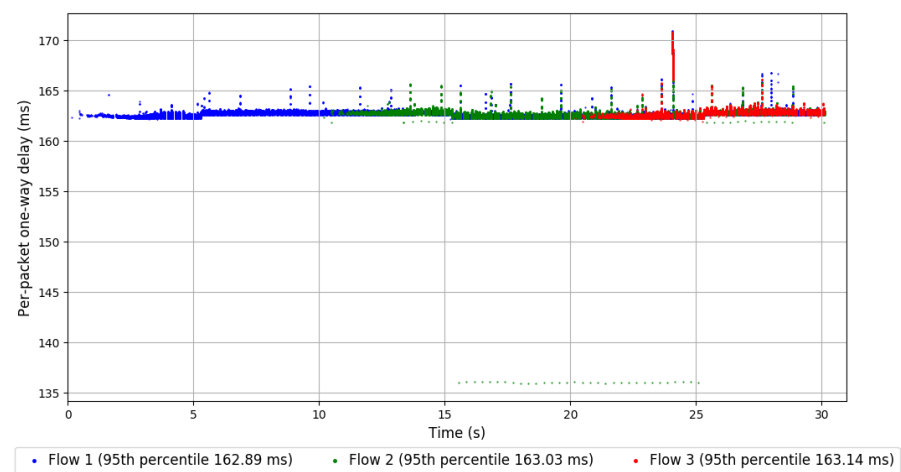
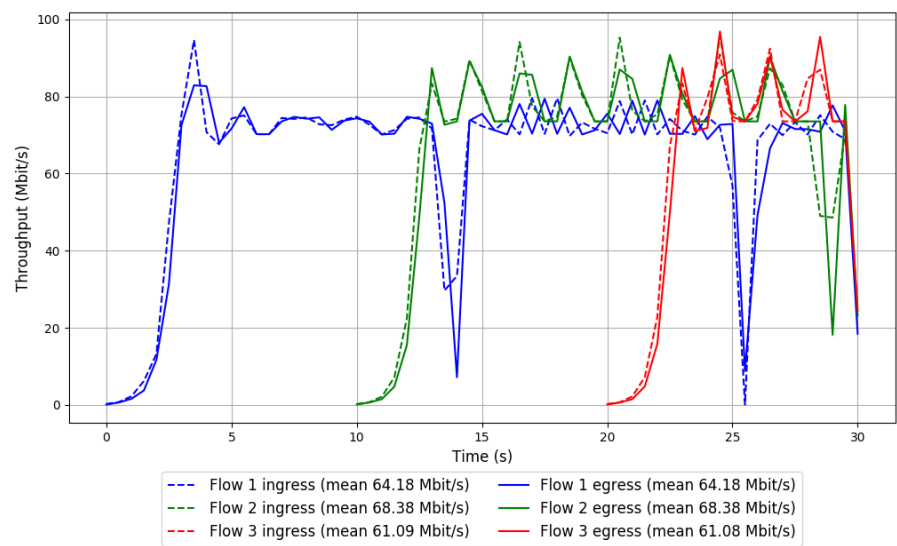
-- Flow 3:

Average throughput: 61.08 Mbit/s

95th percentile per-packet one-way delay: 163.140 ms

Loss rate: 0.00%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-18 03:24:44

End at: 2018-02-18 03:25:14

Below is generated by plot.py at 2018-02-18 05:36:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 135.55 Mbit/s

95th percentile per-packet one-way delay: 162.539 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 71.78 Mbit/s

95th percentile per-packet one-way delay: 162.479 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 65.41 Mbit/s

95th percentile per-packet one-way delay: 162.527 ms

Loss rate: 0.18%

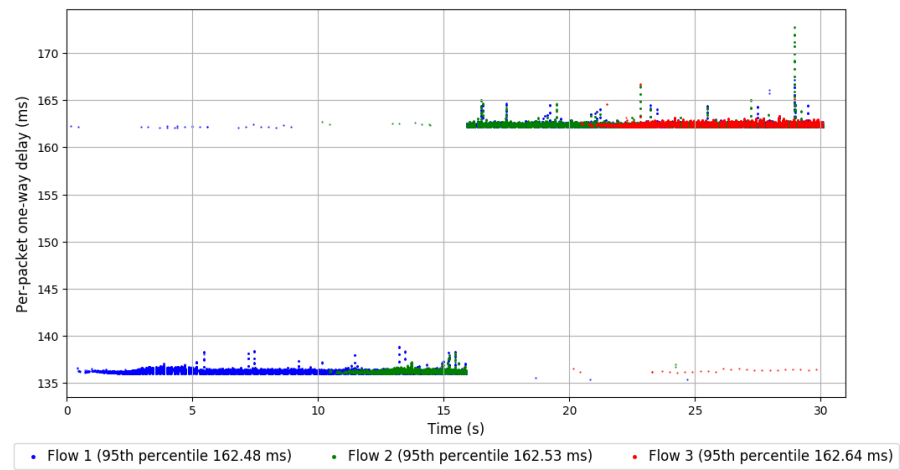
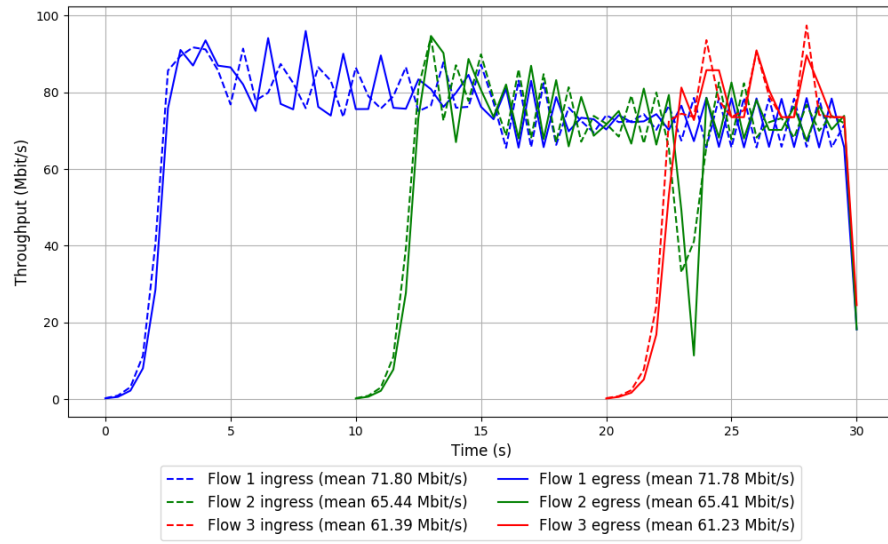
-- Flow 3:

Average throughput: 61.23 Mbit/s

95th percentile per-packet one-way delay: 162.641 ms

Loss rate: 0.00%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-18 00:14:20

End at: 2018-02-18 00:14:50

Below is generated by plot.py at 2018-02-18 05:36:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.97 Mbit/s

95th percentile per-packet one-way delay: 155.478 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.87 Mbit/s

95th percentile per-packet one-way delay: 155.977 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 77.16 Mbit/s

95th percentile per-packet one-way delay: 155.141 ms

Loss rate: 0.00%

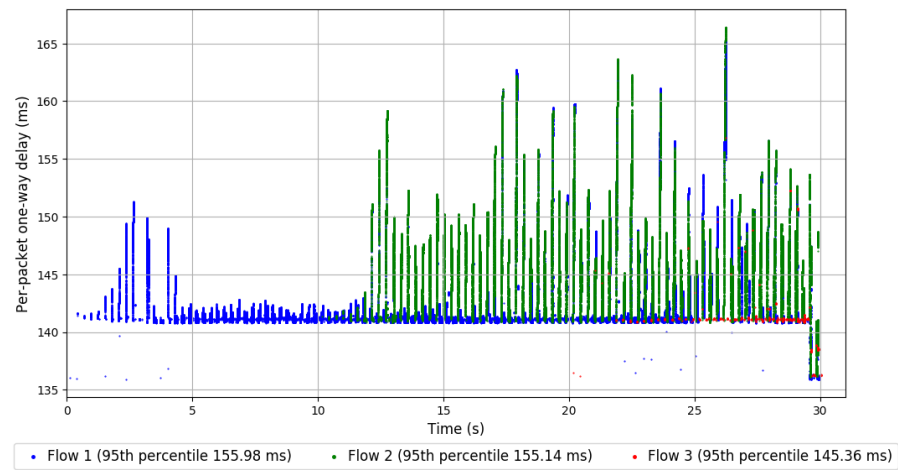
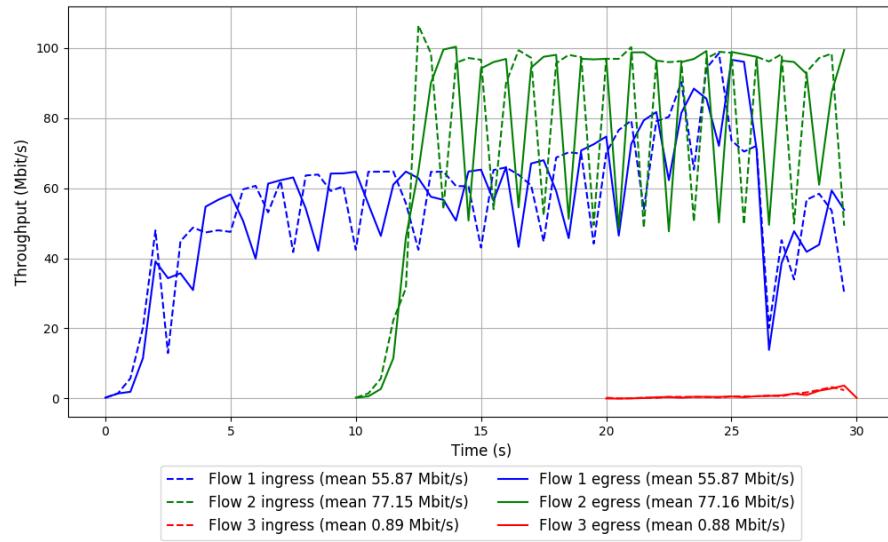
-- Flow 3:

Average throughput: 0.88 Mbit/s

95th percentile per-packet one-way delay: 145.361 ms

Loss rate: 1.37%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-18 00:35:17

End at: 2018-02-18 00:35:47

Below is generated by plot.py at 2018-02-18 05:36:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 111.97 Mbit/s

95th percentile per-packet one-way delay: 150.717 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 54.96 Mbit/s

95th percentile per-packet one-way delay: 150.305 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.55 Mbit/s

95th percentile per-packet one-way delay: 151.311 ms

Loss rate: 0.00%

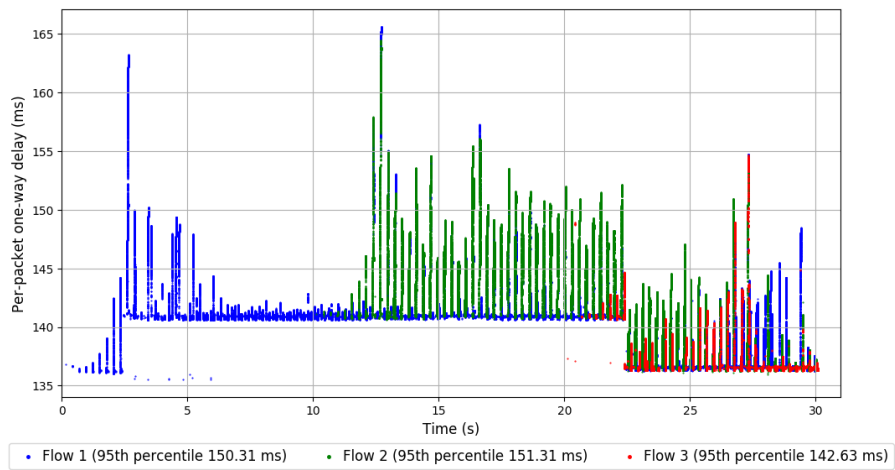
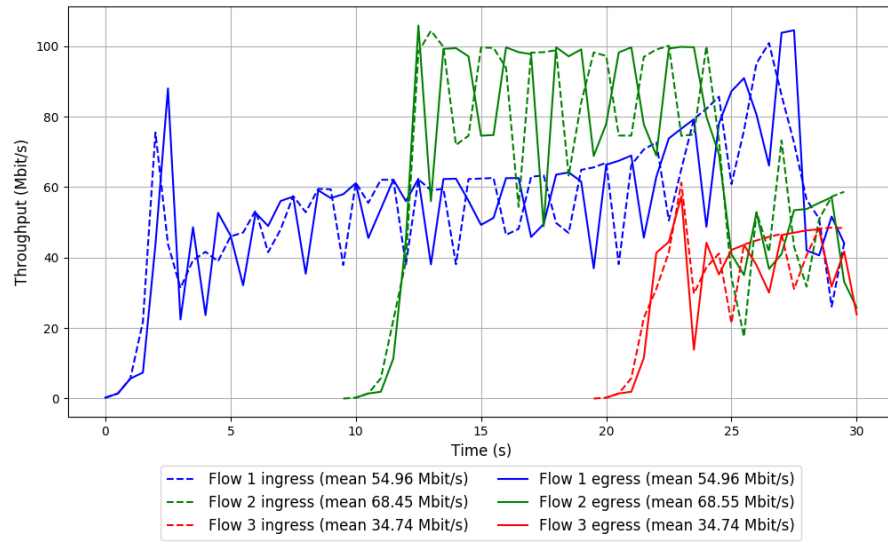
-- Flow 3:

Average throughput: 34.74 Mbit/s

95th percentile per-packet one-way delay: 142.626 ms

Loss rate: 0.00%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-02-18 00:55:50

End at: 2018-02-18 00:56:20

Below is generated by plot.py at 2018-02-18 05:36:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.29 Mbit/s

95th percentile per-packet one-way delay: 141.098 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 59.50 Mbit/s

95th percentile per-packet one-way delay: 141.095 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.01 Mbit/s

95th percentile per-packet one-way delay: 141.705 ms

Loss rate: 0.00%

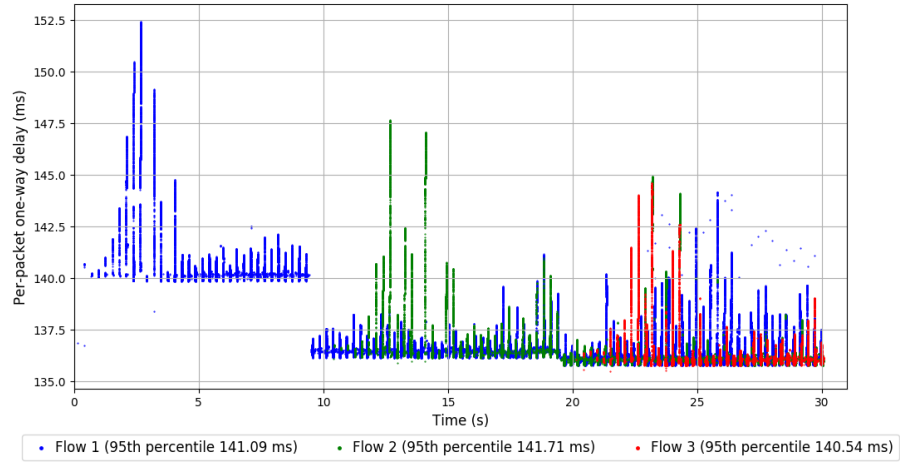
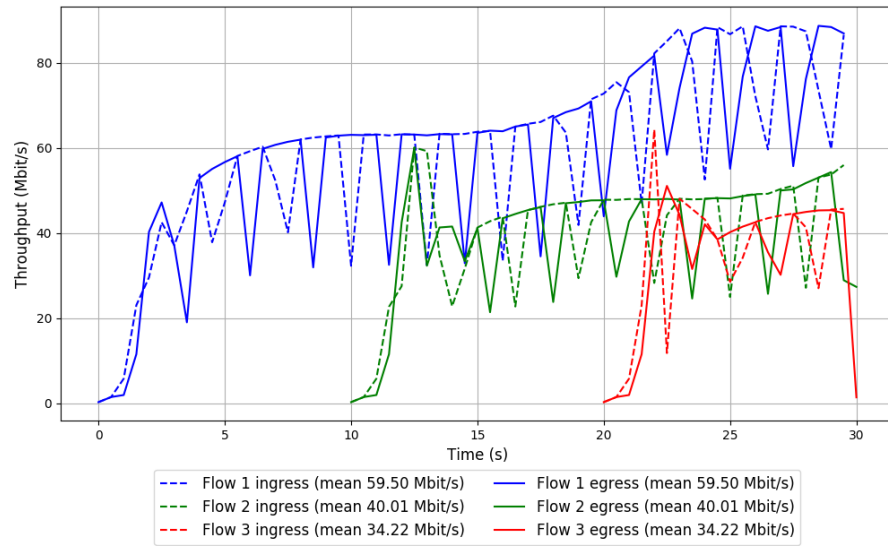
-- Flow 3:

Average throughput: 34.22 Mbit/s

95th percentile per-packet one-way delay: 140.540 ms

Loss rate: 0.00%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-18 01:16:23

End at: 2018-02-18 01:16:53

Below is generated by plot.py at 2018-02-18 05:36:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 98.03 Mbit/s

95th percentile per-packet one-way delay: 143.729 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 56.78 Mbit/s

95th percentile per-packet one-way delay: 144.119 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 44.86 Mbit/s

95th percentile per-packet one-way delay: 142.935 ms

Loss rate: 0.00%

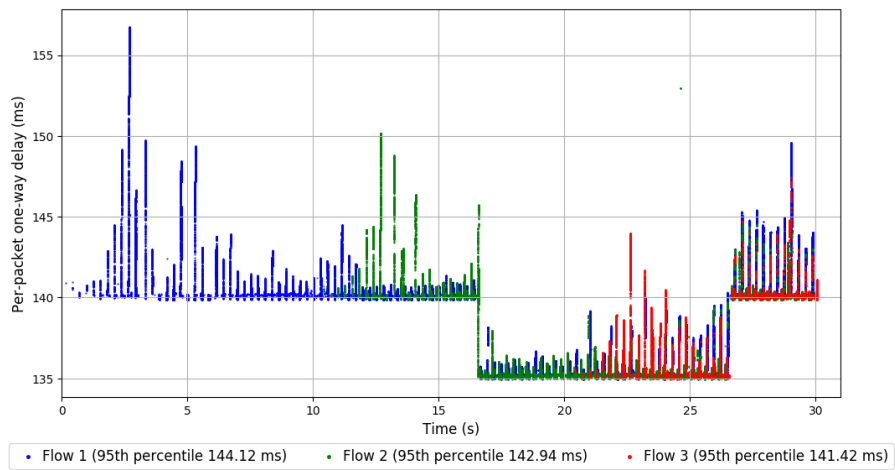
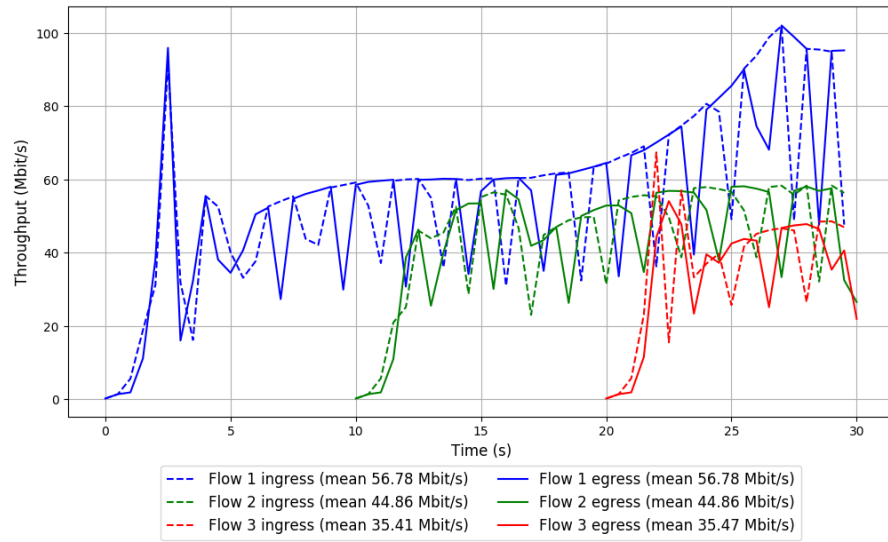
-- Flow 3:

Average throughput: 35.47 Mbit/s

95th percentile per-packet one-way delay: 141.416 ms

Loss rate: 0.00%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-18 01:37:05

End at: 2018-02-18 01:37:35

Below is generated by plot.py at 2018-02-18 05:36:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.40 Mbit/s

95th percentile per-packet one-way delay: 148.001 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 52.65 Mbit/s

95th percentile per-packet one-way delay: 146.980 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 37.81 Mbit/s

95th percentile per-packet one-way delay: 147.040 ms

Loss rate: 0.00%

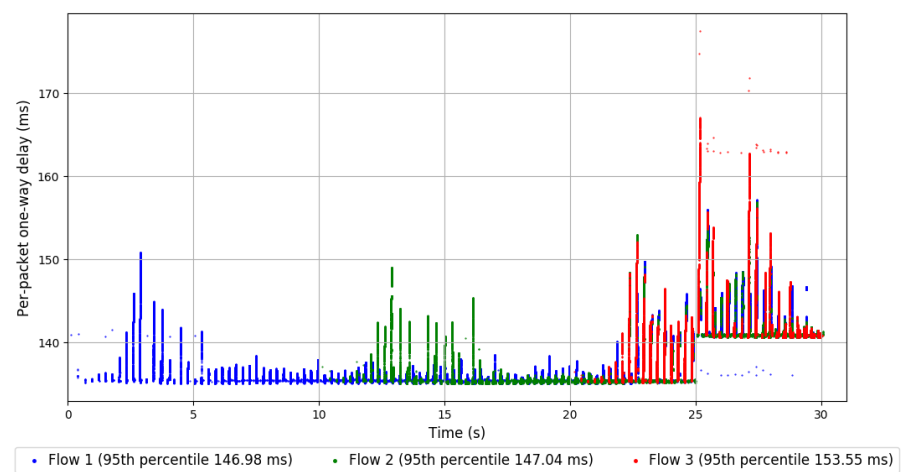
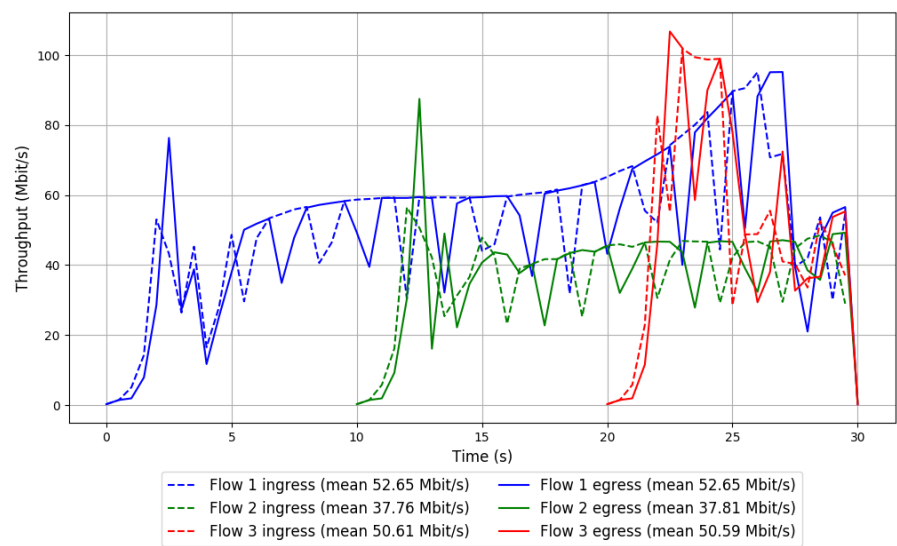
-- Flow 3:

Average throughput: 50.59 Mbit/s

95th percentile per-packet one-way delay: 153.550 ms

Loss rate: 0.00%

Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-18 01:57:39

End at: 2018-02-18 01:58:09

Below is generated by plot.py at 2018-02-18 05:36:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.34 Mbit/s

95th percentile per-packet one-way delay: 142.665 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.27 Mbit/s

95th percentile per-packet one-way delay: 142.445 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.05 Mbit/s

95th percentile per-packet one-way delay: 141.536 ms

Loss rate: 0.00%

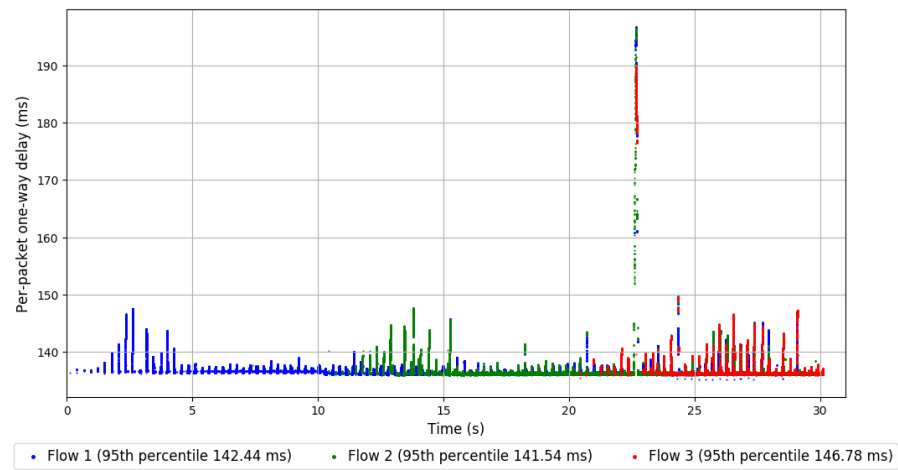
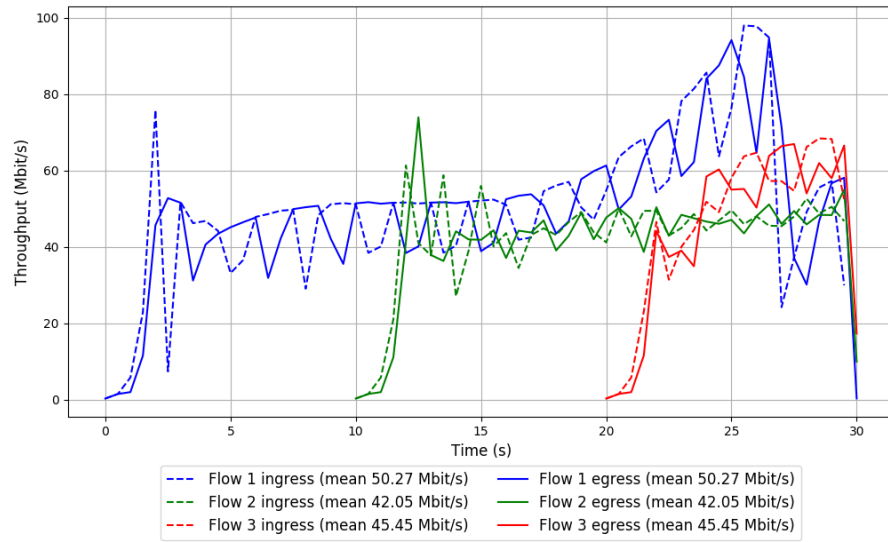
-- Flow 3:

Average throughput: 45.45 Mbit/s

95th percentile per-packet one-way delay: 146.776 ms

Loss rate: 0.00%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-18 02:17:56

End at: 2018-02-18 02:18:26

Below is generated by plot.py at 2018-02-18 05:36:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.40 Mbit/s

95th percentile per-packet one-way delay: 170.982 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 34.76 Mbit/s

95th percentile per-packet one-way delay: 168.947 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 63.21 Mbit/s

95th percentile per-packet one-way delay: 172.070 ms

Loss rate: 0.00%

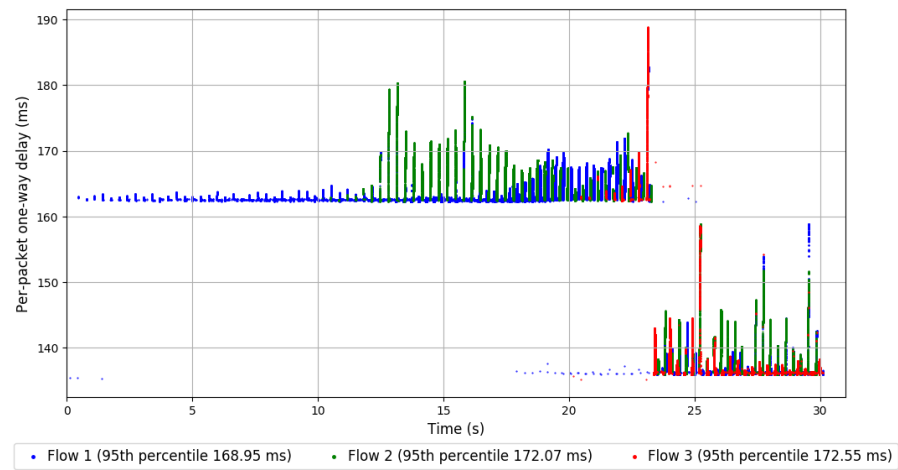
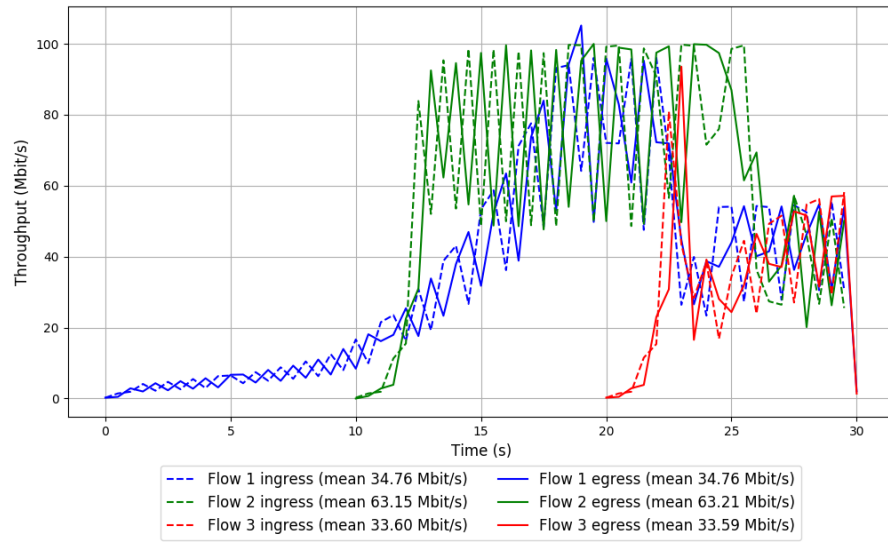
-- Flow 3:

Average throughput: 33.59 Mbit/s

95th percentile per-packet one-way delay: 172.550 ms

Loss rate: 0.00%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-18 02:38:27

End at: 2018-02-18 02:38:57

Below is generated by plot.py at 2018-02-18 05:36:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 74.32 Mbit/s

95th percentile per-packet one-way delay: 167.035 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 45.06 Mbit/s

95th percentile per-packet one-way delay: 168.093 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 34.68 Mbit/s

95th percentile per-packet one-way delay: 164.931 ms

Loss rate: 0.03%

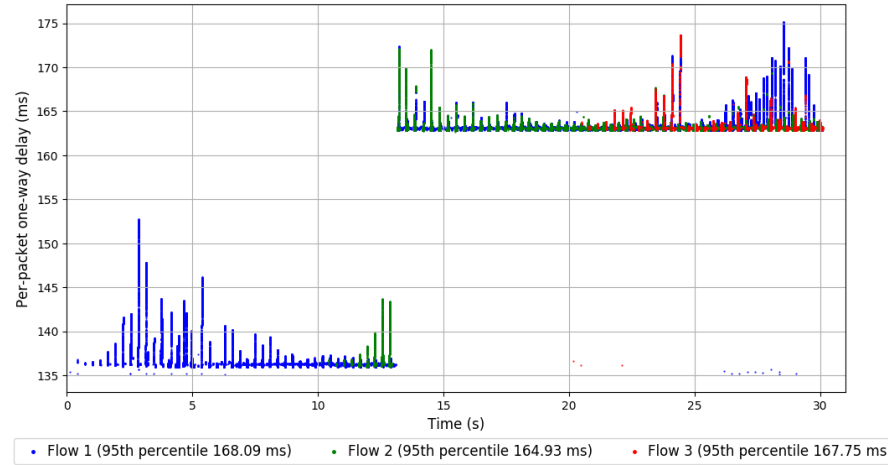
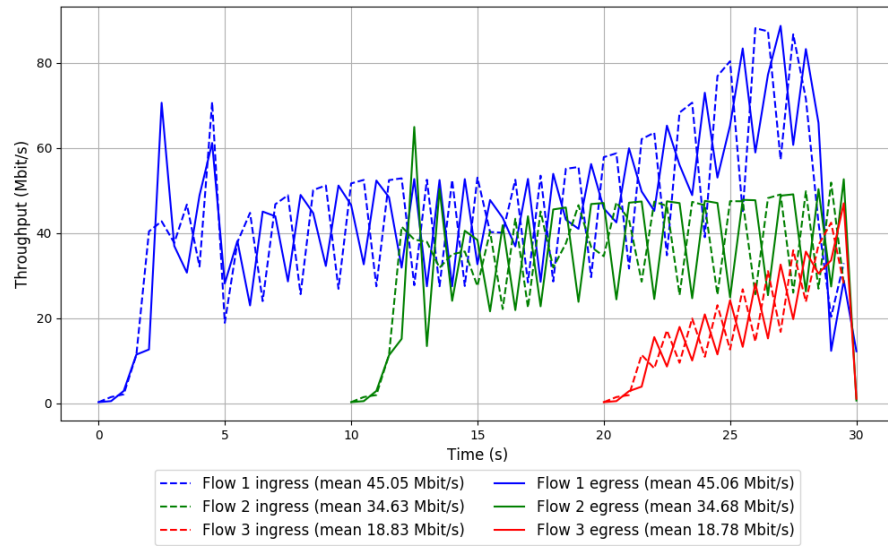
-- Flow 3:

Average throughput: 18.78 Mbit/s

95th percentile per-packet one-way delay: 167.749 ms

Loss rate: 0.00%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-18 02:59:01

End at: 2018-02-18 02:59:31

Below is generated by plot.py at 2018-02-18 05:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.95 Mbit/s

95th percentile per-packet one-way delay: 173.191 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 50.24 Mbit/s

95th percentile per-packet one-way delay: 171.674 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 43.91 Mbit/s

95th percentile per-packet one-way delay: 167.295 ms

Loss rate: 0.00%

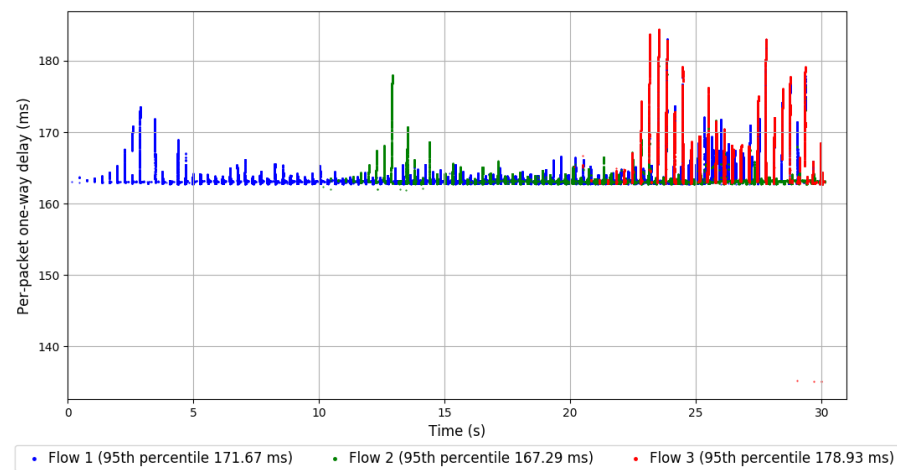
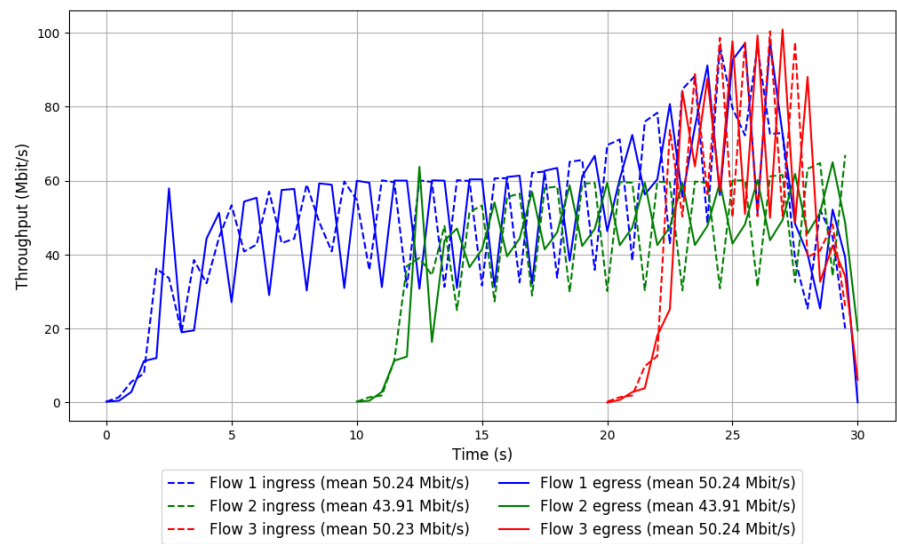
-- Flow 3:

Average throughput: 50.24 Mbit/s

95th percentile per-packet one-way delay: 178.929 ms

Loss rate: 0.00%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-18 03:19:26

End at: 2018-02-18 03:19:56

Below is generated by plot.py at 2018-02-18 05:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.17 Mbit/s

95th percentile per-packet one-way delay: 165.868 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 46.06 Mbit/s

95th percentile per-packet one-way delay: 163.527 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.21 Mbit/s

95th percentile per-packet one-way delay: 165.841 ms

Loss rate: 0.00%

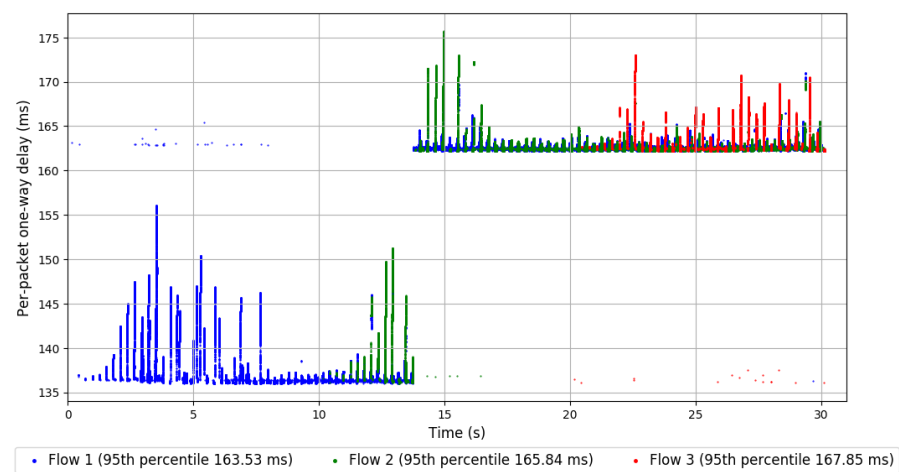
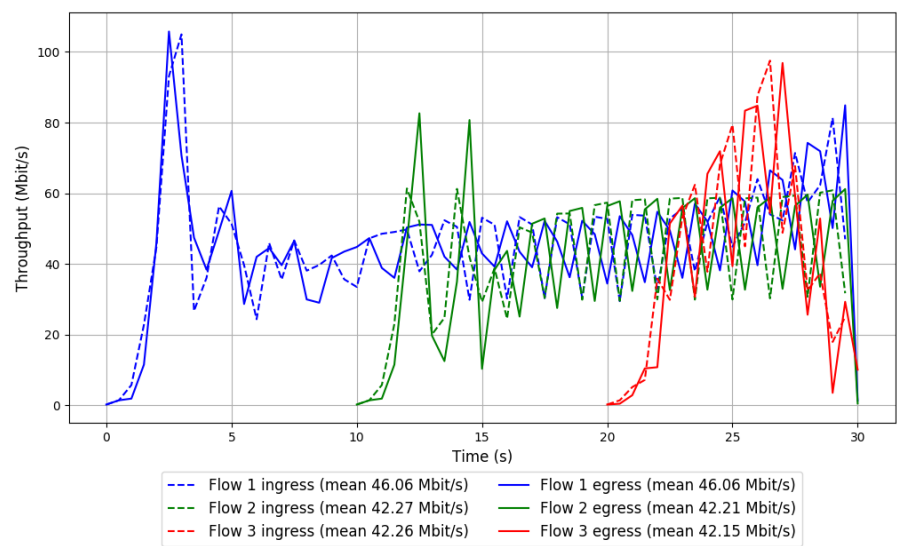
-- Flow 3:

Average throughput: 42.15 Mbit/s

95th percentile per-packet one-way delay: 167.846 ms

Loss rate: 0.00%

Run 10: Report of TCP Cubic — Data Link

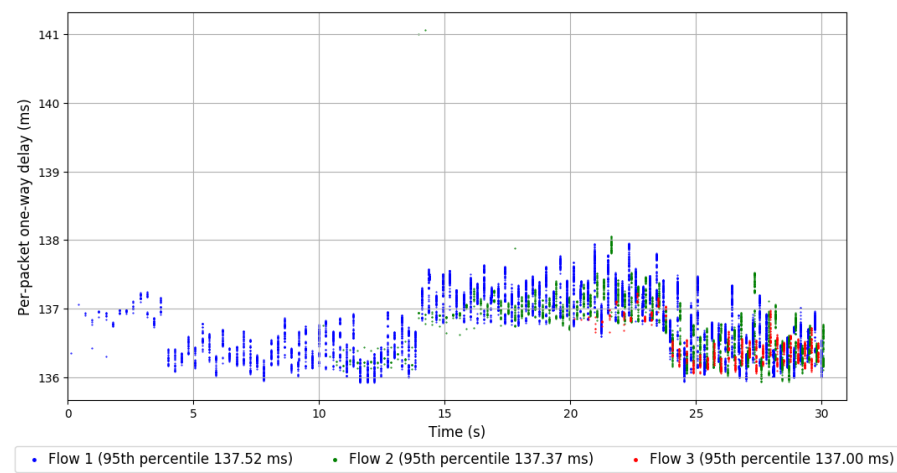
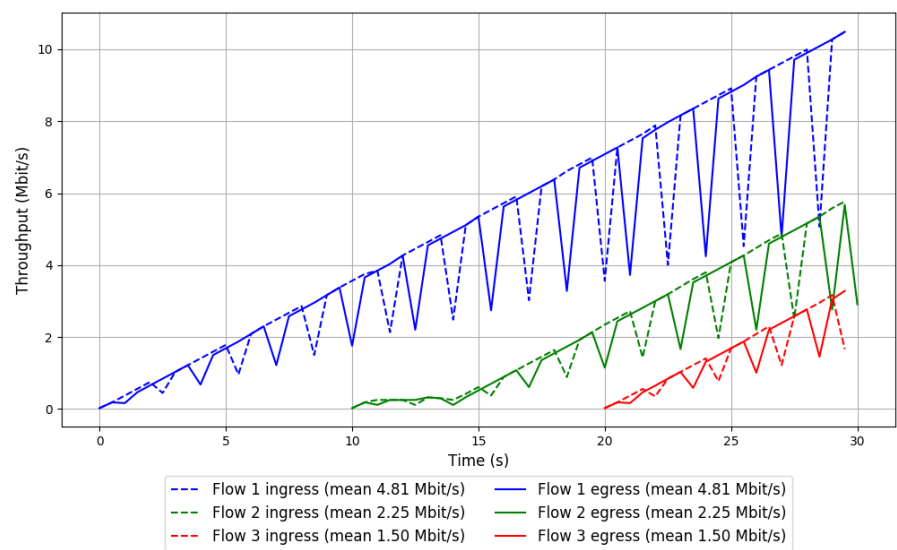


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-18 00:11:26
End at: 2018-02-18 00:11:56

# Below is generated by plot.py at 2018-02-18 05:37:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.78 Mbit/s
95th percentile per-packet one-way delay: 137.469 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.81 Mbit/s
95th percentile per-packet one-way delay: 137.520 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 137.366 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 136.996 ms
Loss rate: 0.00%
```


Run 1: Report of LEDBAT — Data Link

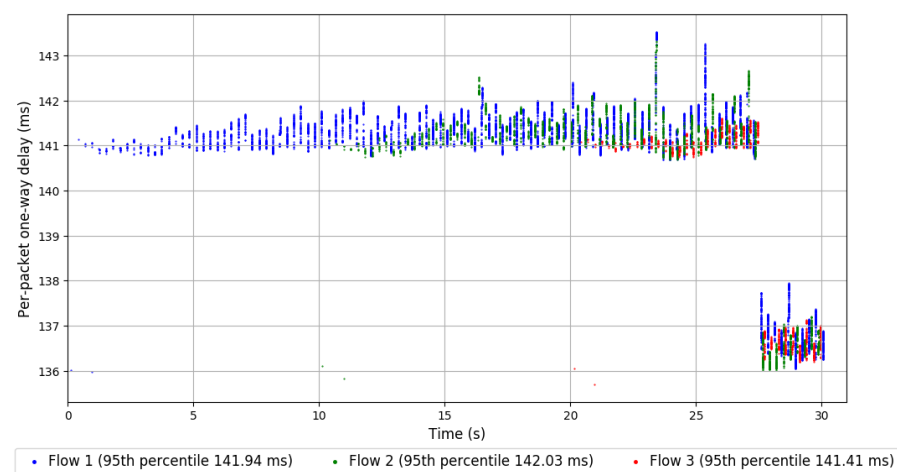
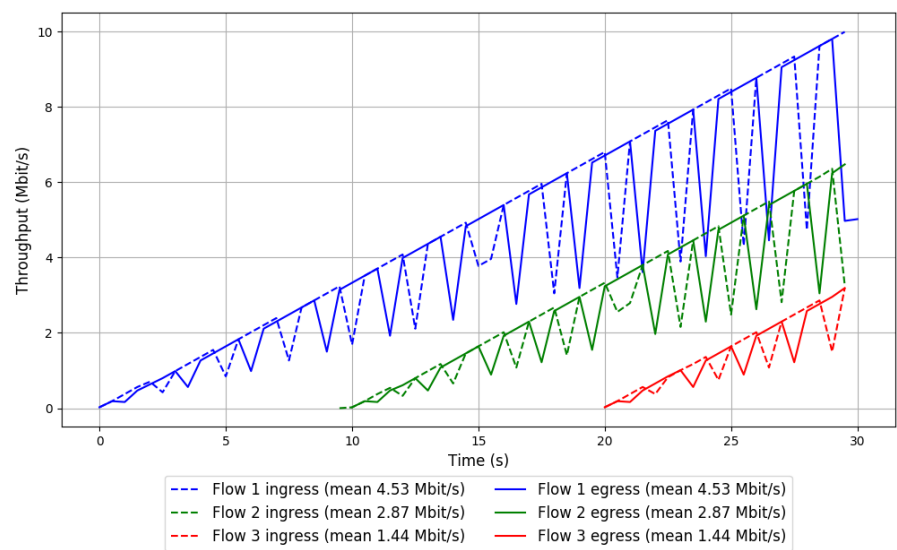


```
Run 2: Statistics of LEDBAT

Start at: 2018-02-18 00:32:22
End at: 2018-02-18 00:32:52

# Below is generated by plot.py at 2018-02-18 05:37:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 141.946 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 141.936 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 142.033 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 141.415 ms
Loss rate: 0.00%
```

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-18 00:52:56

End at: 2018-02-18 00:53:26

Below is generated by plot.py at 2018-02-18 05:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 7.30 Mbit/s

95th percentile per-packet one-way delay: 140.393 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.71 Mbit/s

95th percentile per-packet one-way delay: 140.501 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.17 Mbit/s

95th percentile per-packet one-way delay: 137.532 ms

Loss rate: 0.00%

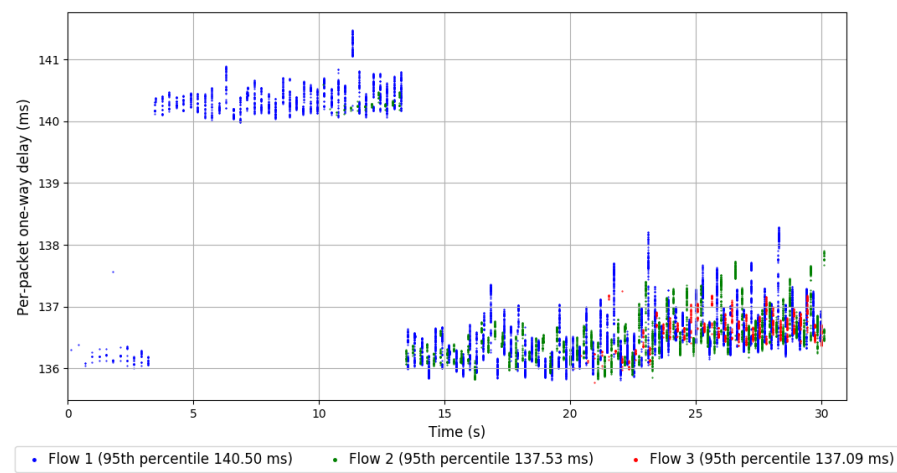
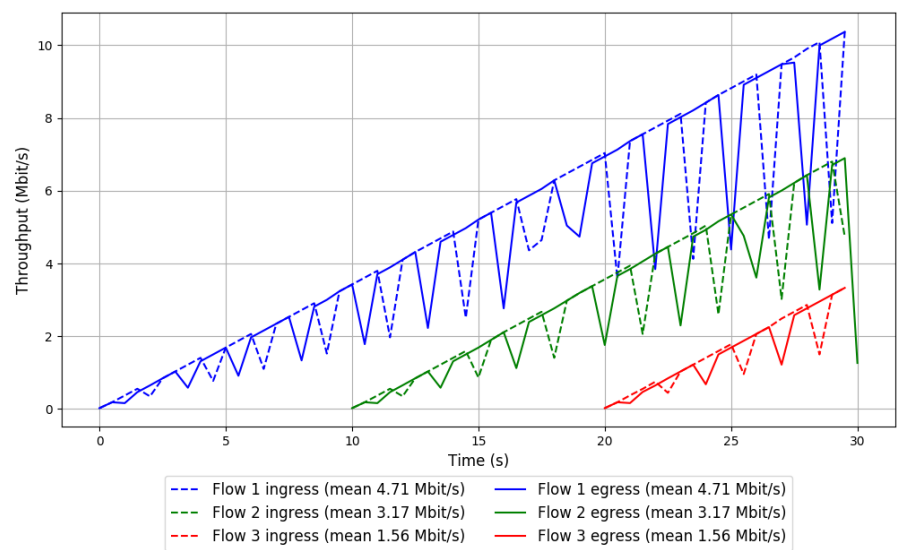
-- Flow 3:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 137.093 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

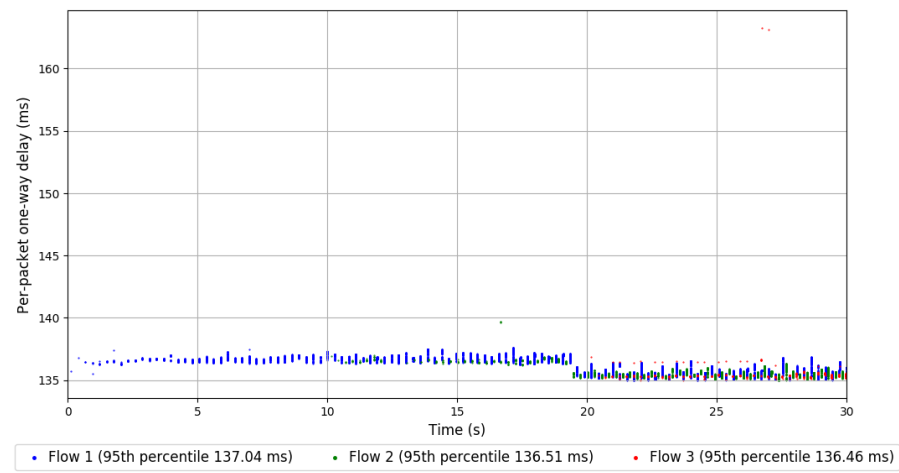
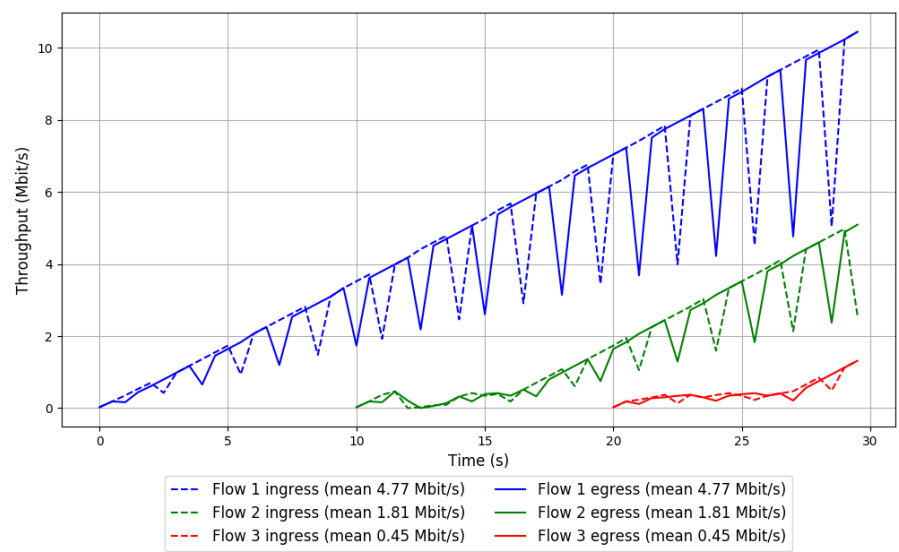


```
Run 4: Statistics of LEDBAT

Start at: 2018-02-18 01:13:30
End at: 2018-02-18 01:14:00

# Below is generated by plot.py at 2018-02-18 05:37:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.11 Mbit/s
95th percentile per-packet one-way delay: 136.997 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.77 Mbit/s
95th percentile per-packet one-way delay: 137.042 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 136.506 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 136.460 ms
Loss rate: 0.00%
```

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-18 01:34:10

End at: 2018-02-18 01:34:40

Below is generated by plot.py at 2018-02-18 05:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 5.40 Mbit/s

95th percentile per-packet one-way delay: 136.795 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.68 Mbit/s

95th percentile per-packet one-way delay: 136.818 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.95 Mbit/s

95th percentile per-packet one-way delay: 136.011 ms

Loss rate: 0.00%

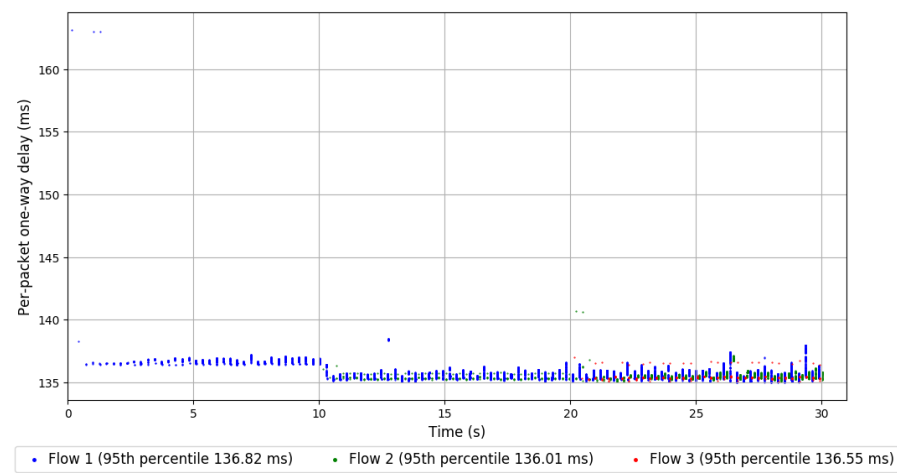
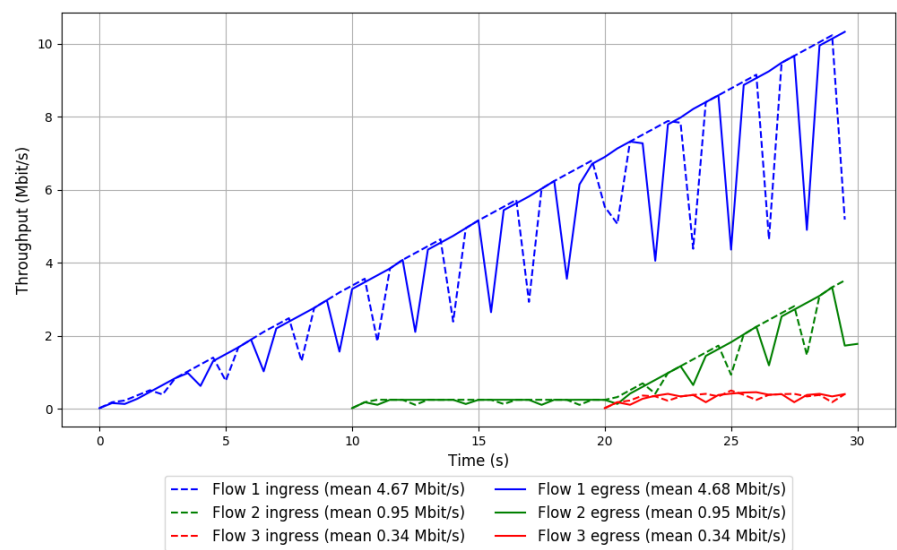
-- Flow 3:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 136.551 ms

Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-18 01:54:47

End at: 2018-02-18 01:55:17

Below is generated by plot.py at 2018-02-18 05:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.74 Mbit/s

95th percentile per-packet one-way delay: 137.182 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 4.23 Mbit/s

95th percentile per-packet one-way delay: 137.192 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 3.22 Mbit/s

95th percentile per-packet one-way delay: 137.223 ms

Loss rate: 0.00%

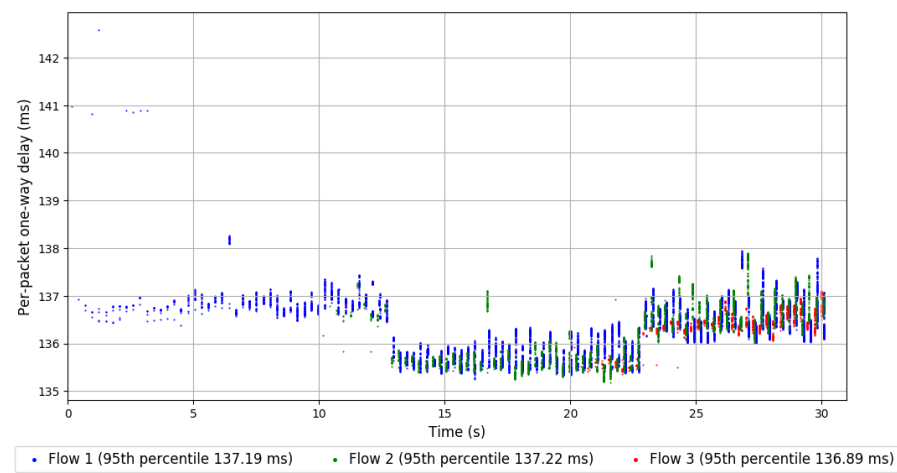
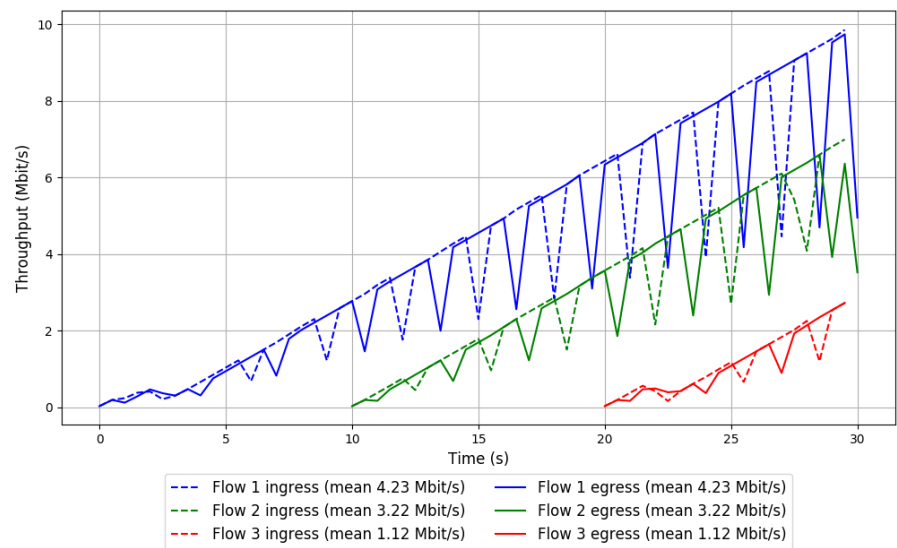
-- Flow 3:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 136.890 ms

Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-18 02:14:59

End at: 2018-02-18 02:15:29

Below is generated by plot.py at 2018-02-18 05:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.30 Mbit/s

95th percentile per-packet one-way delay: 163.642 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.68 Mbit/s

95th percentile per-packet one-way delay: 163.656 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 162.992 ms

Loss rate: 0.00%

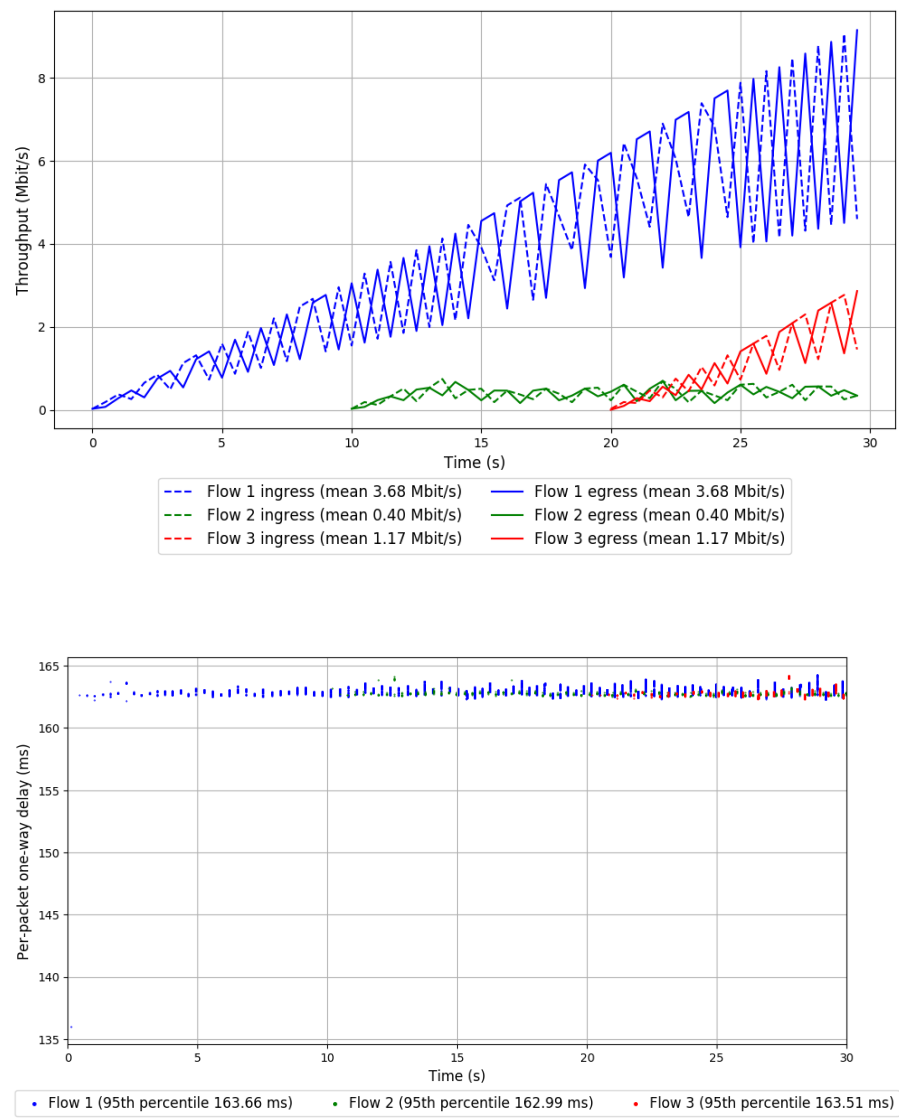
-- Flow 3:

Average throughput: 1.17 Mbit/s

95th percentile per-packet one-way delay: 163.506 ms

Loss rate: 0.00%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-18 02:35:29

End at: 2018-02-18 02:35:59

Below is generated by plot.py at 2018-02-18 05:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 163.968 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.04 Mbit/s

95th percentile per-packet one-way delay: 164.051 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.70 Mbit/s

95th percentile per-packet one-way delay: 163.641 ms

Loss rate: 0.00%

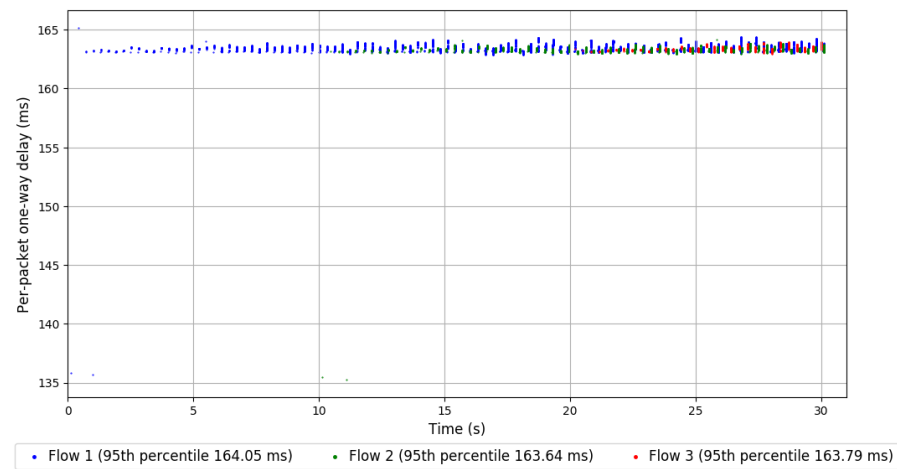
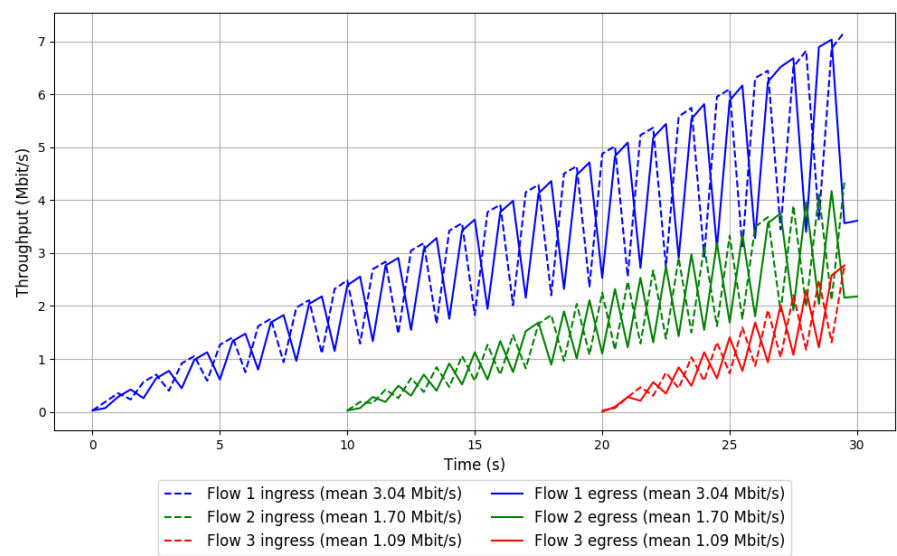
-- Flow 3:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 163.795 ms

Loss rate: 0.00%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-18 02:56:11

End at: 2018-02-18 02:56:41

Below is generated by plot.py at 2018-02-18 05:37:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 6.13 Mbit/s

95th percentile per-packet one-way delay: 164.129 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 3.99 Mbit/s

95th percentile per-packet one-way delay: 164.179 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 2.64 Mbit/s

95th percentile per-packet one-way delay: 163.915 ms

Loss rate: 0.00%

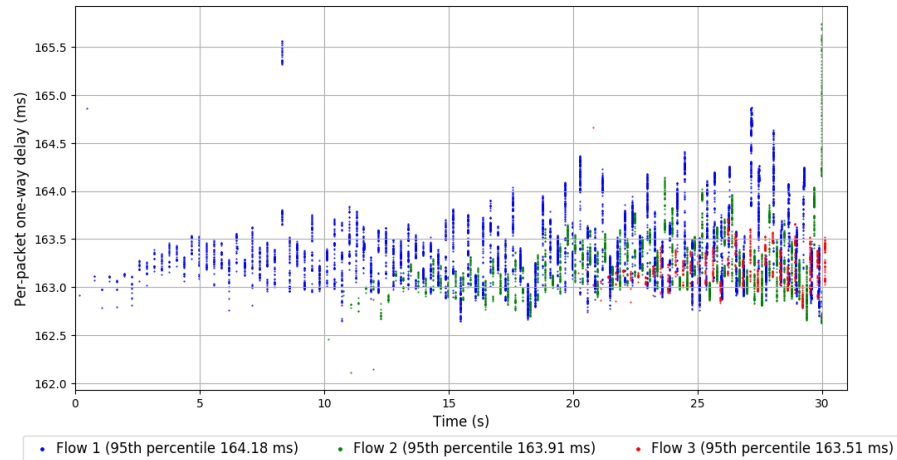
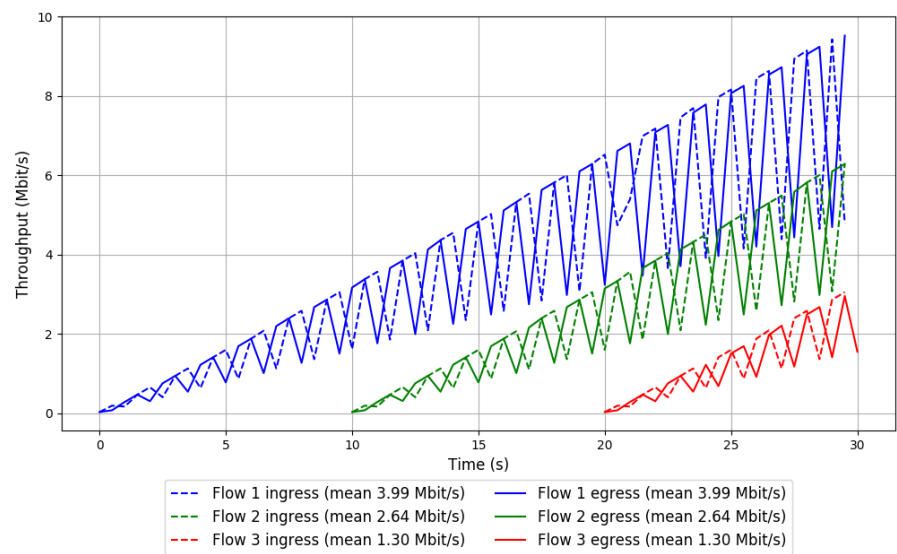
-- Flow 3:

Average throughput: 1.30 Mbit/s

95th percentile per-packet one-way delay: 163.514 ms

Loss rate: 0.00%

Run 9: Report of LEDBAT — Data Link

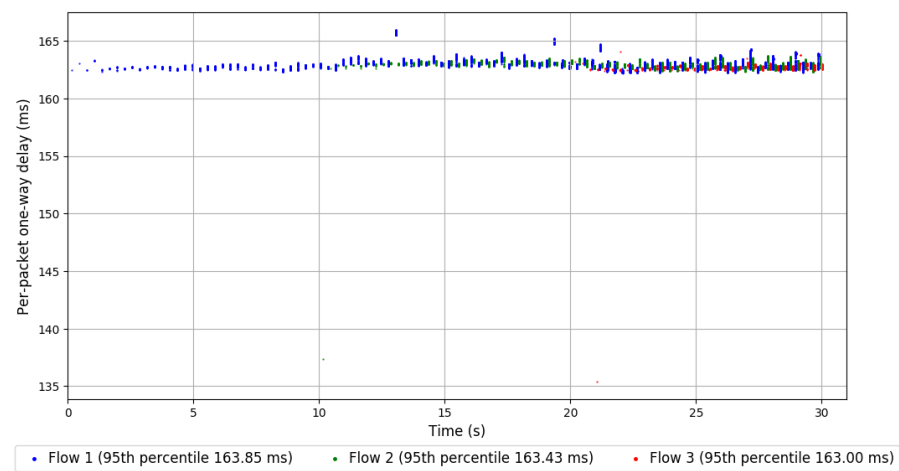
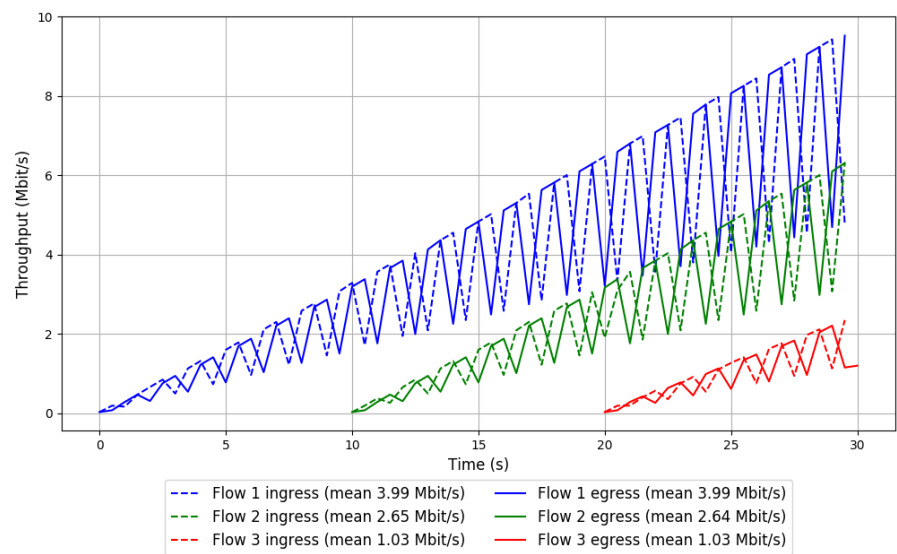


