

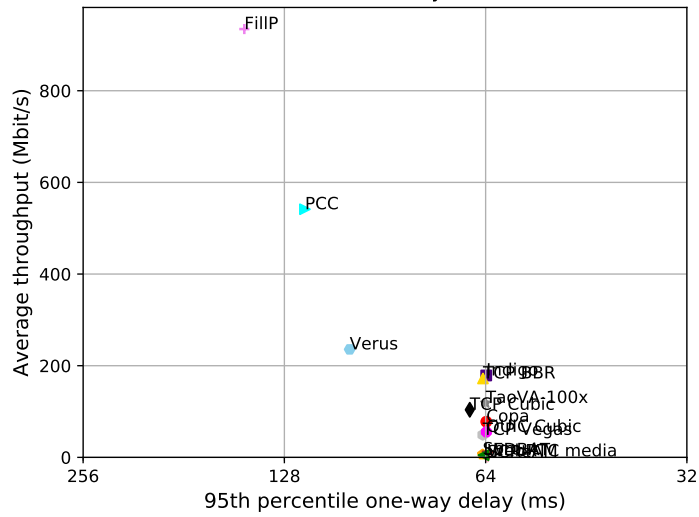
## Pantheon Report

Generated at 2017-12-20 11:59:15 (UTC).  
Data path: GCE Tokyo Ethernet (*remote*) → GCE Iowa Ethernet (*local*).  
Repeated the test of 14 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**).

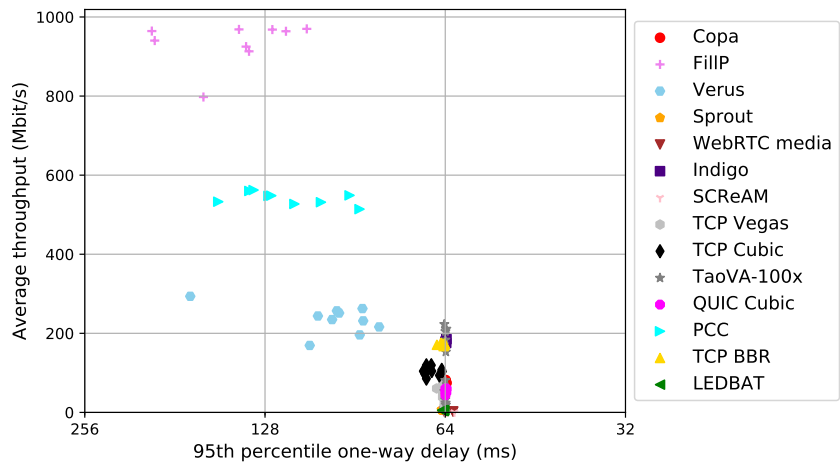
Git summary:

```
branch: master @ 904a5750834816b1e46a2c86405d707788d27c16
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/llp @ dcaef6b00654e660f73f7ed679d2eab61ce08639
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ b19f3730105f9aa95452552af924e3719b03cc55
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream @ c3370fd7bd17265a79aeb34e4016ad23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeab30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/webRTC @ a488197ddd041ace68a42849b2540ad834825f42
```

test from GCE Tokyo Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme  
(mean of all runs by scheme)



test from GCE Tokyo Ethernet to GCE Iowa Ethernet, 10 runs of 30s each per scheme



| scheme       | # runs | mean avg tput (Mbit/s)<br>flow 1 | mean 95th-%ile delay (ms)<br>flow 1 | mean loss rate (%)<br>flow 1 |
|--------------|--------|----------------------------------|-------------------------------------|------------------------------|
| TCP BBR      | 10     | 172.18                           | 64.59                               | 0.53                         |
| TCP Cubic    | 10     | 103.86                           | 67.59                               | 0.52                         |
| LEDBAT       | 10     | 4.75                             | 64.49                               | 1.11                         |
| PCC          | 9      | 541.39                           | 119.24                              | 1.01                         |
| QUIC Cubic   | 10     | 55.53                            | 63.83                               | 0.66                         |
| SCReAM       | 10     | 0.22                             | 63.71                               | 0.41                         |
| WebRTC media | 10     | 2.25                             | 63.58                               | 0.49                         |
| Sprout       | 10     | 6.41                             | 64.67                               | 0.79                         |
| TaoVA-100x   | 10     | 118.68                           | 63.98                               | 0.74                         |
| TCP Vegas    | 10     | 49.06                            | 64.65                               | 0.62                         |
| Verus        | 10     | 235.62                           | 102.23                              | 0.78                         |
| Copa         | 8      | 77.75                            | 63.86                               | 0.47                         |
| FillP        | 9      | 934.58                           | 146.94                              | 2.26                         |
| Indigo       | 9      | 178.68                           | 63.87                               | 0.50                         |

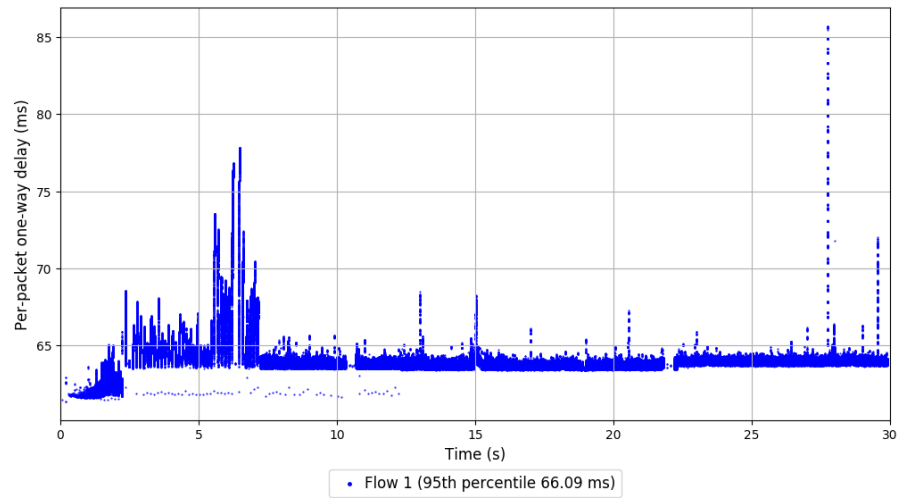
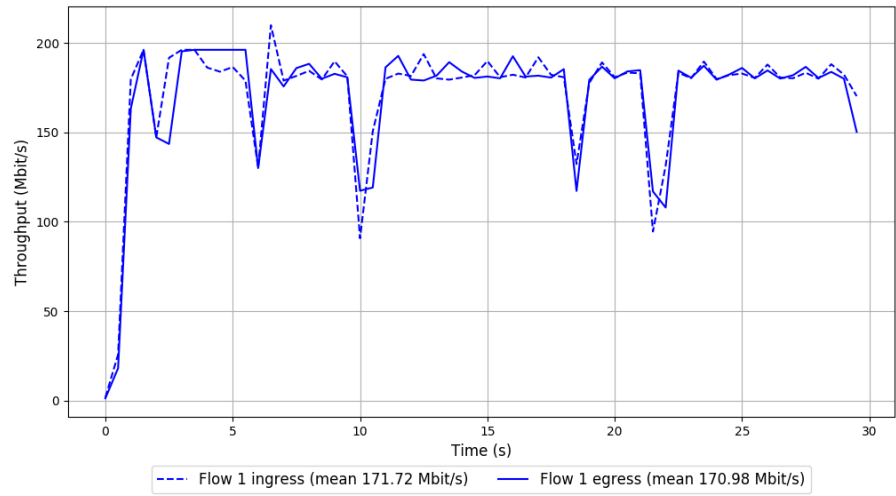
```
Run 1: Statistics of TCP BBR

Start at: 2017-12-20 07:12:06
End at: 2017-12-20 07:12:36

# Below is generated by plot.py at 2017-12-20 11:07:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 170.98 Mbit/s
95th percentile per-packet one-way delay: 66.086 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 170.98 Mbit/s
95th percentile per-packet one-way delay: 66.086 ms
Loss rate: 0.85%
```



# Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2017-12-20 07:23:42

End at: 2017-12-20 07:24:12

# Below is generated by plot.py at 2017-12-20 11:07:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 174.65 Mbit/s

95th percentile per-packet one-way delay: 64.869 ms

Loss rate: 0.50%

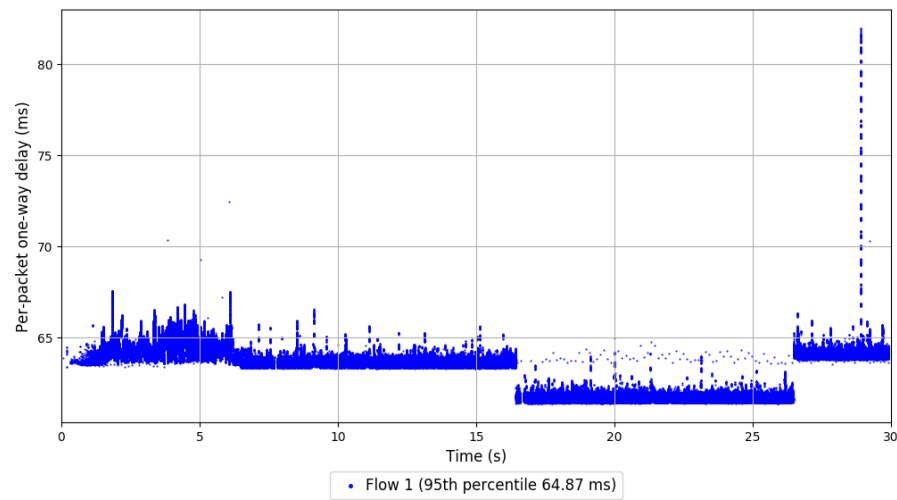
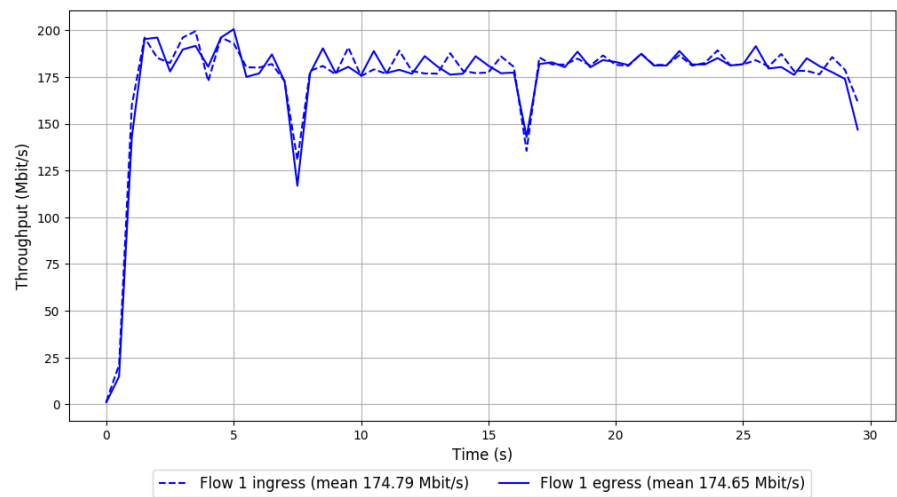
-- Flow 1:

Average throughput: 174.65 Mbit/s

95th percentile per-packet one-way delay: 64.869 ms

Loss rate: 0.50%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2017-12-20 07:35:22

End at: 2017-12-20 07:35:52

# Below is generated by plot.py at 2017-12-20 11:07:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 176.07 Mbit/s

95th percentile per-packet one-way delay: 65.066 ms

Loss rate: 0.45%

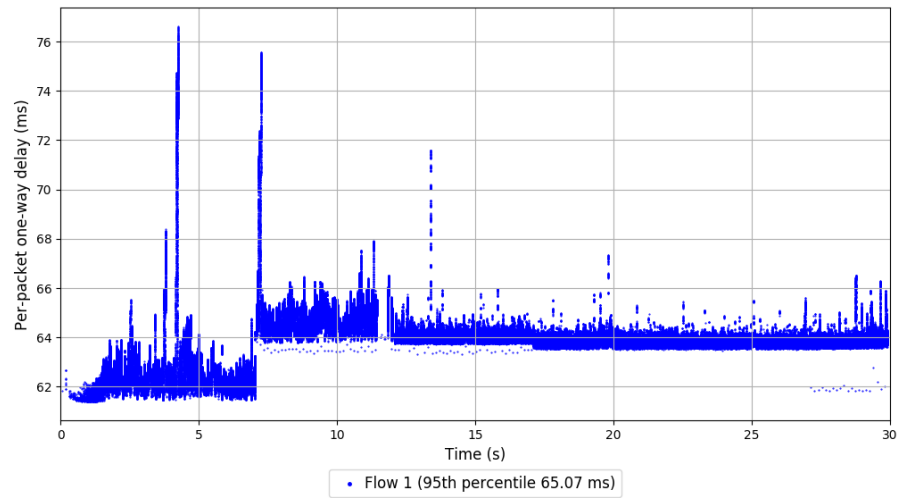
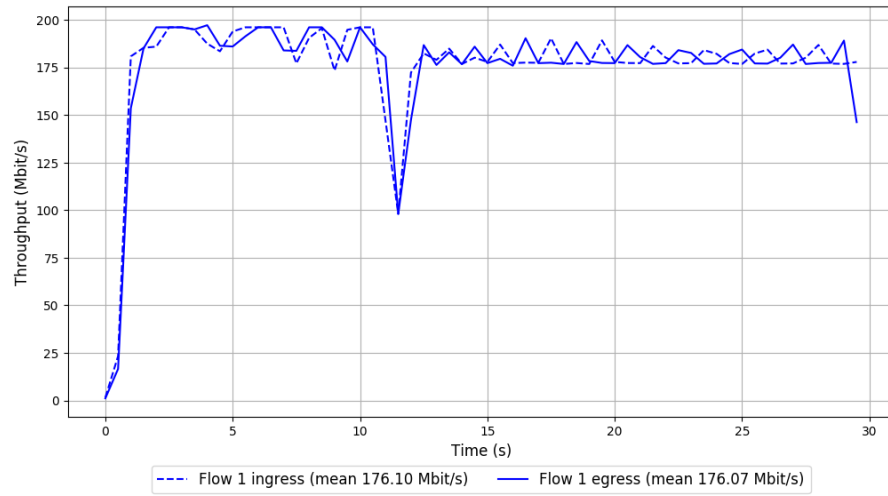
-- Flow 1:

Average throughput: 176.07 Mbit/s

95th percentile per-packet one-way delay: 65.066 ms

Loss rate: 0.45%

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



Run 4: Statistics of TCP BBR

Start at: 2017-12-20 07:47:18

End at: 2017-12-20 07:47:48

# Below is generated by plot.py at 2017-12-20 11:07:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 171.36 Mbit/s

95th percentile per-packet one-way delay: 64.226 ms

Loss rate: 0.55%

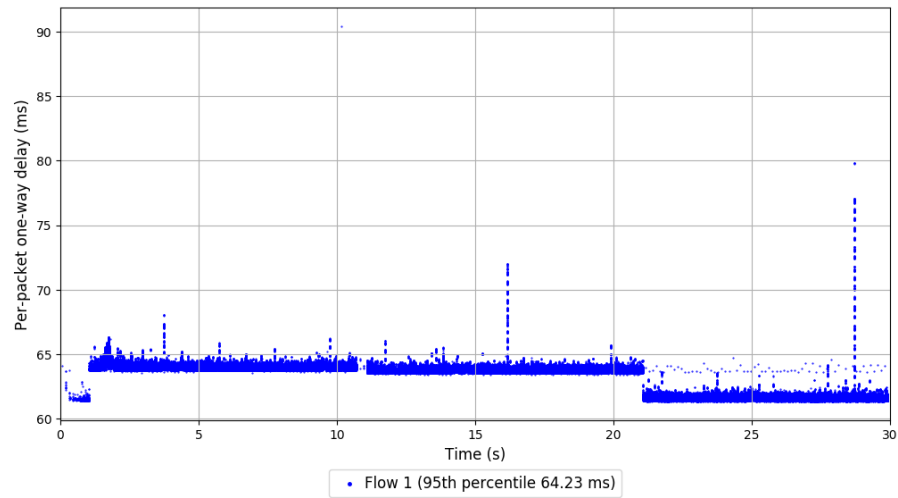
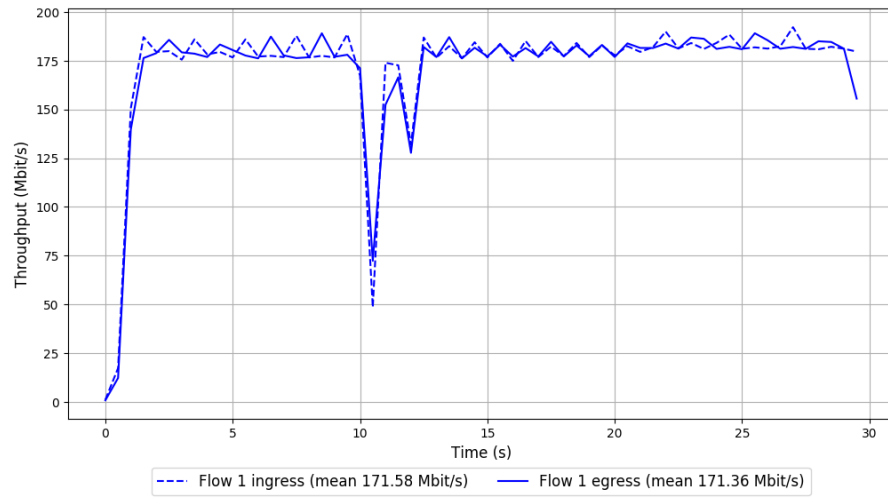
-- Flow 1:

Average throughput: 171.36 Mbit/s

95th percentile per-packet one-way delay: 64.226 ms

Loss rate: 0.55%

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



Run 5: Statistics of TCP BBR

Start at: 2017-12-20 07:59:01

End at: 2017-12-20 07:59:31

# Below is generated by plot.py at 2017-12-20 11:07:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 174.49 Mbit/s

95th percentile per-packet one-way delay: 64.135 ms

Loss rate: 0.44%

-- Flow 1:

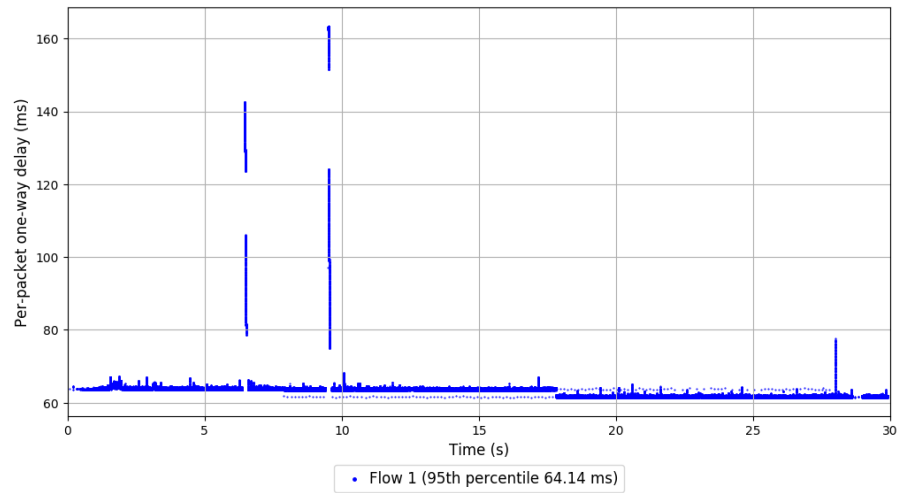
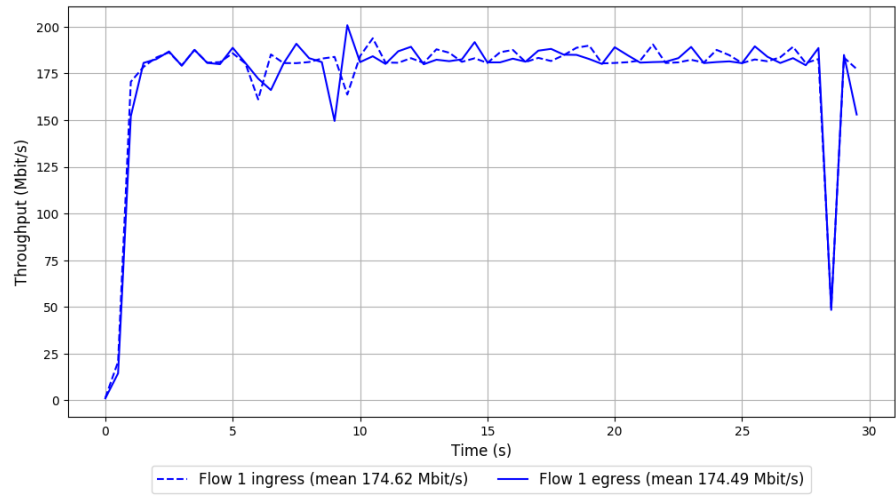
Average throughput: 174.49 Mbit/s

95th percentile per-packet one-way delay: 64.135 ms

Loss rate: 0.44%



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



Run 6: Statistics of TCP BBR

Start at: 2017-12-20 08:10:11

End at: 2017-12-20 08:10:41

# Below is generated by plot.py at 2017-12-20 11:07:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 171.47 Mbit/s

95th percentile per-packet one-way delay: 64.324 ms

Loss rate: 0.45%

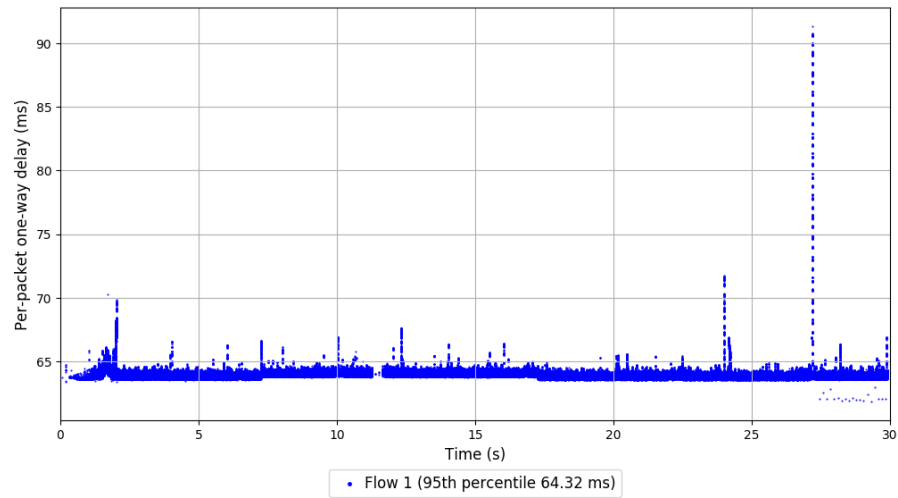
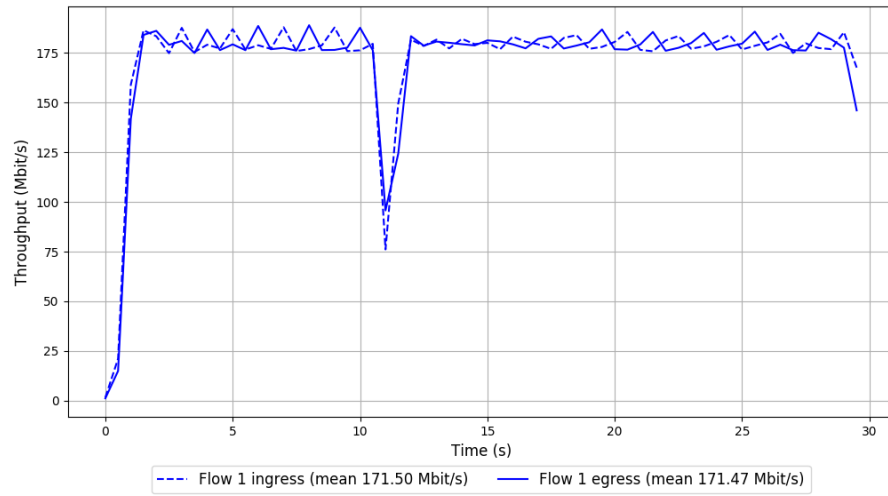
-- Flow 1:

Average throughput: 171.47 Mbit/s

95th percentile per-packet one-way delay: 64.324 ms

Loss rate: 0.45%

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



Run 7: Statistics of TCP BBR

Start at: 2017-12-20 08:21:46

End at: 2017-12-20 08:22:16

# Below is generated by plot.py at 2017-12-20 11:07:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 172.92 Mbit/s

95th percentile per-packet one-way delay: 64.261 ms

Loss rate: 0.58%

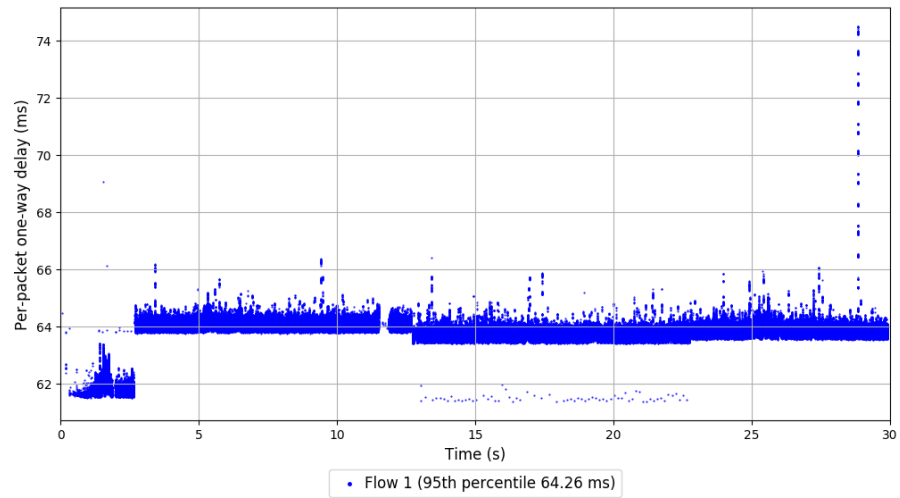
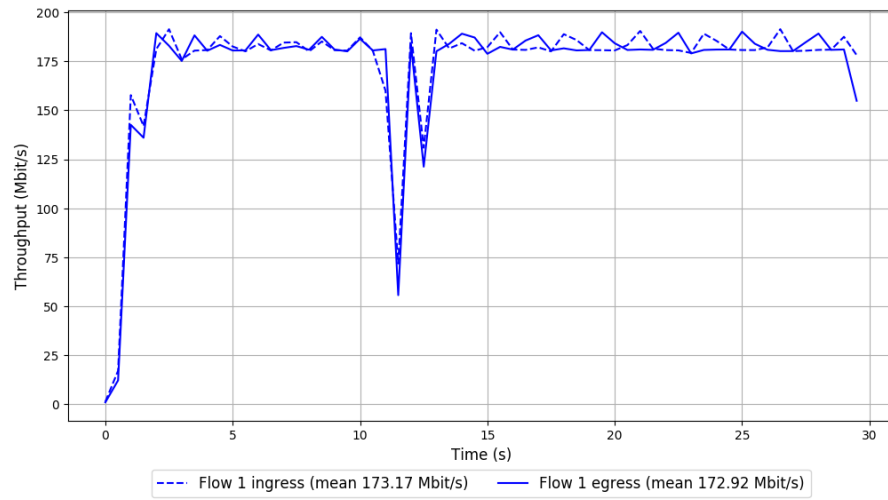
-- Flow 1:

Average throughput: 172.92 Mbit/s

95th percentile per-packet one-way delay: 64.261 ms

Loss rate: 0.58%

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



Run 8: Statistics of TCP BBR

Start at: 2017-12-20 08:33:12

End at: 2017-12-20 08:33:42

# Below is generated by plot.py at 2017-12-20 11:07:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 173.25 Mbit/s

95th percentile per-packet one-way delay: 64.240 ms

Loss rate: 0.44%

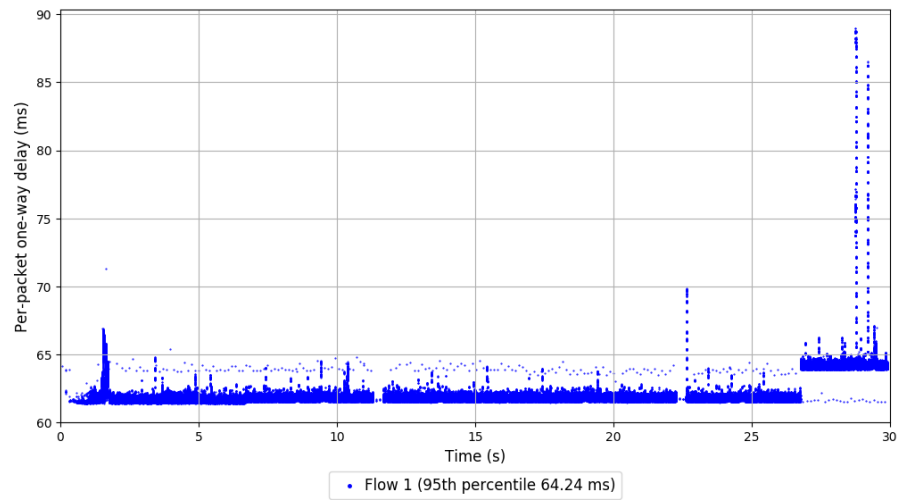
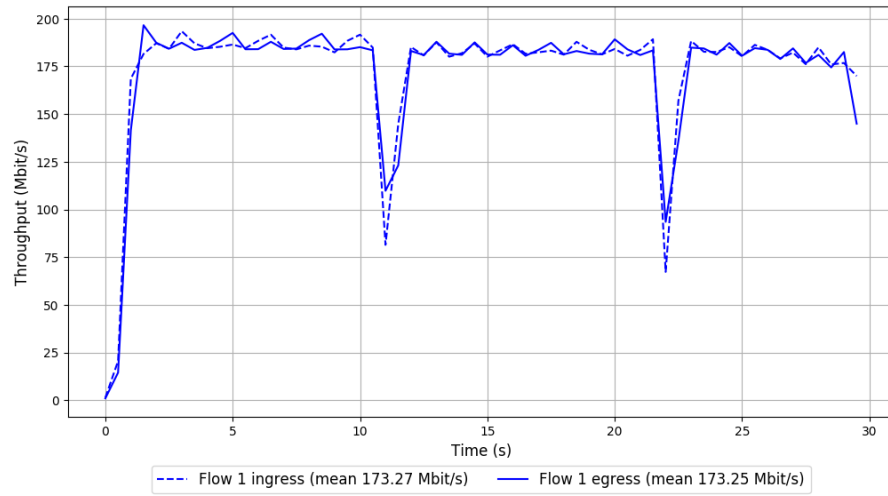
-- Flow 1:

Average throughput: 173.25 Mbit/s

95th percentile per-packet one-way delay: 64.240 ms

Loss rate: 0.44%

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



Run 9: Statistics of TCP BBR

Start at: 2017-12-20 08:44:58

End at: 2017-12-20 08:45:28

# Below is generated by plot.py at 2017-12-20 11:11:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 167.59 Mbit/s

95th percentile per-packet one-way delay: 64.401 ms

Loss rate: 0.51%

-- Flow 1:

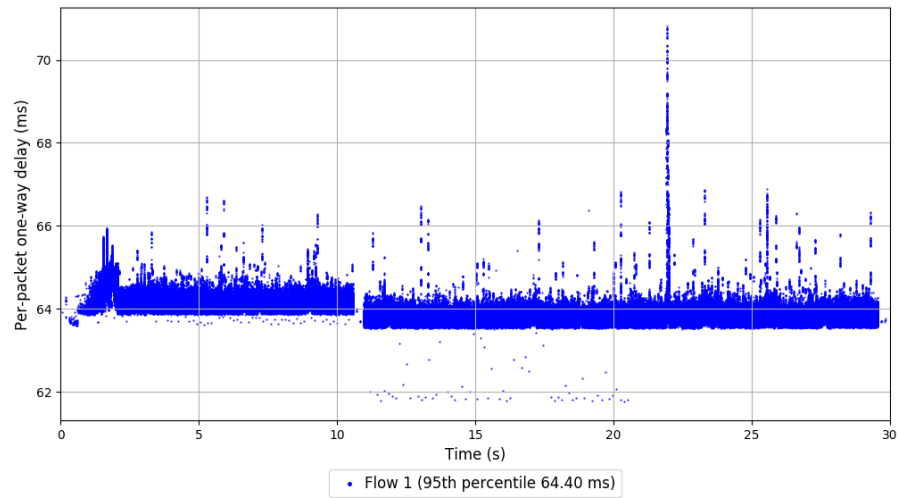
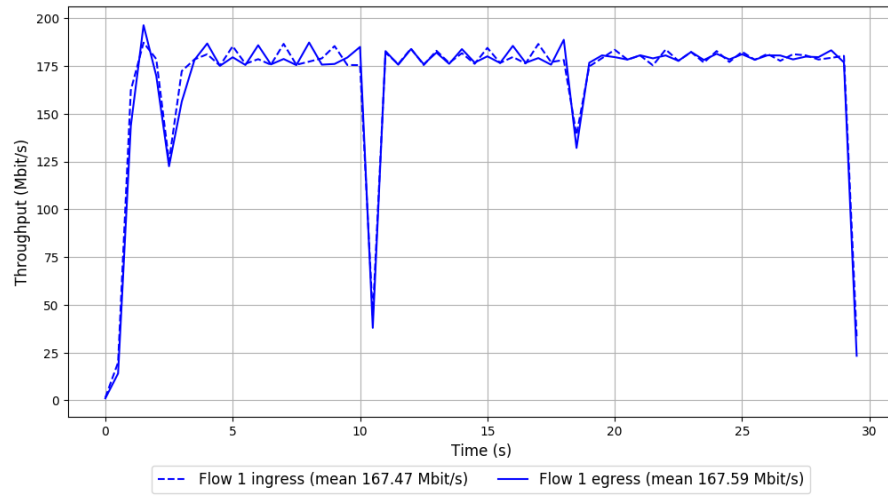
Average throughput: 167.59 Mbit/s

95th percentile per-packet one-way delay: 64.401 ms

Loss rate: 0.51%



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



Run 10: Statistics of TCP BBR

Start at: 2017-12-20 08:56:48

End at: 2017-12-20 08:57:18

# Below is generated by plot.py at 2017-12-20 11:11:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 169.04 Mbit/s

95th percentile per-packet one-way delay: 64.309 ms

Loss rate: 0.53%

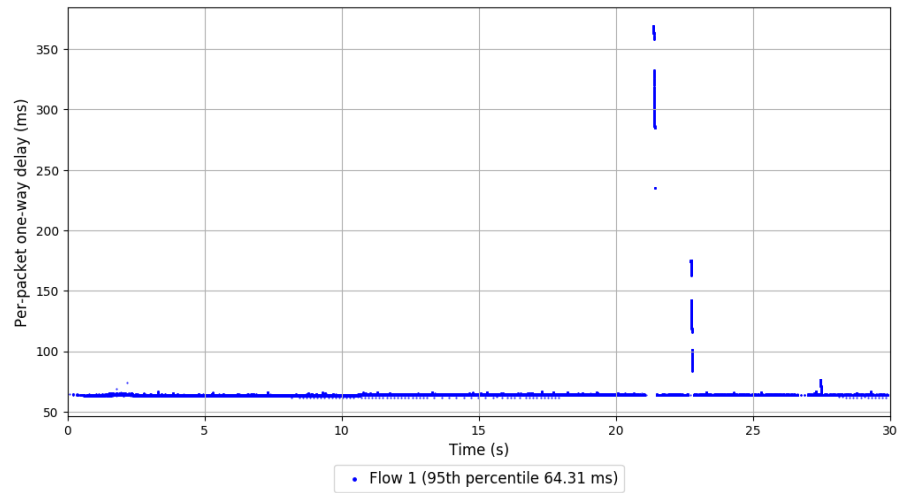
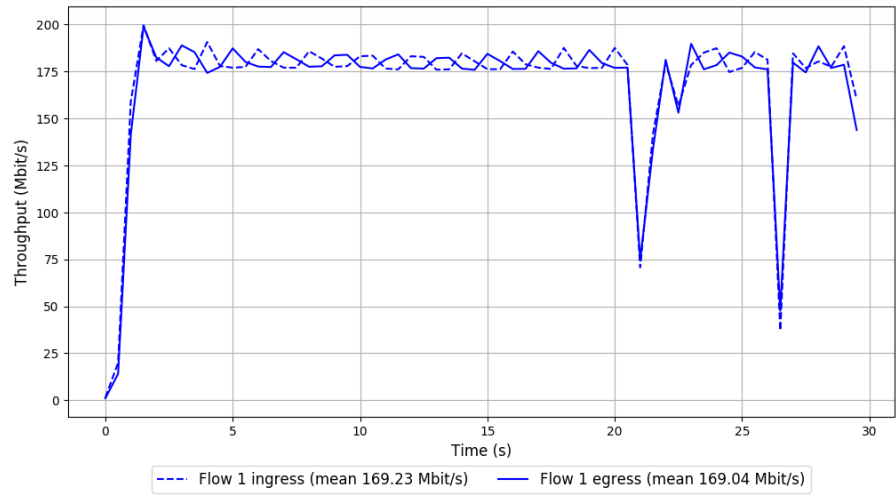
-- Flow 1:

Average throughput: 169.04 Mbit/s

95th percentile per-packet one-way delay: 64.309 ms

Loss rate: 0.53%

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



Run 1: Statistics of TCP Cubic

Start at: 2017-12-20 07:16:29

End at: 2017-12-20 07:16:59

# Below is generated by plot.py at 2017-12-20 11:11:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 103.33 Mbit/s

95th percentile per-packet one-way delay: 64.737 ms

Loss rate: 0.61%

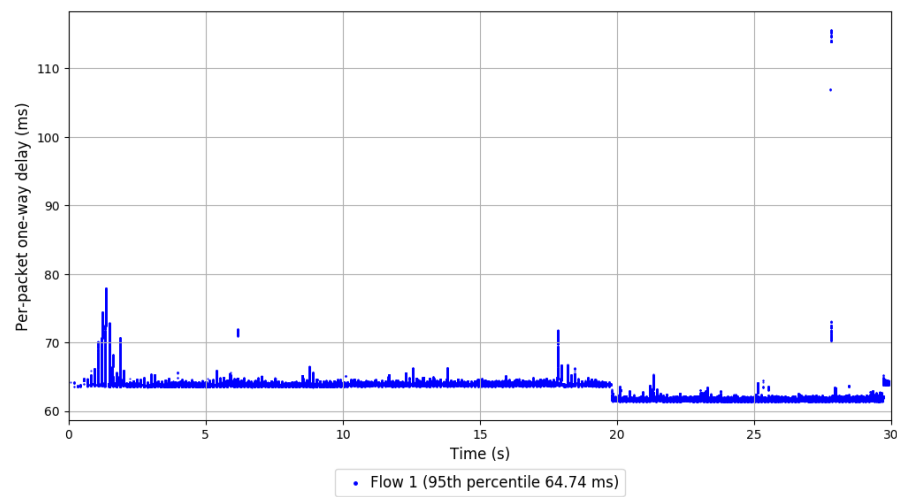
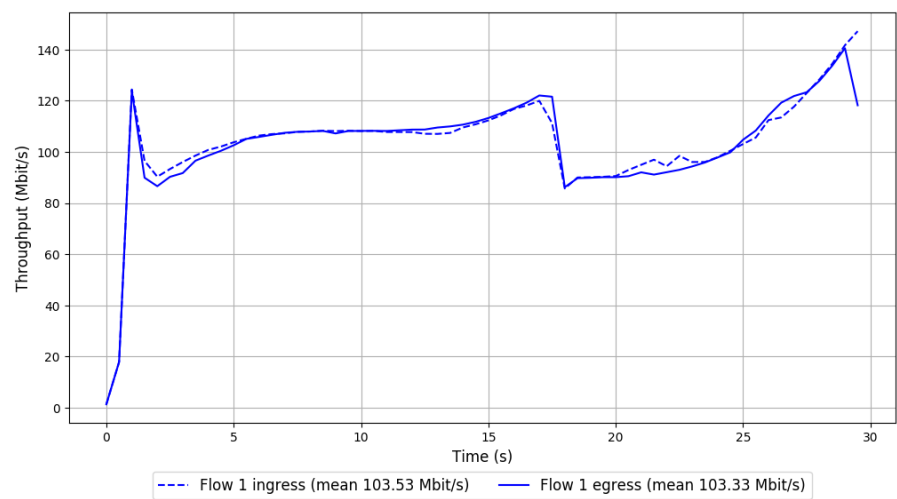
-- Flow 1:

Average throughput: 103.33 Mbit/s

95th percentile per-packet one-way delay: 64.737 ms

Loss rate: 0.61%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2017-12-20 07:28:06

End at: 2017-12-20 07:28:36

# Below is generated by plot.py at 2017-12-20 11:11:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 119.18 Mbit/s

95th percentile per-packet one-way delay: 68.816 ms

Loss rate: 0.34%

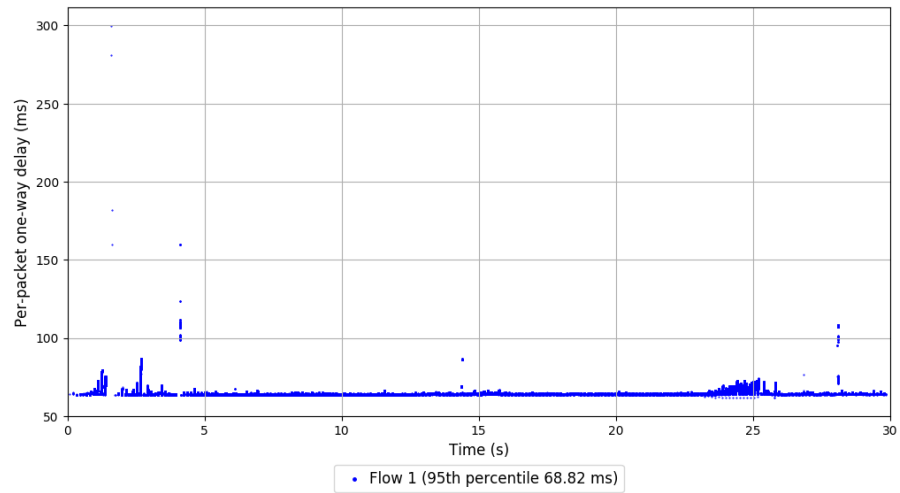
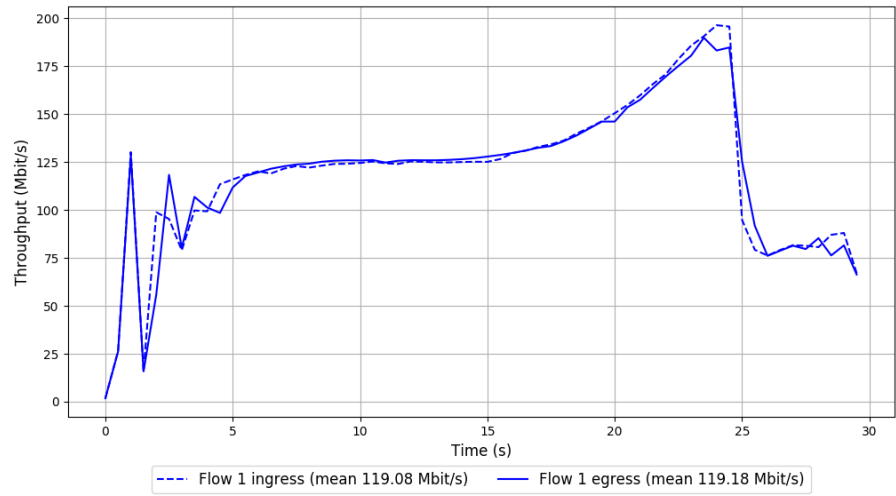
-- Flow 1:

Average throughput: 119.18 Mbit/s

95th percentile per-packet one-way delay: 68.816 ms

Loss rate: 0.34%

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



Run 3: Statistics of TCP Cubic

Start at: 2017-12-20 07:39:47

End at: 2017-12-20 07:40:17

# Below is generated by plot.py at 2017-12-20 11:11:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 104.55 Mbit/s

95th percentile per-packet one-way delay: 67.404 ms

Loss rate: 0.34%

-- Flow 1:

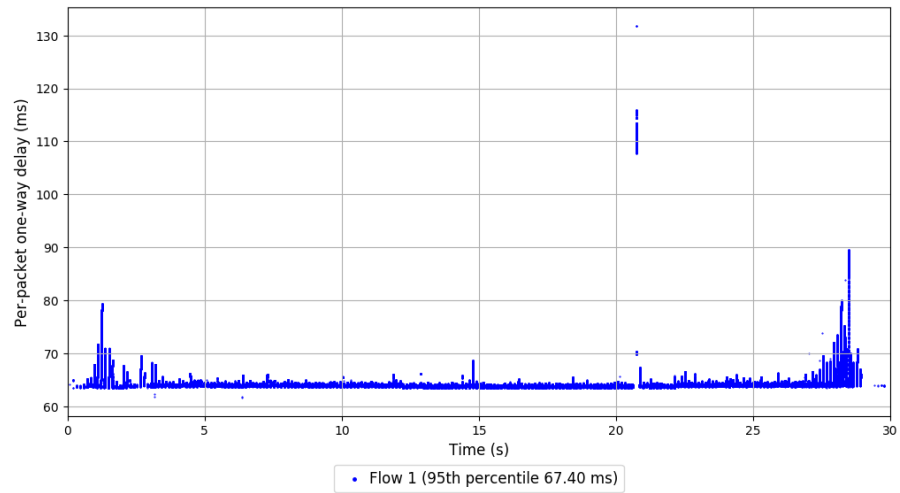
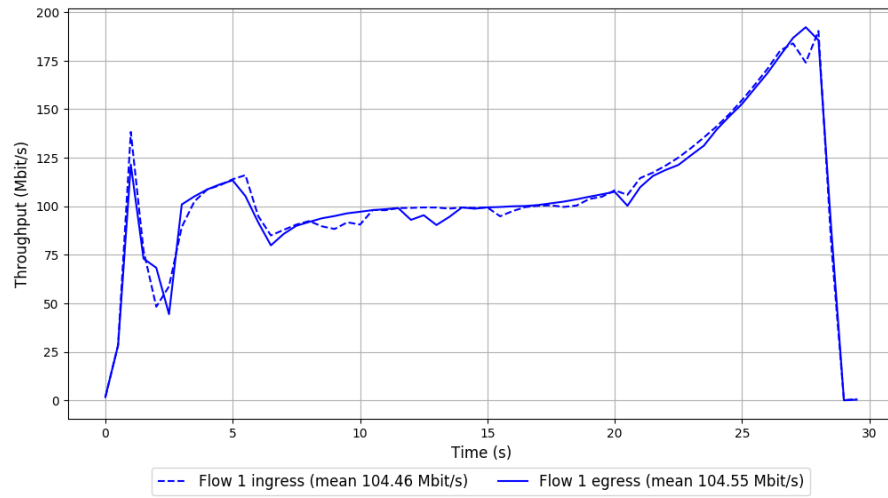
Average throughput: 104.55 Mbit/s

95th percentile per-packet one-way delay: 67.404 ms

Loss rate: 0.34%



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



Run 4: Statistics of TCP Cubic

Start at: 2017-12-20 07:51:45

End at: 2017-12-20 07:52:15

# Below is generated by plot.py at 2017-12-20 11:11:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 104.66 Mbit/s

95th percentile per-packet one-way delay: 69.489 ms

Loss rate: 0.33%

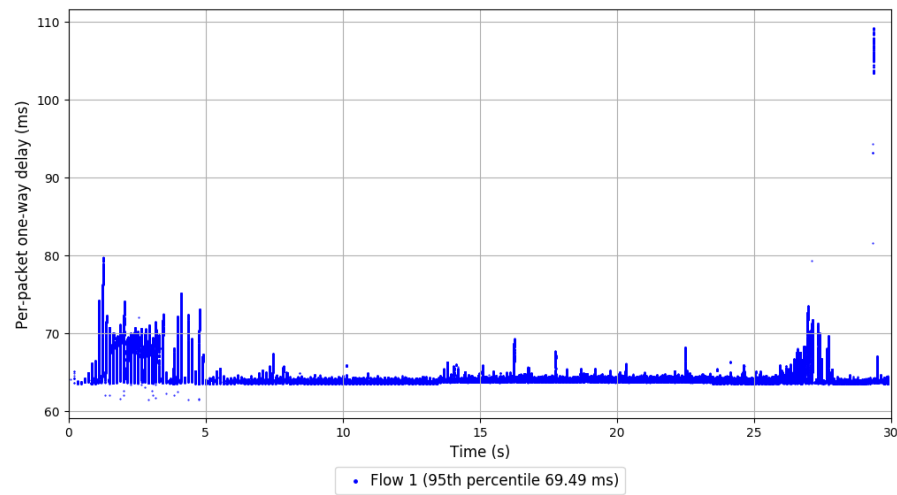
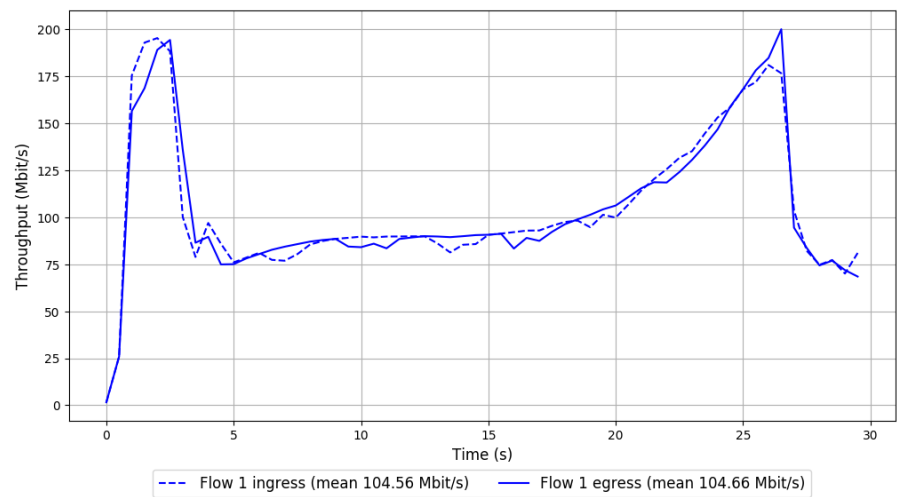
-- Flow 1:

Average throughput: 104.66 Mbit/s

95th percentile per-packet one-way delay: 69.489 ms

Loss rate: 0.33%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2017-12-20 08:03:19

End at: 2017-12-20 08:03:49

# Below is generated by plot.py at 2017-12-20 11:11:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 104.21 Mbit/s

95th percentile per-packet one-way delay: 69.620 ms

Loss rate: 0.50%

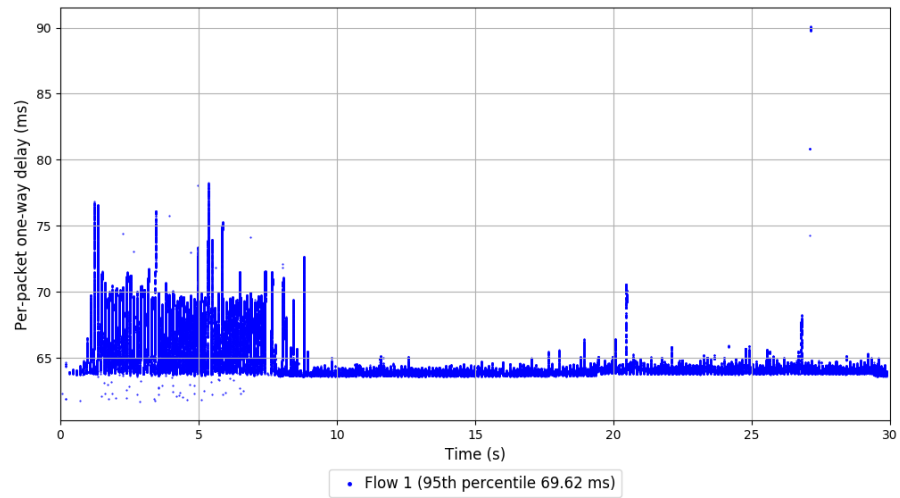
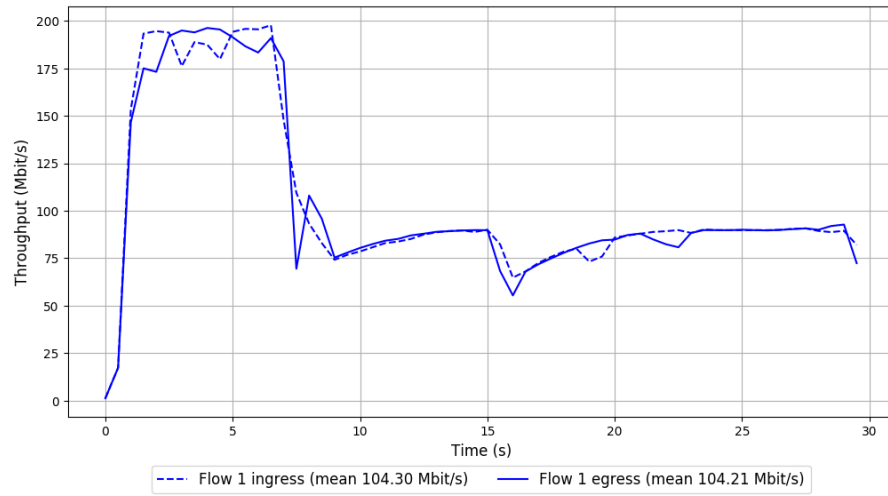
-- Flow 1:

Average throughput: 104.21 Mbit/s

95th percentile per-packet one-way delay: 69.620 ms

Loss rate: 0.50%

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



Run 6: Statistics of TCP Cubic

Start at: 2017-12-20 08:14:34

End at: 2017-12-20 08:15:04

# Below is generated by plot.py at 2017-12-20 11:11:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 96.68 Mbit/s

95th percentile per-packet one-way delay: 69.216 ms

Loss rate: 0.38%

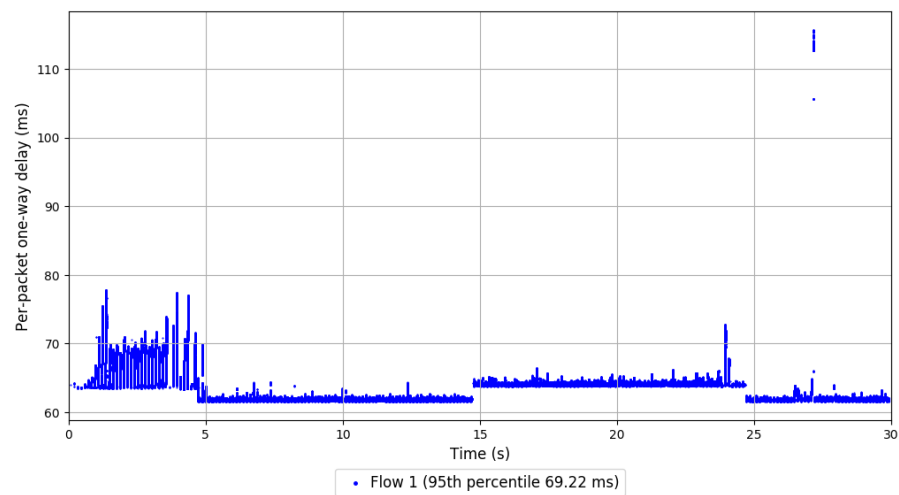
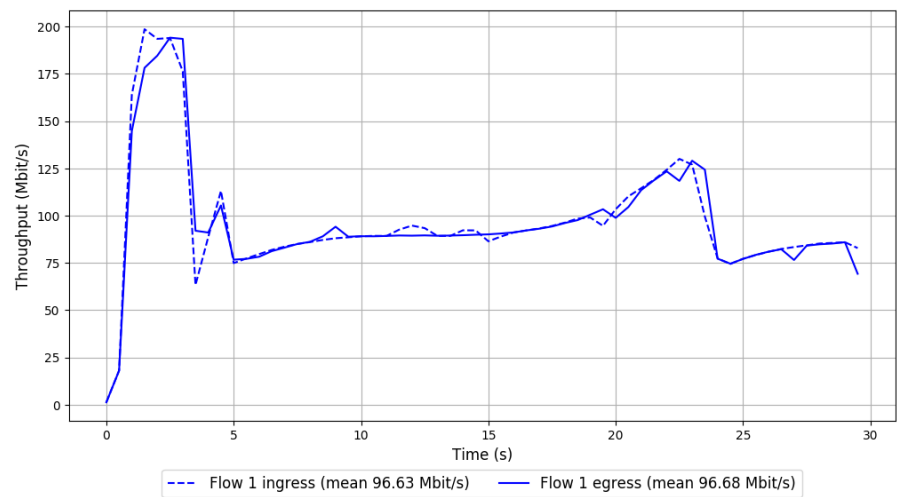
-- Flow 1:

Average throughput: 96.68 Mbit/s

95th percentile per-packet one-way delay: 69.216 ms

Loss rate: 0.38%

Run 6: Report of TCP Cubic — Data Link



Run 7: Statistics of TCP Cubic

Start at: 2017-12-20 08:26:02

End at: 2017-12-20 08:26:32

# Below is generated by plot.py at 2017-12-20 11:11:16

# Datalink statistics

-- Total of 1 flow:

