

Pantheon Report

Generated at 2018-02-05 01:35:16 (UTC).

Data path: China Ethernet (*remote*) → AWS Korea Ethernet (*local*).

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).

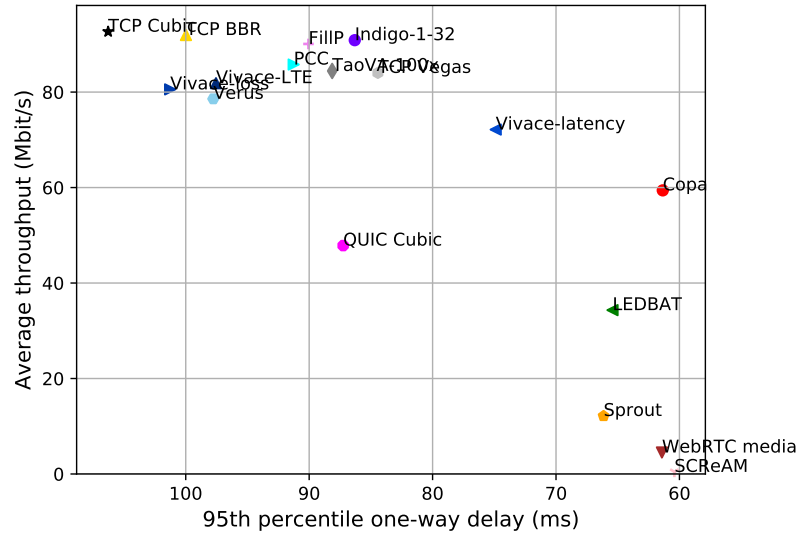
Tested BBR with qdisc of Fair Queuing (*fq*), and other schemes with the default Linux qdisc (*pfifo_fast*).

NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

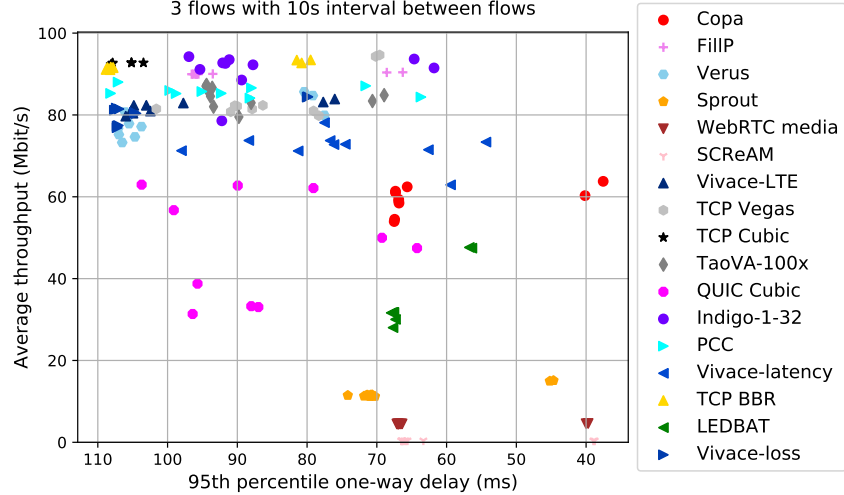
Git summary:

```
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1c1b0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
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 @ f1a14bffe749737437f61b1eae30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from China Ethernet to AWS Korea Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from China Ethernet to AWS Korea Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows



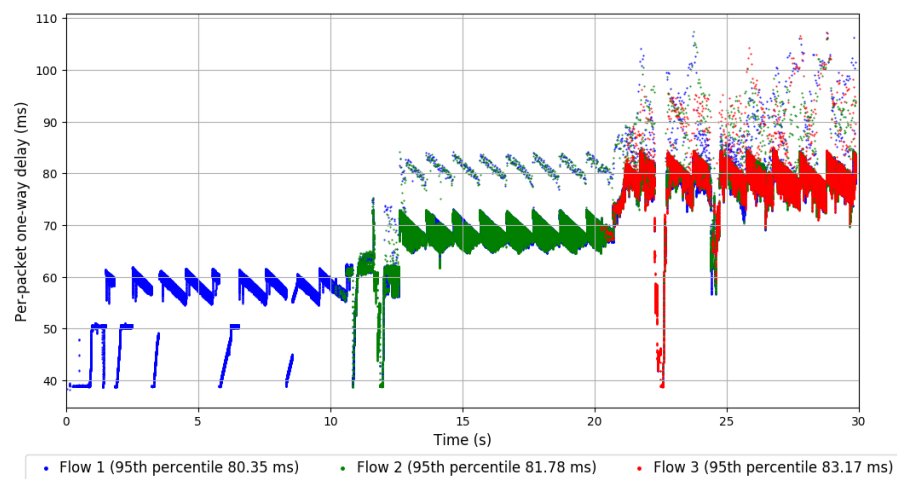
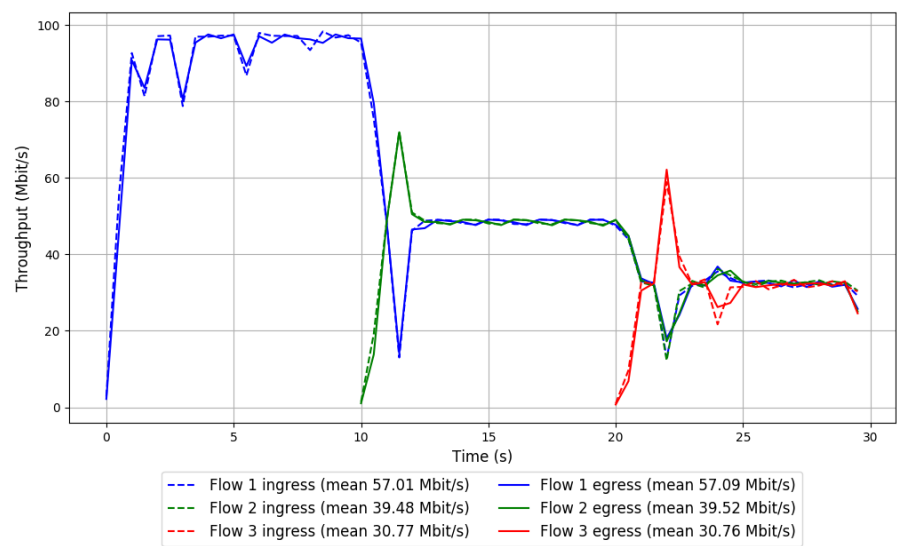
scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	56.26	39.12	29.80	98.71	100.39	101.59	0.34	0.77	2.05
TCP Cubic	6	61.46	34.96	24.45	104.58	107.20	108.99	0.38	1.36	3.78
LEDBAT	10	22.34	14.64	7.02	65.20	65.75	66.85	0.80	1.24	2.61
PCC	10	65.00	21.35	20.26	90.62	91.82	92.99	1.33	0.96	4.89
QUIC Cubic	10	12.86	40.95	23.99	70.90	87.24	87.76	0.13	1.22	1.97
SCReAM	10	0.22	0.22	0.22	60.14	60.38	60.15	0.35	0.59	1.11
WebRTC media	10	2.46	1.61	0.64	61.37	61.30	61.71	0.57	0.71	1.77
Sprout	10	6.28	6.10	5.61	65.82	66.28	66.99	0.43	0.73	1.50
TaoVA-100x	10	53.94	36.37	27.12	86.15	88.73	90.96	2.09	3.70	6.19
TCP Vegas	10	54.00	39.81	13.76	83.15	85.26	85.51	0.39	0.66	2.38
Verus	10	47.08	35.65	23.98	95.46	98.11	100.03	0.31	1.07	1.45
Copa	10	35.19	28.69	15.71	60.91	61.75	62.11	0.31	0.63	1.86
FillP	10	55.30	38.21	28.86	88.76	90.25	91.91	0.43	2.85	7.67
Indigo-1-32	10	67.45	26.40	18.30	85.18	87.98	89.09	0.35	0.61	1.38
Vivace-latency	10	55.75	21.30	6.93	74.27	75.51	73.03	0.40	0.85	1.95
Vivace-loss	10	50.36	32.88	25.89	100.11	101.60	102.86	1.38	2.40	10.81
Vivace-LTE	9	53.79	32.05	21.70	96.48	97.97	99.87	0.60	0.76	5.29

Run 1: Statistics of TCP BBR

Start at: 2018-02-04 17:23:18
End at: 2018-02-04 17:23:48
Local clock offset: 0.045 ms
Remote clock offset: -2.796 ms

Below is generated by plot.py at 2018-02-05 01:12:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.41 Mbit/s
95th percentile per-packet one-way delay: 81.475 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 57.09 Mbit/s
95th percentile per-packet one-way delay: 80.351 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 39.52 Mbit/s
95th percentile per-packet one-way delay: 81.779 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 30.76 Mbit/s
95th percentile per-packet one-way delay: 83.165 ms
Loss rate: 1.67%

Run 1: Report of TCP BBR — Data Link

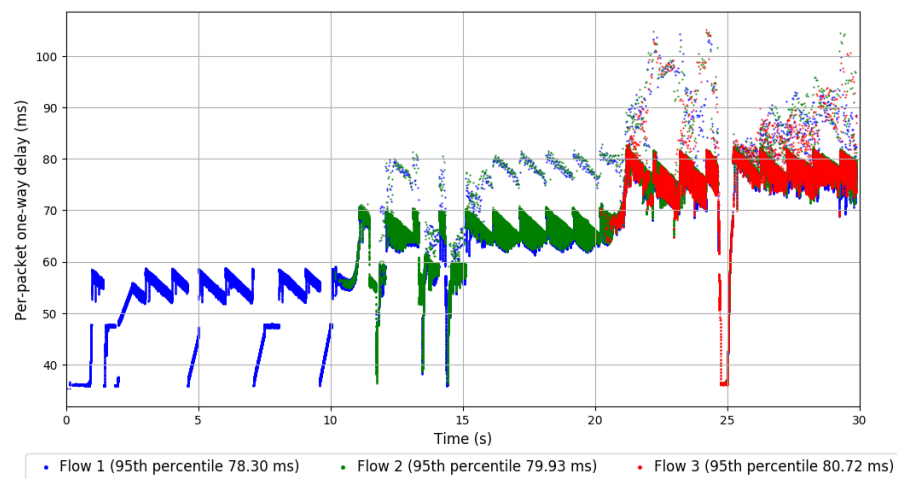
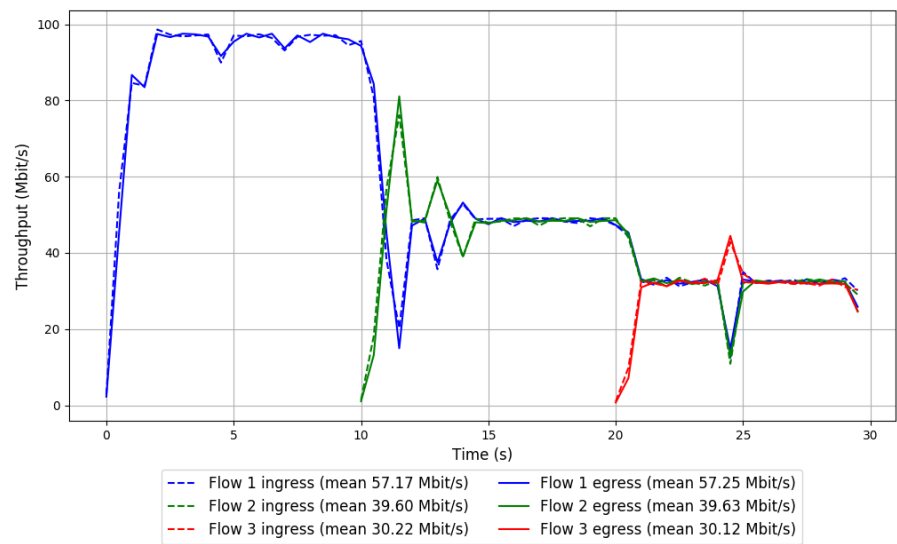


Run 2: Statistics of TCP BBR

Start at: 2018-02-04 17:46:06
End at: 2018-02-04 17:46:36
Local clock offset: -3.174 ms
Remote clock offset: -1.196 ms

Below is generated by plot.py at 2018-02-05 01:12:44
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.45 Mbit/s
95th percentile per-packet one-way delay: 79.498 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 57.25 Mbit/s
95th percentile per-packet one-way delay: 78.298 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 39.63 Mbit/s
95th percentile per-packet one-way delay: 79.934 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 30.12 Mbit/s
95th percentile per-packet one-way delay: 80.723 ms
Loss rate: 1.71%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-04 18:08:51

End at: 2018-02-04 18:09:22

Local clock offset: -1.049 ms

Remote clock offset: 0.415 ms

Below is generated by plot.py at 2018-02-05 01:12:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.71 Mbit/s

95th percentile per-packet one-way delay: 80.778 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 57.10 Mbit/s

95th percentile per-packet one-way delay: 79.417 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 38.95 Mbit/s

95th percentile per-packet one-way delay: 81.445 ms

Loss rate: 0.62%

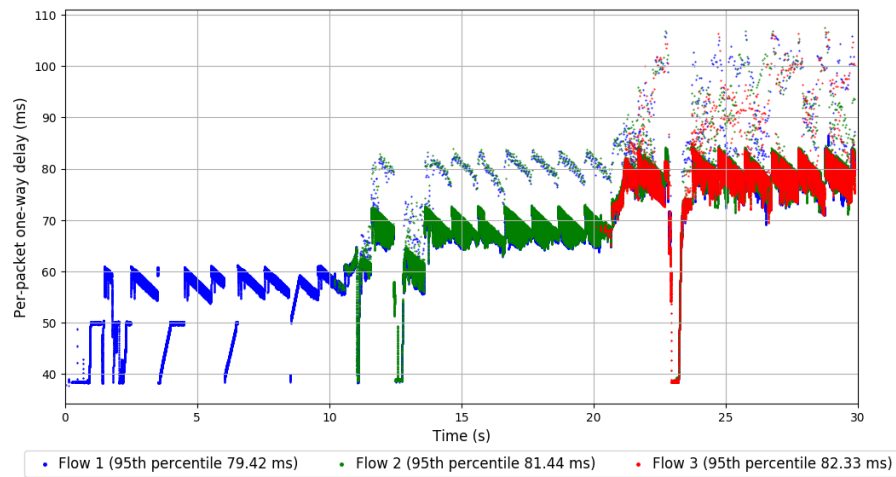
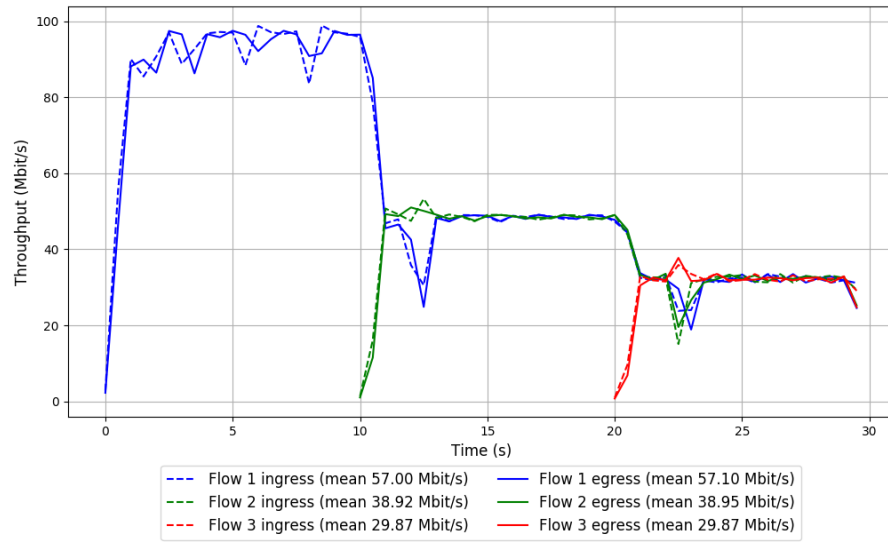
-- Flow 3:

Average throughput: 29.87 Mbit/s

95th percentile per-packet one-way delay: 82.325 ms

Loss rate: 1.61%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-04 18:32:20

End at: 2018-02-04 18:32:50

Local clock offset: -1.363 ms

Remote clock offset: 2.003 ms

Below is generated by plot.py at 2018-02-05 01:12:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.58 Mbit/s

95th percentile per-packet one-way delay: 108.621 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 56.11 Mbit/s

95th percentile per-packet one-way delay: 107.214 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 39.00 Mbit/s

95th percentile per-packet one-way delay: 108.702 ms

Loss rate: 0.75%

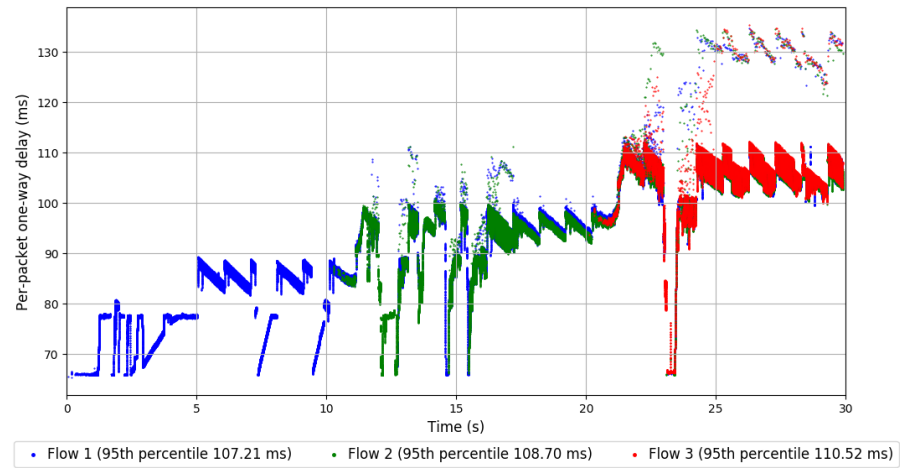
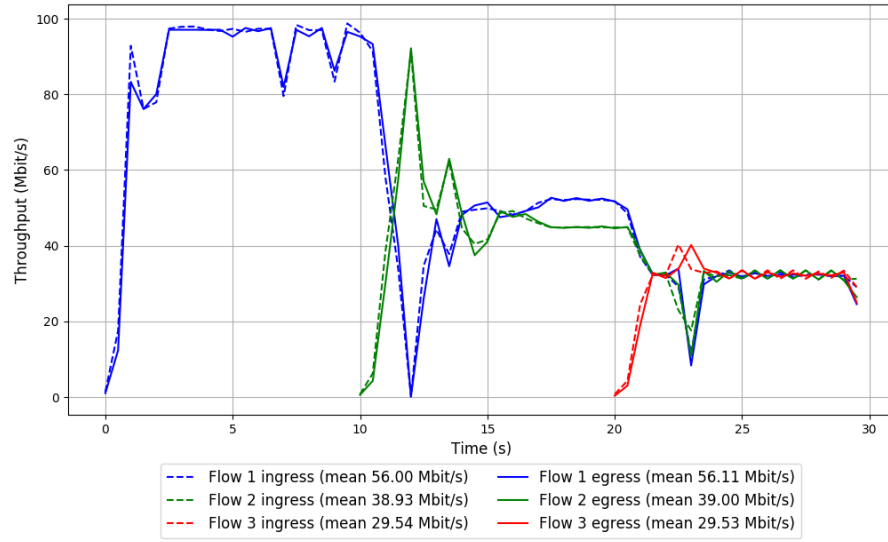
-- Flow 3:

Average throughput: 29.53 Mbit/s

95th percentile per-packet one-way delay: 110.524 ms

Loss rate: 1.91%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-04 18:55:38

End at: 2018-02-04 18:56:08

Local clock offset: -1.865 ms

Remote clock offset: 3.345 ms

Below is generated by plot.py at 2018-02-05 01:12:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.53 Mbit/s

95th percentile per-packet one-way delay: 107.830 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 55.75 Mbit/s

95th percentile per-packet one-way delay: 106.435 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 39.31 Mbit/s

95th percentile per-packet one-way delay: 108.364 ms

Loss rate: 0.72%

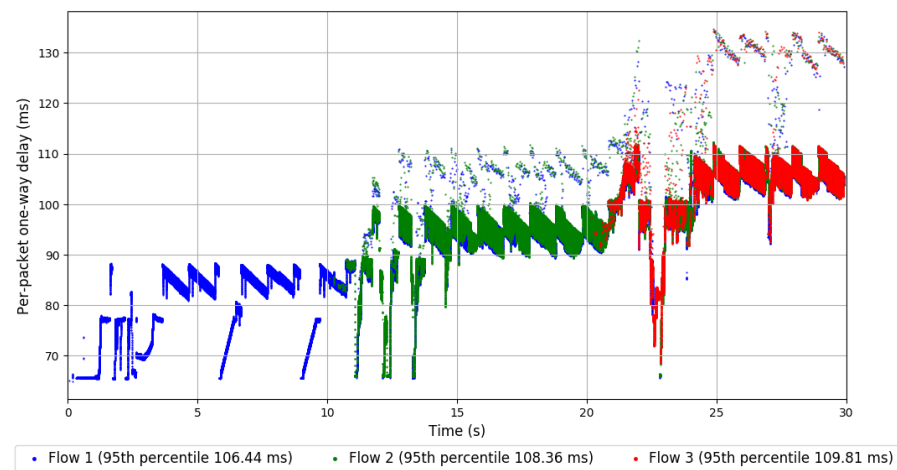
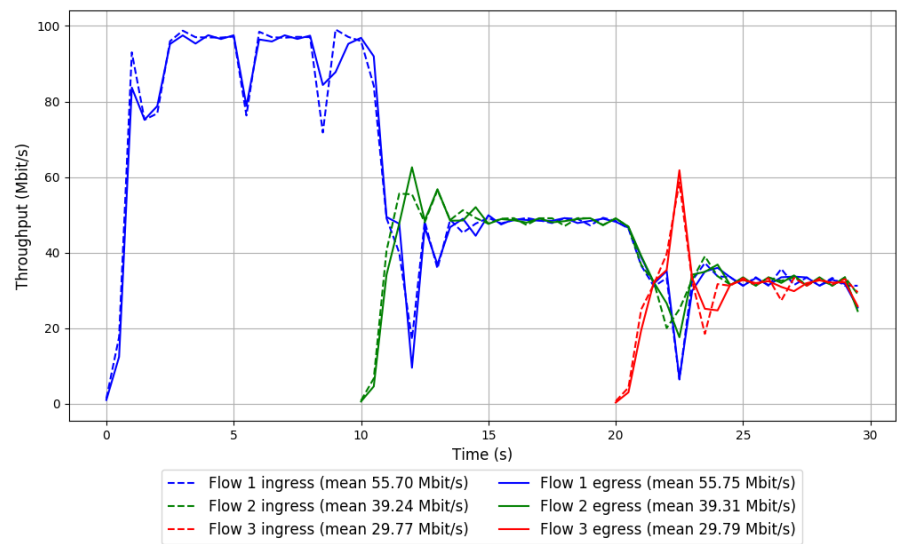
-- Flow 3:

Average throughput: 29.79 Mbit/s

95th percentile per-packet one-way delay: 109.806 ms

Loss rate: 1.90%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-04 19:18:52

End at: 2018-02-04 19:19:22

Local clock offset: -2.285 ms

Remote clock offset: 4.406 ms

Below is generated by plot.py at 2018-02-05 01:12:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.40 Mbit/s

95th percentile per-packet one-way delay: 108.602 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 55.90 Mbit/s

95th percentile per-packet one-way delay: 107.211 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 38.96 Mbit/s

95th percentile per-packet one-way delay: 109.281 ms

Loss rate: 0.72%

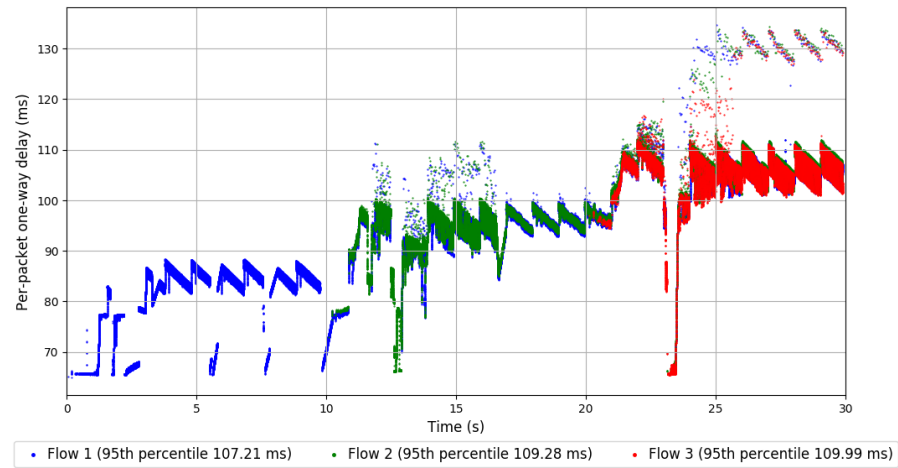
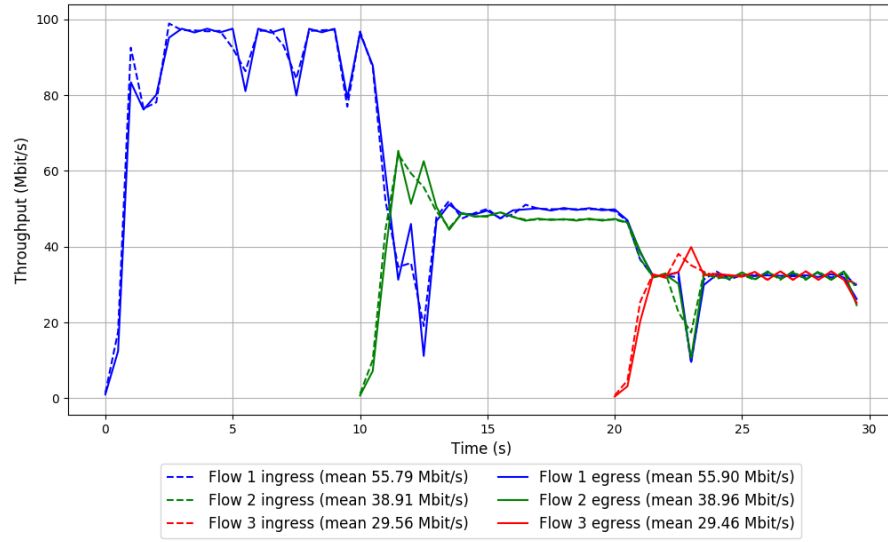
-- Flow 3:

Average throughput: 29.46 Mbit/s

95th percentile per-packet one-way delay: 109.986 ms

Loss rate: 2.02%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-04 19:42:07

End at: 2018-02-04 19:42:37

Local clock offset: -2.324 ms

Remote clock offset: 4.764 ms

Below is generated by plot.py at 2018-02-05 01:12:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.11 Mbit/s

95th percentile per-packet one-way delay: 108.820 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 55.69 Mbit/s

95th percentile per-packet one-way delay: 107.664 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 39.08 Mbit/s

95th percentile per-packet one-way delay: 109.158 ms

Loss rate: 0.72%

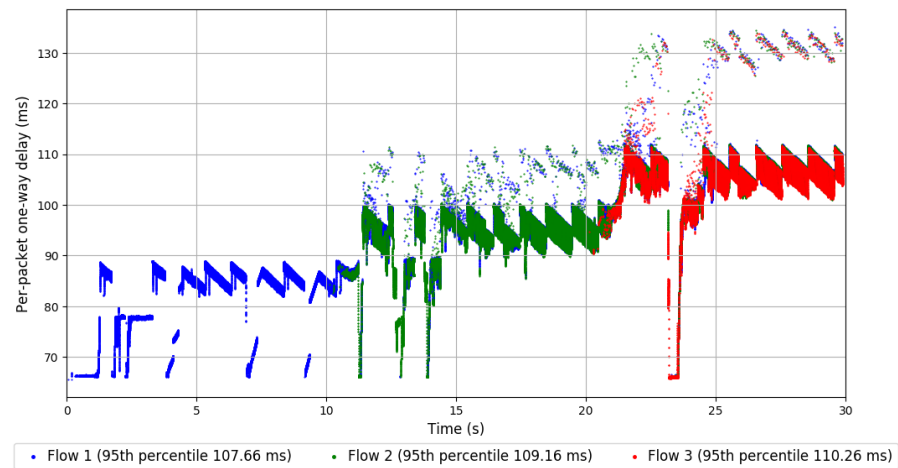
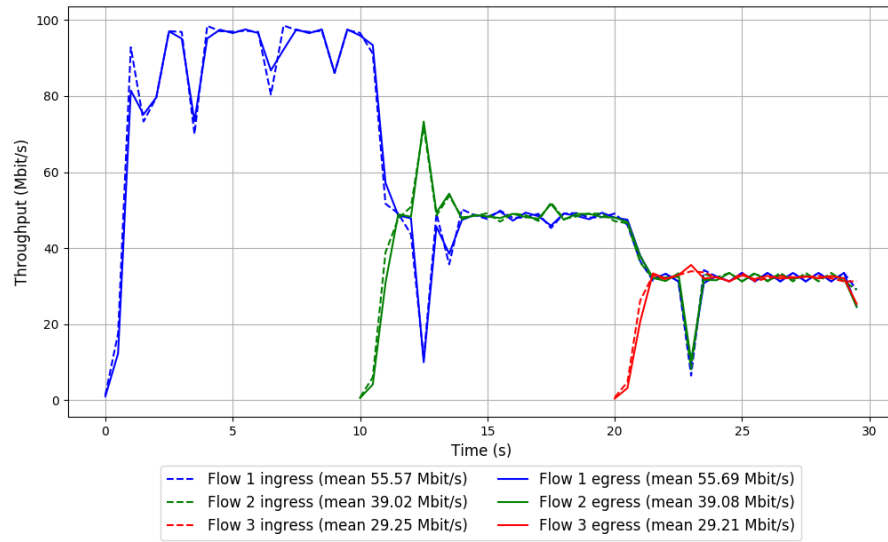
-- Flow 3:

Average throughput: 29.21 Mbit/s

95th percentile per-packet one-way delay: 110.259 ms

Loss rate: 2.03%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-04 20:05:24

End at: 2018-02-04 20:05:54

Local clock offset: -2.818 ms

Remote clock offset: 4.851 ms

Below is generated by plot.py at 2018-02-05 01:12:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.69 Mbit/s

95th percentile per-packet one-way delay: 108.147 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 56.42 Mbit/s

95th percentile per-packet one-way delay: 107.149 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 38.16 Mbit/s

95th percentile per-packet one-way delay: 108.579 ms

Loss rate: 1.49%

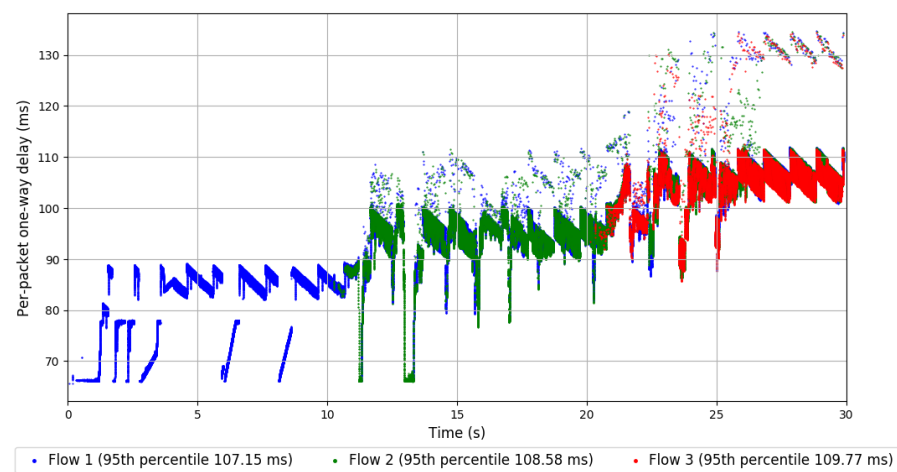
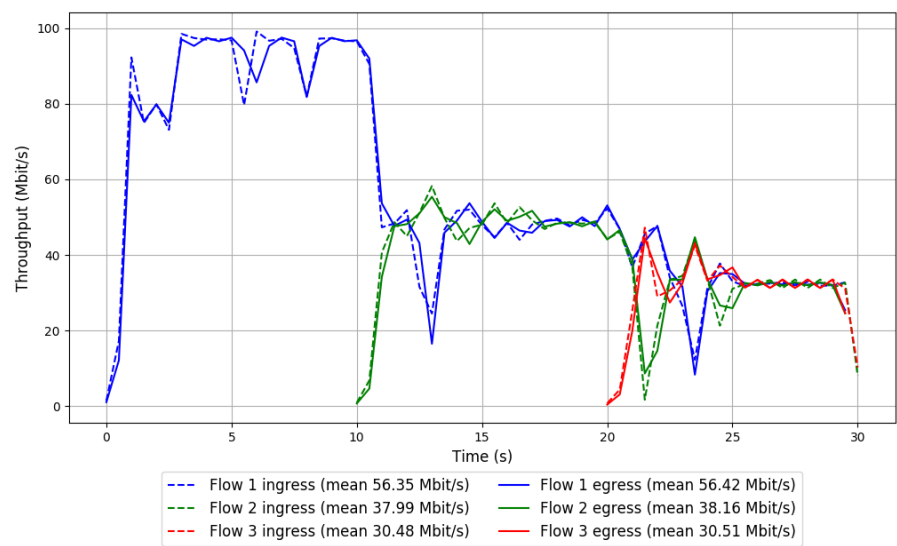
-- Flow 3:

Average throughput: 30.51 Mbit/s

95th percentile per-packet one-way delay: 109.767 ms

Loss rate: 3.80%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-04 20:28:56

End at: 2018-02-04 20:29:26

Local clock offset: -3.365 ms

Remote clock offset: 5.133 ms

Below is generated by plot.py at 2018-02-05 01:14:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.58 Mbit/s

95th percentile per-packet one-way delay: 107.805 ms

Loss rate: 0.60%

-- Flow 1:

Average throughput: 55.96 Mbit/s

95th percentile per-packet one-way delay: 106.235 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 39.37 Mbit/s

95th percentile per-packet one-way delay: 108.236 ms

Loss rate: 0.71%

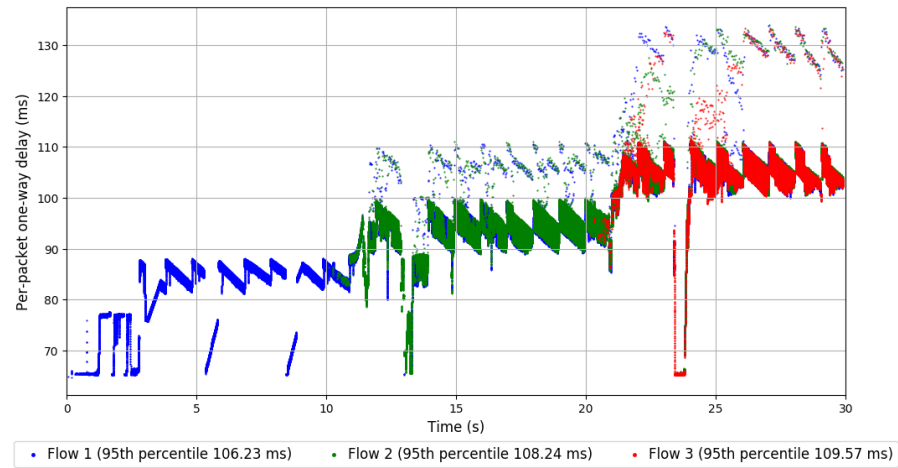
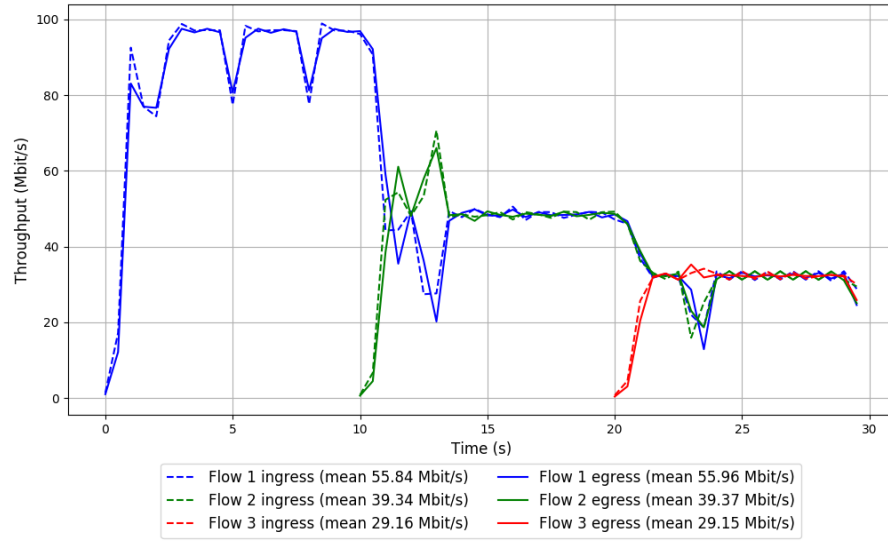
-- Flow 3:

Average throughput: 29.15 Mbit/s

95th percentile per-packet one-way delay: 109.566 ms

Loss rate: 1.91%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-04 20:52:14

End at: 2018-02-04 20:52:44

Local clock offset: -2.942 ms

Remote clock offset: 5.103 ms

Below is generated by plot.py at 2018-02-05 01:14:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.06 Mbit/s

95th percentile per-packet one-way delay: 108.247 ms

Loss rate: 0.63%

-- Flow 1:

Average throughput: 55.37 Mbit/s

95th percentile per-packet one-way delay: 107.146 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 39.18 Mbit/s

95th percentile per-packet one-way delay: 108.434 ms

Loss rate: 0.72%

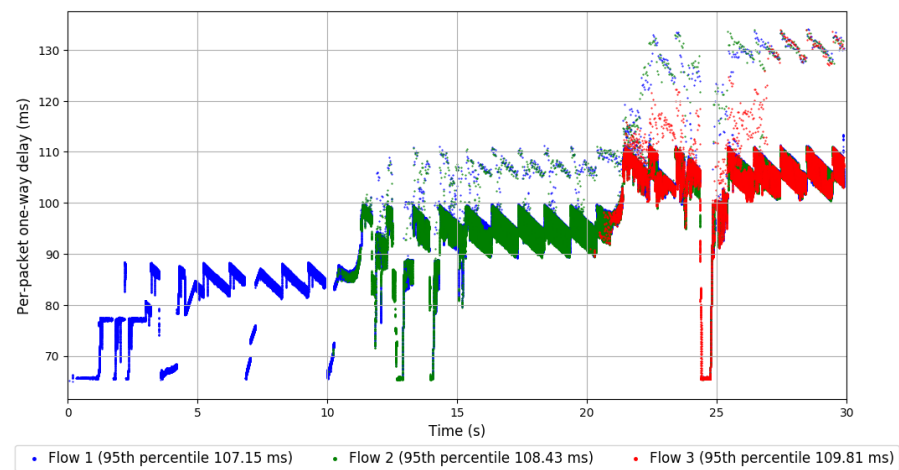
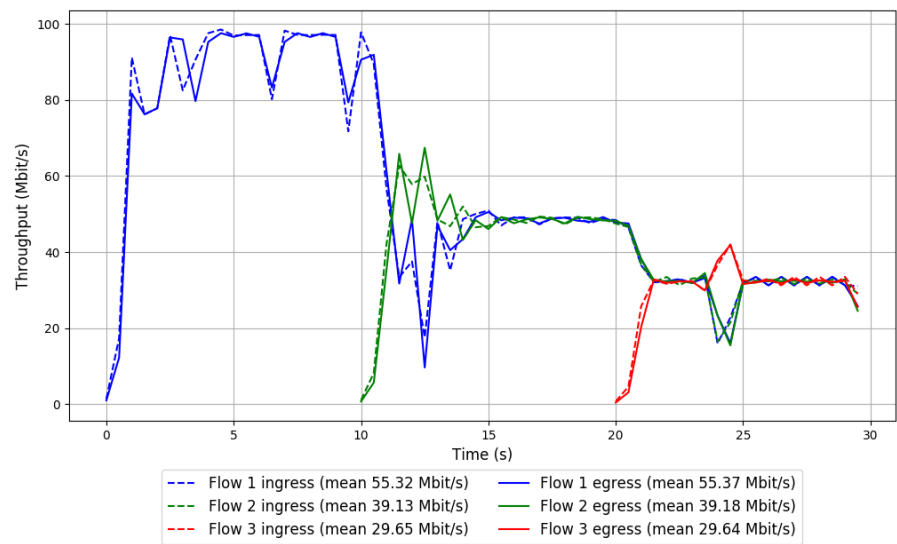
-- Flow 3:

Average throughput: 29.64 Mbit/s

95th percentile per-packet one-way delay: 109.805 ms

Loss rate: 1.90%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-04 17:43:33

End at: 2018-02-04 17:44:03

Local clock offset: -0.302 ms

Remote clock offset: -1.423 ms

Run 1: Report of TCP Cubic — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of TCP Cubic

Start at: 2018-02-04 18:06:19

End at: 2018-02-04 18:06:49

Local clock offset: -0.716 ms

Remote clock offset: 0.319 ms

Run 2: Report of TCP Cubic — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of TCP Cubic

Start at: 2018-02-04 18:29:42

End at: 2018-02-04 18:30:12

Local clock offset: -1.772 ms

Remote clock offset: 1.83 ms

Below is generated by plot.py at 2018-02-05 01:14:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.74 Mbit/s

95th percentile per-packet one-way delay: 103.456 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 68.36 Mbit/s

95th percentile per-packet one-way delay: 101.482 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 29.56 Mbit/s

95th percentile per-packet one-way delay: 104.873 ms

Loss rate: 1.81%

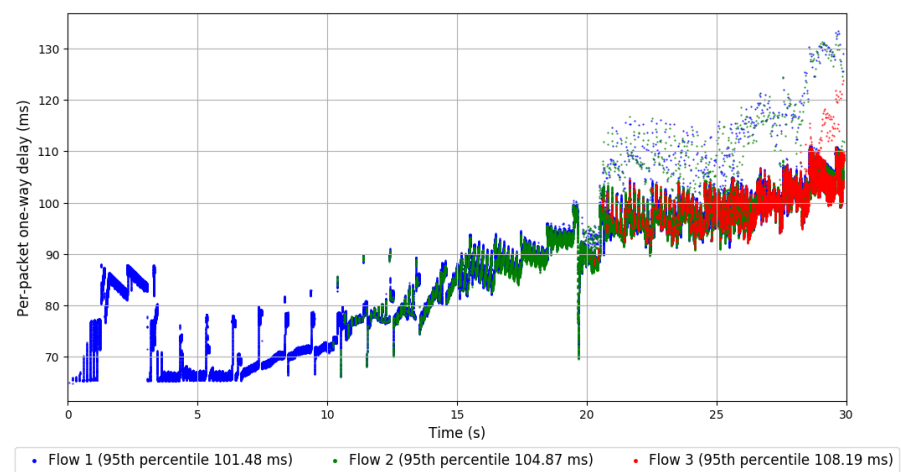
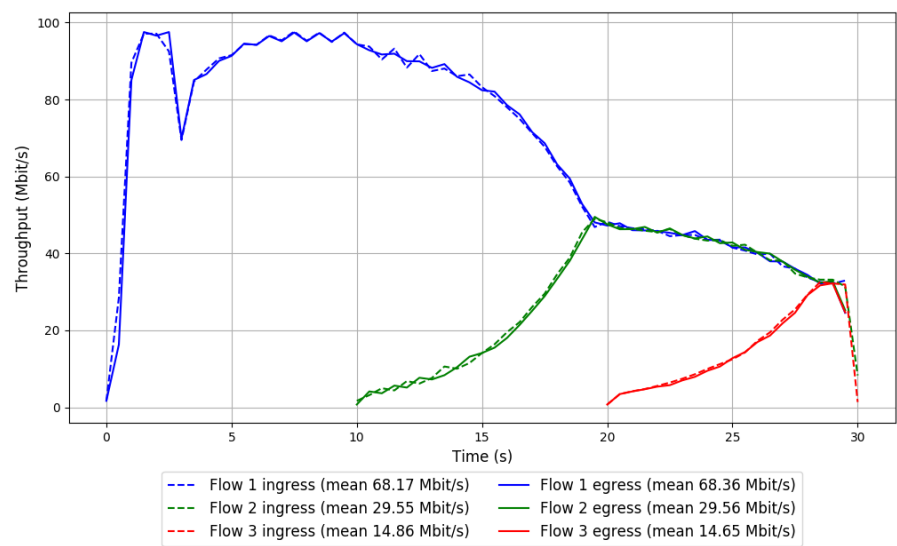
-- Flow 3:

Average throughput: 14.65 Mbit/s

95th percentile per-packet one-way delay: 108.195 ms

Loss rate: 5.09%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2018-02-04 18:52:59

End at: 2018-02-04 18:53:29

Local clock offset: -1.572 ms

Remote clock offset: 3.202 ms

Below is generated by plot.py at 2018-02-05 01:14:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.70 Mbit/s

95th percentile per-packet one-way delay: 105.163 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 68.44 Mbit/s

95th percentile per-packet one-way delay: 102.806 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 29.21 Mbit/s

95th percentile per-packet one-way delay: 106.492 ms

Loss rate: 0.96%

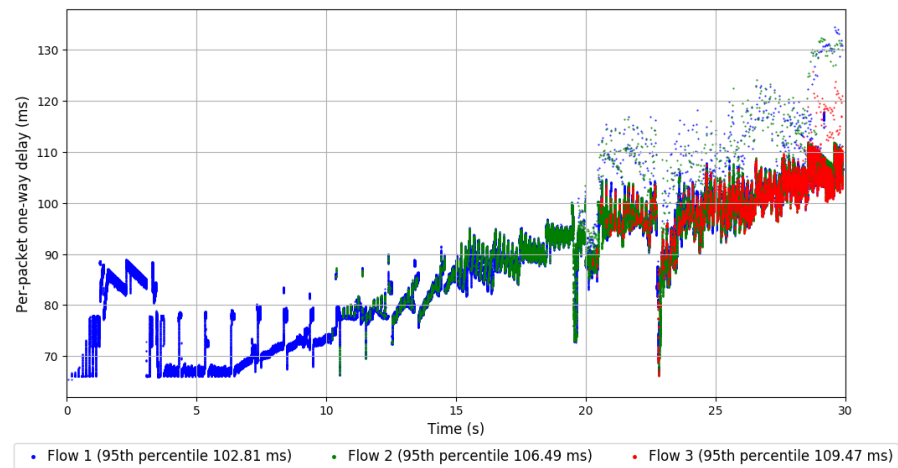
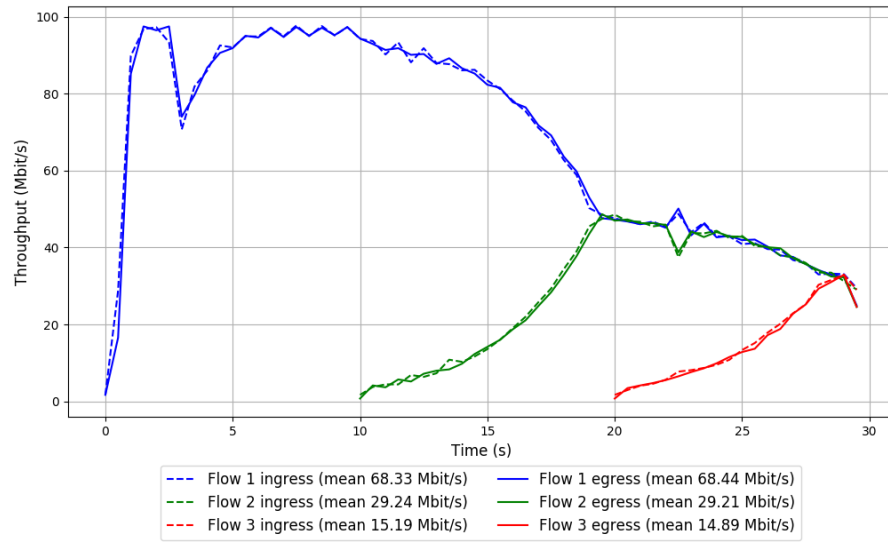
-- Flow 3:

Average throughput: 14.89 Mbit/s

95th percentile per-packet one-way delay: 109.471 ms

Loss rate: 3.71%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-04 19:16:16

End at: 2018-02-04 19:16:46

Local clock offset: -2.22 ms

Remote clock offset: 4.344 ms

Run 5: Report of TCP Cubic — Data Link

Figure is missing

Figure is missing

Run 6: Statistics of TCP Cubic

Start at: 2018-02-04 19:39:29

End at: 2018-02-04 19:39:59

Local clock offset: -2.51 ms

Remote clock offset: 4.704 ms

Below is generated by plot.py at 2018-02-05 01:14:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.72 Mbit/s

95th percentile per-packet one-way delay: 107.876 ms

Loss rate: 0.93%

-- Flow 1:

Average throughput: 58.08 Mbit/s

95th percentile per-packet one-way delay: 106.340 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 37.82 Mbit/s

95th percentile per-packet one-way delay: 108.526 ms

Loss rate: 1.26%

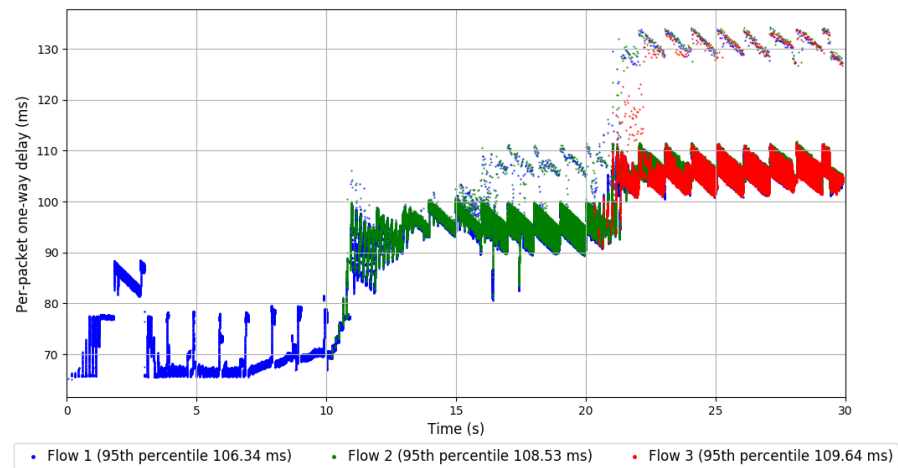
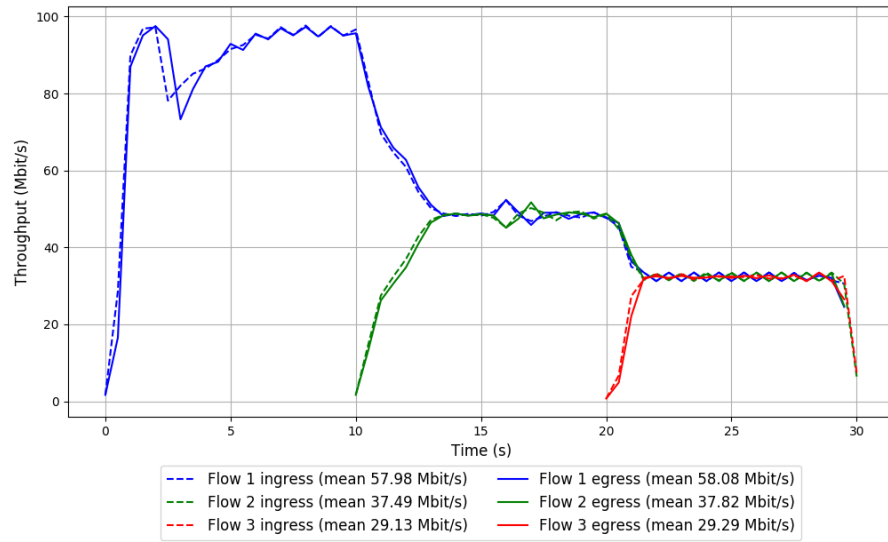
-- Flow 3:

Average throughput: 29.29 Mbit/s

95th percentile per-packet one-way delay: 109.643 ms

Loss rate: 3.41%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-04 20:02:46

End at: 2018-02-04 20:03:16

Local clock offset: -5.584 ms

Remote clock offset: 4.794 ms

Below is generated by plot.py at 2018-02-05 01:14:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.82 Mbit/s

95th percentile per-packet one-way delay: 105.181 ms

Loss rate: 0.98%

-- Flow 1:

Average throughput: 57.26 Mbit/s

95th percentile per-packet one-way delay: 103.759 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 39.16 Mbit/s

95th percentile per-packet one-way delay: 105.804 ms

Loss rate: 1.30%

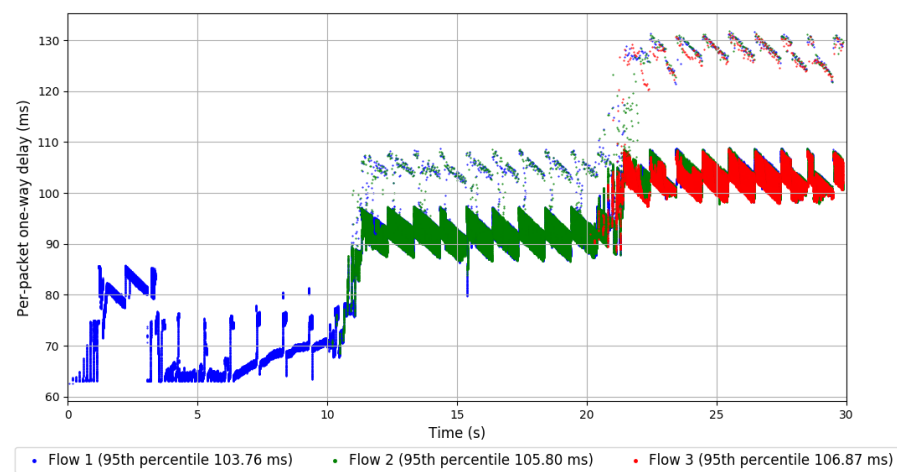
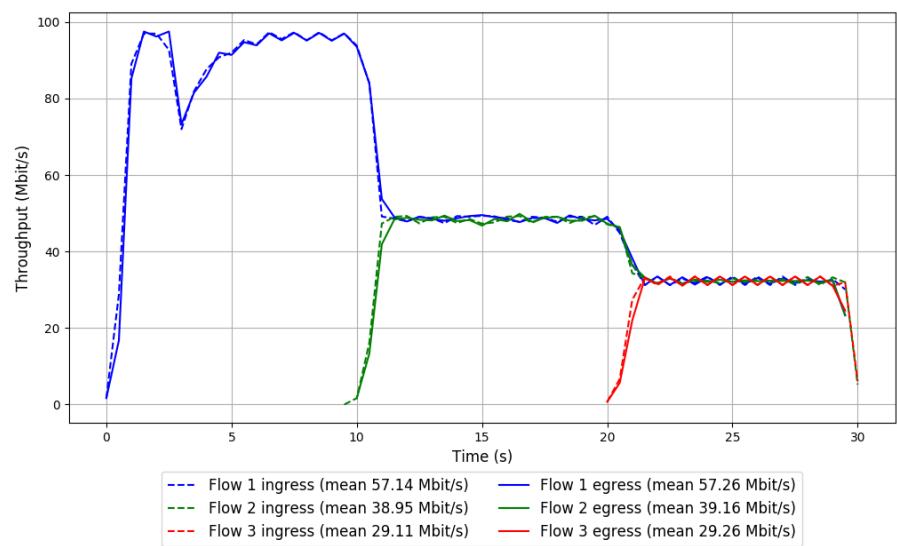
-- Flow 3:

Average throughput: 29.26 Mbit/s

95th percentile per-packet one-way delay: 106.870 ms

Loss rate: 3.42%

Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-04 20:26:17

End at: 2018-02-04 20:26:47

Local clock offset: -2.712 ms

Remote clock offset: 5.187 ms

Below is generated by plot.py at 2018-02-05 01:14:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.54 Mbit/s

95th percentile per-packet one-way delay: 107.919 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 59.94 Mbit/s

95th percentile per-packet one-way delay: 106.435 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 34.71 Mbit/s

95th percentile per-packet one-way delay: 108.848 ms

Loss rate: 1.59%

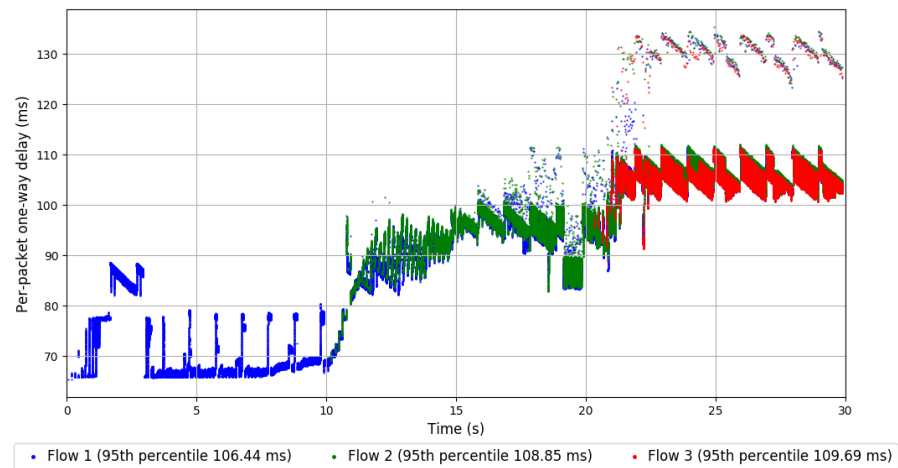
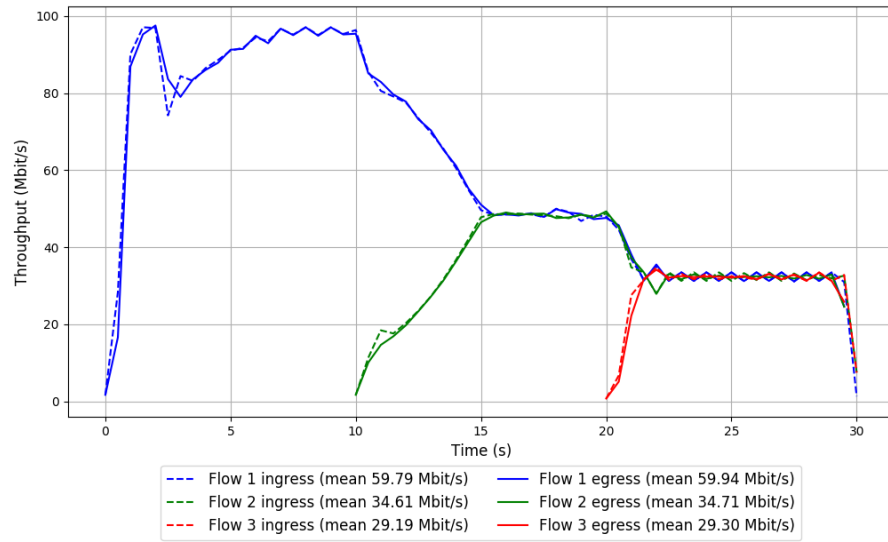
-- Flow 3:

Average throughput: 29.30 Mbit/s

95th percentile per-packet one-way delay: 109.691 ms

Loss rate: 3.57%

Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-04 20:49:37

End at: 2018-02-04 20:50:07

Local clock offset: -2.967 ms

Remote clock offset: 5.136 ms

Run 9: Report of TCP Cubic — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of TCP Cubic

Start at: 2018-02-04 21:13:07

End at: 2018-02-04 21:13:38

Local clock offset: -2.363 ms

Remote clock offset: 5.055 ms

Below is generated by plot.py at 2018-02-05 01:14:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.35 Mbit/s

95th percentile per-packet one-way delay: 108.125 ms

Loss rate: 0.99%

-- Flow 1:

Average throughput: 56.67 Mbit/s

95th percentile per-packet one-way delay: 106.671 ms

Loss rate: 0.43%

-- Flow 2:

Average throughput: 39.31 Mbit/s

95th percentile per-packet one-way delay: 108.670 ms

Loss rate: 1.26%

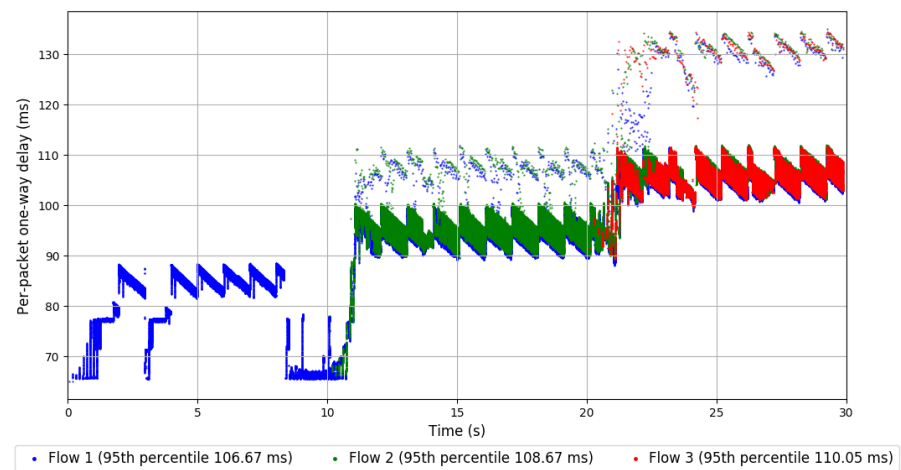
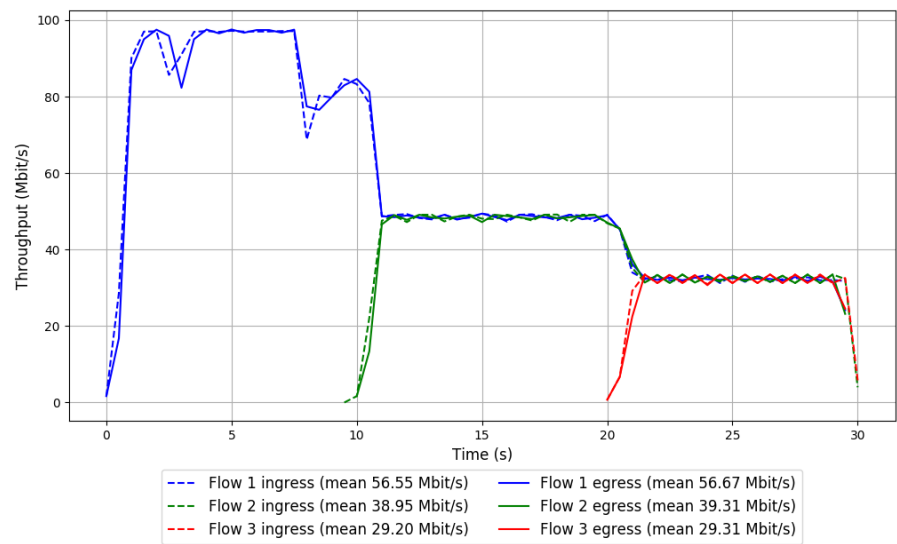
-- Flow 3:

Average throughput: 29.31 Mbit/s

95th percentile per-packet one-way delay: 110.048 ms

Loss rate: 3.47%

Run 10: Report of TCP Cubic — Data Link

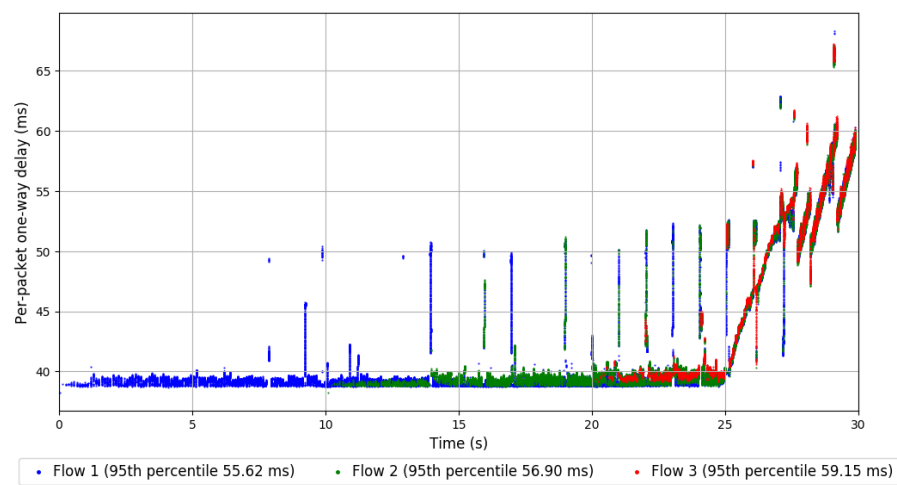
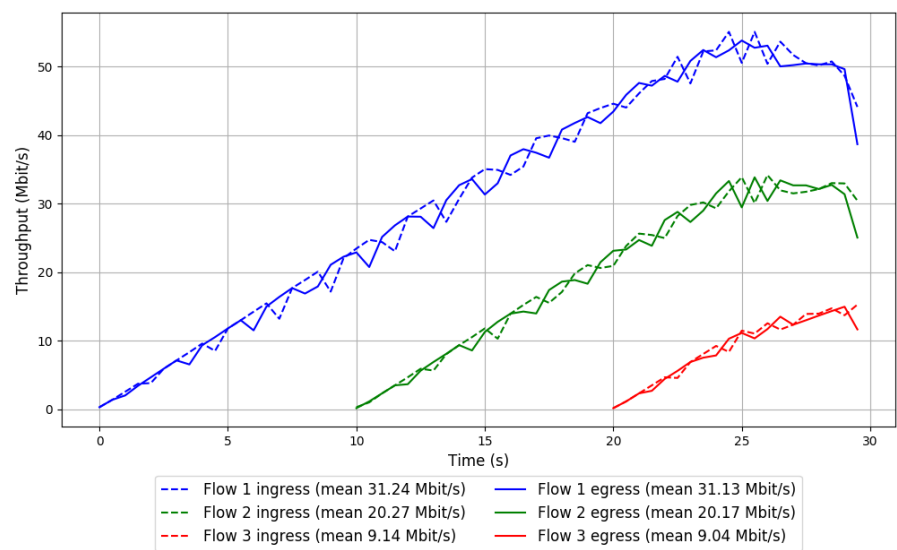


```
Run 1: Statistics of LEDBAT

Start at: 2018-02-04 17:30:58
End at: 2018-02-04 17:31:28
Local clock offset: -0.2 ms
Remote clock offset: -2.324 ms

