

Pantheon Report

Generated at 2017-09-22 09:38:32 (UTC).

Data path: Mexico ppp0 (*remote*) → AWS California 2 Ethernet (*local*).

Repeated the test of 13 congestion control schemes 3 times.

Each test lasted for 30 seconds running 1 flow.

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

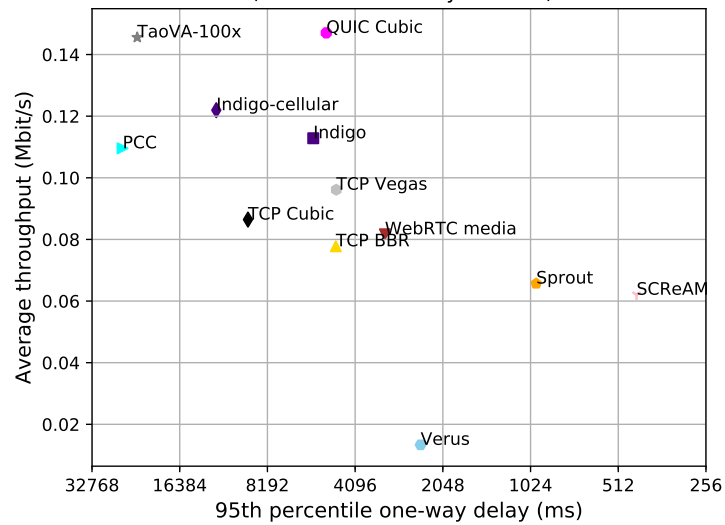
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

NTP offsets were measured against `time.stanford.edu` and have been applied to correct the timestamps in logs.

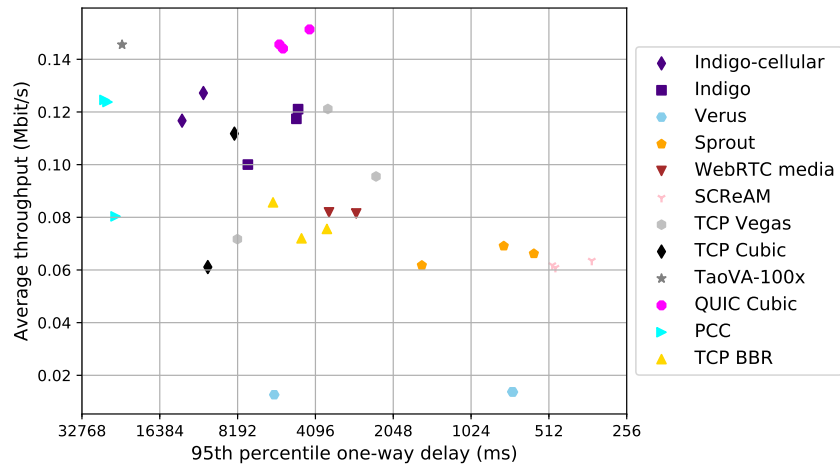
Git summary:

```
branch: indigos @ 46c7c812d4acb71eea4f5fb0b03b3657cea3062f
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/genericCC @ f7ca42f251bf49b432bb71de6d13fa903515c366
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-cellular @ aee99e8eb842cb053f8c9a80e28cd256a930bbc2
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/indigo-no-cwnd @ 3e58442c04028a11d7b02456e137604633ba2d6c
third_party/indigo-no-delivery-rate @ 57caa40858b964906edff4876d5a7e5bfff666c5
third_party/indigo-no-queuing-delay @ 03455460fd1a8ffbdad86fab936fdca204b80db
third_party/indigo-no-send-rate @ b39dfa6b2c5f19cb7cd89626cb4f5bb81f9fecda
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ baf443516dea3eeddeccaf9b916cc313273ca4f4
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
```

test from Mexico ppp0 to AWS California 2 Ethernet, 3 runs of 30s each per scheme
(mean of all runs by scheme)



test from Mexico ppp0 to AWS California 2 Ethernet, 3 runs of 30s each per scheme



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	3	0.08	4769.98	2.82
TCP Cubic	2	0.08	9554.08	33.28
LEDBAT	0	N/A	N/A	N/A
PCC	3	0.11	25729.88	99.72
QUIC Cubic	3	0.15	5144.25	14.53
SCReAM	3	0.06	443.12	0.51
WebRTC media	2	0.08	3238.88	9.38
Sprout	3	0.07	979.43	1.60
TaoVA-100x	1	0.15	22919.74	66.41
TCP Vegas	3	0.10	4754.12	5.35
Verus	3	0.01	2441.89	2.02
Indigo	3	0.11	5703.28	9.38
Indigo-cellular	2	0.12	12271.50	42.35

Run 1: Statistics of TCP BBR

Start at: 2017-09-22 08:05:53

End at: 2017-09-22 08:06:23

Local clock offset: -0.019 ms

Remote clock offset: -2.851 ms

Below is generated by plot.py at 2017-09-22 09:38:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 5975.251 ms

Loss rate: 0.00%

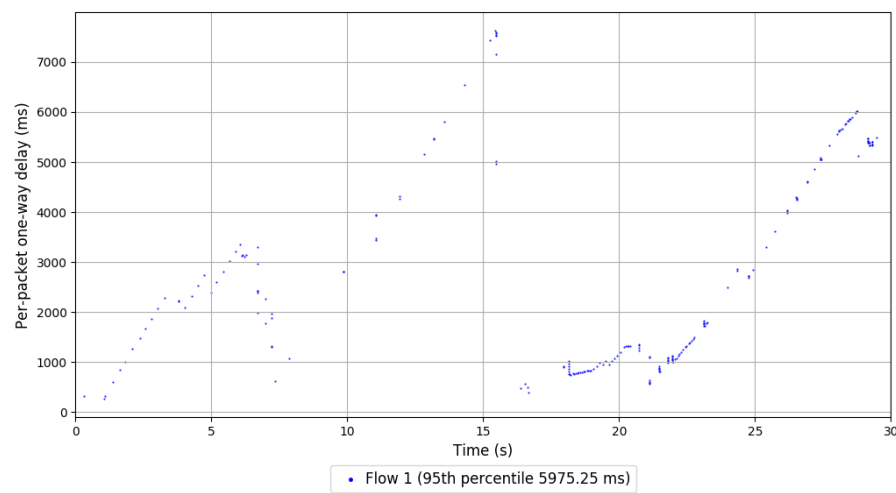
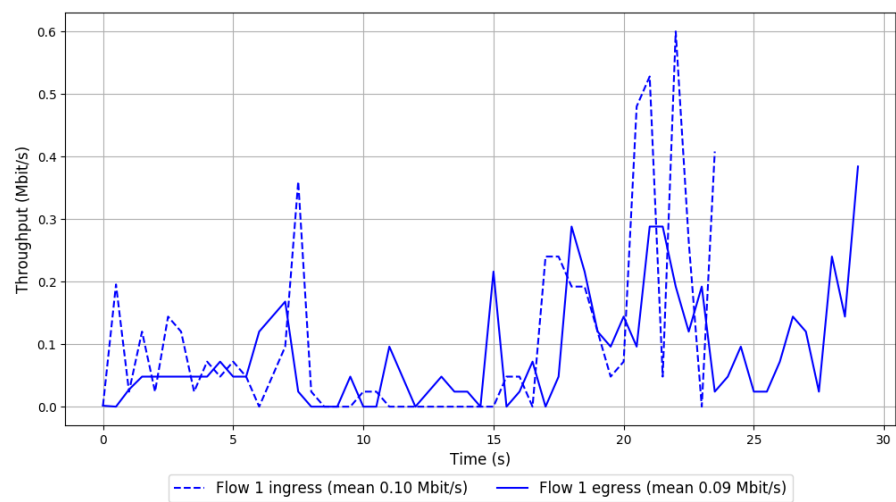
-- Flow 1:

Average throughput: 0.09 Mbit/s

95th percentile per-packet one-way delay: 5975.251 ms

Loss rate: 0.00%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-09-22 08:23:27

End at: 2017-09-22 08:23:57

Local clock offset: -0.123 ms

Remote clock offset: -0.51 ms

Below is generated by plot.py at 2017-09-22 09:38:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 4636.559 ms

Loss rate: 0.56%

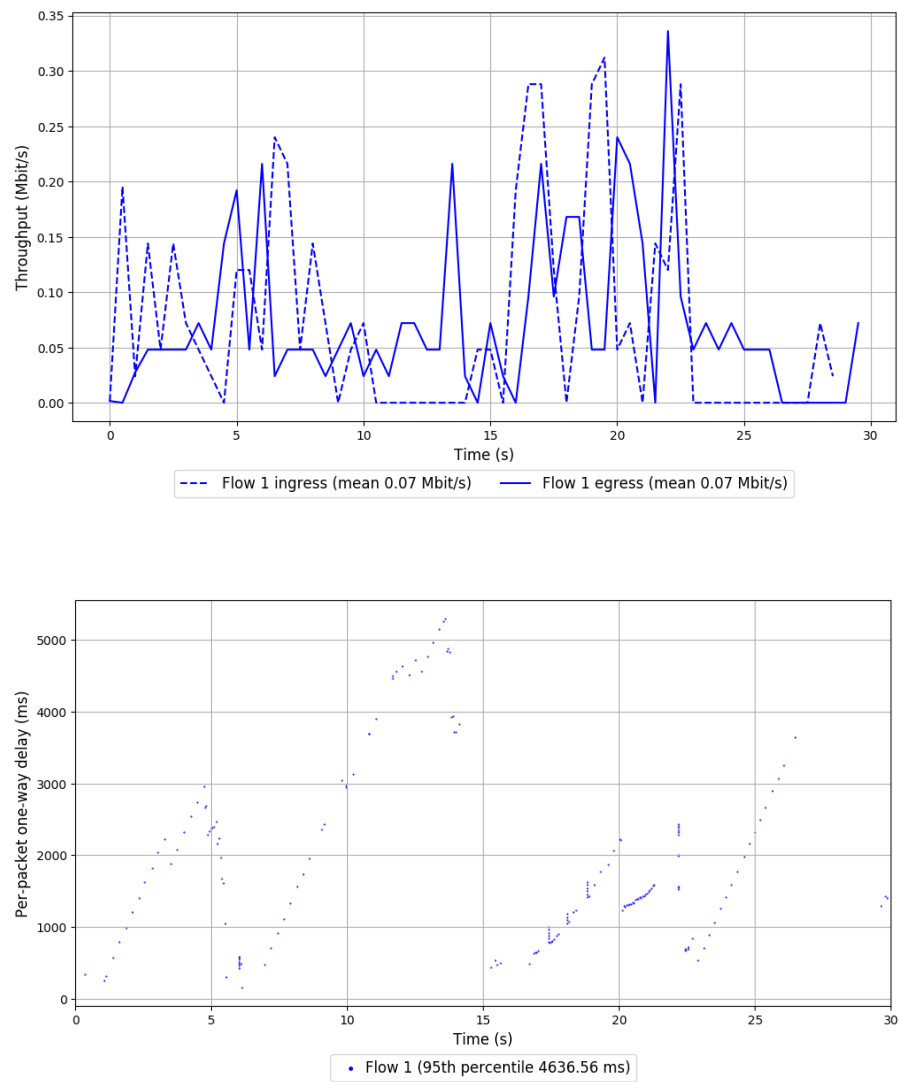
-- Flow 1:

Average throughput: 0.07 Mbit/s

95th percentile per-packet one-way delay: 4636.559 ms

Loss rate: 0.56%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-09-22 08:41:33

End at: 2017-09-22 08:42:03

Local clock offset: -0.236 ms

Remote clock offset: -0.415 ms

Below is generated by plot.py at 2017-09-22 09:38:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 3698.141 ms

Loss rate: 7.91%

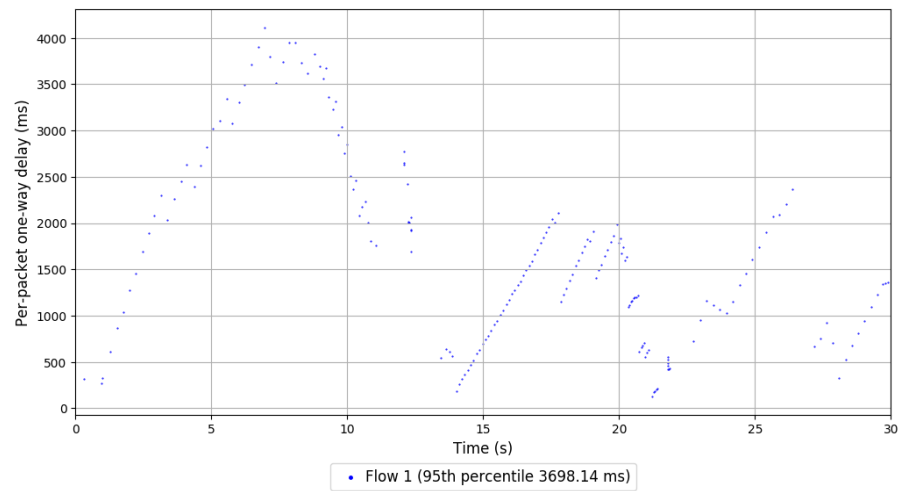
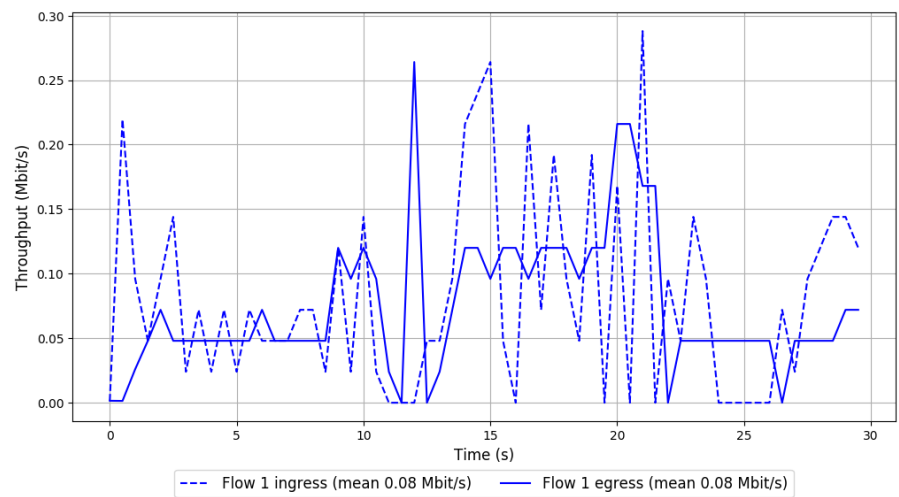
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 3698.141 ms

