

Pantheon Report

Generated at 2019-02-12 03:41:17 (UTC).

Data path: Colombia cellular on ppp0 (*remote*) → AWS Brazil 2 on ens5 (*local*).

Repeated the test of 21 congestion control schemes 3 times.

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

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

System info:

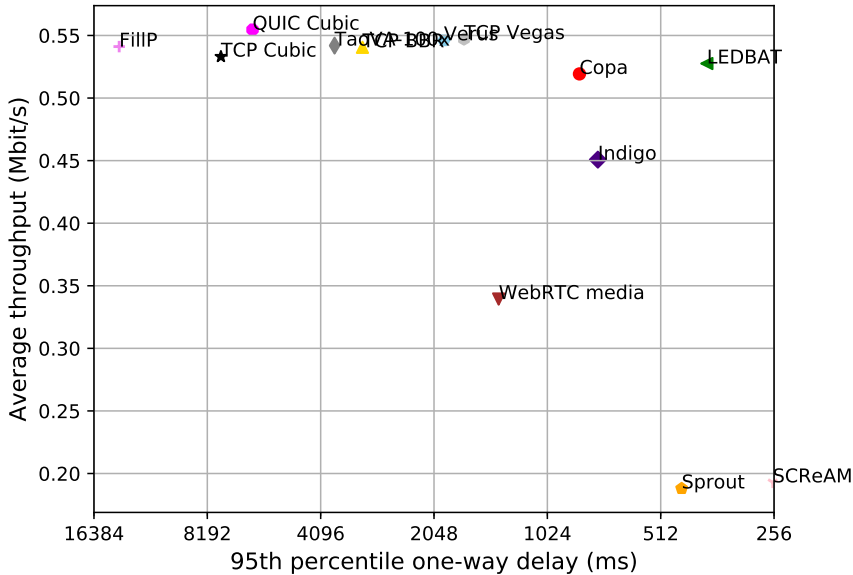
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

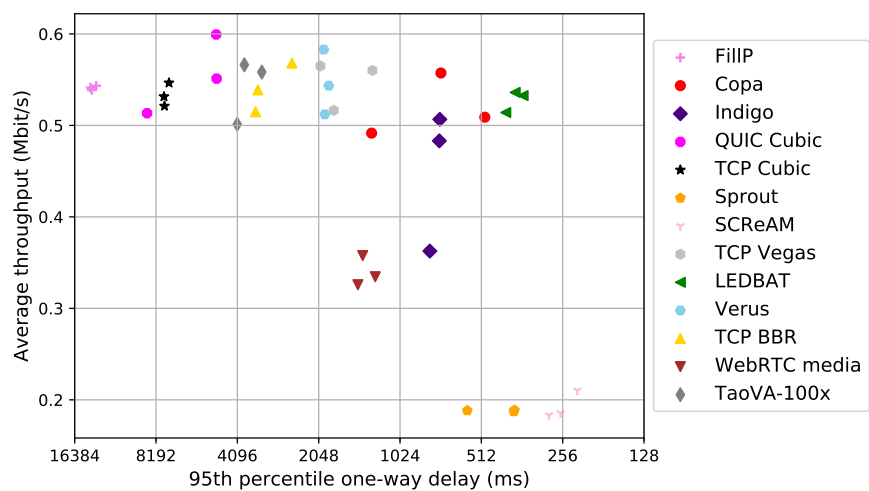
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
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/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
```

```
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```

test from Colombia cellular to AWS Brazil 2, 3 runs of 30s each per scheme
 3 flows with 10s interval between flows (mean of all runs by scheme)



test from Colombia cellular to AWS Brazil 2, 3 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	3	0.35	0.27	0.07	3162.34	3193.00	2671.03	4.13	8.09	31.86
Copa	3	0.29	0.27	0.15	802.20	840.48	851.71	2.48	4.78	5.71
TCP Cubic	3	0.51	0.03	0.00	7500.93	7817.56	7512.70	30.52	40.52	90.78
FillP	3	0.54	0.01	0.00	14118.28	7671.12	6101.69	22.47	0.00	80.19
FillP-Sheep	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indigo	3	0.23	0.23	0.23	684.75	726.76	840.17	0.47	2.31	2.45
Indigo-MusesC3	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indigo-MusesC5	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indigo-MusesD	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indigo-MusesT	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LEDBAT	3	0.28	0.27	0.23	347.91	395.02	386.62	0.23	1.22	4.64
PCC-Allegro	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCC-Expr	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QUIC Cubic	3	0.54	0.02	0.00	6202.13	6355.41	6374.90	22.21	13.02	58.33
SCReAM	3	0.08	0.11	0.11	244.09	265.16	265.89	0.66	1.01	1.83
Sprout	3	0.09	0.10	0.10	755.68	332.86	463.31	0.76	1.46	2.18
TaoVA-100x	3	0.34	0.26	0.17	2970.22	3829.78	3960.49	4.19	23.15	52.13
TCP Vegas	3	0.34	0.23	0.22	1487.85	1609.46	1781.21	2.06	4.85	20.48
Verus	3	0.53	0.01	0.02	1928.56	1843.35	1866.24	5.64	7.36	12.38
PCC-Vivace	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WebRTC media	3	0.14	0.12	0.08	1318.86	1359.33	1398.25	0.65	1.00	5.00

Run 1: Statistics of TCP BBR

Start at: 2019-02-12 02:38:07

End at: 2019-02-12 02:38:37

Local clock offset: -6.87 ms

Remote clock offset: 8.245 ms

Below is generated by plot.py at 2019-02-12 03:40:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 3437.784 ms

Loss rate: 3.98%

-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 3428.588 ms

Loss rate: 2.24%

-- Flow 2:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 3439.303 ms

Loss rate: 5.55%

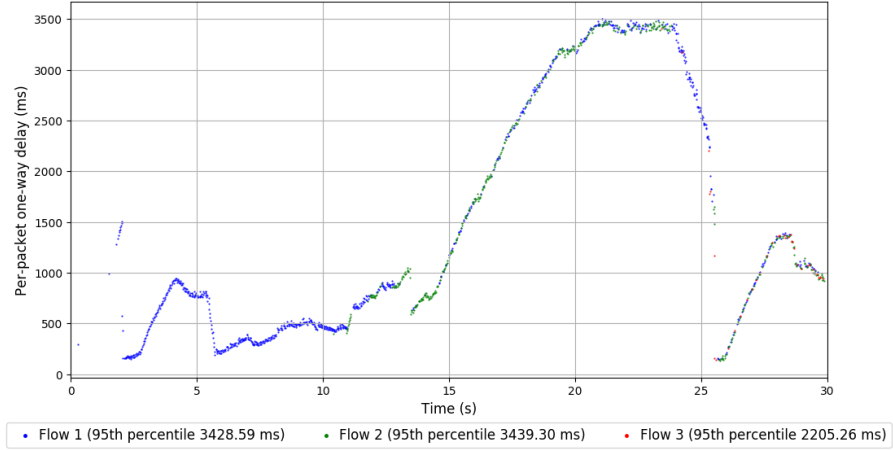
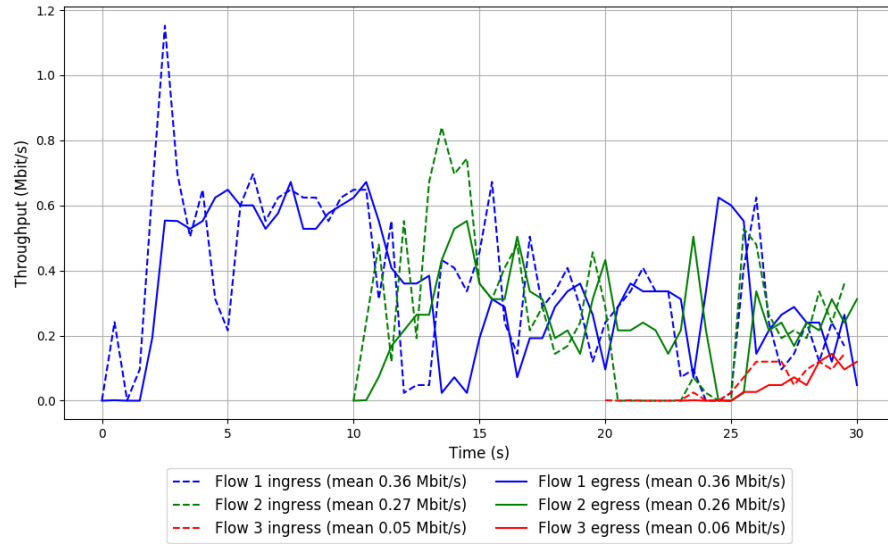
-- Flow 3:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 2205.257 ms

Loss rate: 24.17%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-02-12 03:03:59

End at: 2019-02-12 03:04:29

Local clock offset: -7.539 ms

Remote clock offset: 3.244 ms

Below is generated by plot.py at 2019-02-12 03:40:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 2572.513 ms

Loss rate: 11.22%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 2548.614 ms

Loss rate: 8.14%

-- Flow 2:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 2632.633 ms

Loss rate: 12.65%

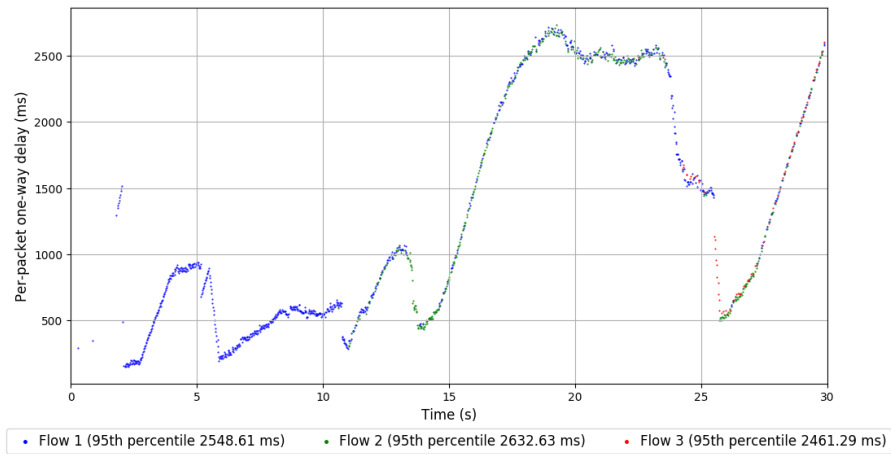
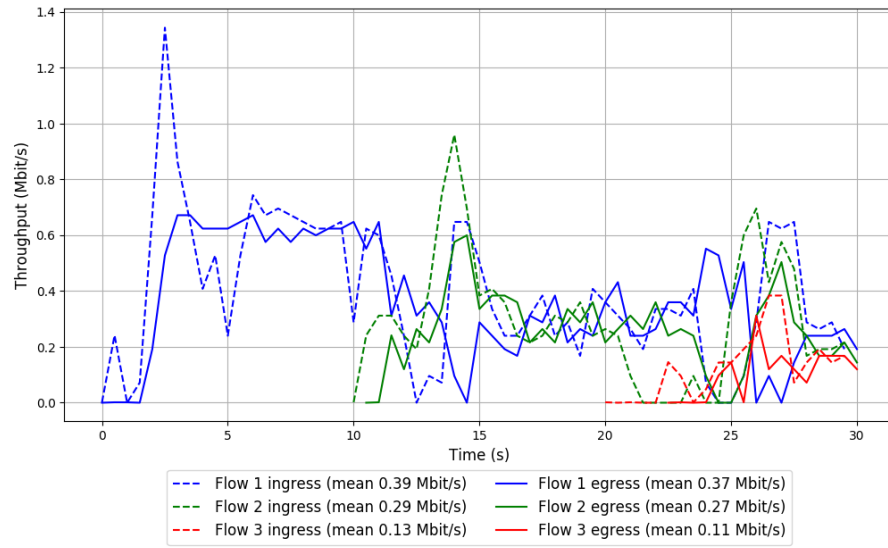
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 2461.293 ms

Loss rate: 33.57%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-02-12 03:30:00

End at: 2019-02-12 03:30:30

Local clock offset: -7.478 ms

Remote clock offset: 7.766 ms

Below is generated by plot.py at 2019-02-12 03:40:34

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 3507.175 ms

Loss rate: 4.46%

-- Flow 1:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 3509.824 ms

Loss rate: 2.01%

-- Flow 2:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 3507.066 ms

Loss rate: 6.07%

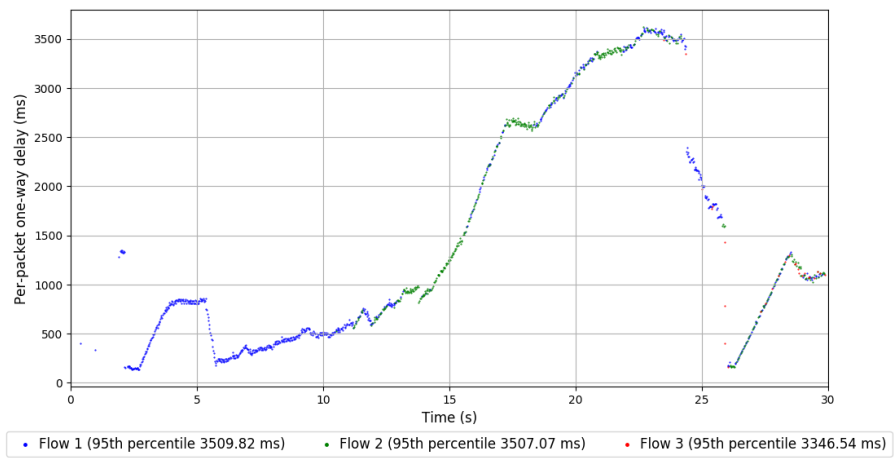
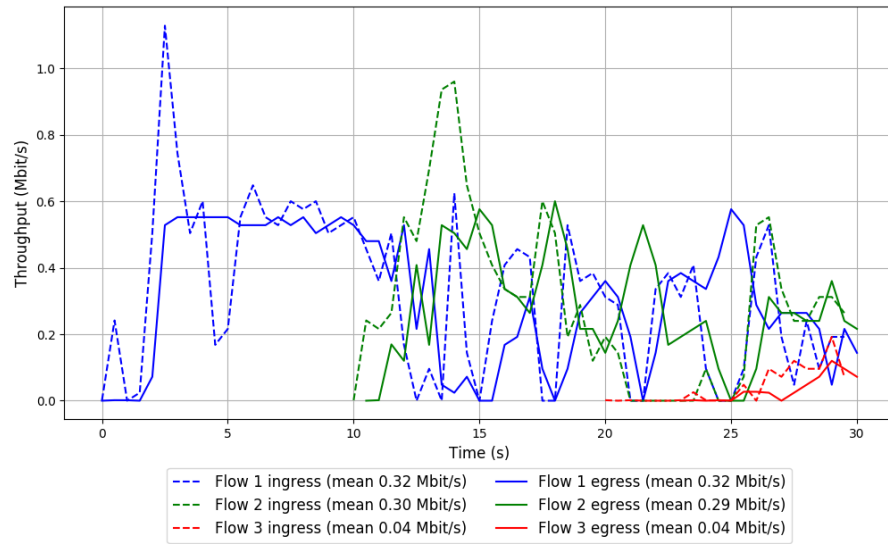
-- Flow 3:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 3346.537 ms

Loss rate: 37.83%

Run 3: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-02-12 02:44:14

End at: 2019-02-12 02:44:44

Local clock offset: -7.01 ms

Remote clock offset: 3.397 ms

Below is generated by plot.py at 2019-02-12 03:40:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 497.258 ms

Loss rate: 2.19%

-- Flow 1:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 507.714 ms

Loss rate: 1.71%

-- Flow 2:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 483.873 ms

Loss rate: 2.61%

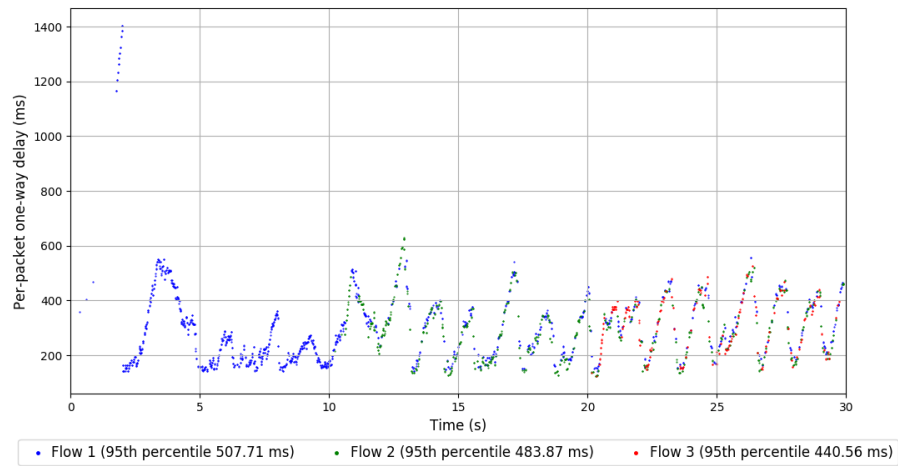
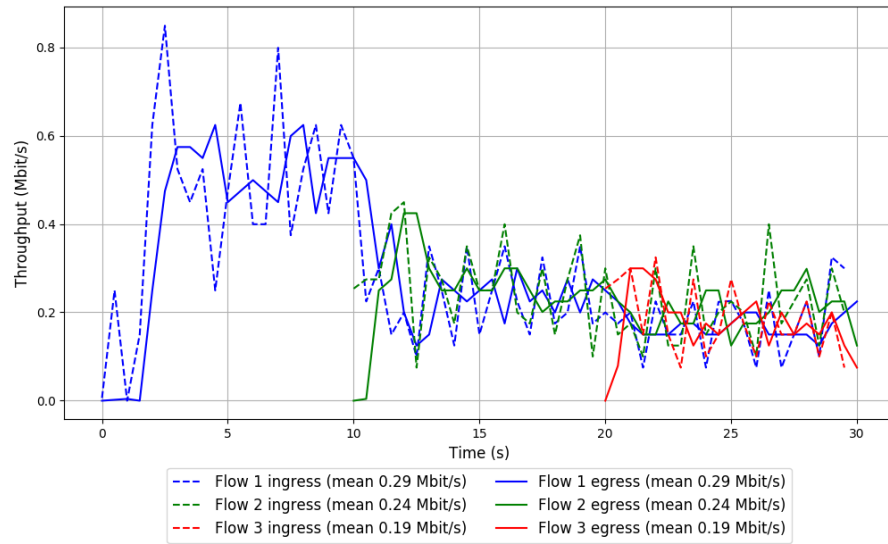
-- Flow 3:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 440.557 ms

Loss rate: 3.35%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-02-12 03:10:09

End at: 2019-02-12 03:10:39

Local clock offset: -7.37 ms

Remote clock offset: 2.699 ms

Below is generated by plot.py at 2019-02-12 03:40:35

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 1304.670 ms

Loss rate: 5.52%

-- Flow 1:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 1198.100 ms

Loss rate: 3.32%

-- Flow 2:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 1314.931 ms

Loss rate: 7.49%

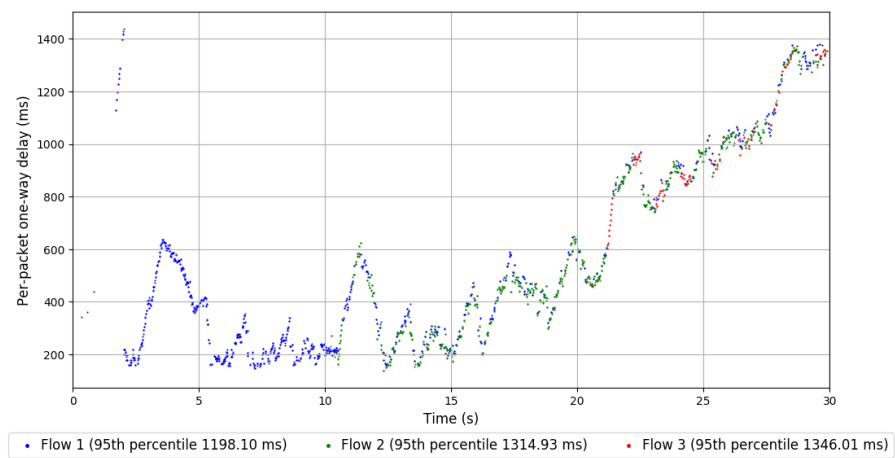
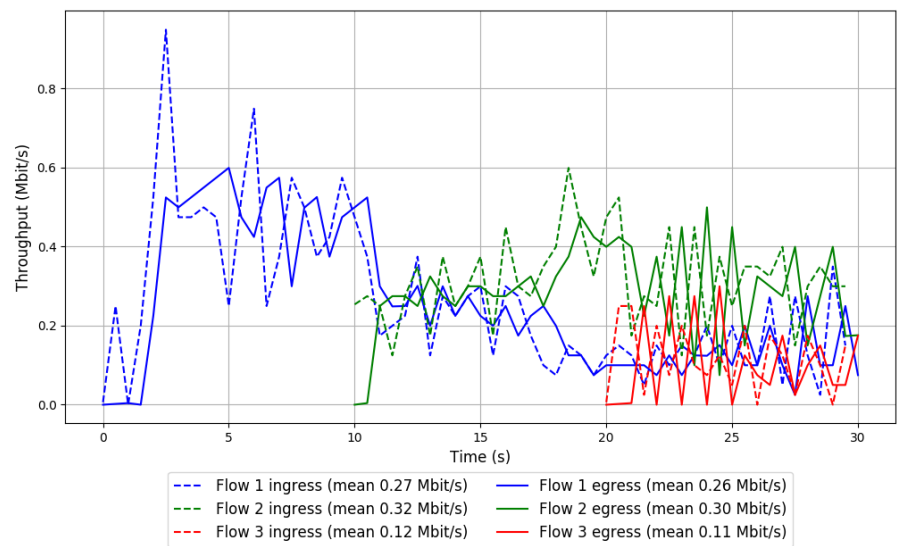
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 1346.007 ms

Loss rate: 9.76%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-02-12 03:36:09

End at: 2019-02-12 03:36:39

Local clock offset: -7.517 ms

Remote clock offset: 2.449 ms

Below is generated by plot.py at 2019-02-12 03:40:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 722.636 ms

Loss rate: 3.16%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 700.793 ms

Loss rate: 2.40%

-- Flow 2:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 722.636 ms

Loss rate: 4.25%

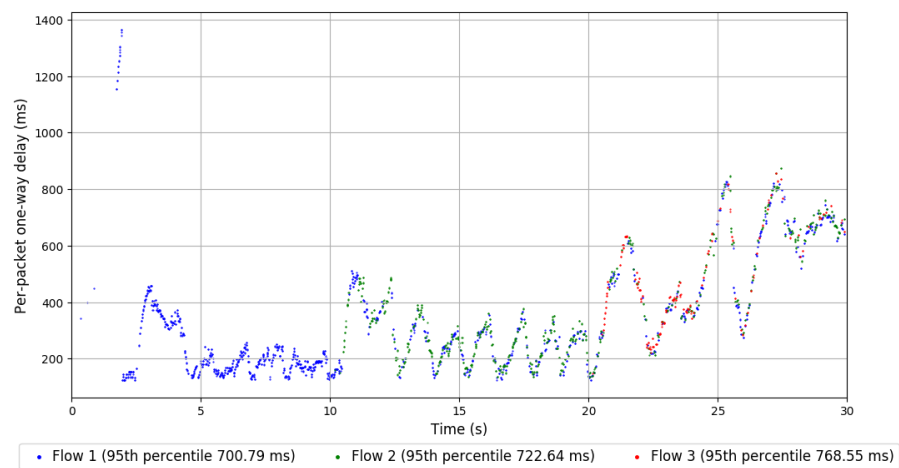
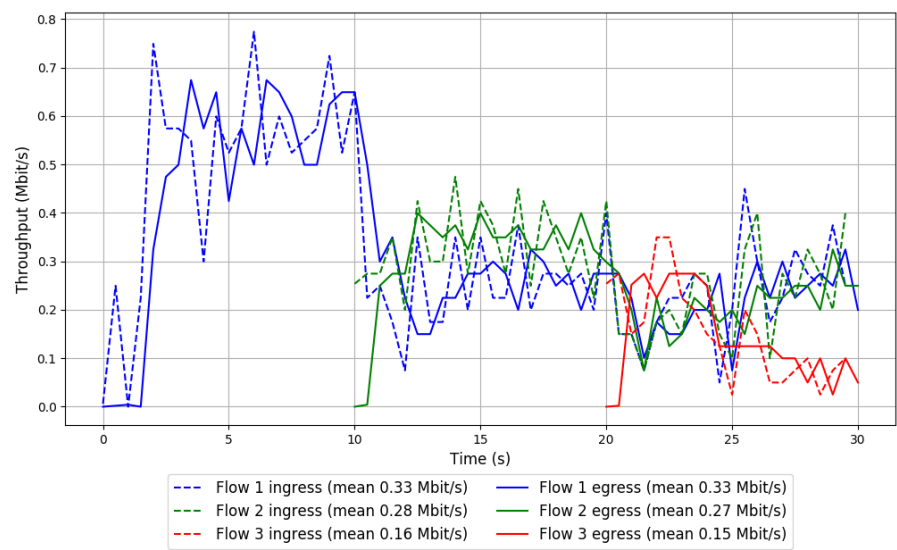
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 768.552 ms

Loss rate: 4.03%

Run 3: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-02-12 02:43:01

End at: 2019-02-12 02:43:31

Local clock offset: -7.004 ms

Remote clock offset: 8.698 ms

Below is generated by plot.py at 2019-02-12 03:40:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 7656.685 ms