# Below is generated by plot.py at 2018-02-05 01:14:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.44 Mbit/s
95th percentile per-packet one-way delay: 56.374 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 31.13 Mbit/s
95th percentile per-packet one-way delay: 55.619 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 20.17 Mbit/s
95th percentile per-packet one-way delay: 56.896 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 9.04 Mbit/s
95th percentile per-packet one-way delay: 59.153 ms
Loss rate: 2.20%
```


Run 1: Report of LEDBAT — Data Link

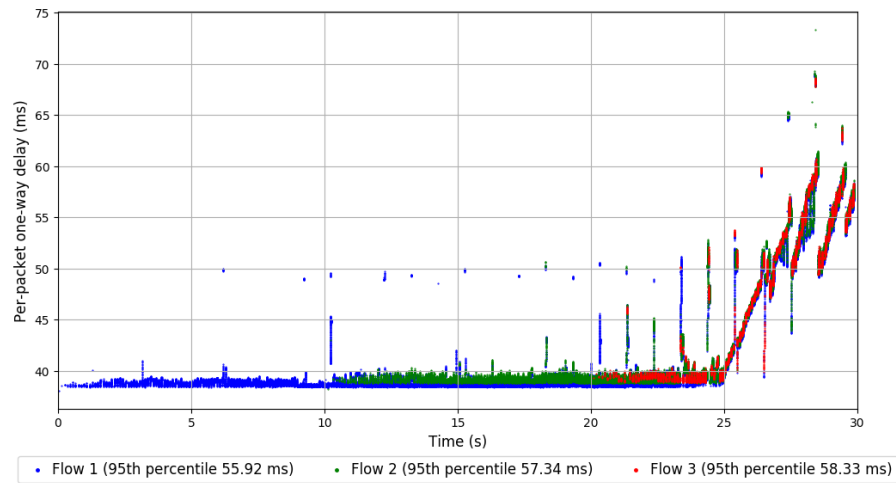
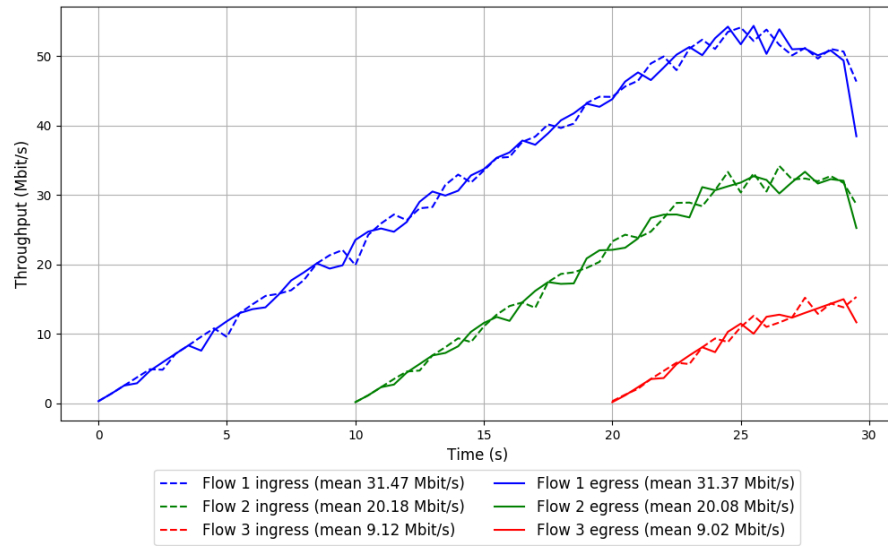


Run 2: Statistics of LEDBAT

Start at: 2018-02-04 17:53:45
End at: 2018-02-04 17:54:15
Local clock offset: -0.69 ms
Remote clock offset: -0.564 ms

Below is generated by plot.py at 2018-02-05 01:14:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 47.62 Mbit/s
95th percentile per-packet one-way delay: 56.741 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 31.37 Mbit/s
95th percentile per-packet one-way delay: 55.918 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 20.08 Mbit/s
95th percentile per-packet one-way delay: 57.339 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 9.02 Mbit/s
95th percentile per-packet one-way delay: 58.326 ms
Loss rate: 2.20%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-04 18:16:50

End at: 2018-02-04 18:17:20

Local clock offset: -0.985 ms

Remote clock offset: 1.031 ms

Below is generated by plot.py at 2018-02-05 01:14:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.75 Mbit/s

95th percentile per-packet one-way delay: 67.550 ms

Loss rate: 1.12%

-- Flow 1:

Average throughput: 20.59 Mbit/s

95th percentile per-packet one-way delay: 67.497 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 13.63 Mbit/s

95th percentile per-packet one-way delay: 67.773 ms

Loss rate: 1.32%

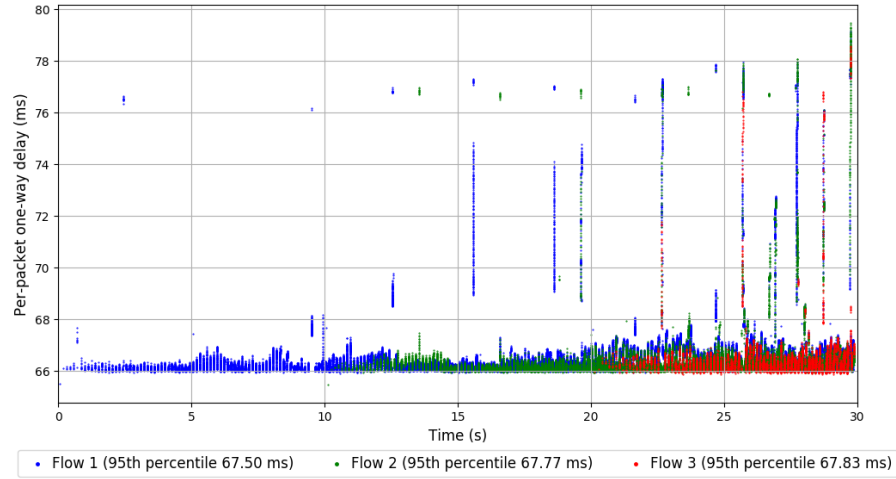
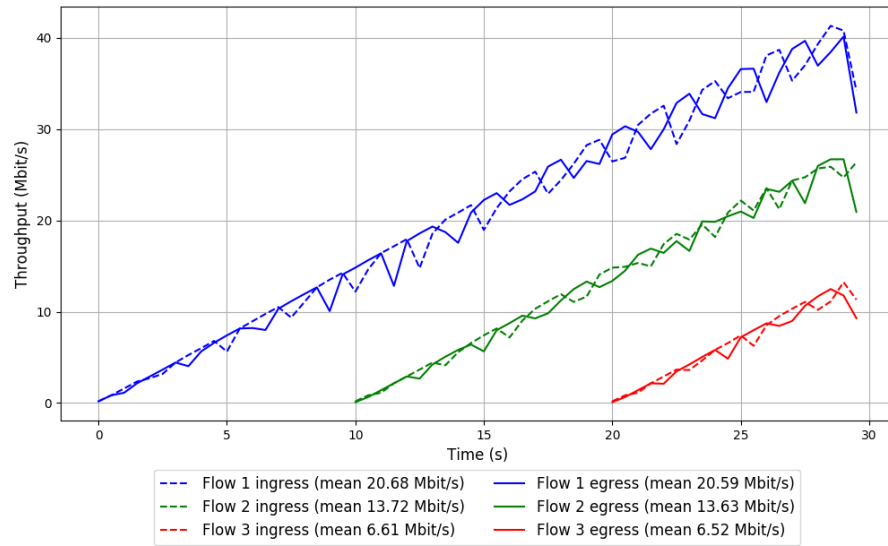
-- Flow 3:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 67.828 ms

Loss rate: 2.68%

Run 3: Report of LEDBAT — Data Link

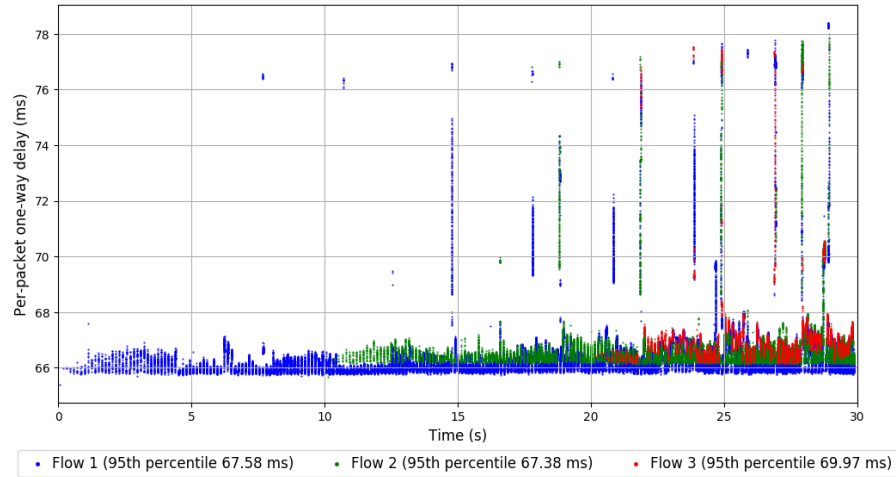
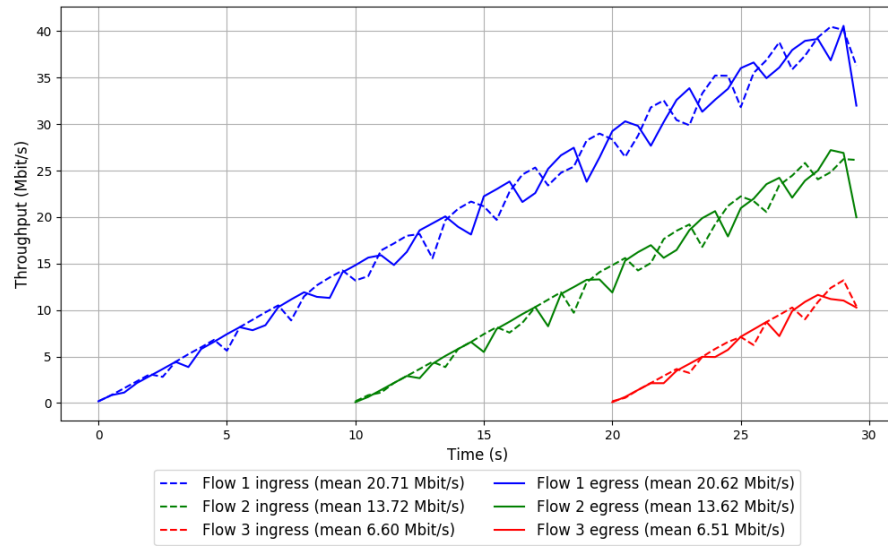


Run 4: Statistics of LEDBAT

Start at: 2018-02-04 18:40:10
End at: 2018-02-04 18:40:40
Local clock offset: -1.343 ms
Remote clock offset: 2.505 ms

Below is generated by plot.py at 2018-02-05 01:14:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 31.75 Mbit/s
95th percentile per-packet one-way delay: 67.653 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 20.62 Mbit/s
95th percentile per-packet one-way delay: 67.576 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 13.62 Mbit/s
95th percentile per-packet one-way delay: 67.380 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 69.967 ms
Loss rate: 2.72%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-04 19:03:27

End at: 2018-02-04 19:03:57

Local clock offset: -2.078 ms

Remote clock offset: 3.742 ms

Below is generated by plot.py at 2018-02-05 01:14:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.59 Mbit/s

95th percentile per-packet one-way delay: 67.623 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 20.48 Mbit/s

95th percentile per-packet one-way delay: 67.497 ms

Loss rate: 0.88%

-- Flow 2:

Average throughput: 13.59 Mbit/s

95th percentile per-packet one-way delay: 67.770 ms

Loss rate: 1.33%

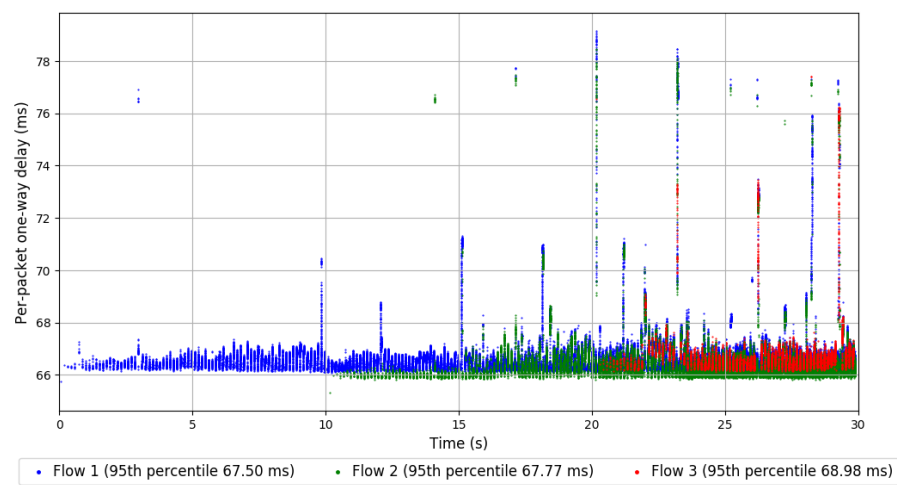
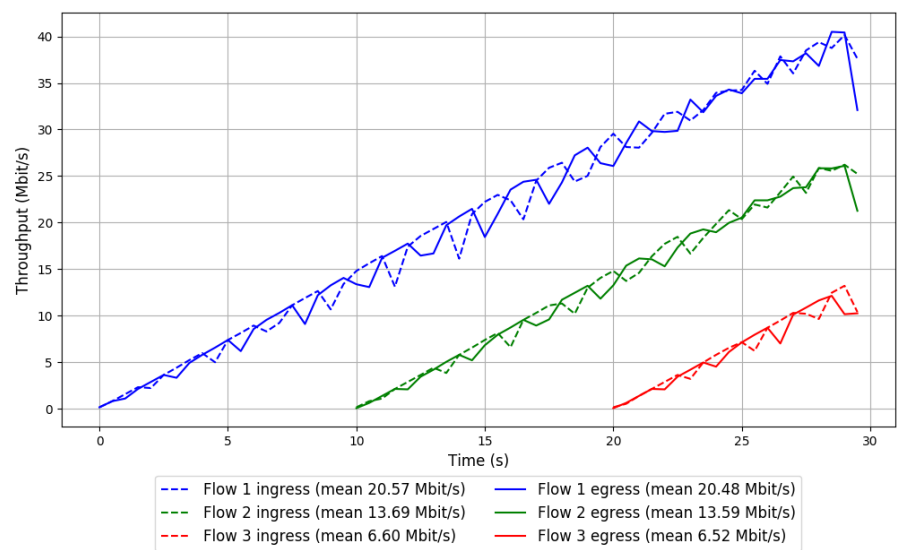
-- Flow 3:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 68.981 ms

Loss rate: 2.72%

Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-04 19:26:42

End at: 2018-02-04 19:27:12

Local clock offset: -2.36 ms

Remote clock offset: 4.69 ms

Below is generated by plot.py at 2018-02-05 01:14:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.66 Mbit/s

95th percentile per-packet one-way delay: 67.743 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 20.57 Mbit/s

95th percentile per-packet one-way delay: 67.758 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 13.56 Mbit/s

95th percentile per-packet one-way delay: 67.598 ms

Loss rate: 1.32%

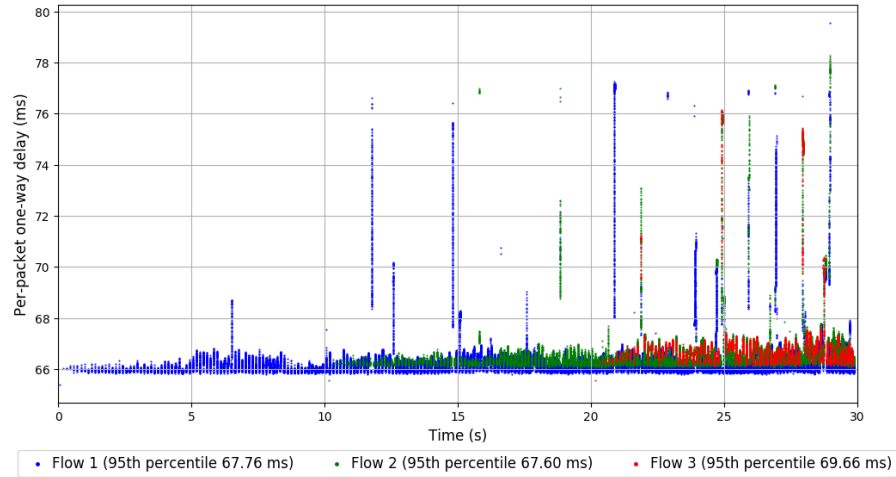
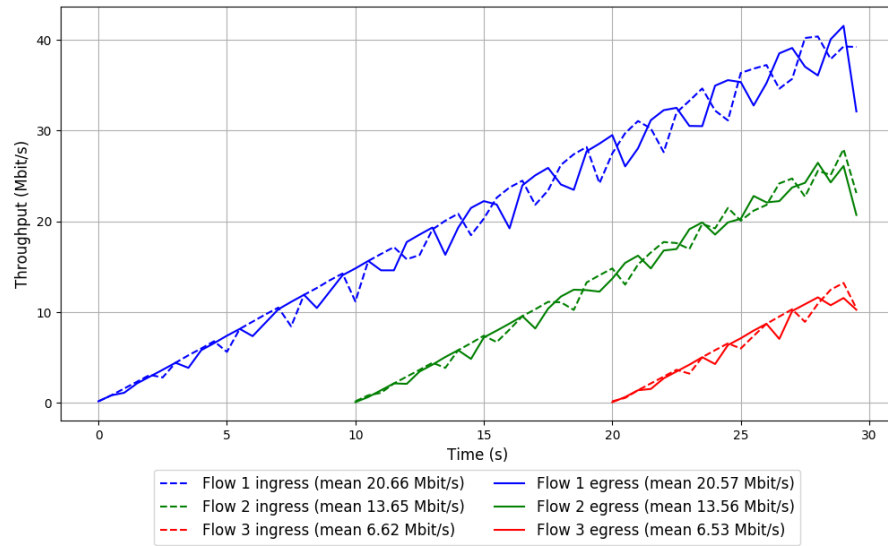
-- Flow 3:

Average throughput: 6.53 Mbit/s

95th percentile per-packet one-way delay: 69.656 ms

Loss rate: 2.72%

Run 6: Report of LEDBAT — Data Link

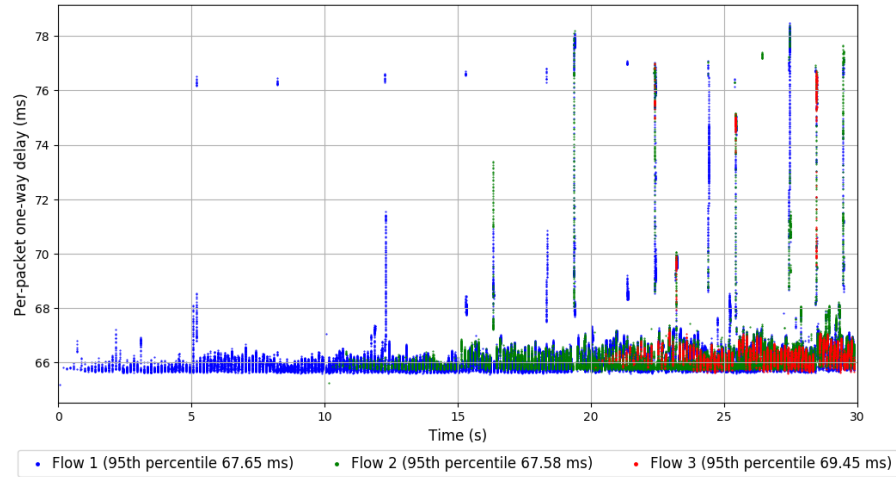
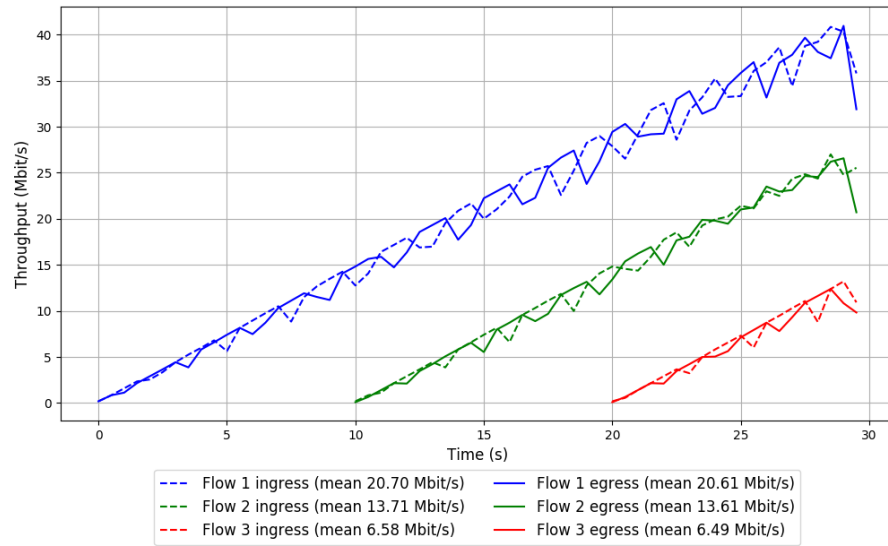


Run 7: Statistics of LEDBAT

Start at: 2018-02-04 19:49:57
End at: 2018-02-04 19:50:27
Local clock offset: -2.751 ms
Remote clock offset: 4.79 ms

Below is generated by plot.py at 2018-02-05 01:14:47
Datalink statistics
-- Total of 3 flows:
Average throughput: 31.74 Mbit/s
95th percentile per-packet one-way delay: 67.629 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 20.61 Mbit/s
95th percentile per-packet one-way delay: 67.654 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 13.61 Mbit/s
95th percentile per-packet one-way delay: 67.579 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 6.49 Mbit/s
95th percentile per-packet one-way delay: 69.449 ms
Loss rate: 2.68%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-04 20:13:15

End at: 2018-02-04 20:13:45

Local clock offset: -2.944 ms

Remote clock offset: 4.985 ms

Below is generated by plot.py at 2018-02-05 01:14:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 28.02 Mbit/s

95th percentile per-packet one-way delay: 67.680 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 16.97 Mbit/s

95th percentile per-packet one-way delay: 67.199 ms

Loss rate: 0.56%

-- Flow 2:

Average throughput: 13.50 Mbit/s

95th percentile per-packet one-way delay: 69.957 ms

Loss rate: 1.31%

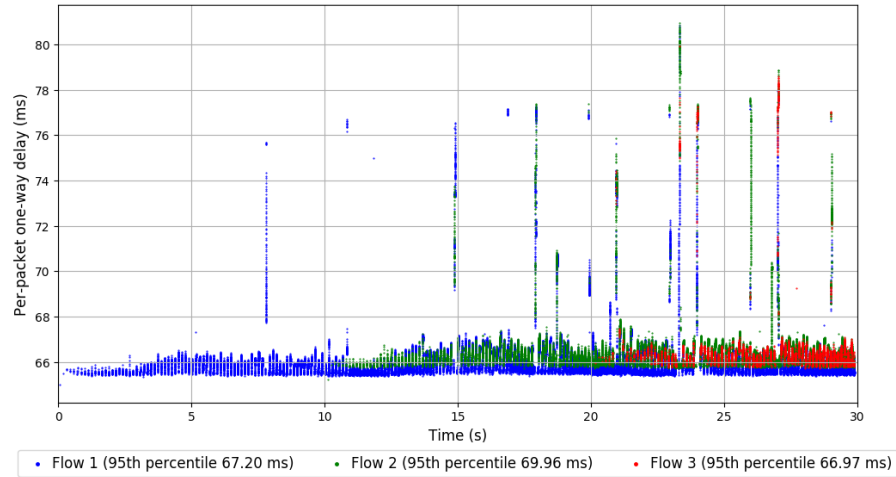
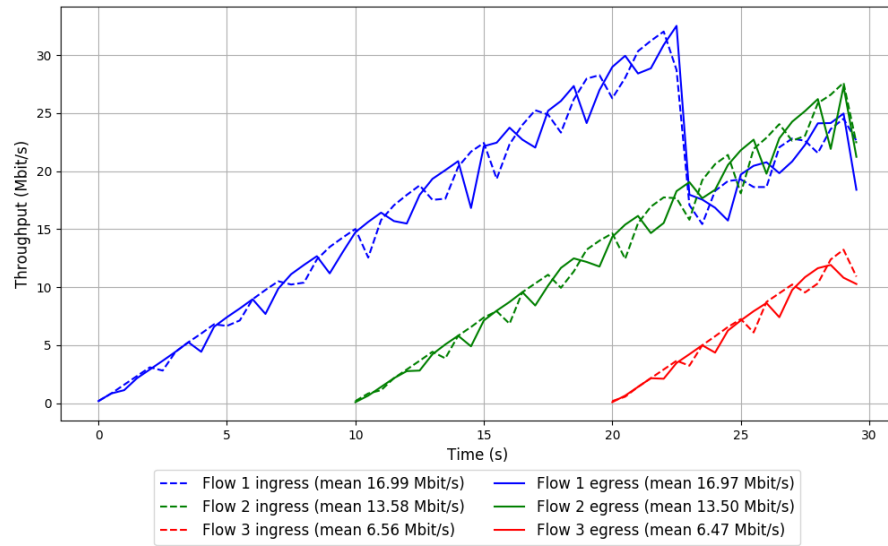
-- Flow 3:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 66.975 ms

Loss rate: 2.71%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-04 20:36:47

End at: 2018-02-04 20:37:17

Local clock offset: -2.513 ms

Remote clock offset: 5.211 ms

Below is generated by plot.py at 2018-02-05 01:14:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 30.03 Mbit/s

95th percentile per-packet one-way delay: 67.325 ms

Loss rate: 1.04%

-- Flow 1:

Average throughput: 20.54 Mbit/s

95th percentile per-packet one-way delay: 67.232 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 11.17 Mbit/s

95th percentile per-packet one-way delay: 67.888 ms

Loss rate: 1.01%

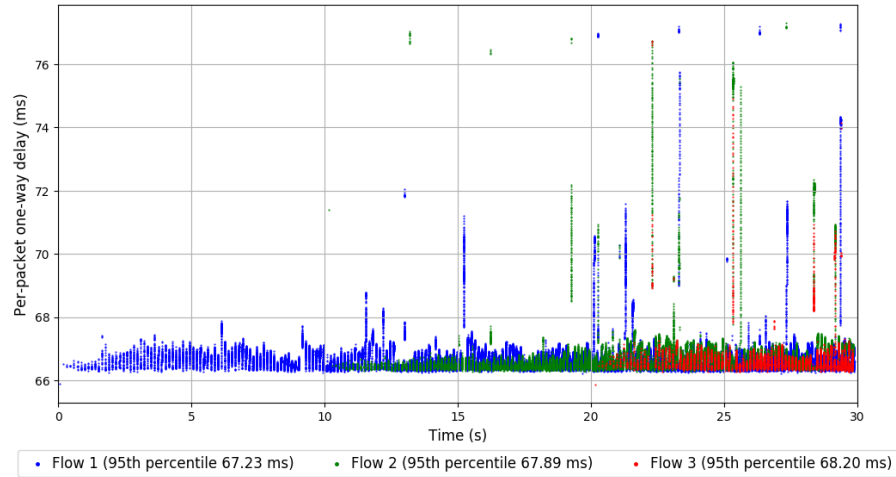
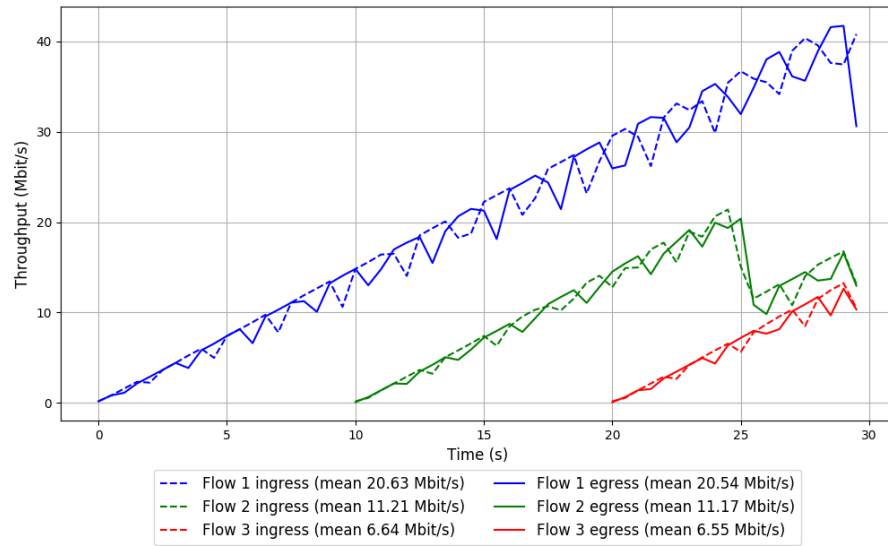
-- Flow 3:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 68.199 ms

Loss rate: 2.73%

Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-04 21:00:04

End at: 2018-02-04 21:00:34

Local clock offset: -3.244 ms

Remote clock offset: 5.087 ms

Below is generated by plot.py at 2018-02-05 01:15:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.63 Mbit/s

95th percentile per-packet one-way delay: 67.943 ms

Loss rate: 1.13%

-- Flow 1:

Average throughput: 20.56 Mbit/s

95th percentile per-packet one-way delay: 68.040 ms

Loss rate: 0.87%

-- Flow 2:

Average throughput: 13.52 Mbit/s

95th percentile per-packet one-way delay: 67.313 ms

Loss rate: 1.33%

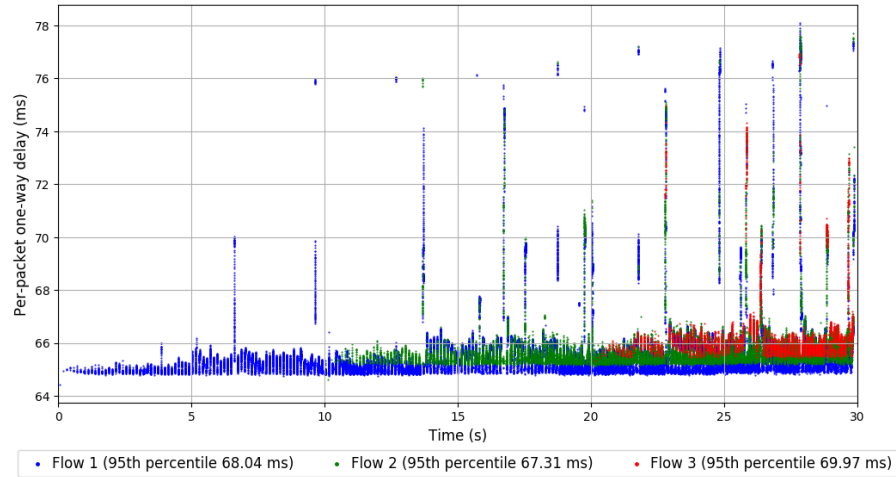
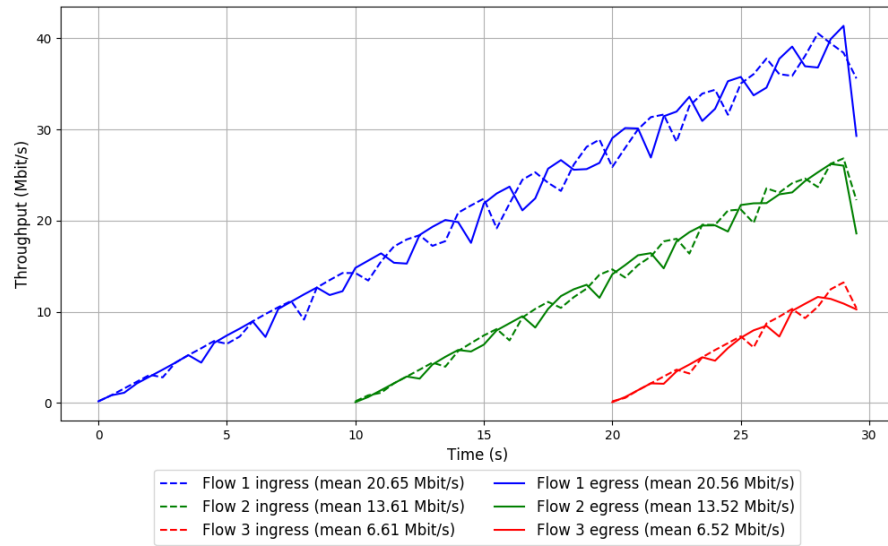
-- Flow 3:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 69.970 ms

Loss rate: 2.72%

Run 10: Report of LEDBAT — Data Link

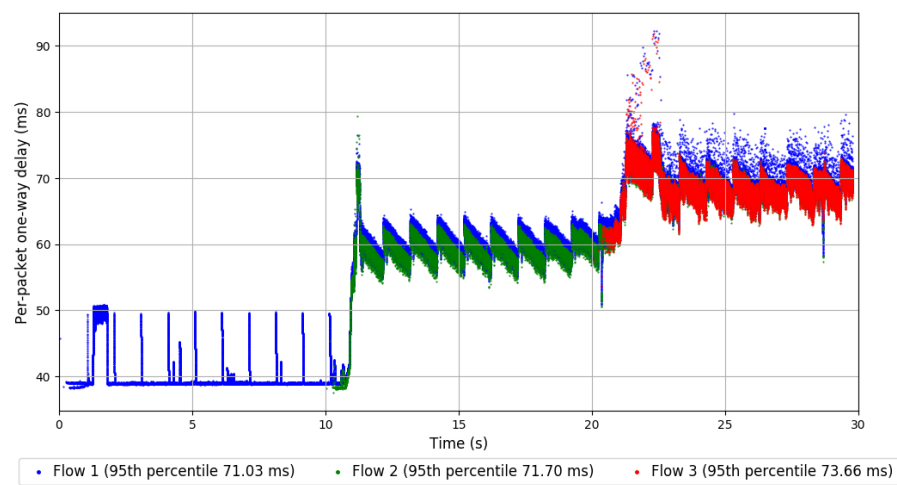
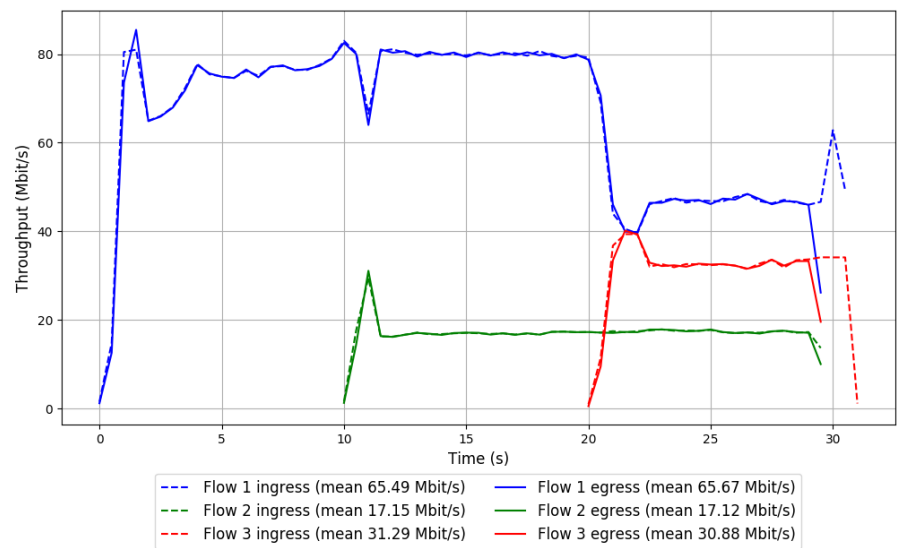


Run 1: Statistics of PCC

Start at: 2018-02-04 17:40:59
End at: 2018-02-04 17:41:29
Local clock offset: -0.432 ms
Remote clock offset: -1.564 ms

Below is generated by plot.py at 2018-02-05 01:15:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.10 Mbit/s
95th percentile per-packet one-way delay: 71.586 ms
Loss rate: 4.33%
-- Flow 1:
Average throughput: 65.67 Mbit/s
95th percentile per-packet one-way delay: 71.025 ms
Loss rate: 3.44%
-- Flow 2:
Average throughput: 17.12 Mbit/s
95th percentile per-packet one-way delay: 71.704 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 30.88 Mbit/s
95th percentile per-packet one-way delay: 73.662 ms
Loss rate: 12.93%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-04 18:03:46

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

Local clock offset: -1.359 ms

Remote clock offset: 0.083 ms

Below is generated by plot.py at 2018-02-05 01:15:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.37 Mbit/s

95th percentile per-packet one-way delay: 63.675 ms

Loss rate: 0.43%

-- Flow 1:

Average throughput: 61.36 Mbit/s

95th percentile per-packet one-way delay: 63.643 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 32.65 Mbit/s

95th percentile per-packet one-way delay: 63.841 ms

Loss rate: 0.60%

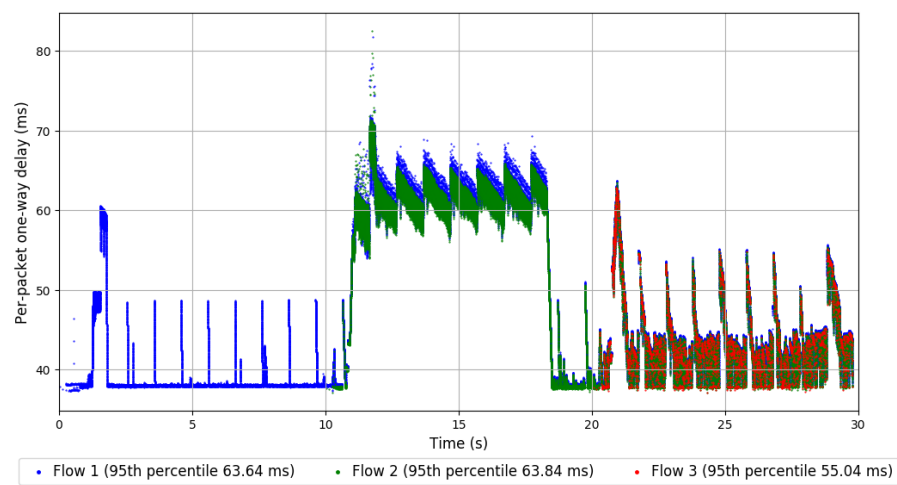
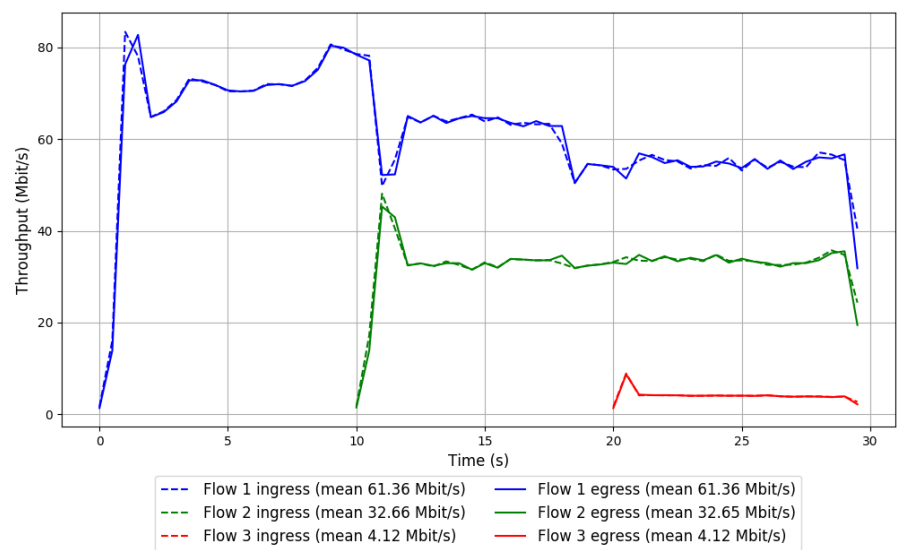
-- Flow 3:

Average throughput: 4.12 Mbit/s

95th percentile per-packet one-way delay: 55.044 ms

Loss rate: 1.06%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-04 18:27:06

End at: 2018-02-04 18:27:36

Local clock offset: -1.278 ms

Remote clock offset: 1.659 ms

Below is generated by plot.py at 2018-02-05 01:15:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.27 Mbit/s

95th percentile per-packet one-way delay: 108.166 ms

Loss rate: 4.34%

-- Flow 1:

Average throughput: 54.51 Mbit/s

95th percentile per-packet one-way delay: 107.152 ms

Loss rate: 3.75%

-- Flow 2:

Average throughput: 31.99 Mbit/s

95th percentile per-packet one-way delay: 108.479 ms

Loss rate: 1.06%

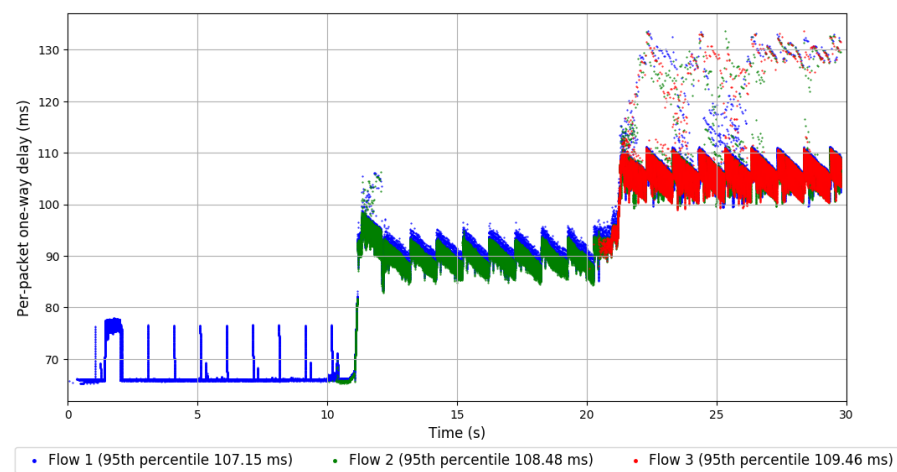
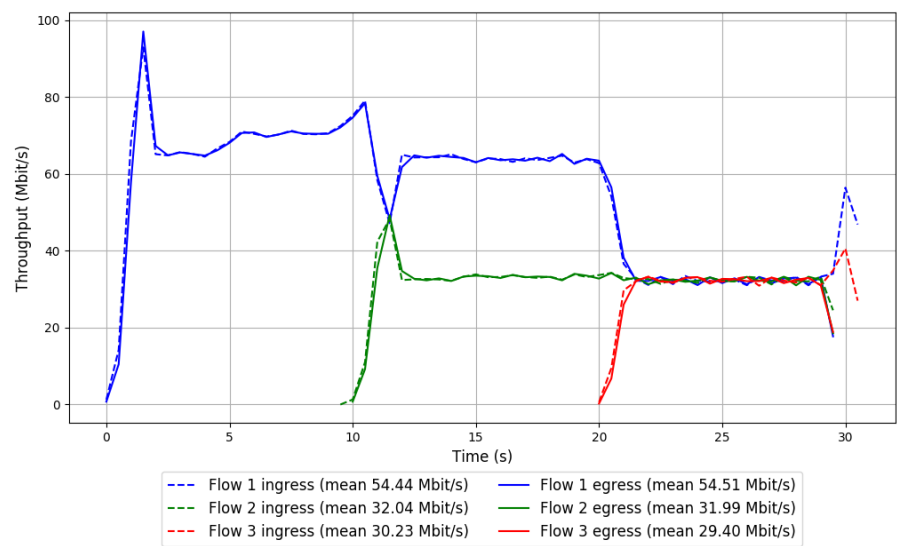
-- Flow 3:

Average throughput: 29.40 Mbit/s

95th percentile per-packet one-way delay: 109.456 ms

Loss rate: 13.69%

Run 3: Report of PCC — Data Link

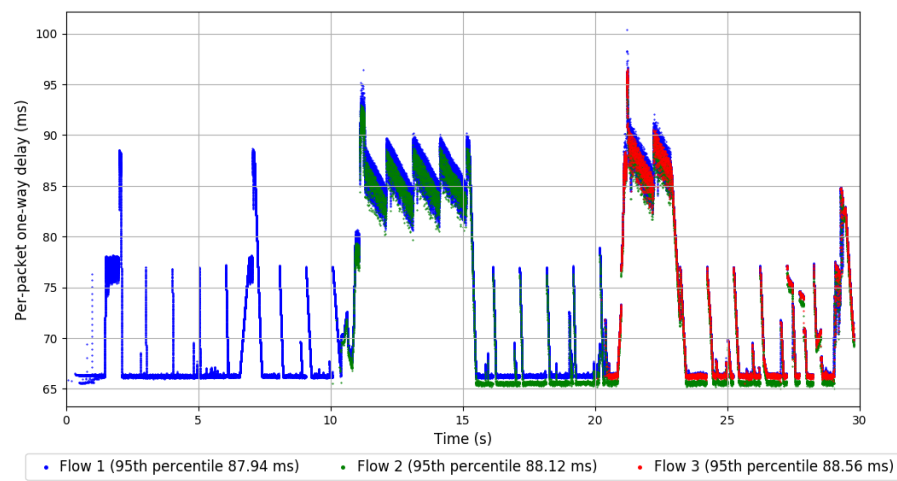
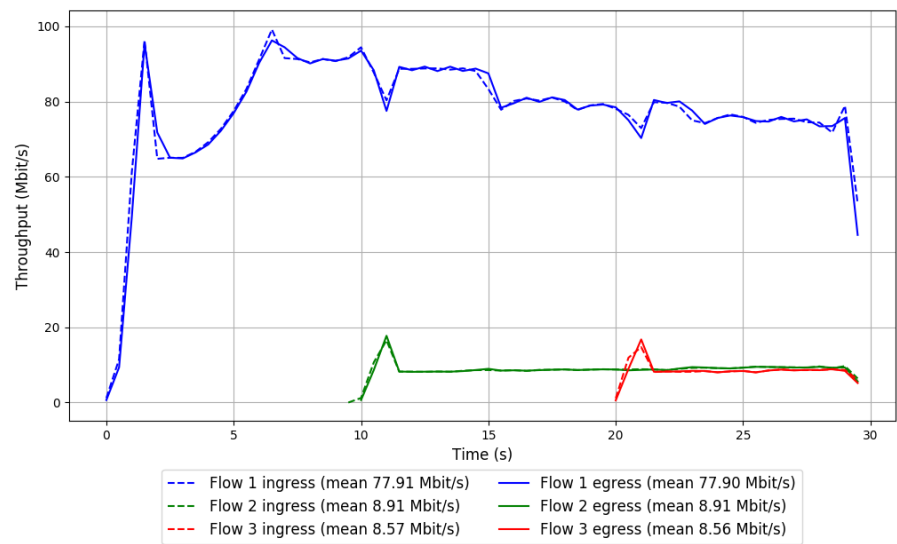


Run 4: Statistics of PCC

Start at: 2018-02-04 18:50:24
End at: 2018-02-04 18:50:54
Local clock offset: -1.753 ms
Remote clock offset: 3.063 ms

Below is generated by plot.py at 2018-02-05 01:15:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 86.60 Mbit/s
95th percentile per-packet one-way delay: 87.971 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 77.90 Mbit/s
95th percentile per-packet one-way delay: 87.936 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 8.91 Mbit/s
95th percentile per-packet one-way delay: 88.121 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 88.559 ms
Loss rate: 1.37%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-04 19:13:40

End at: 2018-02-04 19:14:10

Local clock offset: -1.989 ms

Remote clock offset: 4.198 ms

Below is generated by plot.py at 2018-02-05 01:16:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.22 Mbit/s

95th percentile per-packet one-way delay: 98.776 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 63.74 Mbit/s

95th percentile per-packet one-way delay: 98.075 ms

Loss rate: 0.39%

-- Flow 2:

Average throughput: 17.04 Mbit/s

95th percentile per-packet one-way delay: 98.998 ms

Loss rate: 0.82%

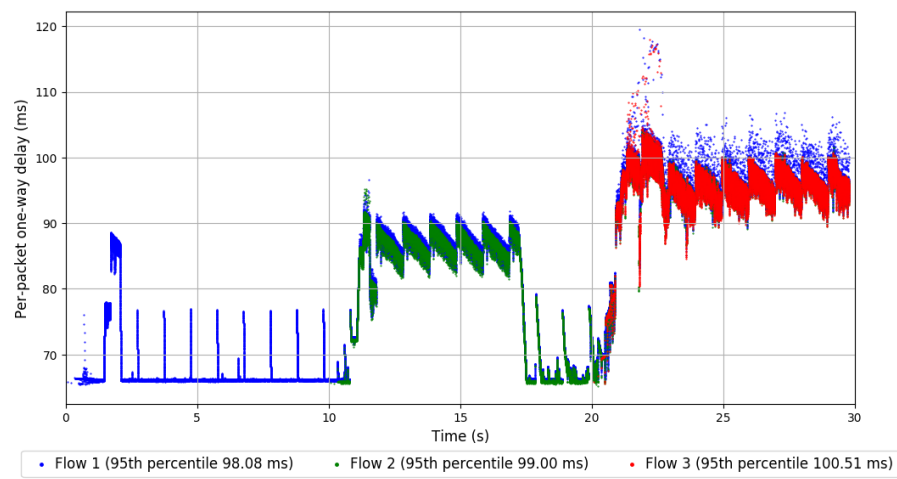
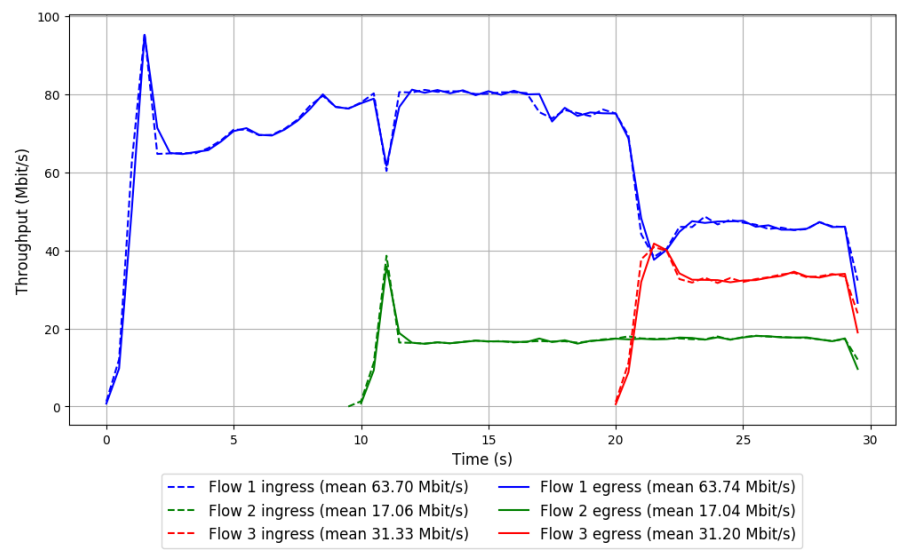
-- Flow 3:

Average throughput: 31.20 Mbit/s

95th percentile per-packet one-way delay: 100.506 ms

Loss rate: 1.79%

Run 5: Report of PCC — Data Link

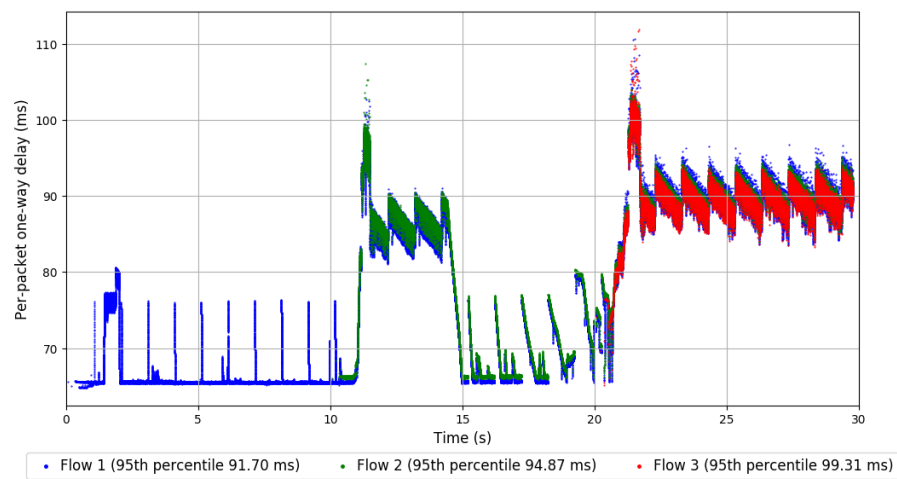
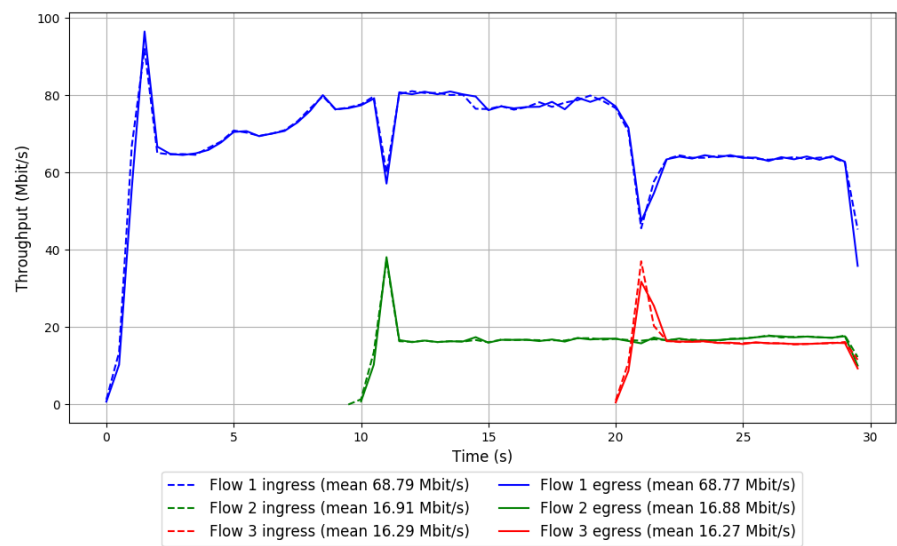


Run 6: Statistics of PCC

Start at: 2018-02-04 19:36:54
End at: 2018-02-04 19:37:24
Local clock offset: -2.494 ms
Remote clock offset: 4.737 ms

Below is generated by plot.py at 2018-02-05 01:16:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.28 Mbit/s
95th percentile per-packet one-way delay: 92.303 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 68.77 Mbit/s
95th percentile per-packet one-way delay: 91.705 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 16.88 Mbit/s
95th percentile per-packet one-way delay: 94.871 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 16.27 Mbit/s
95th percentile per-packet one-way delay: 99.313 ms
Loss rate: 1.64%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-02-04 20:00:10

End at: 2018-02-04 20:00:40

Local clock offset: -2.625 ms

Remote clock offset: 4.772 ms

Below is generated by plot.py at 2018-02-05 01:16:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.02 Mbit/s

95th percentile per-packet one-way delay: 107.093 ms

Loss rate: 3.30%

-- Flow 1:

Average throughput: 57.62 Mbit/s

95th percentile per-packet one-way delay: 105.453 ms

Loss rate: 2.98%

-- Flow 2:

Average throughput: 31.15 Mbit/s

95th percentile per-packet one-way delay: 108.057 ms

Loss rate: 1.01%

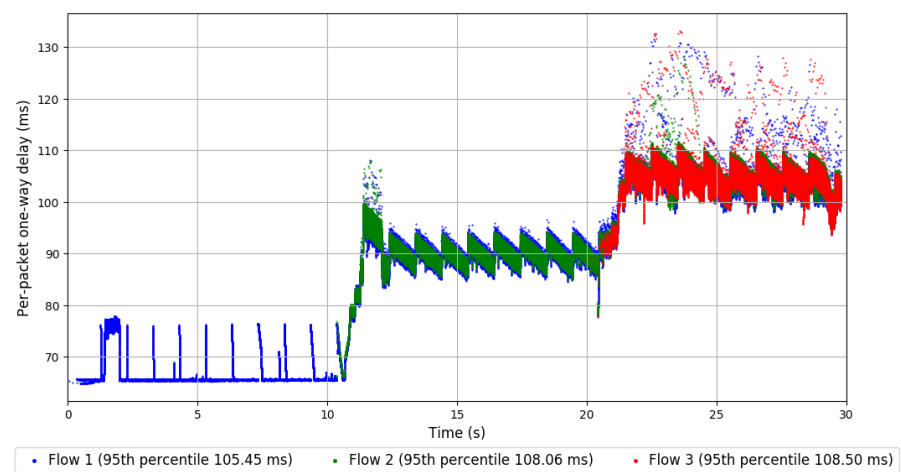
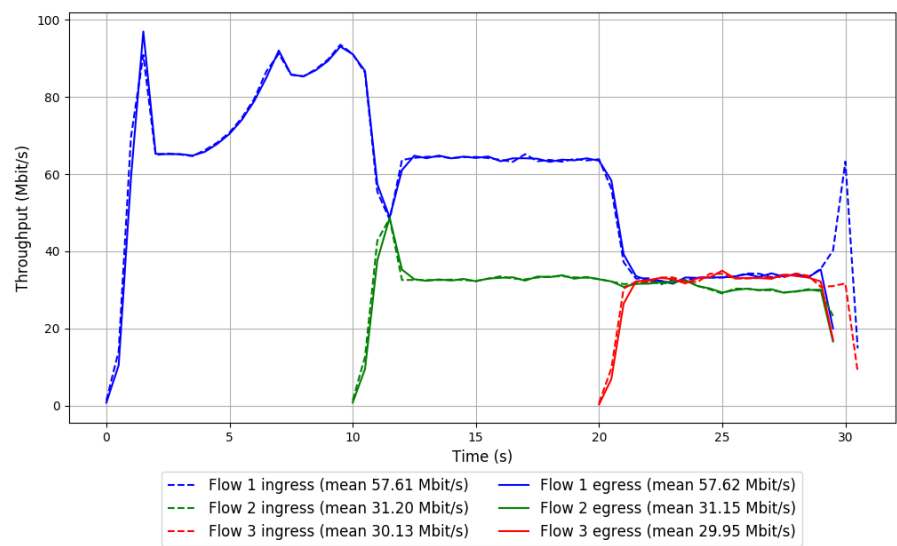
-- Flow 3:

Average throughput: 29.95 Mbit/s

95th percentile per-packet one-way delay: 108.498 ms

Loss rate: 9.46%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-02-04 20:23:41

End at: 2018-02-04 20:24:11

Local clock offset: -2.725 ms

Remote clock offset: 5.202 ms

Below is generated by plot.py at 2018-02-05 01:16:19

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.12 Mbit/s

95th percentile per-packet one-way delay: 88.185 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 71.92 Mbit/s

95th percentile per-packet one-way delay: 87.885 ms

Loss rate: 0.49%

-- Flow 2:

Average throughput: 16.29 Mbit/s

95th percentile per-packet one-way delay: 89.036 ms

Loss rate: 0.75%

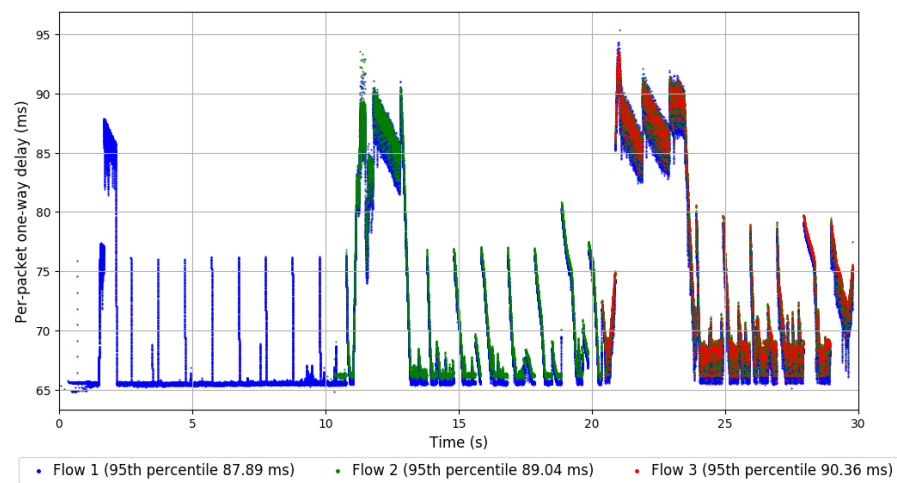
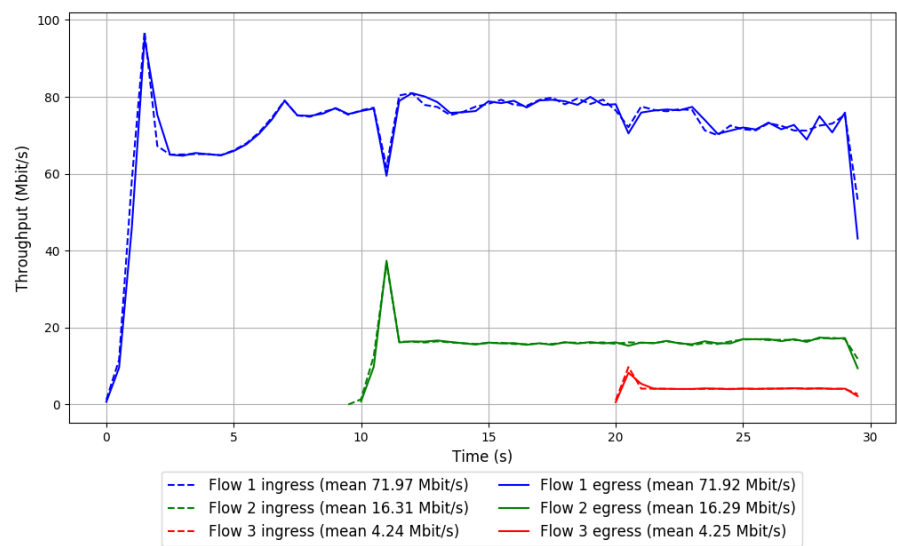
-- Flow 3:

Average throughput: 4.25 Mbit/s

95th percentile per-packet one-way delay: 90.364 ms

Loss rate: 1.29%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-04 20:47:01

End at: 2018-02-04 20:47:31

Local clock offset: -2.608 ms

Remote clock offset: 5.165 ms

Below is generated by plot.py at 2018-02-05 01:17:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.72 Mbit/s

95th percentile per-packet one-way delay: 95.082 ms

Loss rate: 0.62%

-- Flow 1:

Average throughput: 70.01 Mbit/s

95th percentile per-packet one-way delay: 94.430 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 8.31 Mbit/s

95th percentile per-packet one-way delay: 94.986 ms

Loss rate: 0.84%

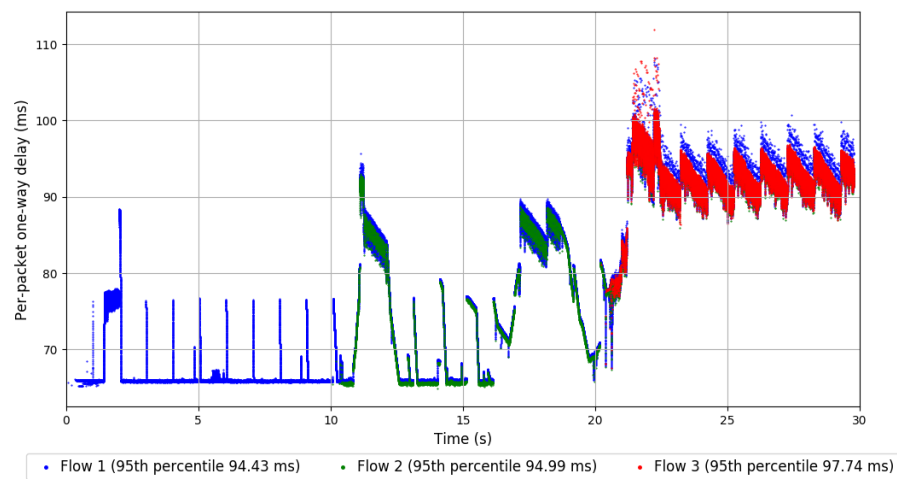
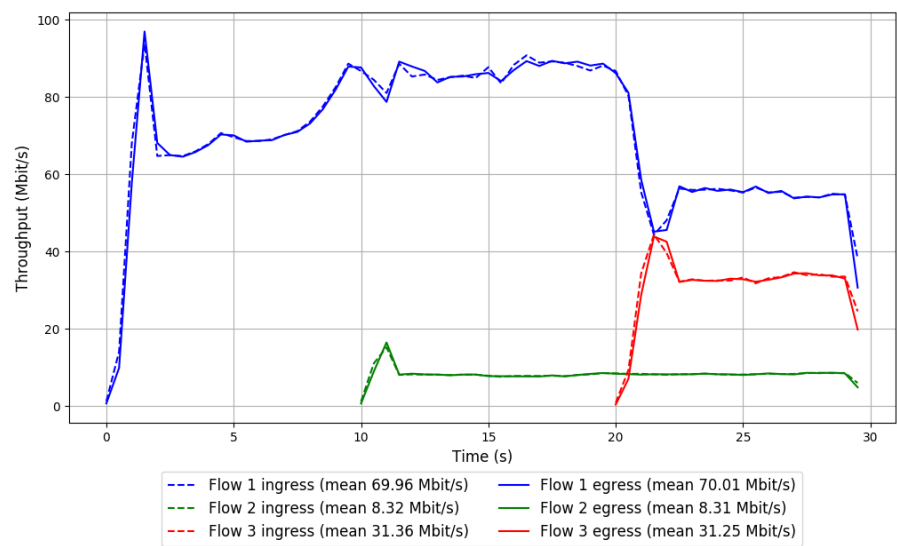
-- Flow 3:

Average throughput: 31.25 Mbit/s

95th percentile per-packet one-way delay: 97.742 ms

Loss rate: 1.83%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-04 21:10:30

End at: 2018-02-04 21:11:00

Local clock offset: -2.383 ms

Remote clock offset: 5.046 ms

Below is generated by plot.py at 2018-02-05 01:17:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.98 Mbit/s

95th percentile per-packet one-way delay: 99.689 ms

Loss rate: 1.14%

-- Flow 1:

Average throughput: 58.50 Mbit/s

95th percentile per-packet one-way delay: 98.900 ms

Loss rate: 0.51%

-- Flow 2:

Average throughput: 33.21 Mbit/s

95th percentile per-packet one-way delay: 100.092 ms

Loss rate: 2.08%

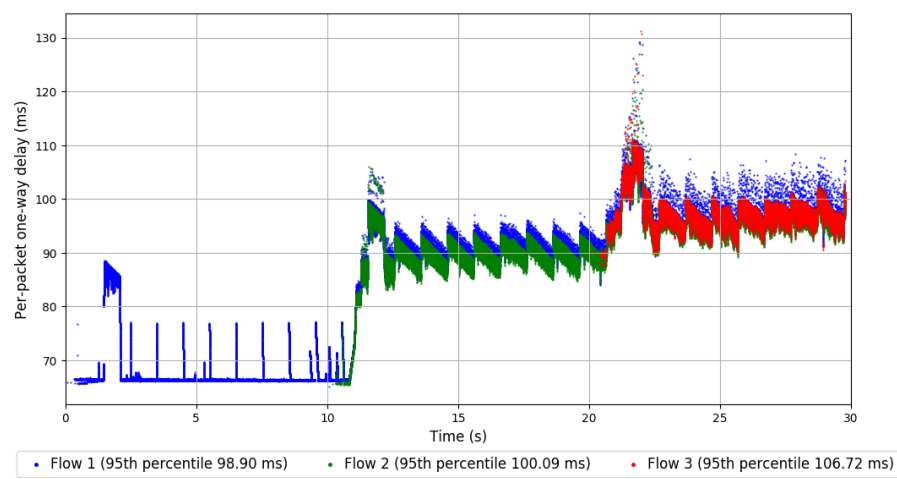
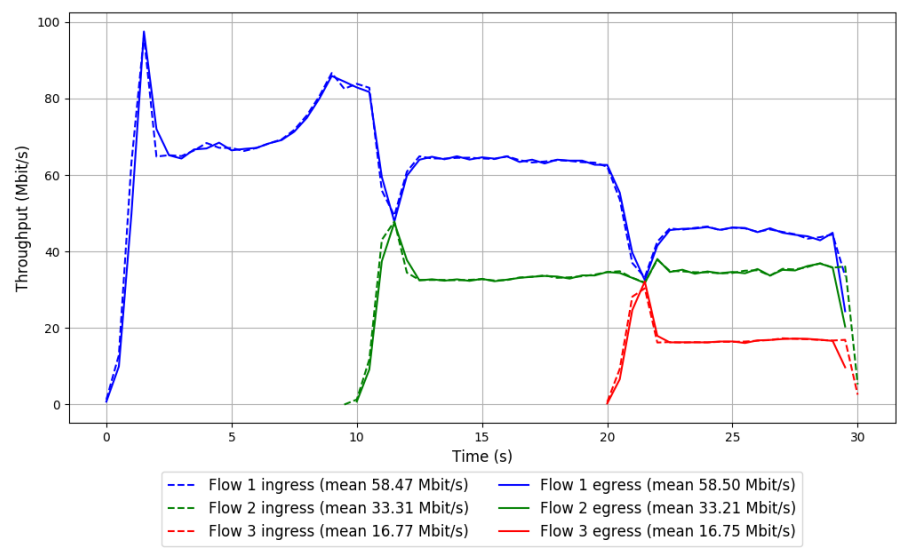
-- Flow 3:

Average throughput: 16.75 Mbit/s

95th percentile per-packet one-way delay: 106.717 ms

Loss rate: 3.87%

Run 10: Report of PCC — Data Link

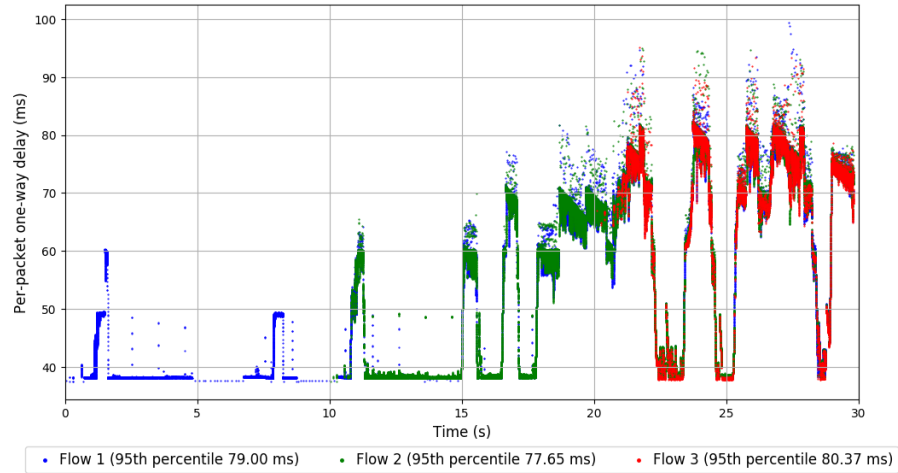
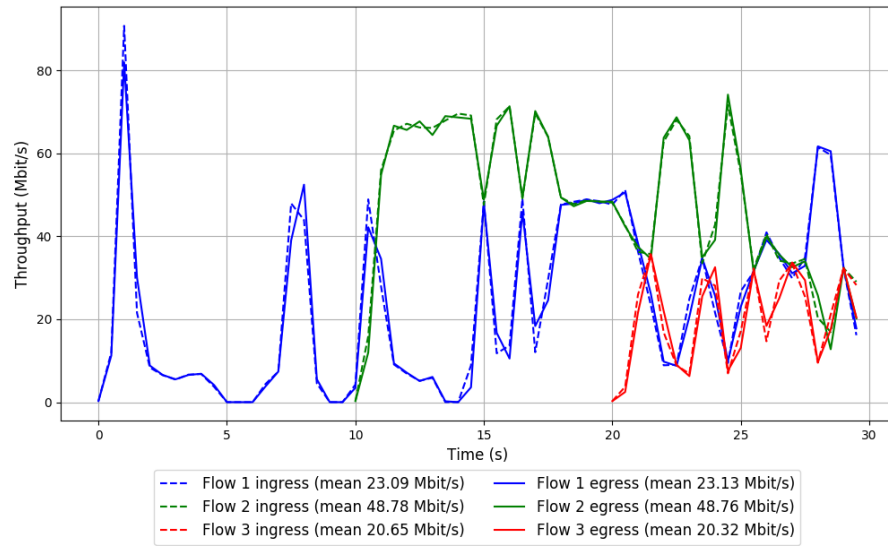


Run 1: Statistics of QUIC Cubic

Start at: 2018-02-04 17:25:51
End at: 2018-02-04 17:26:21
Local clock offset: -0.773 ms
Remote clock offset: -2.707 ms

Below is generated by plot.py at 2018-02-05 01:17:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 62.13 Mbit/s
95th percentile per-packet one-way delay: 79.089 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 23.13 Mbit/s
95th percentile per-packet one-way delay: 79.001 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 48.76 Mbit/s
95th percentile per-packet one-way delay: 77.653 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 20.32 Mbit/s
95th percentile per-packet one-way delay: 80.374 ms
Loss rate: 3.06%

Run 1: Report of QUIC Cubic — Data Link

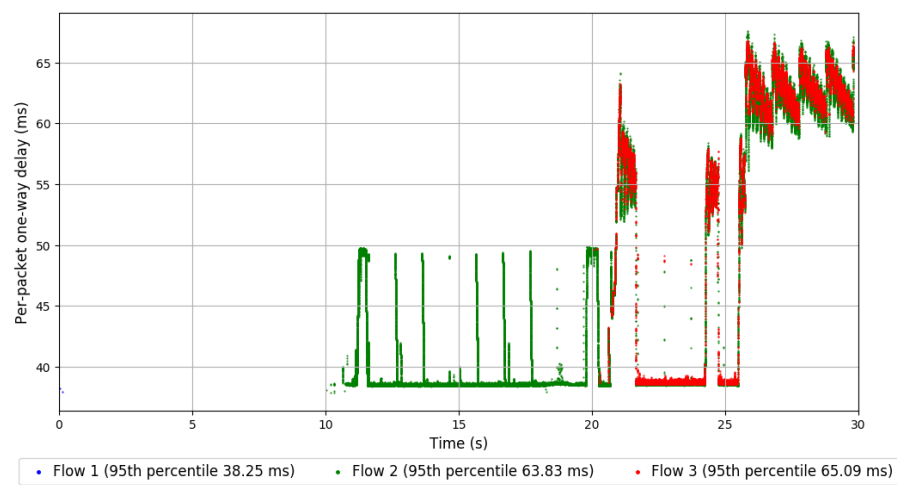
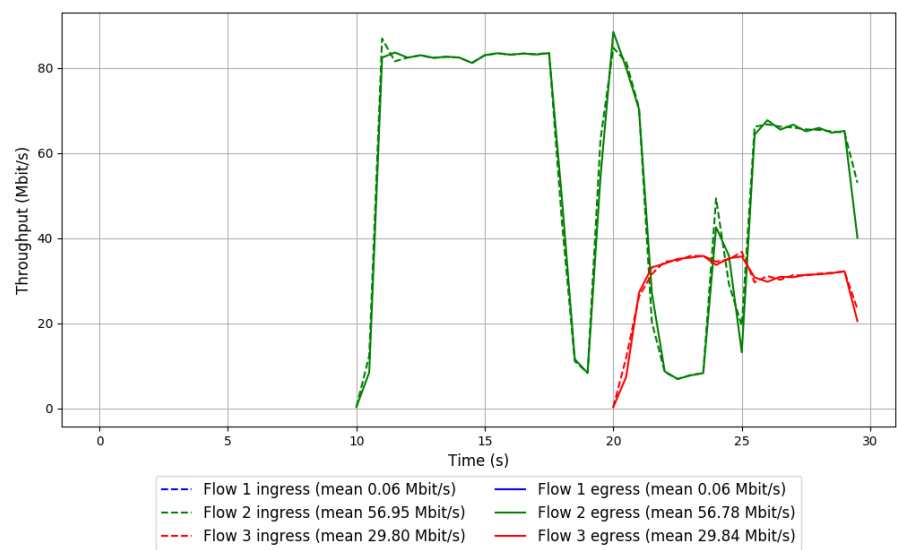


Run 2: Statistics of QUIC Cubic

Start at: 2018-02-04 17:48:39
End at: 2018-02-04 17:49:09
Local clock offset: -0.573 ms
Remote clock offset: -0.995 ms

Below is generated by plot.py at 2018-02-05 01:17:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 47.46 Mbit/s
95th percentile per-packet one-way delay: 64.236 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 38.246 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 56.78 Mbit/s
95th percentile per-packet one-way delay: 63.828 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 29.84 Mbit/s
95th percentile per-packet one-way delay: 65.094 ms
Loss rate: 1.17%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-04 18:11:25

End at: 2018-02-04 18:11:55

Local clock offset: -0.817 ms

Remote clock offset: 0.574 ms

Below is generated by plot.py at 2018-02-05 01:17:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 49.98 Mbit/s

95th percentile per-packet one-way delay: 69.265 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 38.873 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.05 Mbit/s

95th percentile per-packet one-way delay: 68.267 ms

Loss rate: 0.92%

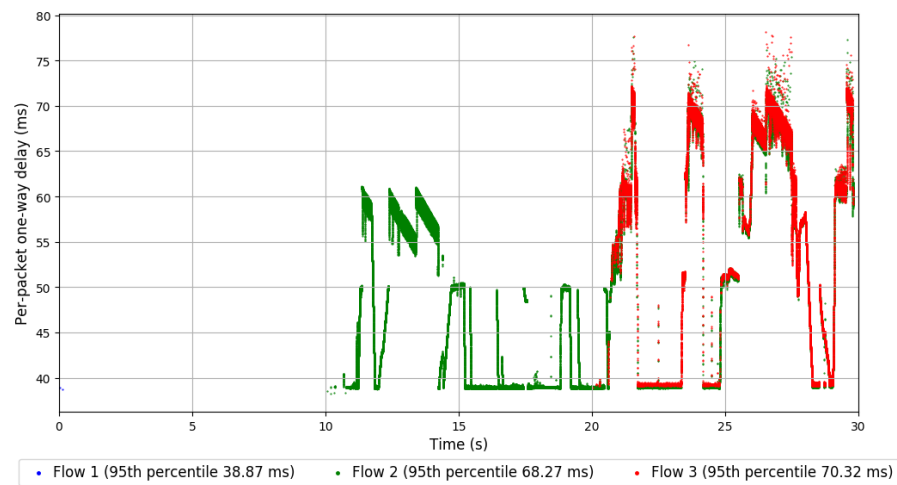
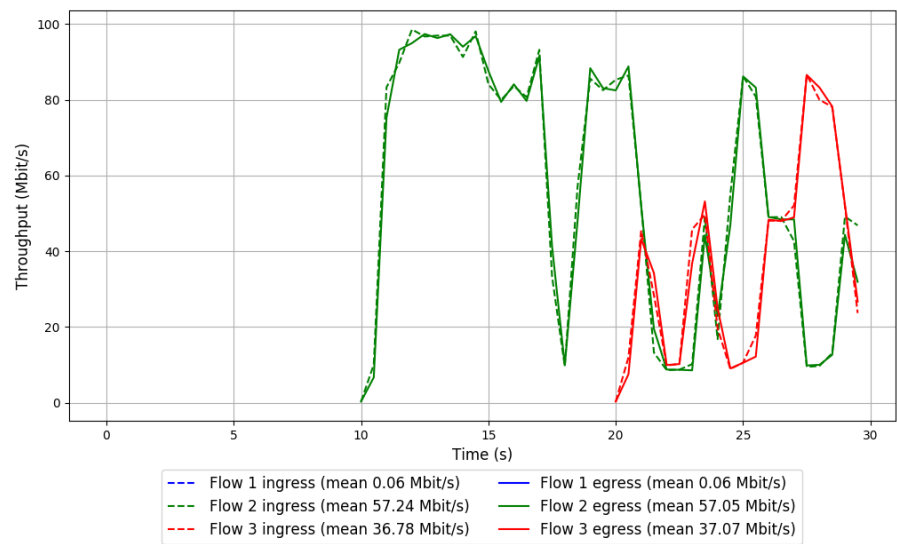
-- Flow 3:

Average throughput: 37.07 Mbit/s

95th percentile per-packet one-way delay: 70.322 ms

Loss rate: 0.39%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-04 18:34:57

End at: 2018-02-04 18:35:27

Local clock offset: -1.206 ms

Remote clock offset: 2.191 ms

Below is generated by plot.py at 2018-02-05 01:17:22

Datalink statistics

-- Total of 3 flows:

Average throughput: 56.73 Mbit/s

95th percentile per-packet one-way delay: 99.107 ms

Loss rate: 0.91%

-- Flow 1:

Average throughput: 40.08 Mbit/s

95th percentile per-packet one-way delay: 97.522 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 14.40 Mbit/s

95th percentile per-packet one-way delay: 102.487 ms

Loss rate: 2.30%

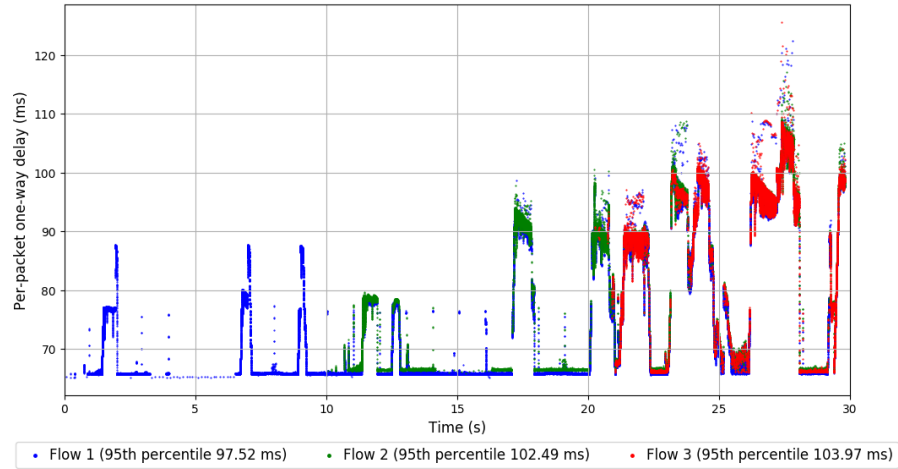
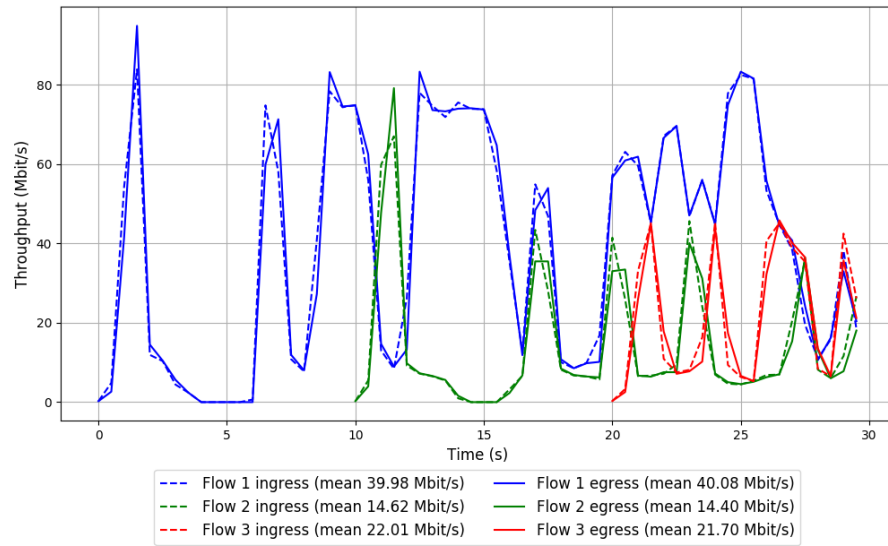
-- Flow 3:

Average throughput: 21.70 Mbit/s

95th percentile per-packet one-way delay: 103.972 ms

Loss rate: 2.91%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-04 18:58:15

End at: 2018-02-04 18:58:45

Local clock offset: -2.1 ms

Remote clock offset: 3.435 ms

Below is generated by plot.py at 2018-02-05 01:17:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.74 Mbit/s

95th percentile per-packet one-way delay: 89.938 ms

Loss rate: 0.79%

-- Flow 1:

Average throughput: 40.26 Mbit/s

95th percentile per-packet one-way delay: 89.891 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 29.75 Mbit/s

95th percentile per-packet one-way delay: 90.279 ms

Loss rate: 0.92%

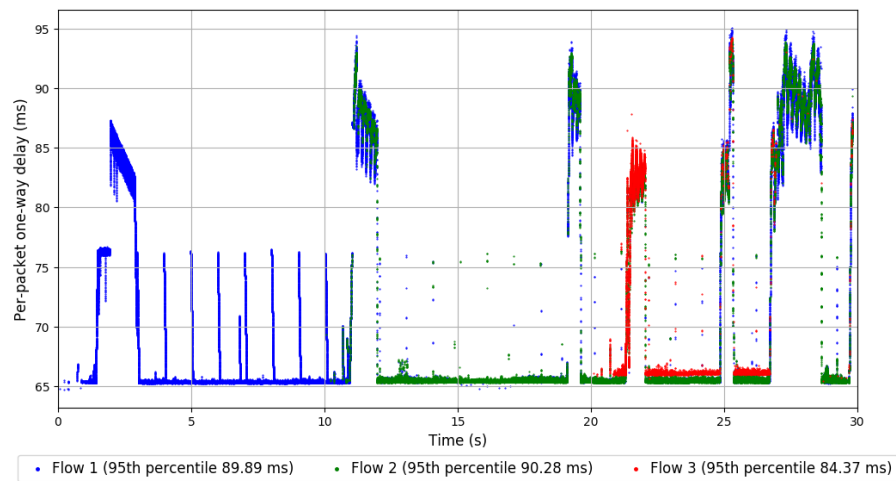
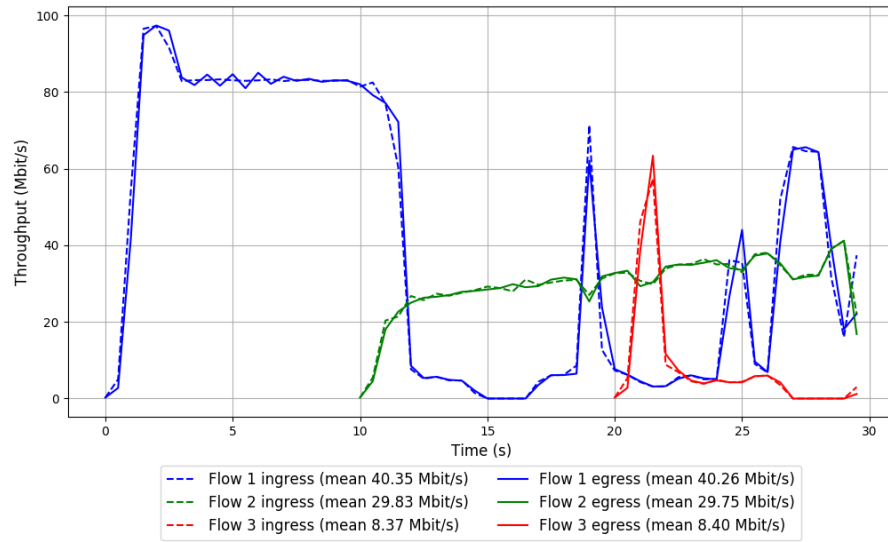
-- Flow 3:

Average throughput: 8.40 Mbit/s

95th percentile per-packet one-way delay: 84.373 ms

Loss rate: 1.10%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-04 19:21:29

End at: 2018-02-04 19:21:59

Local clock offset: -2.096 ms

Remote clock offset: 4.489 ms

Below is generated by plot.py at 2018-02-05 01:17:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 33.27 Mbit/s

95th percentile per-packet one-way delay: 88.000 ms

Loss rate: 1.58%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 65.886 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 47.00 Mbit/s

95th percentile per-packet one-way delay: 87.986 ms

Loss rate: 1.54%

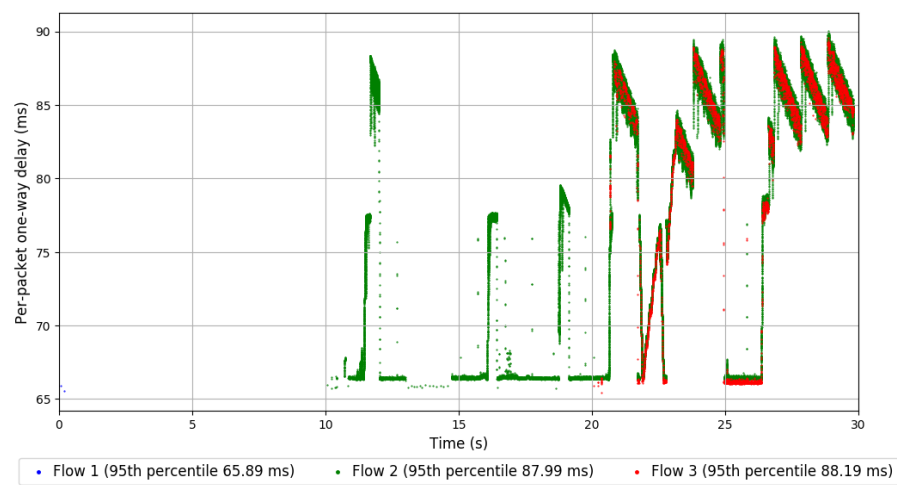
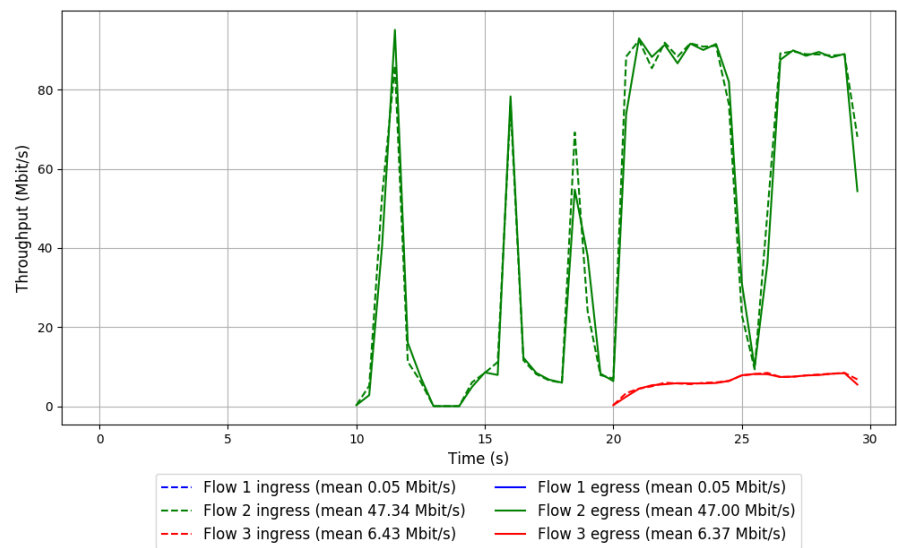
-- Flow 3:

Average throughput: 6.37 Mbit/s

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

Loss rate: 2.26%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-04 19:44:44

End at: 2018-02-04 19:45:14

Local clock offset: -2.867 ms

Remote clock offset: 4.77 ms

Below is generated by plot.py at 2018-02-05 01:17:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 38.77 Mbit/s

95th percentile per-packet one-way delay: 95.708 ms

Loss rate: 1.37%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 65.319 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 40.92 Mbit/s

95th percentile per-packet one-way delay: 95.306 ms

Loss rate: 0.99%

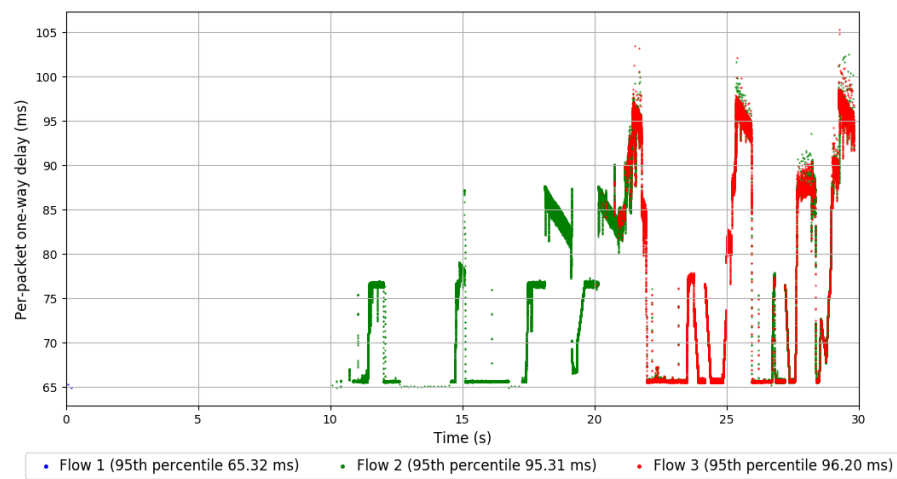
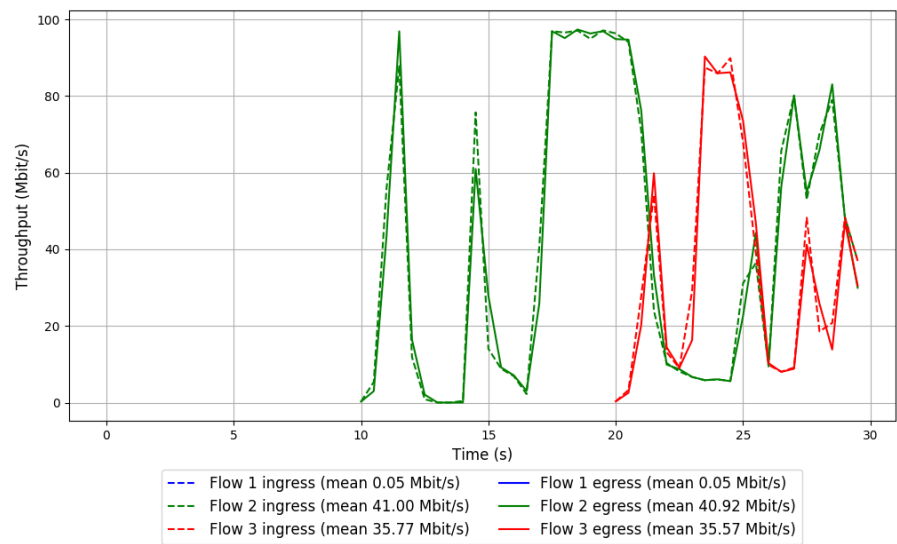
-- Flow 3:

Average throughput: 35.57 Mbit/s

95th percentile per-packet one-way delay: 96.200 ms

Loss rate: 2.26%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-04 20:08:01

End at: 2018-02-04 20:08:31

Local clock offset: -5.622 ms

Remote clock offset: 4.893 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.96 Mbit/s

95th percentile per-packet one-way delay: 103.716 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 24.81 Mbit/s

95th percentile per-packet one-way delay: 103.463 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 41.90 Mbit/s

95th percentile per-packet one-way delay: 103.164 ms

Loss rate: 0.91%

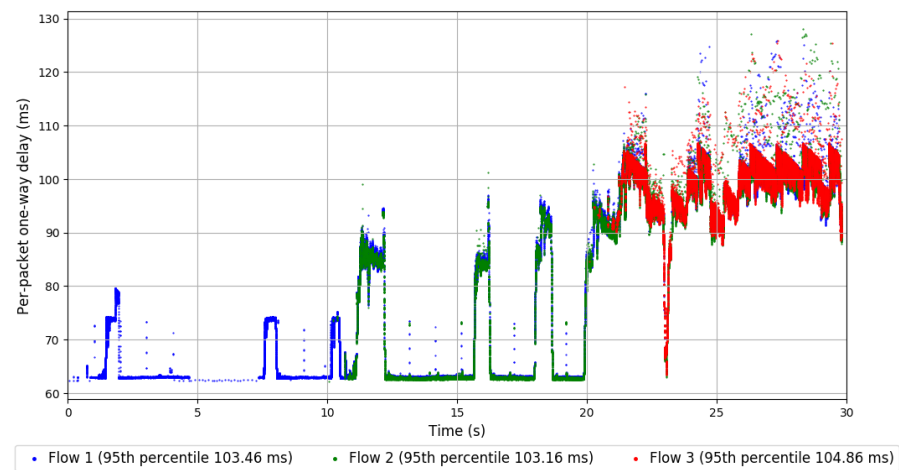
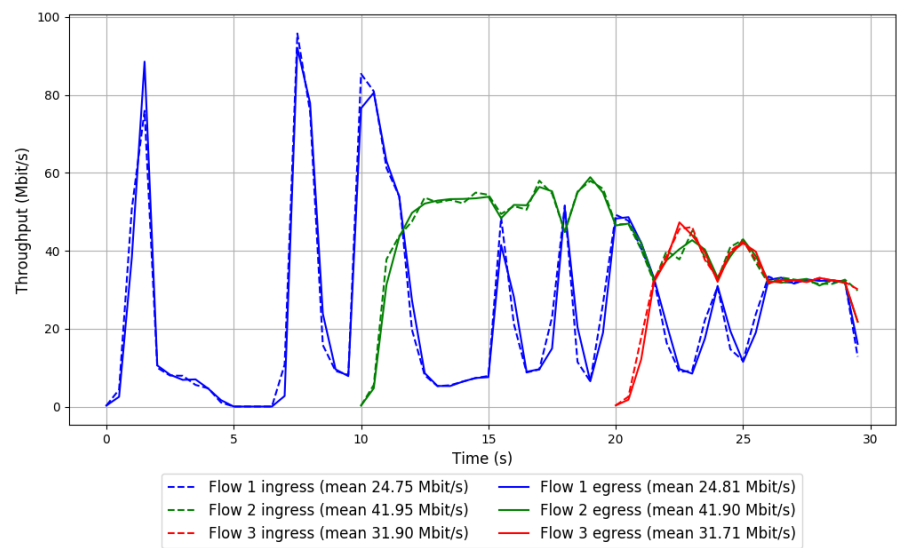
-- Flow 3:

Average throughput: 31.71 Mbit/s

95th percentile per-packet one-way delay: 104.855 ms

Loss rate: 2.33%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-04 20:31:34

End at: 2018-02-04 20:32:04

Local clock offset: -3.212 ms

Remote clock offset: 5.22 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 31.36 Mbit/s

95th percentile per-packet one-way delay: 96.403 ms

Loss rate: 1.73%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 65.440 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 26.95 Mbit/s

95th percentile per-packet one-way delay: 96.565 ms

Loss rate: 1.51%

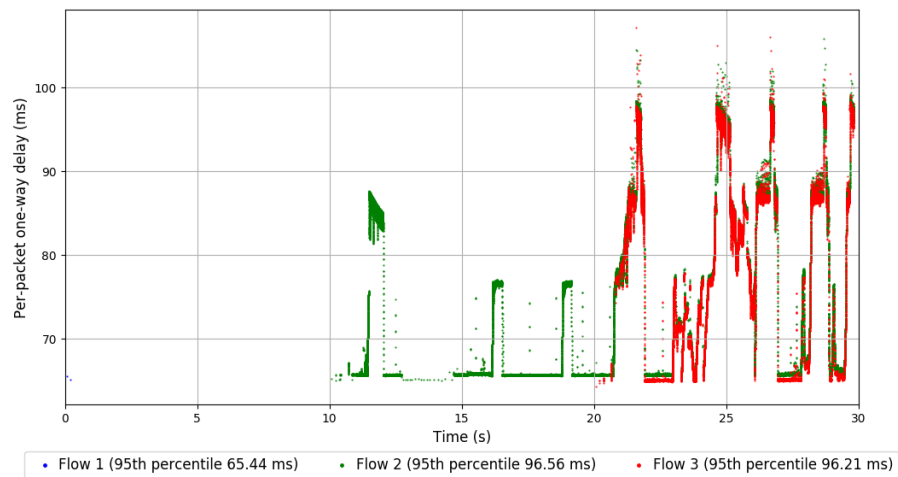
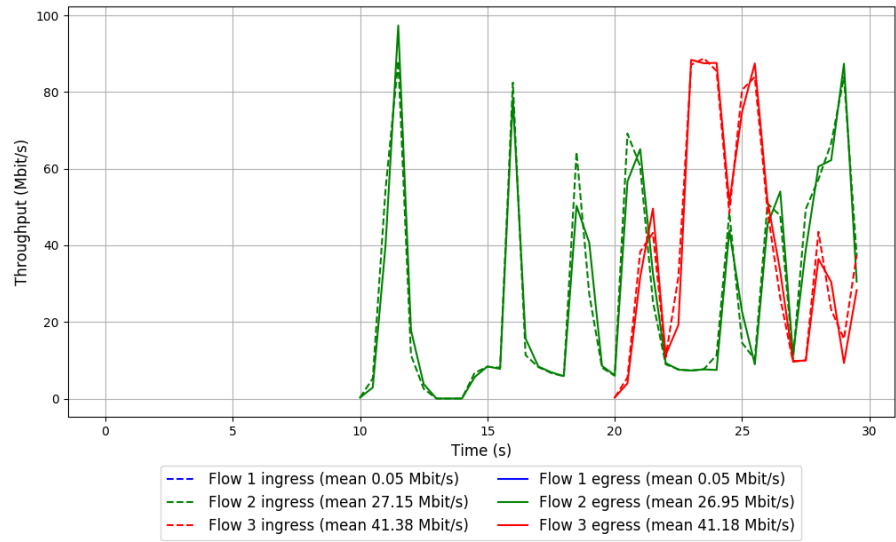
-- Flow 3:

Average throughput: 41.18 Mbit/s

95th percentile per-packet one-way delay: 96.213 ms

Loss rate: 2.03%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-04 20:54:51

End at: 2018-02-04 20:55:21

Local clock offset: -3.084 ms

Remote clock offset: 5.078 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 33.04 Mbit/s

95th percentile per-packet one-way delay: 86.986 ms

Loss rate: 1.55%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 65.315 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 45.96 Mbit/s

95th percentile per-packet one-way delay: 86.848 ms

Loss rate: 1.50%

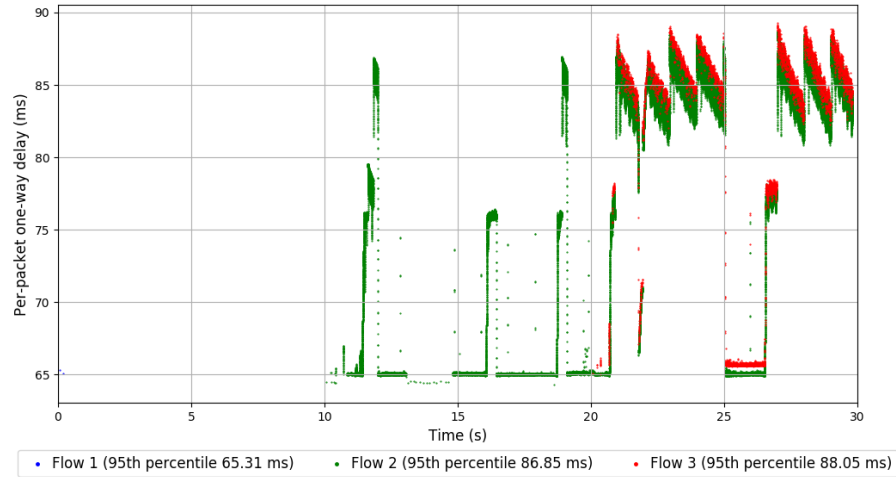
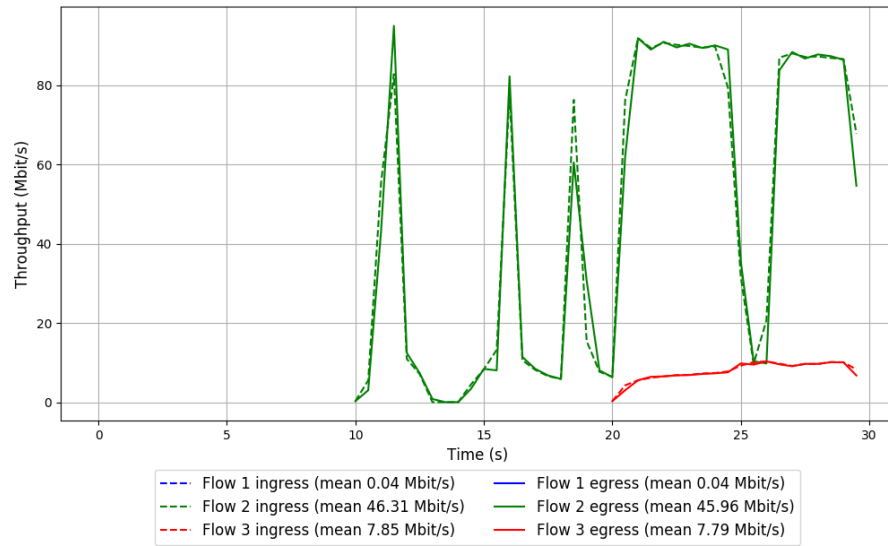
-- Flow 3:

Average throughput: 7.79 Mbit/s

95th percentile per-packet one-way delay: 88.050 ms

Loss rate: 2.19%

Run 10: Report of QUIC Cubic — Data Link

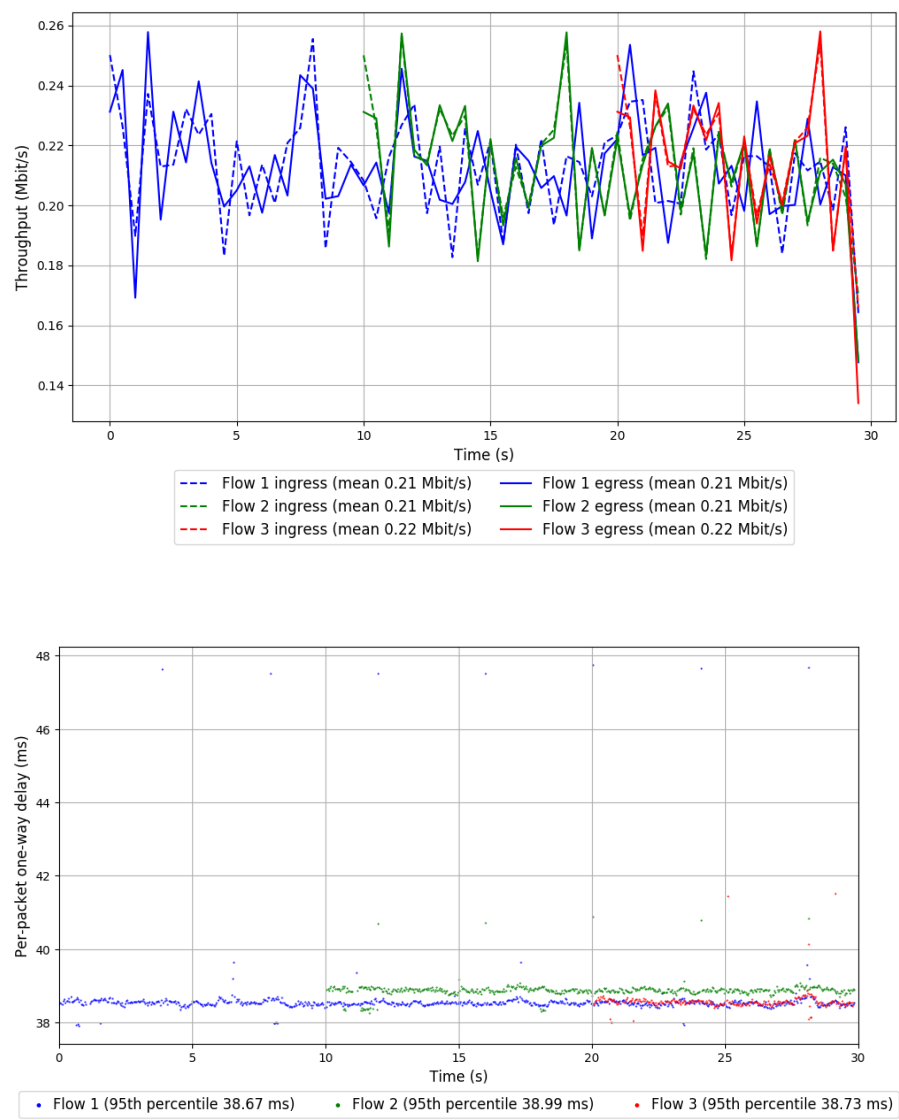