```
Run 10: Statistics of LEDBAT

Start at: 2018-02-18 03:16:29
End at: 2018-02-18 03:16:59

# Below is generated by plot.py at 2018-02-18 05:37:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 163.660 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.99 Mbit/s
95th percentile per-packet one-way delay: 163.852 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.64 Mbit/s
95th percentile per-packet one-way delay: 163.430 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 163.004 ms
Loss rate: 0.00%
```

Run 10: Report of LEDBAT — Data Link

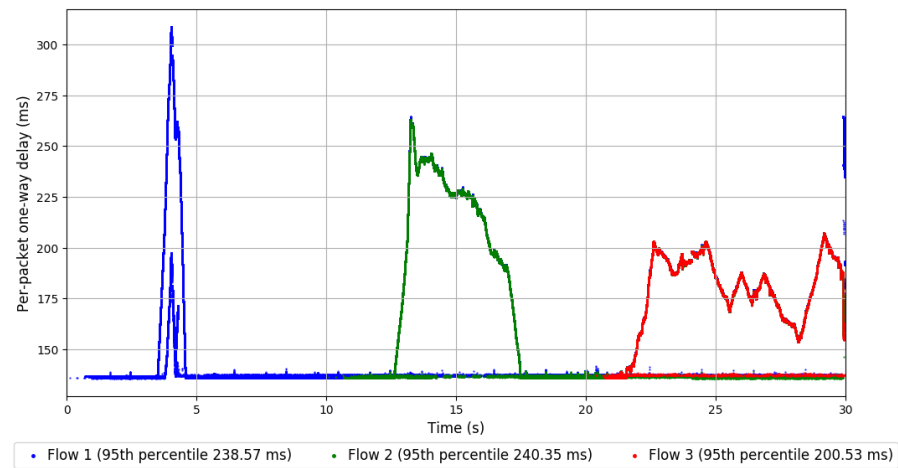
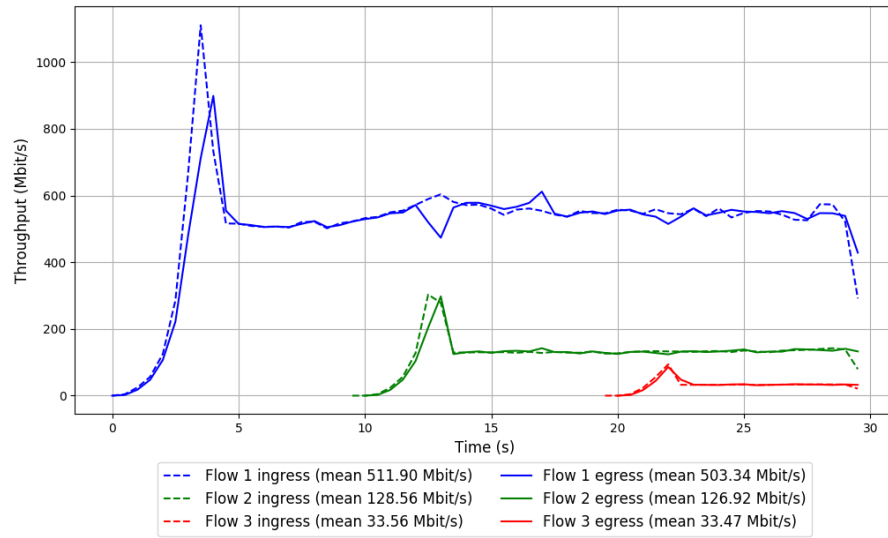


```
Run 1: Statistics of PCC

Start at: 2018-02-18 00:12:15
End at: 2018-02-18 00:12:45

# Below is generated by plot.py at 2018-02-18 05:46:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 598.80 Mbit/s
95th percentile per-packet one-way delay: 238.601 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 503.34 Mbit/s
95th percentile per-packet one-way delay: 238.573 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 126.92 Mbit/s
95th percentile per-packet one-way delay: 240.352 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 33.47 Mbit/s
95th percentile per-packet one-way delay: 200.528 ms
Loss rate: 0.24%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-18 00:33:12

End at: 2018-02-18 00:33:42

Below is generated by plot.py at 2018-02-18 05:46:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 589.34 Mbit/s

95th percentile per-packet one-way delay: 243.413 ms

Loss rate: 4.49%

-- Flow 1:

Average throughput: 402.92 Mbit/s

95th percentile per-packet one-way delay: 243.046 ms

Loss rate: 3.96%

-- Flow 2:

Average throughput: 222.73 Mbit/s

95th percentile per-packet one-way delay: 244.127 ms

Loss rate: 5.52%

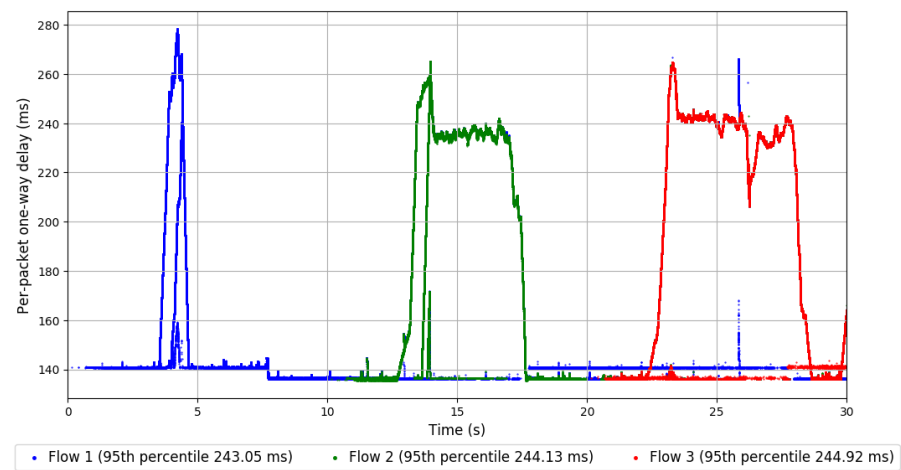
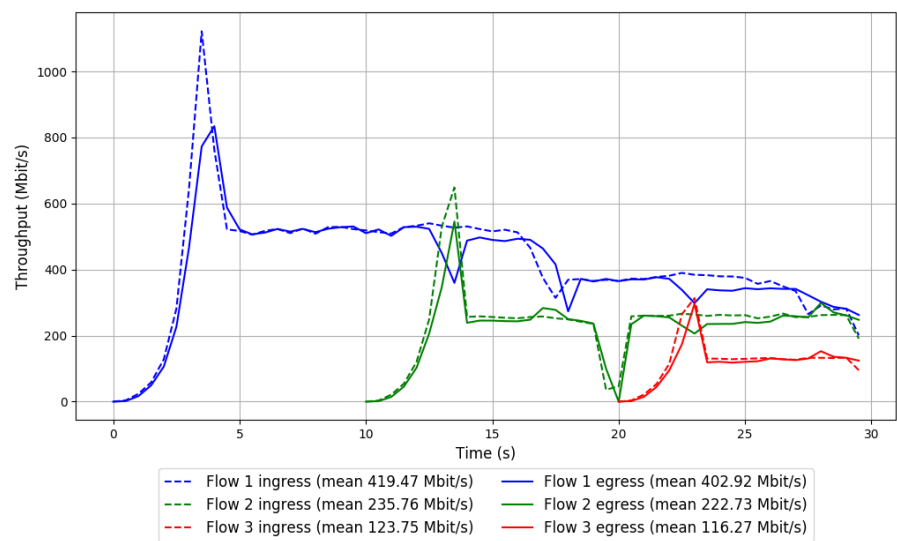
-- Flow 3:

Average throughput: 116.27 Mbit/s

95th percentile per-packet one-way delay: 244.916 ms

Loss rate: 6.04%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-18 00:53:46

End at: 2018-02-18 00:54:16

Below is generated by plot.py at 2018-02-18 05:46:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 578.85 Mbit/s

95th percentile per-packet one-way delay: 264.815 ms

Loss rate: 2.40%

-- Flow 1:

Average throughput: 494.42 Mbit/s

95th percentile per-packet one-way delay: 264.918 ms

Loss rate: 2.36%

-- Flow 2:

Average throughput: 68.75 Mbit/s

95th percentile per-packet one-way delay: 265.444 ms

Loss rate: 1.58%

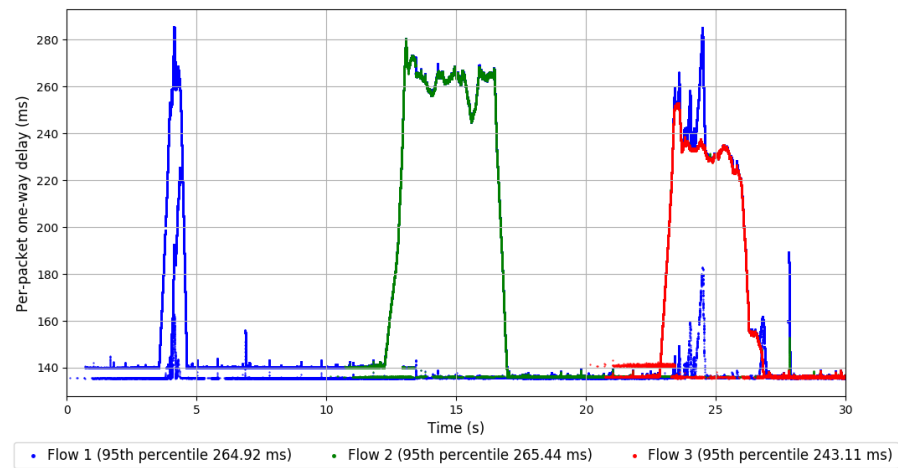
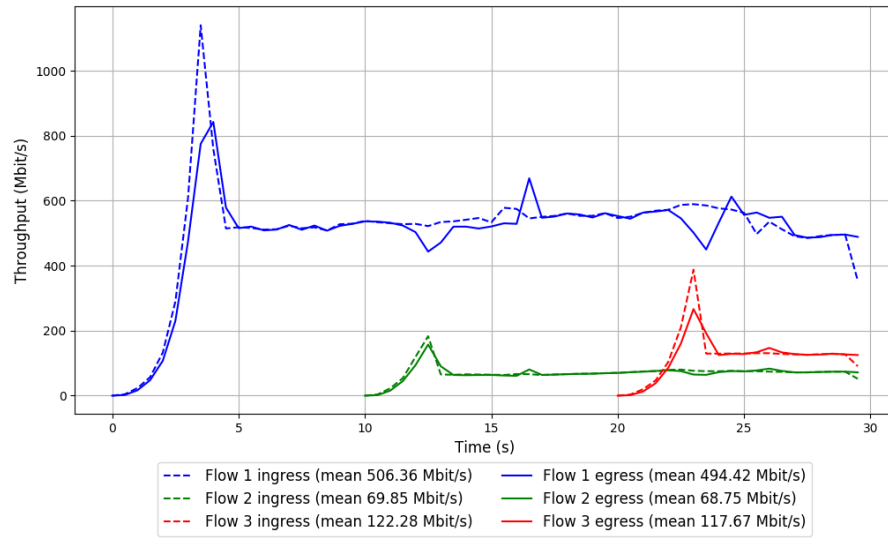
-- Flow 3:

Average throughput: 117.67 Mbit/s

95th percentile per-packet one-way delay: 243.113 ms

Loss rate: 3.82%

Run 3: Report of PCC — Data Link

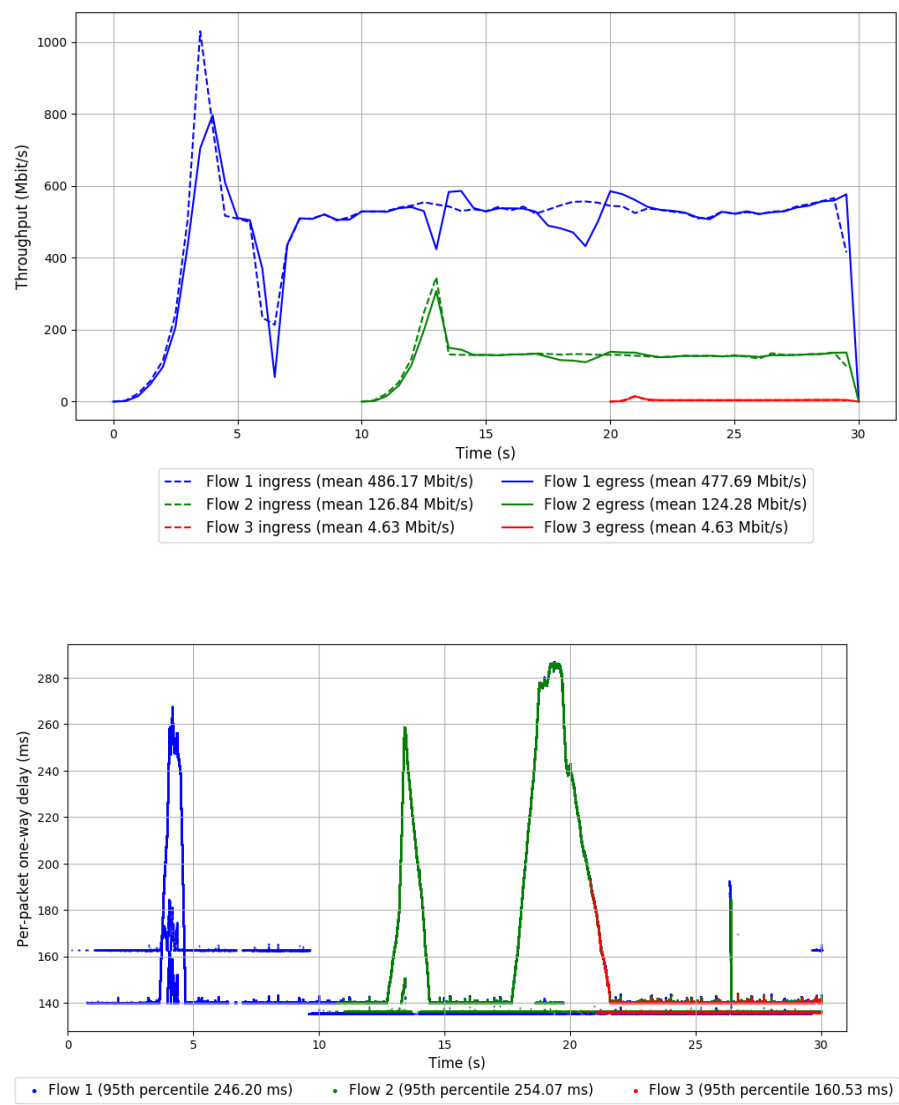


```
Run 4: Statistics of PCC

Start at: 2018-02-18 01:14:20
End at: 2018-02-18 01:14:50

# Below is generated by plot.py at 2018-02-18 05:46:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 561.85 Mbit/s
95th percentile per-packet one-way delay: 246.800 ms
Loss rate: 1.79%
-- Flow 1:
Average throughput: 477.69 Mbit/s
95th percentile per-packet one-way delay: 246.196 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 124.28 Mbit/s
95th percentile per-packet one-way delay: 254.072 ms
Loss rate: 2.01%
-- Flow 3:
Average throughput: 4.63 Mbit/s
95th percentile per-packet one-way delay: 160.528 ms
Loss rate: 0.00%
```

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-18 01:34:59

End at: 2018-02-18 01:35:29

Below is generated by plot.py at 2018-02-18 05:46:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 582.74 Mbit/s

95th percentile per-packet one-way delay: 243.707 ms

Loss rate: 3.91%

-- Flow 1:

Average throughput: 394.77 Mbit/s

95th percentile per-packet one-way delay: 243.138 ms

Loss rate: 3.43%

-- Flow 2:

Average throughput: 225.53 Mbit/s

95th percentile per-packet one-way delay: 244.148 ms

Loss rate: 4.75%

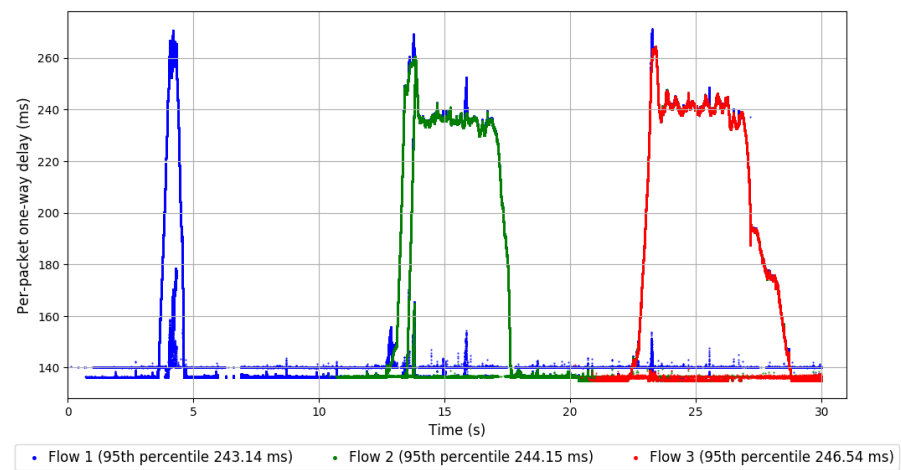
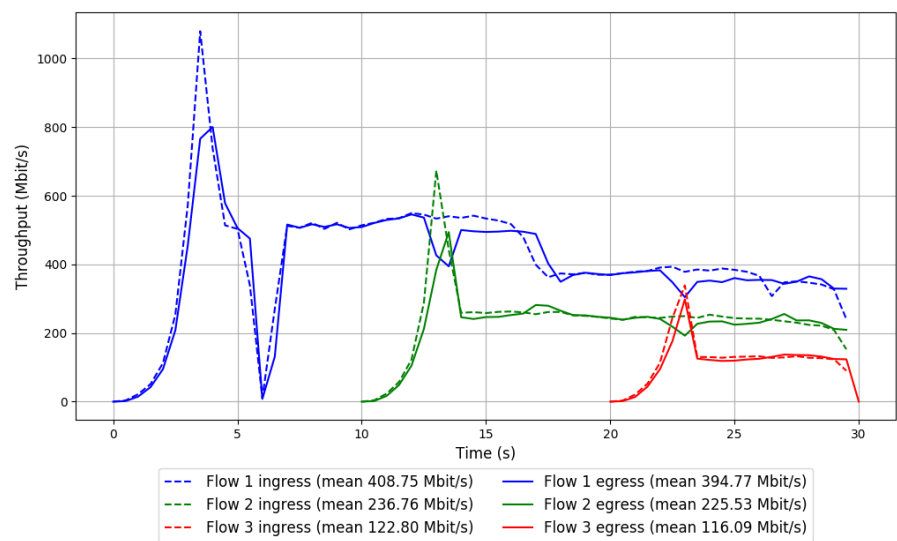
-- Flow 3:

Average throughput: 116.09 Mbit/s

95th percentile per-packet one-way delay: 246.543 ms

Loss rate: 5.49%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-18 01:55:37

End at: 2018-02-18 01:56:07

Below is generated by plot.py at 2018-02-18 05:46:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 542.67 Mbit/s

95th percentile per-packet one-way delay: 274.618 ms

Loss rate: 5.82%

-- Flow 1:

Average throughput: 461.87 Mbit/s

95th percentile per-packet one-way delay: 274.421 ms

Loss rate: 5.82%

-- Flow 2:

Average throughput: 120.52 Mbit/s

95th percentile per-packet one-way delay: 276.280 ms

Loss rate: 5.80%

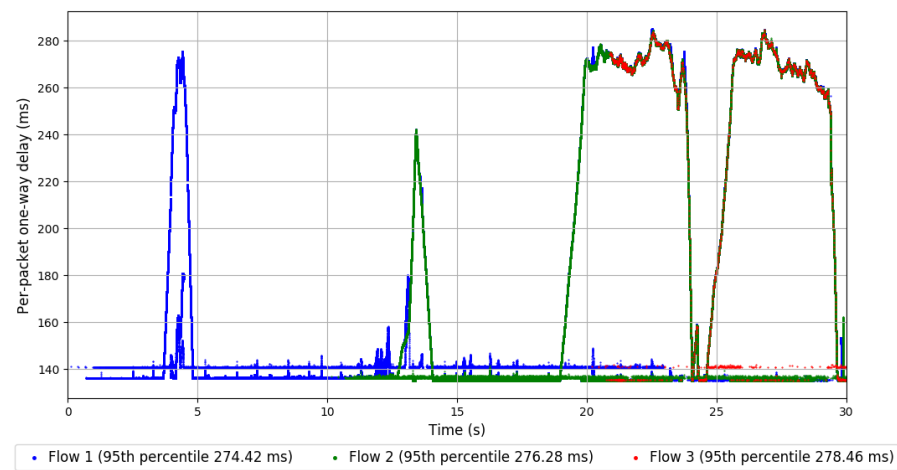
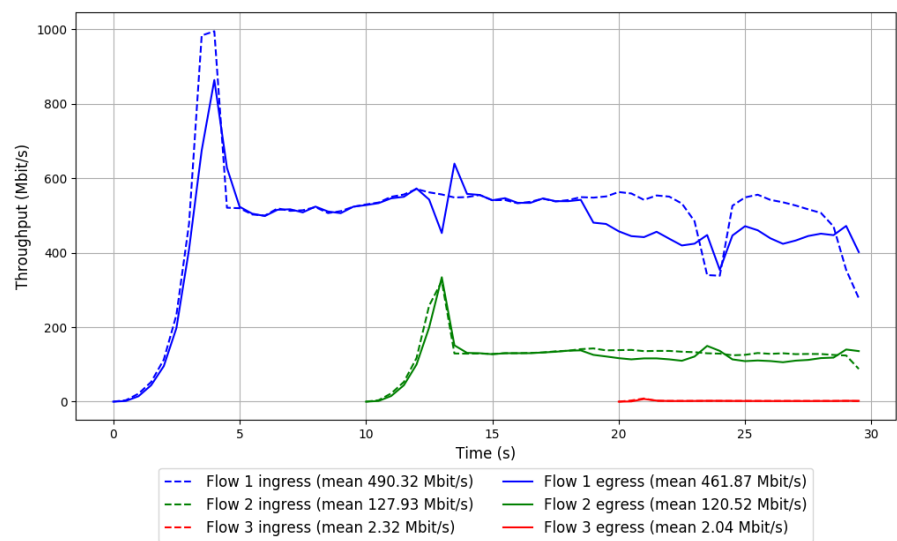
-- Flow 3:

Average throughput: 2.04 Mbit/s

95th percentile per-packet one-way delay: 278.461 ms

Loss rate: 11.97%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-18 02:15:49

End at: 2018-02-18 02:16:19

Below is generated by plot.py at 2018-02-18 05:46:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 570.23 Mbit/s

95th percentile per-packet one-way delay: 271.566 ms

Loss rate: 3.62%

-- Flow 1:

Average throughput: 486.19 Mbit/s

95th percentile per-packet one-way delay: 266.422 ms

Loss rate: 3.28%

-- Flow 2:

Average throughput: 68.28 Mbit/s

95th percentile per-packet one-way delay: 287.761 ms

Loss rate: 3.62%

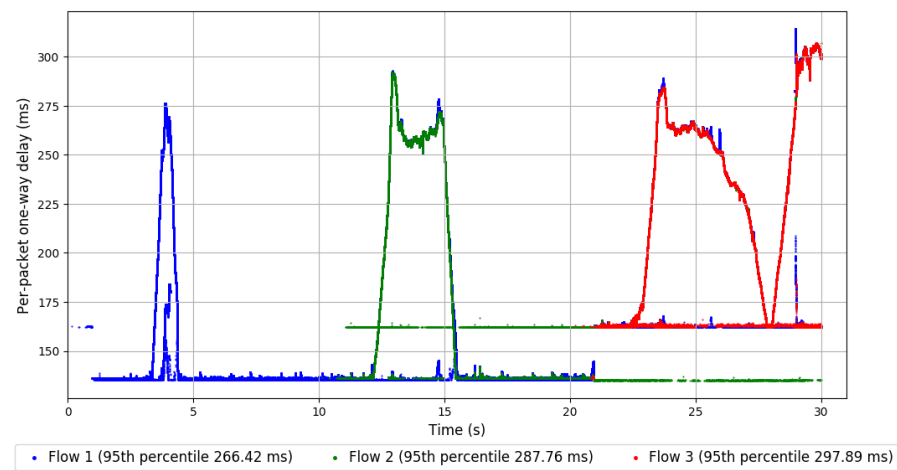
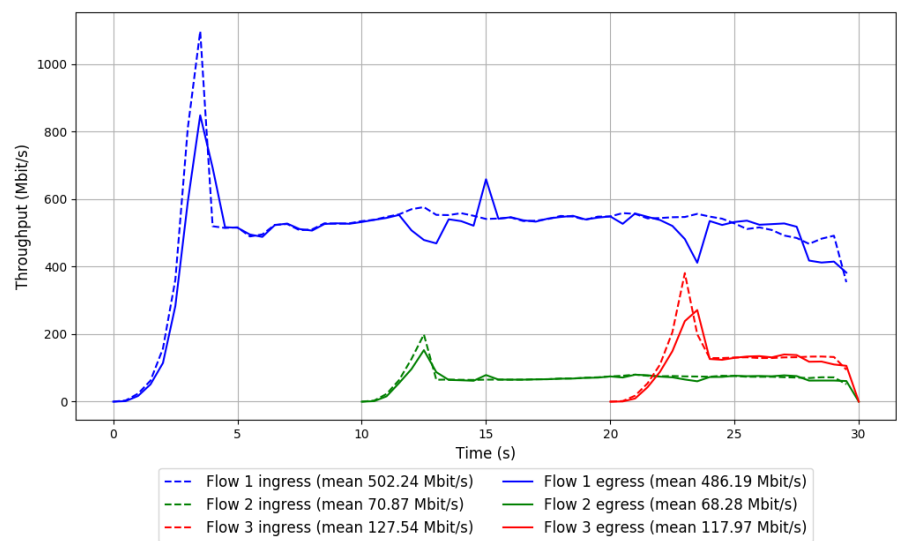
-- Flow 3:

Average throughput: 117.97 Mbit/s

95th percentile per-packet one-way delay: 297.890 ms

Loss rate: 7.72%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-18 02:36:20

End at: 2018-02-18 02:36:50

Below is generated by plot.py at 2018-02-18 05:47:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 576.63 Mbit/s

95th percentile per-packet one-way delay: 269.956 ms

Loss rate: 2.65%

-- Flow 1:

Average throughput: 475.06 Mbit/s

95th percentile per-packet one-way delay: 269.917 ms

Loss rate: 2.63%

-- Flow 2:

Average throughput: 121.64 Mbit/s

95th percentile per-packet one-way delay: 269.582 ms

Loss rate: 2.48%

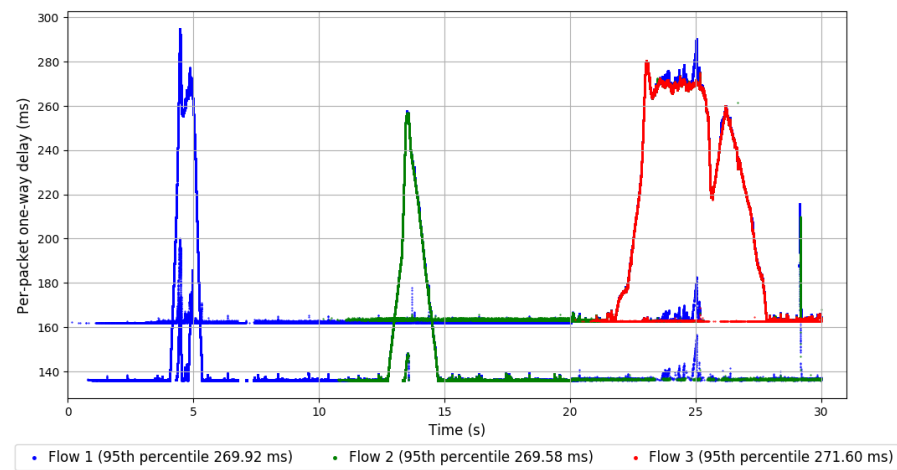
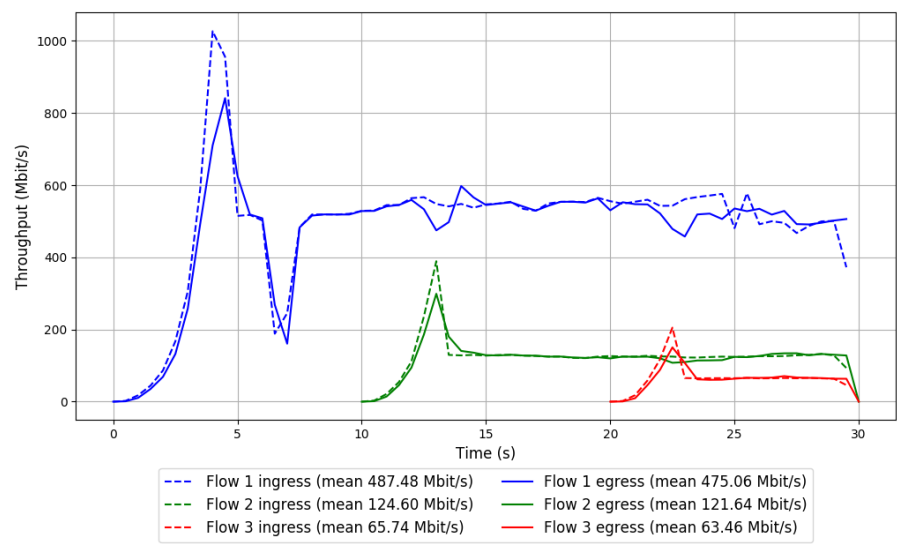
-- Flow 3:

Average throughput: 63.46 Mbit/s

95th percentile per-packet one-way delay: 271.595 ms

Loss rate: 3.72%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-18 02:57:02

End at: 2018-02-18 02:57:32

Below is generated by plot.py at 2018-02-18 05:52:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 348.16 Mbit/s

95th percentile per-packet one-way delay: 276.672 ms

Loss rate: 5.62%

-- Flow 1:

Average throughput: 4.42 Mbit/s

95th percentile per-packet one-way delay: 262.138 ms

Loss rate: 1.79%

-- Flow 2:

Average throughput: 412.43 Mbit/s

95th percentile per-packet one-way delay: 276.934 ms

Loss rate: 5.35%

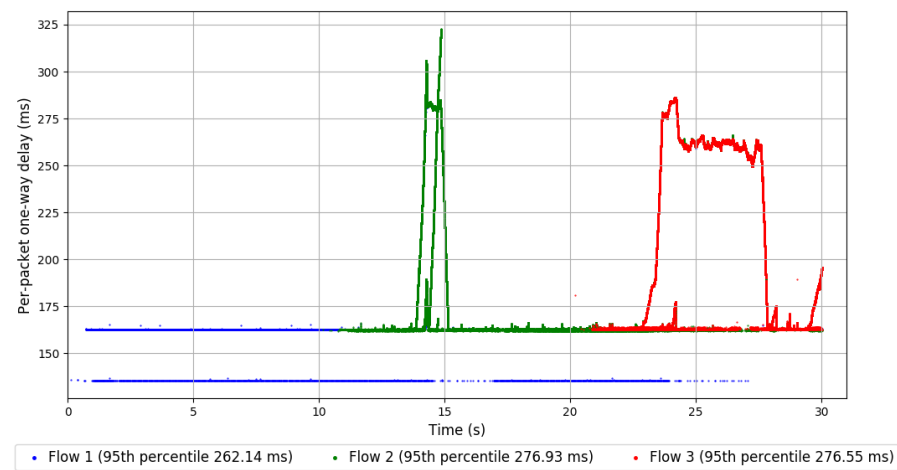
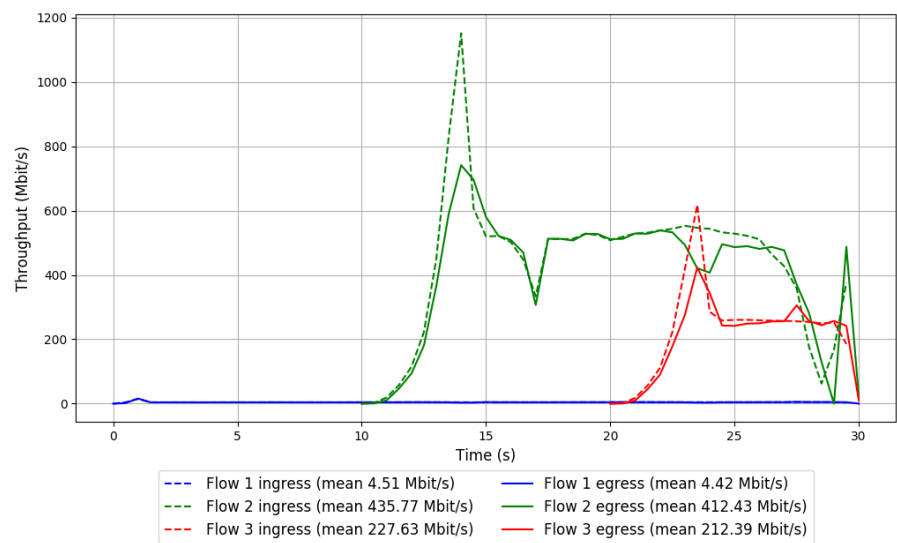
-- Flow 3:

Average throughput: 212.39 Mbit/s

95th percentile per-packet one-way delay: 276.548 ms

Loss rate: 6.86%

Run 9: Report of PCC — Data Link

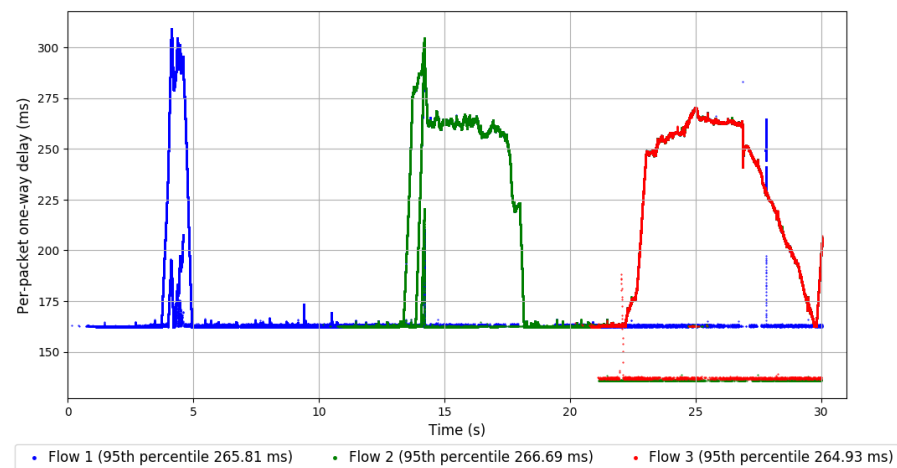
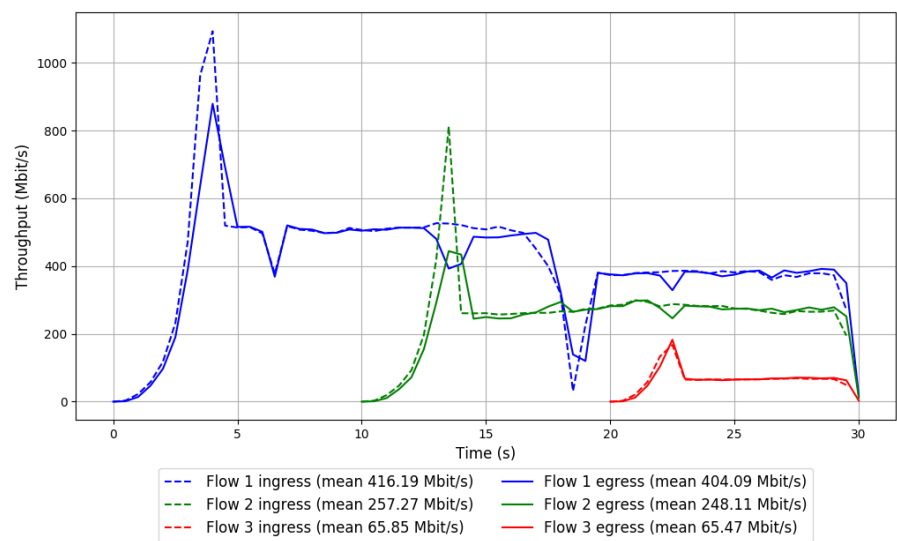


```
Run 10: Statistics of PCC

Start at: 2018-02-18 03:17:18
End at: 2018-02-18 03:17:48

# Below is generated by plot.py at 2018-02-18 05:56:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 590.54 Mbit/s
95th percentile per-packet one-way delay: 265.922 ms
Loss rate: 3.01%
-- Flow 1:
Average throughput: 404.09 Mbit/s
95th percentile per-packet one-way delay: 265.805 ms
Loss rate: 2.91%
-- Flow 2:
Average throughput: 248.11 Mbit/s
95th percentile per-packet one-way delay: 266.689 ms
Loss rate: 3.57%
-- Flow 3:
Average throughput: 65.47 Mbit/s
95th percentile per-packet one-way delay: 264.934 ms
Loss rate: 0.60%
```

Run 10: Report of PCC — Data Link

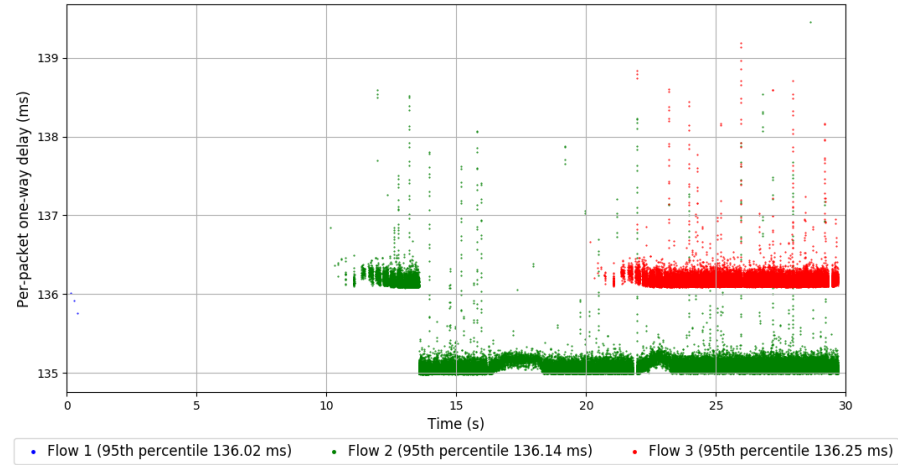
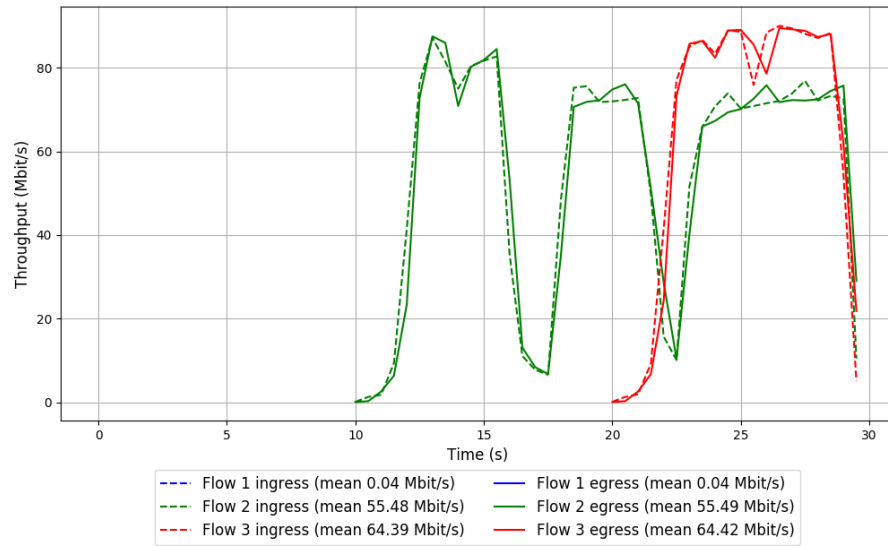


```
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-18 00:00:26
End at: 2018-02-18 00:00:56

# Below is generated by plot.py at 2018-02-18 05:56:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.51 Mbit/s
95th percentile per-packet one-way delay: 136.216 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 136.017 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 55.49 Mbit/s
95th percentile per-packet one-way delay: 136.137 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 64.42 Mbit/s
95th percentile per-packet one-way delay: 136.253 ms
Loss rate: 0.00%
```


Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-18 00:20:36

End at: 2018-02-18 00:21:06

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 114.22 Mbit/s

95th percentile per-packet one-way delay: 137.175 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 61.03 Mbit/s

95th percentile per-packet one-way delay: 137.202 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.40 Mbit/s

95th percentile per-packet one-way delay: 135.921 ms

Loss rate: 0.00%

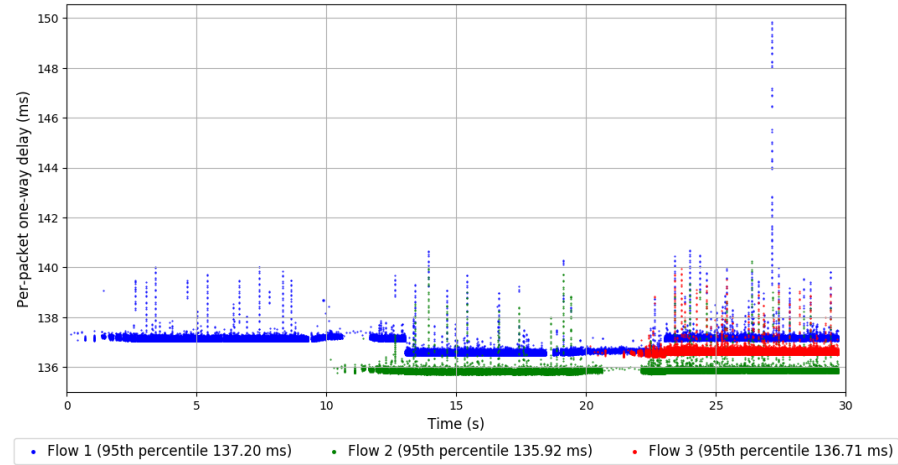
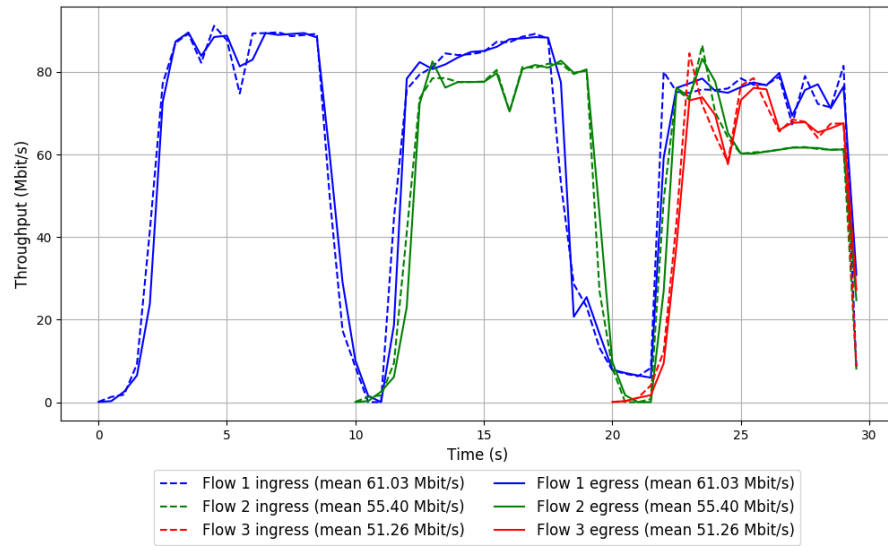
-- Flow 3:

Average throughput: 51.26 Mbit/s

95th percentile per-packet one-way delay: 136.714 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-18 00:41:28

End at: 2018-02-18 00:41:58

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 57.48 Mbit/s

95th percentile per-packet one-way delay: 198.671 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 37.11 Mbit/s

95th percentile per-packet one-way delay: 197.591 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 30.13 Mbit/s

95th percentile per-packet one-way delay: 199.245 ms

Loss rate: 0.68%

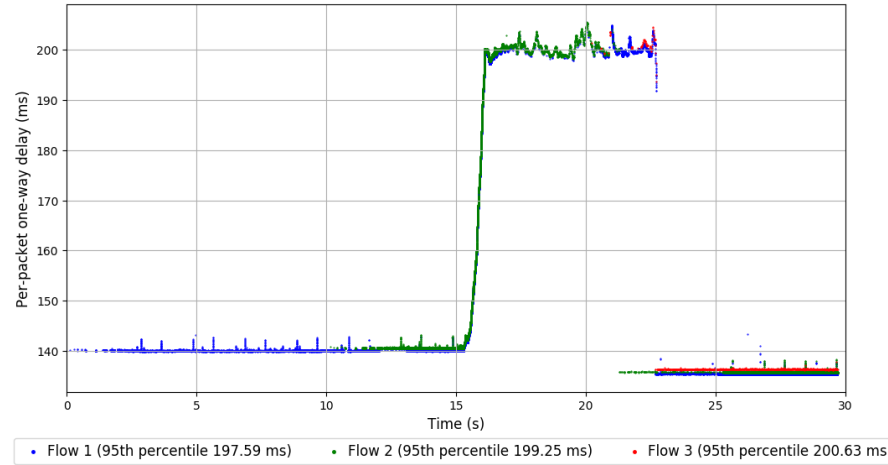
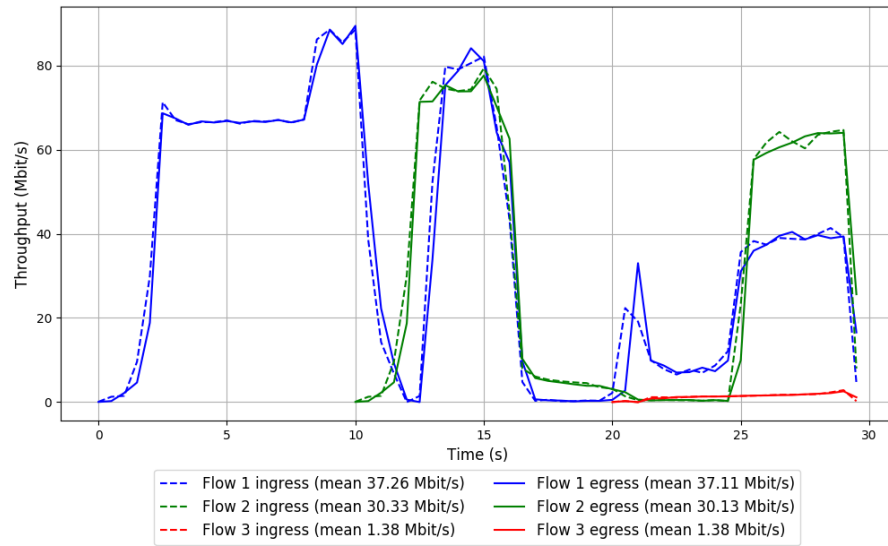
-- Flow 3:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 200.633 ms

Loss rate: 0.62%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-18 01:01:59

End at: 2018-02-18 01:02:29

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.75 Mbit/s

95th percentile per-packet one-way delay: 140.607 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 54.48 Mbit/s

95th percentile per-packet one-way delay: 140.633 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 43.07 Mbit/s

95th percentile per-packet one-way delay: 136.168 ms

Loss rate: 0.00%

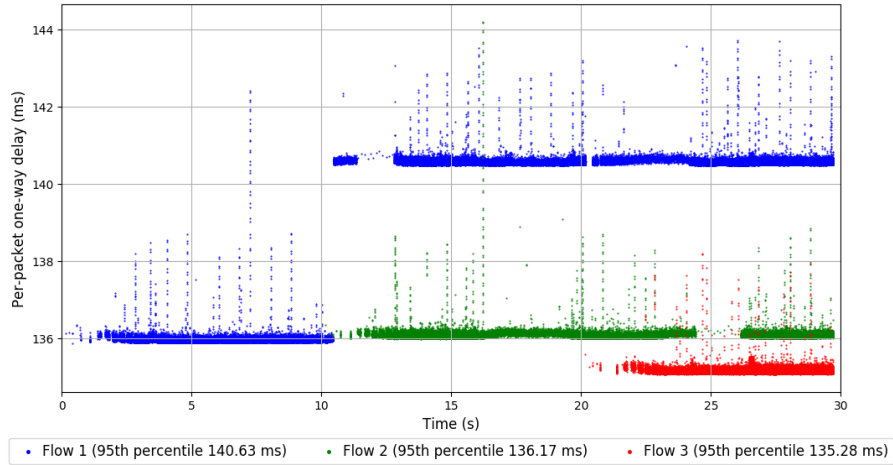
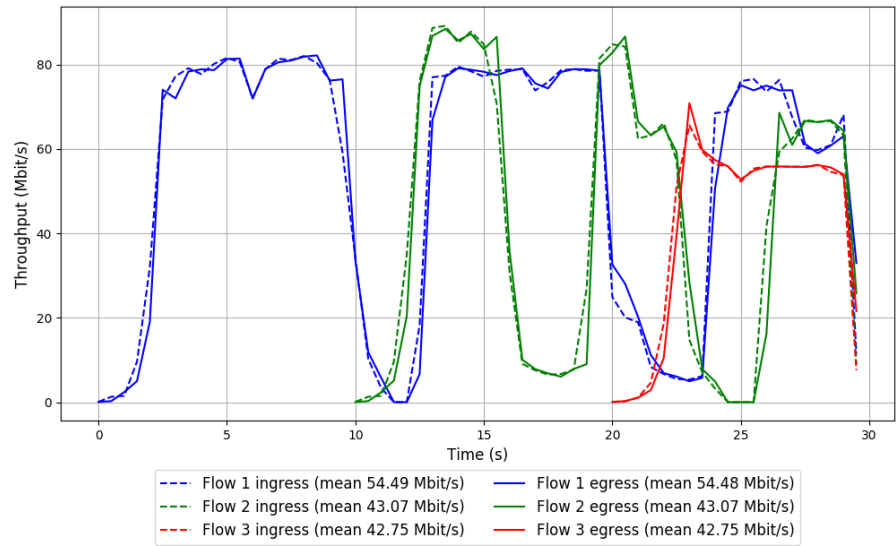
-- Flow 3:

Average throughput: 42.75 Mbit/s

95th percentile per-packet one-way delay: 135.276 ms

Loss rate: 0.00%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-18 01:22:46

End at: 2018-02-18 01:23:16

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.02 Mbit/s

95th percentile per-packet one-way delay: 162.592 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 51.65 Mbit/s

95th percentile per-packet one-way delay: 162.617 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 61.46 Mbit/s

95th percentile per-packet one-way delay: 135.690 ms

Loss rate: 0.00%

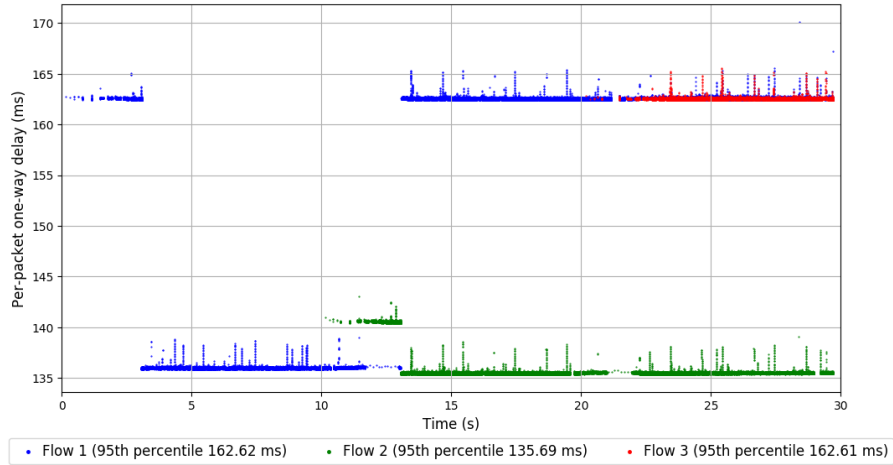
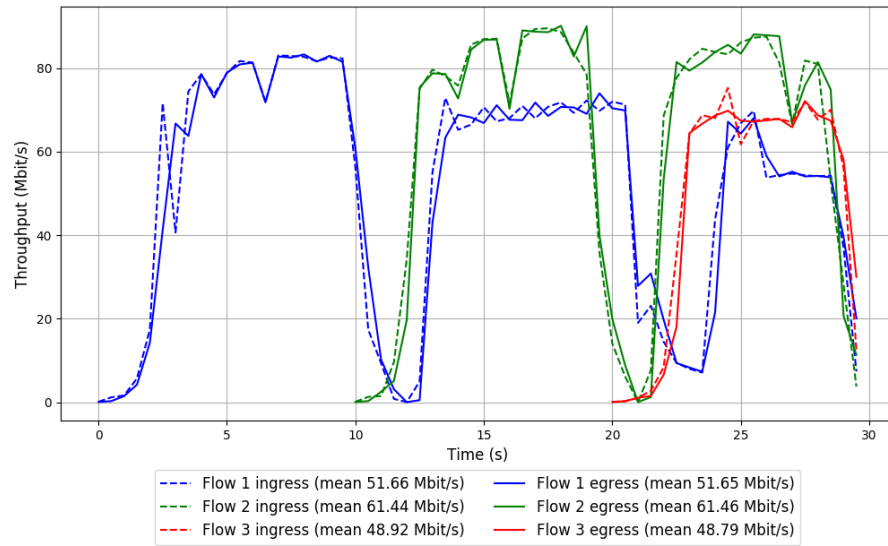
-- Flow 3:

Average throughput: 48.79 Mbit/s

95th percentile per-packet one-way delay: 162.613 ms

Loss rate: 0.54%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-18 01:43:18

End at: 2018-02-18 01:43:48

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.74 Mbit/s

95th percentile per-packet one-way delay: 140.635 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 52.38 Mbit/s

95th percentile per-packet one-way delay: 136.587 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.30 Mbit/s

95th percentile per-packet one-way delay: 140.694 ms

Loss rate: 0.02%

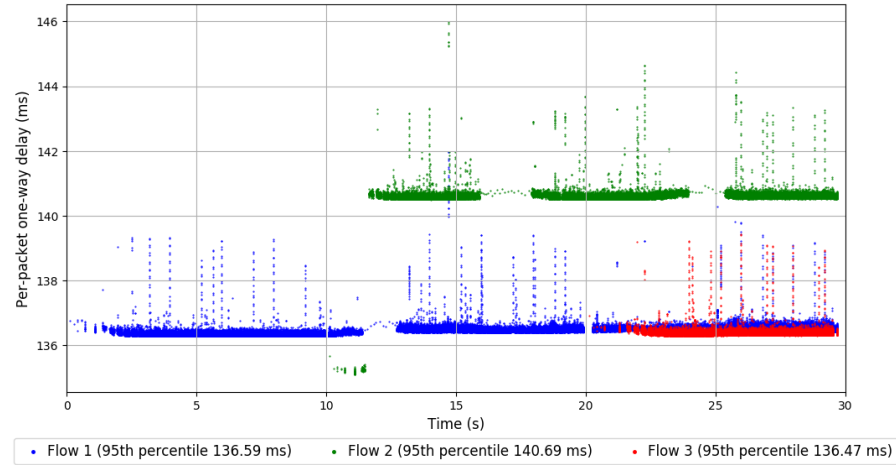
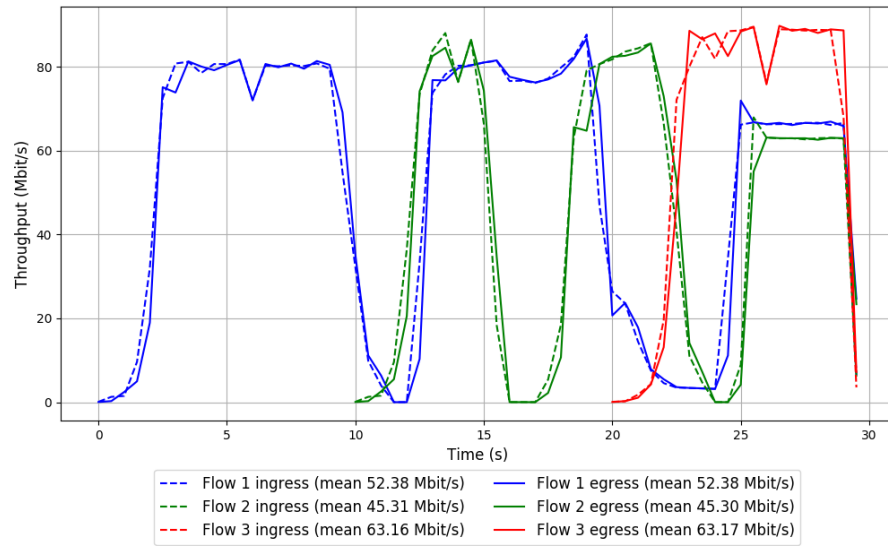
-- Flow 3:

Average throughput: 63.17 Mbit/s

95th percentile per-packet one-way delay: 136.465 ms

Loss rate: 0.00%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-18 02:03:55

End at: 2018-02-18 02:04:25

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 109.39 Mbit/s

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

Loss rate: 0.11%

-- Flow 1:

Average throughput: 57.63 Mbit/s

95th percentile per-packet one-way delay: 162.318 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 55.18 Mbit/s

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

Loss rate: 0.18%

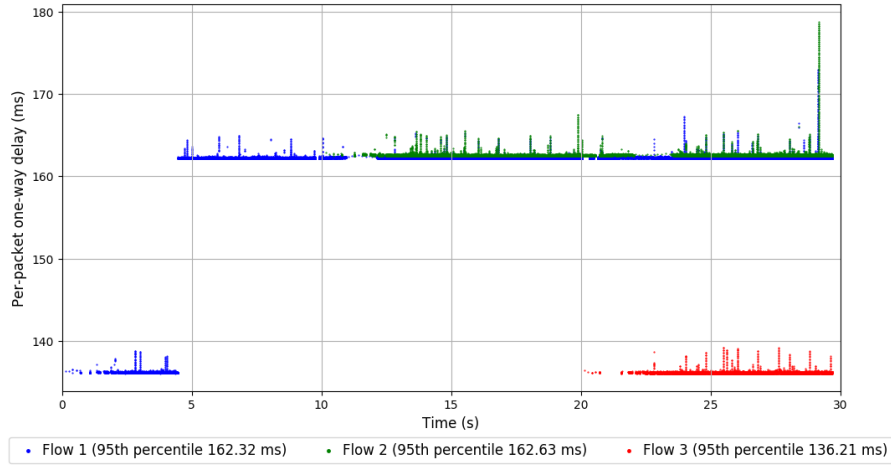
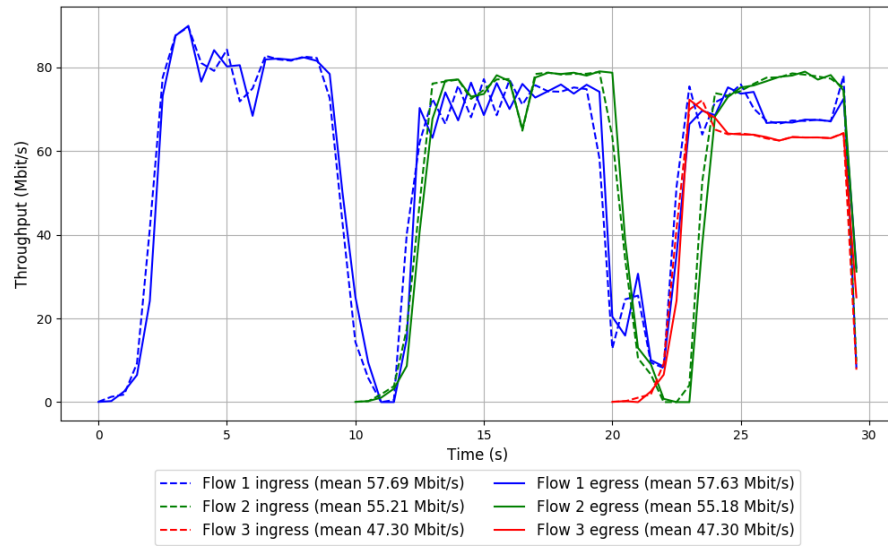
-- Flow 3:

Average throughput: 47.30 Mbit/s

95th percentile per-packet one-way delay: 136.209 ms

Loss rate: 0.00%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-18 02:24:16

End at: 2018-02-18 02:24:46

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.09 Mbit/s

95th percentile per-packet one-way delay: 164.568 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 49.45 Mbit/s

95th percentile per-packet one-way delay: 164.596 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 43.38 Mbit/s

95th percentile per-packet one-way delay: 162.190 ms

Loss rate: 0.20%

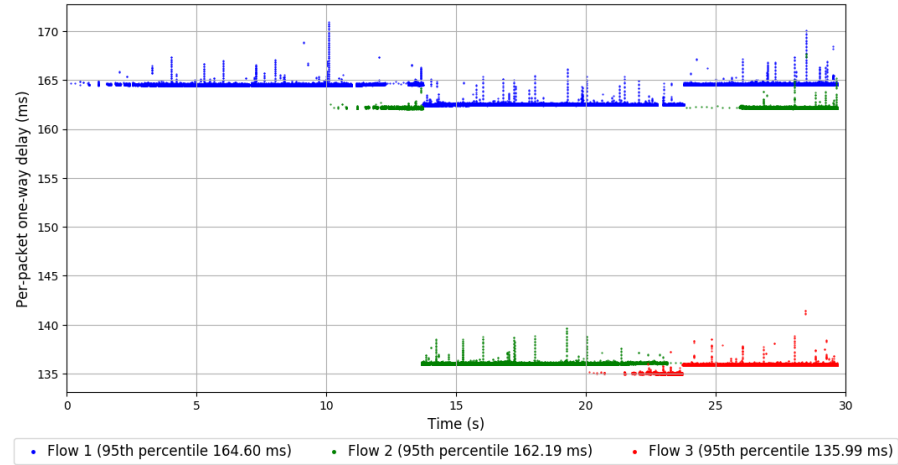
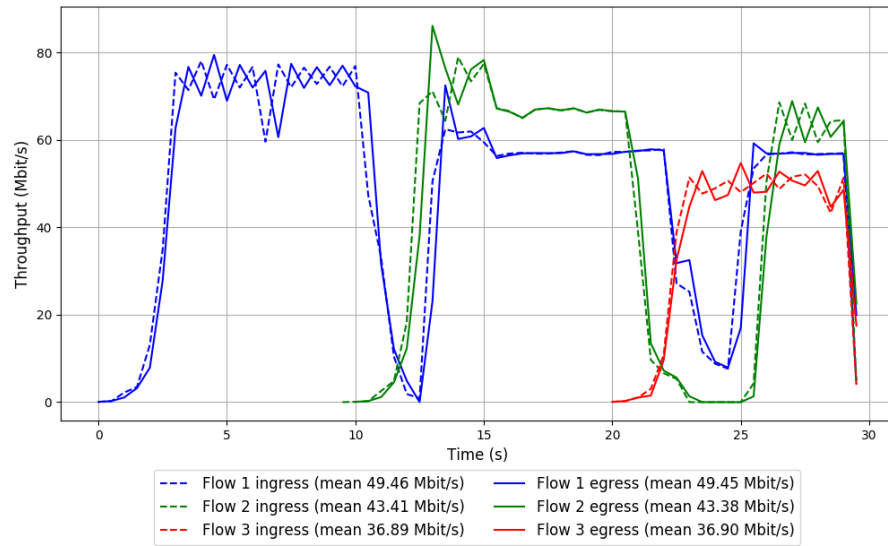
-- Flow 3:

Average throughput: 36.90 Mbit/s

95th percentile per-packet one-way delay: 135.985 ms

Loss rate: 0.00%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-18 02:44:56

End at: 2018-02-18 02:45:26

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 108.19 Mbit/s

95th percentile per-packet one-way delay: 163.304 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 55.46 Mbit/s

95th percentile per-packet one-way delay: 162.848 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.34 Mbit/s

