

Pantheon Report

Generated at 2018-01-02 20:24:54 (UTC).

Data path: AWS Brazil 2 Ethernet (*local*) → Colombia ppp0 (*remote*).

Repeated the test of 14 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).

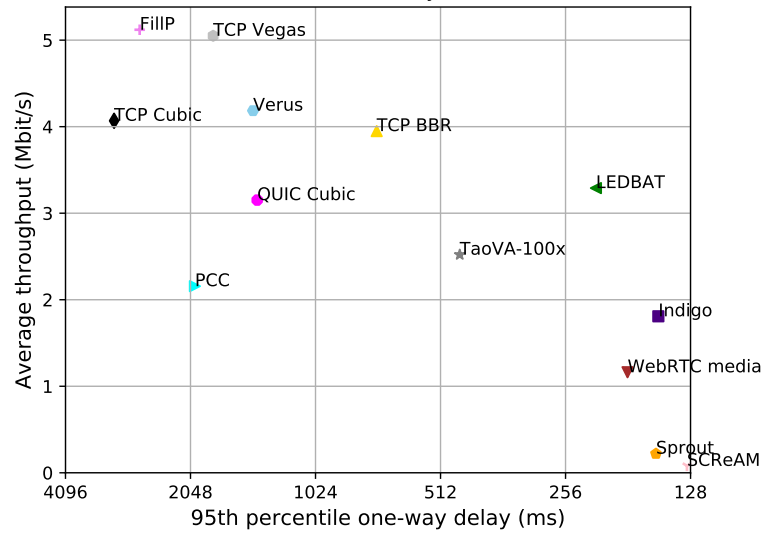
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo_fast**).

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

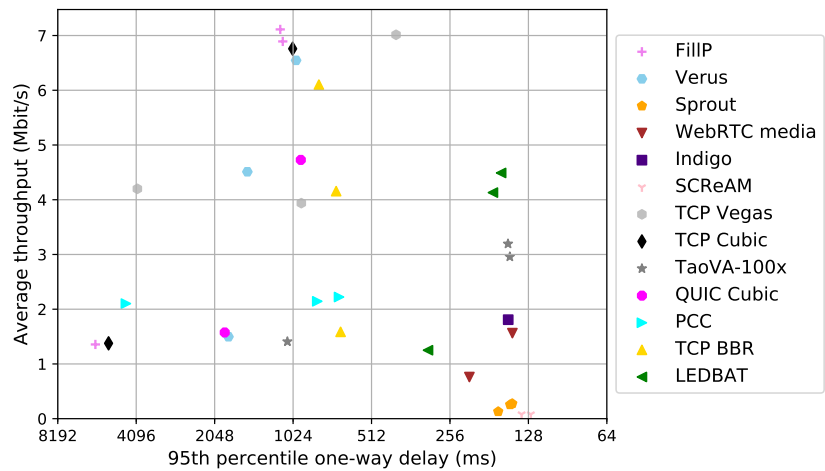
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
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 @ f1a14bffe749737437f61b1eaeab30b267cde681
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 AWS Brazil 2 Ethernet to Colombia ppp0, 3 runs of 30s each per scheme
(mean of all runs by scheme)



test from AWS Brazil 2 Ethernet to Colombia ppp0, 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	3.95	729.39	1.60
TCP Cubic	2	4.07	3128.58	11.87
LEDBAT	3	3.29	216.33	0.51
PCC	3	2.15	1998.39	28.41
QUIC Cubic	2	3.16	1414.96	4.84
SCReAM	2	0.08	130.58	0.00
WebRTC media	2	1.16	181.54	0.25
Sprout	3	0.22	155.06	0.34
TaoVA-100x	3	2.52	460.31	0.45
TCP Vegas	3	5.05	1806.18	2.42
Verus	3	4.19	1447.78	6.29
Copa	0	N/A	N/A	N/A
FillP	3	5.12	2714.76	89.21
Indigo	1	1.81	153.02	0.14

Run 1: Statistics of TCP BBR

Start at: 2018-01-02 19:37:00

End at: 2018-01-02 19:37:30

Local clock offset: 0.26 ms

Remote clock offset: 1.251 ms

Below is generated by plot.py at 2018-01-02 20:24:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 699.847 ms

Loss rate: 1.98%

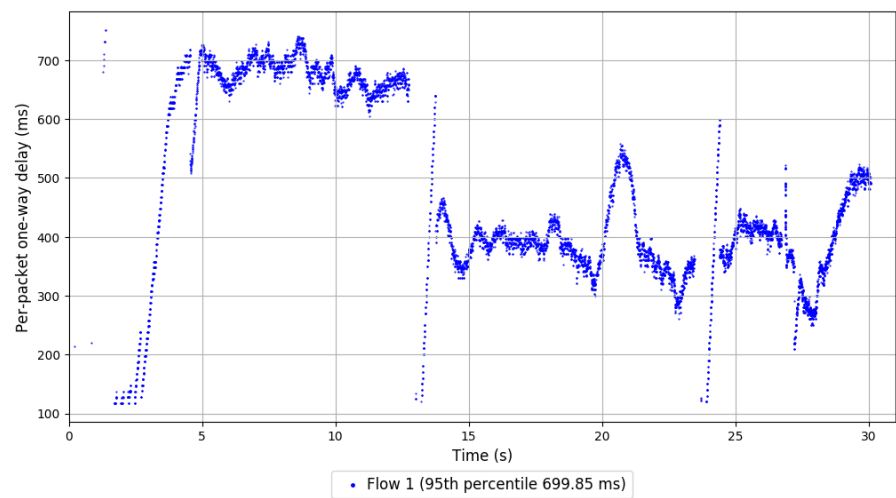
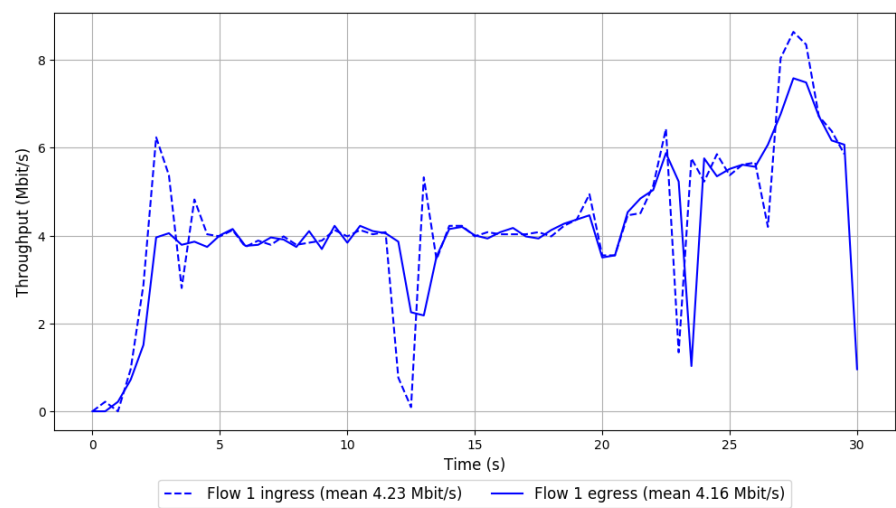
-- Flow 1:

Average throughput: 4.16 Mbit/s

95th percentile per-packet one-way delay: 699.847 ms

Loss rate: 1.98%

Run 1: Report of TCP BBR — Data Link

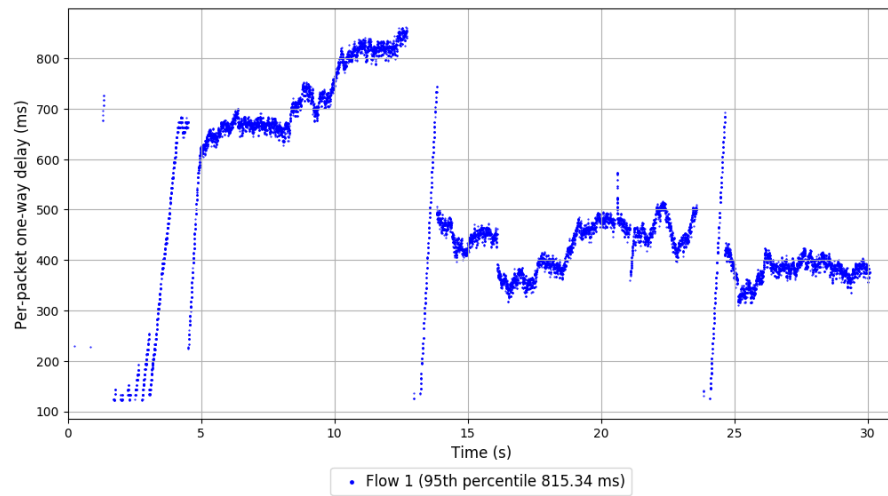
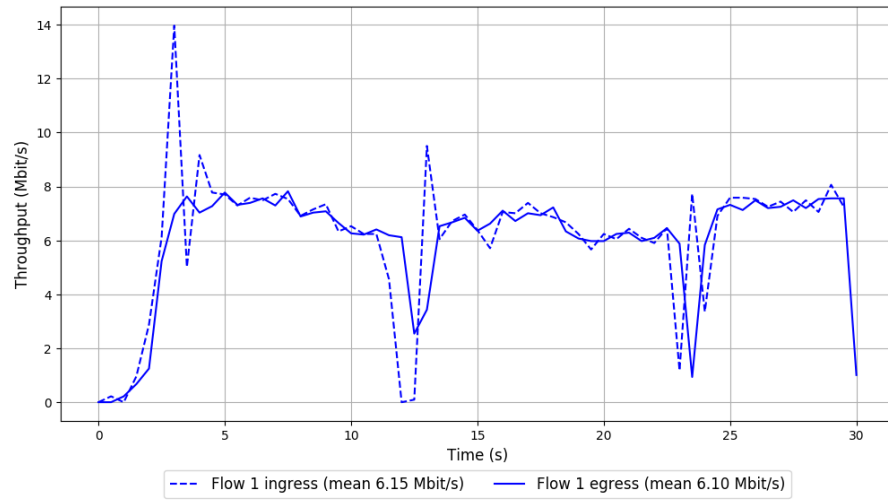


Run 2: Statistics of TCP BBR

Start at: 2018-01-02 19:54:41
End at: 2018-01-02 19:55:11
Local clock offset: 0.086 ms
Remote clock offset: -4.847 ms

Below is generated by plot.py at 2018-01-02 20:24:27
Datalink statistics
-- Total of 1 flow:
Average throughput: 6.10 Mbit/s
95th percentile per-packet one-way delay: 815.339 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 6.10 Mbit/s
95th percentile per-packet one-way delay: 815.339 ms
Loss rate: 1.22%

Run 2: Report of TCP BBR — Data Link

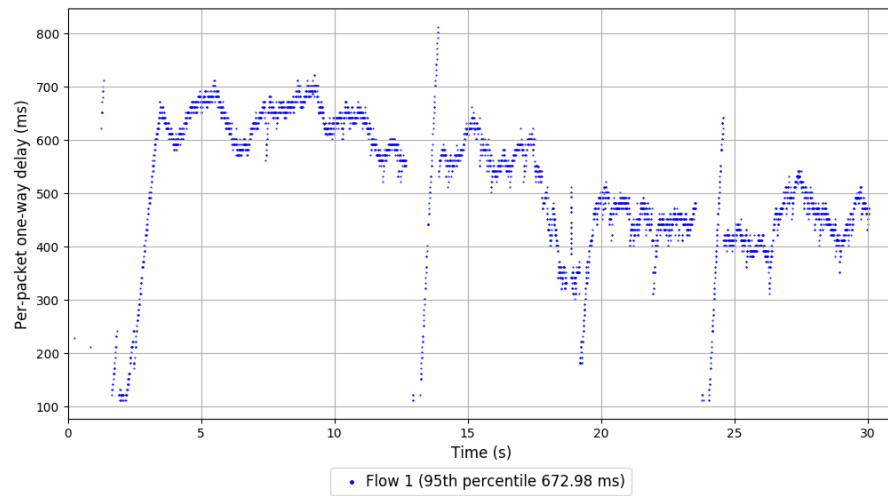
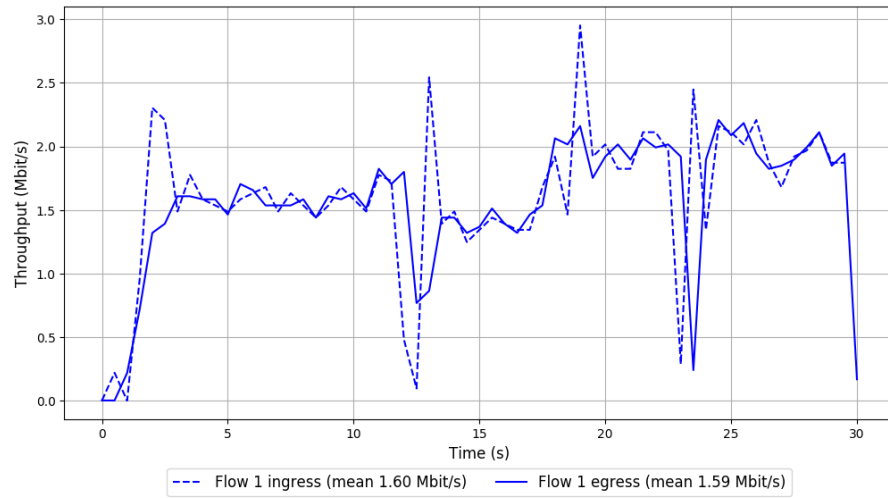


Run 3: Statistics of TCP BBR

Start at: 2018-01-02 20:12:20
End at: 2018-01-02 20:12:50
Local clock offset: 0.068 ms
Remote clock offset: -4.825 ms

Below is generated by plot.py at 2018-01-02 20:24:27
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 672.980 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 672.980 ms
Loss rate: 1.60%

Run 3: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-01-02 19:45:13

End at: 2018-01-02 19:45:43

Local clock offset: 0.245 ms

Remote clock offset: 0.35 ms

Run 1: Report of TCP Cubic — Data Link

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Run 2: Statistics of TCP Cubic

Start at: 2018-01-02 20:02:54

End at: 2018-01-02 20:03:24

Local clock offset: 0.067 ms

Remote clock offset: 0.331 ms

Below is generated by plot.py at 2018-01-02 20:24:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.76 Mbit/s

95th percentile per-packet one-way delay: 1027.805 ms

Loss rate: 3.75%

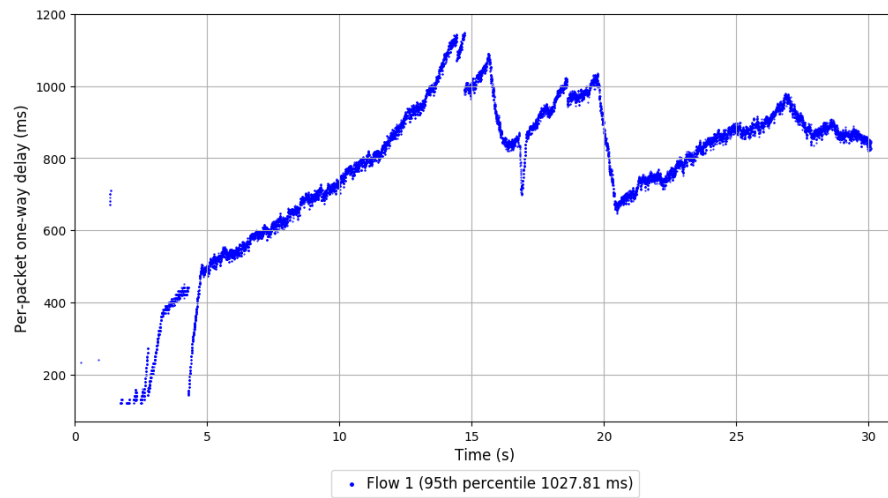
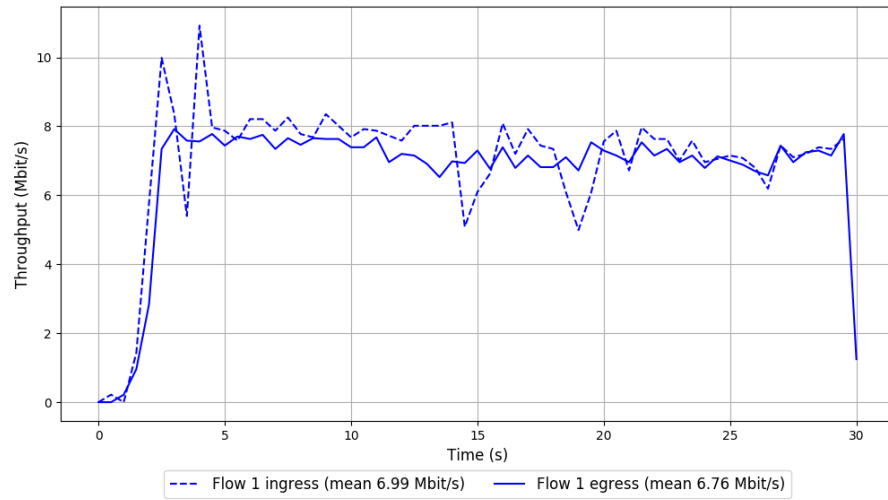
-- Flow 1:

Average throughput: 6.76 Mbit/s

95th percentile per-packet one-way delay: 1027.805 ms

Loss rate: 3.75%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2018-01-02 20:20:32

End at: 2018-01-02 20:21:03

Local clock offset: 0.068 ms

Remote clock offset: 0.127 ms

Below is generated by plot.py at 2018-01-02 20:24:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 5229.348 ms

Loss rate: 19.99%

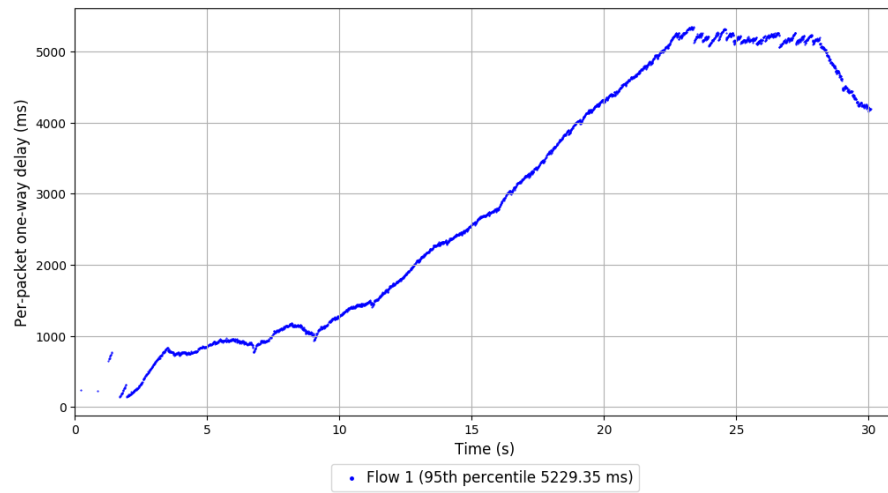
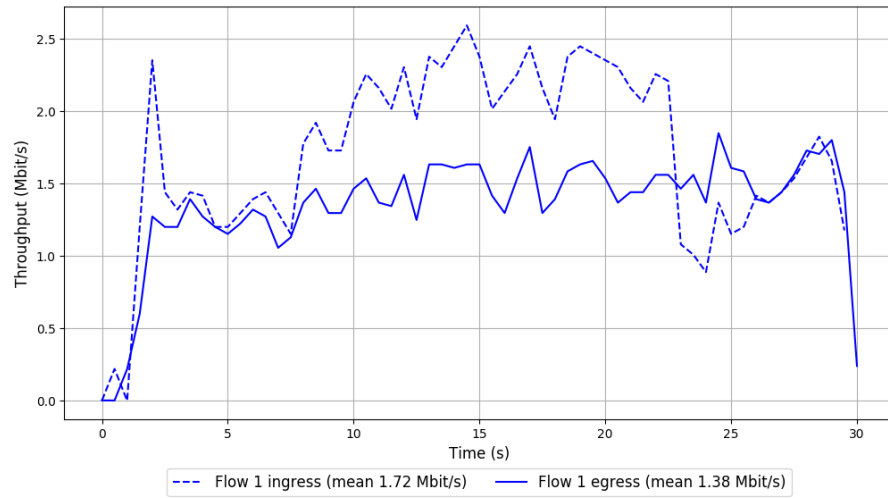
-- Flow 1:

Average throughput: 1.38 Mbit/s

95th percentile per-packet one-way delay: 5229.348 ms

Loss rate: 19.99%

Run 3: Report of TCP Cubic — Data Link

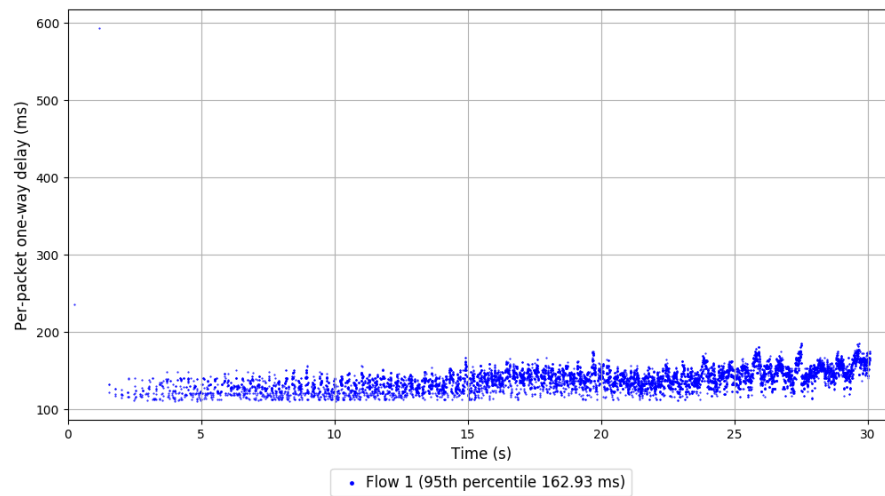
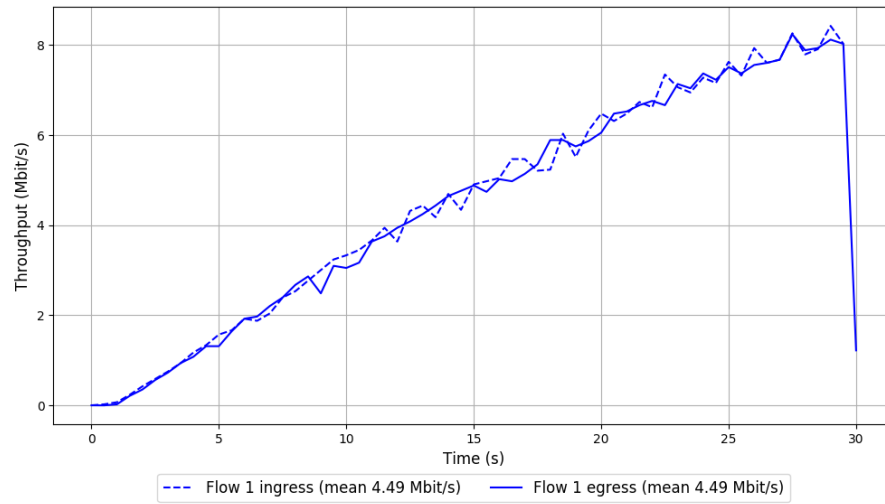


```
Run 1: Statistics of LEDBAT

Start at: 2018-01-02 19:44:03
End at: 2018-01-02 19:44:33
Local clock offset: 0.263 ms
Remote clock offset: 1.248 ms

# Below is generated by plot.py at 2018-01-02 20:24:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 162.929 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 4.49 Mbit/s
95th percentile per-packet one-way delay: 162.929 ms
Loss rate: 0.52%
```


Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-01-02 20:01:44

End at: 2018-01-02 20:02:14

Local clock offset: 0.096 ms

Remote clock offset: 0.324 ms

Below is generated by plot.py at 2018-01-02 20:24:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 175.158 ms

Loss rate: 0.47%

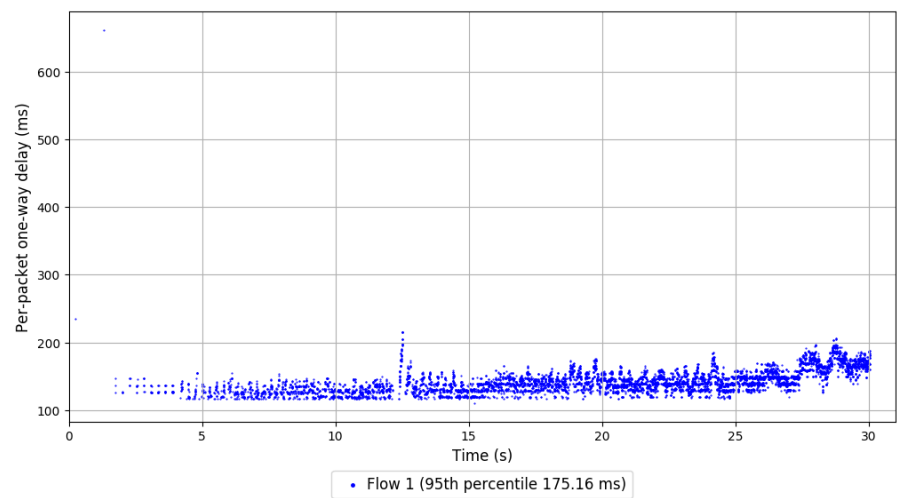
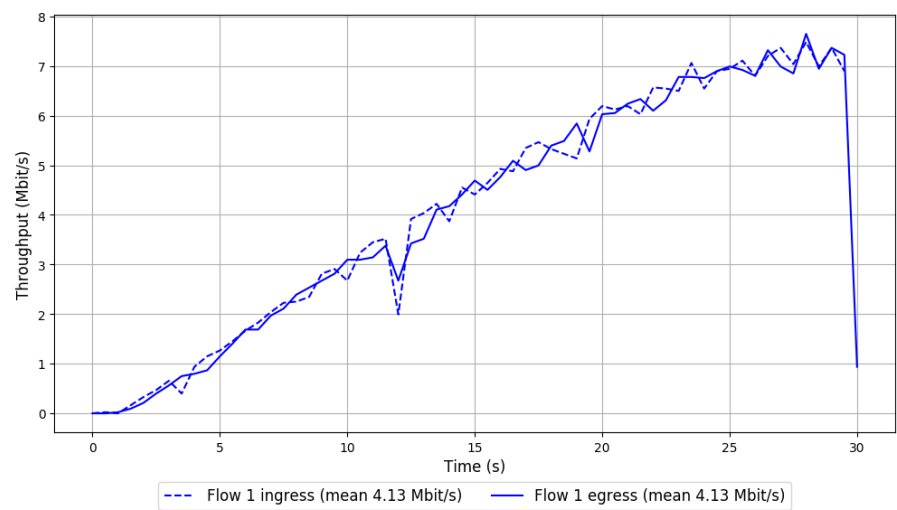
-- Flow 1:

Average throughput: 4.13 Mbit/s

95th percentile per-packet one-way delay: 175.158 ms

Loss rate: 0.47%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-01-02 20:19:22

End at: 2018-01-02 20:19:52

Local clock offset: 0.058 ms

Remote clock offset: 0.708 ms

Below is generated by plot.py at 2018-01-02 20:24:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 310.890 ms

Loss rate: 0.53%

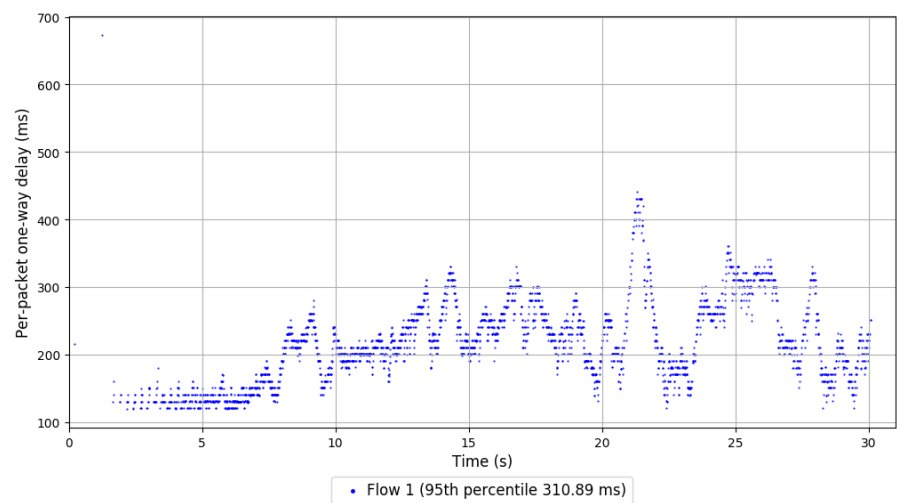
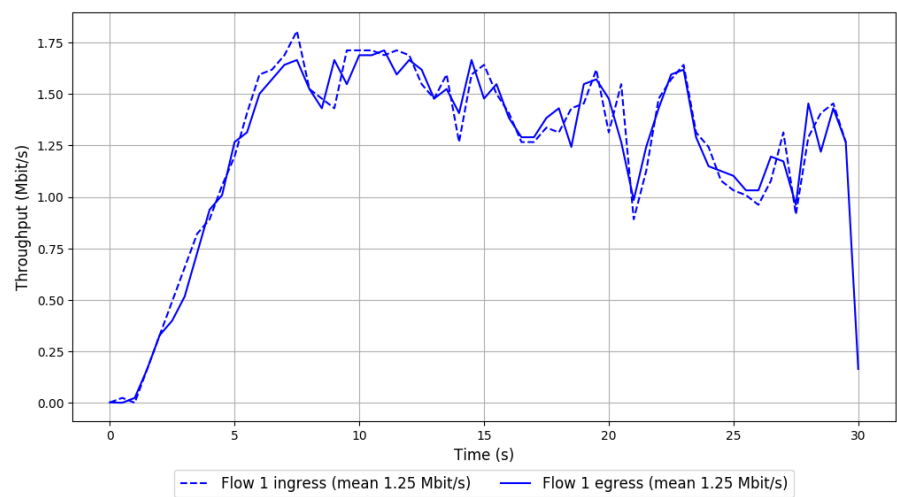
-- Flow 1:

Average throughput: 1.25 Mbit/s

95th percentile per-packet one-way delay: 310.890 ms

Loss rate: 0.53%

Run 3: Report of LEDBAT — Data Link

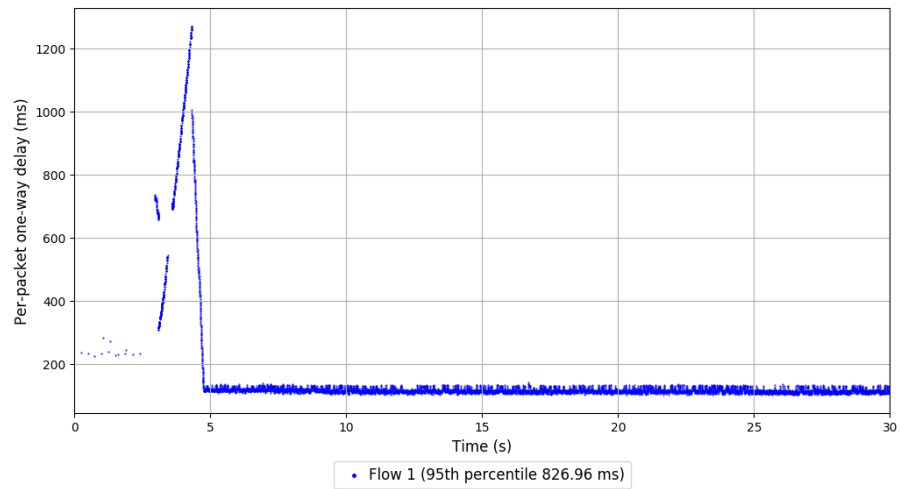
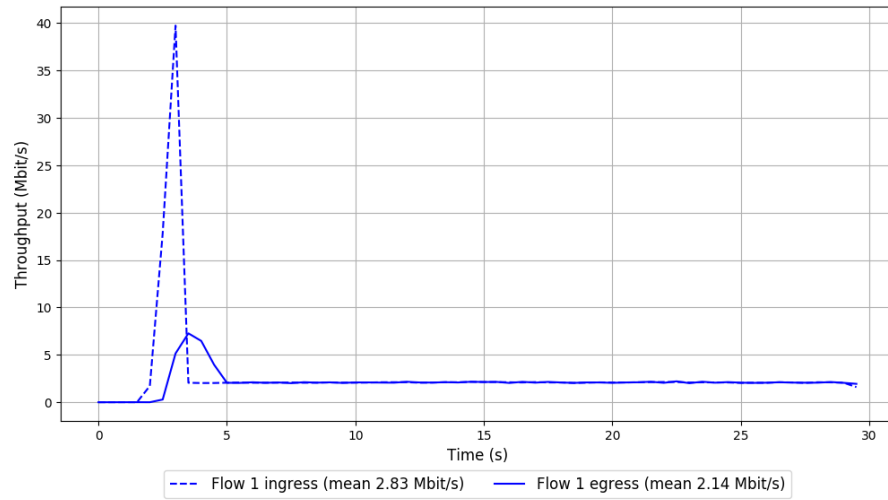


Run 1: Statistics of PCC

Start at: 2018-01-02 19:40:31
End at: 2018-01-02 19:41:01
Local clock offset: 0.294 ms
Remote clock offset: -4.375 ms