```
Run 1: Statistics of SReAM

Start at: 2018-02-04 17:33:30
End at: 2018-02-04 17:34:00
Local clock offset: -0.454 ms
Remote clock offset: -2.155 ms

# Below is generated by plot.py at 2018-02-05 01:18:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 38.963 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 38.667 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 38.992 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 38.733 ms
Loss rate: 1.11%
```

Run 1: Report of SReAM — Data Link

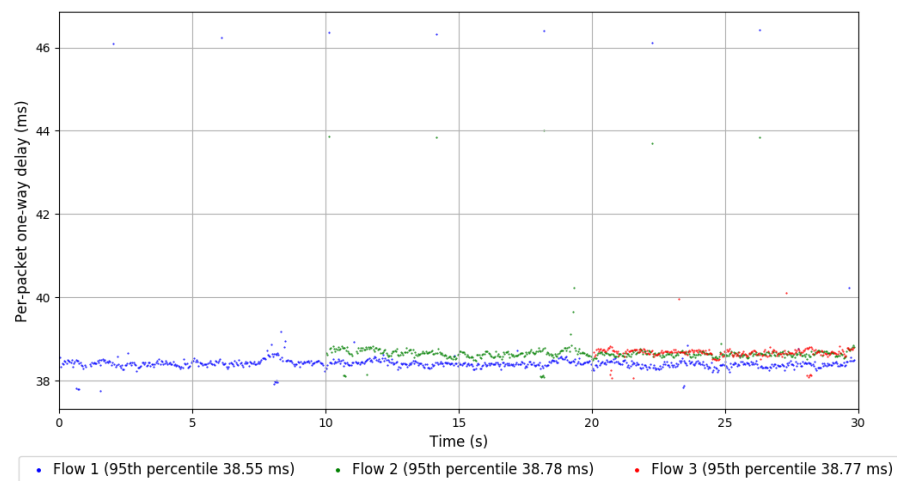
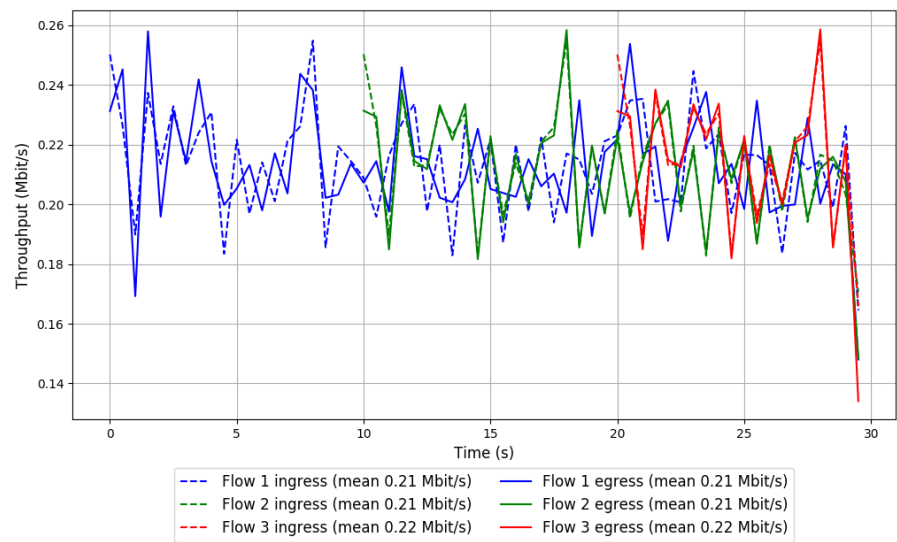


Run 2: Statistics of SReAM

Start at: 2018-02-04 17:56:17
End at: 2018-02-04 17:56:47
Local clock offset: -0.611 ms
Remote clock offset: -0.409 ms

Below is generated by plot.py at 2018-02-05 01:18:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 38.760 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 38.548 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 38.784 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 38.772 ms
Loss rate: 1.11%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2018-02-04 18:19:27

End at: 2018-02-04 18:19:57

Local clock offset: -1.244 ms

Remote clock offset: 1.139 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 66.283 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 66.285 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 66.293 ms

Loss rate: 0.63%

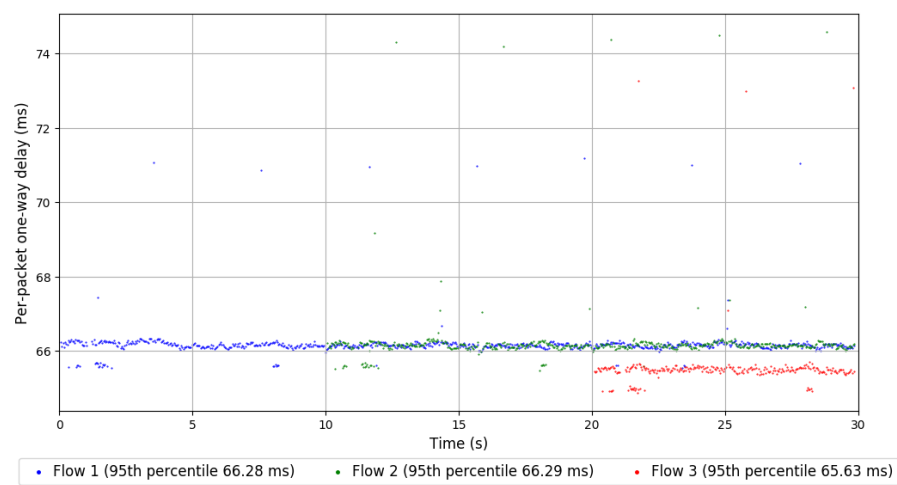
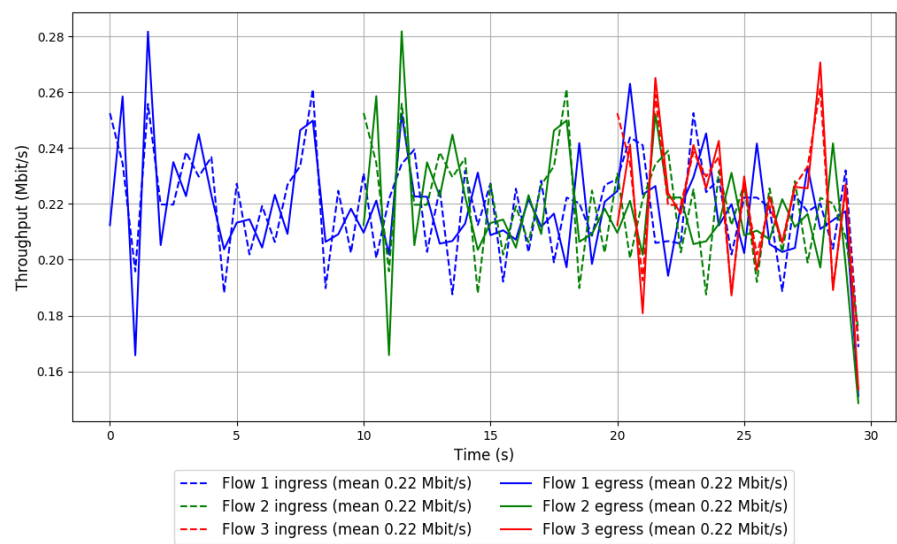
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 65.634 ms

Loss rate: 1.11%

Run 3: Report of SReAM — Data Link

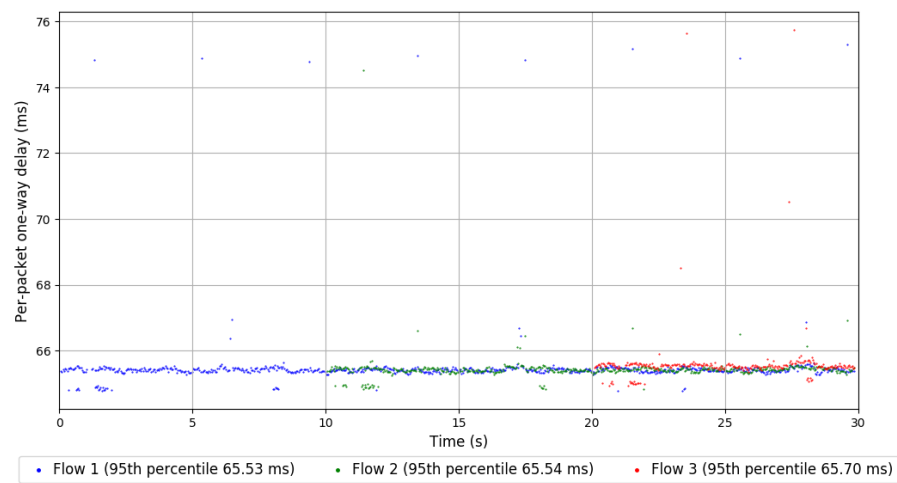
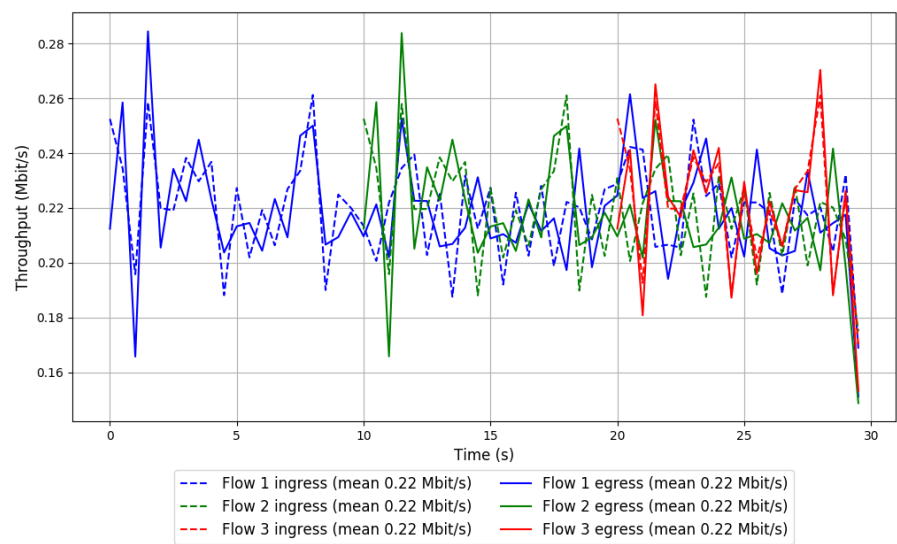


Run 4: Statistics of SReAM

Start at: 2018-02-04 18:42:45
End at: 2018-02-04 18:43:15
Local clock offset: -1.997 ms
Remote clock offset: 2.71 ms

Below is generated by plot.py at 2018-02-05 01:18:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 65.601 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.530 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.536 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.698 ms
Loss rate: 1.11%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SReAM

Start at: 2018-02-04 19:06:02

End at: 2018-02-04 19:06:32

Local clock offset: -4.836 ms

Remote clock offset: 3.874 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 63.329 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.318 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.346 ms

Loss rate: 0.63%

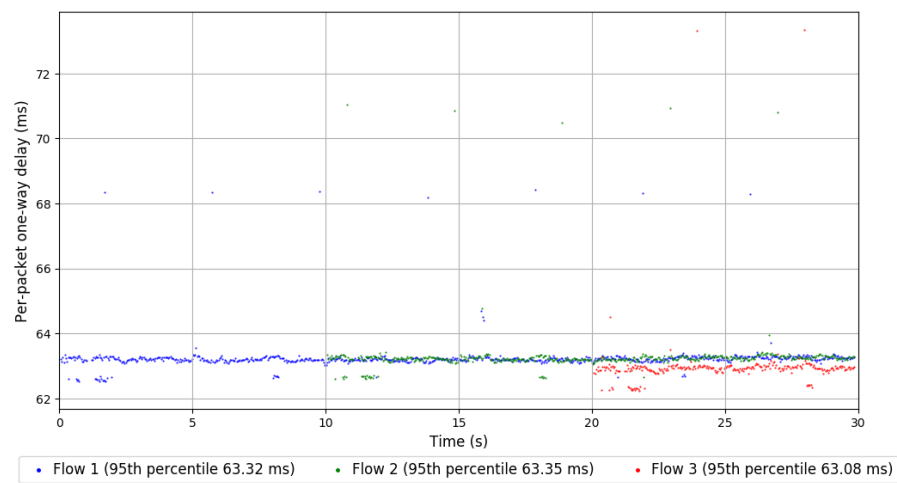
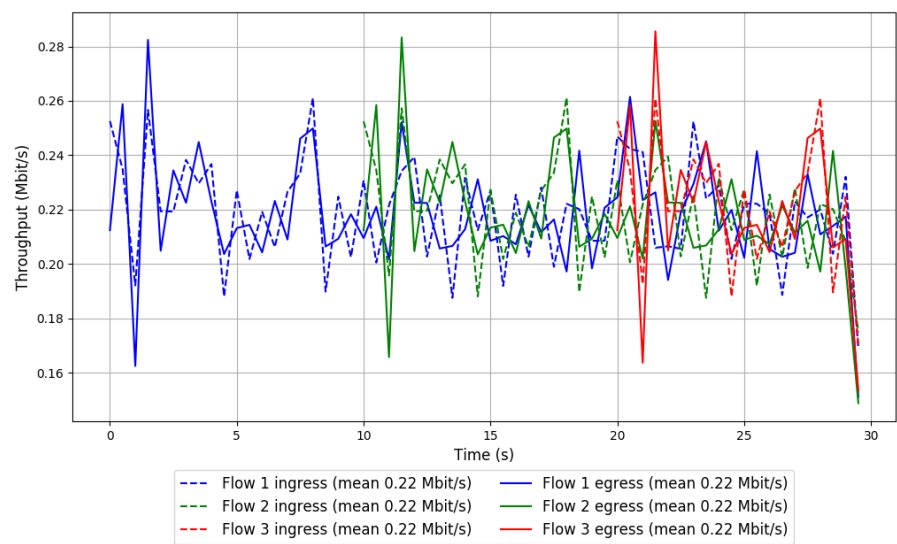
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.080 ms

Loss rate: 1.11%

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SReAM

Start at: 2018-02-04 19:29:16

End at: 2018-02-04 19:29:46

Local clock offset: -2.275 ms

Remote clock offset: 4.681 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 66.508 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 65.865 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 66.544 ms

Loss rate: 0.63%

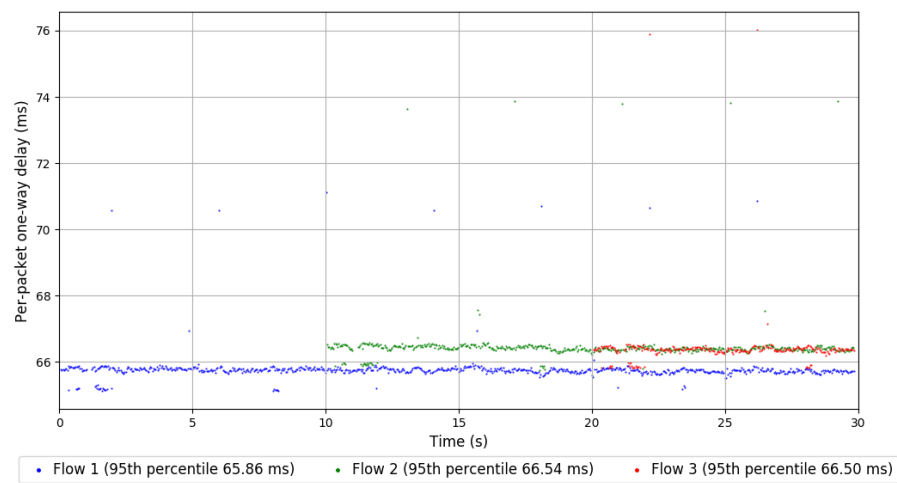
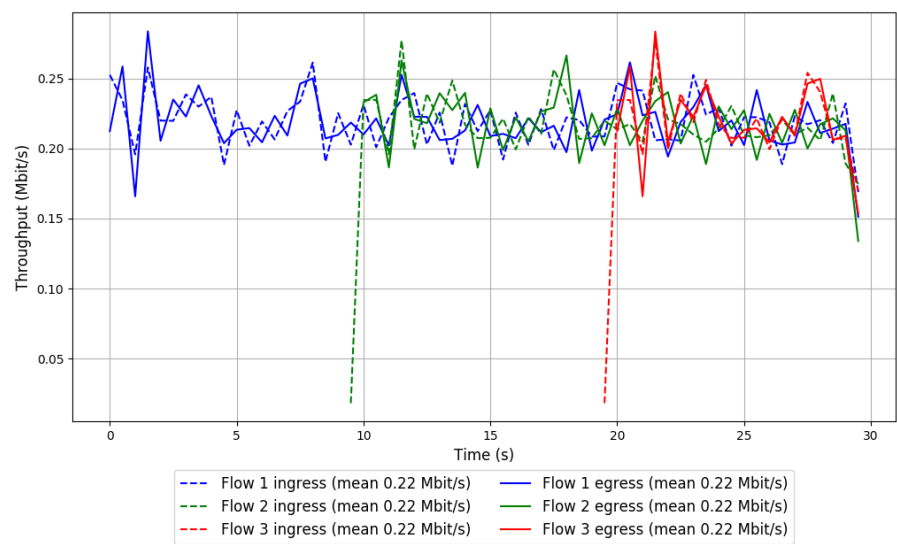
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 66.495 ms

Loss rate: 1.11%

Run 6: Report of SReAM — Data Link

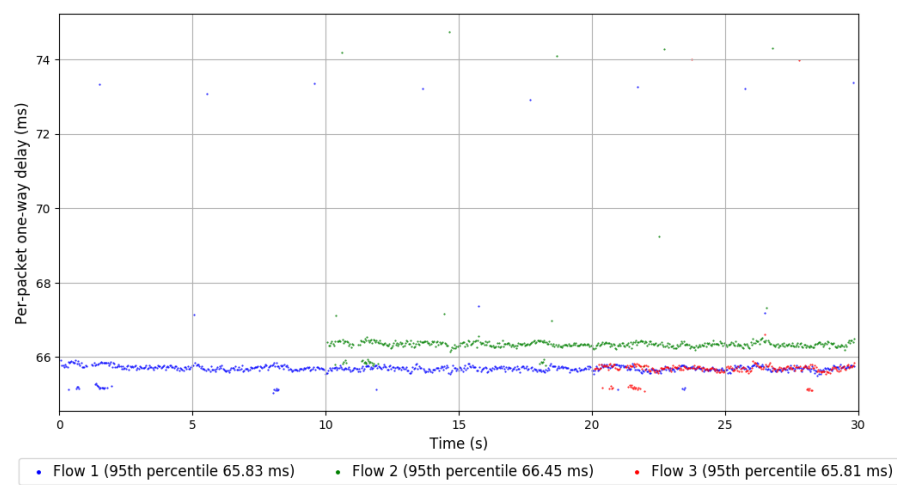
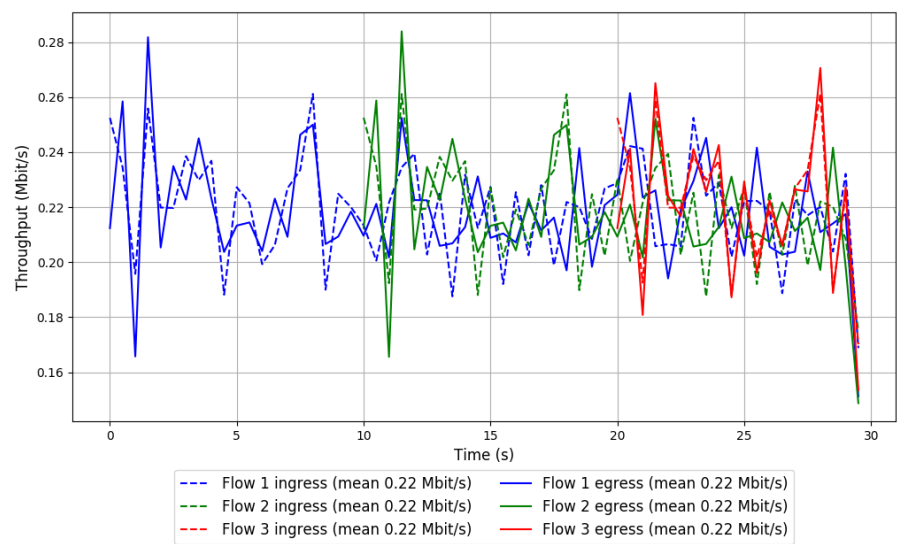


Run 7: Statistics of SReAM

Start at: 2018-02-04 19:52:31
End at: 2018-02-04 19:53:01
Local clock offset: -2.47 ms
Remote clock offset: 4.799 ms

Below is generated by plot.py at 2018-02-05 01:18:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 66.425 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.831 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.452 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.807 ms
Loss rate: 1.11%

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SReAM

Start at: 2018-02-04 20:15:51

End at: 2018-02-04 20:16:21

Local clock offset: -2.724 ms

Remote clock offset: 5.061 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 66.029 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 65.761 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 66.059 ms

Loss rate: 0.63%

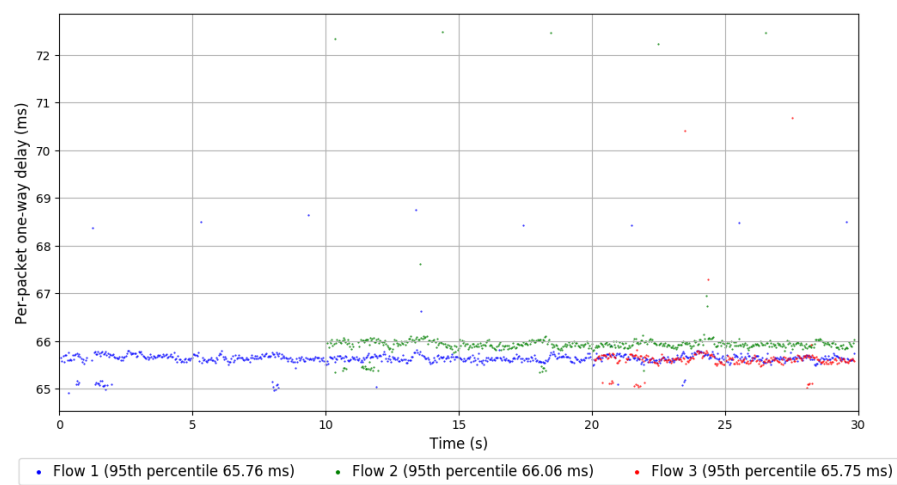
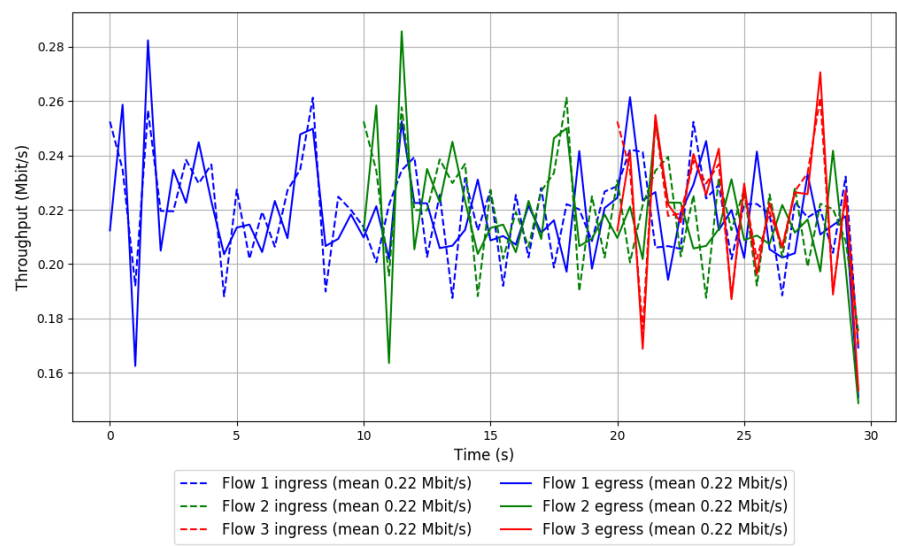
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 65.748 ms

Loss rate: 1.12%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SReAM

Start at: 2018-02-04 20:39:22

End at: 2018-02-04 20:39:52

Local clock offset: -2.559 ms

Remote clock offset: 5.245 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 66.376 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 65.756 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 66.417 ms

Loss rate: 0.63%

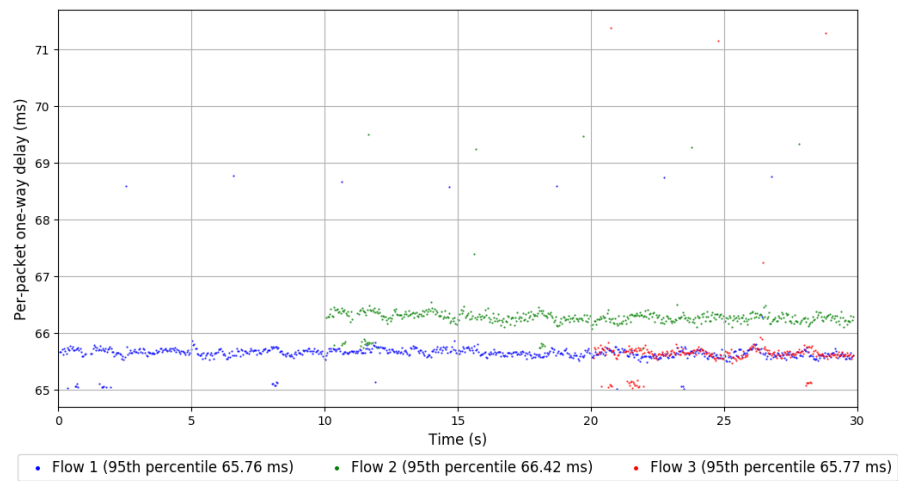
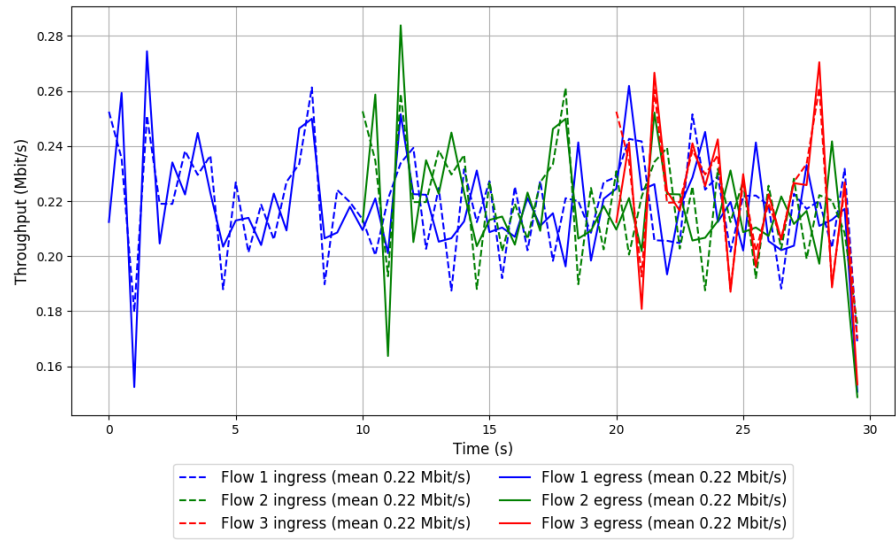
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 65.770 ms

Loss rate: 1.11%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2018-02-04 21:02:39

End at: 2018-02-04 21:03:09

Local clock offset: -2.764 ms

Remote clock offset: 5.075 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.44 Mbit/s

95th percentile per-packet one-way delay: 65.828 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 65.847 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 65.399 ms

Loss rate: 0.63%

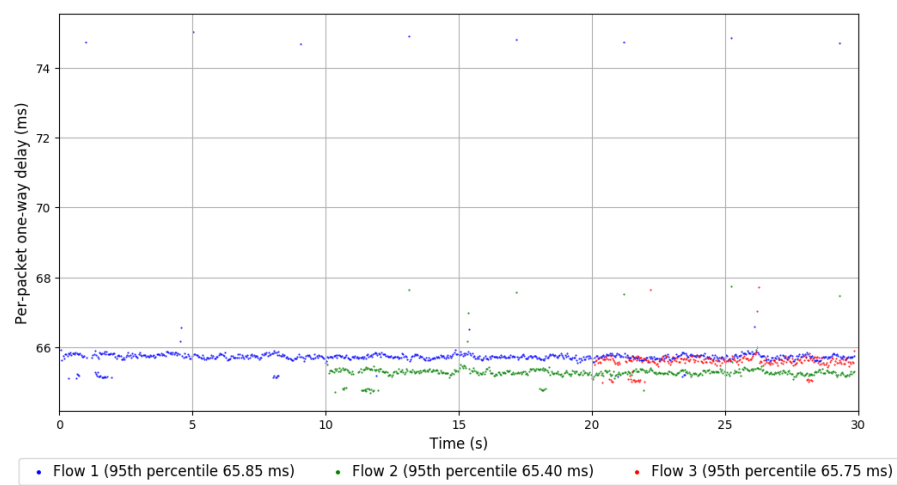
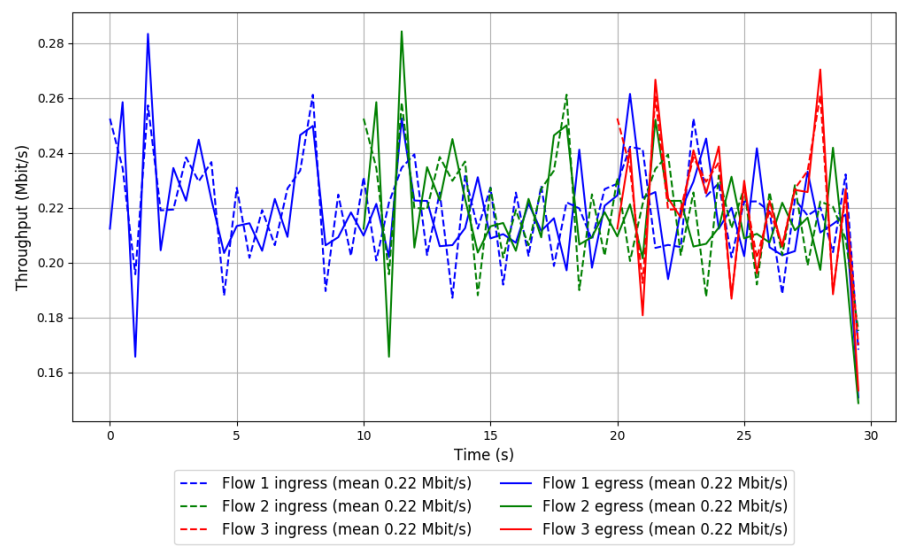
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 65.751 ms

Loss rate: 1.11%

Run 10: Report of SReAM — Data Link

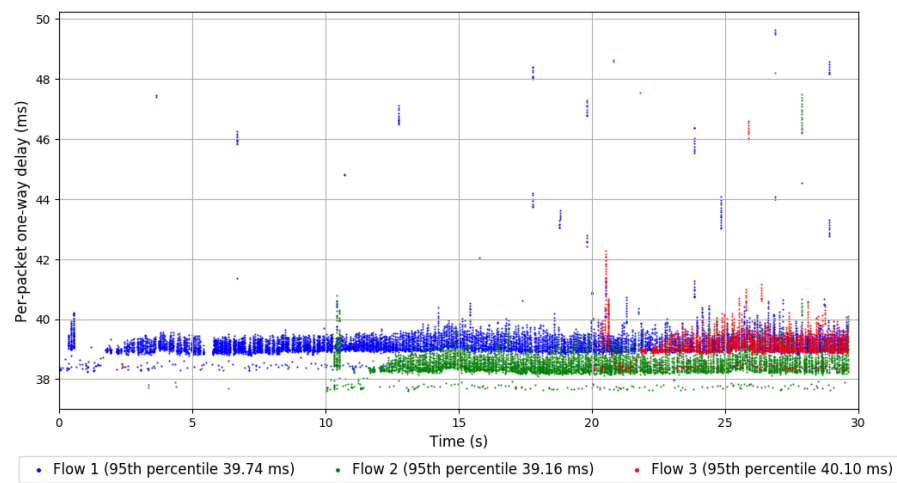
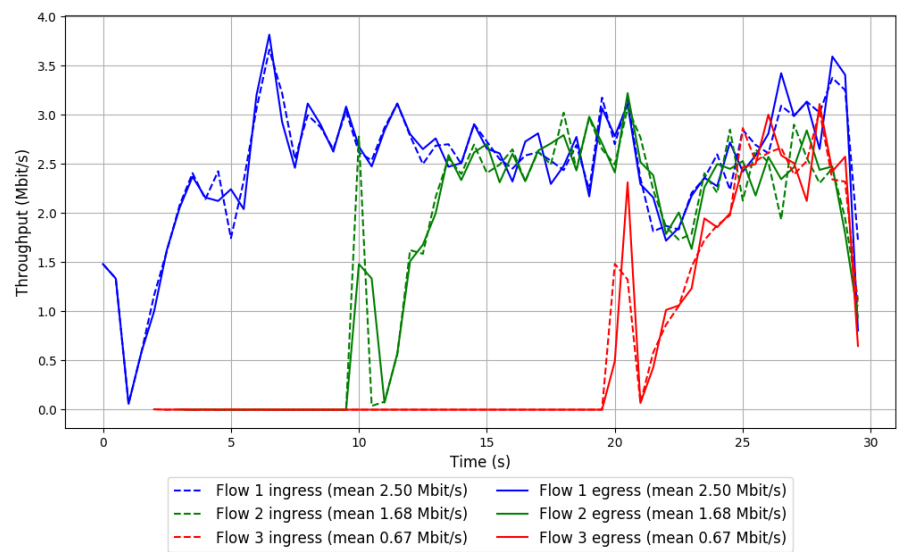


Run 1: Statistics of WebRTC media

Start at: 2018-02-04 17:37:13
End at: 2018-02-04 17:37:43
Local clock offset: -0.381 ms
Remote clock offset: -1.855 ms

Below is generated by plot.py at 2018-02-05 01:18:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.60 Mbit/s
95th percentile per-packet one-way delay: 39.703 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 39.745 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 1.68 Mbit/s
95th percentile per-packet one-way delay: 39.160 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 40.104 ms
Loss rate: 1.10%

Run 1: Report of WebRTC media — Data Link

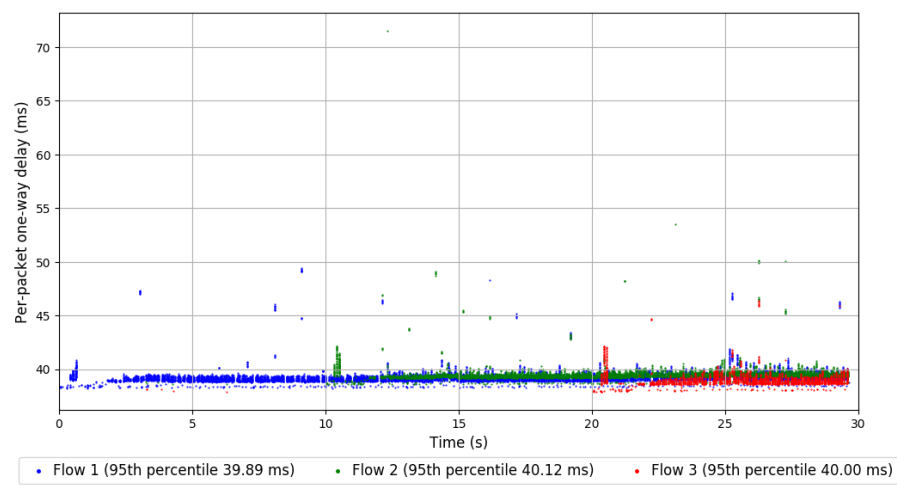
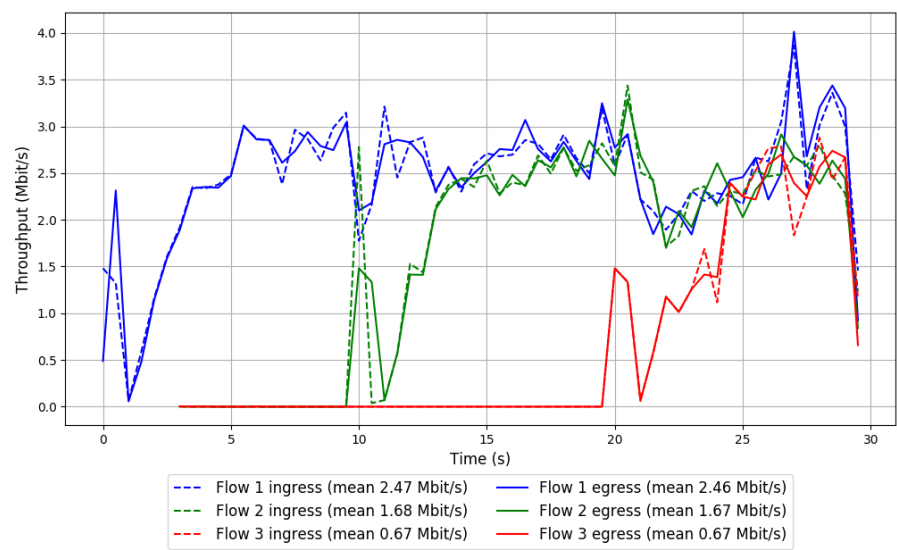


Run 2: Statistics of WebRTC media

Start at: 2018-02-04 18:00:00
End at: 2018-02-04 18:00:31
Local clock offset: -0.505 ms
Remote clock offset: -0.214 ms

Below is generated by plot.py at 2018-02-05 01:18:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.55 Mbit/s
95th percentile per-packet one-way delay: 39.995 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 39.889 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 40.115 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 39.999 ms
Loss rate: 1.39%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-04 18:23:15

End at: 2018-02-04 18:23:45

Local clock offset: -1.372 ms

Remote clock offset: 1.359 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.46 Mbit/s

95th percentile per-packet one-way delay: 66.676 ms

Loss rate: 0.75%

-- Flow 1:

Average throughput: 2.43 Mbit/s

95th percentile per-packet one-way delay: 66.591 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 1.62 Mbit/s

95th percentile per-packet one-way delay: 66.808 ms

Loss rate: 0.63%

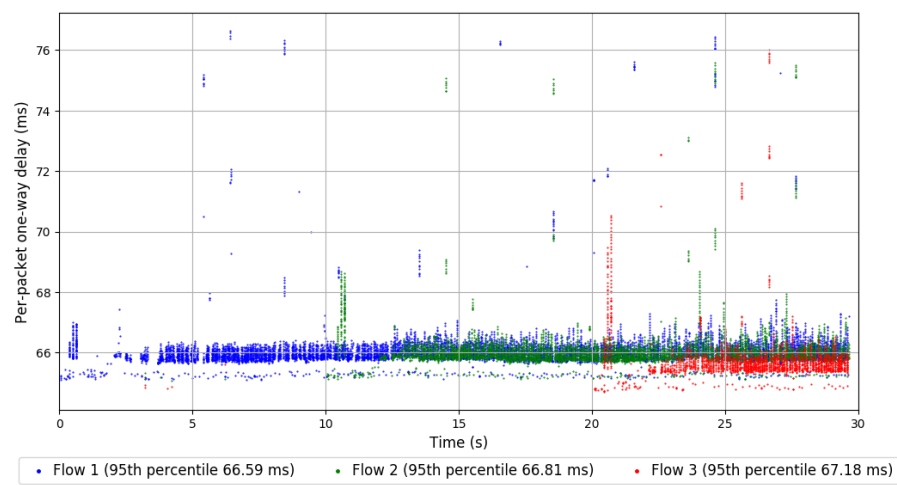
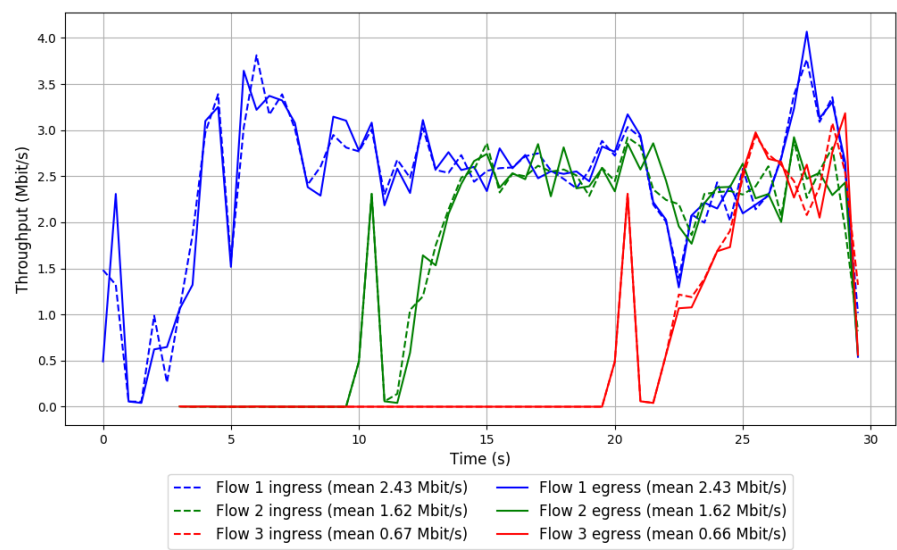
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 67.177 ms

Loss rate: 2.14%

Run 3: Report of WebRTC media — Data Link

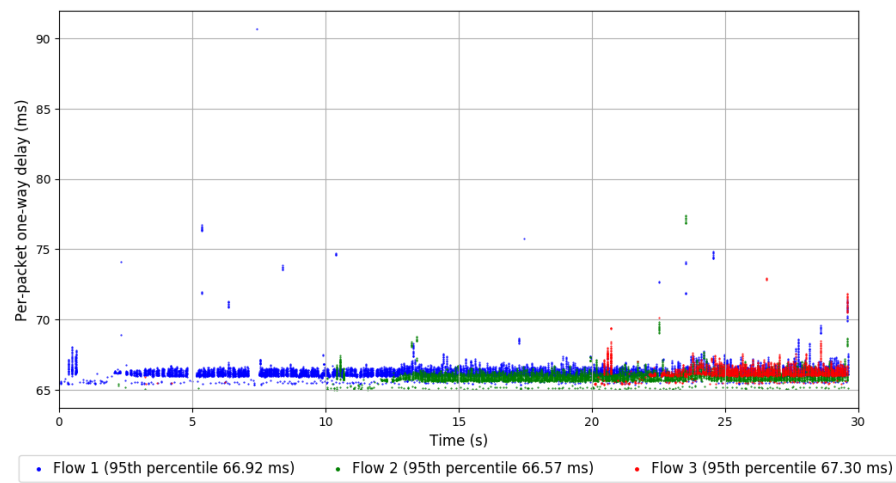
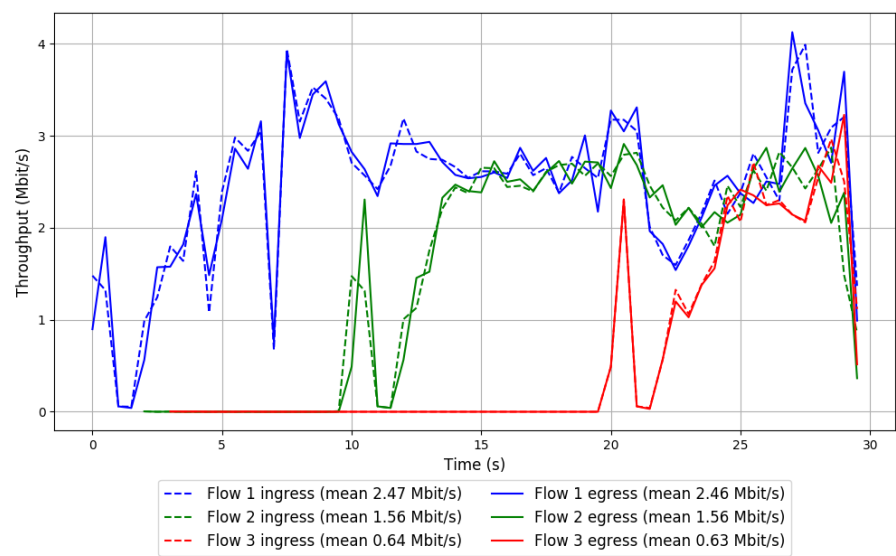


Run 4: Statistics of WebRTC media

Start at: 2018-02-04 18:46:33
End at: 2018-02-04 18:47:03
Local clock offset: -1.532 ms
Remote clock offset: 2.818 ms

Below is generated by plot.py at 2018-02-05 01:18:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 4.48 Mbit/s
95th percentile per-packet one-way delay: 66.893 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 66.915 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 66.568 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 0.63 Mbit/s
95th percentile per-packet one-way delay: 67.303 ms
Loss rate: 1.78%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-04 19:09:49

End at: 2018-02-04 19:10:19

Local clock offset: -2.19 ms

Remote clock offset: 4.03 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 67.056 ms

Loss rate: 0.72%

-- Flow 1:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 67.016 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 66.401 ms

Loss rate: 0.64%

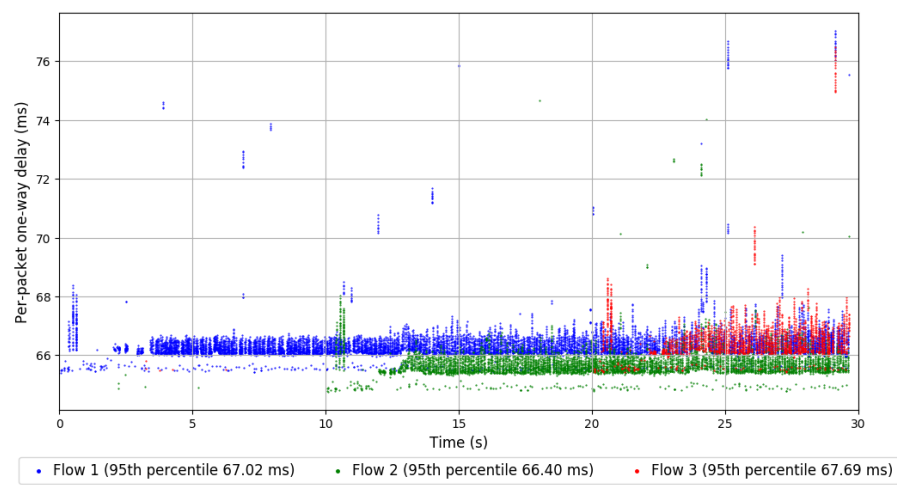
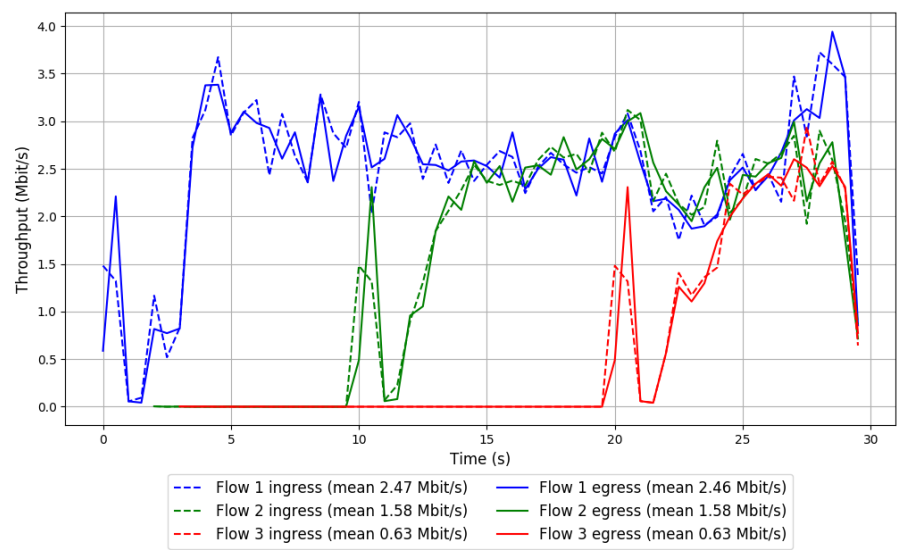
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 67.690 ms

Loss rate: 1.05%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-04 19:33:04

End at: 2018-02-04 19:33:34

Local clock offset: -2.563 ms

Remote clock offset: 4.651 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 66.957 ms

Loss rate: 0.97%

-- Flow 1:

Average throughput: 2.44 Mbit/s

95th percentile per-packet one-way delay: 67.006 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 1.67 Mbit/s

95th percentile per-packet one-way delay: 66.652 ms

Loss rate: 1.04%

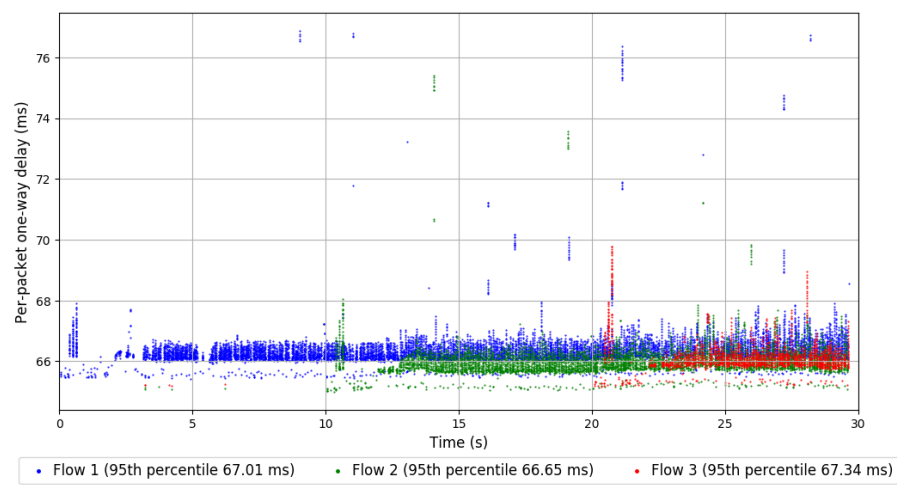
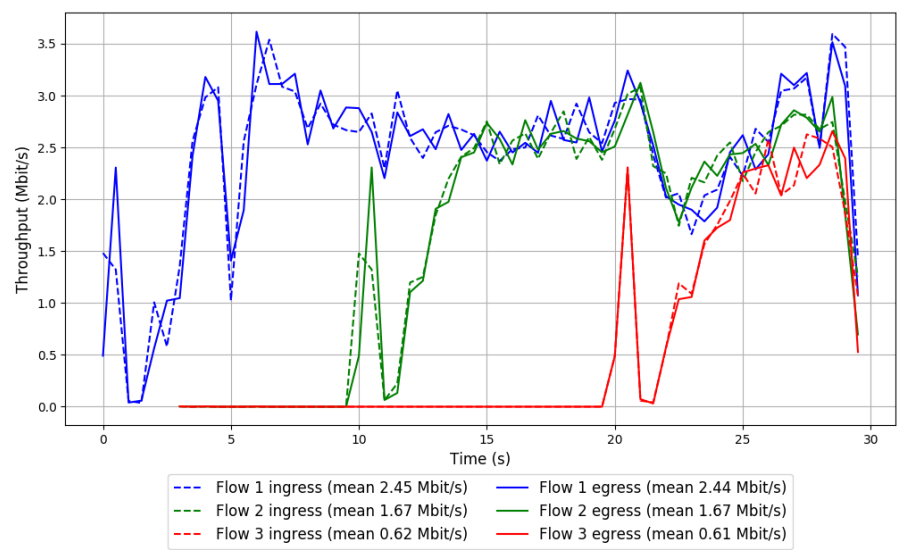
-- Flow 3:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 67.339 ms

Loss rate: 1.66%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-04 19:56:19

End at: 2018-02-04 19:56:49

Local clock offset: -2.622 ms

Remote clock offset: 4.774 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 67.126 ms

Loss rate: 0.81%

-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 67.036 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 67.295 ms

Loss rate: 0.50%

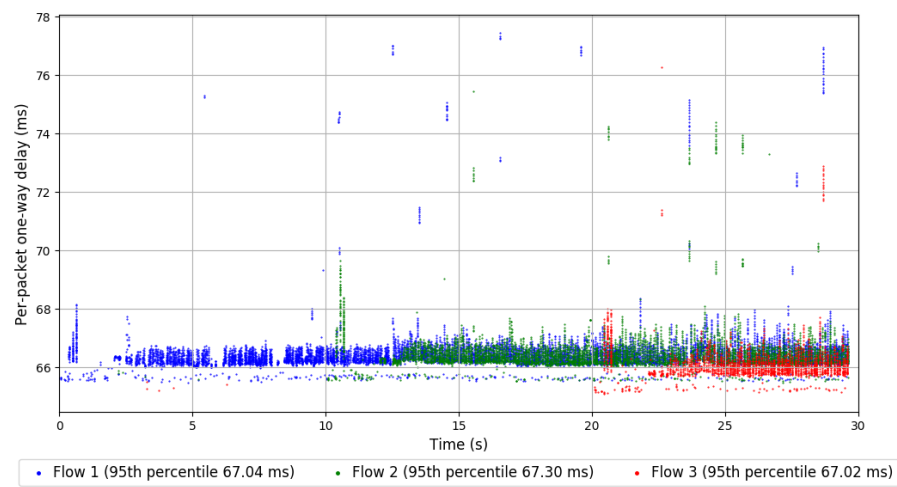
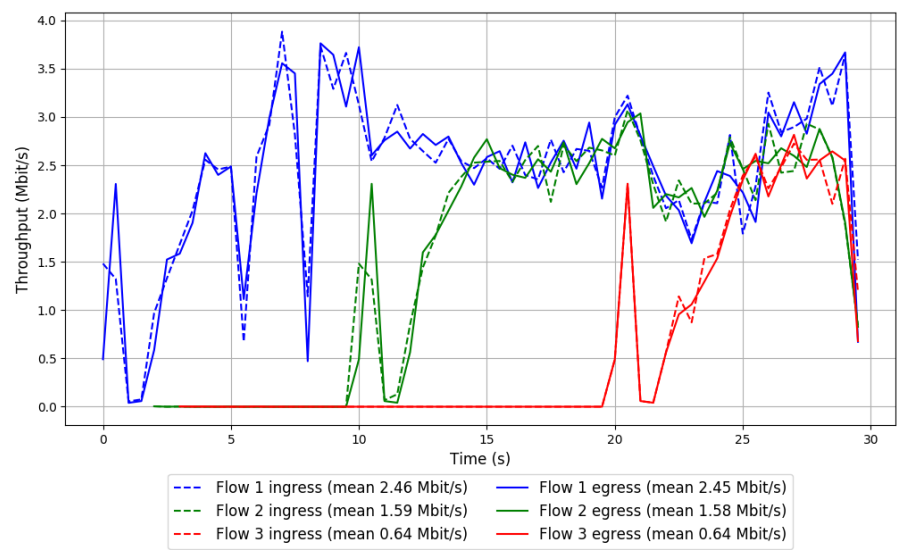
-- Flow 3:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 67.020 ms

Loss rate: 1.56%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-04 20:19:48

End at: 2018-02-04 20:20:18

Local clock offset: -2.896 ms

Remote clock offset: 5.121 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.47 Mbit/s

95th percentile per-packet one-way delay: 66.900 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 2.45 Mbit/s

95th percentile per-packet one-way delay: 66.840 ms

Loss rate: 0.47%

-- Flow 2:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 66.919 ms

Loss rate: 1.17%

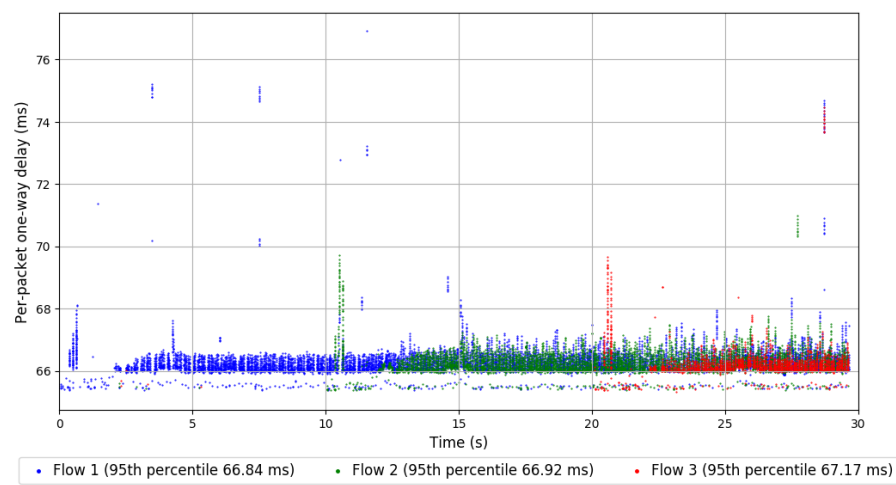
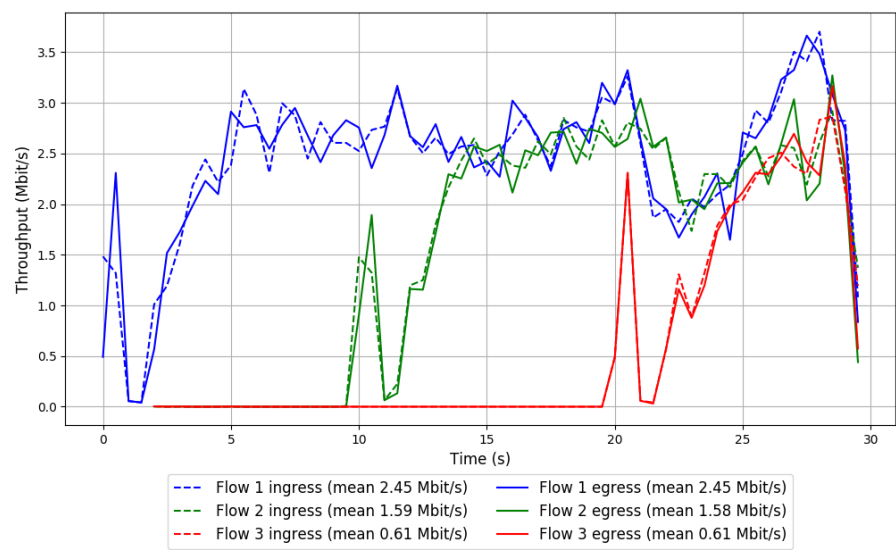
-- Flow 3:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 67.165 ms

Loss rate: 1.84%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-04 20:43:10

End at: 2018-02-04 20:43:40

Local clock offset: -2.67 ms

Remote clock offset: 5.183 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 66.512 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 2.50 Mbit/s

95th percentile per-packet one-way delay: 66.486 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 66.430 ms

Loss rate: 1.11%

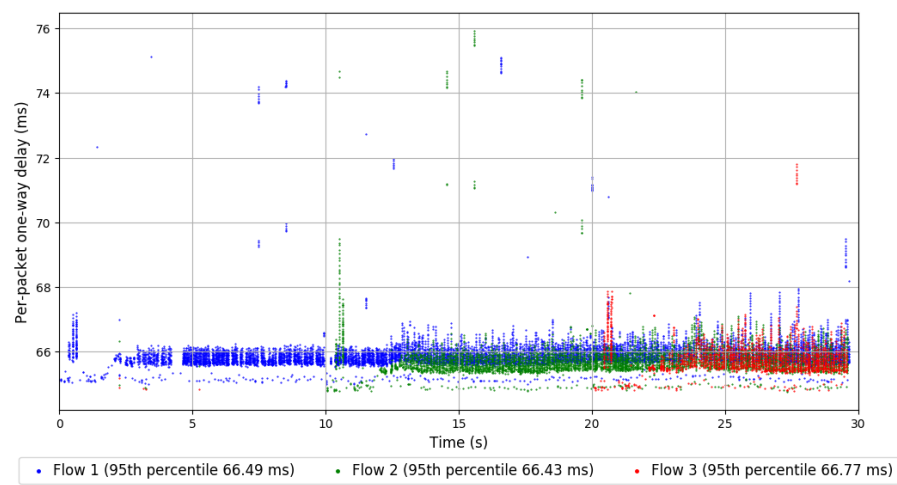
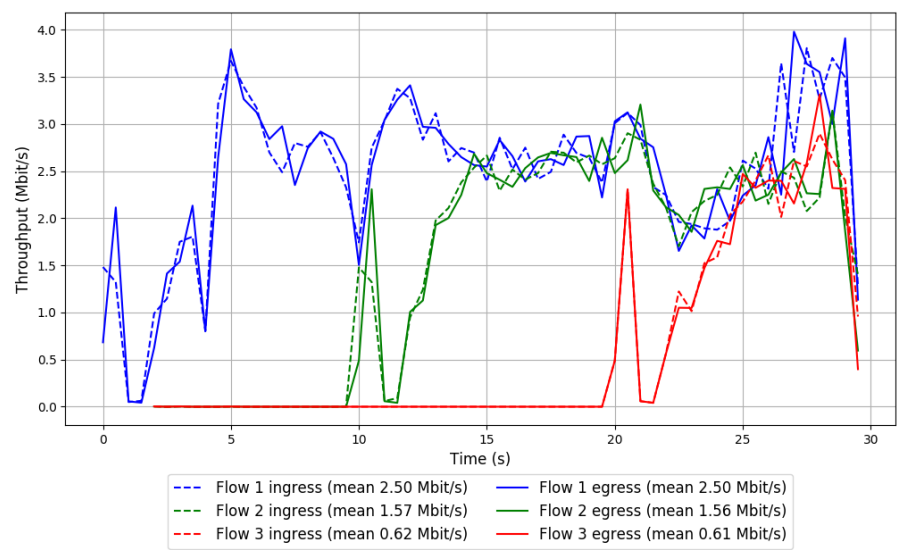
-- Flow 3:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 66.766 ms

Loss rate: 2.80%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-04 21:06:38

End at: 2018-02-04 21:07:08

Local clock offset: -3.061 ms

Remote clock offset: 5.042 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.50 Mbit/s

95th percentile per-packet one-way delay: 66.374 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 2.46 Mbit/s

95th percentile per-packet one-way delay: 66.173 ms

Loss rate: 0.70%

-- Flow 2:

Average throughput: 1.59 Mbit/s

95th percentile per-packet one-way delay: 66.613 ms

Loss rate: 0.55%

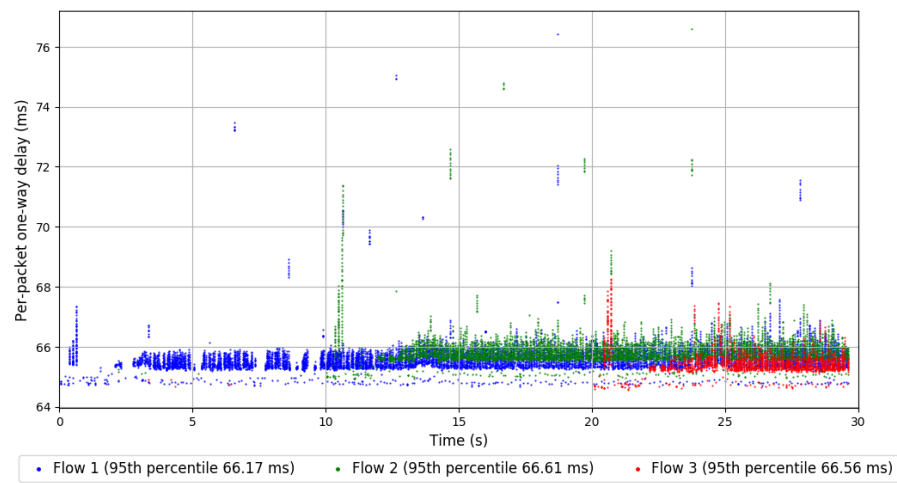
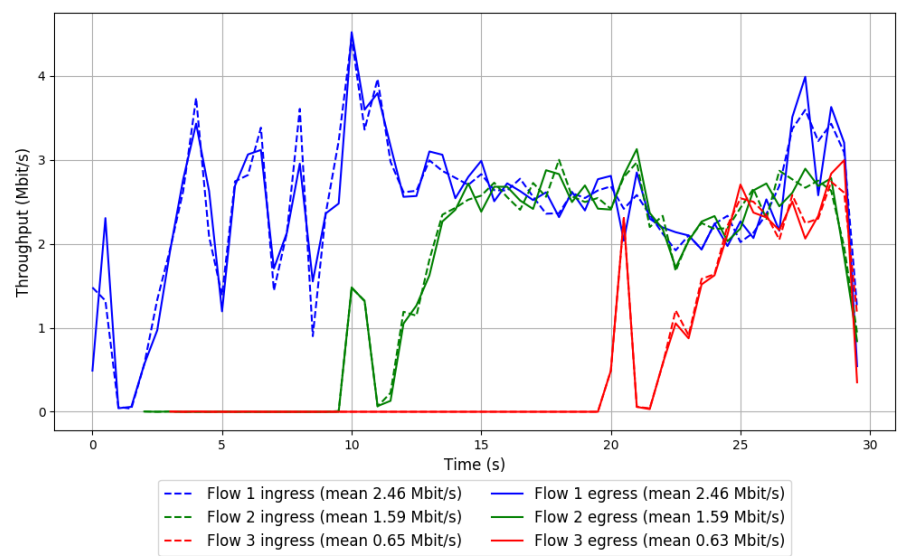
-- Flow 3:

Average throughput: 0.63 Mbit/s

95th percentile per-packet one-way delay: 66.563 ms

Loss rate: 2.39%

Run 10: Report of WebRTC media — Data Link

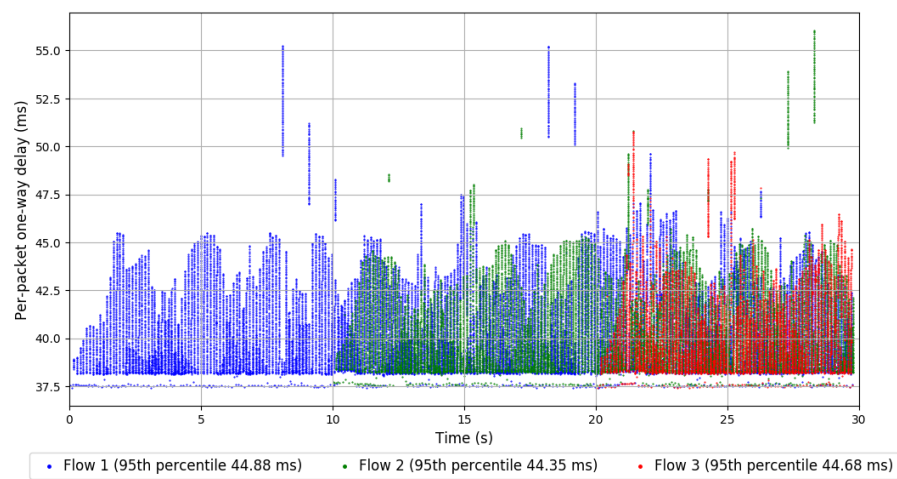
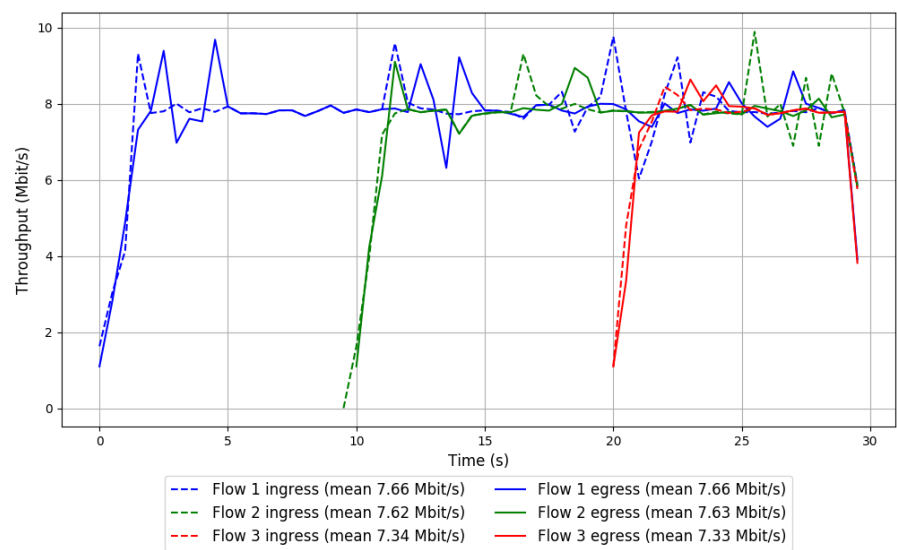


Run 1: Statistics of Sprout

Start at: 2018-02-04 17:34:42
End at: 2018-02-04 17:35:12
Local clock offset: -0.888 ms
Remote clock offset: -2.035 ms

Below is generated by plot.py at 2018-02-05 01:18:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 15.11 Mbit/s
95th percentile per-packet one-way delay: 44.678 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 44.876 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 7.63 Mbit/s
95th percentile per-packet one-way delay: 44.347 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 7.33 Mbit/s
95th percentile per-packet one-way delay: 44.680 ms
Loss rate: 1.35%

Run 1: Report of Sprout — Data Link

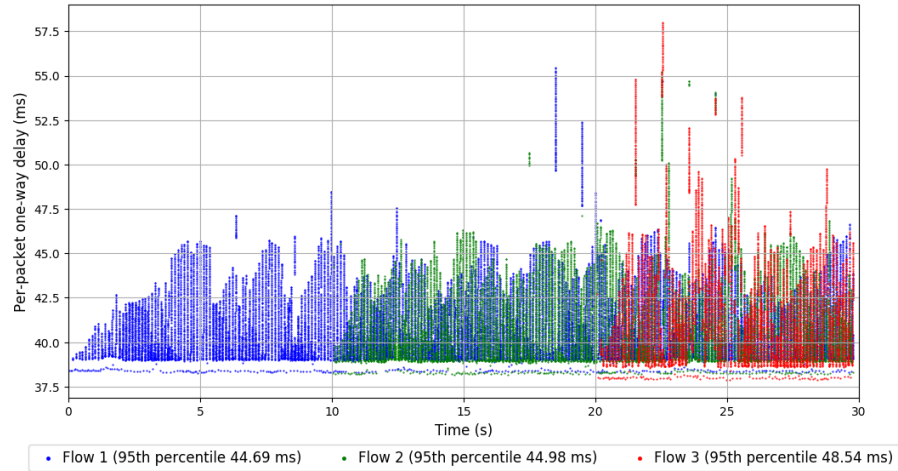
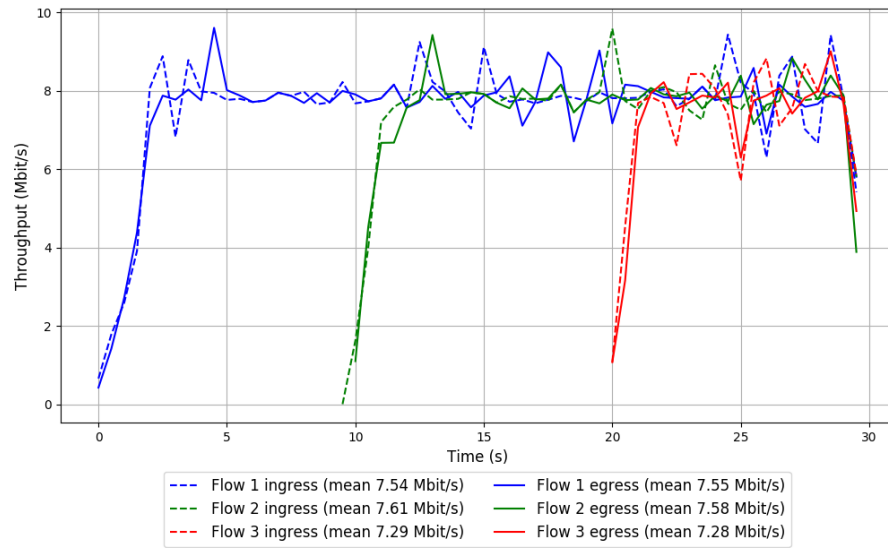


Run 2: Statistics of Sprout

Start at: 2018-02-04 17:57:29
End at: 2018-02-04 17:57:59
Local clock offset: -0.578 ms
Remote clock offset: -0.414 ms