95th percentile per-packet one-way delay: 163.366 ms

Loss rate: 0.00%

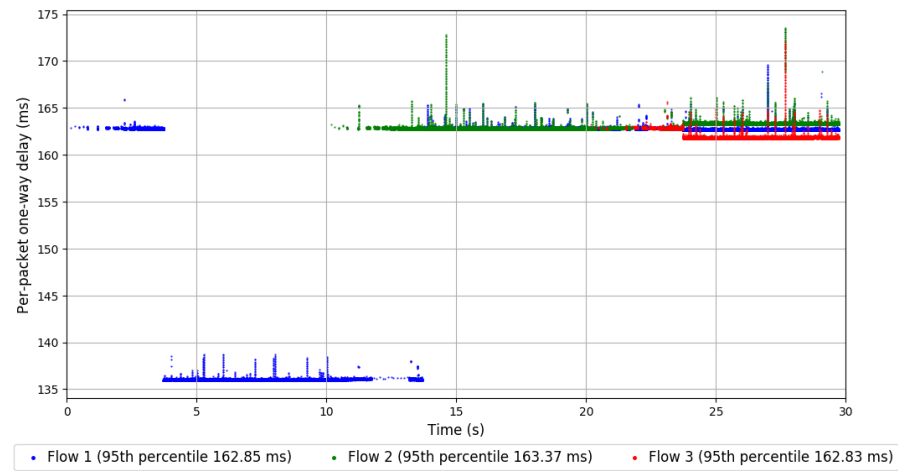
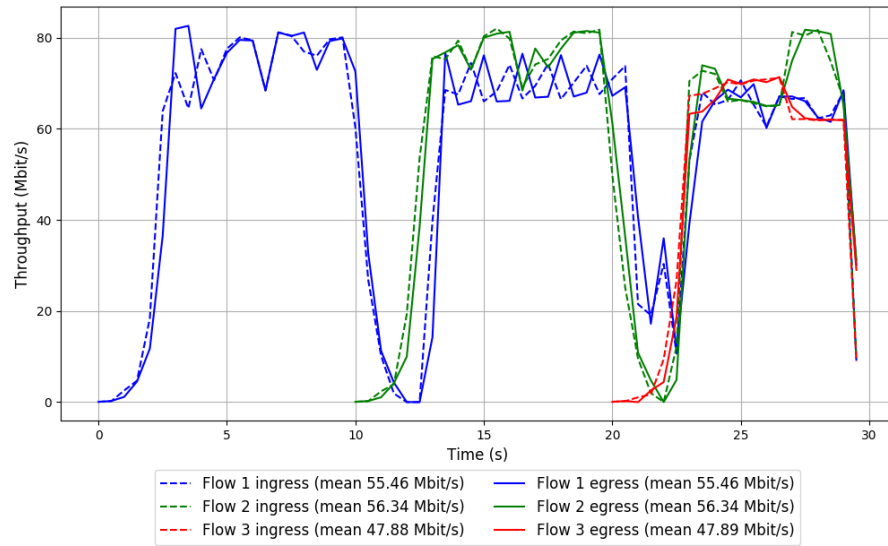
-- Flow 3:

Average throughput: 47.89 Mbit/s

95th percentile per-packet one-way delay: 162.826 ms

Loss rate: 0.00%

Run 9: Report of QUIC Cubic — Data Link

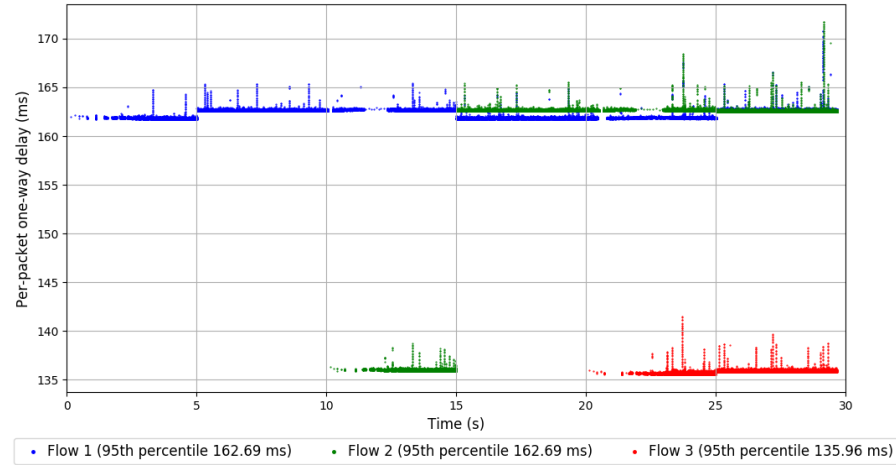
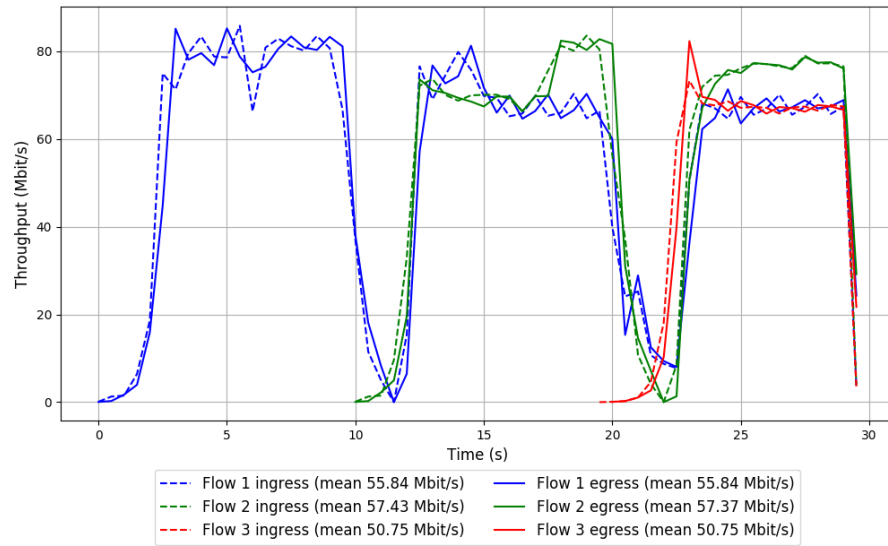


```
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-18 03:05:24
End at: 2018-02-18 03:05:54

# Below is generated by plot.py at 2018-02-18 05:56:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 110.19 Mbit/s
95th percentile per-packet one-way delay: 162.684 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.84 Mbit/s
95th percentile per-packet one-way delay: 162.691 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 57.37 Mbit/s
95th percentile per-packet one-way delay: 162.690 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 50.75 Mbit/s
95th percentile per-packet one-way delay: 135.959 ms
Loss rate: 0.00%
```

Run 10: Report of QUIC Cubic — Data Link

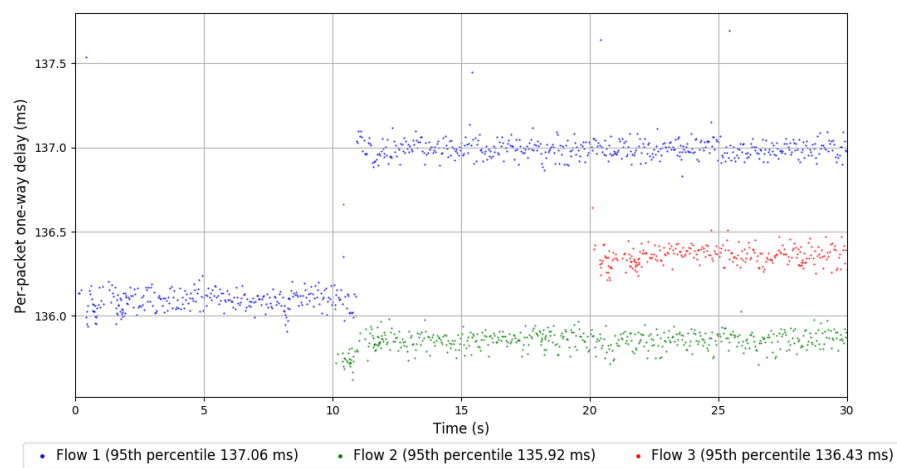
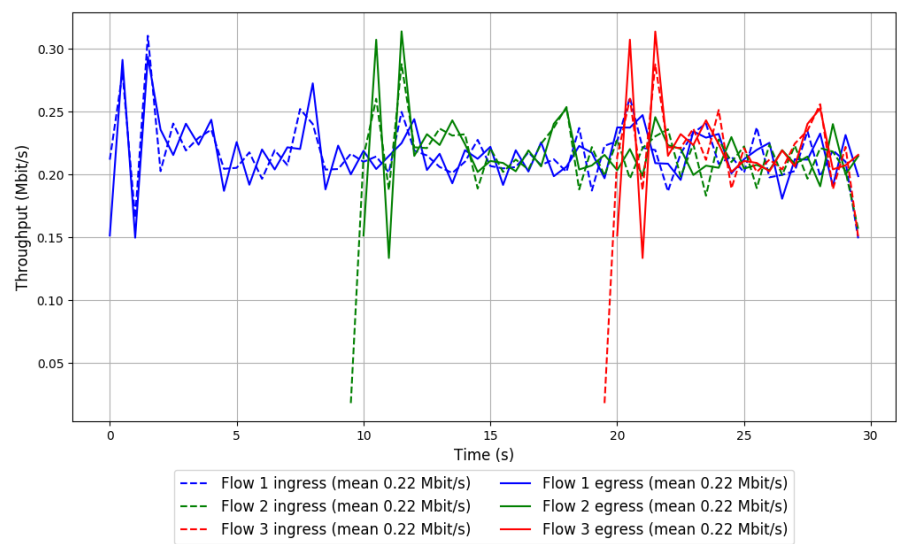


```
Run 1: Statistics of SCReAM

Start at: 2018-02-18 00:01:19
End at: 2018-02-18 00:01:49

# Below is generated by plot.py at 2018-02-18 05:56:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 137.039 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.057 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.924 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.433 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link

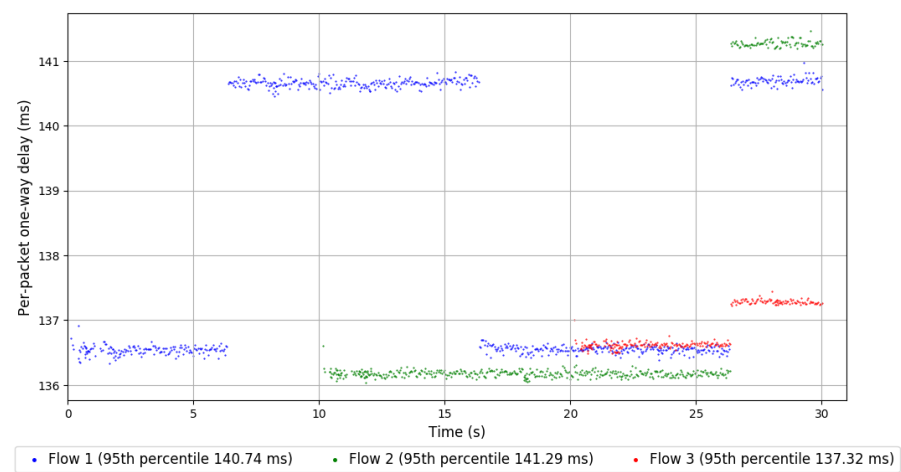
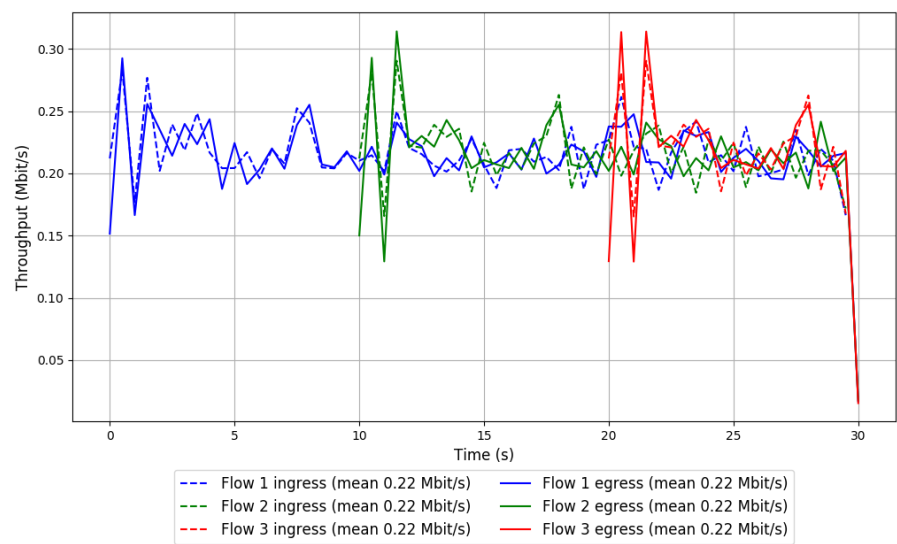


```
Run 2: Statistics of SCReAM

Start at: 2018-02-18 00:21:33
End at: 2018-02-18 00:22:03

# Below is generated by plot.py at 2018-02-18 05:56:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 141.226 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 140.738 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 141.291 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 137.320 ms
Loss rate: 0.00%
```

Run 2: Report of SReAM — Data Link

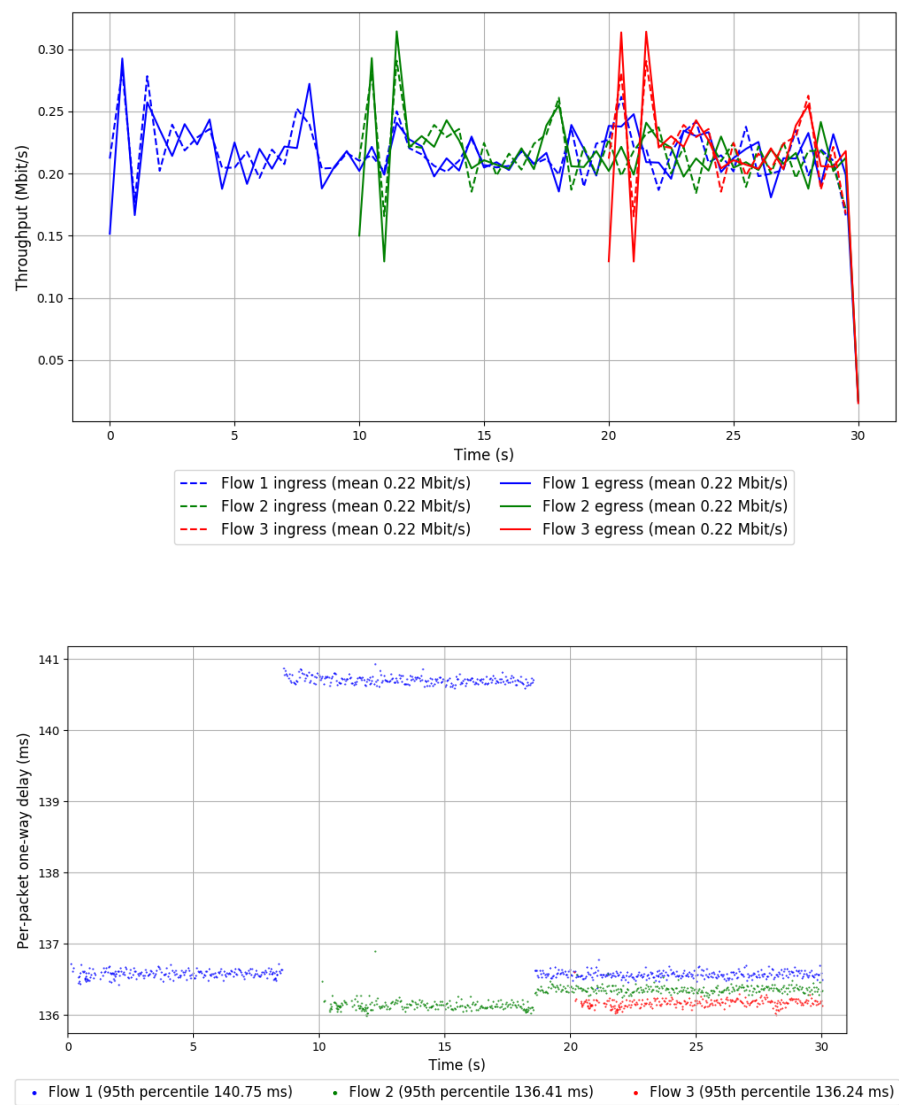


```
Run 3: Statistics of SCReAM

Start at: 2018-02-18 00:42:21
End at: 2018-02-18 00:42:51

# Below is generated by plot.py at 2018-02-18 05:56:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 140.722 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 140.754 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.412 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.235 ms
Loss rate: 0.00%
```


Run 3: Report of SCReAM — Data Link

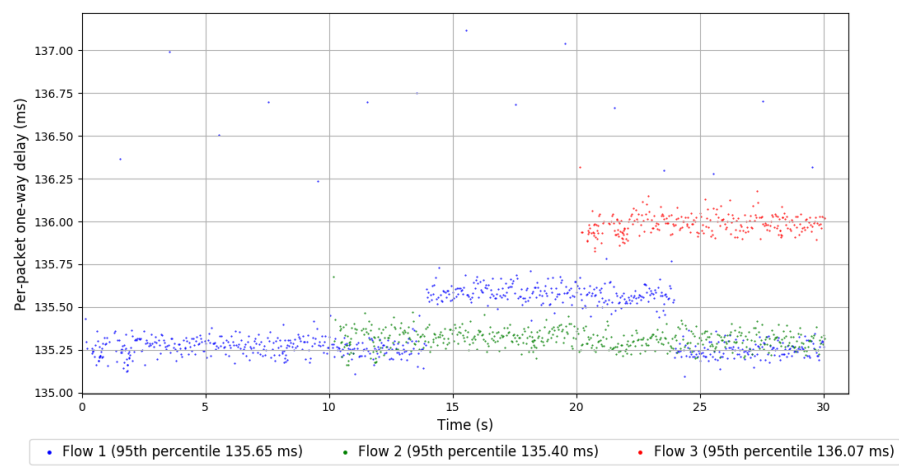
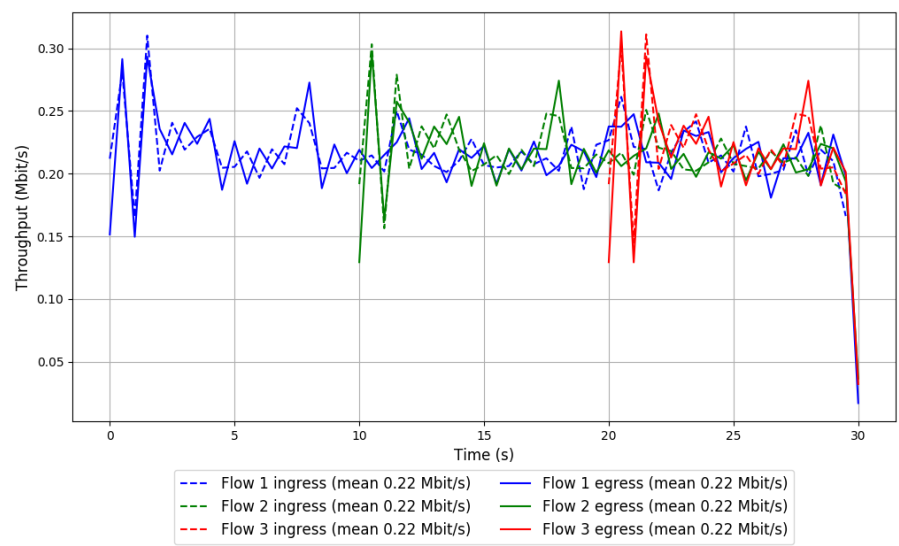


```
Run 4: Statistics of SCReAM

Start at: 2018-02-18 01:02:56
End at: 2018-02-18 01:03:26

# Below is generated by plot.py at 2018-02-18 05:56:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.021 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.645 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.397 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.074 ms
Loss rate: 0.00%
```

Run 4: Report of SReAM — Data Link

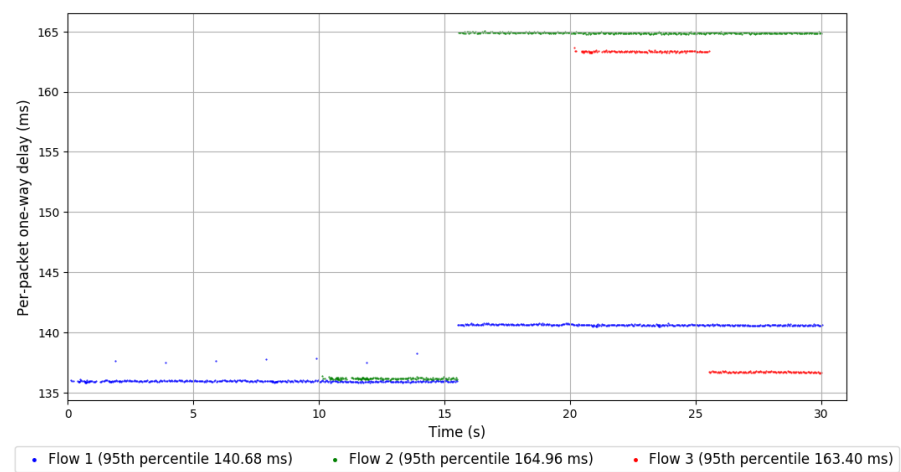
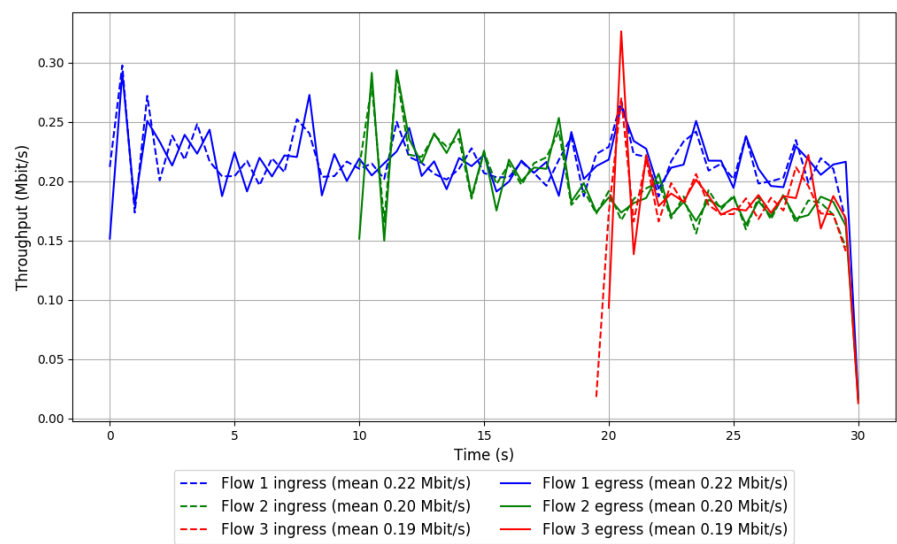


```
Run 5: Statistics of SCReAM

Start at: 2018-02-18 01:23:44
End at: 2018-02-18 01:24:14

# Below is generated by plot.py at 2018-02-18 05:56:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 164.918 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 140.675 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 164.958 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 163.403 ms
Loss rate: 0.00%
```

Run 5: Report of SCReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-02-18 01:44:14

End at: 2018-02-18 01:44:44

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 140.987 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.489 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 136.183 ms

Loss rate: 0.00%

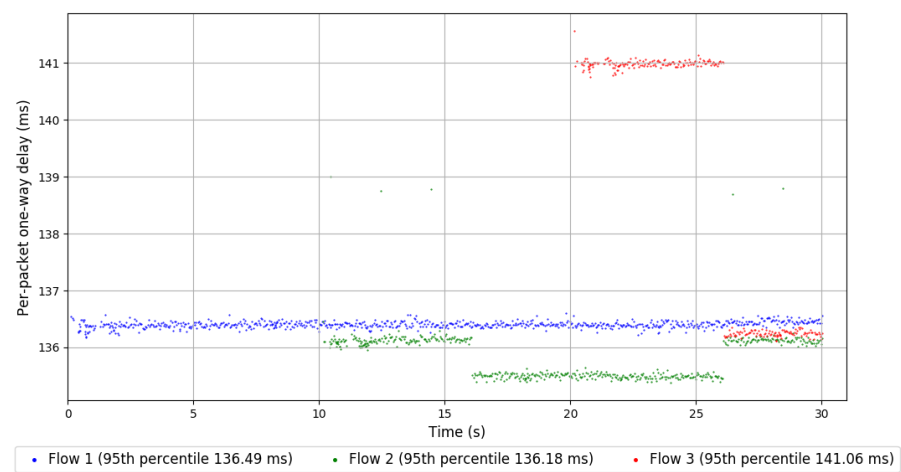
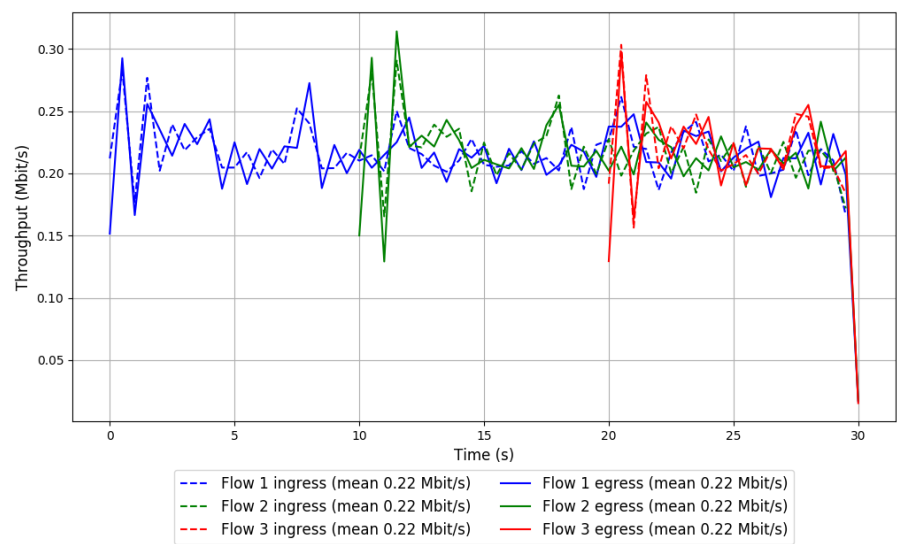
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 141.061 ms

Loss rate: 0.00%

Run 6: Report of SCReAM — Data Link

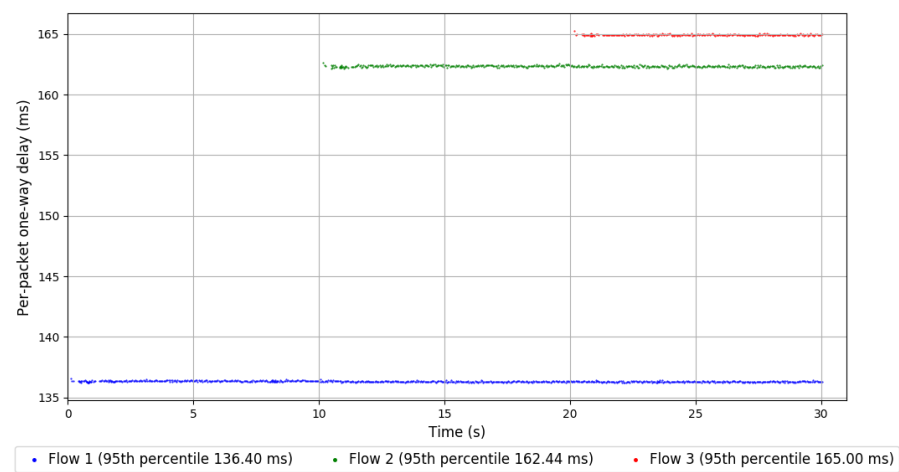
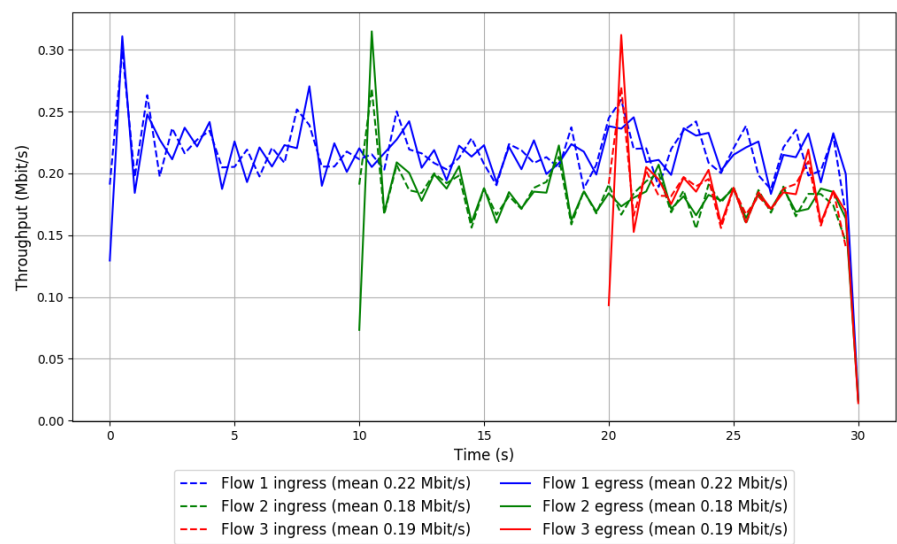


```
Run 7: Statistics of SReAM

Start at: 2018-02-18 02:04:52
End at: 2018-02-18 02:05:22

# Below is generated by plot.py at 2018-02-18 05:56:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 164.933 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.400 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 162.440 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 164.999 ms
Loss rate: 0.35%
```


Run 7: Report of SCReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-02-18 02:25:13

End at: 2018-02-18 02:25:43

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 162.747 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 162.113 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 162.753 ms

Loss rate: 0.00%

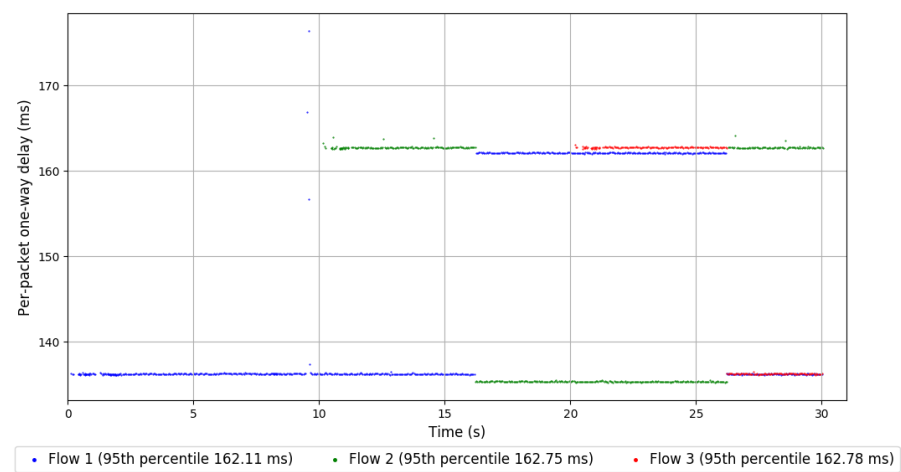
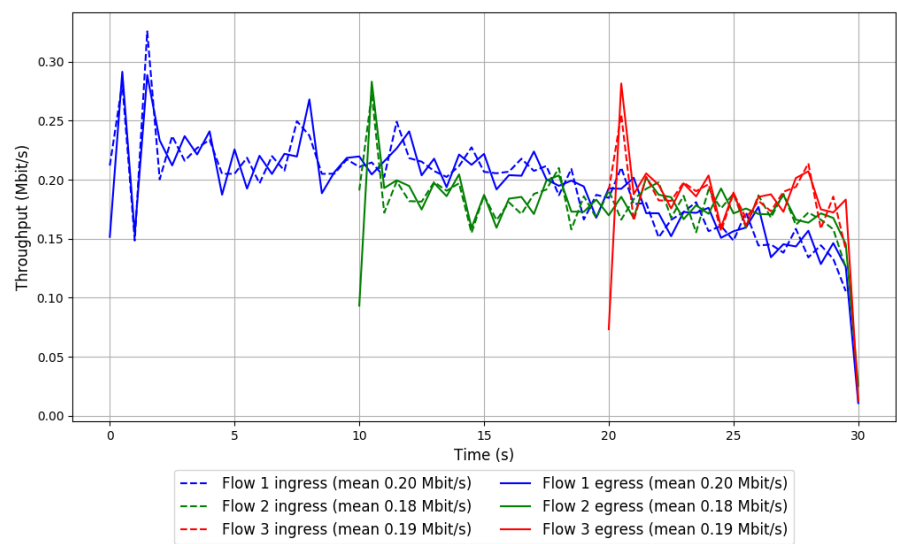
-- Flow 3:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 162.782 ms

Loss rate: 0.00%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-02-18 02:45:55

End at: 2018-02-18 02:46:25

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 163.493 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 163.509 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 163.124 ms

Loss rate: 0.00%

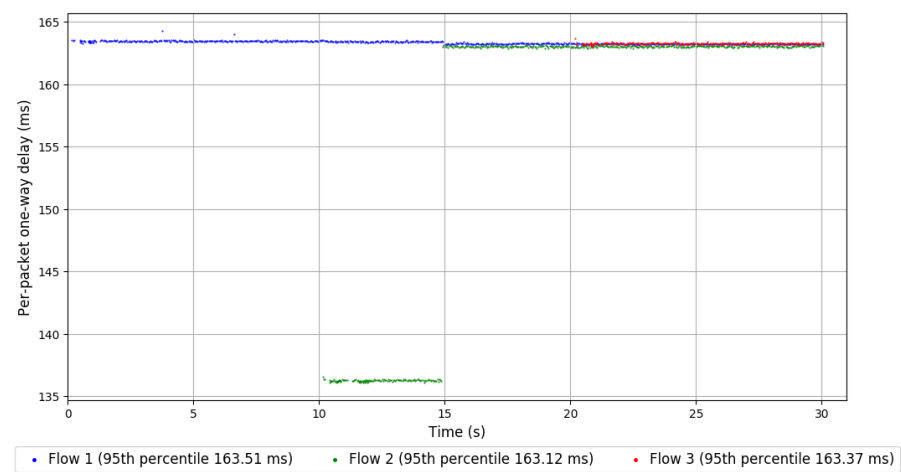
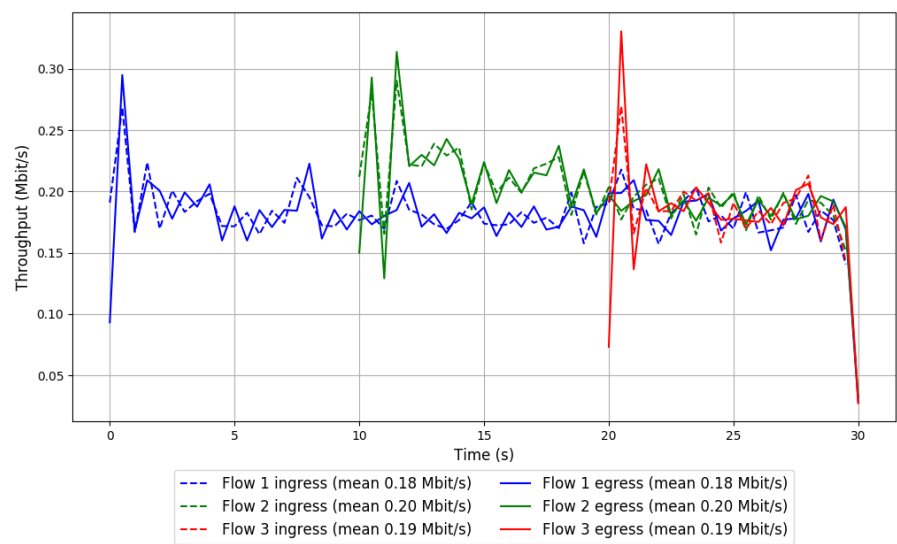
-- Flow 3:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 163.369 ms

Loss rate: 0.00%

Run 9: Report of SReAM — Data Link

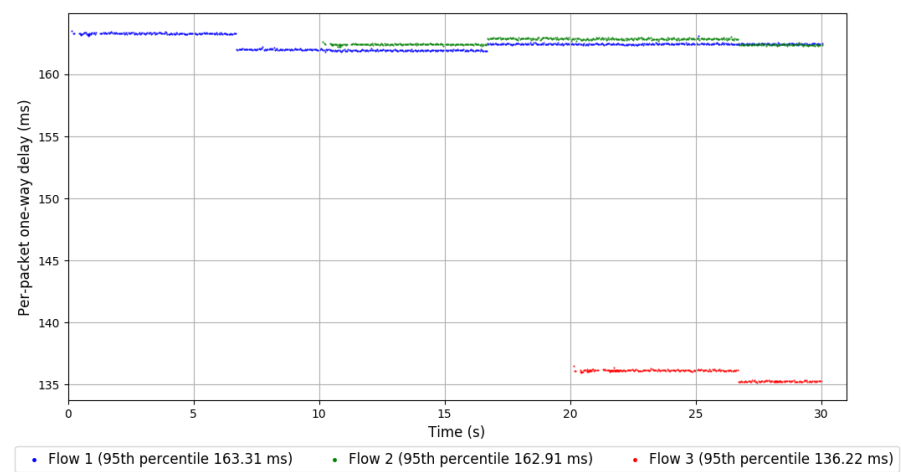
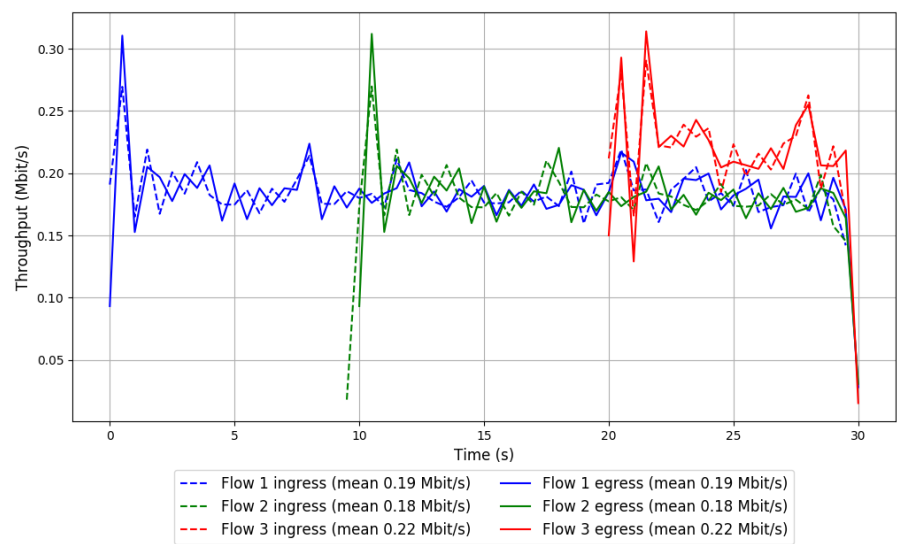


```
Run 10: Statistics of SReAM

Start at: 2018-02-18 03:06:23
End at: 2018-02-18 03:06:53

# Below is generated by plot.py at 2018-02-18 05:56:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 163.267 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 163.310 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 162.910 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.218 ms
Loss rate: 0.00%
```

Run 10: Report of SCReAM — Data Link

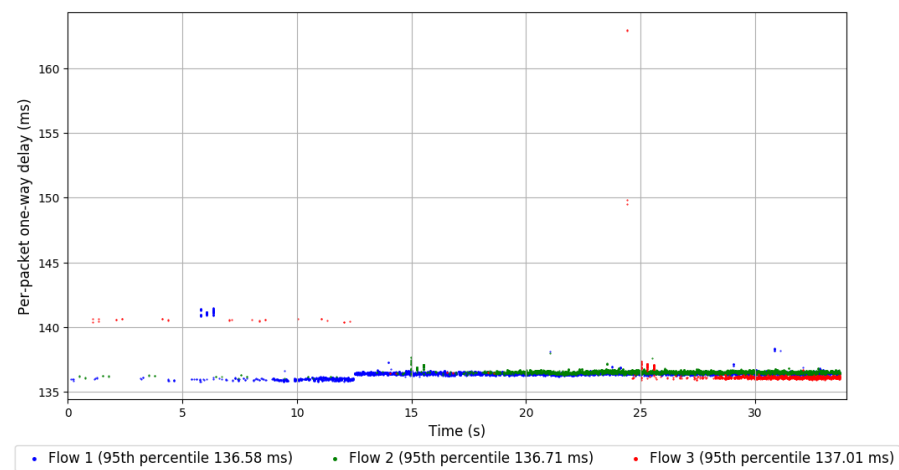
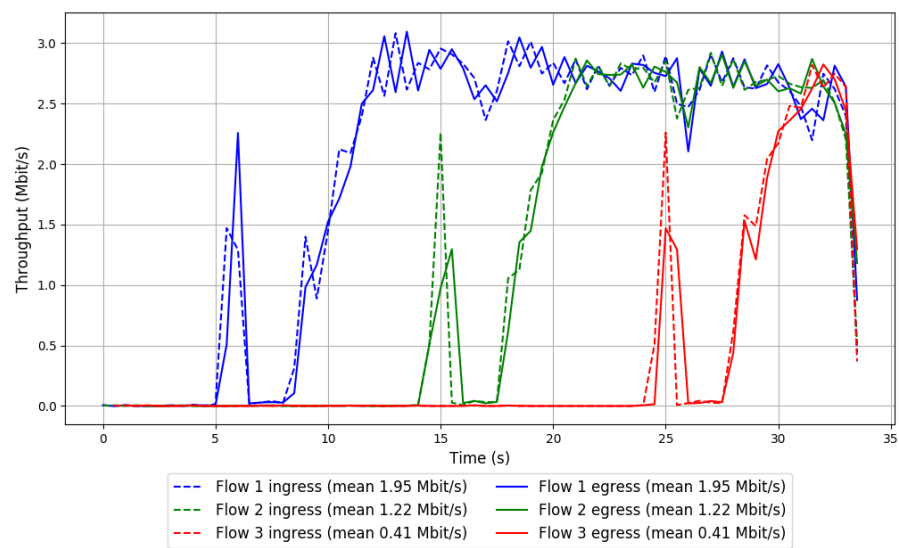


```
Run 1: Statistics of WebRTC media

Start at: 2018-02-18 00:13:31
End at: 2018-02-18 00:14:01

# Below is generated by plot.py at 2018-02-18 05:56:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.56 Mbit/s
95th percentile per-packet one-way delay: 136.675 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 136.578 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 136.708 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 137.006 ms
Loss rate: 0.01%
```


Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-18 00:34:28

End at: 2018-02-18 00:34:58

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.77 Mbit/s

95th percentile per-packet one-way delay: 141.255 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.09 Mbit/s

95th percentile per-packet one-way delay: 141.293 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.26 Mbit/s

95th percentile per-packet one-way delay: 136.960 ms

Loss rate: 0.00%

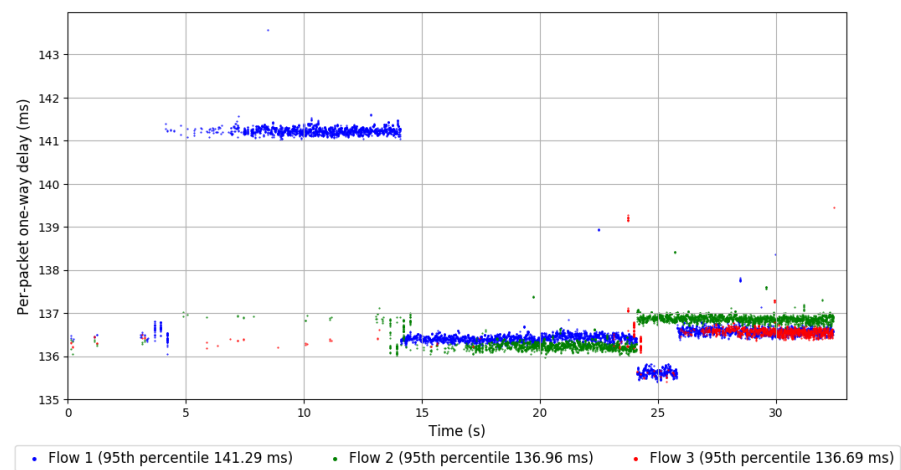
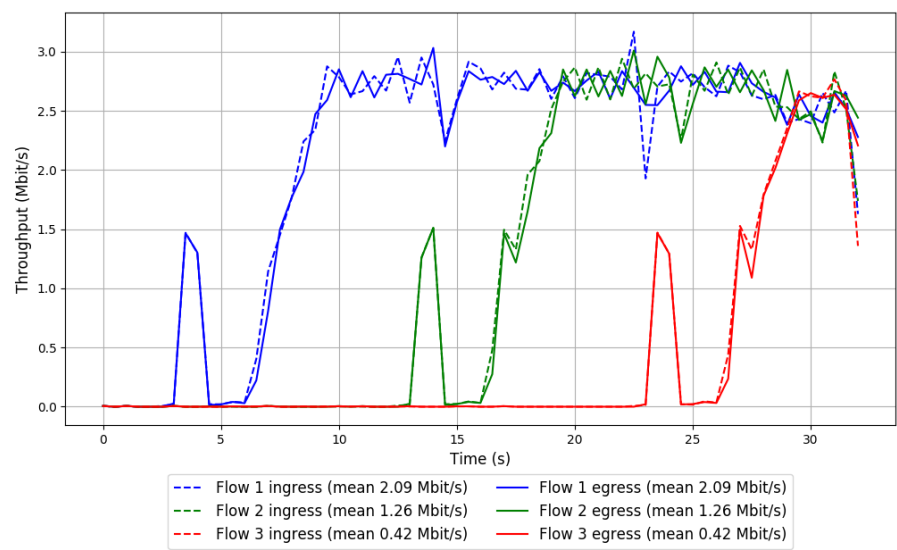
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 136.693 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-18 00:55:01

End at: 2018-02-18 00:55:31

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.62 Mbit/s

95th percentile per-packet one-way delay: 140.663 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 2.02 Mbit/s

95th percentile per-packet one-way delay: 140.205 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.22 Mbit/s

95th percentile per-packet one-way delay: 140.705 ms

Loss rate: 0.02%

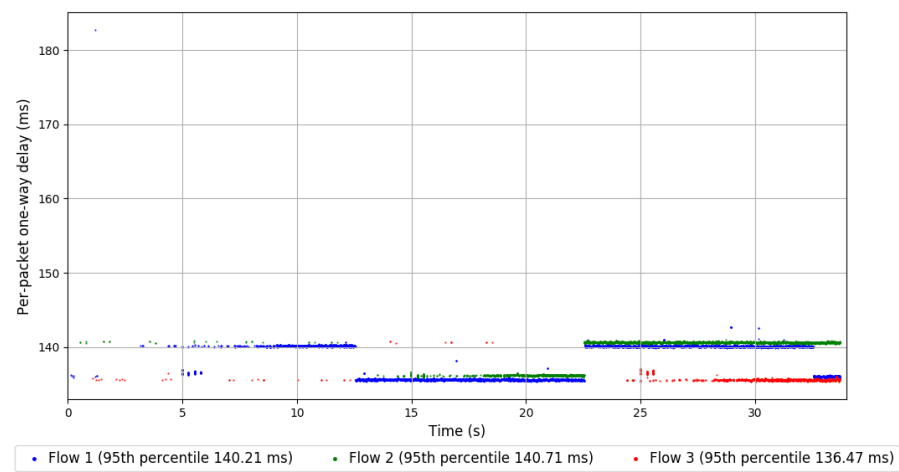
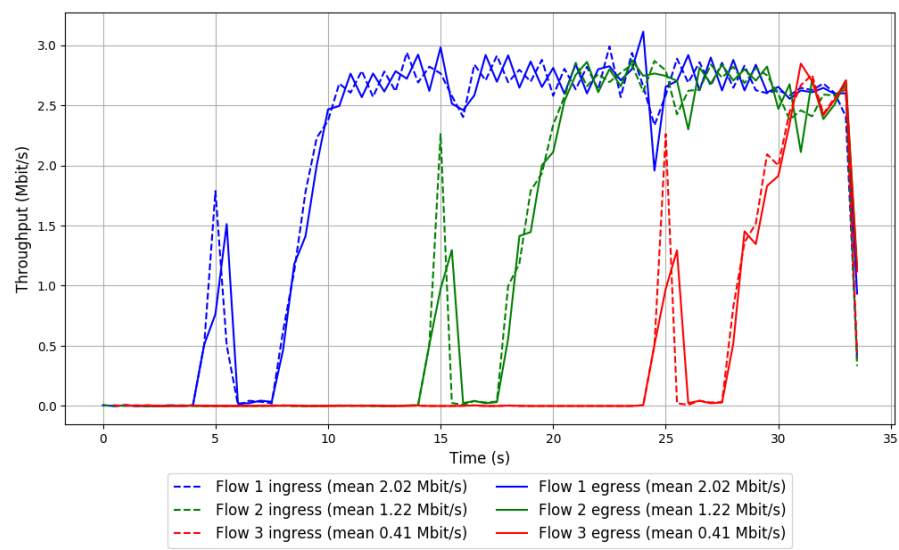
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 136.469 ms

Loss rate: 0.01%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-18 01:15:34

End at: 2018-02-18 01:16:04

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.56 Mbit/s

95th percentile per-packet one-way delay: 136.804 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 135.696 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.22 Mbit/s

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

Loss rate: 0.00%

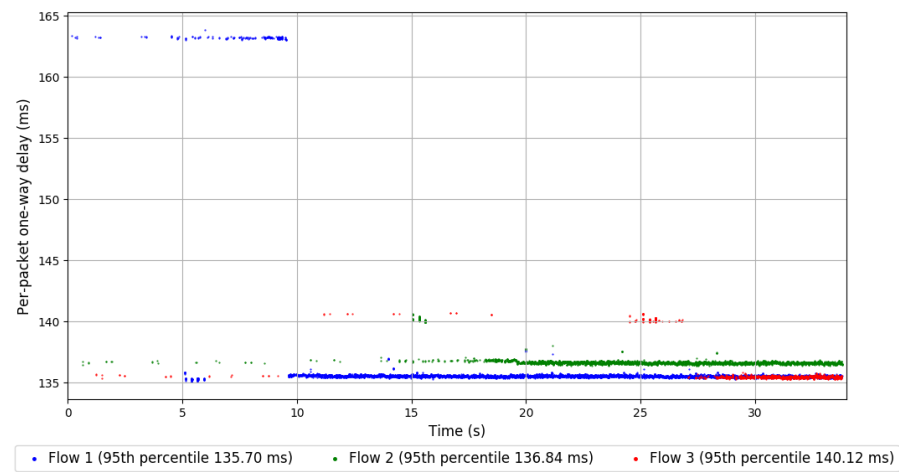
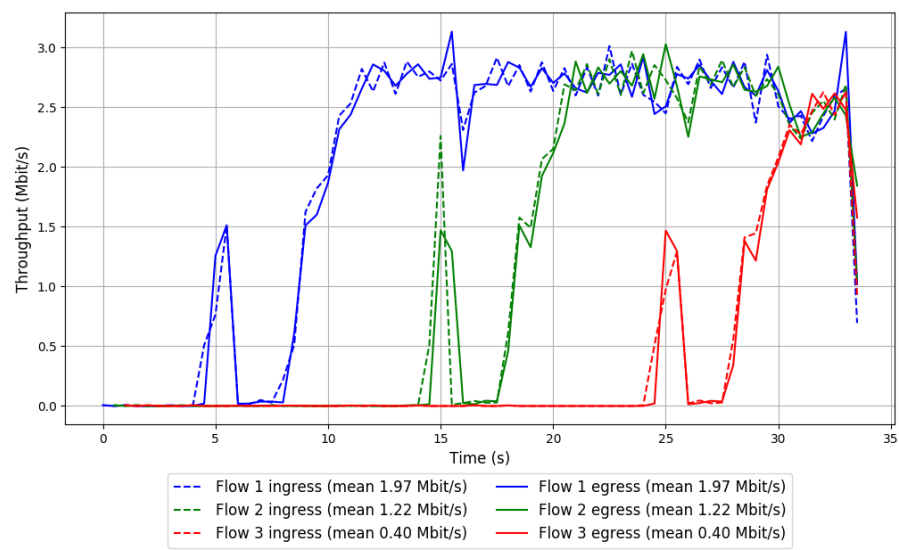
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 140.118 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-18 01:36:15

End at: 2018-02-18 01:36:45

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.58 Mbit/s

95th percentile per-packet one-way delay: 162.894 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 1.97 Mbit/s

95th percentile per-packet one-way delay: 162.830 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.23 Mbit/s

95th percentile per-packet one-way delay: 136.264 ms

Loss rate: 0.00%

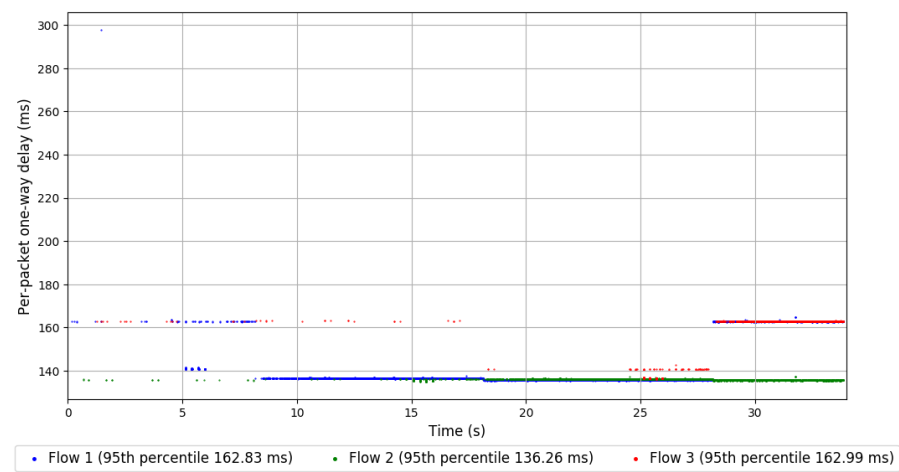
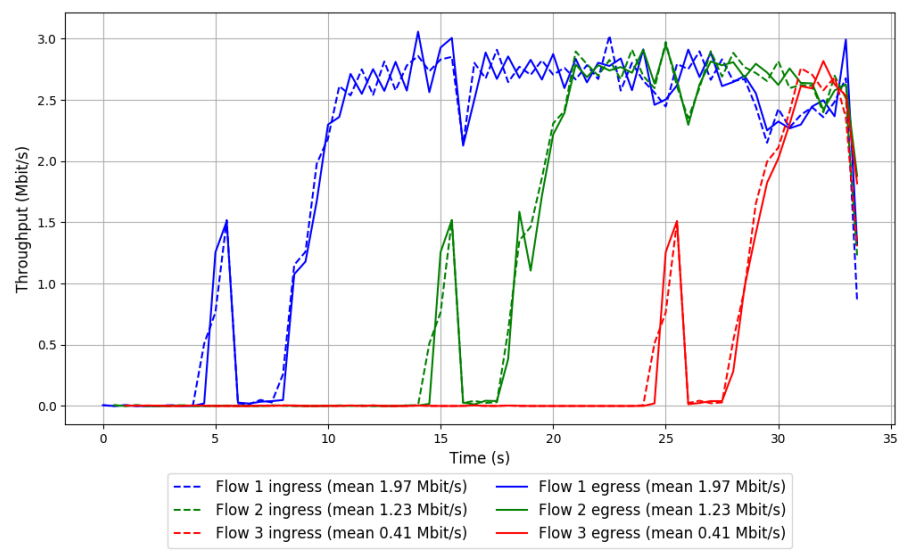
-- Flow 3:

Average throughput: 0.41 Mbit/s

95th percentile per-packet one-way delay: 162.992 ms

Loss rate: 0.85%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-18 01:56:50

End at: 2018-02-18 01:57:20

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.66 Mbit/s

95th percentile per-packet one-way delay: 137.026 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 135.500 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.24 Mbit/s

95th percentile per-packet one-way delay: 137.081 ms

Loss rate: 0.00%

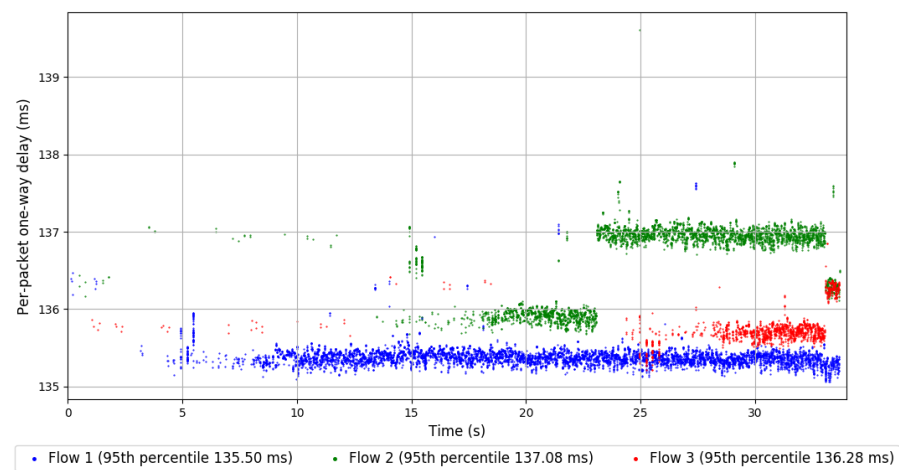
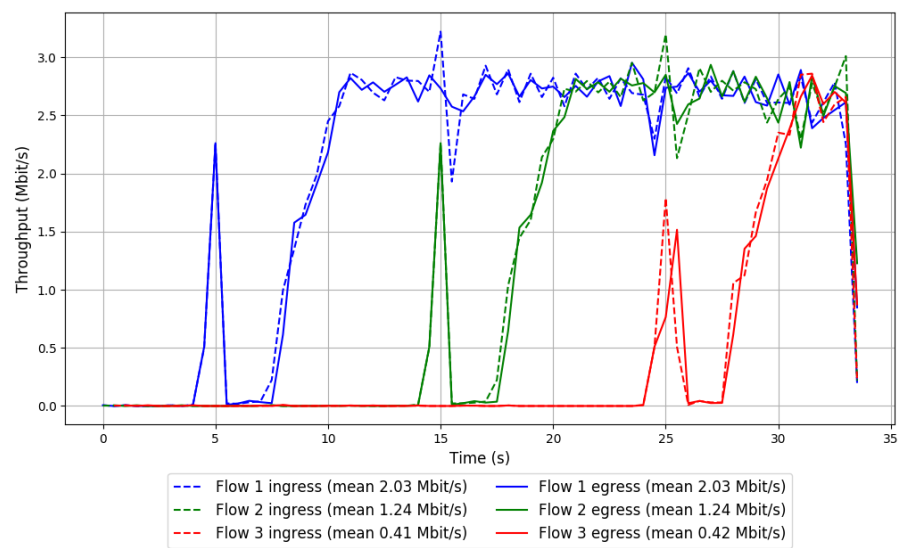
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 136.279 ms

Loss rate: 0.01%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-18 02:17:06

End at: 2018-02-18 02:17:36

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.54 Mbit/s

95th percentile per-packet one-way delay: 162.498 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 1.98 Mbit/s

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

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.22 Mbit/s

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

Loss rate: 0.00%

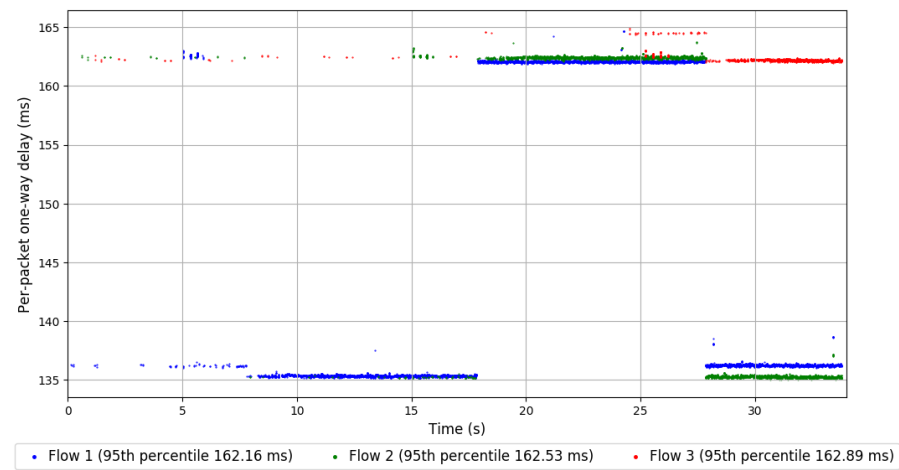
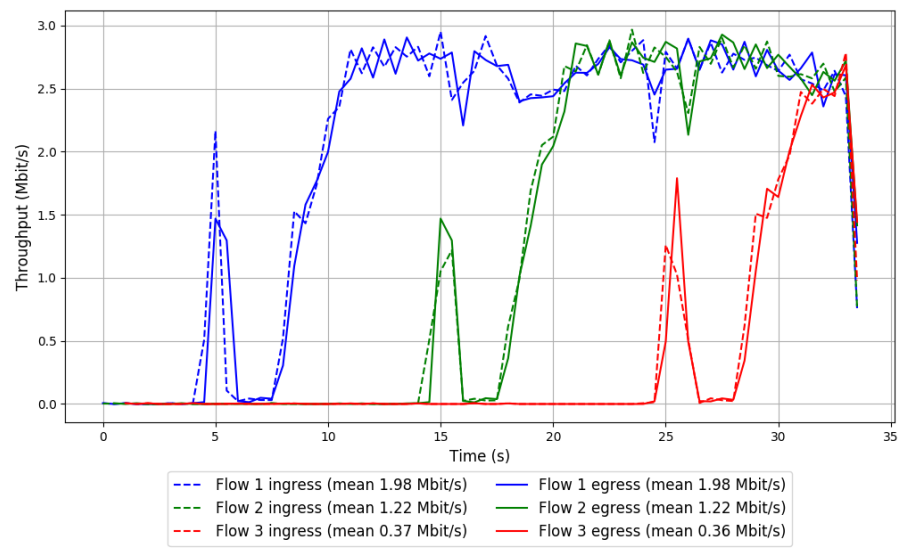
-- Flow 3:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 162.886 ms

Loss rate: 1.32%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-18 02:37:36

End at: 2018-02-18 02:38:06

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.51 Mbit/s

95th percentile per-packet one-way delay: 163.311 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 1.93 Mbit/s

95th percentile per-packet one-way delay: 163.240 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 1.20 Mbit/s

95th percentile per-packet one-way delay: 163.357 ms

Loss rate: 0.34%

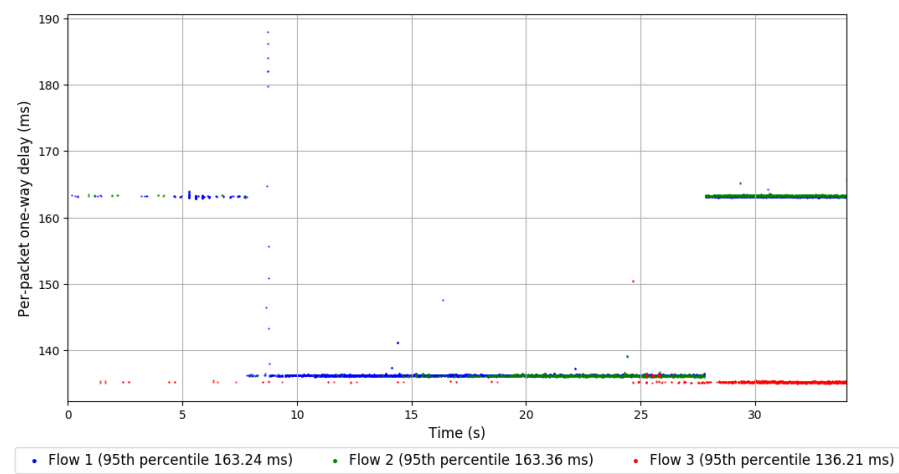
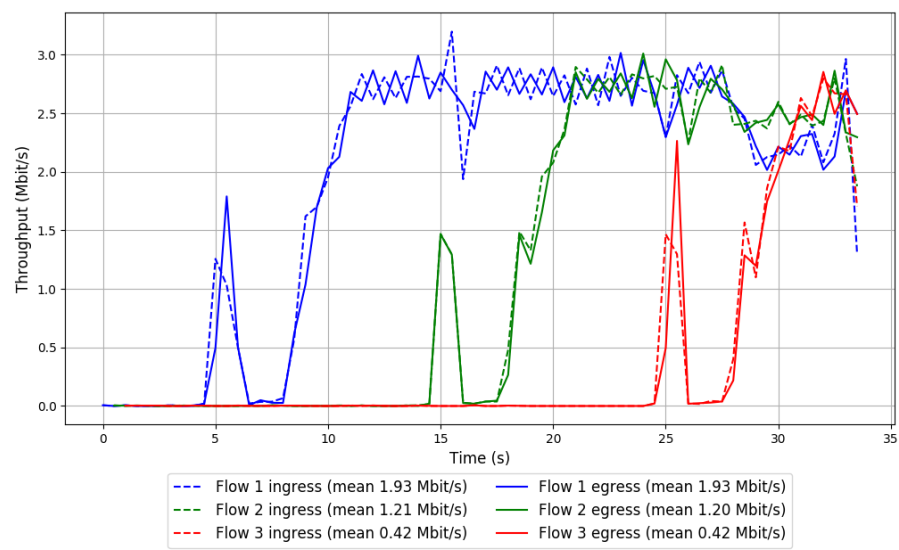
-- Flow 3:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 136.205 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-18 02:58:10

End at: 2018-02-18 02:58:40

Below is generated by plot.py at 2018-02-18 05:56:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.40 Mbit/s

95th percentile per-packet one-way delay: 163.339 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 1.96 Mbit/s

95th percentile per-packet one-way delay: 162.918 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.13 Mbit/s

95th percentile per-packet one-way delay: 163.381 ms

Loss rate: 0.00%

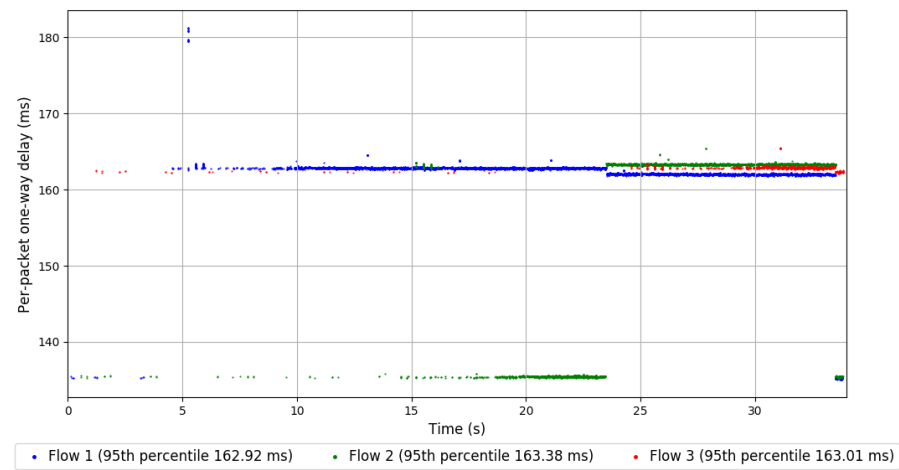
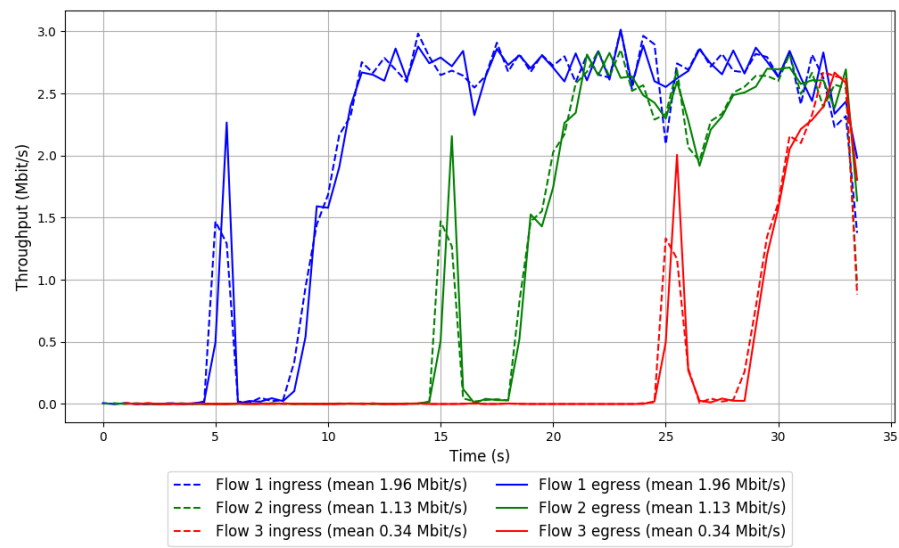
-- Flow 3:

Average throughput: 0.34 Mbit/s

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

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-18 03:18:36

End at: 2018-02-18 03:19:06

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 3.55 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 136.204 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 162.646 ms

Loss rate: 0.00%

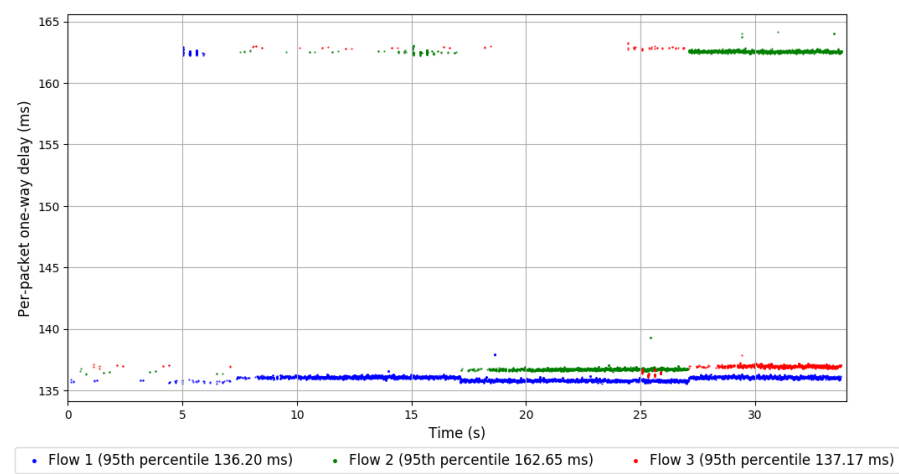
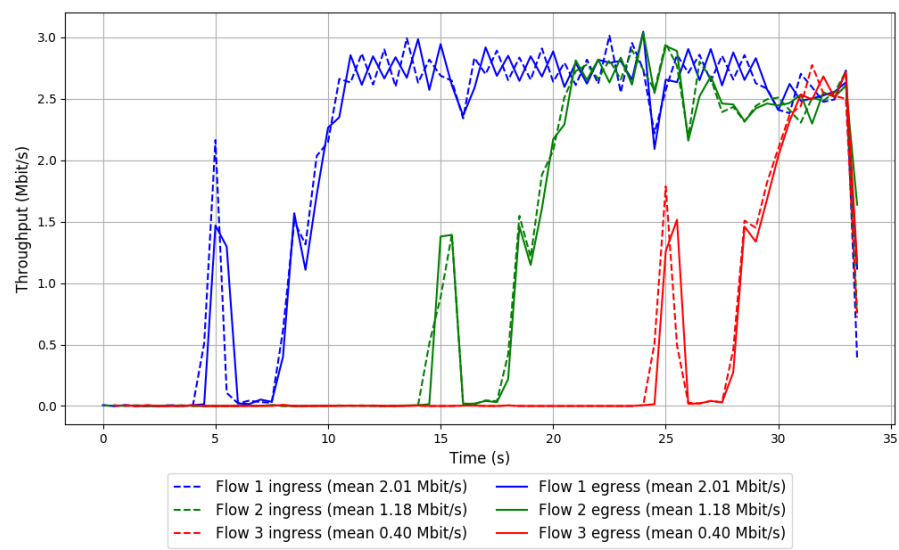
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.169 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

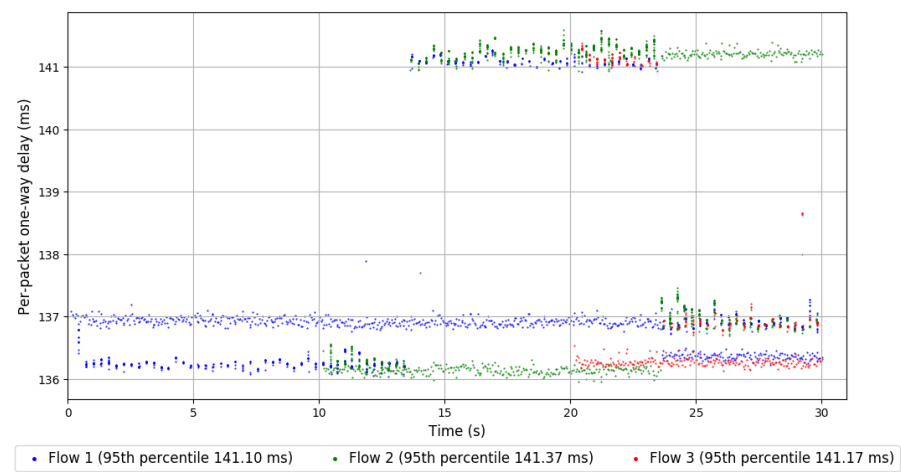
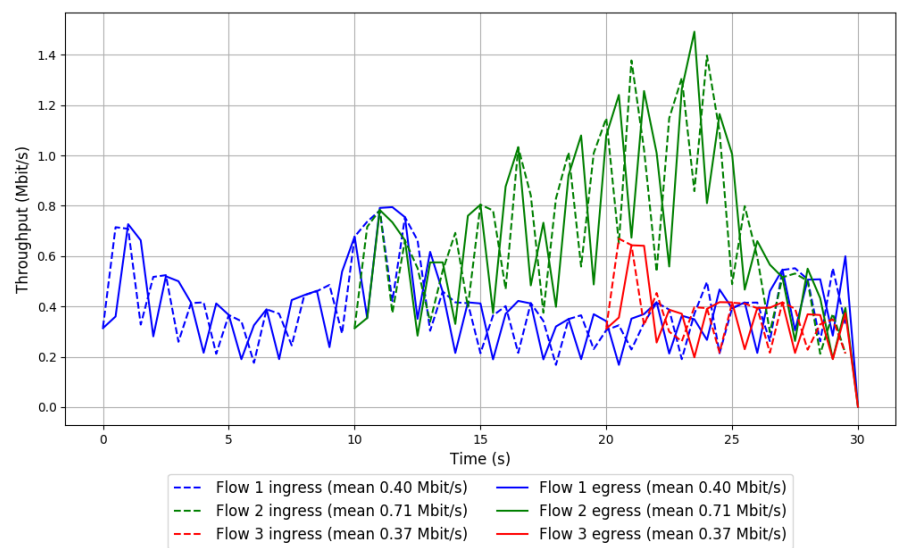


