

## Pantheon Report

Generated at 2018-02-04 12:12:02 (UTC).

Data path: China Ethernet (*remote*) → AWS Korea Ethernet (*local*).

Repeated the test of 17 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

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

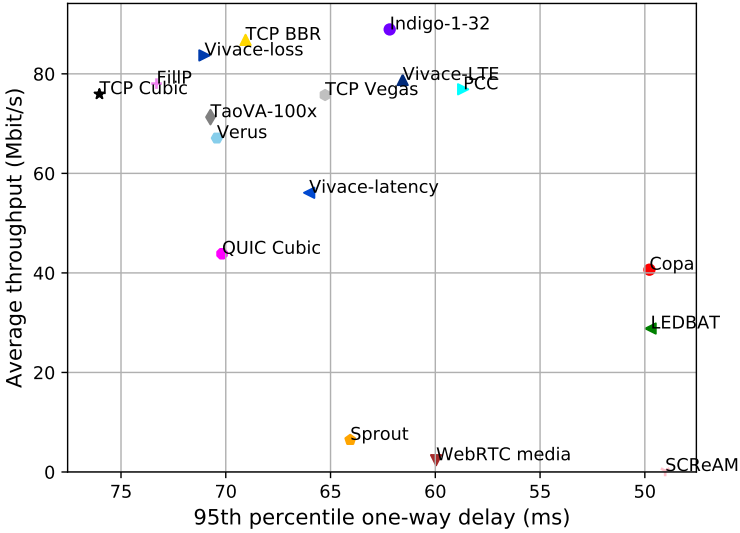
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo\_fast**).

NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

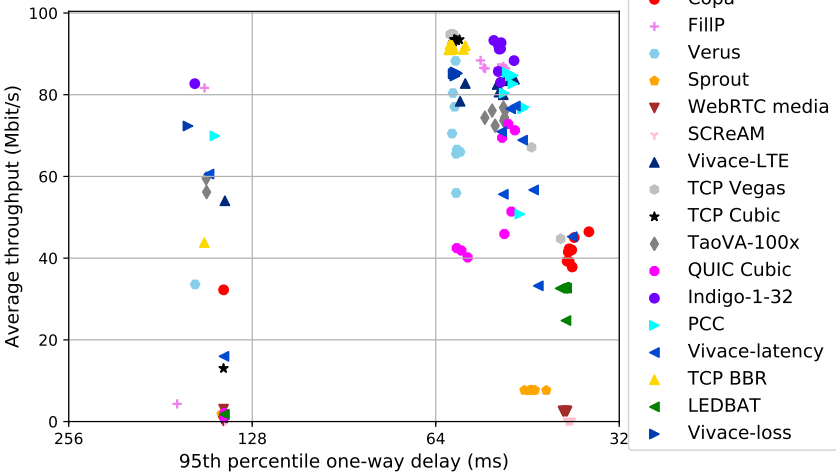
Git summary:

```
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1c1b0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
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-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eae30b267cde681
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/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

test from China Ethernet to AWS Korea Ethernet, 10 runs of 30s each per scheme  
(mean of all runs by scheme)



test from China Ethernet to AWS Korea Ethernet, 10 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	10	86.83	69.06	0.70
TCP Cubic	10	75.93	76.03	0.91
LEDBAT	10	28.83	49.73	0.66
PCC	9	76.89	58.67	0.67
QUIC Cubic	10	43.84	70.18	1.76
SCReAM	10	0.20	49.03	0.54
WebRTC media	10	2.36	59.96	3.57
Sprout	10	6.46	64.06	0.68
TaoVA-100x	10	71.30	70.73	2.06
TCP Vegas	9	75.74	65.26	0.47
Verus	9	67.10	70.43	0.68
Copa	9	40.65	49.78	1.76
FillP	10	78.03	73.31	5.71
Indigo-1-32	9	88.92	62.18	0.71
Vivace-latency	10	56.10	66.02	1.02
Vivace-loss	9	83.70	71.02	0.70
Vivace-LTE	9	78.78	61.56	0.80

Run 1: Statistics of TCP BBR

Start at: 2018-02-04 04:28:58

End at: 2018-02-04 04:29:28

Local clock offset: -0.239 ms

Remote clock offset: 2.438 ms

# Below is generated by plot.py at 2018-02-04 11:52:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.01 Mbit/s

95th percentile per-packet one-way delay: 60.292 ms

Loss rate: 0.45%

-- Flow 1:

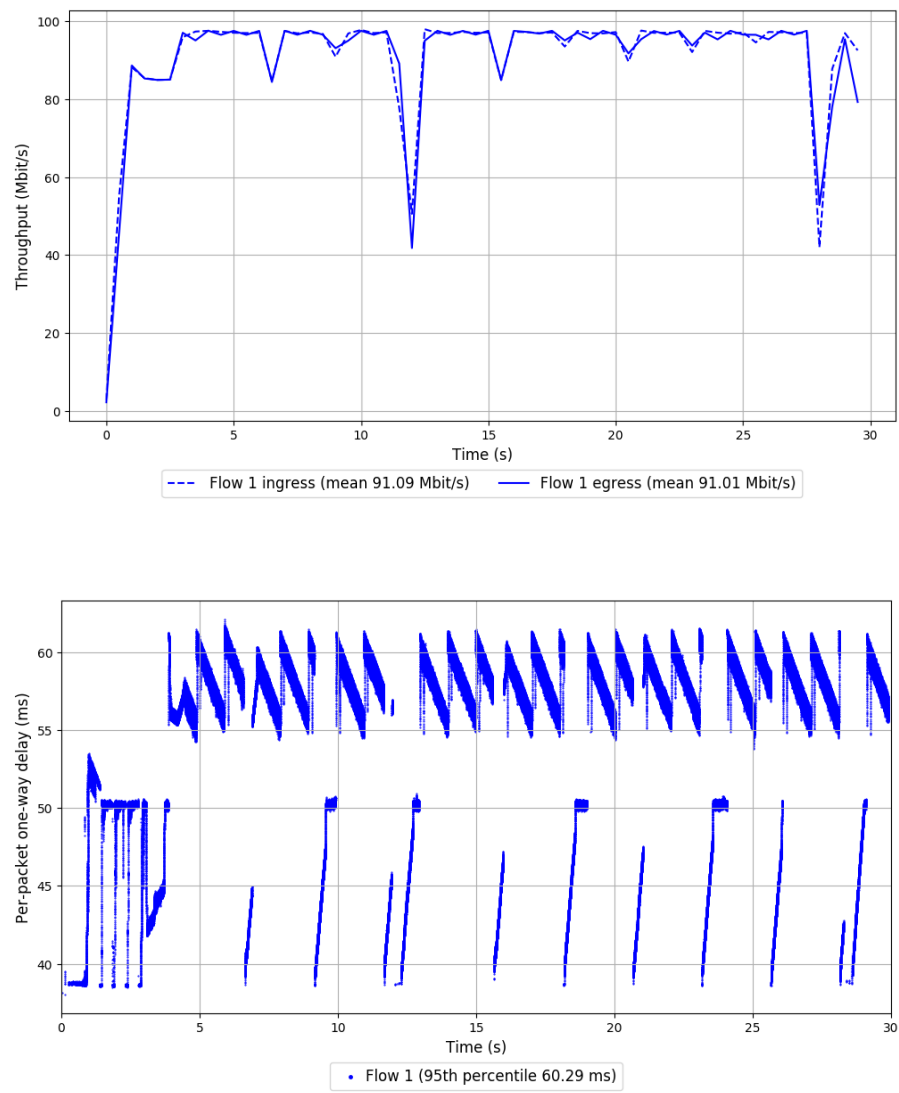
Average throughput: 91.01 Mbit/s

95th percentile per-packet one-way delay: 60.292 ms

Loss rate: 0.45%



Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-02-04 04:50:49

End at: 2018-02-04 04:51:19

Local clock offset: 0.23 ms

Remote clock offset: 3.321 ms

# Below is generated by plot.py at 2018-02-04 11:52:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.70 Mbit/s

95th percentile per-packet one-way delay: 60.203 ms

Loss rate: 0.46%

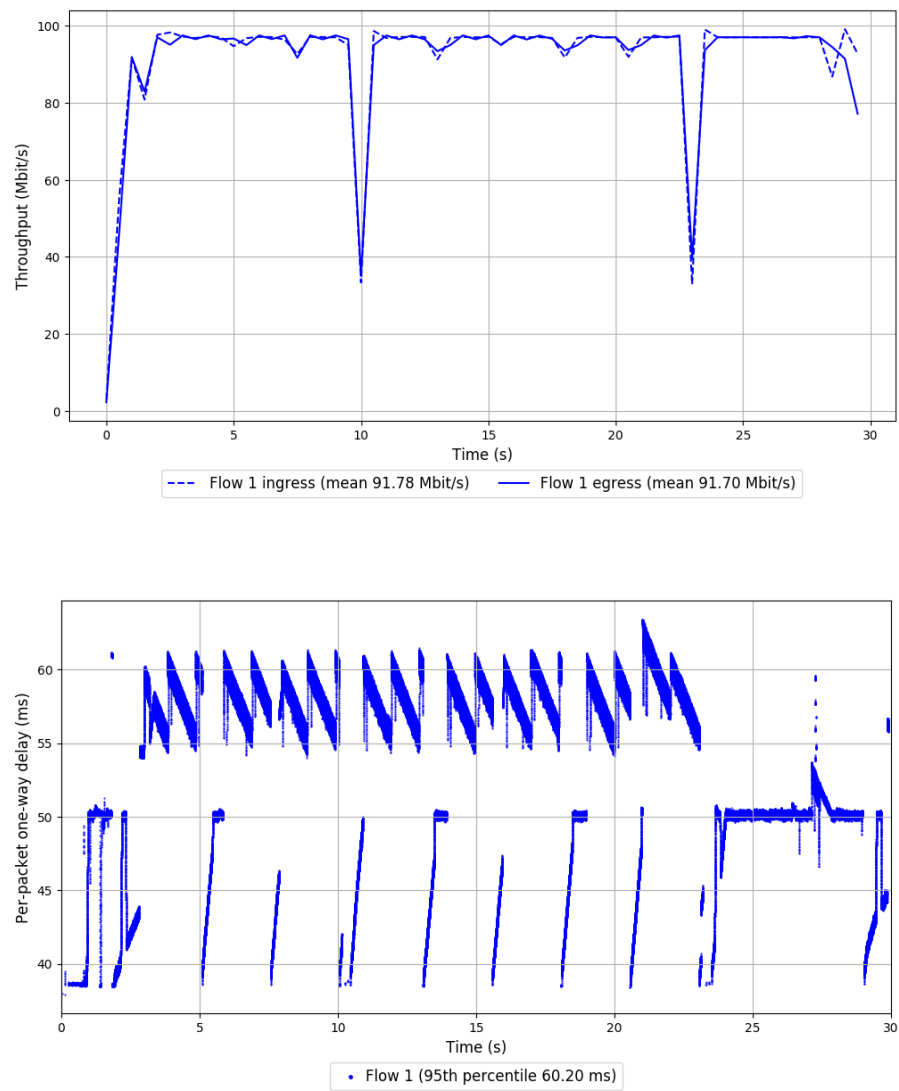
-- Flow 1:

Average throughput: 91.70 Mbit/s

95th percentile per-packet one-way delay: 60.203 ms

Loss rate: 0.46%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-02-04 05:12:36

End at: 2018-02-04 05:13:06

Local clock offset: -0.033 ms

Remote clock offset: 4.195 ms

# Below is generated by plot.py at 2018-02-04 11:52:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.28 Mbit/s

95th percentile per-packet one-way delay: 59.815 ms

Loss rate: 0.46%

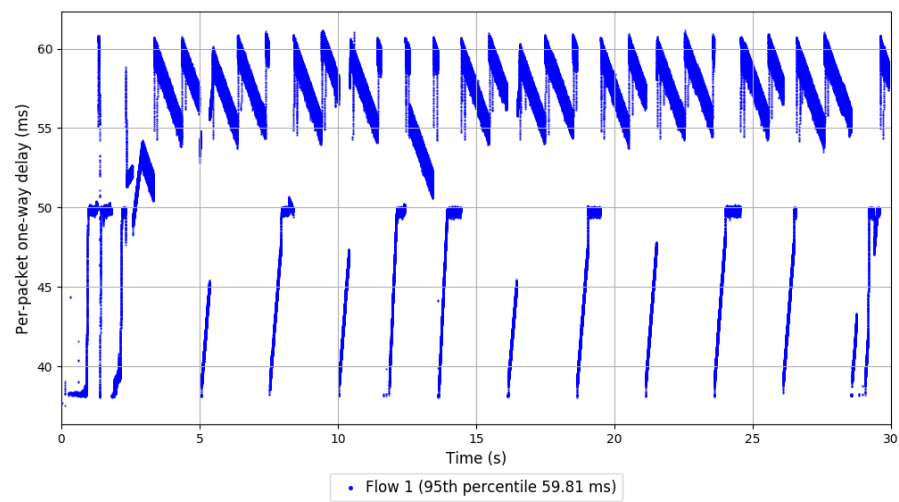
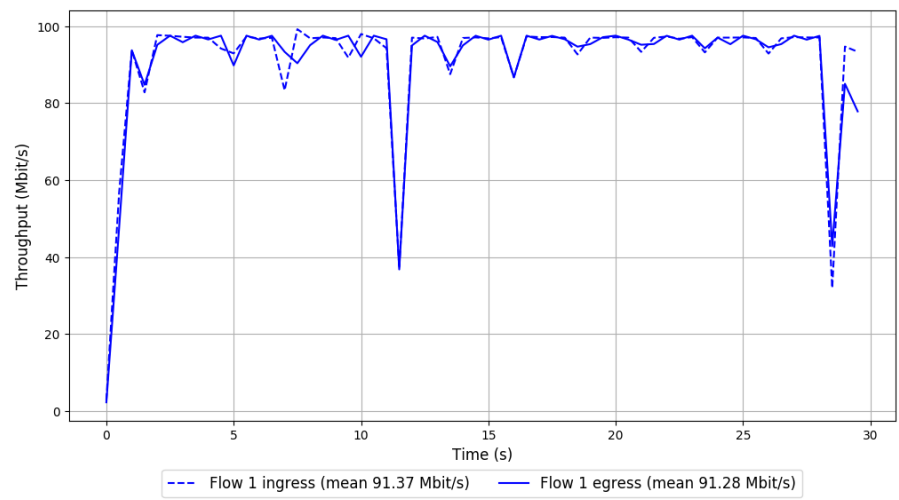
-- Flow 1:

Average throughput: 91.28 Mbit/s

95th percentile per-packet one-way delay: 59.815 ms

Loss rate: 0.46%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-02-04 05:34:19

End at: 2018-02-04 05:34:49

Local clock offset: -2.392 ms

Remote clock offset: 5.239 ms

# Below is generated by plot.py at 2018-02-04 11:52:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.01 Mbit/s

95th percentile per-packet one-way delay: 57.231 ms

Loss rate: 0.47%

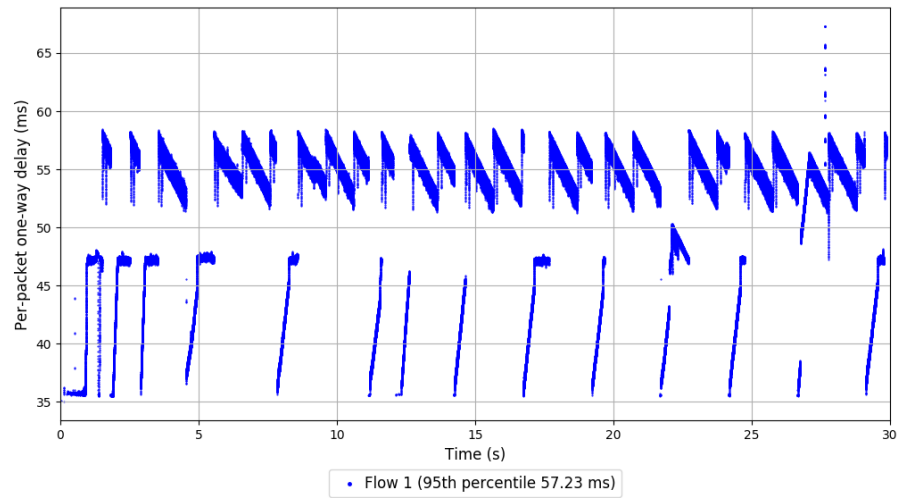
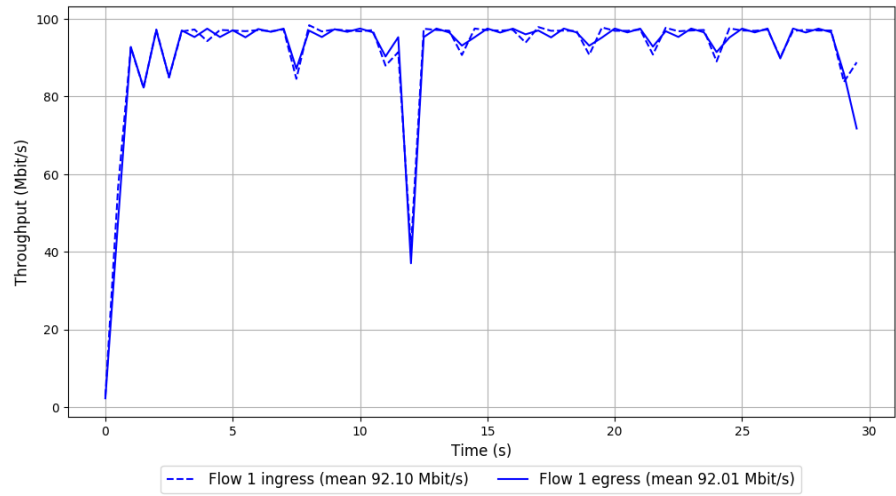
-- Flow 1:

Average throughput: 92.01 Mbit/s

95th percentile per-packet one-way delay: 57.231 ms

Loss rate: 0.47%

#### Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-02-04 06:01:05

End at: 2018-02-04 06:01:35

Local clock offset: 0.203 ms

Remote clock offset: 6.128 ms

# Below is generated by plot.py at 2018-02-04 11:52:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 43.81 Mbit/s

95th percentile per-packet one-way delay: 153.416 ms

Loss rate: 2.86%

-- Flow 1:

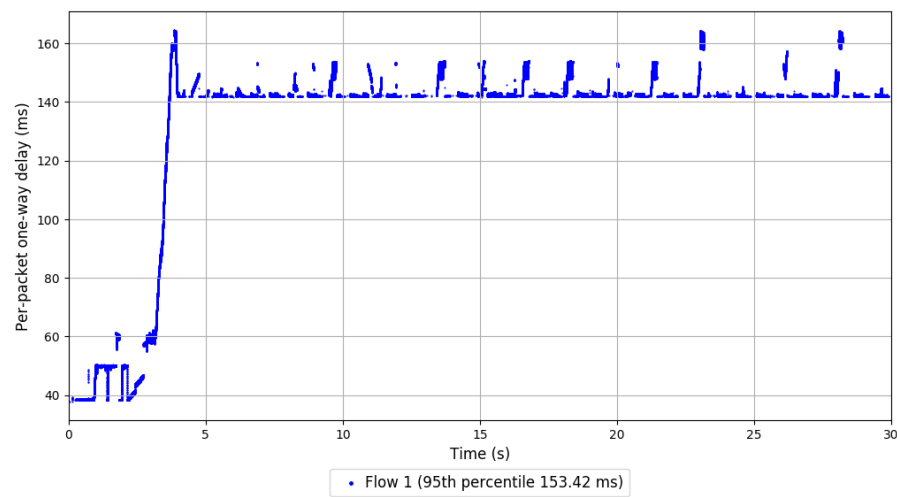
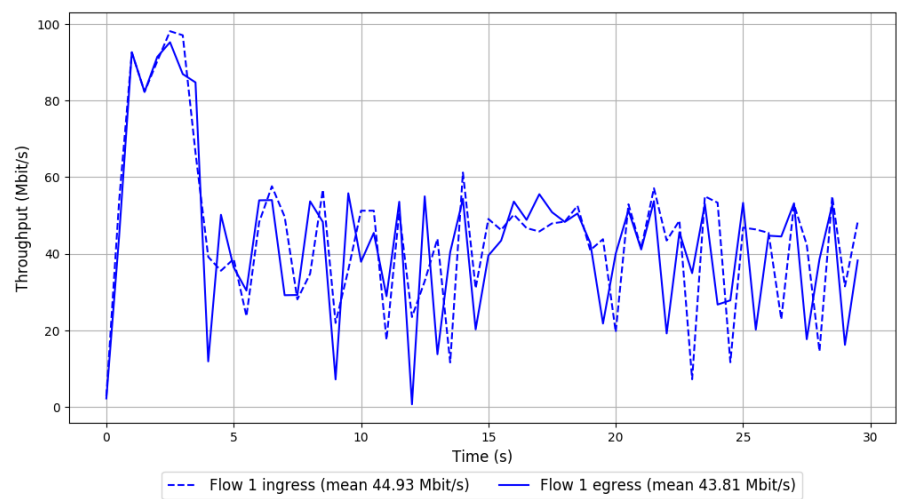
Average throughput: 43.81 Mbit/s

95th percentile per-packet one-way delay: 153.416 ms

Loss rate: 2.86%



Run 5: Report of TCP BBR — Data Link



Run 6: Statistics of TCP BBR

Start at: 2018-02-04 06:26:33

End at: 2018-02-04 06:27:03

Local clock offset: 0.974 ms

Remote clock offset: 6.534 ms

# Below is generated by plot.py at 2018-02-04 11:52:53

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.05 Mbit/s

95th percentile per-packet one-way delay: 60.134 ms

Loss rate: 0.46%

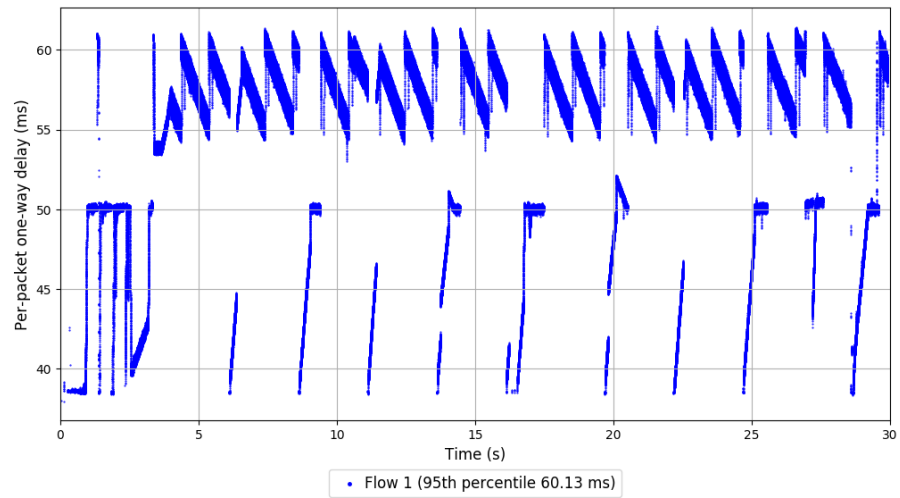
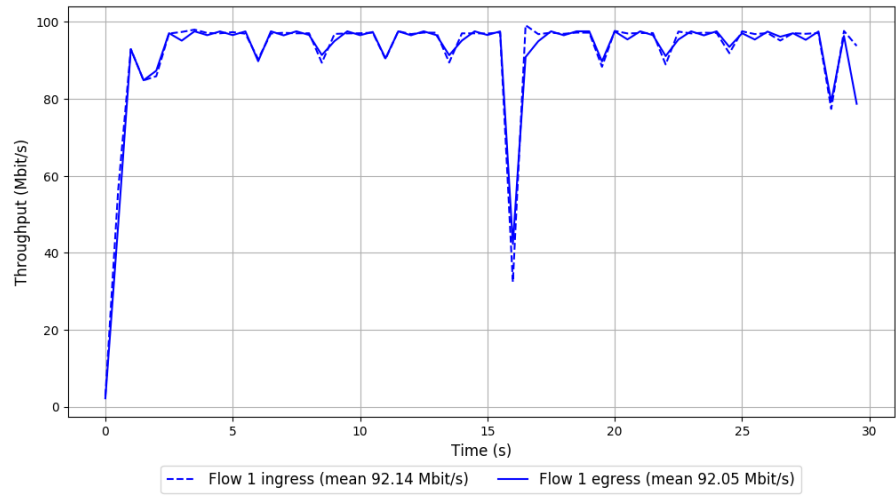
-- Flow 1:

Average throughput: 92.05 Mbit/s

95th percentile per-packet one-way delay: 60.134 ms

Loss rate: 0.46%

## Run 6: Report of TCP BBR — Data Link



Run 7: Statistics of TCP BBR

Start at: 2018-02-04 06:49:59

End at: 2018-02-04 06:50:29

Local clock offset: 1.455 ms

Remote clock offset: 7.155 ms

# Below is generated by plot.py at 2018-02-04 11:52:53

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.25 Mbit/s

95th percentile per-packet one-way delay: 60.669 ms

Loss rate: 0.46%

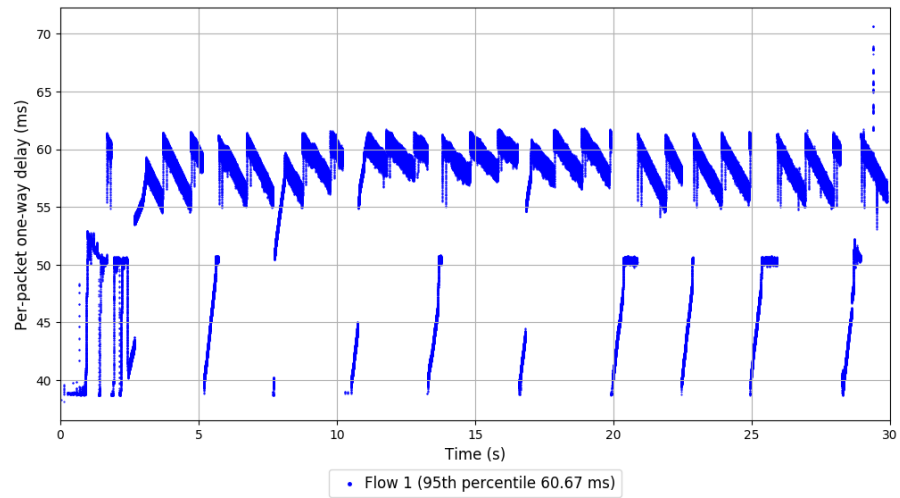
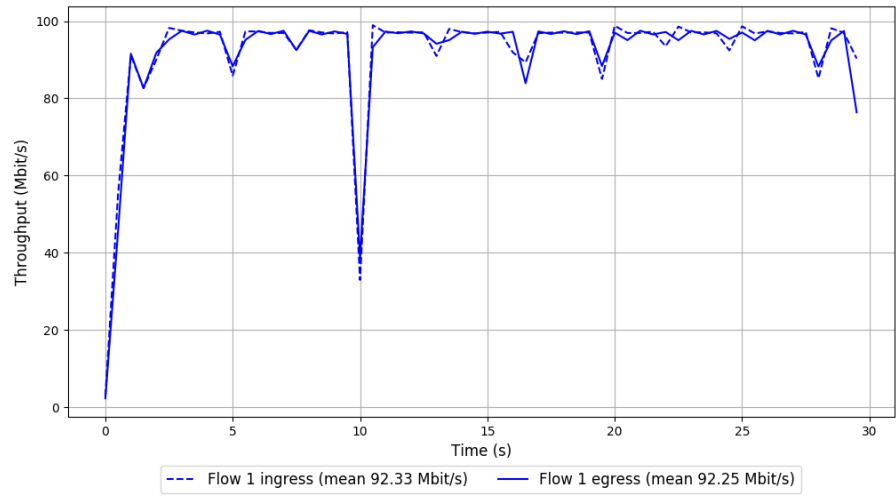
-- Flow 1:

Average throughput: 92.25 Mbit/s

95th percentile per-packet one-way delay: 60.669 ms

Loss rate: 0.46%

### Run 7: Report of TCP BBR — Data Link



Run 8: Statistics of TCP BBR

Start at: 2018-02-04 07:13:36

End at: 2018-02-04 07:14:06

Local clock offset: 1.574 ms

Remote clock offset: 8.041 ms

# Below is generated by plot.py at 2018-02-04 11:52:53

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.00 Mbit/s

95th percentile per-packet one-way delay: 60.923 ms

Loss rate: 0.43%

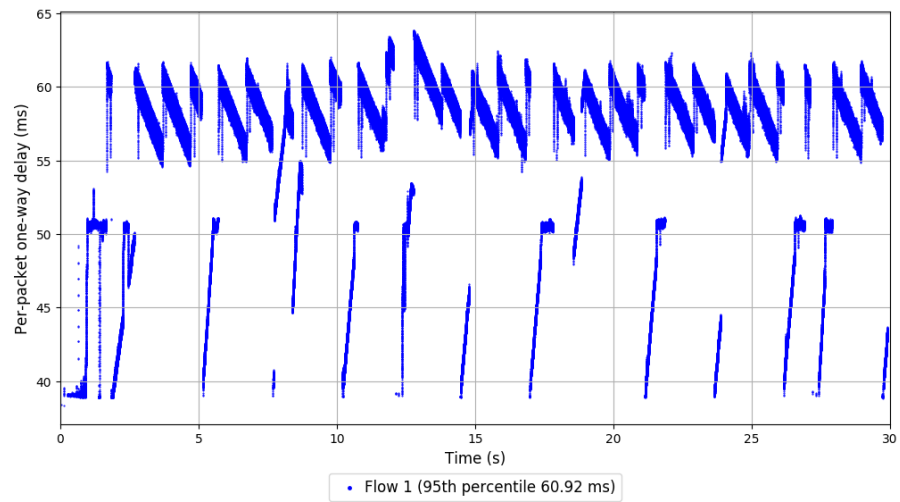
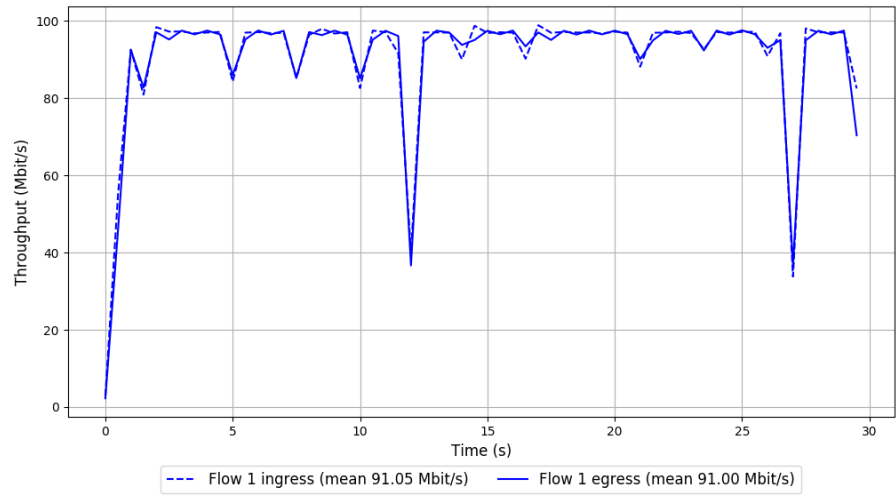
-- Flow 1:

Average throughput: 91.00 Mbit/s

95th percentile per-packet one-way delay: 60.923 ms

Loss rate: 0.43%

### Run 8: Report of TCP BBR — Data Link



Run 9: Statistics of TCP BBR

Start at: 2018-02-04 07:35:23

End at: 2018-02-04 07:35:53

Local clock offset: -1.672 ms

Remote clock offset: 9.451 ms

# Below is generated by plot.py at 2018-02-04 11:53:22

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.08 Mbit/s

95th percentile per-packet one-way delay: 57.651 ms

Loss rate: 0.46%

-- Flow 1:

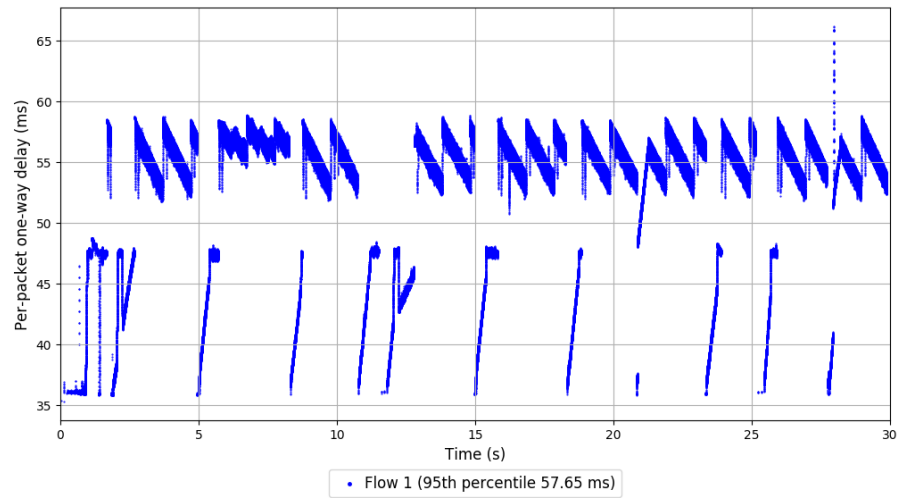
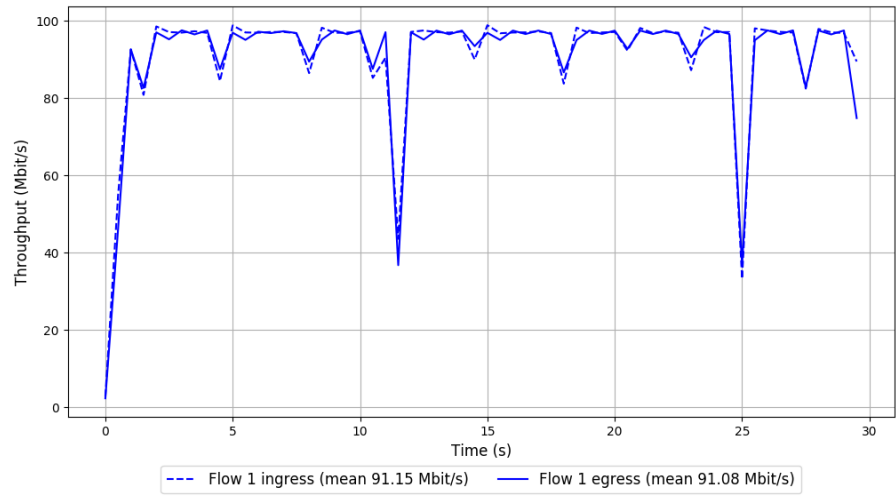
Average throughput: 91.08 Mbit/s

95th percentile per-packet one-way delay: 57.651 ms

Loss rate: 0.46%



### Run 9: Report of TCP BBR — Data Link



Run 10: Statistics of TCP BBR

Start at: 2018-02-04 07:57:09

End at: 2018-02-04 07:57:39

Local clock offset: 0.694 ms

Remote clock offset: 10.415 ms

# Below is generated by plot.py at 2018-02-04 11:54:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.09 Mbit/s

95th percentile per-packet one-way delay: 60.223 ms

Loss rate: 0.46%

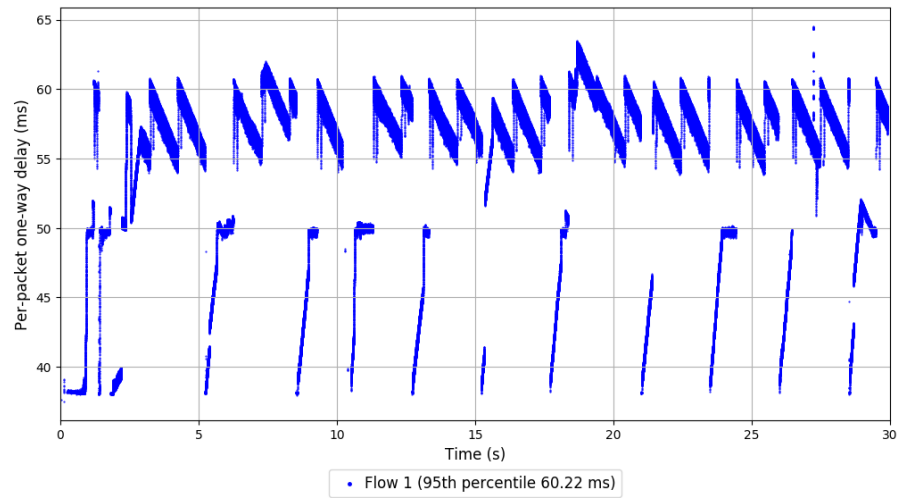
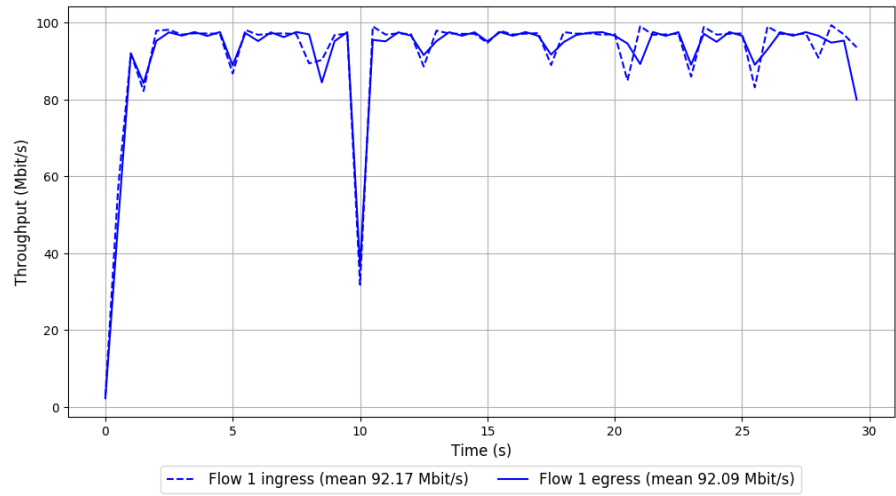
-- Flow 1:

Average throughput: 92.09 Mbit/s

95th percentile per-packet one-way delay: 60.223 ms

Loss rate: 0.46%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2018-02-04 04:15:10

End at: 2018-02-04 04:15:40

Local clock offset: -1.065 ms

Remote clock offset: 2.056 ms

# Below is generated by plot.py at 2018-02-04 11:54:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 142.269 ms

Loss rate: 3.37%

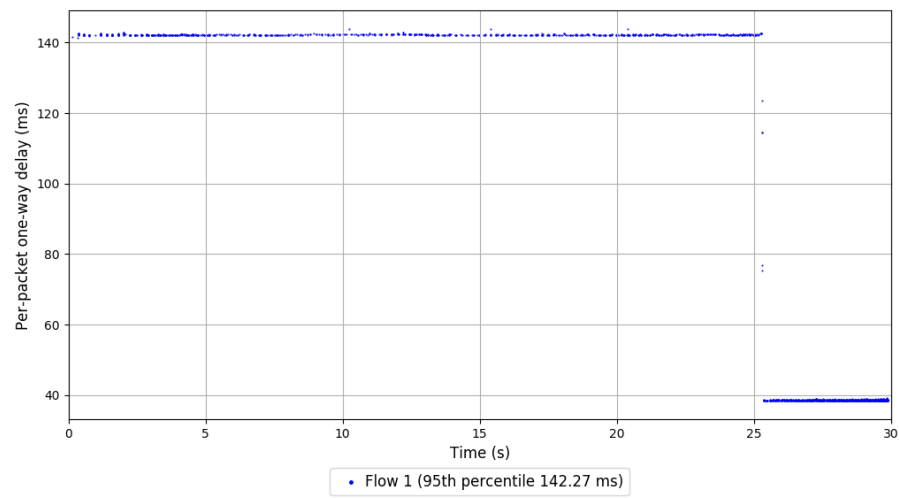
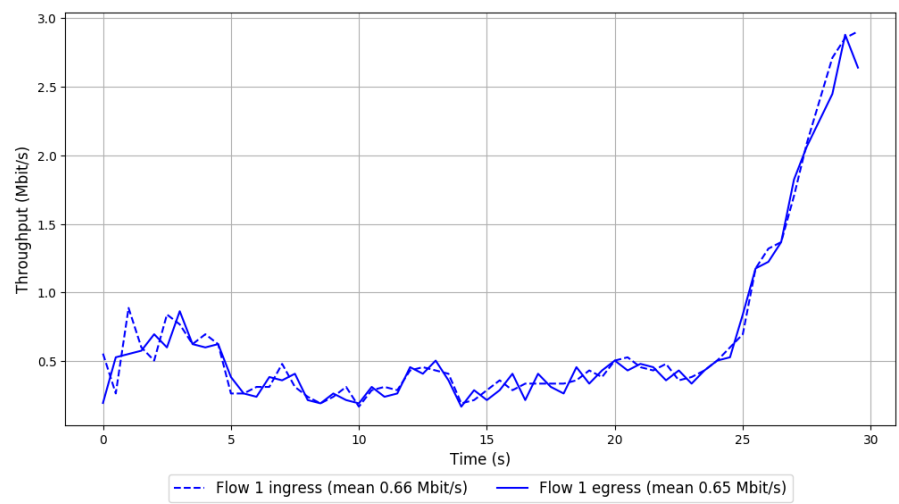
-- Flow 1:

Average throughput: 0.65 Mbit/s

95th percentile per-packet one-way delay: 142.269 ms

Loss rate: 3.37%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-02-04 04:39:57

End at: 2018-02-04 04:40:27

Local clock offset: -0.226 ms

Remote clock offset: 2.837 ms

# Below is generated by plot.py at 2018-02-04 11:54:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.26 Mbit/s

95th percentile per-packet one-way delay: 59.162 ms

Loss rate: 0.40%

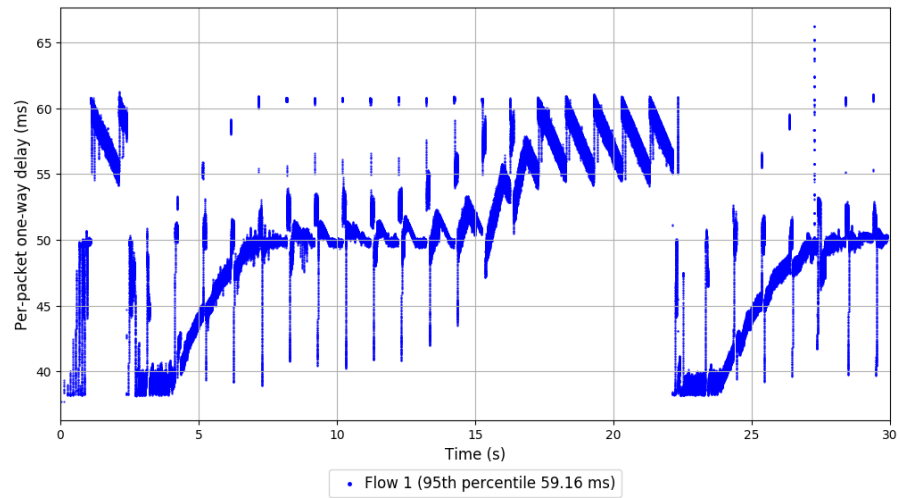
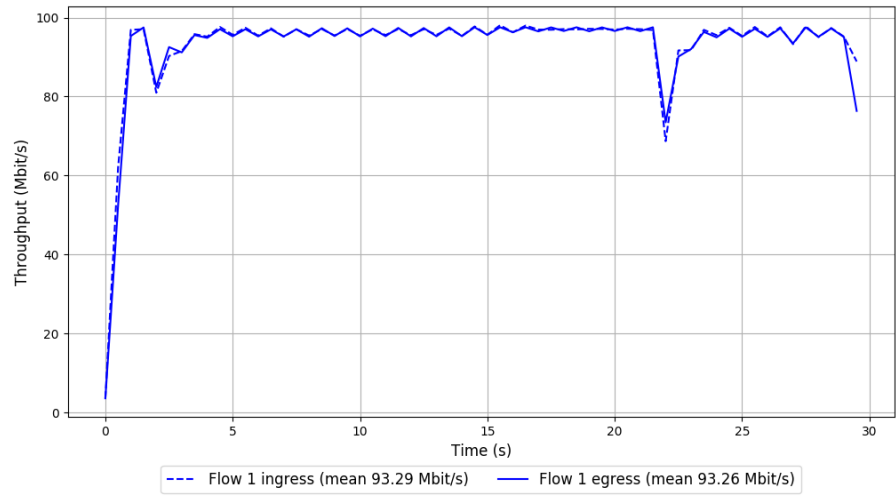
-- Flow 1:

Average throughput: 93.26 Mbit/s

95th percentile per-packet one-way delay: 59.162 ms

Loss rate: 0.40%

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



Run 3: Statistics of TCP Cubic

Start at: 2018-02-04 05:01:44

End at: 2018-02-04 05:02:14

Local clock offset: 0.06 ms

Remote clock offset: 3.74 ms

# Below is generated by plot.py at 2018-02-04 11:54:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.92 Mbit/s

95th percentile per-packet one-way delay: 59.846 ms

Loss rate: 0.40%

-- Flow 1:

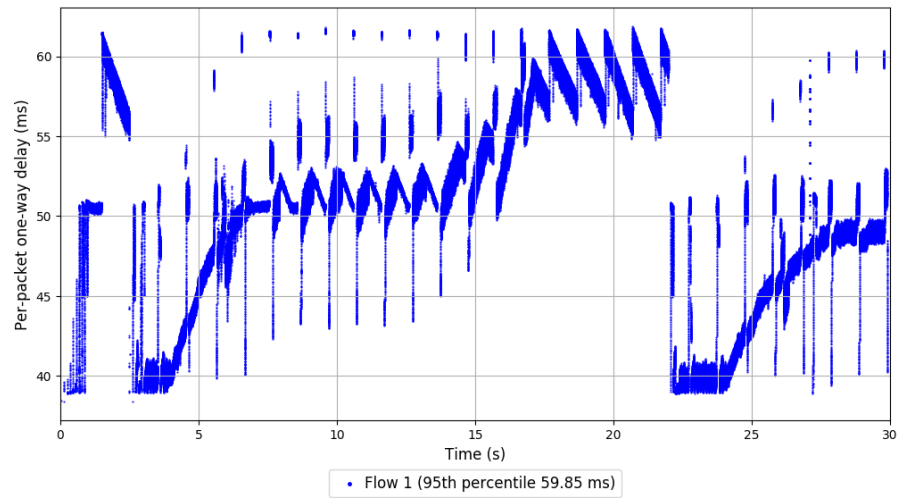
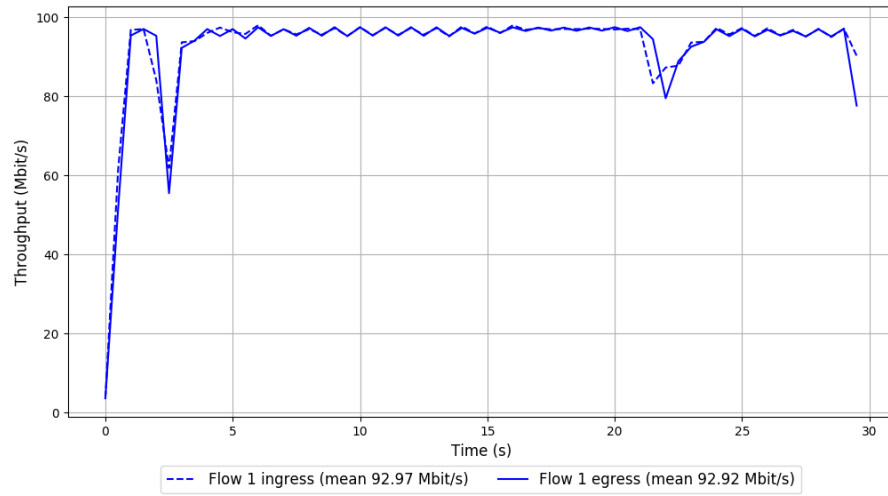
Average throughput: 92.92 Mbit/s

95th percentile per-packet one-way delay: 59.846 ms

Loss rate: 0.40%



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



Run 4: Statistics of TCP Cubic

Start at: 2018-02-04 05:23:30

End at: 2018-02-04 05:24:00

Local clock offset: 0.428 ms

Remote clock offset: 4.718 ms

# Below is generated by plot.py at 2018-02-04 11:54:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.56 Mbit/s

95th percentile per-packet one-way delay: 59.662 ms

Loss rate: 0.40%

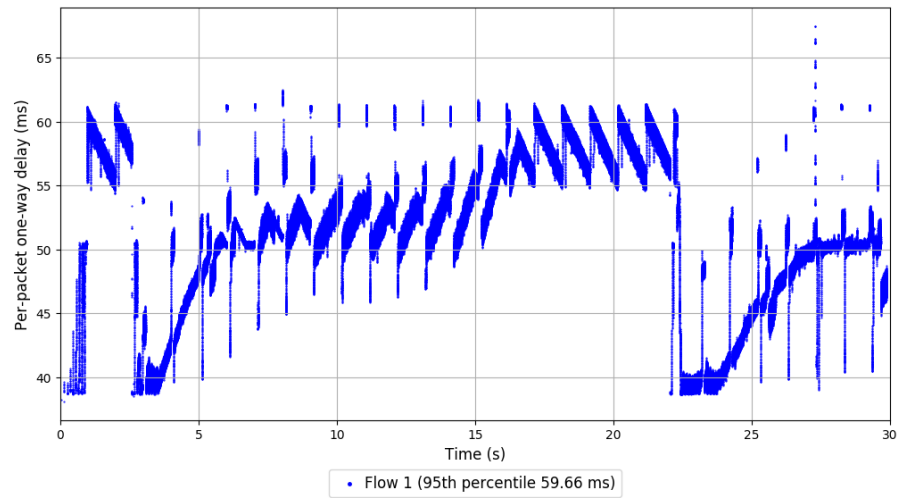
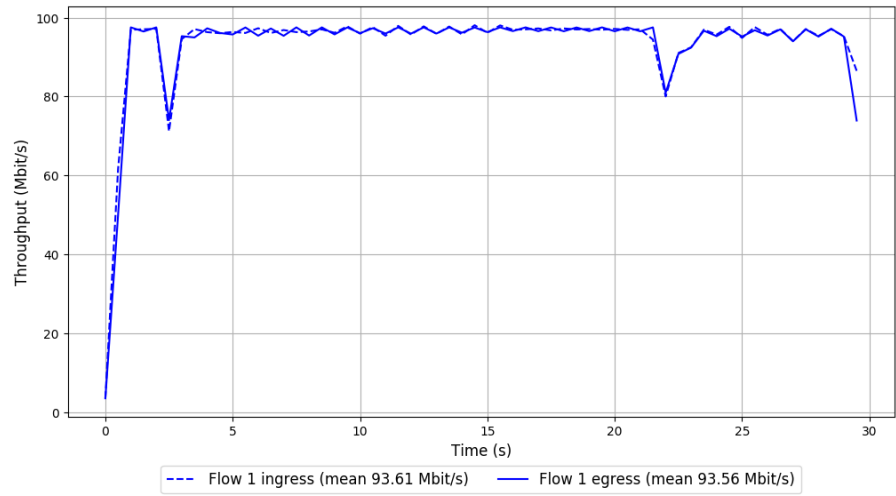
-- Flow 1:

Average throughput: 93.56 Mbit/s

95th percentile per-packet one-way delay: 59.662 ms

Loss rate: 0.40%

#### Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-02-04 05:45:16

End at: 2018-02-04 05:45:46

Local clock offset: 0.488 ms

Remote clock offset: 5.764 ms

# Below is generated by plot.py at 2018-02-04 11:54:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 13.02 Mbit/s

95th percentile per-packet one-way delay: 142.658 ms

Loss rate: 2.61%

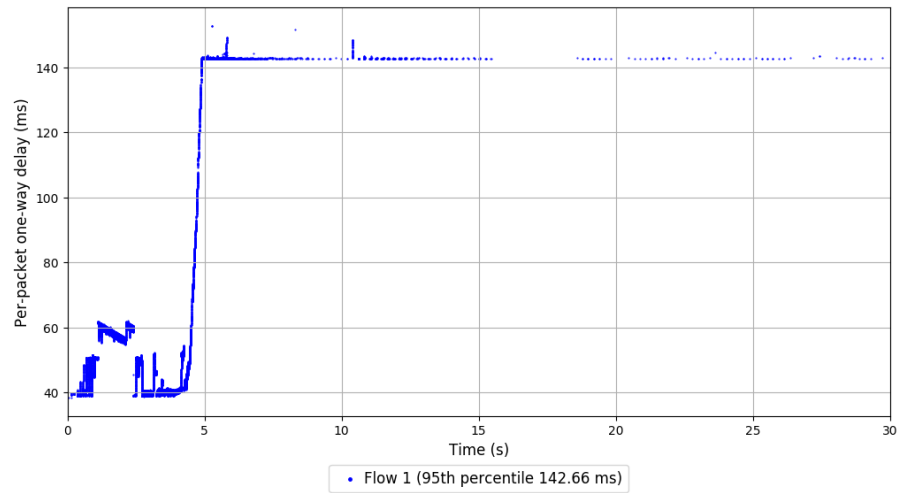
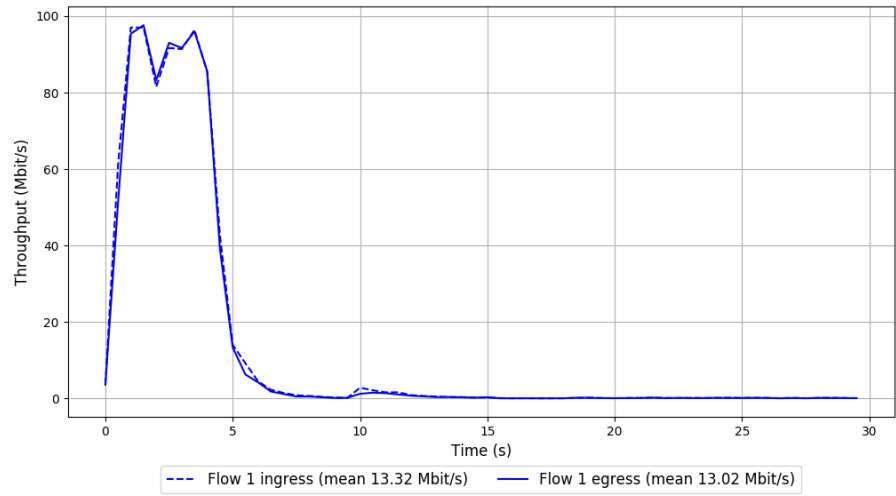
-- Flow 1:

Average throughput: 13.02 Mbit/s

95th percentile per-packet one-way delay: 142.658 ms

Loss rate: 2.61%

### Run 5: Report of TCP Cubic — Data Link



Run 6: Statistics of TCP Cubic

Start at: 2018-02-04 06:15:41

End at: 2018-02-04 06:16:11

Local clock offset: 0.622 ms

Remote clock offset: 6.204 ms

# Below is generated by plot.py at 2018-02-04 11:54:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.27 Mbit/s

95th percentile per-packet one-way delay: 59.105 ms

Loss rate: 0.39%

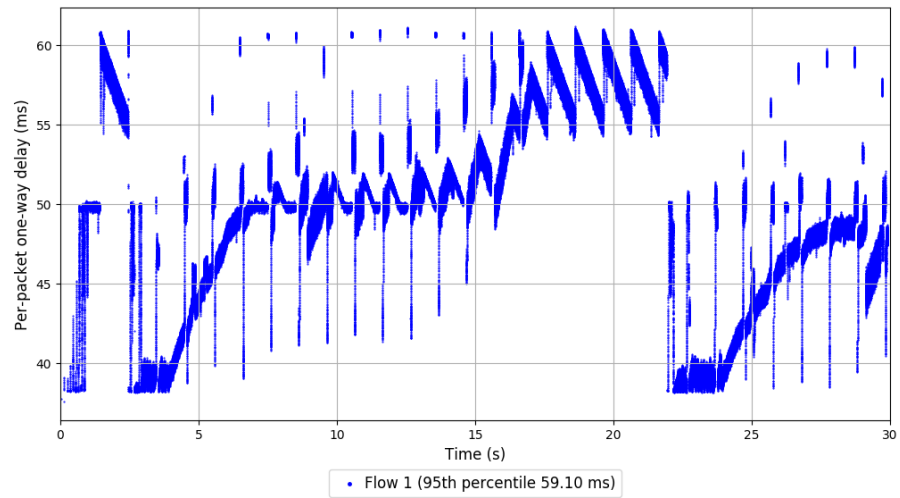
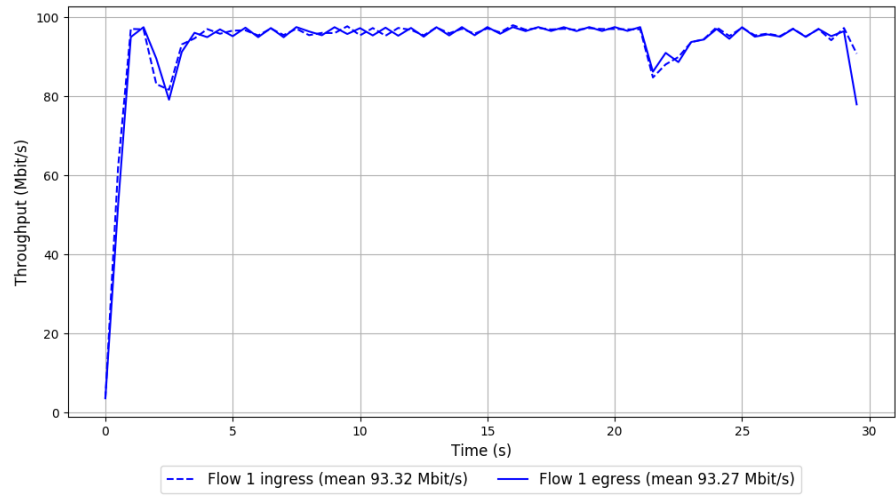
-- Flow 1:

Average throughput: 93.27 Mbit/s

95th percentile per-packet one-way delay: 59.105 ms

Loss rate: 0.39%

### Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2018-02-04 06:39:11

End at: 2018-02-04 06:39:41

Local clock offset: 1.331 ms

Remote clock offset: 6.85 ms

# Below is generated by plot.py at 2018-02-04 11:54:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.35 Mbit/s

95th percentile per-packet one-way delay: 59.546 ms

Loss rate: 0.40%

-- Flow 1:

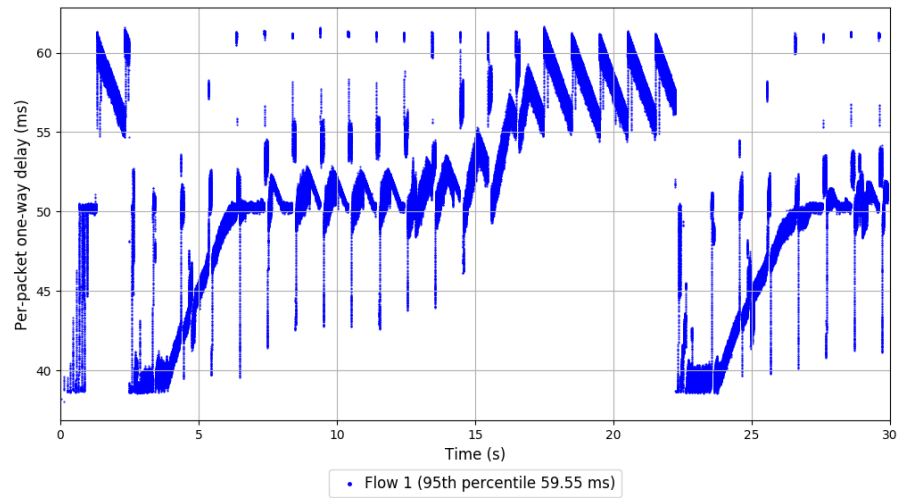
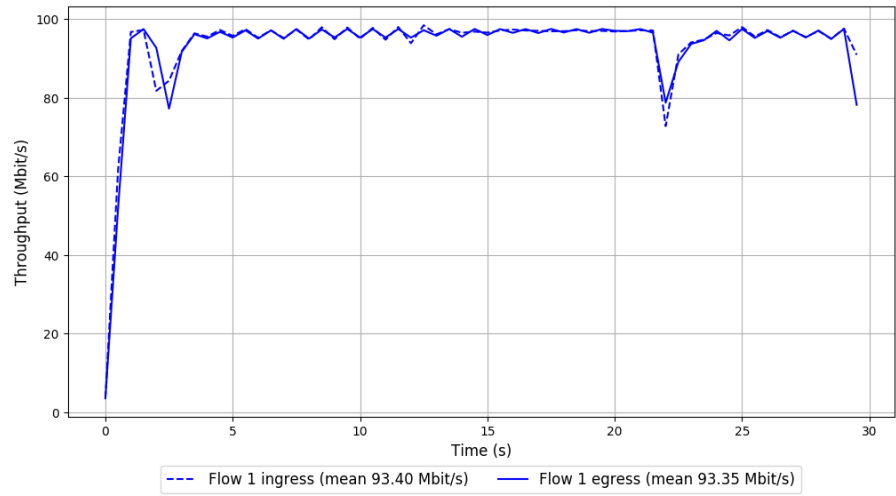
Average throughput: 93.35 Mbit/s

95th percentile per-packet one-way delay: 59.546 ms

Loss rate: 0.40%



### Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

Start at: 2018-02-04 07:02:44

End at: 2018-02-04 07:03:14

Local clock offset: 1.596 ms

Remote clock offset: 7.461 ms

# Below is generated by plot.py at 2018-02-04 11:54:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.39 Mbit/s

95th percentile per-packet one-way delay: 59.487 ms

Loss rate: 0.40%

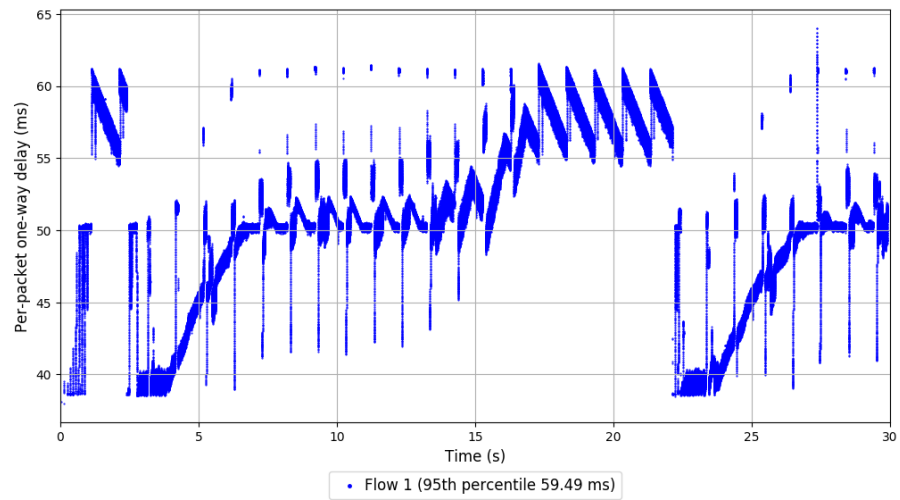
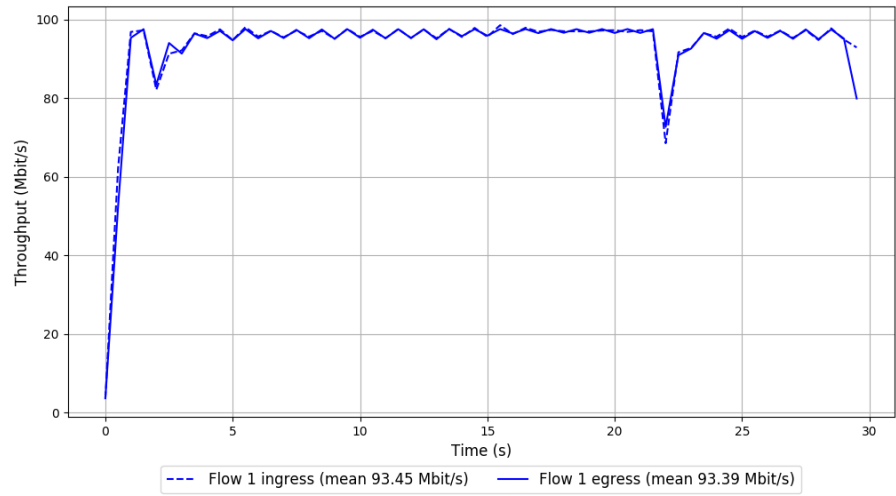
-- Flow 1:

Average throughput: 93.39 Mbit/s

95th percentile per-packet one-way delay: 59.487 ms

Loss rate: 0.40%

### Run 8: Report of TCP Cubic — Data Link



Run 9: Statistics of TCP Cubic

Start at: 2018-02-04 07:24:33

End at: 2018-02-04 07:25:03

Local clock offset: 1.36 ms

Remote clock offset: 8.691 ms

# Below is generated by plot.py at 2018-02-04 11:54:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.38 Mbit/s

95th percentile per-packet one-way delay: 60.052 ms

Loss rate: 0.33%

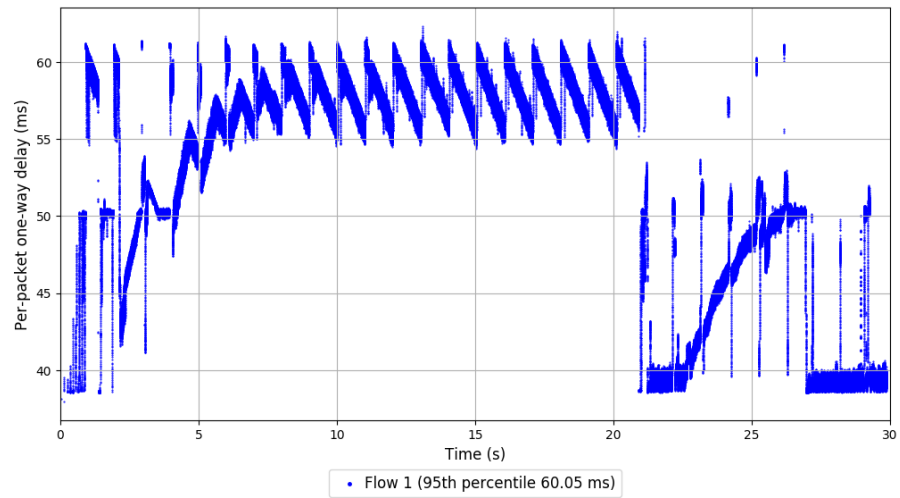
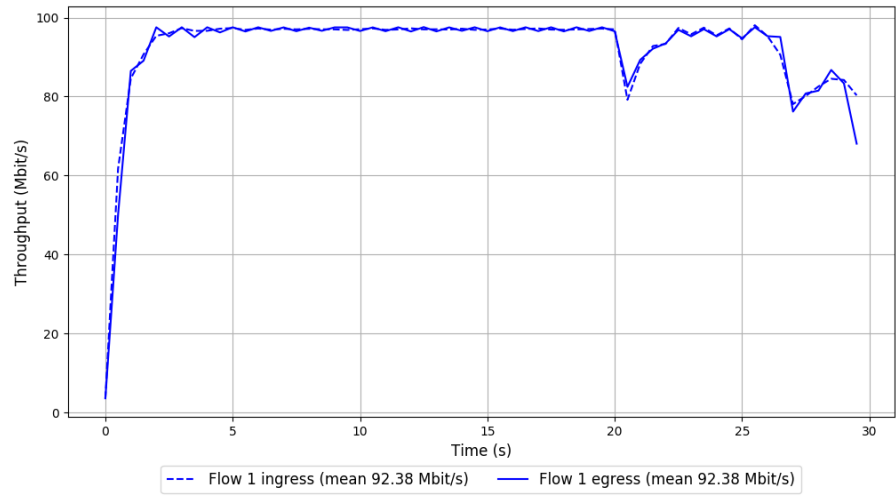
-- Flow 1:

Average throughput: 92.38 Mbit/s

95th percentile per-packet one-way delay: 60.052 ms

Loss rate: 0.33%

### Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2018-02-04 07:46:19

End at: 2018-02-04 07:46:49

Local clock offset: 0.356 ms

Remote clock offset: 9.988 ms

# Below is generated by plot.py at 2018-02-04 11:55:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.50 Mbit/s

95th percentile per-packet one-way delay: 58.507 ms

Loss rate: 0.40%

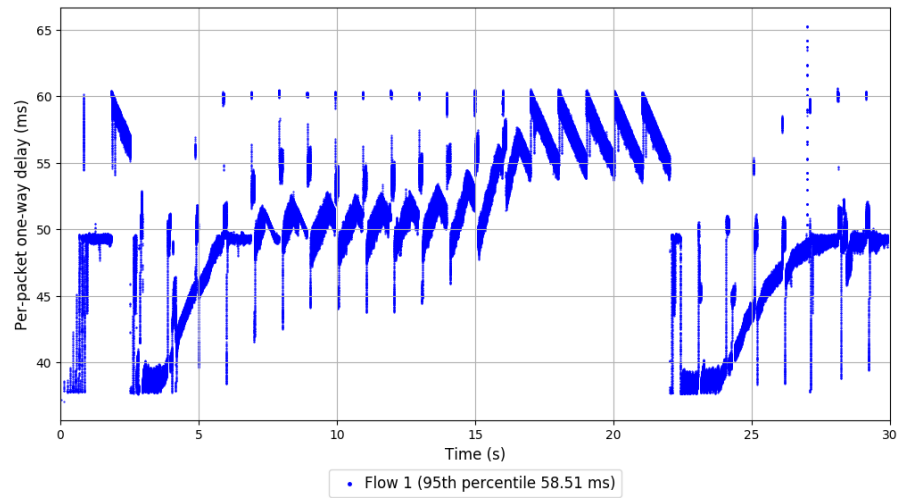
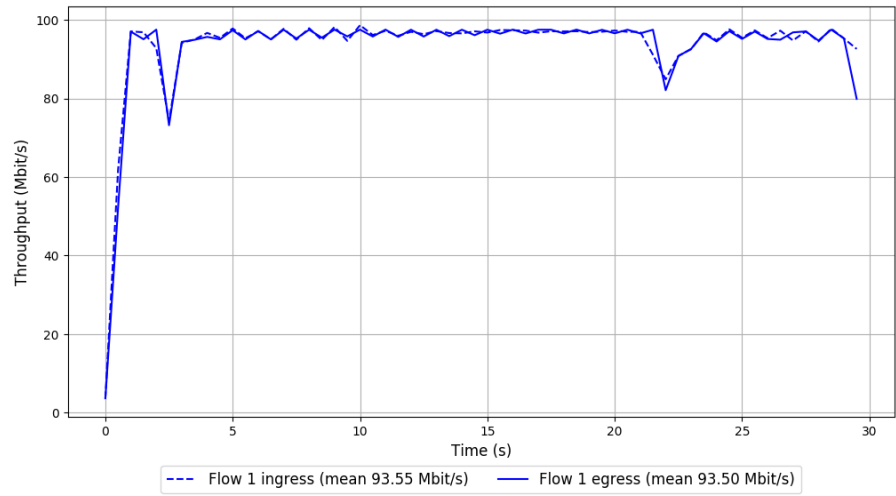
-- Flow 1:

Average throughput: 93.50 Mbit/s

95th percentile per-packet one-way delay: 58.507 ms

Loss rate: 0.40%

### Run 10: Report of TCP Cubic — Data Link



Run 1: Statistics of LEDBAT

Start at: 2018-02-04 04:27:40

End at: 2018-02-04 04:28:10

Local clock offset: -0.714 ms

Remote clock offset: 2.408 ms

# Below is generated by plot.py at 2018-02-04 11:55:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 24.72 Mbit/s

95th percentile per-packet one-way delay: 39.138 ms

Loss rate: 0.80%

-- Flow 1:

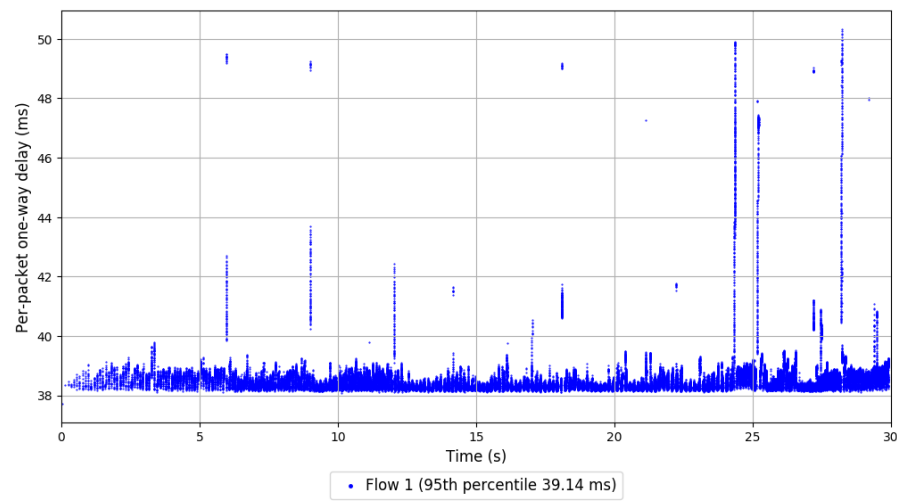
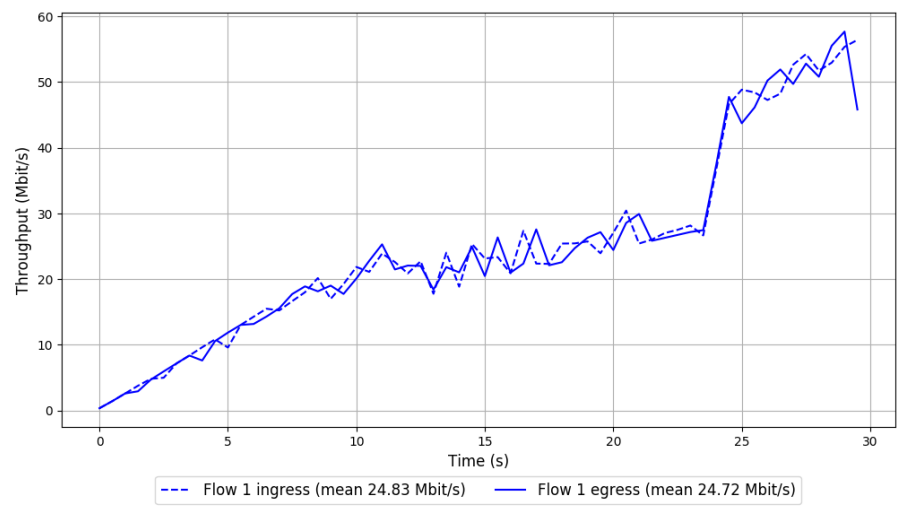
Average throughput: 24.72 Mbit/s

95th percentile per-packet one-way delay: 39.138 ms

Loss rate: 0.80%



Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-02-04 04:49:37

End at: 2018-02-04 04:50:07

Local clock offset: 0.244 ms

Remote clock offset: 3.252 ms

# Below is generated by plot.py at 2018-02-04 11:55:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 32.84 Mbit/s

95th percentile per-packet one-way delay: 39.432 ms

Loss rate: 0.69%

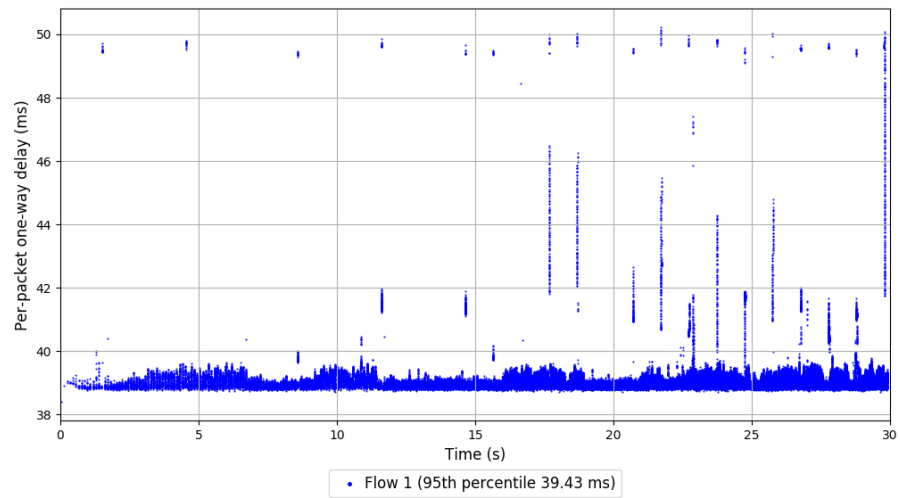
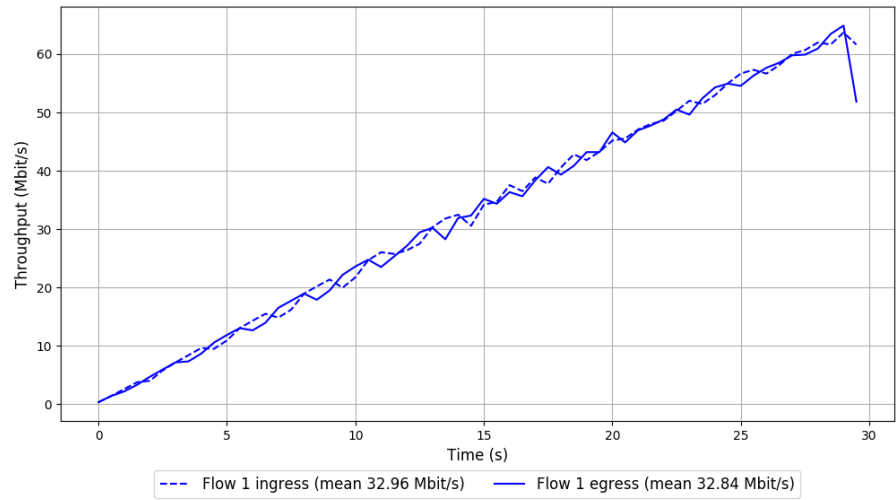
-- Flow 1:

Average throughput: 32.84 Mbit/s

95th percentile per-packet one-way delay: 39.432 ms

Loss rate: 0.69%

## Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-02-04 05:11:24

End at: 2018-02-04 05:11:54

Local clock offset: -0.396 ms

Remote clock offset: 4.189 ms

# Below is generated by plot.py at 2018-02-04 11:55:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 32.67 Mbit/s

95th percentile per-packet one-way delay: 39.043 ms

Loss rate: 0.69%

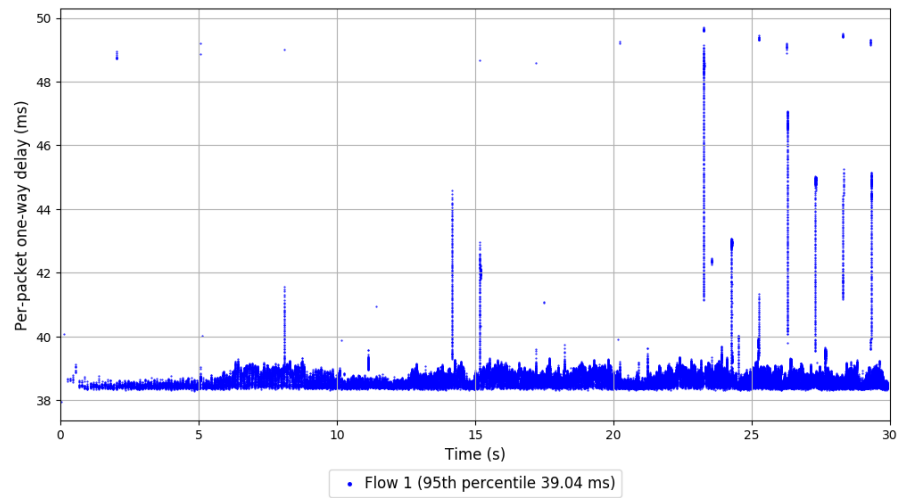
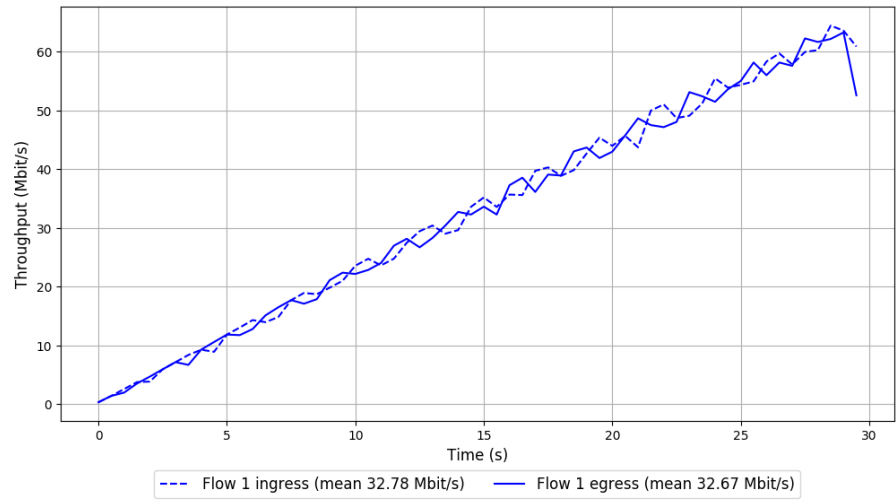
-- Flow 1:

Average throughput: 32.67 Mbit/s

95th percentile per-packet one-way delay: 39.043 ms

Loss rate: 0.69%

### Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2018-02-04 05:33:08

End at: 2018-02-04 05:33:38

Local clock offset: -0.058 ms

Remote clock offset: 5.154 ms

# Below is generated by plot.py at 2018-02-04 11:55:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 32.63 Mbit/s

95th percentile per-packet one-way delay: 39.294 ms

Loss rate: 0.69%

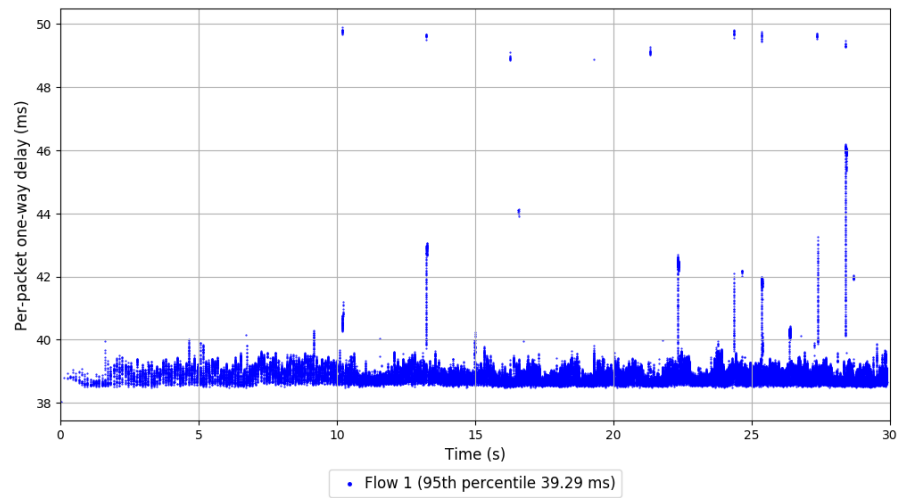
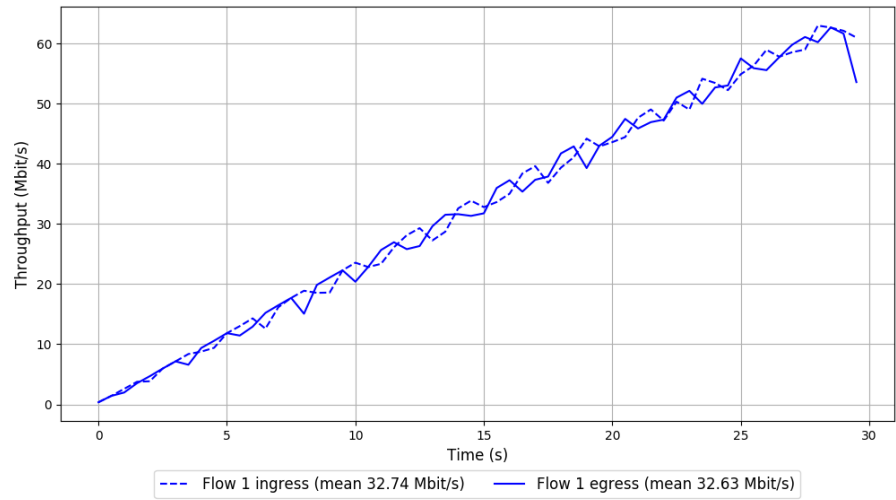
-- Flow 1:

Average throughput: 32.63 Mbit/s

95th percentile per-packet one-way delay: 39.294 ms

Loss rate: 0.69%

#### Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2018-02-04 05:59:49

End at: 2018-02-04 06:00:19

Local clock offset: 0.823 ms

Remote clock offset: 6.116 ms

# Below is generated by plot.py at 2018-02-04 11:55:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 142.244 ms

Loss rate: 0.27%

-- Flow 1:

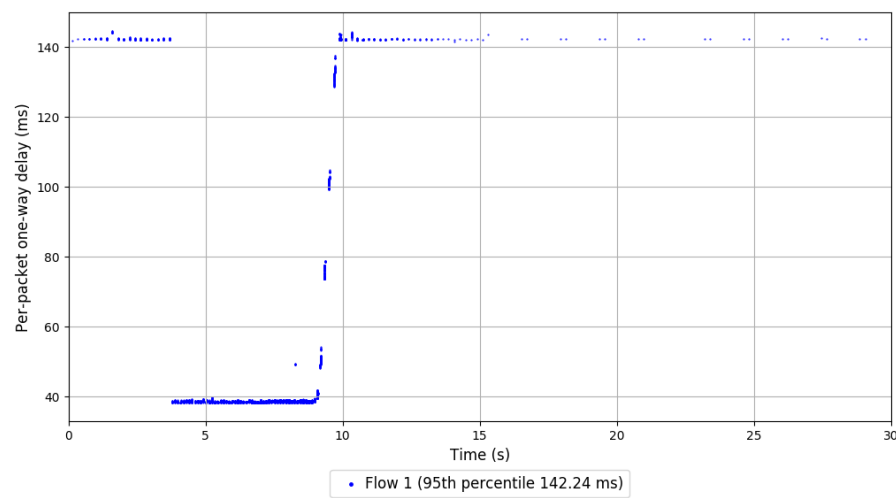
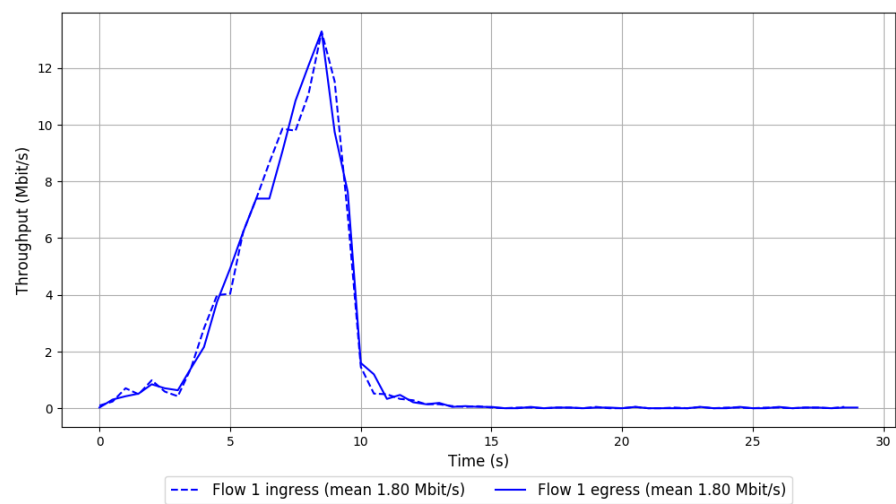
Average throughput: 1.80 Mbit/s

95th percentile per-packet one-way delay: 142.244 ms

Loss rate: 0.27%



Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2018-02-04 06:25:21

End at: 2018-02-04 06:25:51

Local clock offset: 1.112 ms

Remote clock offset: 6.502 ms

# Below is generated by plot.py at 2018-02-04 11:55:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 32.68 Mbit/s

95th percentile per-packet one-way delay: 39.773 ms

Loss rate: 0.69%

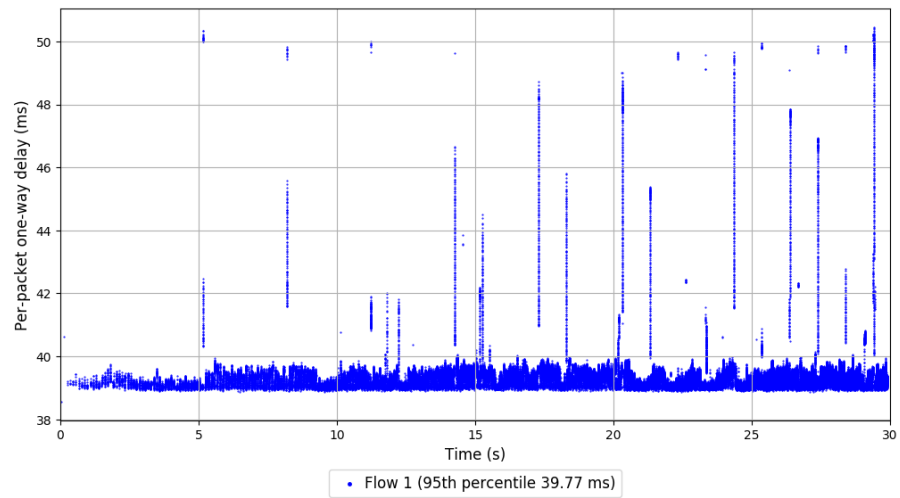
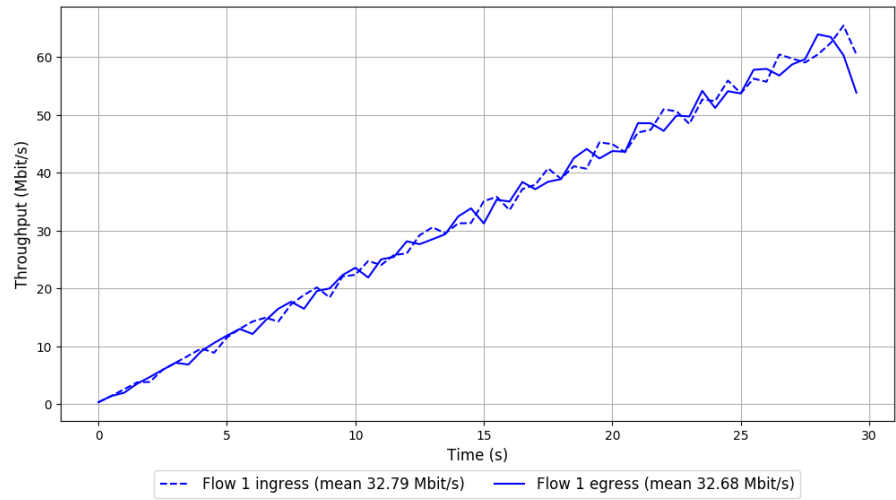
-- Flow 1:

Average throughput: 32.68 Mbit/s

95th percentile per-packet one-way delay: 39.773 ms

Loss rate: 0.69%

## Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2018-02-04 06:48:47

End at: 2018-02-04 06:49:17

Local clock offset: 1.426 ms

Remote clock offset: 7.123 ms

# Below is generated by plot.py at 2018-02-04 11:55:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 32.87 Mbit/s

95th percentile per-packet one-way delay: 39.460 ms

Loss rate: 0.69%

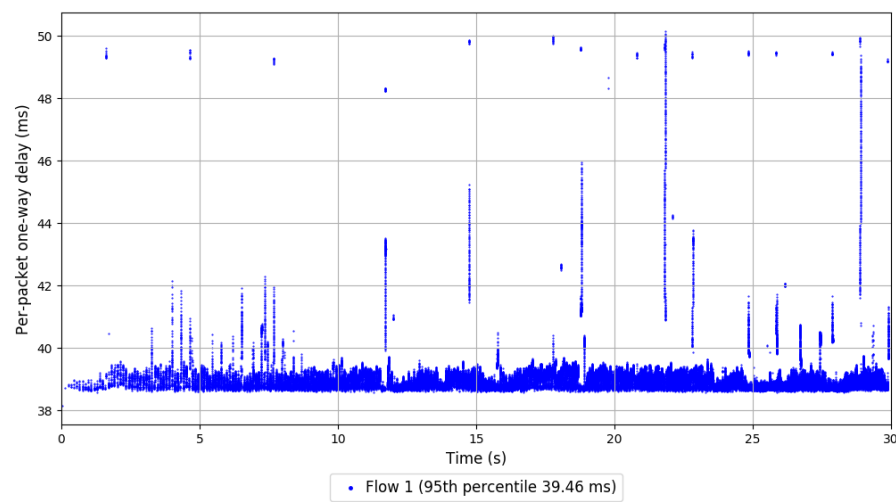
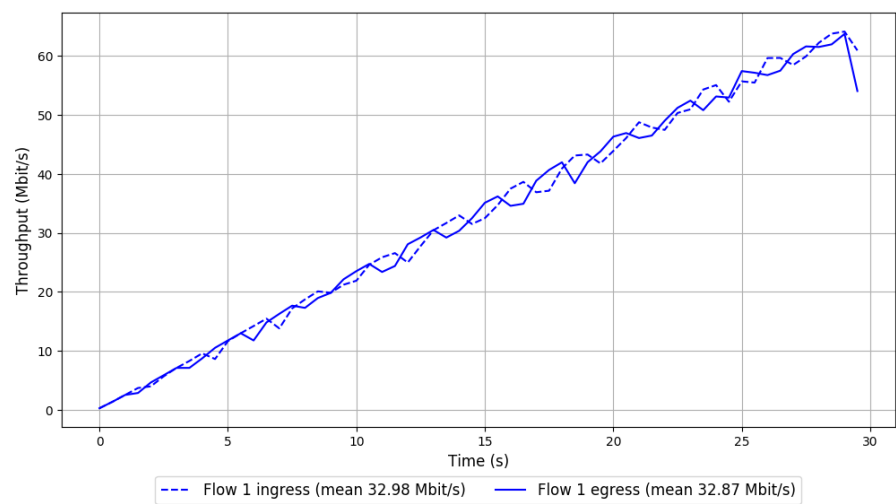
-- Flow 1:

Average throughput: 32.87 Mbit/s

95th percentile per-packet one-way delay: 39.460 ms

Loss rate: 0.69%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2018-02-04 07:12:25

End at: 2018-02-04 07:12:55

Local clock offset: 1.385 ms

Remote clock offset: 8.004 ms

# Below is generated by plot.py at 2018-02-04 11:55:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 32.60 Mbit/s

95th percentile per-packet one-way delay: 39.999 ms

Loss rate: 0.69%

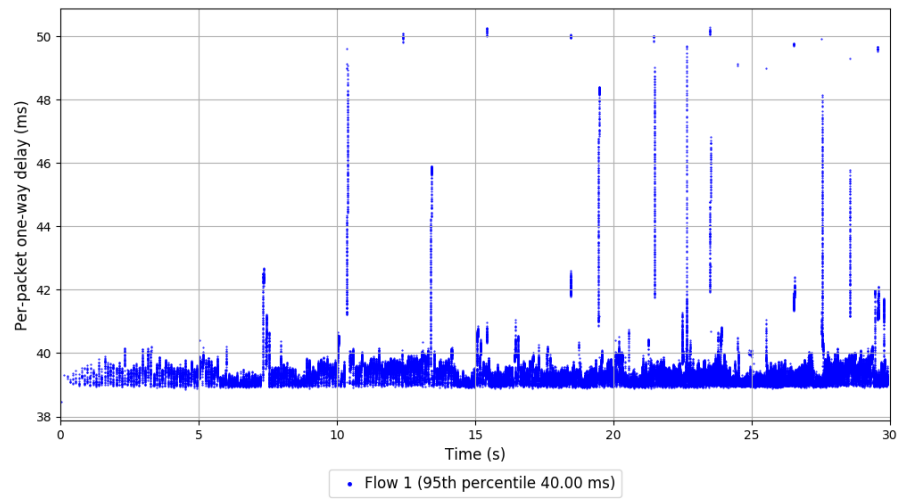
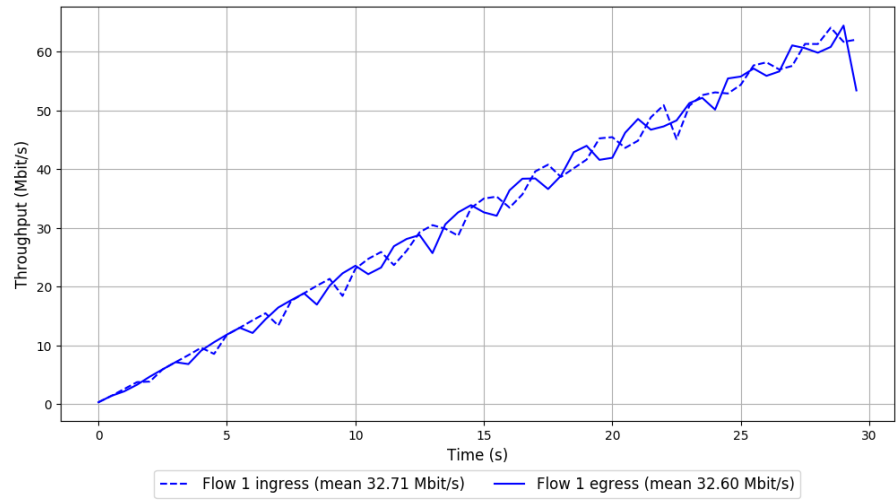
-- Flow 1:

Average throughput: 32.60 Mbit/s

95th percentile per-packet one-way delay: 39.999 ms

Loss rate: 0.69%

# Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2018-02-04 07:34:12

End at: 2018-02-04 07:34:42

Local clock offset: 1.138 ms

Remote clock offset: 9.415 ms

# Below is generated by plot.py at 2018-02-04 11:55:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 32.90 Mbit/s

95th percentile per-packet one-way delay: 39.306 ms

Loss rate: 0.69%

-- Flow 1:

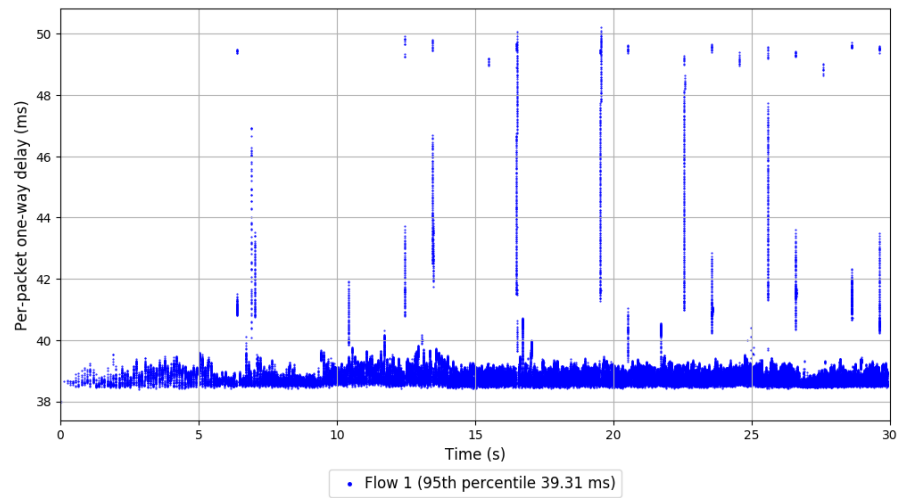
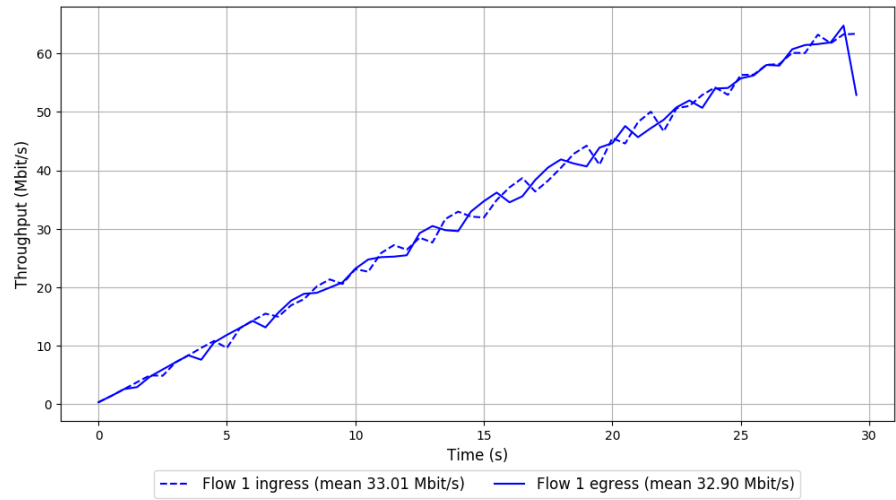
Average throughput: 32.90 Mbit/s

95th percentile per-packet one-way delay: 39.306 ms

Loss rate: 0.69%



### Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2018-02-04 07:55:58

End at: 2018-02-04 07:56:28

Local clock offset: 0.32 ms

Remote clock offset: 10.379 ms

# Below is generated by plot.py at 2018-02-04 11:55:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 32.57 Mbit/s

95th percentile per-packet one-way delay: 39.580 ms

Loss rate: 0.69%

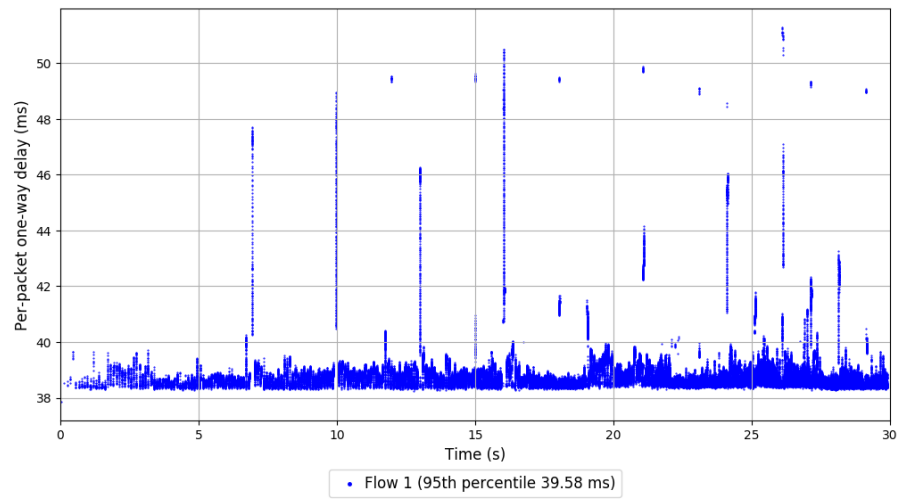
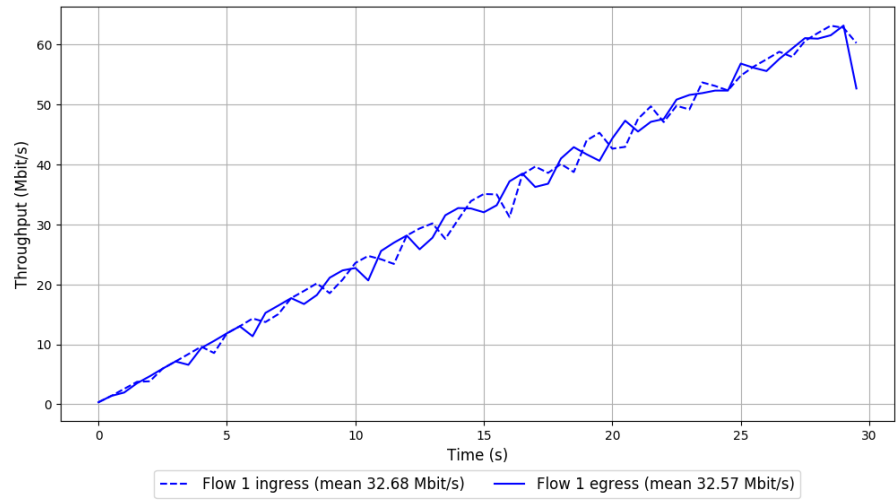
-- Flow 1:

Average throughput: 32.57 Mbit/s

95th percentile per-packet one-way delay: 39.580 ms

Loss rate: 0.69%

## Run 10: Report of LEDBAT — Data Link

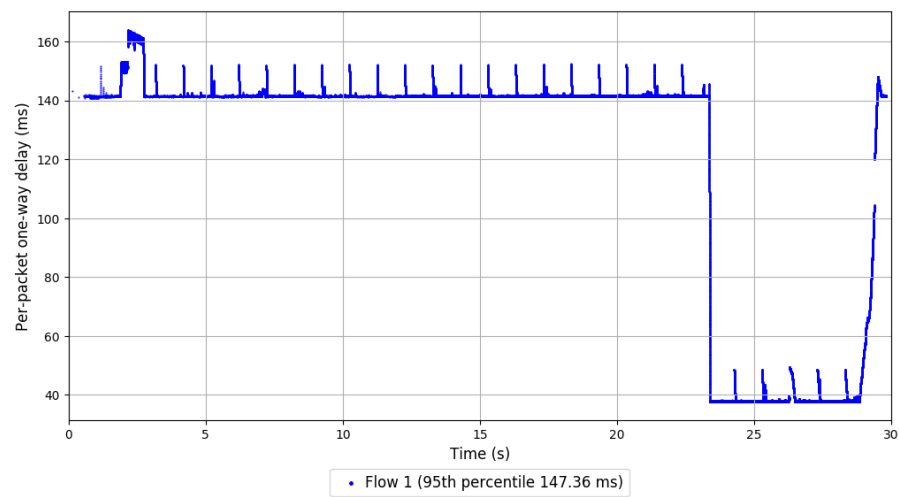
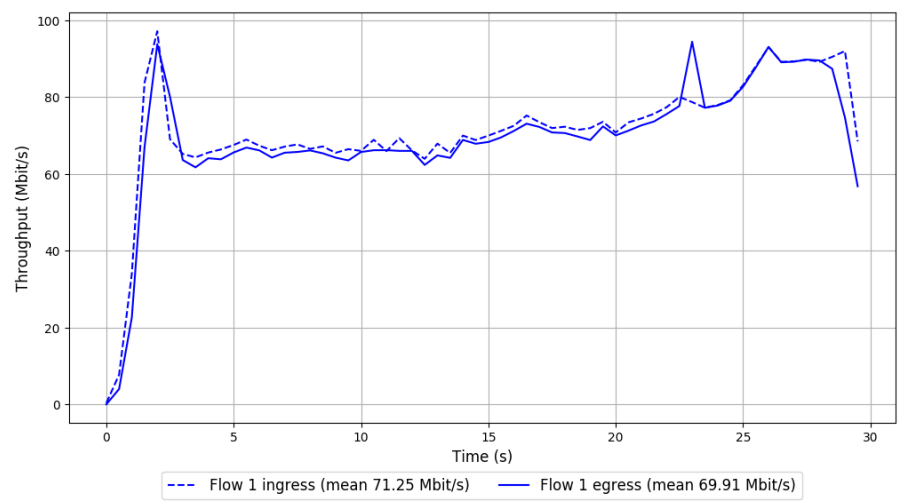