```
# Below is generated by plot.py at 2018-02-05 01:18:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.96 Mbit/s
95th percentile per-packet one-way delay: 45.200 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 7.55 Mbit/s
95th percentile per-packet one-way delay: 44.686 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 7.58 Mbit/s
95th percentile per-packet one-way delay: 44.975 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 48.536 ms
Loss rate: 1.36%
```

Run 2: Report of Sprout — Data Link

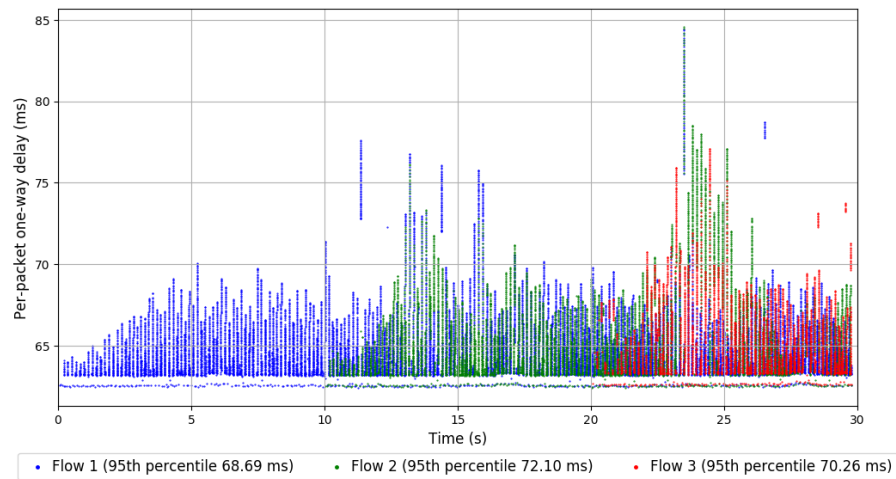
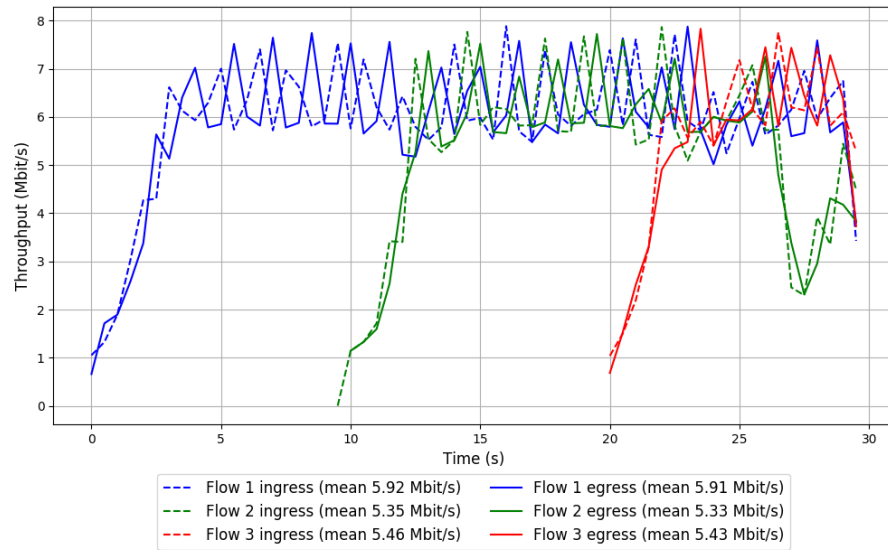


Run 3: Statistics of Sprout

Start at: 2018-02-04 18:20:40
End at: 2018-02-04 18:21:10
Local clock offset: -3.931 ms
Remote clock offset: 1.249 ms

```
# Below is generated by plot.py at 2018-02-05 01:18:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.22 Mbit/s
95th percentile per-packet one-way delay: 70.269 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 5.91 Mbit/s
95th percentile per-packet one-way delay: 68.692 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 5.33 Mbit/s
95th percentile per-packet one-way delay: 72.099 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 5.43 Mbit/s
95th percentile per-packet one-way delay: 70.263 ms
Loss rate: 1.72%
```


Run 3: Report of Sprout — Data Link

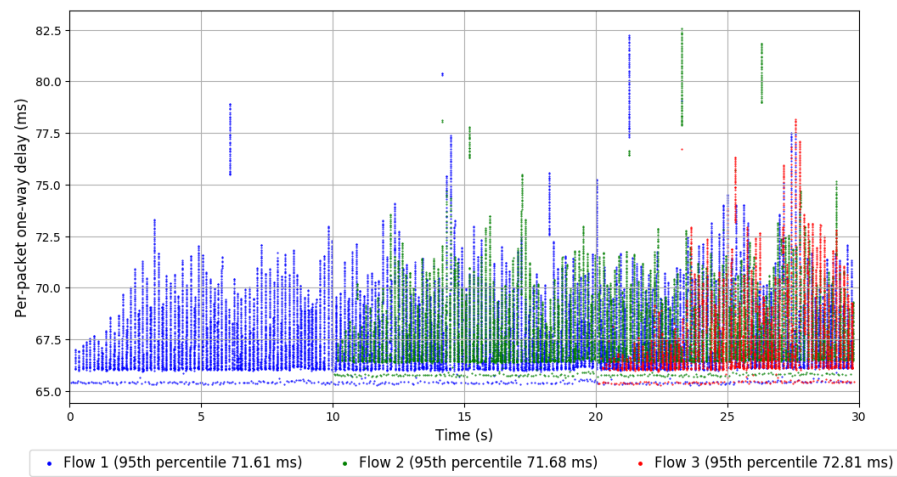
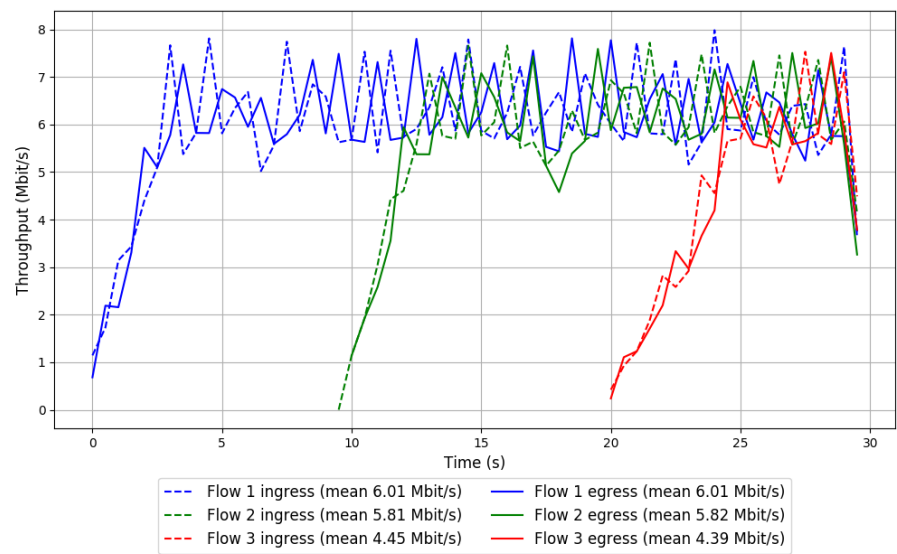


Run 4: Statistics of Sprout

Start at: 2018-02-04 18:43:58
End at: 2018-02-04 18:44:28
Local clock offset: -1.474 ms
Remote clock offset: 2.764 ms

```
# Below is generated by plot.py at 2018-02-05 01:18:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.30 Mbit/s
95th percentile per-packet one-way delay: 71.818 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 6.01 Mbit/s
95th percentile per-packet one-way delay: 71.613 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 5.82 Mbit/s
95th percentile per-packet one-way delay: 71.679 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 72.807 ms
Loss rate: 2.21%
```

Run 4: Report of Sprout — Data Link

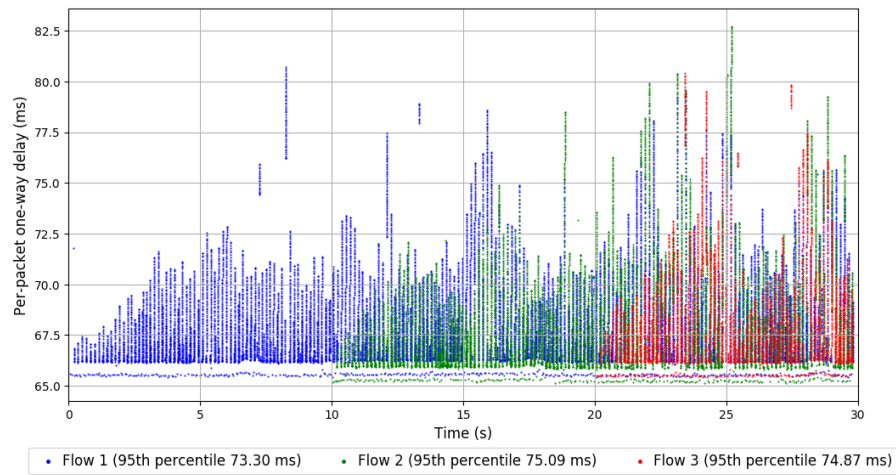
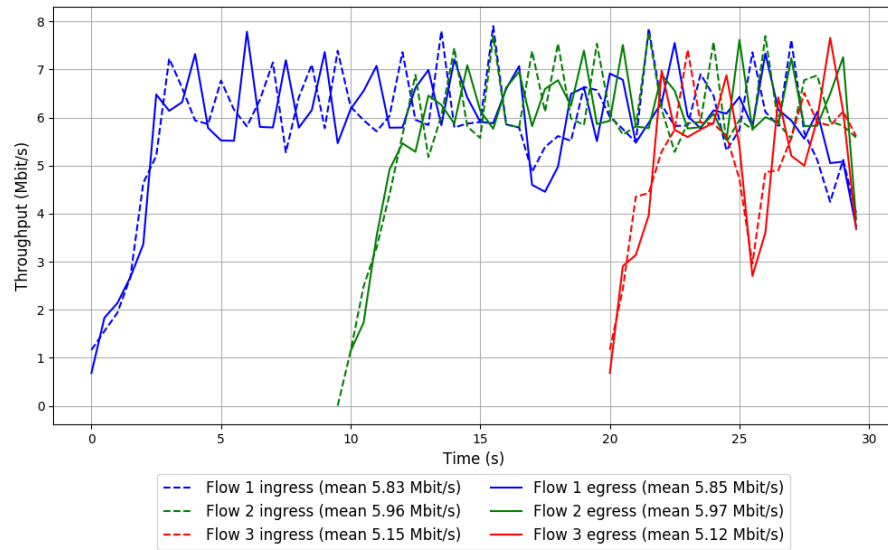


Run 5: Statistics of Sprout

Start at: 2018-02-04 19:07:15
End at: 2018-02-04 19:07:45
Local clock offset: -2.253 ms
Remote clock offset: 3.906 ms

```
# Below is generated by plot.py at 2018-02-05 01:18:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.48 Mbit/s
95th percentile per-packet one-way delay: 74.161 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 5.85 Mbit/s
95th percentile per-packet one-way delay: 73.298 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 5.97 Mbit/s
95th percentile per-packet one-way delay: 75.087 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 5.12 Mbit/s
95th percentile per-packet one-way delay: 74.873 ms
Loss rate: 1.92%
```

Run 5: Report of Sprout — Data Link

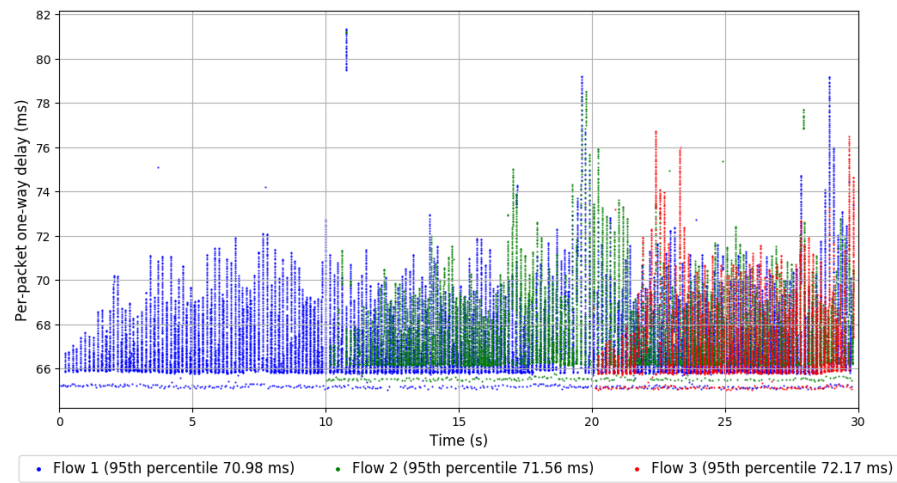
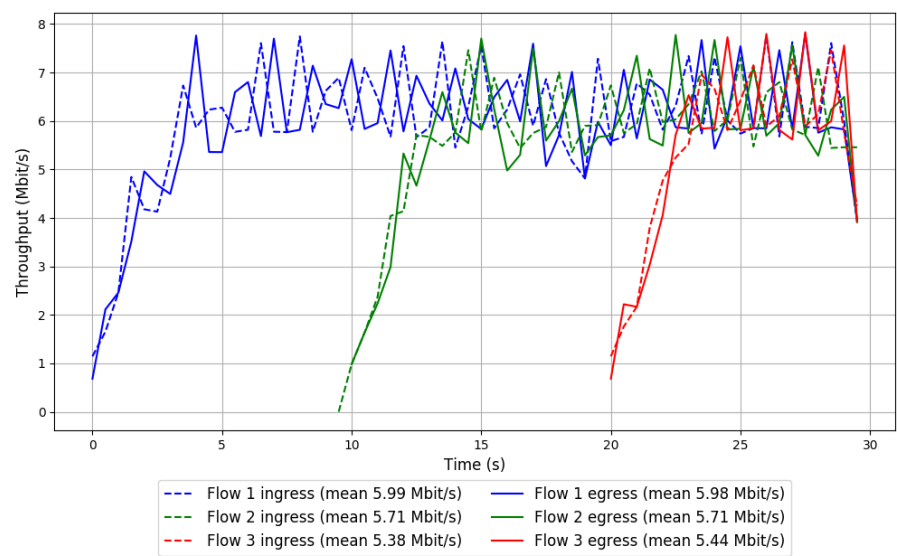


Run 6: Statistics of Sprout

Start at: 2018-02-04 19:30:29
End at: 2018-02-04 19:30:59
Local clock offset: -2.54 ms
Remote clock offset: 4.687 ms

Below is generated by plot.py at 2018-02-05 01:18:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 11.55 Mbit/s
95th percentile per-packet one-way delay: 71.333 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 5.98 Mbit/s
95th percentile per-packet one-way delay: 70.984 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 71.556 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 5.44 Mbit/s
95th percentile per-packet one-way delay: 72.167 ms
Loss rate: 0.31%

Run 6: Report of Sprout — Data Link

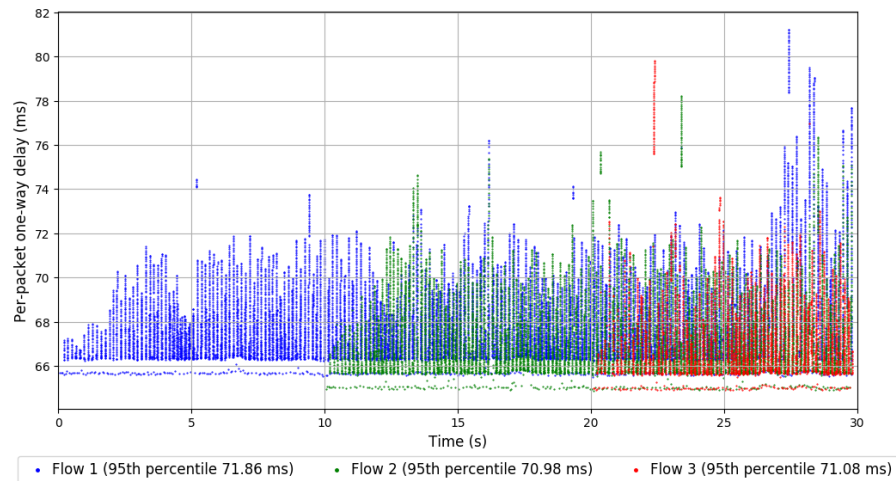
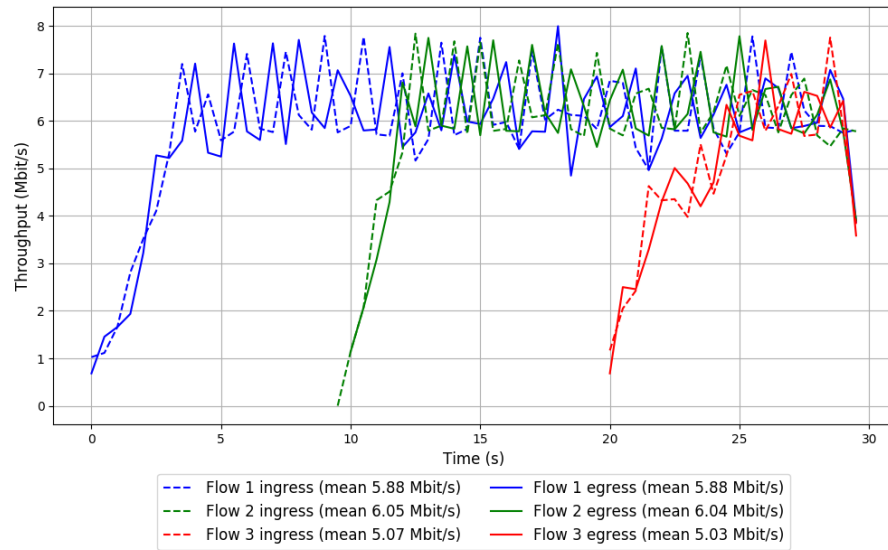


Run 7: Statistics of Sprout

Start at: 2018-02-04 19:53:44
End at: 2018-02-04 19:54:14
Local clock offset: -2.608 ms
Remote clock offset: 4.759 ms

