

## Pantheon Report

Generated at 2019-01-22 02:02:34 (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:

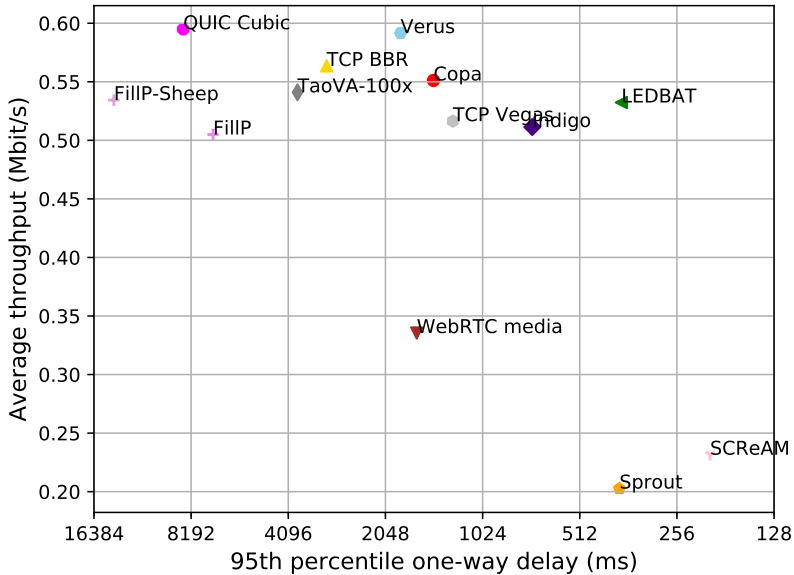
```
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

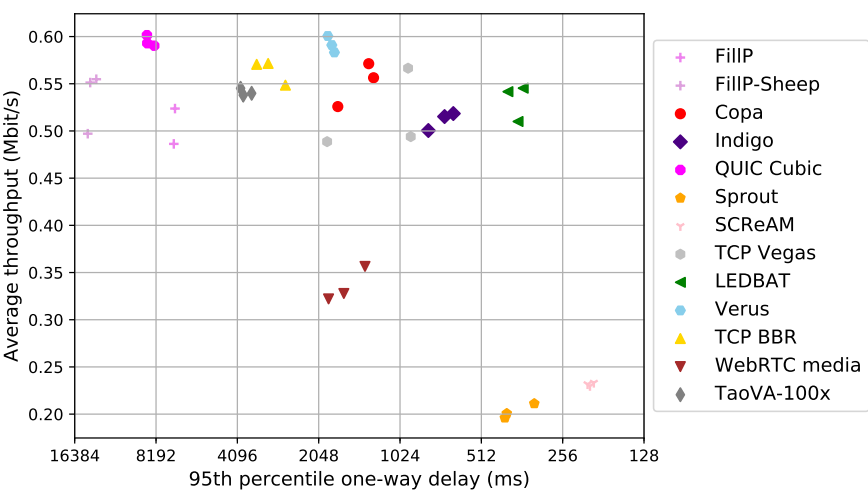
```
branch: muses @ 89d24e57783e7fbfec537a619071de937b639e38
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 1ddcff131048c6962f123bcd22b4d166a422adde
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	0.37	0.28	0.06	3105.72	3123.42	2589.76	5.24	9.60	37.68
Copa	3	0.37	0.22	0.14	1423.76	1470.77	1544.09	4.18	6.17	7.15
TCP Cubic	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FillP	2	0.50	0.01	0.00	7039.29	6142.93	6566.61	22.02	0.00	82.28
FillP-Sheep	3	0.53	0.01	0.01	14304.46	8005.99	4168.82	15.22	0.00	99.14
Indigo	3	0.28	0.24	0.23	615.15	739.33	807.04	0.82	0.94	2.19
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	0.29	0.25	366.33	381.36	386.71	0.00	0.72	5.14
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	0.58	0.02	0.00	8639.57	8585.92	9001.33	31.24	15.49	77.78
SCReAM	3	0.08	0.15	0.15	192.07	210.78	234.19	0.74	0.97	1.81
Sprout	3	0.10	0.10	0.11	933.03	268.54	319.12	0.67	1.14	2.13
TaoVA-100x	3	0.33	0.24	0.23	2669.84	3729.96	4490.30	4.34	11.04	19.05
TCP Vegas	3	0.26	0.25	0.27	1135.47	1249.02	1368.52	1.29	3.34	12.53
Verus	3	0.58	0.01	0.01	1837.60	1816.29	1768.19	4.65	6.43	12.73
PCC-Vivace	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WebRTC media	3	0.13	0.13	0.07	1583.90	1641.37	1579.73	0.83	0.93	6.61

Run 1: Statistics of TCP BBR

Start at: 2019-01-22 01:09:37

End at: 2019-01-22 01:10:07

Local clock offset: -0.633 ms

Remote clock offset: 7.378 ms

# Below is generated by plot.py at 2019-01-22 02:01:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 2719.110 ms

Loss rate: 15.45%

-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 2709.181 ms

Loss rate: 11.54%

-- Flow 2:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 2729.533 ms

Loss rate: 16.86%

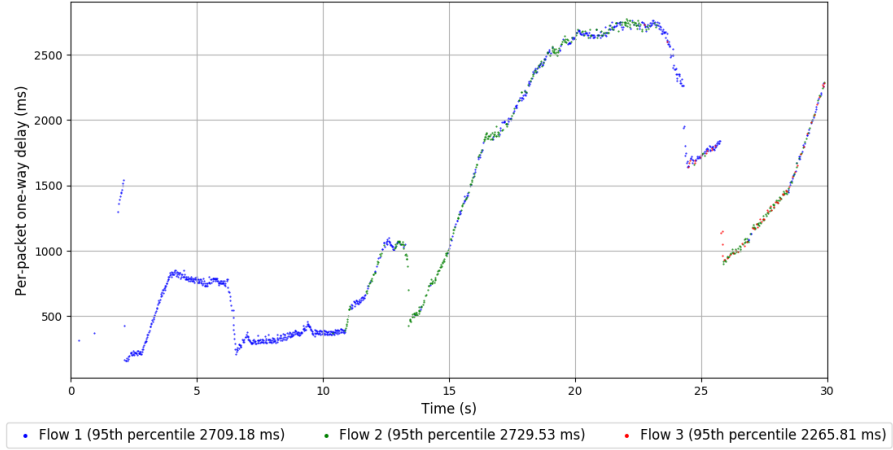
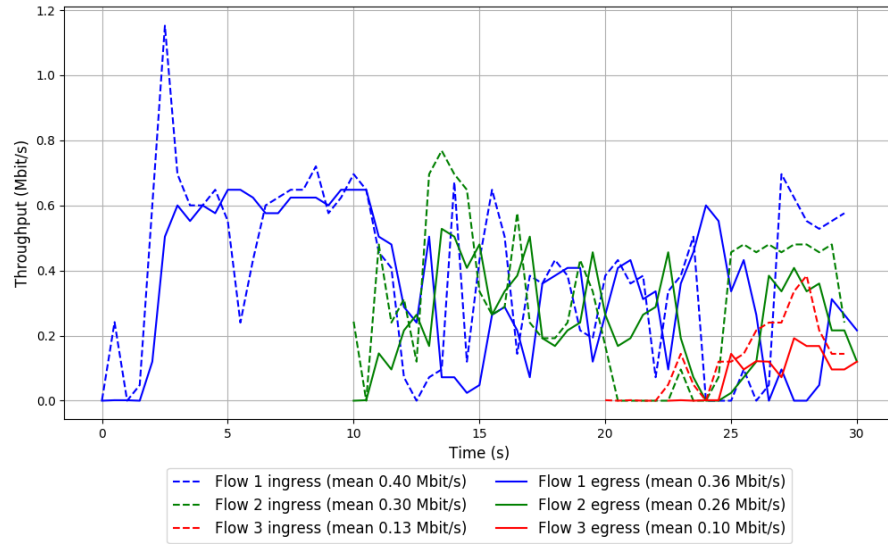
-- Flow 3:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 2265.808 ms

Loss rate: 45.18%

# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-01-22 01:35:23

End at: 2019-01-22 01:35:53

Local clock offset: -7.397 ms

Remote clock offset: 3.321 ms

# Below is generated by plot.py at 2019-01-22 02:01:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 3151.072 ms

Loss rate: 4.22%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 3132.695 ms

Loss rate: 2.30%

-- Flow 2:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 3177.877 ms

Loss rate: 5.69%

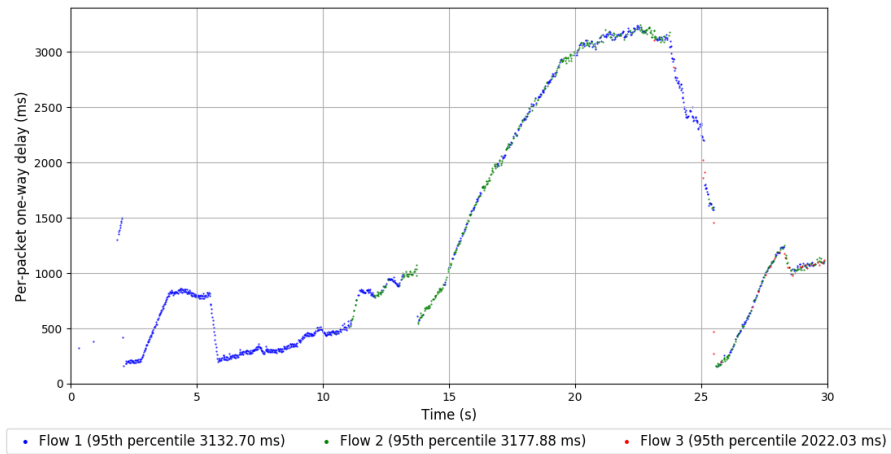
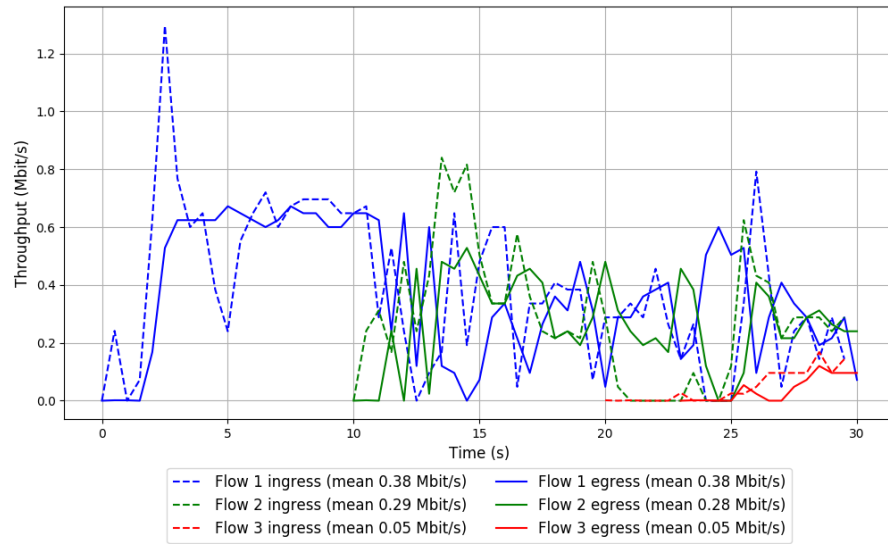
-- Flow 3:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 2022.032 ms

Loss rate: 33.88%

## Run 2: Report of TCP BBR — Data Link





Run 3: Statistics of TCP BBR

Start at: 2019-01-22 02:01:07

End at: 2019-01-22 02:01:37

Local clock offset: -3.152 ms

Remote clock offset: 2.033 ms

# Below is generated by plot.py at 2019-01-22 02:01:52

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 3474.346 ms

Loss rate: 4.16%

-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 3475.269 ms

Loss rate: 1.88%

-- Flow 2:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 3462.842 ms

Loss rate: 6.24%

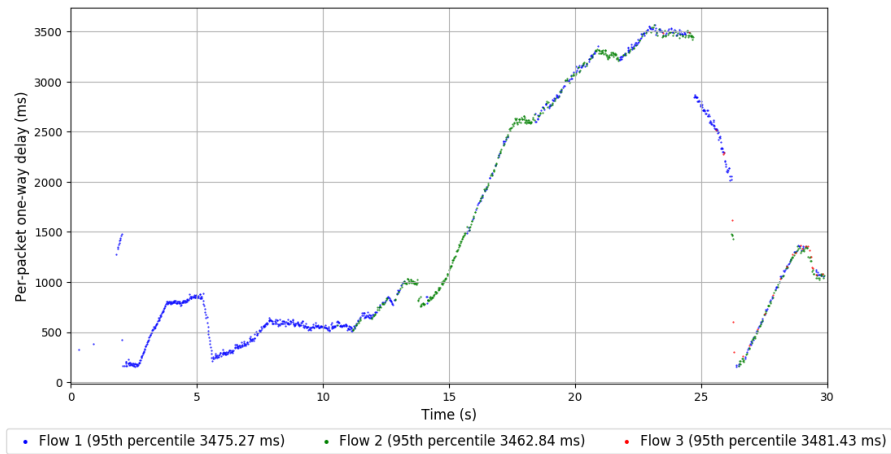
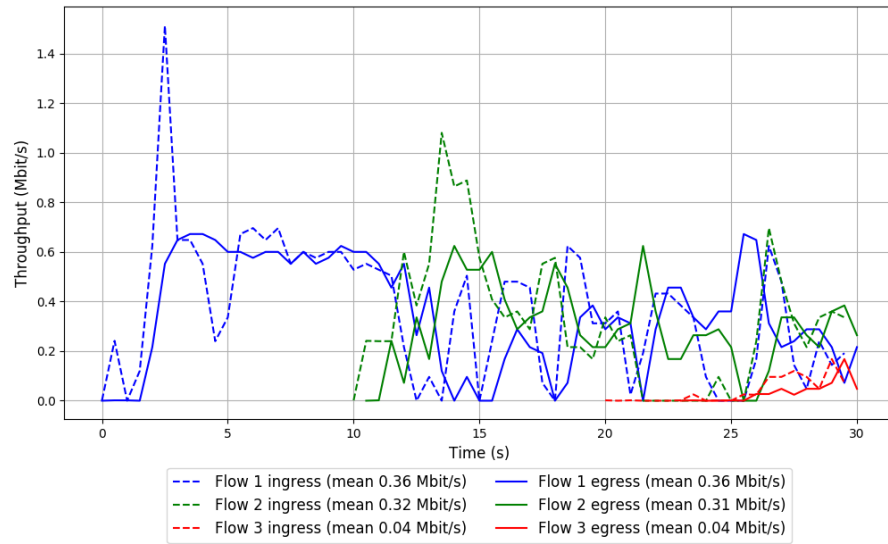
-- Flow 3:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 3481.429 ms

Loss rate: 33.98%

### Run 3: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-01-22 00:49:55

End at: 2019-01-22 00:50:25

Local clock offset: -4.819 ms

Remote clock offset: 1.515 ms

# Below is generated by plot.py at 2019-01-22 02:01:53

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.53 Mbit/s

95th percentile per-packet one-way delay: 1740.328 ms

Loss rate: 5.62%

-- Flow 1:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 1671.494 ms

Loss rate: 4.19%

-- Flow 2:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 1846.986 ms

Loss rate: 8.05%

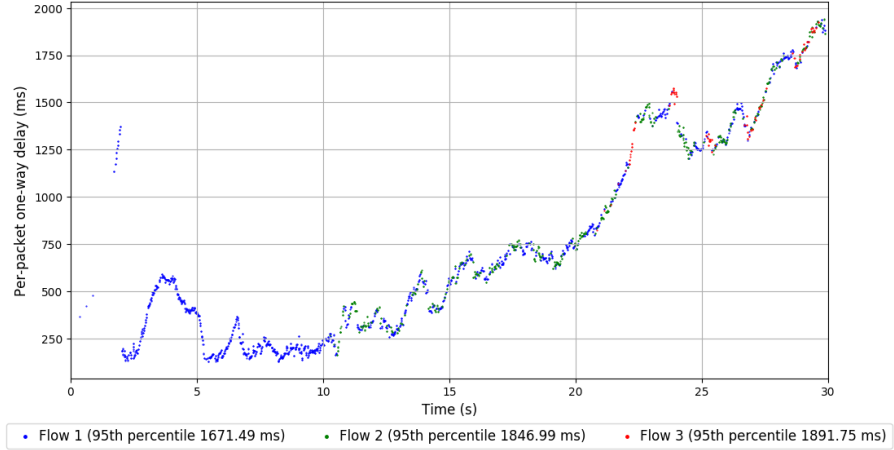
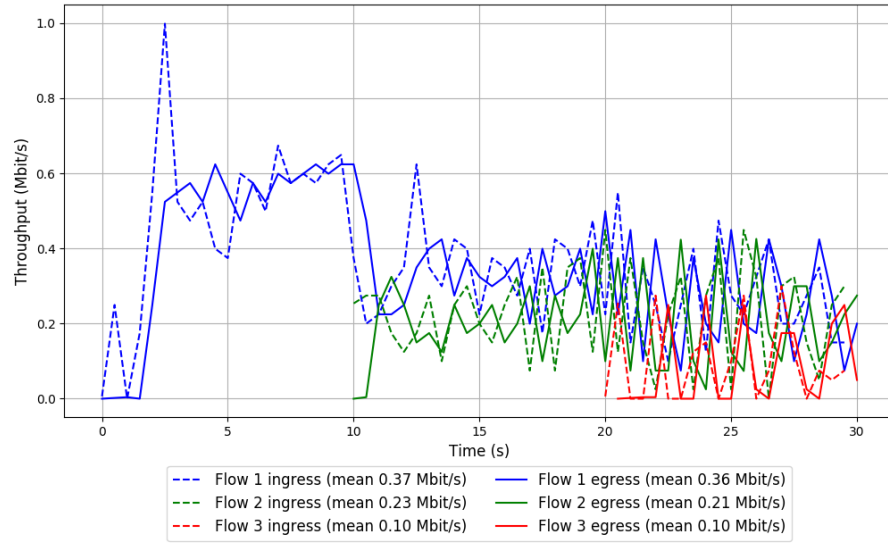
-- Flow 3:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 1891.754 ms

Loss rate: 10.61%

# Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-01-22 01:15:45

End at: 2019-01-22 01:16:15

Local clock offset: -0.791 ms

Remote clock offset: 7.838 ms

# Below is generated by plot.py at 2019-01-22 02:01:54

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 1337.151 ms

Loss rate: 4.35%

-- Flow 1:

Average throughput: 0.38 Mbit/s

95th percentile per-packet one-way delay: 1316.737 ms

Loss rate: 3.92%

-- Flow 2:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1333.549 ms

Loss rate: 5.20%

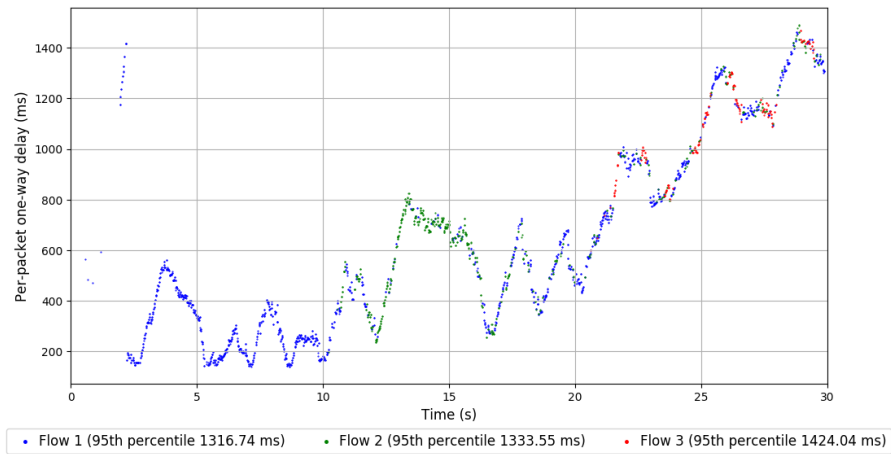
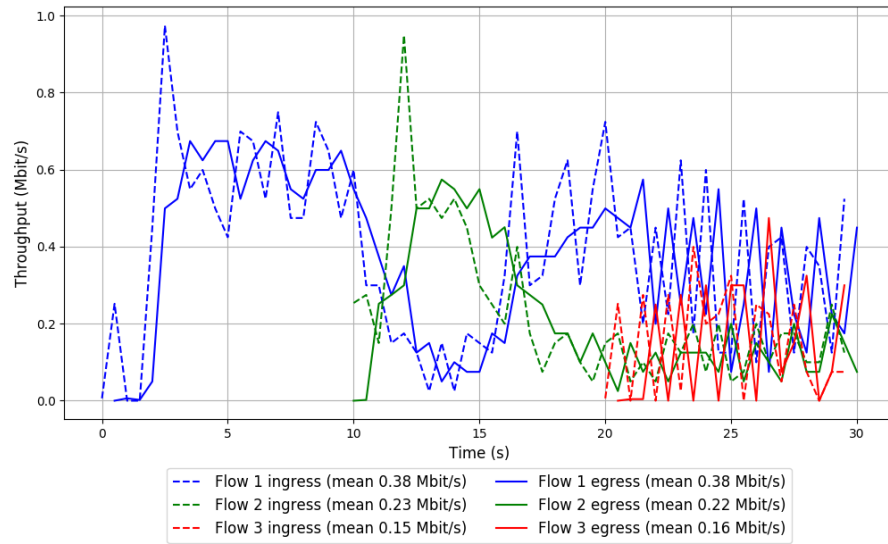
-- Flow 3:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 1424.035 ms

Loss rate: 5.03%

## Run 2: Report of Copa — Data Link

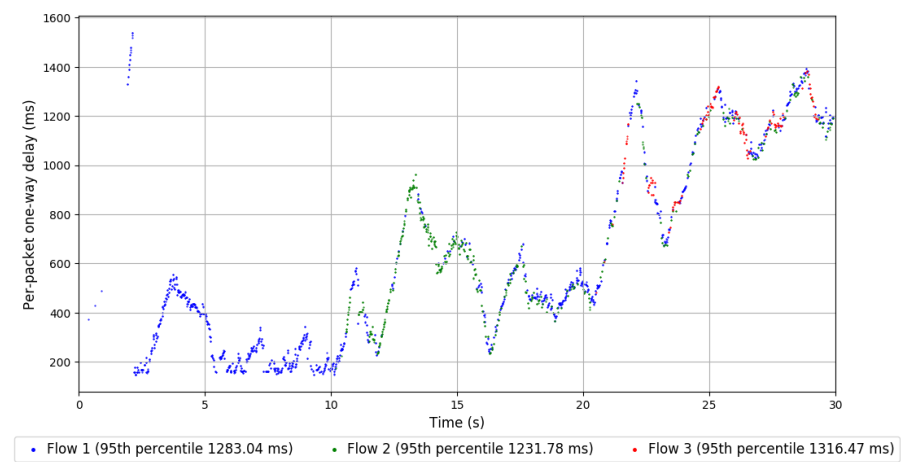
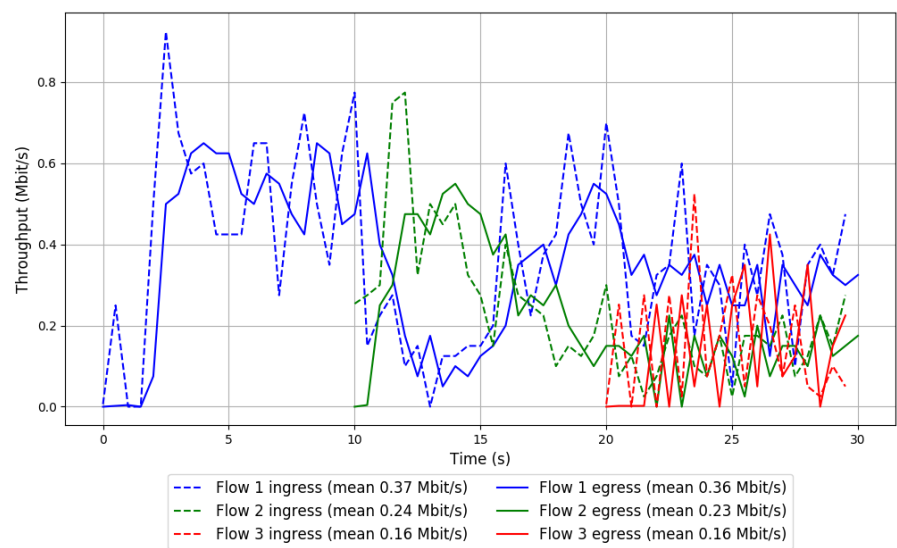


Run 3: Statistics of Copa

Start at: 2019-01-22 01:41:30  
End at: 2019-01-22 01:42:00  
Local clock offset: -7.122 ms  
Remote clock offset: 1.81 ms

```
# Below is generated by plot.py at 2019-01-22 02:01:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.56 Mbit/s
95th percentile per-packet one-way delay: 1283.043 ms
Loss rate: 4.78%
-- Flow 1:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 1283.043 ms
Loss rate: 4.43%
-- Flow 2:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 1231.782 ms
Loss rate: 5.25%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 1316.469 ms
Loss rate: 5.82%
```