```
Run 1: Statistics of PCC

Start at: 2018-02-04 04:12:52
End at: 2018-02-04 04:13:22
Local clock offset: -0.979 ms
Remote clock offset: 2.019 ms

# Below is generated by plot.py at 2018-02-04 11:55:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.91 Mbit/s
95th percentile per-packet one-way delay: 147.362 ms
Loss rate: 2.56%
-- Flow 1:
Average throughput: 69.91 Mbit/s
95th percentile per-packet one-way delay: 147.362 ms
Loss rate: 2.56%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2018-02-04 04:38:45

End at: 2018-02-04 04:39:15

Local clock offset: -0.151 ms

Remote clock offset: 2.812 ms

# Below is generated by plot.py at 2018-02-04 11:56:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 82.68 Mbit/s

95th percentile per-packet one-way delay: 47.807 ms

Loss rate: 0.42%

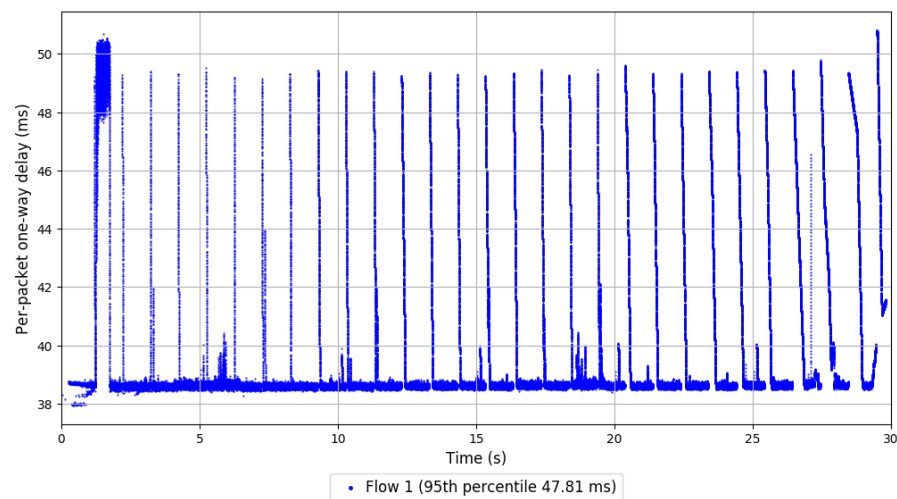
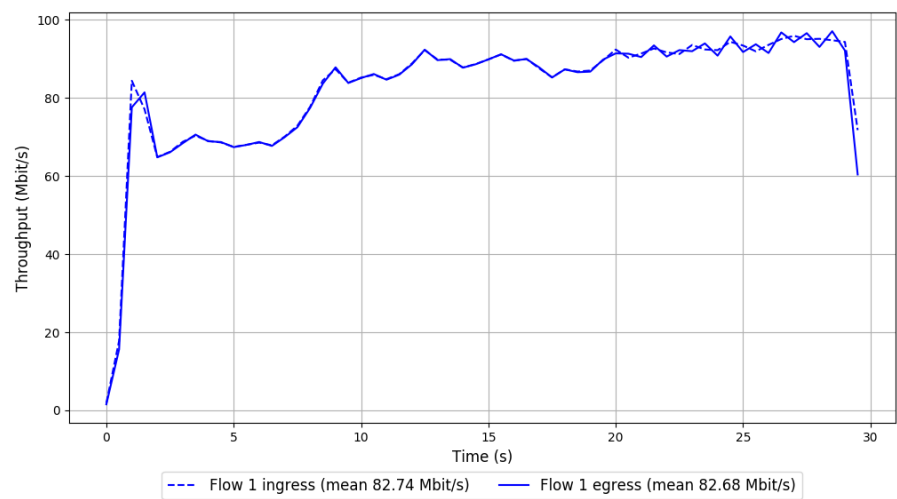
-- Flow 1:

Average throughput: 82.68 Mbit/s

95th percentile per-packet one-way delay: 47.807 ms

Loss rate: 0.42%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2018-02-04 05:00:32

End at: 2018-02-04 05:01:02

Local clock offset: -0.132 ms

Remote clock offset: 3.666 ms

# Below is generated by plot.py at 2018-02-04 11:56:03

# Datalink statistics

-- Total of 1 flow:

Average throughput: 80.38 Mbit/s

95th percentile per-packet one-way delay: 49.416 ms

Loss rate: 0.40%

-- Flow 1:

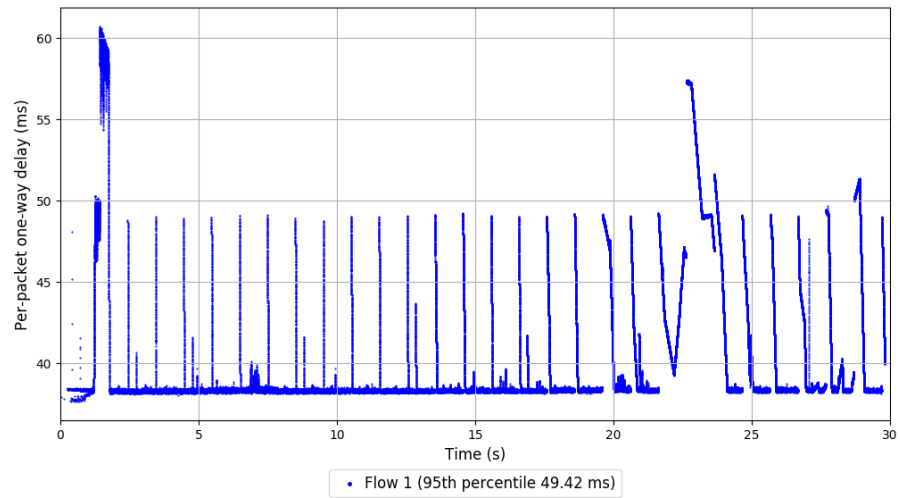
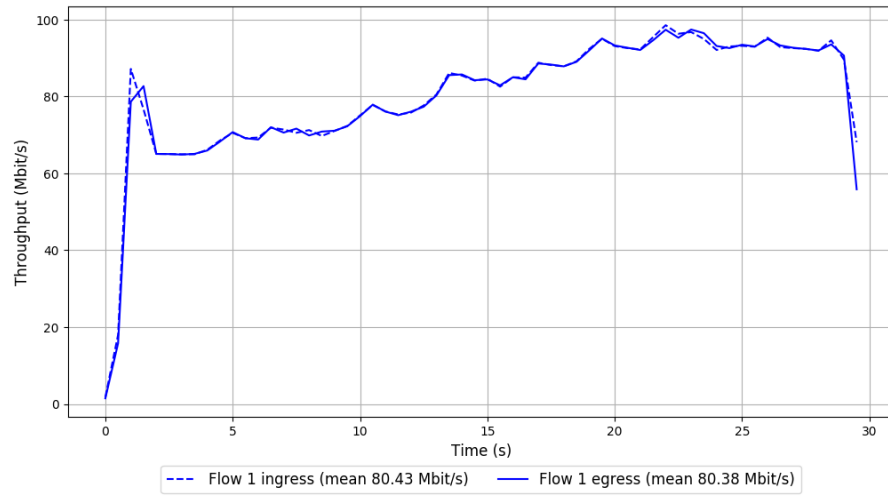
Average throughput: 80.38 Mbit/s

95th percentile per-packet one-way delay: 49.416 ms

Loss rate: 0.40%



### Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2018-02-04 05:22:18

End at: 2018-02-04 05:22:48

Local clock offset: 0.162 ms

Remote clock offset: 4.589 ms

# Below is generated by plot.py at 2018-02-04 11:56:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 85.44 Mbit/s

95th percentile per-packet one-way delay: 48.849 ms

Loss rate: 0.38%

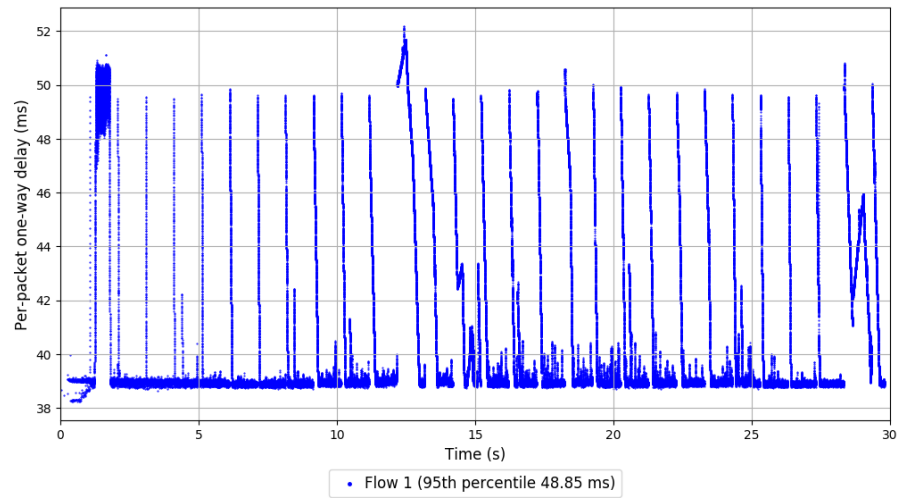
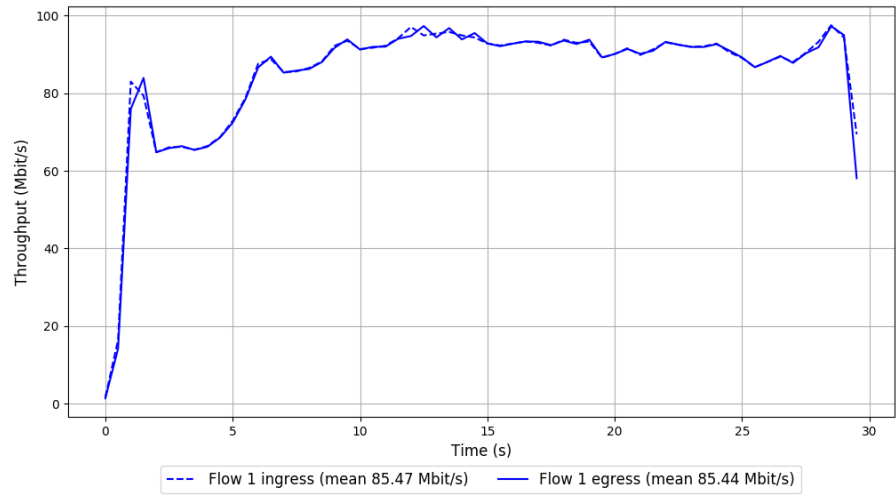
-- Flow 1:

Average throughput: 85.44 Mbit/s

95th percentile per-packet one-way delay: 48.849 ms

Loss rate: 0.38%

#### Run 4: Report of PCC — Data Link



Run 5: Statistics of PCC

Start at: 2018-02-04 05:44:05

End at: 2018-02-04 05:44:35

Local clock offset: -0.06 ms

Remote clock offset: 5.699 ms

# Below is generated by plot.py at 2018-02-04 11:56:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 50.78 Mbit/s

95th percentile per-packet one-way delay: 46.577 ms

Loss rate: 0.63%

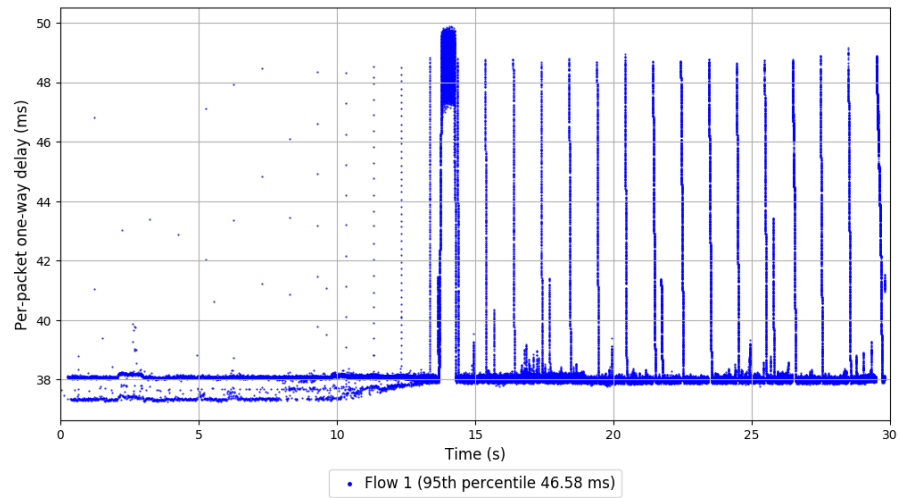
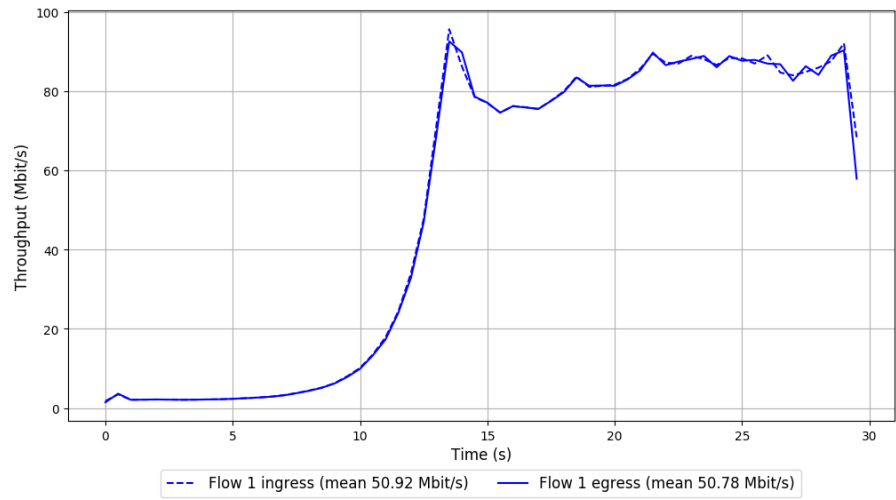
-- Flow 1:

Average throughput: 50.78 Mbit/s

95th percentile per-packet one-way delay: 46.577 ms

Loss rate: 0.63%

### Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2018-02-04 06:14:29

End at: 2018-02-04 06:14:59

Local clock offset: 0.745 ms

Remote clock offset: 6.21 ms

# Below is generated by plot.py at 2018-02-04 11:56:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 84.61 Mbit/s

95th percentile per-packet one-way delay: 48.270 ms

Loss rate: 0.41%

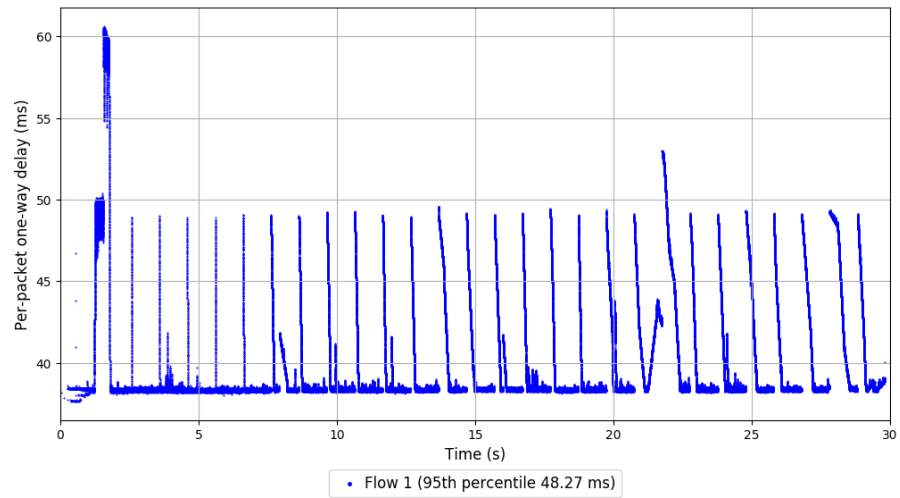
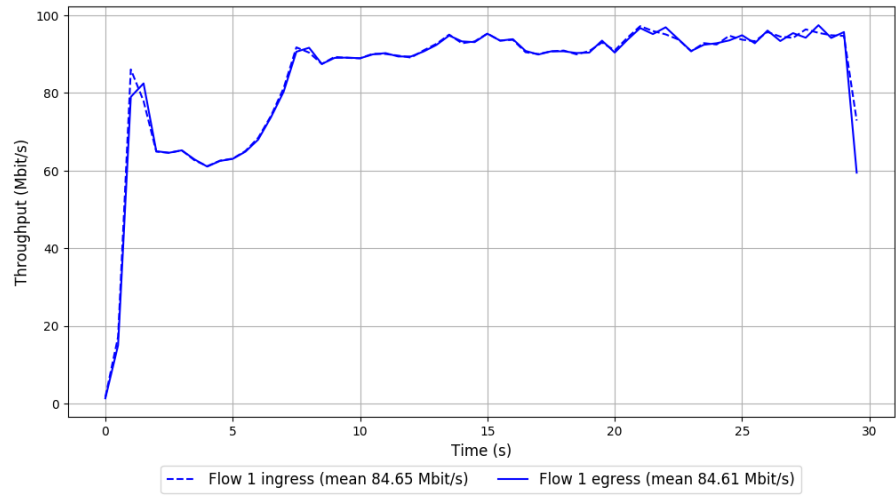
-- Flow 1:

Average throughput: 84.61 Mbit/s

95th percentile per-packet one-way delay: 48.270 ms

Loss rate: 0.41%

## Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

/home/ubuntu/pantheon\_data/2018-02-04T04-02-China-to-AWS-Korea-10-runs/pcc\_stats\_run7.log d



Run 7: Report of PCC — Data Link

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Run 8: Statistics of PCC

Start at: 2018-02-04 07:01:32

End at: 2018-02-04 07:02:02

Local clock offset: 1.286 ms

Remote clock offset: 7.489 ms

# Below is generated by plot.py at 2018-02-04 11:56:30

# Datalink statistics

-- Total of 1 flow:

Average throughput: 84.71 Mbit/s

95th percentile per-packet one-way delay: 47.794 ms

Loss rate: 0.40%

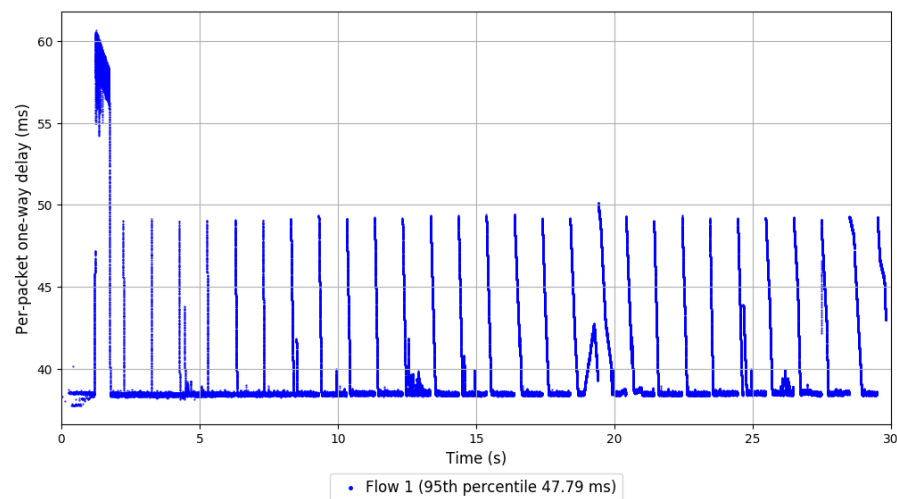
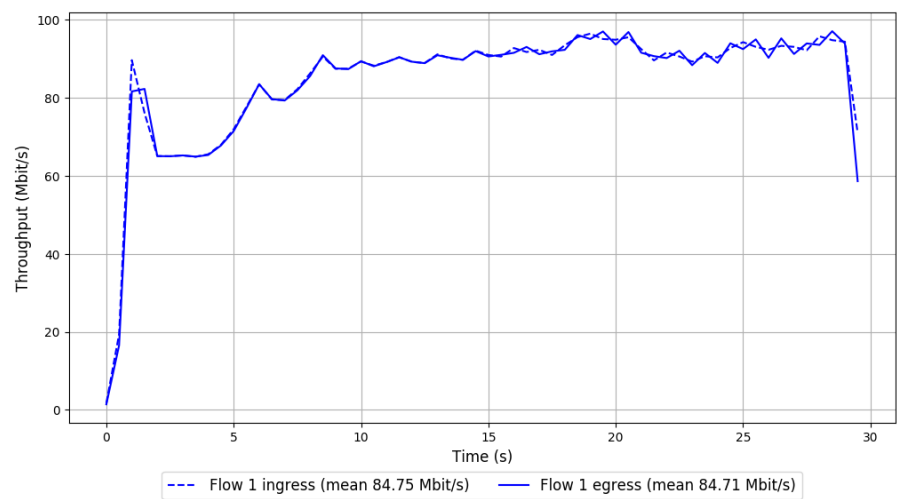
-- Flow 1:

Average throughput: 84.71 Mbit/s

95th percentile per-packet one-way delay: 47.794 ms

Loss rate: 0.40%

Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2018-02-04 07:23:22

End at: 2018-02-04 07:23:52

Local clock offset: 1.346 ms

Remote clock offset: 8.623 ms

# Below is generated by plot.py at 2018-02-04 11:56:42

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.56 Mbit/s

95th percentile per-packet one-way delay: 46.087 ms

Loss rate: 0.43%

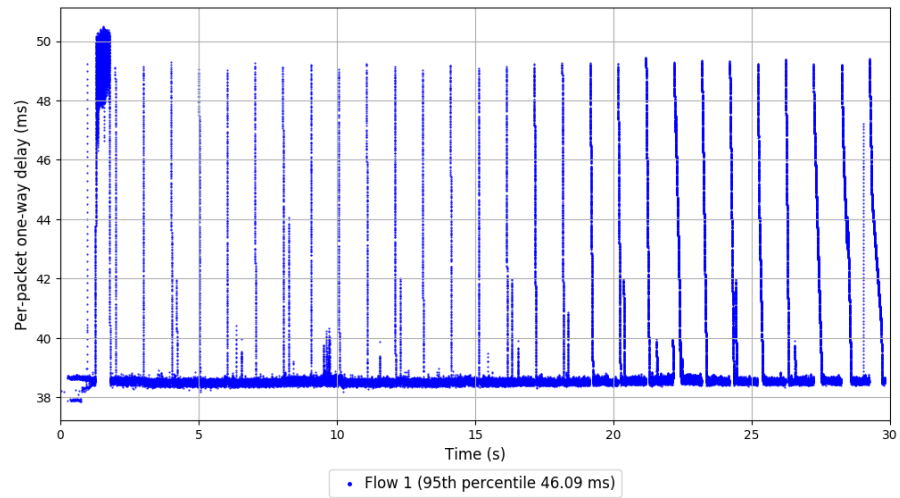
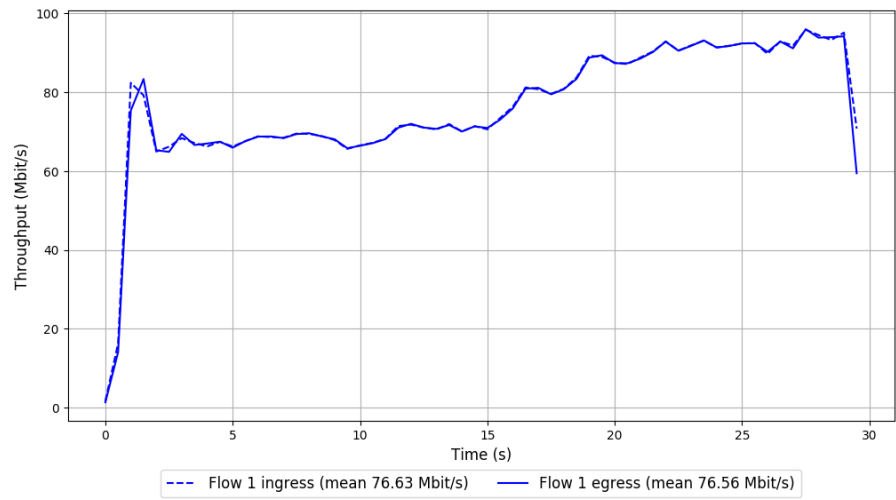
-- Flow 1:

Average throughput: 76.56 Mbit/s

95th percentile per-packet one-way delay: 46.087 ms

Loss rate: 0.43%

### Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2018-02-04 07:45:08

End at: 2018-02-04 07:45:38

Local clock offset: 0.917 ms

Remote clock offset: 9.932 ms

# Below is generated by plot.py at 2018-02-04 11:57:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.98 Mbit/s

95th percentile per-packet one-way delay: 45.853 ms

Loss rate: 0.43%

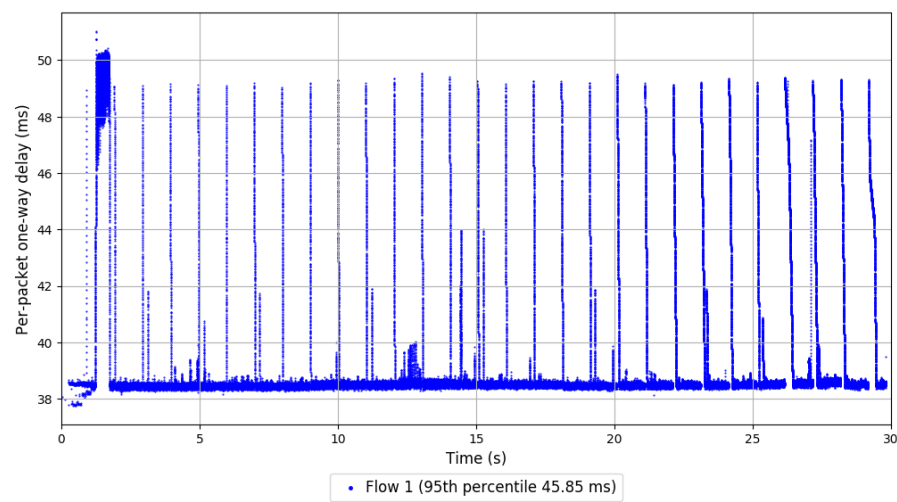
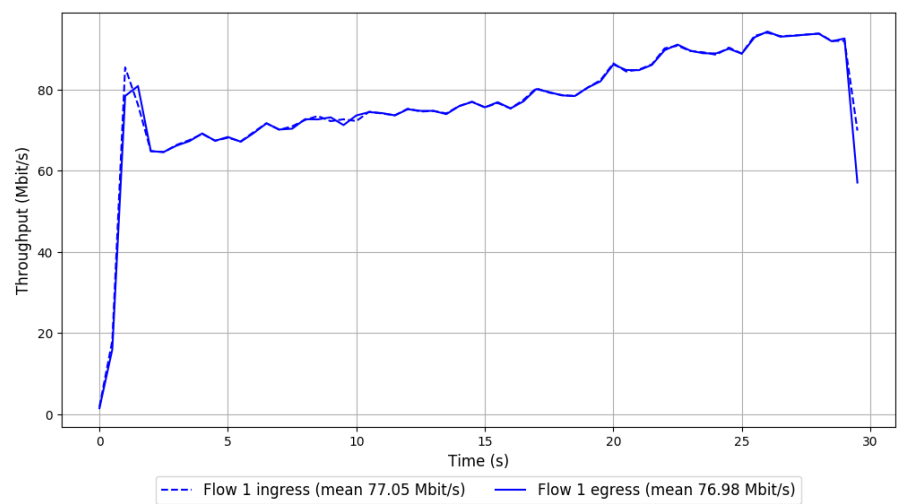
-- Flow 1:

Average throughput: 76.98 Mbit/s

95th percentile per-packet one-way delay: 45.853 ms

Loss rate: 0.43%

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-02-04 04:26:24

End at: 2018-02-04 04:26:54

Local clock offset: -0.814 ms

Remote clock offset: 2.391 ms

# Below is generated by plot.py at 2018-02-04 11:57:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 142.240 ms

Loss rate: 12.45%

-- Flow 1:

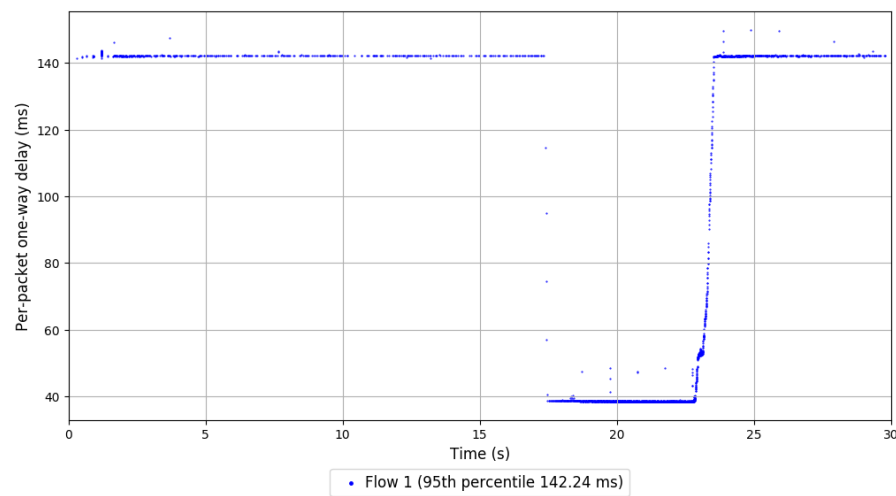
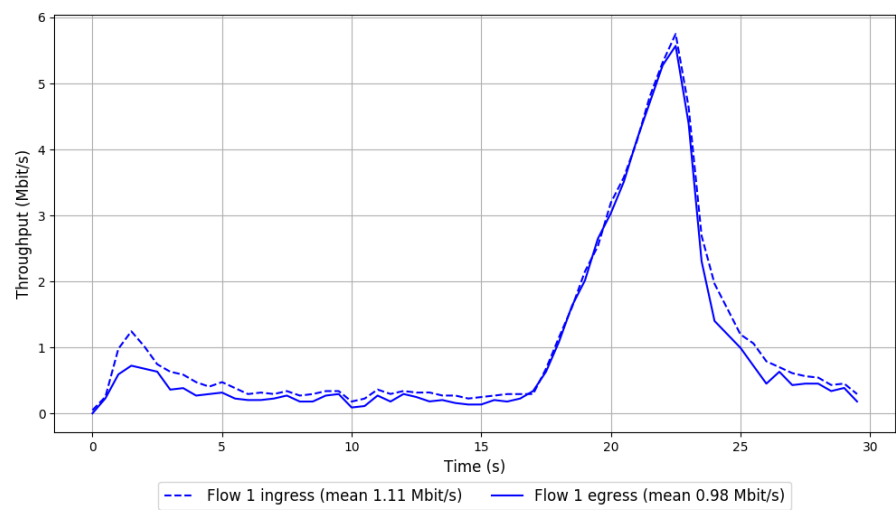
Average throughput: 0.98 Mbit/s

95th percentile per-packet one-way delay: 142.240 ms

Loss rate: 12.45%



Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-02-04 04:48:25

End at: 2018-02-04 04:48:55

Local clock offset: -0.078 ms

Remote clock offset: 3.21 ms

# Below is generated by plot.py at 2018-02-04 11:57:09

# Datalink statistics

-- Total of 1 flow:

Average throughput: 72.83 Mbit/s

95th percentile per-packet one-way delay: 48.677 ms

Loss rate: 0.39%

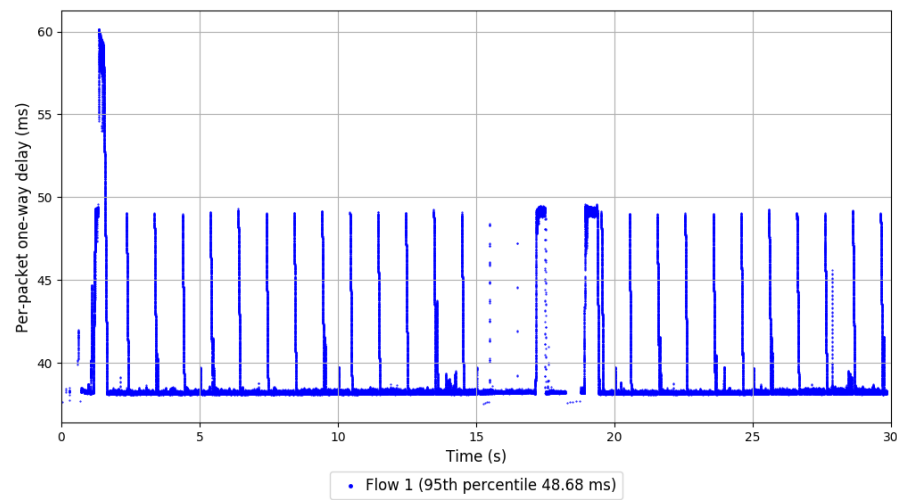
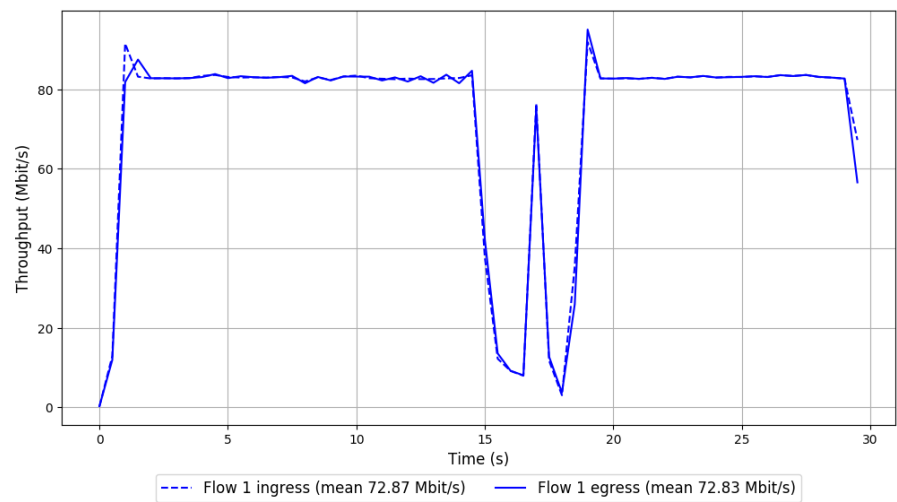
-- Flow 1:

Average throughput: 72.83 Mbit/s

95th percentile per-packet one-way delay: 48.677 ms

Loss rate: 0.39%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-02-04 05:10:12

End at: 2018-02-04 05:10:42

Local clock offset: 0.162 ms

Remote clock offset: 4.112 ms

# Below is generated by plot.py at 2018-02-04 11:57:18

# Datalink statistics

-- Total of 1 flow:

Average throughput: 69.47 Mbit/s

95th percentile per-packet one-way delay: 49.808 ms

Loss rate: 0.41%

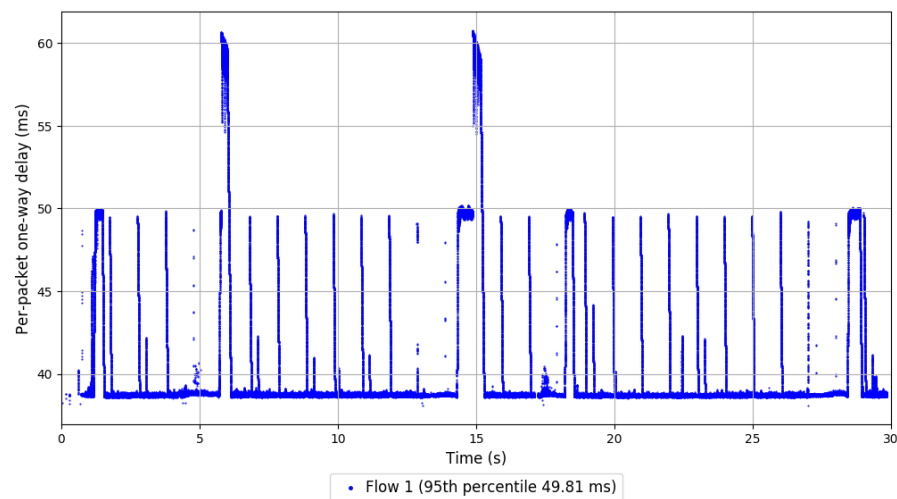
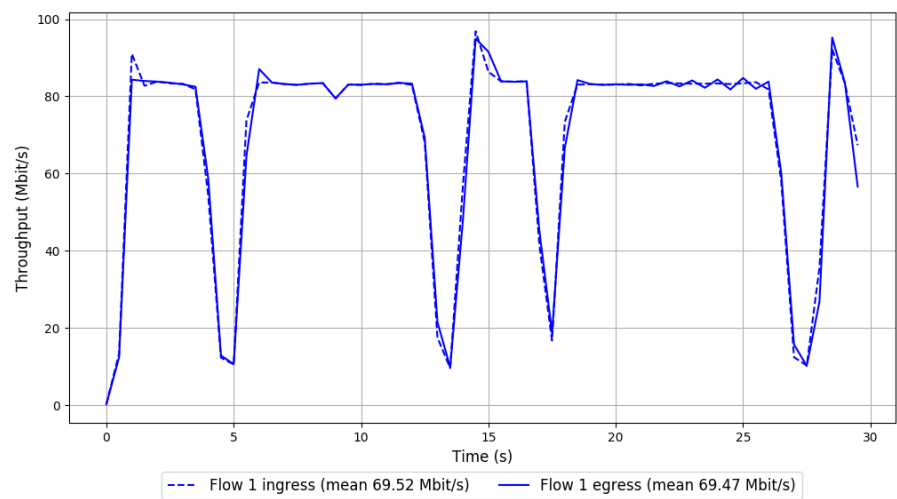
-- Flow 1:

Average throughput: 69.47 Mbit/s

95th percentile per-packet one-way delay: 49.808 ms

Loss rate: 0.41%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-02-04 05:31:55

End at: 2018-02-04 05:32:25

Local clock offset: 0.107 ms

Remote clock offset: 5.098 ms

# Below is generated by plot.py at 2018-02-04 11:57:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 71.30 Mbit/s

95th percentile per-packet one-way delay: 47.464 ms

Loss rate: 0.39%

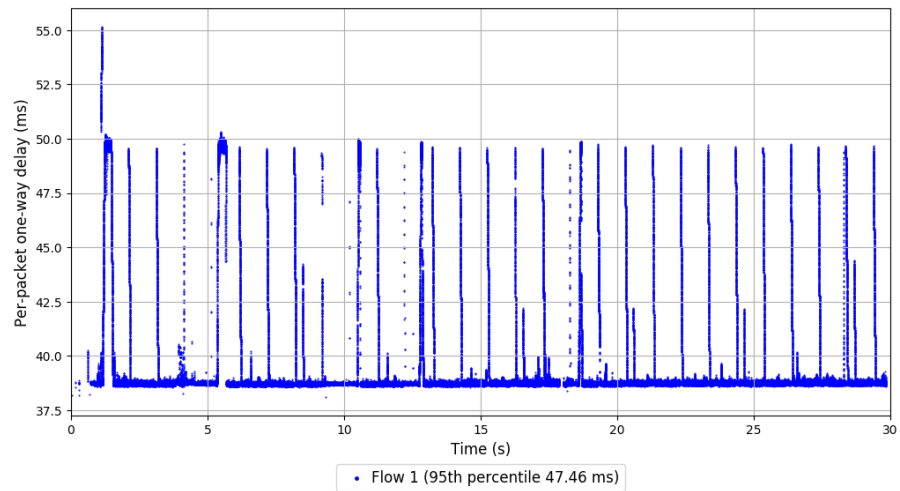
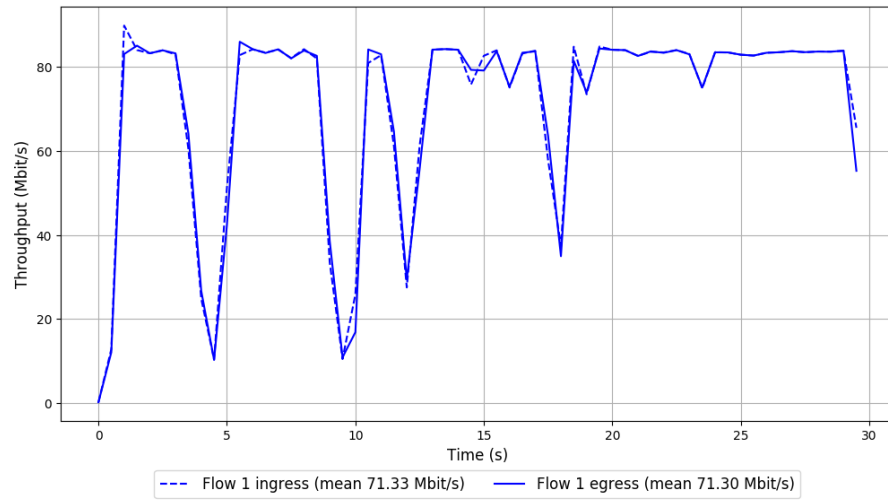
-- Flow 1:

Average throughput: 71.30 Mbit/s

95th percentile per-packet one-way delay: 47.464 ms

Loss rate: 0.39%

#### Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-02-04 05:58:30

End at: 2018-02-04 05:59:00

Local clock offset: 0.624 ms

Remote clock offset: 6.151 ms

# Below is generated by plot.py at 2018-02-04 11:57:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 142.187 ms

Loss rate: 1.81%

-- Flow 1:

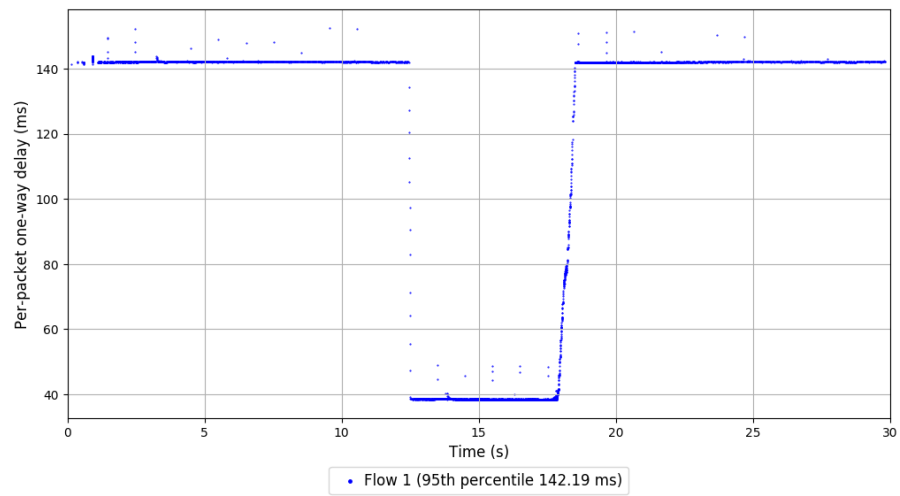
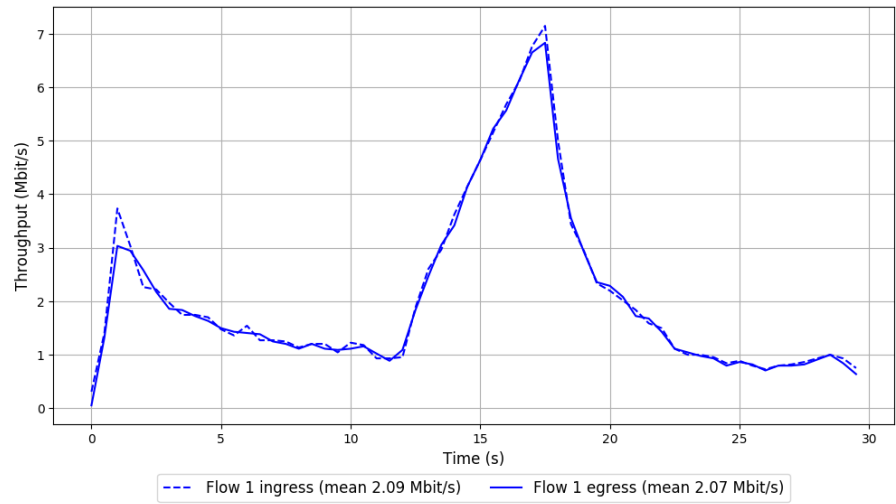
Average throughput: 2.07 Mbit/s

95th percentile per-packet one-way delay: 142.187 ms

Loss rate: 1.81%



### Run 5: Report of QUIC Cubic — Data Link



Run 6: Statistics of QUIC Cubic

Start at: 2018-02-04 06:24:10

End at: 2018-02-04 06:24:40

Local clock offset: 0.943 ms

Remote clock offset: 6.444 ms

# Below is generated by plot.py at 2018-02-04 11:57:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 41.86 Mbit/s

95th percentile per-packet one-way delay: 58.092 ms

Loss rate: 0.10%

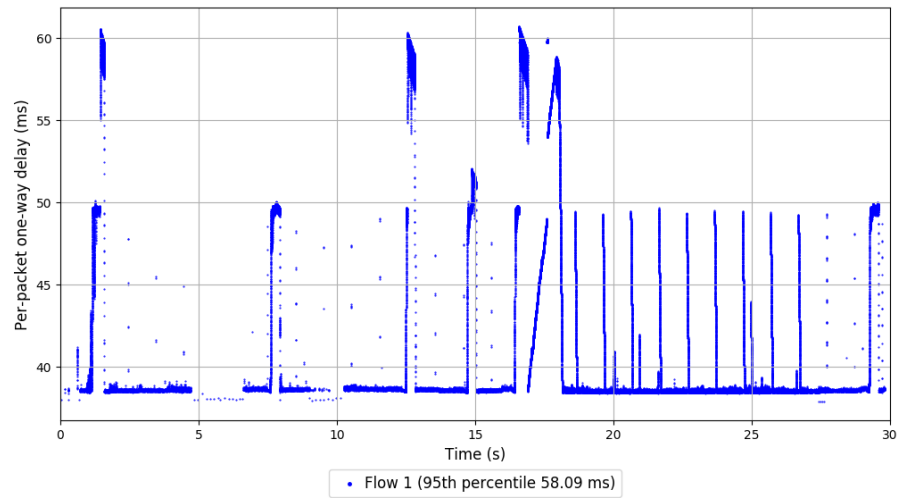
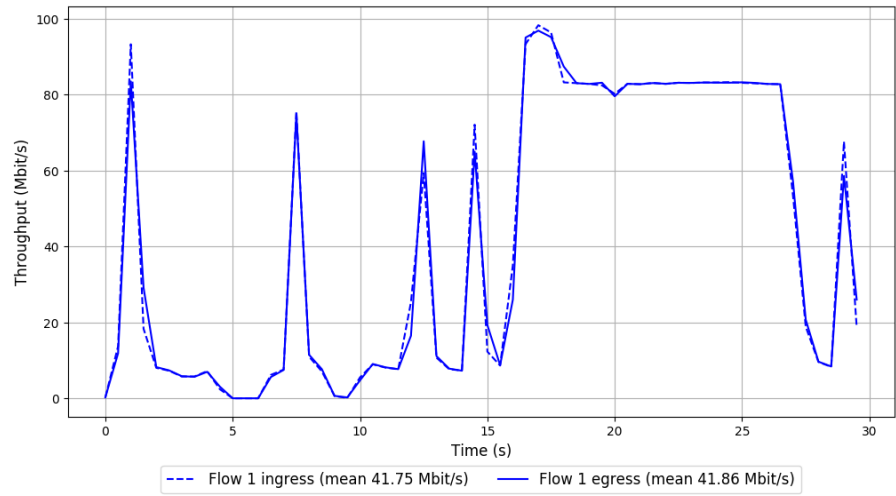
-- Flow 1:

Average throughput: 41.86 Mbit/s

95th percentile per-packet one-way delay: 58.092 ms

Loss rate: 0.10%

## Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2018-02-04 06:47:36

End at: 2018-02-04 06:48:06

Local clock offset: 1.506 ms

Remote clock offset: 7.092 ms

# Below is generated by plot.py at 2018-02-04 11:57:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 40.18 Mbit/s

95th percentile per-packet one-way delay: 56.733 ms

Loss rate: 0.11%

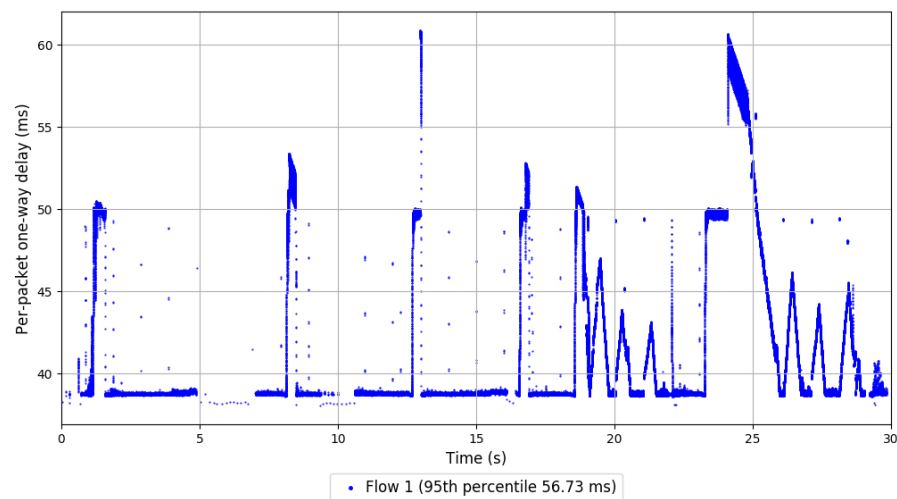
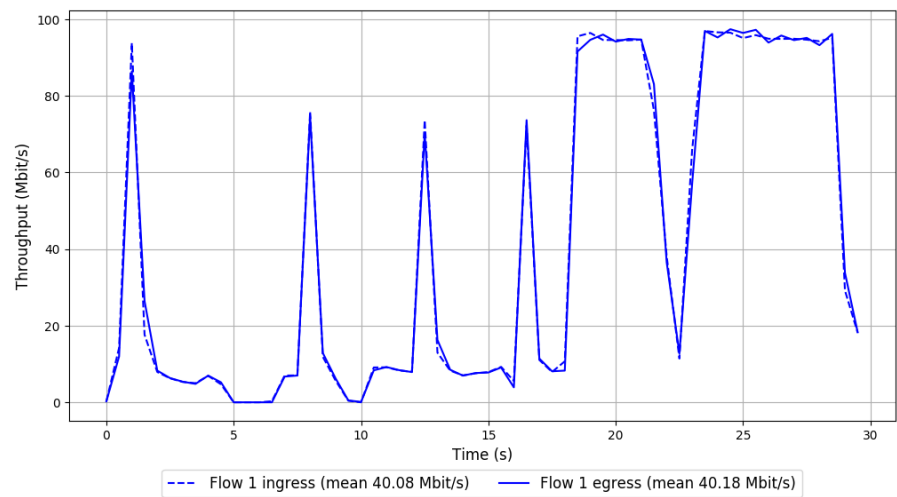
-- Flow 1:

Average throughput: 40.18 Mbit/s

95th percentile per-packet one-way delay: 56.733 ms

Loss rate: 0.11%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2018-02-04 07:11:13

End at: 2018-02-04 07:11:43

Local clock offset: -1.502 ms

Remote clock offset: 7.932 ms

# Below is generated by plot.py at 2018-02-04 11:57:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 51.40 Mbit/s

95th percentile per-packet one-way delay: 48.085 ms

Loss rate: 0.49%

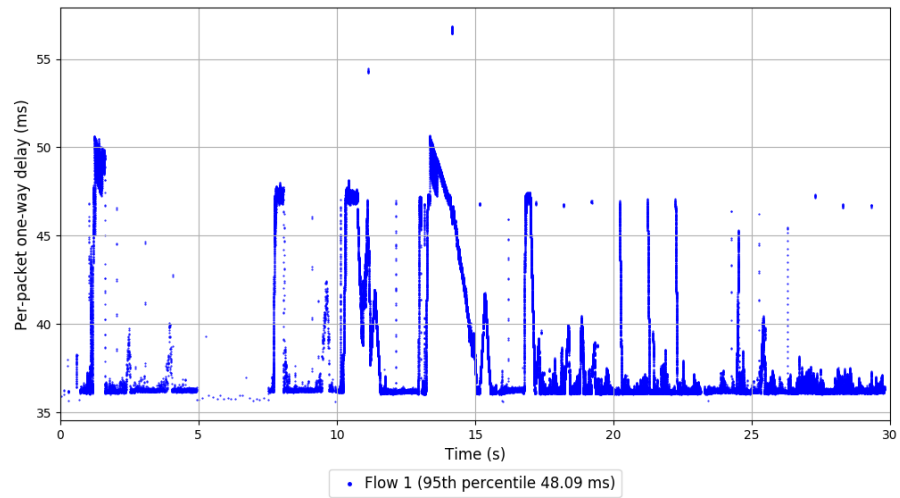
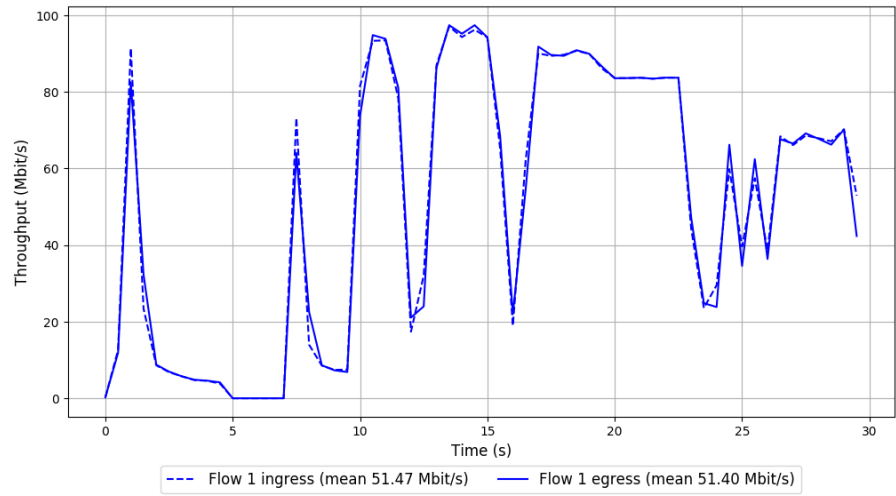
-- Flow 1:

Average throughput: 51.40 Mbit/s

95th percentile per-packet one-way delay: 48.085 ms

Loss rate: 0.49%

### Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2018-02-04 07:33:00

End at: 2018-02-04 07:33:31

Local clock offset: 1.193 ms

Remote clock offset: 9.29 ms

# Below is generated by plot.py at 2018-02-04 11:57:42

# Datalink statistics

-- Total of 1 flow:

Average throughput: 42.45 Mbit/s

95th percentile per-packet one-way delay: 59.119 ms

Loss rate: 0.77%

-- Flow 1:

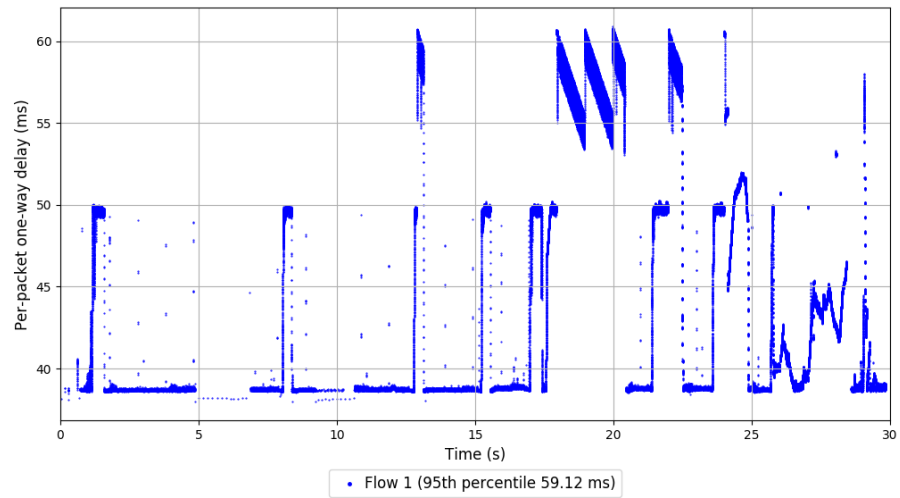
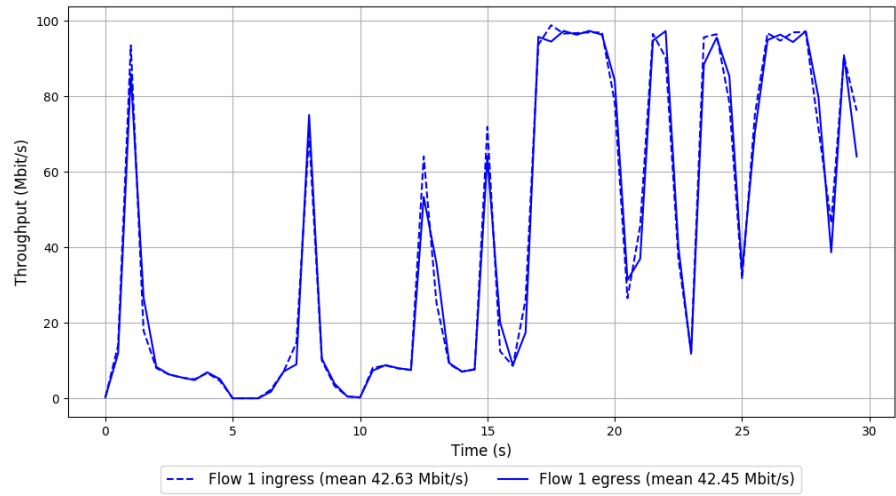
Average throughput: 42.45 Mbit/s

95th percentile per-packet one-way delay: 59.119 ms

Loss rate: 0.77%



### Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2018-02-04 07:54:46

End at: 2018-02-04 07:55:16

Local clock offset: 0.446 ms

Remote clock offset: 10.306 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 45.91 Mbit/s

95th percentile per-packet one-way delay: 49.384 ms

Loss rate: 0.63%

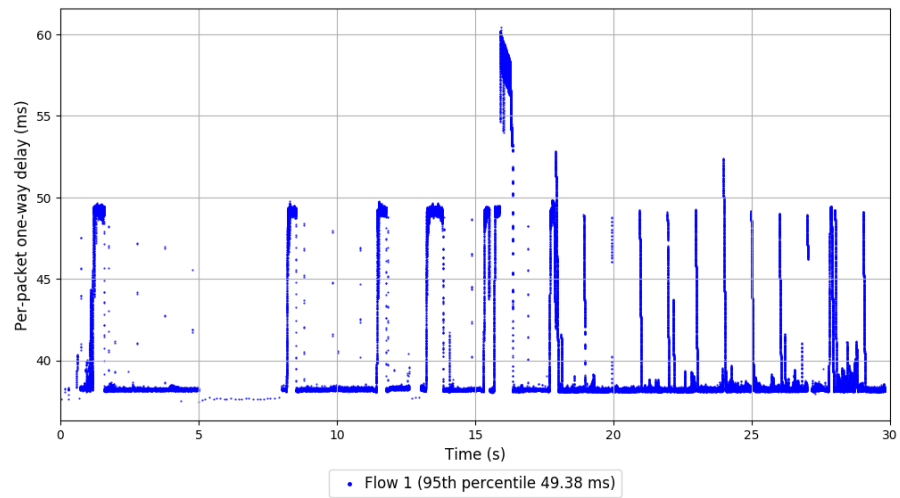
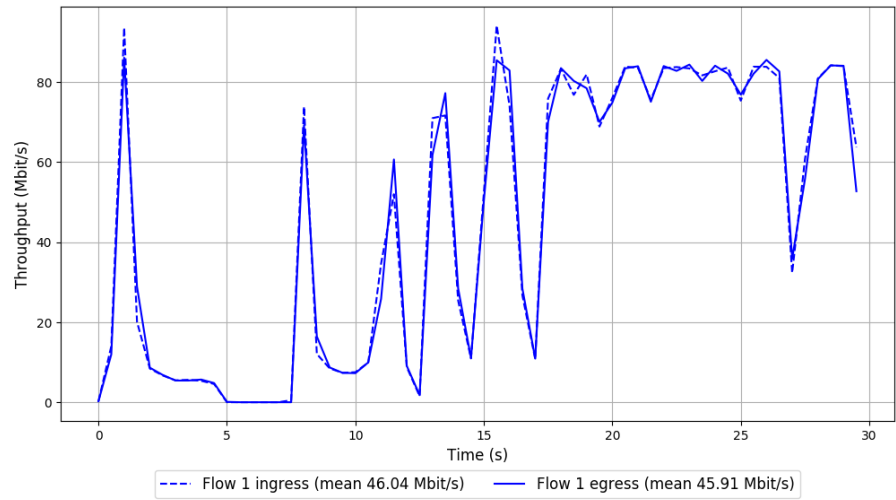
-- Flow 1:

Average throughput: 45.91 Mbit/s

95th percentile per-packet one-way delay: 49.384 ms

Loss rate: 0.63%

### Run 10: Report of QUIC Cubic — Data Link

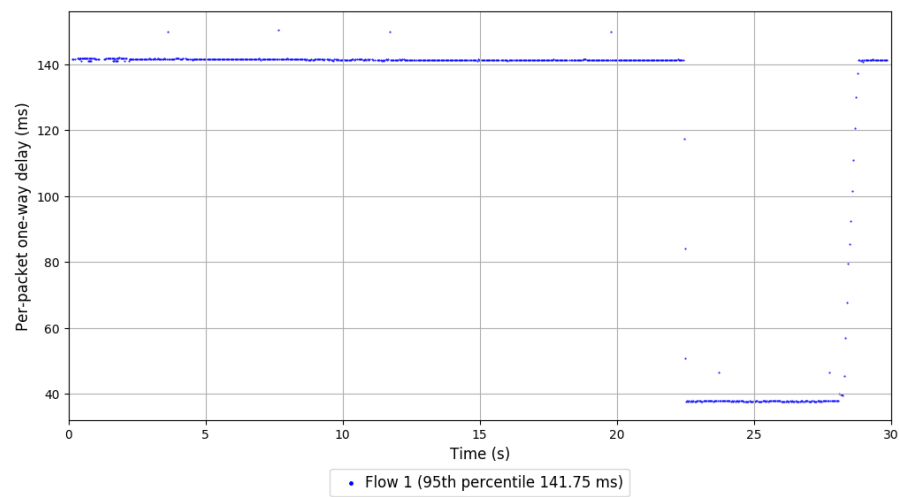
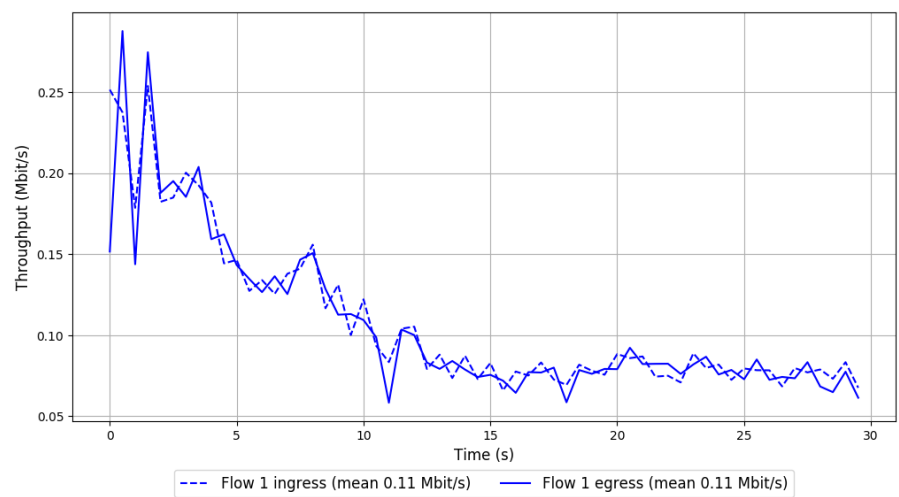


```
Run 1: Statistics of SCReAM

Start at: 2018-02-04 04:05:17
End at: 2018-02-04 04:05:47
Local clock offset: -0.805 ms
Remote clock offset: 1.905 ms

# Below is generated by plot.py at 2018-02-04 11:57:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 141.750 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 141.750 ms
Loss rate: 2.07%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-02-04 04:33:55

End at: 2018-02-04 04:34:25

Local clock offset: -0.106 ms

Remote clock offset: 2.675 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.512 ms

Loss rate: 0.38%

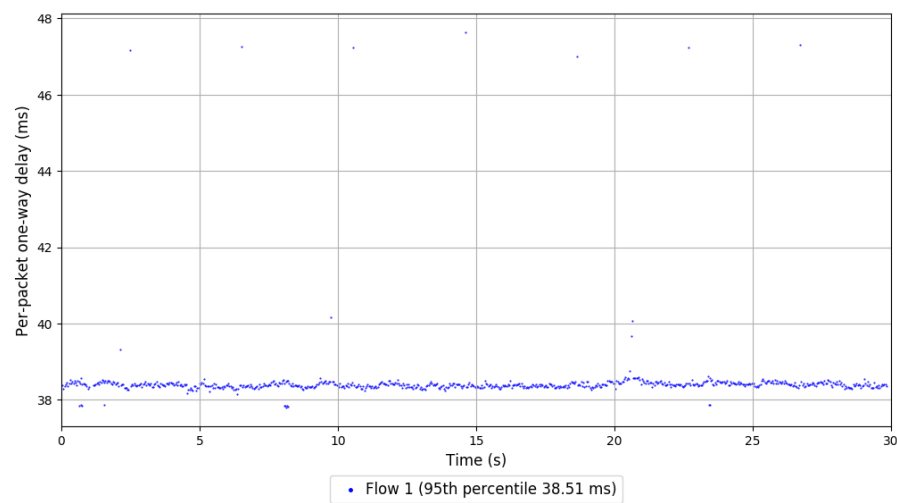
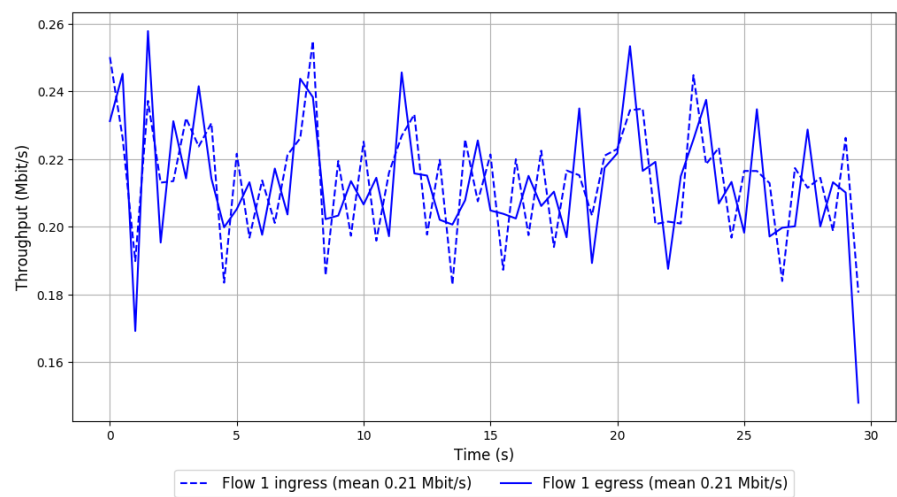
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.512 ms

Loss rate: 0.38%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SReAM

Start at: 2018-02-04 04:55:43

End at: 2018-02-04 04:56:13

Local clock offset: -0.128 ms

Remote clock offset: 3.464 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.939 ms

Loss rate: 0.38%

-- Flow 1:

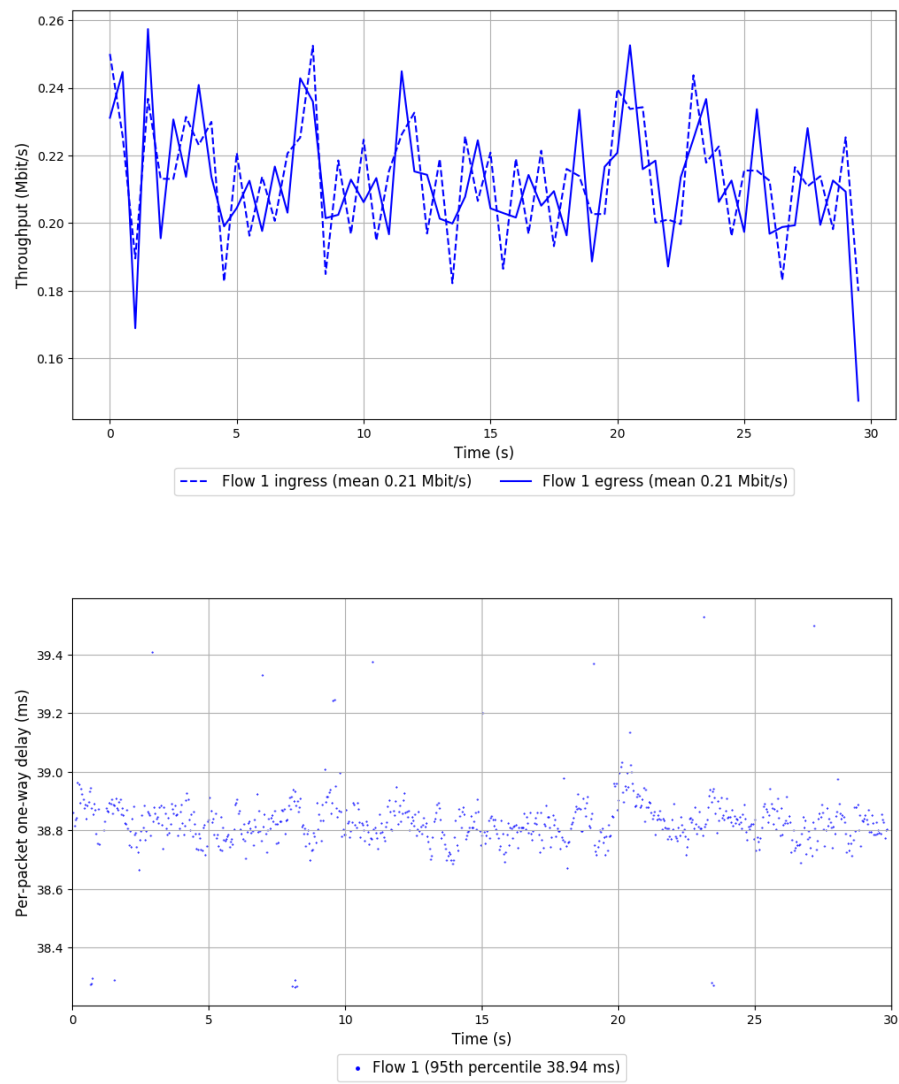
Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.939 ms

Loss rate: 0.38%



Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2018-02-04 05:17:30

End at: 2018-02-04 05:18:00

Local clock offset: 0.221 ms

Remote clock offset: 4.405 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.847 ms

Loss rate: 0.38%

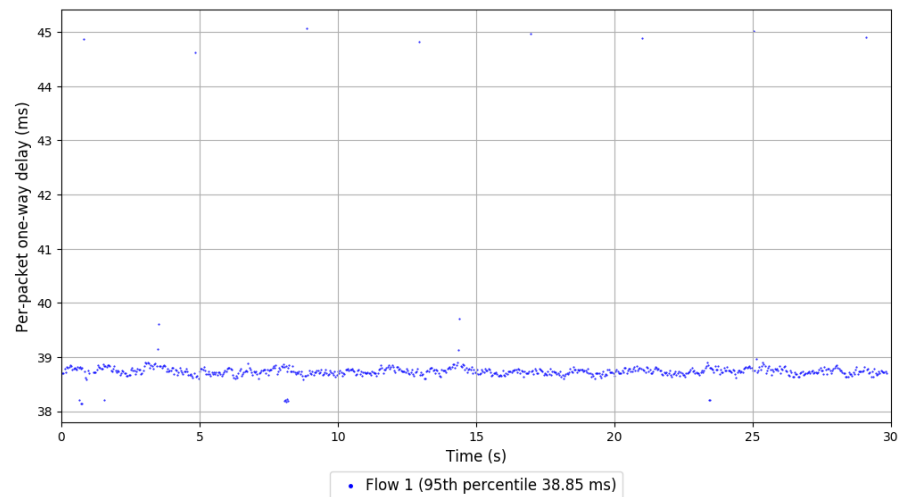
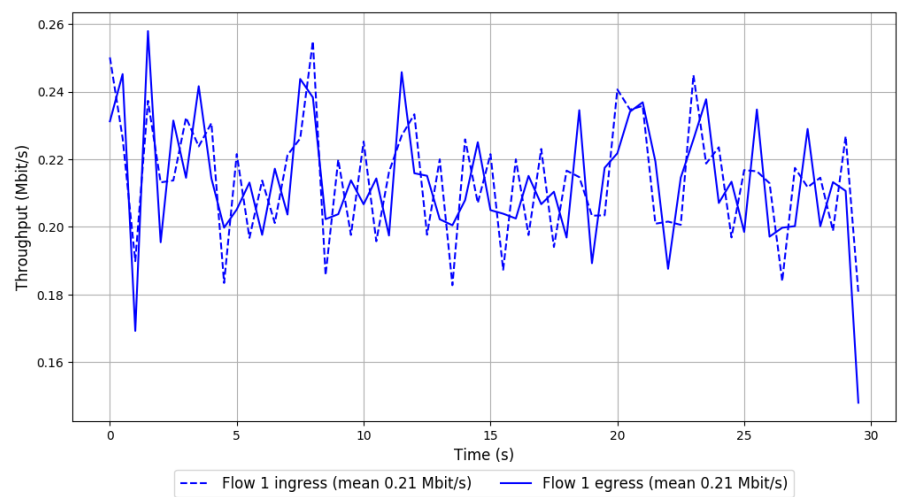
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.847 ms

Loss rate: 0.38%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2018-02-04 05:39:14

End at: 2018-02-04 05:39:44

Local clock offset: 0.645 ms

Remote clock offset: 5.422 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.998 ms

Loss rate: 0.25%

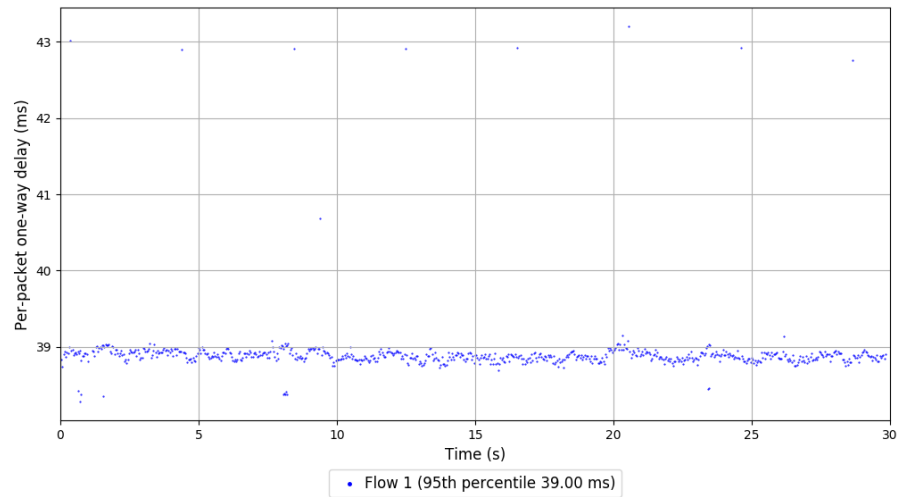
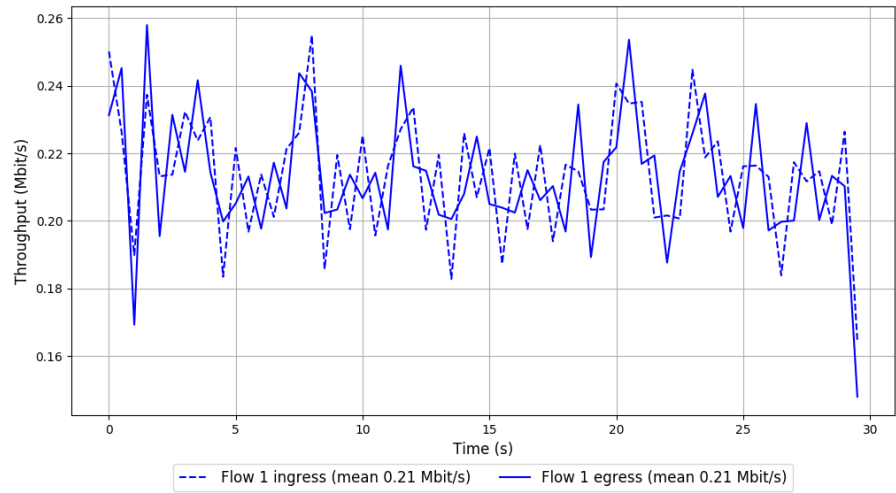
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.998 ms

Loss rate: 0.25%

## Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2018-02-04 06:09:39

End at: 2018-02-04 06:10:09

Local clock offset: 0.819 ms

Remote clock offset: 6.158 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 39.003 ms

Loss rate: 0.38%

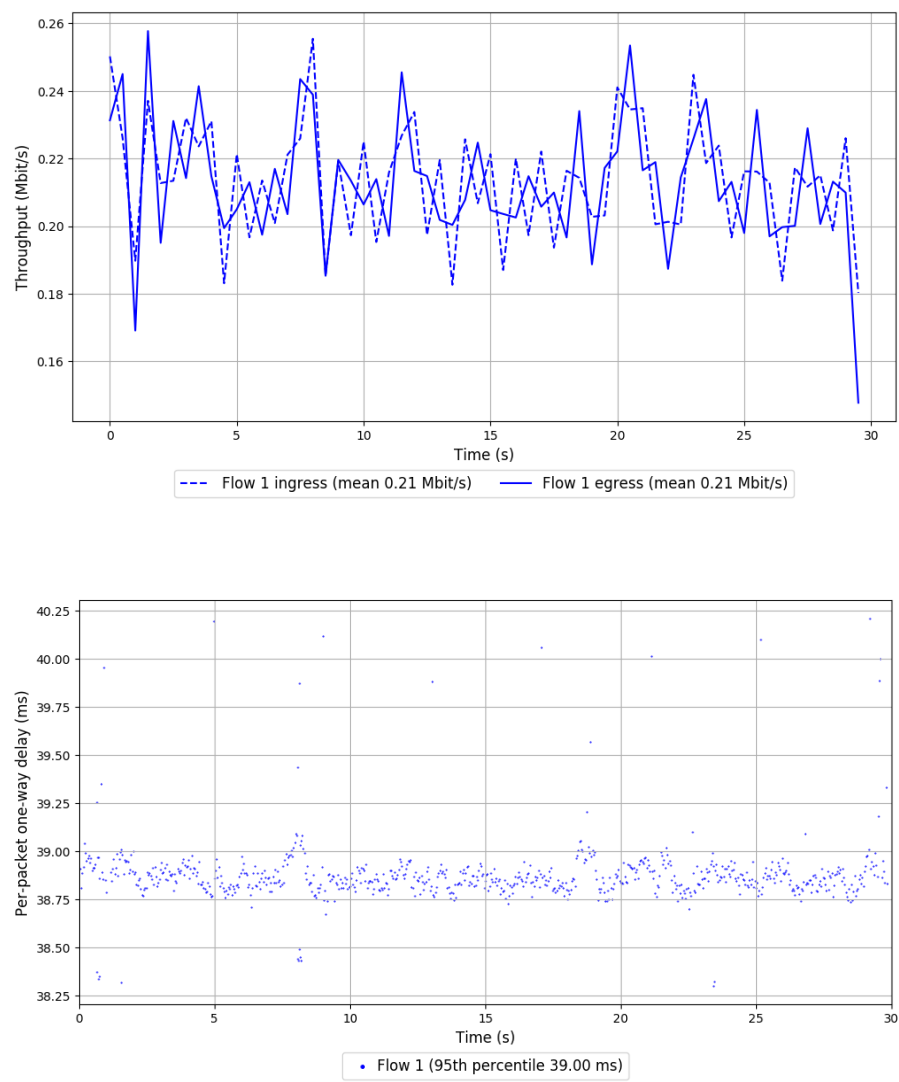
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 39.003 ms

Loss rate: 0.38%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SReAM

Start at: 2018-02-04 06:31:27

End at: 2018-02-04 06:31:57

Local clock offset: 1.096 ms

Remote clock offset: 6.701 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.730 ms

Loss rate: 0.38%

-- Flow 1:

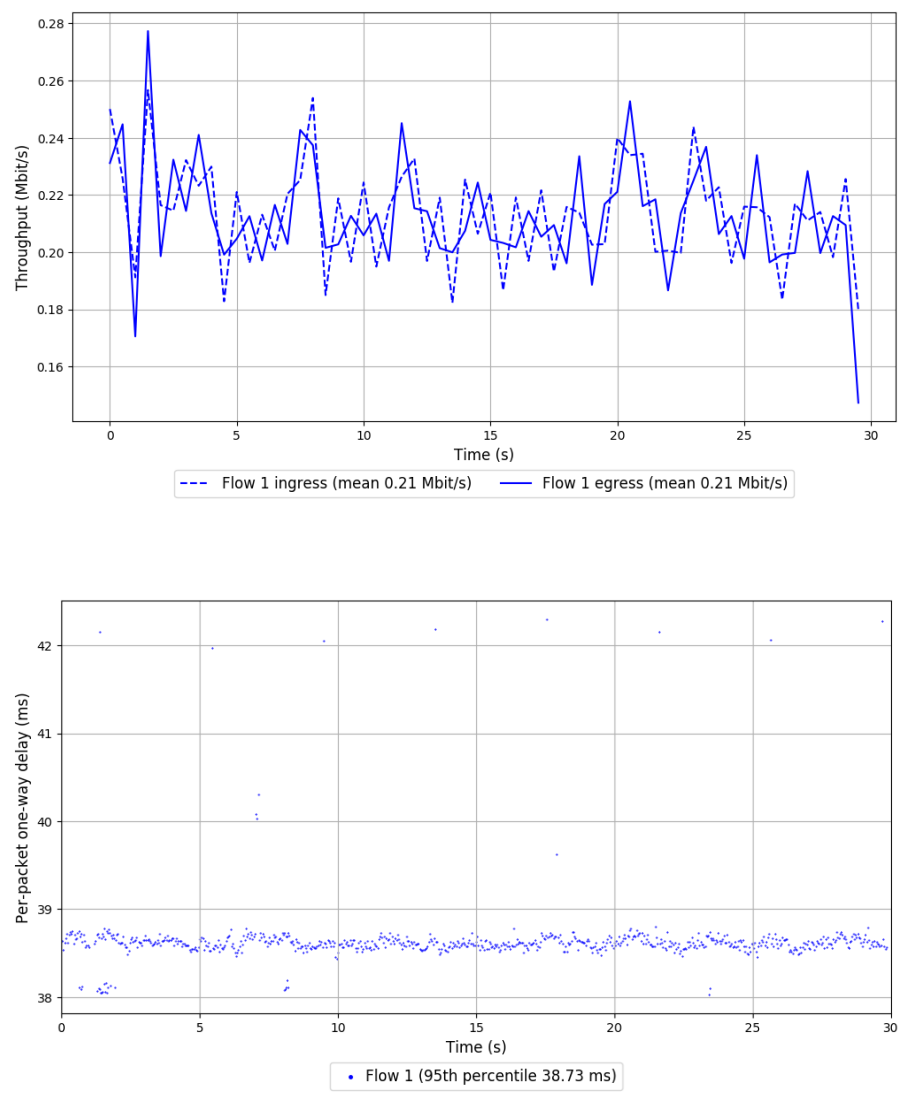
Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.730 ms

Loss rate: 0.38%



Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2018-02-04 06:56:41

End at: 2018-02-04 06:57:11

Local clock offset: 1.373 ms

Remote clock offset: 7.281 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.476 ms

Loss rate: 0.38%

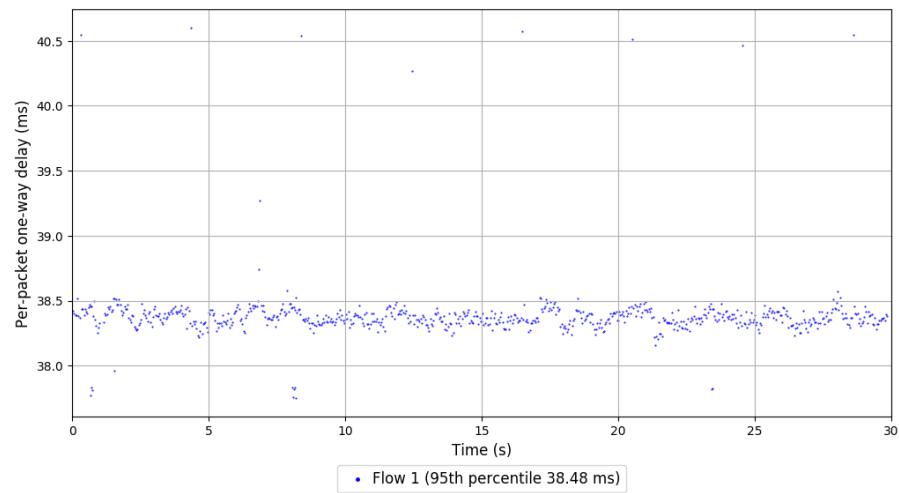
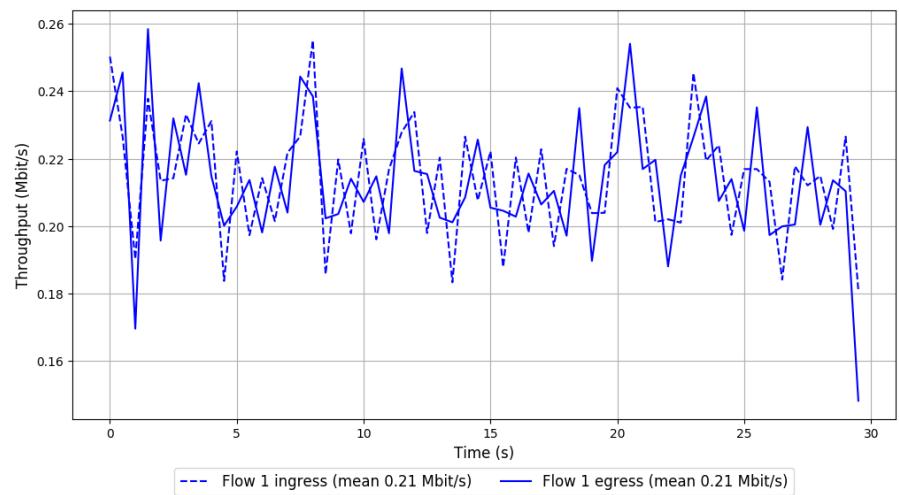
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.476 ms

Loss rate: 0.38%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2018-02-04 07:18:30

End at: 2018-02-04 07:19:01

Local clock offset: 1.355 ms

Remote clock offset: 8.327 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.806 ms

Loss rate: 0.38%

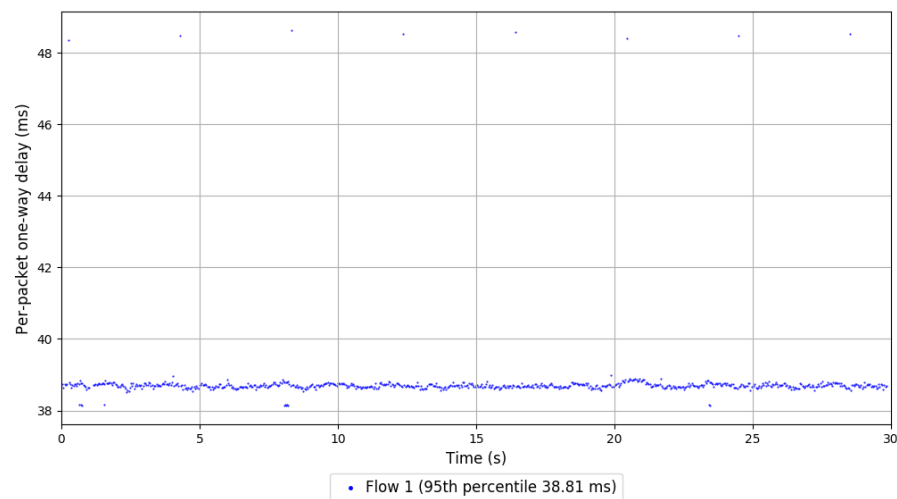
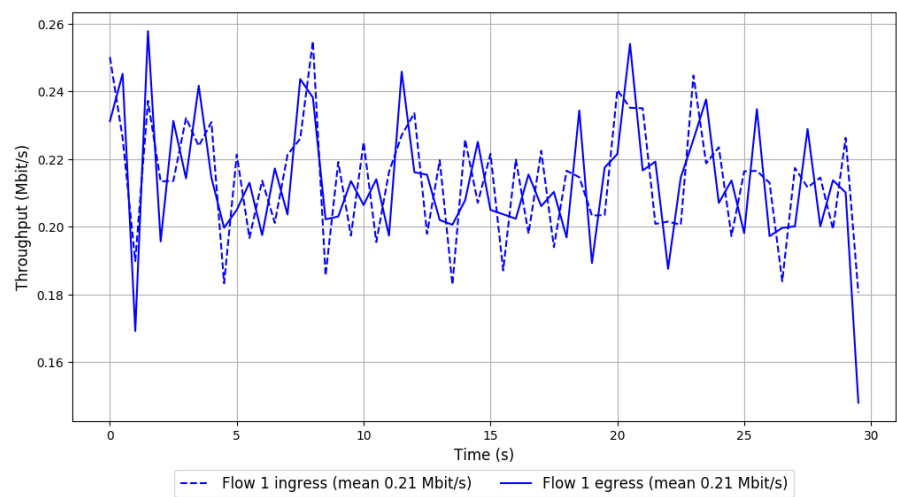
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.806 ms

Loss rate: 0.38%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SCReAM

Start at: 2018-02-04 07:40:18

End at: 2018-02-04 07:40:48

Local clock offset: 0.508 ms

Remote clock offset: 9.874 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.234 ms

Loss rate: 0.38%

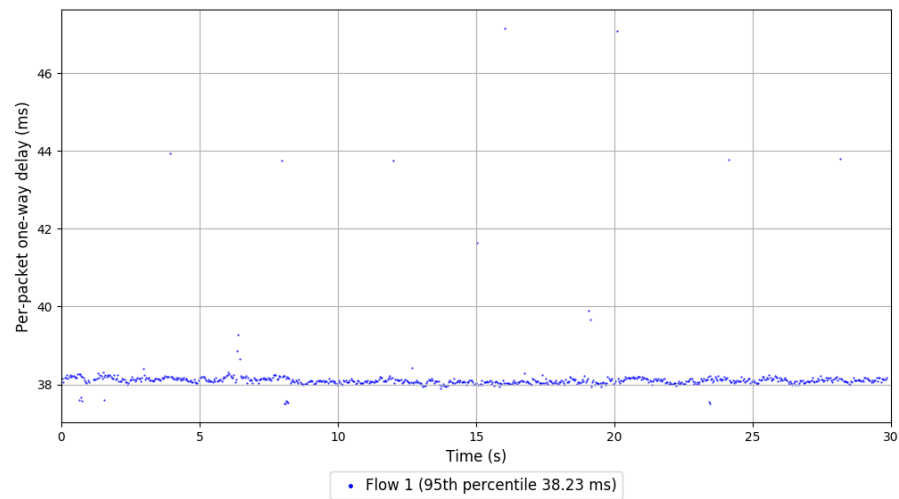
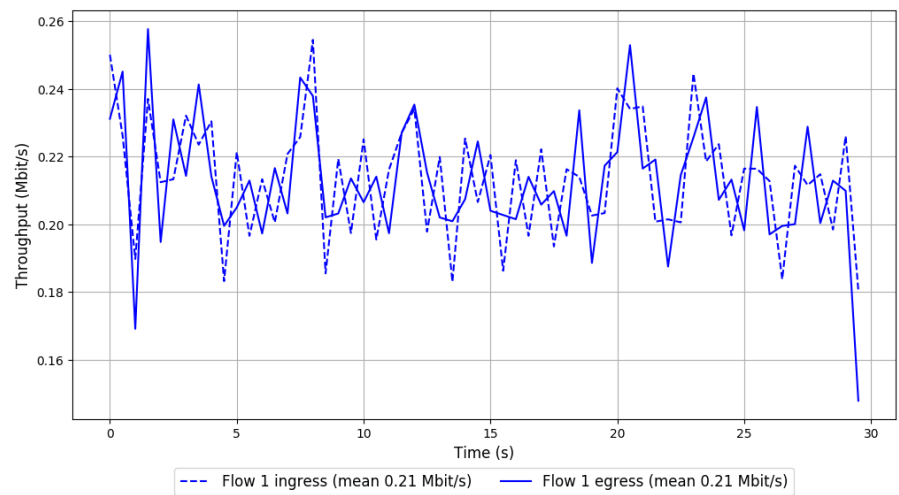
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 38.234 ms

Loss rate: 0.38%

Run 10: Report of SReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-02-04 04:16:22

End at: 2018-02-04 04:16:52

Local clock offset: -0.601 ms

Remote clock offset: 2.094 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 142.631 ms

Loss rate: 2.47%

-- Flow 1:

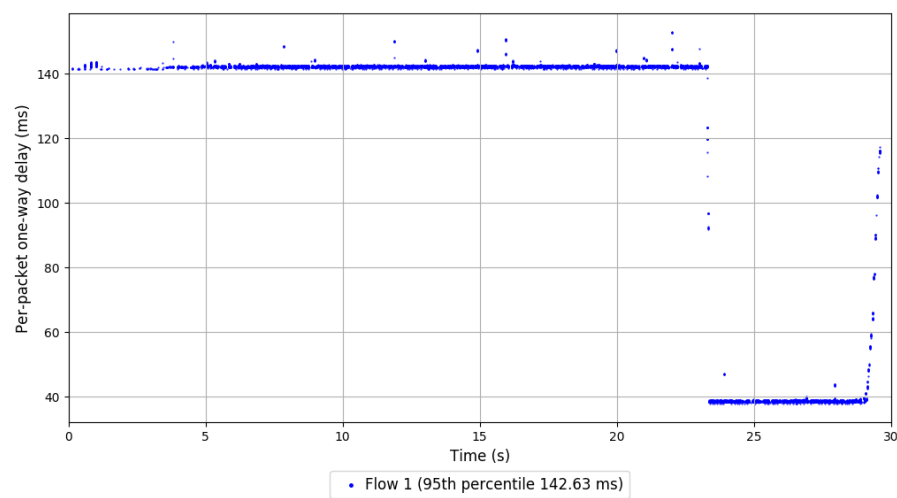
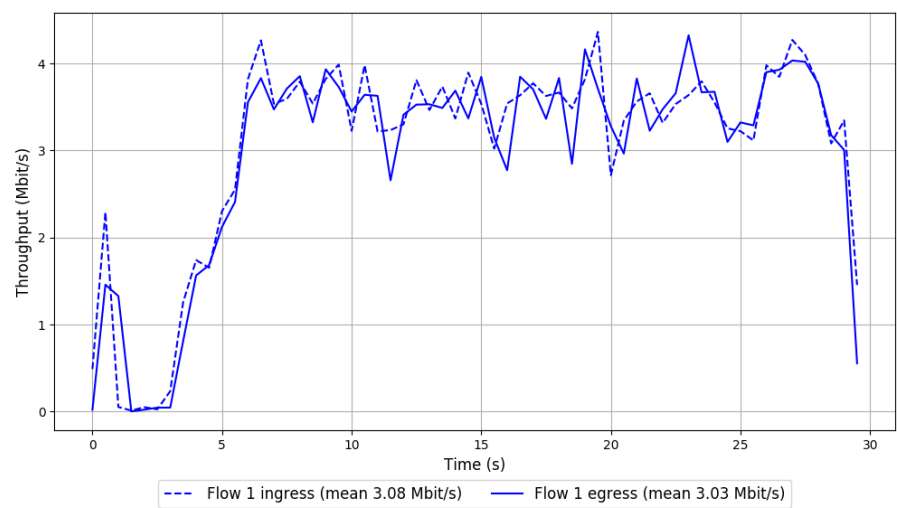
Average throughput: 3.03 Mbit/s

95th percentile per-packet one-way delay: 142.631 ms

Loss rate: 2.47%



Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2018-02-04 04:41:10

End at: 2018-02-04 04:41:40

Local clock offset: -0.047 ms

Remote clock offset: 2.882 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 39.503 ms

Loss rate: 0.31%

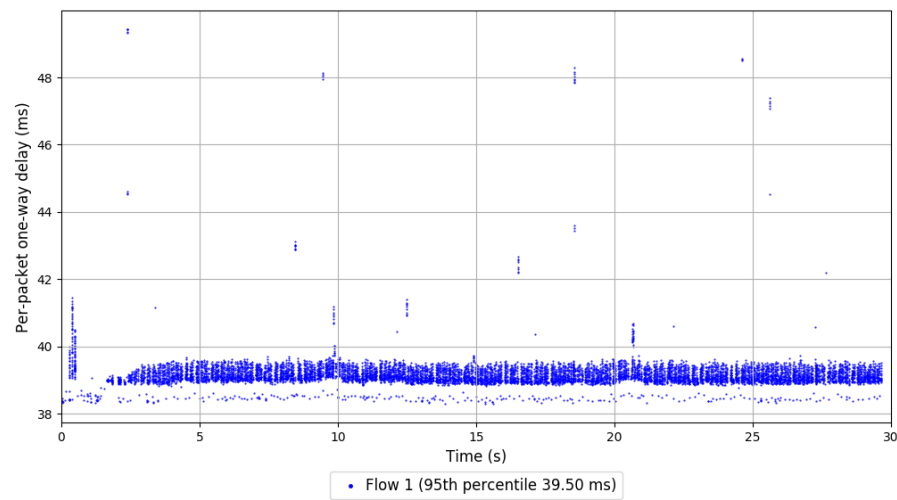
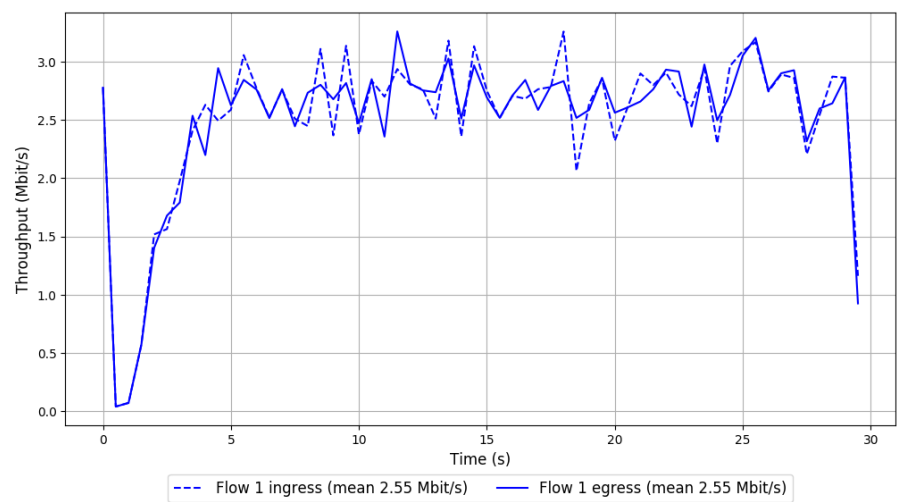
-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 39.503 ms

Loss rate: 0.31%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2018-02-04 05:02:57

End at: 2018-02-04 05:03:27

Local clock offset: 0.323 ms

Remote clock offset: 3.796 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 39.397 ms

Loss rate: 0.45%

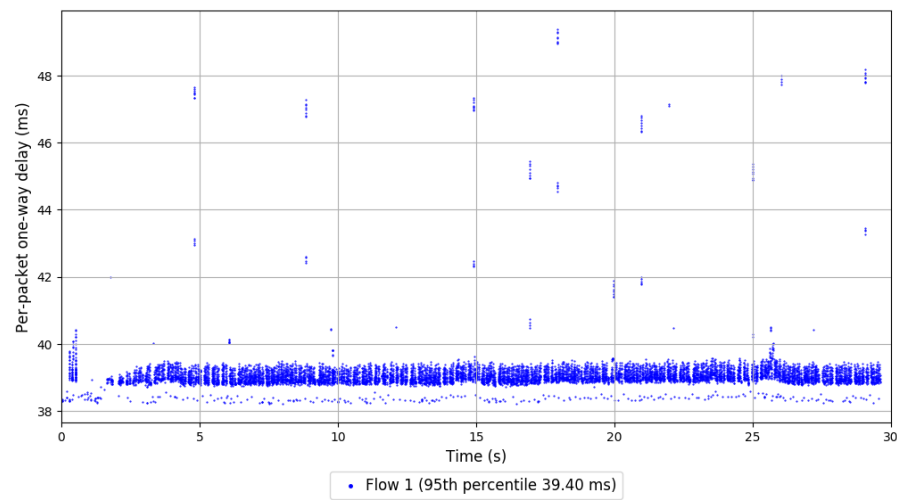
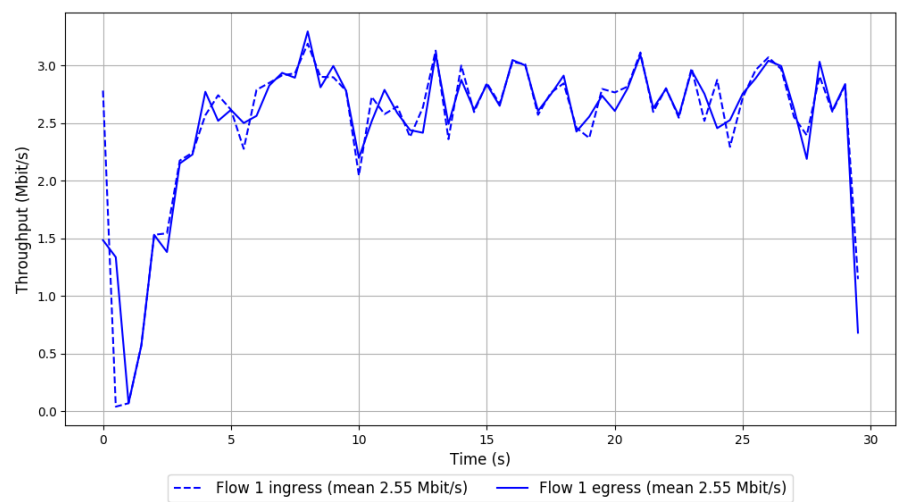
-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 39.397 ms

Loss rate: 0.45%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2018-02-04 05:24:43

End at: 2018-02-04 05:25:13

Local clock offset: 0.552 ms

Remote clock offset: 4.732 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 39.065 ms

Loss rate: 0.51%

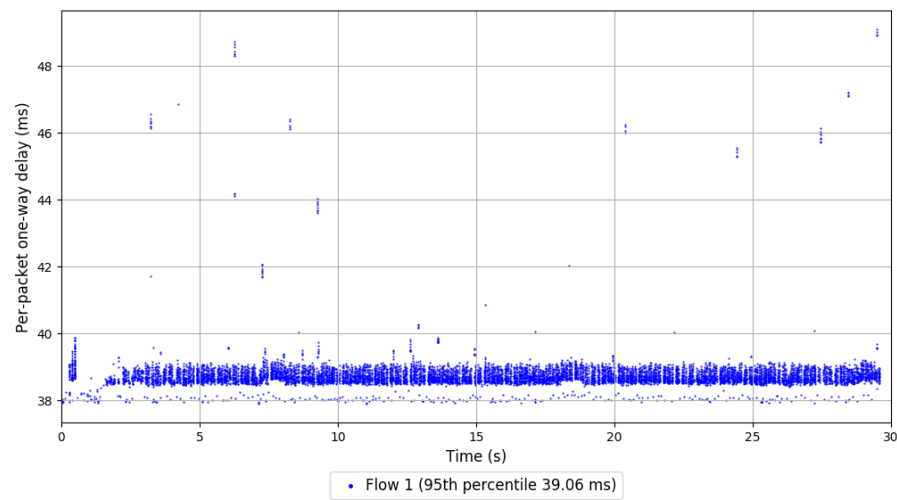
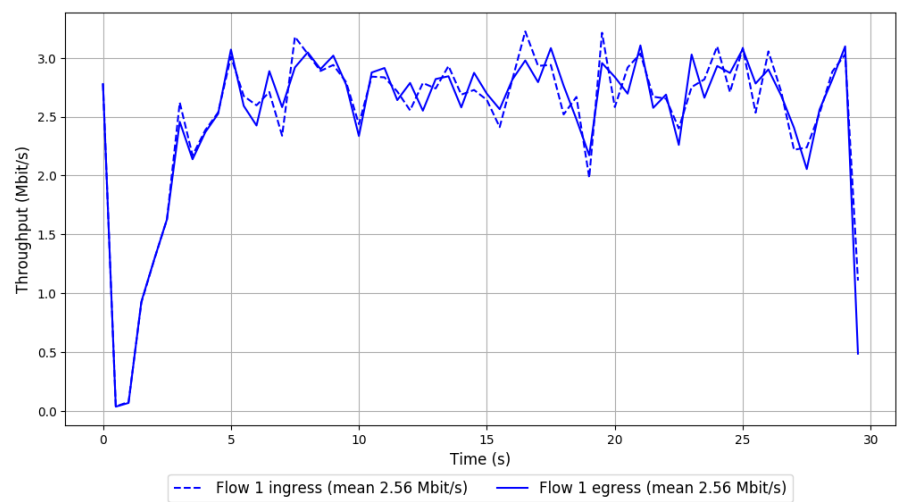
-- Flow 1:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 39.065 ms

Loss rate: 0.51%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-02-04 05:46:32

End at: 2018-02-04 05:47:02

Local clock offset: 0.345 ms

Remote clock offset: 5.778 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 142.734 ms

Loss rate: 29.63%

-- Flow 1:

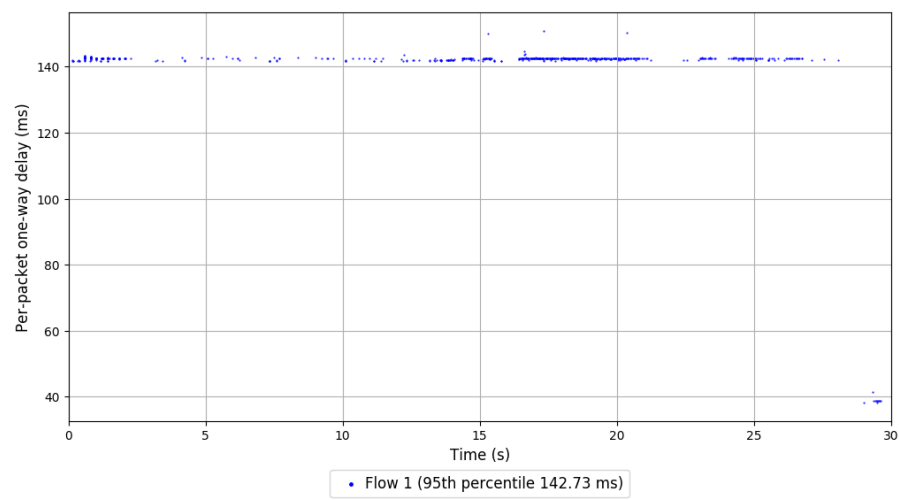
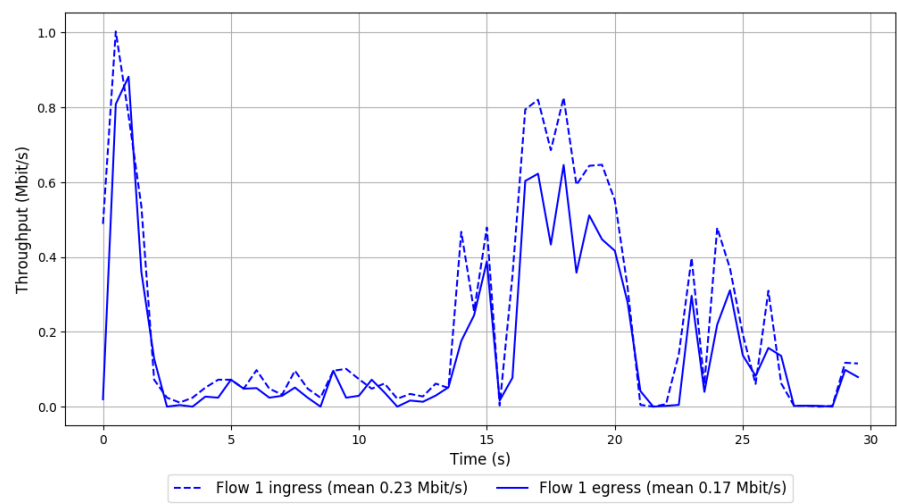
Average throughput: 0.17 Mbit/s

95th percentile per-packet one-way delay: 142.734 ms

Loss rate: 29.63%



Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2018-02-04 06:16:54

End at: 2018-02-04 06:17:24

Local clock offset: 0.851 ms

Remote clock offset: 6.202 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 38.975 ms

Loss rate: 0.38%

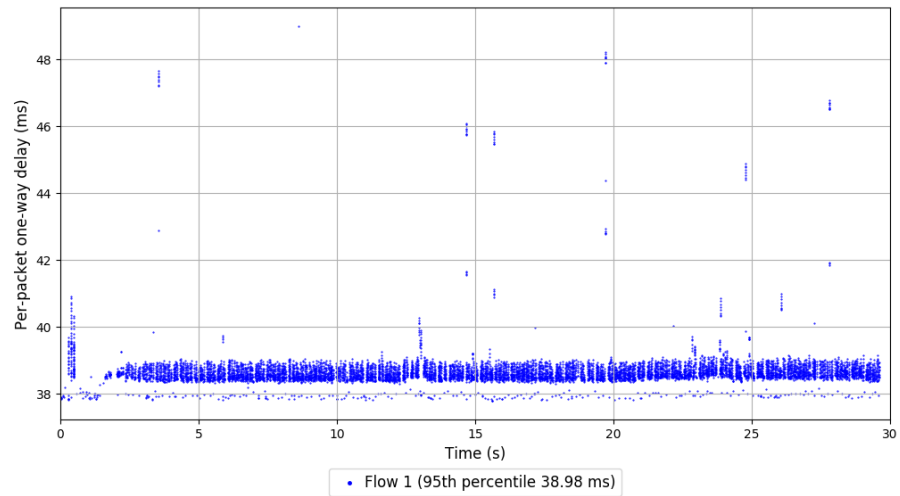
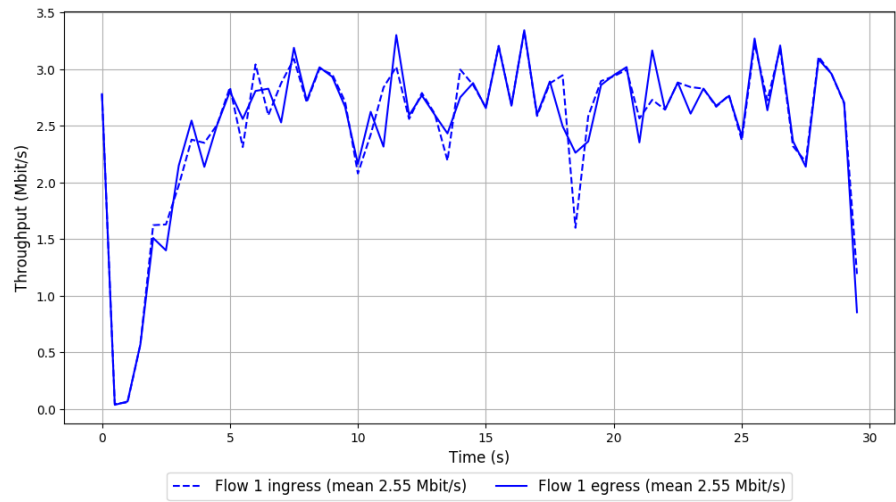
-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 38.975 ms

Loss rate: 0.38%

## Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2018-02-04 06:40:24

End at: 2018-02-04 06:40:54

Local clock offset: 1.447 ms

Remote clock offset: 6.906 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 39.579 ms

Loss rate: 0.63%

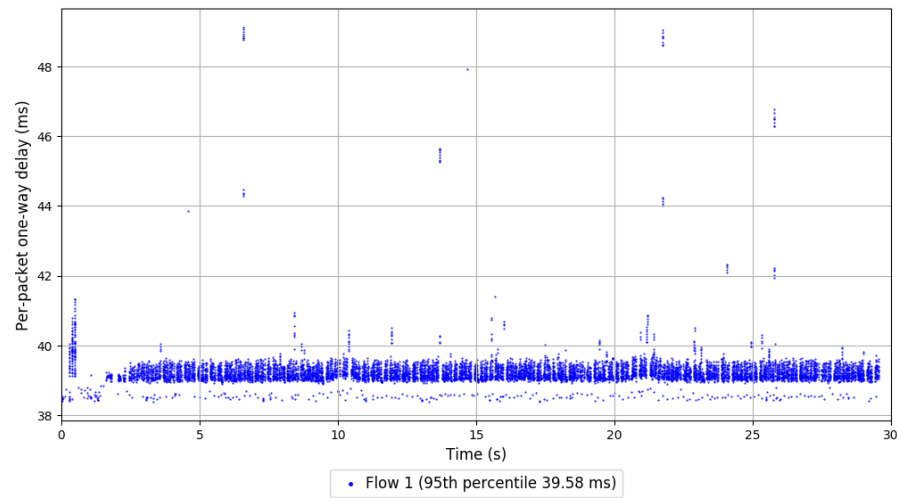
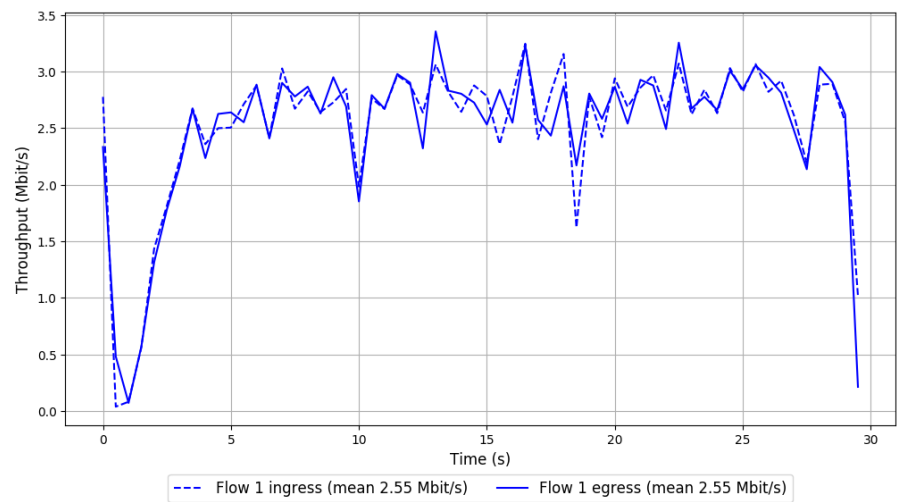
-- Flow 1:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 39.579 ms

Loss rate: 0.63%

Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2018-02-04 07:03:58

End at: 2018-02-04 07:04:28

Local clock offset: 0.821 ms

Remote clock offset: 7.561 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 39.200 ms

Loss rate: 0.50%

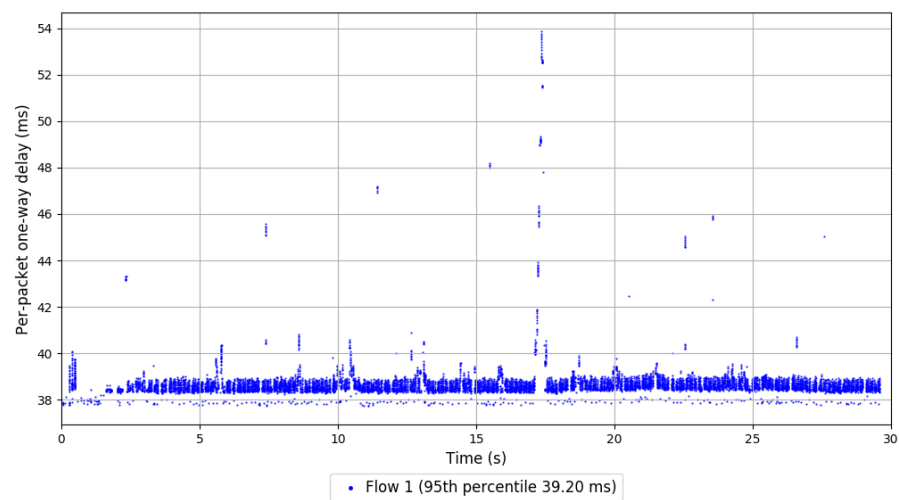
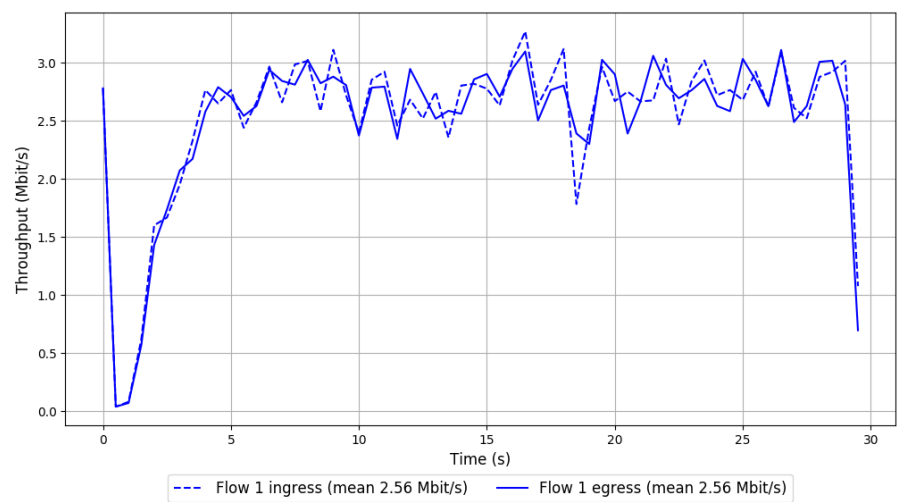
-- Flow 1:

Average throughput: 2.56 Mbit/s

95th percentile per-packet one-way delay: 39.200 ms

Loss rate: 0.50%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2018-02-04 07:25:47

End at: 2018-02-04 07:26:17

Local clock offset: 0.961 ms

Remote clock offset: 8.786 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 39.029 ms

Loss rate: 0.31%

-- Flow 1:

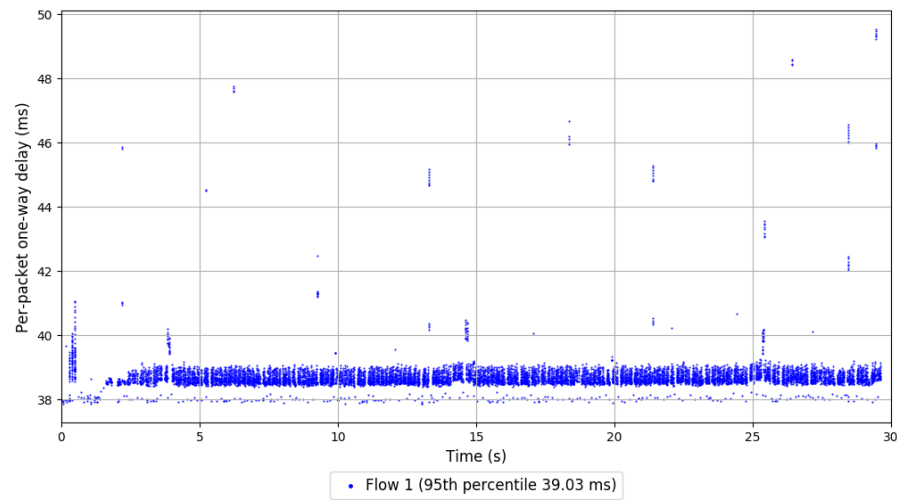
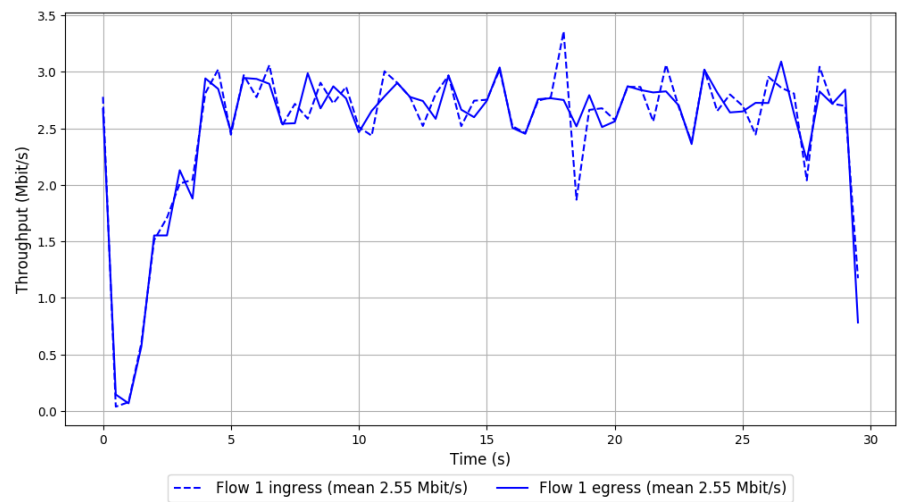
Average throughput: 2.55 Mbit/s

95th percentile per-packet one-way delay: 39.029 ms

Loss rate: 0.31%



Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2018-02-04 07:47:33

End at: 2018-02-04 07:48:03

Local clock offset: 1.149 ms

Remote clock offset: 10.069 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 39.511 ms

Loss rate: 0.47%

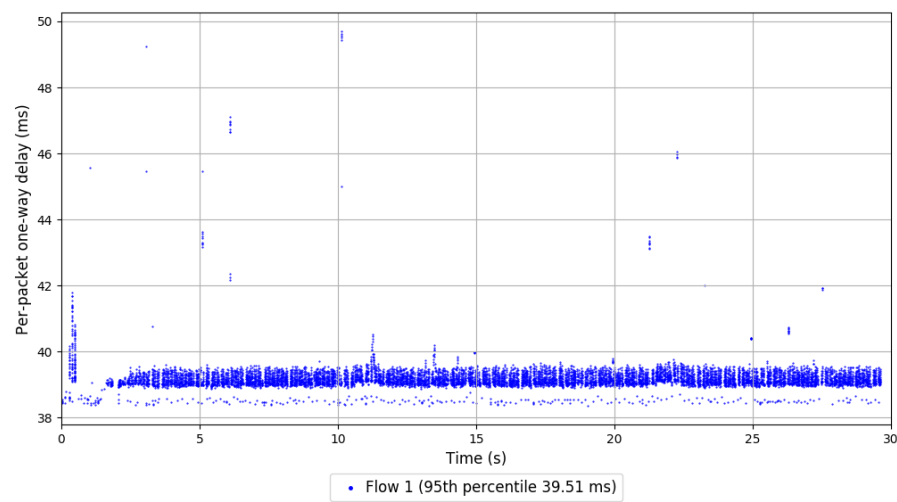
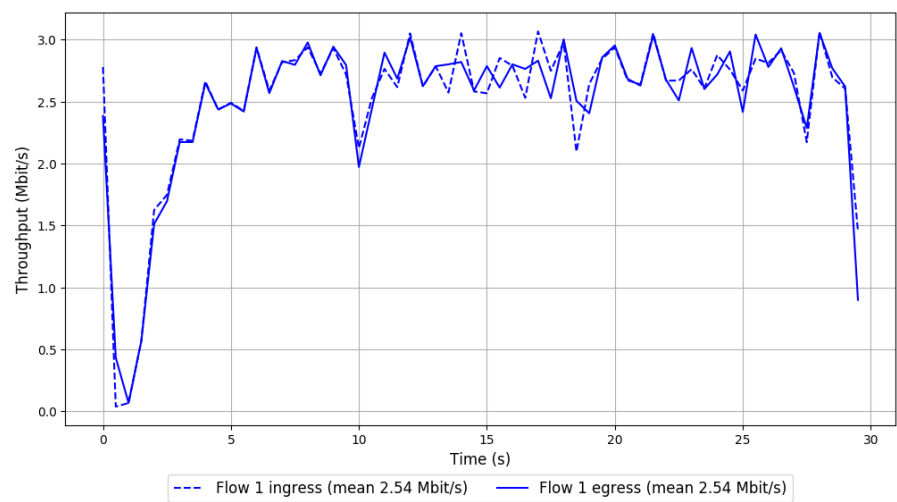
-- Flow 1:

Average throughput: 2.54 Mbit/s

95th percentile per-packet one-way delay: 39.511 ms

Loss rate: 0.47%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2018-02-04 04:25:09

End at: 2018-02-04 04:25:39

Local clock offset: -0.184 ms

Remote clock offset: 2.355 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 143.736 ms

Loss rate: 1.08%

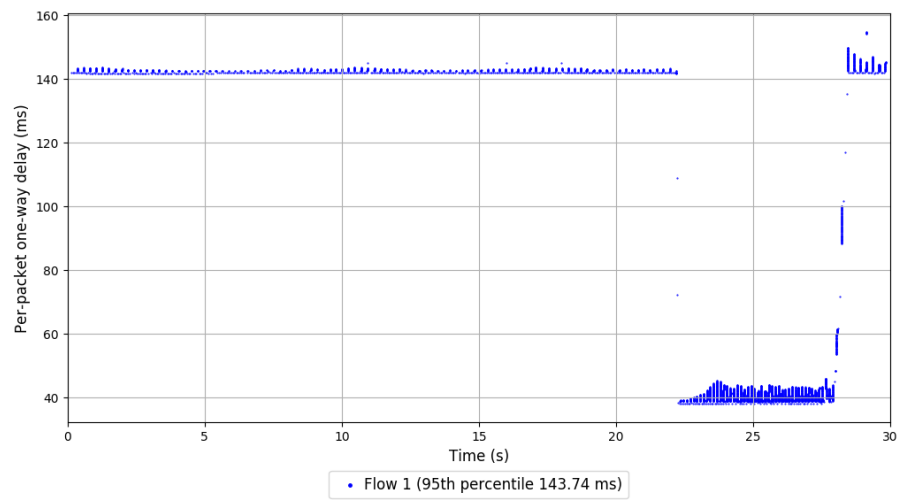
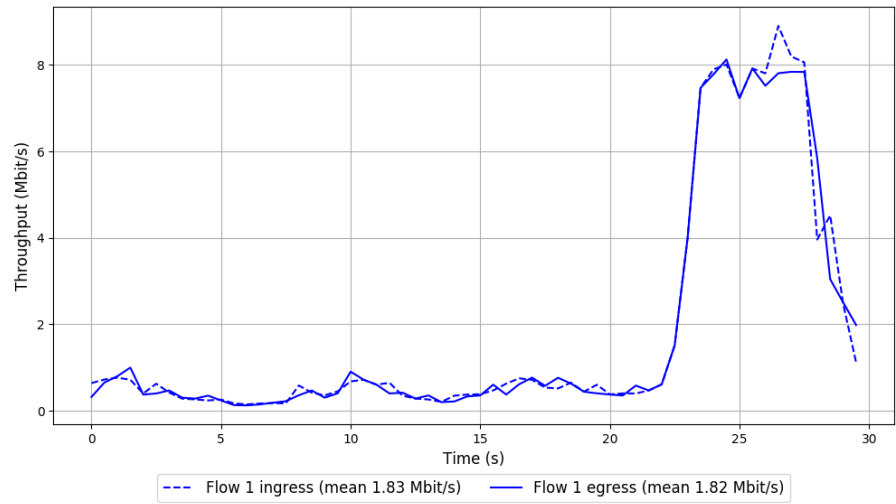
-- Flow 1:

Average throughput: 1.82 Mbit/s

95th percentile per-packet one-way delay: 143.736 ms

Loss rate: 1.08%

# Run 1: Report of Sprout — Data Link

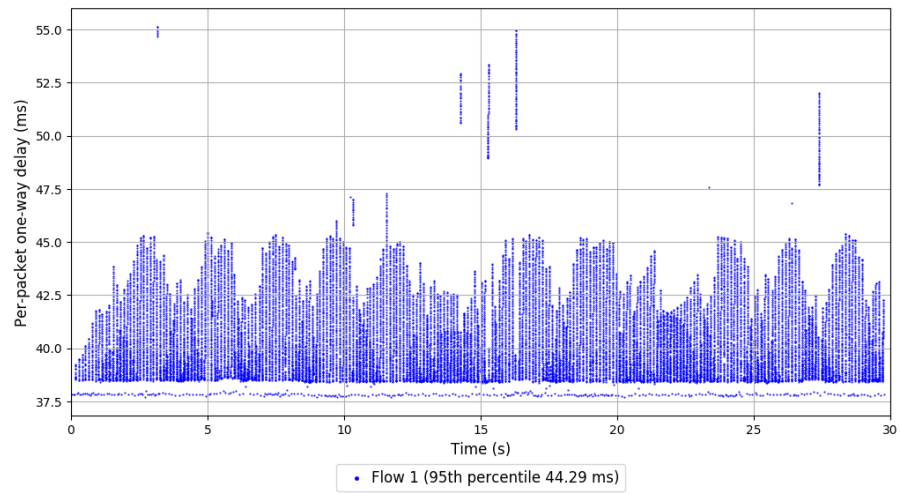
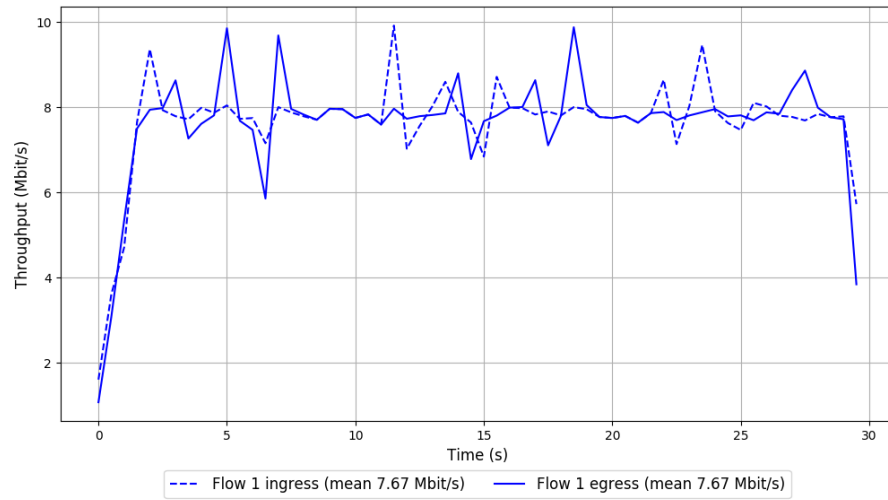


Run 2: Statistics of Sprout

Start at: 2018-02-04 04:47:15  
End at: 2018-02-04 04:47:45  
Local clock offset: -0.312 ms  
Remote clock offset: 3.138 ms

# Below is generated by plot.py at 2018-02-04 11:57:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 7.67 Mbit/s  
95th percentile per-packet one-way delay: 44.291 ms  
Loss rate: 0.43%  
-- Flow 1:  
Average throughput: 7.67 Mbit/s  
95th percentile per-packet one-way delay: 44.291 ms  
Loss rate: 0.43%

## Run 2: Report of Sprout — Data Link



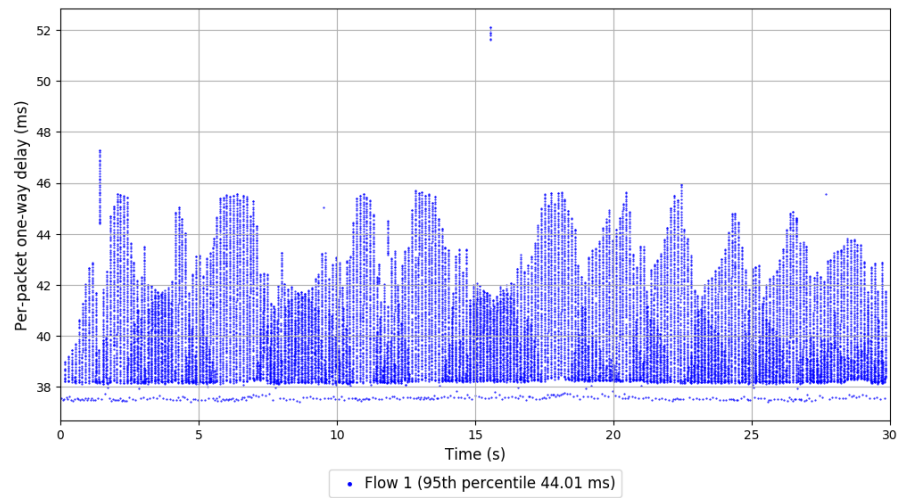
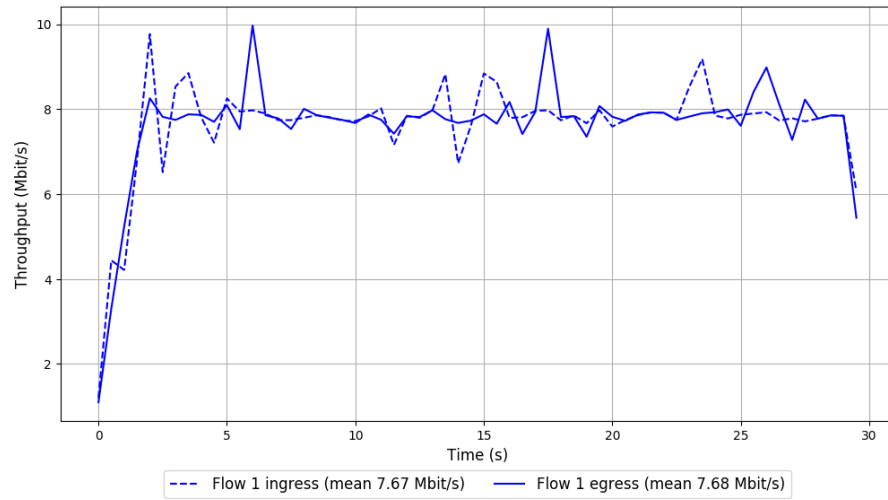
Run 3: Statistics of Sprout

Start at: 2018-02-04 05:09:02  
End at: 2018-02-04 05:09:32  
Local clock offset: -0.079 ms  
Remote clock offset: 4.081 ms

# Below is generated by plot.py at 2018-02-04 11:57:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 7.68 Mbit/s  
95th percentile per-packet one-way delay: 44.012 ms  
Loss rate: 0.14%  
-- Flow 1:  
Average throughput: 7.68 Mbit/s  
95th percentile per-packet one-way delay: 44.012 ms  
Loss rate: 0.14%



### Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2018-02-04 05:30:46

End at: 2018-02-04 05:31:16

Local clock offset: -2.425 ms

Remote clock offset: 5.002 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 42.163 ms

Loss rate: 0.43%

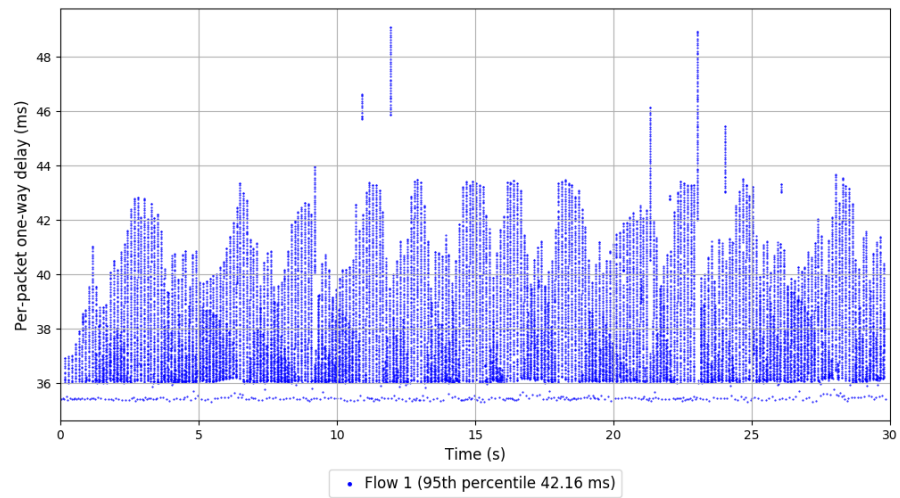
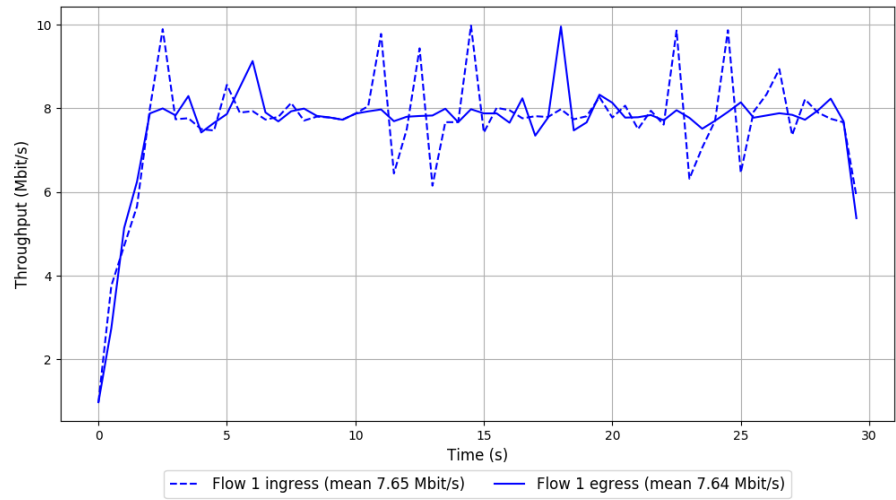
-- Flow 1:

Average throughput: 7.64 Mbit/s

95th percentile per-packet one-way delay: 42.163 ms

Loss rate: 0.43%

#### Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2018-02-04 05:57:16

End at: 2018-02-04 05:57:46

Local clock offset: 0.443 ms

Remote clock offset: 6.121 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 141.999 ms

Loss rate: 2.90%

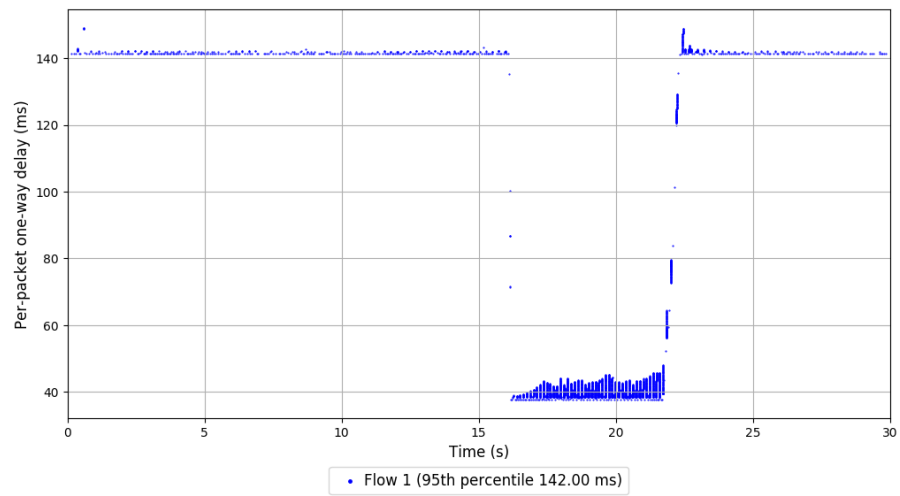
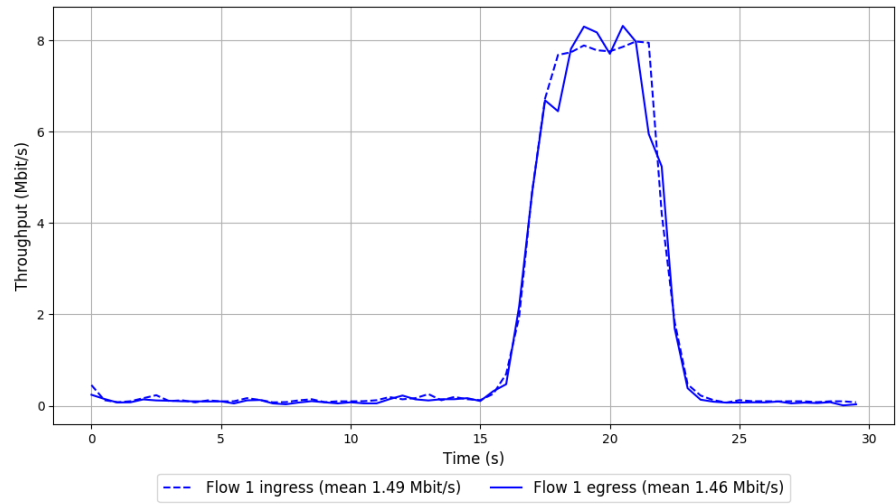
-- Flow 1:

Average throughput: 1.46 Mbit/s

95th percentile per-packet one-way delay: 141.999 ms

Loss rate: 2.90%

# Run 5: Report of Sprout — Data Link



Run 6: Statistics of Sprout

Start at: 2018-02-04 06:23:01

End at: 2018-02-04 06:23:31

Local clock offset: 1.137 ms

Remote clock offset: 6.499 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 44.950 ms

Loss rate: 0.43%

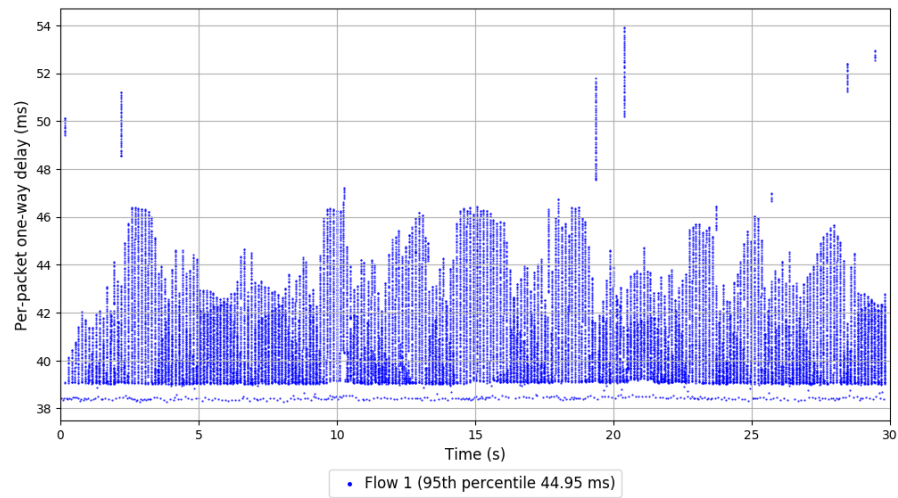
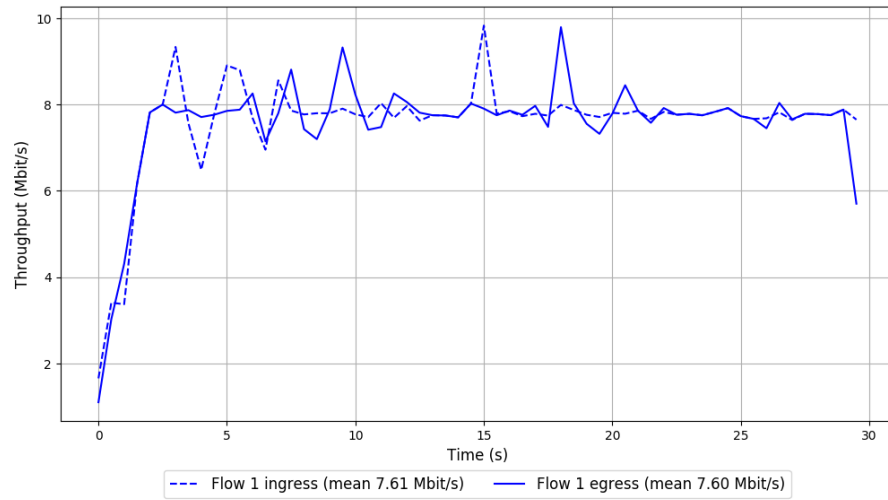
-- Flow 1:

Average throughput: 7.60 Mbit/s

95th percentile per-packet one-way delay: 44.950 ms

Loss rate: 0.43%

## Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2018-02-04 06:46:27

End at: 2018-02-04 06:46:57

Local clock offset: 1.365 ms

Remote clock offset: 7.08 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 44.699 ms

Loss rate: 0.42%

-- Flow 1:

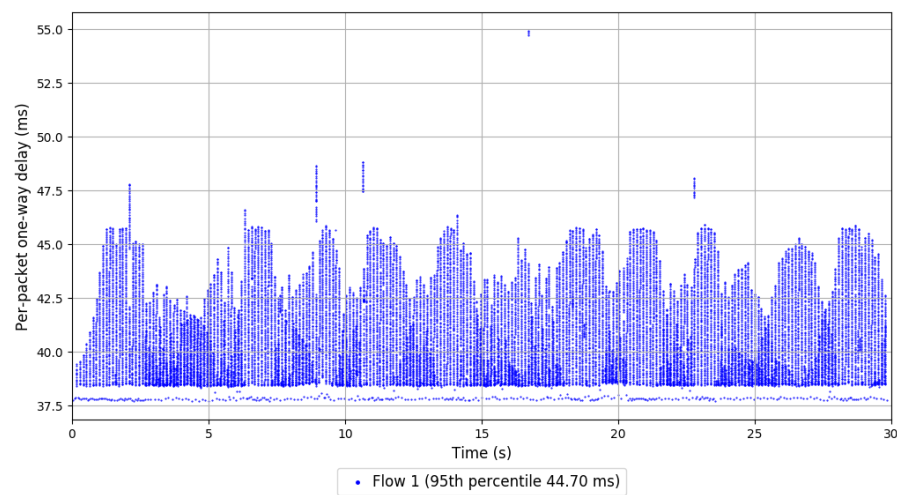
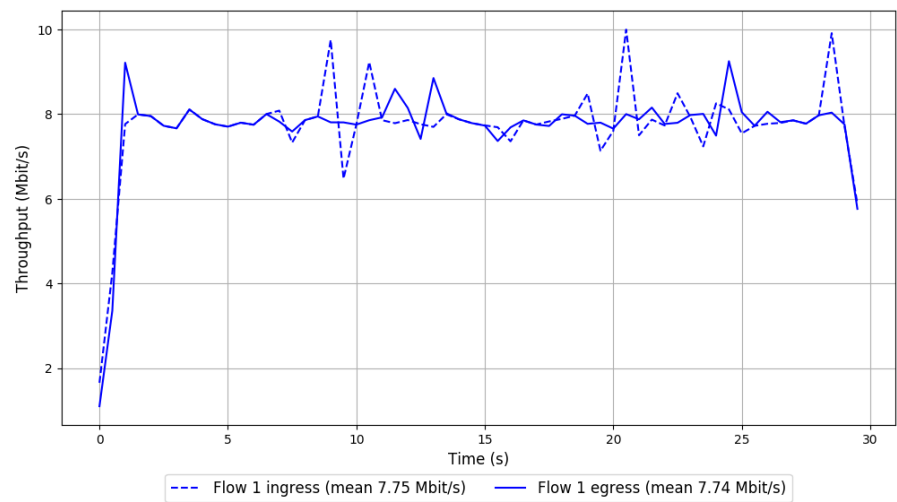
Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 44.699 ms

Loss rate: 0.42%



Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2018-02-04 07:10:04

End at: 2018-02-04 07:10:34

Local clock offset: 1.656 ms

Remote clock offset: 7.876 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 45.782 ms

Loss rate: 0.43%

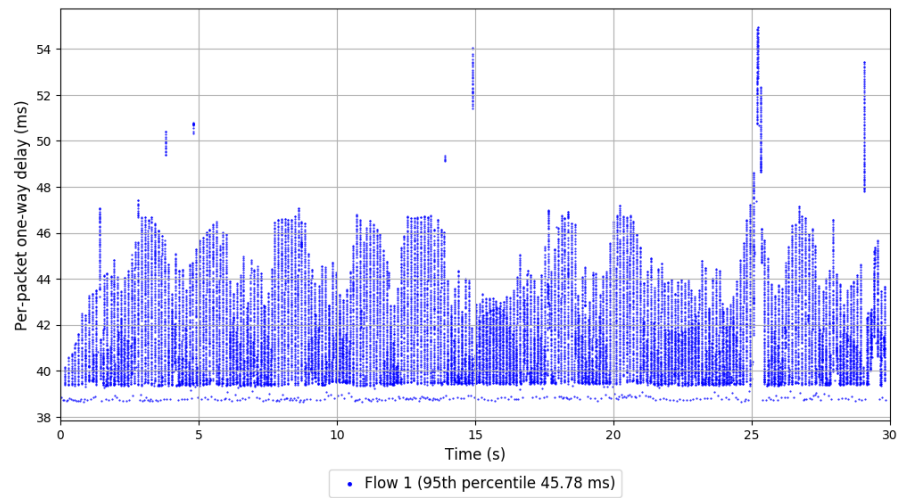
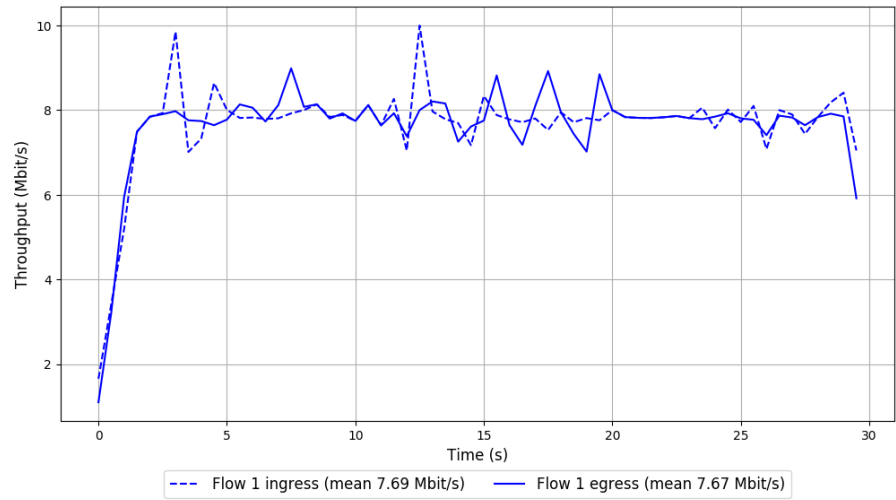
-- Flow 1:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 45.782 ms

Loss rate: 0.43%

# Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2018-02-04 07:31:51

End at: 2018-02-04 07:32:21

Local clock offset: 1.132 ms

Remote clock offset: 9.202 ms

# Below is generated by plot.py at 2018-02-04 11:57:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 44.432 ms

Loss rate: 0.43%

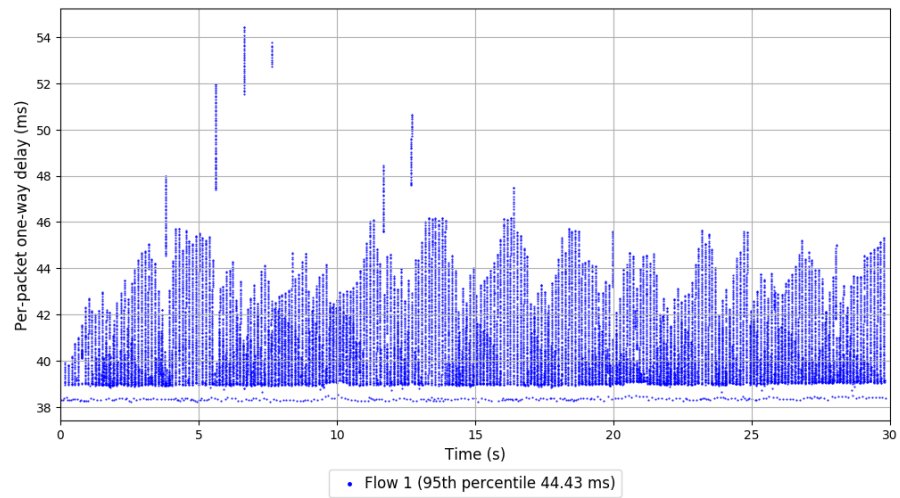
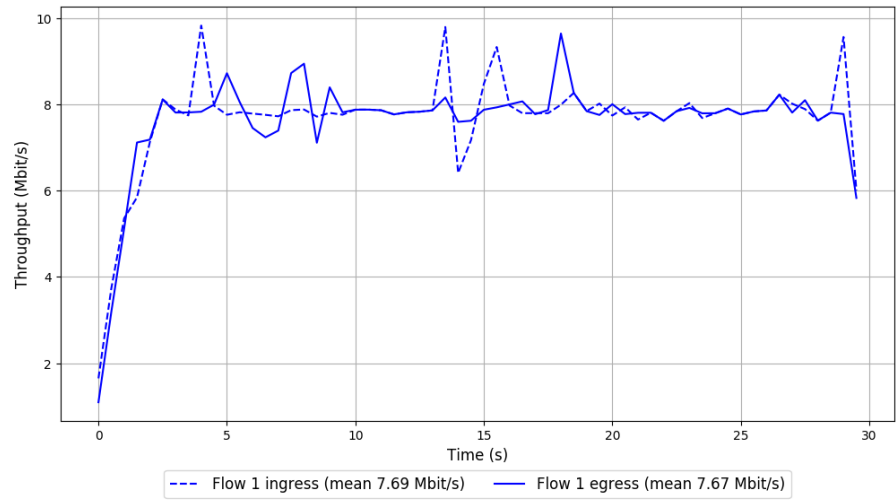
-- Flow 1:

Average throughput: 7.67 Mbit/s

95th percentile per-packet one-way delay: 44.432 ms

Loss rate: 0.43%

### Run 9: Report of Sprout — Data Link

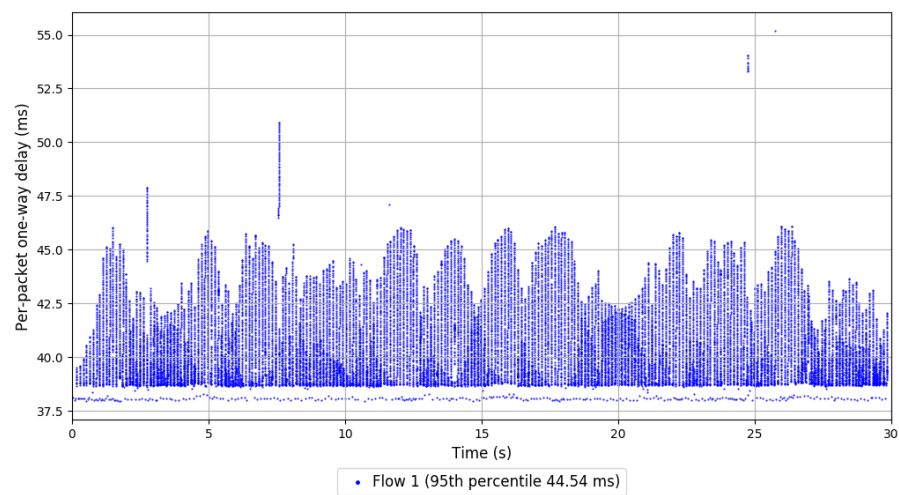
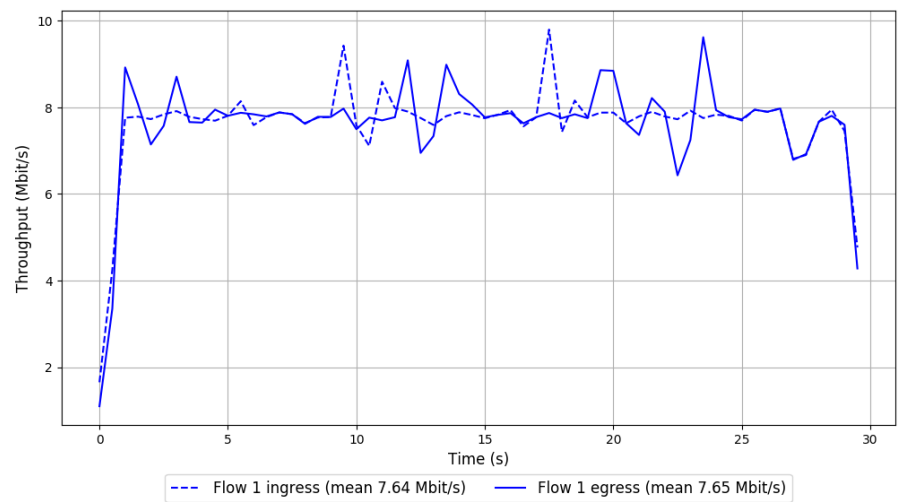


Run 10: Statistics of Sprout

Start at: 2018-02-04 07:53:37  
End at: 2018-02-04 07:54:07  
Local clock offset: 0.912 ms  
Remote clock offset: 10.272 ms

# Below is generated by plot.py at 2018-02-04 11:57:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 7.65 Mbit/s  
95th percentile per-packet one-way delay: 44.537 ms  
Loss rate: 0.11%  
-- Flow 1:  
Average throughput: 7.65 Mbit/s  
95th percentile per-packet one-way delay: 44.537 ms  
Loss rate: 0.11%

Run 10: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-02-04 04:20:56

End at: 2018-02-04 04:21:26

Local clock offset: -0.29 ms

Remote clock offset: 2.283 ms

# Below is generated by plot.py at 2018-02-04 11:58:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 56.17 Mbit/s

95th percentile per-packet one-way delay: 152.072 ms

Loss rate: 3.57%

-- Flow 1:

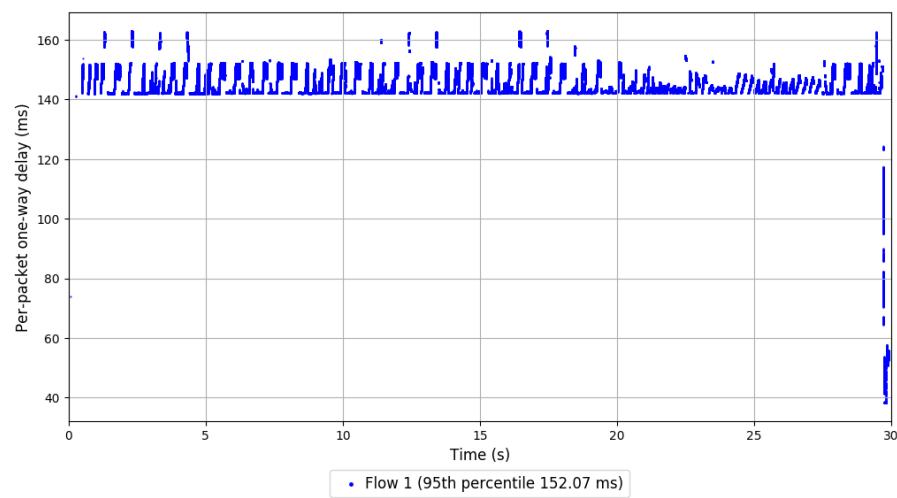
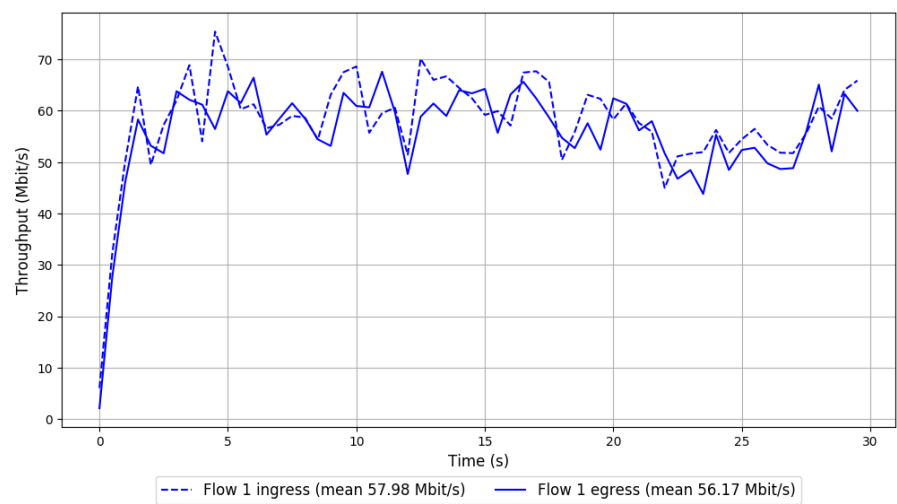
Average throughput: 56.17 Mbit/s

95th percentile per-packet one-way delay: 152.072 ms

Loss rate: 3.57%



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



Run 2: Statistics of TaoVA-100x

Start at: 2018-02-04 04:44:47

End at: 2018-02-04 04:45:17

Local clock offset: -0.299 ms

Remote clock offset: 3.026 ms

# Below is generated by plot.py at 2018-02-04 11:59:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 73.37 Mbit/s

95th percentile per-packet one-way delay: 49.250 ms

Loss rate: 1.18%

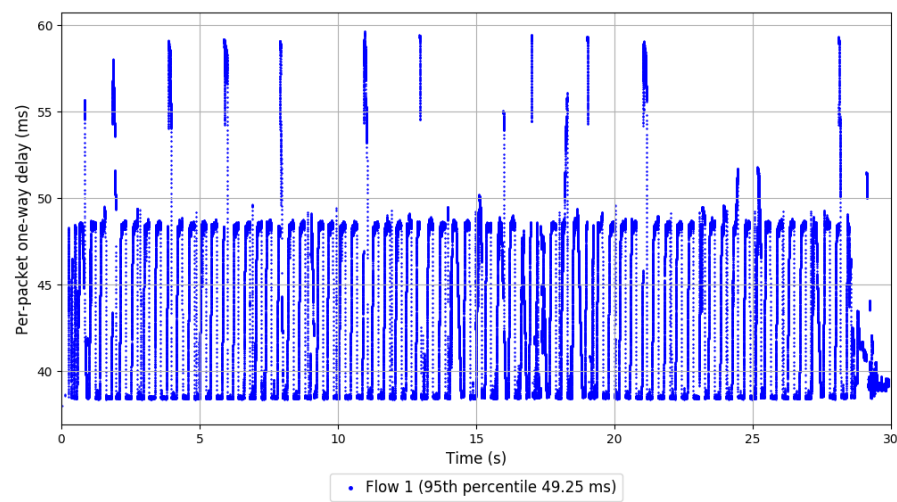
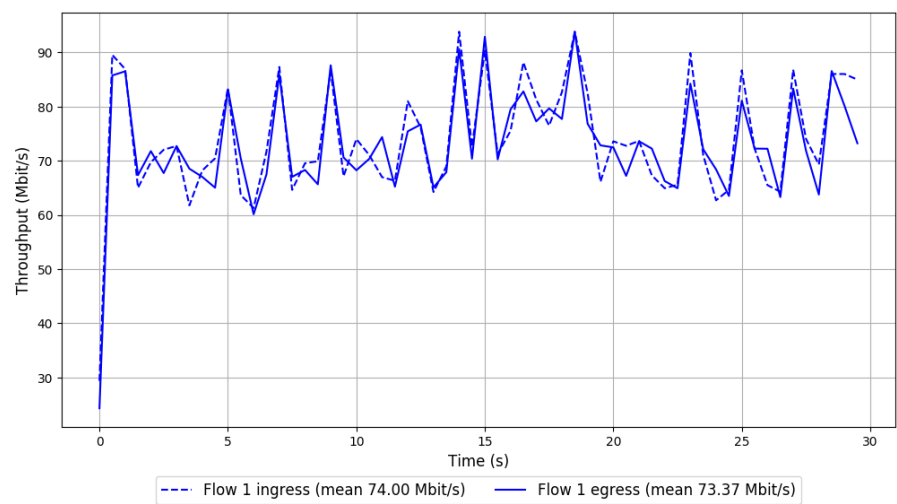
-- Flow 1:

Average throughput: 73.37 Mbit/s

95th percentile per-packet one-way delay: 49.250 ms

Loss rate: 1.18%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-02-04 05:06:34

End at: 2018-02-04 05:07:04

Local clock offset: 0.014 ms

Remote clock offset: 3.943 ms

# Below is generated by plot.py at 2018-02-04 11:59:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.10 Mbit/s

95th percentile per-packet one-way delay: 49.253 ms

Loss rate: 0.74%

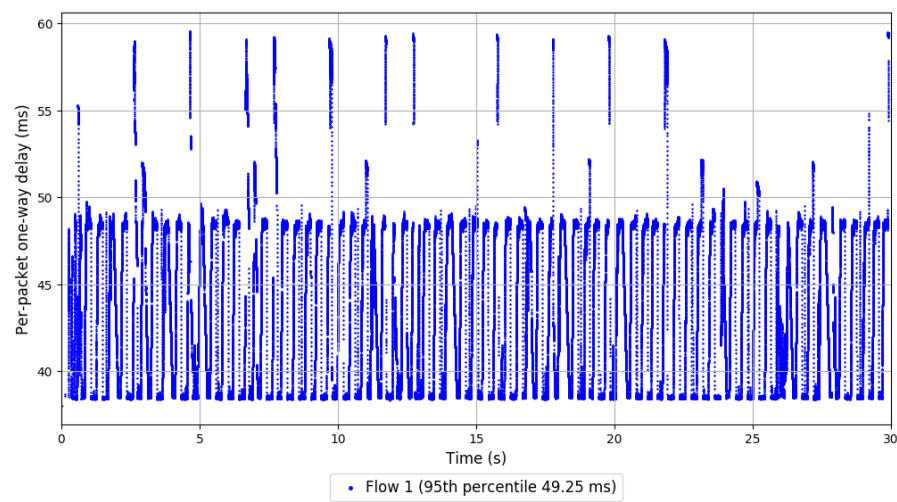
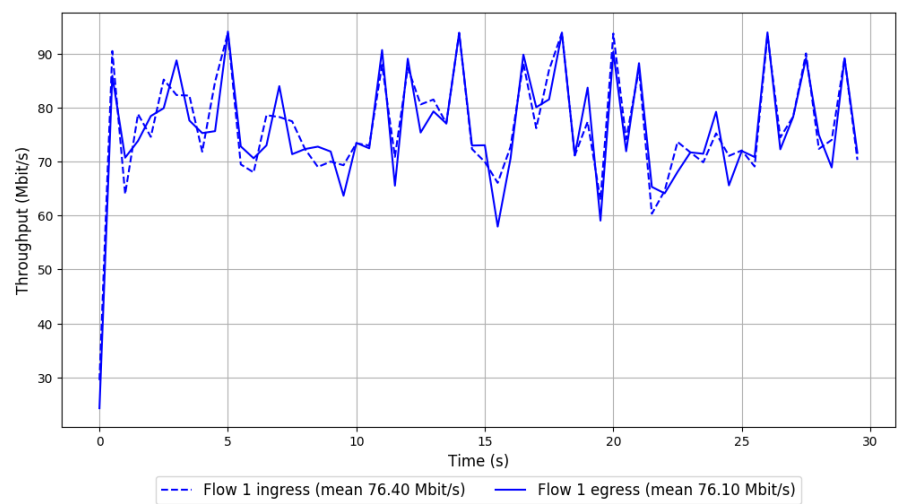
-- Flow 1:

Average throughput: 76.10 Mbit/s

95th percentile per-packet one-way delay: 49.253 ms

Loss rate: 0.74%

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



Run 4: Statistics of TaoVA-100x

Start at: 2018-02-04 05:28:19

End at: 2018-02-04 05:28:49

Local clock offset: 0.266 ms

Remote clock offset: 4.929 ms

# Below is generated by plot.py at 2018-02-04 11:59:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 73.68 Mbit/s

95th percentile per-packet one-way delay: 49.518 ms

Loss rate: 2.14%

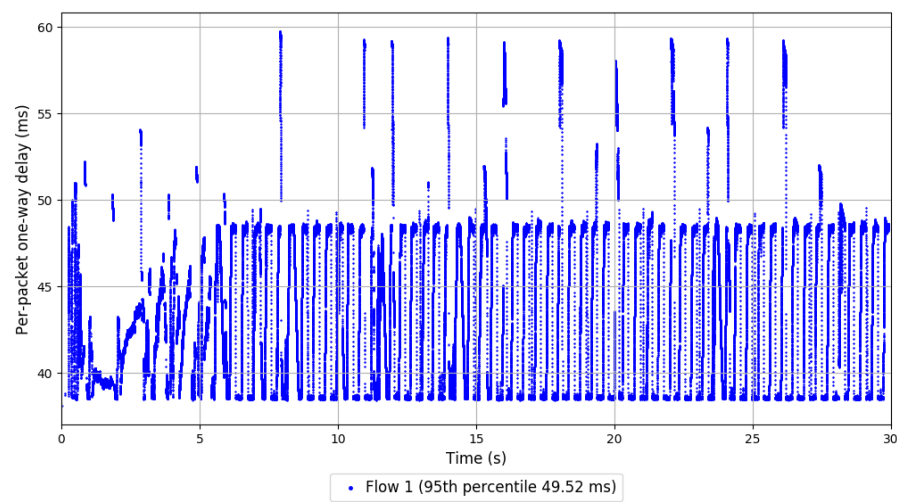
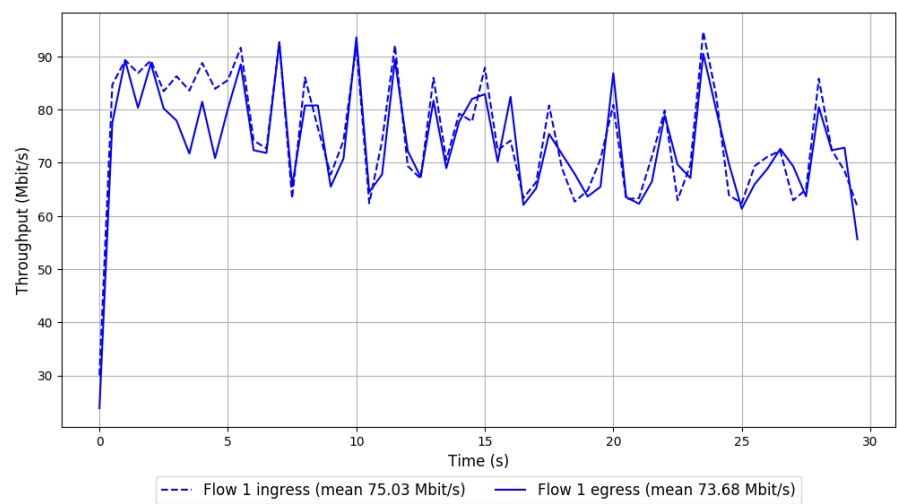
-- Flow 1:

Average throughput: 73.68 Mbit/s

95th percentile per-packet one-way delay: 49.518 ms

Loss rate: 2.14%

Run 4: Report of TaoVA-100x — Data Link



Run 5: Statistics of TaoVA-100x

Start at: 2018-02-04 05:52:30

End at: 2018-02-04 05:53:00

Local clock offset: 0.61 ms

Remote clock offset: 6.06 ms

# Below is generated by plot.py at 2018-02-04 11:59:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 59.51 Mbit/s

95th percentile per-packet one-way delay: 152.319 ms

Loss rate: 2.14%

-- Flow 1:

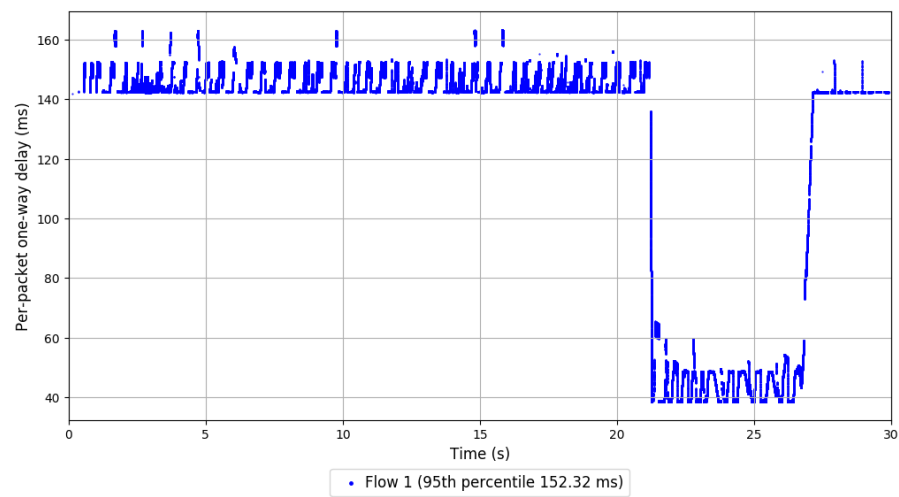
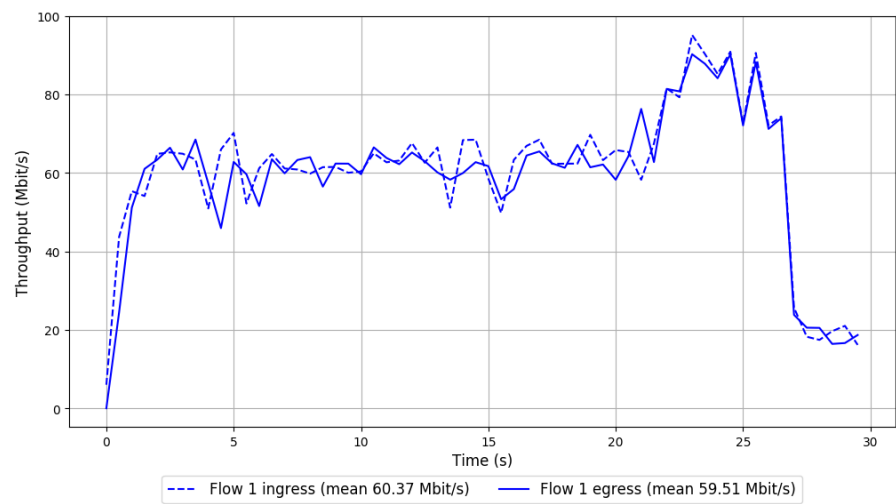
Average throughput: 59.51 Mbit/s

95th percentile per-packet one-way delay: 152.319 ms

Loss rate: 2.14%



Run 5: Report of TaoVA-100x — Data Link



Run 6: Statistics of TaoVA-100x

Start at: 2018-02-04 06:20:31

End at: 2018-02-04 06:21:01

Local clock offset: 0.614 ms

Remote clock offset: 6.32 ms

# Below is generated by plot.py at 2018-02-04 11:59:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 74.36 Mbit/s

95th percentile per-packet one-way delay: 53.156 ms

Loss rate: 0.35%

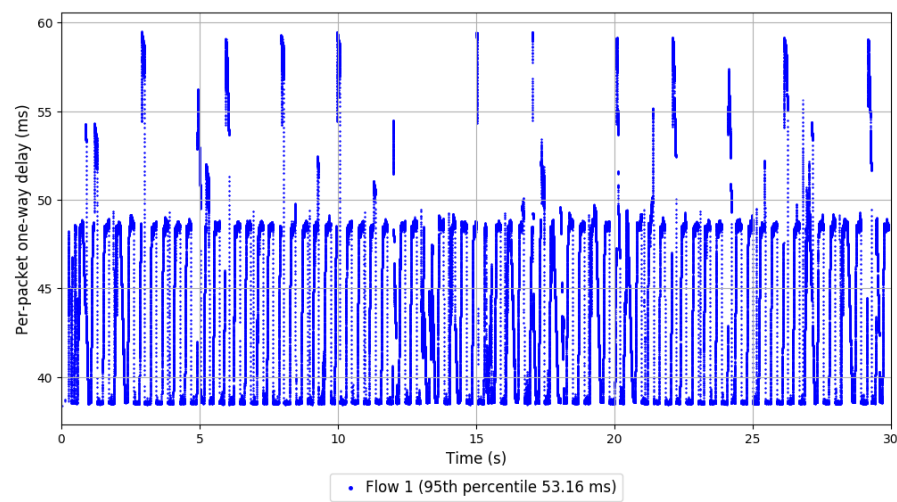
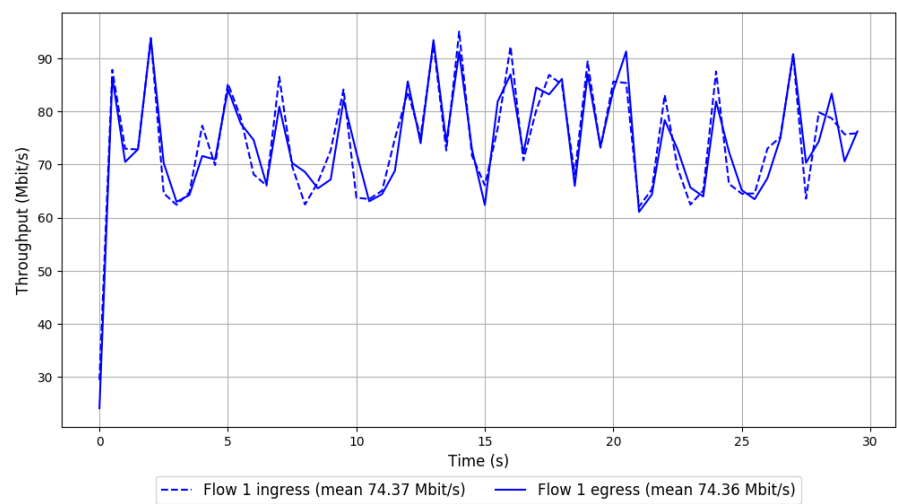
-- Flow 1:

Average throughput: 74.36 Mbit/s

95th percentile per-packet one-way delay: 53.156 ms

Loss rate: 0.35%

Run 6: Report of TaoVA-100x — Data Link



Run 7: Statistics of TaoVA-100x

Start at: 2018-02-04 06:43:59

End at: 2018-02-04 06:44:29

Local clock offset: 0.769 ms

Remote clock offset: 7.004 ms

# Below is generated by plot.py at 2018-02-04 11:59:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 72.43 Mbit/s

95th percentile per-packet one-way delay: 51.131 ms

Loss rate: 2.34%

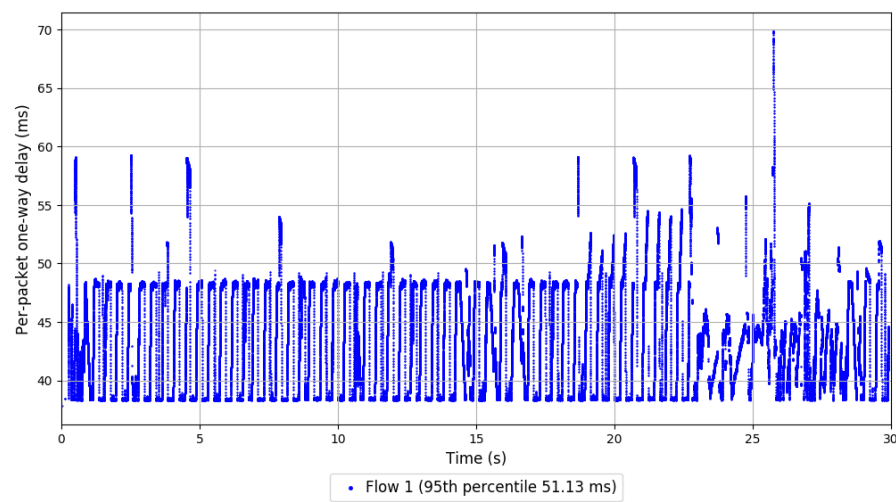
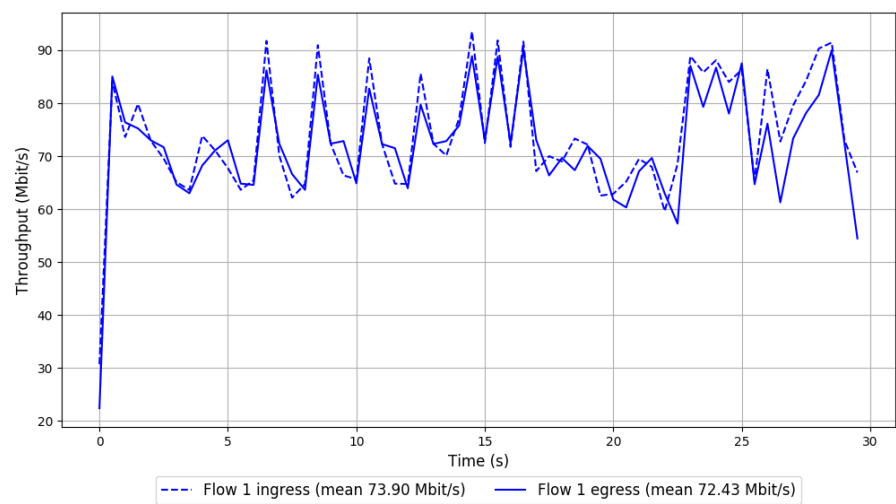
-- Flow 1:

Average throughput: 72.43 Mbit/s

95th percentile per-packet one-way delay: 51.131 ms

Loss rate: 2.34%

Run 7: Report of TaoVA-100x — Data Link



Run 8: Statistics of TaoVA-100x

Start at: 2018-02-04 07:07:34

End at: 2018-02-04 07:08:04

Local clock offset: 0.81 ms

Remote clock offset: 7.749 ms

# Below is generated by plot.py at 2018-02-04 11:59:55

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.11 Mbit/s