Below is generated by plot.py at 2018-01-02 20:24:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 826.955 ms
Loss rate: 24.72%
-- Flow 1:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 826.955 ms
Loss rate: 24.72%

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-01-02 19:58:12

End at: 2018-01-02 19:58:42

Local clock offset: 0.09 ms

Remote clock offset: 1.169 ms

Below is generated by plot.py at 2018-01-02 20:24:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 682.228 ms

Loss rate: 12.37%

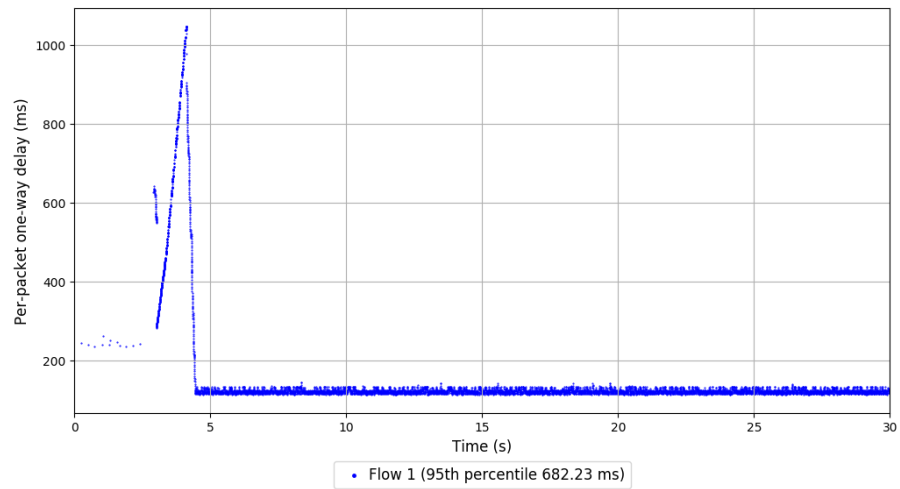
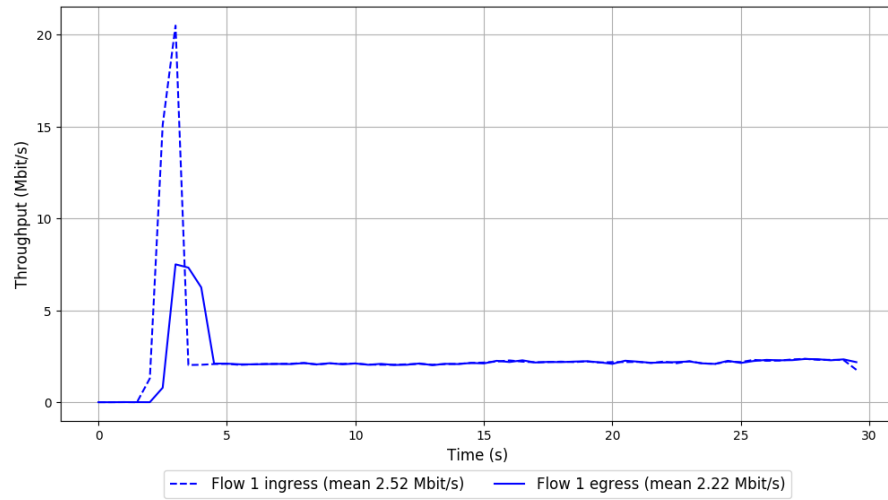
-- Flow 1:

Average throughput: 2.22 Mbit/s

95th percentile per-packet one-way delay: 682.228 ms

Loss rate: 12.37%

Run 2: Report of PCC — Data Link

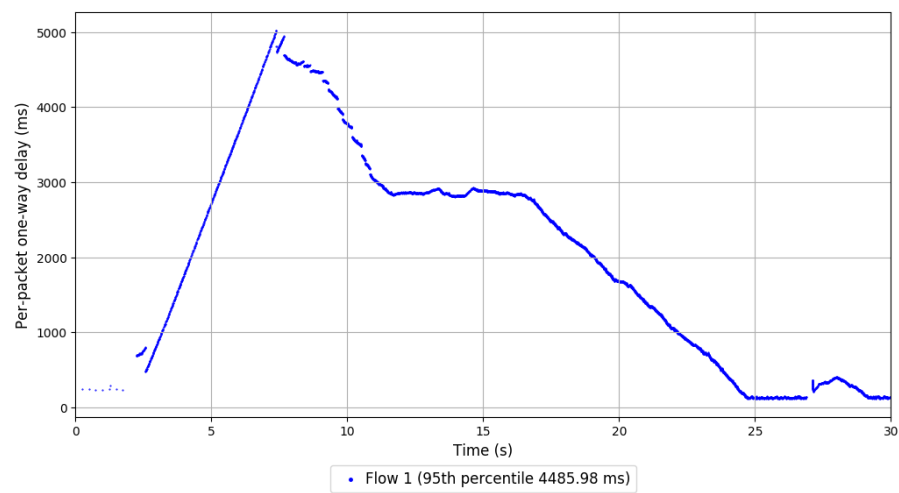
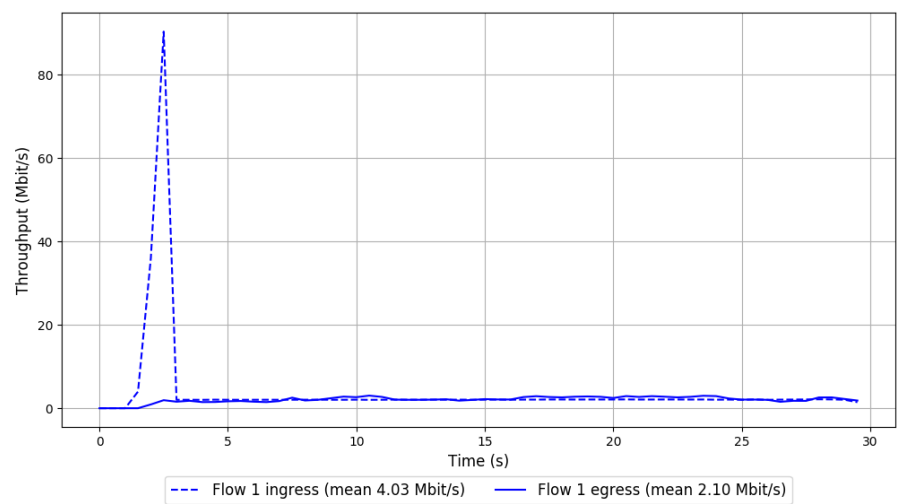


Run 3: Statistics of PCC

Start at: 2018-01-02 20:15:51
End at: 2018-01-02 20:16:21
Local clock offset: 0.081 ms
Remote clock offset: -0.047 ms

Below is generated by plot.py at 2018-01-02 20:24:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 4485.978 ms
Loss rate: 48.14%
-- Flow 1:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 4485.978 ms
Loss rate: 48.14%

Run 3: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

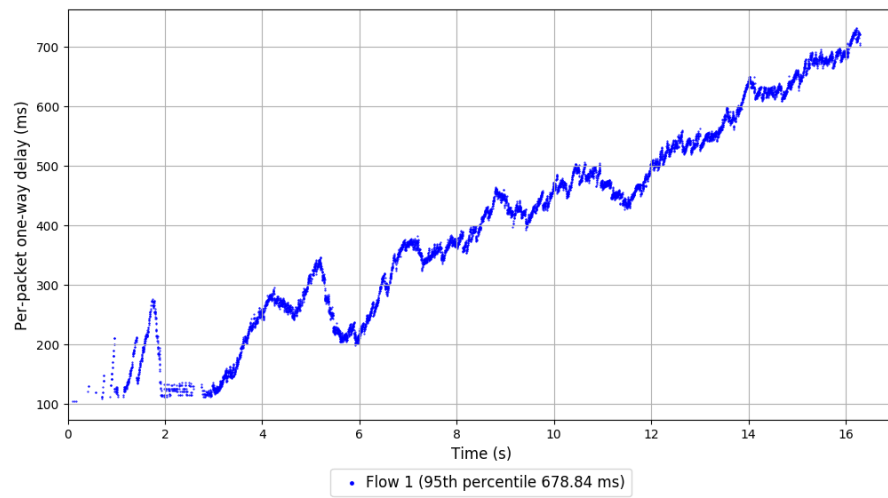
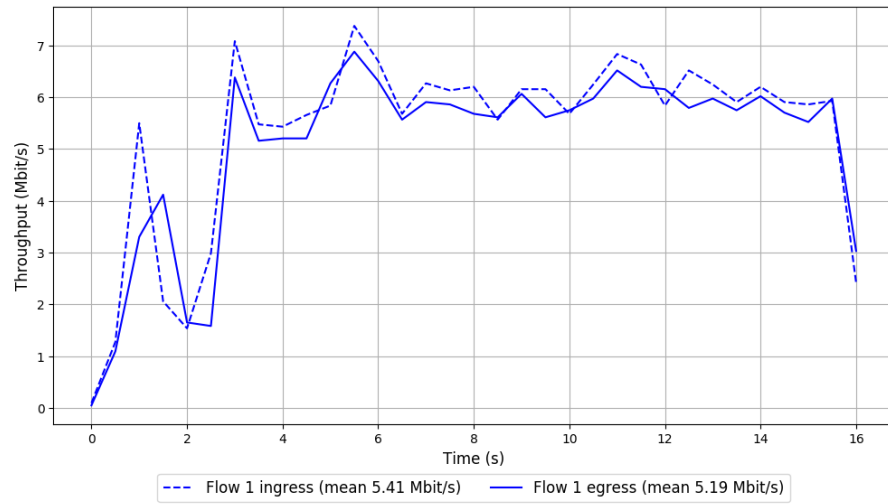
Start at: 2018-01-02 19:35:49

End at: 2018-01-02 19:36:19

Local clock offset: 0.363 ms

Remote clock offset: -4.627 ms

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-01-02 19:53:30

End at: 2018-01-02 19:54:00

Local clock offset: 0.112 ms

Remote clock offset: 0.051 ms

Below is generated by plot.py at 2018-01-02 20:24:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.73 Mbit/s

95th percentile per-packet one-way delay: 956.529 ms

Loss rate: 3.51%

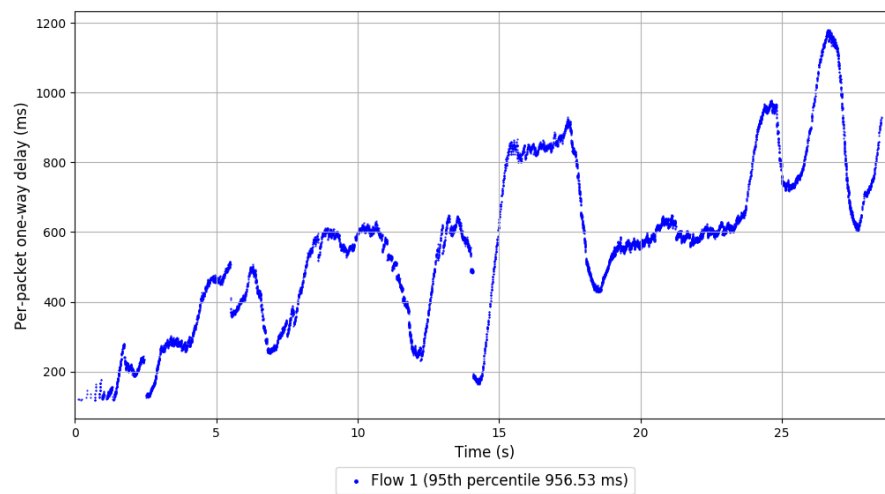
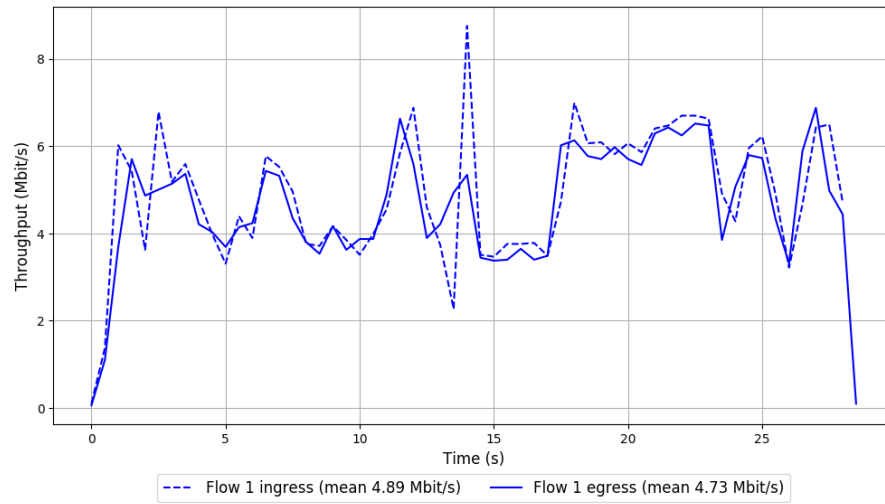
-- Flow 1:

Average throughput: 4.73 Mbit/s

95th percentile per-packet one-way delay: 956.529 ms

Loss rate: 3.51%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-01-02 20:11:10

End at: 2018-01-02 20:11:40

Local clock offset: 0.054 ms

Remote clock offset: 0.723 ms

Below is generated by plot.py at 2018-01-02 20:24:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 1873.384 ms

Loss rate: 6.18%

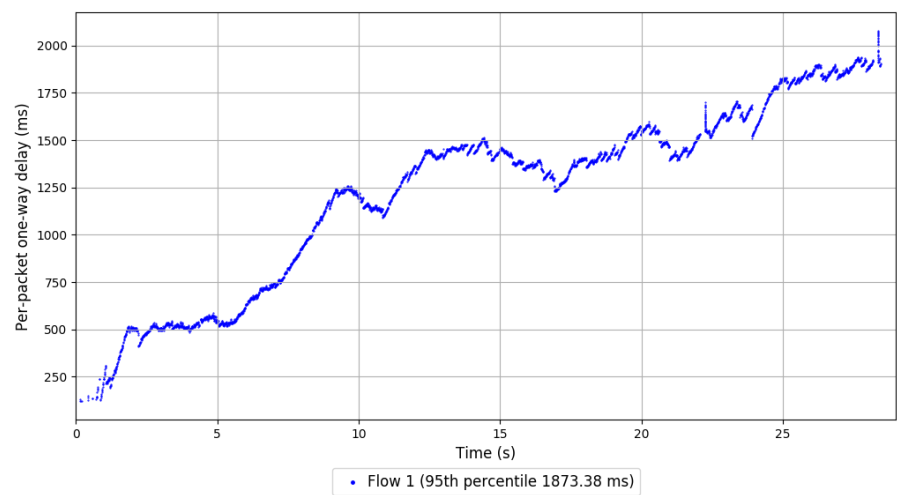
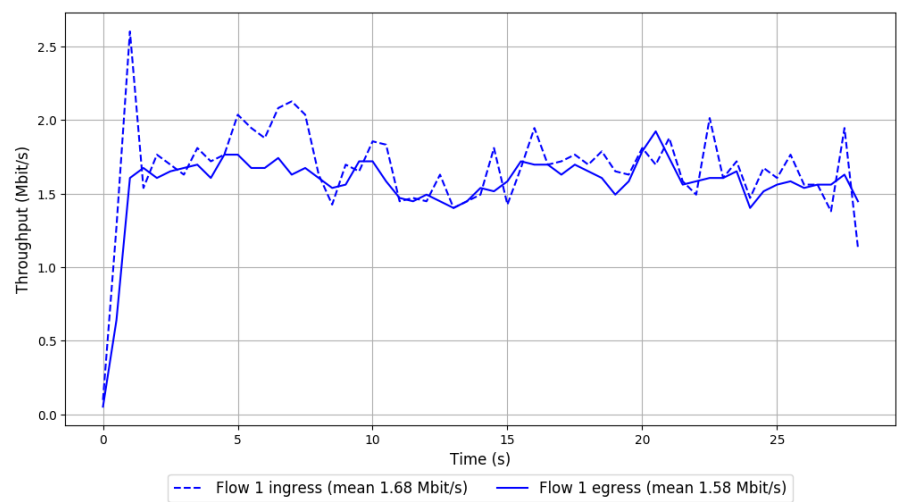
-- Flow 1:

Average throughput: 1.58 Mbit/s

95th percentile per-packet one-way delay: 1873.384 ms

Loss rate: 6.18%

Run 3: Report of QUIC Cubic — Data Link

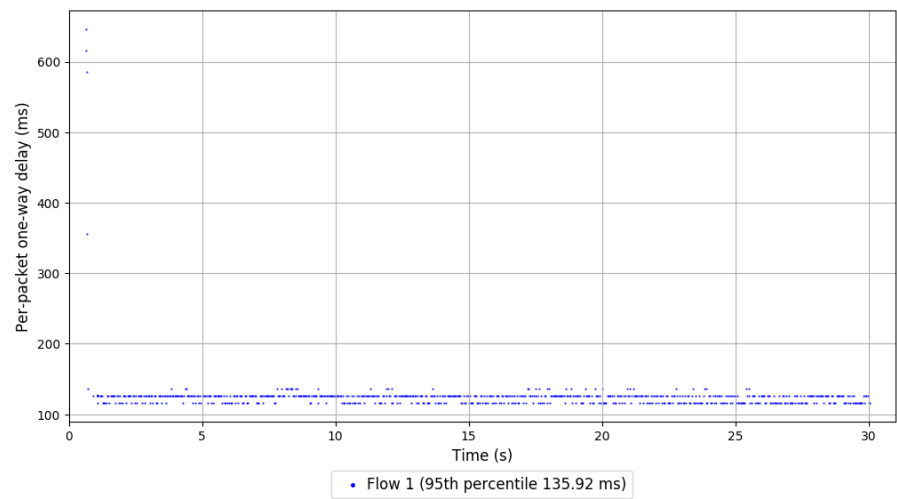
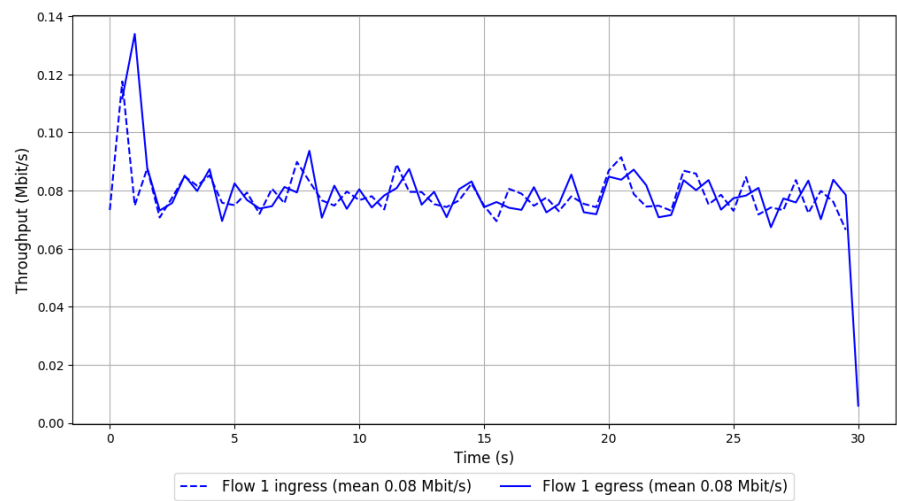


```
Run 1: Statistics of SCReAM

Start at: 2018-01-02 19:32:18
End at: 2018-01-02 19:32:48
Local clock offset: 0.423 ms
Remote clock offset: 2.241 ms

# Below is generated by plot.py at 2018-01-02 20:24:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 135.920 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 135.920 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-01-02 19:49:58

End at: 2018-01-02 19:50:28

Local clock offset: 0.183 ms

Remote clock offset: 1.928 ms

Below is generated by plot.py at 2018-01-02 20:24:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 125.247 ms

Loss rate: 0.00%

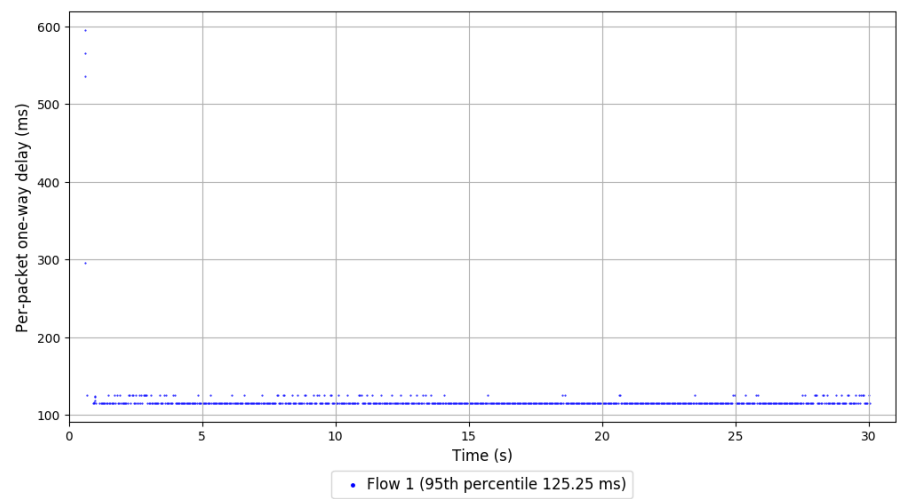
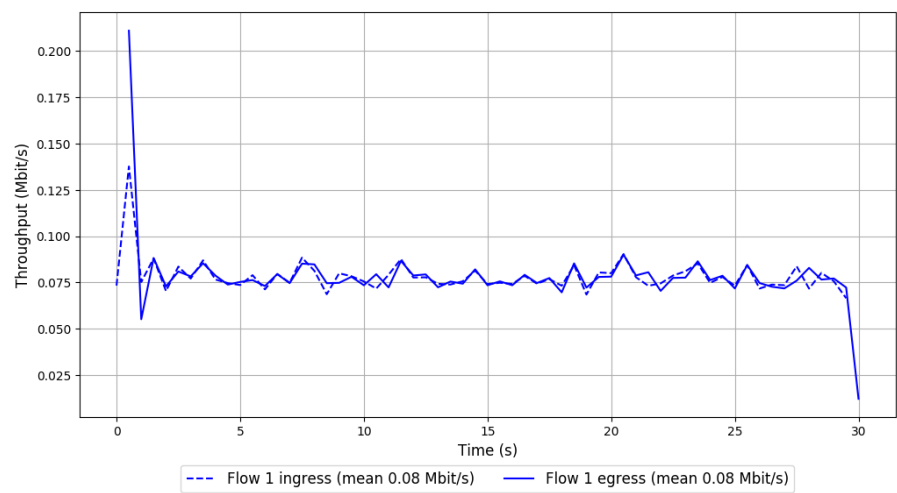
-- Flow 1:

Average throughput: 0.08 Mbit/s

95th percentile per-packet one-way delay: 125.247 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

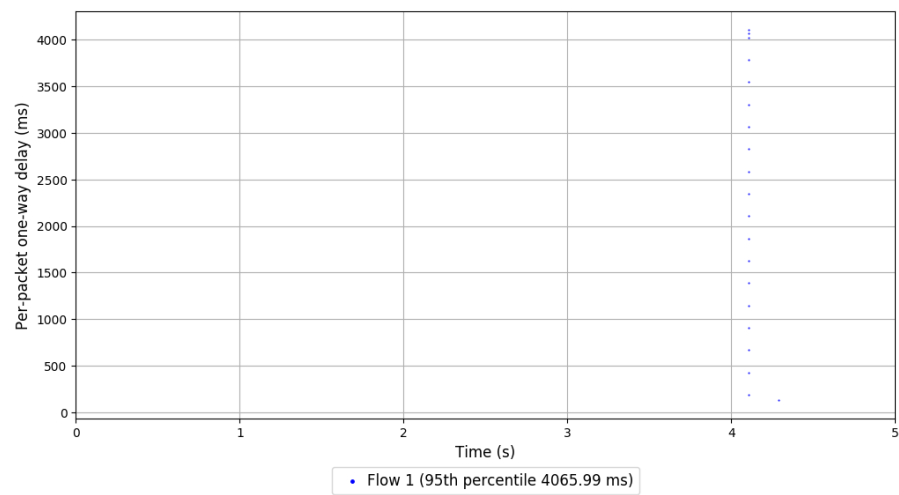
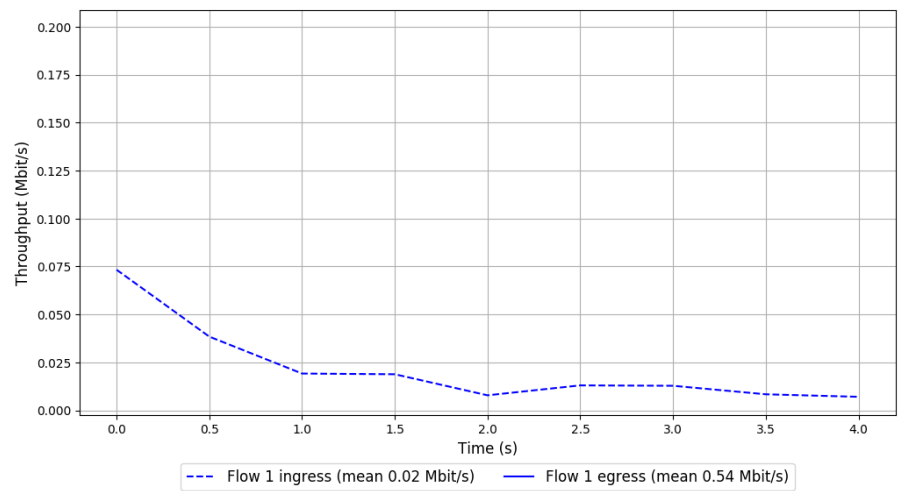
Start at: 2018-01-02 20:07:39

End at: 2018-01-02 20:08:09

Local clock offset: 0.064 ms

Remote clock offset: -4.568 ms

Run 3: Report of SReAM — Data Link



Run 1: Statistics of WebRTC media

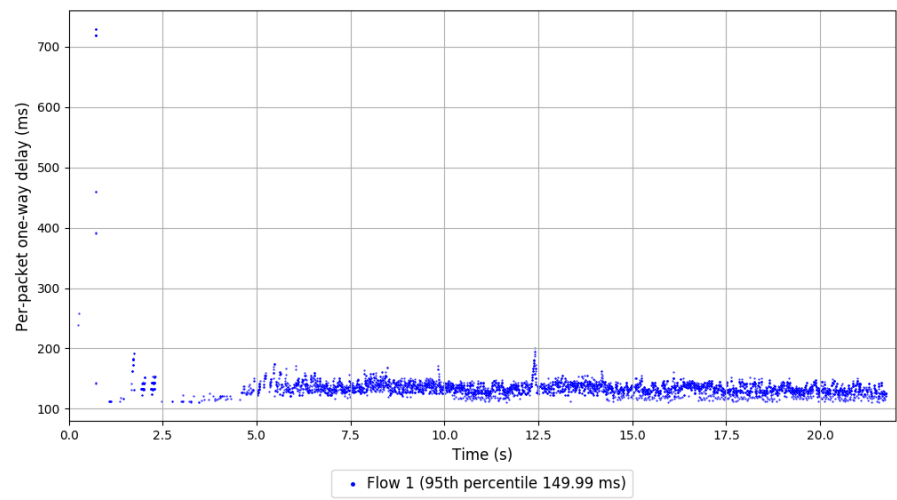
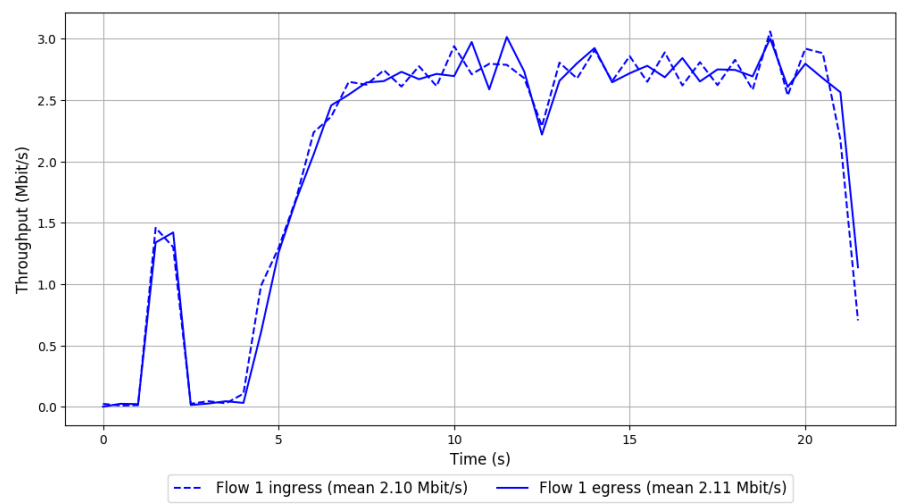
Start at: 2018-01-02 19:39:21

End at: 2018-01-02 19:39:51

Local clock offset: 0.244 ms

Remote clock offset: 2.077 ms

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-01-02 19:57:02

End at: 2018-01-02 19:57:32

Local clock offset: 0.127 ms

Remote clock offset: 1.138 ms

Below is generated by plot.py at 2018-01-02 20:24:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 147.462 ms

Loss rate: 0.22%

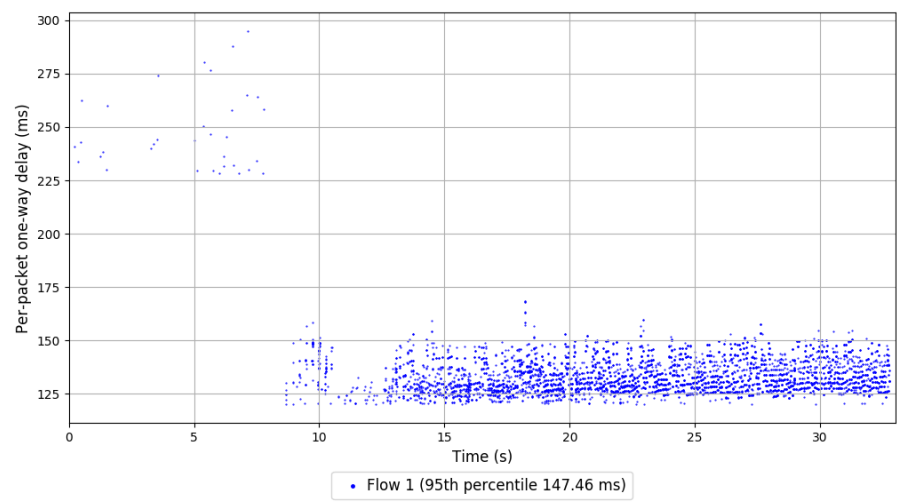
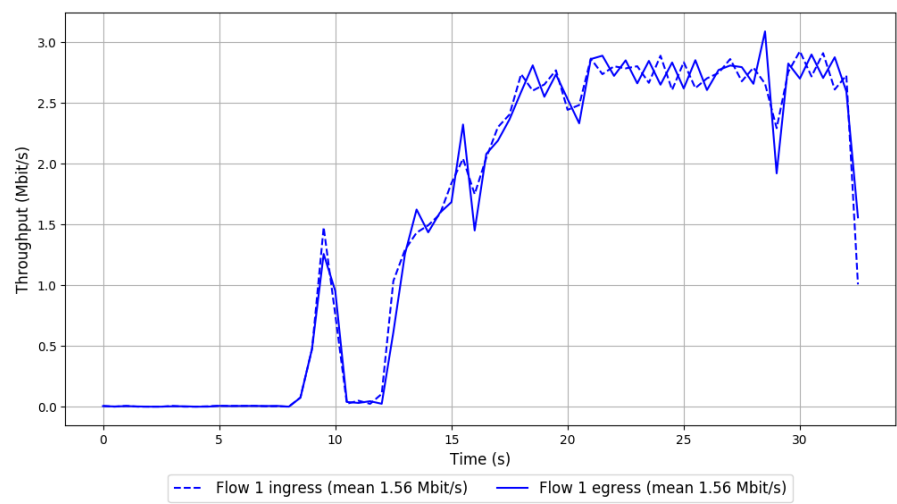
-- Flow 1:

Average throughput: 1.56 Mbit/s

95th percentile per-packet one-way delay: 147.462 ms

Loss rate: 0.22%

Run 2: Report of WebRTC media — Data Link

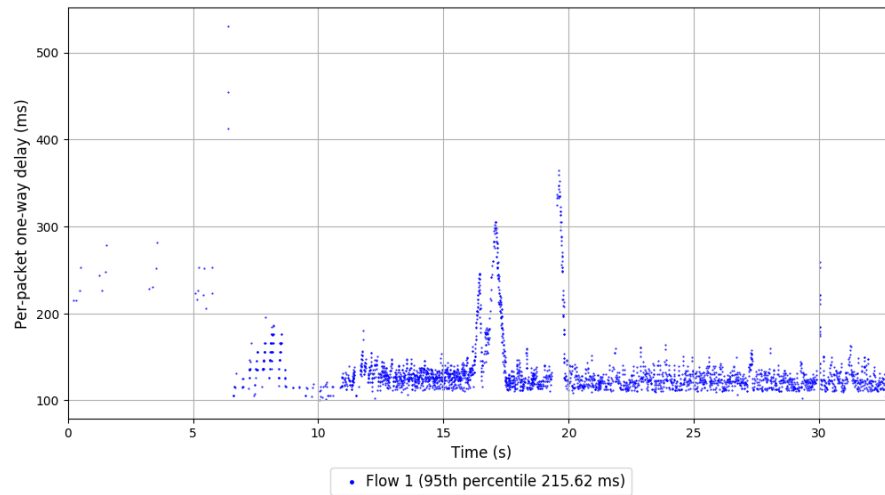
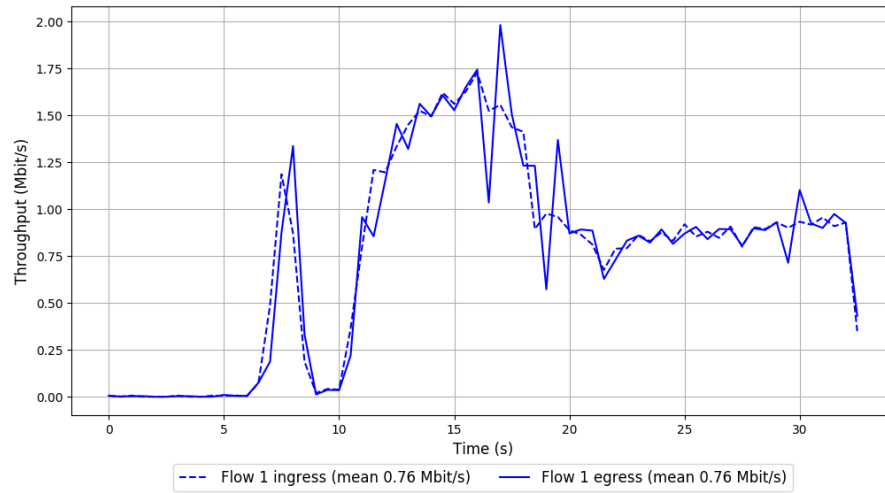


Run 3: Statistics of WebRTC media

Start at: 2018-01-02 20:14:40
End at: 2018-01-02 20:15:10
Local clock offset: -0.001 ms
