

Pantheon Report

Generated at 2019-03-27 00:37:32 (UTC).

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

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:

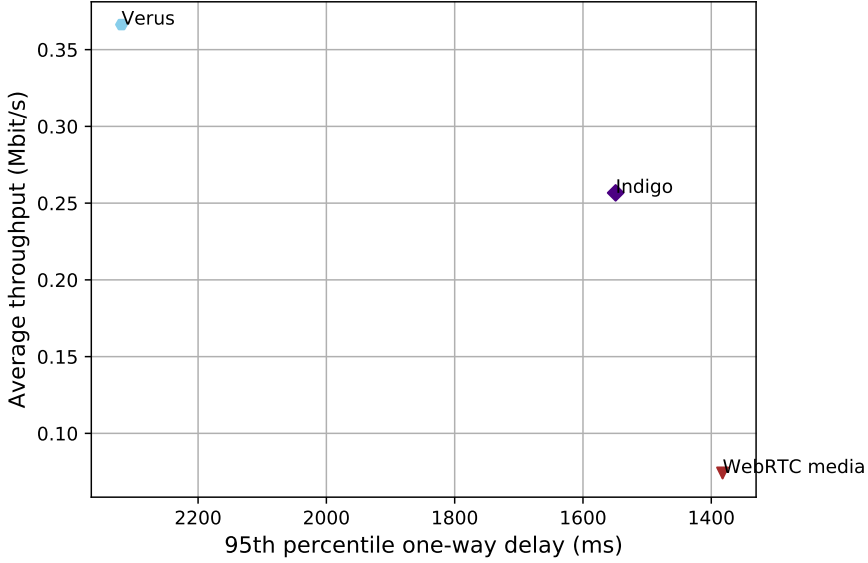
```
Linux 4.15.0-1034-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

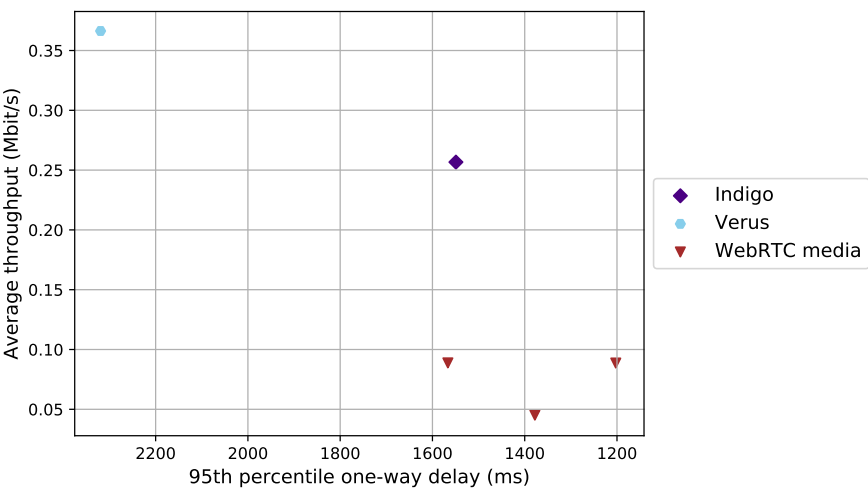
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
```

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

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



test from AWS Brazil 2 to Colombia cellular, 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	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Copa	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TCP Cubic	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FillP	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FillP-Sheep	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indigo	1	0.11	0.16	0.14	1188.27	1758.95	1639.08	0.00	0.79	0.00
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	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
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	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SCReAM	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sprout	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TaoVA-100x	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TCP Vegas	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Verus	1	0.35	0.02	0.01	2307.11	3098.83	2019.06	3.46	3.70	10.00
PCC-Vivace	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WebRTC media	3	0.04	0.03	0.00	1234.17	1070.72	231.03	0.00	0.00	0.00

Run 1: Statistics of TCP BBR

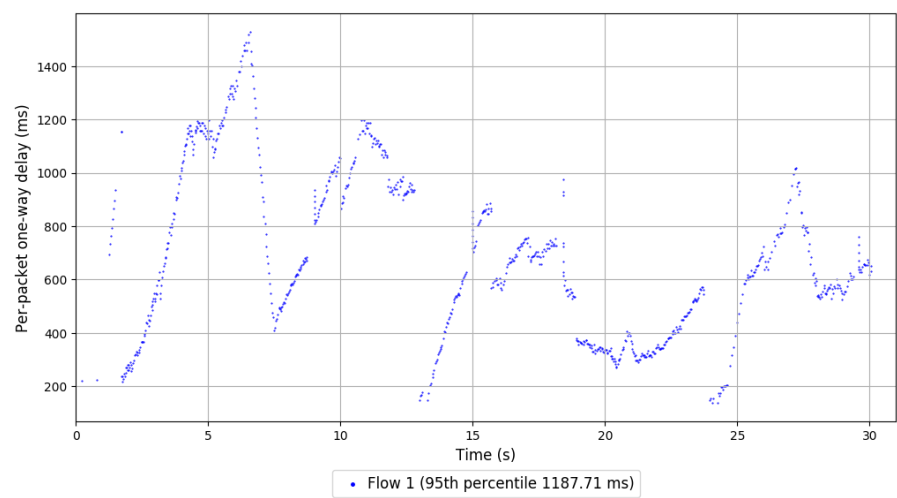
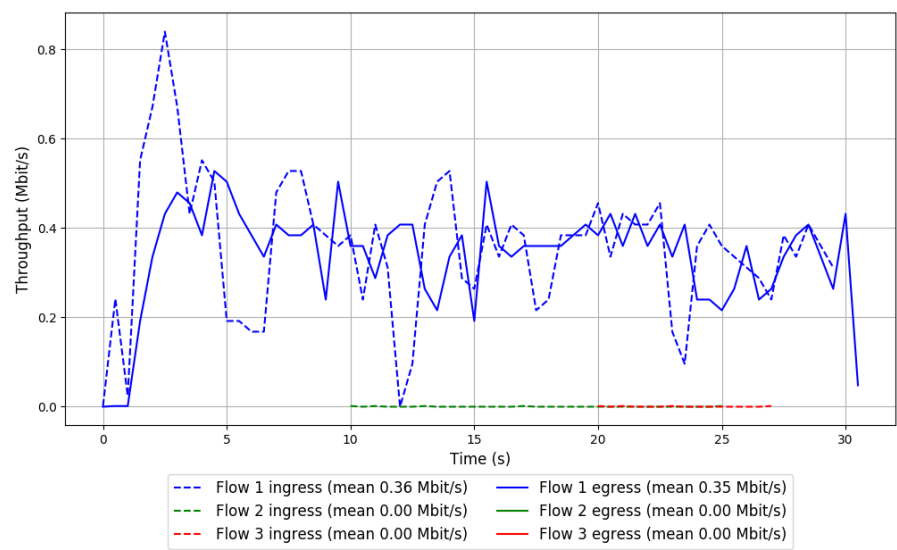
Start at: 2019-03-26 23:44:49

End at: 2019-03-26 23:45:19

Local clock offset: -8.101 ms

Remote clock offset: 4.023 ms

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

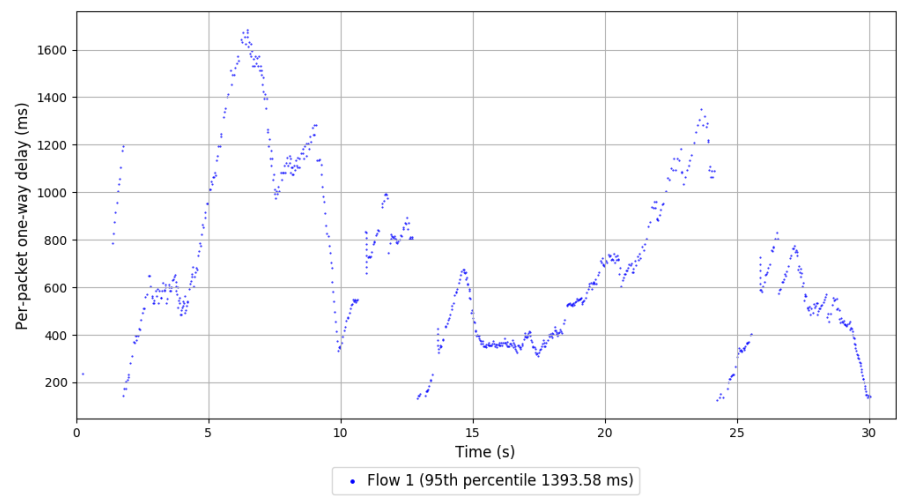
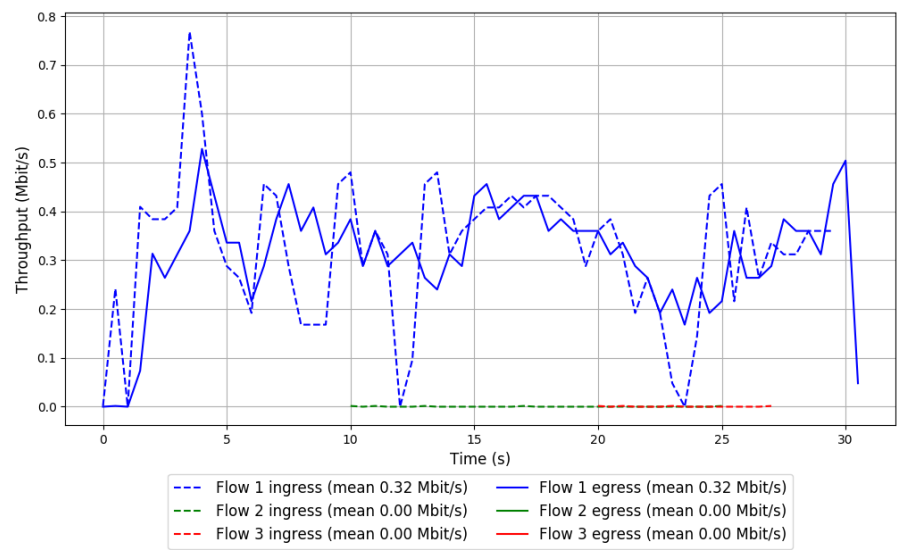
Start at: 2019-03-27 00:10:40

End at: 2019-03-27 00:11:10

Local clock offset: -7.818 ms

Remote clock offset: -1.166 ms

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

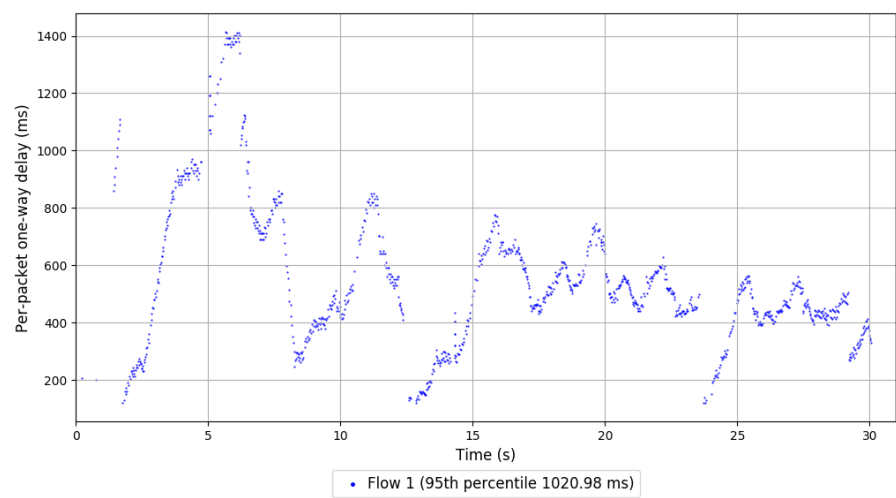
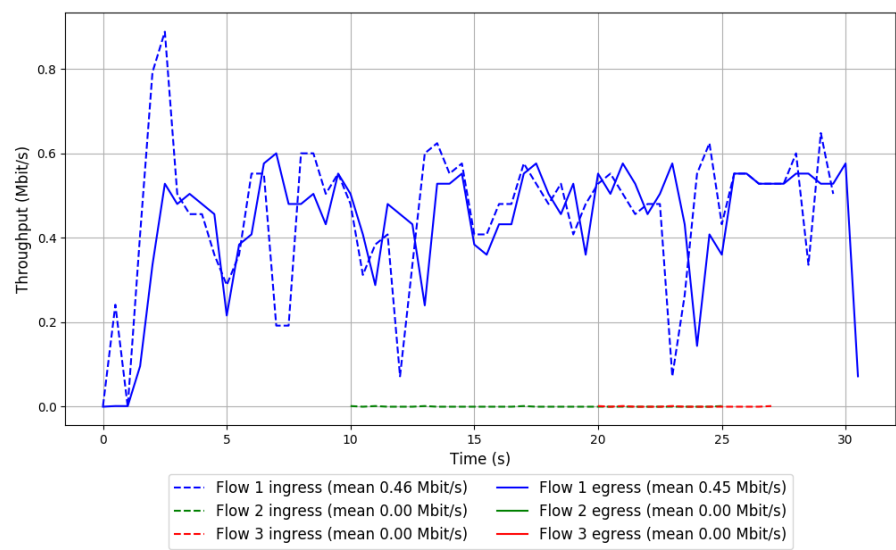
Start at: 2019-03-27 00:36:20

End at: 2019-03-27 00:36:50

Local clock offset: -2.88 ms

Remote clock offset: -2.874 ms

Run 3: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

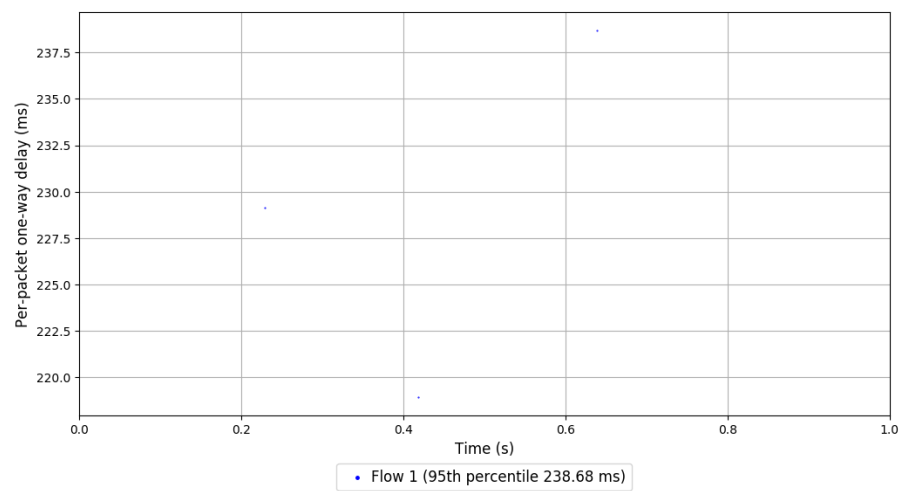
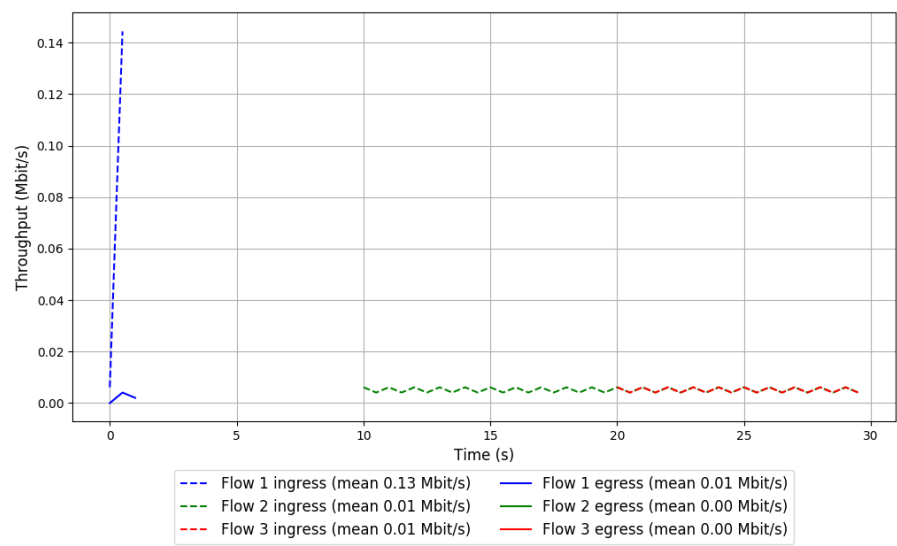
Start at: 2019-03-26 23:42:22

End at: 2019-03-26 23:42:52

Local clock offset: -7.158 ms

Remote clock offset: 6.128 ms

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

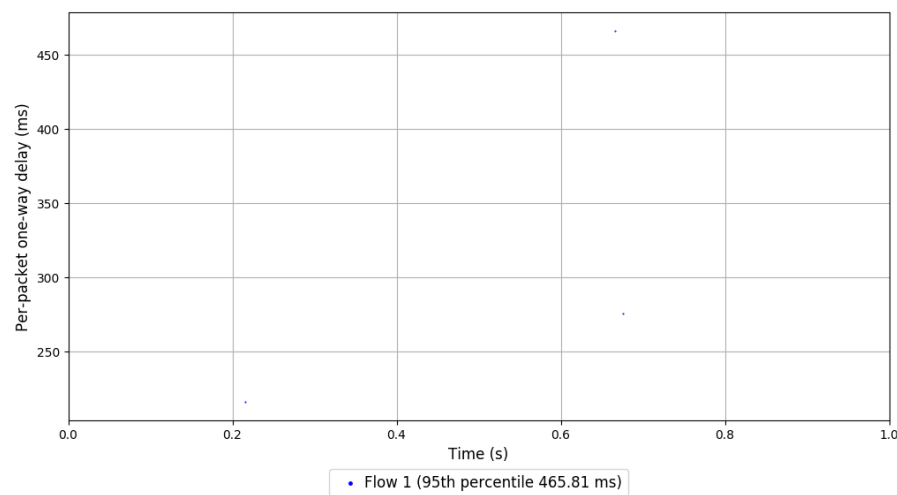
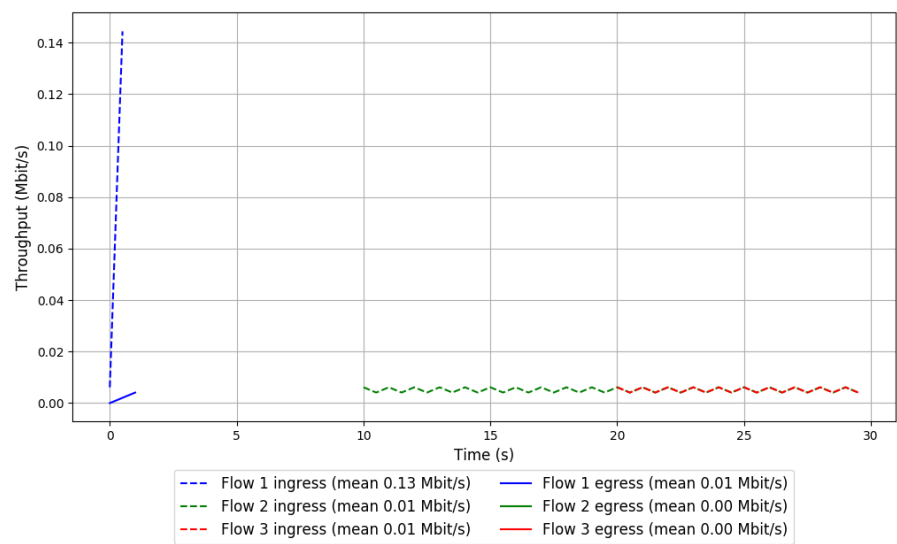
Start at: 2019-03-27 00:08:14

