

Pantheon Report

Generated at 2019-01-19 11:09:44 (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:

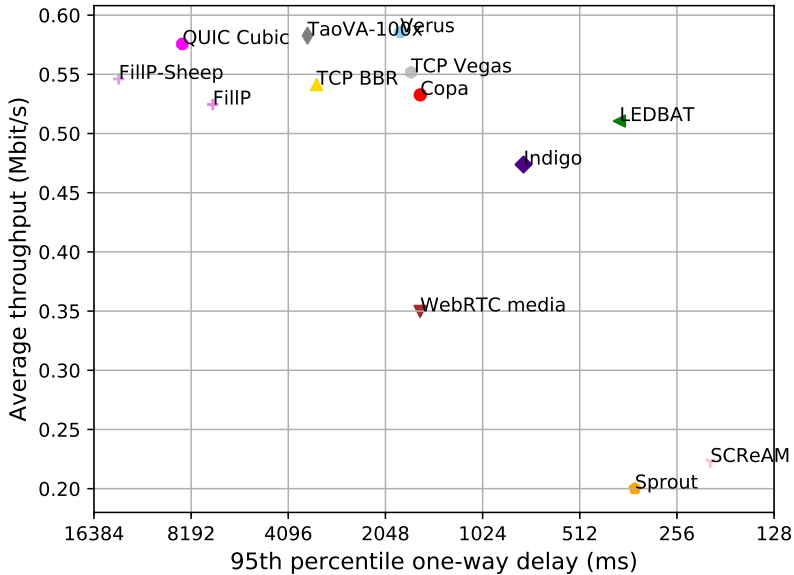
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