Average throughput: 85.41 Mbit/s

95th percentile per-packet one-way delay: 68.814 ms

Loss rate: 0.53%

-- Flow 1:

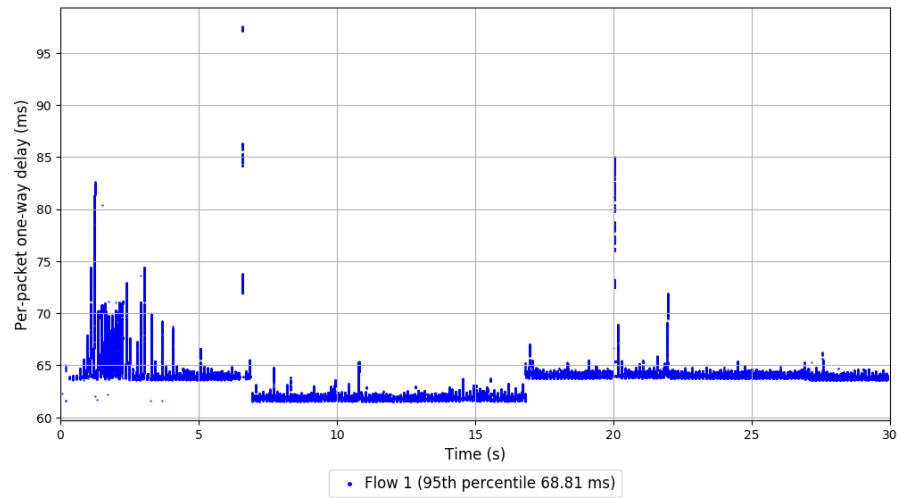
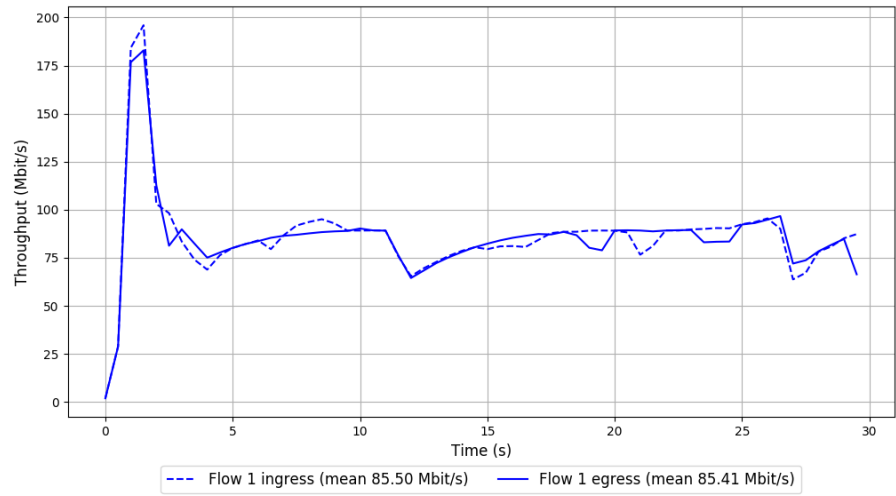
Average throughput: 85.41 Mbit/s

95th percentile per-packet one-way delay: 68.814 ms

Loss rate: 0.53%



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



Run 8: Statistics of TCP Cubic

Start at: 2017-12-20 08:37:36

End at: 2017-12-20 08:38:06

# Below is generated by plot.py at 2017-12-20 11:11:22

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.58 Mbit/s

95th percentile per-packet one-way delay: 65.454 ms

Loss rate: 0.90%

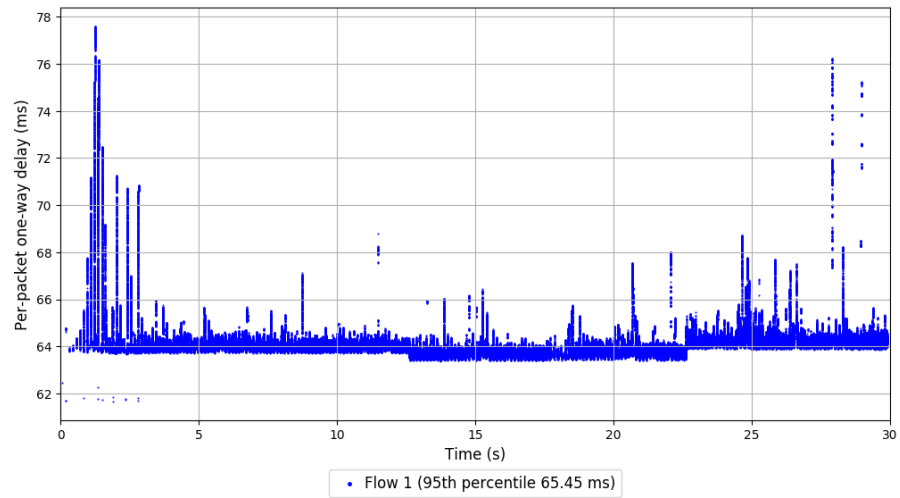
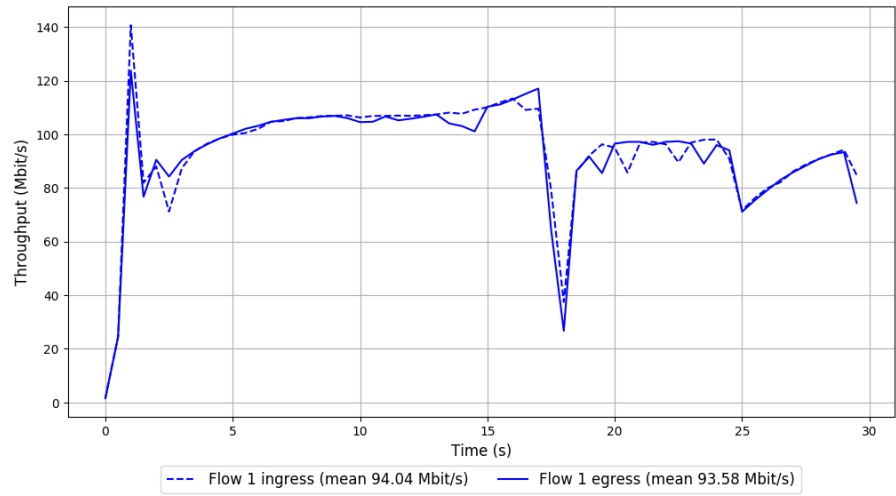
-- Flow 1:

Average throughput: 93.58 Mbit/s

95th percentile per-packet one-way delay: 65.454 ms

Loss rate: 0.90%

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



Run 9: Statistics of TCP Cubic

Start at: 2017-12-20 08:49:18

End at: 2017-12-20 08:49:48

# Below is generated by plot.py at 2017-12-20 11:11:33

# Datalink statistics

-- Total of 1 flow:

Average throughput: 107.65 Mbit/s

95th percentile per-packet one-way delay: 64.869 ms

Loss rate: 0.87%

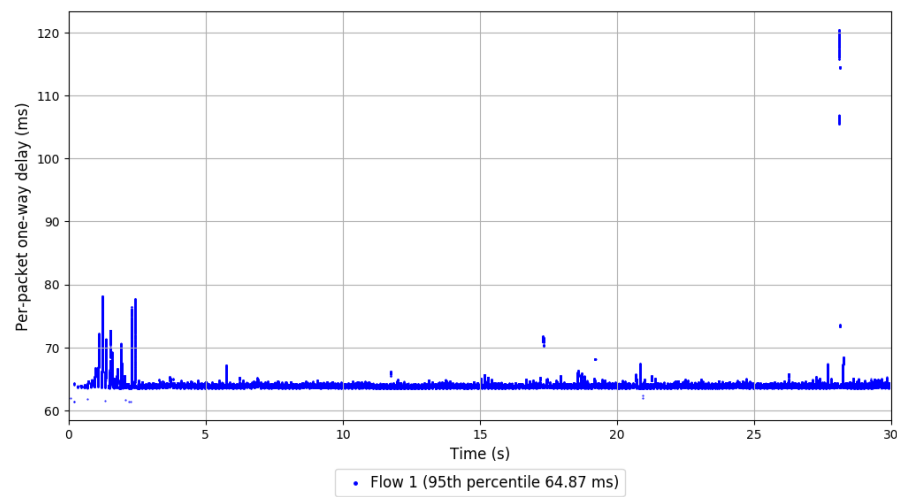
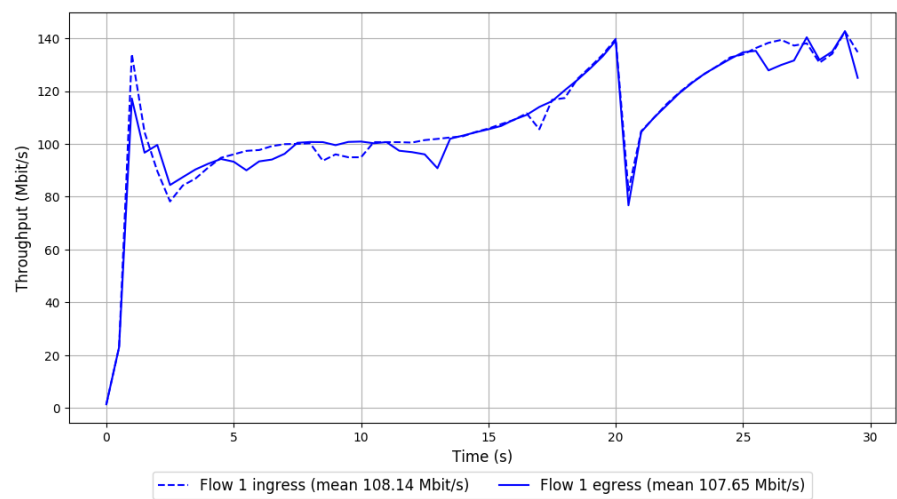
-- Flow 1:

Average throughput: 107.65 Mbit/s

95th percentile per-packet one-way delay: 64.869 ms

Loss rate: 0.87%

Run 9: Report of TCP Cubic — Data Link



Run 10: Statistics of TCP Cubic

Start at: 2017-12-20 09:01:14

End at: 2017-12-20 09:01:44

# Below is generated by plot.py at 2017-12-20 11:11:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 119.31 Mbit/s

95th percentile per-packet one-way delay: 67.520 ms

Loss rate: 0.44%

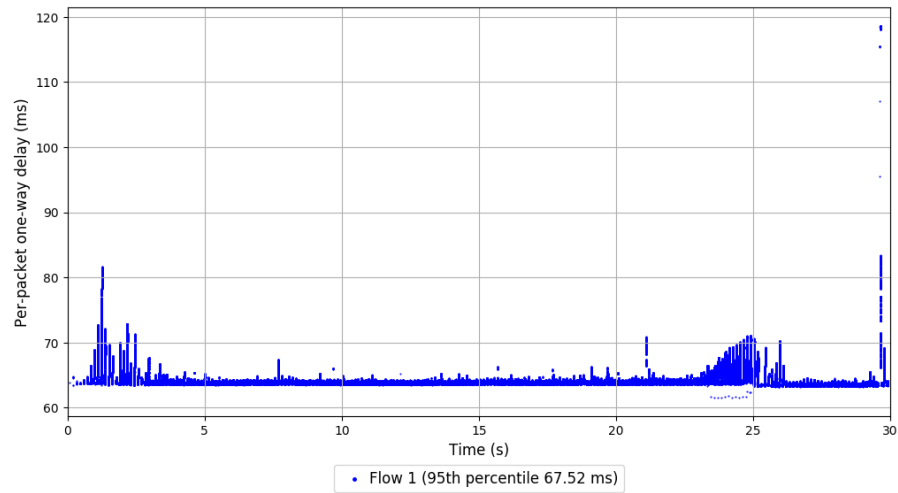
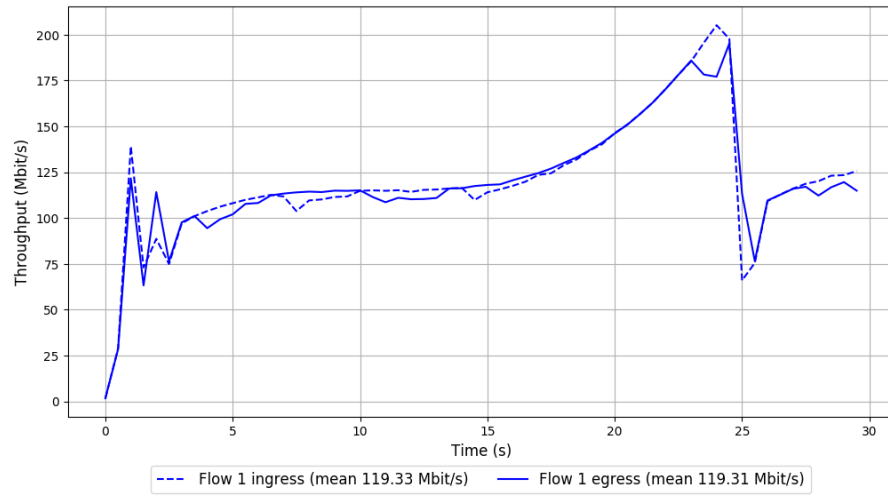
-- Flow 1:

Average throughput: 119.31 Mbit/s

95th percentile per-packet one-way delay: 67.520 ms

Loss rate: 0.44%

# Run 10: Report of TCP Cubic — Data Link



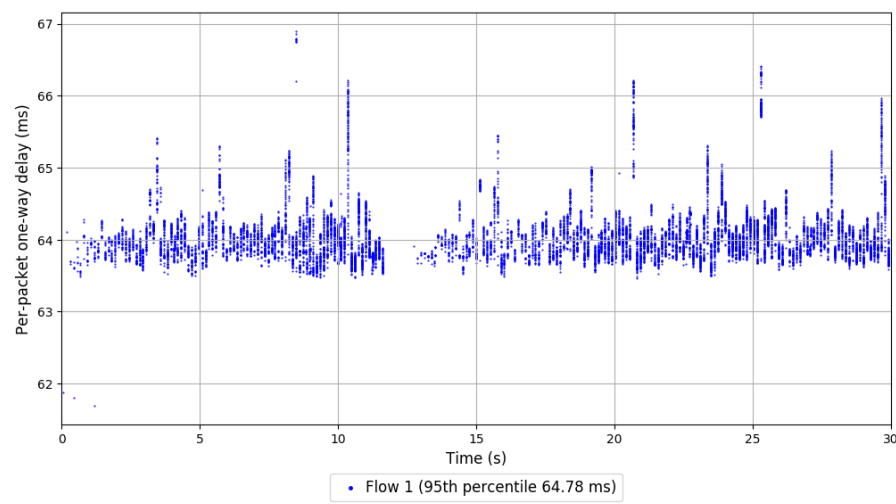
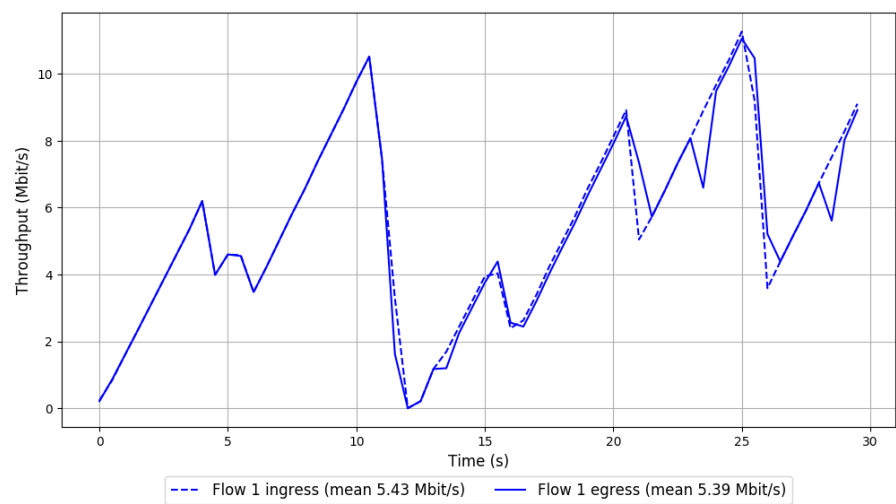
```
Run 1: Statistics of LEDBAT

Start at: 2017-12-20 07:12:53
End at: 2017-12-20 07:13:23

# Below is generated by plot.py at 2017-12-20 11:11:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.39 Mbit/s
95th percentile per-packet one-way delay: 64.784 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 5.39 Mbit/s
95th percentile per-packet one-way delay: 64.784 ms
Loss rate: 1.24%
```



Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2017-12-20 07:24:29

End at: 2017-12-20 07:24:59

# Below is generated by plot.py at 2017-12-20 11:11:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.81 Mbit/s

95th percentile per-packet one-way delay: 64.216 ms

Loss rate: 1.29%

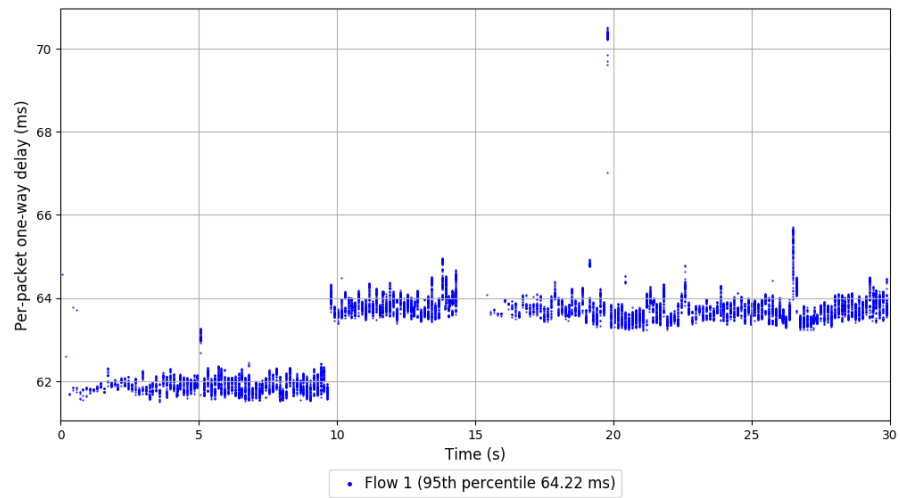
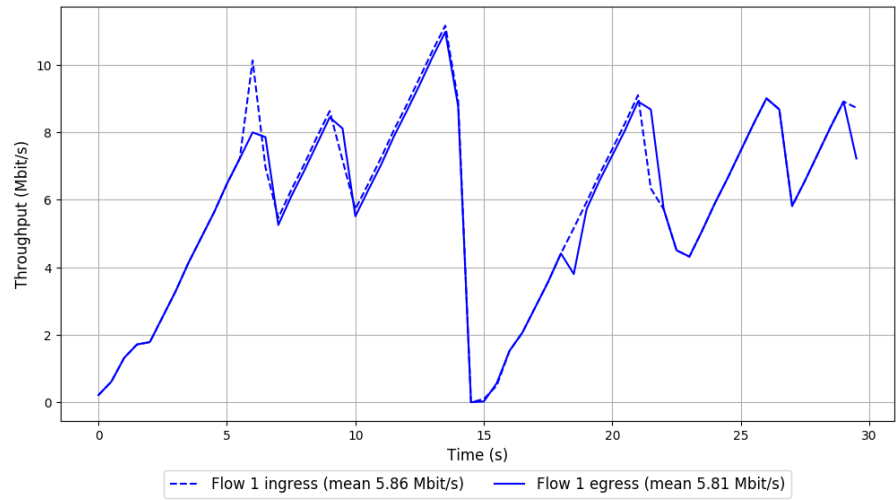
-- Flow 1:

Average throughput: 5.81 Mbit/s

95th percentile per-packet one-way delay: 64.216 ms

Loss rate: 1.29%

## Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2017-12-20 07:36:08

End at: 2017-12-20 07:36:38

# Below is generated by plot.py at 2017-12-20 11:11:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.92 Mbit/s

95th percentile per-packet one-way delay: 64.486 ms

Loss rate: 1.23%

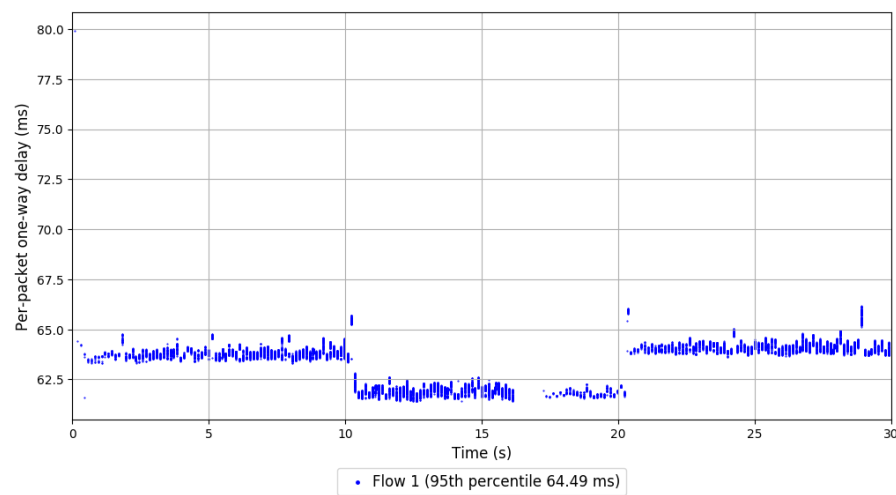
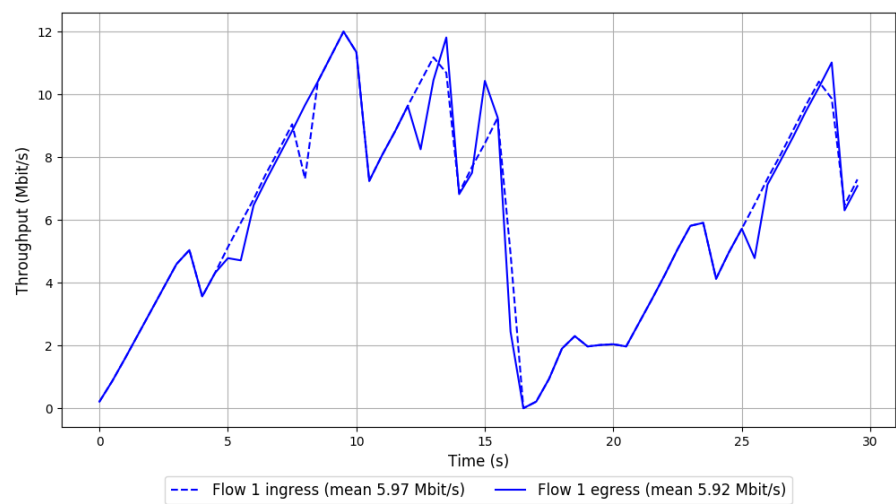
-- Flow 1:

Average throughput: 5.92 Mbit/s

95th percentile per-packet one-way delay: 64.486 ms

Loss rate: 1.23%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-20 07:48:04

End at: 2017-12-20 07:48:34

# Below is generated by plot.py at 2017-12-20 11:11:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 64.419 ms

Loss rate: 1.50%

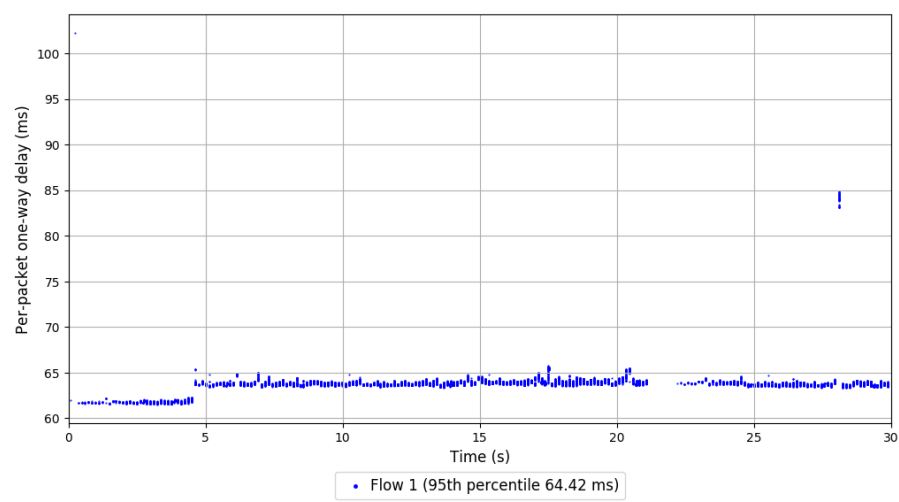
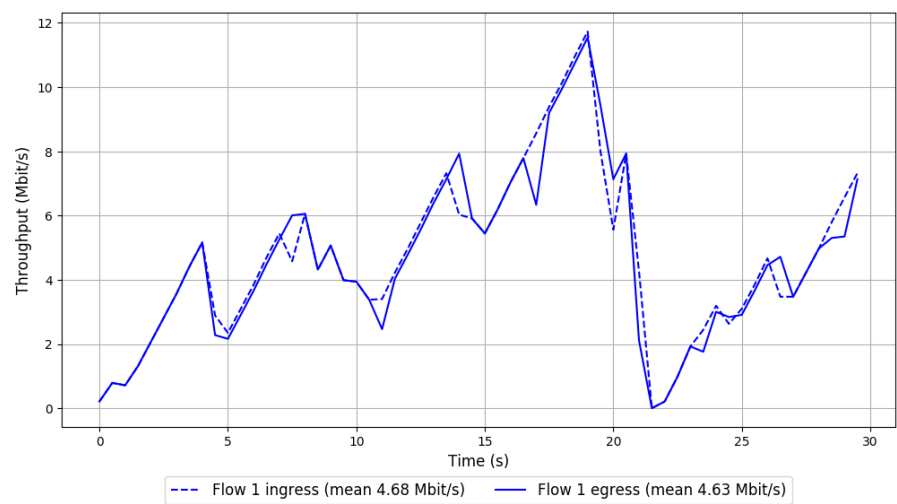
-- Flow 1:

Average throughput: 4.63 Mbit/s

95th percentile per-packet one-way delay: 64.419 ms

Loss rate: 1.50%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2017-12-20 07:59:47

End at: 2017-12-20 08:00:17

# Below is generated by plot.py at 2017-12-20 11:11:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 4.82 Mbit/s

95th percentile per-packet one-way delay: 64.686 ms

Loss rate: 1.15%

-- Flow 1:

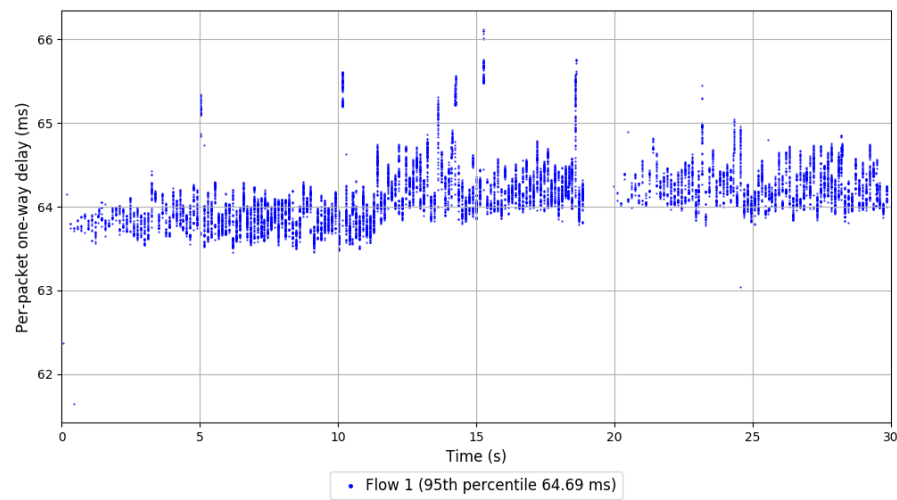
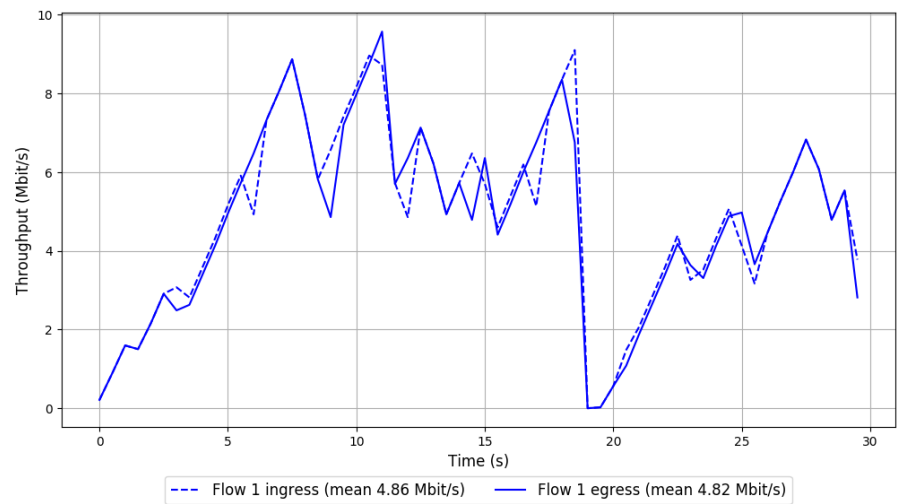
Average throughput: 4.82 Mbit/s

95th percentile per-packet one-way delay: 64.686 ms

Loss rate: 1.15%



Run 5: Report of LEDBAT — Data Link



Run 6: Statistics of LEDBAT

Start at: 2017-12-20 08:10:58

End at: 2017-12-20 08:11:28

# Below is generated by plot.py at 2017-12-20 11:11:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 4.69 Mbit/s

95th percentile per-packet one-way delay: 64.383 ms

Loss rate: 0.54%

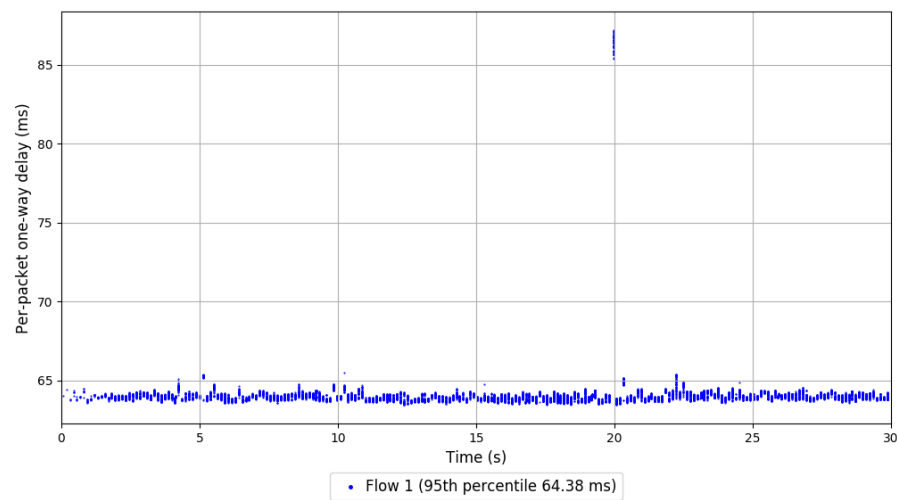
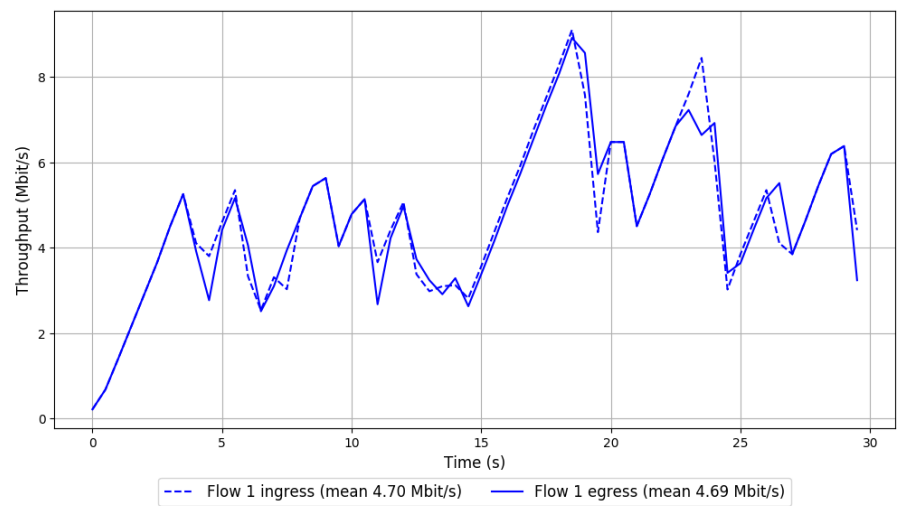
-- Flow 1:

Average throughput: 4.69 Mbit/s

95th percentile per-packet one-way delay: 64.383 ms

Loss rate: 0.54%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-20 08:22:33

End at: 2017-12-20 08:23:03

# Below is generated by plot.py at 2017-12-20 11:11:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 4.69 Mbit/s

95th percentile per-packet one-way delay: 64.481 ms

Loss rate: 1.50%

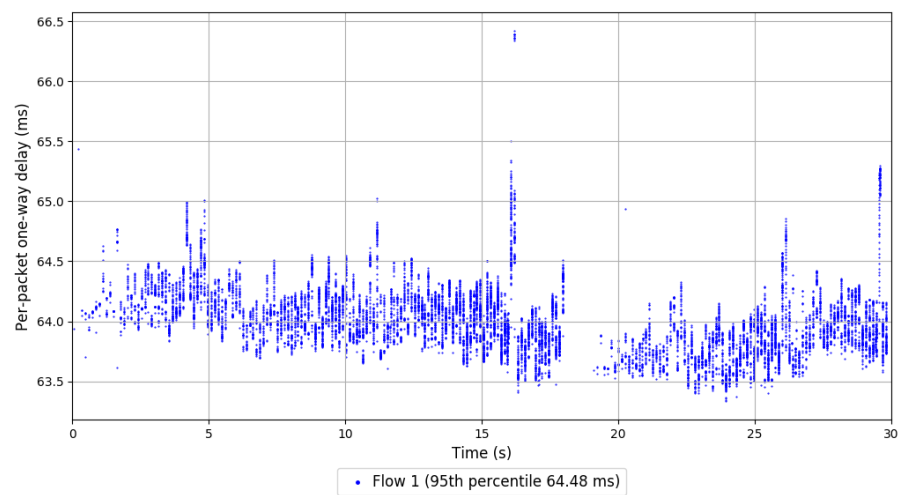
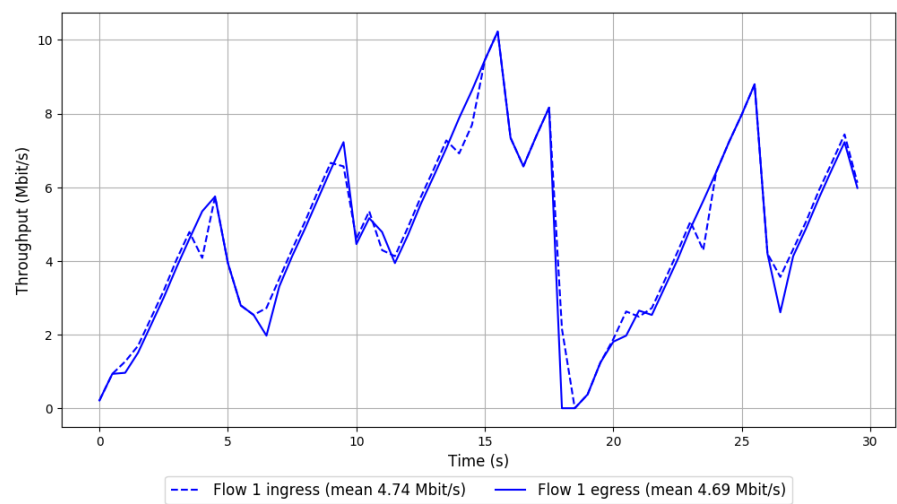
-- Flow 1:

Average throughput: 4.69 Mbit/s

95th percentile per-packet one-way delay: 64.481 ms

Loss rate: 1.50%

Run 7: Report of LEDBAT — Data Link



Run 8: Statistics of LEDBAT

Start at: 2017-12-20 08:33:59

End at: 2017-12-20 08:34:29

# Below is generated by plot.py at 2017-12-20 11:11:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 64.569 ms

Loss rate: 0.75%

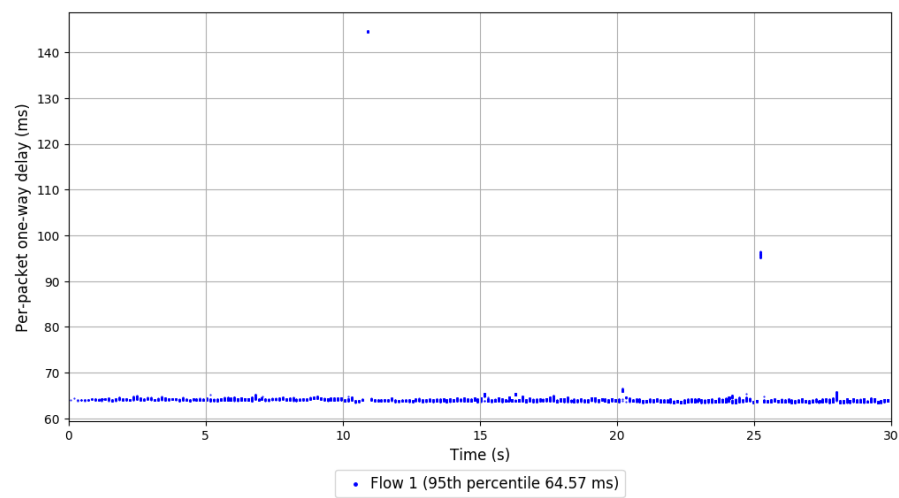
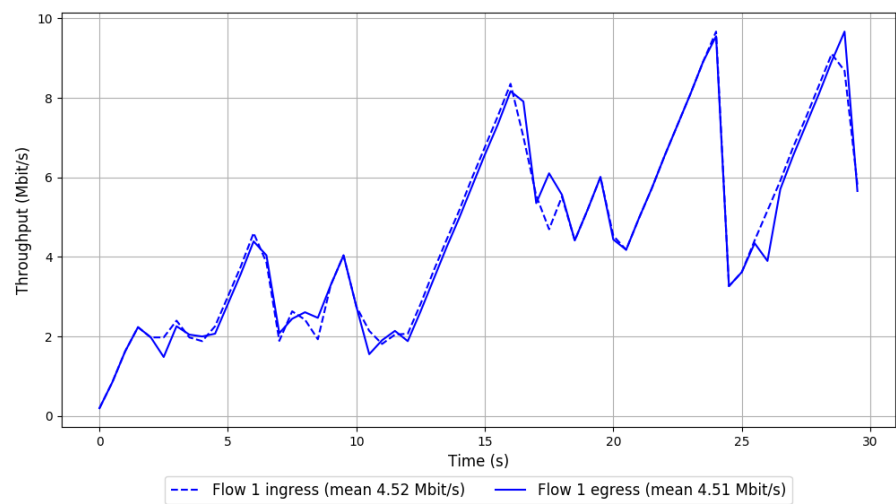
-- Flow 1:

Average throughput: 4.51 Mbit/s

95th percentile per-packet one-way delay: 64.569 ms

Loss rate: 0.75%

Run 8: Report of LEDBAT — Data Link



Run 9: Statistics of LEDBAT

Start at: 2017-12-20 08:45:45

End at: 2017-12-20 08:46:15

# Below is generated by plot.py at 2017-12-20 11:11:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 3.73 Mbit/s

95th percentile per-packet one-way delay: 64.489 ms

Loss rate: 0.60%

-- Flow 1:

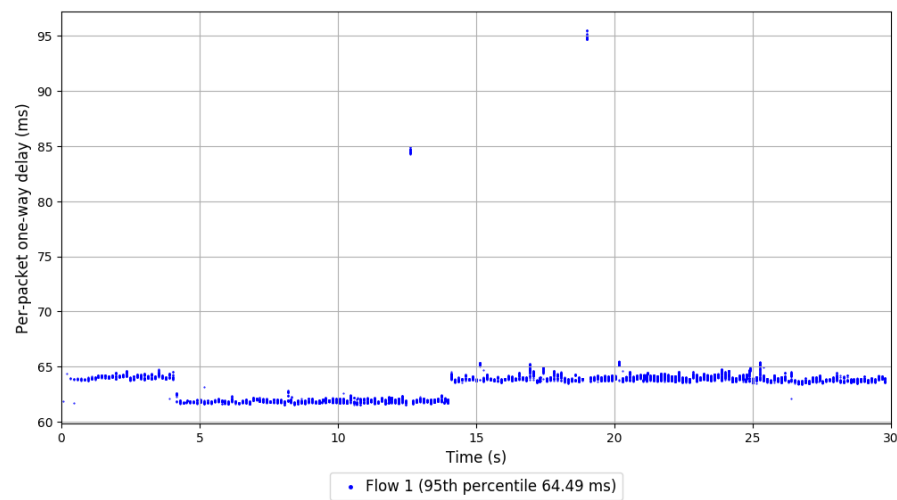
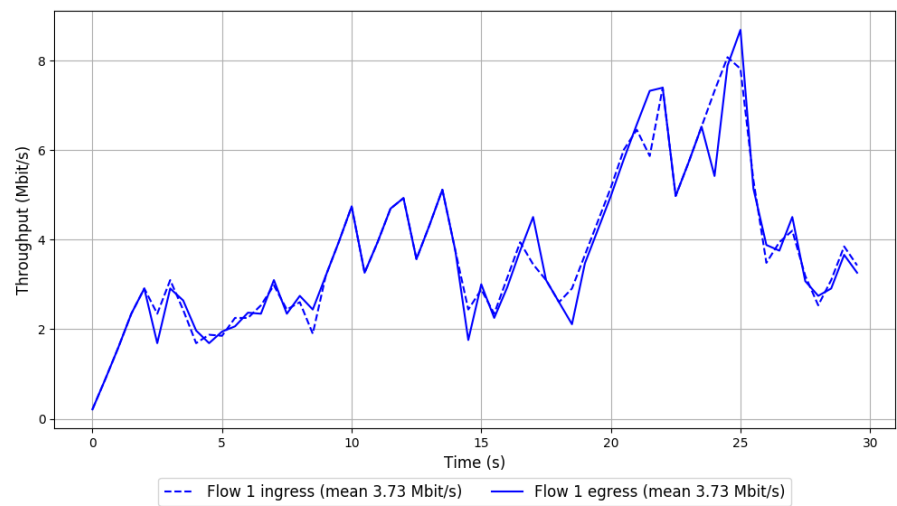
Average throughput: 3.73 Mbit/s

95th percentile per-packet one-way delay: 64.489 ms

Loss rate: 0.60%



Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-20 08:57:35

End at: 2017-12-20 08:58:05

# Below is generated by plot.py at 2017-12-20 11:11:47

# Datalink statistics

-- Total of 1 flow:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 64.350 ms

Loss rate: 1.26%

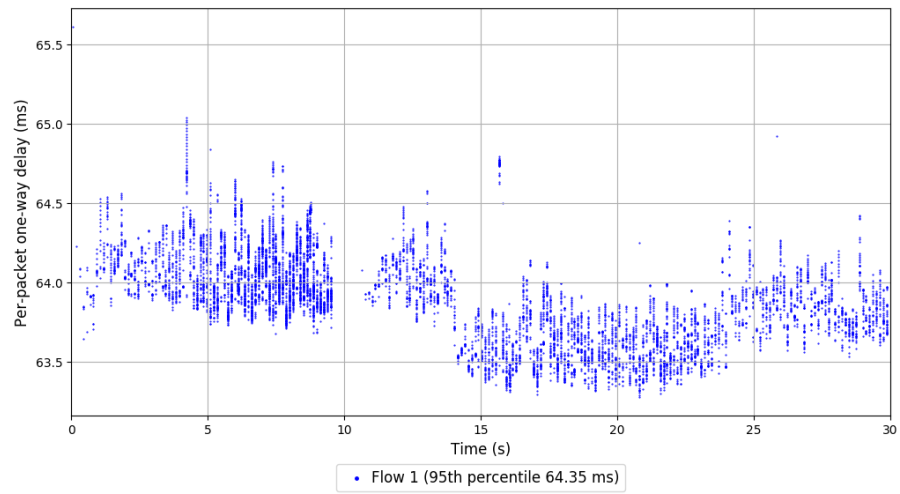
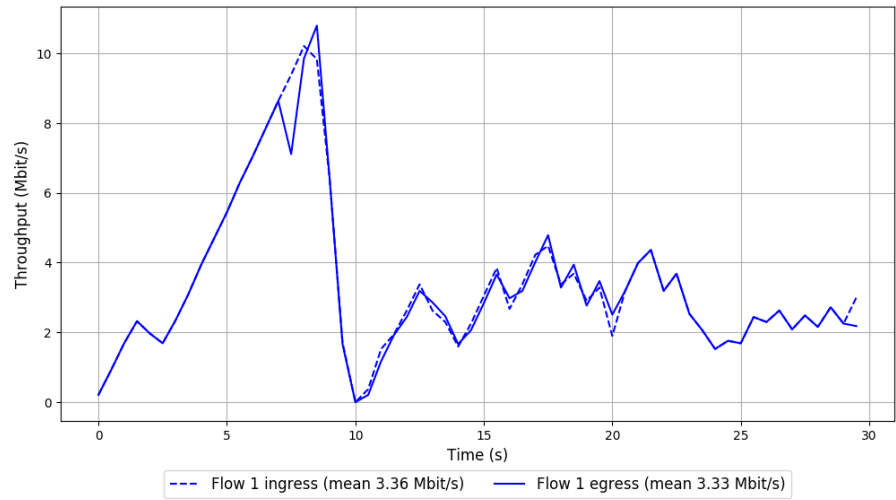
-- Flow 1:

Average throughput: 3.33 Mbit/s

95th percentile per-packet one-way delay: 64.350 ms

Loss rate: 1.26%

# Run 10: Report of LEDBAT — Data Link

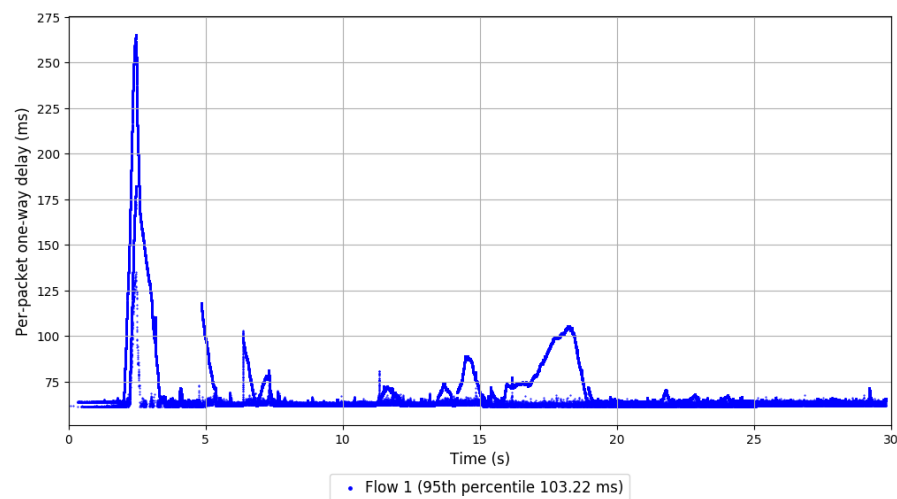
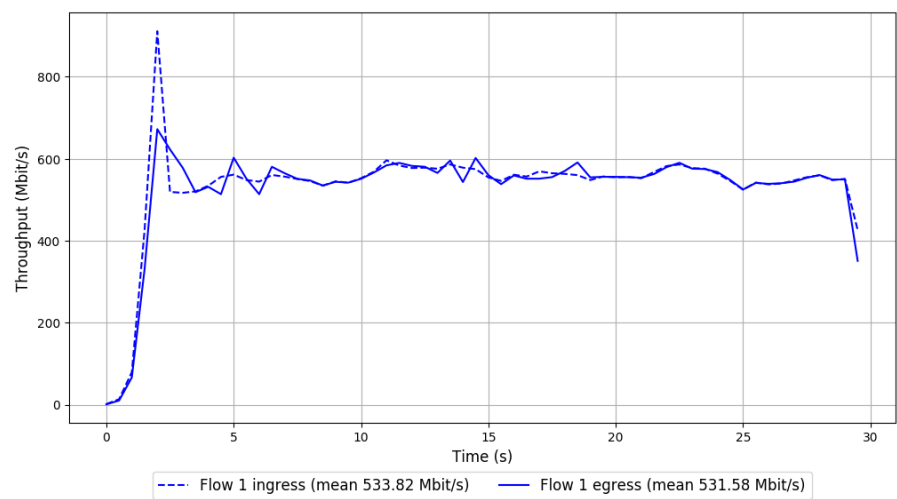


```
Run 1: Statistics of PCC

Start at: 2017-12-20 07:18:03
End at: 2017-12-20 07:18:34

# Below is generated by plot.py at 2017-12-20 11:19:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 531.58 Mbit/s
95th percentile per-packet one-way delay: 103.220 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 531.58 Mbit/s
95th percentile per-packet one-way delay: 103.220 ms
Loss rate: 0.84%
```

Run 1: Report of PCC — Data Link



Run 2: Statistics of PCC

Start at: 2017-12-20 07:29:41

End at: 2017-12-20 07:30:11

# Below is generated by plot.py at 2017-12-20 11:19:50

# Datalink statistics

-- Total of 1 flow:

Average throughput: 547.50 Mbit/s

95th percentile per-packet one-way delay: 126.303 ms

Loss rate: 0.91%

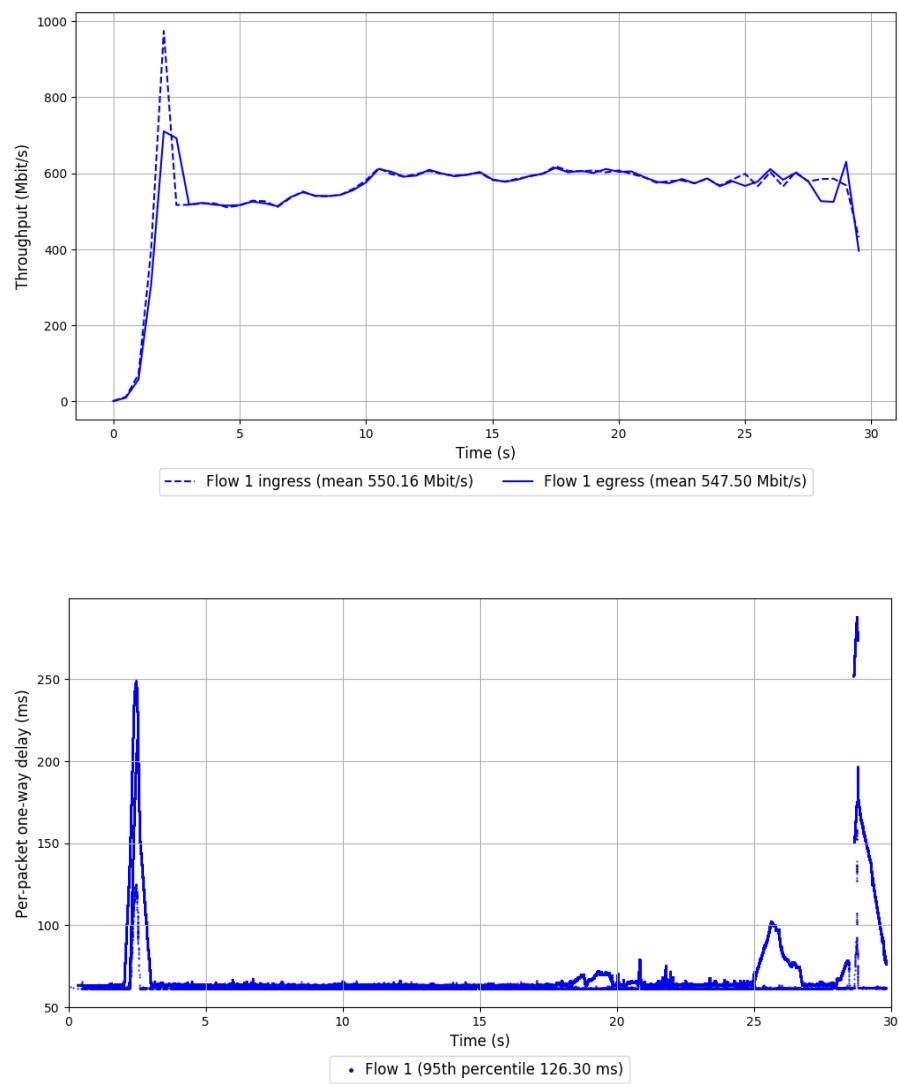
-- Flow 1:

Average throughput: 547.50 Mbit/s

95th percentile per-packet one-way delay: 126.303 ms

Loss rate: 0.91%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-20 07:41:21

End at: 2017-12-20 07:41:51

# Below is generated by plot.py at 2017-12-20 11:20:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 548.16 Mbit/s

95th percentile per-packet one-way delay: 124.940 ms

Loss rate: 1.29%

-- Flow 1:

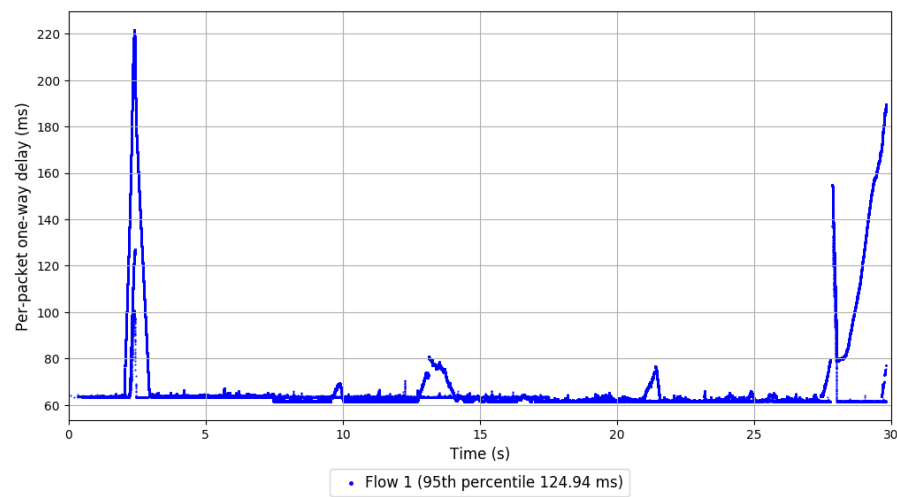
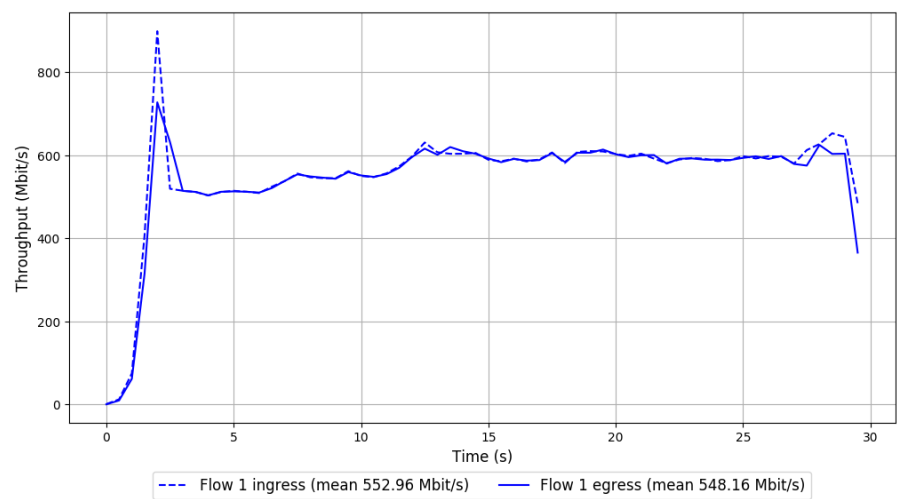
Average throughput: 548.16 Mbit/s