End at: 2019-03-27 00:08:44

Local clock offset: -7.846 ms

Remote clock offset: -1.017 ms

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

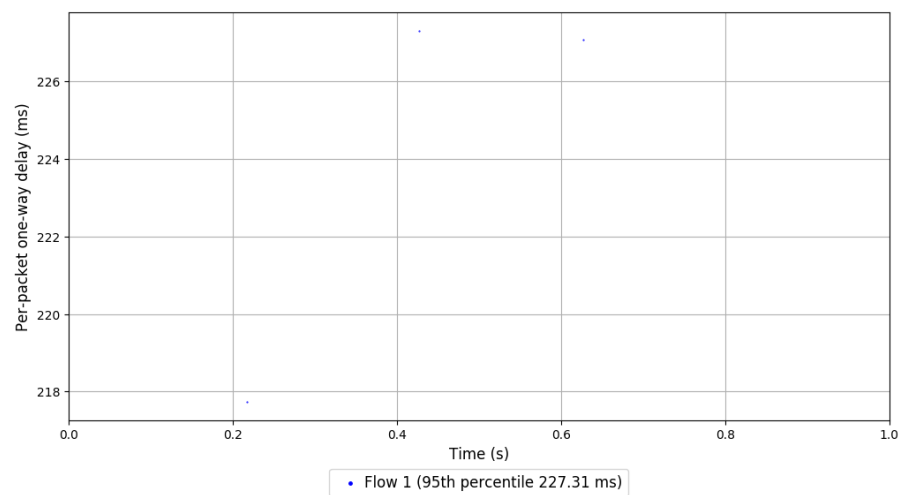
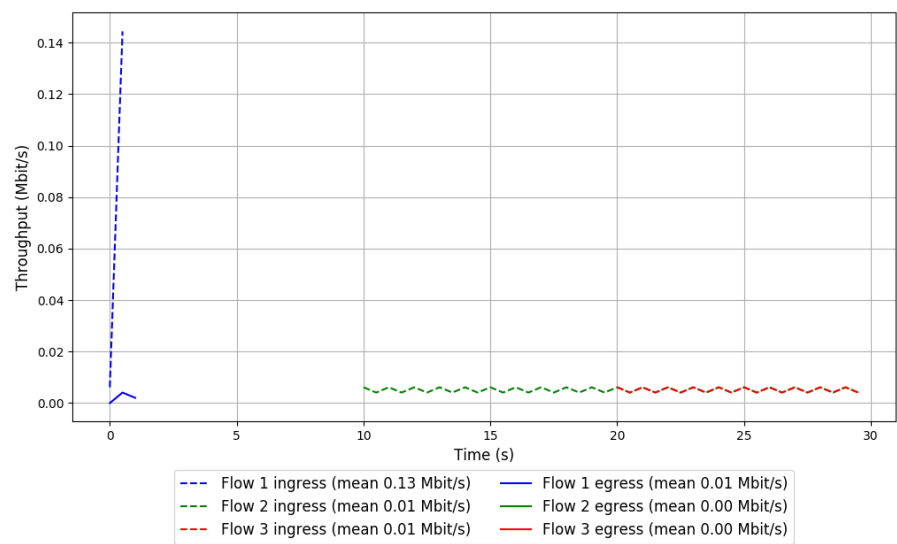
Start at: 2019-03-27 00:33:53

End at: 2019-03-27 00:34:23

Local clock offset: -2.378 ms

Remote clock offset: 0.2 ms

Run 3: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

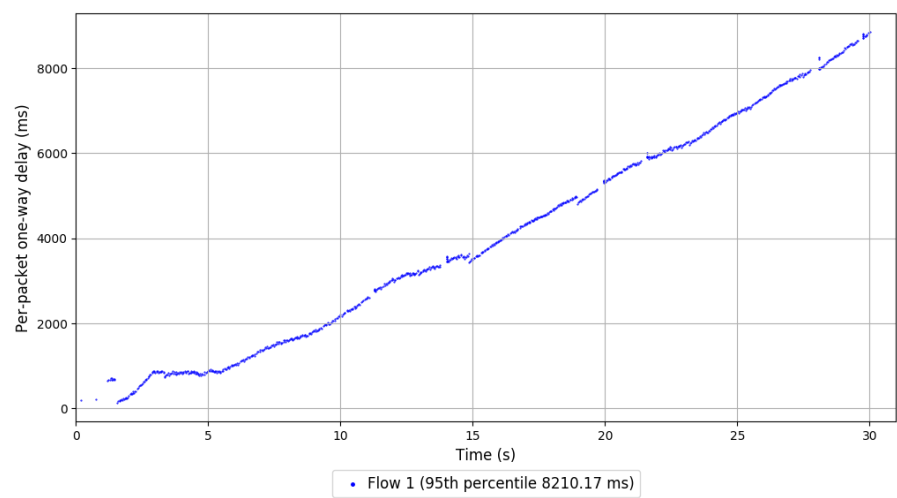
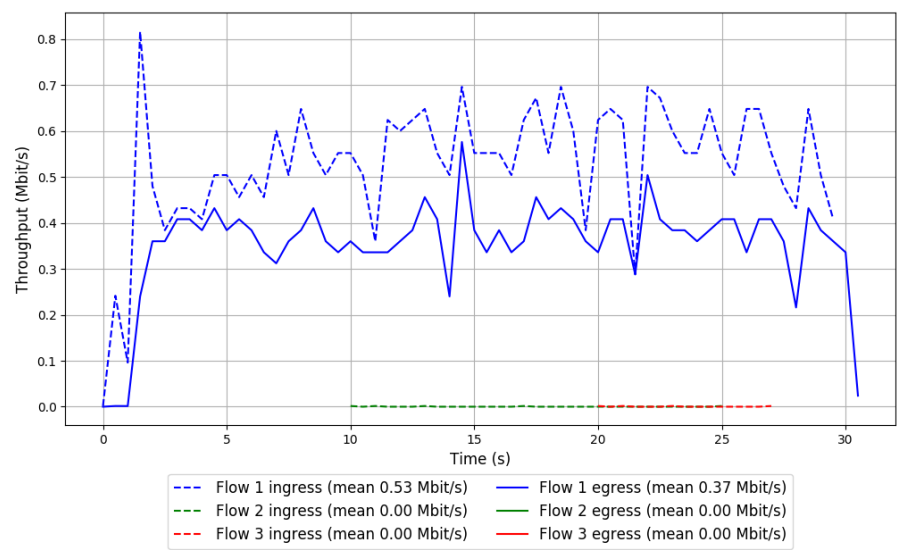
Start at: 2019-03-26 23:36:14

End at: 2019-03-26 23:36:44

Local clock offset: -6.639 ms

Remote clock offset: 4.457 ms

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

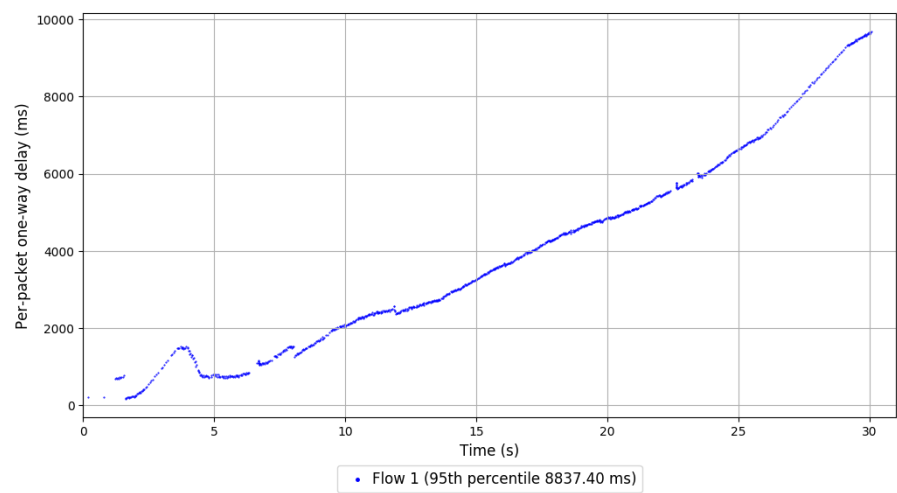
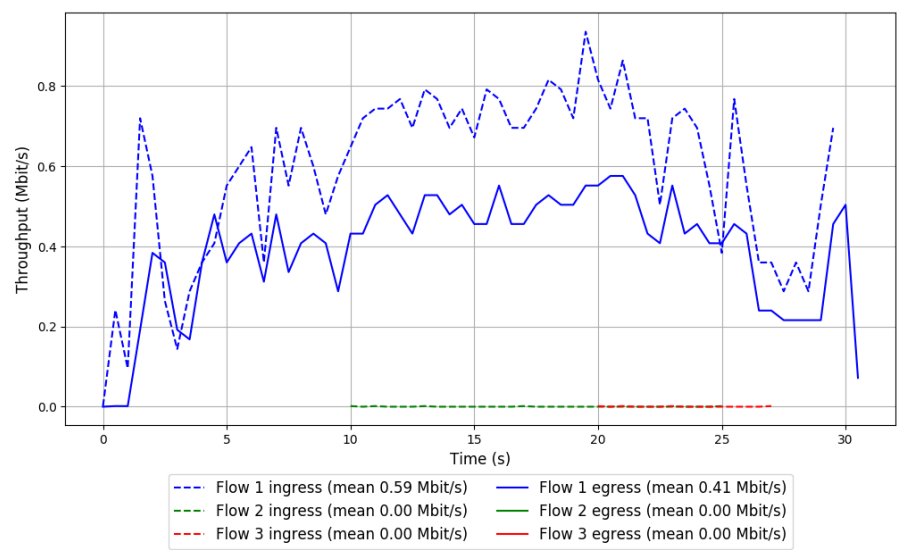
Start at: 2019-03-27 00:02:01

End at: 2019-03-27 00:02:31

Local clock offset: -6.927 ms

Remote clock offset: 3.212 ms

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

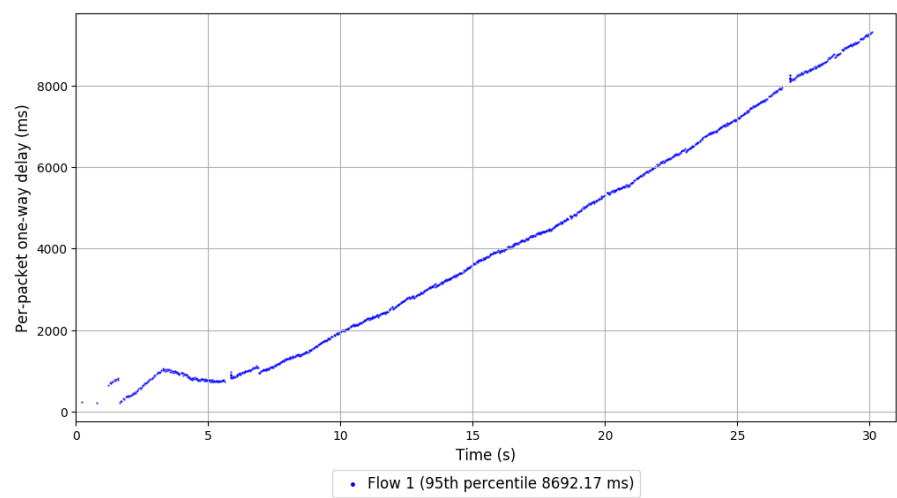
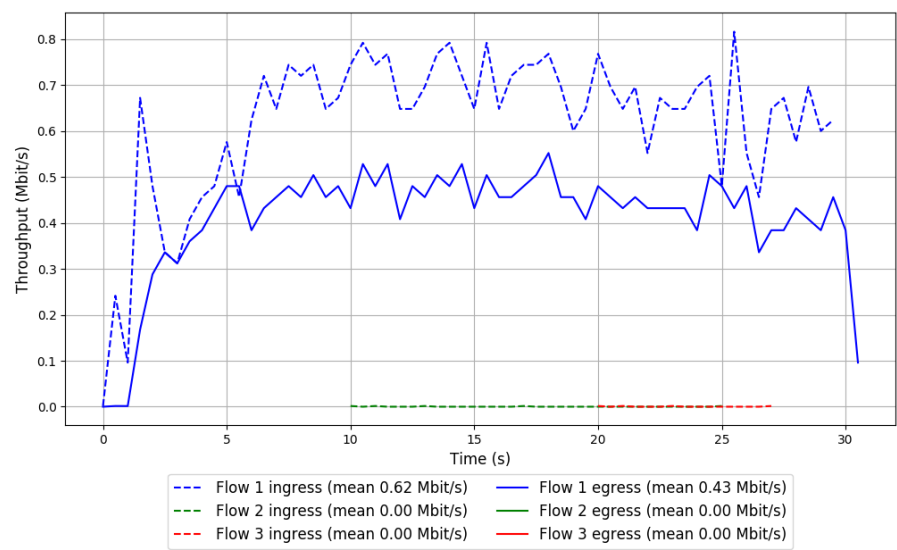
Start at: 2019-03-27 00:27:46

End at: 2019-03-27 00:28:16

Local clock offset: -3.236 ms

Remote clock offset: 1.646 ms

Run 3: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

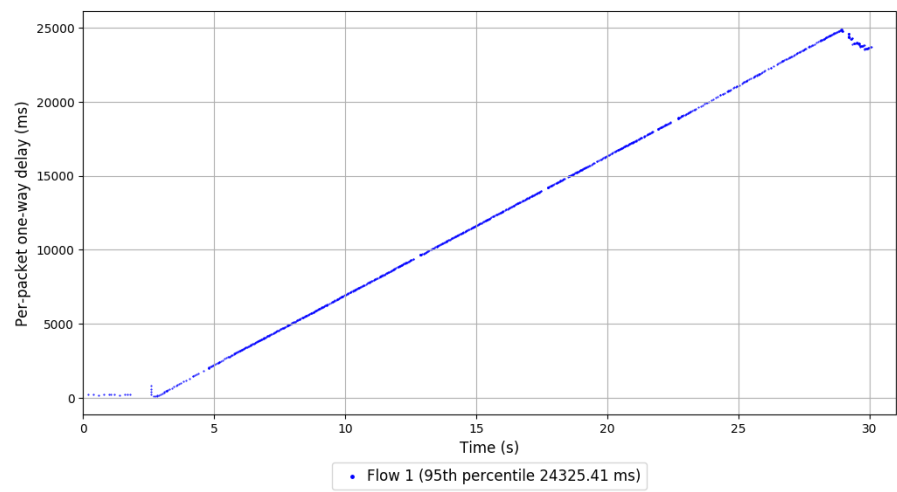
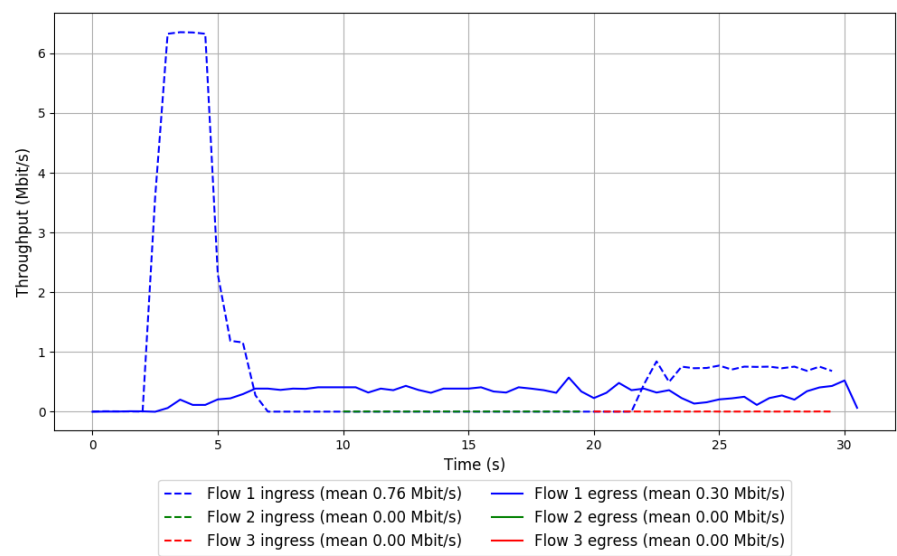
Start at: 2019-03-26 23:28:54

End at: 2019-03-26 23:29:24

Local clock offset: -5.678 ms

Remote clock offset: 4.516 ms

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

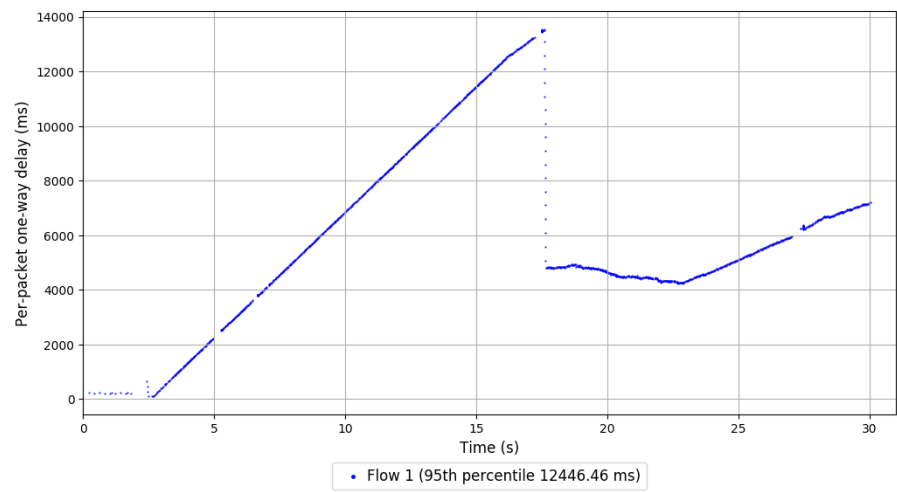
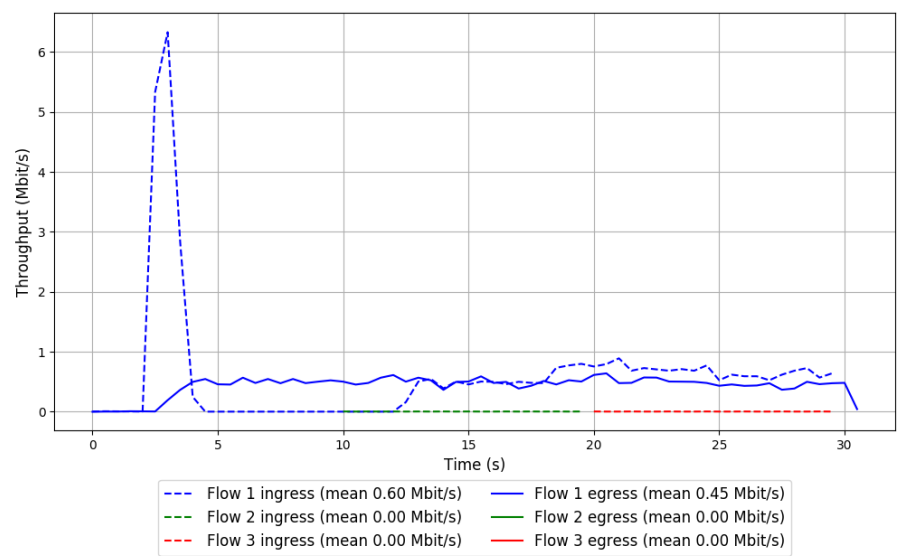
Start at: 2019-03-26 23:54:35

End at: 2019-03-26 23:55:05

Local clock offset: -6.977 ms

Remote clock offset: 3.684 ms

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

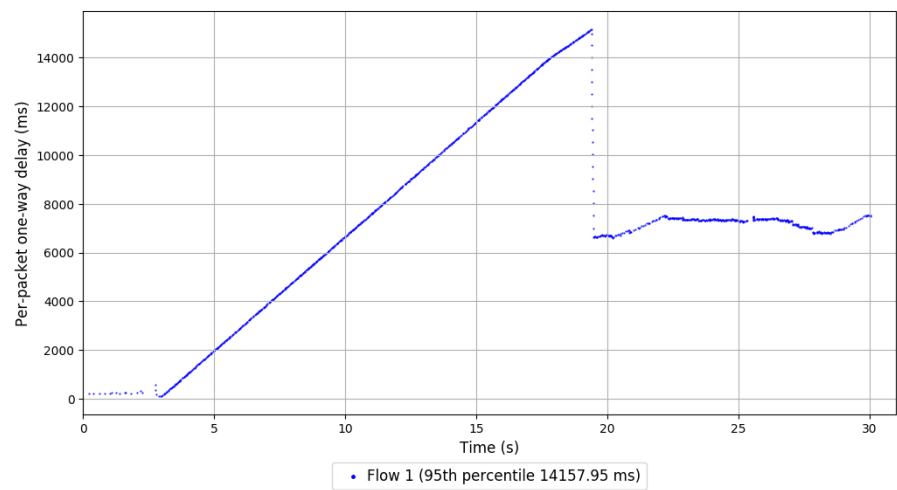
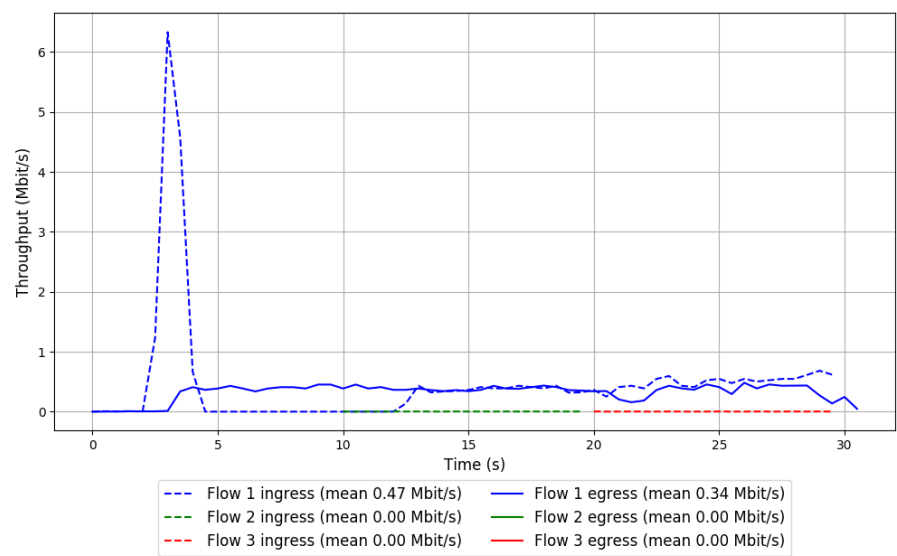
Start at: 2019-03-27 00:20:26