Run 3: Report of Copa — Data Link





Run 1: Statistics of TCP Cubic

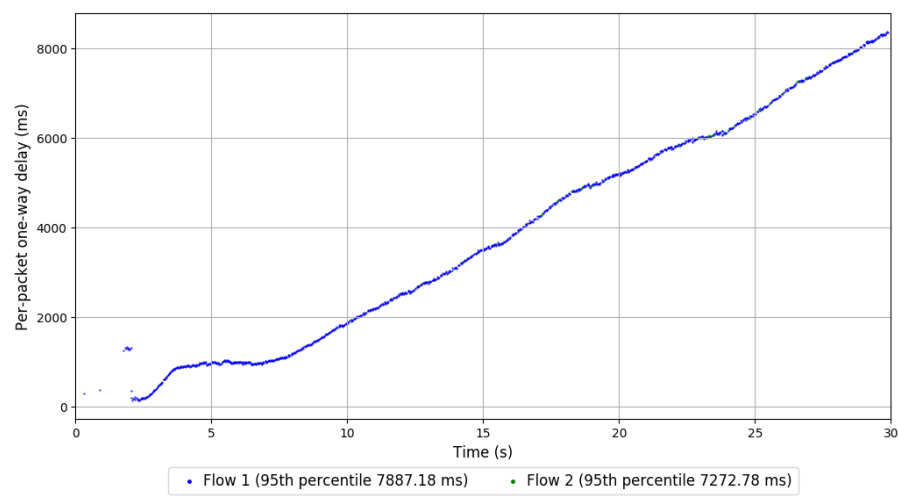
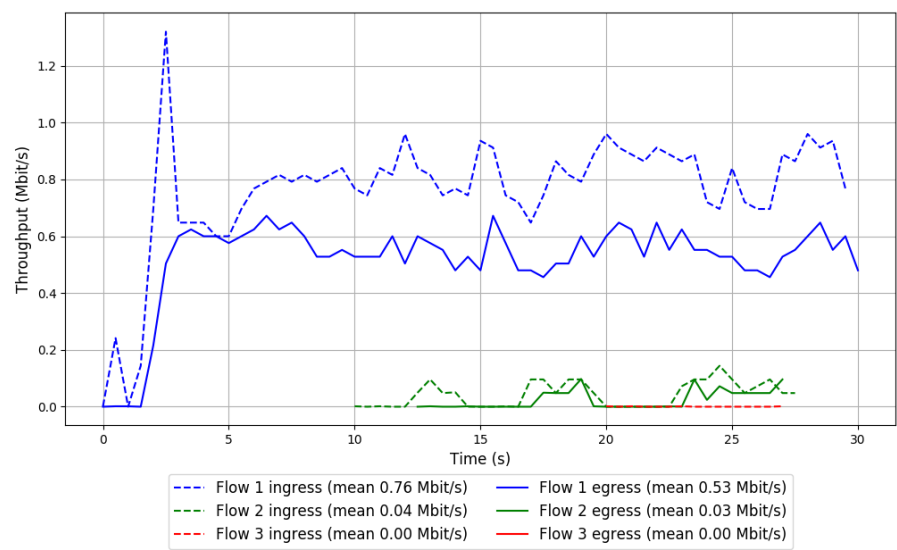
Start at: 2019-01-22 00:54:52

End at: 2019-01-22 00:55:22

Local clock offset: -3.125 ms

Remote clock offset: 0.997 ms

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

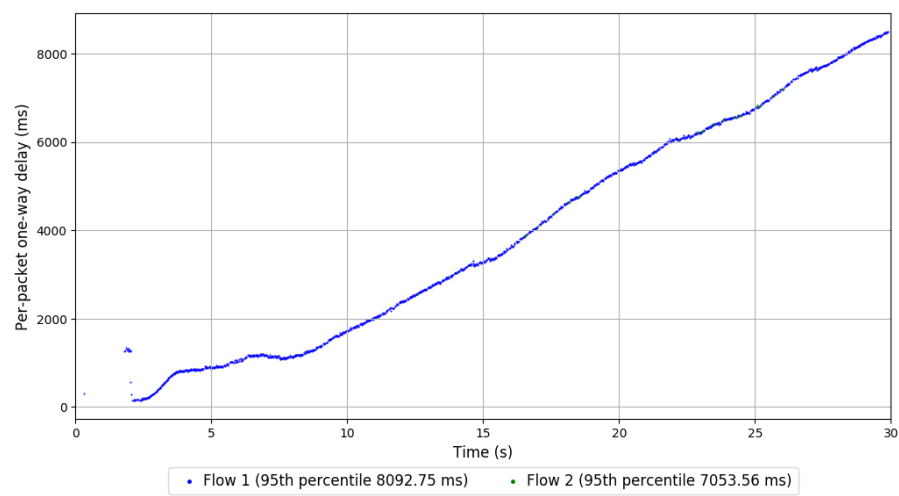
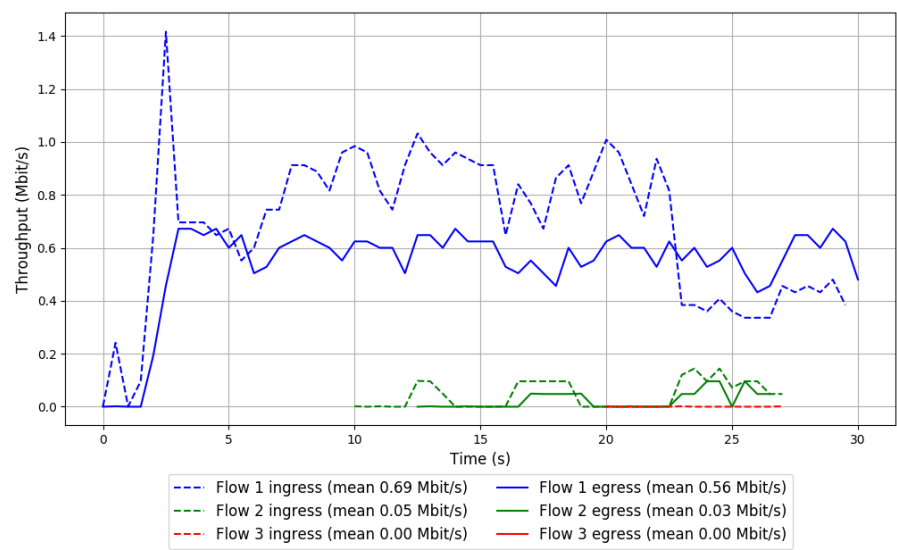
Start at: 2019-01-22 01:20:40

End at: 2019-01-22 01:21:10

Local clock offset: -3.686 ms

Remote clock offset: 8.964 ms

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

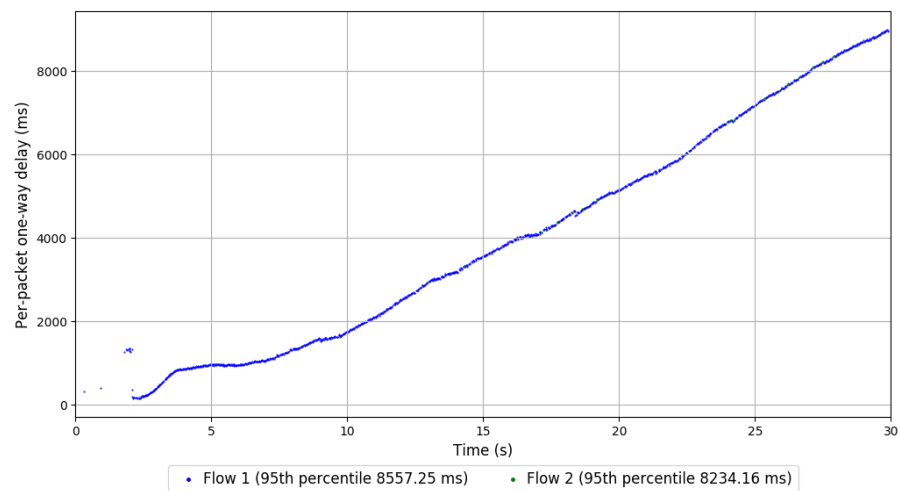
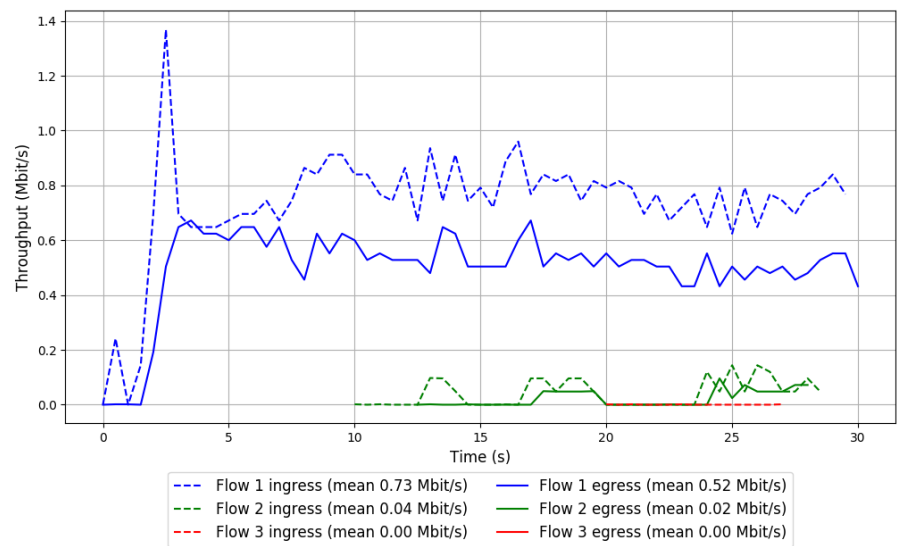
Start at: 2019-01-22 01:46:25

End at: 2019-01-22 01:46:55

Local clock offset: -7.233 ms

Remote clock offset: 1.994 ms

Run 3: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-01-22 00:48:42

End at: 2019-01-22 00:49:12

Local clock offset: -6.032 ms

Remote clock offset: 5.345 ms

# Below is generated by plot.py at 2019-01-22 02:01:57

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 6970.368 ms

Loss rate: 21.00%

-- Flow 1:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 7018.229 ms

Loss rate: 20.88%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 5680.202 ms

Loss rate: 0.00%

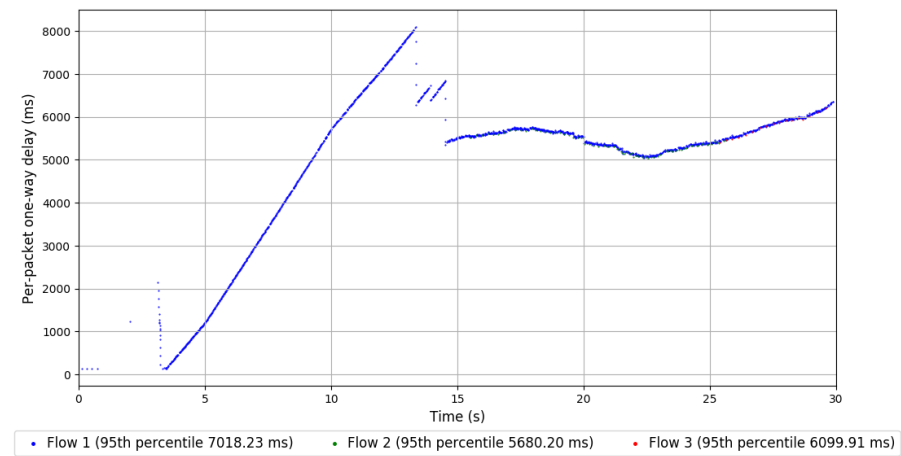
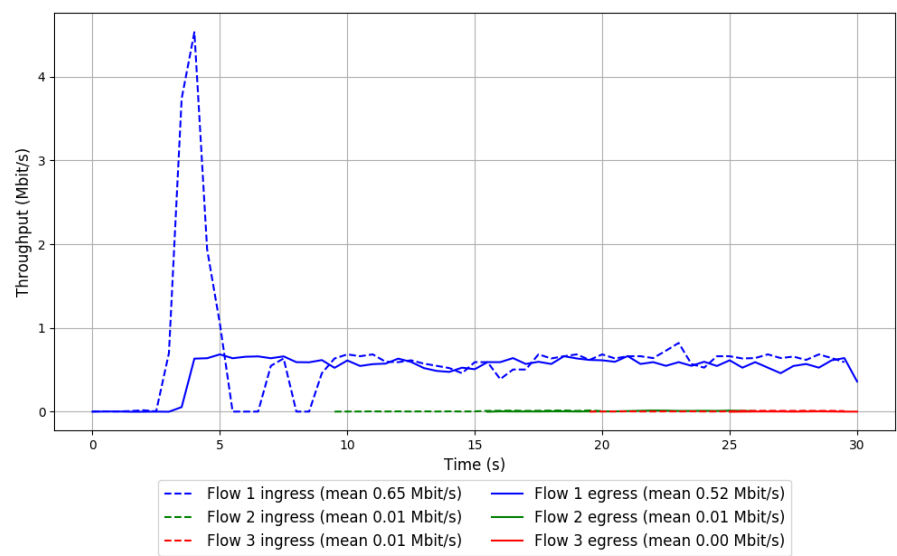
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 6099.915 ms

Loss rate: 80.92%

Run 1: Report of FillP — Data Link





Run 2: Statistics of FillP

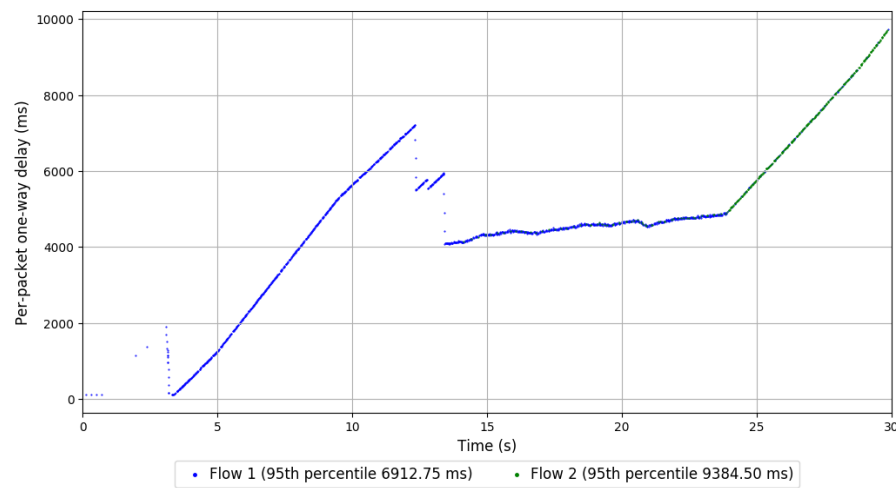
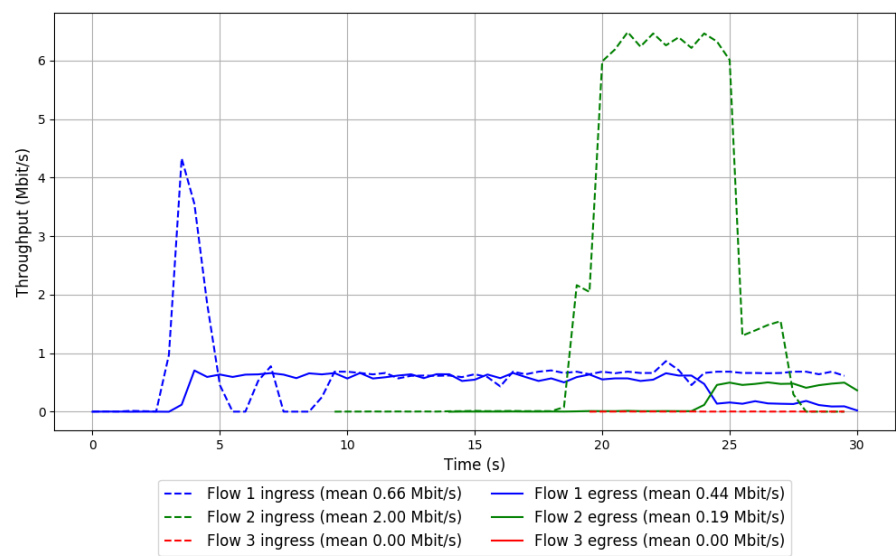
Start at: 2019-01-22 01:14:31

End at: 2019-01-22 01:15:01

Local clock offset: -0.88 ms

Remote clock offset: 7.741 ms

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-01-22 01:40:16

End at: 2019-01-22 01:40:46

Local clock offset: -7.813 ms

Remote clock offset: 3.197 ms

# Below is generated by plot.py at 2019-01-22 02:01:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 7041.088 ms

Loss rate: 23.28%

-- Flow 1:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 7060.349 ms

Loss rate: 23.17%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 6605.658 ms

Loss rate: 0.00%

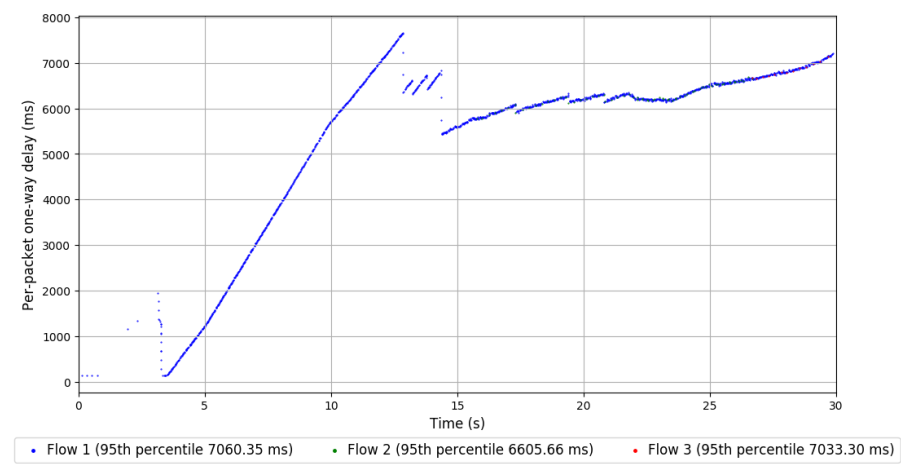
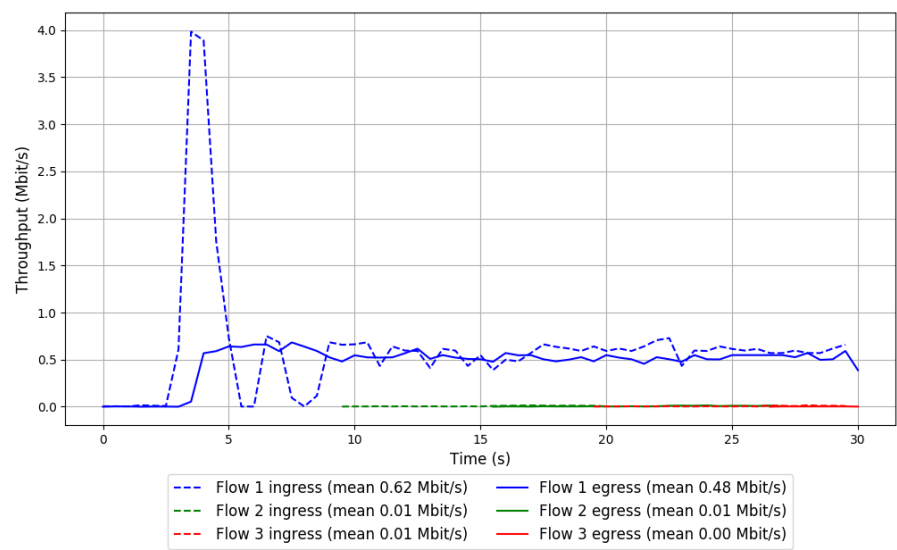
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 7033.299 ms

Loss rate: 83.63%

Run 3: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-01-22 00:53:36

End at: 2019-01-22 00:54:06

Local clock offset: -4.18 ms

Remote clock offset: 5.458 ms

# Below is generated by plot.py at 2019-01-22 02:01:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.50 Mbit/s

95th percentile per-packet one-way delay: 14659.485 ms

Loss rate: 23.66%

-- Flow 1:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 14752.509 ms

Loss rate: 17.12%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 8706.354 ms

Loss rate: 0.00%

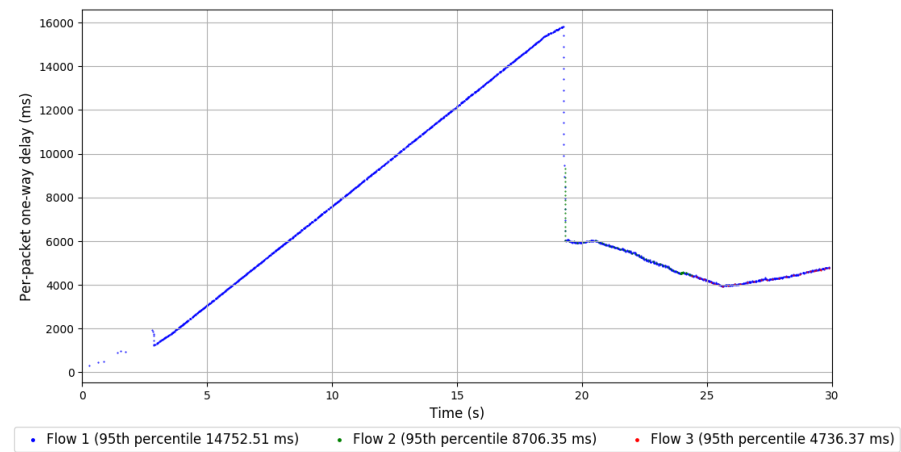
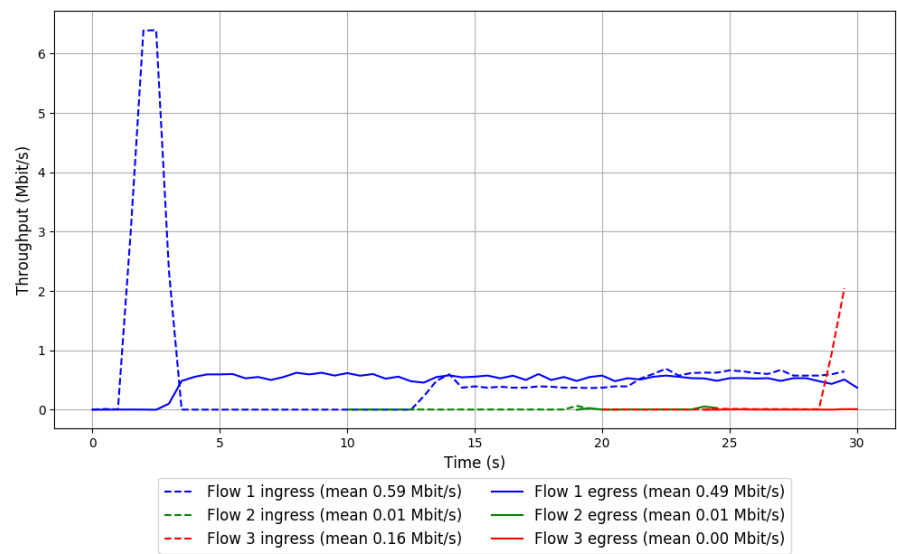
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 4736.368 ms

Loss rate: 98.30%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-01-22 01:19:26

End at: 2019-01-22 01:19:56

Local clock offset: -2.258 ms

Remote clock offset: 3.087 ms

# Below is generated by plot.py at 2019-01-22 02:01:59

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 14357.396 ms

Loss rate: 39.22%

-- Flow 1:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 14440.665 ms

Loss rate: 14.66%

-- Flow 2:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 8080.641 ms

Loss rate: 0.00%

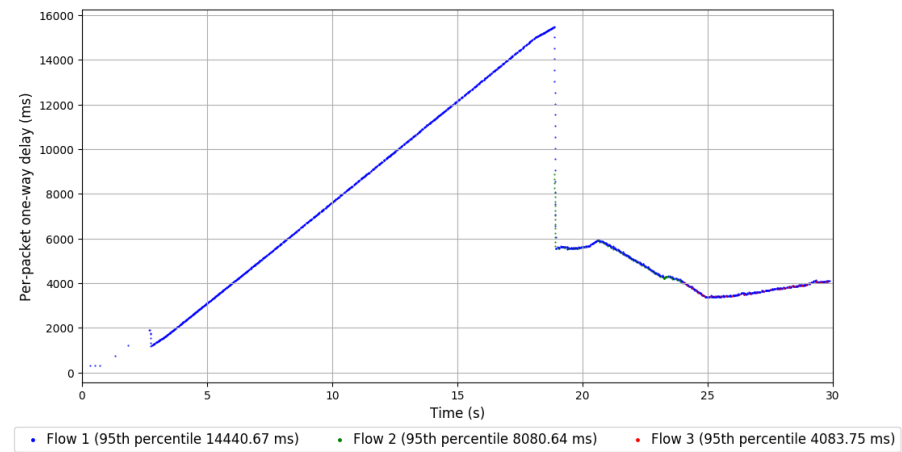
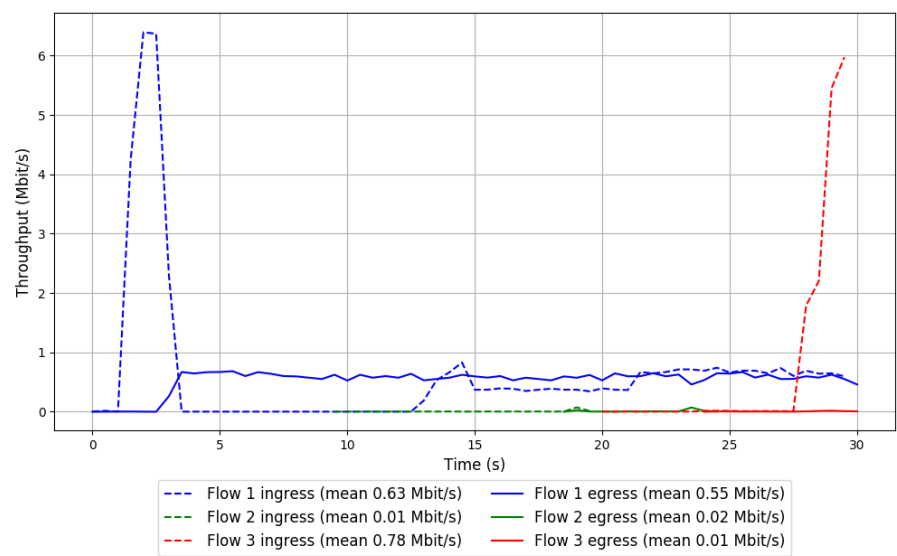
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 4083.752 ms

Loss rate: 99.46%

Run 2: Report of FillP-Sheep — Data Link





Run 3: Statistics of FillP-Sheep

Start at: 2019-01-22 01:45:11

End at: 2019-01-22 01:45:41

Local clock offset: -8.118 ms

Remote clock offset: 7.966 ms

# Below is generated by plot.py at 2019-01-22 02:02:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 13629.489 ms

Loss rate: 49.32%

-- Flow 1:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 13720.207 ms

Loss rate: 13.89%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 7230.961 ms