Loss rate: 7.91%

Run 3: Report of TCP BBR — Data Link

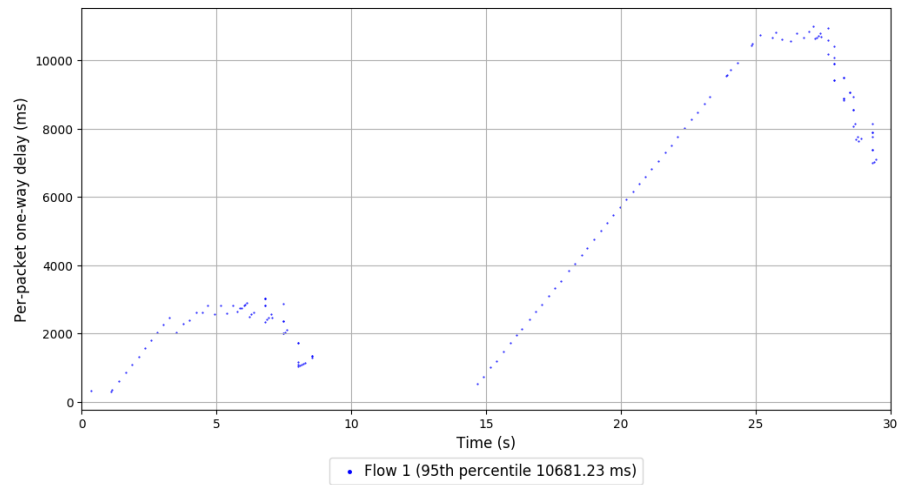
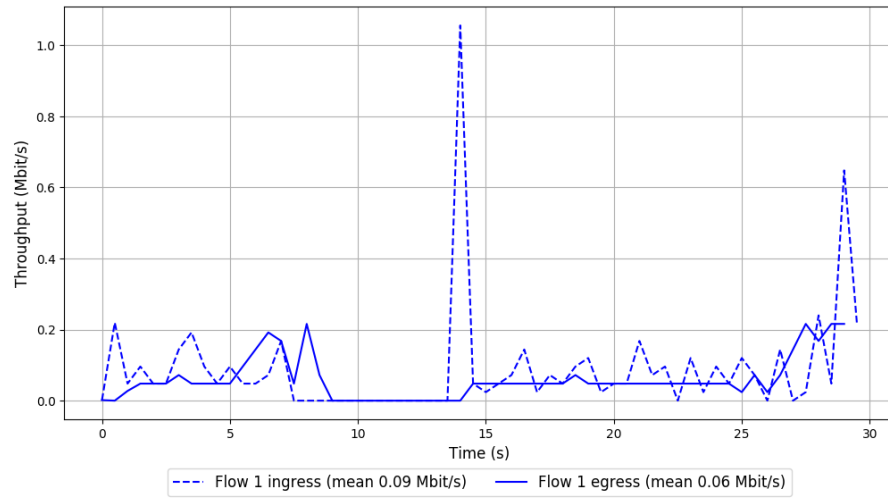


Run 1: Statistics of TCP Cubic

Start at: 2017-09-22 07:56:53
End at: 2017-09-22 07:57:23
Local clock offset: -0.062 ms
Remote clock offset: -2.955 ms

Below is generated by plot.py at 2017-09-22 09:38:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 10681.229 ms
Loss rate: 33.90%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 10681.229 ms
Loss rate: 33.90%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-09-22 08:14:28

End at: 2017-09-22 08:14:58

Local clock offset: -0.158 ms

Remote clock offset: -2.73 ms

Below is generated by plot.py at 2017-09-22 09:38:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 8426.937 ms

Loss rate: 32.66%

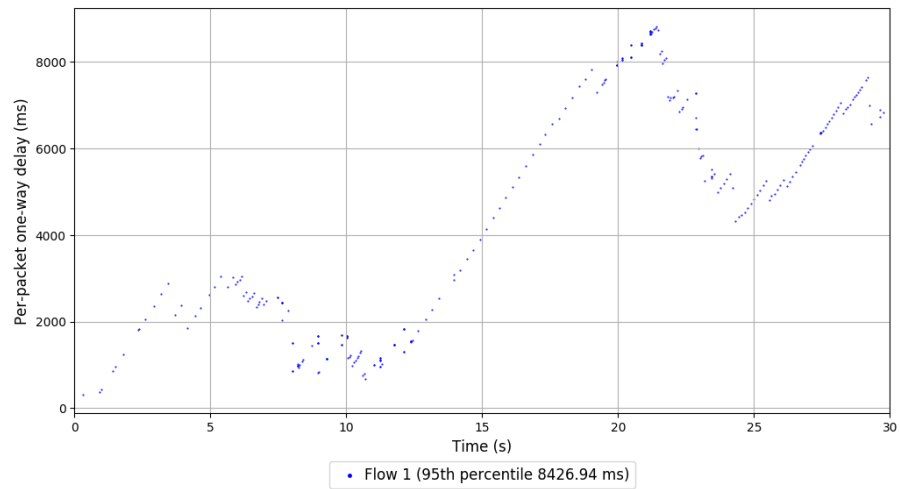
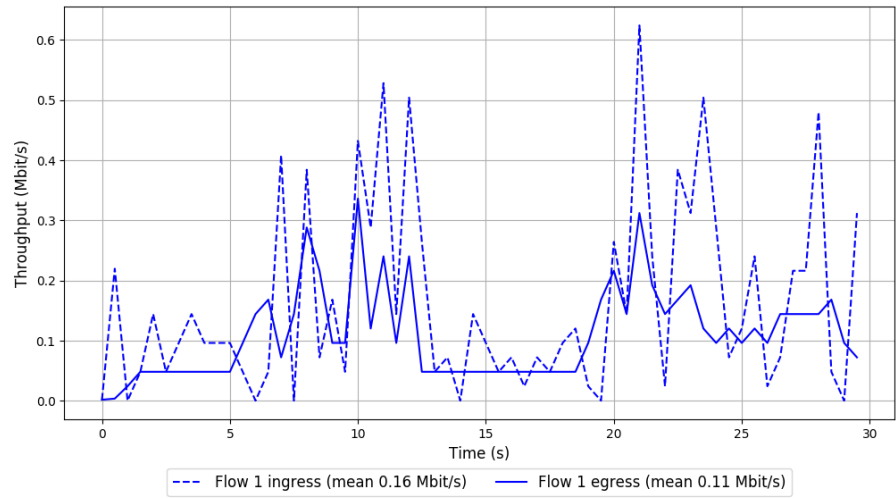
-- Flow 1:

Average throughput: 0.11 Mbit/s

95th percentile per-packet one-way delay: 8426.937 ms

Loss rate: 32.66%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

/home/ubuntu/pantheon_data/2017-09-22T07-53-Mexico-ppp0-to-AWS-California-2-3-runs/default_t

Run 3: Report of TCP Cubic — Data Link

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Figure is missing

Run 1: Statistics of LEDBAT

/home/ubuntu/pantheon_data/2017-09-22T07-53-Mexico-ppp0-to-AWS-California-2-3-runs/ledbat_st

Run 1: Report of LEDBAT — Data Link

Figure is missing

Figure is missing

Run 2: Statistics of LEDBAT

/home/ubuntu/pantheon_data/2017-09-22T07-53-Mexico-ppp0-to-AWS-California-2-3-runs/ledbat_st

Run 2: Report of LEDBAT — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of LEDBAT

/home/ubuntu/pantheon_data/2017-09-22T07-53-Mexico-ppp0-to-AWS-California-2-3-runs/ledbat_st

Run 3: Report of LEDBAT — Data Link

Figure is missing

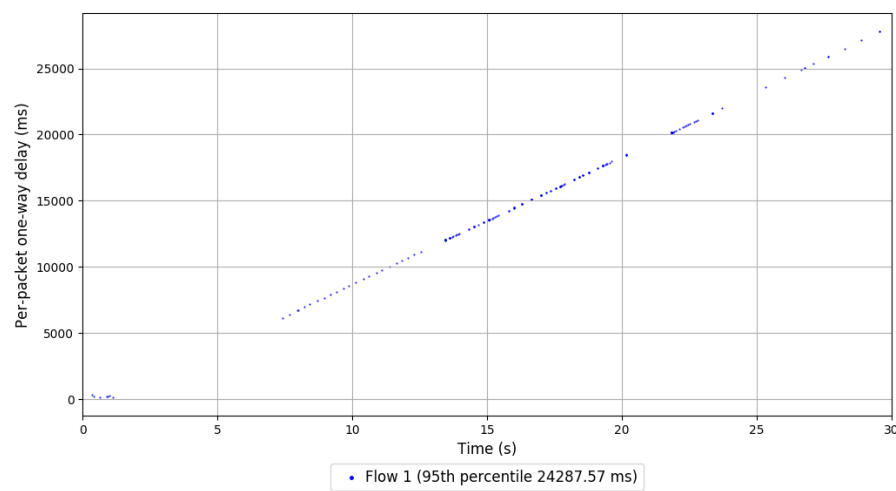
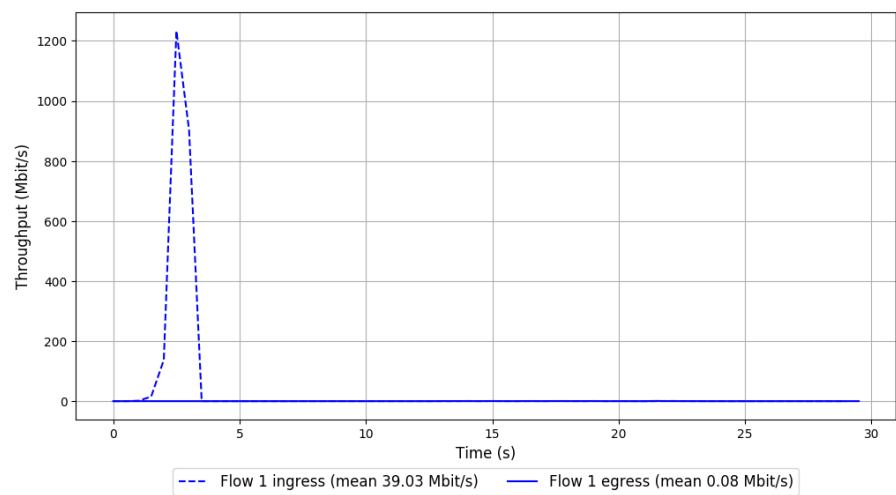
Figure is missing

Run 1: Statistics of PCC

Start at: 2017-09-22 08:09:44
End at: 2017-09-22 08:10:14
Local clock offset: -0.026 ms
Remote clock offset: -2.663 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 24287.571 ms
Loss rate: 99.80%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 24287.571 ms
Loss rate: 99.80%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-09-22 08:27:23

End at: 2017-09-22 08:27:53

Local clock offset: -0.119 ms

Remote clock offset: -2.6 ms

Below is generated by plot.py at 2017-09-22 09:38:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 26095.565 ms

Loss rate: 99.68%

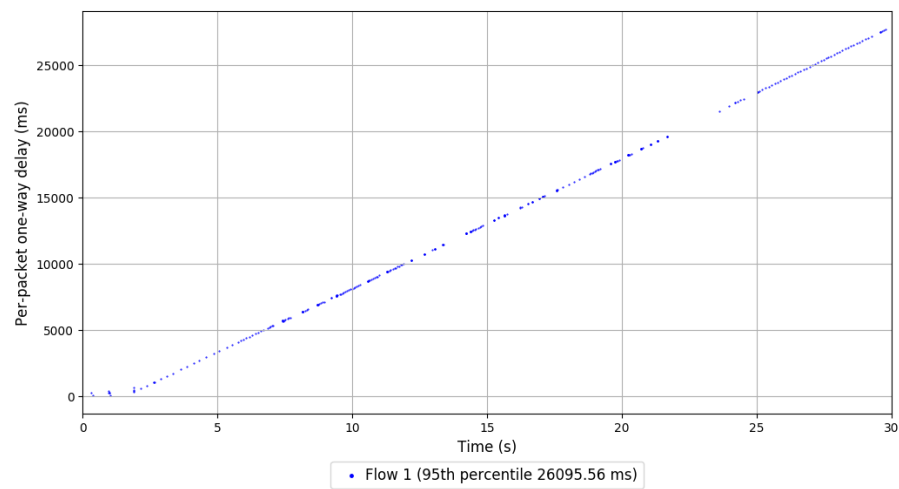
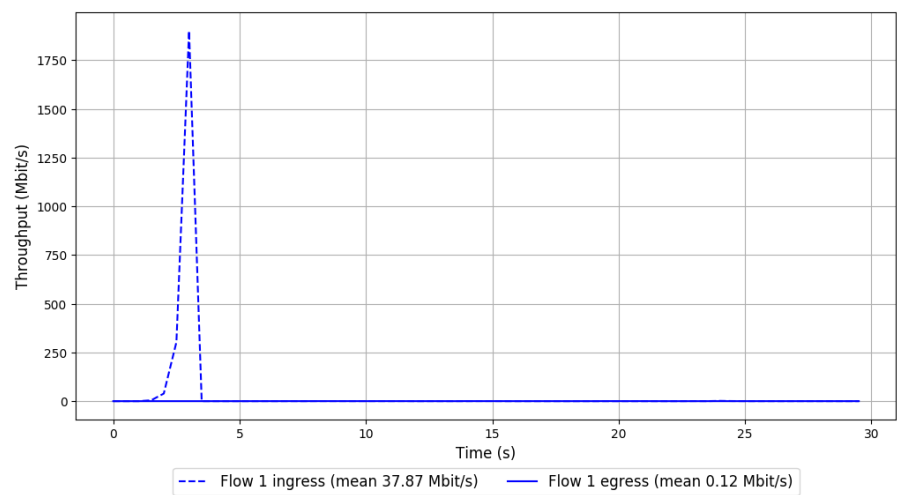
-- Flow 1:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 26095.565 ms