End at: 2019-03-27 00:20:56

Local clock offset: -5.945 ms

Remote clock offset: -2.893 ms

Run 3: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

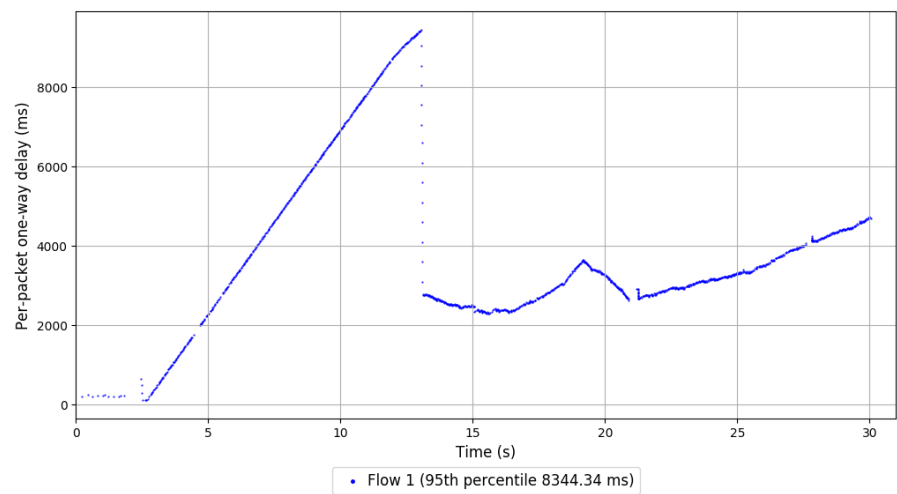
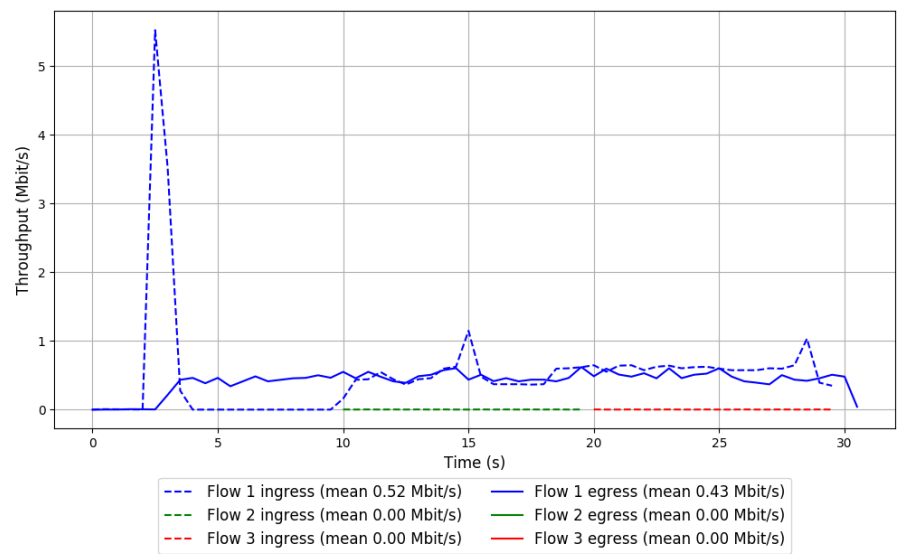
Start at: 2019-03-26 23:20:22

End at: 2019-03-26 23:20:52

Local clock offset: -3.869 ms

Remote clock offset: 3.234 ms

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

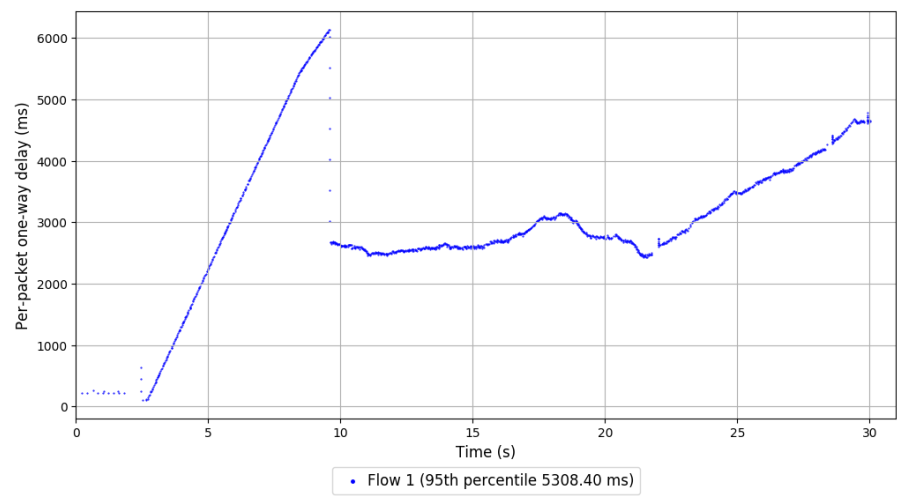
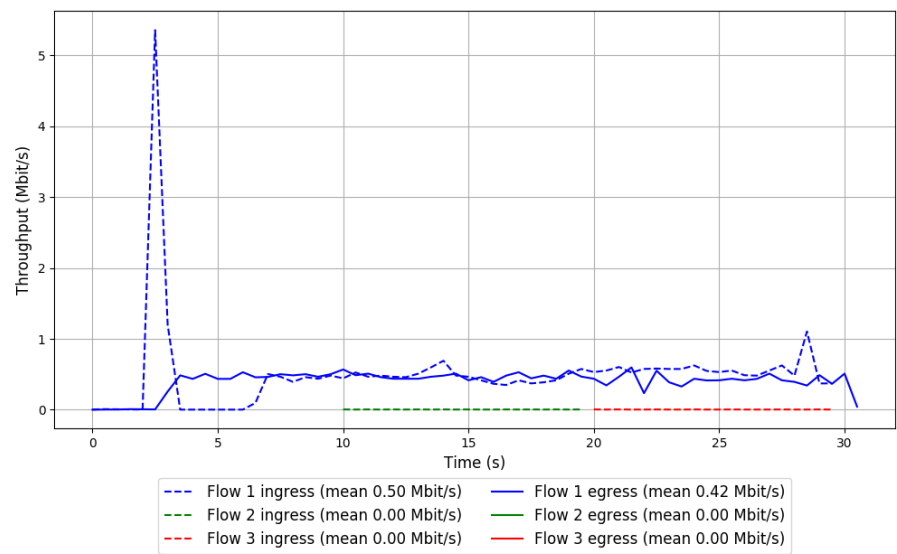
Start at: 2019-03-26 23:46:02

End at: 2019-03-26 23:46:32

Local clock offset: -8.23 ms

Remote clock offset: 5.106 ms

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

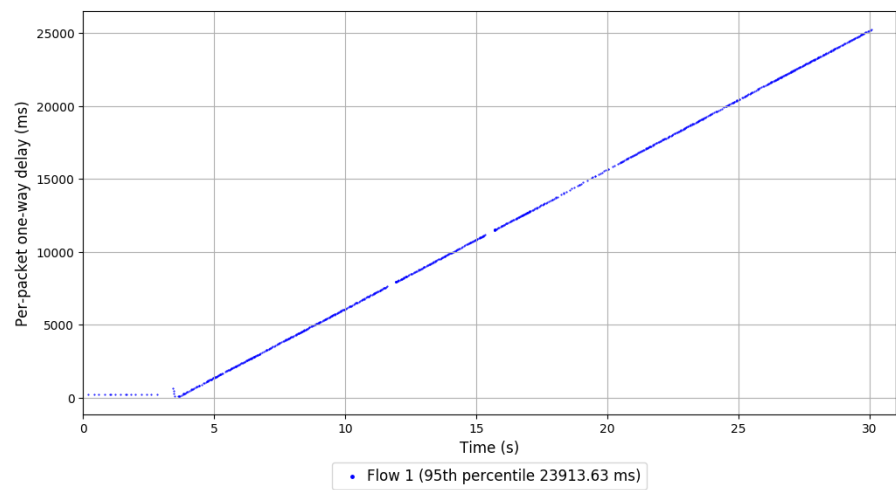
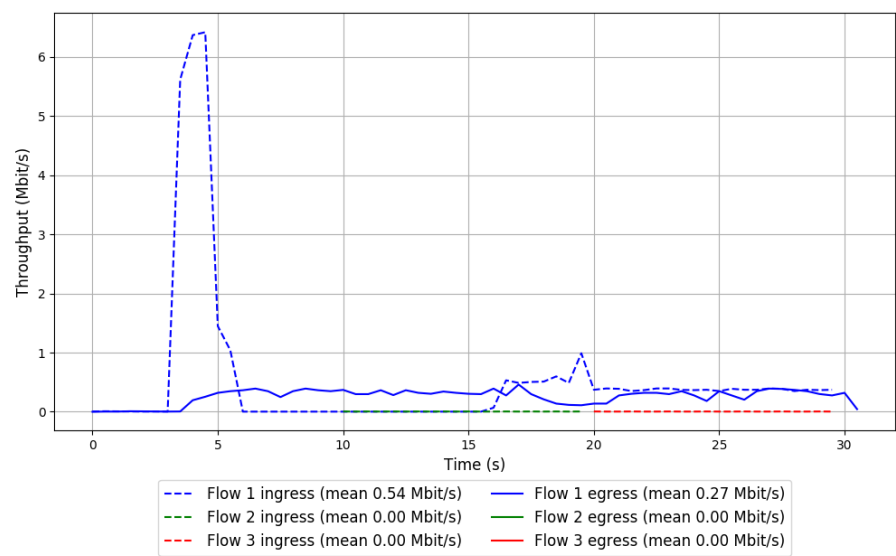
Start at: 2019-03-27 00:11:54