```
Run 1: Statistics of Sprout

Start at: 2018-02-18 00:16:46
End at: 2018-02-18 00:17:16

# Below is generated by plot.py at 2018-02-18 05:56:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 141.326 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 141.097 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 141.371 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 141.167 ms
Loss rate: 0.00%
```

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-02-18 00:37:39

End at: 2018-02-18 00:38:09

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.82 Mbit/s

95th percentile per-packet one-way delay: 140.235 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 136.388 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 140.248 ms

Loss rate: 0.00%

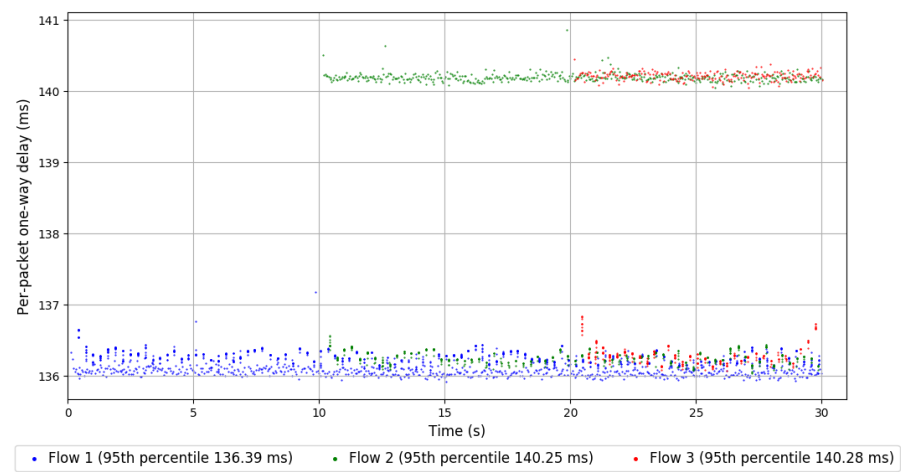
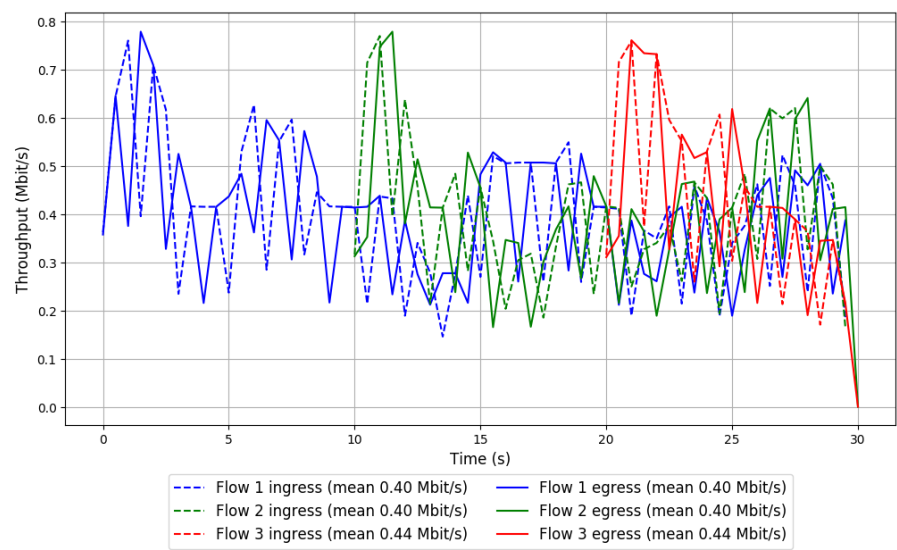
-- Flow 3:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 140.275 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-02-18 00:58:10

End at: 2018-02-18 00:58:40

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.94 Mbit/s

95th percentile per-packet one-way delay: 140.891 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 140.954 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 140.423 ms

Loss rate: 0.00%

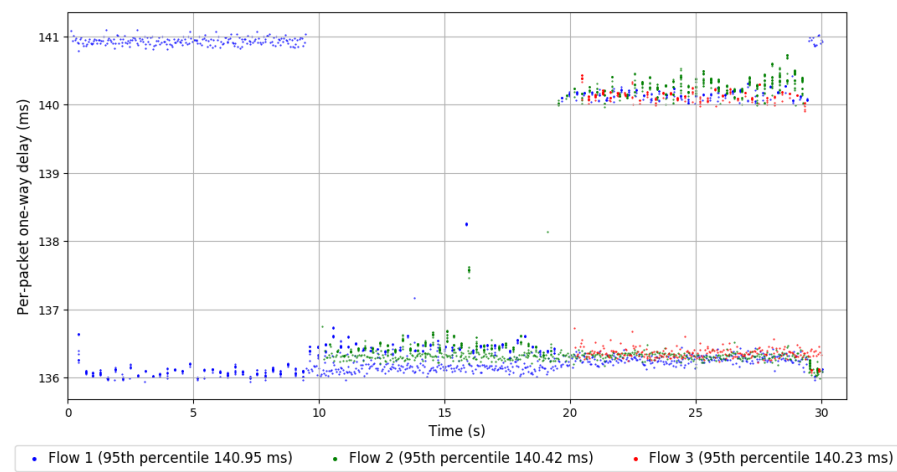
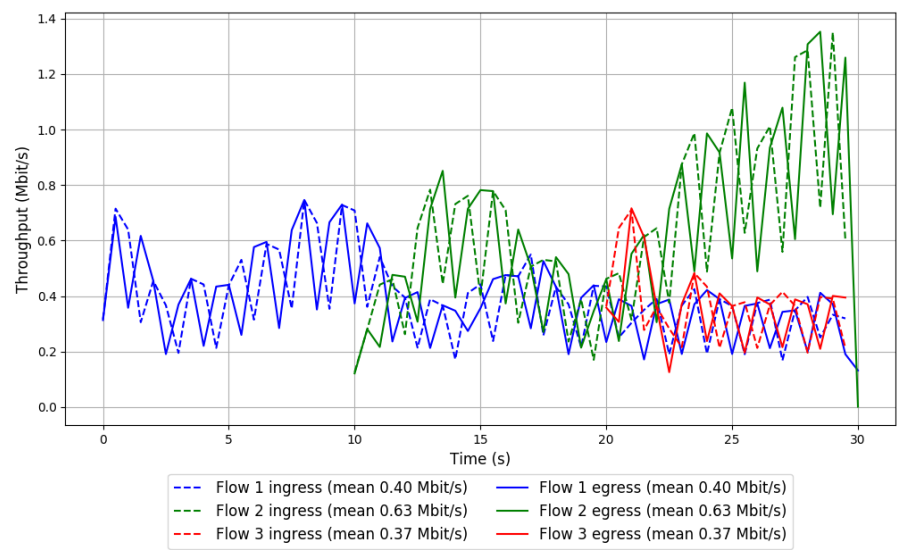
-- Flow 3:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 140.230 ms

Loss rate: 0.00%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-18 01:18:53

End at: 2018-02-18 01:19:23

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 1.02 Mbit/s

95th percentile per-packet one-way delay: 140.982 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 141.019 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 140.923 ms

Loss rate: 0.00%

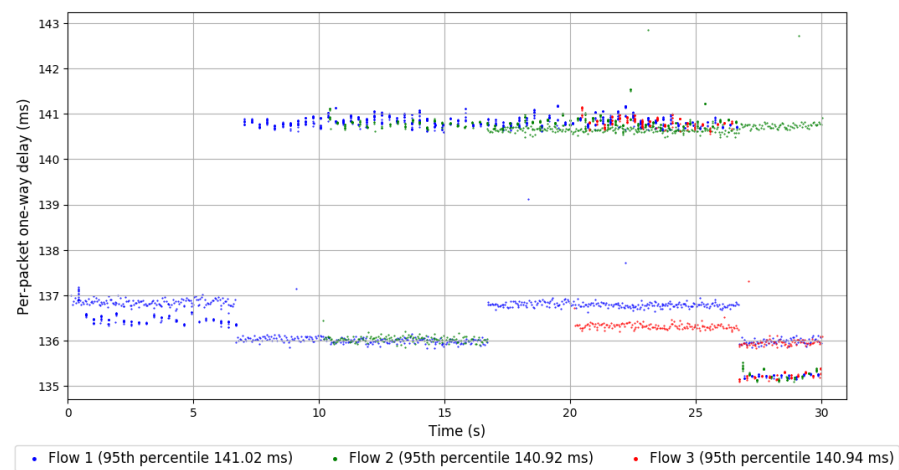
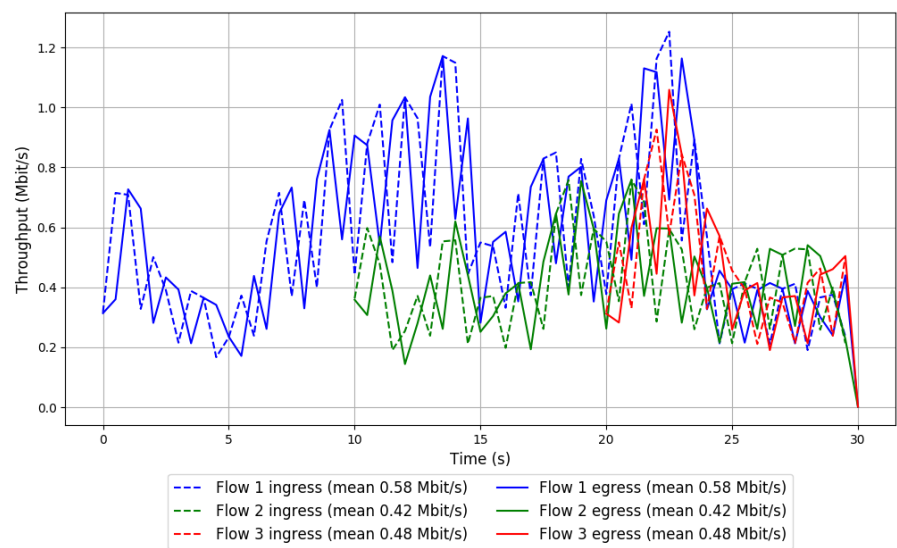
-- Flow 3:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 140.936 ms

Loss rate: 0.00%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-18 01:39:25

End at: 2018-02-18 01:39:55

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.79 Mbit/s

95th percentile per-packet one-way delay: 137.083 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 137.026 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 140.782 ms

Loss rate: 0.00%

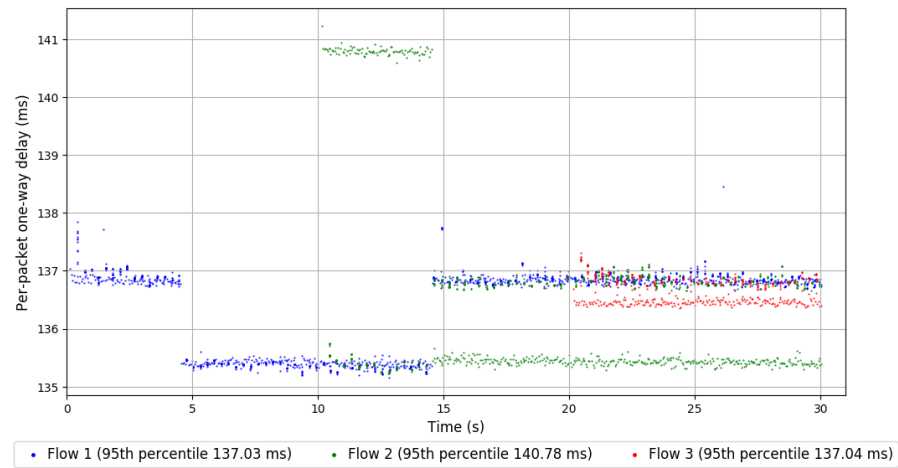
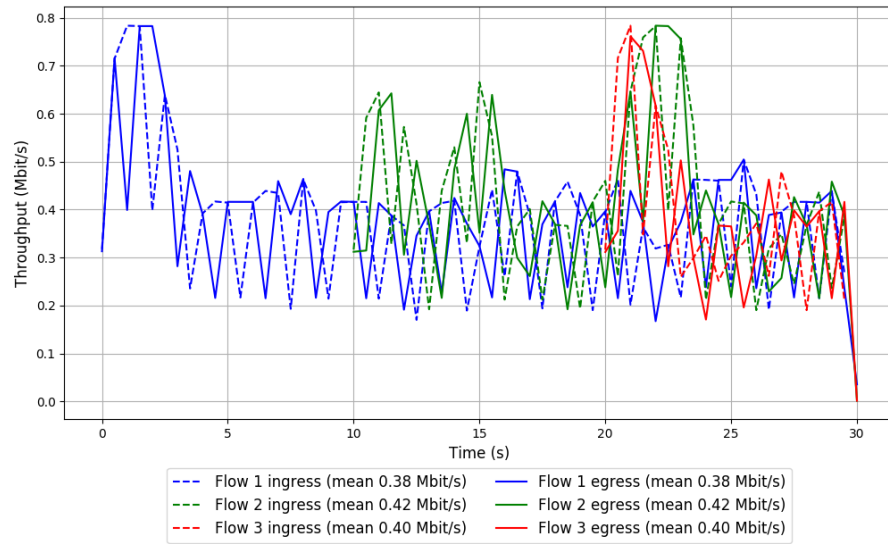
-- Flow 3:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 137.037 ms

Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-18 02:00:01

End at: 2018-02-18 02:00:31

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.72 Mbit/s

95th percentile per-packet one-way delay: 161.876 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 161.892 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 161.856 ms

Loss rate: 0.10%

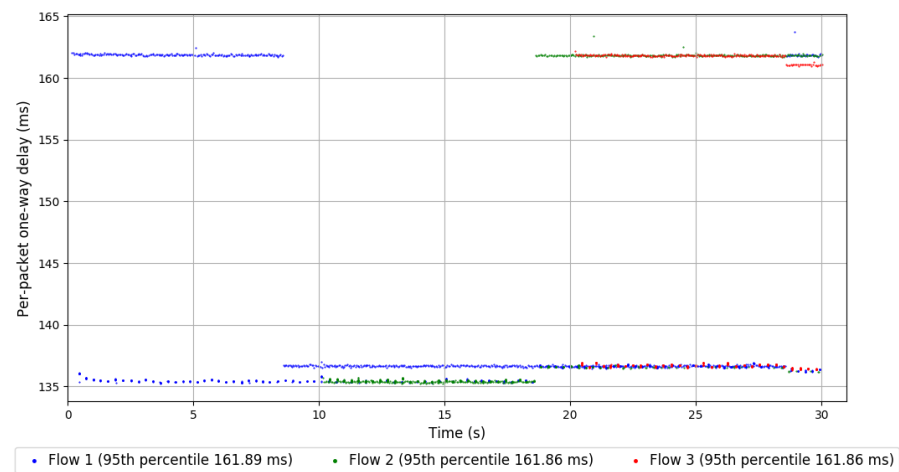
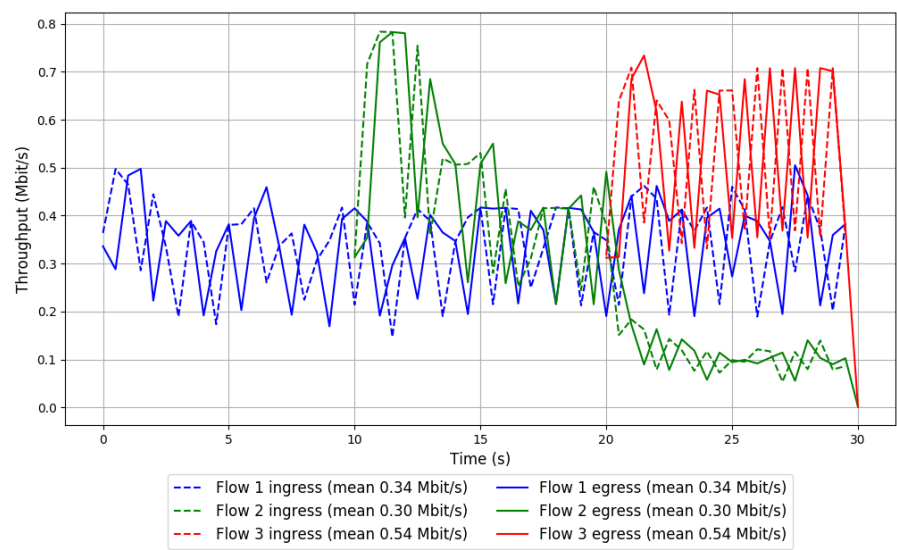
-- Flow 3:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 161.861 ms

Loss rate: 0.00%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-18 02:20:21

End at: 2018-02-18 02:20:51

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 162.707 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 162.700 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 162.740 ms

Loss rate: 0.00%

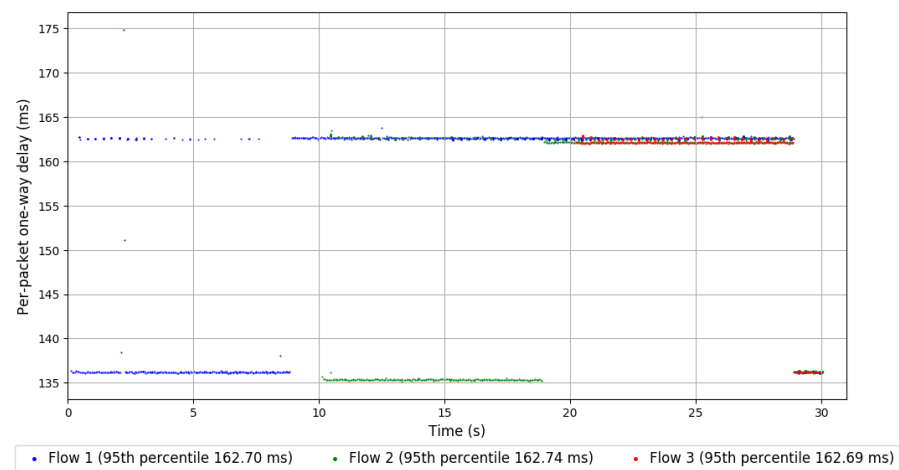
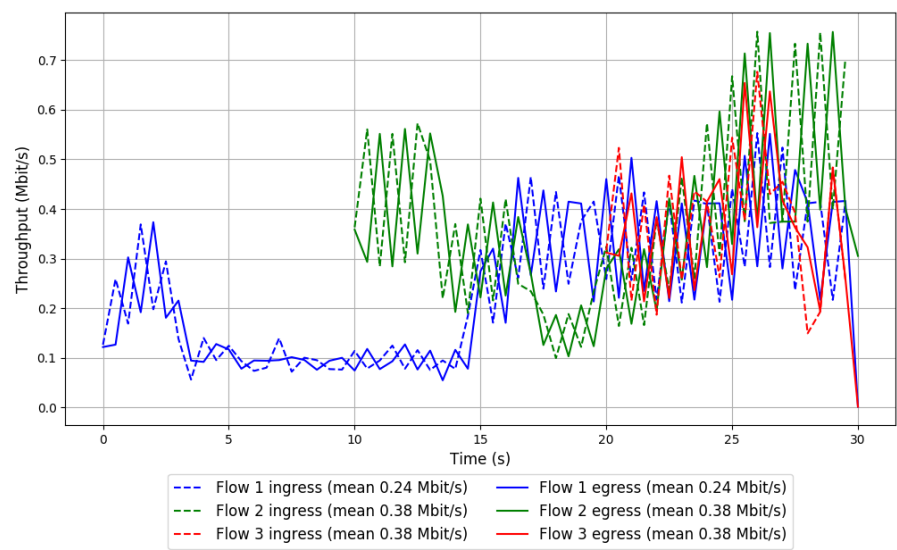
-- Flow 3:

Average throughput: 0.38 Mbit/s

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

Loss rate: 0.00%

Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-18 02:40:58

End at: 2018-02-18 02:41:28

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.75 Mbit/s

95th percentile per-packet one-way delay: 163.250 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.42 Mbit/s

95th percentile per-packet one-way delay: 163.265 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 163.231 ms

Loss rate: 0.00%

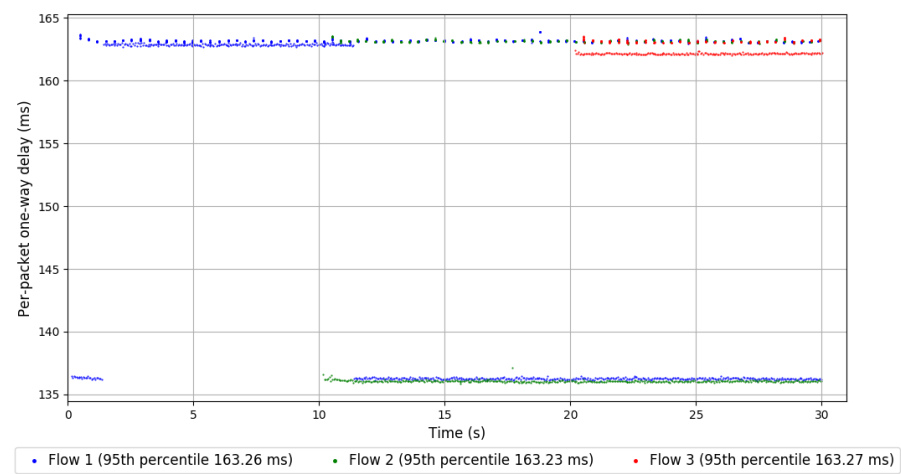
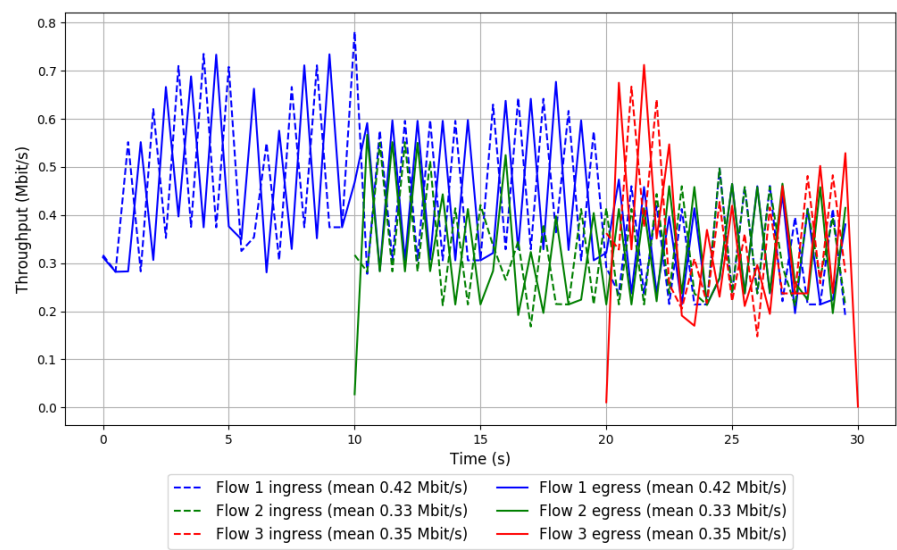
-- Flow 3:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 163.272 ms

Loss rate: 0.00%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-18 03:01:32

End at: 2018-02-18 03:02:02

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 162.938 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 162.953 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 162.923 ms

Loss rate: 0.00%

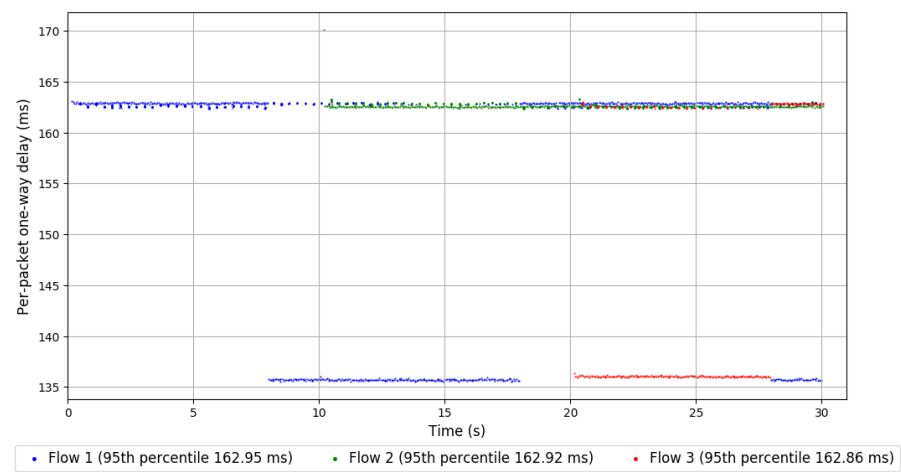
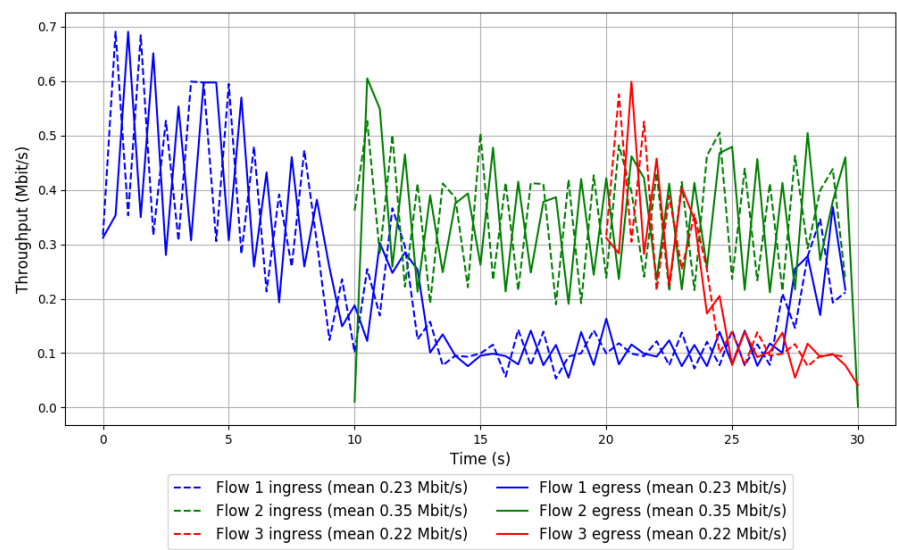
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 162.858 ms

Loss rate: 0.00%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2018-02-18 03:21:50

End at: 2018-02-18 03:22:20

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 162.765 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 162.442 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 162.821 ms

Loss rate: 0.00%

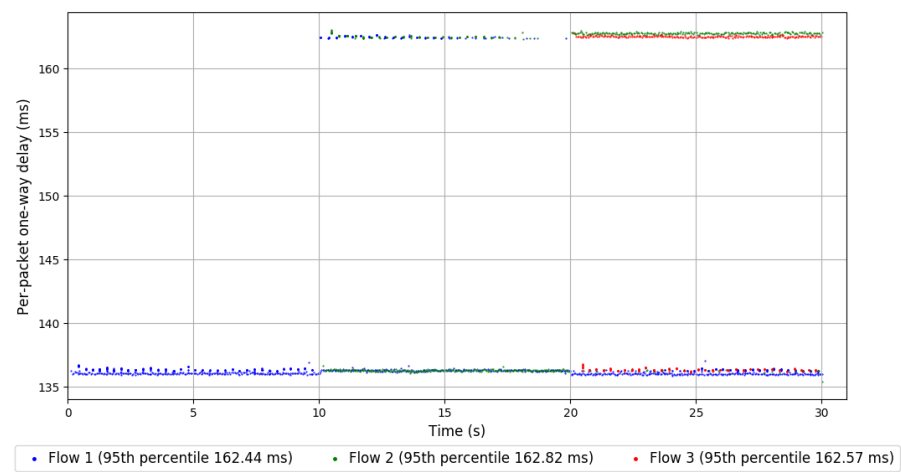
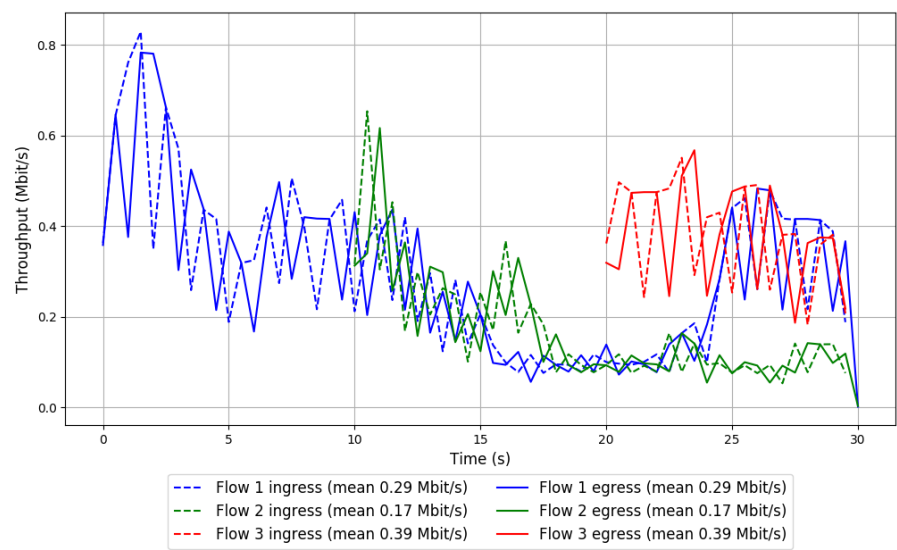
-- Flow 3:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 162.574 ms

Loss rate: 0.02%

Run 10: Report of Sprout — Data Link

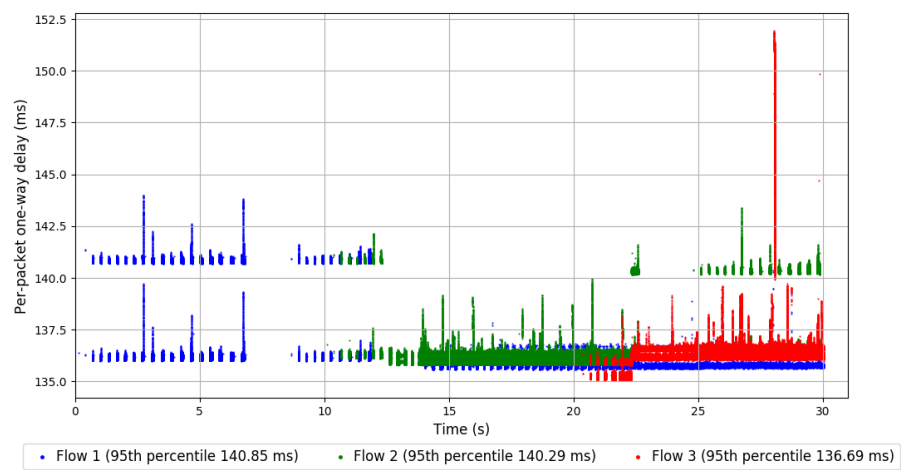
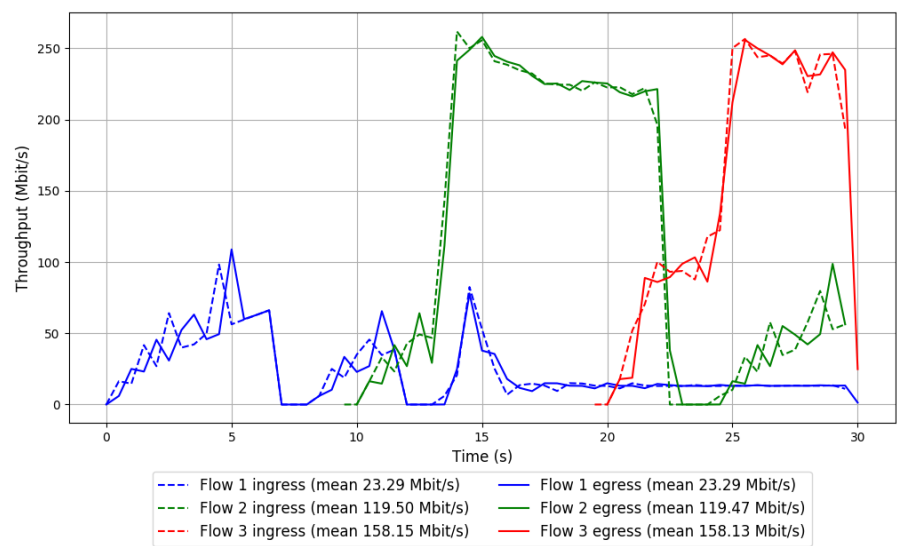


```
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-18 00:02:07
End at: 2018-02-18 00:02:37

# Below is generated by plot.py at 2018-02-18 05:56:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 154.74 Mbit/s
95th percentile per-packet one-way delay: 140.732 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.29 Mbit/s
95th percentile per-packet one-way delay: 140.855 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 119.47 Mbit/s
95th percentile per-packet one-way delay: 140.294 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 158.13 Mbit/s
95th percentile per-packet one-way delay: 136.691 ms
Loss rate: 0.01%
```


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

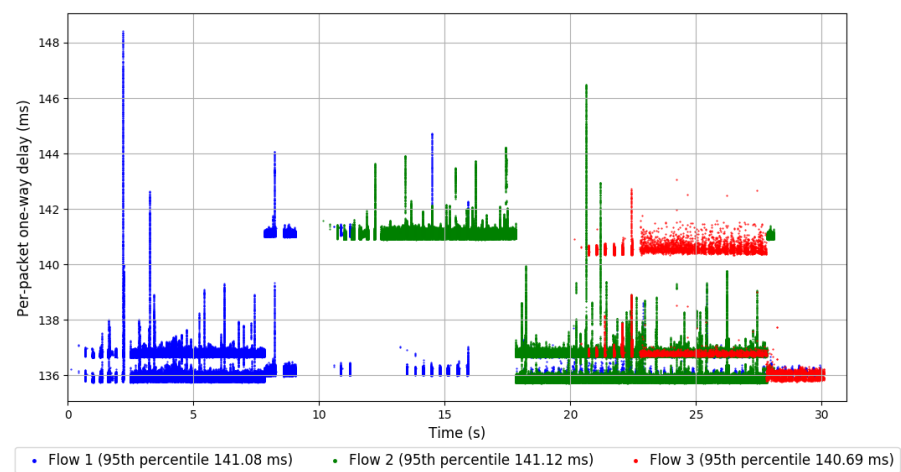
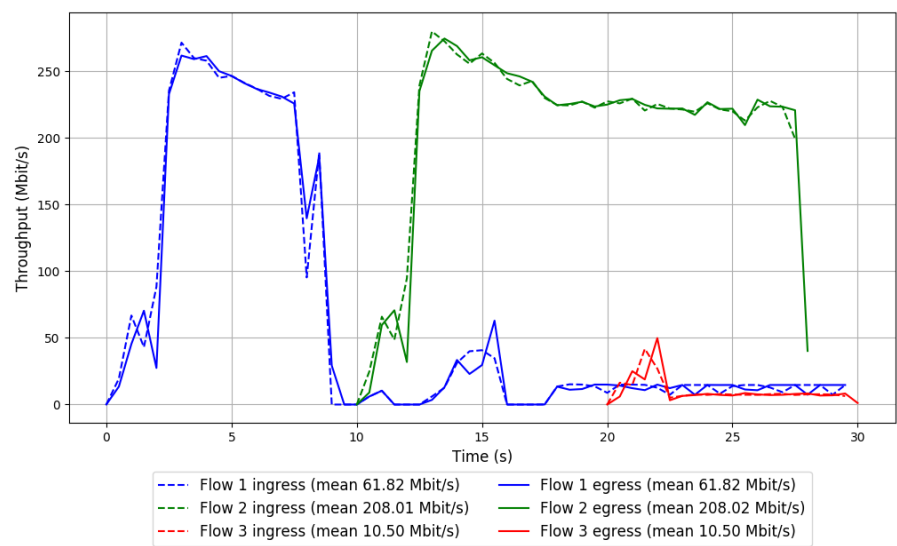


```
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-18 00:22:22
End at: 2018-02-18 00:22:52

# Below is generated by plot.py at 2018-02-18 05:56:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 189.60 Mbit/s
95th percentile per-packet one-way delay: 141.113 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.82 Mbit/s
95th percentile per-packet one-way delay: 141.081 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 208.02 Mbit/s
95th percentile per-packet one-way delay: 141.124 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.50 Mbit/s
95th percentile per-packet one-way delay: 140.686 ms
Loss rate: 0.00%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-02-18 00:43:10

End at: 2018-02-18 00:43:40

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 189.06 Mbit/s

95th percentile per-packet one-way delay: 140.648 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 171.11 Mbit/s

95th percentile per-packet one-way delay: 140.694 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.17 Mbit/s

95th percentile per-packet one-way delay: 140.591 ms

Loss rate: 0.00%

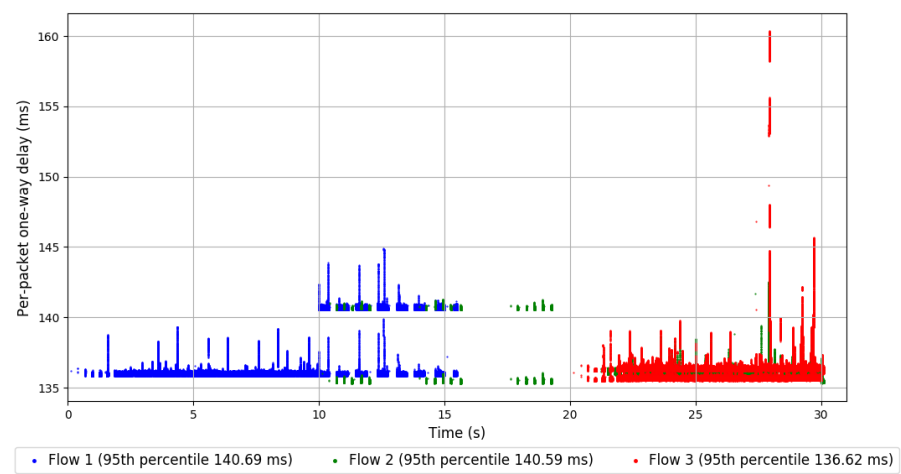
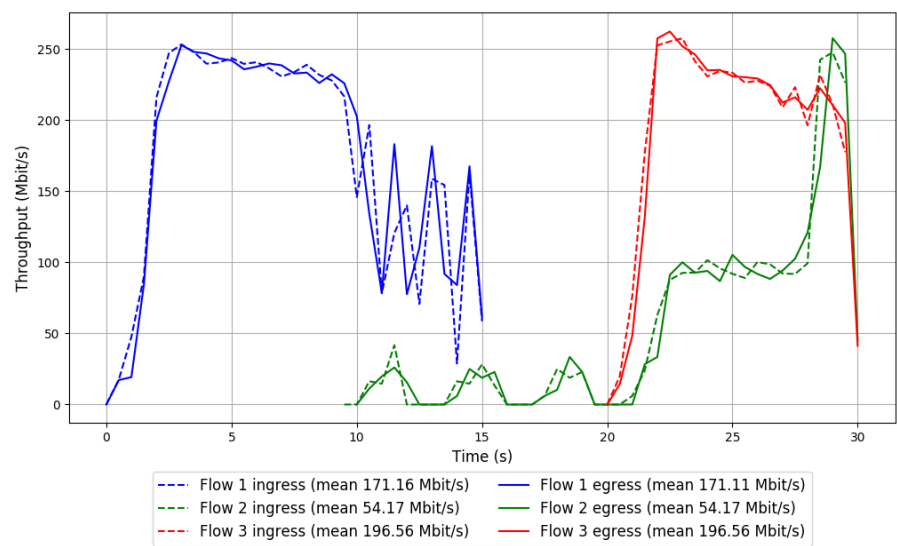
-- Flow 3:

Average throughput: 196.56 Mbit/s

95th percentile per-packet one-way delay: 136.619 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-18 01:03:44

End at: 2018-02-18 01:04:14

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 186.10 Mbit/s

95th percentile per-packet one-way delay: 140.051 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 162.18 Mbit/s

95th percentile per-packet one-way delay: 136.344 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 33.40 Mbit/s

95th percentile per-packet one-way delay: 140.579 ms

Loss rate: 0.00%

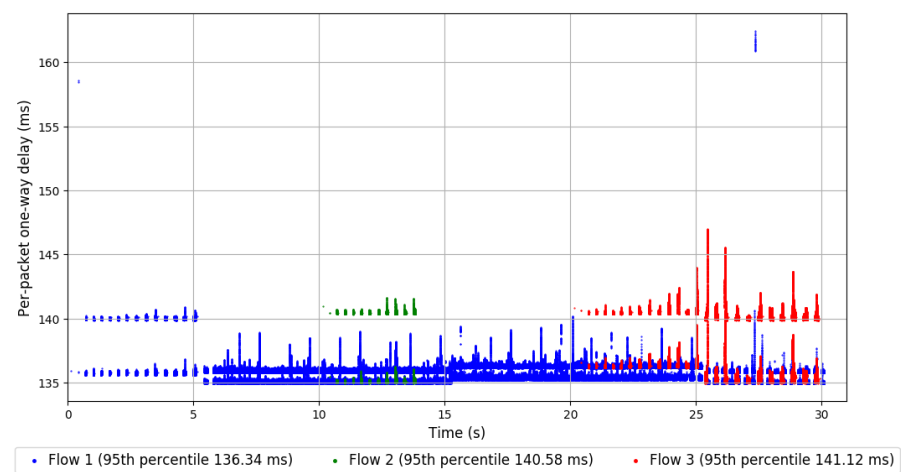
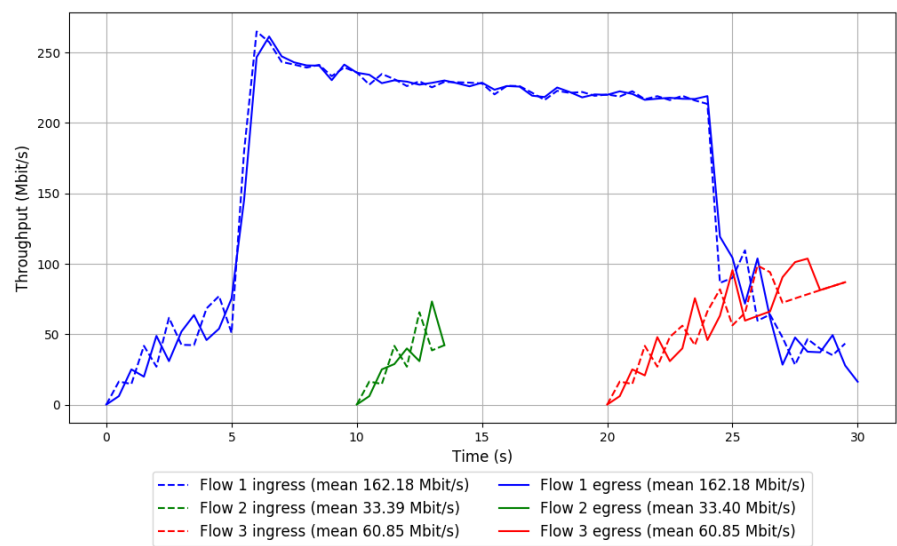
-- Flow 3:

Average throughput: 60.85 Mbit/s

95th percentile per-packet one-way delay: 141.122 ms

Loss rate: 0.00%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-18 01:24:33

End at: 2018-02-18 01:25:03

Below is generated by plot.py at 2018-02-18 05:56:57

Datalink statistics

-- Total of 3 flows:

Average throughput: 150.04 Mbit/s

95th percentile per-packet one-way delay: 140.724 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 13.02 Mbit/s

95th percentile per-packet one-way delay: 141.089 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 204.94 Mbit/s

95th percentile per-packet one-way delay: 140.707 ms

Loss rate: 0.03%

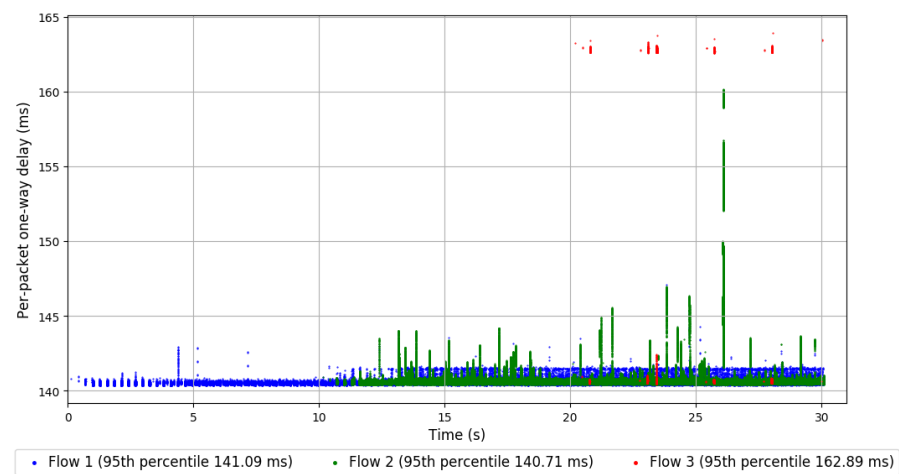
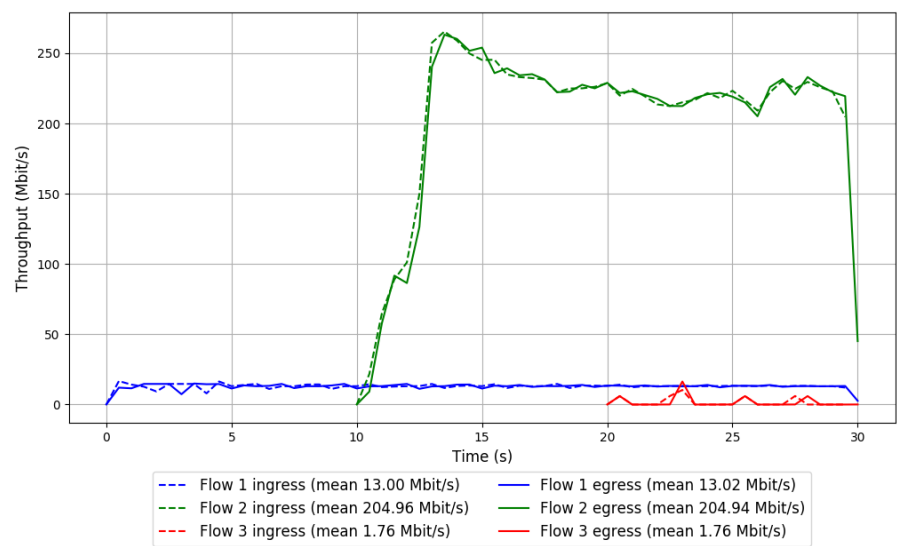
-- Flow 3:

Average throughput: 1.76 Mbit/s

95th percentile per-packet one-way delay: 162.888 ms

Loss rate: 0.00%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-18 01:45:02

End at: 2018-02-18 01:45:32

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 246.65 Mbit/s

95th percentile per-packet one-way delay: 136.827 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 199.41 Mbit/s

95th percentile per-packet one-way delay: 136.774 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 58.89 Mbit/s

95th percentile per-packet one-way delay: 138.001 ms

Loss rate: 0.03%

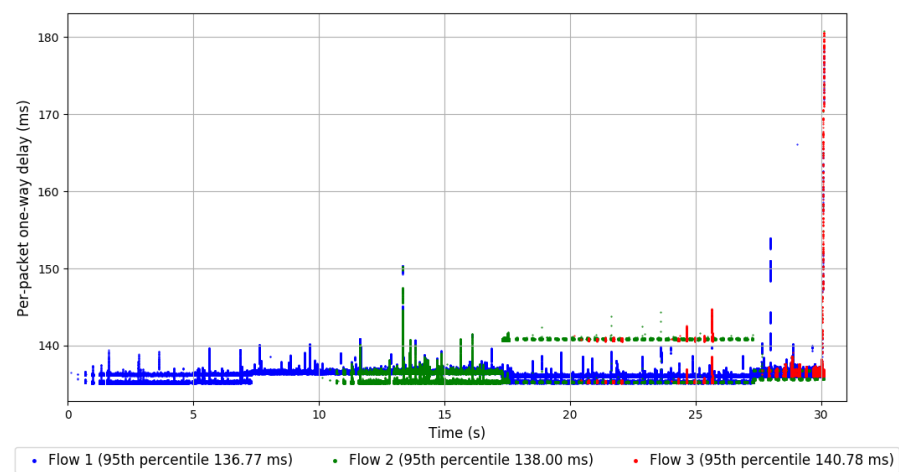
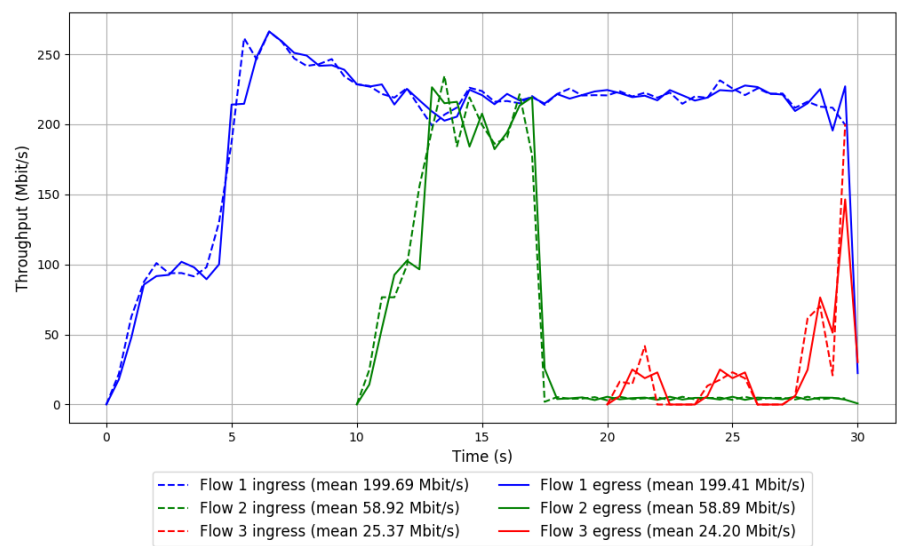
-- Flow 3:

Average throughput: 24.20 Mbit/s

95th percentile per-packet one-way delay: 140.781 ms

Loss rate: 4.66%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-18 02:05:43

End at: 2018-02-18 02:06:13

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.09 Mbit/s

95th percentile per-packet one-way delay: 162.819 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 25.52 Mbit/s

95th percentile per-packet one-way delay: 162.800 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 4.31 Mbit/s

95th percentile per-packet one-way delay: 164.678 ms

Loss rate: 0.24%

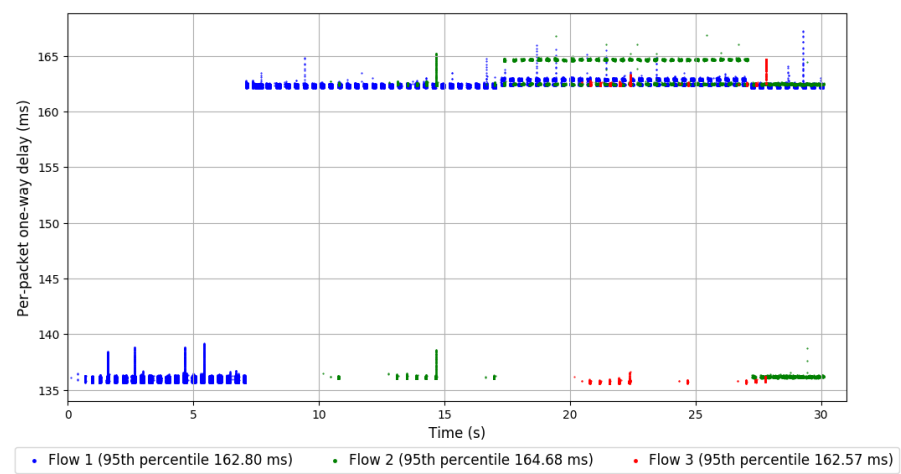
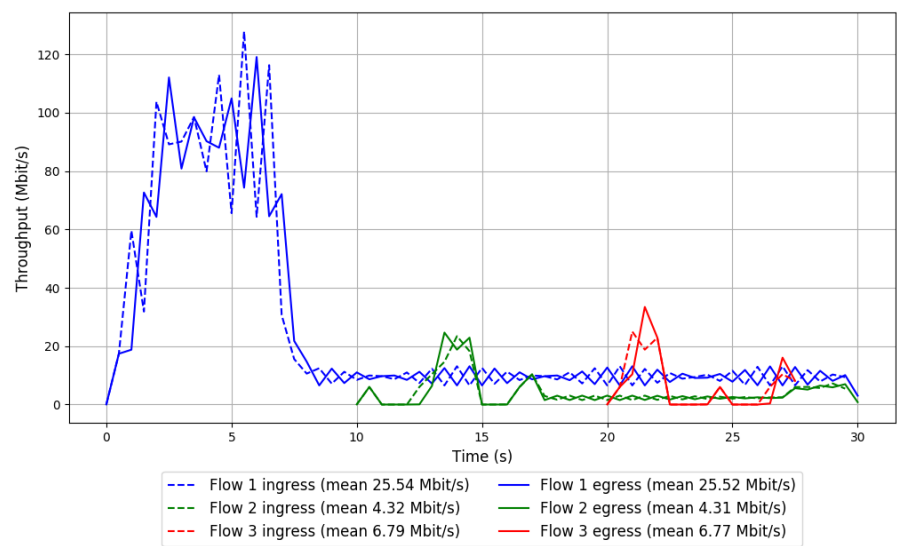
-- Flow 3:

Average throughput: 6.77 Mbit/s

95th percentile per-packet one-way delay: 162.569 ms

Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-18 02:26:02

End at: 2018-02-18 02:26:33

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 143.71 Mbit/s

95th percentile per-packet one-way delay: 162.670 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 137.47 Mbit/s

95th percentile per-packet one-way delay: 162.657 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 8.25 Mbit/s

95th percentile per-packet one-way delay: 162.849 ms

Loss rate: 0.01%

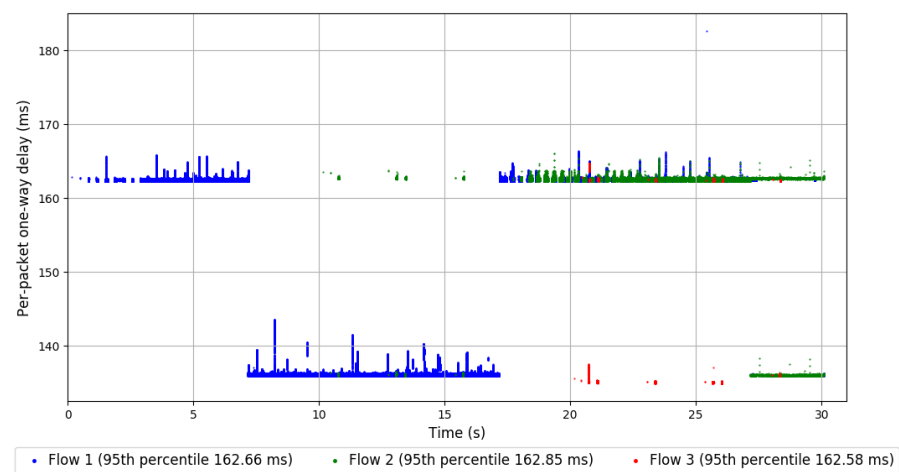
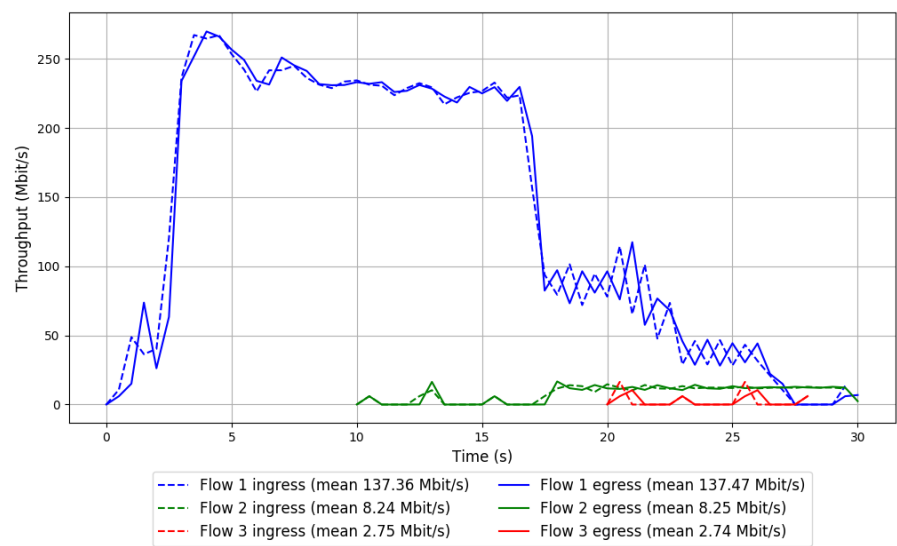
-- Flow 3:

Average throughput: 2.74 Mbit/s

95th percentile per-packet one-way delay: 162.578 ms

Loss rate: 0.00%

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

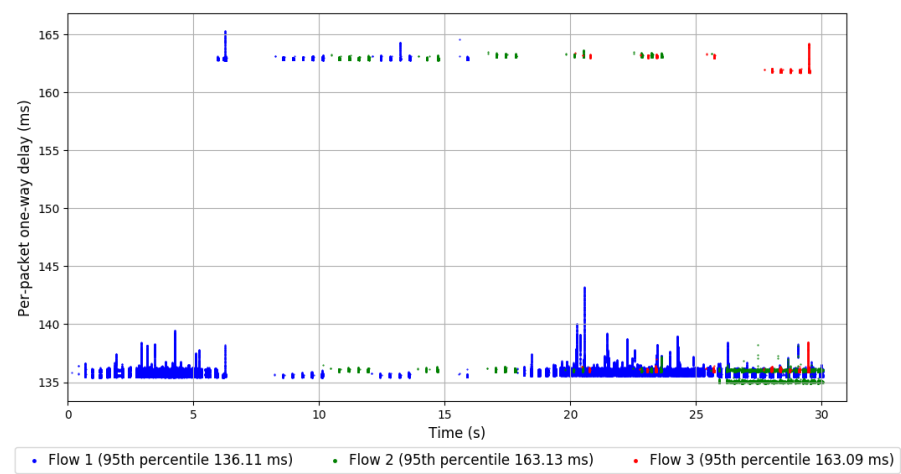
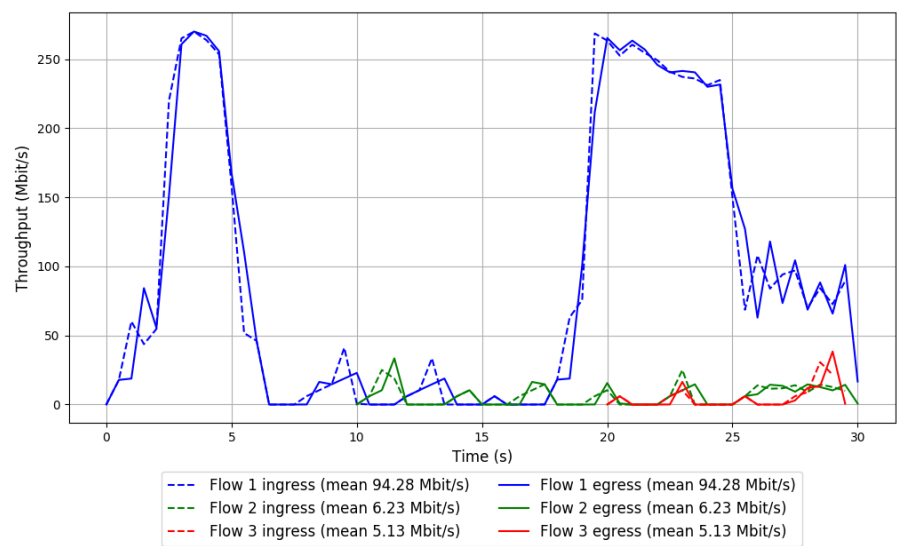


```
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-18 02:46:44
End at: 2018-02-18 02:47:14

# Below is generated by plot.py at 2018-02-18 05:59:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 99.97 Mbit/s
95th percentile per-packet one-way delay: 136.289 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 94.28 Mbit/s
95th percentile per-packet one-way delay: 136.107 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.23 Mbit/s
95th percentile per-packet one-way delay: 163.135 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.13 Mbit/s
95th percentile per-packet one-way delay: 163.088 ms
Loss rate: 0.00%
```