Remote clock offset: -4.652 ms

Below is generated by plot.py at 2018-01-02 20:24:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 215.623 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 215.623 ms
Loss rate: 0.28%

Run 3: Report of WebRTC media — Data Link

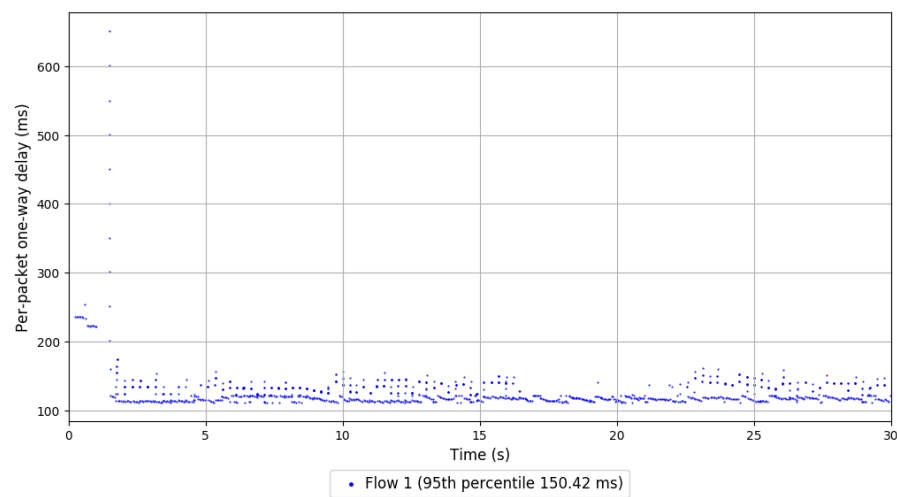
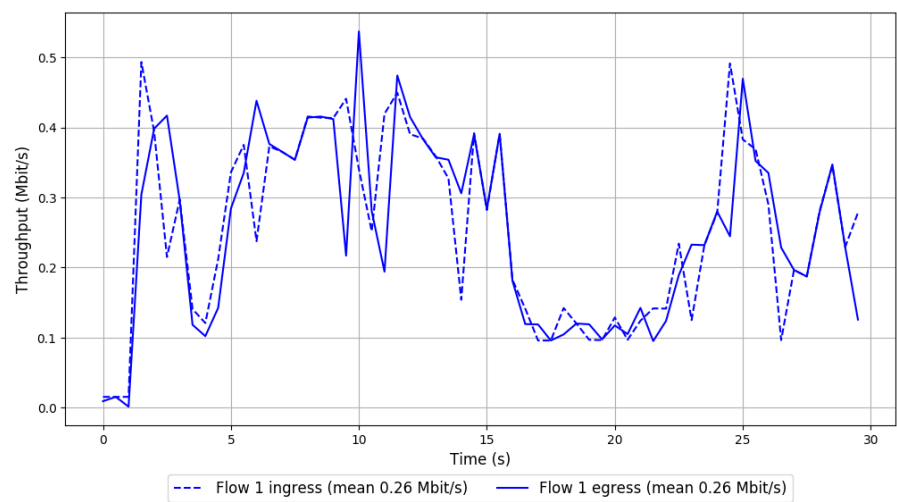


Run 1: Statistics of Sprout

Start at: 2018-01-02 19:46:23
End at: 2018-01-02 19:46:53
Local clock offset: 0.229 ms
Remote clock offset: -0.027 ms

Below is generated by plot.py at 2018-01-02 20:24:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 150.423 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 150.423 ms
Loss rate: 1.01%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-01-02 20:04:05

End at: 2018-01-02 20:04:35

Local clock offset: 0.053 ms

Remote clock offset: 0.313 ms

Below is generated by plot.py at 2018-01-02 20:24:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 147.623 ms

Loss rate: 0.00%

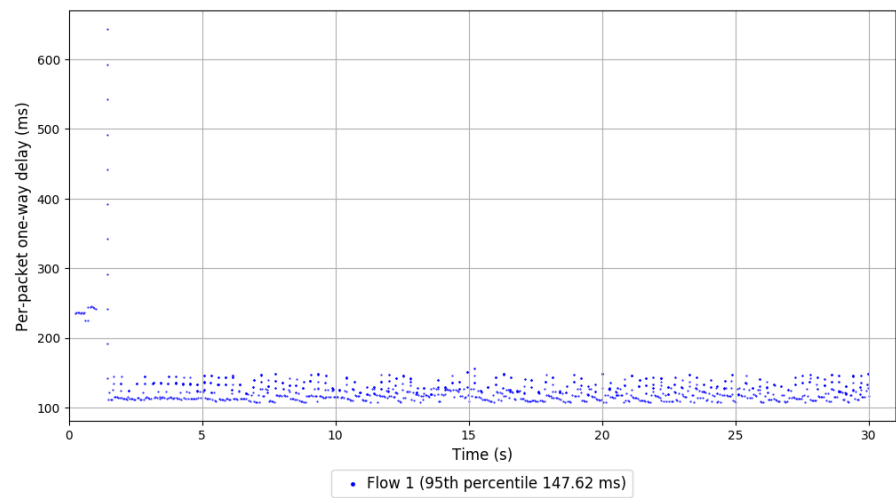
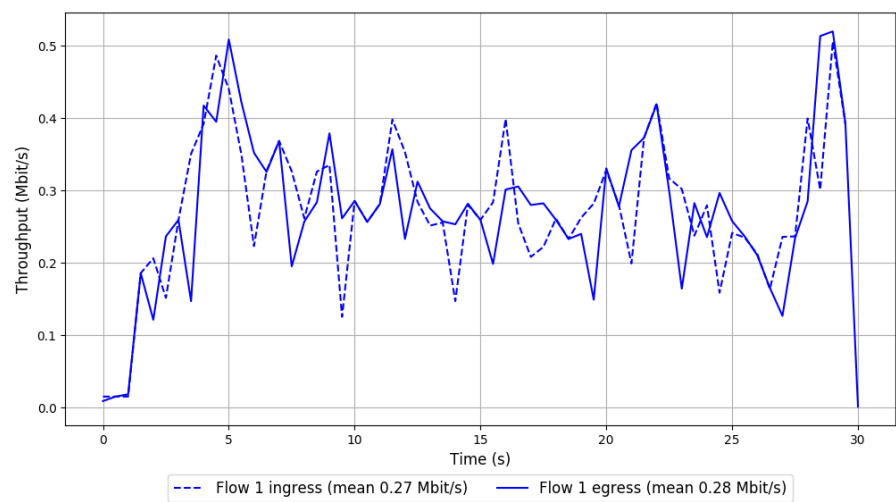
-- Flow 1:

Average throughput: 0.28 Mbit/s

95th percentile per-packet one-way delay: 147.623 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2018-01-02 20:21:43

End at: 2018-01-02 20:22:13

Local clock offset: 0.066 ms

Remote clock offset: 0.899 ms

Below is generated by plot.py at 2018-01-02 20:24:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 167.142 ms

Loss rate: 0.02%

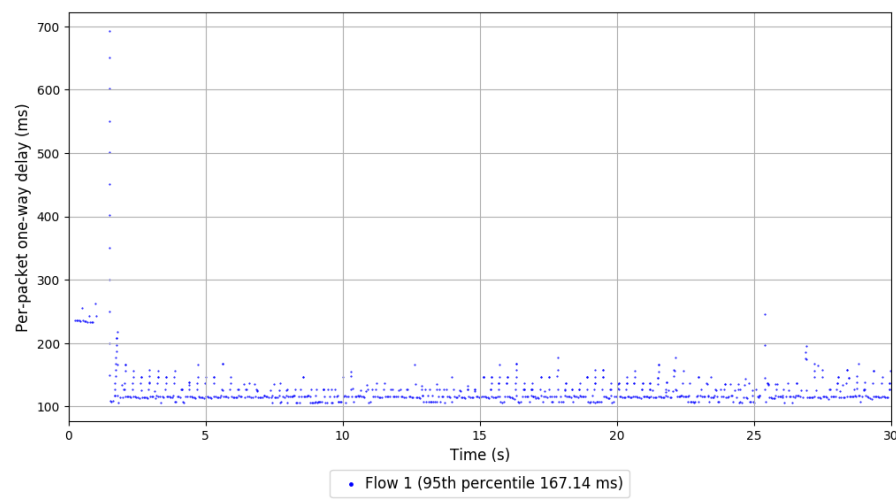
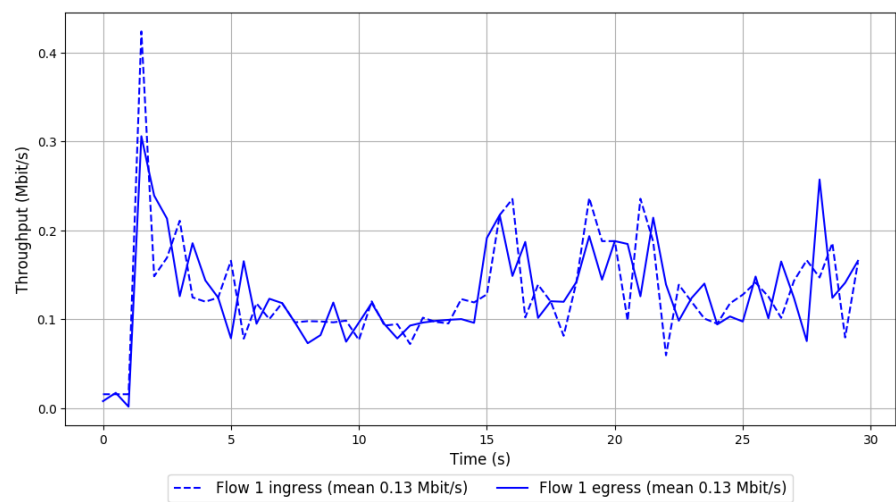
-- Flow 1:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 167.142 ms

Loss rate: 0.02%

Run 3: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-01-02 19:42:52

End at: 2018-01-02 19:43:22

Local clock offset: 0.261 ms

Remote clock offset: 1.695 ms

Below is generated by plot.py at 2018-01-02 20:24:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 150.847 ms

Loss rate: 0.29%

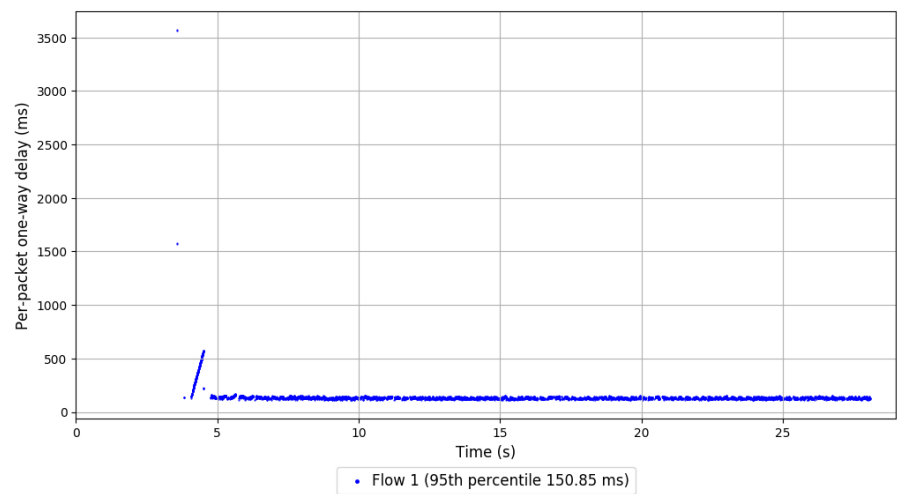
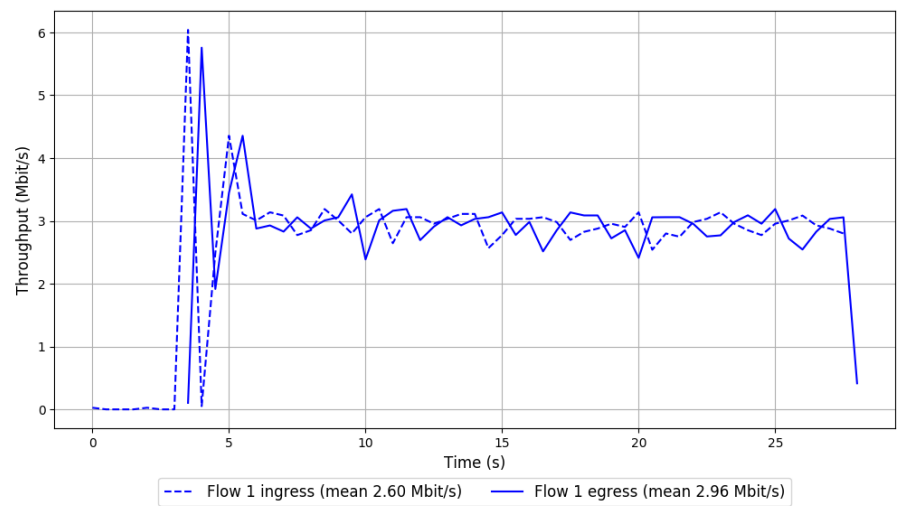
-- Flow 1:

Average throughput: 2.96 Mbit/s

95th percentile per-packet one-way delay: 150.847 ms

Loss rate: 0.29%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-01-02 20:00:33

End at: 2018-01-02 20:01:03

Local clock offset: 0.096 ms

Remote clock offset: -0.063 ms