Loss rate: 0.00%

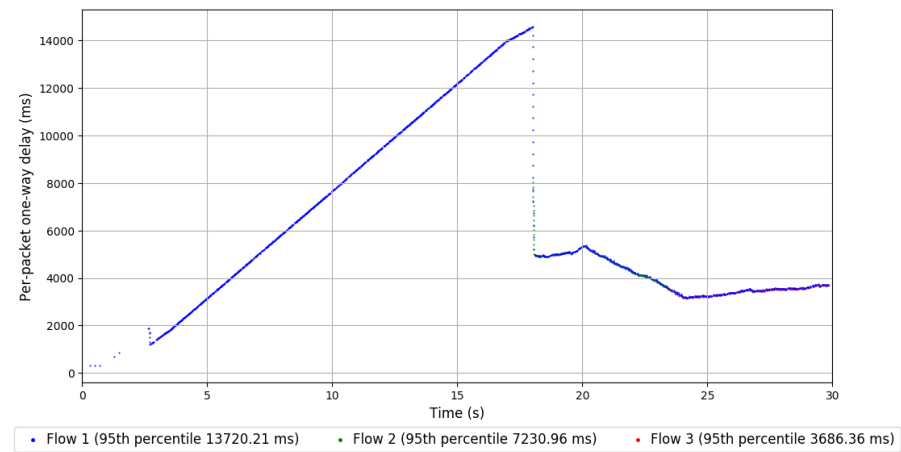
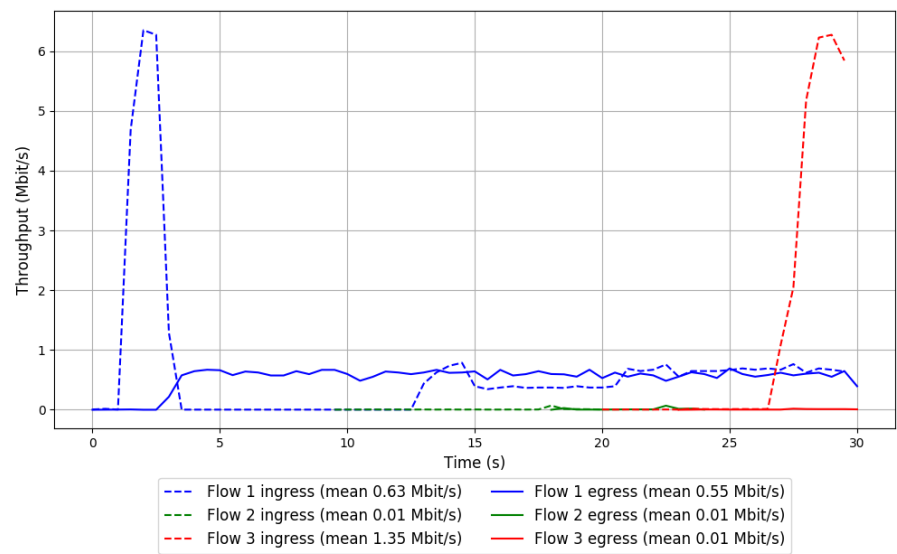
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 3686.355 ms