95th percentile per-packet one-way delay: 124.940 ms

Loss rate: 1.29%



Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

Start at: 2017-12-20 07:53:20

End at: 2017-12-20 07:53:50

# Below is generated by plot.py at 2017-12-20 11:20:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 562.34 Mbit/s

95th percentile per-packet one-way delay: 133.739 ms

Loss rate: 0.85%

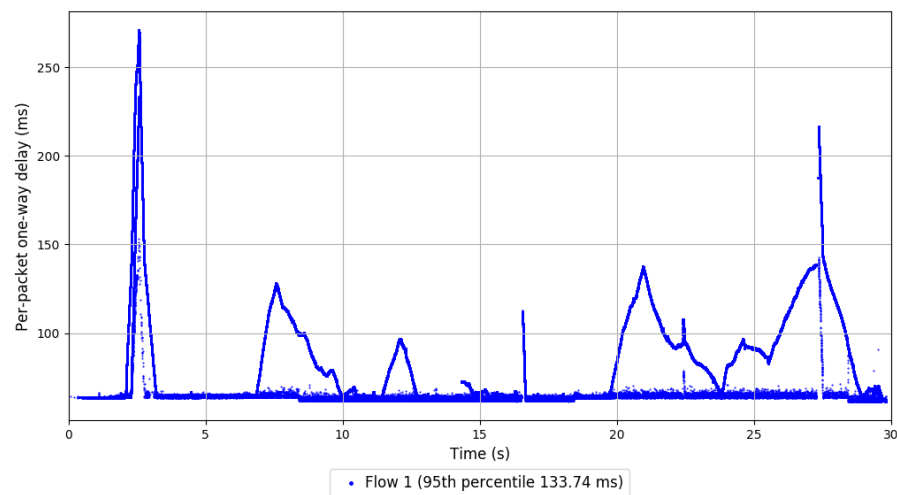
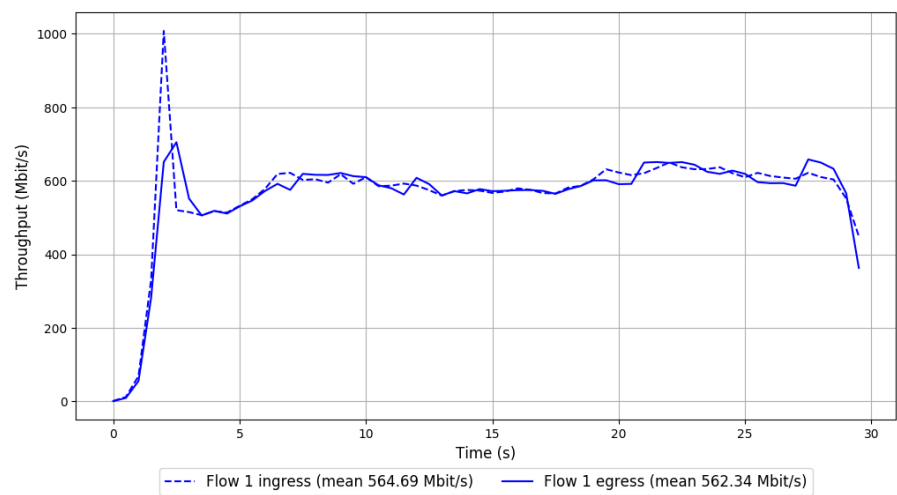
-- Flow 1:

Average throughput: 562.34 Mbit/s

95th percentile per-packet one-way delay: 133.739 ms

Loss rate: 0.85%

Run 4: Report of PCC — Data Link

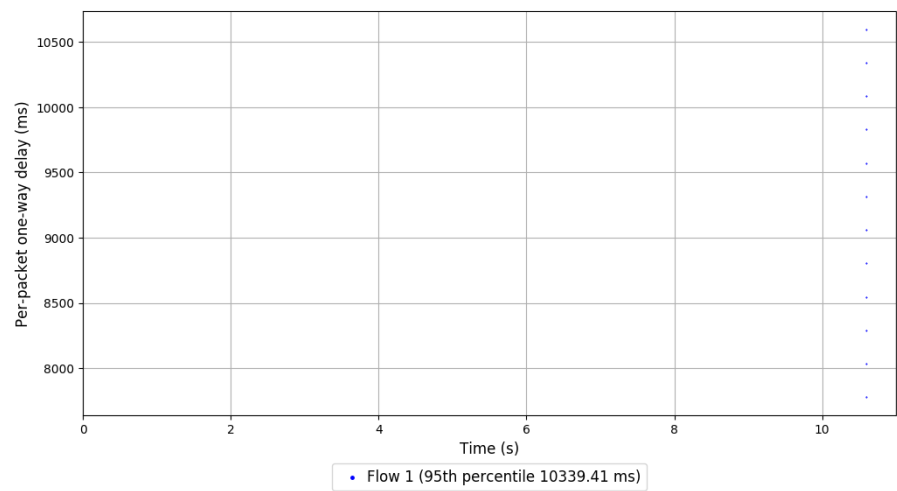
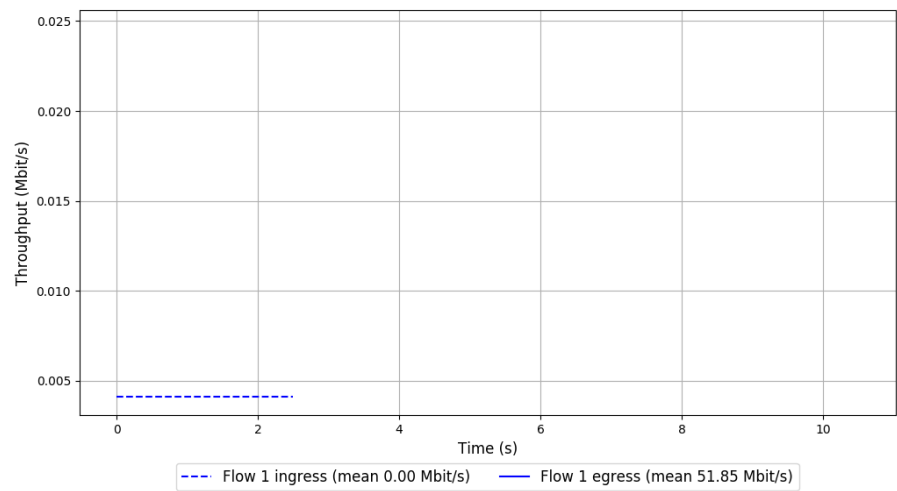


Run 5: Statistics of PCC

Start at: 2017-12-20 08:04:54

End at: 2017-12-20 08:05:24

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

Start at: 2017-12-20 08:16:09

End at: 2017-12-20 08:16:39

# Below is generated by plot.py at 2017-12-20 11:20:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 527.14 Mbit/s

95th percentile per-packet one-way delay: 114.310 ms

Loss rate: 0.95%

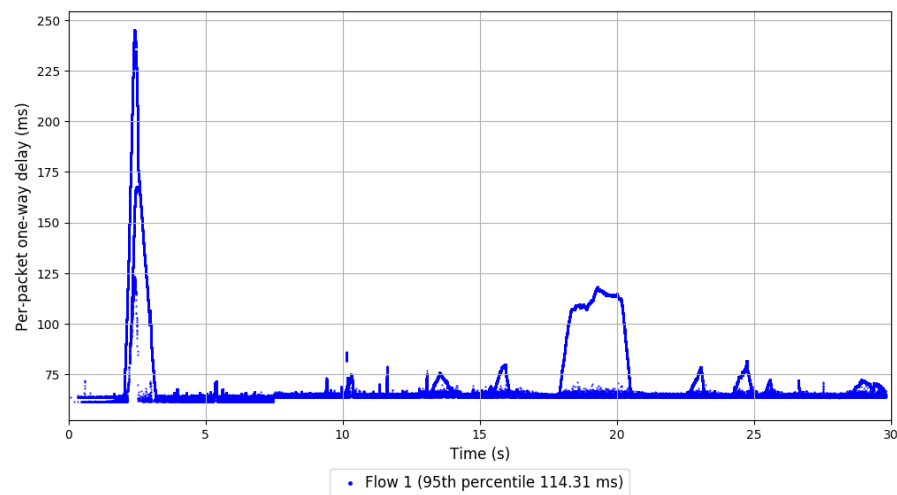
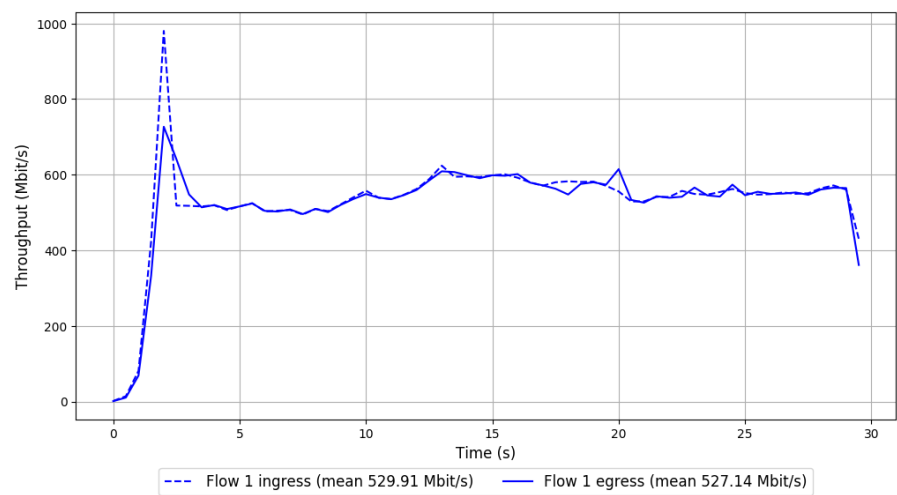
-- Flow 1:

Average throughput: 527.14 Mbit/s

95th percentile per-packet one-way delay: 114.310 ms

Loss rate: 0.95%

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-20 08:27:35

End at: 2017-12-20 08:28:05

# Below is generated by plot.py at 2017-12-20 11:20:32

# Datalink statistics

-- Total of 1 flow:

Average throughput: 548.89 Mbit/s

95th percentile per-packet one-way delay: 92.463 ms

Loss rate: 0.87%

-- Flow 1:

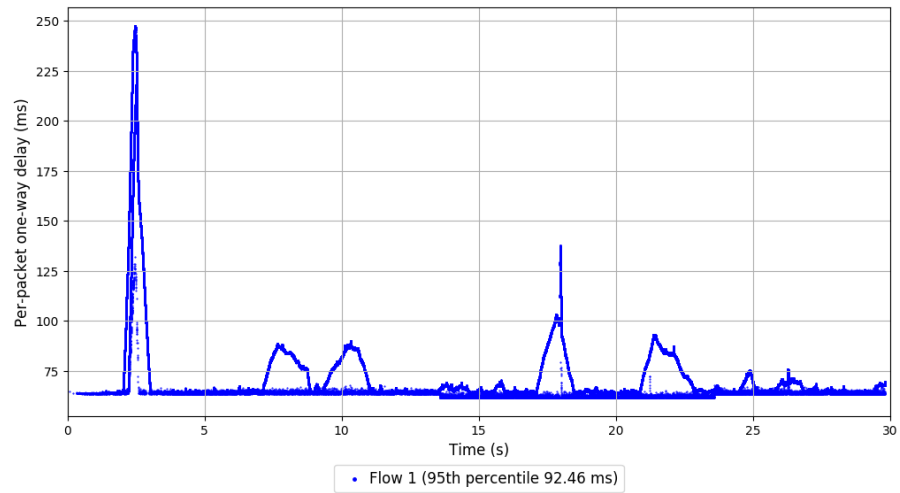
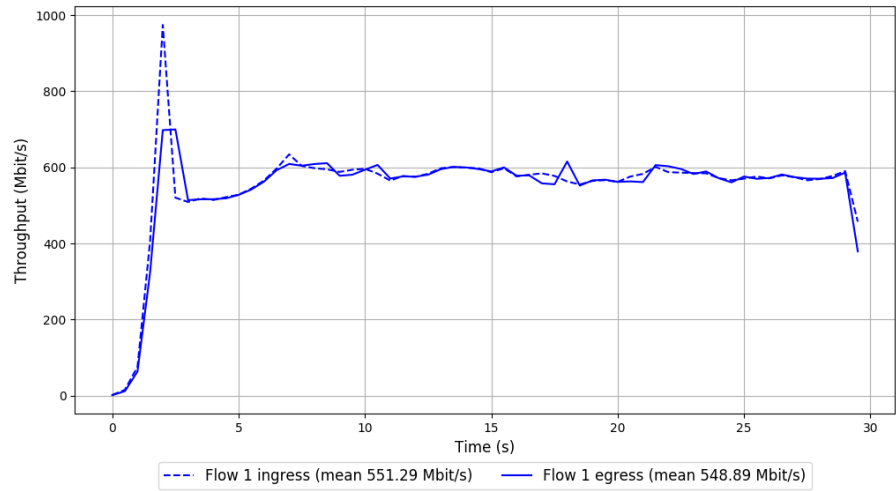
Average throughput: 548.89 Mbit/s

95th percentile per-packet one-way delay: 92.463 ms

Loss rate: 0.87%



## Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-20 08:39:11

End at: 2017-12-20 08:39:41

# Below is generated by plot.py at 2017-12-20 11:20:32

# Datalink statistics

-- Total of 1 flow:

Average throughput: 514.05 Mbit/s

95th percentile per-packet one-way delay: 88.984 ms

Loss rate: 1.04%

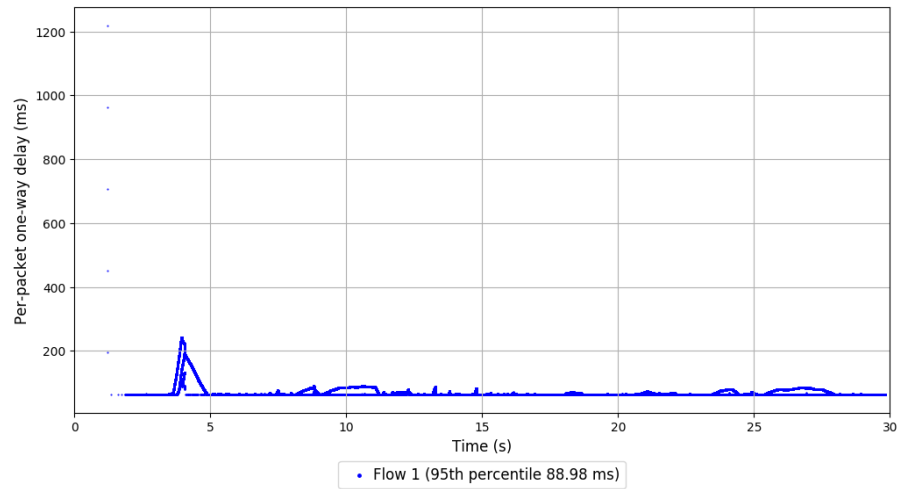
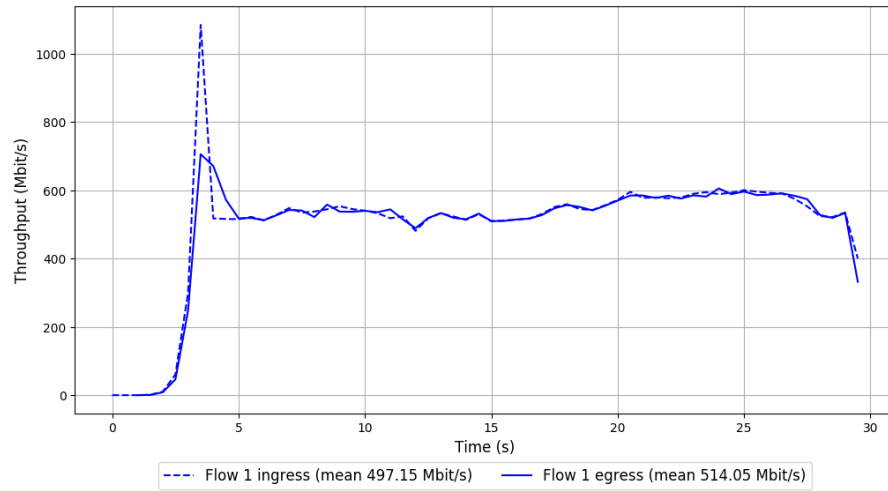
-- Flow 1:

Average throughput: 514.05 Mbit/s

95th percentile per-packet one-way delay: 88.984 ms

Loss rate: 1.04%

## Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-20 08:50:52

End at: 2017-12-20 08:51:22

# Below is generated by plot.py at 2017-12-20 11:21:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 560.00 Mbit/s

95th percentile per-packet one-way delay: 135.957 ms

Loss rate: 1.30%

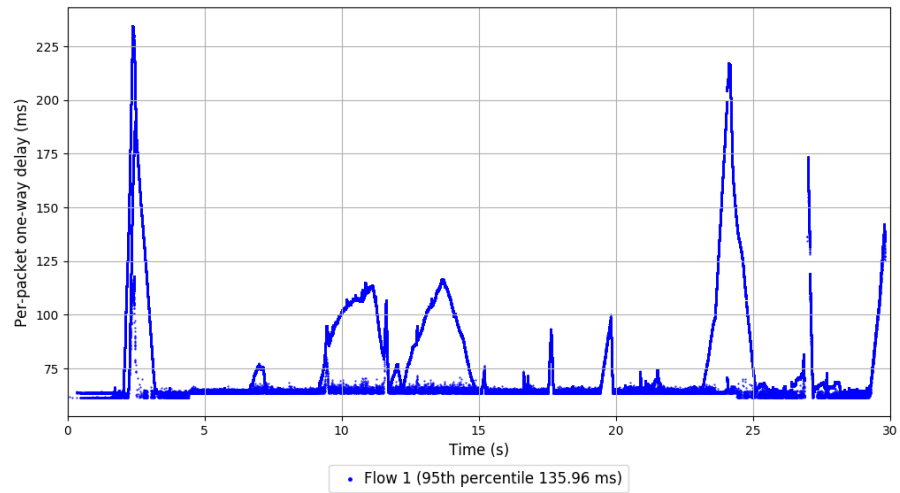
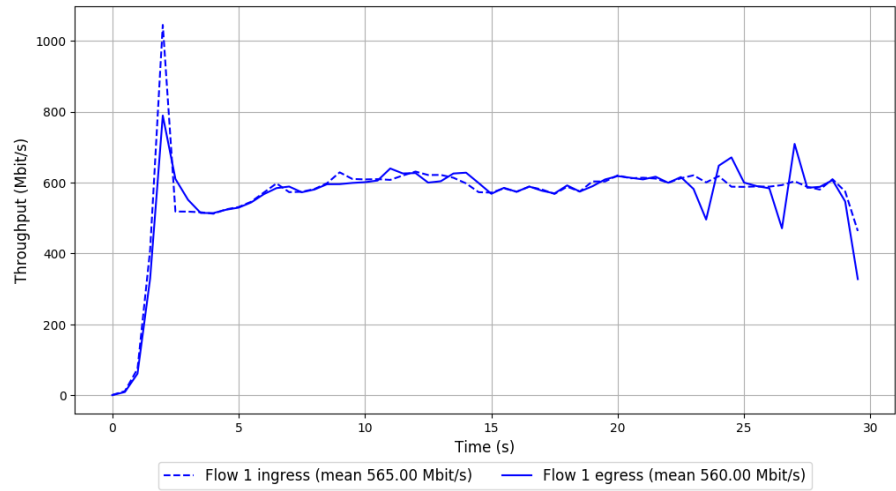
-- Flow 1:

Average throughput: 560.00 Mbit/s

95th percentile per-packet one-way delay: 135.957 ms

Loss rate: 1.30%

### Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

Start at: 2017-12-20 09:02:48

End at: 2017-12-20 09:03:18

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 532.89 Mbit/s

95th percentile per-packet one-way delay: 153.215 ms

Loss rate: 1.03%

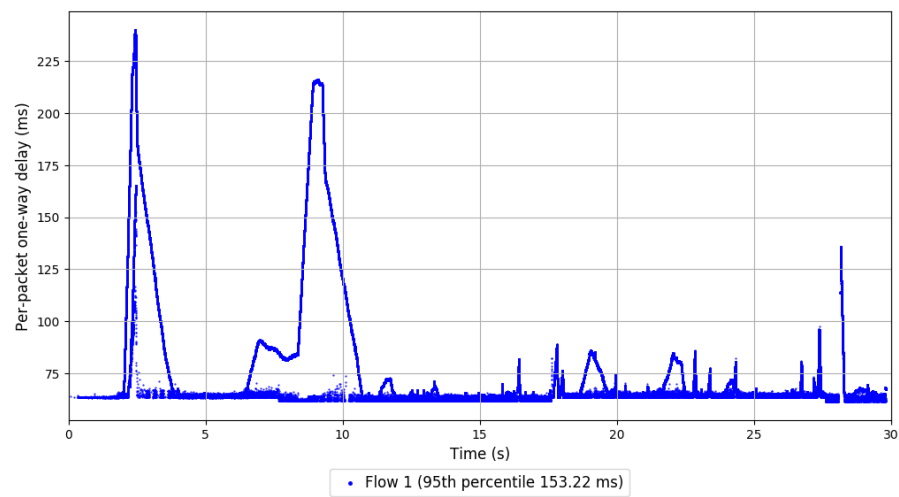
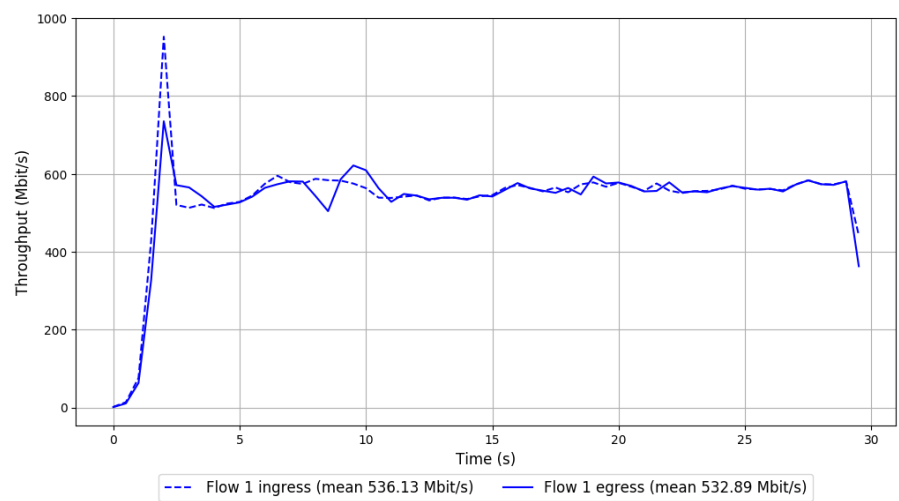
-- Flow 1:

Average throughput: 532.89 Mbit/s

95th percentile per-packet one-way delay: 153.215 ms

Loss rate: 1.03%

Run 10: Report of PCC — Data Link



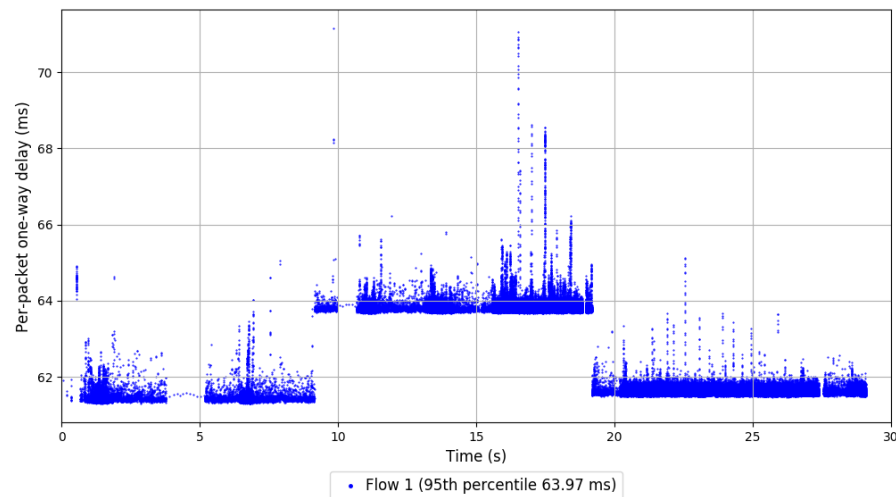
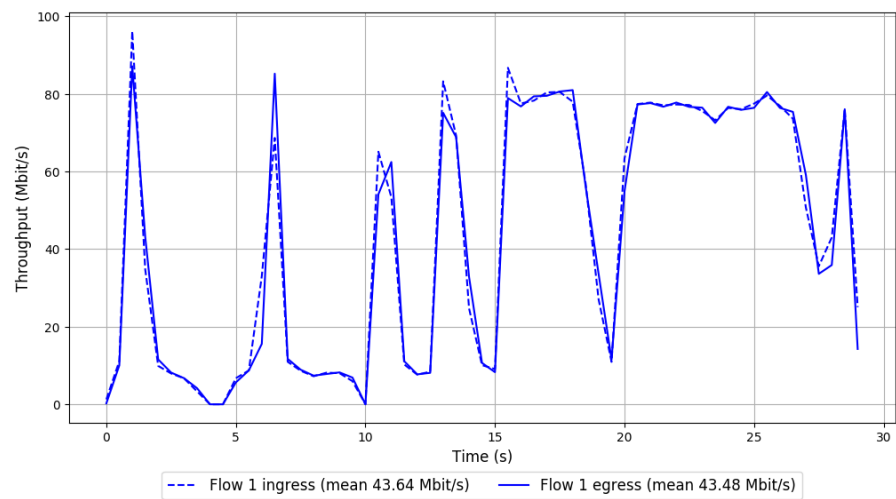
```
Run 1: Statistics of QUIC Cubic

Start at: 2017-12-20 07:09:19
End at: 2017-12-20 07:09:49

# Below is generated by plot.py at 2017-12-20 11:29:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.48 Mbit/s
95th percentile per-packet one-way delay: 63.966 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 43.48 Mbit/s
95th percentile per-packet one-way delay: 63.966 ms
Loss rate: 0.79%
```



Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-20 07:20:56

End at: 2017-12-20 07:21:26

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 53.37 Mbit/s

95th percentile per-packet one-way delay: 63.822 ms

Loss rate: 0.72%

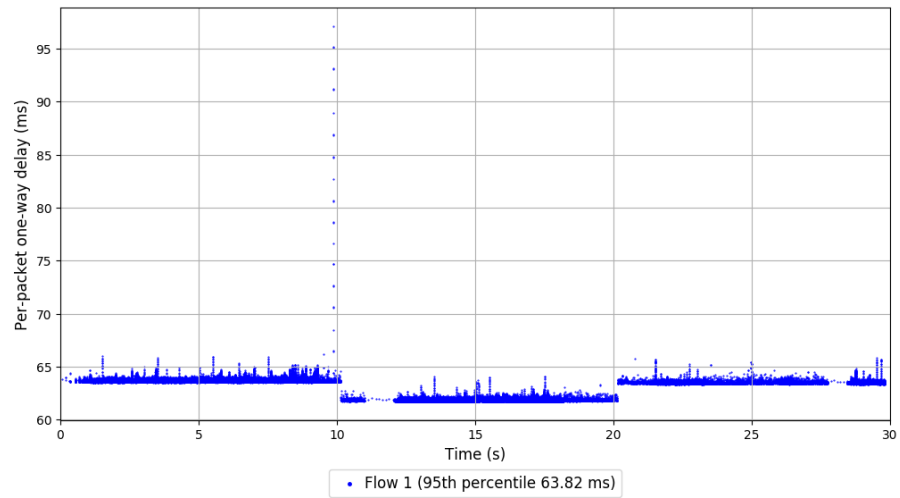
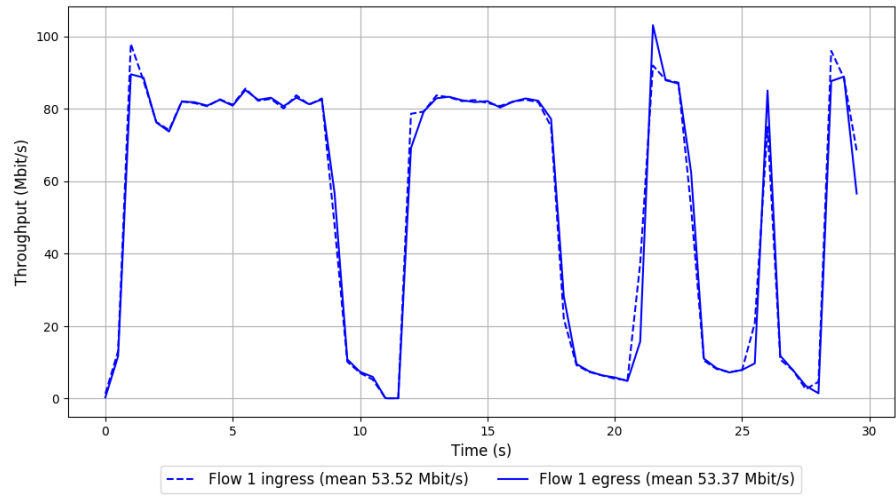
-- Flow 1:

Average throughput: 53.37 Mbit/s

95th percentile per-packet one-way delay: 63.822 ms

Loss rate: 0.72%

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



Run 3: Statistics of QUIC Cubic

Start at: 2017-12-20 07:32:34

End at: 2017-12-20 07:33:04

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 57.35 Mbit/s

95th percentile per-packet one-way delay: 63.827 ms

Loss rate: 0.66%

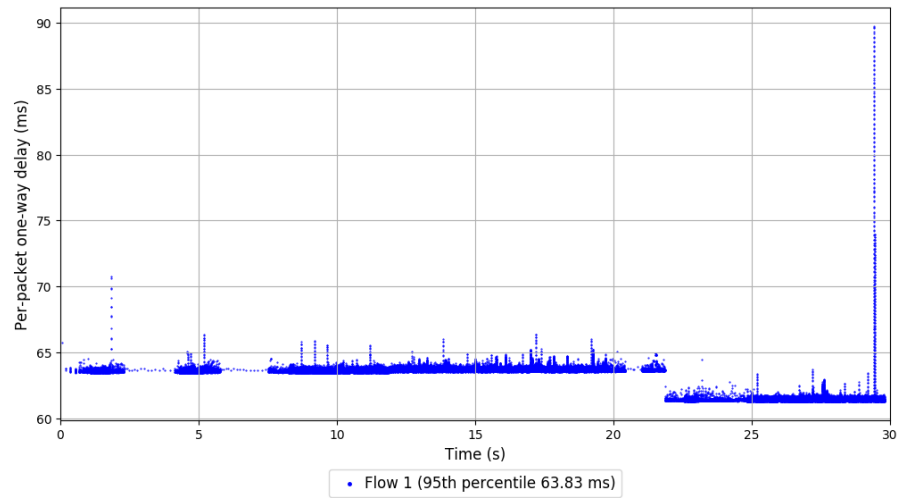
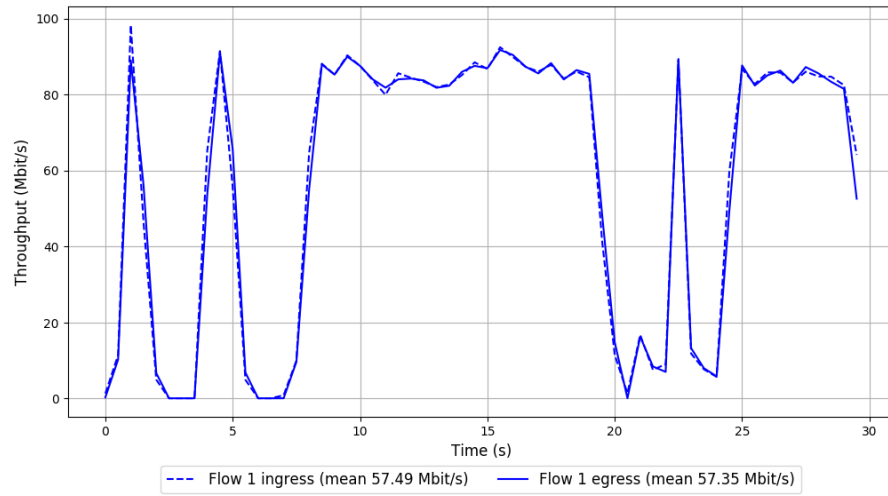
-- Flow 1:

Average throughput: 57.35 Mbit/s

95th percentile per-packet one-way delay: 63.827 ms

Loss rate: 0.66%

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



Run 4: Statistics of QUIC Cubic

Start at: 2017-12-20 07:44:14

End at: 2017-12-20 07:44:44

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 59.24 Mbit/s

95th percentile per-packet one-way delay: 63.720 ms

Loss rate: 0.63%

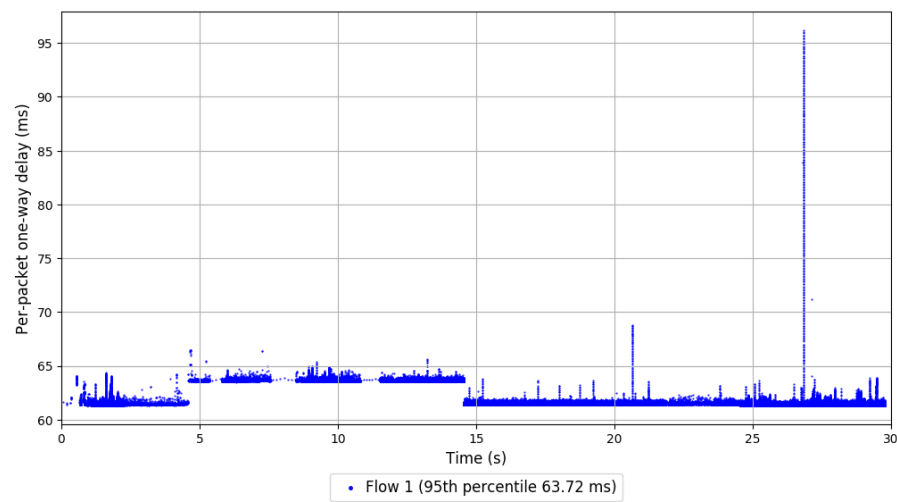
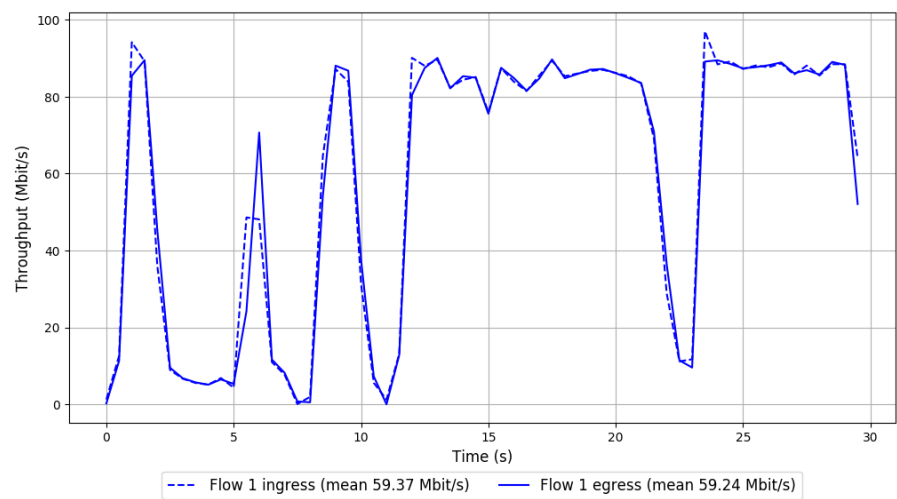
-- Flow 1:

Average throughput: 59.24 Mbit/s

95th percentile per-packet one-way delay: 63.720 ms

Loss rate: 0.63%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-20 07:56:13

End at: 2017-12-20 07:56:43

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 60.15 Mbit/s

95th percentile per-packet one-way delay: 63.976 ms

Loss rate: 0.60%

-- Flow 1:

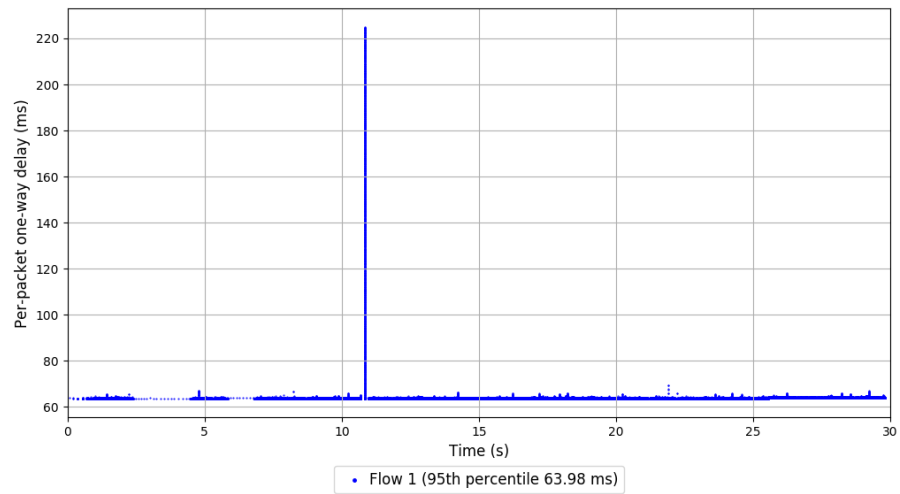
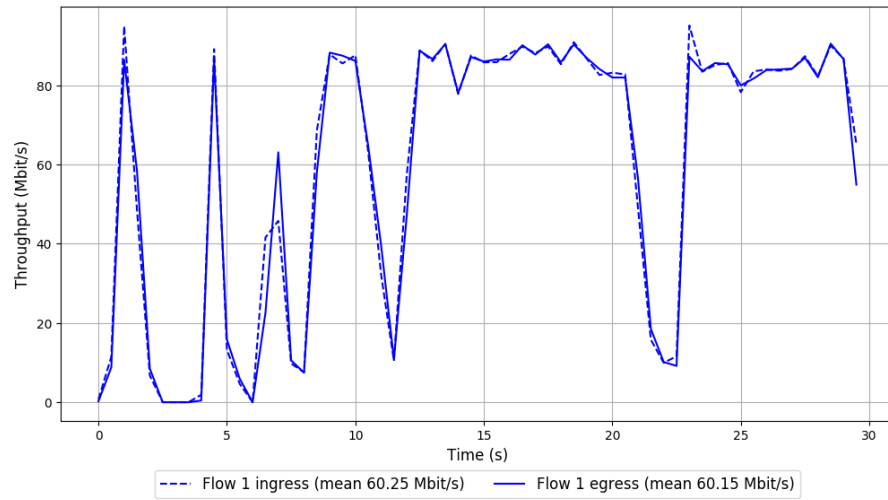
Average throughput: 60.15 Mbit/s

95th percentile per-packet one-way delay: 63.976 ms

Loss rate: 0.60%



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



Run 6: Statistics of QUIC Cubic

Start at: 2017-12-20 08:07:12

End at: 2017-12-20 08:07:42

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 53.01 Mbit/s

95th percentile per-packet one-way delay: 63.990 ms

Loss rate: 0.69%

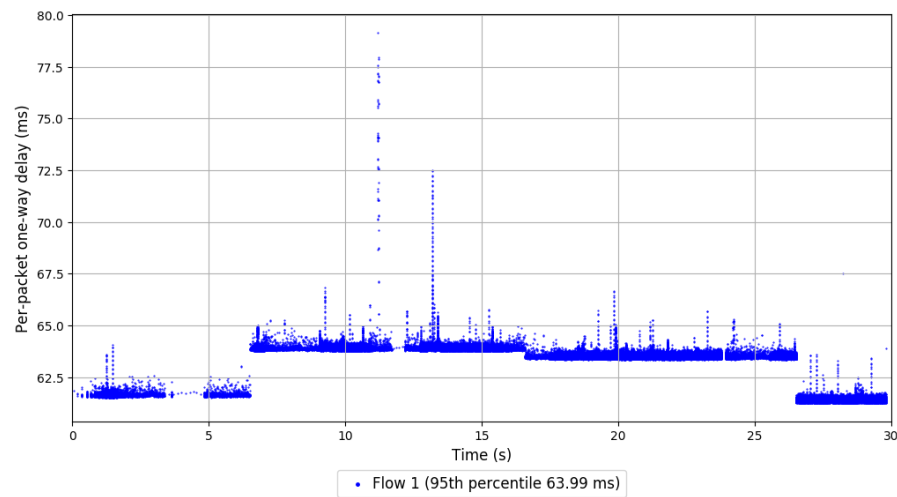
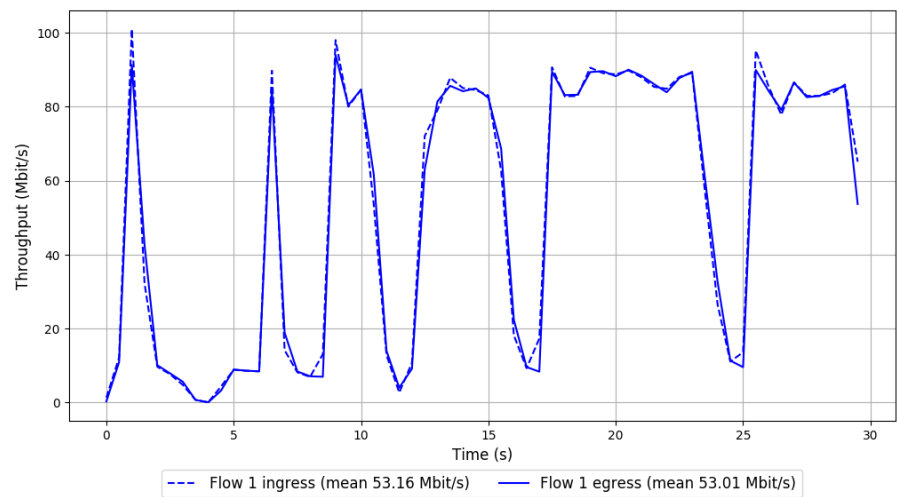
-- Flow 1:

Average throughput: 53.01 Mbit/s

95th percentile per-packet one-way delay: 63.990 ms

Loss rate: 0.69%

Run 6: Report of QUIC Cubic — Data Link



Run 7: Statistics of QUIC Cubic

Start at: 2017-12-20 08:19:01

End at: 2017-12-20 08:19:31

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 58.35 Mbit/s

95th percentile per-packet one-way delay: 63.814 ms

Loss rate: 0.62%

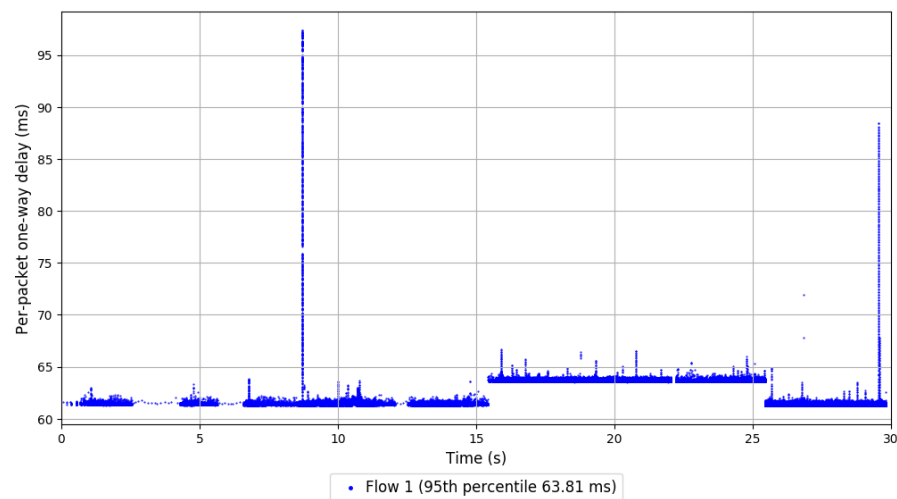
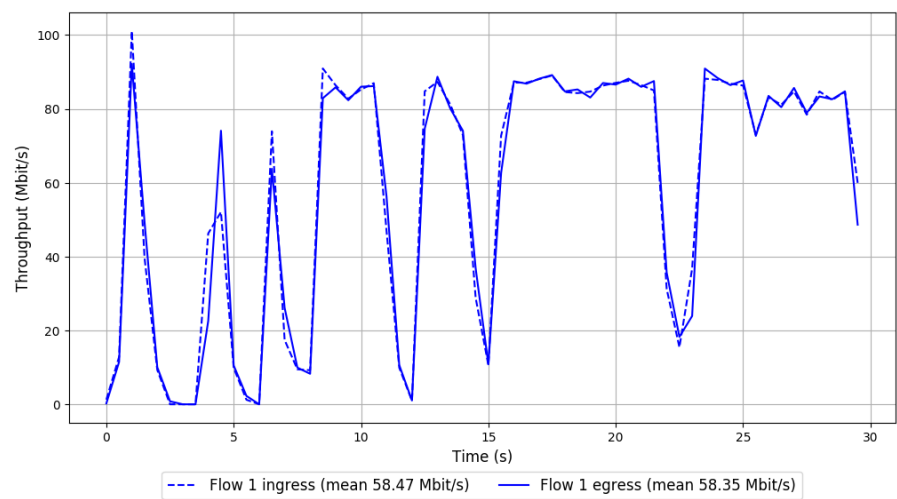
-- Flow 1:

Average throughput: 58.35 Mbit/s

95th percentile per-packet one-way delay: 63.814 ms

Loss rate: 0.62%

Run 7: Report of QUIC Cubic — Data Link



Run 8: Statistics of QUIC Cubic

Start at: 2017-12-20 08:30:28

End at: 2017-12-20 08:30:58

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 59.34 Mbit/s

95th percentile per-packet one-way delay: 63.815 ms

Loss rate: 0.60%

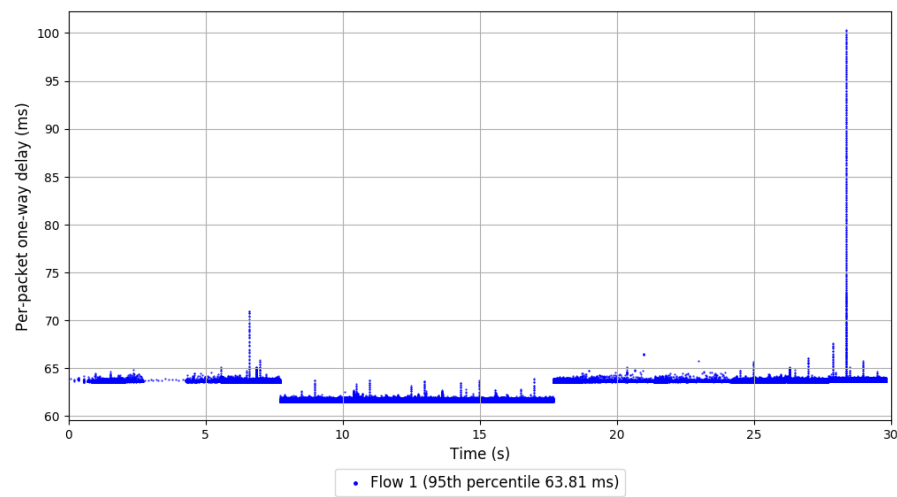
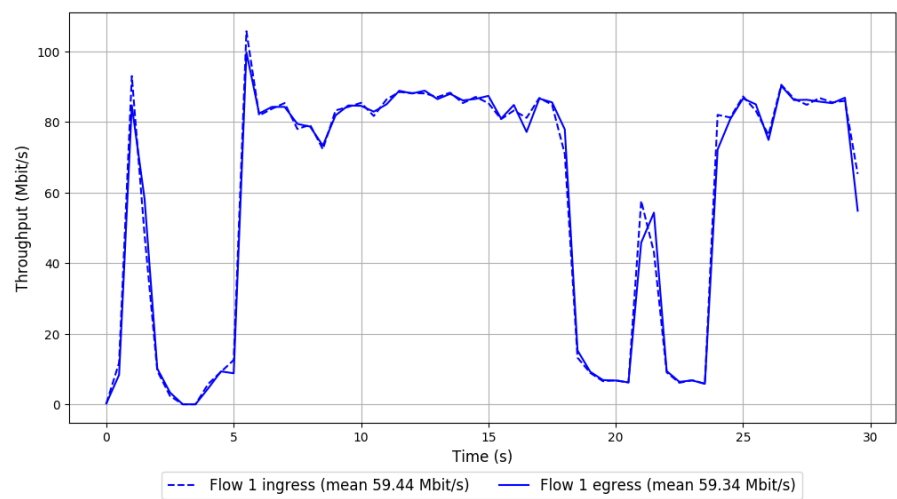
-- Flow 1:

Average throughput: 59.34 Mbit/s

95th percentile per-packet one-way delay: 63.815 ms

Loss rate: 0.60%

Run 8: Report of QUIC Cubic — Data Link



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-20 08:41:56

End at: 2017-12-20 08:42:26

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 50.61 Mbit/s

95th percentile per-packet one-way delay: 63.725 ms

Loss rate: 0.60%

-- Flow 1:

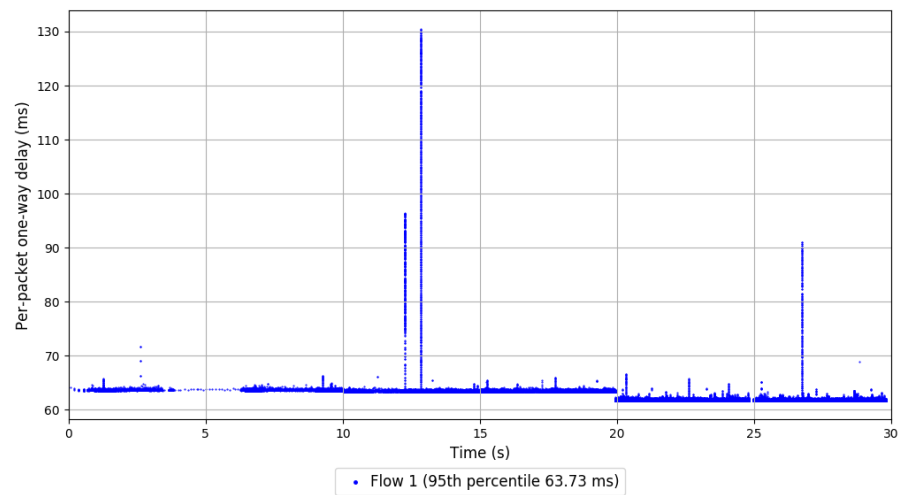
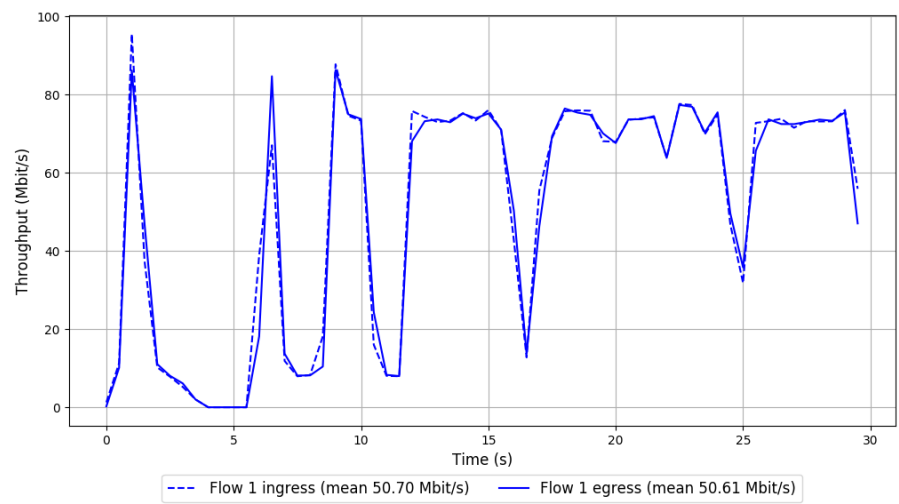
Average throughput: 50.61 Mbit/s

95th percentile per-packet one-way delay: 63.725 ms

Loss rate: 0.60%



Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

Start at: 2017-12-20 08:53:45

End at: 2017-12-20 08:54:15

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 60.41 Mbit/s

95th percentile per-packet one-way delay: 63.689 ms

Loss rate: 0.66%

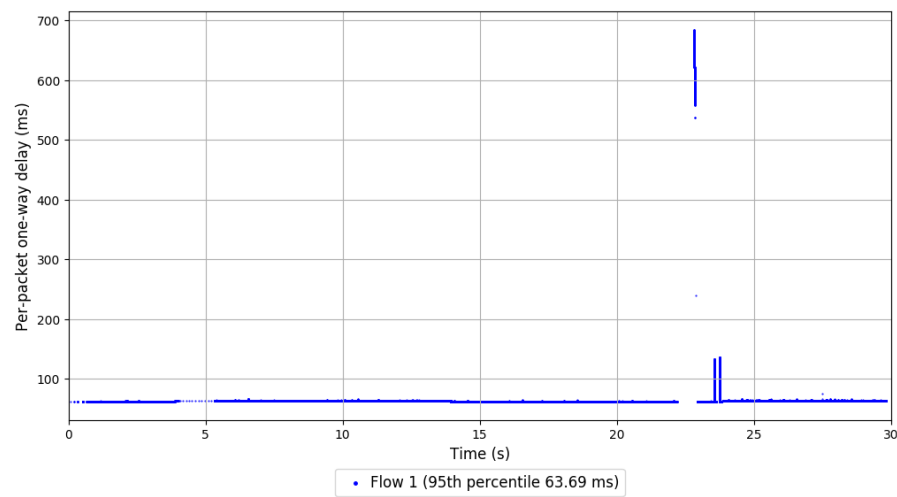
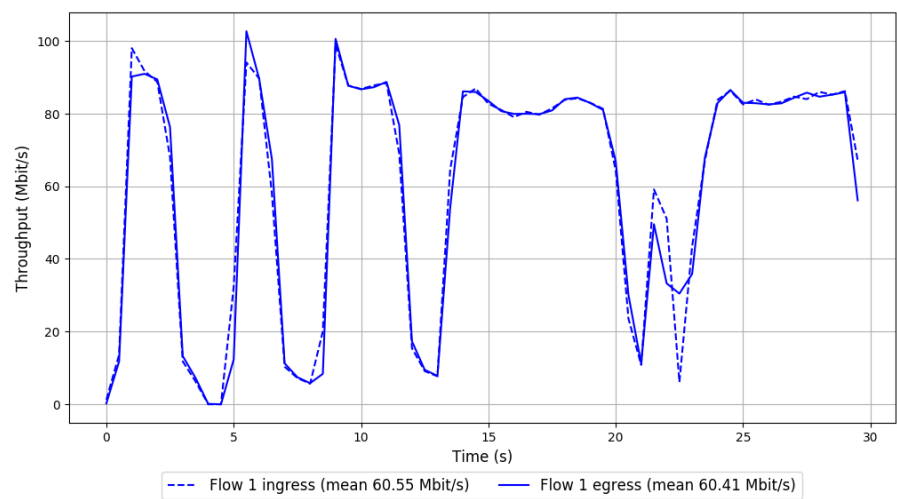
-- Flow 1:

Average throughput: 60.41 Mbit/s

95th percentile per-packet one-way delay: 63.689 ms

Loss rate: 0.66%

Run 10: Report of QUIC Cubic — Data Link

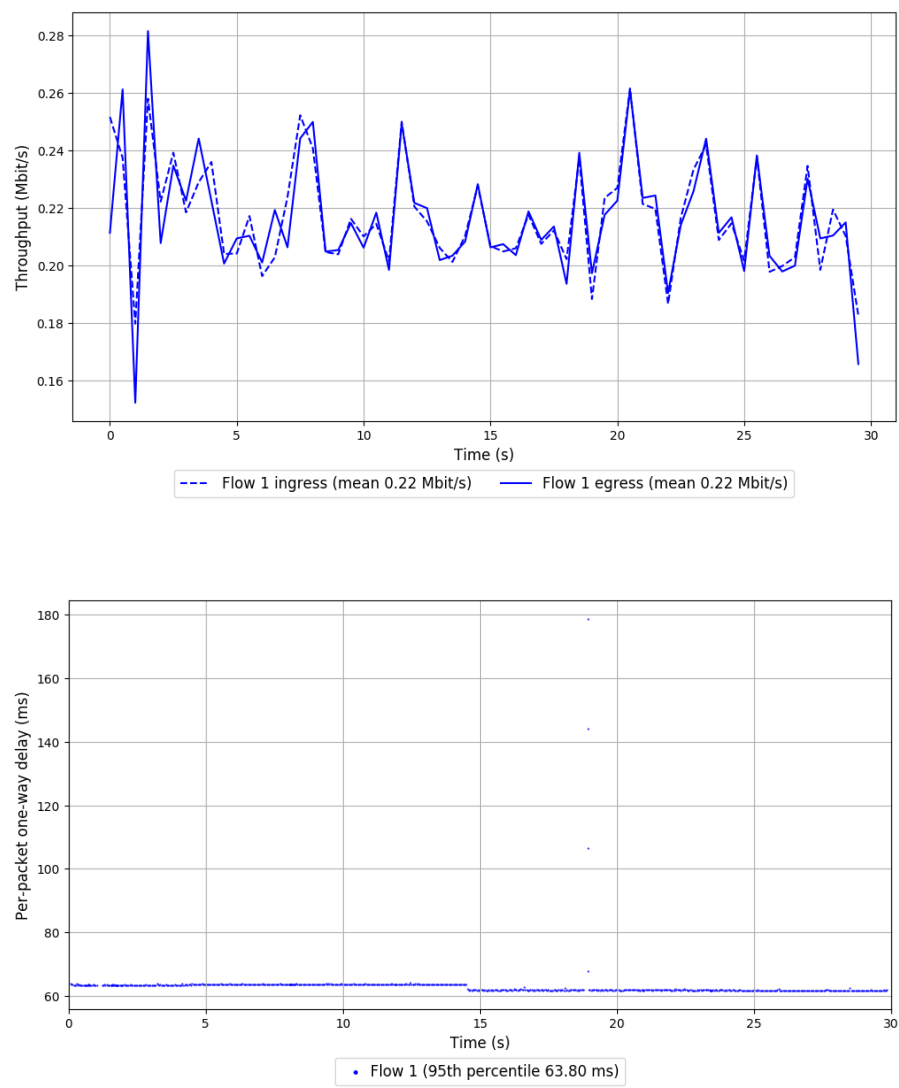


```
Run 1: Statistics of SCReAM

Start at: 2017-12-20 07:15:51
End at: 2017-12-20 07:16:22

# Below is generated by plot.py at 2017-12-20 11:29:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.795 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.795 ms
Loss rate: 0.38%
```