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

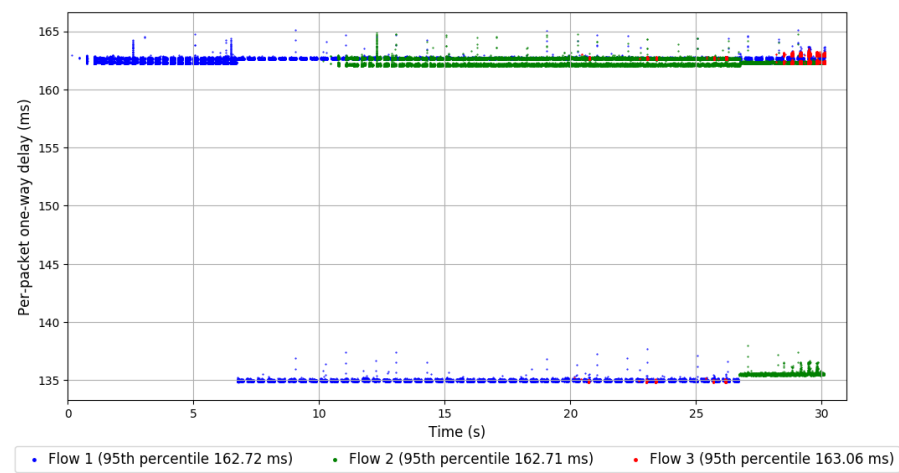
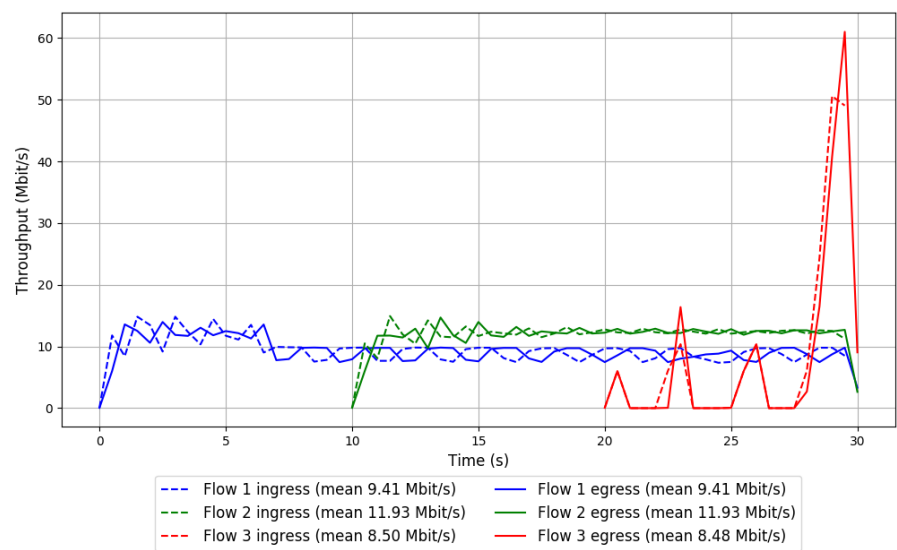


```
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-18 03:07:13
End at: 2018-02-18 03:07:43

# Below is generated by plot.py at 2018-02-18 05:59:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.18 Mbit/s
95th percentile per-packet one-way delay: 162.925 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 9.41 Mbit/s
95th percentile per-packet one-way delay: 162.719 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.93 Mbit/s
95th percentile per-packet one-way delay: 162.708 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.48 Mbit/s
95th percentile per-packet one-way delay: 163.063 ms
Loss rate: 0.01%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-18 00:08:03

End at: 2018-02-18 00:08:33

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.03 Mbit/s

95th percentile per-packet one-way delay: 150.906 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 29.00 Mbit/s

95th percentile per-packet one-way delay: 149.786 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 38.11 Mbit/s

95th percentile per-packet one-way delay: 151.272 ms

Loss rate: 0.00%

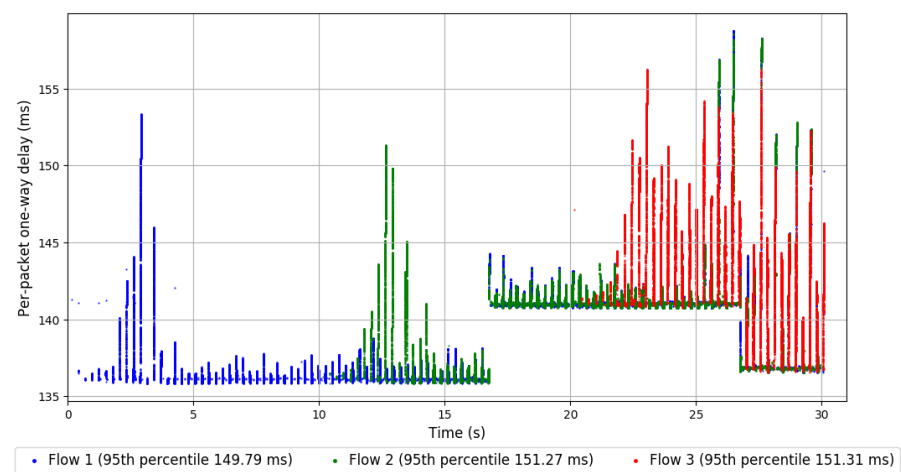
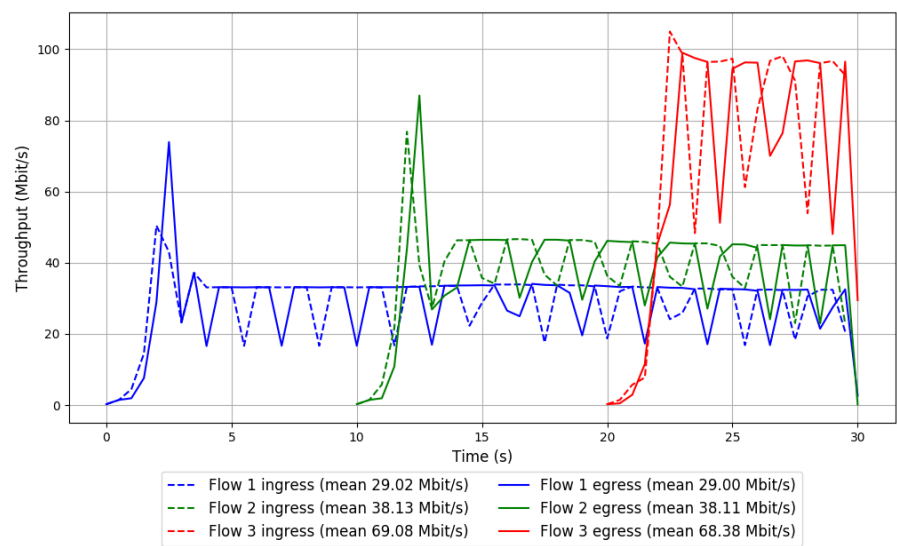
-- Flow 3:

Average throughput: 68.38 Mbit/s

95th percentile per-packet one-way delay: 151.313 ms

Loss rate: 1.12%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-18 00:28:35

End at: 2018-02-18 00:29:05

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.95 Mbit/s

95th percentile per-packet one-way delay: 150.154 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.02 Mbit/s

95th percentile per-packet one-way delay: 150.583 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.24 Mbit/s

95th percentile per-packet one-way delay: 142.821 ms

Loss rate: 0.00%

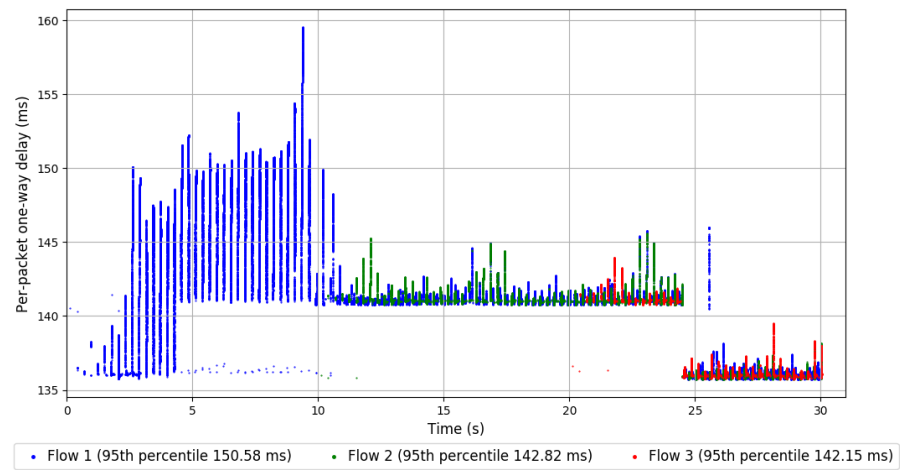
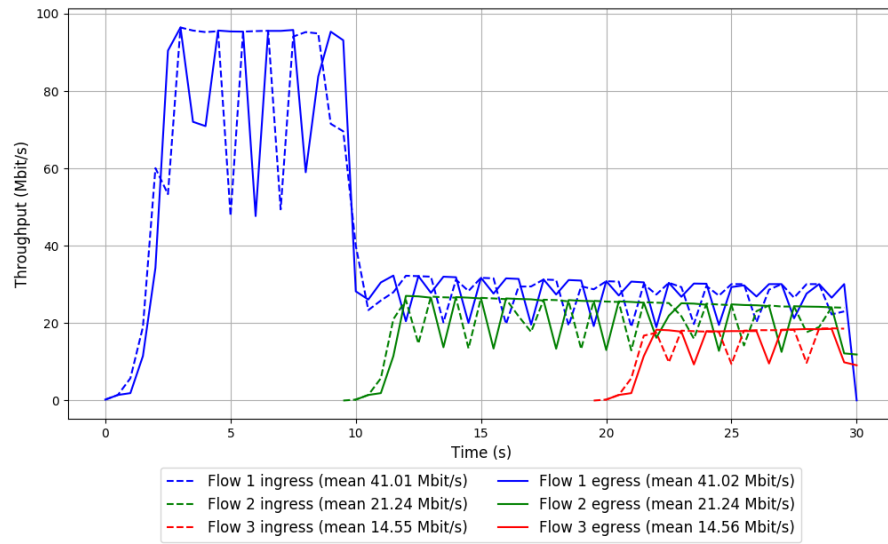
-- Flow 3:

Average throughput: 14.56 Mbit/s

95th percentile per-packet one-way delay: 142.148 ms

Loss rate: 0.00%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-18 00:49:31

End at: 2018-02-18 00:50:01

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 43.23 Mbit/s

95th percentile per-packet one-way delay: 164.834 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 28.35 Mbit/s

95th percentile per-packet one-way delay: 164.789 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 13.72 Mbit/s

95th percentile per-packet one-way delay: 164.857 ms

Loss rate: 0.01%

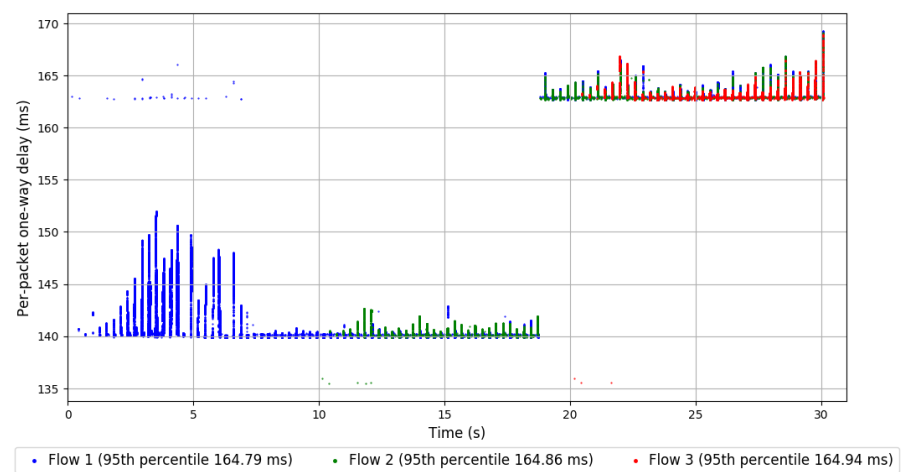
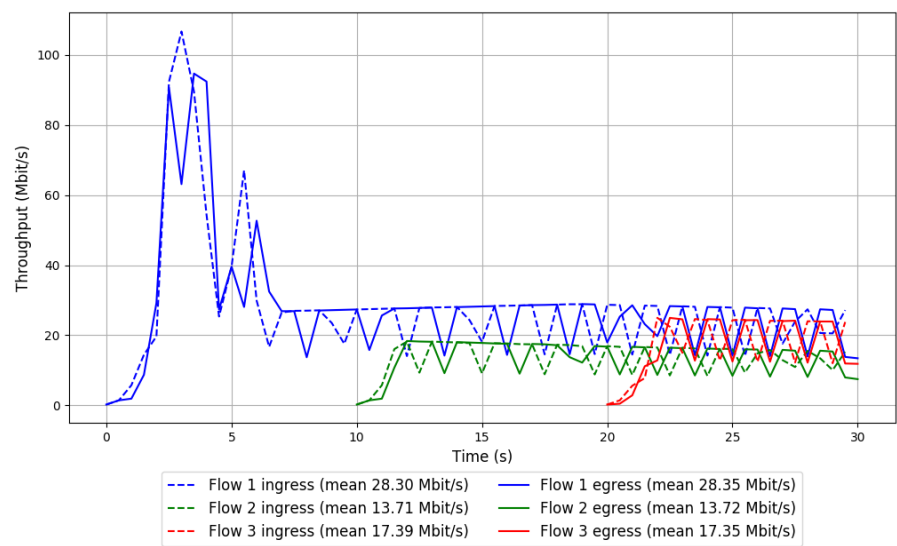
-- Flow 3:

Average throughput: 17.35 Mbit/s

95th percentile per-packet one-way delay: 164.937 ms

Loss rate: 0.00%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-18 01:10:01

End at: 2018-02-18 01:10:31

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 68.93 Mbit/s

95th percentile per-packet one-way delay: 141.347 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 22.04 Mbit/s

95th percentile per-packet one-way delay: 143.665 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.26 Mbit/s

95th percentile per-packet one-way delay: 138.835 ms

Loss rate: 0.00%

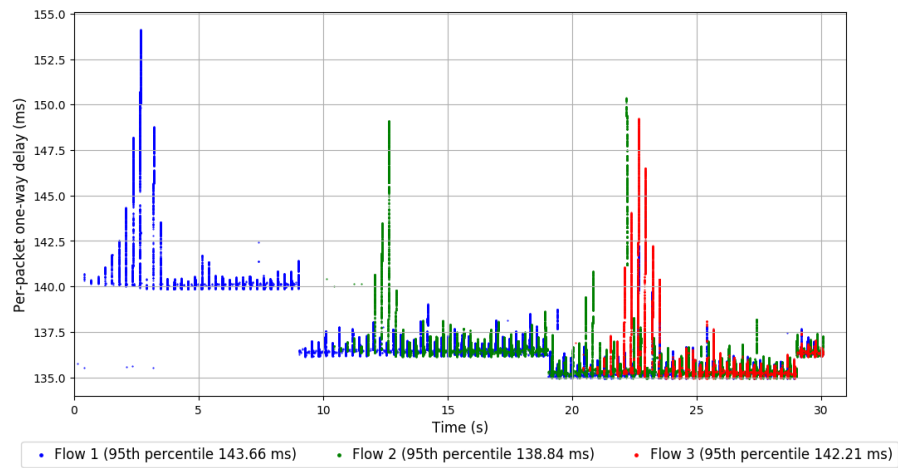
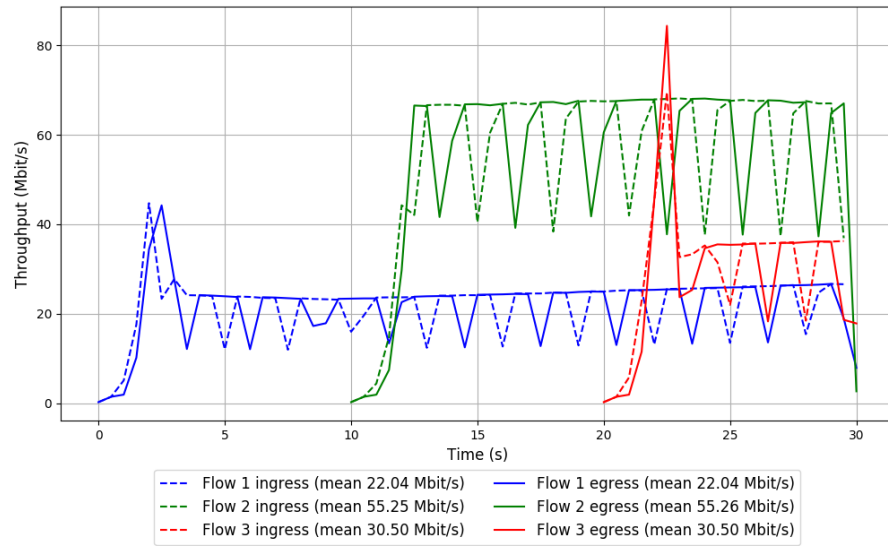
-- Flow 3:

Average throughput: 30.50 Mbit/s

95th percentile per-packet one-way delay: 142.206 ms

Loss rate: 0.00%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-18 01:30:43

End at: 2018-02-18 01:31:13

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 44.23 Mbit/s

95th percentile per-packet one-way delay: 141.121 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 9.78 Mbit/s

95th percentile per-packet one-way delay: 141.259 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 32.75 Mbit/s

95th percentile per-packet one-way delay: 140.260 ms

Loss rate: 0.00%

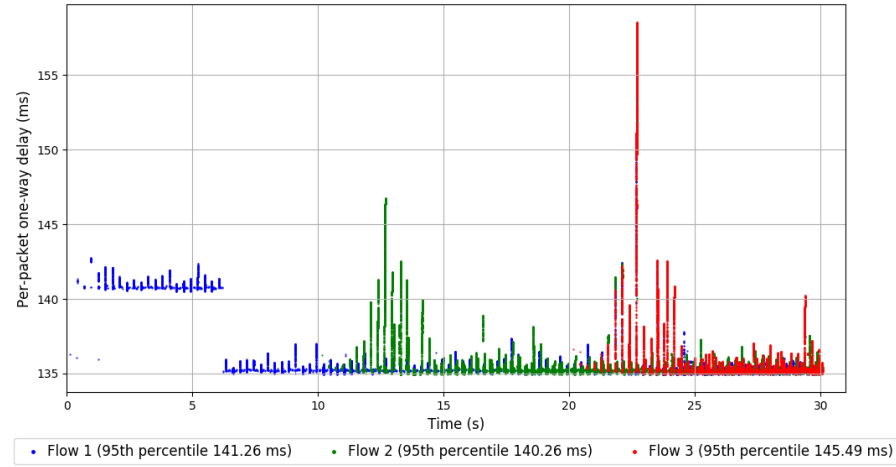
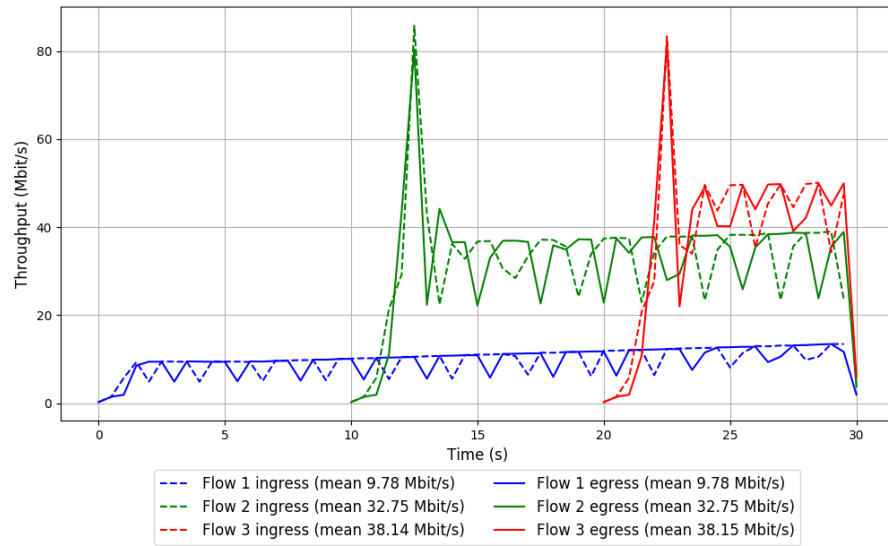
-- Flow 3:

Average throughput: 38.15 Mbit/s

95th percentile per-packet one-way delay: 145.487 ms

Loss rate: 0.00%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-18 01:51:22

End at: 2018-02-18 01:51:52

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.68 Mbit/s

95th percentile per-packet one-way delay: 144.104 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 33.06 Mbit/s

95th percentile per-packet one-way delay: 140.413 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 30.08 Mbit/s

95th percentile per-packet one-way delay: 145.087 ms

Loss rate: 0.00%

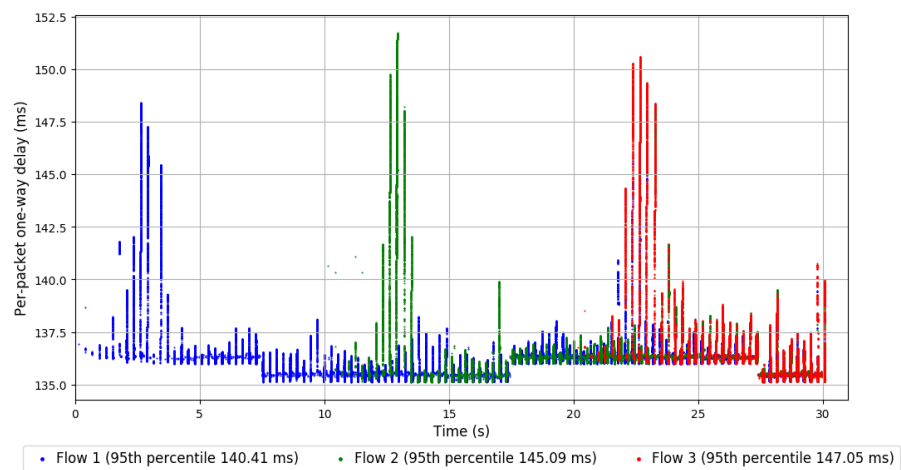
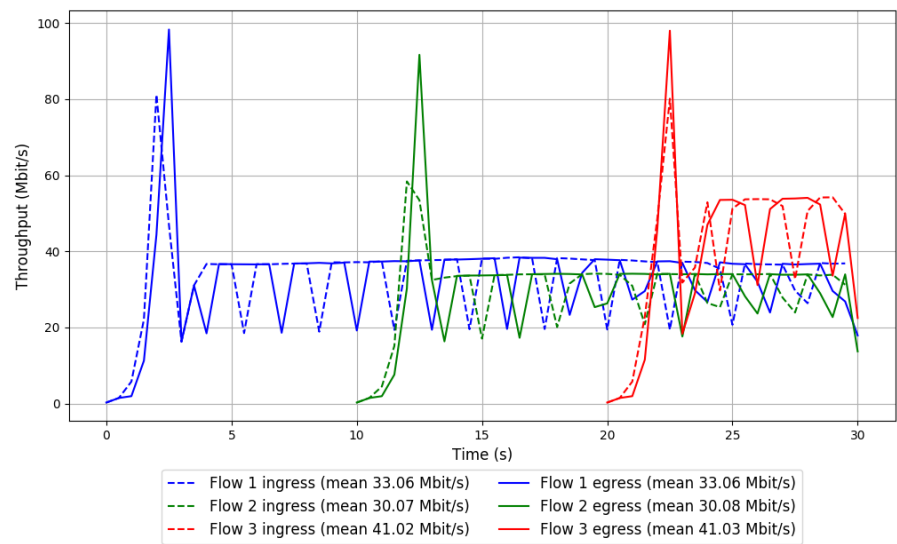
-- Flow 3:

Average throughput: 41.03 Mbit/s

95th percentile per-packet one-way delay: 147.048 ms

Loss rate: 0.01%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-18 02:11:44

End at: 2018-02-18 02:12:14

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 32.60 Mbit/s

95th percentile per-packet one-way delay: 167.161 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 17.33 Mbit/s

95th percentile per-packet one-way delay: 168.002 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 11.28 Mbit/s

95th percentile per-packet one-way delay: 164.335 ms

Loss rate: 0.00%

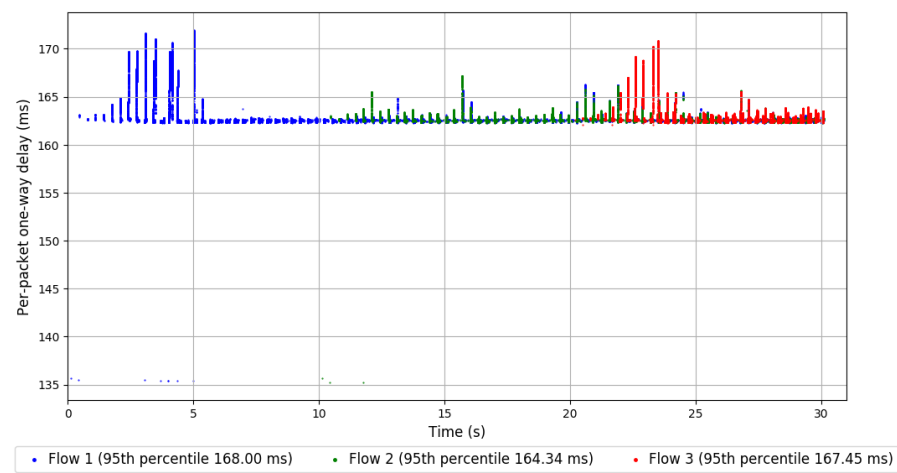
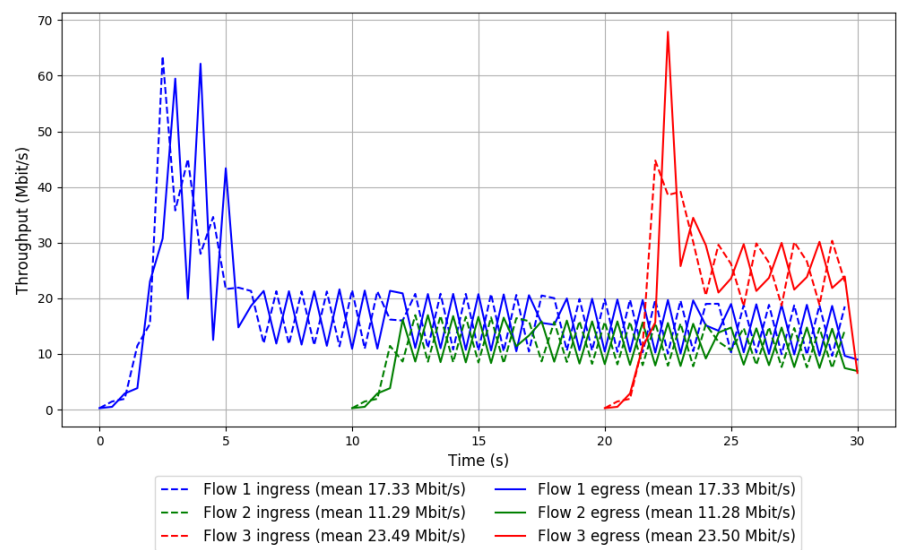
-- Flow 3:

Average throughput: 23.50 Mbit/s

95th percentile per-packet one-way delay: 167.452 ms

Loss rate: 0.25%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-18 02:32:03

End at: 2018-02-18 02:32:33

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.38 Mbit/s

95th percentile per-packet one-way delay: 171.959 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 68.28 Mbit/s

95th percentile per-packet one-way delay: 171.978 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 21.38 Mbit/s

95th percentile per-packet one-way delay: 171.769 ms

Loss rate: 0.14%

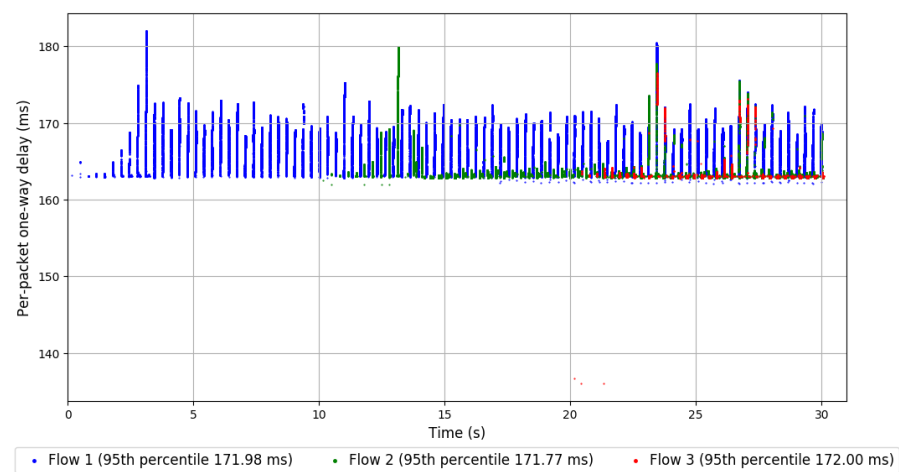
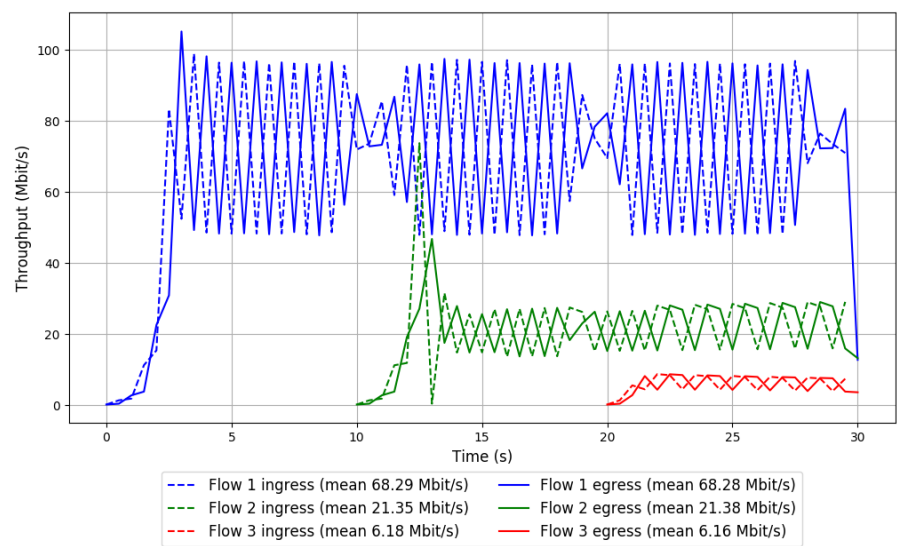
-- Flow 3:

Average throughput: 6.16 Mbit/s

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

Loss rate: 0.00%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-18 02:52:41

End at: 2018-02-18 02:53:11

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 60.86 Mbit/s

95th percentile per-packet one-way delay: 170.161 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 36.75 Mbit/s

95th percentile per-packet one-way delay: 166.231 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 23.62 Mbit/s

95th percentile per-packet one-way delay: 170.937 ms

Loss rate: 0.00%

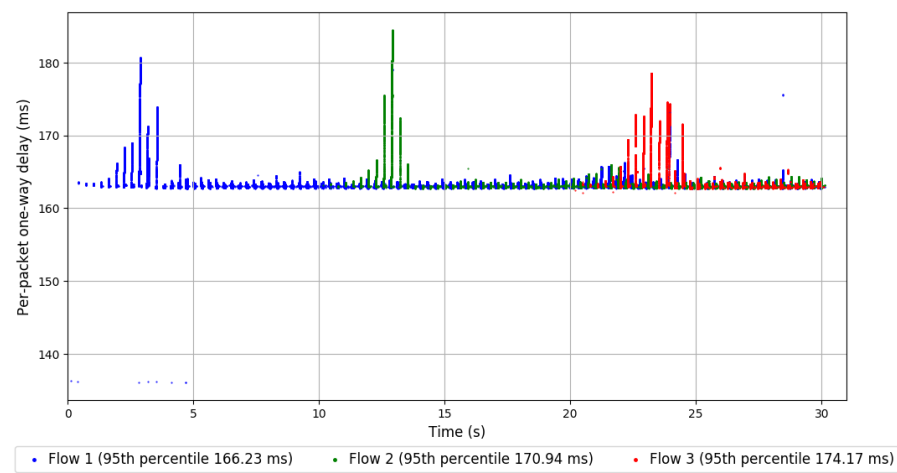
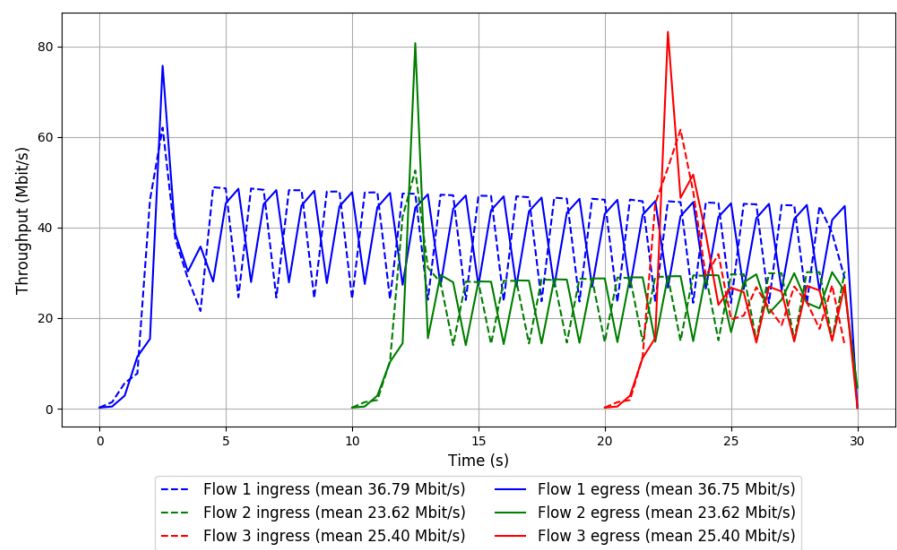
-- Flow 3:

Average throughput: 25.40 Mbit/s

95th percentile per-packet one-way delay: 174.171 ms

Loss rate: 0.00%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-18 03:13:09

End at: 2018-02-18 03:13:39

Below is generated by plot.py at 2018-02-18 05:59:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 33.06 Mbit/s

95th percentile per-packet one-way delay: 167.099 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 5.32 Mbit/s

95th percentile per-packet one-way delay: 163.489 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 25.25 Mbit/s

95th percentile per-packet one-way delay: 165.476 ms

Loss rate: 0.00%

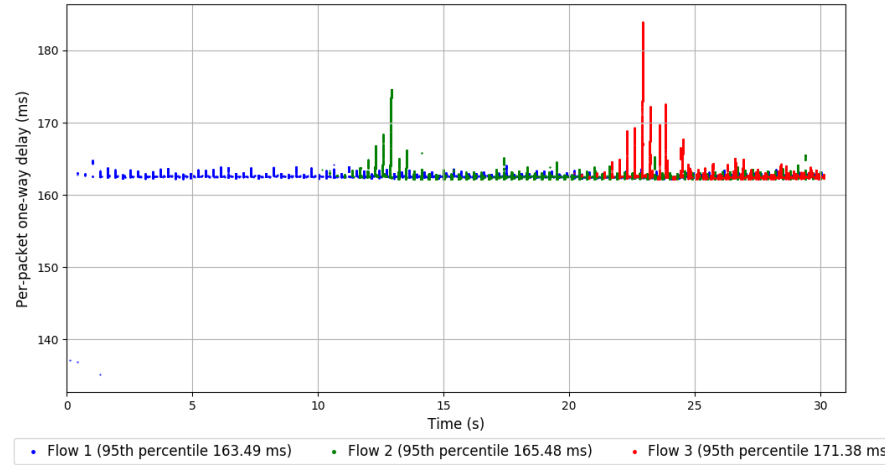
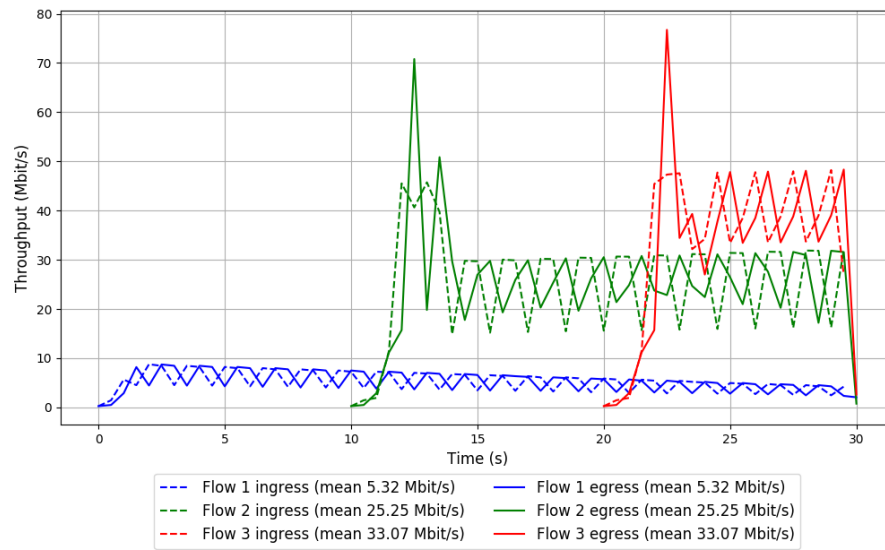
-- Flow 3:

Average throughput: 33.07 Mbit/s

95th percentile per-packet one-way delay: 171.385 ms

Loss rate: 0.00%

Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-02-18 00:03:13

End at: 2018-02-18 00:03:43

Below is generated by plot.py at 2018-02-18 05:59:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 115.40 Mbit/s

95th percentile per-packet one-way delay: 262.593 ms

Loss rate: 3.36%

-- Flow 1:

Average throughput: 70.11 Mbit/s

95th percentile per-packet one-way delay: 323.567 ms

Loss rate: 5.41%

-- Flow 2:

Average throughput: 50.82 Mbit/s

95th percentile per-packet one-way delay: 186.061 ms

Loss rate: 0.00%

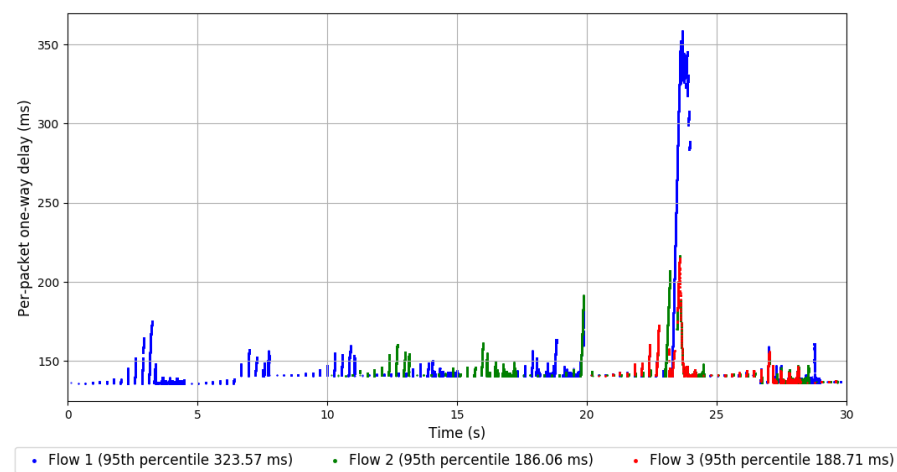
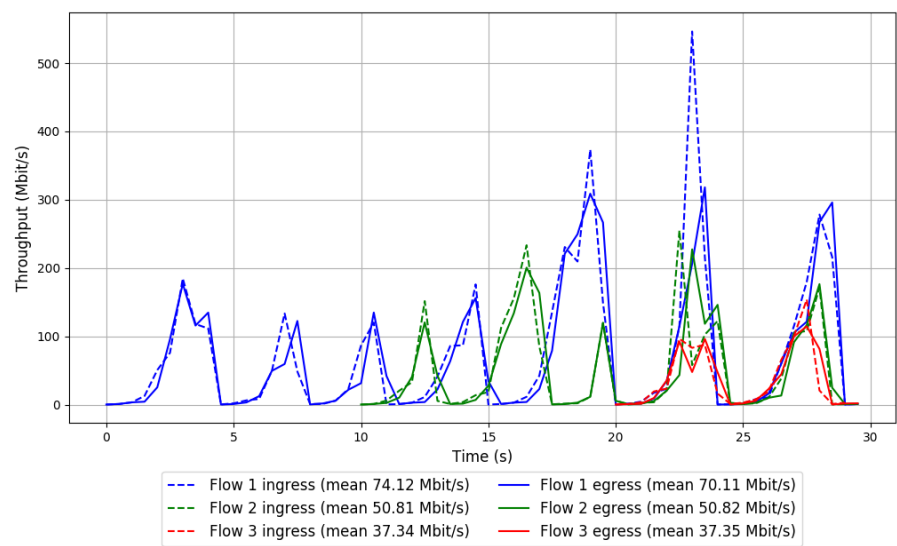
-- Flow 3:

Average throughput: 37.35 Mbit/s

95th percentile per-packet one-way delay: 188.710 ms

Loss rate: 0.00%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-18 00:23:32

End at: 2018-02-18 00:24:02

Below is generated by plot.py at 2018-02-18 06:02:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 234.29 Mbit/s

95th percentile per-packet one-way delay: 306.758 ms

Loss rate: 5.28%

-- Flow 1:

Average throughput: 200.49 Mbit/s

95th percentile per-packet one-way delay: 310.658 ms

Loss rate: 6.06%

-- Flow 2:

Average throughput: 35.40 Mbit/s

95th percentile per-packet one-way delay: 230.300 ms

Loss rate: 0.54%

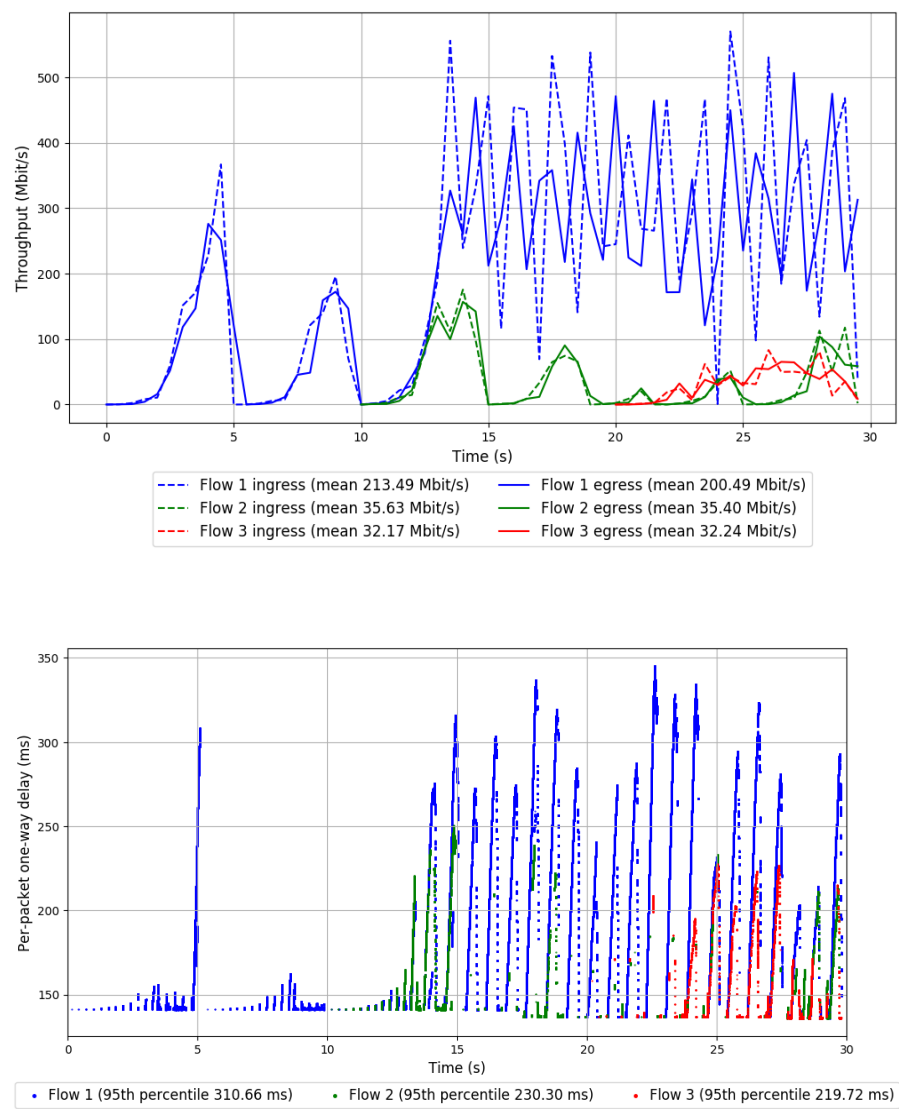
-- Flow 3:

Average throughput: 32.24 Mbit/s

95th percentile per-packet one-way delay: 219.716 ms

Loss rate: 0.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-18 00:44:19

End at: 2018-02-18 00:44:49

Below is generated by plot.py at 2018-02-18 06:03:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 335.81 Mbit/s

95th percentile per-packet one-way delay: 263.446 ms

Loss rate: 2.29%

-- Flow 1:

Average throughput: 187.83 Mbit/s

95th percentile per-packet one-way delay: 243.011 ms

Loss rate: 1.61%

-- Flow 2:

Average throughput: 210.44 Mbit/s

95th percentile per-packet one-way delay: 290.241 ms

Loss rate: 2.02%

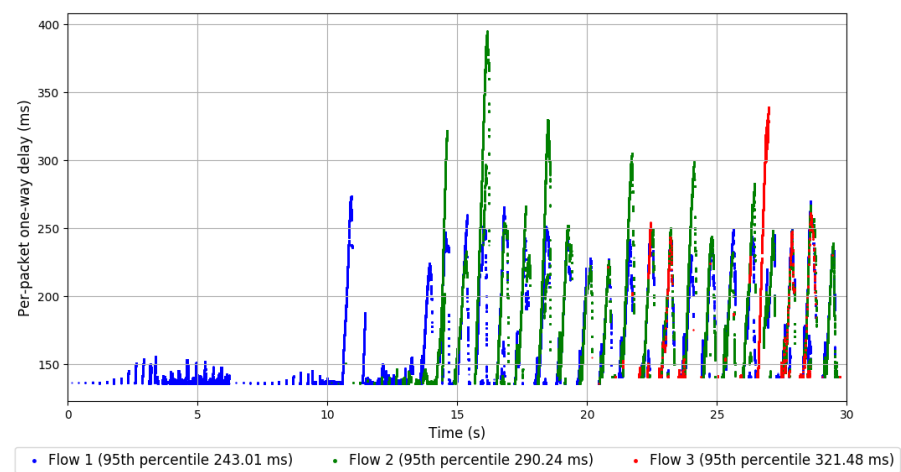
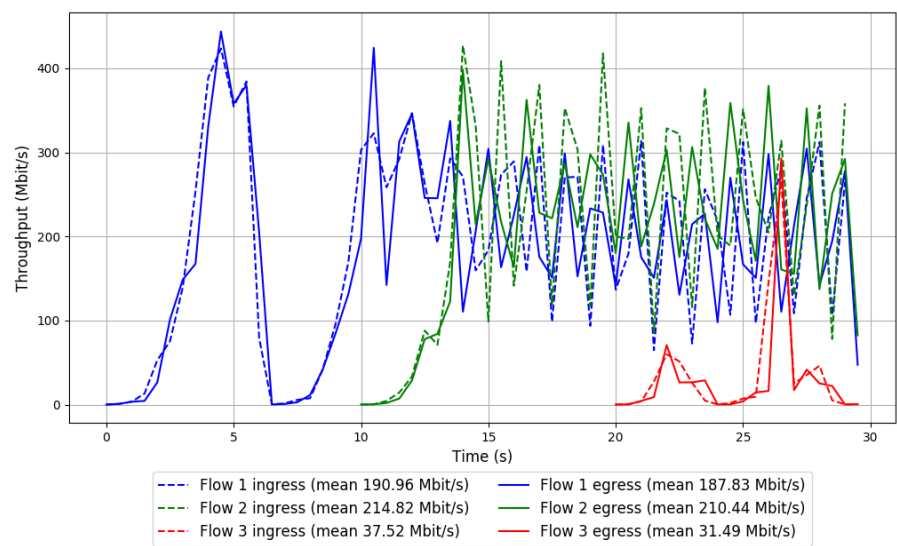
-- Flow 3:

Average throughput: 31.49 Mbit/s

95th percentile per-packet one-way delay: 321.484 ms

Loss rate: 16.19%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-18 01:04:53

End at: 2018-02-18 01:05:23

Below is generated by plot.py at 2018-02-18 06:03:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 203.69 Mbit/s

95th percentile per-packet one-way delay: 173.361 ms

Loss rate: 0.34%

-- Flow 1:

Average throughput: 69.95 Mbit/s

95th percentile per-packet one-way delay: 163.624 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 169.86 Mbit/s

95th percentile per-packet one-way delay: 181.265 ms

Loss rate: 0.43%

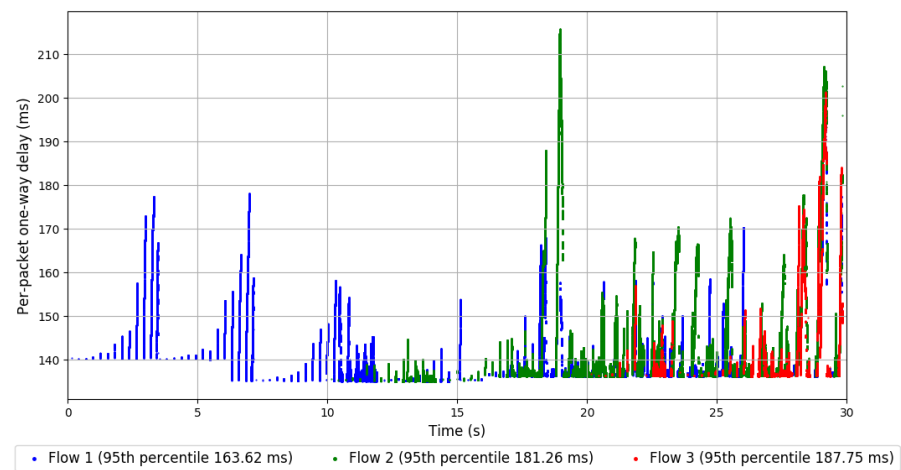
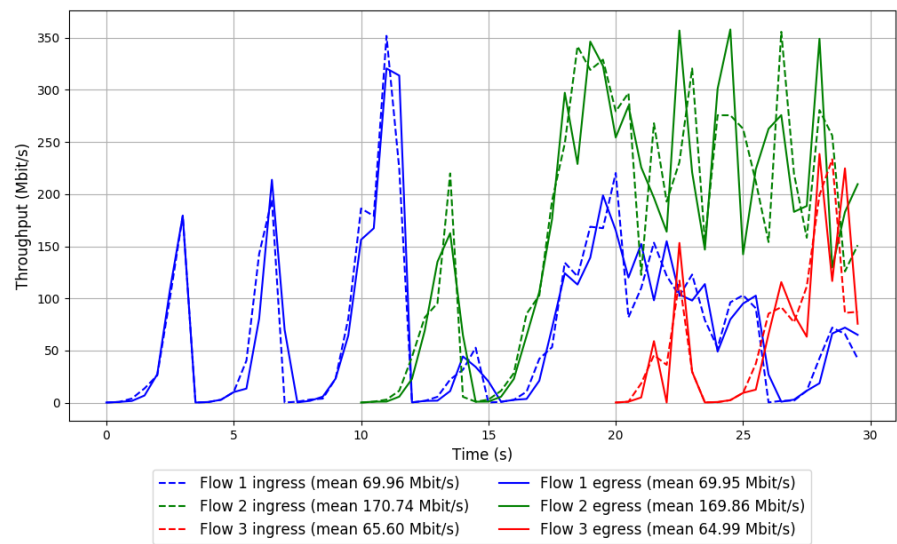
-- Flow 3:

Average throughput: 64.99 Mbit/s

95th percentile per-packet one-way delay: 187.751 ms

Loss rate: 0.90%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-18 01:25:38

End at: 2018-02-18 01:26:08

Below is generated by plot.py at 2018-02-18 06:03:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 282.02 Mbit/s

95th percentile per-packet one-way delay: 239.364 ms

Loss rate: 0.25%

-- Flow 1:

Average throughput: 194.86 Mbit/s

95th percentile per-packet one-way delay: 248.986 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 104.26 Mbit/s

95th percentile per-packet one-way delay: 203.864 ms

Loss rate: 0.00%

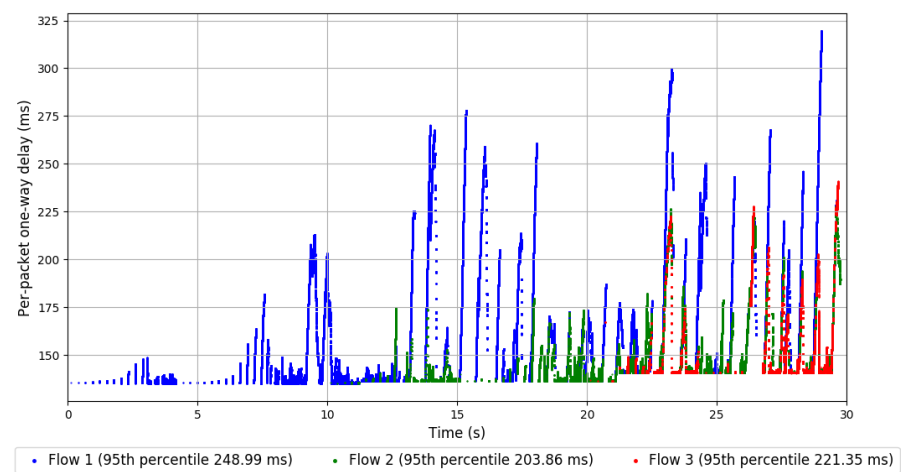
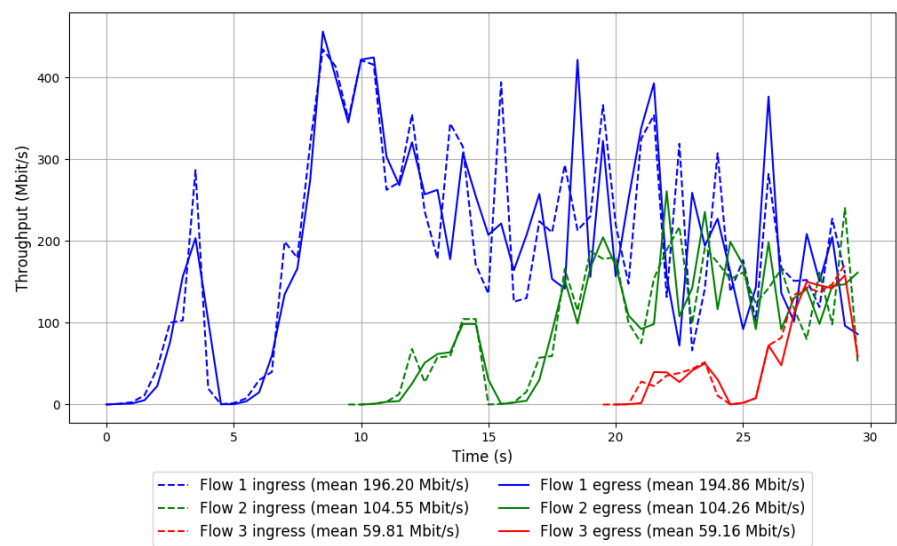
-- Flow 3:

Average throughput: 59.16 Mbit/s

95th percentile per-packet one-way delay: 221.349 ms

Loss rate: 0.00%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-18 01:46:18

End at: 2018-02-18 01:46:48

Below is generated by plot.py at 2018-02-18 06:03:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 231.86 Mbit/s

95th percentile per-packet one-way delay: 162.870 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 191.81 Mbit/s

95th percentile per-packet one-way delay: 168.445 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 39.70 Mbit/s

95th percentile per-packet one-way delay: 148.245 ms

Loss rate: 0.00%

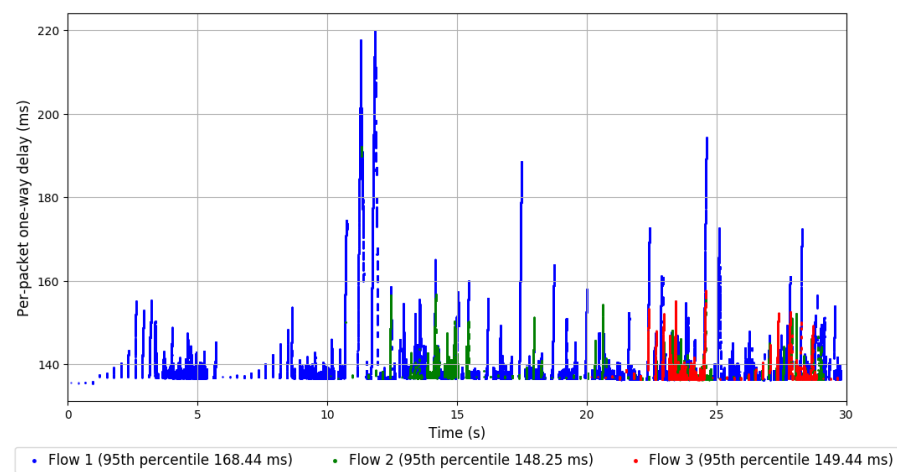
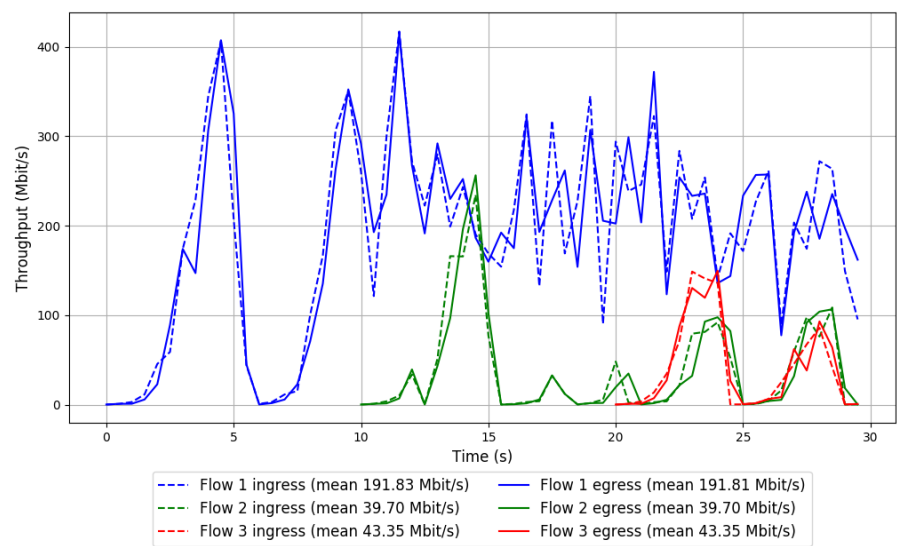
-- Flow 3:

Average throughput: 43.35 Mbit/s

95th percentile per-packet one-way delay: 149.445 ms

Loss rate: 0.00%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-18 02:06:35

End at: 2018-02-18 02:07:05

Below is generated by plot.py at 2018-02-18 06:03:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 274.59 Mbit/s

95th percentile per-packet one-way delay: 190.906 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 162.22 Mbit/s

95th percentile per-packet one-way delay: 180.862 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 144.34 Mbit/s

95th percentile per-packet one-way delay: 202.572 ms

Loss rate: 0.85%

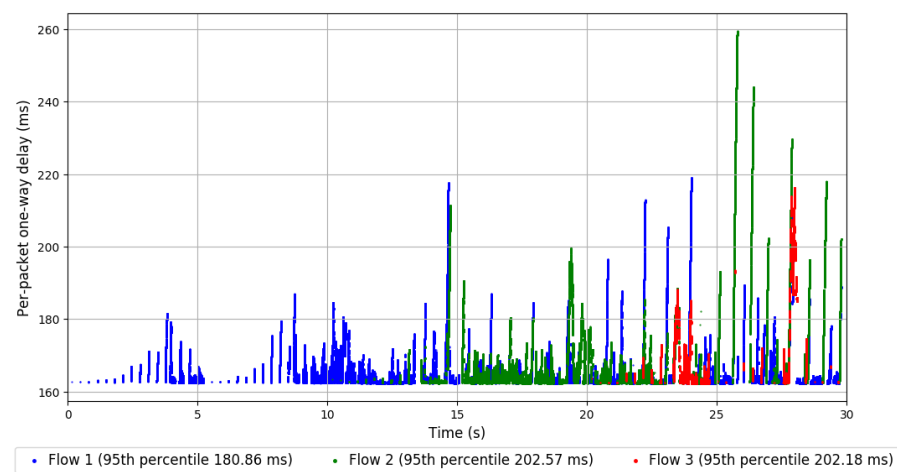
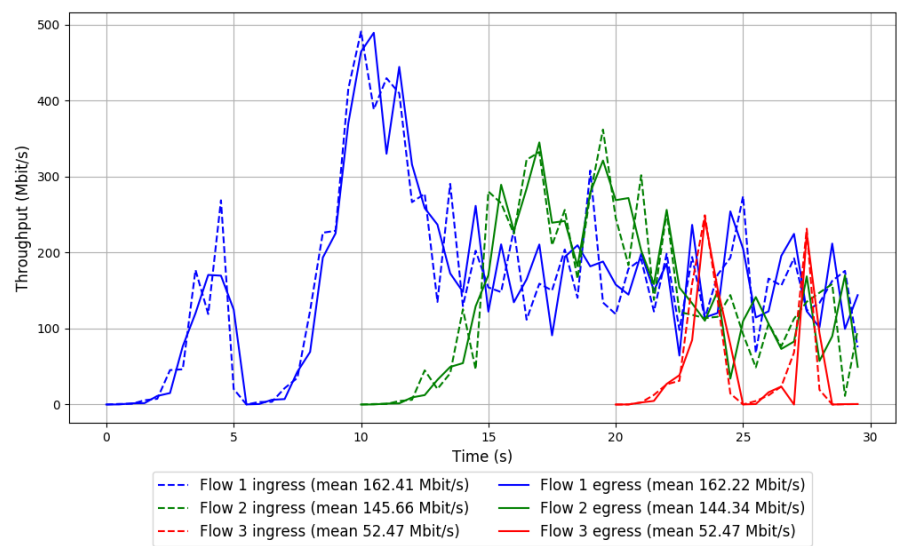
-- Flow 3:

Average throughput: 52.47 Mbit/s

95th percentile per-packet one-way delay: 202.177 ms

Loss rate: 0.00%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-18 02:27:09

End at: 2018-02-18 02:27:39

Below is generated by plot.py at 2018-02-18 06:04:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 273.32 Mbit/s

95th percentile per-packet one-way delay: 294.019 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 194.91 Mbit/s

95th percentile per-packet one-way delay: 253.721 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 94.30 Mbit/s

95th percentile per-packet one-way delay: 323.862 ms

Loss rate: 0.95%

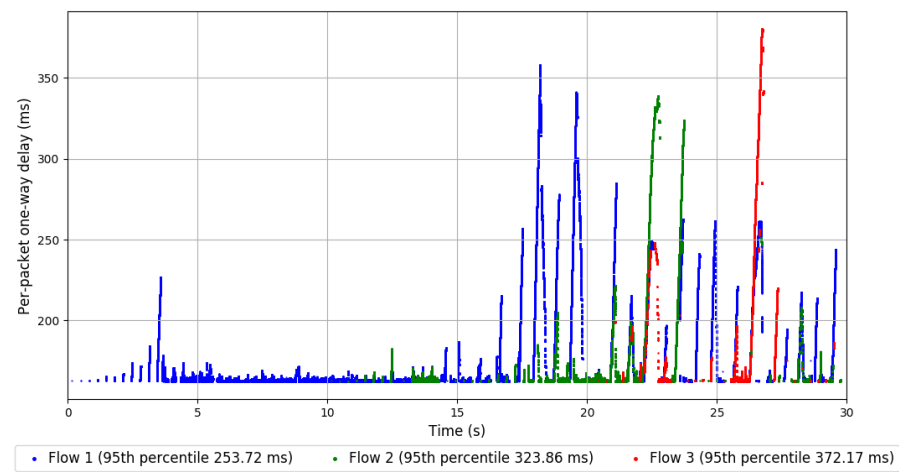
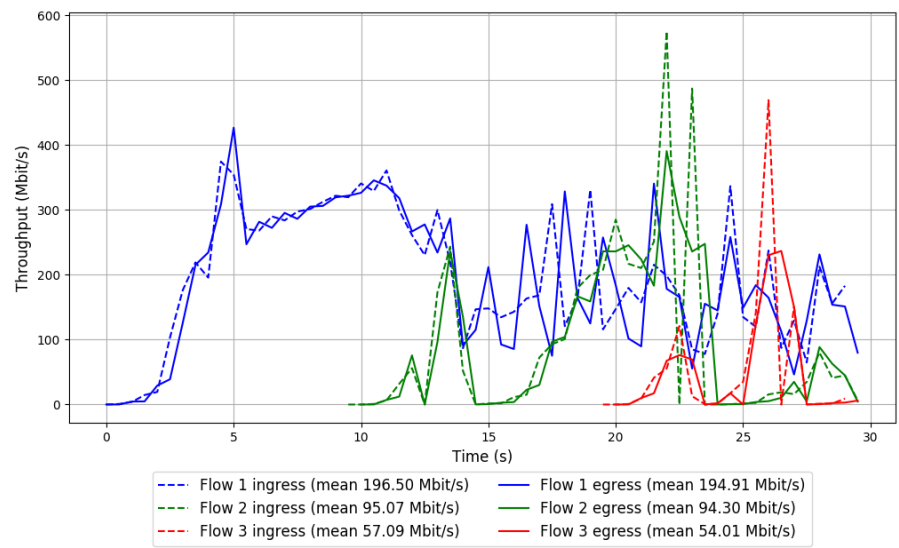
-- Flow 3:

Average throughput: 54.01 Mbit/s

95th percentile per-packet one-way delay: 372.168 ms

Loss rate: 5.16%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-18 02:47:46

End at: 2018-02-18 02:48:16

Below is generated by plot.py at 2018-02-18 06:04:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 139.12 Mbit/s

95th percentile per-packet one-way delay: 171.975 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 58.45 Mbit/s

95th percentile per-packet one-way delay: 167.709 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 55.09 Mbit/s

95th percentile per-packet one-way delay: 169.448 ms

Loss rate: 0.00%

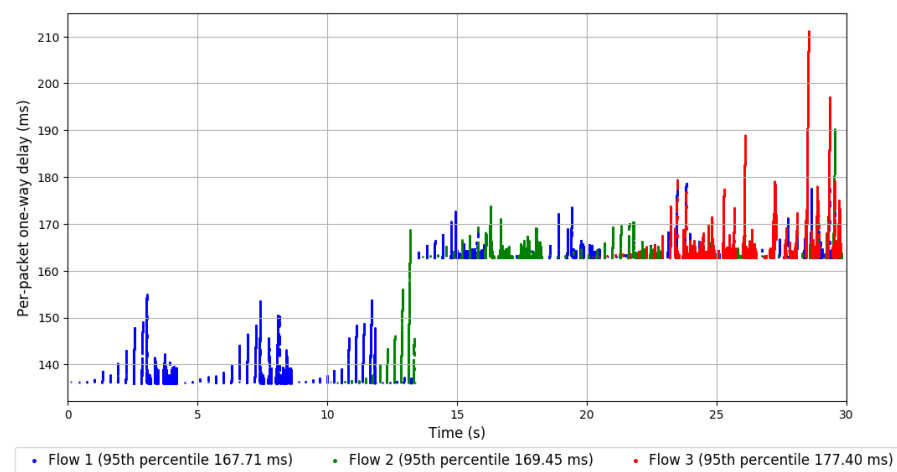
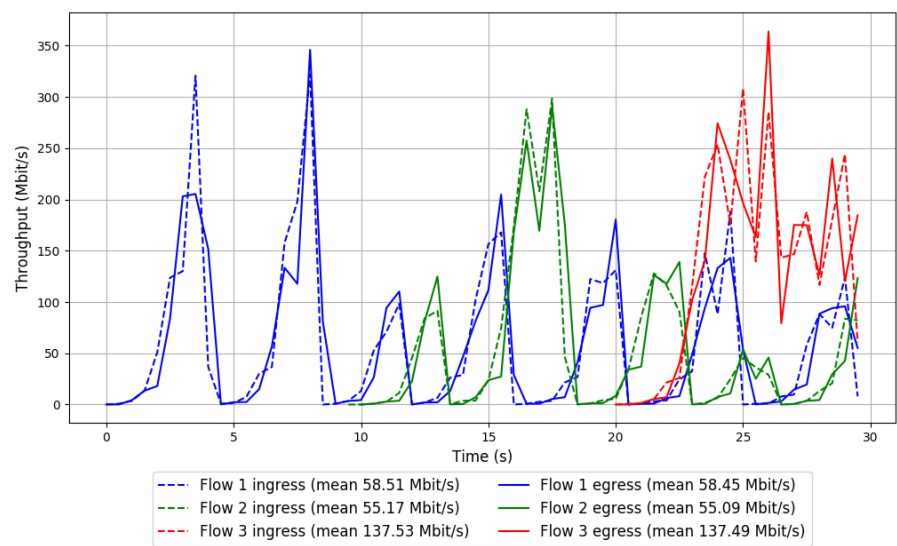
-- Flow 3:

Average throughput: 137.49 Mbit/s

95th percentile per-packet one-way delay: 177.395 ms

Loss rate: 0.00%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-18 03:08:06

End at: 2018-02-18 03:08:36

Below is generated by plot.py at 2018-02-18 06:06:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 244.42 Mbit/s

95th percentile per-packet one-way delay: 178.670 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 180.74 Mbit/s

95th percentile per-packet one-way delay: 179.307 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 68.06 Mbit/s

95th percentile per-packet one-way delay: 170.336 ms

Loss rate: 0.00%

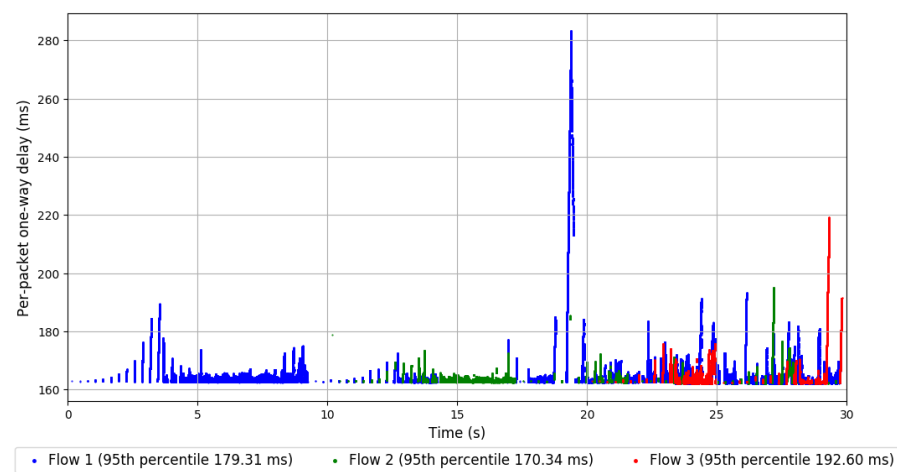
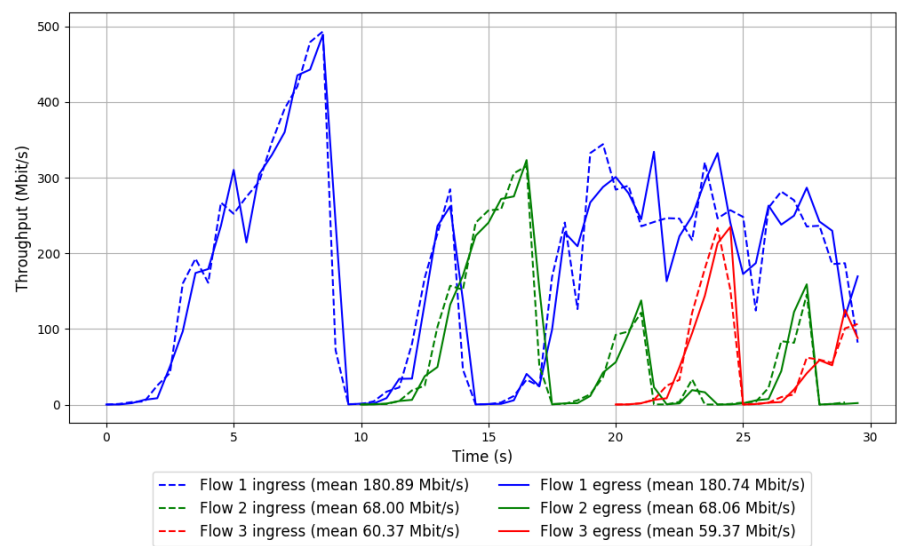
-- Flow 3:

Average throughput: 59.37 Mbit/s

95th percentile per-packet one-way delay: 192.597 ms

Loss rate: 1.61%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-18 00:10:22

End at: 2018-02-18 00:10:52

Below is generated by plot.py at 2018-02-18 06:06:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 137.28 Mbit/s

95th percentile per-packet one-way delay: 140.884 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 65.52 Mbit/s

95th percentile per-packet one-way delay: 140.894 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 85.38 Mbit/s

95th percentile per-packet one-way delay: 140.875 ms

Loss rate: 0.02%

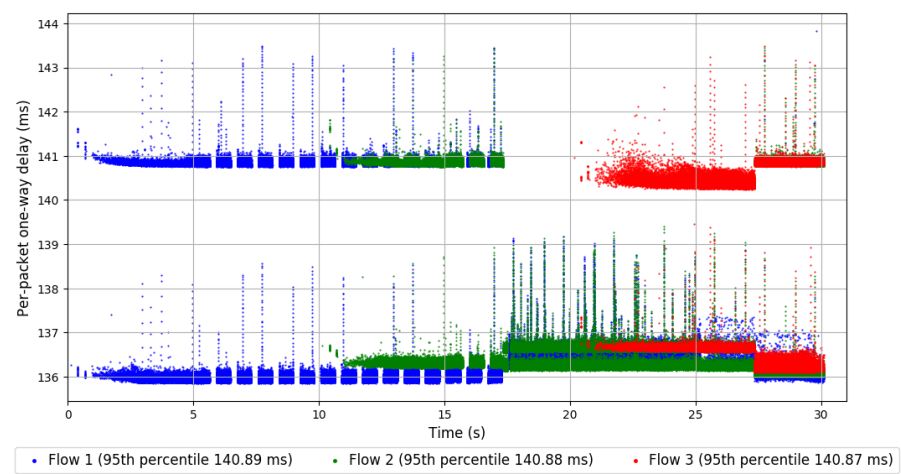
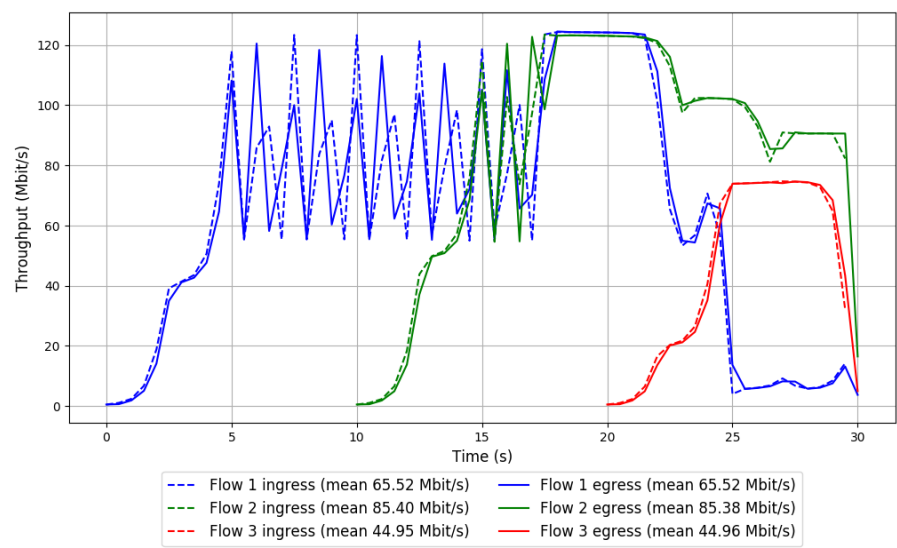
-- Flow 3:

Average throughput: 44.96 Mbit/s

95th percentile per-packet one-way delay: 140.874 ms

Loss rate: 0.02%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-18 00:30:54

End at: 2018-02-18 00:31:24

Below is generated by plot.py at 2018-02-18 06:17:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 433.22 Mbit/s

95th percentile per-packet one-way delay: 307.172 ms

Loss rate: 38.37%

-- Flow 1:

Average throughput: 432.84 Mbit/s

95th percentile per-packet one-way delay: 307.174 ms

Loss rate: 38.39%

-- Flow 2:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 248.114 ms

Loss rate: 6.13%

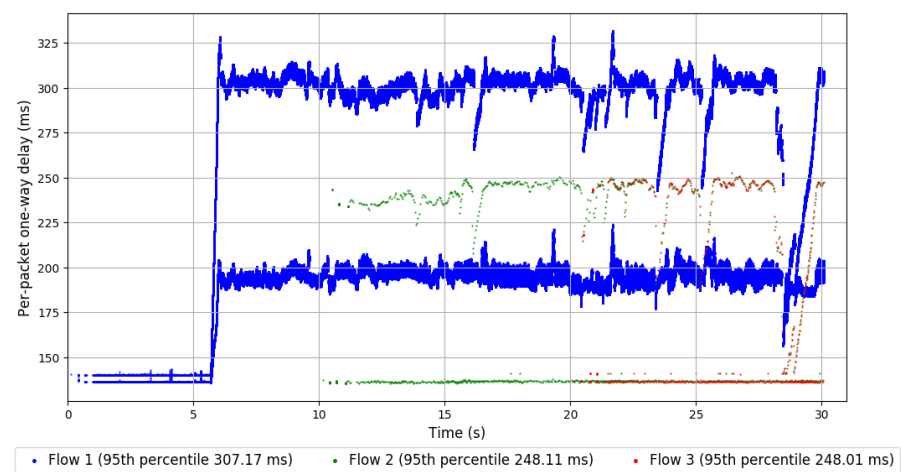
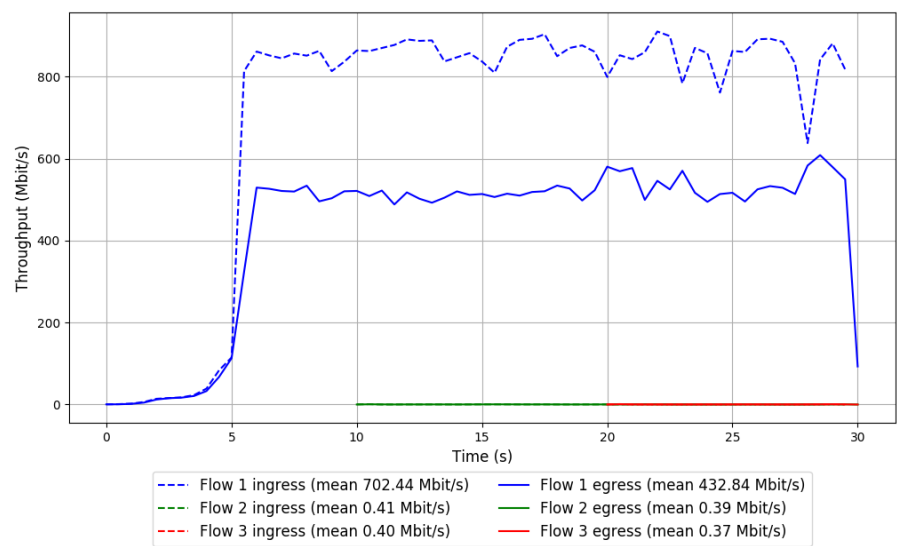
-- Flow 3:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 248.008 ms

Loss rate: 7.62%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-18 00:51:55

End at: 2018-02-18 00:52:25

Below is generated by plot.py at 2018-02-18 06:17:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 106.56 Mbit/s

95th percentile per-packet one-way delay: 140.470 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 54.45 Mbit/s

95th percentile per-packet one-way delay: 139.968 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 48.22 Mbit/s

95th percentile per-packet one-way delay: 140.527 ms

Loss rate: 0.00%

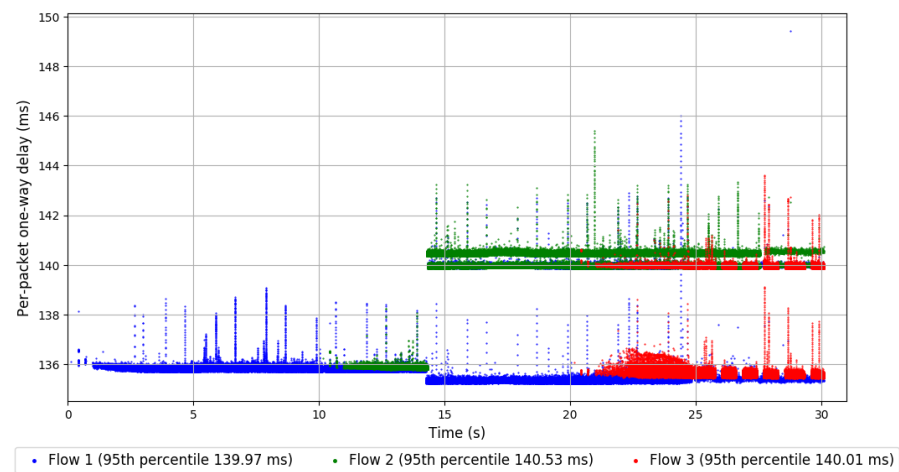
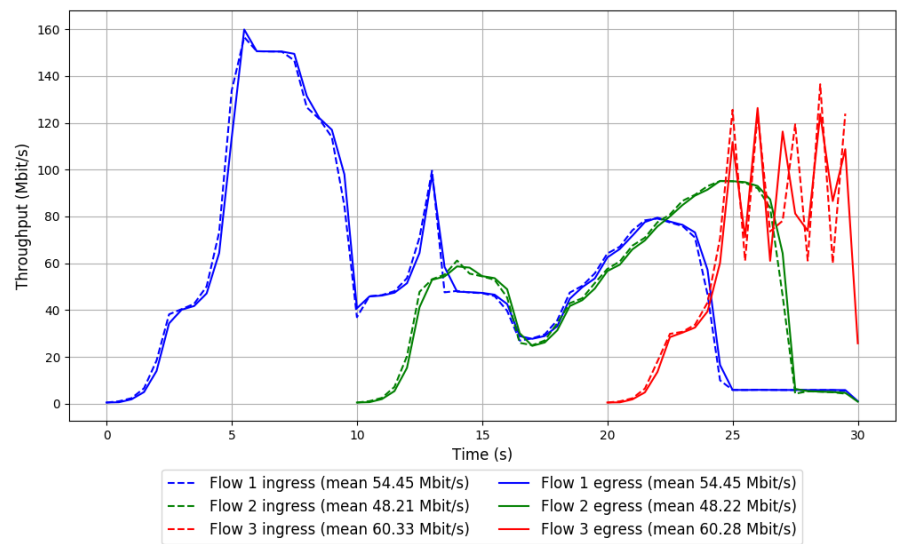
-- Flow 3:

Average throughput: 60.28 Mbit/s

95th percentile per-packet one-way delay: 140.009 ms

Loss rate: 0.08%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-18 01:12:26

End at: 2018-02-18 01:12:56

Below is generated by plot.py at 2018-02-18 06:17:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 142.25 Mbit/s

95th percentile per-packet one-way delay: 139.997 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 83.05 Mbit/s

95th percentile per-packet one-way delay: 139.972 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 56.83 Mbit/s

95th percentile per-packet one-way delay: 140.084 ms

Loss rate: 0.00%

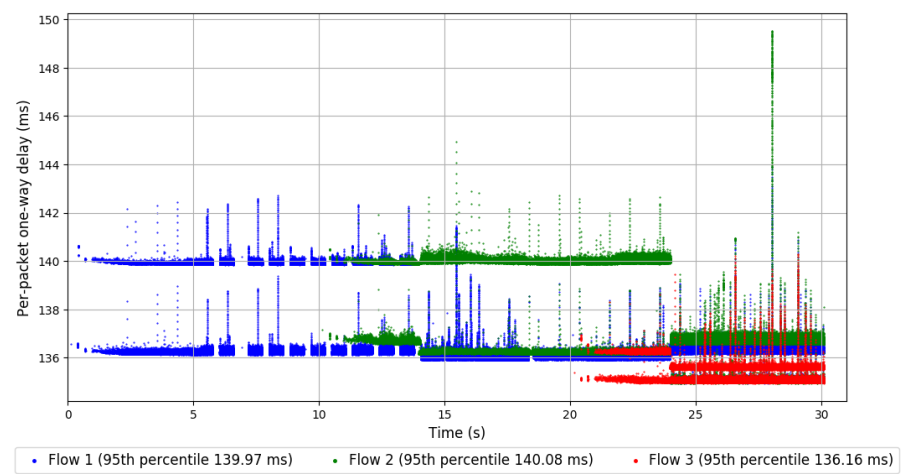
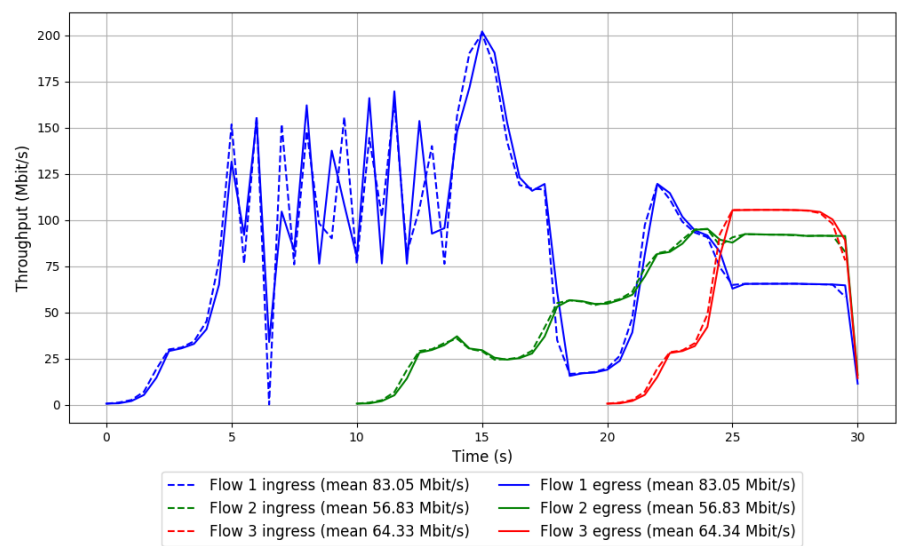
-- Flow 3:

Average throughput: 64.34 Mbit/s

95th percentile per-packet one-way delay: 136.161 ms

Loss rate: 0.00%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-18 01:33:04

End at: 2018-02-18 01:33:34

Below is generated by plot.py at 2018-02-18 06:17:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 138.66 Mbit/s

95th percentile per-packet one-way delay: 136.405 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 78.92 Mbit/s

95th percentile per-packet one-way delay: 136.461 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 70.07 Mbit/s

95th percentile per-packet one-way delay: 136.292 ms

Loss rate: 0.00%

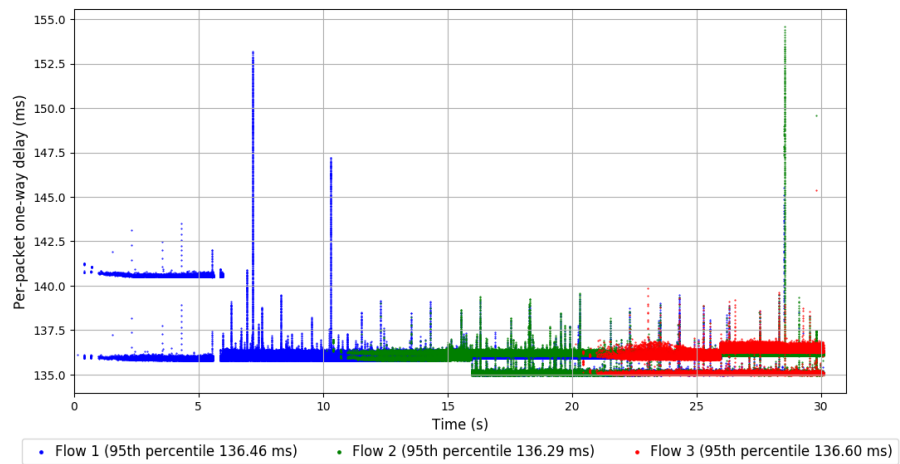
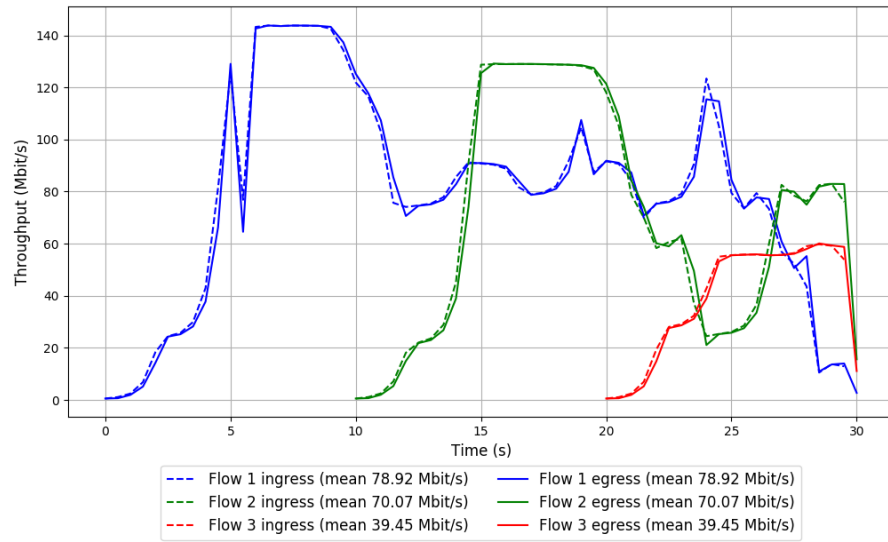
-- Flow 3:

Average throughput: 39.45 Mbit/s

95th percentile per-packet one-way delay: 136.604 ms

Loss rate: 0.00%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-18 01:53:43

End at: 2018-02-18 01:54:13

Below is generated by plot.py at 2018-02-18 06:17:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 136.52 Mbit/s

95th percentile per-packet one-way delay: 140.223 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 72.17 Mbit/s

95th percentile per-packet one-way delay: 140.223 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 67.30 Mbit/s

95th percentile per-packet one-way delay: 136.545 ms

Loss rate: 0.00%

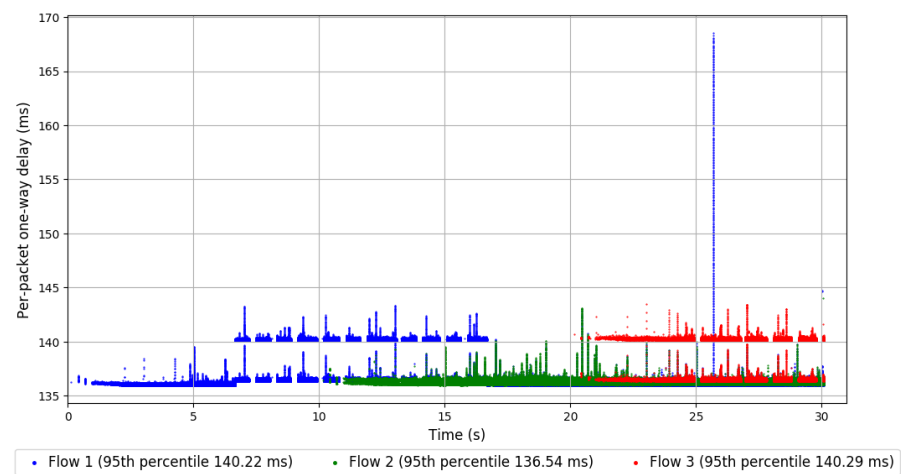
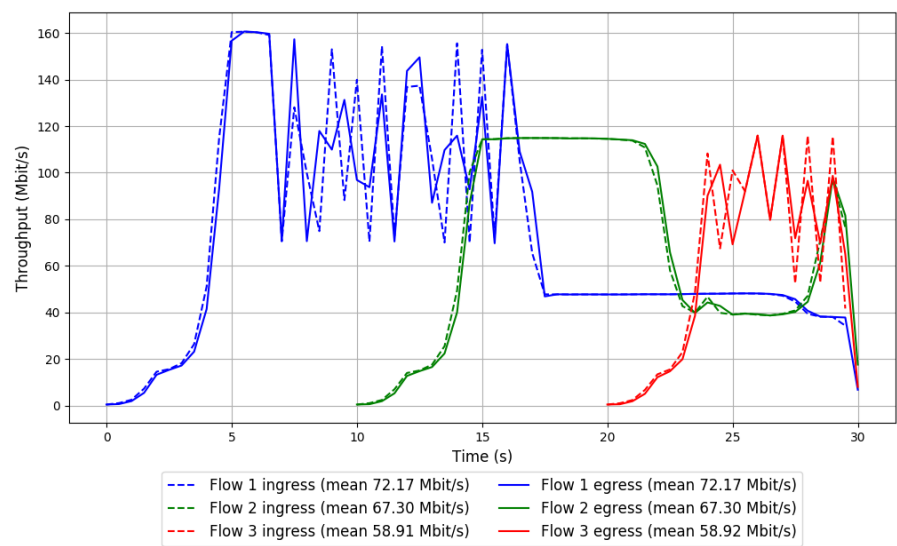
-- Flow 3:

Average throughput: 58.92 Mbit/s

95th percentile per-packet one-way delay: 140.292 ms

Loss rate: 0.00%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-18 02:14:04

End at: 2018-02-18 02:14:34

Below is generated by plot.py at 2018-02-18 06:17:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 40.56 Mbit/s

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

Loss rate: 0.23%

-- Flow 1:

Average throughput: 19.78 Mbit/s

95th percentile per-packet one-way delay: 162.502 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 14.36 Mbit/s

95th percentile per-packet one-way delay: 162.576 ms

Loss rate: 0.06%

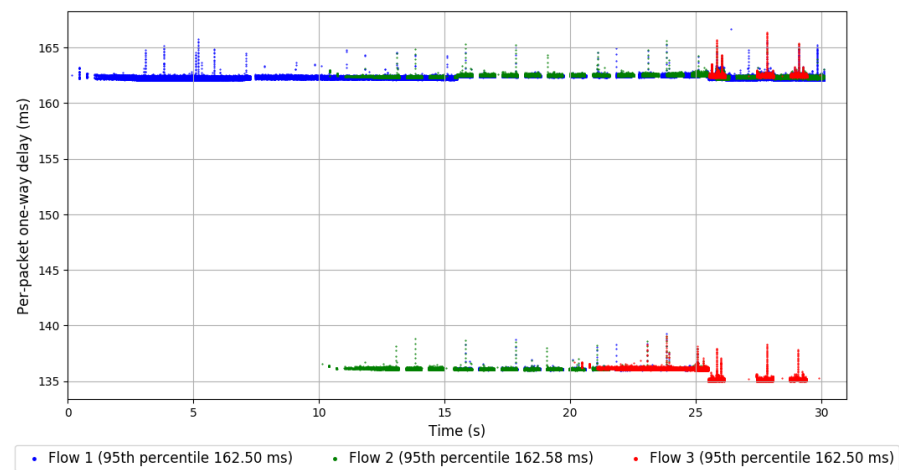
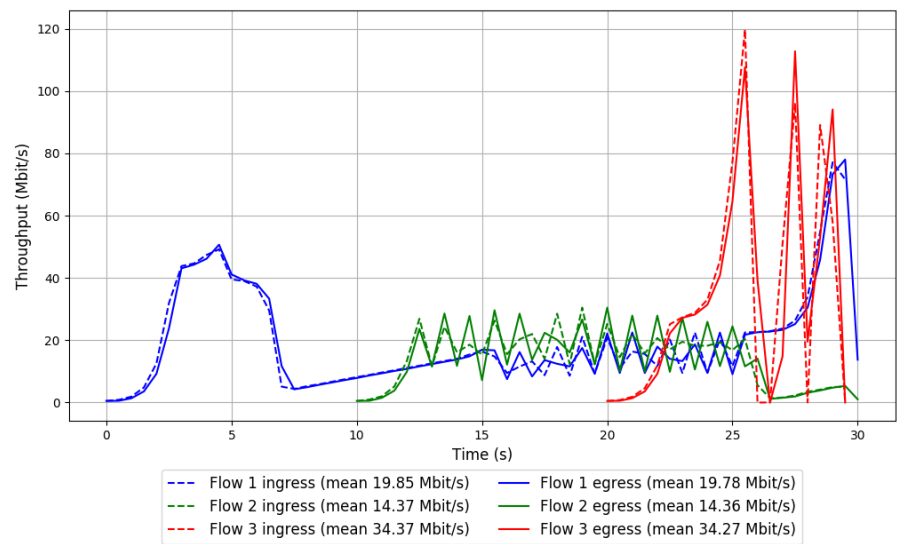
-- Flow 3:

Average throughput: 34.27 Mbit/s

95th percentile per-packet one-way delay: 162.502 ms

Loss rate: 0.00%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-18 02:34:32

End at: 2018-02-18 02:35:02

Below is generated by plot.py at 2018-02-18 06:17:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.67 Mbit/s

95th percentile per-packet one-way delay: 163.123 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 28.26 Mbit/s

95th percentile per-packet one-way delay: 163.027 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 28.81 Mbit/s

95th percentile per-packet one-way delay: 163.165 ms

Loss rate: 0.00%

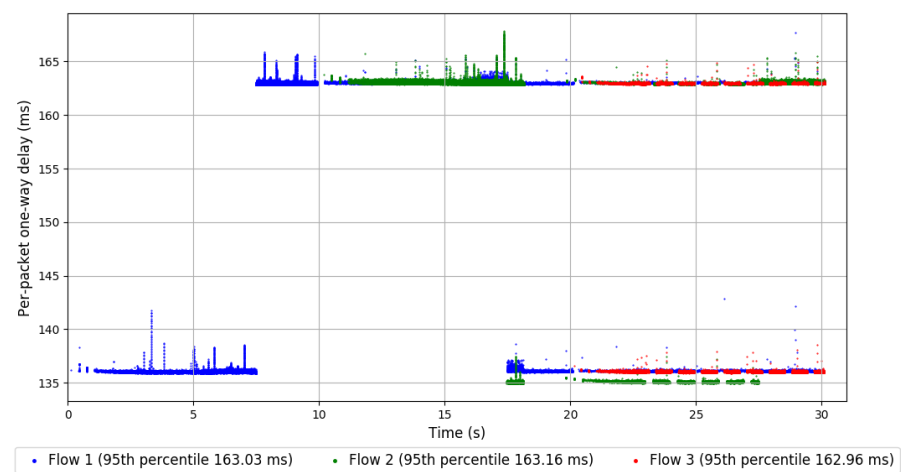
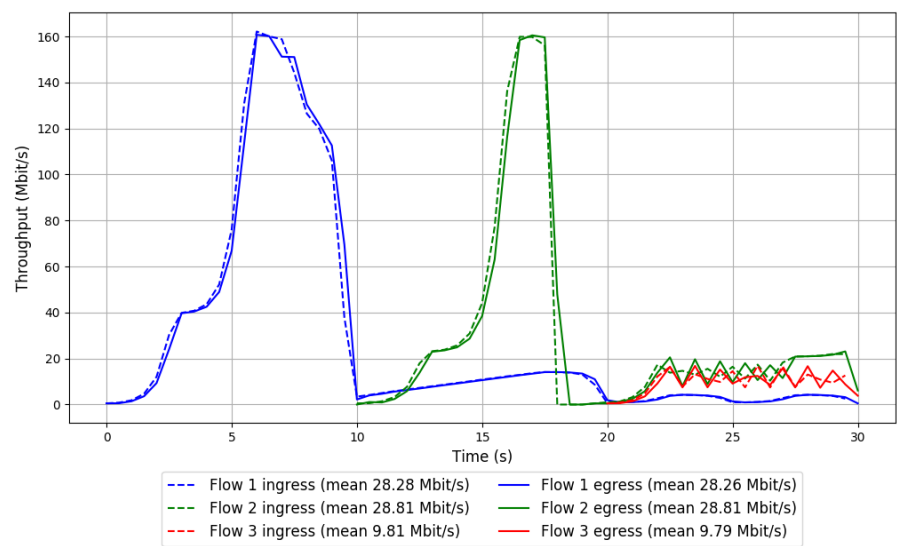
-- Flow 3:

Average throughput: 9.79 Mbit/s

95th percentile per-packet one-way delay: 162.959 ms

Loss rate: 0.01%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-18 02:55:08

End at: 2018-02-18 02:55:38

Below is generated by plot.py at 2018-02-18 06:17:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 102.12 Mbit/s

95th percentile per-packet one-way delay: 163.177 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 73.10 Mbit/s

95th percentile per-packet one-way delay: 163.209 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 13.16 Mbit/s

95th percentile per-packet one-way delay: 162.912 ms

Loss rate: 0.00%

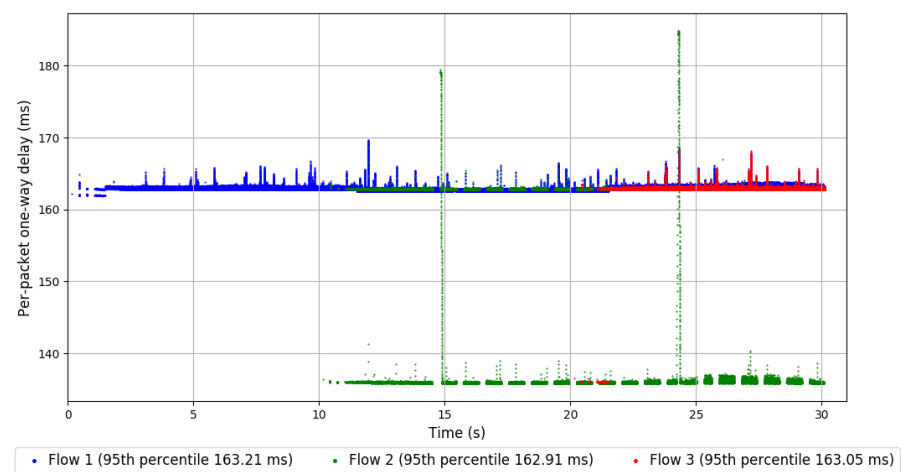
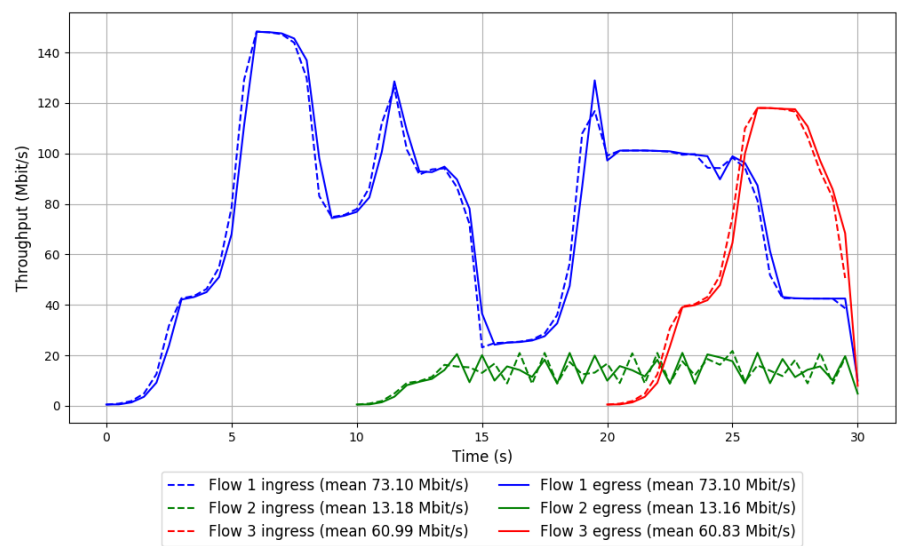
-- Flow 3:

Average throughput: 60.83 Mbit/s

95th percentile per-packet one-way delay: 163.046 ms

Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-18 03:15:32

End at: 2018-02-18 03:16:02

Below is generated by plot.py at 2018-02-18 06:17:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.89 Mbit/s

95th percentile per-packet one-way delay: 163.020 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 15.63 Mbit/s

95th percentile per-packet one-way delay: 162.711 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.69 Mbit/s

95th percentile per-packet one-way delay: 163.107 ms

Loss rate: 0.00%

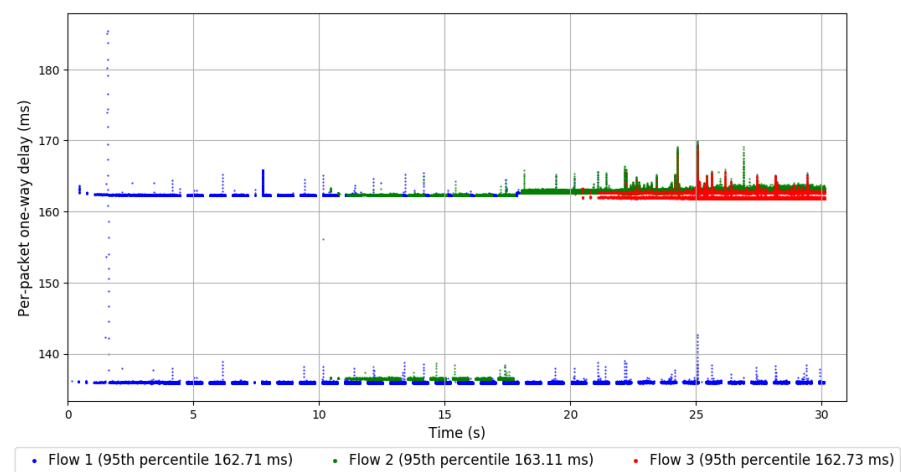
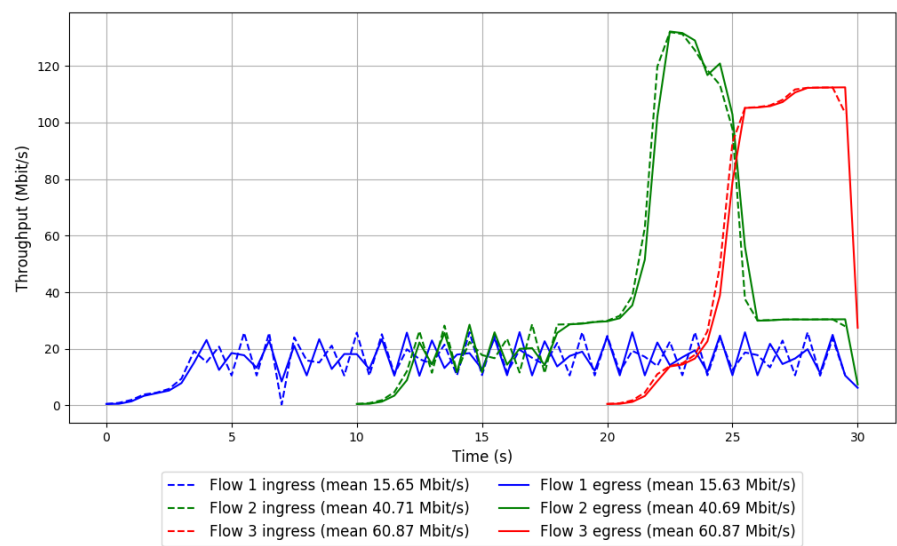
-- Flow 3:

Average throughput: 60.87 Mbit/s

95th percentile per-packet one-way delay: 162.732 ms

Loss rate: 0.00%

Run 10: Report of Copa — Data Link

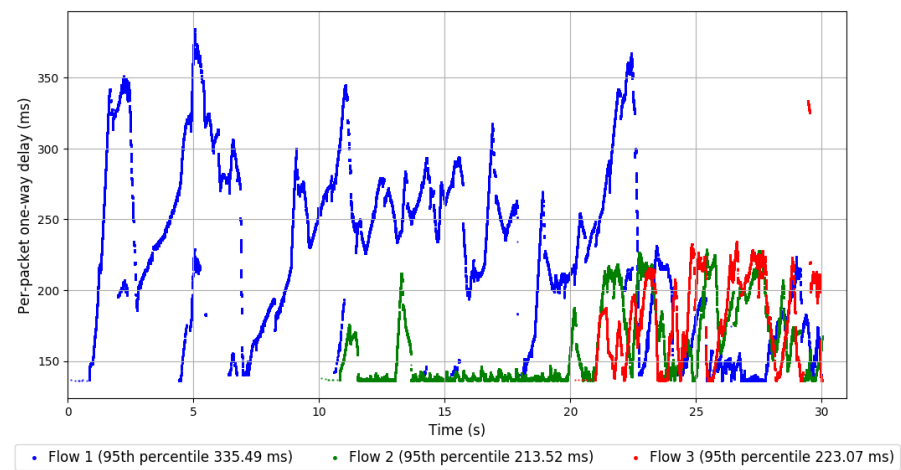
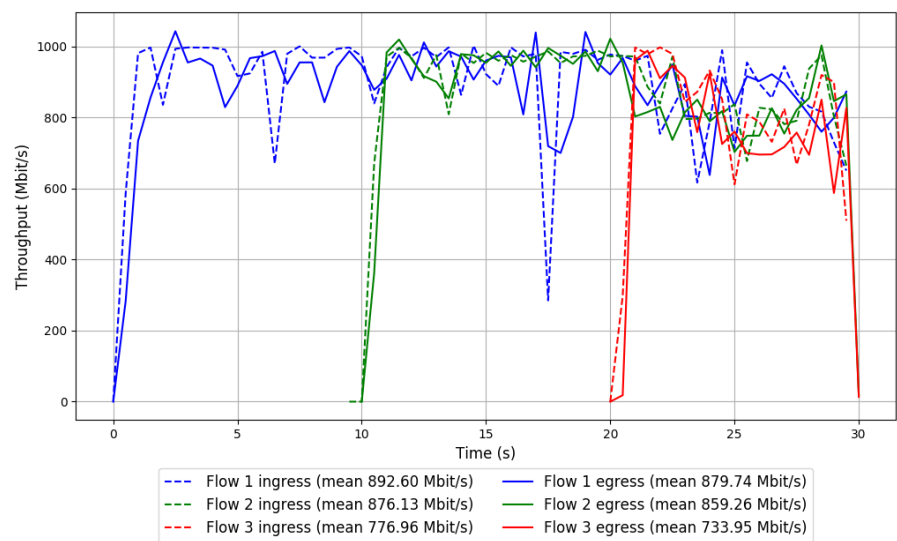