Loss rate: 99.68%

Run 2: Report of PCC — Data Link

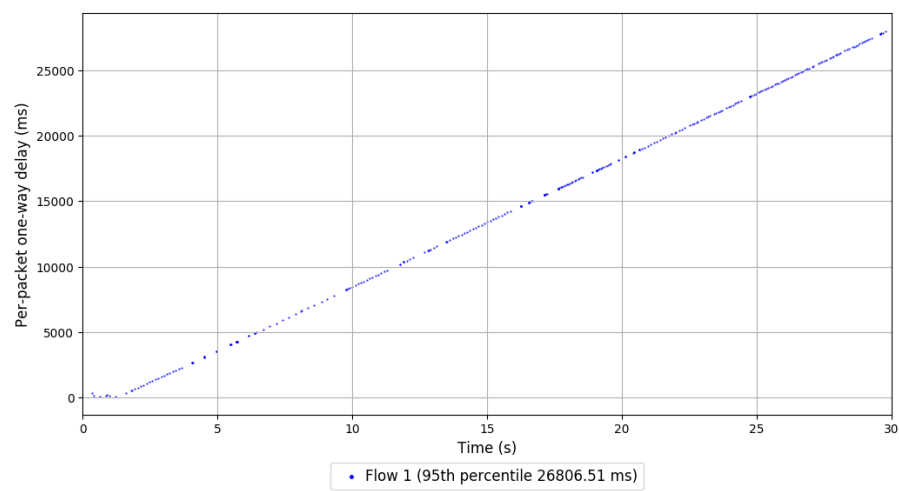
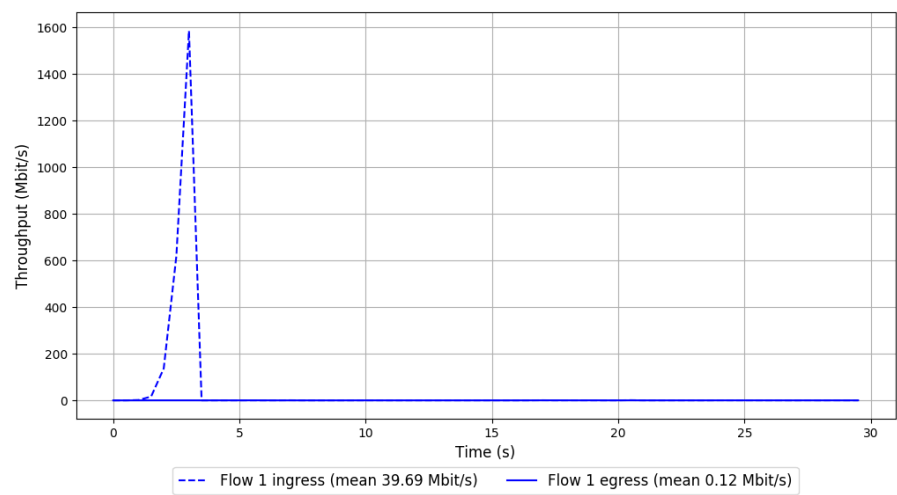


Run 3: Statistics of PCC

Start at: 2017-09-22 08:45:24
End at: 2017-09-22 08:45:54
Local clock offset: -0.165 ms
Remote clock offset: -0.493 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 26806.512 ms
Loss rate: 99.69%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 26806.512 ms
Loss rate: 99.69%

Run 3: Report of PCC — Data Link

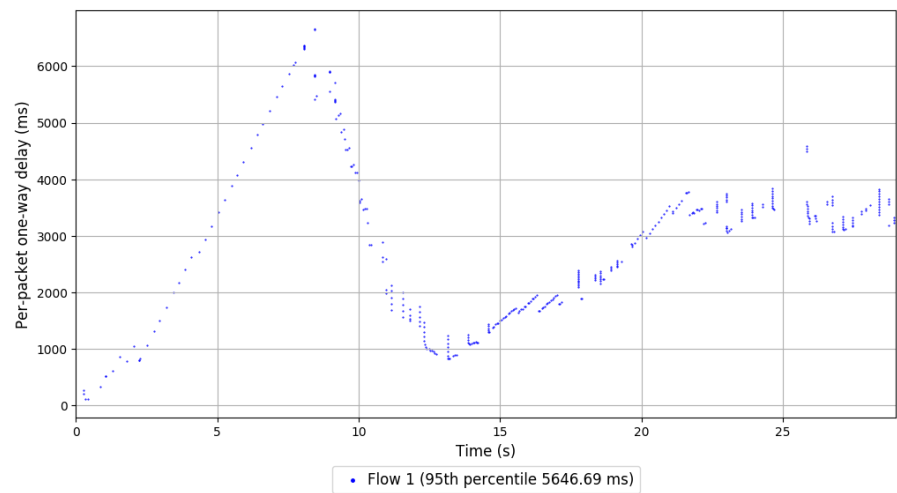
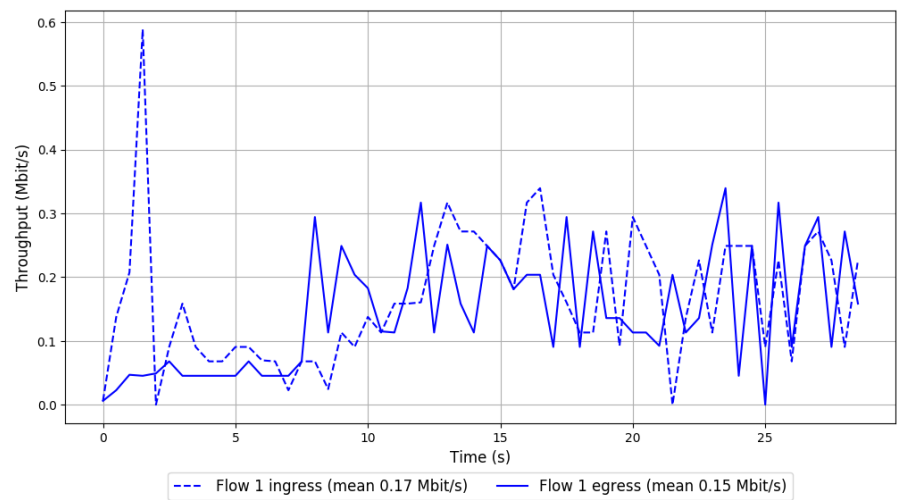


Run 1: Statistics of QUIC Cubic

Start at: 2017-09-22 07:58:10
End at: 2017-09-22 07:58:40
Local clock offset: -0.068 ms
Remote clock offset: -2.835 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 5646.691 ms
Loss rate: 13.38%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 5646.691 ms
Loss rate: 13.38%

Run 1: Report of QUIC Cubic — Data Link

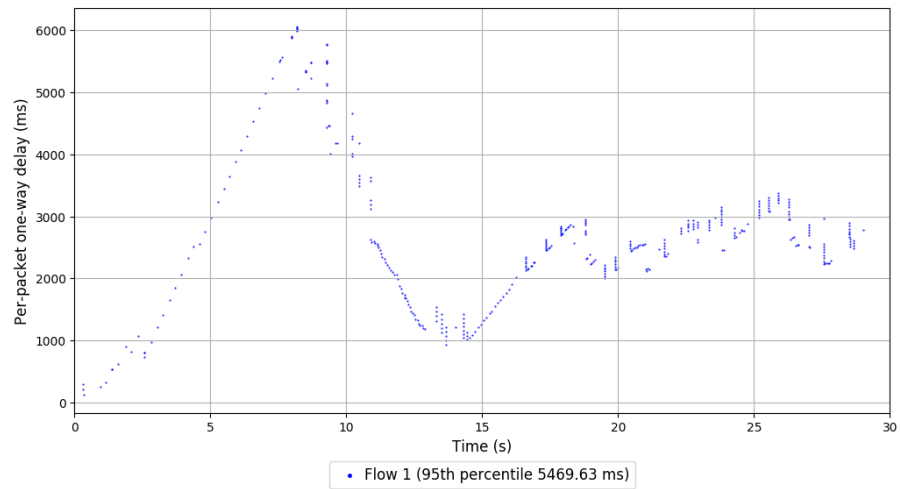
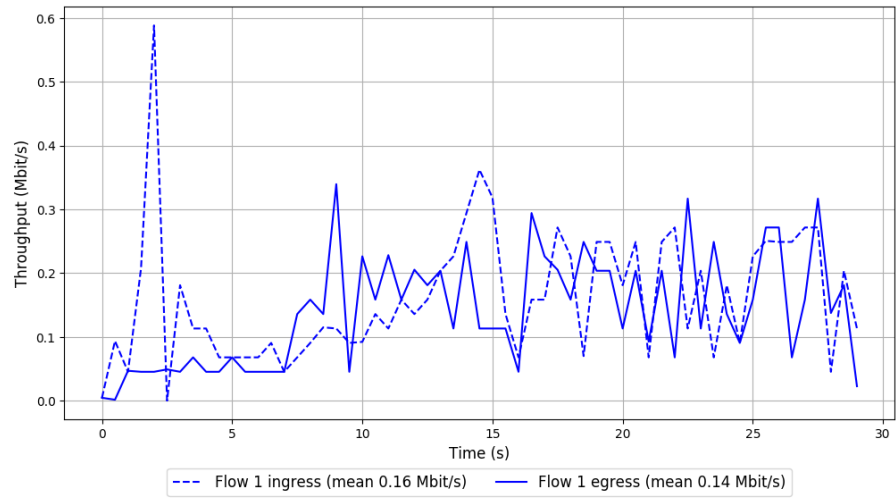


Run 2: Statistics of QUIC Cubic

Start at: 2017-09-22 08:15:45
End at: 2017-09-22 08:16:15
Local clock offset: -0.157 ms
Remote clock offset: -0.135 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 5469.628 ms
Loss rate: 13.48%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 5469.628 ms
Loss rate: 13.48%

Run 2: Report of QUIC Cubic — Data Link

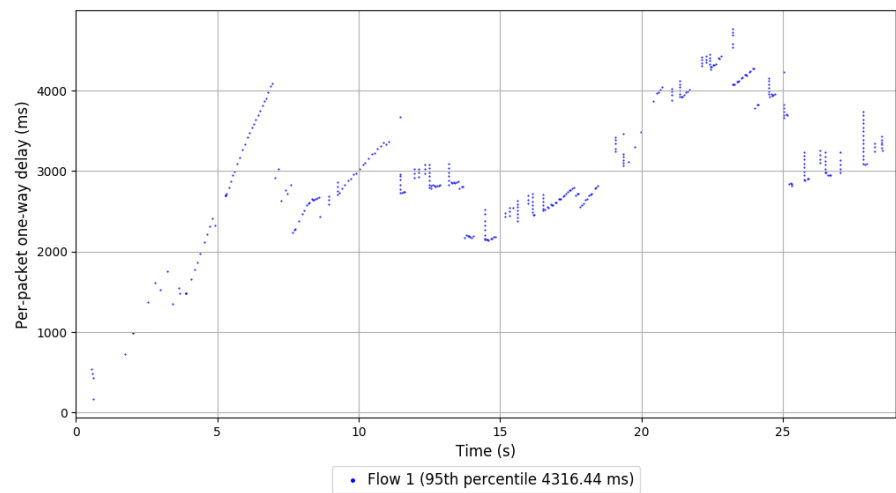
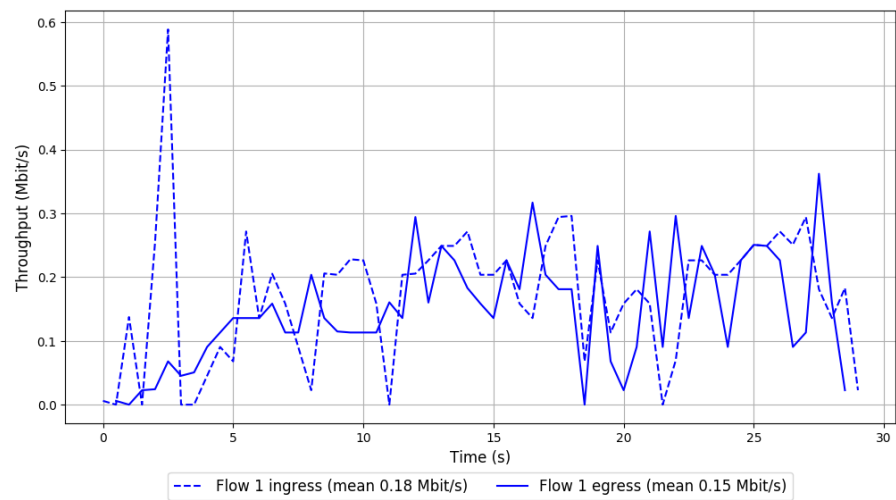


Run 3: Statistics of QUIC Cubic

Start at: 2017-09-22 08:33:49
End at: 2017-09-22 08:34:19
Local clock offset: -0.223 ms
Remote clock offset: -2.462 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 4316.442 ms
Loss rate: 16.73%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 4316.442 ms
Loss rate: 16.73%