Loss rate: 99.65%

Run 3: Report of FillP-Sheep — Data Link

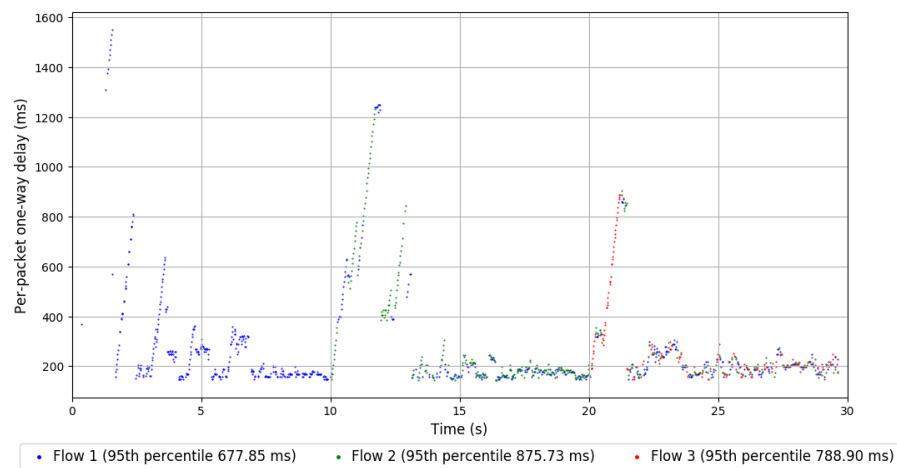
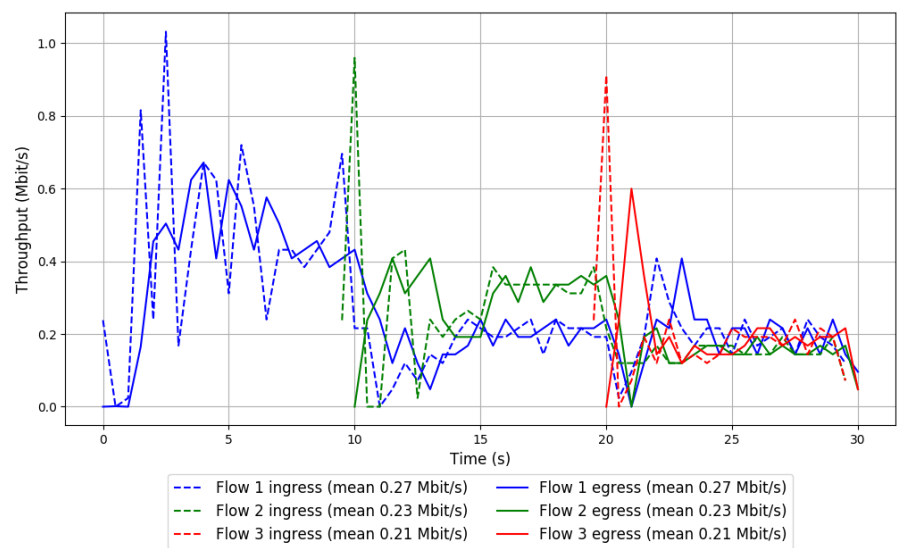


```
Run 1: Statistics of Indigo

Start at: 2019-01-22 00:45:02
End at: 2019-01-22 00:45:32
Local clock offset: -7.469 ms
Remote clock offset: 5.385 ms

# Below is generated by plot.py at 2019-01-22 02:02:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 804.347 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 677.847 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 875.731 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 788.900 ms
Loss rate: 2.33%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-01-22 01:10:50

End at: 2019-01-22 01:11:20

Local clock offset: -0.48 ms

Remote clock offset: 3.504 ms

# Below is generated by plot.py at 2019-01-22 02:02:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 700.483 ms

Loss rate: 0.87%

-- Flow 1:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 610.006 ms

Loss rate: 0.59%

-- Flow 2:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 713.678 ms

Loss rate: 0.80%

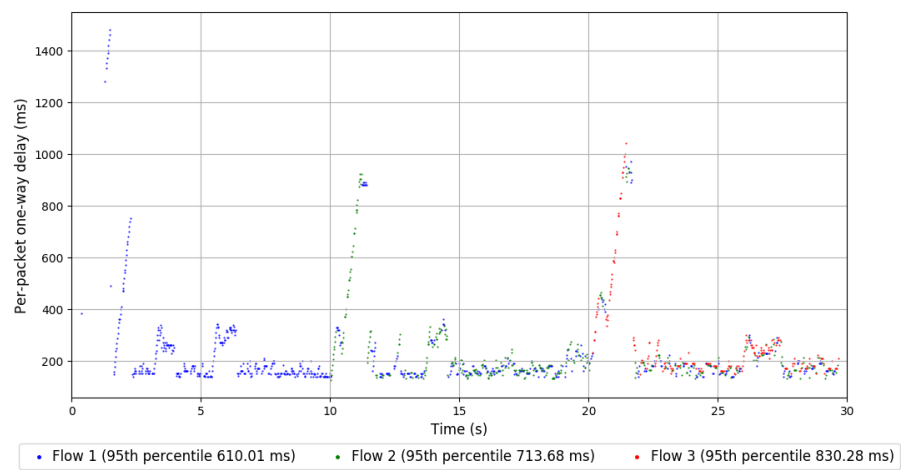
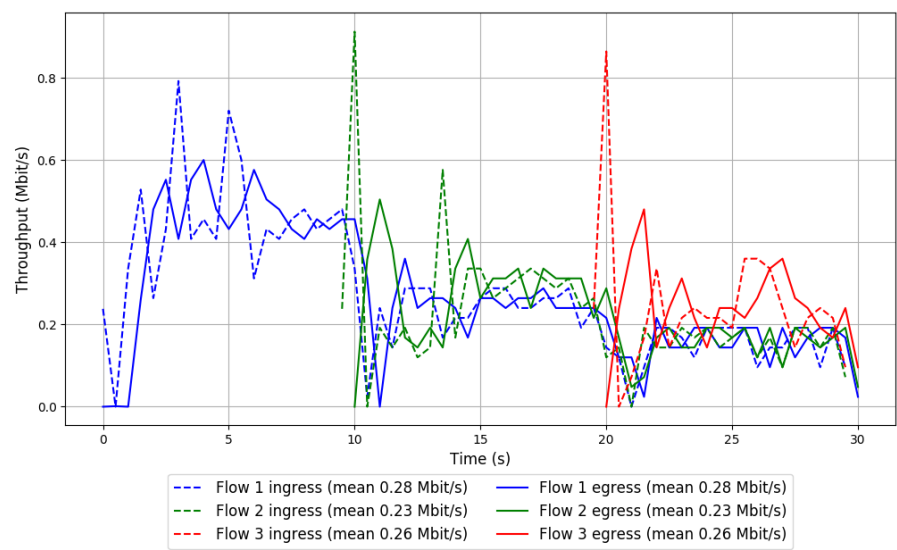
-- Flow 3:

Average throughput: 0.26 Mbit/s

95th percentile per-packet one-way delay: 830.276 ms

Loss rate: 1.88%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-01-22 01:36:36

End at: 2019-01-22 01:37:06

Local clock offset: -6.735 ms

Remote clock offset: 3.5 ms

# Below is generated by plot.py at 2019-01-22 02:02:00

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.52 Mbit/s

95th percentile per-packet one-way delay: 650.223 ms

Loss rate: 1.25%

-- Flow 1:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 557.593 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 0.25 Mbit/s

95th percentile per-packet one-way delay: 628.574 ms

Loss rate: 1.00%

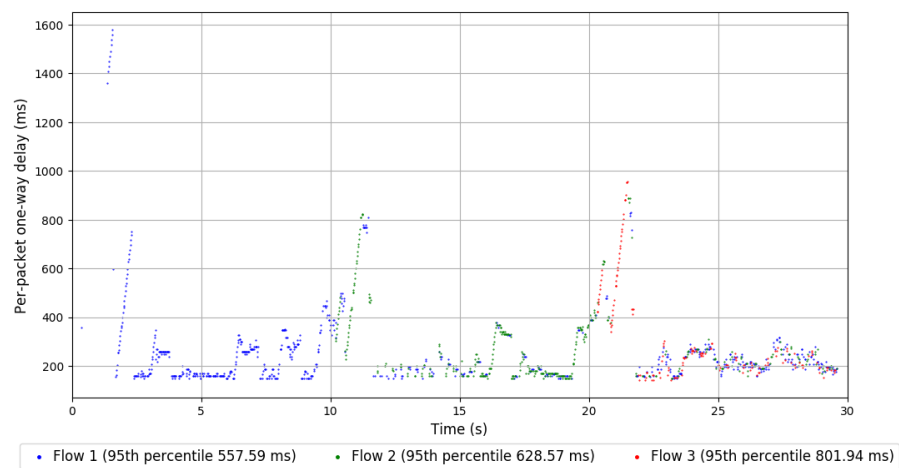
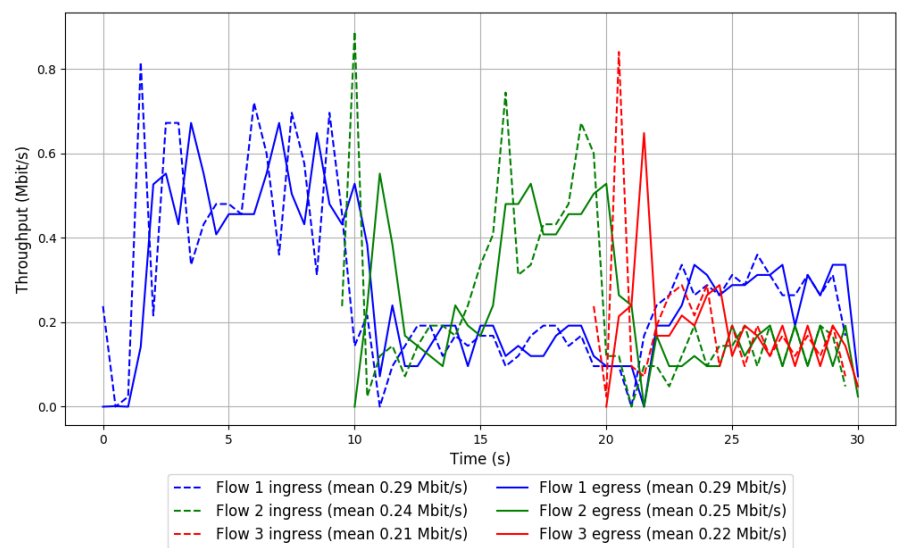
-- Flow 3:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 801.936 ms

Loss rate: 2.37%

Run 3: Report of Indigo — Data Link





Run 1: Statistics of Indigo-MusesC3

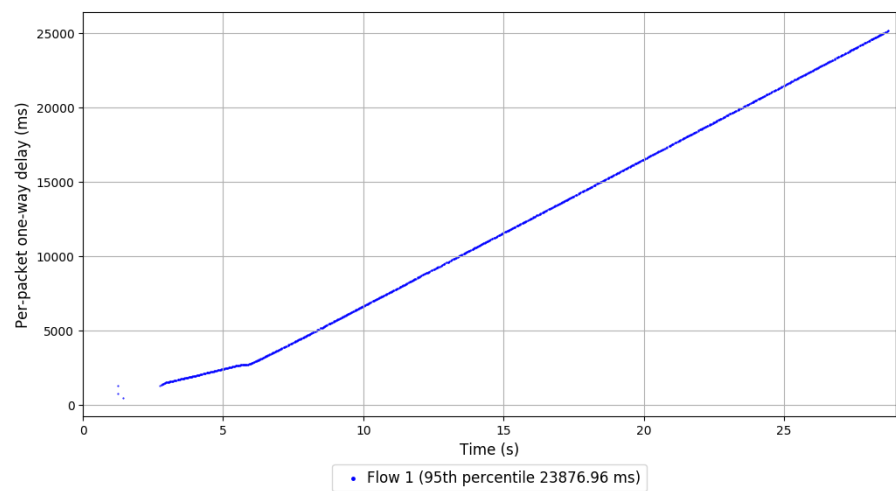
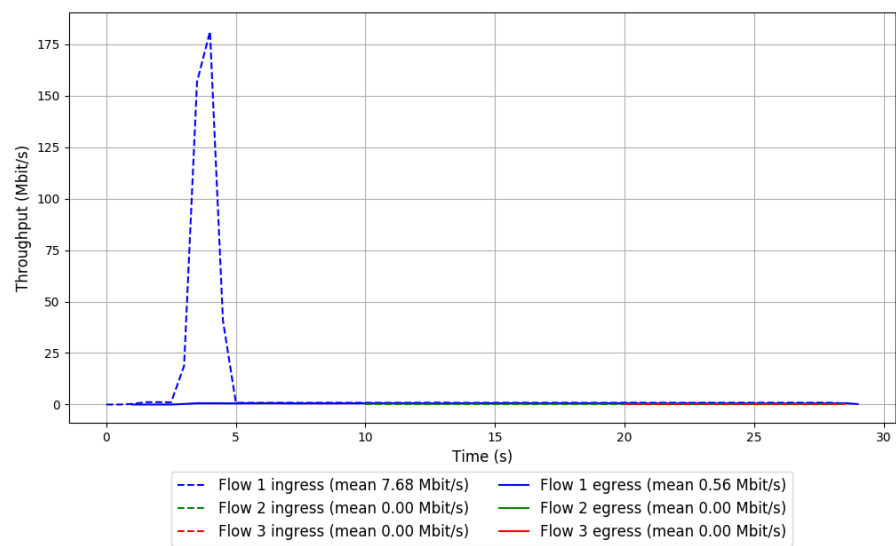
Start at: 2019-01-22 01:05:56

End at: 2019-01-22 01:06:26

Local clock offset: -1.873 ms

Remote clock offset: 2.316 ms

Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

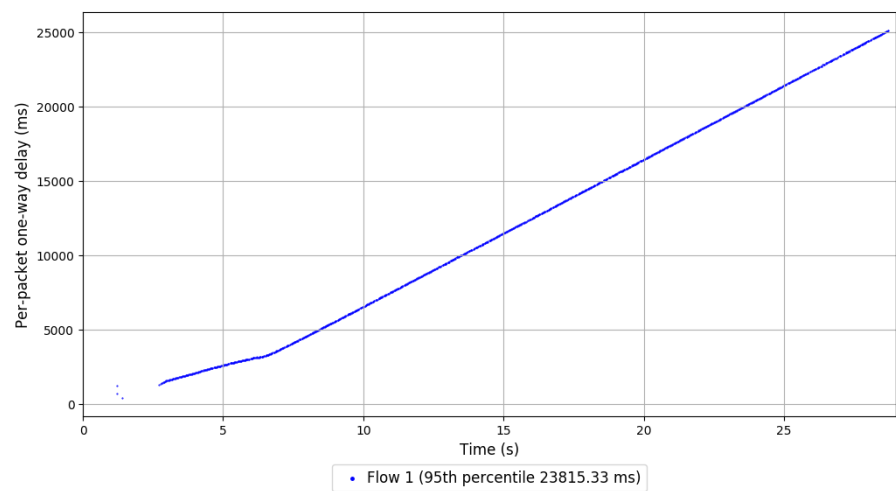
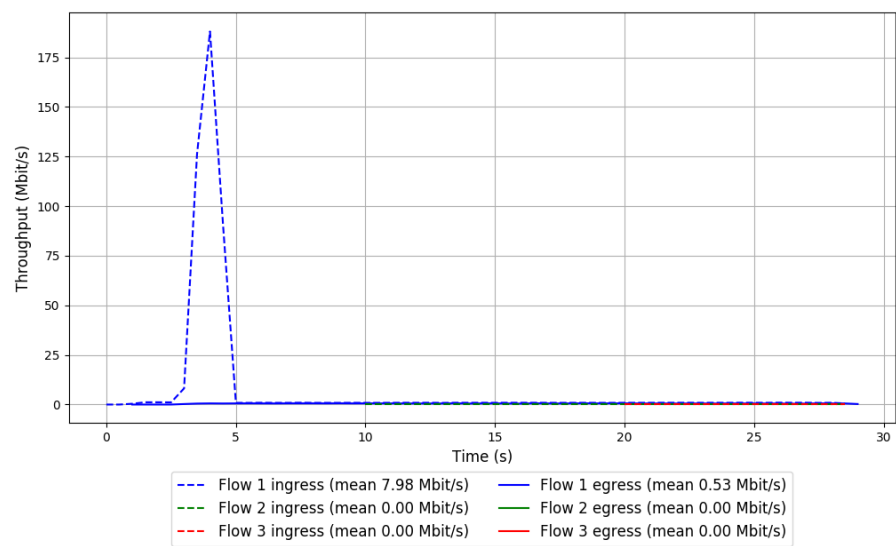
Start at: 2019-01-22 01:31:43

End at: 2019-01-22 01:32:13

Local clock offset: -6.894 ms

Remote clock offset: 8.636 ms

Run 2: Report of Indigo-MusesC3 — Data Link



Run 3: Statistics of Indigo-MusesC3

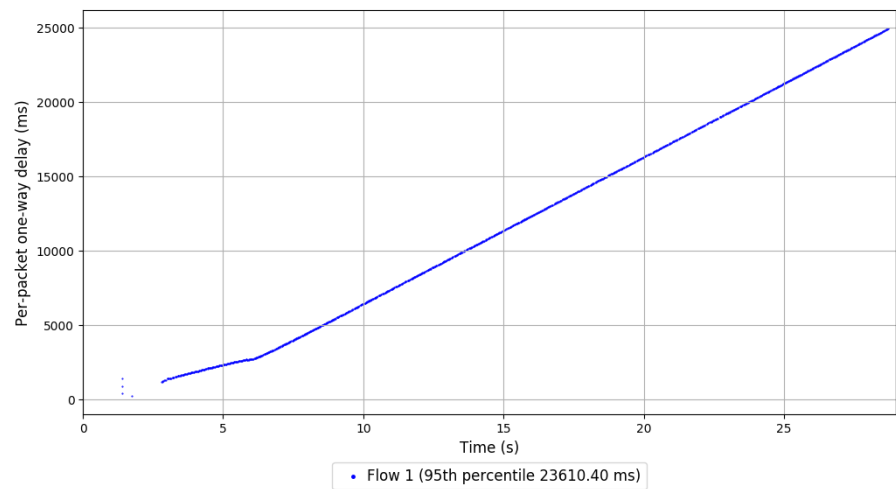
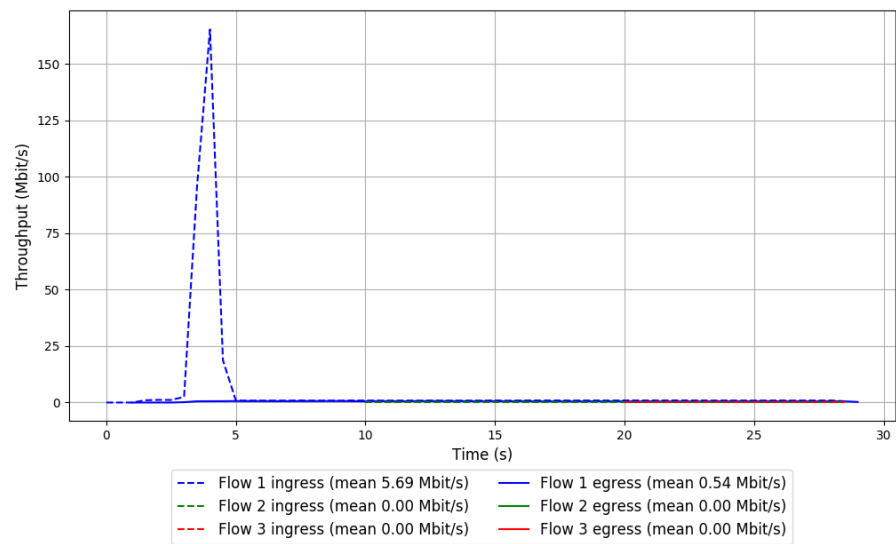
Start at: 2019-01-22 01:57:26

End at: 2019-01-22 01:57:56

Local clock offset: -3.758 ms

Remote clock offset: 6.857 ms

Run 3: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

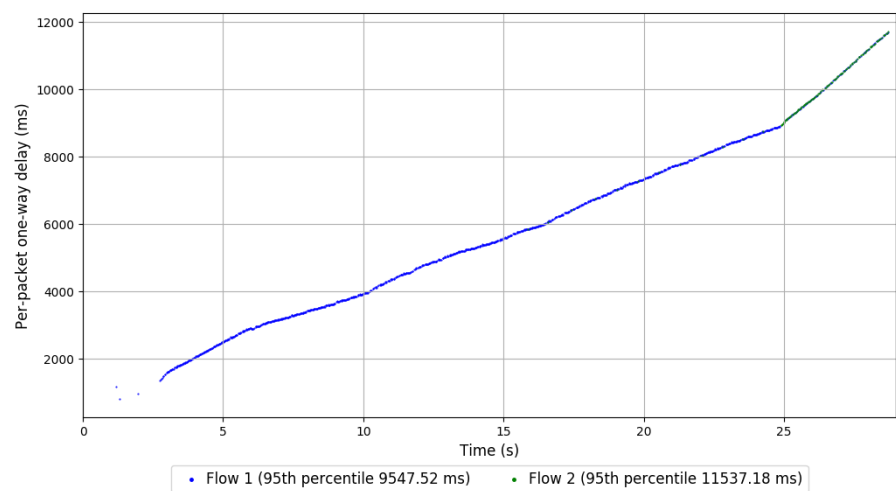
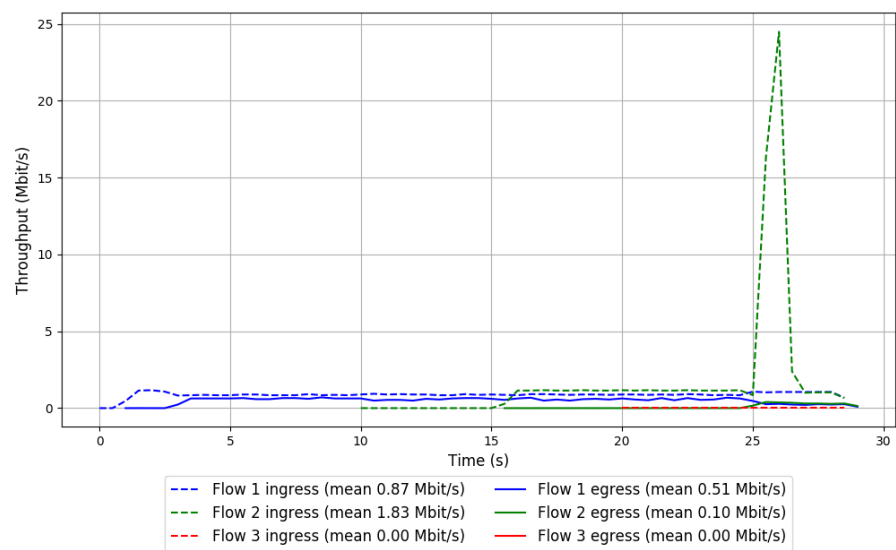
Start at: 2019-01-22 00:58:35

End at: 2019-01-22 00:59:05

Local clock offset: -2.23 ms

Remote clock offset: 1.593 ms

Run 1: Report of Indigo-MusesC5 — Data Link





Run 2: Statistics of Indigo-MusesC5

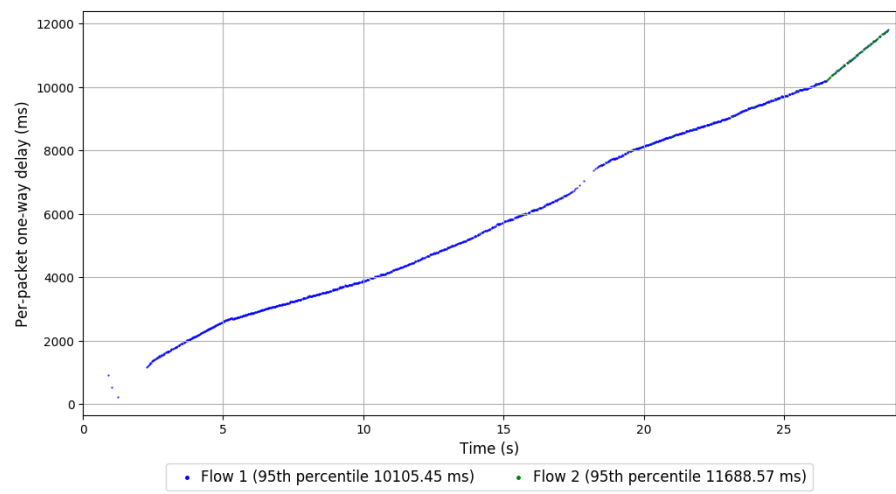
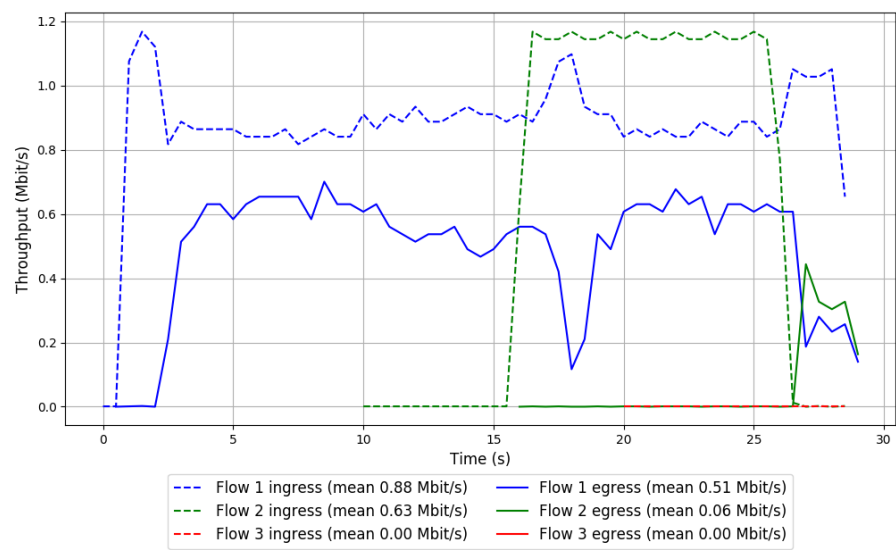
Start at: 2019-01-22 01:24:21

End at: 2019-01-22 01:24:51

Local clock offset: -4.453 ms

Remote clock offset: 7.091 ms

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

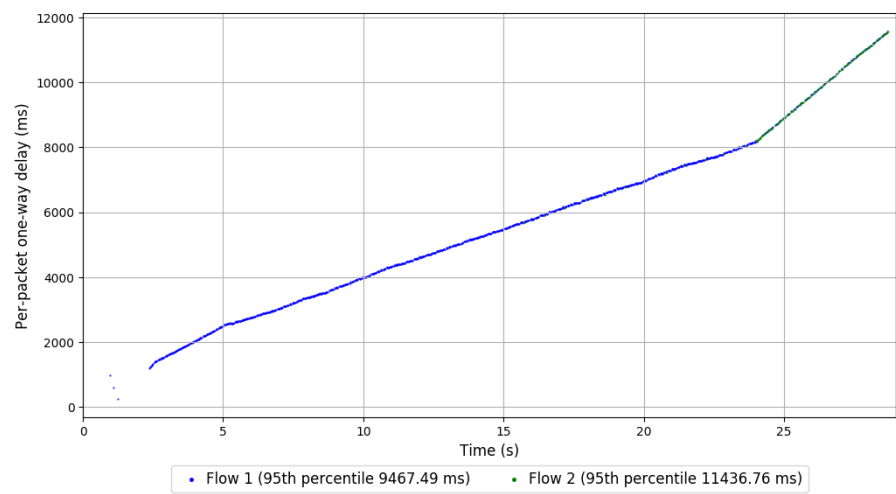
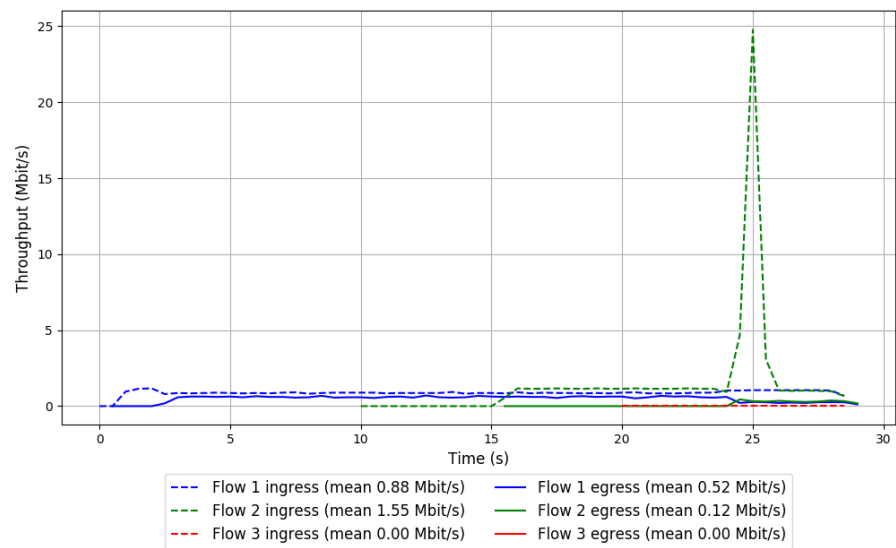
Start at: 2019-01-22 01:50:05

End at: 2019-01-22 01:50:35

Local clock offset: -5.228 ms

Remote clock offset: 7.118 ms

Run 3: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

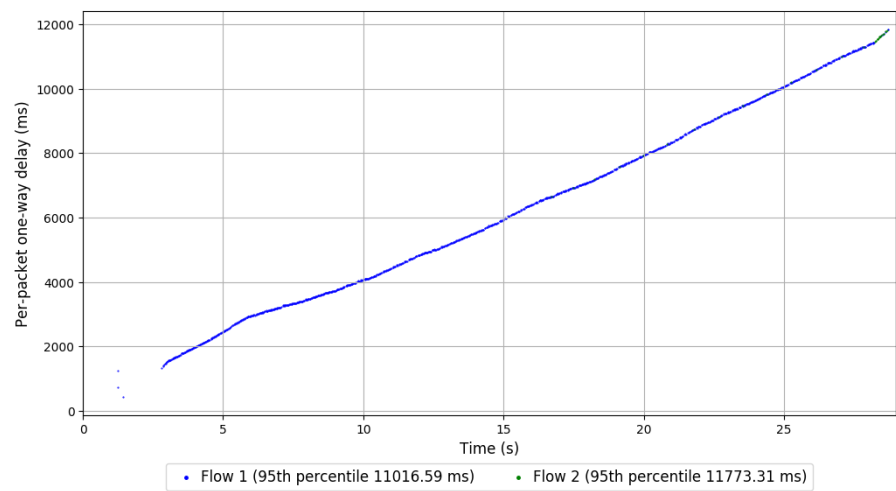
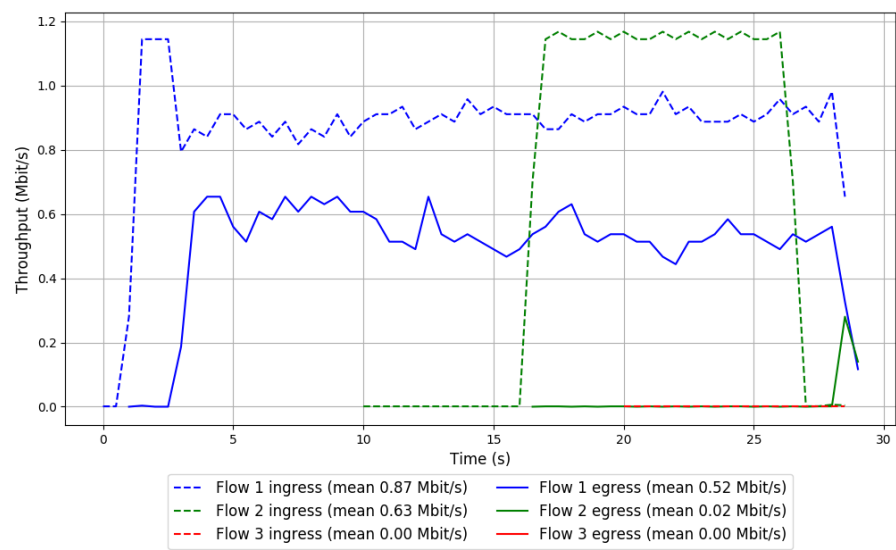
Start at: 2019-01-22 00:57:20

End at: 2019-01-22 00:57:50

Local clock offset: -2.481 ms

Remote clock offset: 6.301 ms

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

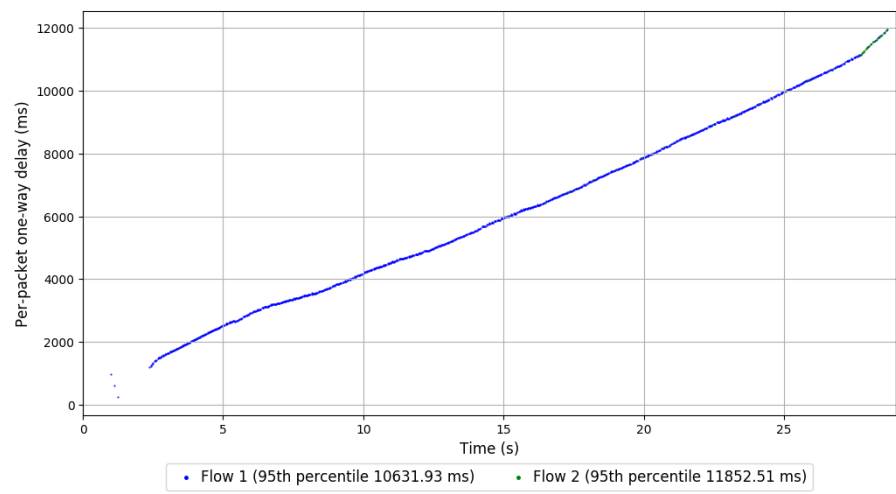
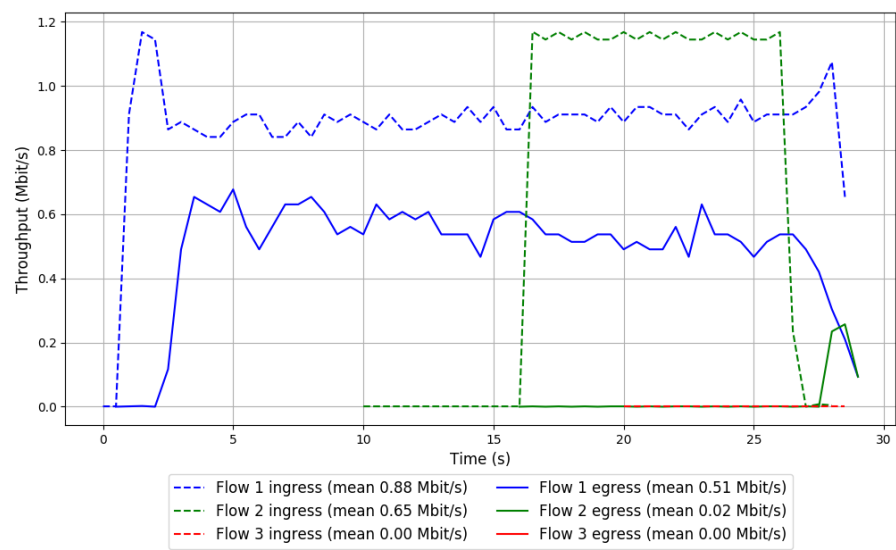
Start at: 2019-01-22 01:23:08

End at: 2019-01-22 01:23:38

Local clock offset: -4.033 ms

Remote clock offset: 3.132 ms

Run 2: Report of Indigo-MusesD — Data Link





Run 3: Statistics of Indigo-MusesD

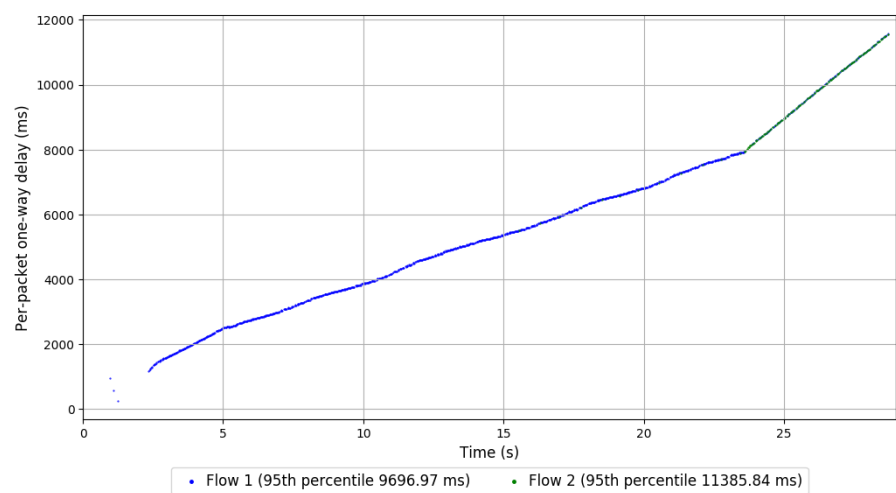
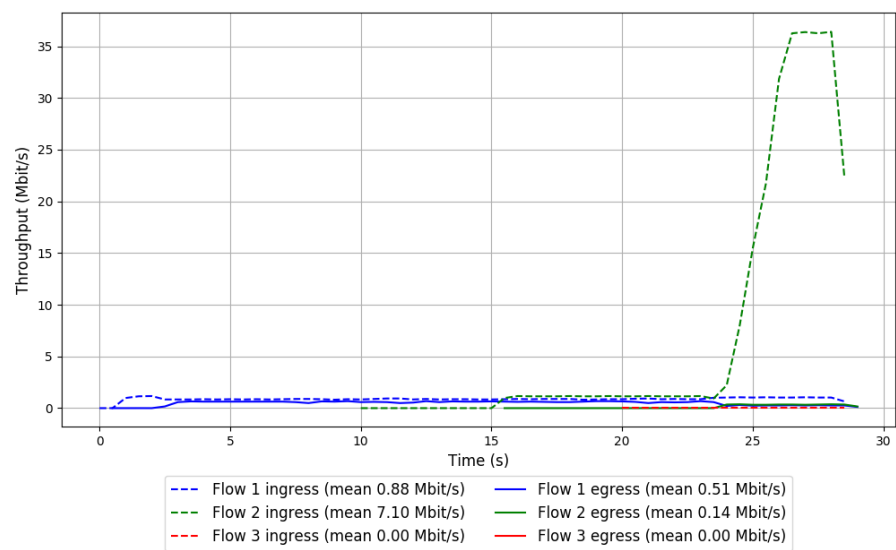
Start at: 2019-01-22 01:48:52

End at: 2019-01-22 01:49:22

Local clock offset: -6.527 ms

Remote clock offset: 1.996 ms

Run 3: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

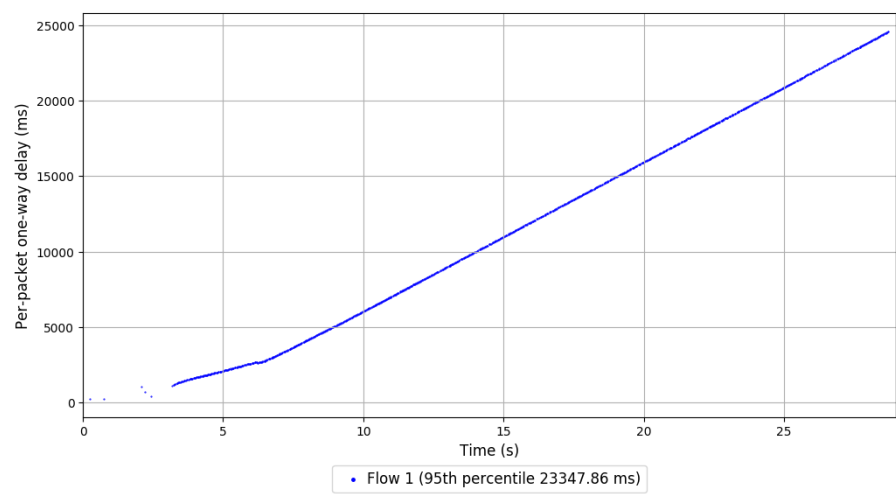
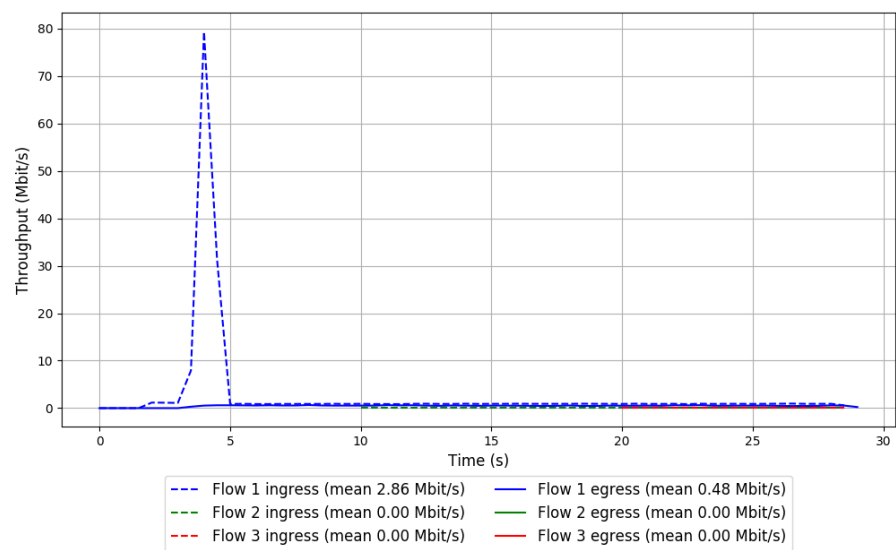
Start at: 2019-01-22 00:47:29

End at: 2019-01-22 00:47:59

Local clock offset: -6.644 ms

Remote clock offset: 6.427 ms

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

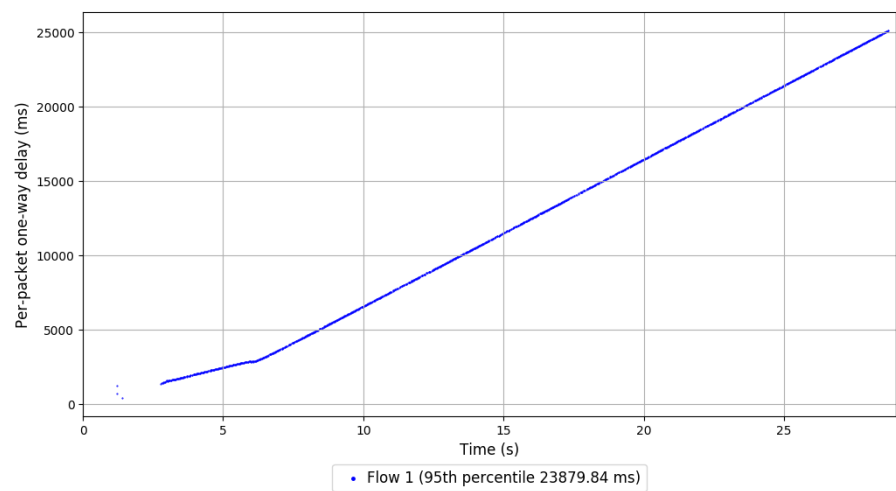
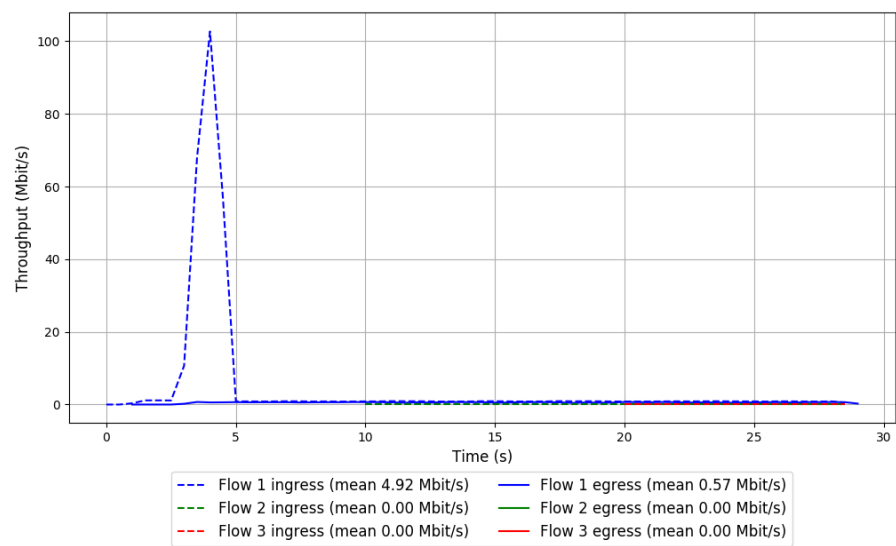
Start at: 2019-01-22 01:13:17

End at: 2019-01-22 01:13:47

Local clock offset: -0.261 ms

Remote clock offset: 7.662 ms

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

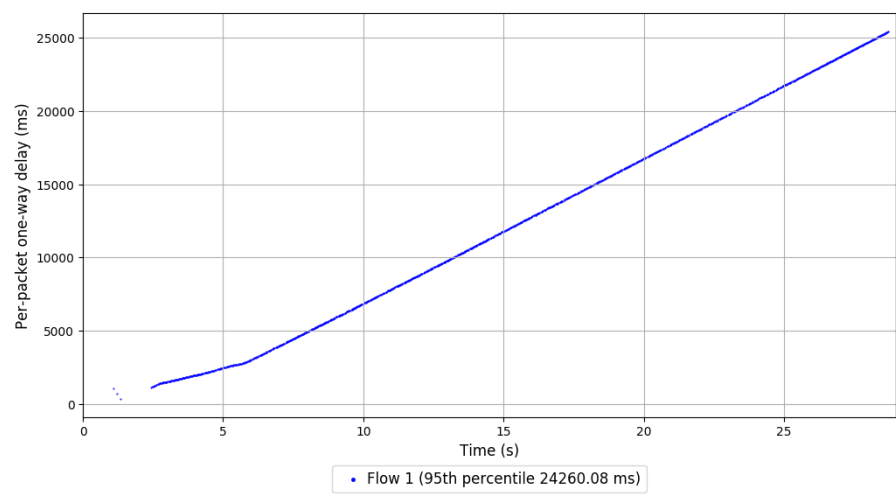
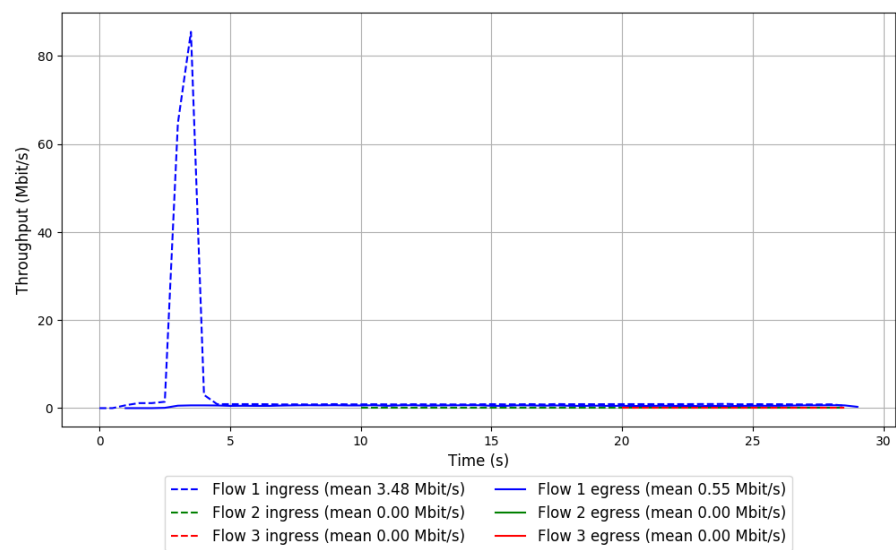
Start at: 2019-01-22 01:39:03

End at: 2019-01-22 01:39:33

Local clock offset: -7.726 ms

Remote clock offset: 2.231 ms

Run 3: Report of Indigo-MusesT — Data Link



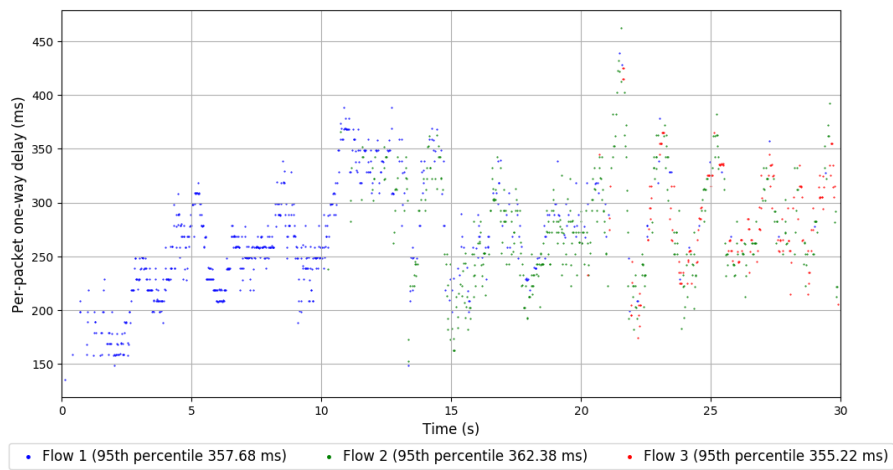
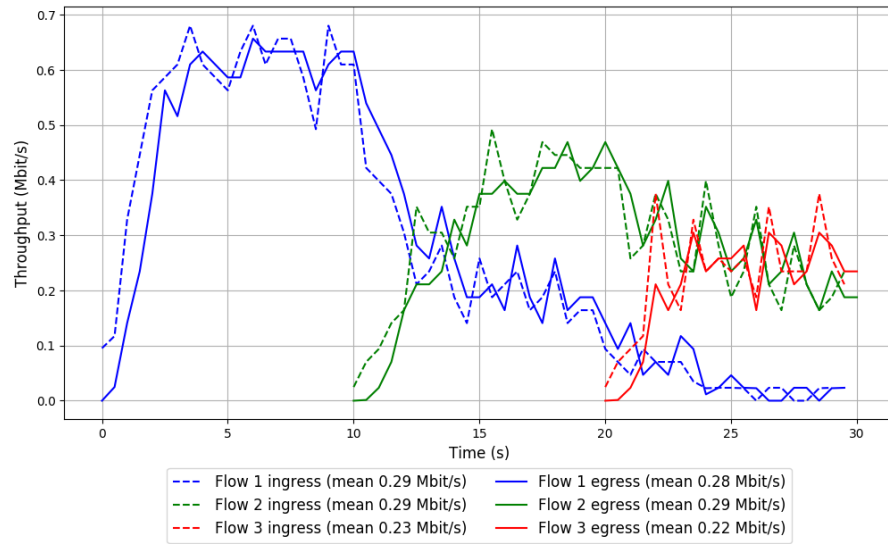


```
Run 1: Statistics of LEDBAT

Start at: 2019-01-22 01:07:10
End at: 2019-01-22 01:07:40
Local clock offset: -1.673 ms
Remote clock offset: 7.196 ms