End at: 2019-03-27 00:12:24

Local clock offset: -7.065 ms

Remote clock offset: 1.234 ms

Run 3: Report of FillP-Sheep — Data Link

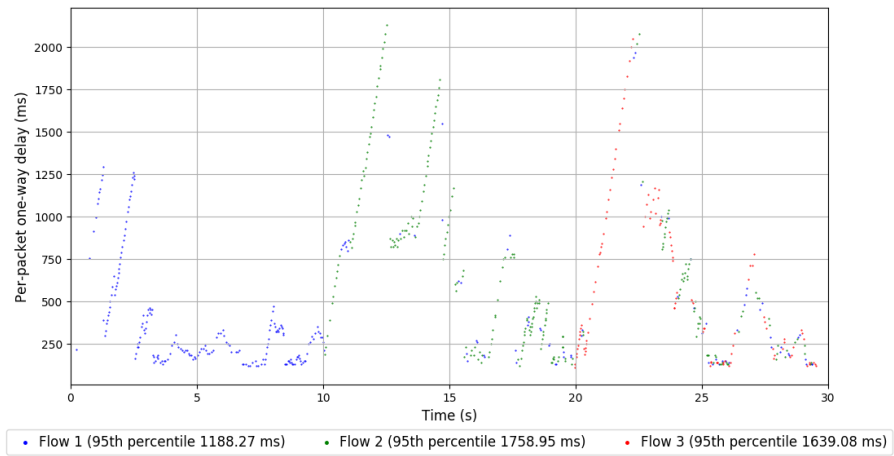
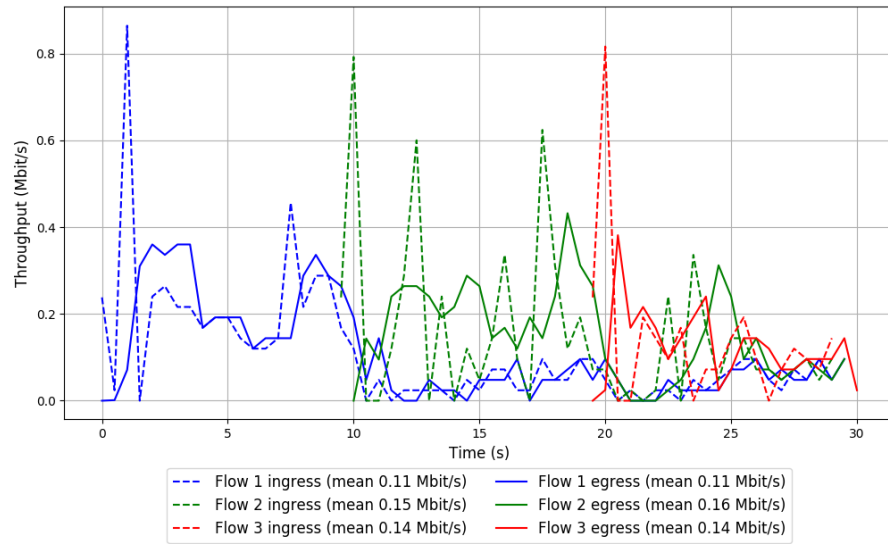


```
Run 1: Statistics of Indigo

Start at: 2019-03-26 23:33:47
End at: 2019-03-26 23:34:17
Local clock offset: -7.166 ms
Remote clock offset: 3.293 ms

# Below is generated by plot.py at 2019-03-27 00:37:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 1549.127 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 1188.265 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 1758.952 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 1639.080 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-03-26 23:59:33

End at: 2019-03-27 00:00:03

Local clock offset: -6.943 ms

Remote clock offset: -0.487 ms

Run 2: Report of Indigo — Data Link

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Run 3: Statistics of Indigo

Start at: 2019-03-27 00:25:20

End at: 2019-03-27 00:25:50

Local clock offset: -4.563 ms

Remote clock offset: 0.669 ms

Run 3: Report of Indigo — Data Link

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Run 1: Statistics of Indigo-MusesC3

Start at: 2019-03-26 23:22:48

End at: 2019-03-26 23:23:18

Local clock offset: -3.986 ms

Remote clock offset: 6.909 ms

Run 1: Report of Indigo-MusesC3 — Data Link

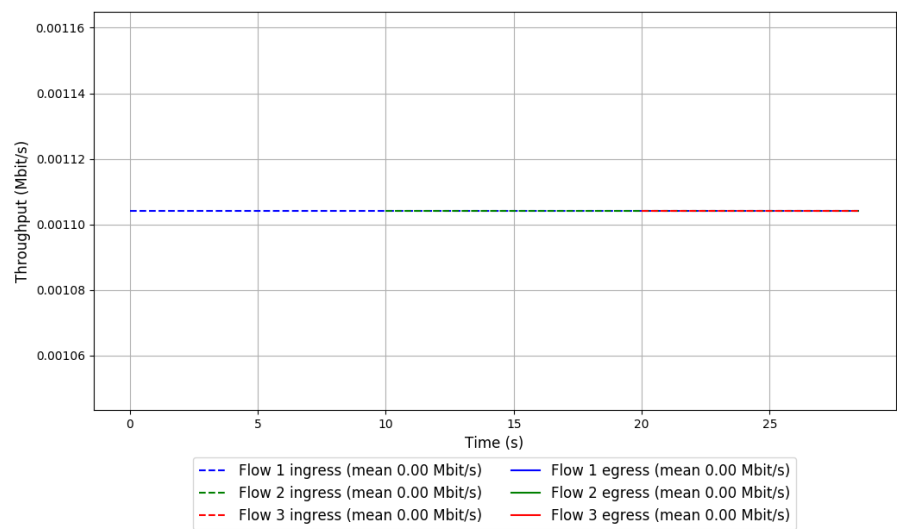


Figure is missing

Run 2: Statistics of Indigo-MusesC3

Start at: 2019-03-26 23:48:29

End at: 2019-03-26 23:48:59

Local clock offset: -7.309 ms

Remote clock offset: 5.831 ms

Run 2: Report of Indigo-MusesC3 — Data Link

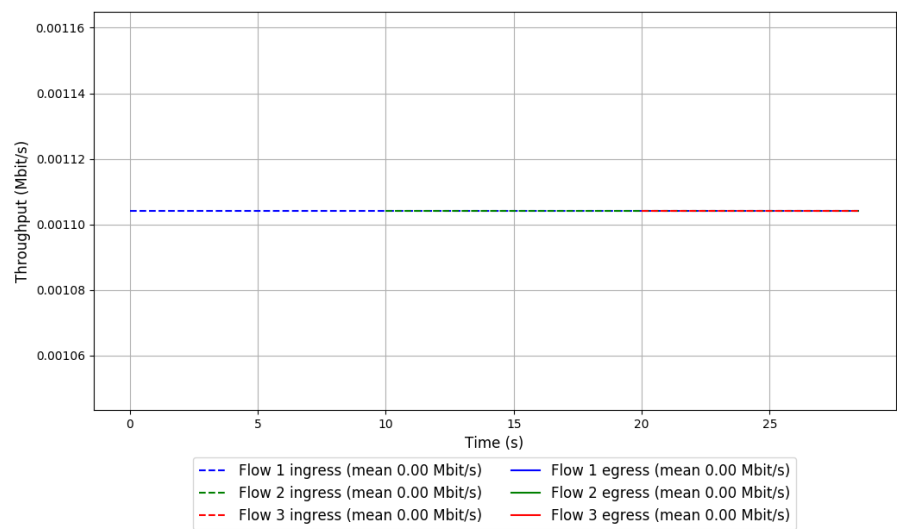


Figure is missing

Run 3: Statistics of Indigo-MusesC3

Start at: 2019-03-27 00:14:20

End at: 2019-03-27 00:14:50

Local clock offset: -7.123 ms

Remote clock offset: -2.442 ms

Run 3: Report of Indigo-MusesC3 — Data Link

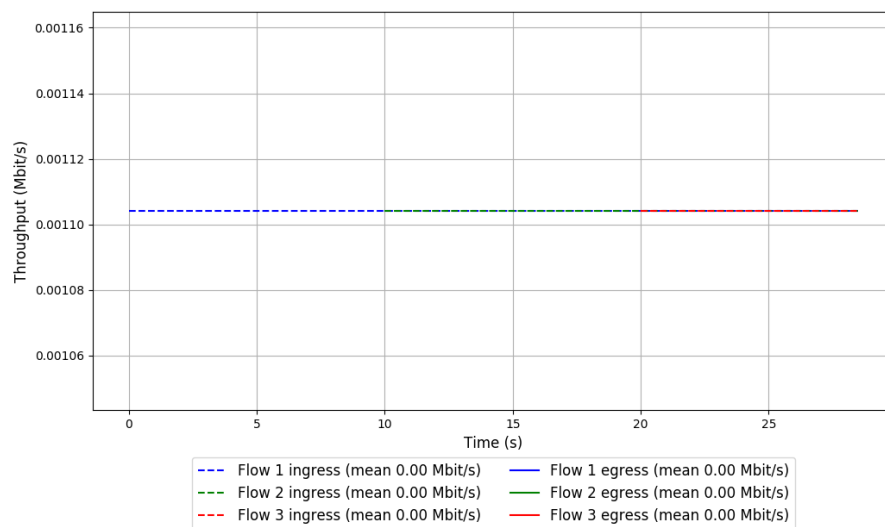


Figure is missing

Run 1: Statistics of Indigo-MusesC5

Start at: 2019-03-26 23:25:14

End at: 2019-03-26 23:25:44

Local clock offset: -4.743 ms

Remote clock offset: 3.047 ms

Run 1: Report of Indigo-MusesC5 — Data Link

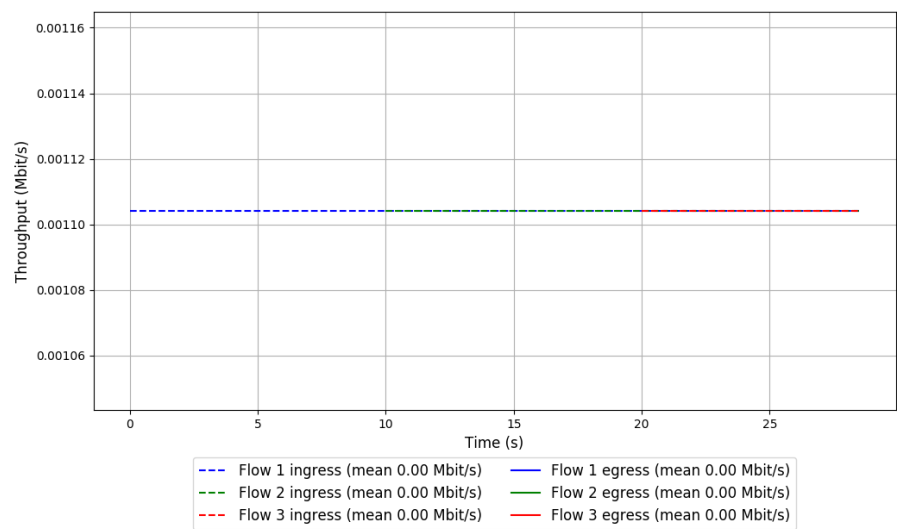


Figure is missing

Run 2: Statistics of Indigo-MusesC5

Start at: 2019-03-26 23:50:55

End at: 2019-03-26 23:51:25

Local clock offset: -7.084 ms

Remote clock offset: 4.339 ms

Run 2: Report of Indigo-MusesC5 — Data Link

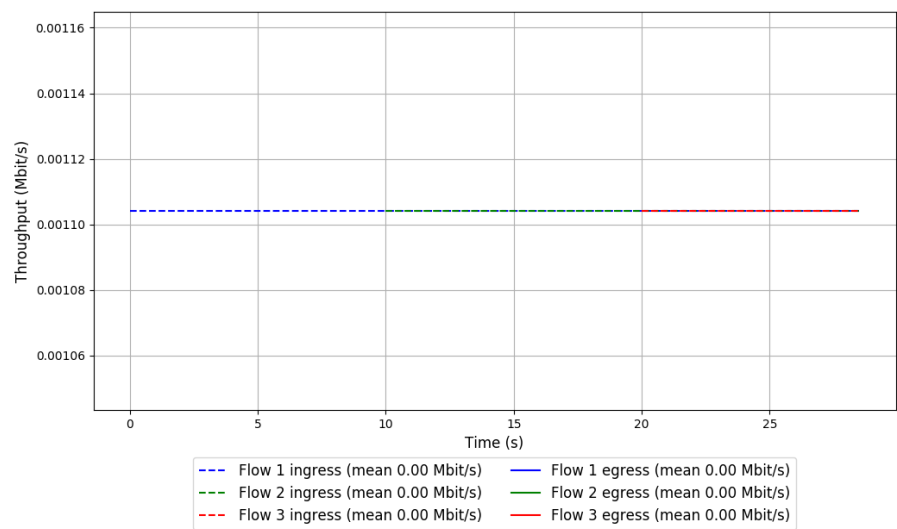


Figure is missing

Run 3: Statistics of Indigo-MusesC5

Start at: 2019-03-27 00:16:47

End at: 2019-03-27 00:17:17

Local clock offset: -7.57 ms

Remote clock offset: -1.503 ms

Run 3: Report of Indigo-MusesC5 — Data Link

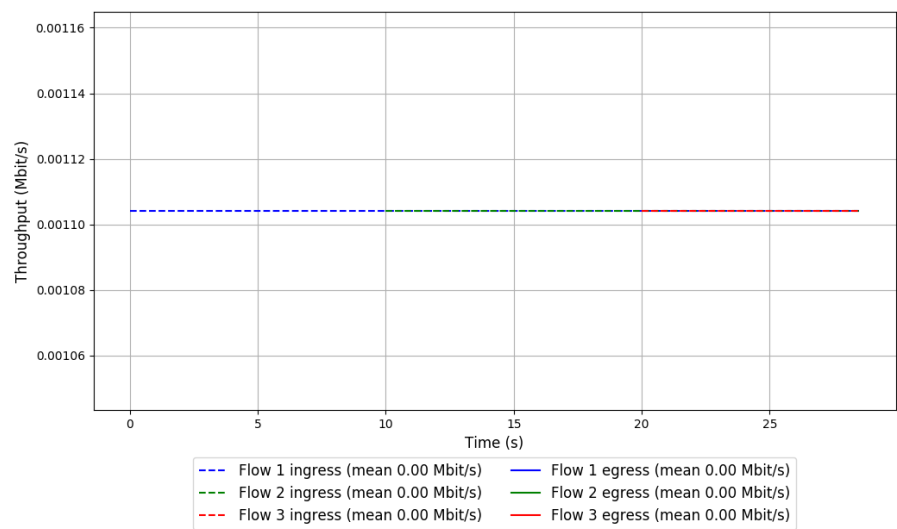


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Run 1: Statistics of Indigo-MusesD

Start at: 2019-03-26 23:26:28