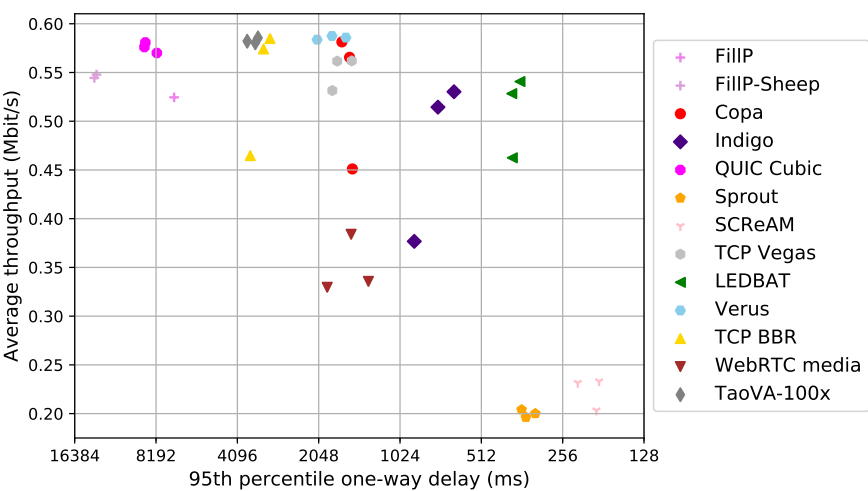
```
branch: muses @ c80a283586bf7b0cc1fe08c69c8f60d56498f81c
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ c3eee875824760ec5b2fd207fefe166e1afe2170
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	0.28	0.04	3331.60	3371.92	2719.44	2.83	5.59	38.35
Copa	3	0.37	0.21	0.08	1558.12	1677.44	1582.00	4.53	8.42	12.87
TCP Cubic	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FillP	1	0.52	0.01	0.00	7052.51	6196.53	6674.83	23.00	0.00	81.98
FillP-Sheep	2	0.54	0.02	0.01	13795.75	7299.54	3709.66	13.79	0.00	99.69
Indigo	3	0.25	0.20	0.26	709.16	756.46	818.61	0.54	0.86	2.78
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	0.26	0.24	0.28	357.85	391.19	408.80	0.23	0.57	5.67
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	0.57	0.01	0.01	8698.88	8559.18	9216.49	31.50	31.03	77.78
SCReAM	3	0.08	0.13	0.16	183.26	200.41	206.95	0.70	0.82	2.05
Sprout	3	0.09	0.10	0.11	780.41	251.60	321.23	0.98	0.98	2.40
TaoVA-100x	3	0.36	0.25	0.23	2621.01	3423.57	4239.80	9.02	8.18	22.54
TCP Vegas	3	0.36	0.22	0.17	1616.41	1731.35	1784.01	2.64	6.09	19.55
Verus	3	0.57	0.01	0.01	1841.00	1823.03	1758.69	5.39	8.02	15.25
PCC-Vivace	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WebRTC media	3	0.15	0.13	0.08	1558.06	1613.56	1521.40	0.43	0.55	3.86

Run 1: Statistics of TCP BBR

Start at: 2019-01-19 09:58:29

End at: 2019-01-19 09:58:59

Local clock offset: -3.099 ms

Remote clock offset: 8.221 ms

Below is generated by plot.py at 2019-01-19 11:09:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.46 Mbit/s

95th percentile per-packet one-way delay: 3669.036 ms

Loss rate: 4.66%

-- Flow 1:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 3671.708 ms

Loss rate: 2.75%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 3659.210 ms

Loss rate: 6.36%

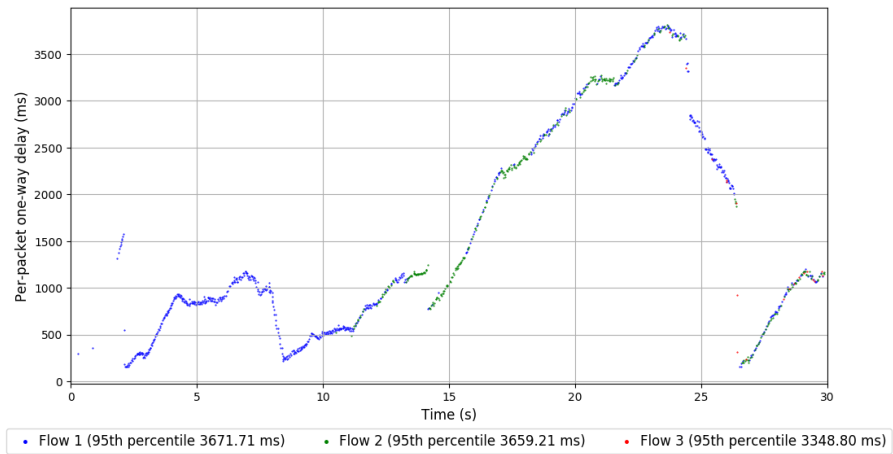
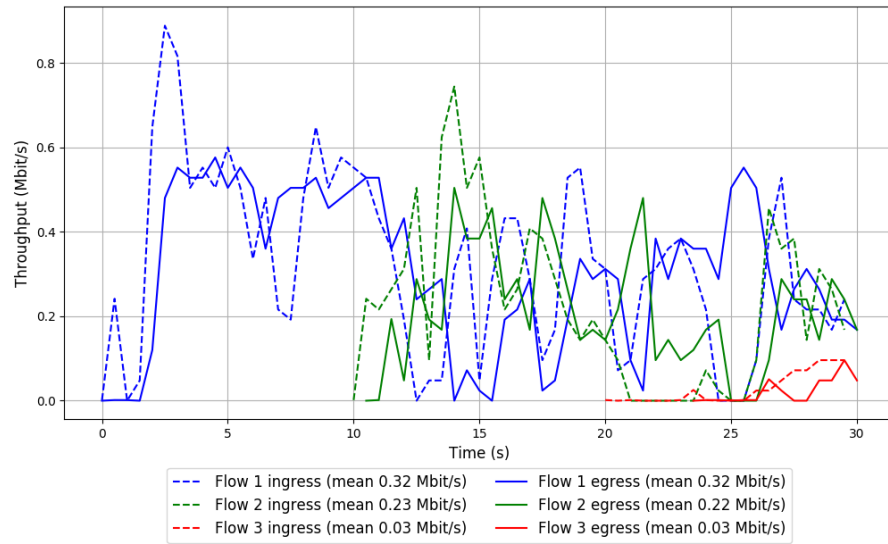
-- Flow 3:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 3348.800 ms

Loss rate: 42.79%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-01-19 10:24:12

End at: 2019-01-19 10:24:42

Local clock offset: -1.419 ms

Remote clock offset: 3.515 ms

Below is generated by plot.py at 2019-01-19 11:09:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 3101.312 ms

Loss rate: 5.14%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 3084.464 ms

Loss rate: 3.92%

-- Flow 2:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 3149.654 ms

Loss rate: 5.47%

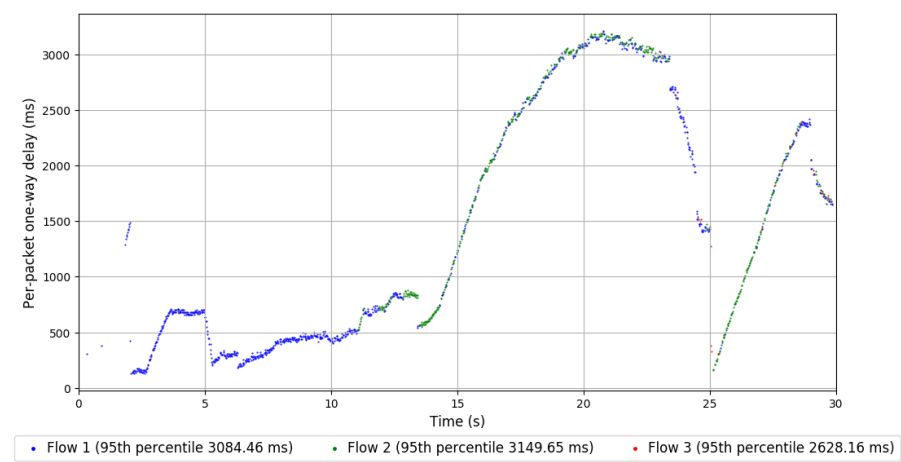
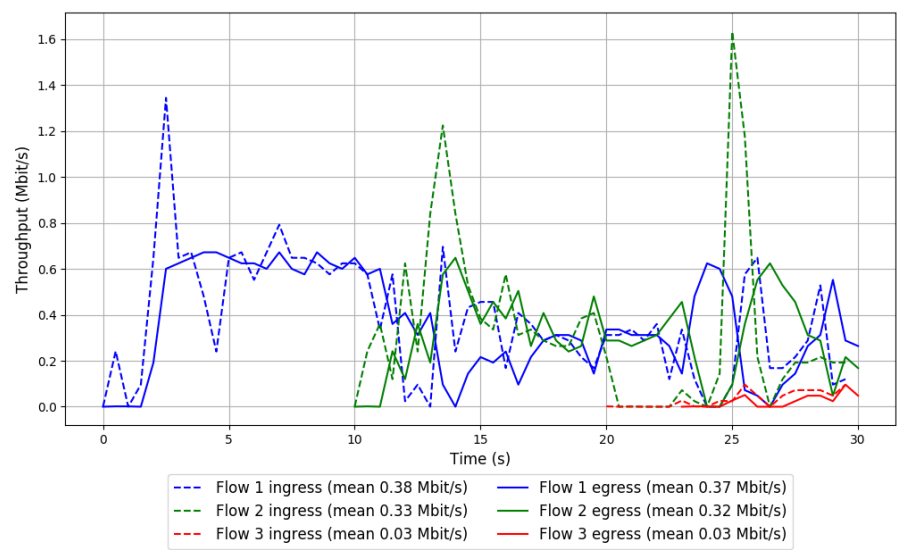
-- Flow 3:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 2628.164 ms

Loss rate: 41.72%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-01-19 10:49:58

End at: 2019-01-19 10:50:28

Local clock offset: -2.729 ms

Remote clock offset: 9.127 ms

Below is generated by plot.py at 2019-01-19 11:09:02

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 3277.405 ms

Loss rate: 3.87%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 3238.620 ms

Loss rate: 1.82%

-- Flow 2:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 3306.903 ms

Loss rate: 4.93%

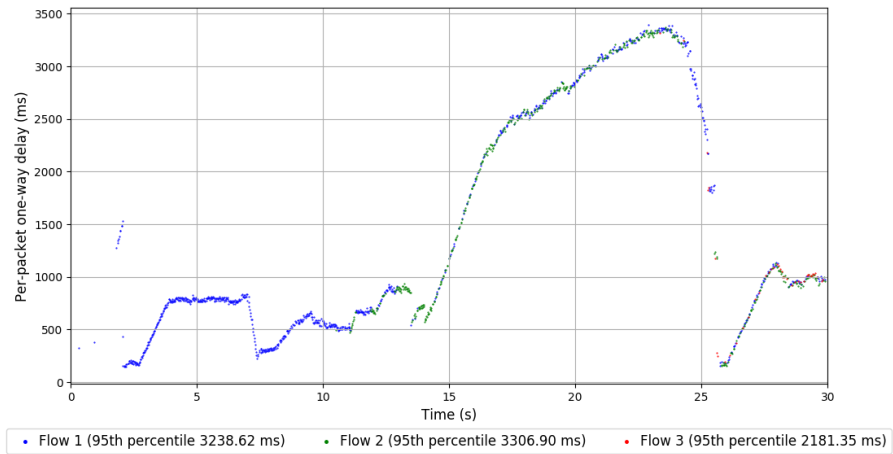
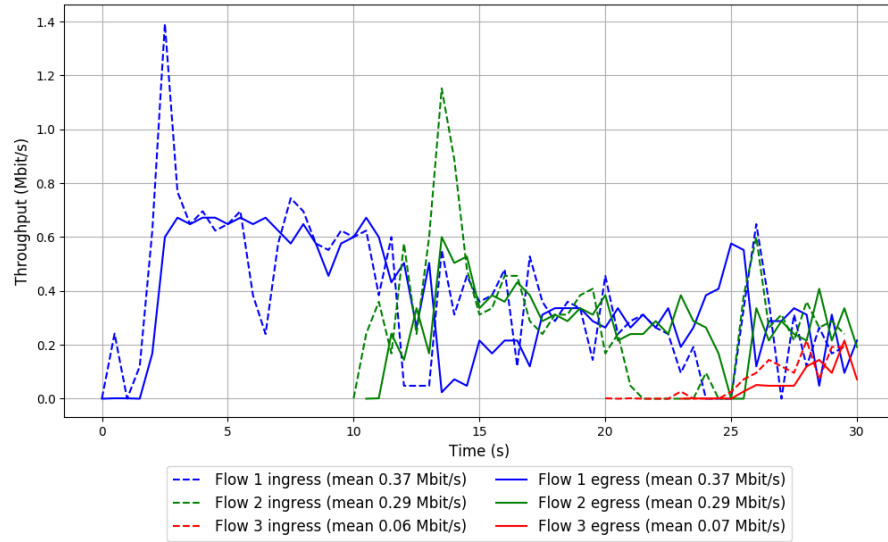
-- Flow 3:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 2181.346 ms

Loss rate: 30.55%

Run 3: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-01-19 09:52:19

End at: 2019-01-19 09:52:49

Local clock offset: -4.375 ms

Remote clock offset: 2.537 ms

Below is generated by plot.py at 2019-01-19 11:09:03

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.45 Mbit/s

95th percentile per-packet one-way delay: 1536.874 ms

Loss rate: 6.32%

-- Flow 1:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 1458.890 ms

Loss rate: 4.83%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 1630.075 ms

Loss rate: 8.46%

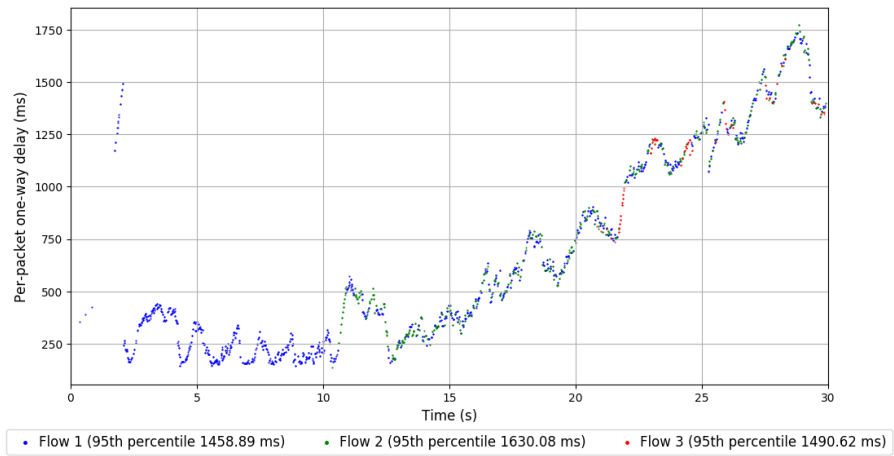
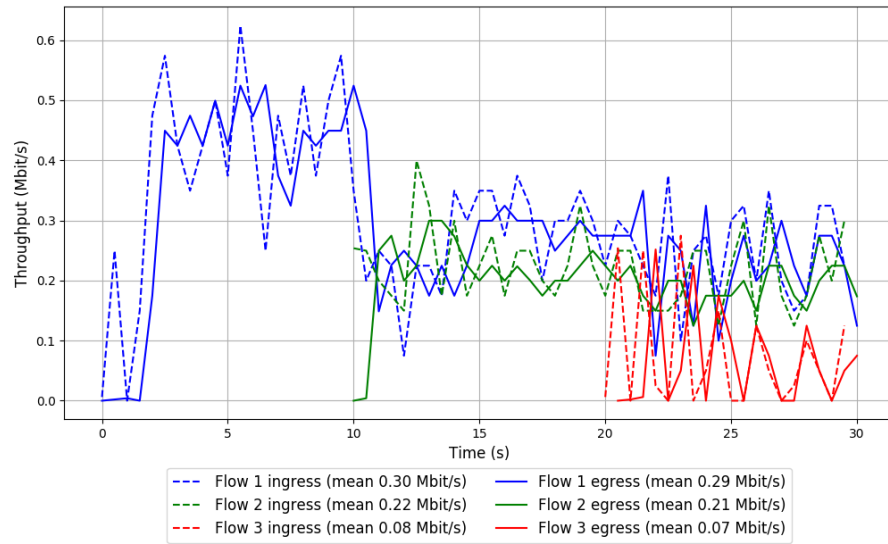
-- Flow 3:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 1490.620 ms

Loss rate: 11.78%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-01-19 10:18:02

End at: 2019-01-19 10:18:32

Local clock offset: -2.384 ms

Remote clock offset: 4.067 ms

Below is generated by plot.py at 2019-01-19 11:09:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 1680.813 ms

Loss rate: 5.69%

-- Flow 1:

Average throughput: 0.43 Mbit/s

95th percentile per-packet one-way delay: 1649.373 ms

Loss rate: 4.54%

-- Flow 2:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 1817.141 ms

Loss rate: 8.10%

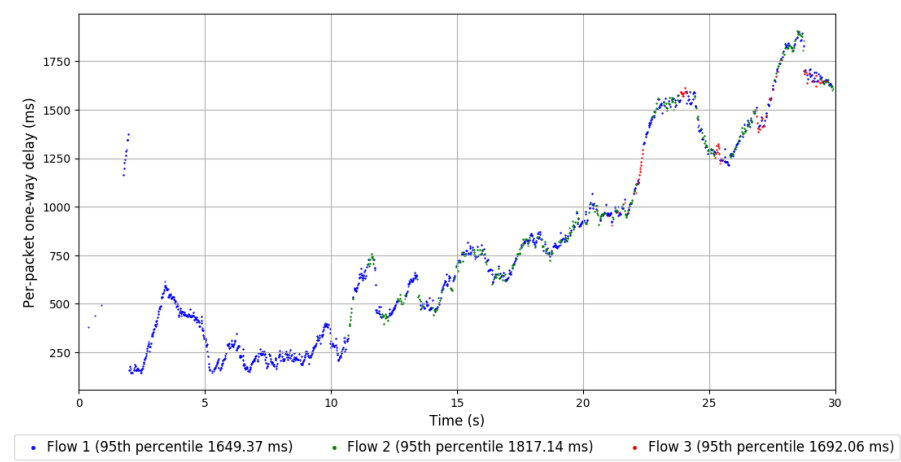
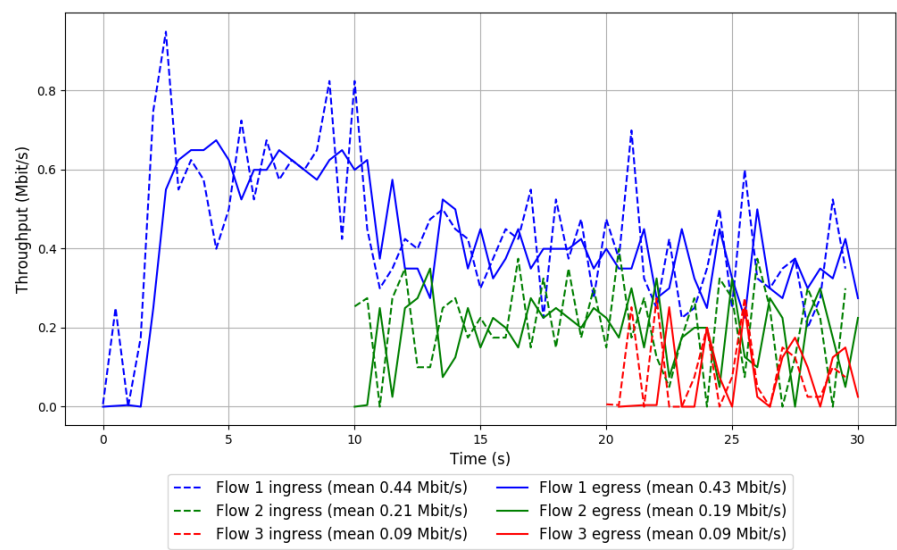
-- Flow 3:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 1692.057 ms

Loss rate: 11.68%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-01-19 10:43:47