# Below is generated by plot.py at 2019-01-22 02:02:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 358.538 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 357.682 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 362.383 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 355.220 ms
Loss rate: 4.21%
```

# Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-01-22 01:32:56

End at: 2019-01-22 01:33:26

Local clock offset: -6.348 ms

Remote clock offset: 8.325 ms

# Below is generated by plot.py at 2019-01-22 02:02:10

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 408.325 ms

Loss rate: 1.08%

-- Flow 1:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 369.833 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 406.630 ms

Loss rate: 0.84%

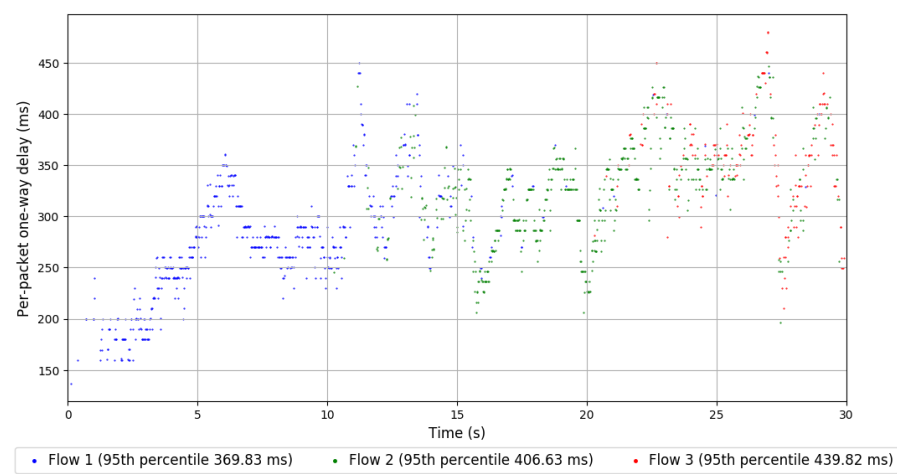
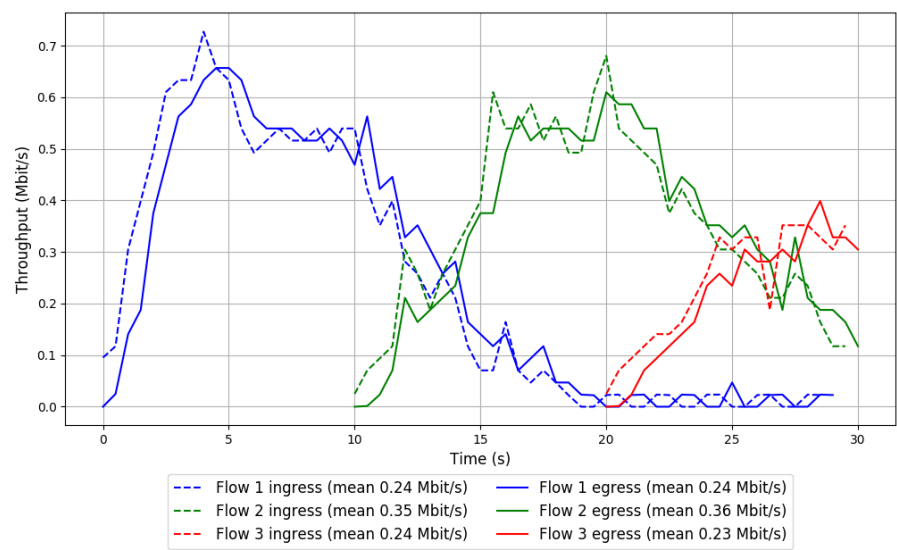
-- Flow 3:

Average throughput: 0.23 Mbit/s

95th percentile per-packet one-way delay: 439.822 ms

Loss rate: 4.95%

Run 2: Report of LEDBAT — Data Link

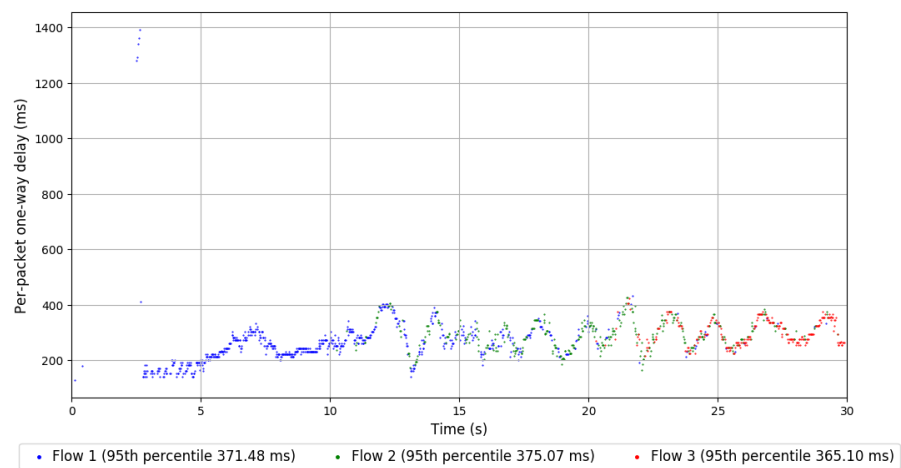
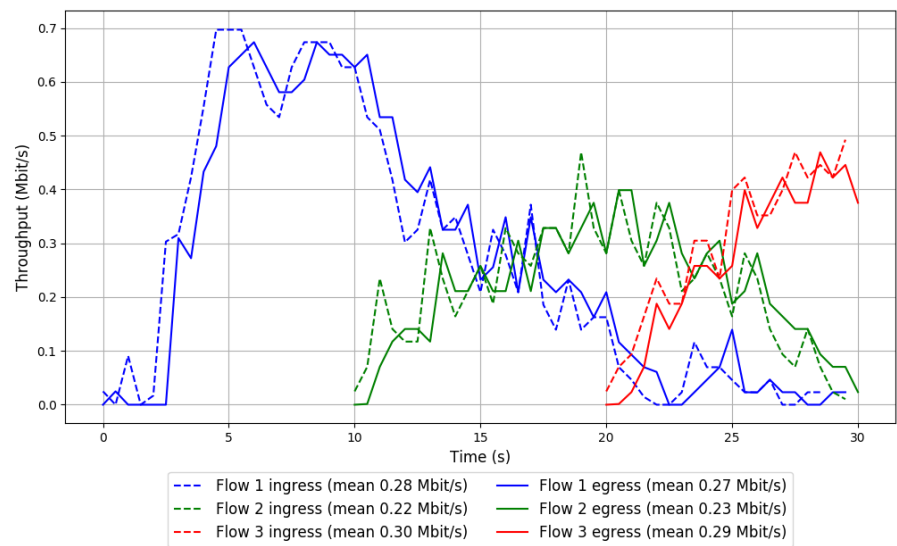


Run 3: Statistics of LEDBAT

Start at: 2019-01-22 01:58:40  
End at: 2019-01-22 01:59:10  
Local clock offset: -3.521 ms  
Remote clock offset: 3.14 ms

# Below is generated by plot.py at 2019-01-22 02:02:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.51 Mbit/s  
95th percentile per-packet one-way delay: 374.630 ms  
Loss rate: 1.25%  
-- Flow 1:  
Average throughput: 0.27 Mbit/s  
95th percentile per-packet one-way delay: 371.484 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.23 Mbit/s  
95th percentile per-packet one-way delay: 375.070 ms  
Loss rate: 0.12%  
-- Flow 3:  
Average throughput: 0.29 Mbit/s  
95th percentile per-packet one-way delay: 365.098 ms  
Loss rate: 6.27%

Run 3: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

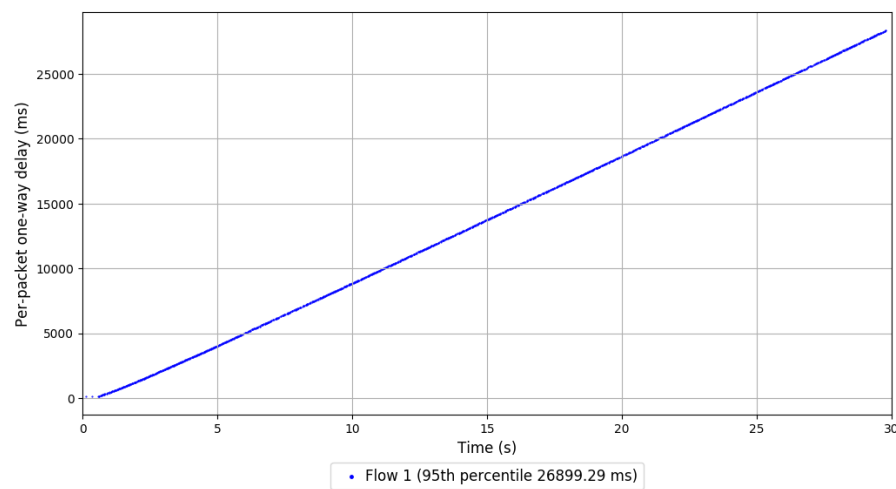
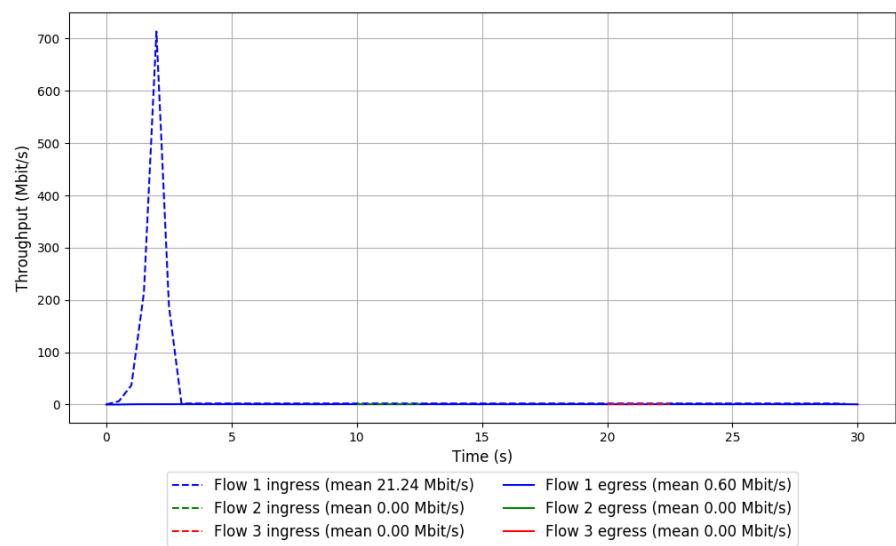
Start at: 2019-01-22 00:59:48

End at: 2019-01-22 01:00:18

Local clock offset: -2.731 ms

Remote clock offset: 2.905 ms

Run 1: Report of PCC-Allegro — Data Link





Run 2: Statistics of PCC-Allegro

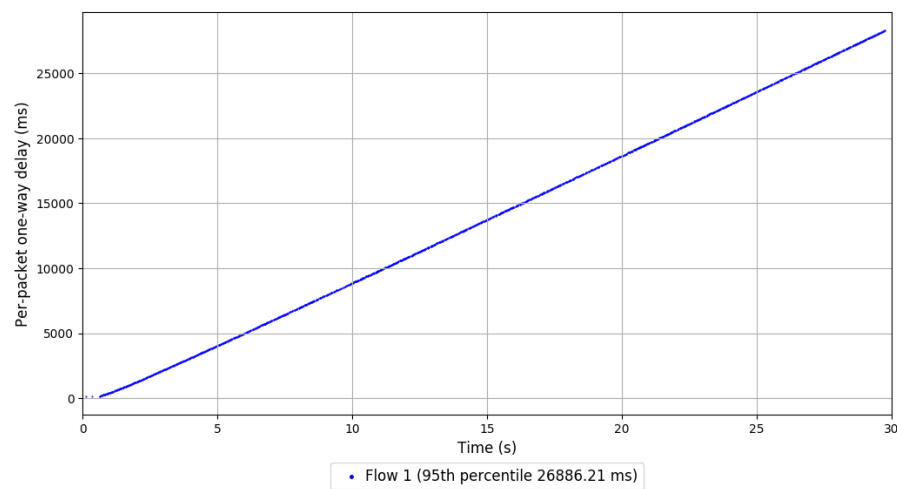
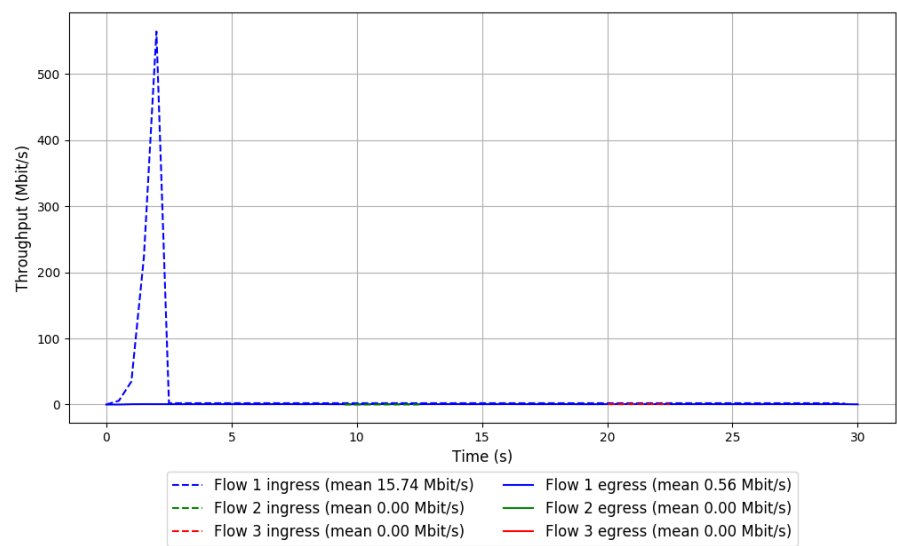
Start at: 2019-01-22 01:25:33

End at: 2019-01-22 01:26:03

Local clock offset: -5.684 ms

Remote clock offset: 3.153 ms

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

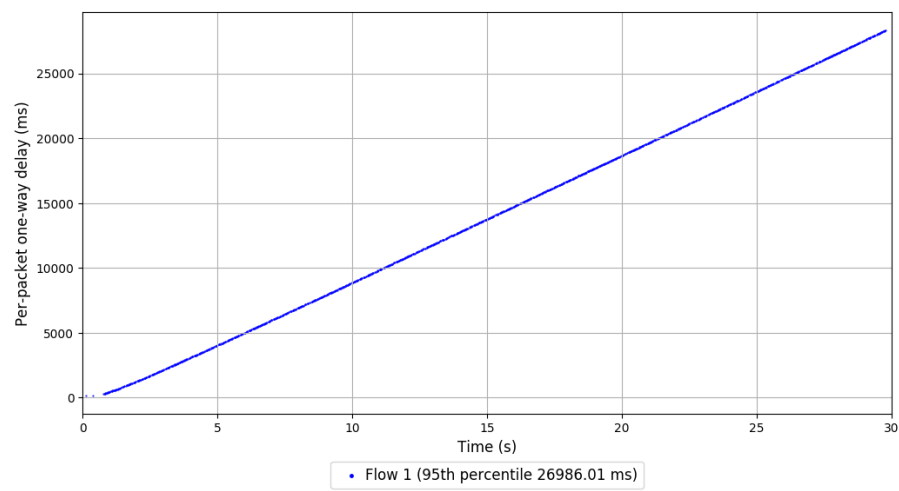
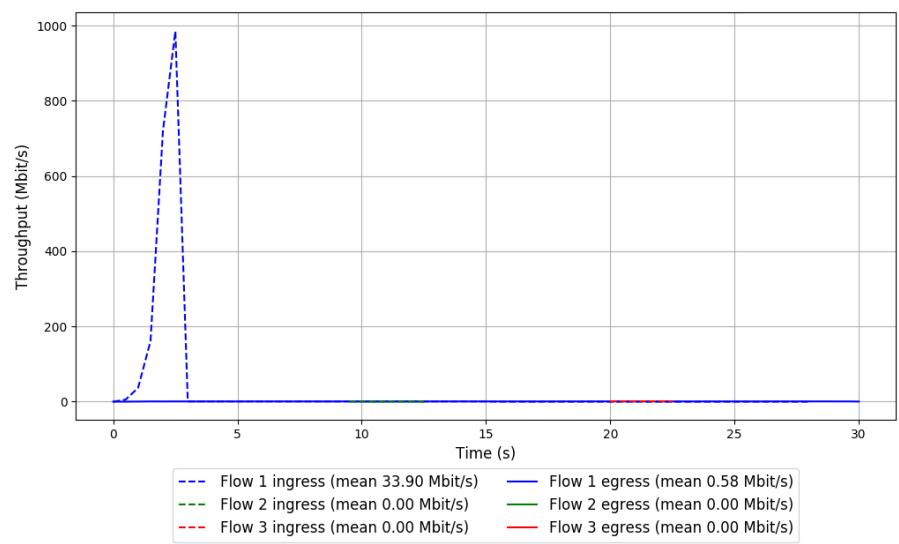
Start at: 2019-01-22 01:51:18

End at: 2019-01-22 01:51:48

Local clock offset: -5.585 ms

Remote clock offset: 6.895 ms

Run 3: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

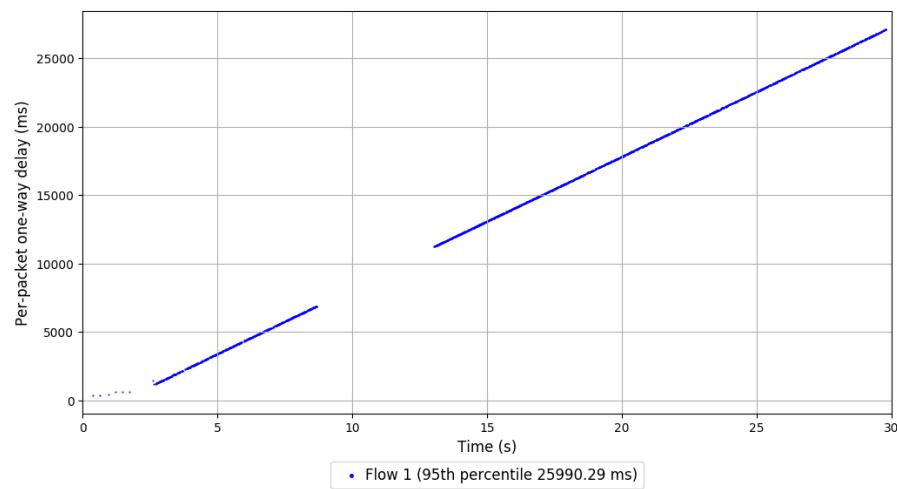
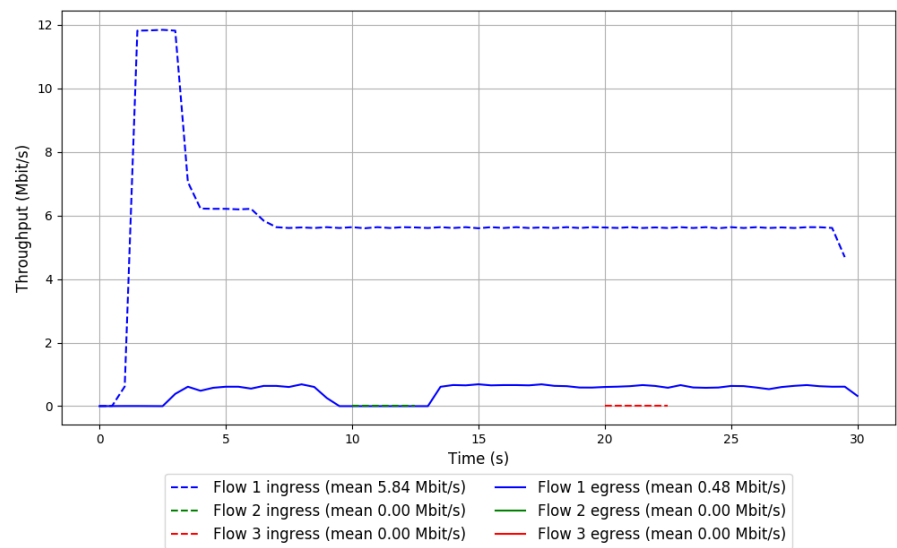
Start at: 2019-01-22 00:56:06

End at: 2019-01-22 00:56:36

Local clock offset: -3.575 ms

Remote clock offset: 6.12 ms

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

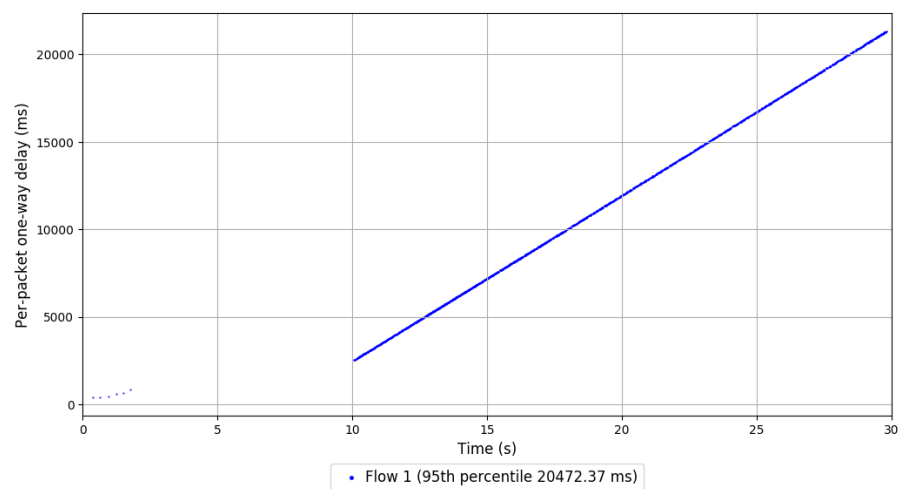
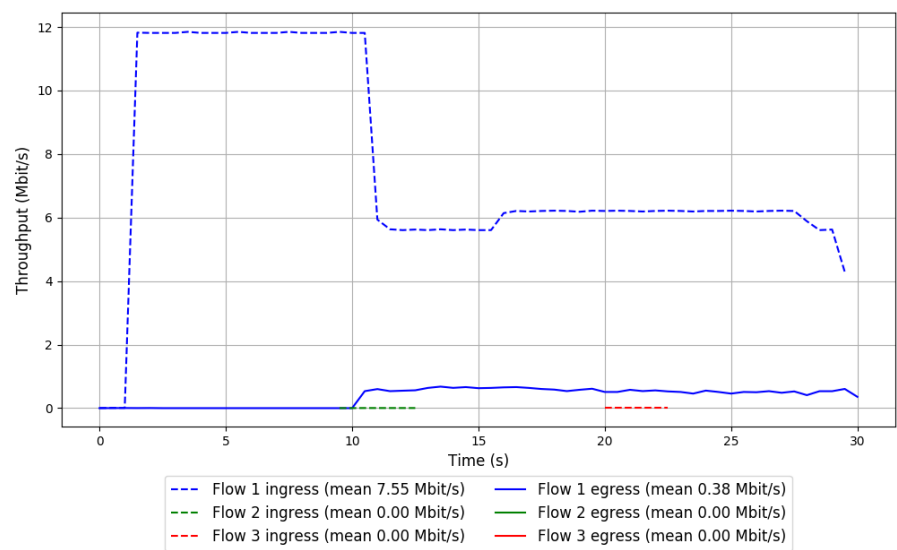
Start at: 2019-01-22 01:21:54

End at: 2019-01-22 01:22:24

Local clock offset: -4.206 ms

Remote clock offset: 9.358 ms

Run 2: Report of PCC-Expr — Data Link





Run 3: Statistics of PCC-Expr

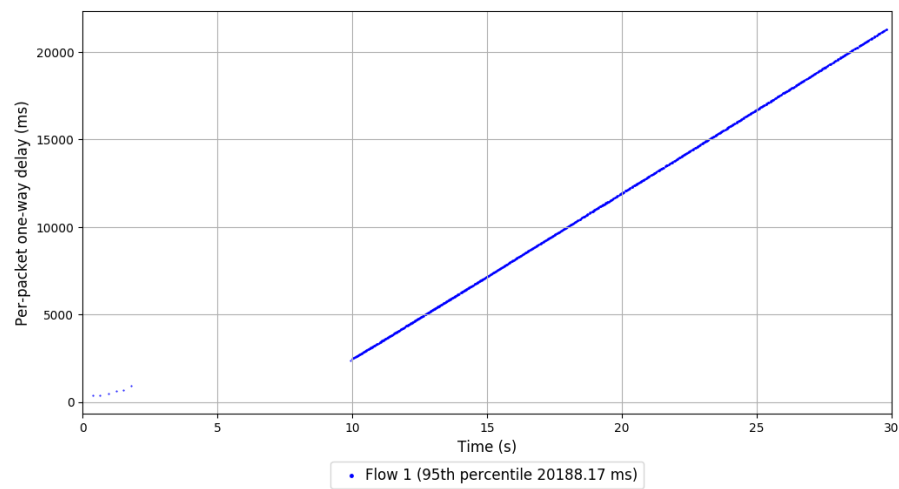
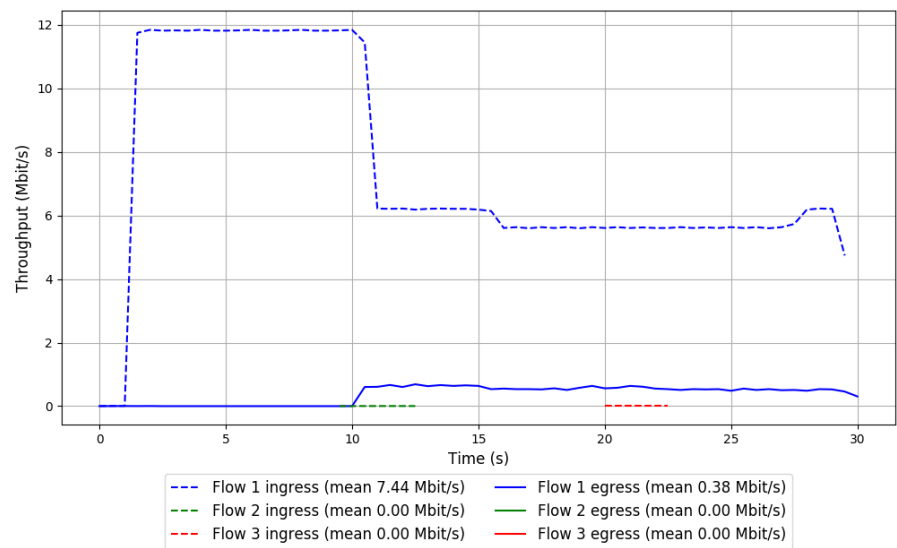
Start at: 2019-01-22 01:47:38

End at: 2019-01-22 01:48:08

Local clock offset: -6.49 ms

Remote clock offset: 8.24 ms

Run 3: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-01-22 01:08:23

End at: 2019-01-22 01:08:53

Local clock offset: -0.772 ms

Remote clock offset: 2.481 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 8826.811 ms

Loss rate: 32.80%

-- Flow 1:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 8816.565 ms

Loss rate: 32.78%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 9064.248 ms

Loss rate: 41.67%

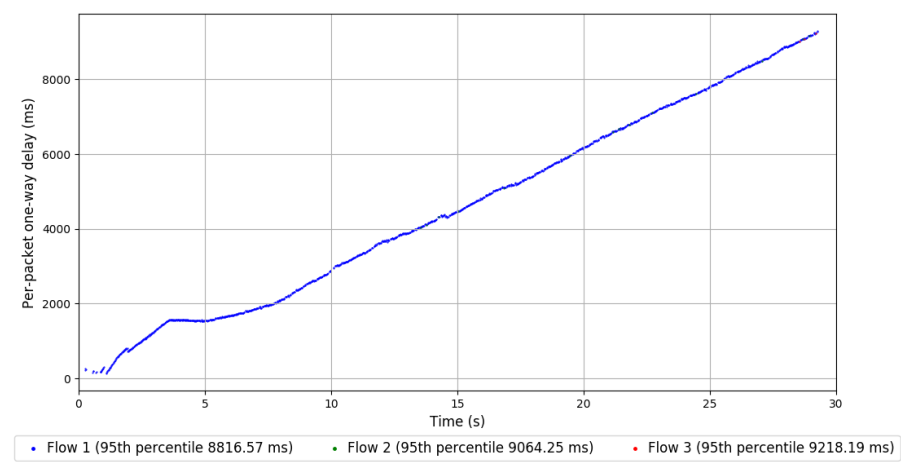
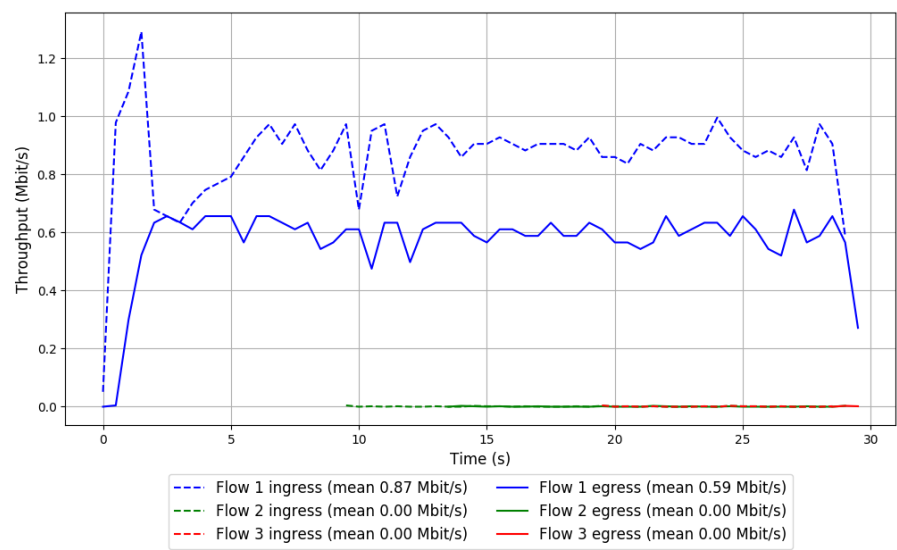
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 9218.194 ms

Loss rate: 75.00%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-01-22 01:34:09

End at: 2019-01-22 01:34:39

Local clock offset: -6.457 ms

Remote clock offset: 2.354 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 8317.758 ms

Loss rate: 29.94%

-- Flow 1:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 8319.168 ms

Loss rate: 30.55%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 7475.392 ms

Loss rate: 1.56%

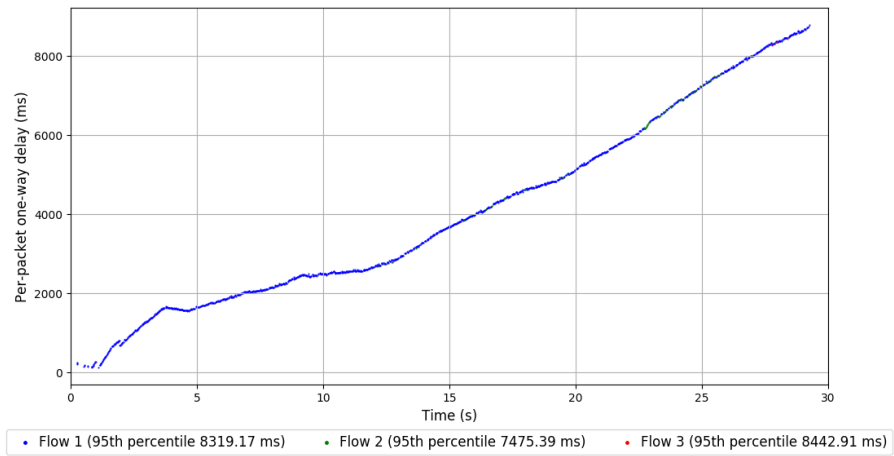
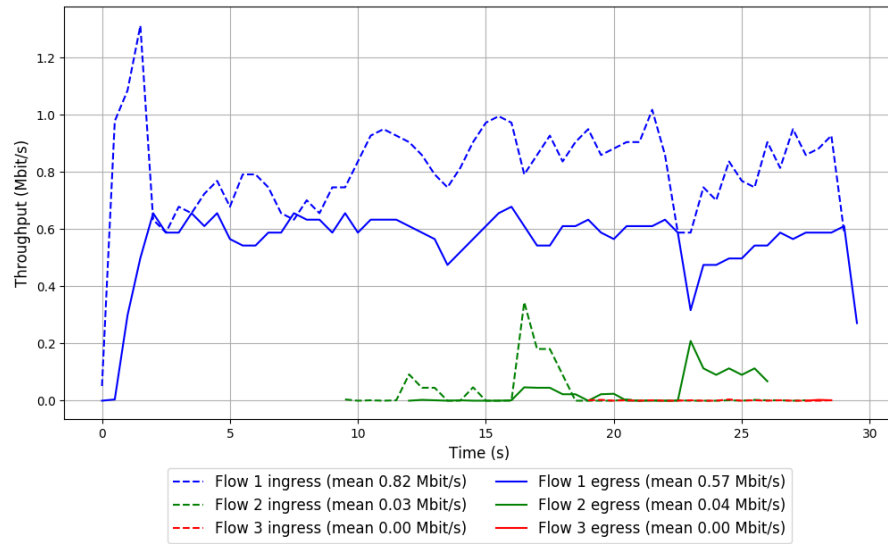
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 8442.905 ms

Loss rate: 75.00%

## Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-01-22 01:59:53

End at: 2019-01-22 02:00:23

Local clock offset: -2.552 ms

Remote clock offset: 5.775 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.60 Mbit/s

95th percentile per-packet one-way delay: 8852.911 ms

Loss rate: 30.13%

-- Flow 1:

Average throughput: 0.59 Mbit/s

95th percentile per-packet one-way delay: 8782.978 ms

Loss rate: 30.39%

-- Flow 2:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 9218.116 ms

Loss rate: 3.24%

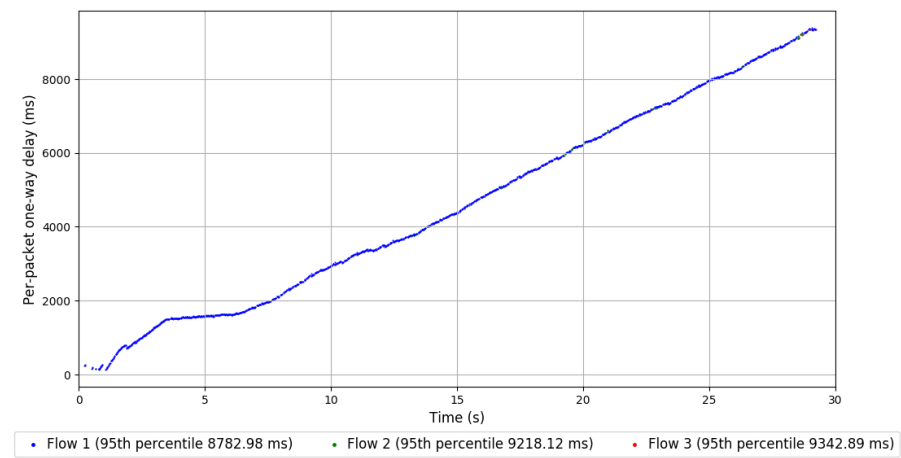
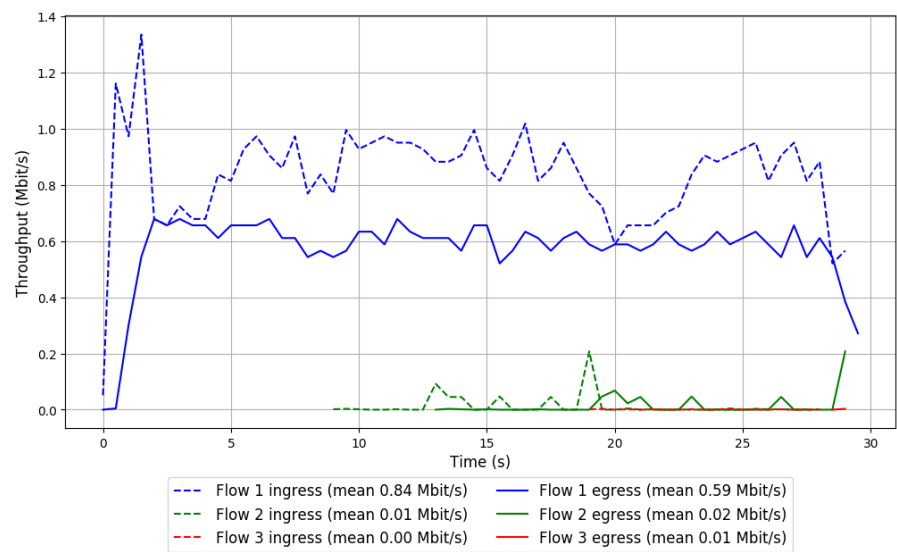
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 9342.893 ms

Loss rate: 83.33%

Run 3: Report of QUIC Cubic — Data Link



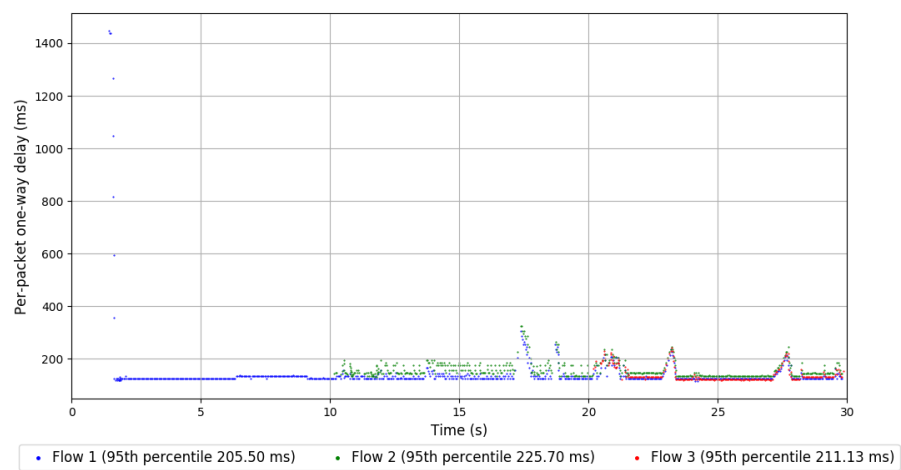
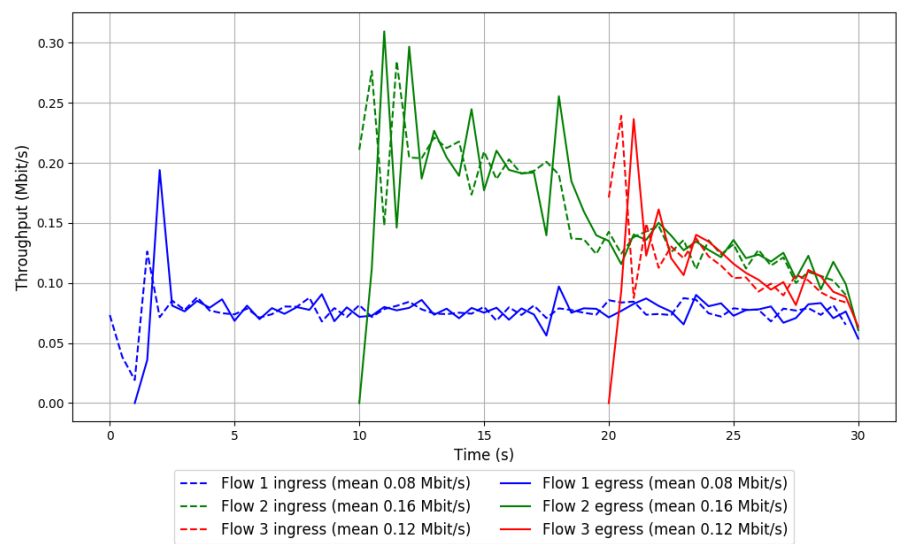