Loss rate: 31.21%

-- Flow 1:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 7625.179 ms

Loss rate: 30.69%

-- Flow 2:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 7930.524 ms

Loss rate: 41.55%

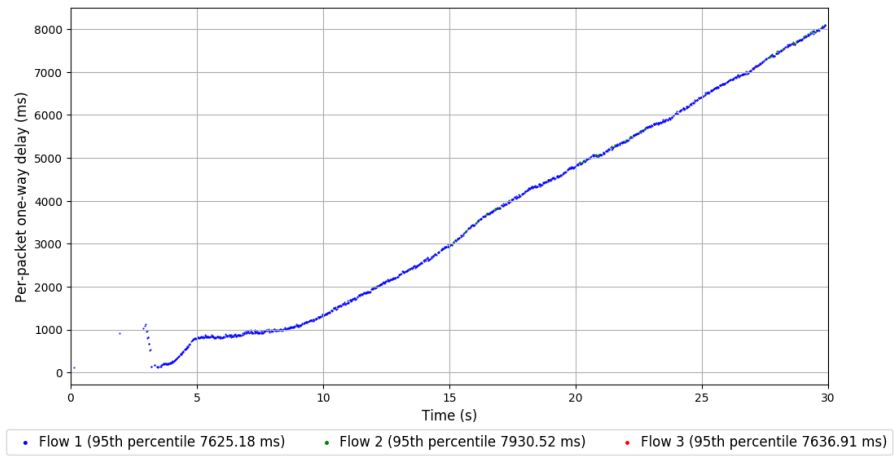
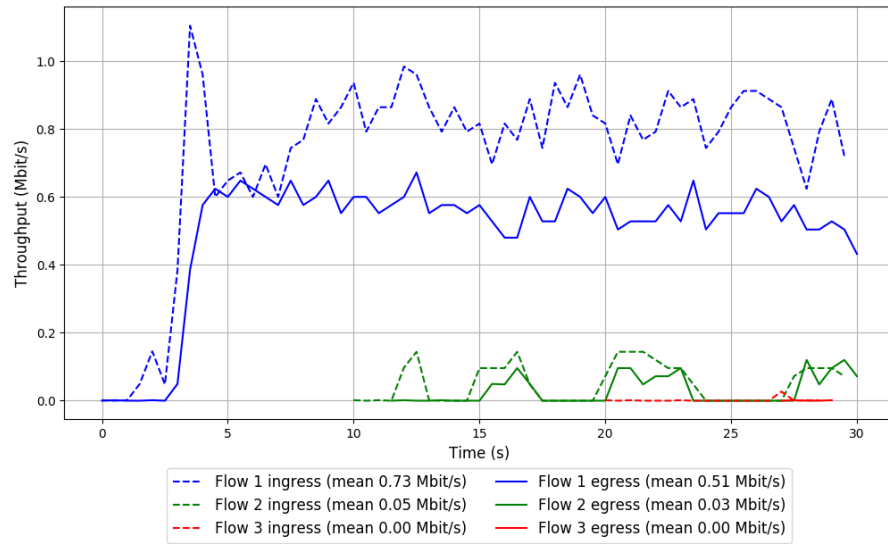
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7636.912 ms

Loss rate: 91.06%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-02-12 03:08:55

End at: 2019-02-12 03:09:25

Local clock offset: -7.393 ms

Remote clock offset: 2.821 ms

Below is generated by plot.py at 2019-02-12 03:40:36

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 7622.928 ms

Loss rate: 31.42%

-- Flow 1:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 7577.828 ms

Loss rate: 30.86%

-- Flow 2:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 7832.285 ms

Loss rate: 42.23%

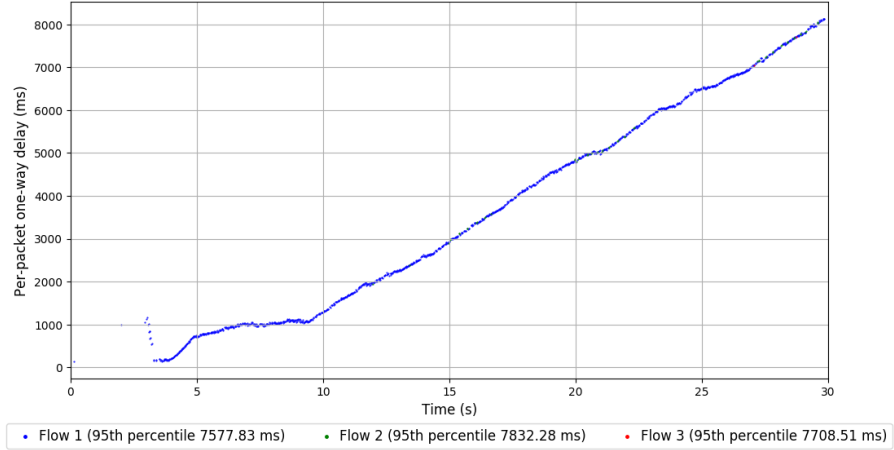
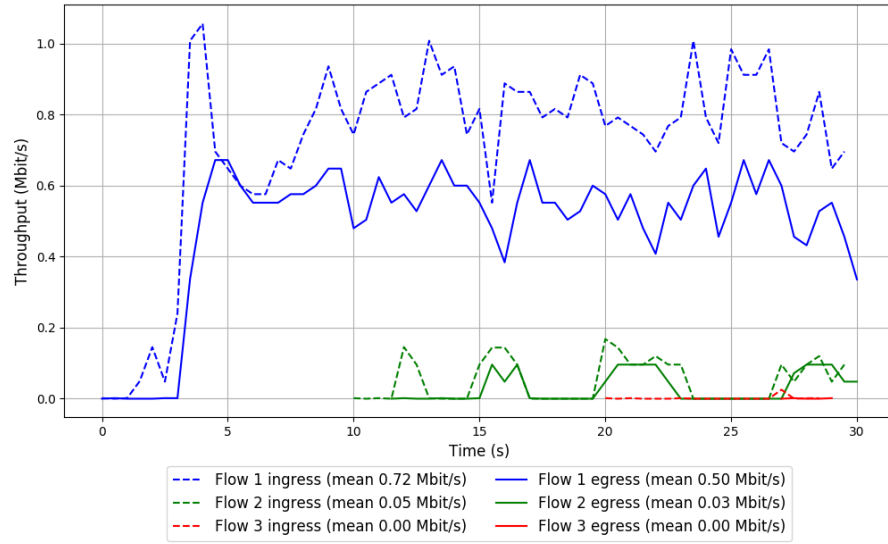
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7708.507 ms

Loss rate: 90.64%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2019-02-12 03:34:54

End at: 2019-02-12 03:35:25

Local clock offset: -6.776 ms

Remote clock offset: 2.492 ms

Below is generated by plot.py at 2019-02-12 03:40:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 7335.241 ms

Loss rate: 30.44%

-- Flow 1:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 7299.777 ms

Loss rate: 30.02%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 7689.857 ms

Loss rate: 37.77%

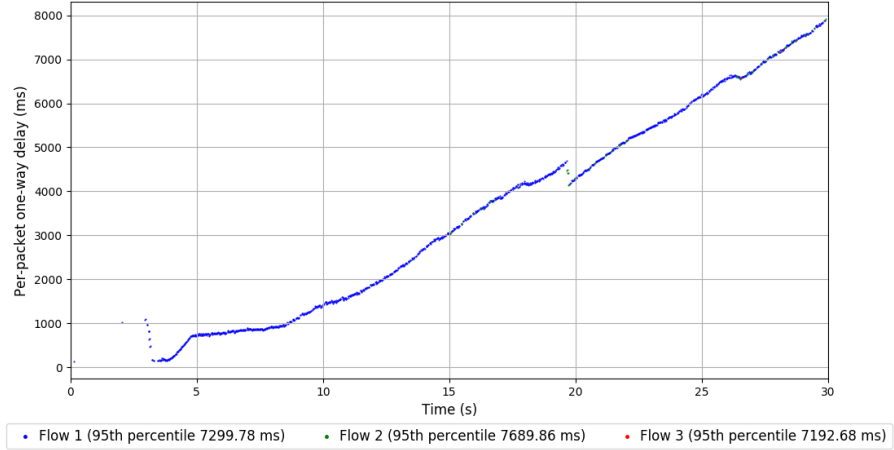
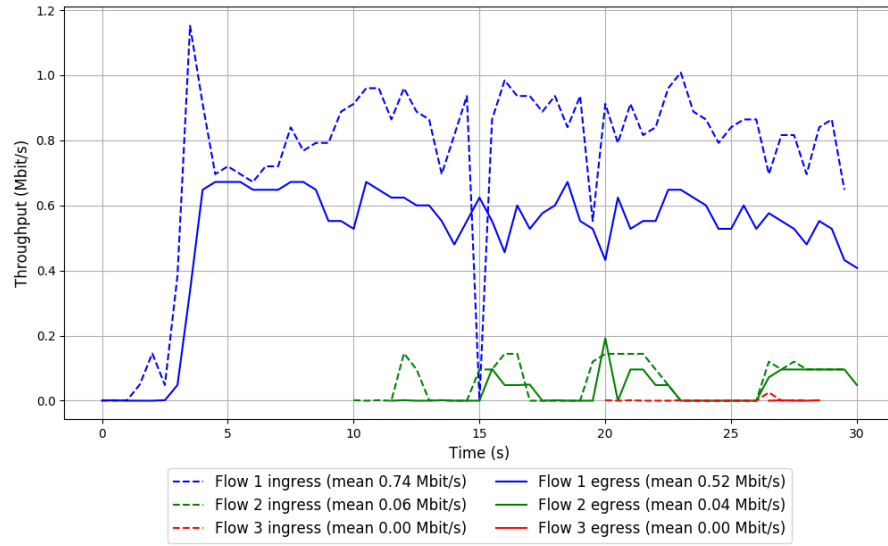
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7192.681 ms

Loss rate: 90.64%

Run 3: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-02-12 02:46:42

End at: 2019-02-12 02:47:12

Local clock offset: -7.067 ms

Remote clock offset: 3.39 ms

Below is generated by plot.py at 2019-02-12 03:40:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 13639.896 ms

Loss rate: 21.44%

-- Flow 1:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 13731.282 ms

Loss rate: 21.33%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 7370.894 ms

Loss rate: 0.00%

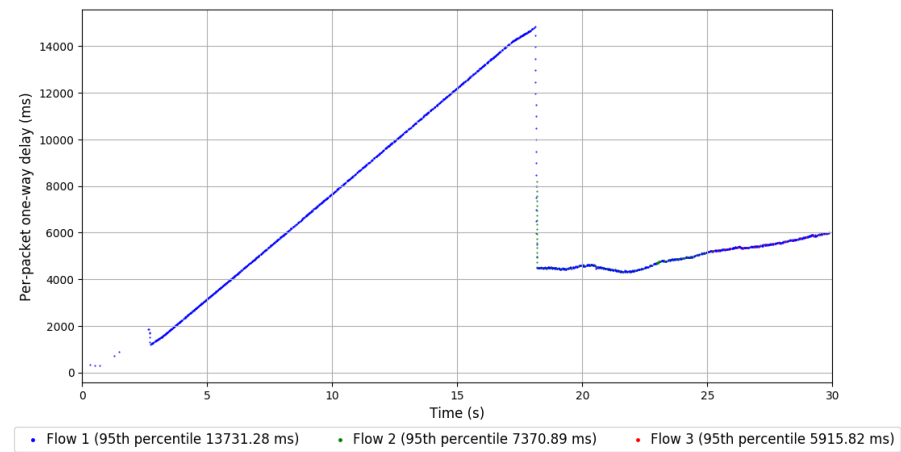
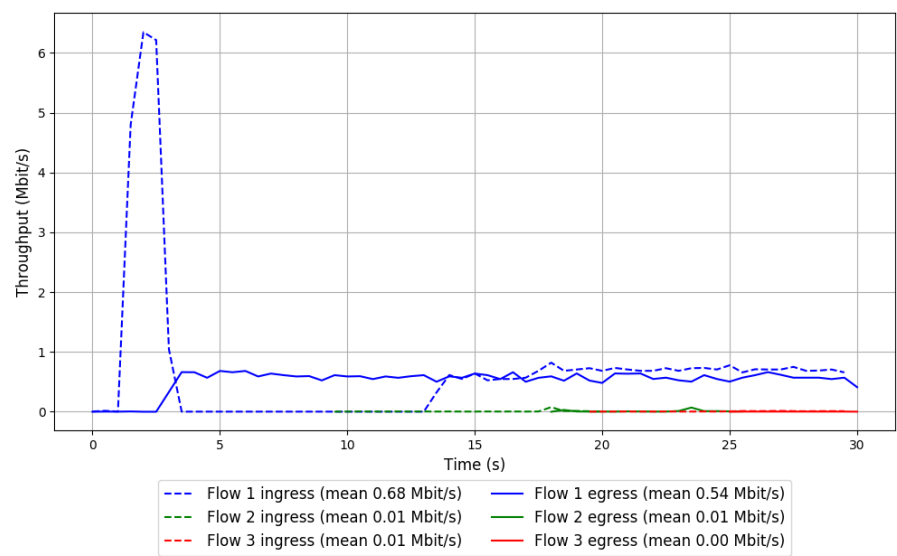
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 5915.817 ms

Loss rate: 79.55%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-02-12 03:12:37

End at: 2019-02-12 03:13:07

Local clock offset: -6.571 ms

Remote clock offset: 7.757 ms

Below is generated by plot.py at 2019-02-12 03:40:39

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 14319.490 ms

Loss rate: 23.50%

-- Flow 1:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 14382.478 ms

Loss rate: 23.40%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 7843.474 ms

Loss rate: 0.00%

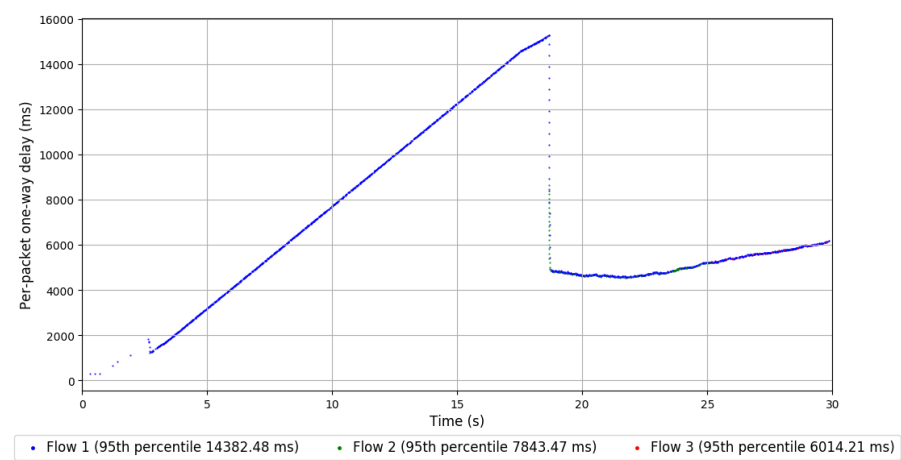
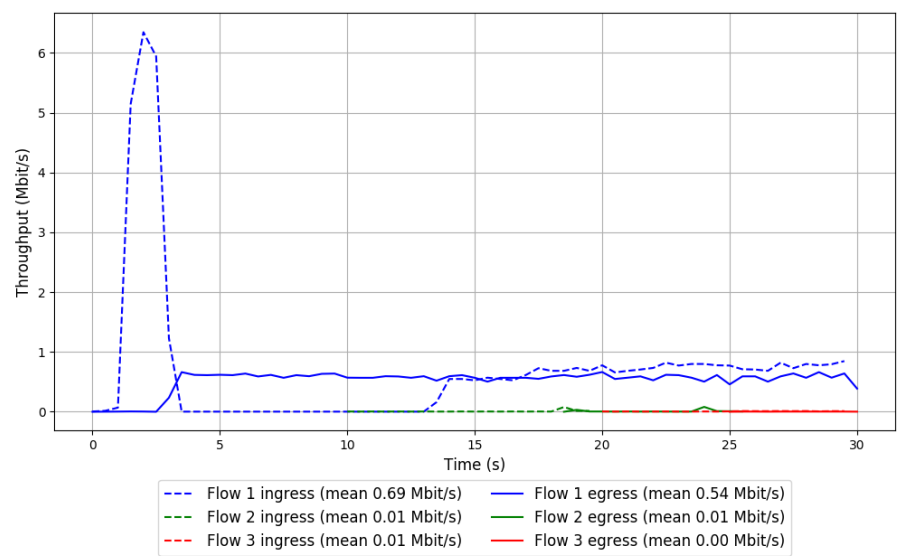
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 6014.212 ms

Loss rate: 80.11%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-02-12 03:38:36

End at: 2019-02-12 03:39:06

Local clock offset: -7.485 ms

Remote clock offset: 7.713 ms

Below is generated by plot.py at 2019-02-12 03:40:40

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 14169.984 ms

Loss rate: 22.77%

-- Flow 1:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 14241.085 ms

Loss rate: 22.67%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 7798.997 ms

Loss rate: 0.00%

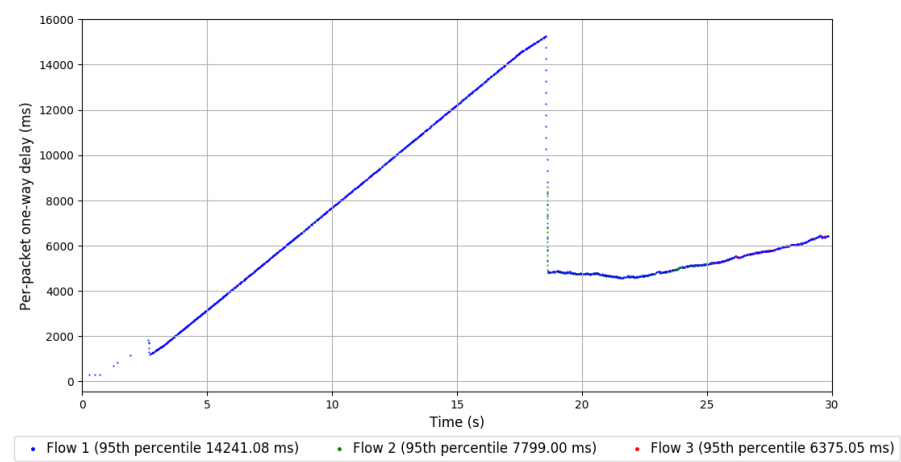
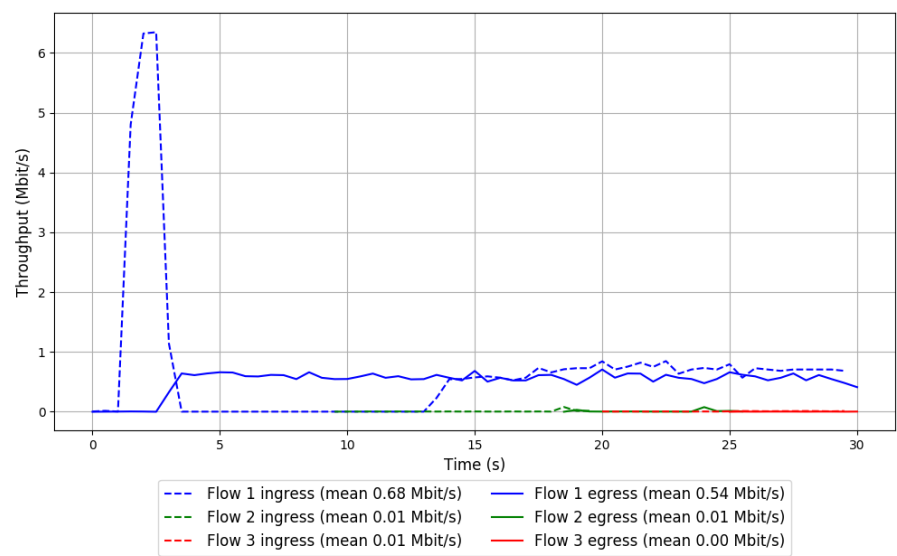
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 6375.049 ms

Loss rate: 80.92%

Run 3: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

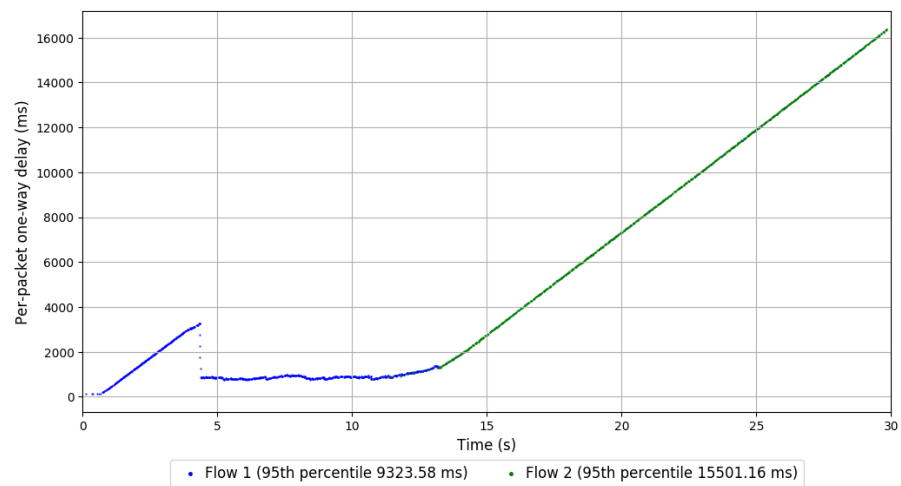
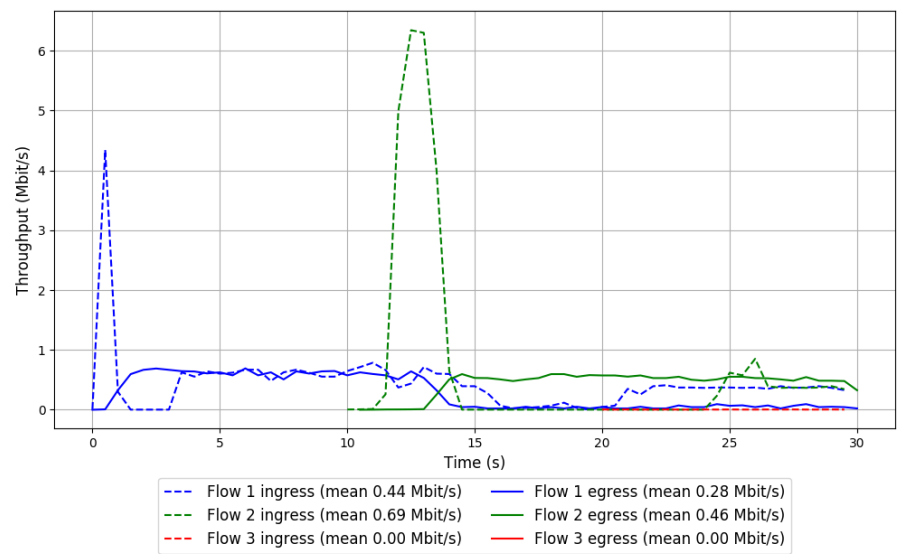
Start at: 2019-02-12 02:33:10

End at: 2019-02-12 02:33:40

Local clock offset: -6.046 ms

Remote clock offset: 8.143 ms

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

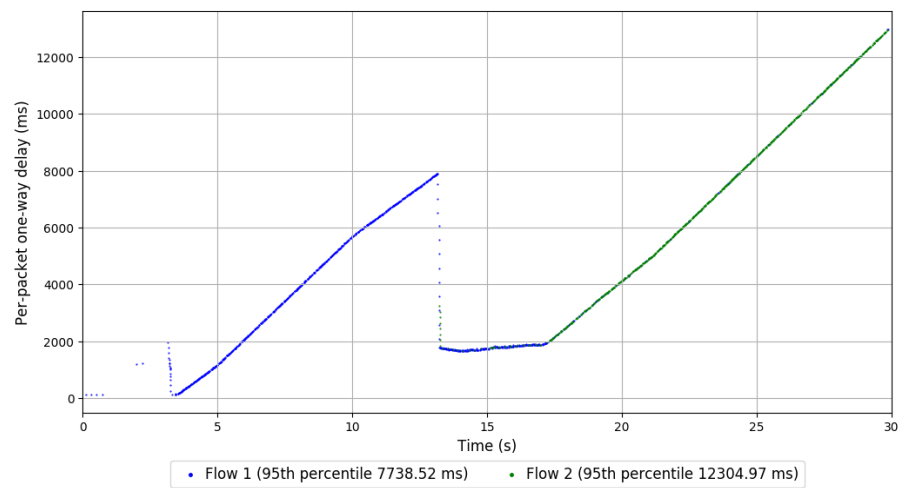
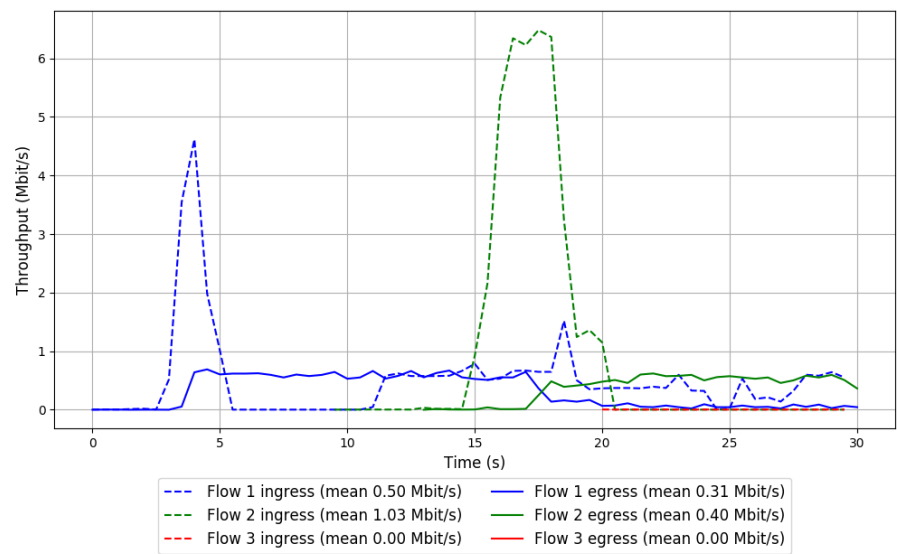
Start at: 2019-02-12 02:59:01

