

Pantheon Report

Generated at 2018-01-10 05:51:45 (UTC).

Data path: Brazil Ethernet (*remote*) → AWS Brazil 1 Ethernet (*local*).

Repeated the test of 14 congestion control schemes 10 times.

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

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

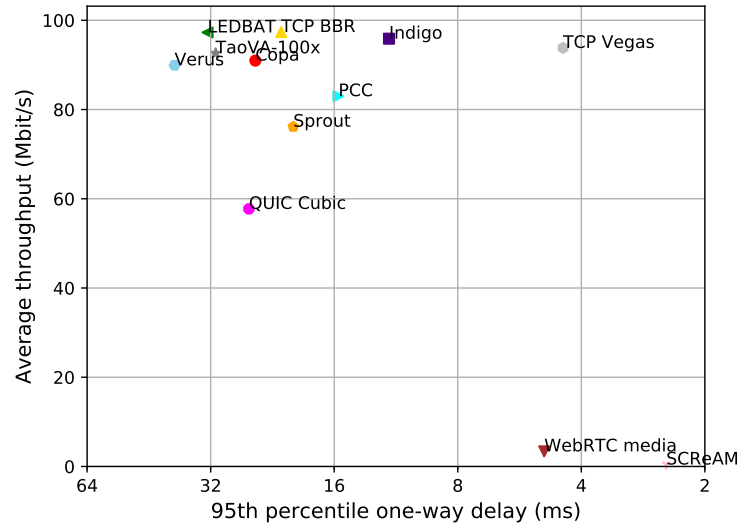
Tested BBR with qdisc of Fair Queuing (*fq*), and other schemes with the default Linux qdisc (*pfifo_fast*).

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

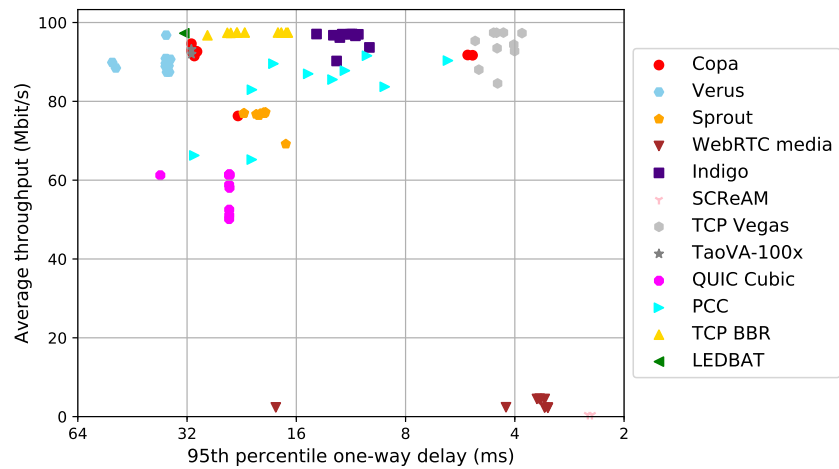
Git summary:

```
branch: master @ 56d1792c316a5efca3f2d21342905405fedffb48
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from Brazil Ethernet to AWS Brazil 1 Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)



test from Brazil Ethernet to AWS Brazil 1 Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows



scheme	# runs	mean avg tput (Mbit/s)			mean 95th-%ile delay (ms)			mean loss rate (%)		
		flow 1	flow 2	flow 3	flow 1	flow 2	flow 3	flow 1	flow 2	flow 3
TCP BBR	10	67.04	33.68	23.98	20.95	21.57	25.82	0.07	0.09	0.18
TCP Cubic	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LEDBAT	1	64.49	45.59	25.27	26.67	33.99	36.36	0.07	0.12	1.47
PCC	10	65.37	19.49	14.13	13.84	16.87	16.71	0.22	0.06	0.45
QUIC Cubic	10	0.88	64.18	45.57	3.79	25.79	25.90	0.00	0.10	0.29
SCReAM	2	0.22	0.22	0.22	2.47	2.49	2.50	0.00	0.10	0.00
WebRTC media	10	1.22	1.53	0.67	5.60	4.84	5.03	0.00	0.02	0.02
Sprout	10	42.52	36.08	29.21	19.09	20.12	21.89	0.05	0.06	0.20
TaoVA-100x	2	58.21	39.52	31.87	30.65	31.14	31.24	0.06	0.17	0.53
TCP Vegas	10	52.43	39.07	46.51	5.57	4.33	4.36	0.01	0.02	0.06
Verus	10	52.61	40.09	32.18	38.14	39.24	39.56	0.07	0.15	0.40
Copa	10	54.49	42.88	31.70	23.84	25.09	25.36	0.10	0.24	0.64
FillP	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indigo	10	63.99	31.10	34.67	11.18	11.85	13.24	0.03	0.03	0.14

Run 1: Statistics of TCP BBR

Start at: 2018-01-09 23:47:30

End at: 2018-01-09 23:48:00

Local clock offset: -0.128 ms

Remote clock offset: 0.052 ms

Below is generated by plot.py at 2018-01-10 05:23:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.44 Mbit/s

95th percentile per-packet one-way delay: 17.076 ms

Loss rate: 0.07%

-- Flow 1:

Average throughput: 61.45 Mbit/s

95th percentile per-packet one-way delay: 17.097 ms

Loss rate: 0.09%

-- Flow 2:

Average throughput: 43.50 Mbit/s

95th percentile per-packet one-way delay: 16.660 ms

Loss rate: 0.01%

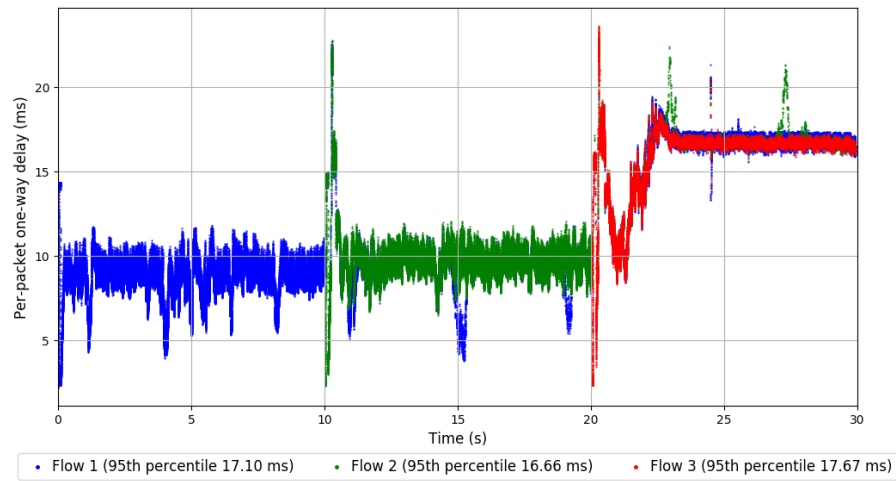
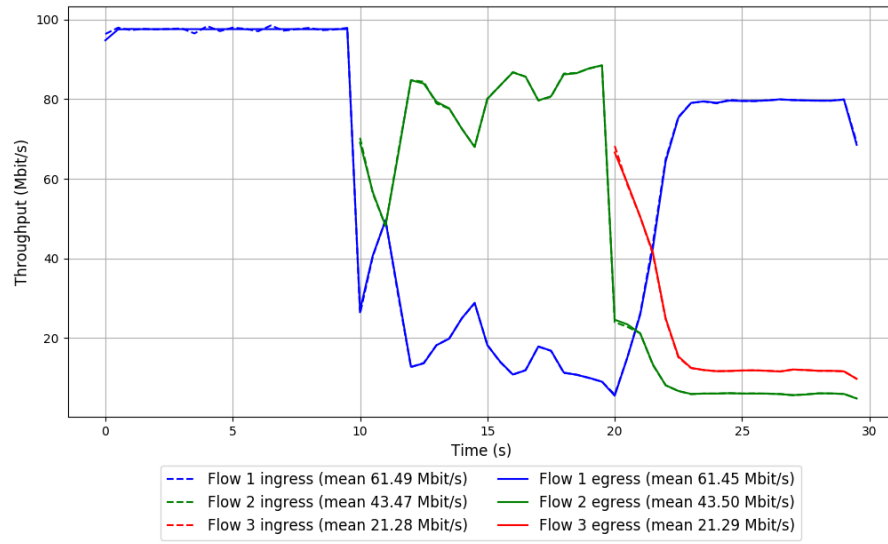
-- Flow 3:

Average throughput: 21.29 Mbit/s

95th percentile per-packet one-way delay: 17.670 ms

Loss rate: 0.09%

Run 1: Report of TCP BBR — Data Link

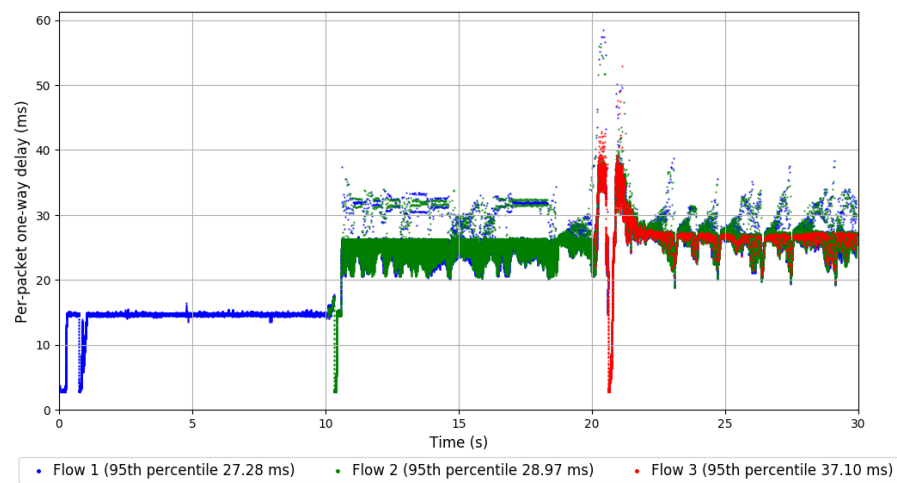
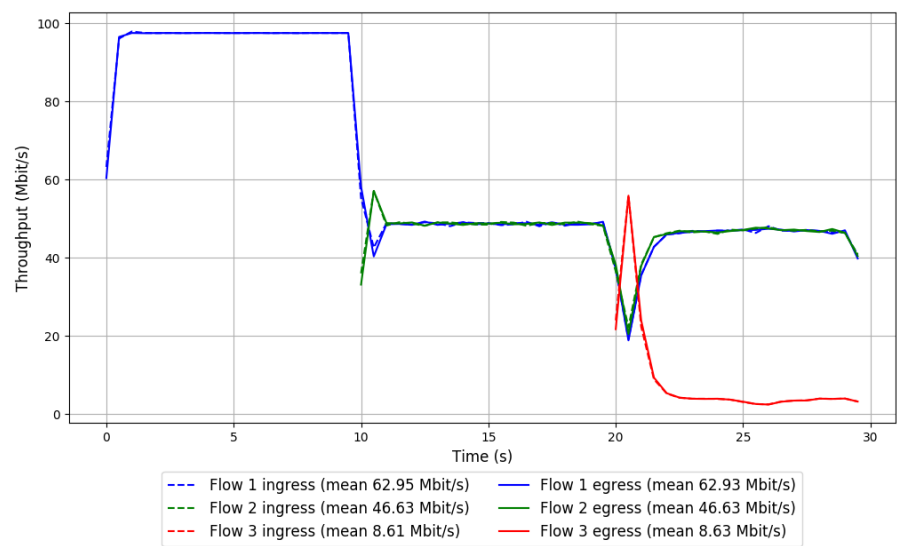


Run 2: Statistics of TCP BBR

Start at: 2018-01-10 00:04:31
End at: 2018-01-10 00:05:01
Local clock offset: -0.15 ms
Remote clock offset: -0.095 ms

Below is generated by plot.py at 2018-01-10 05:23:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 96.76 Mbit/s
95th percentile per-packet one-way delay: 28.114 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 62.93 Mbit/s
95th percentile per-packet one-way delay: 27.283 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 46.63 Mbit/s
95th percentile per-packet one-way delay: 28.971 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 8.63 Mbit/s
95th percentile per-packet one-way delay: 37.101 ms
Loss rate: 0.14%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-01-10 00:21:28

End at: 2018-01-10 00:21:58

Local clock offset: -0.195 ms

Remote clock offset: 0.121 ms

Below is generated by plot.py at 2018-01-10 05:23:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.37 Mbit/s

95th percentile per-packet one-way delay: 24.259 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 63.56 Mbit/s

95th percentile per-packet one-way delay: 20.719 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 25.74 Mbit/s

95th percentile per-packet one-way delay: 24.674 ms

Loss rate: 0.23%

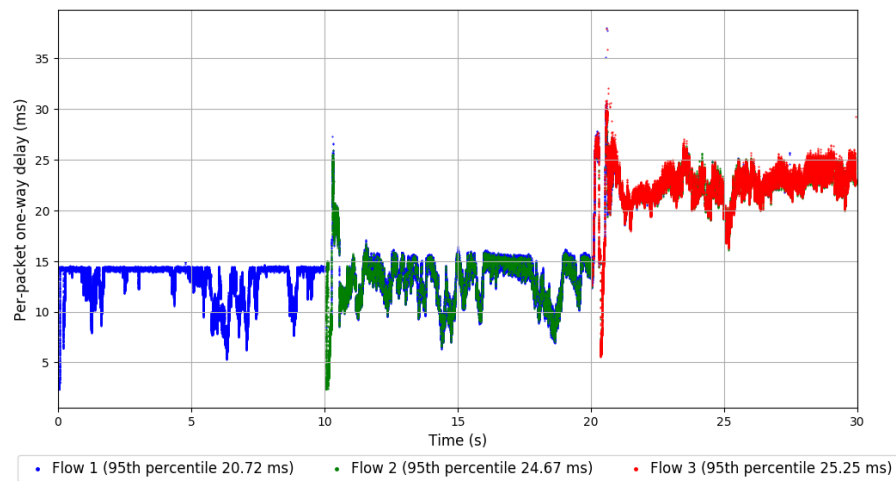
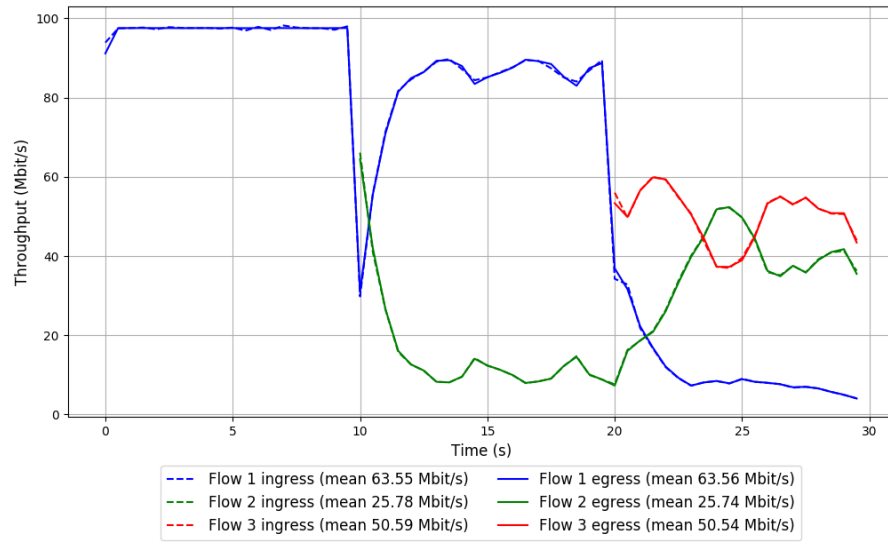
-- Flow 3:

Average throughput: 50.54 Mbit/s

95th percentile per-packet one-way delay: 25.252 ms

Loss rate: 0.28%

Run 3: Report of TCP BBR — Data Link

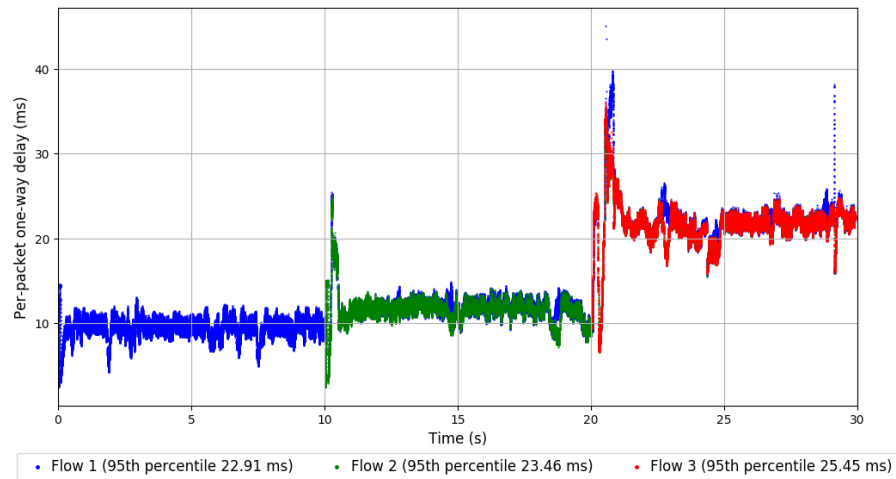
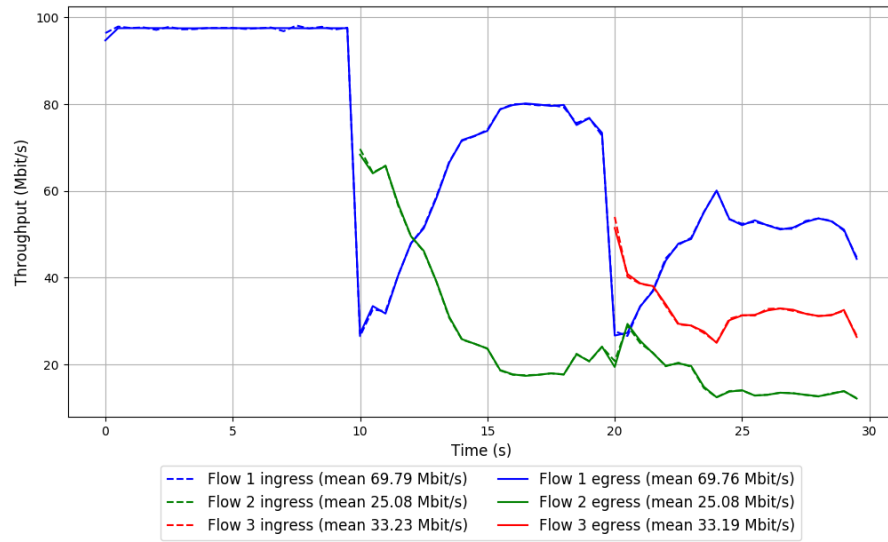


Run 4: Statistics of TCP BBR

Start at: 2018-01-10 00:38:29
End at: 2018-01-10 00:38:59
Local clock offset: -0.198 ms
Remote clock offset: -0.128 ms

Below is generated by plot.py at 2018-01-10 05:23:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 97.44 Mbit/s
95th percentile per-packet one-way delay: 23.287 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 69.76 Mbit/s
95th percentile per-packet one-way delay: 22.906 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 25.08 Mbit/s
95th percentile per-packet one-way delay: 23.461 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 33.19 Mbit/s
95th percentile per-packet one-way delay: 25.447 ms
Loss rate: 0.24%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-01-10 00:55:26

End at: 2018-01-10 00:55:56

Local clock offset: -0.248 ms

Remote clock offset: 0.179 ms

Below is generated by plot.py at 2018-01-10 05:23:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.43 Mbit/s

95th percentile per-packet one-way delay: 23.341 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 63.10 Mbit/s

95th percentile per-packet one-way delay: 22.865 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 36.46 Mbit/s

95th percentile per-packet one-way delay: 23.520 ms

Loss rate: 0.19%

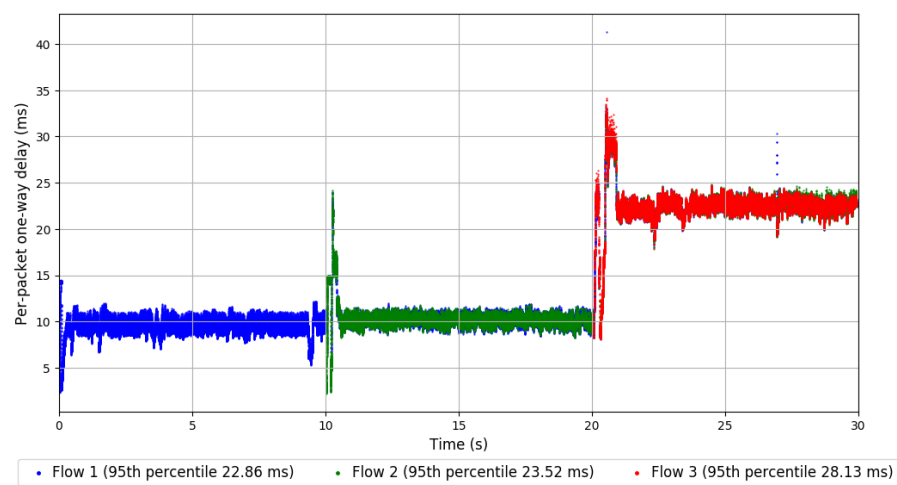
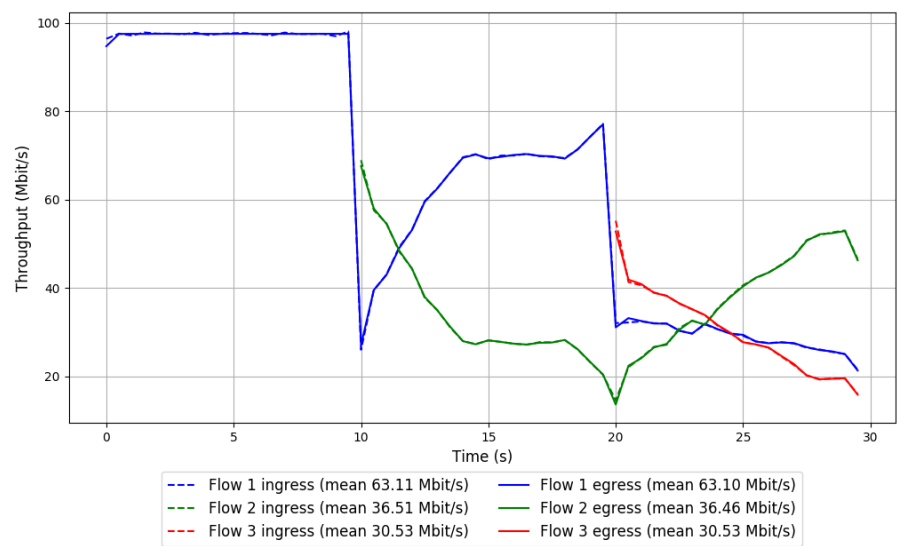
-- Flow 3:

Average throughput: 30.53 Mbit/s

95th percentile per-packet one-way delay: 28.126 ms

Loss rate: 0.16%

Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-01-10 01:12:24

End at: 2018-01-10 01:12:54

Local clock offset: -0.254 ms

Remote clock offset: 0.369 ms

Below is generated by plot.py at 2018-01-10 05:23:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.45 Mbit/s

95th percentile per-packet one-way delay: 17.596 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 72.39 Mbit/s

95th percentile per-packet one-way delay: 17.589 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 30.50 Mbit/s

95th percentile per-packet one-way delay: 17.271 ms

Loss rate: 0.03%

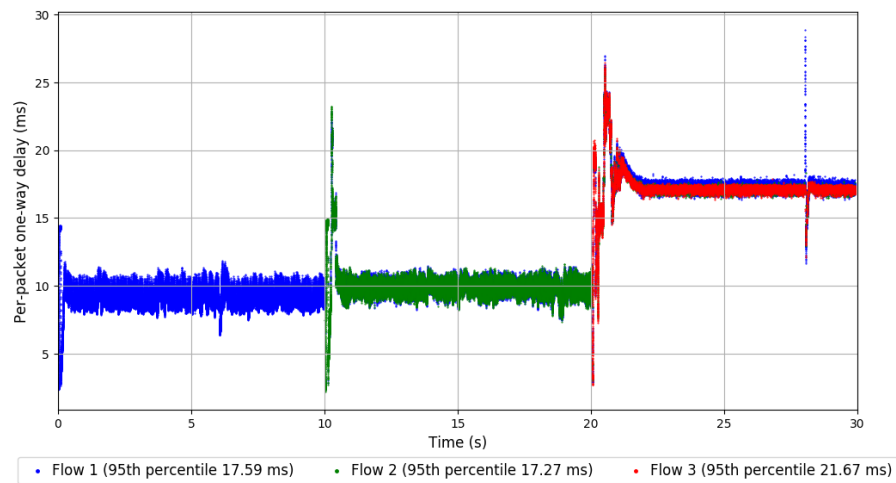
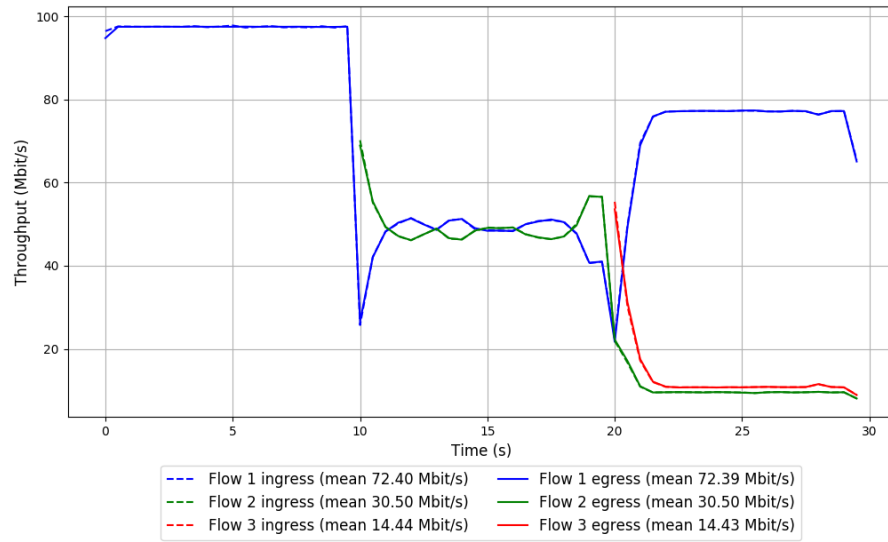
-- Flow 3:

Average throughput: 14.43 Mbit/s

95th percentile per-packet one-way delay: 21.671 ms

Loss rate: 0.14%

Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-01-10 01:29:21

End at: 2018-01-10 01:29:51

Local clock offset: -0.264 ms

Remote clock offset: 0.516 ms

Below is generated by plot.py at 2018-01-10 05:23:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.40 Mbit/s

95th percentile per-packet one-way delay: 24.779 ms

Loss rate: 0.10%

-- Flow 1:

Average throughput: 71.15 Mbit/s

95th percentile per-packet one-way delay: 24.458 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 23.82 Mbit/s

95th percentile per-packet one-way delay: 24.886 ms

Loss rate: 0.09%

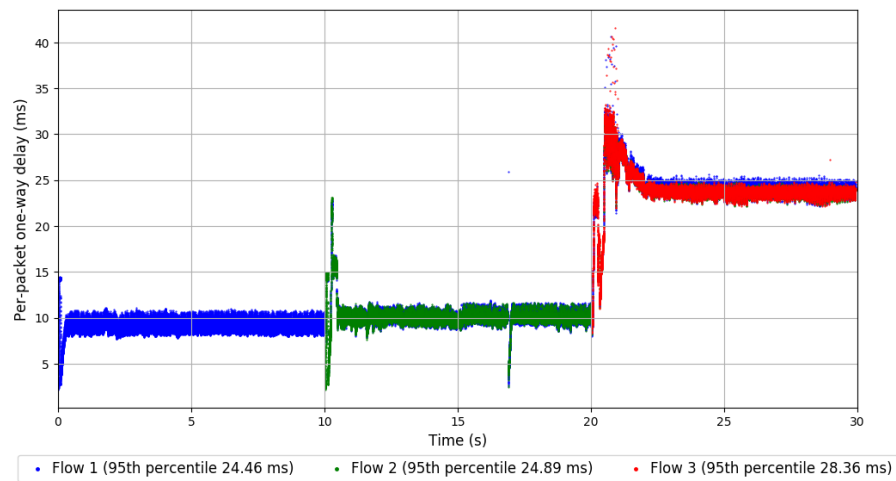
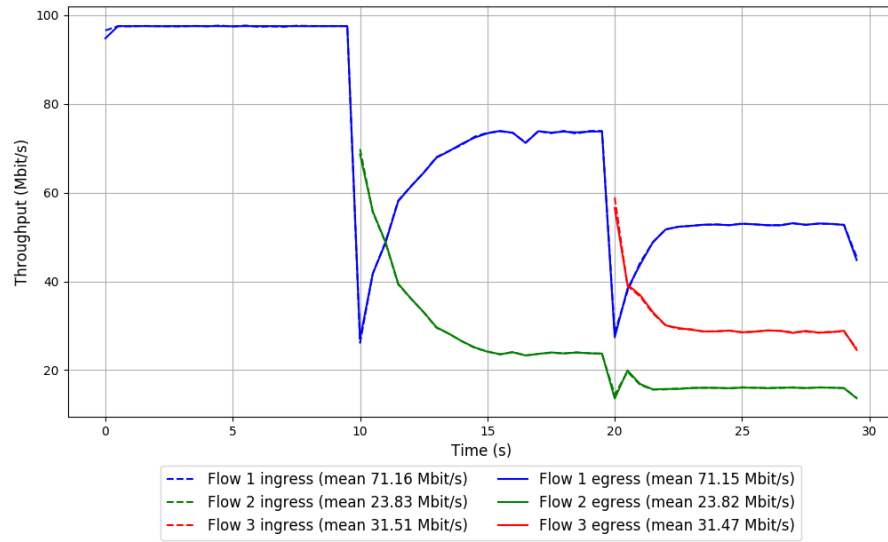
-- Flow 3:

Average throughput: 31.47 Mbit/s

95th percentile per-packet one-way delay: 28.359 ms

Loss rate: 0.25%

Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-01-10 01:46:19

End at: 2018-01-10 01:46:49

Local clock offset: -0.279 ms

Remote clock offset: 0.576 ms

Below is generated by plot.py at 2018-01-10 05:23:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.45 Mbit/s

95th percentile per-packet one-way delay: 16.883 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 67.98 Mbit/s

95th percentile per-packet one-way delay: 16.890 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 37.72 Mbit/s

95th percentile per-packet one-way delay: 16.499 ms

Loss rate: 0.02%

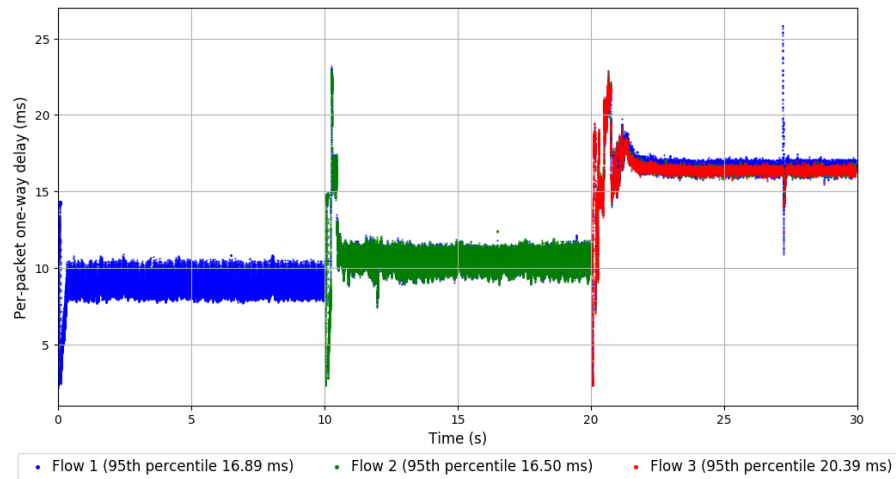
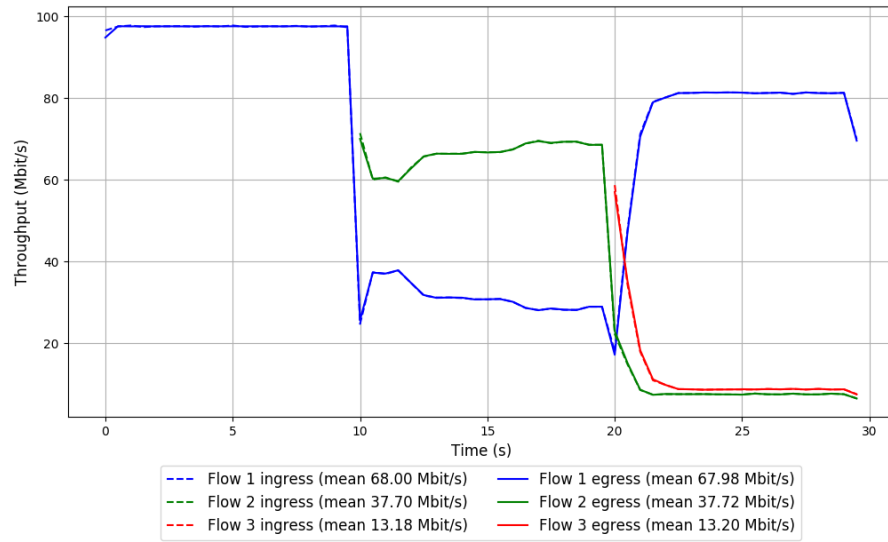
-- Flow 3:

Average throughput: 13.20 Mbit/s

95th percentile per-packet one-way delay: 20.390 ms

Loss rate: 0.14%

Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-01-10 02:03:17

End at: 2018-01-10 02:03:47

Local clock offset: -0.13 ms

Remote clock offset: 0.66 ms

Below is generated by plot.py at 2018-01-10 05:25:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.46 Mbit/s

95th percentile per-packet one-way delay: 22.196 ms

Loss rate: 0.08%

-- Flow 1:

Average throughput: 69.35 Mbit/s

95th percentile per-packet one-way delay: 21.907 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 31.90 Mbit/s

95th percentile per-packet one-way delay: 22.302 ms

Loss rate: 0.13%

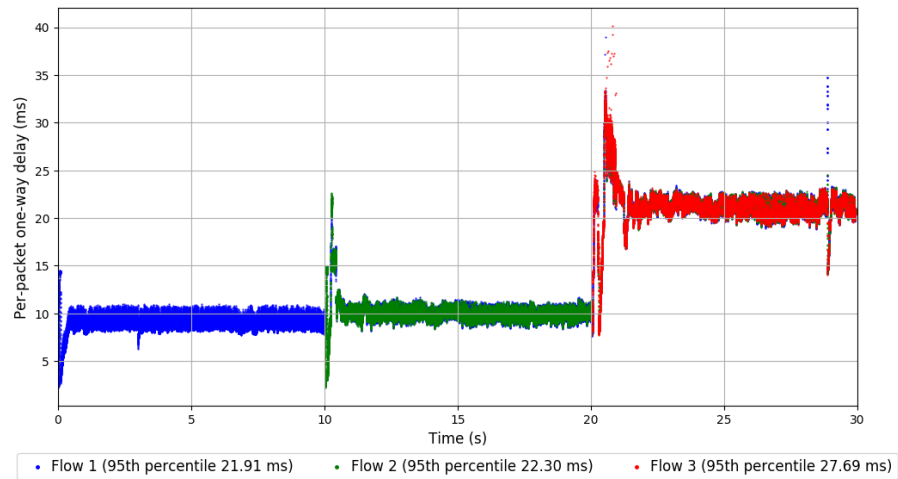
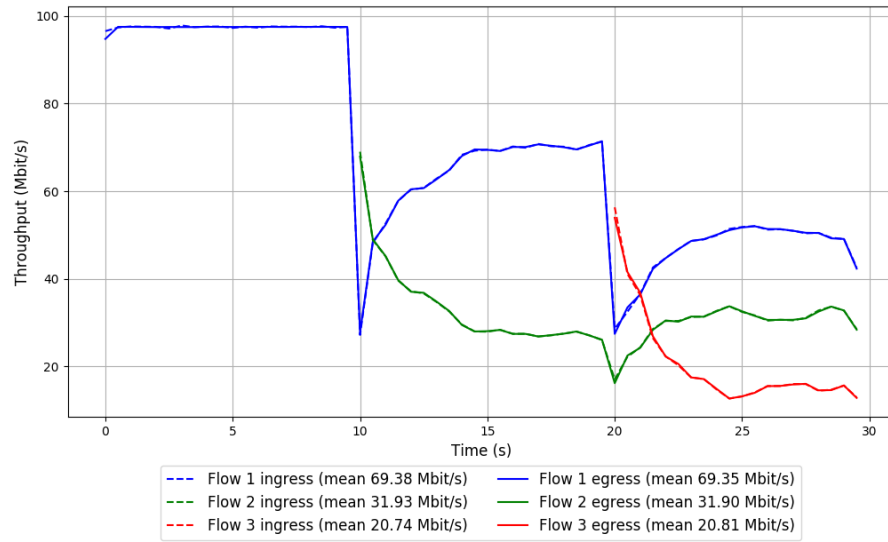
-- Flow 3:

Average throughput: 20.81 Mbit/s

95th percentile per-packet one-way delay: 27.692 ms

Loss rate: 0.19%

Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-01-10 02:20:18

End at: 2018-01-10 02:20:48

Local clock offset: -0.103 ms

Remote clock offset: 0.654 ms

Below is generated by plot.py at 2018-01-10 05:25:48

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.47 Mbit/s

95th percentile per-packet one-way delay: 17.977 ms

Loss rate: 0.09%

-- Flow 1:

Average throughput: 68.70 Mbit/s

95th percentile per-packet one-way delay: 17.774 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 35.46 Mbit/s

95th percentile per-packet one-way delay: 17.446 ms

Loss rate: 0.02%

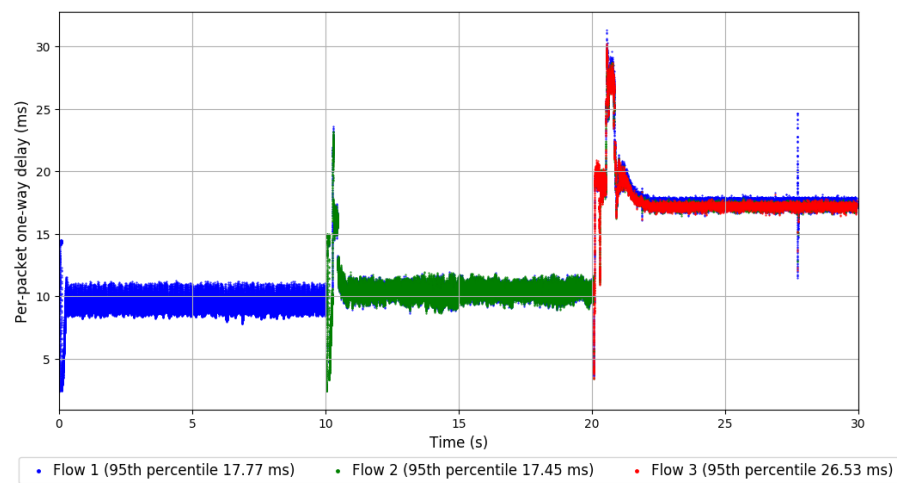
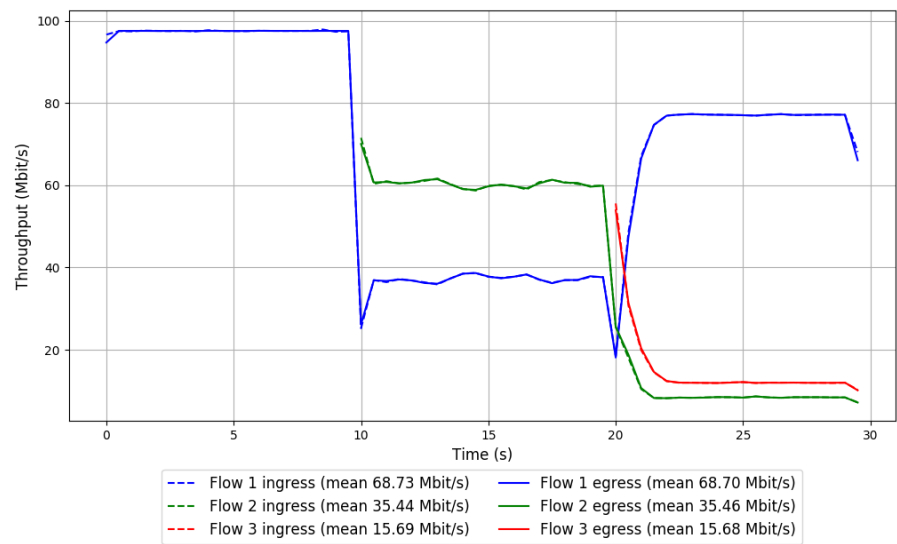
-- Flow 3:

Average throughput: 15.68 Mbit/s

95th percentile per-packet one-way delay: 26.531 ms

Loss rate: 0.15%

Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-09 23:48:39

End at: 2018-01-09 23:49:09

Local clock offset: -0.19 ms

Remote clock offset: 0.07 ms

Run 1: Report of TCP Cubic — Data Link

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Run 2: Statistics of TCP Cubic

Start at: 2018-01-10 00:05:39

End at: 2018-01-10 00:06:09

Local clock offset: -0.159 ms

Remote clock offset: 0.353 ms

Run 2: Report of TCP Cubic — Data Link

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Run 3: Statistics of TCP Cubic

Start at: 2018-01-10 00:22:36

End at: 2018-01-10 00:23:06

Local clock offset: -0.321 ms

Remote clock offset: 0.075 ms

Run 3: Report of TCP Cubic — Data Link

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Run 4: Statistics of TCP Cubic

Start at: 2018-01-10 00:39:37

End at: 2018-01-10 00:40:07

Local clock offset: -0.231 ms

Remote clock offset: -0.05 ms

Run 4: Report of TCP Cubic — Data Link

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Run 5: Statistics of TCP Cubic

Start at: 2018-01-10 00:56:34

End at: 2018-01-10 00:57:05

Local clock offset: -0.225 ms

Remote clock offset: 0.191 ms

Run 5: Report of TCP Cubic — Data Link

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Run 6: Statistics of TCP Cubic

Start at: 2018-01-10 01:13:33

End at: 2018-01-10 01:14:03

Local clock offset: -0.281 ms

Remote clock offset: 0.31 ms

Run 6: Report of TCP Cubic — Data Link

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Run 7: Statistics of TCP Cubic

Start at: 2018-01-10 01:30:29

End at: 2018-01-10 01:31:00

Local clock offset: -0.342 ms

Remote clock offset: 0.48 ms

Run 7: Report of TCP Cubic — Data Link

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Run 8: Statistics of TCP Cubic

Start at: 2018-01-10 01:47:27

End at: 2018-01-10 01:47:57

Local clock offset: -0.252 ms

Remote clock offset: 0.593 ms

Run 8: Report of TCP Cubic — Data Link

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Run 9: Statistics of TCP Cubic

Start at: 2018-01-10 02:04:26

End at: 2018-01-10 02:04:56

Local clock offset: -0.137 ms

Remote clock offset: 0.688 ms

Run 9: Report of TCP Cubic — Data Link

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Run 10: Statistics of TCP Cubic

Start at: 2018-01-10 02:21:27

End at: 2018-01-10 02:21:57

Local clock offset: -0.121 ms

Remote clock offset: 0.743 ms

Run 10: Report of TCP Cubic — Data Link

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Run 1: Statistics of LEDBAT

Start at: 2018-01-09 23:46:22

End at: 2018-01-09 23:46:52

Local clock offset: -0.129 ms

Remote clock offset: 0.048 ms

Run 1: Report of LEDBAT — Data Link

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Run 2: Statistics of LEDBAT

Start at: 2018-01-10 00:03:22

End at: 2018-01-10 00:03:52

Local clock offset: -0.222 ms

Remote clock offset: 0.298 ms

Run 2: Report of LEDBAT — Data Link

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Run 3: Statistics of LEDBAT

Start at: 2018-01-10 00:20:19

End at: 2018-01-10 00:20:49

Local clock offset: -0.226 ms

Remote clock offset: 0.133 ms

Run 3: Report of LEDBAT — Data Link

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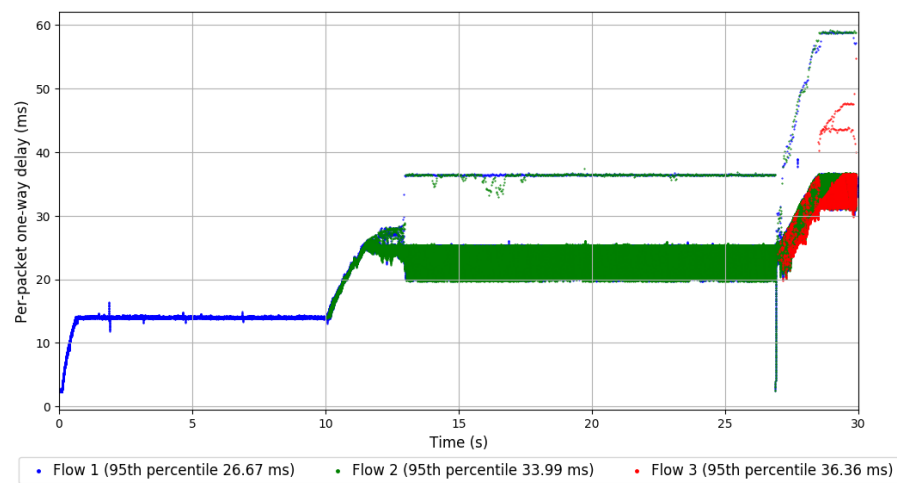
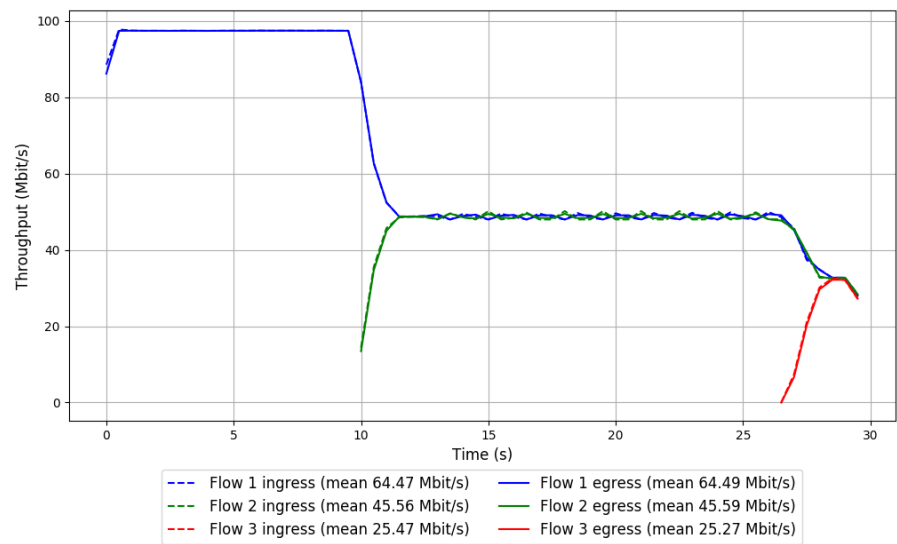
Figure is missing

Run 4: Statistics of LEDBAT

Start at: 2018-01-10 00:37:18
End at: 2018-01-10 00:37:48
Local clock offset: -0.216 ms
Remote clock offset: -0.035 ms

Below is generated by plot.py at 2018-01-10 05:25:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 97.27 Mbit/s
95th percentile per-packet one-way delay: 32.567 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 64.49 Mbit/s
95th percentile per-packet one-way delay: 26.671 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 45.59 Mbit/s
95th percentile per-packet one-way delay: 33.994 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 25.27 Mbit/s
95th percentile per-packet one-way delay: 36.356 ms
Loss rate: 1.47%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-01-10 00:54:18

End at: 2018-01-10 00:54:48

Local clock offset: -0.266 ms

Remote clock offset: 0.088 ms

Run 5: Report of LEDBAT — Data Link

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Run 6: Statistics of LEDBAT

Start at: 2018-01-10 01:11:16

End at: 2018-01-10 01:11:46

Local clock offset: -0.295 ms

Remote clock offset: 0.351 ms

Run 6: Report of LEDBAT — Data Link

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Run 7: Statistics of LEDBAT

Start at: 2018-01-10 01:28:13

End at: 2018-01-10 01:28:43

Local clock offset: -0.251 ms

Remote clock offset: 0.473 ms

Run 7: Report of LEDBAT — Data Link

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Run 8: Statistics of LEDBAT

Start at: 2018-01-10 01:45:11

End at: 2018-01-10 01:45:41

Local clock offset: -0.256 ms

Remote clock offset: 0.564 ms

Run 8: Report of LEDBAT — Data Link

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Run 9: Statistics of LEDBAT

Start at: 2018-01-10 02:02:09

End at: 2018-01-10 02:02:39

Local clock offset: -0.219 ms

Remote clock offset: 0.685 ms

Run 9: Report of LEDBAT — Data Link

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Run 10: Statistics of LEDBAT

Start at: 2018-01-10 02:19:10

End at: 2018-01-10 02:19:40

Local clock offset: -0.118 ms

Remote clock offset: 0.66 ms

Run 10: Report of LEDBAT — Data Link

Figure is missing

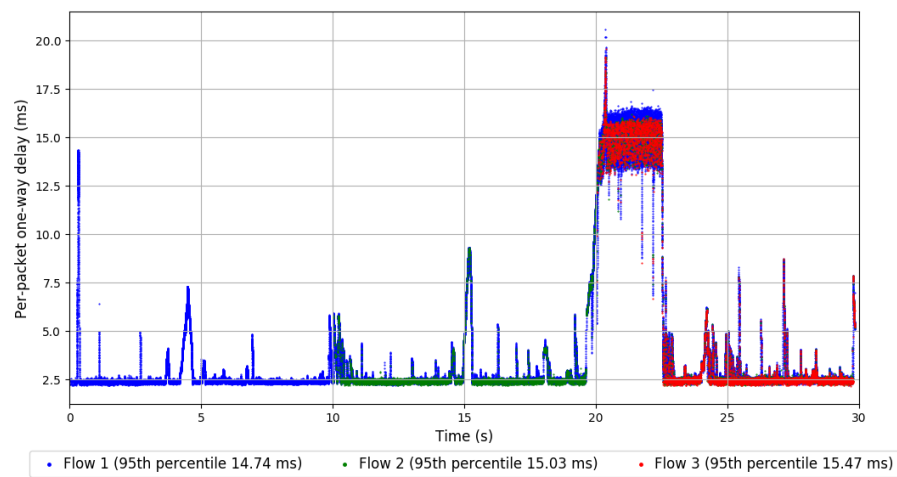
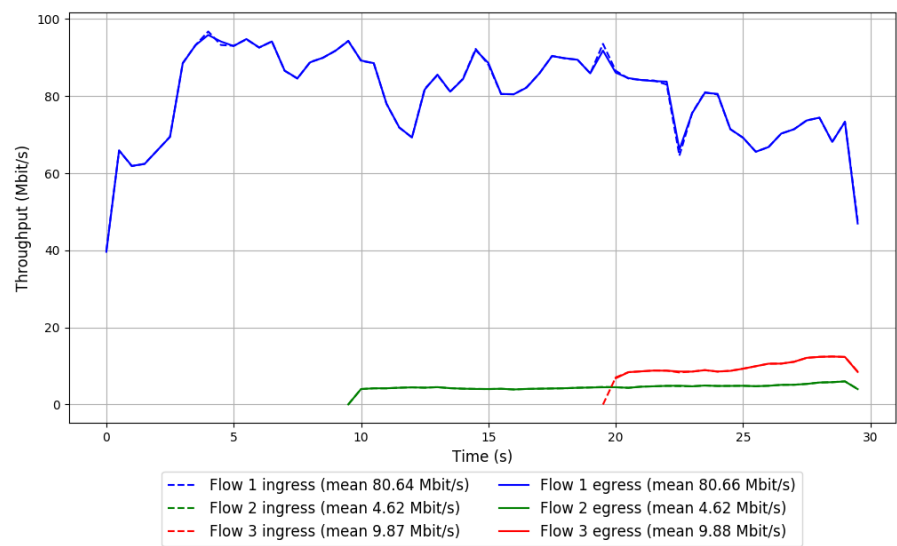
Figure is missing