End at: 2019-01-19 10:44:17

Local clock offset: -1.607 ms

Remote clock offset: 9.177 ms

Below is generated by plot.py at 2019-01-19 11:09:04

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 1574.216 ms

Loss rate: 5.91%

-- Flow 1:

Average throughput: 0.39 Mbit/s

95th percentile per-packet one-way delay: 1566.093 ms

Loss rate: 4.23%

-- Flow 2:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 1585.101 ms

Loss rate: 8.69%

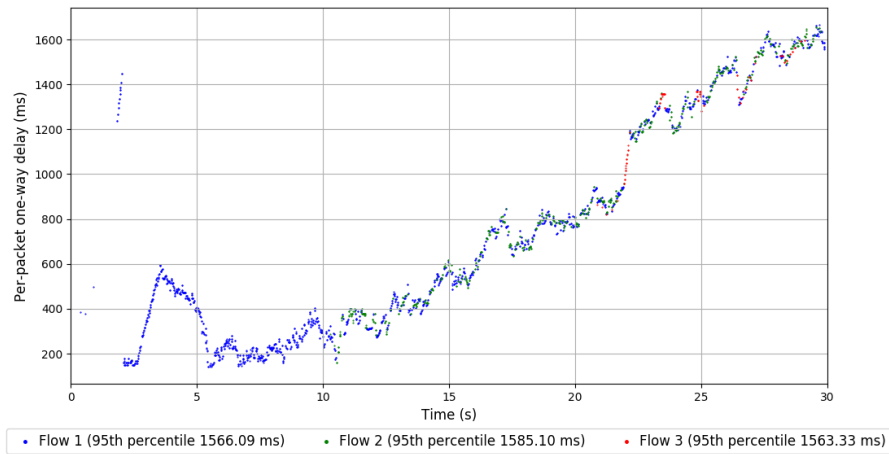
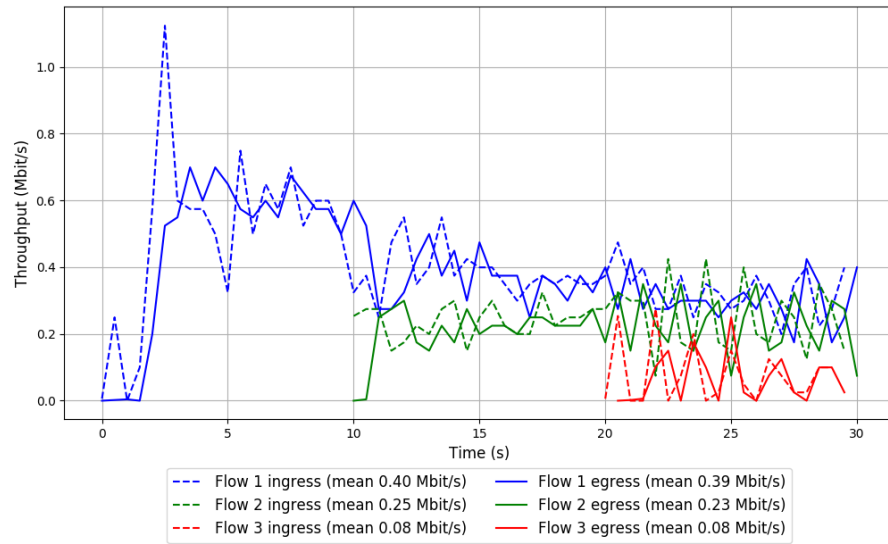
-- Flow 3:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 1563.329 ms

Loss rate: 15.15%

Run 3: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

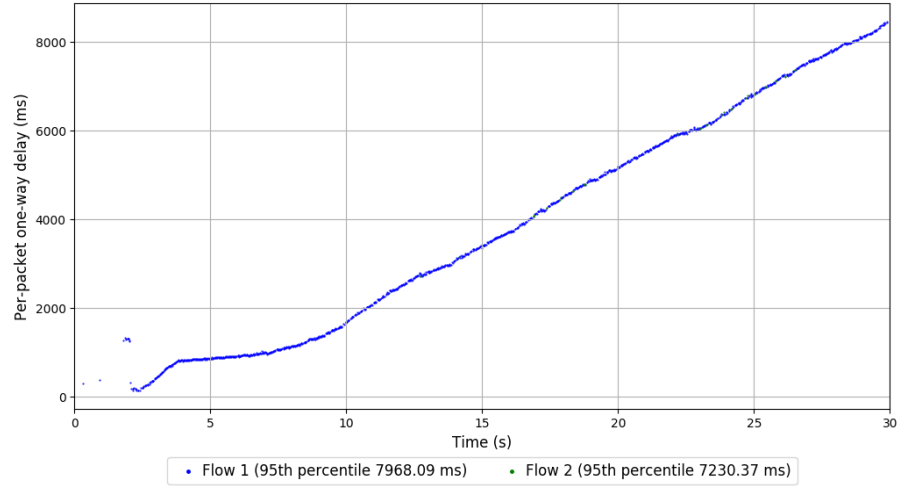
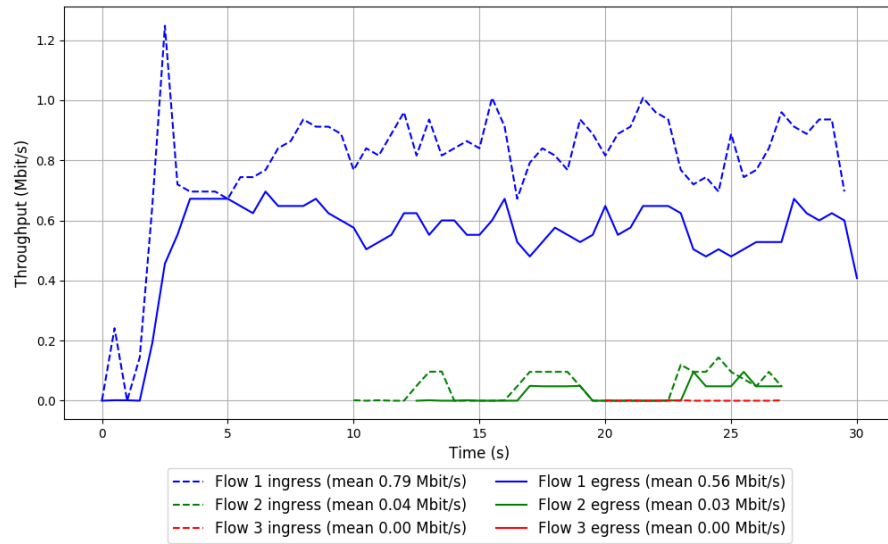
Start at: 2019-01-19 10:04:37

End at: 2019-01-19 10:05:07

Local clock offset: -2.382 ms

Remote clock offset: 3.444 ms

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

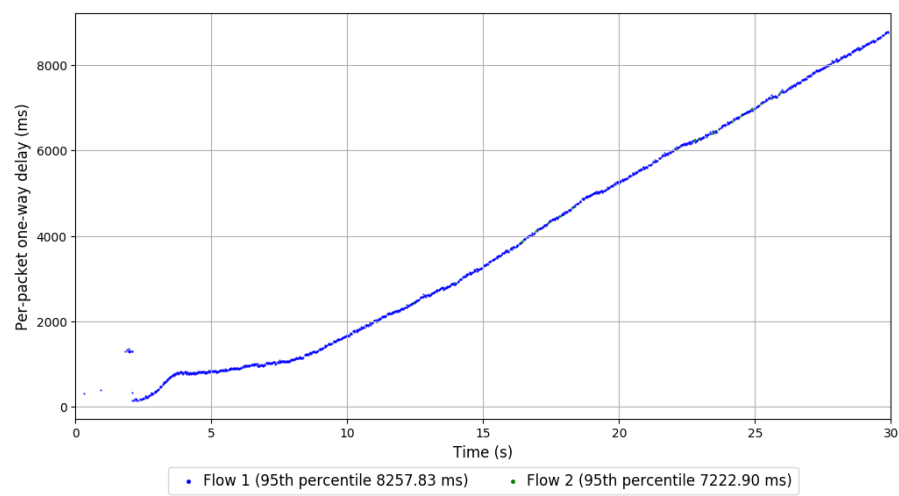
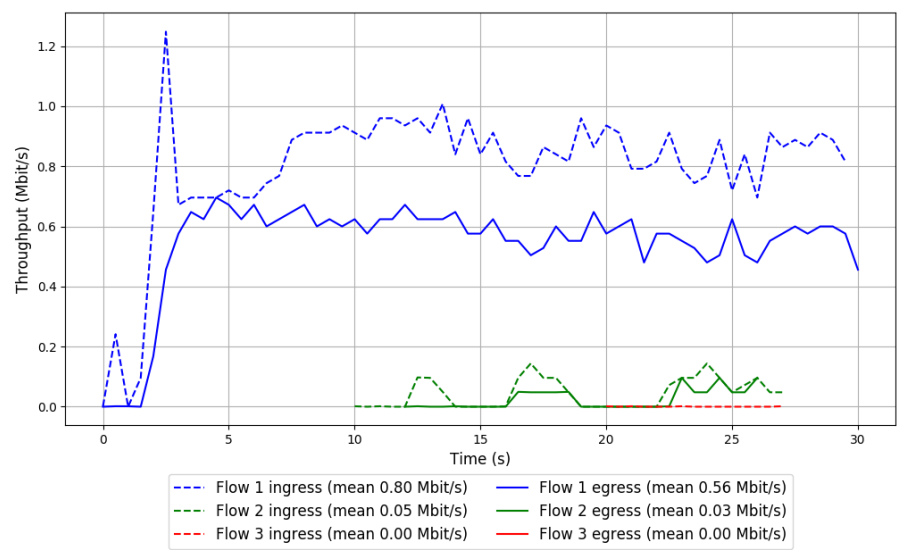
Start at: 2019-01-19 10:30:19

End at: 2019-01-19 10:30:49

Local clock offset: -1.267 ms

Remote clock offset: 8.648 ms

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

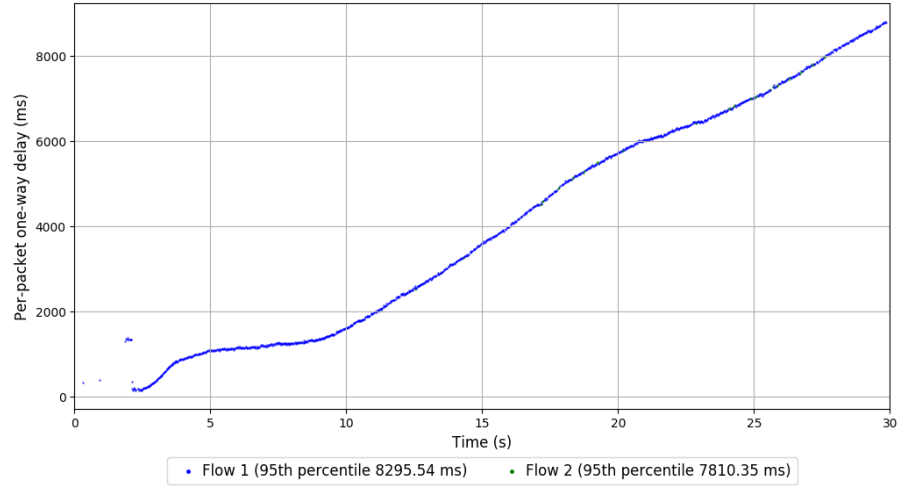
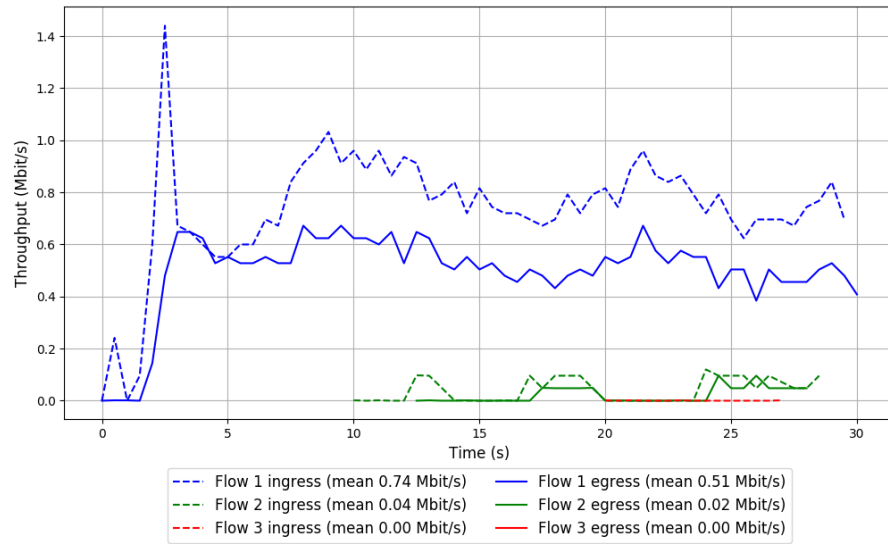
Start at: 2019-01-19 10:56:06

End at: 2019-01-19 10:56:36

Local clock offset: -6.018 ms

Remote clock offset: 3.931 ms

Run 3: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

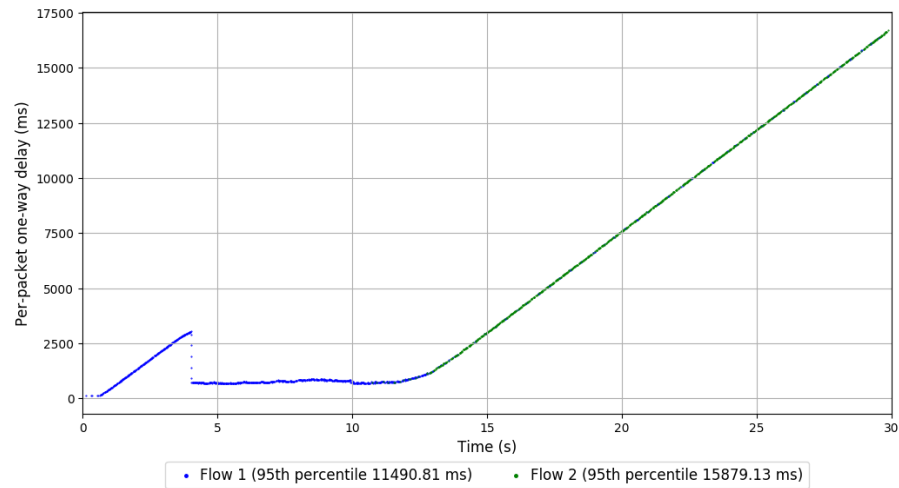
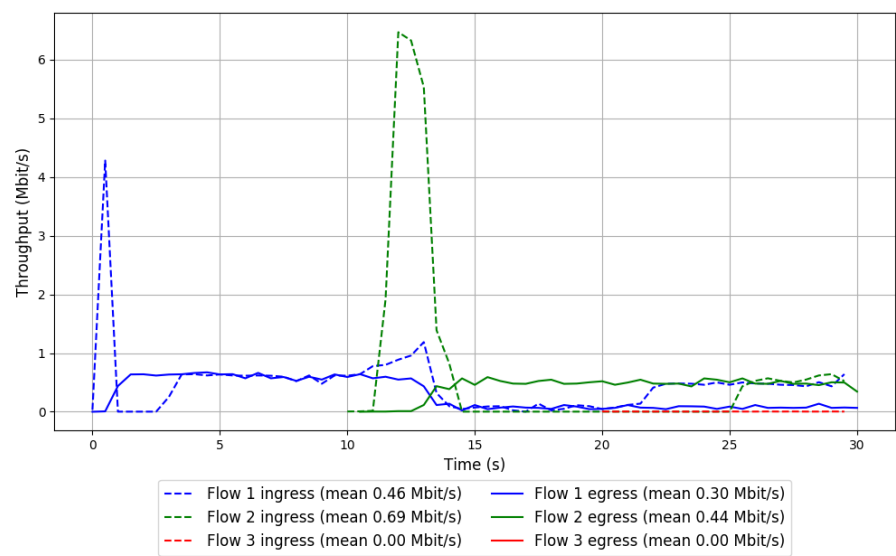
Start at: 2019-01-19 10:13:08

End at: 2019-01-19 10:13:38

Local clock offset: -2.526 ms

Remote clock offset: 7.101 ms

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-01-19 10:38:52

End at: 2019-01-19 10:39:22

Local clock offset: -1.776 ms

Remote clock offset: 3.856 ms

Below is generated by plot.py at 2019-01-19 11:09:07

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 7020.529 ms

Loss rate: 23.09%

-- Flow 1:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 7052.507 ms

Loss rate: 23.00%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 6196.535 ms

Loss rate: 0.00%

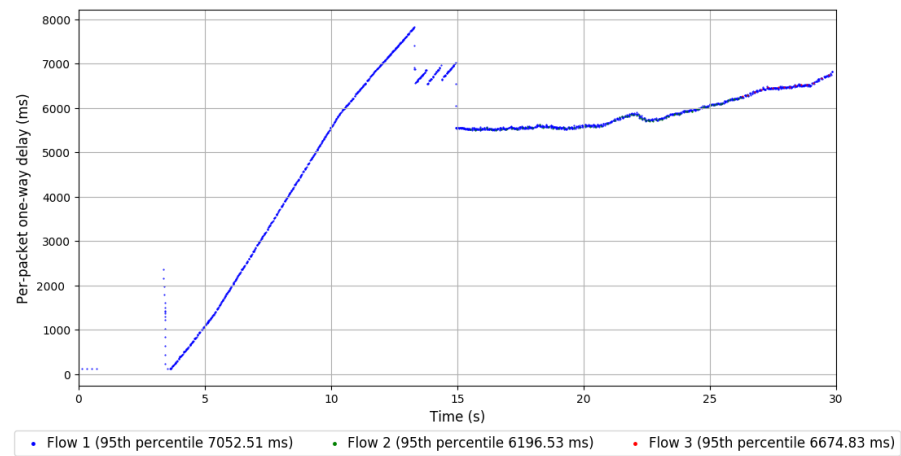
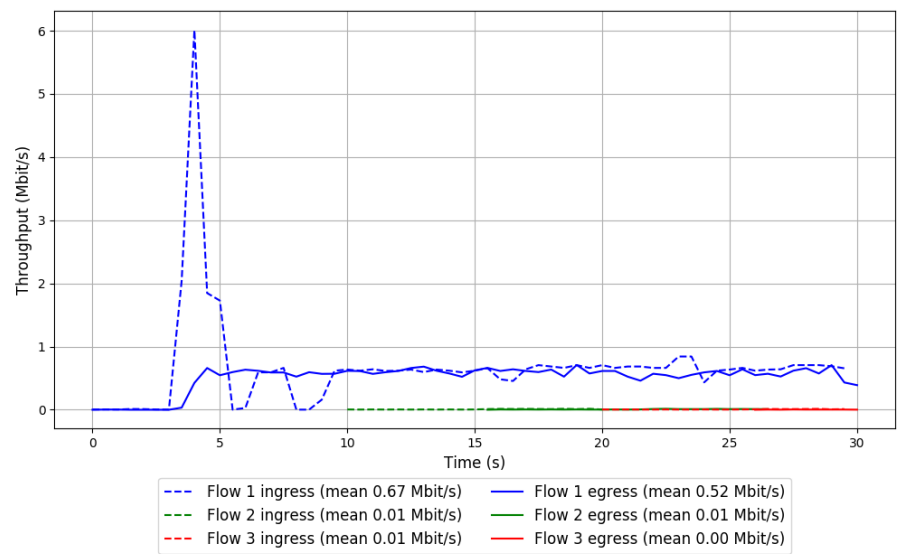
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 6674.834 ms

Loss rate: 81.98%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

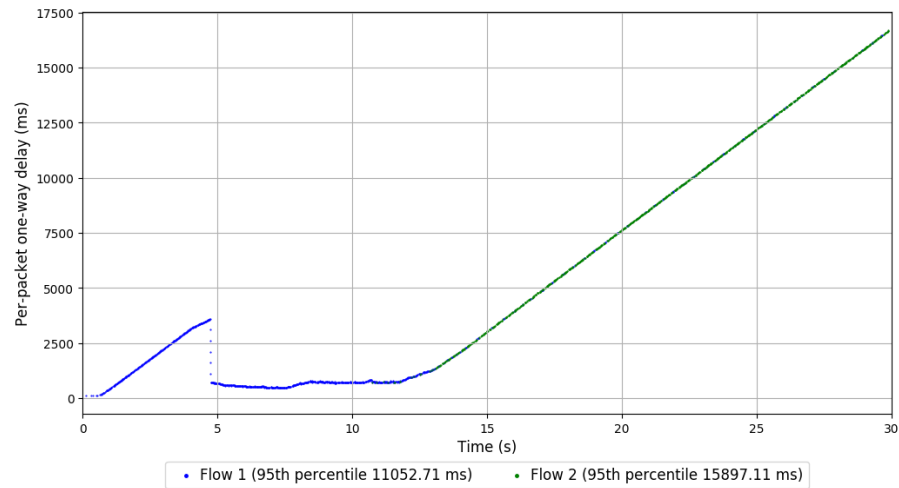
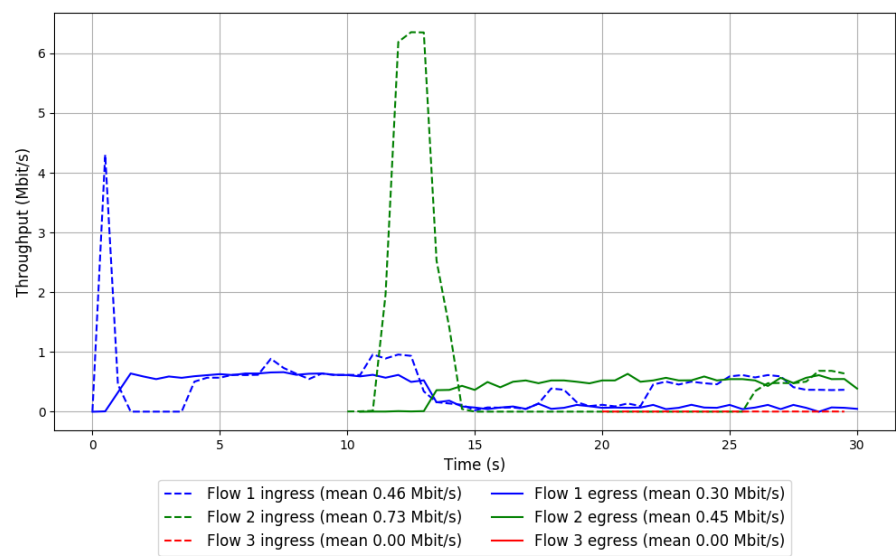
Start at: 2019-01-19 11:04:37

End at: 2019-01-19 11:05:07

Local clock offset: -7.875 ms

Remote clock offset: 4.789 ms

Run 3: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

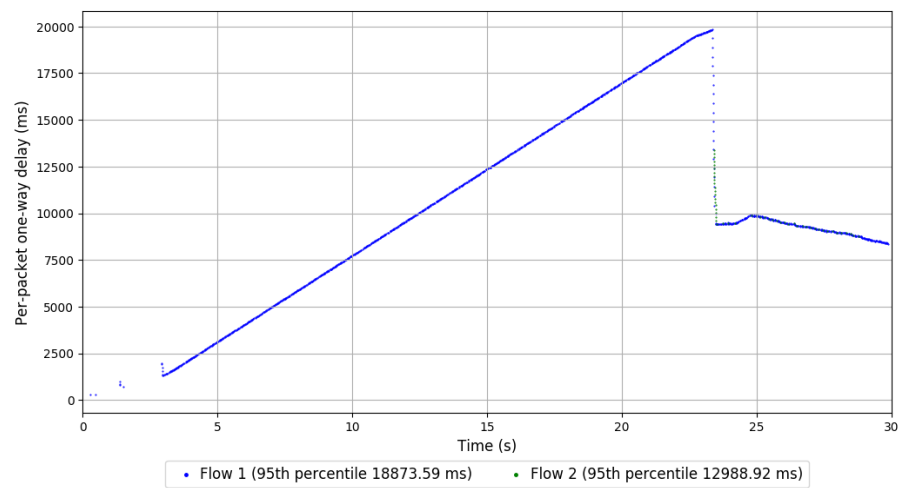
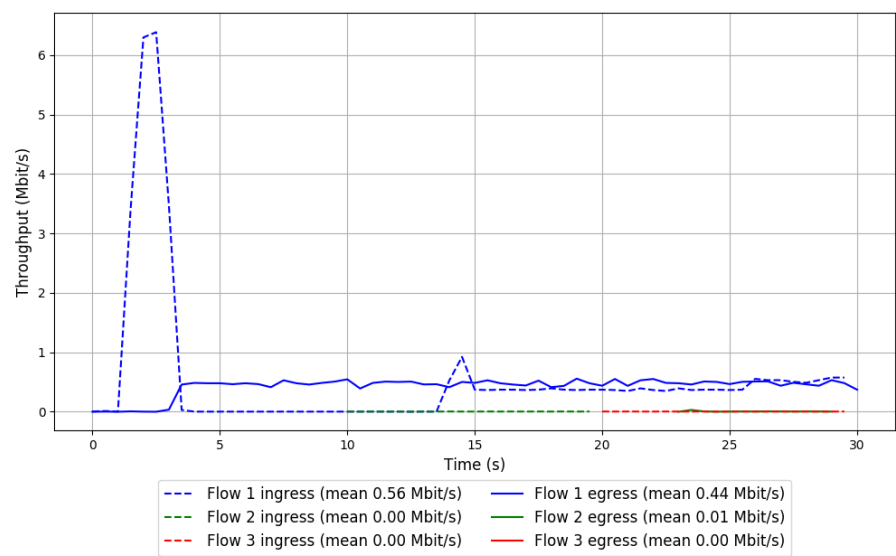
Start at: 2019-01-19 09:53:33

End at: 2019-01-19 09:54:03

Local clock offset: -4.099 ms

Remote clock offset: 2.446 ms

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-01-19 10:19:16

End at: 2019-01-19 10:19:46

Local clock offset: -2.294 ms

Remote clock offset: 4.079 ms

Below is generated by plot.py at 2019-01-19 11:09:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 13860.192 ms

Loss rate: 47.57%

-- Flow 1:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 13913.374 ms

Loss rate: 14.17%

-- Flow 2:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 7451.242 ms

Loss rate: 0.00%

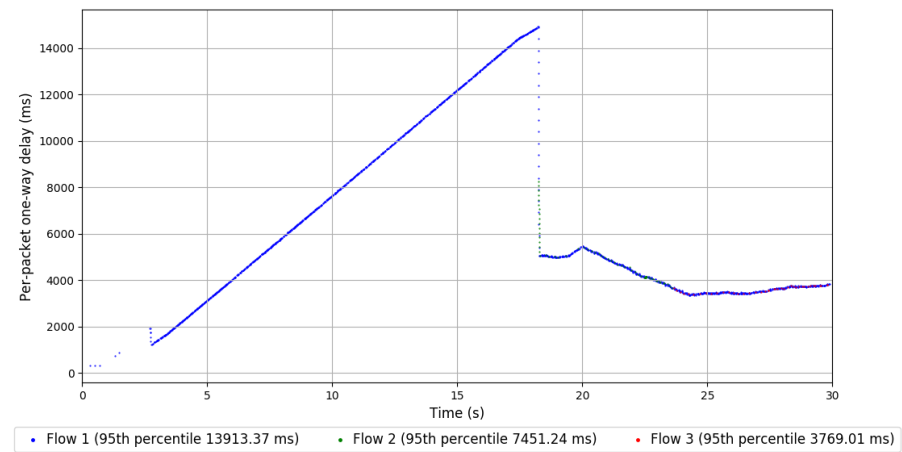
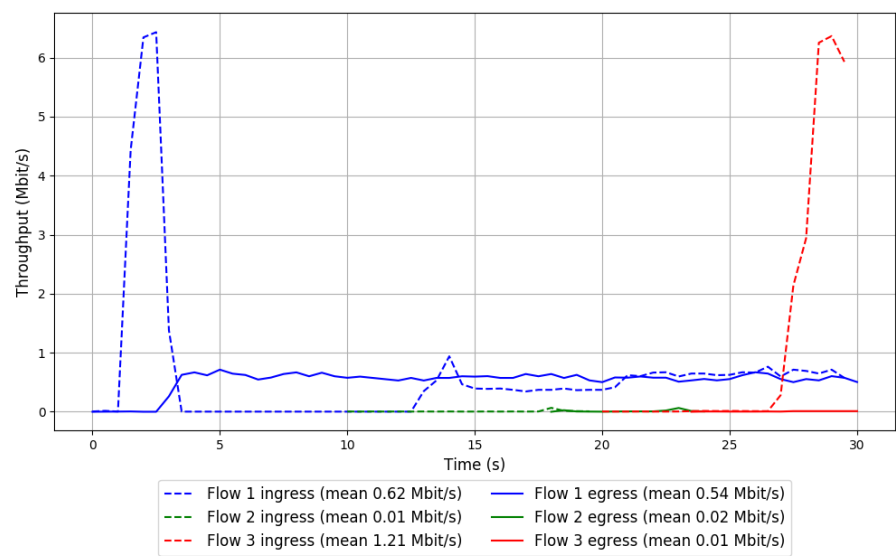
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 3769.010 ms

Loss rate: 99.63%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-01-19 10:45:02

End at: 2019-01-19 10:45:32

Local clock offset: -0.874 ms

Remote clock offset: 9.198 ms

Below is generated by plot.py at 2019-01-19 11:09:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 13598.556 ms

Loss rate: 58.68%

-- Flow 1:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 13678.119 ms

Loss rate: 13.41%

-- Flow 2:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 7147.835 ms

Loss rate: 0.00%

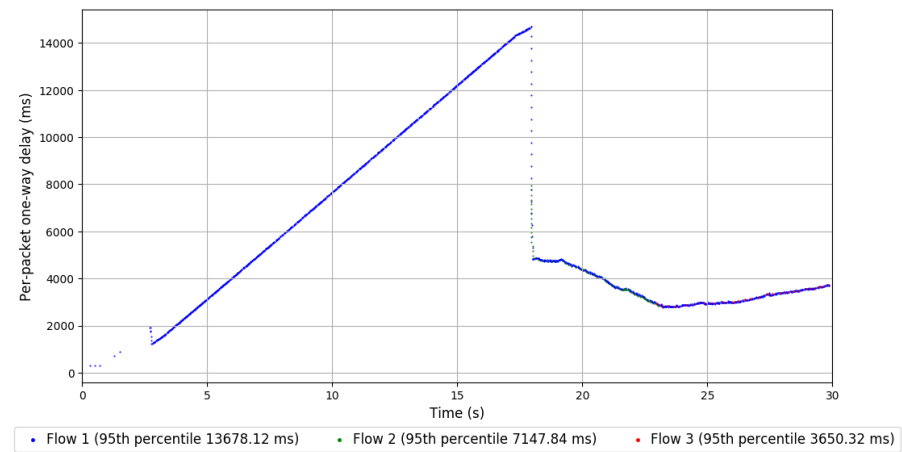
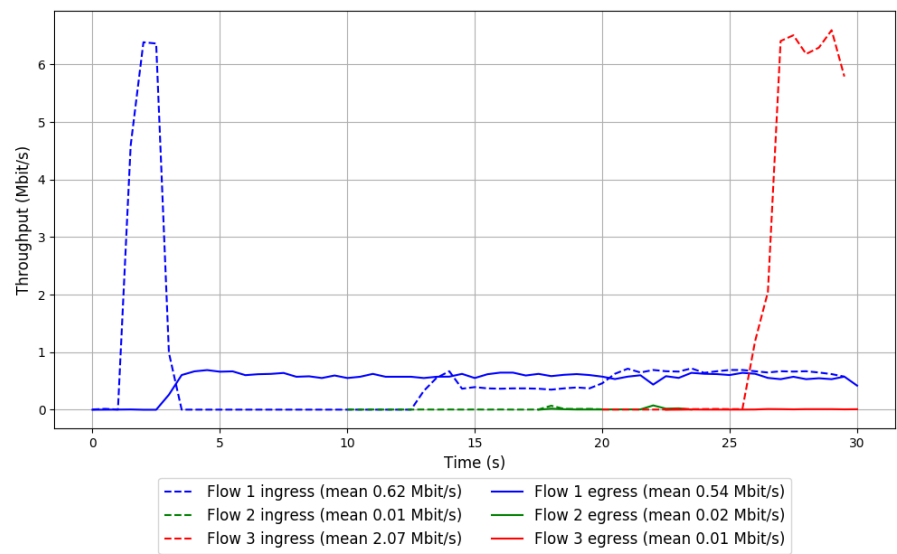
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 3650.316 ms

Loss rate: 99.76%

Run 3: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

Start at: 2019-01-19 09:59:43

End at: 2019-01-19 10:00:13

Local clock offset: -2.955 ms

Remote clock offset: 8.599 ms

Below is generated by plot.py at 2019-01-19 11:09:09

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 906.928 ms

Loss rate: 1.29%

-- Flow 1:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 904.286 ms

Loss rate: 0.89%

-- Flow 2:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 895.897 ms

Loss rate: 0.72%

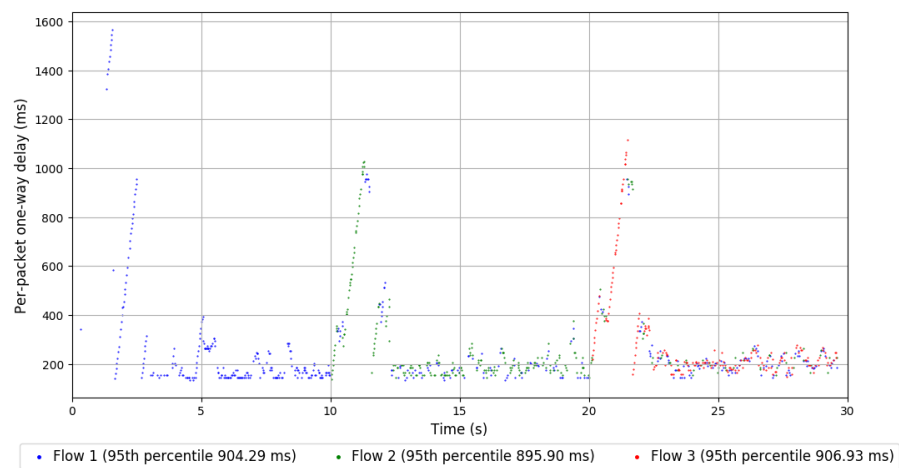
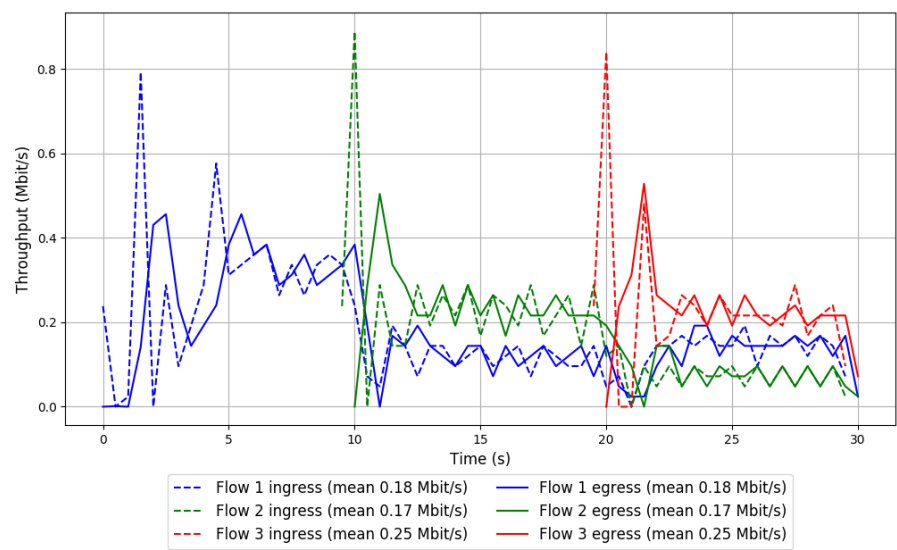