```
# Below is generated by plot.py at 2018-02-05 01:18:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.53 Mbit/s
95th percentile per-packet one-way delay: 71.456 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 5.88 Mbit/s
95th percentile per-packet one-way delay: 71.862 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 6.04 Mbit/s
95th percentile per-packet one-way delay: 70.978 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 5.03 Mbit/s
95th percentile per-packet one-way delay: 71.076 ms
Loss rate: 1.59%
```


Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-04 20:17:04

End at: 2018-02-04 20:17:34

Local clock offset: -3.25 ms

Remote clock offset: 5.056 ms

Below is generated by plot.py at 2018-02-05 01:18:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 11.21 Mbit/s

95th percentile per-packet one-way delay: 70.982 ms

Loss rate: 0.76%

-- Flow 1:

Average throughput: 5.74 Mbit/s

95th percentile per-packet one-way delay: 70.883 ms

Loss rate: 0.58%

-- Flow 2:

Average throughput: 5.56 Mbit/s

95th percentile per-packet one-way delay: 70.733 ms

Loss rate: 0.65%

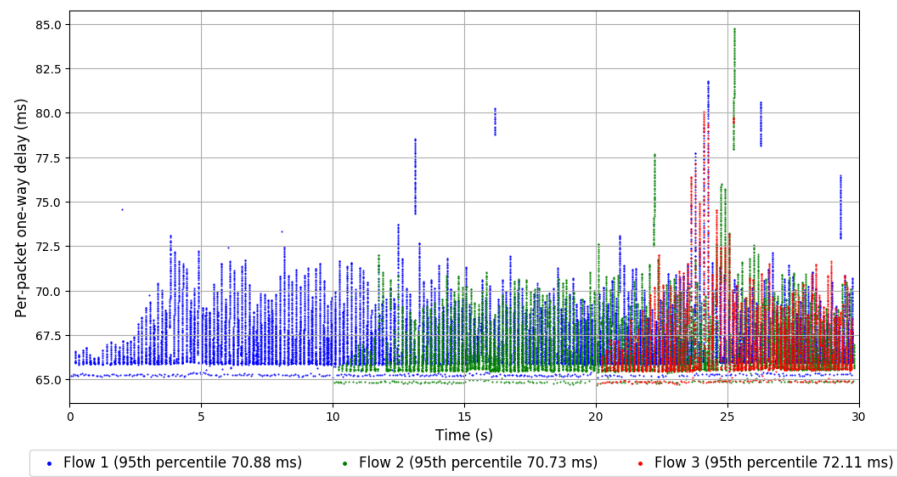
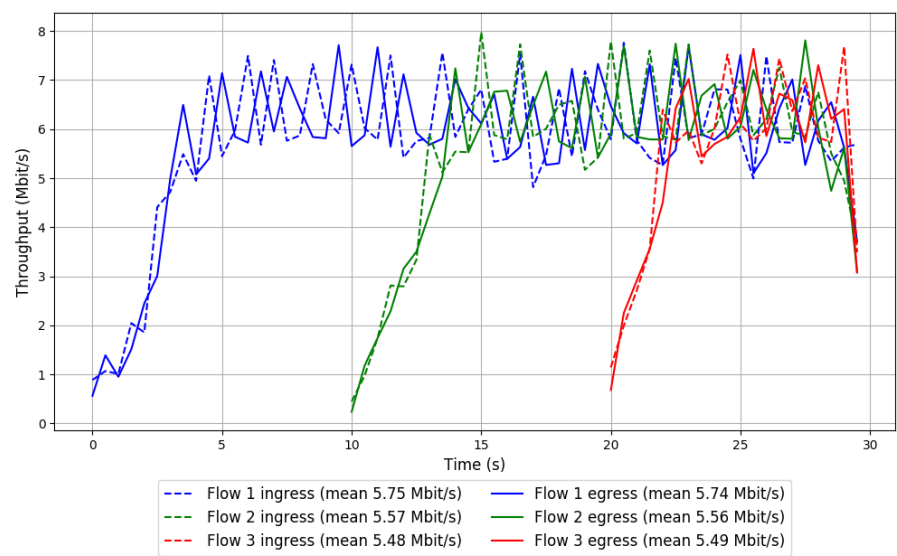
-- Flow 3:

Average throughput: 5.49 Mbit/s

95th percentile per-packet one-way delay: 72.112 ms

Loss rate: 1.57%

Run 8: Report of Sprout — Data Link

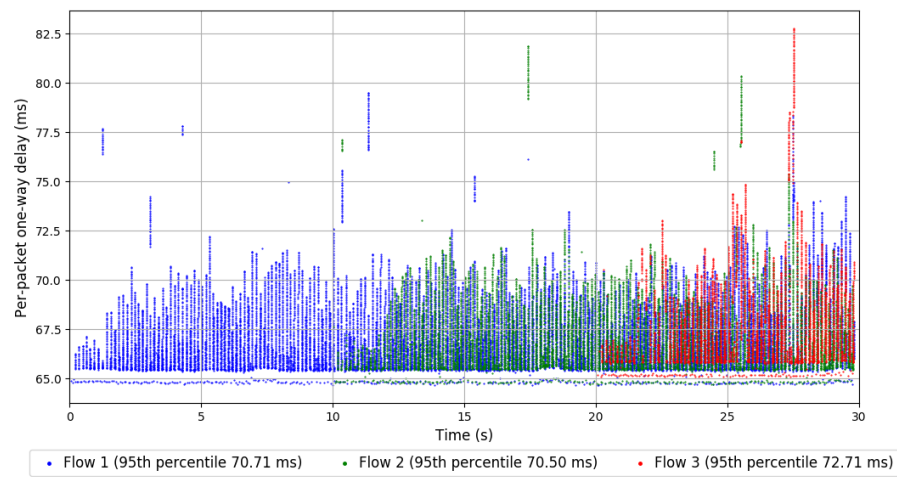
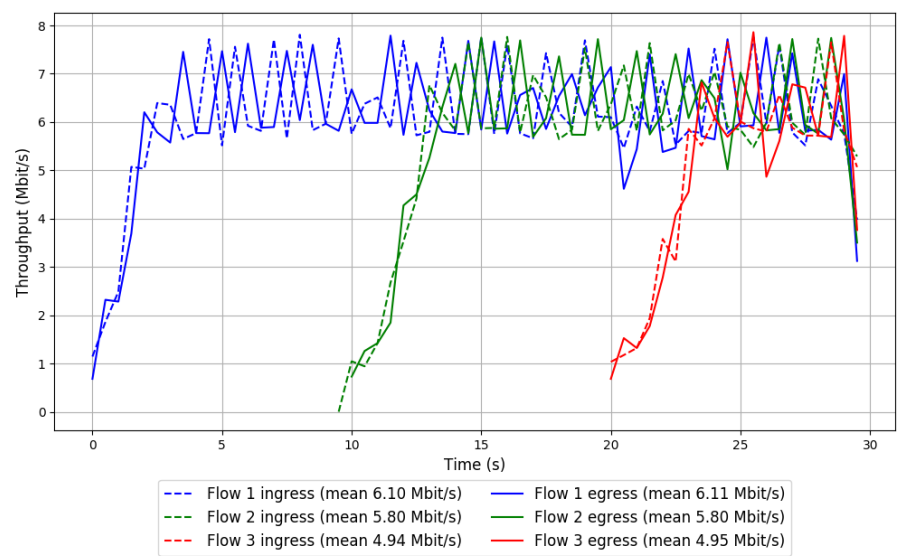


Run 9: Statistics of Sprout

Start at: 2018-02-04 20:40:35
End at: 2018-02-04 20:41:05
Local clock offset: -2.759 ms
Remote clock offset: 5.286 ms

Below is generated by plot.py at 2018-02-05 01:18:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 70.900 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 6.11 Mbit/s
95th percentile per-packet one-way delay: 70.714 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 5.80 Mbit/s
95th percentile per-packet one-way delay: 70.498 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 72.713 ms
Loss rate: 1.34%

Run 9: Report of Sprout — Data Link

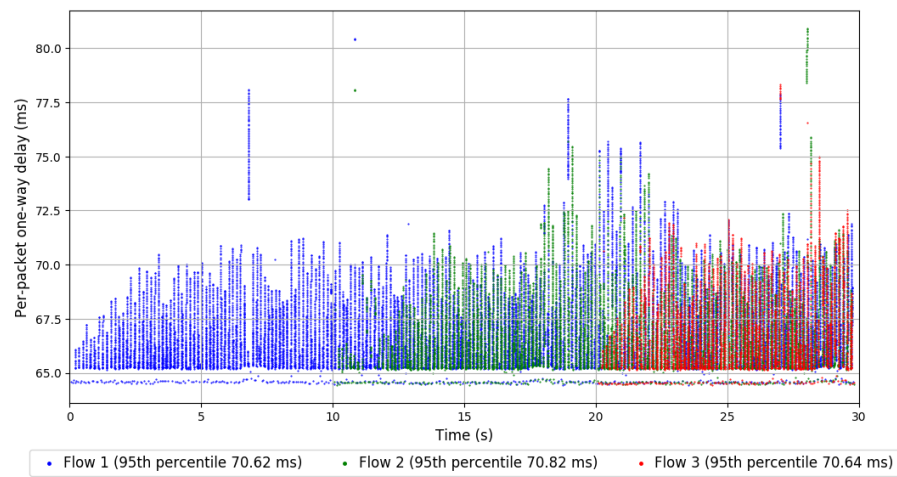
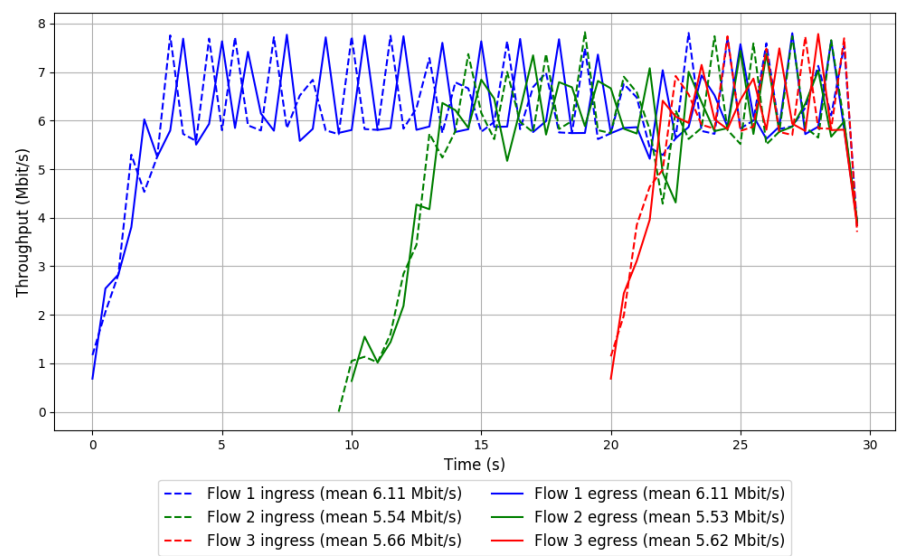


Run 10: Statistics of Sprout

Start at: 2018-02-04 21:03:52
End at: 2018-02-04 21:04:22
Local clock offset: -2.925 ms
Remote clock offset: 5.107 ms

Below is generated by plot.py at 2018-02-05 01:18:16
Datalink statistics
-- Total of 3 flows:
Average throughput: 11.61 Mbit/s
95th percentile per-packet one-way delay: 70.672 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 6.11 Mbit/s
95th percentile per-packet one-way delay: 70.621 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 5.53 Mbit/s
95th percentile per-packet one-way delay: 70.821 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 5.62 Mbit/s
95th percentile per-packet one-way delay: 70.636 ms
Loss rate: 1.60%

Run 10: Report of Sprout — Data Link

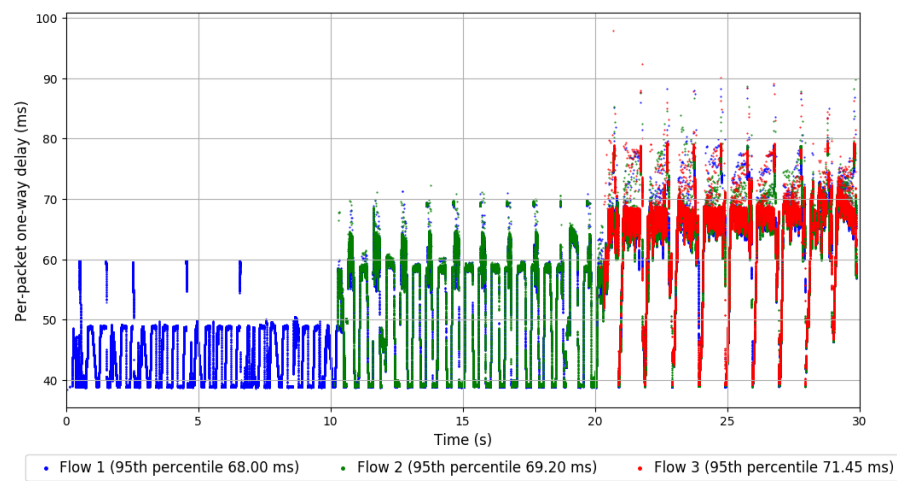
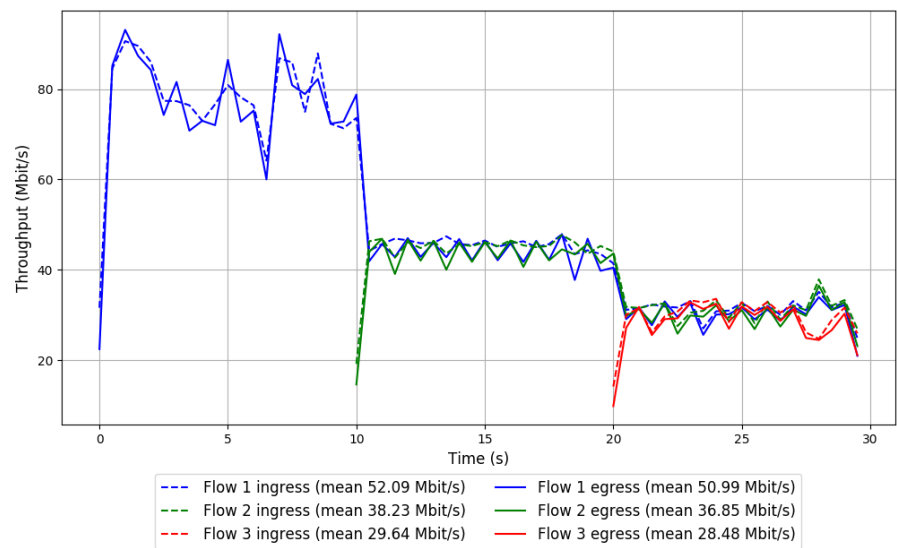


Run 1: Statistics of TaoVA-100x

Start at: 2018-02-04 17:35:54
End at: 2018-02-04 17:36:24
Local clock offset: -0.076 ms
Remote clock offset: -1.973 ms

Below is generated by plot.py at 2018-02-05 01:20:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.83 Mbit/s
95th percentile per-packet one-way delay: 68.948 ms
Loss rate: 3.23%
-- Flow 1:
Average throughput: 50.99 Mbit/s
95th percentile per-packet one-way delay: 67.997 ms
Loss rate: 2.45%
-- Flow 2:
Average throughput: 36.85 Mbit/s
95th percentile per-packet one-way delay: 69.200 ms
Loss rate: 4.12%
-- Flow 3:
Average throughput: 28.48 Mbit/s
95th percentile per-packet one-way delay: 71.447 ms
Loss rate: 5.04%

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

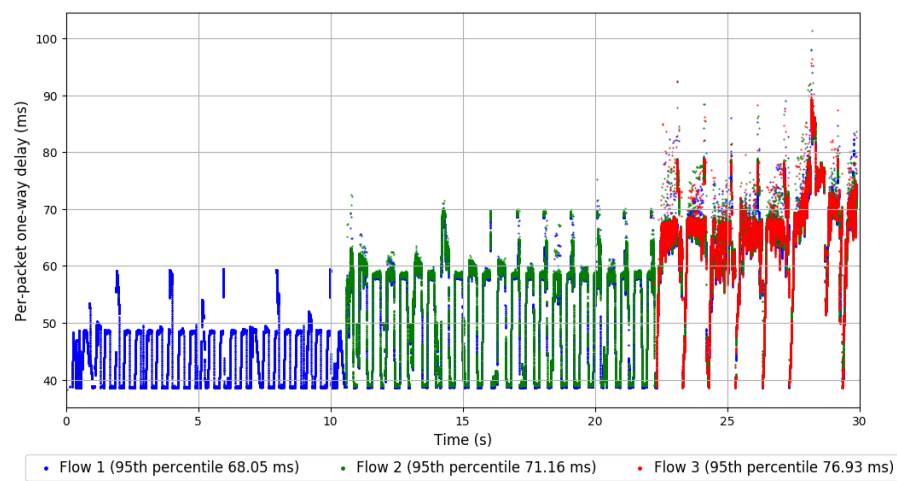
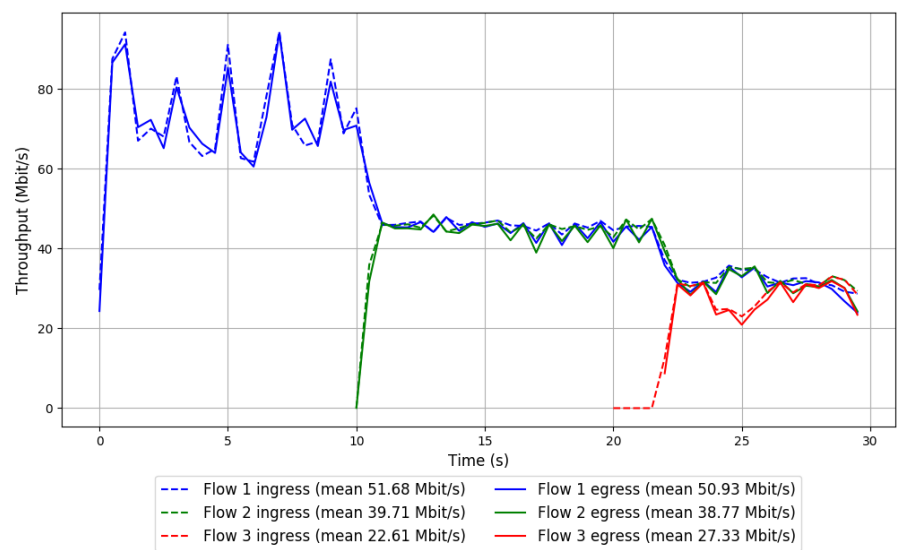


Run 2: Statistics of TaoVA-100x

Start at: 2018-02-04 17:58:41
End at: 2018-02-04 17:59:11
Local clock offset: -0.655 ms
Remote clock offset: -0.241 ms

Below is generated by plot.py at 2018-02-05 01:20:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 83.40 Mbit/s
95th percentile per-packet one-way delay: 70.628 ms
Loss rate: 2.55%
-- Flow 1:
Average throughput: 50.93 Mbit/s
95th percentile per-packet one-way delay: 68.053 ms
Loss rate: 1.89%
-- Flow 2:
Average throughput: 38.77 Mbit/s
95th percentile per-packet one-way delay: 71.161 ms
Loss rate: 3.04%
-- Flow 3:
Average throughput: 27.33 Mbit/s
95th percentile per-packet one-way delay: 76.930 ms
Loss rate: 5.39%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-02-04 18:21:53

End at: 2018-02-04 18:22:23

Local clock offset: -1.696 ms

Remote clock offset: 1.268 ms

Below is generated by plot.py at 2018-02-05 01:20:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.97 Mbit/s

95th percentile per-packet one-way delay: 94.220 ms

Loss rate: 2.22%

-- Flow 1:

Average throughput: 53.56 Mbit/s

95th percentile per-packet one-way delay: 93.735 ms

Loss rate: 1.48%

-- Flow 2:

Average throughput: 35.05 Mbit/s

95th percentile per-packet one-way delay: 94.353 ms

Loss rate: 3.02%

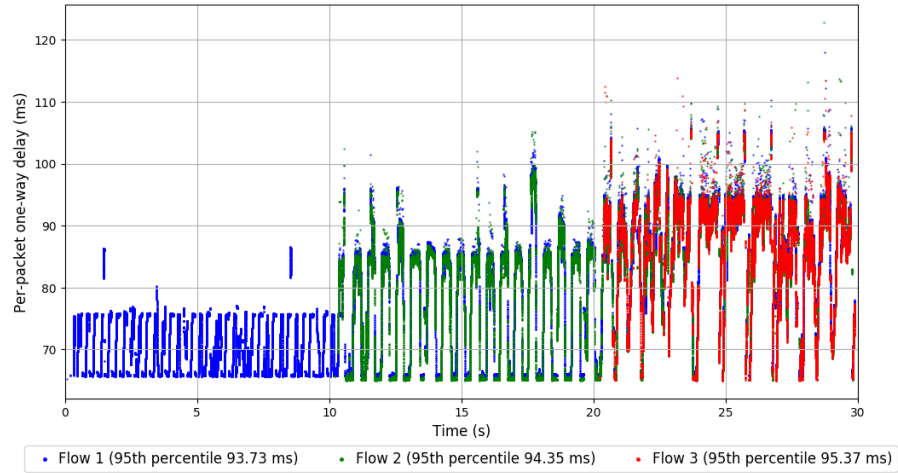
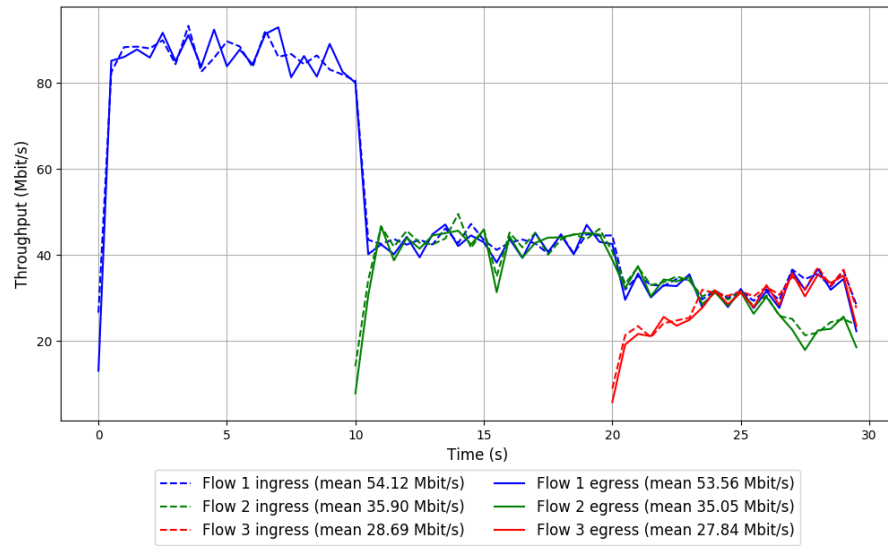
-- Flow 3:

Average throughput: 27.84 Mbit/s

95th percentile per-packet one-way delay: 95.370 ms

Loss rate: 4.38%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-04 18:45:12

End at: 2018-02-04 18:45:42

Local clock offset: -1.607 ms

Remote clock offset: 2.813 ms

Below is generated by plot.py at 2018-02-05 01:20:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 86.62 Mbit/s

95th percentile per-packet one-way delay: 93.594 ms

Loss rate: 2.21%

-- Flow 1:

Average throughput: 54.93 Mbit/s

95th percentile per-packet one-way delay: 91.114 ms

Loss rate: 1.38%

-- Flow 2:

Average throughput: 37.92 Mbit/s

95th percentile per-packet one-way delay: 94.137 ms

Loss rate: 3.18%

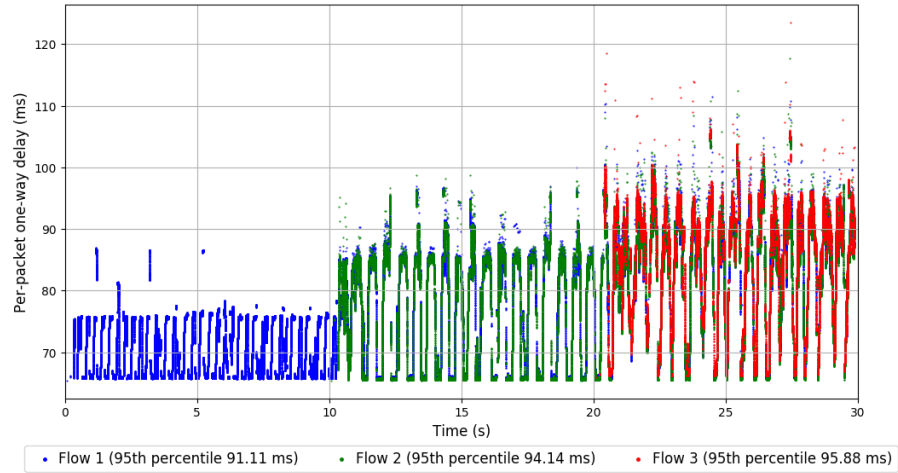
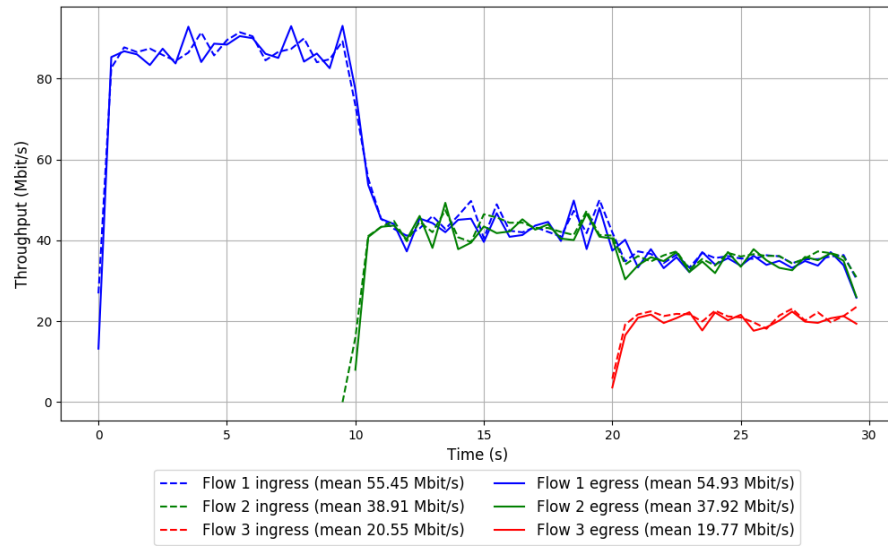
-- Flow 3:

Average throughput: 19.77 Mbit/s

95th percentile per-packet one-way delay: 95.876 ms

Loss rate: 5.23%

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



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-04 19:08:28

End at: 2018-02-04 19:08:58

Local clock offset: -2.608 ms

Remote clock offset: 3.98 ms

Below is generated by plot.py at 2018-02-05 01:20:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.97 Mbit/s

95th percentile per-packet one-way delay: 88.018 ms

Loss rate: 3.11%

-- Flow 1:

Average throughput: 63.49 Mbit/s

95th percentile per-packet one-way delay: 84.732 ms

Loss rate: 2.27%

-- Flow 2:

Average throughput: 44.86 Mbit/s

95th percentile per-packet one-way delay: 89.048 ms

Loss rate: 3.51%

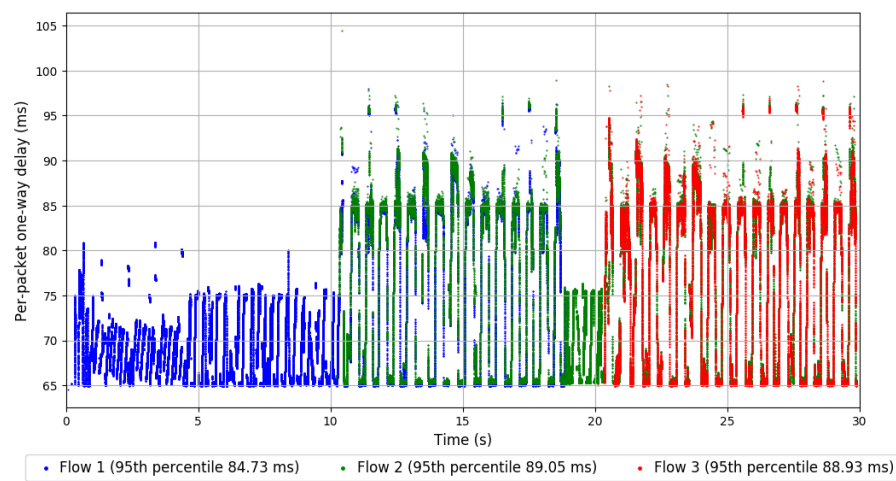
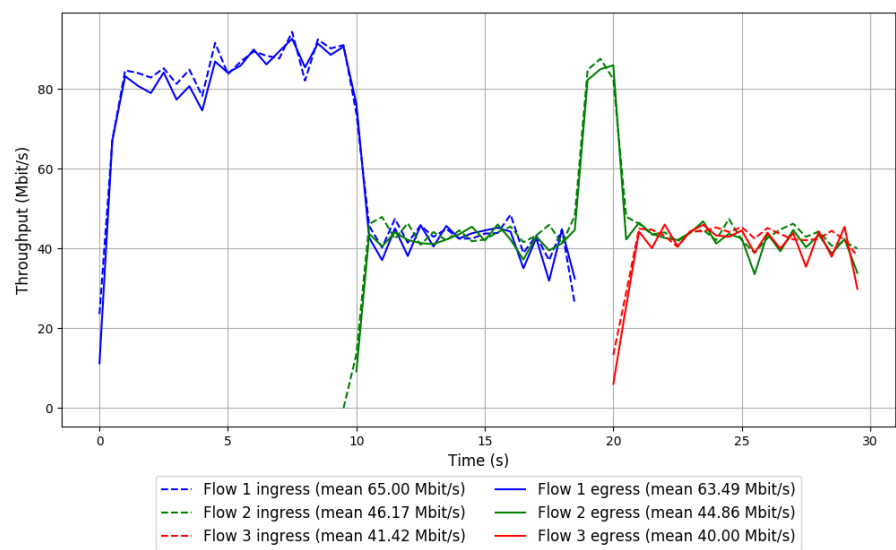
-- Flow 3:

Average throughput: 40.00 Mbit/s

95th percentile per-packet one-way delay: 88.934 ms

Loss rate: 4.70%

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



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-04 19:31:43

End at: 2018-02-04 19:32:13

Local clock offset: -2.557 ms

Remote clock offset: 4.731 ms

Below is generated by plot.py at 2018-02-05 01:20:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.33 Mbit/s

95th percentile per-packet one-way delay: 94.411 ms

Loss rate: 1.90%

-- Flow 1:

Average throughput: 53.71 Mbit/s

95th percentile per-packet one-way delay: 93.707 ms

Loss rate: 1.21%

-- Flow 2:

Average throughput: 36.00 Mbit/s

95th percentile per-packet one-way delay: 94.381 ms

Loss rate: 2.49%

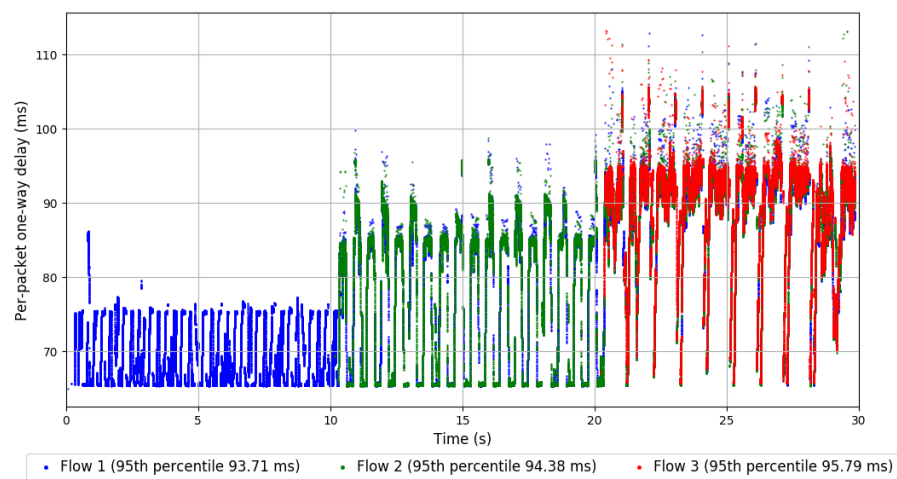
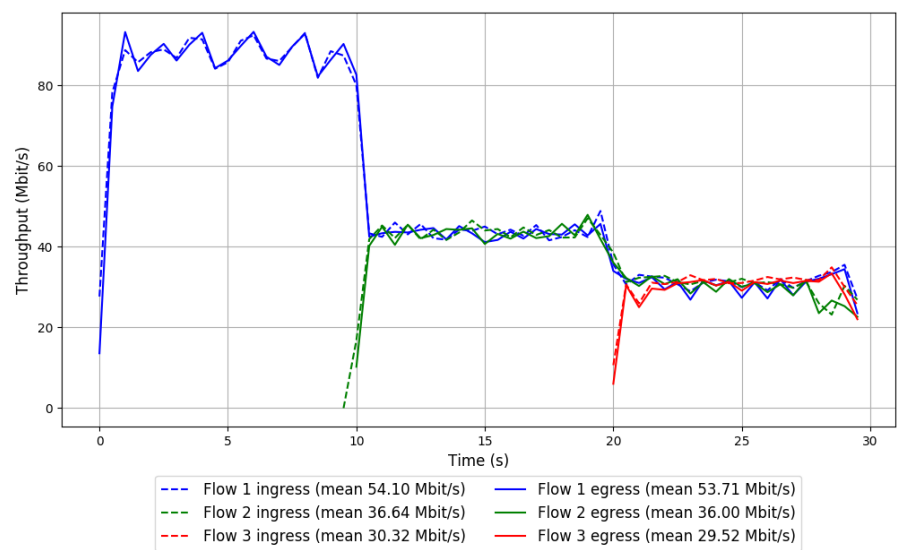
-- Flow 3:

Average throughput: 29.52 Mbit/s

95th percentile per-packet one-way delay: 95.789 ms

Loss rate: 4.16%

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



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-04 19:54:58

End at: 2018-02-04 19:55:28

Local clock offset: -2.456 ms

Remote clock offset: 4.752 ms

Below is generated by plot.py at 2018-02-05 01:20:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.03 Mbit/s

95th percentile per-packet one-way delay: 94.501 ms

Loss rate: 1.94%

-- Flow 1:

Average throughput: 51.87 Mbit/s

95th percentile per-packet one-way delay: 92.340 ms

Loss rate: 1.17%

-- Flow 2:

Average throughput: 38.30 Mbit/s

95th percentile per-packet one-way delay: 94.636 ms

Loss rate: 2.57%

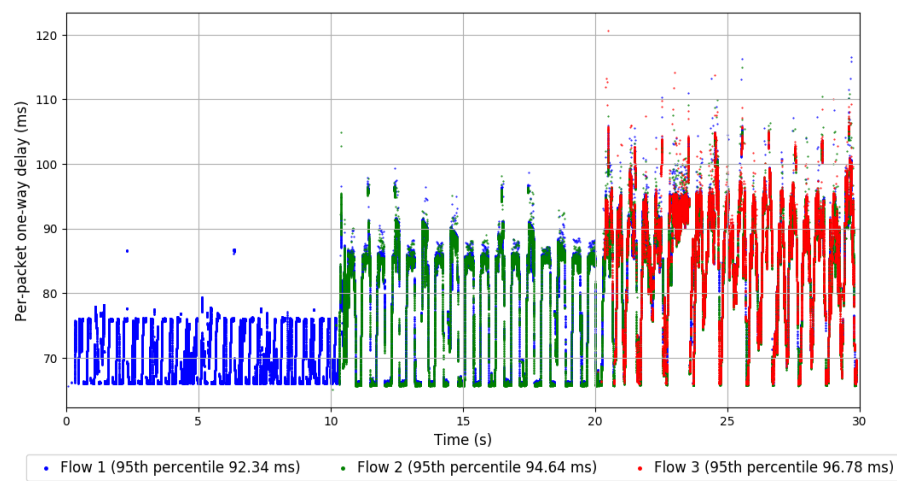
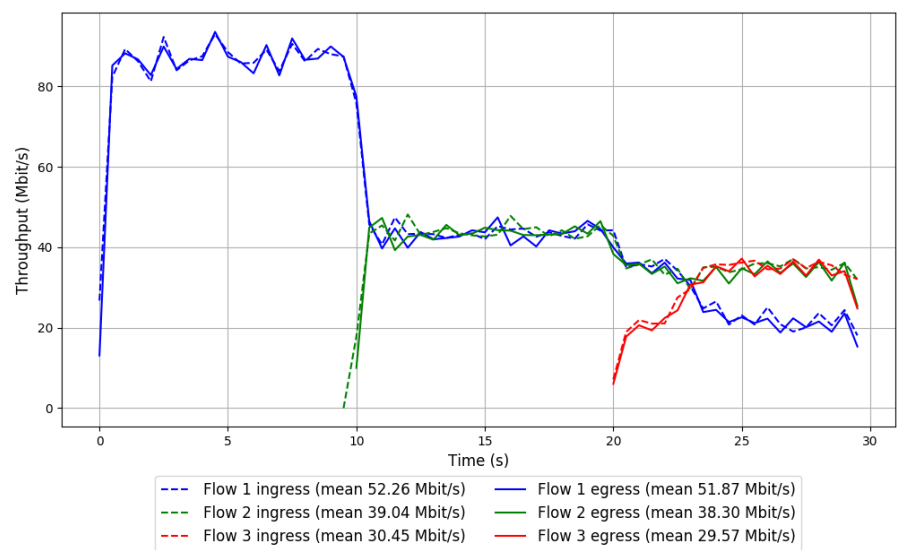
-- Flow 3:

Average throughput: 29.57 Mbit/s

95th percentile per-packet one-way delay: 96.777 ms

Loss rate: 4.29%

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



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-04 20:18:18

End at: 2018-02-04 20:18:48

Local clock offset: -2.696 ms

Remote clock offset: 5.064 ms

Below is generated by plot.py at 2018-02-05 01:20:31

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.53 Mbit/s

95th percentile per-packet one-way delay: 89.777 ms

Loss rate: 4.96%

-- Flow 1:

Average throughput: 55.22 Mbit/s

95th percentile per-packet one-way delay: 87.894 ms

Loss rate: 3.90%

-- Flow 2:

Average throughput: 31.16 Mbit/s

95th percentile per-packet one-way delay: 91.781 ms

Loss rate: 6.06%

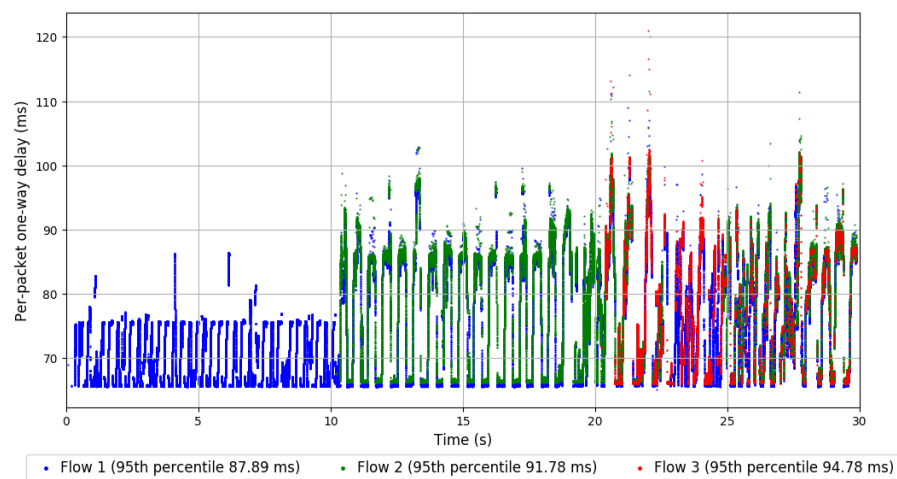
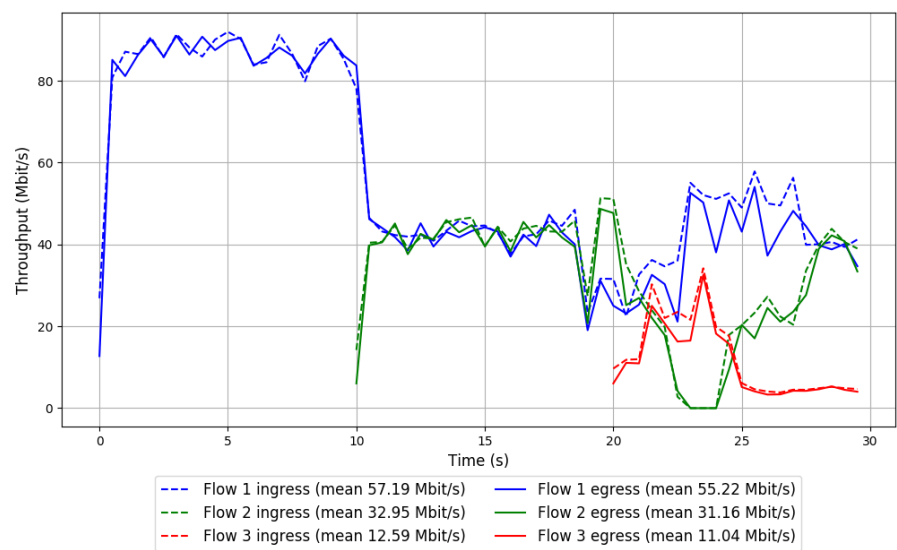
-- Flow 3:

Average throughput: 11.04 Mbit/s

95th percentile per-packet one-way delay: 94.775 ms

Loss rate: 13.61%

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



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-04 20:41:49

End at: 2018-02-04 20:42:19

Local clock offset: -2.501 ms

Remote clock offset: 5.176 ms

Below is generated by plot.py at 2018-02-05 01:22:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.55 Mbit/s

95th percentile per-packet one-way delay: 93.847 ms

Loss rate: 3.42%

-- Flow 1:

Average throughput: 53.53 Mbit/s

95th percentile per-packet one-way delay: 91.135 ms

Loss rate: 2.49%

-- Flow 2:

Average throughput: 30.91 Mbit/s

95th percentile per-packet one-way delay: 94.366 ms

Loss rate: 4.19%

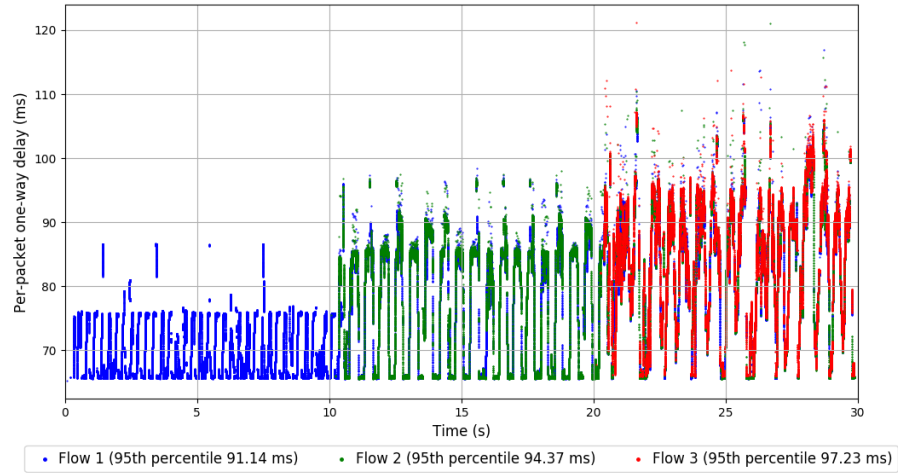
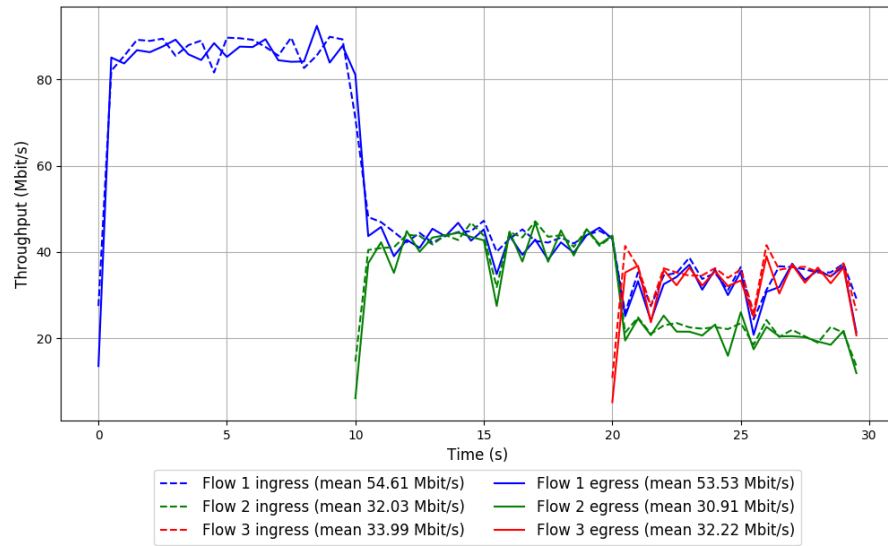
-- Flow 3:

Average throughput: 32.22 Mbit/s

95th percentile per-packet one-way delay: 97.234 ms

Loss rate: 6.50%

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-02-04 21:05:06

End at: 2018-02-04 21:05:36

Local clock offset: -2.445 ms

Remote clock offset: 5.035 ms

Below is generated by plot.py at 2018-02-05 01:22:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.02 Mbit/s

95th percentile per-packet one-way delay: 93.412 ms

Loss rate: 3.93%

-- Flow 1:

Average throughput: 51.12 Mbit/s

95th percentile per-packet one-way delay: 90.833 ms

Loss rate: 2.68%

-- Flow 2:

Average throughput: 33.91 Mbit/s

95th percentile per-packet one-way delay: 94.280 ms

Loss rate: 4.86%

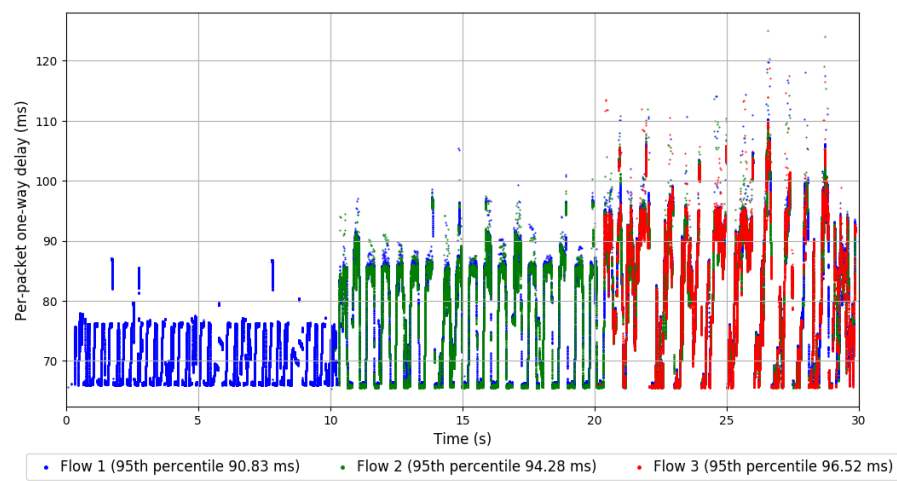
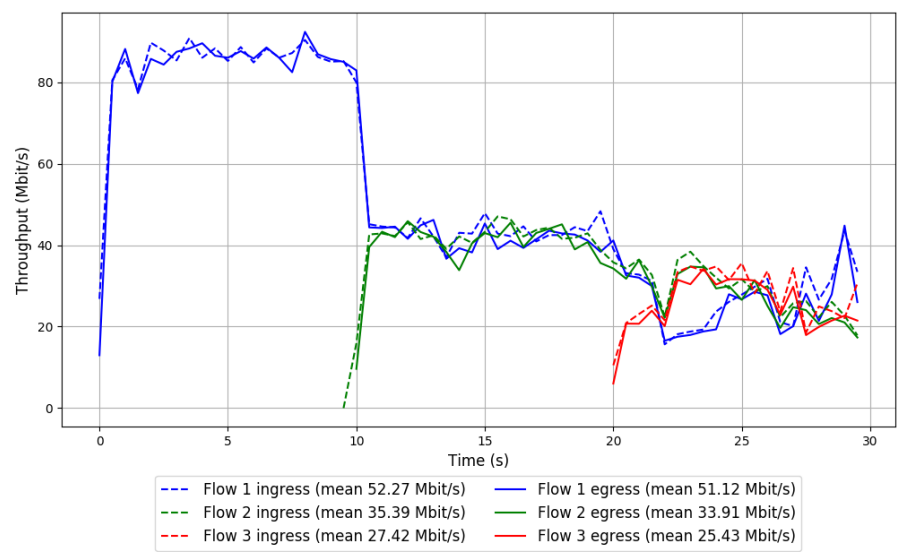
-- Flow 3:

Average throughput: 25.43 Mbit/s

95th percentile per-packet one-way delay: 96.516 ms

Loss rate: 8.64%

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



Run 1: Statistics of TCP Vegas

Start at: 2018-02-04 17:39:43

End at: 2018-02-04 17:40:13

Local clock offset: -0.903 ms

Remote clock offset: -1.72 ms

Below is generated by plot.py at 2018-02-05 01:22:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.29 Mbit/s

95th percentile per-packet one-way delay: 70.169 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 80.40 Mbit/s

95th percentile per-packet one-way delay: 67.168 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 12.10 Mbit/s

95th percentile per-packet one-way delay: 69.942 ms

Loss rate: 0.54%

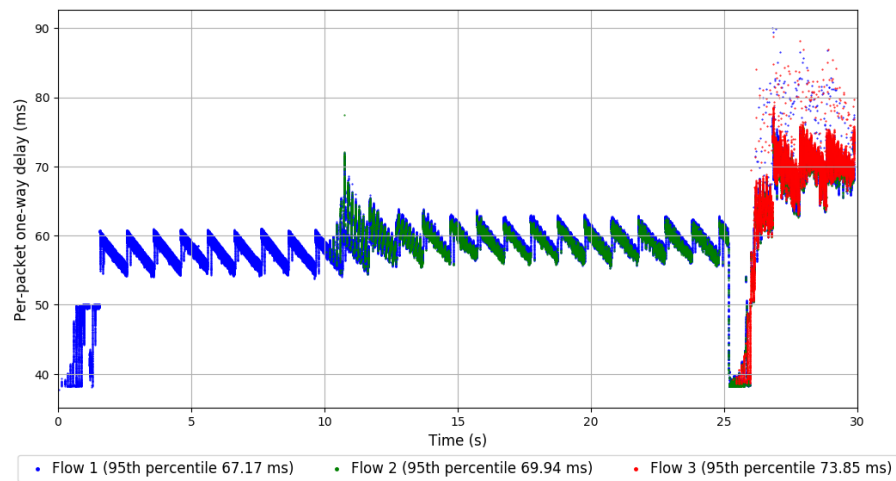
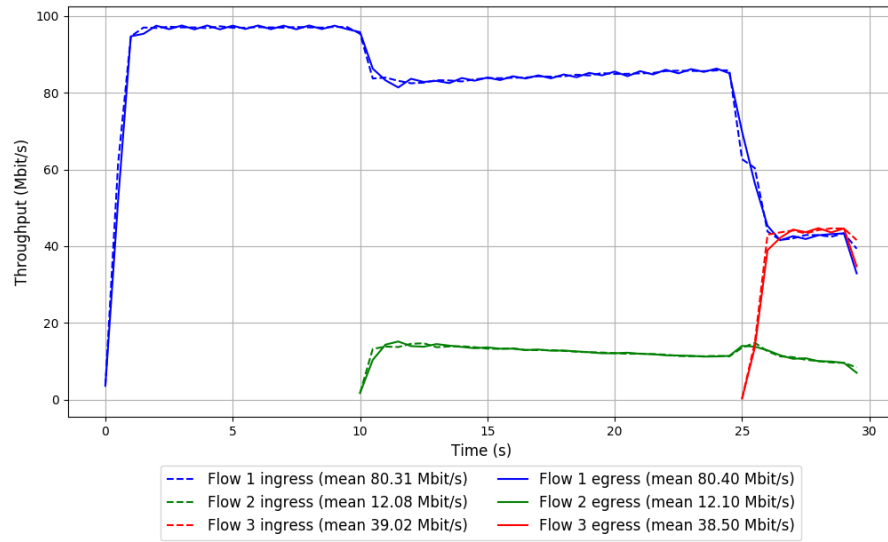
-- Flow 3:

Average throughput: 38.50 Mbit/s

95th percentile per-packet one-way delay: 73.854 ms

Loss rate: 3.72%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-04 18:02:30

End at: 2018-02-04 18:03:00

Local clock offset: -0.96 ms

Remote clock offset: 0.091 ms

Below is generated by plot.py at 2018-02-05 01:22:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.65 Mbit/s

95th percentile per-packet one-way delay: 69.598 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 61.81 Mbit/s

95th percentile per-packet one-way delay: 68.764 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 48.31 Mbit/s

95th percentile per-packet one-way delay: 70.699 ms

Loss rate: 0.66%

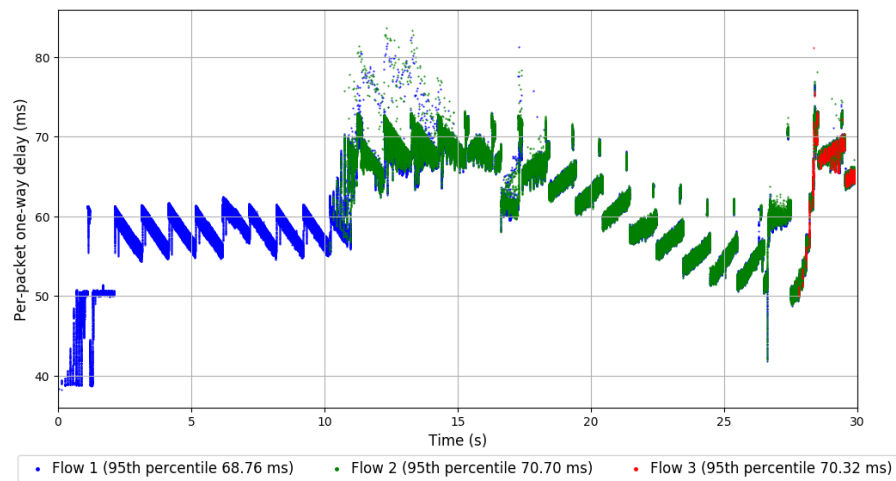
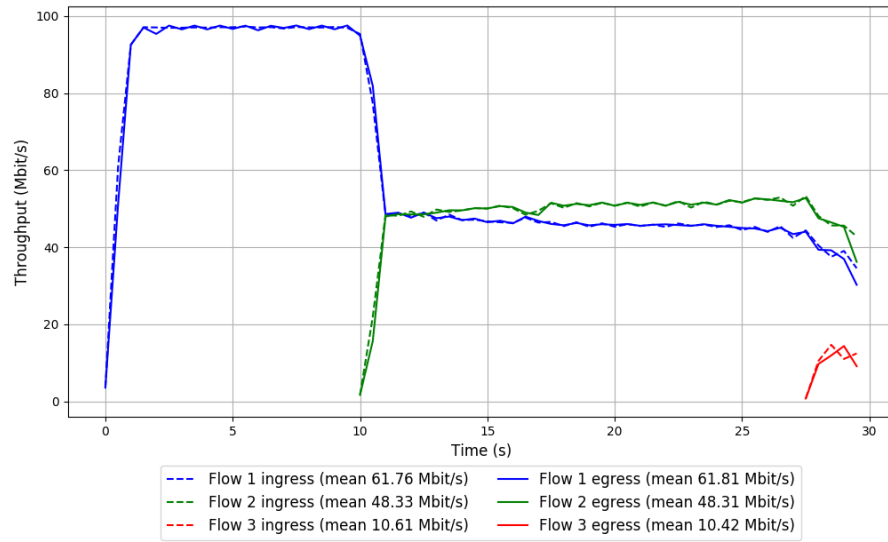
-- Flow 3:

Average throughput: 10.42 Mbit/s

95th percentile per-packet one-way delay: 70.323 ms

Loss rate: 7.11%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-02-04 18:25:48

End at: 2018-02-04 18:26:18

Local clock offset: -1.201 ms

Remote clock offset: 1.589 ms

Below is generated by plot.py at 2018-02-05 01:22:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.34 Mbit/s

95th percentile per-packet one-way delay: 86.337 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 51.37 Mbit/s

95th percentile per-packet one-way delay: 85.565 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 41.58 Mbit/s

95th percentile per-packet one-way delay: 87.322 ms

Loss rate: 0.68%

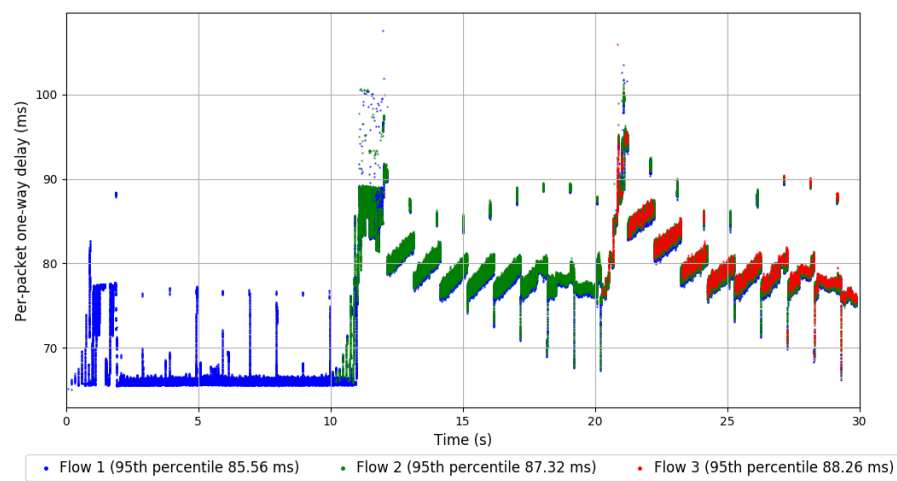
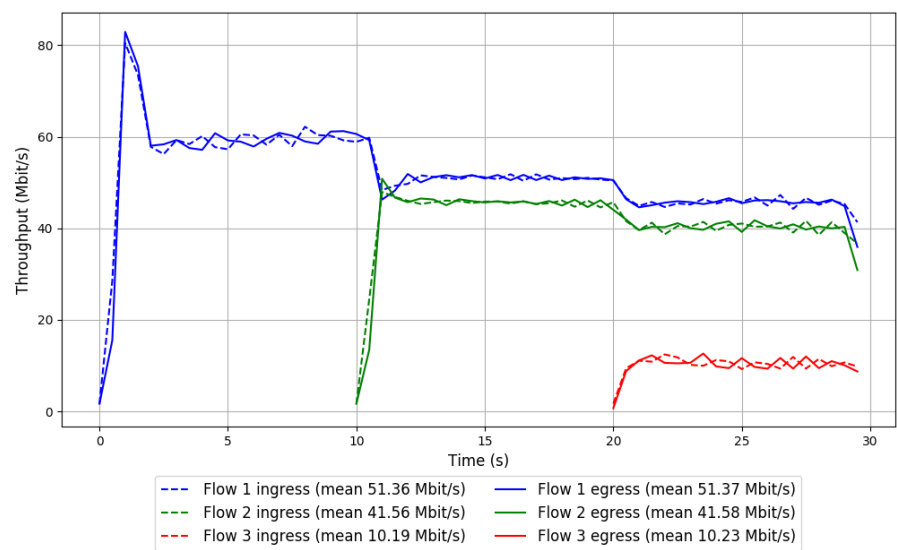
-- Flow 3:

Average throughput: 10.23 Mbit/s

95th percentile per-packet one-way delay: 88.260 ms

Loss rate: 1.43%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-02-04 18:49:06

End at: 2018-02-04 18:49:36

Local clock offset: -1.628 ms

Remote clock offset: 3.0 ms

Below is generated by plot.py at 2018-02-05 01:22:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.99 Mbit/s

95th percentile per-packet one-way delay: 79.074 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 58.22 Mbit/s

95th percentile per-packet one-way delay: 78.991 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 28.98 Mbit/s

95th percentile per-packet one-way delay: 79.051 ms

Loss rate: 0.65%

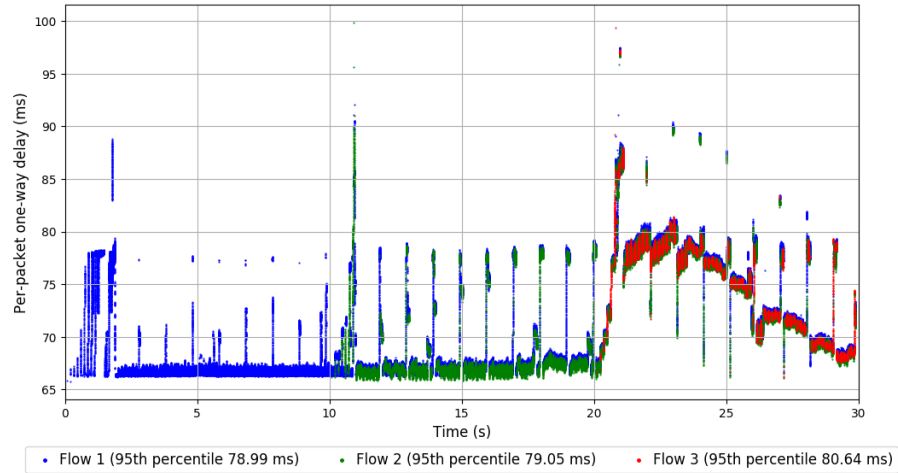
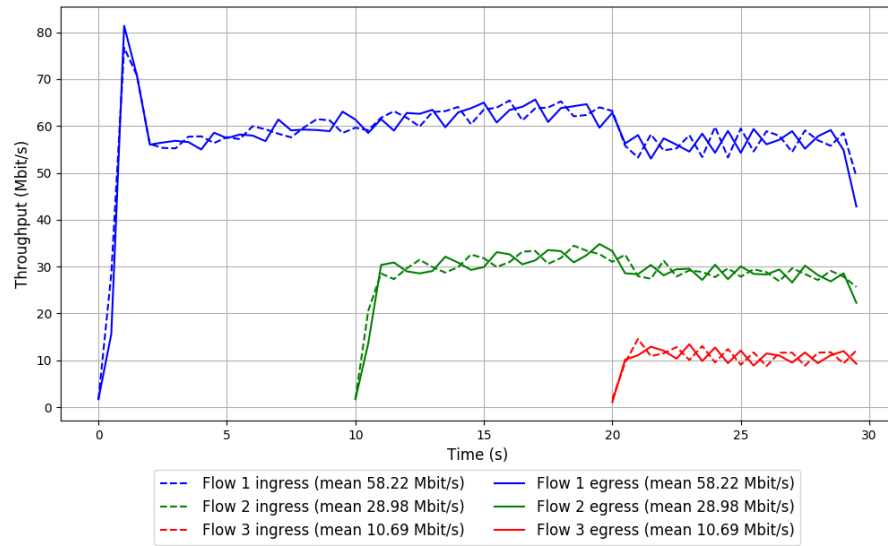
-- Flow 3:

Average throughput: 10.69 Mbit/s

95th percentile per-packet one-way delay: 80.640 ms

Loss rate: 1.48%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-04 19:12:23

End at: 2018-02-04 19:12:53

Local clock offset: -2.836 ms

Remote clock offset: 4.135 ms

Below is generated by plot.py at 2018-02-05 01:22:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.82 Mbit/s

95th percentile per-packet one-way delay: 78.322 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 45.28 Mbit/s

95th percentile per-packet one-way delay: 78.237 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 48.24 Mbit/s

95th percentile per-packet one-way delay: 78.573 ms

Loss rate: 0.66%

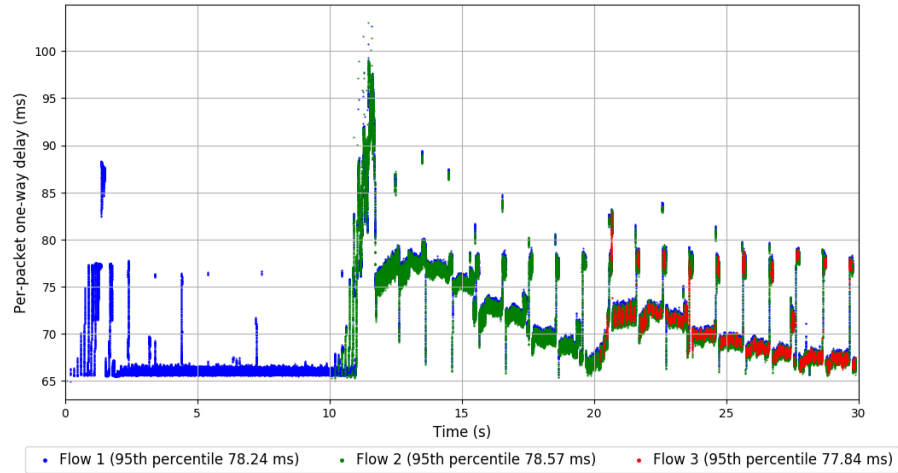
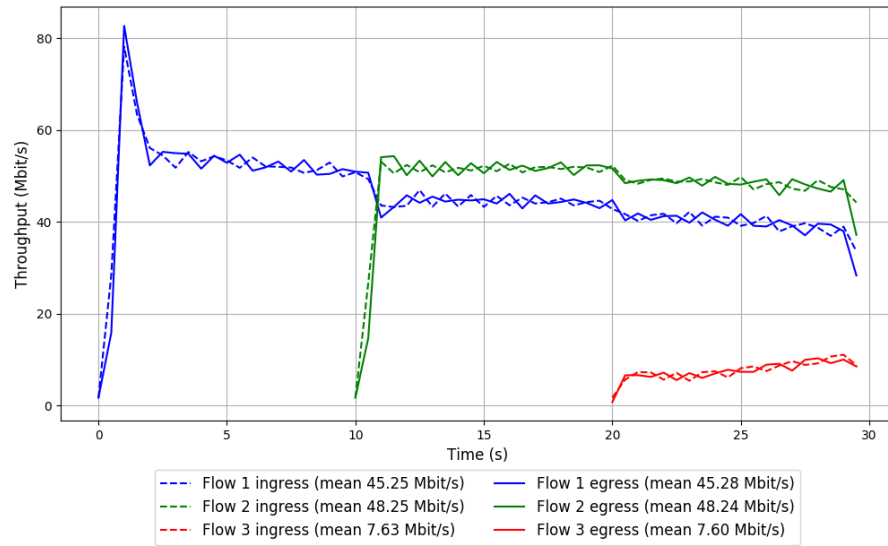
-- Flow 3:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 77.838 ms

Loss rate: 1.92%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-04 19:35:37

End at: 2018-02-04 19:36:07

Local clock offset: -2.769 ms

Remote clock offset: 4.714 ms

Below is generated by plot.py at 2018-02-05 01:22:27

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.25 Mbit/s

95th percentile per-packet one-way delay: 90.371 ms

Loss rate: 0.58%

-- Flow 1:

Average throughput: 50.80 Mbit/s

95th percentile per-packet one-way delay: 89.484 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 42.40 Mbit/s

95th percentile per-packet one-way delay: 91.051 ms

Loss rate: 0.71%

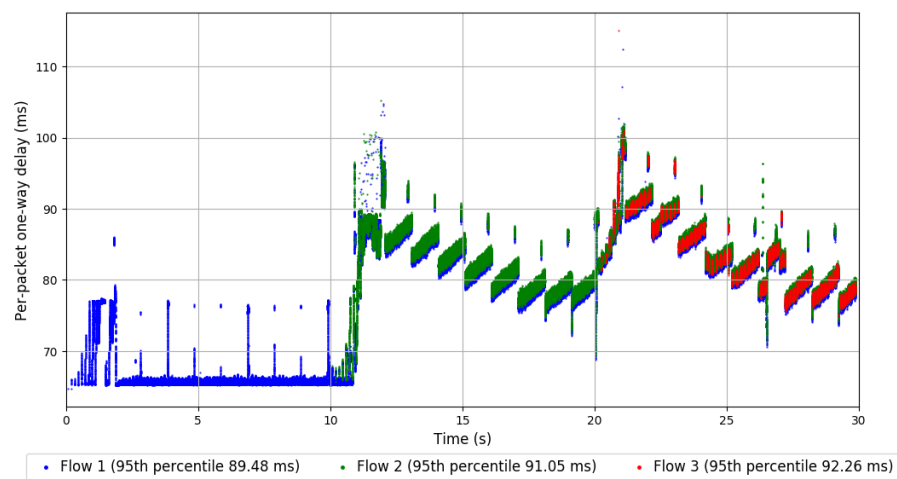
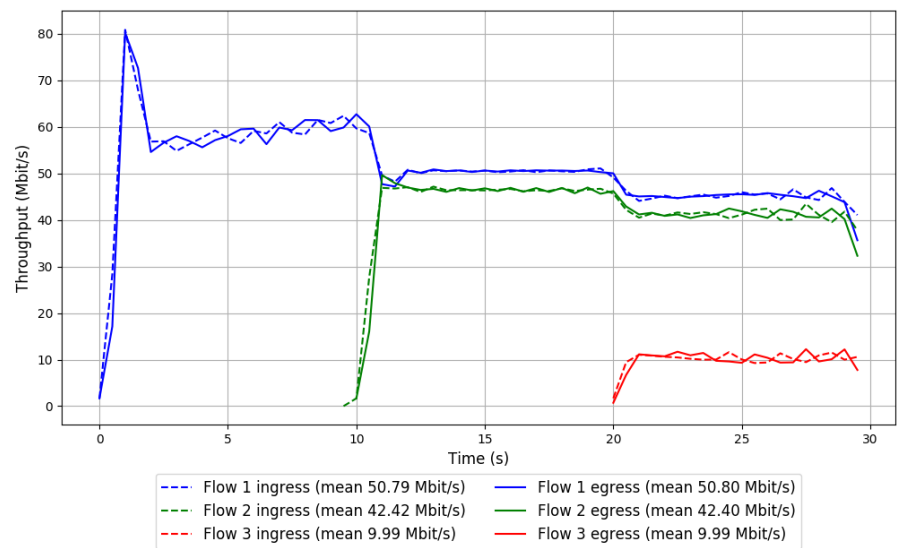
-- Flow 3:

Average throughput: 9.99 Mbit/s

95th percentile per-packet one-way delay: 92.257 ms

Loss rate: 1.73%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-04 19:58:53

End at: 2018-02-04 19:59:23

Local clock offset: -2.901 ms

Remote clock offset: 4.819 ms

Below is generated by plot.py at 2018-02-05 01:22:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.76 Mbit/s

95th percentile per-packet one-way delay: 90.943 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 47.78 Mbit/s

95th percentile per-packet one-way delay: 87.366 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 44.29 Mbit/s

95th percentile per-packet one-way delay: 93.404 ms

Loss rate: 0.65%

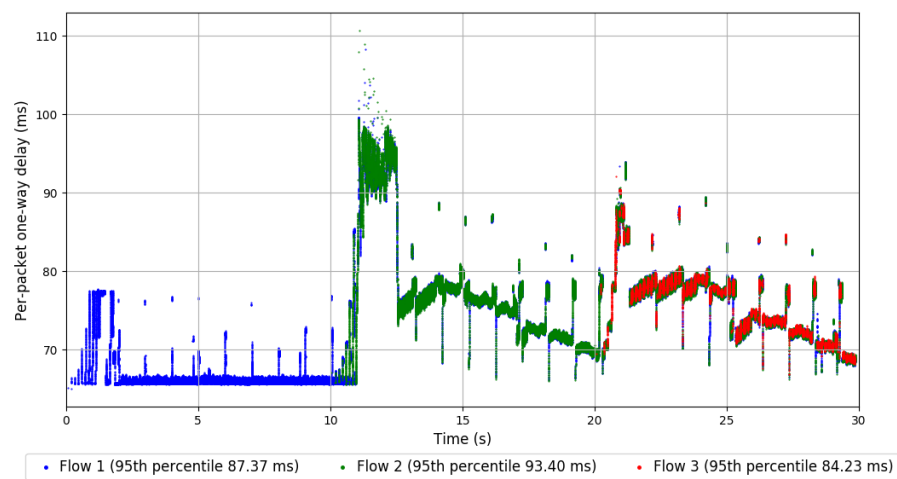
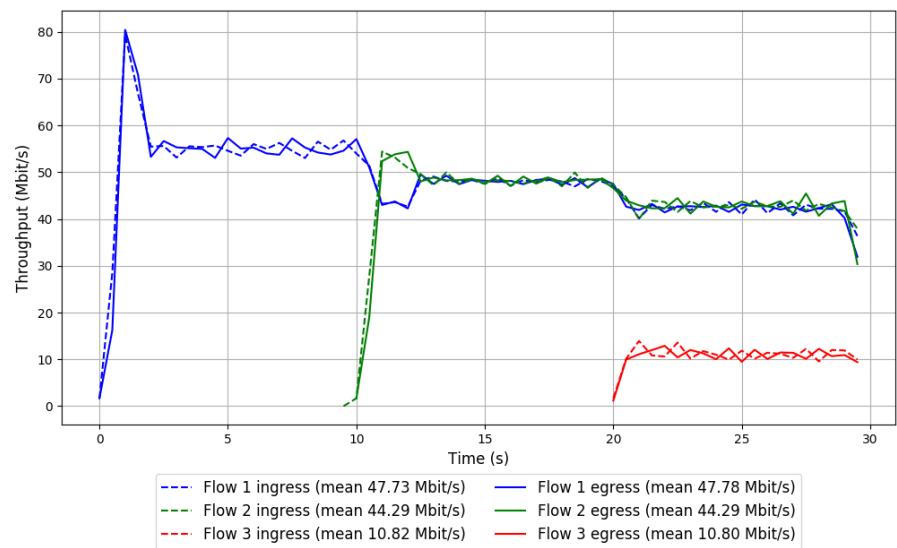
-- Flow 3:

Average throughput: 10.80 Mbit/s

95th percentile per-packet one-way delay: 84.233 ms

Loss rate: 1.50%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-04 20:22:22

End at: 2018-02-04 20:22:52

Local clock offset: -3.066 ms

Remote clock offset: 5.219 ms

Below is generated by plot.py at 2018-02-05 01:22:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.44 Mbit/s

95th percentile per-packet one-way delay: 87.871 ms

Loss rate: 0.55%

-- Flow 1:

Average throughput: 48.36 Mbit/s

95th percentile per-packet one-way delay: 86.522 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 44.70 Mbit/s

95th percentile per-packet one-way delay: 90.209 ms

Loss rate: 0.69%

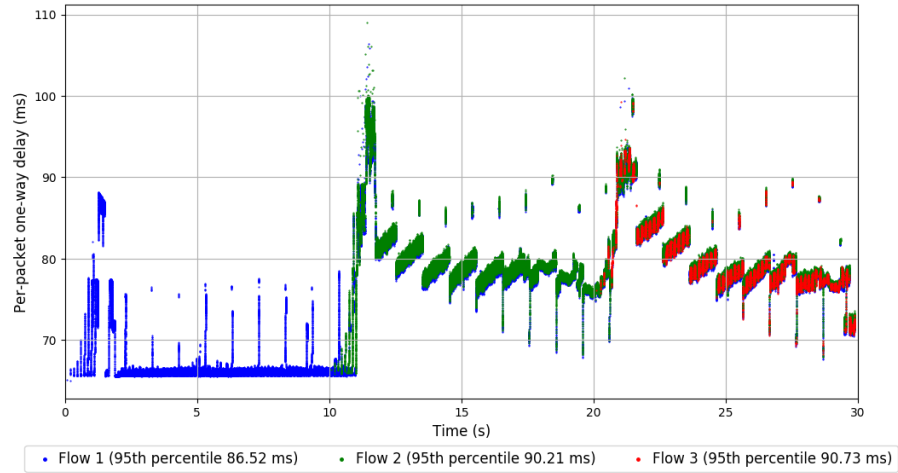
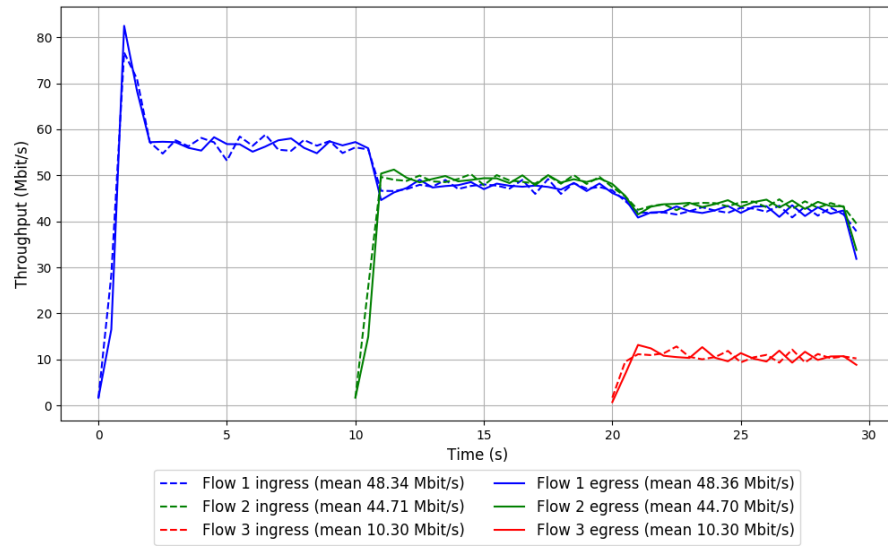
-- Flow 3:

Average throughput: 10.30 Mbit/s

95th percentile per-packet one-way delay: 90.732 ms

Loss rate: 1.43%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-04 20:45:43

End at: 2018-02-04 20:46:13

Local clock offset: -2.722 ms