Run 1: Report of SReAM — Data Link

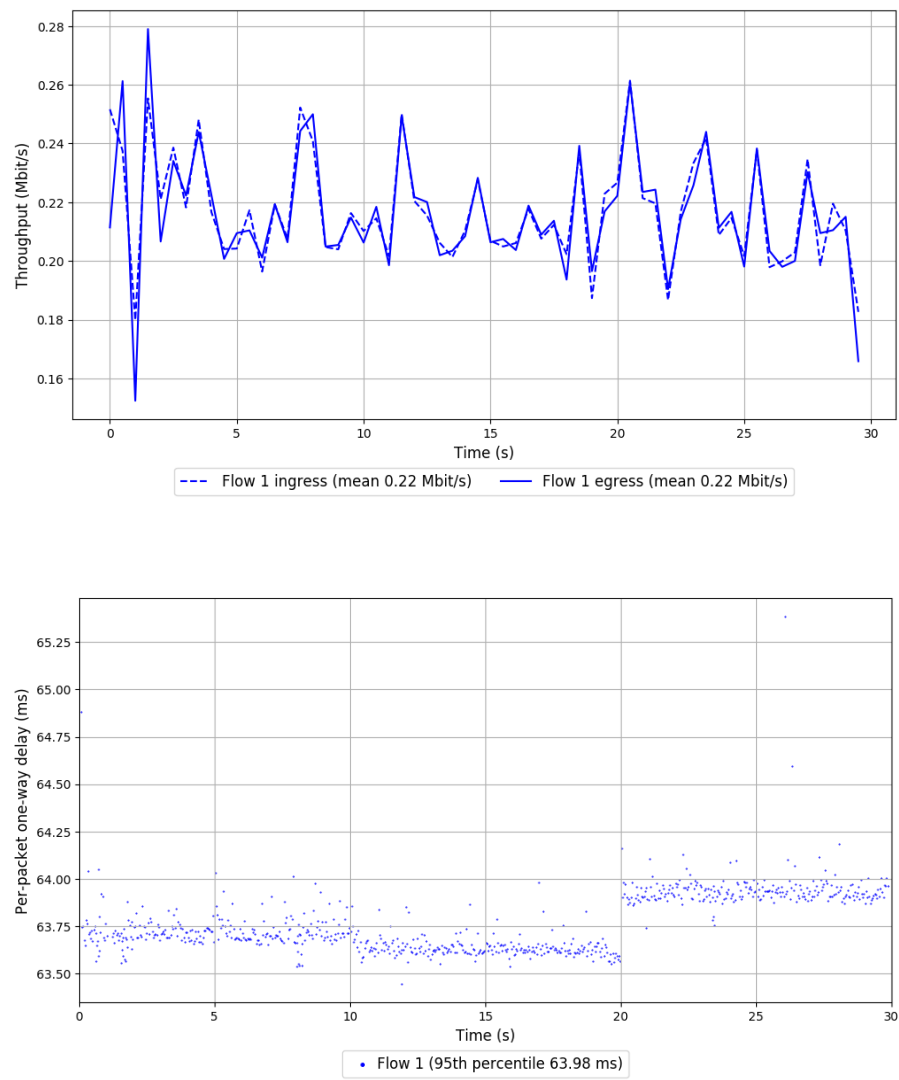


```
Run 2: Statistics of SCReAM

Start at: 2017-12-20 07:27:29
End at: 2017-12-20 07:27:59

# Below is generated by plot.py at 2017-12-20 11:29:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.981 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.981 ms
Loss rate: 0.38%
```

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2017-12-20 07:39:09

End at: 2017-12-20 07:39:39

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.908 ms

Loss rate: 0.38%

-- Flow 1:

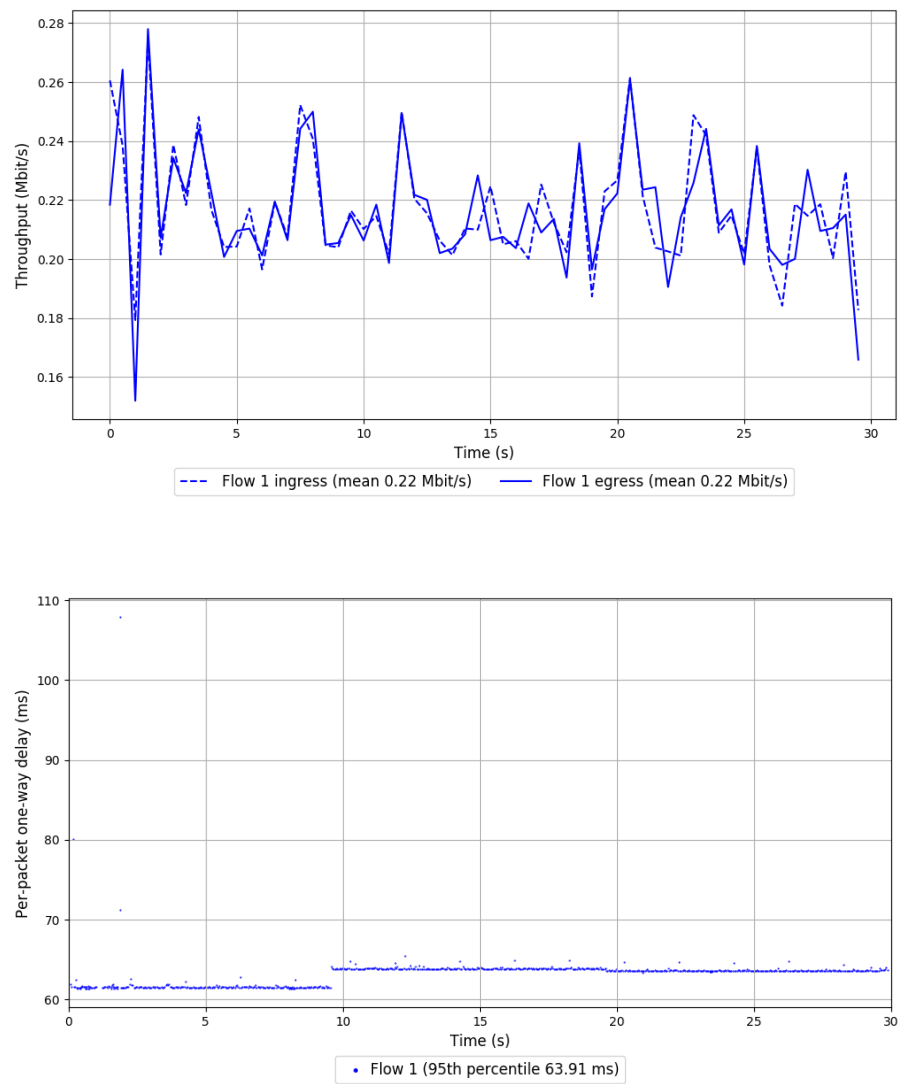
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.908 ms

Loss rate: 0.38%



Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-20 07:51:08

End at: 2017-12-20 07:51:38

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 64.039 ms

Loss rate: 0.51%

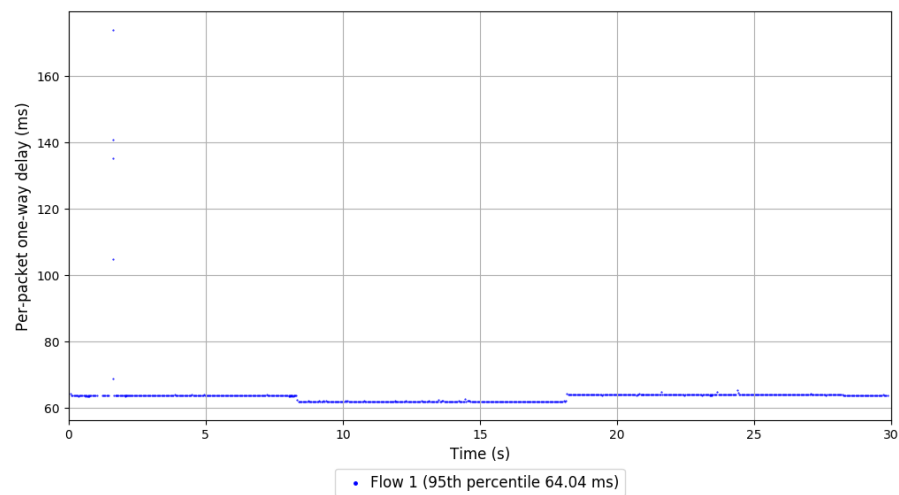
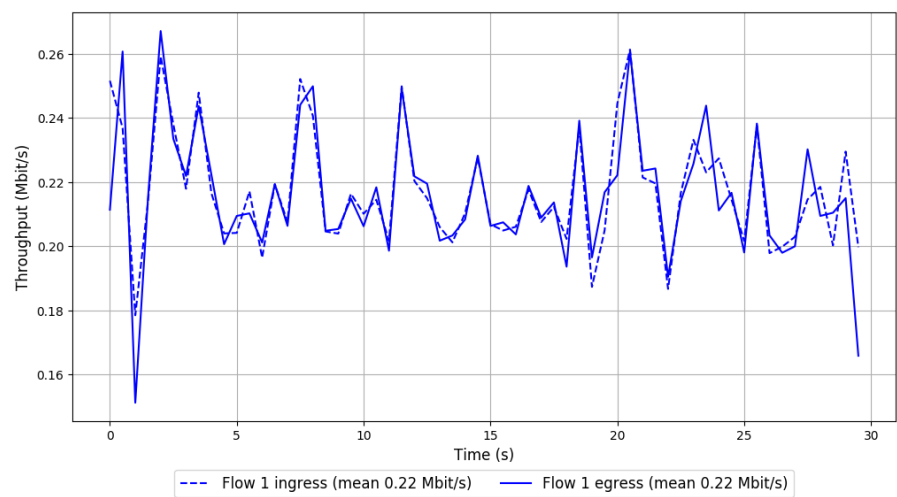
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 64.039 ms

Loss rate: 0.51%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2017-12-20 08:02:42

End at: 2017-12-20 08:03:12

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 64.048 ms

Loss rate: 0.38%

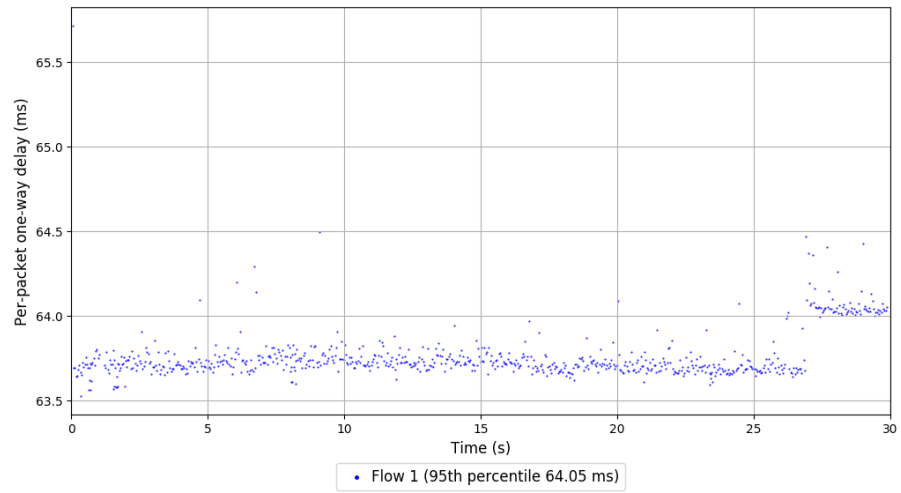
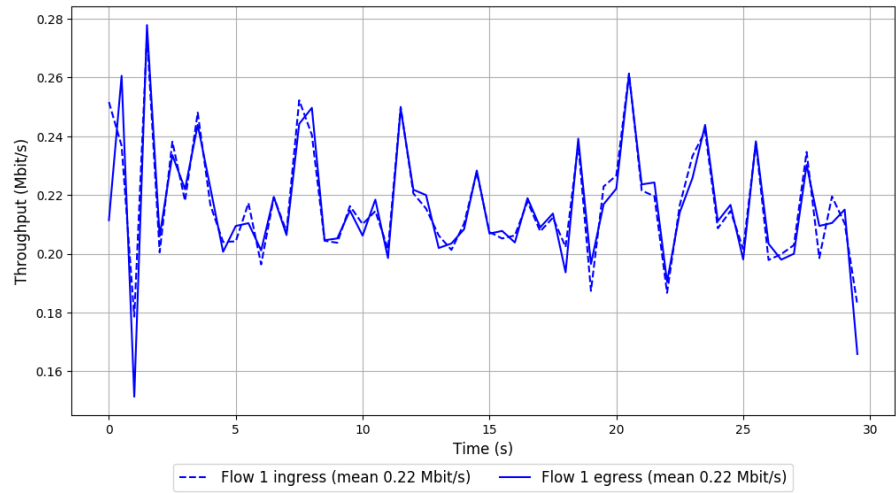
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 64.048 ms

Loss rate: 0.38%

## Run 5: Report of SReAM — Data Link



Run 6: Statistics of SCReAM

Start at: 2017-12-20 08:13:57

End at: 2017-12-20 08:14:27

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.862 ms

Loss rate: 0.38%

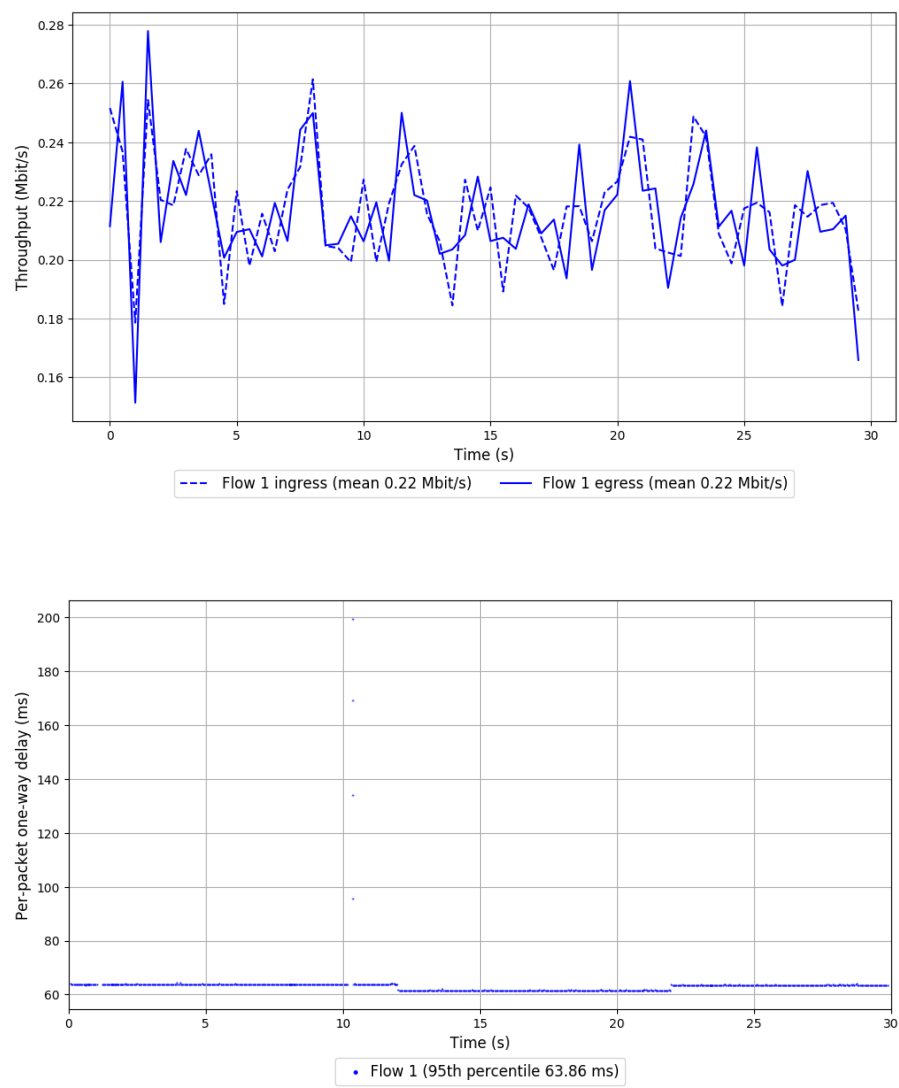
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.862 ms

Loss rate: 0.38%

Run 6: Report of SReAM — Data Link



Run 7: Statistics of SCReAM

Start at: 2017-12-20 08:25:24

End at: 2017-12-20 08:25:54

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 64.102 ms

Loss rate: 0.38%

-- Flow 1:

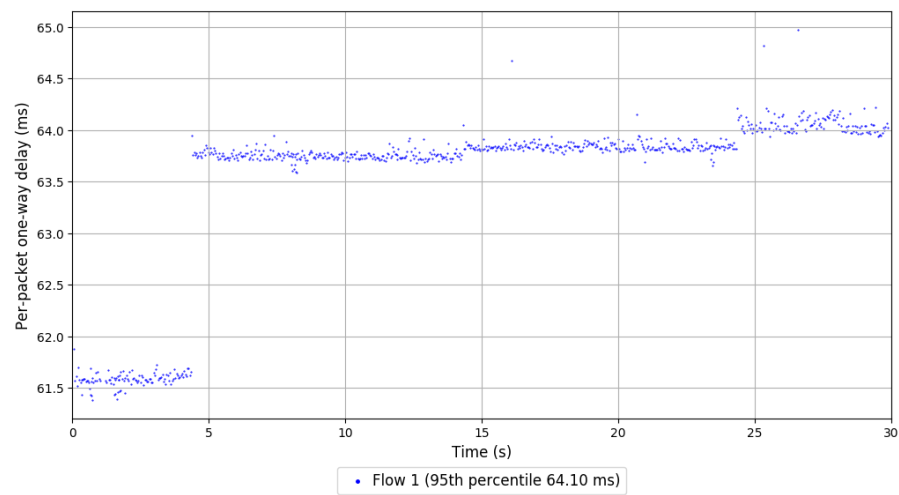
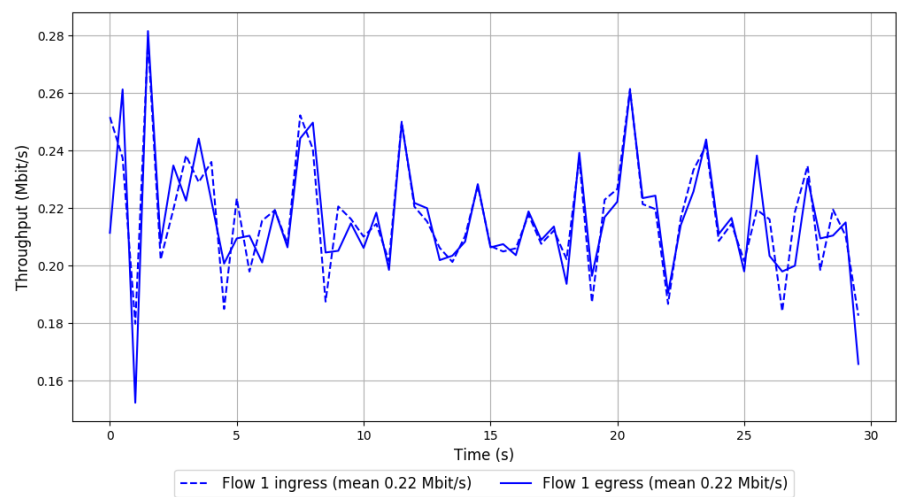
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 64.102 ms

Loss rate: 0.38%



Run 7: Report of SReAM — Data Link



Run 8: Statistics of SCReAM

Start at: 2017-12-20 08:36:59

End at: 2017-12-20 08:37:29

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.765 ms

Loss rate: 0.51%

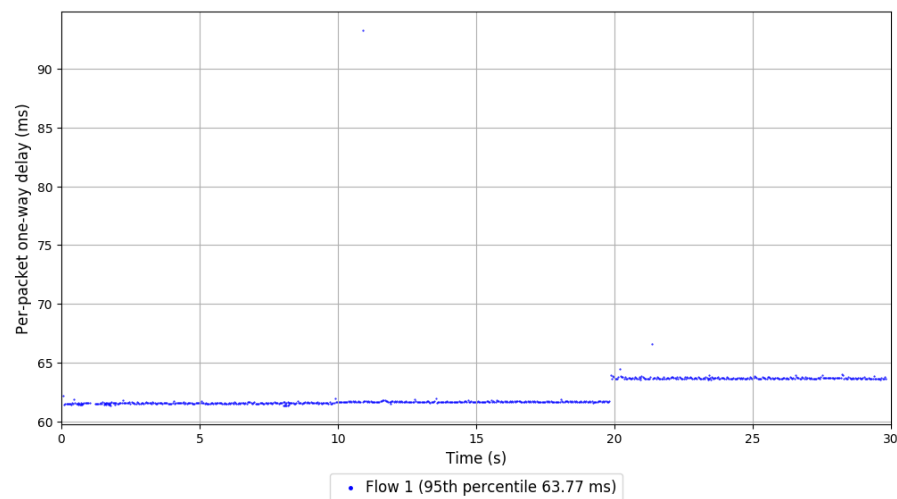
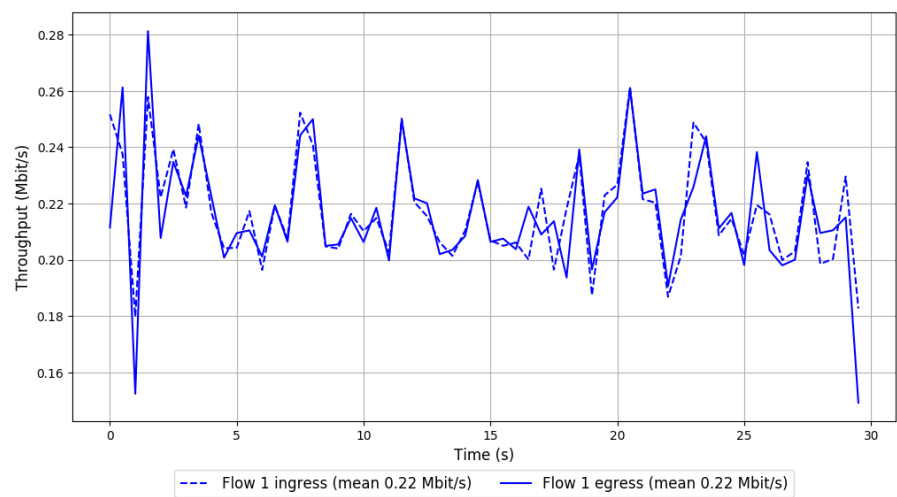
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.765 ms

Loss rate: 0.51%

Run 8: Report of SReAM — Data Link



Run 9: Statistics of SCReAM

Start at: 2017-12-20 08:48:40

End at: 2017-12-20 08:49:10

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.822 ms

Loss rate: 0.38%

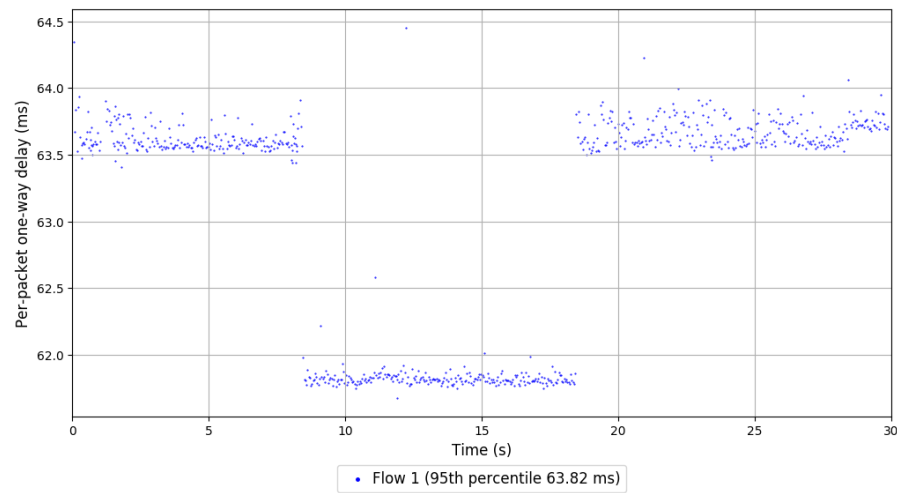
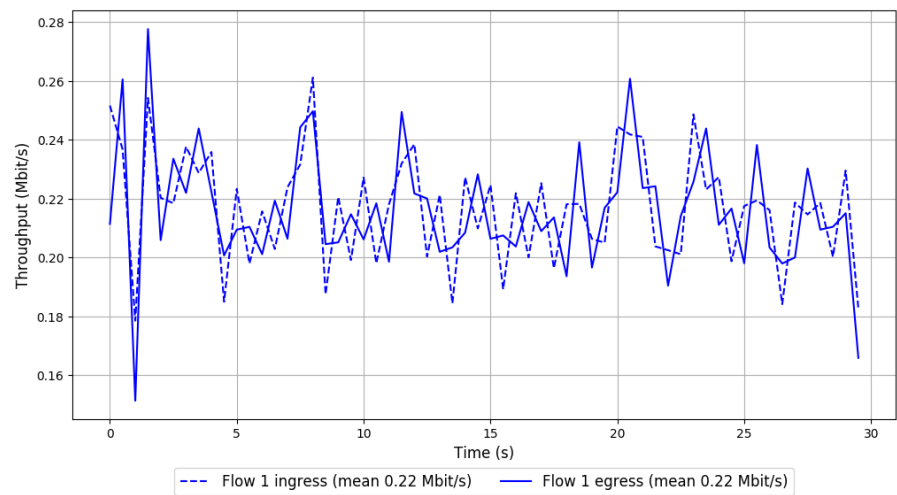
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 63.822 ms

Loss rate: 0.38%

Run 9: Report of SReAM — Data Link



Run 10: Statistics of SReAM

Start at: 2017-12-20 09:00:36

End at: 2017-12-20 09:01:06

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.781 ms

Loss rate: 0.38%

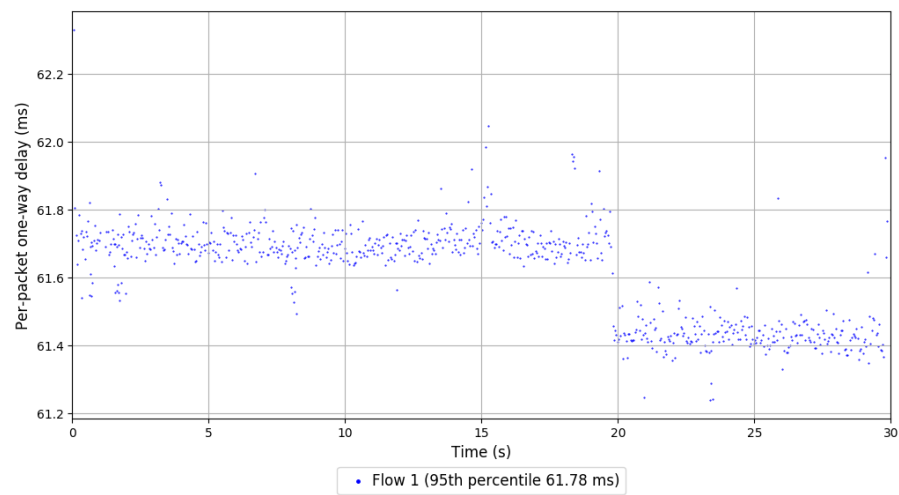
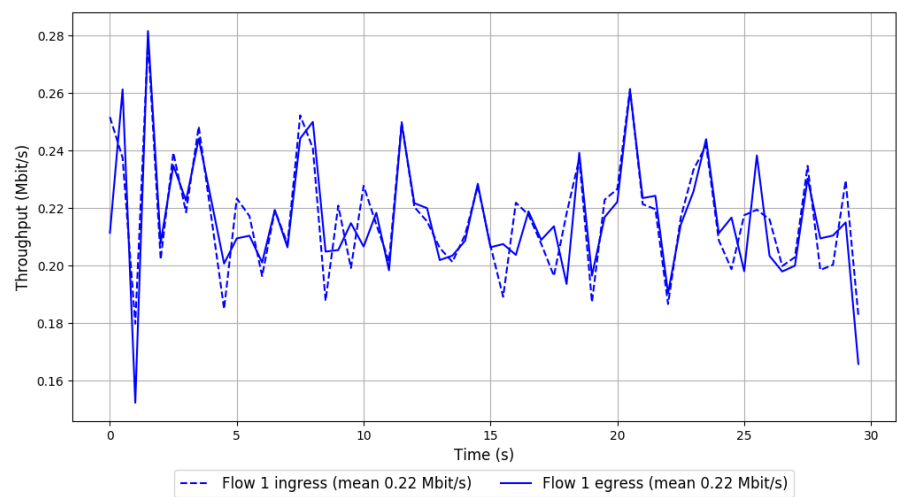
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 61.781 ms

Loss rate: 0.38%

Run 10: Report of SCReAM — Data Link



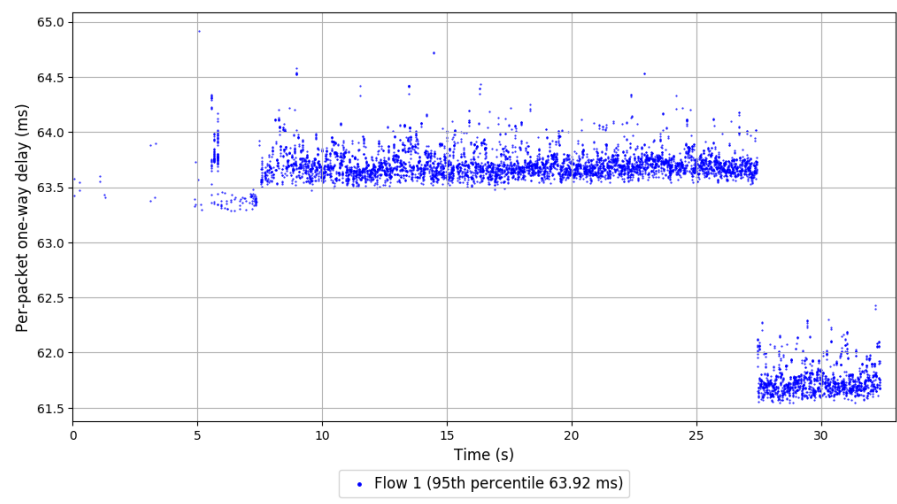
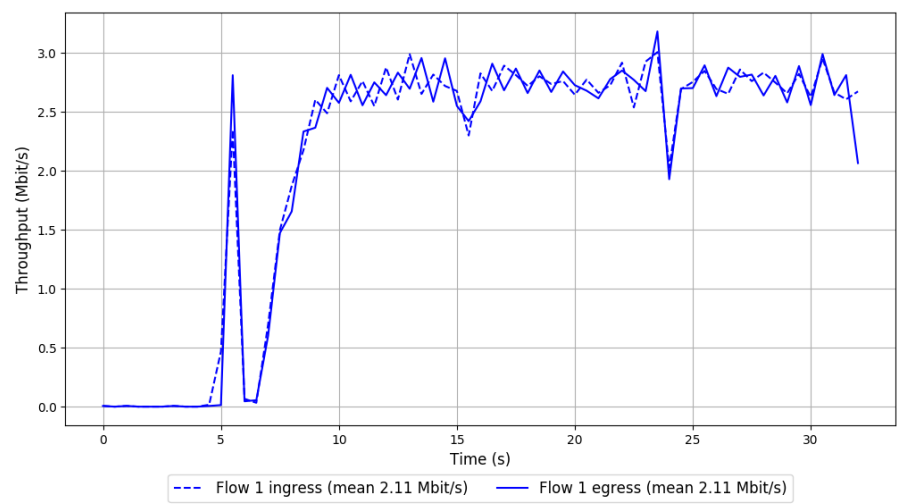
```
Run 1: Statistics of WebRTC media

Start at: 2017-12-20 07:13:31
End at: 2017-12-20 07:14:01

# Below is generated by plot.py at 2017-12-20 11:29:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 63.918 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 63.918 ms
Loss rate: 0.61%
```



Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2017-12-20 07:25:07

End at: 2017-12-20 07:25:37

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 62.079 ms

Loss rate: 0.44%

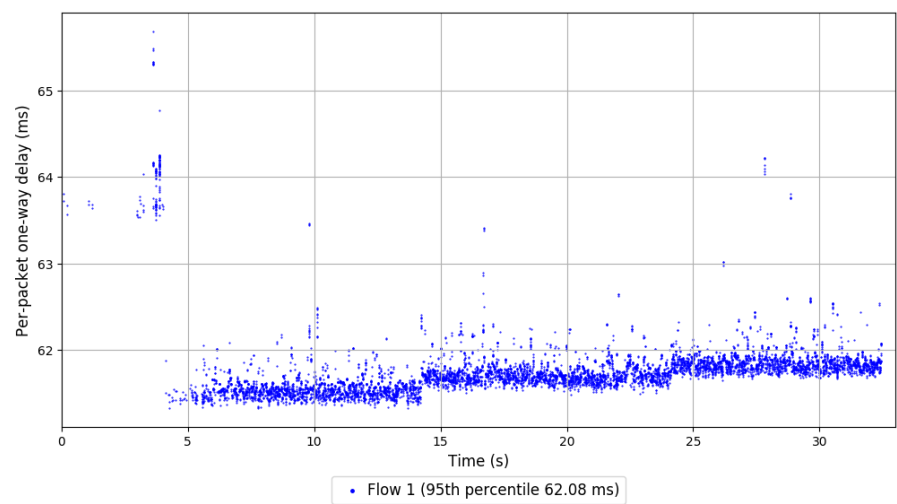
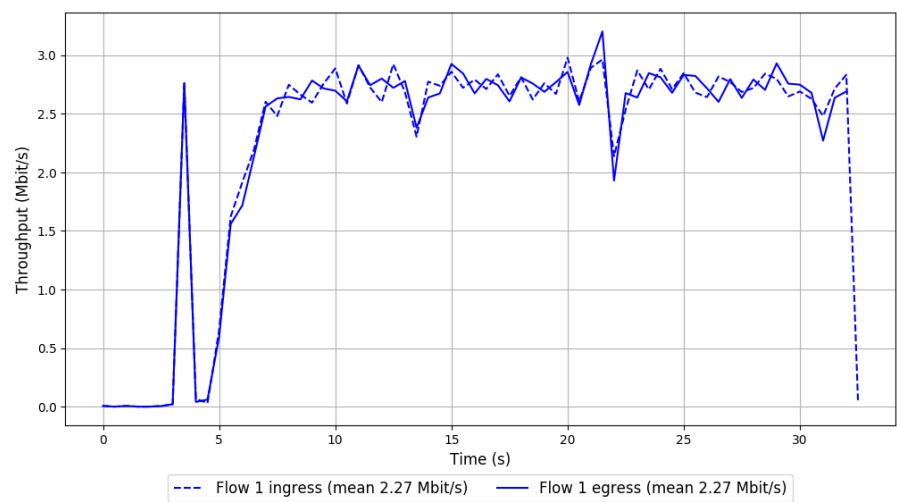
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 62.079 ms

Loss rate: 0.44%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2017-12-20 07:36:46

End at: 2017-12-20 07:37:16

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.685 ms

Loss rate: 0.45%

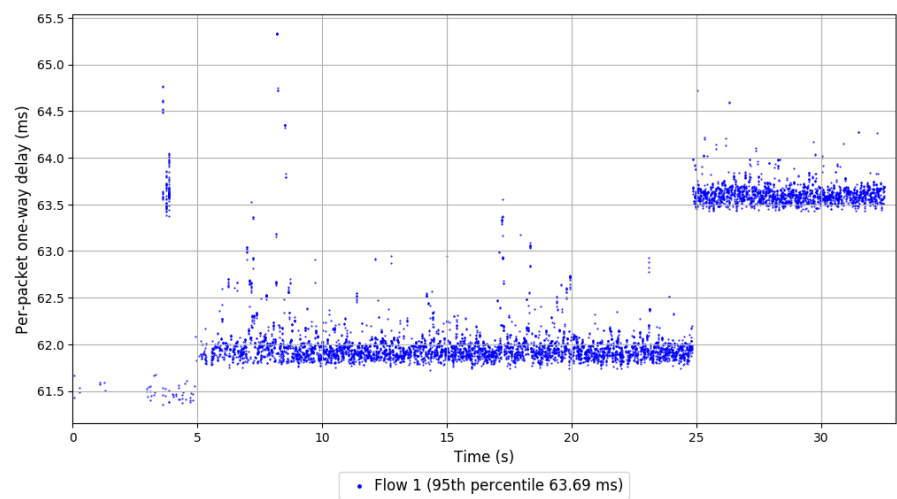
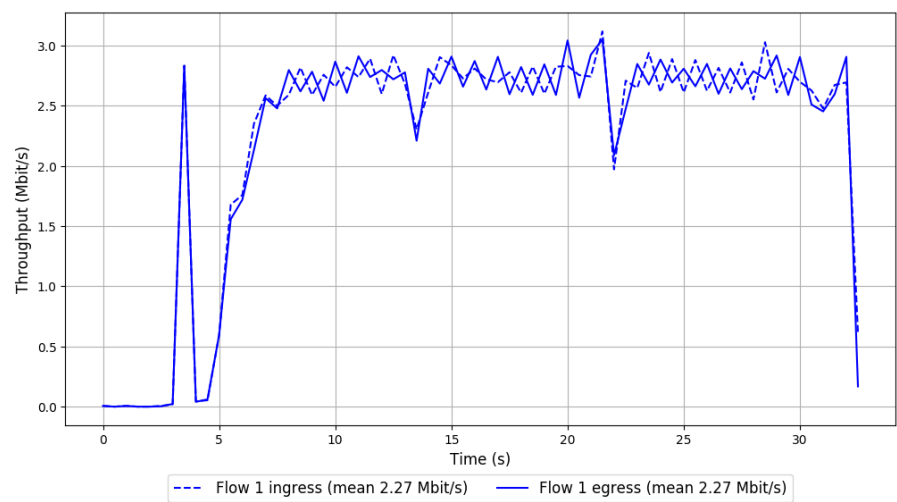
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.685 ms

Loss rate: 0.45%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2017-12-20 07:48:42

End at: 2017-12-20 07:49:12

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 64.271 ms

Loss rate: 0.45%

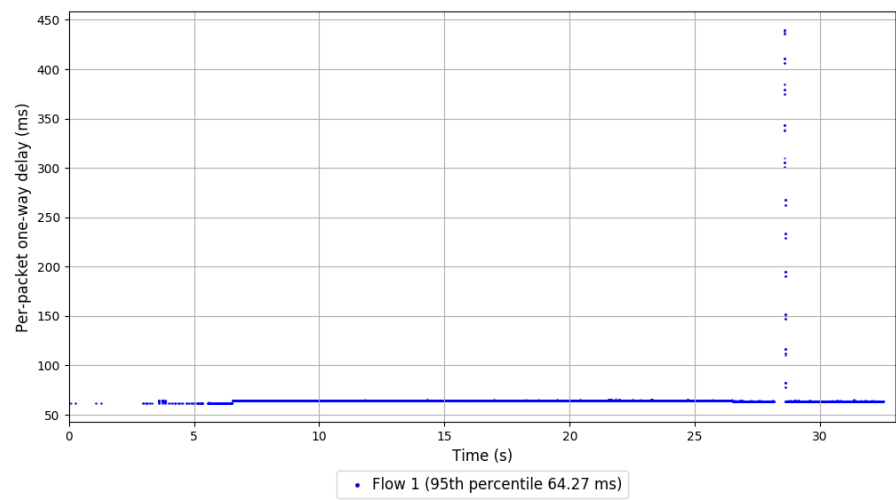
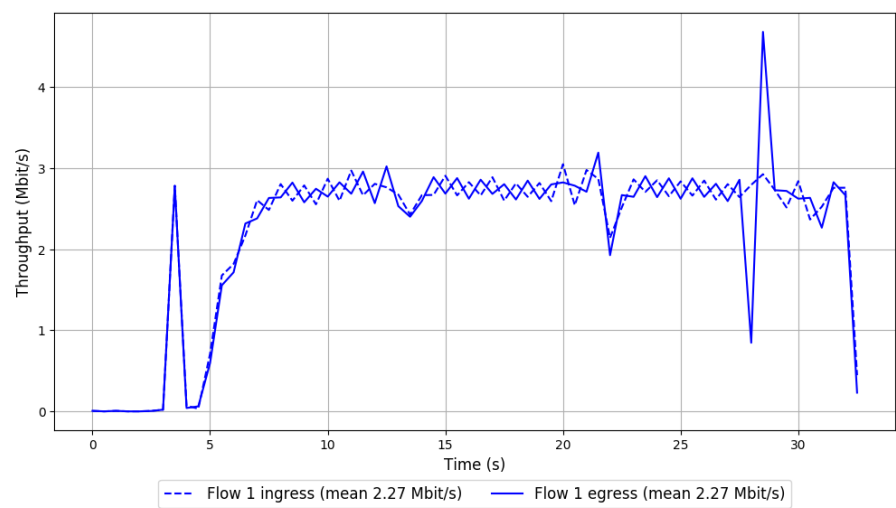
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 64.271 ms

Loss rate: 0.45%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2017-12-20 08:00:25

End at: 2017-12-20 08:00:55

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 62.098 ms

Loss rate: 0.46%

-- Flow 1:

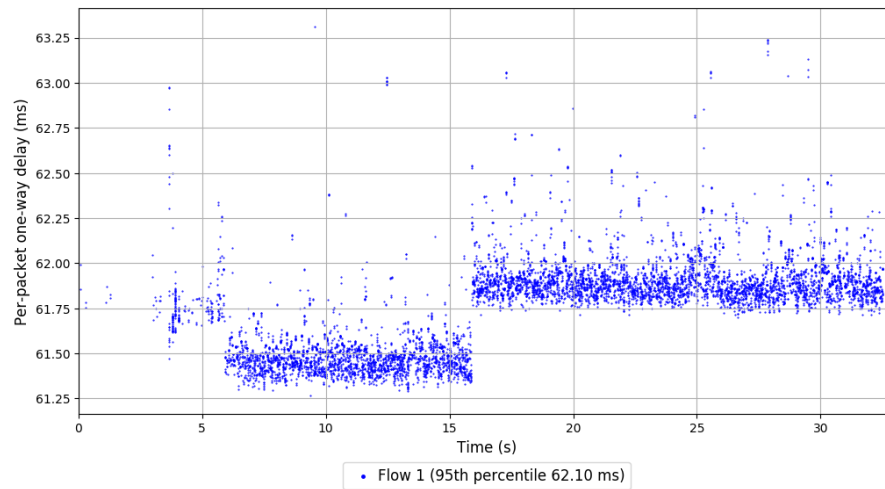
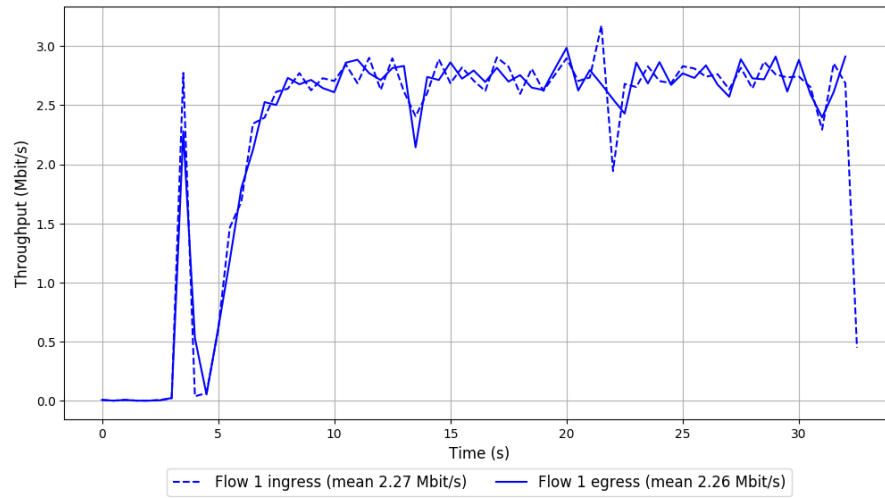
Average throughput: 2.26 Mbit/s

95th percentile per-packet one-way delay: 62.098 ms

Loss rate: 0.46%



### Run 5: Report of WebRTC media — Data Link



Run 6: Statistics of WebRTC media

Start at: 2017-12-20 08:11:36

End at: 2017-12-20 08:12:06

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.923 ms

Loss rate: 0.44%

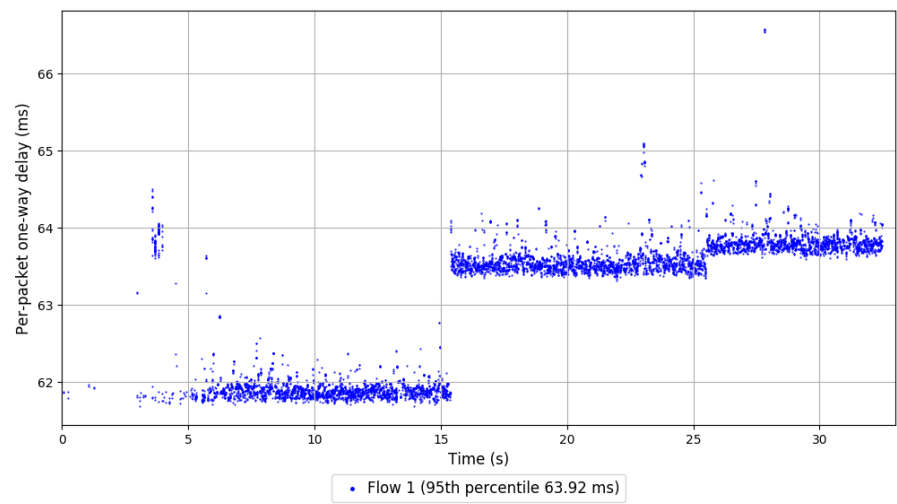
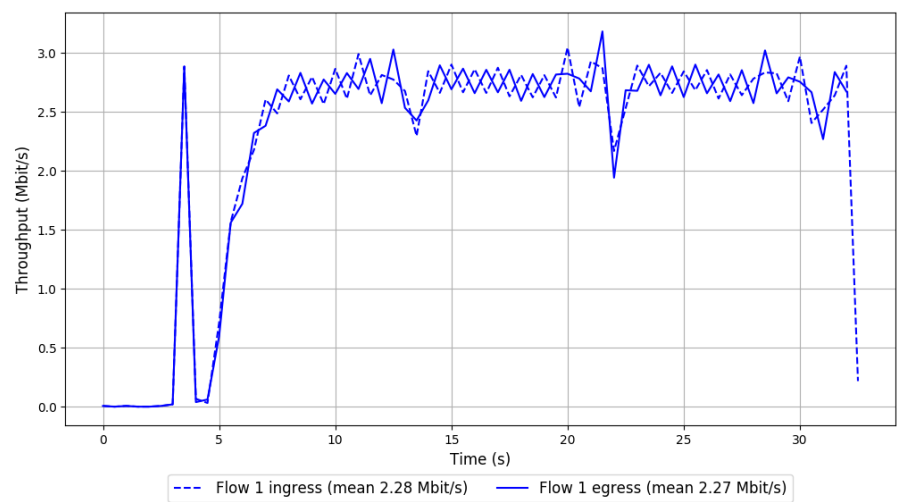
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.923 ms

Loss rate: 0.44%

Run 6: Report of WebRTC media — Data Link



Run 7: Statistics of WebRTC media

Start at: 2017-12-20 08:23:11

End at: 2017-12-20 08:23:41

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.985 ms

Loss rate: 0.46%

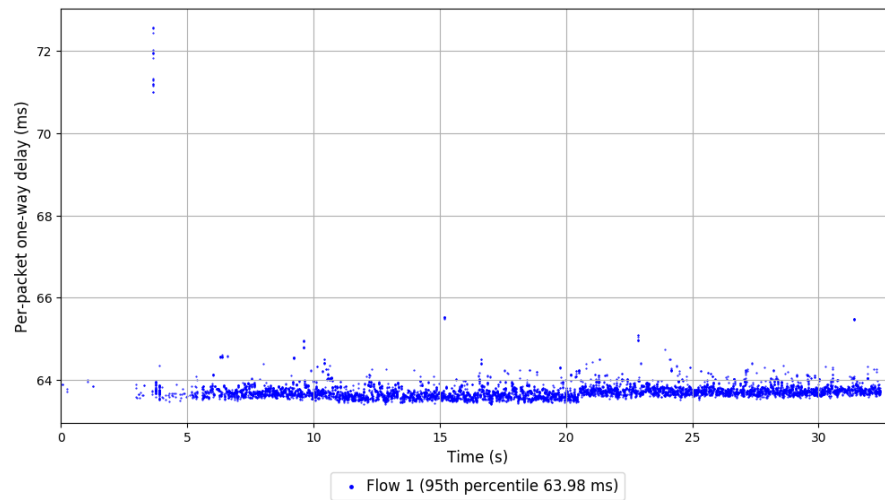
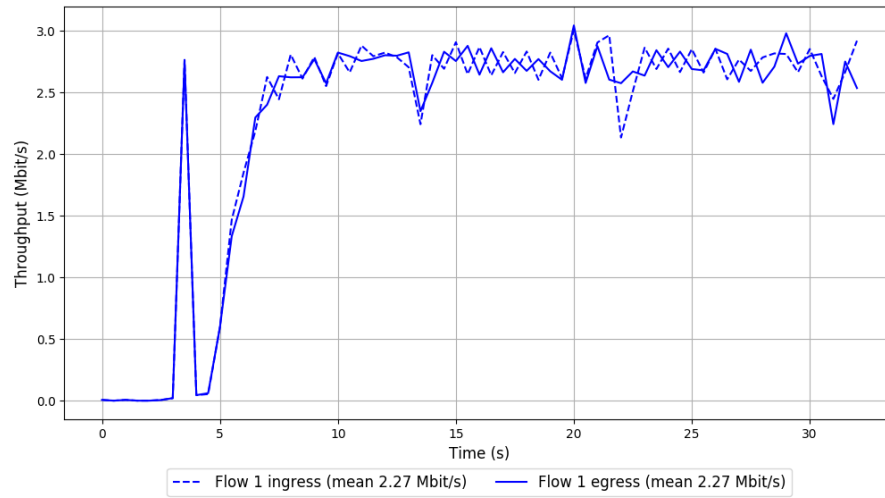
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.985 ms

Loss rate: 0.46%

### Run 7: Report of WebRTC media — Data Link



Run 8: Statistics of WebRTC media

Start at: 2017-12-20 08:34:37

End at: 2017-12-20 08:35:07

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.940 ms

Loss rate: 0.61%

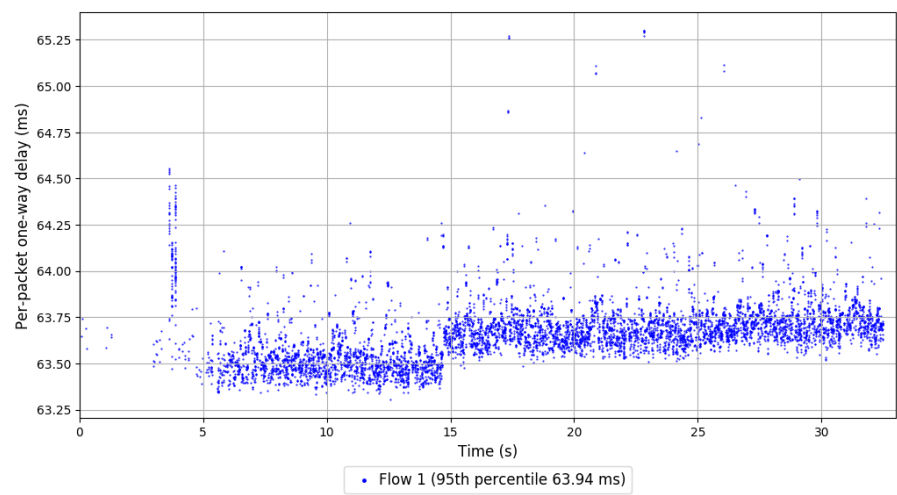
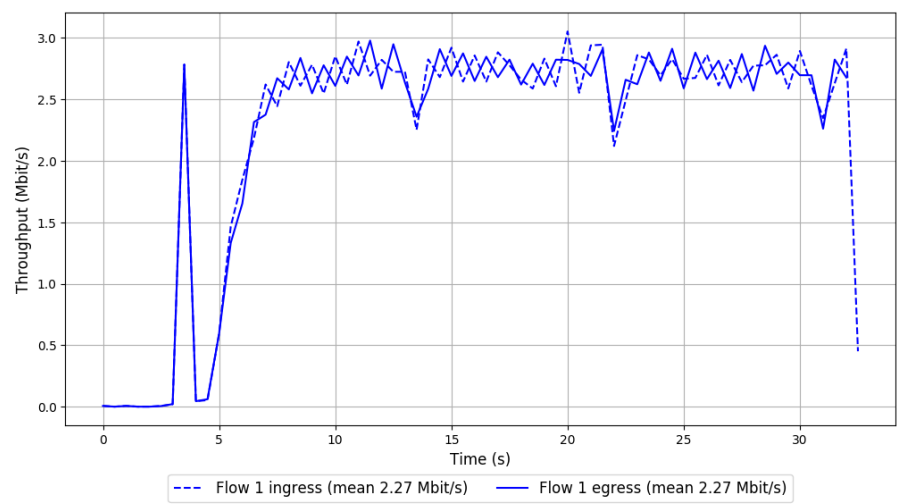
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.940 ms

Loss rate: 0.61%

Run 8: Report of WebRTC media — Data Link



Run 9: Statistics of WebRTC media

Start at: 2017-12-20 08:46:22

End at: 2017-12-20 08:46:52

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 64.052 ms

Loss rate: 0.46%

-- Flow 1:

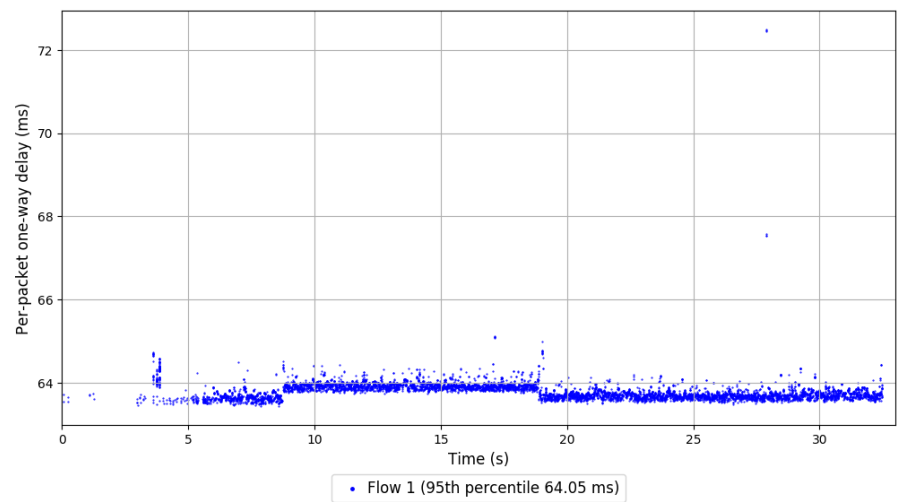
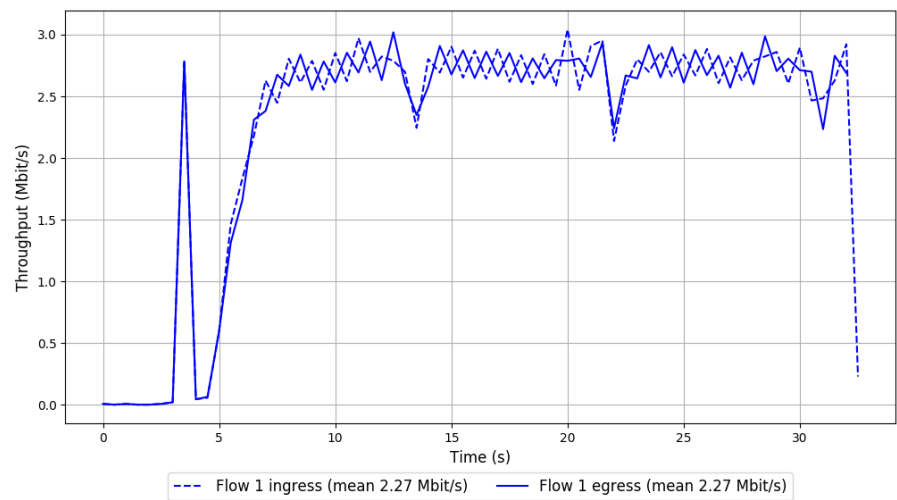
Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 64.052 ms