```
Run 1: Statistics of PCC

Start at: 2018-01-09 23:41:47
End at: 2018-01-09 23:42:17
Local clock offset: -0.066 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-01-10 05:25:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.98 Mbit/s
95th percentile per-packet one-way delay: 14.838 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 80.66 Mbit/s
95th percentile per-packet one-way delay: 14.738 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 15.033 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 9.88 Mbit/s
95th percentile per-packet one-way delay: 15.468 ms
Loss rate: 0.09%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-09 23:58:46

End at: 2018-01-09 23:59:16

Local clock offset: -0.139 ms

Remote clock offset: 0.21 ms

Below is generated by plot.py at 2018-01-10 05:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.79 Mbit/s

95th percentile per-packet one-way delay: 11.754 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 74.82 Mbit/s

95th percentile per-packet one-way delay: 11.296 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 7.37 Mbit/s

95th percentile per-packet one-way delay: 11.924 ms

Loss rate: 0.02%

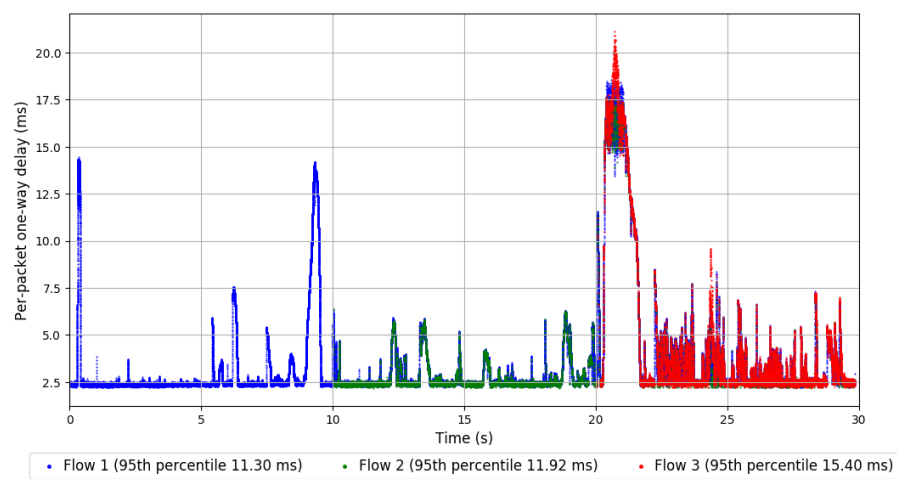
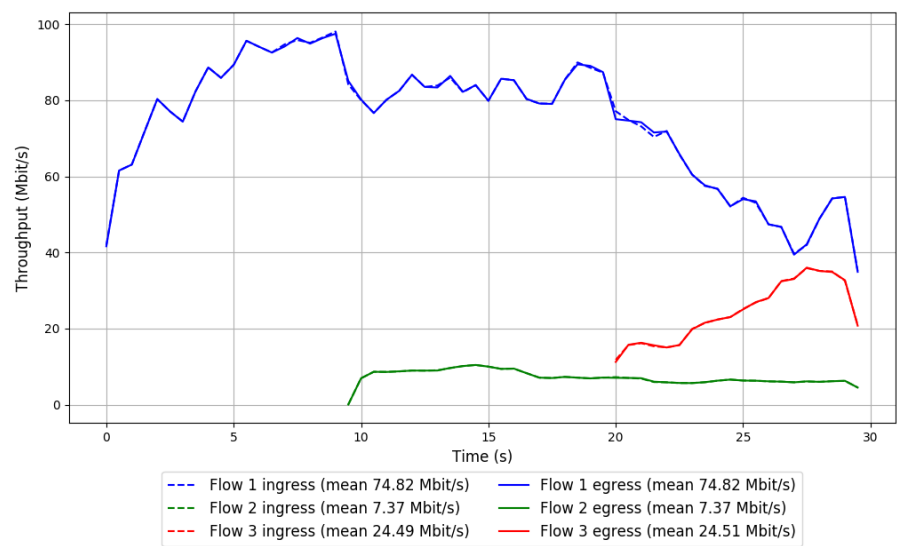
-- Flow 3:

Average throughput: 24.51 Mbit/s

95th percentile per-packet one-way delay: 15.401 ms

Loss rate: 0.06%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-01-10 00:15:45

End at: 2018-01-10 00:16:15

Local clock offset: -0.215 ms

Remote clock offset: 0.22 ms

Below is generated by plot.py at 2018-01-10 05:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 66.27 Mbit/s

95th percentile per-packet one-way delay: 30.558 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 26.38 Mbit/s

95th percentile per-packet one-way delay: 30.574 ms

Loss rate: 2.11%

-- Flow 2:

Average throughput: 50.80 Mbit/s

95th percentile per-packet one-way delay: 29.971 ms

Loss rate: 0.23%

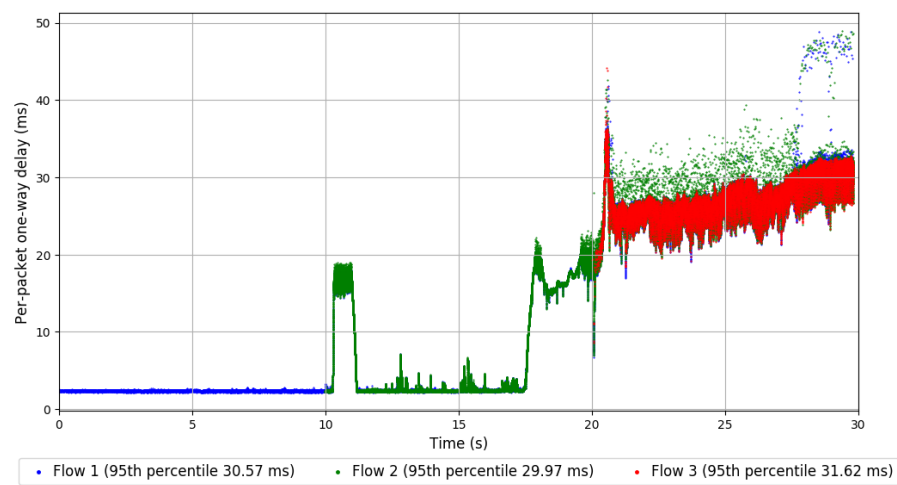
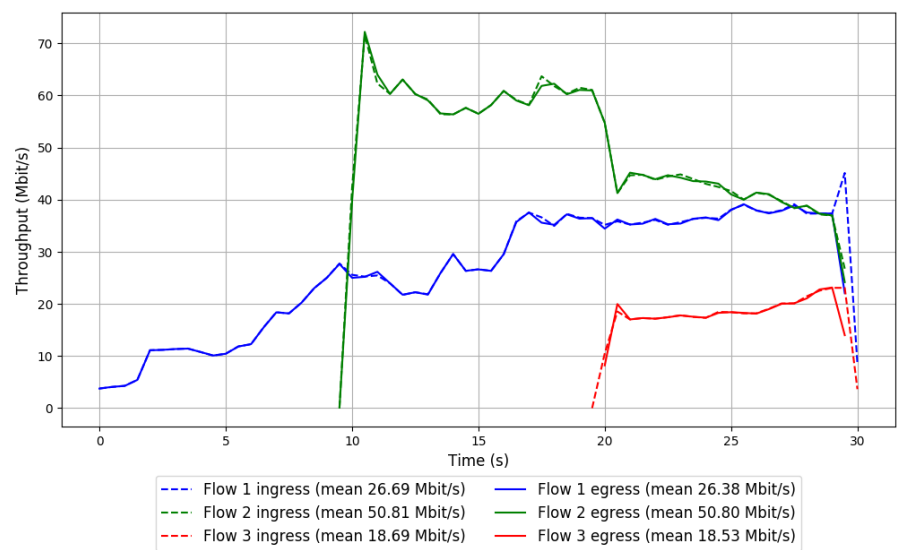
-- Flow 3:

Average throughput: 18.53 Mbit/s

95th percentile per-packet one-way delay: 31.625 ms

Loss rate: 3.70%

Run 3: Report of PCC — Data Link

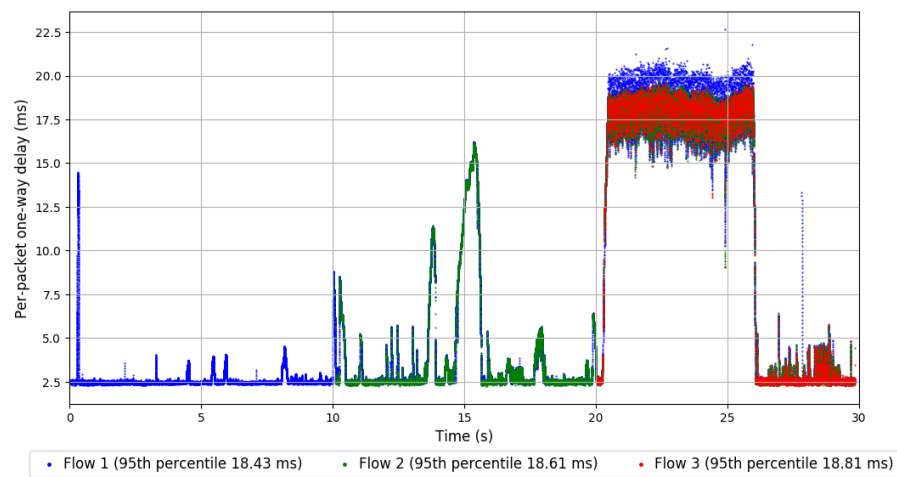
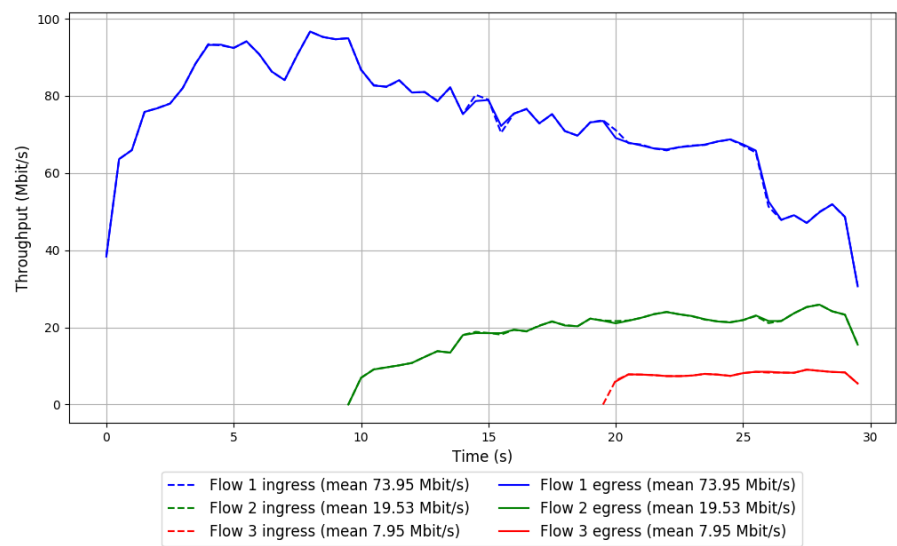


Run 4: Statistics of PCC

Start at: 2018-01-10 00:32:43
End at: 2018-01-10 00:33:13
Local clock offset: -0.23 ms
Remote clock offset: -0.168 ms

Below is generated by plot.py at 2018-01-10 05:25:54
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.55 Mbit/s
95th percentile per-packet one-way delay: 18.498 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 73.95 Mbit/s
95th percentile per-packet one-way delay: 18.425 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 19.53 Mbit/s
95th percentile per-packet one-way delay: 18.610 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 7.95 Mbit/s
95th percentile per-packet one-way delay: 18.811 ms
Loss rate: 0.03%

Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-01-10 00:49:43

End at: 2018-01-10 00:50:13

Local clock offset: -0.191 ms

Remote clock offset: 0.093 ms

Below is generated by plot.py at 2018-01-10 05:25:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 83.69 Mbit/s

95th percentile per-packet one-way delay: 9.130 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 76.47 Mbit/s

95th percentile per-packet one-way delay: 9.454 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 2.15 Mbit/s

95th percentile per-packet one-way delay: 12.555 ms

Loss rate: 0.03%

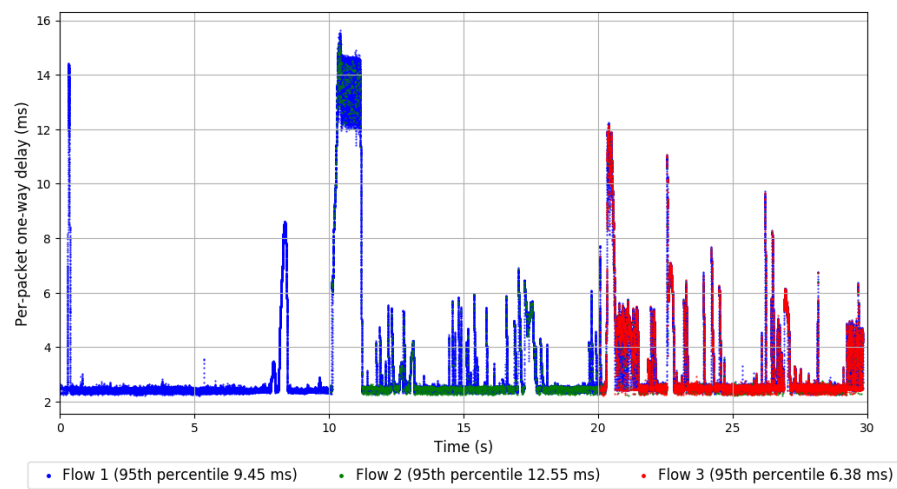
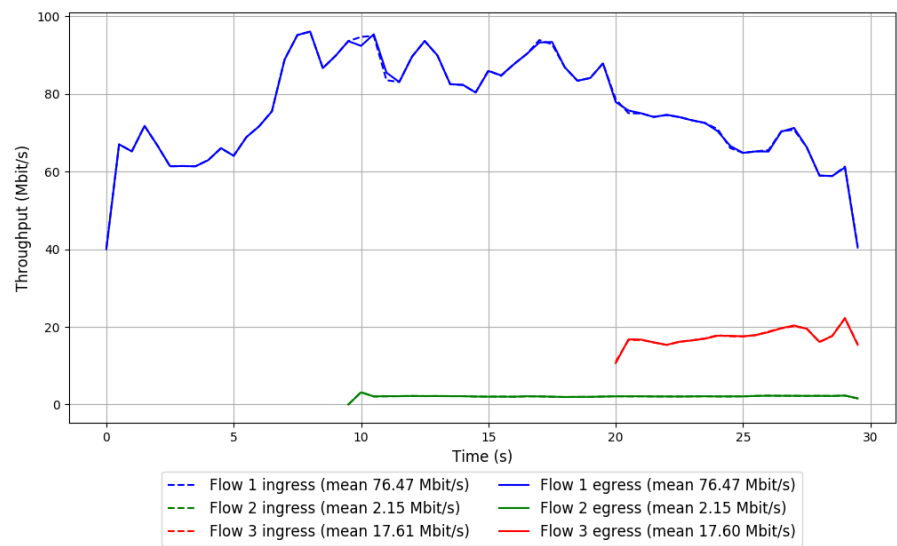
-- Flow 3:

Average throughput: 17.60 Mbit/s

95th percentile per-packet one-way delay: 6.381 ms

Loss rate: 0.09%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-01-10 01:06:42

End at: 2018-01-10 01:07:12

Local clock offset: -0.253 ms

Remote clock offset: 0.295 ms

Below is generated by plot.py at 2018-01-10 05:27:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.34 Mbit/s

95th percentile per-packet one-way delay: 6.114 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 80.06 Mbit/s

95th percentile per-packet one-way delay: 6.033 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 7.420 ms

Loss rate: 0.03%

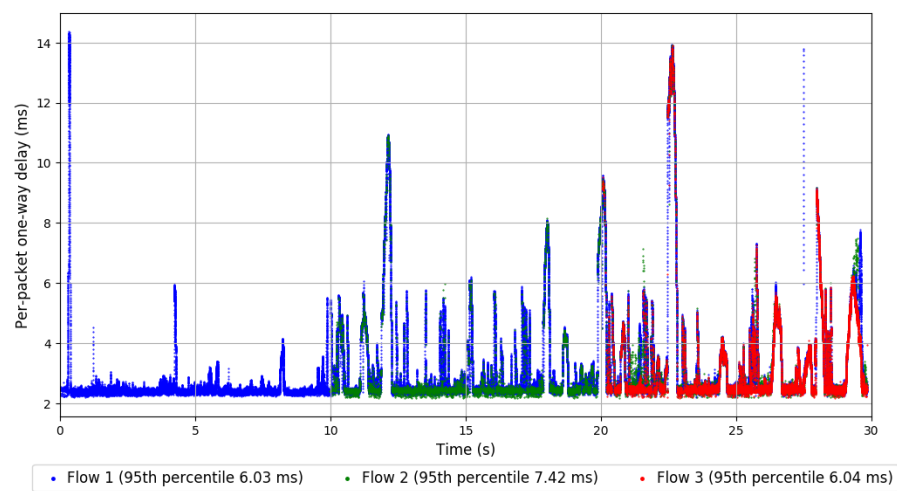
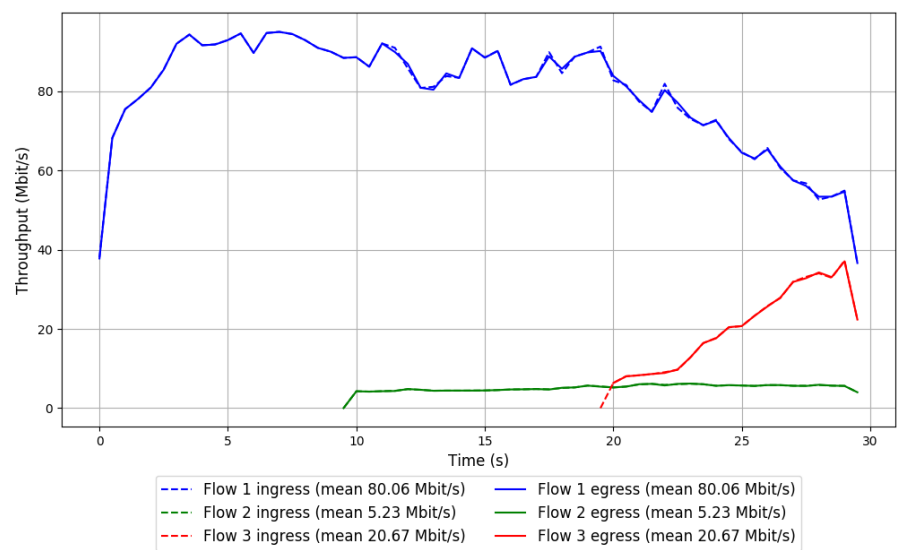
-- Flow 3:

Average throughput: 20.67 Mbit/s

95th percentile per-packet one-way delay: 6.038 ms

Loss rate: 0.08%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2018-01-10 01:23:38

End at: 2018-01-10 01:24:08

Local clock offset: -0.268 ms

Remote clock offset: 0.416 ms

Below is generated by plot.py at 2018-01-10 05:28:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 85.53 Mbit/s

95th percentile per-packet one-way delay: 12.716 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 72.17 Mbit/s

95th percentile per-packet one-way delay: 12.071 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 8.65 Mbit/s

95th percentile per-packet one-way delay: 14.023 ms

Loss rate: 0.03%

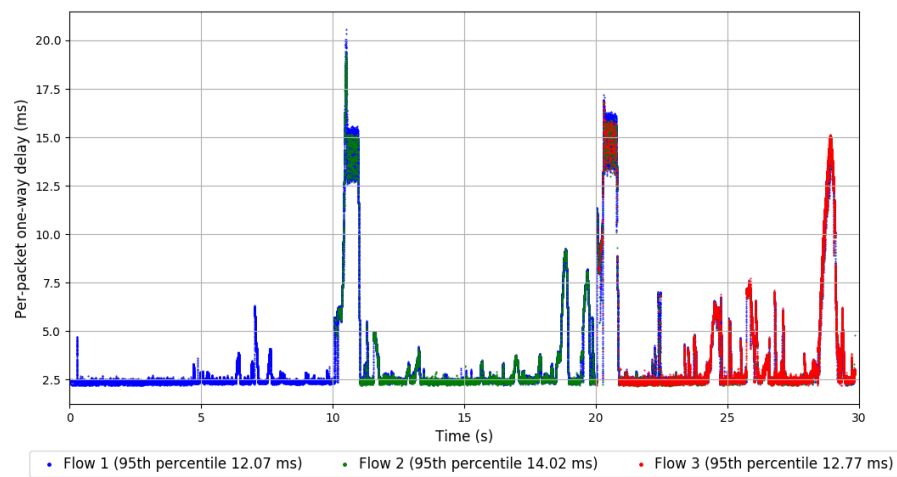
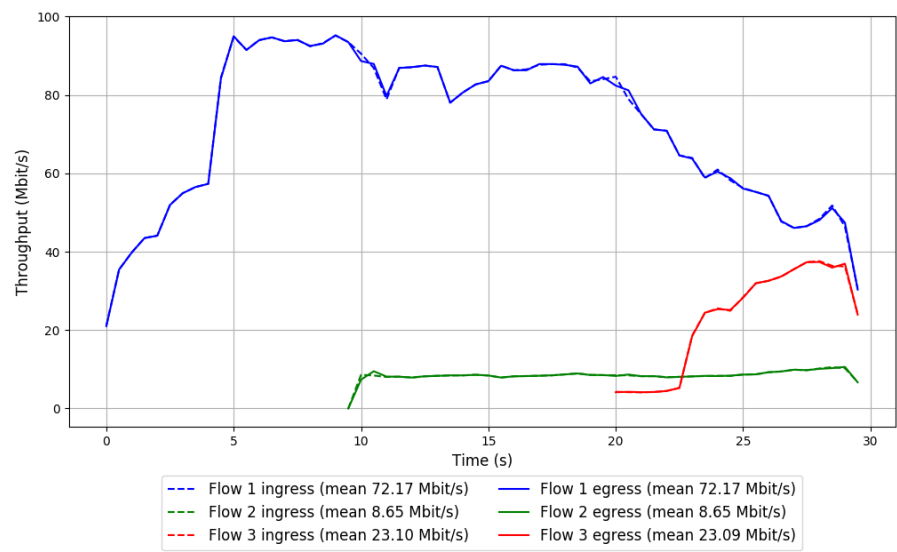
-- Flow 3:

Average throughput: 23.09 Mbit/s

95th percentile per-packet one-way delay: 12.774 ms

Loss rate: 0.08%

Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2018-01-10 01:40:36

End at: 2018-01-10 01:41:06

Local clock offset: -0.246 ms

Remote clock offset: 0.46 ms

Below is generated by plot.py at 2018-01-10 05:28:05

Datalink statistics

-- Total of 3 flows:

Average throughput: 65.22 Mbit/s

95th percentile per-packet one-way delay: 21.225 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 29.63 Mbit/s

95th percentile per-packet one-way delay: 21.006 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 51.43 Mbit/s

95th percentile per-packet one-way delay: 21.356 ms

Loss rate: 0.02%

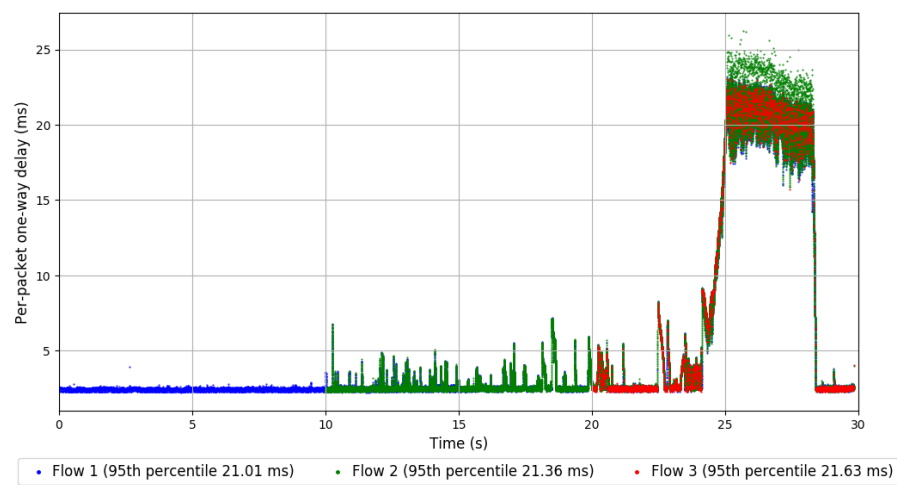
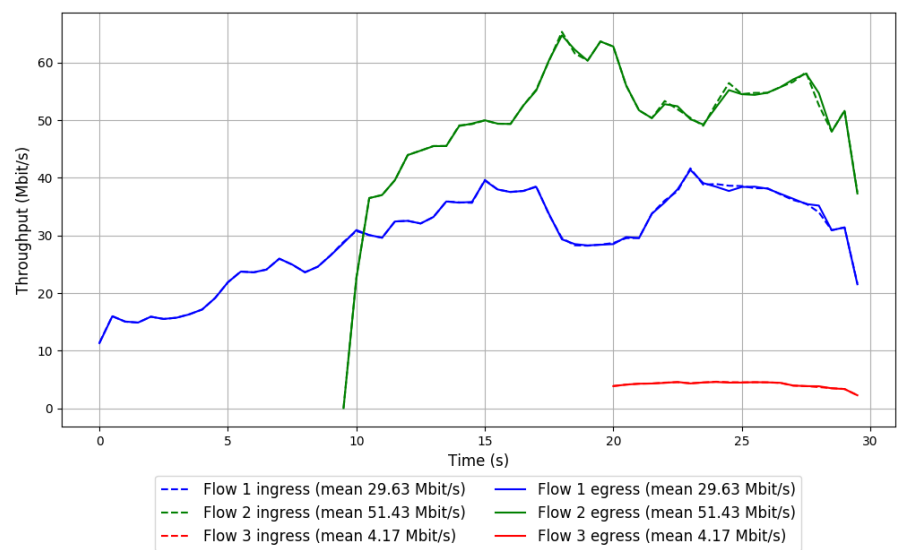
-- Flow 3:

Average throughput: 4.17 Mbit/s

95th percentile per-packet one-way delay: 21.634 ms

Loss rate: 0.03%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-01-10 01:57:34

End at: 2018-01-10 01:58:04

Local clock offset: -0.253 ms

Remote clock offset: 0.575 ms

Below is generated by plot.py at 2018-01-10 05:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.58 Mbit/s

95th percentile per-packet one-way delay: 10.219 ms

Loss rate: 0.06%

-- Flow 1:

Average throughput: 73.13 Mbit/s

95th percentile per-packet one-way delay: 6.729 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 25.14 Mbit/s

95th percentile per-packet one-way delay: 15.087 ms

Loss rate: 0.16%

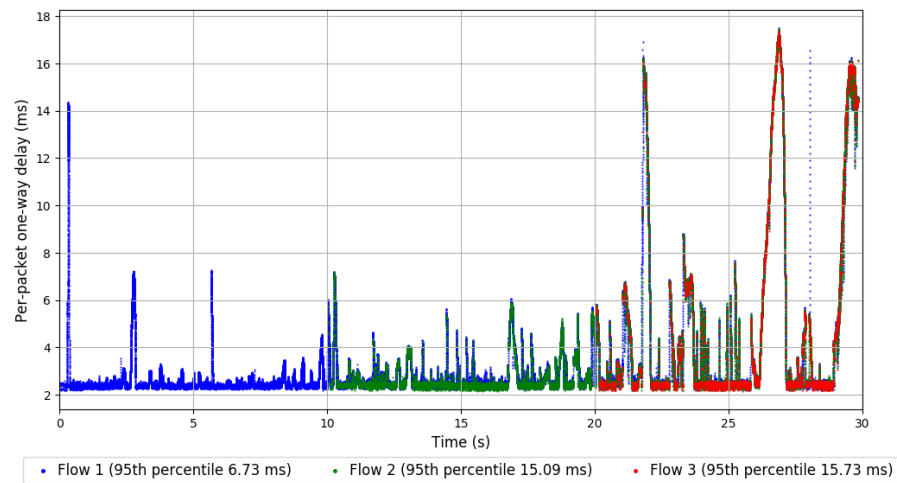
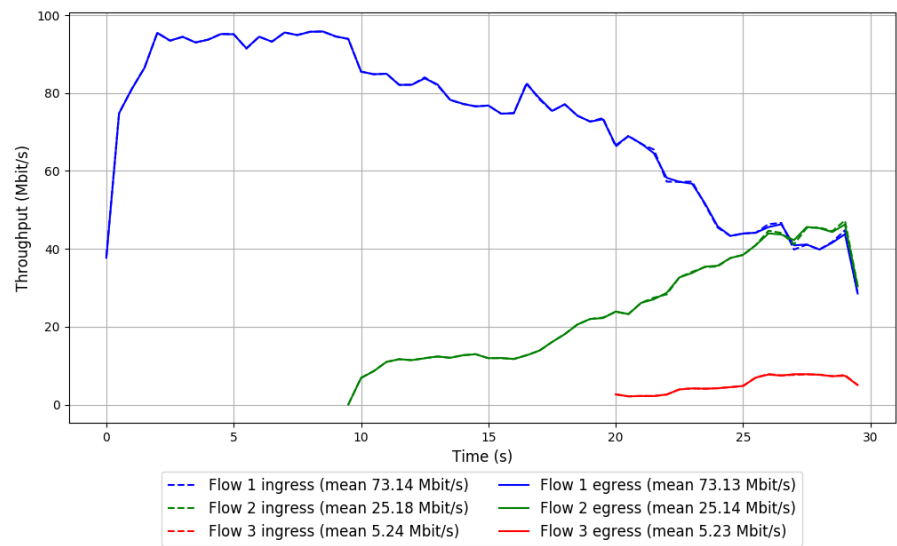
-- Flow 3:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 15.727 ms

Loss rate: 0.22%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-01-10 02:14:33

End at: 2018-01-10 02:15:03

Local clock offset: -0.121 ms

Remote clock offset: 0.702 ms

Below is generated by plot.py at 2018-01-10 05:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 82.95 Mbit/s

95th percentile per-packet one-way delay: 21.204 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 66.45 Mbit/s

95th percentile per-packet one-way delay: 8.065 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 20.00 Mbit/s

95th percentile per-packet one-way delay: 22.709 ms

Loss rate: 0.04%

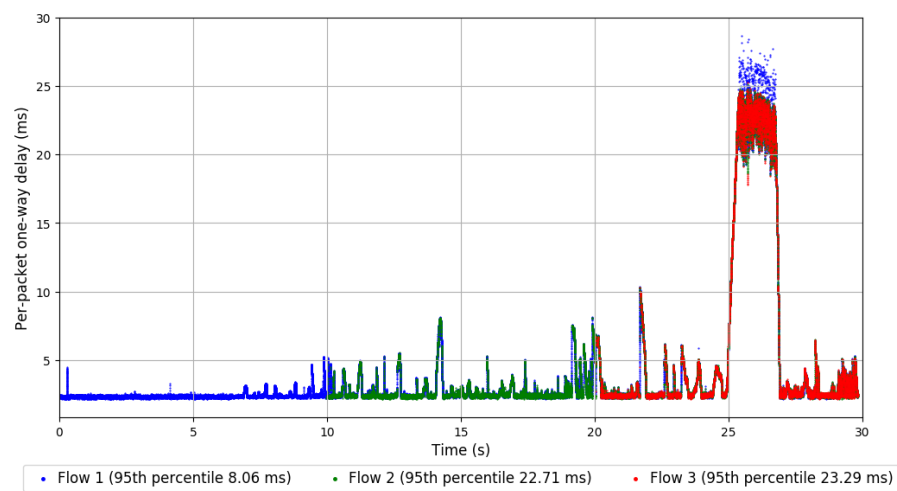
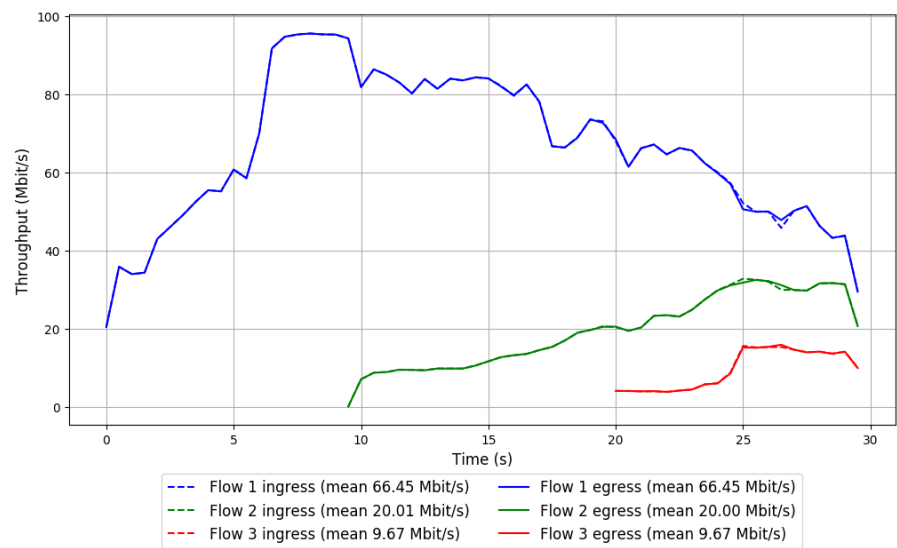
-- Flow 3:

Average throughput: 9.67 Mbit/s

95th percentile per-packet one-way delay: 23.289 ms

Loss rate: 0.08%

Run 10: Report of PCC — Data Link

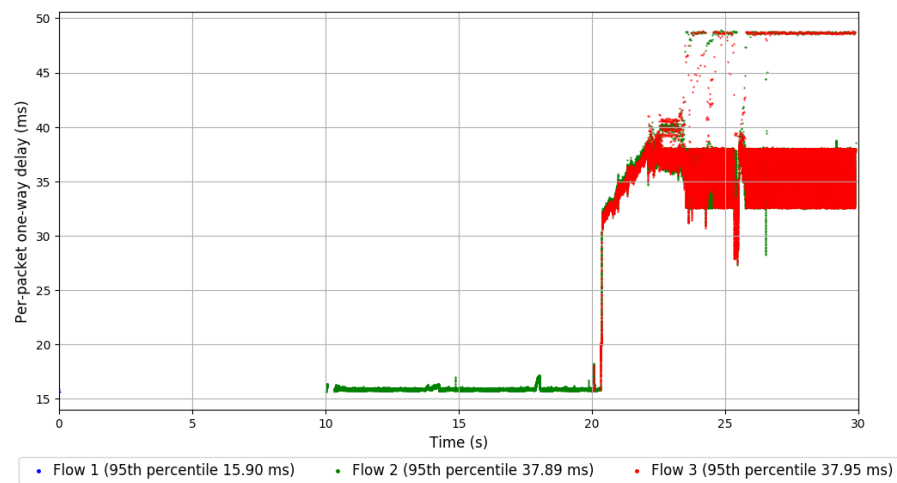
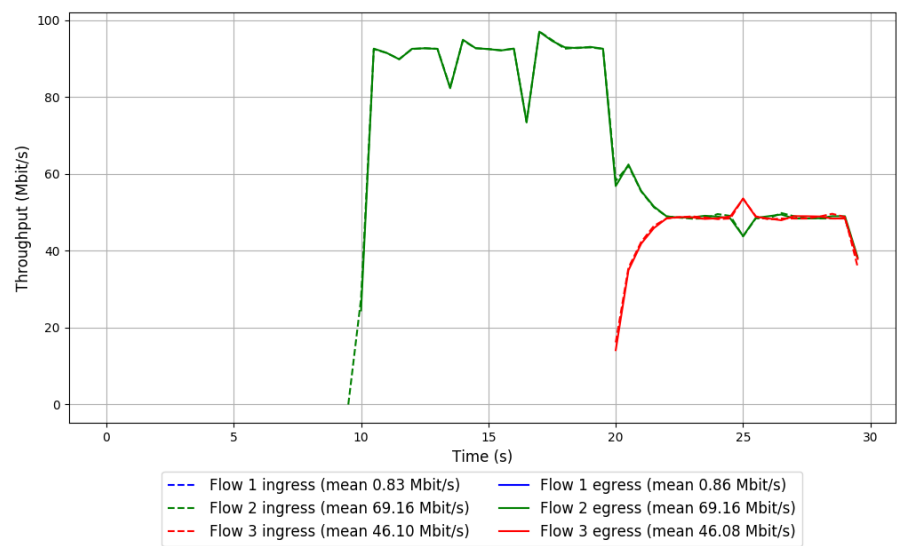


Run 1: Statistics of QUIC Cubic

Start at: 2018-01-09 23:38:27
End at: 2018-01-09 23:38:57
Local clock offset: -0.061 ms
Remote clock offset: -13.51 ms

Below is generated by plot.py at 2018-01-10 05:28:18
Datalink statistics
-- Total of 3 flows:
Average throughput: 61.24 Mbit/s
95th percentile per-packet one-way delay: 37.918 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 15.902 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.16 Mbit/s
95th percentile per-packet one-way delay: 37.892 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 46.08 Mbit/s
95th percentile per-packet one-way delay: 37.954 ms
Loss rate: 0.24%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-09 23:55:25

End at: 2018-01-09 23:55:55

Local clock offset: -0.149 ms

Remote clock offset: 0.17 ms

Below is generated by plot.py at 2018-01-10 05:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.06 Mbit/s

95th percentile per-packet one-way delay: 24.445 ms

Loss rate: 0.15%

-- Flow 1:

Average throughput: 1.01 Mbit/s

95th percentile per-packet one-way delay: 2.305 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 64.92 Mbit/s

95th percentile per-packet one-way delay: 24.418 ms

Loss rate: 0.12%

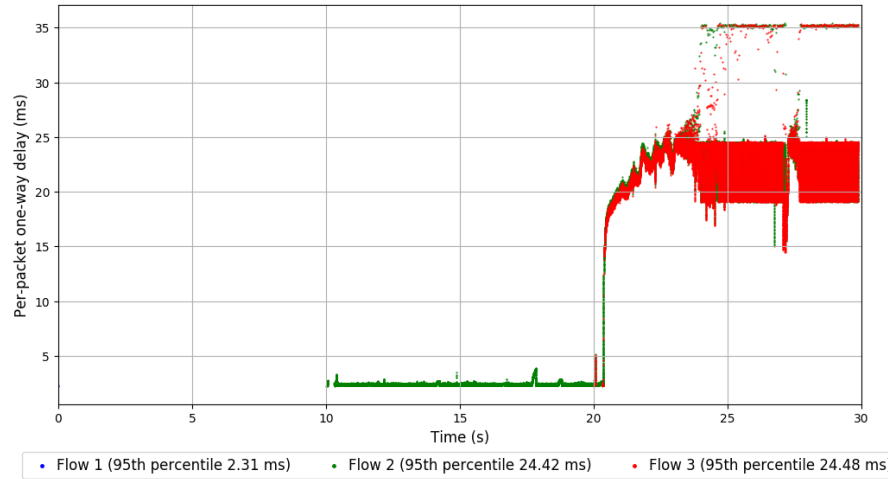
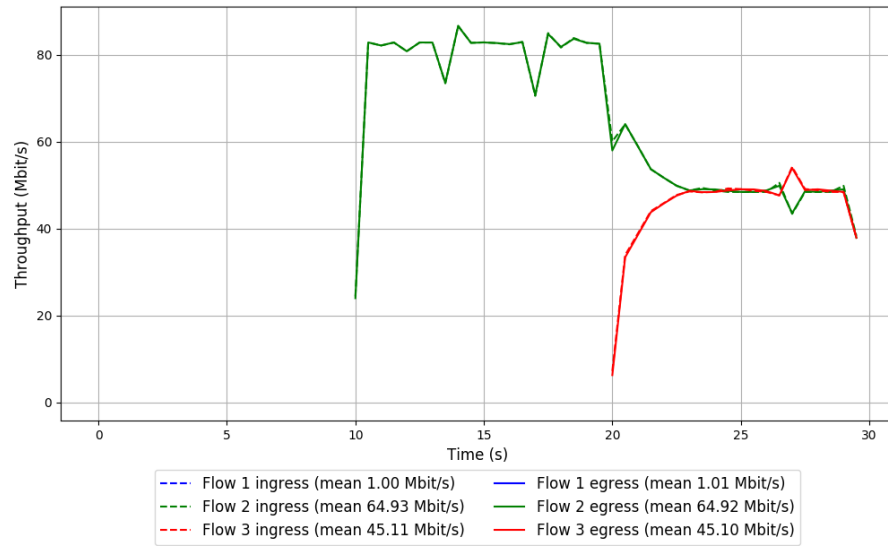
-- Flow 3:

Average throughput: 45.10 Mbit/s

95th percentile per-packet one-way delay: 24.482 ms

Loss rate: 0.24%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-10 00:12:24

End at: 2018-01-10 00:12:54

Local clock offset: -0.206 ms

Remote clock offset: 0.294 ms

Below is generated by plot.py at 2018-01-10 05:28:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 52.51 Mbit/s

95th percentile per-packet one-way delay: 24.493 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 2.427 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 57.60 Mbit/s

95th percentile per-packet one-way delay: 24.433 ms

Loss rate: 0.14%

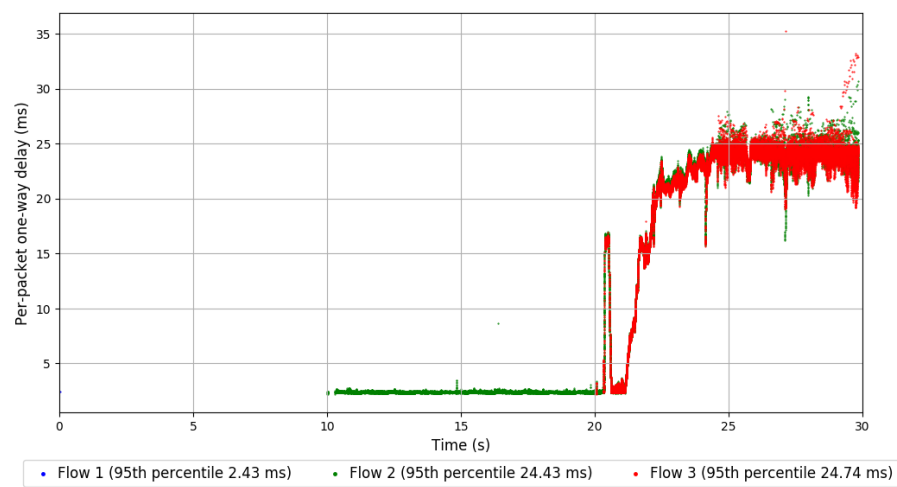
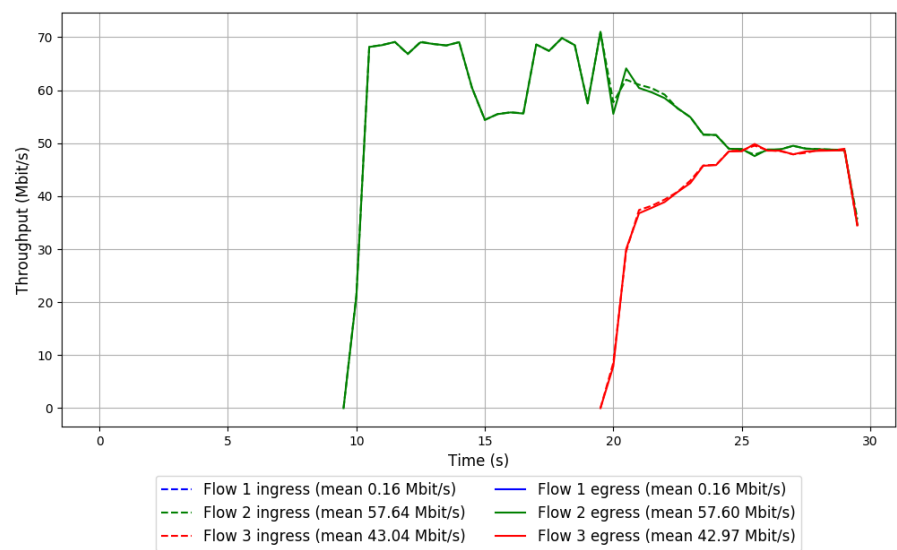
-- Flow 3:

Average throughput: 42.97 Mbit/s

95th percentile per-packet one-way delay: 24.741 ms

Loss rate: 0.26%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-01-10 00:29:22

End at: 2018-01-10 00:29:52

Local clock offset: -0.254 ms

Remote clock offset: -0.03 ms

Below is generated by plot.py at 2018-01-10 05:29:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 51.12 Mbit/s

95th percentile per-packet one-way delay: 24.488 ms

Loss rate: 0.18%

-- Flow 1:

Average throughput: 0.83 Mbit/s

95th percentile per-packet one-way delay: 2.562 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 54.35 Mbit/s

95th percentile per-packet one-way delay: 24.455 ms

Loss rate: 0.13%

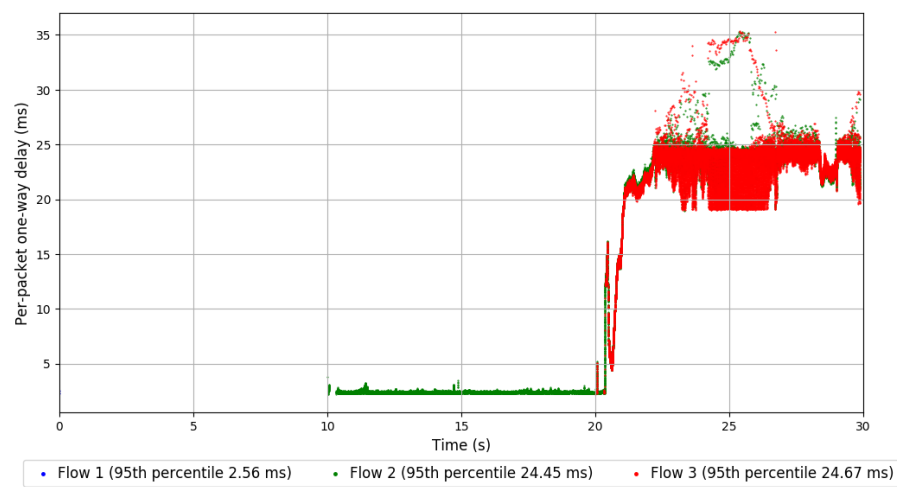
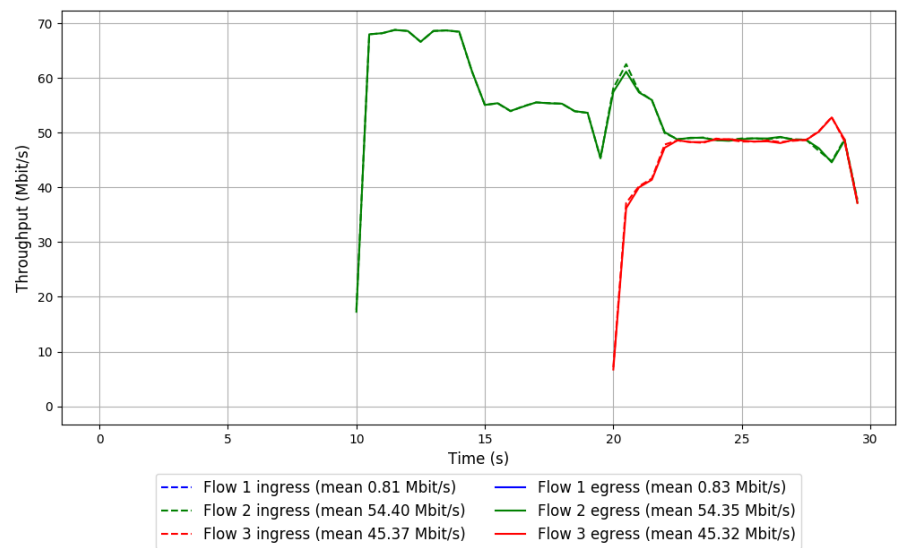
-- Flow 3:

Average throughput: 45.32 Mbit/s

95th percentile per-packet one-way delay: 24.670 ms

Loss rate: 0.29%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-01-10 00:46:22

End at: 2018-01-10 00:46:52

Local clock offset: -0.19 ms

Remote clock offset: 0.057 ms

Below is generated by plot.py at 2018-01-10 05:29:28

Datalink statistics

-- Total of 3 flows:

Average throughput: 58.83 Mbit/s

95th percentile per-packet one-way delay: 24.503 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 0.78 Mbit/s

95th percentile per-packet one-way delay: 2.505 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 65.62 Mbit/s