End at: 2019-03-26 23:26:58

Local clock offset: -5.054 ms

Remote clock offset: 8.267 ms

Run 1: Report of Indigo-MusesD — Data Link

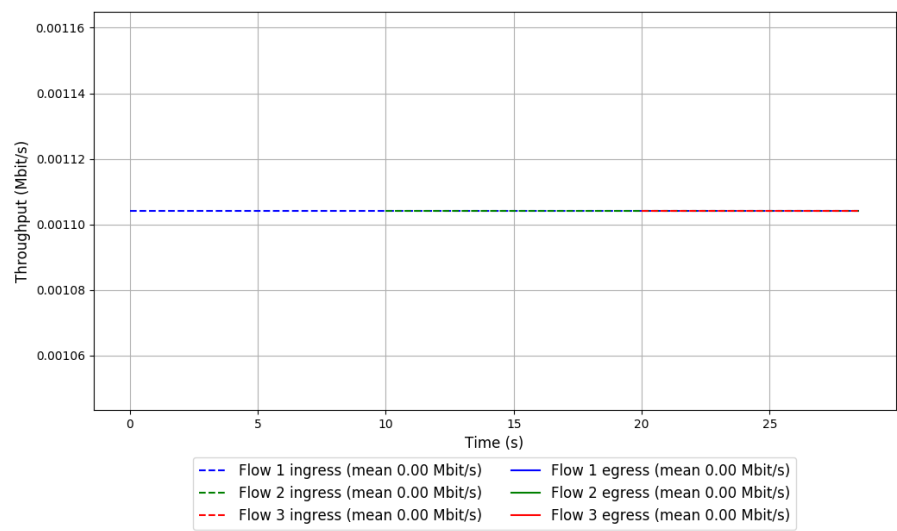


Figure is missing

Run 2: Statistics of Indigo-MusesD

Start at: 2019-03-26 23:52:08

End at: 2019-03-26 23:52:38

Local clock offset: -7.832 ms

Remote clock offset: 5.257 ms

Run 2: Report of Indigo-MusesD — Data Link

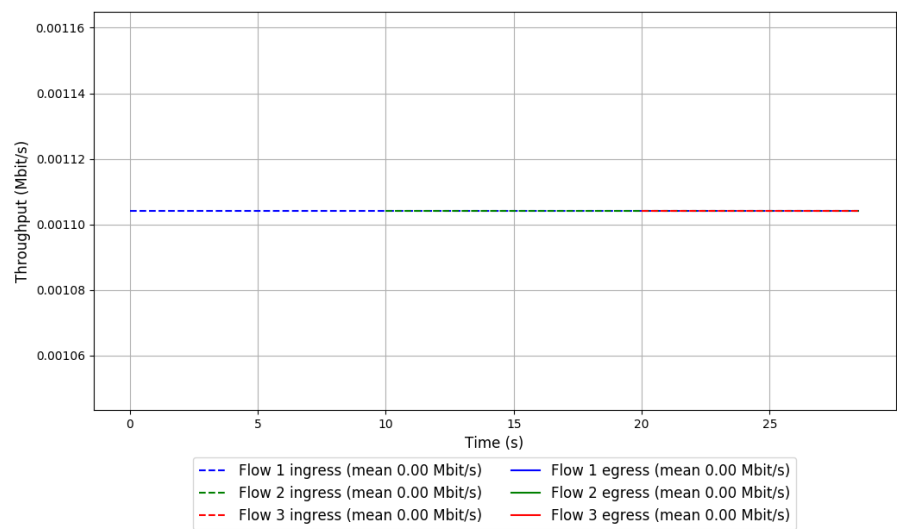


Figure is missing

Run 3: Statistics of Indigo-MusesD

Start at: 2019-03-27 00:18:00

End at: 2019-03-27 00:18:30

Local clock offset: -7.053 ms

Remote clock offset: 2.188 ms

Run 3: Report of Indigo-MusesD — Data Link

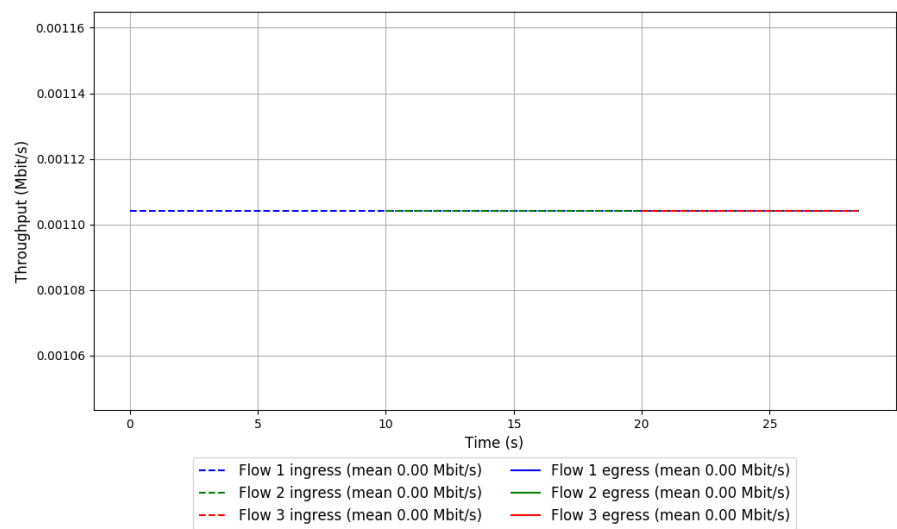


Figure is missing

Run 1: Statistics of Indigo-MusesT

Start at: 2019-03-26 23:24:01

End at: 2019-03-26 23:24:31

Local clock offset: -4.42 ms

Remote clock offset: 9.466 ms

Run 1: Report of Indigo-MusesT — Data Link

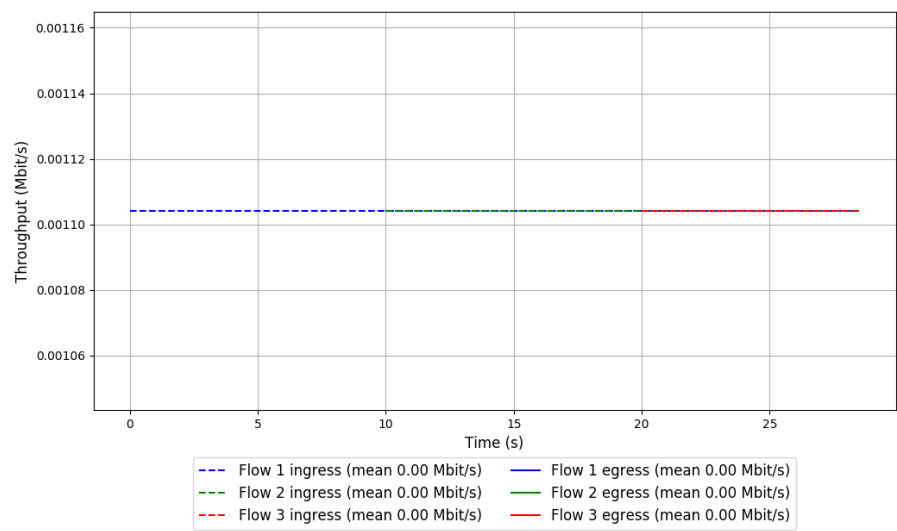


Figure is missing

Run 2: Statistics of Indigo-MusesT

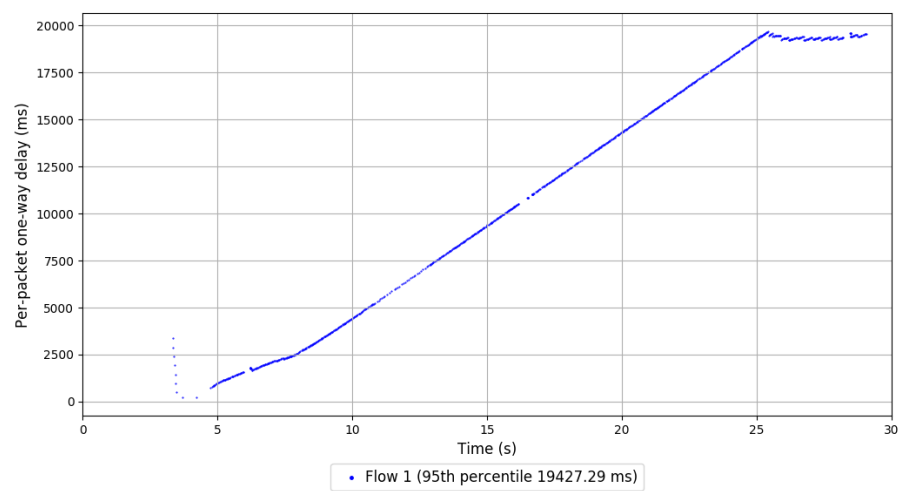
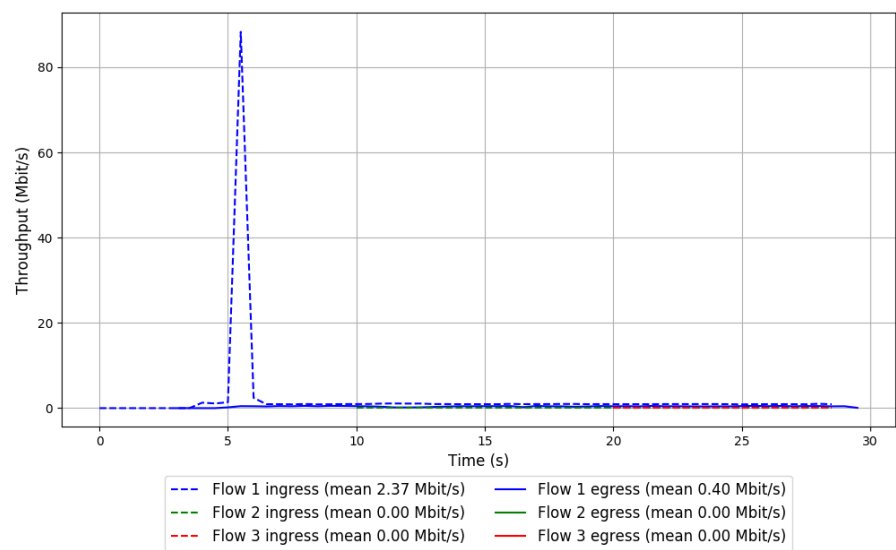
Start at: 2019-03-26 23:49:42

End at: 2019-03-26 23:50:12

Local clock offset: -7.935 ms

Remote clock offset: 5.685 ms

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

Start at: 2019-03-27 00:15:33

End at: 2019-03-27 00:16:03

Local clock offset: -7.923 ms

Remote clock offset: 3.53 ms

Run 3: Report of Indigo-MusesT — Data Link

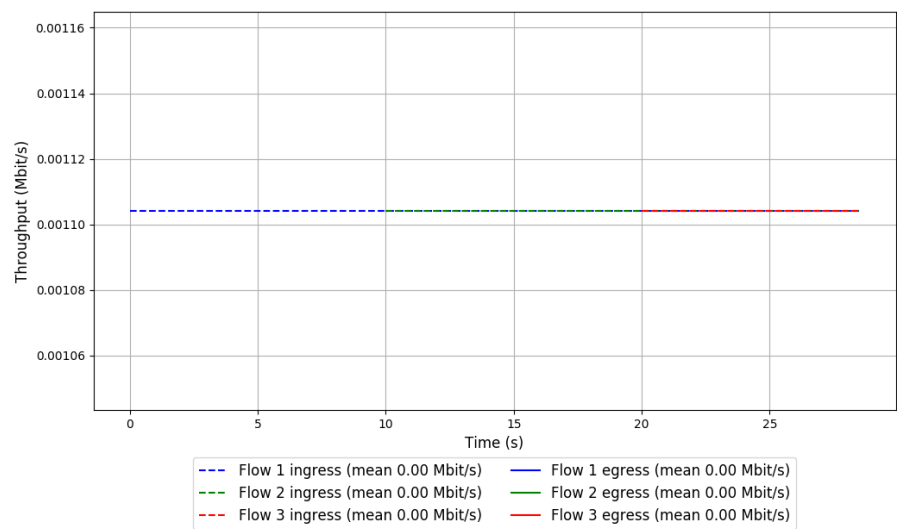


Figure is missing

Run 1: Statistics of LEDBAT

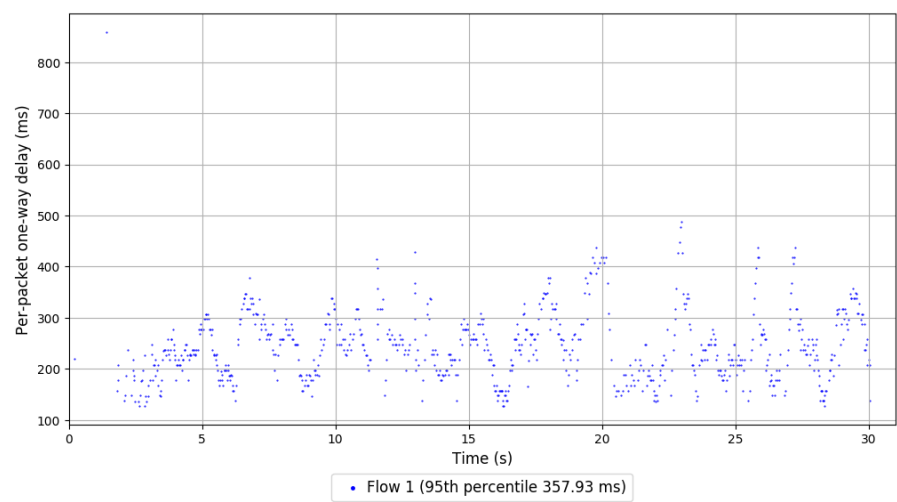
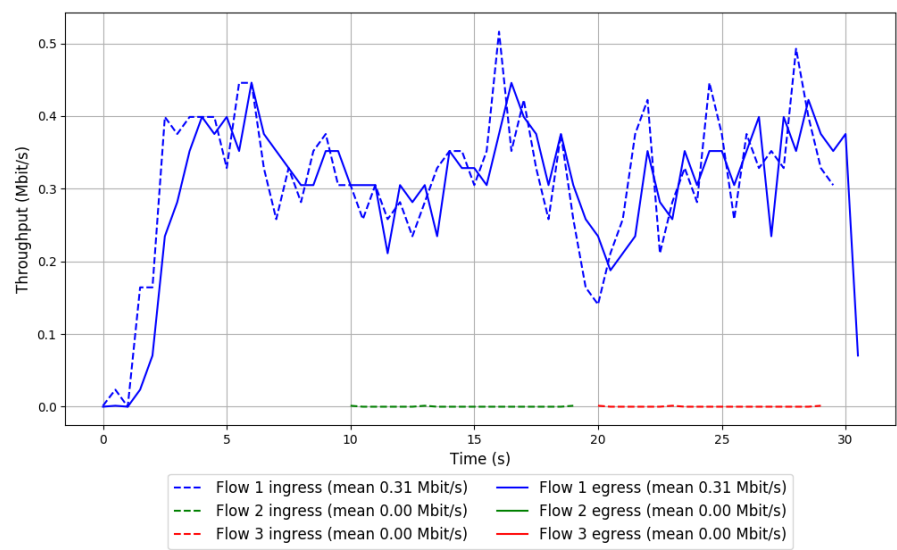
Start at: 2019-03-26 23:35:00

End at: 2019-03-26 23:35:30

Local clock offset: -6.519 ms

Remote clock offset: 7.196 ms

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

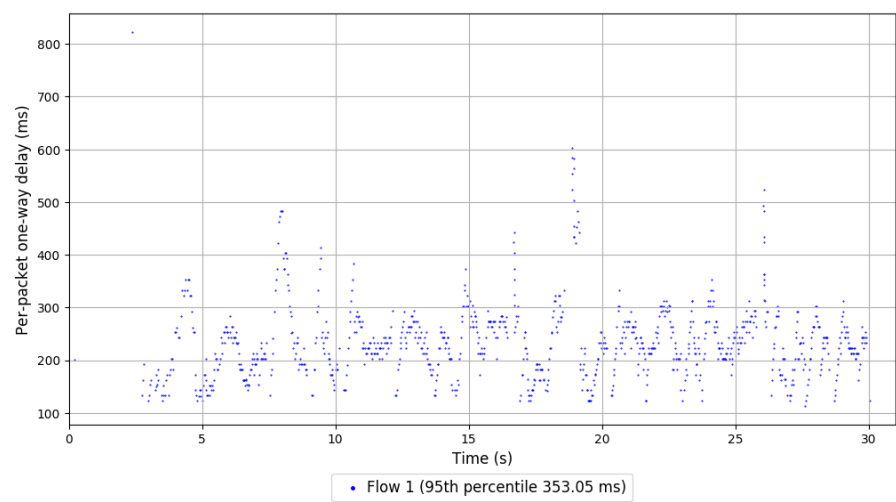
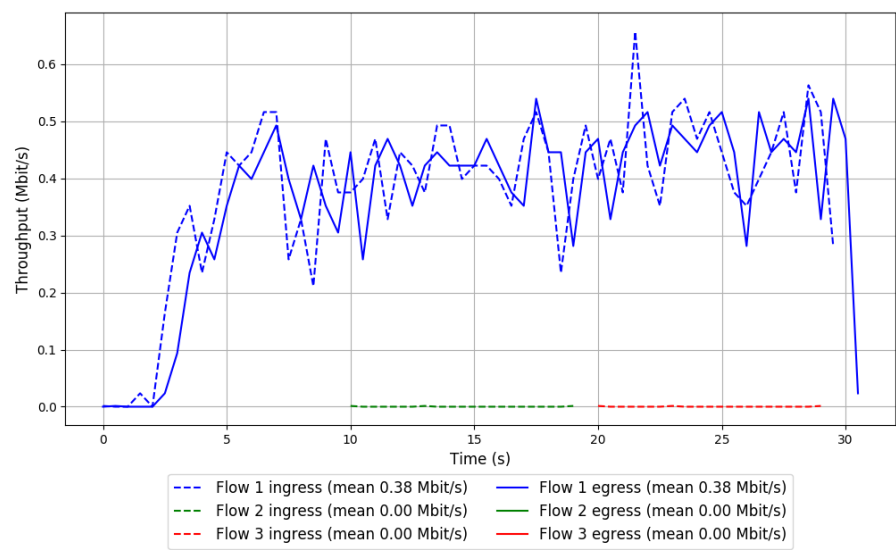
Start at: 2019-03-27 00:00:47

End at: 2019-03-27 00:01:17

Local clock offset: -7.777 ms

Remote clock offset: 2.53 ms

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

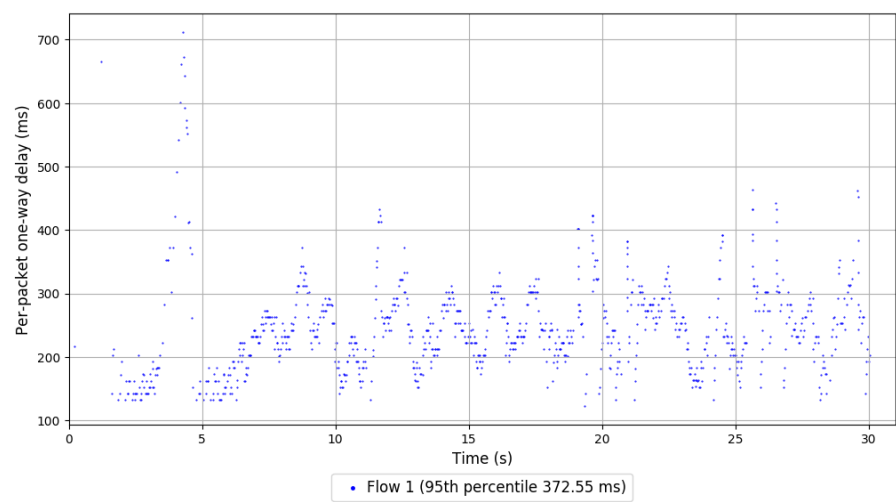
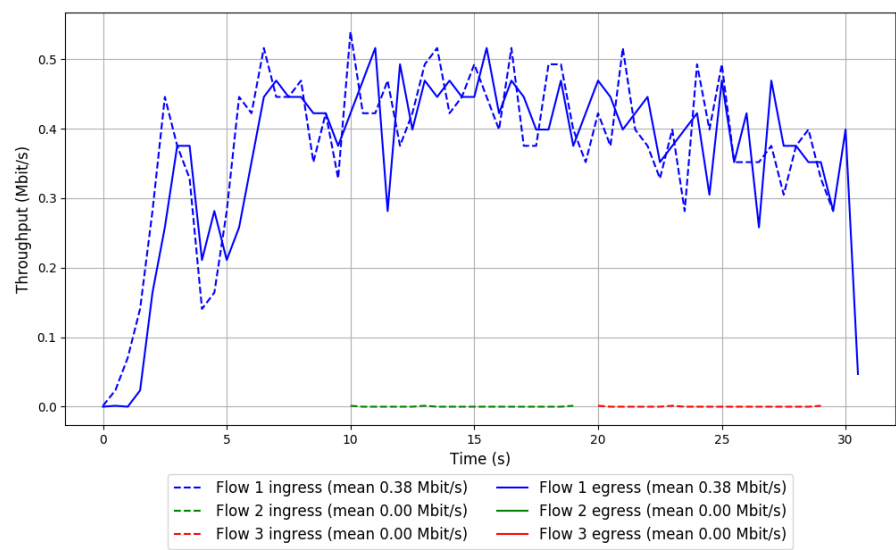
Start at: 2019-03-27 00:26:33

End at: 2019-03-27 00:27:03

Local clock offset: -3.47 ms

Remote clock offset: -3.209 ms

Run 3: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

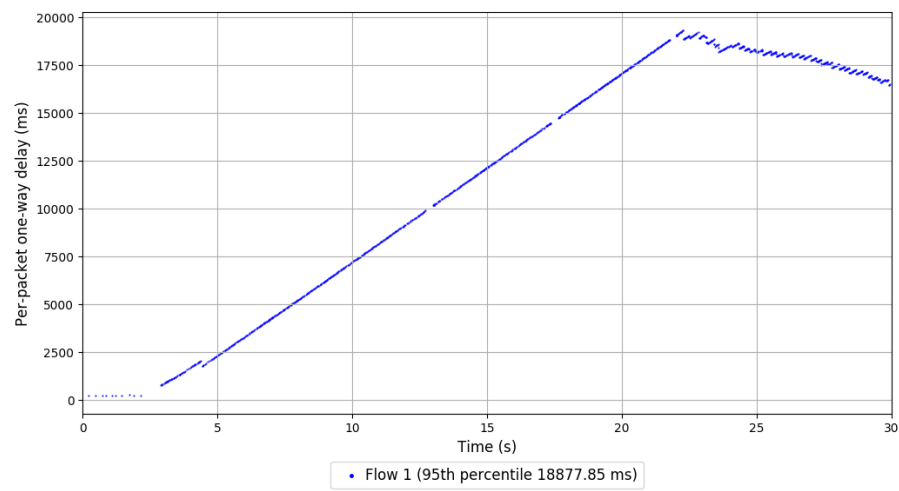
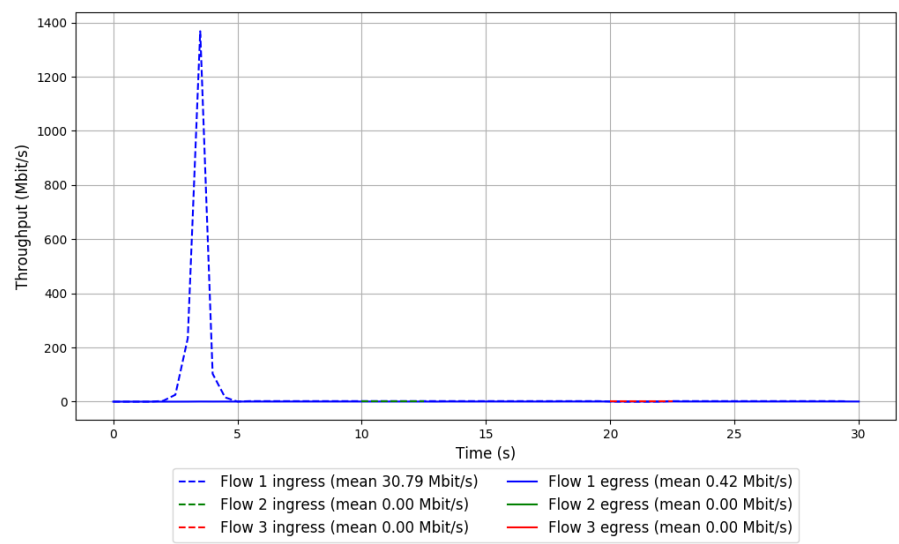
Start at: 2019-03-26 23:41:08

End at: 2019-03-26 23:41:38

Local clock offset: -7.859 ms

Remote clock offset: 2.609 ms

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

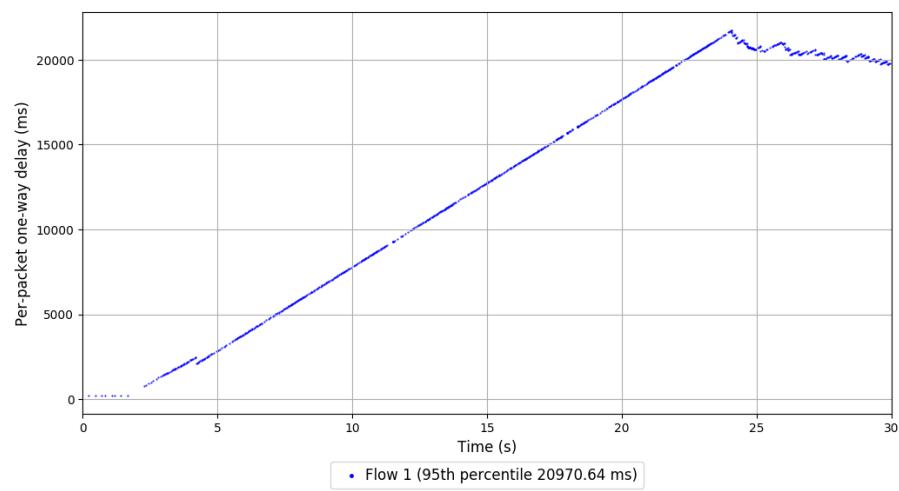
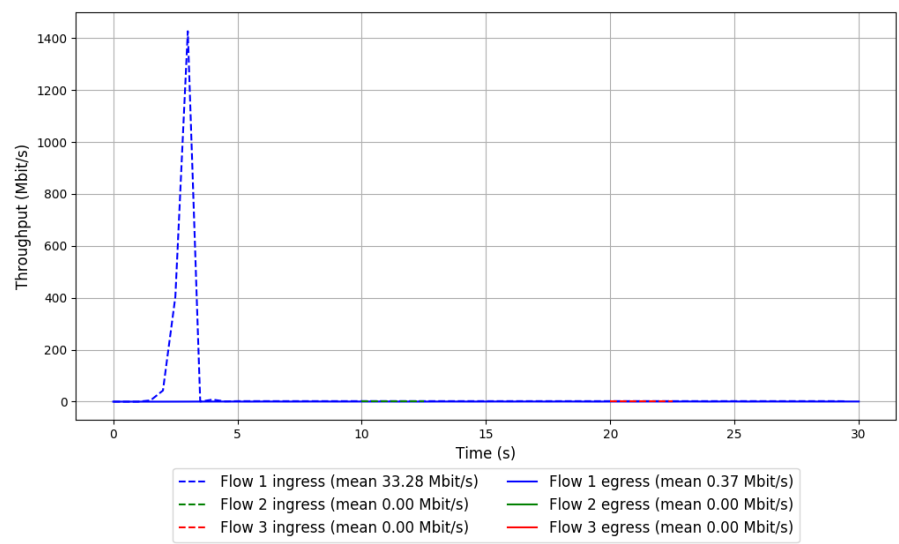
Start at: 2019-03-27 00:06:55

End at: 2019-03-27 00:07:25

Local clock offset: -6.993 ms

Remote clock offset: -0.854 ms

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

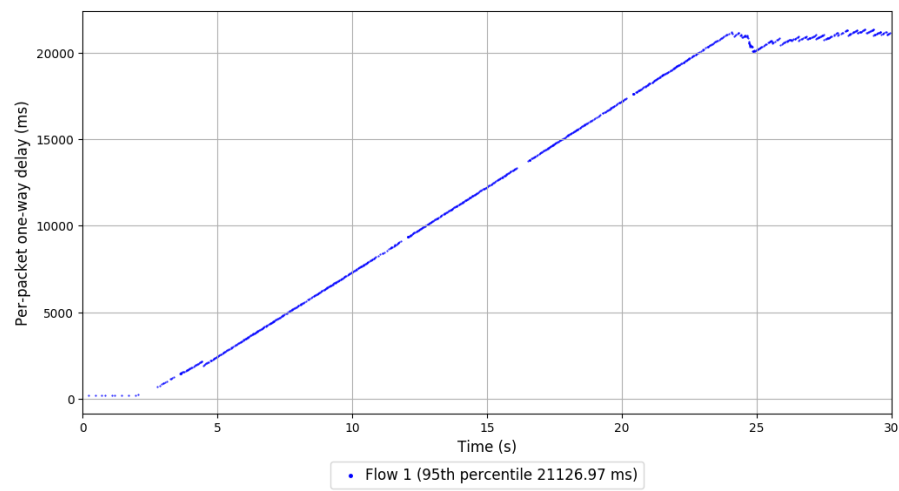