Run 3: Report of QUIC Cubic — Data Link

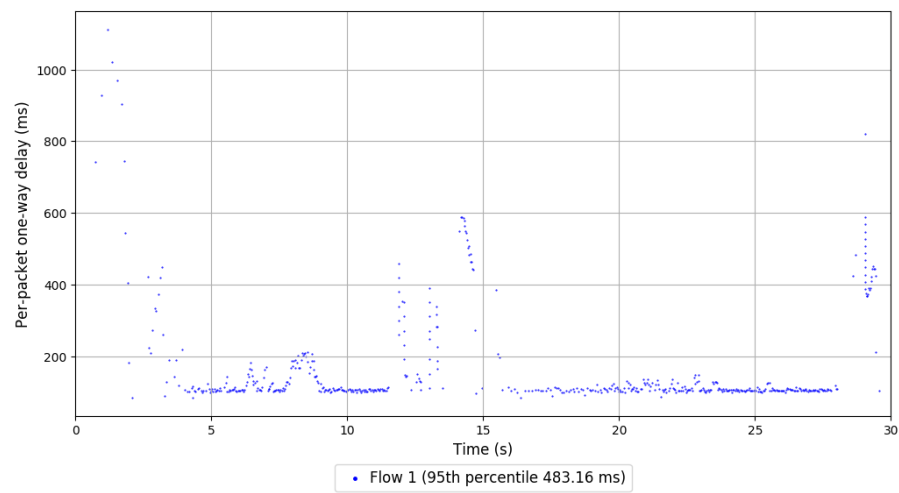
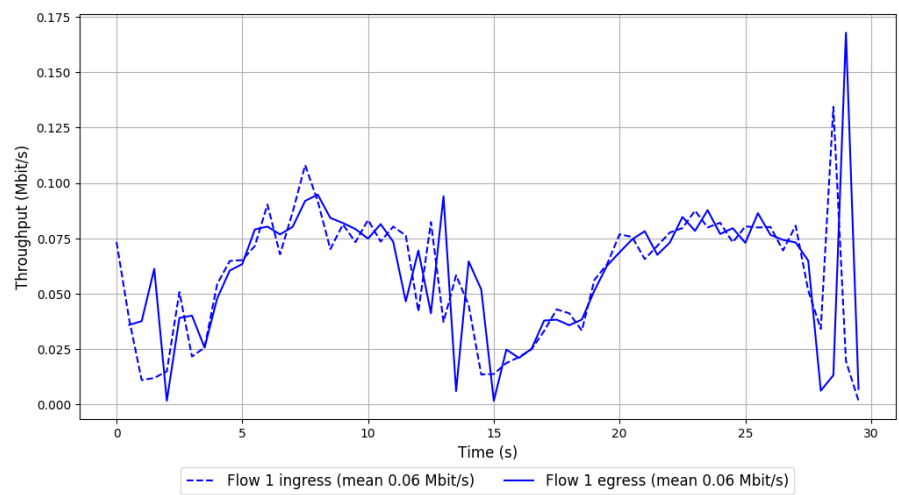


Run 1: Statistics of SCReAM

Start at: 2017-09-22 08:07:10
End at: 2017-09-22 08:07:40
Local clock offset: -0.028 ms
Remote clock offset: -0.761 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 483.161 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 483.161 ms
Loss rate: 0.04%

Run 1: Report of SReAM — Data Link

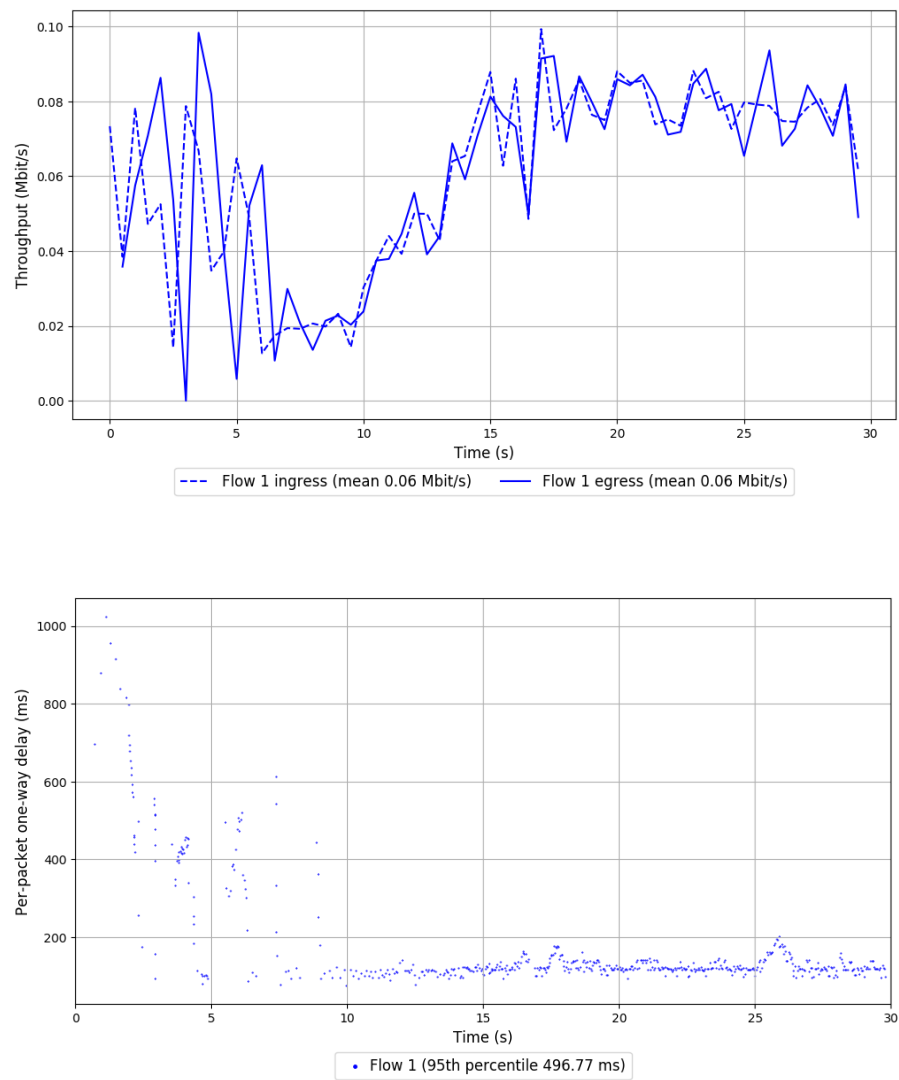


Run 2: Statistics of SCReAM

Start at: 2017-09-22 08:24:49
End at: 2017-09-22 08:25:19
Local clock offset: -0.125 ms
Remote clock offset: -2.552 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 496.766 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 496.766 ms
Loss rate: 0.85%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-09-22 08:42:50

End at: 2017-09-22 08:43:20

Local clock offset: -0.163 ms

Remote clock offset: 0.06 ms

Below is generated by plot.py at 2017-09-22 09:38:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 349.419 ms

Loss rate: 0.65%

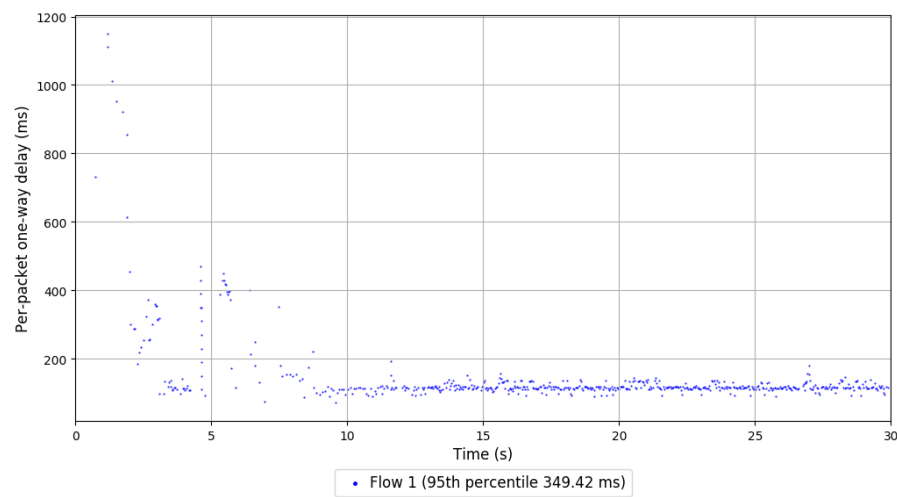
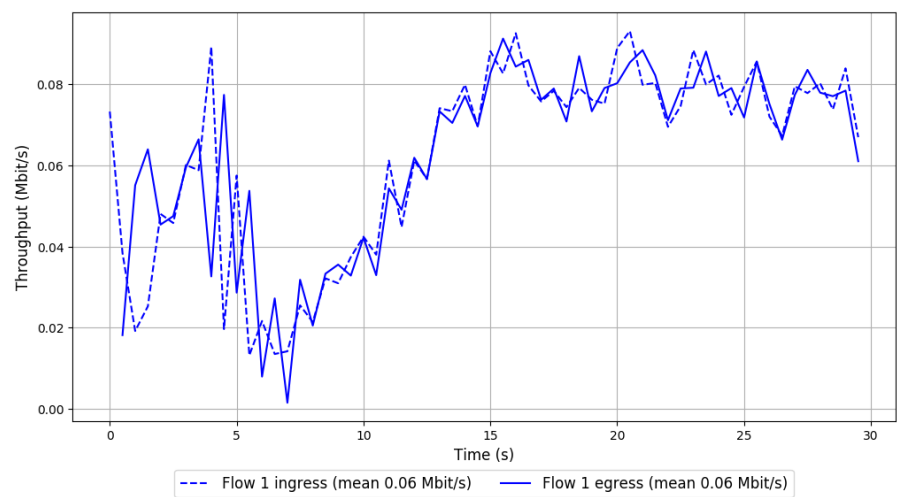
-- Flow 1:

Average throughput: 0.06 Mbit/s

95th percentile per-packet one-way delay: 349.419 ms

Loss rate: 0.65%

Run 3: Report of SReAM — Data Link



Run 1: Statistics of WebRTC media

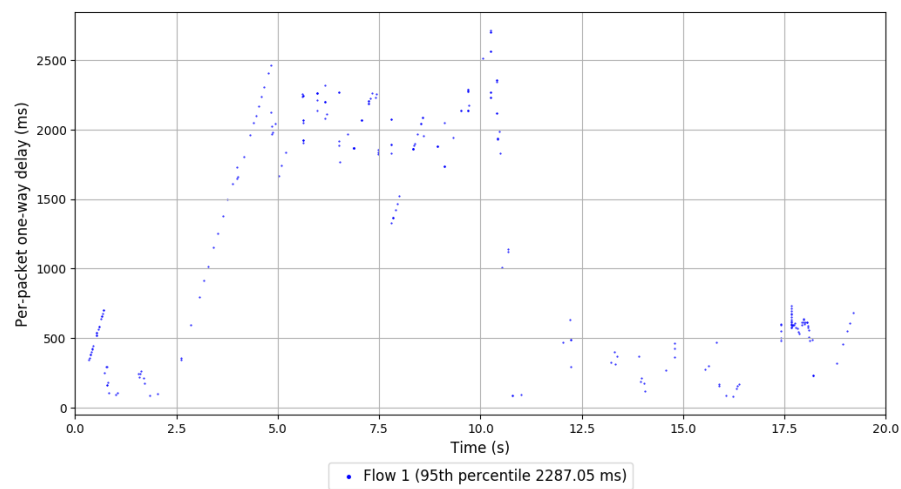
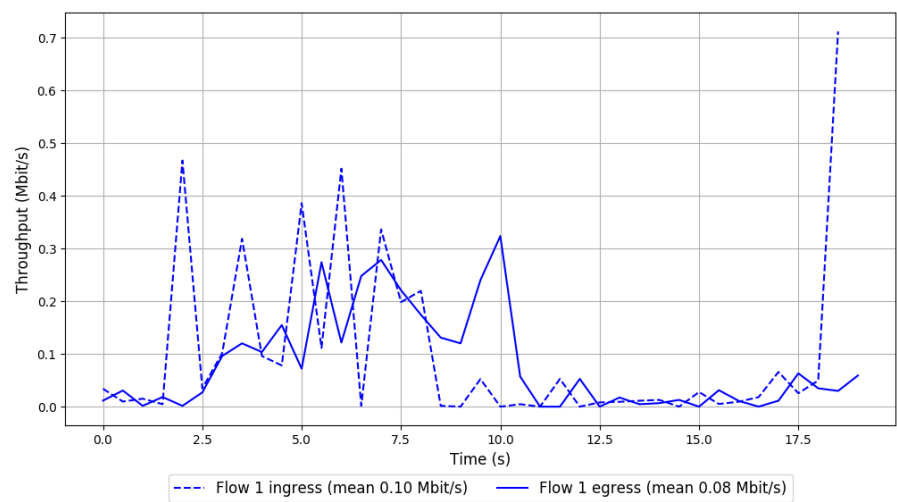
Start at: 2017-09-22 08:00:45