95th percentile per-packet one-way delay: 24.483 ms

Loss rate: 0.08%

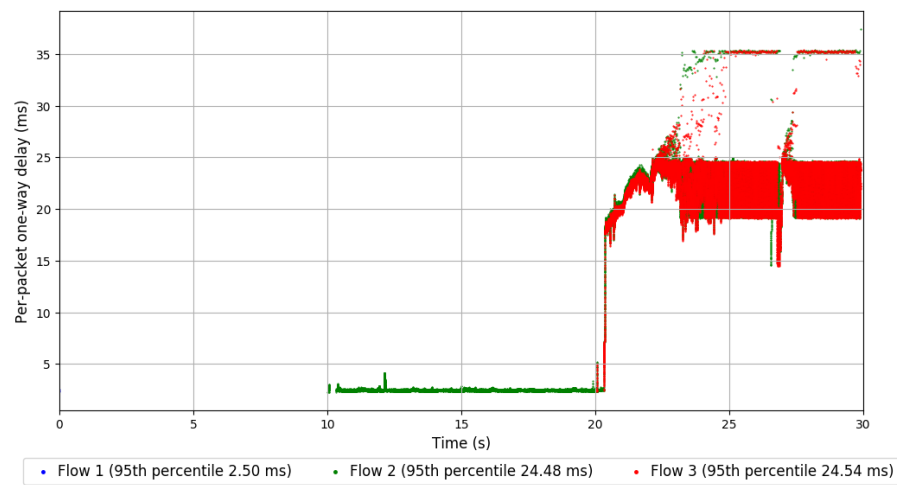
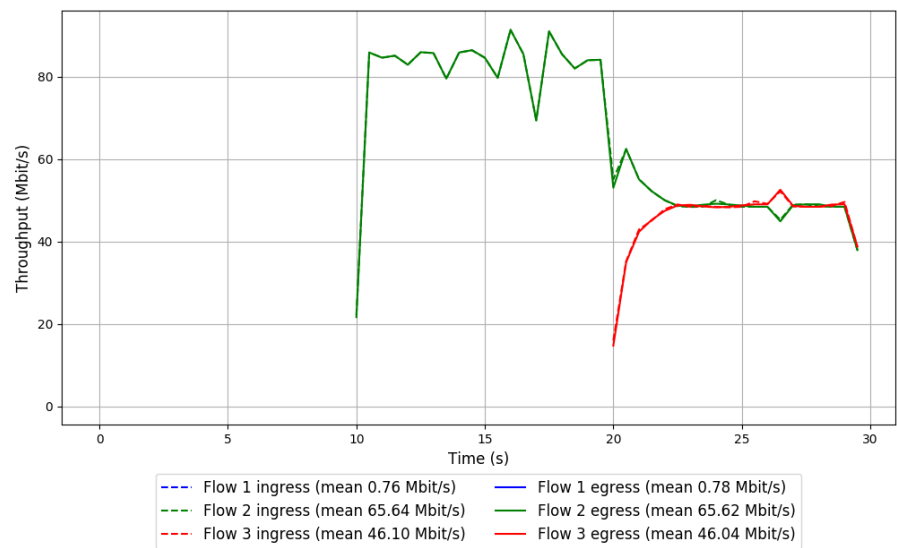
-- Flow 3:

Average throughput: 46.04 Mbit/s

95th percentile per-packet one-way delay: 24.536 ms

Loss rate: 0.25%

Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

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

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

Local clock offset: -0.28 ms

Remote clock offset: 0.189 ms

Below is generated by plot.py at 2018-01-10 05:29:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.41 Mbit/s

95th percentile per-packet one-way delay: 24.508 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 1.09 Mbit/s

95th percentile per-packet one-way delay: 2.411 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.71 Mbit/s

95th percentile per-packet one-way delay: 24.469 ms

Loss rate: 0.08%

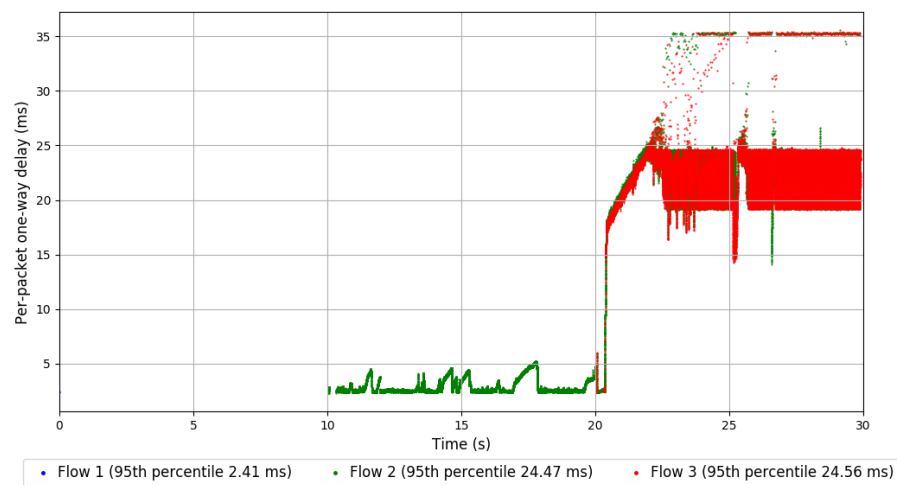
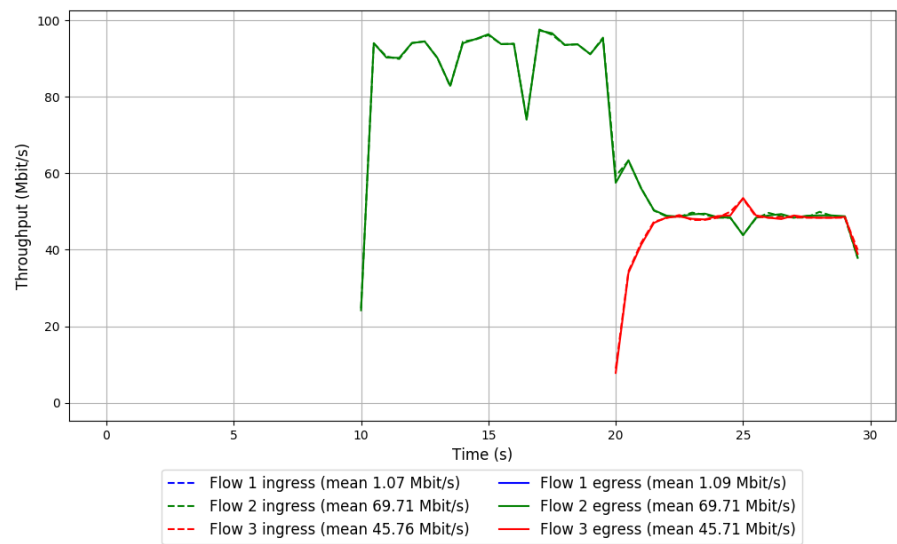
-- Flow 3:

Average throughput: 45.71 Mbit/s

95th percentile per-packet one-way delay: 24.557 ms

Loss rate: 0.33%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-01-10 01:20:17

End at: 2018-01-10 01:20:47

Local clock offset: -0.25 ms

Remote clock offset: 0.437 ms

Below is generated by plot.py at 2018-01-10 05:29:44

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.11 Mbit/s

95th percentile per-packet one-way delay: 24.461 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 2.590 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.08 Mbit/s

95th percentile per-packet one-way delay: 24.436 ms

Loss rate: 0.08%

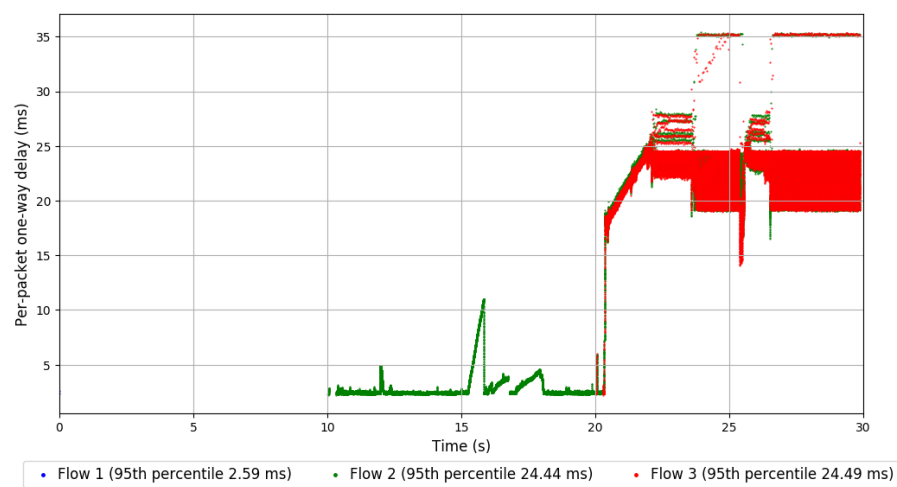
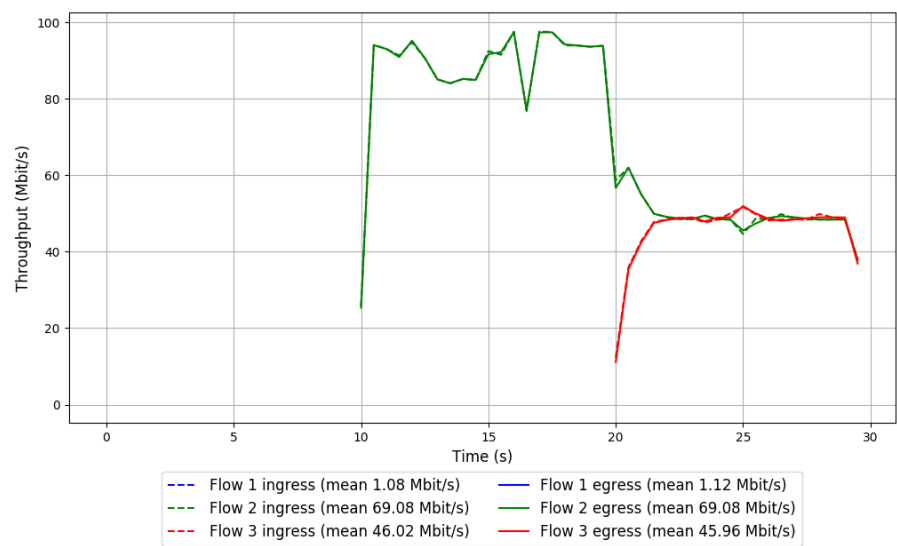
-- Flow 3:

Average throughput: 45.96 Mbit/s

95th percentile per-packet one-way delay: 24.493 ms

Loss rate: 0.34%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-01-10 01:37:15

End at: 2018-01-10 01:37:45

Local clock offset: -0.262 ms

Remote clock offset: 0.537 ms

Below is generated by plot.py at 2018-01-10 05:29:46

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.36 Mbit/s

95th percentile per-packet one-way delay: 24.464 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 2.430 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.64 Mbit/s

95th percentile per-packet one-way delay: 24.432 ms

Loss rate: 0.08%

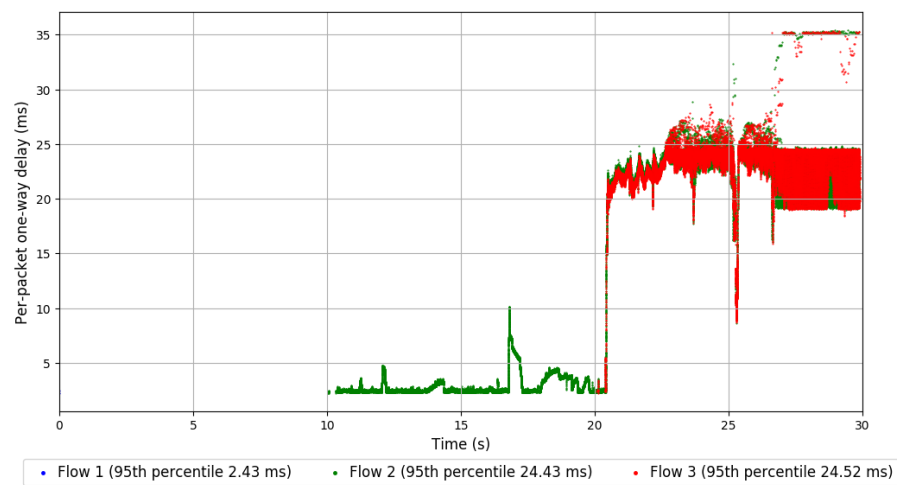
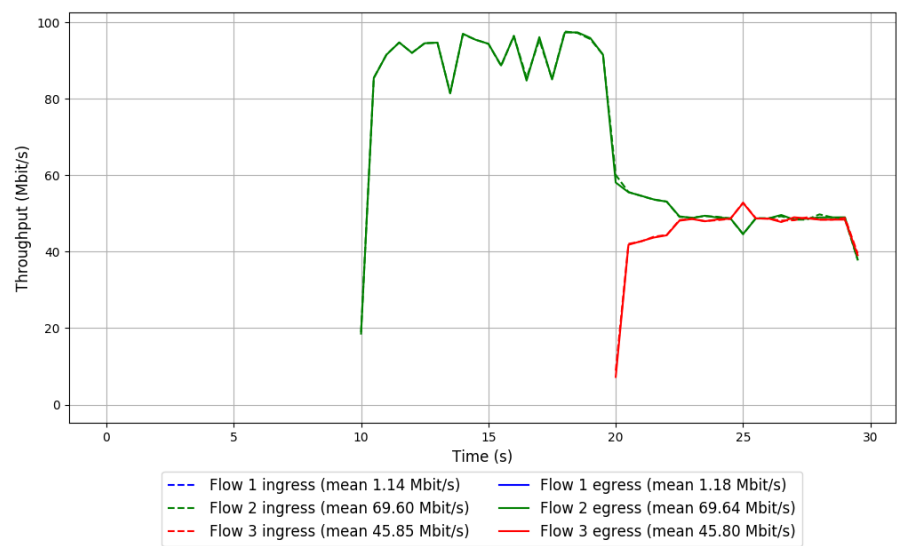
-- Flow 3:

Average throughput: 45.80 Mbit/s

95th percentile per-packet one-way delay: 24.524 ms

Loss rate: 0.34%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-01-10 01:54:13

End at: 2018-01-10 01:54:43

Local clock offset: -0.215 ms

Remote clock offset: 0.617 ms

Below is generated by plot.py at 2018-01-10 05:30:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 61.48 Mbit/s

95th percentile per-packet one-way delay: 24.451 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 1.12 Mbit/s

95th percentile per-packet one-way delay: 2.434 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 69.70 Mbit/s

95th percentile per-packet one-way delay: 24.421 ms

Loss rate: 0.09%

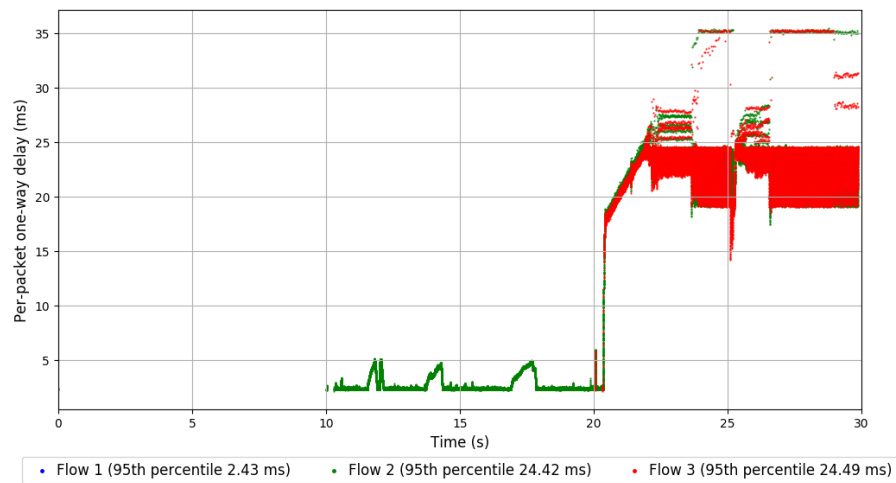
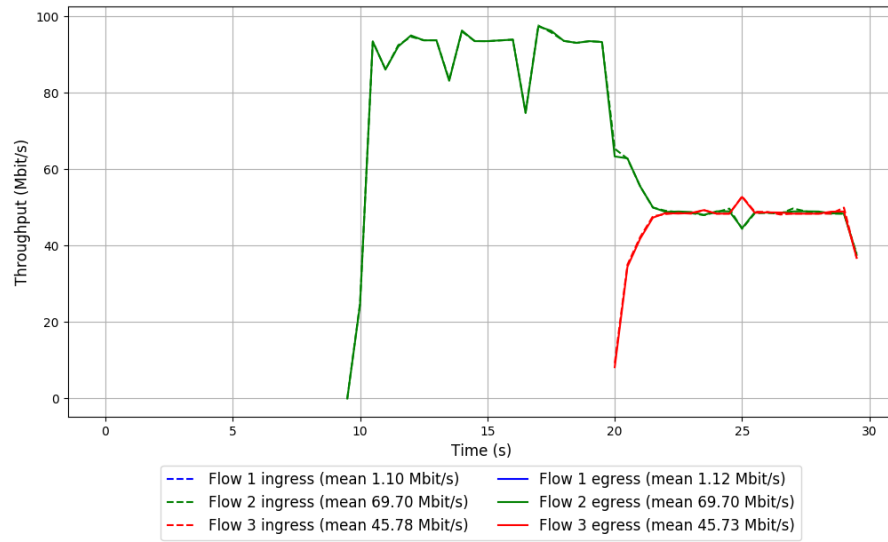
-- Flow 3:

Average throughput: 45.73 Mbit/s

95th percentile per-packet one-way delay: 24.490 ms

Loss rate: 0.28%

Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-01-10 02:11:12

End at: 2018-01-10 02:11:42

Local clock offset: -0.107 ms

Remote clock offset: 0.683 ms

Below is generated by plot.py at 2018-01-10 05:30:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 50.14 Mbit/s

95th percentile per-packet one-way delay: 24.502 ms

Loss rate: 0.17%

-- Flow 1:

Average throughput: 0.68 Mbit/s

95th percentile per-packet one-way delay: 2.365 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 52.05 Mbit/s

95th percentile per-packet one-way delay: 24.493 ms

Loss rate: 0.10%

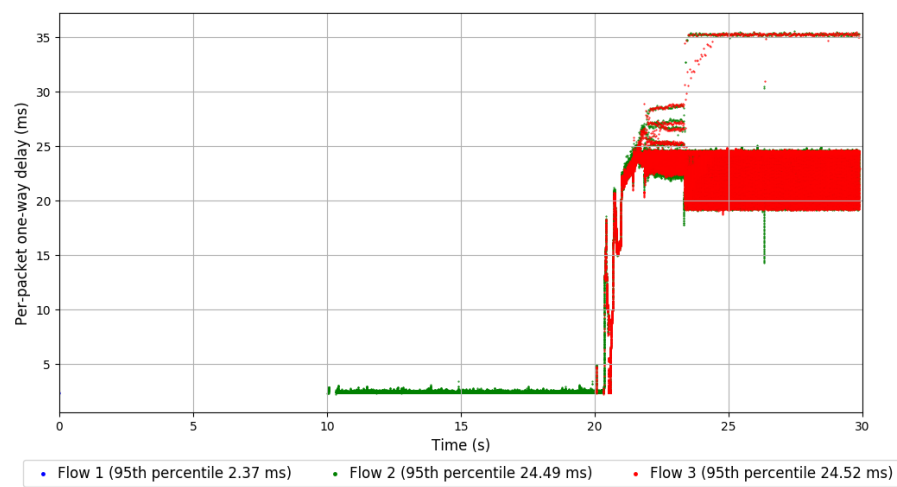
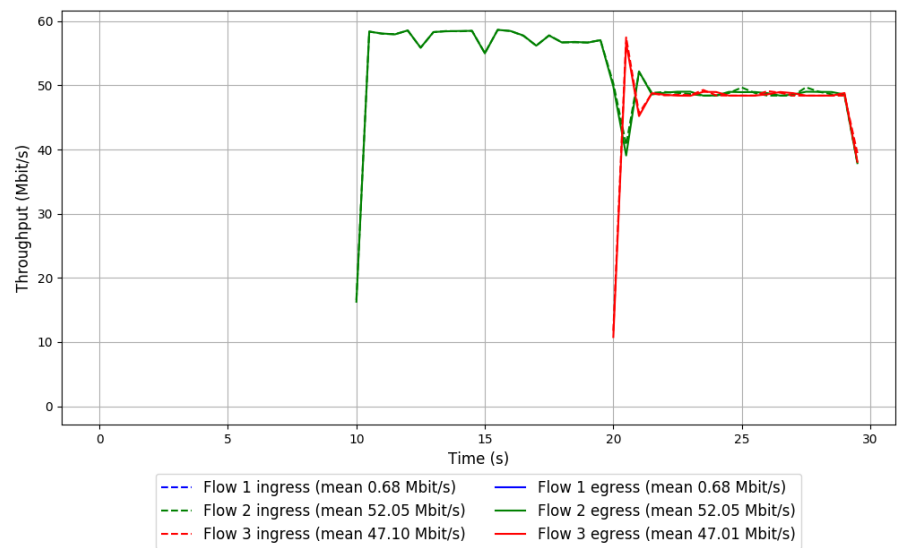
-- Flow 3:

Average throughput: 47.01 Mbit/s

95th percentile per-packet one-way delay: 24.515 ms

Loss rate: 0.33%

Run 10: Report of QUIC Cubic — Data Link

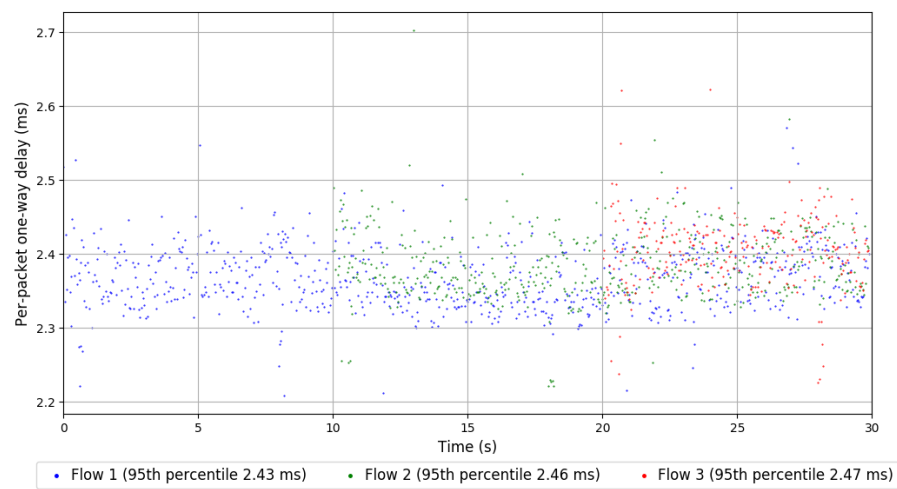
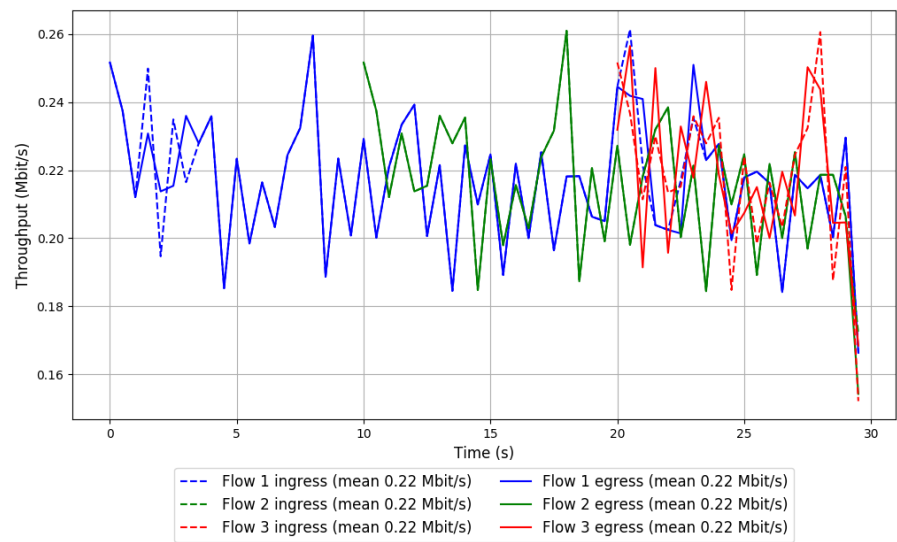


```
Run 1: Statistics of SReAM

Start at: 2018-01-09 23:51:59
End at: 2018-01-09 23:52:29
Local clock offset: -0.122 ms
Remote clock offset: 0.138 ms

# Below is generated by plot.py at 2018-01-10 05:30:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.452 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.432 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.458 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.473 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SReAM

Start at: 2018-01-10 00:09:00

End at: 2018-01-10 00:09:30

Local clock offset: -0.17 ms

Remote clock offset: 0.311 ms

Below is generated by plot.py at 2018-01-10 05:30:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 2.517 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.511 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.524 ms

Loss rate: 0.00%

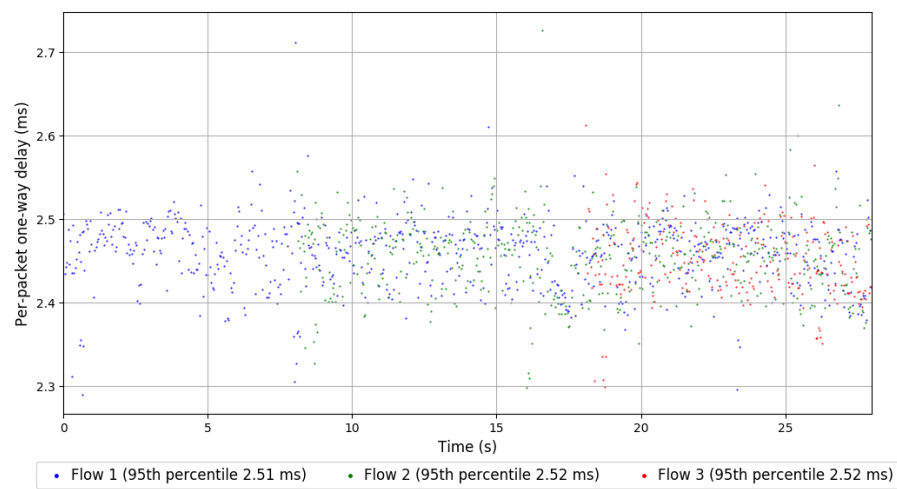
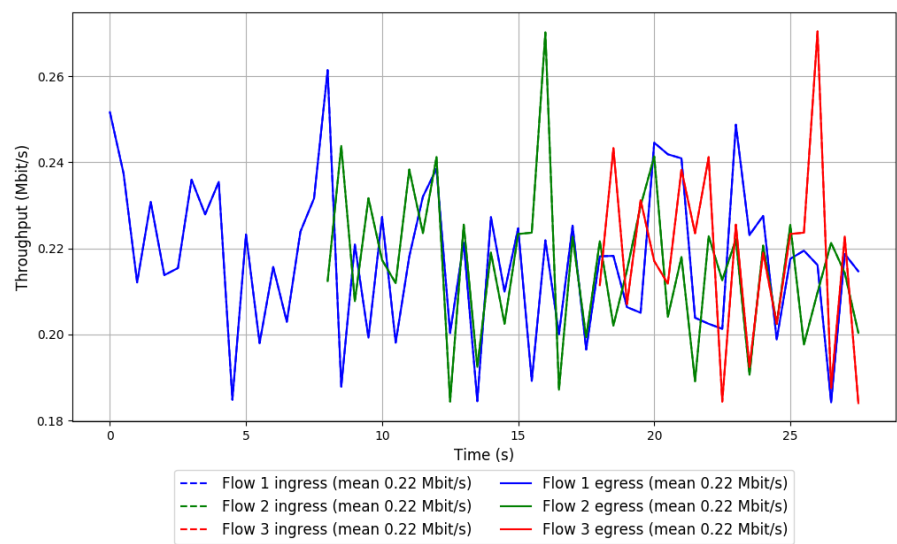
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.520 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

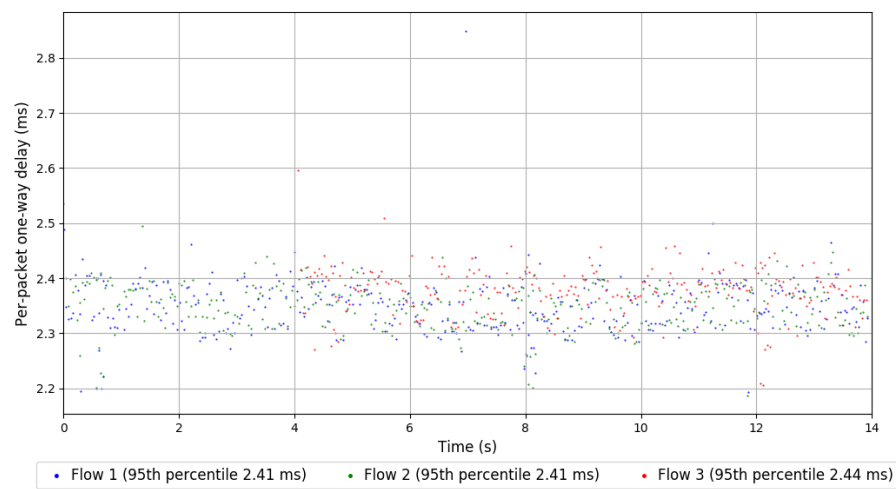
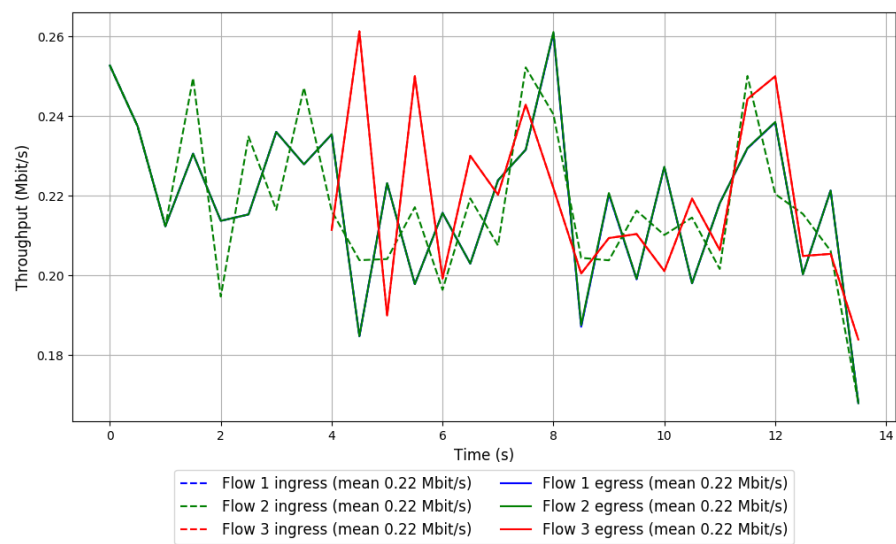
Start at: 2018-01-10 00:25:56

End at: 2018-01-10 00:26:27

Local clock offset: -0.247 ms

Remote clock offset: 0.044 ms

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

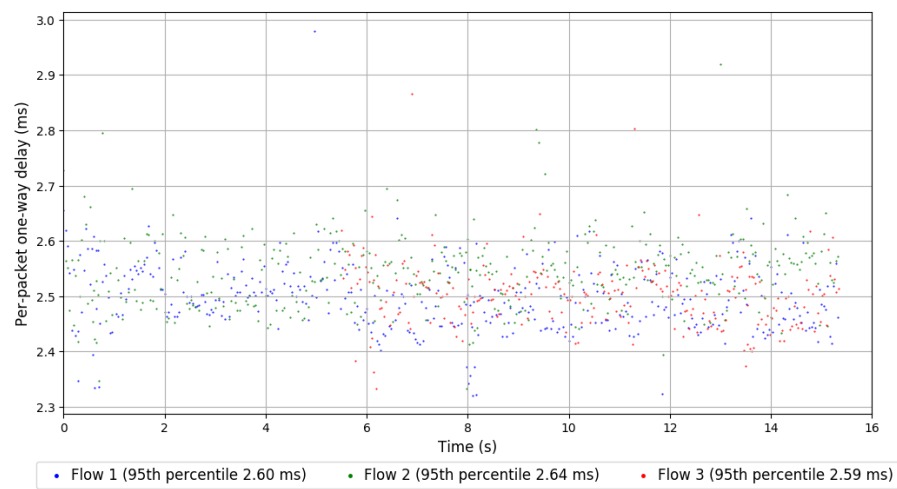
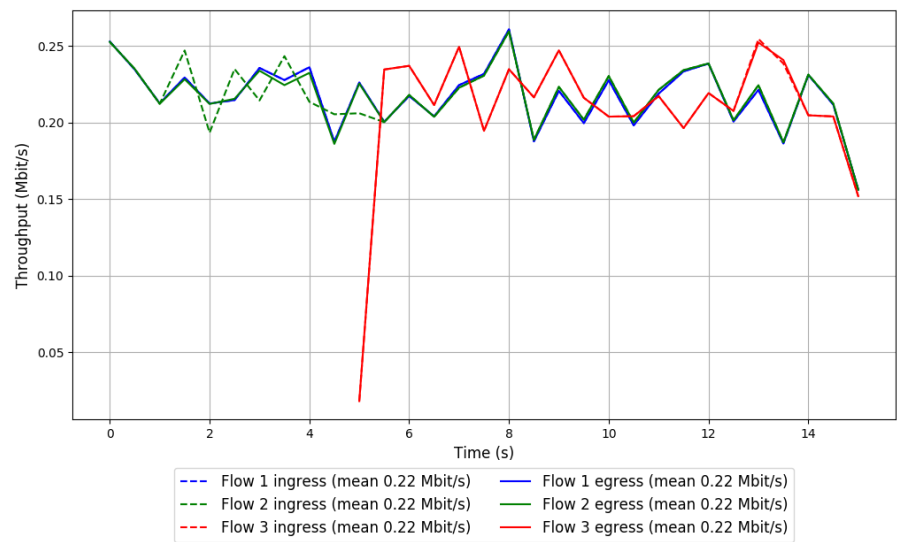
Start at: 2018-01-10 00:42:58

End at: 2018-01-10 00:43:28

Local clock offset: -0.137 ms

Remote clock offset: 0.04 ms

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

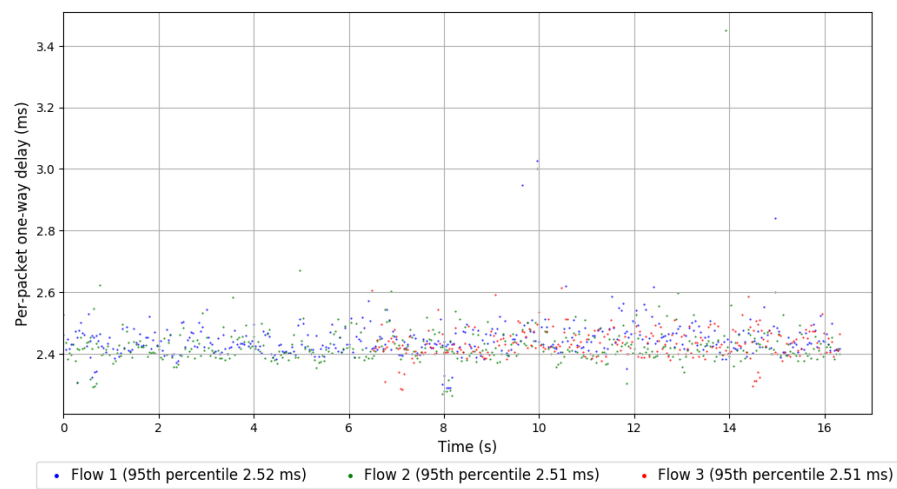
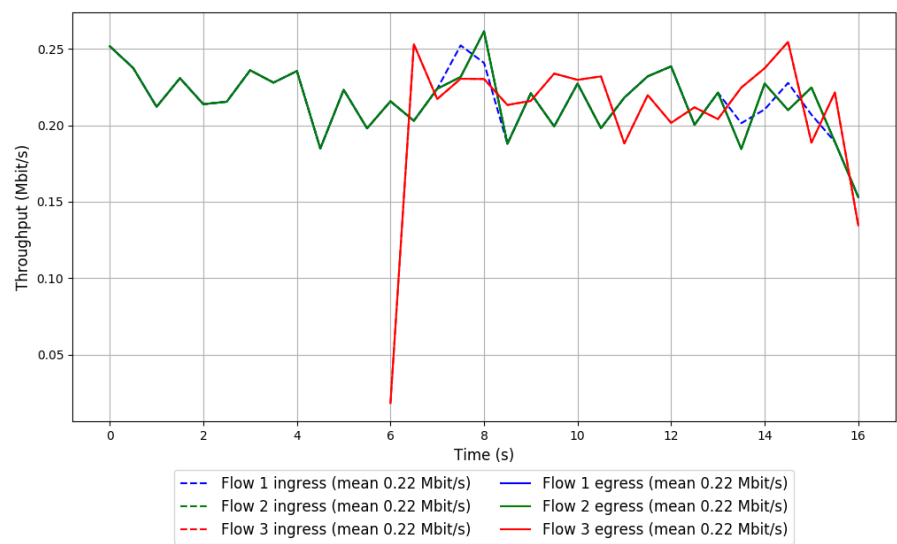
Start at: 2018-01-10 00:59:55

End at: 2018-01-10 01:00:25

Local clock offset: -0.287 ms

Remote clock offset: 0.159 ms

Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

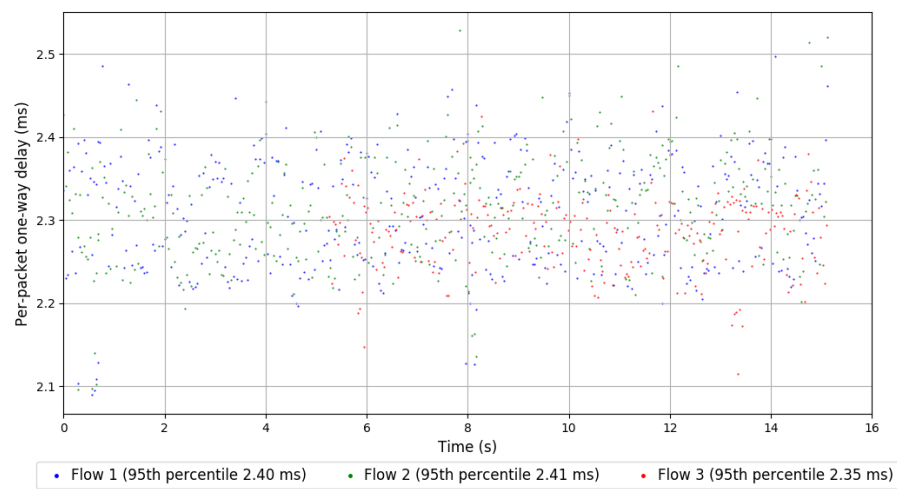
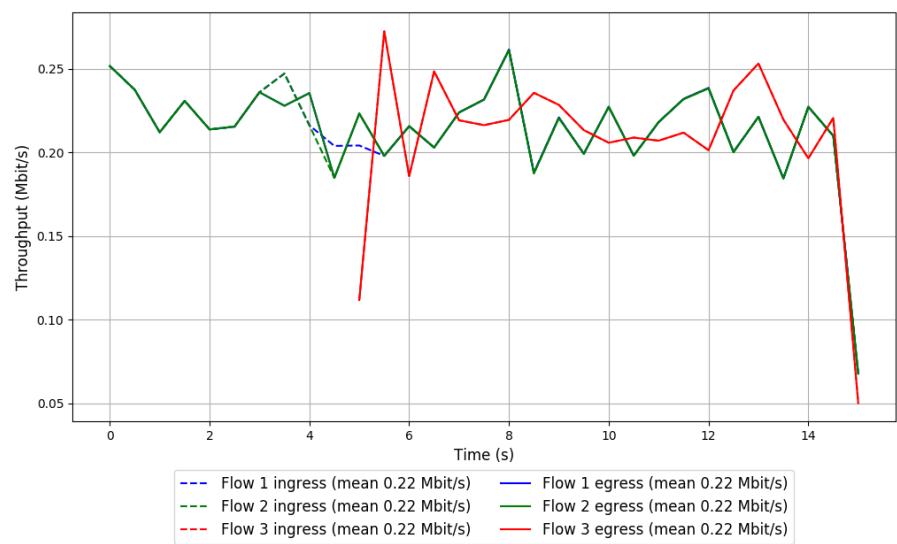
Start at: 2018-01-10 01:16:53

End at: 2018-01-10 01:17:23

Local clock offset: -0.36 ms

Remote clock offset: 0.425 ms

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

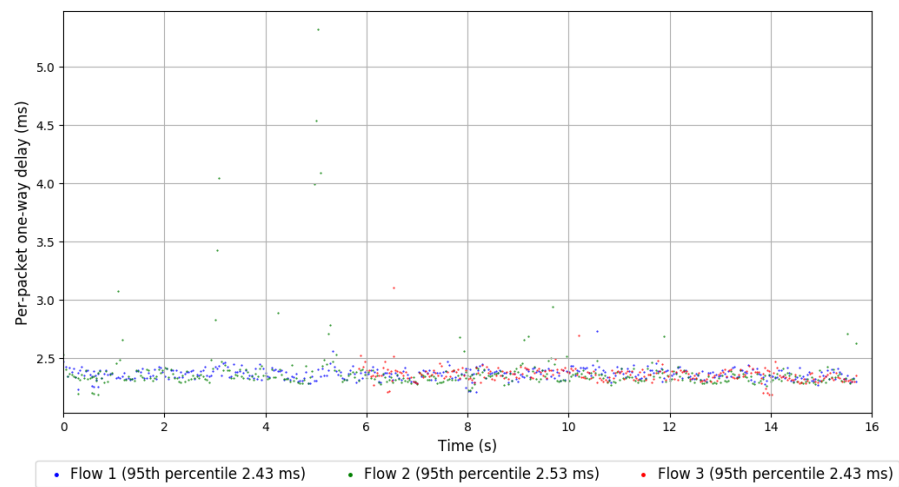
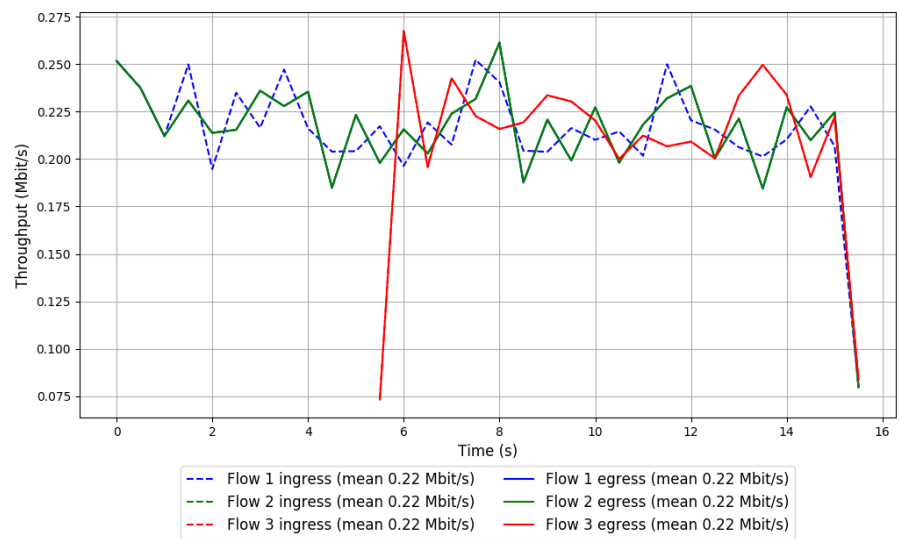
Start at: 2018-01-10 01:33:50

End at: 2018-01-10 01:34:20

Local clock offset: -0.312 ms

Remote clock offset: 0.521 ms

Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

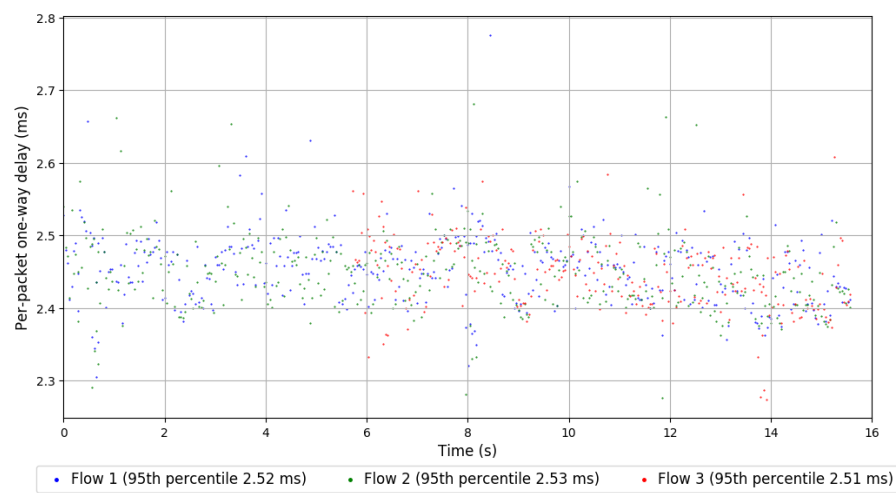
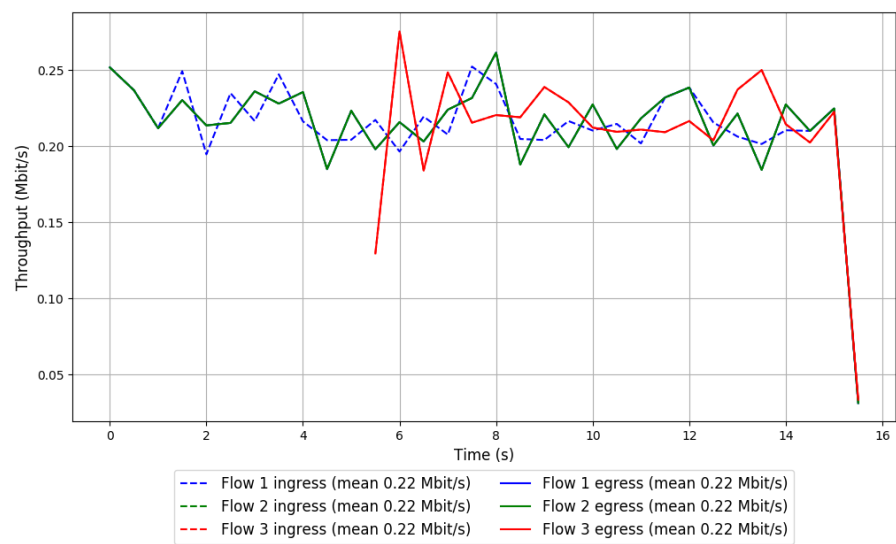
Start at: 2018-01-10 01:50:47

End at: 2018-01-10 01:51:17

Local clock offset: -0.254 ms

Remote clock offset: 0.531 ms

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

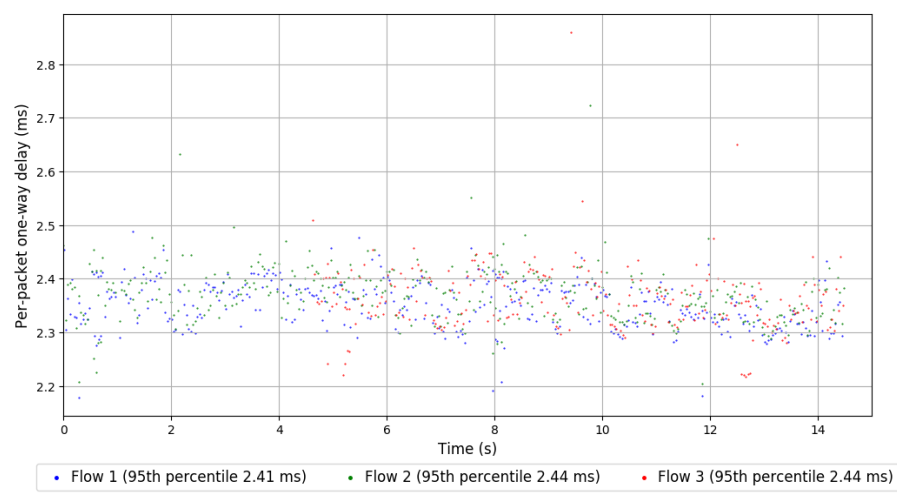
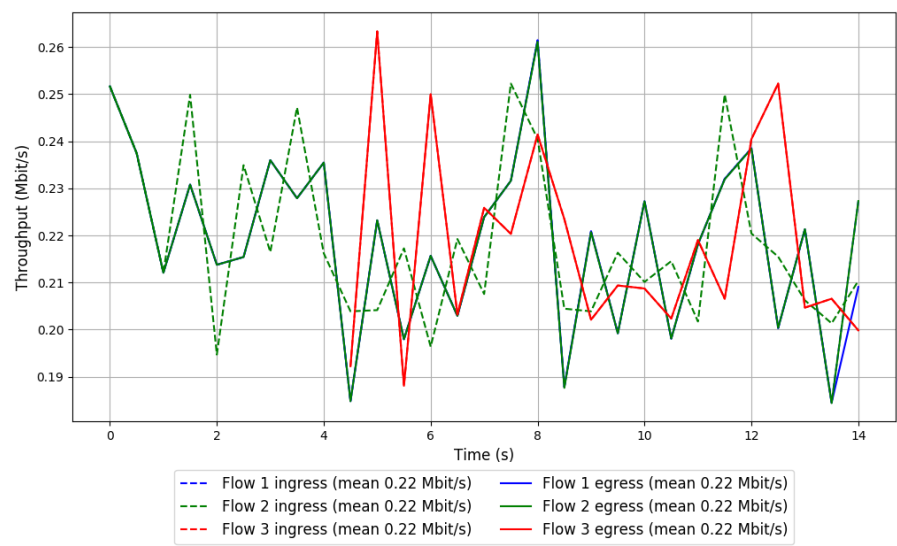
Start at: 2018-01-10 02:07:46

End at: 2018-01-10 02:08:16

Local clock offset: -0.16 ms

Remote clock offset: 0.685 ms

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

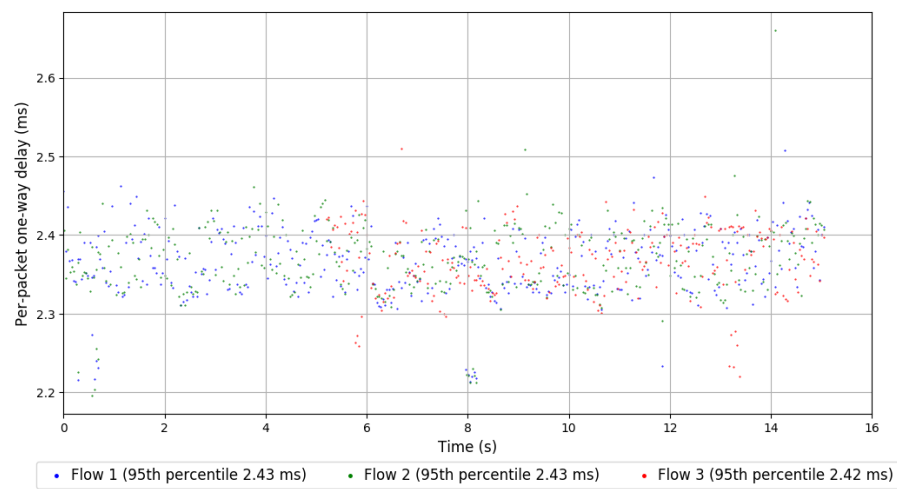
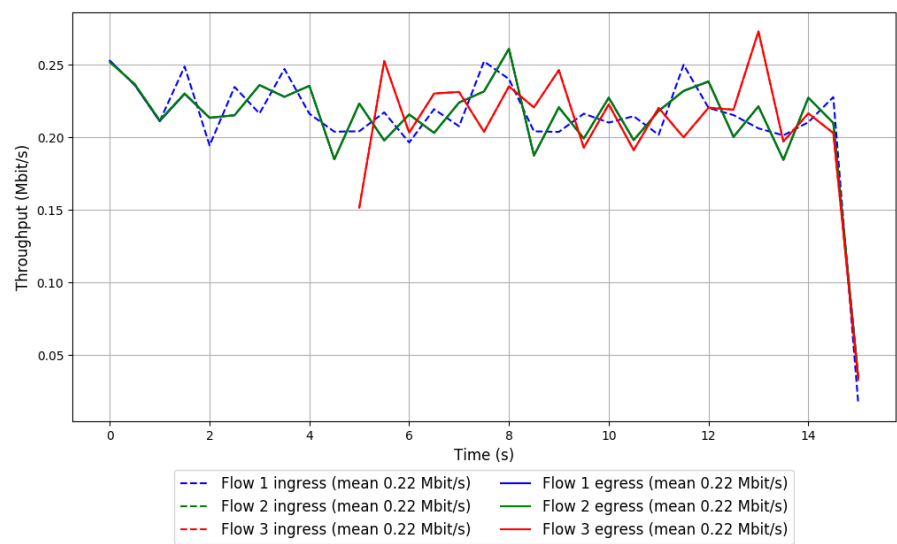
Start at: 2018-01-10 02:24:47

End at: 2018-01-10 02:25:17

Local clock offset: -0.105 ms

Remote clock offset: 0.748 ms

Run 10: Report of SReAM — Data Link

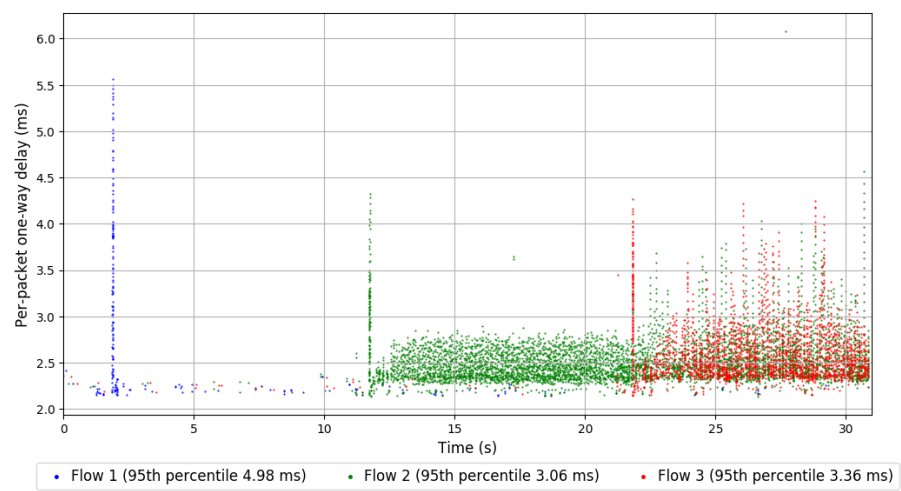
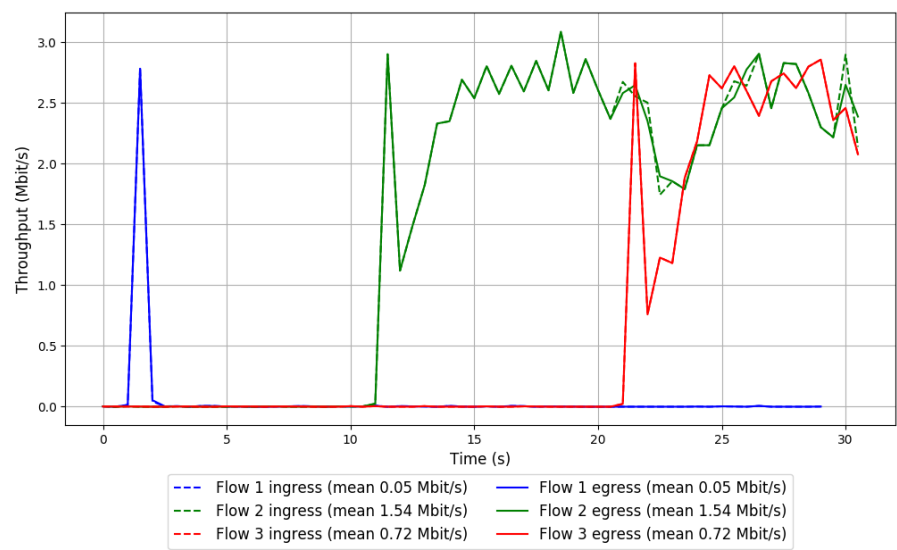


Run 1: Statistics of WebRTC media

Start at: 2018-01-09 23:40:43
End at: 2018-01-09 23:41:13
Local clock offset: -0.121 ms
Remote clock offset: -0.043 ms

Below is generated by plot.py at 2018-01-10 05:30:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 3.245 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.976 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 3.063 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.72 Mbit/s
95th percentile per-packet one-way delay: 3.356 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-09 23:57:41

End at: 2018-01-09 23:58:11

Local clock offset: -0.145 ms

Remote clock offset: 0.211 ms

Below is generated by plot.py at 2018-01-10 05:30:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.44 Mbit/s

95th percentile per-packet one-way delay: 3.421 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 3.326 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.44 Mbit/s

95th percentile per-packet one-way delay: 3.462 ms

Loss rate: 0.00%

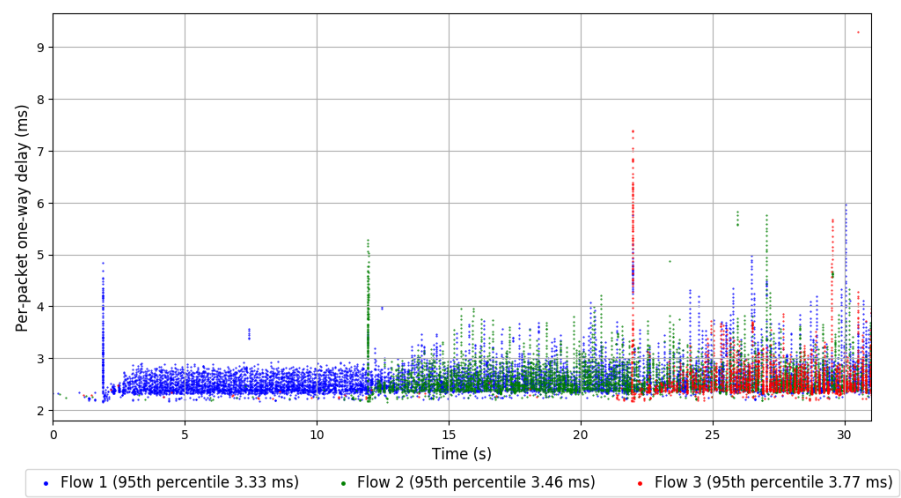
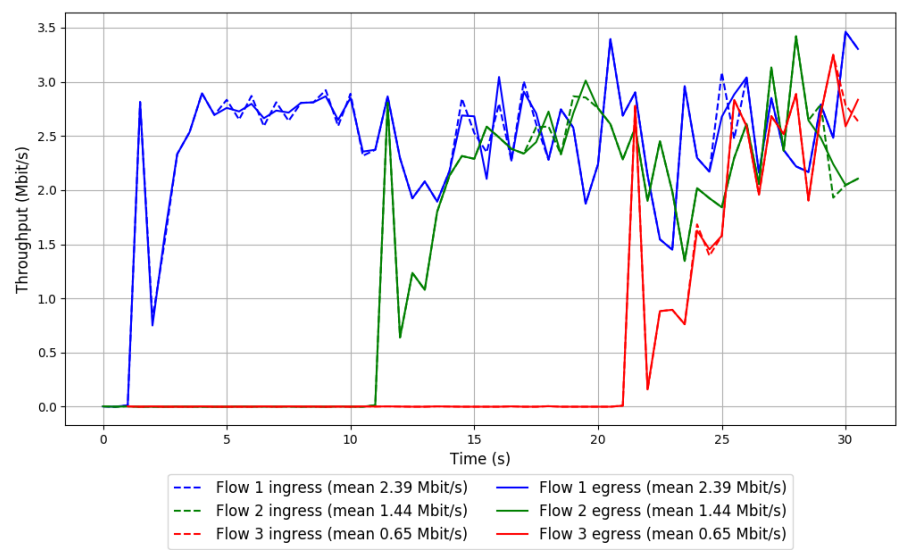
-- Flow 3:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 3.765 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

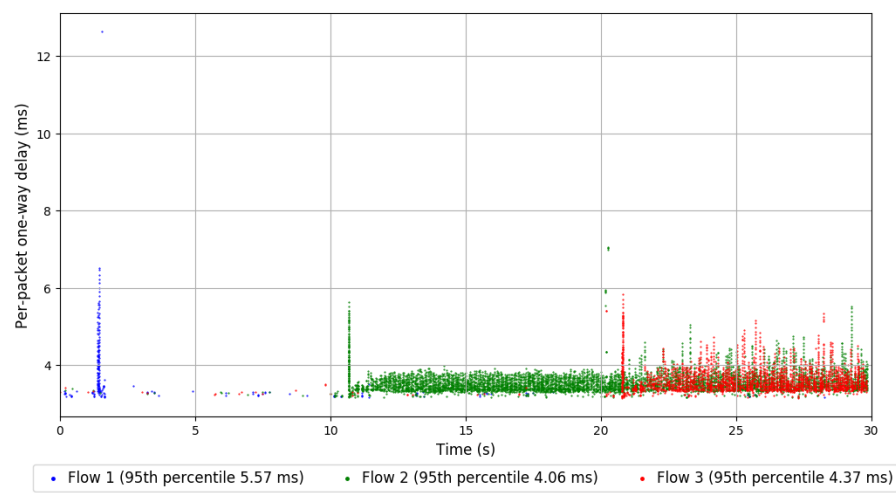
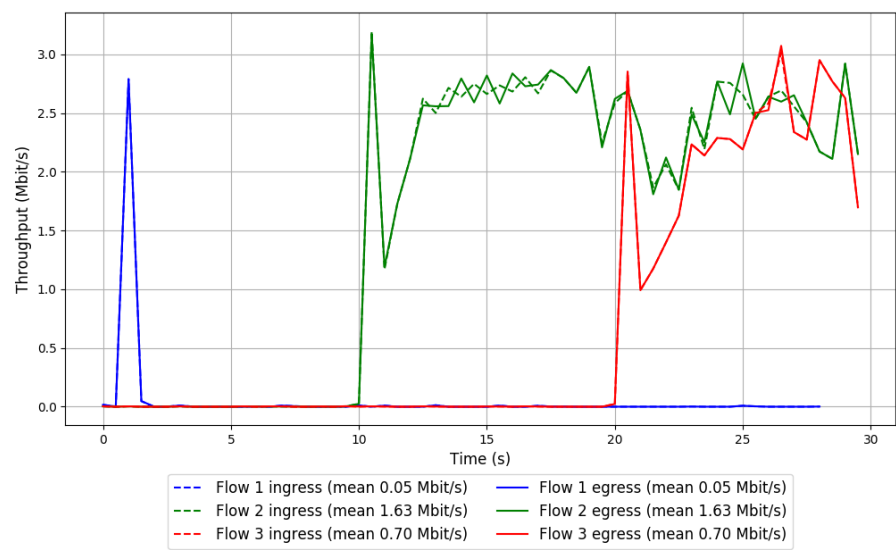


Run 3: Statistics of WebRTC media

Start at: 2018-01-10 00:14:41
End at: 2018-01-10 00:15:11
Local clock offset: -0.319 ms
Remote clock offset: -0.858 ms

Below is generated by plot.py at 2018-01-10 05:30:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 4.230 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.567 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 4.060 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 4.368 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

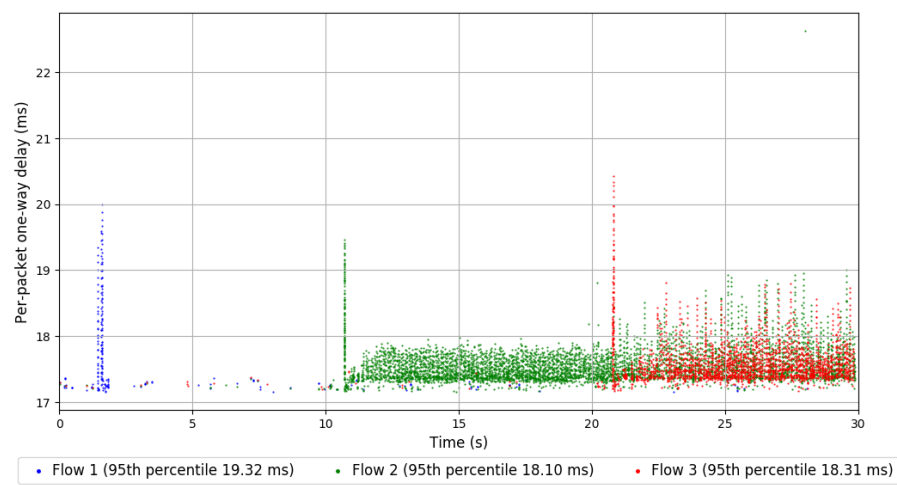
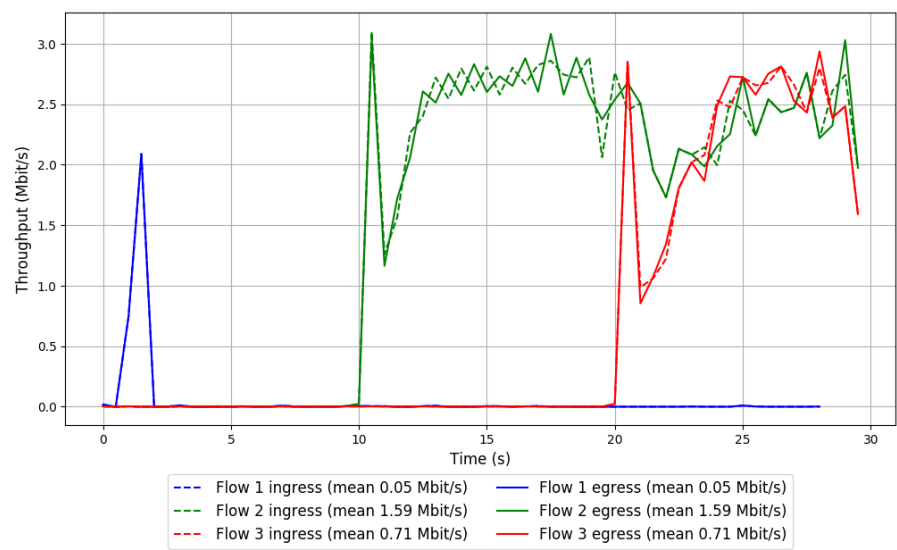


Run 4: Statistics of WebRTC media

Start at: 2018-01-10 00:31:39
End at: 2018-01-10 00:32:09
Local clock offset: -0.242 ms
Remote clock offset: -15.063 ms

Below is generated by plot.py at 2018-01-10 05:30:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 18.223 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 19.323 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 18.098 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 18.309 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-01-10 00:48:39

End at: 2018-01-10 00:49:09

Local clock offset: -0.279 ms

Remote clock offset: 0.022 ms

Below is generated by plot.py at 2018-01-10 05:30:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.39 Mbit/s

95th percentile per-packet one-way delay: 3.393 ms

Loss rate: 0.03%

-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 3.560 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.49 Mbit/s

95th percentile per-packet one-way delay: 3.157 ms

Loss rate: 0.00%

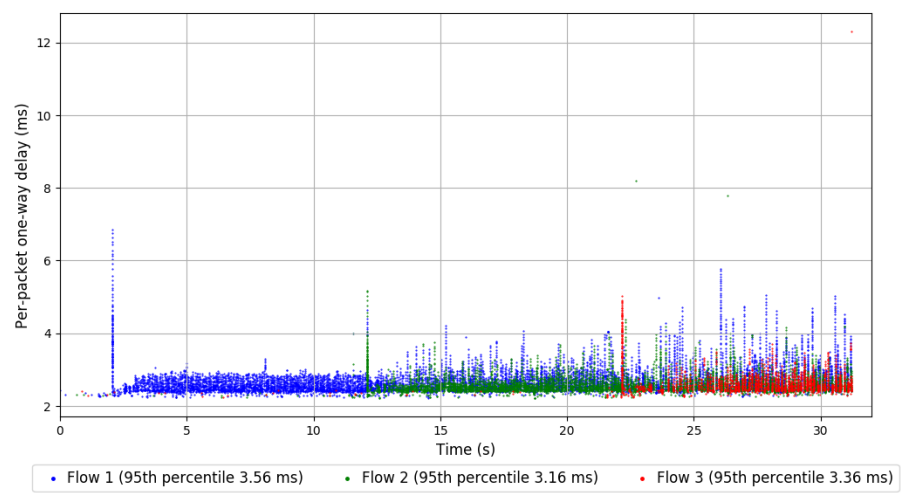
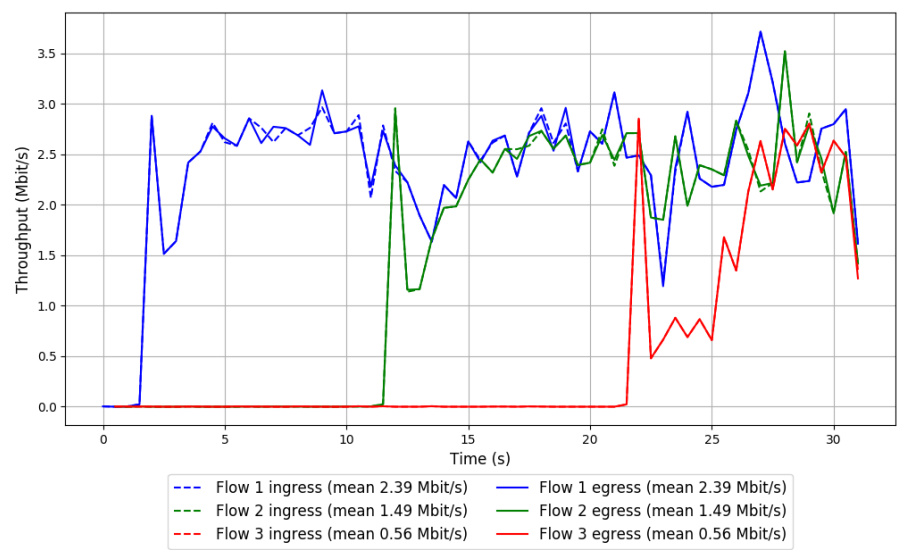
-- Flow 3:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 3.357 ms

Loss rate: 0.23%

Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-01-10 01:05:37

End at: 2018-01-10 01:06:07

Local clock offset: -0.3 ms

Remote clock offset: 0.221 ms

Below is generated by plot.py at 2018-01-10 05:30:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 3.308 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.39 Mbit/s

95th percentile per-packet one-way delay: 3.276 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 3.273 ms

Loss rate: 0.00%

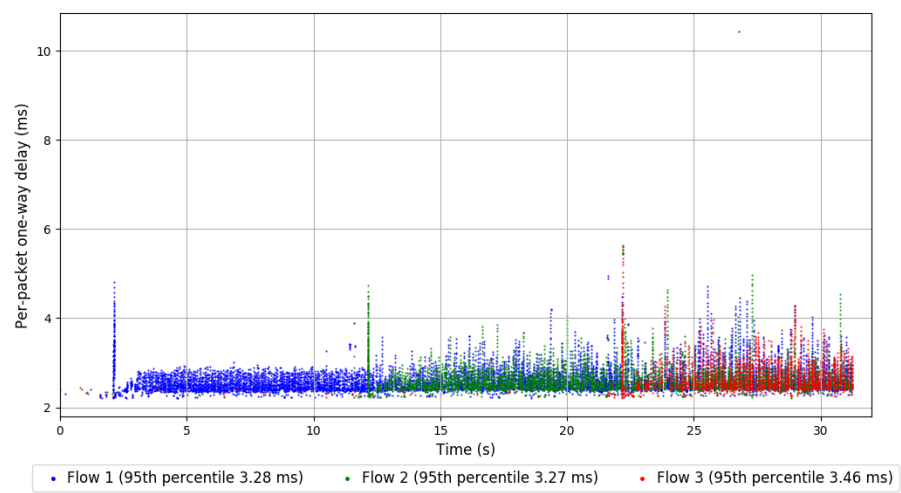
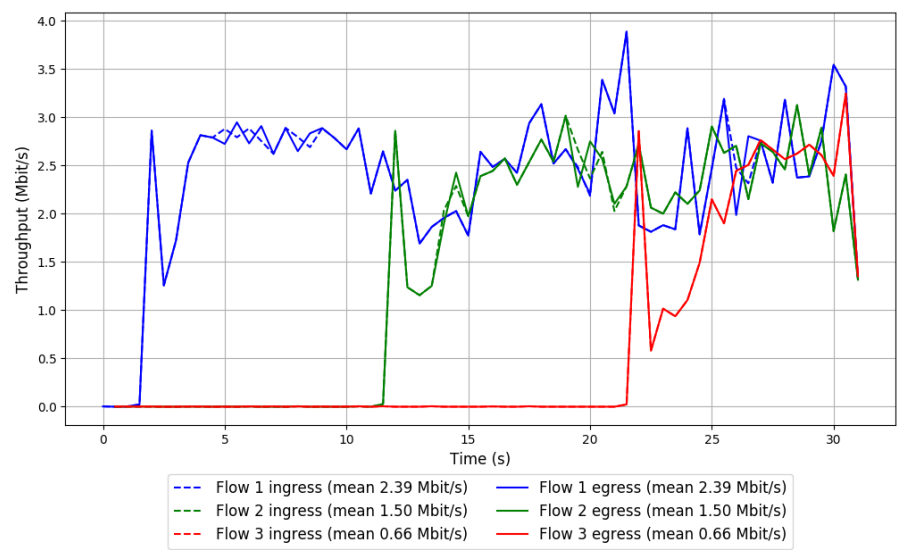
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 3.464 ms

Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link

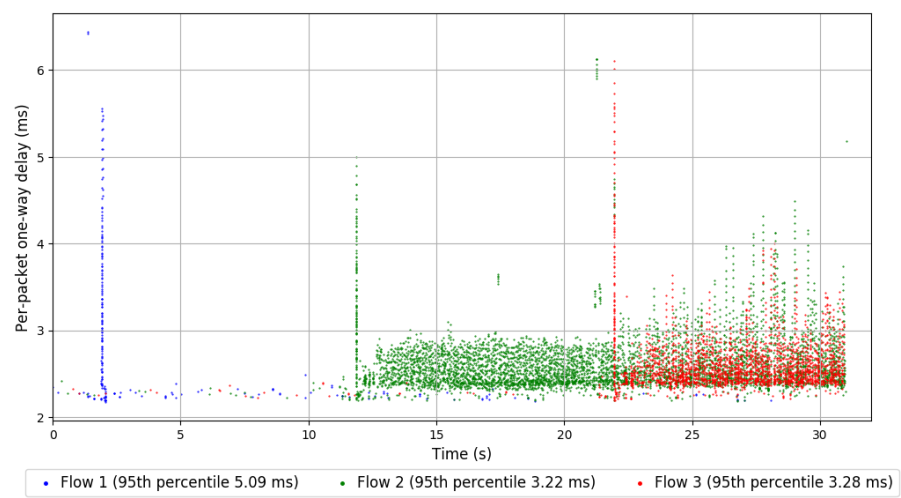
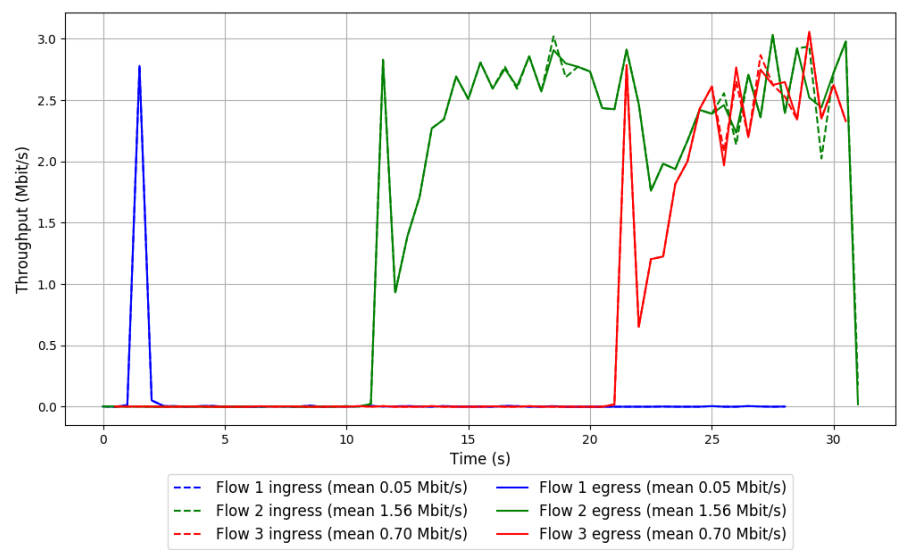


Run 7: Statistics of WebRTC media

Start at: 2018-01-10 01:22:34
End at: 2018-01-10 01:23:04
Local clock offset: -0.254 ms
Remote clock offset: 0.434 ms

Below is generated by plot.py at 2018-01-10 05:30:06
Datalink statistics
-- Total of 3 flows:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 3.310 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.089 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 3.222 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 3.276 ms
Loss rate: 0.00%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-01-10 01:39:32

End at: 2018-01-10 01:40:02

Local clock offset: -0.244 ms

Remote clock offset: 0.471 ms

Below is generated by plot.py at 2018-01-10 05:30:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 2.24 Mbit/s

95th percentile per-packet one-way delay: 3.243 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 4.177 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 3.099 ms

Loss rate: 0.00%

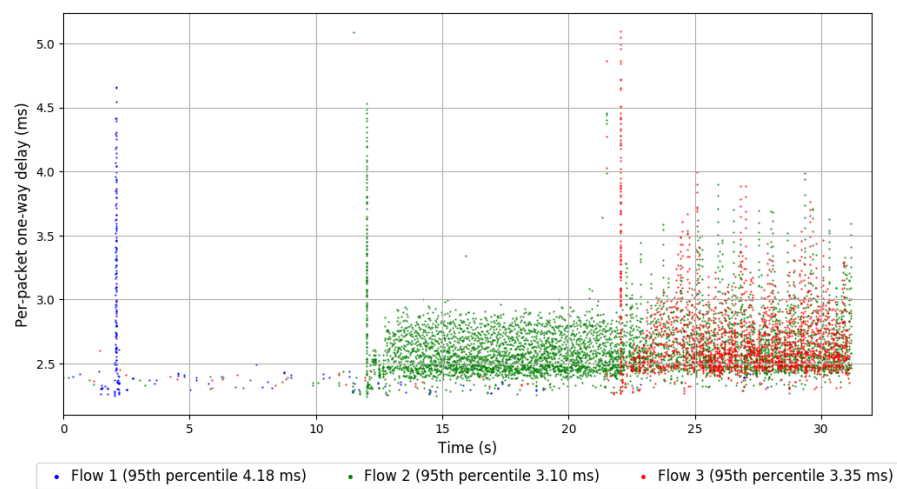
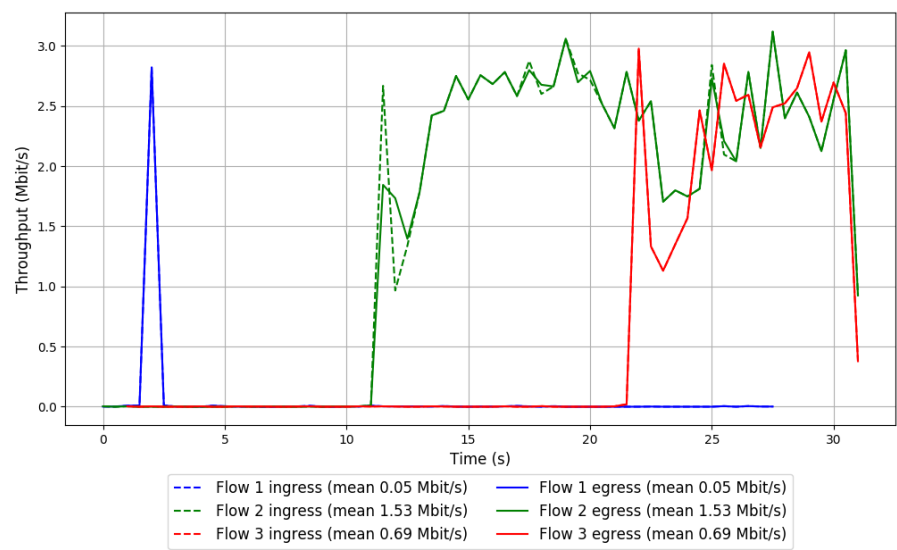
-- Flow 3:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 3.353 ms

Loss rate: 0.00%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-01-10 01:56:30

End at: 2018-01-10 01:57:00

Local clock offset: -0.191 ms

Remote clock offset: 0.612 ms

Below is generated by plot.py at 2018-01-10 05:30:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.49 Mbit/s

95th percentile per-packet one-way delay: 3.476 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 3.452 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.51 Mbit/s

95th percentile per-packet one-way delay: 3.441 ms

Loss rate: 0.00%

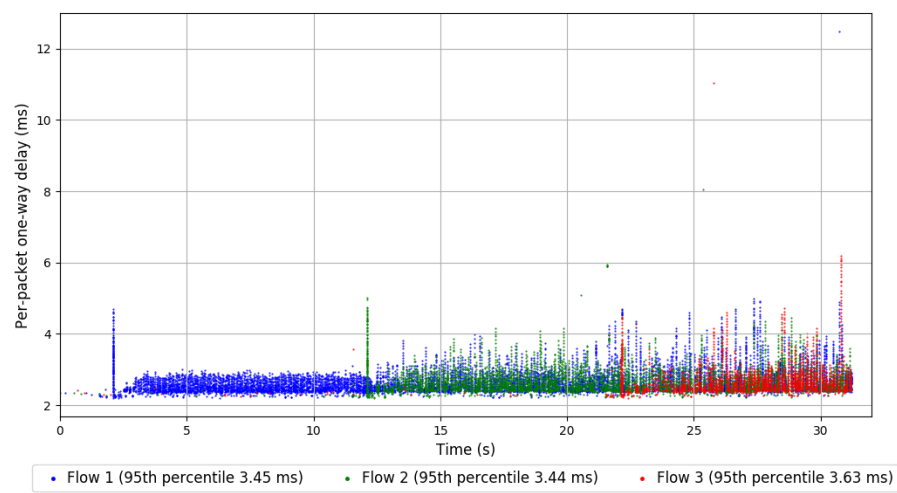
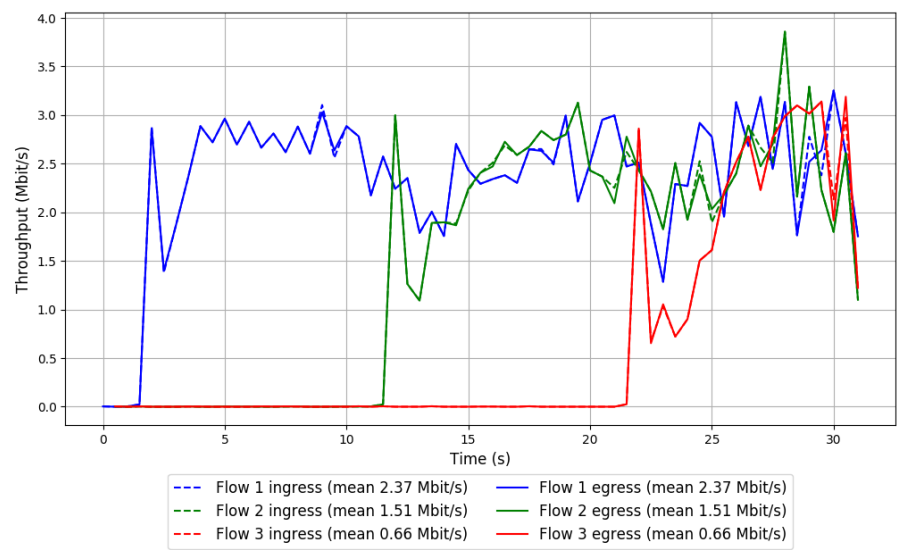
-- Flow 3:

Average throughput: 0.66 Mbit/s

95th percentile per-packet one-way delay: 3.635 ms

Loss rate: 0.00%

Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-01-10 02:13:28

End at: 2018-01-10 02:13:58

Local clock offset: -0.097 ms

Remote clock offset: 0.693 ms

Below is generated by plot.py at 2018-01-10 05:30:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 4.52 Mbit/s

95th percentile per-packet one-way delay: 3.415 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 2.42 Mbit/s

95th percentile per-packet one-way delay: 3.301 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 1.53 Mbit/s

95th percentile per-packet one-way delay: 3.529 ms

Loss rate: 0.00%

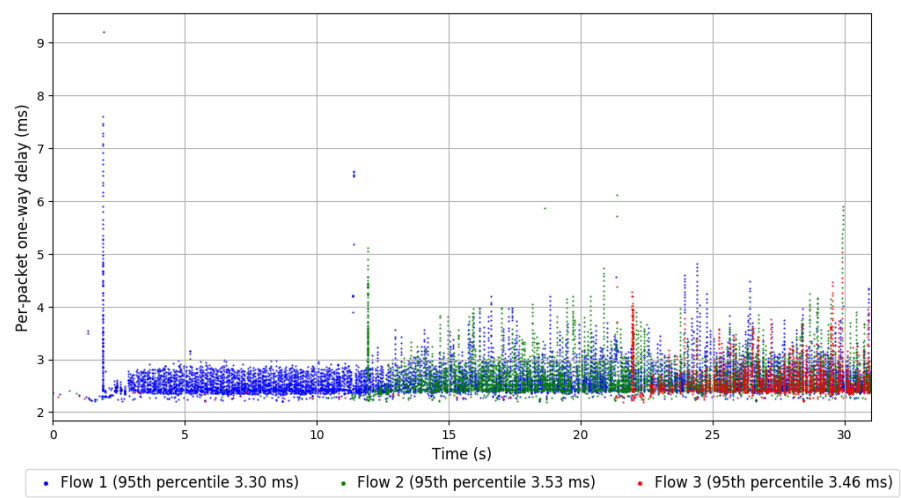
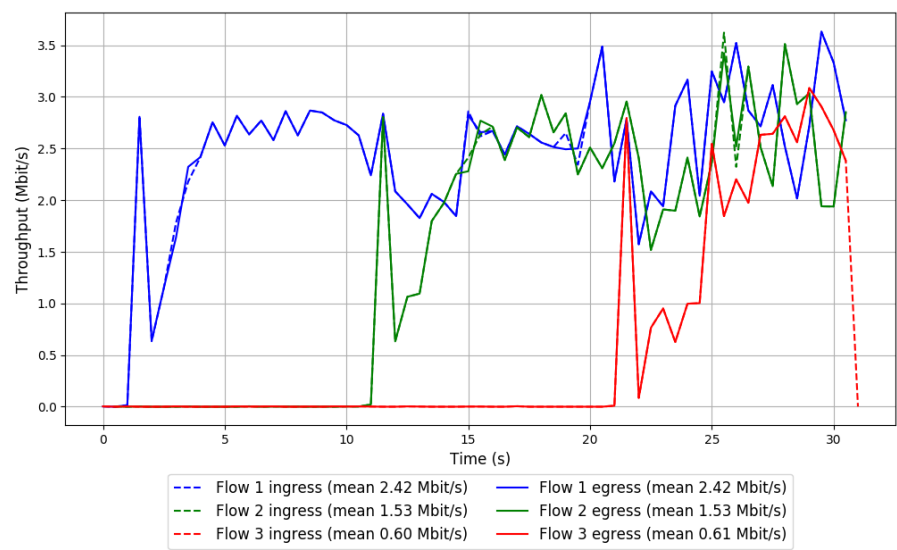
-- Flow 3:

Average throughput: 0.61 Mbit/s

95th percentile per-packet one-way delay: 3.462 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-01-09 23:50:52

End at: 2018-01-09 23:51:22

Local clock offset: -0.12 ms

Remote clock offset: 0.036 ms

Below is generated by plot.py at 2018-01-10 05:31:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.42 Mbit/s

95th percentile per-packet one-way delay: 20.301 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 41.30 Mbit/s

95th percentile per-packet one-way delay: 19.271 ms

Loss rate: 0.04%

-- Flow 2:

Average throughput: 38.55 Mbit/s

95th percentile per-packet one-way delay: 19.909 ms

Loss rate: 0.06%

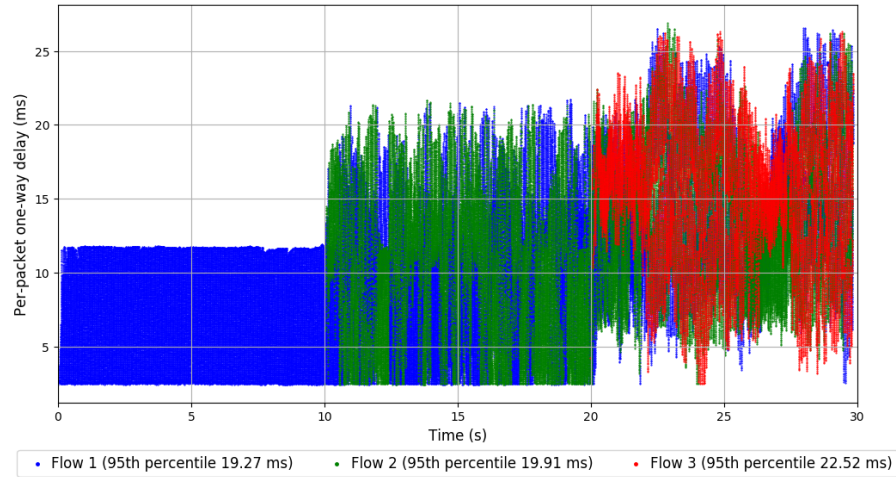
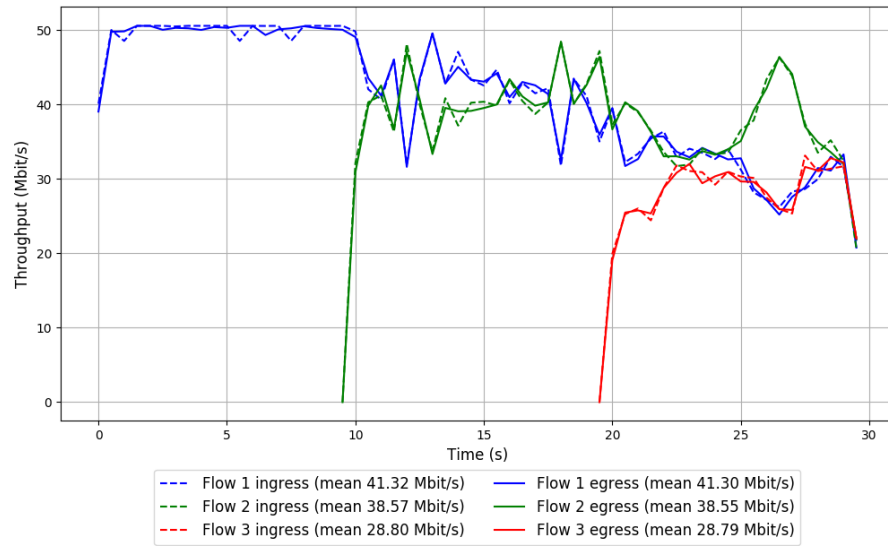
-- Flow 3:

Average throughput: 28.79 Mbit/s

95th percentile per-packet one-way delay: 22.517 ms

Loss rate: 0.01%

Run 1: Report of Sprout — Data Link

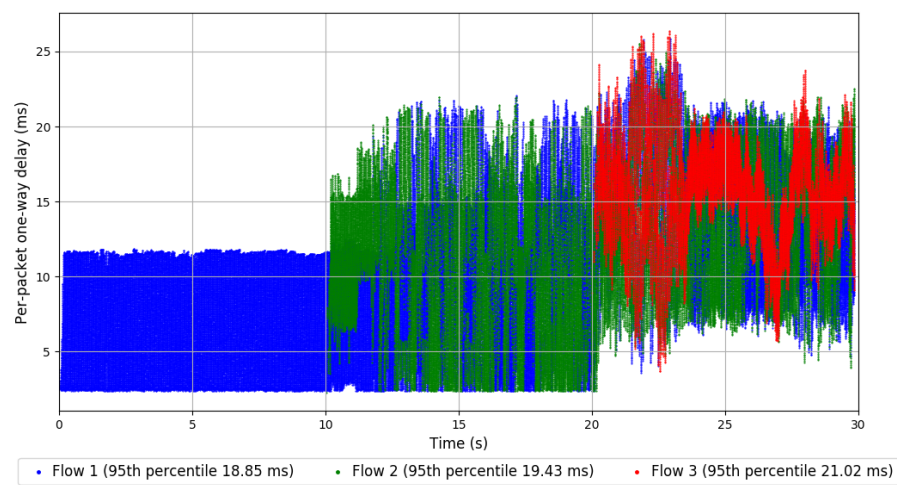
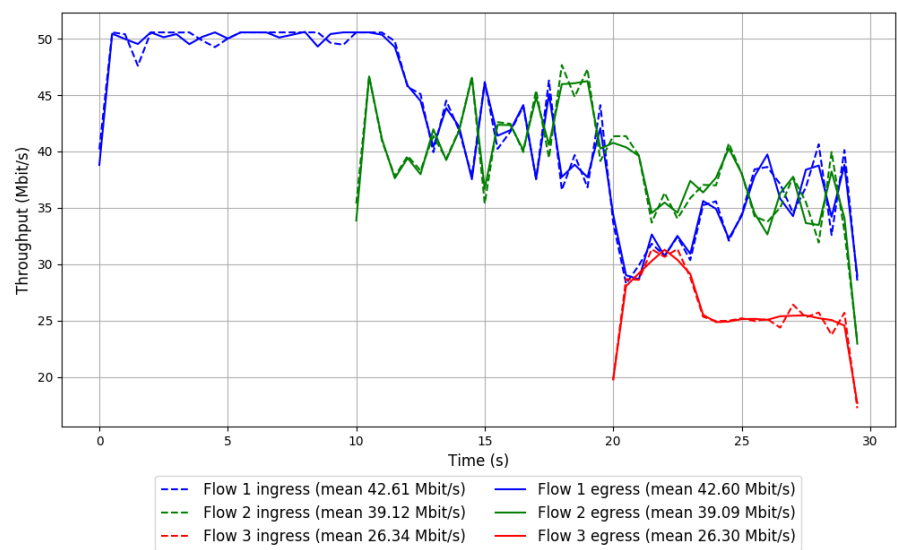


Run 2: Statistics of Sprout

Start at: 2018-01-10 00:07:53
End at: 2018-01-10 00:08:23
Local clock offset: -0.181 ms
Remote clock offset: 0.39 ms

Below is generated by plot.py at 2018-01-10 05:31:58
Datalink statistics
-- Total of 3 flows:
Average throughput: 77.23 Mbit/s
95th percentile per-packet one-way delay: 19.457 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 42.60 Mbit/s
95th percentile per-packet one-way delay: 18.851 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 39.09 Mbit/s
95th percentile per-packet one-way delay: 19.433 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 26.30 Mbit/s
95th percentile per-packet one-way delay: 21.025 ms
Loss rate: 0.13%

Run 2: Report of Sprout — Data Link

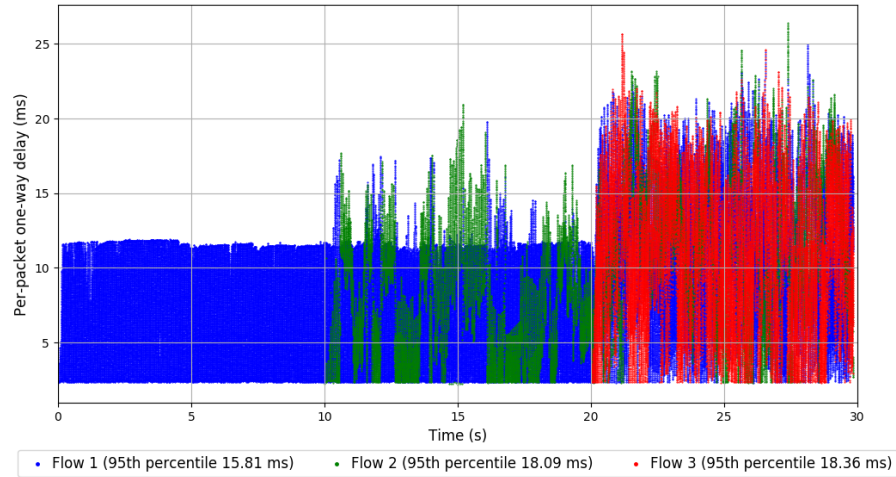
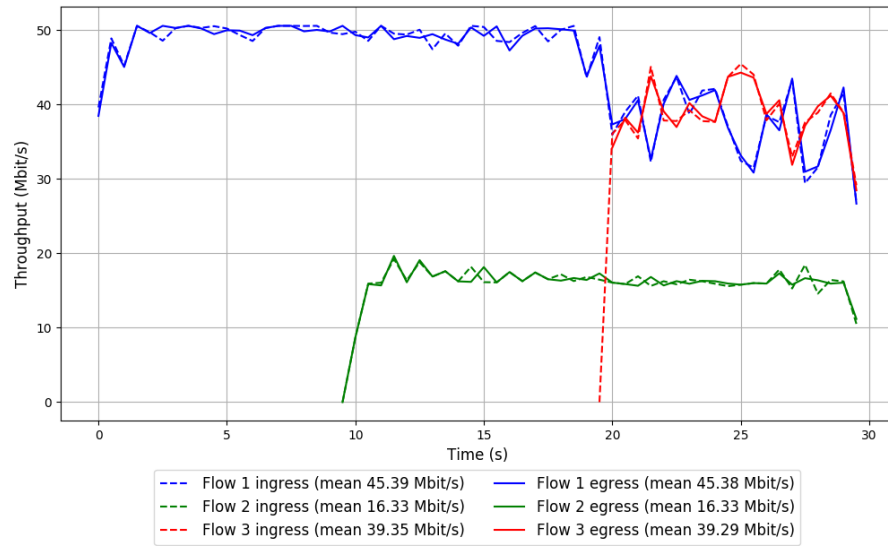


Run 3: Statistics of Sprout

Start at: 2018-01-10 00:24:50
End at: 2018-01-10 00:25:20
Local clock offset: -0.276 ms
Remote clock offset: 0.051 ms

```
# Below is generated by plot.py at 2018-01-10 05:31:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.18 Mbit/s
95th percentile per-packet one-way delay: 17.101 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 45.38 Mbit/s
95th percentile per-packet one-way delay: 15.810 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 16.33 Mbit/s
95th percentile per-packet one-way delay: 18.090 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.29 Mbit/s
95th percentile per-packet one-way delay: 18.364 ms
Loss rate: 0.26%
```


Run 3: Report of Sprout — Data Link

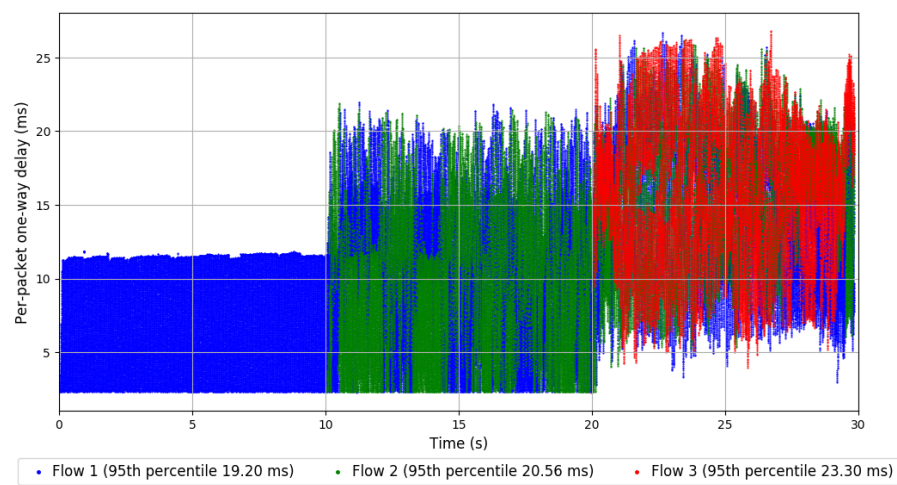
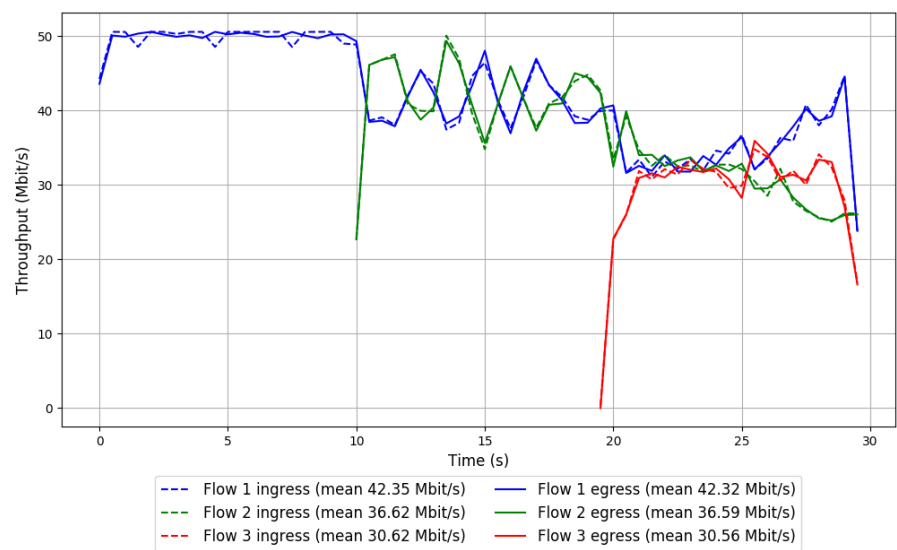


Run 4: Statistics of Sprout

Start at: 2018-01-10 00:41:51
End at: 2018-01-10 00:42:21
Local clock offset: -0.31 ms
Remote clock offset: 0.022 ms