Loss rate: 0.46%



Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-20 08:58:13

End at: 2017-12-20 08:58:43

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.852 ms

Loss rate: 0.48%

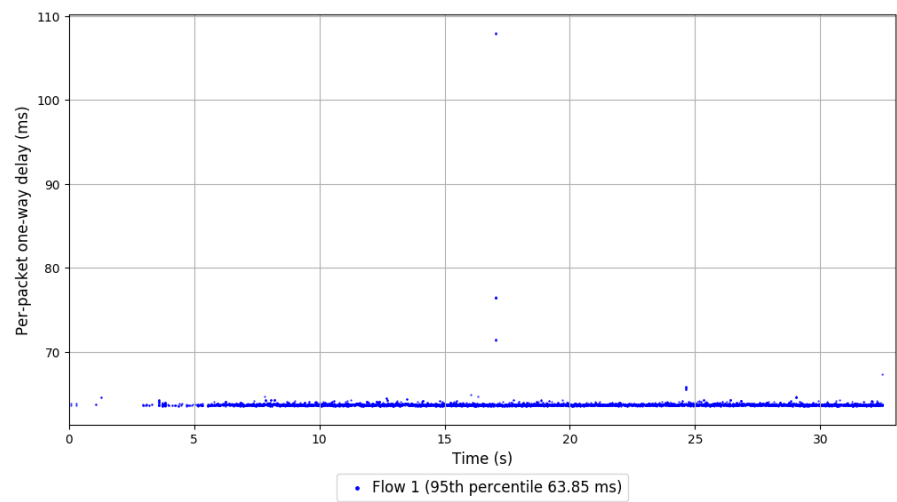
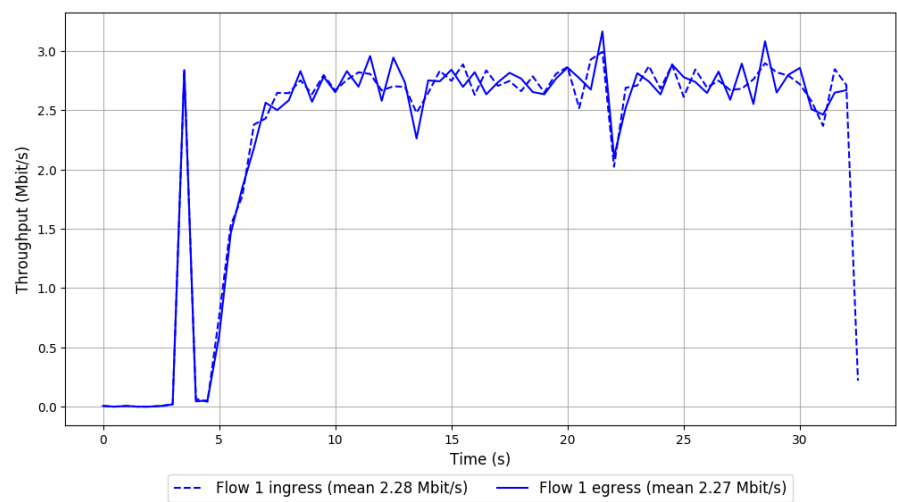
-- Flow 1:

Average throughput: 2.27 Mbit/s

95th percentile per-packet one-way delay: 63.852 ms

Loss rate: 0.48%

Run 10: Report of WebRTC media — Data Link



Run 1: Statistics of Sprout

Start at: 2017-12-20 07:19:01

End at: 2017-12-20 07:19:31

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 64.889 ms

Loss rate: 0.92%

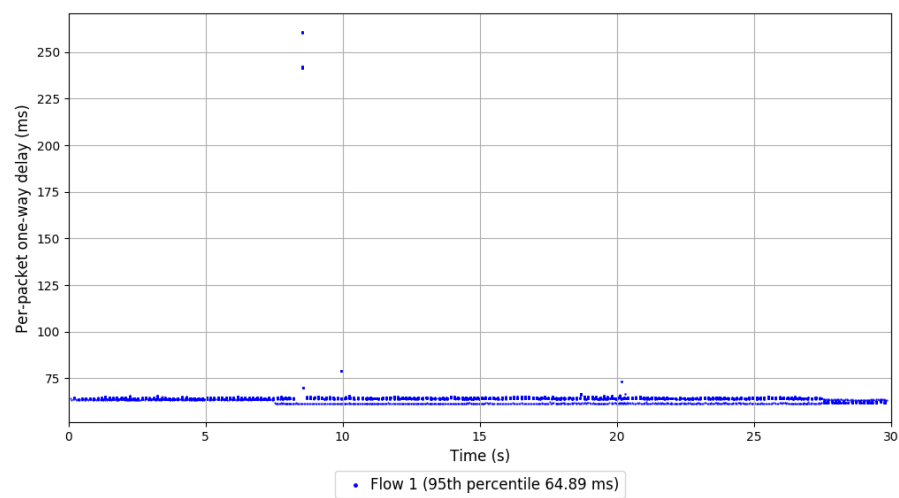
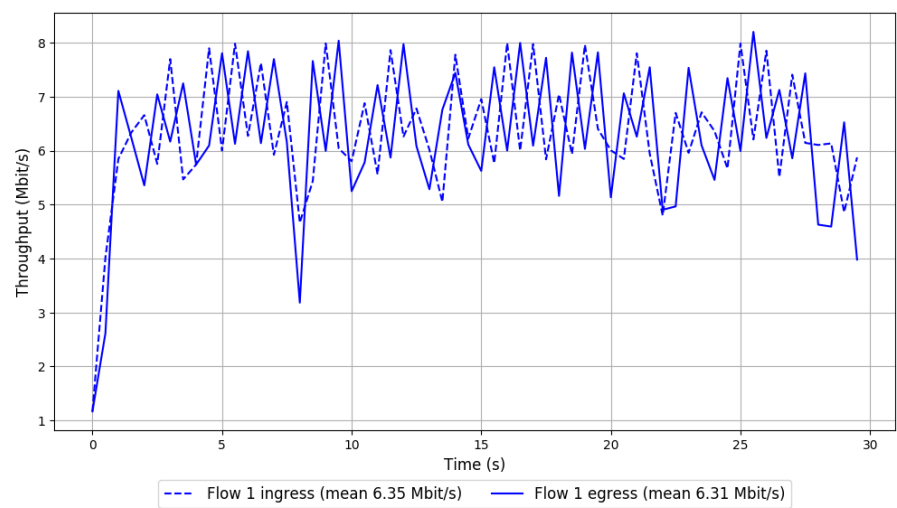
-- Flow 1:

Average throughput: 6.31 Mbit/s

95th percentile per-packet one-way delay: 64.889 ms

Loss rate: 0.92%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2017-12-20 07:30:40

End at: 2017-12-20 07:31:10

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 64.494 ms

Loss rate: 1.04%

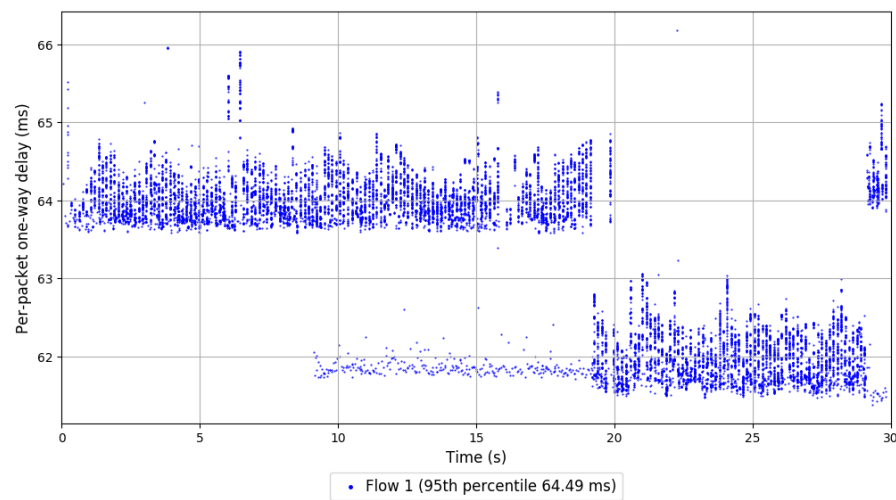
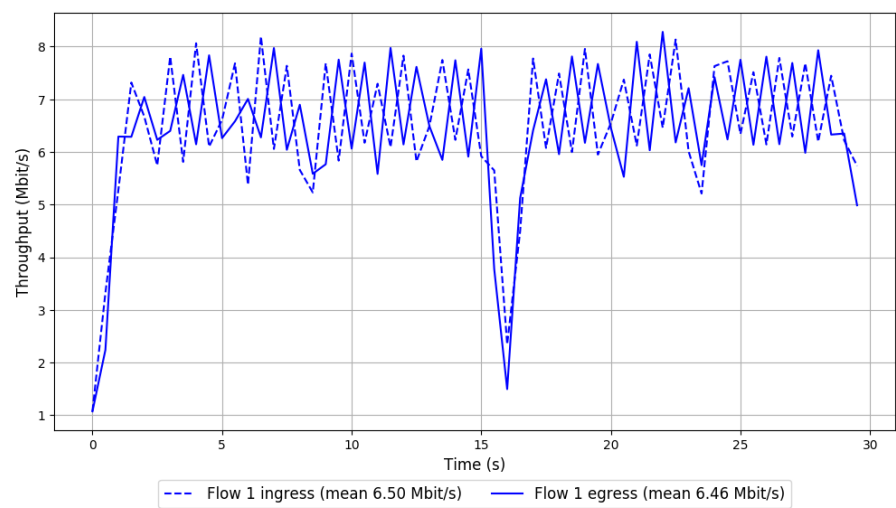
-- Flow 1:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 64.494 ms

Loss rate: 1.04%

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

Start at: 2017-12-20 07:42:20

End at: 2017-12-20 07:42:50

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 64.853 ms

Loss rate: 0.94%

-- Flow 1:

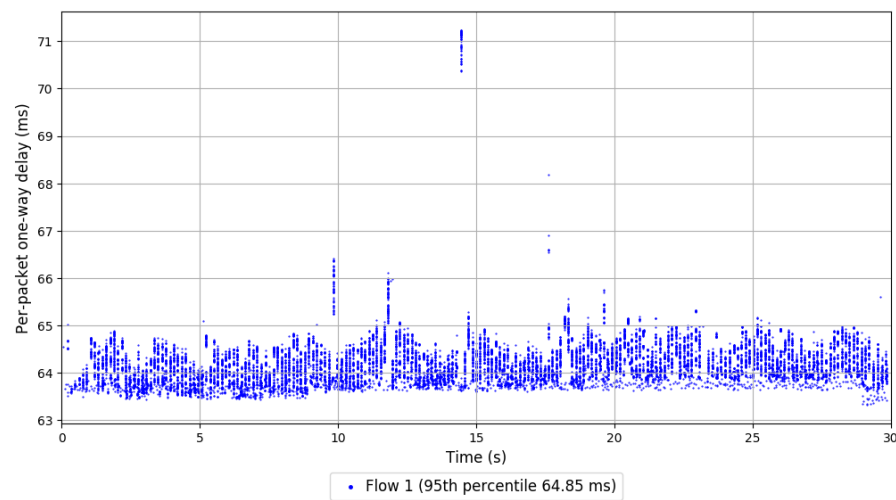
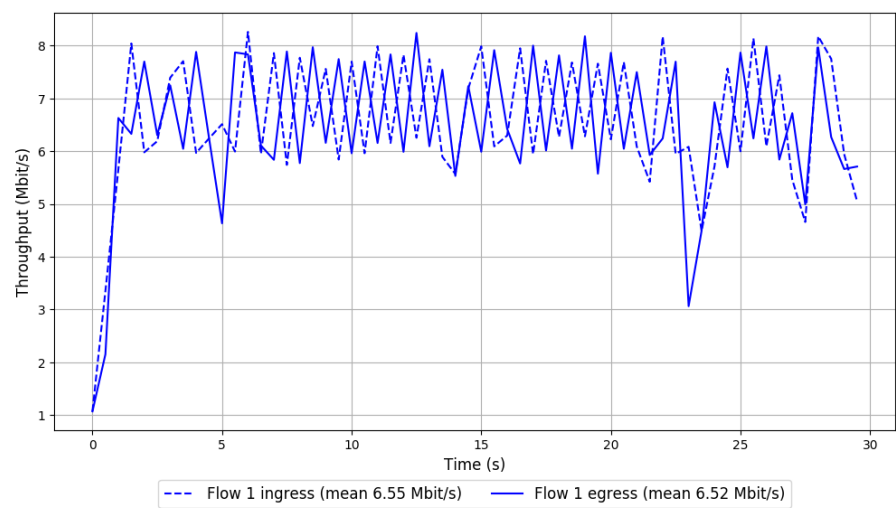
Average throughput: 6.52 Mbit/s

95th percentile per-packet one-way delay: 64.853 ms

Loss rate: 0.94%



Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2017-12-20 07:54:19

End at: 2017-12-20 07:54:49

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 64.699 ms

Loss rate: 1.06%

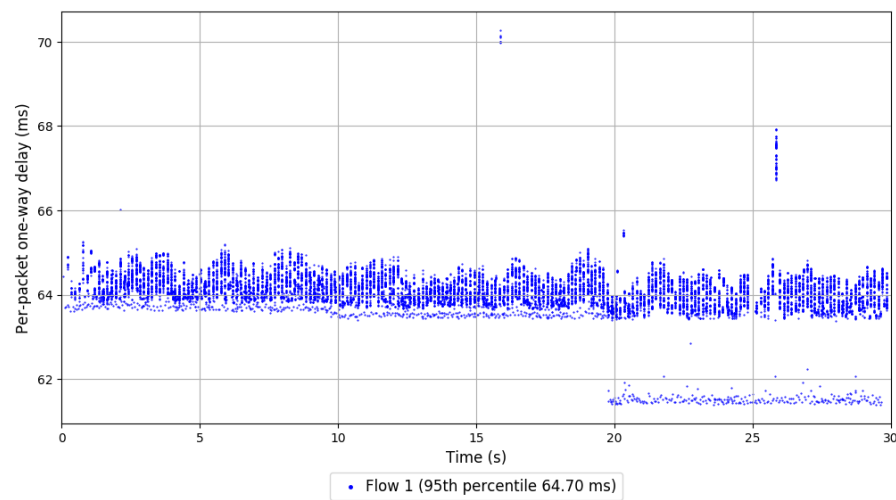
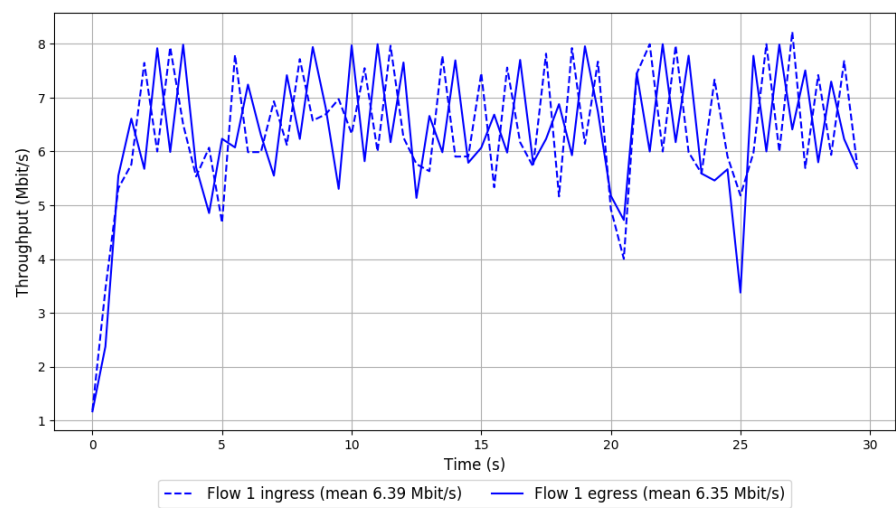
-- Flow 1:

Average throughput: 6.35 Mbit/s

95th percentile per-packet one-way delay: 64.699 ms

Loss rate: 1.06%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2017-12-20 08:05:31

End at: 2017-12-20 08:06:01

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.29 Mbit/s

95th percentile per-packet one-way delay: 64.661 ms

Loss rate: 0.64%

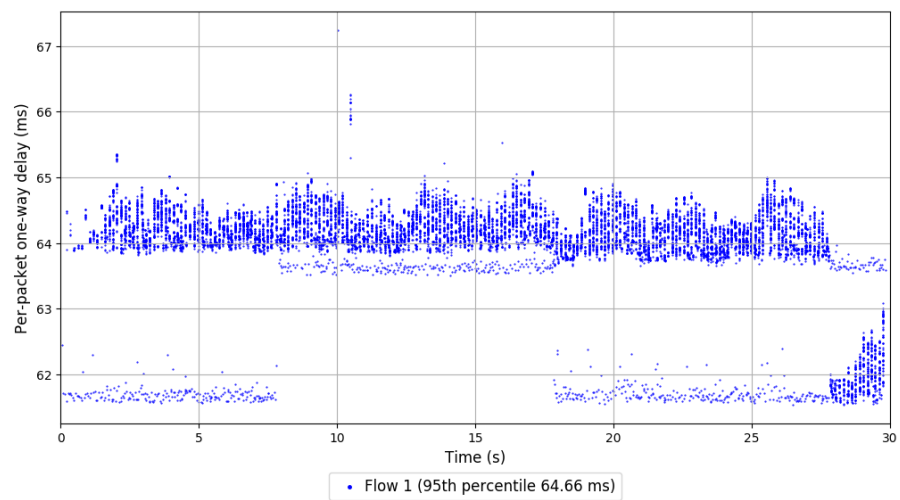
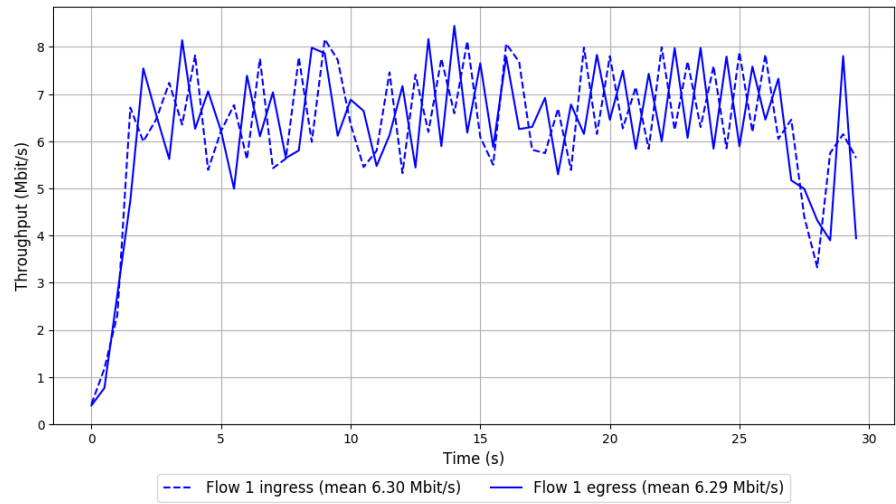
-- Flow 1:

Average throughput: 6.29 Mbit/s

95th percentile per-packet one-way delay: 64.661 ms

Loss rate: 0.64%

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



Run 6: Statistics of Sprout

Start at: 2017-12-20 08:17:06

End at: 2017-12-20 08:17:36

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.27 Mbit/s

95th percentile per-packet one-way delay: 64.637 ms

Loss rate: 0.58%

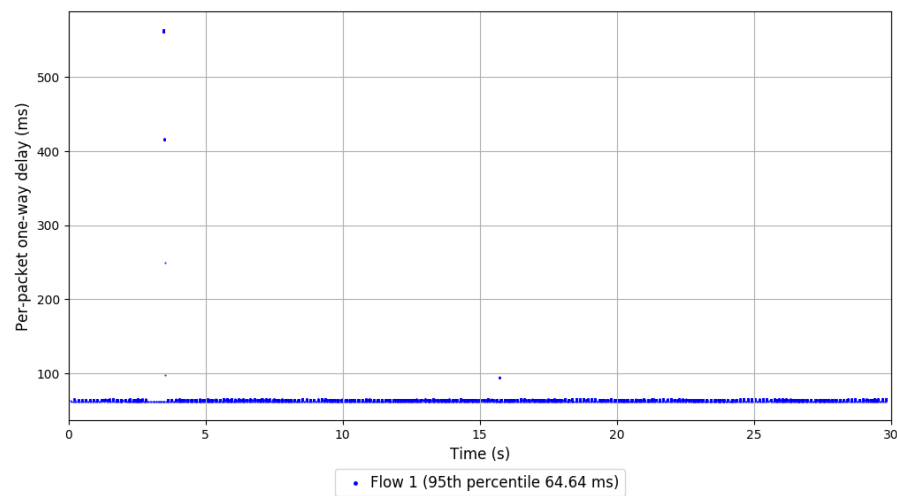
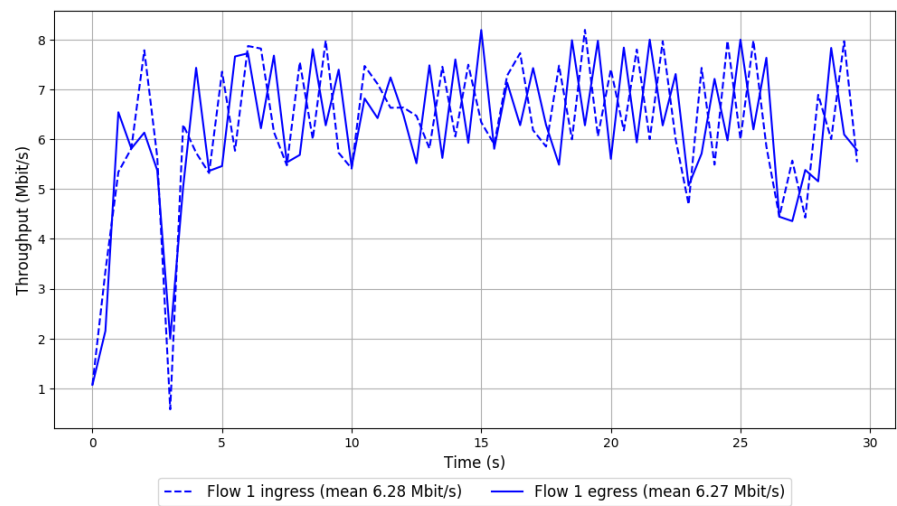
-- Flow 1:

Average throughput: 6.27 Mbit/s

95th percentile per-packet one-way delay: 64.637 ms

Loss rate: 0.58%

Run 6: Report of Sprout — Data Link



Run 7: Statistics of Sprout

Start at: 2017-12-20 08:28:34

End at: 2017-12-20 08:29:04

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 64.583 ms

Loss rate: 1.06%

-- Flow 1:

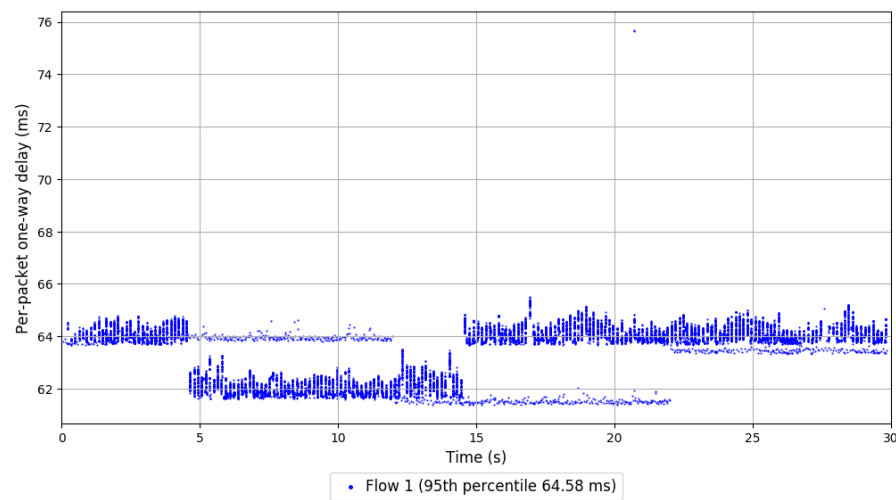
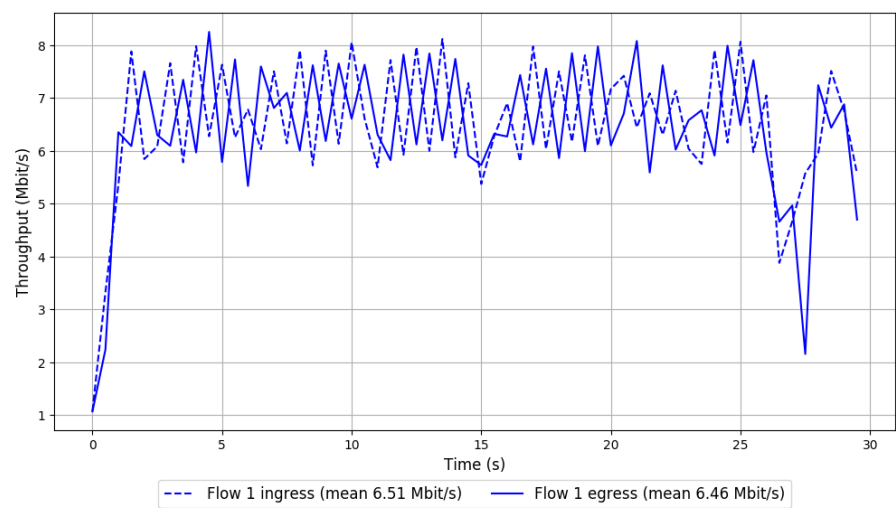
Average throughput: 6.46 Mbit/s

95th percentile per-packet one-way delay: 64.583 ms

Loss rate: 1.06%



Run 7: Report of Sprout — Data Link



Run 8: Statistics of Sprout

Start at: 2017-12-20 08:40:07

End at: 2017-12-20 08:40:37

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 64.578 ms

Loss rate: 0.58%

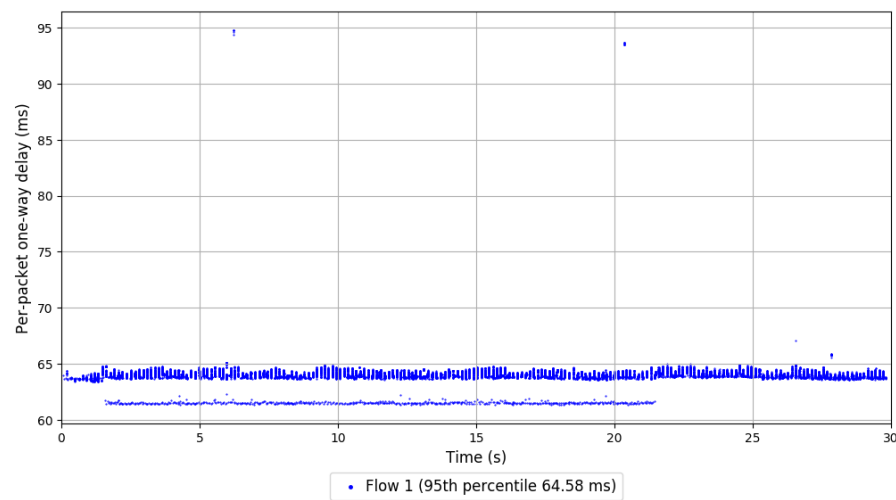
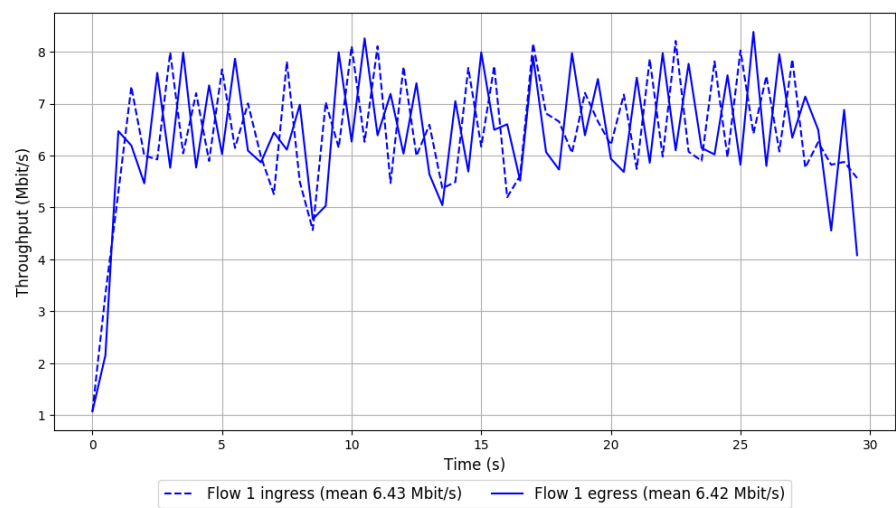
-- Flow 1:

Average throughput: 6.42 Mbit/s

95th percentile per-packet one-way delay: 64.578 ms

Loss rate: 0.58%

Run 8: Report of Sprout — Data Link



Run 9: Statistics of Sprout

Start at: 2017-12-20 08:51:50

End at: 2017-12-20 08:52:20

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 64.637 ms

Loss rate: 0.50%

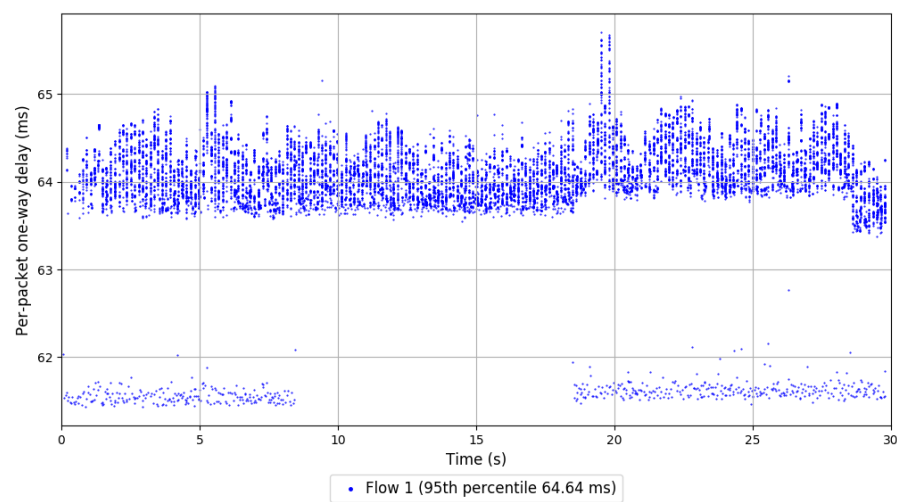
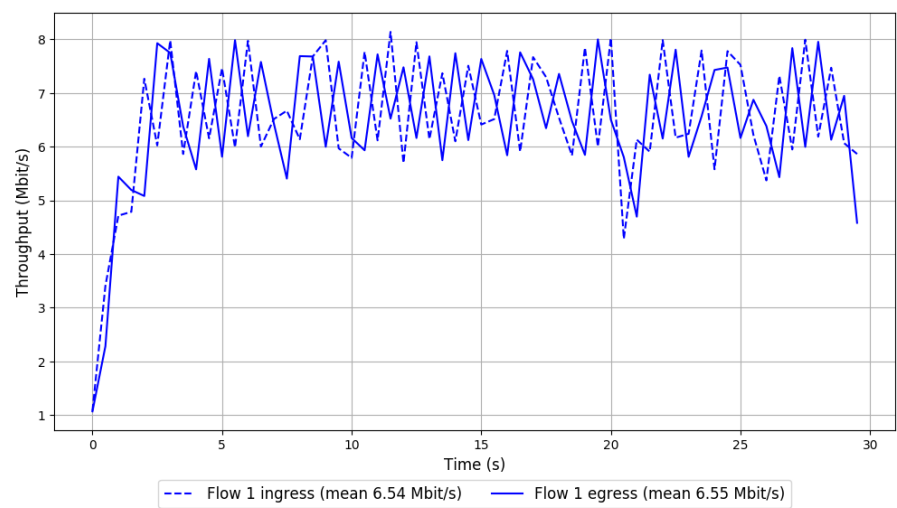
-- Flow 1:

Average throughput: 6.55 Mbit/s

95th percentile per-packet one-way delay: 64.637 ms

Loss rate: 0.50%

Run 9: Report of Sprout — Data Link



Run 10: Statistics of Sprout

Start at: 2017-12-20 09:03:46

End at: 2017-12-20 09:04:16

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 64.686 ms

Loss rate: 0.55%

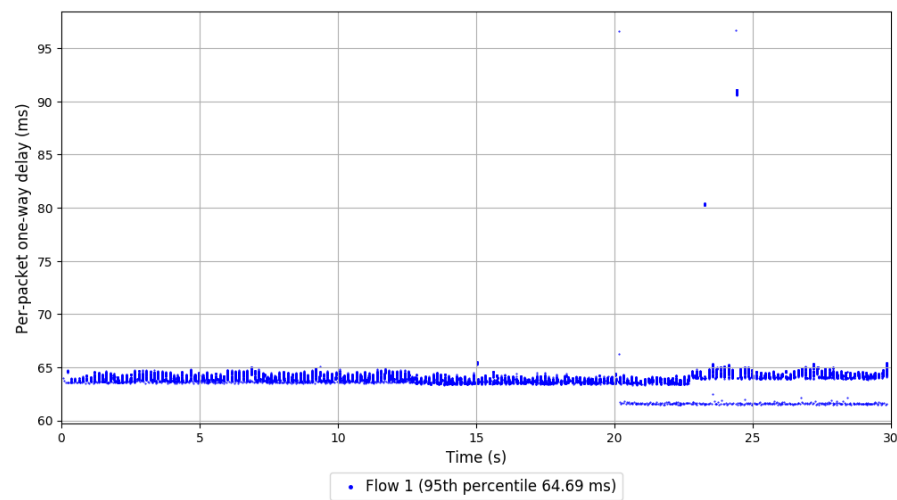
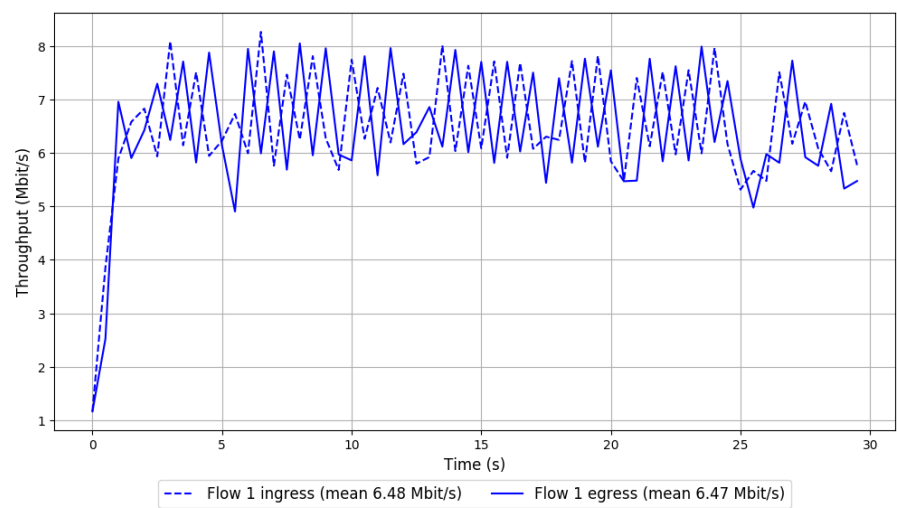
-- Flow 1:

Average throughput: 6.47 Mbit/s

95th percentile per-packet one-way delay: 64.686 ms

Loss rate: 0.55%

Run 10: Report of Sprout — Data Link



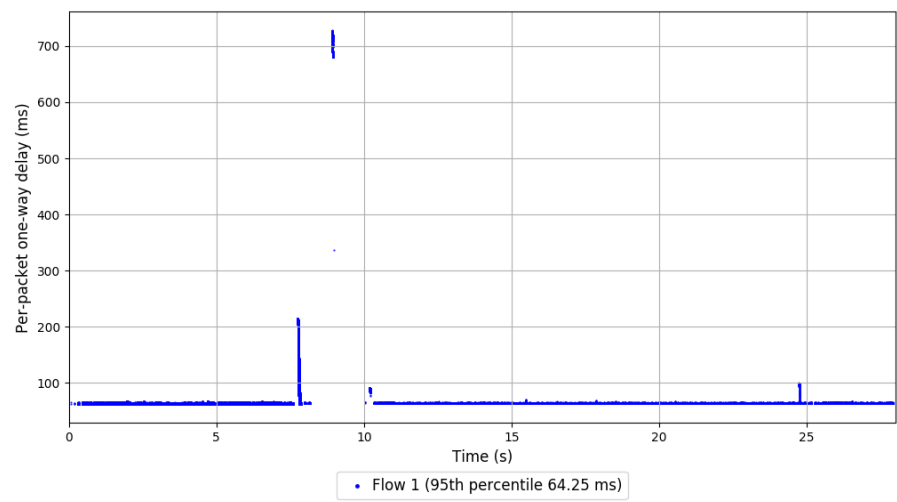
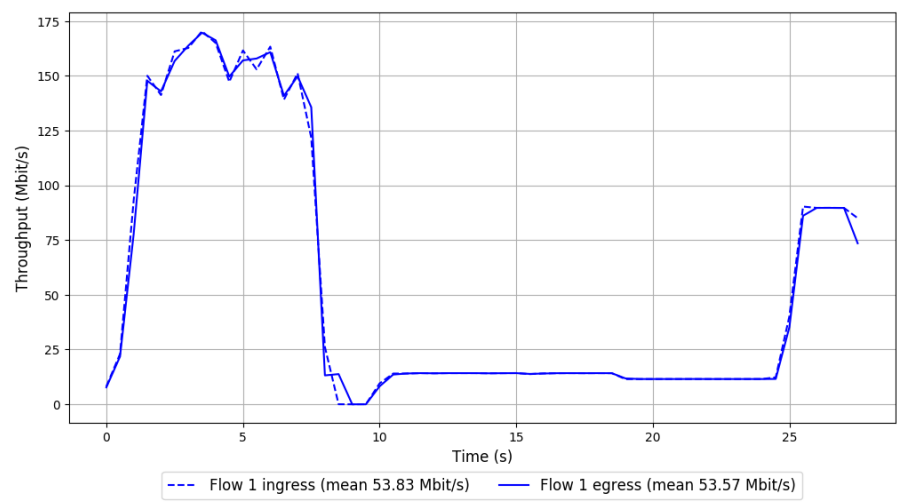
```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-20 07:09:59
End at: 2017-12-20 07:10:29

# Below is generated by plot.py at 2017-12-20 11:29:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.57 Mbit/s
95th percentile per-packet one-way delay: 64.245 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 53.57 Mbit/s
95th percentile per-packet one-way delay: 64.245 ms
Loss rate: 0.93%
```



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

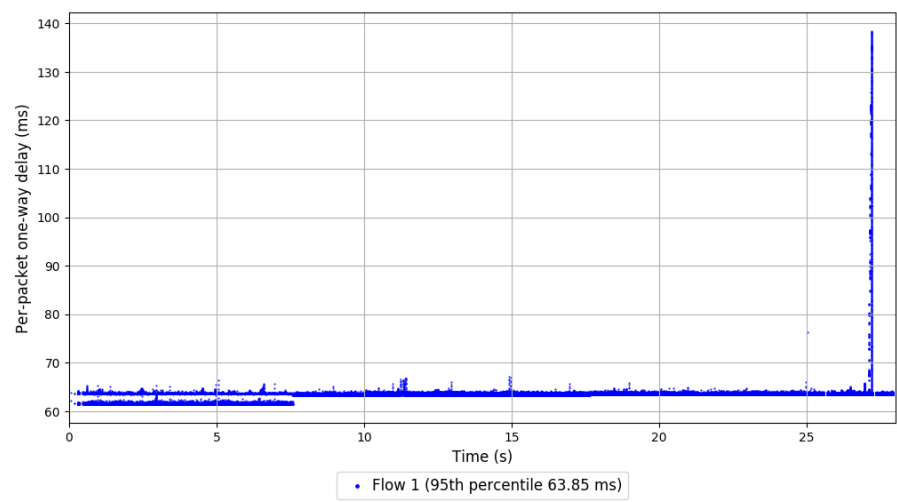
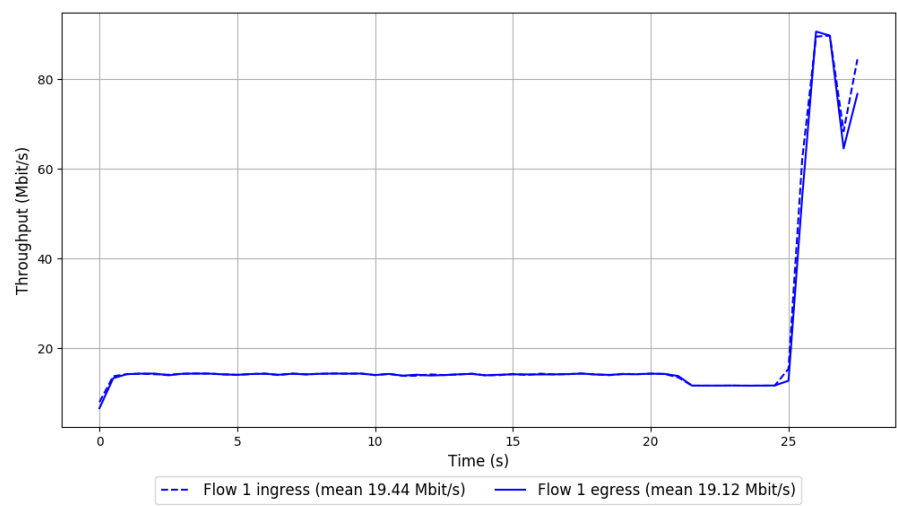


```
Run 2: Statistics of TaoVA-100x

Start at: 2017-12-20 07:21:36
End at: 2017-12-20 07:22:06

# Below is generated by plot.py at 2017-12-20 11:29:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.12 Mbit/s
95th percentile per-packet one-way delay: 63.846 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 19.12 Mbit/s
95th percentile per-packet one-way delay: 63.846 ms
Loss rate: 2.11%
```

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-20 07:33:15

End at: 2017-12-20 07:33:45

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 153.09 Mbit/s

95th percentile per-packet one-way delay: 63.848 ms

Loss rate: 0.36%

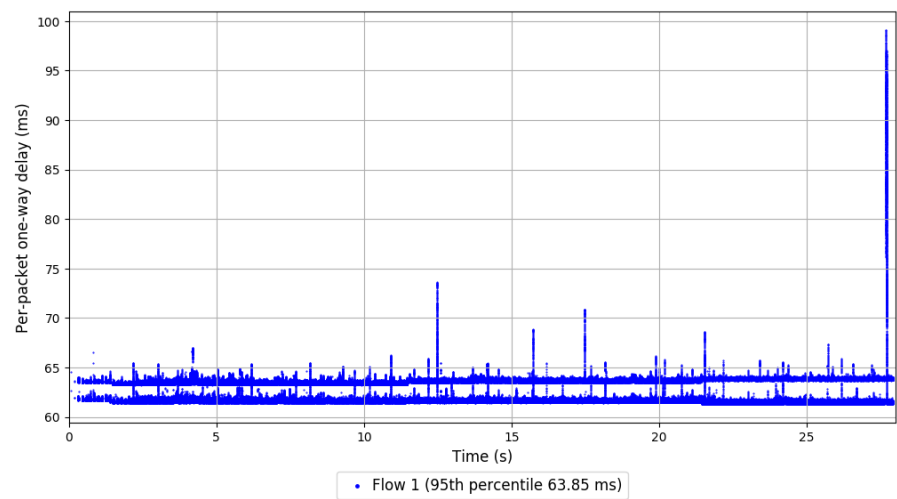
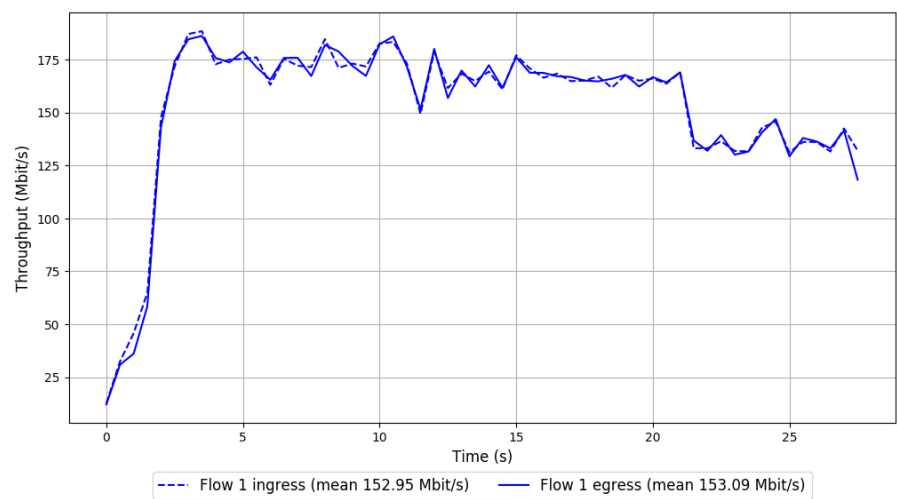
-- Flow 1:

Average throughput: 153.09 Mbit/s

95th percentile per-packet one-way delay: 63.848 ms

Loss rate: 0.36%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-20 07:44:55

End at: 2017-12-20 07:45:25

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 223.09 Mbit/s

95th percentile per-packet one-way delay: 64.239 ms

Loss rate: 0.34%

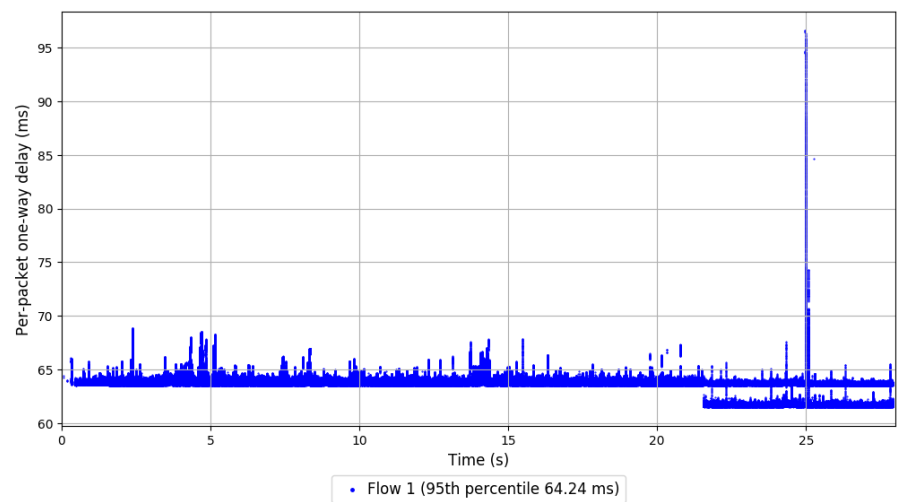
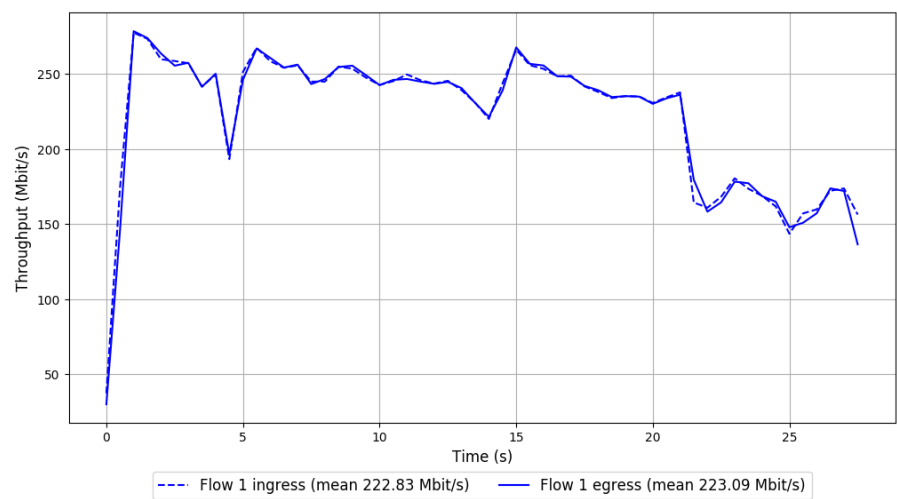
-- Flow 1:

Average throughput: 223.09 Mbit/s

95th percentile per-packet one-way delay: 64.239 ms

Loss rate: 0.34%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-20 07:56:54

End at: 2017-12-20 07:57:24

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 24.19 Mbit/s

95th percentile per-packet one-way delay: 63.903 ms

Loss rate: 0.27%

-- Flow 1:

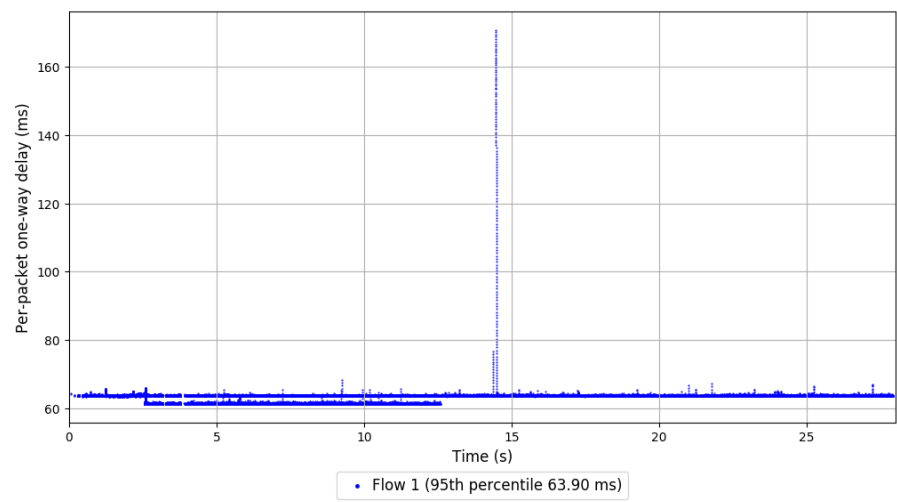
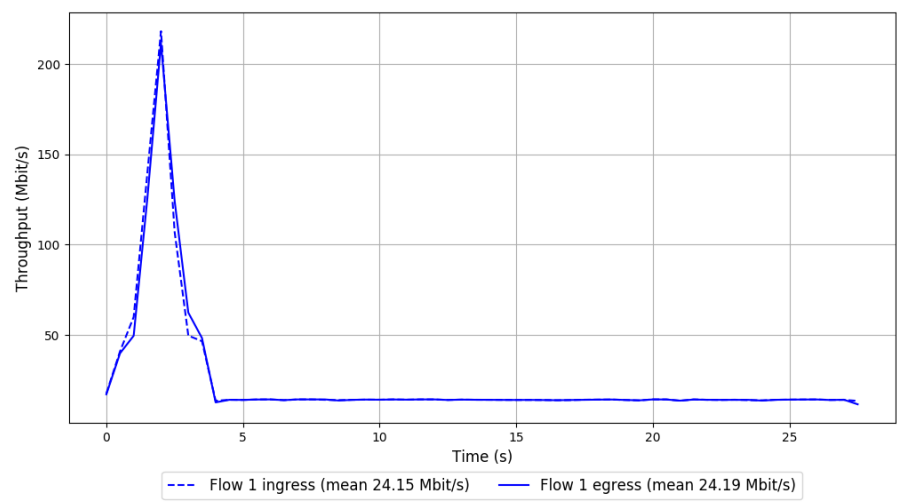
Average throughput: 24.19 Mbit/s

95th percentile per-packet one-way delay: 63.903 ms

Loss rate: 0.27%



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



Run 6: Statistics of TaoVA-100x

Start at: 2017-12-20 08:07:53

End at: 2017-12-20 08:08:23

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 183.58 Mbit/s

95th percentile per-packet one-way delay: 63.986 ms

Loss rate: 0.61%

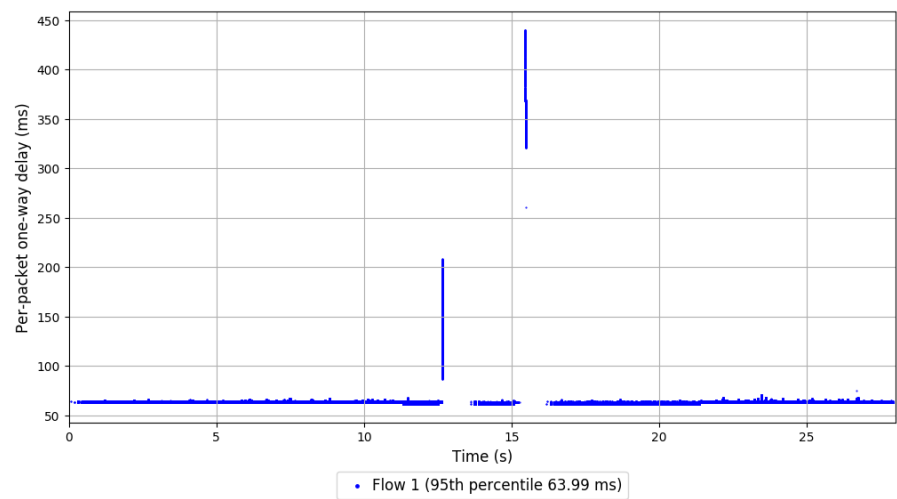
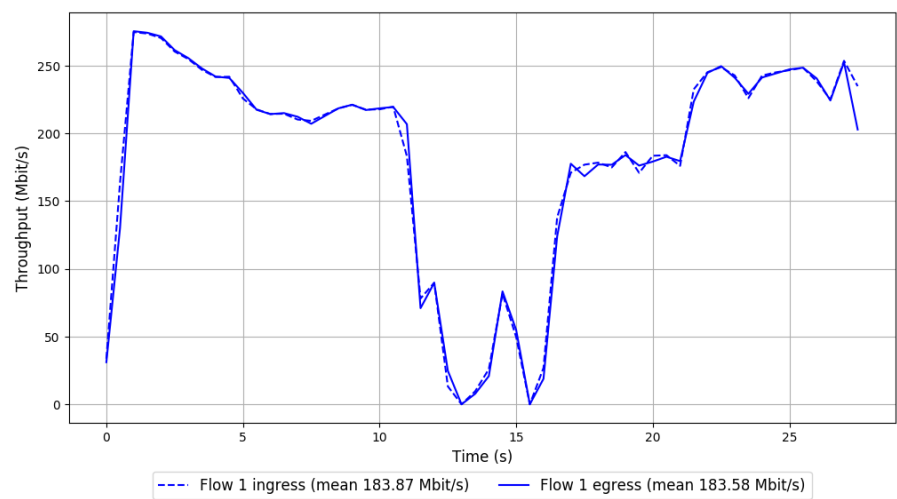
-- Flow 1:

Average throughput: 183.58 Mbit/s

95th percentile per-packet one-way delay: 63.986 ms

Loss rate: 0.61%

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



Run 7: Statistics of TaoVA-100x

Start at: 2017-12-20 08:19:42

End at: 2017-12-20 08:20:12

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 32.50 Mbit/s

95th percentile per-packet one-way delay: 64.011 ms

Loss rate: 1.27%

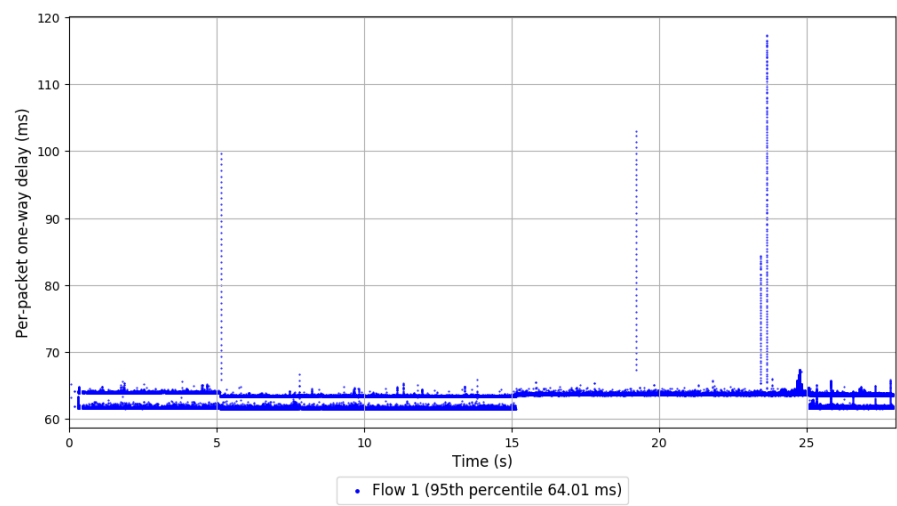
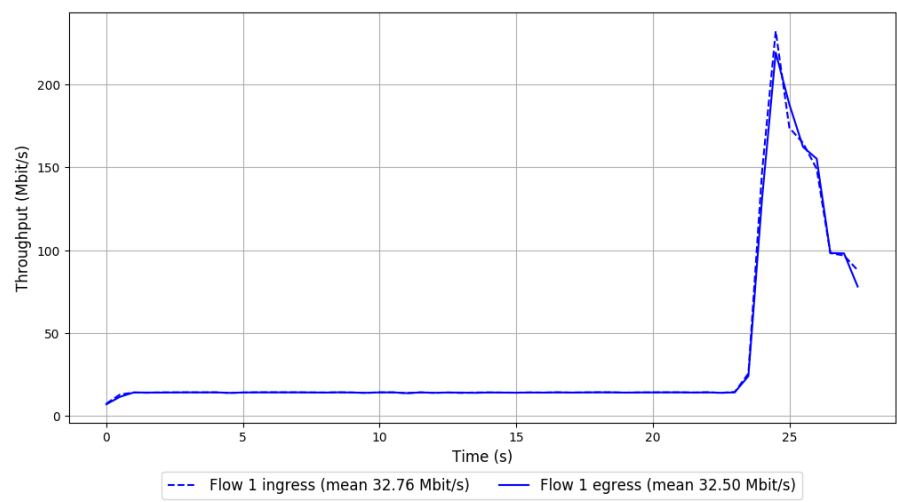
-- Flow 1:

Average throughput: 32.50 Mbit/s

95th percentile per-packet one-way delay: 64.011 ms

Loss rate: 1.27%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-20 08:31:10

End at: 2017-12-20 08:31:40

# Below is generated by plot.py at 2017-12-20 11:29:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.63 Mbit/s

95th percentile per-packet one-way delay: 64.001 ms

Loss rate: 0.49%

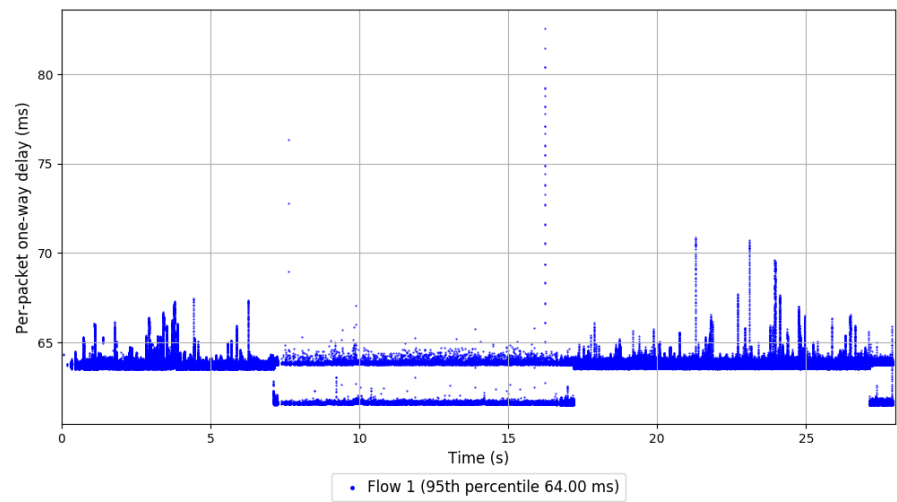
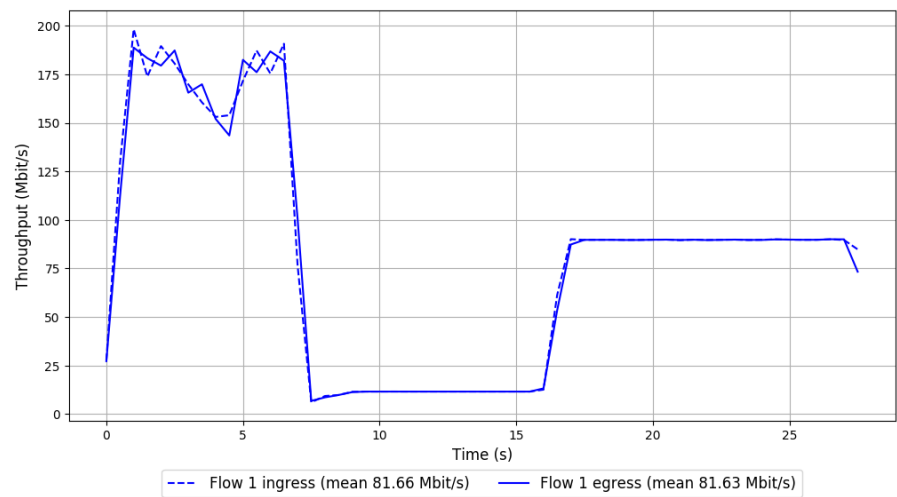
-- Flow 1:

Average throughput: 81.63 Mbit/s

95th percentile per-packet one-way delay: 64.001 ms

Loss rate: 0.49%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-20 08:42:37

End at: 2017-12-20 08:43:07

# Below is generated by plot.py at 2017-12-20 11:29:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 204.84 Mbit/s

95th percentile per-packet one-way delay: 63.964 ms

Loss rate: 0.47%

-- Flow 1:

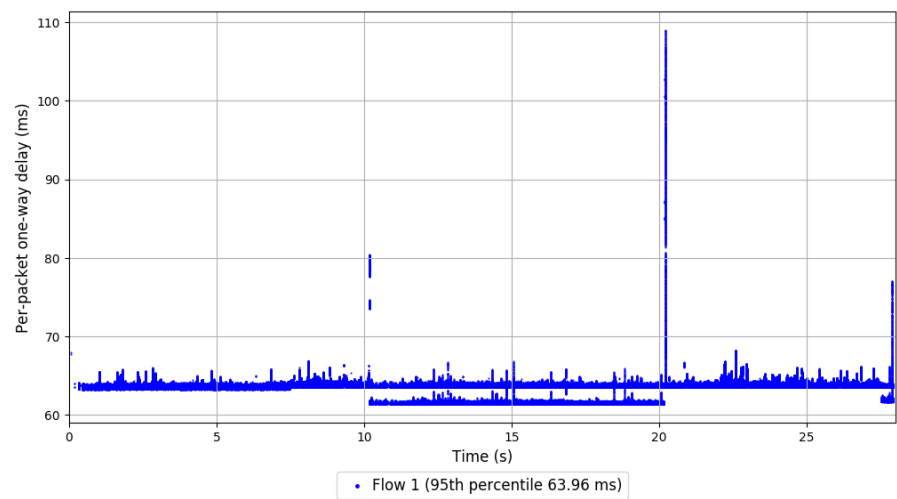
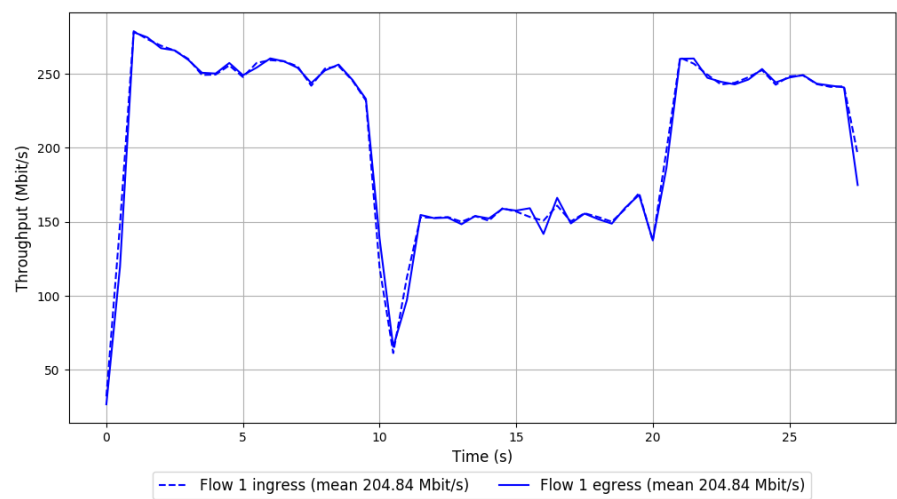
Average throughput: 204.84 Mbit/s

95th percentile per-packet one-way delay: 63.964 ms

Loss rate: 0.47%



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

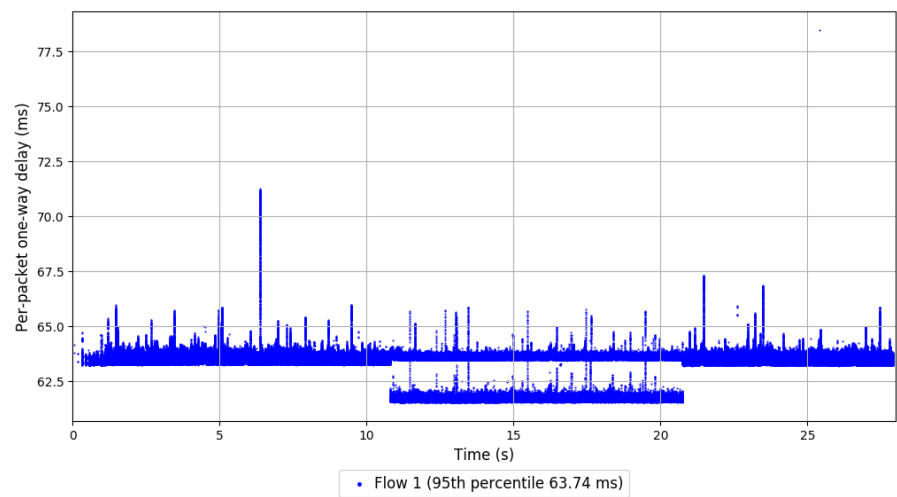
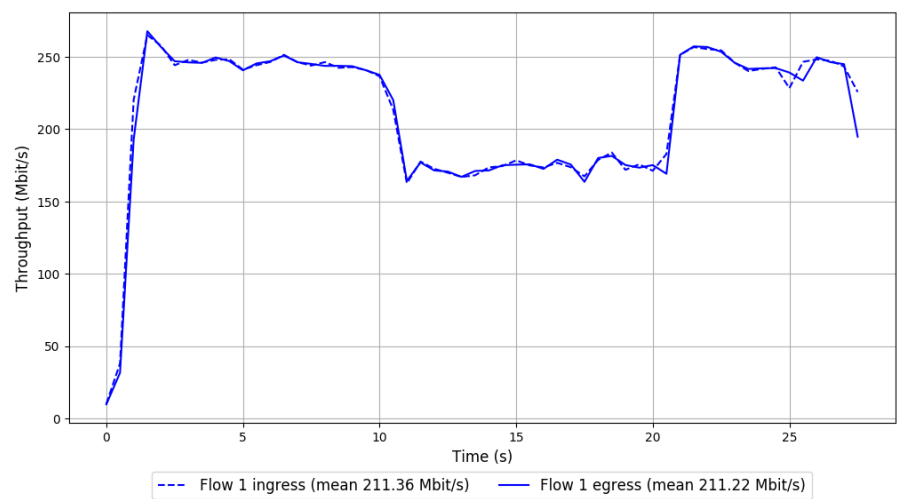


```
Run 10: Statistics of TaoVA-100x

Start at: 2017-12-20 08:54:26
End at: 2017-12-20 08:54:56

# Below is generated by plot.py at 2017-12-20 11:29:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.22 Mbit/s
95th percentile per-packet one-way delay: 63.743 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 211.22 Mbit/s
95th percentile per-packet one-way delay: 63.743 ms
Loss rate: 0.52%
```

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



Run 1: Statistics of TCP Vegas

Start at: 2017-12-20 07:11:26

End at: 2017-12-20 07:11:56

# Below is generated by plot.py at 2017-12-20 11:29:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 50.92 Mbit/s

95th percentile per-packet one-way delay: 64.638 ms

Loss rate: 0.43%

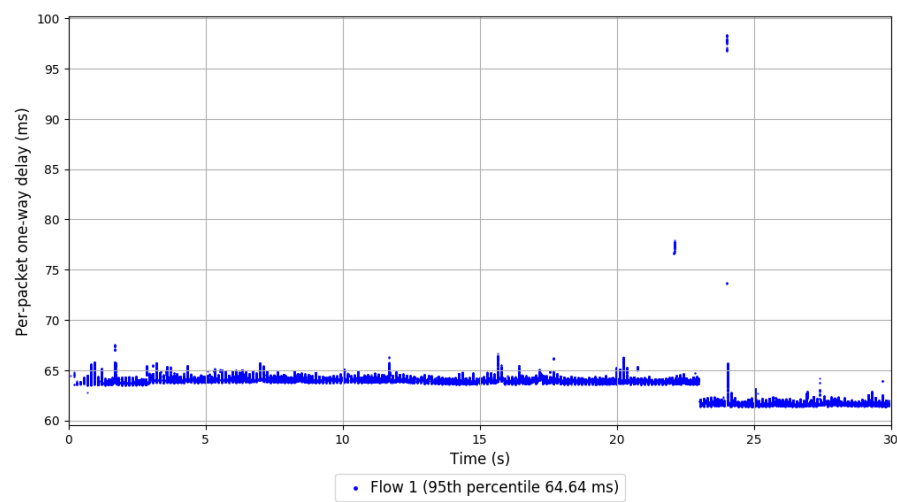
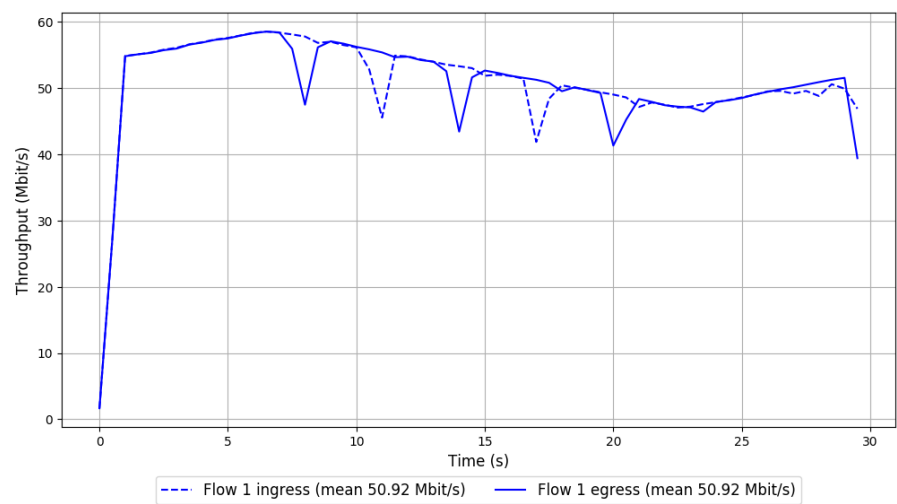
-- Flow 1:

Average throughput: 50.92 Mbit/s

95th percentile per-packet one-way delay: 64.638 ms

Loss rate: 0.43%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2017-12-20 07:23:01

End at: 2017-12-20 07:23:31

# Below is generated by plot.py at 2017-12-20 11:29:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 60.63 Mbit/s

95th percentile per-packet one-way delay: 66.153 ms

Loss rate: 0.63%

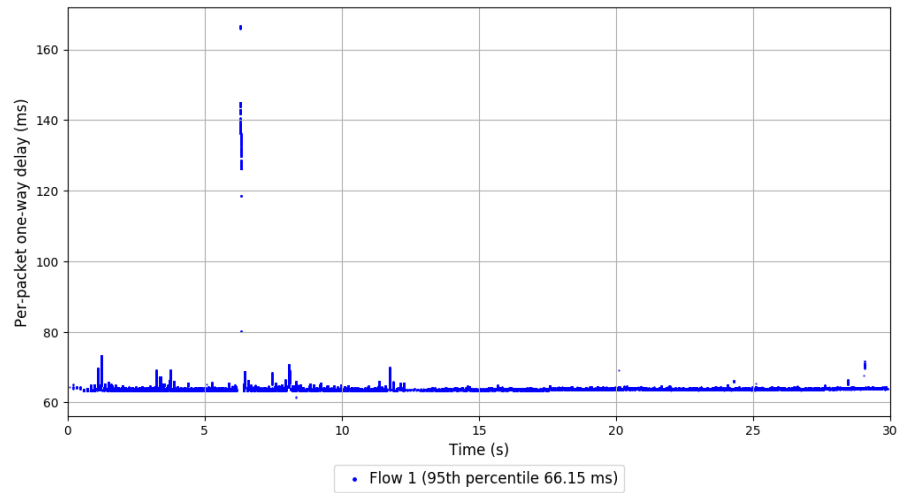
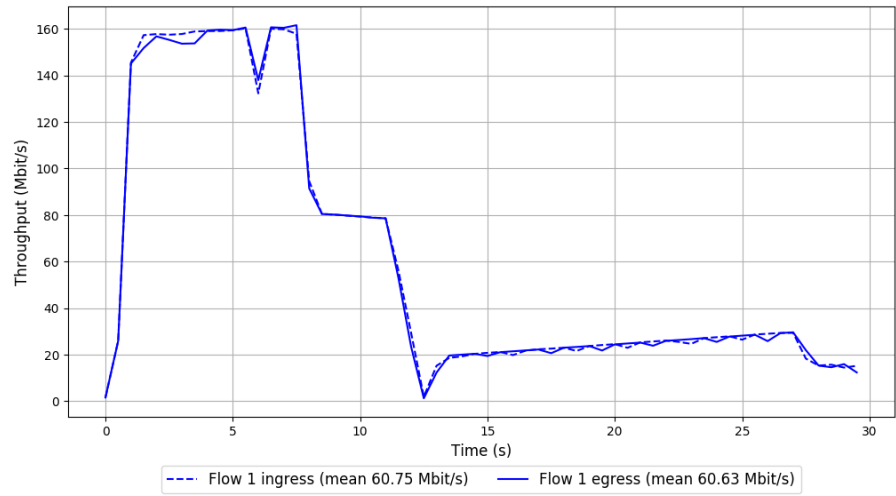
-- Flow 1:

Average throughput: 60.63 Mbit/s

95th percentile per-packet one-way delay: 66.153 ms

Loss rate: 0.63%

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



Run 3: Statistics of TCP Vegas

Start at: 2017-12-20 07:34:42

End at: 2017-12-20 07:35:12

# Below is generated by plot.py at 2017-12-20 11:29:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 24.20 Mbit/s

95th percentile per-packet one-way delay: 64.240 ms

Loss rate: 0.48%

-- Flow 1:

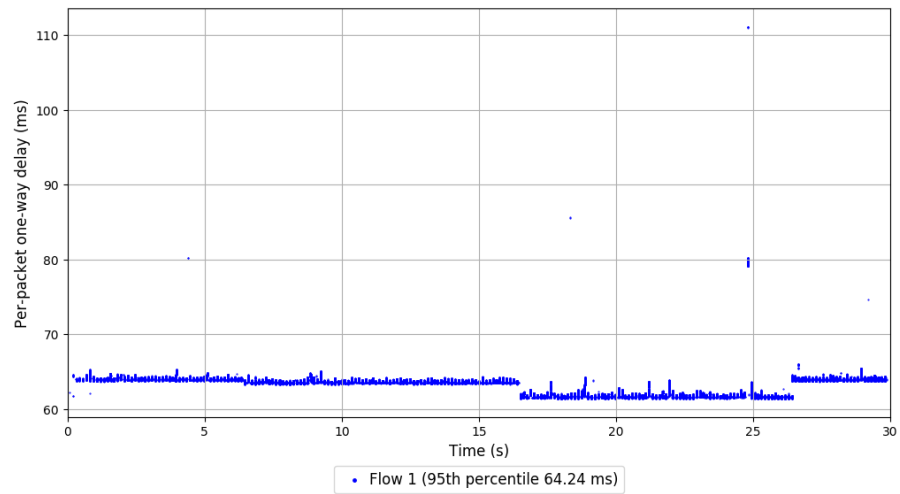
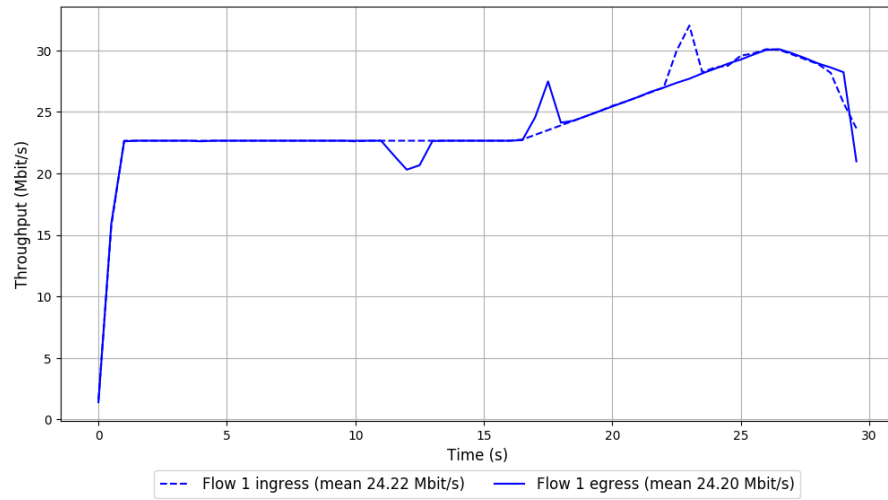
Average throughput: 24.20 Mbit/s

95th percentile per-packet one-way delay: 64.240 ms

Loss rate: 0.48%



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



Run 4: Statistics of TCP Vegas

Start at: 2017-12-20 07:46:36

End at: 2017-12-20 07:47:06

# Below is generated by plot.py at 2017-12-20 11:29:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 57.19 Mbit/s

95th percentile per-packet one-way delay: 64.404 ms

Loss rate: 0.39%

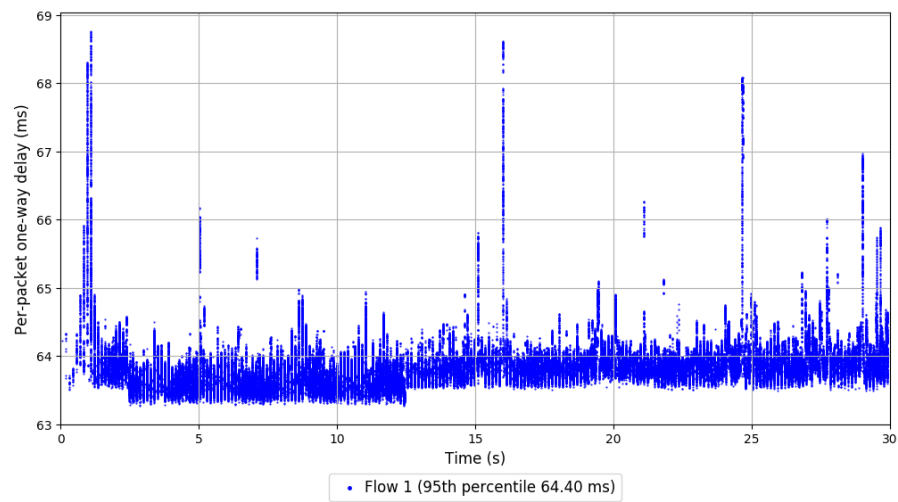
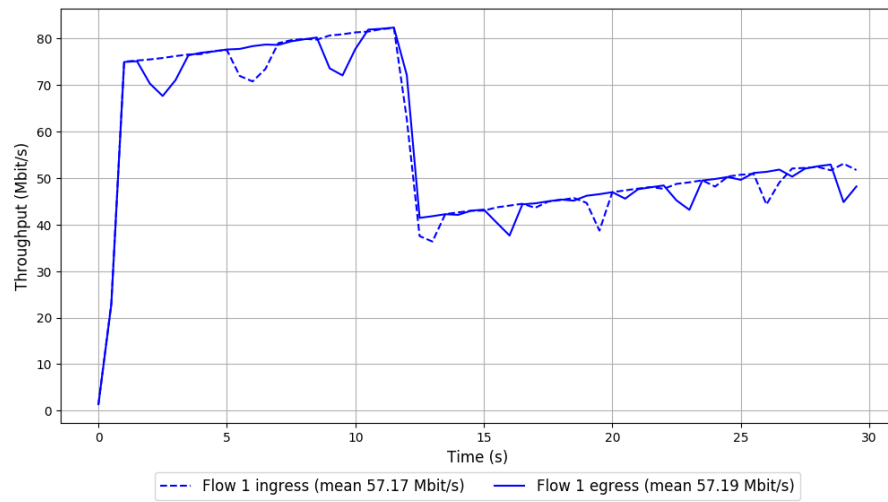
-- Flow 1:

Average throughput: 57.19 Mbit/s

95th percentile per-packet one-way delay: 64.404 ms

Loss rate: 0.39%

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



Run 5: Statistics of TCP Vegas

Start at: 2017-12-20 07:58:19

End at: 2017-12-20 07:58:49

# Below is generated by plot.py at 2017-12-20 11:29:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 75.31 Mbit/s

95th percentile per-packet one-way delay: 64.557 ms

Loss rate: 0.47%

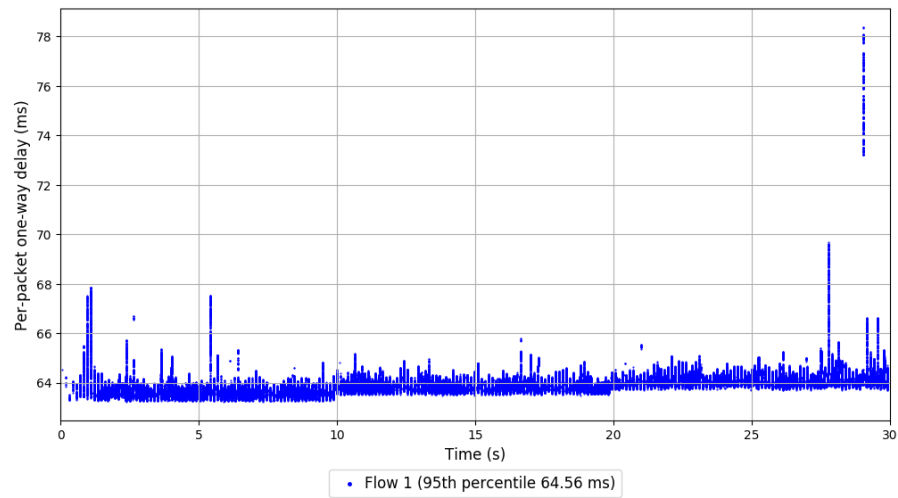
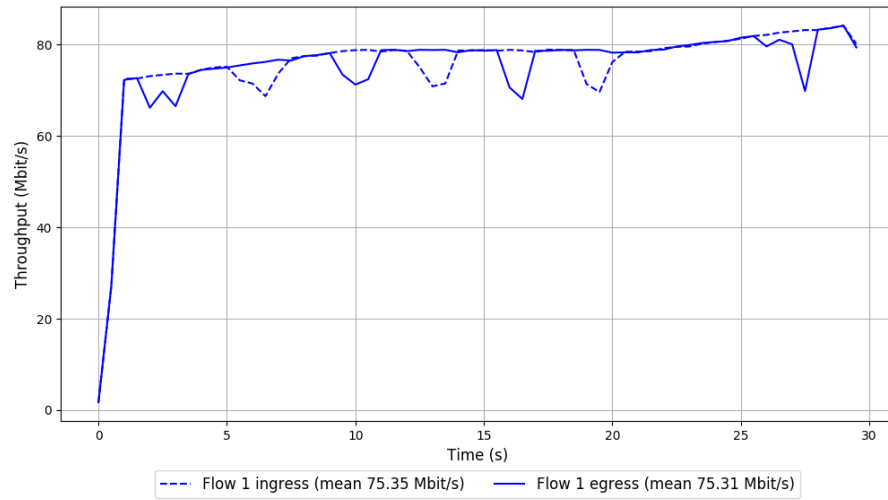
-- Flow 1:

Average throughput: 75.31 Mbit/s

95th percentile per-packet one-way delay: 64.557 ms

Loss rate: 0.47%

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



Run 6: Statistics of TCP Vegas

Start at: 2017-12-20 08:09:31

End at: 2017-12-20 08:10:01

# Below is generated by plot.py at 2017-12-20 11:29:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 38.61 Mbit/s

95th percentile per-packet one-way delay: 64.654 ms

Loss rate: 1.40%

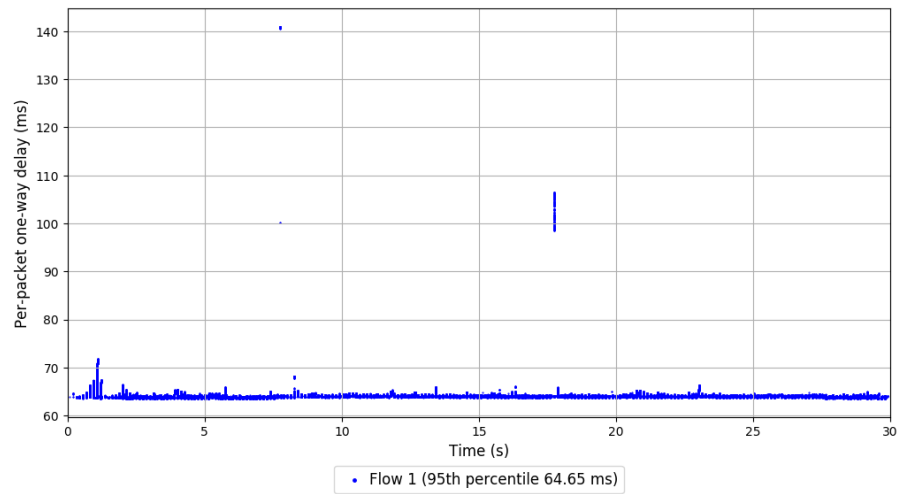
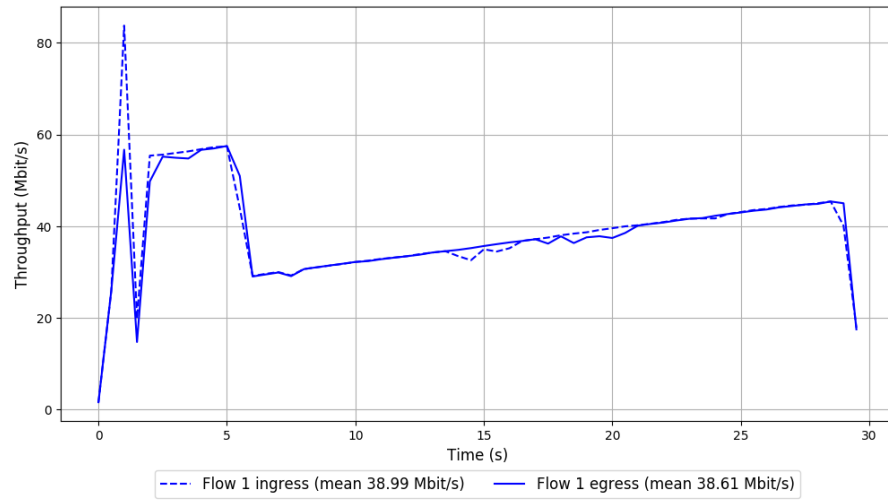
-- Flow 1:

Average throughput: 38.61 Mbit/s

95th percentile per-packet one-way delay: 64.654 ms

Loss rate: 1.40%

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



Run 7: Statistics of TCP Vegas

Start at: 2017-12-20 08:21:07

End at: 2017-12-20 08:21:37

# Below is generated by plot.py at 2017-12-20 11:29:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 13.35 Mbit/s

95th percentile per-packet one-way delay: 64.287 ms

Loss rate: 0.38%

-- Flow 1:

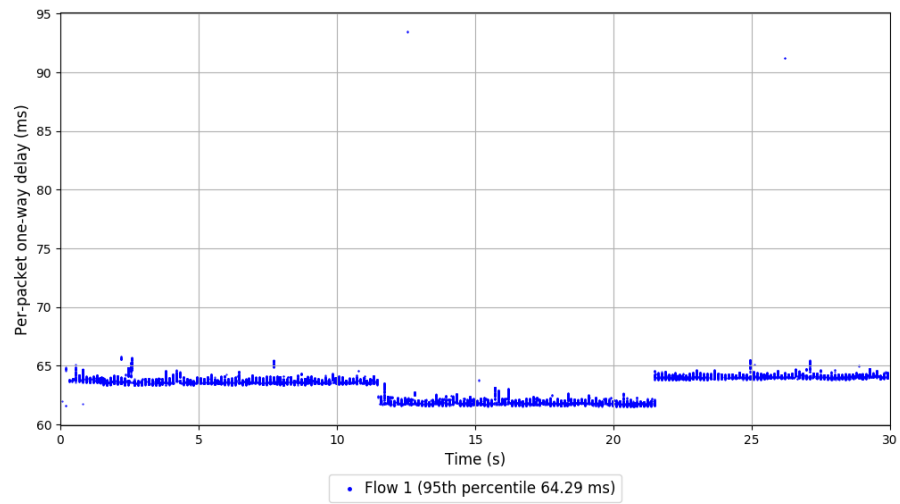
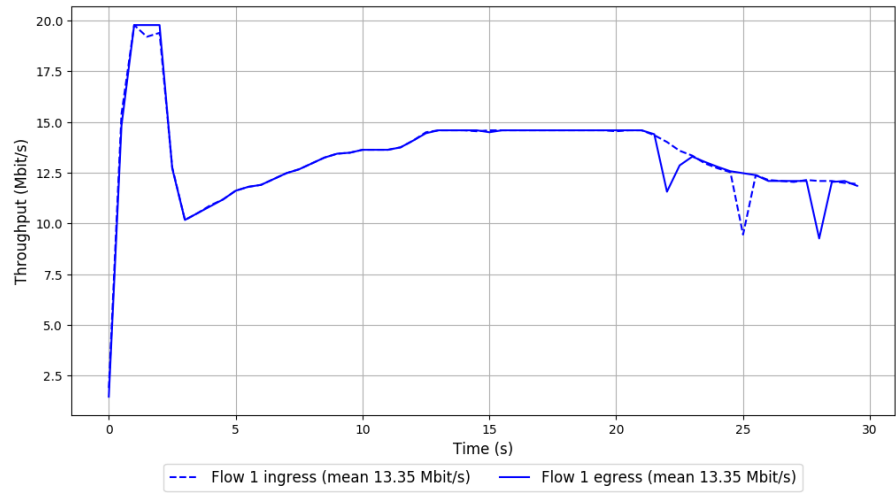
Average throughput: 13.35 Mbit/s

95th percentile per-packet one-way delay: 64.287 ms

Loss rate: 0.38%



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



Run 8: Statistics of TCP Vegas

Start at: 2017-12-20 08:32:32

End at: 2017-12-20 08:33:02

# Below is generated by plot.py at 2017-12-20 11:29:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 42.95 Mbit/s

95th percentile per-packet one-way delay: 64.452 ms

Loss rate: 1.12%

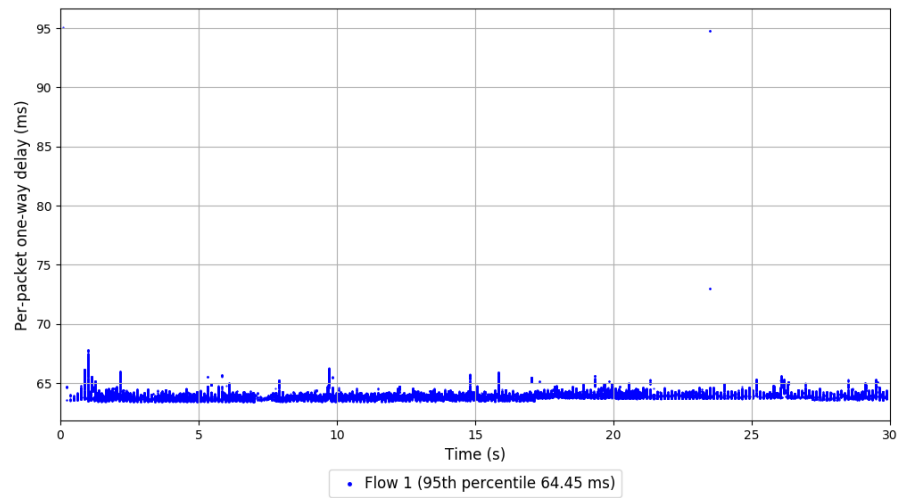
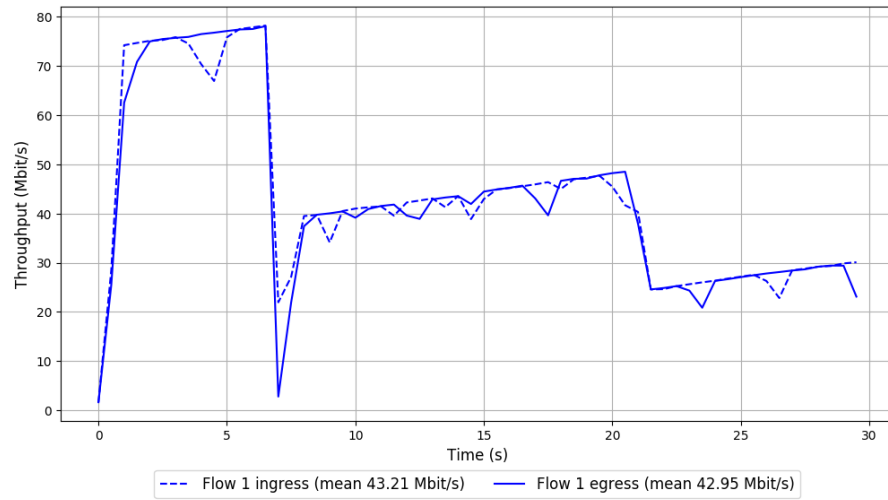
-- Flow 1:

Average throughput: 42.95 Mbit/s

95th percentile per-packet one-way delay: 64.452 ms

Loss rate: 1.12%

# Run 8: Report of TCP Vegas — Data Link



Run 9: Statistics of TCP Vegas

Start at: 2017-12-20 08:44:17

End at: 2017-12-20 08:44:47

# Below is generated by plot.py at 2017-12-20 11:29:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 60.30 Mbit/s

95th percentile per-packet one-way delay: 64.472 ms

Loss rate: 0.46%

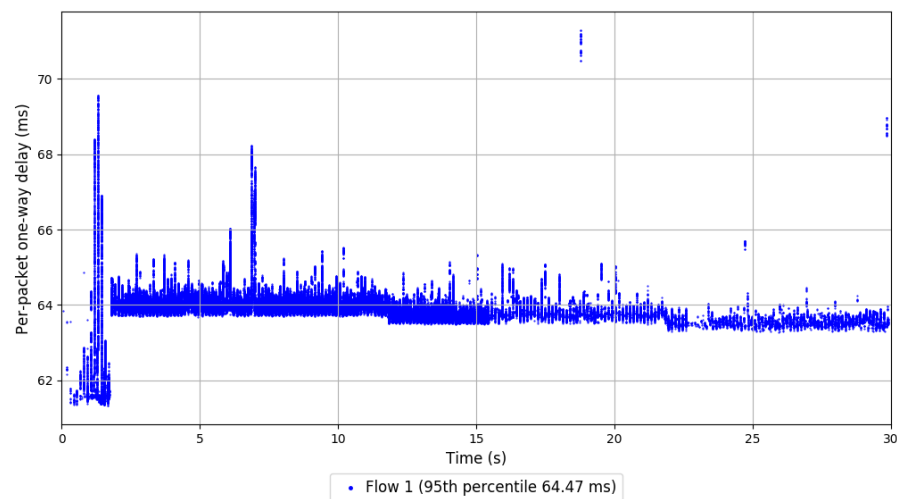
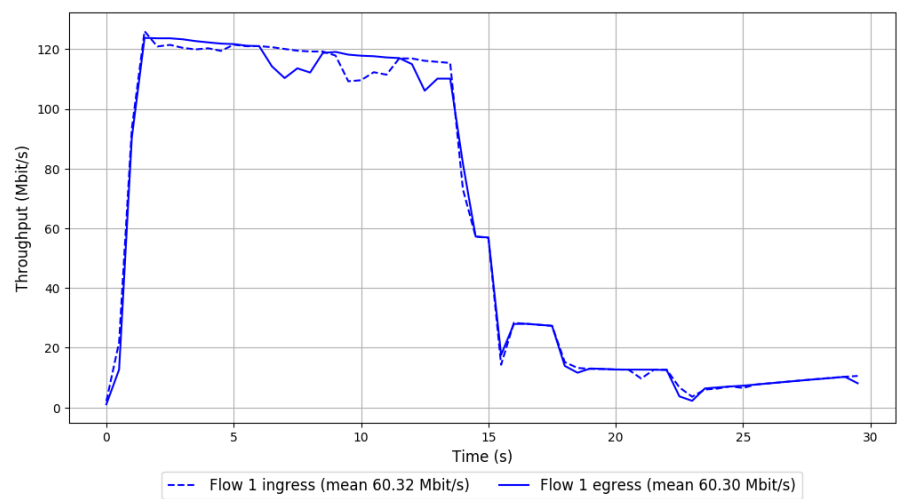
-- Flow 1:

Average throughput: 60.30 Mbit/s

95th percentile per-packet one-way delay: 64.472 ms

Loss rate: 0.46%

Run 9: Report of TCP Vegas — Data Link



Run 10: Statistics of TCP Vegas

Start at: 2017-12-20 08:56:07

End at: 2017-12-20 08:56:37

# Below is generated by plot.py at 2017-12-20 11:29:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 67.16 Mbit/s

95th percentile per-packet one-way delay: 64.677 ms

Loss rate: 0.45%

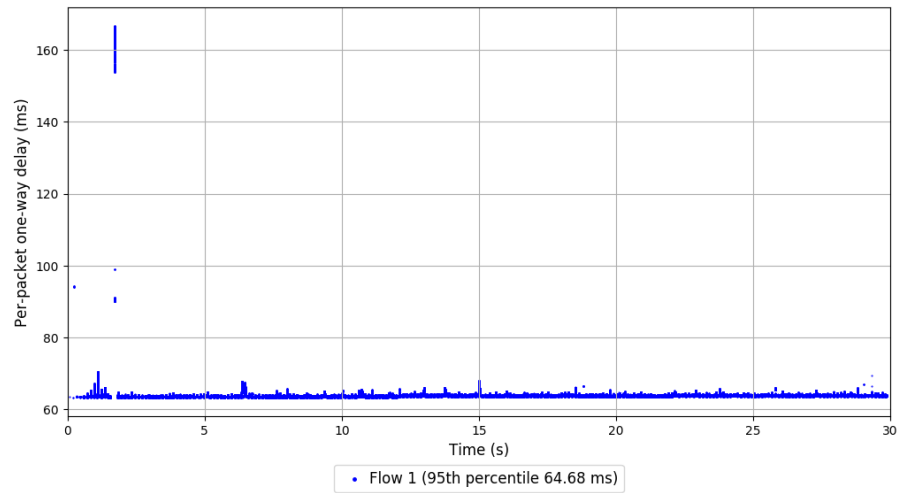
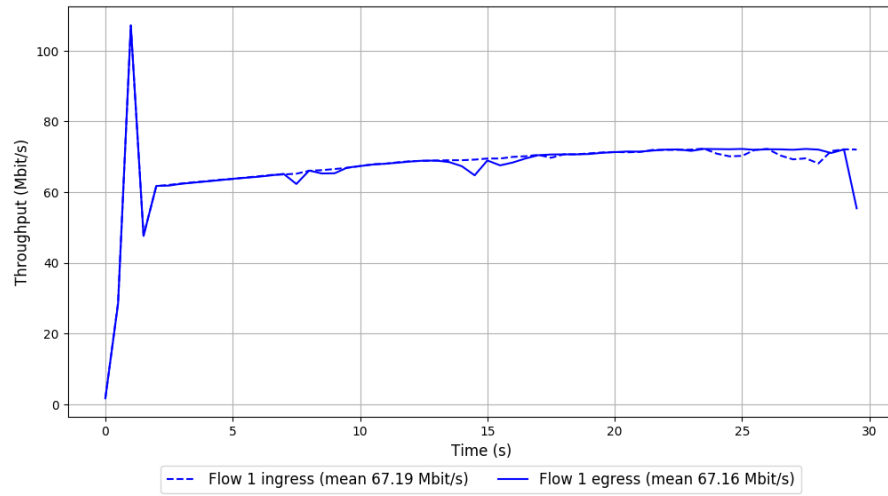
-- Flow 1:

Average throughput: 67.16 Mbit/s

95th percentile per-packet one-way delay: 64.677 ms

Loss rate: 0.45%

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



Run 1: Statistics of Verus

Start at: 2017-12-20 07:14:09

End at: 2017-12-20 07:14:39

# Below is generated by plot.py at 2017-12-20 11:32:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 231.53 Mbit/s

95th percentile per-packet one-way delay: 87.746 ms

Loss rate: 0.58%

-- Flow 1:

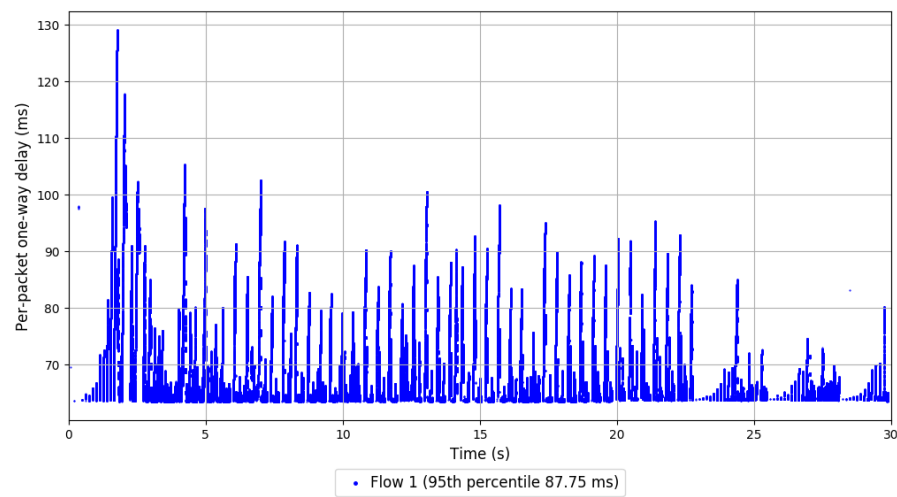
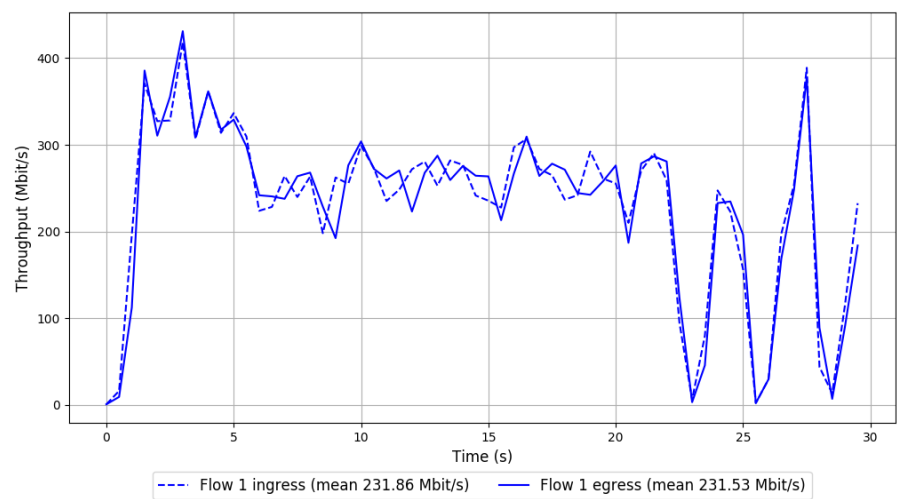
Average throughput: 231.53 Mbit/s

95th percentile per-packet one-way delay: 87.746 ms

Loss rate: 0.58%



Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2017-12-20 07:25:45

End at: 2017-12-20 07:26:15

# Below is generated by plot.py at 2017-12-20 11:32:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 243.85 Mbit/s

95th percentile per-packet one-way delay: 104.441 ms

Loss rate: 0.43%

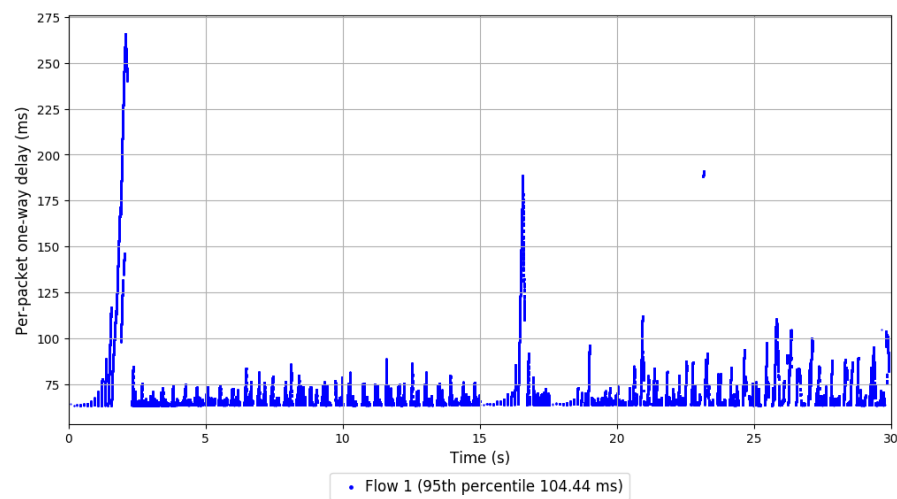
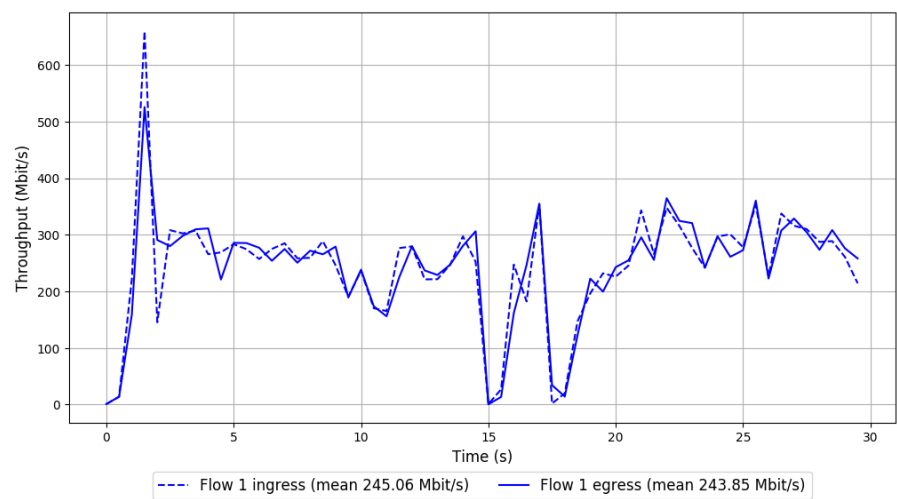
-- Flow 1:

Average throughput: 243.85 Mbit/s

95th percentile per-packet one-way delay: 104.441 ms

Loss rate: 0.43%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2017-12-20 07:37:24

End at: 2017-12-20 07:37:54

# Below is generated by plot.py at 2017-12-20 11:32:33

# Datalink statistics

-- Total of 1 flow:

Average throughput: 256.86 Mbit/s

95th percentile per-packet one-way delay: 97.087 ms

Loss rate: 0.55%

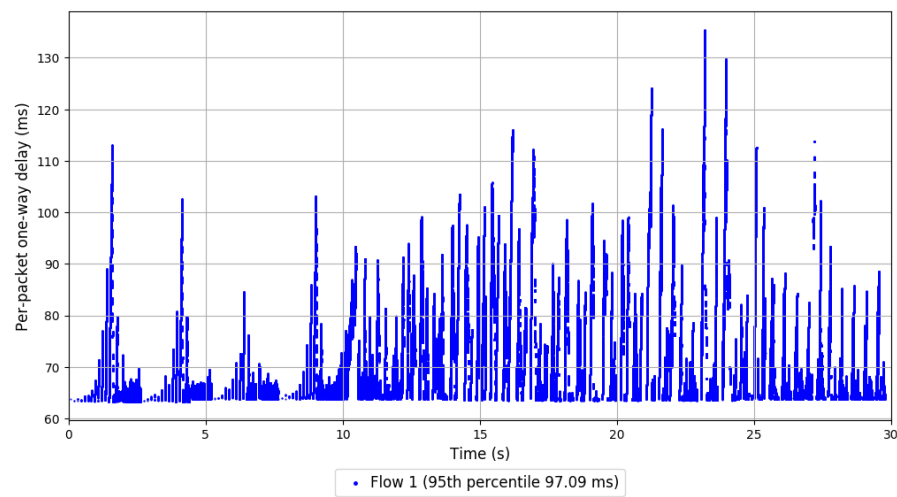
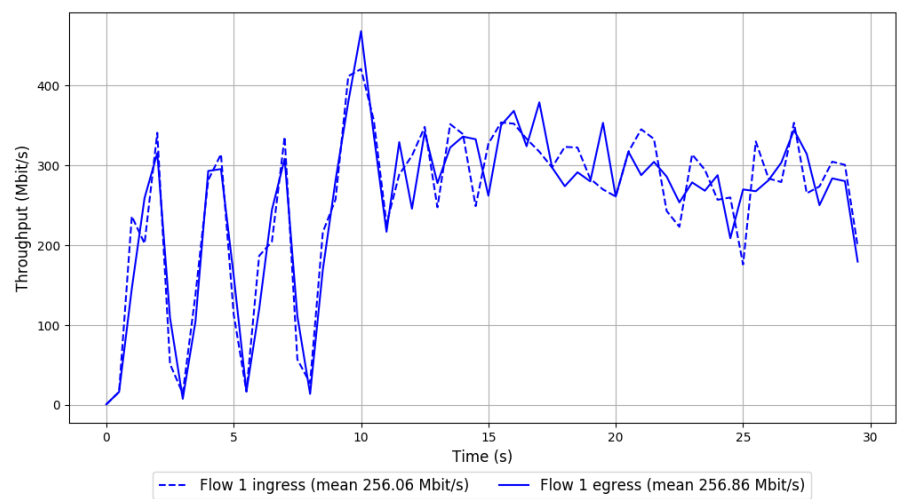
-- Flow 1:

Average throughput: 256.86 Mbit/s

95th percentile per-packet one-way delay: 97.087 ms

Loss rate: 0.55%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2017-12-20 07:49:20

End at: 2017-12-20 07:49:50

# Below is generated by plot.py at 2017-12-20 11:33:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 293.63 Mbit/s

95th percentile per-packet one-way delay: 170.640 ms

Loss rate: 1.79%

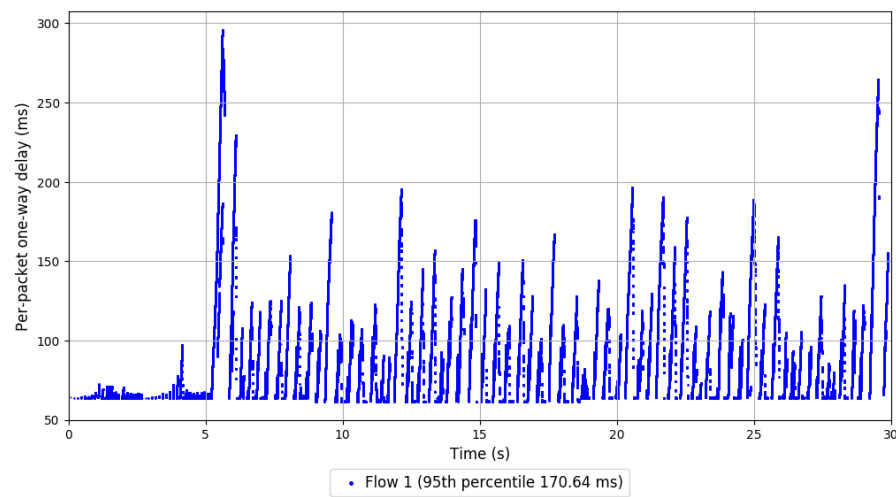
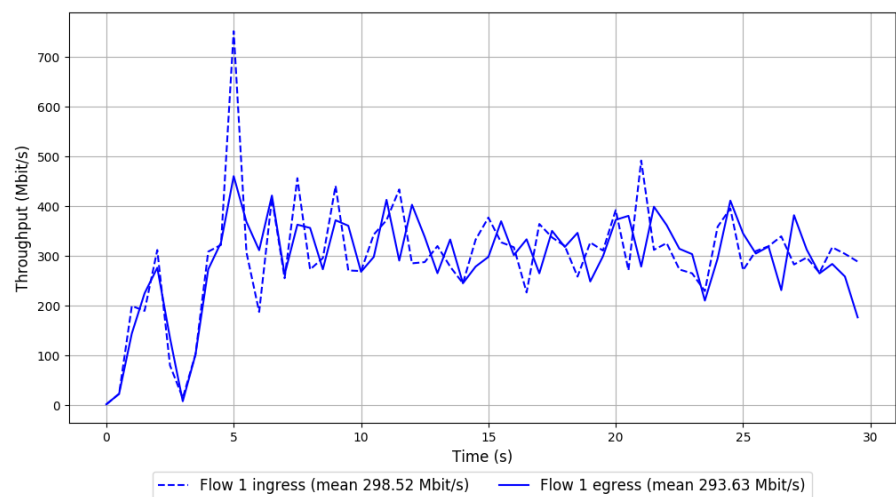
-- Flow 1:

Average throughput: 293.63 Mbit/s

95th percentile per-packet one-way delay: 170.640 ms

Loss rate: 1.79%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2017-12-20 08:01:03

End at: 2017-12-20 08:01:33

# Below is generated by plot.py at 2017-12-20 11:33:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 196.03 Mbit/s

95th percentile per-packet one-way delay: 88.915 ms

Loss rate: 0.64%

-- Flow 1:

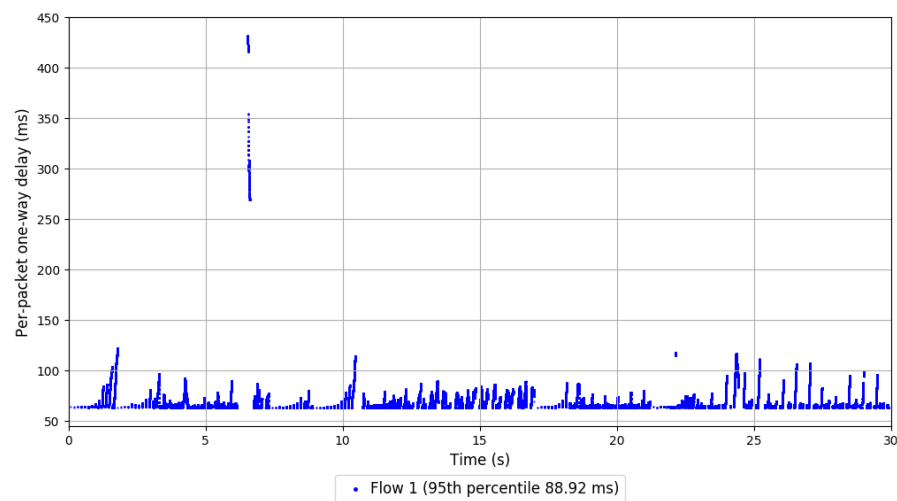
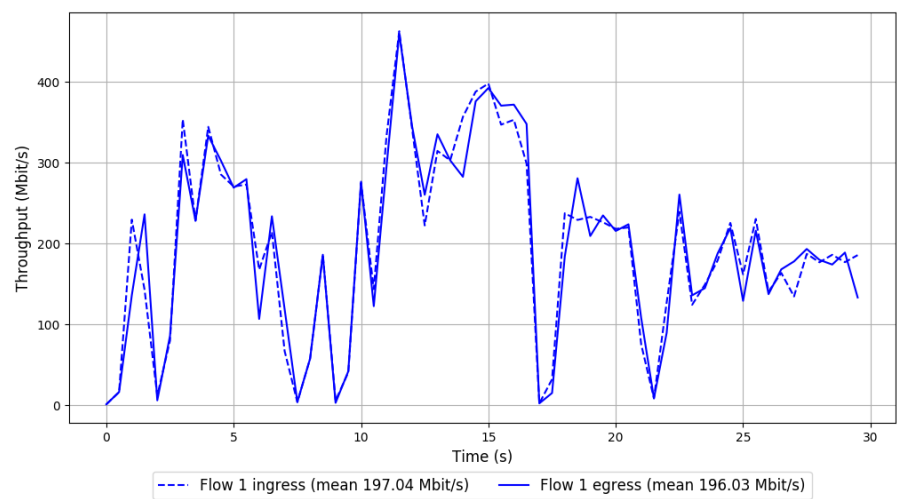
Average throughput: 196.03 Mbit/s

95th percentile per-packet one-way delay: 88.915 ms

Loss rate: 0.64%



Run 5: Report of Verus — Data Link



Run 6: Statistics of Verus

Start at: 2017-12-20 08:12:14

End at: 2017-12-20 08:12:44

# Below is generated by plot.py at 2017-12-20 11:33:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 234.79 Mbit/s

95th percentile per-packet one-way delay: 98.892 ms

Loss rate: 0.28%

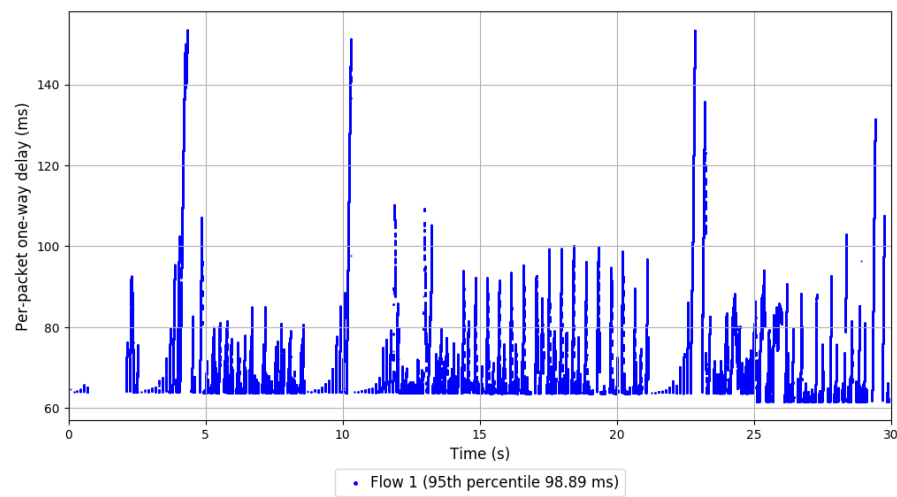
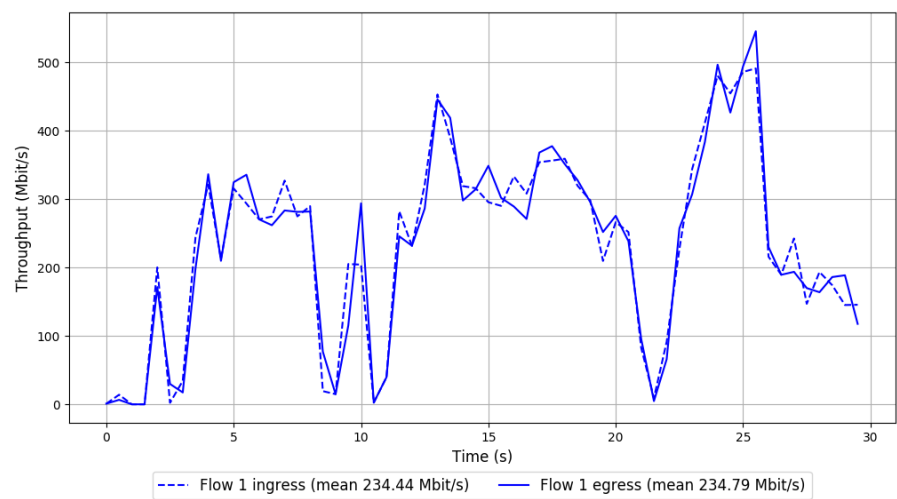
-- Flow 1:

Average throughput: 234.79 Mbit/s

95th percentile per-packet one-way delay: 98.892 ms

Loss rate: 0.28%

Run 6: Report of Verus — Data Link



Run 7: Statistics of Verus

Start at: 2017-12-20 08:23:49

End at: 2017-12-20 08:24:19

# Below is generated by plot.py at 2017-12-20 11:33:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 169.35 Mbit/s

95th percentile per-packet one-way delay: 107.777 ms

Loss rate: 1.06%

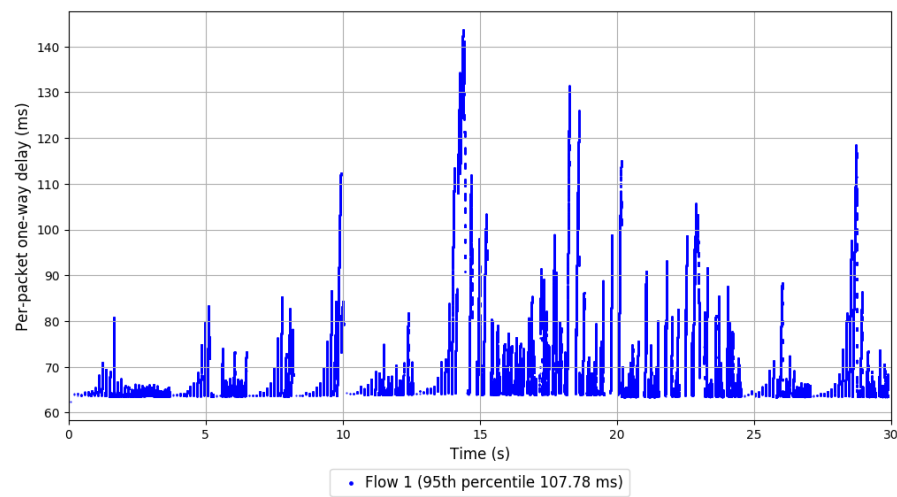
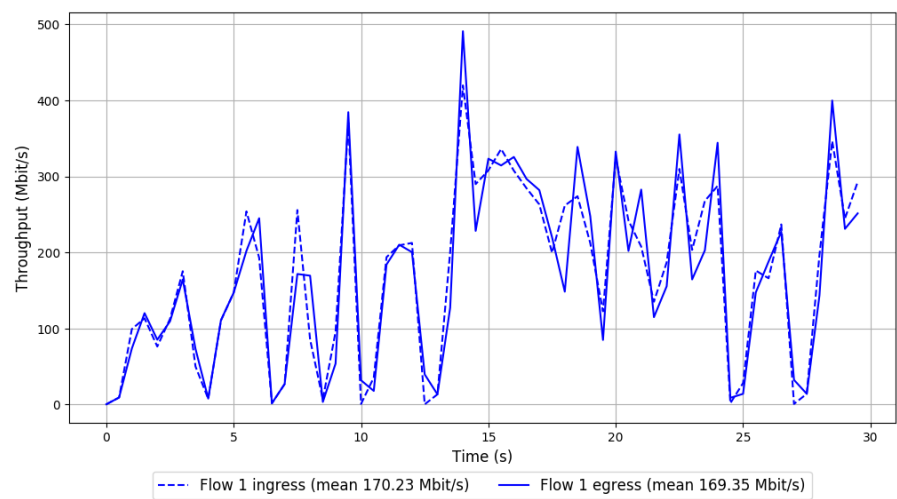
-- Flow 1:

Average throughput: 169.35 Mbit/s

95th percentile per-packet one-way delay: 107.777 ms

Loss rate: 1.06%

Run 7: Report of Verus — Data Link



Run 8: Statistics of Verus

Start at: 2017-12-20 08:35:14

End at: 2017-12-20 08:35:44

# Below is generated by plot.py at 2017-12-20 11:34:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 251.31 Mbit/s

95th percentile per-packet one-way delay: 96.251 ms

Loss rate: 0.55%

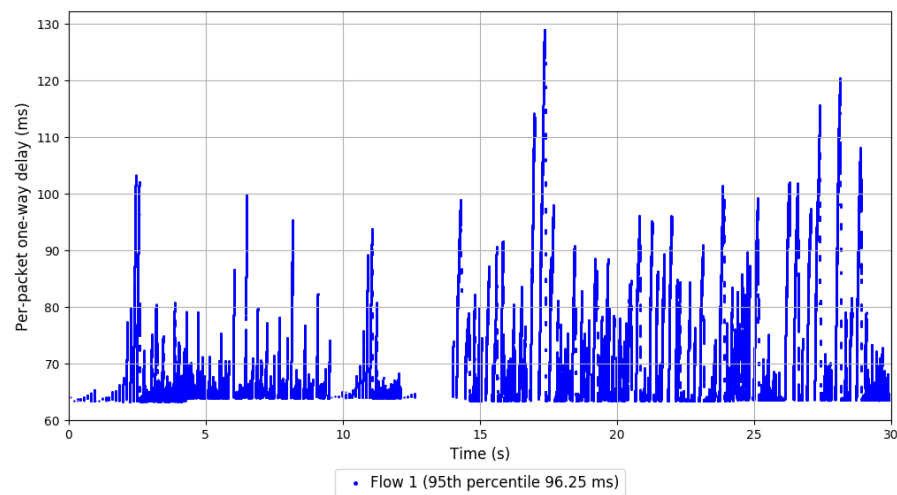
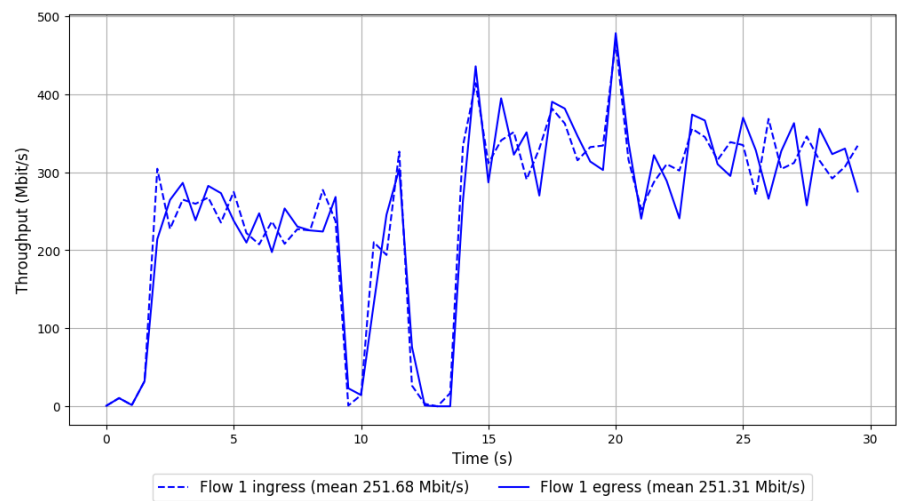
-- Flow 1:

Average throughput: 251.31 Mbit/s

95th percentile per-packet one-way delay: 96.251 ms

Loss rate: 0.55%

Run 8: Report of Verus — Data Link



Run 9: Statistics of Verus

Start at: 2017-12-20 08:47:00

End at: 2017-12-20 08:47:30

# Below is generated by plot.py at 2017-12-20 11:35:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 216.22 Mbit/s

95th percentile per-packet one-way delay: 82.523 ms

Loss rate: 1.05%

-- Flow 1:

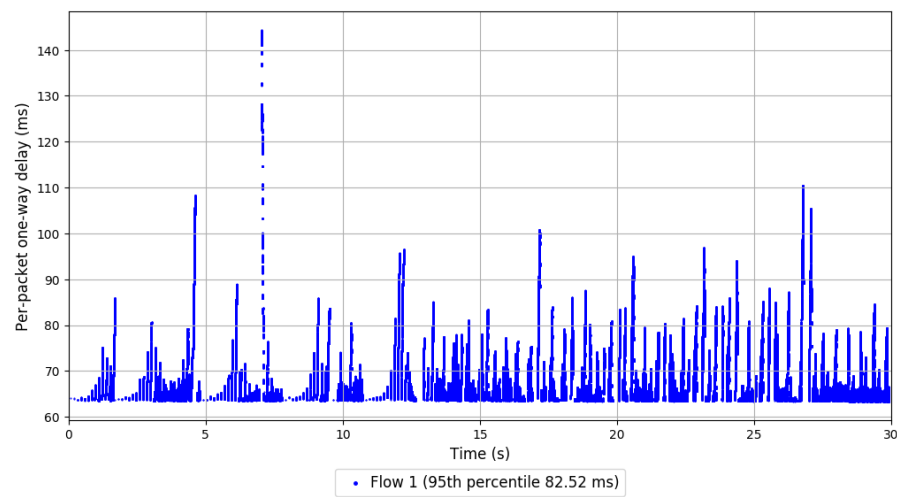
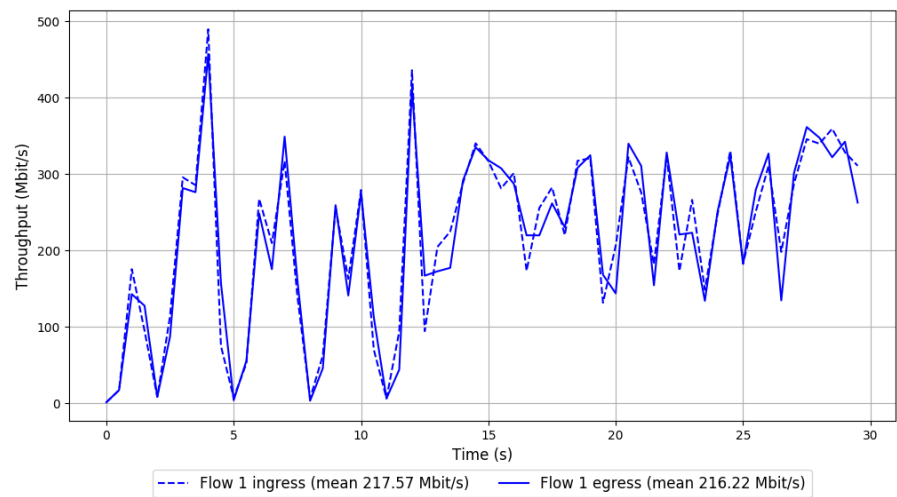
Average throughput: 216.22 Mbit/s

95th percentile per-packet one-way delay: 82.523 ms

Loss rate: 1.05%



Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-20 08:58:50

End at: 2017-12-20 08:59:20

# Below is generated by plot.py at 2017-12-20 11:36:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 262.60 Mbit/s

95th percentile per-packet one-way delay: 87.994 ms

Loss rate: 0.85%

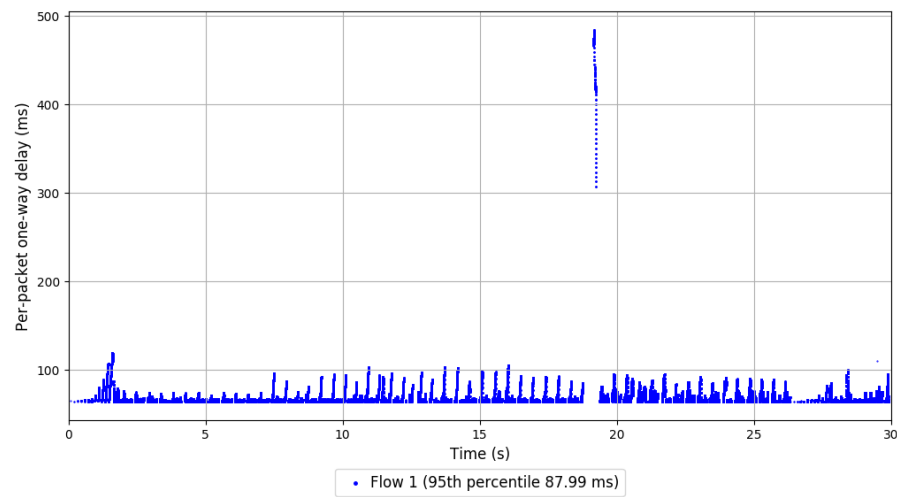
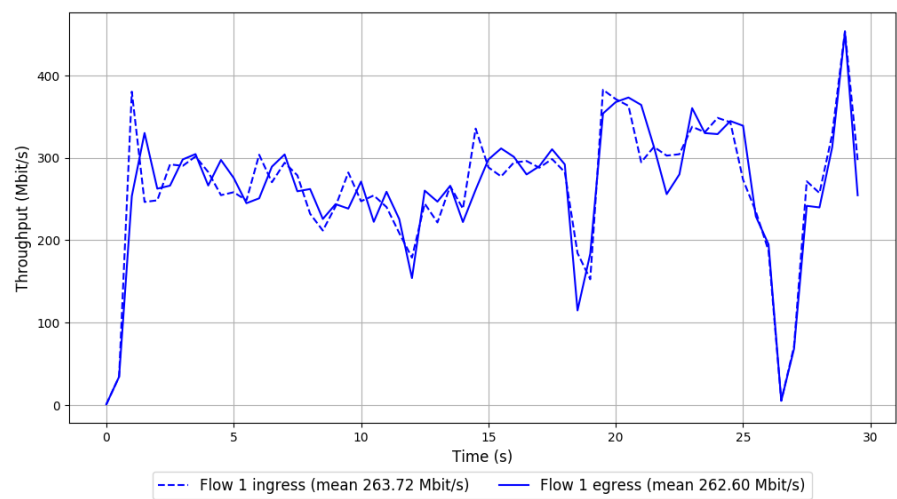
-- Flow 1:

Average throughput: 262.60 Mbit/s

95th percentile per-packet one-way delay: 87.994 ms

Loss rate: 0.85%

Run 10: Report of Verus — Data Link



Run 1: Statistics of Copa

Start at: 2017-12-20 07:10:41

End at: 2017-12-20 07:11:11

# Below is generated by plot.py at 2017-12-20 11:36:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 75.04 Mbit/s

95th percentile per-packet one-way delay: 63.845 ms

Loss rate: 0.58%

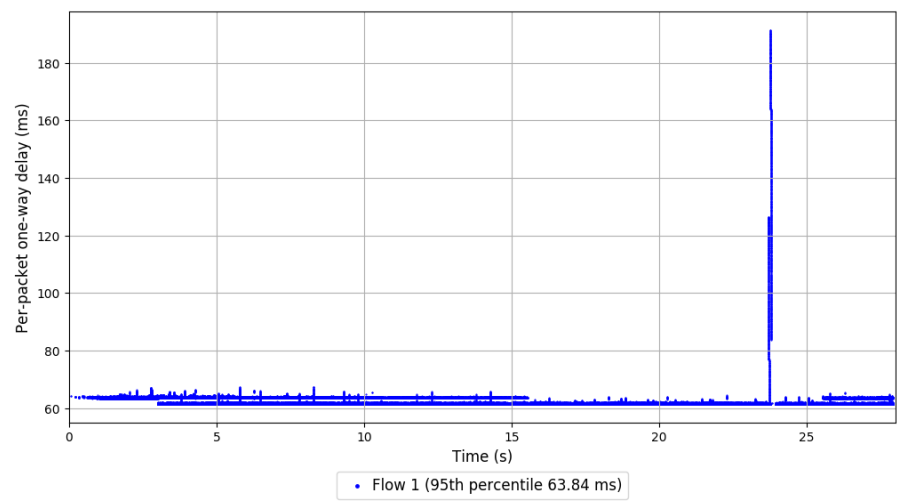
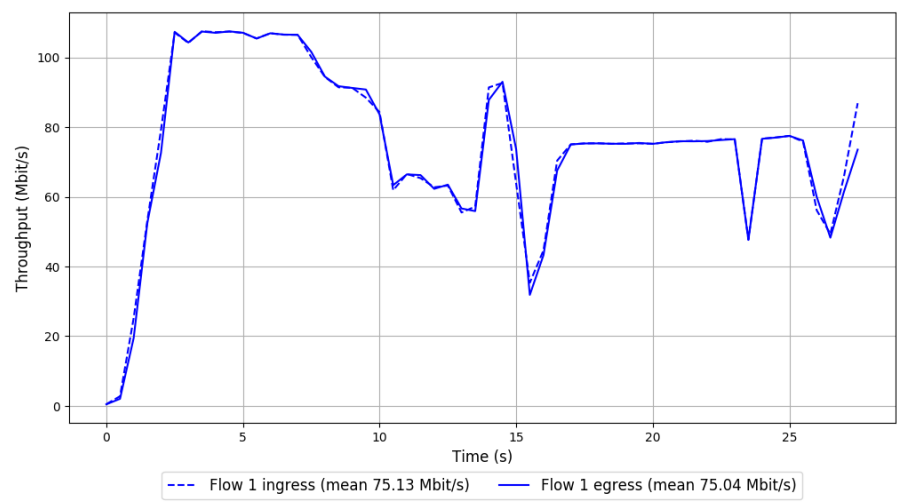
-- Flow 1:

Average throughput: 75.04 Mbit/s

95th percentile per-packet one-way delay: 63.845 ms

Loss rate: 0.58%

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2017-12-20 07:22:16

End at: 2017-12-20 07:22:46

# Below is generated by plot.py at 2017-12-20 11:36:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.16 Mbit/s

95th percentile per-packet one-way delay: 63.902 ms

Loss rate: 0.41%

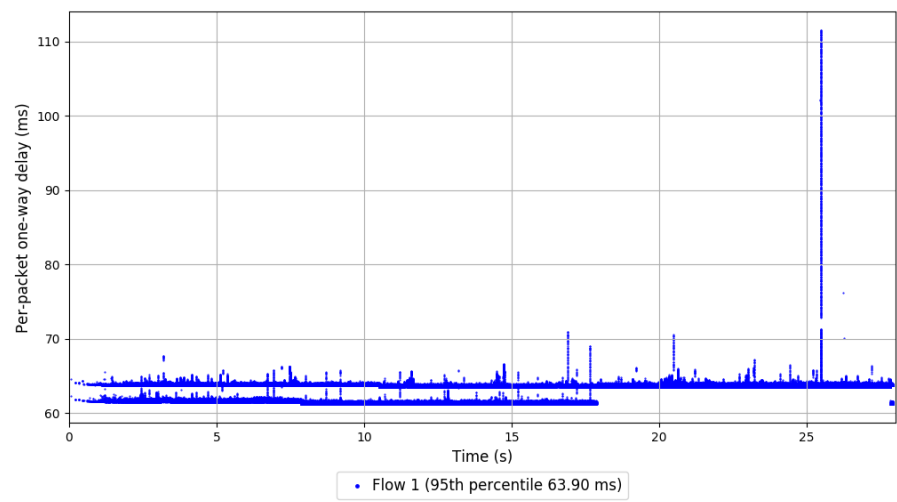
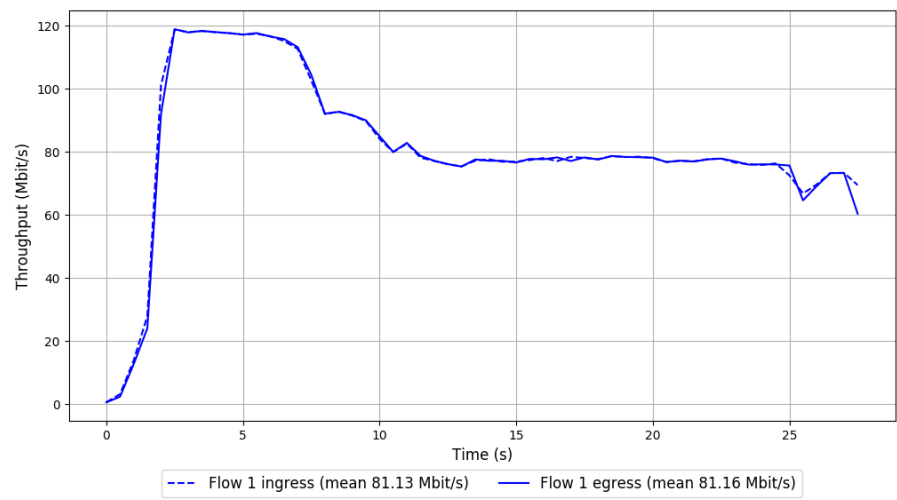
-- Flow 1:

Average throughput: 81.16 Mbit/s

95th percentile per-packet one-way delay: 63.902 ms

Loss rate: 0.41%

Run 2: Report of Copa — Data Link



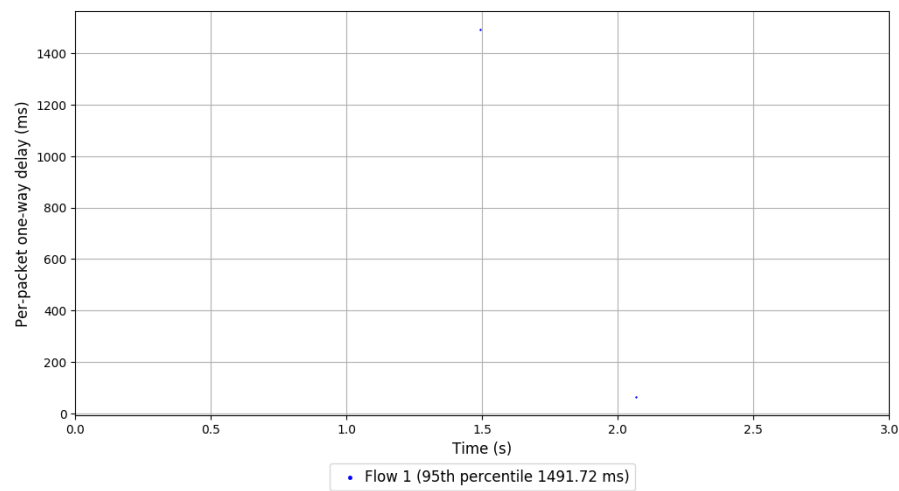
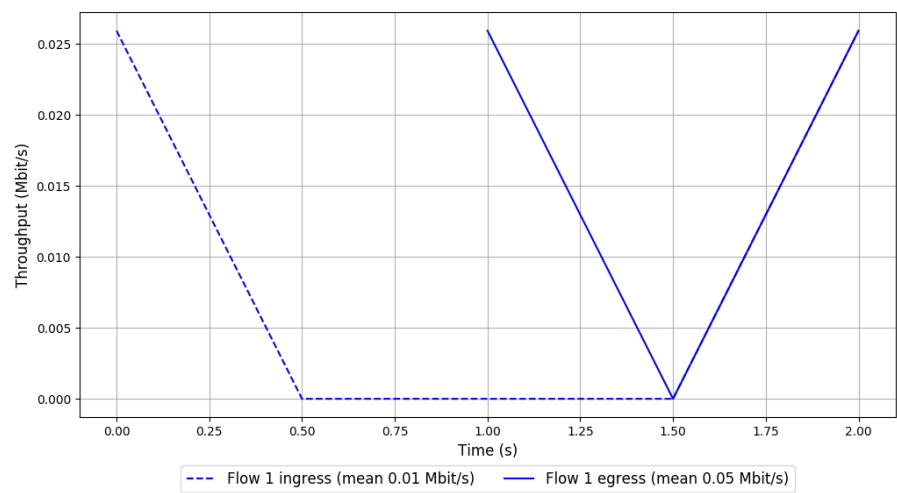
Run 3: Statistics of Copa

Start at: 2017-12-20 07:34:05

End at: 2017-12-20 07:34:35



Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2017-12-20 07:45:52

End at: 2017-12-20 07:46:22

# Below is generated by plot.py at 2017-12-20 11:36:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.77 Mbit/s

95th percentile per-packet one-way delay: 63.892 ms

Loss rate: 0.39%

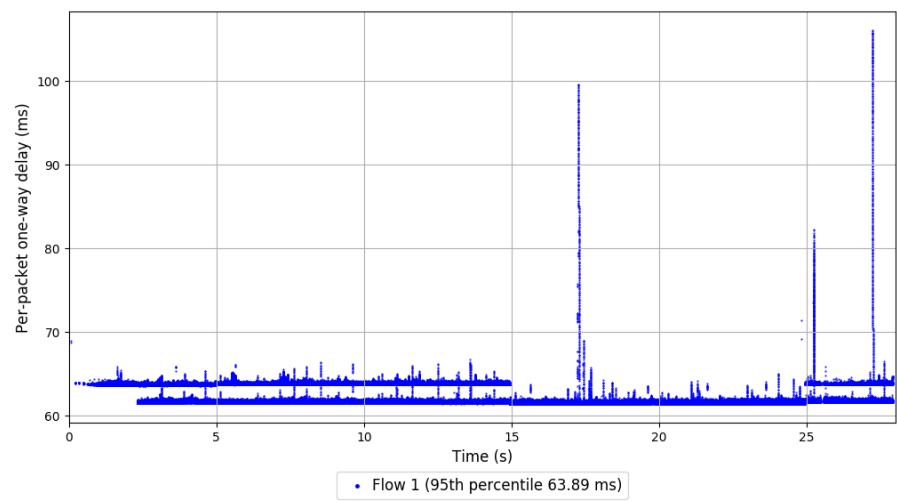
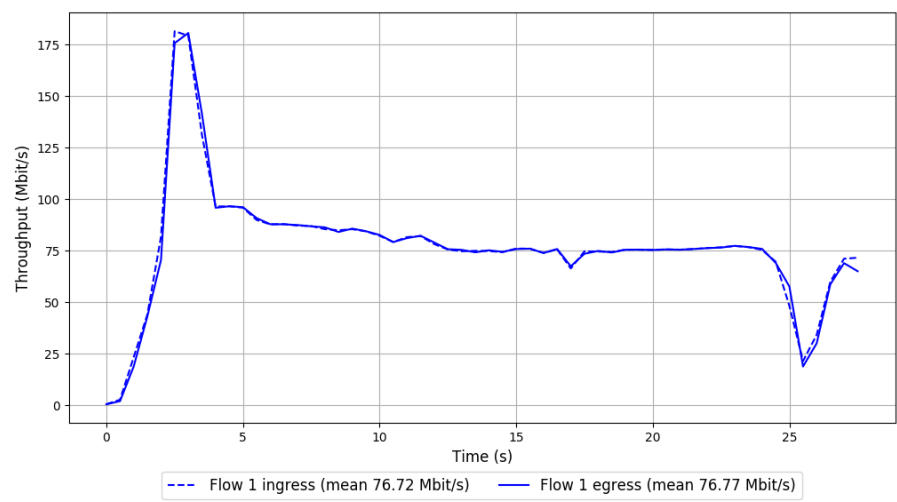
-- Flow 1:

Average throughput: 76.77 Mbit/s

95th percentile per-packet one-way delay: 63.892 ms

Loss rate: 0.39%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2017-12-20 07:57:34

End at: 2017-12-20 07:58:04

# Below is generated by plot.py at 2017-12-20 11:36:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.34 Mbit/s

95th percentile per-packet one-way delay: 63.866 ms

Loss rate: 0.57%

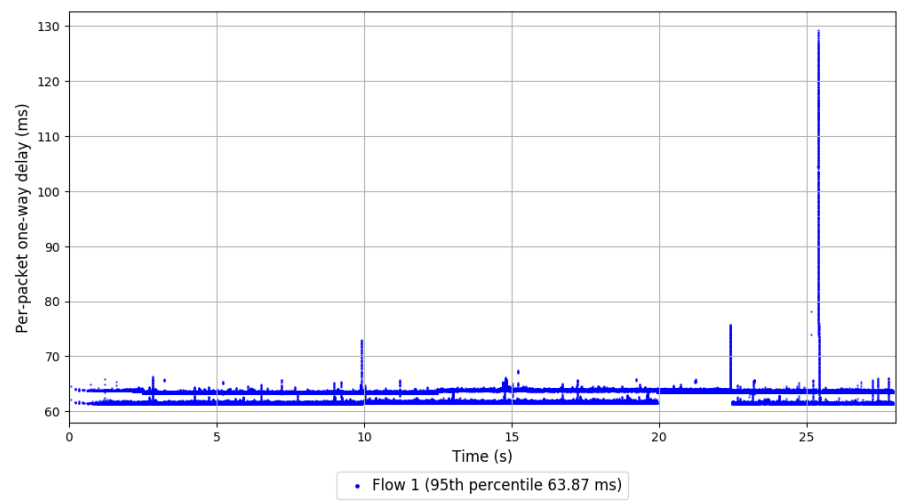
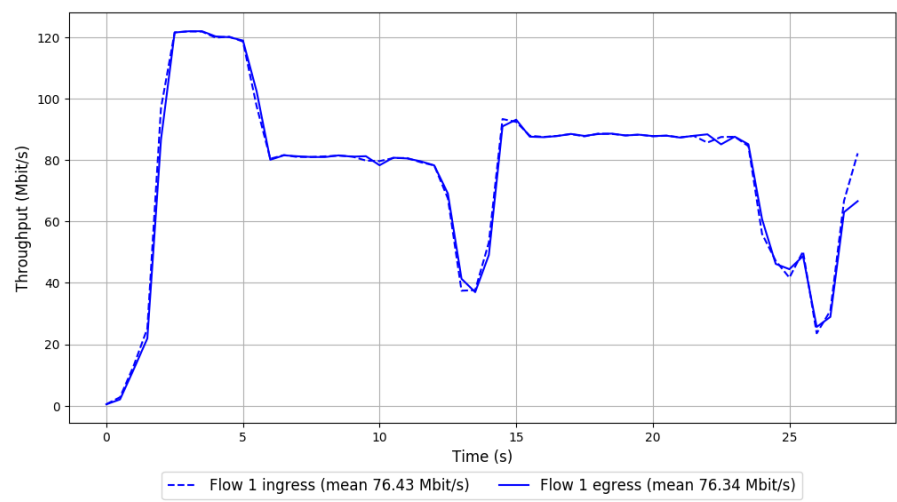
-- Flow 1:

Average throughput: 76.34 Mbit/s

95th percentile per-packet one-way delay: 63.866 ms

Loss rate: 0.57%

Run 5: Report of Copa — Data Link



Run 6: Statistics of Copa

Start at: 2017-12-20 08:08:46

End at: 2017-12-20 08:09:16

# Below is generated by plot.py at 2017-12-20 11:36:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 75.85 Mbit/s

95th percentile per-packet one-way delay: 63.726 ms

Loss rate: 0.57%

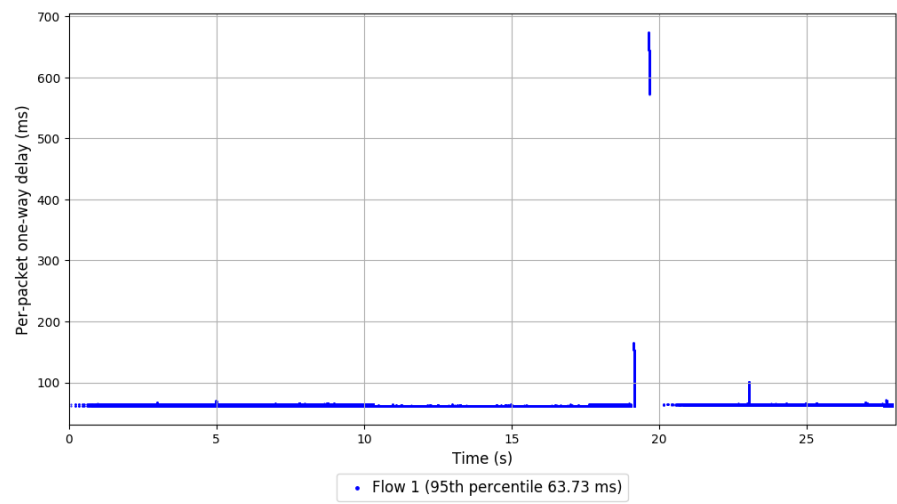
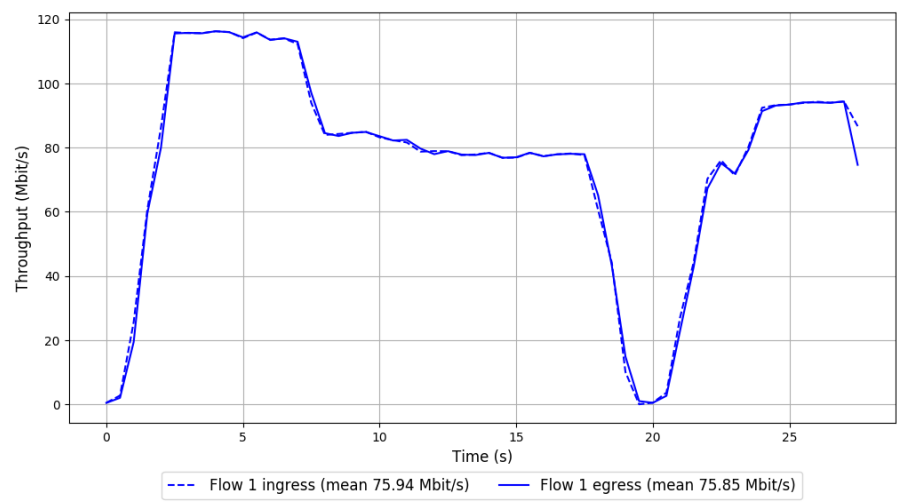
-- Flow 1:

Average throughput: 75.85 Mbit/s

95th percentile per-packet one-way delay: 63.726 ms

Loss rate: 0.57%

Run 6: Report of Copa — Data Link



Run 7: Statistics of Copa

Start at: 2017-12-20 08:20:22

End at: 2017-12-20 08:20:52

# Below is generated by plot.py at 2017-12-20 11:36:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.77 Mbit/s

95th percentile per-packet one-way delay: 63.916 ms

Loss rate: 0.43%

-- Flow 1:

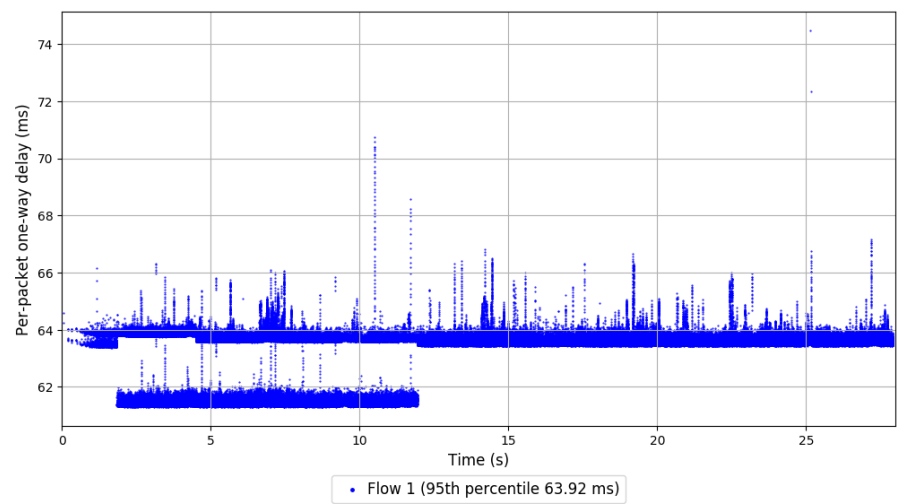
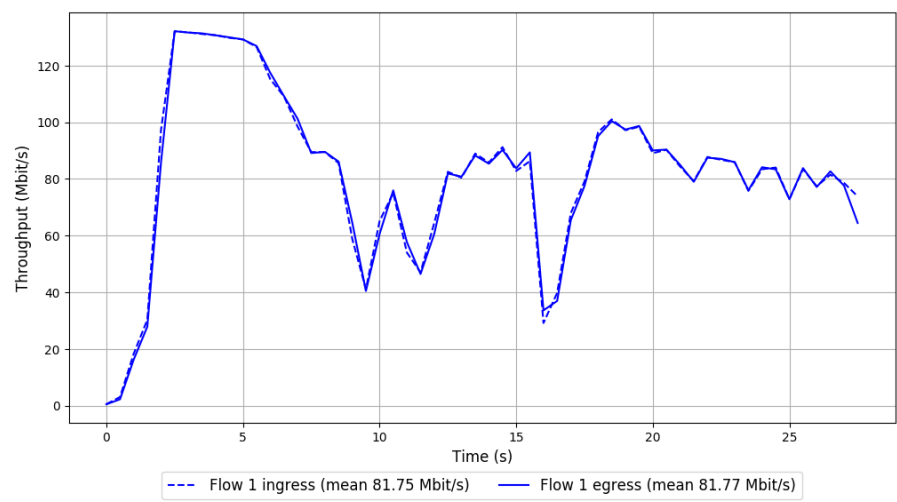
Average throughput: 81.77 Mbit/s

95th percentile per-packet one-way delay: 63.916 ms

Loss rate: 0.43%



Run 7: Report of Copa — Data Link

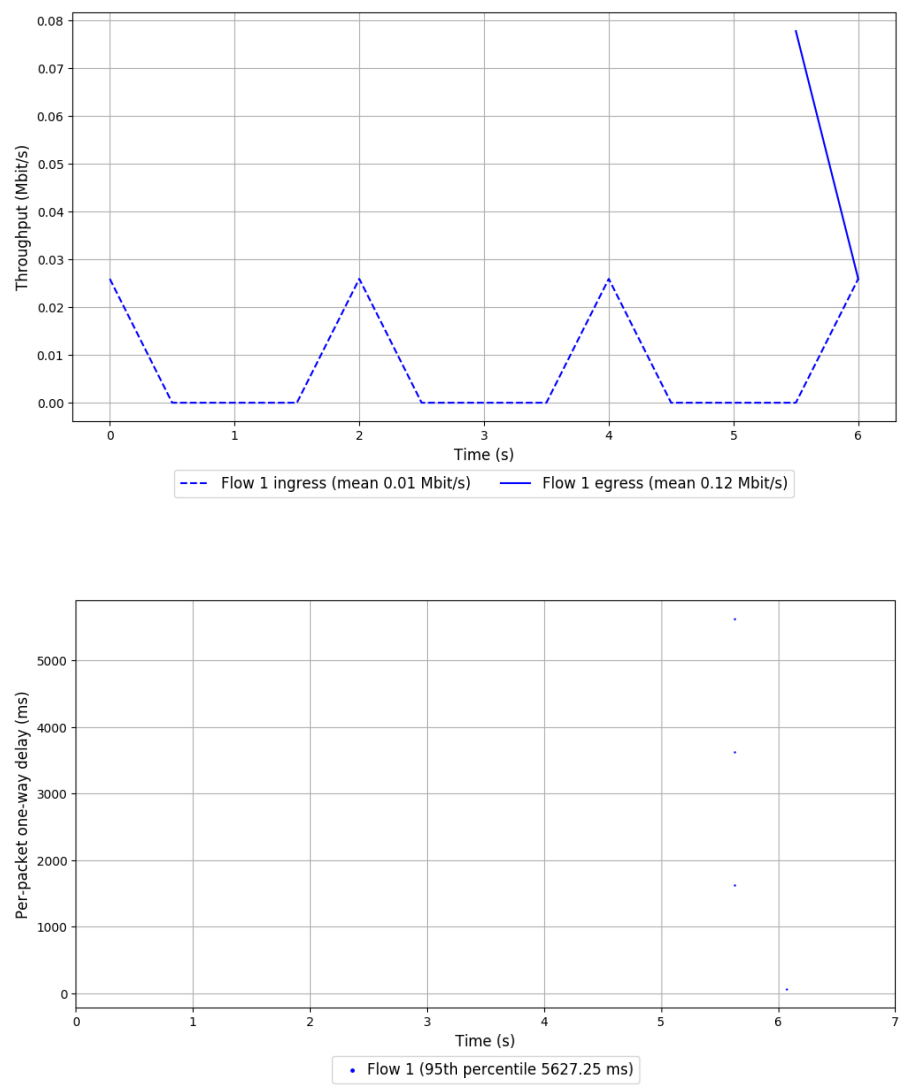


Run 8: Statistics of Copa

Start at: 2017-12-20 08:31:54

End at: 2017-12-20 08:32:24

Run 8: Report of Copa — Data Link



Run 9: Statistics of Copa

Start at: 2017-12-20 08:43:32

End at: 2017-12-20 08:44:02

# Below is generated by plot.py at 2017-12-20 11:36:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.56 Mbit/s

95th percentile per-packet one-way delay: 64.003 ms

Loss rate: 0.38%

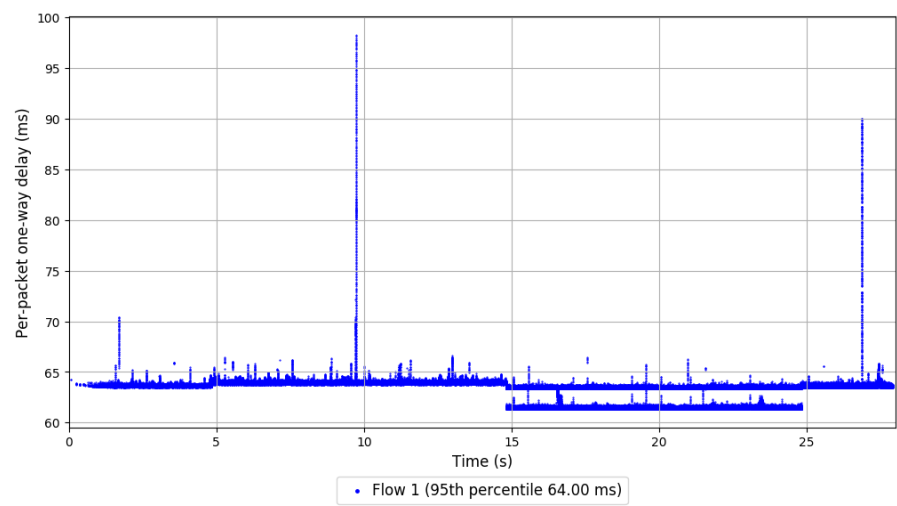
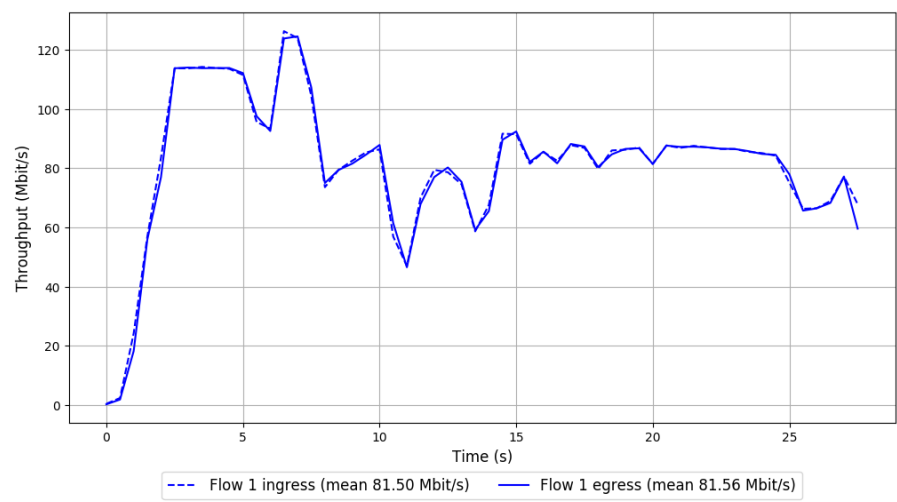
-- Flow 1:

Average throughput: 81.56 Mbit/s

95th percentile per-packet one-way delay: 64.003 ms

Loss rate: 0.38%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-20 08:55:22

End at: 2017-12-20 08:55:52

# Below is generated by plot.py at 2017-12-20 11:36:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 73.52 Mbit/s

95th percentile per-packet one-way delay: 63.712 ms

Loss rate: 0.45%

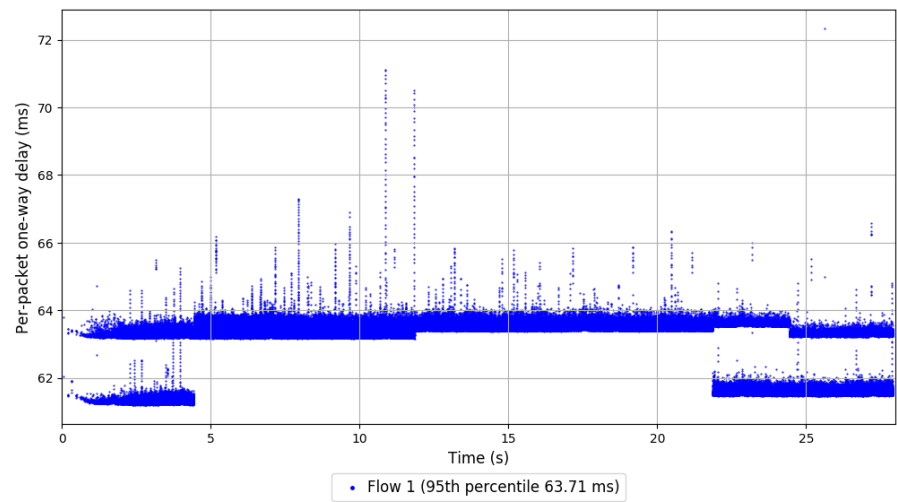
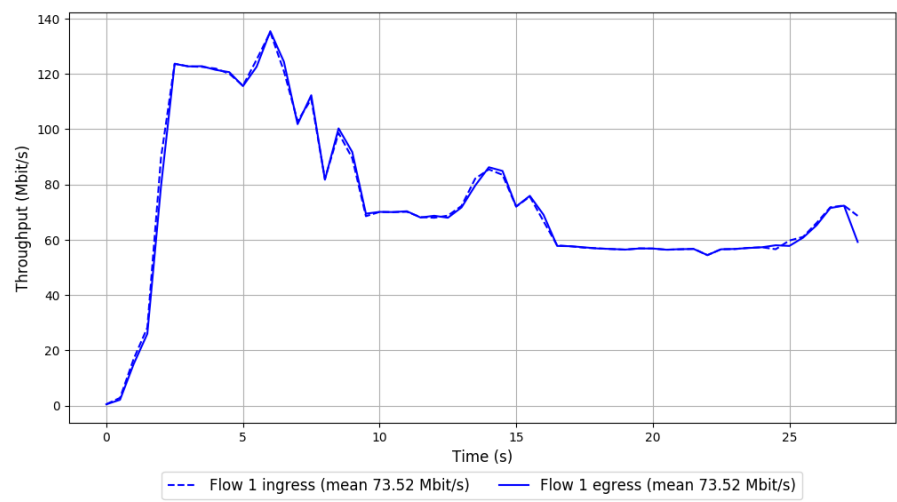
-- Flow 1:

Average throughput: 73.52 Mbit/s

95th percentile per-packet one-way delay: 63.712 ms

Loss rate: 0.45%

Run 10: Report of Copa — Data Link



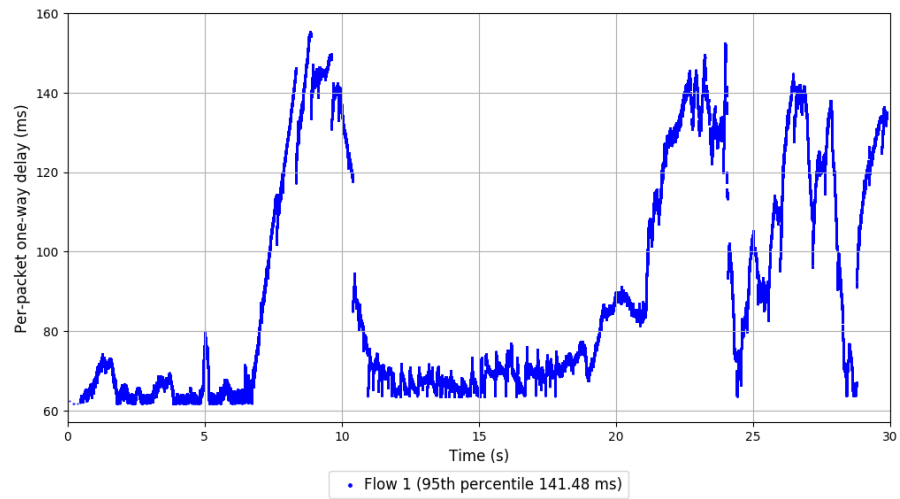
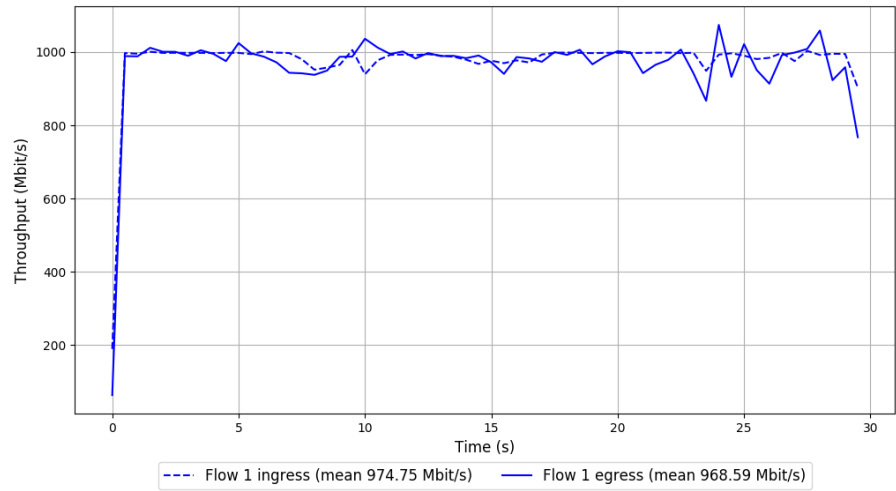
```
Run 1: Statistics of FillP

Start at: 2017-12-20 07:19:40
End at: 2017-12-20 07:20:10

# Below is generated by plot.py at 2017-12-20 11:52:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 968.59 Mbit/s
95th percentile per-packet one-way delay: 141.484 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 968.59 Mbit/s
95th percentile per-packet one-way delay: 141.484 ms
Loss rate: 1.05%
```



### Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2017-12-20 07:31:18

End at: 2017-12-20 07:31:48

# Below is generated by plot.py at 2017-12-20 11:53:03

# Datalink statistics

-- Total of 1 flow:

Average throughput: 969.94 Mbit/s

95th percentile per-packet one-way delay: 109.008 ms

Loss rate: 0.57%

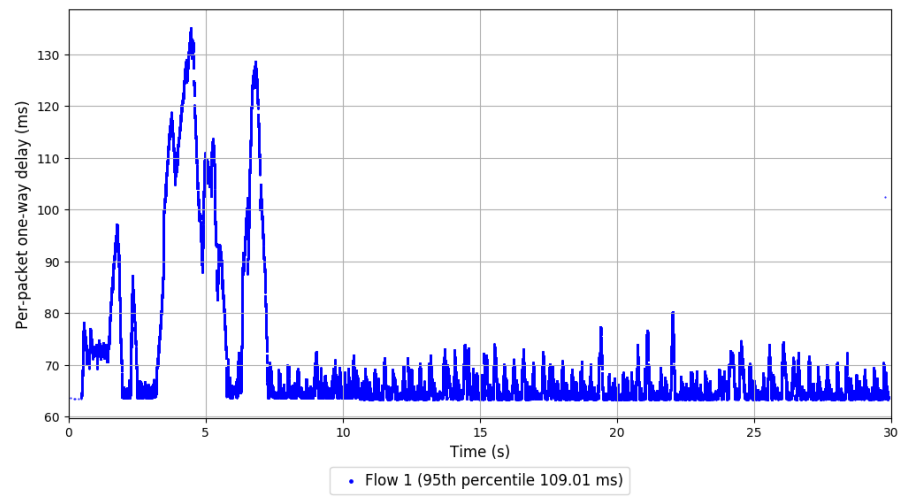
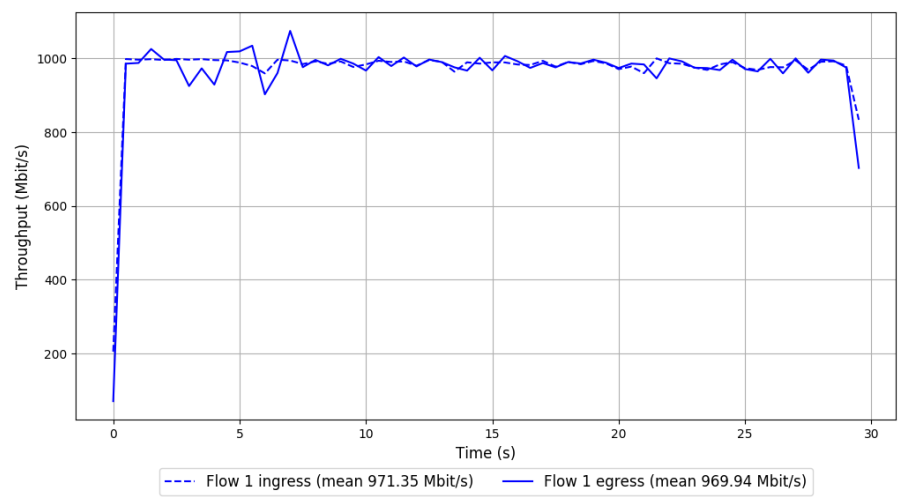
-- Flow 1:

Average throughput: 969.94 Mbit/s

95th percentile per-packet one-way delay: 109.008 ms

Loss rate: 0.57%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2017-12-20 07:42:58

End at: 2017-12-20 07:43:28

# Below is generated by plot.py at 2017-12-20 11:53:03

# Datalink statistics

-- Total of 1 flow:

Average throughput: 925.07 Mbit/s

95th percentile per-packet one-way delay: 137.664 ms

Loss rate: 4.14%

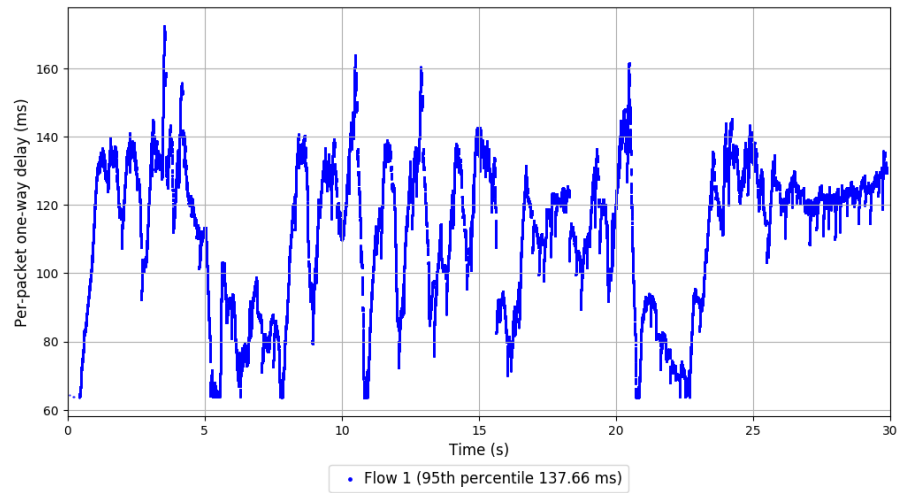
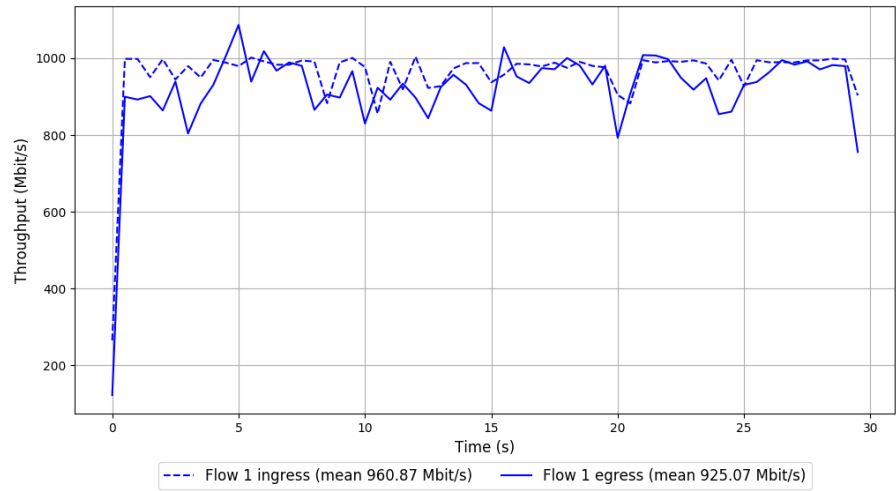
-- Flow 1:

Average throughput: 925.07 Mbit/s

95th percentile per-packet one-way delay: 137.664 ms

Loss rate: 4.14%

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



Run 4: Statistics of FillP

Start at: 2017-12-20 07:54:57

End at: 2017-12-20 07:55:27

# Below is generated by plot.py at 2017-12-20 11:53:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 963.89 Mbit/s

95th percentile per-packet one-way delay: 118.093 ms

Loss rate: 1.21%

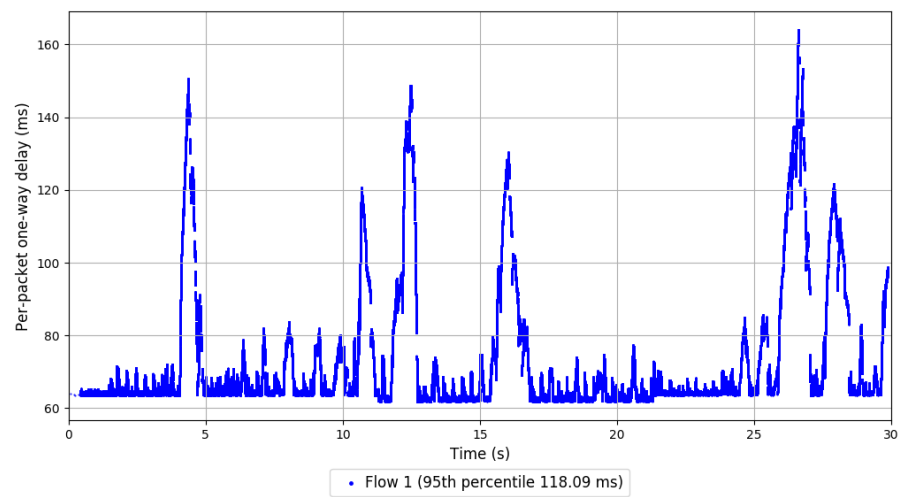
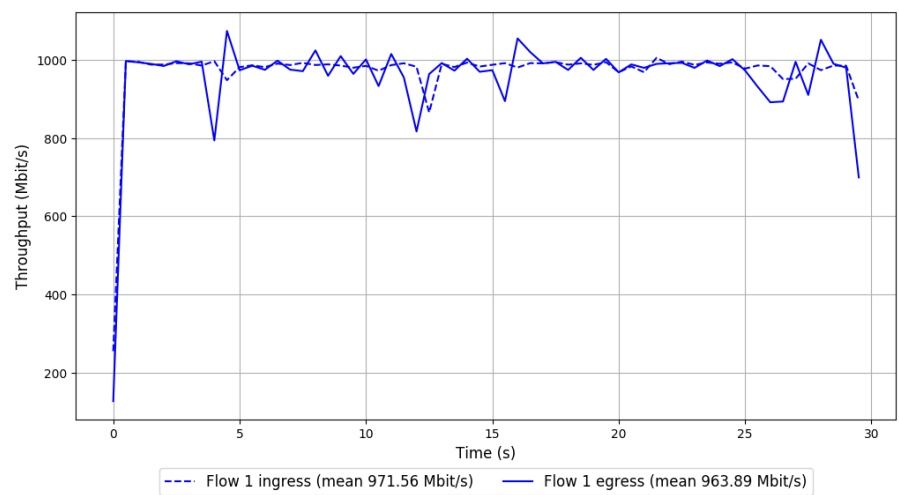
-- Flow 1:

Average throughput: 963.89 Mbit/s

95th percentile per-packet one-way delay: 118.093 ms

Loss rate: 1.21%

Run 4: Report of FillP — Data Link



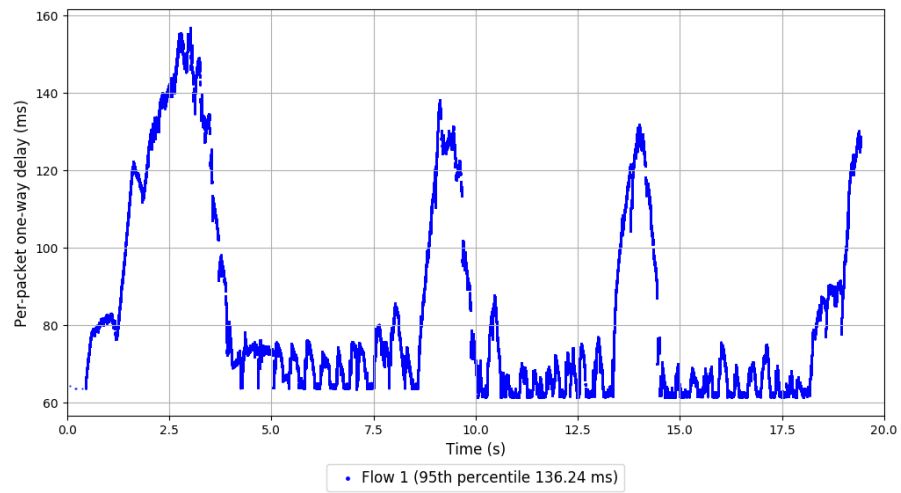
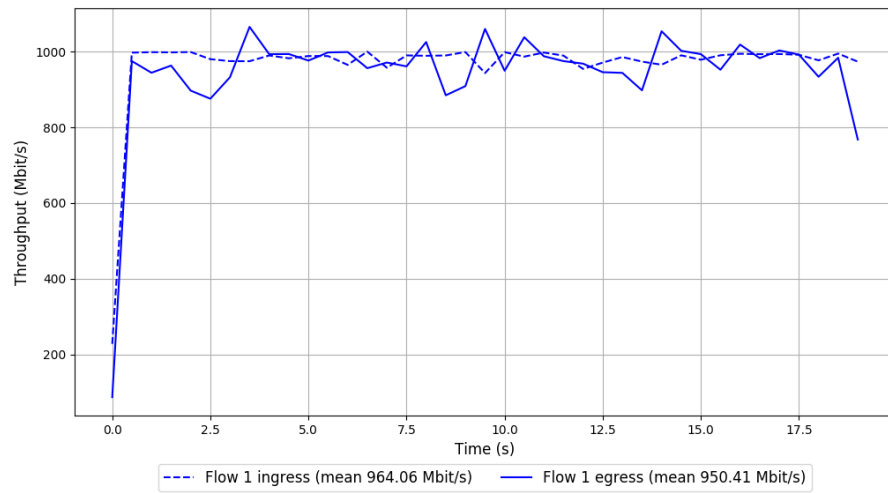
Run 5: Statistics of FillP

Start at: 2017-12-20 08:06:09

End at: 2017-12-20 08:06:39



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



Run 6: Statistics of FillP

Start at: 2017-12-20 08:17:45

End at: 2017-12-20 08:18:15

# Below is generated by plot.py at 2017-12-20 11:54:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 964.39 Mbit/s

95th percentile per-packet one-way delay: 197.815 ms

Loss rate: 0.80%

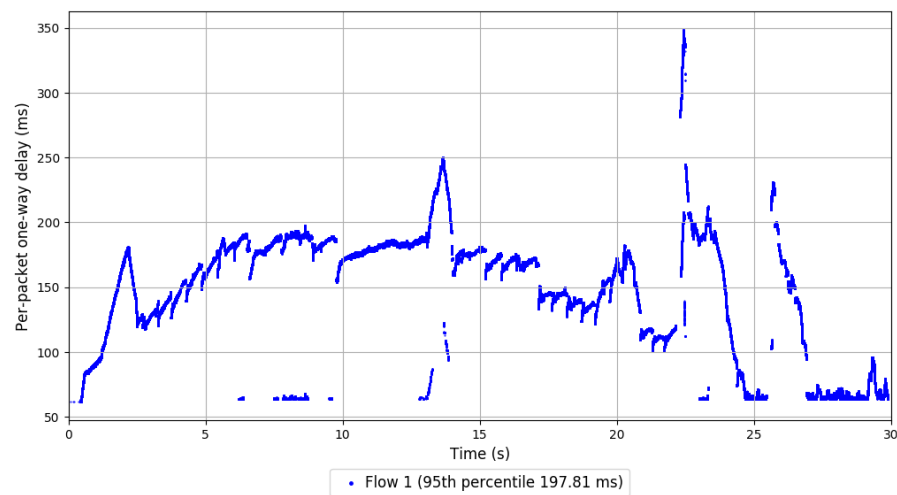
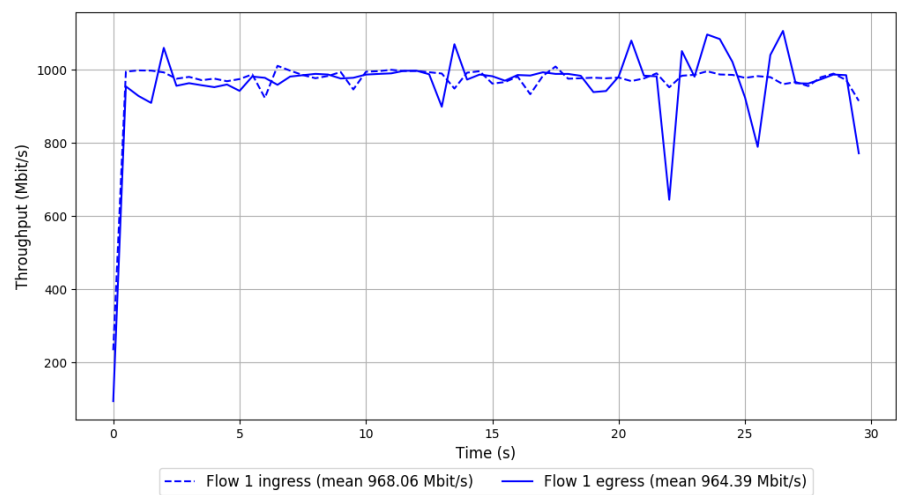
-- Flow 1:

Average throughput: 964.39 Mbit/s

95th percentile per-packet one-way delay: 197.815 ms

Loss rate: 0.80%

Run 6: Report of FillP — Data Link



Run 7: Statistics of FillP

Start at: 2017-12-20 08:29:13

End at: 2017-12-20 08:29:43

# Below is generated by plot.py at 2017-12-20 11:54:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 913.20 Mbit/s

95th percentile per-packet one-way delay: 136.124 ms

Loss rate: 5.05%

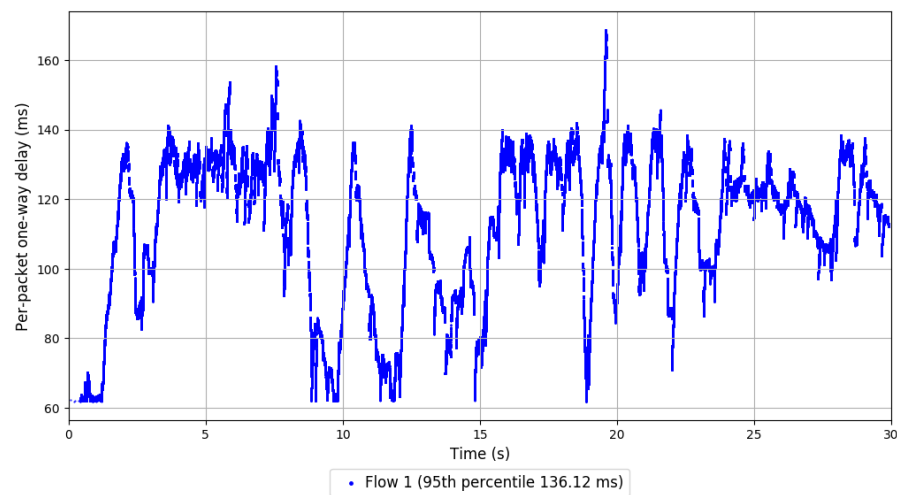
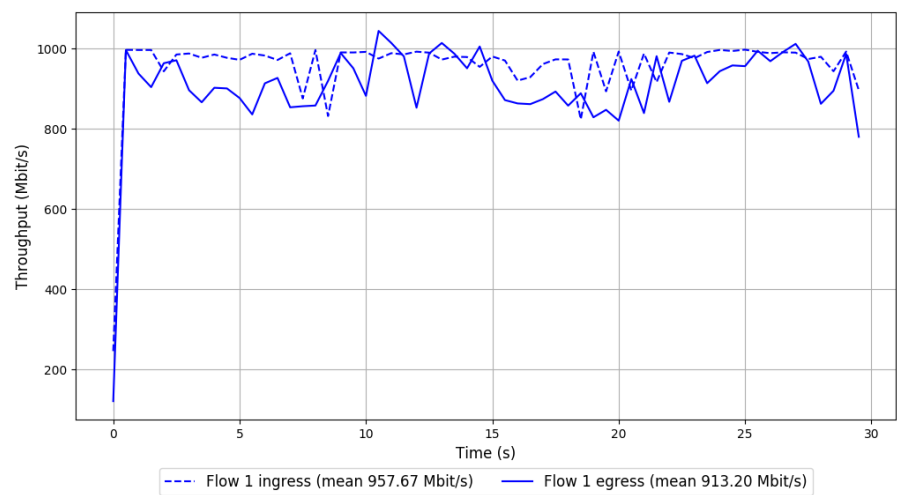
-- Flow 1:

Average throughput: 913.20 Mbit/s

95th percentile per-packet one-way delay: 136.124 ms

Loss rate: 5.05%

Run 7: Report of FillP — Data Link



Run 8: Statistics of FillP

Start at: 2017-12-20 08:40:46

End at: 2017-12-20 08:41:16

# Below is generated by plot.py at 2017-12-20 11:54:26

# Datalink statistics

-- Total of 1 flow:

Average throughput: 797.63 Mbit/s

95th percentile per-packet one-way delay: 162.210 ms

Loss rate: 5.07%

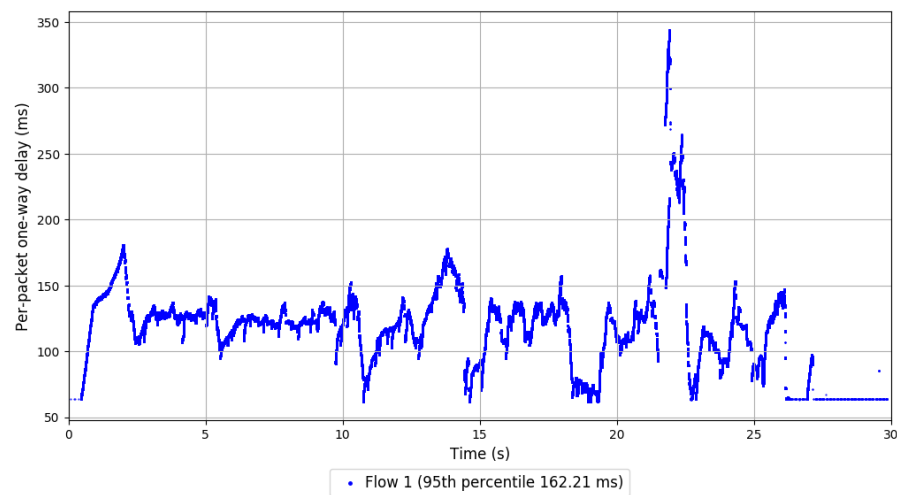
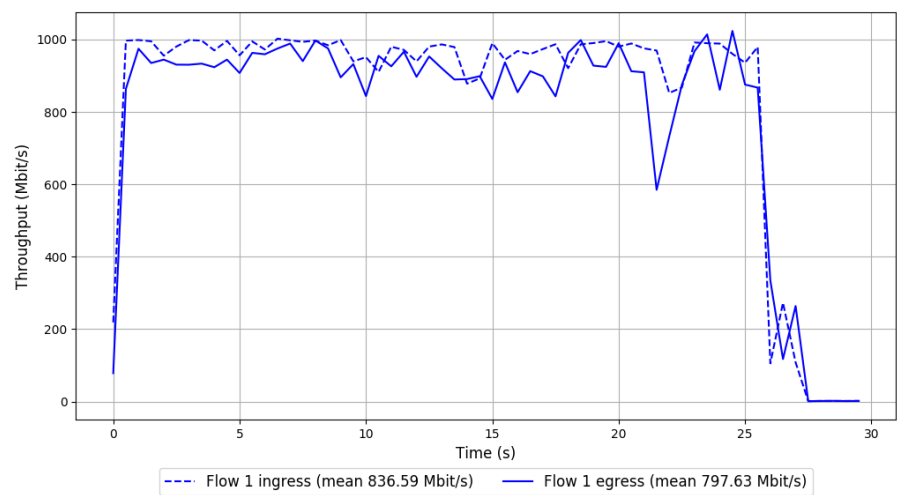
-- Flow 1:

Average throughput: 797.63 Mbit/s

95th percentile per-packet one-way delay: 162.210 ms

Loss rate: 5.07%

Run 8: Report of FillP — Data Link



Run 9: Statistics of FillP

Start at: 2017-12-20 08:52:29

End at: 2017-12-20 08:52:59

# Below is generated by plot.py at 2017-12-20 11:59:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 968.13 Mbit/s

95th percentile per-packet one-way delay: 124.437 ms

Loss rate: 0.94%

-- Flow 1:

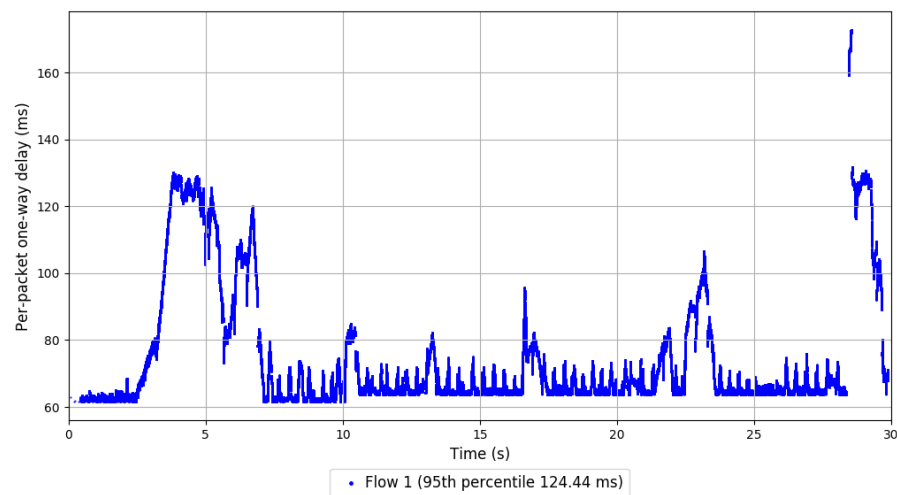
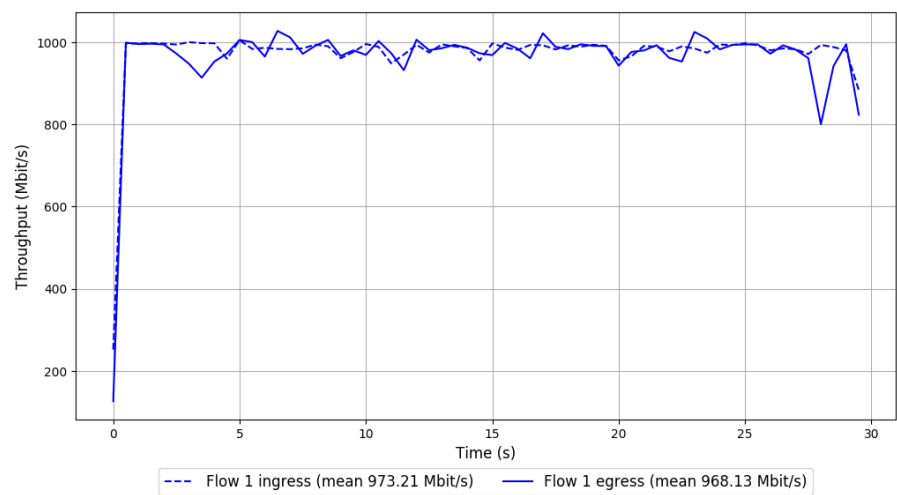
Average throughput: 968.13 Mbit/s

95th percentile per-packet one-way delay: 124.437 ms

Loss rate: 0.94%



Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2017-12-20 09:04:24

End at: 2017-12-20 09:04:54

# Below is generated by plot.py at 2017-12-20 11:59:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 940.34 Mbit/s

95th percentile per-packet one-way delay: 195.622 ms

Loss rate: 1.53%

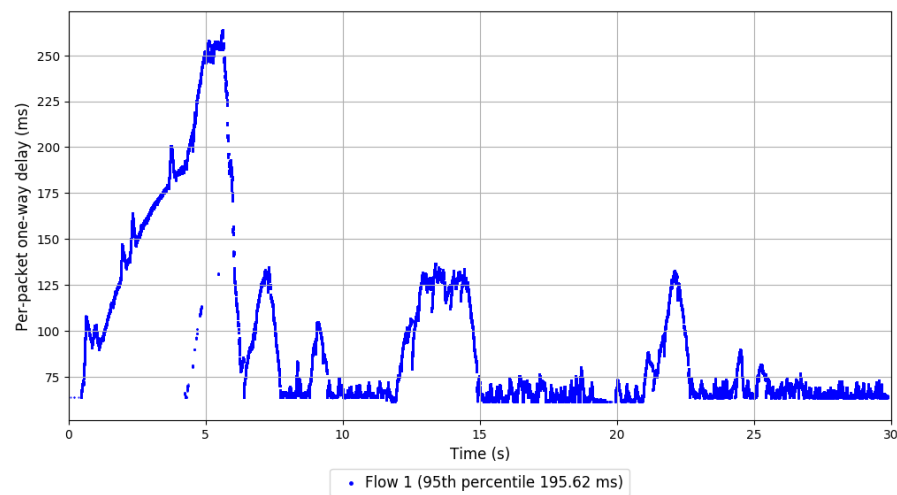
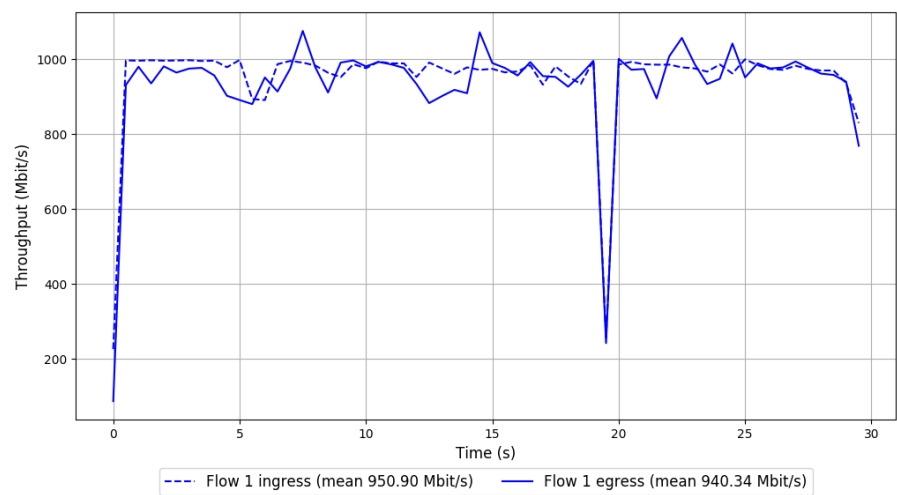
-- Flow 1:

Average throughput: 940.34 Mbit/s

95th percentile per-packet one-way delay: 195.622 ms

Loss rate: 1.53%

Run 10: Report of FillP — Data Link

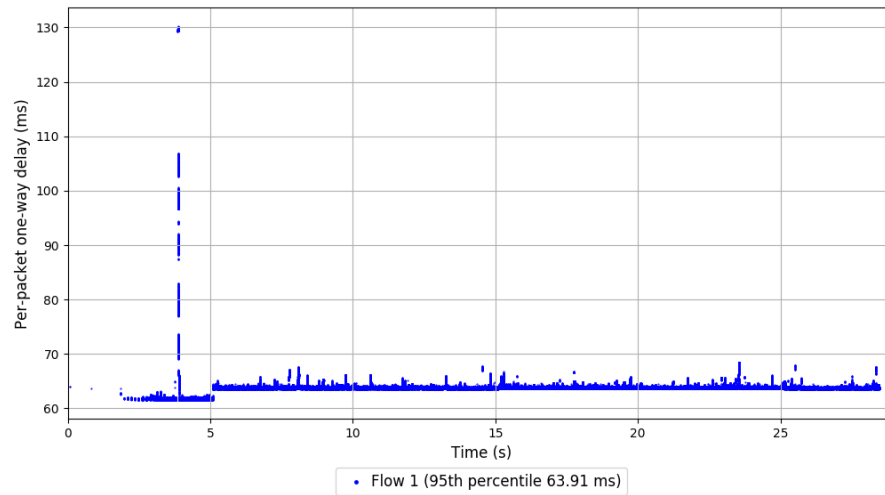
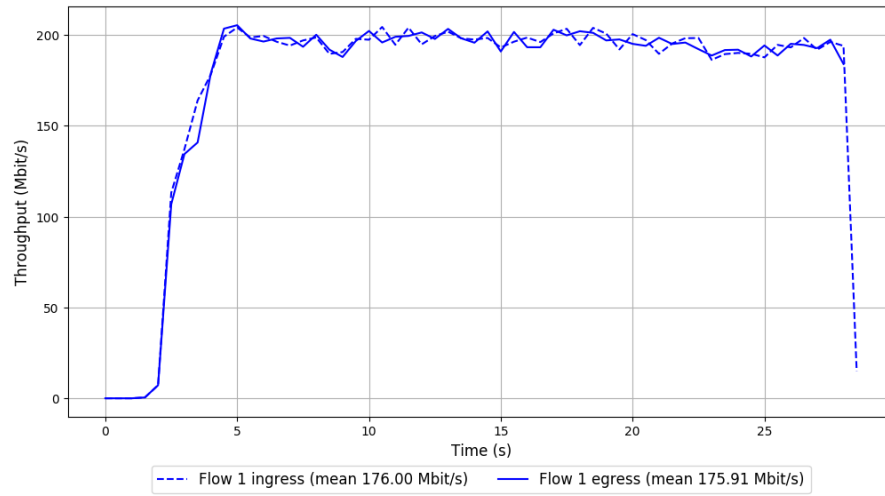


```
Run 1: Statistics of Indigo

Start at: 2017-12-20 07:15:02
End at: 2017-12-20 07:15:32

# Below is generated by plot.py at 2017-12-20 11:59:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 175.91 Mbit/s
95th percentile per-packet one-way delay: 63.912 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 175.91 Mbit/s
95th percentile per-packet one-way delay: 63.912 ms
Loss rate: 0.50%
```

### Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2017-12-20 07:26:39

End at: 2017-12-20 07:27:09

# Below is generated by plot.py at 2017-12-20 11:59:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 176.82 Mbit/s

95th percentile per-packet one-way delay: 63.997 ms

Loss rate: 0.49%

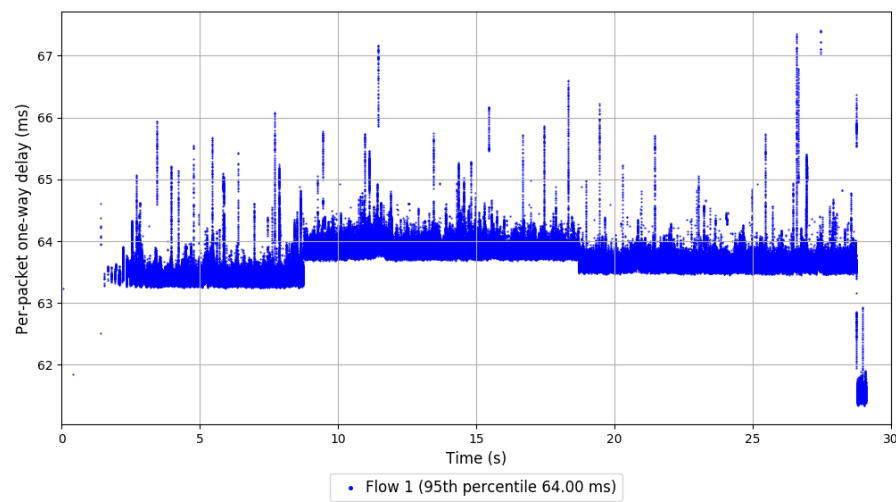
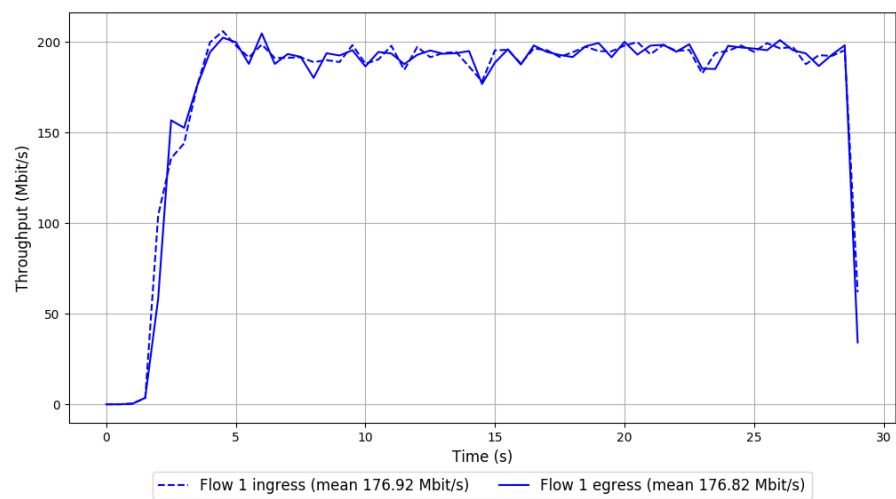
-- Flow 1:

Average throughput: 176.82 Mbit/s

95th percentile per-packet one-way delay: 63.997 ms

Loss rate: 0.49%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-20 07:38:20

End at: 2017-12-20 07:38:50

# Below is generated by plot.py at 2017-12-20 11:59:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 177.49 Mbit/s

95th percentile per-packet one-way delay: 63.948 ms

Loss rate: 0.49%

-- Flow 1:

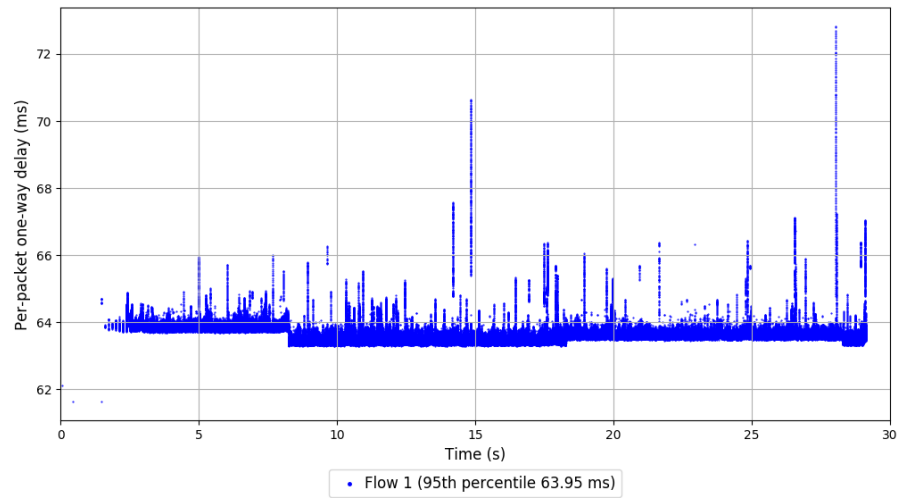
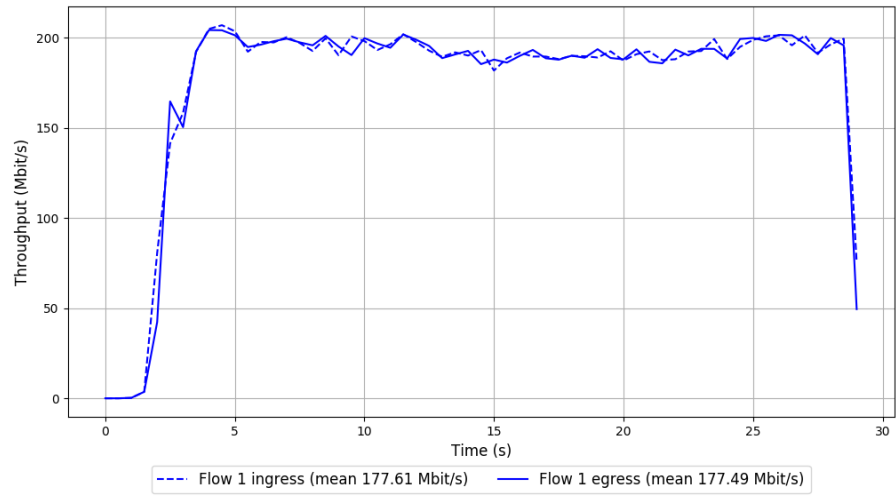
Average throughput: 177.49 Mbit/s

95th percentile per-packet one-way delay: 63.948 ms

Loss rate: 0.49%



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



Run 4: Statistics of Indigo

Start at: 2017-12-20 07:50:18

End at: 2017-12-20 07:50:48

# Below is generated by plot.py at 2017-12-20 11:59:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 184.88 Mbit/s

95th percentile per-packet one-way delay: 63.751 ms

Loss rate: 0.47%

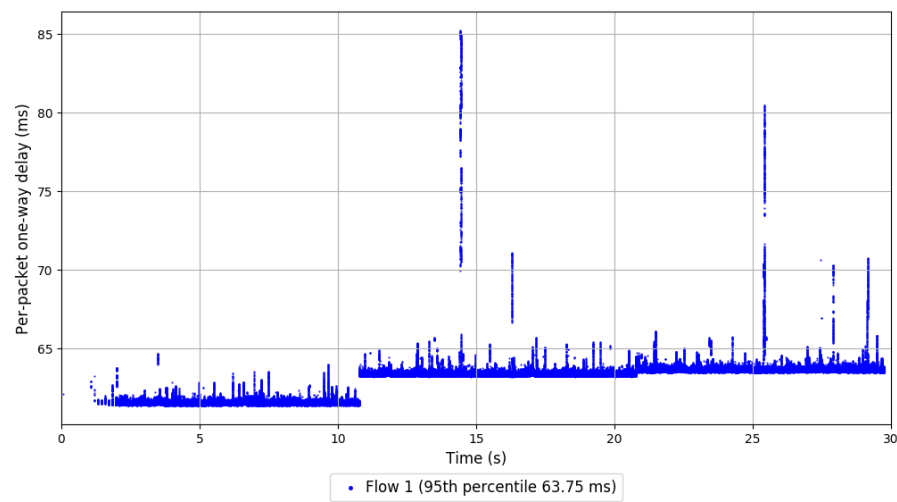
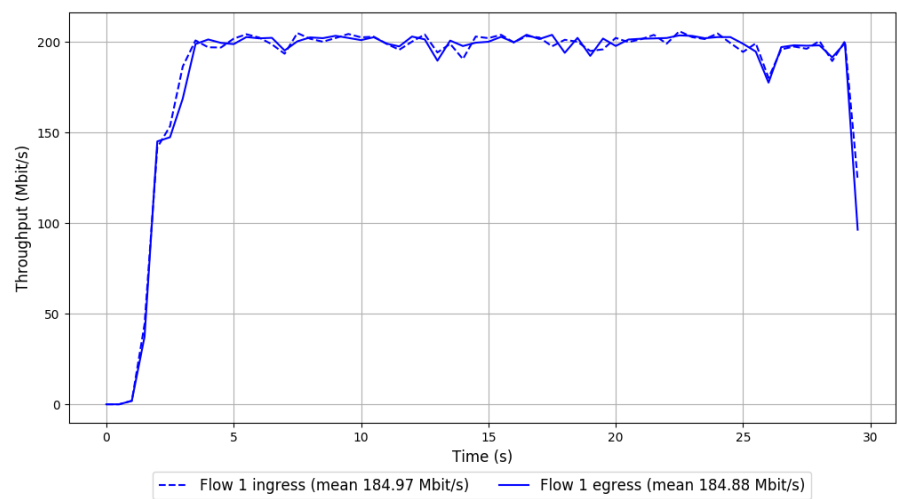
-- Flow 1:

Average throughput: 184.88 Mbit/s

95th percentile per-packet one-way delay: 63.751 ms

Loss rate: 0.47%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2017-12-20 08:01:54

End at: 2017-12-20 08:02:24

# Below is generated by plot.py at 2017-12-20 11:59:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 176.53 Mbit/s

95th percentile per-packet one-way delay: 63.867 ms

Loss rate: 0.55%

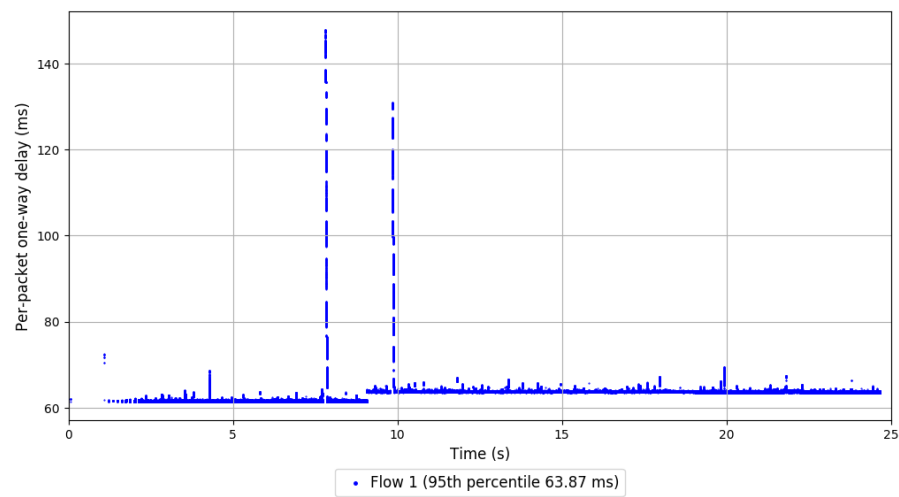
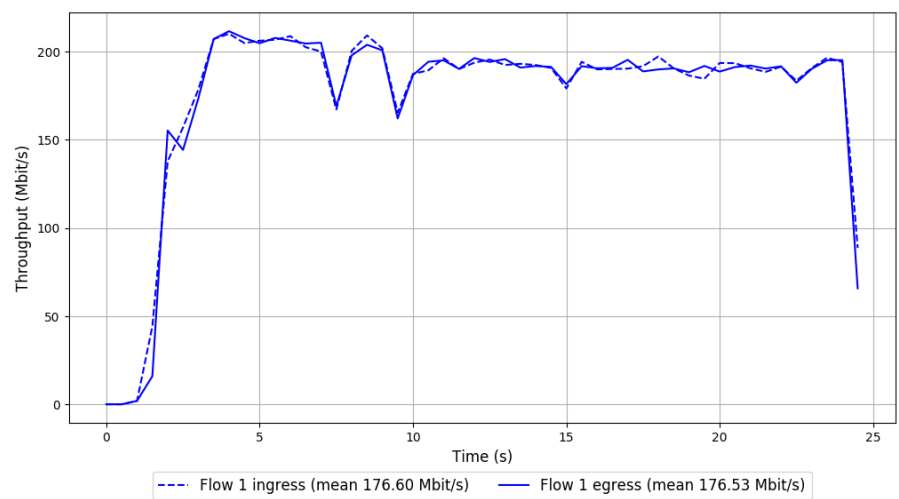
-- Flow 1:

Average throughput: 176.53 Mbit/s

95th percentile per-packet one-way delay: 63.867 ms

Loss rate: 0.55%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-20 08:13:08

End at: 2017-12-20 08:13:38

# Below is generated by plot.py at 2017-12-20 11:59:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 178.95 Mbit/s

95th percentile per-packet one-way delay: 63.975 ms

Loss rate: 0.48%

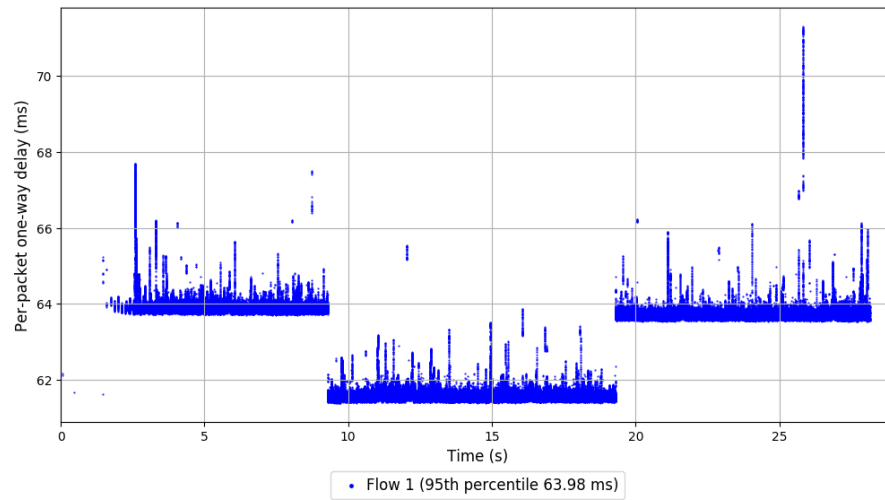
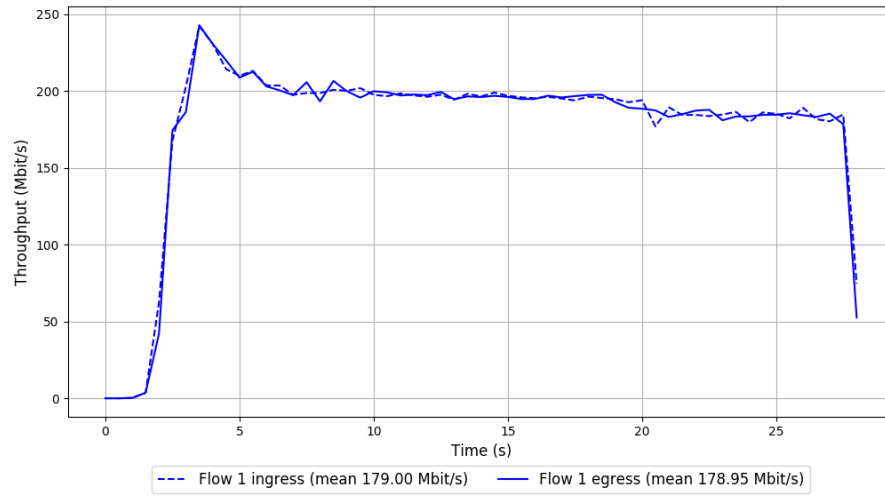
-- Flow 1:

Average throughput: 178.95 Mbit/s

95th percentile per-packet one-way delay: 63.975 ms

Loss rate: 0.48%

## Run 6: Report of Indigo — Data Link



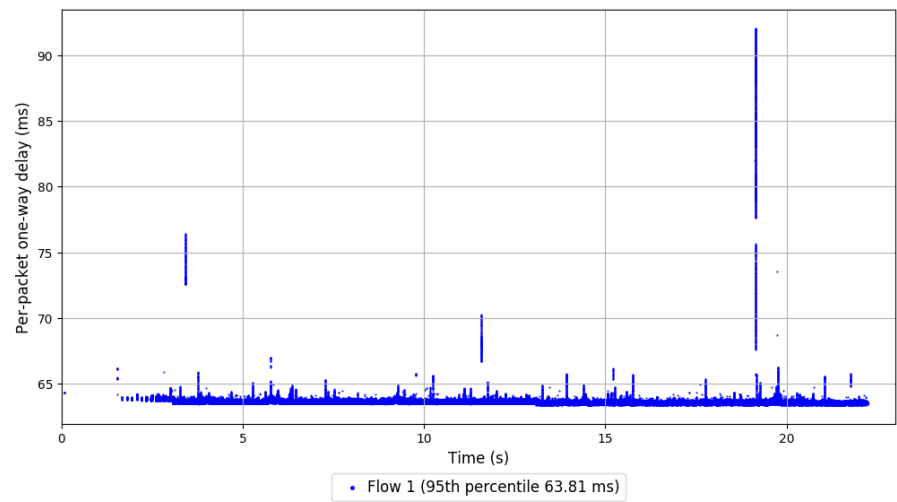
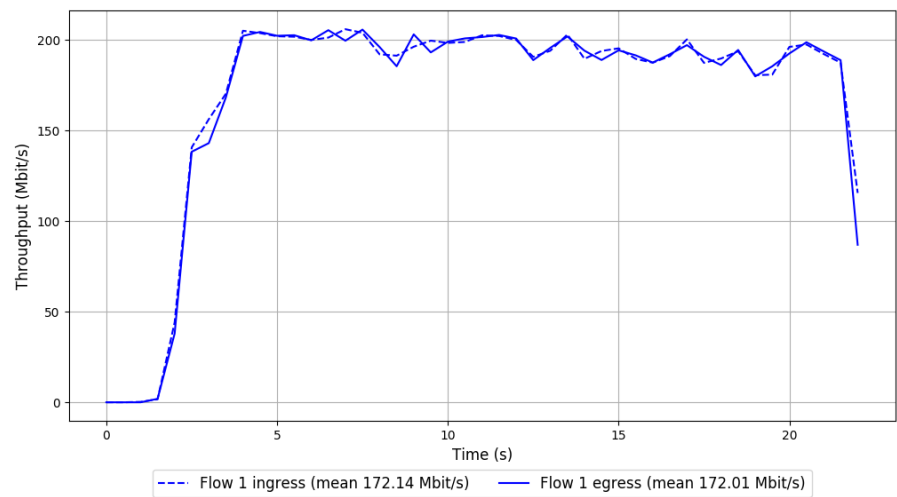
Run 7: Statistics of Indigo

Start at: 2017-12-20 08:24:38

End at: 2017-12-20 08:25:08



Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-20 08:36:09

End at: 2017-12-20 08:36:39

# Below is generated by plot.py at 2017-12-20 11:59:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 176.12 Mbit/s

95th percentile per-packet one-way delay: 63.857 ms

Loss rate: 0.48%

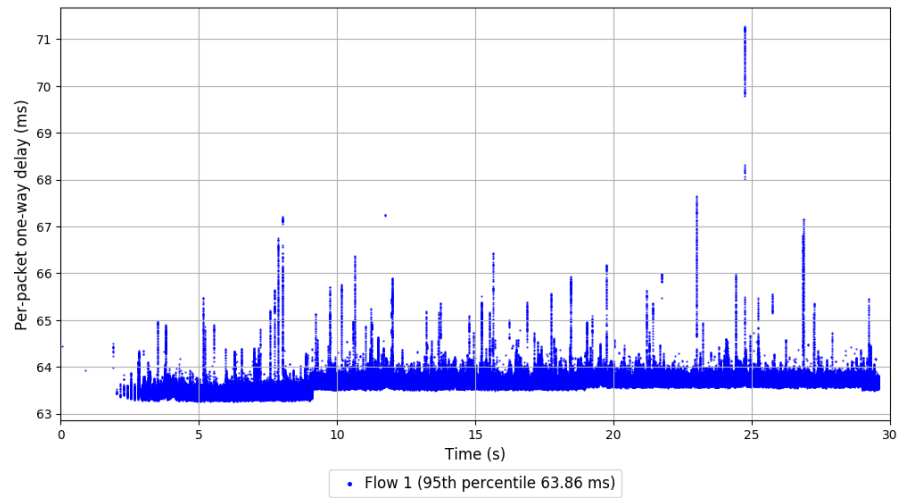
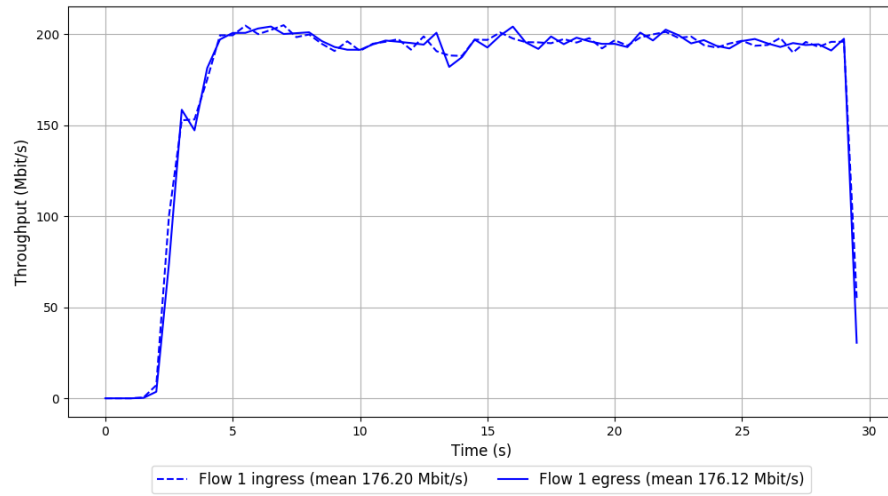
-- Flow 1:

Average throughput: 176.12 Mbit/s

95th percentile per-packet one-way delay: 63.857 ms

Loss rate: 0.48%

## Run 8: Report of Indigo — Data Link



Run 9: Statistics of Indigo

Start at: 2017-12-20 08:47:53

End at: 2017-12-20 08:48:23

# Below is generated by plot.py at 2017-12-20 11:59:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 175.58 Mbit/s

95th percentile per-packet one-way delay: 63.798 ms

Loss rate: 0.60%

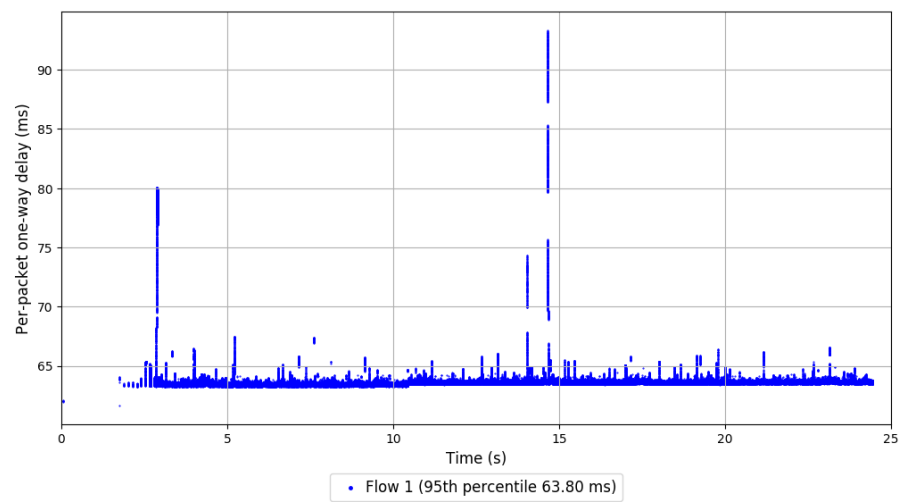
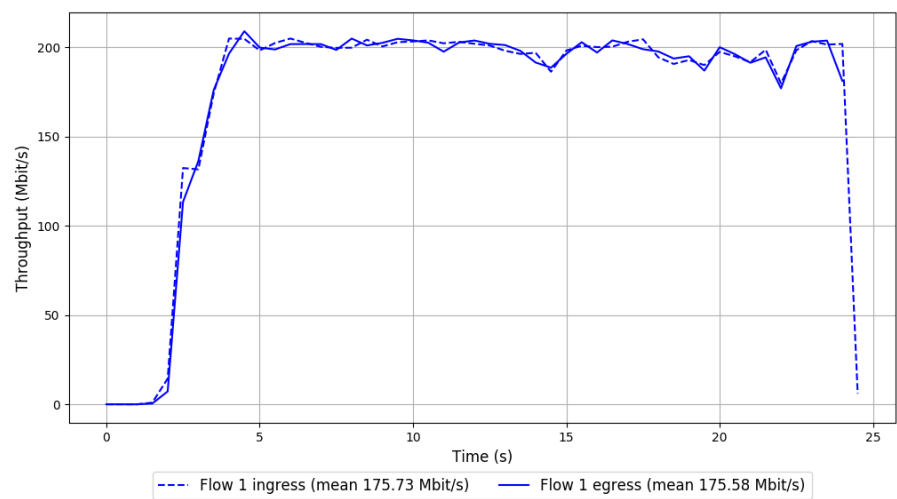
-- Flow 1:

Average throughput: 175.58 Mbit/s

95th percentile per-packet one-way delay: 63.798 ms

Loss rate: 0.60%

Run 9: Report of Indigo — Data Link



Run 10: Statistics of Indigo

Start at: 2017-12-20 08:59:46

End at: 2017-12-20 09:00:16

# Below is generated by plot.py at 2017-12-20 11:59:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 185.85 Mbit/s

95th percentile per-packet one-way delay: 63.744 ms

Loss rate: 0.42%

-- Flow 1:

Average throughput: 185.85 Mbit/s

95th percentile per-packet one-way delay: 63.744 ms

Loss rate: 0.42%

Run 10: Report of Indigo — Data Link