Below is generated by plot.py at 2018-01-02 20:24:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 153.298 ms

Loss rate: 0.13%

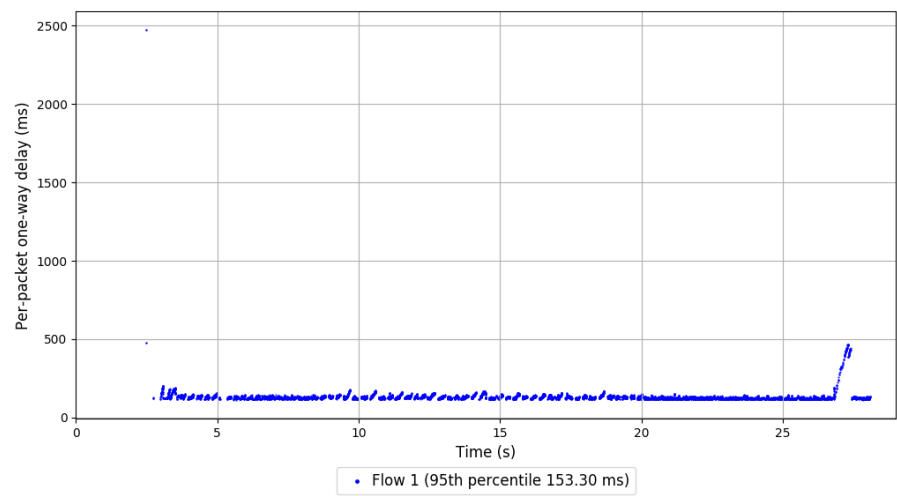
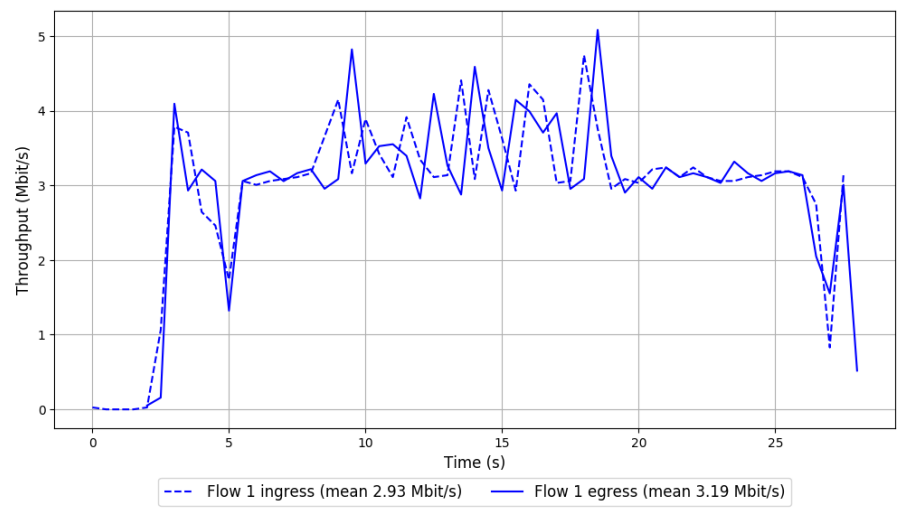
-- Flow 1:

Average throughput: 3.19 Mbit/s

95th percentile per-packet one-way delay: 153.298 ms

Loss rate: 0.13%

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

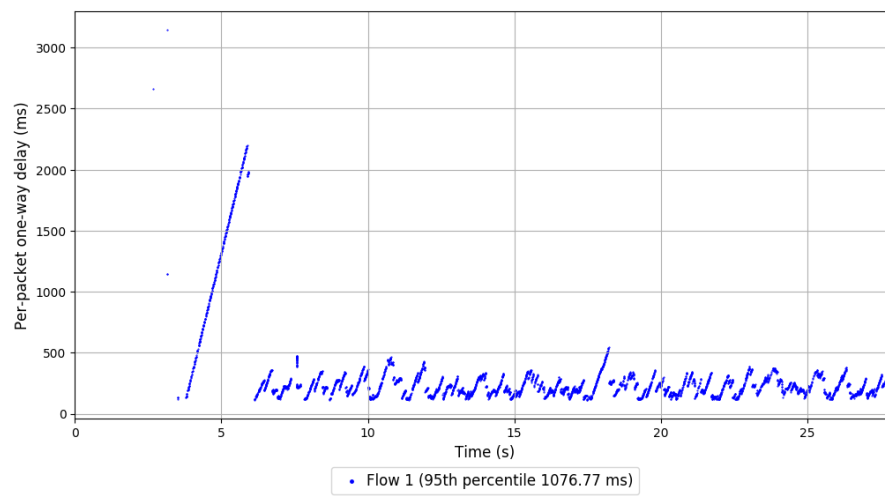
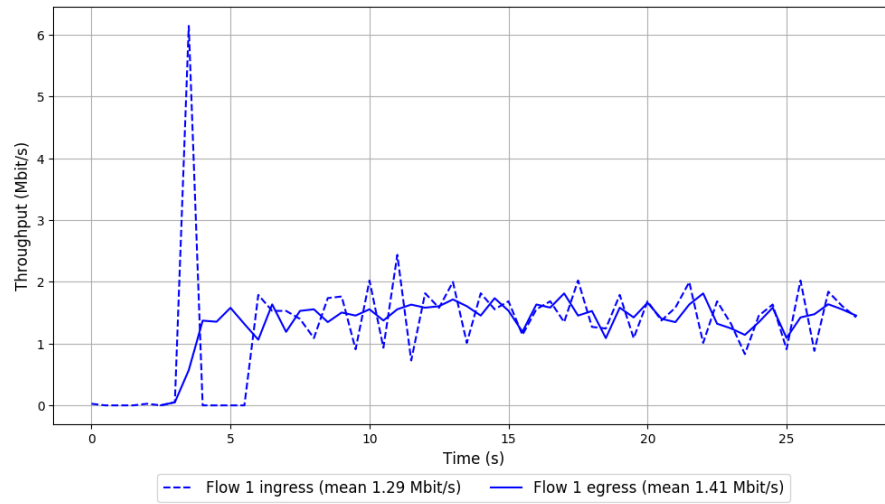


Run 3: Statistics of TaoVA-100x

Start at: 2018-01-02 20:18:12
End at: 2018-01-02 20:18:42
Local clock offset: 0.072 ms
Remote clock offset: -4.947 ms

Below is generated by plot.py at 2018-01-02 20:24:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 1076.772 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 1076.772 ms
Loss rate: 0.94%

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

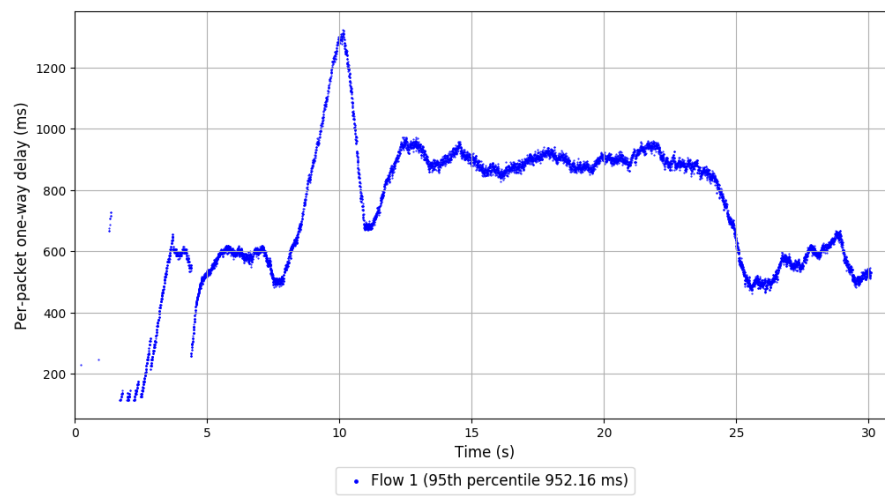
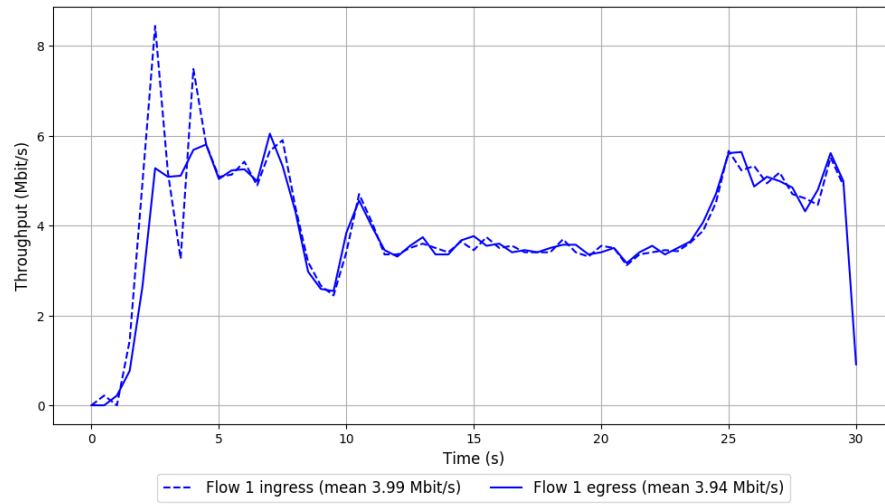


Run 1: Statistics of TCP Vegas

Start at: 2018-01-02 19:31:07
End at: 2018-01-02 19:31:37
Local clock offset: 0.369 ms
Remote clock offset: -4.218 ms

Below is generated by plot.py at 2018-01-02 20:24:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 952.158 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 952.158 ms
Loss rate: 1.87%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-01-02 19:48:47

End at: 2018-01-02 19:49:17

Local clock offset: 0.135 ms

Remote clock offset: 1.7 ms

Below is generated by plot.py at 2018-01-02 20:24:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.01 Mbit/s

95th percentile per-packet one-way delay: 412.286 ms

Loss rate: 0.80%

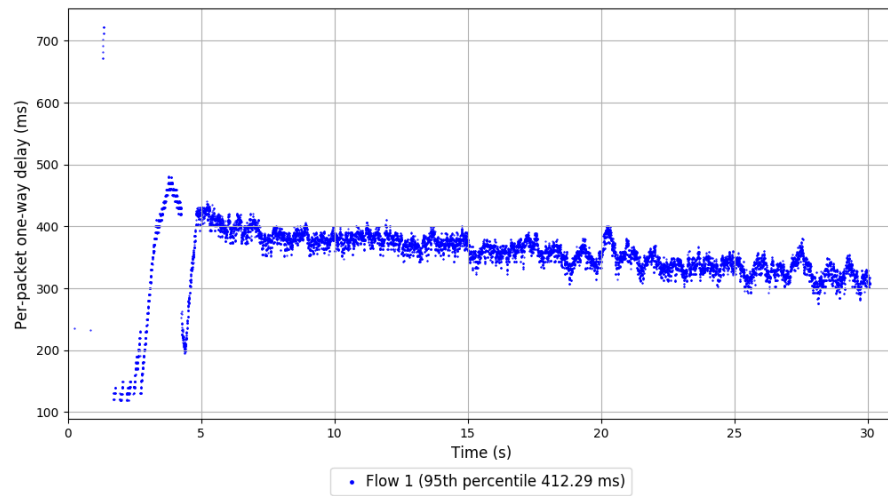
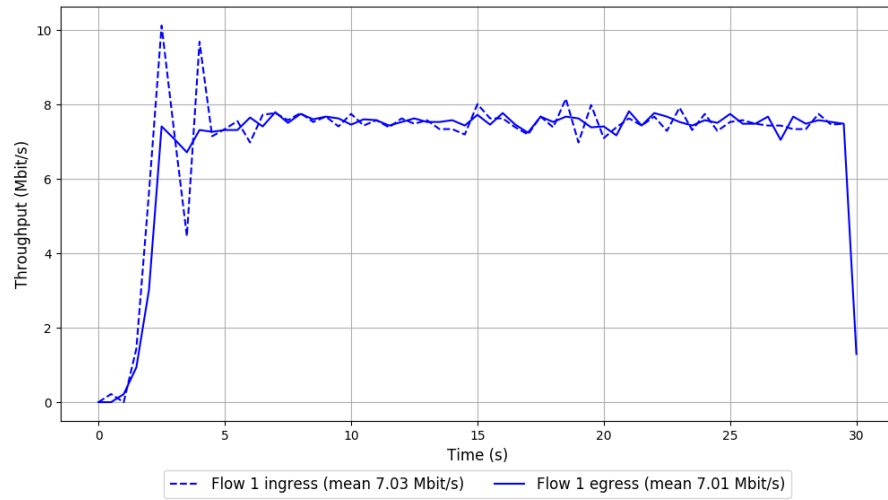
-- Flow 1:

Average throughput: 7.01 Mbit/s

95th percentile per-packet one-way delay: 412.286 ms

Loss rate: 0.80%

Run 2: Report of TCP Vegas — Data Link

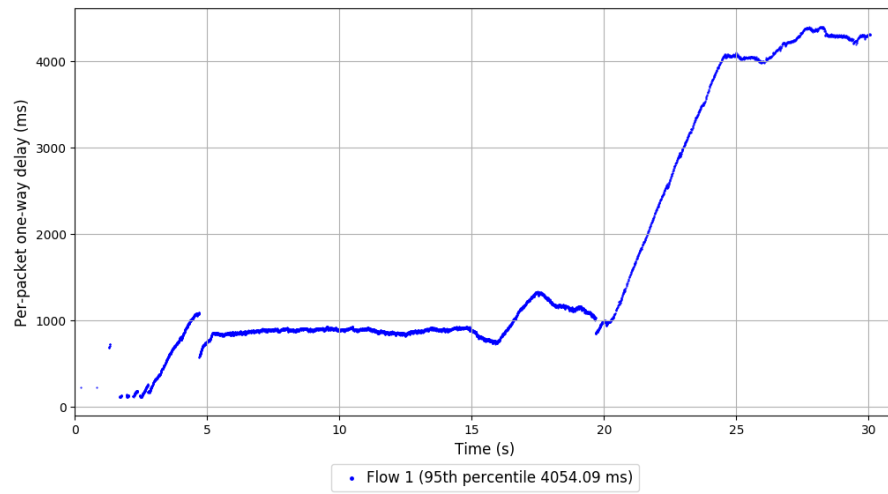
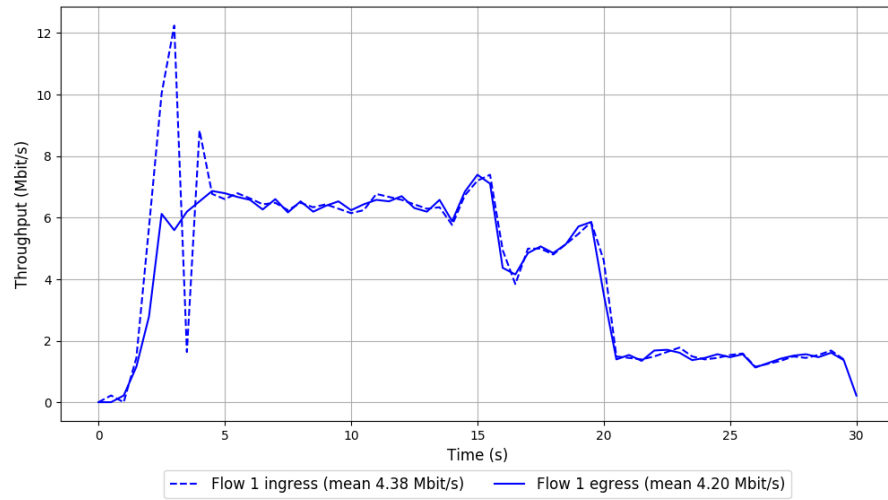


Run 3: Statistics of TCP Vegas

Start at: 2018-01-02 20:06:29
End at: 2018-01-02 20:06:59
Local clock offset: 0.078 ms
Remote clock offset: -3.778 ms

Below is generated by plot.py at 2018-01-02 20:24:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 4054.094 ms
Loss rate: 4.59%
-- Flow 1:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 4054.094 ms
Loss rate: 4.59%

