

## Pantheon Report

Generated at 2019-04-24 08:06:48 (UTC).

Data path: GCE London on `ens4` (*remote*) → GCE Sydney on `ens4` (*local*).

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

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

### System info:

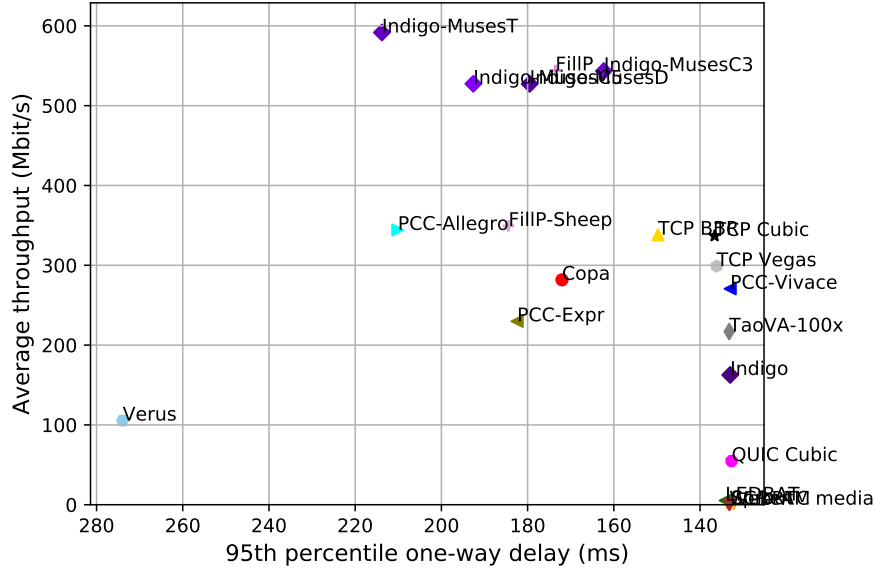
```
Linux 4.15.0-1028-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

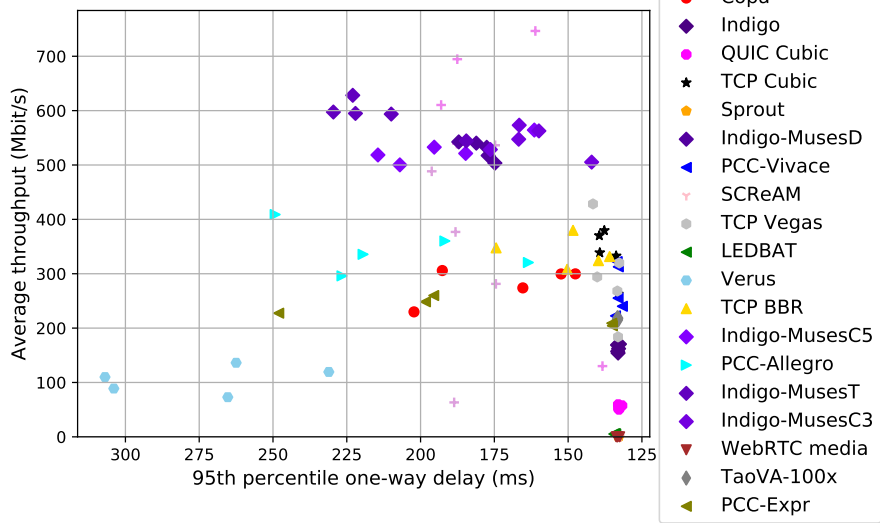
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
  M src/ScreamClient
  M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
```

third\_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from GCE London to GCE Sydney, 5 runs of 30s each per scheme  
(mean of all runs by scheme)