End at: 2017-09-22 08:01:15

Local clock offset: -0.072 ms

Remote clock offset: -0.408 ms

Run 1: Report of WebRTC media — Data Link

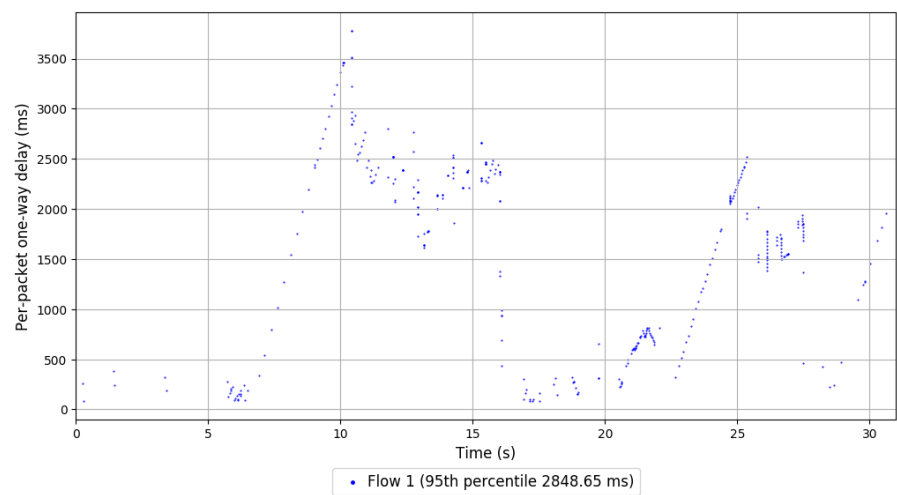
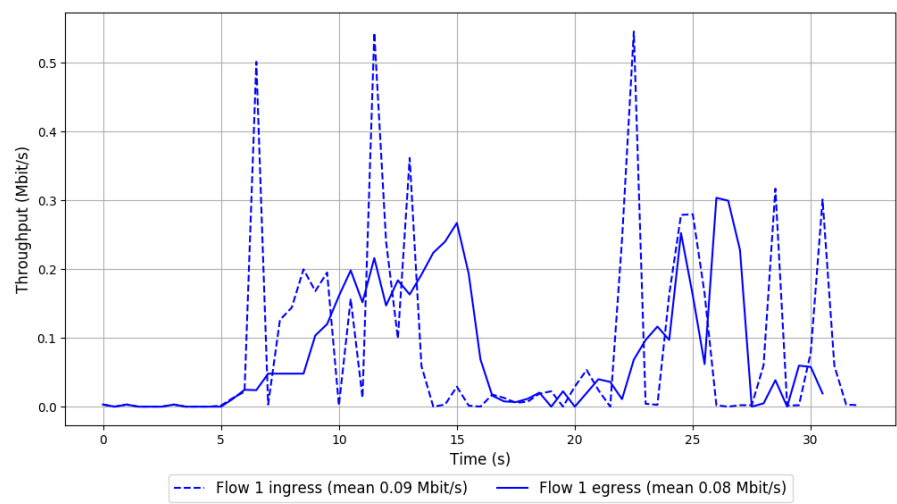


Run 2: Statistics of WebRTC media

Start at: 2017-09-22 08:18:19
End at: 2017-09-22 08:18:49
Local clock offset: -0.096 ms
Remote clock offset: -0.459 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 2848.647 ms
Loss rate: 11.58%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 2848.647 ms
Loss rate: 11.58%

Run 2: Report of WebRTC media — Data Link

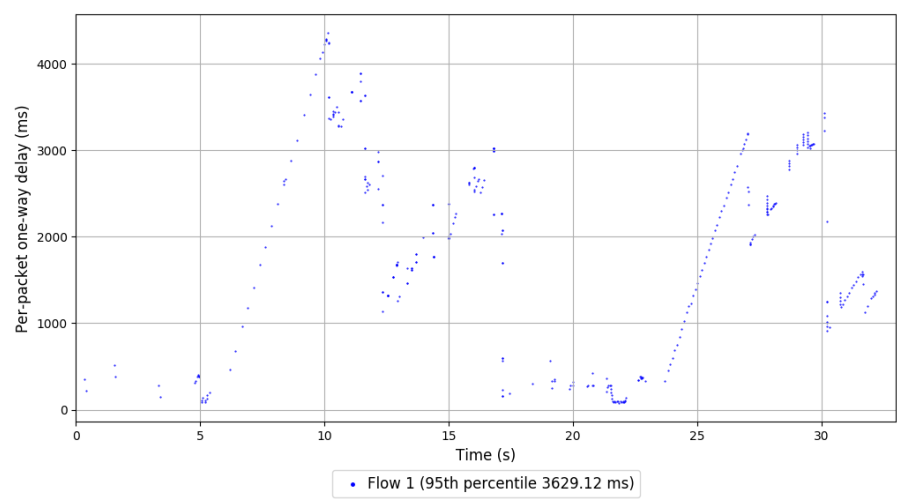
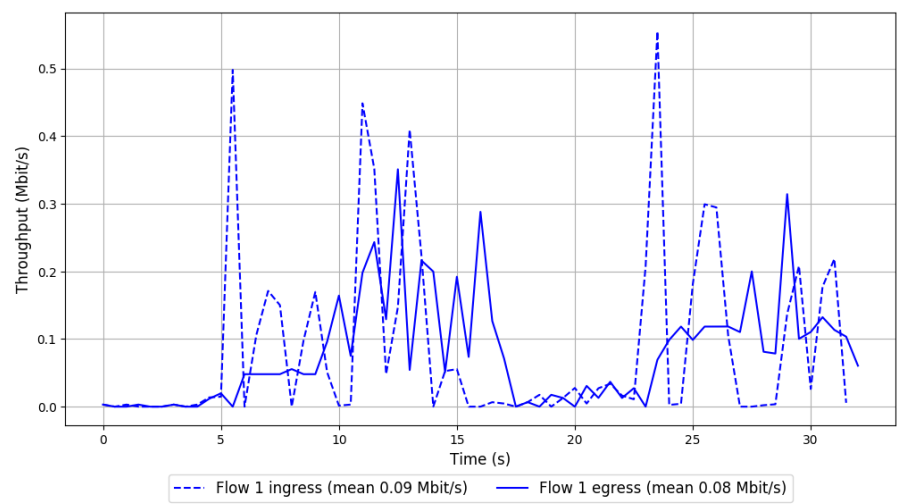


Run 3: Statistics of WebRTC media

Start at: 2017-09-22 08:36:23
End at: 2017-09-22 08:36:53
Local clock offset: -0.126 ms
Remote clock offset: -0.392 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 3629.119 ms
Loss rate: 7.19%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 3629.119 ms
Loss rate: 7.19%

Run 3: Report of WebRTC media — Data Link

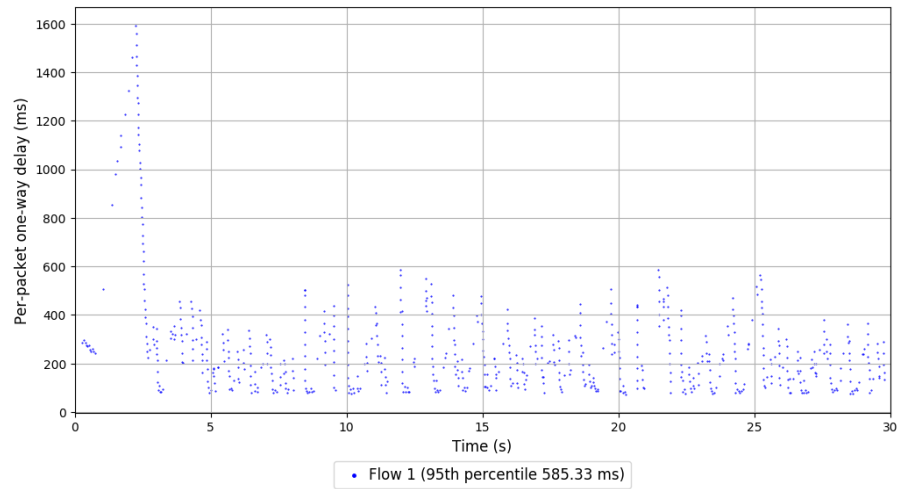
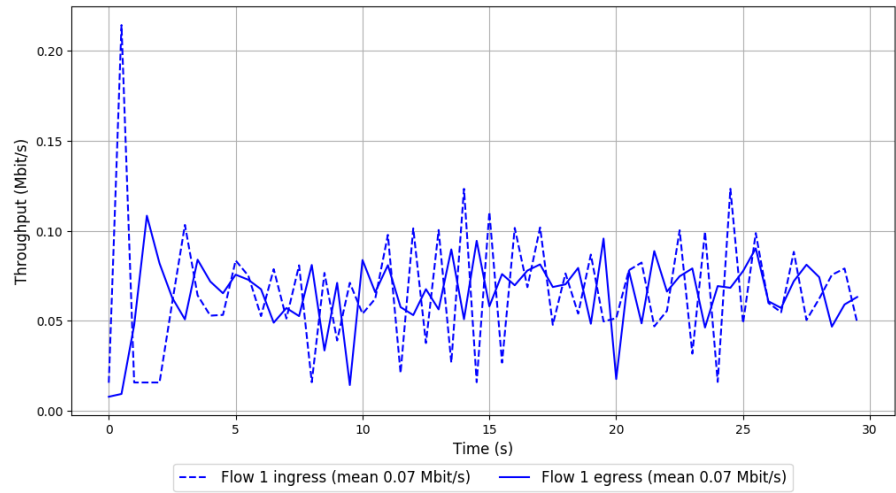


Run 1: Statistics of Sprout

Start at: 2017-09-22 08:08:27
End at: 2017-09-22 08:08:57
Local clock offset: -0.123 ms
Remote clock offset: -2.864 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 585.325 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 585.325 ms
Loss rate: 1.07%

Run 1: Report of Sprout — Data Link

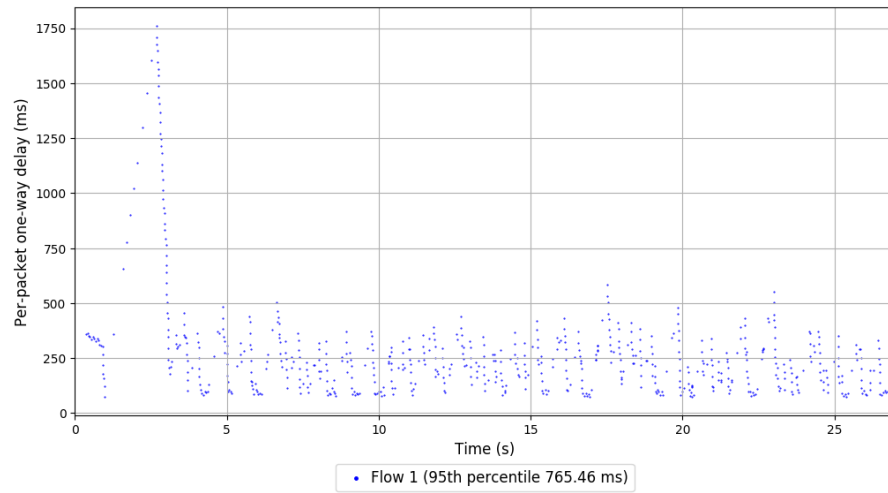
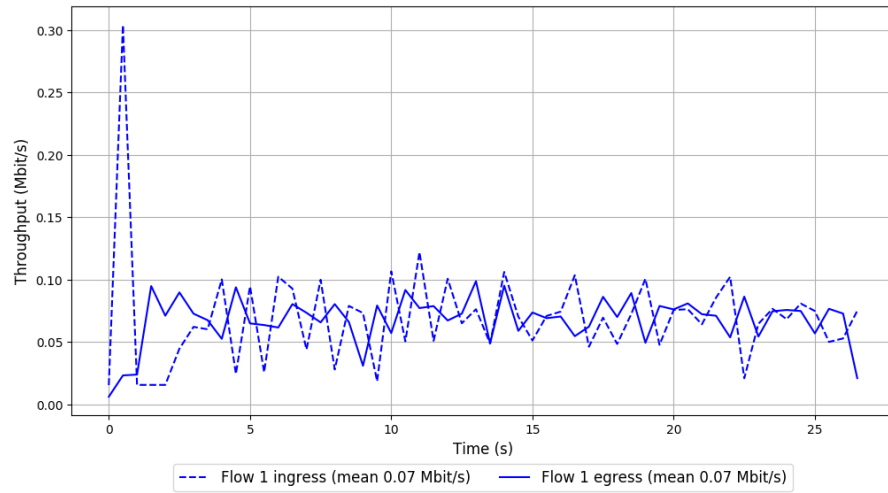


Run 2: Statistics of Sprout

Start at: 2017-09-22 08:26:06
End at: 2017-09-22 08:26:36
Local clock offset: -0.208 ms
Remote clock offset: -2.456 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 765.461 ms
Loss rate: 2.83%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 765.461 ms
Loss rate: 2.83%

Run 2: Report of Sprout — Data Link

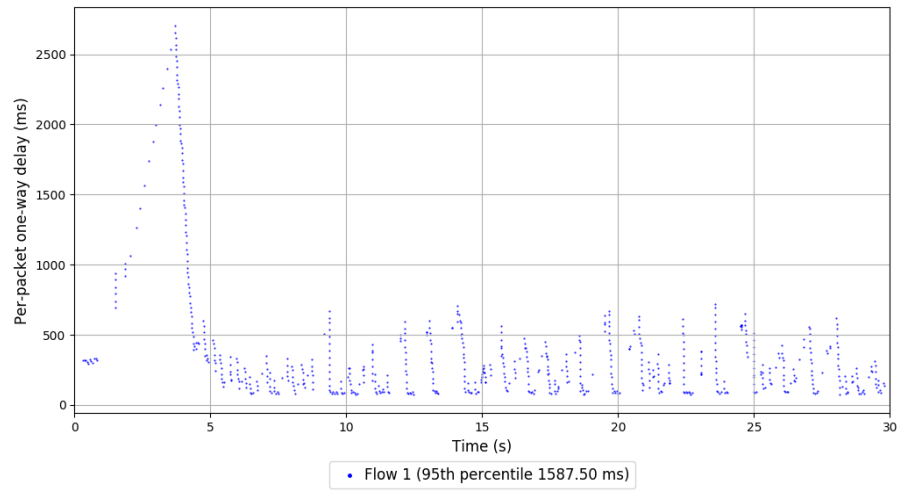
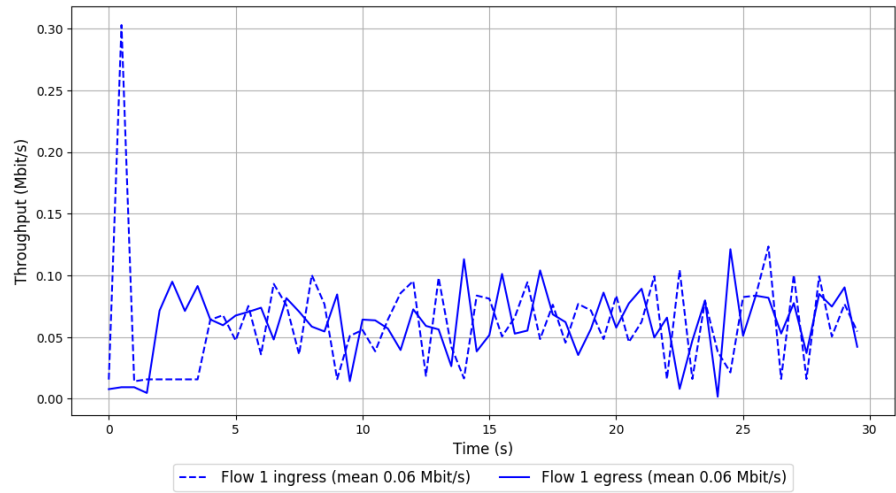