-- Flow 3:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 906.928 ms

Loss rate: 2.94%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-01-19 10:25:26

End at: 2019-01-19 10:25:56

Local clock offset: -2.144 ms

Remote clock offset: 3.436 ms

Below is generated by plot.py at 2019-01-19 11:09:10

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.51 Mbit/s

95th percentile per-packet one-way delay: 741.180 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 676.972 ms

Loss rate: 0.48%

-- Flow 2:

Average throughput: 0.30 Mbit/s

95th percentile per-packet one-way delay: 701.364 ms

Loss rate: 1.01%

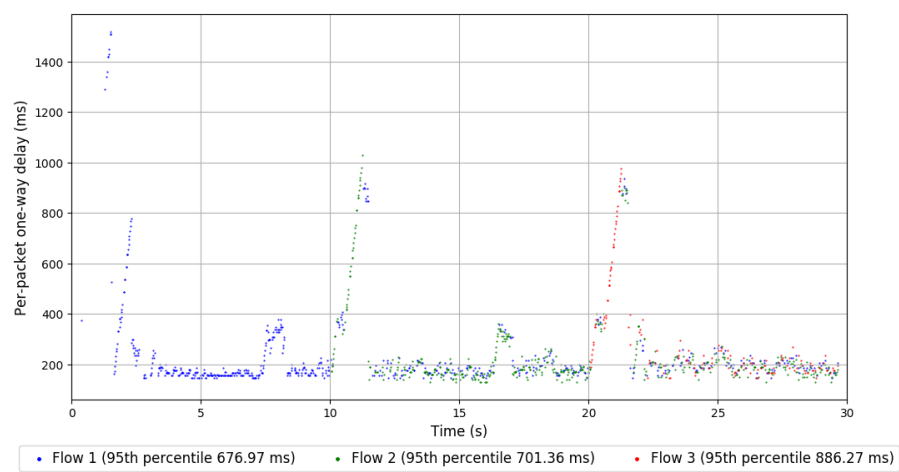
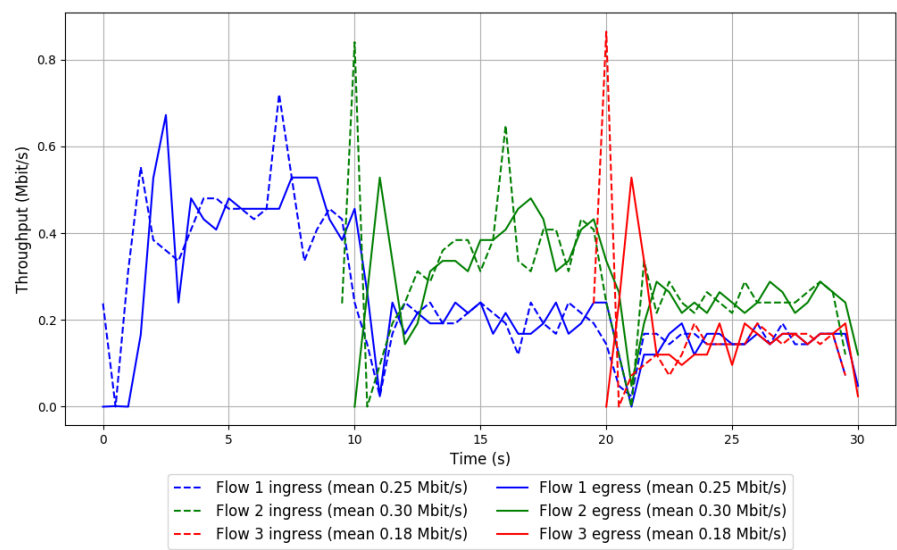
-- Flow 3:

Average throughput: 0.18 Mbit/s

95th percentile per-packet one-way delay: 886.274 ms

Loss rate: 2.01%

Run 2: Report of Indigo — Data Link

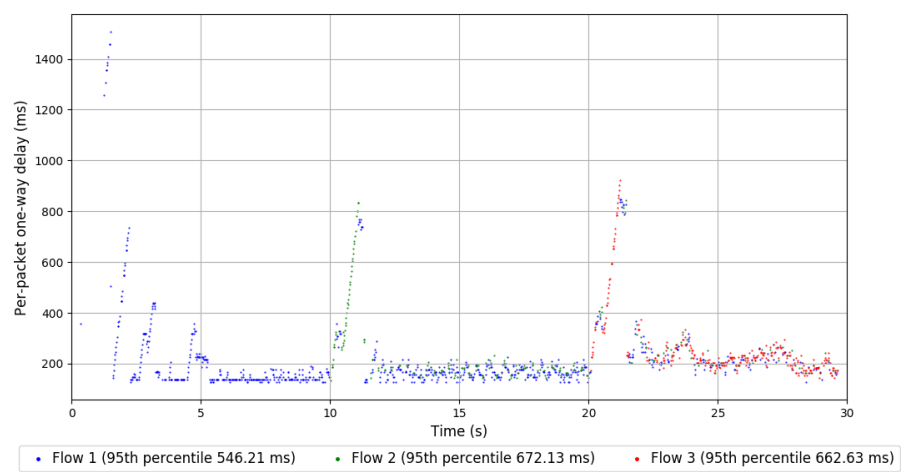
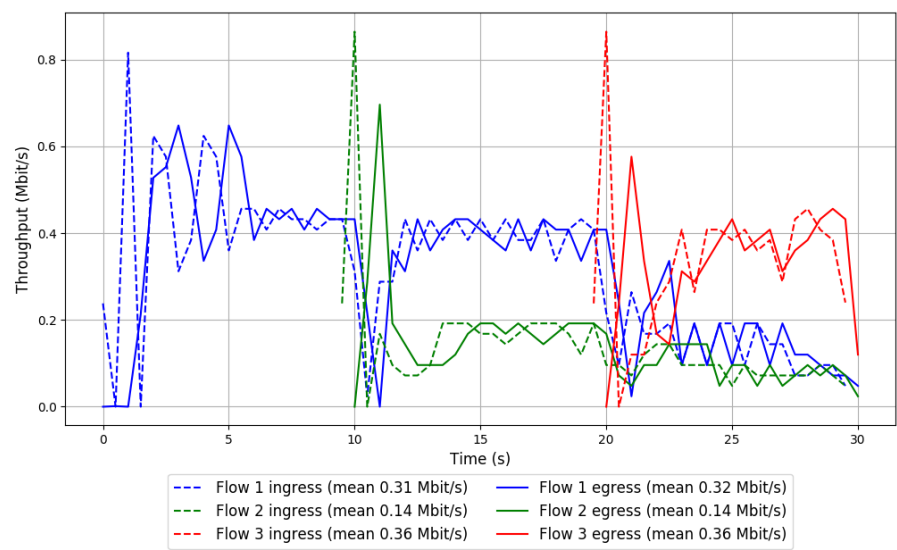


Run 3: Statistics of Indigo

Start at: 2019-01-19 10:51:11
End at: 2019-01-19 10:51:42
Local clock offset: -3.999 ms
Remote clock offset: 9.127 ms

Below is generated by plot.py at 2019-01-19 11:09:11
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 646.411 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 546.209 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 672.133 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 662.635 ms
Loss rate: 3.38%

Run 3: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

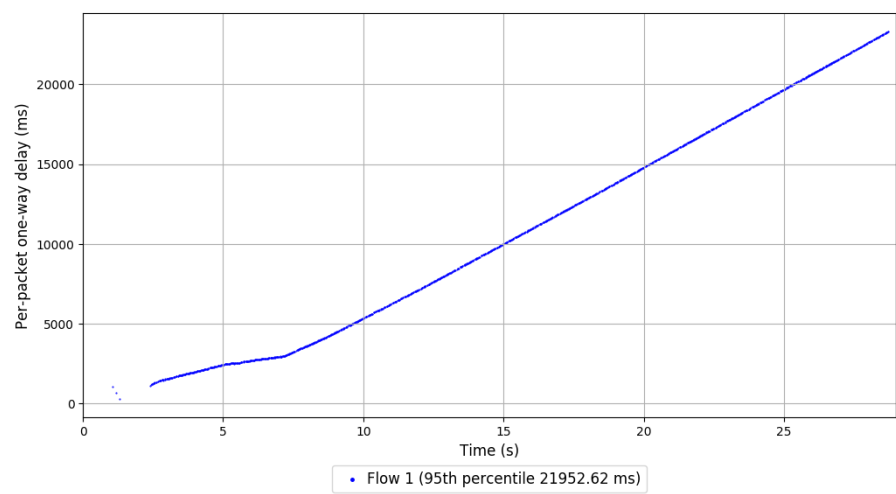
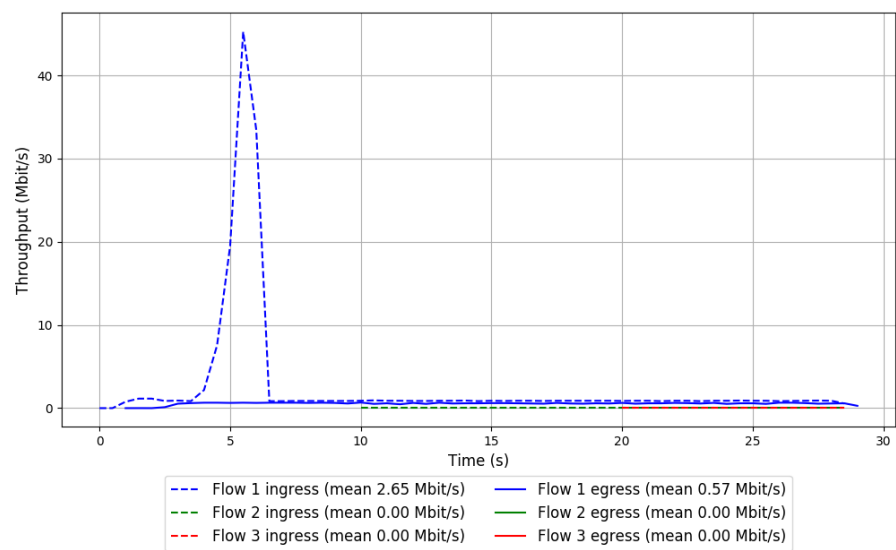
Start at: 2019-01-19 10:10:43

End at: 2019-01-19 10:11:13

Local clock offset: -1.902 ms

Remote clock offset: 2.083 ms

Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

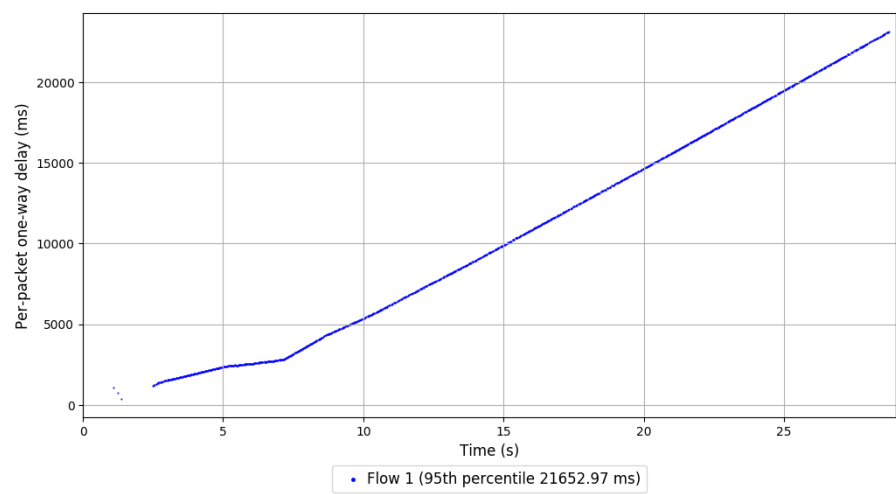
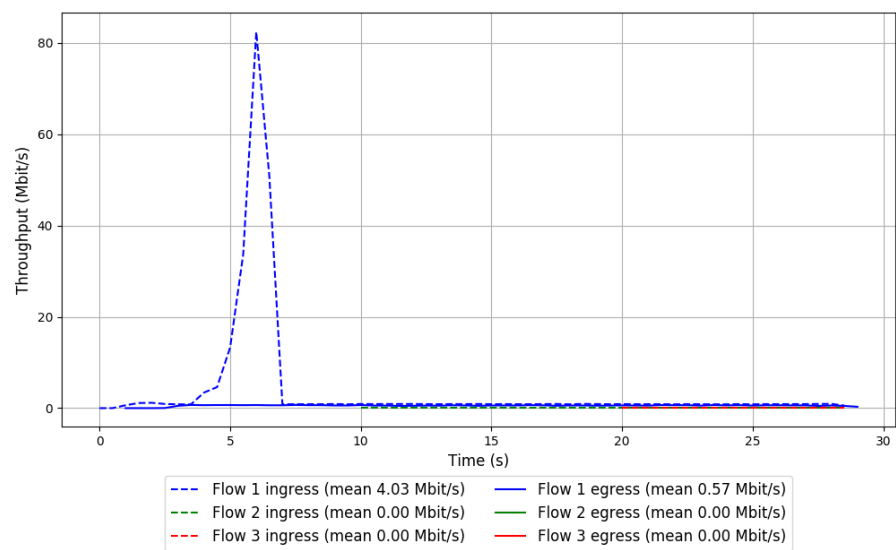
Start at: 2019-01-19 10:36:25

End at: 2019-01-19 10:36:55

Local clock offset: -1.842 ms

Remote clock offset: 3.983 ms

Run 2: Report of Indigo-MusesC3 — Data Link



Run 3: Statistics of Indigo-MusesC3

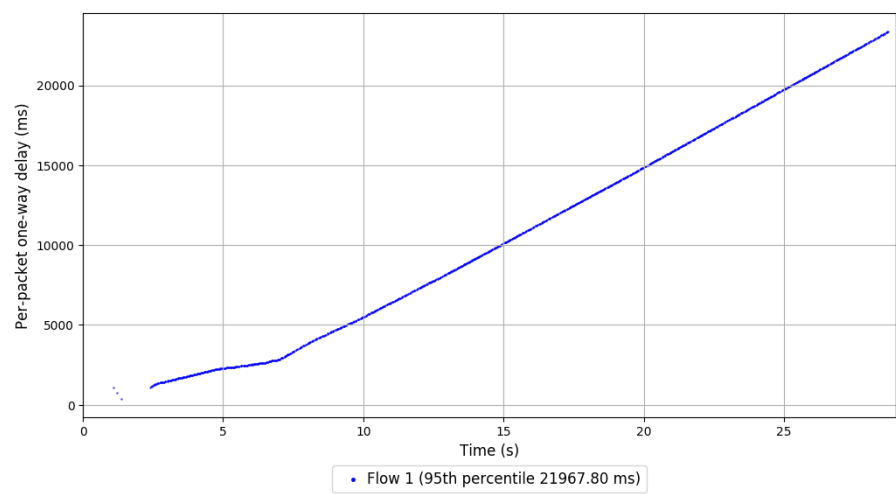
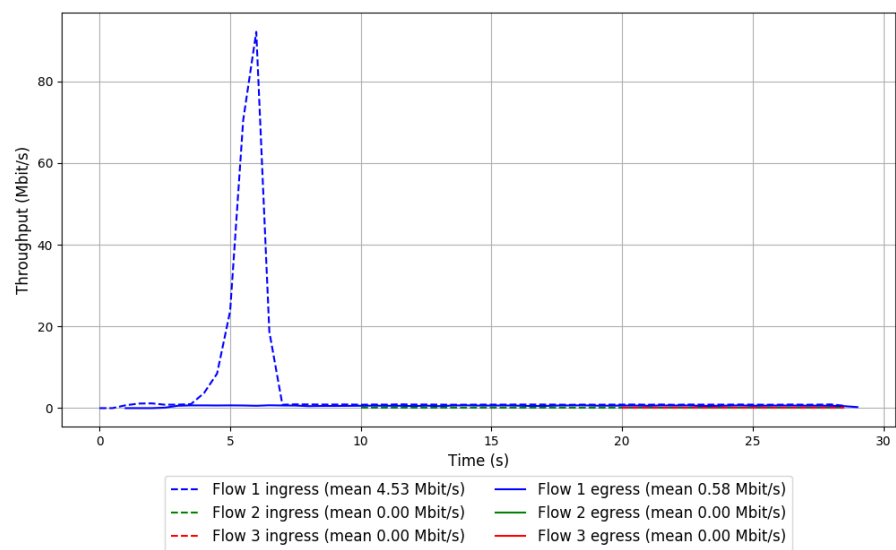
Start at: 2019-01-19 11:02:12

End at: 2019-01-19 11:02:42

Local clock offset: -6.665 ms

Remote clock offset: 4.628 ms

Run 3: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

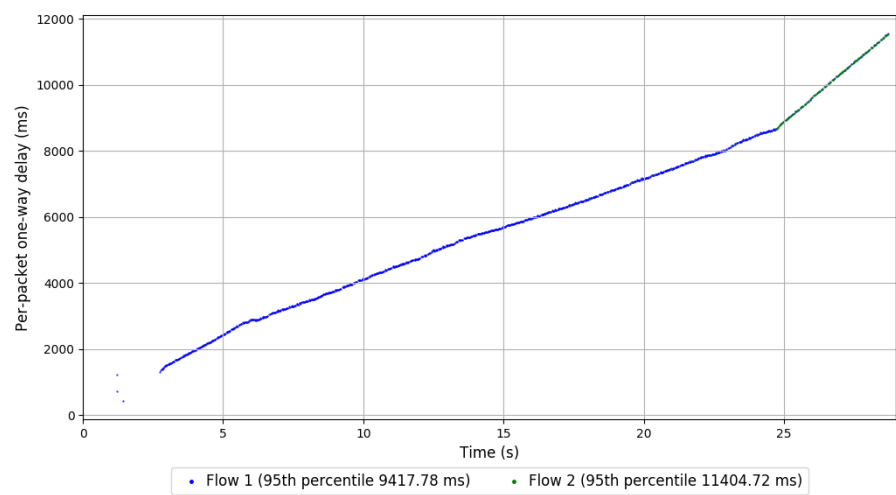
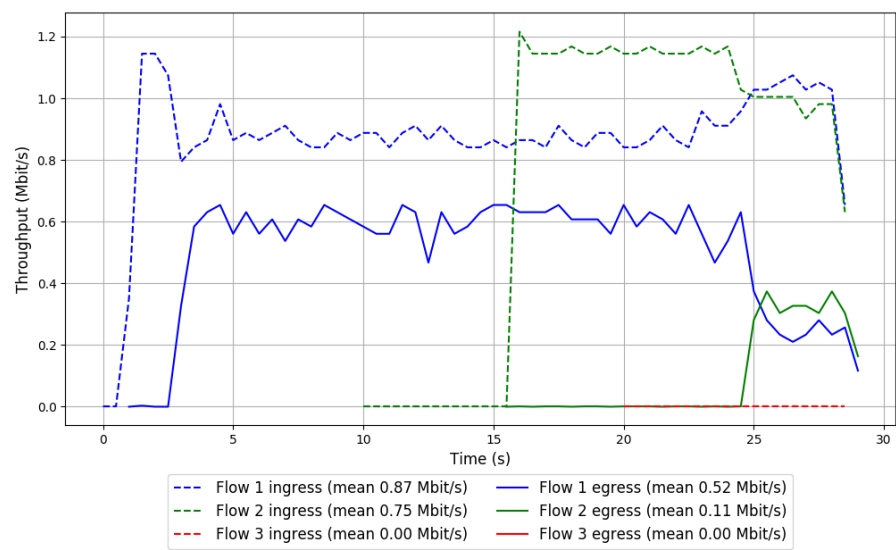
Start at: 2019-01-19 10:08:17

End at: 2019-01-19 10:08:47

Local clock offset: -2.074 ms

Remote clock offset: 2.244 ms

Run 1: Report of Indigo-MusesC5 — Data Link



Run 2: Statistics of Indigo-MusesC5

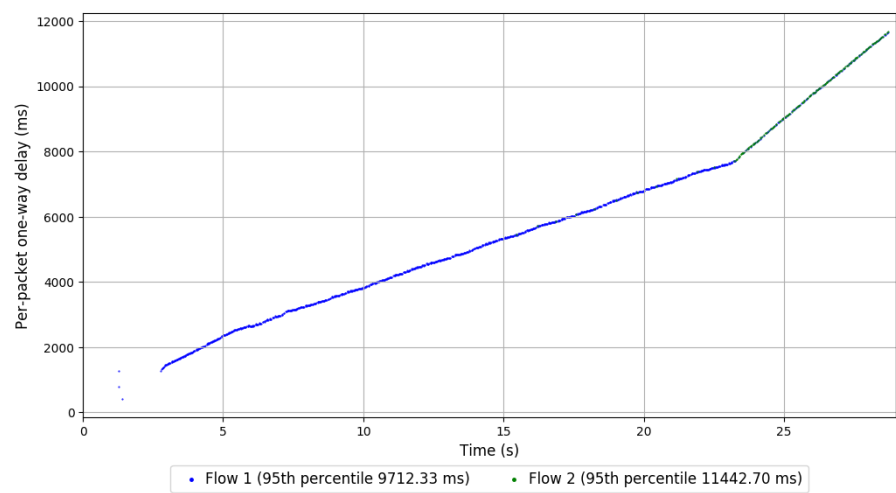
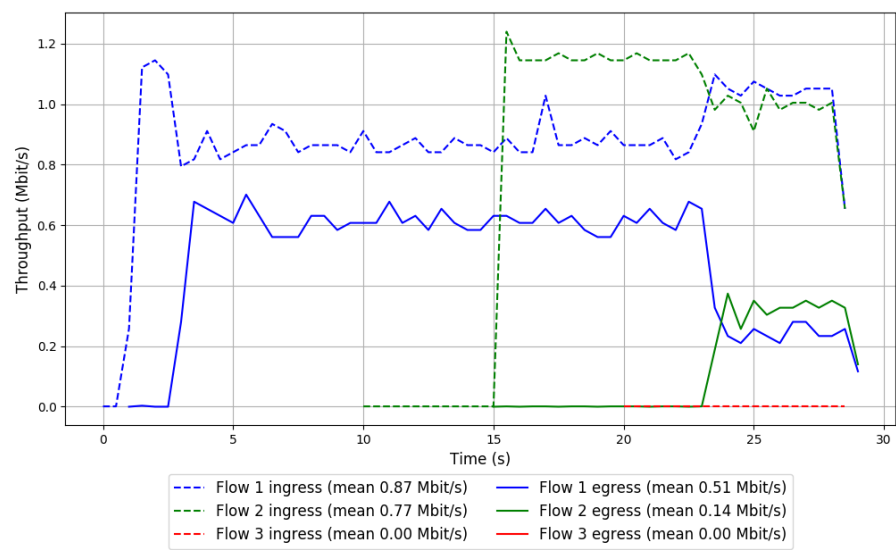
Start at: 2019-01-19 10:33:59

End at: 2019-01-19 10:34:29

Local clock offset: -1.979 ms

Remote clock offset: 4.964 ms

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

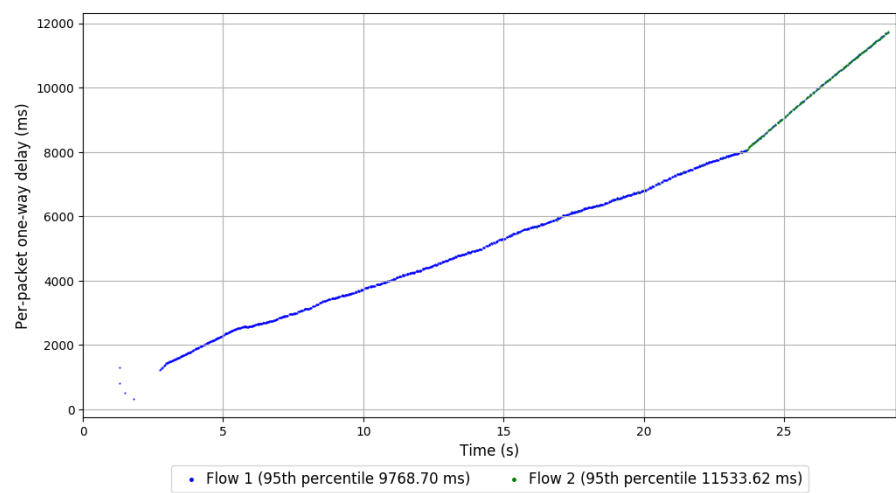
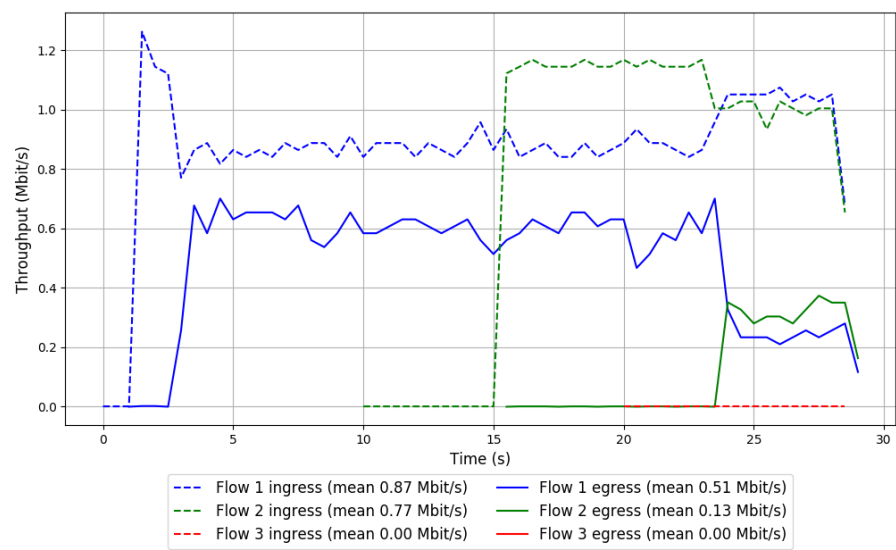
Start at: 2019-01-19 10:59:45

End at: 2019-01-19 11:00:15

Local clock offset: -7.004 ms

Remote clock offset: 8.465 ms

Run 3: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

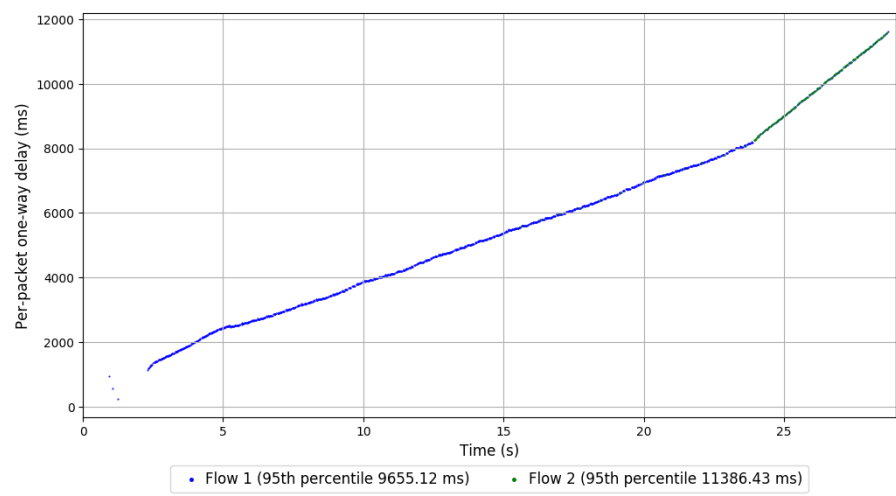
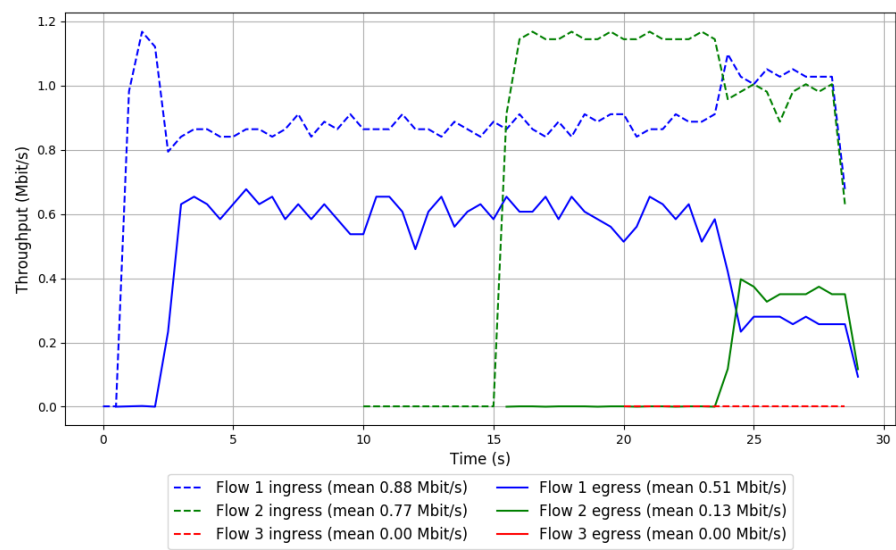
Start at: 2019-01-19 10:11:55

End at: 2019-01-19 10:12:25

Local clock offset: -2.603 ms

Remote clock offset: 7.083 ms

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

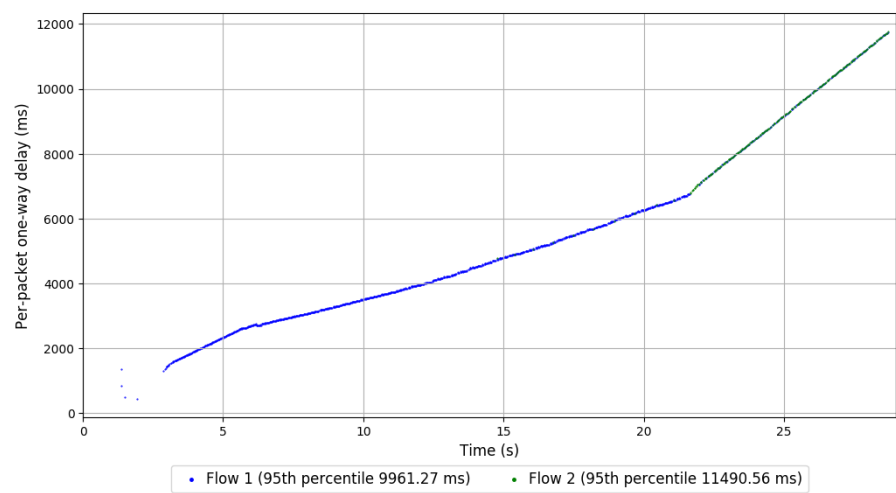
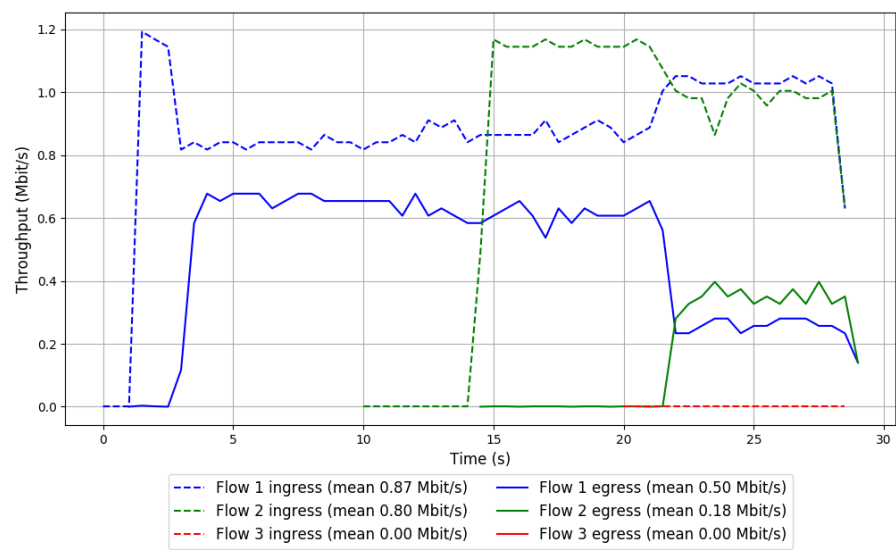
Start at: 2019-01-19 10:37:40

End at: 2019-01-19 10:38:10

Local clock offset: -1.802 ms

Remote clock offset: 5.151 ms

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

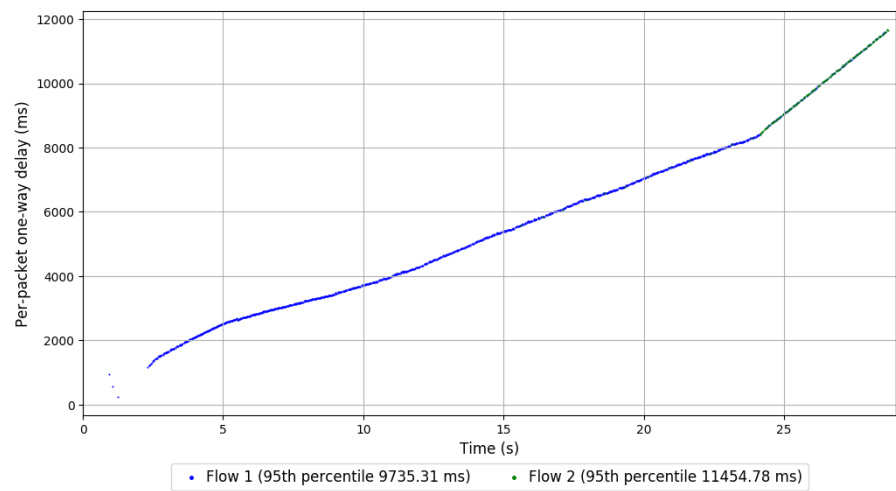
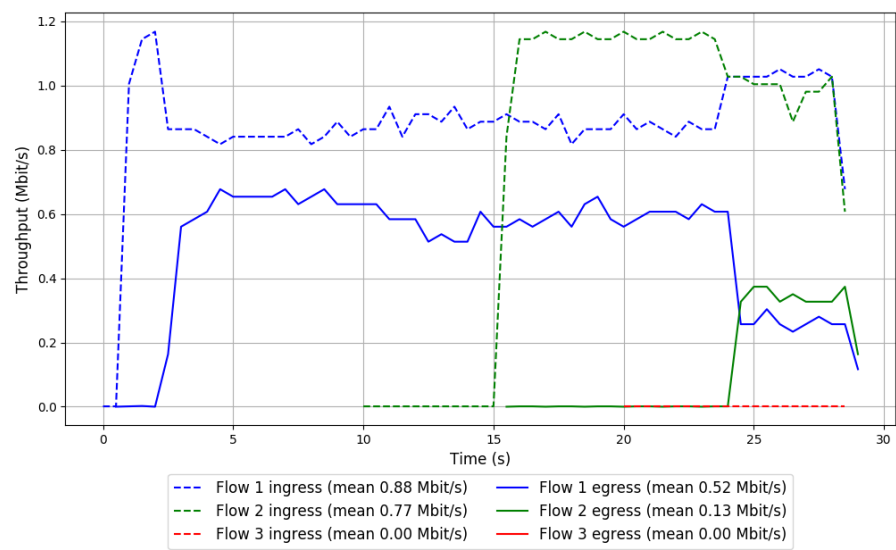
Start at: 2019-01-19 11:03:25

End at: 2019-01-19 11:03:55

Local clock offset: -6.934 ms

Remote clock offset: 7.359 ms

Run 3: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

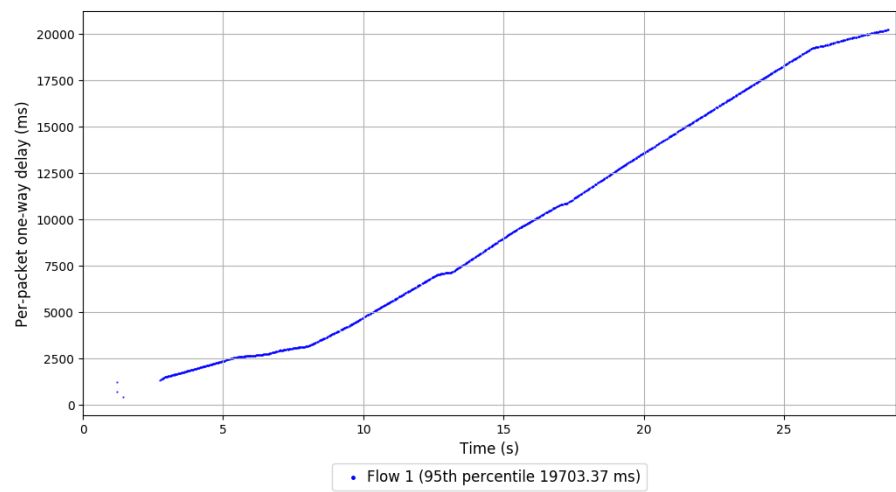
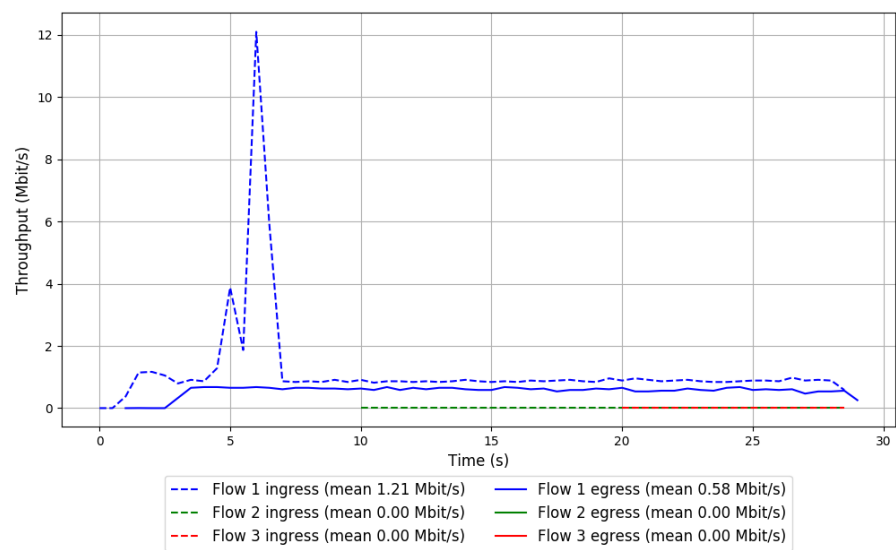
Start at: 2019-01-19 10:16:49

End at: 2019-01-19 10:17:19

Local clock offset: -2.332 ms

Remote clock offset: 3.923 ms

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

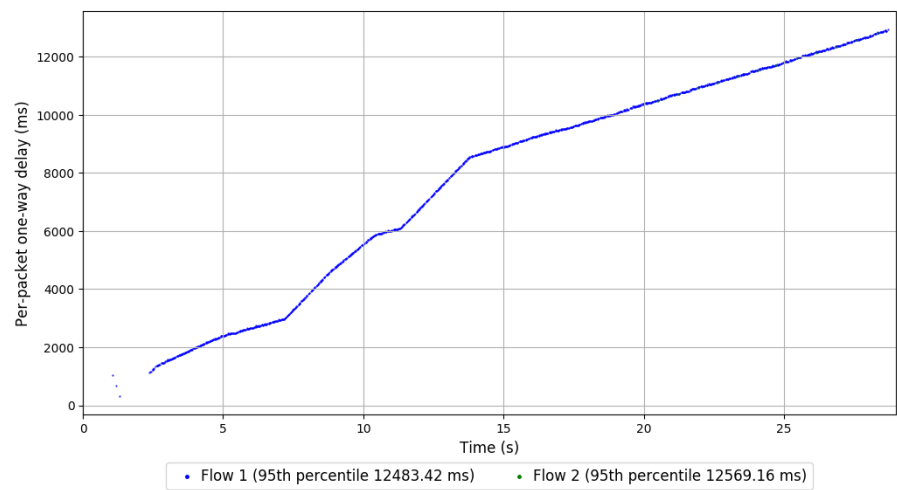
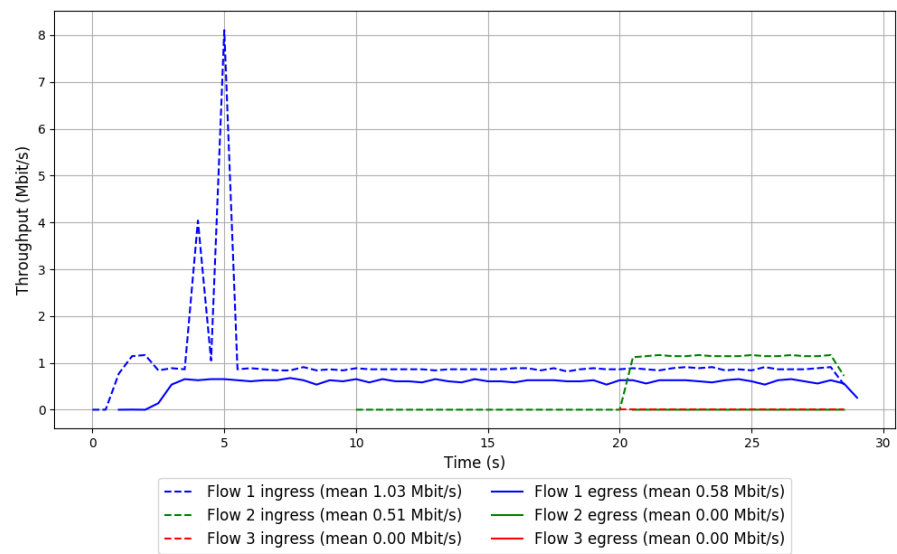
Start at: 2019-01-19 10:42:33

End at: 2019-01-19 10:43:03

Local clock offset: -1.667 ms

Remote clock offset: 9.136 ms

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

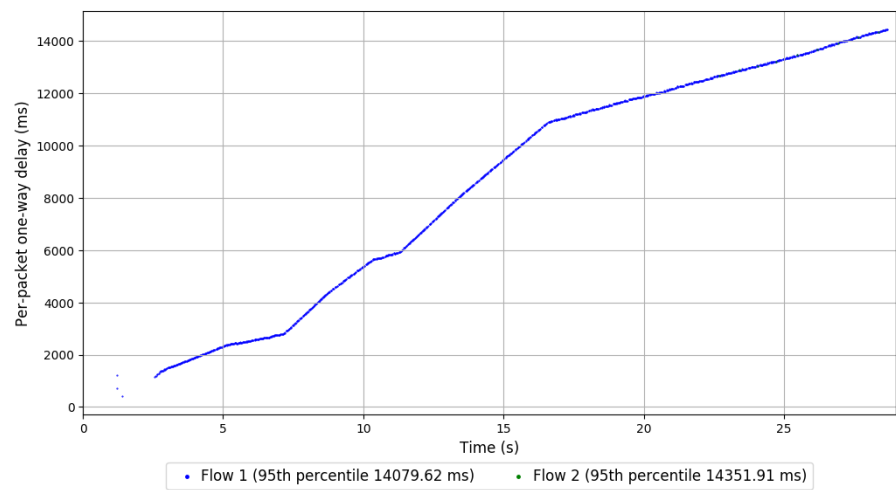
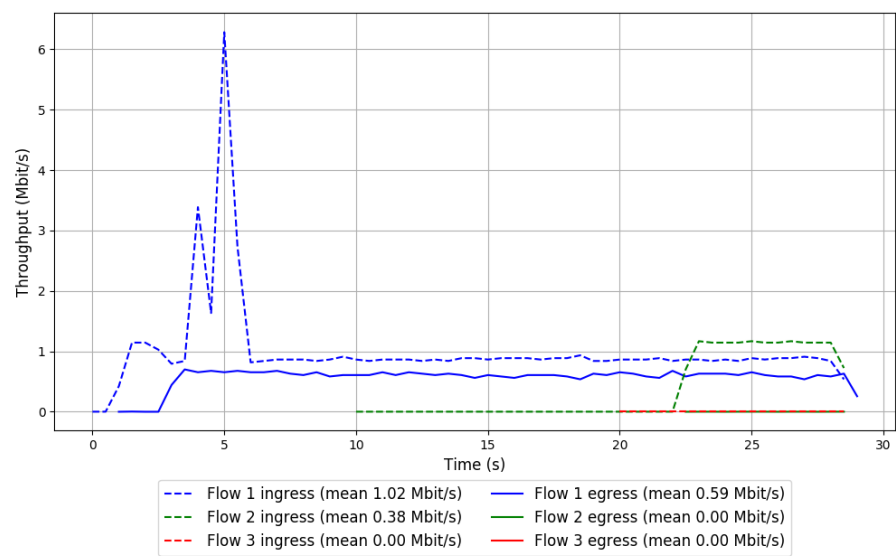
Start at: 2019-01-19 11:08:18

End at: 2019-01-19 11:08:48

Local clock offset: -8.418 ms

Remote clock offset: 4.951 ms

Run 3: Report of Indigo-MusesT — Data Link

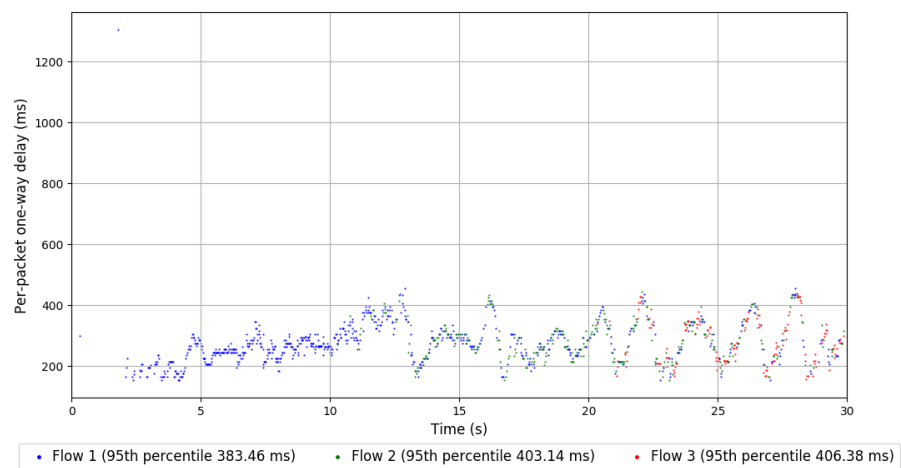
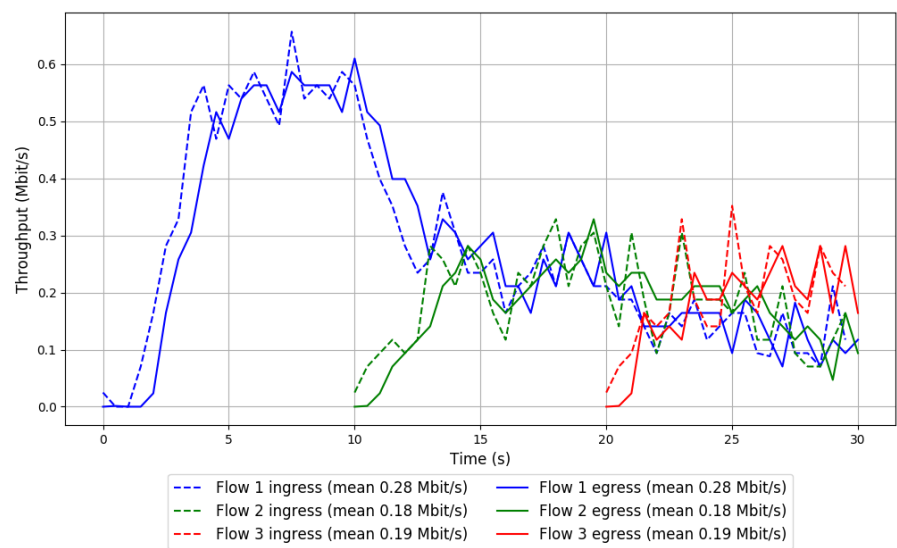