Run 3: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-01-02 19:33:28

End at: 2018-01-02 19:33:58

Local clock offset: 0.37 ms

Remote clock offset: 1.415 ms

Below is generated by plot.py at 2018-01-02 20:24:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 1533.871 ms

Loss rate: 8.91%

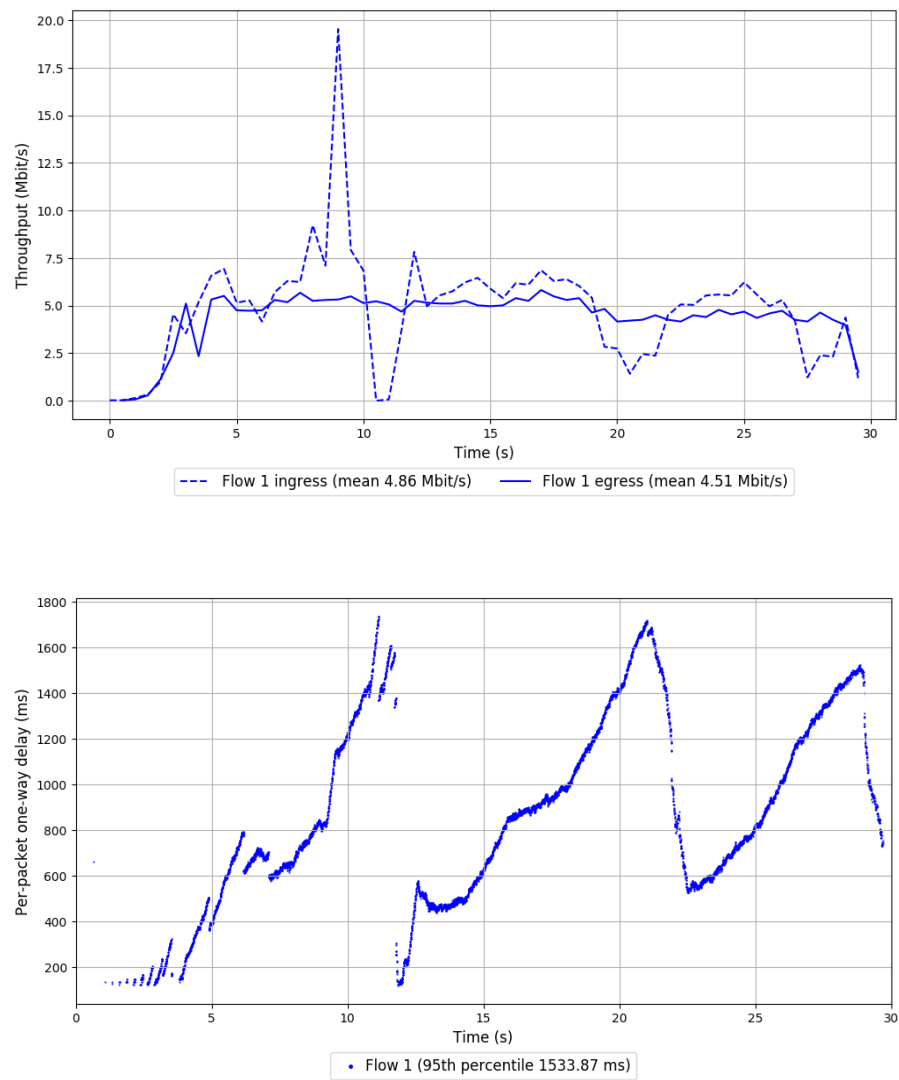
-- Flow 1:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 1533.871 ms

Loss rate: 8.91%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-01-02 19:51:08

End at: 2018-01-02 19:51:38

Local clock offset: 0.164 ms

Remote clock offset: 0.768 ms

Below is generated by plot.py at 2018-01-02 20:24:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 997.125 ms

Loss rate: 5.85%

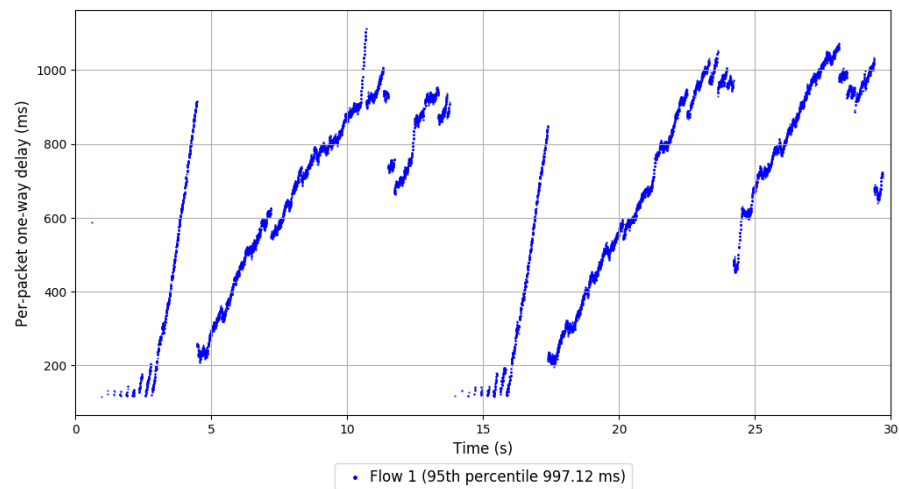
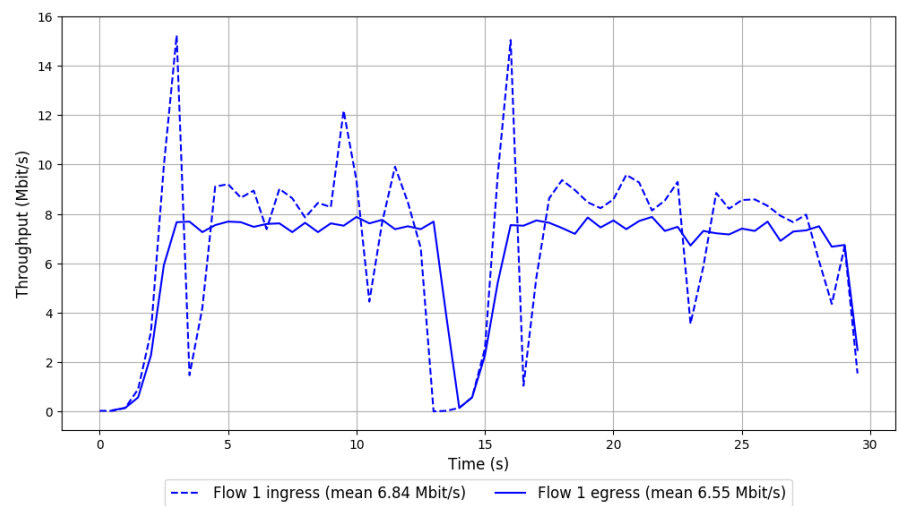
-- Flow 1:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 997.125 ms

Loss rate: 5.85%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-01-02 20:08:49

End at: 2018-01-02 20:09:19

Local clock offset: 0.057 ms

Remote clock offset: 1.995 ms

Below is generated by plot.py at 2018-01-02 20:24:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 1812.339 ms

Loss rate: 4.10%

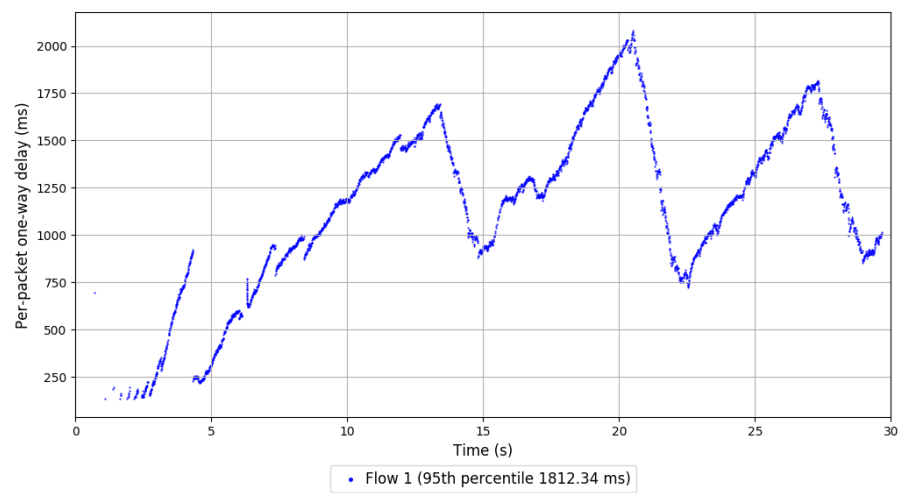
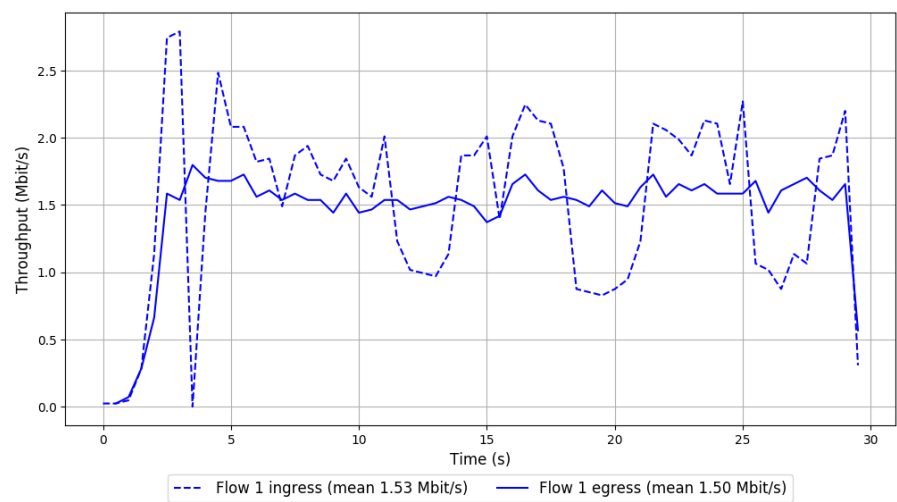
-- Flow 1:

Average throughput: 1.50 Mbit/s

95th percentile per-packet one-way delay: 1812.339 ms

Loss rate: 4.10%

Run 3: Report of Verus — Data Link



Run 1: Statistics of Copa

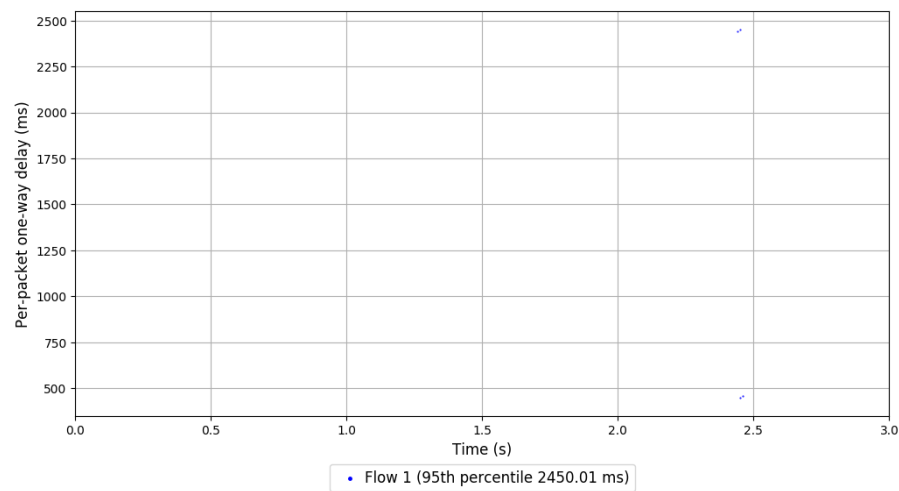
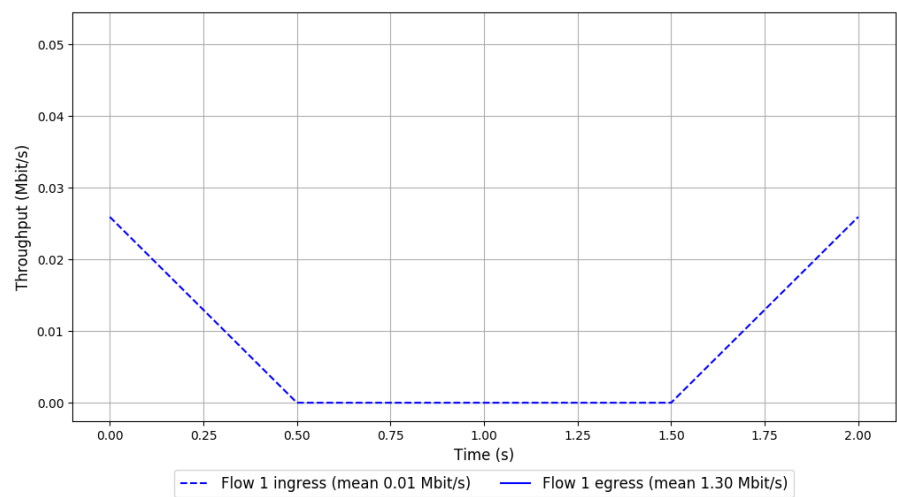
Start at: 2018-01-02 19:38:11

End at: 2018-01-02 19:38:41

Local clock offset: 0.323 ms

Remote clock offset: 0.94 ms

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

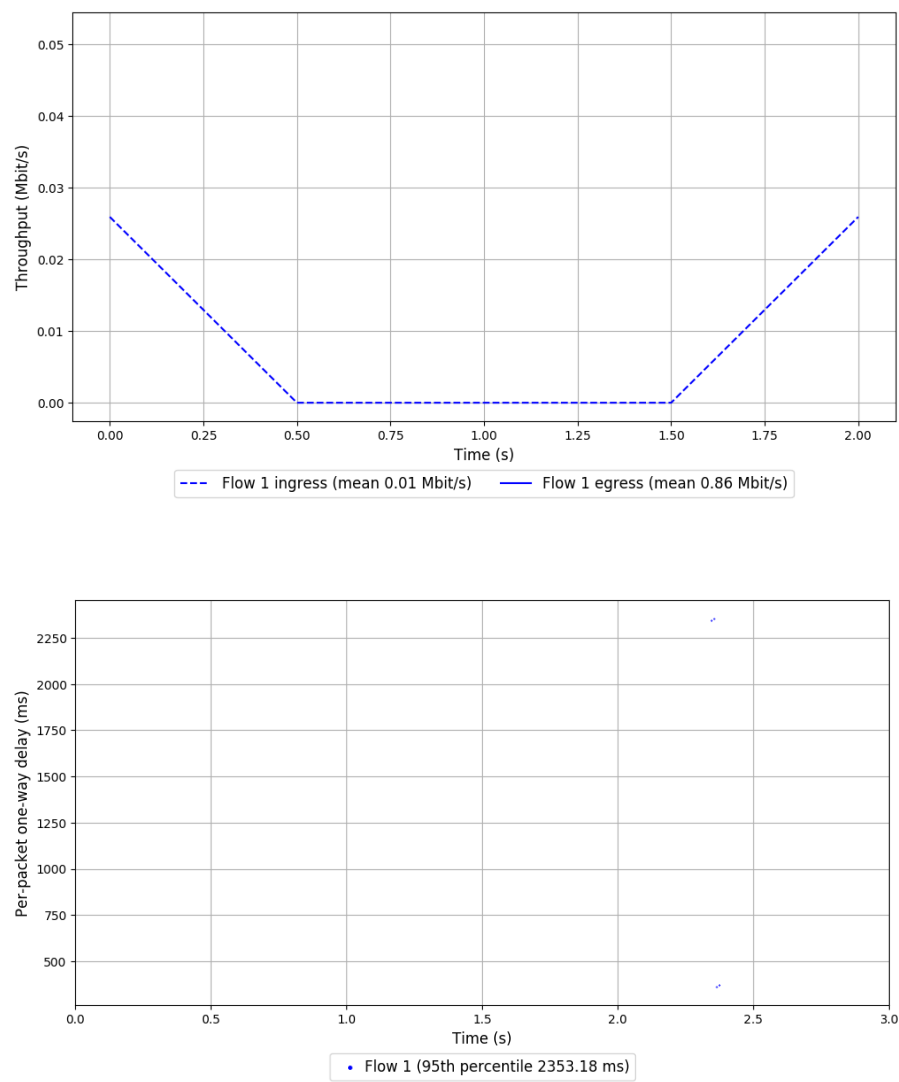
Start at: 2018-01-02 19:55:52

End at: 2018-01-02 19:56:22

Local clock offset: 0.14 ms

Remote clock offset: -4.89 ms

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

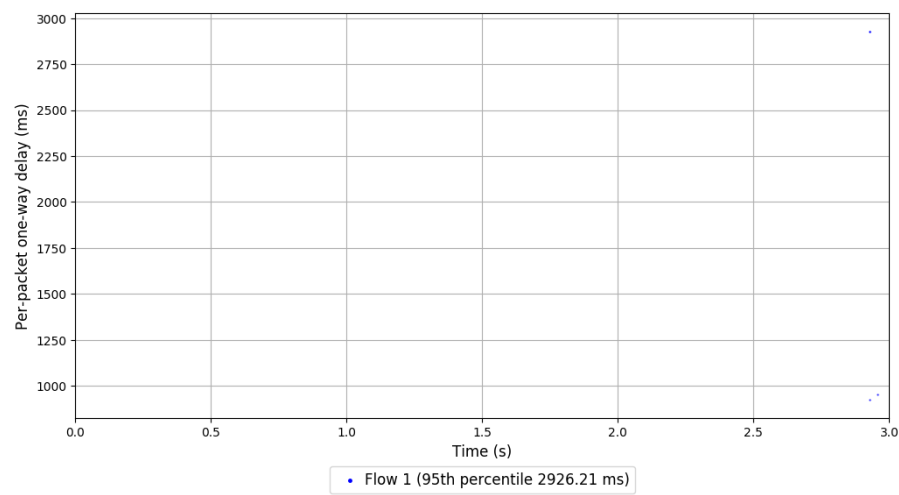
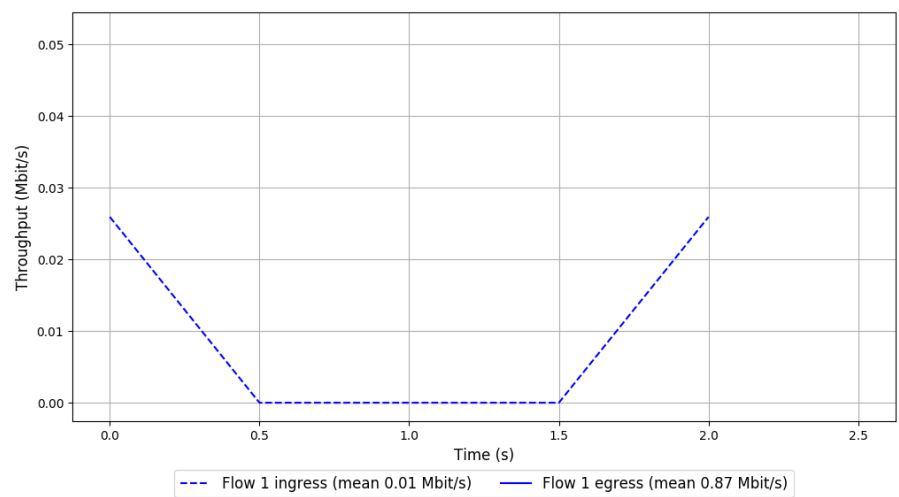
Start at: 2018-01-02 20:13:31

End at: 2018-01-02 20:14:01

Local clock offset: 0.066 ms

Remote clock offset: -3.779 ms

Run 3: Report of Copa — Data Link

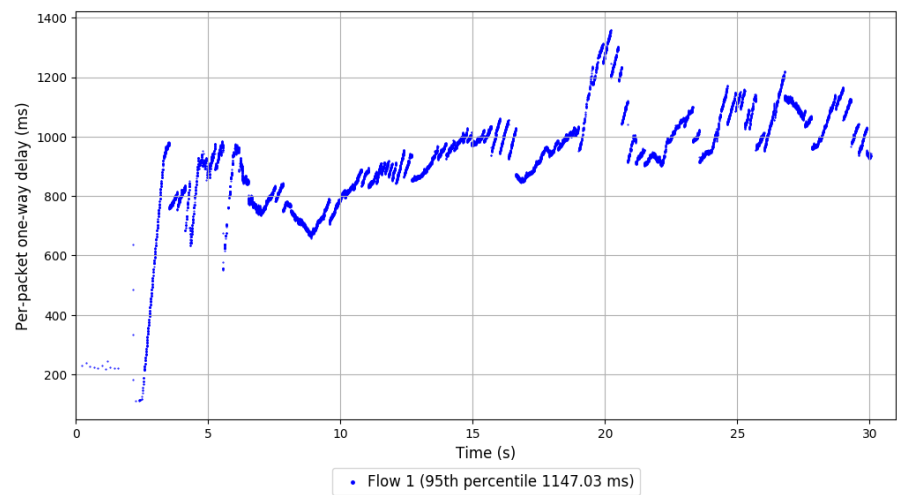
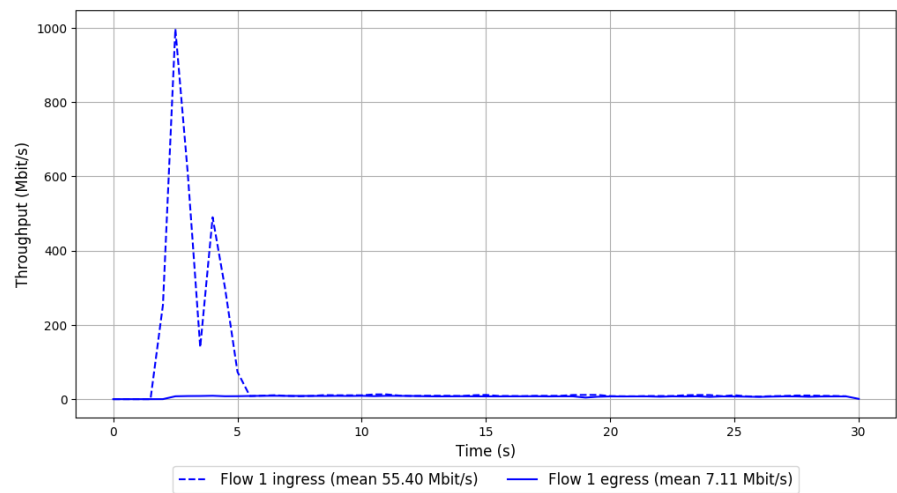


Run 1: Statistics of FillP

Start at: 2018-01-02 19:47:34