95th percentile per-packet one-way delay: 51.716 ms

Loss rate: 1.31%

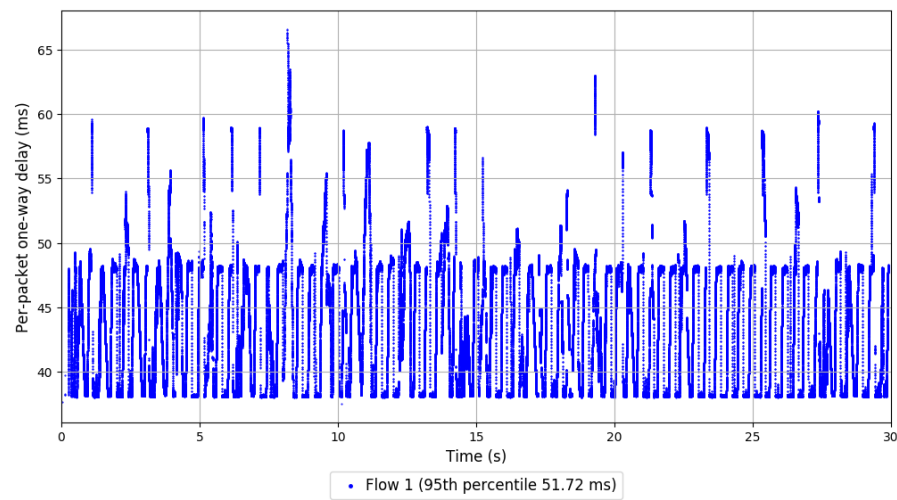
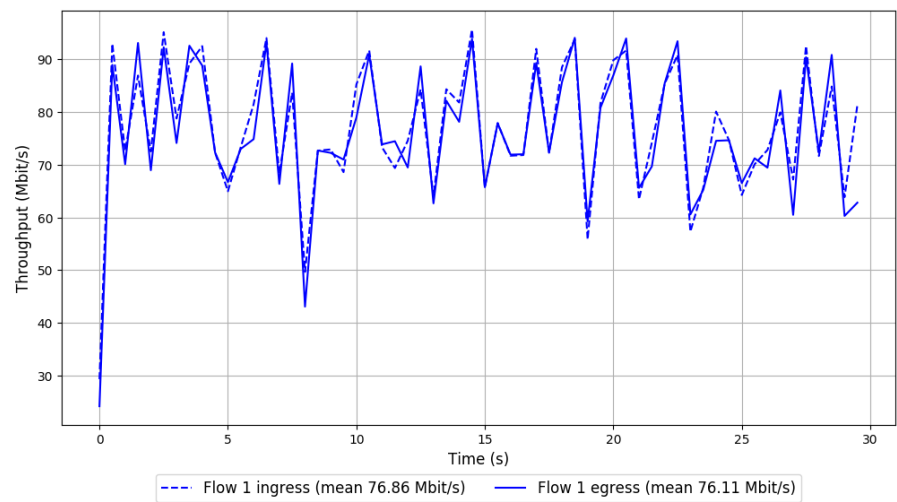
-- Flow 1:

Average throughput: 76.11 Mbit/s

95th percentile per-packet one-way delay: 51.716 ms

Loss rate: 1.31%

Run 8: Report of TaoVA-100x — Data Link



Run 9: Statistics of TaoVA-100x

Start at: 2018-02-04 07:29:22

End at: 2018-02-04 07:29:52

Local clock offset: 1.521 ms

Remote clock offset: 8.997 ms

# Below is generated by plot.py at 2018-02-04 12:01:10

# Datalink statistics

-- Total of 1 flow:

Average throughput: 74.43 Mbit/s

95th percentile per-packet one-way delay: 49.336 ms

Loss rate: 2.32%

-- Flow 1:

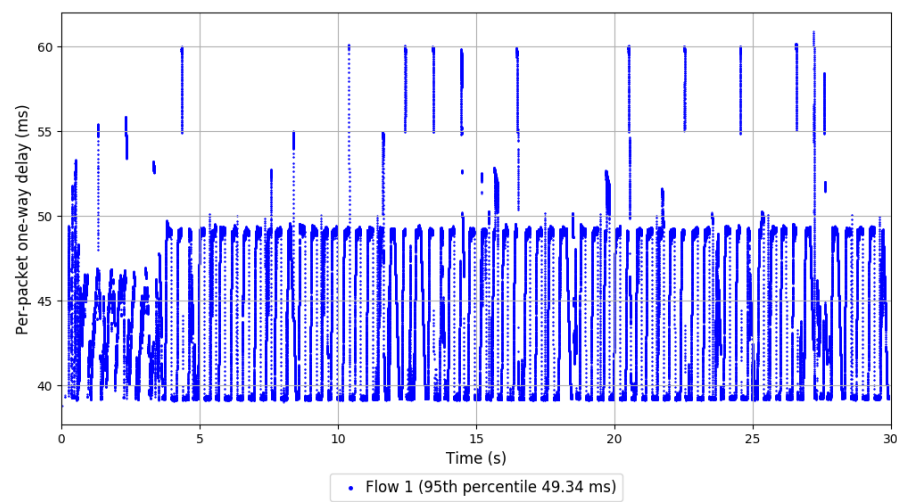
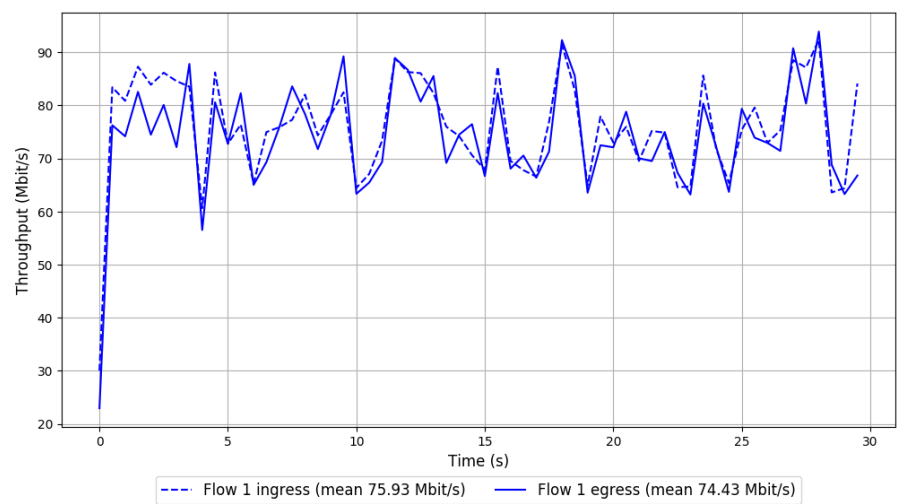
Average throughput: 74.43 Mbit/s

95th percentile per-packet one-way delay: 49.336 ms

Loss rate: 2.32%



Run 9: Report of TaoVA-100x — Data Link



Run 10: Statistics of TaoVA-100x

Start at: 2018-02-04 07:51:09

End at: 2018-02-04 07:51:39

Local clock offset: 0.848 ms

Remote clock offset: 10.184 ms

# Below is generated by plot.py at 2018-02-04 12:01:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.85 Mbit/s

95th percentile per-packet one-way delay: 49.560 ms

Loss rate: 4.53%

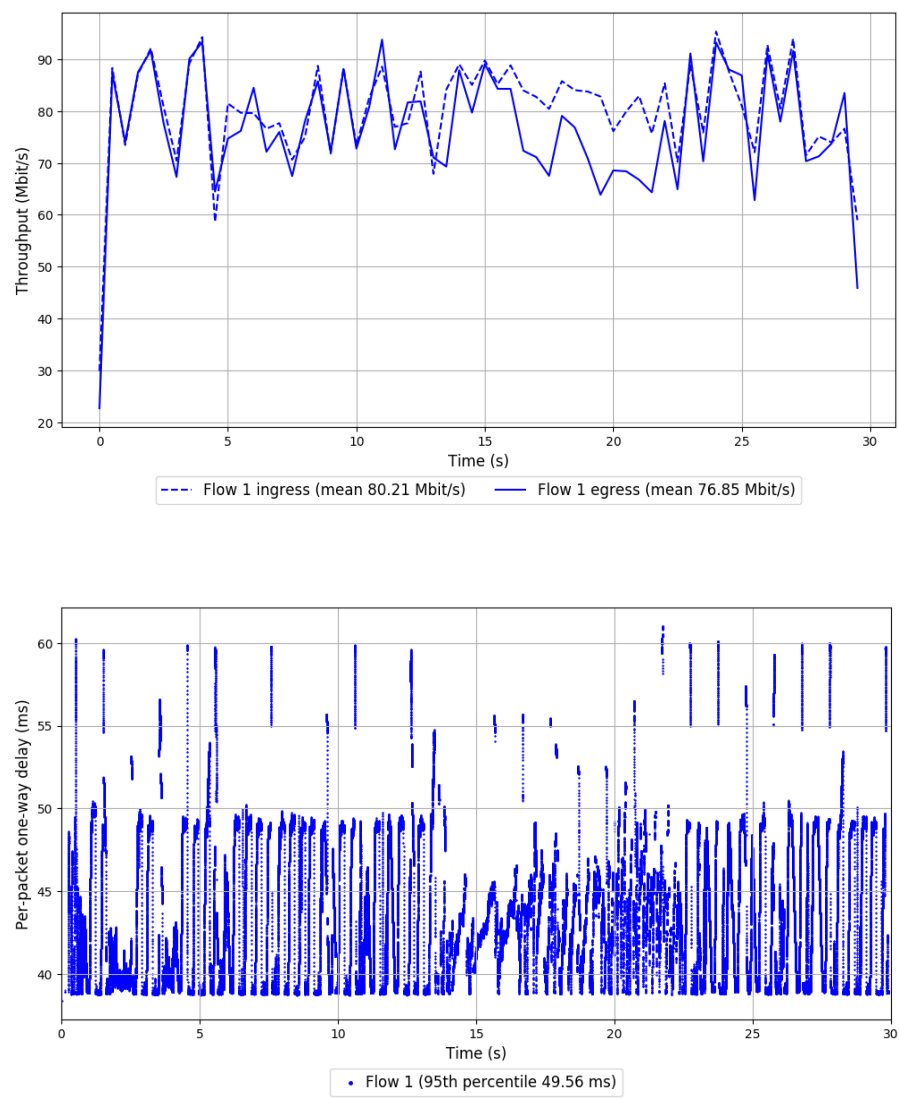
-- Flow 1:

Average throughput: 76.85 Mbit/s

95th percentile per-packet one-way delay: 49.560 ms

Loss rate: 4.53%

Run 10: Report of TaoVA-100x — Data Link



Run 1: Statistics of TCP Vegas

Start at: 2018-02-04 04:06:31

End at: 2018-02-04 04:07:02

Local clock offset: -0.993 ms

Remote clock offset: 1.927 ms

# Below is generated by plot.py at 2018-02-04 12:01:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 141.790 ms

Loss rate: 1.01%

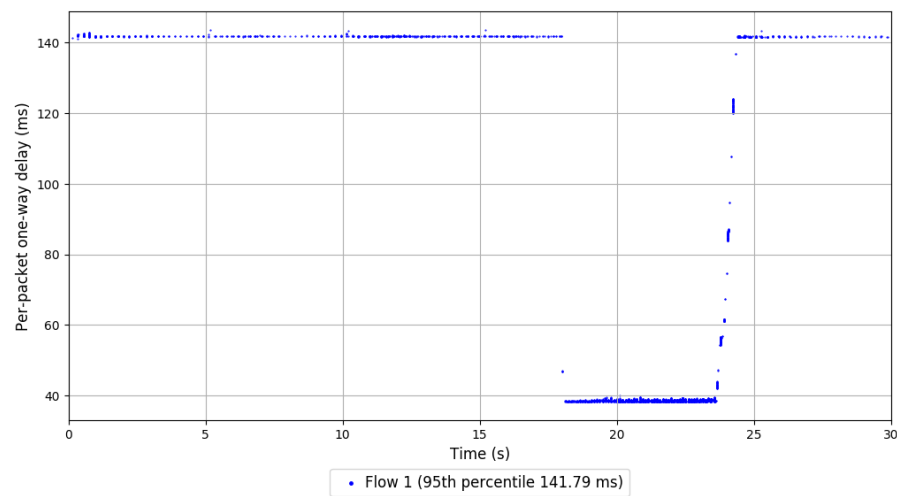
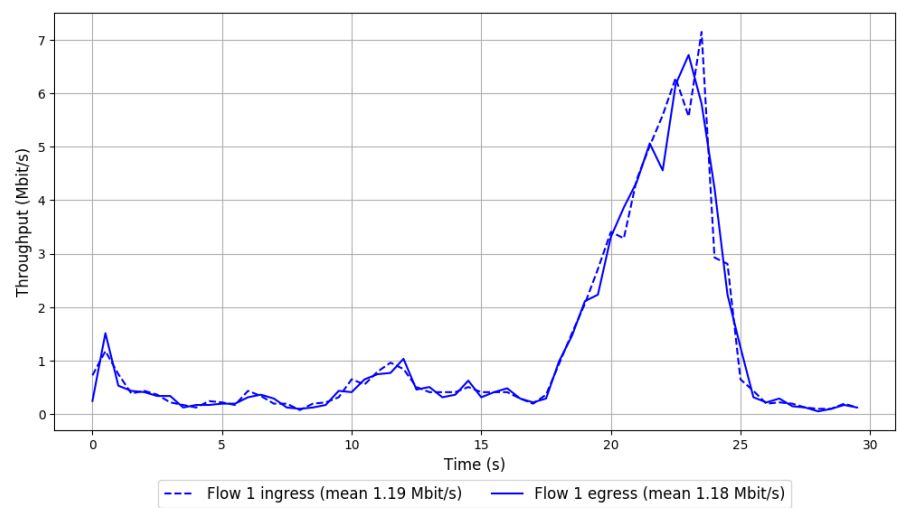
-- Flow 1:

Average throughput: 1.18 Mbit/s

95th percentile per-packet one-way delay: 141.790 ms

Loss rate: 1.01%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2018-02-04 04:35:04

End at: 2018-02-04 04:35:34

Local clock offset: -0.384 ms

Remote clock offset: 2.667 ms

# Below is generated by plot.py at 2018-02-04 12:01:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 94.79 Mbit/s

95th percentile per-packet one-way delay: 59.837 ms

Loss rate: 0.42%

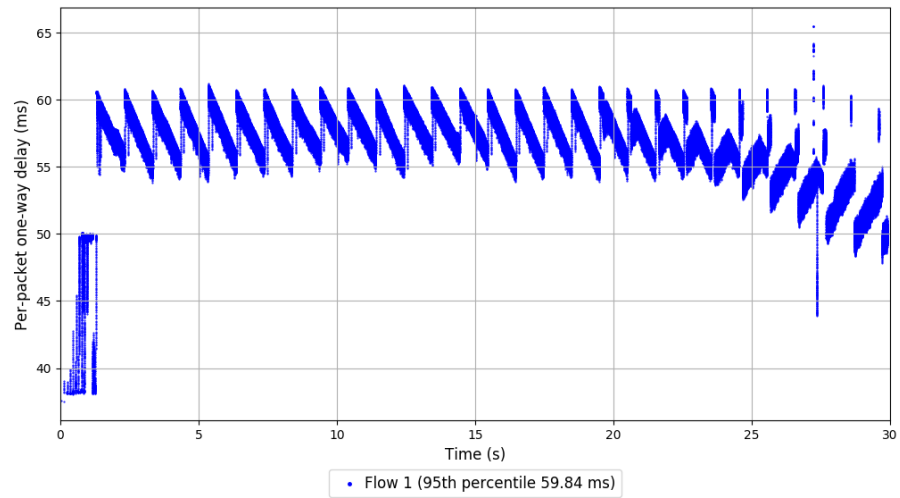
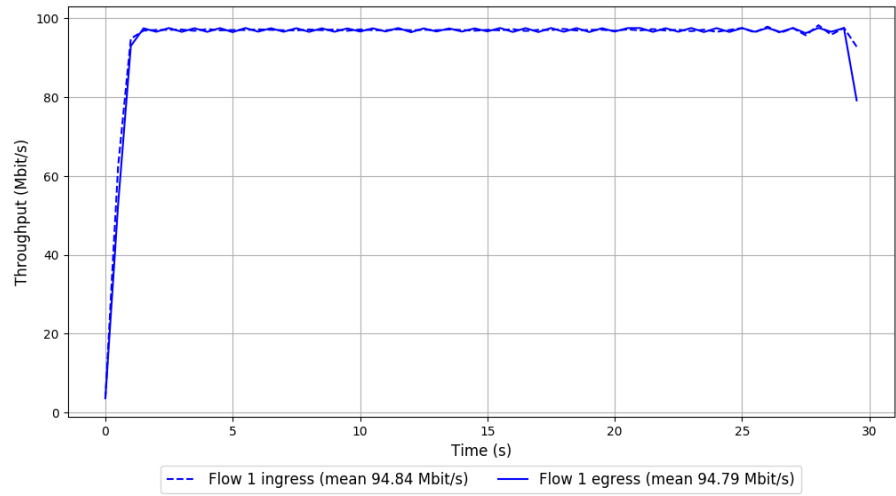
-- Flow 1:

Average throughput: 94.79 Mbit/s

95th percentile per-packet one-way delay: 59.837 ms

Loss rate: 0.42%

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



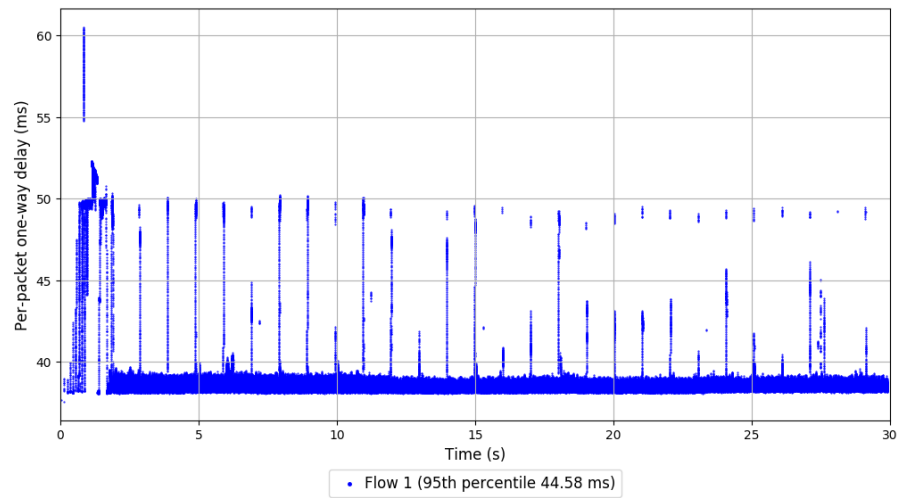
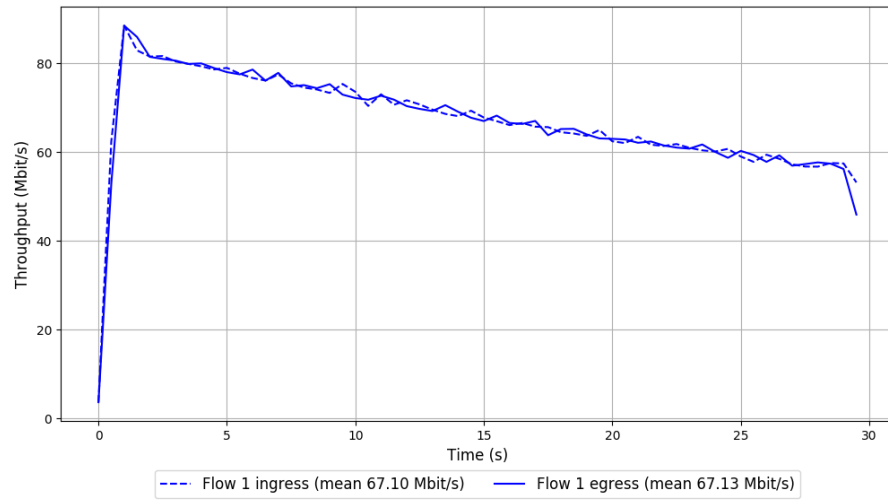
Run 3: Statistics of TCP Vegas

Start at: 2018-02-04 04:56:52  
End at: 2018-02-04 04:57:22  
Local clock offset: -0.105 ms  
Remote clock offset: 3.557 ms

# Below is generated by plot.py at 2018-02-04 12:01:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 67.13 Mbit/s  
95th percentile per-packet one-way delay: 44.577 ms  
Loss rate: 0.29%  
-- Flow 1:  
Average throughput: 67.13 Mbit/s  
95th percentile per-packet one-way delay: 44.577 ms  
Loss rate: 0.29%



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



Run 4: Statistics of TCP Vegas

Start at: 2018-02-04 05:18:39

End at: 2018-02-04 05:19:09

Local clock offset: 0.246 ms

Remote clock offset: 4.529 ms

# Below is generated by plot.py at 2018-02-04 12:01:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 44.76 Mbit/s

95th percentile per-packet one-way delay: 39.920 ms

Loss rate: 0.42%

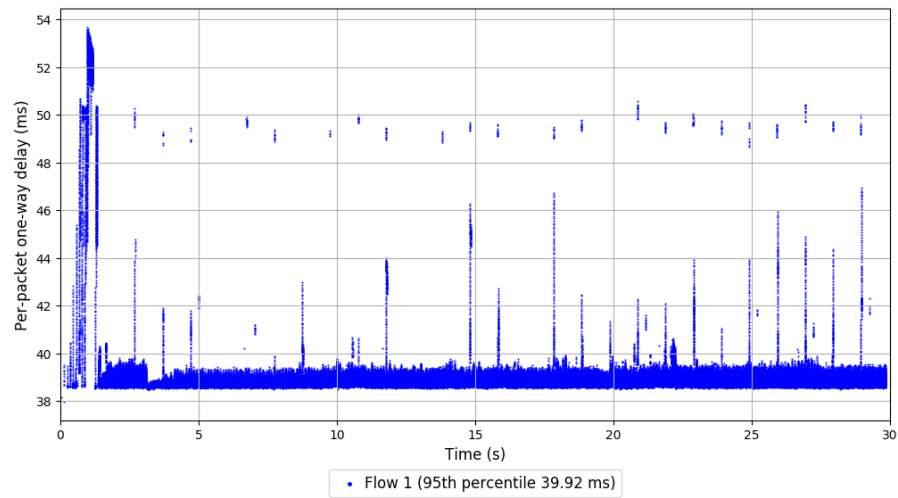
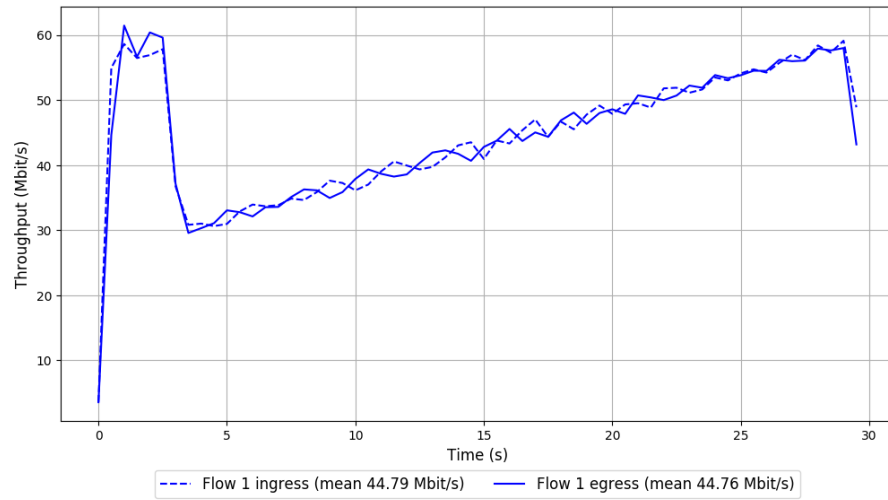
-- Flow 1:

Average throughput: 44.76 Mbit/s

95th percentile per-packet one-way delay: 39.920 ms

Loss rate: 0.42%

#### Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-02-04 05:40:23

End at: 2018-02-04 05:40:53

Local clock offset: 0.577 ms

Remote clock offset: 5.514 ms

# Below is generated by plot.py at 2018-02-04 12:01:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 94.75 Mbit/s

95th percentile per-packet one-way delay: 60.512 ms

Loss rate: 0.42%

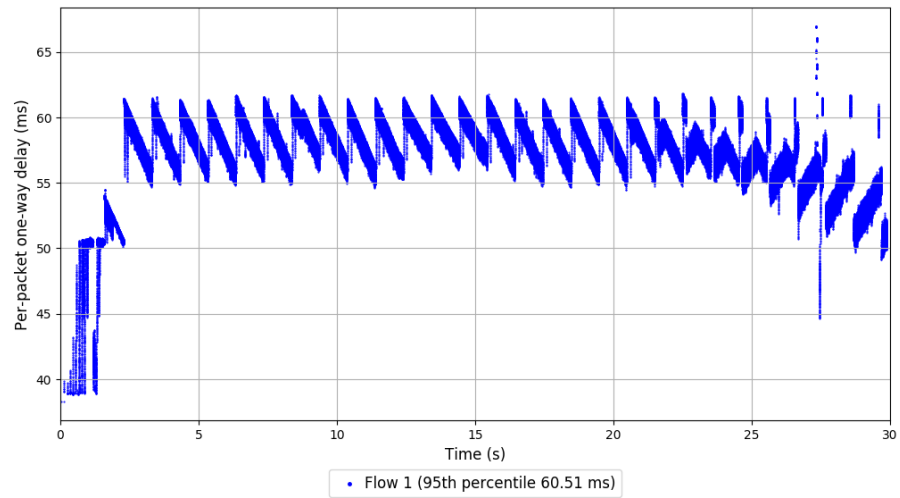
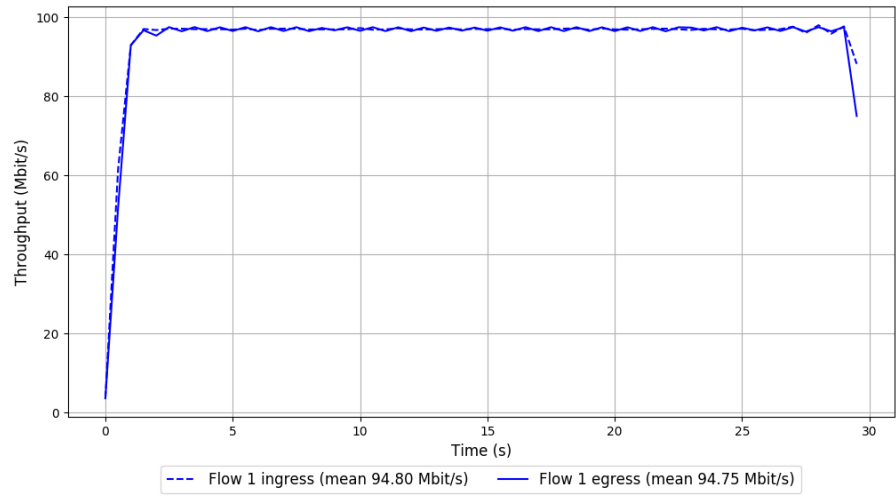
-- Flow 1:

Average throughput: 94.75 Mbit/s

95th percentile per-packet one-way delay: 60.512 ms

Loss rate: 0.42%

### Run 5: Report of TCP Vegas — Data Link



Run 6: Statistics of TCP Vegas

Start at: 2018-02-04 06:10:48

End at: 2018-02-04 06:11:18

Local clock offset: 1.057 ms

Remote clock offset: 6.124 ms

# Below is generated by plot.py at 2018-02-04 12:01:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 94.79 Mbit/s

95th percentile per-packet one-way delay: 60.185 ms

Loss rate: 0.43%

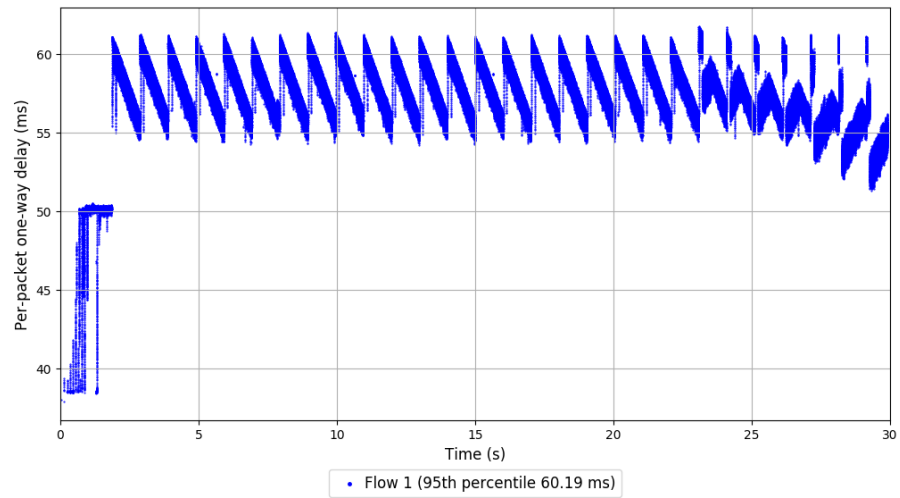
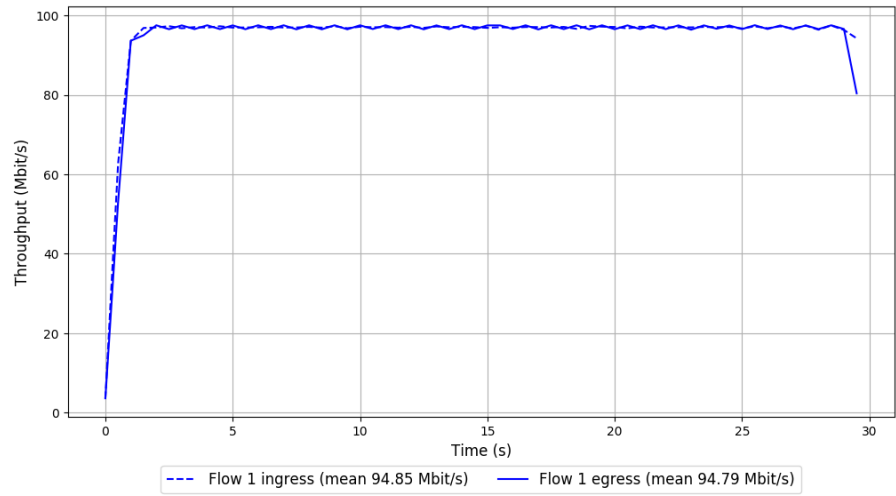
-- Flow 1:

Average throughput: 94.79 Mbit/s

95th percentile per-packet one-way delay: 60.185 ms

Loss rate: 0.43%

## Run 6: Report of TCP Vegas — Data Link



Run 7: Statistics of TCP Vegas

Start at: 2018-02-04 06:32:36

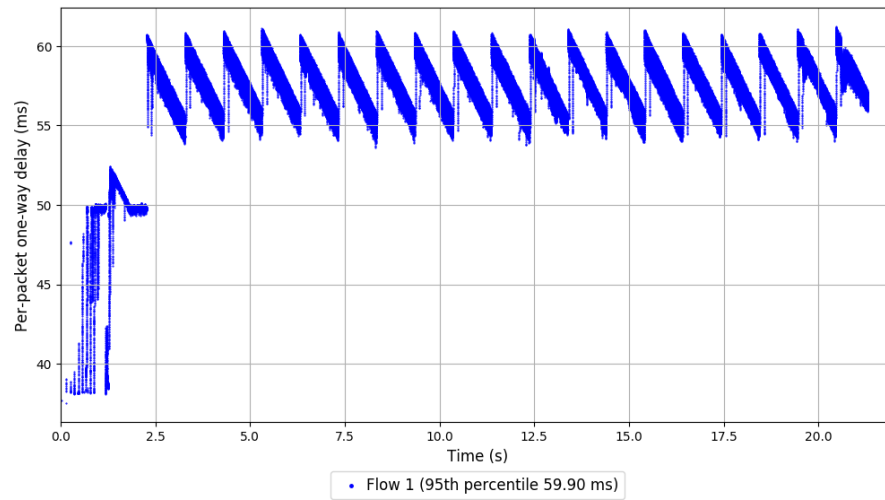
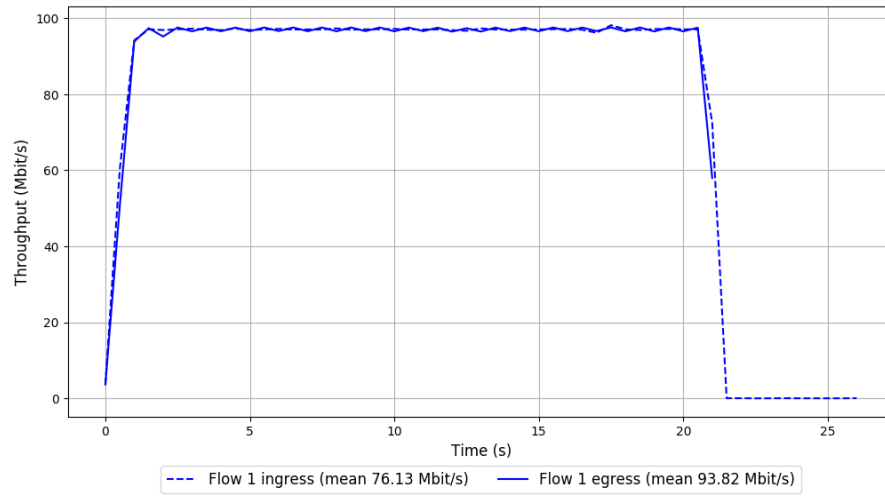
End at: 2018-02-04 06:33:06

Local clock offset: 0.761 ms

Remote clock offset: 6.73 ms



### Run 7: Report of TCP Vegas — Data Link



Run 8: Statistics of TCP Vegas

Start at: 2018-02-04 06:57:50

End at: 2018-02-04 06:58:20

Local clock offset: 1.589 ms

Remote clock offset: 7.332 ms

# Below is generated by plot.py at 2018-02-04 12:01:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 94.77 Mbit/s

95th percentile per-packet one-way delay: 60.562 ms

Loss rate: 0.40%

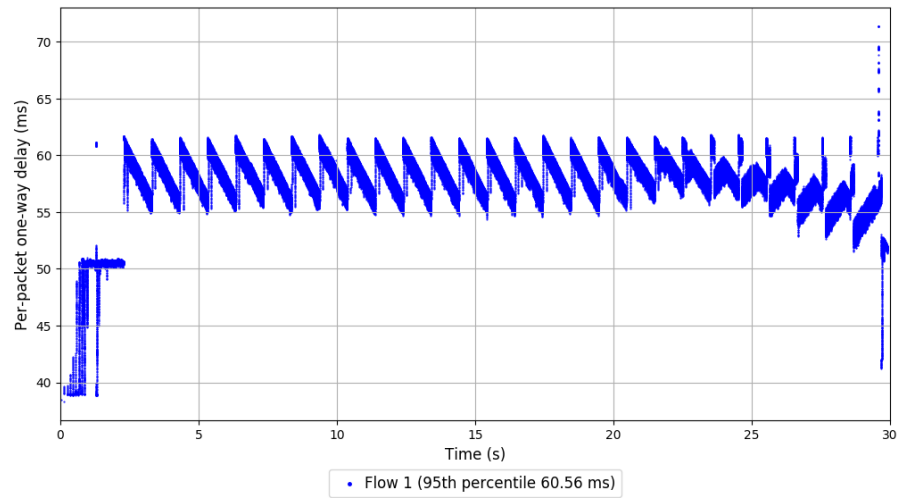
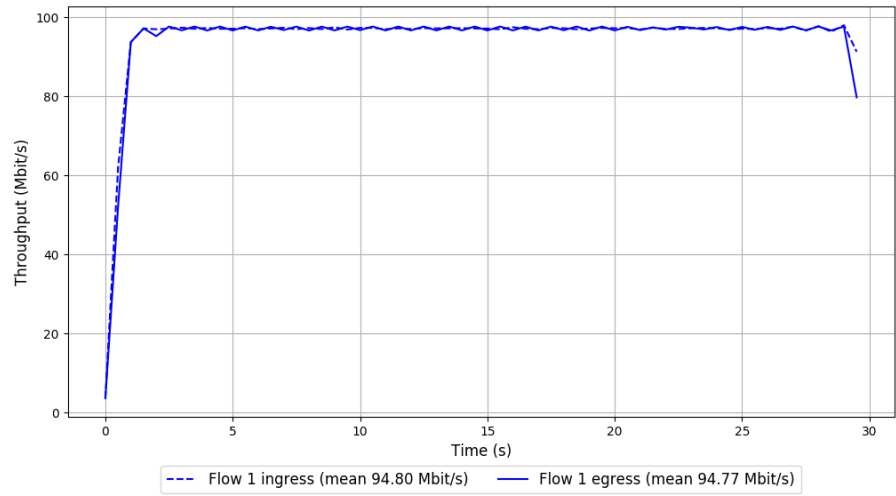
-- Flow 1:

Average throughput: 94.77 Mbit/s

95th percentile per-packet one-way delay: 60.562 ms

Loss rate: 0.40%

### Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2018-02-04 07:19:39

End at: 2018-02-04 07:20:09

Local clock offset: 1.206 ms

Remote clock offset: 8.44 ms

# Below is generated by plot.py at 2018-02-04 12:02:04

# Datalink statistics

-- Total of 1 flow:

Average throughput: 94.74 Mbit/s

95th percentile per-packet one-way delay: 59.987 ms

Loss rate: 0.42%

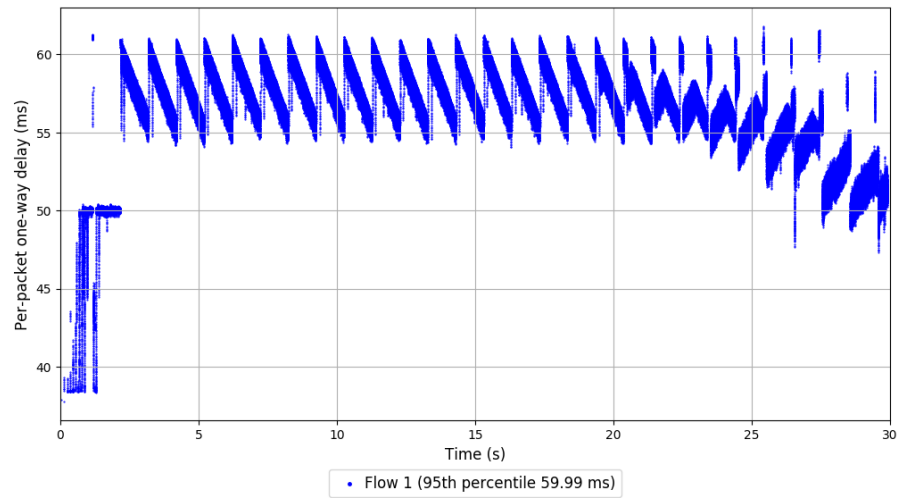
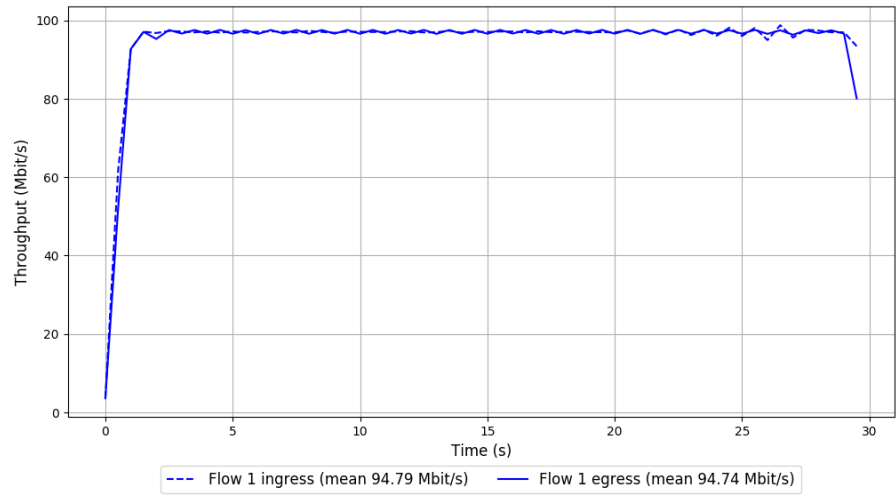
-- Flow 1:

Average throughput: 94.74 Mbit/s

95th percentile per-packet one-way delay: 59.987 ms

Loss rate: 0.42%

### Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2018-02-04 07:41:27

End at: 2018-02-04 07:41:57

Local clock offset: 1.006 ms

Remote clock offset: 9.889 ms

# Below is generated by plot.py at 2018-02-04 12:02:17

# Datalink statistics

-- Total of 1 flow:

Average throughput: 94.79 Mbit/s

95th percentile per-packet one-way delay: 59.959 ms

Loss rate: 0.43%

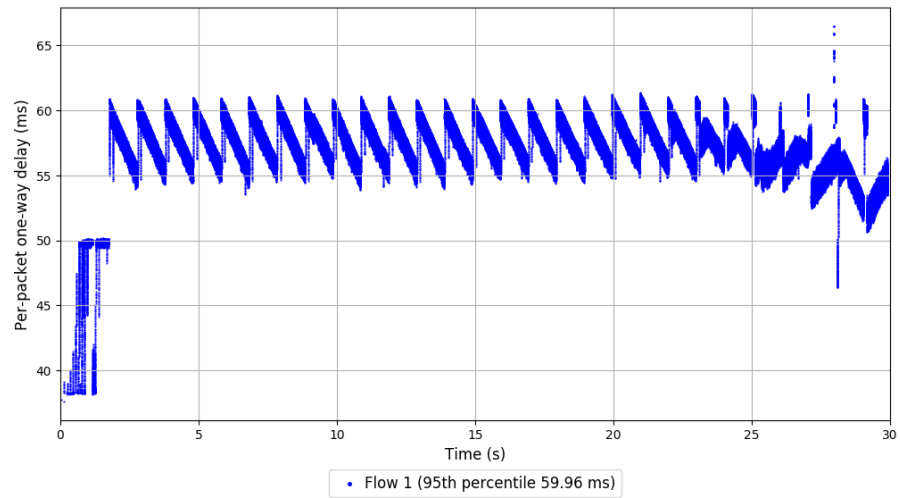
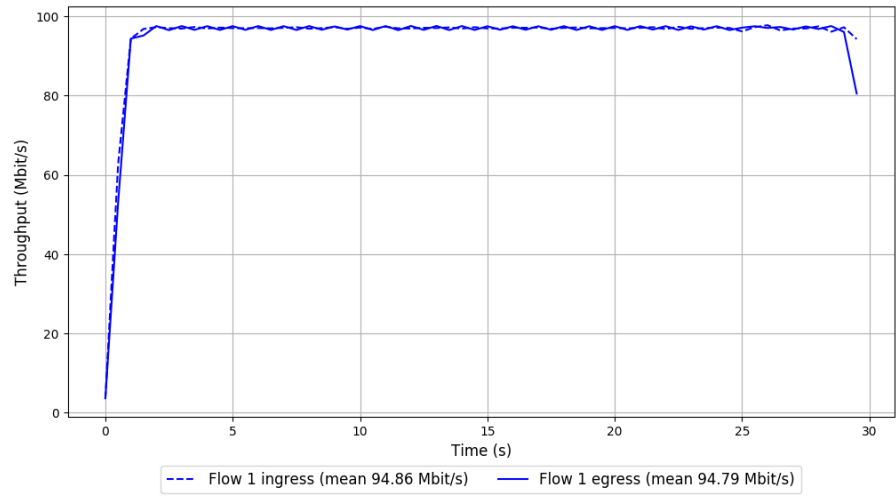
-- Flow 1:

Average throughput: 94.79 Mbit/s

95th percentile per-packet one-way delay: 59.959 ms

Loss rate: 0.43%

### Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-02-04 04:23:27

End at: 2018-02-04 04:23:57

Local clock offset: -0.473 ms

Remote clock offset: 2.298 ms

# Below is generated by plot.py at 2018-02-04 12:02:17

# Datalink statistics

-- Total of 1 flow:

Average throughput: 33.58 Mbit/s

95th percentile per-packet one-way delay: 158.798 ms

Loss rate: 2.50%

-- Flow 1:

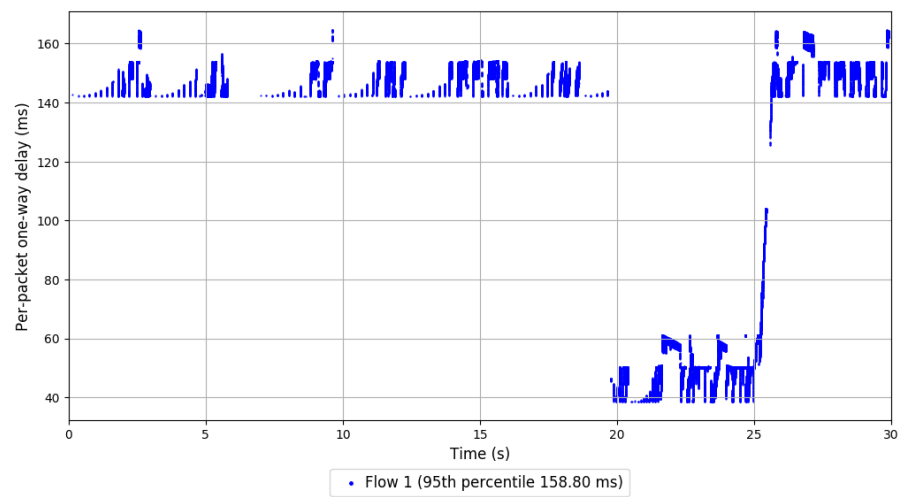
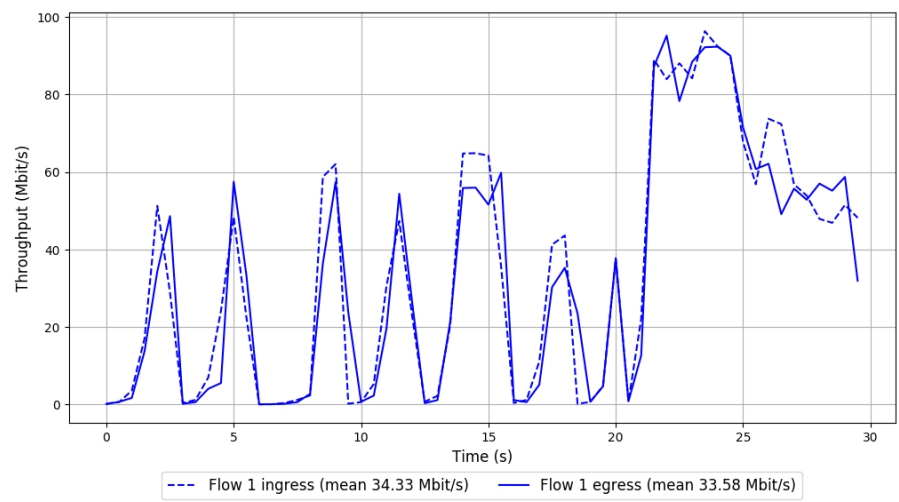
Average throughput: 33.58 Mbit/s

95th percentile per-packet one-way delay: 158.798 ms

Loss rate: 2.50%



Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2018-02-04 04:46:02

End at: 2018-02-04 04:46:32

Local clock offset: -0.108 ms

Remote clock offset: 3.106 ms

# Below is generated by plot.py at 2018-02-04 12:02:17

# Datalink statistics

-- Total of 1 flow:

Average throughput: 66.59 Mbit/s

95th percentile per-packet one-way delay: 59.062 ms

Loss rate: 0.63%

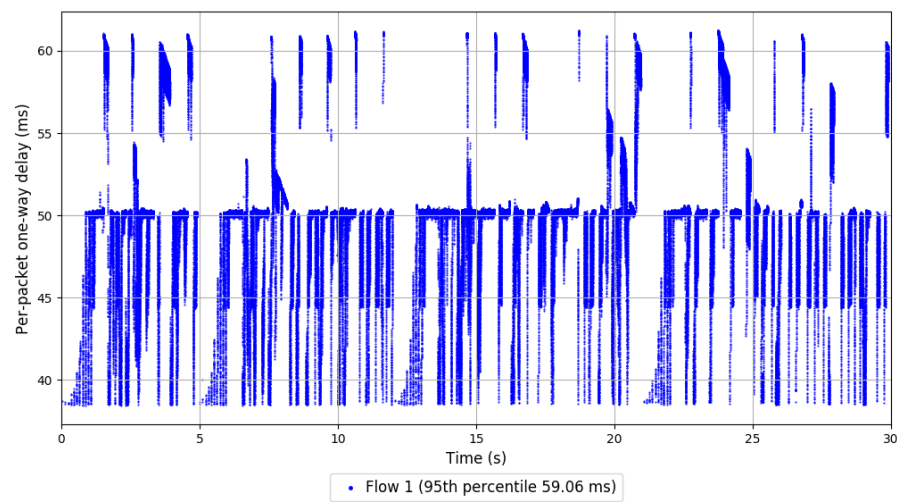
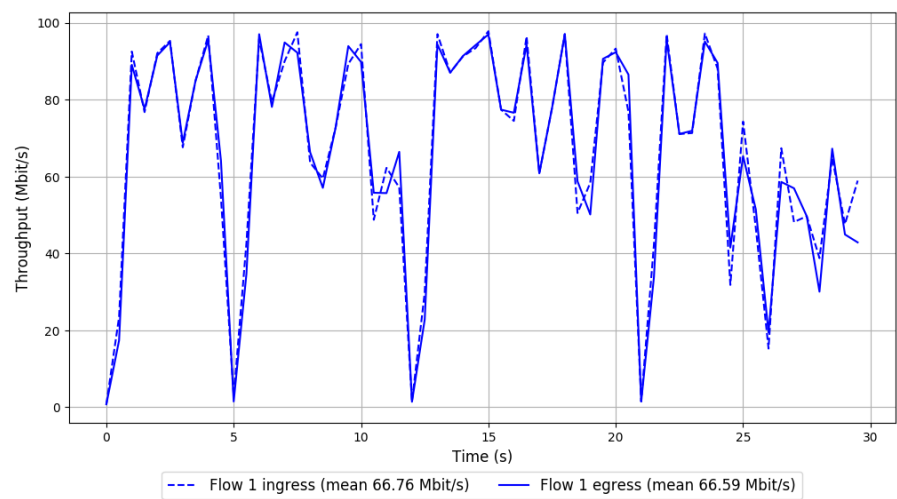
-- Flow 1:

Average throughput: 66.59 Mbit/s

95th percentile per-packet one-way delay: 59.062 ms

Loss rate: 0.63%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-02-04 05:07:49

End at: 2018-02-04 05:08:20

Local clock offset: -0.229 ms

Remote clock offset: 4.003 ms

# Below is generated by plot.py at 2018-02-04 12:02:17

# Datalink statistics

-- Total of 1 flow:

Average throughput: 65.54 Mbit/s

95th percentile per-packet one-way delay: 59.237 ms

Loss rate: 0.06%

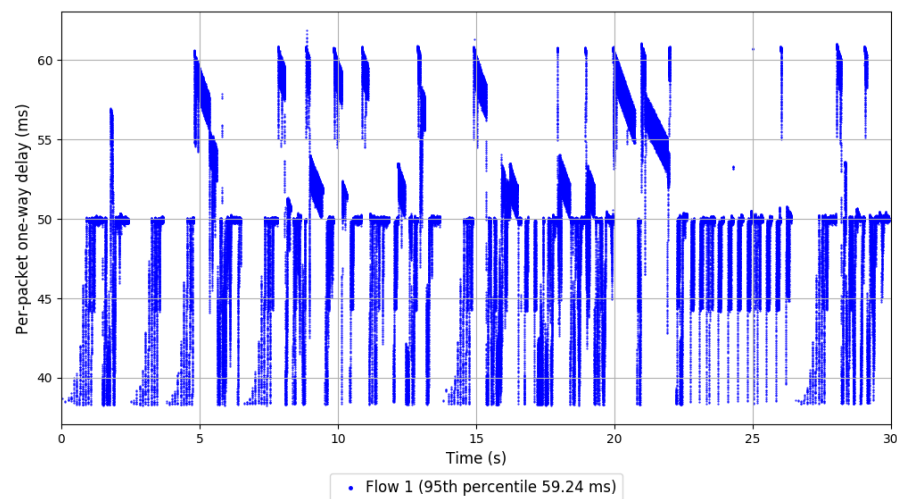
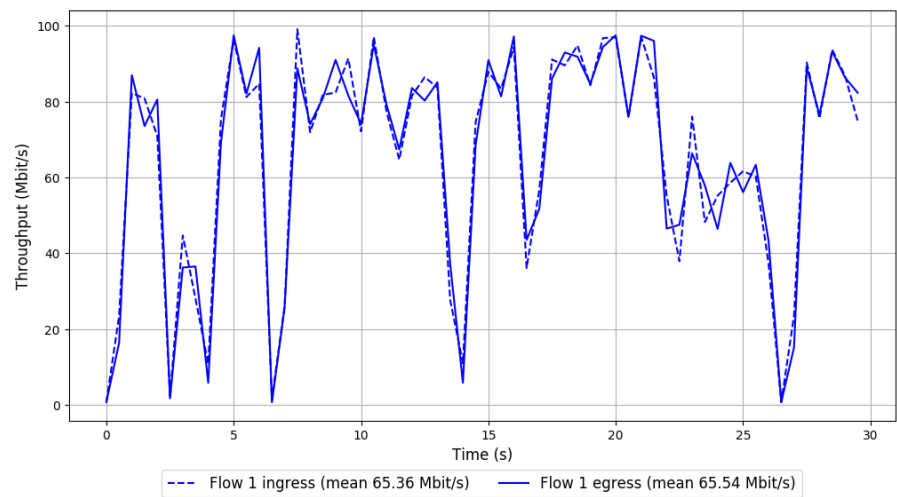
-- Flow 1:

Average throughput: 65.54 Mbit/s

95th percentile per-packet one-way delay: 59.237 ms

Loss rate: 0.06%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2018-02-04 05:29:34

End at: 2018-02-04 05:30:04

Local clock offset: 0.175 ms

Remote clock offset: 4.934 ms

# Below is generated by plot.py at 2018-02-04 12:02:17

# Datalink statistics

-- Total of 1 flow:

Average throughput: 55.95 Mbit/s

95th percentile per-packet one-way delay: 59.243 ms

Loss rate: 0.36%

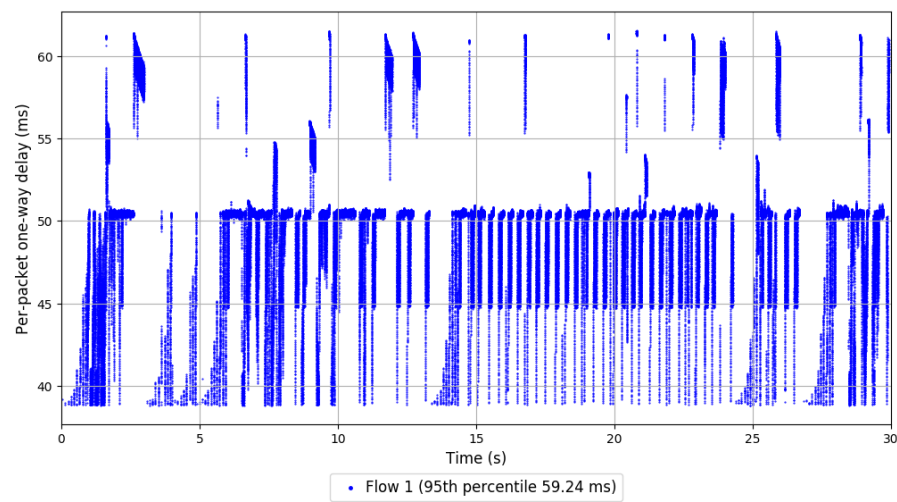
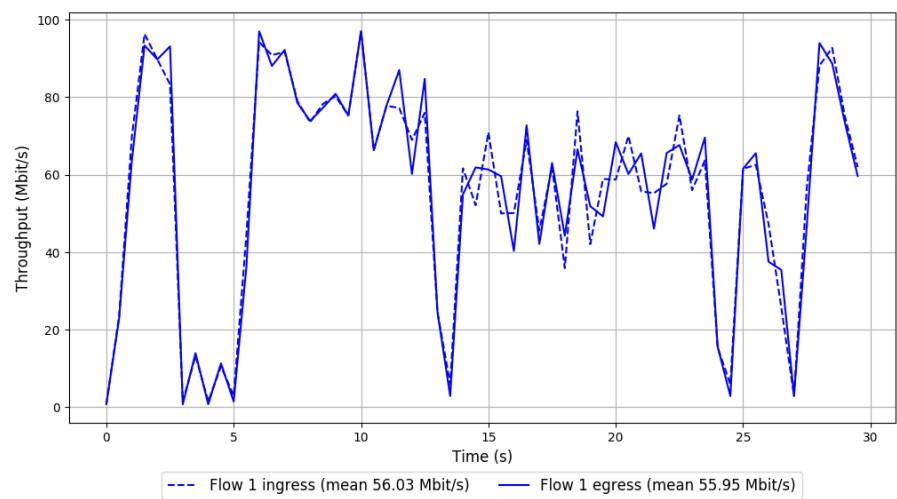
-- Flow 1:

Average throughput: 55.95 Mbit/s

95th percentile per-packet one-way delay: 59.243 ms

Loss rate: 0.36%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2018-02-04 05:55:26

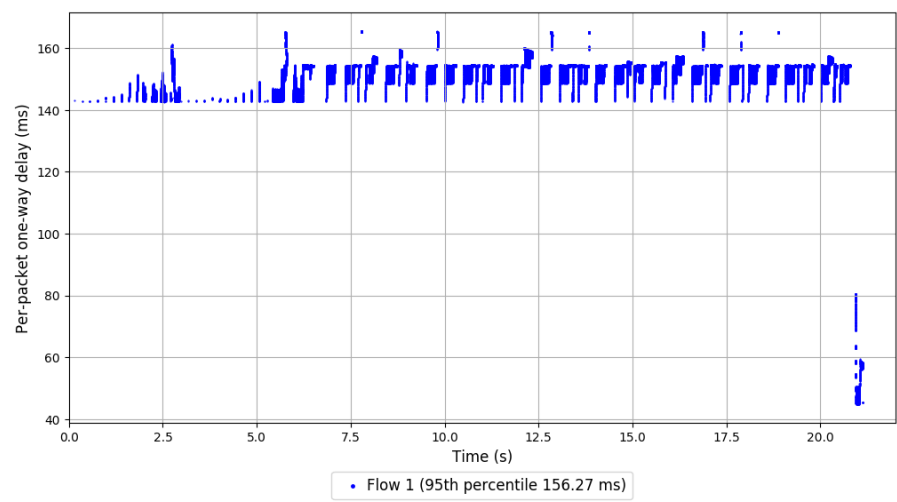
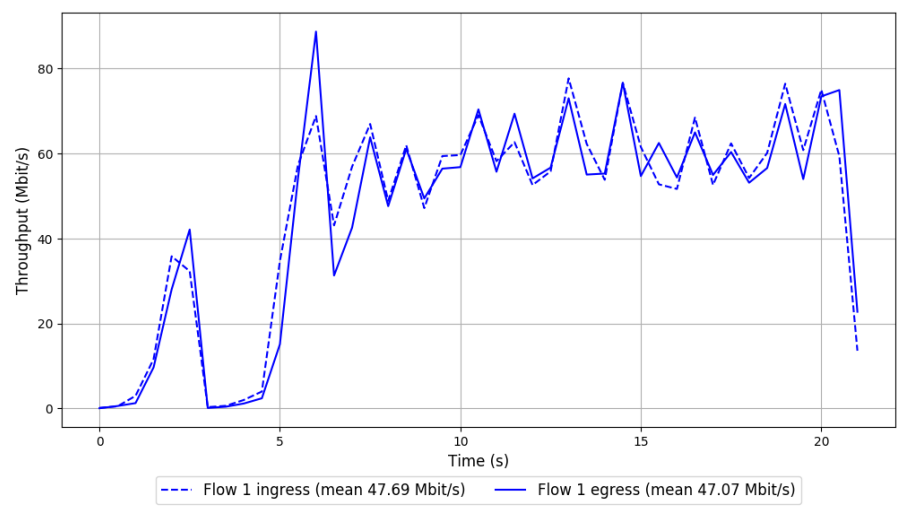
End at: 2018-02-04 05:55:56

Local clock offset: 0.711 ms

Remote clock offset: 6.105 ms



Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2018-02-04 06:21:47

End at: 2018-02-04 06:22:17

Local clock offset: 1.297 ms

Remote clock offset: 6.416 ms

# Below is generated by plot.py at 2018-02-04 12:02:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 80.42 Mbit/s

95th percentile per-packet one-way delay: 59.982 ms

Loss rate: 0.49%

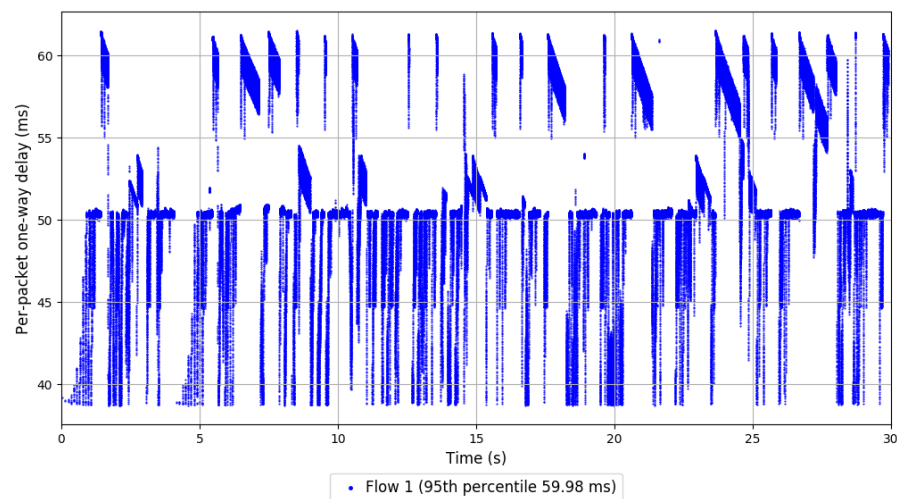
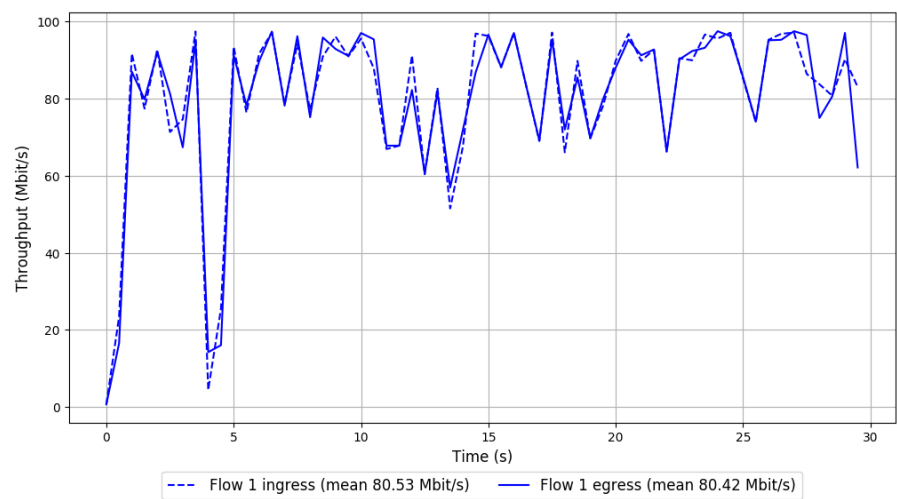
-- Flow 1:

Average throughput: 80.42 Mbit/s

95th percentile per-packet one-way delay: 59.982 ms

Loss rate: 0.49%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2018-02-04 06:45:14

End at: 2018-02-04 06:45:44

Local clock offset: 1.247 ms

Remote clock offset: 7.198 ms

# Below is generated by plot.py at 2018-02-04 12:02:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 70.50 Mbit/s

95th percentile per-packet one-way delay: 60.172 ms

Loss rate: 0.56%

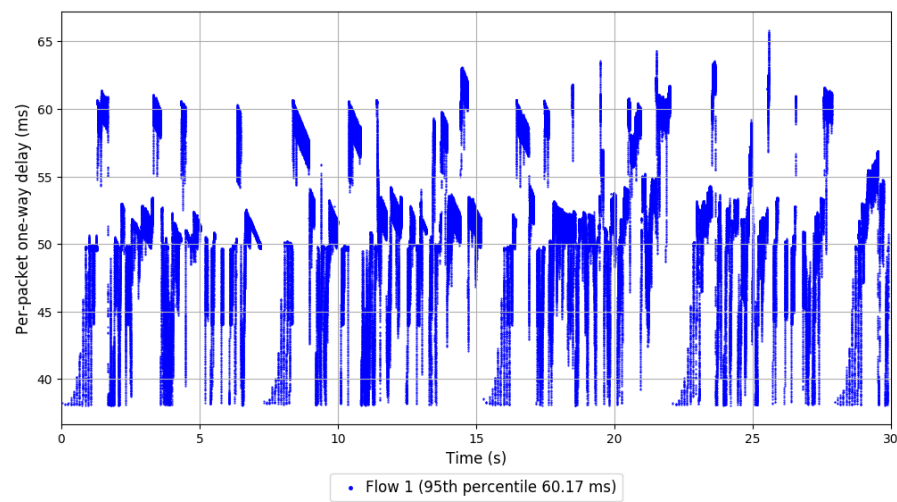
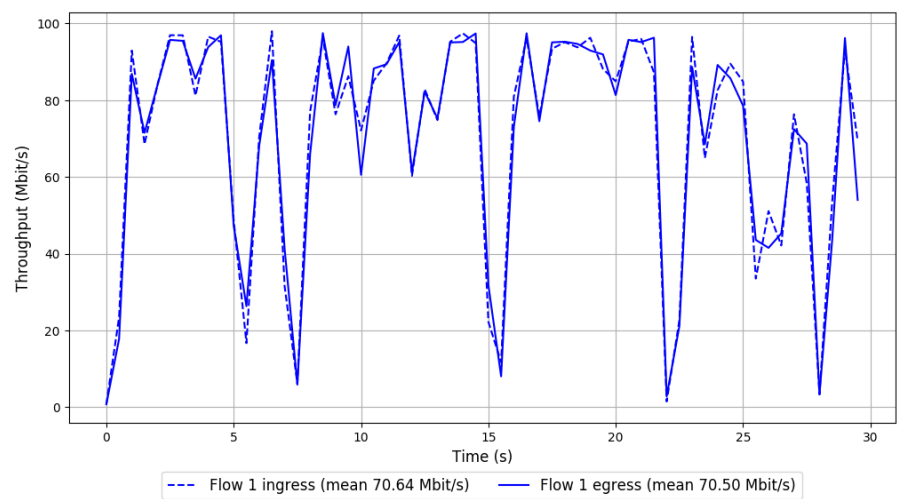
-- Flow 1:

Average throughput: 70.50 Mbit/s

95th percentile per-packet one-way delay: 60.172 ms

Loss rate: 0.56%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2018-02-04 07:08:50

End at: 2018-02-04 07:09:20

Local clock offset: 1.264 ms

Remote clock offset: 7.843 ms

# Below is generated by plot.py at 2018-02-04 12:03:16

# Datalink statistics

-- Total of 1 flow:

Average throughput: 88.28 Mbit/s

95th percentile per-packet one-way delay: 59.379 ms

Loss rate: 0.49%

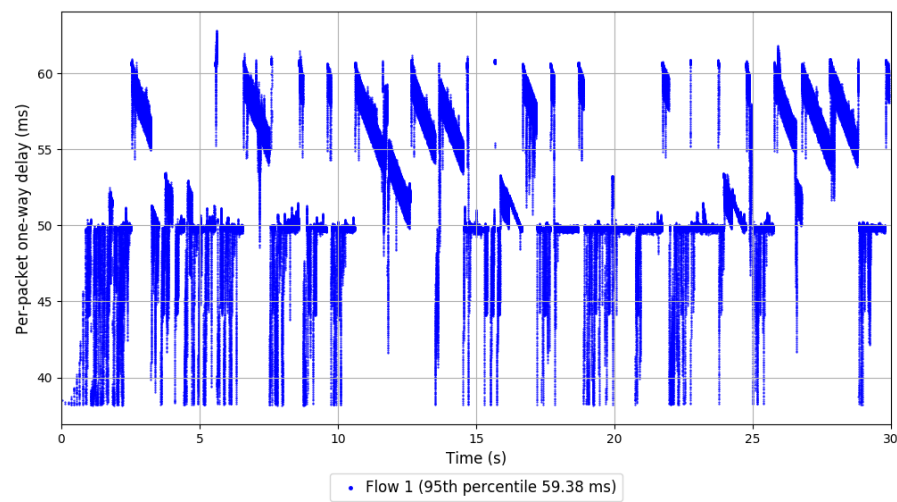
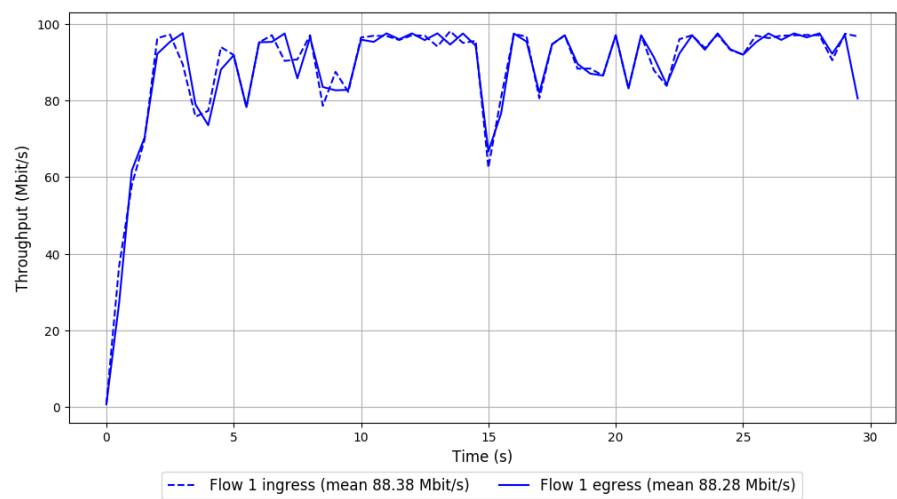
-- Flow 1:

Average throughput: 88.28 Mbit/s

95th percentile per-packet one-way delay: 59.379 ms

Loss rate: 0.49%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2018-02-04 07:30:37

End at: 2018-02-04 07:31:07

Local clock offset: 1.175 ms

Remote clock offset: 9.186 ms

# Below is generated by plot.py at 2018-02-04 12:03:16

# Datalink statistics

-- Total of 1 flow:

Average throughput: 77.04 Mbit/s

95th percentile per-packet one-way delay: 59.594 ms

Loss rate: 0.46%

-- Flow 1:

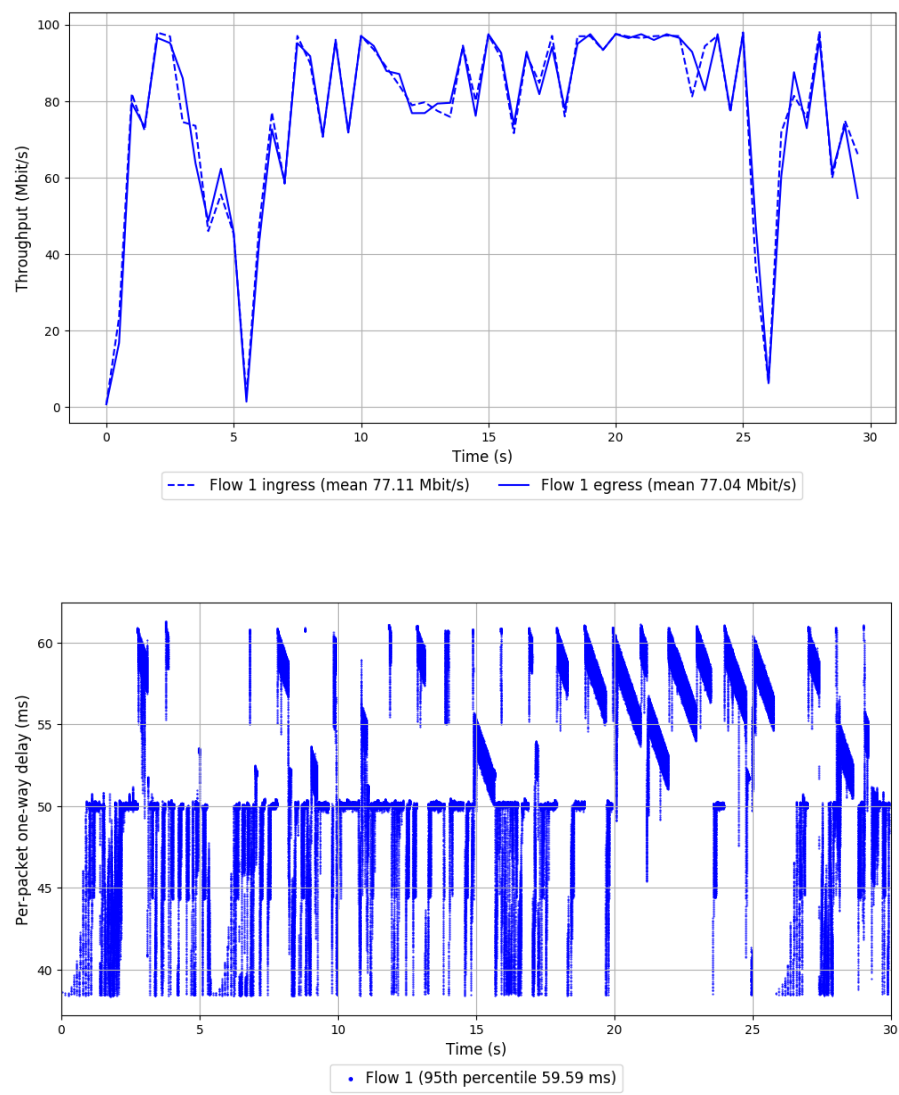
Average throughput: 77.04 Mbit/s

95th percentile per-packet one-way delay: 59.594 ms

Loss rate: 0.46%



Run 9: Report of Verus — Data Link

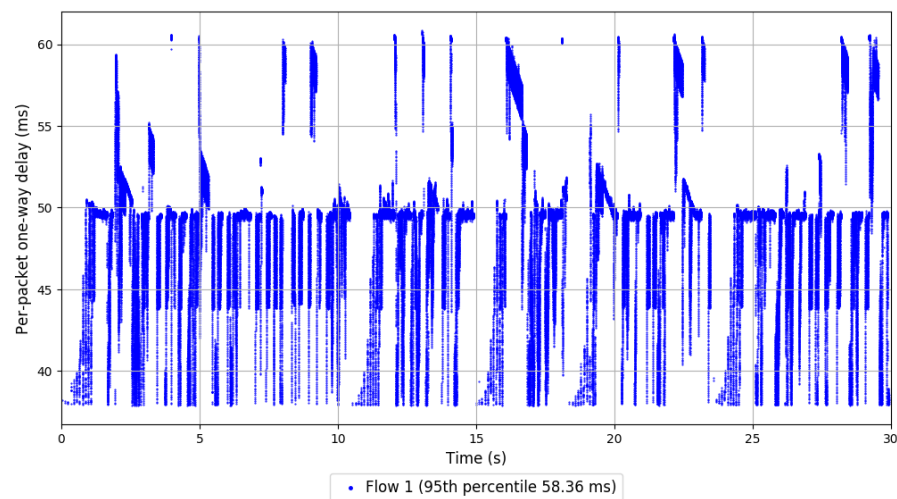
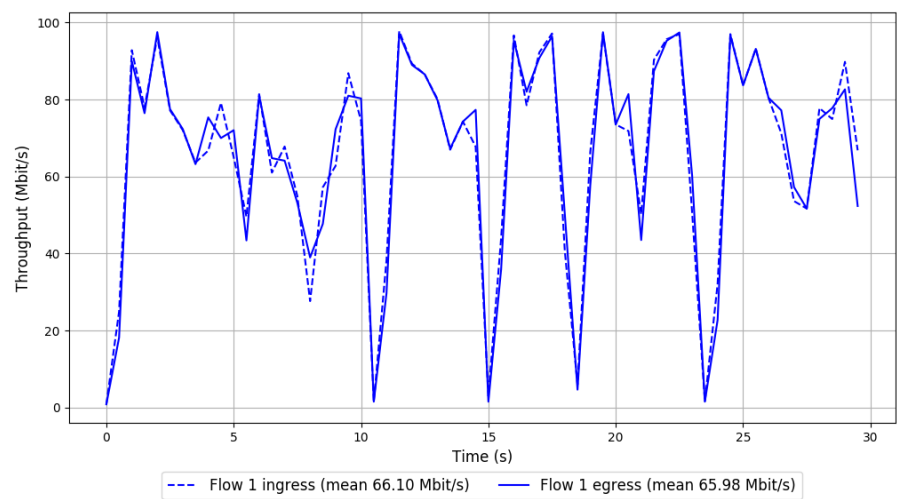


Run 10: Statistics of Verus

Start at: 2018-02-04 07:52:24  
End at: 2018-02-04 07:52:54  
Local clock offset: 0.579 ms  
Remote clock offset: 10.243 ms

# Below is generated by plot.py at 2018-02-04 12:03:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 65.98 Mbit/s  
95th percentile per-packet one-way delay: 58.363 ms  
Loss rate: 0.55%  
-- Flow 1:  
Average throughput: 65.98 Mbit/s  
95th percentile per-packet one-way delay: 58.363 ms  
Loss rate: 0.55%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2018-02-04 04:31:27

End at: 2018-02-04 04:31:58

Local clock offset: -0.343 ms

Remote clock offset: 2.517 ms

# Below is generated by plot.py at 2018-02-04 12:03:16

# Datalink statistics

-- Total of 1 flow:

Average throughput: 42.00 Mbit/s

95th percentile per-packet one-way delay: 38.298 ms

Loss rate: 0.31%

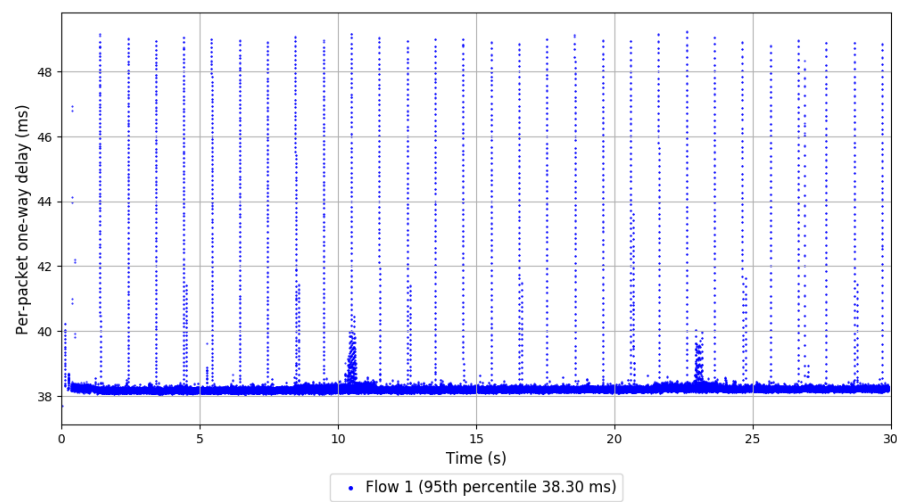
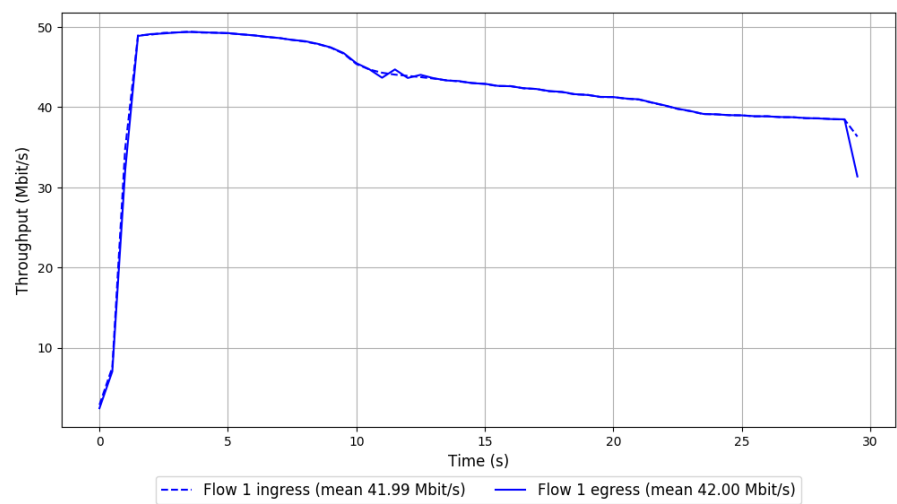
-- Flow 1:

Average throughput: 42.00 Mbit/s

95th percentile per-packet one-way delay: 38.298 ms

Loss rate: 0.31%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2018-02-04 04:53:16

End at: 2018-02-04 04:53:46

Local clock offset: -0.069 ms

Remote clock offset: 3.346 ms

# Below is generated by plot.py at 2018-02-04 12:03:16

# Datalink statistics

-- Total of 1 flow:

Average throughput: 39.16 Mbit/s

95th percentile per-packet one-way delay: 38.657 ms

Loss rate: 0.37%

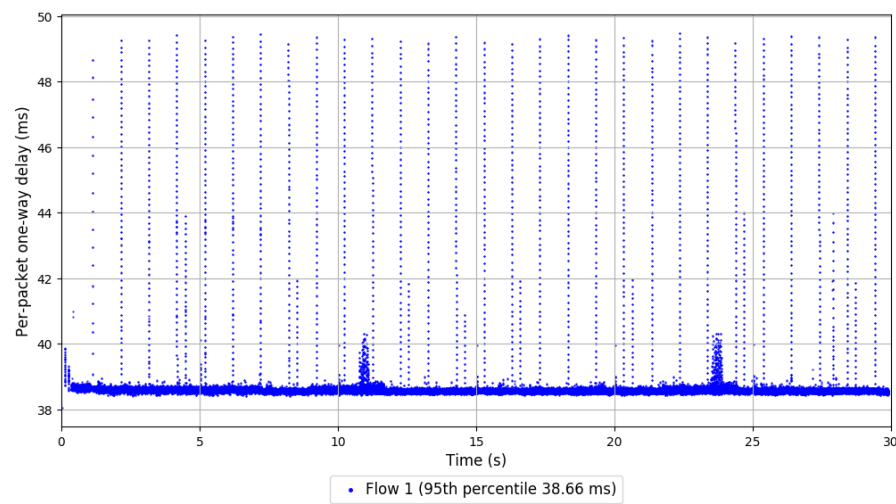
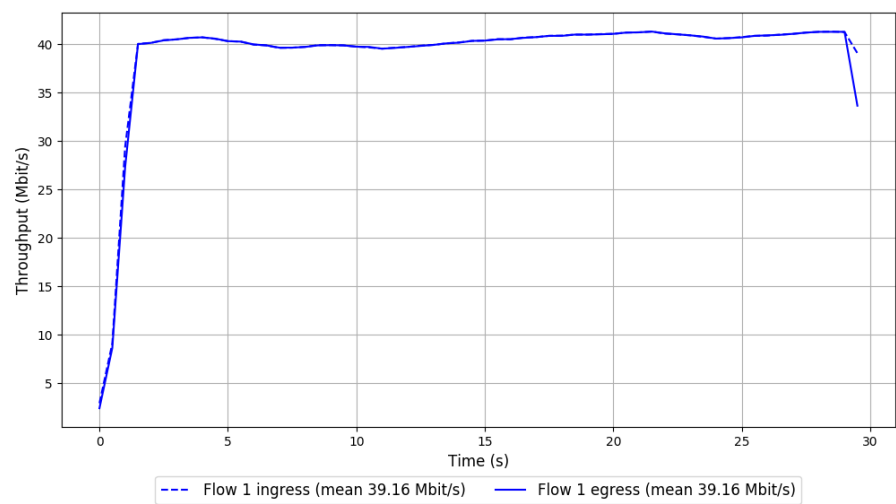
-- Flow 1:

Average throughput: 39.16 Mbit/s

95th percentile per-packet one-way delay: 38.657 ms

Loss rate: 0.37%

Run 2: Report of Copa — Data Link



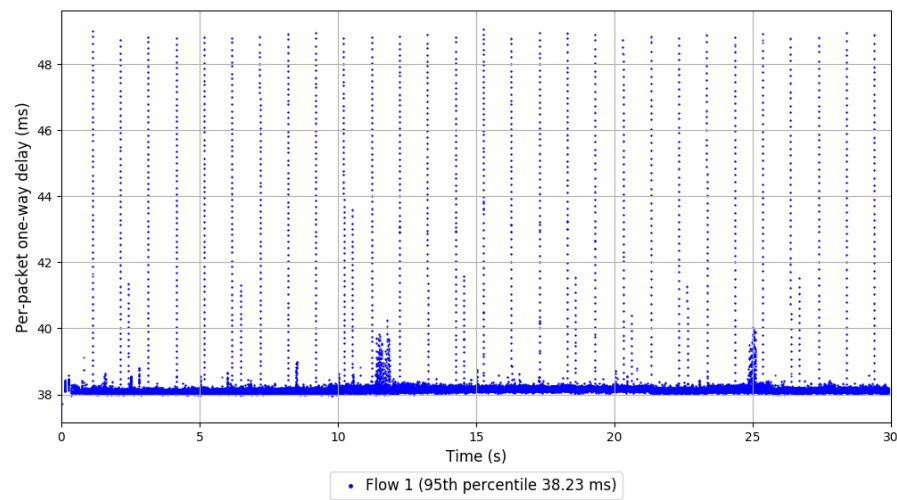
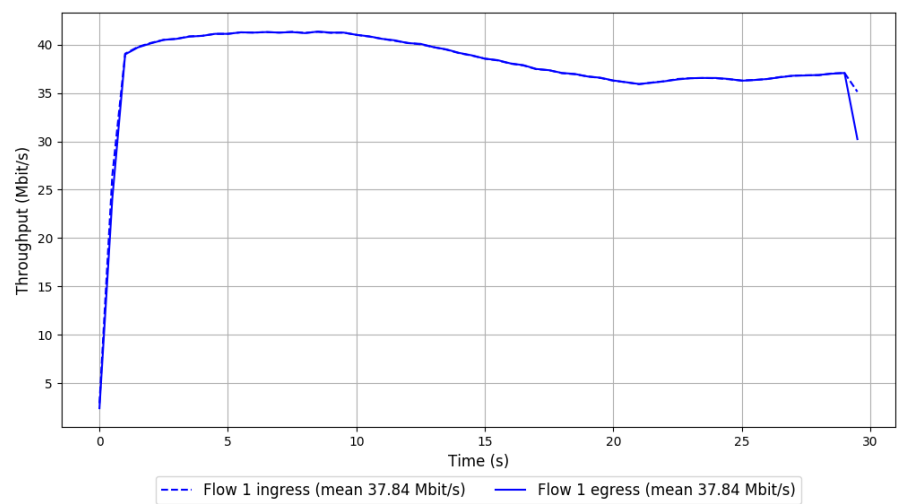
Run 3: Statistics of Copa

Start at: 2018-02-04 05:15:03  
End at: 2018-02-04 05:15:33  
Local clock offset: -0.273 ms  
Remote clock offset: 4.367 ms

# Below is generated by plot.py at 2018-02-04 12:03:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 37.84 Mbit/s  
95th percentile per-packet one-way delay: 38.228 ms  
Loss rate: 0.34%  
-- Flow 1:  
Average throughput: 37.84 Mbit/s  
95th percentile per-packet one-way delay: 38.228 ms  
Loss rate: 0.34%



Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-02-04 05:36:47

End at: 2018-02-04 05:37:17

Local clock offset: -0.105 ms

Remote clock offset: 5.296 ms

# Below is generated by plot.py at 2018-02-04 12:03:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 45.05 Mbit/s

95th percentile per-packet one-way delay: 37.926 ms

Loss rate: 0.35%

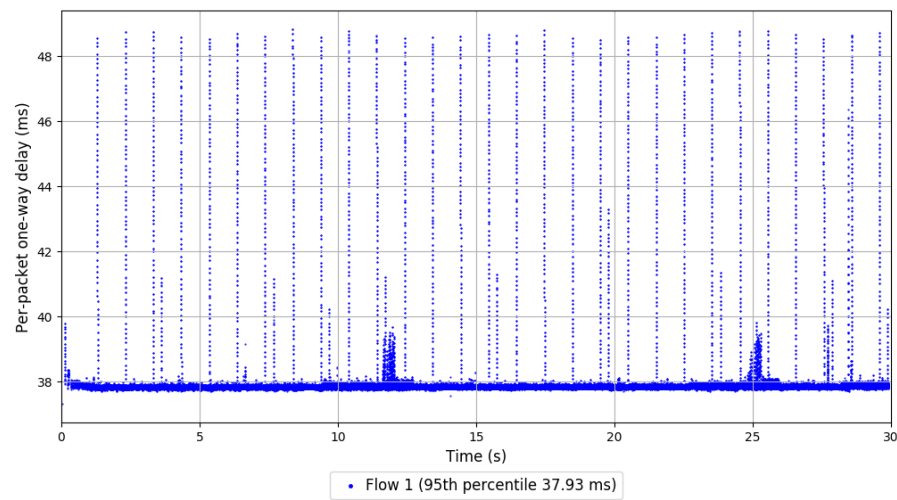
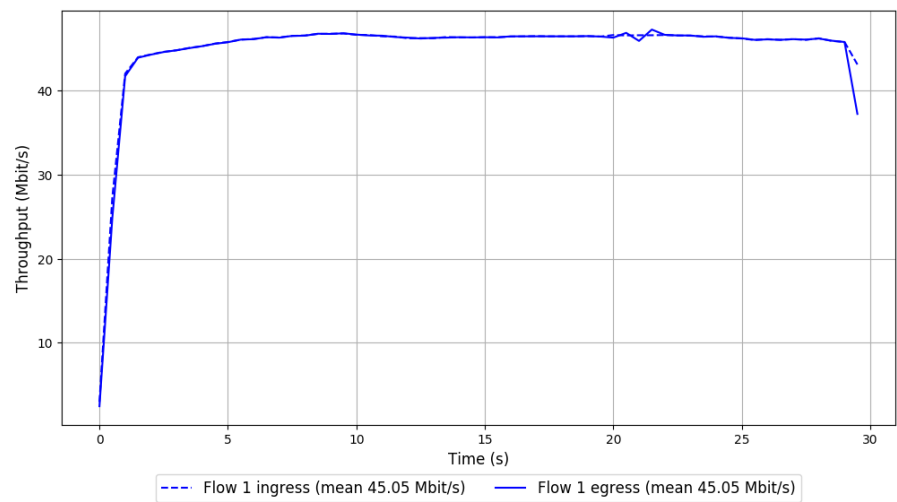
-- Flow 1:

Average throughput: 45.05 Mbit/s

95th percentile per-packet one-way delay: 37.926 ms

Loss rate: 0.35%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2018-02-04 06:05:58

End at: 2018-02-04 06:06:28

Local clock offset: 0.906 ms

Remote clock offset: 6.121 ms

# Below is generated by plot.py at 2018-02-04 12:03:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 32.24 Mbit/s

95th percentile per-packet one-way delay: 142.615 ms

Loss rate: 13.20%

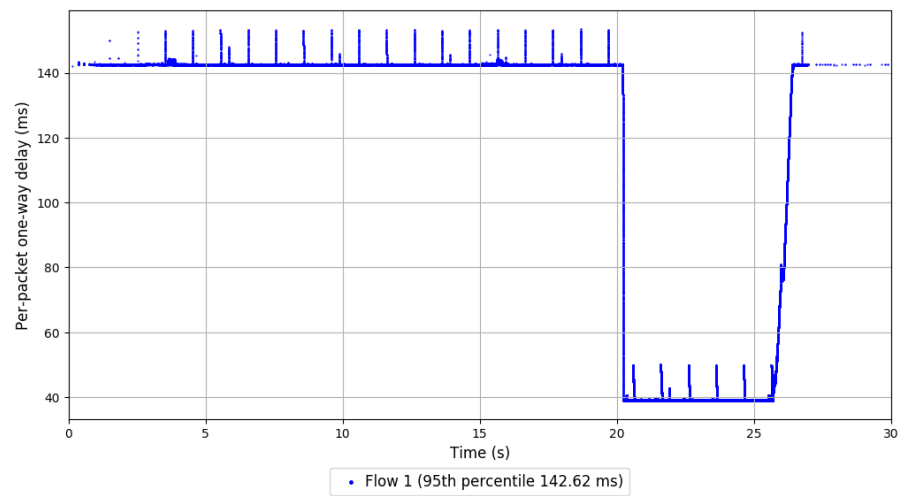
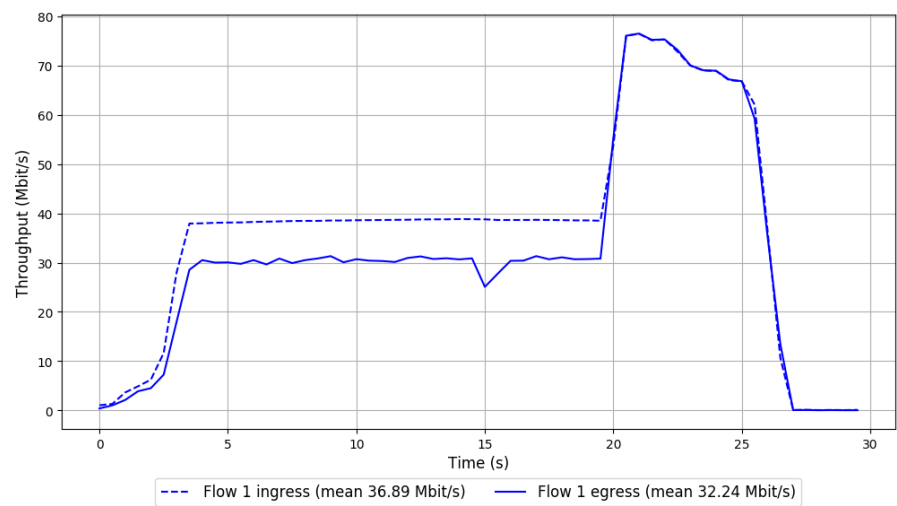
-- Flow 1:

Average throughput: 32.24 Mbit/s

95th percentile per-packet one-way delay: 142.615 ms

Loss rate: 13.20%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2018-02-04 06:29:00

End at: 2018-02-04 06:29:30

Local clock offset: 0.926 ms

Remote clock offset: 6.657 ms

# Below is generated by plot.py at 2018-02-04 12:04:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 41.53 Mbit/s

95th percentile per-packet one-way delay: 38.791 ms

Loss rate: 0.33%

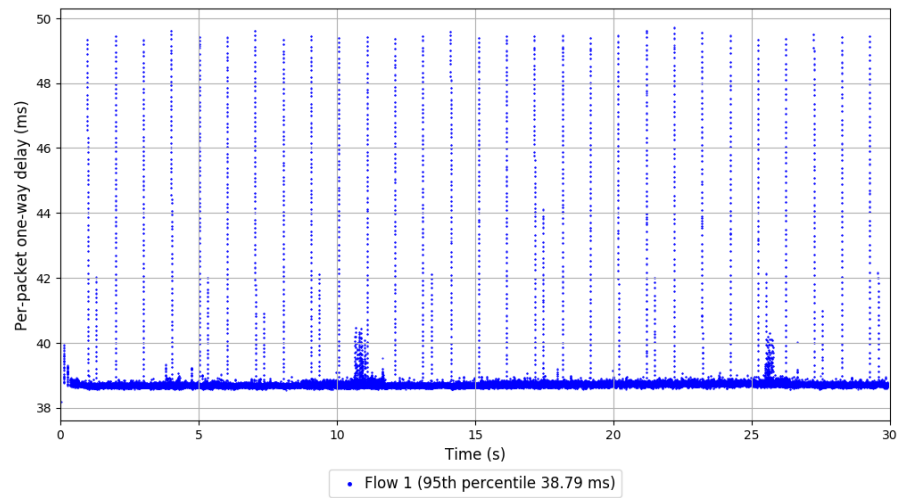
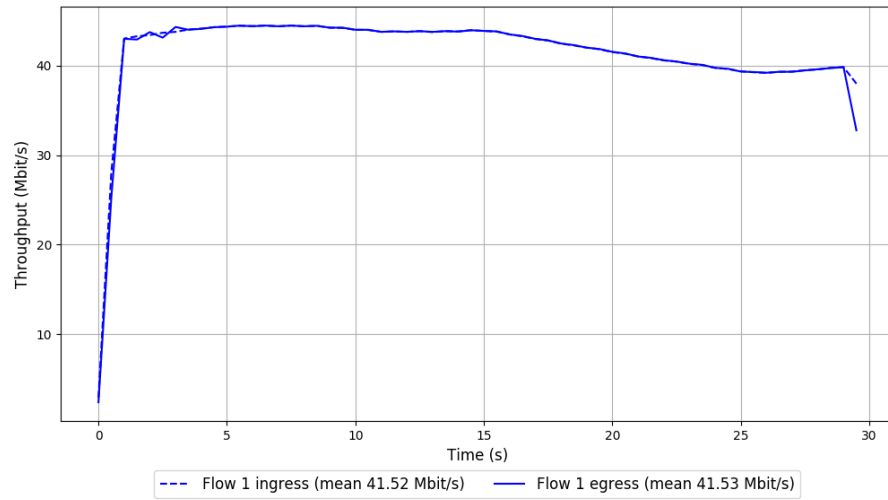
-- Flow 1:

Average throughput: 41.53 Mbit/s

95th percentile per-packet one-way delay: 38.791 ms

Loss rate: 0.33%

## Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2018-02-04 06:53:40

End at: 2018-02-04 06:54:10

Local clock offset: 0.769 ms

Remote clock offset: 7.208 ms



Run 7: Report of Copa — Data Link

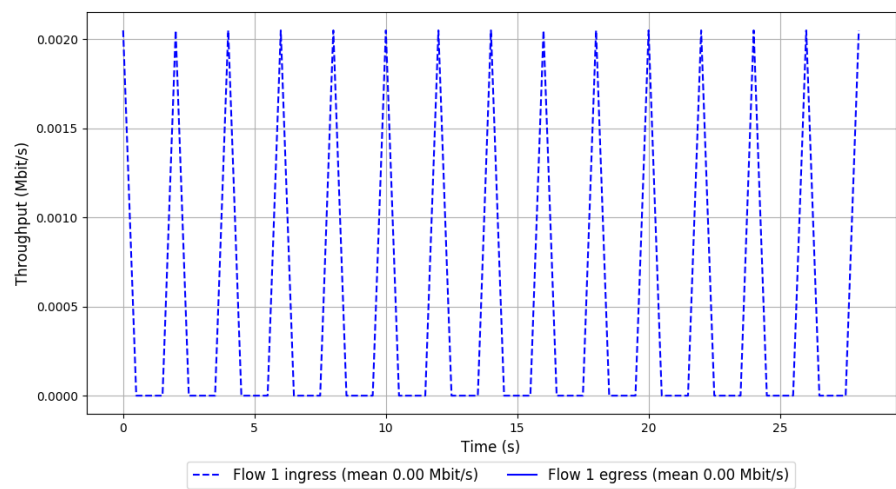


Figure is missing

Run 8: Statistics of Copa

Start at: 2018-02-04 07:16:04

End at: 2018-02-04 07:16:34

Local clock offset: 1.283 ms

Remote clock offset: 8.18 ms

# Below is generated by plot.py at 2018-02-04 12:04:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 39.27 Mbit/s

95th percentile per-packet one-way delay: 38.961 ms

Loss rate: 0.38%

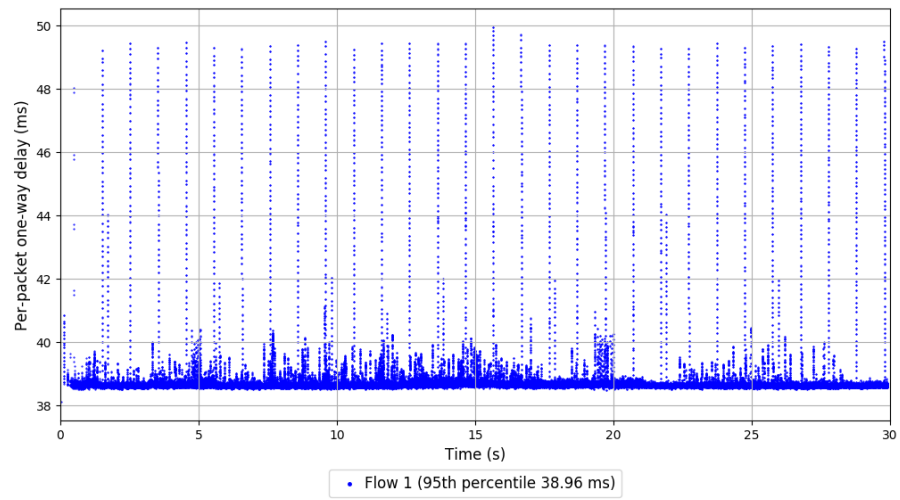
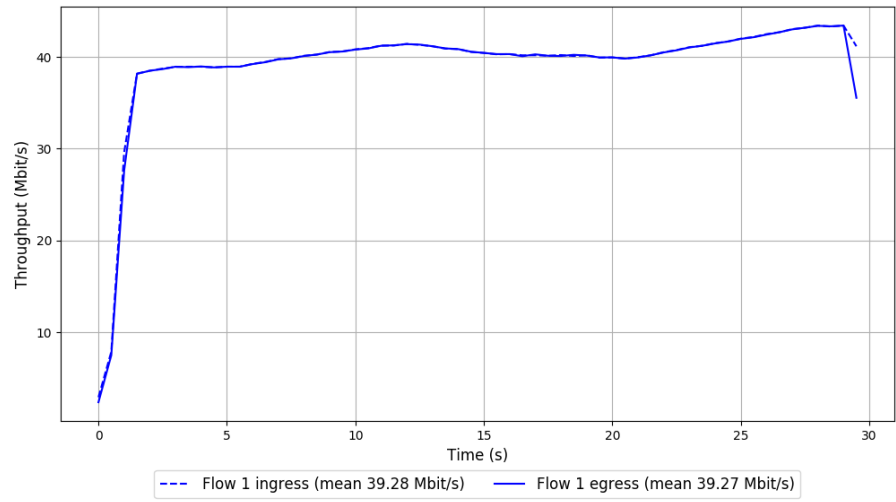
-- Flow 1:

Average throughput: 39.27 Mbit/s

95th percentile per-packet one-way delay: 38.961 ms

Loss rate: 0.38%

## Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2018-02-04 07:37:51

End at: 2018-02-04 07:38:21

Local clock offset: 0.942 ms

Remote clock offset: 9.702 ms

# Below is generated by plot.py at 2018-02-04 12:04:18

# Datalink statistics

-- Total of 1 flow:

Average throughput: 42.29 Mbit/s

95th percentile per-packet one-way delay: 38.660 ms

Loss rate: 0.26%

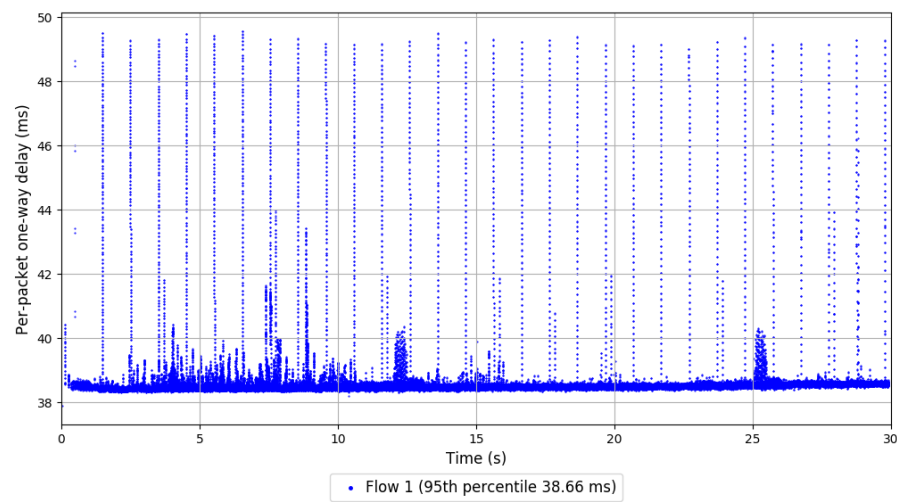
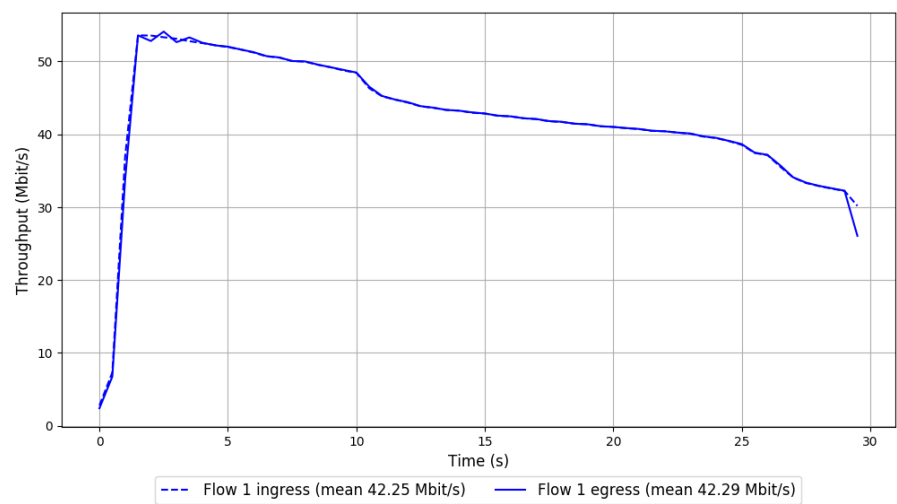
-- Flow 1:

Average throughput: 42.29 Mbit/s

95th percentile per-packet one-way delay: 38.660 ms

Loss rate: 0.26%

Run 9: Report of Copa — Data Link

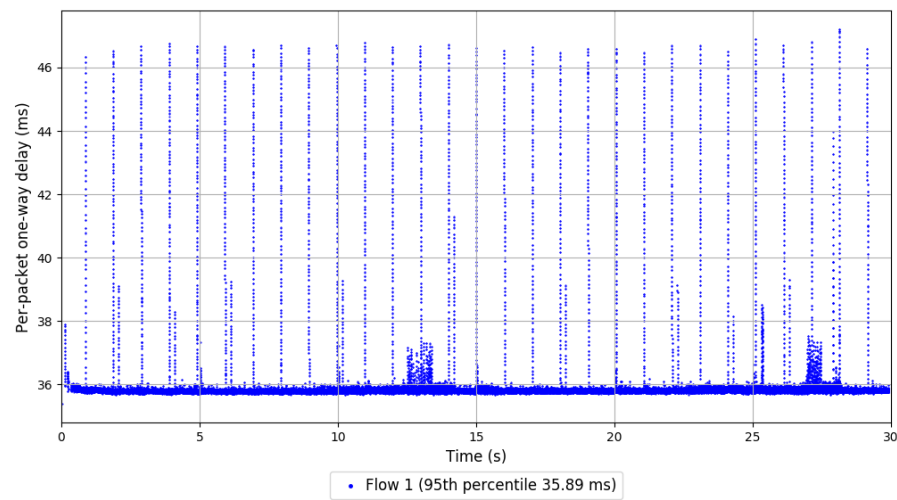
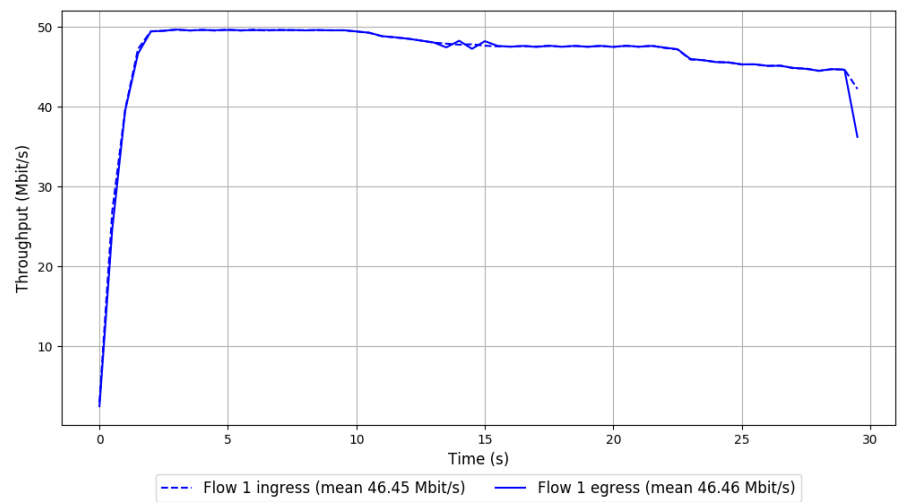


Run 10: Statistics of Copa

Start at: 2018-02-04 07:59:37  
End at: 2018-02-04 08:00:07  
Local clock offset: -1.88 ms  
Remote clock offset: 10.456 ms

# Below is generated by plot.py at 2018-02-04 12:04:25  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 46.46 Mbit/s  
95th percentile per-packet one-way delay: 35.886 ms  
Loss rate: 0.33%  
-- Flow 1:  
Average throughput: 46.46 Mbit/s  
95th percentile per-packet one-way delay: 35.886 ms  
Loss rate: 0.33%

Run 10: Report of Copa — Data Link



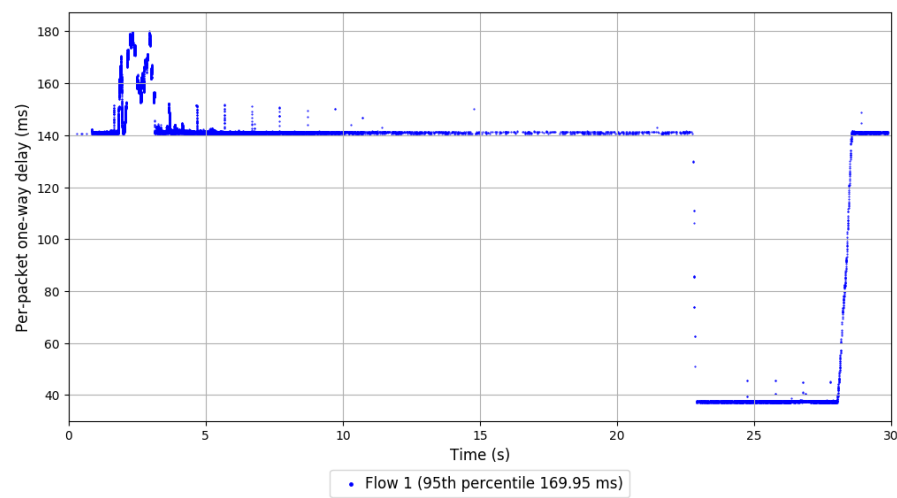
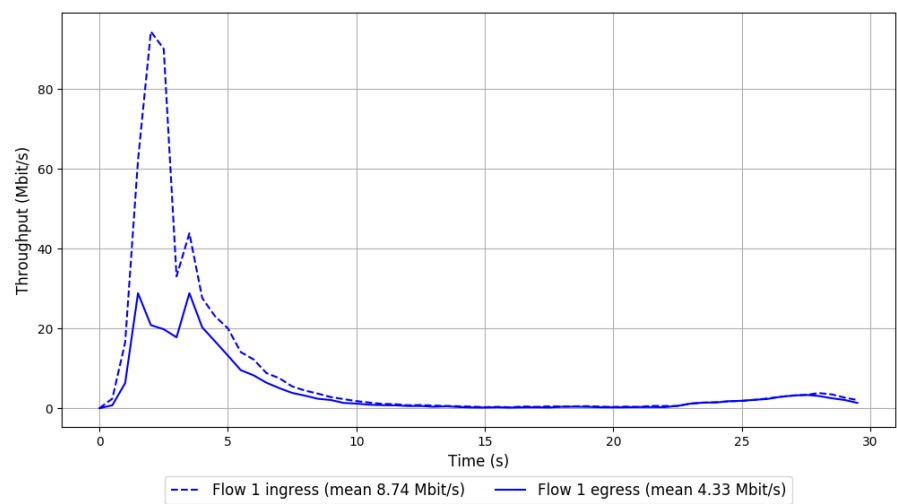
```
Run 1: Statistics of FillP