Remote clock offset: 5.148 ms

Below is generated by plot.py at 2018-02-05 01:22:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.49 Mbit/s

95th percentile per-packet one-way delay: 101.611 ms

Loss rate: 0.65%

-- Flow 1:

Average throughput: 45.09 Mbit/s

95th percentile per-packet one-way delay: 100.500 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 45.31 Mbit/s

95th percentile per-packet one-way delay: 101.892 ms

Loss rate: 0.69%

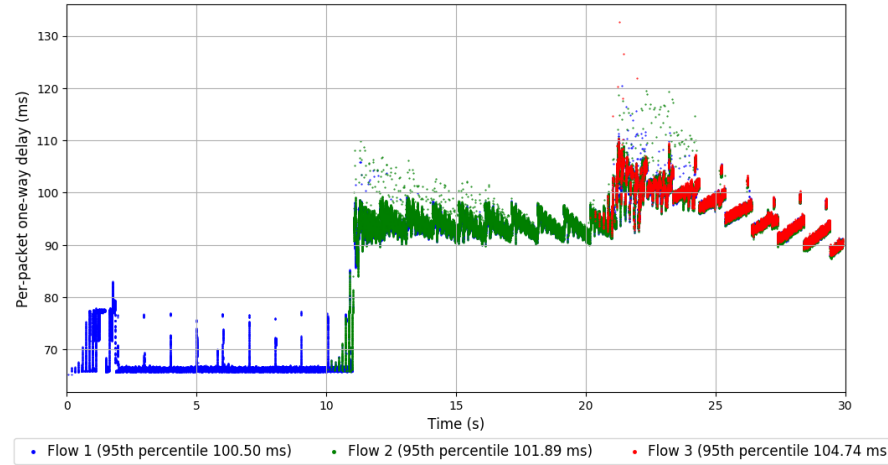
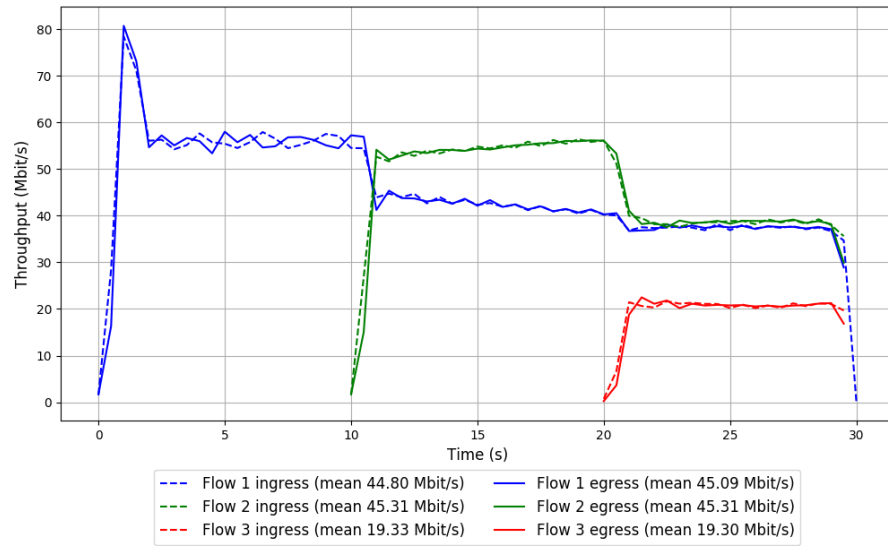
-- Flow 3:

Average throughput: 19.30 Mbit/s

95th percentile per-packet one-way delay: 104.739 ms

Loss rate: 1.85%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-04 21:09:12

End at: 2018-02-04 21:09:42

Local clock offset: -2.36 ms

Remote clock offset: 5.032 ms

Below is generated by plot.py at 2018-02-05 01:22:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.15 Mbit/s

95th percentile per-packet one-way delay: 90.027 ms

Loss rate: 0.57%

-- Flow 1:

Average throughput: 50.91 Mbit/s

95th percentile per-packet one-way delay: 88.921 ms

Loss rate: 0.44%

-- Flow 2:

Average throughput: 42.21 Mbit/s

95th percentile per-packet one-way delay: 90.438 ms

Loss rate: 0.71%

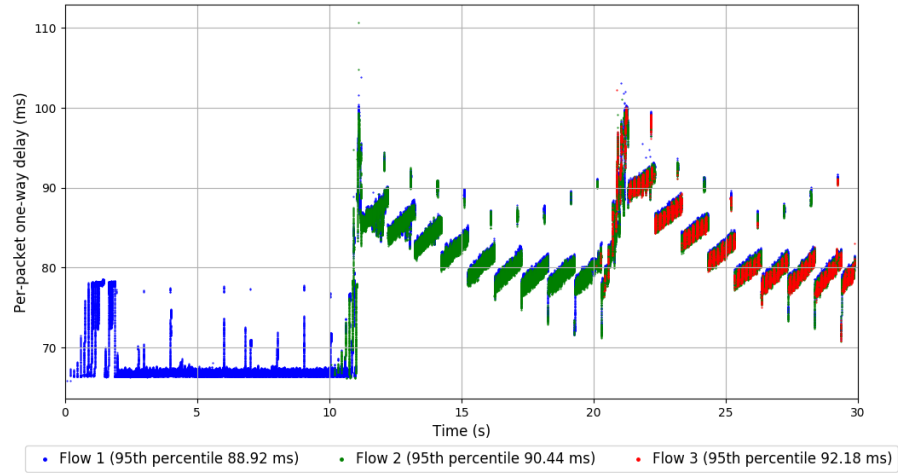
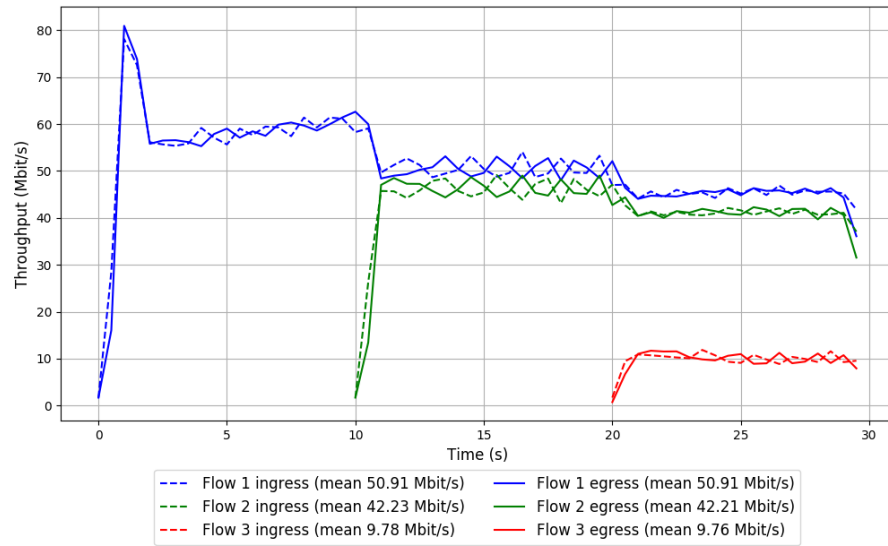
-- Flow 3:

Average throughput: 9.76 Mbit/s

95th percentile per-packet one-way delay: 92.182 ms

Loss rate: 1.60%

Run 10: Report of TCP Vegas — Data Link

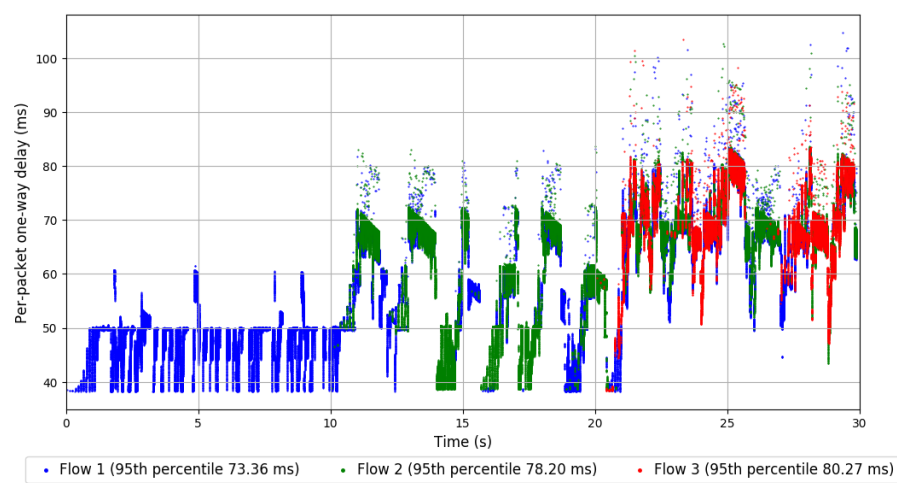
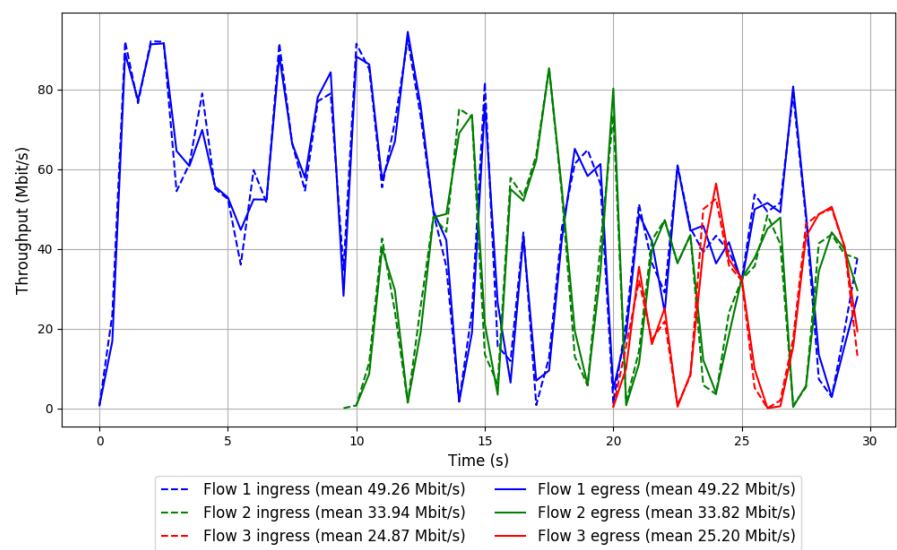


Run 1: Statistics of Verus

Start at: 2018-02-04 17:24:34
End at: 2018-02-04 17:25:04
Local clock offset: -0.53 ms
Remote clock offset: -2.755 ms

Below is generated by plot.py at 2018-02-05 01:22:56
Datalink statistics
-- Total of 3 flows:
Average throughput: 79.91 Mbit/s
95th percentile per-packet one-way delay: 77.508 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 49.22 Mbit/s
95th percentile per-packet one-way delay: 73.359 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 33.82 Mbit/s
95th percentile per-packet one-way delay: 78.197 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 25.20 Mbit/s
95th percentile per-packet one-way delay: 80.273 ms
Loss rate: 0.01%

Run 1: Report of Verus — Data Link

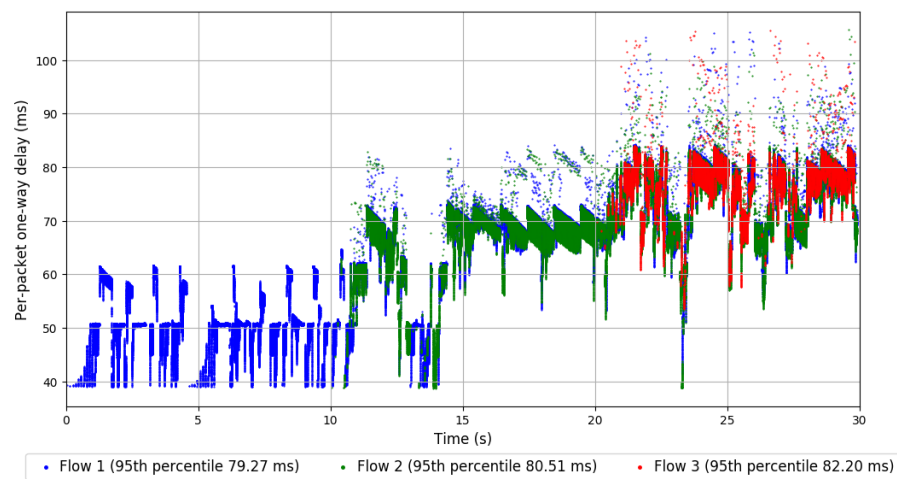
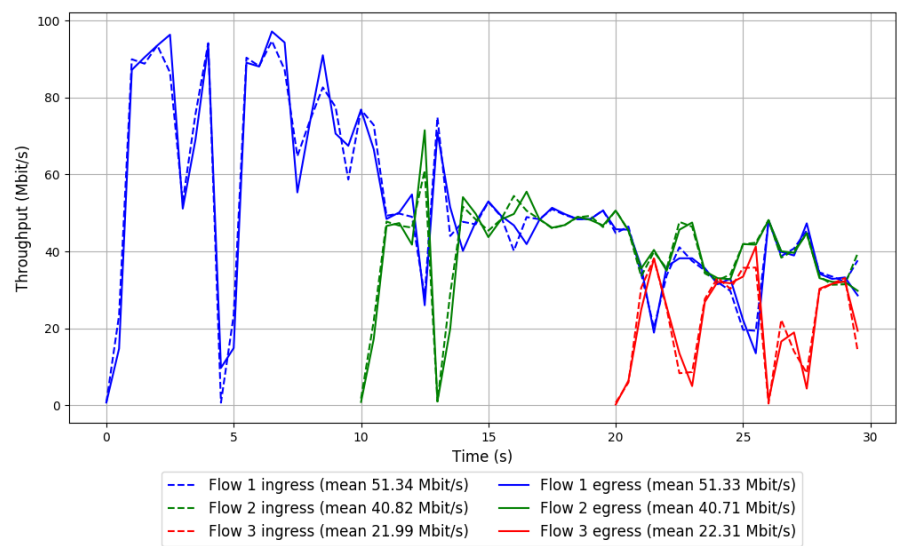


Run 2: Statistics of Verus

Start at: 2018-02-04 17:47:22
End at: 2018-02-04 17:47:52
Local clock offset: -0.405 ms
Remote clock offset: -1.073 ms

Below is generated by plot.py at 2018-02-05 01:23:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 85.67 Mbit/s
95th percentile per-packet one-way delay: 80.402 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 51.33 Mbit/s
95th percentile per-packet one-way delay: 79.274 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 40.71 Mbit/s
95th percentile per-packet one-way delay: 80.508 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 22.31 Mbit/s
95th percentile per-packet one-way delay: 82.199 ms
Loss rate: 0.01%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-04 18:10:08

End at: 2018-02-04 18:10:38

Local clock offset: -0.95 ms

Remote clock offset: 0.545 ms

Below is generated by plot.py at 2018-02-05 01:23:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 84.73 Mbit/s

95th percentile per-packet one-way delay: 79.167 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 49.97 Mbit/s

95th percentile per-packet one-way delay: 77.424 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 39.88 Mbit/s

95th percentile per-packet one-way delay: 79.430 ms

Loss rate: 0.59%

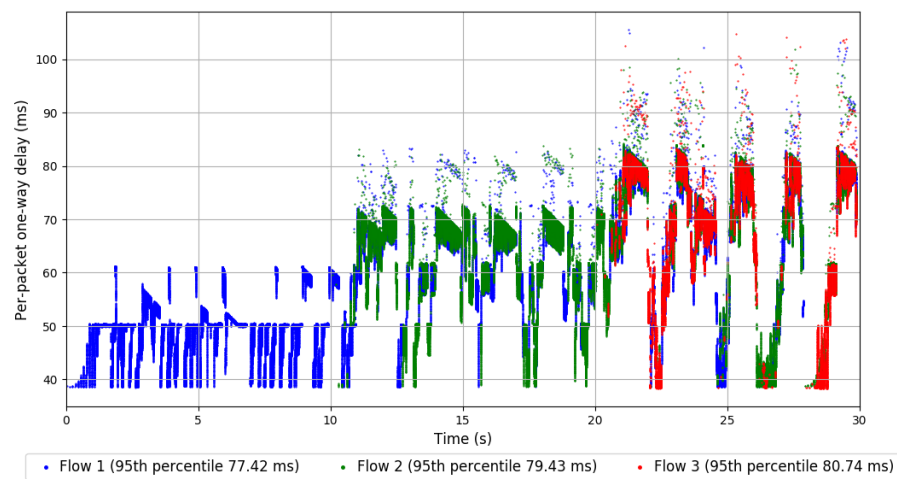
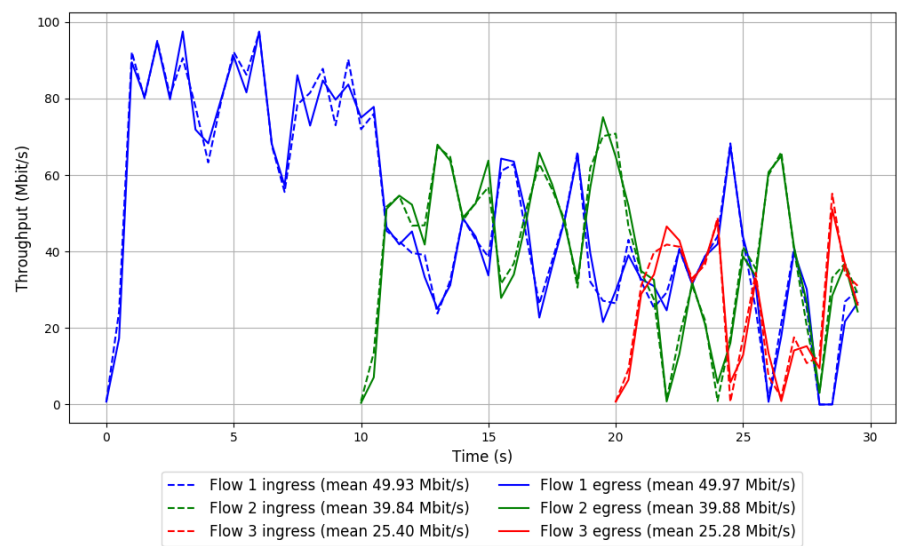
-- Flow 3:

Average throughput: 25.28 Mbit/s

95th percentile per-packet one-way delay: 80.737 ms

Loss rate: 1.89%

Run 3: Report of Verus — Data Link

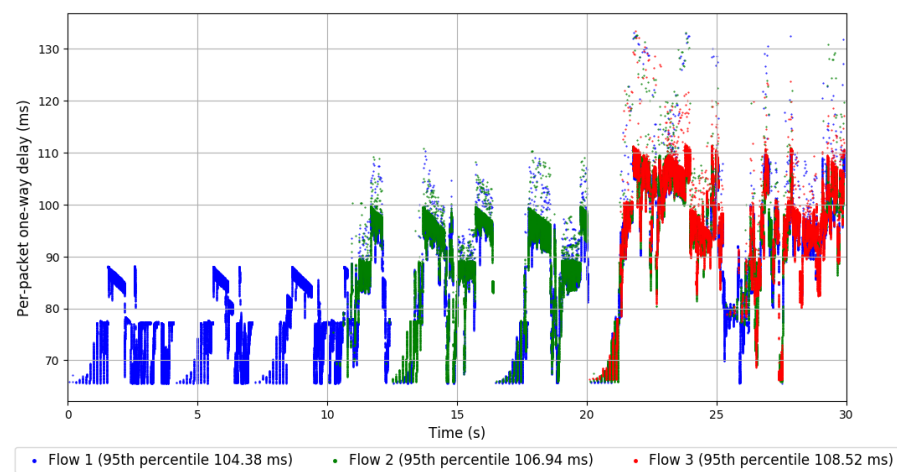
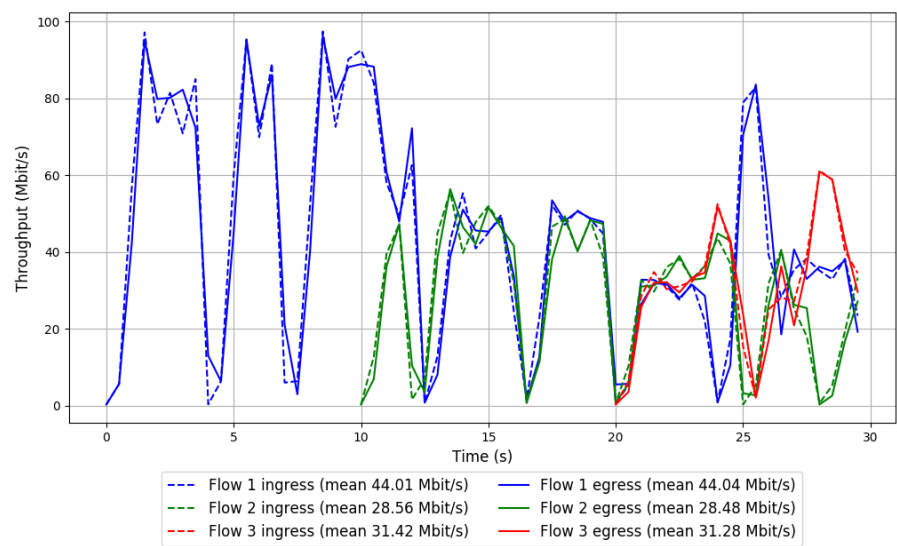


Run 4: Statistics of Verus

Start at: 2018-02-04 18:33:39
End at: 2018-02-04 18:34:09
Local clock offset: -1.366 ms
Remote clock offset: 2.064 ms

Below is generated by plot.py at 2018-02-05 01:23:48
Datalink statistics
-- Total of 3 flows:
Average throughput: 73.26 Mbit/s
95th percentile per-packet one-way delay: 106.503 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 44.04 Mbit/s
95th percentile per-packet one-way delay: 104.380 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 28.48 Mbit/s
95th percentile per-packet one-way delay: 106.936 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 31.28 Mbit/s
95th percentile per-packet one-way delay: 108.519 ms
Loss rate: 1.89%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-04 18:56:56

End at: 2018-02-04 18:57:26

Local clock offset: -1.968 ms

Remote clock offset: 3.401 ms

Below is generated by plot.py at 2018-02-05 01:24:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.71 Mbit/s

95th percentile per-packet one-way delay: 106.094 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 52.78 Mbit/s

95th percentile per-packet one-way delay: 102.714 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 28.33 Mbit/s

95th percentile per-packet one-way delay: 106.924 ms

Loss rate: 1.12%

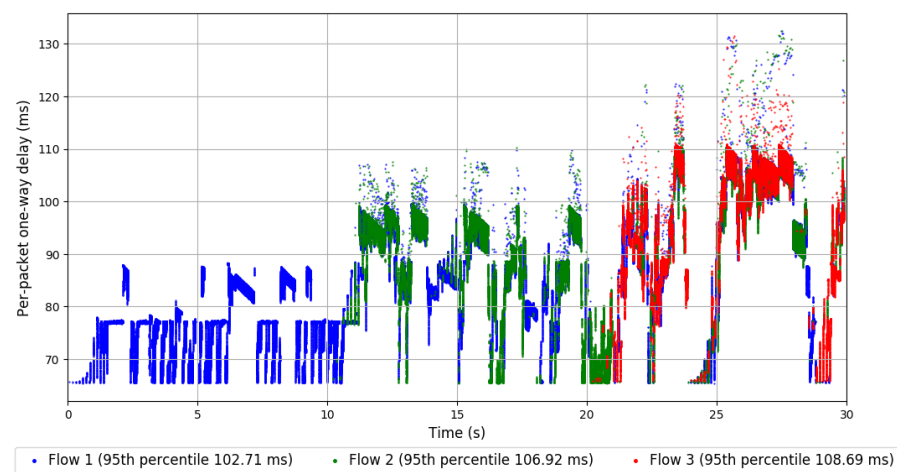
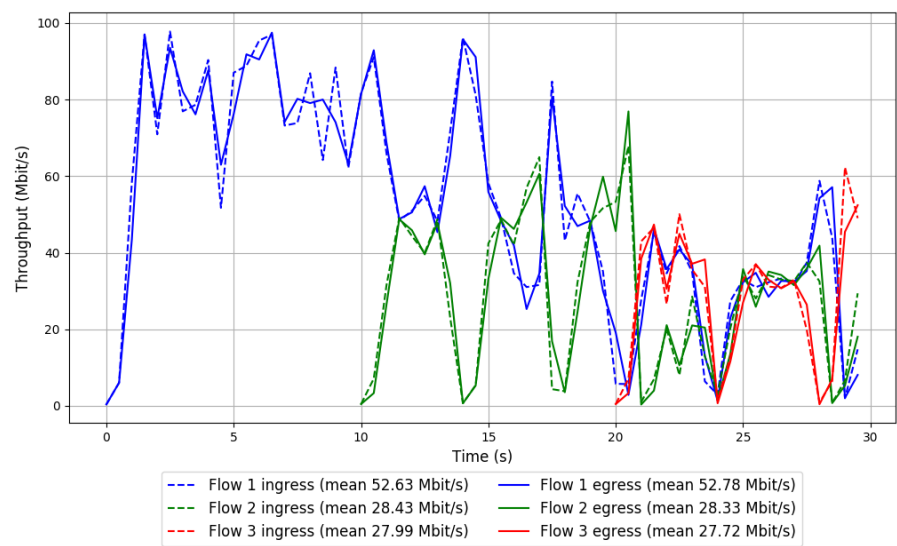
-- Flow 3:

Average throughput: 27.72 Mbit/s

95th percentile per-packet one-way delay: 108.695 ms

Loss rate: 2.42%

Run 5: Report of Verus — Data Link

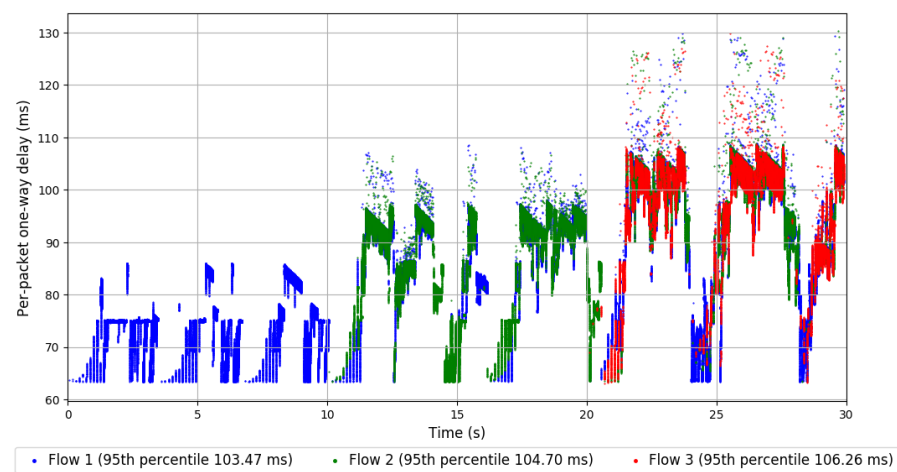
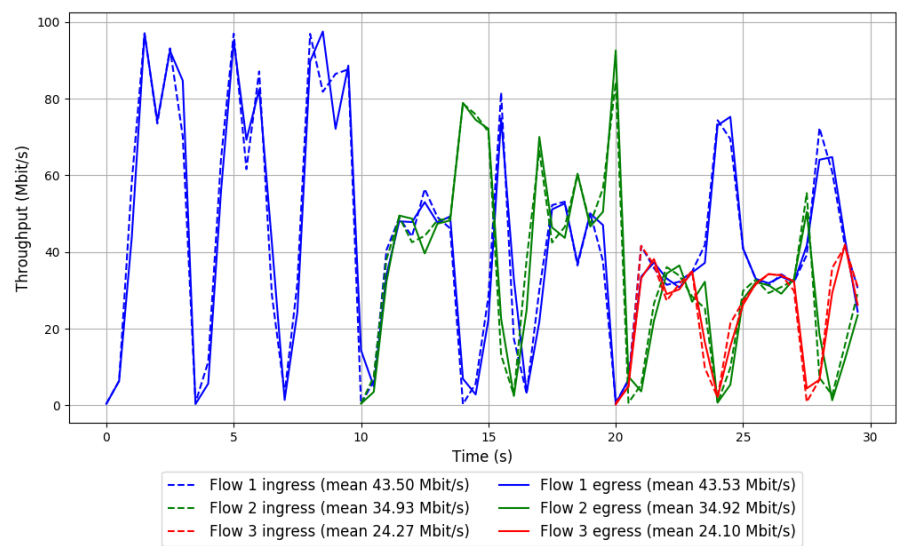


Run 6: Statistics of Verus

Start at: 2018-02-04 19:20:10
End at: 2018-02-04 19:20:40
Local clock offset: -5.061 ms
Remote clock offset: 4.458 ms

Below is generated by plot.py at 2018-02-05 01:24:00
Datalink statistics
-- Total of 3 flows:
Average throughput: 74.64 Mbit/s
95th percentile per-packet one-way delay: 104.680 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 43.53 Mbit/s
95th percentile per-packet one-way delay: 103.474 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 34.92 Mbit/s
95th percentile per-packet one-way delay: 104.696 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 24.10 Mbit/s
95th percentile per-packet one-way delay: 106.257 ms
Loss rate: 2.36%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-04 19:43:26

End at: 2018-02-04 19:43:56

Local clock offset: -2.778 ms

Remote clock offset: 4.744 ms

Below is generated by plot.py at 2018-02-05 01:24:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.15 Mbit/s

95th percentile per-packet one-way delay: 103.737 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 45.11 Mbit/s

95th percentile per-packet one-way delay: 98.831 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 39.26 Mbit/s

95th percentile per-packet one-way delay: 104.299 ms

Loss rate: 0.99%

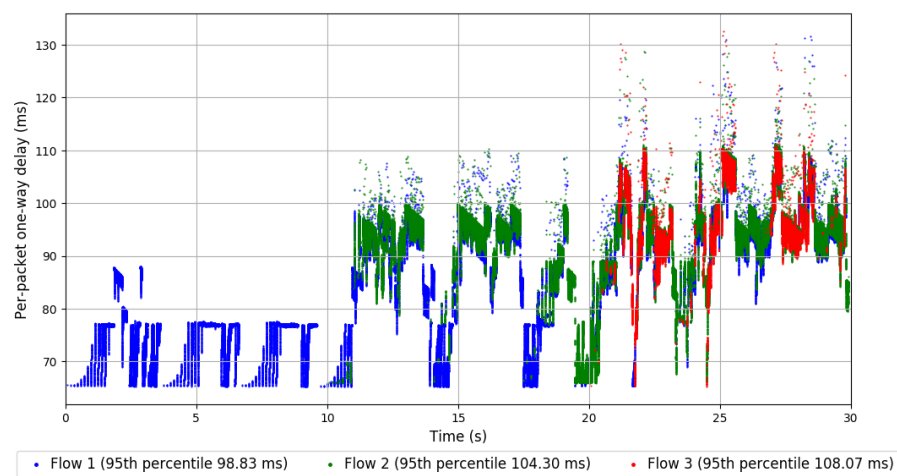
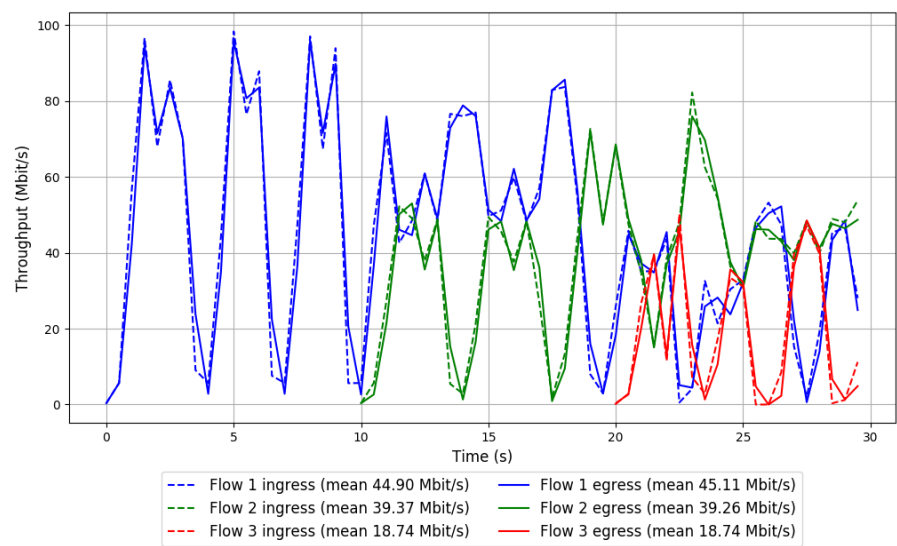
-- Flow 3:

Average throughput: 18.74 Mbit/s

95th percentile per-packet one-way delay: 108.071 ms

Loss rate: 1.73%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-04 20:06:42

End at: 2018-02-04 20:07:12

Local clock offset: -2.643 ms

Remote clock offset: 6.801 ms

Below is generated by plot.py at 2018-02-05 01:24:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.87 Mbit/s

95th percentile per-packet one-way delay: 105.521 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 48.14 Mbit/s

95th percentile per-packet one-way delay: 103.665 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 34.67 Mbit/s

95th percentile per-packet one-way delay: 105.977 ms

Loss rate: 1.90%

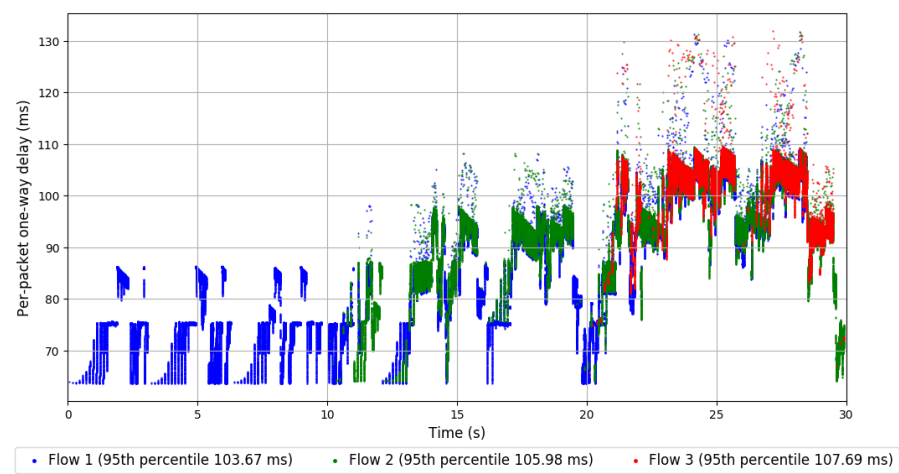
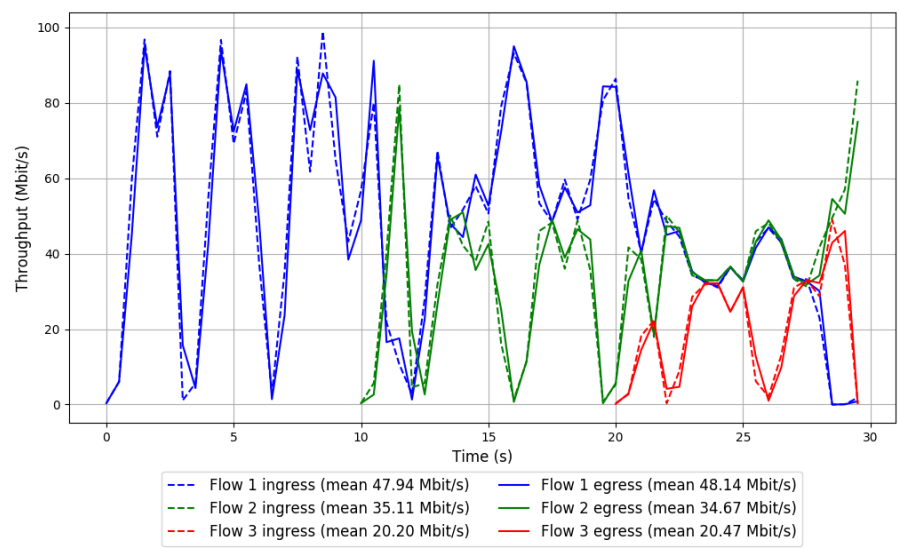
-- Flow 3:

Average throughput: 20.47 Mbit/s

95th percentile per-packet one-way delay: 107.692 ms

Loss rate: 0.03%

Run 8: Report of Verus — Data Link

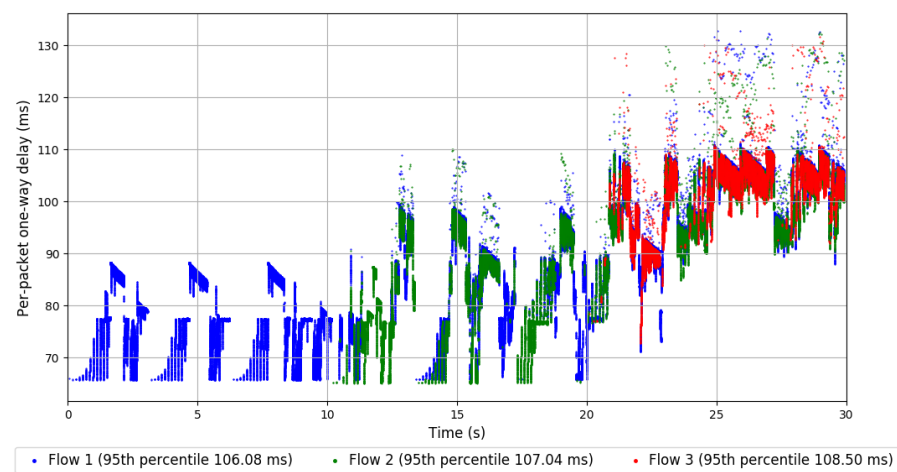
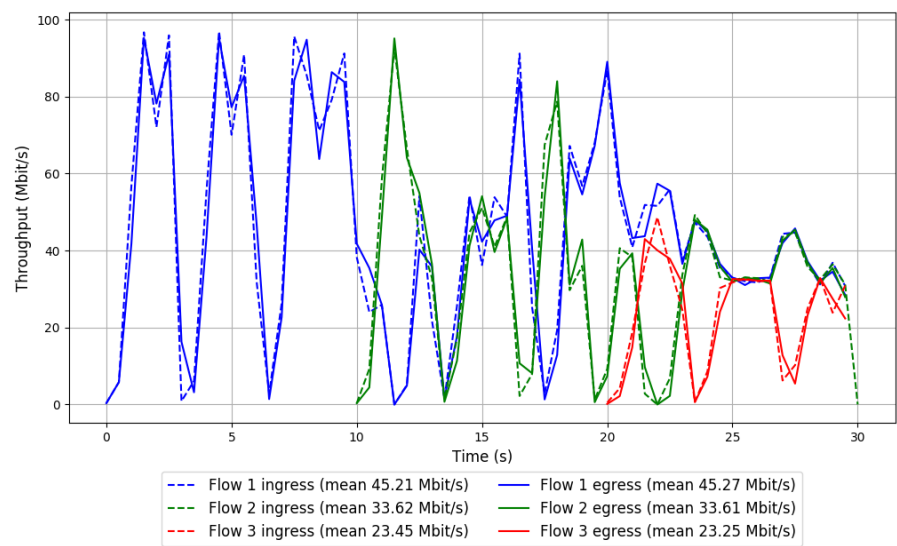


Run 9: Statistics of Verus

Start at: 2018-02-04 20:30:15
End at: 2018-02-04 20:30:45
Local clock offset: -3.169 ms
Remote clock offset: 5.194 ms

Below is generated by plot.py at 2018-02-05 01:24:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 75.21 Mbit/s
95th percentile per-packet one-way delay: 106.976 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 45.27 Mbit/s
95th percentile per-packet one-way delay: 106.080 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 33.61 Mbit/s
95th percentile per-packet one-way delay: 107.037 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 23.25 Mbit/s
95th percentile per-packet one-way delay: 108.505 ms
Loss rate: 2.47%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-02-04 20:53:32

End at: 2018-02-04 20:54:02

Local clock offset: -2.493 ms

Remote clock offset: 5.075 ms

Below is generated by plot.py at 2018-02-05 01:24:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.70 Mbit/s

95th percentile per-packet one-way delay: 107.092 ms

Loss rate: 0.73%

-- Flow 1:

Average throughput: 41.36 Mbit/s

95th percentile per-packet one-way delay: 105.424 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 42.79 Mbit/s

95th percentile per-packet one-way delay: 107.078 ms

Loss rate: 1.52%

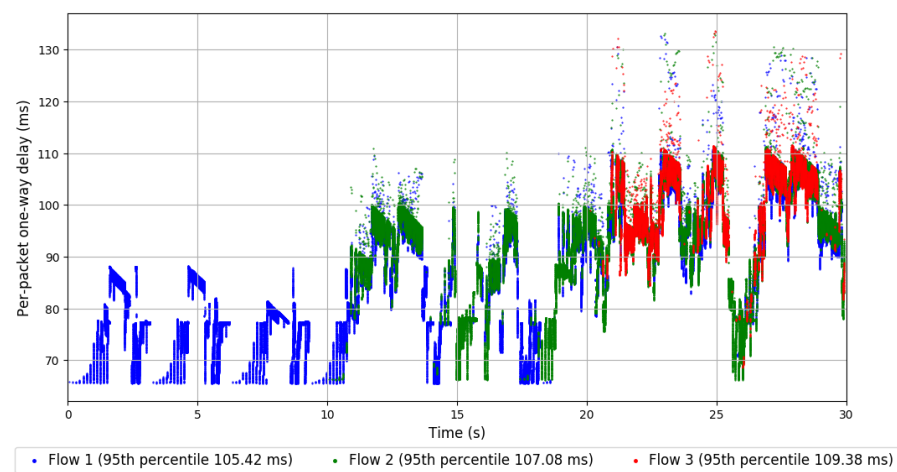
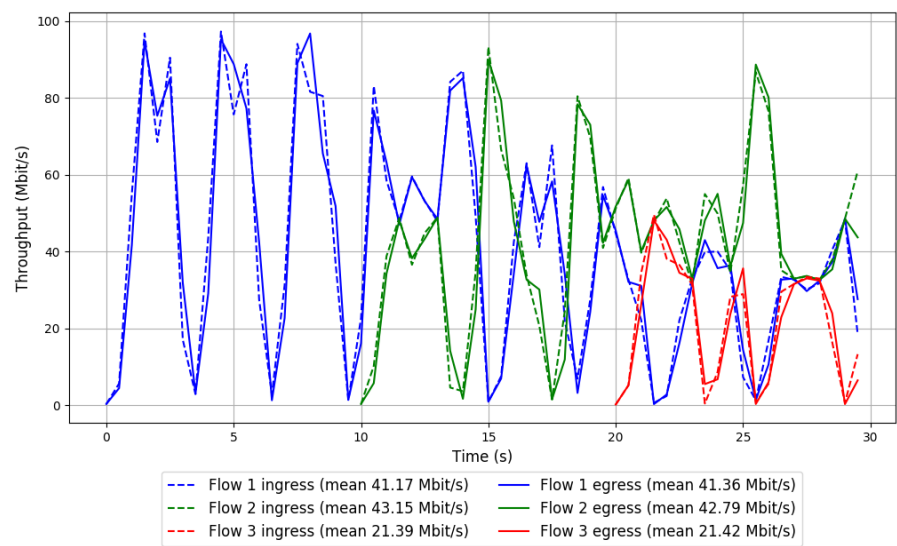
-- Flow 3:

Average throughput: 21.42 Mbit/s

95th percentile per-packet one-way delay: 109.379 ms

Loss rate: 1.69%

Run 10: Report of Verus — Data Link

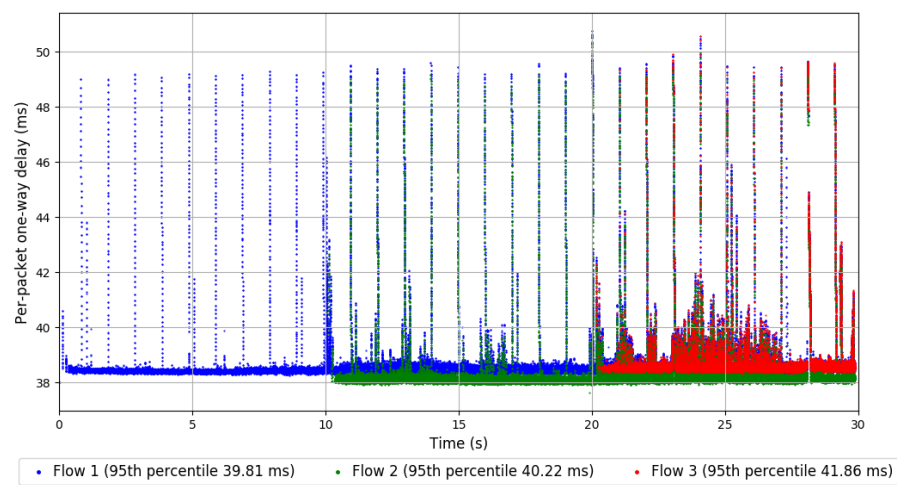
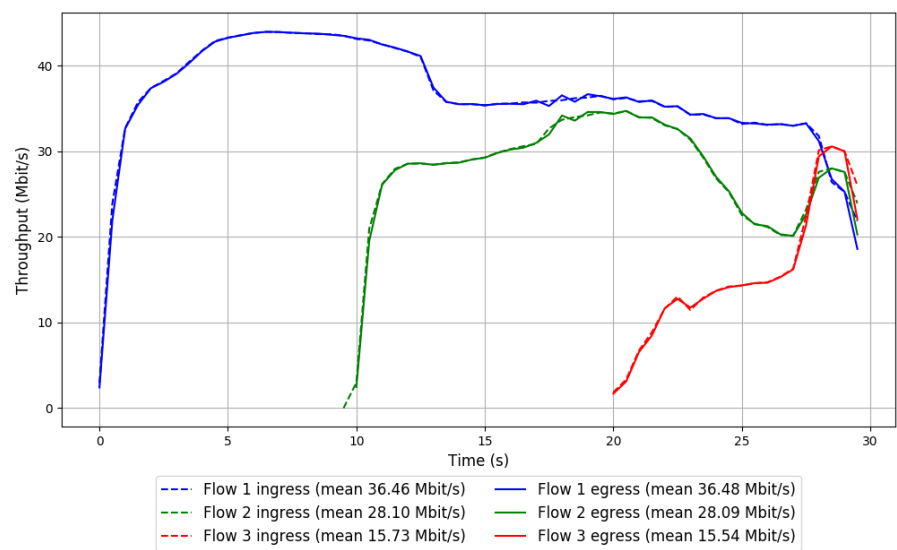


Run 1: Statistics of Copa

Start at: 2018-02-04 17:42:15
End at: 2018-02-04 17:42:45
Local clock offset: -1.003 ms
Remote clock offset: -1.494 ms

Below is generated by plot.py at 2018-02-05 01:25:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 60.28 Mbit/s
95th percentile per-packet one-way delay: 40.150 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 36.48 Mbit/s
95th percentile per-packet one-way delay: 39.806 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 28.09 Mbit/s
95th percentile per-packet one-way delay: 40.218 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 15.54 Mbit/s
95th percentile per-packet one-way delay: 41.863 ms
Loss rate: 2.26%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-04 18:05:01

End at: 2018-02-04 18:05:31

Local clock offset: -3.631 ms

Remote clock offset: 0.284 ms

Below is generated by plot.py at 2018-02-05 01:25:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 63.77 Mbit/s

95th percentile per-packet one-way delay: 37.549 ms

Loss rate: 0.37%

-- Flow 1:

Average throughput: 39.35 Mbit/s

95th percentile per-packet one-way delay: 37.225 ms

Loss rate: 0.21%

-- Flow 2:

Average throughput: 26.32 Mbit/s

95th percentile per-packet one-way delay: 37.682 ms

Loss rate: 0.41%

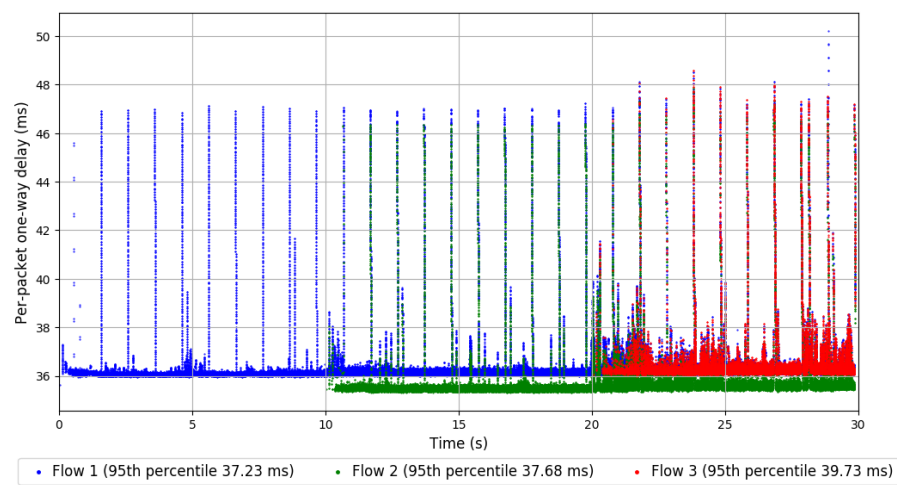
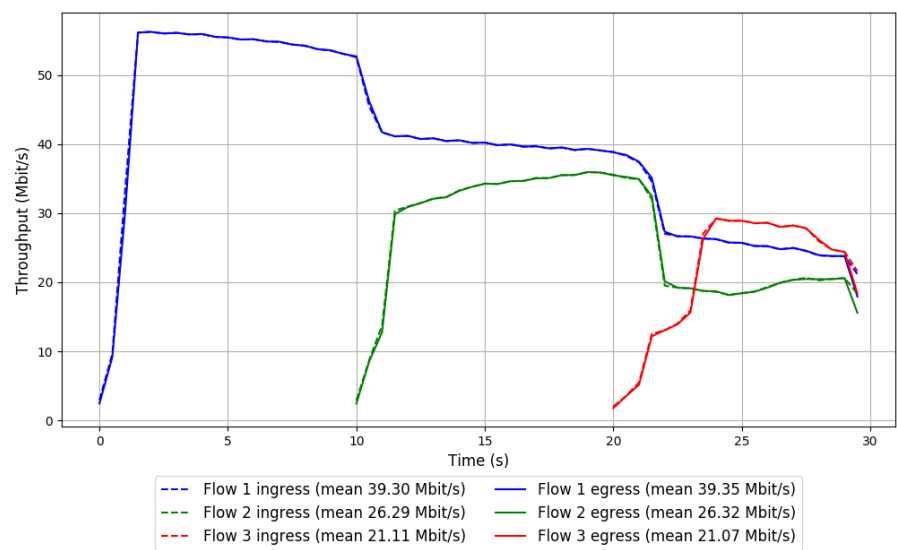
-- Flow 3:

Average throughput: 21.07 Mbit/s

95th percentile per-packet one-way delay: 39.730 ms

Loss rate: 1.20%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-02-04 18:28:23

End at: 2018-02-04 18:28:53

Local clock offset: -1.221 ms

Remote clock offset: 1.738 ms

Below is generated by plot.py at 2018-02-05 01:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.02 Mbit/s

95th percentile per-packet one-way delay: 67.322 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 37.93 Mbit/s

95th percentile per-packet one-way delay: 67.064 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 27.52 Mbit/s

95th percentile per-packet one-way delay: 67.682 ms

Loss rate: 0.69%

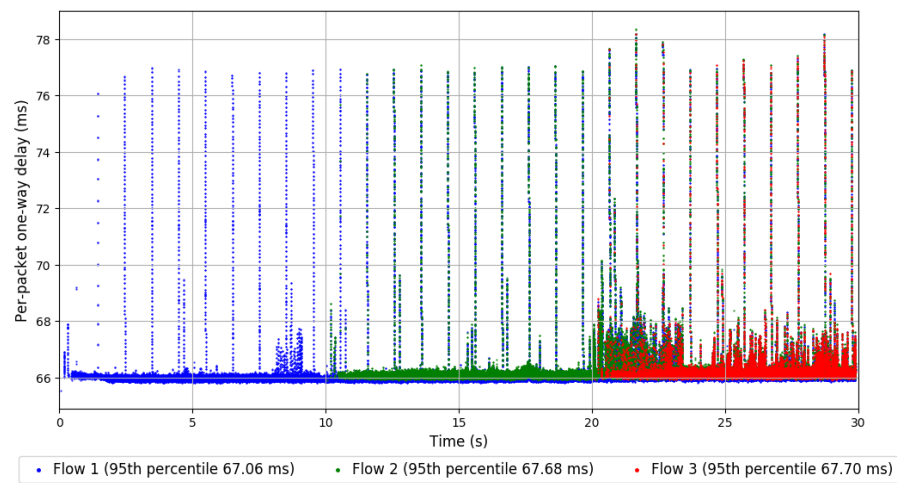
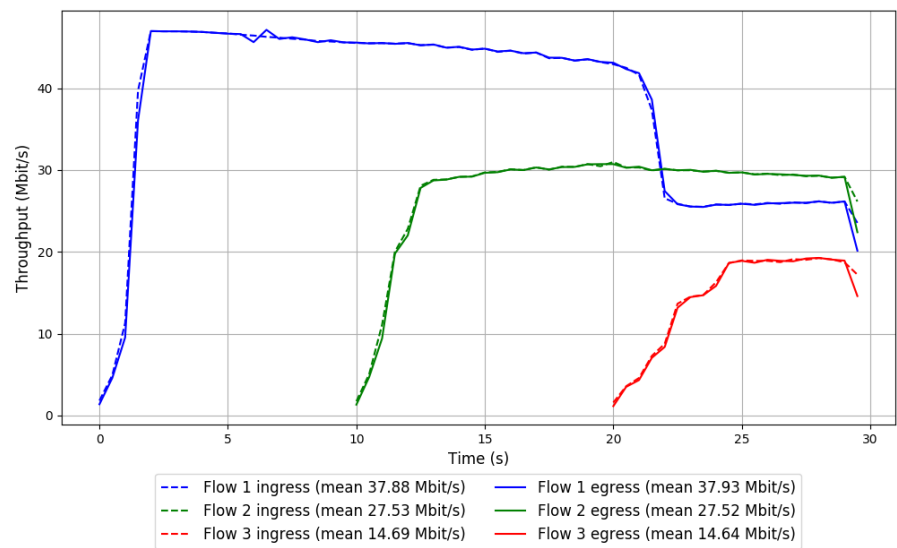
-- Flow 3:

Average throughput: 14.64 Mbit/s

95th percentile per-packet one-way delay: 67.705 ms

Loss rate: 1.69%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-04 18:51:41

End at: 2018-02-04 18:52:11

Local clock offset: -2.02 ms

Remote clock offset: 3.11 ms

Below is generated by plot.py at 2018-02-05 01:25:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.47 Mbit/s

95th percentile per-packet one-way delay: 66.822 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 33.31 Mbit/s

95th percentile per-packet one-way delay: 66.494 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 30.37 Mbit/s

95th percentile per-packet one-way delay: 67.270 ms

Loss rate: 0.67%

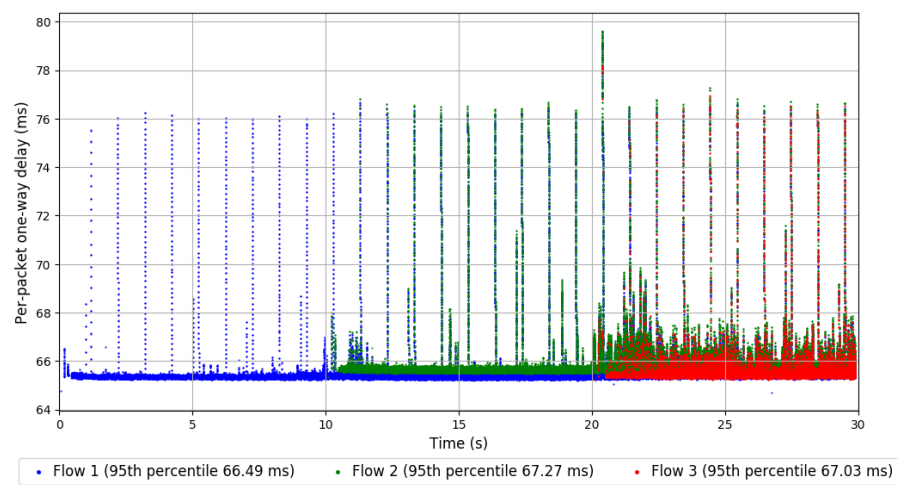
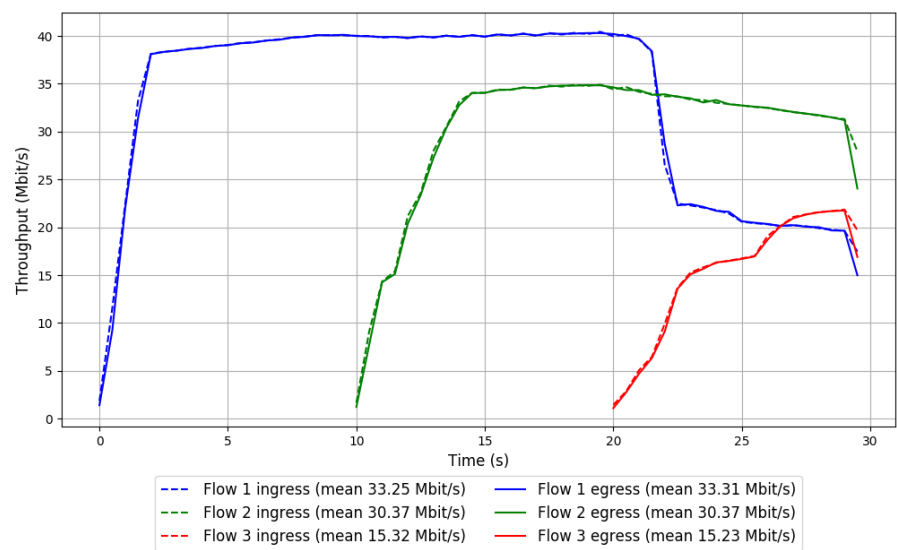
-- Flow 3:

Average throughput: 15.23 Mbit/s

95th percentile per-packet one-way delay: 67.035 ms

Loss rate: 1.90%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-04 19:14:57

End at: 2018-02-04 19:15:27

Local clock offset: -4.812 ms

Remote clock offset: 4.239 ms

Below is generated by plot.py at 2018-02-05 01:25:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 62.43 Mbit/s

95th percentile per-packet one-way delay: 65.646 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 35.40 Mbit/s

95th percentile per-packet one-way delay: 64.947 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 33.02 Mbit/s

95th percentile per-packet one-way delay: 66.603 ms

Loss rate: 0.67%

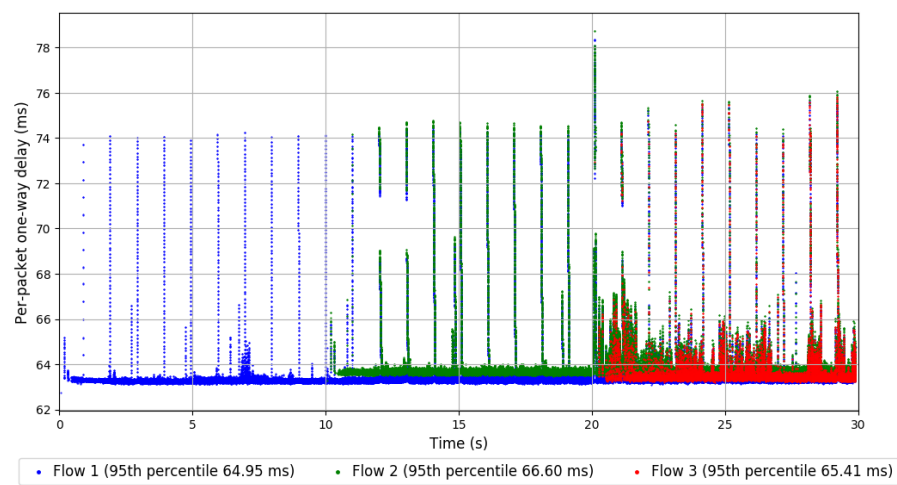
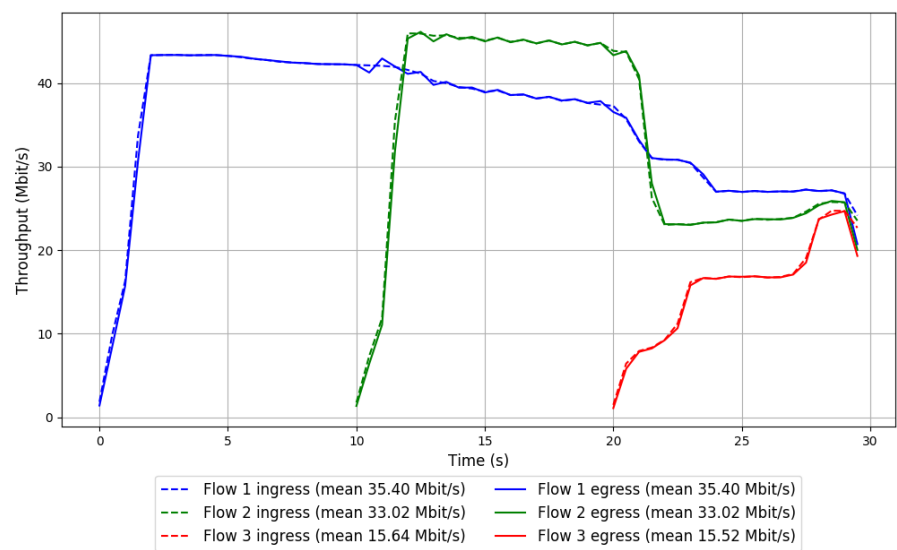
-- Flow 3:

Average throughput: 15.52 Mbit/s

95th percentile per-packet one-way delay: 65.409 ms

Loss rate: 2.13%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-04 19:38:11

End at: 2018-02-04 19:38:41

Local clock offset: -2.265 ms

Remote clock offset: 4.73 ms

Below is generated by plot.py at 2018-02-05 01:25:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 54.50 Mbit/s

95th percentile per-packet one-way delay: 67.450 ms

Loss rate: 0.59%

-- Flow 1:

Average throughput: 30.08 Mbit/s

95th percentile per-packet one-way delay: 66.793 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 30.93 Mbit/s

95th percentile per-packet one-way delay: 67.958 ms

Loss rate: 0.62%

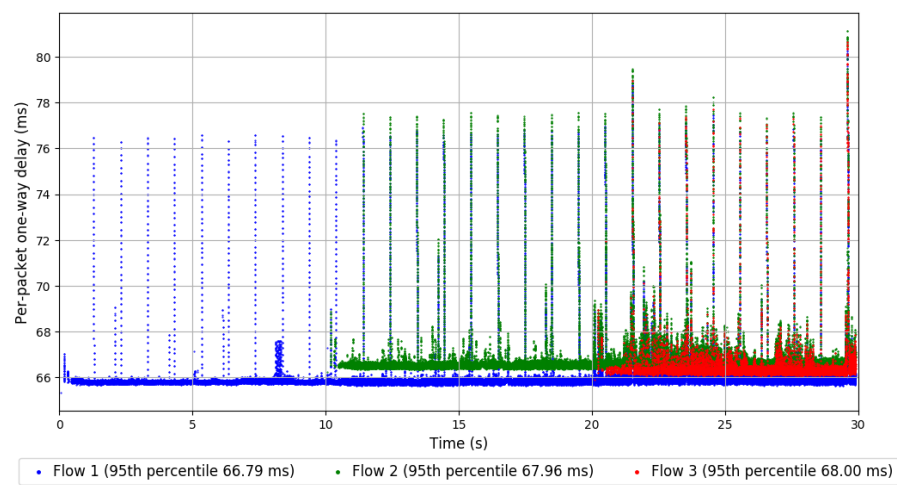
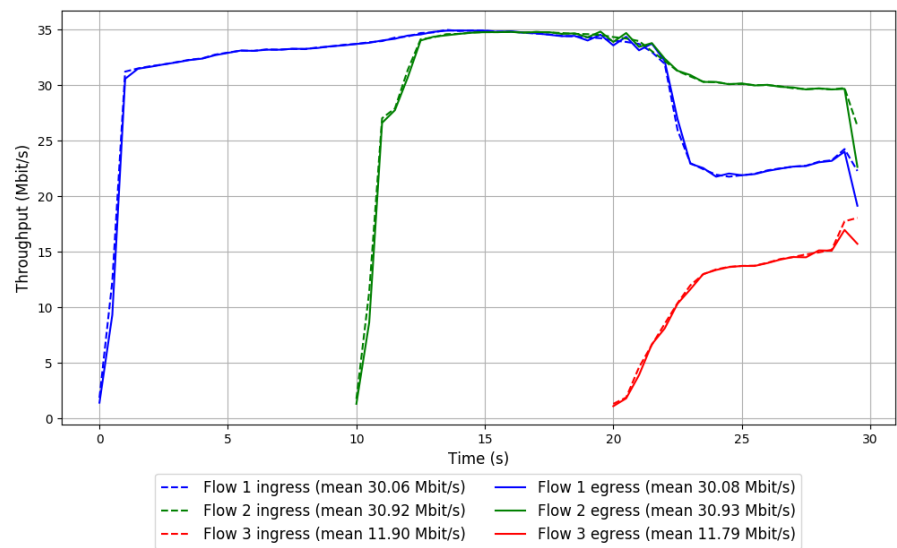
-- Flow 3:

Average throughput: 11.79 Mbit/s

95th percentile per-packet one-way delay: 68.002 ms

Loss rate: 2.20%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-04 20:01:27

End at: 2018-02-04 20:01:57

Local clock offset: -2.437 ms

Remote clock offset: 4.852 ms

Below is generated by plot.py at 2018-02-05 01:25:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 53.95 Mbit/s

95th percentile per-packet one-way delay: 67.510 ms

Loss rate: 0.64%

-- Flow 1:

Average throughput: 29.55 Mbit/s

95th percentile per-packet one-way delay: 67.067 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 27.27 Mbit/s

95th percentile per-packet one-way delay: 67.801 ms

Loss rate: 0.73%

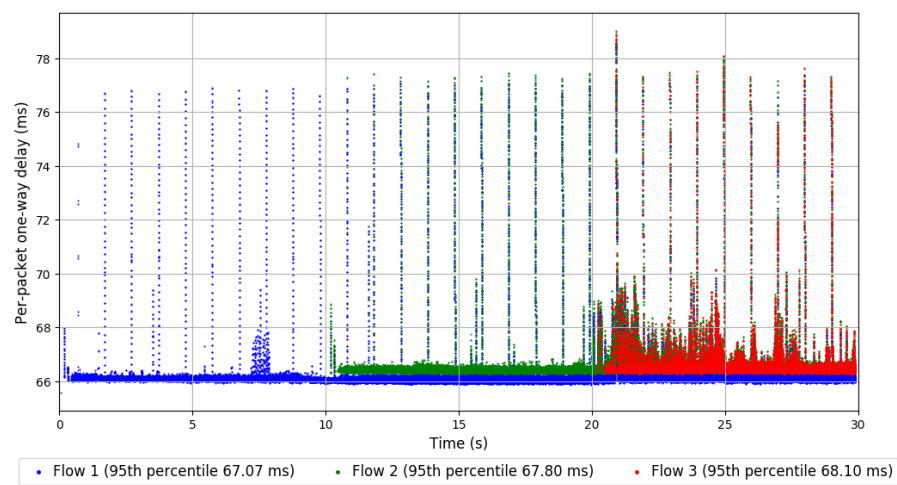
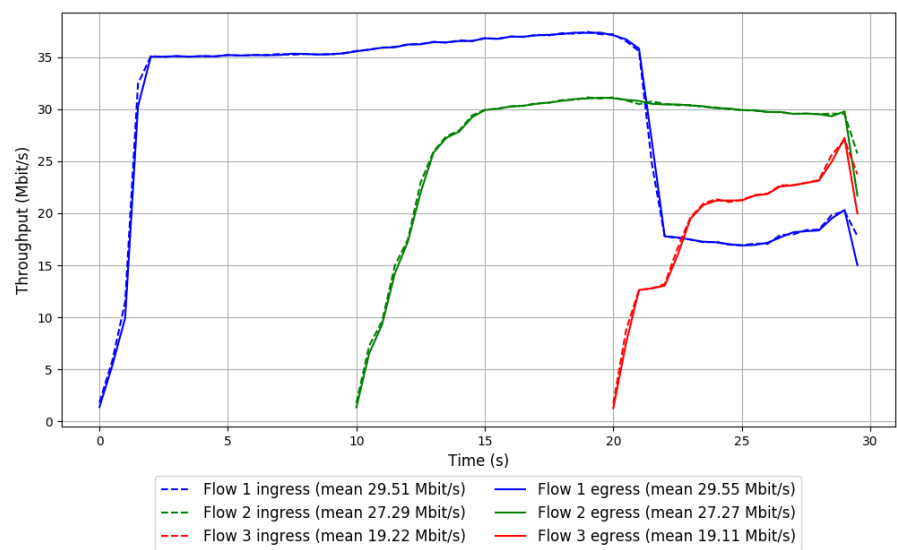
-- Flow 3:

Average throughput: 19.11 Mbit/s

95th percentile per-packet one-way delay: 68.100 ms

Loss rate: 1.94%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-02-04 20:24:58

End at: 2018-02-04 20:25:28

Local clock offset: -3.14 ms

Remote clock offset: 5.174 ms

Below is generated by plot.py at 2018-02-05 01:25:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.96 Mbit/s

95th percentile per-packet one-way delay: 66.859 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 34.78 Mbit/s

95th percentile per-packet one-way delay: 66.430 ms

Loss rate: 0.26%

-- Flow 2:

Average throughput: 29.16 Mbit/s

95th percentile per-packet one-way delay: 67.274 ms

Loss rate: 0.67%

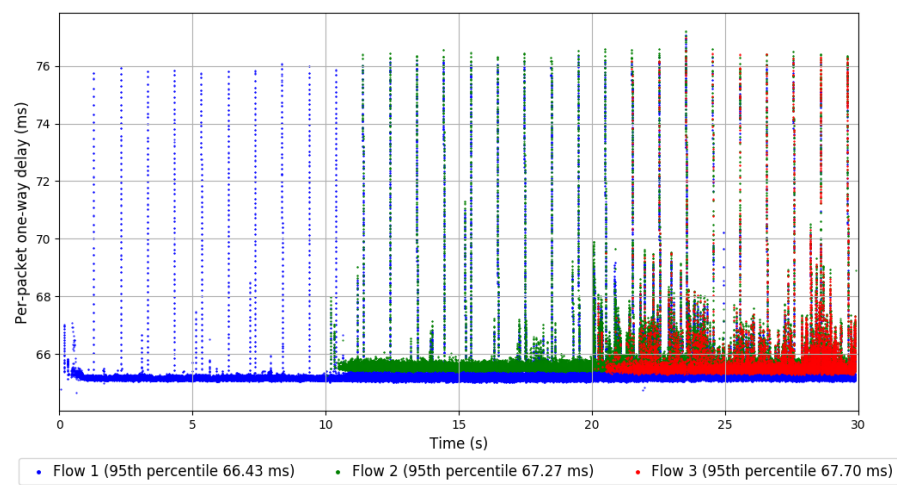
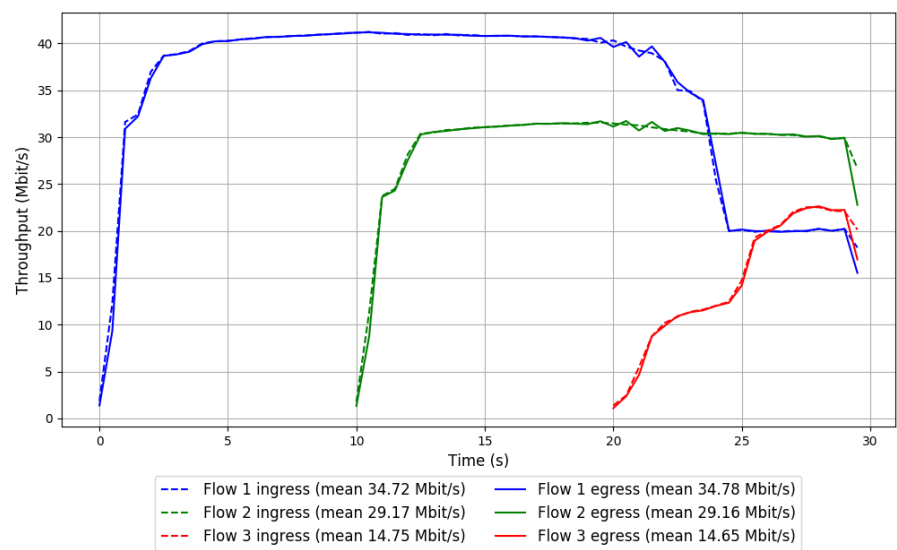
-- Flow 3:

Average throughput: 14.65 Mbit/s

95th percentile per-packet one-way delay: 67.696 ms

Loss rate: 2.02%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-04 20:48:18

End at: 2018-02-04 20:48:48

Local clock offset: -3.1 ms

Remote clock offset: 5.12 ms

Below is generated by plot.py at 2018-02-05 01:26:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 59.36 Mbit/s

95th percentile per-packet one-way delay: 66.865 ms

Loss rate: 0.52%

-- Flow 1:

Average throughput: 38.82 Mbit/s

95th percentile per-packet one-way delay: 66.513 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 23.79 Mbit/s

95th percentile per-packet one-way delay: 67.189 ms

Loss rate: 0.63%

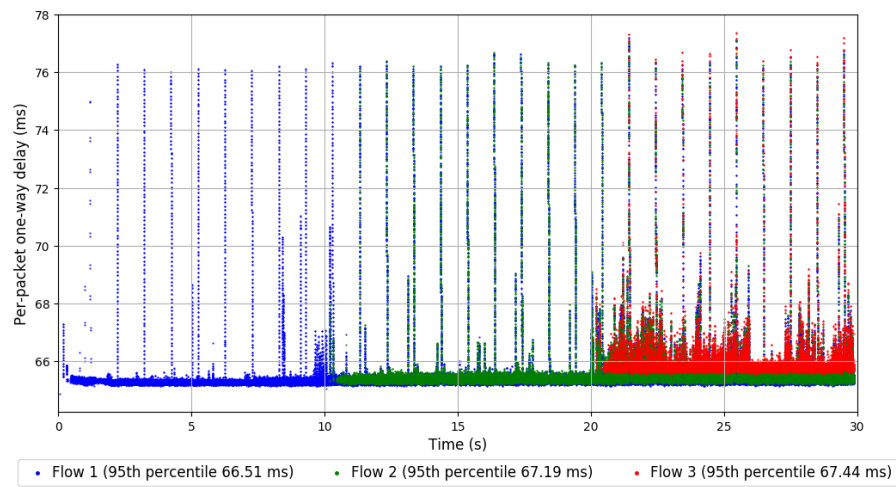
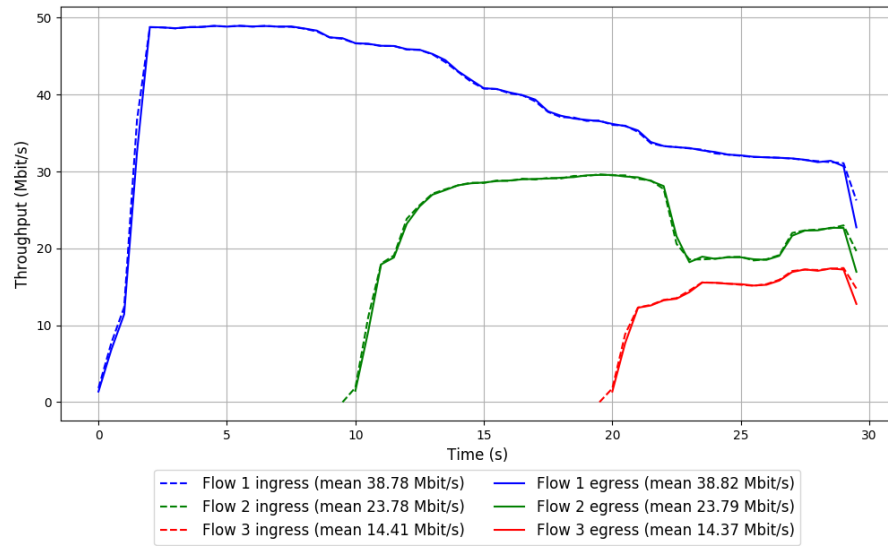
-- Flow 3:

Average throughput: 14.37 Mbit/s

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

Loss rate: 1.58%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-02-04 21:11:48

End at: 2018-02-04 21:12:18

Local clock offset: -2.689 ms

Remote clock offset: 5.059 ms

Below is generated by plot.py at 2018-02-05 01:26:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.36 Mbit/s

95th percentile per-packet one-way delay: 67.331 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 36.19 Mbit/s

95th percentile per-packet one-way delay: 66.806 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 30.39 Mbit/s

95th percentile per-packet one-way delay: 67.854 ms

Loss rate: 0.62%

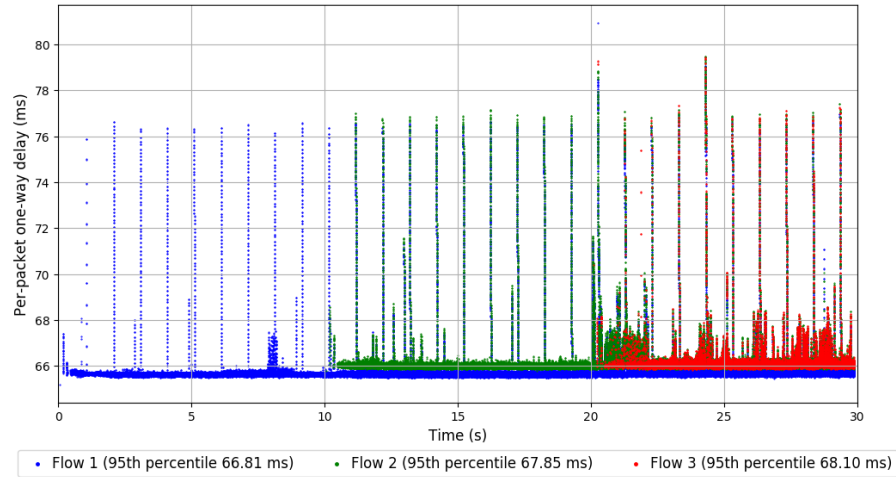
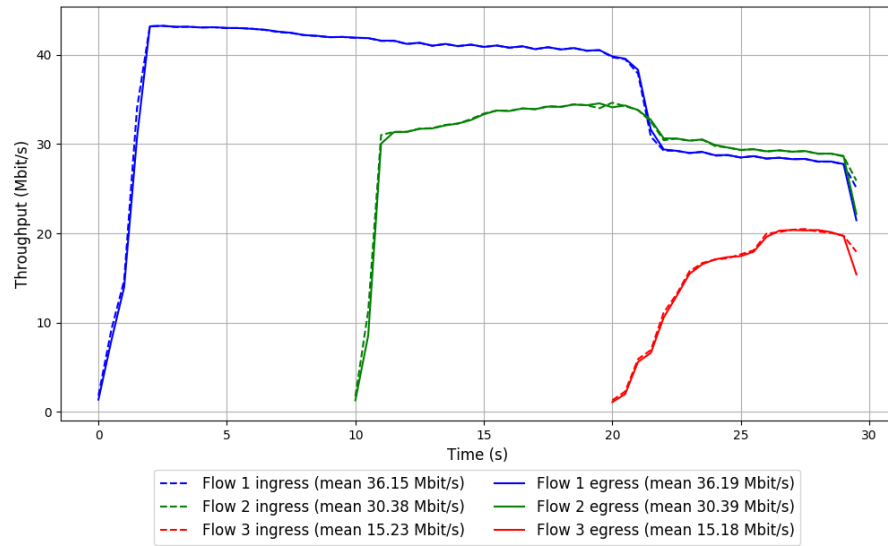
-- Flow 3:

Average throughput: 15.18 Mbit/s

95th percentile per-packet one-way delay: 68.098 ms

Loss rate: 1.72%

Run 10: Report of Copa — Data Link

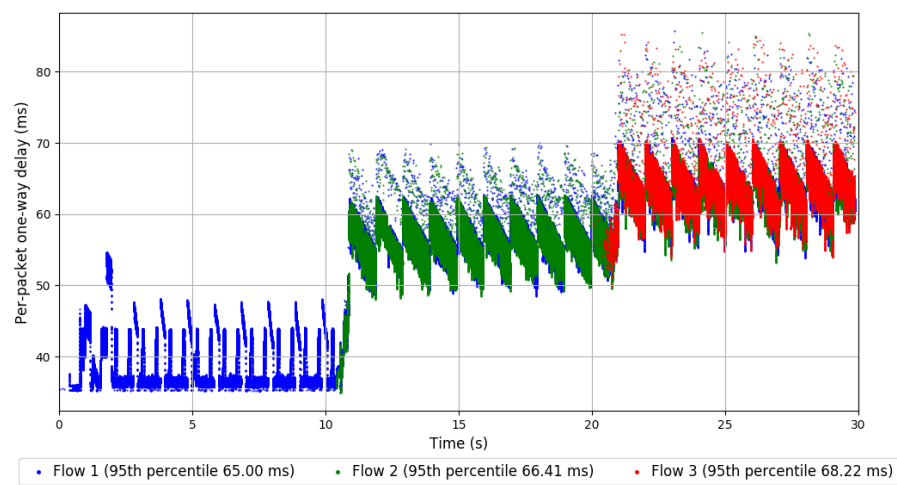
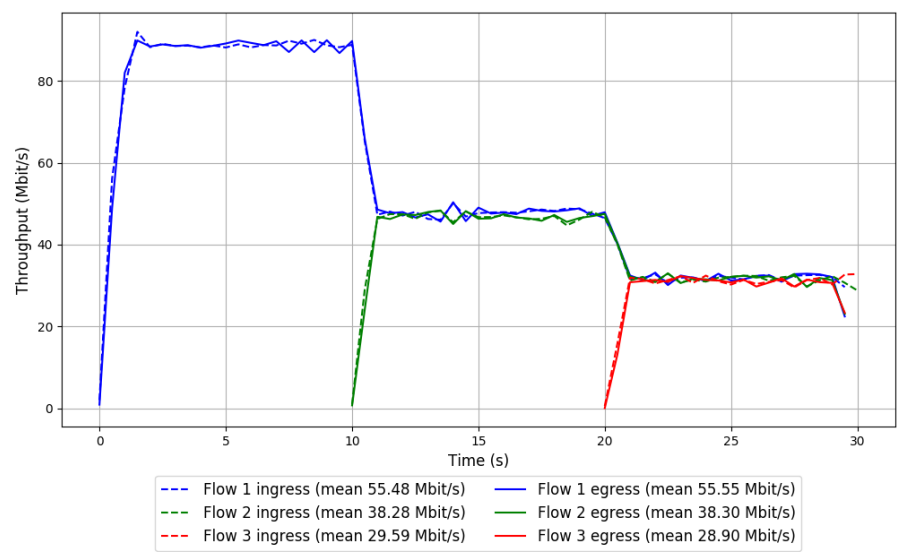