End at: 2019-02-12 02:59:31

Local clock offset: -6.714 ms

Remote clock offset: 8.659 ms

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

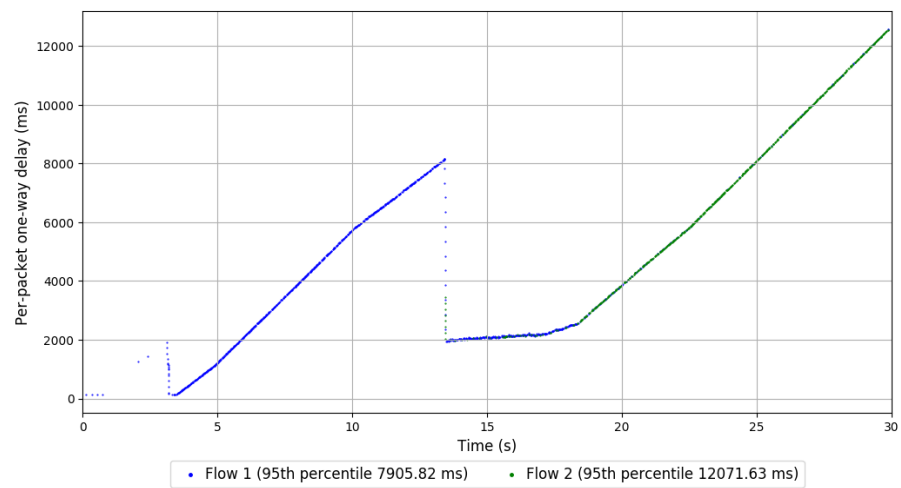
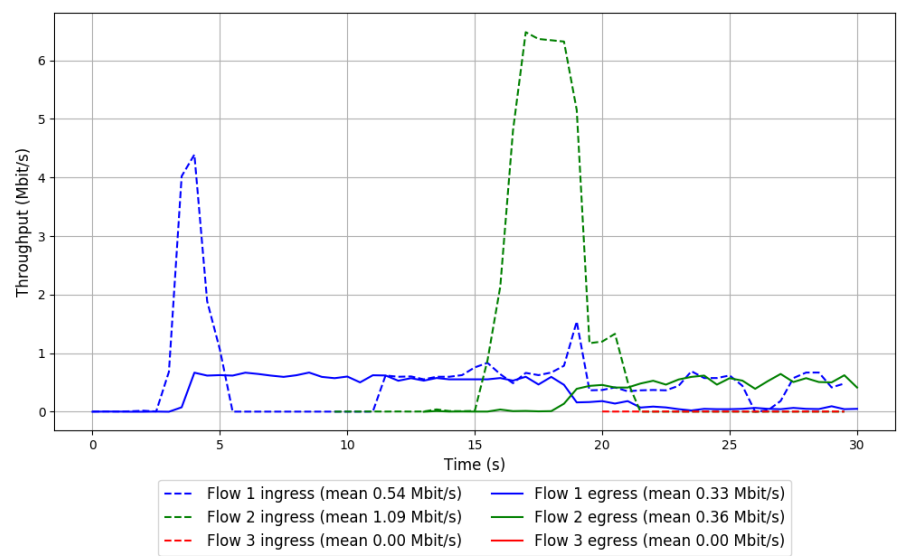
Start at: 2019-02-12 03:25:04