```
Run 1: Statistics of LEDBAT

Start at: 2019-01-19 09:57:16
End at: 2019-01-19 09:57:46
Local clock offset: -3.299 ms
Remote clock offset: 3.506 ms

# Below is generated by plot.py at 2019-01-19 11:09:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 393.363 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 383.465 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 403.143 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 406.377 ms
Loss rate: 4.94%
```

Run 1: Report of LEDBAT — Data Link

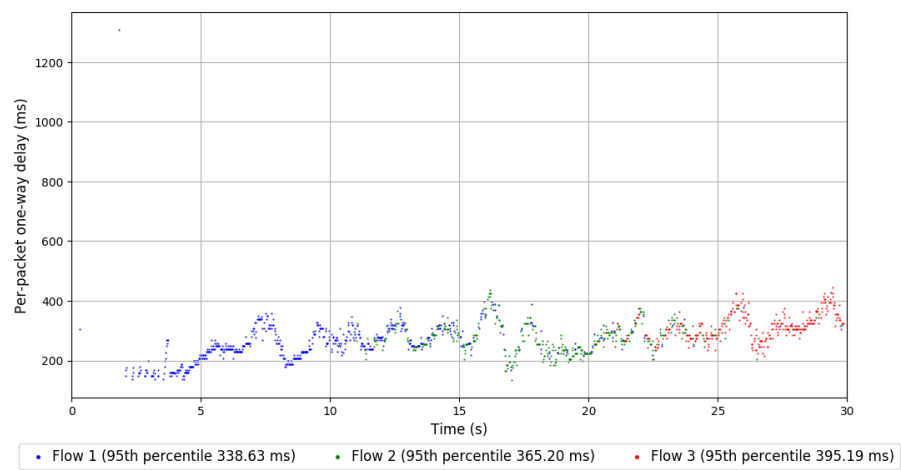
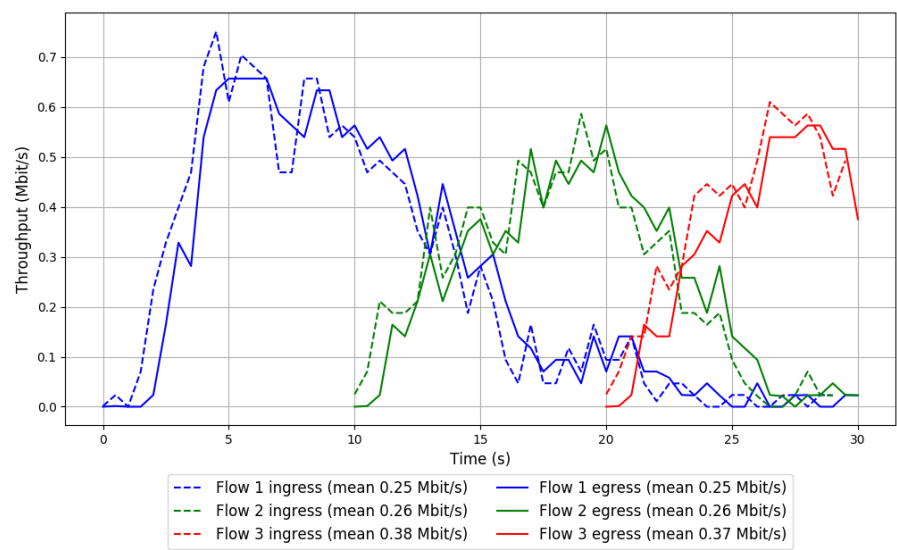


Run 2: Statistics of LEDBAT

Start at: 2019-01-19 10:22:59
End at: 2019-01-19 10:23:29
Local clock offset: -1.514 ms
Remote clock offset: 4.412 ms

Below is generated by plot.py at 2019-01-19 11:09:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 368.512 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 338.629 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 365.203 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 395.192 ms
Loss rate: 5.86%

Run 2: Report of LEDBAT — Data Link

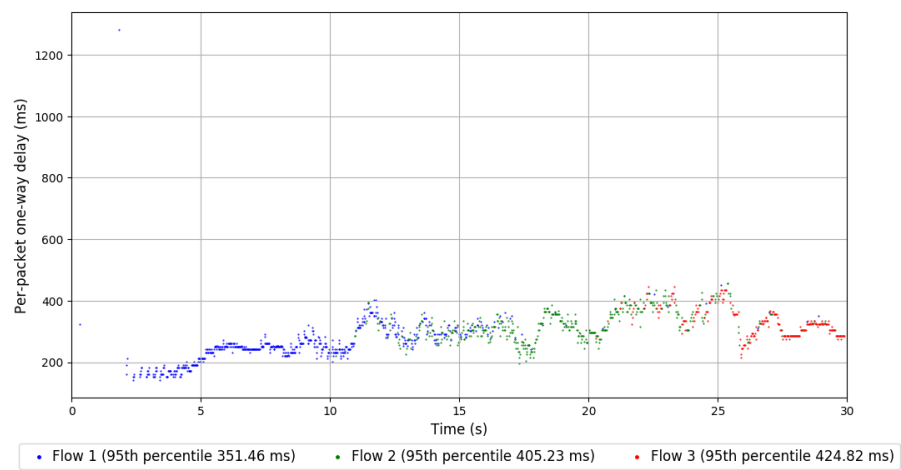
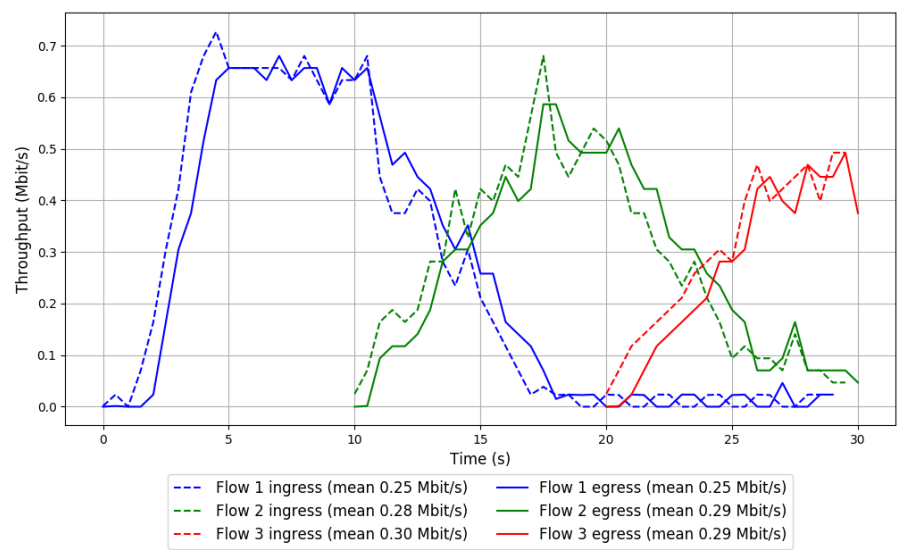


Run 3: Statistics of LEDBAT

Start at: 2019-01-19 10:48:44
End at: 2019-01-19 10:49:15
Local clock offset: -2.744 ms
Remote clock offset: 10.65 ms

Below is generated by plot.py at 2019-01-19 11:09:20
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 395.147 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 351.461 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 405.228 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 424.820 ms
Loss rate: 6.22%

Run 3: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

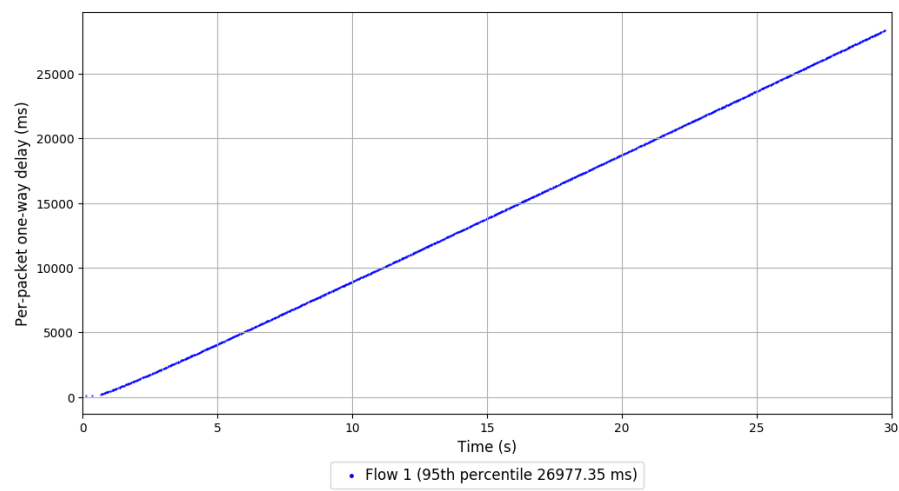
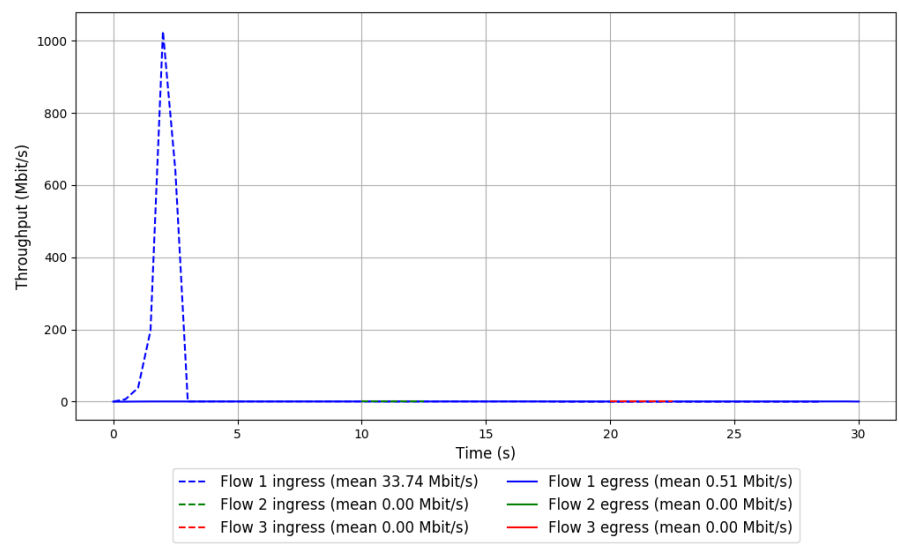
Start at: 2019-01-19 09:56:02

End at: 2019-01-19 09:56:32

Local clock offset: -4.331 ms

Remote clock offset: 7.223 ms

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

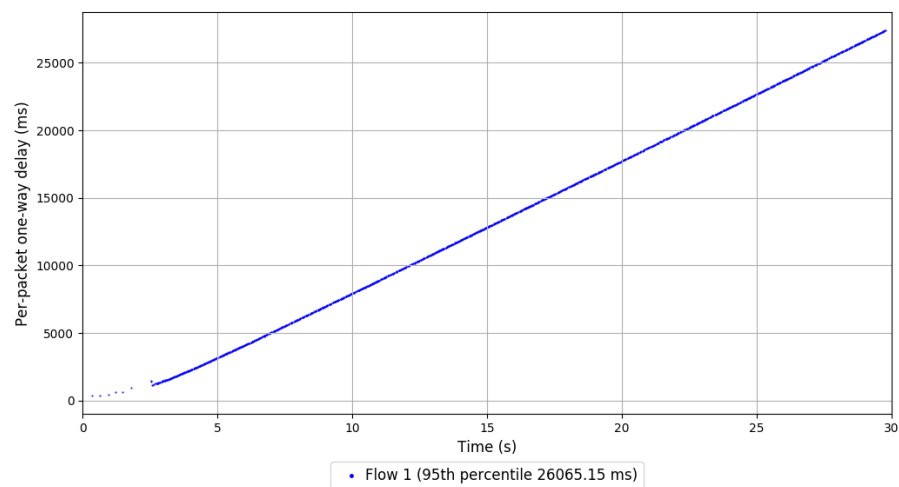
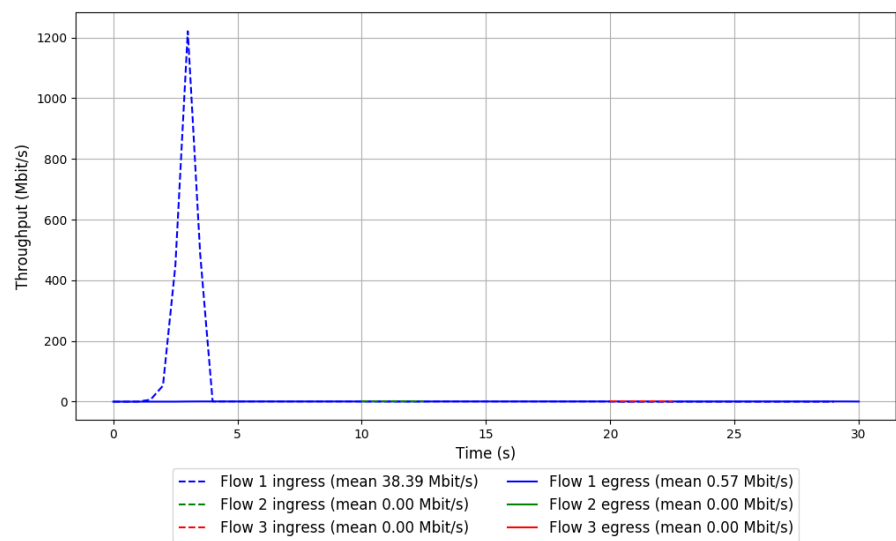
Start at: 2019-01-19 10:21:44

End at: 2019-01-19 10:22:14

Local clock offset: -1.482 ms

Remote clock offset: 7.332 ms

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

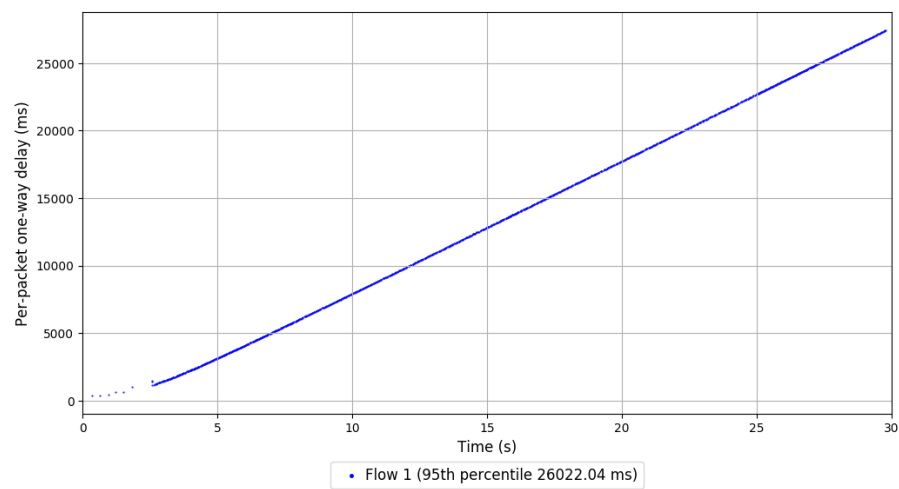
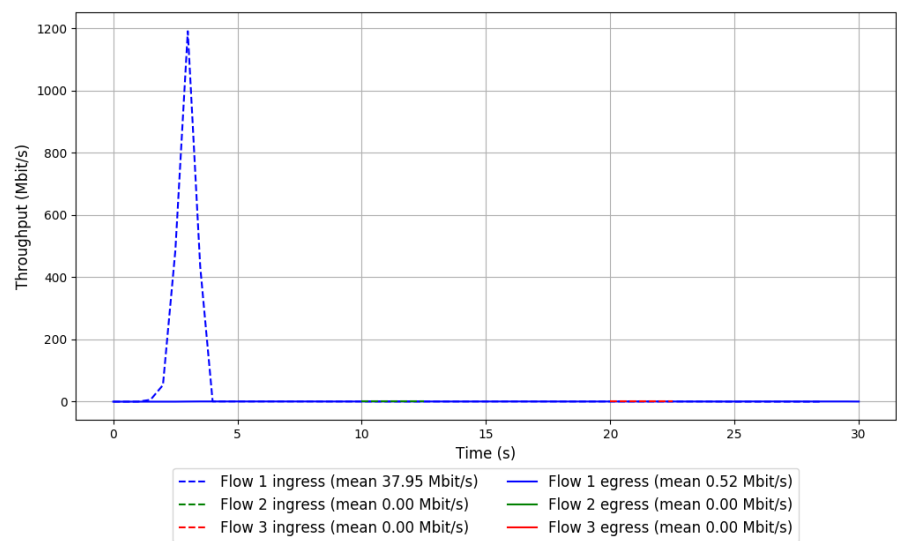
Start at: 2019-01-19 10:47:30

End at: 2019-01-19 10:48:00

Local clock offset: -1.07 ms

Remote clock offset: 10.473 ms

Run 3: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

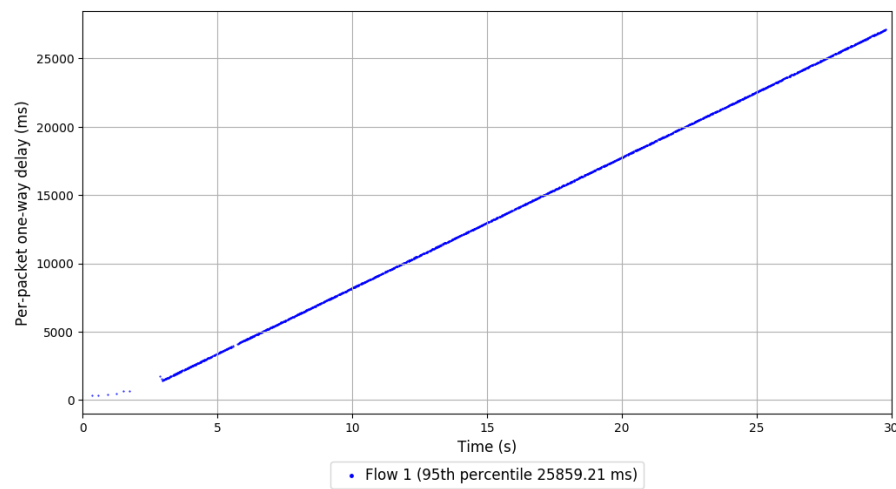
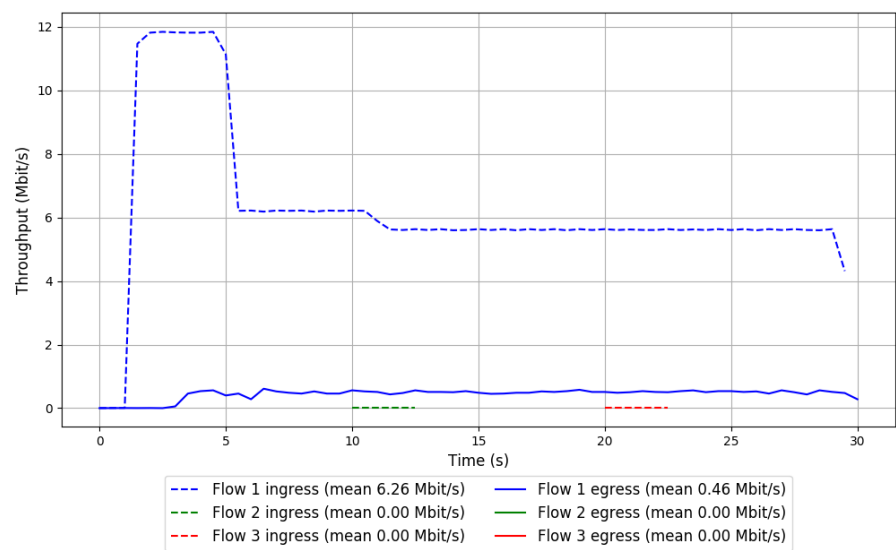
Start at: 2019-01-19 09:54:47

End at: 2019-01-19 09:55:17

Local clock offset: -4.547 ms

Remote clock offset: 7.453 ms

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

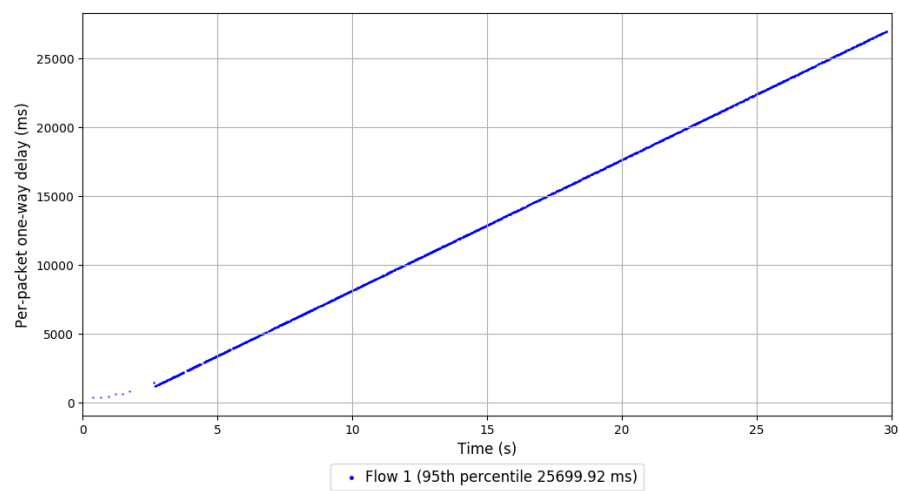
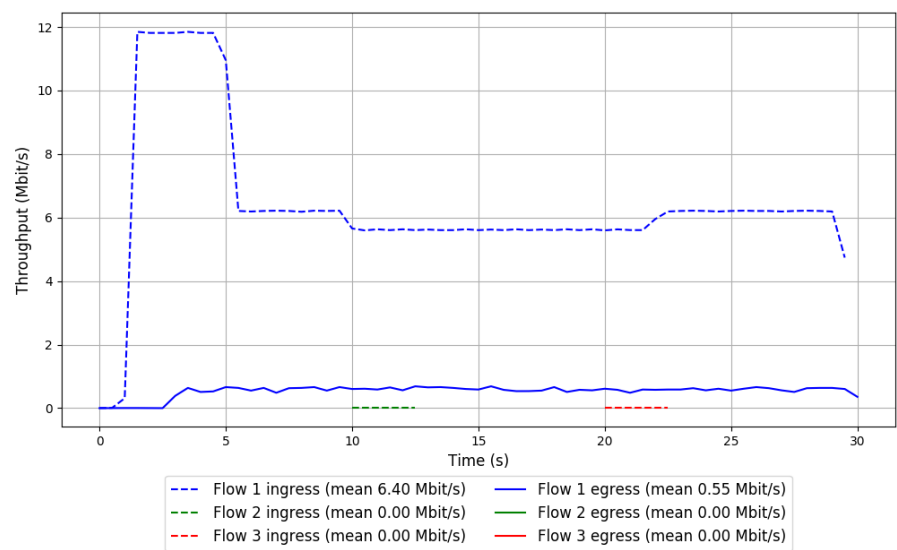
Start at: 2019-01-19 10:20:30

End at: 2019-01-19 10:21:00

Local clock offset: -2.269 ms

Remote clock offset: 8.287 ms

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

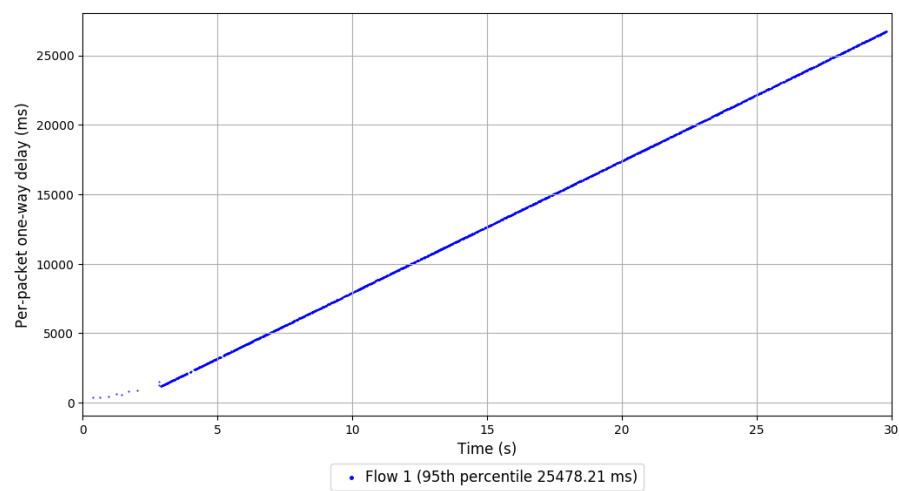
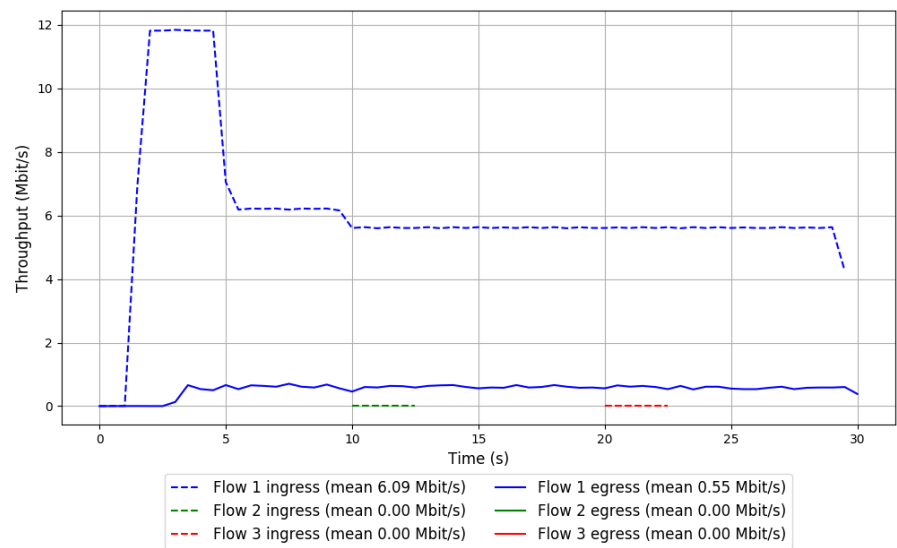
Start at: 2019-01-19 10:46:15

End at: 2019-01-19 10:46:45

Local clock offset: -1.561 ms

Remote clock offset: 9.345 ms

Run 3: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-01-19 10:09:29

End at: 2019-01-19 10:09:59

Local clock offset: -2.736 ms

Remote clock offset: 2.177 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 8136.342 ms

Loss rate: 30.02%

-- Flow 1:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 8126.833 ms

Loss rate: 30.64%

-- Flow 2:

Average throughput: 0.03 Mbit/s

95th percentile per-packet one-way delay: 7897.410 ms

Loss rate: 1.42%

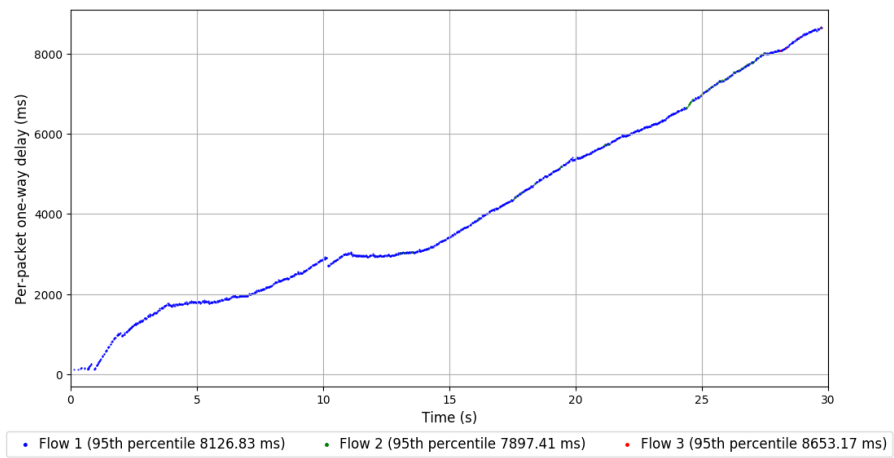
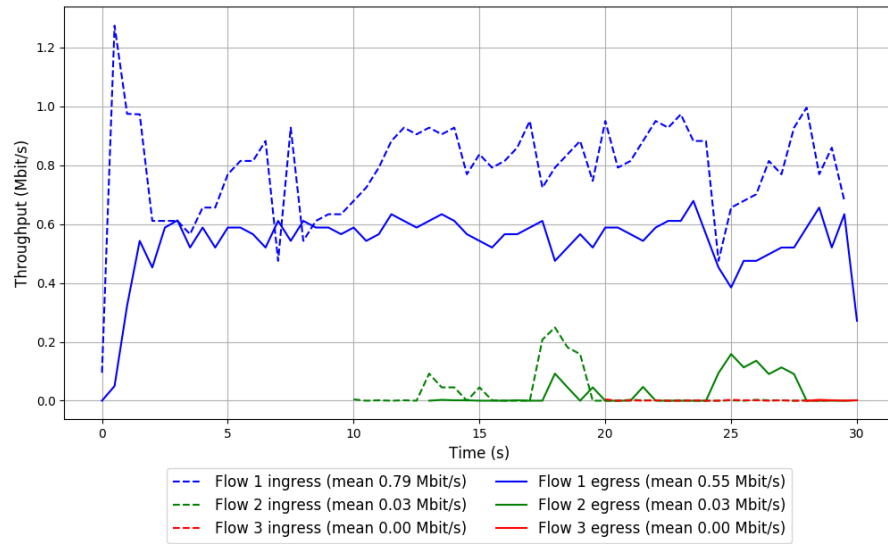
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 8653.174 ms

Loss rate: 66.67%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-01-19 10:35:12

End at: 2019-01-19 10:35:42

Local clock offset: -1.871 ms

Remote clock offset: 5.153 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 9046.110 ms

Loss rate: 30.77%

-- Flow 1:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 9006.666 ms

Loss rate: 30.74%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 8948.193 ms

Loss rate: 45.83%

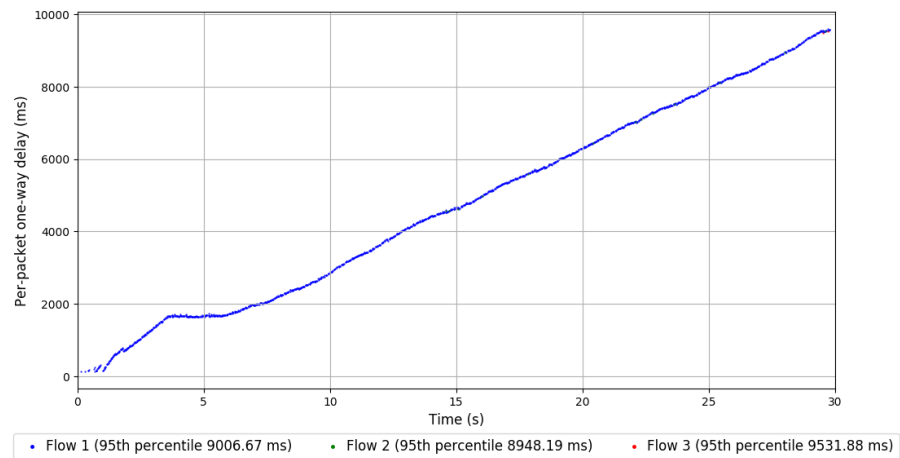
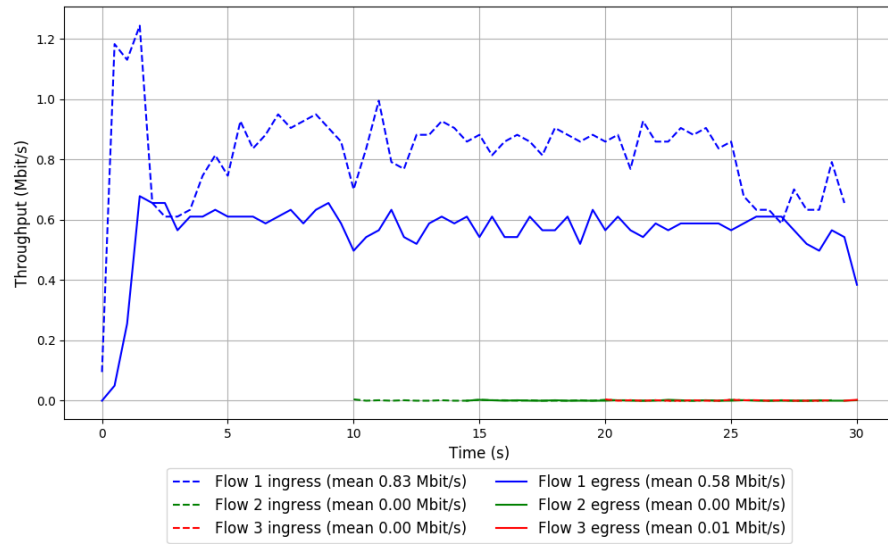
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 9531.878 ms

Loss rate: 83.33%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-01-19 11:00:58

End at: 2019-01-19 11:01:28

Local clock offset: -7.206 ms

Remote clock offset: 8.651 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 8972.093 ms

Loss rate: 33.13%

-- Flow 1:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 8963.155 ms

Loss rate: 33.11%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 8831.930 ms

Loss rate: 45.83%

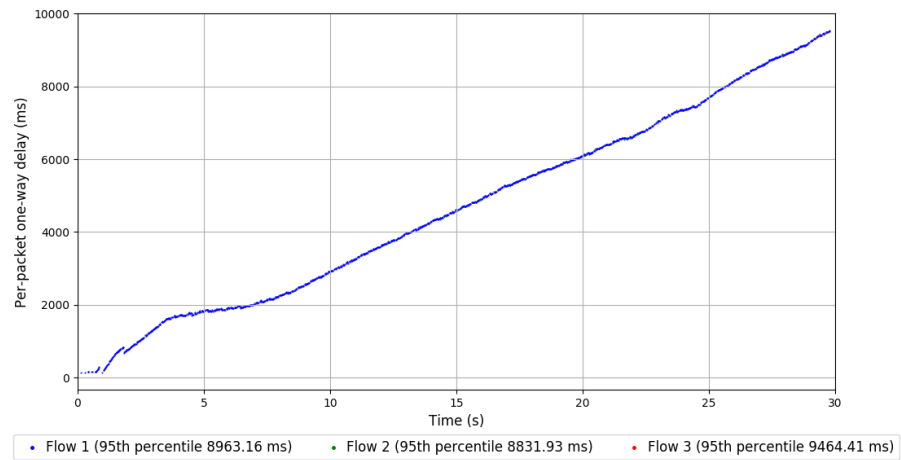
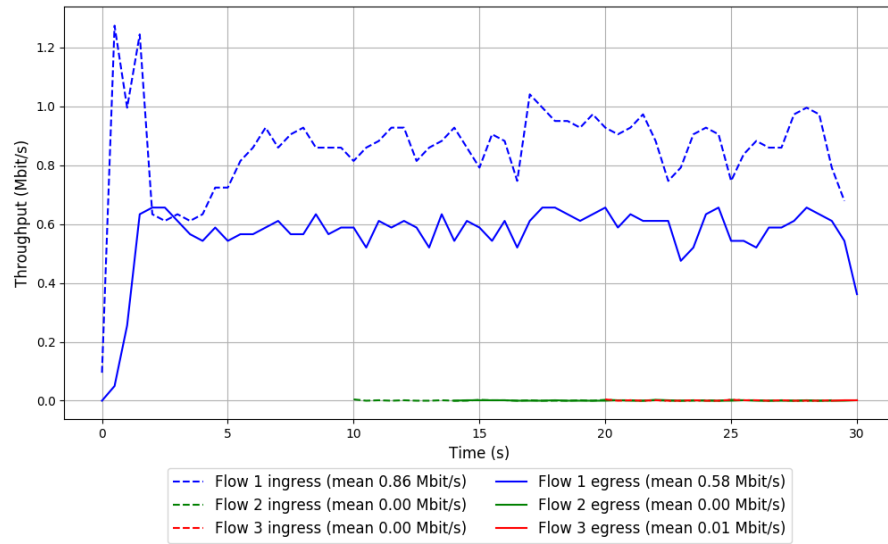
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 9464.407 ms

Loss rate: 83.33%

Run 3: Report of QUIC Cubic — Data Link

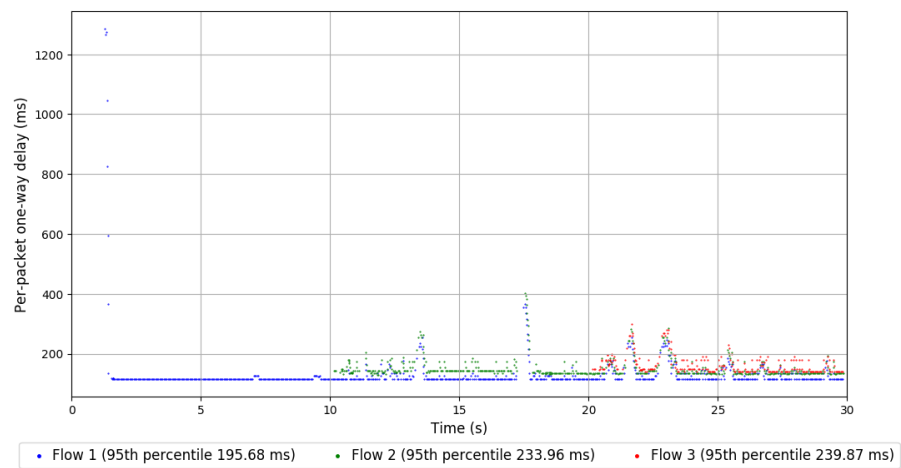
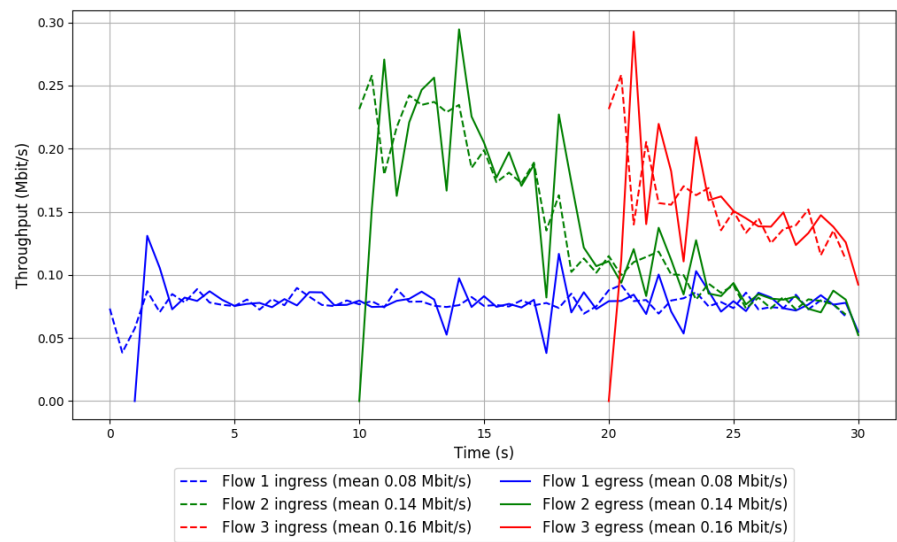