Start at: 2018-02-04 04:19:18
End at: 2018-02-04 04:19:48
Local clock offset: -1.036 ms
Remote clock offset: 2.184 ms

# Below is generated by plot.py at 2018-02-04 12:04:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 169.950 ms
Loss rate: 51.08%
-- Flow 1:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 169.950 ms
Loss rate: 51.08%
```



Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2018-02-04 04:43:33

End at: 2018-02-04 04:44:03

Local clock offset: 0.052 ms

Remote clock offset: 2.927 ms

# Below is generated by plot.py at 2018-02-04 12:05:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 86.58 Mbit/s

95th percentile per-packet one-way delay: 50.030 ms

Loss rate: 0.38%

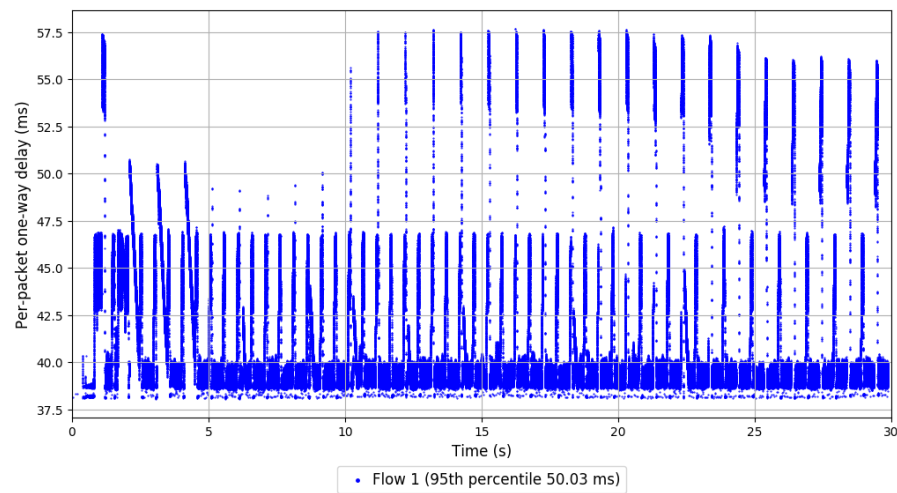
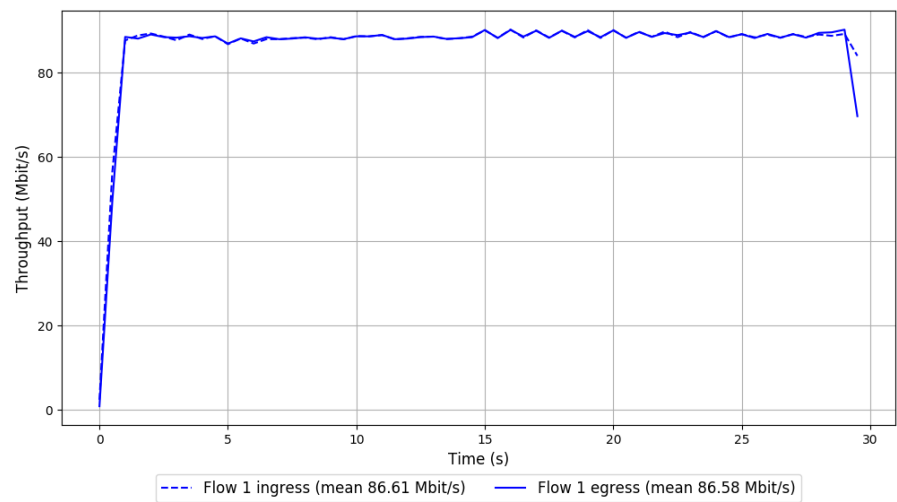
-- Flow 1:

Average throughput: 86.58 Mbit/s

95th percentile per-packet one-way delay: 50.030 ms

Loss rate: 0.38%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

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

End at: 2018-02-04 05:05:50

Local clock offset: 0.089 ms

Remote clock offset: 3.883 ms

# Below is generated by plot.py at 2018-02-04 12:05:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 86.45 Mbit/s

95th percentile per-packet one-way delay: 49.140 ms

Loss rate: 0.40%

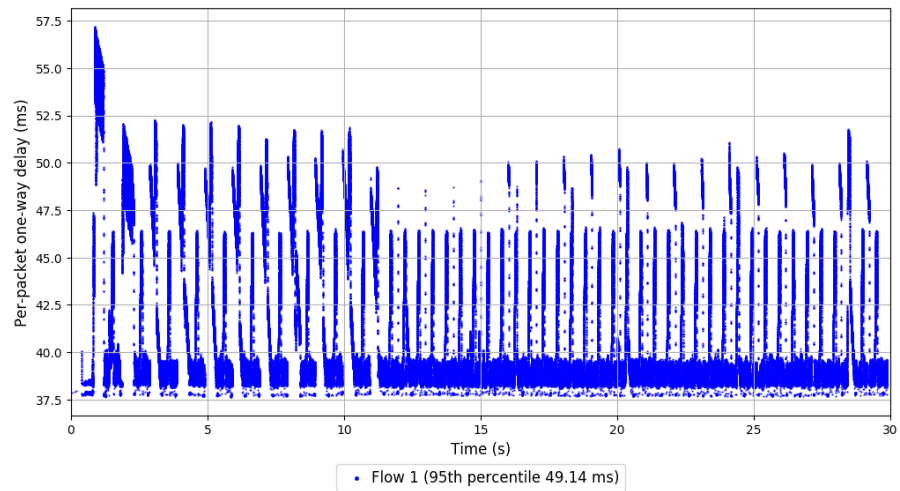
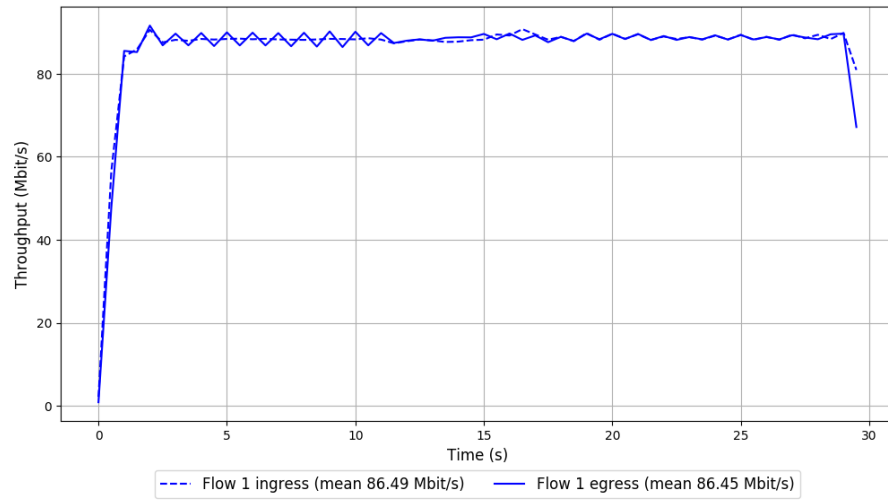
-- Flow 1:

Average throughput: 86.45 Mbit/s

95th percentile per-packet one-way delay: 49.140 ms

Loss rate: 0.40%

### Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-02-04 05:27:04

End at: 2018-02-04 05:27:35

Local clock offset: 0.46 ms

Remote clock offset: 4.855 ms

# Below is generated by plot.py at 2018-02-04 12:06:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 86.91 Mbit/s

95th percentile per-packet one-way delay: 49.563 ms

Loss rate: 0.38%

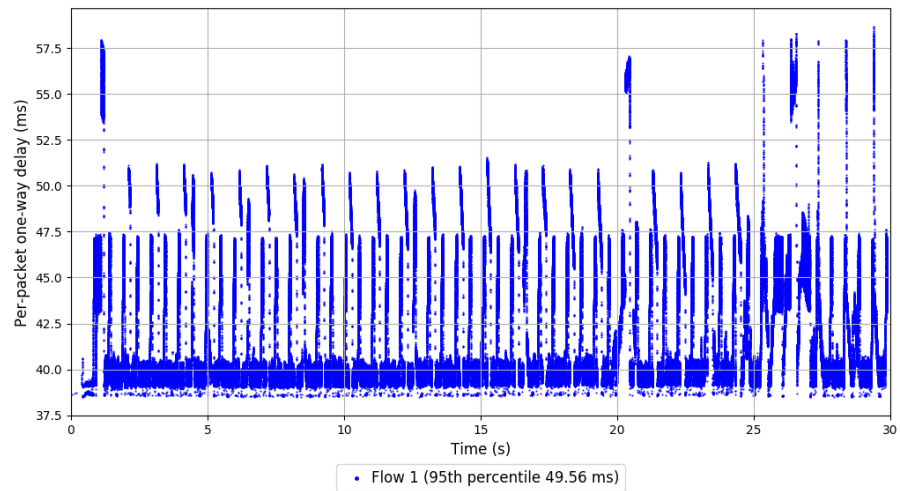
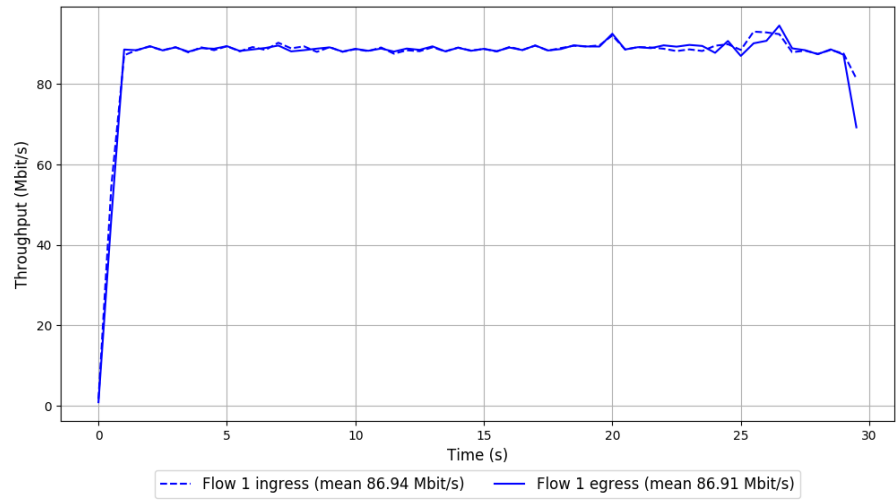
-- Flow 1:

Average throughput: 86.91 Mbit/s

95th percentile per-packet one-way delay: 49.563 ms

Loss rate: 0.38%

#### Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2018-02-04 05:49:35

End at: 2018-02-04 05:50:05

Local clock offset: 0.035 ms

Remote clock offset: 5.922 ms

# Below is generated by plot.py at 2018-02-04 12:06:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.67 Mbit/s

95th percentile per-packet one-way delay: 153.252 ms

Loss rate: 2.93%

-- Flow 1:

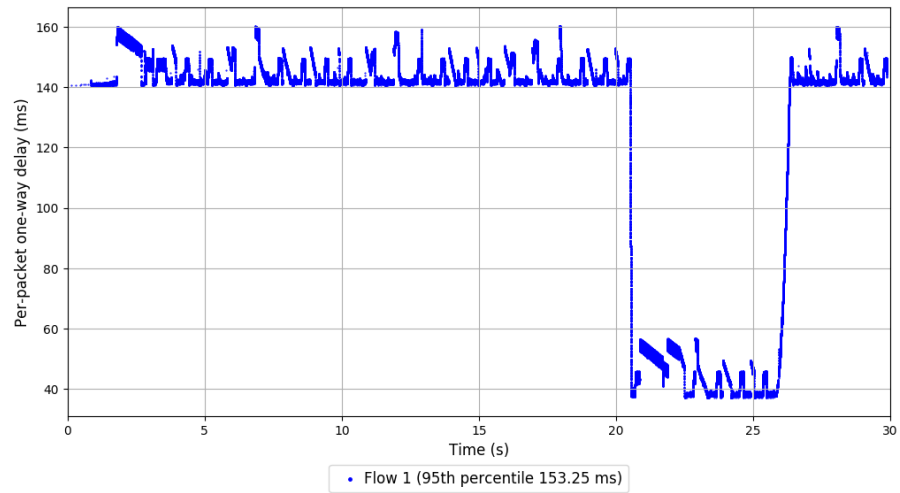
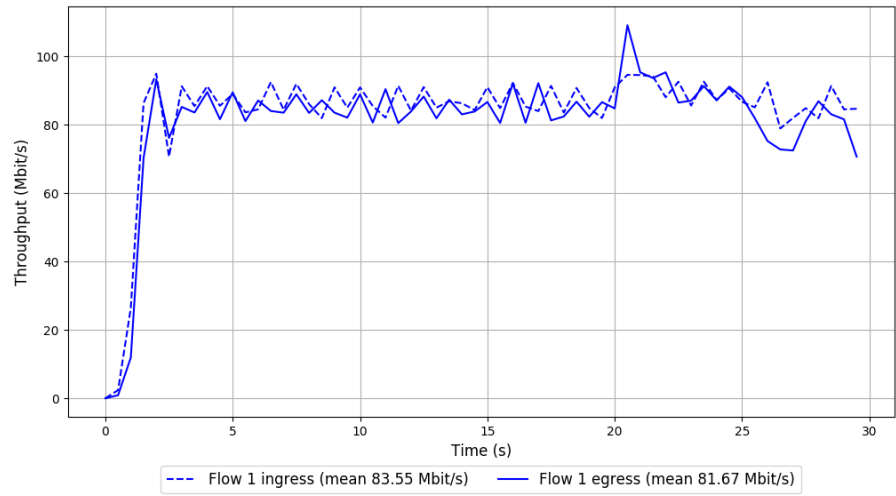
Average throughput: 81.67 Mbit/s

95th percentile per-packet one-way delay: 153.252 ms

Loss rate: 2.93%



### Run 5: Report of FillP — Data Link



Run 6: Statistics of FillP

Start at: 2018-02-04 06:19:17

End at: 2018-02-04 06:19:47

Local clock offset: 0.95 ms

Remote clock offset: 6.274 ms

# Below is generated by plot.py at 2018-02-04 12:06:30

# Datalink statistics

-- Total of 1 flow:

Average throughput: 86.42 Mbit/s

95th percentile per-packet one-way delay: 53.104 ms

Loss rate: 0.40%

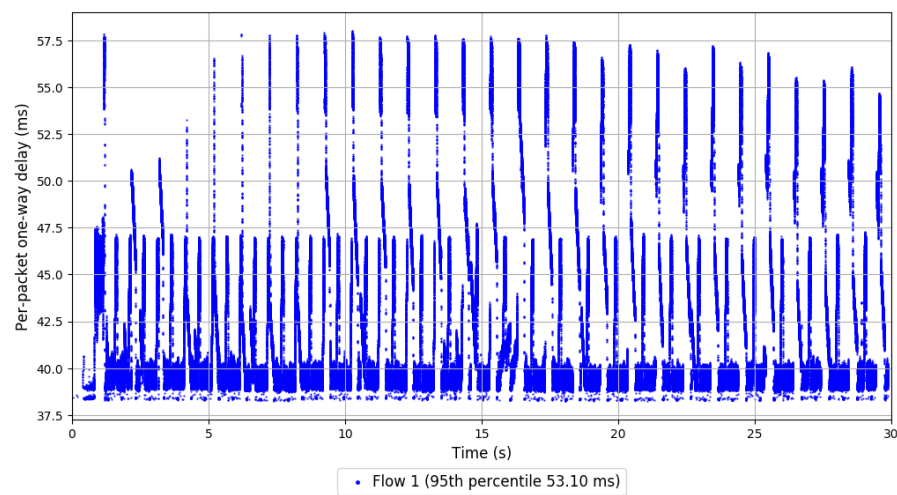
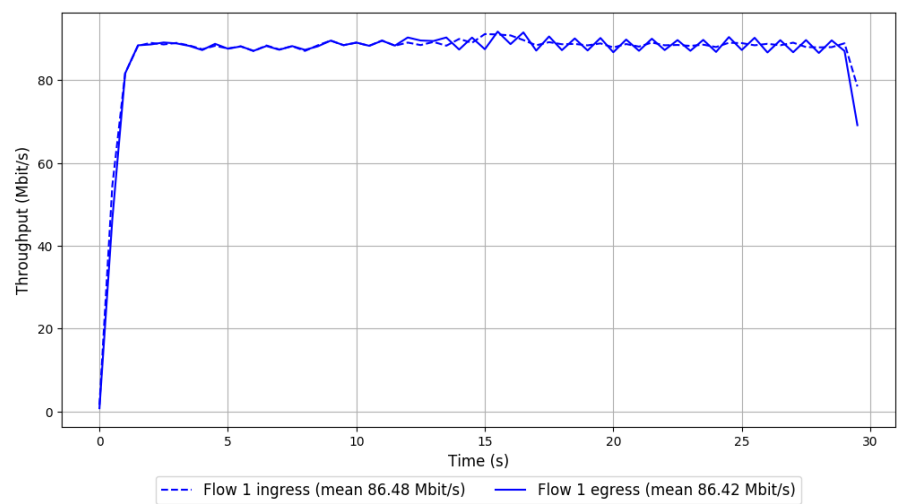
-- Flow 1:

Average throughput: 86.42 Mbit/s

95th percentile per-packet one-way delay: 53.104 ms

Loss rate: 0.40%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2018-02-04 06:42:45

End at: 2018-02-04 06:43:15

Local clock offset: 1.152 ms

Remote clock offset: 6.987 ms

# Below is generated by plot.py at 2018-02-04 12:06:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 86.44 Mbit/s

95th percentile per-packet one-way delay: 50.027 ms

Loss rate: 0.39%

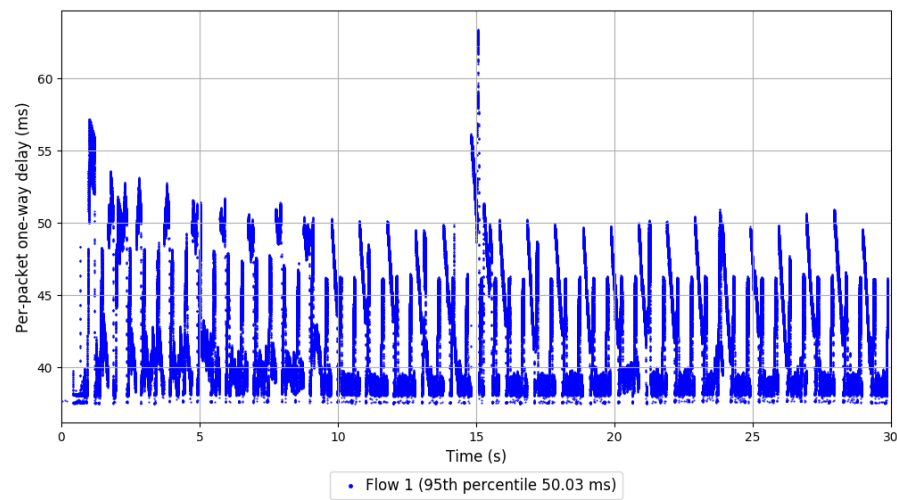
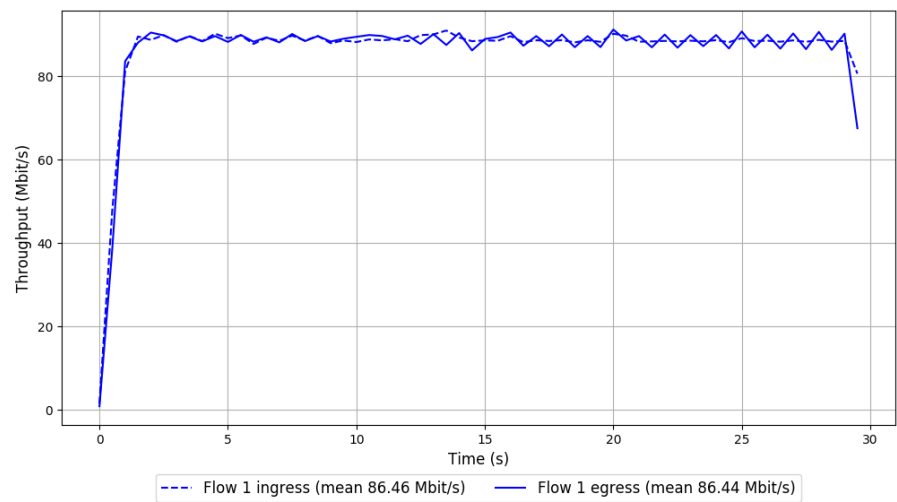
-- Flow 1:

Average throughput: 86.44 Mbit/s

95th percentile per-packet one-way delay: 50.027 ms

Loss rate: 0.39%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2018-02-04 07:06:20

End at: 2018-02-04 07:06:50

Local clock offset: 0.971 ms

Remote clock offset: 7.705 ms

# Below is generated by plot.py at 2018-02-04 12:06:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 88.40 Mbit/s

95th percentile per-packet one-way delay: 54.041 ms

Loss rate: 0.38%

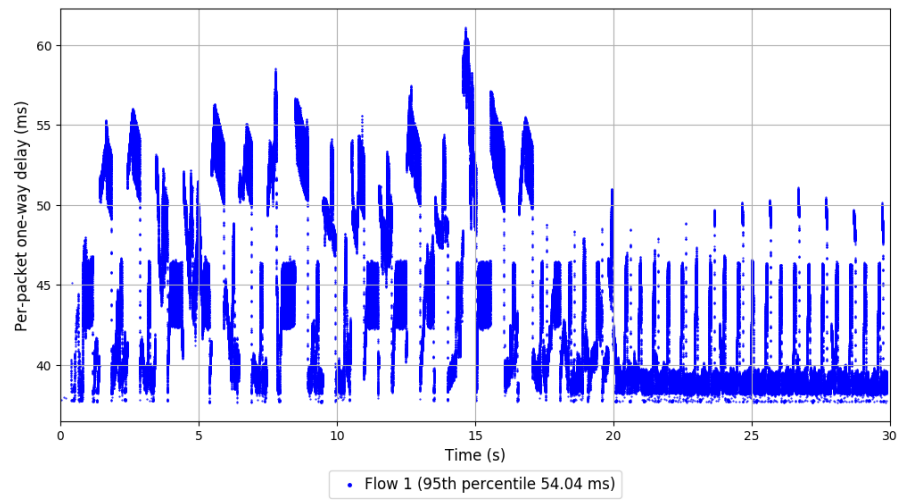
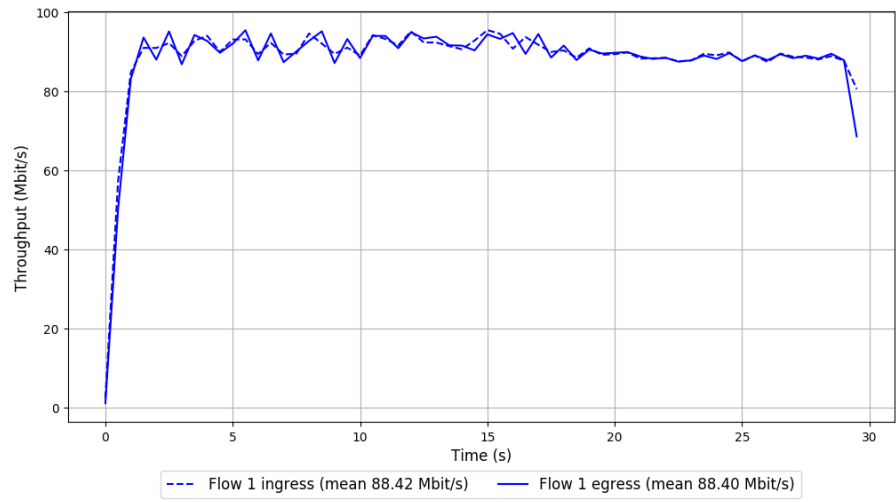
-- Flow 1:

Average throughput: 88.40 Mbit/s

95th percentile per-packet one-way delay: 54.041 ms

Loss rate: 0.38%

## Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2018-02-04 07:28:08

End at: 2018-02-04 07:28:38

Local clock offset: 1.173 ms

Remote clock offset: 8.944 ms

# Below is generated by plot.py at 2018-02-04 12:06:49

# Datalink statistics

-- Total of 1 flow:

Average throughput: 86.57 Mbit/s

95th percentile per-packet one-way delay: 50.565 ms

Loss rate: 0.43%

-- Flow 1:

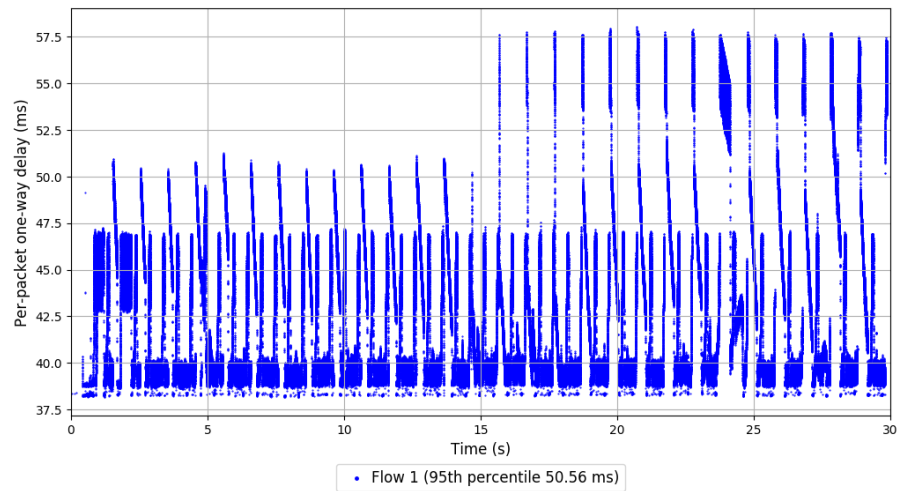
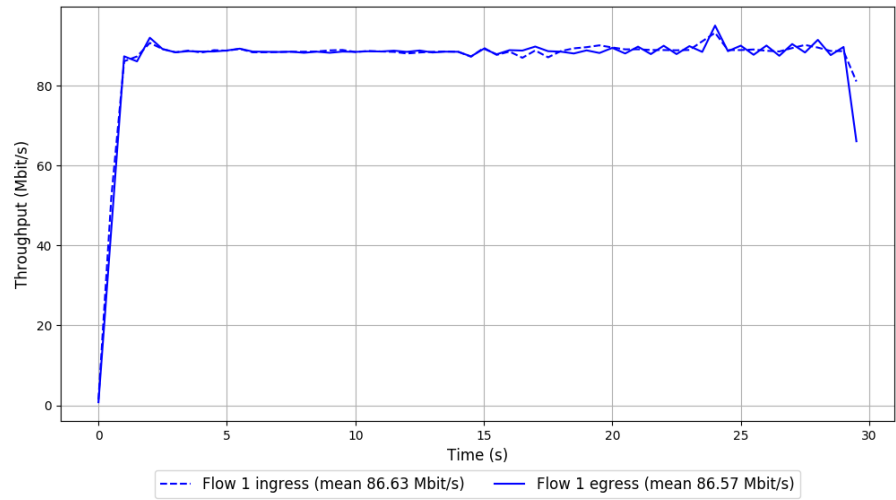
Average throughput: 86.57 Mbit/s

95th percentile per-packet one-way delay: 50.565 ms

Loss rate: 0.43%



### Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2018-02-04 07:49:54

End at: 2018-02-04 07:50:24

Local clock offset: 0.947 ms

Remote clock offset: 10.117 ms

# Below is generated by plot.py at 2018-02-04 12:08:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 86.58 Mbit/s

95th percentile per-packet one-way delay: 53.401 ms

Loss rate: 0.37%

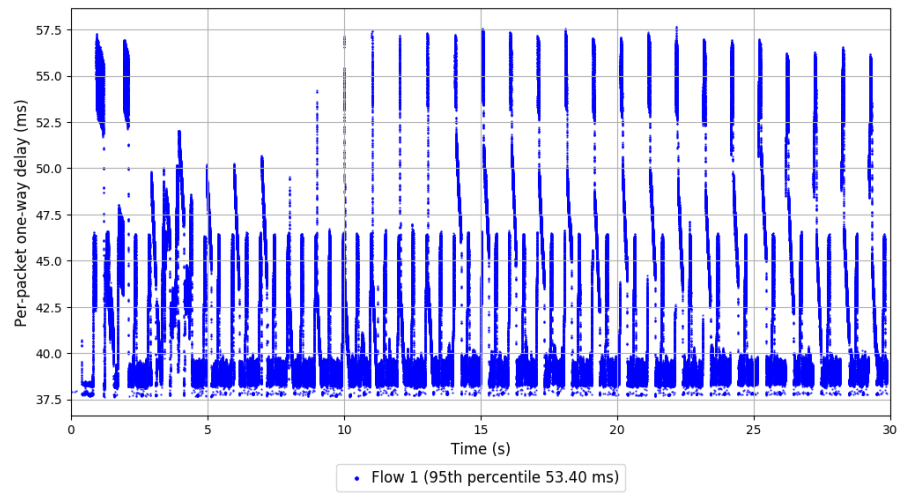
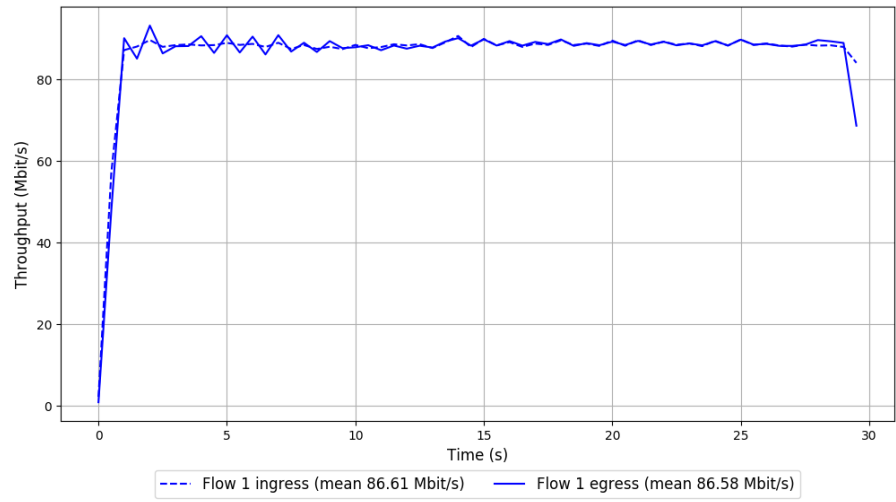
-- Flow 1:

Average throughput: 86.58 Mbit/s

95th percentile per-packet one-way delay: 53.401 ms

Loss rate: 0.37%

# Run 10: Report of FillP — Data Link

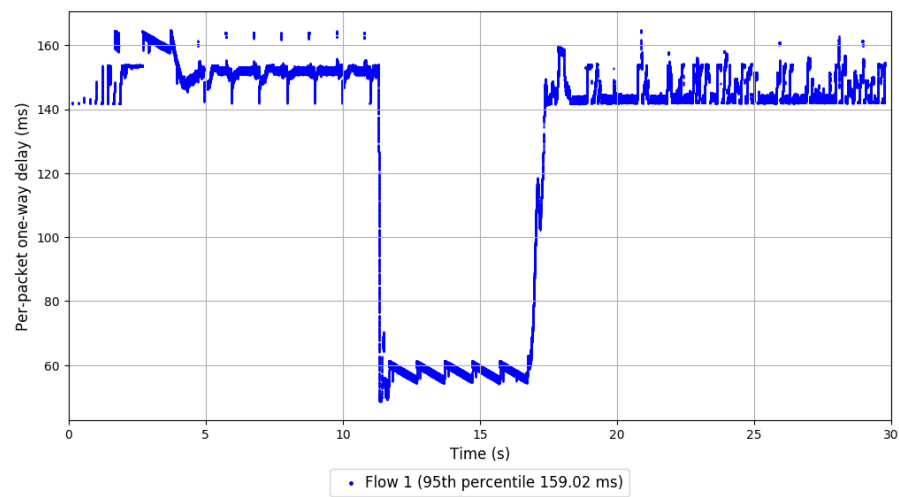
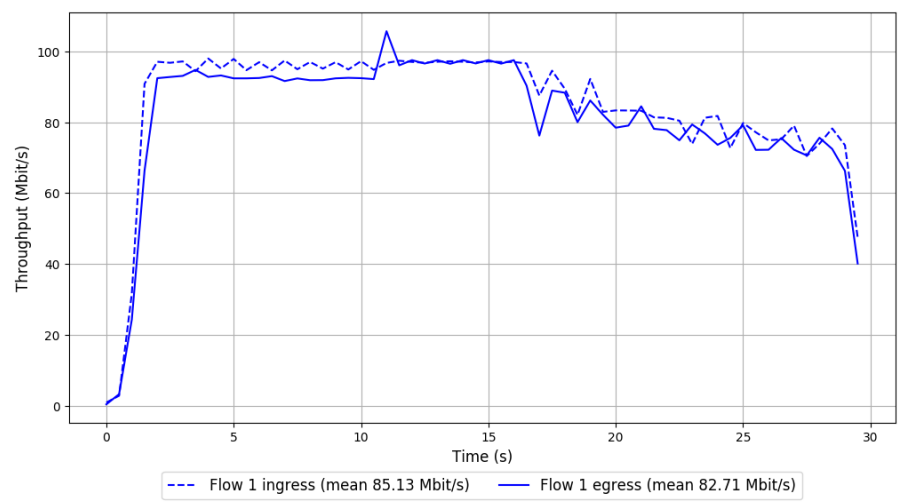