Run 3: Statistics of Sprout

Start at: 2017-09-22 08:44:07
End at: 2017-09-22 08:44:37
Local clock offset: -0.164 ms
Remote clock offset: -0.398 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 1587.499 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 1587.499 ms
Loss rate: 0.89%

Run 3: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2017-09-22 07:53:54

End at: 2017-09-22 07:54:24

Local clock offset: 0.053 ms

Remote clock offset: -2.86 ms

Below is generated by plot.py at 2017-09-22 09:38:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 22919.739 ms

Loss rate: 66.41%

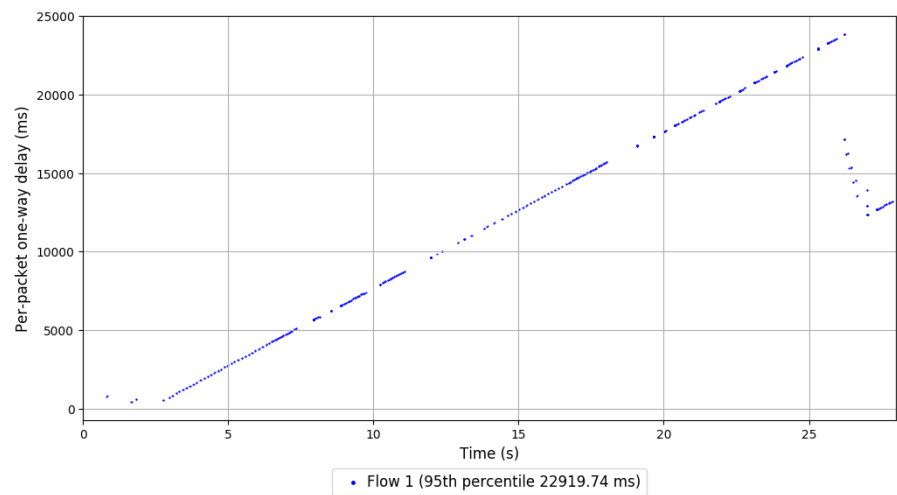
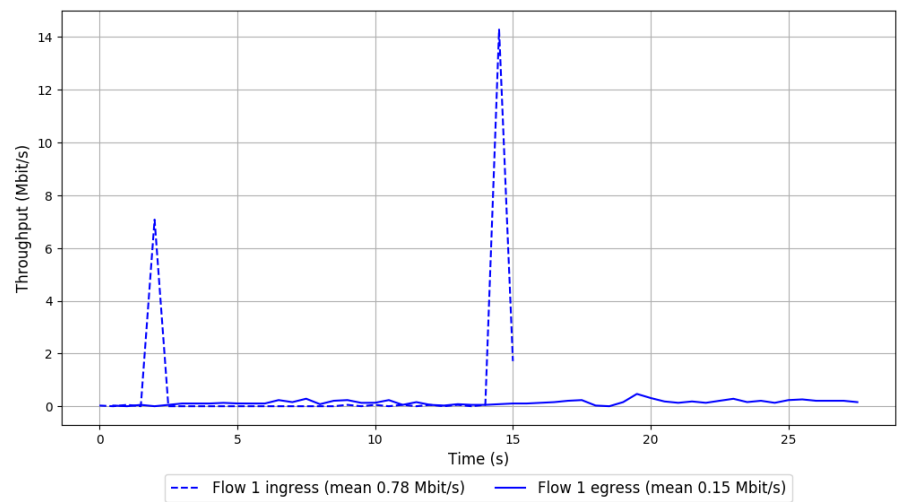
-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 22919.739 ms

Loss rate: 66.41%

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



Run 2: Statistics of TaoVA-100x

/home/ubuntu/pantheon_data/2017-09-22T07-53-Mexico-ppp0-to-AWS-California-2-3-runs/taova_sta

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

Figure is missing

Figure is missing

Run 3: Statistics of TaoVA-100x

/home/ubuntu/pantheon_data/2017-09-22T07-53-Mexico-ppp0-to-AWS-California-2-3-runs/taova_sta

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

Figure is missing

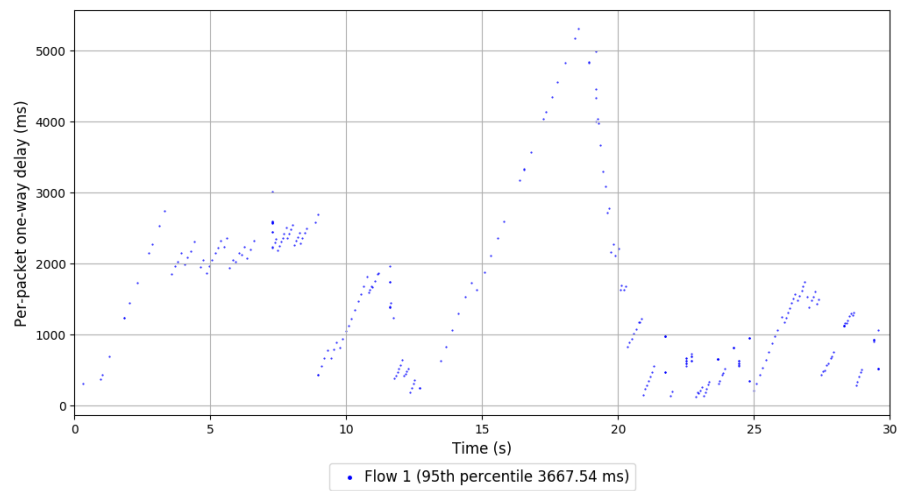
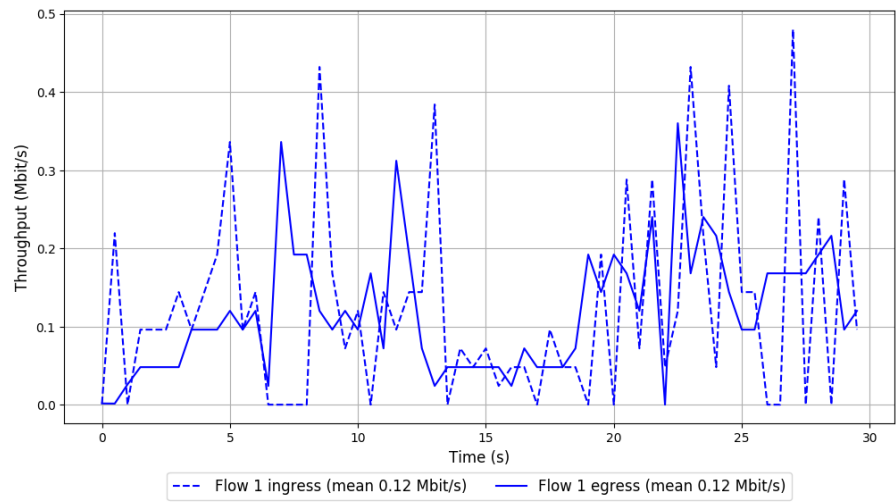
Figure is missing

Run 1: Statistics of TCP Vegas

Start at: 2017-09-22 08:04:36
End at: 2017-09-22 08:05:06
Local clock offset: -0.09 ms
Remote clock offset: -0.709 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 3667.538 ms
Loss rate: 3.91%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 3667.538 ms
Loss rate: 3.91%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-09-22 08:22:09

End at: 2017-09-22 08:22:39

Local clock offset: -0.128 ms

Remote clock offset: 0.024 ms

Below is generated by plot.py at 2017-09-22 09:38:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 2387.445 ms

Loss rate: 3.30%

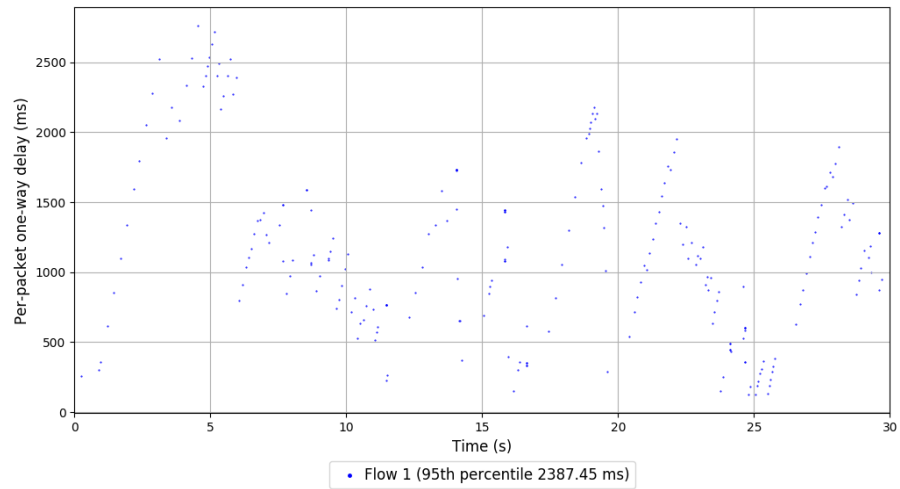
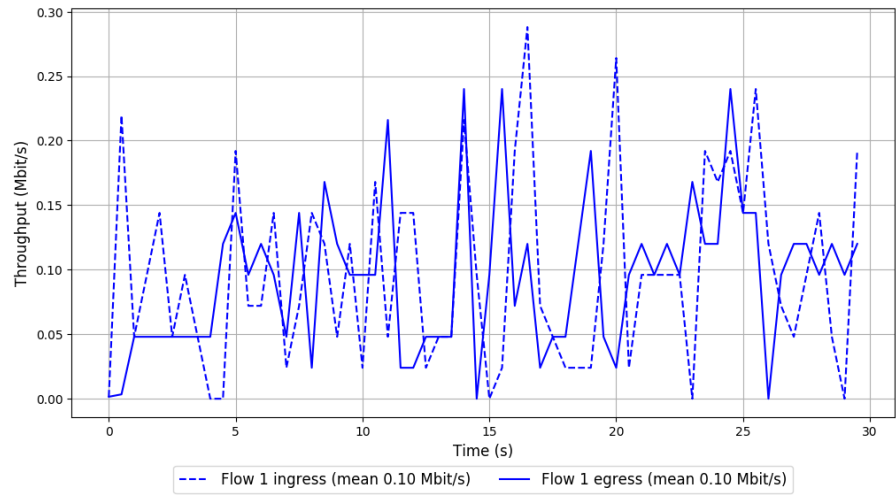
-- Flow 1:

Average throughput: 0.10 Mbit/s

95th percentile per-packet one-way delay: 2387.445 ms

Loss rate: 3.30%

Run 2: Report of TCP Vegas — Data Link

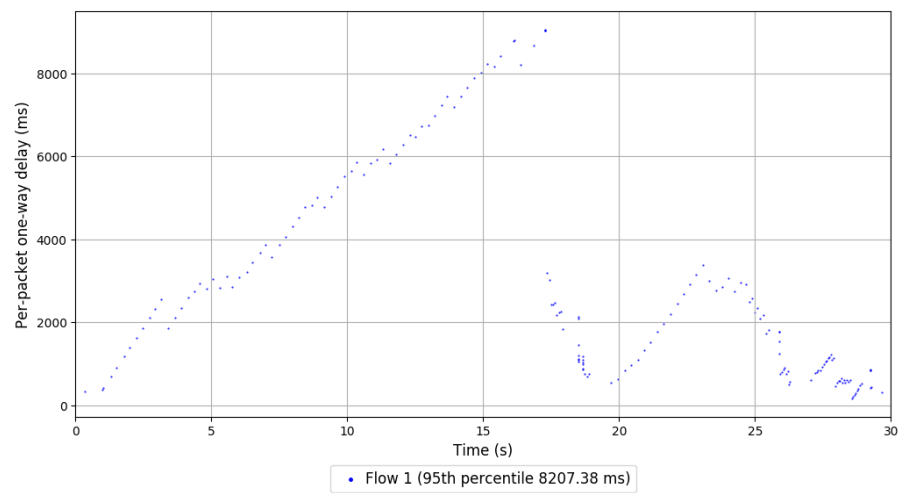
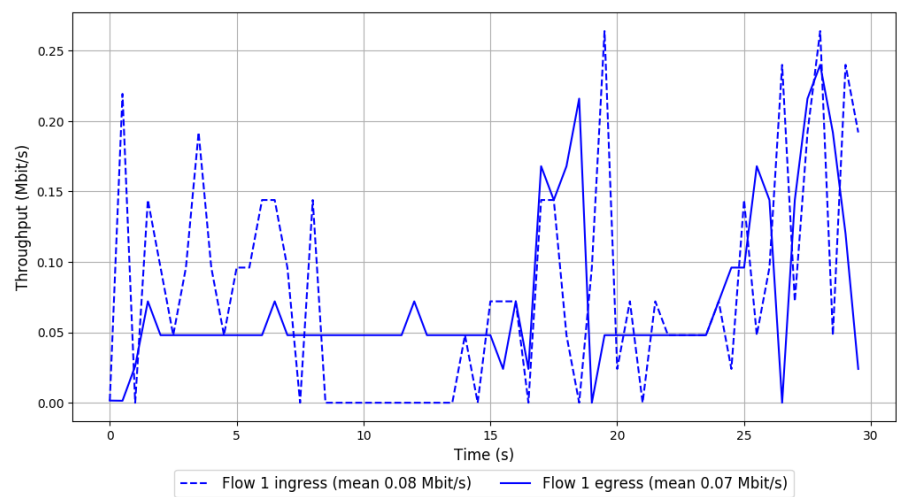