End at: 2018-01-02 19:48:04
Local clock offset: 0.197 ms
Remote clock offset: -4.529 ms

Below is generated by plot.py at 2018-01-02 20:24:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 7.11 Mbit/s
95th percentile per-packet one-way delay: 1147.034 ms
Loss rate: 87.23%
-- Flow 1:
Average throughput: 7.11 Mbit/s
95th percentile per-packet one-way delay: 1147.034 ms
Loss rate: 87.23%

Run 1: Report of FillP — Data Link

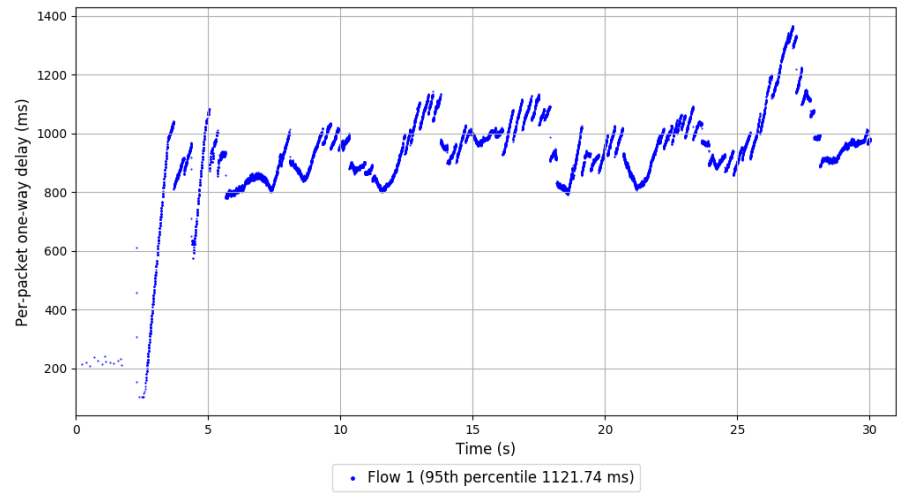
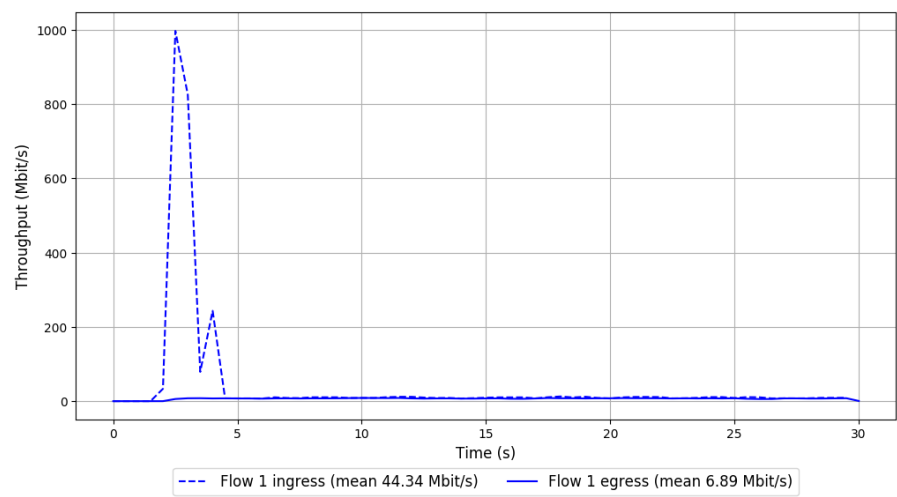


Run 2: Statistics of FillP

Start at: 2018-01-02 20:05:16
End at: 2018-01-02 20:05:46
Local clock offset: -0.013 ms
Remote clock offset: -3.725 ms

Below is generated by plot.py at 2018-01-02 20:24:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 1121.743 ms
Loss rate: 84.53%
-- Flow 1:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 1121.743 ms
Loss rate: 84.53%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-01-02 20:22:54

End at: 2018-01-02 20:23:24

Local clock offset: 0.052 ms

Remote clock offset: 0.605 ms

Below is generated by plot.py at 2018-01-02 20:24:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 5875.508 ms

Loss rate: 95.86%

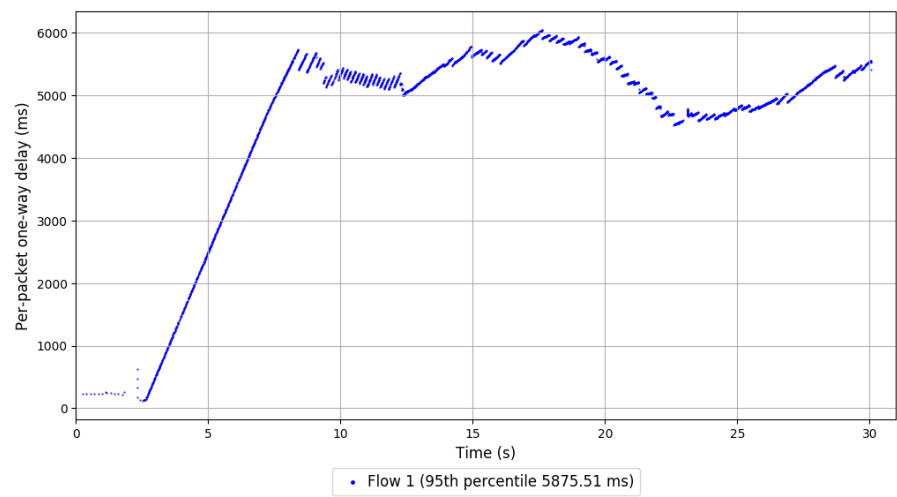
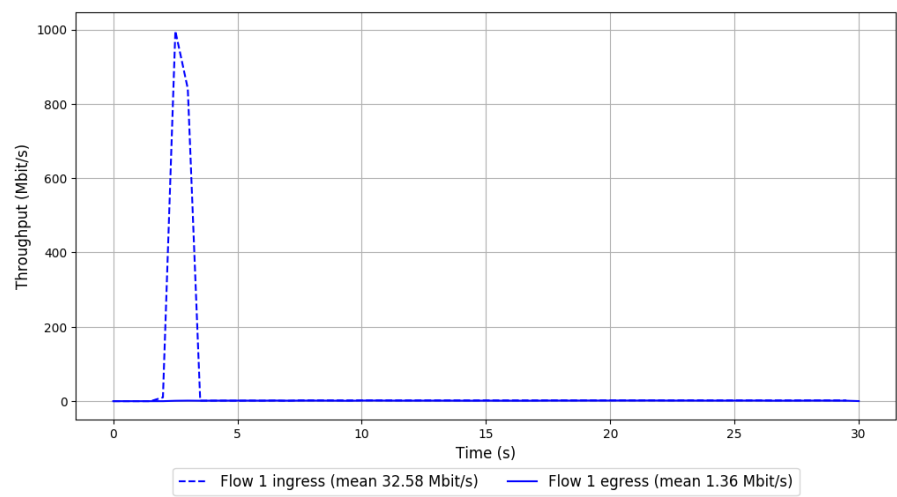
-- Flow 1:

Average throughput: 1.36 Mbit/s

95th percentile per-packet one-way delay: 5875.508 ms

Loss rate: 95.86%

Run 3: Report of FillP — Data Link

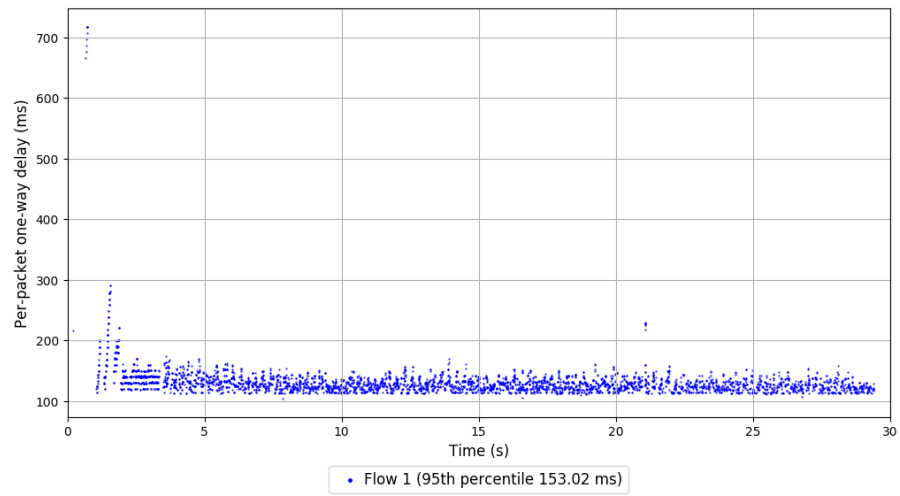
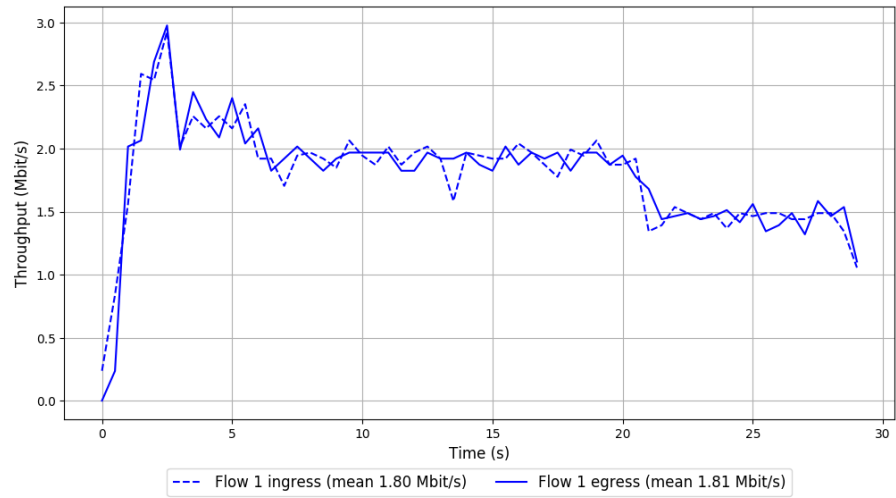


Run 1: Statistics of Indigo

Start at: 2018-01-02 19:34:39
End at: 2018-01-02 19:35:09
Local clock offset: 0.297 ms
Remote clock offset: -4.254 ms

Below is generated by plot.py at 2018-01-02 20:24:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 153.022 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 153.022 ms
Loss rate: 0.14%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

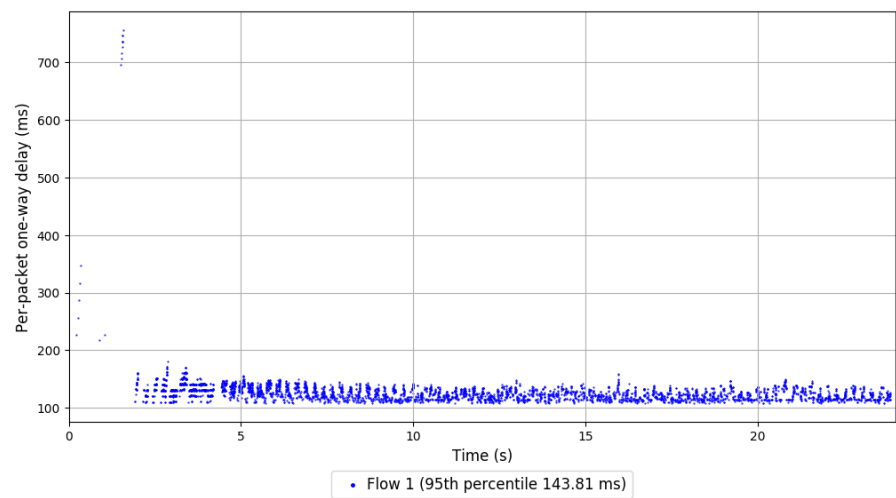
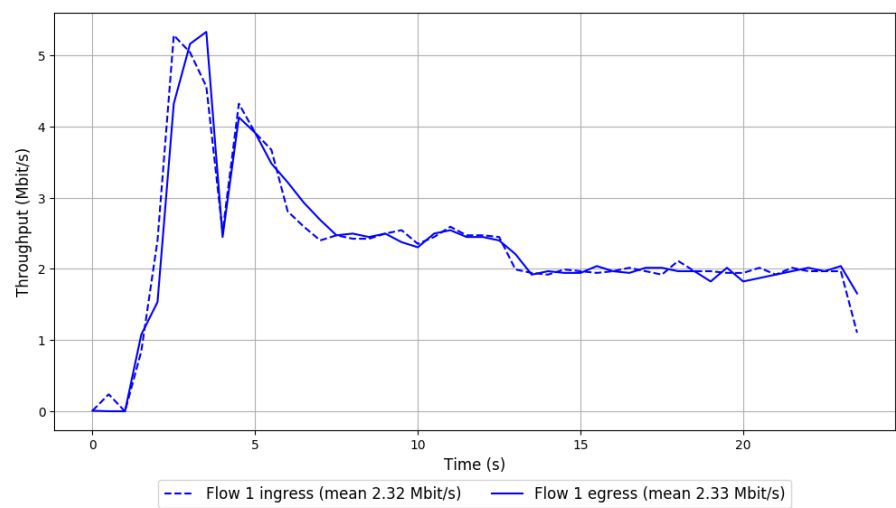
Start at: 2018-01-02 19:52:19

End at: 2018-01-02 19:52:49

Local clock offset: 0.168 ms

Remote clock offset: -4.091 ms

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2018-01-02 20:10:00

End at: 2018-01-02 20:10:30

Local clock offset: 0.077 ms

Remote clock offset: -3.73 ms

Run 3: Report of Indigo — Data Link