End at: 2019-02-12 03:25:34

Local clock offset: -7.458 ms

Remote clock offset: 7.355 ms

Run 3: Report of FillP-Sheep — Data Link

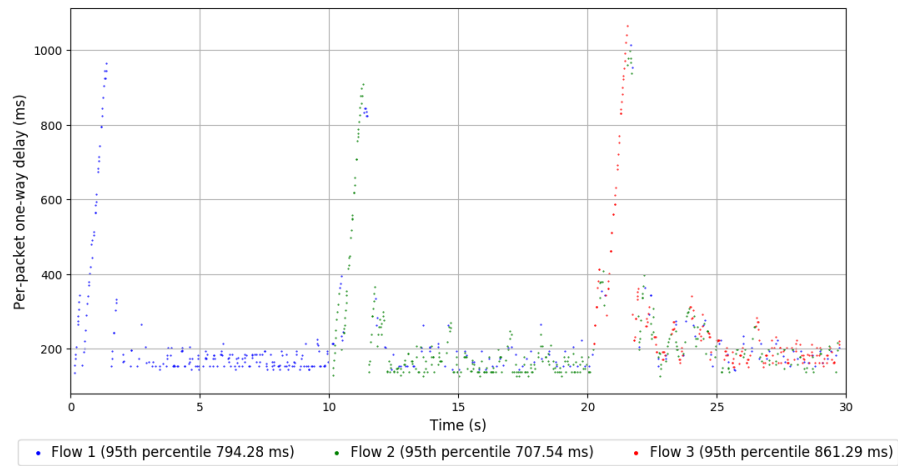
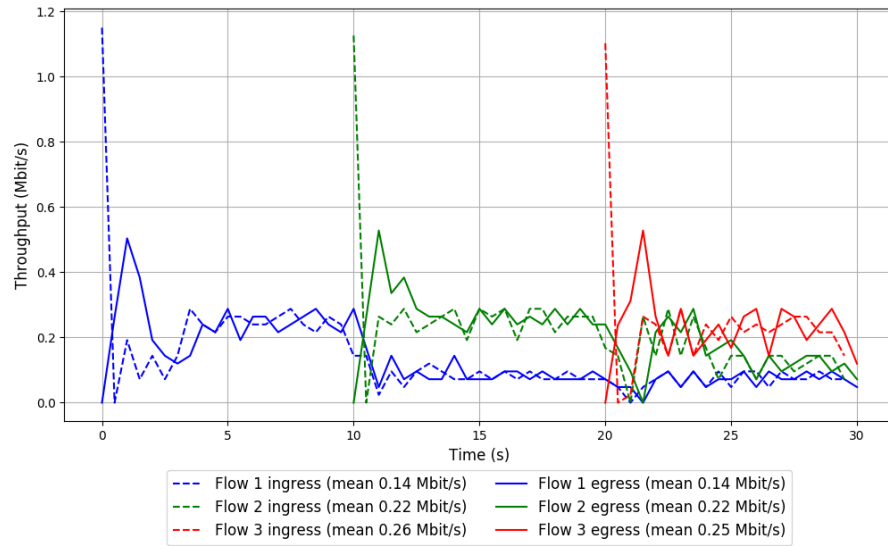


```
Run 1: Statistics of Indigo

Start at: 2019-02-12 02:29:30
End at: 2019-02-12 02:30:00
Local clock offset: -5.771 ms
Remote clock offset: 7.923 ms

# Below is generated by plot.py at 2019-02-12 03:40:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 794.281 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 794.281 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 707.542 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 861.290 ms
Loss rate: 1.95%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-02-12 02:55:20

End at: 2019-02-12 02:55:50

Local clock offset: -6.547 ms

Remote clock offset: 8.927 ms

Below is generated by plot.py at 2019-02-12 03:40:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 729.446 ms

Loss rate: 1.83%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 491.241 ms

Loss rate: 0.62%

-- Flow 2:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 859.592 ms

Loss rate: 4.85%

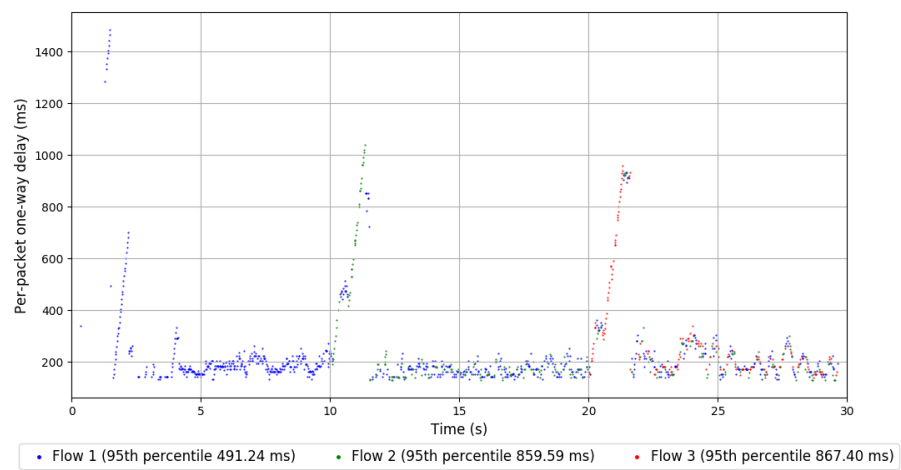
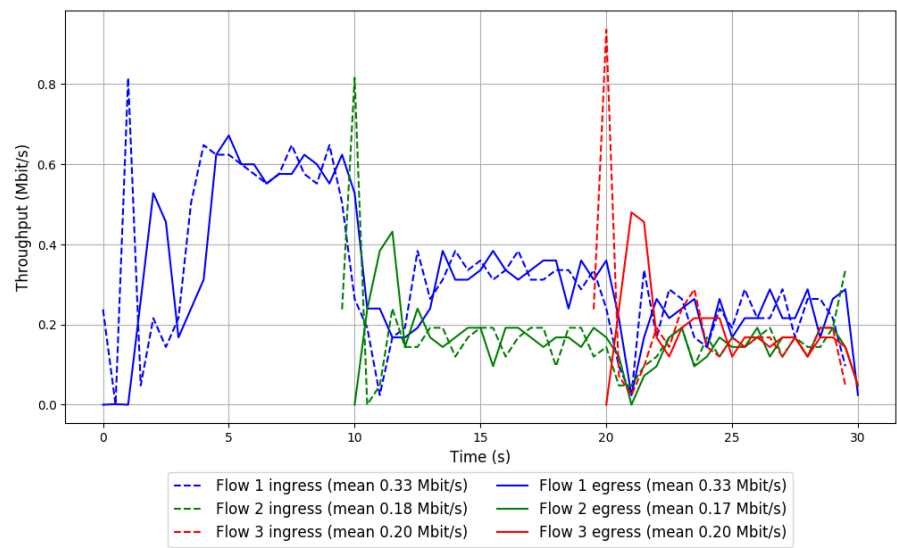
-- Flow 3:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 867.399 ms

Loss rate: 2.41%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-02-12 03:21:23

End at: 2019-02-12 03:21:54

Local clock offset: -7.363 ms

Remote clock offset: 7.48 ms

Below is generated by plot.py at 2019-02-12 03:40:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 732.268 ms

Loss rate: 1.09%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 768.727 ms

Loss rate: 0.20%

-- Flow 2:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 613.148 ms

Loss rate: 1.23%

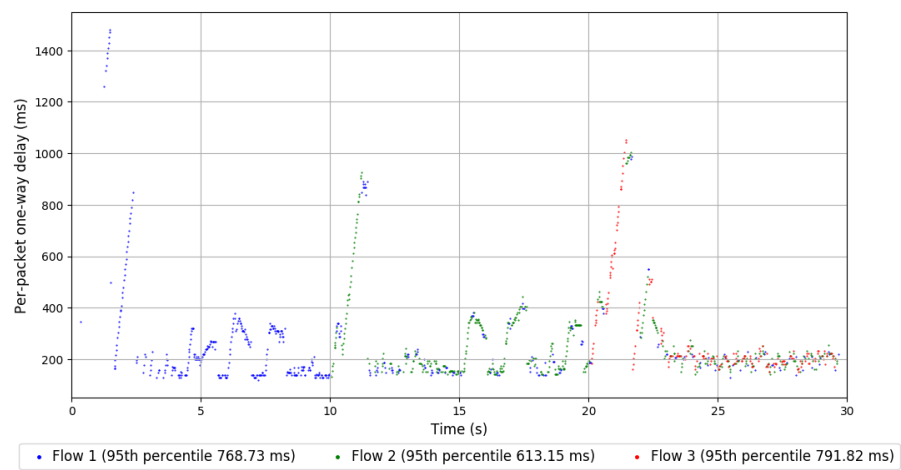
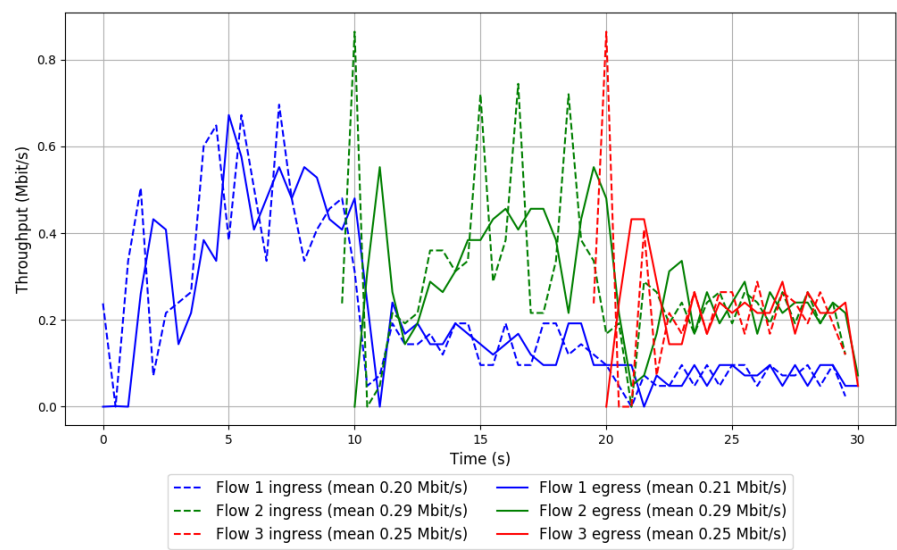
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 791.816 ms

Loss rate: 2.99%

Run 3: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

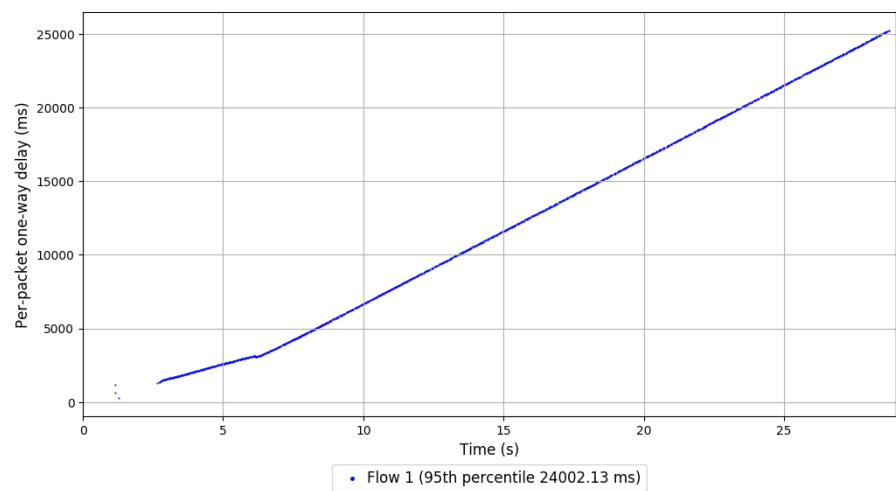
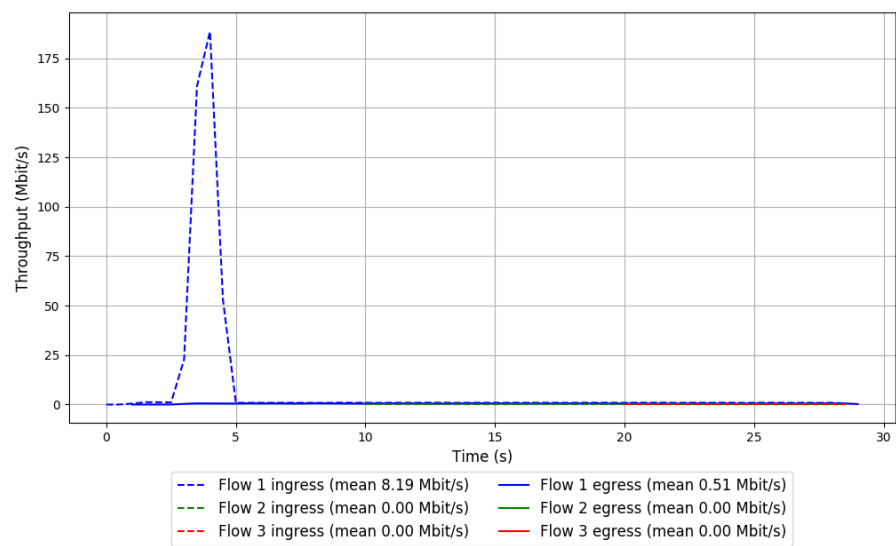
Start at: 2019-02-12 02:34:24

End at: 2019-02-12 02:34:54

Local clock offset: -6.035 ms

Remote clock offset: 2.975 ms

Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

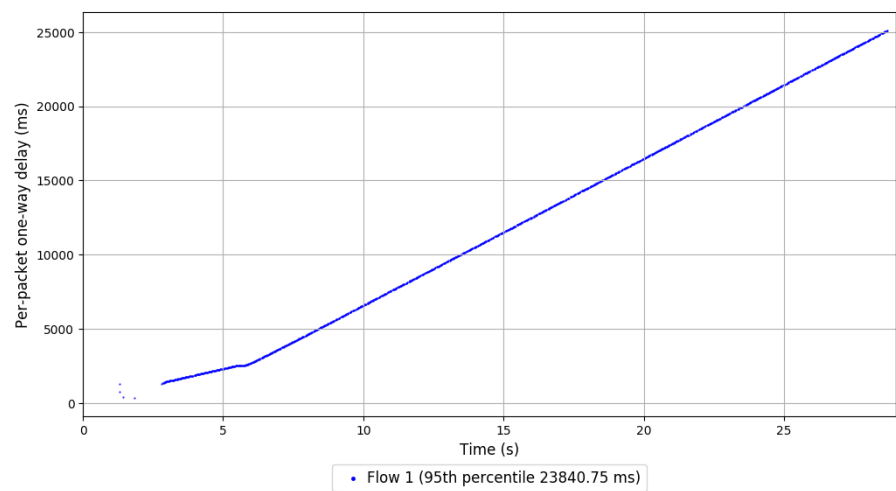
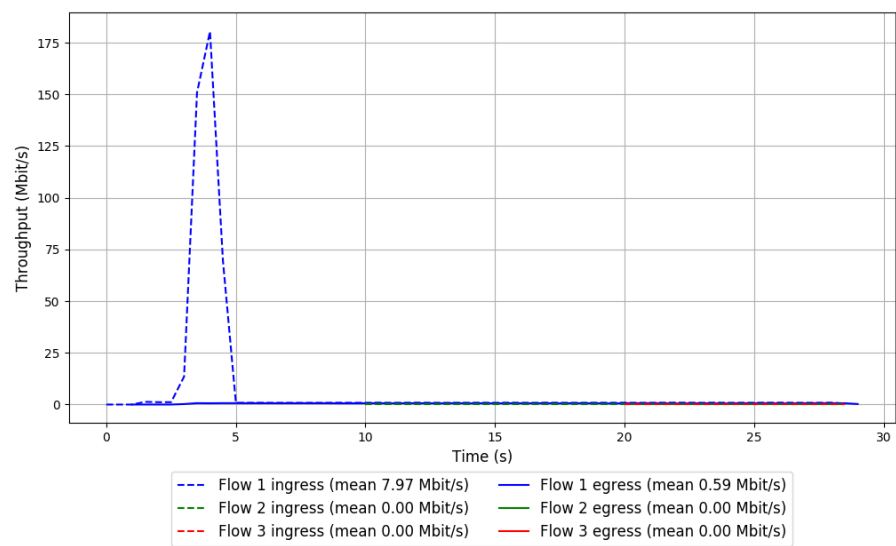
Start at: 2019-02-12 03:00:15

End at: 2019-02-12 03:00:45

Local clock offset: -7.433 ms

Remote clock offset: 8.731 ms

Run 2: Report of Indigo-MusesC3 — Data Link



Run 3: Statistics of Indigo-MusesC3

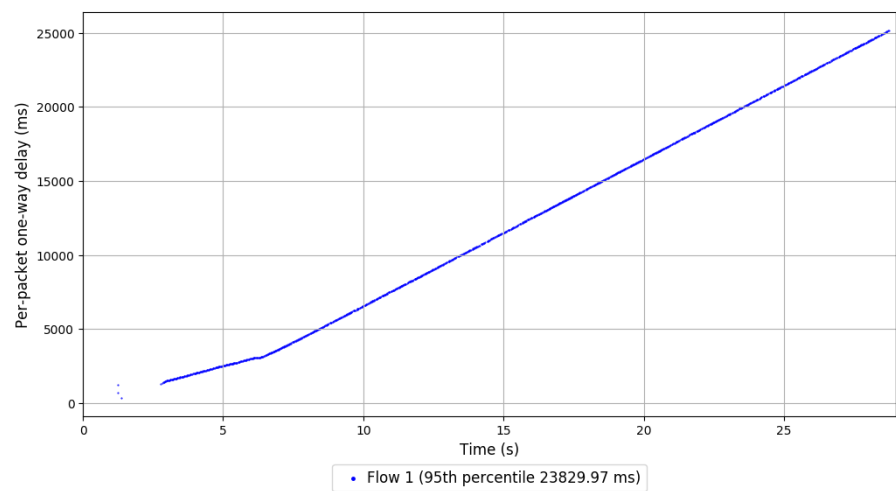
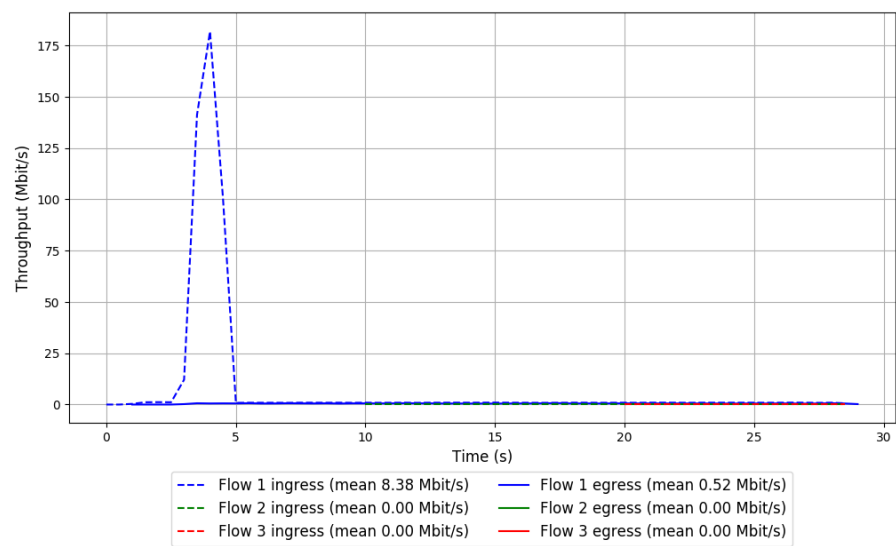
Start at: 2019-02-12 03:26:18

End at: 2019-02-12 03:26:48

Local clock offset: -6.661 ms

Remote clock offset: 7.438 ms

Run 3: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

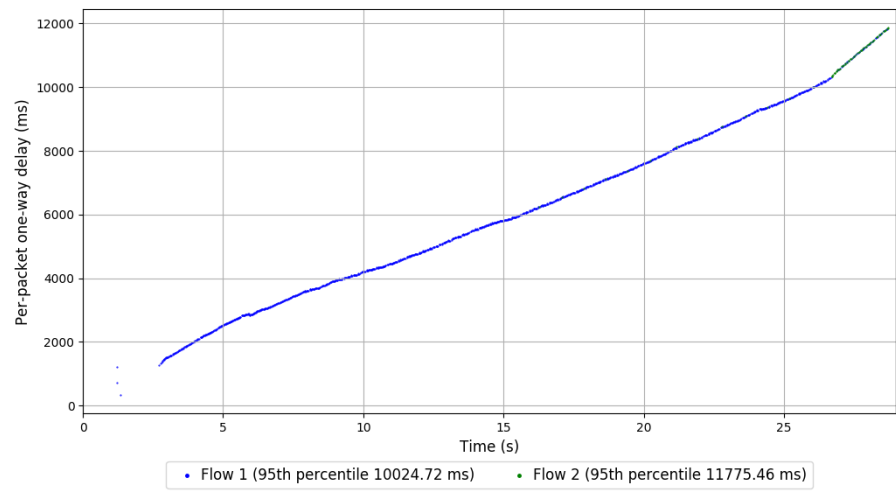
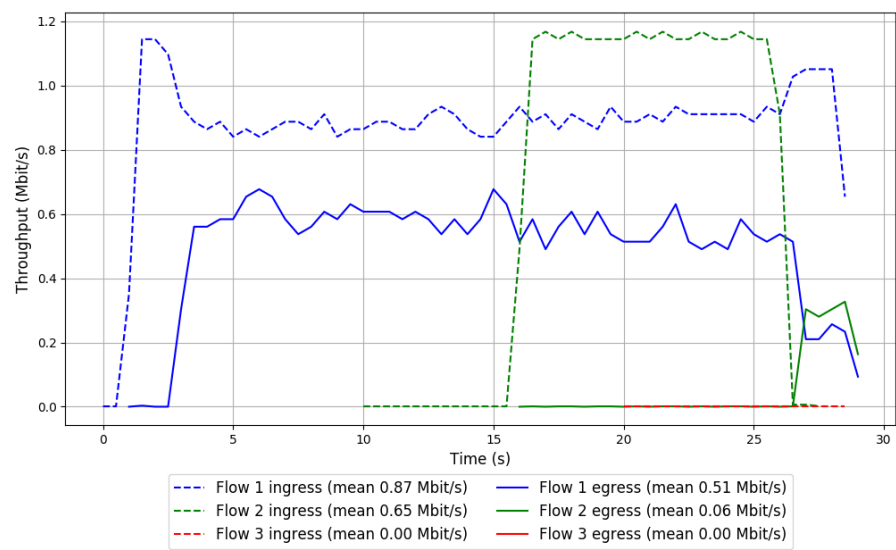
Start at: 2019-02-12 02:31:57

End at: 2019-02-12 02:32:27

Local clock offset: -5.911 ms

Remote clock offset: 8.097 ms

Run 1: Report of Indigo-MusesC5 — Data Link



Run 2: Statistics of Indigo-MusesC5

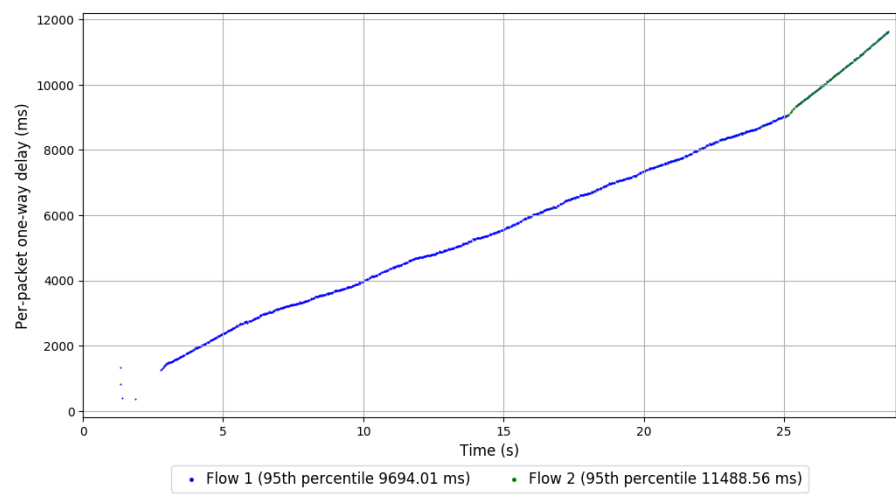
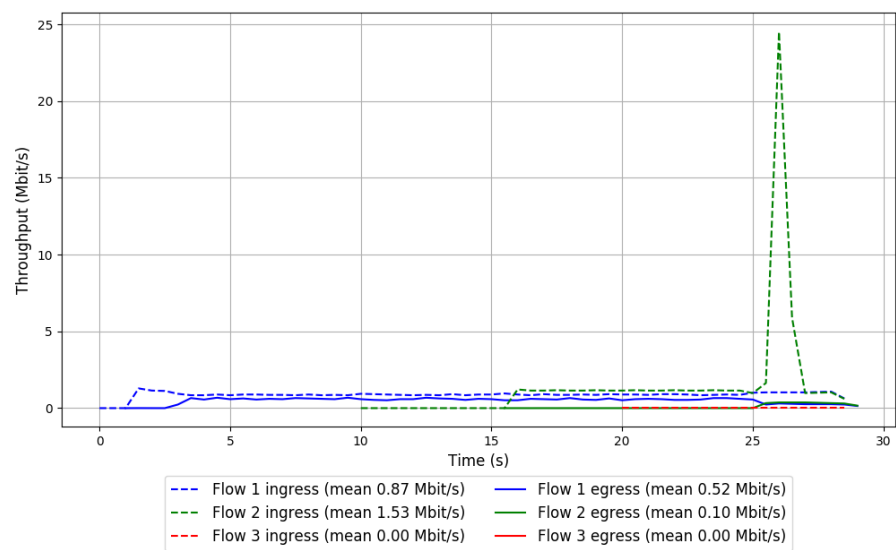
Start at: 2019-02-12 02:57:48

End at: 2019-02-12 02:58:18

Local clock offset: -6.671 ms

Remote clock offset: 3.577 ms

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

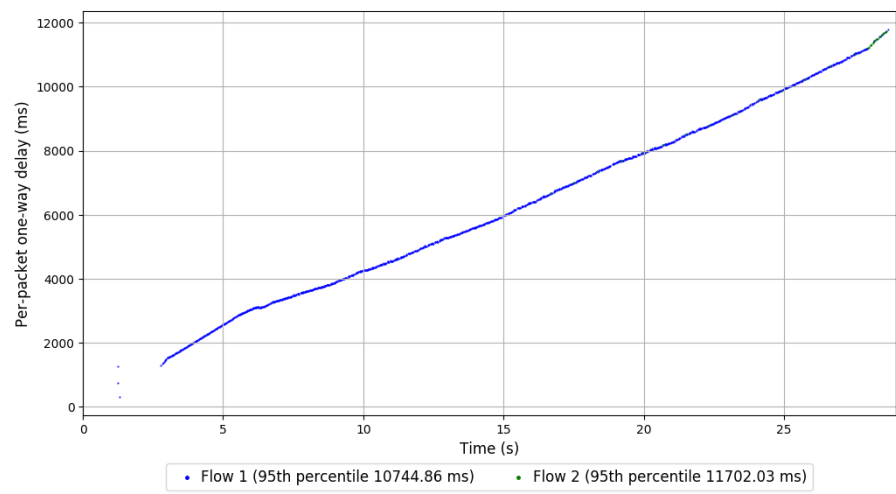
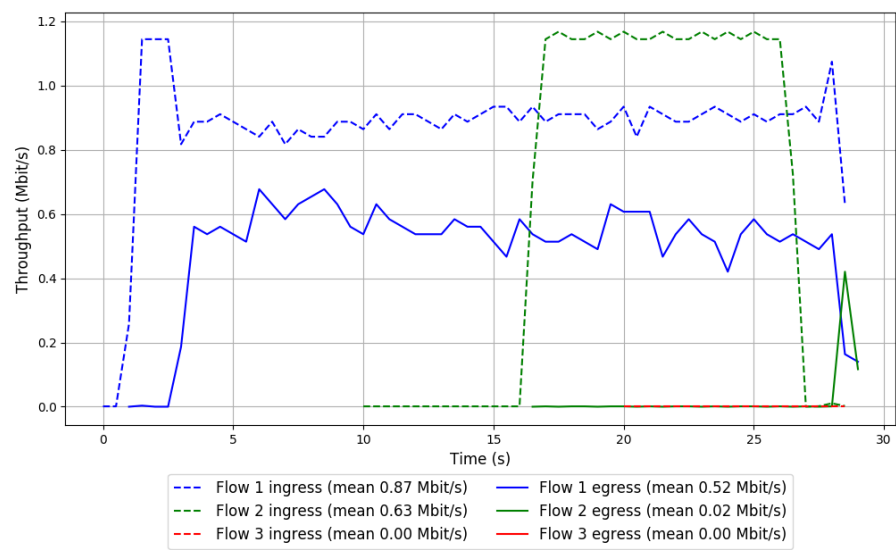
Start at: 2019-02-12 03:23:51

End at: 2019-02-12 03:24:21

Local clock offset: -7.392 ms

Remote clock offset: 7.315 ms

Run 3: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

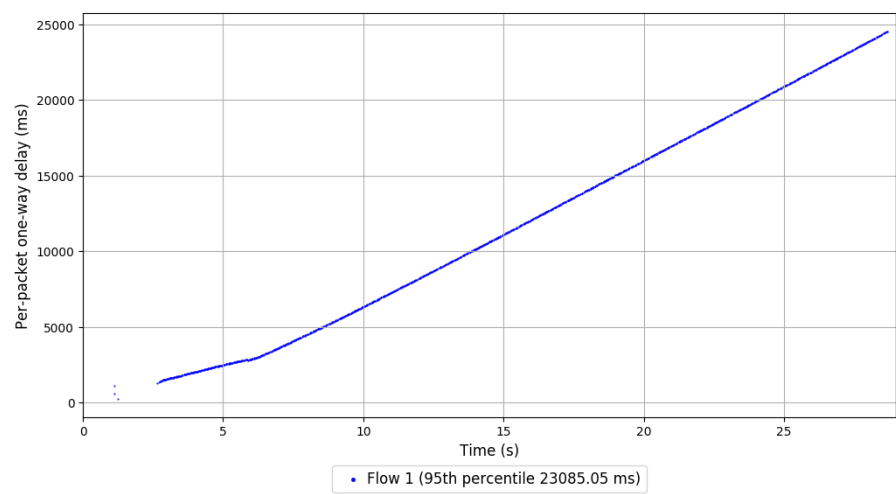
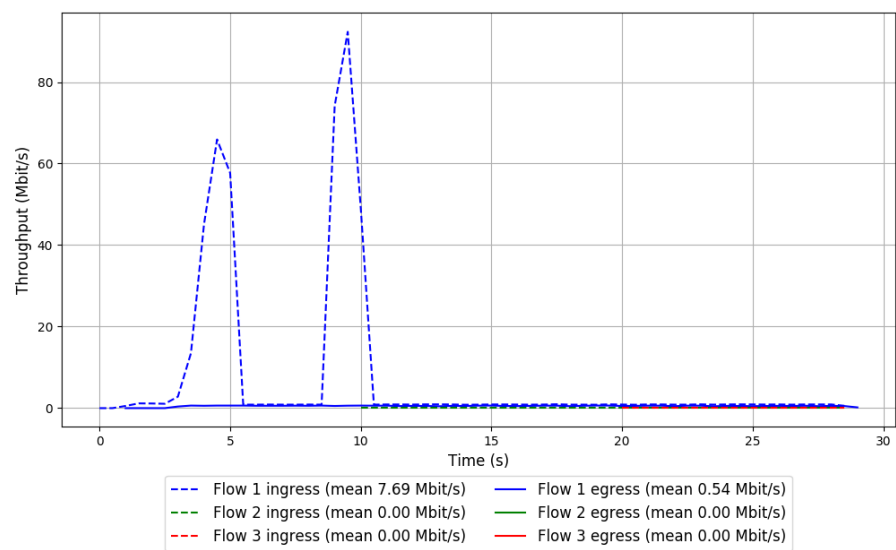
Start at: 2019-02-12 02:25:43

End at: 2019-02-12 02:26:13

Local clock offset: -6.241 ms

Remote clock offset: 7.687 ms

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

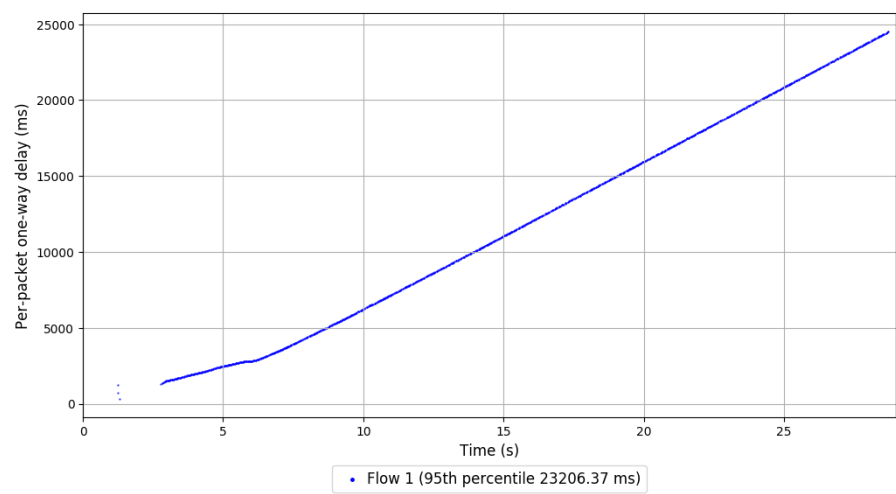
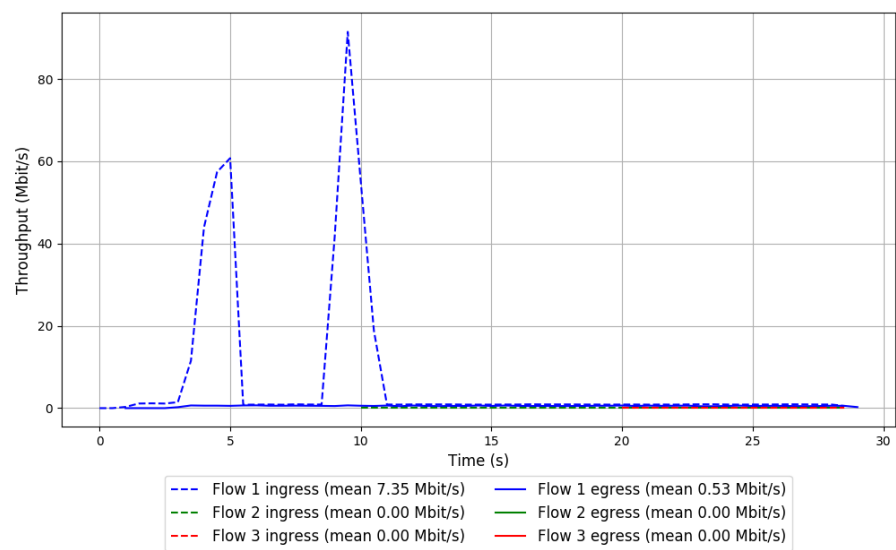
Start at: 2019-02-12 02:51:37

End at: 2019-02-12 02:52:07

Local clock offset: -7.209 ms

Remote clock offset: 3.383 ms

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

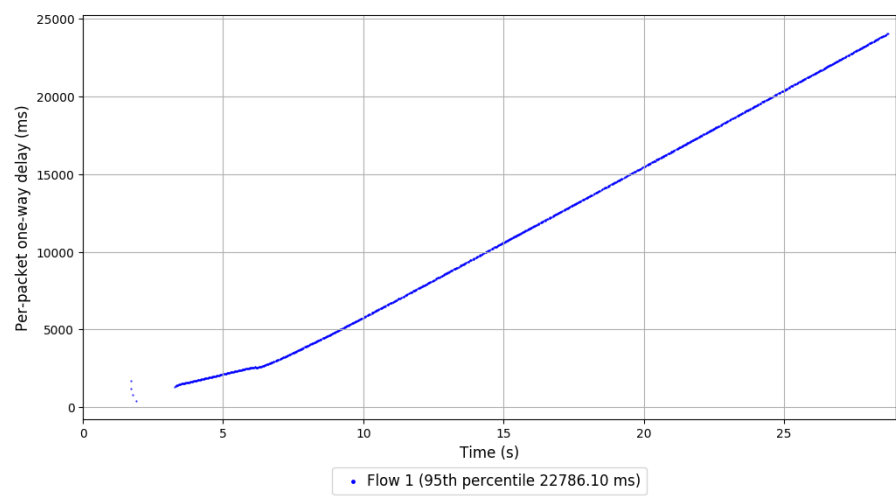
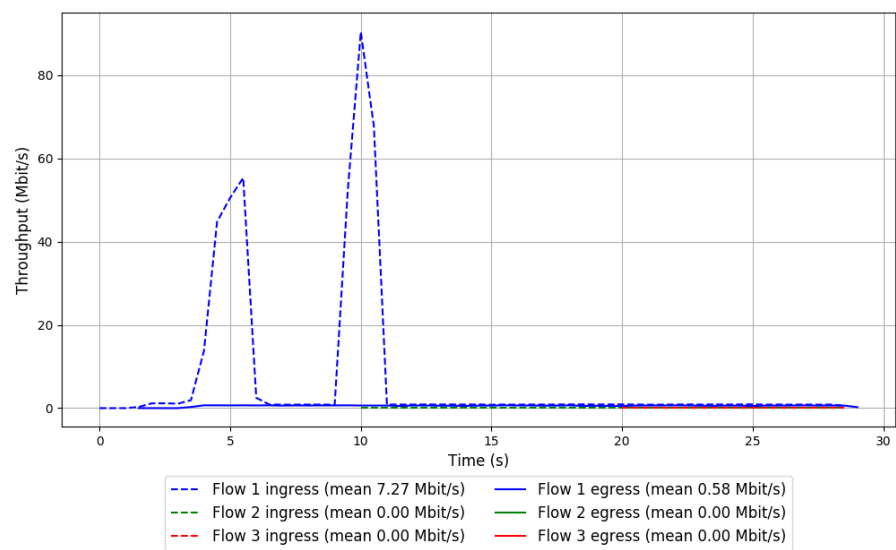
Start at: 2019-02-12 03:17:32

End at: 2019-02-12 03:18:02

Local clock offset: -7.387 ms

Remote clock offset: 2.522 ms

Run 3: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

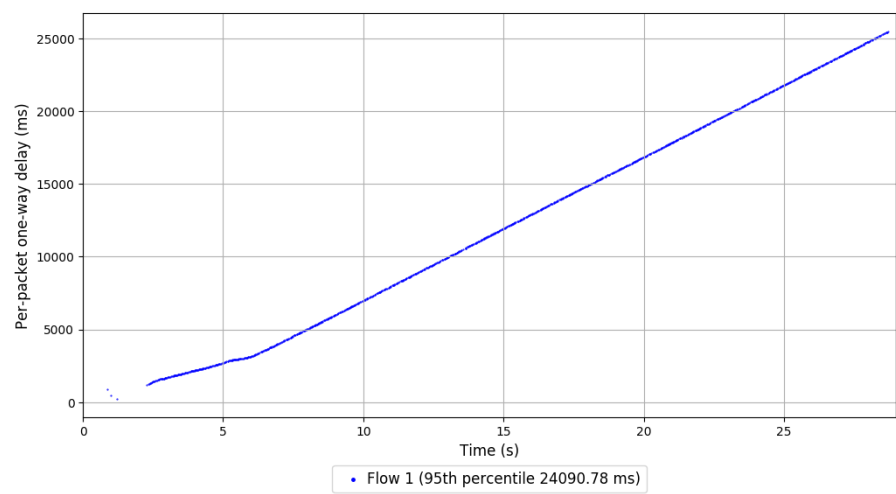
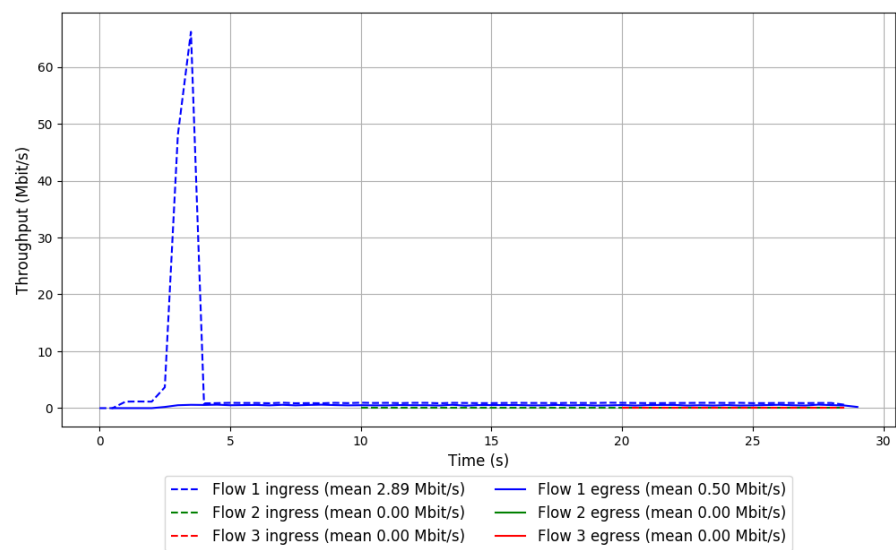
Start at: 2019-02-12 02:26:56

End at: 2019-02-12 02:27:26

Local clock offset: -5.59 ms

Remote clock offset: 7.976 ms

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

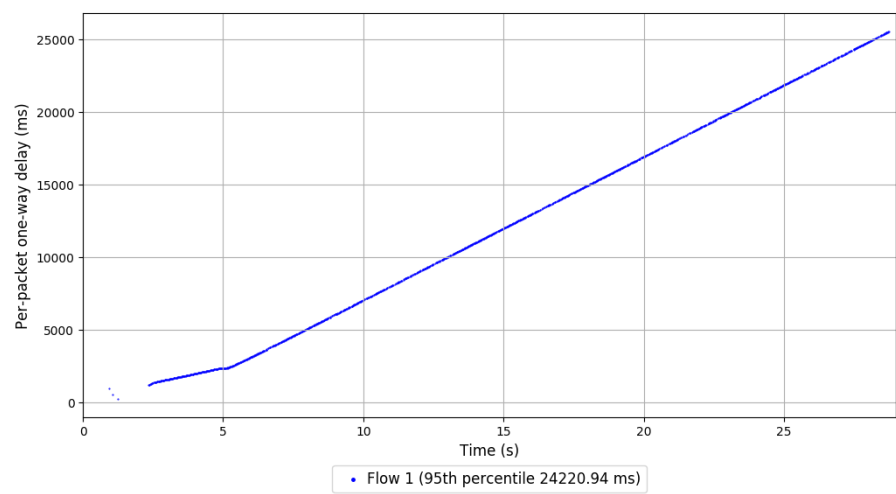
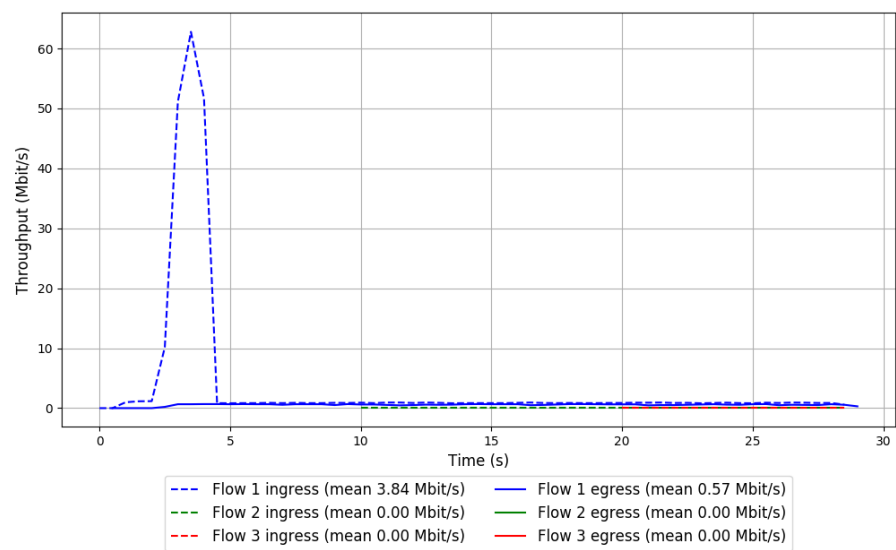
Start at: 2019-02-12 02:52:50

End at: 2019-02-12 02:53:20

Local clock offset: -6.49 ms

Remote clock offset: 3.429 ms

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

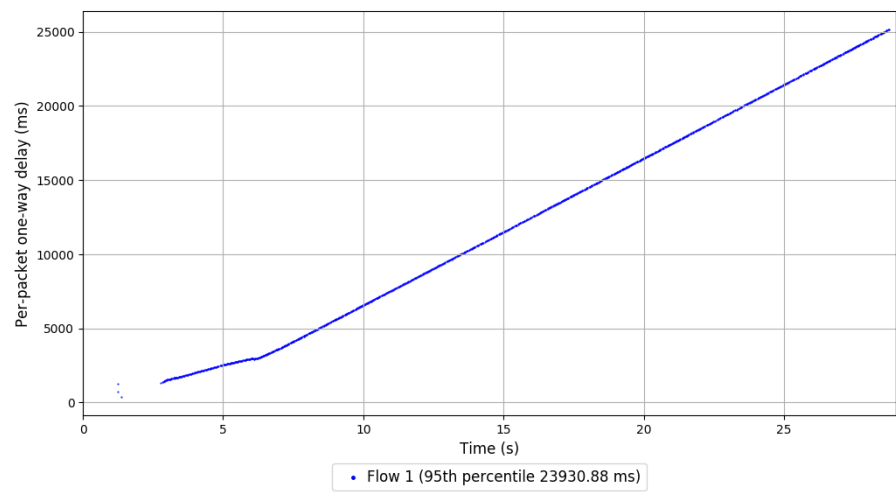
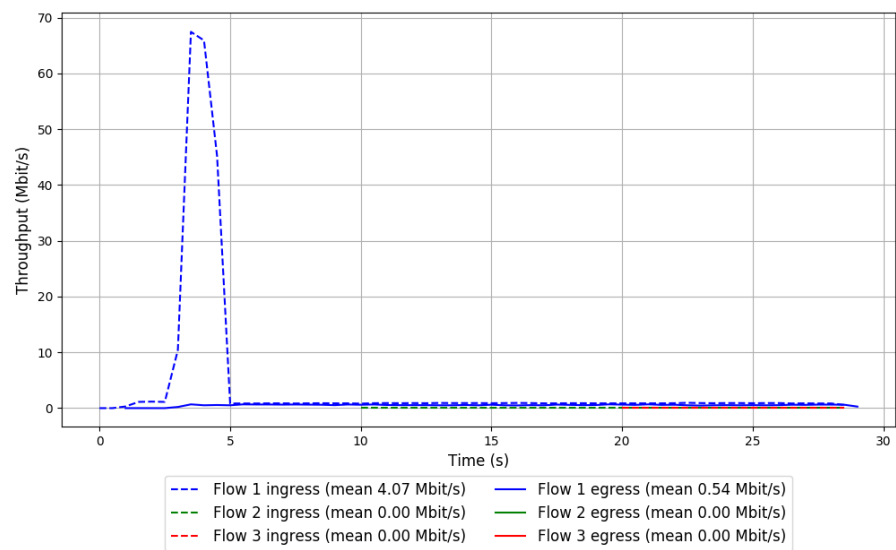
Start at: 2019-02-12 03:18:48

End at: 2019-02-12 03:19:18

Local clock offset: -6.588 ms

Remote clock offset: 7.592 ms

Run 3: Report of Indigo-MusesT — Data Link



Run 1: Statistics of LEDBAT

Start at: 2019-02-12 02:47:55

End at: 2019-02-12 02:48:25

Local clock offset: -6.401 ms

Remote clock offset: 3.362 ms

Below is generated by plot.py at 2019-02-12 03:40:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 383.829 ms

Loss rate: 1.31%

-- Flow 1:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 384.173 ms

Loss rate: 0.25%

-- Flow 2:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 384.447 ms

Loss rate: 1.56%

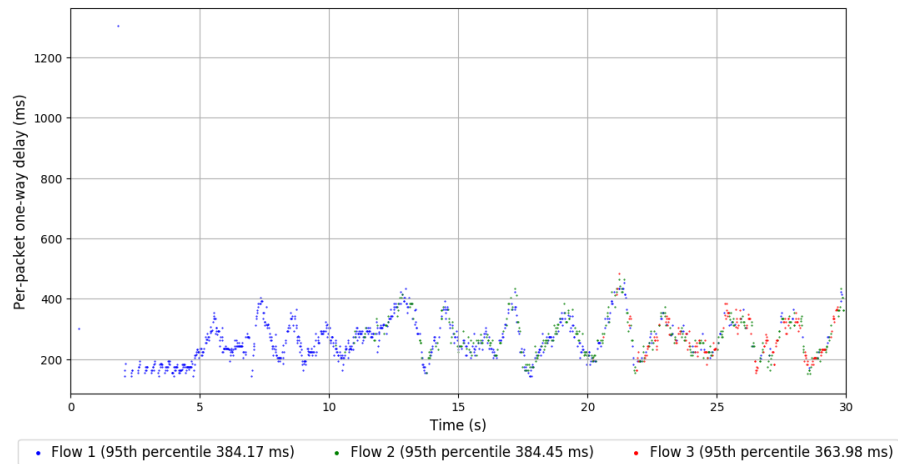
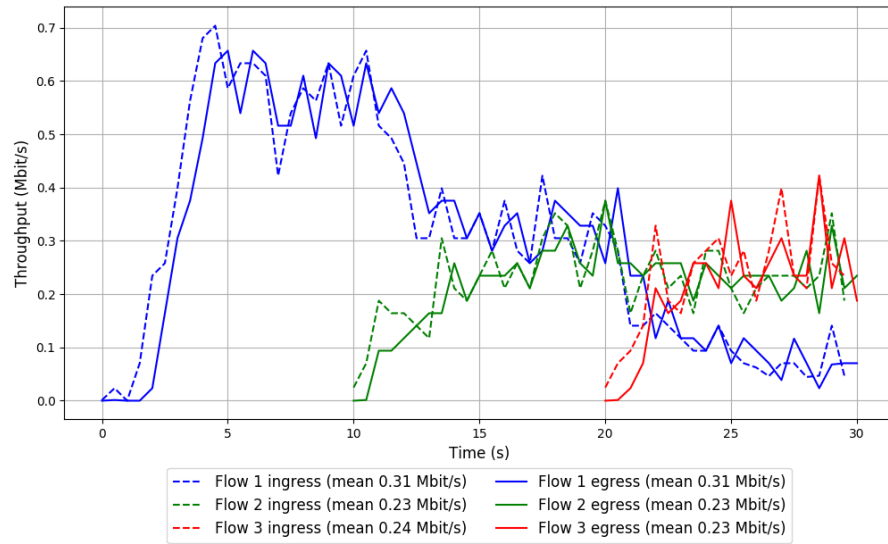
-- Flow 3:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 363.976 ms

Loss rate: 5.10%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-02-12 03:13:50

End at: 2019-02-12 03:14:20

Local clock offset: -6.559 ms

Remote clock offset: 2.683 ms

Below is generated by plot.py at 2019-02-12 03:40:53

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 415.869 ms

Loss rate: 1.22%

-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 330.812 ms

Loss rate: 0.18%

-- Flow 2:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 426.129 ms

Loss rate: 1.34%

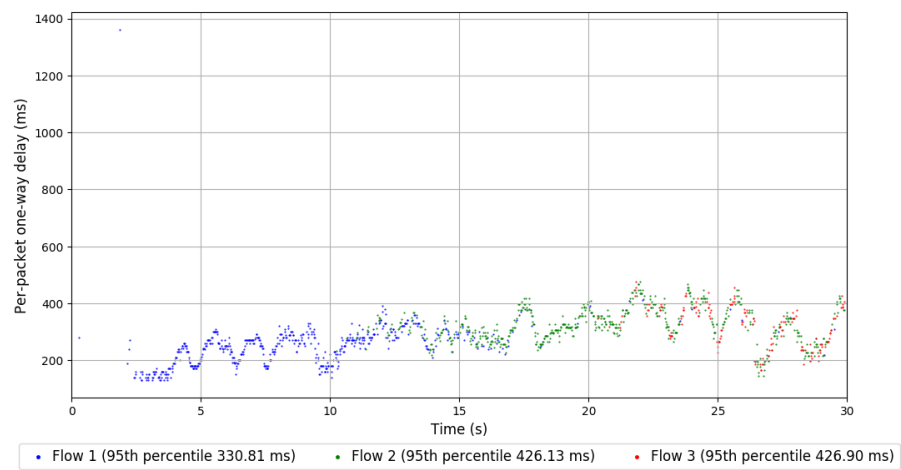
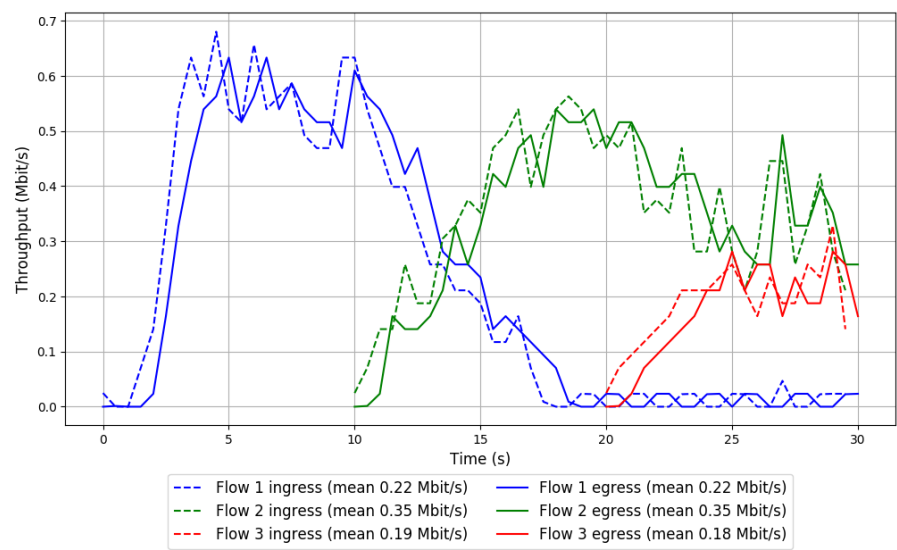
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 426.901 ms

Loss rate: 4.46%

Run 2: Report of LEDBAT — Data Link

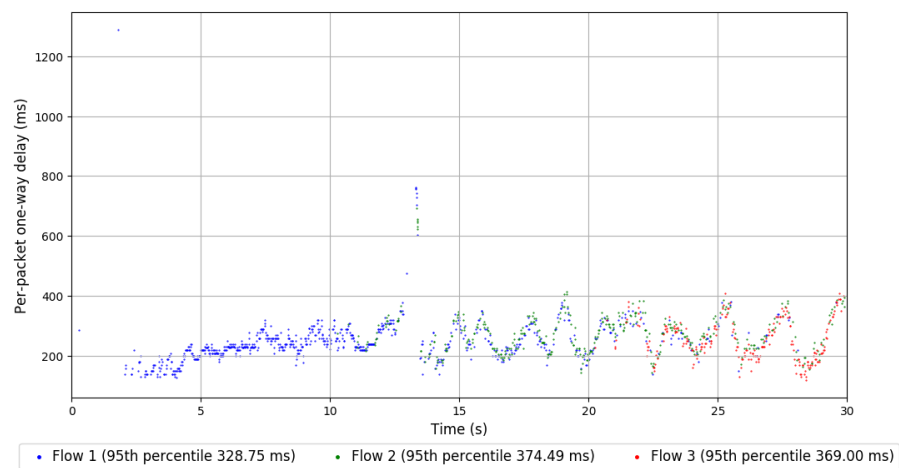
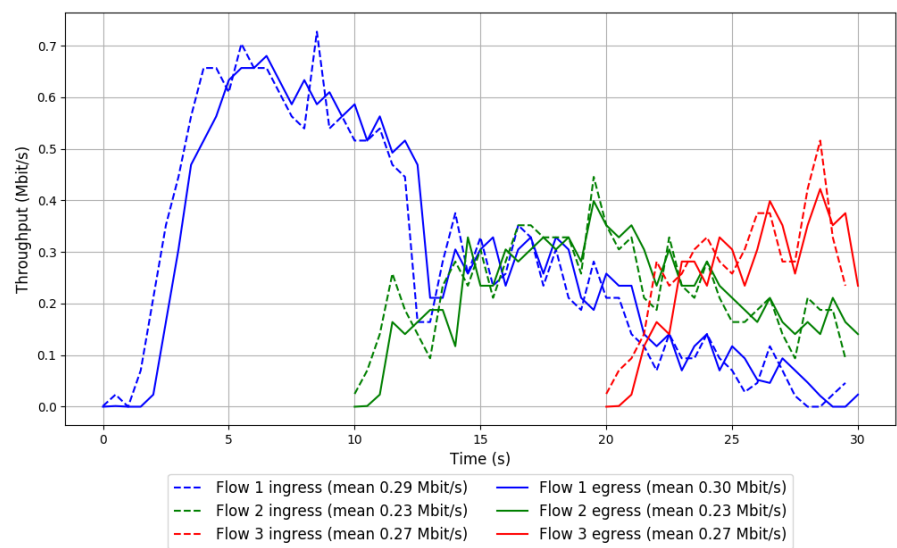


Run 3: Statistics of LEDBAT

Start at: 2019-02-12 03:39:50
End at: 2019-02-12 03:40:20
Local clock offset: -7.498 ms
Remote clock offset: 7.771 ms