```
Run 1: Statistics of SReAM

Start at: 2019-01-22 00:51:09
End at: 2019-01-22 00:51:39
Local clock offset: -4.225 ms
Remote clock offset: 6.523 ms

# Below is generated by plot.py at 2019-01-22 02:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 207.057 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 205.502 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 225.701 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 211.127 ms
Loss rate: 1.75%
```

Run 1: Report of SReAM — Data Link

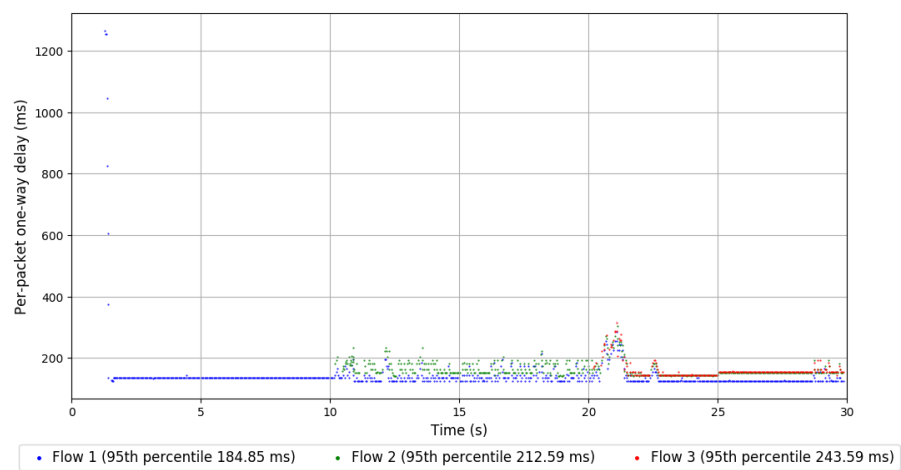
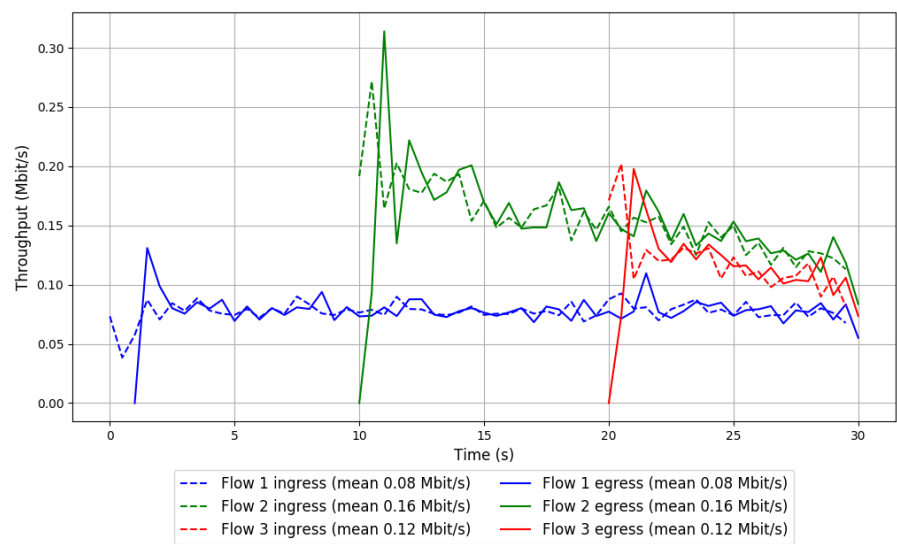


Run 2: Statistics of SCReAM

Start at: 2019-01-22 01:16:59  
End at: 2019-01-22 01:17:29  
Local clock offset: -1.319 ms  
Remote clock offset: 2.984 ms

# Below is generated by plot.py at 2019-01-22 02:02:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.23 Mbit/s  
95th percentile per-packet one-way delay: 202.881 ms  
Loss rate: 1.02%  
-- Flow 1:  
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 184.846 ms  
Loss rate: 0.66%  
-- Flow 2:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 212.587 ms  
Loss rate: 1.03%  
-- Flow 3:  
Average throughput: 0.12 Mbit/s  
95th percentile per-packet one-way delay: 243.593 ms  
Loss rate: 1.67%

Run 2: Report of SCSReAM — Data Link

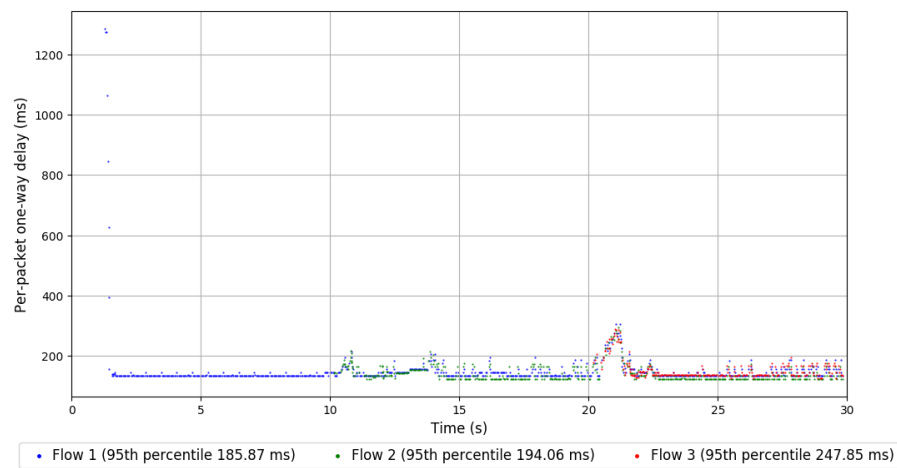
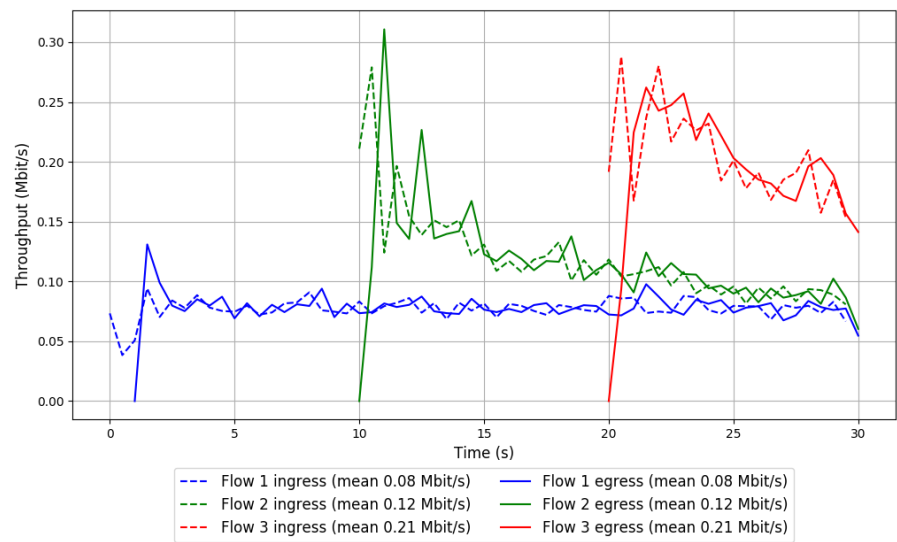


Run 3: Statistics of SCReAM

Start at: 2019-01-22 01:42:44  
End at: 2019-01-22 01:43:14  
Local clock offset: -7.982 ms  
Remote clock offset: 2.028 ms

# Below is generated by plot.py at 2019-01-22 02:02:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.23 Mbit/s  
95th percentile per-packet one-way delay: 196.327 ms  
Loss rate: 1.22%  
-- Flow 1:  
Average throughput: 0.08 Mbit/s  
95th percentile per-packet one-way delay: 185.874 ms  
Loss rate: 0.78%  
-- Flow 2:  
Average throughput: 0.12 Mbit/s  
95th percentile per-packet one-way delay: 194.061 ms  
Loss rate: 0.96%  
-- Flow 3:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 247.846 ms  
Loss rate: 2.01%

Run 3: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-01-22 01:04:43

End at: 2019-01-22 01:05:13

Local clock offset: -1.255 ms

Remote clock offset: 3.213 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 419.064 ms

Loss rate: 1.39%

-- Flow 1:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 1100.336 ms

Loss rate: 0.85%

-- Flow 2:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 340.068 ms

Loss rate: 1.19%

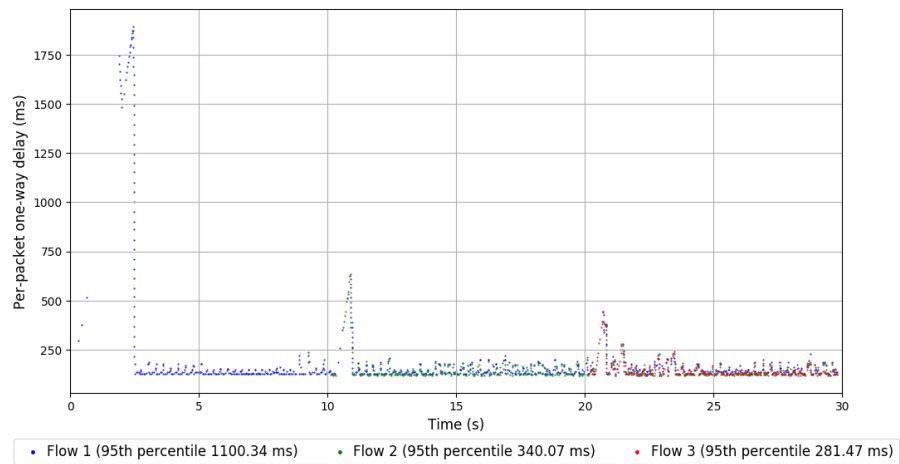
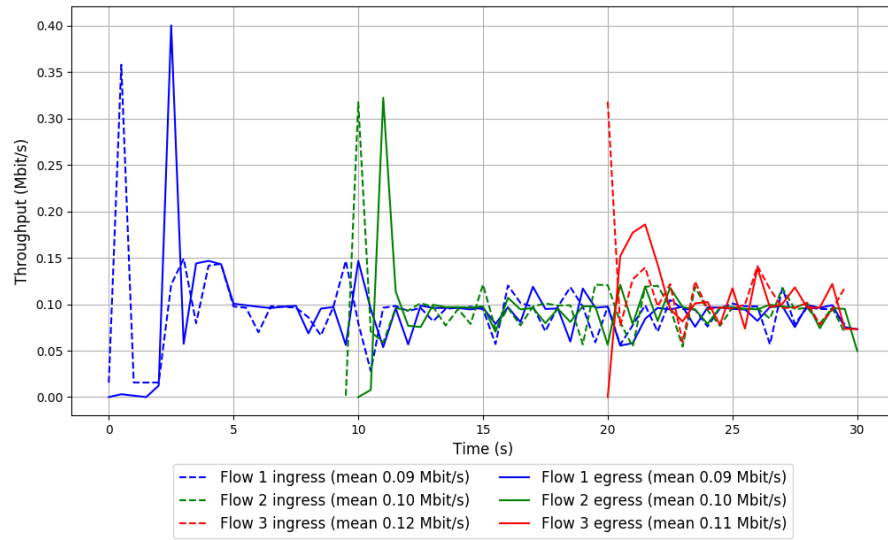
-- Flow 3:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 281.473 ms

Loss rate: 3.06%

## Run 1: Report of Sprout — Data Link



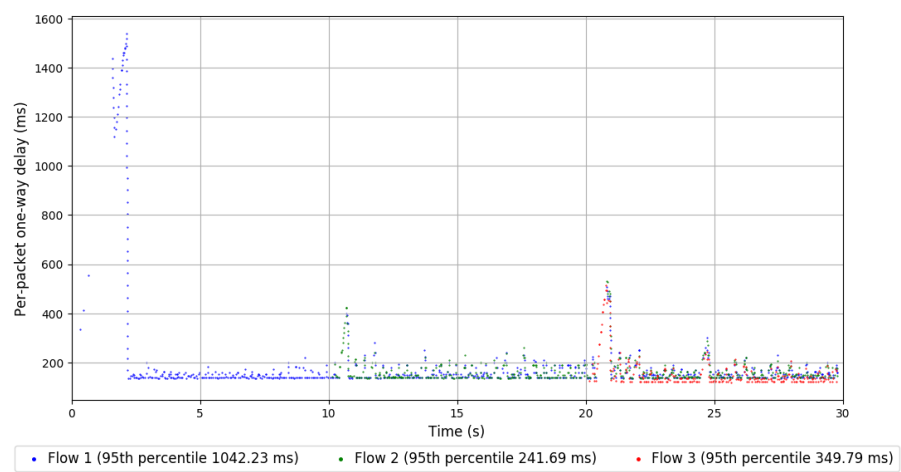
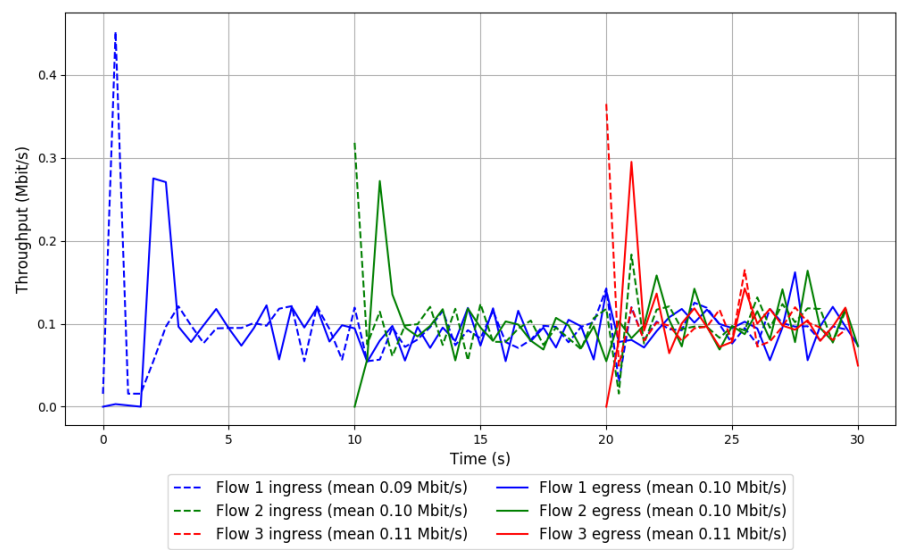


## Run 2: Statistics of Sprout

Start at: 2019-01-22 01:30:29  
End at: 2019-01-22 01:30:59  
Local clock offset: -5.957 ms  
Remote clock offset: 2.658 ms