```
Run 1: Statistics of SCReAM

Start at: 2019-01-19 10:00:56
End at: 2019-01-19 10:01:26
Local clock offset: -3.51 ms
Remote clock offset: 6.924 ms

# Below is generated by plot.py at 2019-01-19 11:09:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 225.033 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 195.682 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 233.959 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 239.867 ms
Loss rate: 1.91%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SReAM

Start at: 2019-01-19 10:26:39

End at: 2019-01-19 10:27:09

Local clock offset: -1.351 ms

Remote clock offset: 8.336 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 187.793 ms

Loss rate: 1.21%

-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 161.772 ms

Loss rate: 0.66%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 197.297 ms

Loss rate: 1.10%

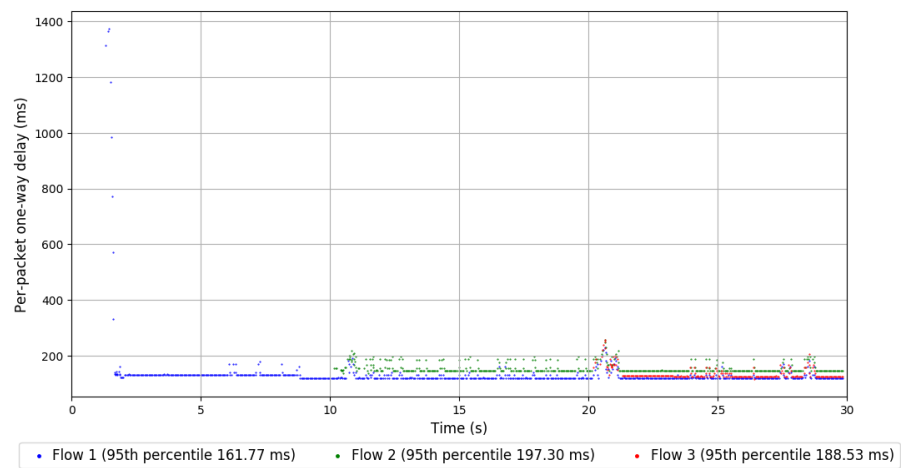
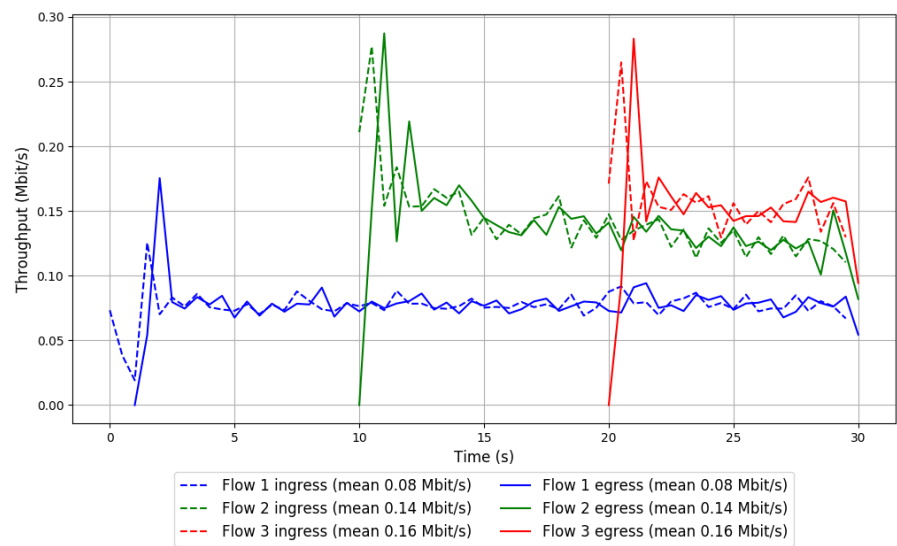
-- Flow 3:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 188.529 ms

Loss rate: 2.20%

Run 2: Report of SReAM — Data Link

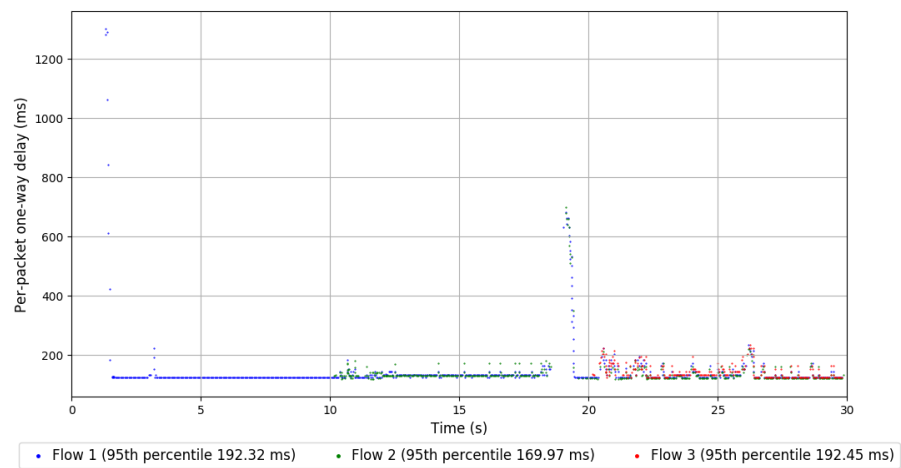
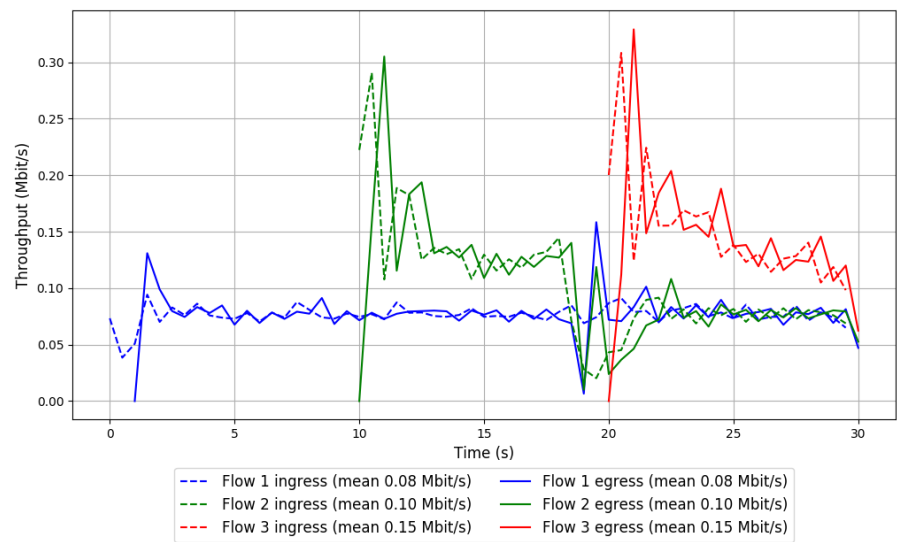


Run 3: Statistics of SCReAM

Start at: 2019-01-19 10:52:25
End at: 2019-01-19 10:52:55
Local clock offset: -3.923 ms
Remote clock offset: 10.051 ms

Below is generated by plot.py at 2019-01-19 11:09:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 192.094 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 192.324 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 169.975 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 192.453 ms
Loss rate: 2.04%

Run 3: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-01-19 10:15:35

End at: 2019-01-19 10:16:05

Local clock offset: -1.715 ms

Remote clock offset: 2.576 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 363.353 ms

Loss rate: 1.07%

-- Flow 1:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 626.950 ms

Loss rate: 0.82%

-- Flow 2:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 298.665 ms

Loss rate: 1.21%

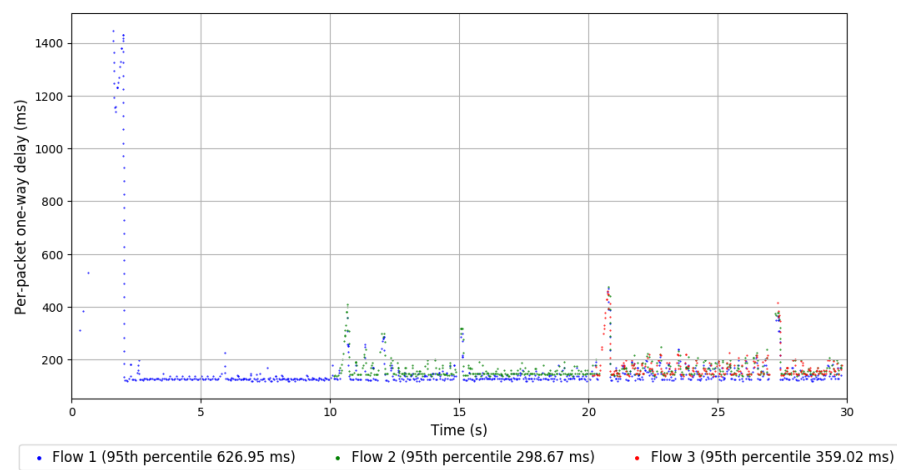
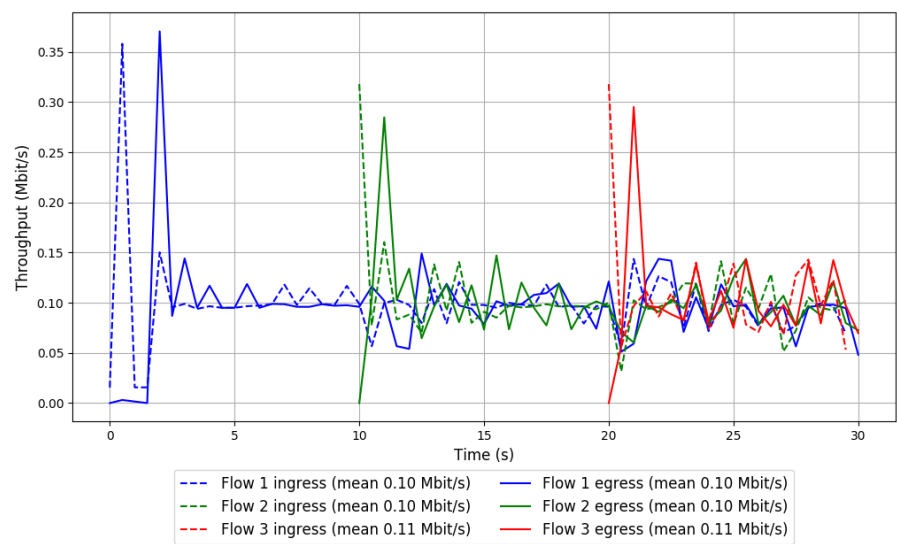
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 359.018 ms