```
# Below is generated by plot.py at 2019-02-12 03:40:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 358.690 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 328.755 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 374.486 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 368.995 ms
Loss rate: 4.35%
```

Run 3: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

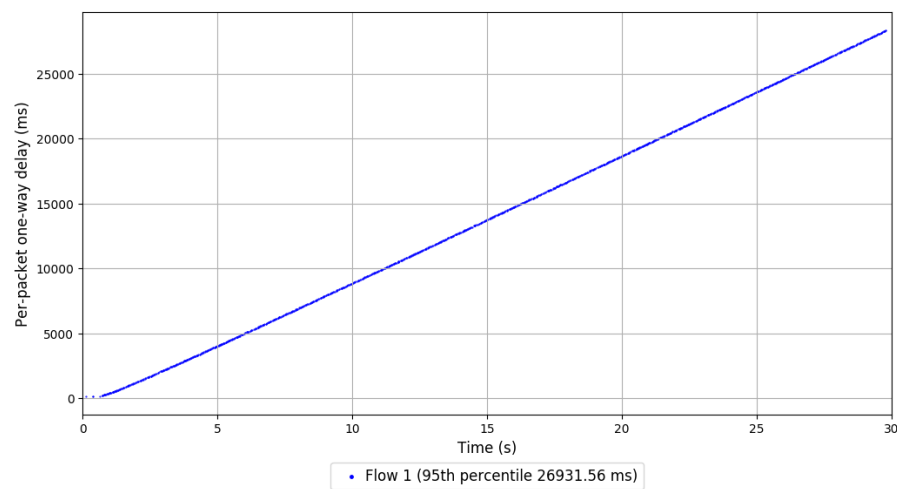
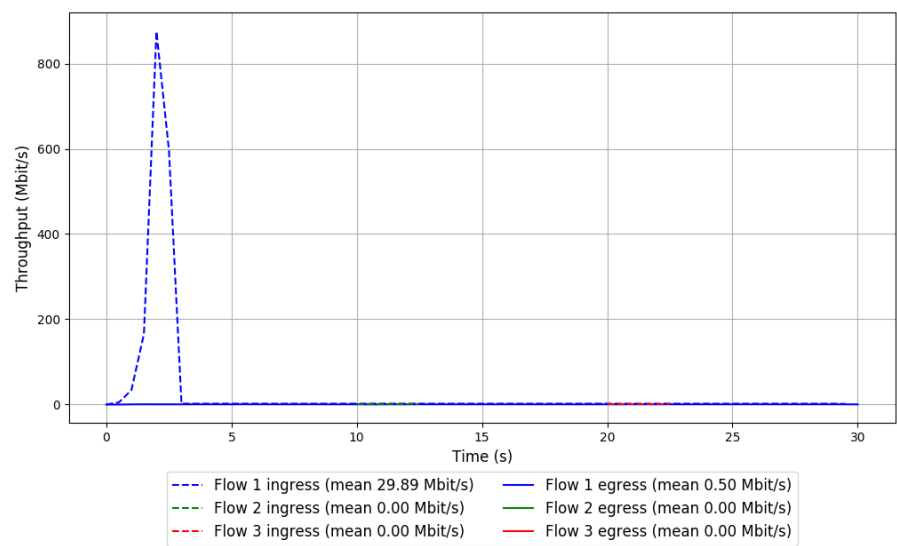
Start at: 2019-02-12 02:28:12

End at: 2019-02-12 02:28:42

Local clock offset: -6.439 ms

Remote clock offset: 8.015 ms

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

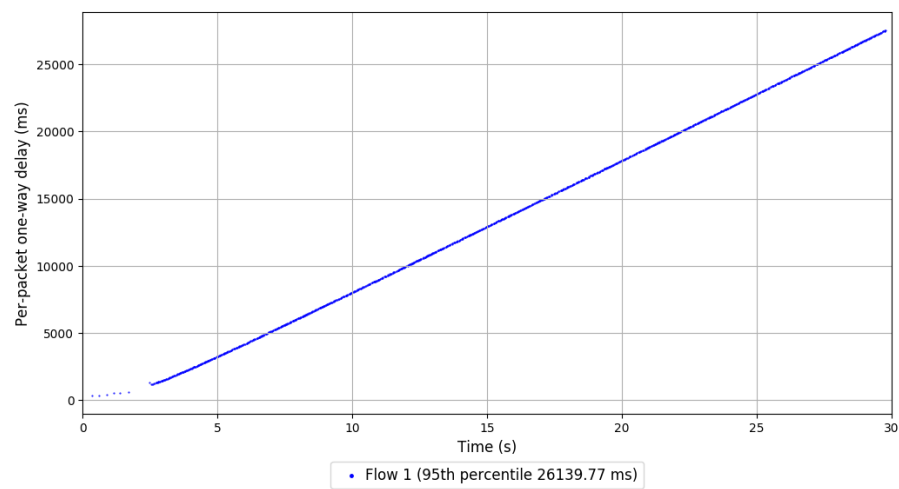
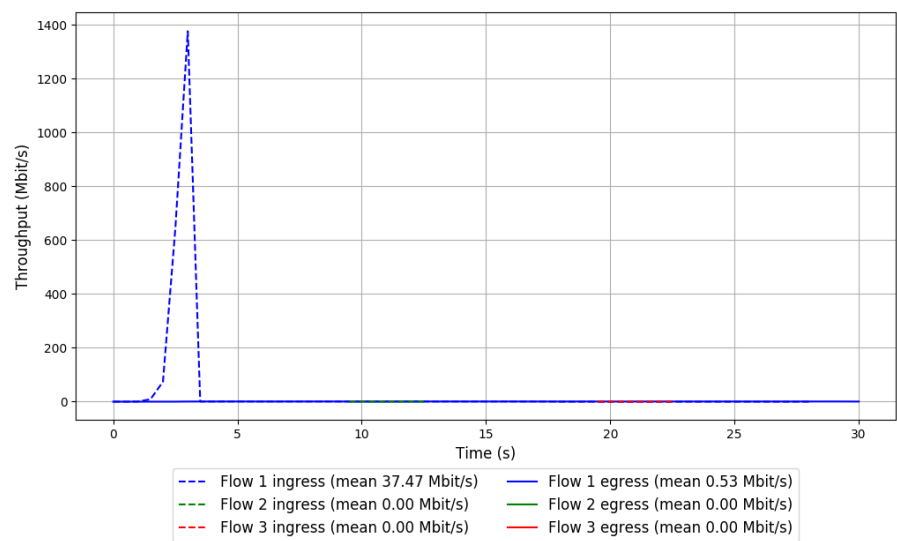
Start at: 2019-02-12 02:54:05

End at: 2019-02-12 02:54:35

Local clock offset: -6.512 ms

Remote clock offset: 8.505 ms

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

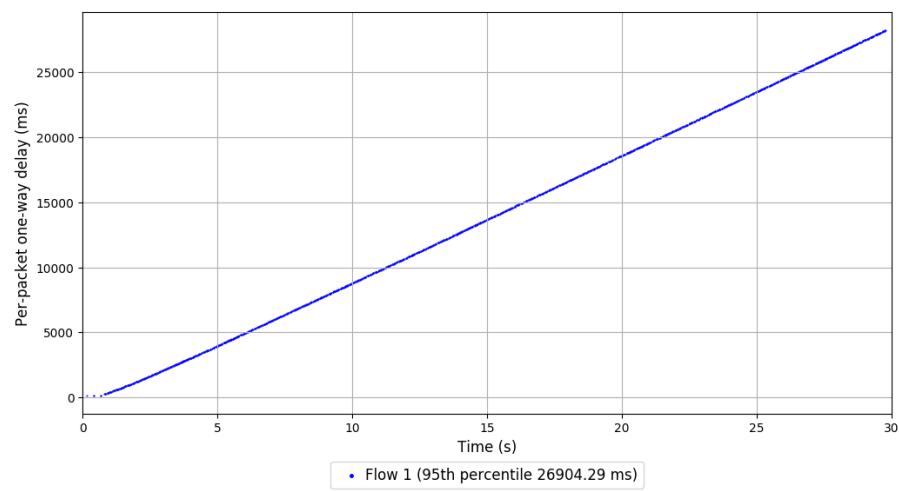
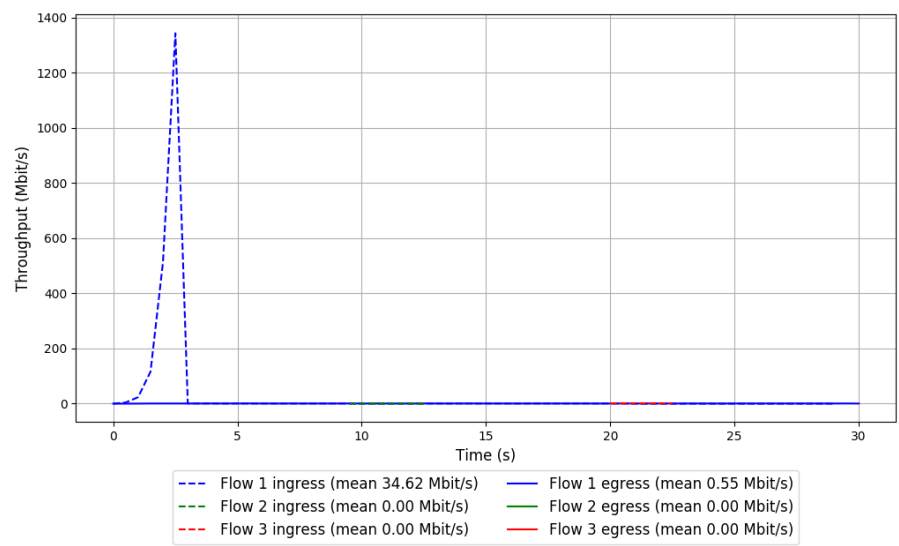
Start at: 2019-02-12 03:20:03

End at: 2019-02-12 03:20:33

Local clock offset: -7.412 ms

Remote clock offset: 7.546 ms

Run 3: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

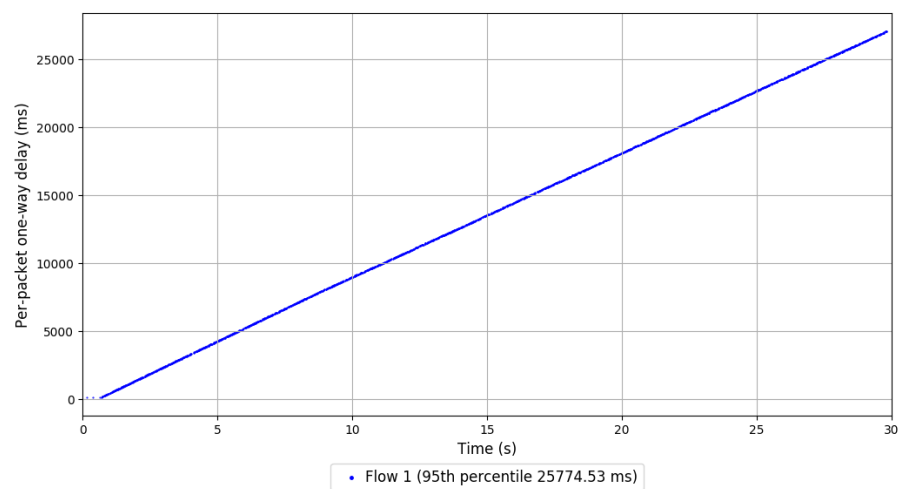
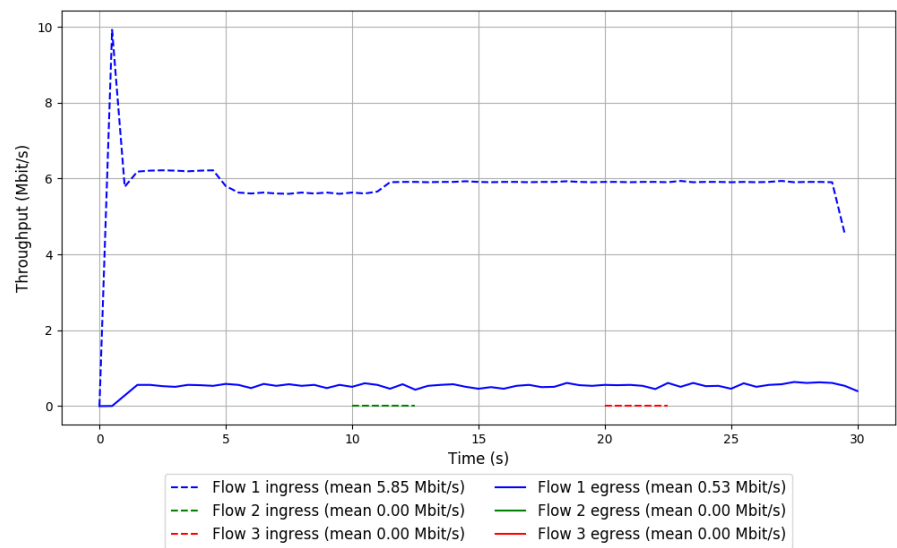
Start at: 2019-02-12 02:35:37

End at: 2019-02-12 02:36:07

Local clock offset: -6.81 ms

Remote clock offset: 3.192 ms

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

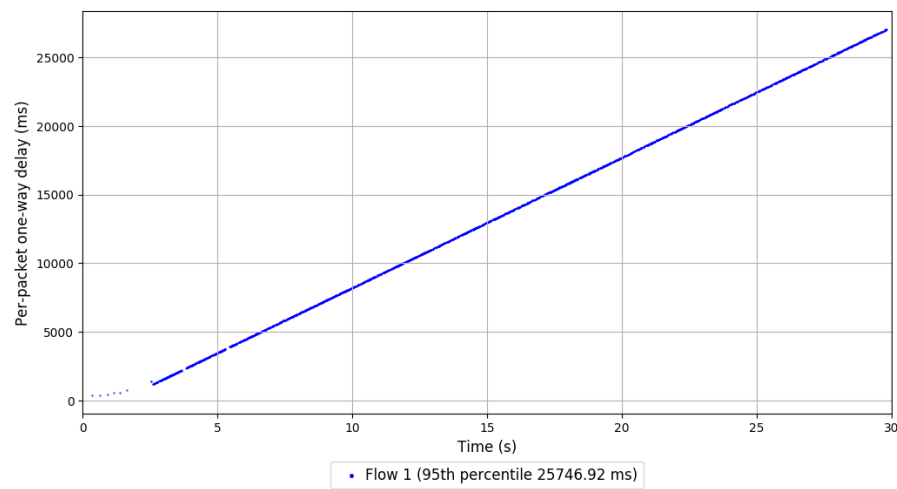
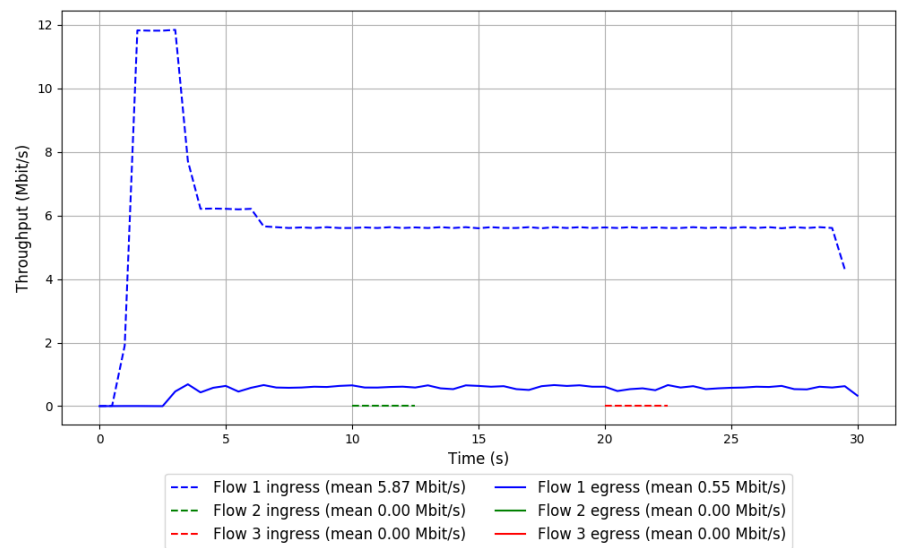
Start at: 2019-02-12 03:01:30

End at: 2019-02-12 03:02:00

Local clock offset: -7.472 ms

Remote clock offset: 3.487 ms

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

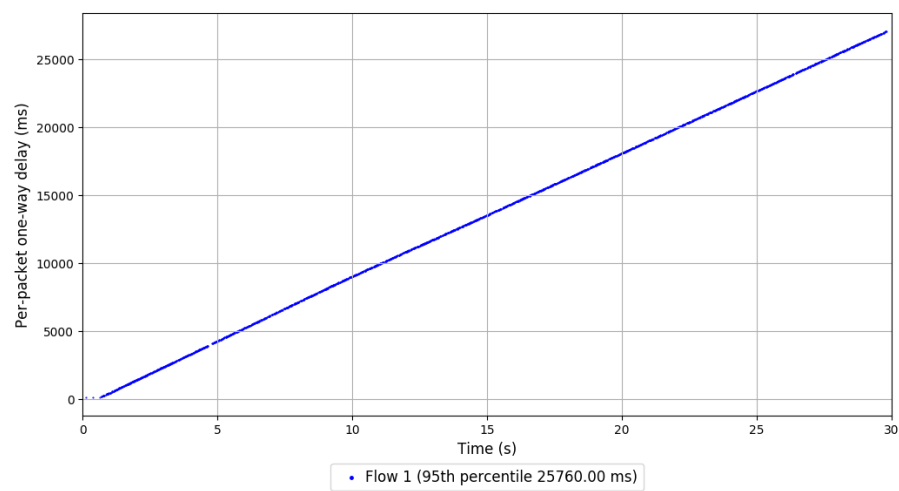
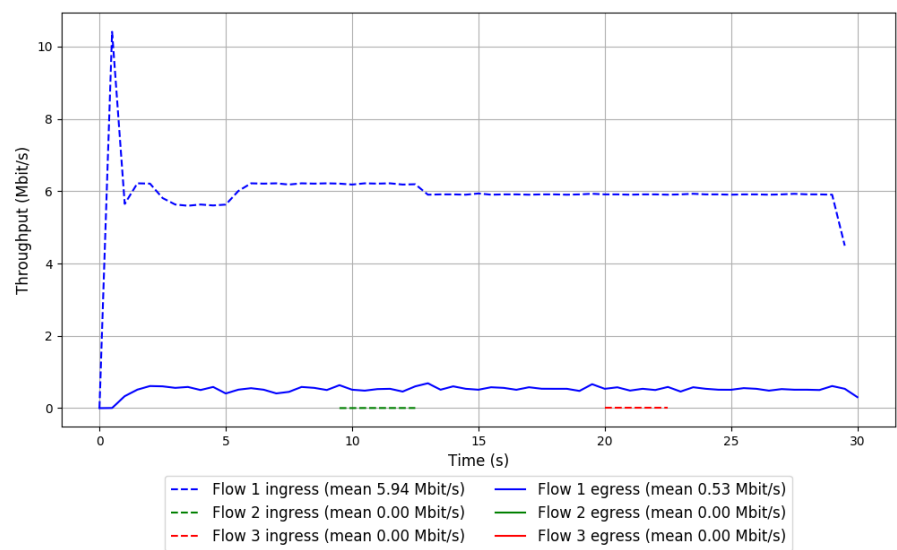
Start at: 2019-02-12 03:27:33

End at: 2019-02-12 03:28:03

Local clock offset: -7.44 ms

Remote clock offset: 7.405 ms

Run 3: Report of PCC-Expr — Data Link

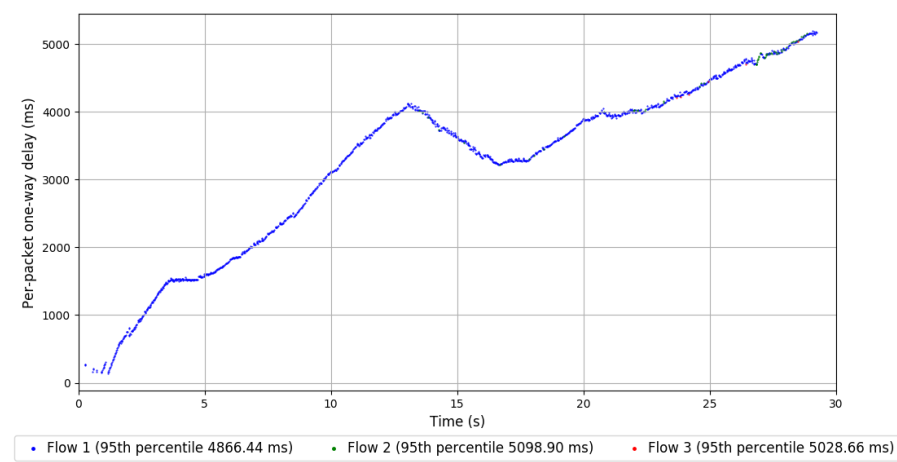
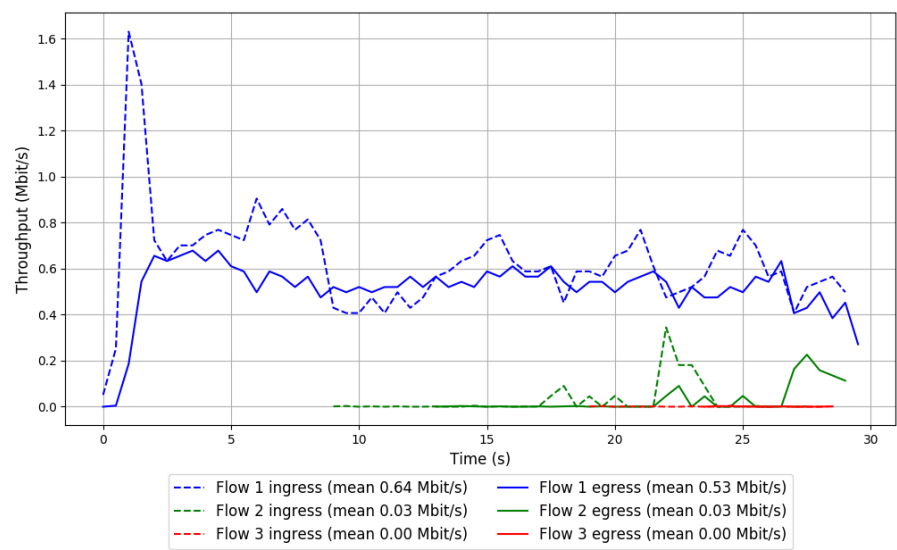