```
# Below is generated by plot.py at 2019-01-22 02:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 412.319 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 1042.232 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 241.692 ms
Loss rate: 1.67%
-- Flow 3:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 349.789 ms
Loss rate: 2.19%
```

Run 2: Report of Sprout — Data Link

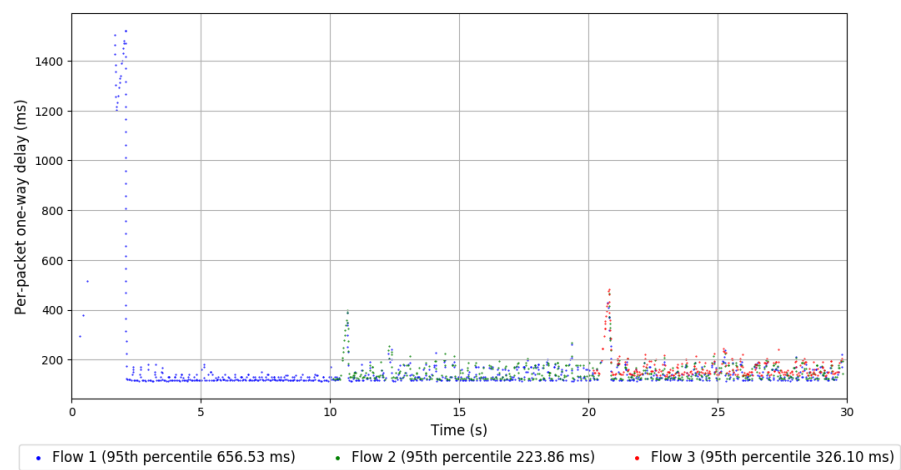
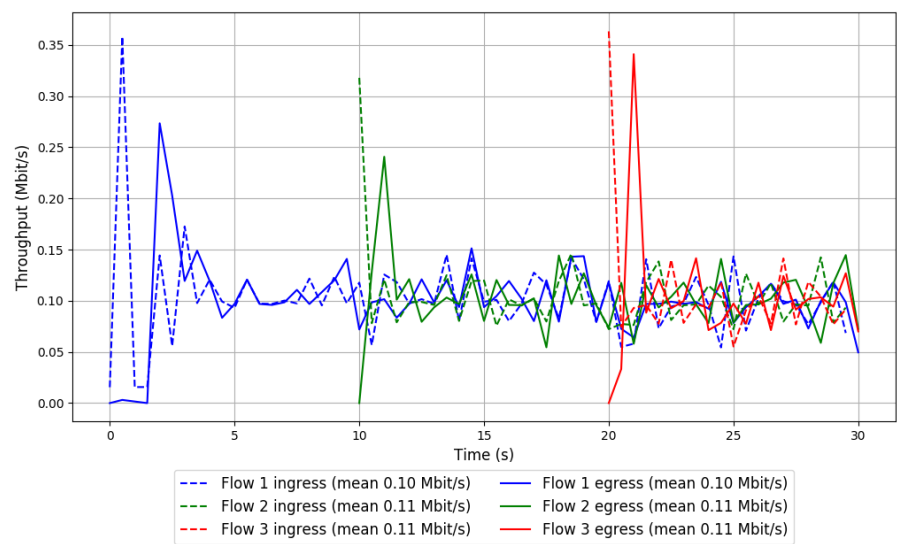


### Run 3: Statistics of Sprout

Start at: 2019-01-22 01:56:13  
End at: 2019-01-22 01:56:43  
Local clock offset: -4.048 ms  
Remote clock offset: 5.783 ms