Run 3: Statistics of TCP Vegas

Start at: 2017-09-22 08:40:15
End at: 2017-09-22 08:40:45
Local clock offset: -0.136 ms
Remote clock offset: -2.564 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 8207.375 ms
Loss rate: 8.84%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 8207.375 ms
Loss rate: 8.84%

Run 3: Report of TCP Vegas — Data Link

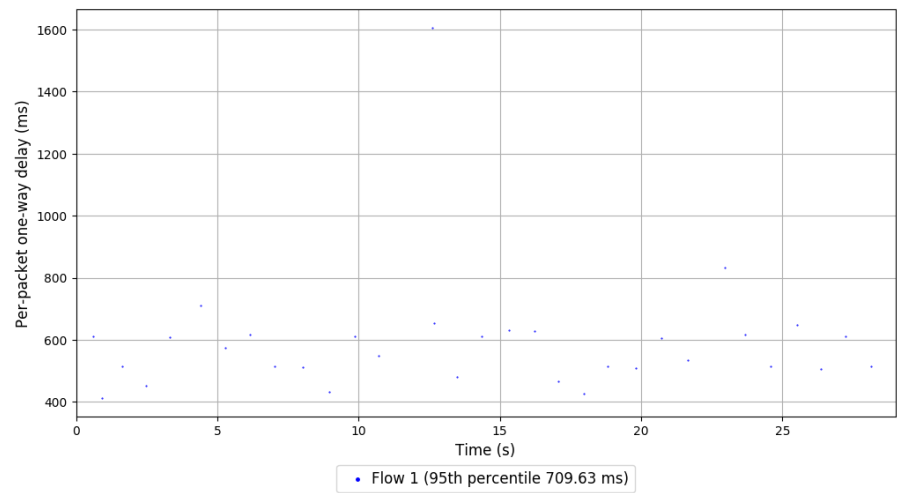
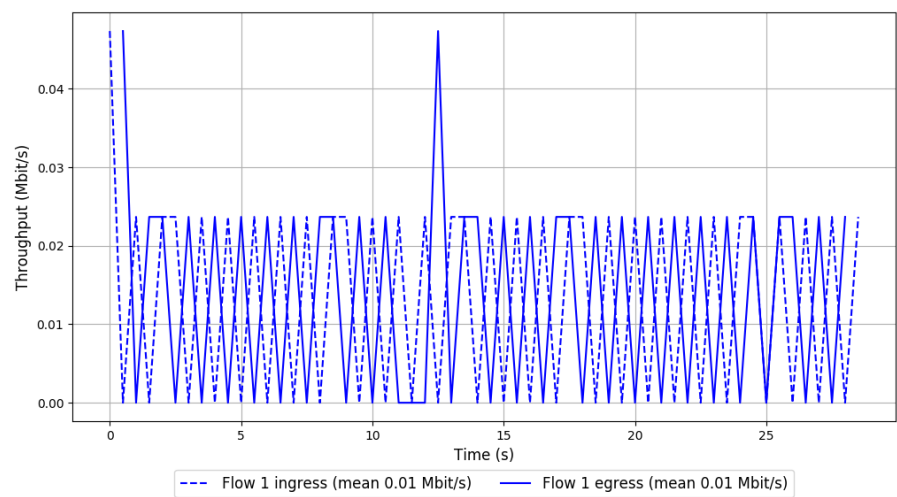


Run 1: Statistics of Verus

Start at: 2017-09-22 08:03:18
End at: 2017-09-22 08:03:48
Local clock offset: -0.094 ms
Remote clock offset: -0.872 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 709.633 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 709.633 ms
Loss rate: 3.03%

Run 1: Report of Verus — Data Link

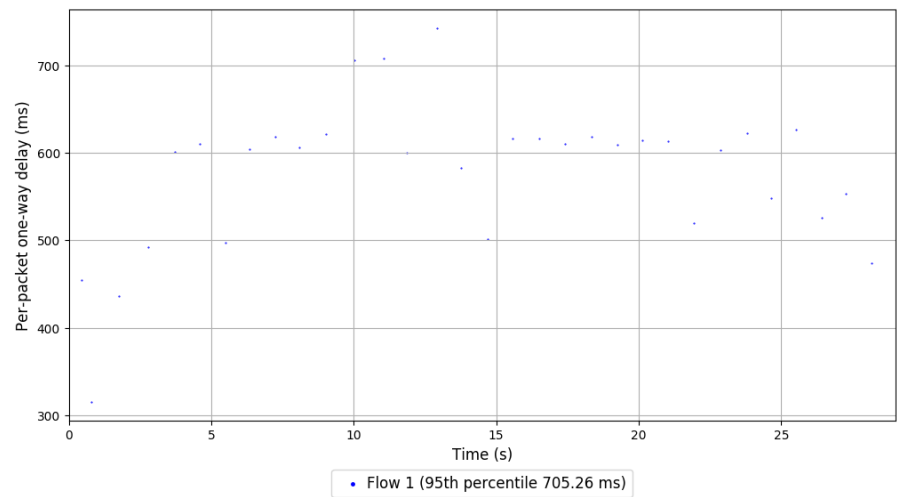
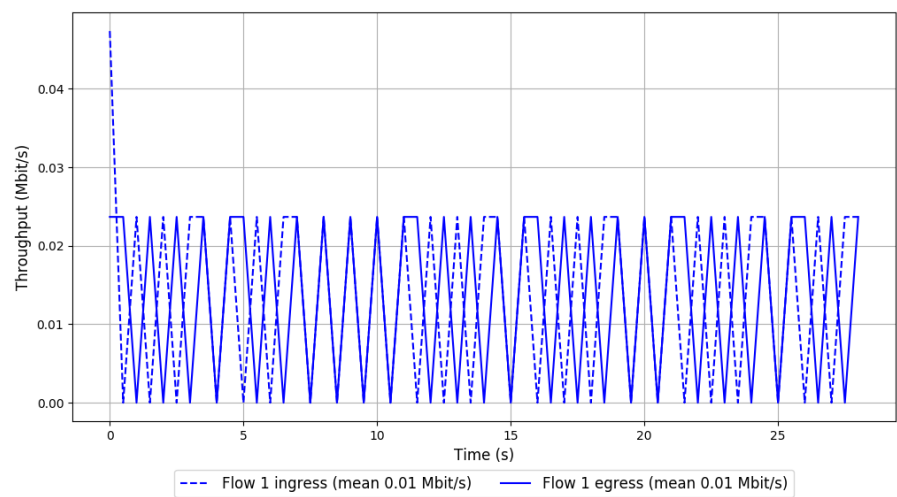


Run 2: Statistics of Verus

Start at: 2017-09-22 08:20:53
End at: 2017-09-22 08:21:23
Local clock offset: -0.101 ms
Remote clock offset: -0.533 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 705.261 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 705.261 ms
Loss rate: 3.03%

Run 2: Report of Verus — Data Link

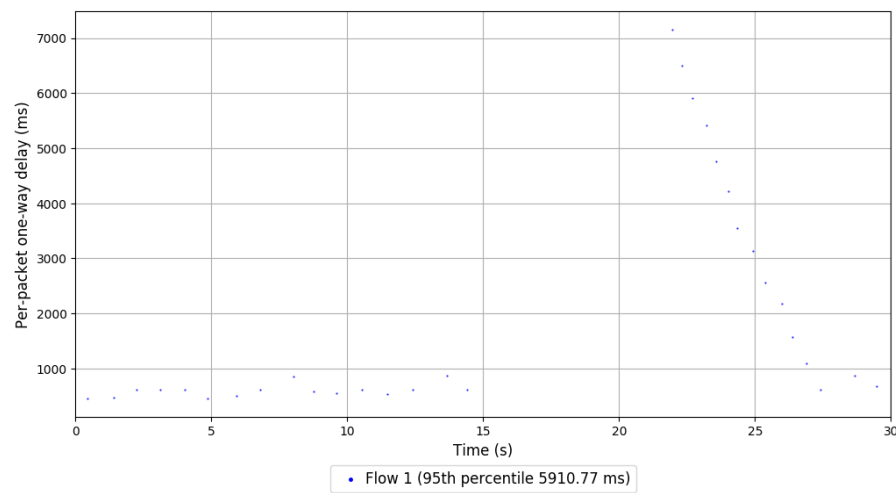
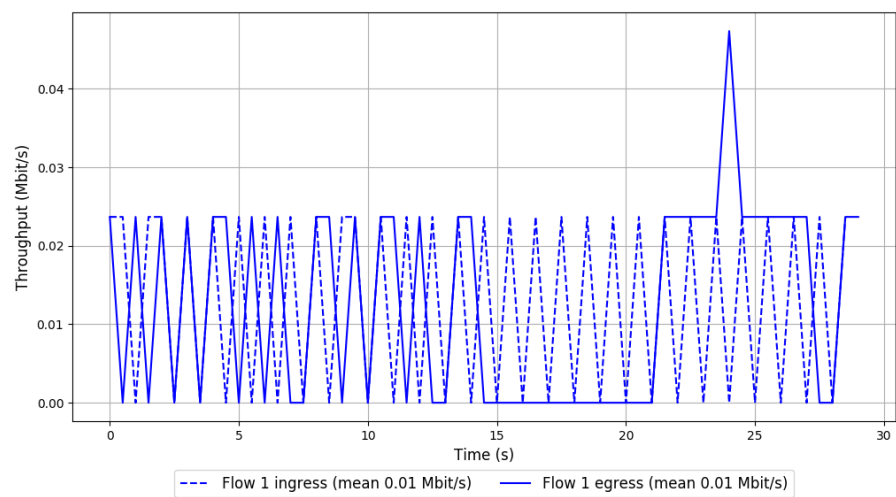


Run 3: Statistics of Verus

Start at: 2017-09-22 08:38:58
End at: 2017-09-22 08:39:28
Local clock offset: -0.152 ms
Remote clock offset: -2.466 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 5910.772 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 5910.772 ms
Loss rate: 0.00%

Run 3: Report of Verus — Data Link

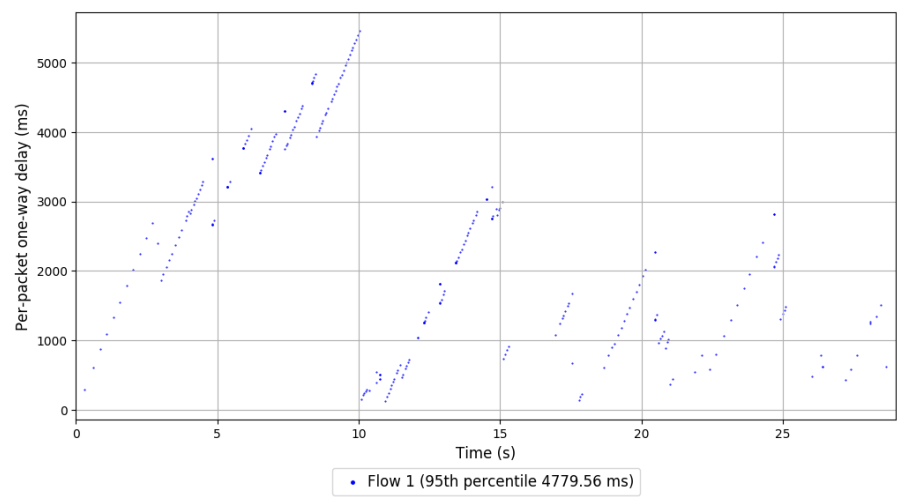
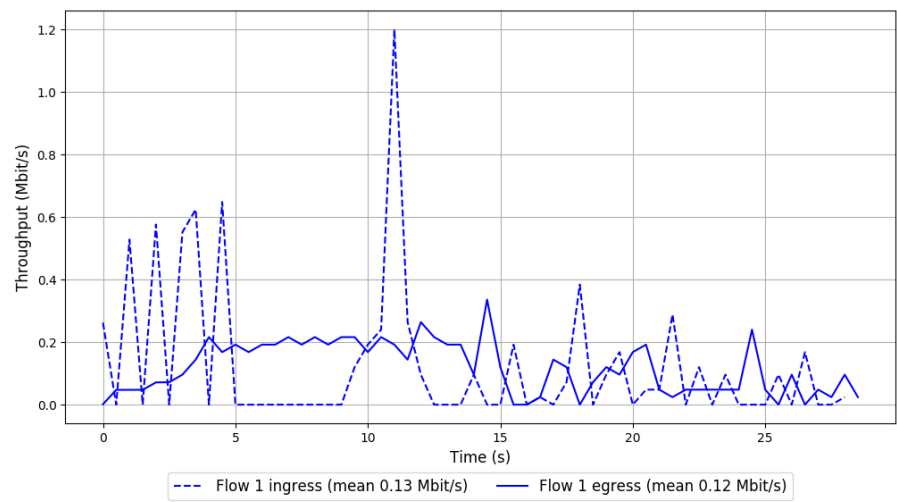


```
Run 1: Statistics of Indigo

Start at: 2017-09-22 08:02:02
End at: 2017-09-22 08:02:32
Local clock offset: 0.019 ms
Remote clock offset: -0.76 ms

# Below is generated by plot.py at 2017-09-22 09:38:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 4779.555 ms
Loss rate: 4.98%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 4779.555 ms
Loss rate: 4.98%
```