```
# Below is generated by plot.py at 2018-01-10 05:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.73 Mbit/s
95th percentile per-packet one-way delay: 20.632 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 42.32 Mbit/s
95th percentile per-packet one-way delay: 19.203 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.59 Mbit/s
95th percentile per-packet one-way delay: 20.556 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 30.56 Mbit/s
95th percentile per-packet one-way delay: 23.303 ms
Loss rate: 0.18%
```

Run 4: Report of Sprout — Data Link

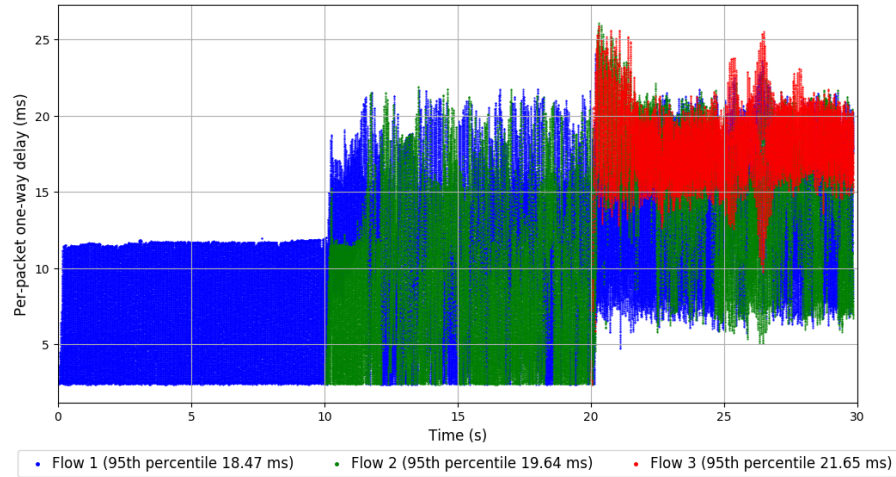
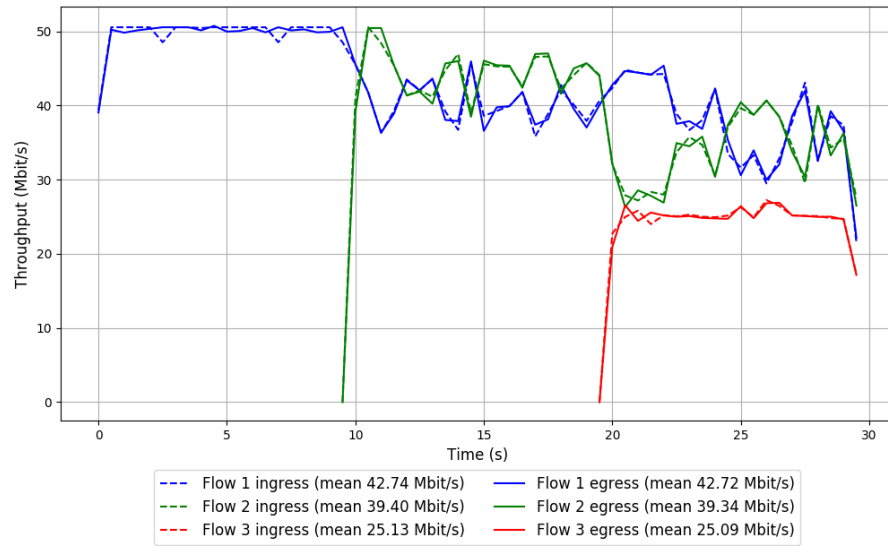


Run 5: Statistics of Sprout

Start at: 2018-01-10 00:58:48
End at: 2018-01-10 00:59:18
Local clock offset: -0.319 ms
Remote clock offset: 0.154 ms

```
# Below is generated by plot.py at 2018-01-10 05:32:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.17 Mbit/s
95th percentile per-packet one-way delay: 19.702 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 42.72 Mbit/s
95th percentile per-packet one-way delay: 18.473 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 39.34 Mbit/s
95th percentile per-packet one-way delay: 19.637 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 25.09 Mbit/s
95th percentile per-packet one-way delay: 21.649 ms
Loss rate: 0.24%
```

Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-01-10 01:15:47

End at: 2018-01-10 01:16:17

Local clock offset: -0.256 ms

Remote clock offset: 0.4 ms

Below is generated by plot.py at 2018-01-10 05:32:06

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.90 Mbit/s

95th percentile per-packet one-way delay: 20.112 ms

Loss rate: 0.11%

-- Flow 1:

Average throughput: 42.83 Mbit/s

95th percentile per-packet one-way delay: 18.881 ms

Loss rate: 0.08%

-- Flow 2:

Average throughput: 37.80 Mbit/s

95th percentile per-packet one-way delay: 20.347 ms

Loss rate: 0.09%

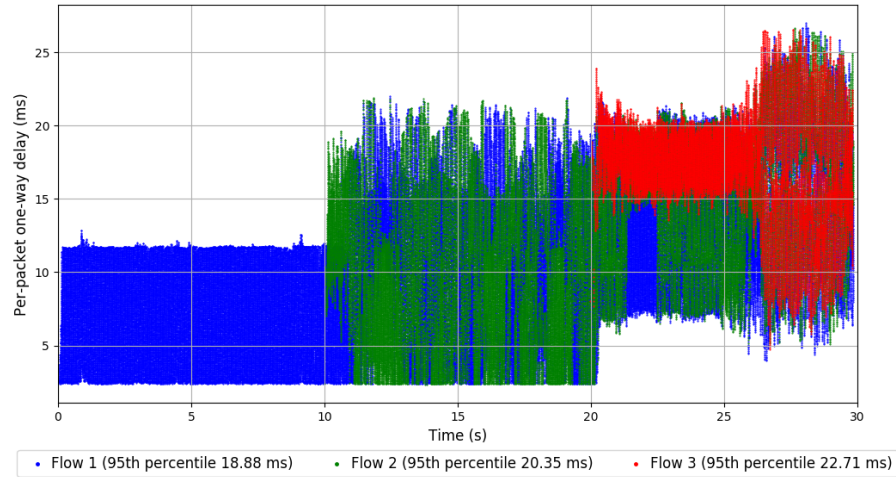
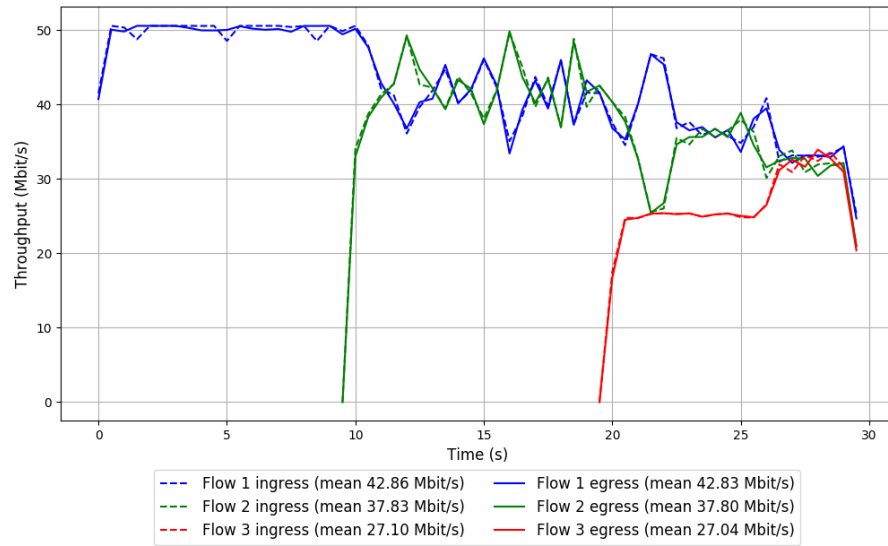
-- Flow 3:

Average throughput: 27.04 Mbit/s

95th percentile per-packet one-way delay: 22.710 ms

Loss rate: 0.36%

Run 6: Report of Sprout — Data Link

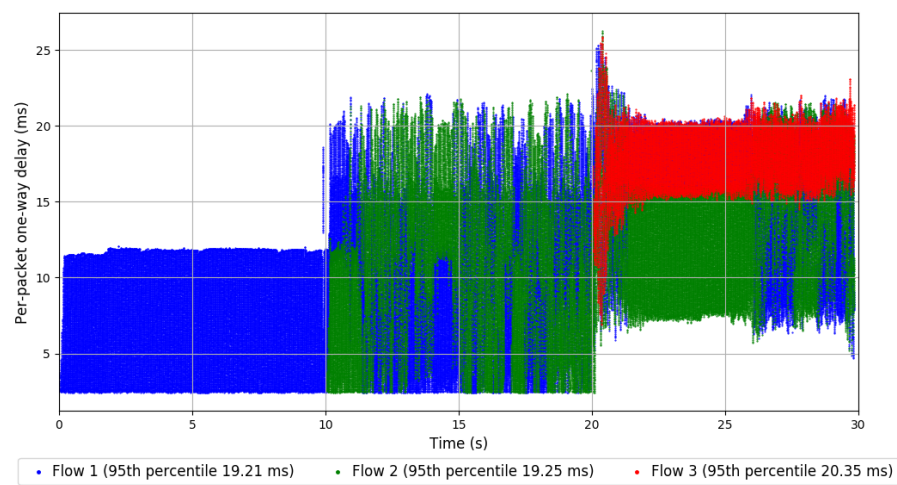
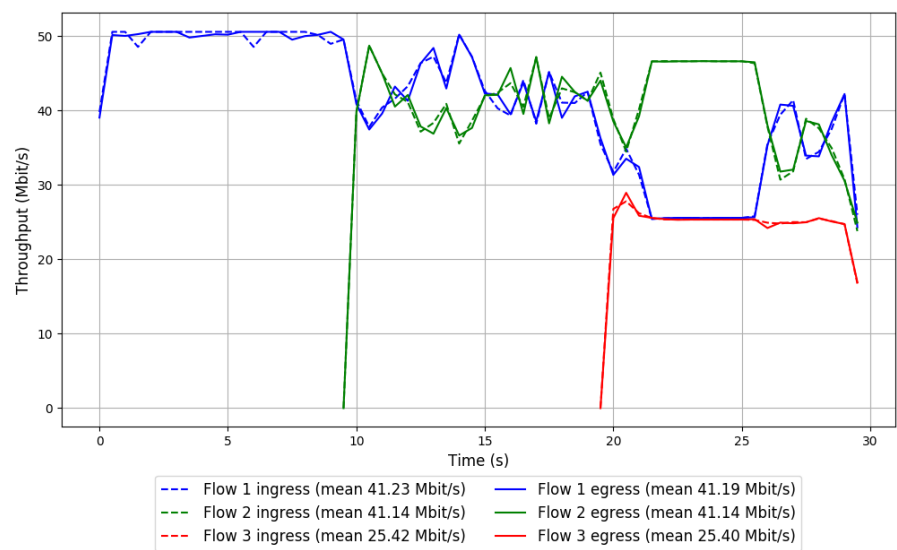


Run 7: Statistics of Sprout

Start at: 2018-01-10 01:32:43
End at: 2018-01-10 01:33:13
Local clock offset: -0.244 ms
Remote clock offset: 0.457 ms

```
# Below is generated by plot.py at 2018-01-10 05:32:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.92 Mbit/s
95th percentile per-packet one-way delay: 19.629 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 41.19 Mbit/s
95th percentile per-packet one-way delay: 19.209 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 41.14 Mbit/s
95th percentile per-packet one-way delay: 19.248 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 25.40 Mbit/s
95th percentile per-packet one-way delay: 20.352 ms
Loss rate: 0.17%
```


Run 7: Report of Sprout — Data Link

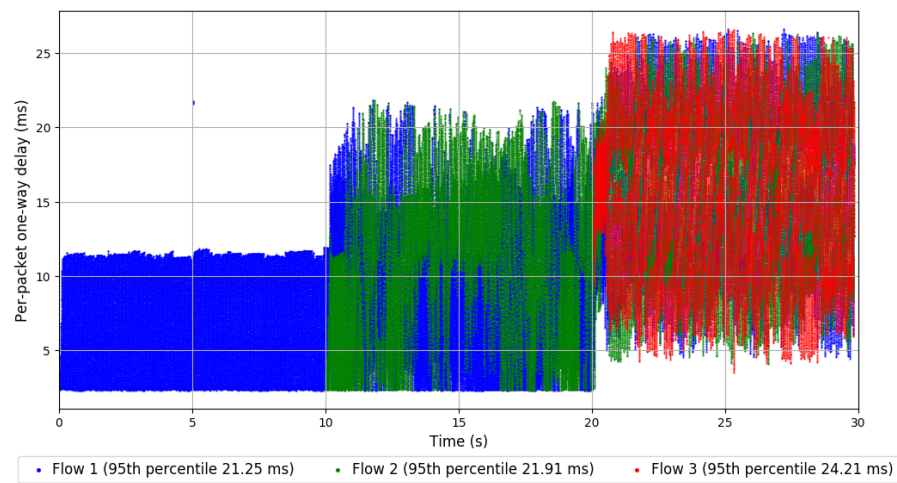
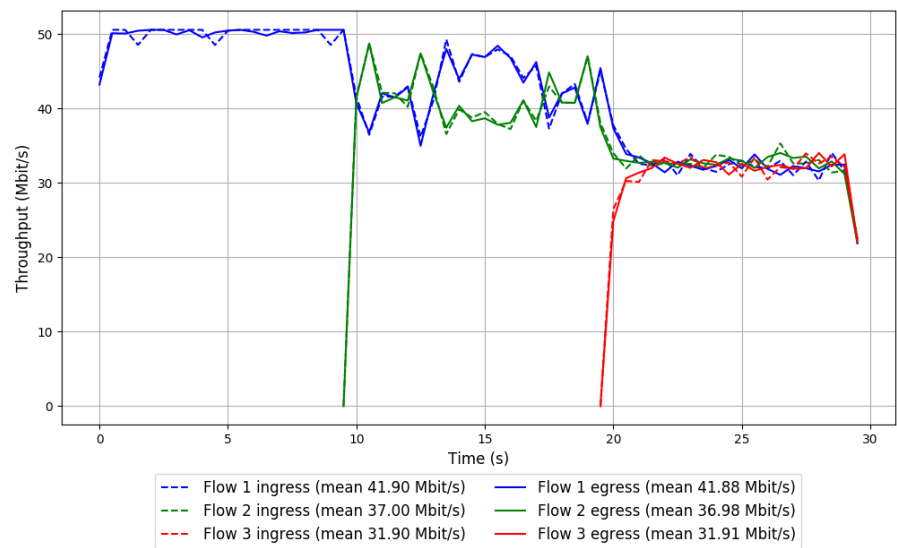


Run 8: Statistics of Sprout

Start at: 2018-01-10 01:49:41
End at: 2018-01-10 01:50:11
Local clock offset: -0.302 ms
Remote clock offset: 0.589 ms

```
# Below is generated by plot.py at 2018-01-10 05:32:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.01 Mbit/s
95th percentile per-packet one-way delay: 22.285 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 41.88 Mbit/s
95th percentile per-packet one-way delay: 21.250 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 36.98 Mbit/s
95th percentile per-packet one-way delay: 21.906 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 31.91 Mbit/s
95th percentile per-packet one-way delay: 24.209 ms
Loss rate: 0.08%
```

Run 8: Report of Sprout — Data Link

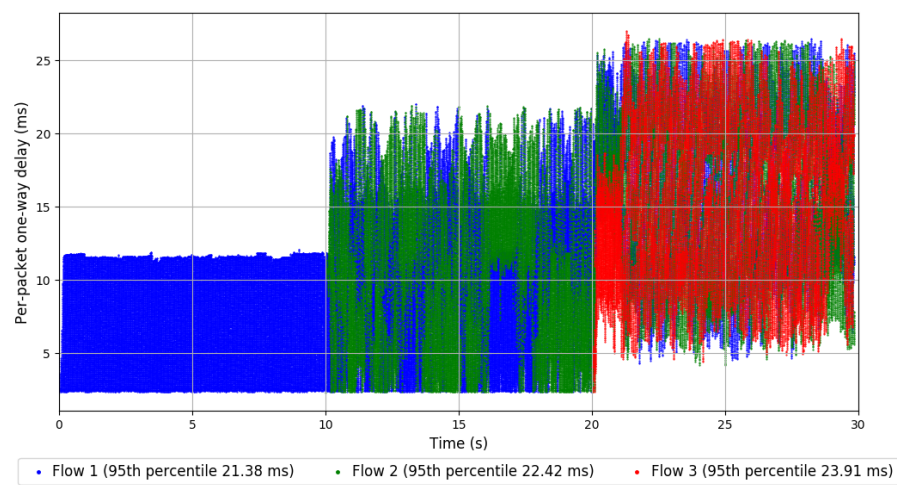
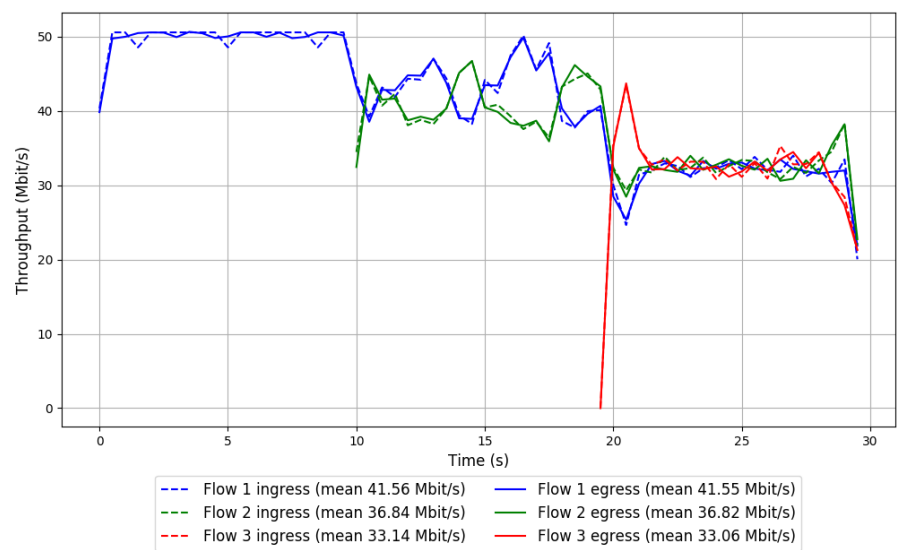


Run 9: Statistics of Sprout

Start at: 2018-01-10 02:06:40
End at: 2018-01-10 02:07:10
Local clock offset: -0.145 ms
Remote clock offset: 0.691 ms