```
Run 1: Statistics of FillP

Start at: 2018-02-04 17:38:25
End at: 2018-02-04 17:38:55
Local clock offset: -3.147 ms
Remote clock offset: -1.791 ms

# Below is generated by plot.py at 2018-02-05 01:27:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.43 Mbit/s
95th percentile per-packet one-way delay: 66.280 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 55.55 Mbit/s
95th percentile per-packet one-way delay: 64.996 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 38.30 Mbit/s
95th percentile per-packet one-way delay: 66.411 ms
Loss rate: 2.61%
-- Flow 3:
Average throughput: 28.90 Mbit/s
95th percentile per-packet one-way delay: 68.222 ms
Loss rate: 7.58%
```


Run 1: Report of FillP — Data Link

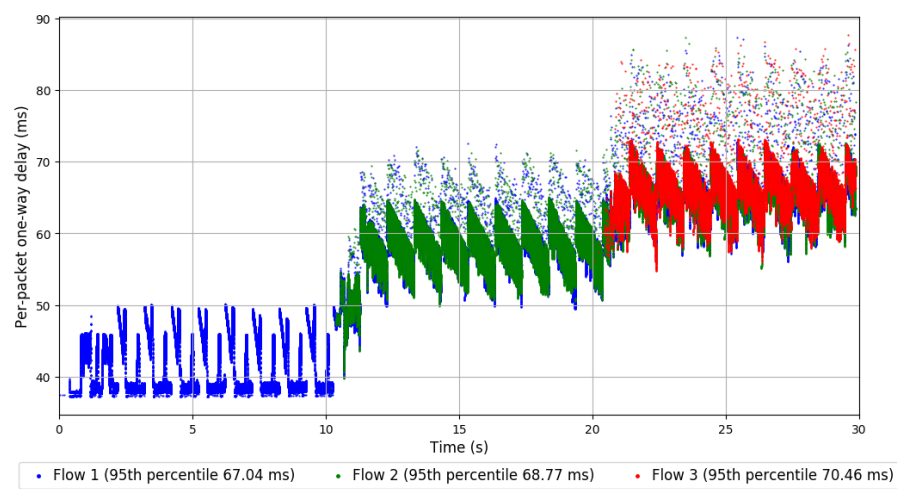
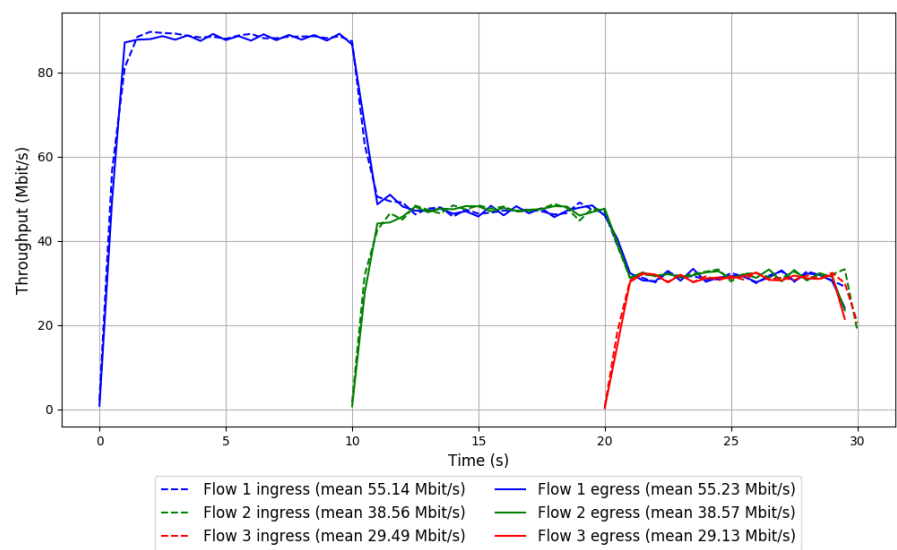


Run 2: Statistics of FillP

Start at: 2018-02-04 18:01:12
End at: 2018-02-04 18:01:42
Local clock offset: -1.229 ms
Remote clock offset: -0.104 ms

Below is generated by plot.py at 2018-02-05 01:27:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.38 Mbit/s
95th percentile per-packet one-way delay: 68.573 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 55.23 Mbit/s
95th percentile per-packet one-way delay: 67.040 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 38.57 Mbit/s
95th percentile per-packet one-way delay: 68.769 ms
Loss rate: 2.10%
-- Flow 3:
Average throughput: 29.13 Mbit/s
95th percentile per-packet one-way delay: 70.457 ms
Loss rate: 5.58%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-02-04 18:24:28

End at: 2018-02-04 18:24:58

Local clock offset: -1.093 ms

Remote clock offset: 1.453 ms

Below is generated by plot.py at 2018-02-05 01:28:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.96 Mbit/s

95th percentile per-packet one-way delay: 96.530 ms

Loss rate: 2.68%

-- Flow 1:

Average throughput: 55.42 Mbit/s

95th percentile per-packet one-way delay: 95.354 ms

Loss rate: 0.41%

-- Flow 2:

Average throughput: 37.81 Mbit/s

95th percentile per-packet one-way delay: 96.770 ms

Loss rate: 4.72%

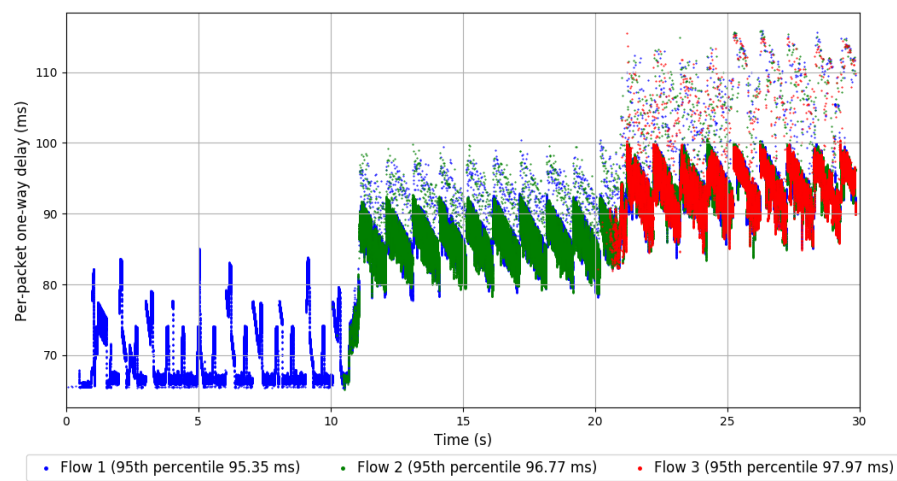
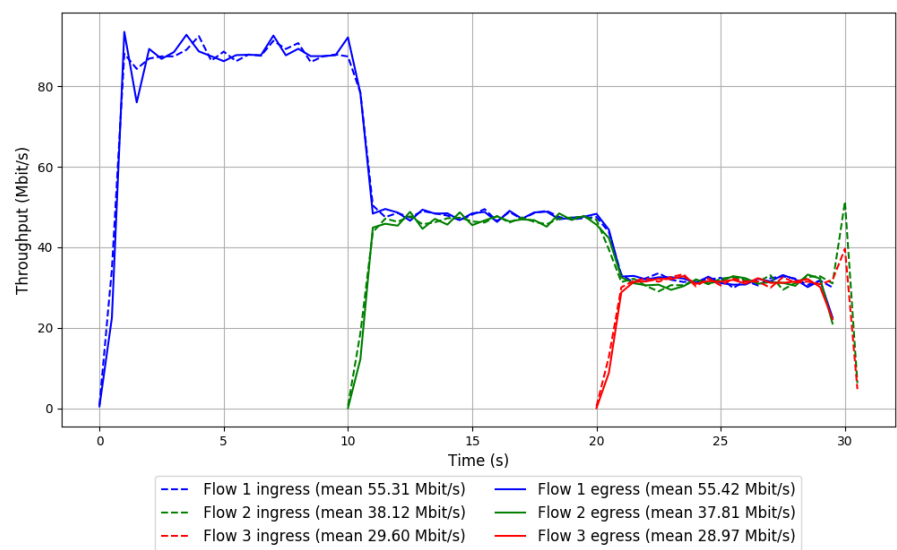
-- Flow 3:

Average throughput: 28.97 Mbit/s

95th percentile per-packet one-way delay: 97.973 ms

Loss rate: 9.62%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-04 18:47:47

End at: 2018-02-04 18:48:17

Local clock offset: -2.309 ms

Remote clock offset: 2.913 ms

Below is generated by plot.py at 2018-02-05 01:28:00

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.08 Mbit/s

95th percentile per-packet one-way delay: 95.994 ms

Loss rate: 1.69%

-- Flow 1:

Average throughput: 55.44 Mbit/s

95th percentile per-packet one-way delay: 94.882 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 38.06 Mbit/s

95th percentile per-packet one-way delay: 96.165 ms

Loss rate: 2.56%

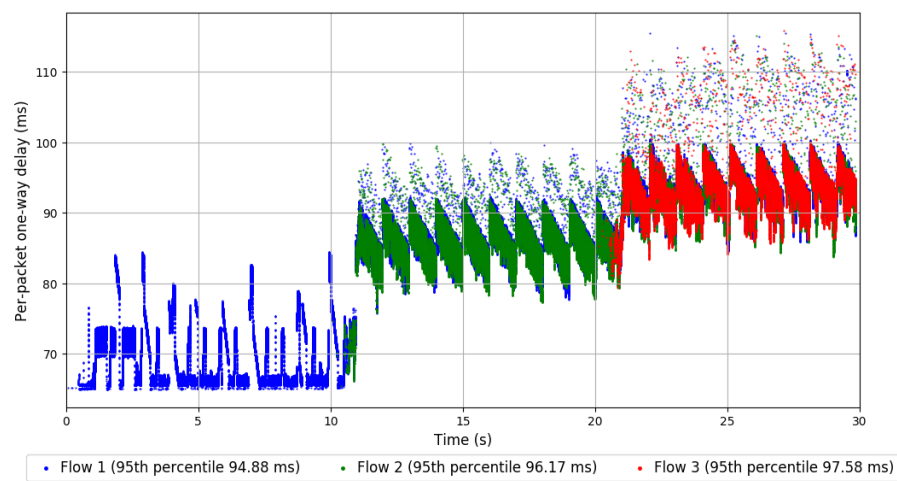
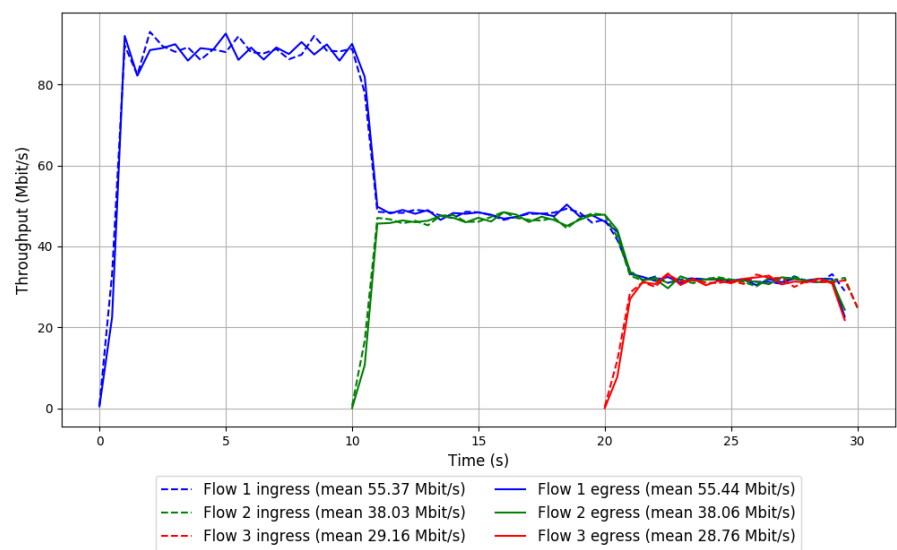
-- Flow 3:

Average throughput: 28.76 Mbit/s

95th percentile per-packet one-way delay: 97.581 ms

Loss rate: 6.69%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-04 19:11:03

End at: 2018-02-04 19:11:33

Local clock offset: -2.283 ms

Remote clock offset: 4.063 ms

Below is generated by plot.py at 2018-02-05 01:28:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.97 Mbit/s

95th percentile per-packet one-way delay: 95.811 ms

Loss rate: 3.10%

-- Flow 1:

Average throughput: 55.20 Mbit/s

95th percentile per-packet one-way delay: 94.558 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 38.31 Mbit/s

95th percentile per-packet one-way delay: 95.870 ms

Loss rate: 4.61%

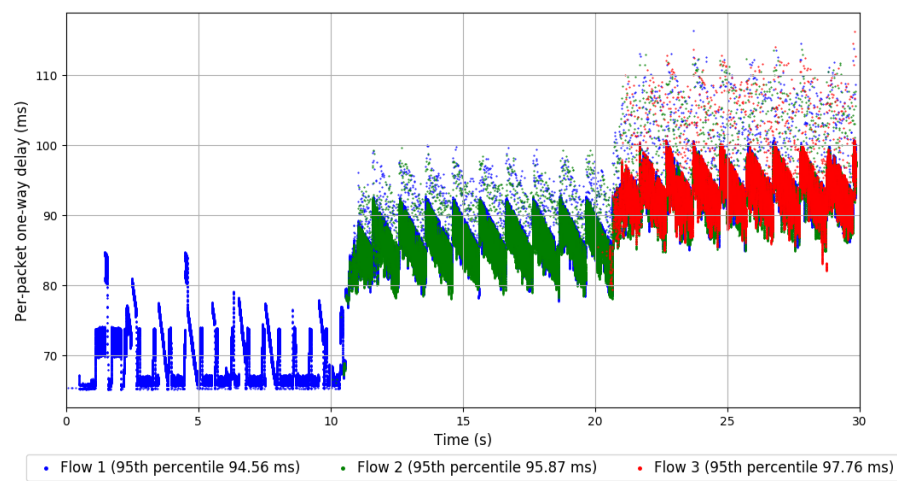
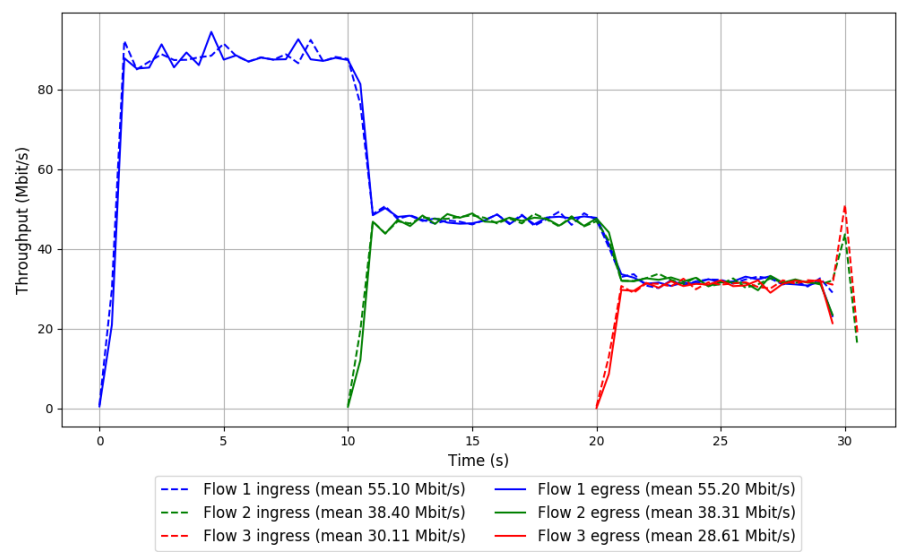
-- Flow 3:

Average throughput: 28.61 Mbit/s

95th percentile per-packet one-way delay: 97.760 ms

Loss rate: 13.31%

Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-04 19:34:17

End at: 2018-02-04 19:34:48

Local clock offset: -2.632 ms

Remote clock offset: 4.664 ms

Below is generated by plot.py at 2018-02-05 01:28:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.99 Mbit/s

95th percentile per-packet one-way delay: 95.579 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 55.12 Mbit/s

95th percentile per-packet one-way delay: 94.171 ms

Loss rate: 1.06%

-- Flow 2:

Average throughput: 38.30 Mbit/s

95th percentile per-packet one-way delay: 95.782 ms

Loss rate: 0.83%

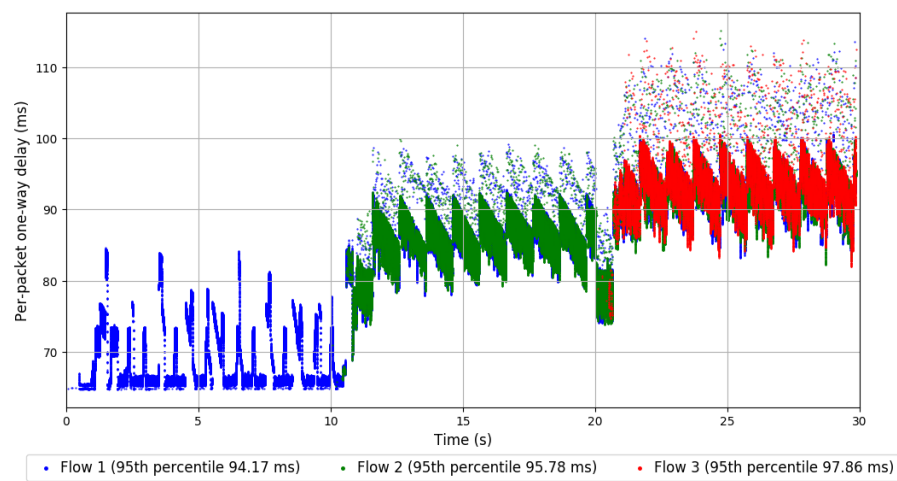
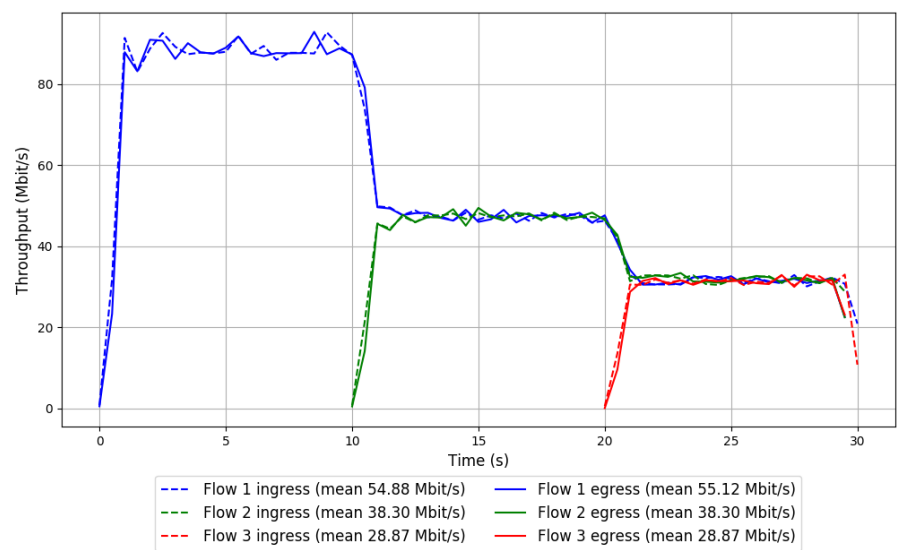
-- Flow 3:

Average throughput: 28.87 Mbit/s

95th percentile per-packet one-way delay: 97.856 ms

Loss rate: 4.45%

Run 6: Report of FillP — Data Link

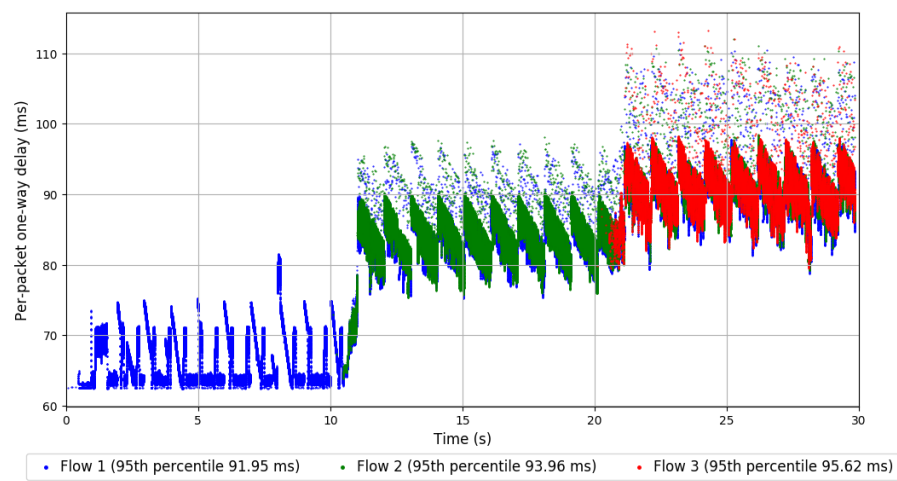
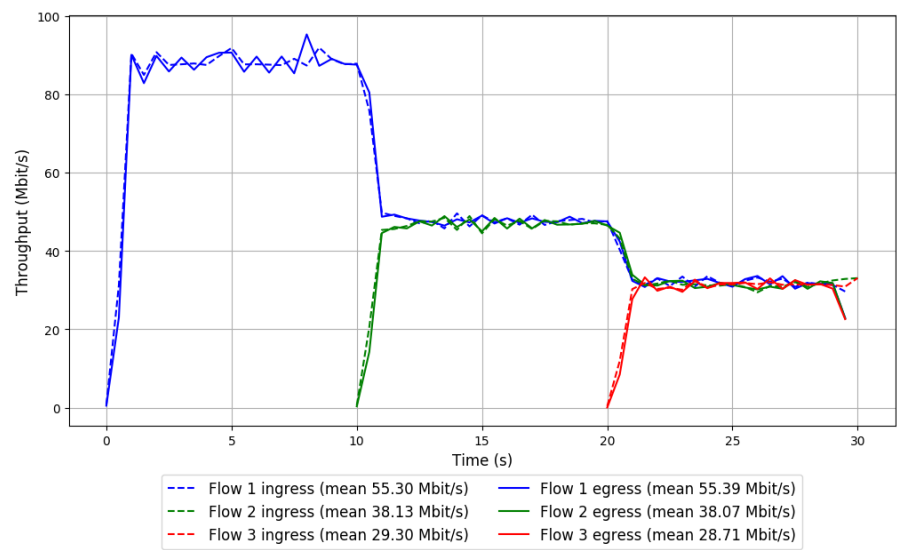


Run 7: Statistics of FillP

Start at: 2018-02-04 19:57:33
End at: 2018-02-04 19:58:03
Local clock offset: -5.418 ms
Remote clock offset: 4.738 ms

Below is generated by plot.py at 2018-02-05 01:29:14
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.03 Mbit/s
95th percentile per-packet one-way delay: 93.515 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 55.39 Mbit/s
95th percentile per-packet one-way delay: 91.947 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 38.07 Mbit/s
95th percentile per-packet one-way delay: 93.962 ms
Loss rate: 3.15%
-- Flow 3:
Average throughput: 28.71 Mbit/s
95th percentile per-packet one-way delay: 95.623 ms
Loss rate: 7.85%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-04 20:21:02

End at: 2018-02-04 20:21:32

Local clock offset: -2.598 ms

Remote clock offset: 5.107 ms

Below is generated by plot.py at 2018-02-05 01:29:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.97 Mbit/s

95th percentile per-packet one-way delay: 96.342 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 55.43 Mbit/s

95th percentile per-packet one-way delay: 94.916 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 37.78 Mbit/s

95th percentile per-packet one-way delay: 96.683 ms

Loss rate: 2.21%

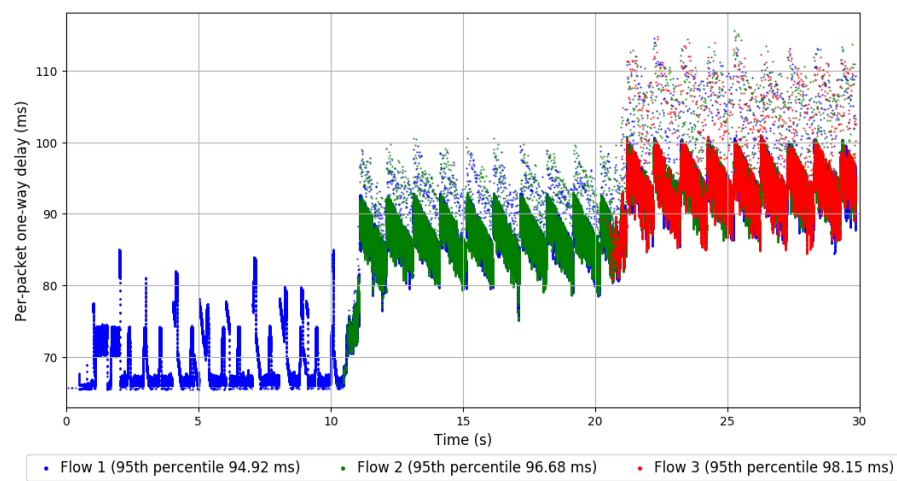
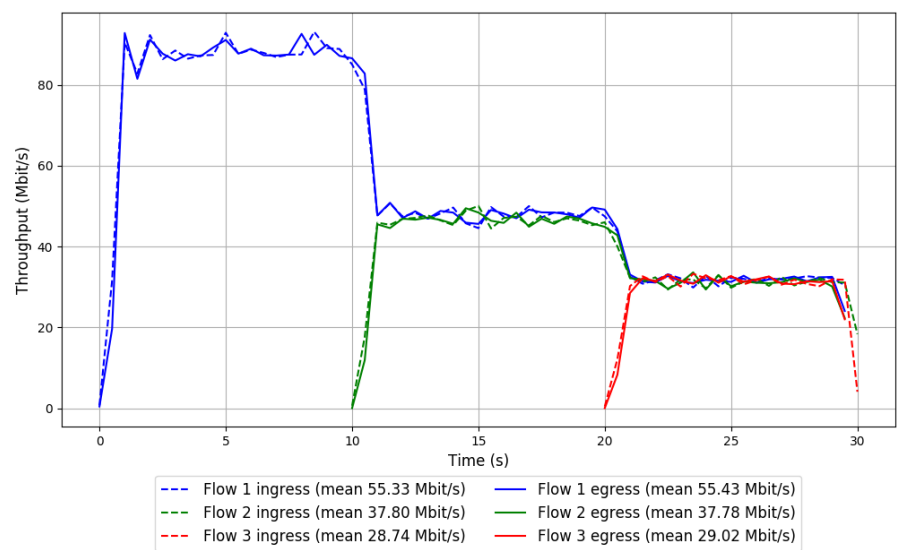
-- Flow 3:

Average throughput: 29.02 Mbit/s

95th percentile per-packet one-way delay: 98.147 ms

Loss rate: 3.29%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-04 20:44:23

End at: 2018-02-04 20:44:53

Local clock offset: -2.714 ms

Remote clock offset: 5.177 ms

Below is generated by plot.py at 2018-02-05 01:30:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.02 Mbit/s

95th percentile per-packet one-way delay: 95.909 ms

Loss rate: 1.72%

-- Flow 1:

Average throughput: 55.33 Mbit/s

95th percentile per-packet one-way delay: 94.568 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 38.20 Mbit/s

95th percentile per-packet one-way delay: 95.903 ms

Loss rate: 1.88%

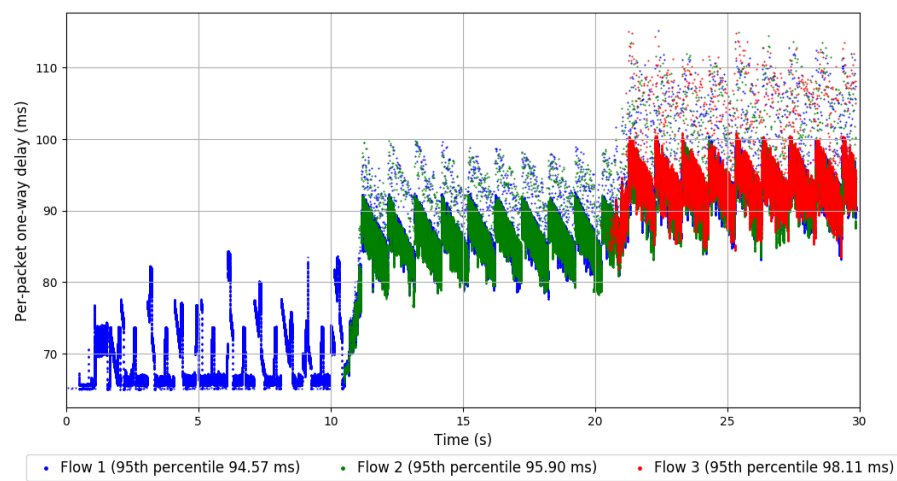
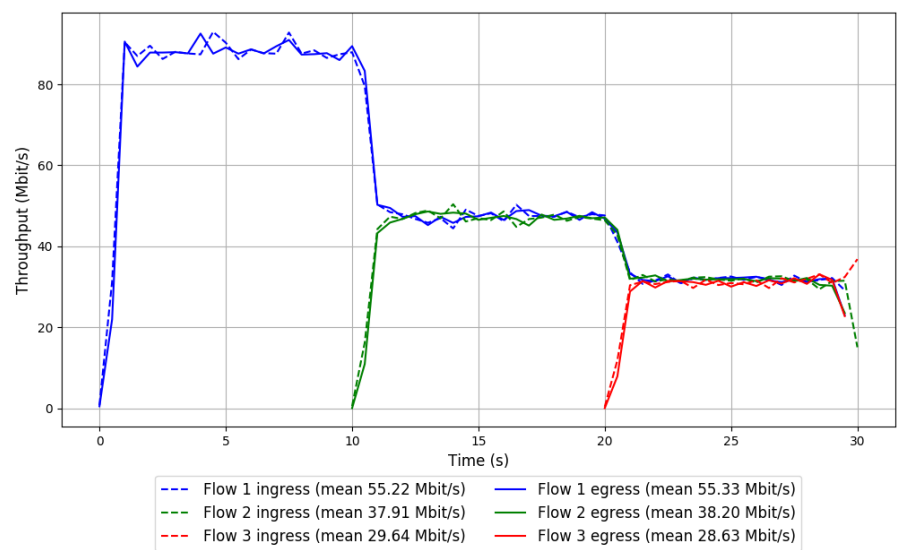
-- Flow 3:

Average throughput: 28.63 Mbit/s

95th percentile per-packet one-way delay: 98.108 ms

Loss rate: 8.56%

Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-04 21:07:51

End at: 2018-02-04 21:08:21

Local clock offset: -3.167 ms

Remote clock offset: 5.071 ms

Below is generated by plot.py at 2018-02-05 01:30:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.99 Mbit/s

95th percentile per-packet one-way delay: 96.024 ms

Loss rate: 2.45%

-- Flow 1:

Average throughput: 54.85 Mbit/s

95th percentile per-packet one-way delay: 95.150 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 38.67 Mbit/s

95th percentile per-packet one-way delay: 96.143 ms

Loss rate: 3.88%

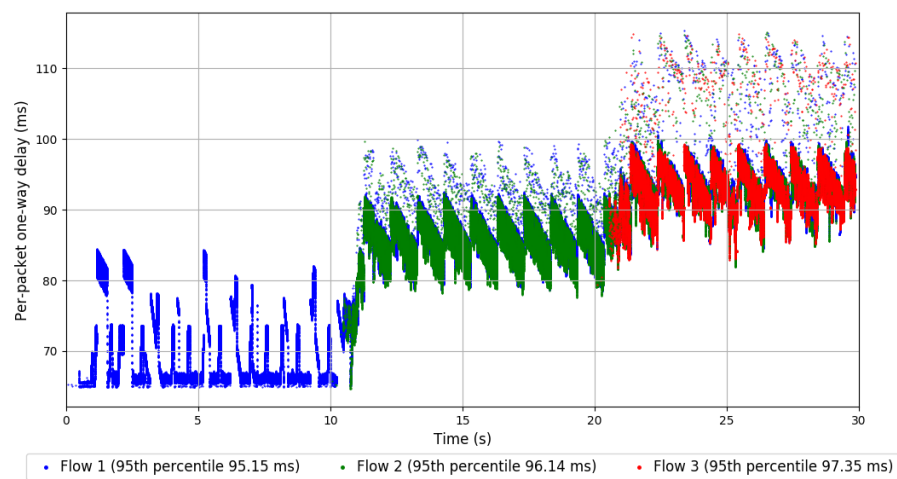
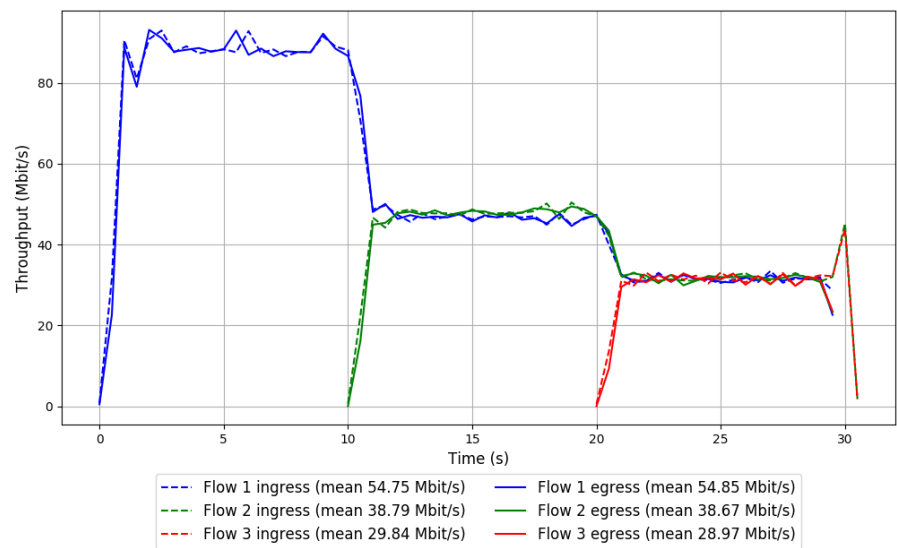
-- Flow 3:

Average throughput: 28.97 Mbit/s

95th percentile per-packet one-way delay: 97.347 ms

Loss rate: 9.79%

Run 10: Report of FillP — Data Link

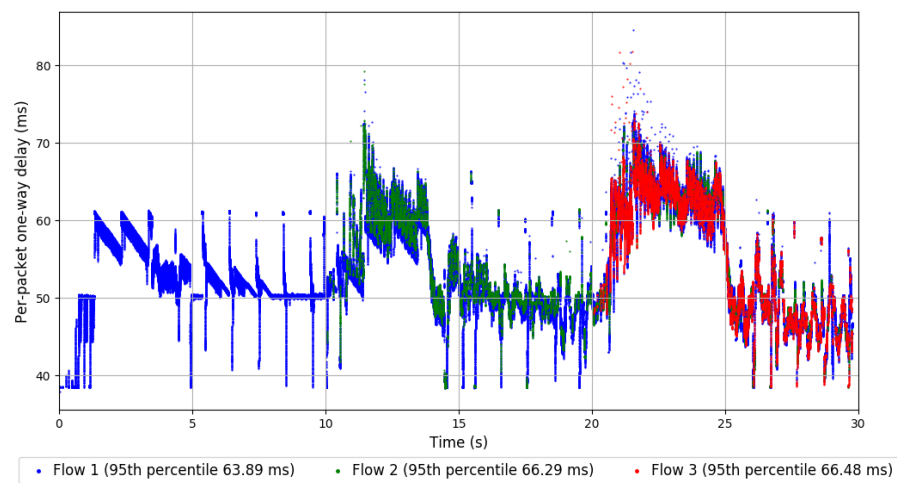
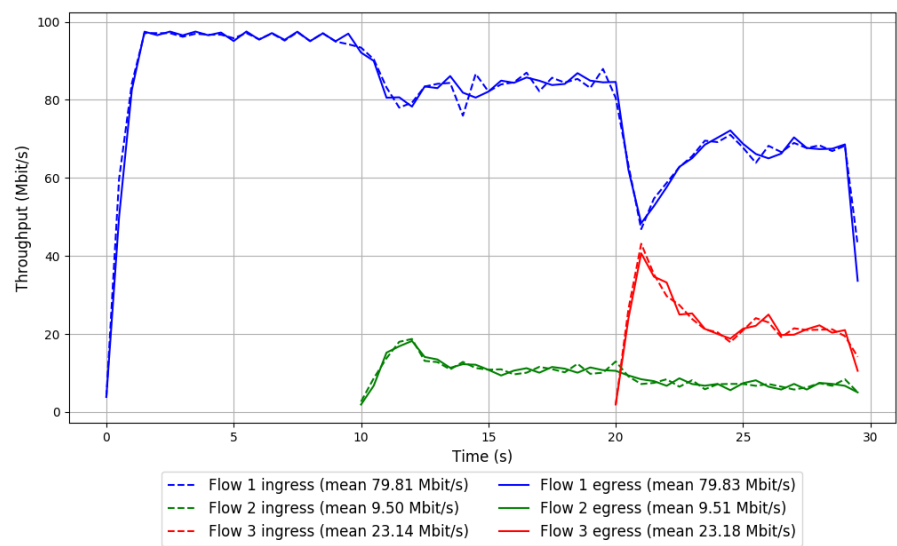


Run 1: Statistics of Indigo-1-32

Start at: 2018-02-04 17:44:47
End at: 2018-02-04 17:45:17
Local clock offset: -0.671 ms
Remote clock offset: -1.311 ms

Below is generated by plot.py at 2018-02-05 01:30:30
Datalink statistics
-- Total of 3 flows:
Average throughput: 93.67 Mbit/s
95th percentile per-packet one-way delay: 64.646 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 79.83 Mbit/s
95th percentile per-packet one-way delay: 63.887 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 9.51 Mbit/s
95th percentile per-packet one-way delay: 66.293 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 23.18 Mbit/s
95th percentile per-packet one-way delay: 66.485 ms
Loss rate: 1.01%

Run 1: Report of Indigo-1-32 — Data Link



Run 2: Statistics of Indigo-1-32

Start at: 2018-02-04 18:07:33

End at: 2018-02-04 18:08:03

Local clock offset: -1.039 ms

Remote clock offset: 0.374 ms

Below is generated by plot.py at 2018-02-05 01:30:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.48 Mbit/s

95th percentile per-packet one-way delay: 61.799 ms

Loss rate: 0.39%

-- Flow 1:

Average throughput: 60.97 Mbit/s

95th percentile per-packet one-way delay: 59.823 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 35.14 Mbit/s

95th percentile per-packet one-way delay: 64.328 ms

Loss rate: 0.53%

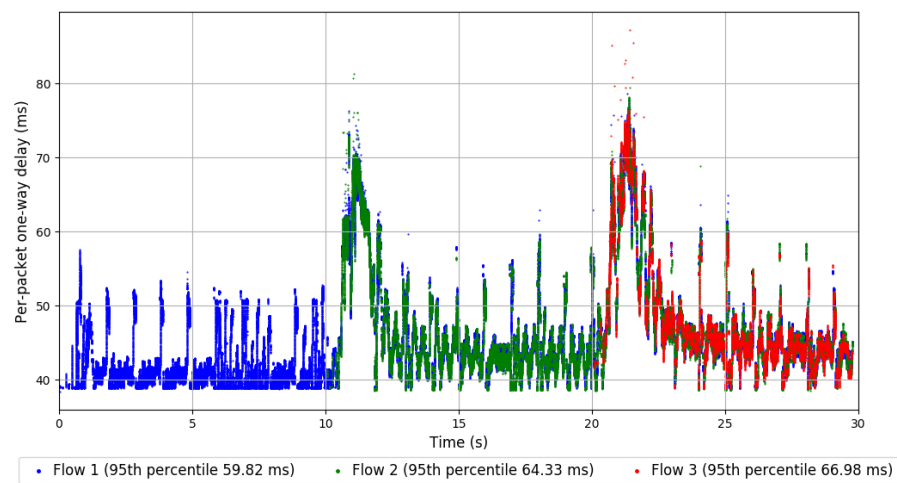
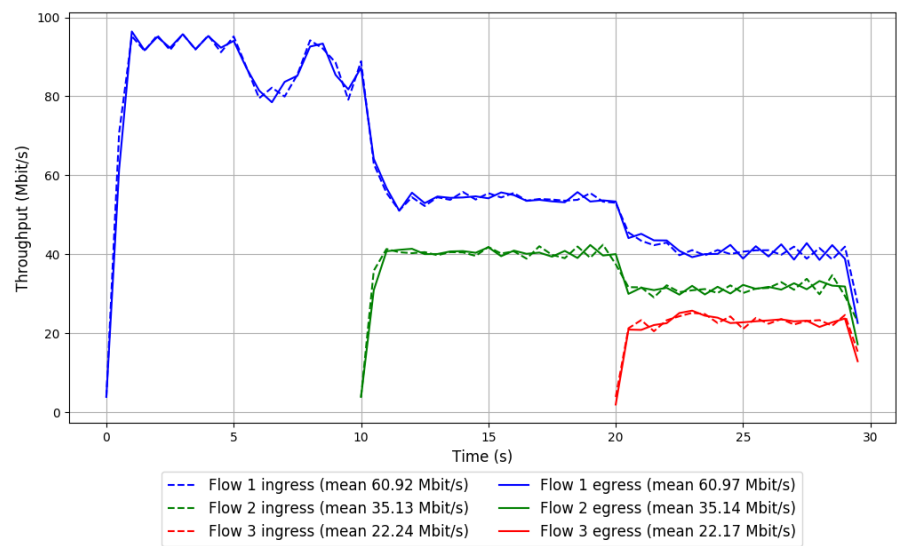
-- Flow 3:

Average throughput: 22.17 Mbit/s

95th percentile per-packet one-way delay: 66.981 ms

Loss rate: 1.15%

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-04 18:31:00

End at: 2018-02-04 18:31:30

Local clock offset: -1.277 ms

Remote clock offset: 1.944 ms

Below is generated by plot.py at 2018-02-05 01:30:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.72 Mbit/s

95th percentile per-packet one-way delay: 92.097 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 70.33 Mbit/s

95th percentile per-packet one-way delay: 90.787 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 21.57 Mbit/s

95th percentile per-packet one-way delay: 93.770 ms

Loss rate: 0.62%

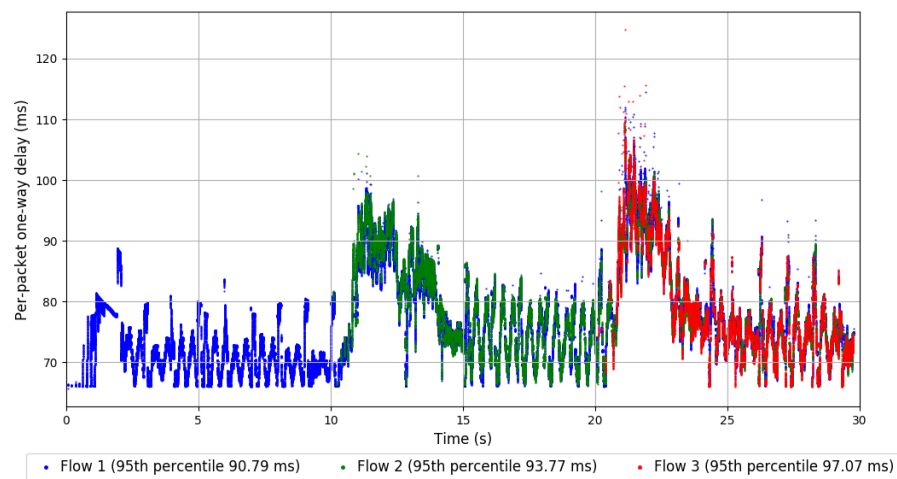
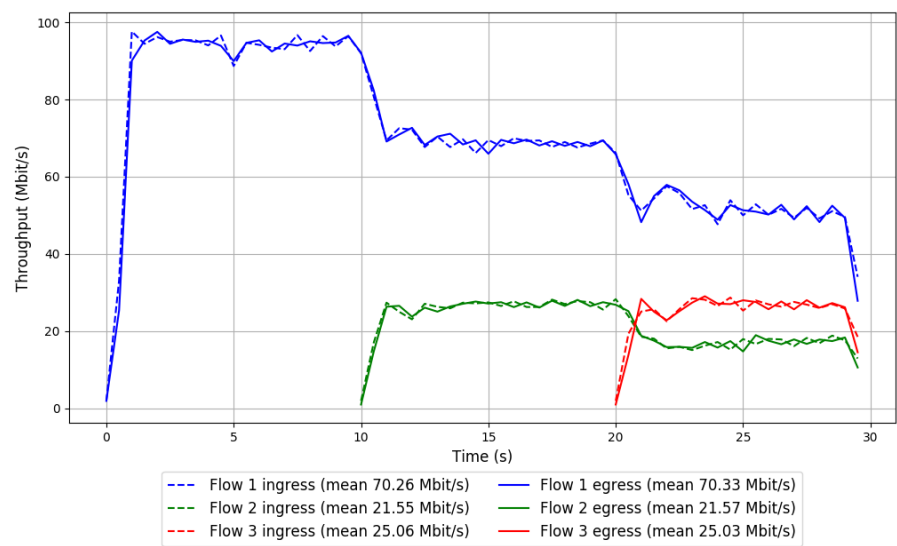
-- Flow 3:

Average throughput: 25.03 Mbit/s

95th percentile per-packet one-way delay: 97.069 ms

Loss rate: 1.46%

Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-04 18:54:17

End at: 2018-02-04 18:54:47

Local clock offset: -1.738 ms

Remote clock offset: 3.279 ms

Below is generated by plot.py at 2018-02-05 01:30:30

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.60 Mbit/s

95th percentile per-packet one-way delay: 91.704 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 73.22 Mbit/s

95th percentile per-packet one-way delay: 91.215 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 23.14 Mbit/s

95th percentile per-packet one-way delay: 93.325 ms

Loss rate: 0.64%

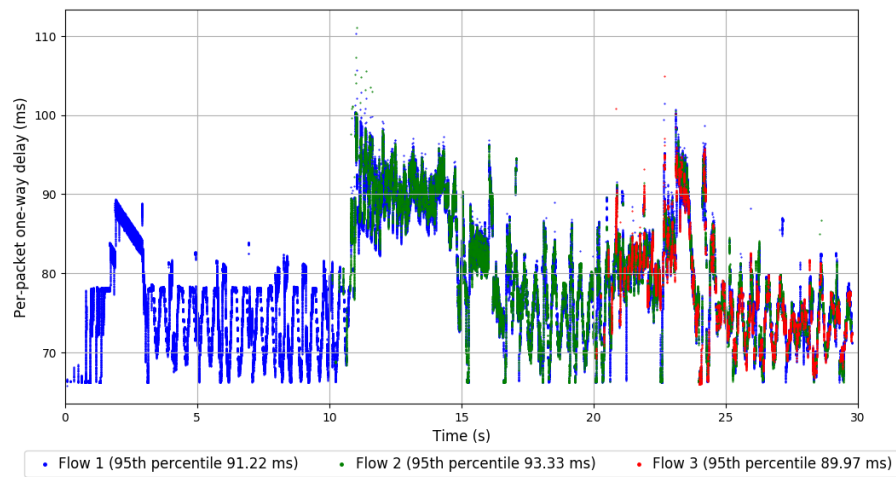
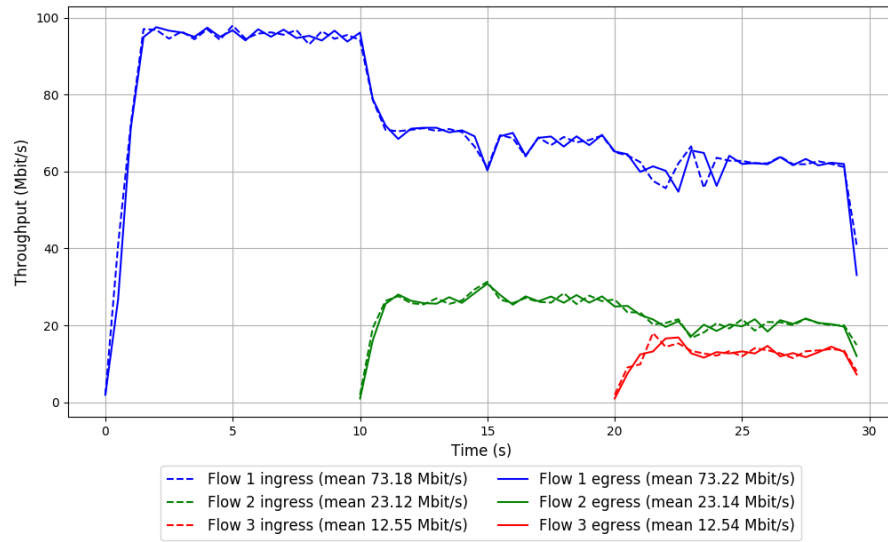
-- Flow 3:

Average throughput: 12.54 Mbit/s

95th percentile per-packet one-way delay: 89.974 ms

Loss rate: 1.46%

Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-04 19:17:32

End at: 2018-02-04 19:18:02

Local clock offset: -1.993 ms

Remote clock offset: 4.345 ms

Below is generated by plot.py at 2018-02-05 01:30:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.54 Mbit/s

95th percentile per-packet one-way delay: 89.375 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 61.82 Mbit/s

95th percentile per-packet one-way delay: 87.517 ms

Loss rate: 0.34%

-- Flow 2:

Average throughput: 28.37 Mbit/s

95th percentile per-packet one-way delay: 91.496 ms

Loss rate: 0.66%

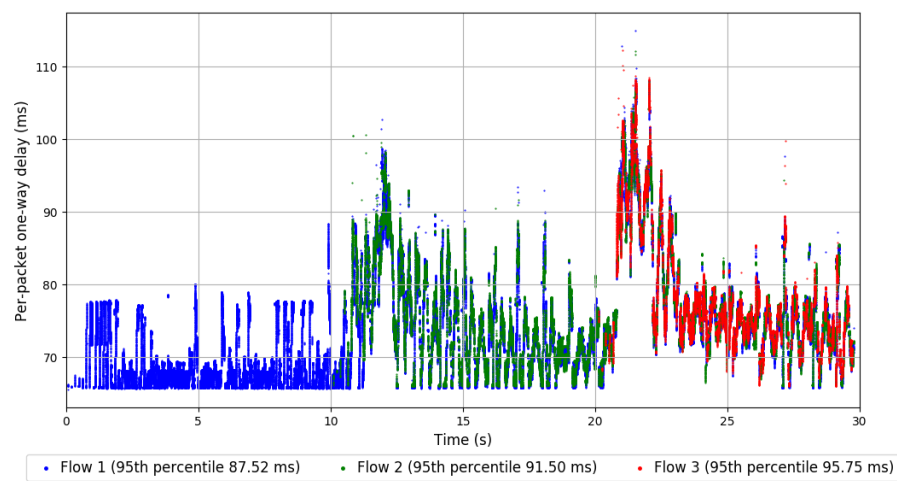
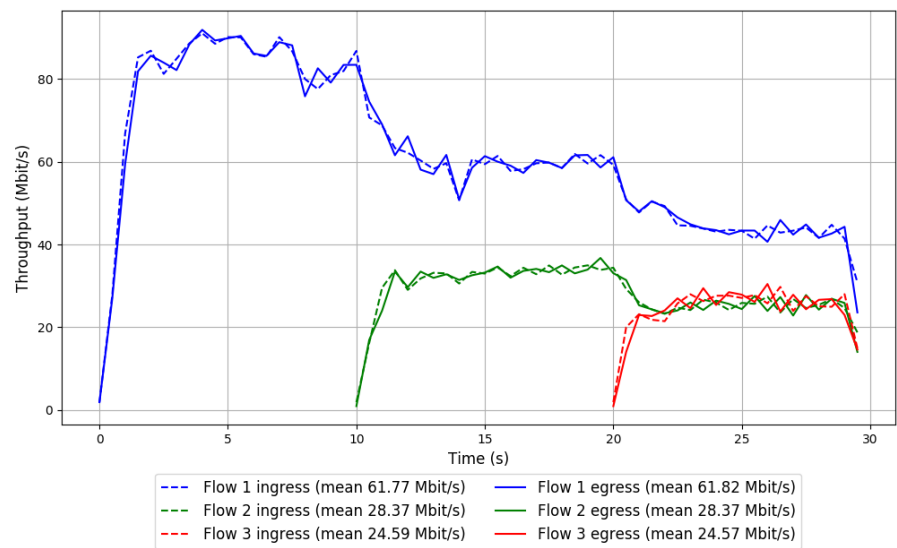
-- Flow 3:

Average throughput: 24.57 Mbit/s

95th percentile per-packet one-way delay: 95.754 ms

Loss rate: 1.53%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-04 19:40:47

End at: 2018-02-04 19:41:17

Local clock offset: -2.526 ms

Remote clock offset: 4.765 ms

Below is generated by plot.py at 2018-02-05 01:30:45

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.13 Mbit/s

95th percentile per-packet one-way delay: 95.357 ms

Loss rate: 0.47%

-- Flow 1:

Average throughput: 61.04 Mbit/s

95th percentile per-packet one-way delay: 93.315 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 33.64 Mbit/s

95th percentile per-packet one-way delay: 96.934 ms

Loss rate: 0.59%

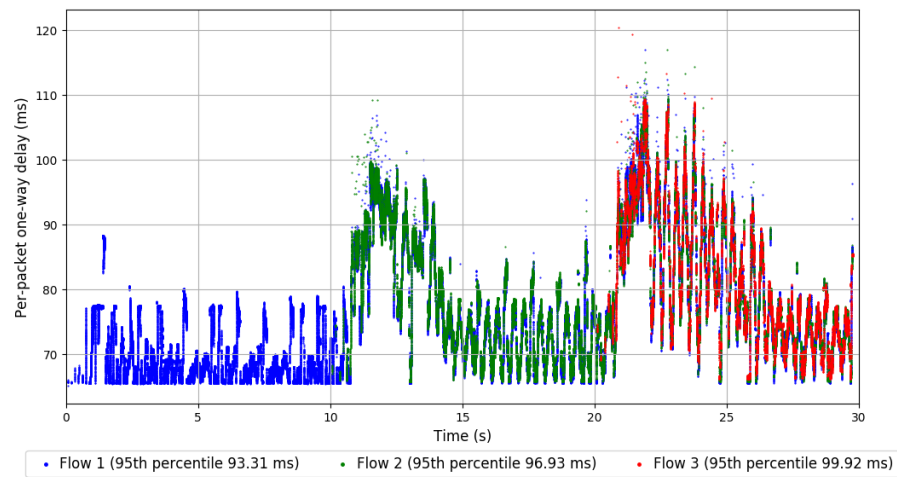
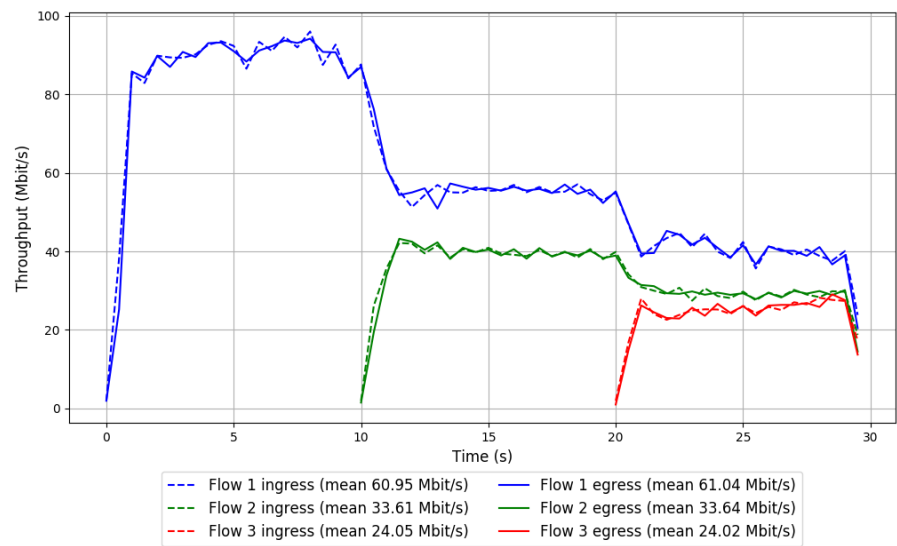
-- Flow 3:

Average throughput: 24.02 Mbit/s

95th percentile per-packet one-way delay: 99.924 ms

Loss rate: 1.61%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

Start at: 2018-02-04 20:04:04

End at: 2018-02-04 20:04:34

Local clock offset: -2.738 ms

Remote clock offset: 4.863 ms

Below is generated by plot.py at 2018-02-05 01:30:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.25 Mbit/s

95th percentile per-packet one-way delay: 87.753 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 79.54 Mbit/s

95th percentile per-packet one-way delay: 87.212 ms

Loss rate: 0.40%

-- Flow 2:

Average throughput: 12.56 Mbit/s

95th percentile per-packet one-way delay: 90.467 ms

Loss rate: 0.70%

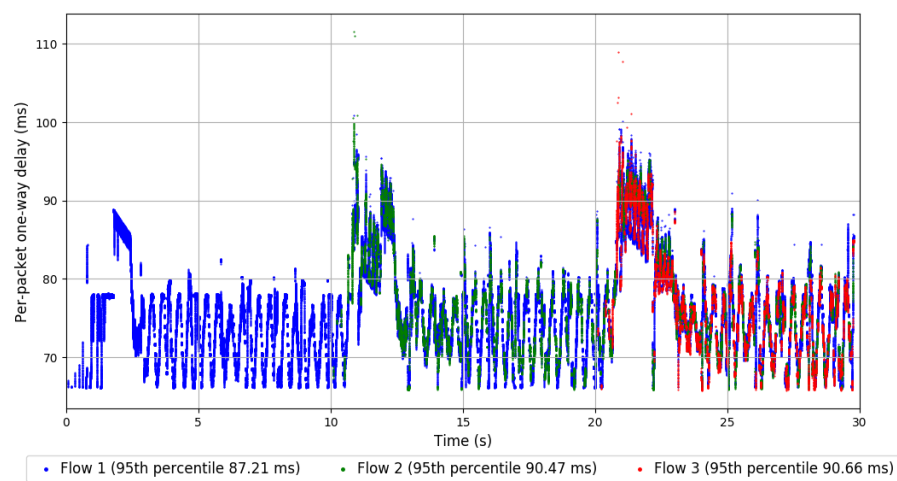
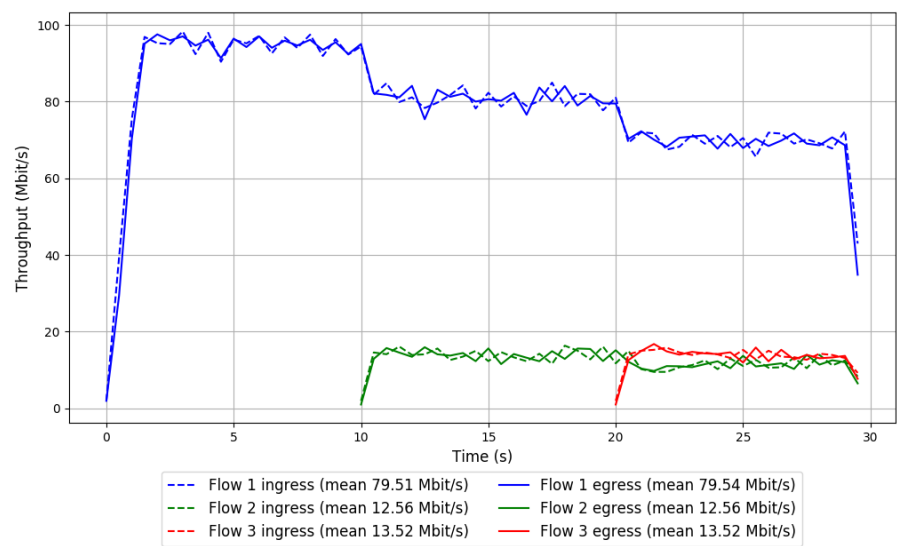
-- Flow 3:

Average throughput: 13.52 Mbit/s

95th percentile per-packet one-way delay: 90.664 ms

Loss rate: 1.40%

Run 7: Report of Indigo-1-32 — Data Link



Run 8: Statistics of Indigo-1-32

Start at: 2018-02-04 20:27:36

End at: 2018-02-04 20:28:06

Local clock offset: -2.681 ms

Remote clock offset: 5.18 ms

Below is generated by plot.py at 2018-02-05 01:30:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.57 Mbit/s

95th percentile per-packet one-way delay: 92.223 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 36.27 Mbit/s

95th percentile per-packet one-way delay: 91.169 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 56.84 Mbit/s

95th percentile per-packet one-way delay: 92.900 ms

Loss rate: 0.67%

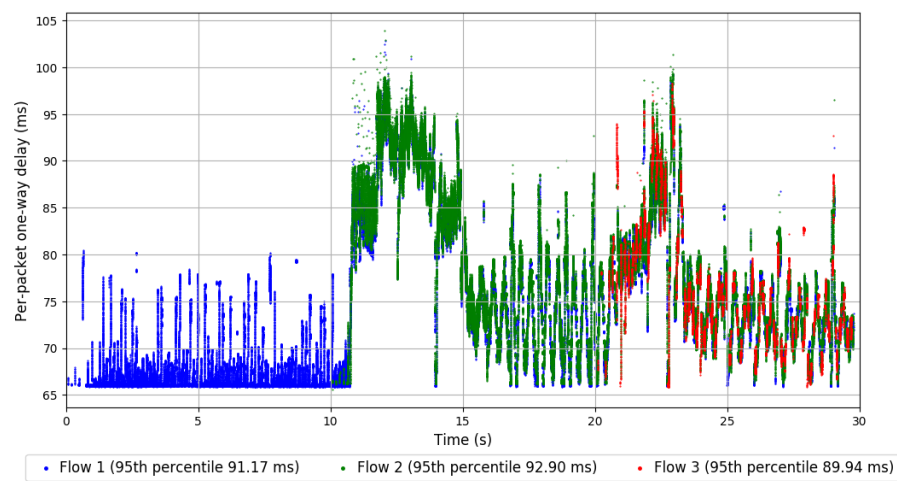
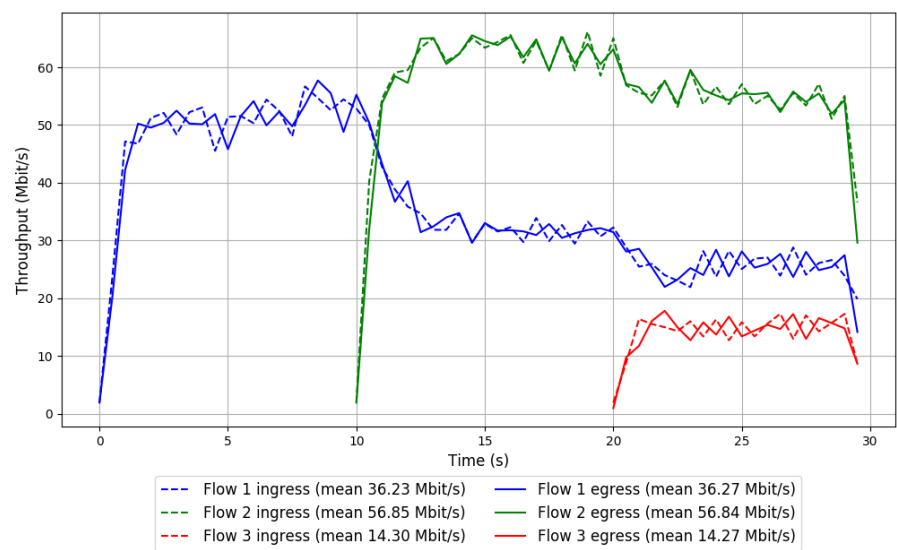
-- Flow 3:

Average throughput: 14.27 Mbit/s

95th percentile per-packet one-way delay: 89.937 ms

Loss rate: 1.55%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-04 20:50:54

End at: 2018-02-04 20:51:24

Local clock offset: -2.494 ms

Remote clock offset: 5.141 ms

Below is generated by plot.py at 2018-02-05 01:30:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.25 Mbit/s

95th percentile per-packet one-way delay: 96.939 ms

Loss rate: 0.56%

-- Flow 1:

Average throughput: 69.41 Mbit/s

95th percentile per-packet one-way delay: 96.494 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 33.70 Mbit/s

95th percentile per-packet one-way delay: 97.555 ms

Loss rate: 0.65%

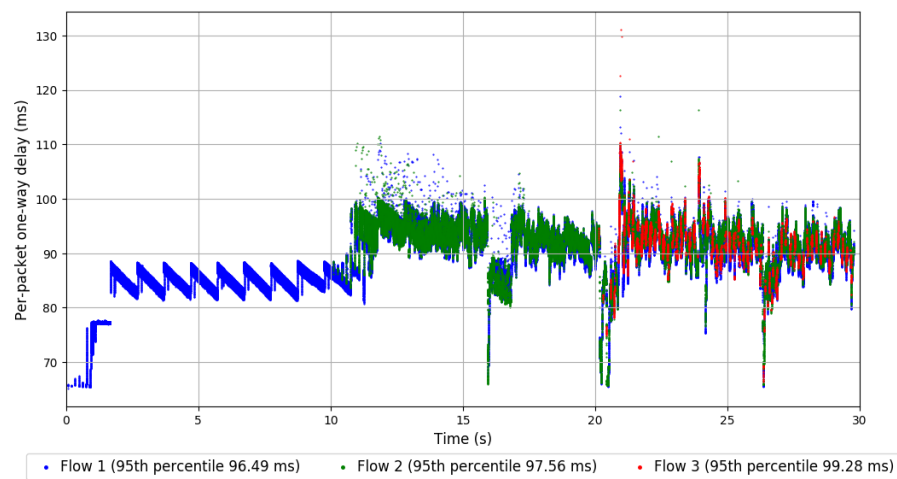
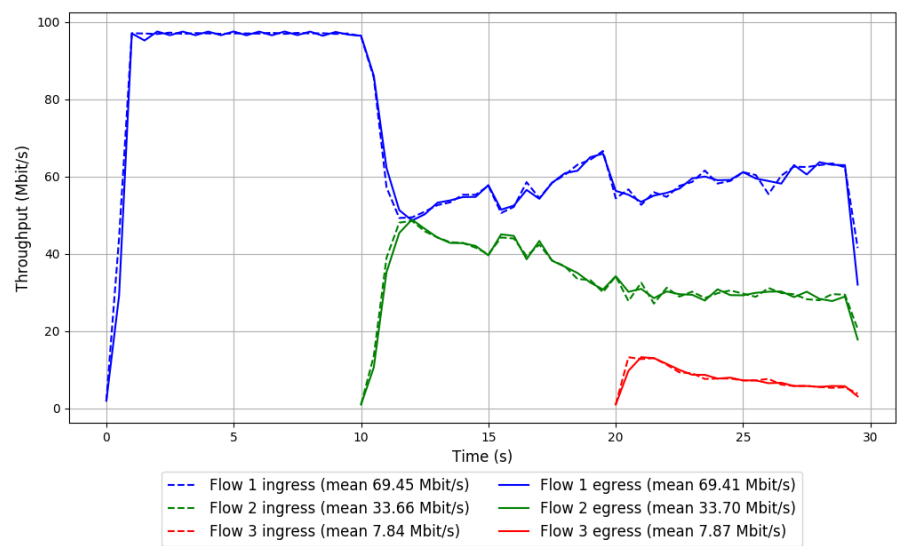
-- Flow 3:

Average throughput: 7.87 Mbit/s

95th percentile per-packet one-way delay: 99.280 ms

Loss rate: 1.23%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-04 21:14:26

End at: 2018-02-04 21:14:56

Local clock offset: -2.406 ms

Remote clock offset: 5.049 ms

Below is generated by plot.py at 2018-02-05 01:30:59

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.51 Mbit/s

95th percentile per-packet one-way delay: 91.162 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 82.09 Mbit/s

95th percentile per-packet one-way delay: 90.395 ms

Loss rate: 0.42%

-- Flow 2:

Average throughput: 9.54 Mbit/s

95th percentile per-packet one-way delay: 92.737 ms

Loss rate: 0.61%

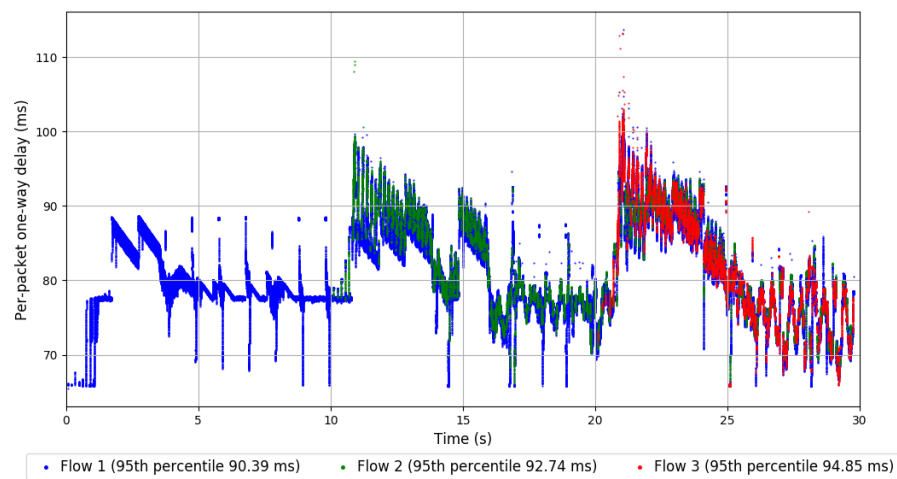
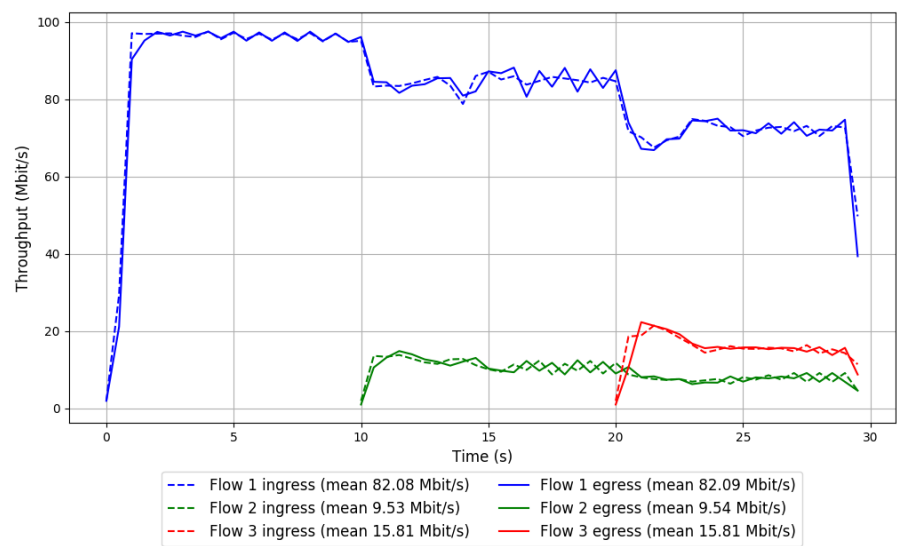
-- Flow 3:

Average throughput: 15.81 Mbit/s

95th percentile per-packet one-way delay: 94.848 ms

Loss rate: 1.40%

Run 10: Report of Indigo-1-32 — Data Link

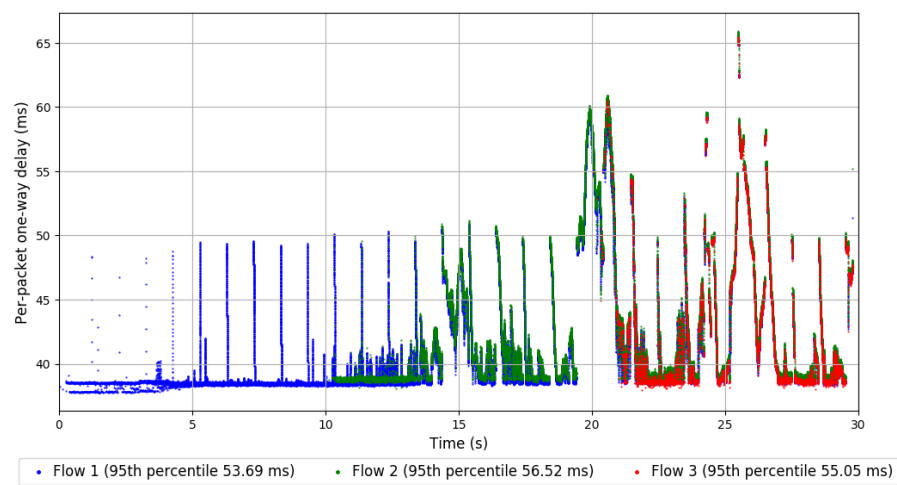
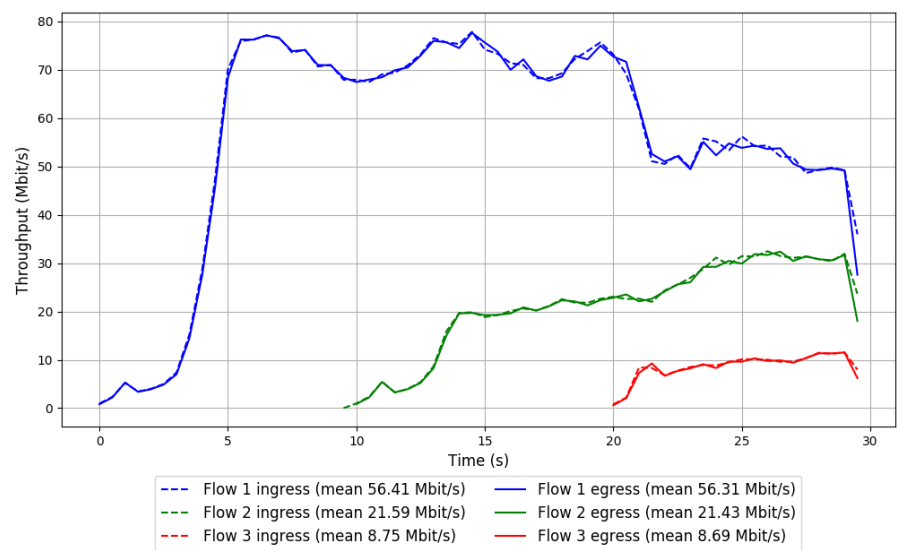


Run 1: Statistics of Vivace-latency

Start at: 2018-02-04 17:27:06
End at: 2018-02-04 17:27:36
Local clock offset: -0.075 ms
Remote clock offset: -2.626 ms

Below is generated by plot.py at 2018-02-05 01:31:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 73.37 Mbit/s
95th percentile per-packet one-way delay: 54.357 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 56.31 Mbit/s
95th percentile per-packet one-way delay: 53.688 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 21.43 Mbit/s
95th percentile per-packet one-way delay: 56.518 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 8.69 Mbit/s
95th percentile per-packet one-way delay: 55.052 ms
Loss rate: 1.99%

Run 1: Report of Vivace-latency — Data Link

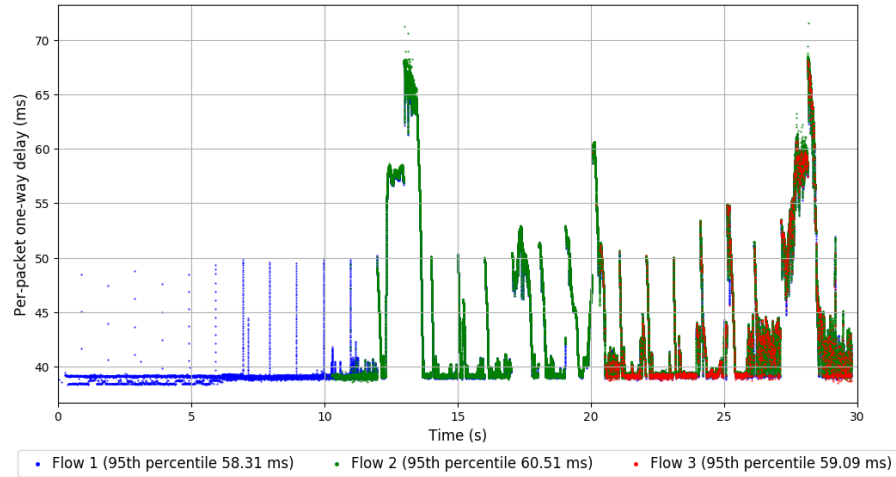
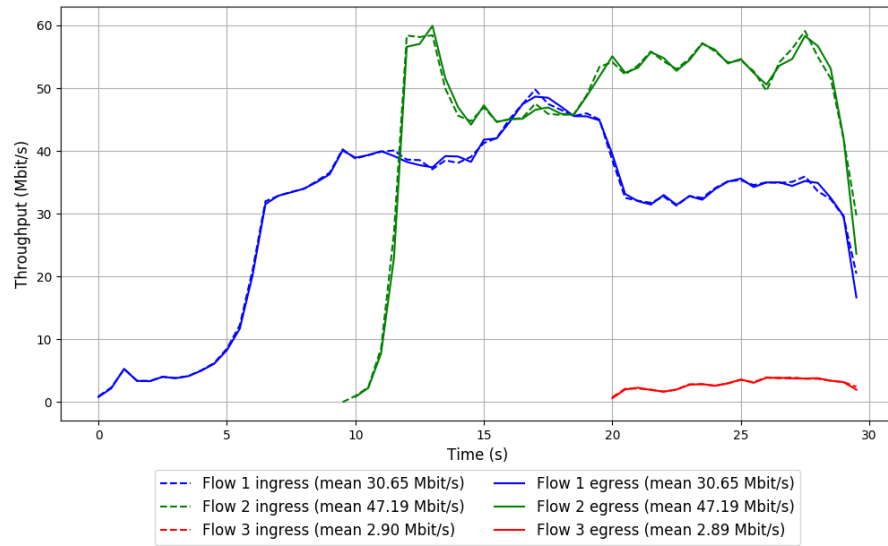


Run 2: Statistics of Vivace-latency

Start at: 2018-02-04 17:49:54
End at: 2018-02-04 17:50:24
Local clock offset: -0.44 ms
Remote clock offset: -0.944 ms

Below is generated by plot.py at 2018-02-05 01:31:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 62.91 Mbit/s
95th percentile per-packet one-way delay: 59.431 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 30.65 Mbit/s
95th percentile per-packet one-way delay: 58.315 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 47.19 Mbit/s
95th percentile per-packet one-way delay: 60.514 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 2.89 Mbit/s
95th percentile per-packet one-way delay: 59.095 ms
Loss rate: 1.35%

Run 2: Report of Vivace-latency — Data Link



Run 3: Statistics of Vivace-latency

Start at: 2018-02-04 18:12:40

End at: 2018-02-04 18:13:10

Local clock offset: -0.984 ms

Remote clock offset: 0.684 ms

Below is generated by plot.py at 2018-02-05 01:31:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.50 Mbit/s

95th percentile per-packet one-way delay: 62.610 ms

Loss rate: 0.41%

-- Flow 1:

Average throughput: 51.62 Mbit/s

95th percentile per-packet one-way delay: 62.275 ms

Loss rate: 0.31%

-- Flow 2:

Average throughput: 21.50 Mbit/s

95th percentile per-packet one-way delay: 63.068 ms

Loss rate: 0.54%

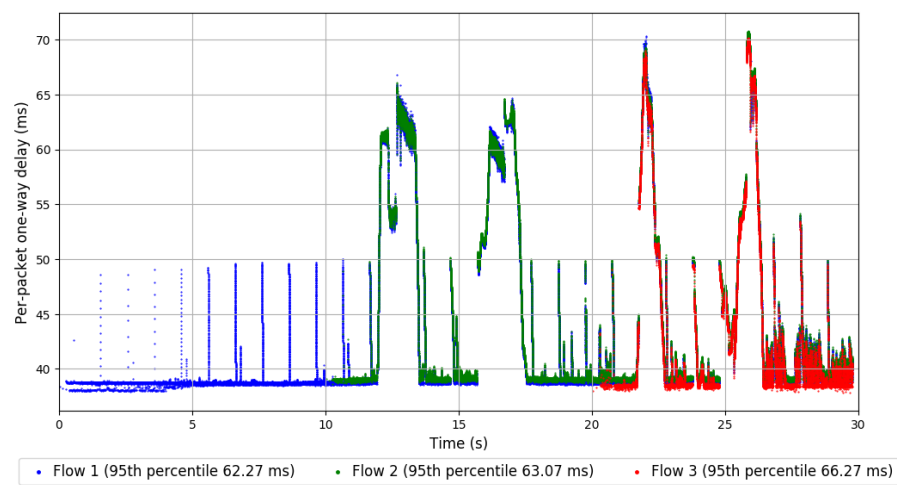
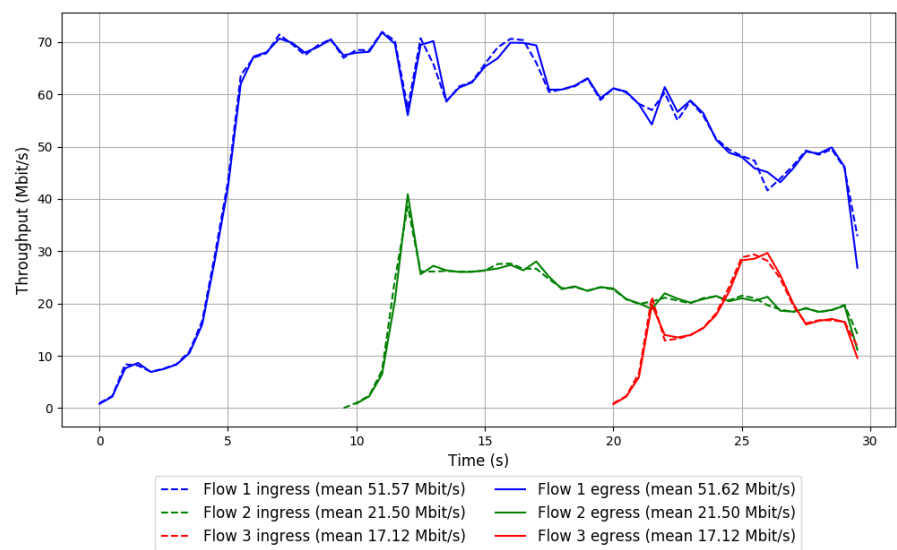
-- Flow 3:

Average throughput: 17.12 Mbit/s

95th percentile per-packet one-way delay: 66.271 ms

Loss rate: 1.07%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-04 18:36:14

End at: 2018-02-04 18:36:44

Local clock offset: -2.138 ms

Remote clock offset: 2.289 ms

Below is generated by plot.py at 2018-02-05 01:31:52

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.26 Mbit/s

95th percentile per-packet one-way delay: 98.006 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 45.26 Mbit/s

95th percentile per-packet one-way delay: 94.407 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 34.31 Mbit/s

95th percentile per-packet one-way delay: 98.858 ms

Loss rate: 0.70%

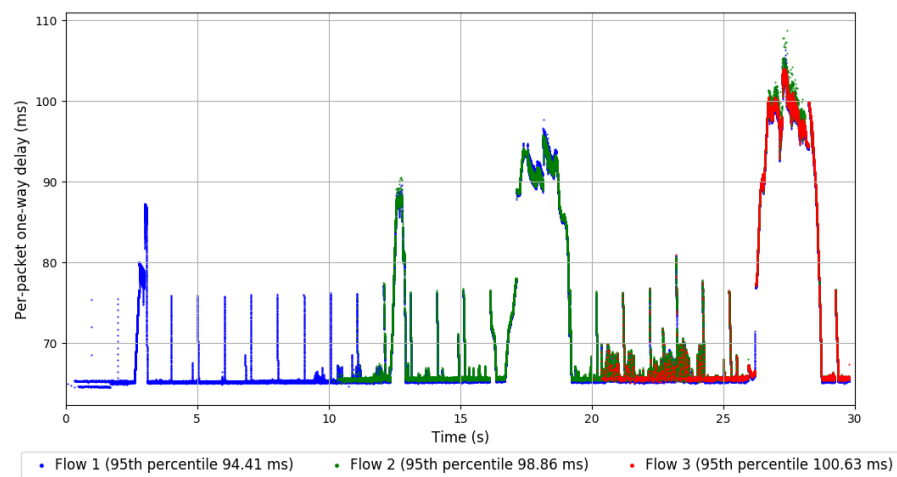
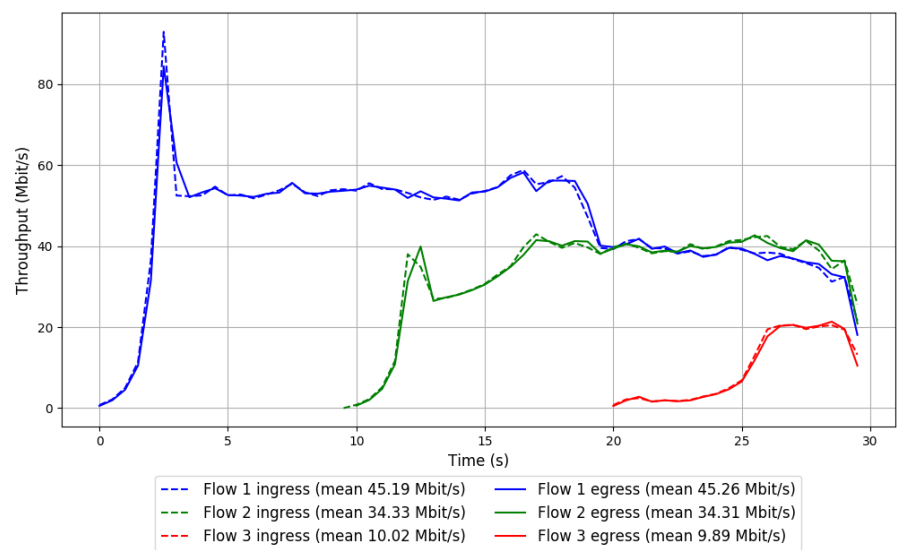
-- Flow 3:

Average throughput: 9.89 Mbit/s

95th percentile per-packet one-way delay: 100.634 ms

Loss rate: 2.65%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-04 18:59:32

End at: 2018-02-04 19:00:02

Local clock offset: -2.427 ms

Remote clock offset: 3.551 ms

Below is generated by plot.py at 2018-02-05 01:31:56

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.83 Mbit/s

95th percentile per-packet one-way delay: 74.517 ms

Loss rate: 0.53%

-- Flow 1:

Average throughput: 54.67 Mbit/s

95th percentile per-packet one-way delay: 74.614 ms

Loss rate: 0.37%

-- Flow 2:

Average throughput: 24.78 Mbit/s

95th percentile per-packet one-way delay: 74.642 ms

Loss rate: 0.90%

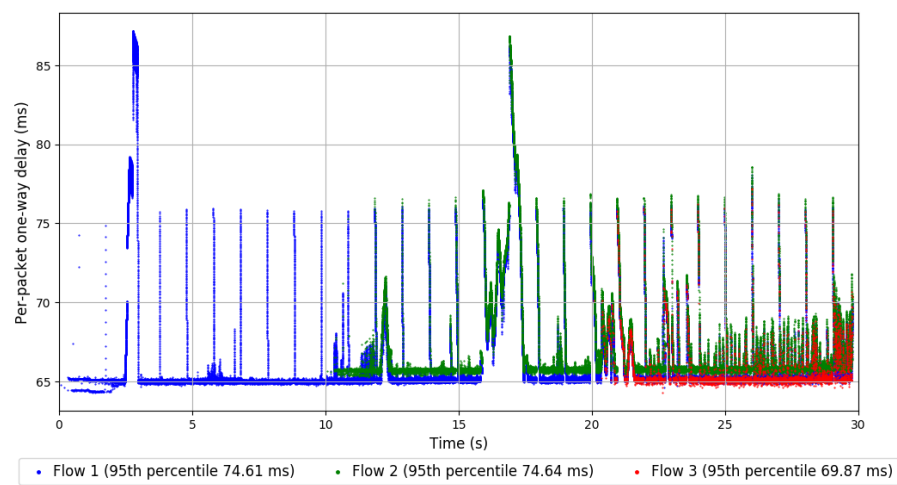
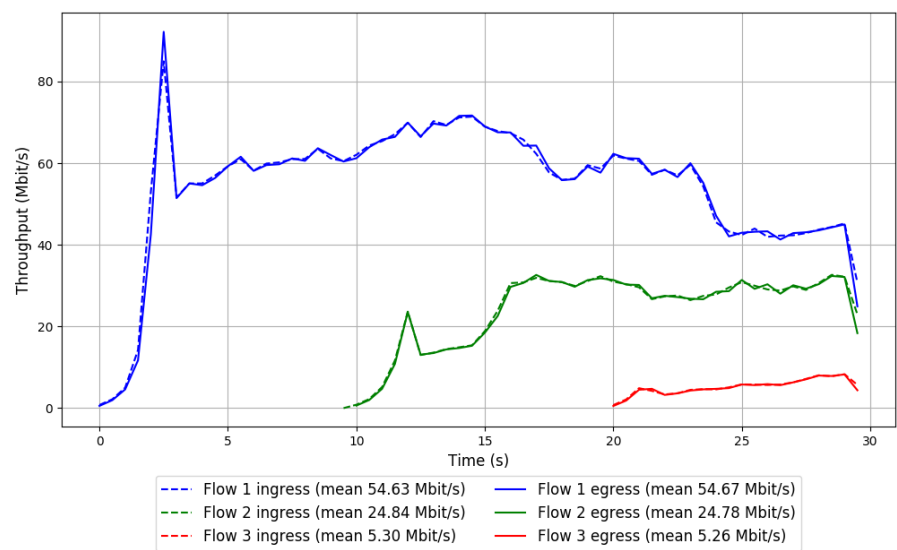
-- Flow 3:

Average throughput: 5.26 Mbit/s

95th percentile per-packet one-way delay: 69.871 ms

Loss rate: 2.26%

Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-04 19:22:44

End at: 2018-02-04 19:23:14

Local clock offset: -2.477 ms

Remote clock offset: 4.493 ms

Below is generated by plot.py at 2018-02-05 01:32:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 78.12 Mbit/s

95th percentile per-packet one-way delay: 77.503 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 72.70 Mbit/s

95th percentile per-packet one-way delay: 77.588 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 5.21 Mbit/s

95th percentile per-packet one-way delay: 75.814 ms

Loss rate: 1.00%

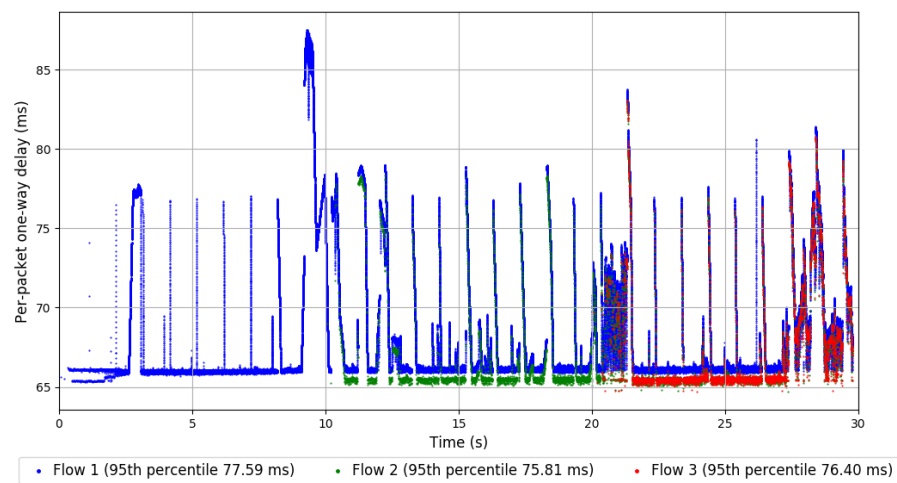
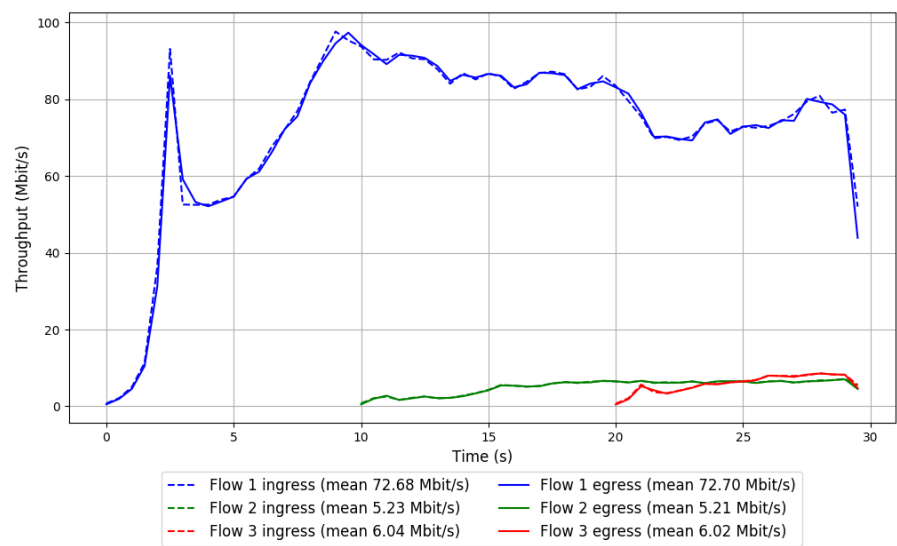
-- Flow 3:

Average throughput: 6.02 Mbit/s

95th percentile per-packet one-way delay: 76.399 ms

Loss rate: 1.75%

Run 6: Report of Vivace-latency — Data Link

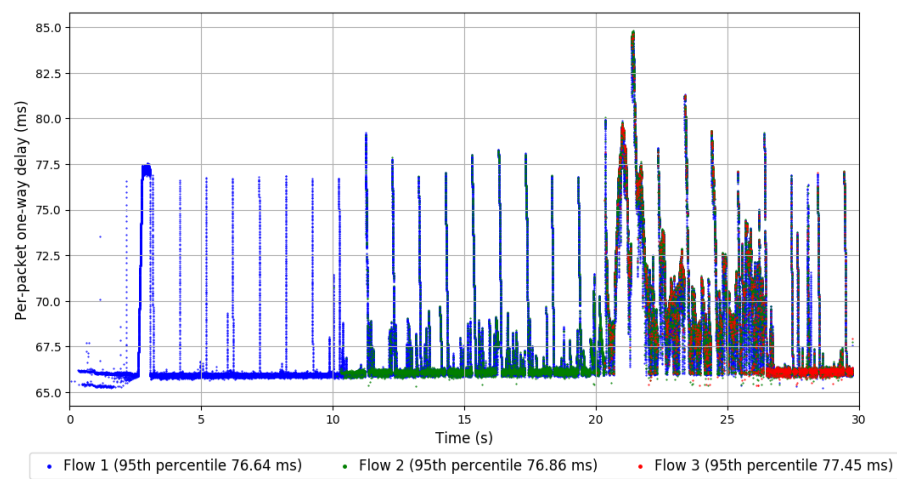
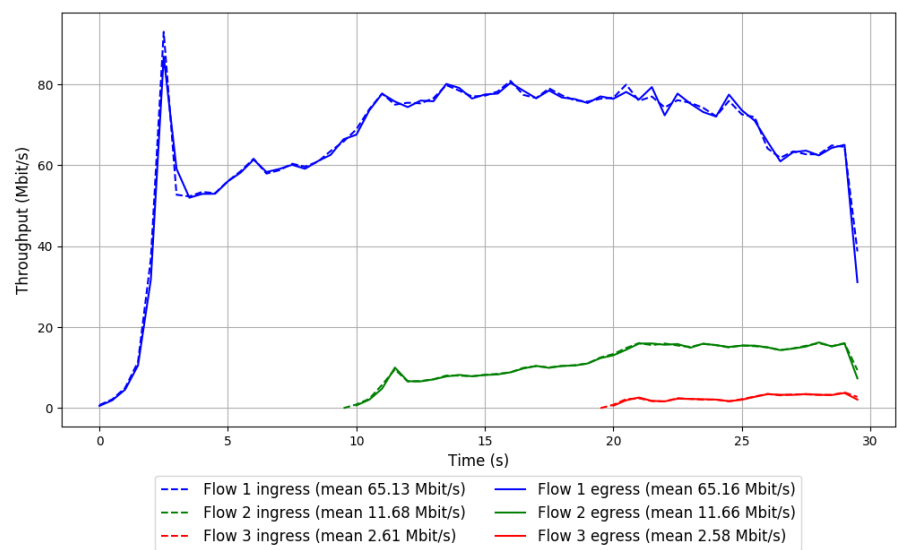


Run 7: Statistics of Vivace-latency

Start at: 2018-02-04 19:46:00
End at: 2018-02-04 19:46:30
Local clock offset: -2.407 ms
Remote clock offset: 4.78 ms

Below is generated by plot.py at 2018-02-05 01:32:07
Datalink statistics
-- Total of 3 flows:
Average throughput: 73.74 Mbit/s
95th percentile per-packet one-way delay: 76.693 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 65.16 Mbit/s
95th percentile per-packet one-way delay: 76.641 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 11.66 Mbit/s
95th percentile per-packet one-way delay: 76.860 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 2.58 Mbit/s
95th percentile per-packet one-way delay: 77.452 ms
Loss rate: 2.44%

Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-04 20:09:18

End at: 2018-02-04 20:09:48

Local clock offset: -2.902 ms

Remote clock offset: 4.897 ms

Below is generated by plot.py at 2018-02-05 01:32:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 71.20 Mbit/s

95th percentile per-packet one-way delay: 81.276 ms

Loss rate: 0.50%

-- Flow 1:

Average throughput: 60.11 Mbit/s

95th percentile per-packet one-way delay: 81.426 ms

Loss rate: 0.35%

-- Flow 2:

Average throughput: 12.00 Mbit/s

95th percentile per-packet one-way delay: 82.692 ms

Loss rate: 0.95%

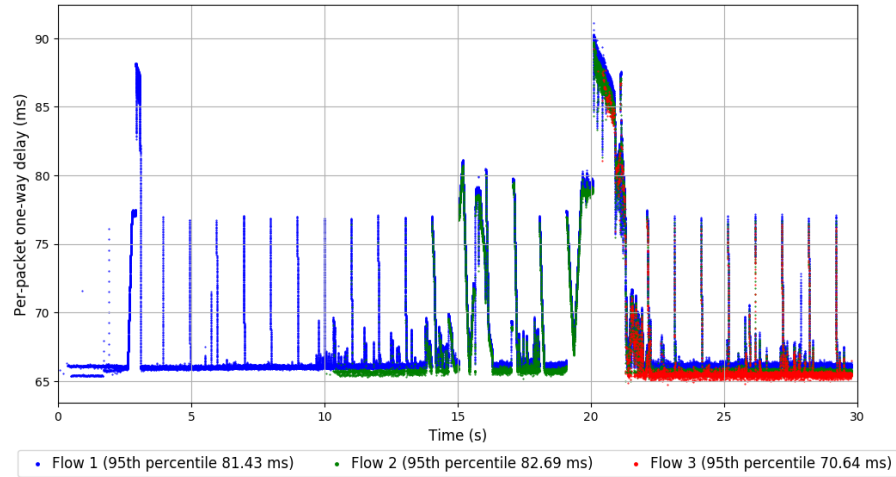
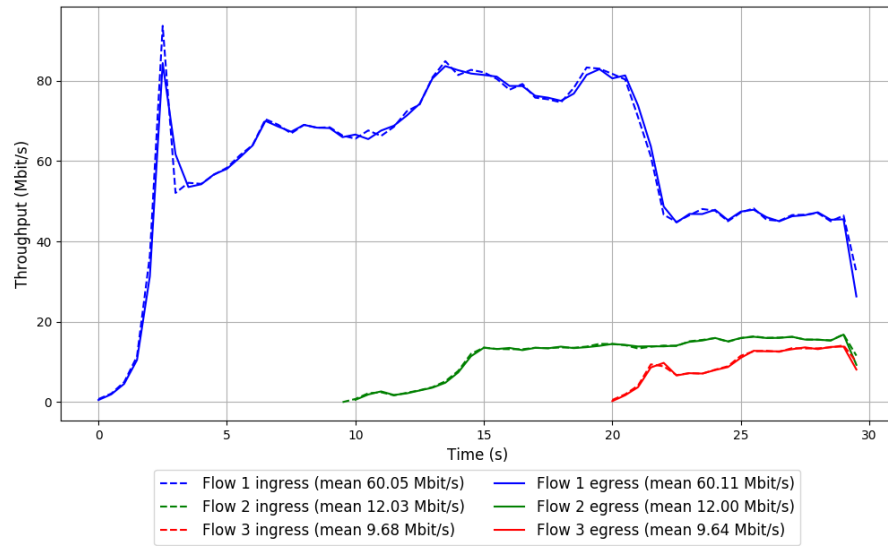
-- Flow 3:

Average throughput: 9.64 Mbit/s

95th percentile per-packet one-way delay: 70.645 ms

Loss rate: 2.04%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-04 20:32:49

End at: 2018-02-04 20:33:19

Local clock offset: -3.147 ms

Remote clock offset: 5.16 ms

Below is generated by plot.py at 2018-02-05 01:32:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 72.76 Mbit/s

95th percentile per-packet one-way delay: 76.143 ms

Loss rate: 0.54%

-- Flow 1:

Average throughput: 66.28 Mbit/s

95th percentile per-packet one-way delay: 76.150 ms

Loss rate: 0.50%

-- Flow 2:

Average throughput: 8.46 Mbit/s

95th percentile per-packet one-way delay: 75.847 ms

Loss rate: 0.91%

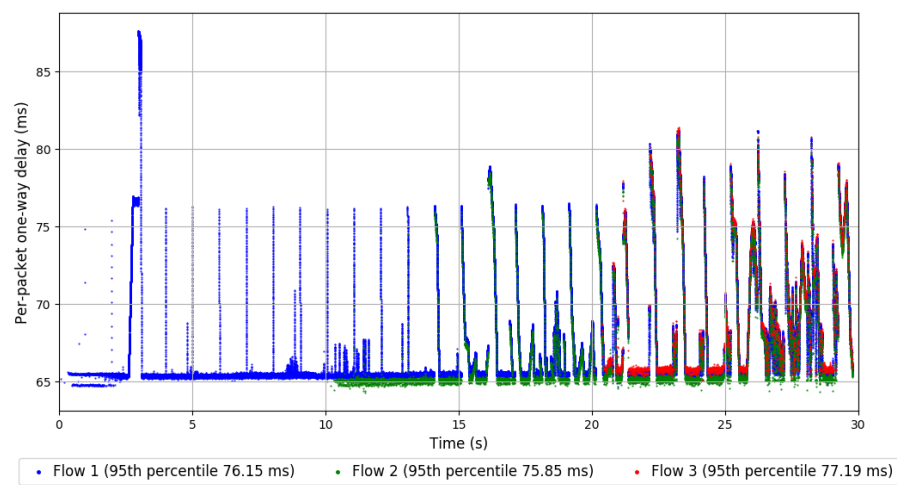
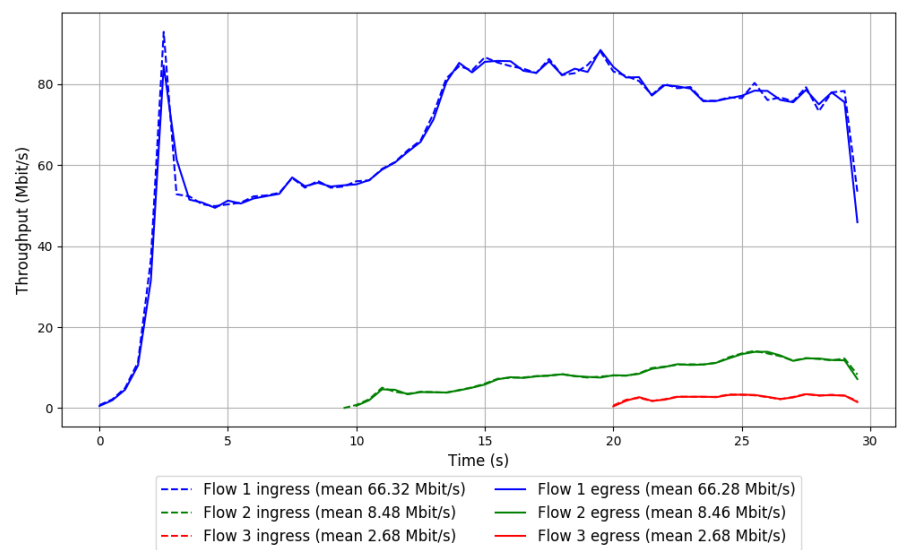
-- Flow 3:

Average throughput: 2.68 Mbit/s

95th percentile per-packet one-way delay: 77.185 ms

Loss rate: 1.34%

Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-04 20:56:06

End at: 2018-02-04 20:56:36

Local clock offset: -2.305 ms

Remote clock offset: 5.102 ms

Below is generated by plot.py at 2018-02-05 01:32:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 73.76 Mbit/s

95th percentile per-packet one-way delay: 88.354 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 54.74 Mbit/s

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

Loss rate: 0.48%

-- Flow 2:

Average throughput: 26.41 Mbit/s

95th percentile per-packet one-way delay: 90.322 ms

Loss rate: 0.82%

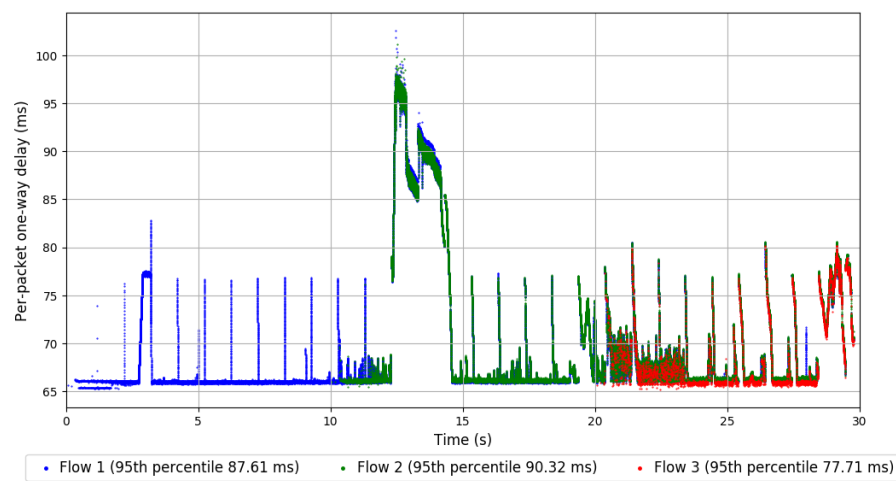
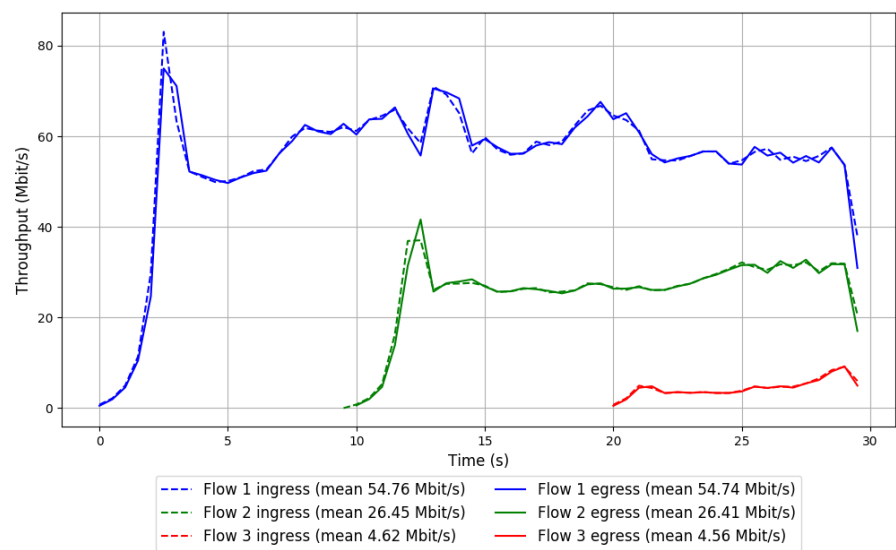
-- Flow 3:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 77.712 ms

Loss rate: 2.59%

Run 10: Report of Vivace-latency — Data Link

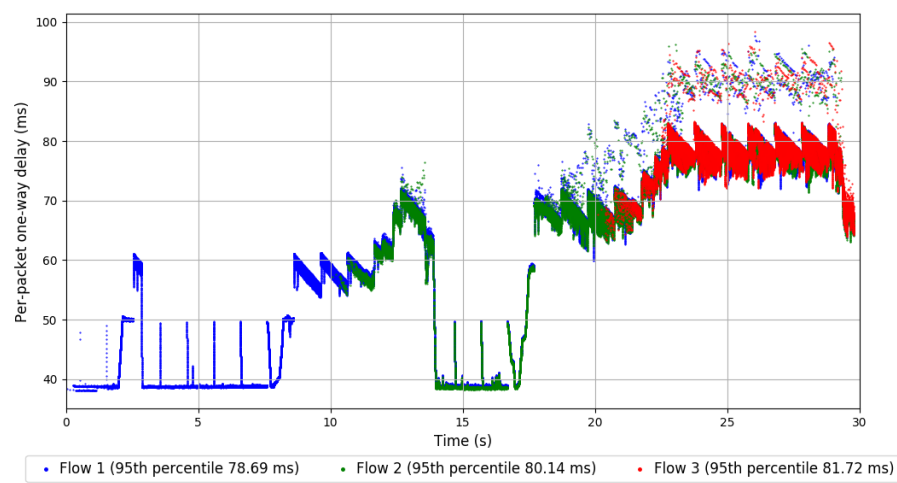
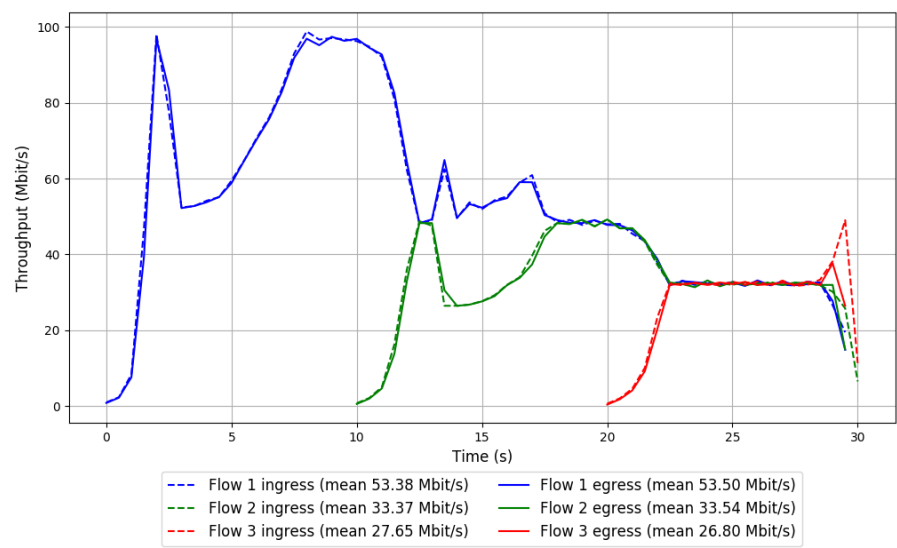


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-04 17:29:40
End at: 2018-02-04 17:30:10
Local clock offset: -0.092 ms
Remote clock offset: -2.415 ms

# Below is generated by plot.py at 2018-02-05 01:33:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.44 Mbit/s
95th percentile per-packet one-way delay: 79.875 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 53.50 Mbit/s
95th percentile per-packet one-way delay: 78.686 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 33.54 Mbit/s
95th percentile per-packet one-way delay: 80.139 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 26.80 Mbit/s
95th percentile per-packet one-way delay: 81.720 ms
Loss rate: 7.17%
```