Loss rate: 1.48%

Run 1: Report of Sprout — Data Link

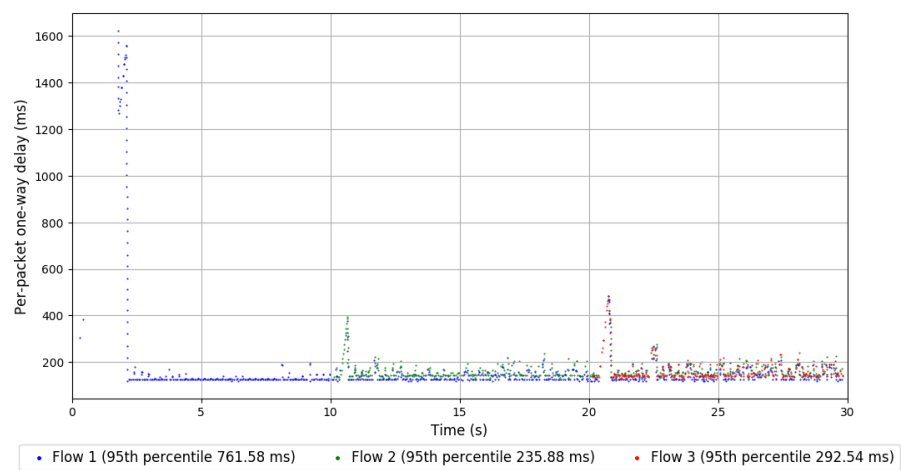
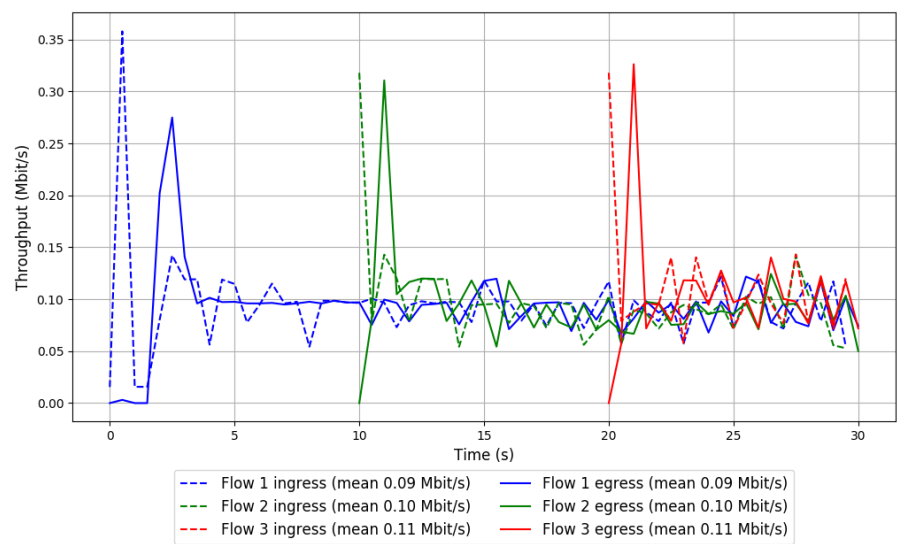


Run 2: Statistics of Sprout

Start at: 2019-01-19 10:41:19
End at: 2019-01-19 10:41:49
Local clock offset: -1.681 ms
Remote clock offset: 9.117 ms

Below is generated by plot.py at 2019-01-19 11:09:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 350.343 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 761.578 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 235.879 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 292.543 ms
Loss rate: 3.14%

Run 2: Report of Sprout — Data Link

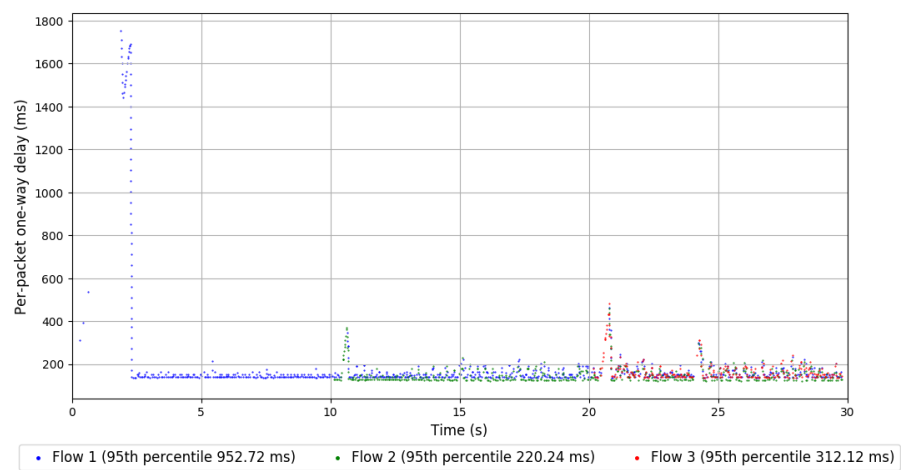
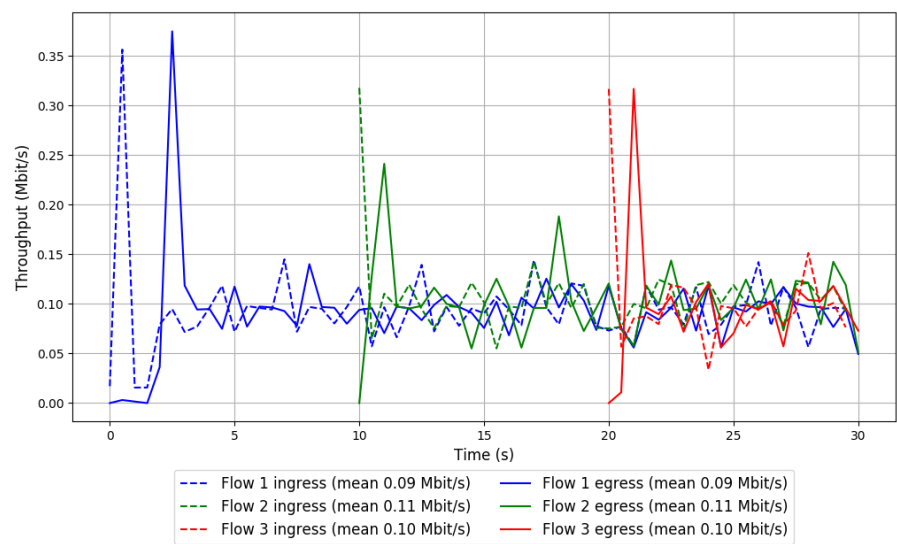


Run 3: Statistics of Sprout

Start at: 2019-01-19 11:07:04
End at: 2019-01-19 11:07:34
Local clock offset: -8.186 ms
Remote clock offset: 3.684 ms

```
# Below is generated by plot.py at 2019-01-19 11:09:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 323.184 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 952.715 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 220.244 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 312.124 ms
Loss rate: 2.58%
```

Run 3: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-01-19 10:07:03

End at: 2019-01-19 10:07:33

Local clock offset: -2.928 ms

Remote clock offset: 2.258 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 3766.009 ms

Loss rate: 9.75%

-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 2555.493 ms

Loss rate: 6.70%

-- Flow 2:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 3323.305 ms

Loss rate: 8.33%

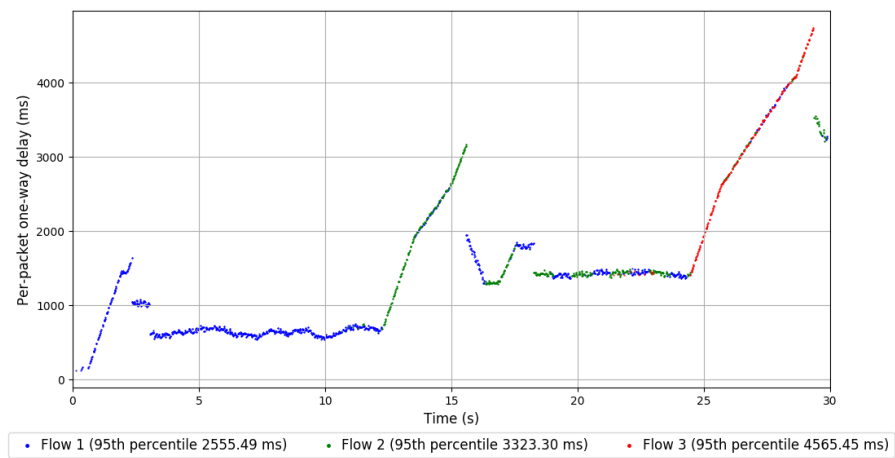
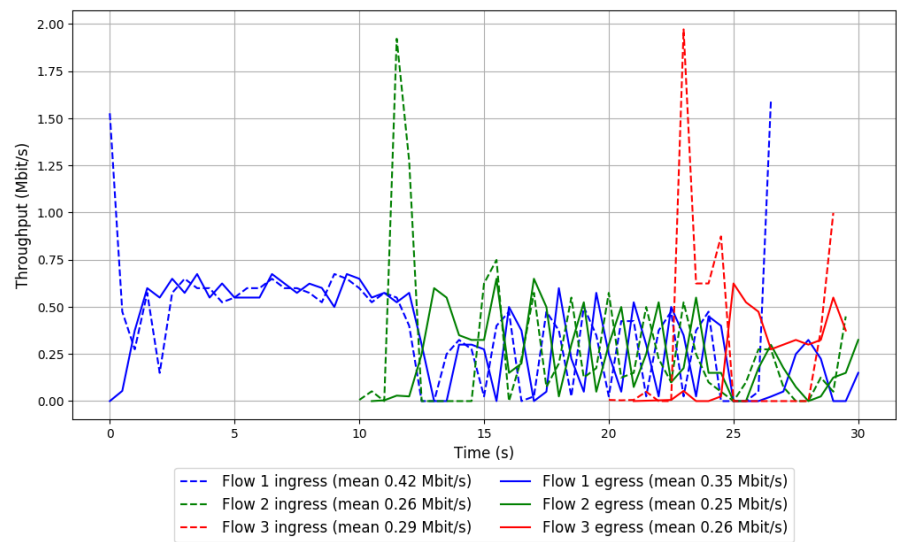
-- Flow 3:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 4565.450 ms

Loss rate: 24.81%

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-01-19 10:32:46

End at: 2019-01-19 10:33:16

Local clock offset: -1.252 ms

Remote clock offset: 9.93 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 3515.313 ms

Loss rate: 7.42%

-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 2707.327 ms

Loss rate: 3.96%

-- Flow 2:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 3495.229 ms

Loss rate: 8.29%

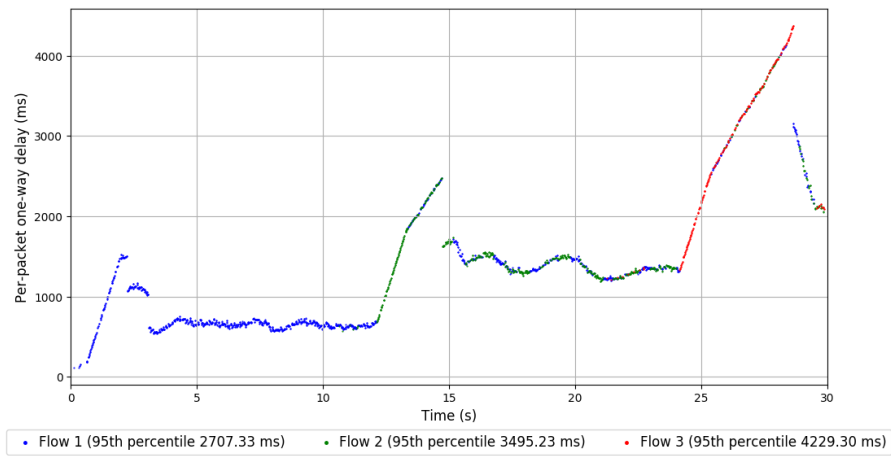
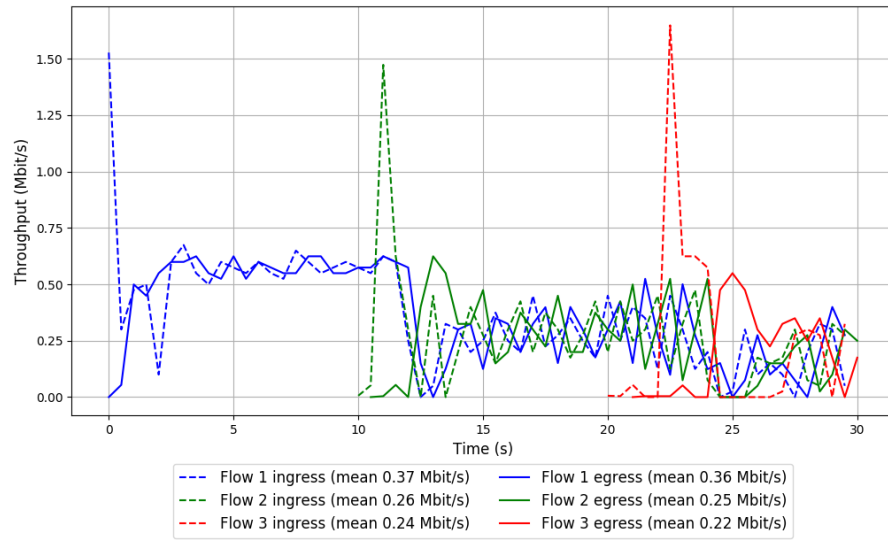
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 4229.299 ms

Loss rate: 21.63%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-01-19 10:58:32

End at: 2019-01-19 10:59:02

Local clock offset: -6.663 ms

Remote clock offset: 3.867 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 3434.641 ms

Loss rate: 14.74%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 2600.200 ms

Loss rate: 16.39%

-- Flow 2:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 3452.168 ms

Loss rate: 7.92%

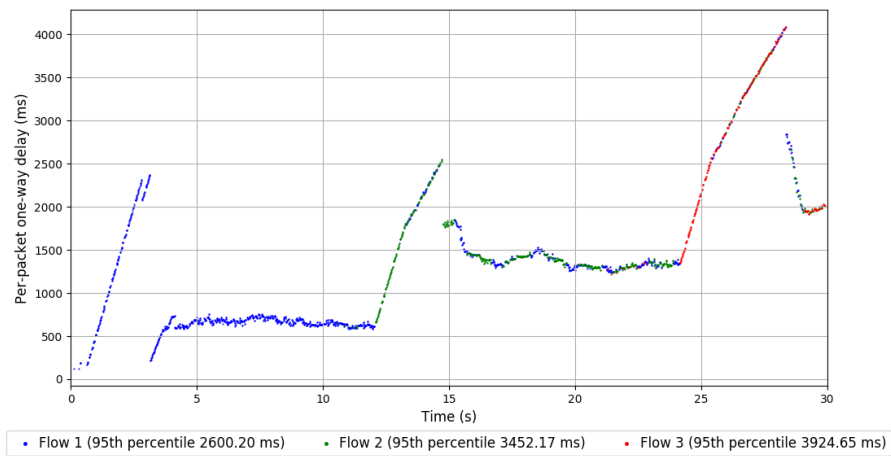
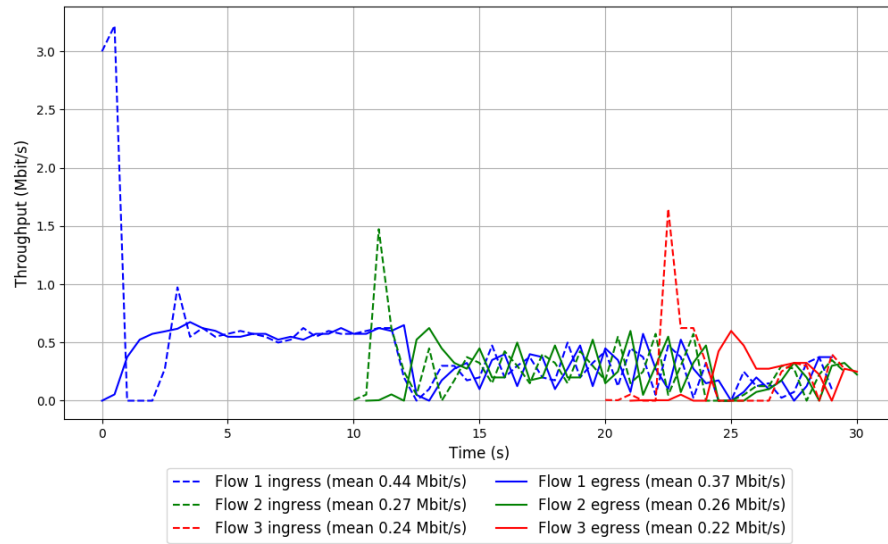
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 3924.653 ms

Loss rate: 21.18%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-01-19 10:02:09

End at: 2019-01-19 10:02:39

Local clock offset: -2.605 ms

Remote clock offset: 7.184 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 1749.202 ms

Loss rate: 5.60%

-- Flow 1:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 1629.580 ms

Loss rate: 2.79%

-- Flow 2:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 1744.813 ms

Loss rate: 6.02%

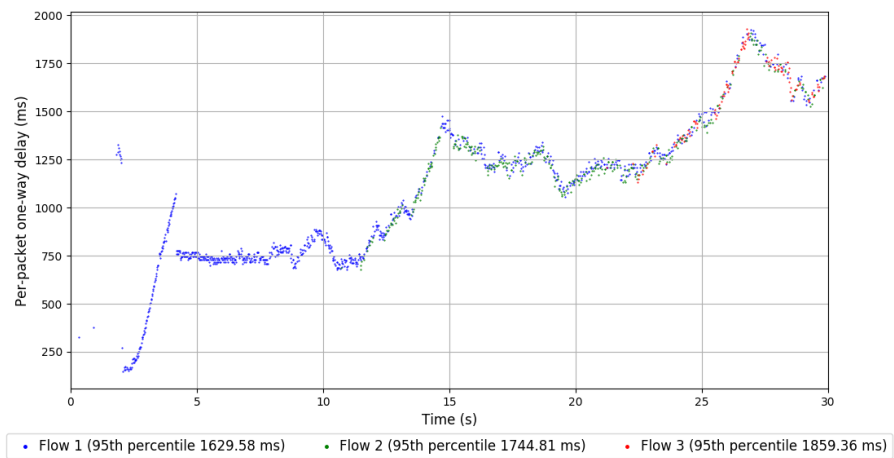
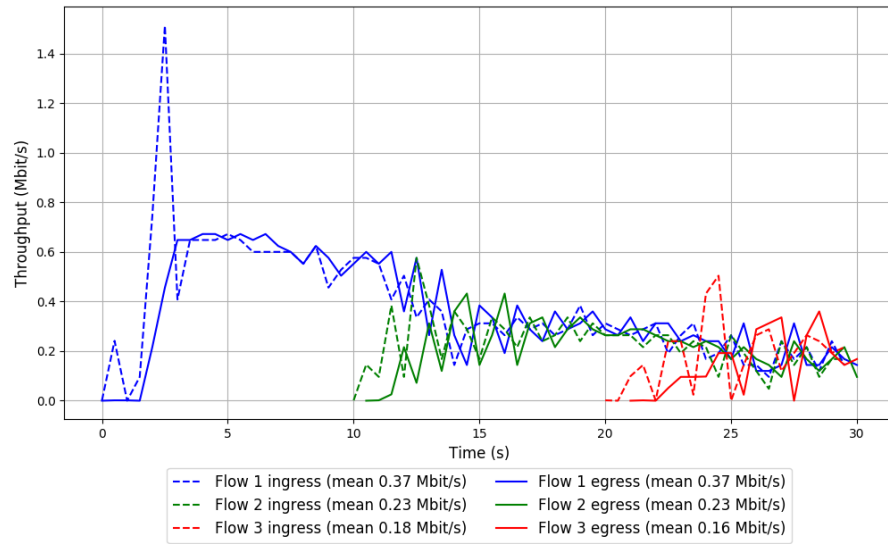
-- Flow 3:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 1859.355 ms

Loss rate: 21.96%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-01-19 10:27:52

End at: 2019-01-19 10:28:22

Local clock offset: -1.321 ms

Remote clock offset: 7.64 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.56 Mbit/s

95th percentile per-packet one-way delay: 1545.007 ms

Loss rate: 4.88%

-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 1506.229 ms

Loss rate: 2.35%

-- Flow 2:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 1556.261 ms

Loss rate: 5.36%

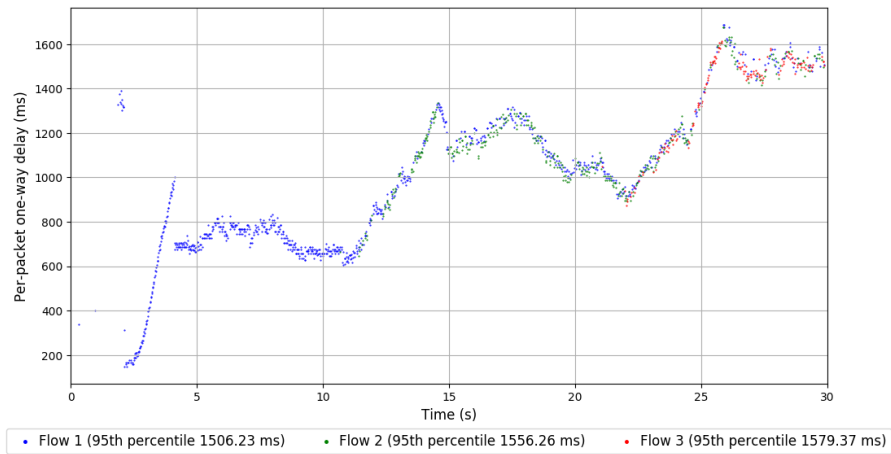
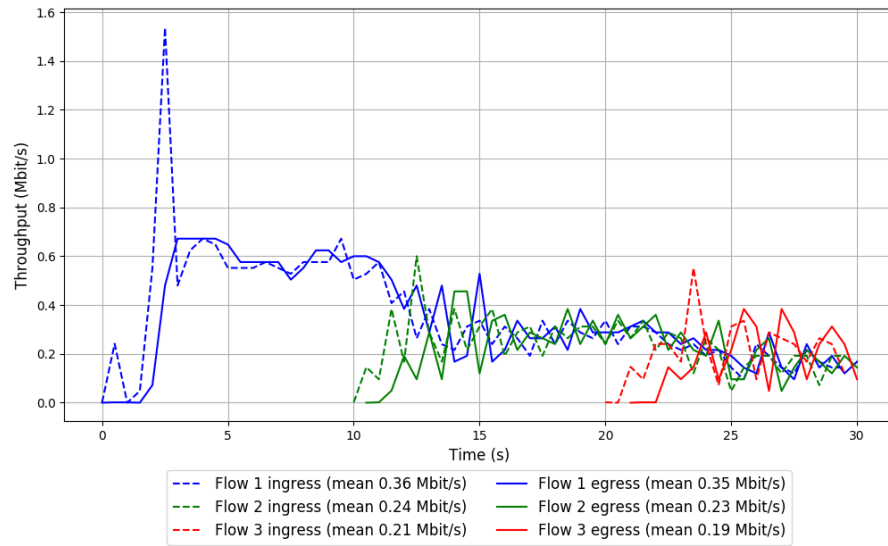
-- Flow 3:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 1579.368 ms

Loss rate: 17.03%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-01-19 10:53:38

End at: 2019-01-19 10:54:08

Local clock offset: -4.383 ms

Remote clock offset: 3.893 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 1823.643 ms

Loss rate: 5.49%

-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 1713.432 ms

Loss rate: 2.78%

-- Flow 2:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 1892.968 ms

Loss rate: 6.89%

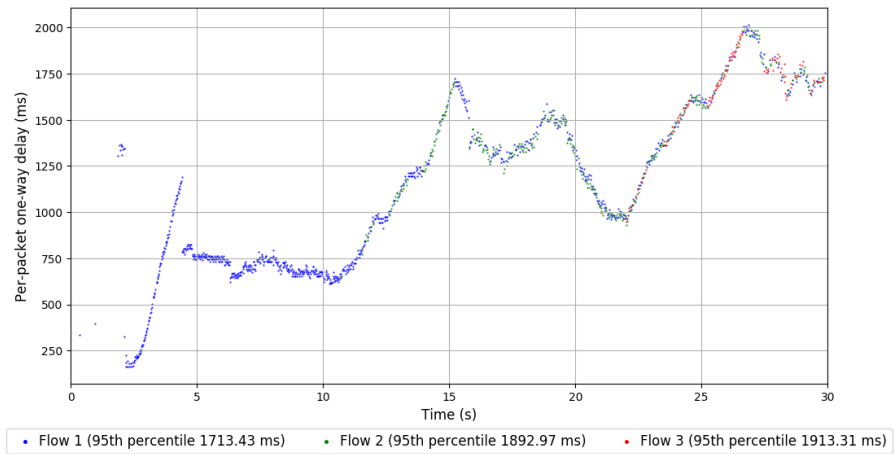
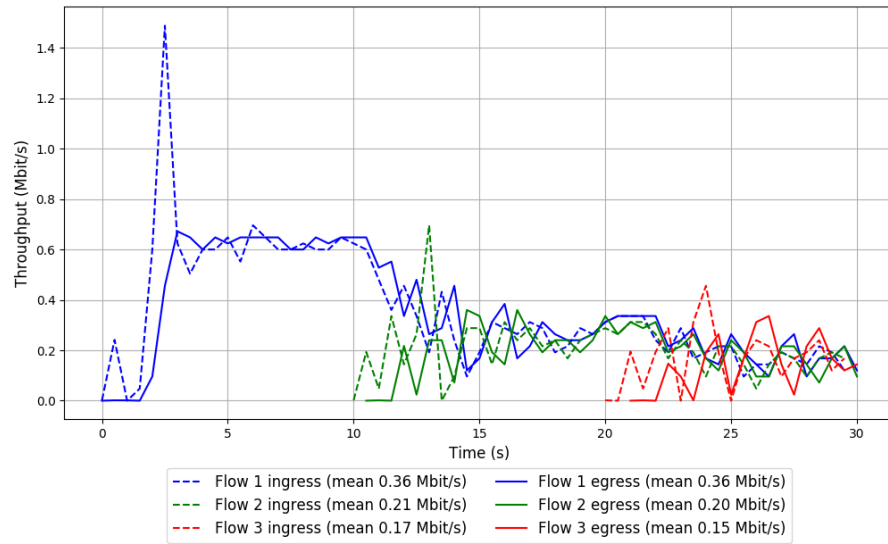
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 1913.308 ms

Loss rate: 19.67%

Run 3: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-01-19 10:14:22

End at: 2019-01-19 10:14:52

Local clock offset: -1.773 ms

Remote clock offset: 2.272 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 1624.291 ms

Loss rate: 5.11%

-- Flow 1:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 1618.361 ms

Loss rate: 5.02%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 1580.844 ms