```
# Below is generated by plot.py at 2018-01-10 05:33:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.91 Mbit/s
95th percentile per-packet one-way delay: 22.362 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 41.55 Mbit/s
95th percentile per-packet one-way delay: 21.380 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.82 Mbit/s
95th percentile per-packet one-way delay: 22.416 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 33.06 Mbit/s
95th percentile per-packet one-way delay: 23.905 ms
Loss rate: 0.30%
```

Run 9: Report of Sprout — Data Link

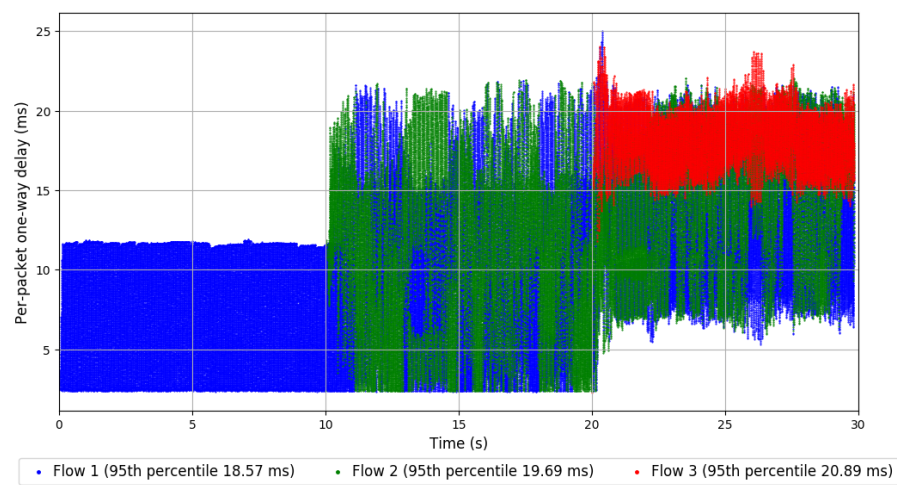
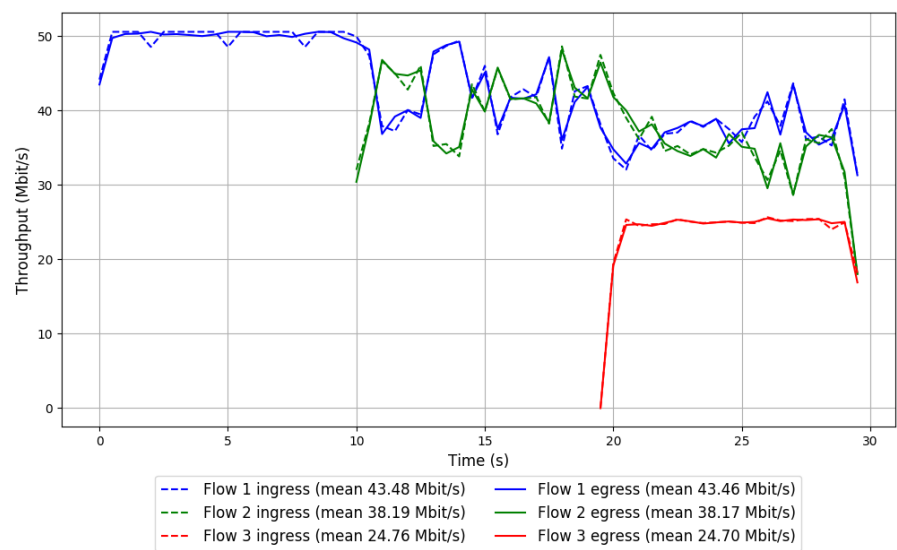


Run 10: Statistics of Sprout

Start at: 2018-01-10 02:23:40
End at: 2018-01-10 02:24:10
Local clock offset: -0.099 ms
Remote clock offset: 0.746 ms

Below is generated by plot.py at 2018-01-10 05:34:05
Datalink statistics
-- Total of 3 flows:
Average throughput: 76.96 Mbit/s
95th percentile per-packet one-way delay: 19.703 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 43.46 Mbit/s
95th percentile per-packet one-way delay: 18.574 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 38.17 Mbit/s
95th percentile per-packet one-way delay: 19.687 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 24.70 Mbit/s
95th percentile per-packet one-way delay: 20.885 ms
Loss rate: 0.30%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

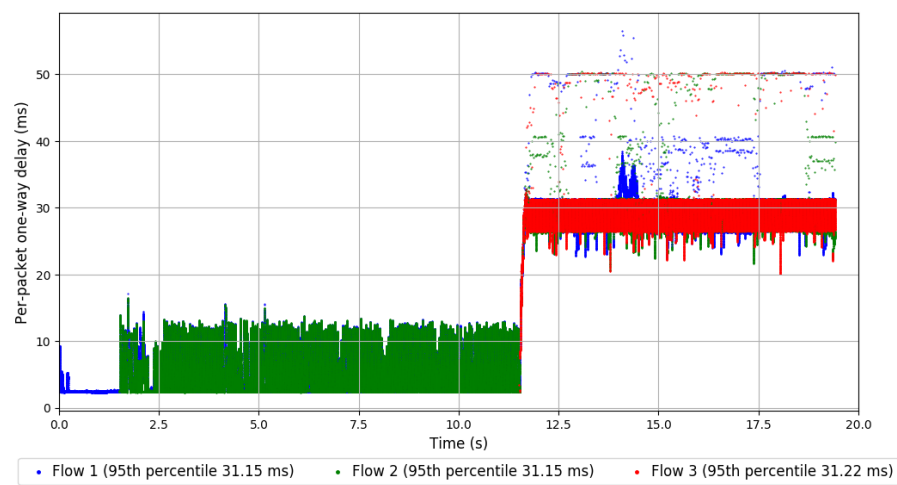
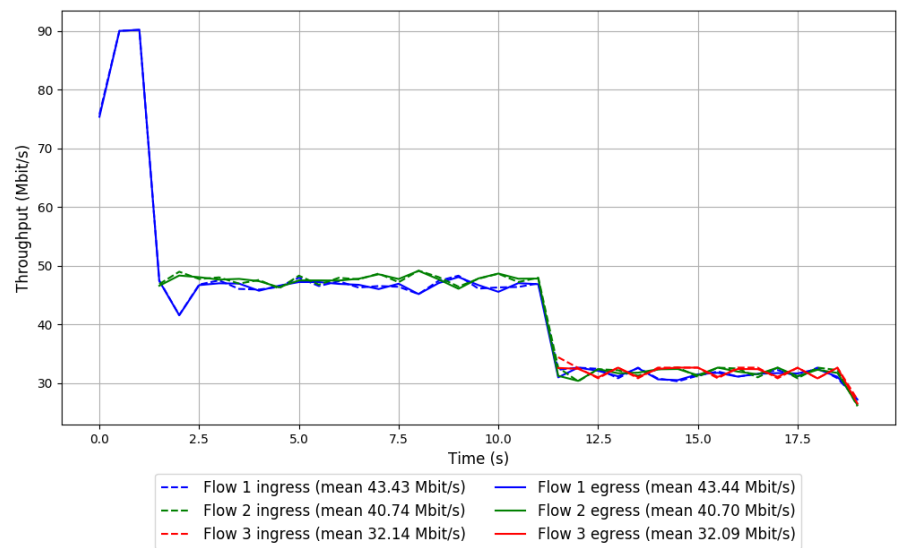
Start at: 2018-01-09 23:45:12

End at: 2018-01-09 23:45:43

Local clock offset: -0.075 ms

Remote clock offset: 0.041 ms

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-01-10 00:02:11

End at: 2018-01-10 00:02:41

Local clock offset: -0.179 ms

Remote clock offset: 0.263 ms

Below is generated by plot.py at 2018-01-10 05:36:18

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.99 Mbit/s

95th percentile per-packet one-way delay: 31.118 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 58.31 Mbit/s

95th percentile per-packet one-way delay: 30.591 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 38.43 Mbit/s

95th percentile per-packet one-way delay: 31.138 ms

Loss rate: 0.21%

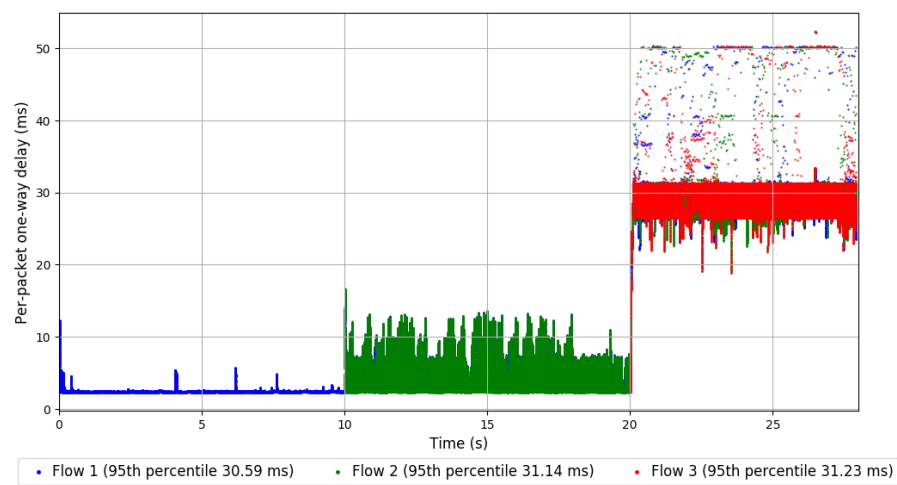
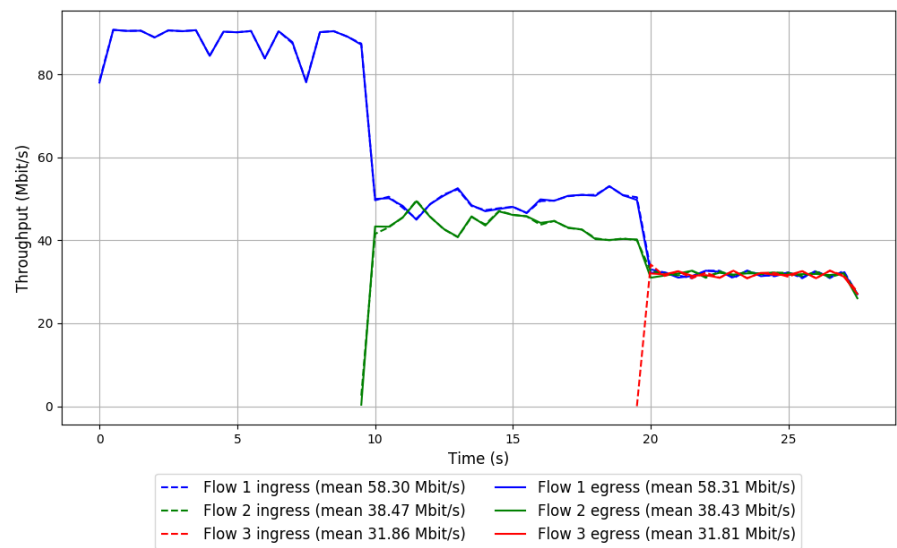
-- Flow 3:

Average throughput: 31.81 Mbit/s

95th percentile per-packet one-way delay: 31.235 ms

Loss rate: 0.52%

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



Run 3: Statistics of TaoVA-100x

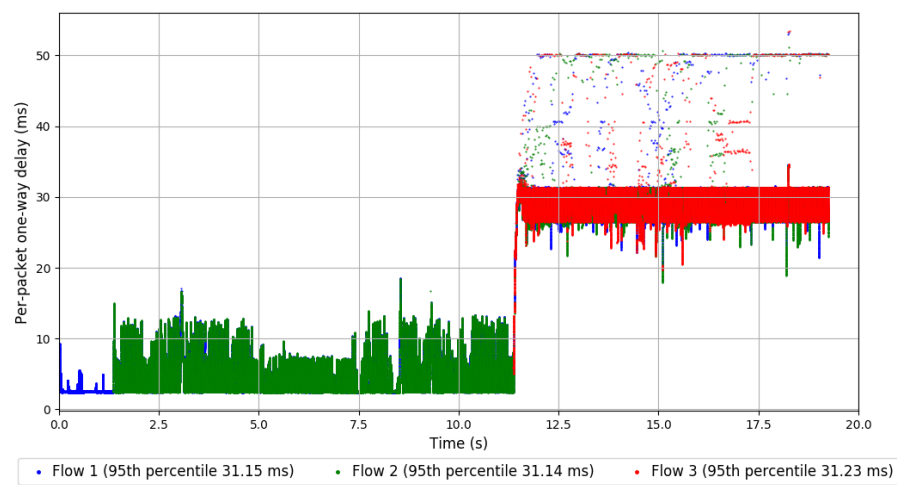
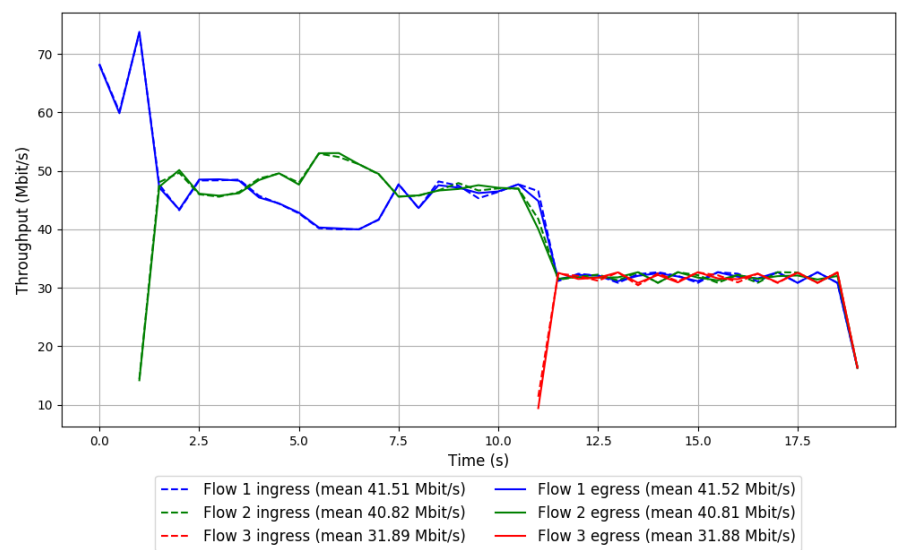
Start at: 2018-01-10 00:19:10

End at: 2018-01-10 00:19:40

Local clock offset: -0.179 ms

Remote clock offset: 0.176 ms

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



Run 4: Statistics of TaoVA-100x

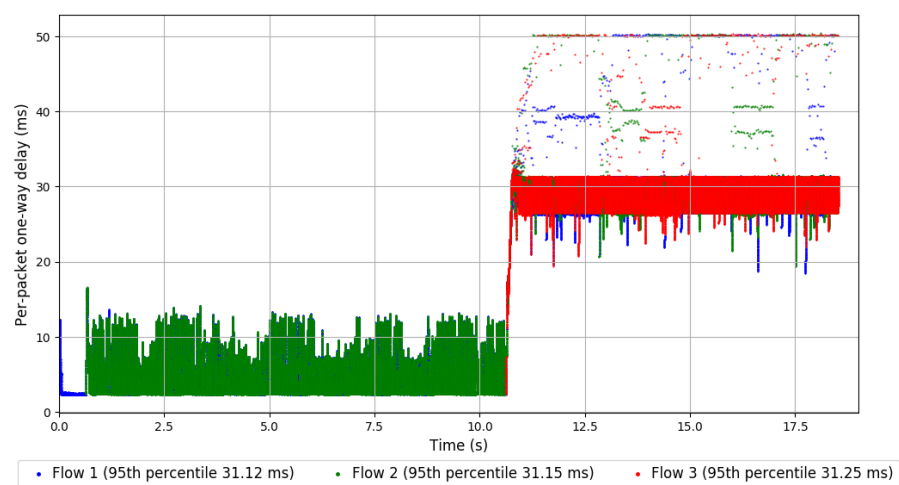
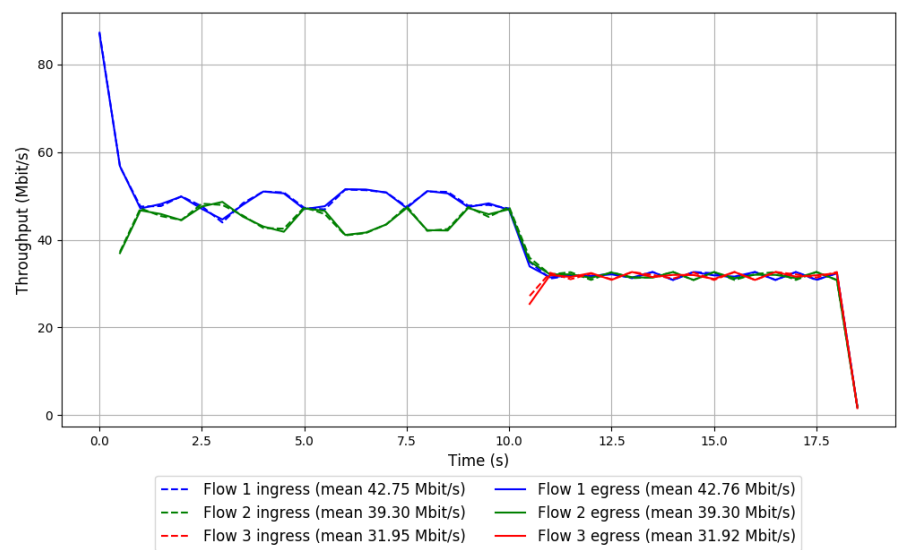
Start at: 2018-01-10 00:36:09

End at: 2018-01-10 00:36:39

Local clock offset: -0.234 ms

Remote clock offset: -0.048 ms

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



Run 5: Statistics of TaoVA-100x

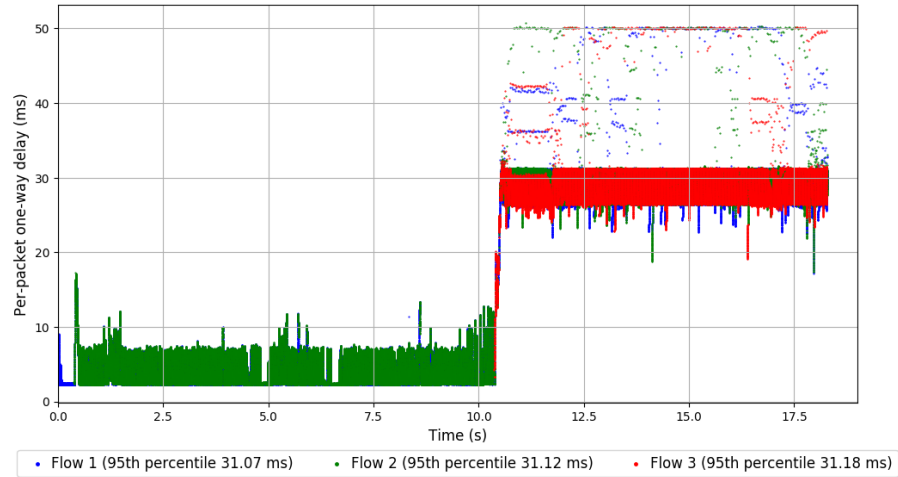
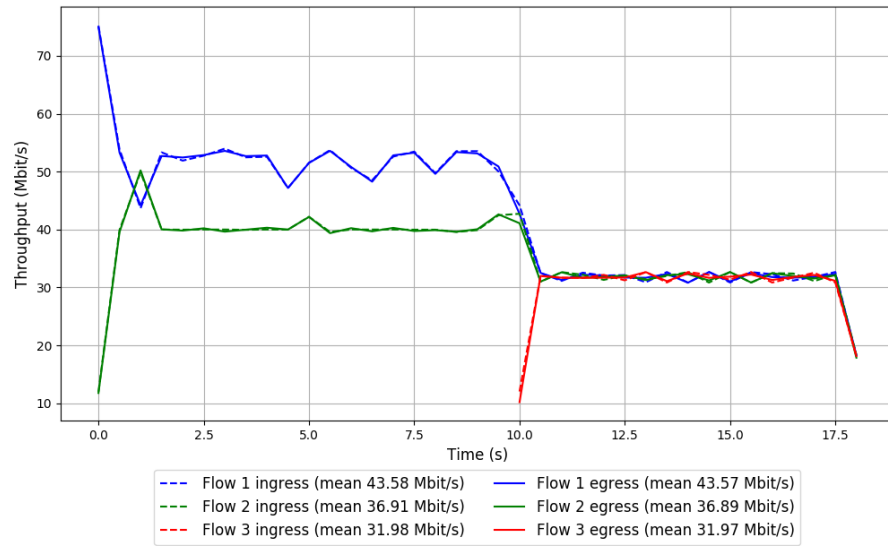
Start at: 2018-01-10 00:53:09

End at: 2018-01-10 00:53:39

Local clock offset: -0.302 ms

Remote clock offset: 0.155 ms

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



Run 6: Statistics of TaoVA-100x

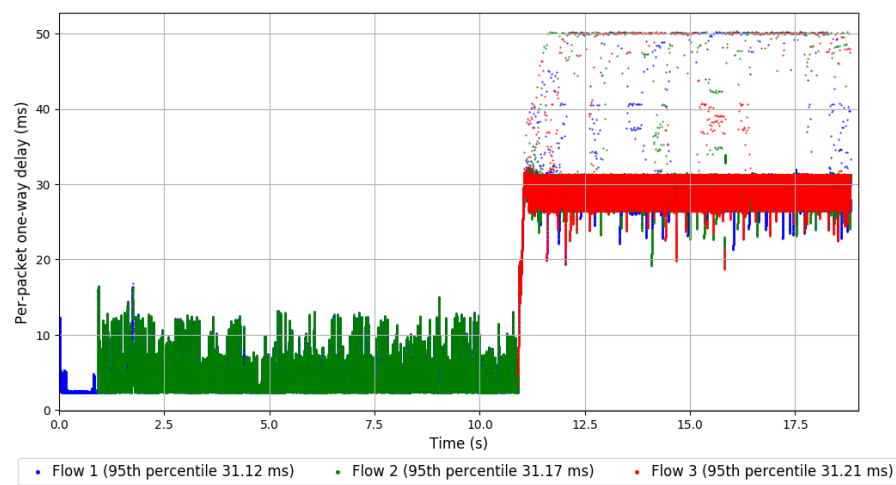
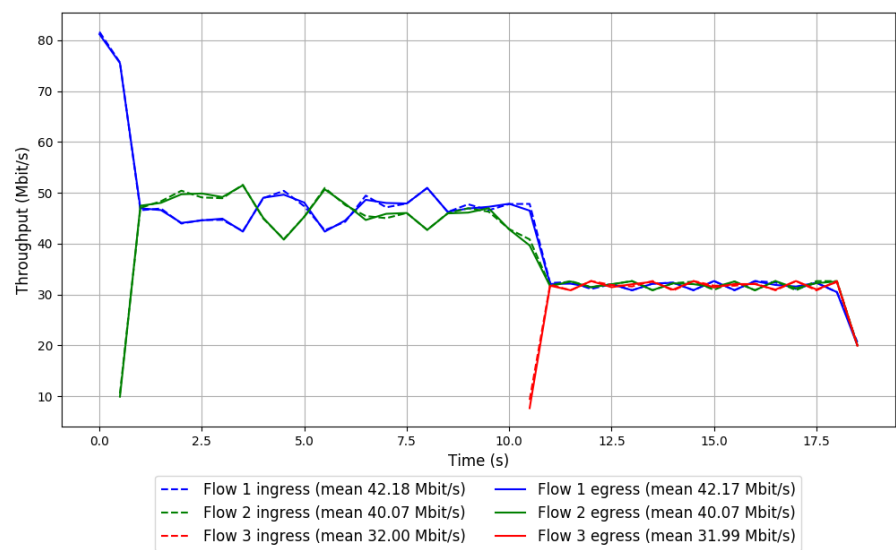
Start at: 2018-01-10 01:10:07

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

Local clock offset: -0.287 ms

Remote clock offset: 0.316 ms

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



Run 7: Statistics of TaoVA-100x

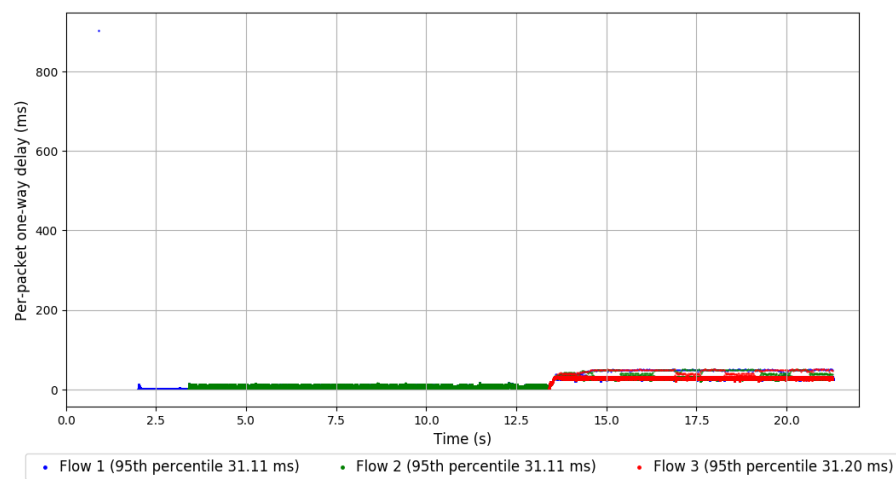
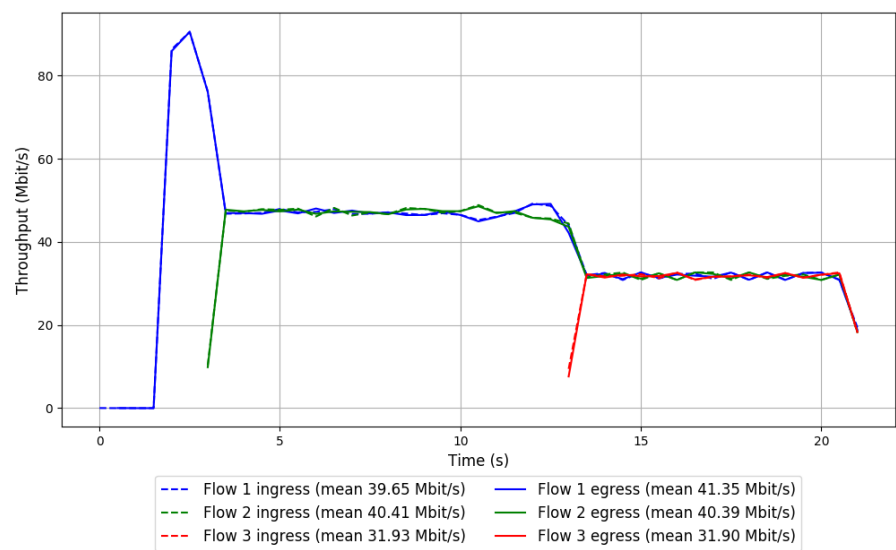
Start at: 2018-01-10 01:27:04

End at: 2018-01-10 01:27:34

Local clock offset: -0.301 ms

Remote clock offset: 0.457 ms

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



Run 8: Statistics of TaoVA-100x

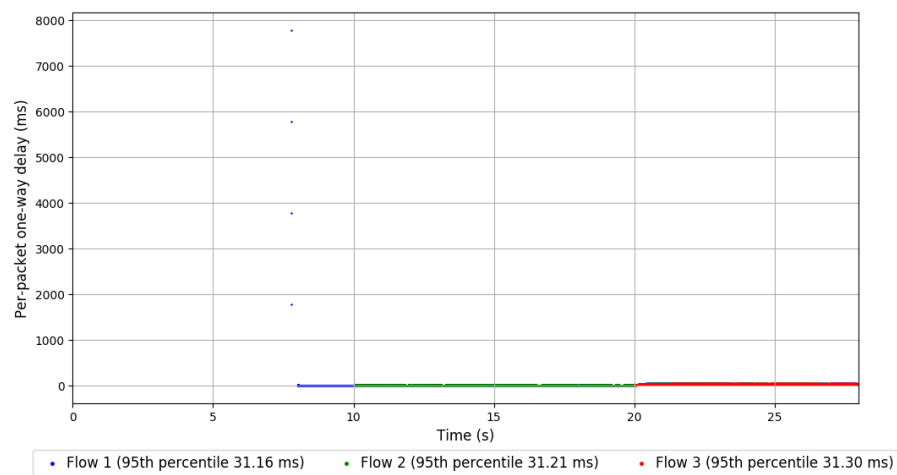
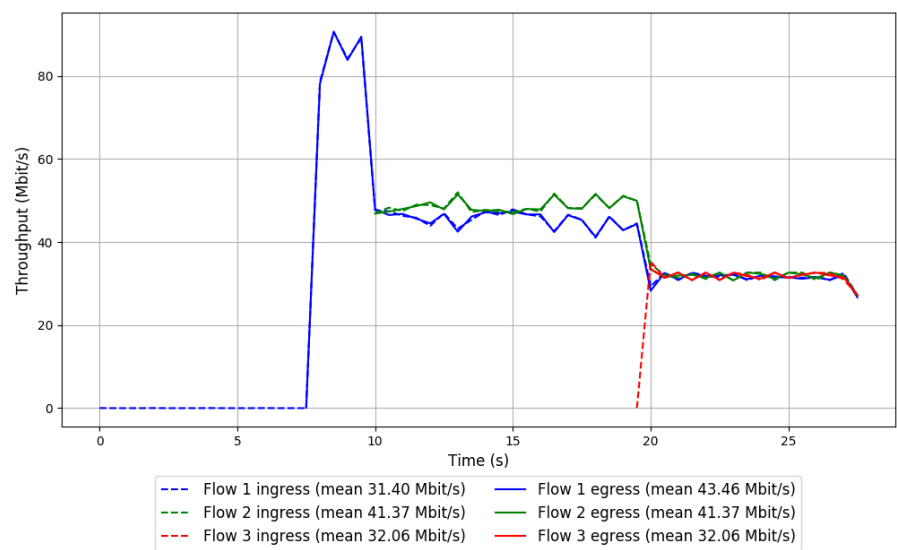
Start at: 2018-01-10 01:44:01

End at: 2018-01-10 01:44:31

Local clock offset: -0.263 ms

Remote clock offset: 0.484 ms

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



Run 9: Statistics of TaoVA-100x

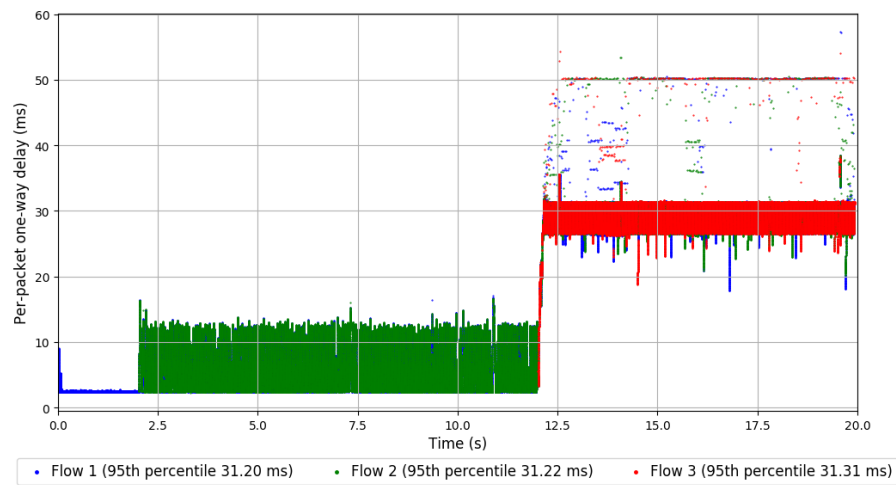
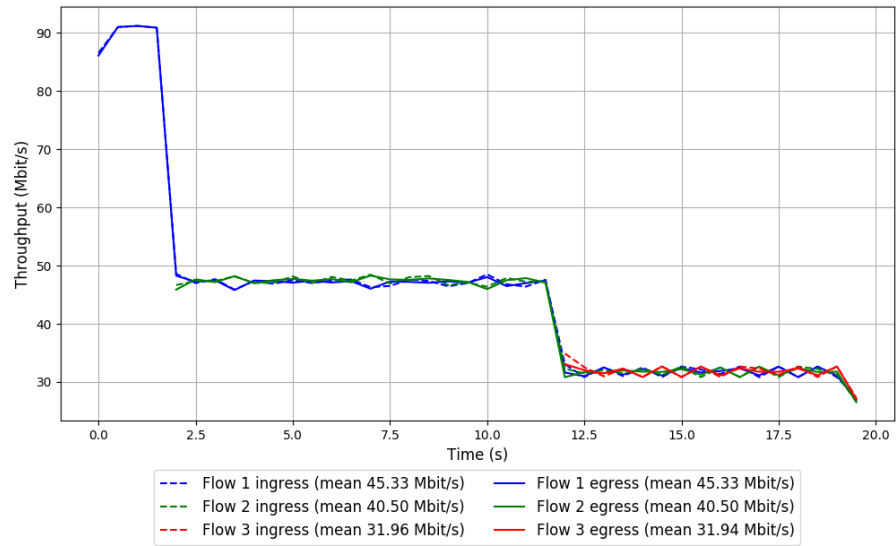
Start at: 2018-01-10 02:01:00

End at: 2018-01-10 02:01:30

Local clock offset: -0.162 ms

Remote clock offset: 0.588 ms

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



Run 10: Statistics of TaoVA-100x

Start at: 2018-01-10 02:17:58

End at: 2018-01-10 02:18:28

Local clock offset: -0.174 ms

Remote clock offset: 0.657 ms

Below is generated by plot.py at 2018-01-10 05:39:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.21 Mbit/s

95th percentile per-packet one-way delay: 31.133 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 58.11 Mbit/s

95th percentile per-packet one-way delay: 30.700 ms

Loss rate: 0.06%

-- Flow 2:

Average throughput: 40.62 Mbit/s

95th percentile per-packet one-way delay: 31.138 ms

Loss rate: 0.13%

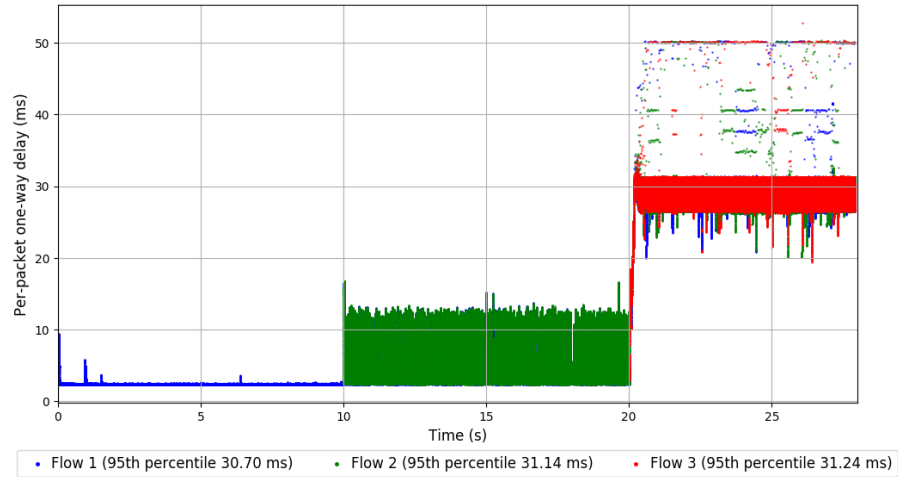
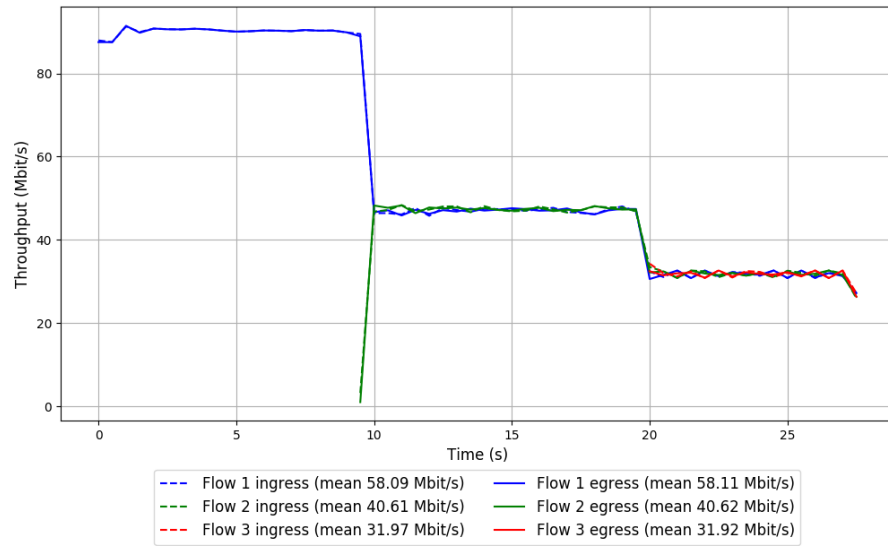
-- Flow 3:

Average throughput: 31.92 Mbit/s

95th percentile per-packet one-way delay: 31.238 ms

Loss rate: 0.53%

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

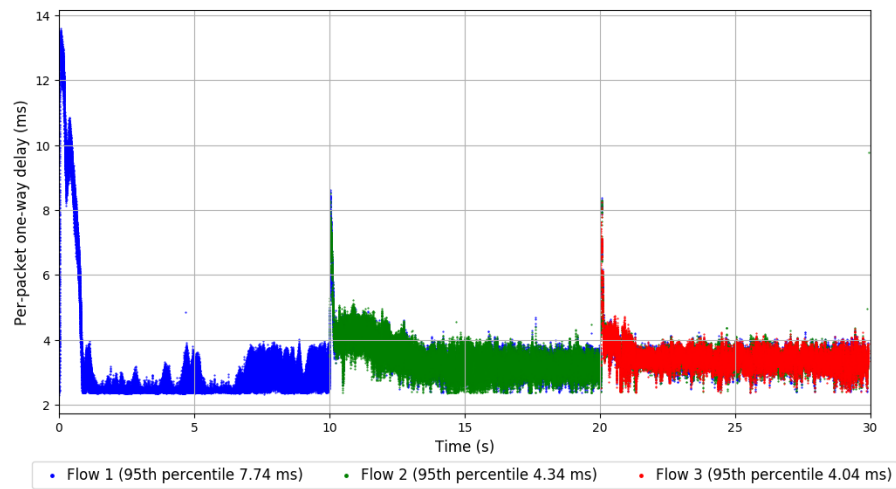
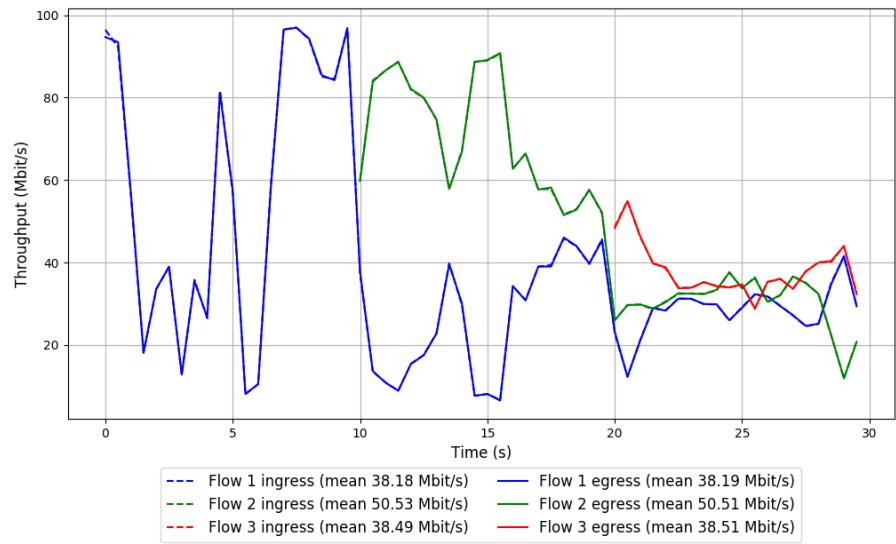


Run 1: Statistics of TCP Vegas

Start at: 2018-01-09 23:42:54
End at: 2018-01-09 23:43:24
Local clock offset: -0.055 ms
Remote clock offset: -0.013 ms

Below is generated by plot.py at 2018-01-10 05:39:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 84.54 Mbit/s
95th percentile per-packet one-way delay: 4.462 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 38.19 Mbit/s
95th percentile per-packet one-way delay: 7.737 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 50.51 Mbit/s
95th percentile per-packet one-way delay: 4.343 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 38.51 Mbit/s
95th percentile per-packet one-way delay: 4.040 ms
Loss rate: 0.06%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-09 23:59:53

End at: 2018-01-10 00:00:23

Local clock offset: 1.198 ms

Remote clock offset: 0.233 ms

Below is generated by plot.py at 2018-01-10 05:39:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.04 Mbit/s

95th percentile per-packet one-way delay: 5.026 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 54.63 Mbit/s

95th percentile per-packet one-way delay: 4.953 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 30.99 Mbit/s

95th percentile per-packet one-way delay: 5.020 ms

Loss rate: 0.01%

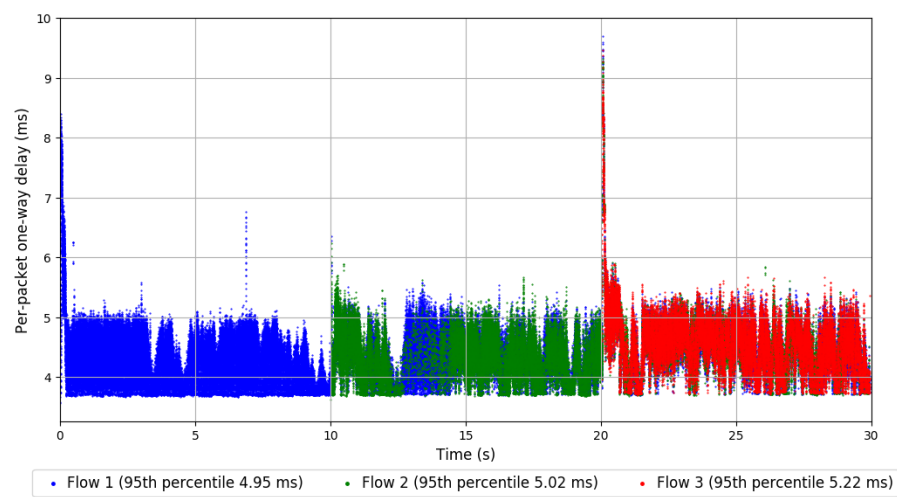
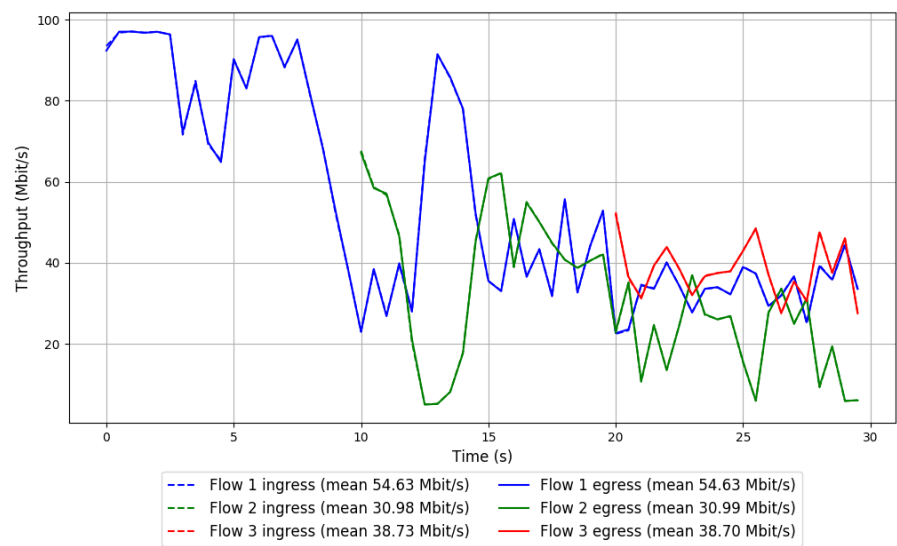
-- Flow 3:

Average throughput: 38.70 Mbit/s

95th percentile per-packet one-way delay: 5.222 ms

Loss rate: 0.08%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2018-01-10 00:16:52

End at: 2018-01-10 00:17:22

Local clock offset: -0.187 ms

Remote clock offset: 0.186 ms

Below is generated by plot.py at 2018-01-10 05:39:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.74 Mbit/s

95th percentile per-packet one-way delay: 4.006 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 65.14 Mbit/s

95th percentile per-packet one-way delay: 3.823 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 25.31 Mbit/s

95th percentile per-packet one-way delay: 4.446 ms

Loss rate: 0.03%

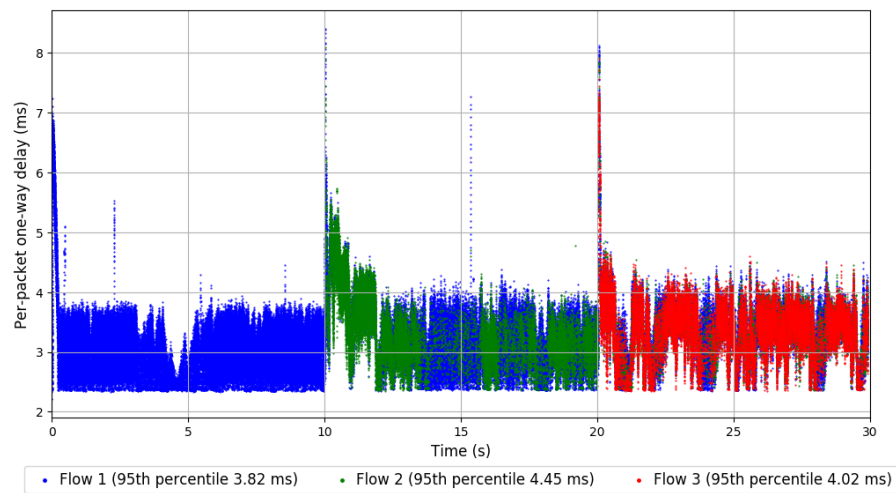
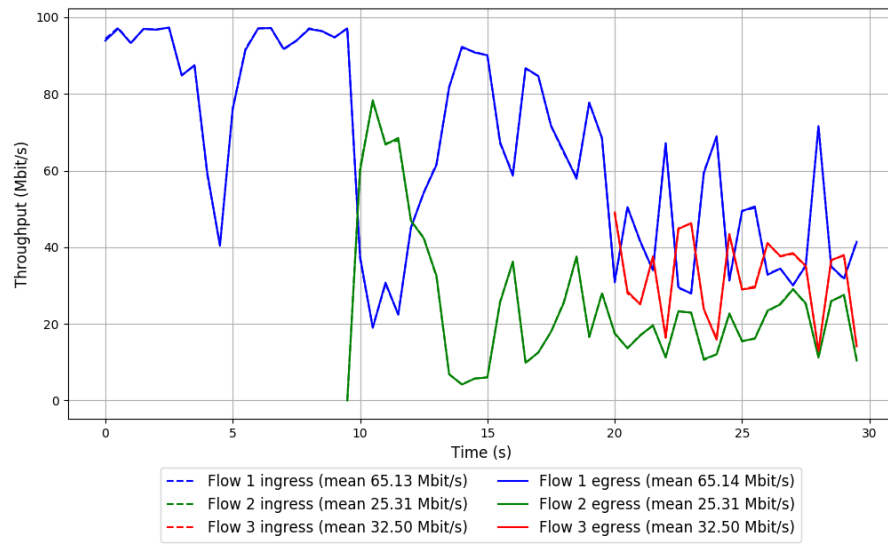
-- Flow 3:

Average throughput: 32.50 Mbit/s

95th percentile per-packet one-way delay: 4.016 ms

Loss rate: 0.06%

Run 3: Report of TCP Vegas — Data Link

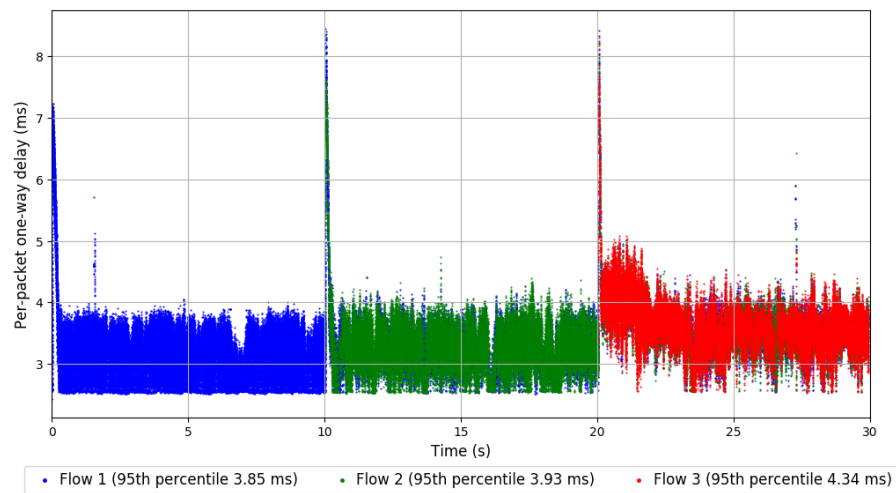
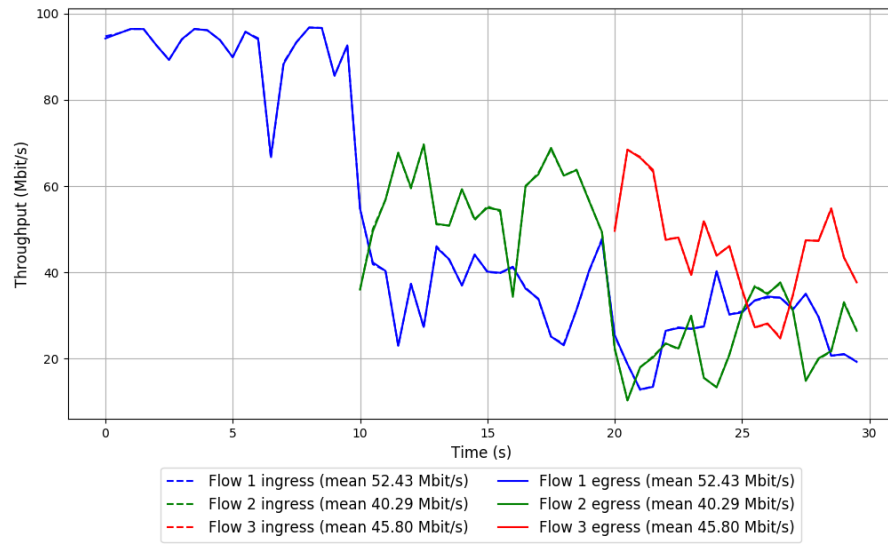


Run 4: Statistics of TCP Vegas

Start at: 2018-01-10 00:33:51
End at: 2018-01-10 00:34:21
Local clock offset: -0.239 ms
Remote clock offset: -0.274 ms

Below is generated by plot.py at 2018-01-10 05:39:34
Datalink statistics
-- Total of 3 flows:
Average throughput: 94.39 Mbit/s
95th percentile per-packet one-way delay: 4.027 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 52.43 Mbit/s
95th percentile per-packet one-way delay: 3.850 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 40.29 Mbit/s
95th percentile per-packet one-way delay: 3.933 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 45.80 Mbit/s
95th percentile per-packet one-way delay: 4.339 ms
Loss rate: 0.04%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-01-10 00:50:50

End at: 2018-01-10 00:51:20

Local clock offset: -0.215 ms

Remote clock offset: 0.045 ms

Below is generated by plot.py at 2018-01-10 05:39:37

Datalink statistics

-- Total of 3 flows:

Average throughput: 95.33 Mbit/s

95th percentile per-packet one-way delay: 5.144 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 53.34 Mbit/s

95th percentile per-packet one-way delay: 9.707 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 41.33 Mbit/s

95th percentile per-packet one-way delay: 4.041 ms

Loss rate: 0.02%

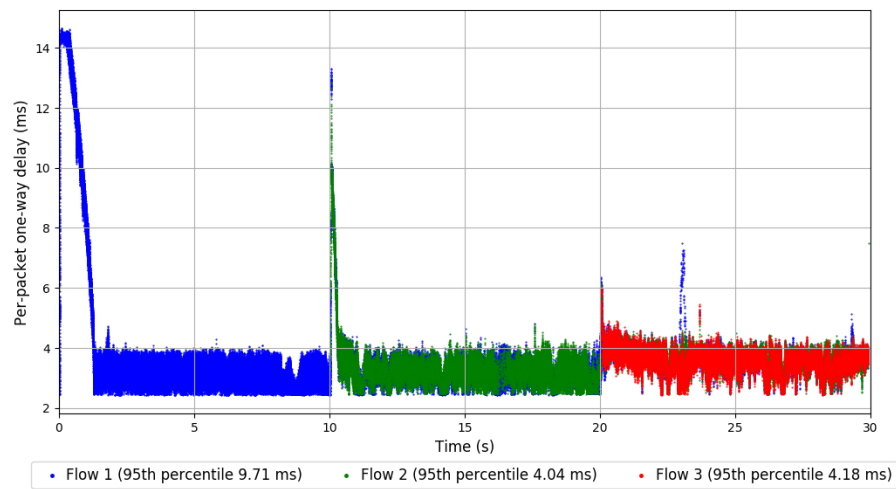
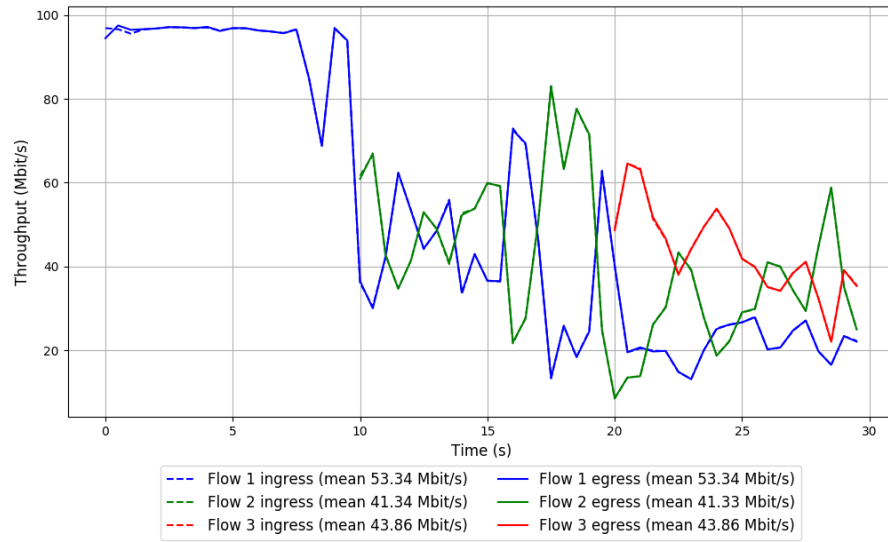
-- Flow 3:

Average throughput: 43.86 Mbit/s

95th percentile per-packet one-way delay: 4.177 ms

Loss rate: 0.06%

Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-01-10 01:07:49

End at: 2018-01-10 01:08:19

Local clock offset: -0.334 ms

Remote clock offset: 0.304 ms

Below is generated by plot.py at 2018-01-10 05:39:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.47 Mbit/s

95th percentile per-packet one-way delay: 4.476 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 62.91 Mbit/s

95th percentile per-packet one-way delay: 4.579 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 17.30 Mbit/s

95th percentile per-packet one-way delay: 4.693 ms

Loss rate: 0.02%

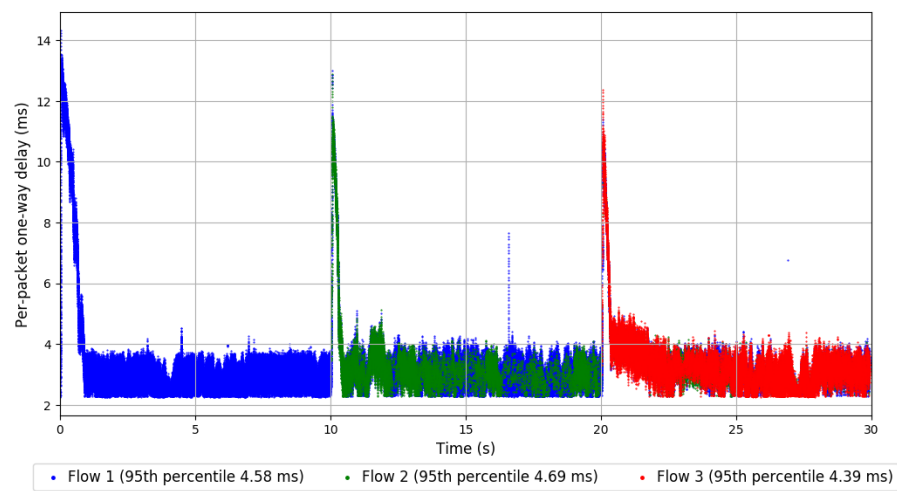
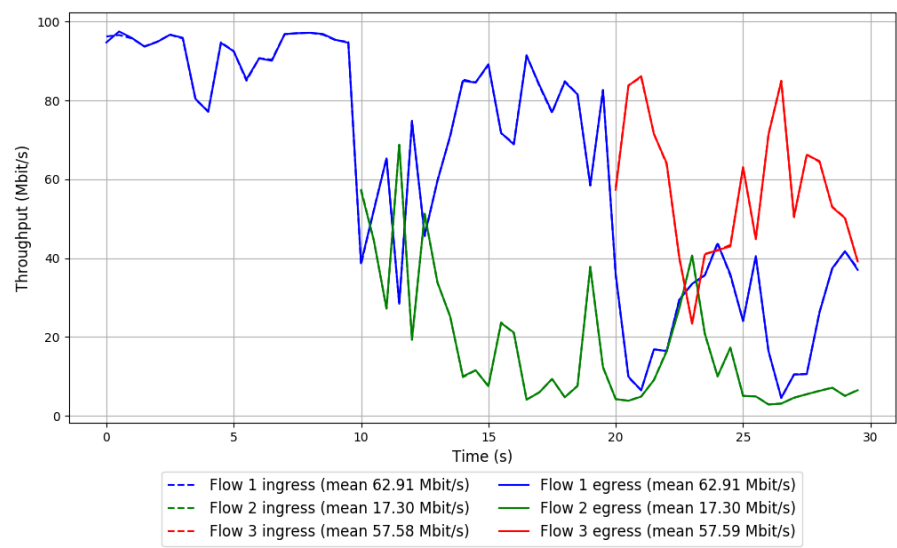
-- Flow 3:

Average throughput: 57.59 Mbit/s

95th percentile per-packet one-way delay: 4.390 ms

Loss rate: 0.05%

Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-01-10 01:24:45

End at: 2018-01-10 01:25:15

Local clock offset: -0.246 ms

Remote clock offset: 0.459 ms

Below is generated by plot.py at 2018-01-10 05:40:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.44 Mbit/s

95th percentile per-packet one-way delay: 4.300 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 50.52 Mbit/s

95th percentile per-packet one-way delay: 4.194 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 41.85 Mbit/s

95th percentile per-packet one-way delay: 4.254 ms

Loss rate: 0.01%

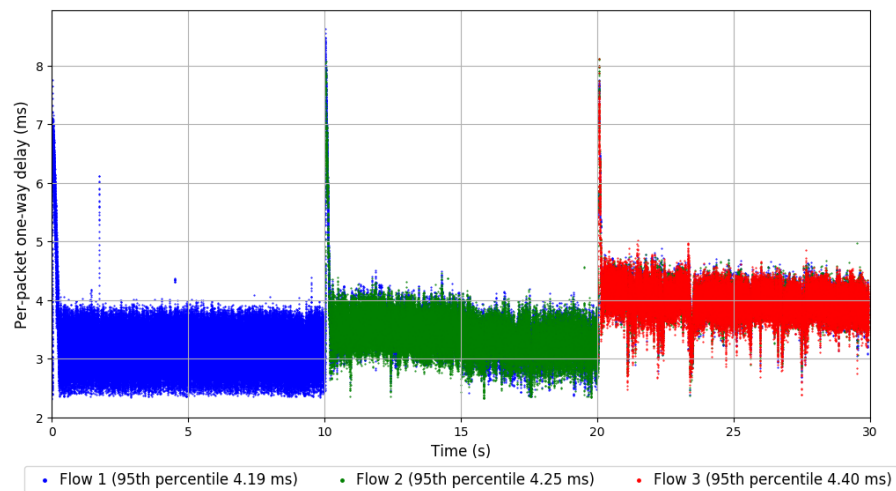
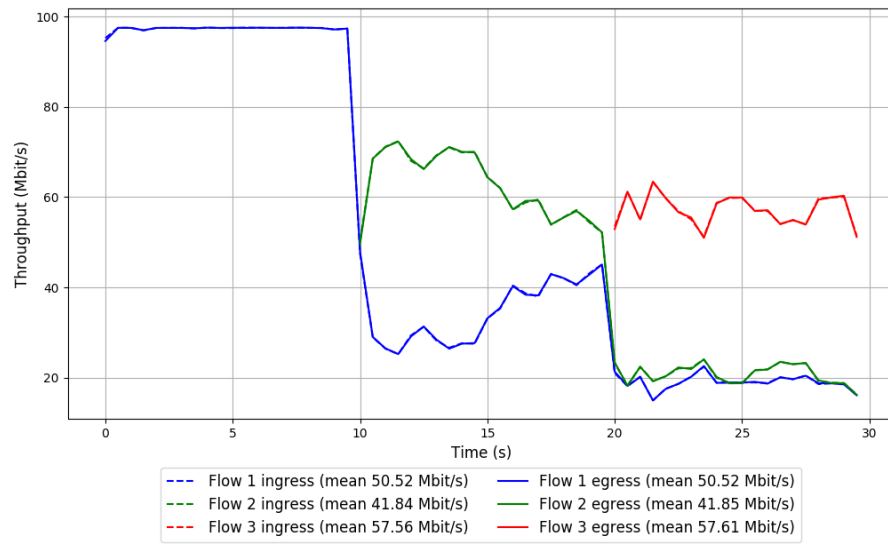
-- Flow 3:

Average throughput: 57.61 Mbit/s

95th percentile per-packet one-way delay: 4.401 ms

Loss rate: 0.06%

Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-01-10 01:41:43

End at: 2018-01-10 01:42:13

Local clock offset: -0.243 ms

Remote clock offset: 0.476 ms

Below is generated by plot.py at 2018-01-10 05:40:20

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.40 Mbit/s

95th percentile per-packet one-way delay: 4.492 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 48.23 Mbit/s

95th percentile per-packet one-way delay: 8.755 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 49.94 Mbit/s

95th percentile per-packet one-way delay: 4.274 ms

Loss rate: 0.02%

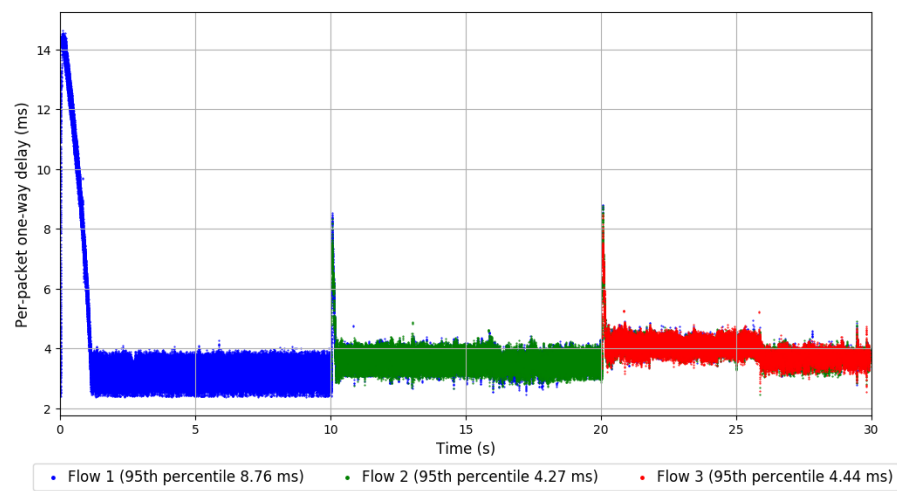
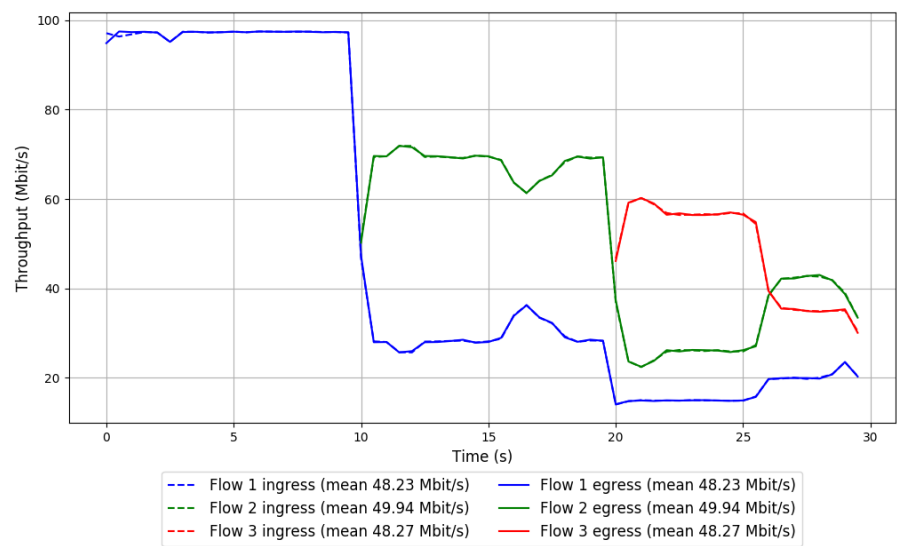
-- Flow 3:

Average throughput: 48.27 Mbit/s

95th percentile per-packet one-way delay: 4.441 ms

Loss rate: 0.05%

Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-01-10 01:58:41

End at: 2018-01-10 01:59:11

Local clock offset: -0.155 ms

Remote clock offset: 0.645 ms

Below is generated by plot.py at 2018-01-10 05:40:29

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.42 Mbit/s

95th percentile per-packet one-way delay: 4.575 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 45.69 Mbit/s

95th percentile per-packet one-way delay: 4.369 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 47.27 Mbit/s

95th percentile per-packet one-way delay: 4.451 ms

Loss rate: 0.02%

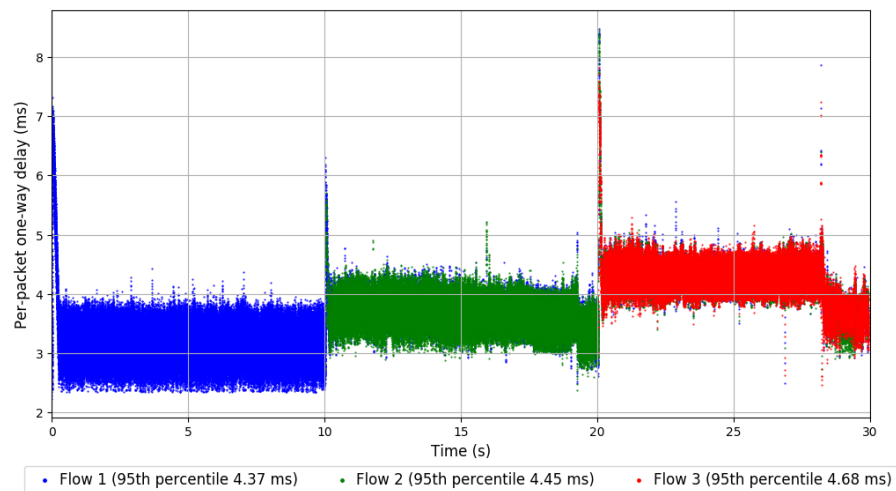
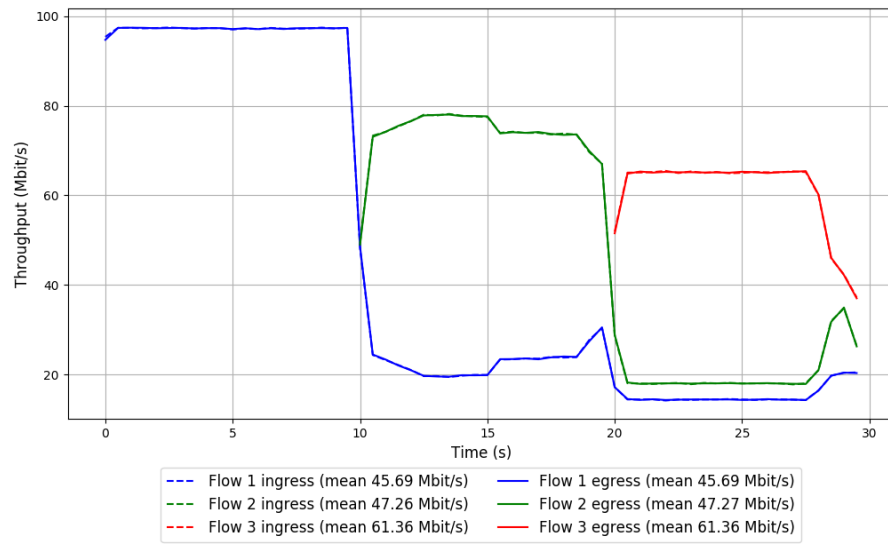
-- Flow 3:

Average throughput: 61.36 Mbit/s

95th percentile per-packet one-way delay: 4.684 ms

Loss rate: 0.04%

Run 9: Report of TCP Vegas — Data Link

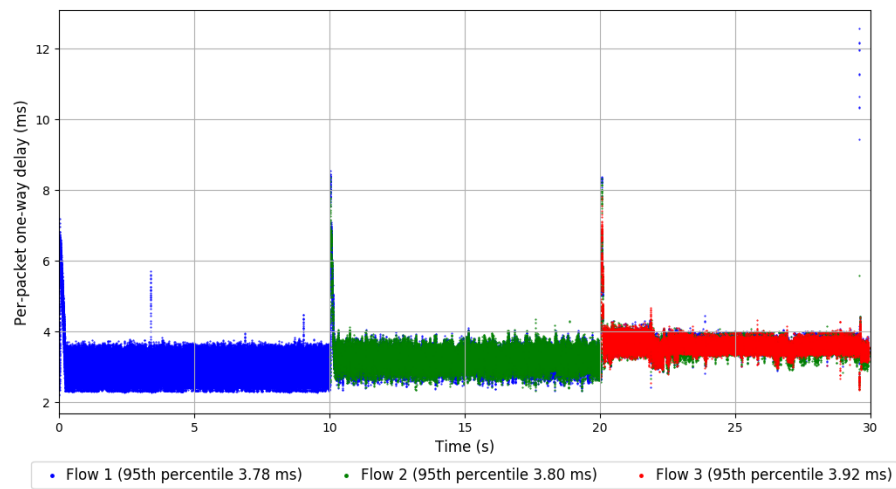
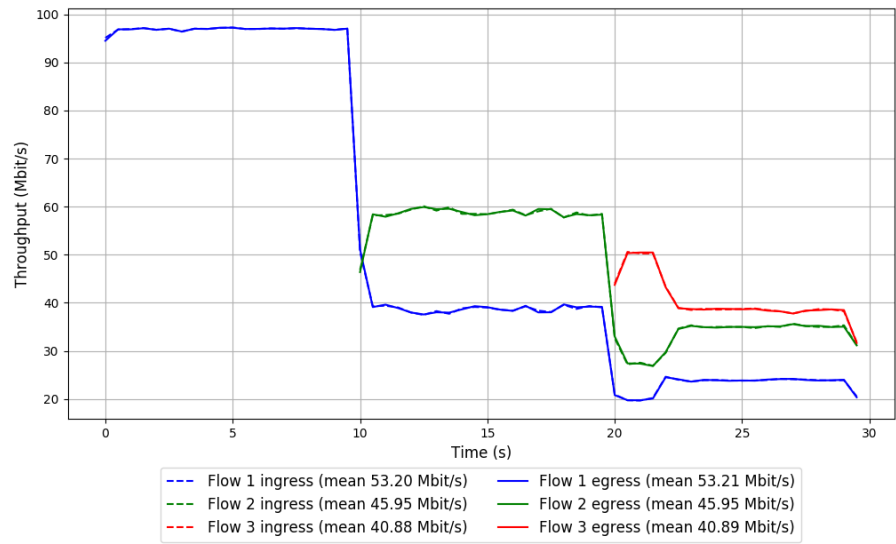


Run 10: Statistics of TCP Vegas

Start at: 2018-01-10 02:15:40
End at: 2018-01-10 02:16:10
Local clock offset: -0.126 ms
Remote clock offset: 0.723 ms

Below is generated by plot.py at 2018-01-10 05:40:55
Datalink statistics
-- Total of 3 flows:
Average throughput: 97.30 Mbit/s
95th percentile per-packet one-way delay: 3.822 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 53.21 Mbit/s
95th percentile per-packet one-way delay: 3.778 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 45.95 Mbit/s
95th percentile per-packet one-way delay: 3.803 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 40.89 Mbit/s
95th percentile per-packet one-way delay: 3.920 ms
Loss rate: 0.05%

Run 10: Report of TCP Vegas — Data Link

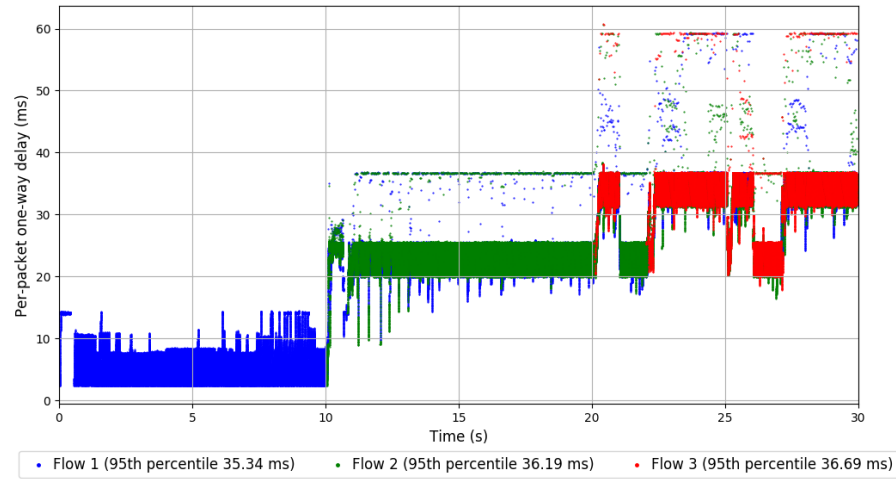
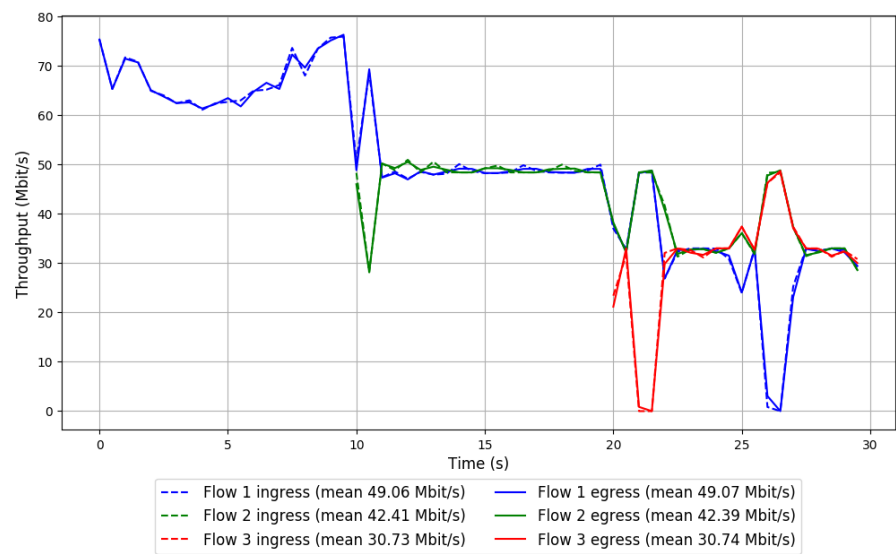


Run 1: Statistics of Verus

Start at: 2018-01-09 23:39:34
End at: 2018-01-09 23:40:04
Local clock offset: -0.078 ms
Remote clock offset: -0.051 ms

Below is generated by plot.py at 2018-01-10 05:41:26
Datalink statistics
-- Total of 3 flows:
Average throughput: 87.41 Mbit/s
95th percentile per-packet one-way delay: 36.360 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 49.07 Mbit/s
95th percentile per-packet one-way delay: 35.337 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 42.39 Mbit/s
95th percentile per-packet one-way delay: 36.189 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 30.74 Mbit/s
95th percentile per-packet one-way delay: 36.694 ms
Loss rate: 0.49%

Run 1: Report of Verus — Data Link

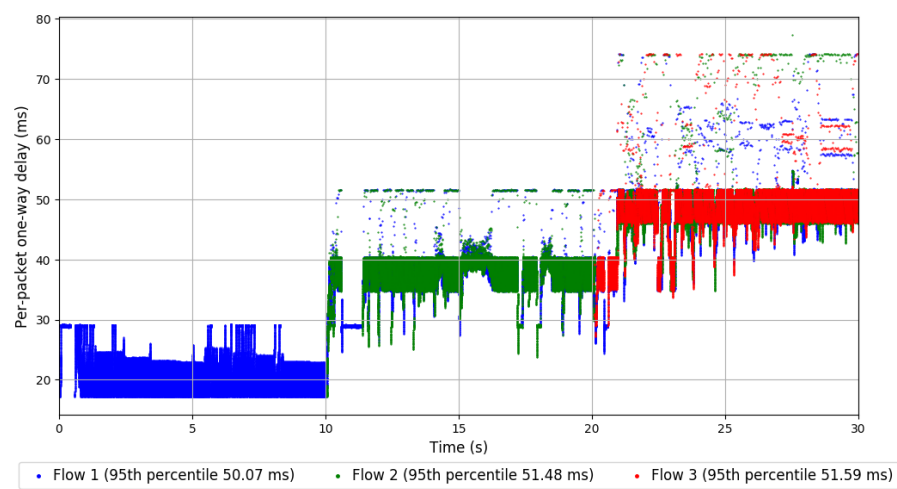
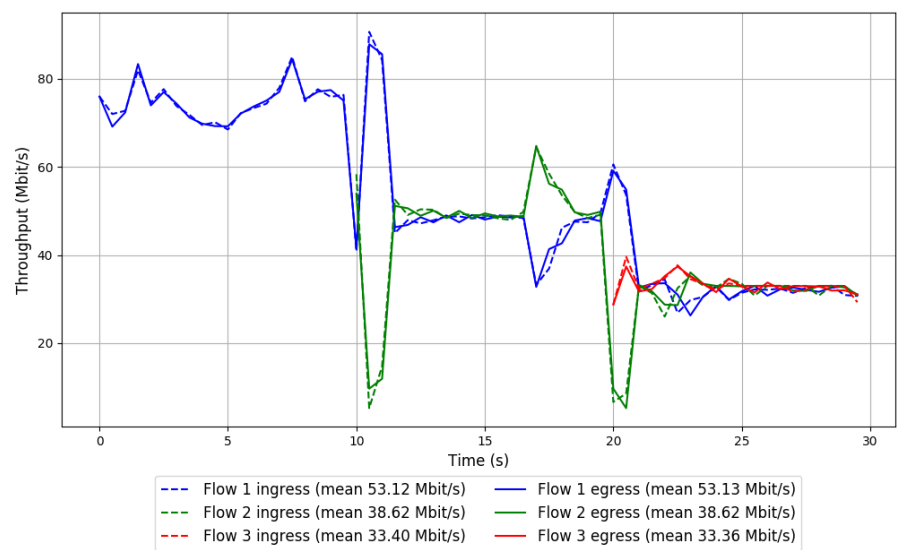


Run 2: Statistics of Verus

Start at: 2018-01-09 23:56:32
End at: 2018-01-09 23:57:02
Local clock offset: -0.181 ms
Remote clock offset: -14.708 ms

Below is generated by plot.py at 2018-01-10 05:42:09
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.87 Mbit/s
95th percentile per-packet one-way delay: 51.423 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 53.13 Mbit/s
95th percentile per-packet one-way delay: 50.066 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 38.62 Mbit/s
95th percentile per-packet one-way delay: 51.476 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 33.36 Mbit/s
95th percentile per-packet one-way delay: 51.585 ms
Loss rate: 0.38%

Run 2: Report of Verus — Data Link

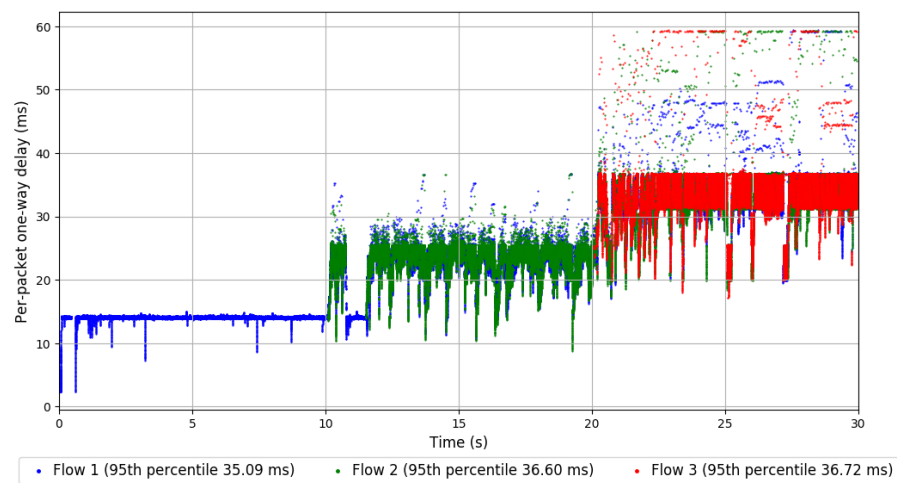
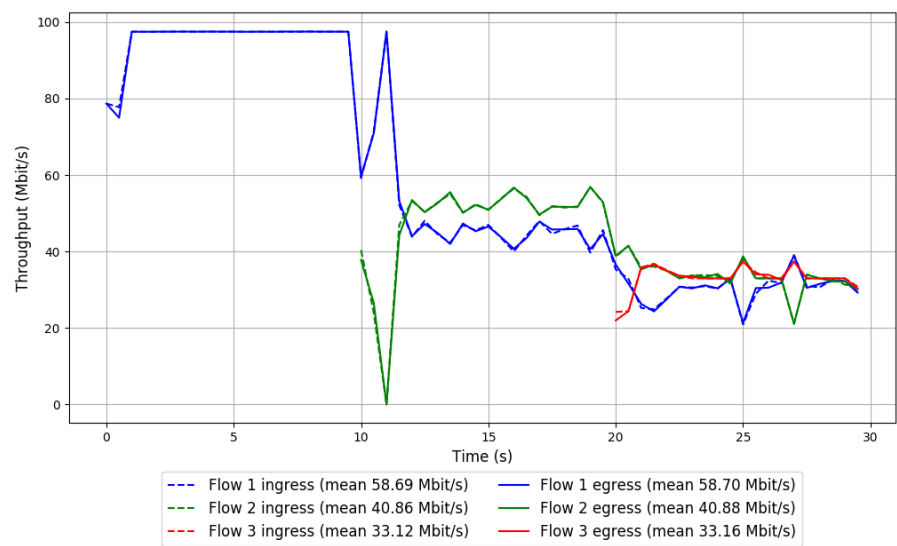


Run 3: Statistics of Verus

Start at: 2018-01-10 00:13:31
End at: 2018-01-10 00:14:01
Local clock offset: -0.203 ms
Remote clock offset: 0.272 ms

Below is generated by plot.py at 2018-01-10 05:42:23
Datalink statistics
-- Total of 3 flows:
Average throughput: 96.80 Mbit/s
95th percentile per-packet one-way delay: 36.529 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 58.70 Mbit/s
95th percentile per-packet one-way delay: 35.091 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 40.88 Mbit/s
95th percentile per-packet one-way delay: 36.600 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 33.16 Mbit/s
95th percentile per-packet one-way delay: 36.724 ms
Loss rate: 0.41%