```
Run 1: Statistics of QUIC Cubic

Start at: 2019-02-12 02:30:43
End at: 2019-02-12 02:31:13
Local clock offset: -6.591 ms
Remote clock offset: 2.946 ms

# Below is generated by plot.py at 2019-02-12 03:41:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 4888.084 ms
Loss rate: 16.74%
-- Flow 1:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 4866.440 ms
Loss rate: 17.18%
-- Flow 2:
Average throughput: 0.03 Mbit/s
95th percentile per-packet one-way delay: 5098.900 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 5028.663 ms
Loss rate: 50.00%
```

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-02-12 02:56:34

End at: 2019-02-12 02:57:04

Local clock offset: -7.331 ms

Remote clock offset: 3.525 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 8843.358 ms

Loss rate: 32.99%

-- Flow 1:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 8833.435 ms

Loss rate: 32.97%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 9100.116 ms

Loss rate: 37.50%

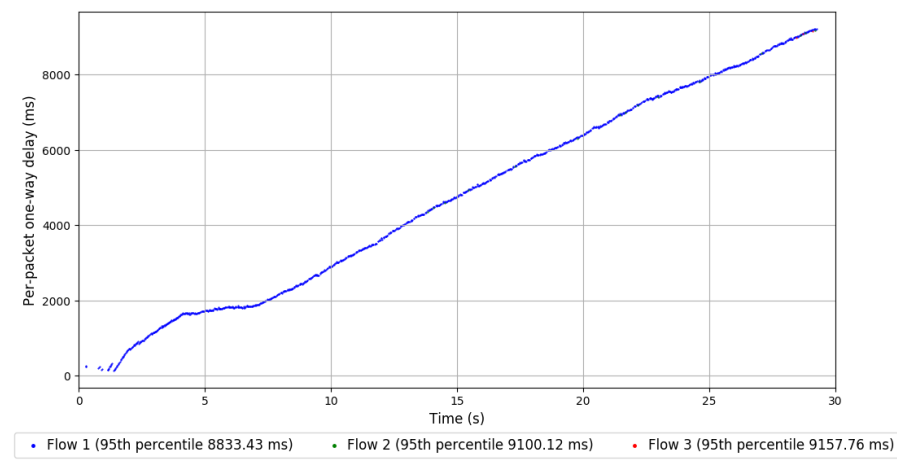
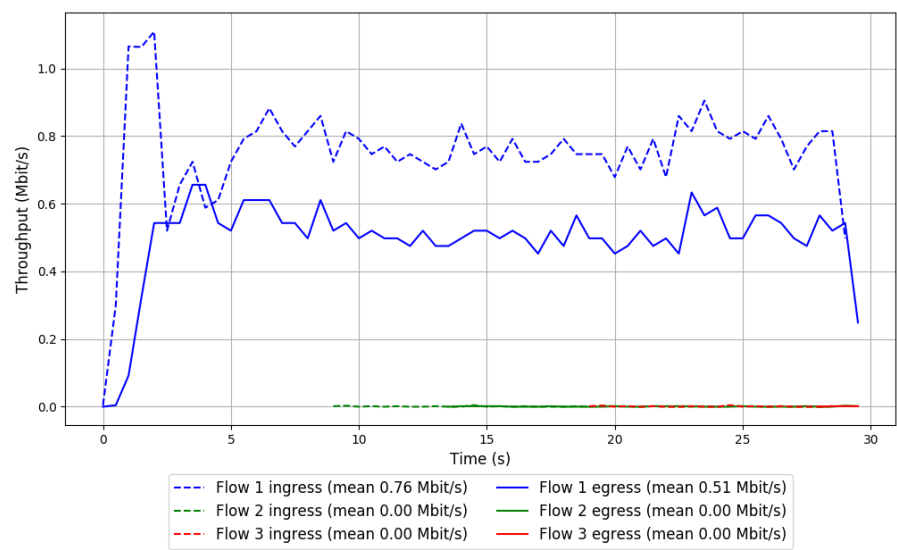
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 9157.756 ms

Loss rate: 75.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-02-12 03:22:37

End at: 2019-02-12 03:23:07

Local clock offset: -6.597 ms

Remote clock offset: 2.387 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 4906.338 ms

Loss rate: 16.11%

-- Flow 1:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 4906.502 ms

Loss rate: 16.49%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 4867.200 ms

Loss rate: 0.85%

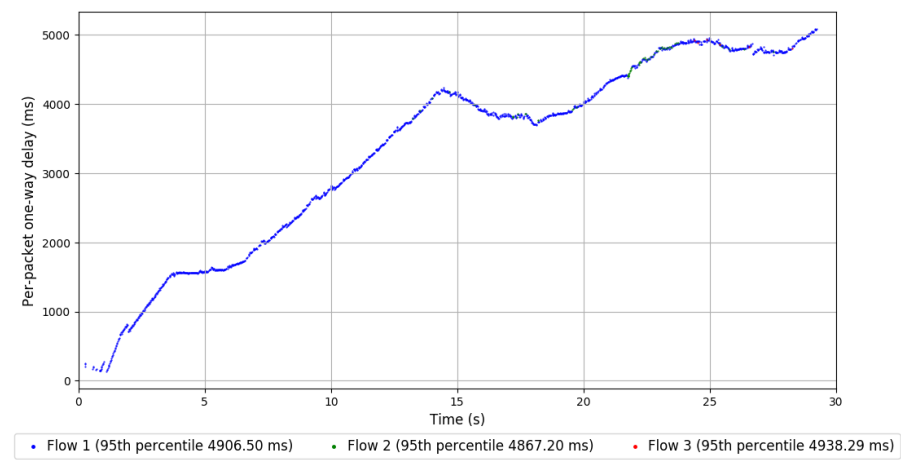
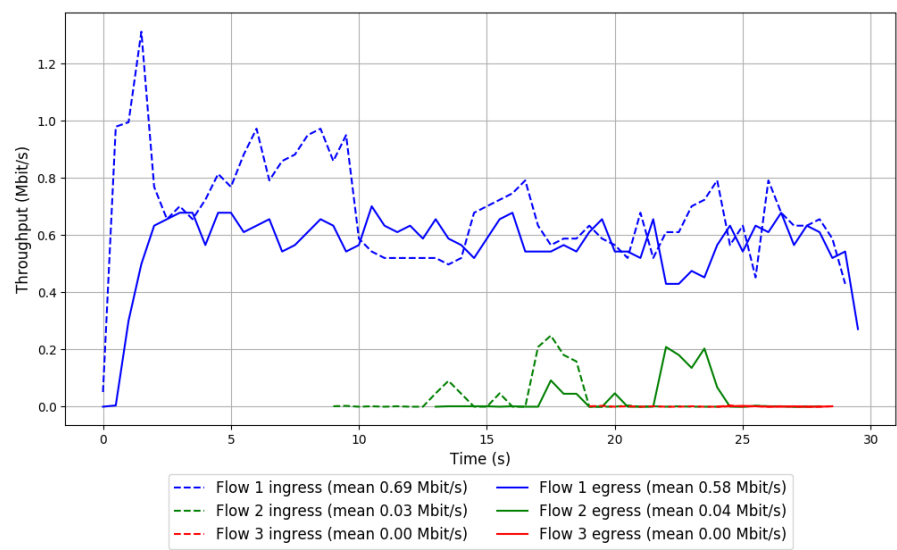
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 4938.288 ms

Loss rate: 50.00%

Run 3: Report of QUIC Cubic — Data Link

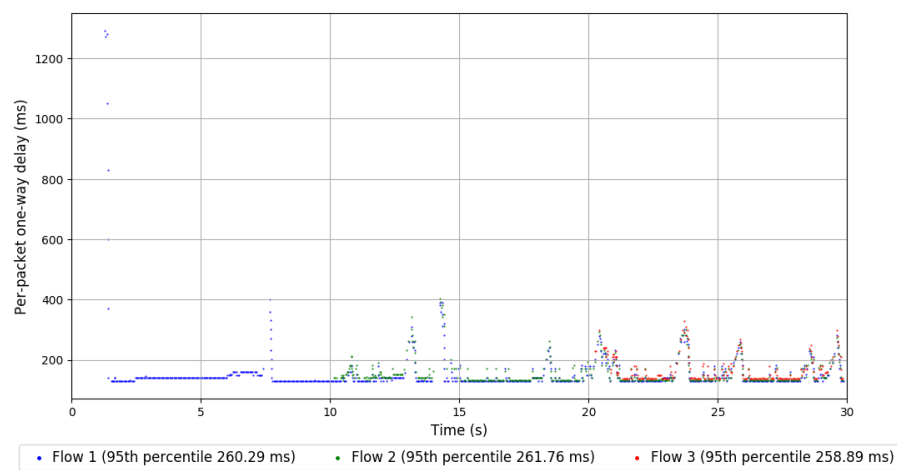
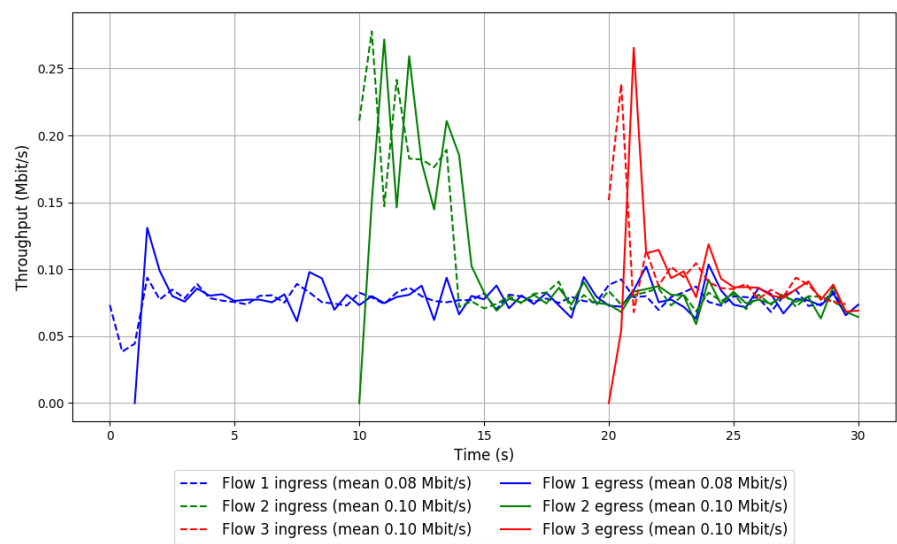


```
Run 1: Statistics of SCReAM

Start at: 2019-02-12 02:45:28
End at: 2019-02-12 02:45:58
Local clock offset: -7.115 ms
Remote clock offset: 3.306 ms

# Below is generated by plot.py at 2019-02-12 03:41:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 260.534 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 260.285 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 261.760 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 258.891 ms
Loss rate: 1.84%
```

Run 1: Report of SReAM — Data Link

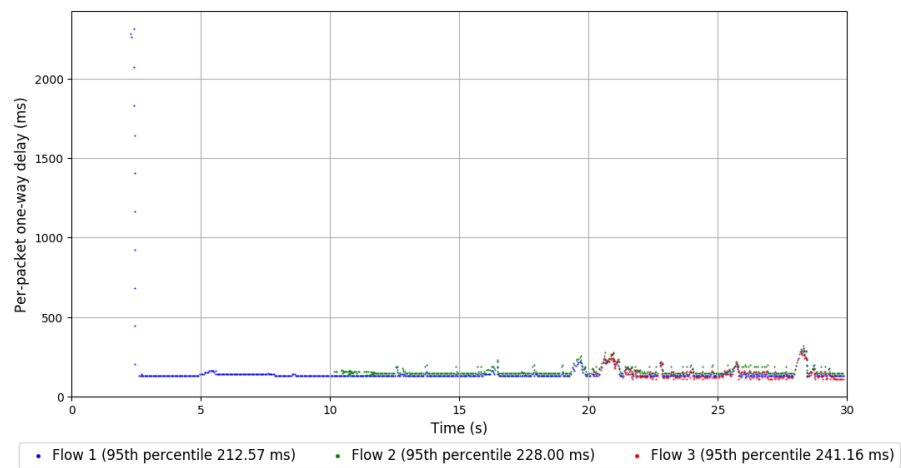
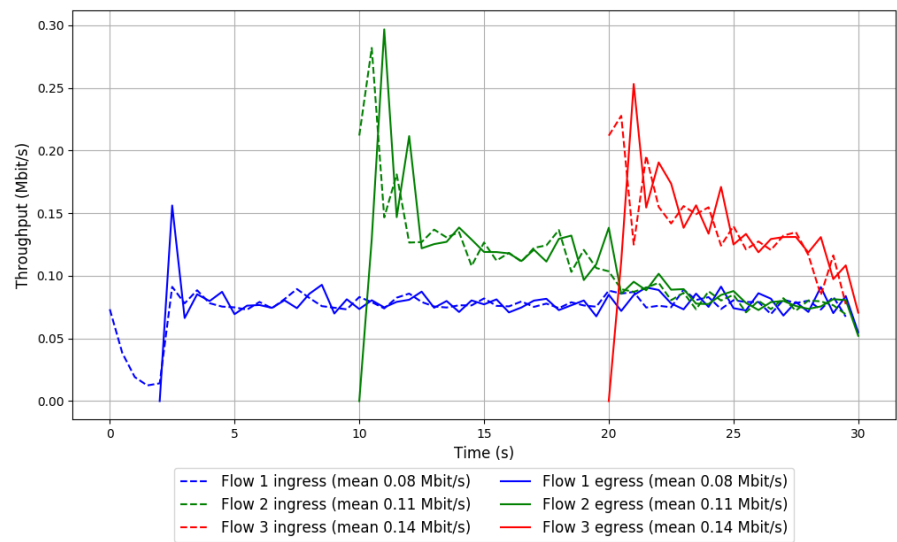


```
Run 2: Statistics of SCReAM

Start at: 2019-02-12 03:11:23
End at: 2019-02-12 03:11:53
Local clock offset: -7.416 ms
Remote clock offset: 7.809 ms

# Below is generated by plot.py at 2019-02-12 03:41:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 226.013 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 212.569 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 227.996 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 241.163 ms
Loss rate: 1.22%
```

Run 2: Report of SReAM — Data Link

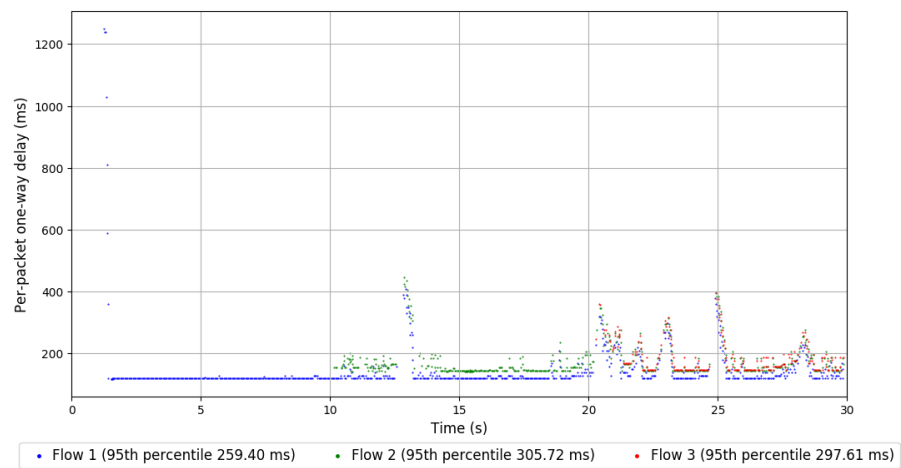
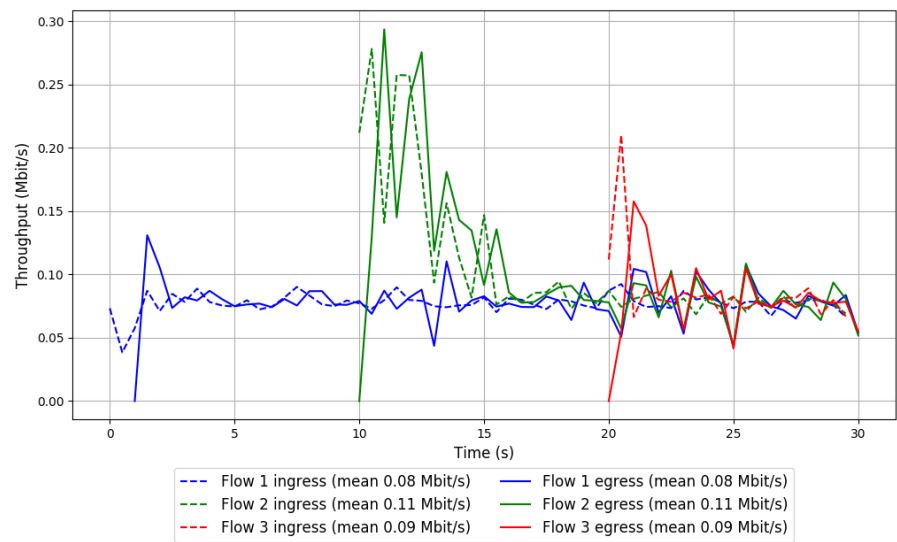


Run 3: Statistics of SCReAM

Start at: 2019-02-12 03:37:22
End at: 2019-02-12 03:37:52
Local clock offset: -7.511 ms
Remote clock offset: 2.621 ms

Below is generated by plot.py at 2019-02-12 03:41:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 287.677 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 259.401 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 305.721 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 297.614 ms
Loss rate: 2.43%

Run 3: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-02-12 02:23:15

End at: 2019-02-12 02:23:45

Local clock offset: -5.297 ms

Remote clock offset: 8.047 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 388.186 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 812.781 ms

Loss rate: 0.38%

-- Flow 2:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 301.075 ms

Loss rate: 1.29%

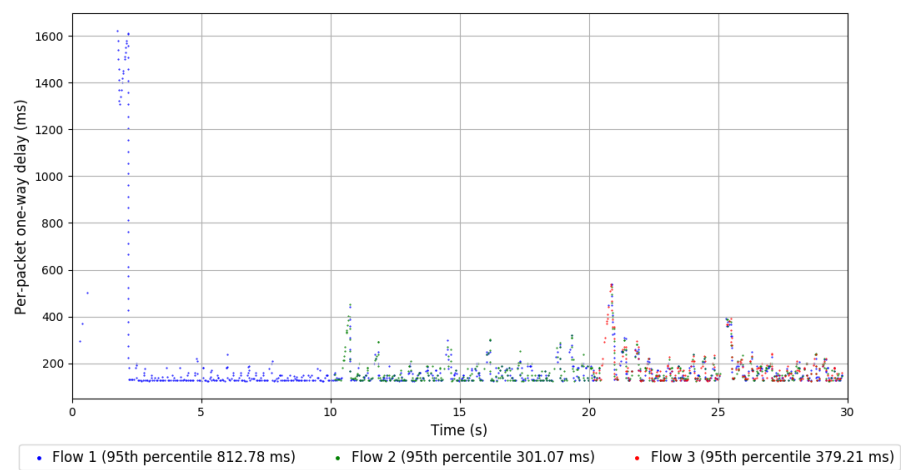
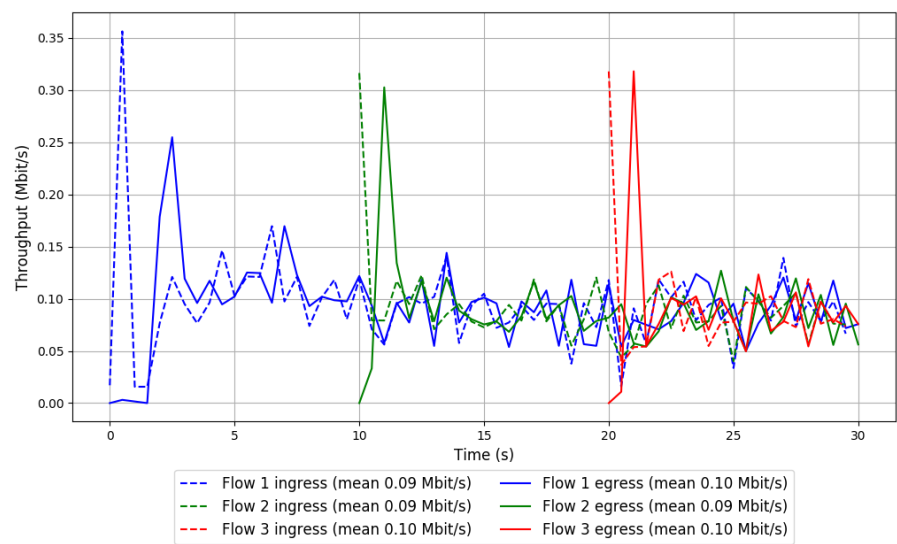
-- Flow 3:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 379.209 ms

Loss rate: 2.76%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2019-02-12 02:49:09

End at: 2019-02-12 02:49:39

Local clock offset: -6.39 ms

Remote clock offset: 3.385 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 386.050 ms

Loss rate: 1.26%

-- Flow 1:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 655.110 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 325.414 ms

Loss rate: 1.19%

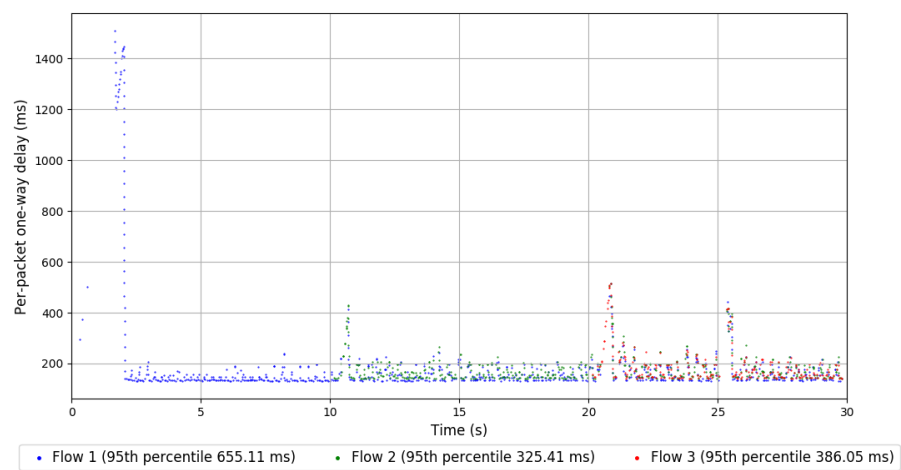
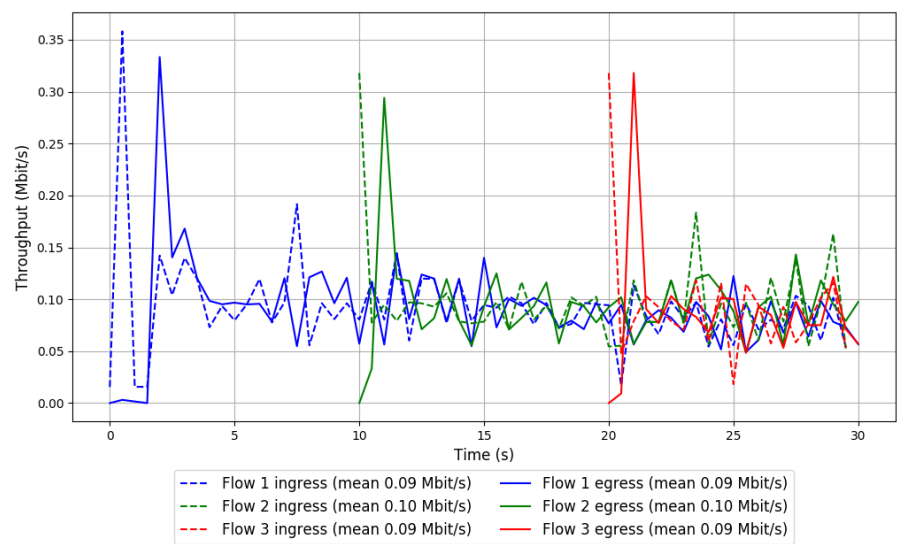
-- Flow 3:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 386.050 ms

Loss rate: 2.51%

Run 2: Report of Sprout — Data Link

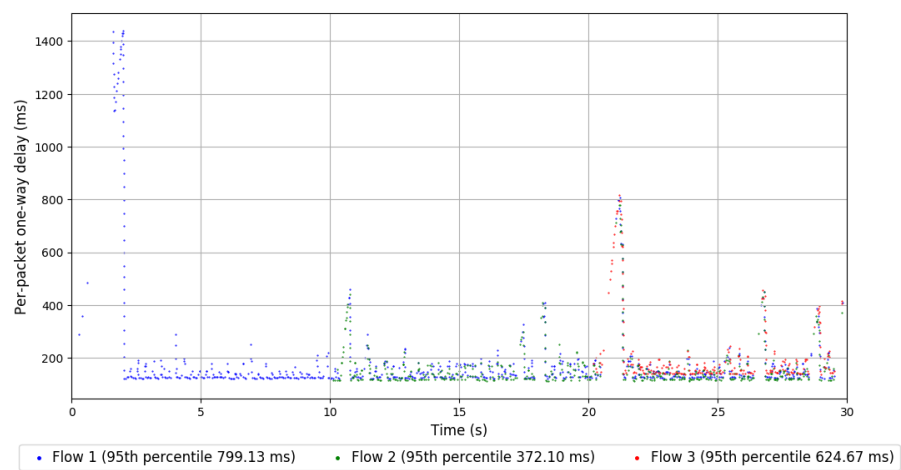
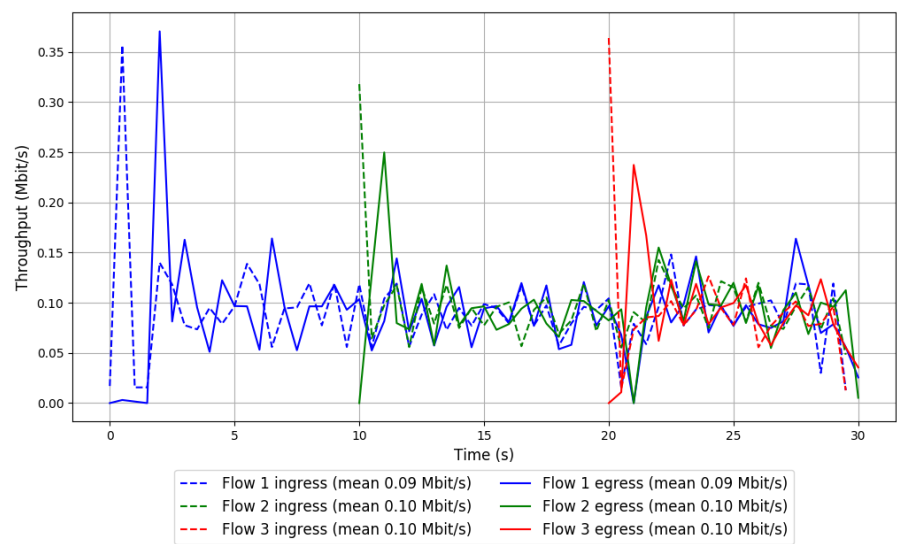


Run 3: Statistics of Sprout

Start at: 2019-02-12 03:15:04
End at: 2019-02-12 03:15:34
Local clock offset: -7.397 ms
Remote clock offset: 2.467 ms