Loss rate: 4.76%

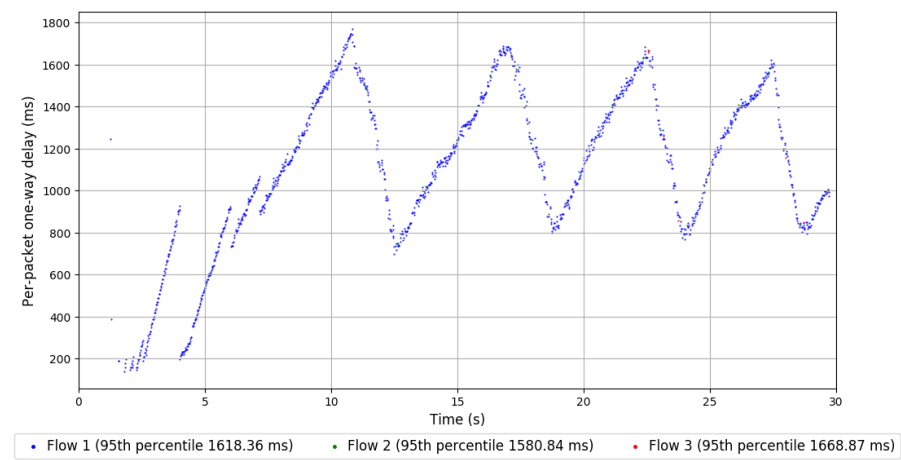
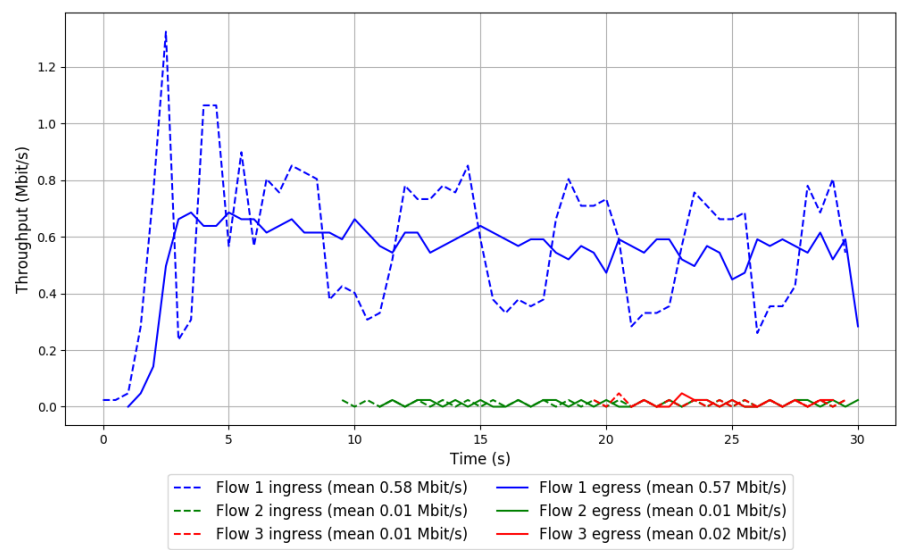
-- Flow 3:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 1668.871 ms

Loss rate: 16.67%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-01-19 10:40:06

End at: 2019-01-19 10:40:36

Local clock offset: -1.724 ms

Remote clock offset: 7.919 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 2075.602 ms

Loss rate: 6.47%

-- Flow 1:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 2071.399 ms

Loss rate: 6.47%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 2096.959 ms

Loss rate: 5.00%

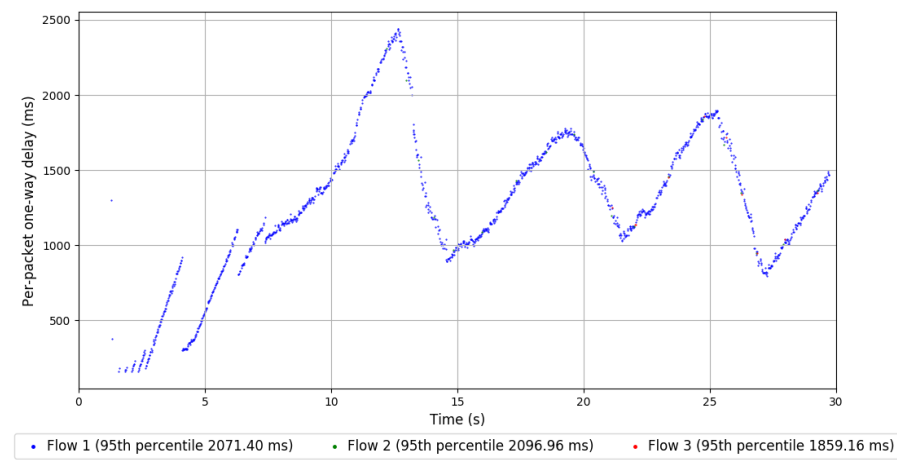
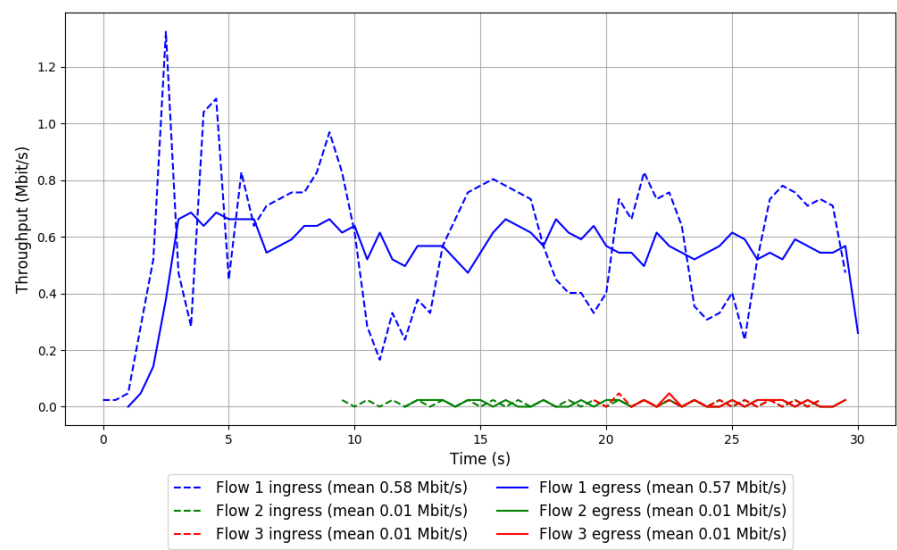
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 1859.160 ms

Loss rate: 9.09%

Run 2: Report of Verus — Data Link

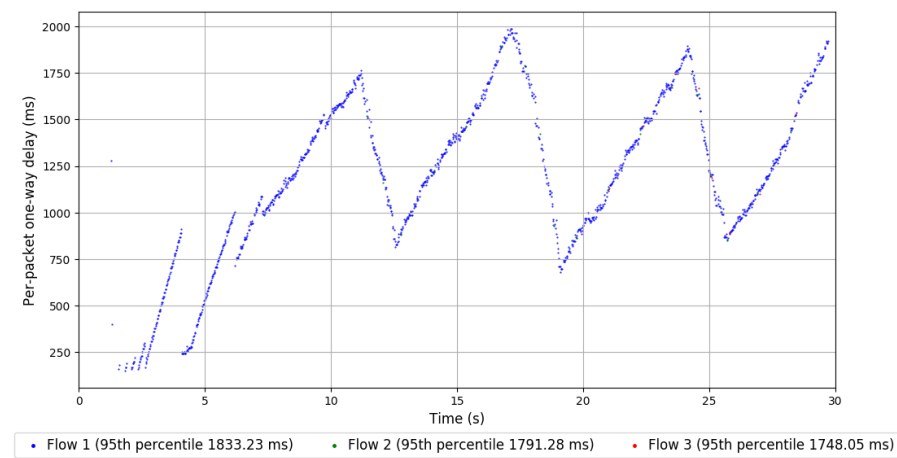
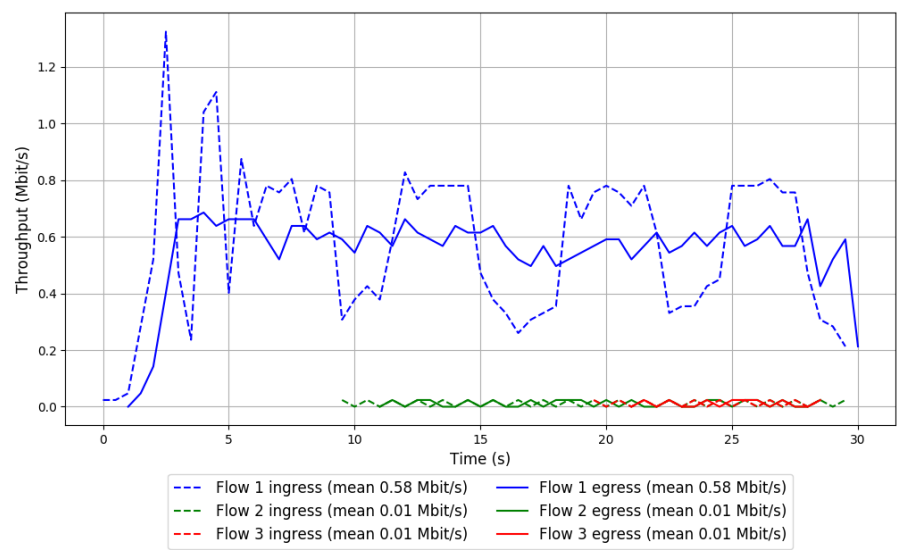


Run 3: Statistics of Verus

Start at: 2019-01-19 11:05:51
End at: 2019-01-19 11:06:21
Local clock offset: -8.032 ms
Remote clock offset: 3.753 ms

Below is generated by plot.py at 2019-01-19 11:09:42
Datalink statistics
-- Total of 3 flows:
Average throughput: 0.59 Mbit/s
95th percentile per-packet one-way delay: 1828.372 ms
Loss rate: 4.92%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 1833.228 ms
Loss rate: 4.68%
-- Flow 2:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1791.276 ms
Loss rate: 14.29%
-- Flow 3:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 1748.053 ms
Loss rate: 20.00%

Run 3: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

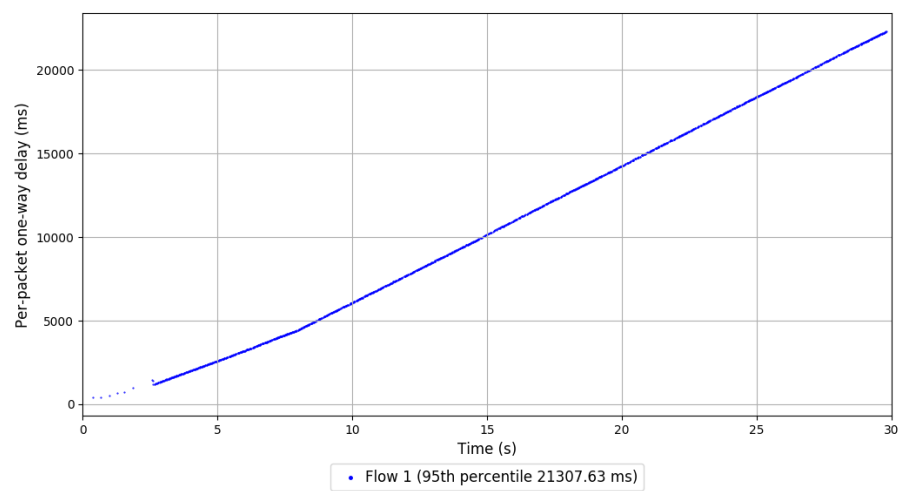
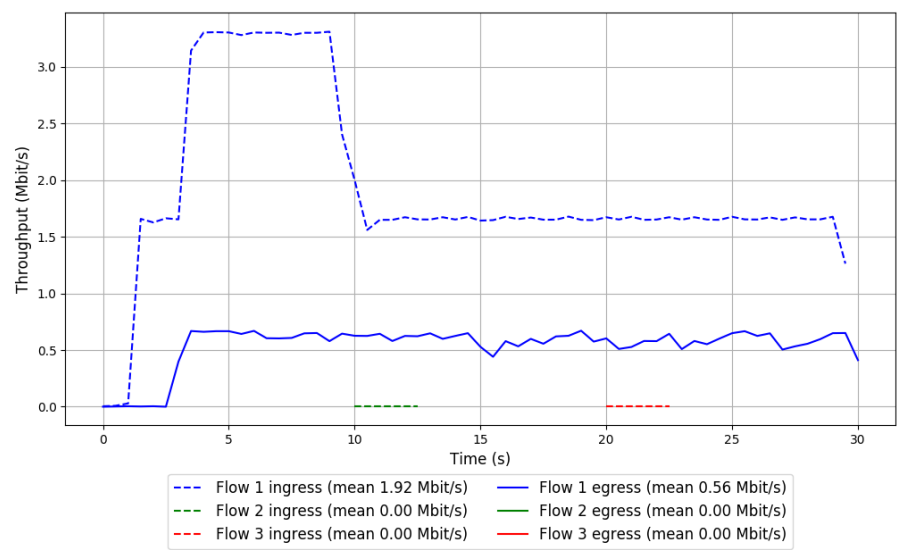
Start at: 2019-01-19 10:05:50

End at: 2019-01-19 10:06:20

Local clock offset: -2.249 ms

Remote clock offset: 3.441 ms

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

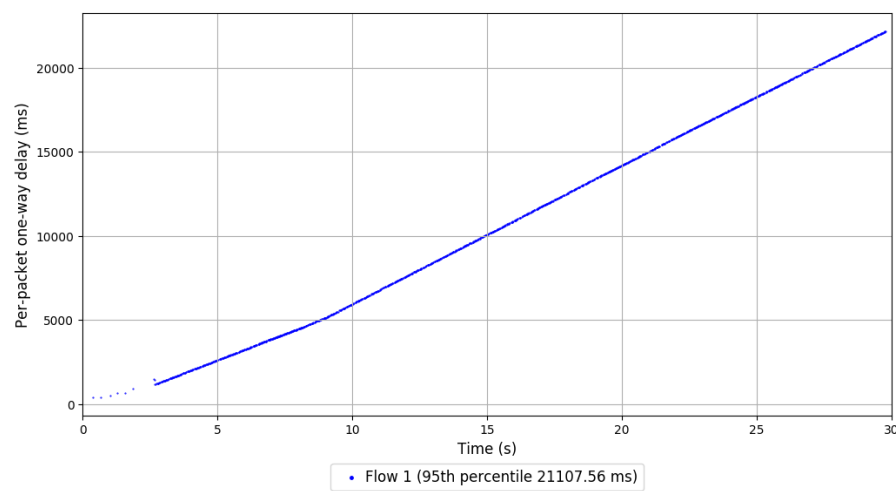
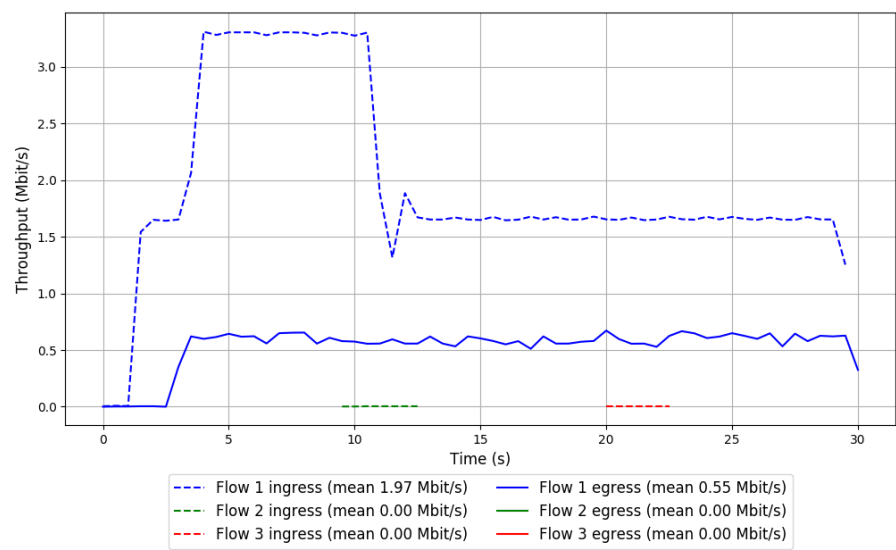
Start at: 2019-01-19 10:31:33

End at: 2019-01-19 10:32:03

Local clock offset: -1.207 ms

Remote clock offset: 8.948 ms

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

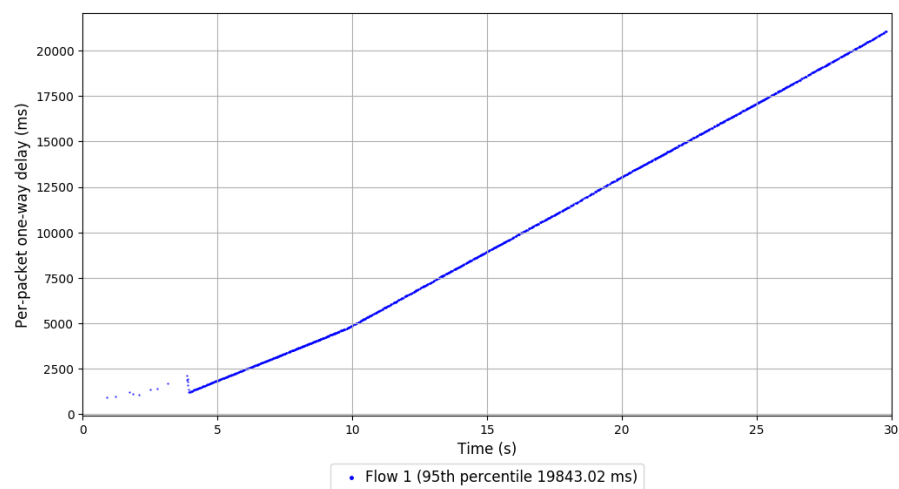
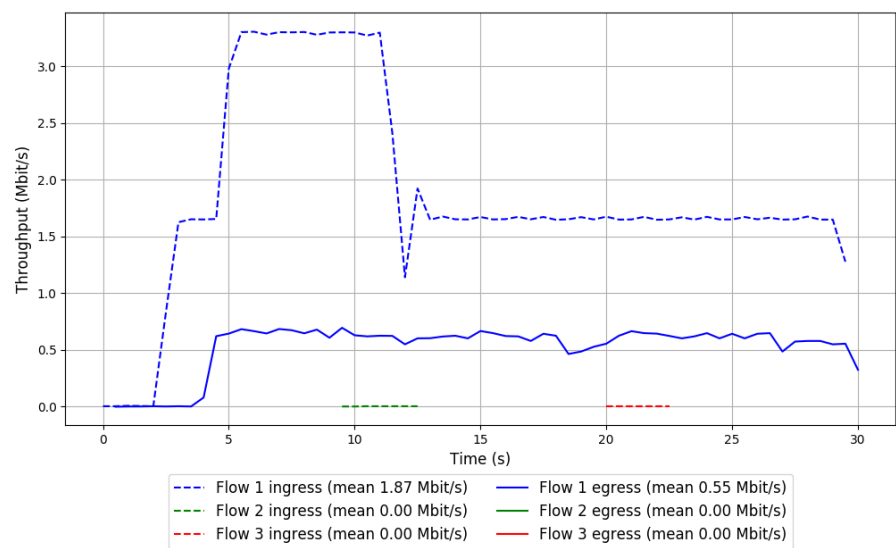
Start at: 2019-01-19 10:57:19

End at: 2019-01-19 10:57:49

Local clock offset: -5.648 ms

Remote clock offset: 9.878 ms

Run 3: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-01-19 10:03:23

End at: 2019-01-19 10:03:53

Local clock offset: -3.265 ms

Remote clock offset: 7.104 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.34 Mbit/s

95th percentile per-packet one-way delay: 1340.455 ms

Loss rate: 0.61%

-- Flow 1:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 1296.807 ms

Loss rate: 0.29%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 1356.606 ms

Loss rate: 0.40%

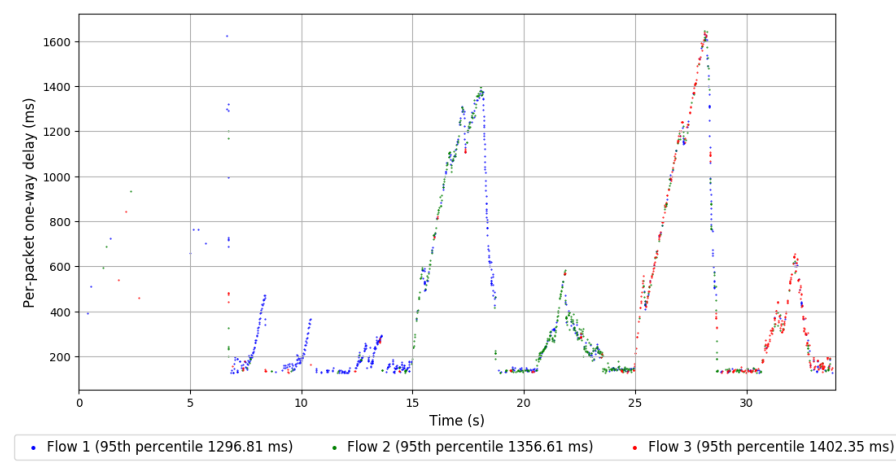
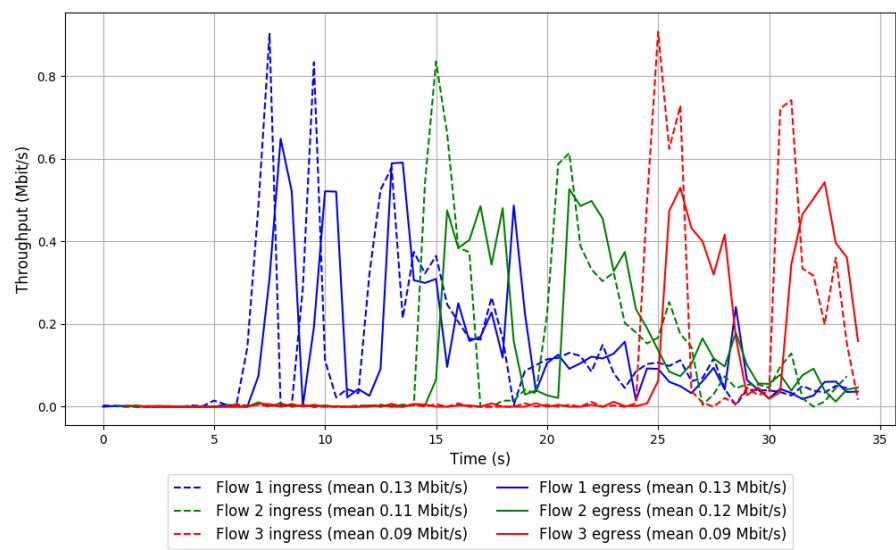
-- Flow 3:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 1402.348 ms

Loss rate: 1.38%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-01-19 10:29:06

End at: 2019-01-19 10:29:36

Local clock offset: -1.288 ms

Remote clock offset: 9.994 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 1553.280 ms

Loss rate: 0.28%

-- Flow 1:

Average throughput: 0.19 Mbit/s

95th percentile per-packet one-way delay: 1559.220 ms

Loss rate: 0.01%

-- Flow 2:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 1567.736 ms

Loss rate: 0.35%

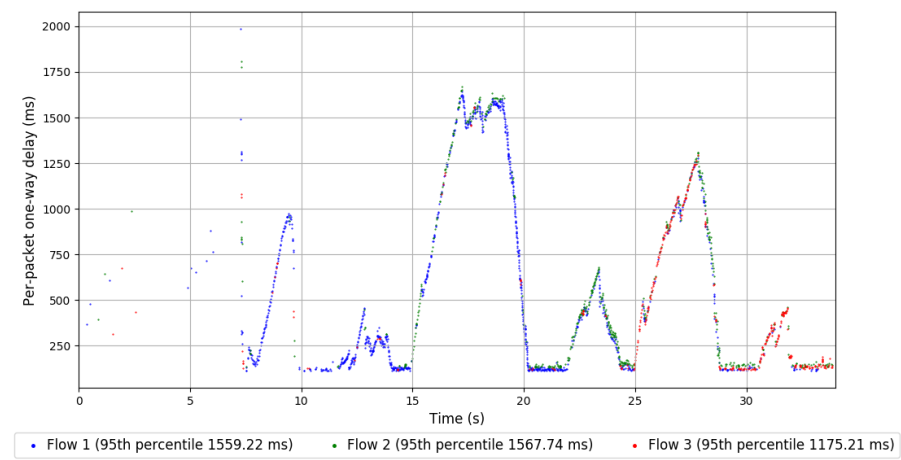
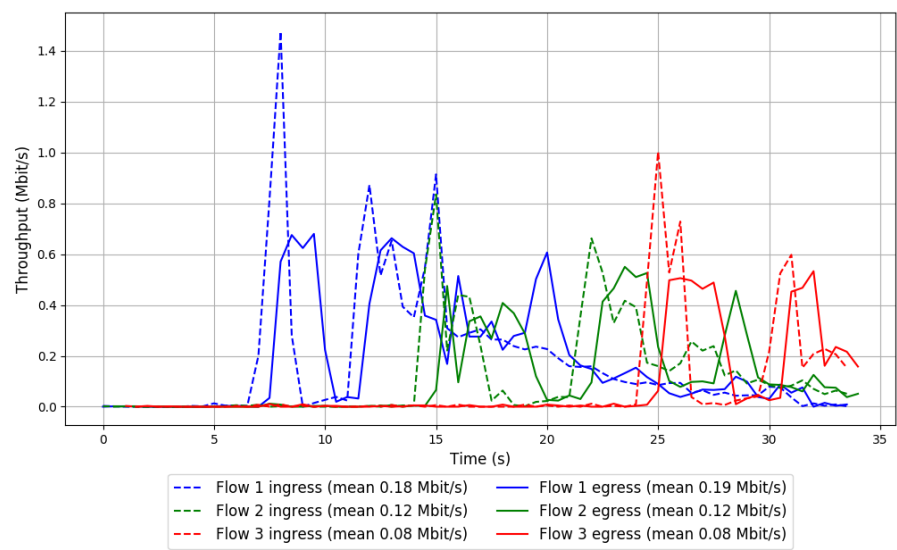
-- Flow 3:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 1175.207 ms

Loss rate: 0.81%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-01-19 10:54:52

End at: 2019-01-19 10:55:22

Local clock offset: -4.833 ms

Remote clock offset: 8.859 ms

Below is generated by plot.py at 2019-01-19 11:09:42

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 1904.399 ms

Loss rate: 2.63%

-- Flow 1:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 1818.149 ms

Loss rate: 0.98%

-- Flow 2:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 1916.347 ms

Loss rate: 0.90%

-- Flow 3:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 1986.631 ms

Loss rate: 9.38%

Run 3: Report of WebRTC media — Data Link