Run 3: Report of Verus — Data Link

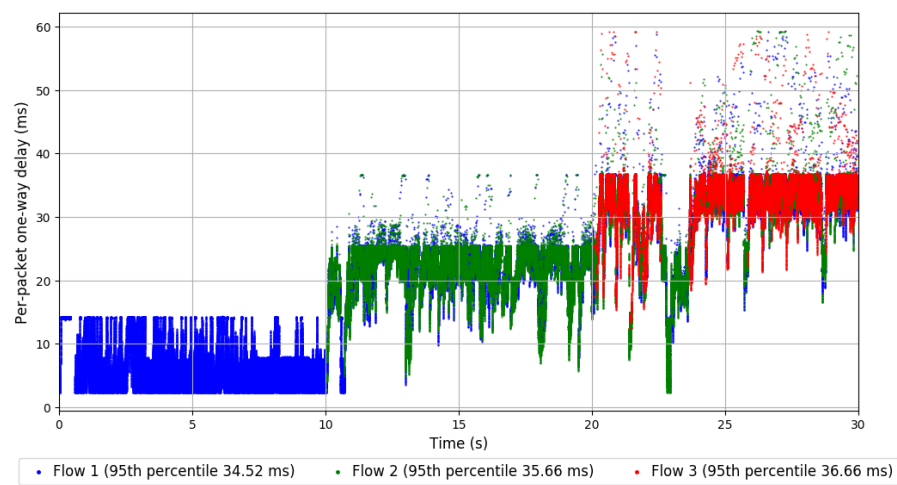
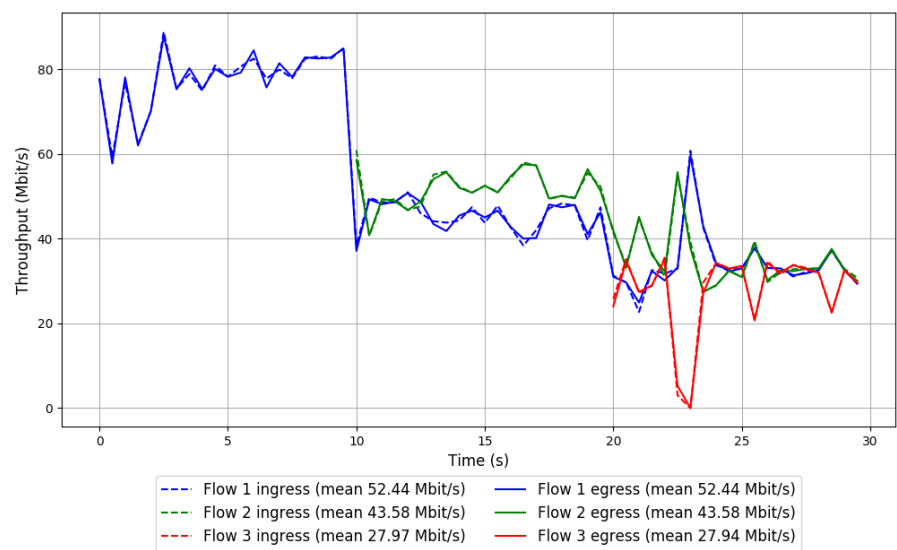


Run 4: Statistics of Verus

Start at: 2018-01-10 00:30:29
End at: 2018-01-10 00:30:59
Local clock offset: -0.246 ms
Remote clock offset: -0.047 ms

Below is generated by plot.py at 2018-01-10 05:42:28
Datalink statistics
-- Total of 3 flows:
Average throughput: 90.67 Mbit/s
95th percentile per-packet one-way delay: 35.585 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 52.44 Mbit/s
95th percentile per-packet one-way delay: 34.523 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 43.58 Mbit/s
95th percentile per-packet one-way delay: 35.656 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 27.94 Mbit/s
95th percentile per-packet one-way delay: 36.661 ms
Loss rate: 0.44%

Run 4: Report of Verus — Data Link

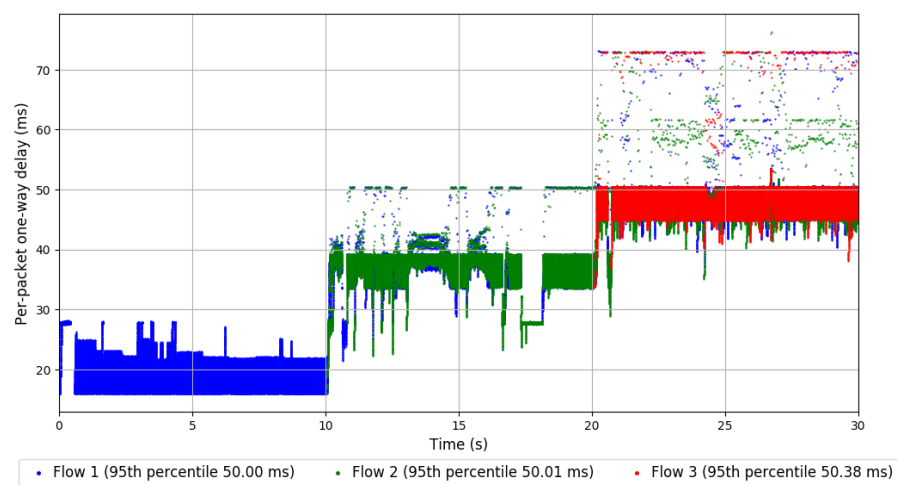
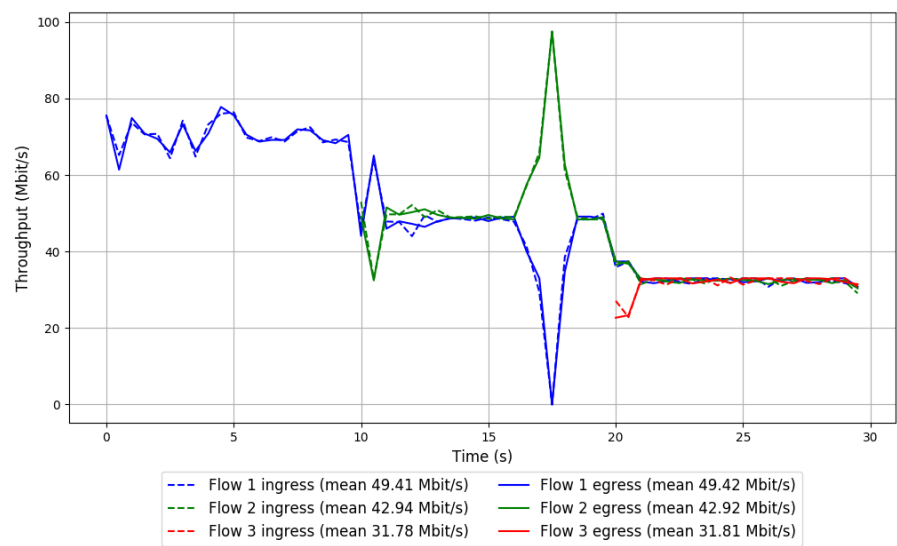


Run 5: Statistics of Verus

Start at: 2018-01-10 00:47:29
End at: 2018-01-10 00:47:59
Local clock offset: -0.259 ms
Remote clock offset: -13.587 ms

Below is generated by plot.py at 2018-01-10 05:42:46
Datalink statistics
-- Total of 3 flows:
Average throughput: 88.46 Mbit/s
95th percentile per-packet one-way delay: 50.271 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 49.42 Mbit/s
95th percentile per-packet one-way delay: 49.998 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 42.92 Mbit/s
95th percentile per-packet one-way delay: 50.011 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 31.81 Mbit/s
95th percentile per-packet one-way delay: 50.383 ms
Loss rate: 0.44%

Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-01-10 01:04:28

End at: 2018-01-10 01:04:58

Local clock offset: -0.287 ms

Remote clock offset: 0.217 ms

Below is generated by plot.py at 2018-01-10 05:42:55

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.87 Mbit/s

95th percentile per-packet one-way delay: 36.620 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 54.62 Mbit/s

95th percentile per-packet one-way delay: 35.577 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 40.40 Mbit/s

95th percentile per-packet one-way delay: 36.502 ms

Loss rate: 0.14%

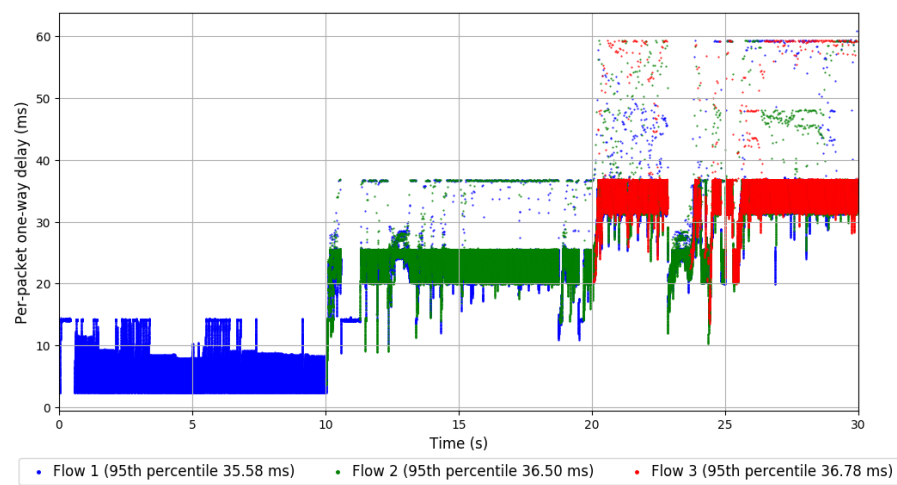
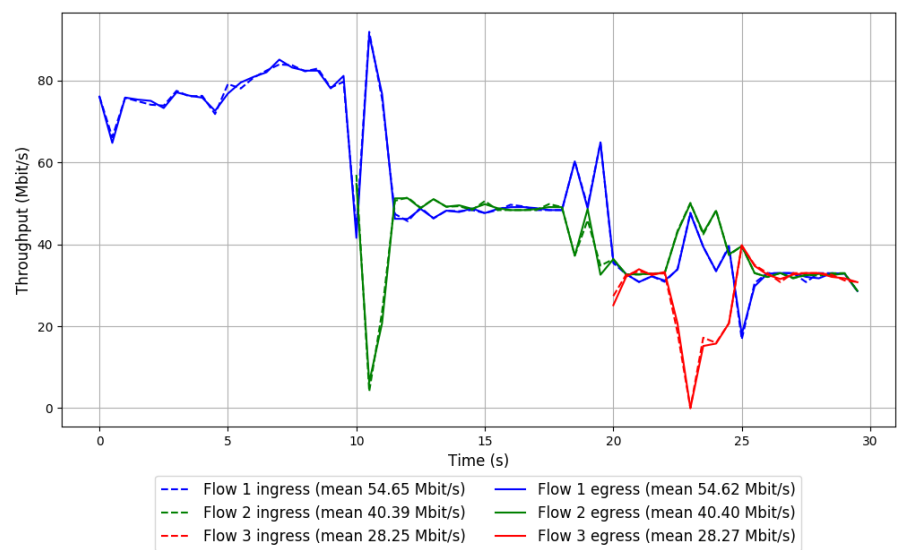
-- Flow 3:

Average throughput: 28.27 Mbit/s

95th percentile per-packet one-way delay: 36.784 ms

Loss rate: 0.40%

Run 6: Report of Verus — Data Link

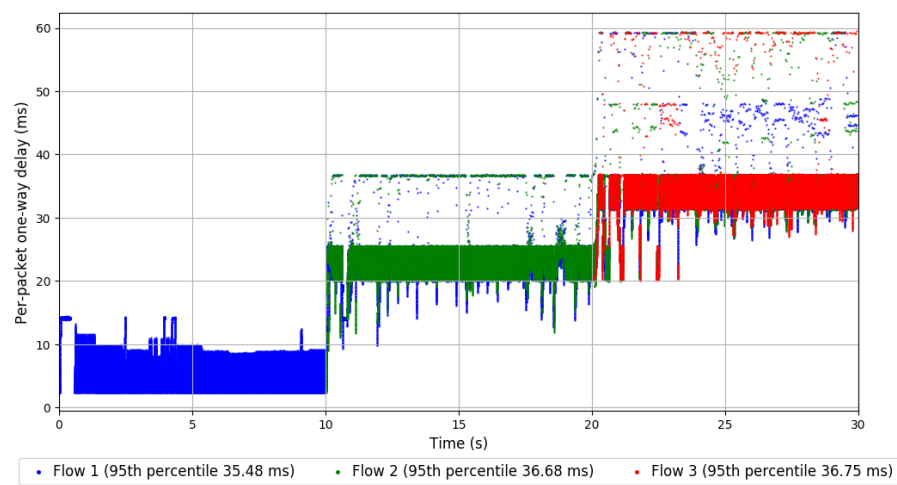
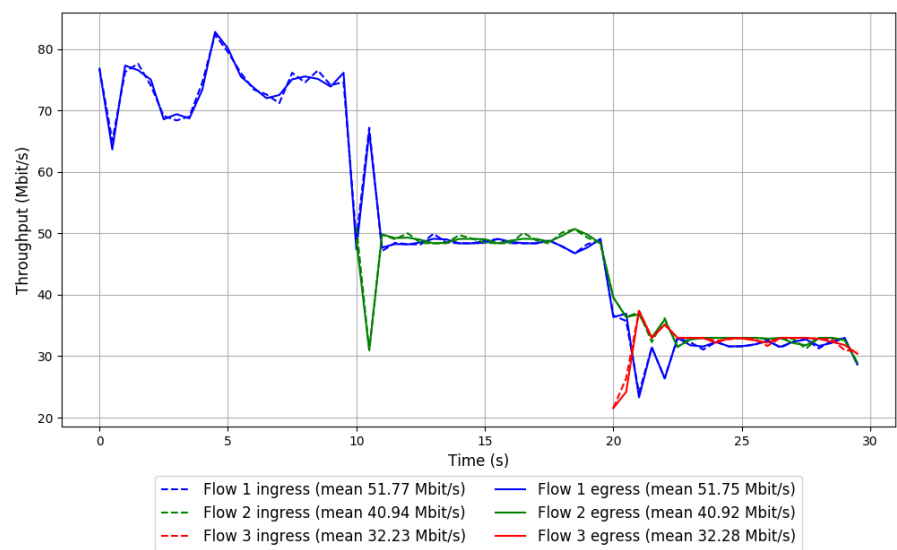


Run 7: Statistics of Verus

Start at: 2018-01-10 01:21:24
End at: 2018-01-10 01:21:54
Local clock offset: -0.246 ms
Remote clock offset: 0.416 ms

Below is generated by plot.py at 2018-01-10 05:43:01
Datalink statistics
-- Total of 3 flows:
Average throughput: 89.67 Mbit/s
95th percentile per-packet one-way delay: 36.630 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 51.75 Mbit/s
95th percentile per-packet one-way delay: 35.483 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 40.92 Mbit/s
95th percentile per-packet one-way delay: 36.676 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 32.28 Mbit/s
95th percentile per-packet one-way delay: 36.748 ms
Loss rate: 0.35%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-01-10 01:38:23

End at: 2018-01-10 01:38:53

Local clock offset: -0.338 ms

Remote clock offset: 0.534 ms

Below is generated by plot.py at 2018-01-10 05:43:24

Datalink statistics

-- Total of 3 flows:

Average throughput: 87.43 Mbit/s

95th percentile per-packet one-way delay: 35.846 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 54.80 Mbit/s

95th percentile per-packet one-way delay: 34.077 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 28.78 Mbit/s

95th percentile per-packet one-way delay: 36.536 ms

Loss rate: 0.24%

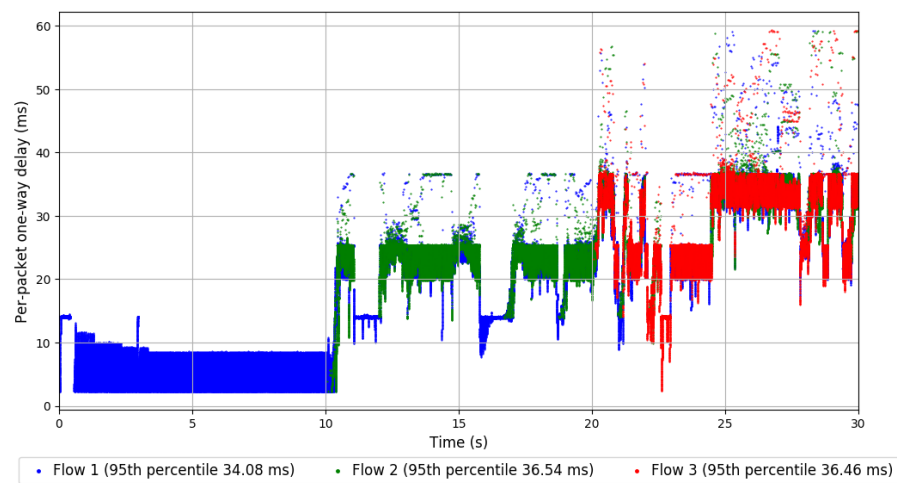
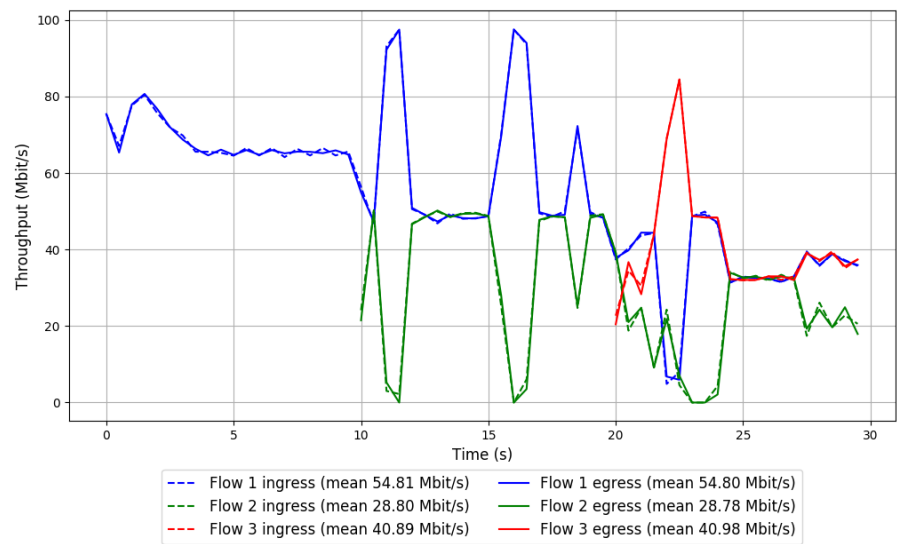
-- Flow 3:

Average throughput: 40.98 Mbit/s

95th percentile per-packet one-way delay: 36.457 ms

Loss rate: 0.28%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-01-10 01:55:20

End at: 2018-01-10 01:55:50

Local clock offset: -0.185 ms

Remote clock offset: 0.617 ms

Below is generated by plot.py at 2018-01-10 05:43:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 88.88 Mbit/s

95th percentile per-packet one-way delay: 36.657 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 50.98 Mbit/s

95th percentile per-packet one-way delay: 36.130 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 41.30 Mbit/s

95th percentile per-packet one-way delay: 36.660 ms

Loss rate: 0.15%

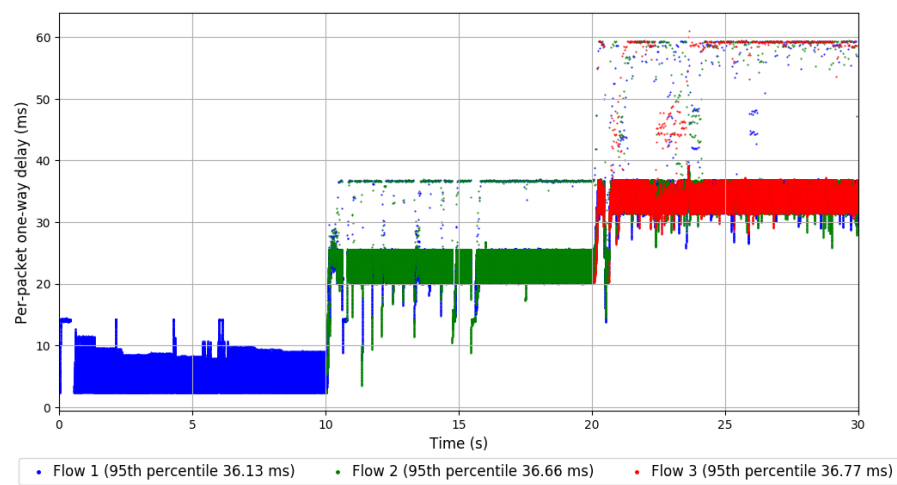
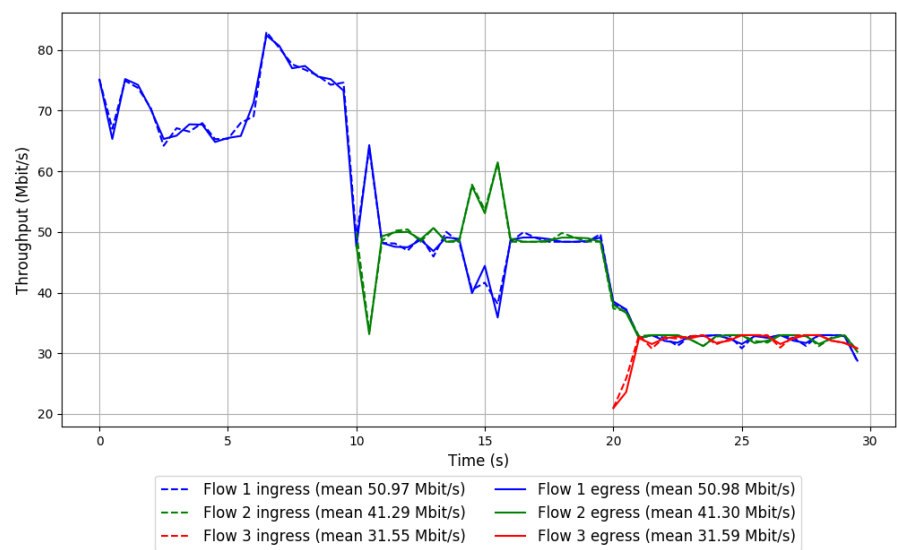
-- Flow 3:

Average throughput: 31.59 Mbit/s

95th percentile per-packet one-way delay: 36.775 ms

Loss rate: 0.36%

Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2018-01-10 02:12:19

End at: 2018-01-10 02:12:49

Local clock offset: -0.123 ms

Remote clock offset: 0.624 ms

Below is generated by plot.py at 2018-01-10 05:44:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 89.03 Mbit/s

95th percentile per-packet one-way delay: 35.980 ms

Loss rate: 0.14%

-- Flow 1:

Average throughput: 51.20 Mbit/s

95th percentile per-packet one-way delay: 35.095 ms

Loss rate: 0.07%

-- Flow 2:

Average throughput: 41.12 Mbit/s

95th percentile per-packet one-way delay: 36.052 ms

Loss rate: 0.14%

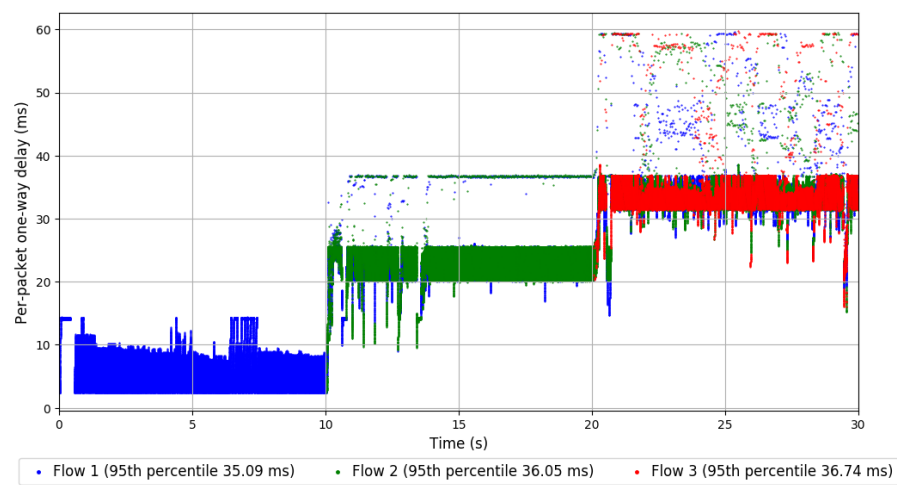
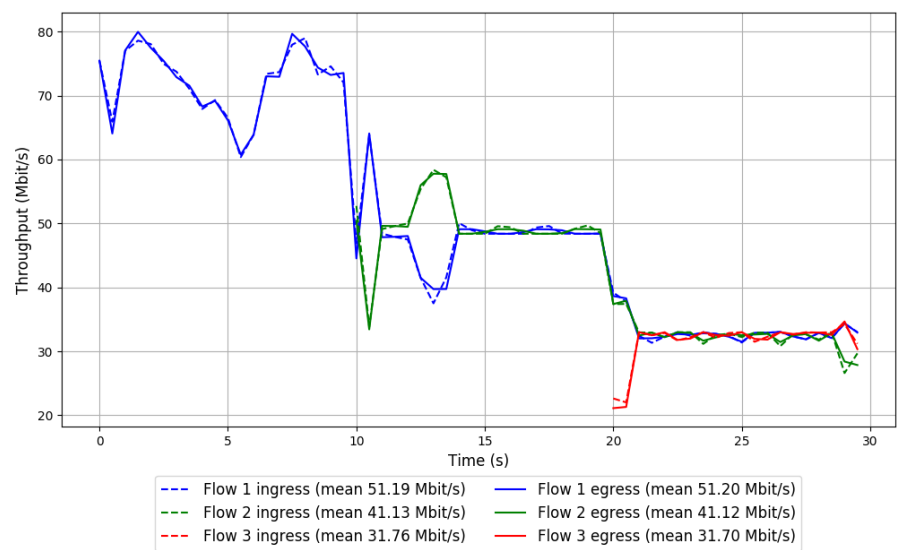
-- Flow 3:

Average throughput: 31.70 Mbit/s

95th percentile per-packet one-way delay: 36.741 ms

Loss rate: 0.49%

Run 10: Report of Verus — Data Link

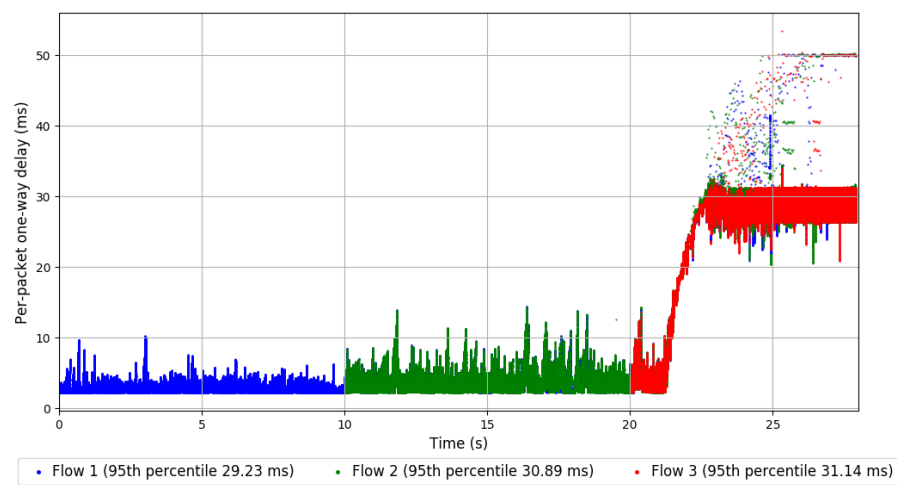
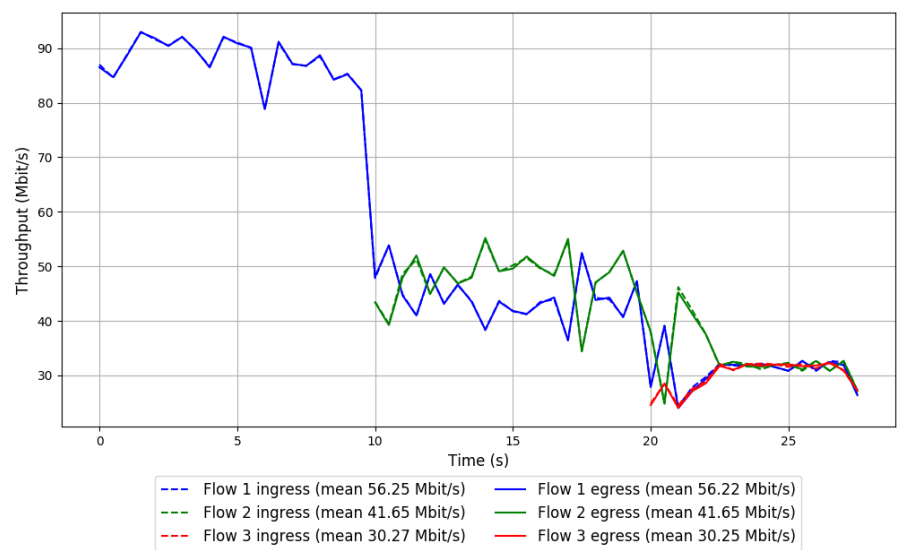


Run 1: Statistics of Copa

Start at: 2018-01-09 23:37:15
End at: 2018-01-09 23:37:45
Local clock offset: -0.114 ms
Remote clock offset: -0.053 ms

Below is generated by plot.py at 2018-01-10 05:46:45
Datalink statistics
-- Total of 3 flows:
Average throughput: 91.49 Mbit/s
95th percentile per-packet one-way delay: 30.558 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 56.22 Mbit/s
95th percentile per-packet one-way delay: 29.229 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 41.65 Mbit/s
95th percentile per-packet one-way delay: 30.890 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 30.25 Mbit/s
95th percentile per-packet one-way delay: 31.135 ms
Loss rate: 0.38%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-01-09 23:54:13

End at: 2018-01-09 23:54:43

Local clock offset: -0.134 ms

Remote clock offset: 0.078 ms

Below is generated by plot.py at 2018-01-10 05:46:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.78 Mbit/s

95th percentile per-packet one-way delay: 30.335 ms

Loss rate: 0.29%

-- Flow 1:

Average throughput: 57.40 Mbit/s

95th percentile per-packet one-way delay: 29.131 ms

Loss rate: 0.14%

-- Flow 2:

Average throughput: 42.19 Mbit/s

95th percentile per-packet one-way delay: 30.546 ms

Loss rate: 0.46%

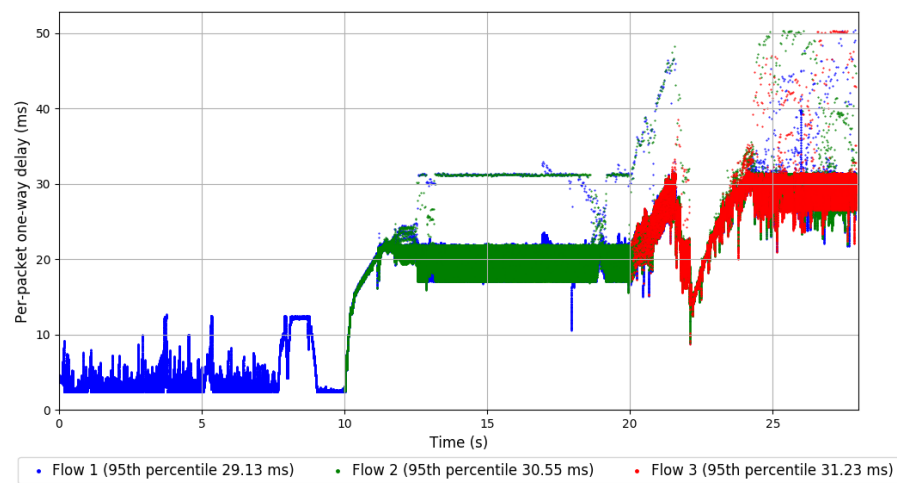
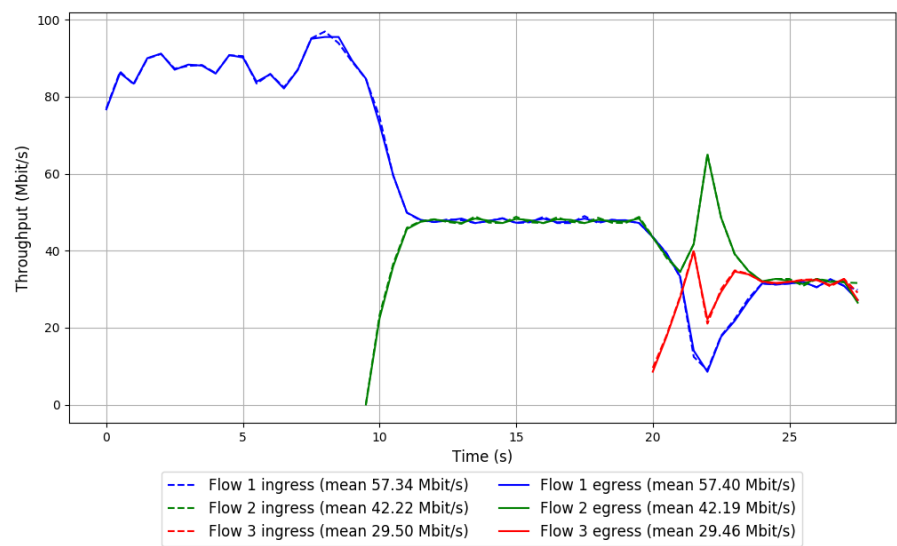
-- Flow 3:

Average throughput: 29.46 Mbit/s

95th percentile per-packet one-way delay: 31.232 ms

Loss rate: 0.80%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2018-01-10 00:11:14

End at: 2018-01-10 00:11:44

Local clock offset: -0.14 ms

Remote clock offset: 0.267 ms

Below is generated by plot.py at 2018-01-10 05:46:54

Datalink statistics

-- Total of 3 flows:

Average throughput: 76.29 Mbit/s

95th percentile per-packet one-way delay: 23.165 ms

Loss rate: 0.12%

-- Flow 1:

Average throughput: 23.77 Mbit/s

95th percentile per-packet one-way delay: 19.634 ms

Loss rate: 0.05%

-- Flow 2:

Average throughput: 63.26 Mbit/s

95th percentile per-packet one-way delay: 23.037 ms

Loss rate: 0.12%

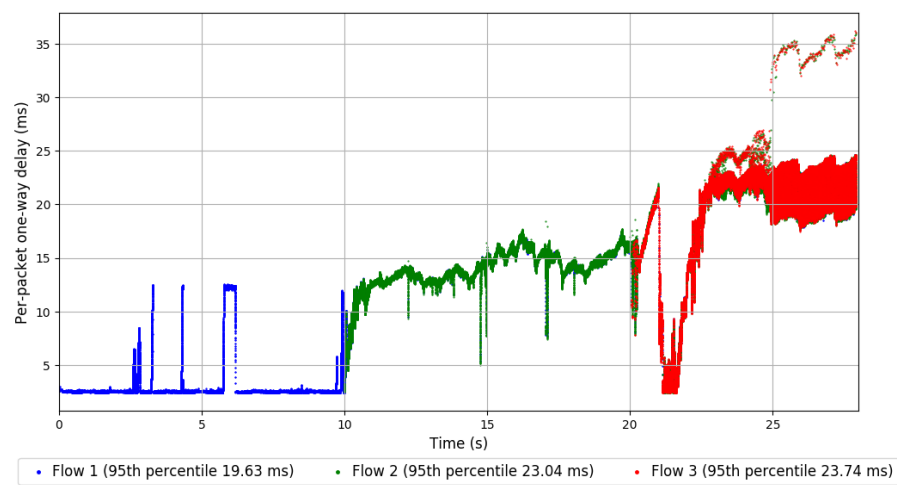
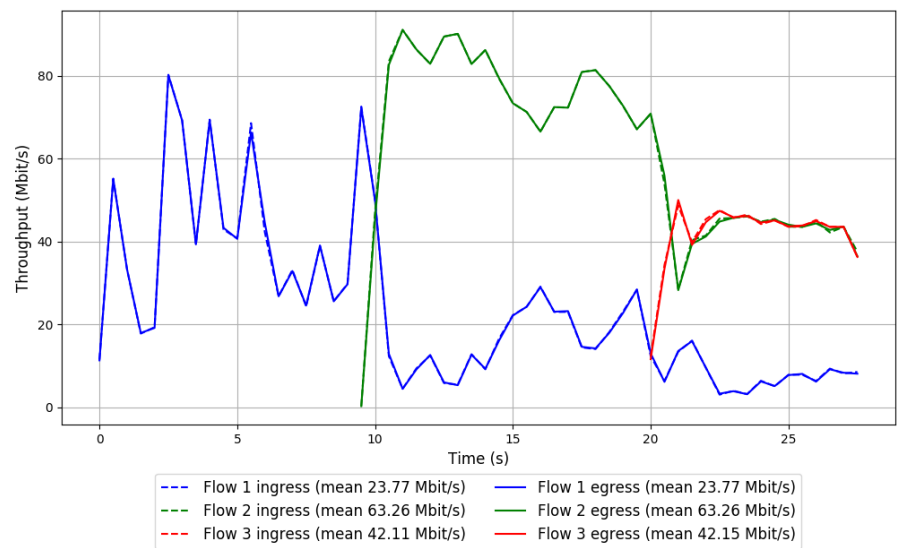
-- Flow 3:

Average throughput: 42.15 Mbit/s

95th percentile per-packet one-way delay: 23.741 ms

Loss rate: 0.28%

Run 3: Report of Copa — Data Link

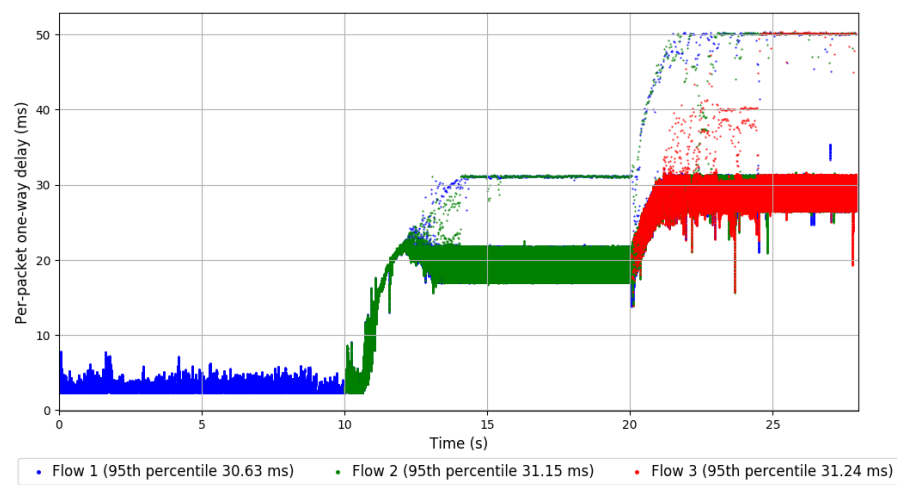
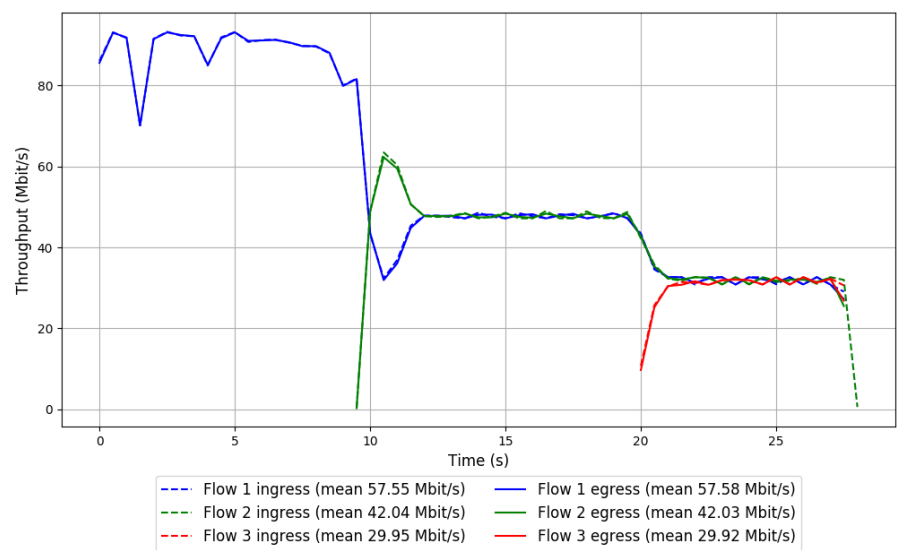


Run 4: Statistics of Copa

Start at: 2018-01-10 00:28:11
End at: 2018-01-10 00:28:41
Local clock offset: -0.203 ms
Remote clock offset: -0.007 ms

Below is generated by plot.py at 2018-01-10 05:47:22
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.98 Mbit/s
95th percentile per-packet one-way delay: 31.113 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 57.58 Mbit/s
95th percentile per-packet one-way delay: 30.633 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 42.03 Mbit/s
95th percentile per-packet one-way delay: 31.146 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 29.92 Mbit/s
95th percentile per-packet one-way delay: 31.238 ms
Loss rate: 1.17%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-01-10 00:45:11

End at: 2018-01-10 00:45:41

Local clock offset: -0.237 ms

Remote clock offset: 0.034 ms

Below is generated by plot.py at 2018-01-10 05:47:26

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.84 Mbit/s

95th percentile per-packet one-way delay: 31.038 ms

Loss rate: 0.30%

-- Flow 1:

Average throughput: 58.63 Mbit/s

95th percentile per-packet one-way delay: 30.486 ms

Loss rate: 0.11%

-- Flow 2:

Average throughput: 40.52 Mbit/s

95th percentile per-packet one-way delay: 31.166 ms

Loss rate: 0.49%

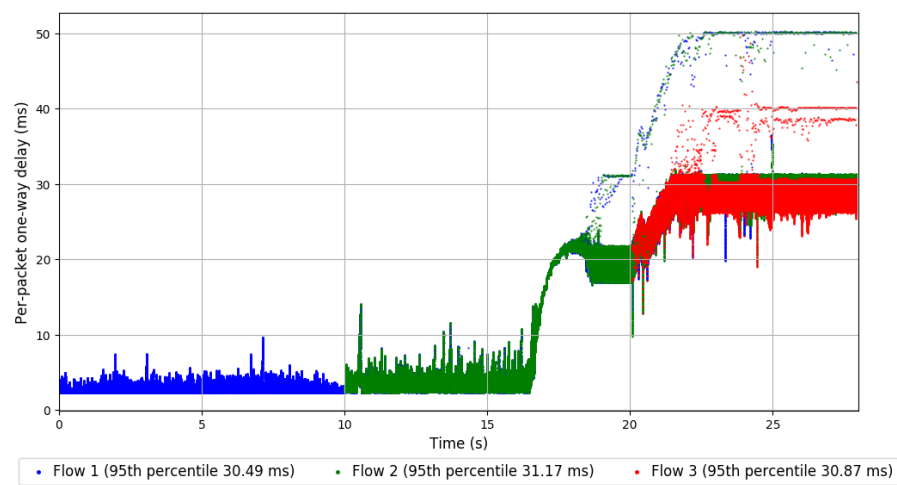
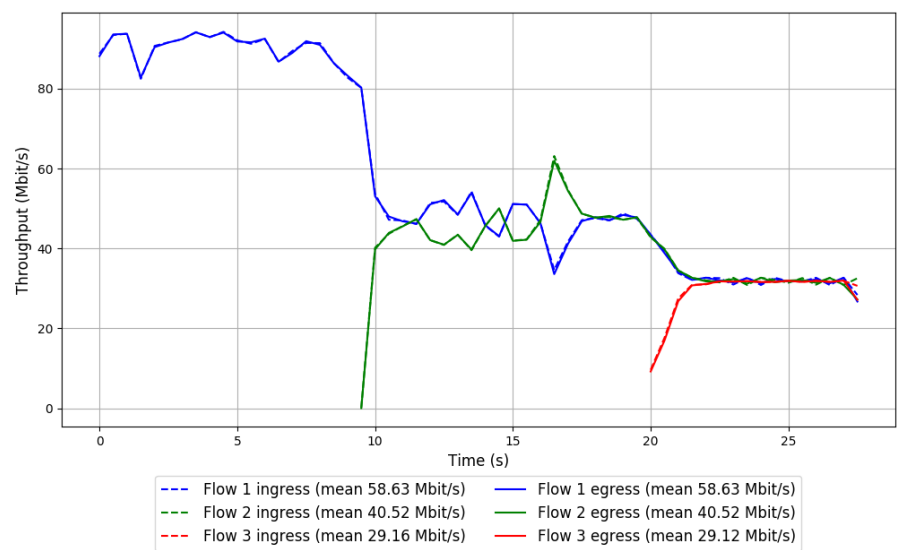
-- Flow 3:

Average throughput: 29.12 Mbit/s

95th percentile per-packet one-way delay: 30.868 ms

Loss rate: 1.13%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-01-10 01:02:09

End at: 2018-01-10 01:02:39

Local clock offset: -0.292 ms

Remote clock offset: 0.238 ms

Below is generated by plot.py at 2018-01-10 05:47:47

Datalink statistics

-- Total of 3 flows:

Average throughput: 92.64 Mbit/s

95th percentile per-packet one-way delay: 30.044 ms

Loss rate: 0.22%

-- Flow 1:

Average throughput: 57.77 Mbit/s

95th percentile per-packet one-way delay: 28.430 ms

Loss rate: 0.13%

-- Flow 2:

Average throughput: 39.65 Mbit/s

95th percentile per-packet one-way delay: 30.627 ms

Loss rate: 0.06%

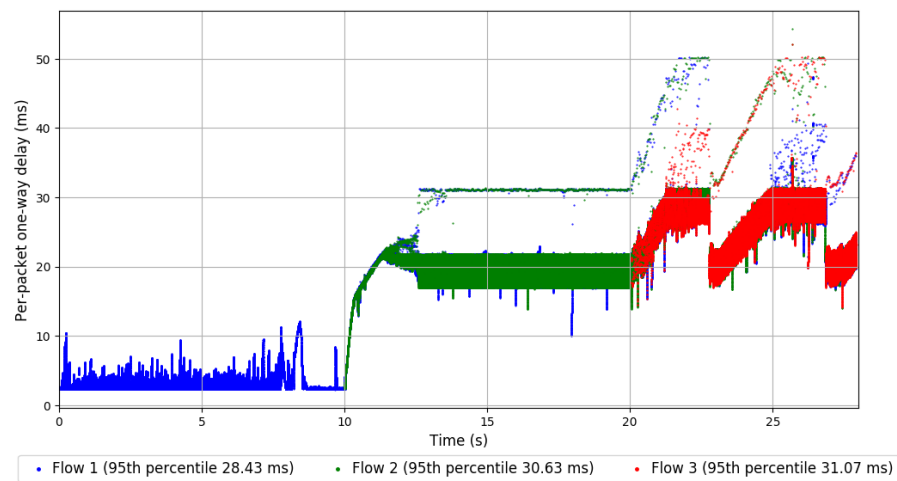
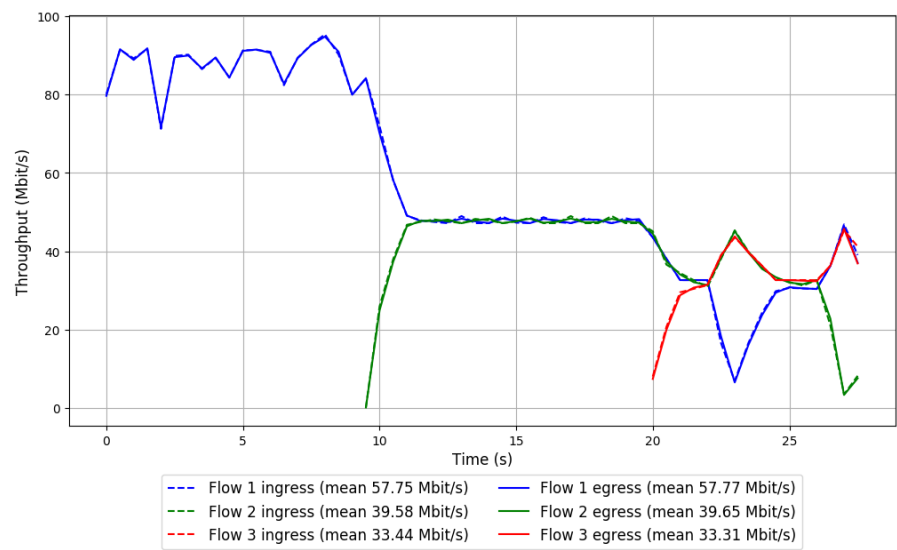
-- Flow 3:

Average throughput: 33.31 Mbit/s

95th percentile per-packet one-way delay: 31.069 ms

Loss rate: 1.15%

Run 6: Report of Copa — Data Link

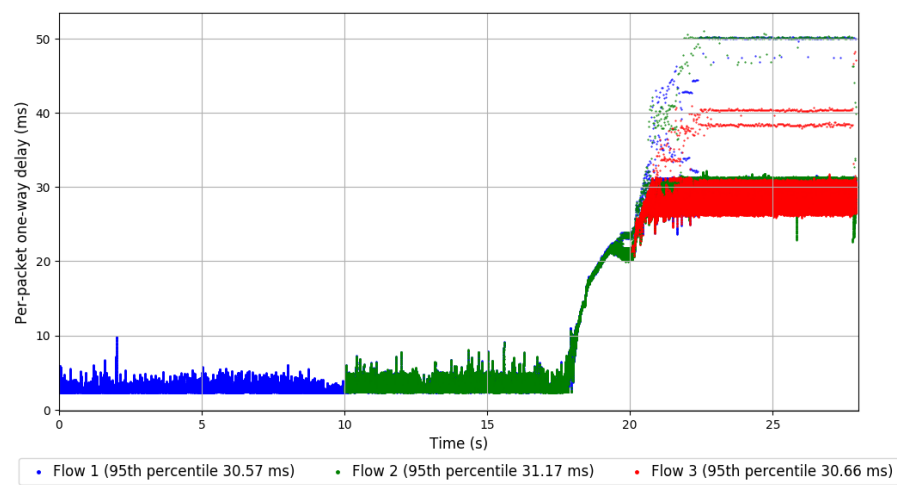
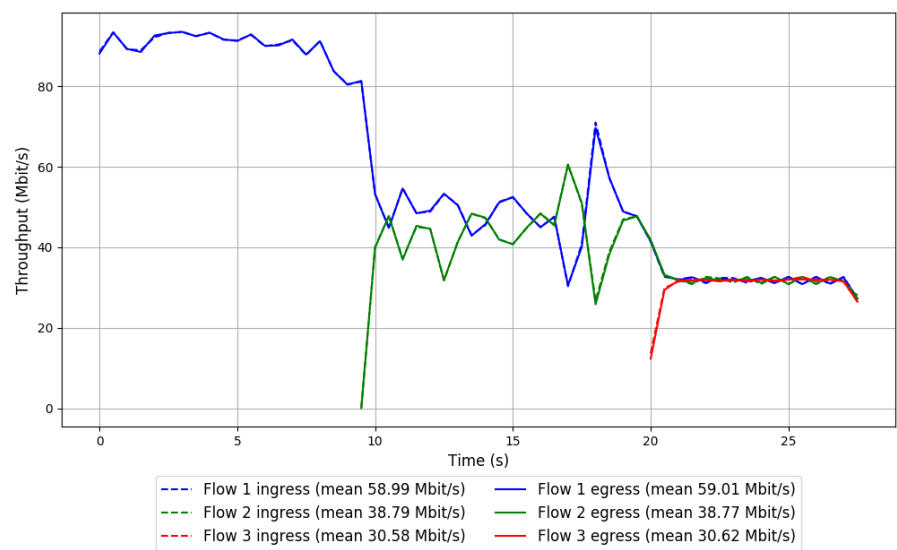


Run 7: Statistics of Copa

Start at: 2018-01-10 01:19:05
End at: 2018-01-10 01:19:35
Local clock offset: -0.289 ms
Remote clock offset: 0.411 ms

Below is generated by plot.py at 2018-01-10 05:48:13
Datalink statistics
-- Total of 3 flows:
Average throughput: 92.52 Mbit/s
95th percentile per-packet one-way delay: 31.045 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 59.01 Mbit/s
95th percentile per-packet one-way delay: 30.567 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 38.77 Mbit/s
95th percentile per-packet one-way delay: 31.167 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 30.62 Mbit/s
95th percentile per-packet one-way delay: 30.656 ms
Loss rate: 0.38%

Run 7: Report of Copa — Data Link



Run 8: Statistics of Copa

Start at: 2018-01-10 01:36:04

End at: 2018-01-10 01:36:34

Local clock offset: -0.326 ms

Remote clock offset: 0.461 ms

Below is generated by plot.py at 2018-01-10 05:48:51

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.76 Mbit/s

95th percentile per-packet one-way delay: 5.394 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 56.92 Mbit/s

95th percentile per-packet one-way delay: 4.905 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 40.52 Mbit/s

95th percentile per-packet one-way delay: 5.624 ms

Loss rate: 0.02%

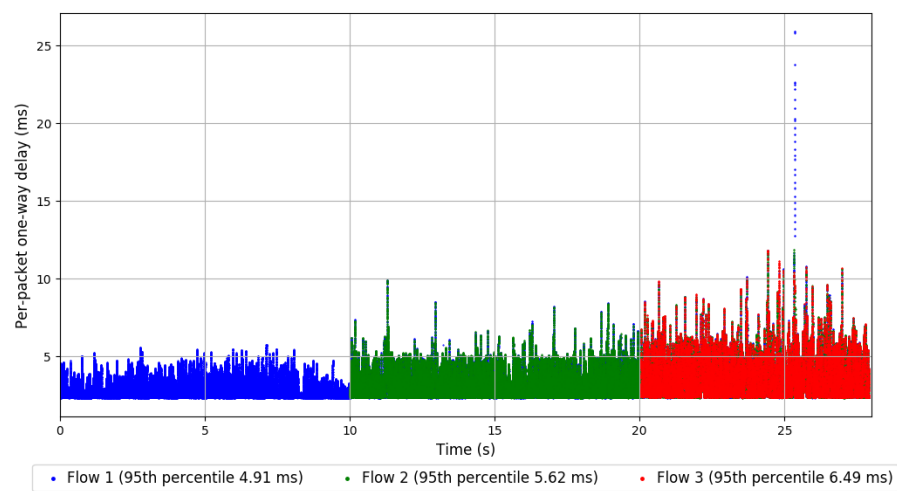
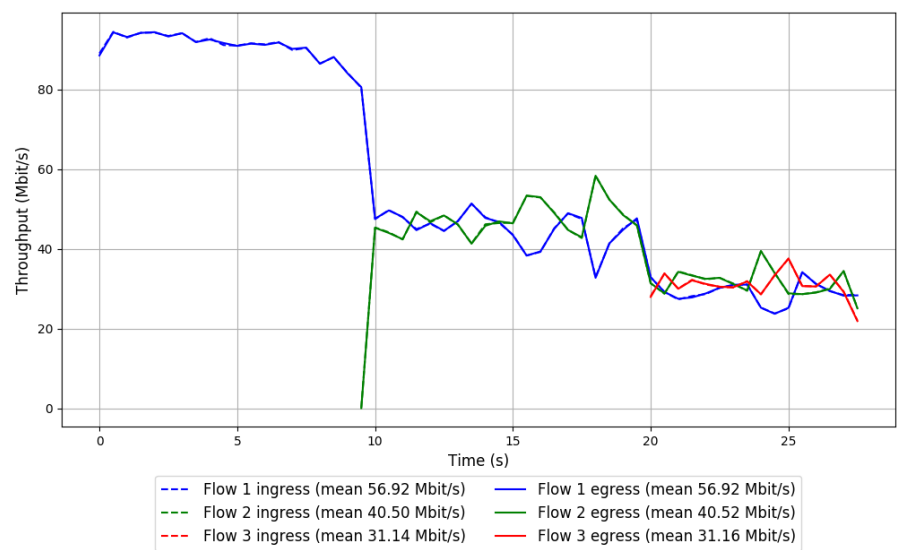
-- Flow 3:

Average throughput: 31.16 Mbit/s

95th percentile per-packet one-way delay: 6.490 ms

Loss rate: 0.08%

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-01-10 01:53:02

End at: 2018-01-10 01:53:32

Local clock offset: -0.348 ms

Remote clock offset: 0.637 ms

Below is generated by plot.py at 2018-01-10 05:50:50

Datalink statistics

-- Total of 3 flows:

Average throughput: 91.69 Mbit/s

95th percentile per-packet one-way delay: 5.230 ms

Loss rate: 0.02%

-- Flow 1:

Average throughput: 58.41 Mbit/s

95th percentile per-packet one-way delay: 4.790 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 38.33 Mbit/s

95th percentile per-packet one-way delay: 5.514 ms

Loss rate: 0.03%

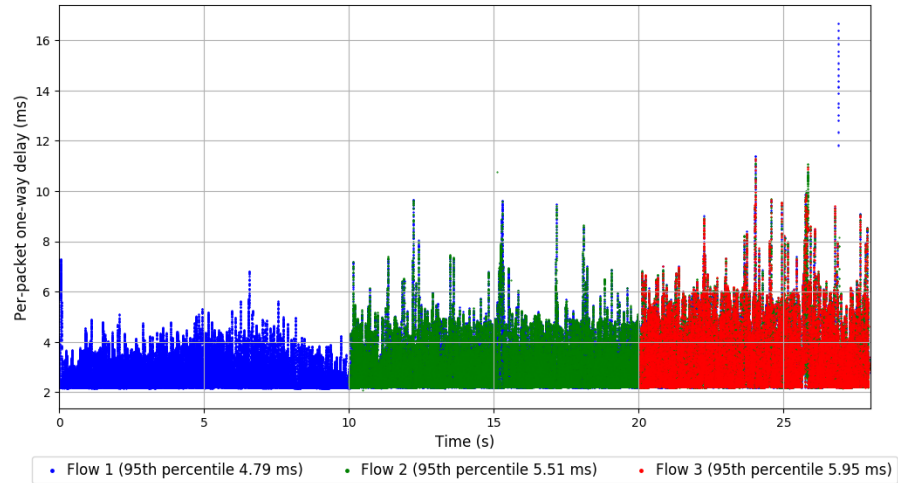
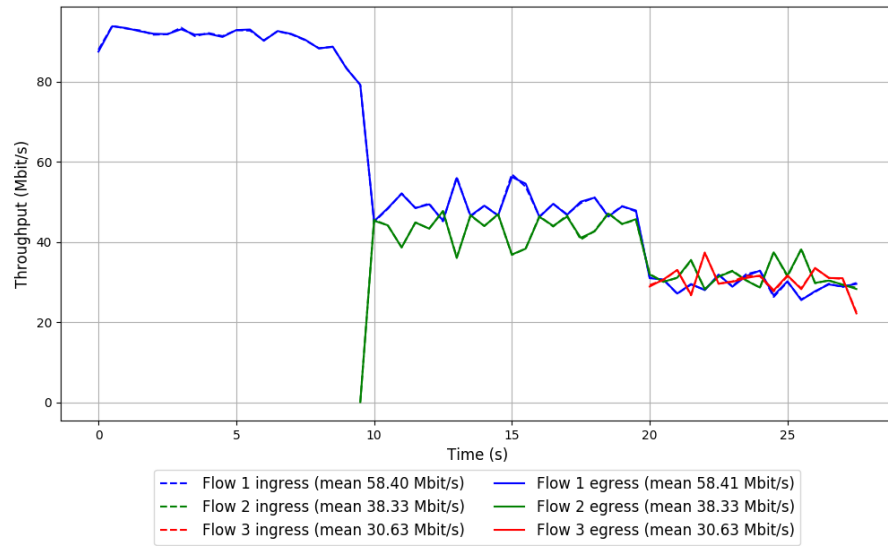
-- Flow 3:

Average throughput: 30.63 Mbit/s

95th percentile per-packet one-way delay: 5.946 ms

Loss rate: 0.08%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2018-01-10 02:10:00

End at: 2018-01-10 02:10:30

Local clock offset: -0.171 ms

Remote clock offset: 0.628 ms

Below is generated by plot.py at 2018-01-10 05:51:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 94.63 Mbit/s

95th percentile per-packet one-way delay: 31.129 ms

Loss rate: 0.33%

-- Flow 1:

Average throughput: 59.22 Mbit/s

95th percentile per-packet one-way delay: 30.636 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 41.84 Mbit/s

95th percentile per-packet one-way delay: 31.160 ms

Loss rate: 0.31%

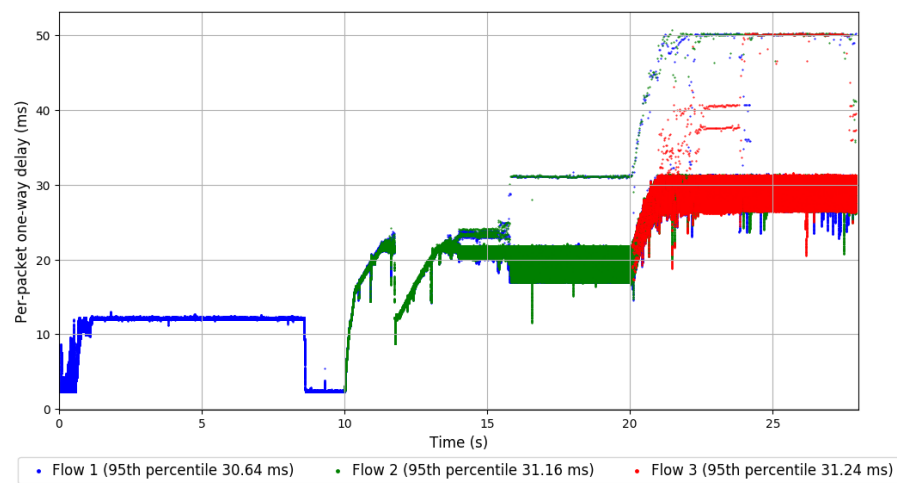
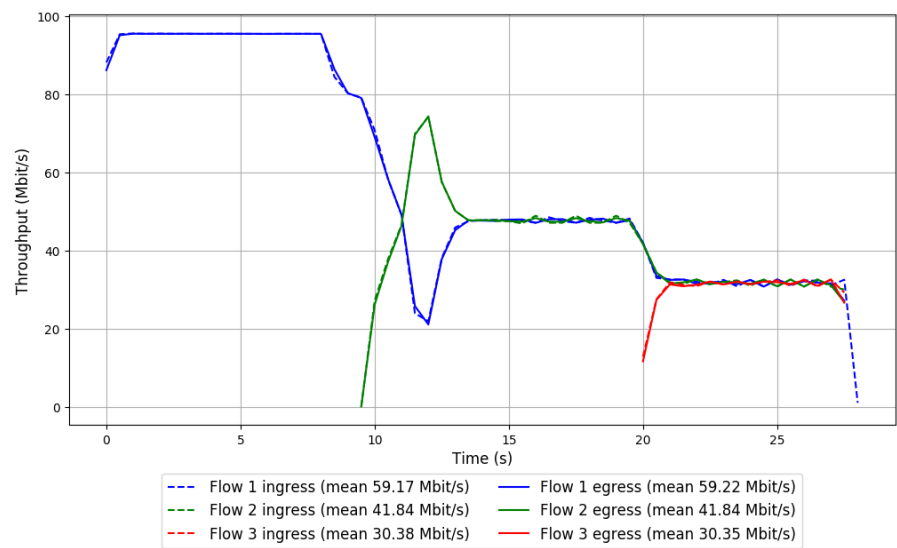
-- Flow 3:

Average throughput: 30.35 Mbit/s

95th percentile per-packet one-way delay: 31.236 ms

Loss rate: 0.91%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2018-01-09 23:49:46

End at: 2018-01-09 23:50:16

Local clock offset: -0.132 ms

Remote clock offset: 0.04 ms

Run 1: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of FillP

Start at: 2018-01-10 00:06:47

End at: 2018-01-10 00:07:17

Local clock offset: -0.136 ms

Remote clock offset: -15.635 ms

Run 2: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of FillP

Start at: 2018-01-10 00:23:44

End at: 2018-01-10 00:24:14

Local clock offset: -0.232 ms

Remote clock offset: 0.079 ms

Run 3: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 4: Statistics of FillP

Start at: 2018-01-10 00:40:45

End at: 2018-01-10 00:41:15

Local clock offset: -0.243 ms

Remote clock offset: 0.011 ms

Run 4: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 5: Statistics of FillP

Start at: 2018-01-10 00:57:42

End at: 2018-01-10 00:58:12

Local clock offset: -0.253 ms

Remote clock offset: 0.168 ms

Run 5: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 6: Statistics of FillP

Start at: 2018-01-10 01:14:40

End at: 2018-01-10 01:15:10

Local clock offset: -0.303 ms

Remote clock offset: 0.39 ms

Run 6: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 7: Statistics of FillP

Start at: 2018-01-10 01:31:37

End at: 2018-01-10 01:32:07

Local clock offset: -0.37 ms

Remote clock offset: 0.44 ms

Run 7: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of FillP

Start at: 2018-01-10 01:48:34

End at: 2018-01-10 01:49:04

Local clock offset: -0.22 ms

Remote clock offset: 0.589 ms

Run 8: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 9: Statistics of FillP

Start at: 2018-01-10 02:05:33

End at: 2018-01-10 02:06:03

Local clock offset: -0.123 ms

Remote clock offset: 0.682 ms

Run 9: Report of FillP — Data Link

Figure is missing

Figure is missing

Run 10: Statistics of FillP

Start at: 2018-01-10 02:22:34

End at: 2018-01-10 02:23:04

Local clock offset: -0.123 ms

Remote clock offset: 0.752 ms

Run 10: Report of FillP — Data Link

Figure is missing

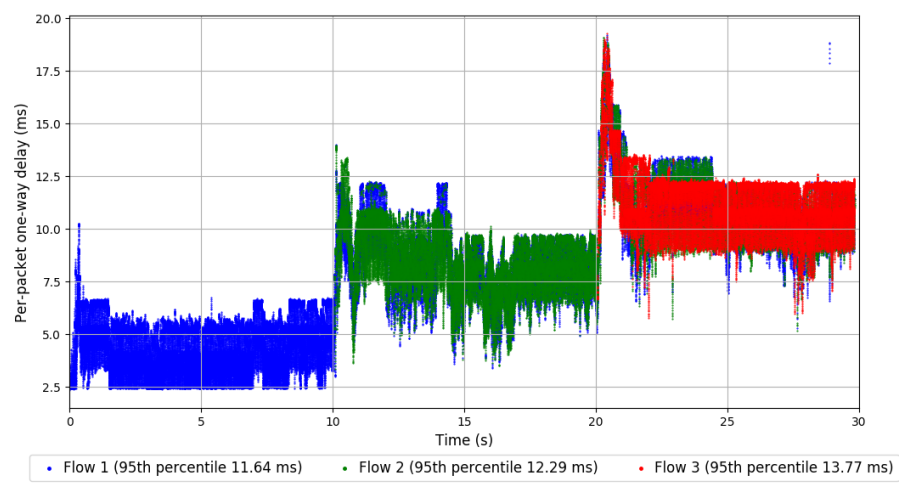
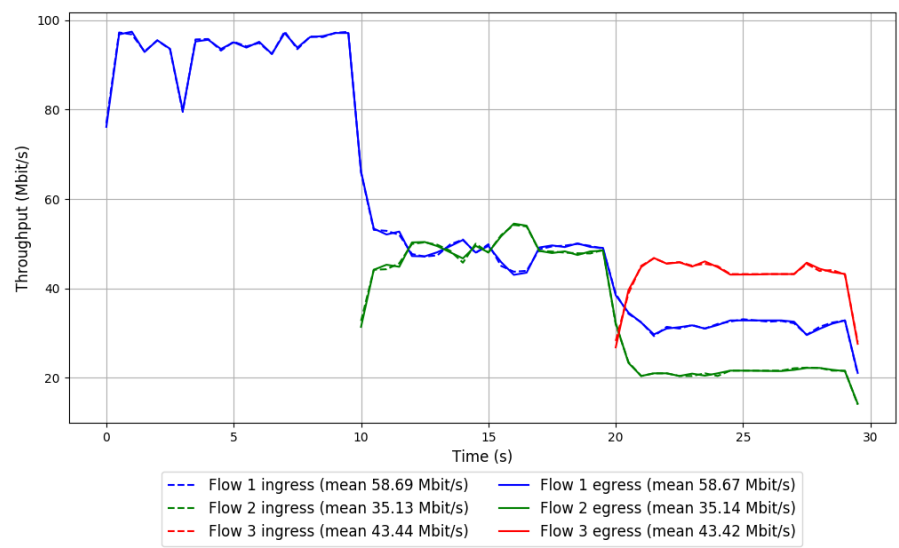
Figure is missing