```
Run 1: Statistics of FillP

Start at: 2018-02-18 00:17:35
End at: 2018-02-18 00:18:05

# Below is generated by plot.py at 2018-02-18 06:36:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1694.02 Mbit/s
95th percentile per-packet one-way delay: 317.692 ms
Loss rate: 2.21%
-- Flow 1:
Average throughput: 879.74 Mbit/s
95th percentile per-packet one-way delay: 335.486 ms
Loss rate: 1.44%
-- Flow 2:
Average throughput: 859.26 Mbit/s
95th percentile per-packet one-way delay: 213.517 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 733.95 Mbit/s
95th percentile per-packet one-way delay: 223.070 ms
Loss rate: 5.54%
```


Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-18 00:38:28

End at: 2018-02-18 00:38:58

Below is generated by plot.py at 2018-02-18 06:36:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 1627.28 Mbit/s

95th percentile per-packet one-way delay: 228.690 ms

Loss rate: 5.11%

-- Flow 1:

Average throughput: 848.08 Mbit/s

95th percentile per-packet one-way delay: 222.004 ms

Loss rate: 4.63%

-- Flow 2:

Average throughput: 795.79 Mbit/s

95th percentile per-packet one-way delay: 247.939 ms

Loss rate: 5.42%

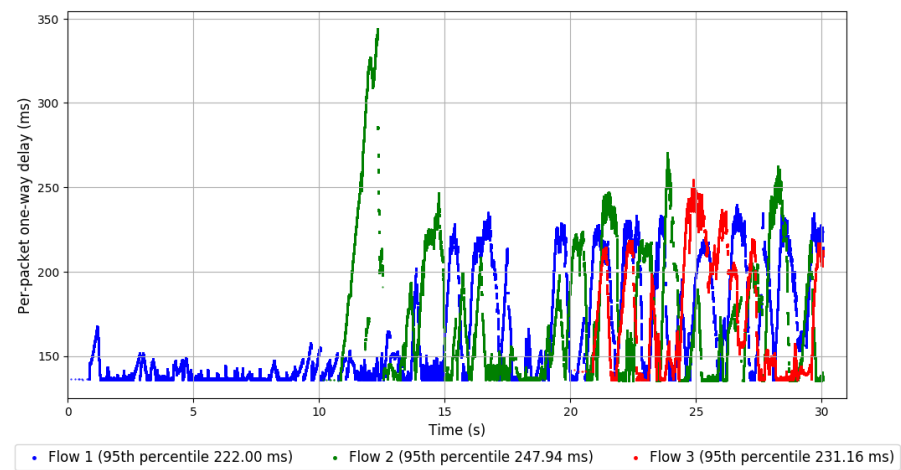
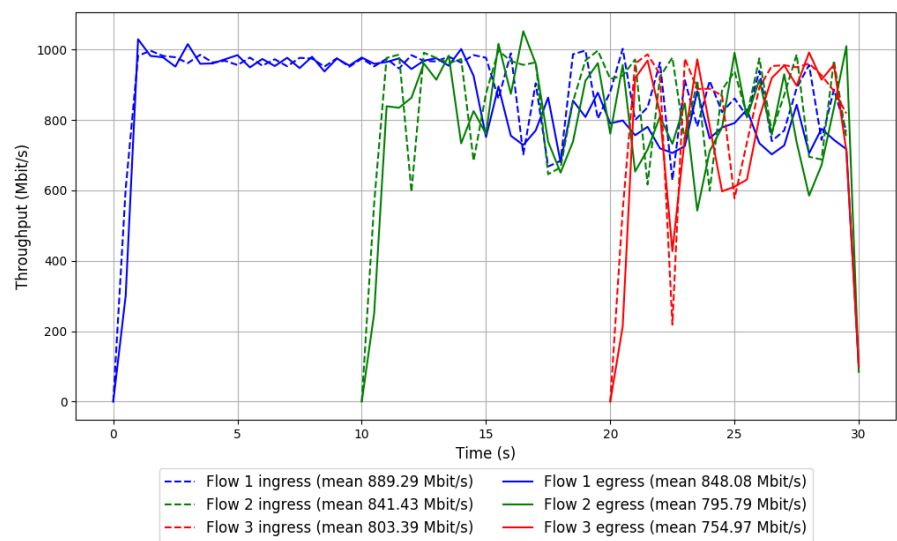
-- Flow 3:

Average throughput: 754.97 Mbit/s

95th percentile per-packet one-way delay: 231.163 ms

Loss rate: 6.07%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-18 00:58:59

End at: 2018-02-18 00:59:29

Below is generated by plot.py at 2018-02-18 06:37:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 1636.98 Mbit/s

95th percentile per-packet one-way delay: 226.106 ms

Loss rate: 5.08%

-- Flow 1:

Average throughput: 870.57 Mbit/s

95th percentile per-packet one-way delay: 223.779 ms

Loss rate: 3.71%

-- Flow 2:

Average throughput: 806.48 Mbit/s

95th percentile per-packet one-way delay: 222.574 ms

Loss rate: 5.99%

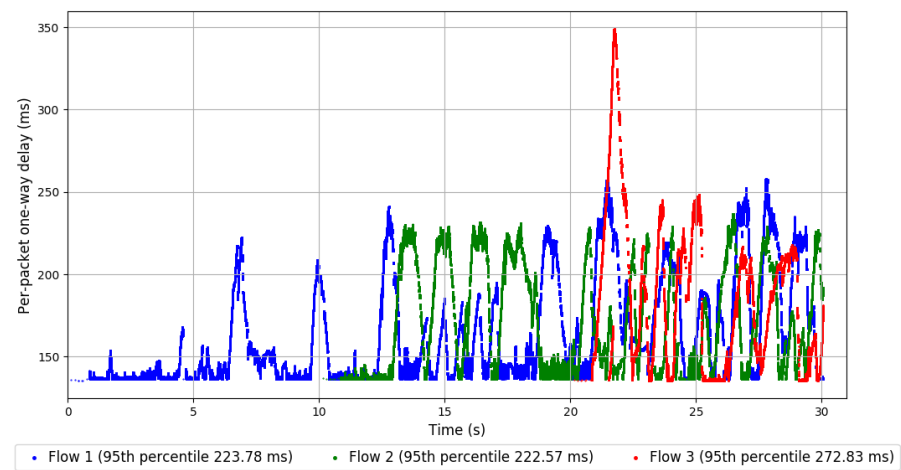
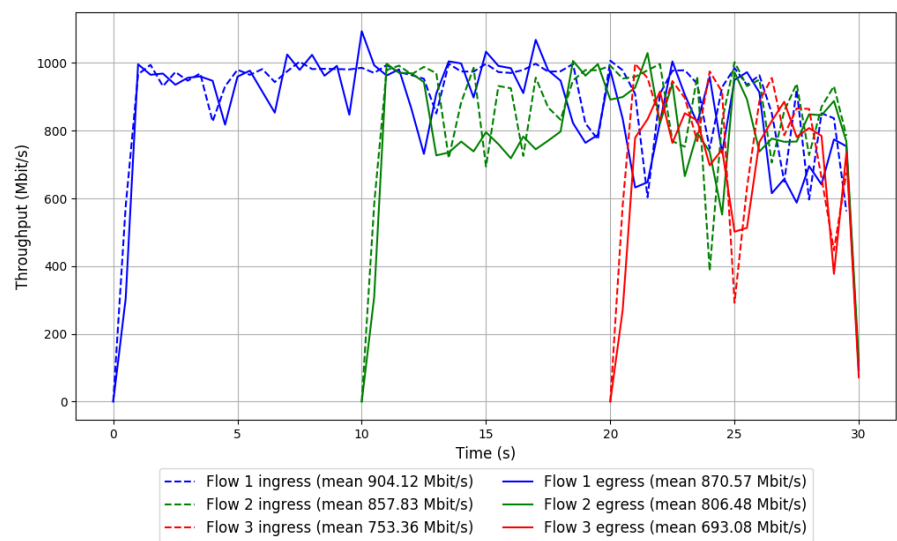
-- Flow 3:

Average throughput: 693.08 Mbit/s

95th percentile per-packet one-way delay: 272.829 ms

Loss rate: 8.00%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-18 01:19:42

End at: 2018-02-18 01:20:12

Below is generated by plot.py at 2018-02-18 06:39:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1715.41 Mbit/s

95th percentile per-packet one-way delay: 221.910 ms

Loss rate: 3.00%

-- Flow 1:

Average throughput: 891.79 Mbit/s

95th percentile per-packet one-way delay: 211.742 ms

Loss rate: 1.91%

-- Flow 2:

Average throughput: 884.43 Mbit/s

95th percentile per-packet one-way delay: 197.390 ms

Loss rate: 1.30%

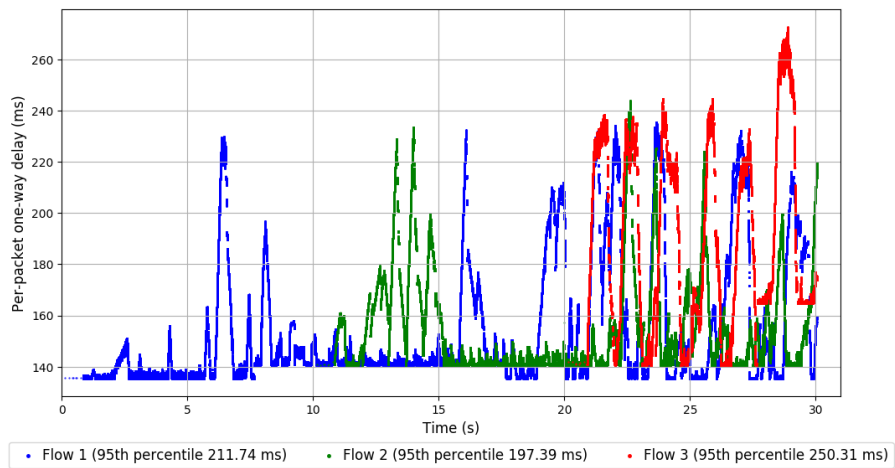
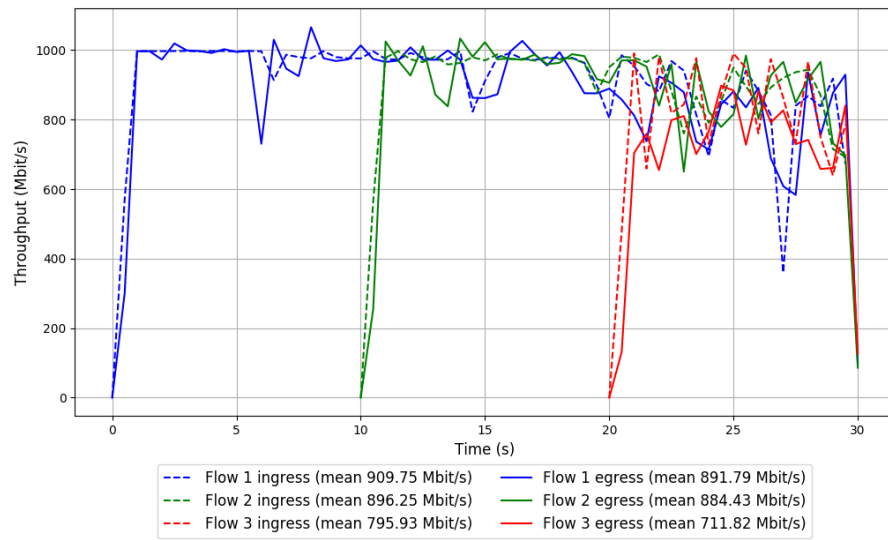
-- Flow 3:

Average throughput: 711.82 Mbit/s

95th percentile per-packet one-way delay: 250.307 ms

Loss rate: 10.60%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-18 01:40:14

End at: 2018-02-18 01:40:44

Below is generated by plot.py at 2018-02-18 06:39:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1670.29 Mbit/s

95th percentile per-packet one-way delay: 346.598 ms

Loss rate: 3.88%

-- Flow 1:

Average throughput: 887.19 Mbit/s

95th percentile per-packet one-way delay: 222.911 ms

Loss rate: 2.55%

-- Flow 2:

Average throughput: 786.69 Mbit/s

95th percentile per-packet one-way delay: 391.278 ms

Loss rate: 5.51%

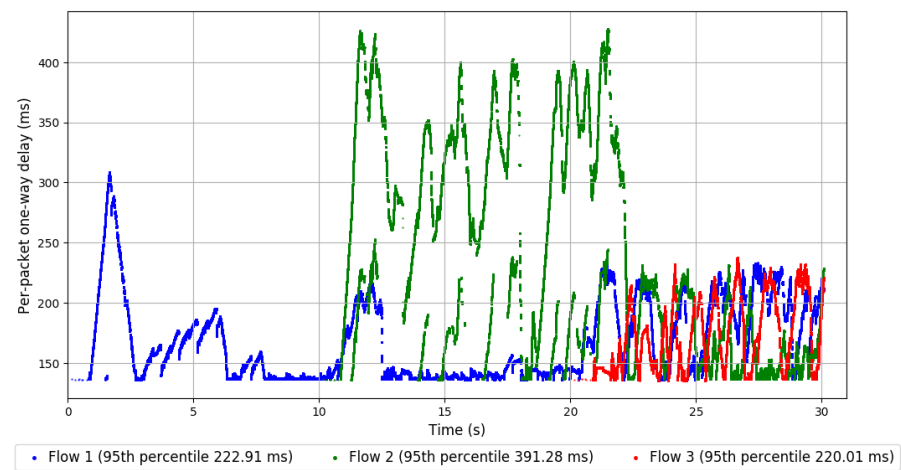
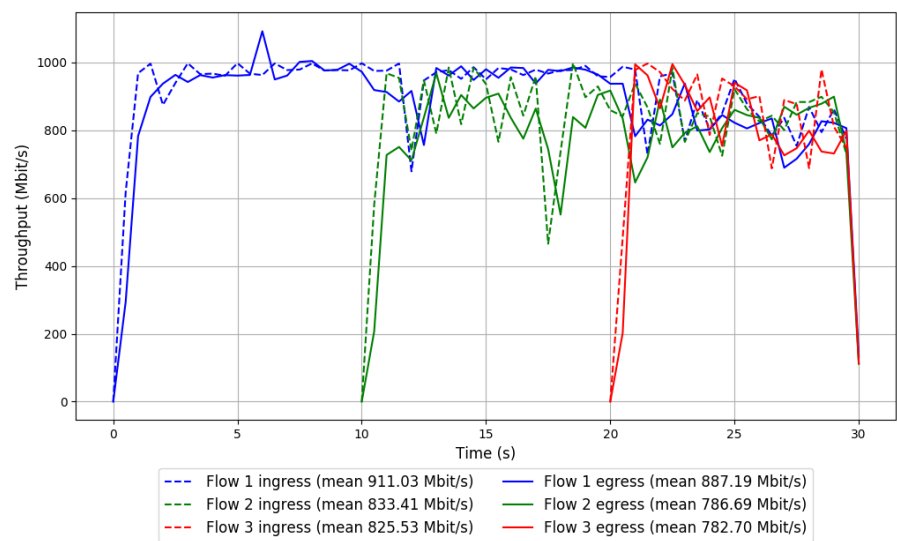
-- Flow 3:

Average throughput: 782.70 Mbit/s

95th percentile per-packet one-way delay: 220.010 ms

Loss rate: 5.00%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-18 02:00:51

End at: 2018-02-18 02:01:21

Below is generated by plot.py at 2018-02-18 06:39:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1556.30 Mbit/s

95th percentile per-packet one-way delay: 351.599 ms

Loss rate: 4.48%

-- Flow 1:

Average throughput: 803.18 Mbit/s

95th percentile per-packet one-way delay: 363.073 ms

Loss rate: 4.16%

-- Flow 2:

Average throughput: 802.86 Mbit/s

95th percentile per-packet one-way delay: 223.067 ms

Loss rate: 5.18%

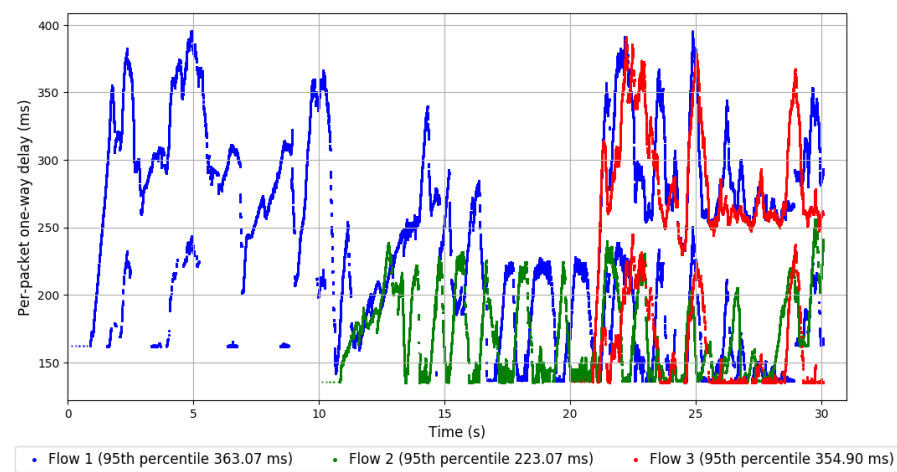
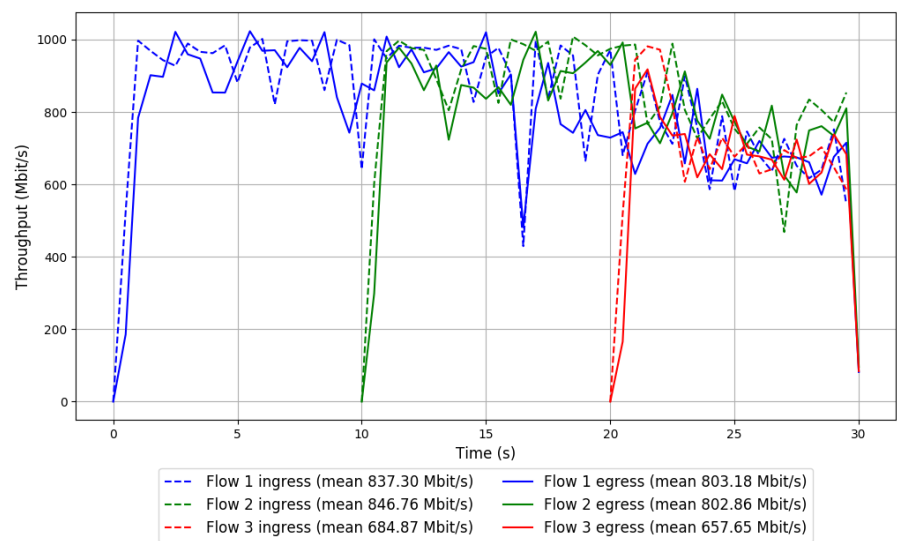
-- Flow 3:

Average throughput: 657.65 Mbit/s

95th percentile per-packet one-way delay: 354.896 ms

Loss rate: 3.97%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-18 02:21:10

End at: 2018-02-18 02:21:40

Below is generated by plot.py at 2018-02-18 06:41:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 1705.37 Mbit/s

95th percentile per-packet one-way delay: 221.830 ms

Loss rate: 2.61%

-- Flow 1:

Average throughput: 914.17 Mbit/s

95th percentile per-packet one-way delay: 206.342 ms

Loss rate: 1.43%

-- Flow 2:

Average throughput: 816.32 Mbit/s

95th percentile per-packet one-way delay: 221.655 ms

Loss rate: 3.92%

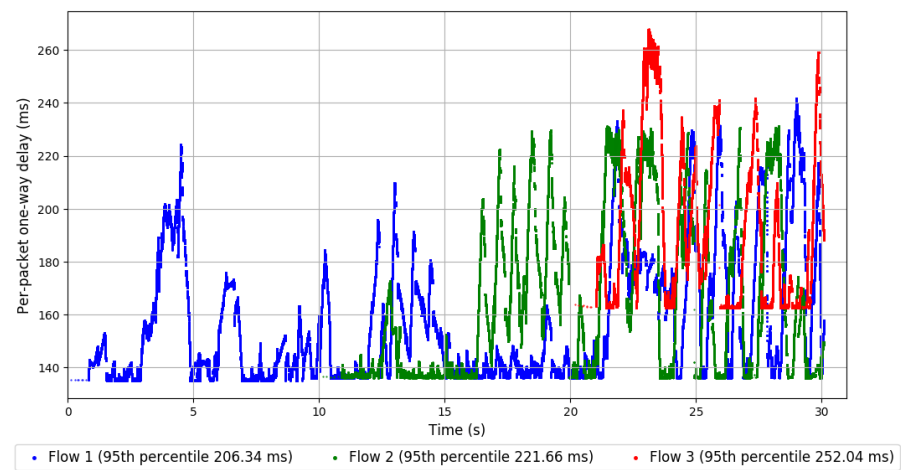
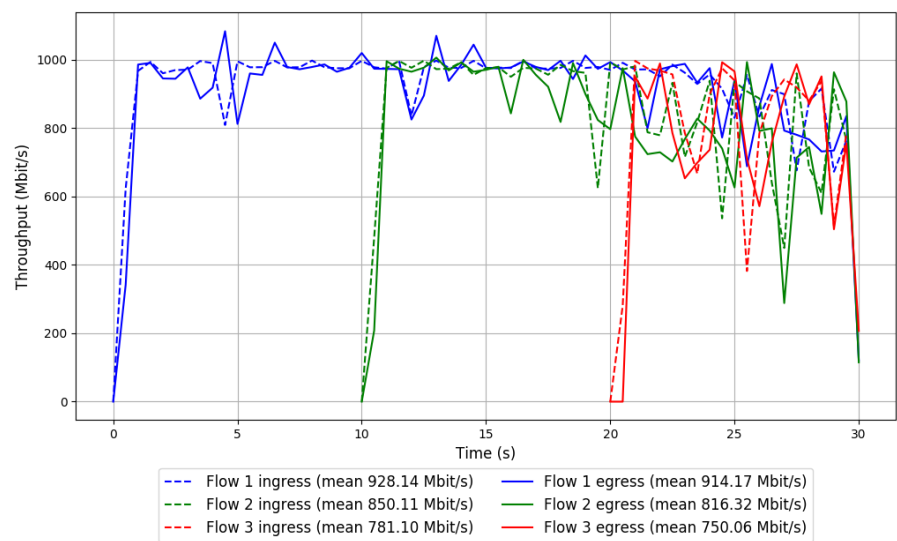
-- Flow 3:

Average throughput: 750.06 Mbit/s

95th percentile per-packet one-way delay: 252.042 ms

Loss rate: 3.99%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-18 02:41:50

End at: 2018-02-18 02:42:20

Below is generated by plot.py at 2018-02-18 06:53:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 1664.37 Mbit/s

95th percentile per-packet one-way delay: 225.607 ms

Loss rate: 2.91%

-- Flow 1:

Average throughput: 880.97 Mbit/s

95th percentile per-packet one-way delay: 227.729 ms

Loss rate: 1.07%

-- Flow 2:

Average throughput: 833.45 Mbit/s

95th percentile per-packet one-way delay: 220.307 ms

Loss rate: 3.78%

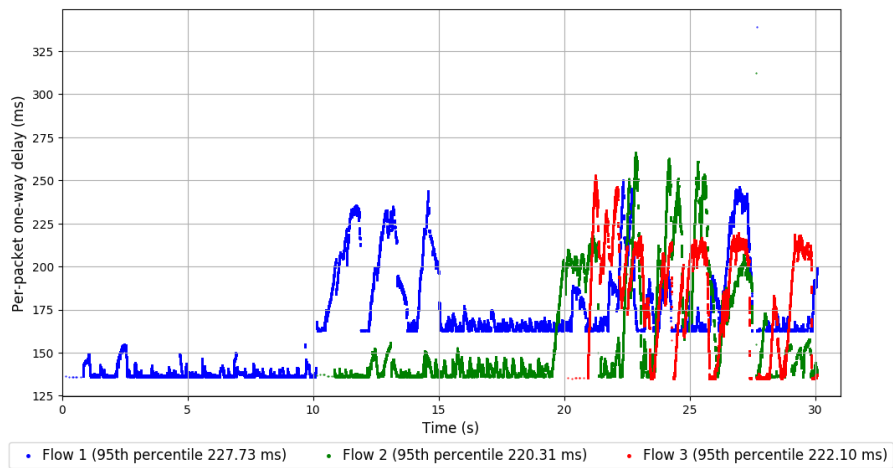
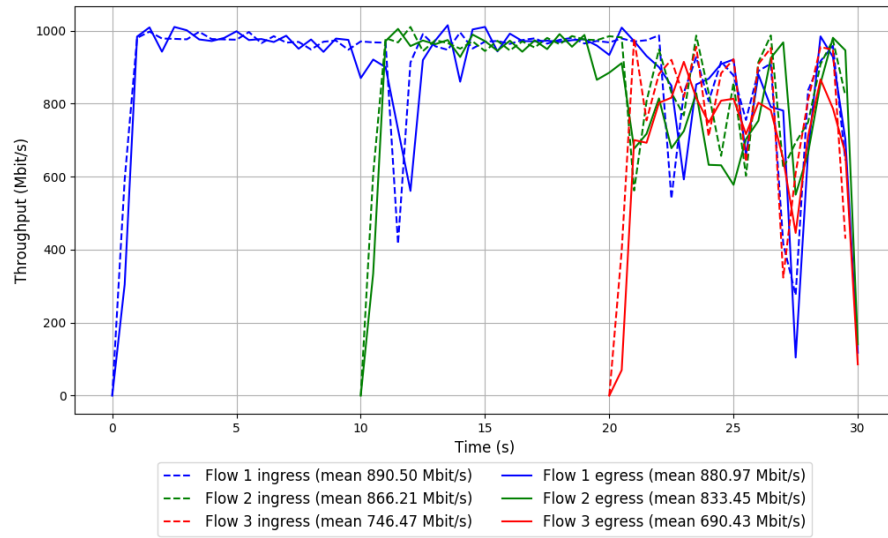
-- Flow 3:

Average throughput: 690.43 Mbit/s

95th percentile per-packet one-way delay: 222.097 ms

Loss rate: 7.49%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-18 03:02:22

End at: 2018-02-18 03:02:52

Below is generated by plot.py at 2018-02-18 07:07:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 1619.68 Mbit/s

95th percentile per-packet one-way delay: 233.514 ms

Loss rate: 4.15%

-- Flow 1:

Average throughput: 843.95 Mbit/s

95th percentile per-packet one-way delay: 234.889 ms

Loss rate: 2.88%

-- Flow 2:

Average throughput: 796.84 Mbit/s

95th percentile per-packet one-way delay: 233.402 ms

Loss rate: 6.19%

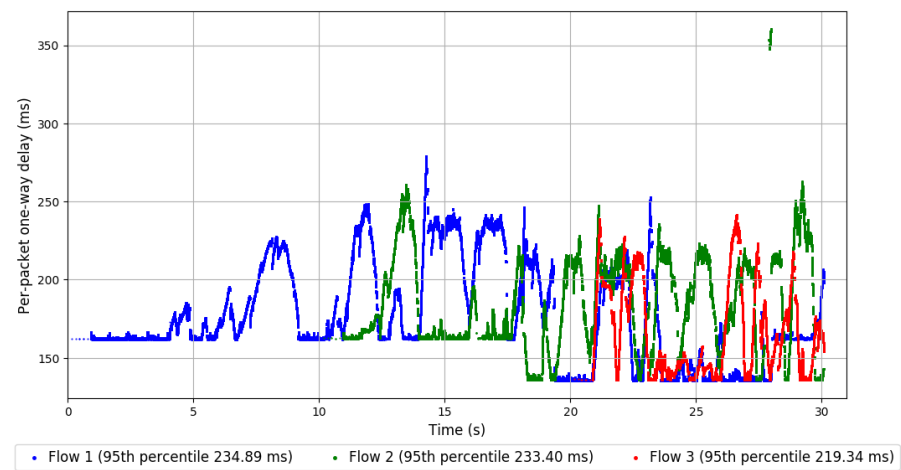
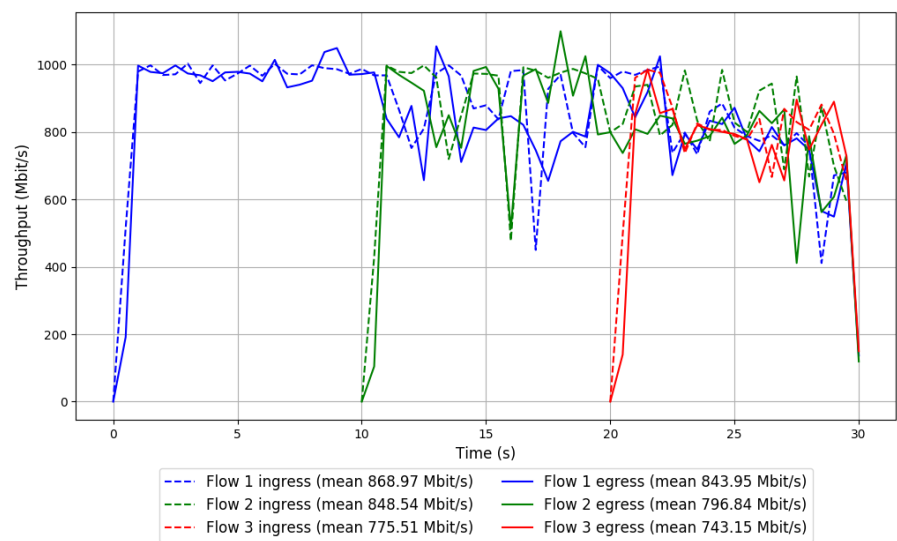
-- Flow 3:

Average throughput: 743.15 Mbit/s

95th percentile per-packet one-way delay: 219.341 ms

Loss rate: 4.00%

Run 9: Report of FillP — Data Link

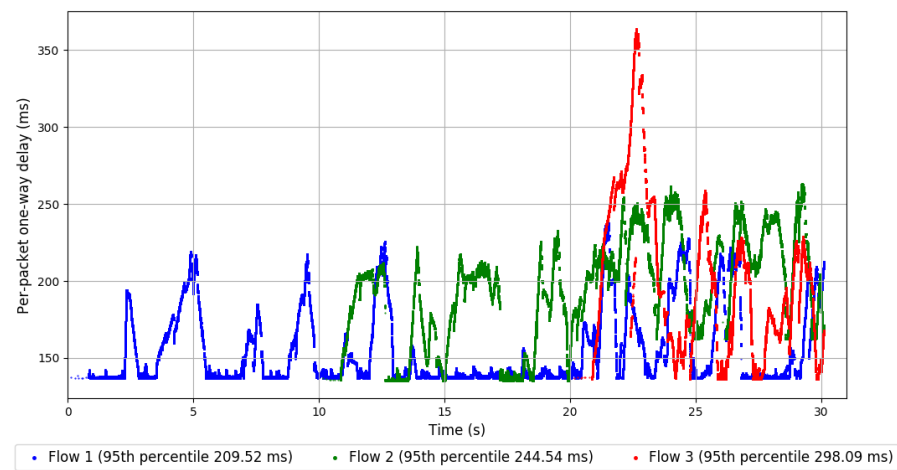
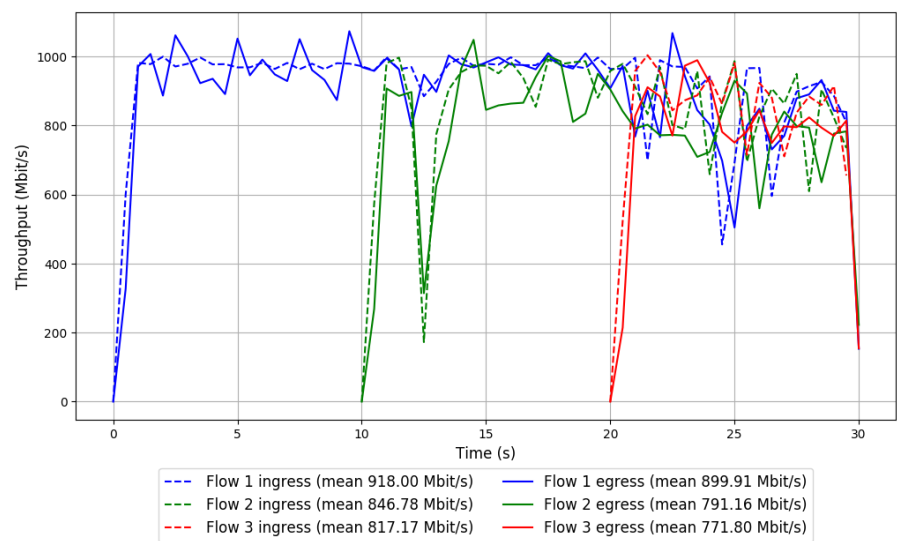