```
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-04 04:07:48
End at: 2018-02-04 04:08:18
Local clock offset: -0.362 ms
Remote clock offset: 1.976 ms

# Below is generated by plot.py at 2018-02-04 12:08:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.71 Mbit/s
95th percentile per-packet one-way delay: 159.016 ms
Loss rate: 3.52%
-- Flow 1:
Average throughput: 82.71 Mbit/s
95th percentile per-packet one-way delay: 159.016 ms
Loss rate: 3.52%
```

Run 1: Report of Indigo-1-32 — Data Link



Run 2: Statistics of Indigo-1-32

Start at: 2018-02-04 04:36:17

End at: 2018-02-04 04:36:47

Local clock offset: -0.657 ms

Remote clock offset: 2.709 ms

# Below is generated by plot.py at 2018-02-04 12:08:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.73 Mbit/s

95th percentile per-packet one-way delay: 49.993 ms

Loss rate: 0.37%

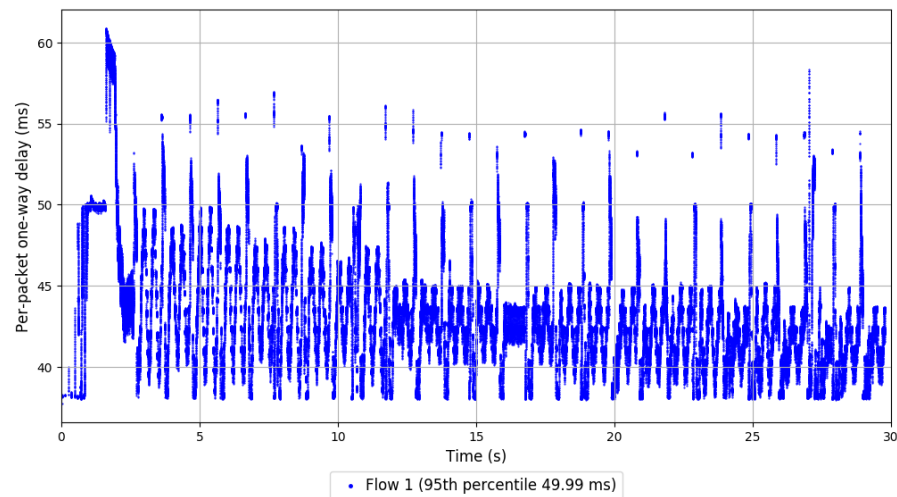
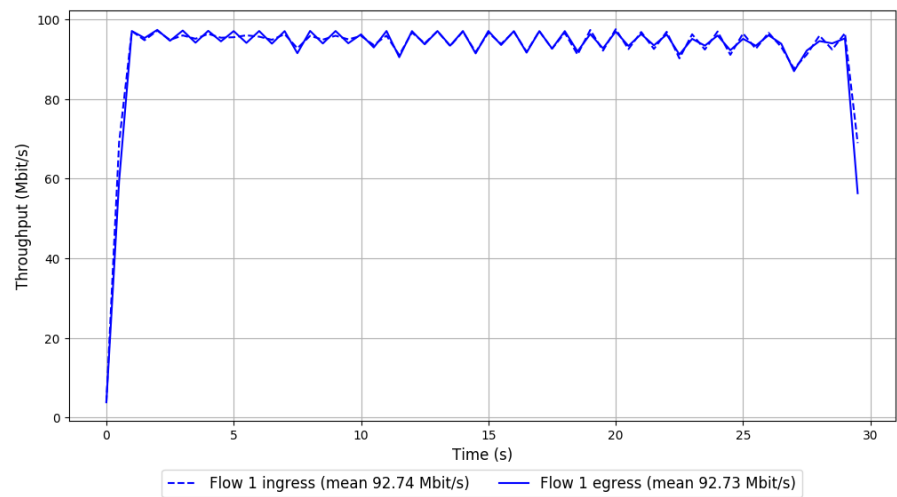
-- Flow 1:

Average throughput: 92.73 Mbit/s

95th percentile per-packet one-way delay: 49.993 ms

Loss rate: 0.37%

Run 2: Report of Indigo-1-32 — Data Link



Run 3: Statistics of Indigo-1-32

Start at: 2018-02-04 04:58:04

End at: 2018-02-04 04:58:34

Local clock offset: -0.451 ms

Remote clock offset: 3.569 ms

# Below is generated by plot.py at 2018-02-04 12:08:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 83.04 Mbit/s

95th percentile per-packet one-way delay: 50.098 ms

Loss rate: 0.37%

-- Flow 1:

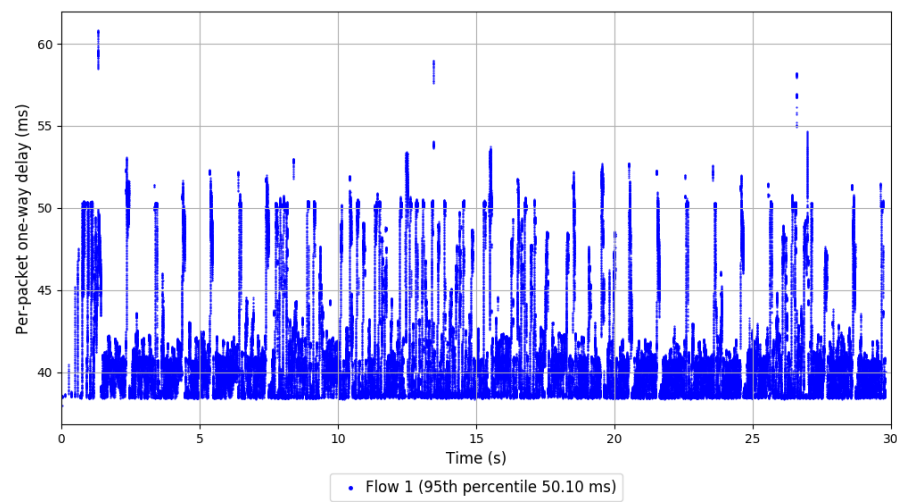
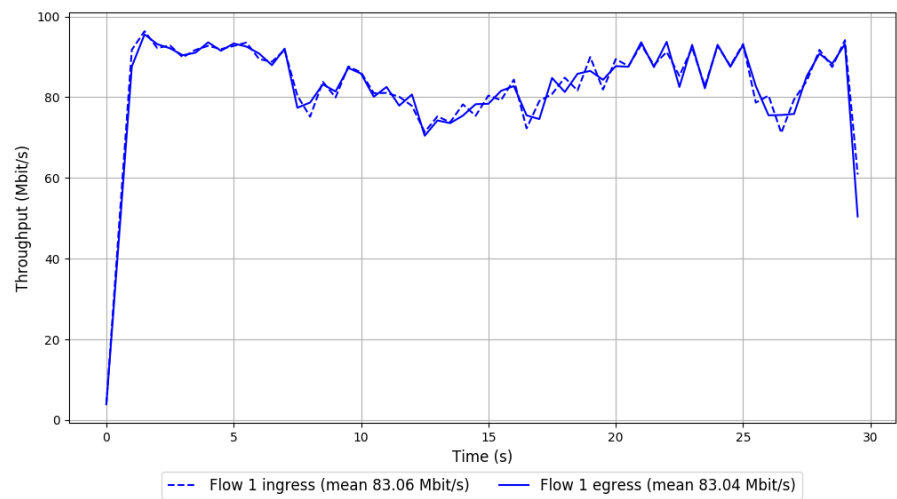
Average throughput: 83.04 Mbit/s

95th percentile per-packet one-way delay: 50.098 ms

Loss rate: 0.37%



Run 3: Report of Indigo-1-32 — Data Link



Run 4: Statistics of Indigo-1-32

Start at: 2018-02-04 05:19:50

End at: 2018-02-04 05:20:20

Local clock offset: 0.08 ms

Remote clock offset: 4.51 ms

# Below is generated by plot.py at 2018-02-04 12:08:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 85.68 Mbit/s

95th percentile per-packet one-way delay: 50.531 ms

Loss rate: 0.37%

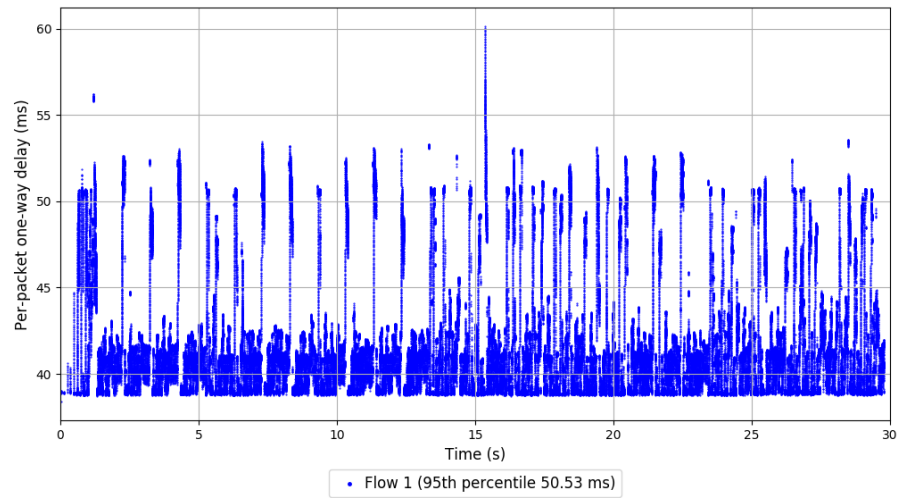
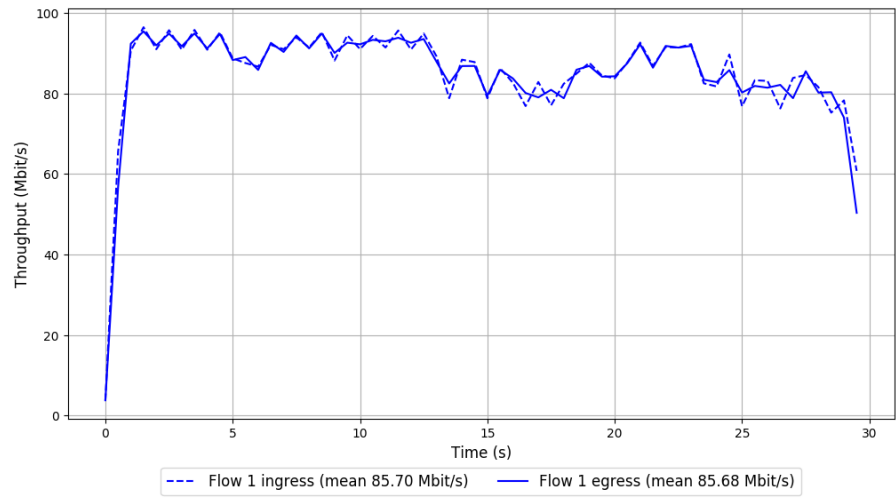
-- Flow 1:

Average throughput: 85.68 Mbit/s

95th percentile per-packet one-way delay: 50.531 ms

Loss rate: 0.37%

#### Run 4: Report of Indigo-1-32 — Data Link



Run 5: Statistics of Indigo-1-32

Start at: 2018-02-04 05:41:37

End at: 2018-02-04 05:42:07

Local clock offset: 0.298 ms

Remote clock offset: 5.544 ms

# Below is generated by plot.py at 2018-02-04 12:08:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.25 Mbit/s

95th percentile per-packet one-way delay: 50.099 ms

Loss rate: 0.38%

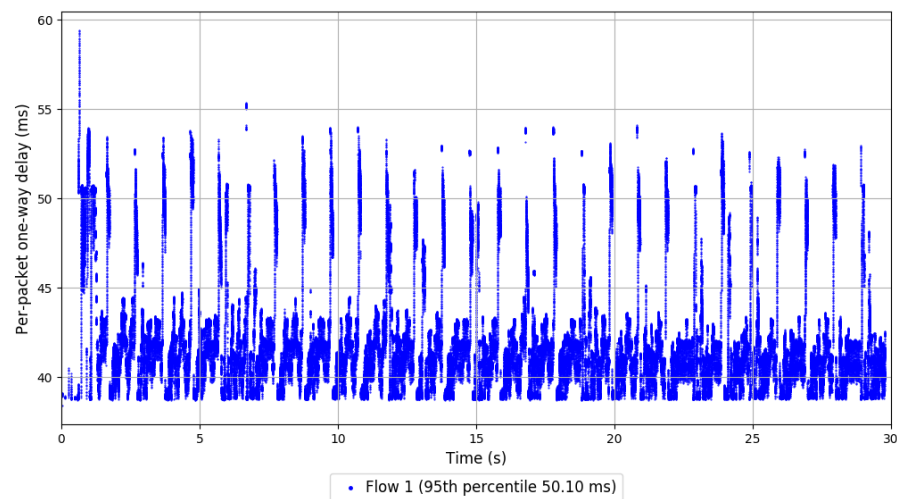
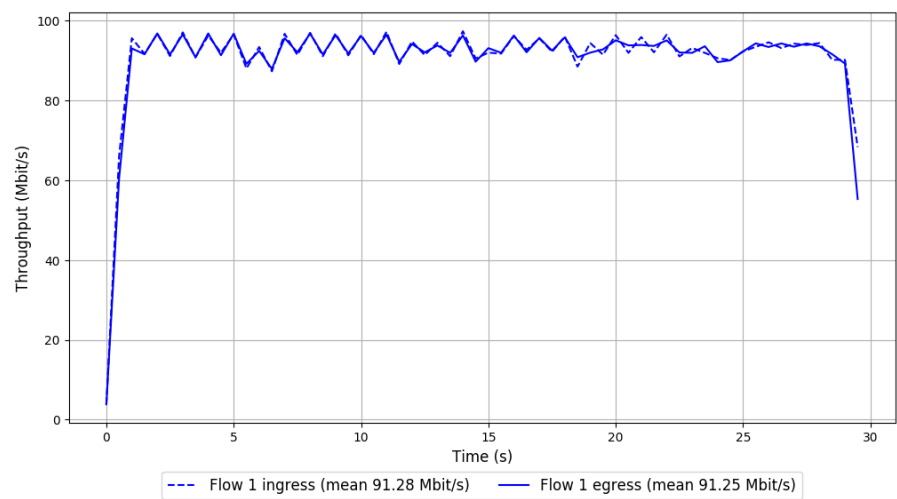
-- Flow 1:

Average throughput: 91.25 Mbit/s

95th percentile per-packet one-way delay: 50.099 ms

Loss rate: 0.38%

Run 5: Report of Indigo-1-32 — Data Link



Run 6: Statistics of Indigo-1-32

Start at: 2018-02-04 06:12:01

End at: 2018-02-04 06:12:31

Local clock offset: 0.357 ms

Remote clock offset: 6.177 ms

# Below is generated by plot.py at 2018-02-04 12:08:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.28 Mbit/s

95th percentile per-packet one-way delay: 51.396 ms

Loss rate: 0.34%

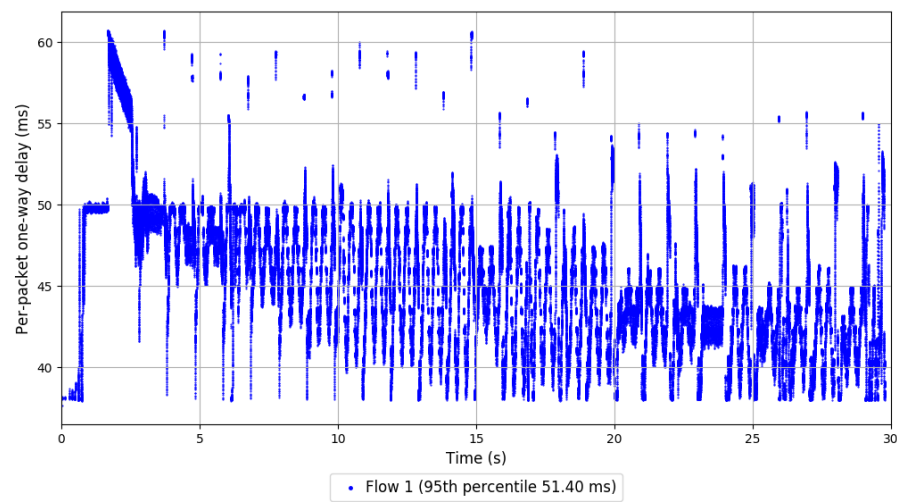
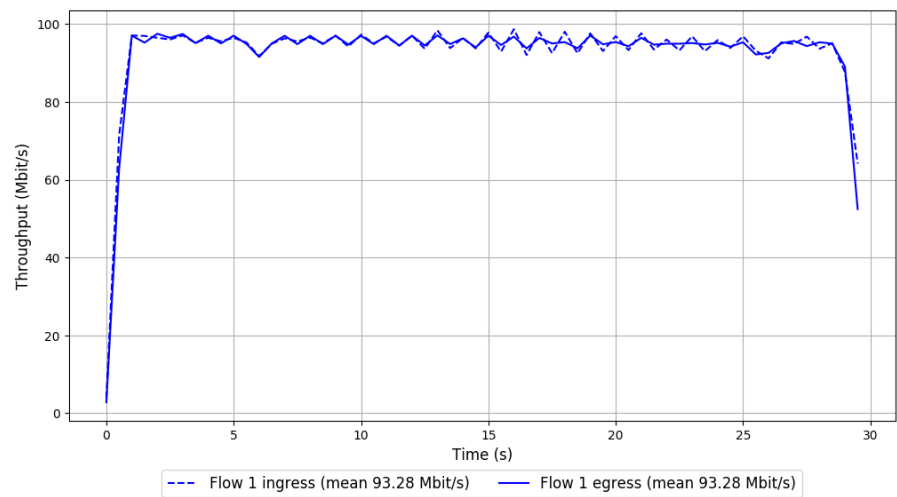
-- Flow 1:

Average throughput: 93.28 Mbit/s

95th percentile per-packet one-way delay: 51.396 ms

Loss rate: 0.34%

Run 6: Report of Indigo-1-32 — Data Link



Run 7: Statistics of Indigo-1-32

/home/ubuntu/pantheon\_data/2018-02-04T04-02-China-to-AWS-Korea-10-runs/indigo\_1\_32\_stats\_run



Run 7: Report of Indigo-1-32 — Data Link

Figure is missing

Figure is missing

Run 8: Statistics of Indigo-1-32

Start at: 2018-02-04 06:59:04

End at: 2018-02-04 06:59:34

Local clock offset: -1.407 ms

Remote clock offset: 7.341 ms

# Below is generated by plot.py at 2018-02-04 12:08:09

# Datalink statistics

-- Total of 1 flow:

Average throughput: 88.35 Mbit/s

95th percentile per-packet one-way delay: 47.616 ms

Loss rate: 0.35%

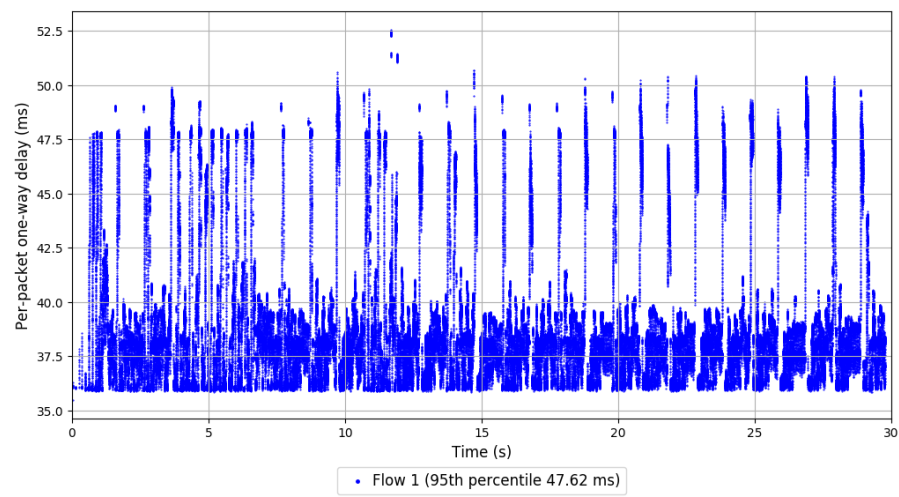
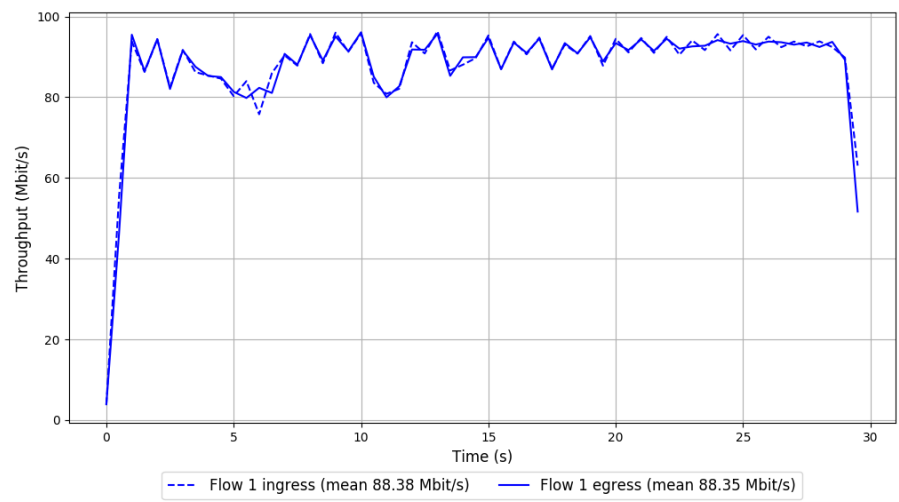
-- Flow 1:

Average throughput: 88.35 Mbit/s

95th percentile per-packet one-way delay: 47.616 ms

Loss rate: 0.35%

Run 8: Report of Indigo-1-32 — Data Link



Run 9: Statistics of Indigo-1-32

Start at: 2018-02-04 07:20:53

End at: 2018-02-04 07:21:23

Local clock offset: 1.218 ms

Remote clock offset: 8.483 ms

# Below is generated by plot.py at 2018-02-04 12:08:16

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.15 Mbit/s

95th percentile per-packet one-way delay: 50.349 ms

Loss rate: 0.31%

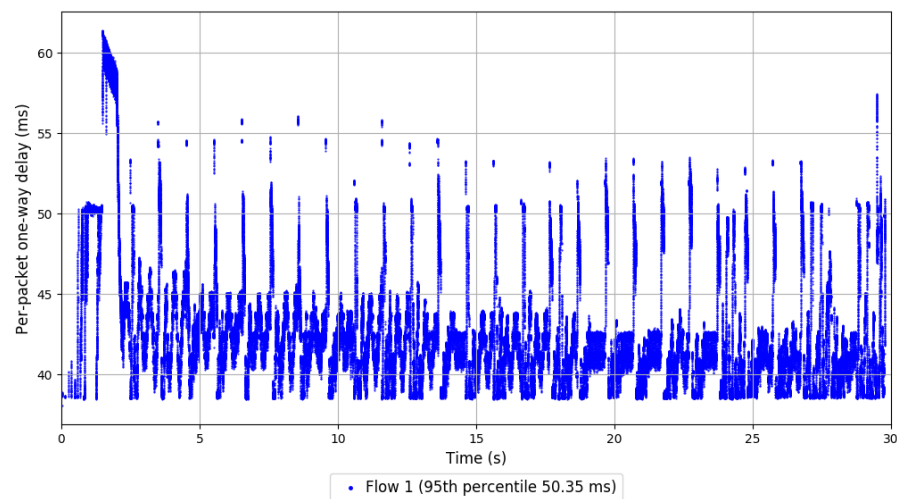
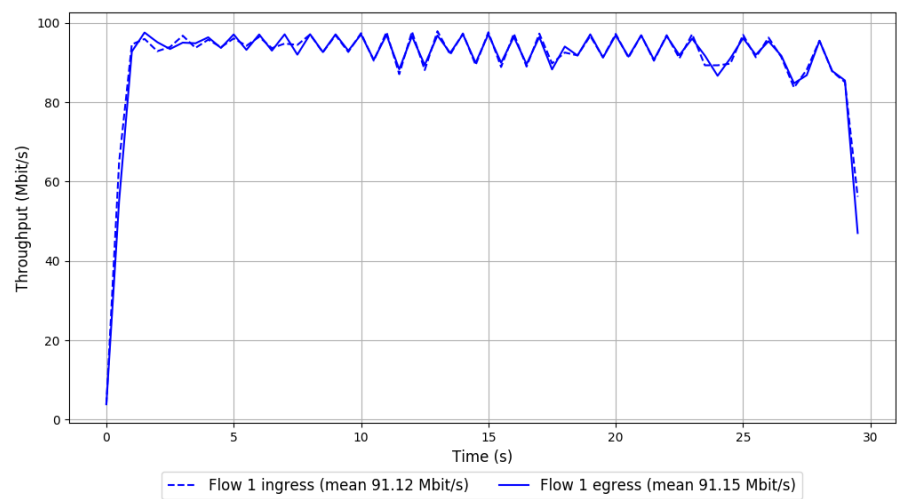
-- Flow 1:

Average throughput: 91.15 Mbit/s

95th percentile per-packet one-way delay: 50.349 ms

Loss rate: 0.31%

Run 9: Report of Indigo-1-32 — Data Link



Run 10: Statistics of Indigo-1-32

Start at: 2018-02-04 07:42:40

End at: 2018-02-04 07:43:10

Local clock offset: 1.382 ms

Remote clock offset: 9.924 ms

# Below is generated by plot.py at 2018-02-04 12:08:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.08 Mbit/s

95th percentile per-packet one-way delay: 50.496 ms

Loss rate: 0.36%

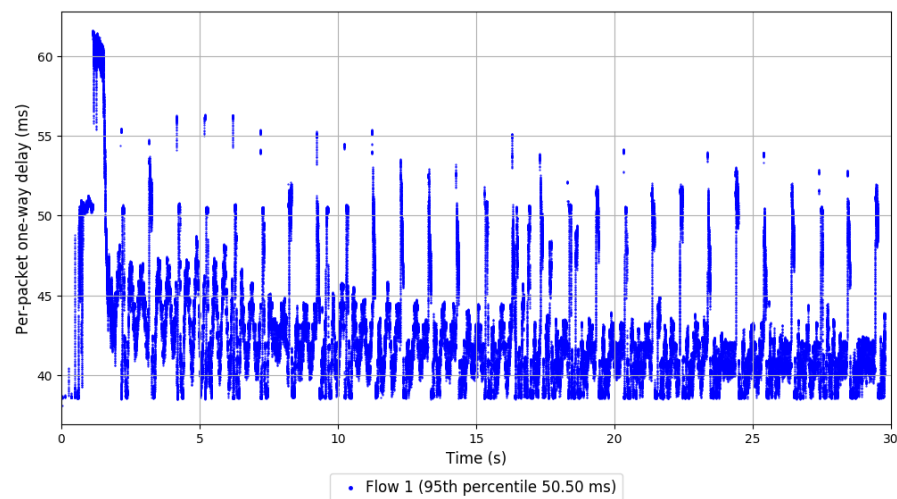
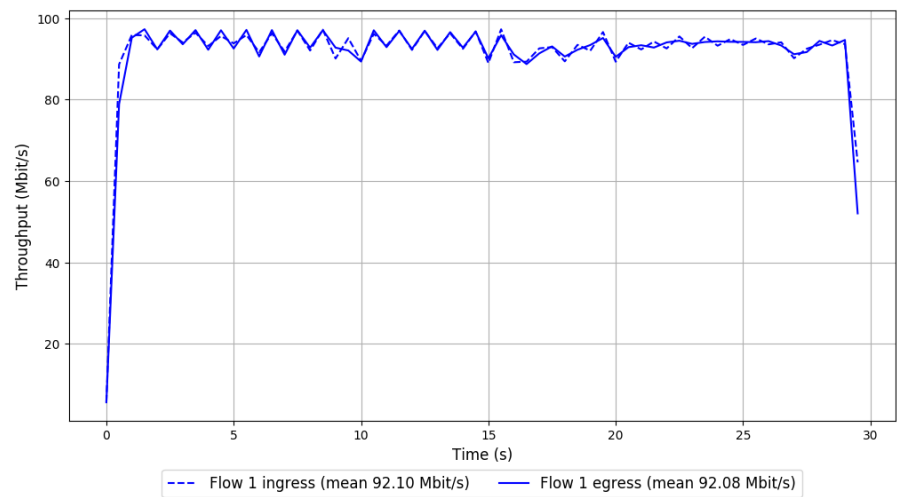
-- Flow 1:

Average throughput: 92.08 Mbit/s

95th percentile per-packet one-way delay: 50.496 ms

Loss rate: 0.36%

Run 10: Report of Indigo-1-32 — Data Link



Run 1: Statistics of Vivace-latency

Start at: 2018-02-04 04:17:41

End at: 2018-02-04 04:18:11

Local clock offset: -0.217 ms

Remote clock offset: 2.126 ms

# Below is generated by plot.py at 2018-02-04 12:08:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 15.97 Mbit/s

95th percentile per-packet one-way delay: 142.420 ms

Loss rate: 3.03%

-- Flow 1:

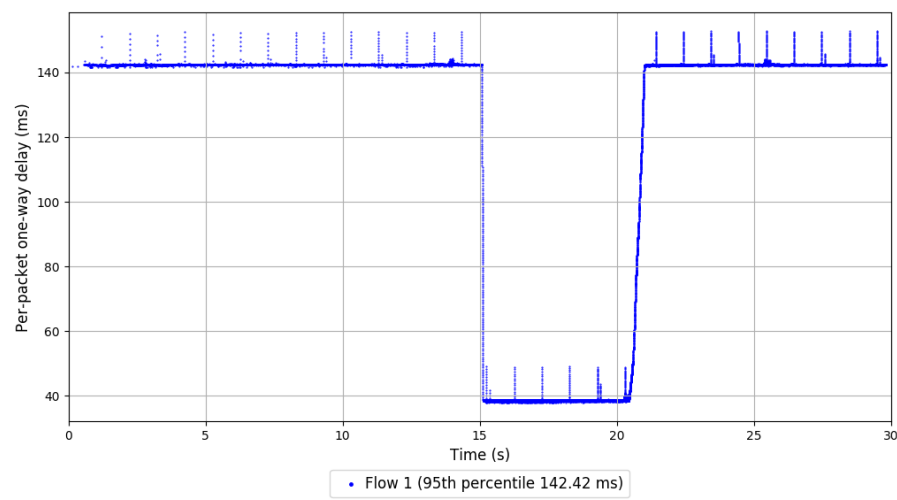
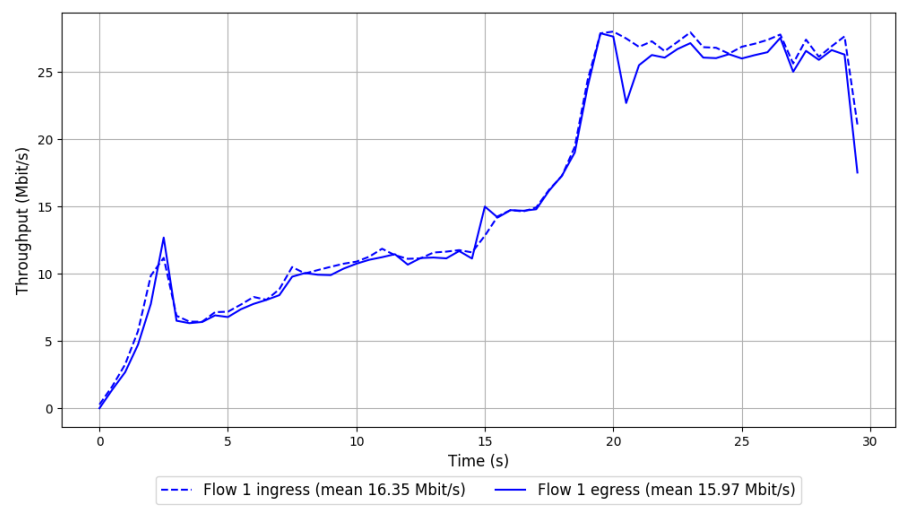
Average throughput: 15.97 Mbit/s

95th percentile per-packet one-way delay: 142.420 ms

Loss rate: 3.03%



Run 1: Report of Vivace-latency — Data Link



Run 2: Statistics of Vivace-latency

Start at: 2018-02-04 04:42:19

End at: 2018-02-04 04:42:49

Local clock offset: 0.059 ms

Remote clock offset: 2.945 ms

# Below is generated by plot.py at 2018-02-04 12:08:56

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.55 Mbit/s

95th percentile per-packet one-way delay: 48.226 ms

Loss rate: 0.42%

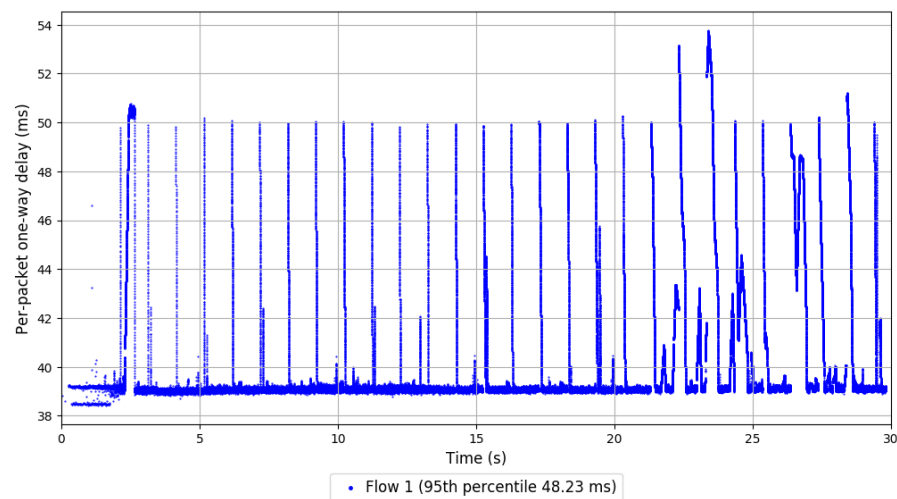
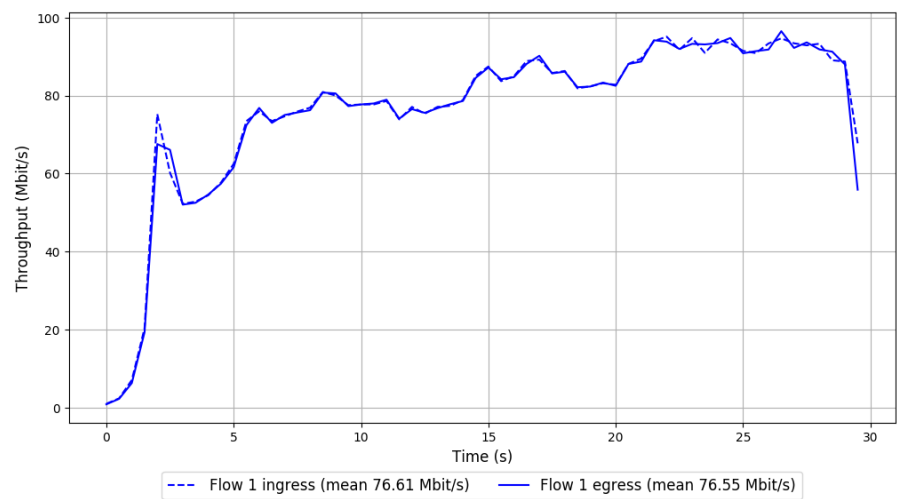
-- Flow 1:

Average throughput: 76.55 Mbit/s

95th percentile per-packet one-way delay: 48.226 ms

Loss rate: 0.42%

Run 2: Report of Vivace-latency — Data Link

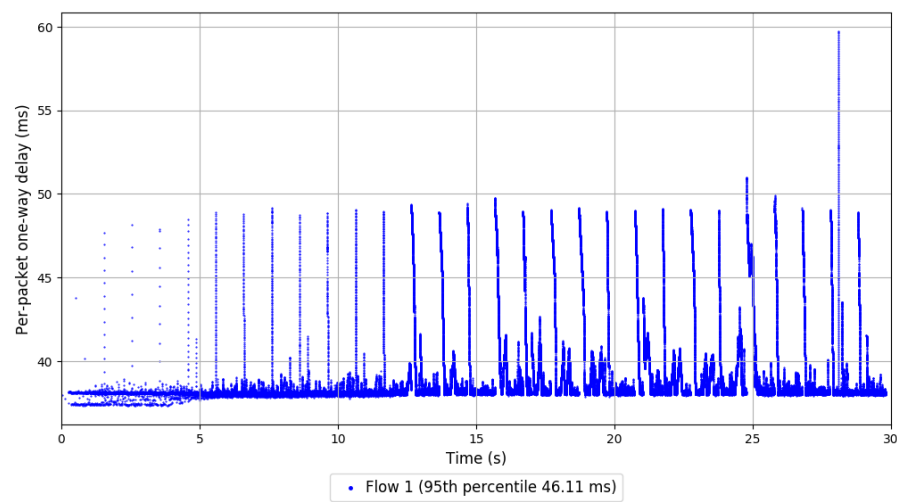
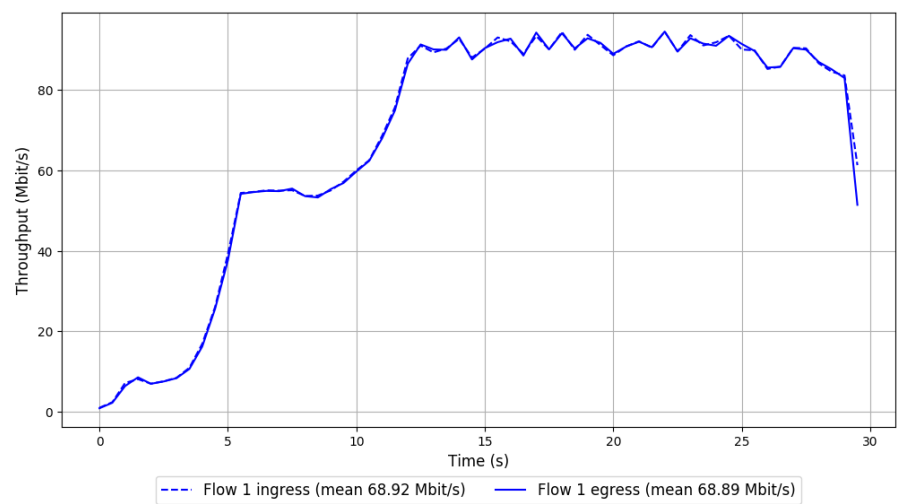


Run 3: Statistics of Vivace-latency

Start at: 2018-02-04 05:04:06  
End at: 2018-02-04 05:04:36  
Local clock offset: -0.079 ms  
Remote clock offset: 3.853 ms

# Below is generated by plot.py at 2018-02-04 12:08:56  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 68.89 Mbit/s  
95th percentile per-packet one-way delay: 46.107 ms  
Loss rate: 0.40%  
-- Flow 1:  
Average throughput: 68.89 Mbit/s  
95th percentile per-packet one-way delay: 46.107 ms  
Loss rate: 0.40%

Run 3: Report of Vivace-latency — Data Link



Run 4: Statistics of Vivace-latency

Start at: 2018-02-04 05:25:52

End at: 2018-02-04 05:26:22

Local clock offset: 0.054 ms

Remote clock offset: 4.822 ms

# Below is generated by plot.py at 2018-02-04 12:08:56

# Datalink statistics

-- Total of 1 flow:

Average throughput: 55.63 Mbit/s

95th percentile per-packet one-way delay: 49.583 ms

Loss rate: 0.54%

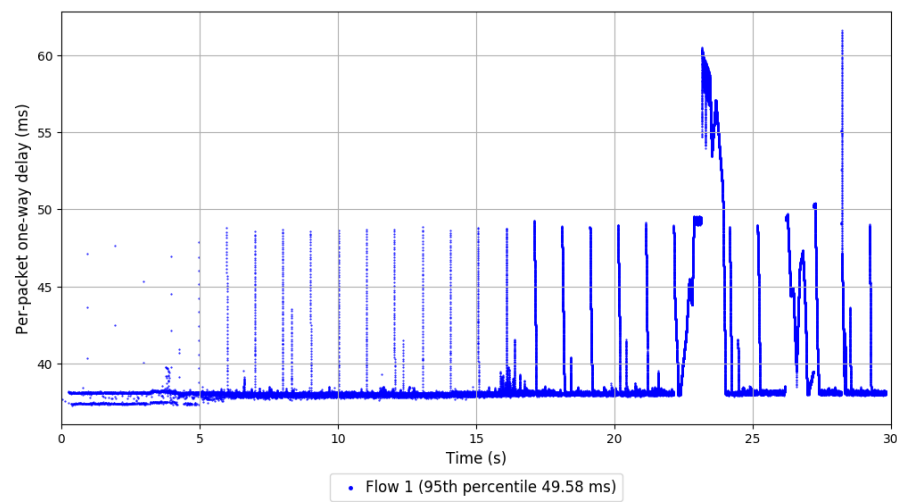
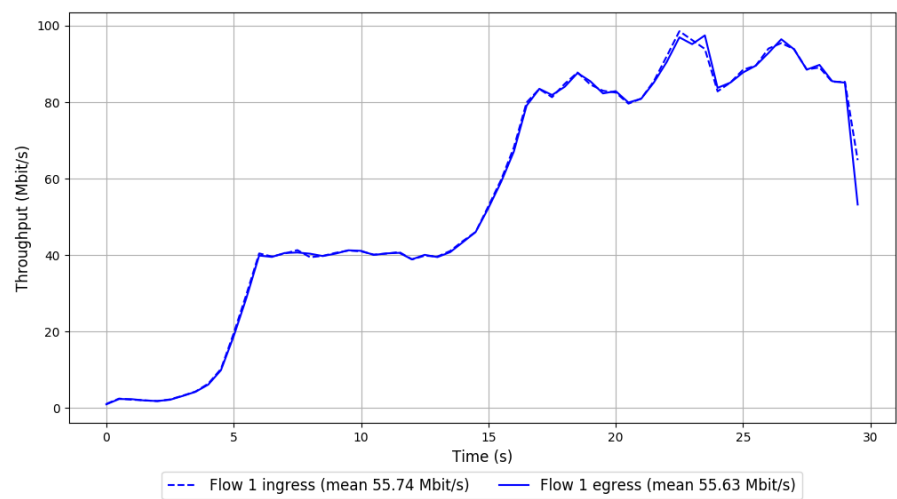
-- Flow 1:

Average throughput: 55.63 Mbit/s

95th percentile per-packet one-way delay: 49.583 ms

Loss rate: 0.54%

Run 4: Report of Vivace-latency — Data Link



Run 5: Statistics of Vivace-latency

Start at: 2018-02-04 05:47:41

End at: 2018-02-04 05:48:11

Local clock offset: 0.338 ms

Remote clock offset: 5.858 ms

# Below is generated by plot.py at 2018-02-04 12:09:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 60.59 Mbit/s

95th percentile per-packet one-way delay: 150.692 ms

Loss rate: 3.00%

-- Flow 1:

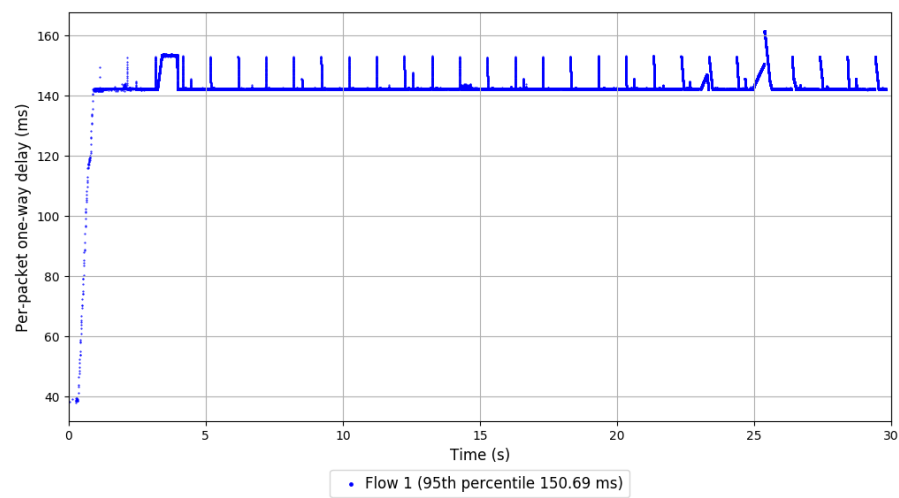
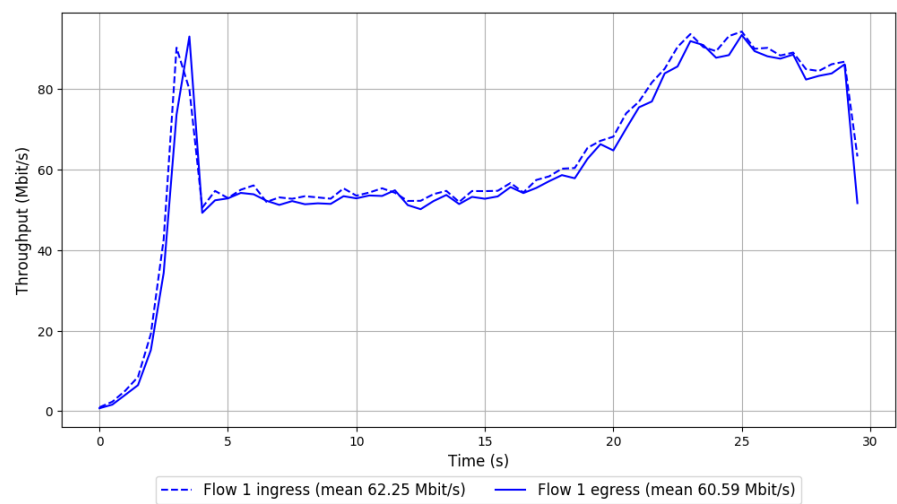
Average throughput: 60.59 Mbit/s

95th percentile per-packet one-way delay: 150.692 ms

Loss rate: 3.00%



Run 5: Report of Vivace-latency — Data Link



Run 6: Statistics of Vivace-latency

Start at: 2018-02-04 06:18:03

End at: 2018-02-04 06:18:33

Local clock offset: 0.852 ms

Remote clock offset: 6.258 ms

# Below is generated by plot.py at 2018-02-04 12:09:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 77.24 Mbit/s

95th percentile per-packet one-way delay: 47.388 ms

Loss rate: 0.39%

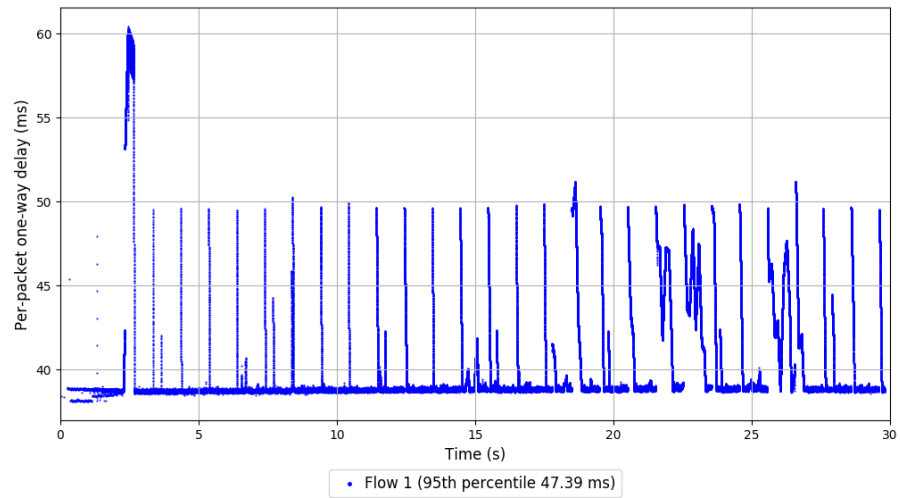
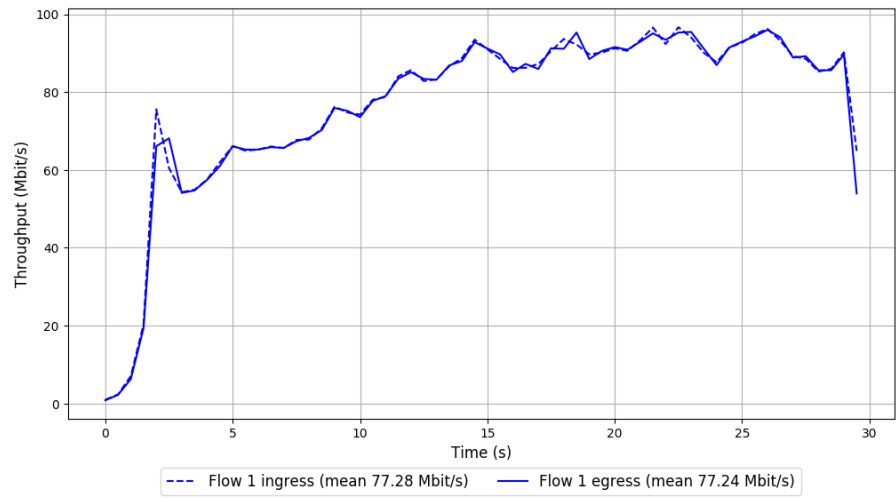
-- Flow 1:

Average throughput: 77.24 Mbit/s

95th percentile per-packet one-way delay: 47.388 ms

Loss rate: 0.39%

## Run 6: Report of Vivace-latency — Data Link



Run 7: Statistics of Vivace-latency

Start at: 2018-02-04 06:41:33

End at: 2018-02-04 06:42:03

Local clock offset: 1.058 ms

Remote clock offset: 6.517 ms

# Below is generated by plot.py at 2018-02-04 12:09:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 33.22 Mbit/s

95th percentile per-packet one-way delay: 43.444 ms

Loss rate: 0.79%

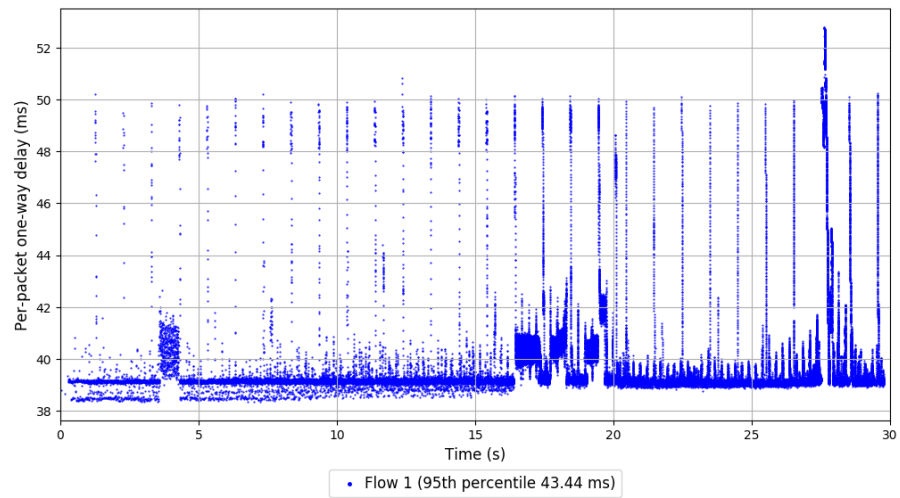
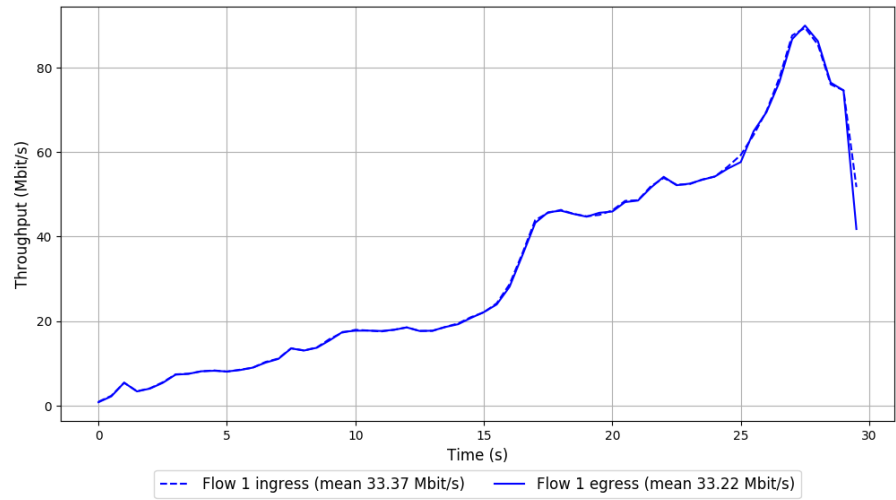
-- Flow 1:

Average throughput: 33.22 Mbit/s

95th percentile per-packet one-way delay: 43.444 ms

Loss rate: 0.79%

## Run 7: Report of Vivace-latency — Data Link



Run 8: Statistics of Vivace-latency

Start at: 2018-02-04 07:05:07

End at: 2018-02-04 07:05:37

Local clock offset: 1.265 ms

Remote clock offset: 7.61 ms

# Below is generated by plot.py at 2018-02-04 12:09:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 70.97 Mbit/s

95th percentile per-packet one-way delay: 49.899 ms

Loss rate: 0.47%

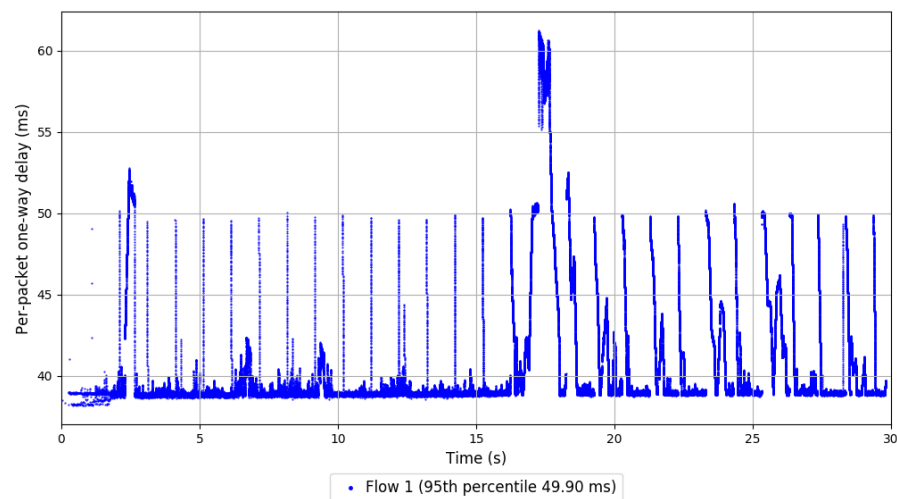
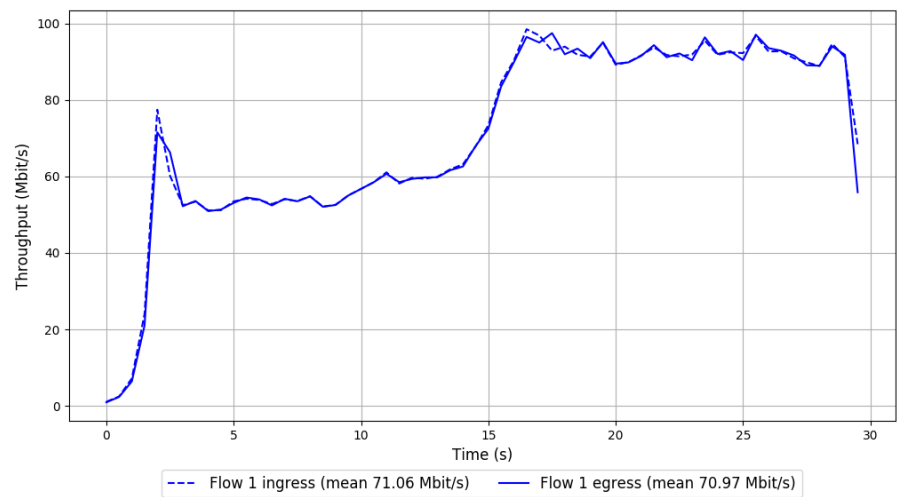
-- Flow 1:

Average throughput: 70.97 Mbit/s

95th percentile per-packet one-way delay: 49.899 ms

Loss rate: 0.47%

Run 8: Report of Vivace-latency — Data Link



Run 9: Statistics of Vivace-latency

Start at: 2018-02-04 07:26:56

End at: 2018-02-04 07:27:26

Local clock offset: 1.13 ms

Remote clock offset: 8.847 ms

# Below is generated by plot.py at 2018-02-04 12:09:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 45.25 Mbit/s

95th percentile per-packet one-way delay: 38.228 ms

Loss rate: 0.65%

-- Flow 1:

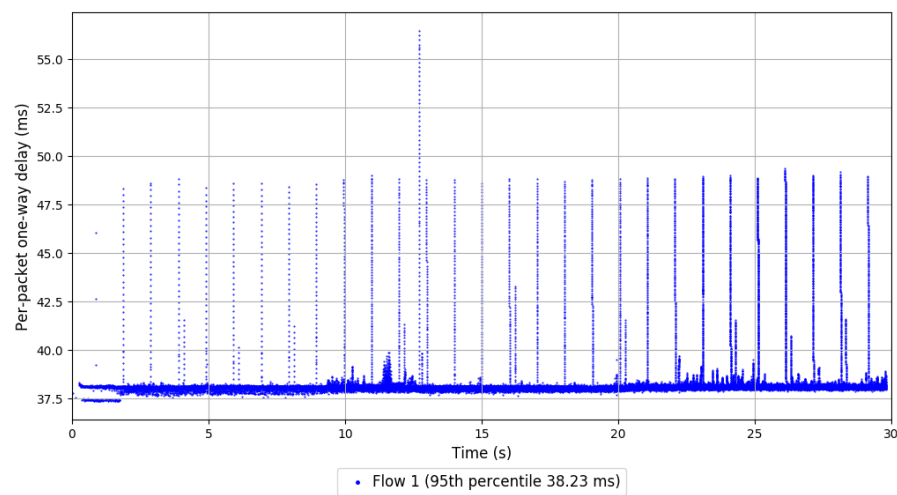
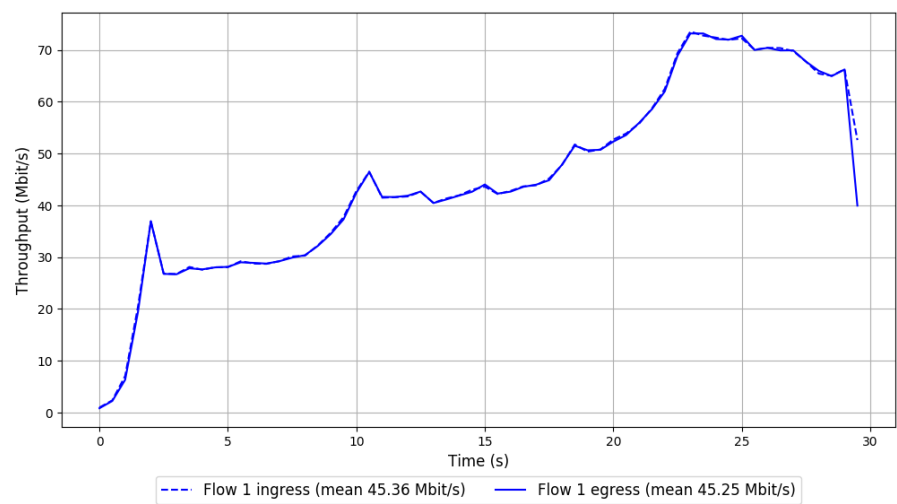
Average throughput: 45.25 Mbit/s

95th percentile per-packet one-way delay: 38.228 ms

Loss rate: 0.65%



Run 9: Report of Vivace-latency — Data Link



Run 10: Statistics of Vivace-latency

Start at: 2018-02-04 07:48:42

End at: 2018-02-04 07:49:12

Local clock offset: 1.011 ms

Remote clock offset: 10.07 ms

# Below is generated by plot.py at 2018-02-04 12:09:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 56.69 Mbit/s

95th percentile per-packet one-way delay: 44.222 ms

Loss rate: 0.54%

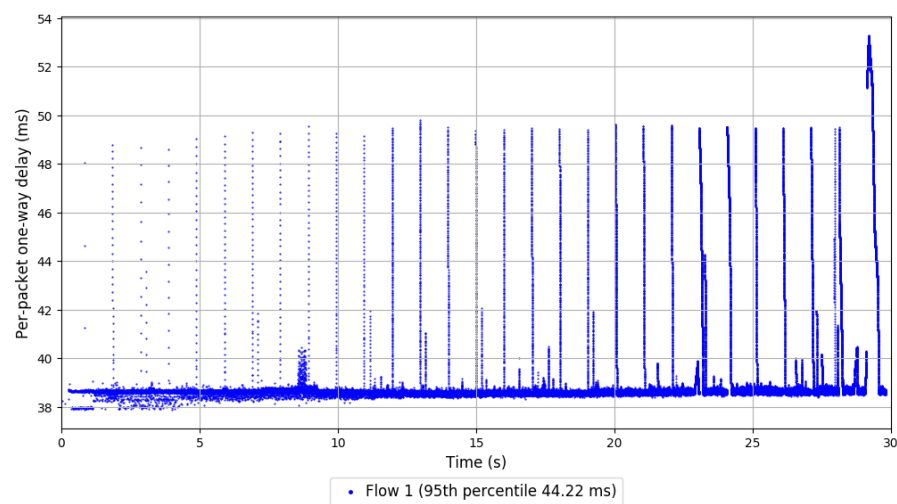
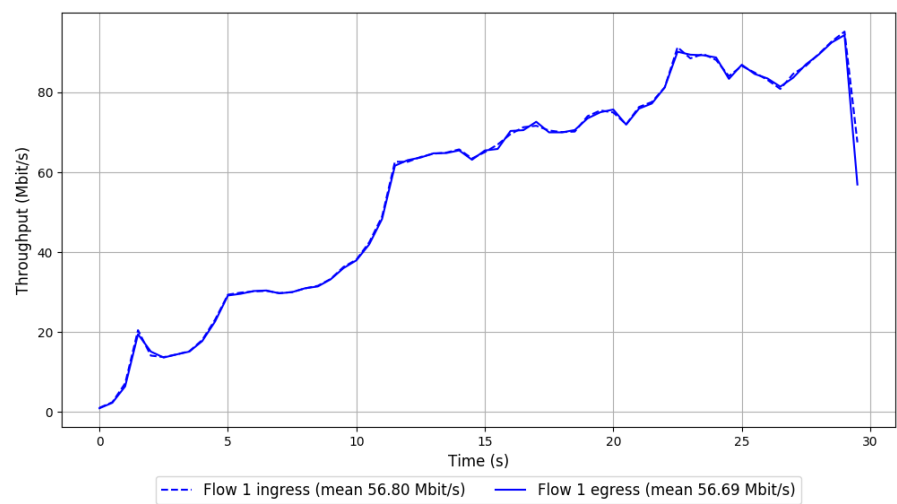
-- Flow 1:

Average throughput: 56.69 Mbit/s

95th percentile per-packet one-way delay: 44.222 ms

Loss rate: 0.54%

Run 10: Report of Vivace-latency — Data Link

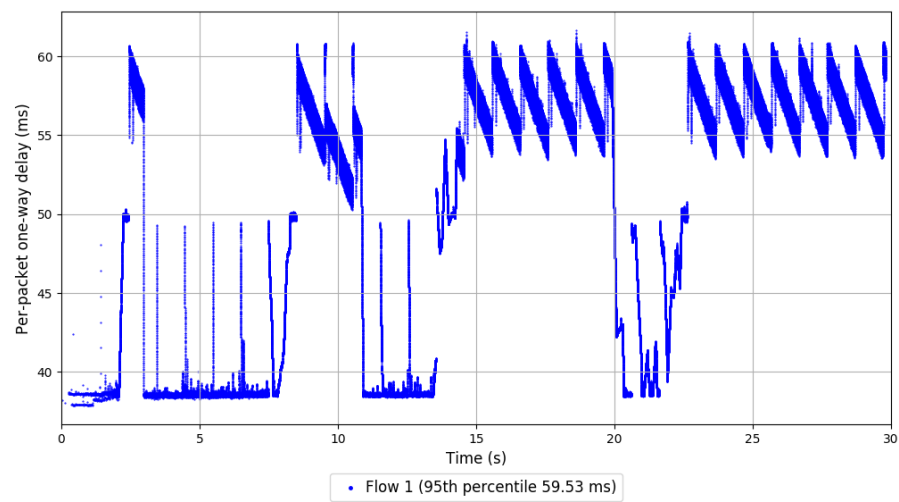
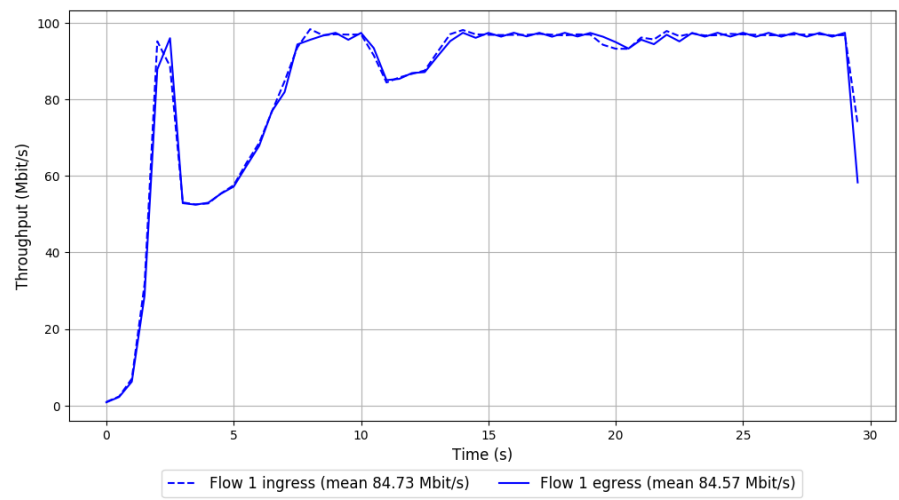