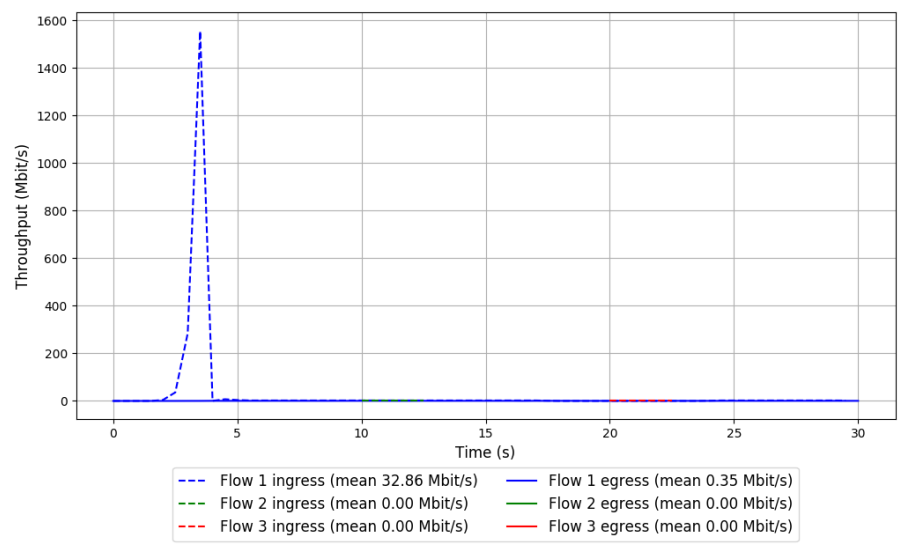
Start at: 2019-03-27 00:32:39

End at: 2019-03-27 00:33:09

Local clock offset: -2.493 ms

Remote clock offset: -3.551 ms

Run 3: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

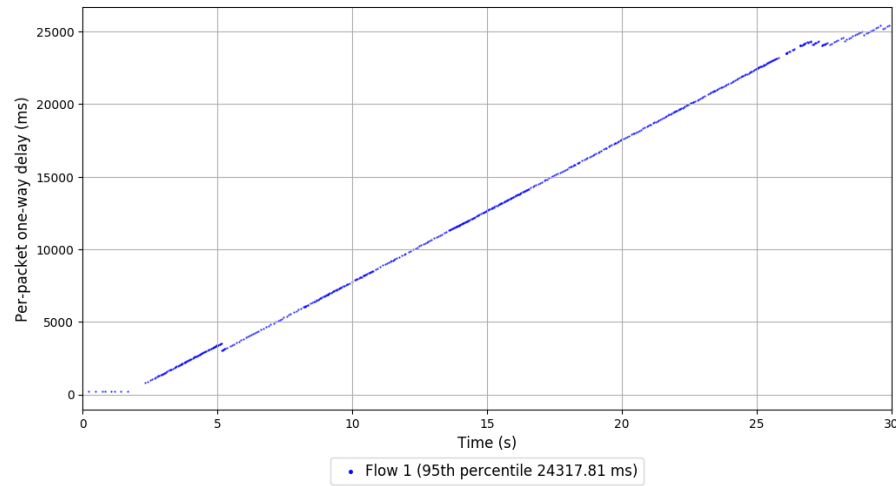
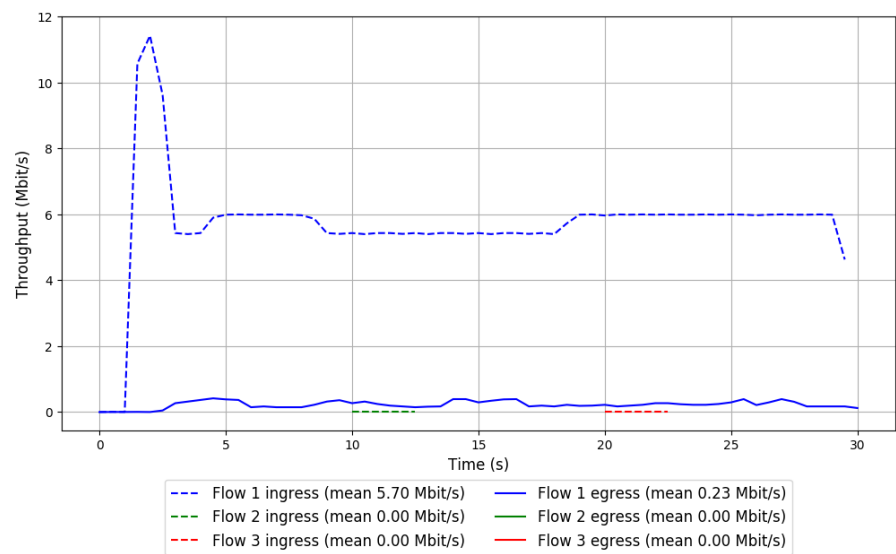
Start at: 2019-03-26 23:32:34

End at: 2019-03-26 23:33:04

Local clock offset: -6.98 ms

Remote clock offset: 4.239 ms

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

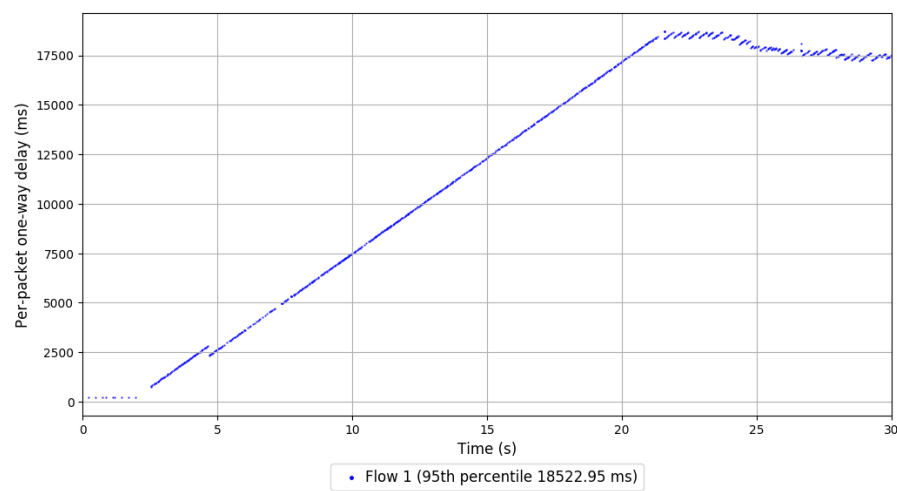
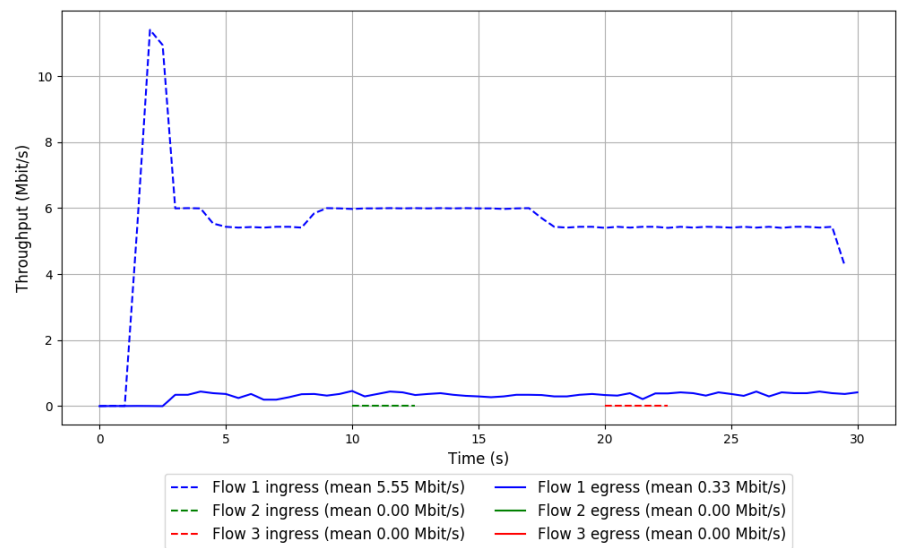
Start at: 2019-03-26 23:58:20

End at: 2019-03-26 23:58:50

Local clock offset: -7.767 ms

Remote clock offset: -0.243 ms

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

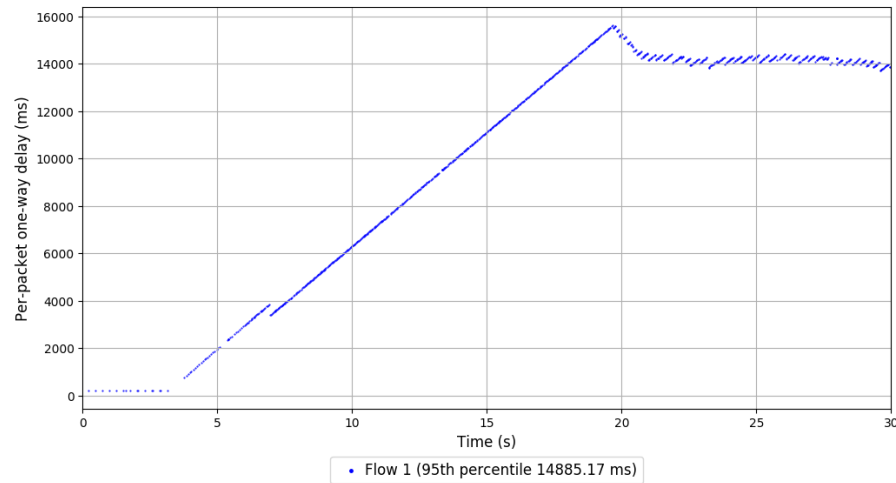
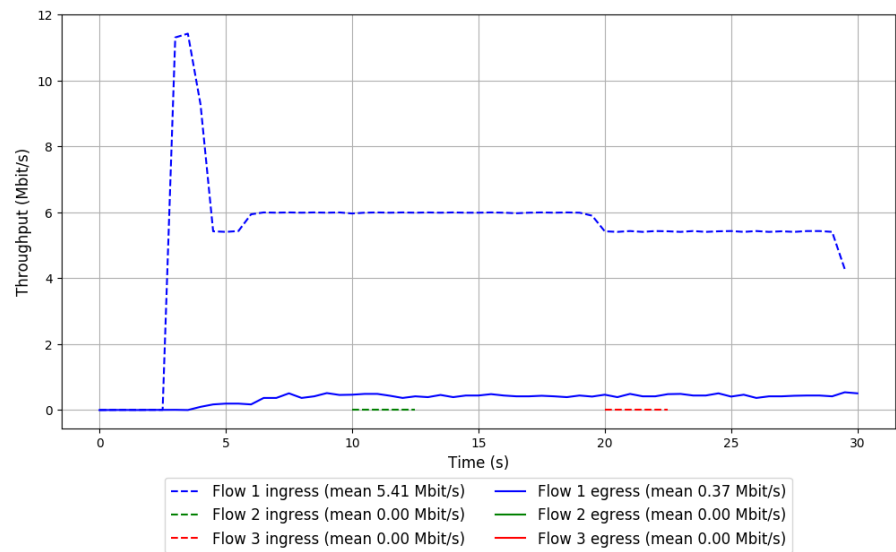
Start at: 2019-03-27 00:24:06

End at: 2019-03-27 00:24:36

Local clock offset: -4.024 ms

Remote clock offset: -3.113 ms

Run 3: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-03-26 23:38:41

End at: 2019-03-26 23:39:11

Local clock offset: -7.729 ms

Remote clock offset: 2.246 ms

Run 1: Report of QUIC Cubic — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of QUIC Cubic

Start at: 2019-03-27 00:04:28

End at: 2019-03-27 00:04:58

Local clock offset: -6.963 ms

Remote clock offset: -1.87 ms

Run 2: Report of QUIC Cubic — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of QUIC Cubic

Start at: 2019-03-27 00:30:13

End at: 2019-03-27 00:30:43

Local clock offset: -2.898 ms

Remote clock offset: -2.332 ms

Run 3: Report of QUIC Cubic — Data Link

Figure is missing

Figure is missing

Run 1: Statistics of SCReAM

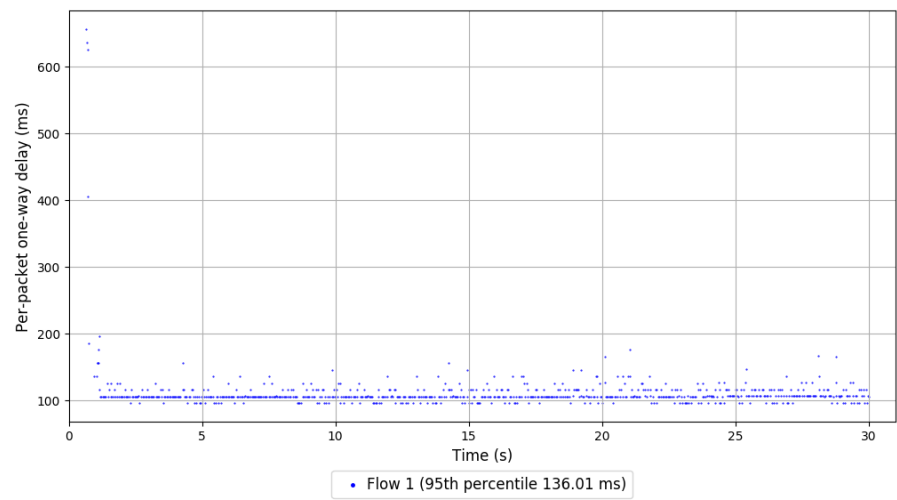
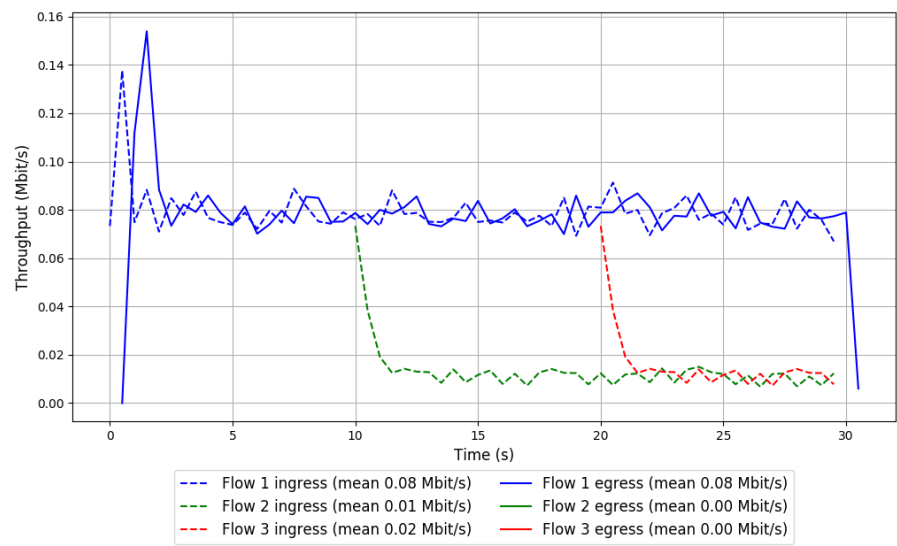
Start at: 2019-03-26 23:21:35

End at: 2019-03-26 23:22:05

Local clock offset: -4.226 ms

Remote clock offset: 3.015 ms

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

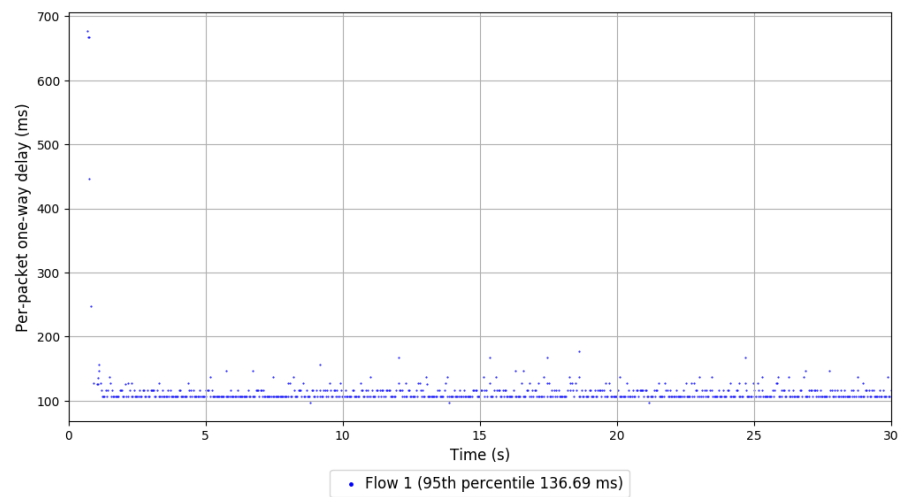
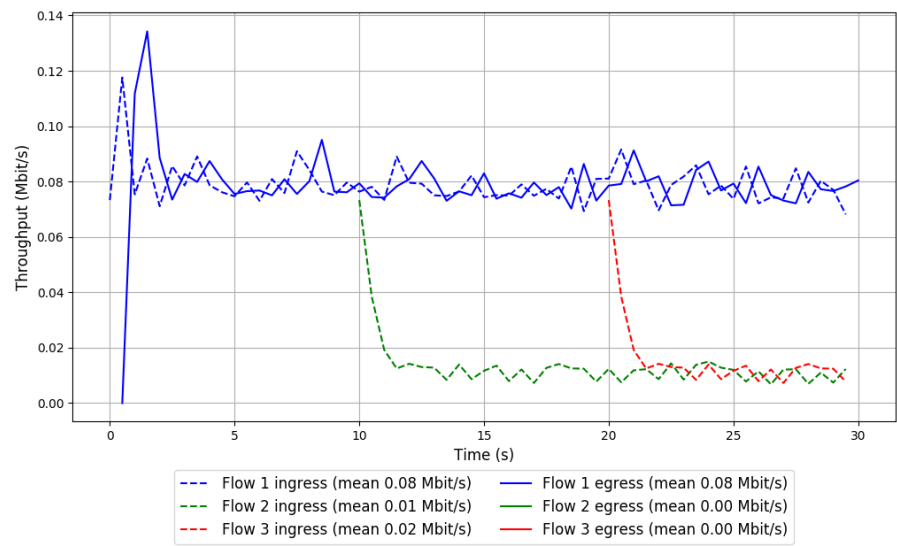
Start at: 2019-03-26 23:47:16

End at: 2019-03-26 23:47:46

Local clock offset: -7.31 ms

Remote clock offset: 0.924 ms

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

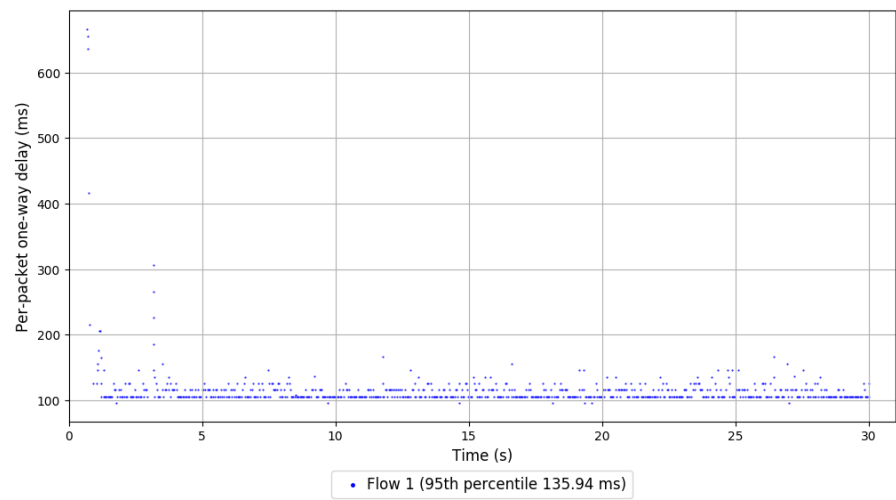
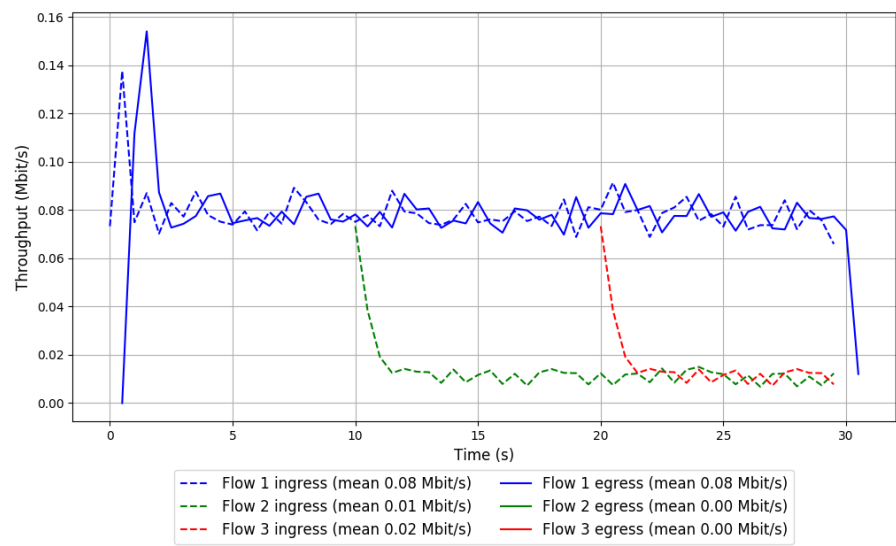
Start at: 2019-03-27 00:13:07

End at: 2019-03-27 00:13:37

Local clock offset: -7.152 ms

Remote clock offset: -2.438 ms

Run 3: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-03-26 23:39:55

End at: 2019-03-26 23:40:25

Local clock offset: -7.796 ms

Remote clock offset: 6.626 ms

Run 1: Report of Sprout — Data Link

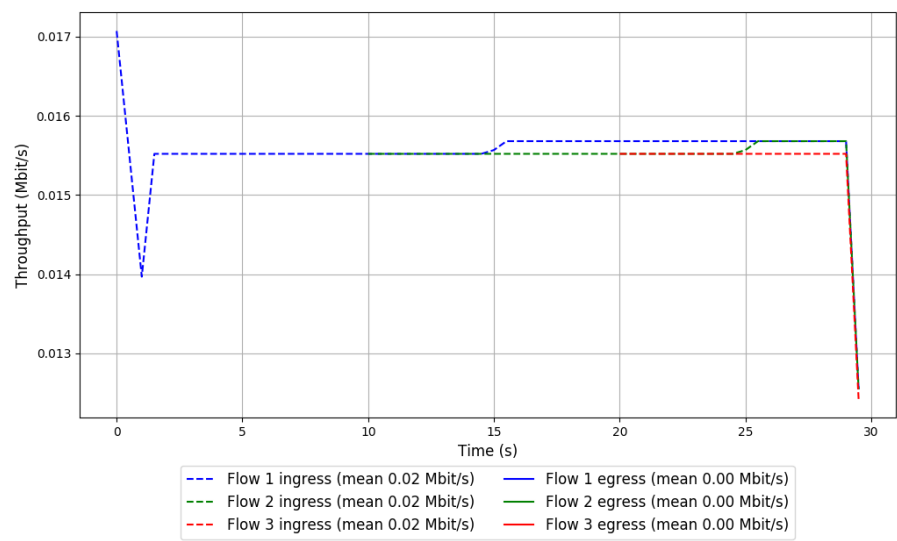


Figure is missing

Run 2: Statistics of Sprout

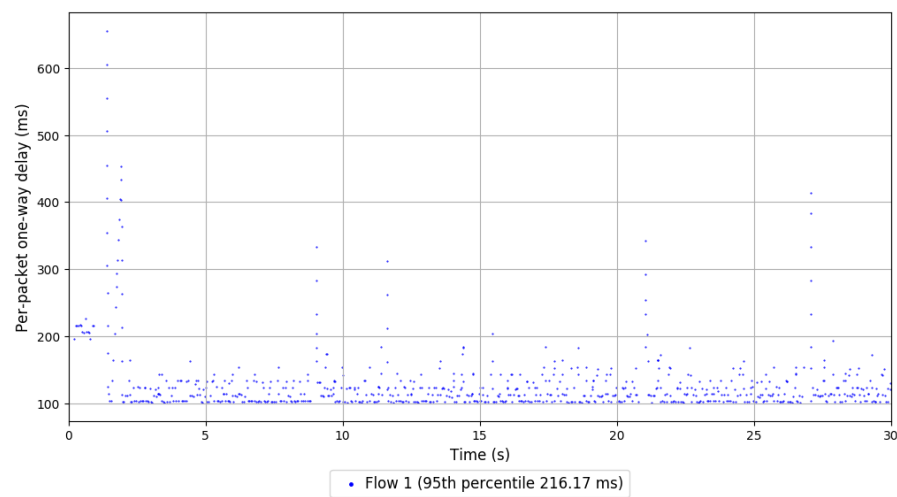
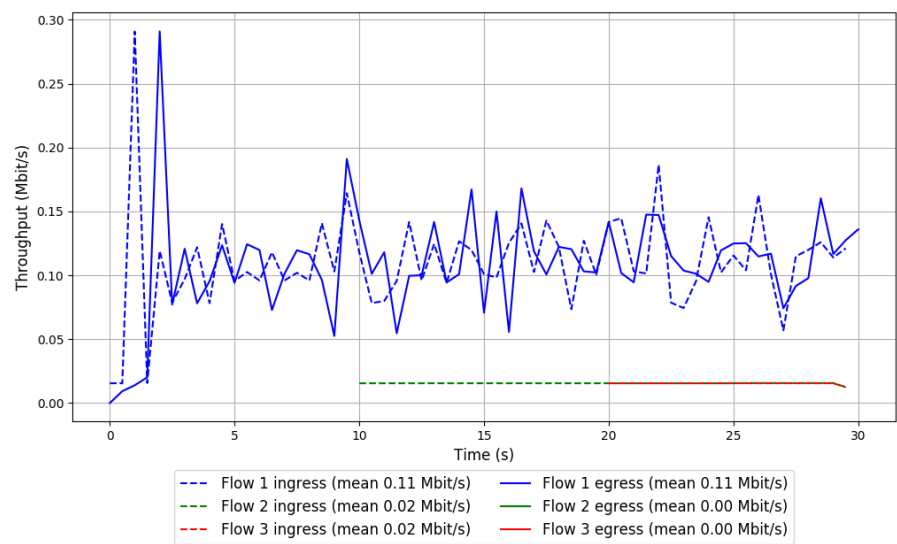
Start at: 2019-03-27 00:05:42

End at: 2019-03-27 00:06:12

Local clock offset: -7.732 ms