```
Run 1: Statistics of Indigo

Start at: 2018-01-09 23:44:02
End at: 2018-01-09 23:44:32
Local clock offset: -0.036 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2018-01-10 05:51:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 12.140 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 58.67 Mbit/s
95th percentile per-packet one-way delay: 11.636 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 35.14 Mbit/s
95th percentile per-packet one-way delay: 12.292 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 43.42 Mbit/s
95th percentile per-packet one-way delay: 13.765 ms
Loss rate: 0.14%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2018-01-10 00:01:01

End at: 2018-01-10 00:01:31

Local clock offset: 0.009 ms

Remote clock offset: 0.176 ms

Below is generated by plot.py at 2018-01-10 05:51:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 93.68 Mbit/s

95th percentile per-packet one-way delay: 10.062 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 64.52 Mbit/s

95th percentile per-packet one-way delay: 9.906 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 34.13 Mbit/s

95th percentile per-packet one-way delay: 10.637 ms

Loss rate: 0.05%

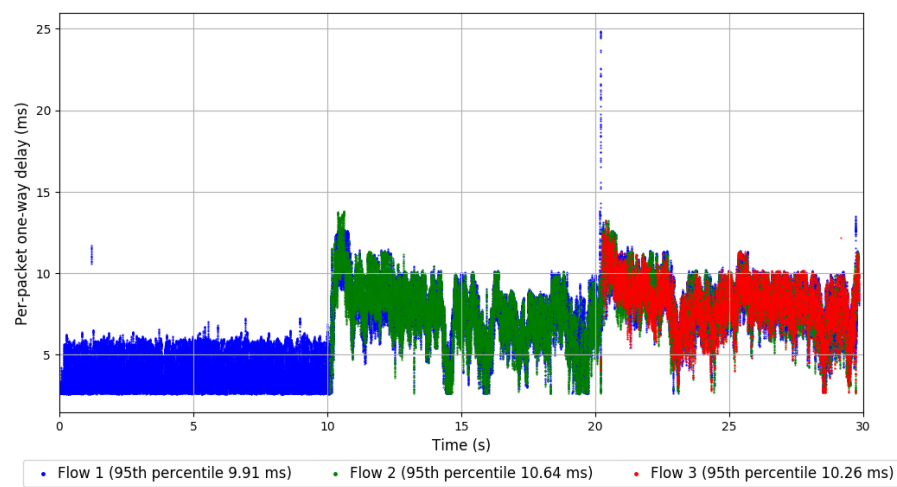
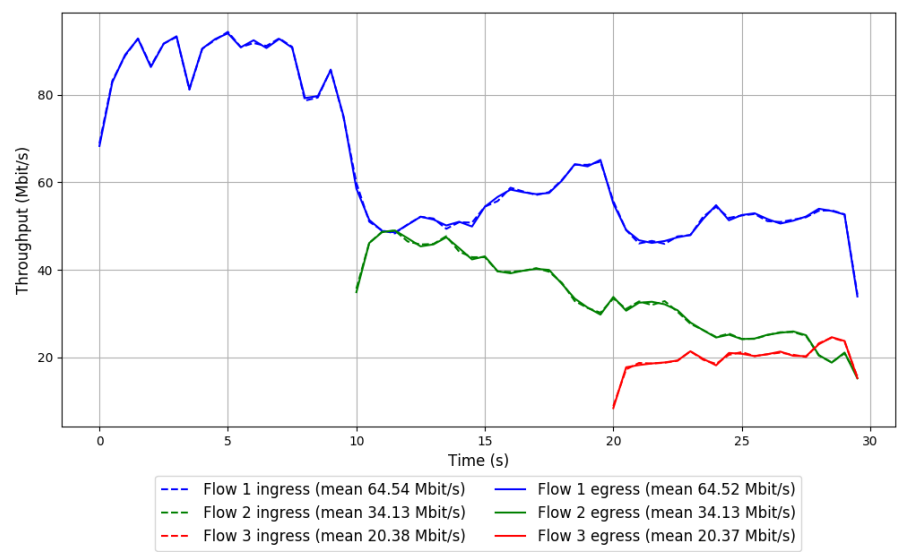
-- Flow 3:

Average throughput: 20.37 Mbit/s

95th percentile per-packet one-way delay: 10.257 ms

Loss rate: 0.12%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-10 00:18:00

End at: 2018-01-10 00:18:31

Local clock offset: -0.257 ms

Remote clock offset: 0.171 ms

Below is generated by plot.py at 2018-01-10 05:51:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 90.24 Mbit/s

95th percentile per-packet one-way delay: 12.392 ms

Loss rate: 0.05%

-- Flow 1:

Average throughput: 56.51 Mbit/s

95th percentile per-packet one-way delay: 11.573 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 29.62 Mbit/s

95th percentile per-packet one-way delay: 12.193 ms

Loss rate: 0.03%

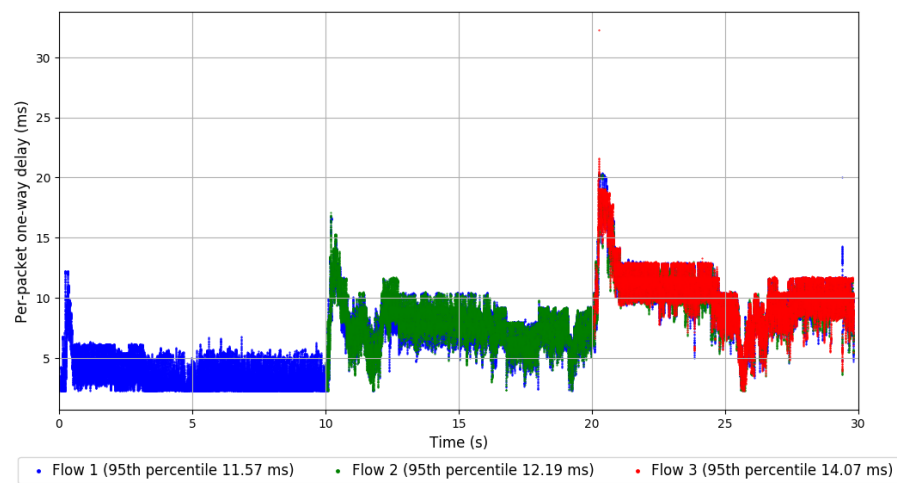
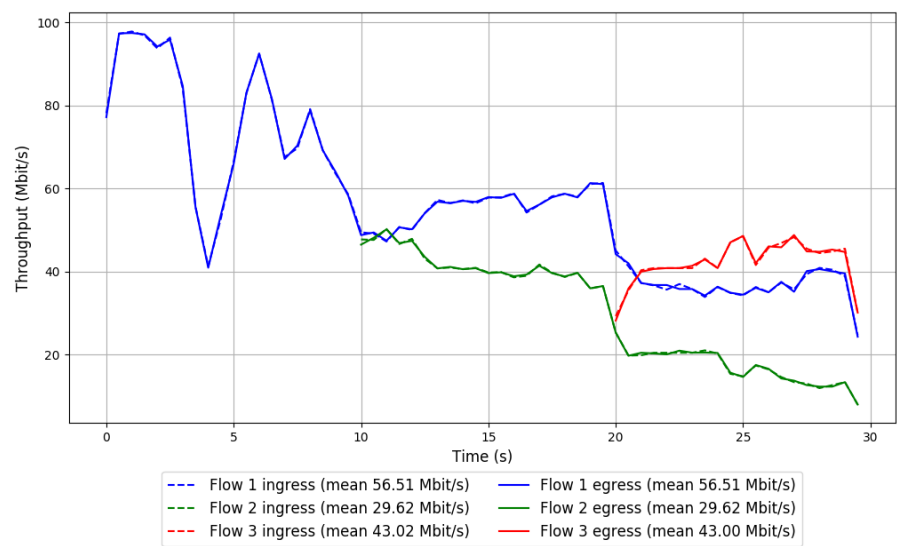
-- Flow 3:

Average throughput: 43.00 Mbit/s

95th percentile per-packet one-way delay: 14.075 ms

Loss rate: 0.14%

Run 3: Report of Indigo — Data Link

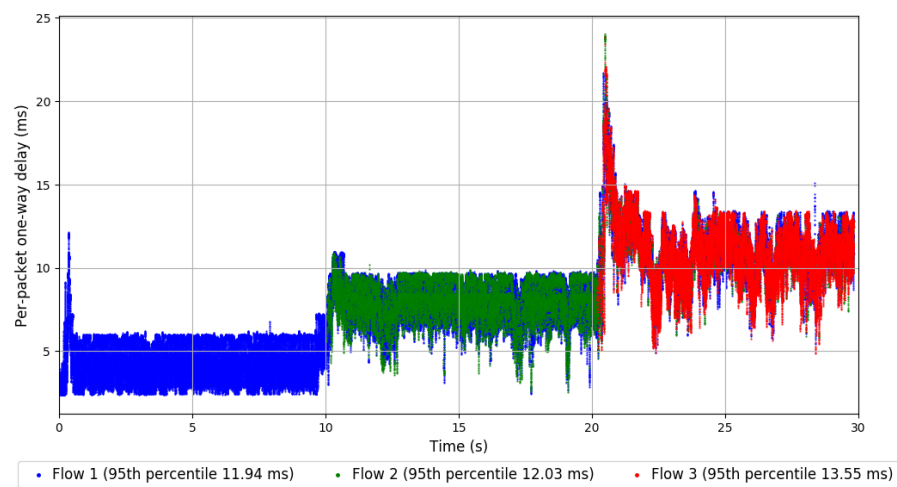
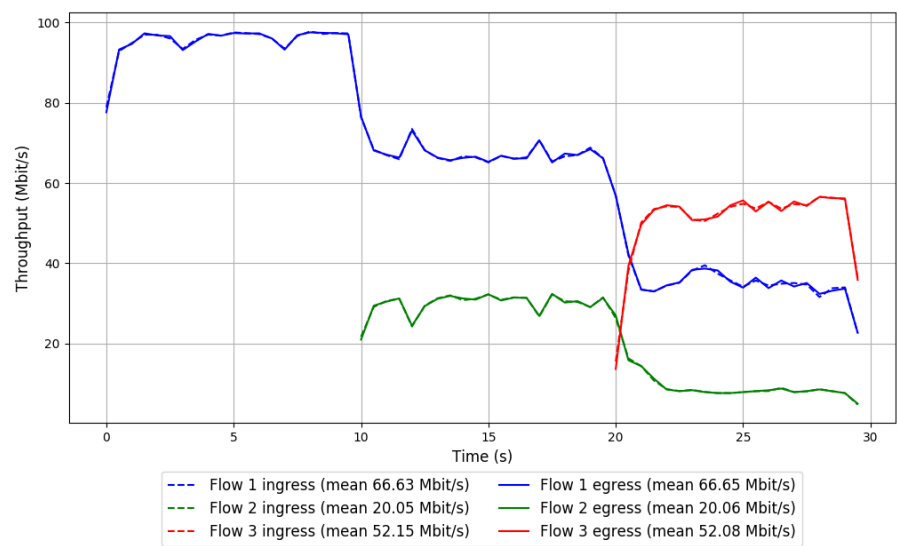


Run 4: Statistics of Indigo

Start at: 2018-01-10 00:34:59
End at: 2018-01-10 00:35:29
Local clock offset: -0.244 ms
Remote clock offset: -0.119 ms

```
# Below is generated by plot.py at 2018-01-10 05:51:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.77 Mbit/s
95th percentile per-packet one-way delay: 12.646 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 66.65 Mbit/s
95th percentile per-packet one-way delay: 11.944 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 20.06 Mbit/s
95th percentile per-packet one-way delay: 12.032 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 52.08 Mbit/s
95th percentile per-packet one-way delay: 13.546 ms
Loss rate: 0.16%
```

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2018-01-10 00:51:59

End at: 2018-01-10 00:52:29

Local clock offset: -0.251 ms

Remote clock offset: 0.061 ms

Below is generated by plot.py at 2018-01-10 05:51:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 96.62 Mbit/s

95th percentile per-packet one-way delay: 10.996 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 65.67 Mbit/s

95th percentile per-packet one-way delay: 10.503 ms

Loss rate: 0.02%

-- Flow 2:

Average throughput: 30.90 Mbit/s

95th percentile per-packet one-way delay: 11.081 ms

Loss rate: 0.05%

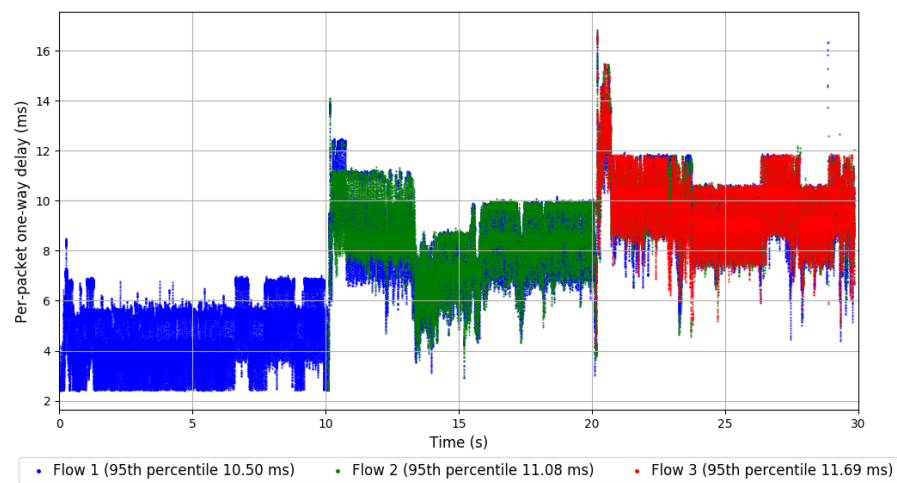
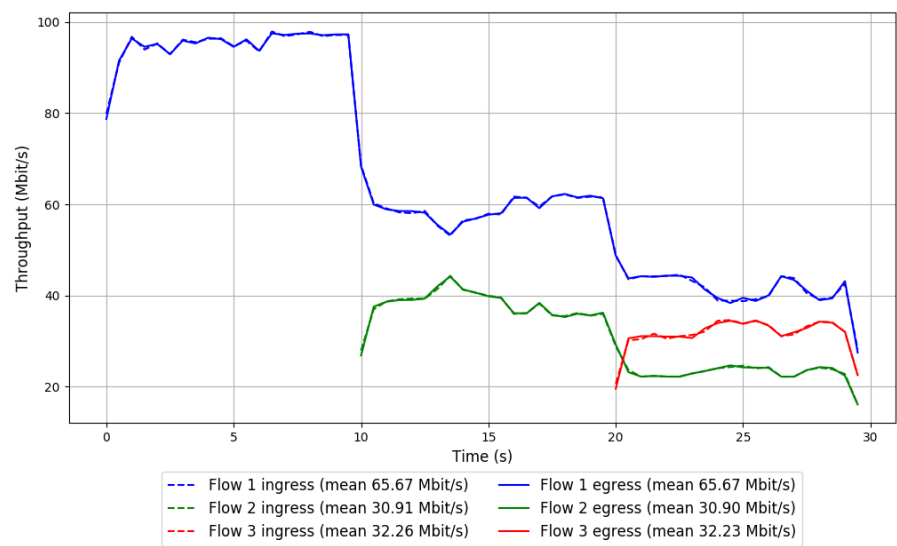
-- Flow 3:

Average throughput: 32.23 Mbit/s

95th percentile per-packet one-way delay: 11.690 ms

Loss rate: 0.13%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2018-01-10 01:08:57

End at: 2018-01-10 01:09:27

Local clock offset: -0.305 ms

Remote clock offset: 0.256 ms

Below is generated by plot.py at 2018-01-10 05:51:16

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.00 Mbit/s

95th percentile per-packet one-way delay: 10.794 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 79.54 Mbit/s

95th percentile per-packet one-way delay: 10.514 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 9.93 Mbit/s

95th percentile per-packet one-way delay: 11.127 ms

Loss rate: 0.00%

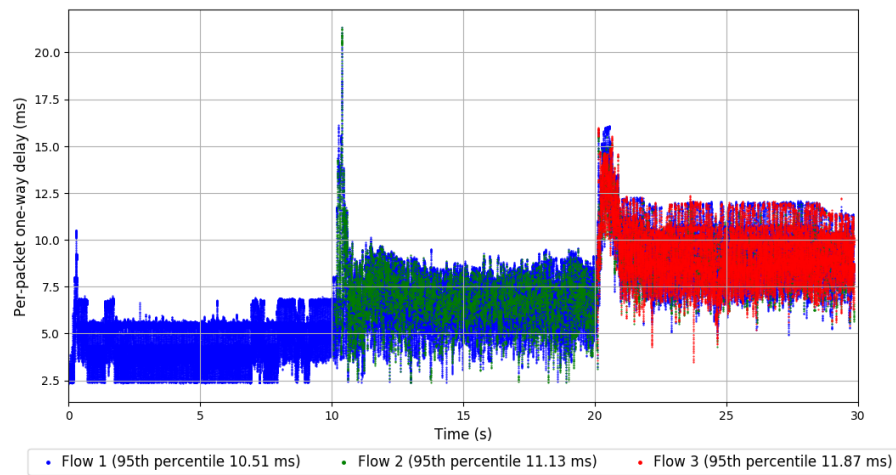
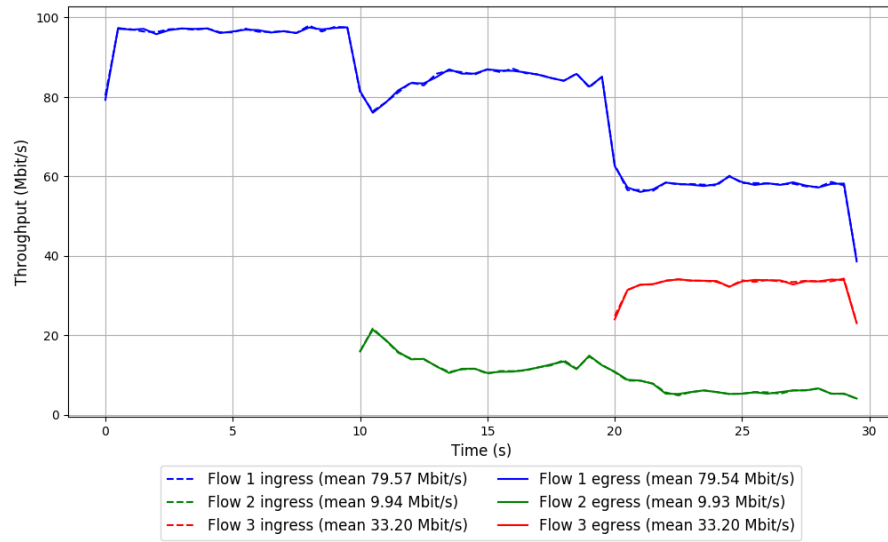
-- Flow 3:

Average throughput: 33.20 Mbit/s

95th percentile per-packet one-way delay: 11.870 ms

Loss rate: 0.13%

Run 6: Report of Indigo — Data Link

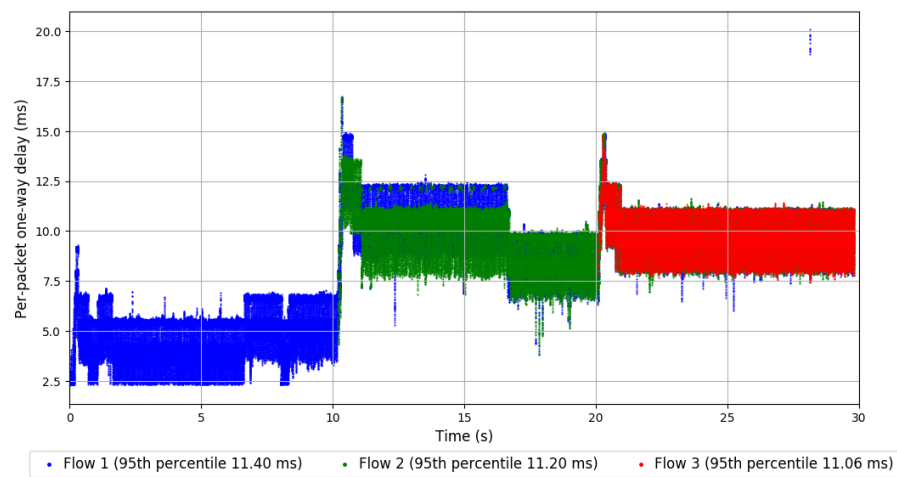
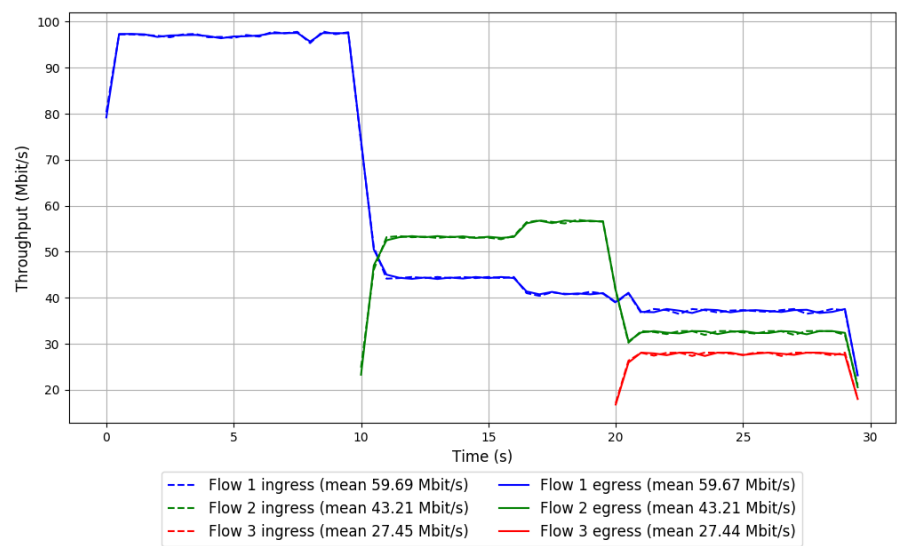


Run 7: Statistics of Indigo

Start at: 2018-01-10 01:25:53
End at: 2018-01-10 01:26:23
Local clock offset: -0.281 ms
Remote clock offset: 0.455 ms

```
# Below is generated by plot.py at 2018-01-10 05:51:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.08 Mbit/s
95th percentile per-packet one-way delay: 11.230 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 59.67 Mbit/s
95th percentile per-packet one-way delay: 11.405 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 43.21 Mbit/s
95th percentile per-packet one-way delay: 11.197 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 27.44 Mbit/s
95th percentile per-packet one-way delay: 11.057 ms
Loss rate: 0.13%
```


Run 7: Report of Indigo — Data Link

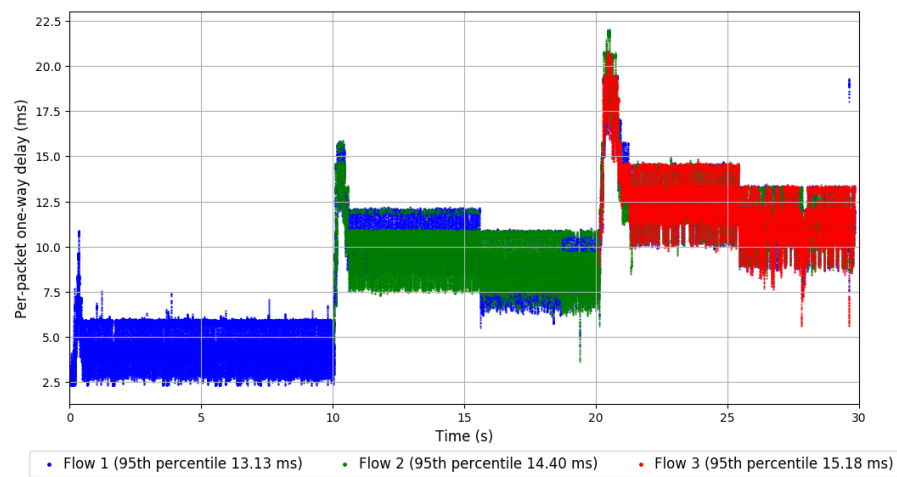
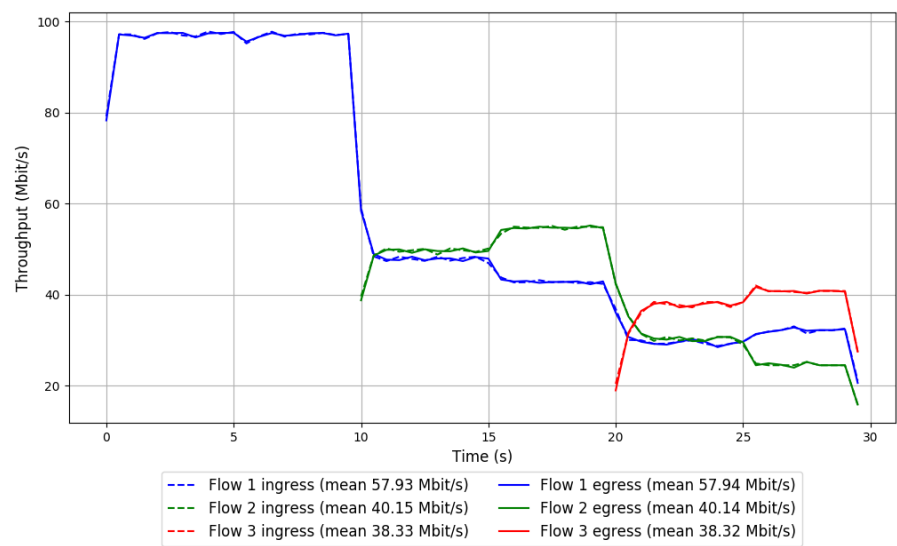


Run 8: Statistics of Indigo

Start at: 2018-01-10 01:42:51
End at: 2018-01-10 01:43:21
Local clock offset: -0.252 ms
Remote clock offset: 0.556 ms

Below is generated by plot.py at 2018-01-10 05:51:41
Datalink statistics
-- Total of 3 flows:
Average throughput: 97.08 Mbit/s
95th percentile per-packet one-way delay: 14.074 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 57.94 Mbit/s
95th percentile per-packet one-way delay: 13.135 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.14 Mbit/s
95th percentile per-packet one-way delay: 14.400 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 38.32 Mbit/s
95th percentile per-packet one-way delay: 15.179 ms
Loss rate: 0.16%

Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2018-01-10 01:59:50

End at: 2018-01-10 02:00:20

Local clock offset: -0.173 ms

Remote clock offset: 0.655 ms

Below is generated by plot.py at 2018-01-10 05:51:41

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.05 Mbit/s

95th percentile per-packet one-way delay: 11.952 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 61.59 Mbit/s

95th percentile per-packet one-way delay: 10.898 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 41.49 Mbit/s

95th percentile per-packet one-way delay: 12.109 ms

Loss rate: 0.04%

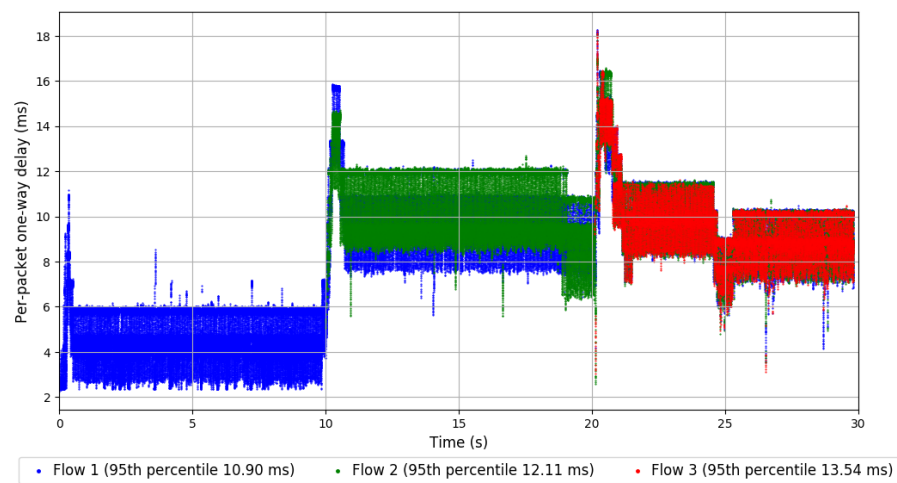
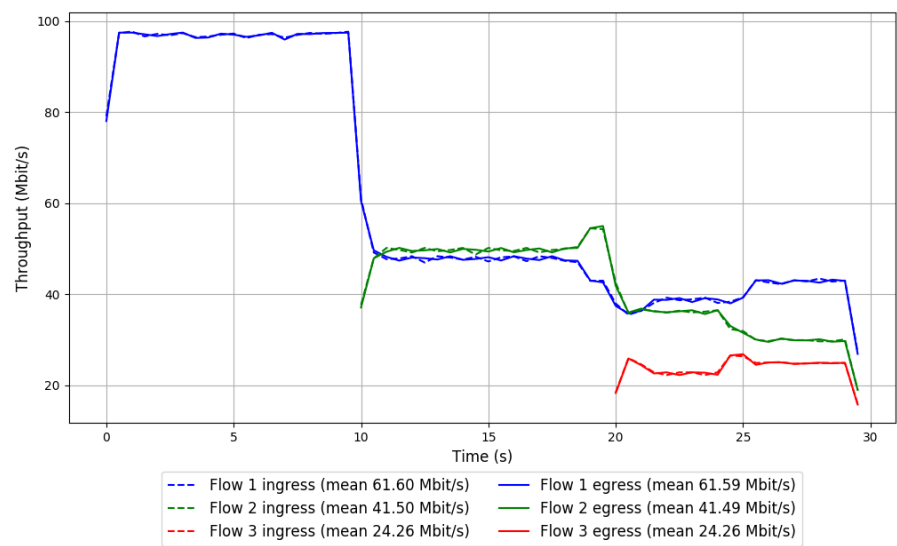
-- Flow 3:

Average throughput: 24.26 Mbit/s

95th percentile per-packet one-way delay: 13.540 ms

Loss rate: 0.13%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2018-01-10 02:16:48

End at: 2018-01-10 02:17:18

Local clock offset: -0.114 ms

Remote clock offset: 0.697 ms

Below is generated by plot.py at 2018-01-10 05:51:43

Datalink statistics

-- Total of 3 flows:

Average throughput: 97.03 Mbit/s

95th percentile per-packet one-way delay: 11.367 ms

Loss rate: 0.04%

-- Flow 1:

Average throughput: 69.15 Mbit/s

95th percentile per-packet one-way delay: 10.272 ms

Loss rate: 0.03%

-- Flow 2:

Average throughput: 26.35 Mbit/s

95th percentile per-packet one-way delay: 11.413 ms

Loss rate: 0.01%

-- Flow 3:

Average throughput: 32.42 Mbit/s

95th percentile per-packet one-way delay: 17.449 ms

Loss rate: 0.11%

Run 10: Report of Indigo — Data Link