```
# Below is generated by plot.py at 2019-02-12 03:41:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 577.174 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 799.134 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 372.098 ms
Loss rate: 1.89%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 624.669 ms
Loss rate: 1.28%
```

Run 3: Report of Sprout — Data Link

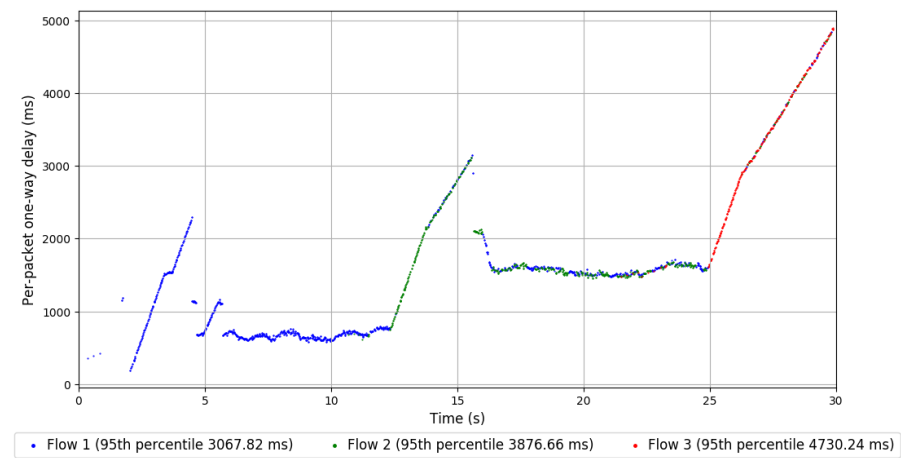
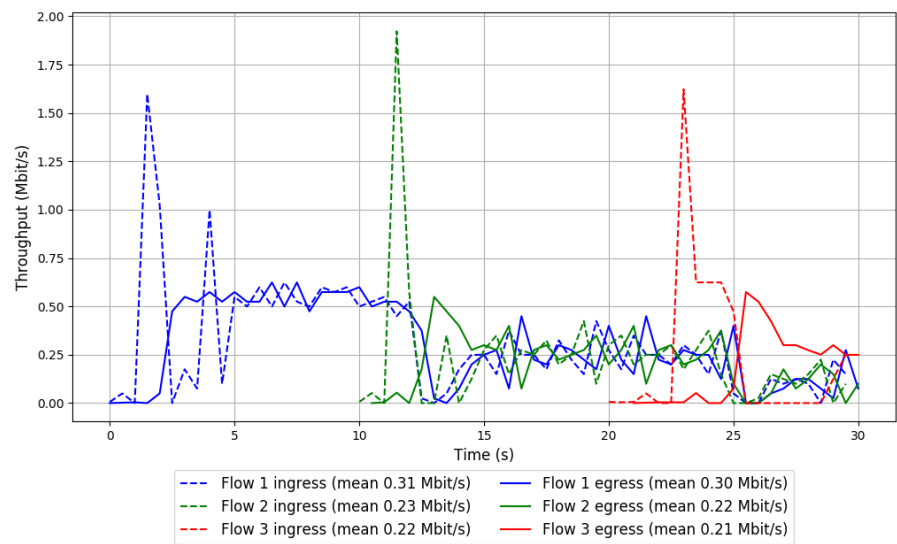


```
Run 1: Statistics of TaoVA-100x

Start at: 2019-02-12 02:24:28
End at: 2019-02-12 02:24:58
Local clock offset: -5.399 ms
Remote clock offset: 8.078 ms