Run 1: Report of Vivace-loss — Data Link

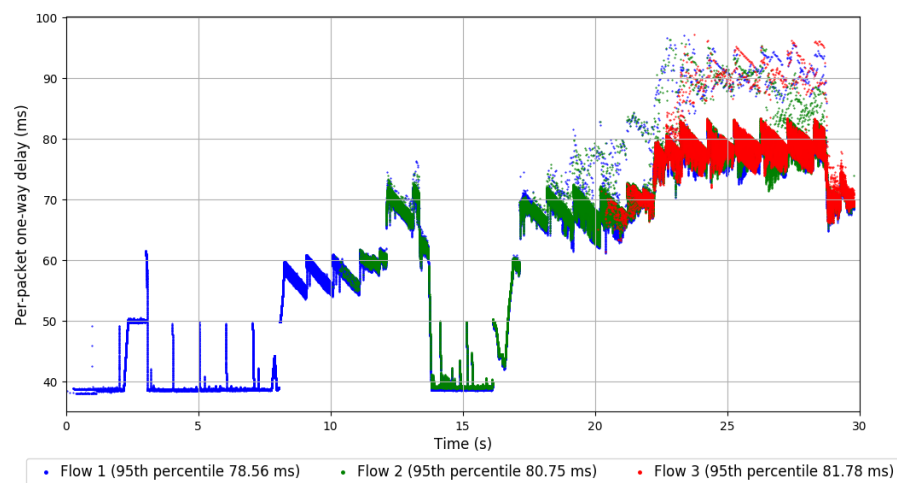
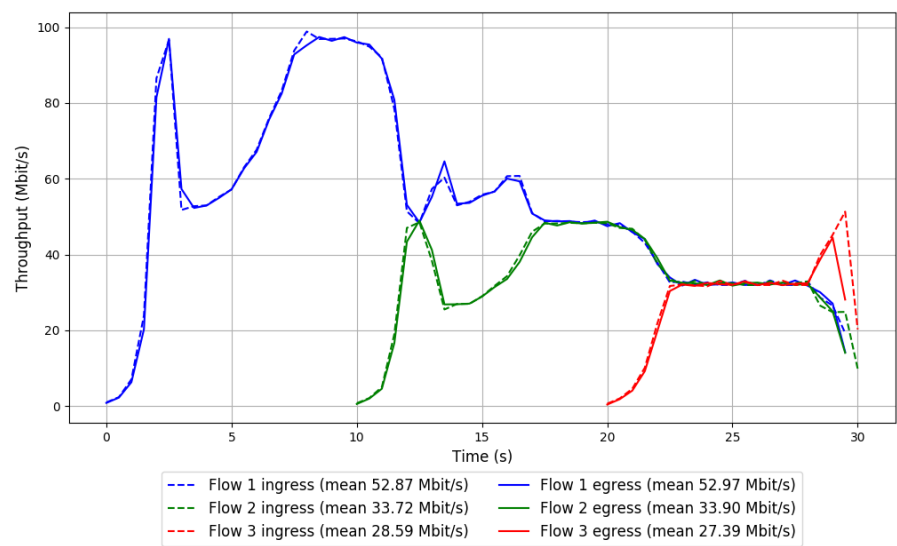


Run 2: Statistics of Vivace-loss

Start at: 2018-02-04 17:52:27
End at: 2018-02-04 17:52:57
Local clock offset: -0.53 ms
Remote clock offset: -0.697 ms

Below is generated by plot.py at 2018-02-05 01:33:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.36 Mbit/s
95th percentile per-packet one-way delay: 79.986 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 52.97 Mbit/s
95th percentile per-packet one-way delay: 78.559 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 33.90 Mbit/s
95th percentile per-packet one-way delay: 80.749 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 27.39 Mbit/s
95th percentile per-packet one-way delay: 81.784 ms
Loss rate: 8.65%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-04 18:15:29

End at: 2018-02-04 18:15:59

Local clock offset: -1.167 ms

Remote clock offset: 0.896 ms

Below is generated by plot.py at 2018-02-05 01:33:11

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.87 Mbit/s

95th percentile per-packet one-way delay: 107.238 ms

Loss rate: 4.35%

-- Flow 1:

Average throughput: 46.97 Mbit/s

95th percentile per-packet one-way delay: 105.873 ms

Loss rate: 3.05%

-- Flow 2:

Average throughput: 32.75 Mbit/s

95th percentile per-packet one-way delay: 107.656 ms

Loss rate: 1.09%

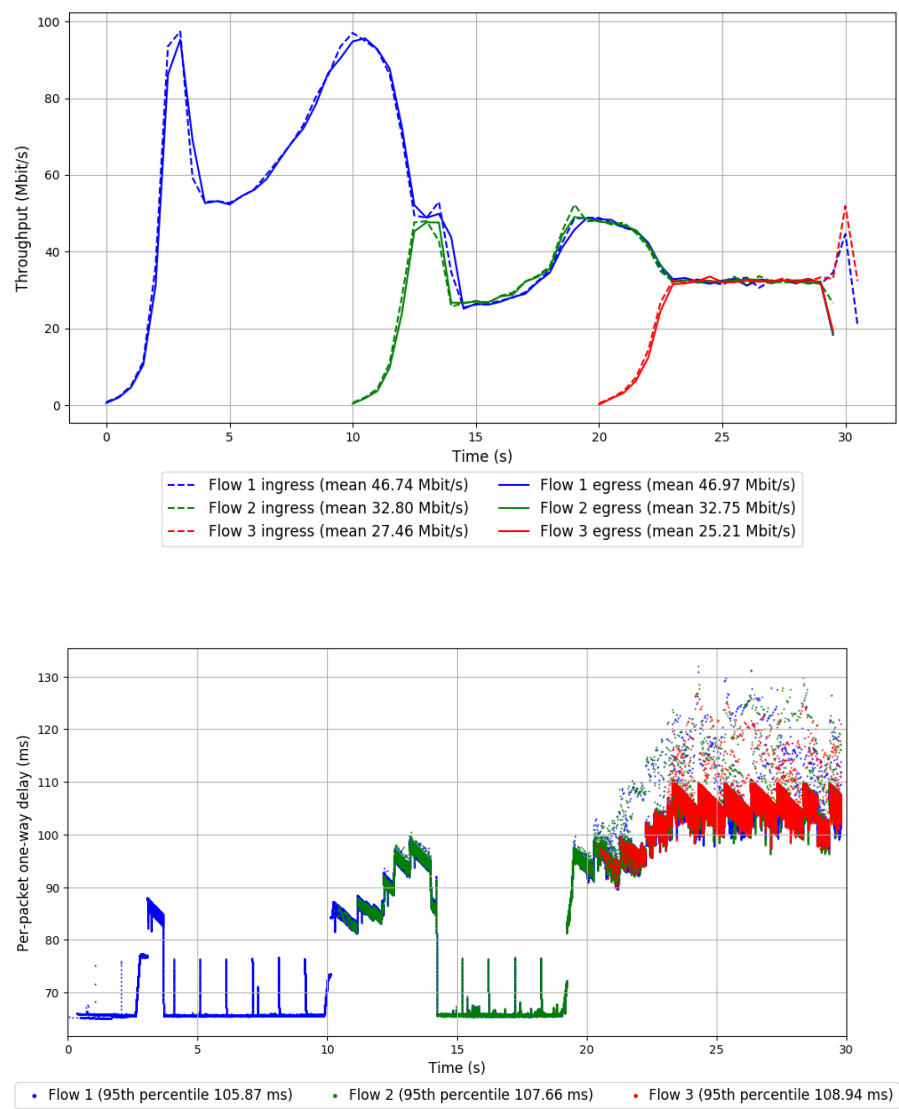
-- Flow 3:

Average throughput: 25.21 Mbit/s

95th percentile per-packet one-way delay: 108.939 ms

Loss rate: 17.82%

Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-04 18:38:51

End at: 2018-02-04 18:39:21

Local clock offset: -1.289 ms

Remote clock offset: 2.455 ms

Below is generated by plot.py at 2018-02-05 01:33:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.29 Mbit/s

95th percentile per-packet one-way delay: 107.230 ms

Loss rate: 2.71%

-- Flow 1:

Average throughput: 46.67 Mbit/s

95th percentile per-packet one-way delay: 106.124 ms

Loss rate: 2.46%

-- Flow 2:

Average throughput: 33.73 Mbit/s

95th percentile per-packet one-way delay: 107.356 ms

Loss rate: 3.21%

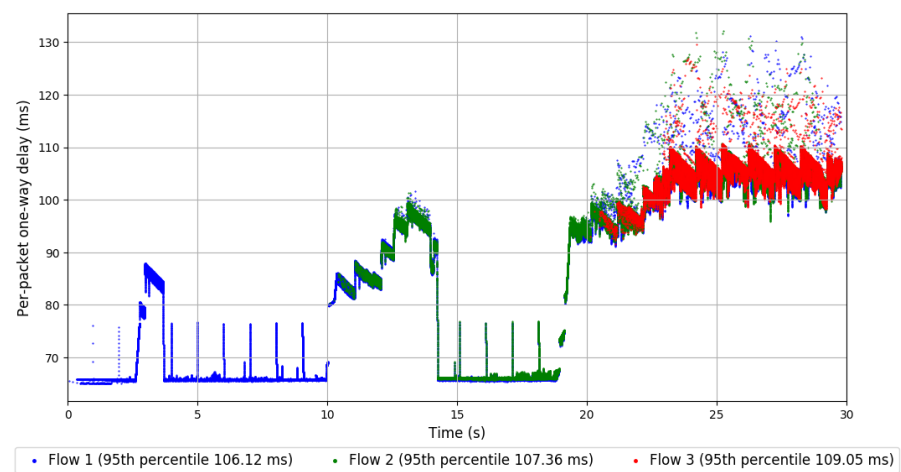
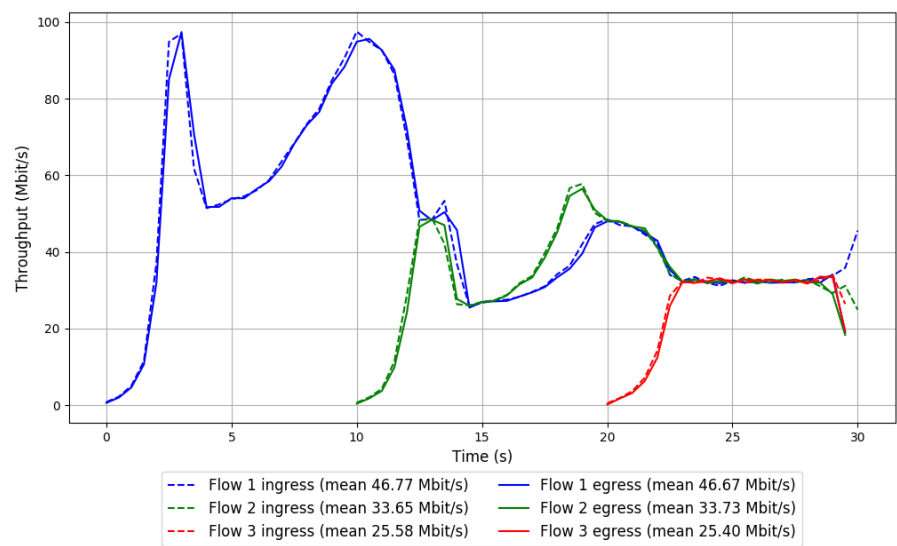
-- Flow 3:

Average throughput: 25.40 Mbit/s

95th percentile per-packet one-way delay: 109.048 ms

Loss rate: 2.78%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-04 19:02:08

End at: 2018-02-04 19:02:38

Local clock offset: -2.067 ms

Remote clock offset: 3.667 ms

Below is generated by plot.py at 2018-02-05 01:33:21

Datalink statistics

-- Total of 3 flows:

Average throughput: 77.42 Mbit/s

95th percentile per-packet one-way delay: 107.047 ms

Loss rate: 2.20%

-- Flow 1:

Average throughput: 47.56 Mbit/s

95th percentile per-packet one-way delay: 105.913 ms

Loss rate: 1.69%

-- Flow 2:

Average throughput: 32.56 Mbit/s

95th percentile per-packet one-way delay: 107.246 ms

Loss rate: 3.11%

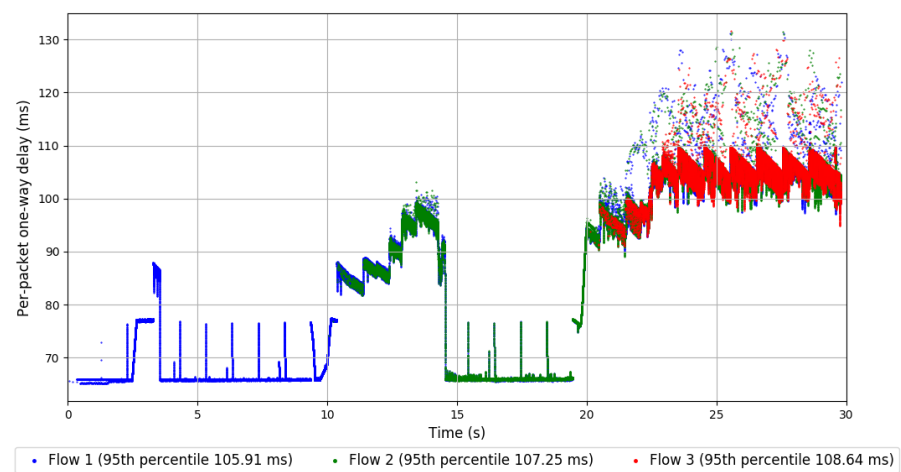
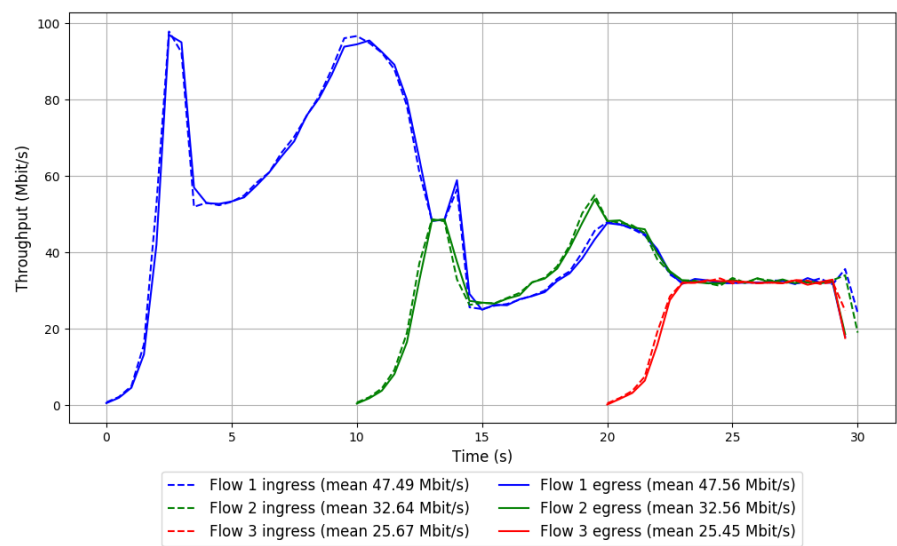
-- Flow 3:

Average throughput: 25.45 Mbit/s

95th percentile per-packet one-way delay: 108.637 ms

Loss rate: 2.69%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-04 19:25:22

End at: 2018-02-04 19:25:52

Local clock offset: -2.286 ms

Remote clock offset: 4.61 ms

Below is generated by plot.py at 2018-02-05 01:33:25

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.68 Mbit/s

95th percentile per-packet one-way delay: 107.358 ms

Loss rate: 3.72%

-- Flow 1:

Average throughput: 51.75 Mbit/s

95th percentile per-packet one-way delay: 105.842 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 32.61 Mbit/s

95th percentile per-packet one-way delay: 107.947 ms

Loss rate: 5.90%

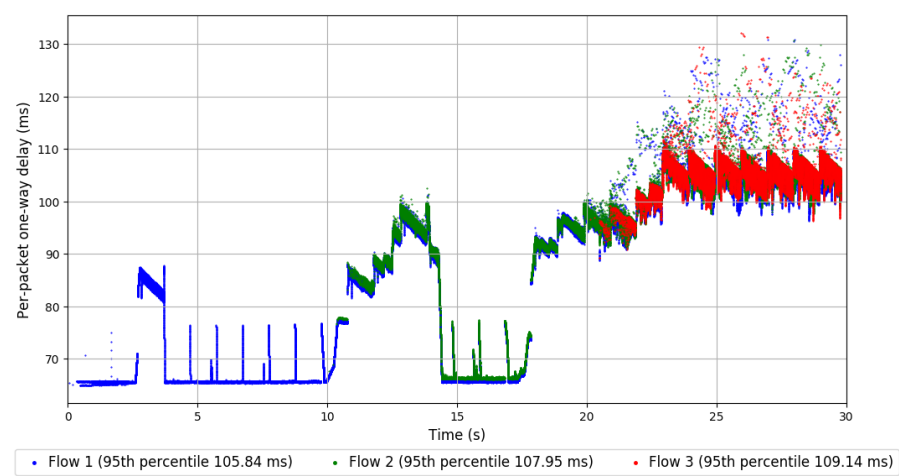
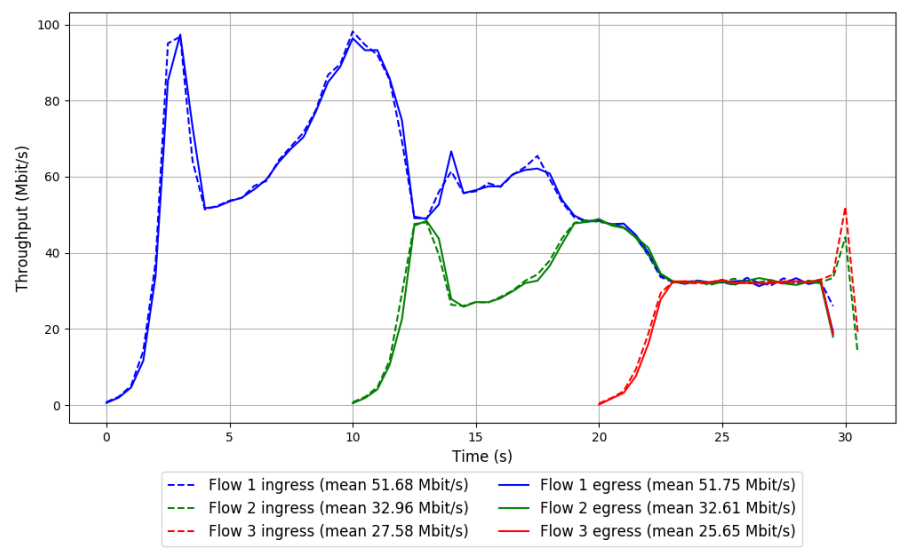
-- Flow 3:

Average throughput: 25.65 Mbit/s

95th percentile per-packet one-way delay: 109.138 ms

Loss rate: 15.84%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

Start at: 2018-02-04 19:48:37

End at: 2018-02-04 19:49:07

Local clock offset: -2.728 ms

Remote clock offset: 4.795 ms

Below is generated by plot.py at 2018-02-05 01:33:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.45 Mbit/s

95th percentile per-packet one-way delay: 106.964 ms

Loss rate: 3.53%

-- Flow 1:

Average throughput: 51.57 Mbit/s

95th percentile per-packet one-way delay: 106.033 ms

Loss rate: 2.38%

-- Flow 2:

Average throughput: 32.31 Mbit/s

95th percentile per-packet one-way delay: 107.404 ms

Loss rate: 1.04%

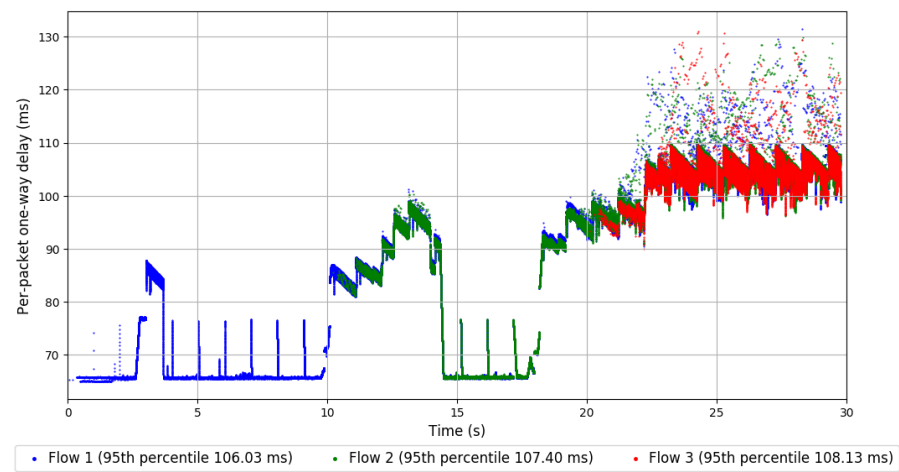
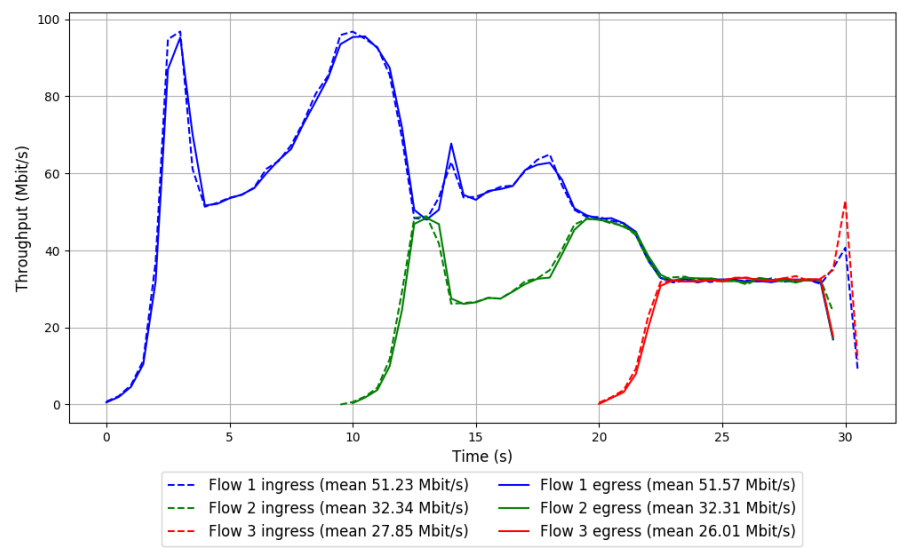
-- Flow 3:

Average throughput: 26.01 Mbit/s

95th percentile per-packet one-way delay: 108.128 ms

Loss rate: 15.03%

Run 7: Report of Vivace-loss — Data Link



Run 8: Statistics of Vivace-loss

Start at: 2018-02-04 20:11:56

End at: 2018-02-04 20:12:26

Local clock offset: -5.512 ms

Remote clock offset: 5.002 ms

Below is generated by plot.py at 2018-02-05 01:34:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.63 Mbit/s

95th percentile per-packet one-way delay: 104.762 ms

Loss rate: 2.97%

-- Flow 1:

Average throughput: 50.67 Mbit/s

95th percentile per-packet one-way delay: 103.994 ms

Loss rate: 0.46%

-- Flow 2:

Average throughput: 32.41 Mbit/s

95th percentile per-packet one-way delay: 104.983 ms

Loss rate: 4.18%

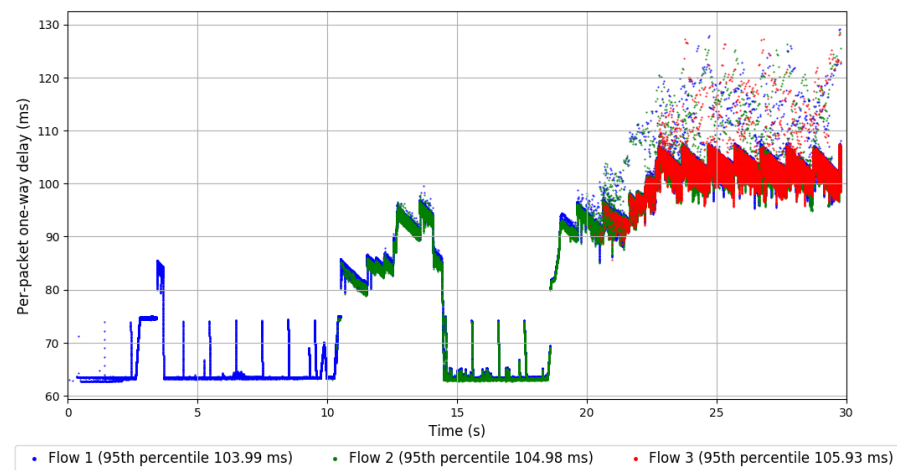
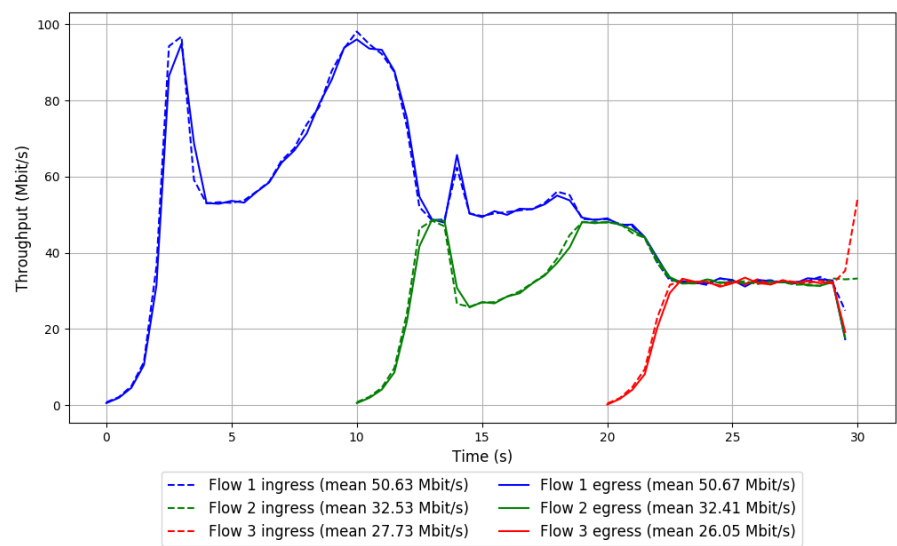
-- Flow 3:

Average throughput: 26.05 Mbit/s

95th percentile per-packet one-way delay: 105.926 ms

Loss rate: 13.24%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-04 20:35:27

End at: 2018-02-04 20:35:57

Local clock offset: -2.549 ms

Remote clock offset: 5.21 ms

Below is generated by plot.py at 2018-02-05 01:34:23

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.16 Mbit/s

95th percentile per-packet one-way delay: 107.630 ms

Loss rate: 2.13%

-- Flow 1:

Average throughput: 51.56 Mbit/s

95th percentile per-packet one-way delay: 106.403 ms

Loss rate: 0.95%

-- Flow 2:

Average throughput: 32.24 Mbit/s

95th percentile per-packet one-way delay: 108.053 ms

Loss rate: 1.18%

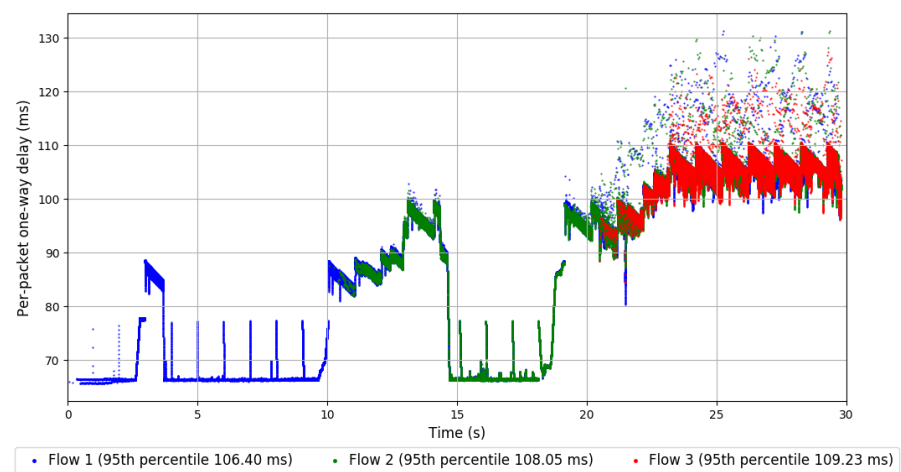
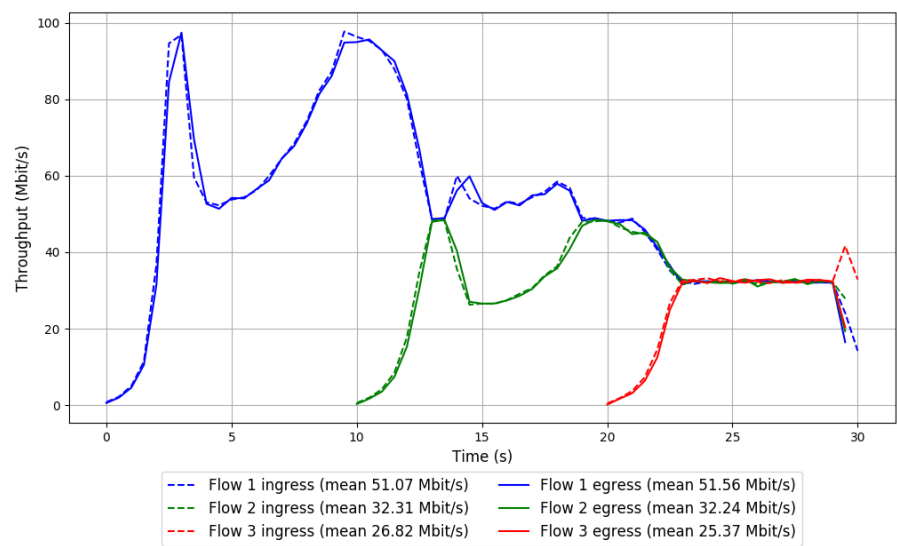
-- Flow 3:

Average throughput: 25.37 Mbit/s

95th percentile per-packet one-way delay: 109.235 ms

Loss rate: 10.98%

Run 9: Report of Vivace-loss — Data Link



Run 10: Statistics of Vivace-loss

Start at: 2018-02-04 20:58:44

End at: 2018-02-04 20:59:14

Local clock offset: -5.196 ms

Remote clock offset: 5.074 ms

Below is generated by plot.py at 2018-02-05 01:34:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.36 Mbit/s

95th percentile per-packet one-way delay: 104.522 ms

Loss rate: 3.02%

-- Flow 1:

Average throughput: 50.36 Mbit/s

95th percentile per-packet one-way delay: 103.687 ms

Loss rate: 1.87%

-- Flow 2:

Average throughput: 32.74 Mbit/s

95th percentile per-packet one-way delay: 104.446 ms

Loss rate: 0.96%

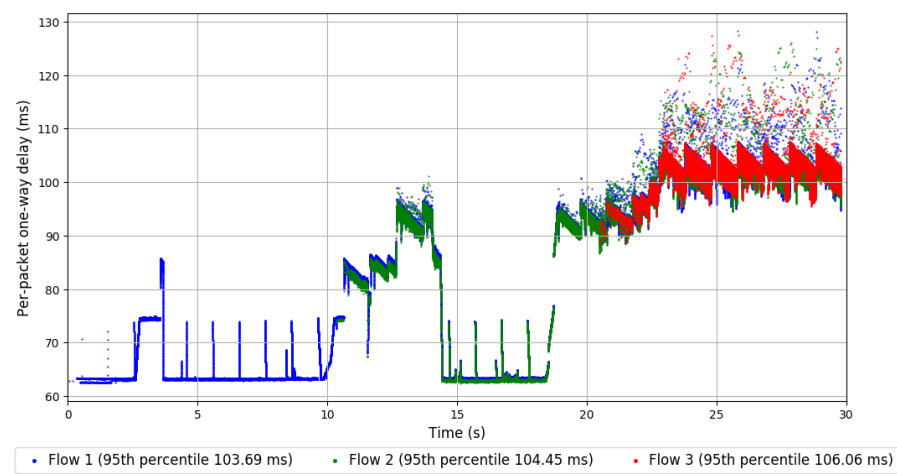
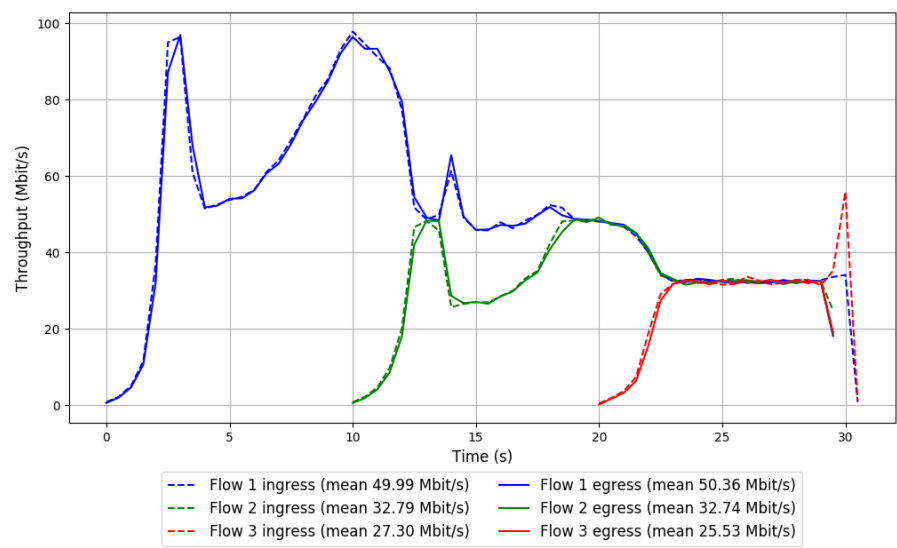
-- Flow 3:

Average throughput: 25.53 Mbit/s

95th percentile per-packet one-way delay: 106.063 ms

Loss rate: 13.88%

Run 10: Report of Vivace-loss — Data Link

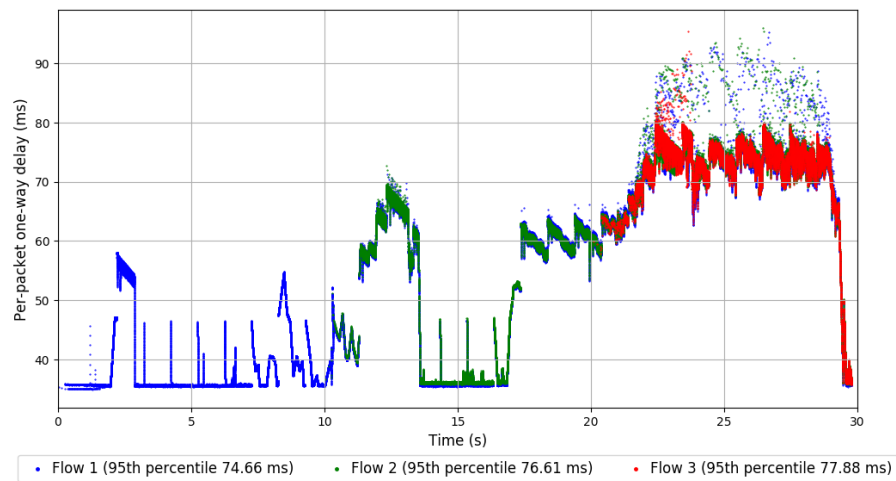
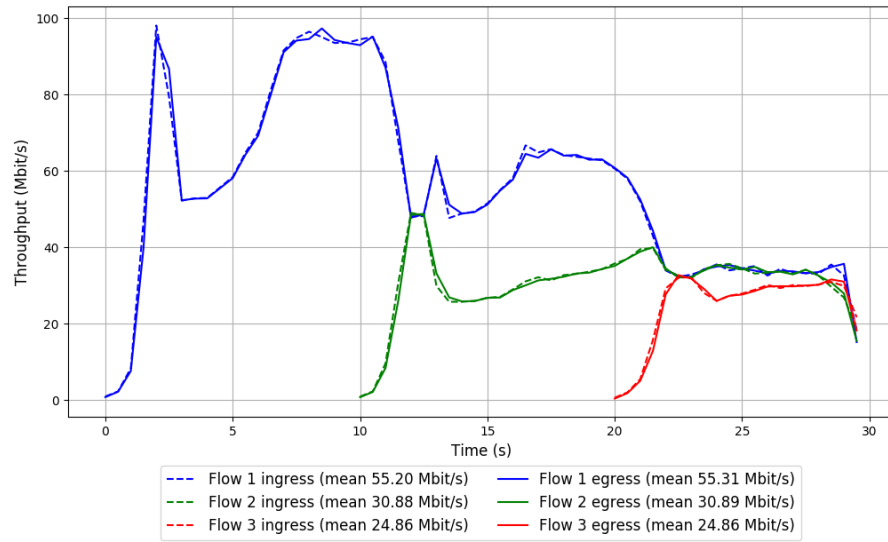


Run 1: Statistics of Vivace-LTE

Start at: 2018-02-04 17:28:23
End at: 2018-02-04 17:28:53
Local clock offset: -2.874 ms
Remote clock offset: -2.485 ms

Below is generated by plot.py at 2018-02-05 01:34:31
Datalink statistics
-- Total of 3 flows:
Average throughput: 83.89 Mbit/s
95th percentile per-packet one-way delay: 76.036 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 55.31 Mbit/s
95th percentile per-packet one-way delay: 74.662 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 30.89 Mbit/s
95th percentile per-packet one-way delay: 76.605 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 24.86 Mbit/s
95th percentile per-packet one-way delay: 77.878 ms
Loss rate: 1.30%

Run 1: Report of Vivace-LTE — Data Link

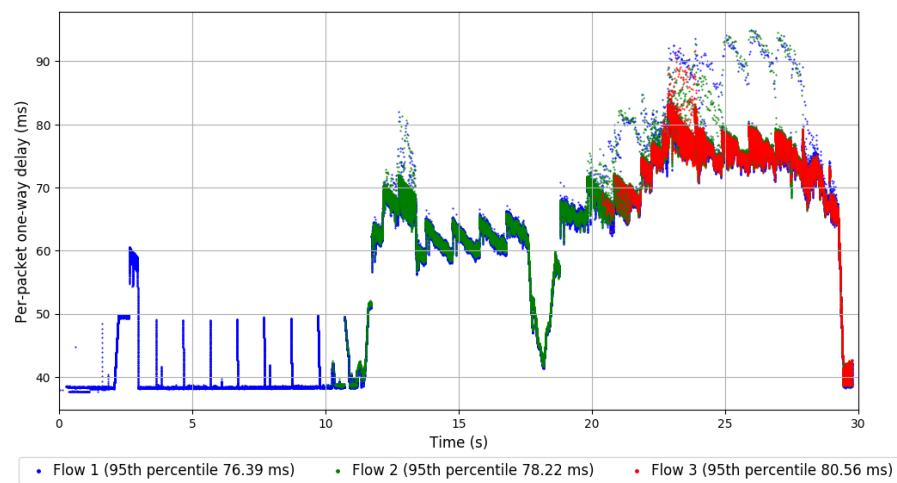
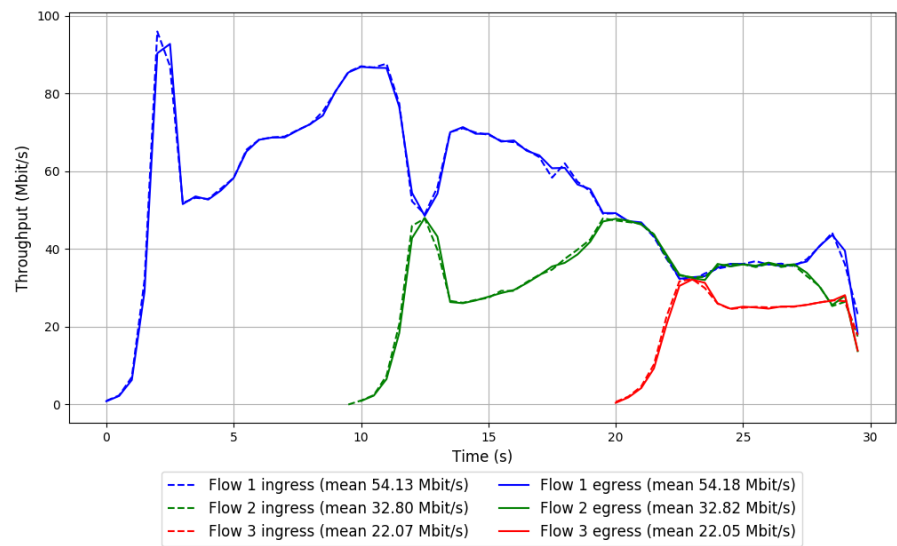


Run 2: Statistics of Vivace-LTE

Start at: 2018-02-04 17:51:10
End at: 2018-02-04 17:51:40
Local clock offset: -0.79 ms
Remote clock offset: -0.807 ms

Below is generated by plot.py at 2018-02-05 01:34:35
Datalink statistics
-- Total of 3 flows:
Average throughput: 83.16 Mbit/s
95th percentile per-packet one-way delay: 77.678 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 54.18 Mbit/s
95th percentile per-packet one-way delay: 76.391 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 32.82 Mbit/s
95th percentile per-packet one-way delay: 78.221 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 22.05 Mbit/s
95th percentile per-packet one-way delay: 80.562 ms
Loss rate: 1.46%

Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-04 18:14:06

End at: 2018-02-04 18:14:36

Local clock offset: -1.547 ms

Remote clock offset: 0.82 ms

Below is generated by plot.py at 2018-02-05 01:34:38

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.43 Mbit/s

95th percentile per-packet one-way delay: 104.956 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 51.44 Mbit/s

95th percentile per-packet one-way delay: 104.328 ms

Loss rate: 0.65%

-- Flow 2:

Average throughput: 32.52 Mbit/s

95th percentile per-packet one-way delay: 105.158 ms

Loss rate: 1.15%

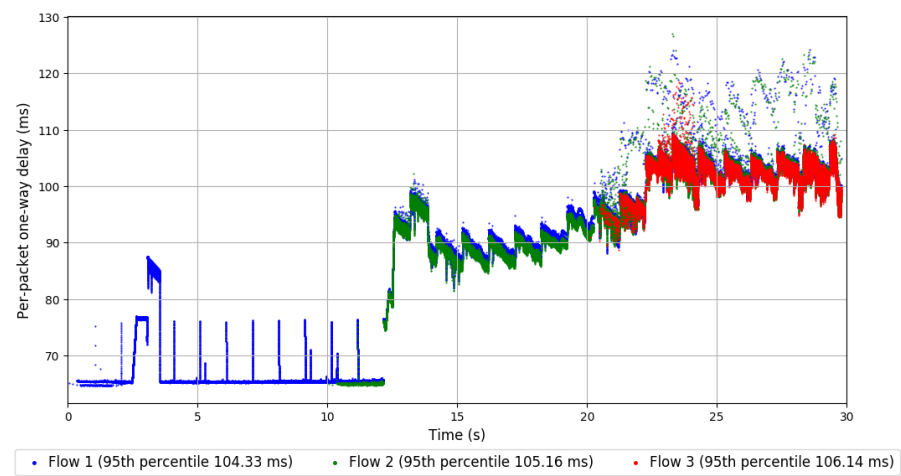
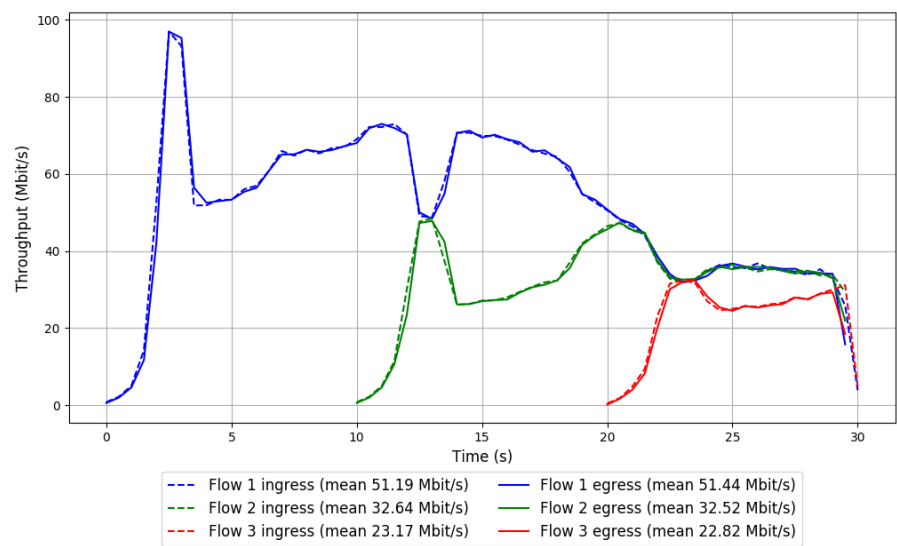
-- Flow 3:

Average throughput: 22.82 Mbit/s

95th percentile per-packet one-way delay: 106.136 ms

Loss rate: 5.19%

Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-04 18:37:32

End at: 2018-02-04 18:38:02

Local clock offset: -4.249 ms

Remote clock offset: 2.354 ms

Below is generated by plot.py at 2018-02-05 01:34:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.36 Mbit/s

95th percentile per-packet one-way delay: 103.043 ms

Loss rate: 0.70%

-- Flow 1:

Average throughput: 53.59 Mbit/s

95th percentile per-packet one-way delay: 102.044 ms

Loss rate: 0.36%

-- Flow 2:

Average throughput: 32.18 Mbit/s

95th percentile per-packet one-way delay: 103.752 ms

Loss rate: 0.88%

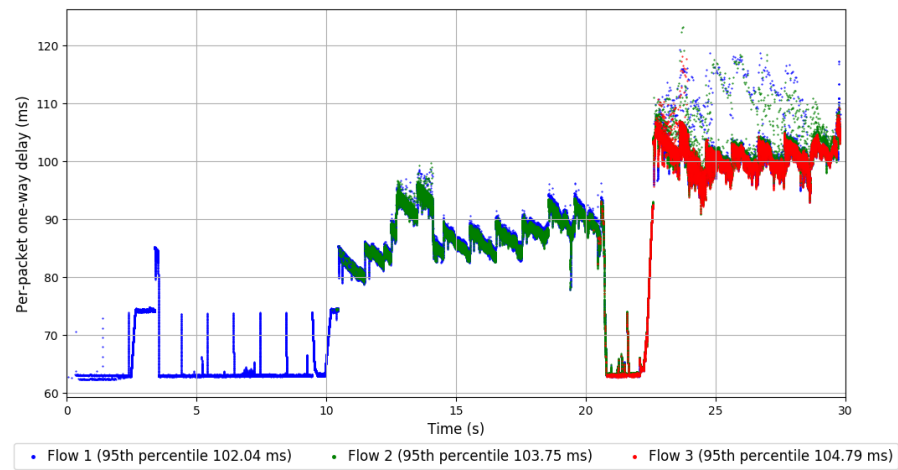
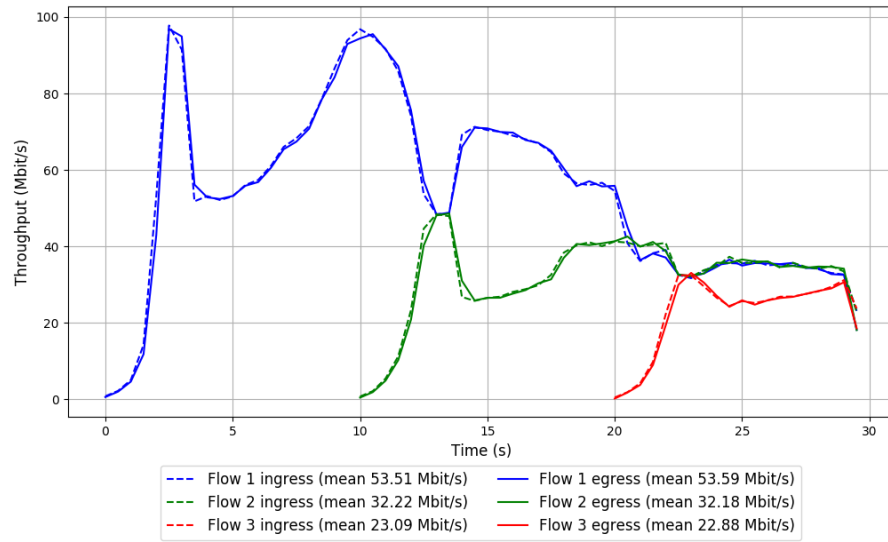
-- Flow 3:

Average throughput: 22.88 Mbit/s

95th percentile per-packet one-way delay: 104.788 ms

Loss rate: 2.61%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-04 19:00:50

End at: 2018-02-04 19:01:20

Local clock offset: -2.214 ms

Remote clock offset: 3.572 ms

Run 5: Report of Vivace-LTE — Data Link

Figure is missing

Figure is missing

Run 6: Statistics of Vivace-LTE

Start at: 2018-02-04 19:24:03

End at: 2018-02-04 19:24:33

Local clock offset: -5.122 ms

Remote clock offset: 4.551 ms

Below is generated by plot.py at 2018-02-05 01:35:01

Datalink statistics

-- Total of 3 flows:

Average throughput: 80.95 Mbit/s

95th percentile per-packet one-way delay: 102.463 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 53.01 Mbit/s

95th percentile per-packet one-way delay: 101.635 ms

Loss rate: 0.45%

-- Flow 2:

Average throughput: 30.95 Mbit/s

95th percentile per-packet one-way delay: 102.834 ms

Loss rate: 0.77%

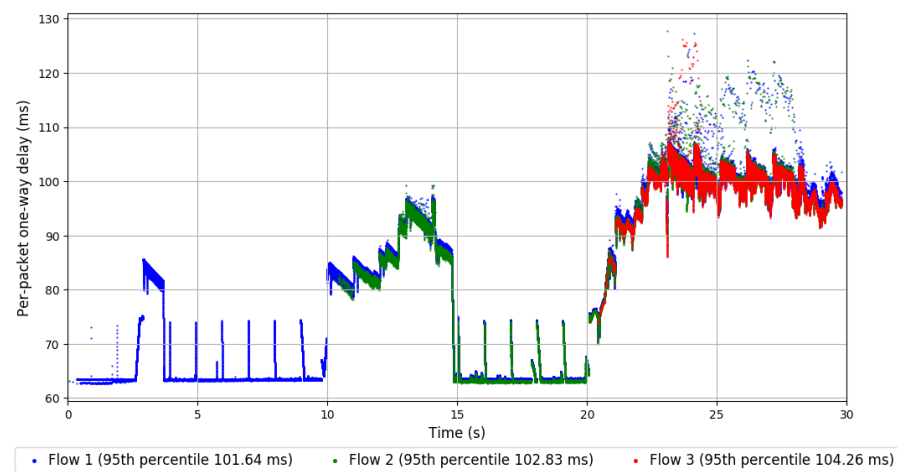
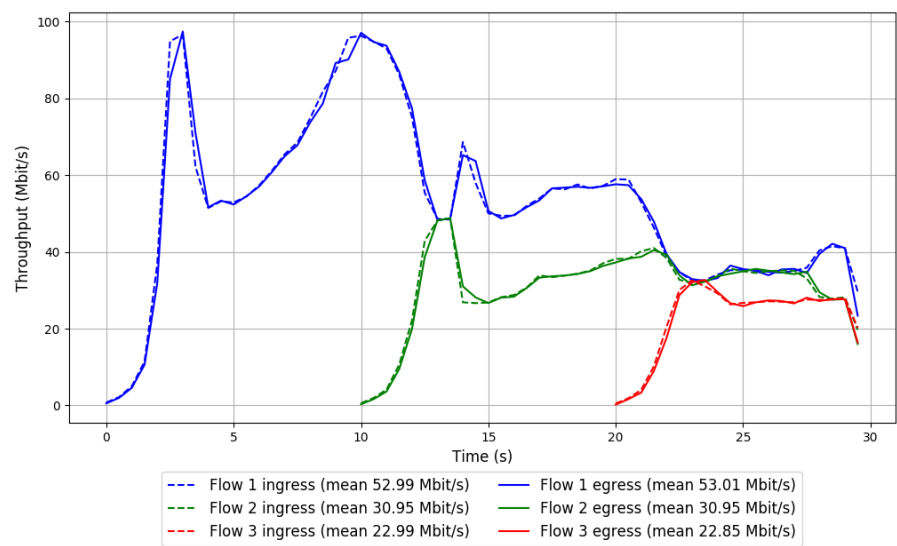
-- Flow 3:

Average throughput: 22.85 Mbit/s

95th percentile per-packet one-way delay: 104.263 ms

Loss rate: 2.07%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-04 19:47:18

End at: 2018-02-04 19:47:48

Local clock offset: -2.858 ms

Remote clock offset: 4.817 ms

Below is generated by plot.py at 2018-02-05 01:35:08

Datalink statistics

-- Total of 3 flows:

Average throughput: 79.70 Mbit/s

95th percentile per-packet one-way delay: 105.995 ms

Loss rate: 0.71%

-- Flow 1:

Average throughput: 50.40 Mbit/s

95th percentile per-packet one-way delay: 104.847 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 32.66 Mbit/s

95th percentile per-packet one-way delay: 106.049 ms

Loss rate: 0.85%

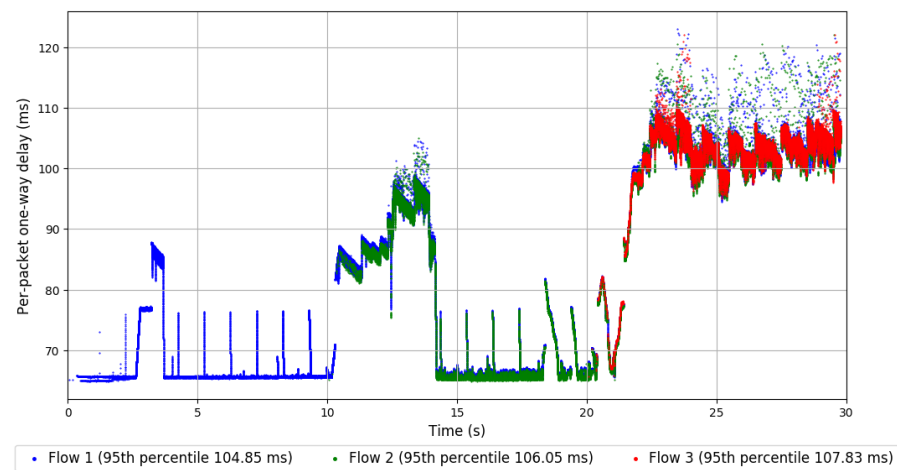
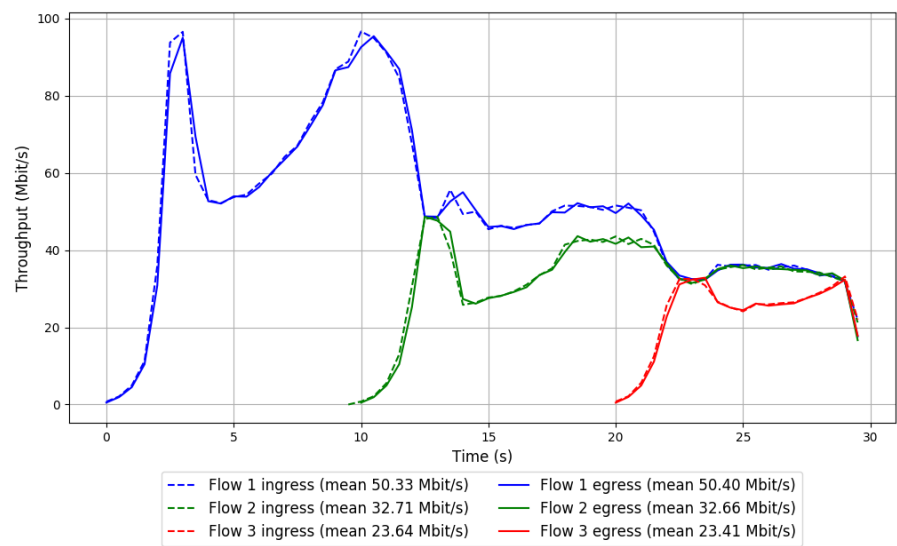
-- Flow 3:

Average throughput: 23.41 Mbit/s

95th percentile per-packet one-way delay: 107.827 ms

Loss rate: 2.50%

Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

Start at: 2018-02-04 20:10:36

End at: 2018-02-04 20:11:06

Local clock offset: -2.801 ms

Remote clock offset: 4.951 ms

Below is generated by plot.py at 2018-02-05 01:35:13

Datalink statistics

-- Total of 3 flows:

Average throughput: 81.04 Mbit/s

95th percentile per-packet one-way delay: 105.219 ms

Loss rate: 3.27%

-- Flow 1:

Average throughput: 52.72 Mbit/s

95th percentile per-packet one-way delay: 103.603 ms

Loss rate: 2.52%

-- Flow 2:

Average throughput: 30.57 Mbit/s

95th percentile per-packet one-way delay: 105.620 ms

Loss rate: 0.82%

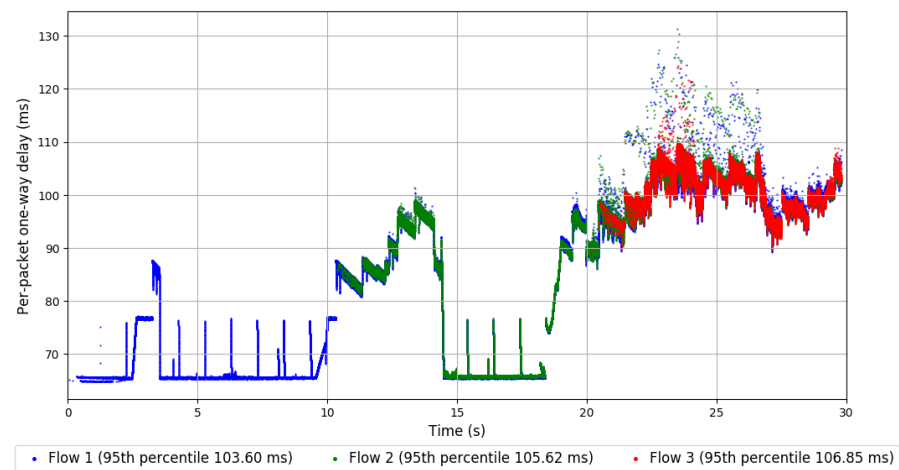
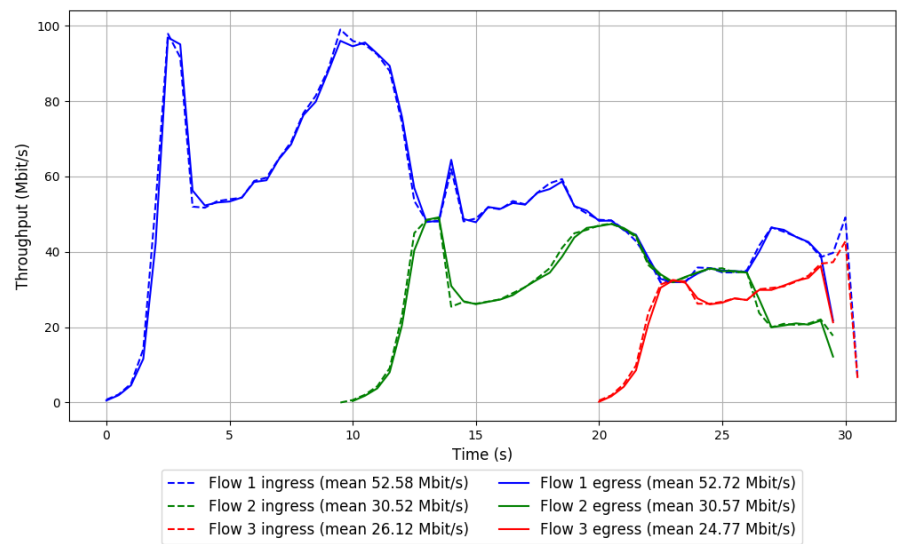
-- Flow 3:

Average throughput: 24.77 Mbit/s

95th percentile per-packet one-way delay: 106.848 ms

Loss rate: 13.08%

Run 8: Report of Vivace-LTE — Data Link



Run 9: Statistics of Vivace-LTE

Start at: 2018-02-04 20:34:08

End at: 2018-02-04 20:34:38

Local clock offset: -2.935 ms

Remote clock offset: 5.157 ms

Below is generated by plot.py at 2018-02-05 01:35:14

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.91 Mbit/s

95th percentile per-packet one-way delay: 97.735 ms

Loss rate: 0.68%

-- Flow 1:

Average throughput: 57.51 Mbit/s

95th percentile per-packet one-way delay: 97.183 ms

Loss rate: 0.32%

-- Flow 2:

Average throughput: 37.04 Mbit/s

95th percentile per-packet one-way delay: 98.338 ms

Loss rate: 0.78%

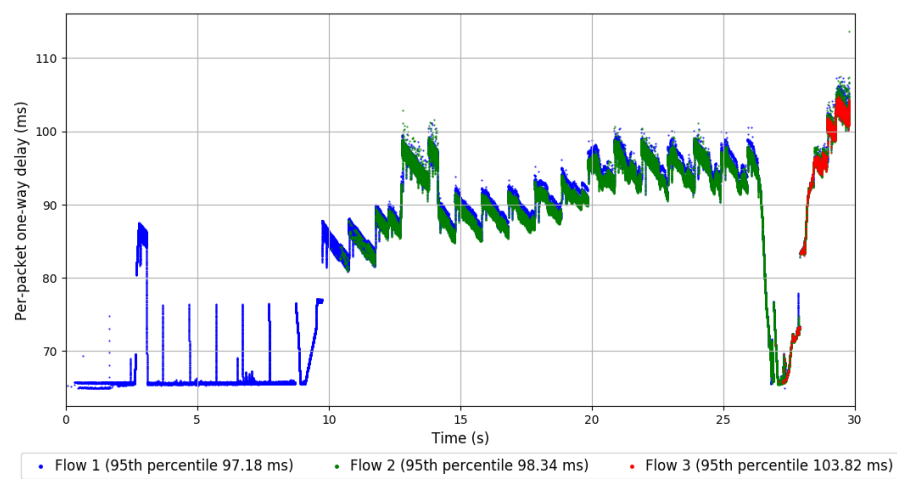
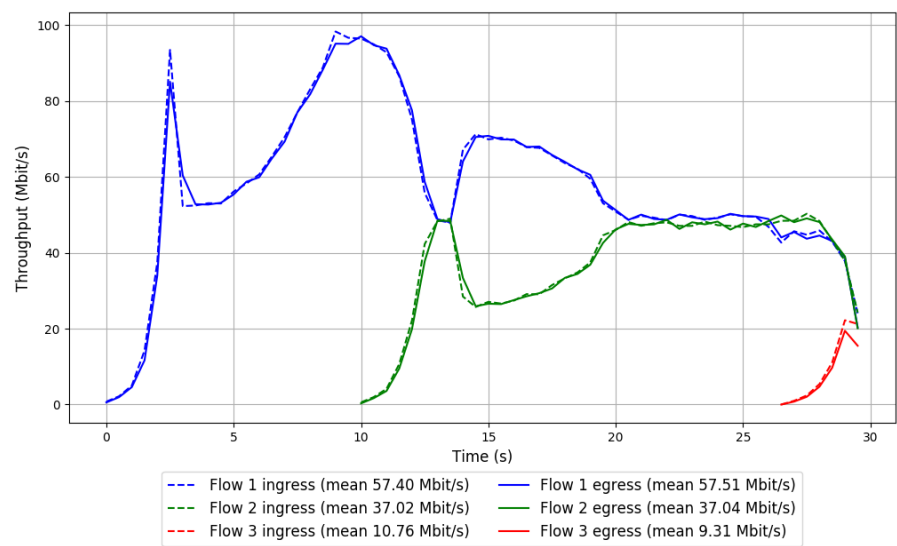
-- Flow 3:

Average throughput: 9.31 Mbit/s

95th percentile per-packet one-way delay: 103.819 ms

Loss rate: 17.59%

Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-04 20:57:25

End at: 2018-02-04 20:57:55

Local clock offset: -2.652 ms

Remote clock offset: 5.081 ms

Below is generated by plot.py at 2018-02-05 01:35:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.34 Mbit/s

95th percentile per-packet one-way delay: 104.837 ms

Loss rate: 0.51%

-- Flow 1:

Average throughput: 55.98 Mbit/s

95th percentile per-packet one-way delay: 103.614 ms

Loss rate: 0.28%

-- Flow 2:

Average throughput: 28.79 Mbit/s

95th percentile per-packet one-way delay: 105.119 ms

Loss rate: 0.64%

-- Flow 3:

Average throughput: 22.34 Mbit/s

95th percentile per-packet one-way delay: 106.751 ms

Loss rate: 1.84%

Run 10: Report of Vivace-LTE — Data Link