```
Run 10: Statistics of FillP

Start at: 2018-02-18 03:22:38
End at: 2018-02-18 03:23:08

# Below is generated by plot.py at 2018-02-18 07:10:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1682.88 Mbit/s
95th percentile per-packet one-way delay: 243.847 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 899.91 Mbit/s
95th percentile per-packet one-way delay: 209.518 ms
Loss rate: 1.88%
-- Flow 2:
Average throughput: 791.16 Mbit/s
95th percentile per-packet one-way delay: 244.537 ms
Loss rate: 6.45%
-- Flow 3:
Average throughput: 771.80 Mbit/s
95th percentile per-packet one-way delay: 298.094 ms
Loss rate: 5.30%
```

Run 10: Report of FillP — Data Link

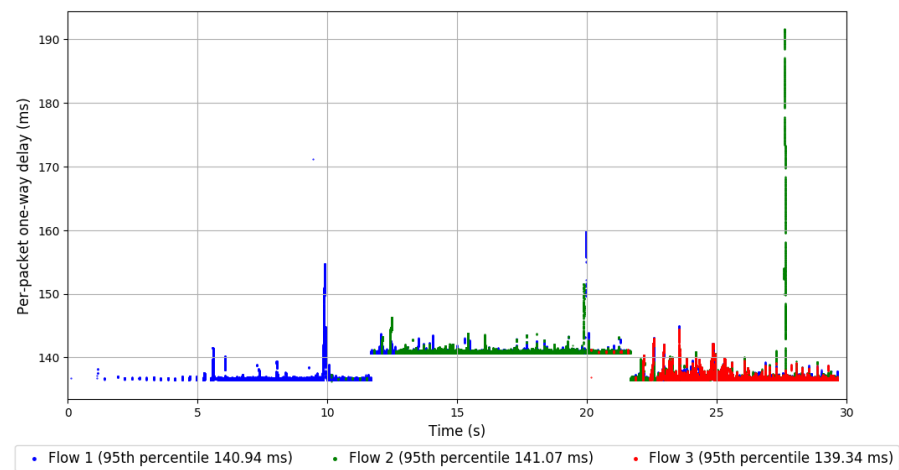
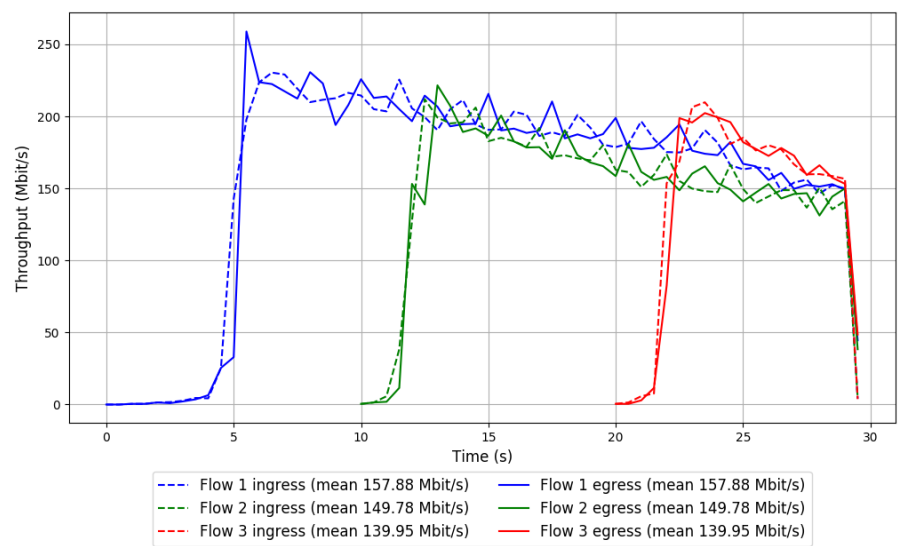


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-18 00:05:38
End at: 2018-02-18 00:06:08

# Below is generated by plot.py at 2018-02-18 07:10:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 301.89 Mbit/s
95th percentile per-packet one-way delay: 140.965 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 157.88 Mbit/s
95th percentile per-packet one-way delay: 140.940 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 149.78 Mbit/s
95th percentile per-packet one-way delay: 141.073 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 139.95 Mbit/s
95th percentile per-packet one-way delay: 139.336 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo-1-32 — Data Link

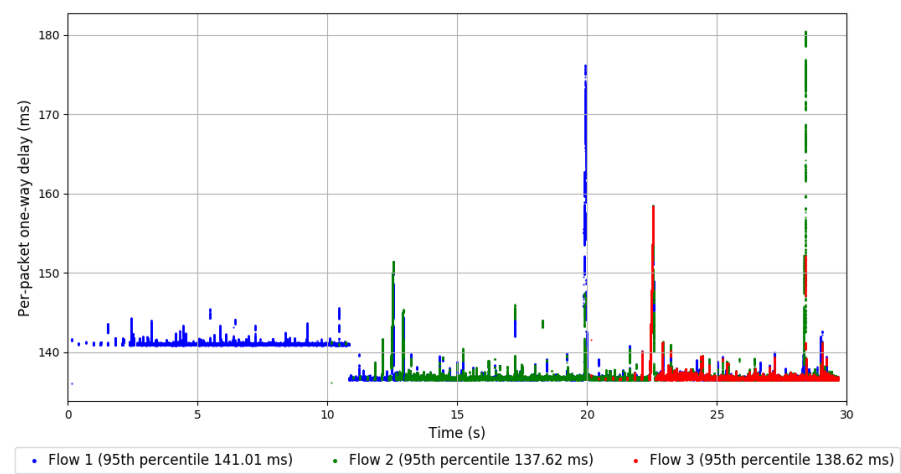
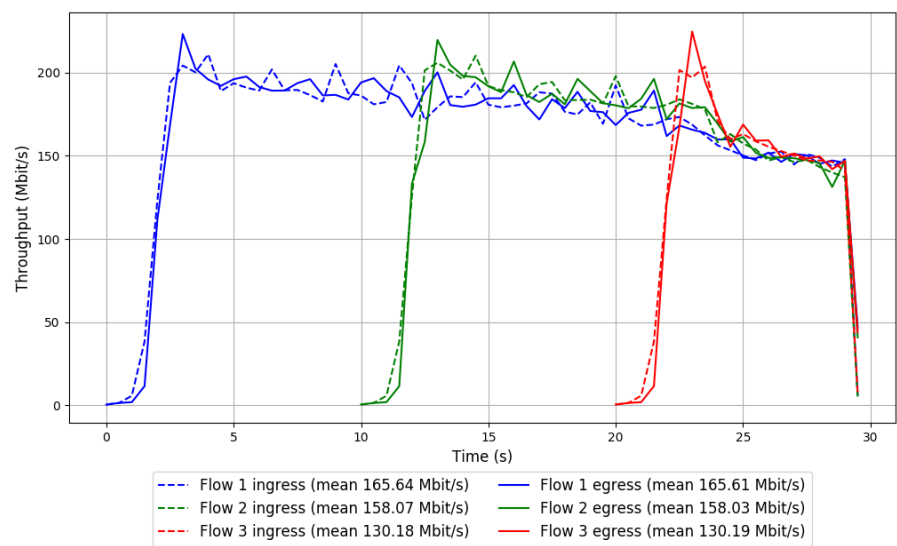


```
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-18 00:26:08
End at: 2018-02-18 00:26:38

# Below is generated by plot.py at 2018-02-18 07:10:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.98 Mbit/s
95th percentile per-packet one-way delay: 140.983 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 165.61 Mbit/s
95th percentile per-packet one-way delay: 141.012 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 158.03 Mbit/s
95th percentile per-packet one-way delay: 137.624 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 130.19 Mbit/s
95th percentile per-packet one-way delay: 138.621 ms
Loss rate: 0.00%
```

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-18 00:47:07

End at: 2018-02-18 00:47:37

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 275.87 Mbit/s

95th percentile per-packet one-way delay: 162.770 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 127.10 Mbit/s

95th percentile per-packet one-way delay: 162.808 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 162.08 Mbit/s

95th percentile per-packet one-way delay: 140.974 ms

Loss rate: 0.01%

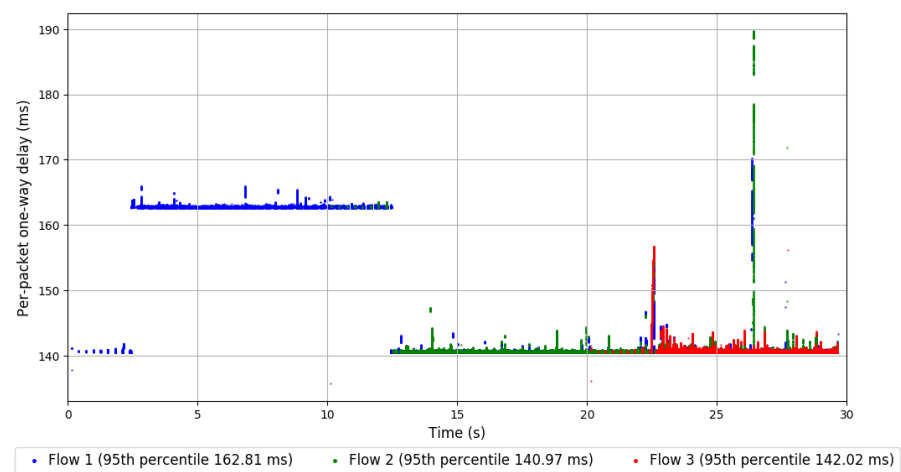
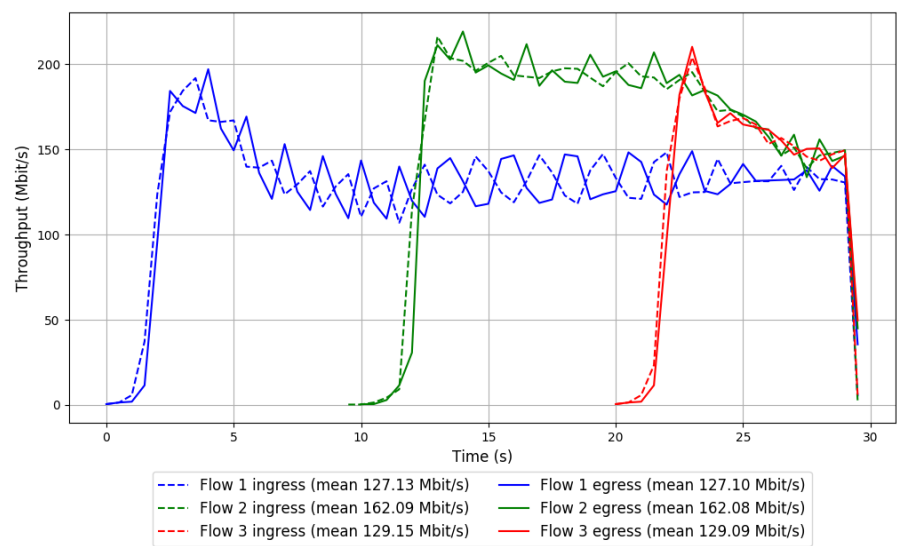
-- Flow 3:

Average throughput: 129.09 Mbit/s

95th percentile per-packet one-way delay: 142.024 ms

Loss rate: 0.04%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-18 01:07:33

End at: 2018-02-18 01:08:03

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 308.15 Mbit/s

95th percentile per-packet one-way delay: 140.051 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 166.31 Mbit/s

95th percentile per-packet one-way delay: 140.034 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 150.96 Mbit/s

95th percentile per-packet one-way delay: 140.049 ms

Loss rate: 0.00%

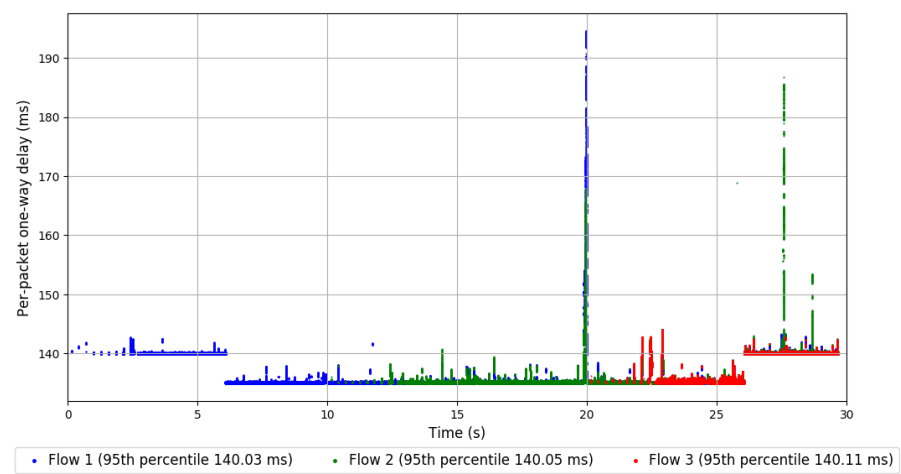
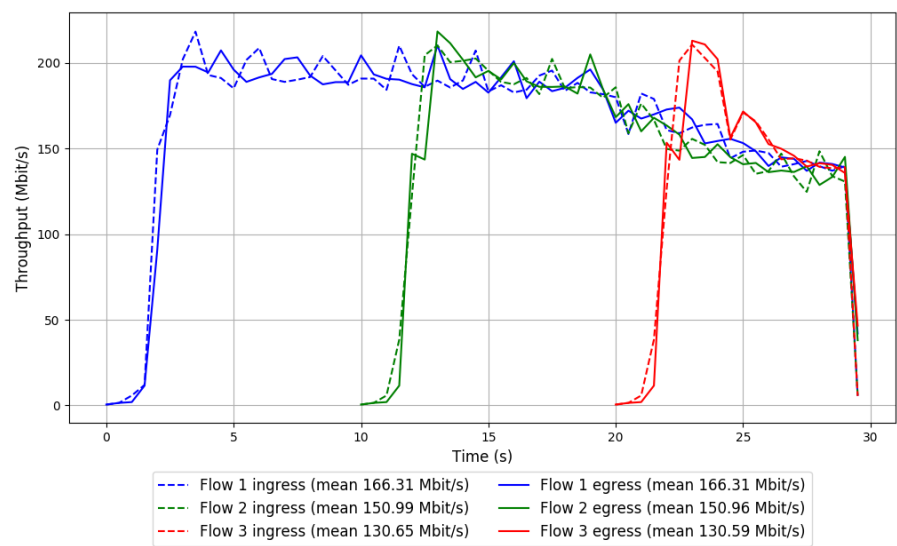
-- Flow 3:

Average throughput: 130.59 Mbit/s

95th percentile per-packet one-way delay: 140.114 ms

Loss rate: 0.00%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-18 01:28:18

End at: 2018-02-18 01:28:48

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 304.38 Mbit/s

95th percentile per-packet one-way delay: 136.600 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 163.61 Mbit/s

95th percentile per-packet one-way delay: 136.508 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 145.90 Mbit/s

95th percentile per-packet one-way delay: 136.535 ms

Loss rate: 0.00%

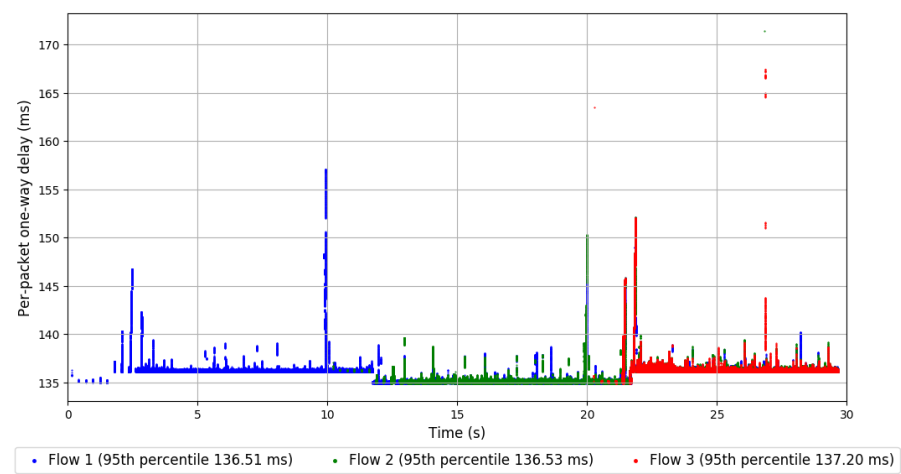
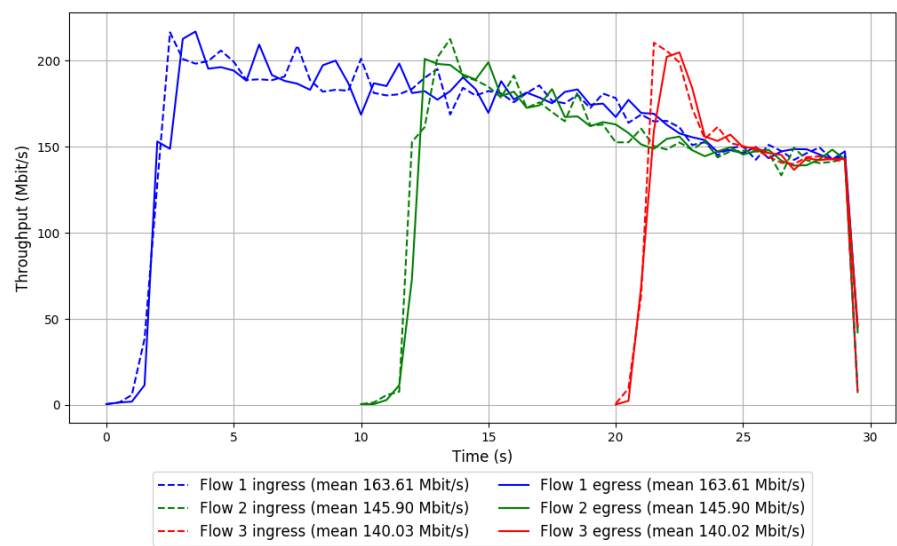
-- Flow 3:

Average throughput: 140.02 Mbit/s

95th percentile per-packet one-way delay: 137.199 ms

Loss rate: 0.00%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-18 01:48:54

End at: 2018-02-18 01:49:24

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 311.22 Mbit/s

95th percentile per-packet one-way delay: 136.776 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 165.59 Mbit/s

95th percentile per-packet one-way delay: 136.596 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 162.82 Mbit/s

95th percentile per-packet one-way delay: 136.771 ms

Loss rate: 0.00%

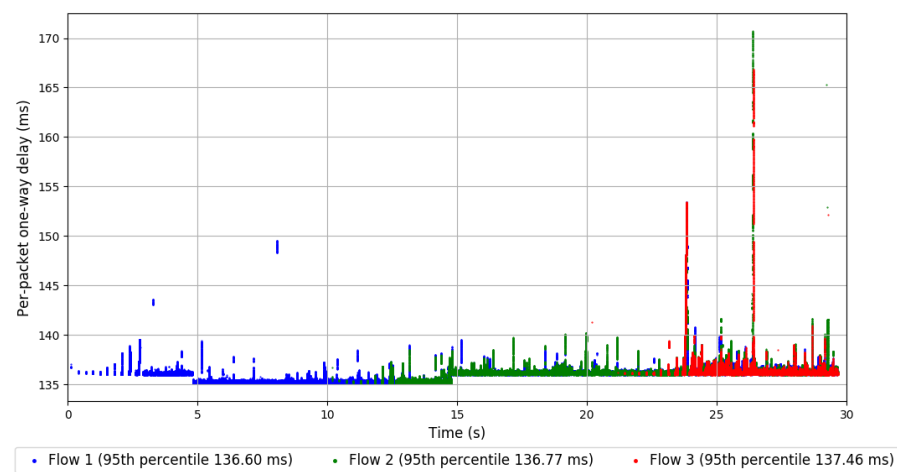
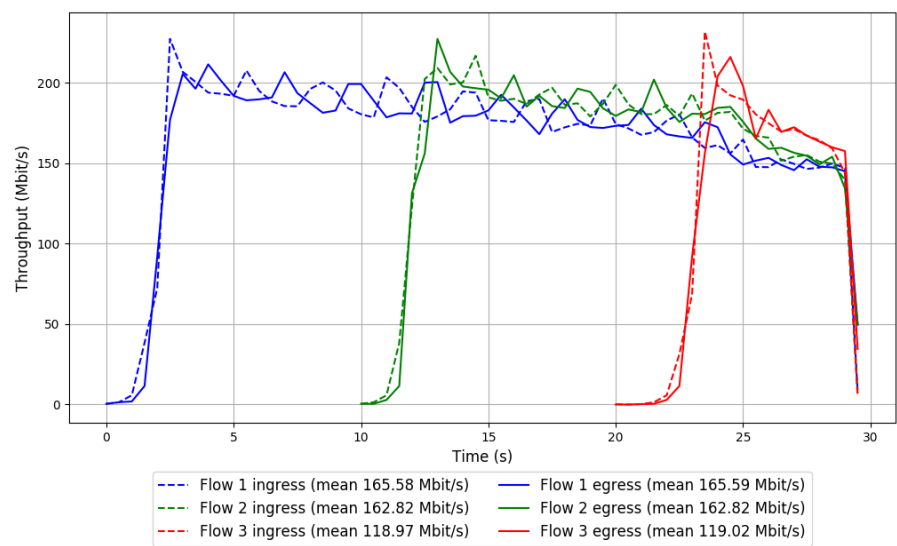
-- Flow 3:

Average throughput: 119.02 Mbit/s

95th percentile per-packet one-way delay: 137.457 ms

Loss rate: 0.01%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-18 02:09:20

End at: 2018-02-18 02:09:50

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 236.67 Mbit/s

95th percentile per-packet one-way delay: 162.902 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 106.58 Mbit/s

95th percentile per-packet one-way delay: 162.735 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 134.56 Mbit/s

95th percentile per-packet one-way delay: 162.861 ms

Loss rate: 0.00%

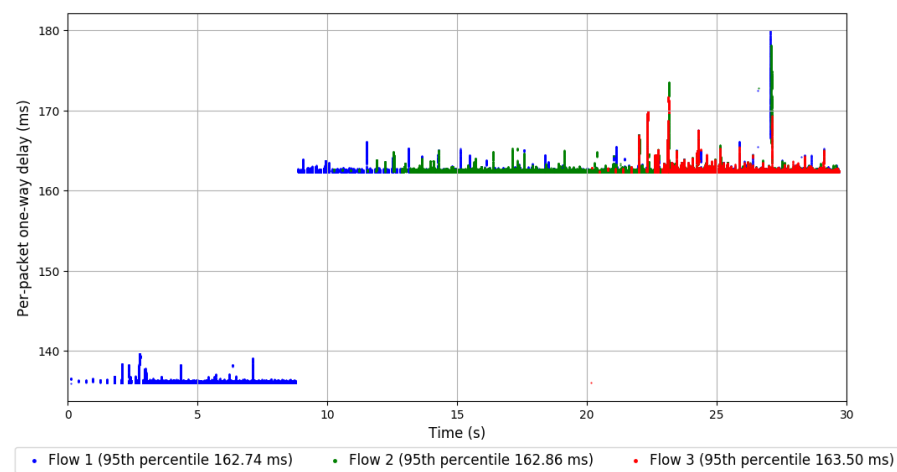
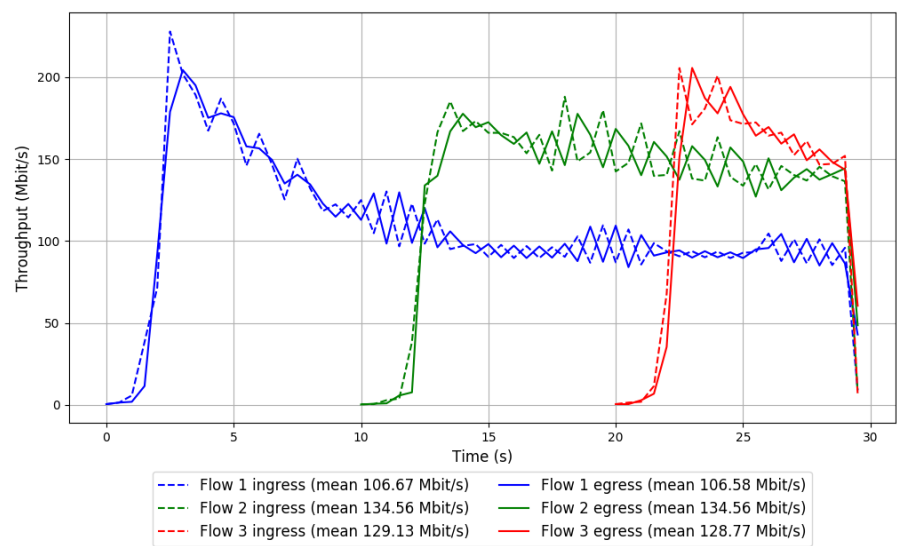
-- Flow 3:

Average throughput: 128.77 Mbit/s

95th percentile per-packet one-way delay: 163.505 ms

Loss rate: 0.00%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-18 02:29:48

End at: 2018-02-18 02:30:18

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 132.10 Mbit/s

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

Loss rate: 0.00%

-- Flow 1:

Average throughput: 41.54 Mbit/s

95th percentile per-packet one-way delay: 162.682 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 136.47 Mbit/s

95th percentile per-packet one-way delay: 162.612 ms

Loss rate: 0.00%

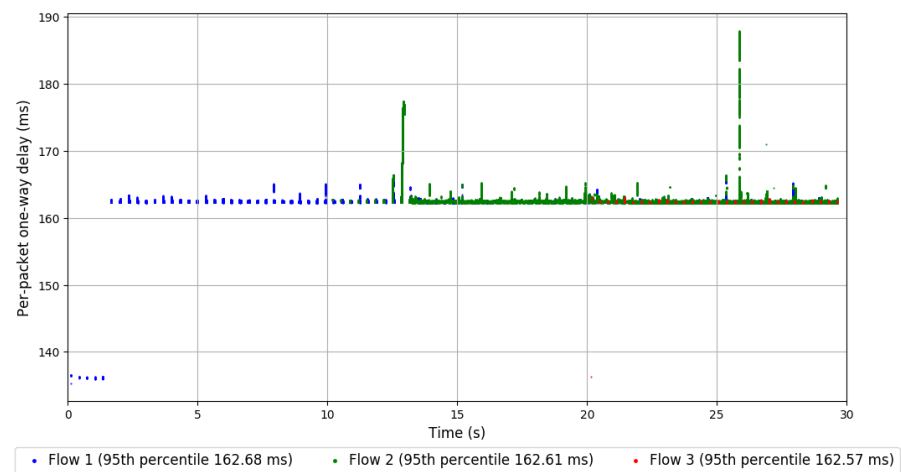
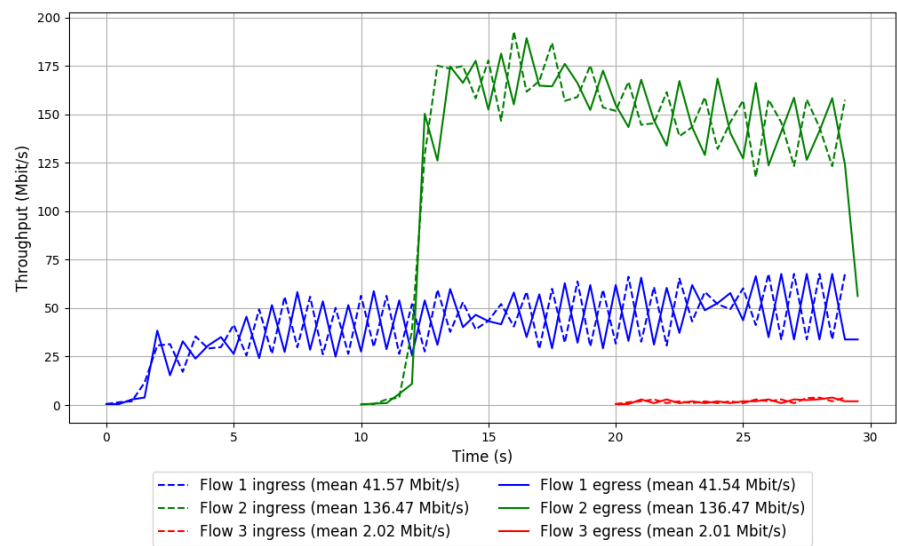
-- Flow 3:

Average throughput: 2.01 Mbit/s

95th percentile per-packet one-way delay: 162.569 ms

Loss rate: 0.00%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-18 02:50:15

End at: 2018-02-18 02:50:45

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 278.43 Mbit/s

95th percentile per-packet one-way delay: 163.495 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 145.51 Mbit/s

95th percentile per-packet one-way delay: 163.290 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 145.45 Mbit/s

95th percentile per-packet one-way delay: 163.550 ms

Loss rate: 0.00%

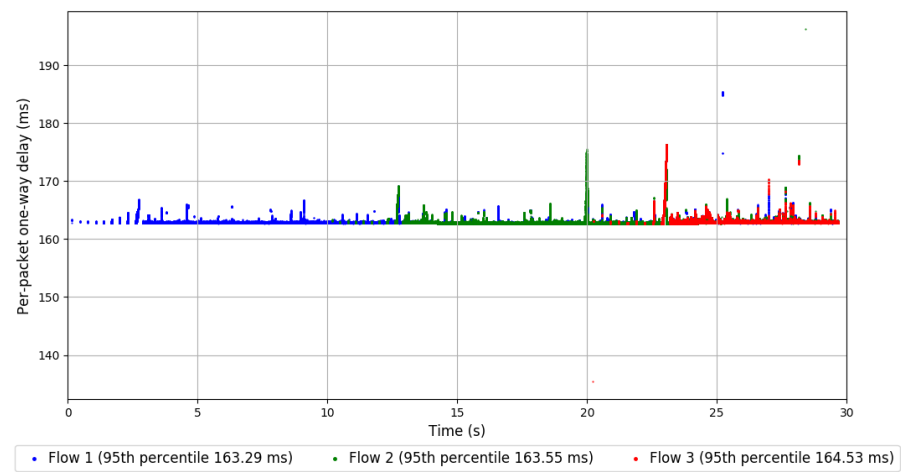
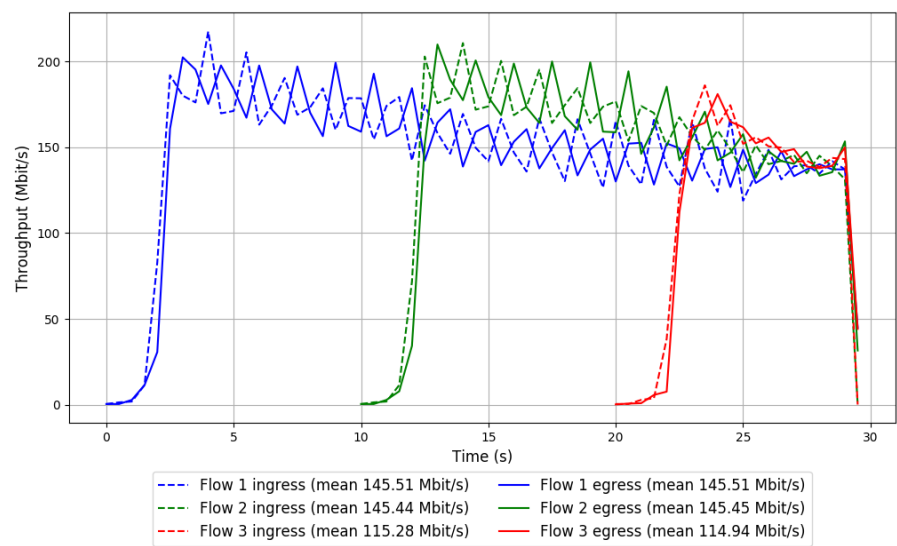
-- Flow 3:

Average throughput: 114.94 Mbit/s

95th percentile per-packet one-way delay: 164.525 ms

Loss rate: 0.00%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-18 03:10:41

End at: 2018-02-18 03:11:11

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 279.23 Mbit/s

95th percentile per-packet one-way delay: 163.424 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 143.93 Mbit/s

95th percentile per-packet one-way delay: 163.113 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 143.56 Mbit/s

95th percentile per-packet one-way delay: 163.617 ms

Loss rate: 0.00%

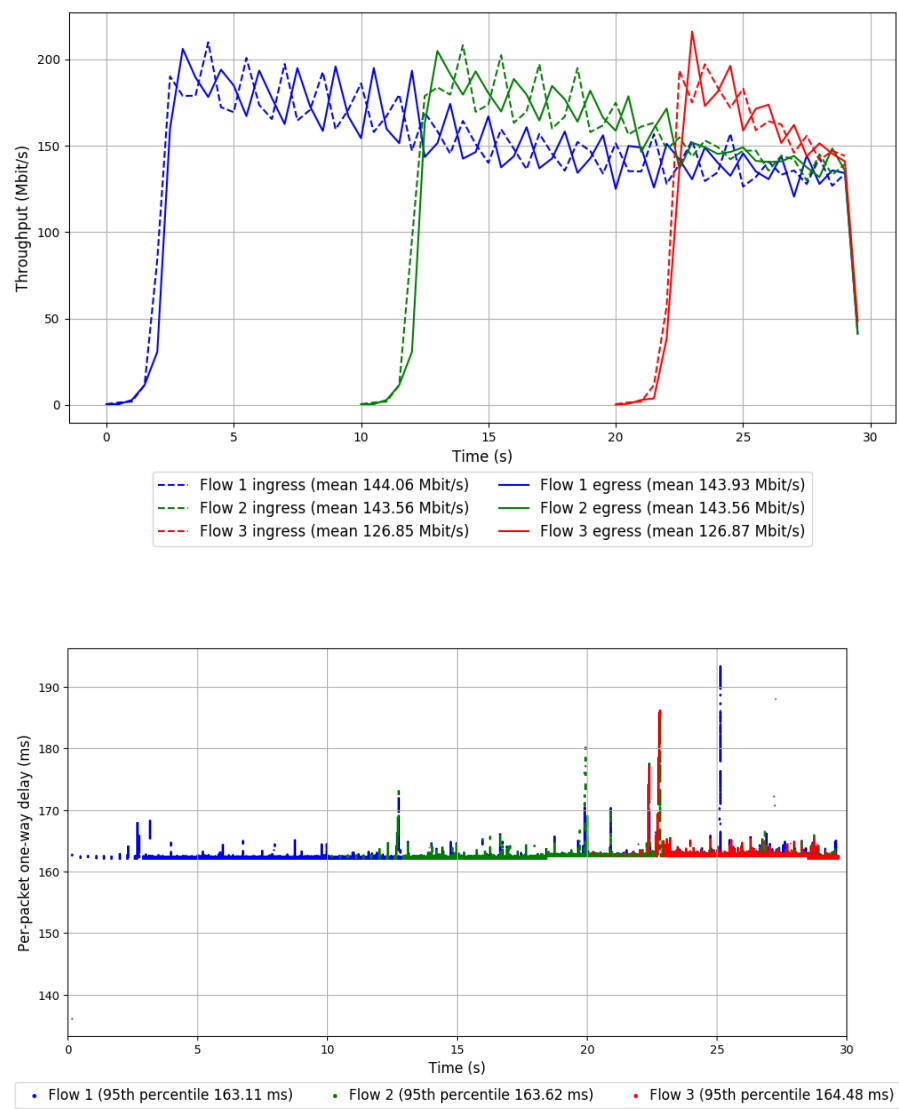
-- Flow 3:

Average throughput: 126.87 Mbit/s

95th percentile per-packet one-way delay: 164.483 ms

Loss rate: 0.00%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-02-18 00:04:12

End at: 2018-02-18 00:04:42

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 440.00 Mbit/s

95th percentile per-packet one-way delay: 141.854 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 276.03 Mbit/s

95th percentile per-packet one-way delay: 146.492 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 184.72 Mbit/s

95th percentile per-packet one-way delay: 136.795 ms

Loss rate: 0.00%

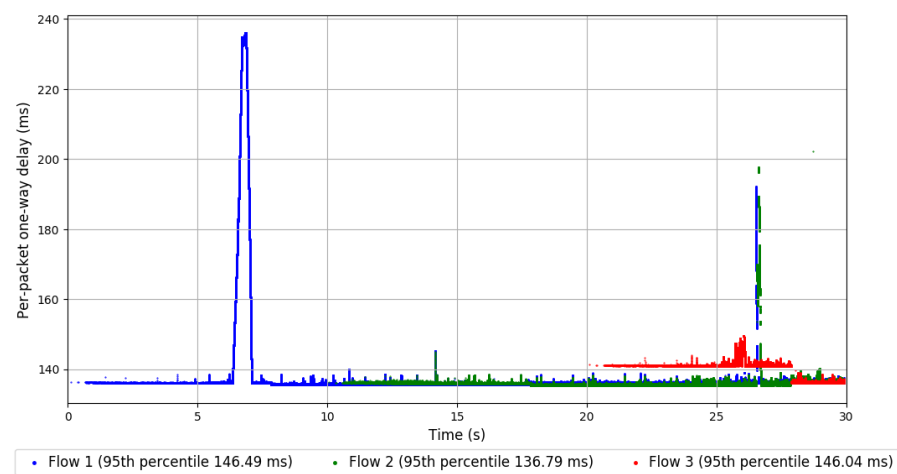
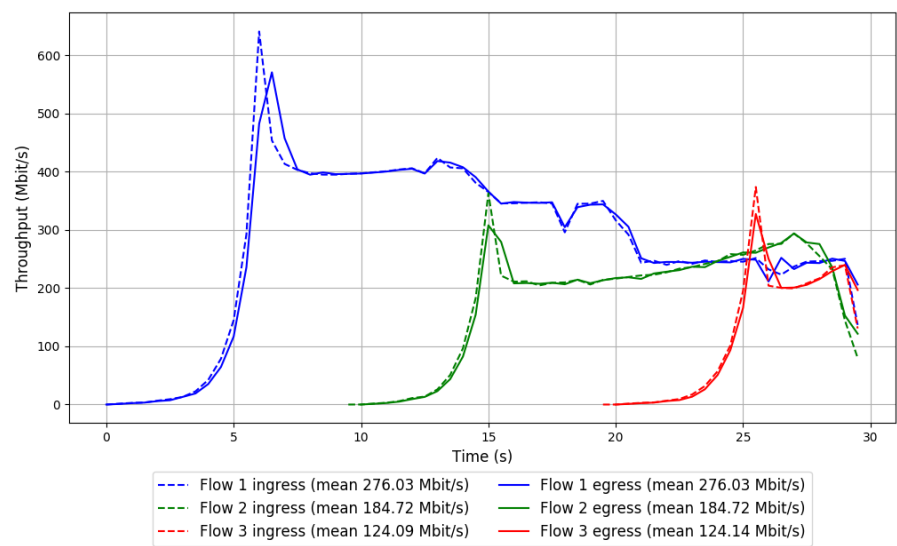
-- Flow 3:

Average throughput: 124.14 Mbit/s

95th percentile per-packet one-way delay: 146.039 ms

Loss rate: 0.00%

Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-18 00:24:40

End at: 2018-02-18 00:25:10

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 460.30 Mbit/s

95th percentile per-packet one-way delay: 158.961 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 303.37 Mbit/s

95th percentile per-packet one-way delay: 162.968 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 180.10 Mbit/s

95th percentile per-packet one-way delay: 136.633 ms

Loss rate: 0.00%

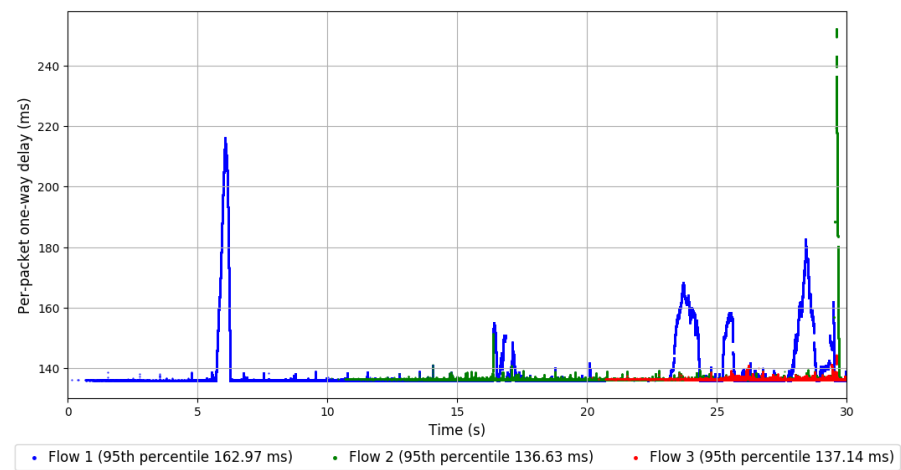
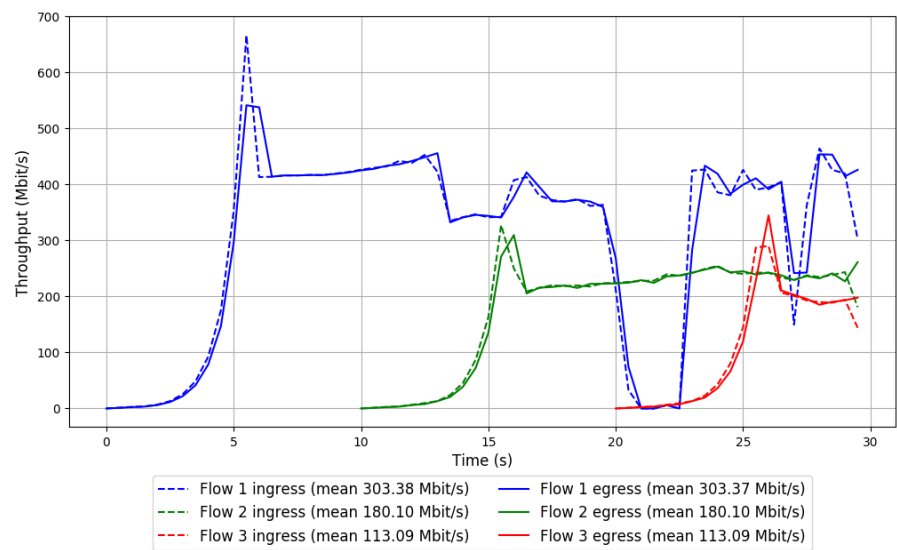
-- Flow 3:

Average throughput: 113.09 Mbit/s

95th percentile per-packet one-way delay: 137.144 ms

Loss rate: 0.00%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-18 00:45:36

End at: 2018-02-18 00:46:06

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 501.28 Mbit/s

95th percentile per-packet one-way delay: 168.167 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 261.51 Mbit/s

95th percentile per-packet one-way delay: 140.423 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 267.35 Mbit/s

95th percentile per-packet one-way delay: 195.445 ms

Loss rate: 1.17%

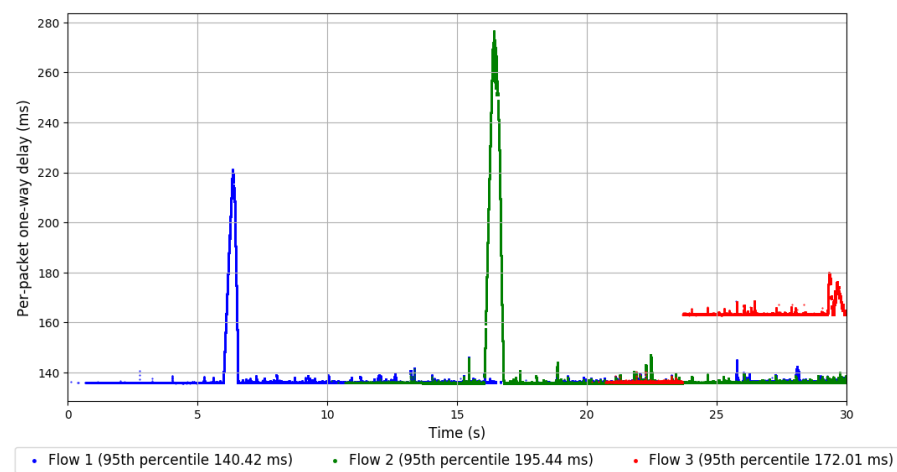
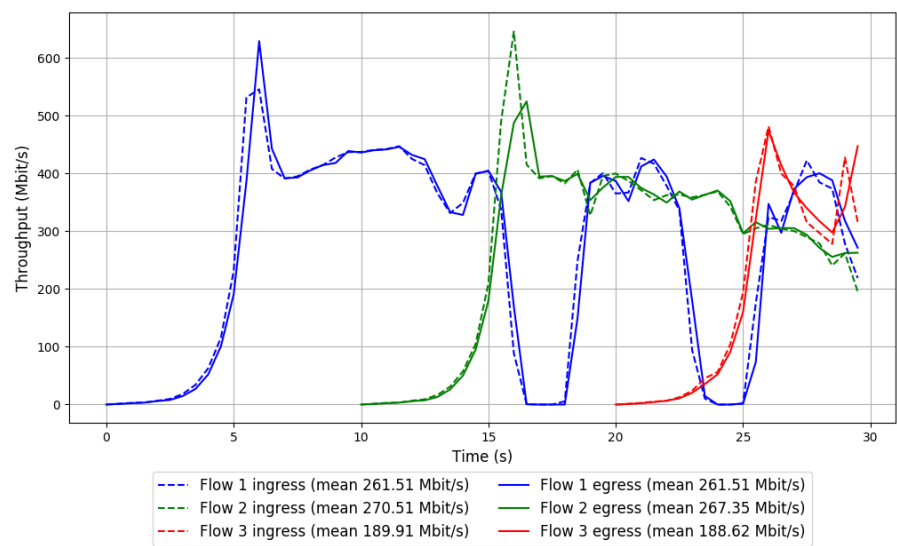
-- Flow 3:

Average throughput: 188.62 Mbit/s

95th percentile per-packet one-way delay: 172.011 ms

Loss rate: 0.69%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-18 01:06:00

End at: 2018-02-18 01:06:30

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 520.45 Mbit/s

95th percentile per-packet one-way delay: 147.395 ms

Loss rate: 0.36%

-- Flow 1:

Average throughput: 305.84 Mbit/s

95th percentile per-packet one-way delay: 137.586 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 262.55 Mbit/s

95th percentile per-packet one-way delay: 193.325 ms

Loss rate: 0.48%

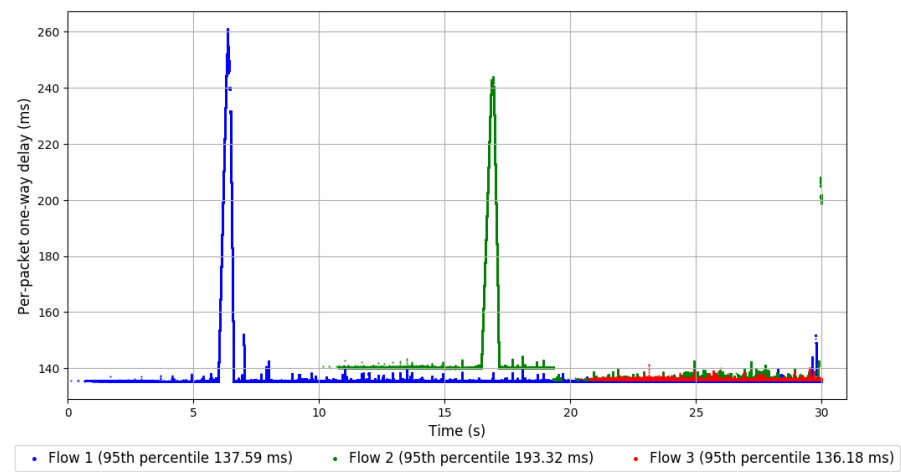
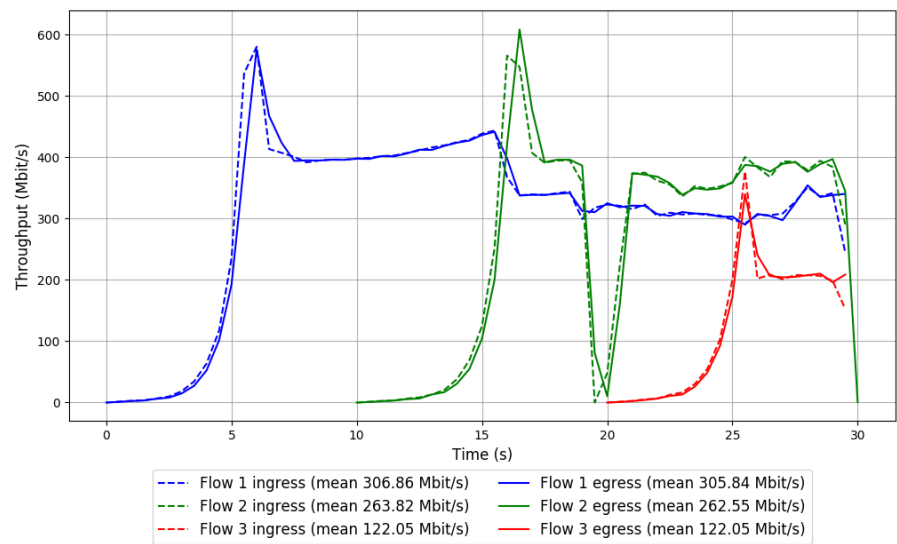
-- Flow 3:

Average throughput: 122.05 Mbit/s

95th percentile per-packet one-way delay: 136.180 ms

Loss rate: 0.00%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-18 01:26:51

End at: 2018-02-18 01:27:21

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 435.38 Mbit/s

95th percentile per-packet one-way delay: 143.380 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 275.86 Mbit/s

95th percentile per-packet one-way delay: 138.328 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 182.83 Mbit/s

95th percentile per-packet one-way delay: 169.261 ms

Loss rate: 0.00%

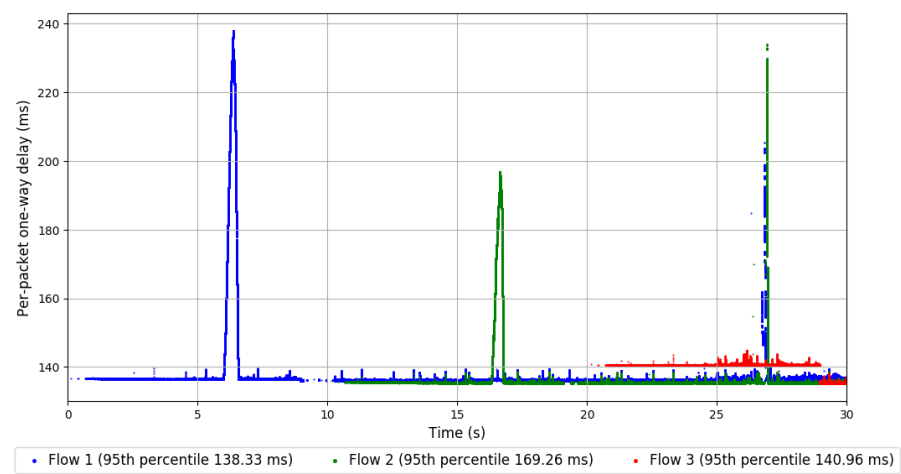
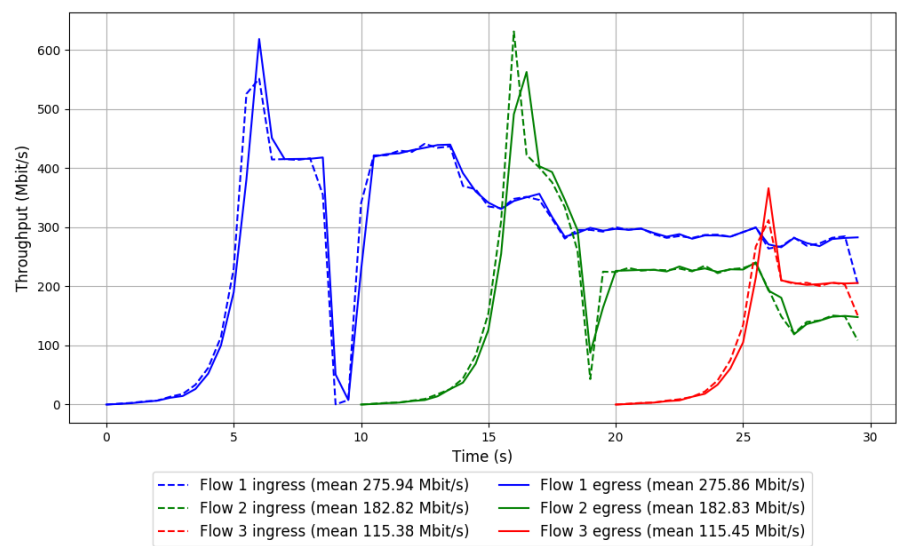
-- Flow 3:

Average throughput: 115.45 Mbit/s

95th percentile per-packet one-way delay: 140.957 ms

Loss rate: 0.00%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-18 01:47:26

End at: 2018-02-18 01:47:56

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 459.56 Mbit/s

95th percentile per-packet one-way delay: 141.393 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 303.56 Mbit/s

95th percentile per-packet one-way delay: 145.064 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.89 Mbit/s

95th percentile per-packet one-way delay: 137.183 ms

Loss rate: 0.00%

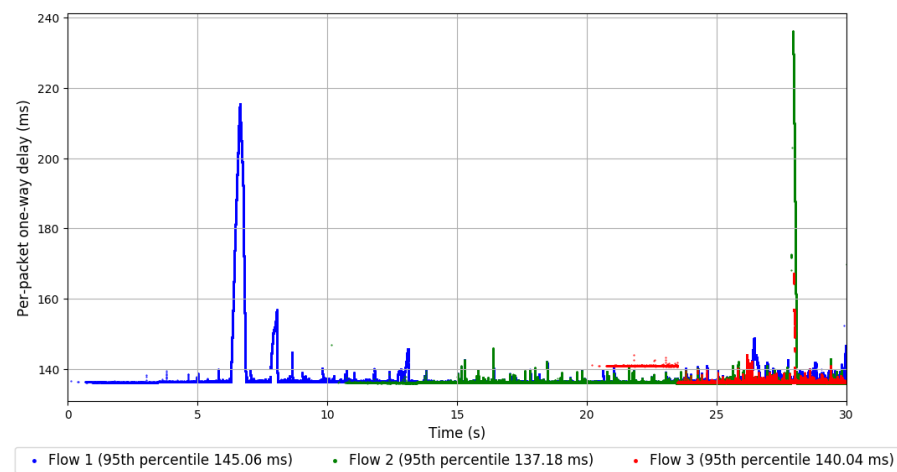
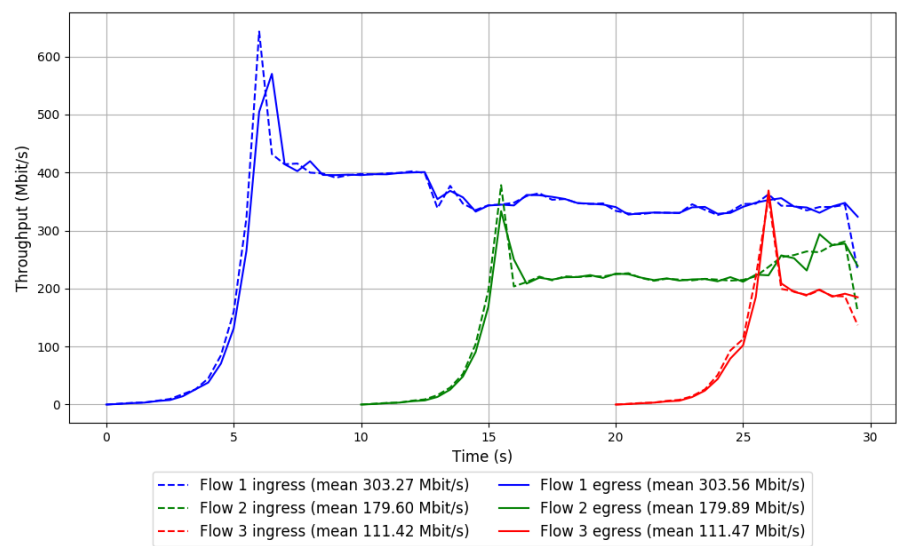
-- Flow 3:

Average throughput: 111.47 Mbit/s

95th percentile per-packet one-way delay: 140.036 ms

Loss rate: 0.00%

Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-18 02:07:50

End at: 2018-02-18 02:08:20

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 465.08 Mbit/s

95th percentile per-packet one-way delay: 165.166 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 300.59 Mbit/s

95th percentile per-packet one-way delay: 167.113 ms

Loss rate: 0.15%

-- Flow 2:

Average throughput: 236.99 Mbit/s

95th percentile per-packet one-way delay: 164.276 ms

Loss rate: 0.00%

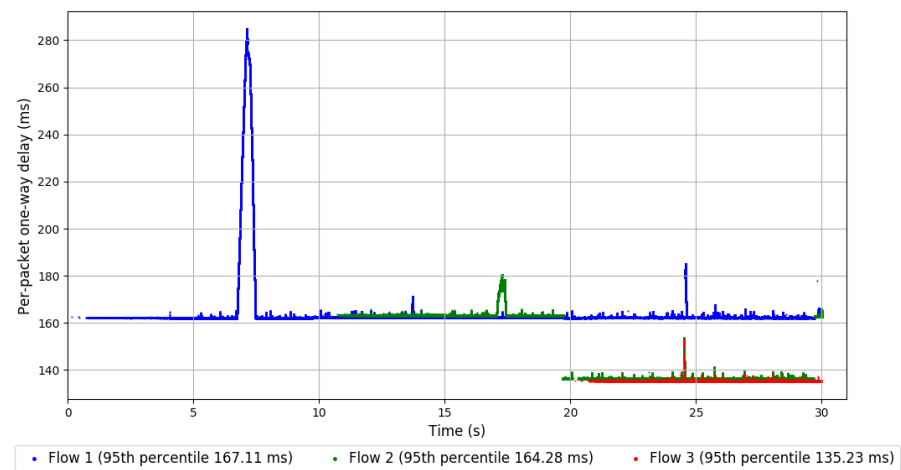
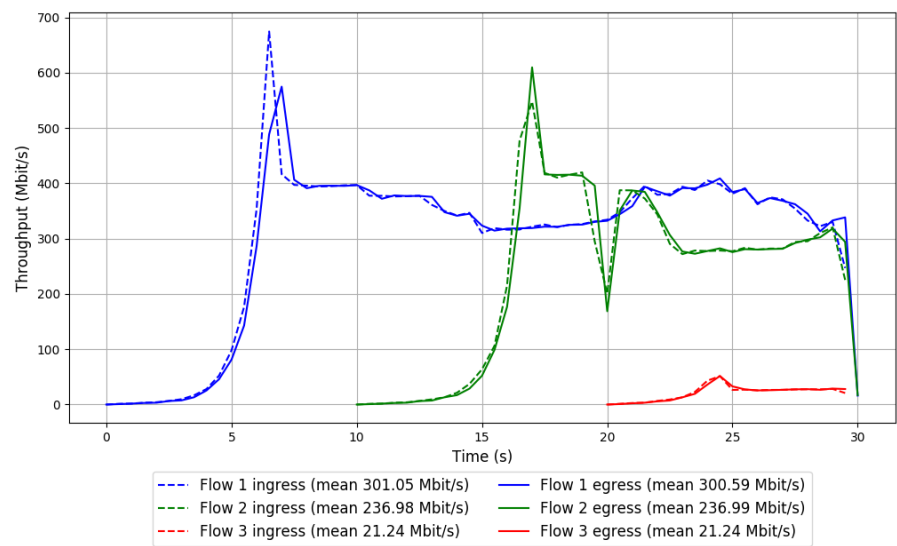
-- Flow 3:

Average throughput: 21.24 Mbit/s

95th percentile per-packet one-way delay: 135.230 ms

Loss rate: 0.00%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-18 02:28:23

End at: 2018-02-18 02:28:53

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 427.31 Mbit/s

95th percentile per-packet one-way delay: 162.830 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 277.64 Mbit/s

95th percentile per-packet one-way delay: 163.671 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 168.86 Mbit/s

95th percentile per-packet one-way delay: 162.415 ms

Loss rate: 0.10%

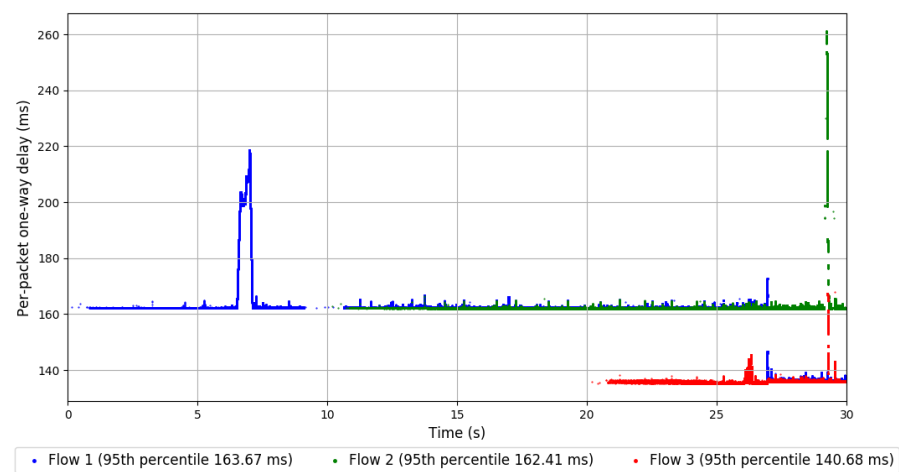
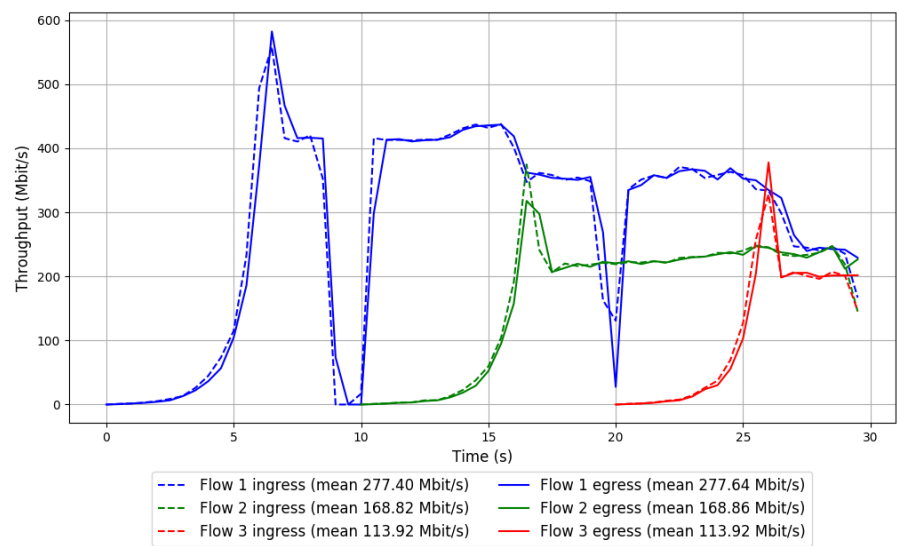
-- Flow 3:

Average throughput: 113.92 Mbit/s

95th percentile per-packet one-way delay: 140.683 ms

Loss rate: 0.00%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-18 02:48:48

End at: 2018-02-18 02:49:18

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 434.10 Mbit/s

95th percentile per-packet one-way delay: 162.927 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 282.83 Mbit/s

95th percentile per-packet one-way delay: 163.002 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 178.46 Mbit/s

95th percentile per-packet one-way delay: 163.027 ms

Loss rate: 0.00%

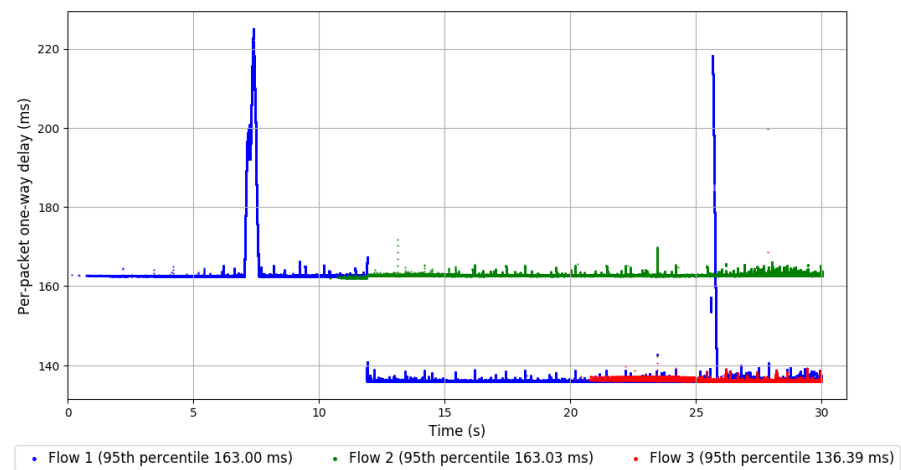
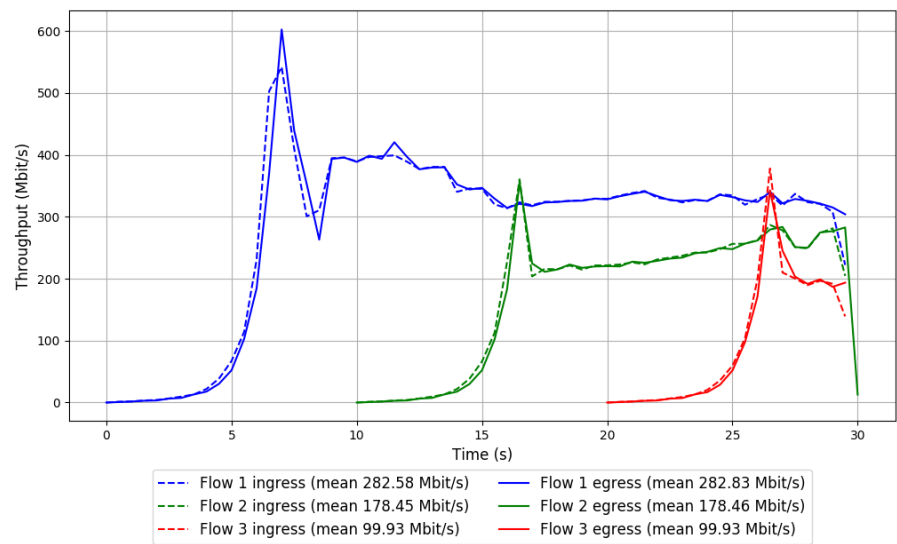
-- Flow 3:

Average throughput: 99.93 Mbit/s

95th percentile per-packet one-way delay: 136.388 ms

Loss rate: 0.00%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-18 03:09:17

End at: 2018-02-18 03:09:47

Below is generated by plot.py at 2018-02-18 07:10:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 394.49 Mbit/s

95th percentile per-packet one-way delay: 162.850 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 239.37 Mbit/s

95th percentile per-packet one-way delay: 162.604 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 230.13 Mbit/s

95th percentile per-packet one-way delay: 197.949 ms

Loss rate: 0.00%

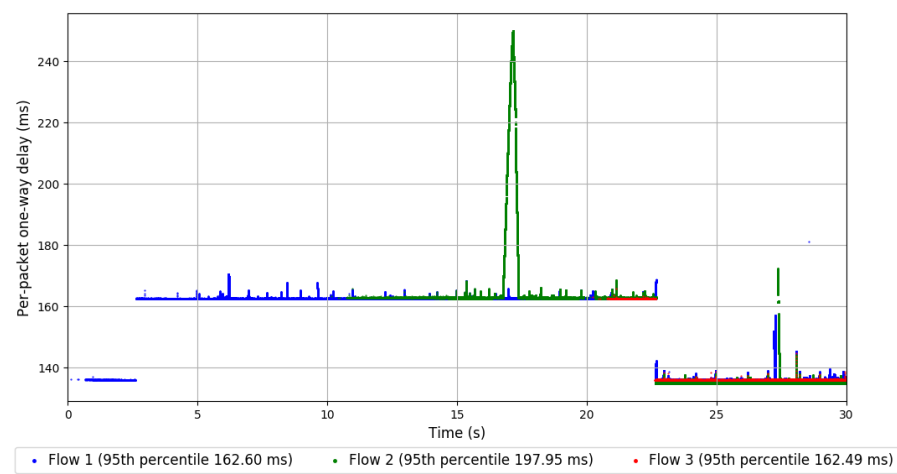
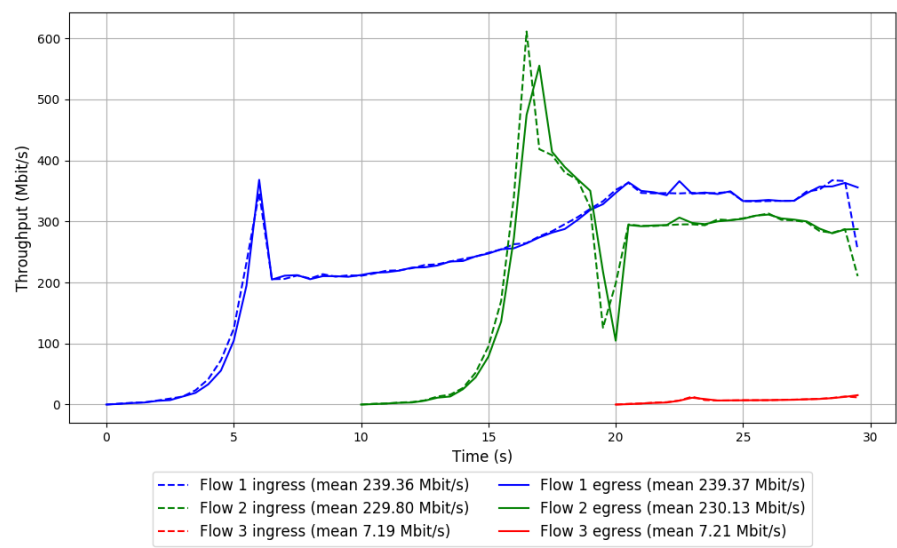
-- Flow 3:

Average throughput: 7.21 Mbit/s

95th percentile per-packet one-way delay: 162.488 ms

Loss rate: 0.00%

Run 10: Report of Vivace-latency — Data Link

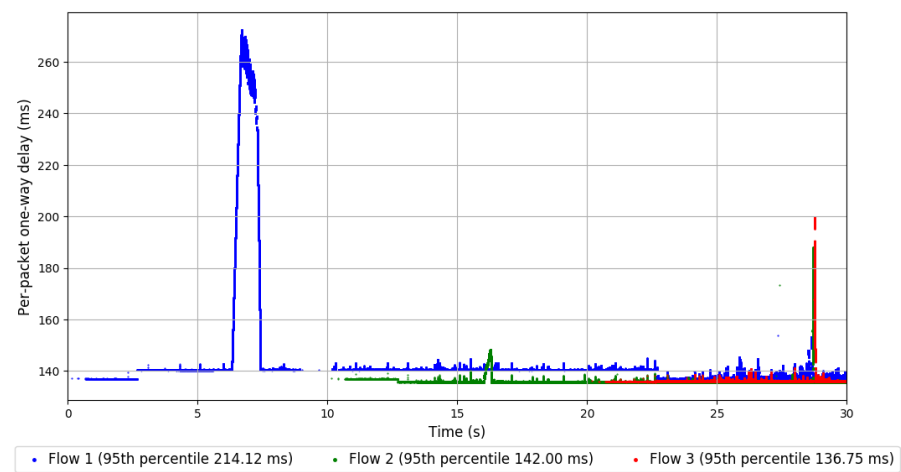
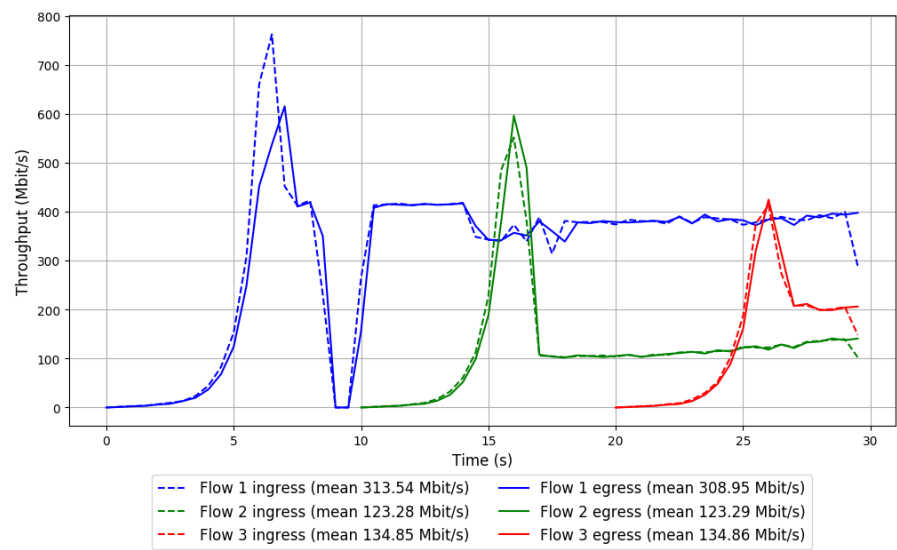


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-18 00:08:57
End at: 2018-02-18 00:09:27

# Below is generated by plot.py at 2018-02-18 07:10:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.19 Mbit/s
95th percentile per-packet one-way delay: 148.102 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 308.95 Mbit/s
95th percentile per-packet one-way delay: 214.121 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 123.29 Mbit/s
95th percentile per-packet one-way delay: 141.997 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 134.86 Mbit/s
95th percentile per-packet one-way delay: 136.754 ms
Loss rate: 0.00%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-18 00:29:28

End at: 2018-02-18 00:29:58

Below is generated by plot.py at 2018-02-18 07:10:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 434.53 Mbit/s

95th percentile per-packet one-way delay: 154.807 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 279.06 Mbit/s

95th percentile per-packet one-way delay: 225.431 ms

Loss rate: 0.86%

-- Flow 2:

Average throughput: 186.59 Mbit/s

95th percentile per-packet one-way delay: 137.180 ms

Loss rate: 0.01%

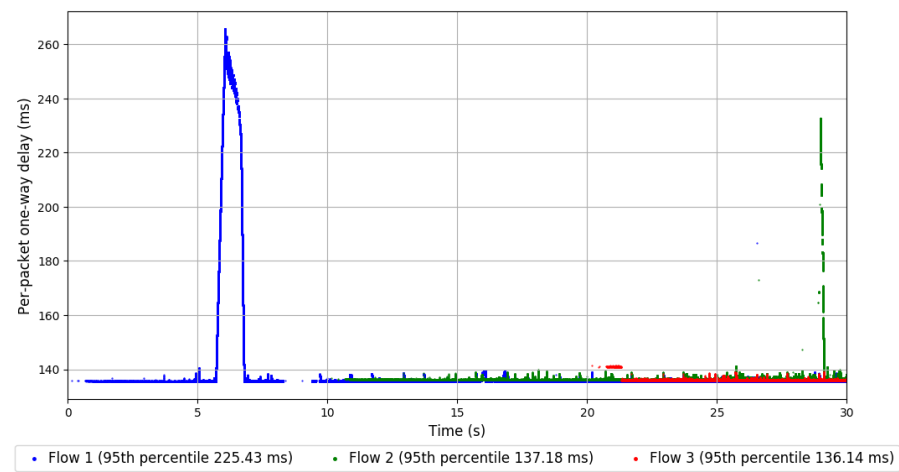
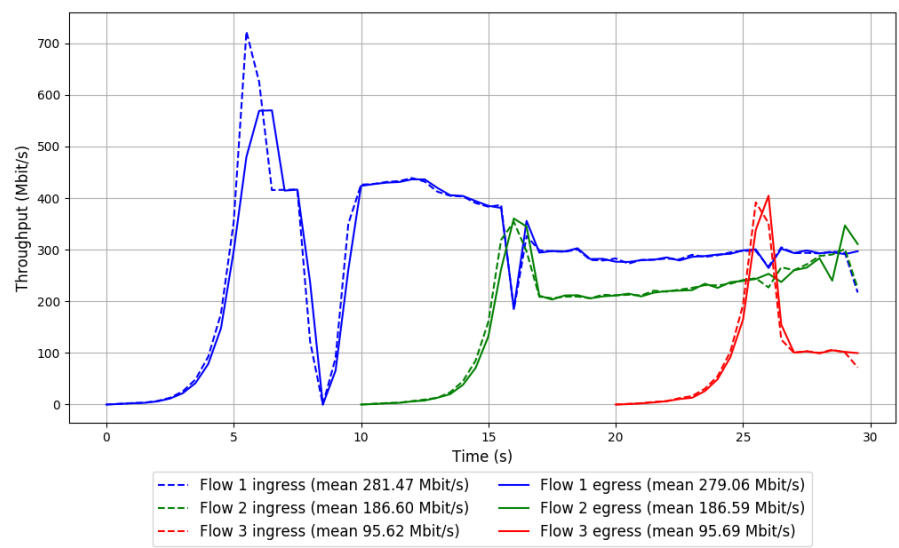
-- Flow 3:

Average throughput: 95.69 Mbit/s

95th percentile per-packet one-way delay: 136.141 ms

Loss rate: 0.00%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-18 00:50:23

End at: 2018-02-18 00:50:53

Below is generated by plot.py at 2018-02-18 07:12:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 522.08 Mbit/s

95th percentile per-packet one-way delay: 139.185 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 285.17 Mbit/s

95th percentile per-packet one-way delay: 177.664 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 287.70 Mbit/s

95th percentile per-packet one-way delay: 138.089 ms

Loss rate: 0.00%

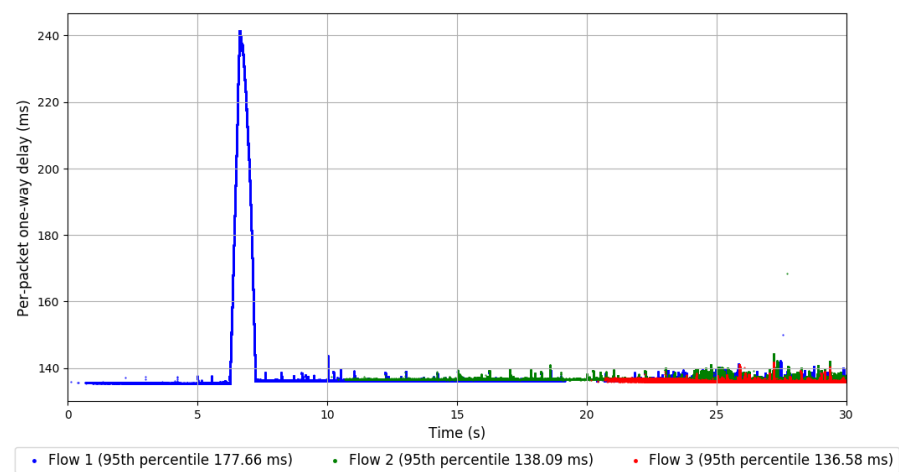
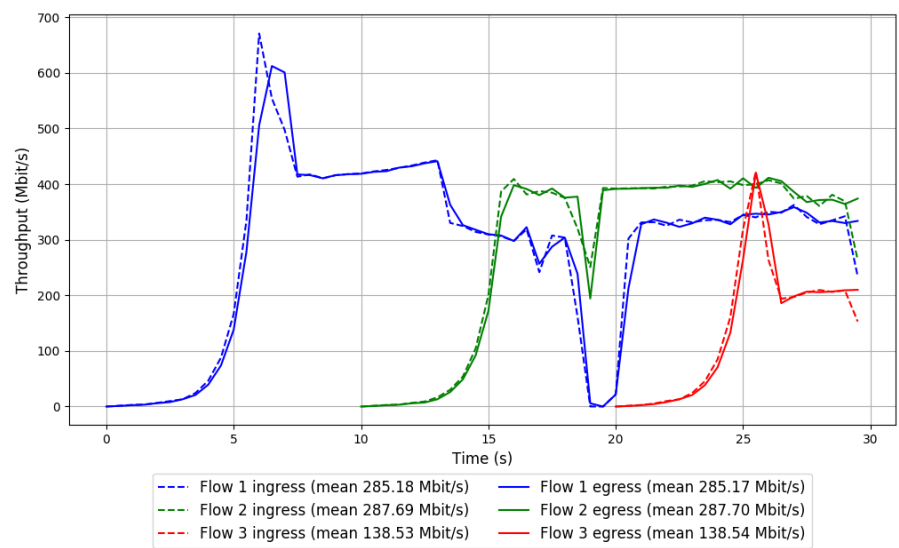
-- Flow 3:

Average throughput: 138.54 Mbit/s

95th percentile per-packet one-way delay: 136.577 ms

Loss rate: 0.00%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-18 01:10:54

End at: 2018-02-18 01:11:24

Below is generated by plot.py at 2018-02-18 07:12:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 516.45 Mbit/s

95th percentile per-packet one-way delay: 194.346 ms

Loss rate: 0.44%

-- Flow 1:

Average throughput: 297.13 Mbit/s

95th percentile per-packet one-way delay: 216.312 ms

Loss rate: 0.54%

-- Flow 2:

Average throughput: 237.15 Mbit/s

95th percentile per-packet one-way delay: 176.665 ms

Loss rate: 0.36%

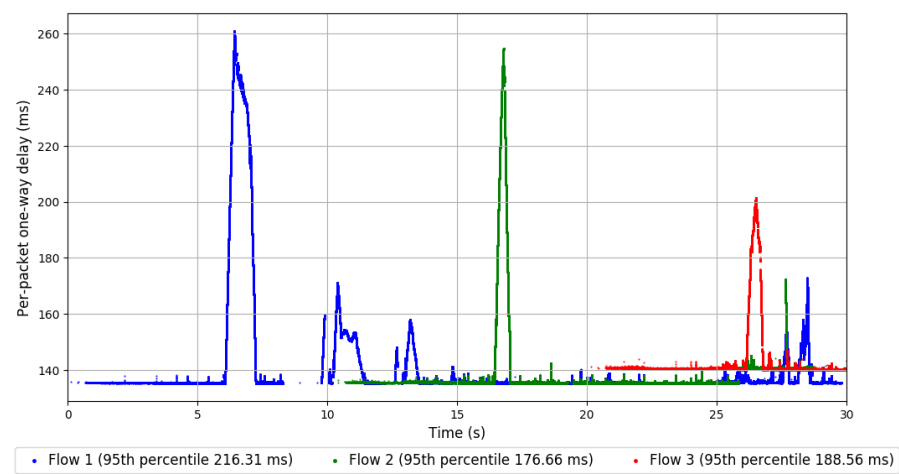
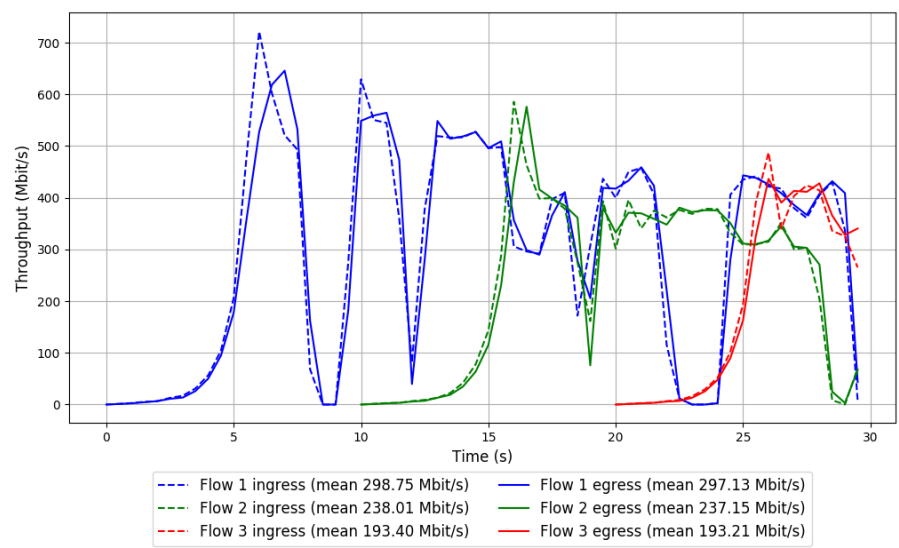
-- Flow 3:

Average throughput: 193.21 Mbit/s

95th percentile per-packet one-way delay: 188.556 ms

Loss rate: 0.15%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-18 01:31:35

End at: 2018-02-18 01:32:05

Below is generated by plot.py at 2018-02-18 07:12:58

Datalink statistics

-- Total of 3 flows:

Average throughput: 463.35 Mbit/s

95th percentile per-packet one-way delay: 165.807 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 283.90 Mbit/s

95th percentile per-packet one-way delay: 170.980 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 190.49 Mbit/s

95th percentile per-packet one-way delay: 137.214 ms

Loss rate: 0.04%

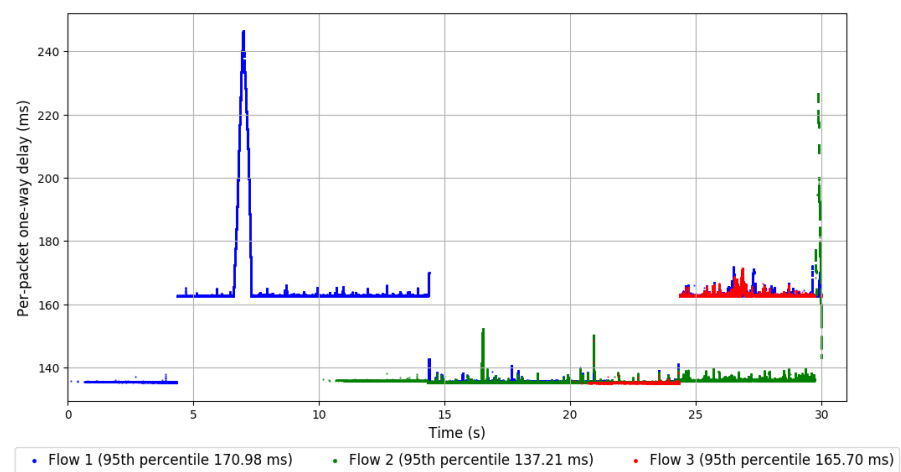
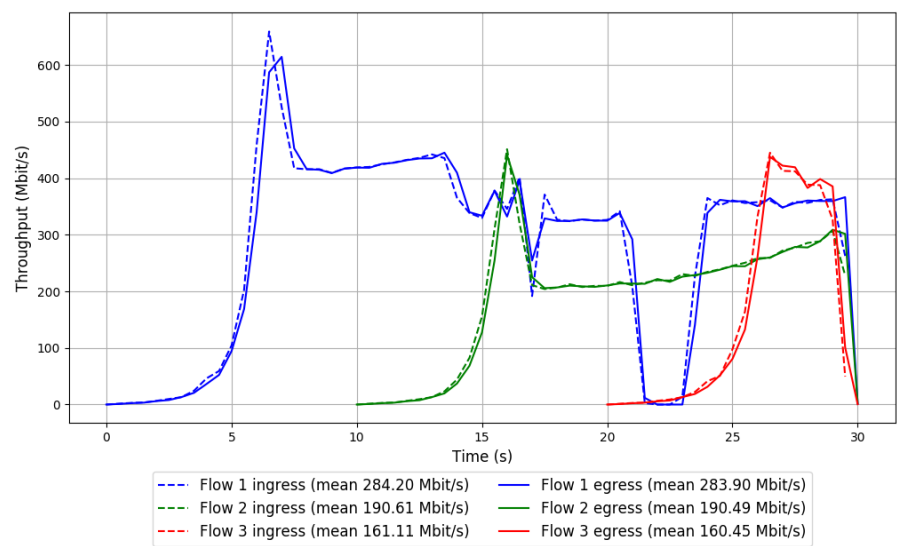
-- Flow 3:

Average throughput: 160.45 Mbit/s

95th percentile per-packet one-way delay: 165.703 ms

Loss rate: 0.37%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-18 01:52:16

End at: 2018-02-18 01:52:46

Below is generated by plot.py at 2018-02-18 07:14:33

Datalink statistics

-- Total of 3 flows:

Average throughput: 450.67 Mbit/s

95th percentile per-packet one-way delay: 196.309 ms

Loss rate: 0.26%

-- Flow 1:

Average throughput: 277.42 Mbit/s

95th percentile per-packet one-way delay: 189.803 ms

Loss rate: 0.24%

-- Flow 2:

Average throughput: 192.42 Mbit/s

95th percentile per-packet one-way delay: 137.839 ms

Loss rate: 0.00%

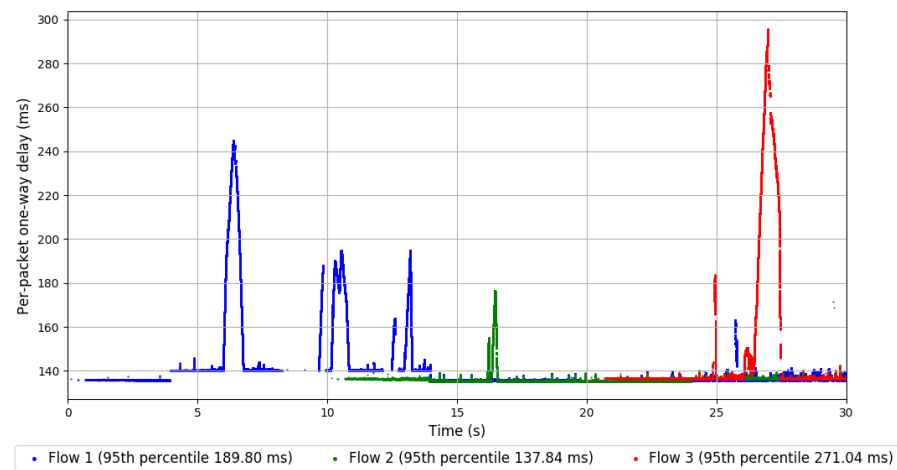
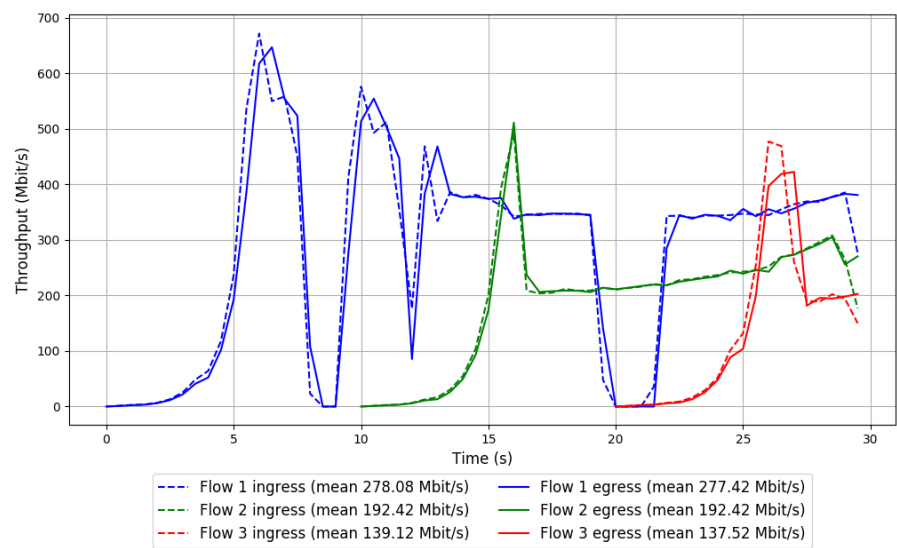
-- Flow 3:

Average throughput: 137.52 Mbit/s

95th percentile per-packet one-way delay: 271.035 ms

Loss rate: 1.15%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-18 02:12:35

End at: 2018-02-18 02:13:05

Below is generated by plot.py at 2018-02-18 07:16:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 450.65 Mbit/s

95th percentile per-packet one-way delay: 167.301 ms

Loss rate: 0.16%

-- Flow 1:

Average throughput: 277.42 Mbit/s

95th percentile per-packet one-way delay: 192.175 ms

Loss rate: 0.16%

-- Flow 2:

Average throughput: 216.75 Mbit/s

95th percentile per-packet one-way delay: 165.736 ms

Loss rate: 0.12%

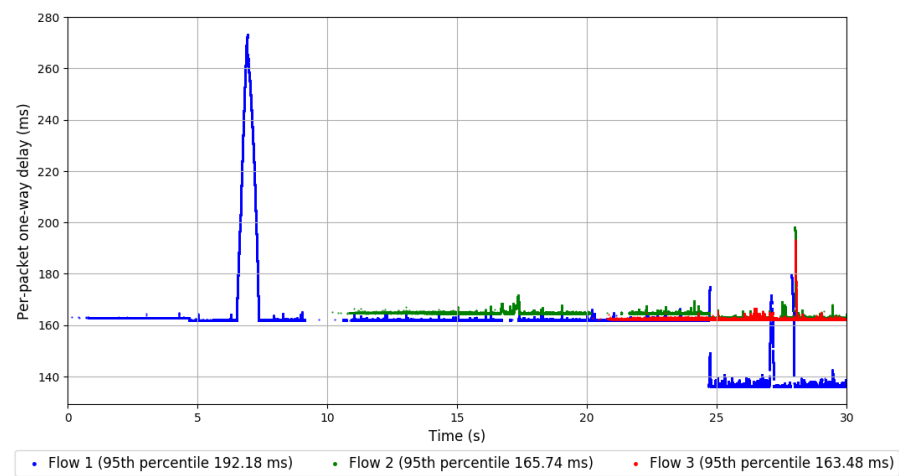
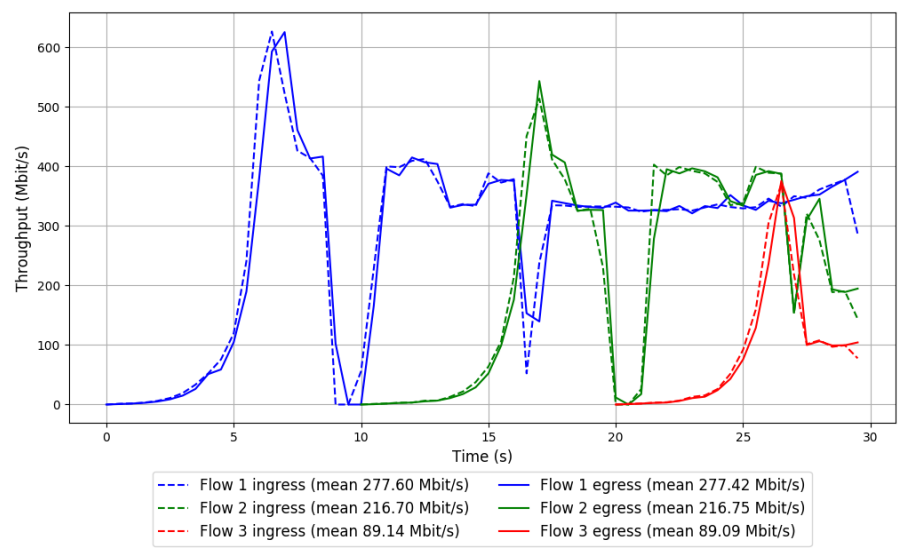
-- Flow 3:

Average throughput: 89.09 Mbit/s

95th percentile per-packet one-way delay: 163.477 ms

Loss rate: 0.35%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-18 02:32:59

End at: 2018-02-18 02:33:29

Below is generated by plot.py at 2018-02-18 07:17:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 489.36 Mbit/s

95th percentile per-packet one-way delay: 174.435 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 272.27 Mbit/s

95th percentile per-packet one-way delay: 163.409 ms

Loss rate: 0.10%

-- Flow 2:

Average throughput: 251.03 Mbit/s

95th percentile per-packet one-way delay: 136.584 ms

Loss rate: 0.00%

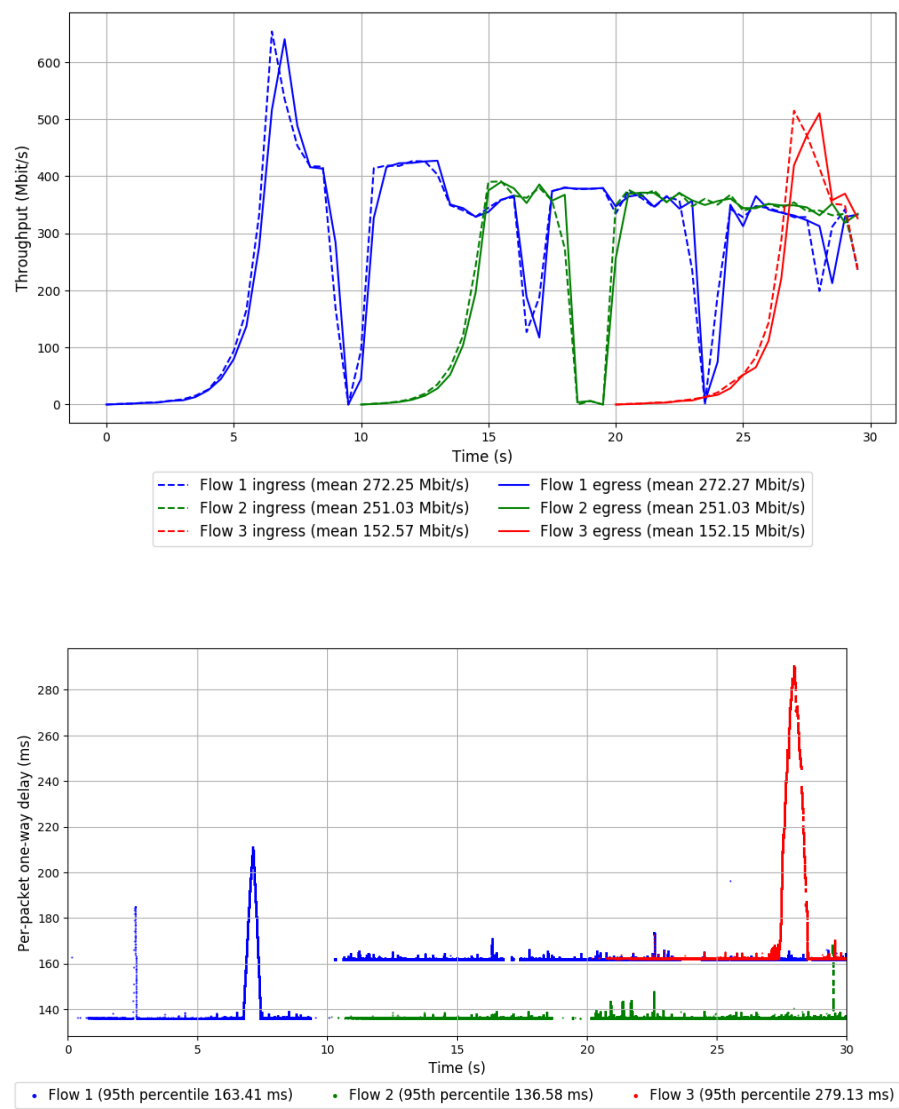
-- Flow 3:

Average throughput: 152.15 Mbit/s

95th percentile per-packet one-way delay: 279.132 ms

Loss rate: 0.53%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-18 02:53:36

End at: 2018-02-18 02:54:06

Below is generated by plot.py at 2018-02-18 07:19:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 497.65 Mbit/s

95th percentile per-packet one-way delay: 206.528 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 282.95 Mbit/s

95th percentile per-packet one-way delay: 224.876 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 239.12 Mbit/s

95th percentile per-packet one-way delay: 162.056 ms

Loss rate: 0.00%

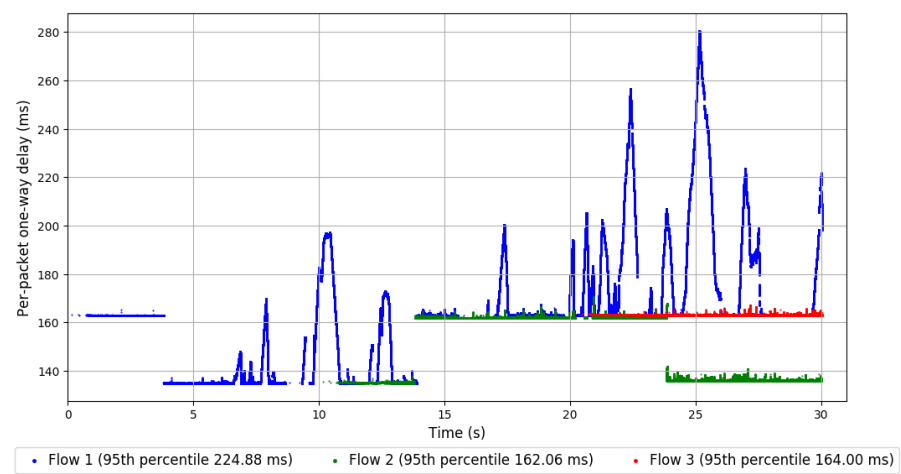
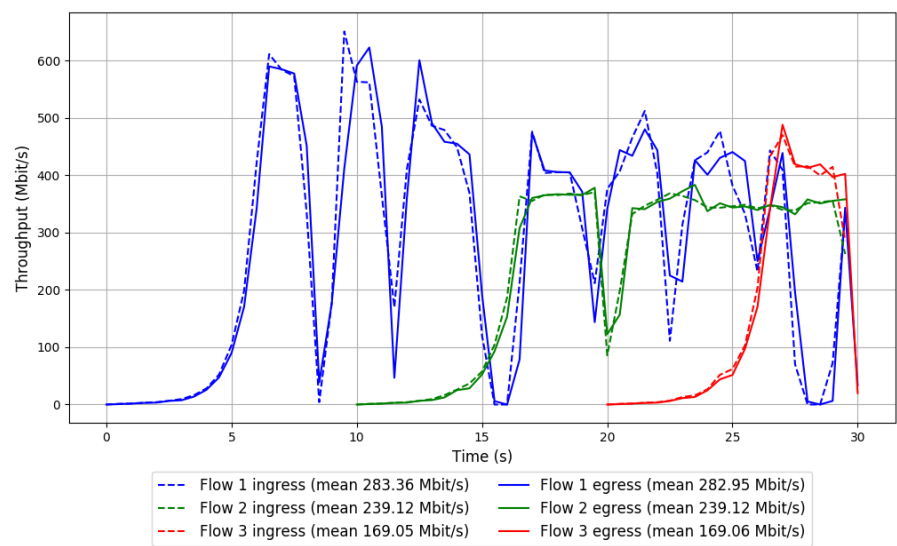
-- Flow 3:

Average throughput: 169.06 Mbit/s

95th percentile per-packet one-way delay: 163.996 ms

Loss rate: 0.00%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-18 03:14:01

End at: 2018-02-18 03:14:31

Below is generated by plot.py at 2018-02-18 07:19:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 480.42 Mbit/s

95th percentile per-packet one-way delay: 162.658 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 292.90 Mbit/s

95th percentile per-packet one-way delay: 163.405 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 221.39 Mbit/s

95th percentile per-packet one-way delay: 162.165 ms

Loss rate: 0.12%

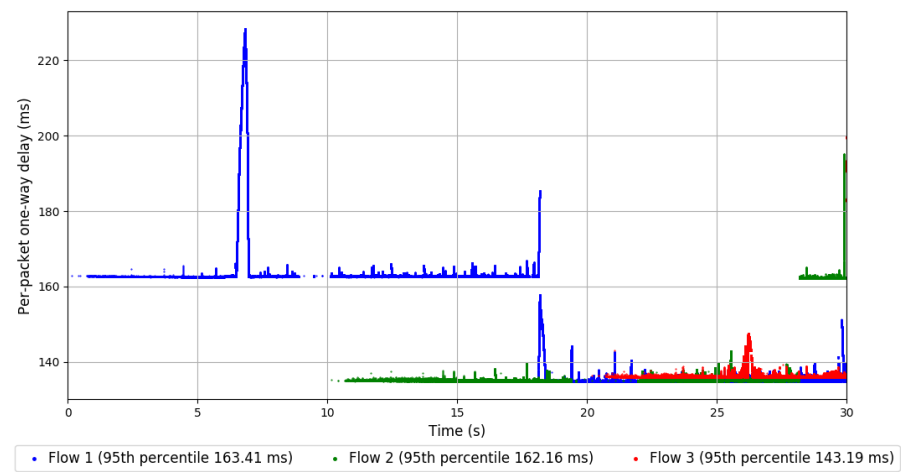
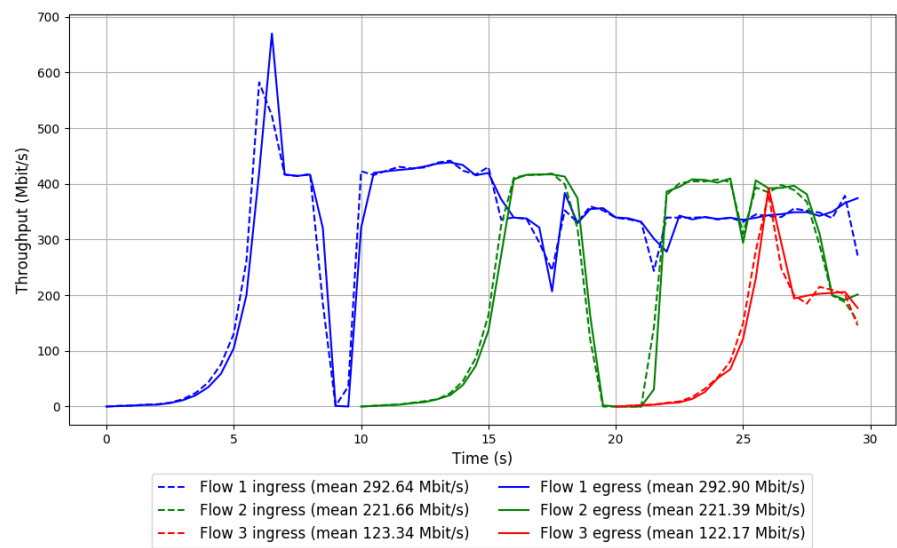
-- Flow 3:

Average throughput: 122.17 Mbit/s

95th percentile per-packet one-way delay: 143.190 ms

Loss rate: 0.96%

Run 10: Report of Vivace-loss — Data Link

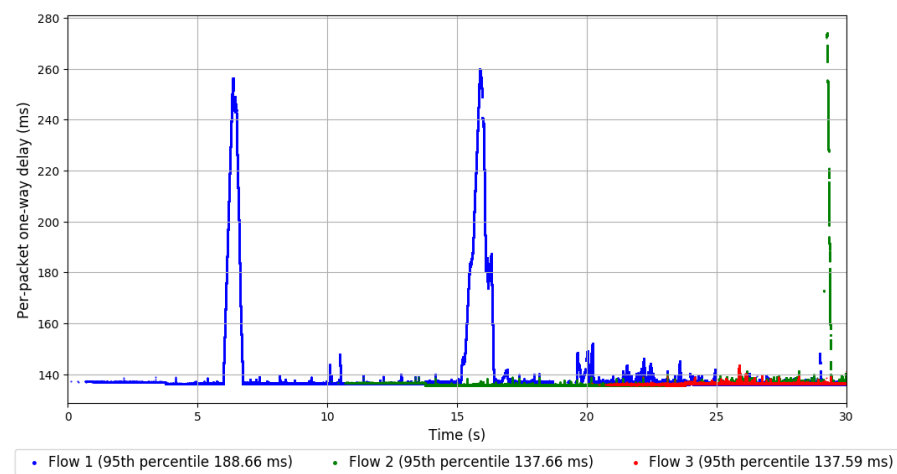
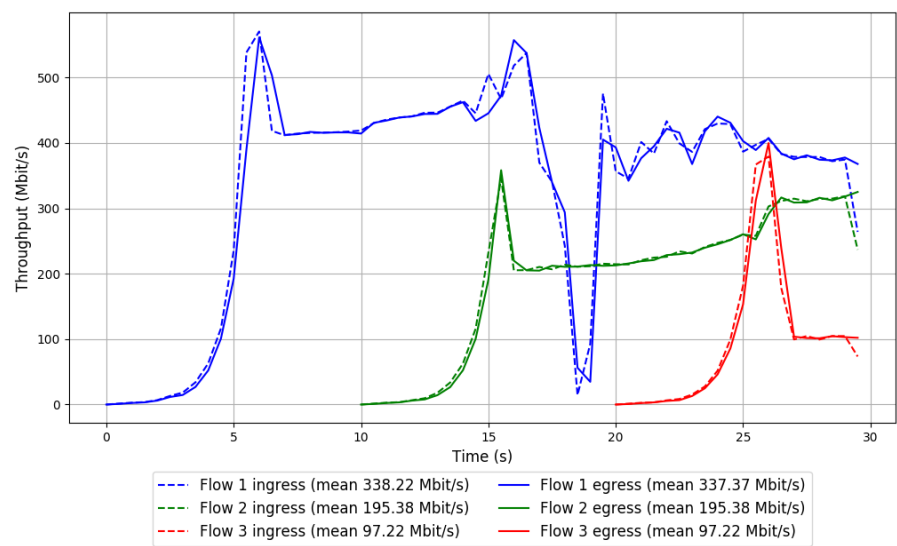