Run 1: Report of Indigo — Data Link

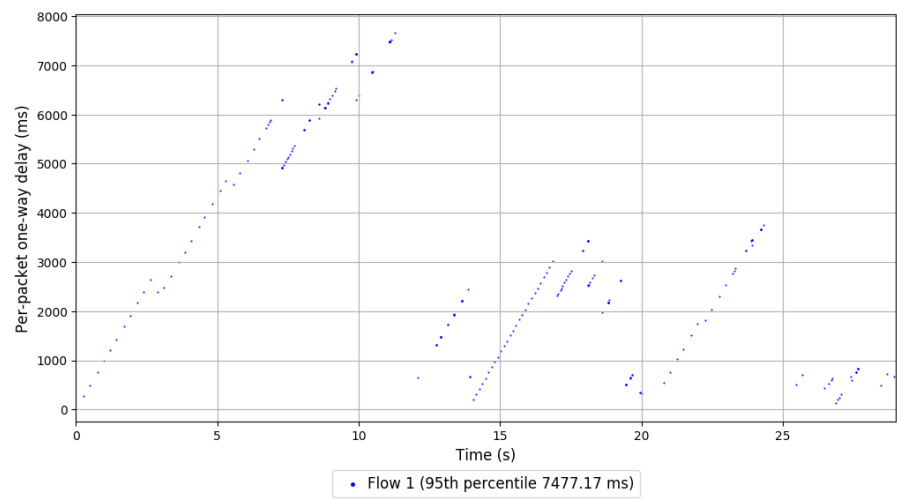
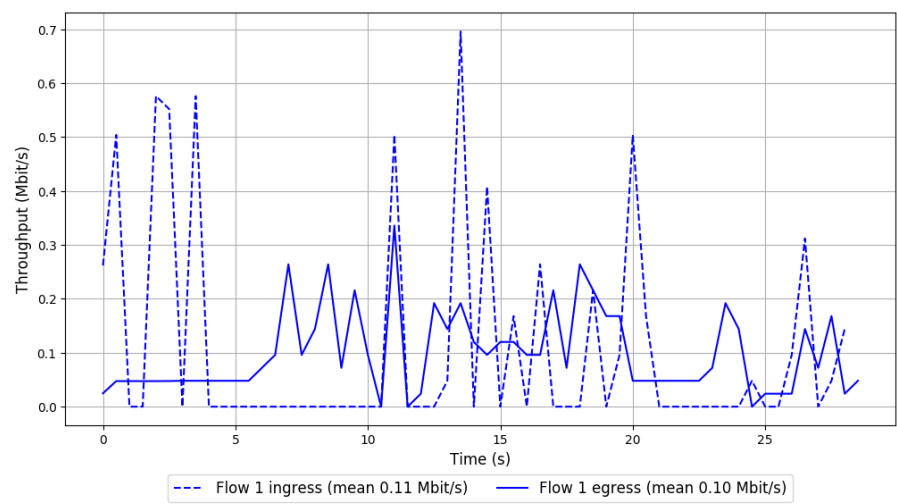


Run 2: Statistics of Indigo

Start at: 2017-09-22 08:19:36
End at: 2017-09-22 08:20:06
Local clock offset: -0.187 ms
Remote clock offset: -0.404 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 7477.174 ms
Loss rate: 7.37%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 7477.174 ms
Loss rate: 7.37%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-09-22 08:37:40

End at: 2017-09-22 08:38:10

Local clock offset: -0.23 ms

Remote clock offset: -0.06 ms

Below is generated by plot.py at 2017-09-22 09:38:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 4853.122 ms

Loss rate: 15.78%

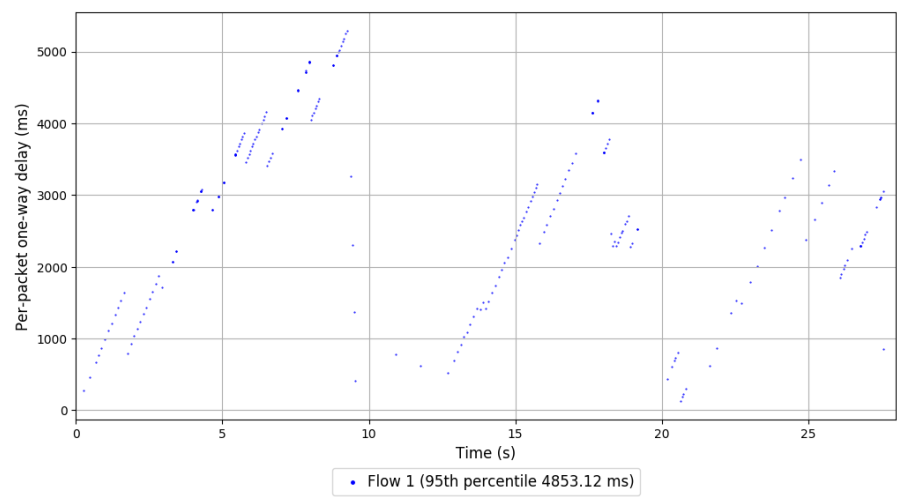
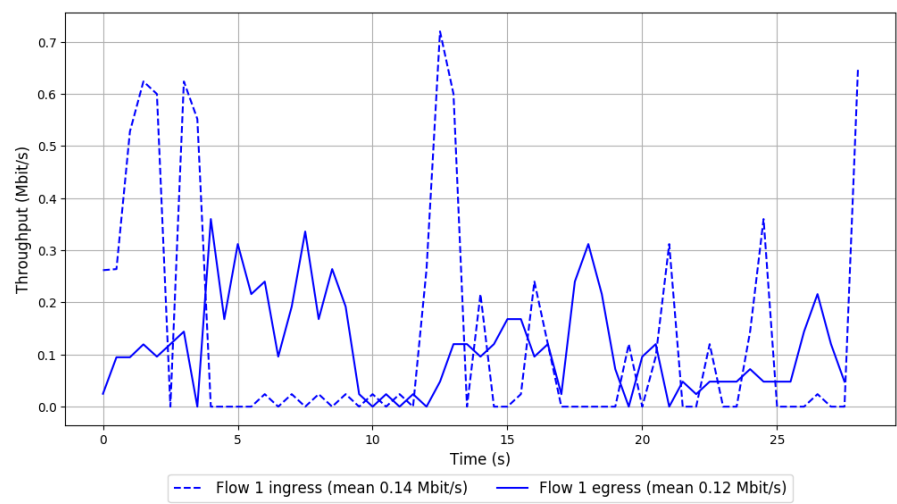
-- Flow 1:

Average throughput: 0.12 Mbit/s

95th percentile per-packet one-way delay: 4853.122 ms

Loss rate: 15.78%

Run 3: Report of Indigo — Data Link

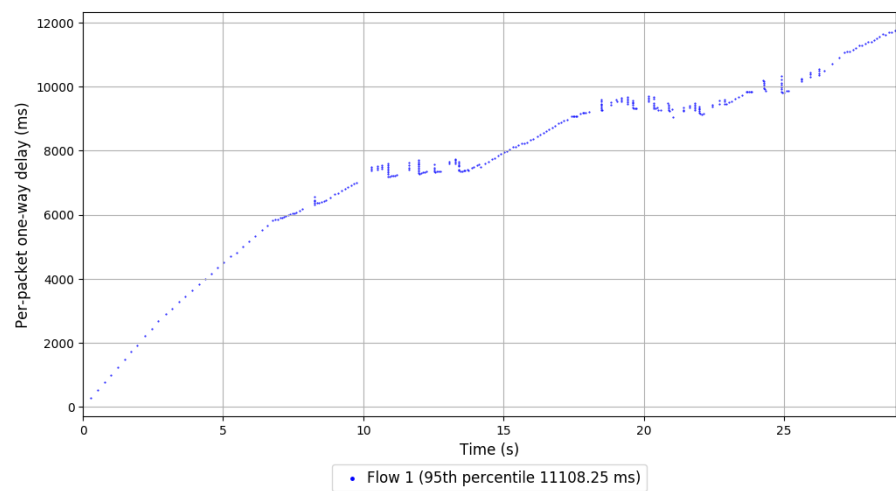
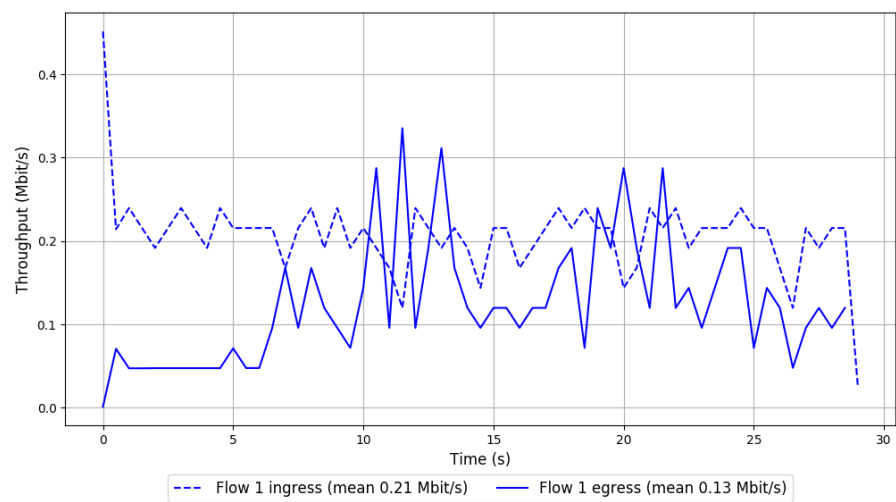


Run 1: Statistics of Indigo-cellular

Start at: 2017-09-22 07:59:27
End at: 2017-09-22 07:59:57
Local clock offset: 0.038 ms
Remote clock offset: -0.402 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 11108.247 ms
Loss rate: 40.21%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 11108.247 ms
Loss rate: 40.21%

Run 1: Report of Indigo-cellular — Data Link



Run 2: Statistics of Indigo-cellular

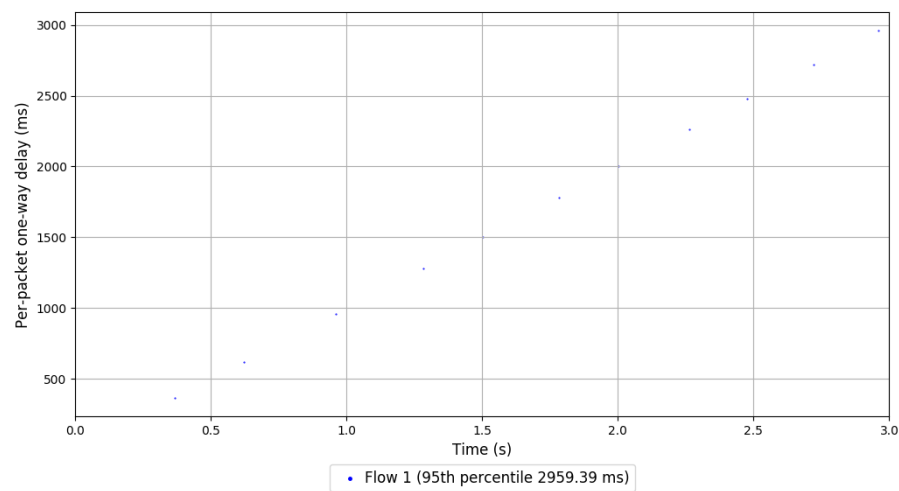
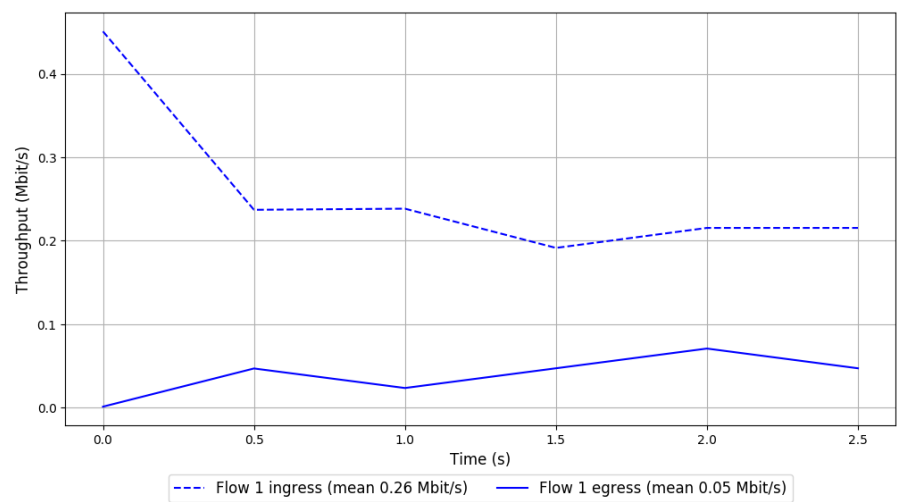
Start at: 2017-09-22 08:17:02

End at: 2017-09-22 08:17:32

Local clock offset: -0.078 ms

Remote clock offset: -2.521 ms

Run 2: Report of Indigo-cellular — Data Link



Run 3: Statistics of Indigo-cellular

Start at: 2017-09-22 08:35:06
End at: 2017-09-22 08:35:36
Local clock offset: -0.131 ms
Remote clock offset: -0.333 ms

Below is generated by plot.py at 2017-09-22 09:38:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 13434.753 ms
Loss rate: 44.49%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 13434.753 ms
Loss rate: 44.49%

Run 3: Report of Indigo-cellular — Data Link