Remote clock offset: 2.002 ms

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

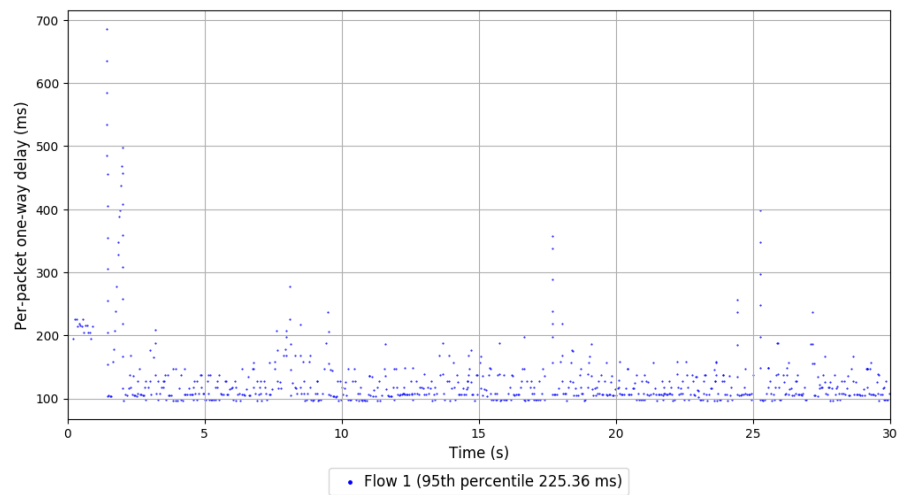
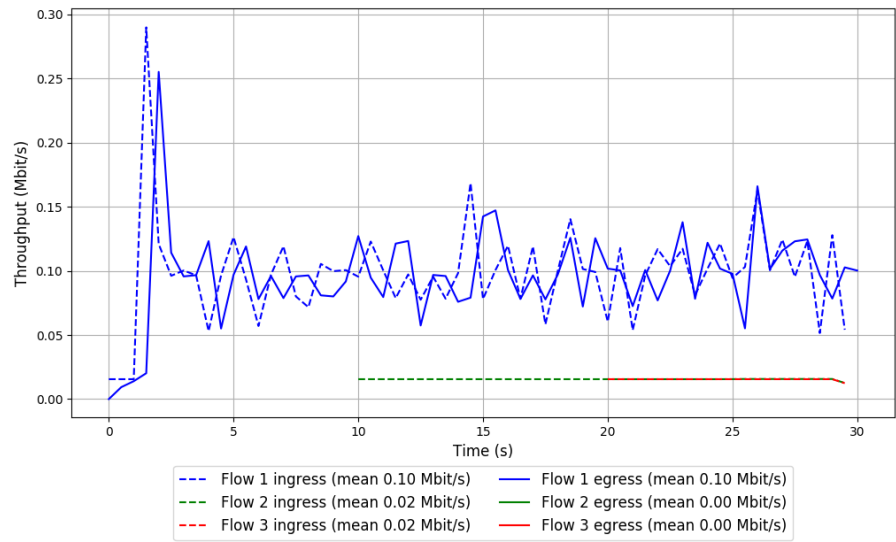
Start at: 2019-03-27 00:31:26

End at: 2019-03-27 00:31:56

Local clock offset: -3.487 ms

Remote clock offset: -2.404 ms

Run 3: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

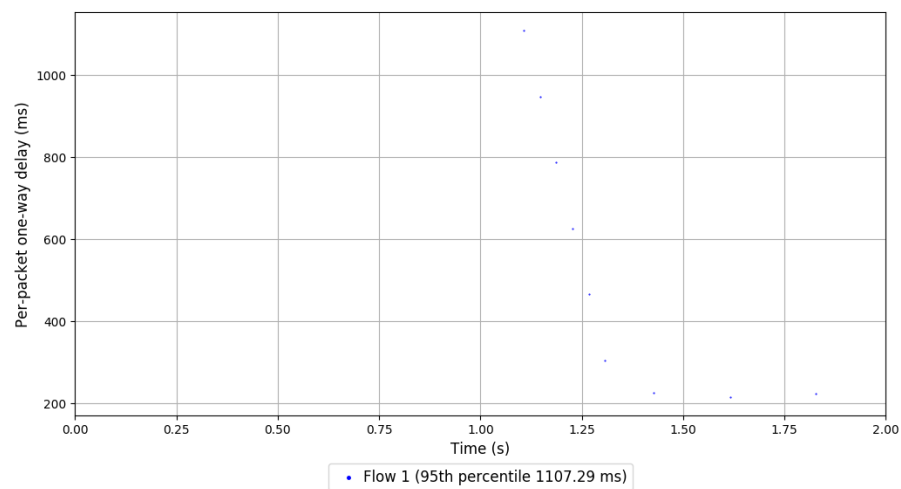
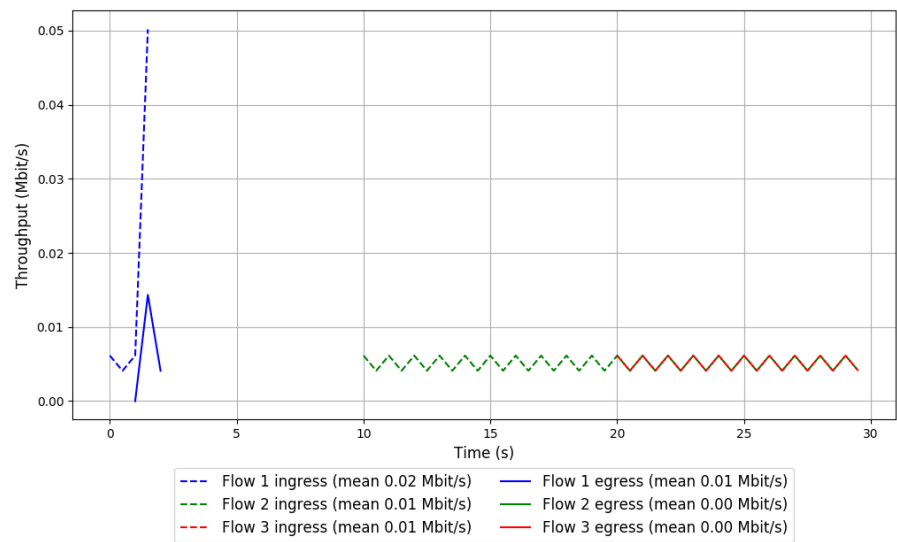
Start at: 2019-03-26 23:31:20

End at: 2019-03-26 23:31:50

Local clock offset: -6.032 ms

Remote clock offset: 7.125 ms

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



Run 2: Statistics of TaoVA-100x

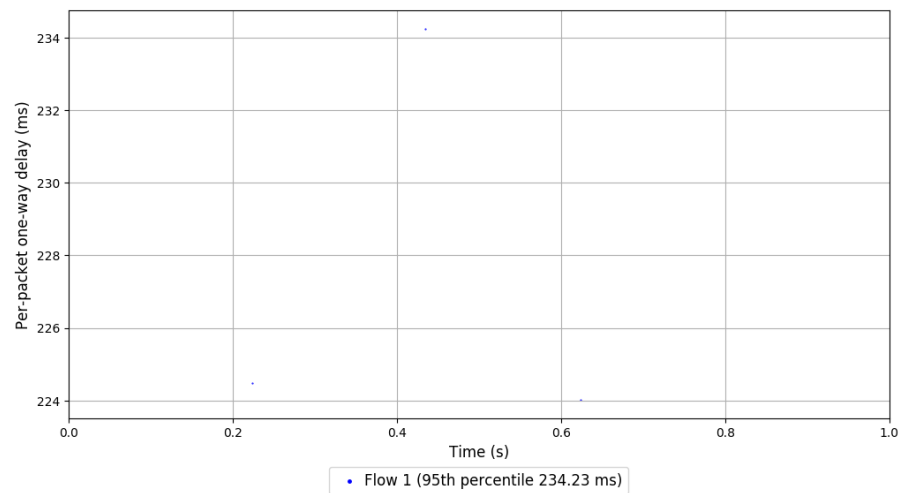
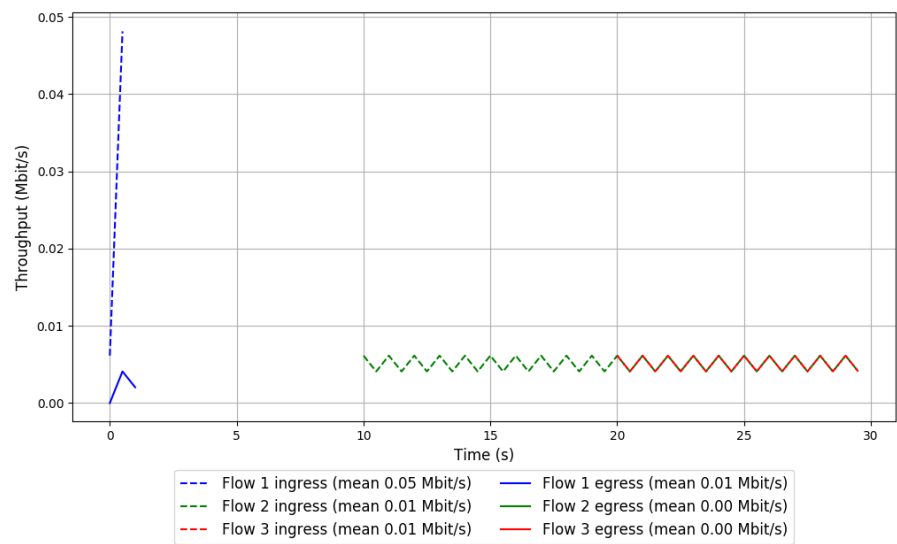
Start at: 2019-03-26 23:57:07

End at: 2019-03-26 23:57:37

Local clock offset: -7.016 ms

Remote clock offset: -0.368 ms

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



Run 3: Statistics of TaoVA-100x

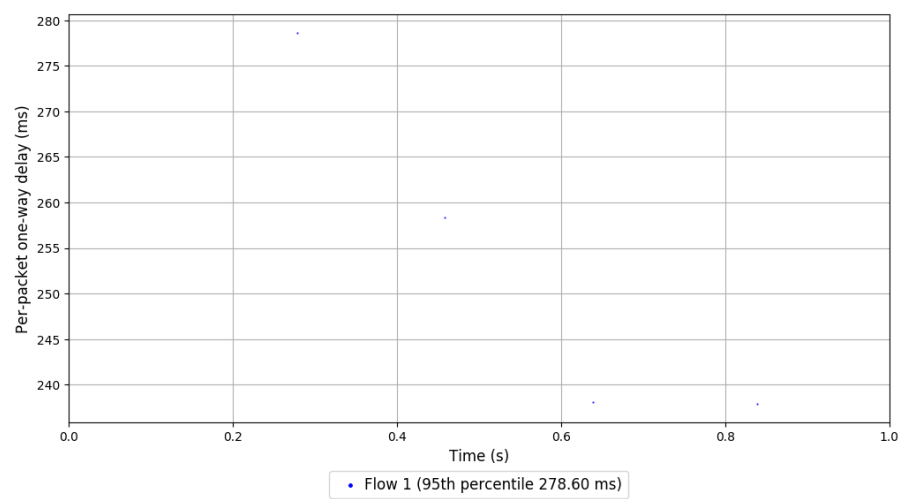
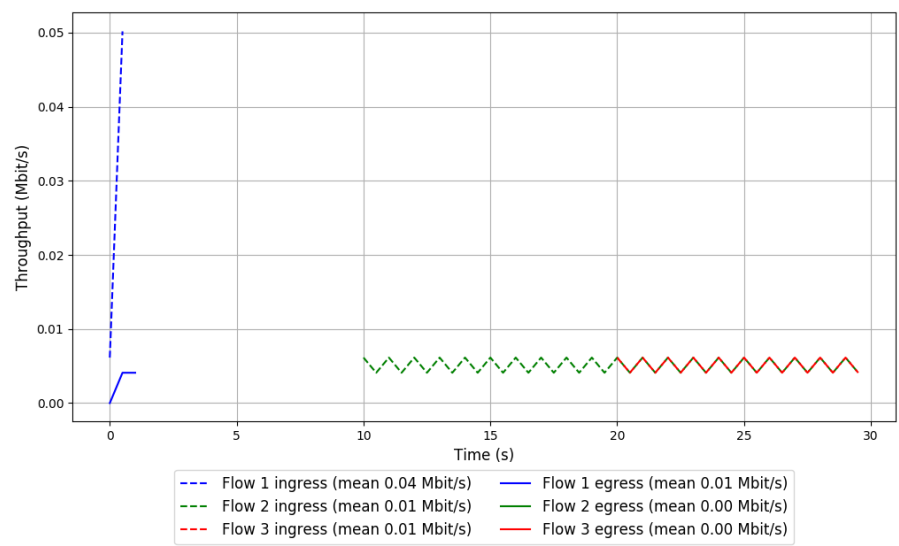
Start at: 2019-03-27 00:22:53

End at: 2019-03-27 00:23:23

Local clock offset: -4.44 ms

Remote clock offset: 1.709 ms

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



Run 1: Statistics of TCP Vegas

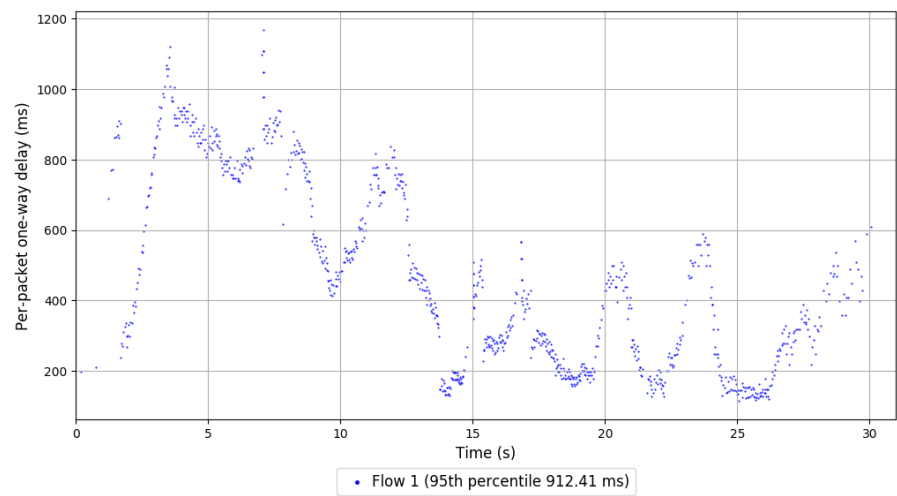
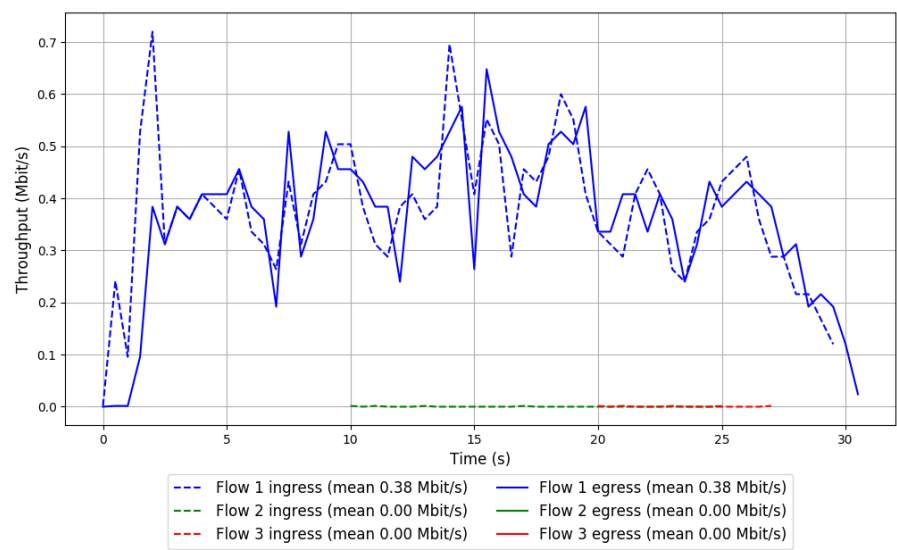
Start at: 2019-03-26 23:27:41

End at: 2019-03-26 23:28:11

Local clock offset: -6.114 ms

Remote clock offset: 3.183 ms

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

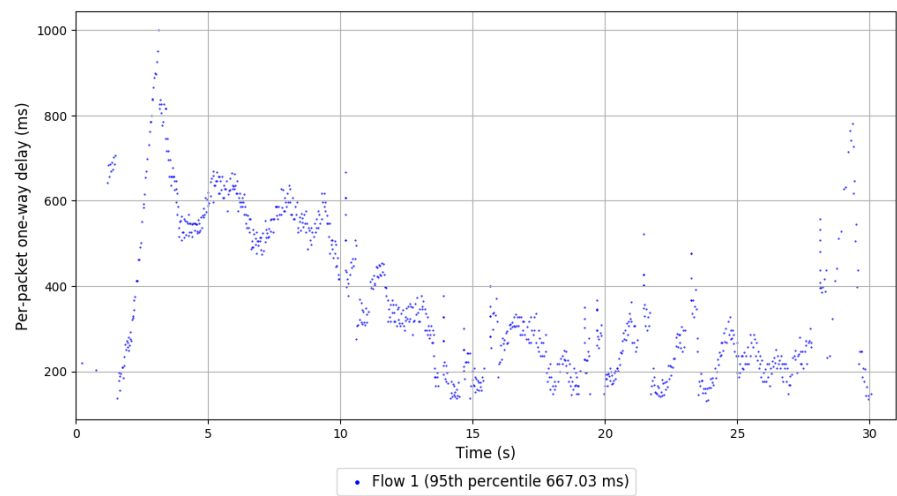
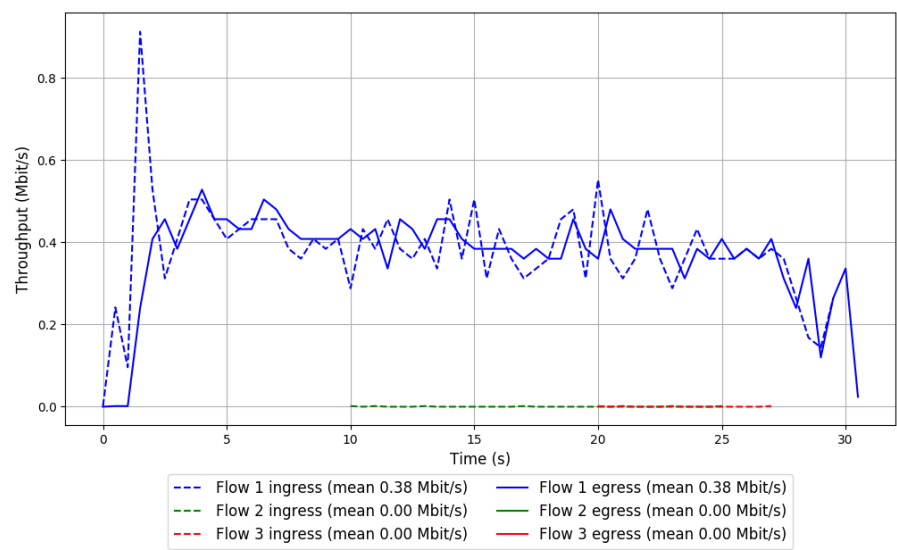
Start at: 2019-03-26 23:53:22

End at: 2019-03-26 23:53:52

Local clock offset: -7.068 ms

Remote clock offset: 3.795 ms

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

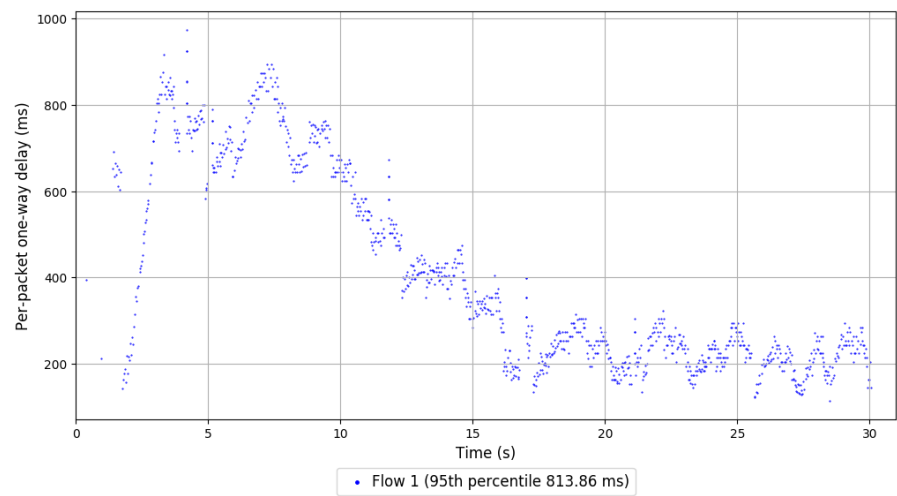
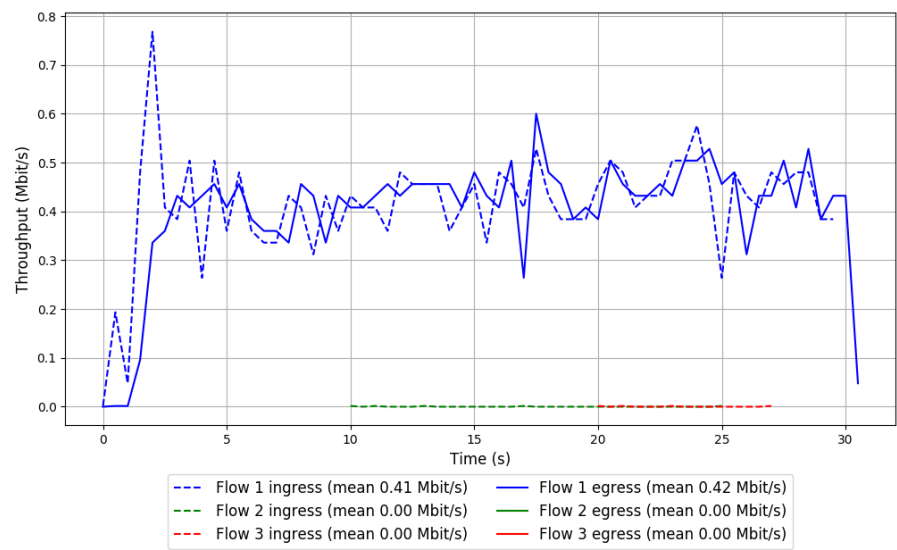
Start at: 2019-03-27 00:19:13

End at: 2019-03-27 00:19:43

Local clock offset: -5.711 ms

Remote clock offset: -2.817 ms

Run 3: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-03-26 23:43:35

End at: 2019-03-26 23:44:05

Local clock offset: -7.227 ms

Remote clock offset: 1.808 ms

Run 1: Report of Verus — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of Verus

Start at: 2019-03-27 00:09:27

End at: 2019-03-27 00:09:57

Local clock offset: -7.766 ms

Remote clock offset: 4.079 ms

Below is generated by plot.py at 2019-03-27 00:37:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.37 Mbit/s

95th percentile per-packet one-way delay: 2319.331 ms

Loss rate: 3.54%

-- Flow 1:

Average throughput: 0.35 Mbit/s

95th percentile per-packet one-way delay: 2307.108 ms

Loss rate: 3.46%

-- Flow 2:

Average throughput: 0.02 Mbit/s

95th percentile per-packet one-way delay: 3098.827 ms

Loss rate: 3.70%

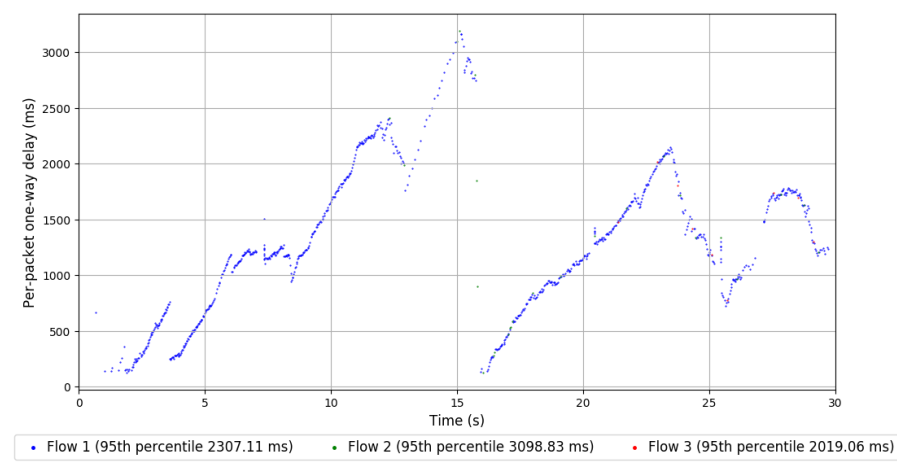
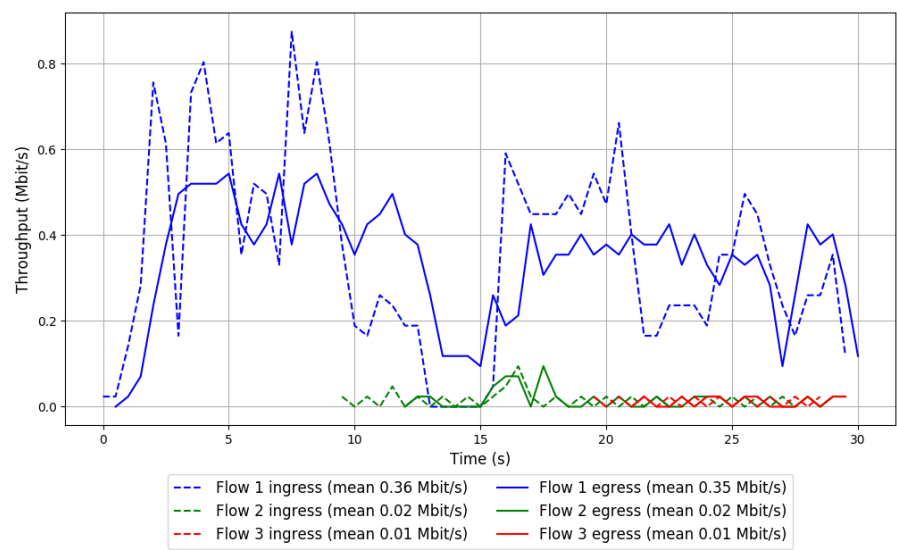
-- Flow 3:

Average throughput: 0.01 Mbit/s