```
# Below is generated by plot.py at 2019-01-22 02:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 326.098 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 656.535 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 223.864 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 326.098 ms
Loss rate: 1.14%
```

Run 3: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-01-22 00:46:15

End at: 2019-01-22 00:46:45

Local clock offset: -6.592 ms

Remote clock offset: 1.66 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.55 Mbit/s

95th percentile per-packet one-way delay: 3985.387 ms

Loss rate: 9.48%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 2590.745 ms

Loss rate: 4.35%

-- Flow 2:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 3936.924 ms

Loss rate: 15.44%

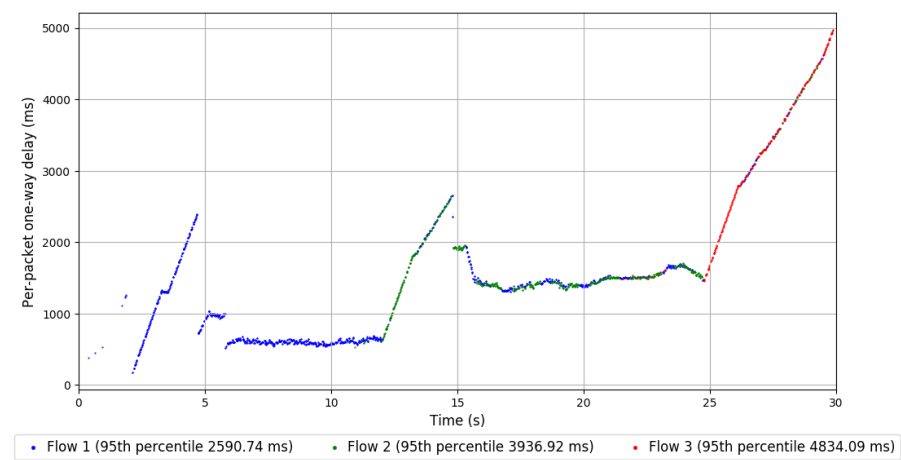
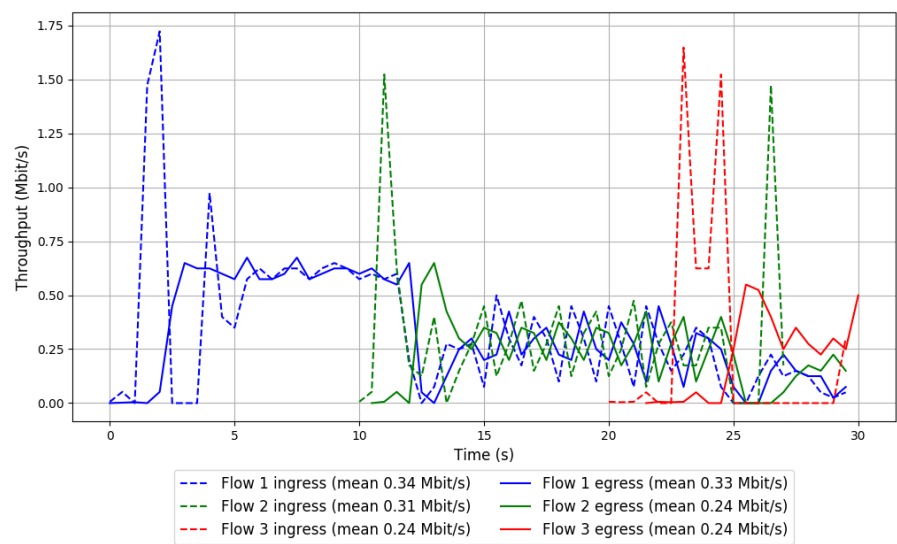
-- Flow 3:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 4834.085 ms

Loss rate: 17.74%

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-01-22 01:12:04

End at: 2019-01-22 01:12:34

Local clock offset: -1.154 ms

Remote clock offset: 2.611 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 3626.804 ms

Loss rate: 7.93%

-- Flow 1:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 2893.237 ms

Loss rate: 4.23%

-- Flow 2:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 3334.477 ms

Loss rate: 8.83%

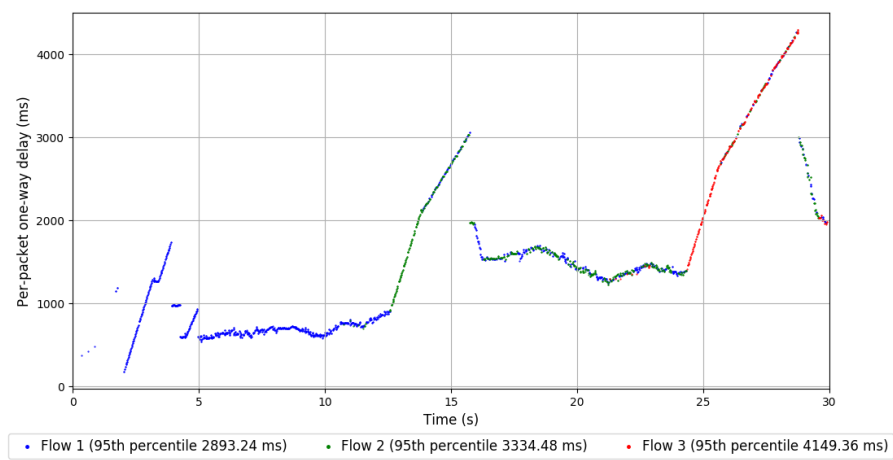
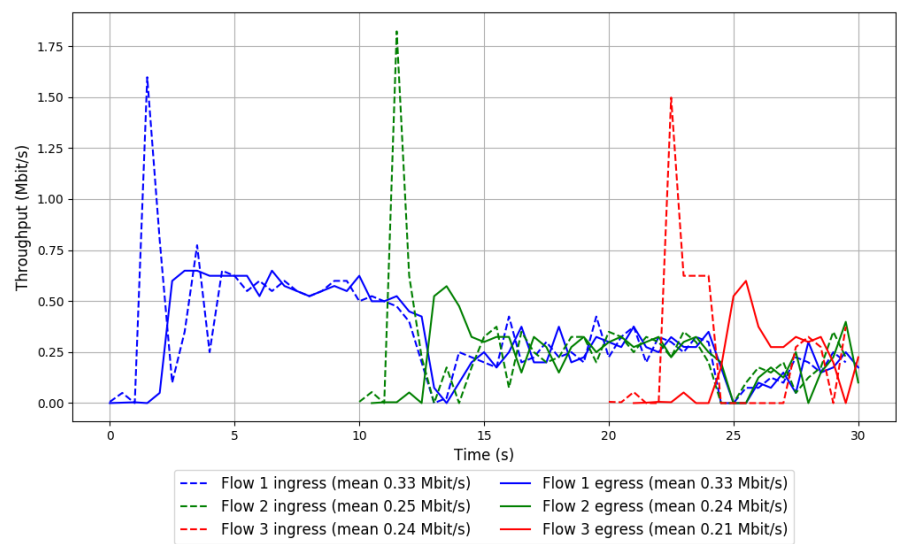
-- Flow 3:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 4149.364 ms

Loss rate: 21.86%

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





Run 3: Statistics of TaoVA-100x

Start at: 2019-01-22 01:37:50

End at: 2019-01-22 01:38:20

Local clock offset: -7.606 ms

Remote clock offset: 5.959 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.54 Mbit/s

95th percentile per-packet one-way delay: 3895.095 ms

Loss rate: 7.56%

-- Flow 1:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 2525.552 ms

Loss rate: 4.45%

-- Flow 2:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 3918.491 ms

Loss rate: 8.85%

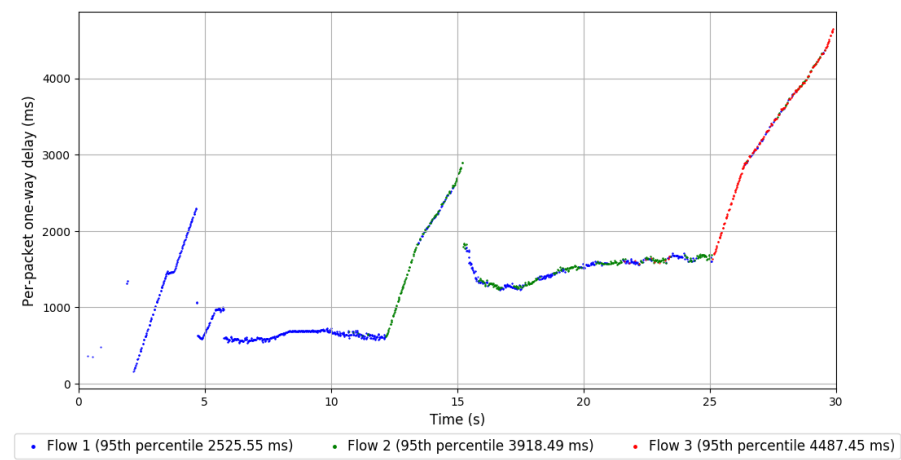
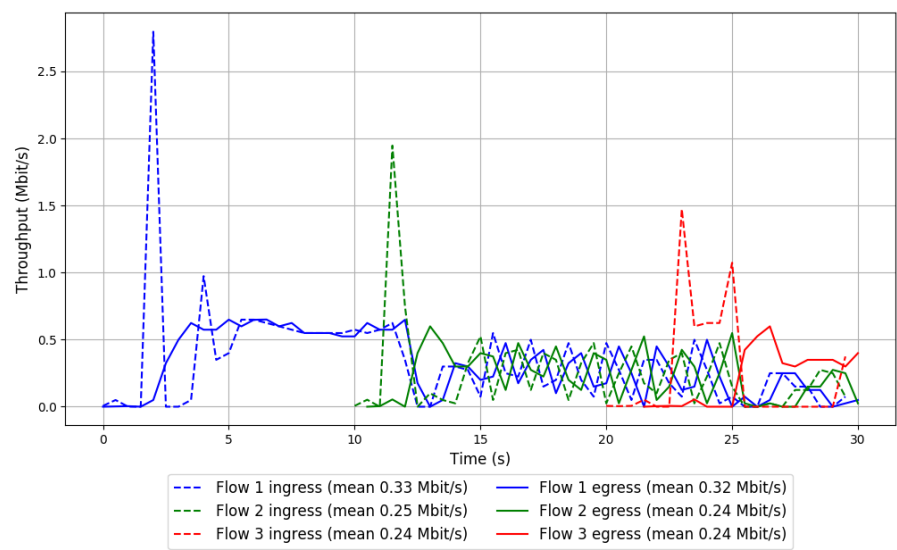
-- Flow 3:

Average throughput: 0.24 Mbit/s

95th percentile per-packet one-way delay: 4487.453 ms

Loss rate: 17.55%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-01-22 01:02:15

End at: 2019-01-22 01:02:45

Local clock offset: -1.597 ms

Remote clock offset: 7.079 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 934.670 ms

Loss rate: 2.31%

-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 844.378 ms

Loss rate: 0.57%

-- Flow 2:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 882.705 ms

Loss rate: 1.89%

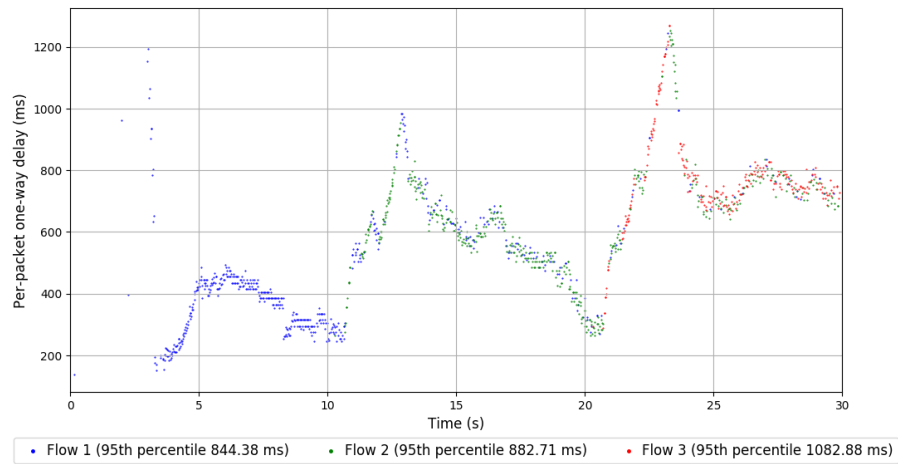
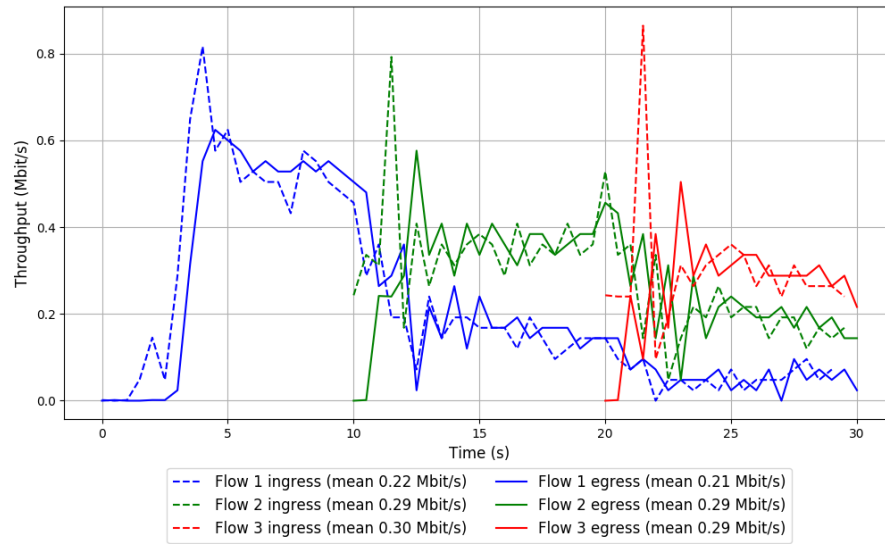
-- Flow 3:

Average throughput: 0.29 Mbit/s

95th percentile per-packet one-way delay: 1082.885 ms

Loss rate: 6.85%

# Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-01-22 01:28:02

End at: 2019-01-22 01:28:32

Local clock offset: -6.227 ms

Remote clock offset: 4.224 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.49 Mbit/s

95th percentile per-packet one-way delay: 1906.241 ms

Loss rate: 6.12%

-- Flow 1:

Average throughput: 0.31 Mbit/s

95th percentile per-packet one-way delay: 1746.396 ms

Loss rate: 3.00%

-- Flow 2:

Average throughput: 0.20 Mbit/s

95th percentile per-packet one-way delay: 1906.418 ms

Loss rate: 6.36%

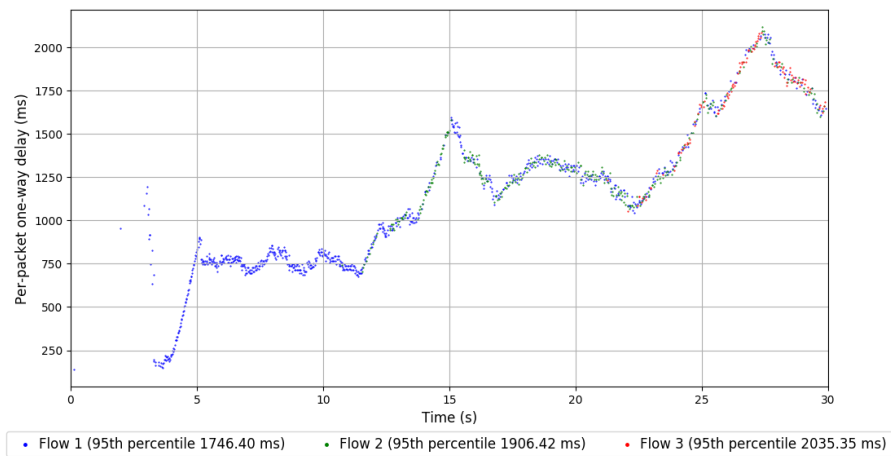
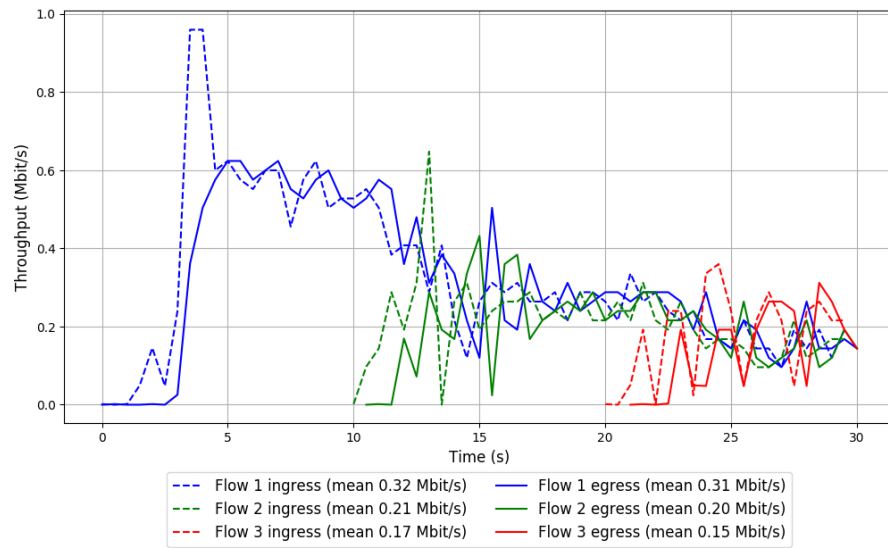
-- Flow 3:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 2035.348 ms

Loss rate: 23.04%

## Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-01-22 01:53:46

End at: 2019-01-22 01:54:16

Local clock offset: -3.892 ms

Remote clock offset: 6.732 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 956.081 ms

Loss rate: 2.36%

-- Flow 1:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 815.644 ms

Loss rate: 0.30%

-- Flow 2:

Average throughput: 0.27 Mbit/s

95th percentile per-packet one-way delay: 957.945 ms

Loss rate: 1.77%

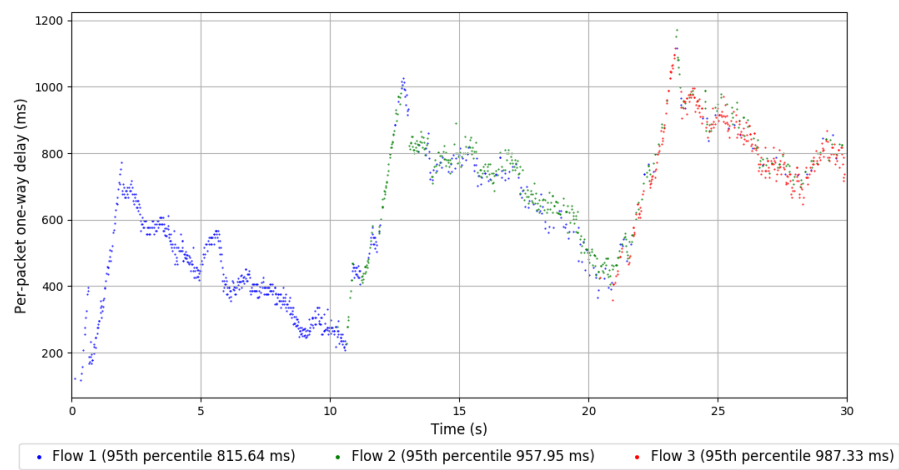
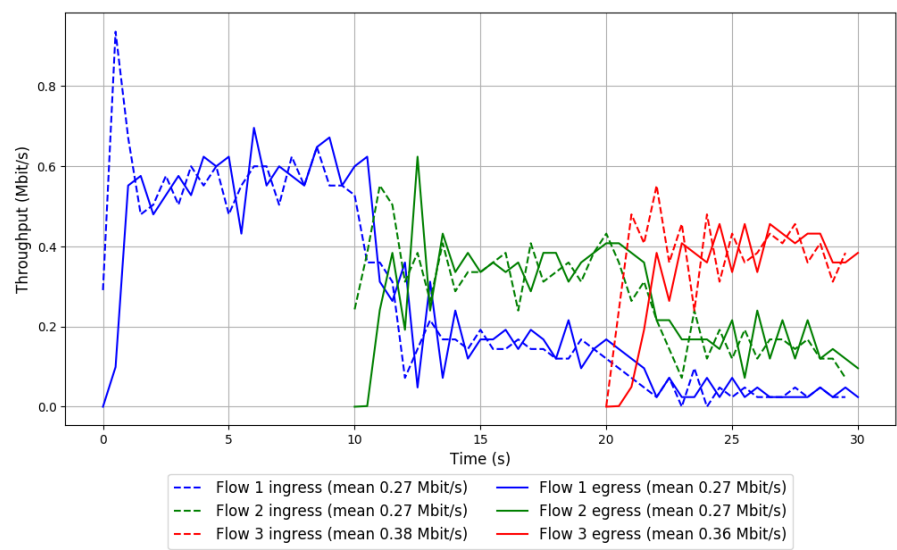
-- Flow 3:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 987.331 ms

Loss rate: 7.71%

Run 3: Report of TCP Vegas — Data Link





Run 1: Statistics of Verus

Start at: 2019-01-22 01:03:29

End at: 2019-01-22 01:03:59

Local clock offset: -1.41 ms

Remote clock offset: 7.203 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.58 Mbit/s

95th percentile per-packet one-way delay: 1791.289 ms

Loss rate: 3.76%

-- Flow 1:

Average throughput: 0.57 Mbit/s

95th percentile per-packet one-way delay: 1791.149 ms

Loss rate: 3.70%

-- Flow 2:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 1785.829 ms

Loss rate: 4.76%

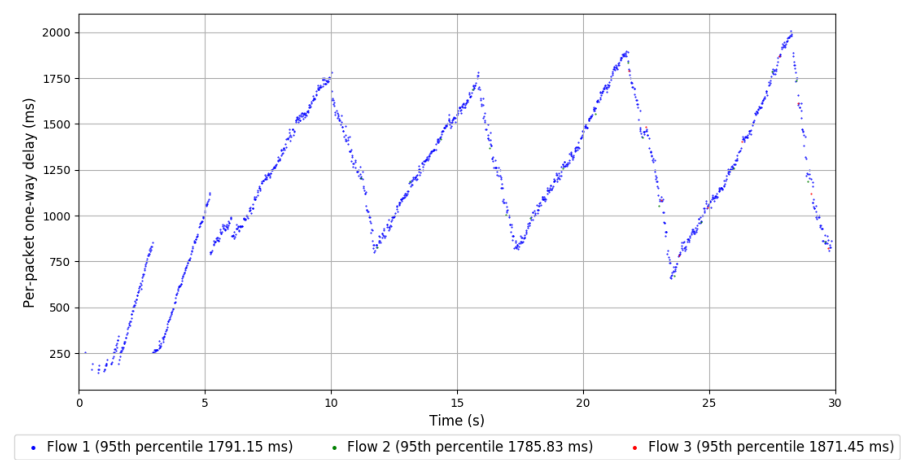
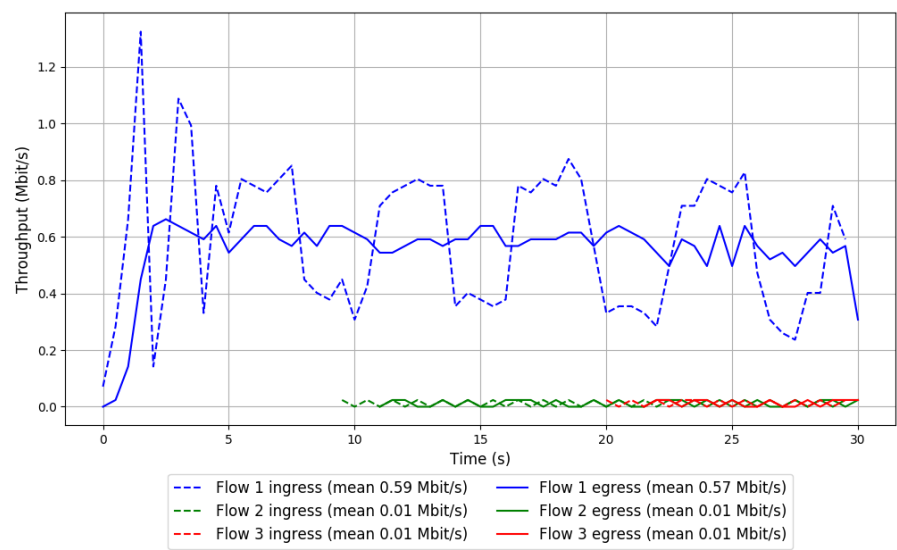
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 1871.454 ms

Loss rate: 9.09%

Run 1: Report of Verus — Data Link

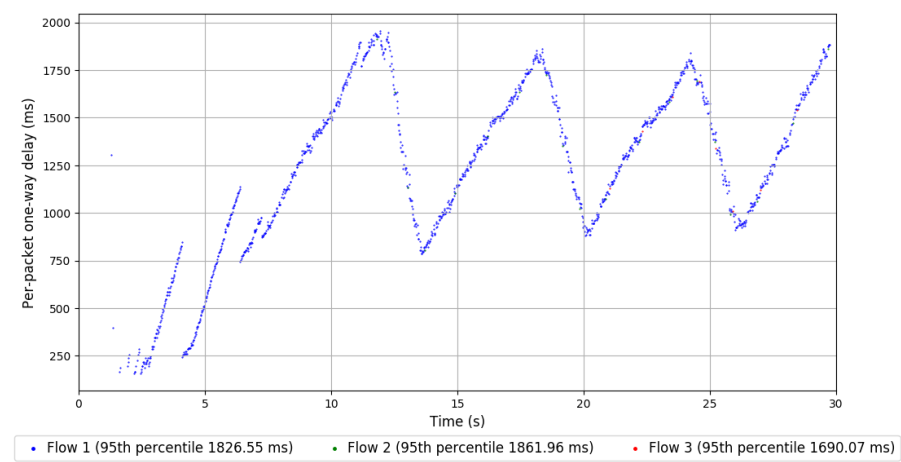
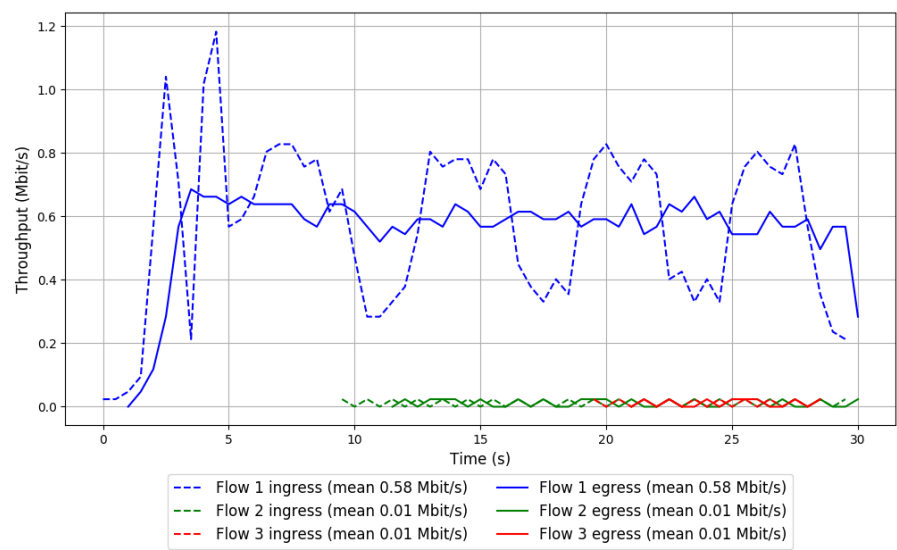


Run 2: Statistics of Verus

Start at: 2019-01-22 01:29:15  
End at: 2019-01-22 01:29:45  
Local clock offset: -6.485 ms  
Remote clock offset: 7.876 ms

# Below is generated by plot.py at 2019-01-22 02:02:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.59 Mbit/s  
95th percentile per-packet one-way delay: 1831.553 ms  
Loss rate: 4.82%  
-- Flow 1:  
Average throughput: 0.58 Mbit/s  
95th percentile per-packet one-way delay: 1826.552 ms  
Loss rate: 4.65%  
-- Flow 2:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 1861.956 ms  
Loss rate: 9.52%  
-- Flow 3:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 1690.066 ms  
Loss rate: 20.00%

Run 2: Report of Verus — Data Link

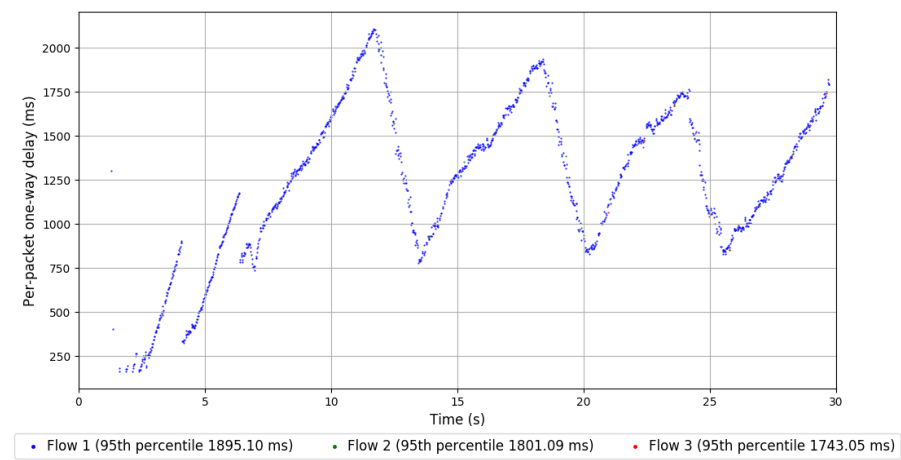
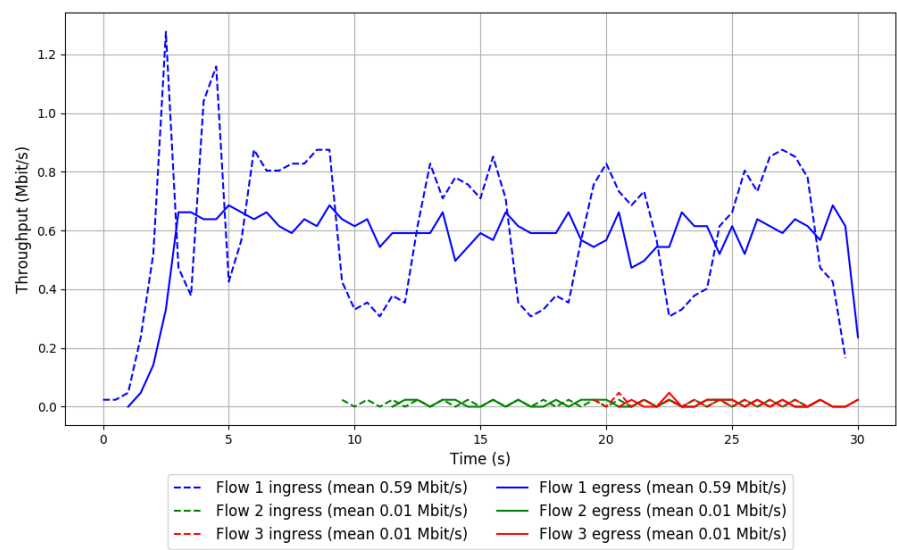


Run 3: Statistics of Verus

Start at: 2019-01-22 01:54:59  
End at: 2019-01-22 01:55:29  
Local clock offset: -4.363 ms  
Remote clock offset: 6.847 ms

# Below is generated by plot.py at 2019-01-22 02:02:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.60 Mbit/s  
95th percentile per-packet one-way delay: 1895.104 ms  
Loss rate: 5.62%  
-- Flow 1:  
Average throughput: 0.59 Mbit/s  
95th percentile per-packet one-way delay: 1895.104 ms  
Loss rate: 5.61%  
-- Flow 2:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 1801.094 ms  
Loss rate: 5.00%  
-- Flow 3:  
Average throughput: 0.01 Mbit/s  
95th percentile per-packet one-way delay: 1743.049 ms  
Loss rate: 9.09%

Run 3: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

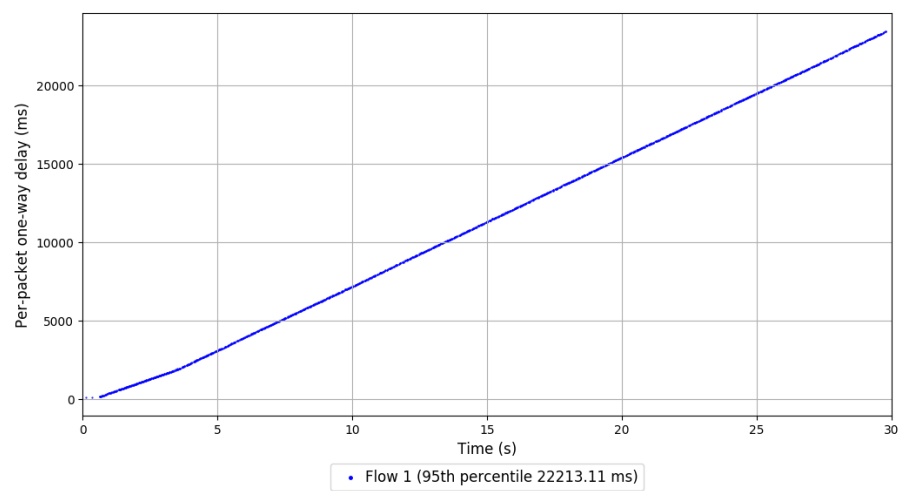
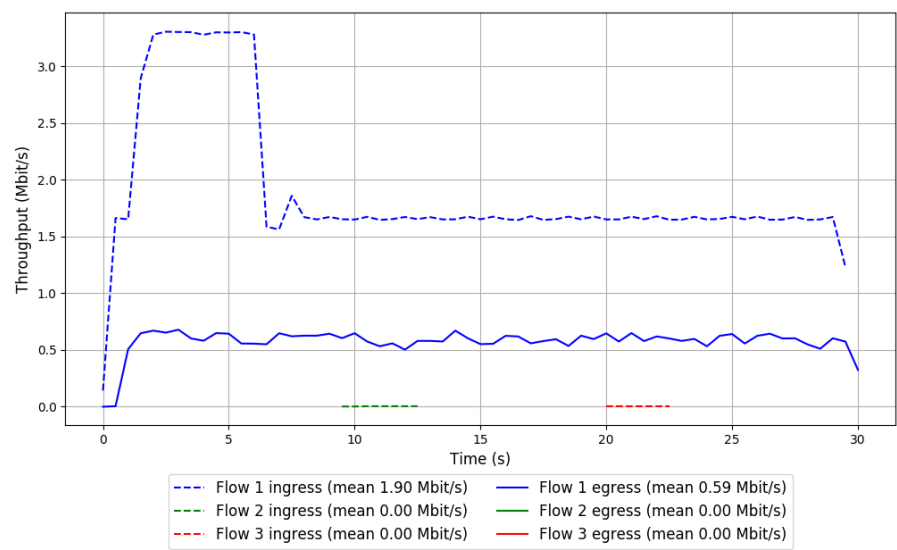
Start at: 2019-01-22 01:01:02

End at: 2019-01-22 01:01:32

Local clock offset: -1.866 ms

Remote clock offset: 6.743 ms

Run 1: Report of PCC-Vivace — Data Link





Run 2: Statistics of PCC-Vivace

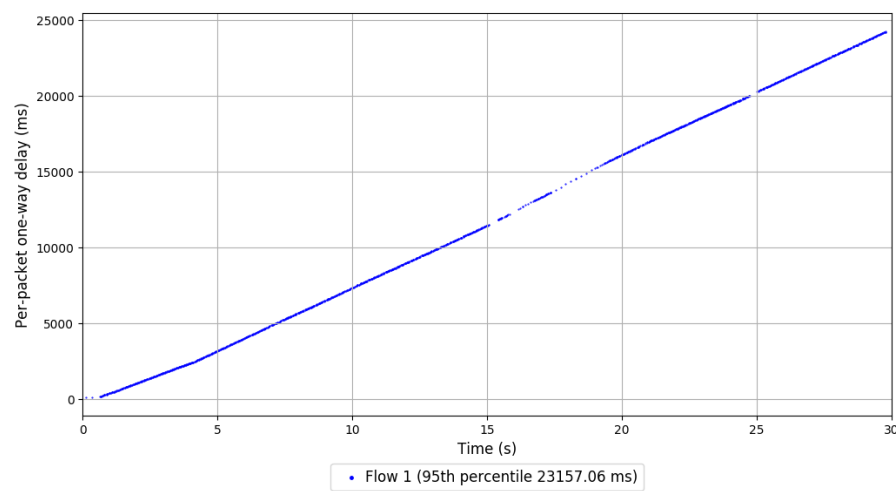
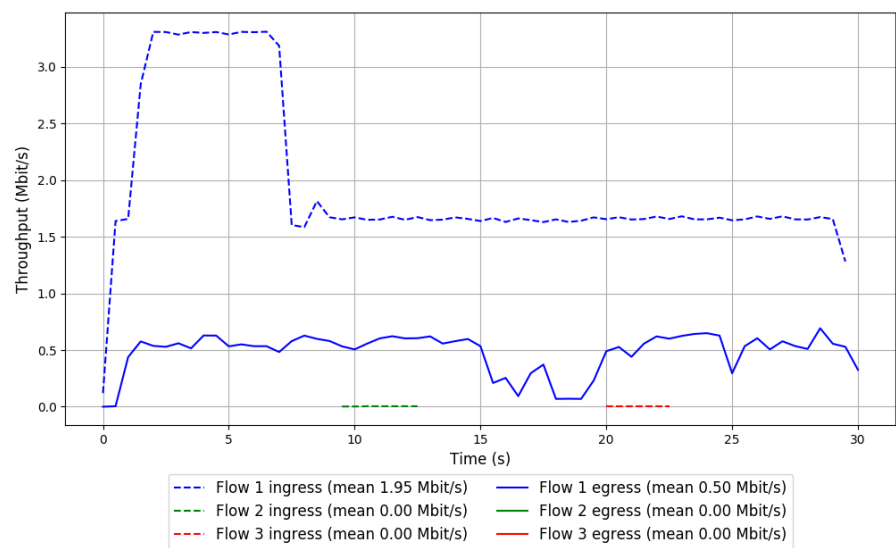
Start at: 2019-01-22 01:26:48

End at: 2019-01-22 01:27:18

Local clock offset: -5.126 ms

Remote clock offset: 8.035 ms

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

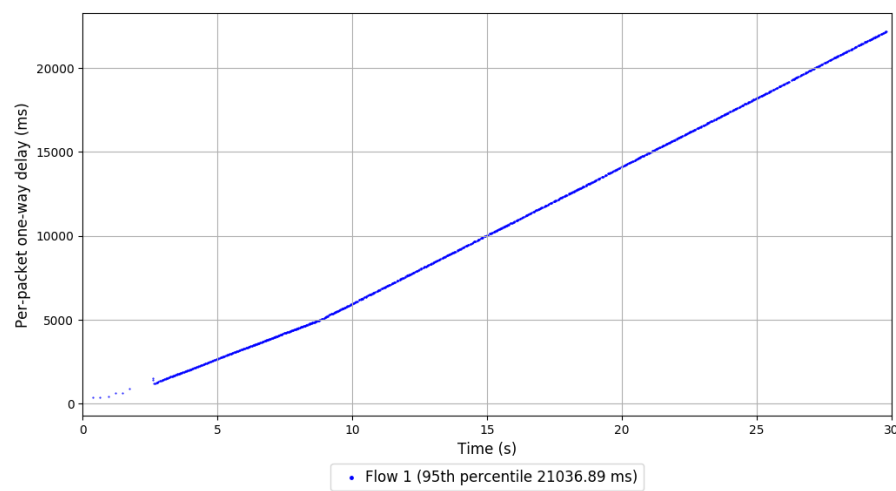
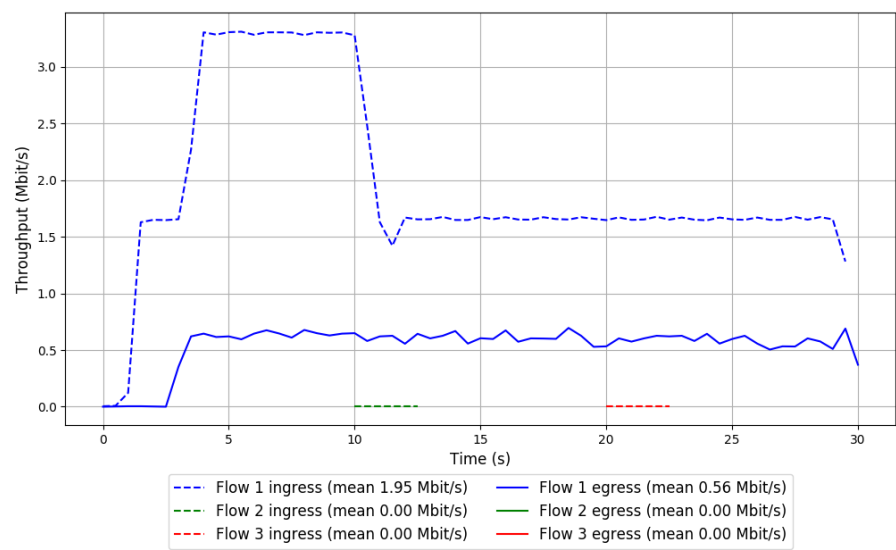
Start at: 2019-01-22 01:52:33

End at: 2019-01-22 01:53:03

Local clock offset: -5.171 ms

Remote clock offset: 3.072 ms

Run 3: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-01-22 00:52:22

End at: 2019-01-22 00:52:52

Local clock offset: -3.842 ms

Remote clock offset: 5.396 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.36 Mbit/s

95th percentile per-packet one-way delay: 1380.176 ms

Loss rate: 0.48%

-- Flow 1:

Average throughput: 0.16 Mbit/s

95th percentile per-packet one-way delay: 1427.042 ms

Loss rate: 0.22%

-- Flow 2:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 1383.169 ms

Loss rate: 0.39%

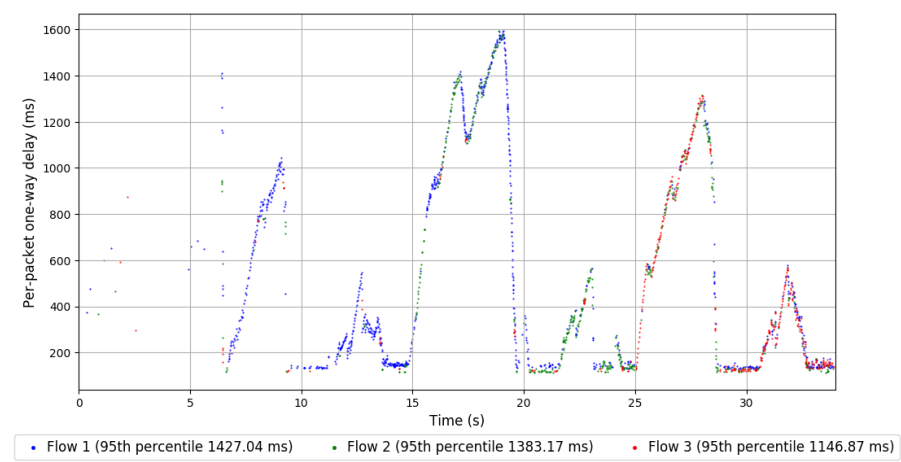
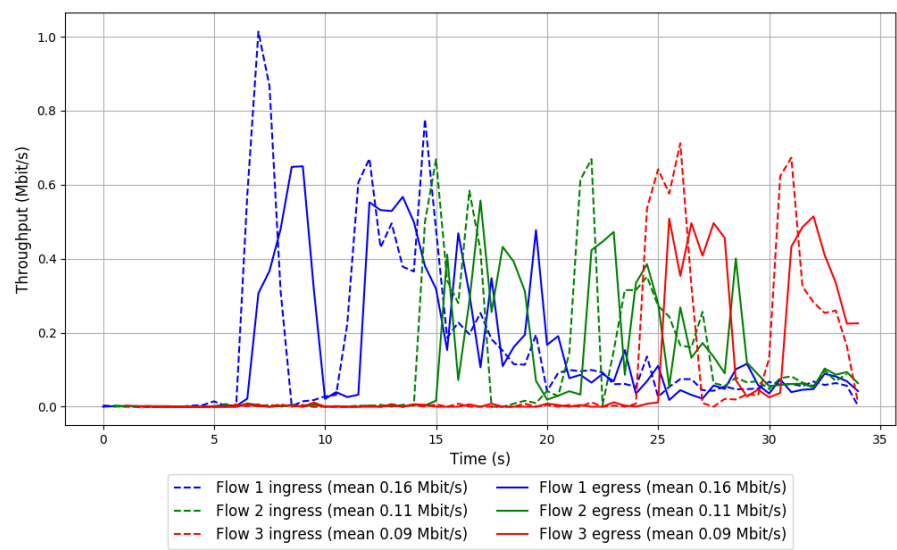
-- Flow 3:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 1146.866 ms

Loss rate: 1.10%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-01-22 01:18:13

End at: 2019-01-22 01:18:43

Local clock offset: -1.605 ms

Remote clock offset: 4.093 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.32 Mbit/s

95th percentile per-packet one-way delay: 1882.740 ms

Loss rate: 4.18%

-- Flow 1:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 1694.134 ms

Loss rate: 1.13%

-- Flow 2:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 1883.886 ms

Loss rate: 1.27%

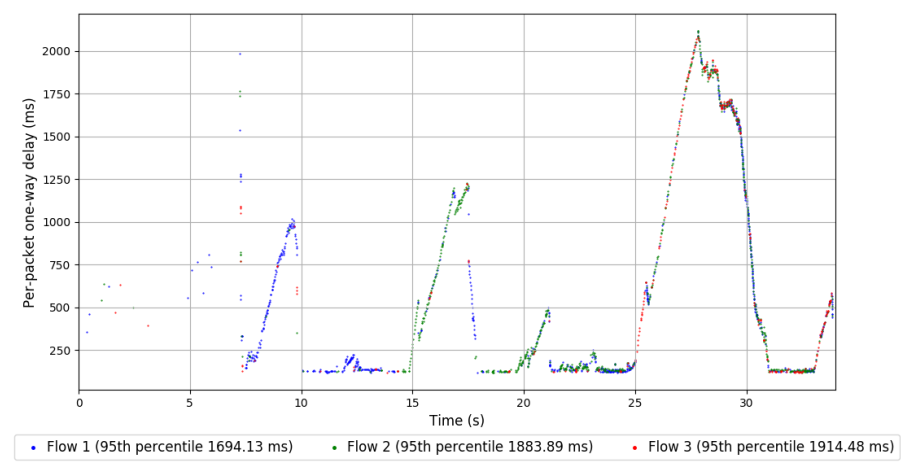
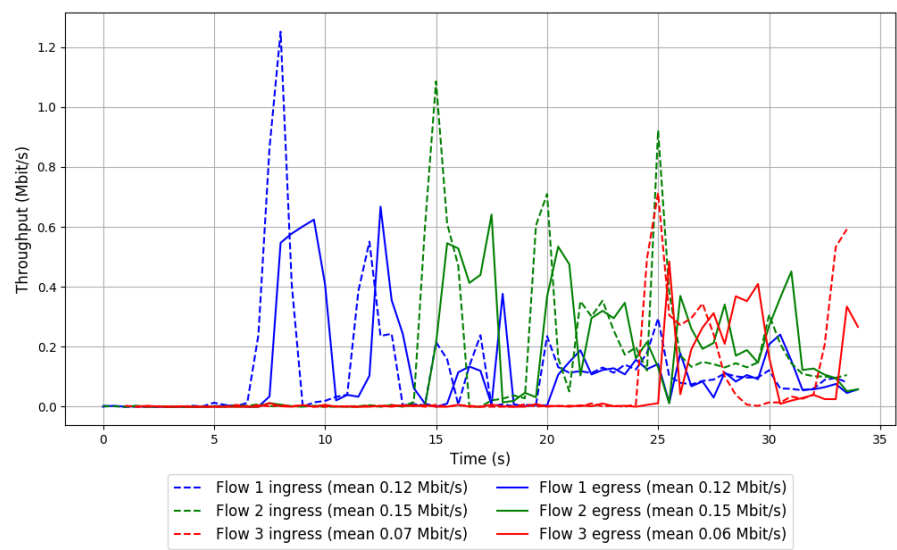
-- Flow 3:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 1914.484 ms

Loss rate: 16.46%

Run 2: Report of WebRTC media — Data Link





Run 3: Statistics of WebRTC media

Start at: 2019-01-22 01:43:57

End at: 2019-01-22 01:44:27

Local clock offset: -7.275 ms

Remote clock offset: 5.539 ms

# Below is generated by plot.py at 2019-01-22 02:02:32

# Datalink statistics

-- Total of 3 flows:

Average throughput: 0.33 Mbit/s

95th percentile per-packet one-way delay: 1652.902 ms

Loss rate: 1.36%

-- Flow 1:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 1630.524 ms

Loss rate: 1.14%

-- Flow 2:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 1657.053 ms

Loss rate: 1.13%

-- Flow 3:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 1677.848 ms

Loss rate: 2.26%

Run 3: Report of WebRTC media — Data Link