# Below is generated by plot.py at 2019-02-12 03:41:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 4100.085 ms
Loss rate: 7.99%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 3067.815 ms
Loss rate: 4.68%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3876.665 ms
Loss rate: 9.58%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 4730.243 ms
Loss rate: 18.68%
```

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-02-12 02:50:23

End at: 2019-02-12 02:50:53

Local clock offset: -6.416 ms

Remote clock offset: 8.408 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 3860.101 ms

Loss rate: 23.81%

-- Flow 1:

Average throughput: 0.40 Mbit/s

95th percentile per-packet one-way delay: 3195.583 ms

Loss rate: 3.61%

-- Flow 2:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 4250.827 ms

Loss rate: 40.98%

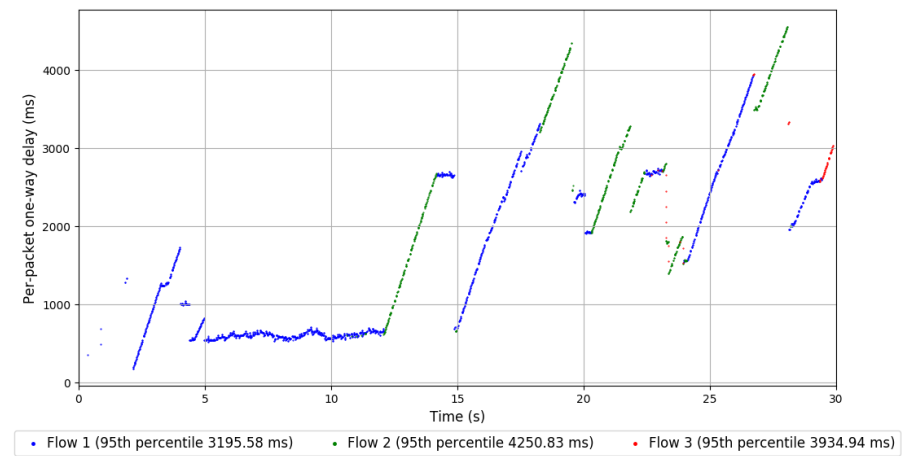
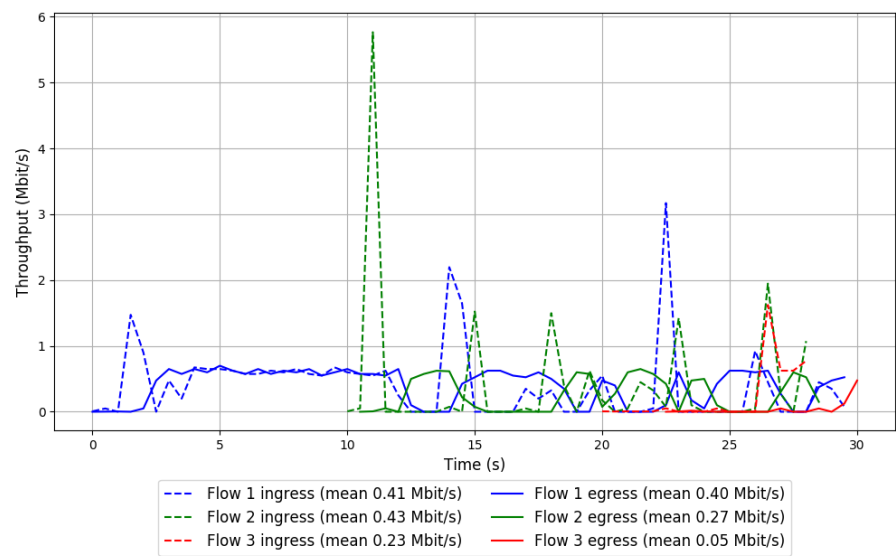
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 3934.936 ms

Loss rate: 80.72%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-02-12 03:16:18

End at: 2019-02-12 03:16:48

Local clock offset: -6.566 ms

Remote clock offset: 7.627 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 3325.883 ms

Loss rate: 17.03%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 2647.270 ms

Loss rate: 4.28%

-- Flow 2:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 3361.849 ms

Loss rate: 18.88%

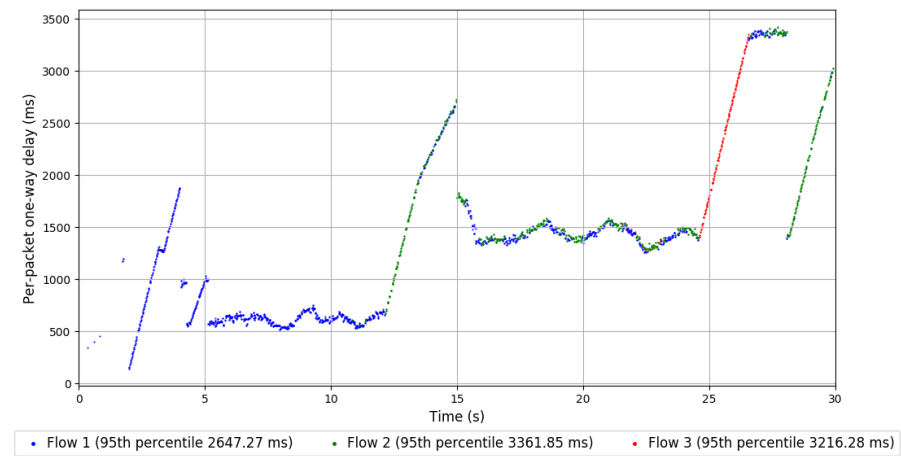
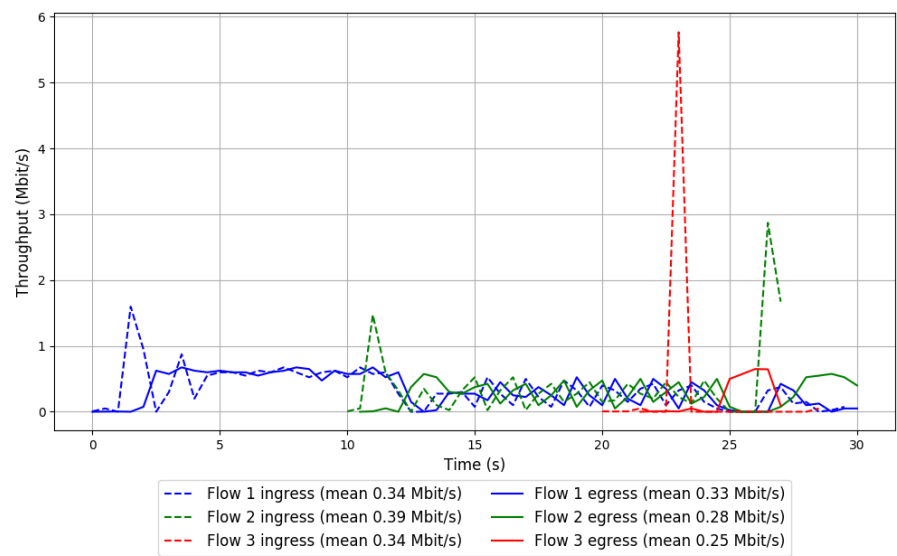
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 3216.285 ms

Loss rate: 56.98%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-02-12 02:40:34

End at: 2019-02-12 02:41:04

Local clock offset: -6.914 ms

Remote clock offset: 8.282 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 1295.667 ms

Loss rate: 3.96%

-- Flow 1:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 1121.673 ms

Loss rate: 0.60%

-- Flow 2:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 1289.046 ms

Loss rate: 4.33%

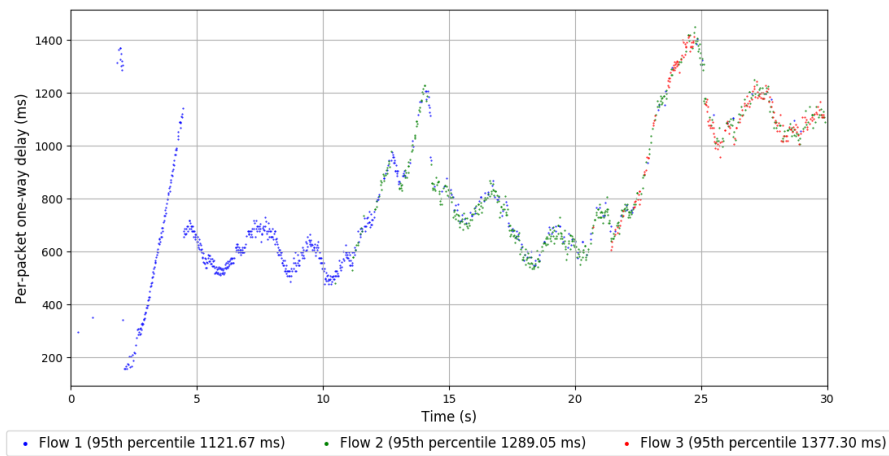
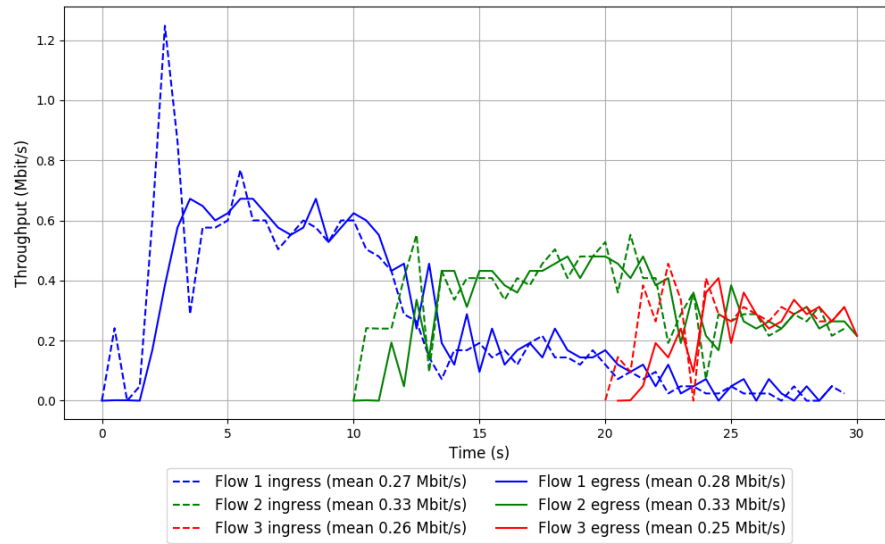
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 1377.303 ms

Loss rate: 13.23%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-02-12 03:06:27

End at: 2019-02-12 03:06:57

Local clock offset: -6.765 ms

Remote clock offset: 3.126 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 2018.230 ms

Loss rate: 6.57%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 1580.451 ms

Loss rate: 2.52%

-- Flow 2:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 1724.795 ms

Loss rate: 4.29%

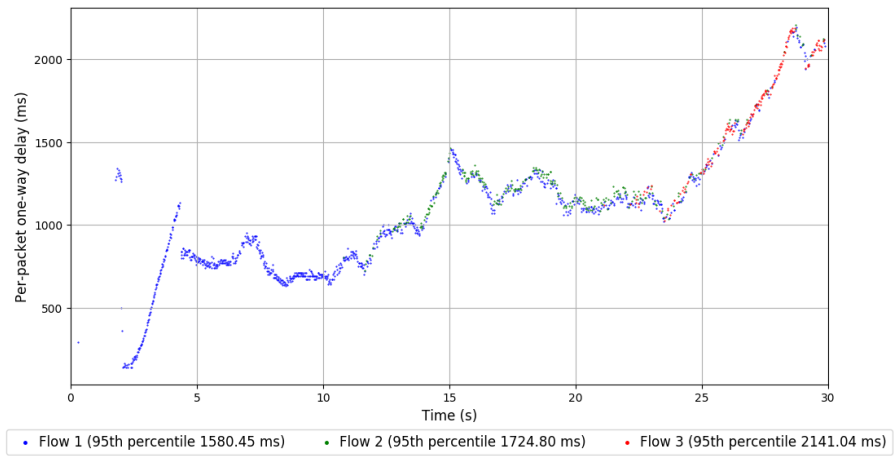
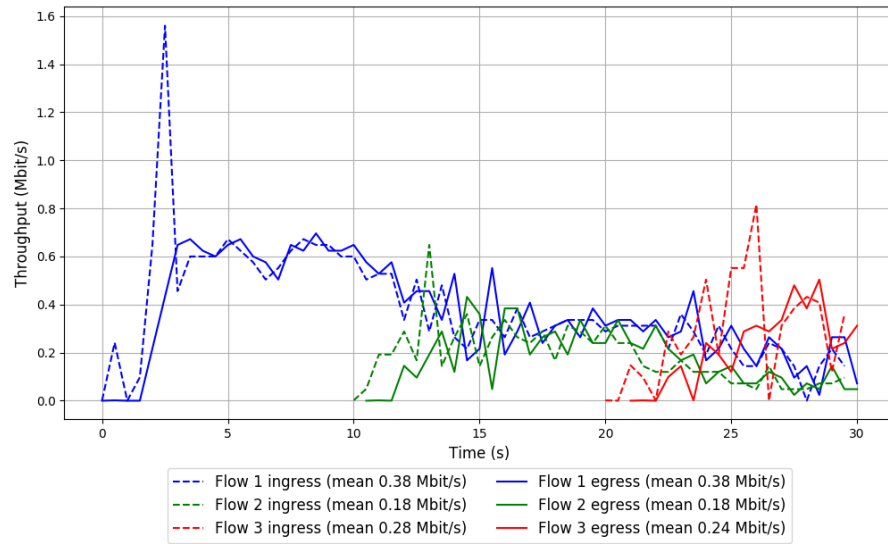
-- Flow 3:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 2141.040 ms

Loss rate: 26.04%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-02-12 03:32:28

End at: 2019-02-12 03:32:58

Local clock offset: -7.518 ms

Remote clock offset: 2.477 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 1801.754 ms

Loss rate: 5.77%

-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 1761.435 ms

Loss rate: 3.05%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 1814.552 ms

Loss rate: 5.92%

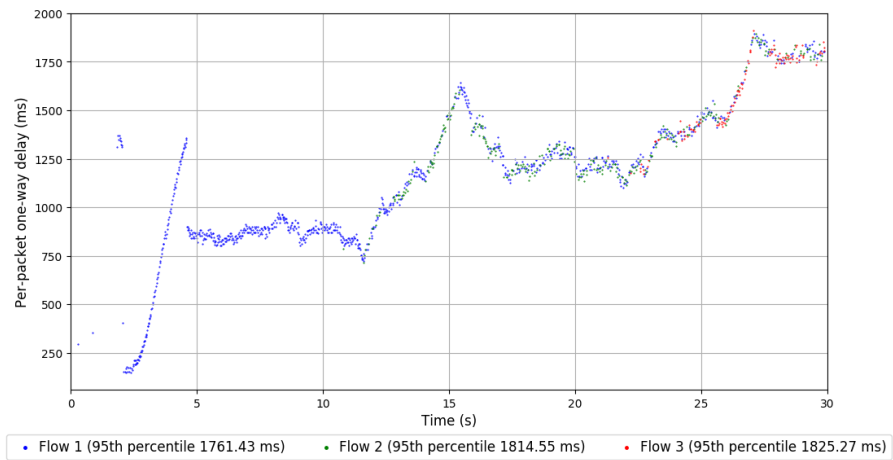
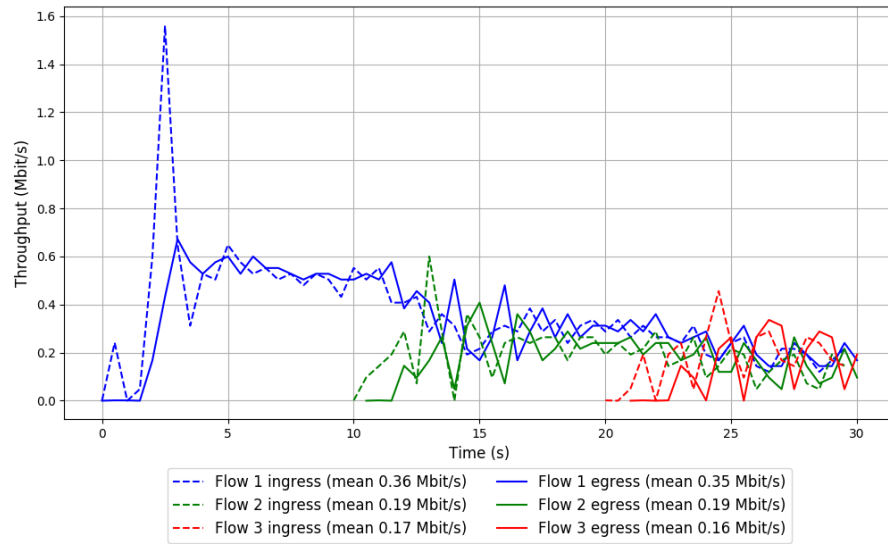
-- Flow 3:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 1825.274 ms

Loss rate: 22.18%

Run 3: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-02-12 02:39:20

End at: 2019-02-12 02:39:50

Local clock offset: -6.894 ms

Remote clock offset: 3.322 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 1961.592 ms

Loss rate: 3.84%

-- Flow 1:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 1961.592 ms

Loss rate: 3.72%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 1853.607 ms

Loss rate: 9.52%

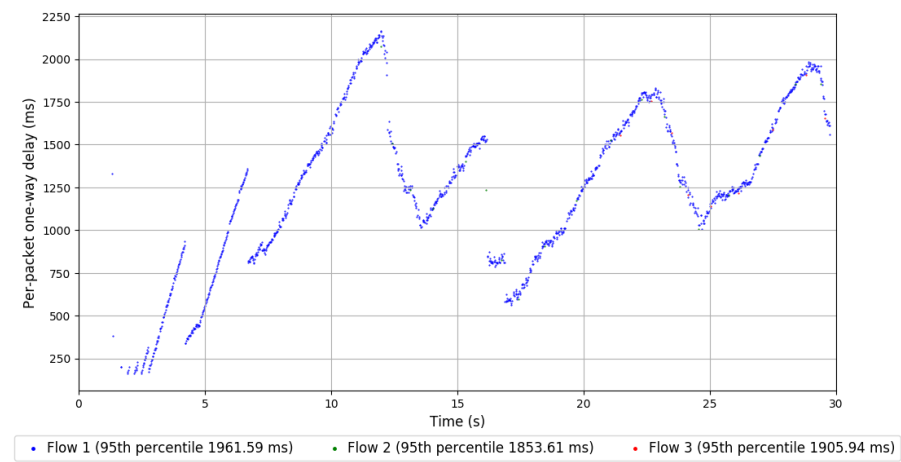
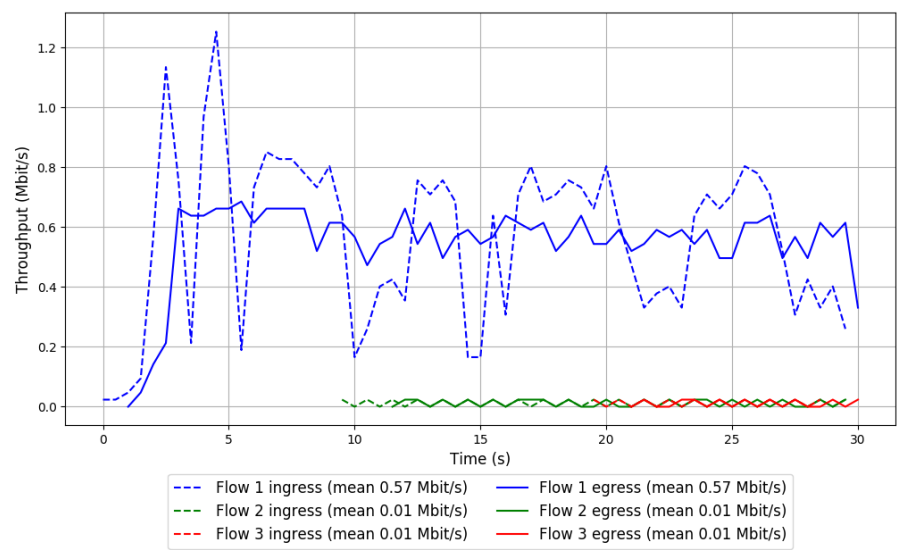
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 1905.942 ms

Loss rate: 10.00%

Run 1: Report of Verus — Data Link

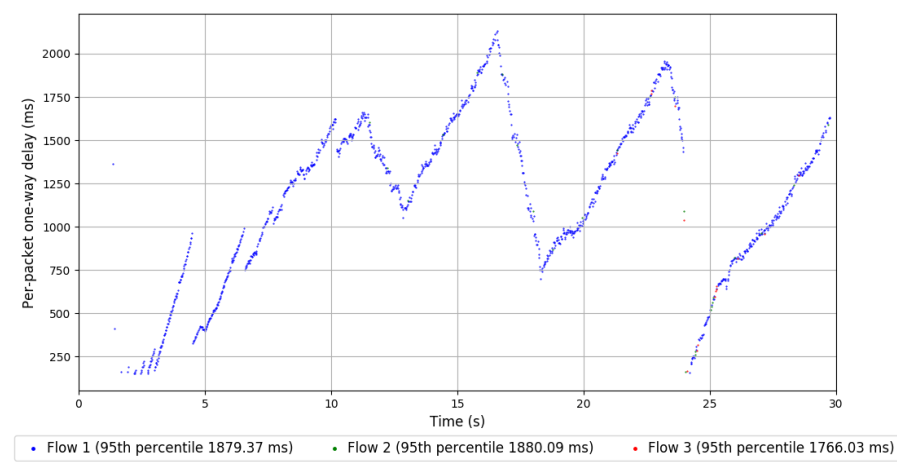
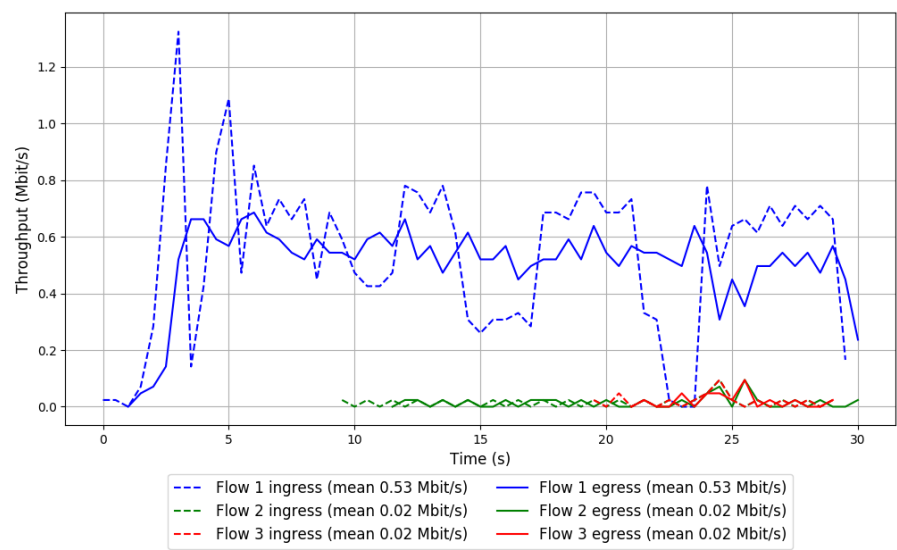


Run 2: Statistics of Verus

Start at: 2019-02-12 03:05:13
End at: 2019-02-12 03:05:43
Local clock offset: -7.519 ms
Remote clock offset: 3.276 ms

Below is generated by plot.py at 2019-02-12 03:41:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 1879.372 ms
Loss rate: 6.39%
-- Flow 1:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 1879.372 ms
Loss rate: 6.37%
-- Flow 2:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 1880.092 ms
Loss rate: 3.85%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 1766.034 ms
Loss rate: 11.76%

Run 2: Report of Verus — Data Link

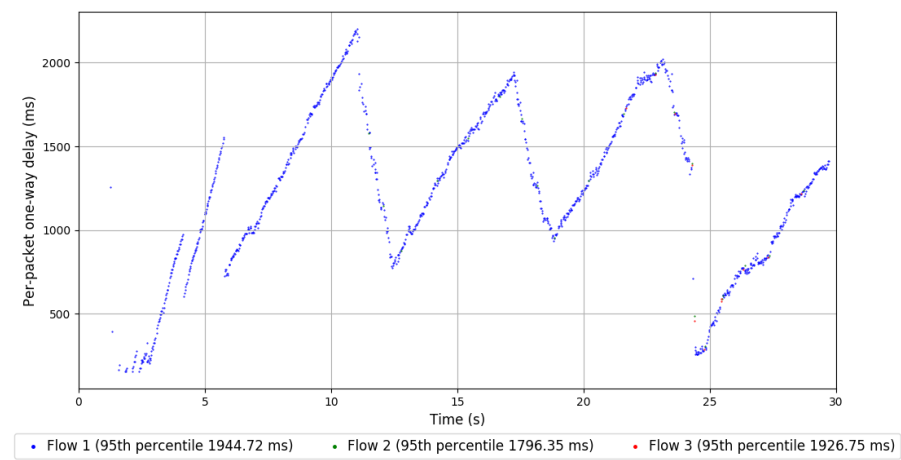
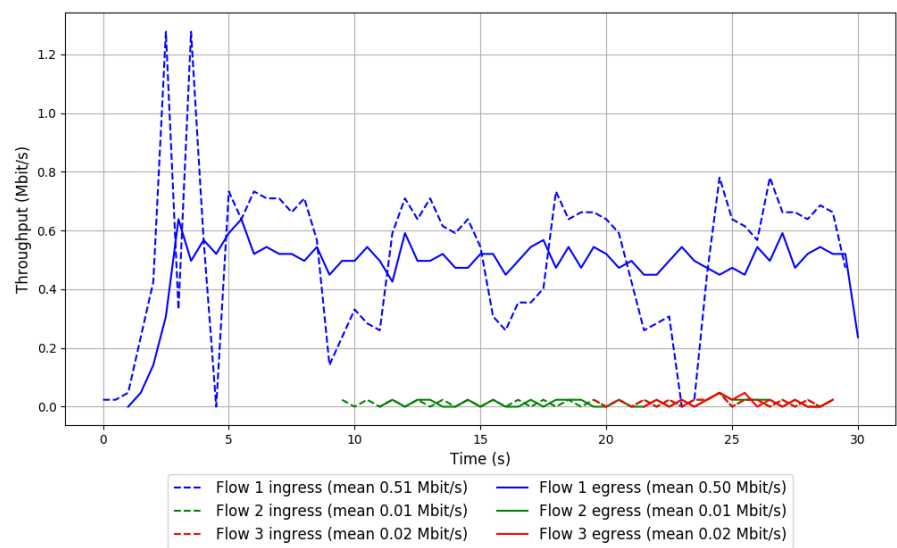


Run 3: Statistics of Verus

Start at: 2019-02-12 03:31:14
End at: 2019-02-12 03:31:44
Local clock offset: -6.742 ms
Remote clock offset: 2.485 ms

Below is generated by plot.py at 2019-02-12 03:41:15
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 1944.019 ms
Loss rate: 6.94%
-- Flow 1:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 1944.725 ms
Loss rate: 6.83%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1796.346 ms
Loss rate: 8.70%
-- Flow 3:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 1926.754 ms
Loss rate: 15.38%

Run 3: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

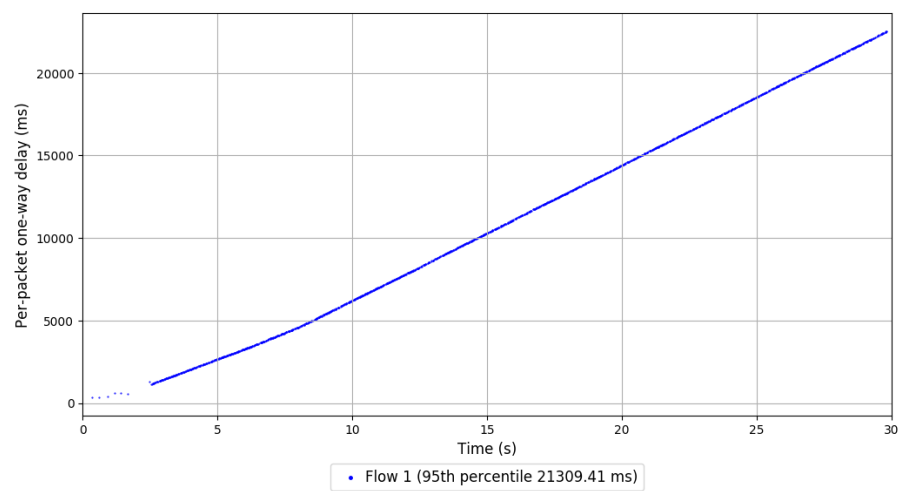
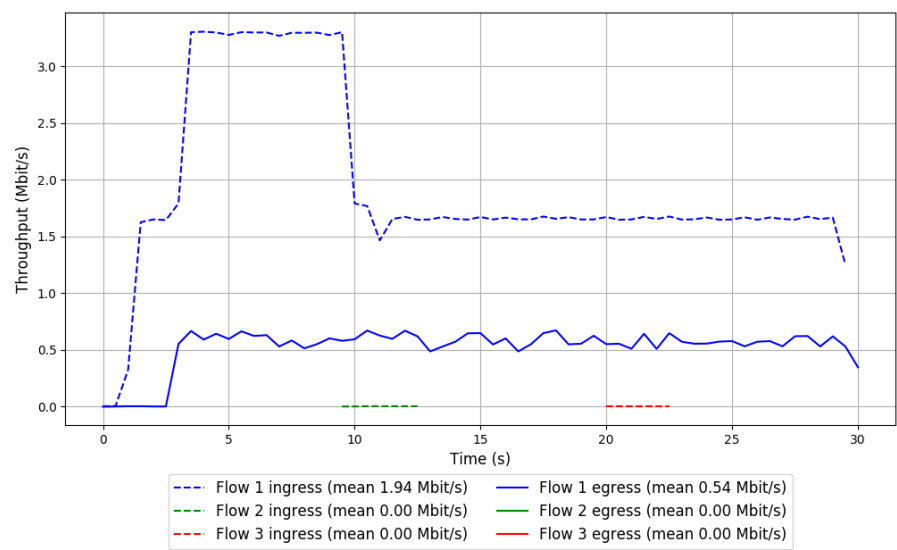
Start at: 2019-02-12 02:41:48

End at: 2019-02-12 02:42:18

Local clock offset: -7.032 ms

Remote clock offset: 3.032 ms

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

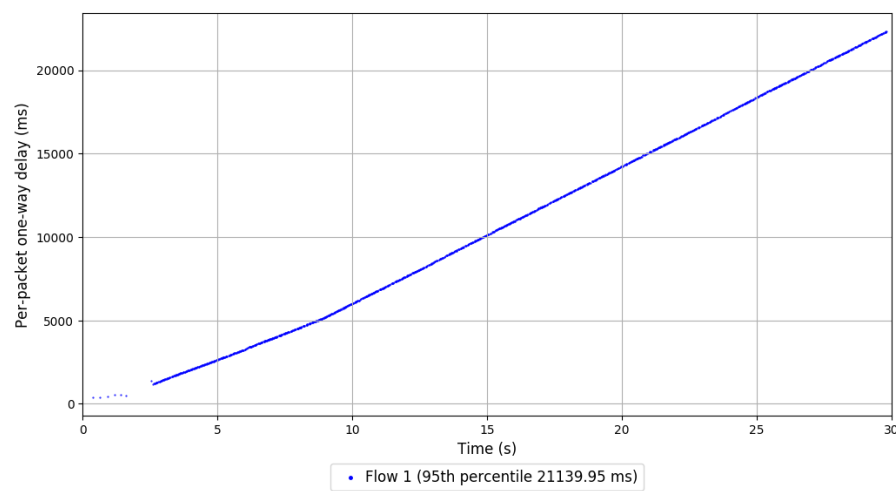
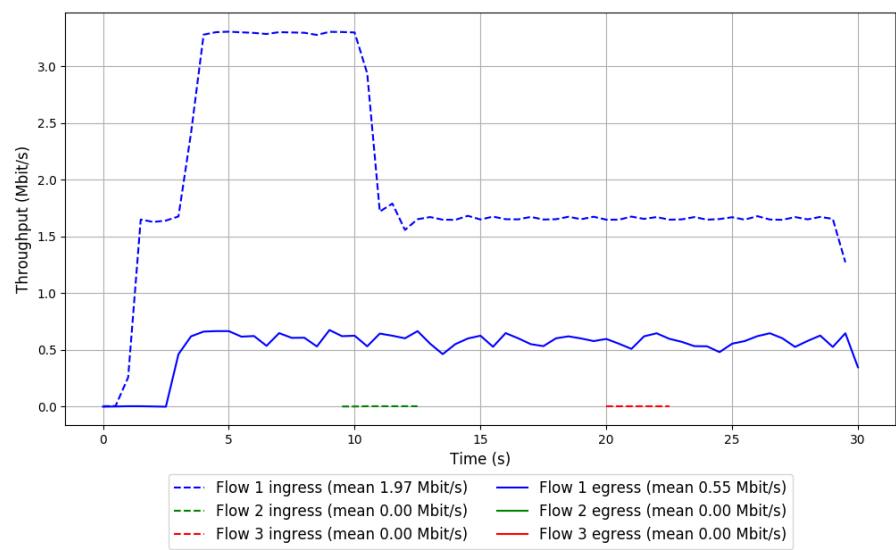
Start at: 2019-02-12 03:07:41

End at: 2019-02-12 03:08:11

Local clock offset: -6.74 ms

Remote clock offset: 2.988 ms

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

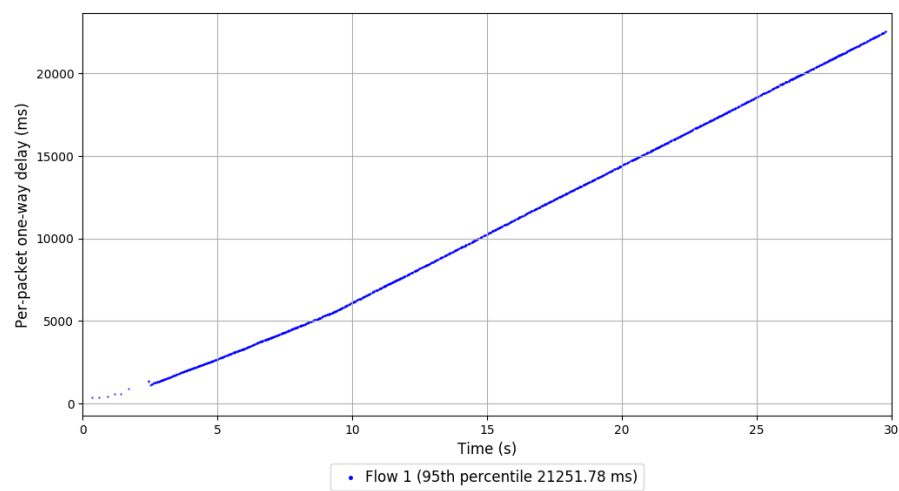
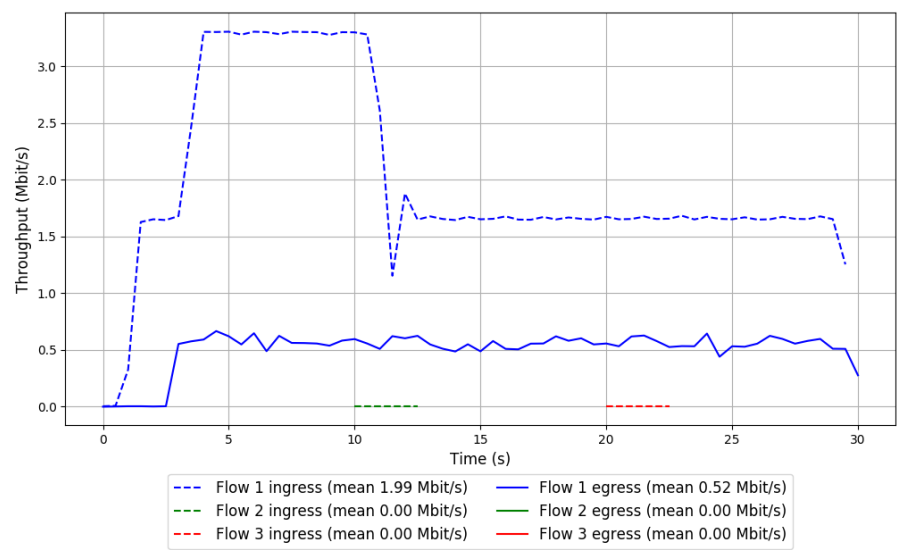
Start at: 2019-02-12 03:33:41

End at: 2019-02-12 03:34:11

Local clock offset: -6.793 ms

Remote clock offset: 2.633 ms

Run 3: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-02-12 02:36:51

End at: 2019-02-12 02:37:21

Local clock offset: -6.106 ms

Remote clock offset: 8.432 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 1264.357 ms

Loss rate: 2.08%

-- Flow 1:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 1276.213 ms

Loss rate: 0.77%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 1264.357 ms

Loss rate: 1.23%

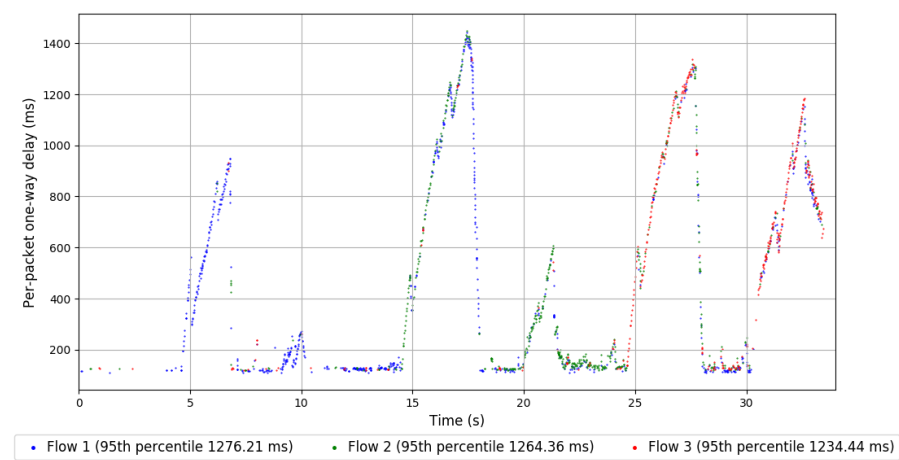
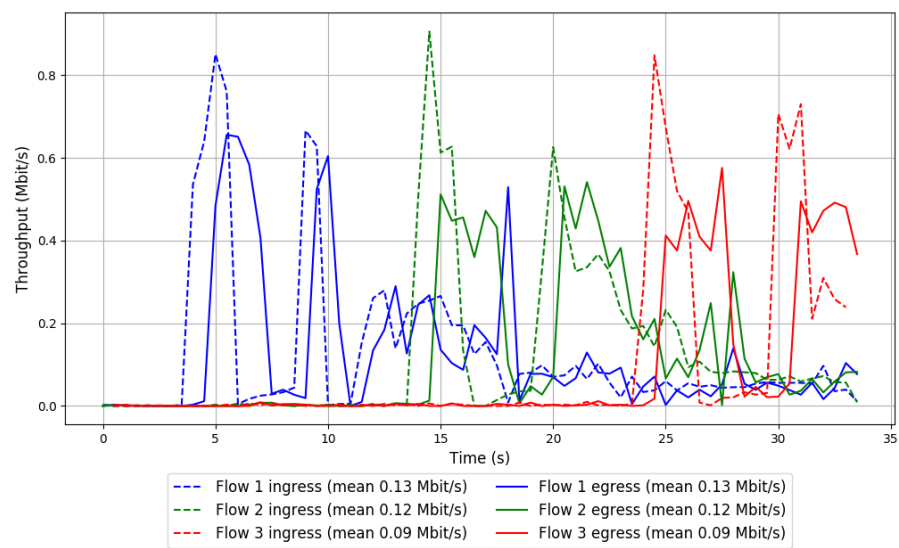
-- Flow 3:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 1234.444 ms

Loss rate: 5.06%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-02-12 03:02:46

End at: 2019-02-12 03:03:16

Local clock offset: -7.569 ms

Remote clock offset: 8.353 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 1466.208 ms

Loss rate: 2.18%

-- Flow 1:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 1475.616 ms

Loss rate: 0.84%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 1443.156 ms

Loss rate: 0.74%

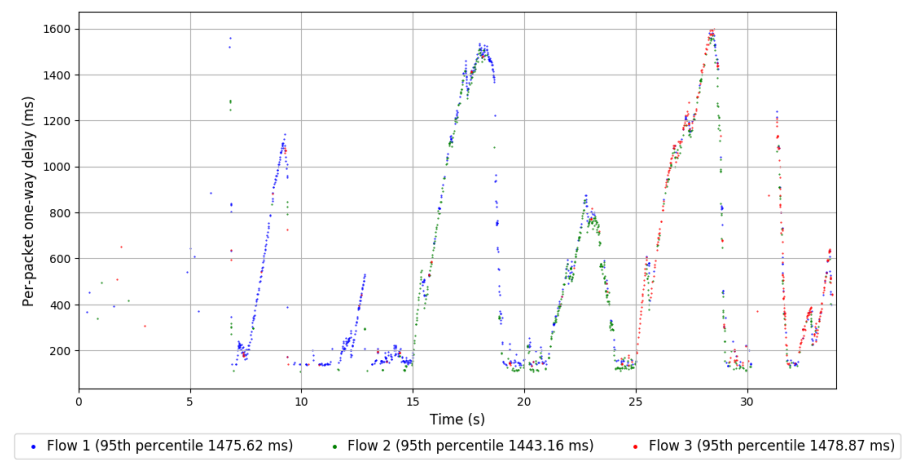
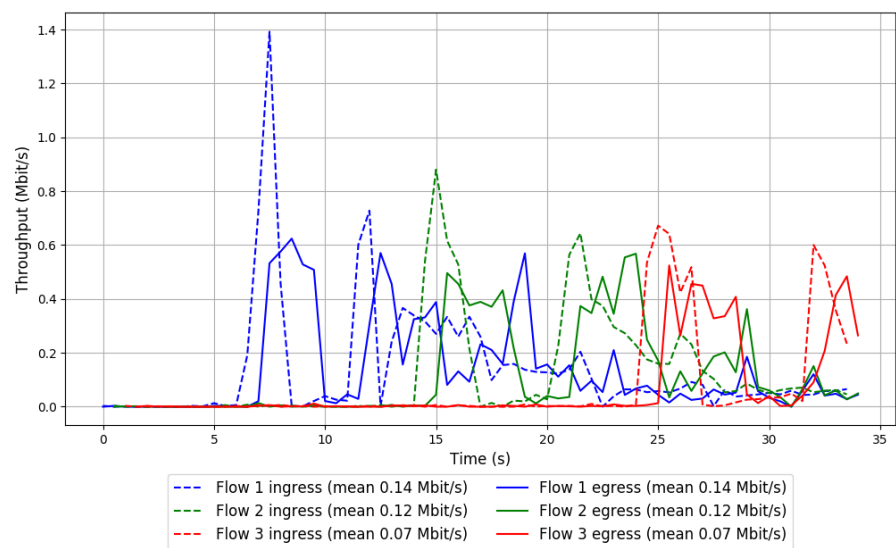
-- Flow 3:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 1478.865 ms

Loss rate: 7.19%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-02-12 03:28:47

End at: 2019-02-12 03:29:17

Local clock offset: -6.74 ms

Remote clock offset: 7.497 ms

Below is generated by plot.py at 2019-02-12 03:41:15

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 1407.893 ms

Loss rate: 1.11%

-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 1204.740 ms

Loss rate: 0.33%

-- Flow 2:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 1370.463 ms

Loss rate: 1.04%

-- Flow 3:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 1481.438 ms

Loss rate: 2.74%

Run 3: Report of WebRTC media — Data Link