```
Run 1: Statistics of Vivace-loss

Start at: 2018-02-04 04:30:13
End at: 2018-02-04 04:30:43
Local clock offset: -0.672 ms
Remote clock offset: 2.465 ms

# Below is generated by plot.py at 2018-02-04 12:10:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.57 Mbit/s
95th percentile per-packet one-way delay: 59.531 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 84.57 Mbit/s
95th percentile per-packet one-way delay: 59.531 ms
Loss rate: 0.57%
```

Run 1: Report of Vivace-loss — Data Link



Run 2: Statistics of Vivace-loss

Start at: 2018-02-04 04:52:02

End at: 2018-02-04 04:52:32

Local clock offset: -0.138 ms

Remote clock offset: 3.31 ms

# Below is generated by plot.py at 2018-02-04 12:10:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 85.58 Mbit/s

95th percentile per-packet one-way delay: 59.509 ms

Loss rate: 0.38%

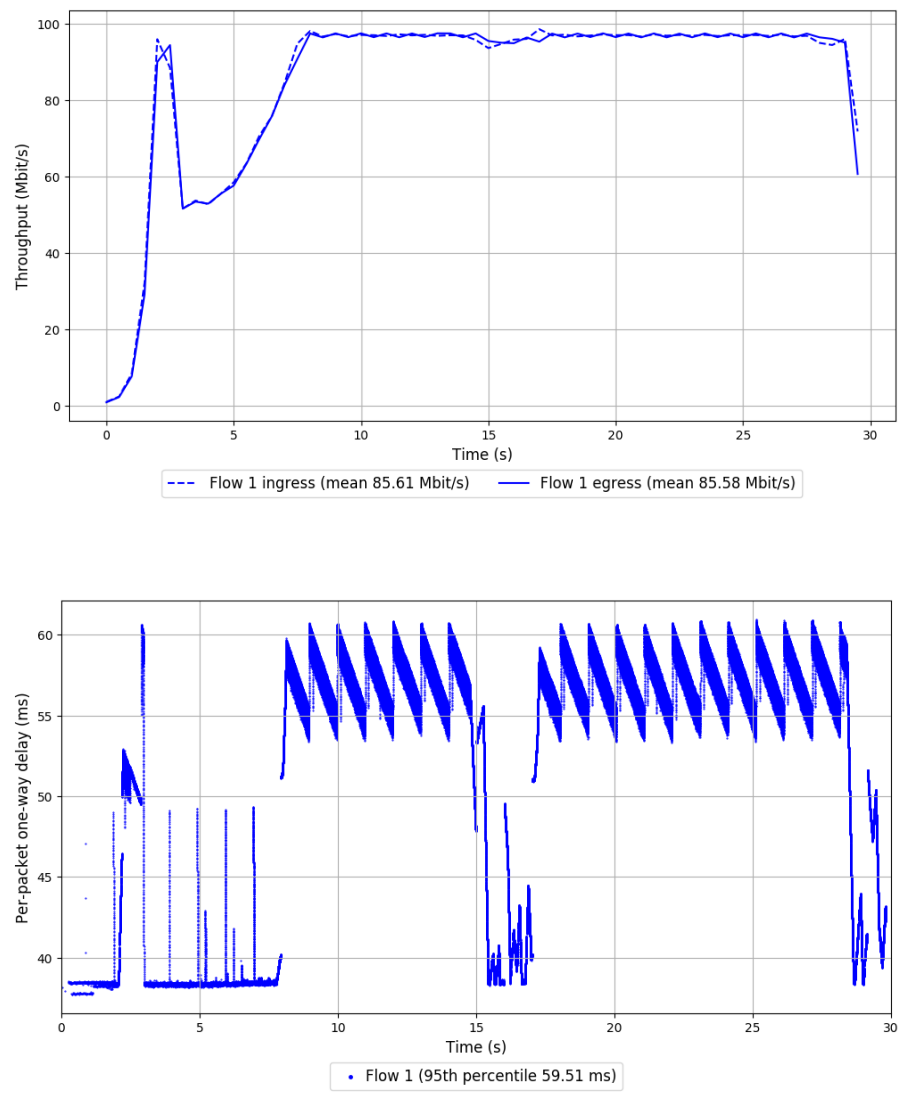
-- Flow 1:

Average throughput: 85.58 Mbit/s

95th percentile per-packet one-way delay: 59.509 ms

Loss rate: 0.38%

Run 2: Report of Vivace-loss — Data Link



Run 3: Statistics of Vivace-loss

Start at: 2018-02-04 05:13:49

End at: 2018-02-04 05:14:19

Local clock offset: 0.141 ms

Remote clock offset: 4.288 ms

# Below is generated by plot.py at 2018-02-04 12:10:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 85.00 Mbit/s

95th percentile per-packet one-way delay: 59.652 ms

Loss rate: 0.46%

-- Flow 1:

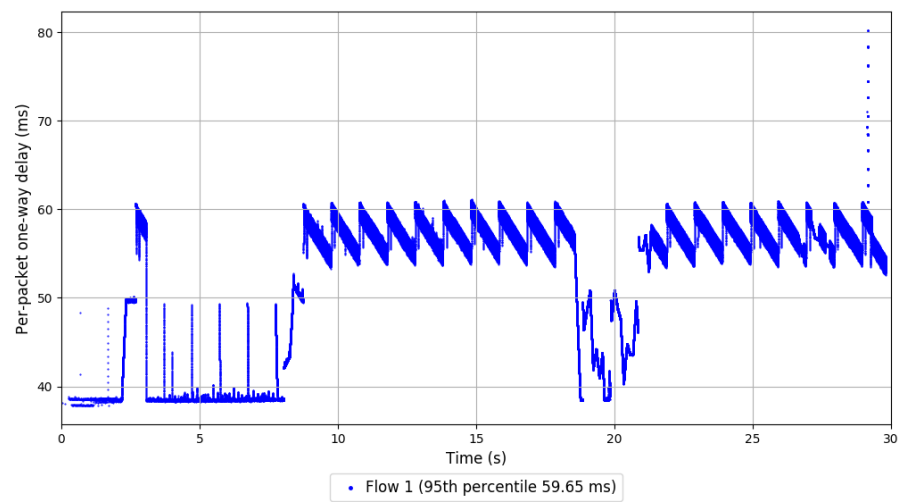
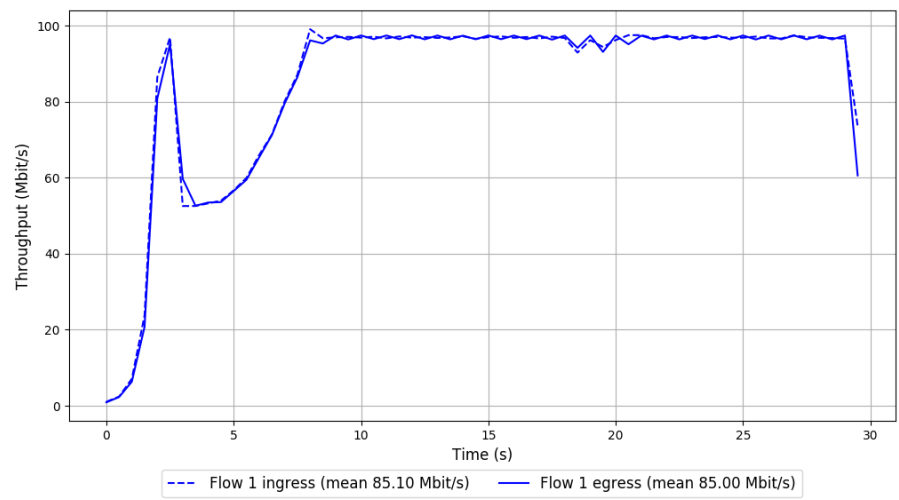
Average throughput: 85.00 Mbit/s

95th percentile per-packet one-way delay: 59.652 ms

Loss rate: 0.46%



Run 3: Report of Vivace-loss — Data Link



Run 4: Statistics of Vivace-loss

Start at: 2018-02-04 05:35:33

End at: 2018-02-04 05:36:03

Local clock offset: 0.236 ms

Remote clock offset: 5.249 ms

# Below is generated by plot.py at 2018-02-04 12:10:19

# Datalink statistics

-- Total of 1 flow:

Average throughput: 85.14 Mbit/s

95th percentile per-packet one-way delay: 59.927 ms

Loss rate: 0.41%

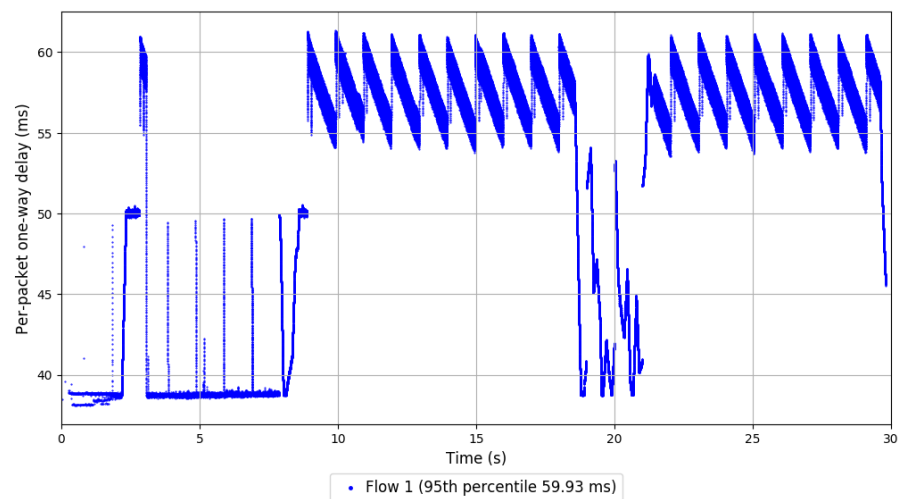
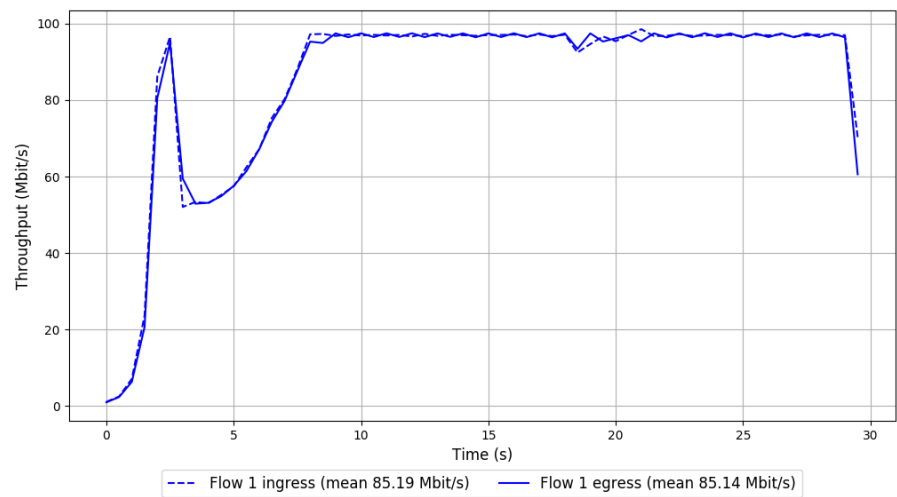
-- Flow 1:

Average throughput: 85.14 Mbit/s

95th percentile per-packet one-way delay: 59.927 ms

Loss rate: 0.41%

Run 4: Report of Vivace-loss — Data Link



Run 5: Statistics of Vivace-loss

Start at: 2018-02-04 06:03:14

End at: 2018-02-04 06:03:44

Local clock offset: 0.879 ms

Remote clock offset: 6.134 ms

# Below is generated by plot.py at 2018-02-04 12:10:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 72.35 Mbit/s

95th percentile per-packet one-way delay: 163.167 ms

Loss rate: 2.56%

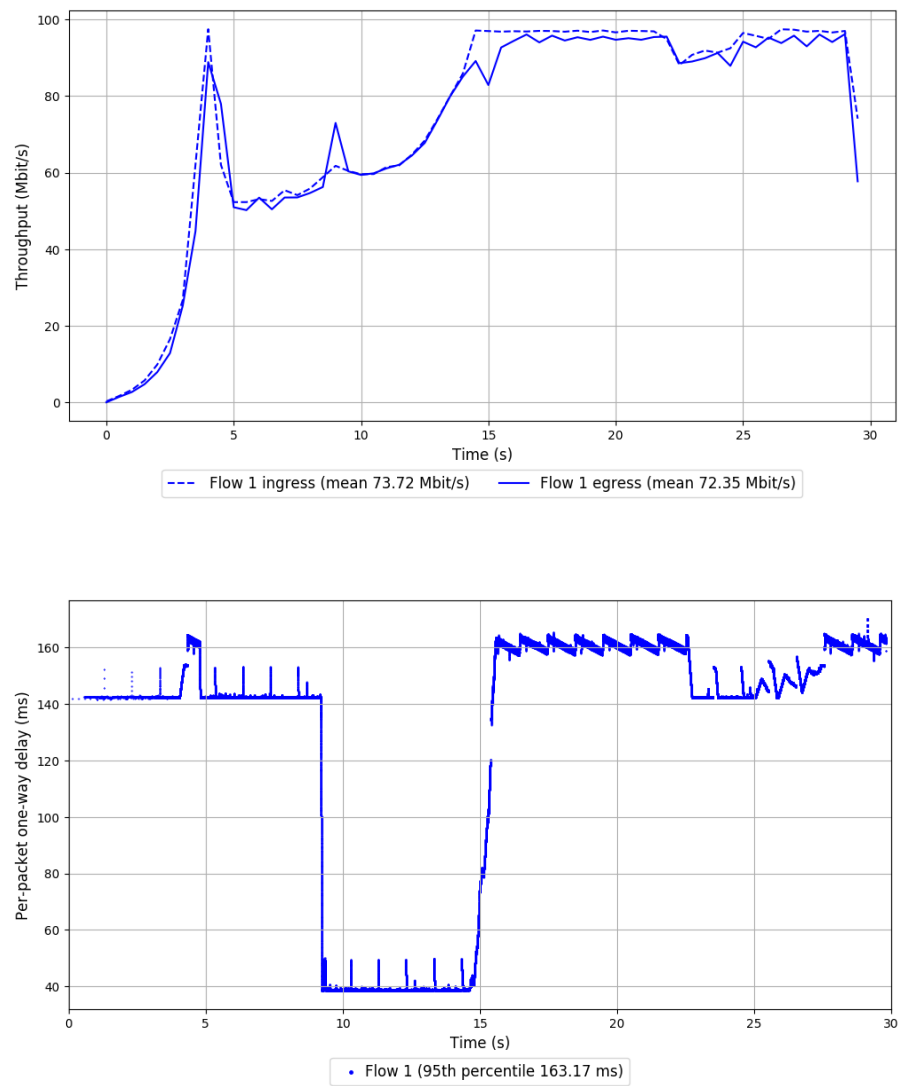
-- Flow 1:

Average throughput: 72.35 Mbit/s

95th percentile per-packet one-way delay: 163.167 ms

Loss rate: 2.56%

Run 5: Report of Vivace-loss — Data Link



Run 6: Statistics of Vivace-loss

Start at: 2018-02-04 06:27:46

End at: 2018-02-04 06:28:16

Local clock offset: 0.621 ms

Remote clock offset: 6.606 ms

# Below is generated by plot.py at 2018-02-04 12:10:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 85.38 Mbit/s

95th percentile per-packet one-way delay: 59.182 ms

Loss rate: 0.48%

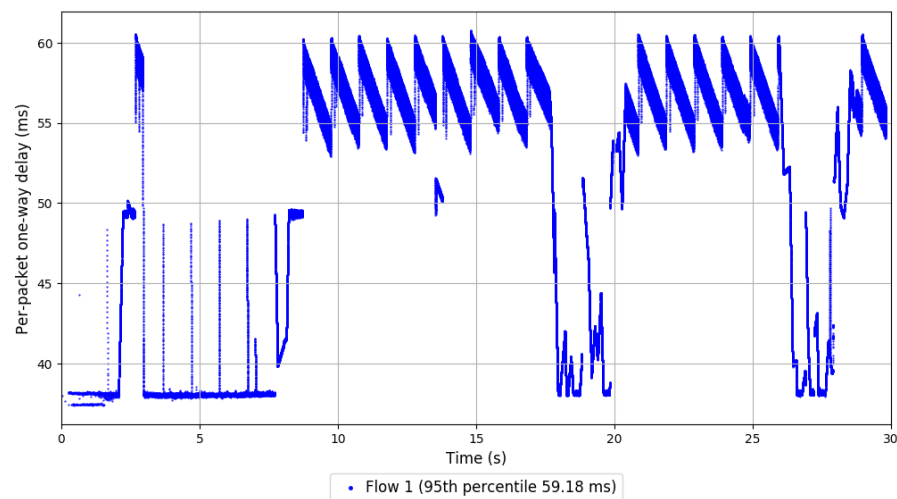
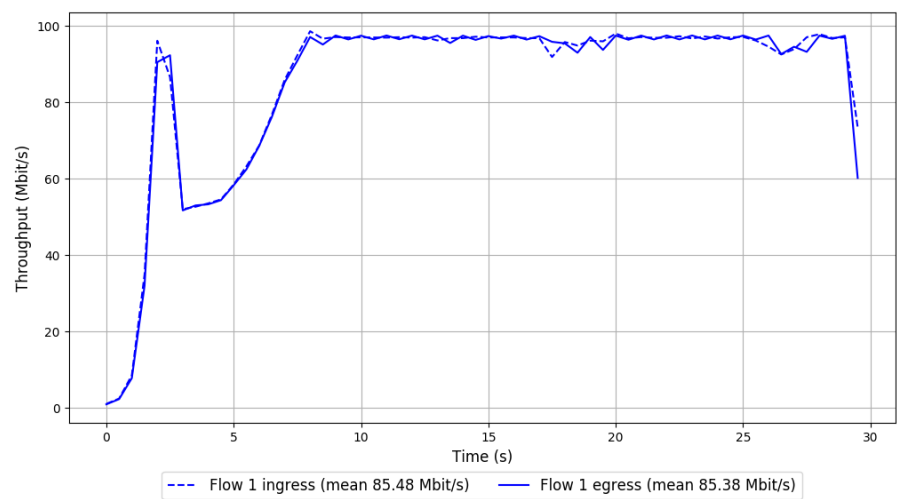
-- Flow 1:

Average throughput: 85.38 Mbit/s

95th percentile per-packet one-way delay: 59.182 ms

Loss rate: 0.48%

Run 6: Report of Vivace-loss — Data Link



Run 7: Statistics of Vivace-loss

/home/ubuntu/pantheon\_data/2018-02-04T04-02-China-to-AWS-Korea-10-runs/vivace\_loss\_stats\_run



Run 7: Report of Vivace-loss — Data Link

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Run 8: Statistics of Vivace-loss

Start at: 2018-02-04 07:14:49

End at: 2018-02-04 07:15:19

Local clock offset: 1.379 ms

Remote clock offset: 8.173 ms

# Below is generated by plot.py at 2018-02-04 12:10:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 84.94 Mbit/s

95th percentile per-packet one-way delay: 59.472 ms

Loss rate: 0.51%

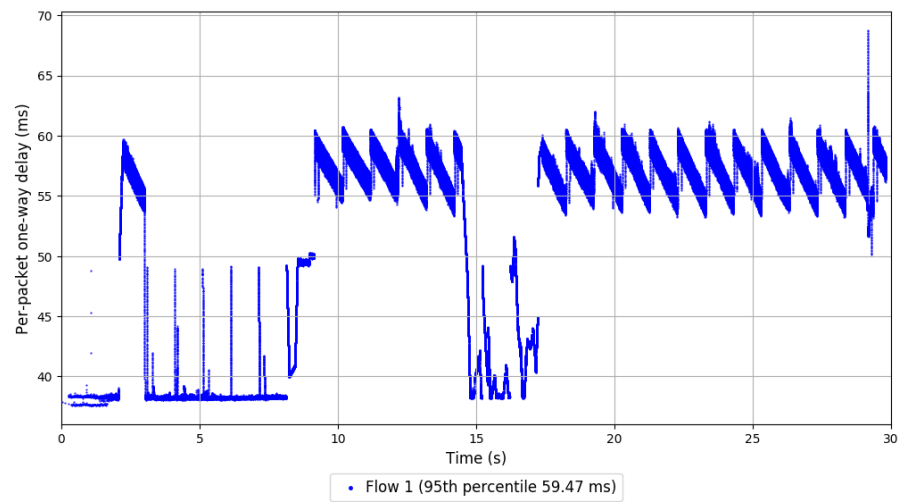
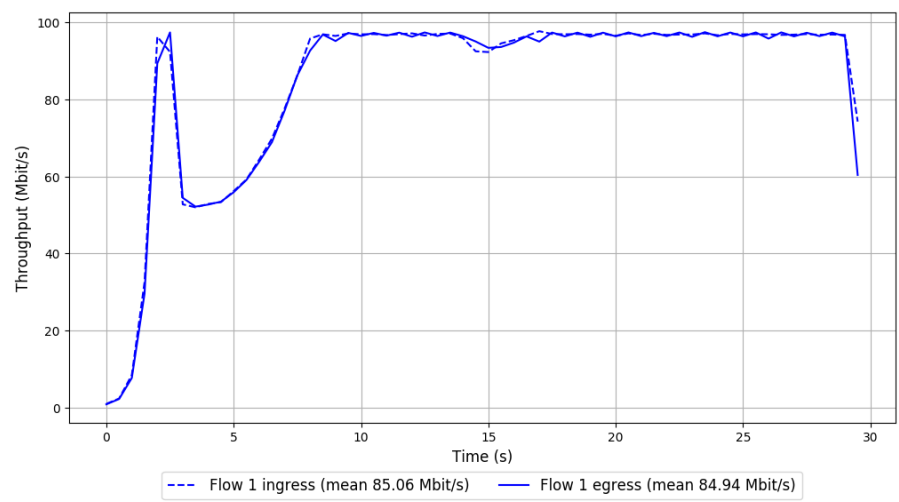
-- Flow 1:

Average throughput: 84.94 Mbit/s

95th percentile per-packet one-way delay: 59.472 ms

Loss rate: 0.51%

Run 8: Report of Vivace-loss — Data Link



Run 9: Statistics of Vivace-loss

Start at: 2018-02-04 07:36:36

End at: 2018-02-04 07:37:06

Local clock offset: 1.125 ms

Remote clock offset: 9.589 ms

# Below is generated by plot.py at 2018-02-04 12:10:55

# Datalink statistics

-- Total of 1 flow:

Average throughput: 85.14 Mbit/s

95th percentile per-packet one-way delay: 59.756 ms

Loss rate: 0.49%

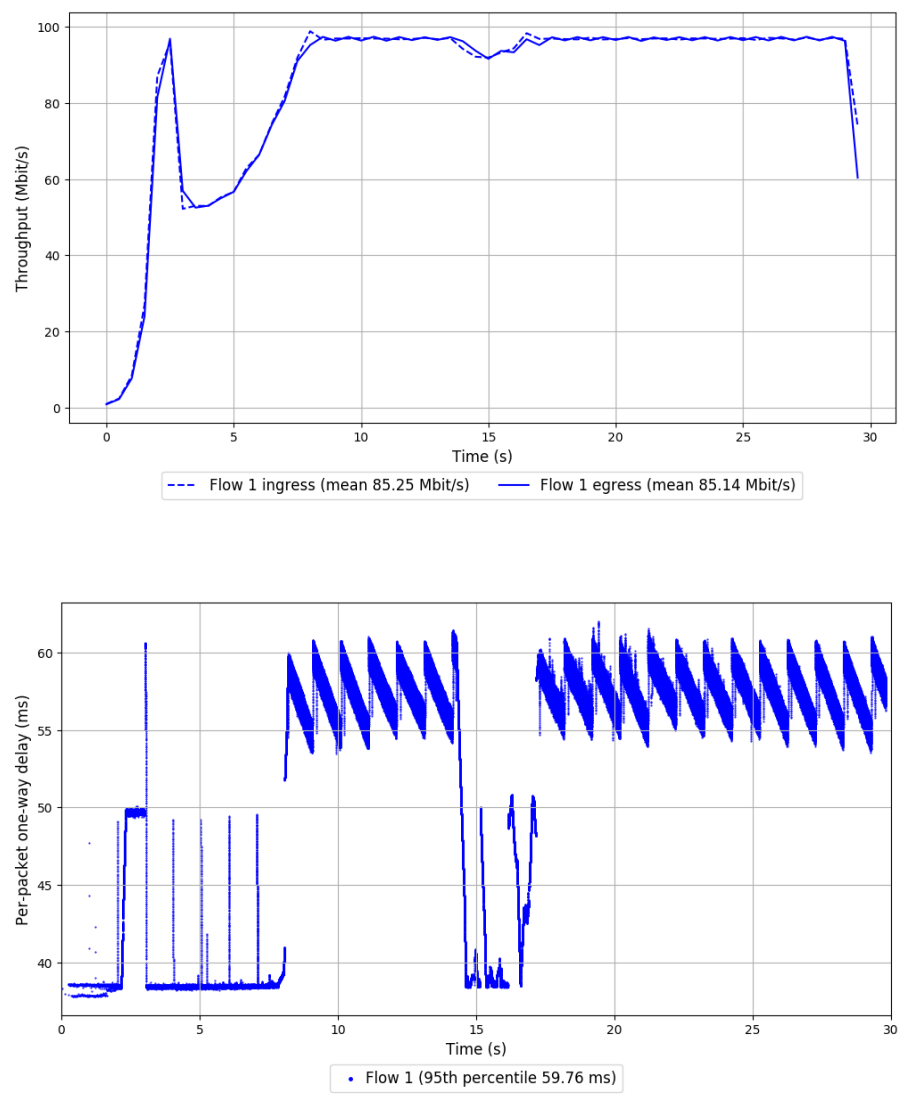
-- Flow 1:

Average throughput: 85.14 Mbit/s

95th percentile per-packet one-way delay: 59.756 ms

Loss rate: 0.49%

Run 9: Report of Vivace-loss — Data Link

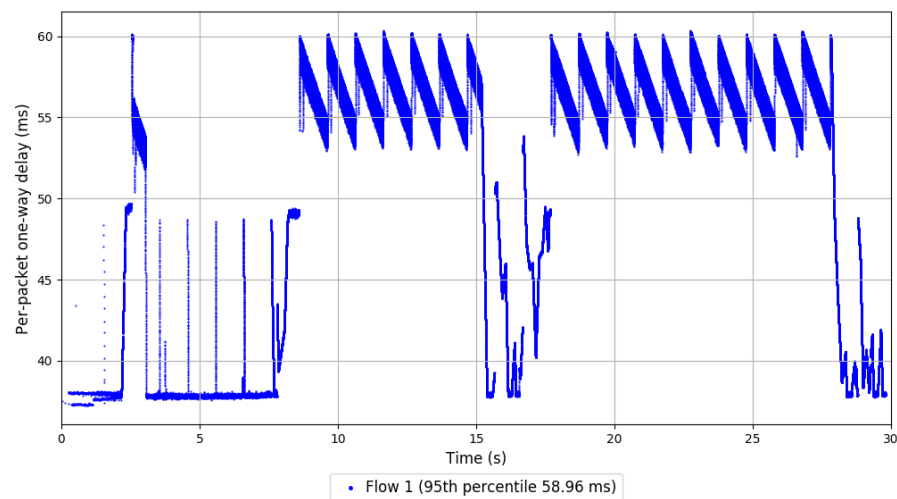
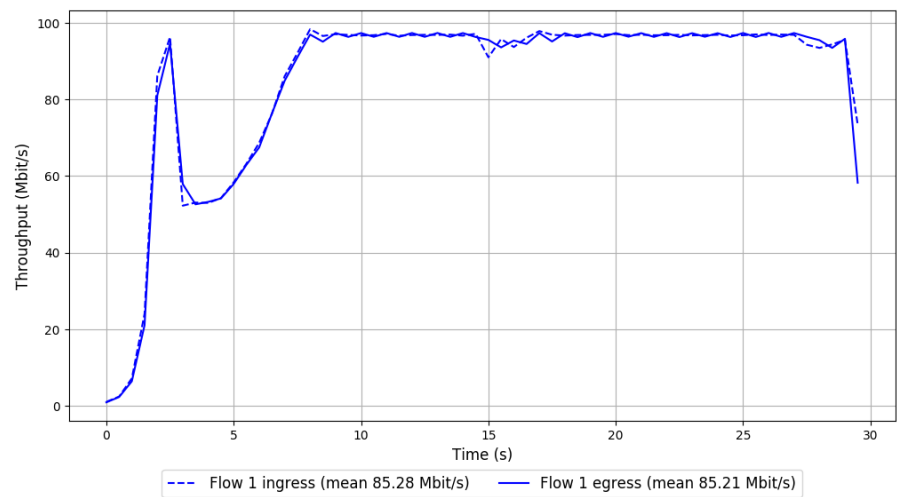


Run 10: Statistics of Vivace-loss

Start at: 2018-02-04 07:58:23  
End at: 2018-02-04 07:58:53  
Local clock offset: 0.209 ms  
Remote clock offset: 10.434 ms

# Below is generated by plot.py at 2018-02-04 12:11:27  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 85.21 Mbit/s  
95th percentile per-packet one-way delay: 58.958 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 85.21 Mbit/s  
95th percentile per-packet one-way delay: 58.958 ms  
Loss rate: 0.47%

Run 10: Report of Vivace-loss — Data Link



Run 1: Statistics of Vivace-LTE

Start at: 2018-02-04 04:02:46

End at: 2018-02-04 04:03:16

Local clock offset: -0.371 ms

Remote clock offset: 1.938 ms

# Below is generated by plot.py at 2018-02-04 12:11:27

# Datalink statistics

-- Total of 1 flow:

Average throughput: 54.04 Mbit/s

95th percentile per-packet one-way delay: 141.924 ms

Loss rate: 3.93%

-- Flow 1:

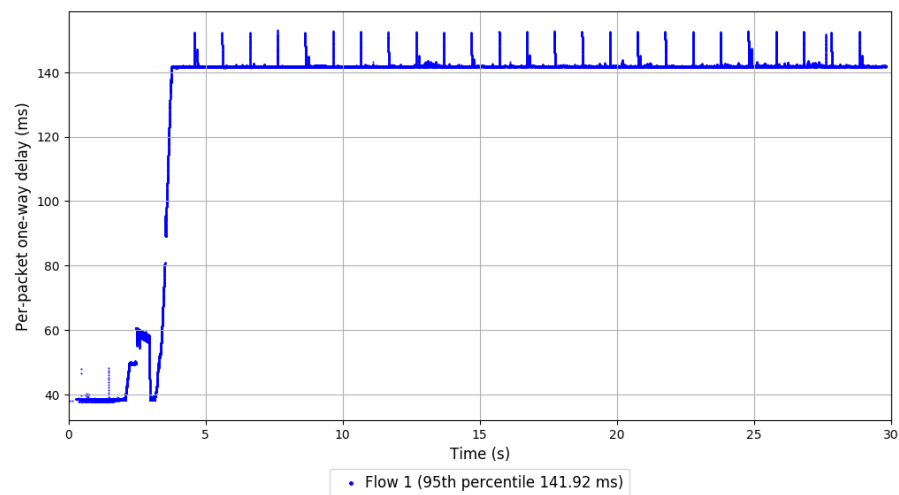
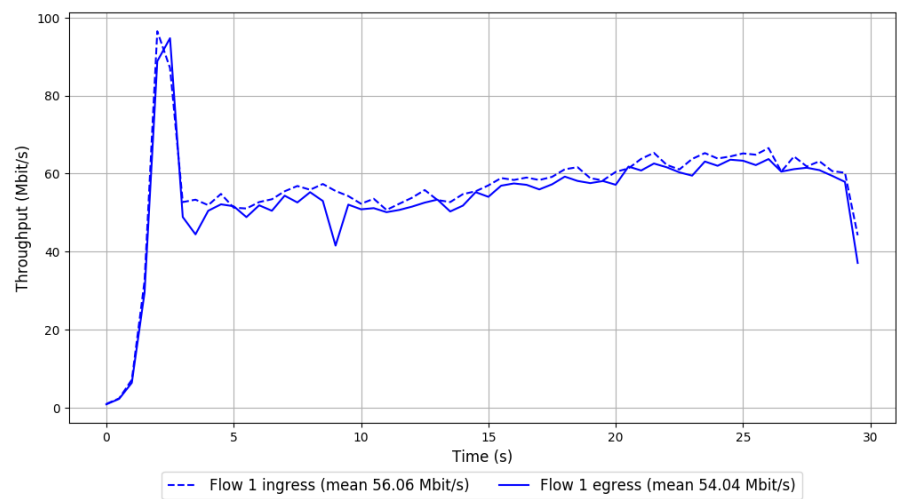
Average throughput: 54.04 Mbit/s

95th percentile per-packet one-way delay: 141.924 ms

Loss rate: 3.93%



Run 1: Report of Vivace-LTE — Data Link



Run 2: Statistics of Vivace-LTE

Start at: 2018-02-04 04:32:40

End at: 2018-02-04 04:33:10

Local clock offset: -2.958 ms

Remote clock offset: 2.567 ms

# Below is generated by plot.py at 2018-02-04 12:11:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 83.79 Mbit/s

95th percentile per-packet one-way delay: 47.536 ms

Loss rate: 0.39%

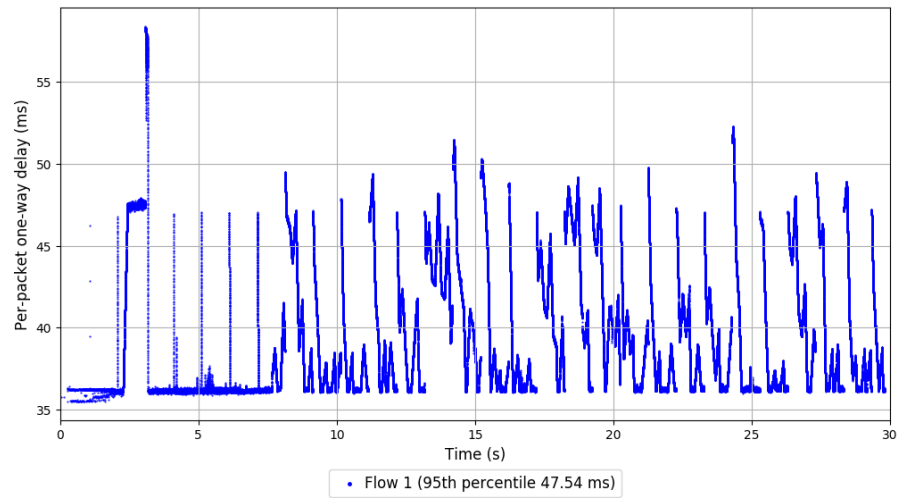
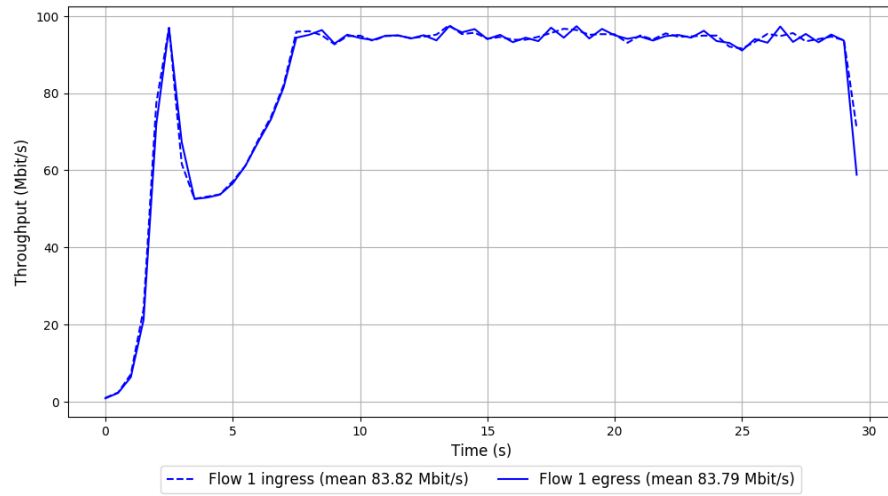
-- Flow 1:

Average throughput: 83.79 Mbit/s

95th percentile per-packet one-way delay: 47.536 ms

Loss rate: 0.39%

## Run 2: Report of Vivace-LTE — Data Link



Run 3: Statistics of Vivace-LTE

Start at: 2018-02-04 04:54:29

End at: 2018-02-04 04:54:59

Local clock offset: -0.04 ms

Remote clock offset: 3.366 ms

# Below is generated by plot.py at 2018-02-04 12:11:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 80.64 Mbit/s

95th percentile per-packet one-way delay: 50.400 ms

Loss rate: 0.42%

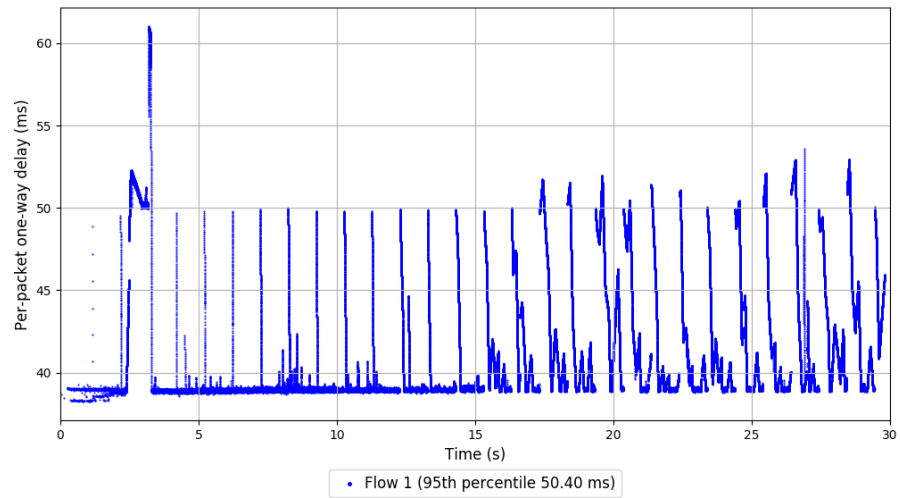
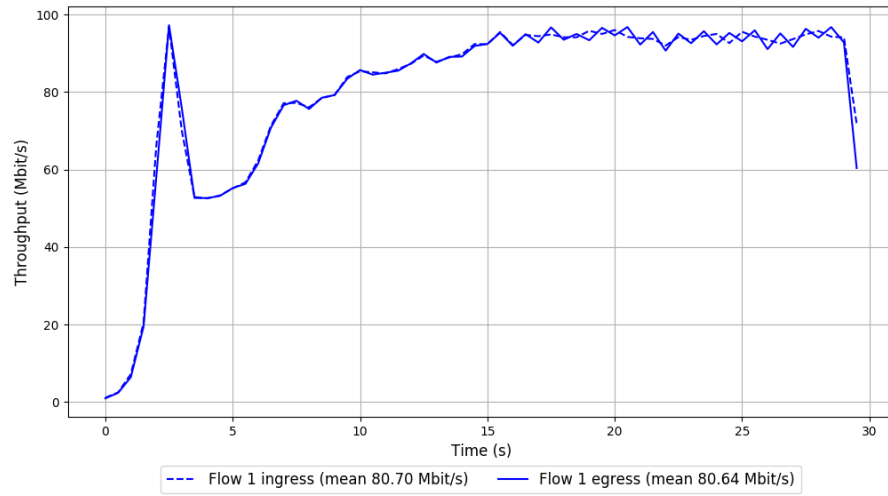
-- Flow 1:

Average throughput: 80.64 Mbit/s

95th percentile per-packet one-way delay: 50.400 ms

Loss rate: 0.42%

### Run 3: Report of Vivace-LTE — Data Link



Run 4: Statistics of Vivace-LTE

Start at: 2018-02-04 05:16:16

End at: 2018-02-04 05:16:46

Local clock offset: 0.011 ms

Remote clock offset: 4.395 ms

# Below is generated by plot.py at 2018-02-04 12:11:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 83.42 Mbit/s

95th percentile per-packet one-way delay: 49.596 ms

Loss rate: 0.41%

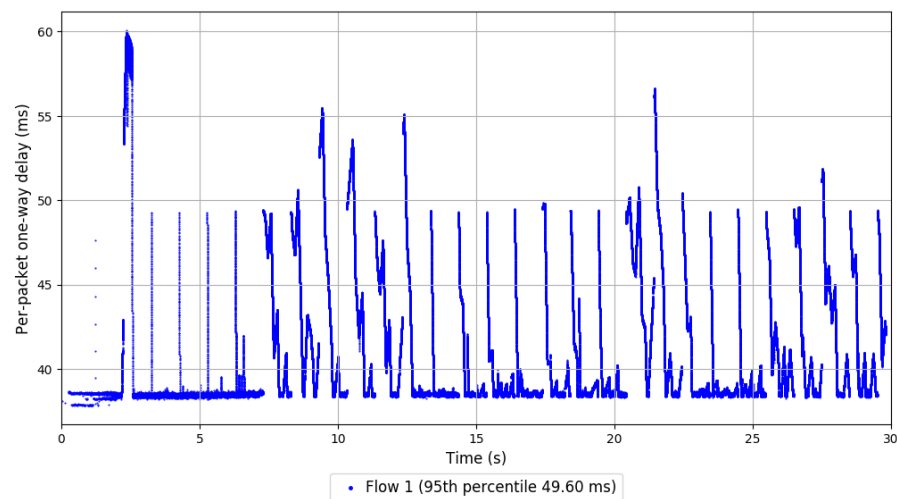
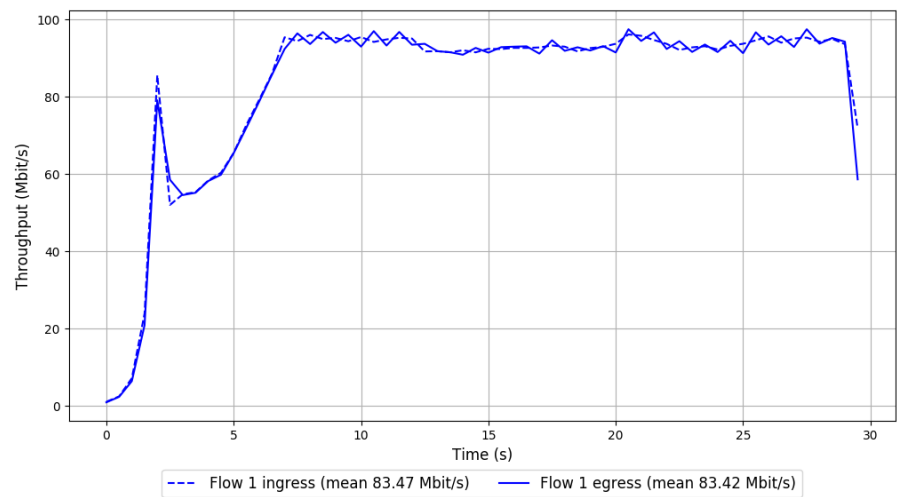
-- Flow 1:

Average throughput: 83.42 Mbit/s

95th percentile per-packet one-way delay: 49.596 ms

Loss rate: 0.41%

Run 4: Report of Vivace-LTE — Data Link



Run 5: Statistics of Vivace-LTE

Start at: 2018-02-04 05:38:00

End at: 2018-02-04 05:38:30

Local clock offset: -2.364 ms

Remote clock offset: 5.36 ms

# Below is generated by plot.py at 2018-02-04 12:11:55

# Datalink statistics

-- Total of 1 flow:

Average throughput: 82.50 Mbit/s

95th percentile per-packet one-way delay: 50.730 ms

Loss rate: 0.41%

-- Flow 1:

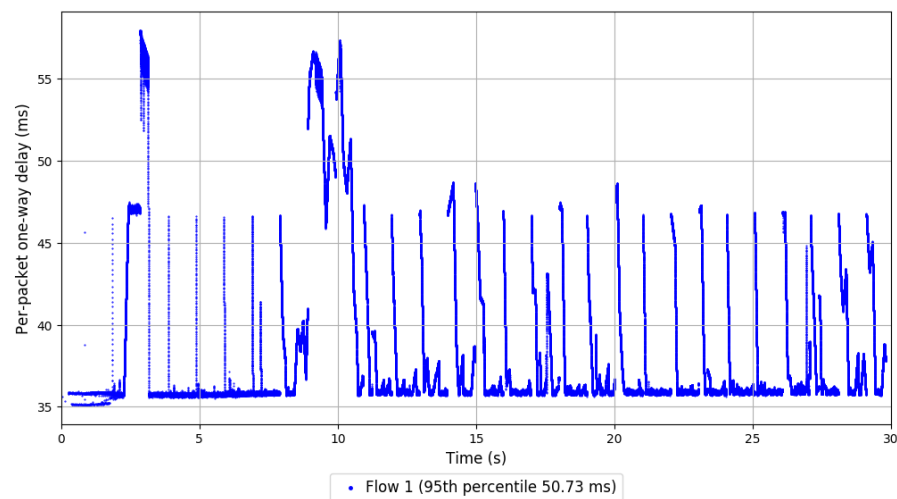
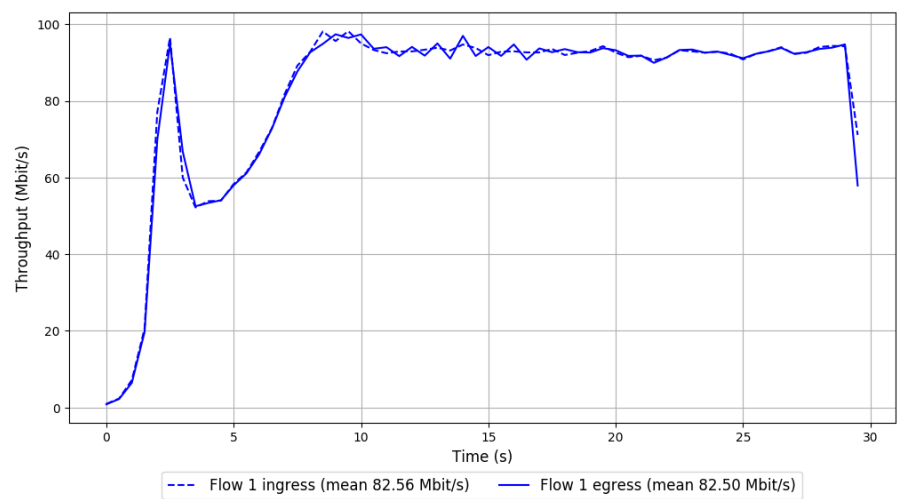
Average throughput: 82.50 Mbit/s

95th percentile per-packet one-way delay: 50.730 ms

Loss rate: 0.41%



Run 5: Report of Vivace-LTE — Data Link



Run 6: Statistics of Vivace-LTE

Start at: 2018-02-04 06:08:16

End at: 2018-02-04 06:08:46

Local clock offset: 0.313 ms

Remote clock offset: 6.121 ms

# Below is generated by plot.py at 2018-02-04 12:11:55

# Datalink statistics

-- Total of 1 flow:

Average throughput: 82.74 Mbit/s

95th percentile per-packet one-way delay: 57.241 ms

Loss rate: 0.41%

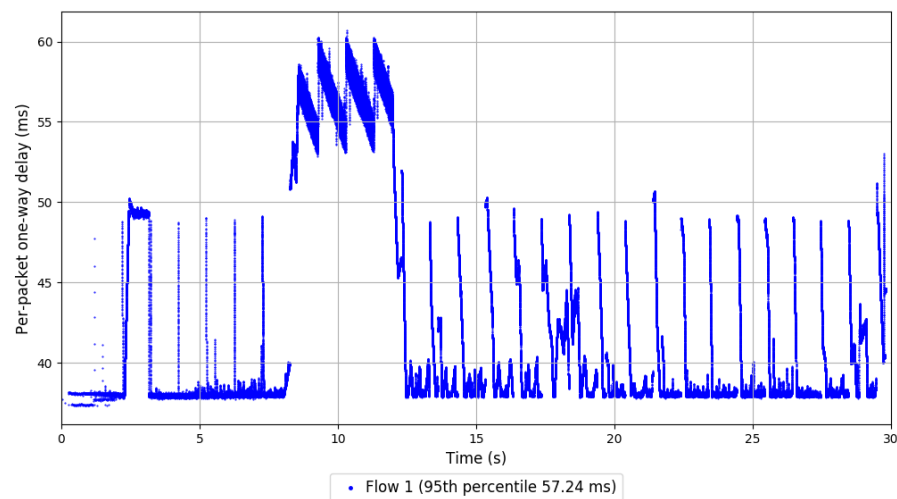
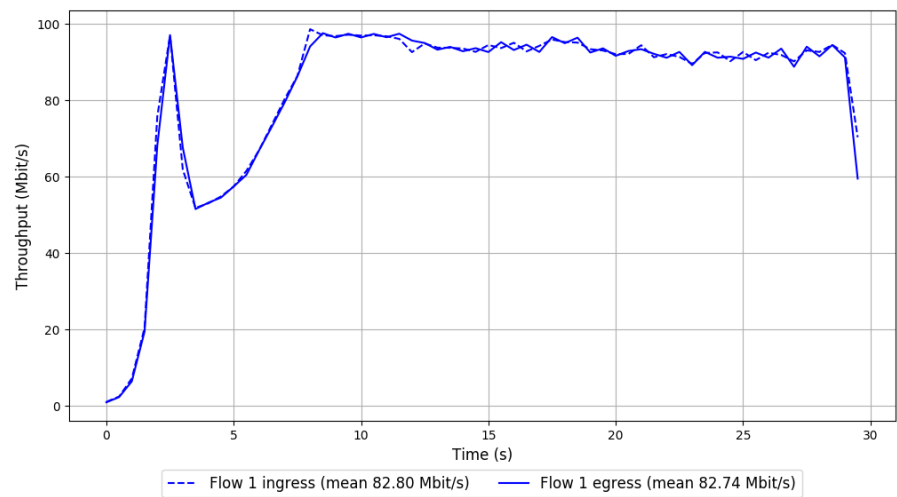
-- Flow 1:

Average throughput: 82.74 Mbit/s

95th percentile per-packet one-way delay: 57.241 ms

Loss rate: 0.41%

Run 6: Report of Vivace-LTE — Data Link



Run 7: Statistics of Vivace-LTE

Start at: 2018-02-04 06:30:13

End at: 2018-02-04 06:30:43

Local clock offset: -1.722 ms

Remote clock offset: 6.673 ms

# Below is generated by plot.py at 2018-02-04 12:11:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 83.49 Mbit/s

95th percentile per-packet one-way delay: 48.614 ms

Loss rate: 0.38%

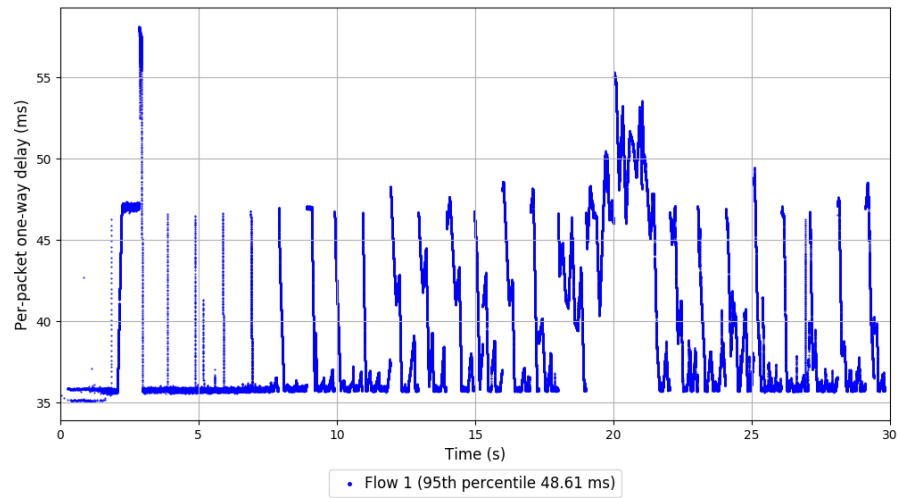
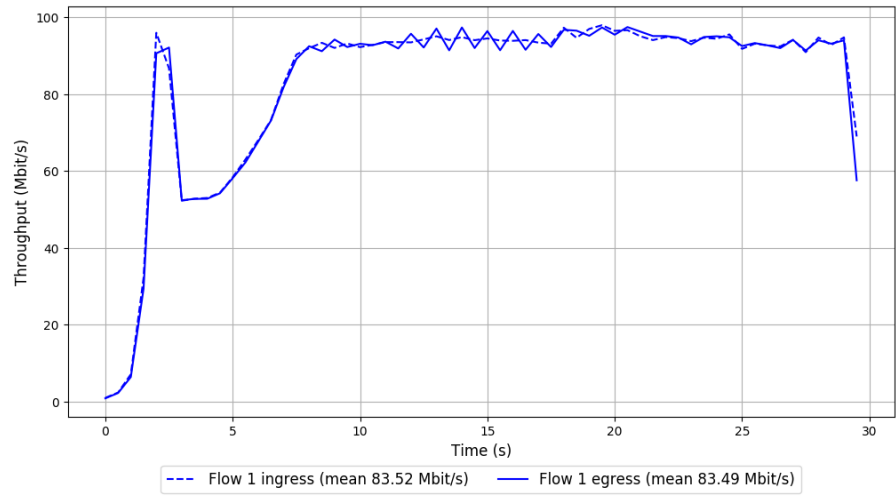
-- Flow 1:

Average throughput: 83.49 Mbit/s

95th percentile per-packet one-way delay: 48.614 ms

Loss rate: 0.38%

### Run 7: Report of Vivace-LTE — Data Link



Run 8: Statistics of Vivace-LTE

/home/ubuntu/pantheon\_data/2018-02-04T04-02-China-to-AWS-Korea-10-runs/vivace\_lte\_stats\_run8

Run 8: Report of Vivace-LTE — Data Link

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Run 9: Statistics of Vivace-LTE

Start at: 2018-02-04 07:17:16

End at: 2018-02-04 07:17:46

Local clock offset: 1.144 ms

Remote clock offset: 8.248 ms

# Below is generated by plot.py at 2018-02-04 12:11:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 78.40 Mbit/s

95th percentile per-packet one-way delay: 58.371 ms

Loss rate: 0.47%

-- Flow 1:

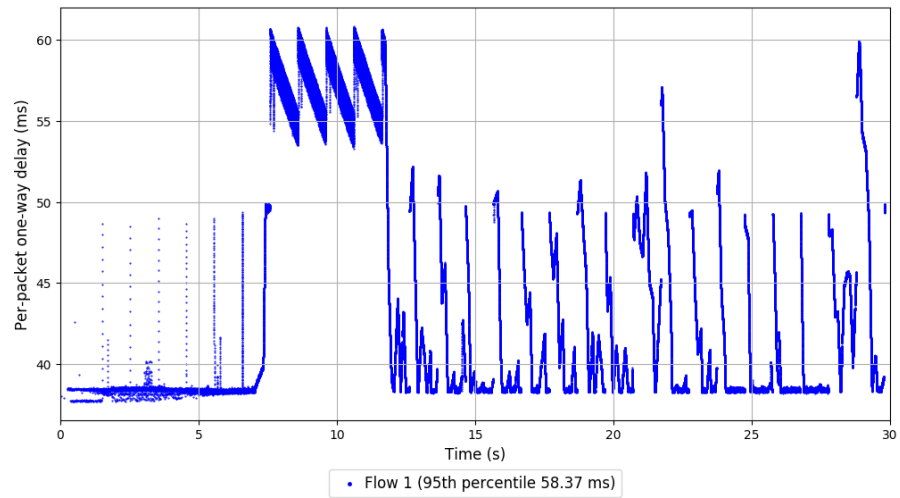
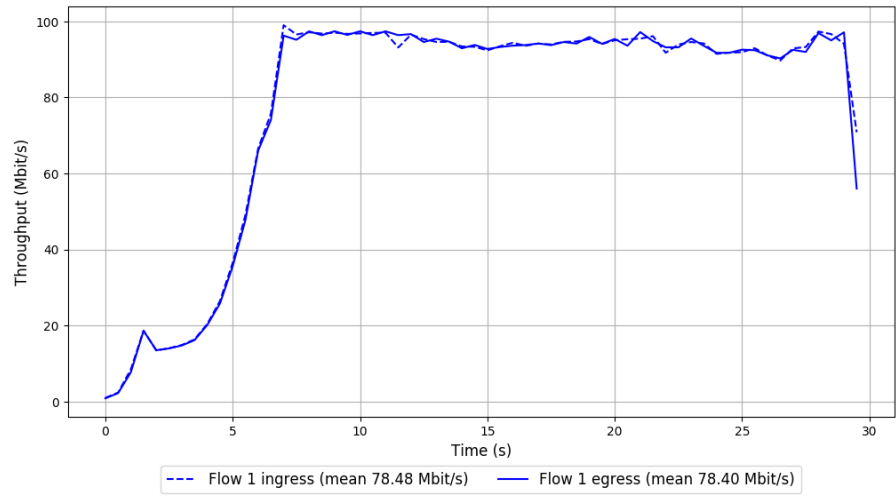
Average throughput: 78.40 Mbit/s

95th percentile per-packet one-way delay: 58.371 ms

Loss rate: 0.47%



### Run 9: Report of Vivace-LTE — Data Link



Run 10: Statistics of Vivace-LTE

Start at: 2018-02-04 07:39:04

End at: 2018-02-04 07:39:34

Local clock offset: 1.17 ms

Remote clock offset: 9.733 ms

# Below is generated by plot.py at 2018-02-04 12:12:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 79.99 Mbit/s

95th percentile per-packet one-way delay: 49.594 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 79.99 Mbit/s

95th percentile per-packet one-way delay: 49.594 ms

Loss rate: 0.42%

Run 10: Report of Vivace-LTE — Data Link