95th percentile per-packet one-way delay: 2019.056 ms

Loss rate: 10.00%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-03-27 00:35:07

End at: 2019-03-27 00:35:37

Local clock offset: -2.285 ms

Remote clock offset: -2.715 ms

Run 3: Report of Verus — Data Link

Figure is missing

Figure is missing

Run 1: Statistics of PCC-Vivace

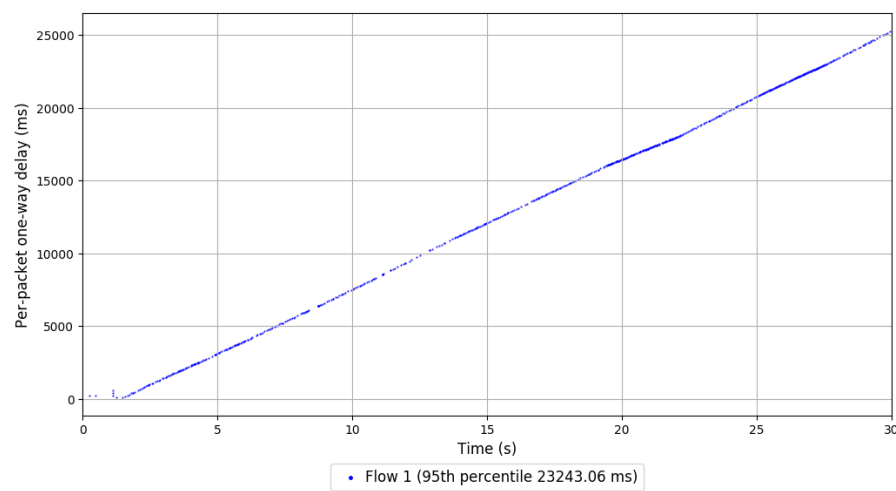
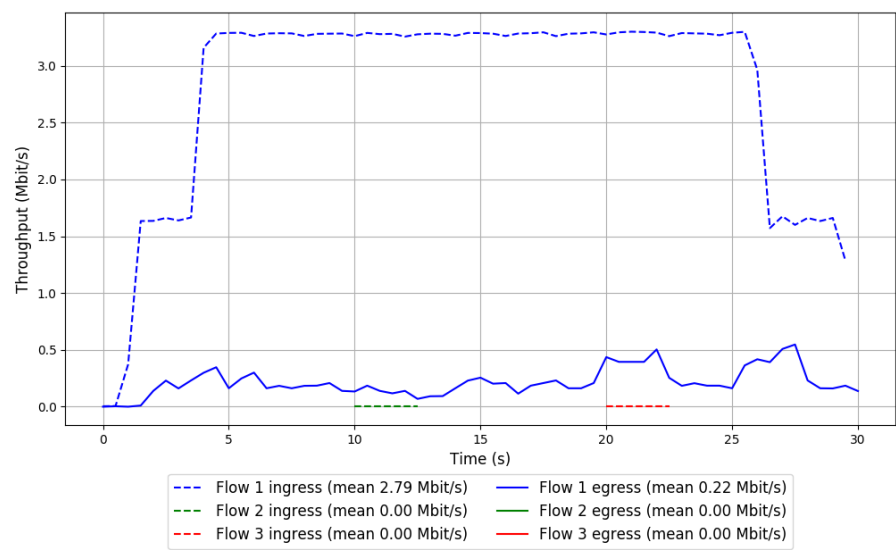
Start at: 2019-03-26 23:30:08

End at: 2019-03-26 23:30:38

Local clock offset: -5.838 ms

Remote clock offset: 8.252 ms

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

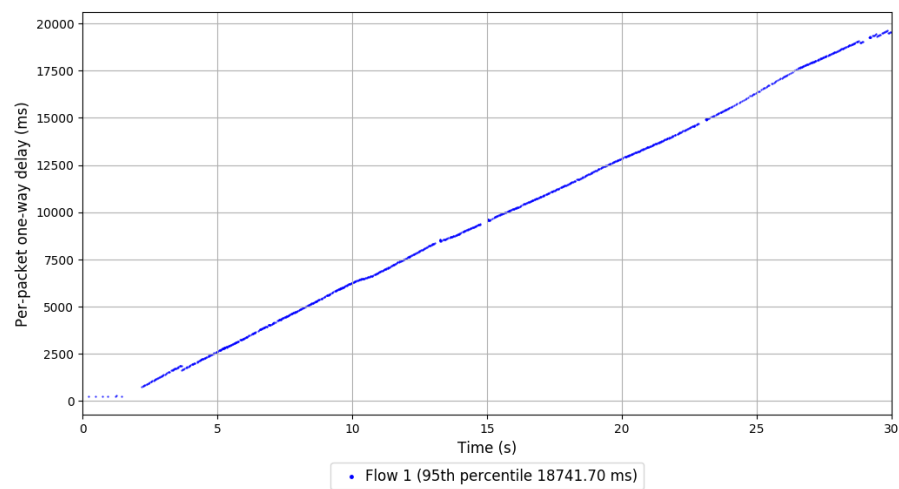
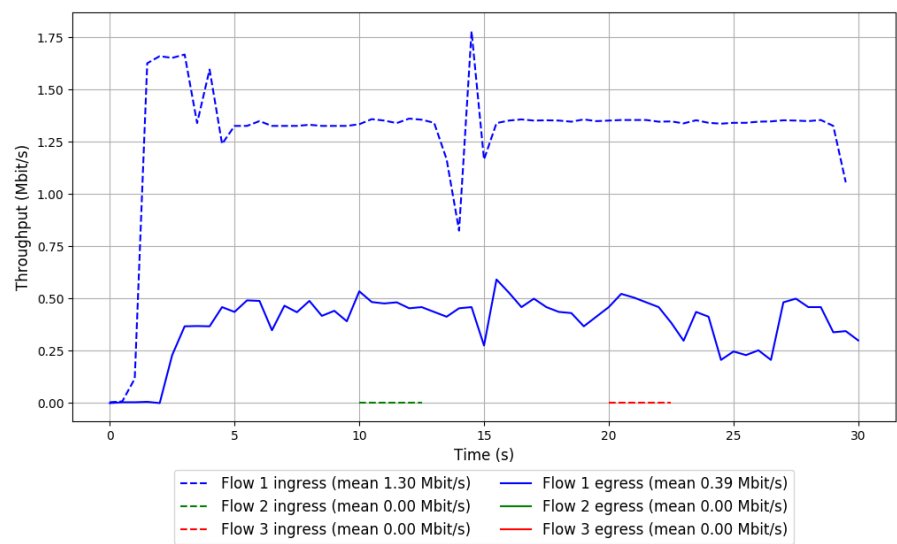
Start at: 2019-03-26 23:55:53

End at: 2019-03-26 23:56:23

Local clock offset: -7.724 ms

Remote clock offset: -0.063 ms

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

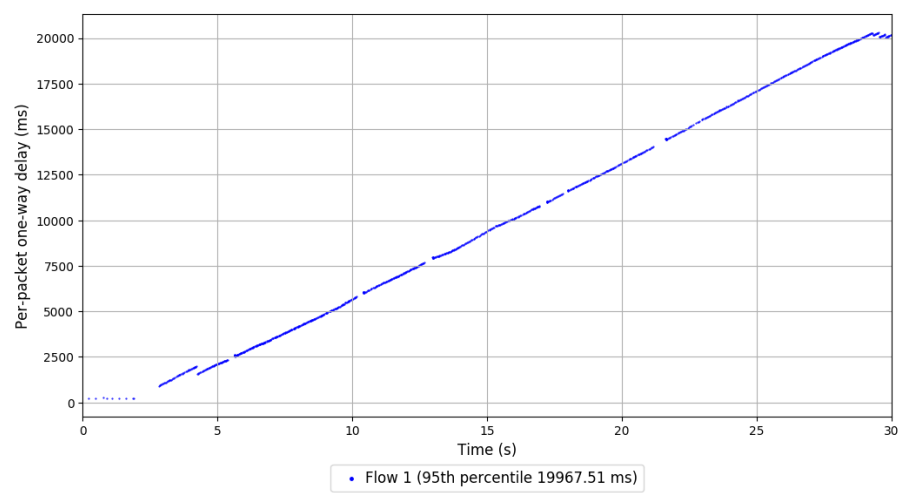
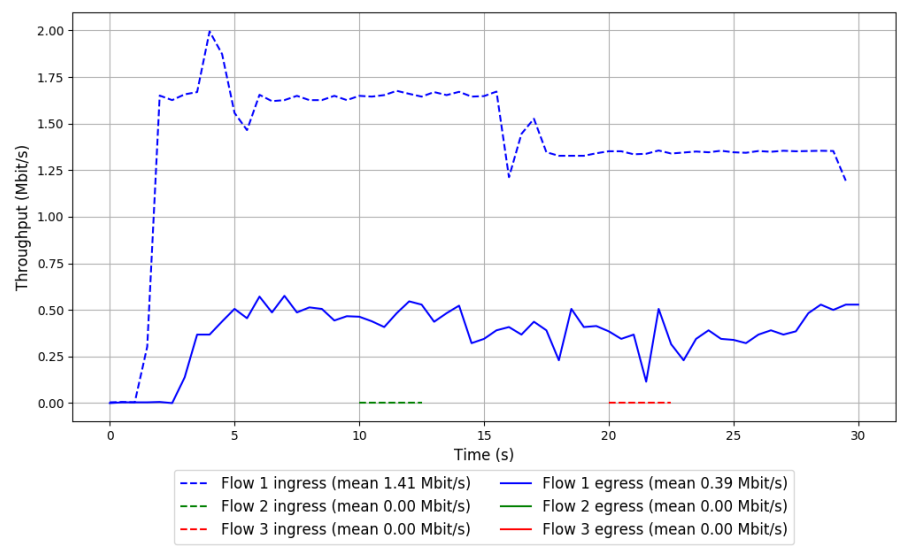
Start at: 2019-03-27 00:21:40

End at: 2019-03-27 00:22:10

Local clock offset: -5.468 ms

Remote clock offset: 0.866 ms

Run 3: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-03-26 23:37:27

End at: 2019-03-26 23:37:57

Local clock offset: -7.548 ms

Remote clock offset: 3.861 ms

Below is generated by plot.py at 2019-03-27 00:37:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 1566.552 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 1226.576 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 1733.362 ms

Loss rate: 0.00%

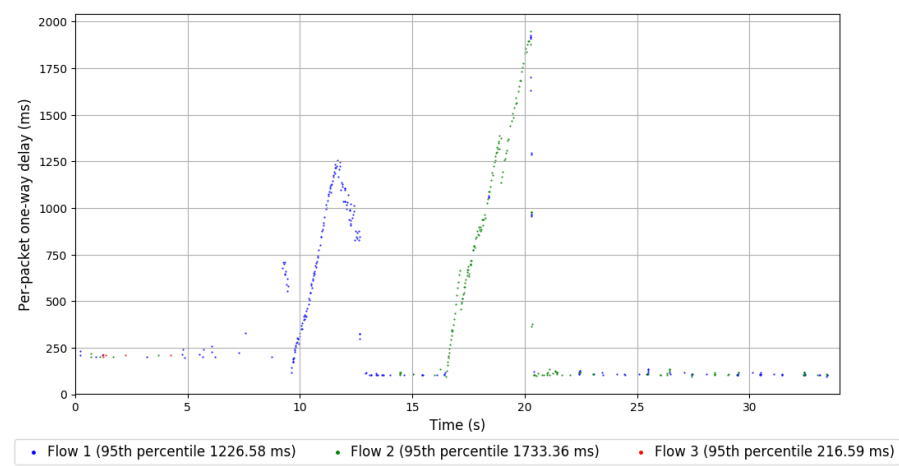
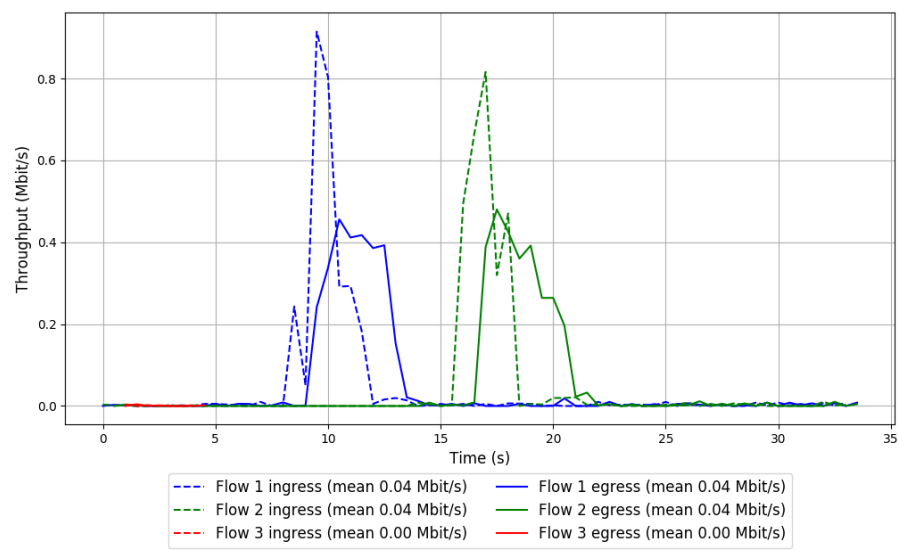
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 216.589 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-03-27 00:03:15

End at: 2019-03-27 00:03:45

Local clock offset: -7.005 ms

Remote clock offset: 3.119 ms

Below is generated by plot.py at 2019-03-27 00:37:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 1377.963 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 1377.963 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 230.542 ms

Loss rate: 0.00%

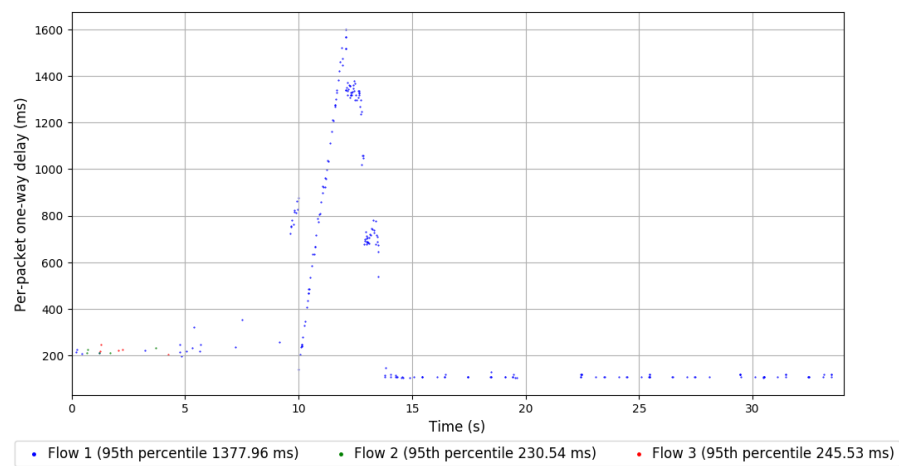
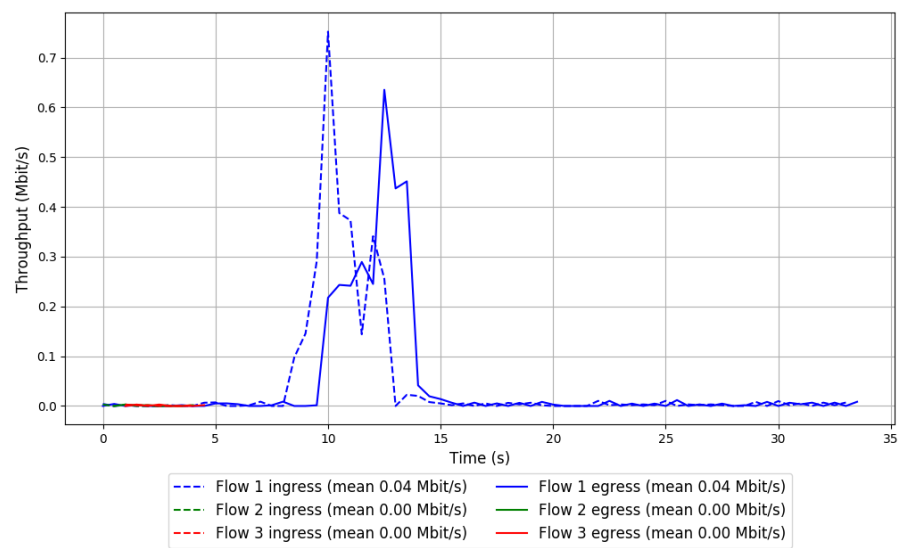
-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 245.532 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-03-27 00:28:59

End at: 2019-03-27 00:29:29

Local clock offset: -3.02 ms

Remote clock offset: 1.843 ms

Below is generated by plot.py at 2019-03-27 00:37:32

Datalink statistics

-- Total of 3 flows:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 1202.636 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 1097.966 ms

Loss rate: 0.00%

-- Flow 2:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 1248.246 ms

Loss rate: 0.00%

-- Flow 3:

Average throughput: 0.00 Mbit/s

95th percentile per-packet one-way delay: 230.973 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