```
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-18 00:15:16
End at: 2018-02-18 00:15:46

# Below is generated by plot.py at 2018-02-18 07:22:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 499.18 Mbit/s
95th percentile per-packet one-way delay: 179.515 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 337.37 Mbit/s
95th percentile per-packet one-way delay: 188.658 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 195.38 Mbit/s
95th percentile per-packet one-way delay: 137.660 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 97.22 Mbit/s
95th percentile per-packet one-way delay: 137.589 ms
Loss rate: 0.00%
```


Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-18 00:36:13

End at: 2018-02-18 00:36:43

Below is generated by plot.py at 2018-02-18 07:22:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 439.83 Mbit/s

95th percentile per-packet one-way delay: 141.050 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 270.79 Mbit/s

95th percentile per-packet one-way delay: 141.406 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 193.80 Mbit/s

95th percentile per-packet one-way delay: 136.447 ms

Loss rate: 0.00%

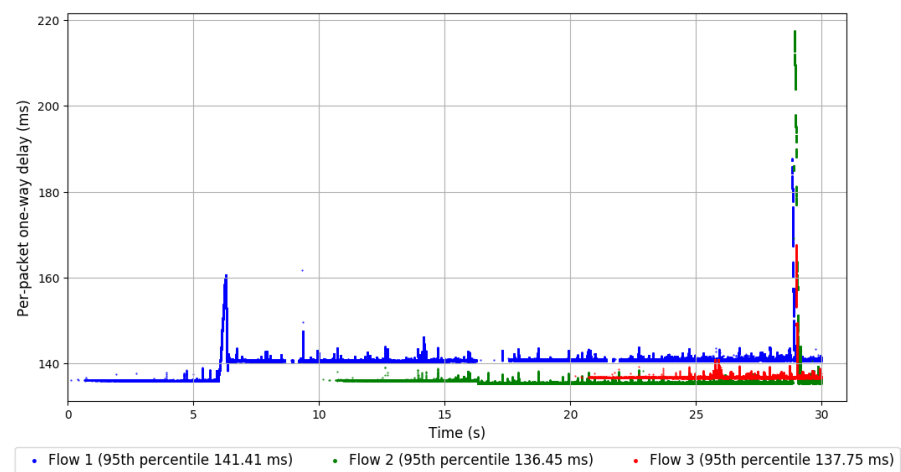
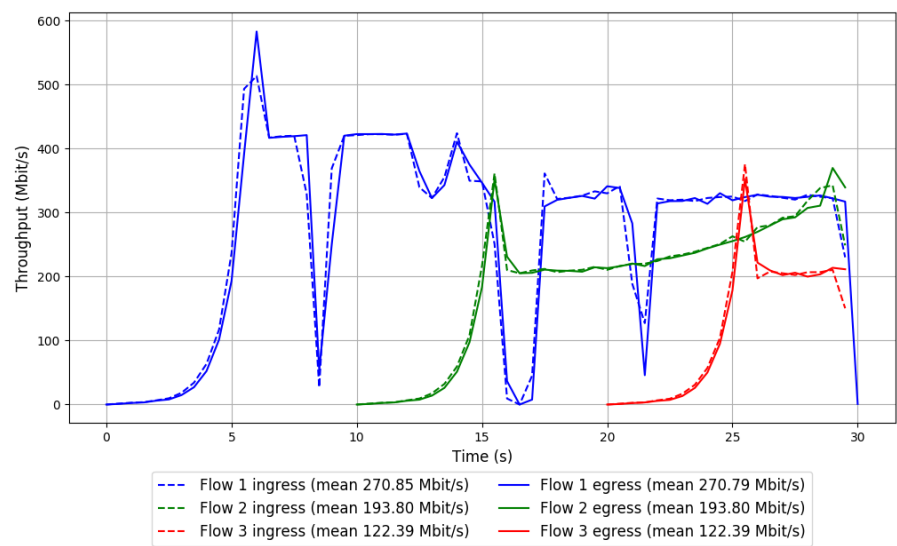
-- Flow 3:

Average throughput: 122.39 Mbit/s

95th percentile per-packet one-way delay: 137.755 ms

Loss rate: 0.00%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-18 00:56:45

End at: 2018-02-18 00:57:15

Below is generated by plot.py at 2018-02-18 07:22:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 422.16 Mbit/s

95th percentile per-packet one-way delay: 143.049 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 304.21 Mbit/s

95th percentile per-packet one-way delay: 148.046 ms

Loss rate: 0.17%

-- Flow 2:

Average throughput: 115.16 Mbit/s

95th percentile per-packet one-way delay: 140.523 ms

Loss rate: 0.00%

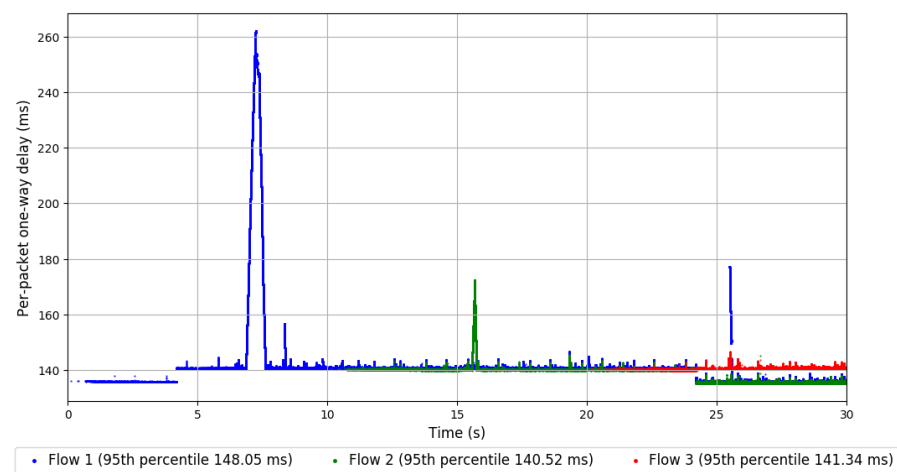
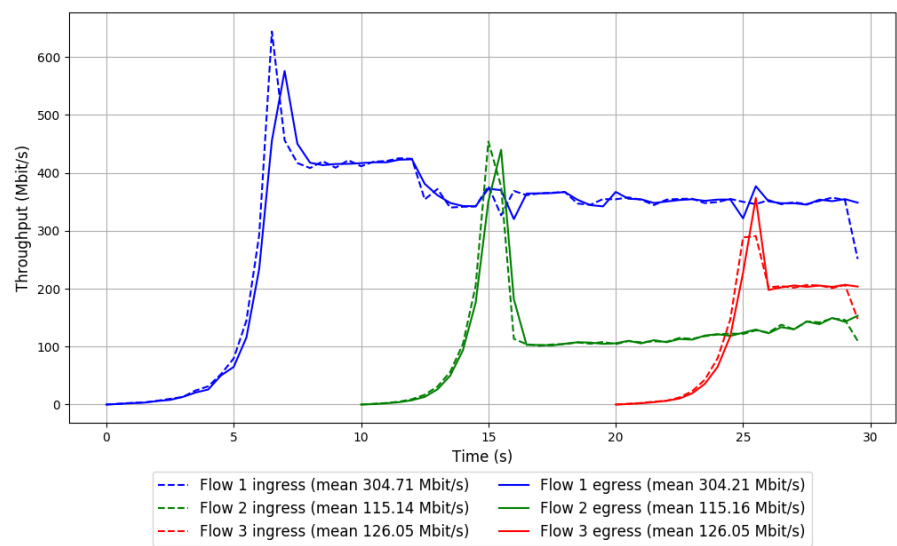
-- Flow 3:

Average throughput: 126.05 Mbit/s

95th percentile per-packet one-way delay: 141.345 ms

Loss rate: 0.05%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-18 01:17:18

End at: 2018-02-18 01:17:48

Below is generated by plot.py at 2018-02-18 07:24:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 553.51 Mbit/s

95th percentile per-packet one-way delay: 141.055 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 330.05 Mbit/s

95th percentile per-packet one-way delay: 142.916 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 255.68 Mbit/s

95th percentile per-packet one-way delay: 140.904 ms

Loss rate: 0.02%

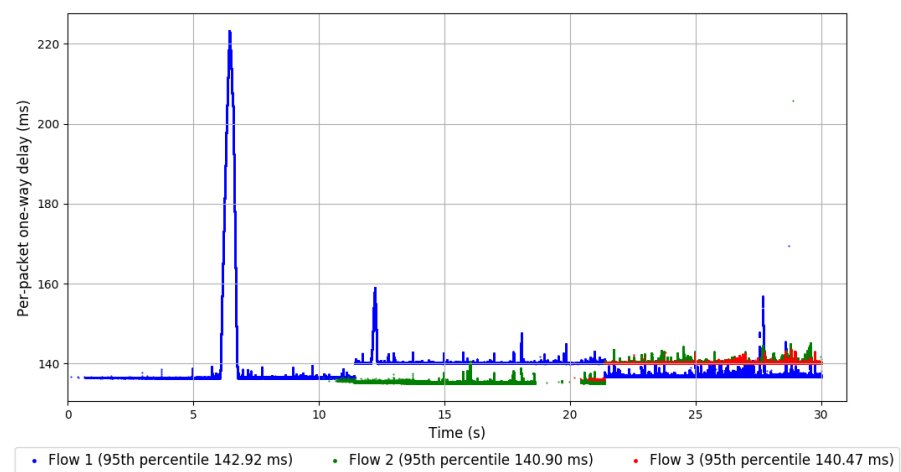
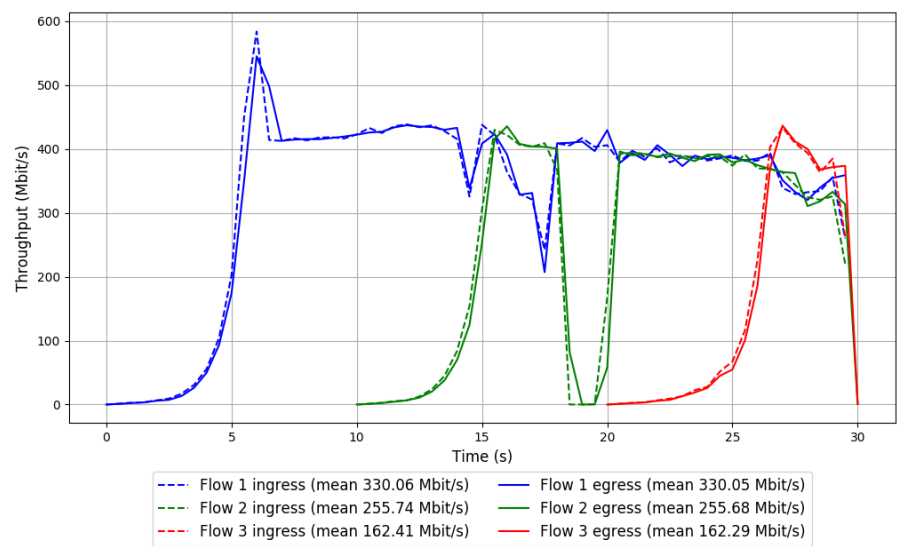
-- Flow 3:

Average throughput: 162.29 Mbit/s

95th percentile per-packet one-way delay: 140.466 ms

Loss rate: 0.06%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-18 01:38:00

End at: 2018-02-18 01:38:30

Below is generated by plot.py at 2018-02-18 07:24:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 427.48 Mbit/s

95th percentile per-packet one-way delay: 163.610 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 274.73 Mbit/s

95th percentile per-packet one-way delay: 165.478 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 182.09 Mbit/s

95th percentile per-packet one-way delay: 137.819 ms

Loss rate: 0.00%

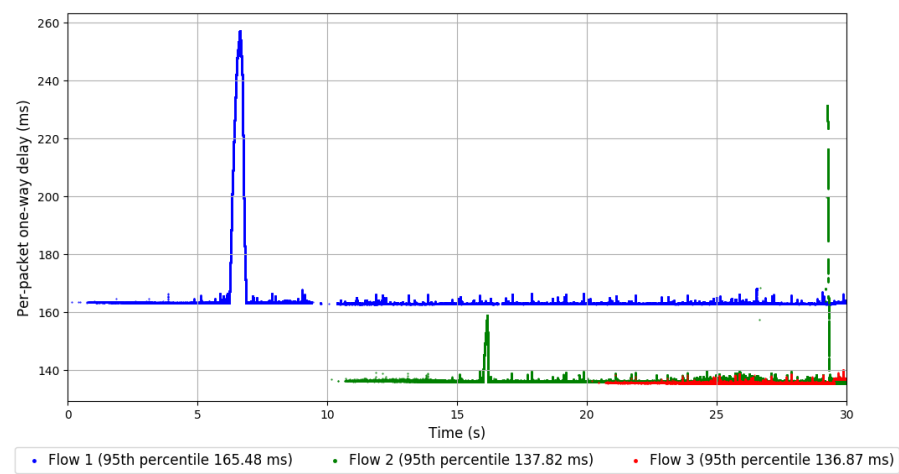
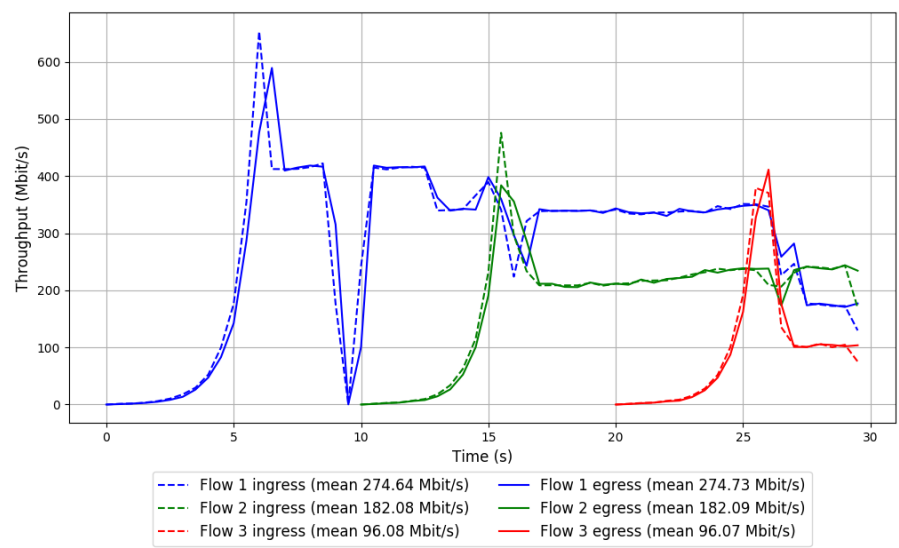
-- Flow 3:

Average throughput: 96.07 Mbit/s

95th percentile per-packet one-way delay: 136.866 ms

Loss rate: 0.00%

Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-18 01:58:34

End at: 2018-02-18 01:59:04

Below is generated by plot.py at 2018-02-18 07:24:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 423.89 Mbit/s

95th percentile per-packet one-way delay: 145.726 ms

Loss rate: 0.31%

-- Flow 1:

Average throughput: 273.74 Mbit/s

95th percentile per-packet one-way delay: 147.029 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 186.05 Mbit/s

95th percentile per-packet one-way delay: 149.967 ms

Loss rate: 0.00%

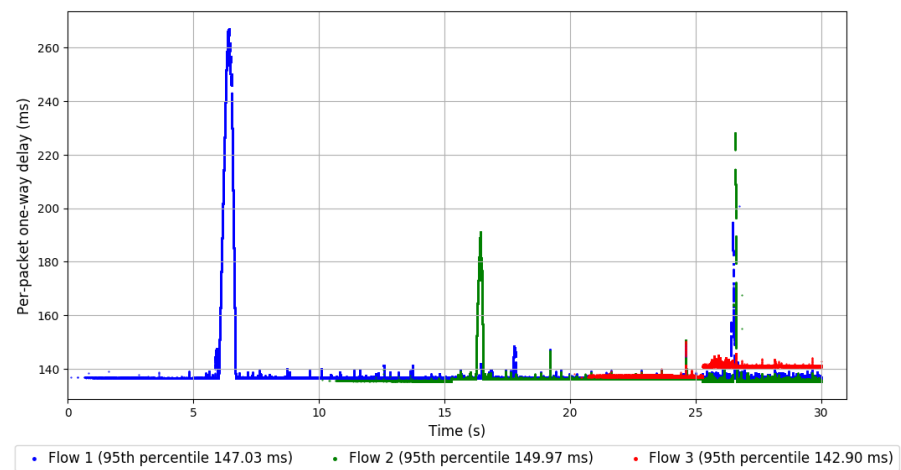
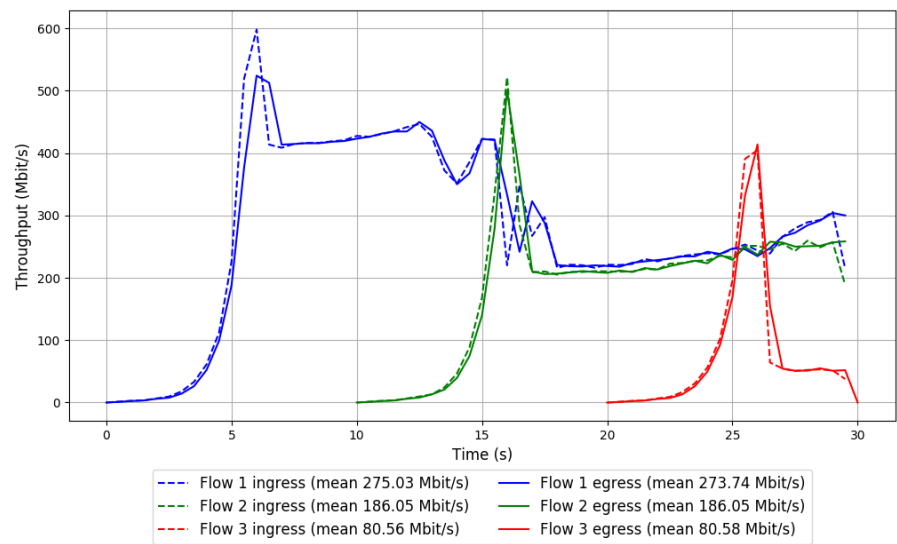
-- Flow 3:

Average throughput: 80.58 Mbit/s

95th percentile per-packet one-way delay: 142.895 ms

Loss rate: 0.02%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-18 02:18:52

End at: 2018-02-18 02:19:22

Below is generated by plot.py at 2018-02-18 07:25:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 454.48 Mbit/s

95th percentile per-packet one-way delay: 162.521 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 283.62 Mbit/s

95th percentile per-packet one-way delay: 136.680 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 179.18 Mbit/s

95th percentile per-packet one-way delay: 137.491 ms

Loss rate: 0.00%

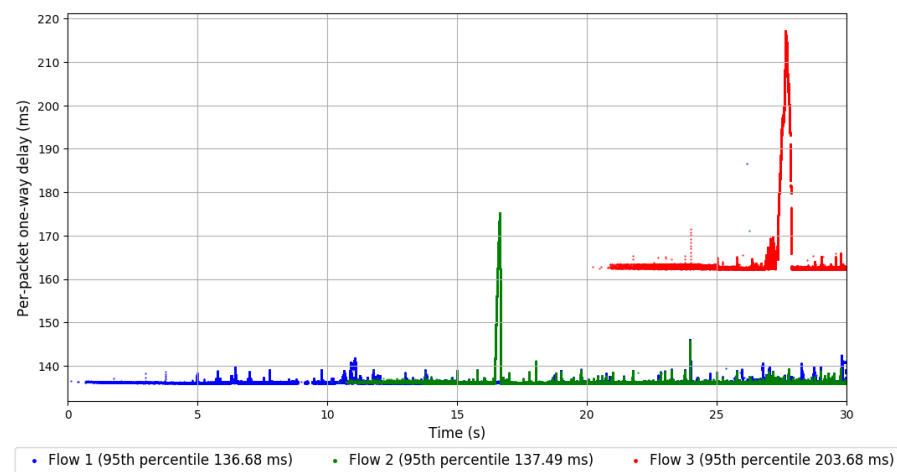
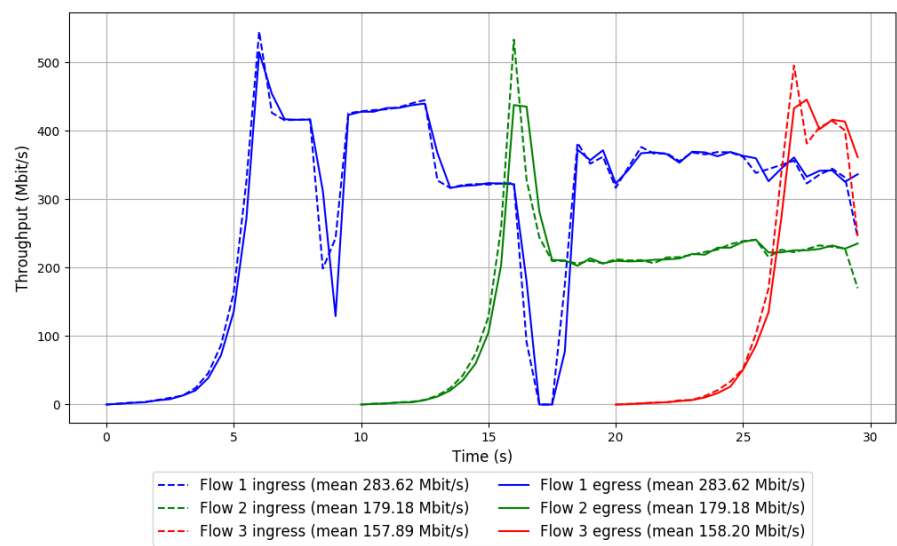
-- Flow 3:

Average throughput: 158.20 Mbit/s

95th percentile per-packet one-way delay: 203.678 ms

Loss rate: 0.16%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-18 02:39:21

End at: 2018-02-18 02:39:51

Below is generated by plot.py at 2018-02-18 07:26:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 532.03 Mbit/s

95th percentile per-packet one-way delay: 201.866 ms

Loss rate: 0.21%

-- Flow 1:

Average throughput: 292.45 Mbit/s

95th percentile per-packet one-way delay: 182.183 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 281.43 Mbit/s

95th percentile per-packet one-way delay: 216.957 ms

Loss rate: 0.51%

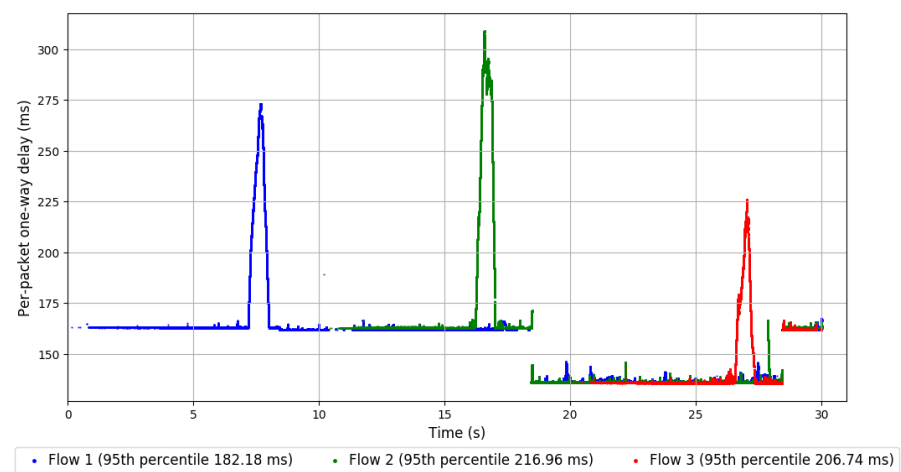
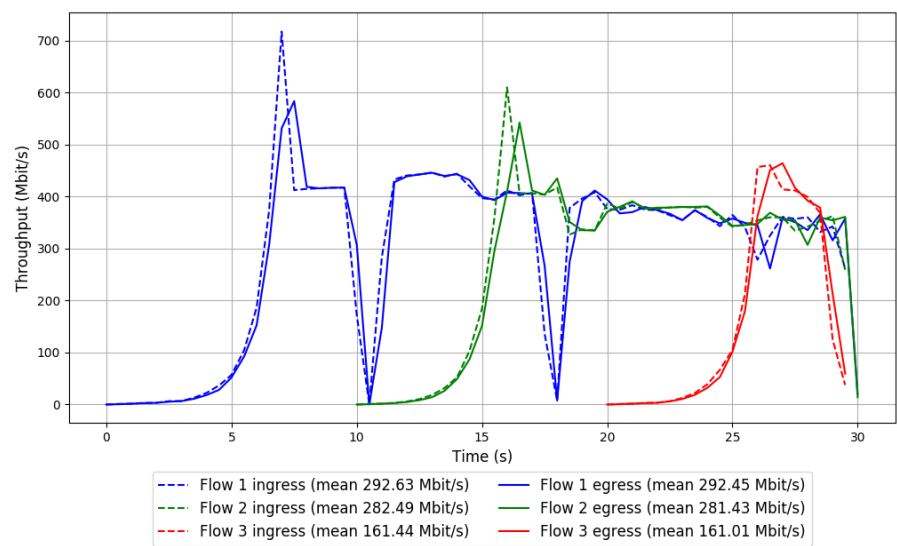
-- Flow 3:

Average throughput: 161.01 Mbit/s

95th percentile per-packet one-way delay: 206.737 ms

Loss rate: 0.00%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-18 02:59:57

End at: 2018-02-18 03:00:27

Below is generated by plot.py at 2018-02-18 07:26:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 521.29 Mbit/s

95th percentile per-packet one-way delay: 165.040 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 304.20 Mbit/s

95th percentile per-packet one-way delay: 163.488 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 273.30 Mbit/s

95th percentile per-packet one-way delay: 165.189 ms

Loss rate: 0.00%

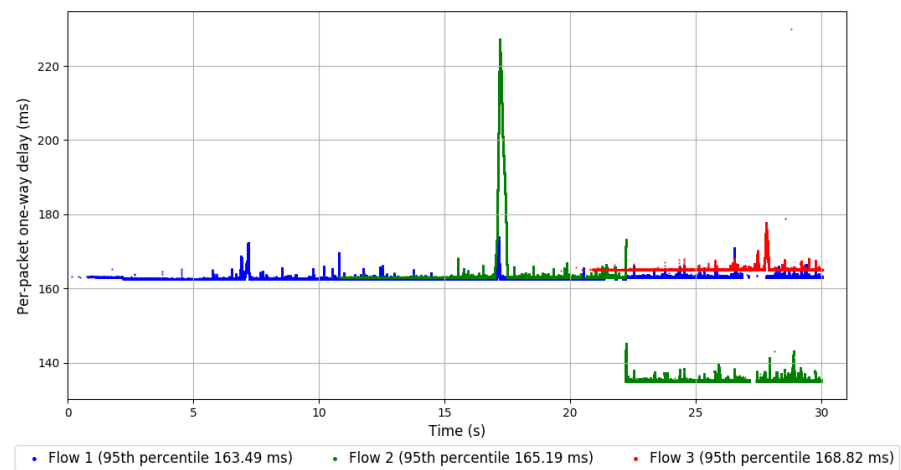
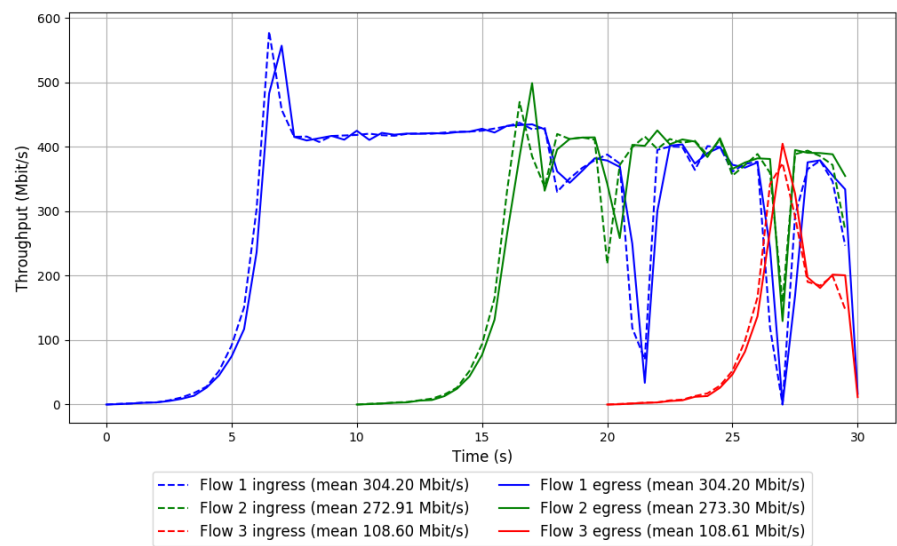
-- Flow 3:

Average throughput: 108.61 Mbit/s

95th percentile per-packet one-way delay: 168.822 ms

Loss rate: 0.00%

Run 9: Report of Vivace-LTE — Data Link



```
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-18 03:20:21
End at: 2018-02-18 03:20:51

# Below is generated by plot.py at 2018-02-18 07:26:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.39 Mbit/s
95th percentile per-packet one-way delay: 162.895 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 267.47 Mbit/s
95th percentile per-packet one-way delay: 166.172 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 185.31 Mbit/s
95th percentile per-packet one-way delay: 136.401 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 188.18 Mbit/s
95th percentile per-packet one-way delay: 171.442 ms
Loss rate: 0.00%
```

Run 10: Report of Vivace-LTE — Data Link