test from GCE London to GCE Sydney, 5 runs of 30s each per scheme



| scheme         | # runs | mean avg tput (Mbit/s) | mean 95th-%ile delay (ms) | mean loss rate (%) |
|----------------|--------|------------------------|---------------------------|--------------------|
|                |        | flow 1                 | flow 1                    | flow 1             |
| TCP BBR        | 5      | 338.28                 | 149.75                    | 1.33               |
| Copa           | 5      | 281.81                 | 172.03                    | 0.90               |
| TCP Cubic      | 5      | 336.78                 | 136.63                    | 1.02               |
| FillP          | 5      | 544.19                 | 173.55                    | 1.23               |
| FillP-Sheep    | 5      | 349.26                 | 184.44                    | 1.26               |
| Indigo         | 5      | 162.61                 | 133.01                    | 0.85               |
| Indigo-MusesC3 | 5      | 543.41                 | 162.32                    | 1.06               |
| Indigo-MusesC5 | 5      | 527.40                 | 192.60                    | 1.23               |
| Indigo-MusesD  | 5      | 527.22                 | 179.54                    | 1.09               |
| Indigo-MusesT  | 5      | 591.70                 | 213.80                    | 1.42               |
| LEDBAT         | 5      | 5.23                   | 134.16                    | 1.79               |
| PCC-Allegro    | 5      | 344.29                 | 210.11                    | 2.12               |
| PCC-Expr       | 5      | 229.81                 | 182.44                    | 2.00               |
| QUIC Cubic     | 5      | 54.76                  | 132.68                    | 1.33               |
| SReAM          | 5      | 0.16                   | 132.74                    | 0.83               |
| Sprout         | 5      | 0.65                   | 132.89                    | 0.93               |
| TaoVA-100x     | 5      | 216.95                 | 133.24                    | 0.92               |
| TCP Vegas      | 5      | 298.88                 | 136.17                    | 0.88               |
| Verus          | 5      | 105.47                 | 273.95                    | 8.08               |
| PCC-Vivace     | 5      | 270.56                 | 133.02                    | 1.03               |
| WebRTC media   | 4      | 0.05                   | 133.21                    | 0.00               |



Run 1: Statistics of TCP BBR

Start at: 2019-04-24 04:14:33

End at: 2019-04-24 04:15:03

Local clock offset: -0.533 ms

Remote clock offset: 0.084 ms

# Below is generated by plot.py at 2019-04-24 06:54:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 331.65 Mbit/s

95th percentile per-packet one-way delay: 135.945 ms

Loss rate: 1.03%

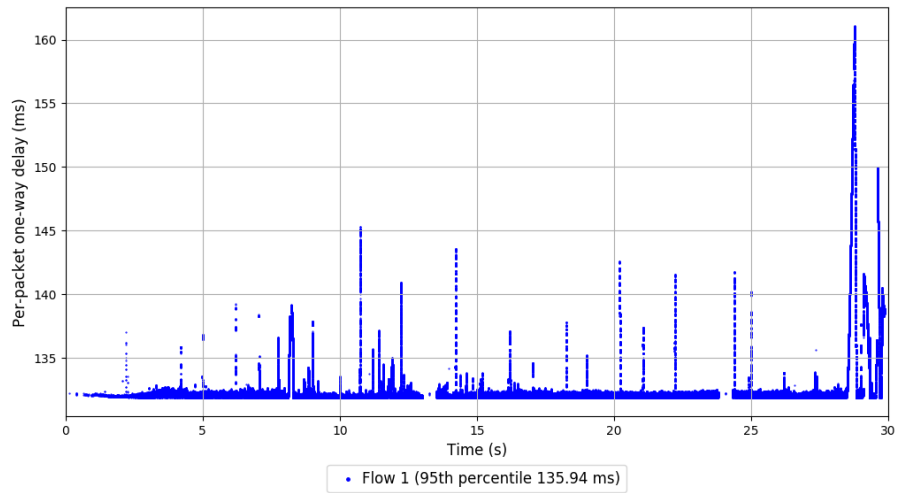
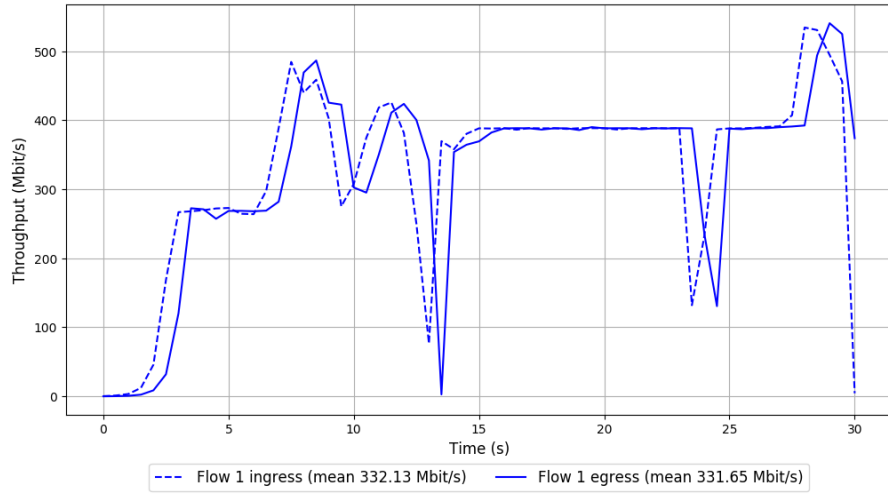
-- Flow 1:

Average throughput: 331.65 Mbit/s

95th percentile per-packet one-way delay: 135.945 ms

Loss rate: 1.03%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-04-24 04:45:27

End at: 2019-04-24 04:45:57

Local clock offset: -0.119 ms

Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2019-04-24 06:54:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 308.21 Mbit/s

95th percentile per-packet one-way delay: 150.331 ms

Loss rate: 1.37%

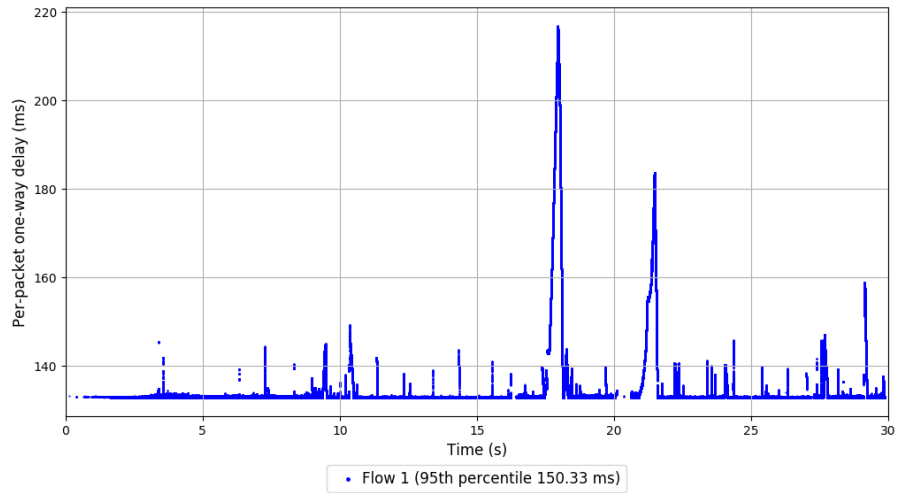
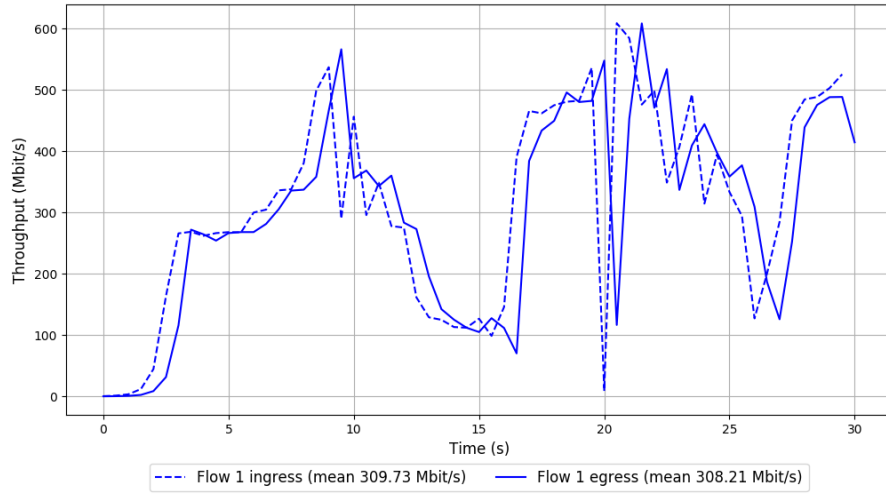
-- Flow 1:

Average throughput: 308.21 Mbit/s

95th percentile per-packet one-way delay: 150.331 ms

Loss rate: 1.37%

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

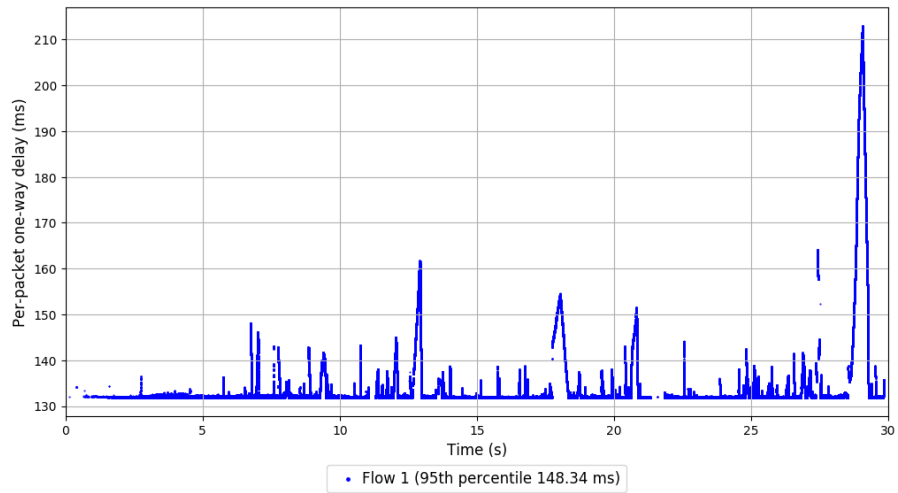
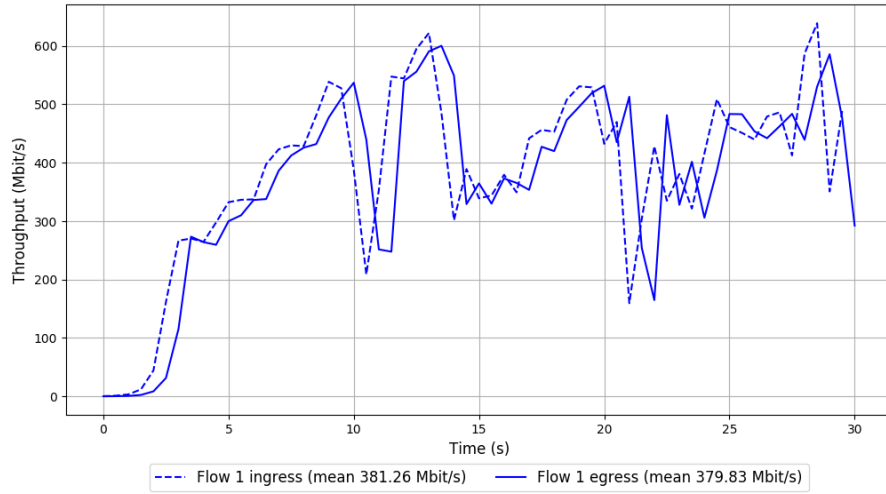


Run 3: Statistics of TCP BBR

Start at: 2019-04-24 05:16:39  
End at: 2019-04-24 05:17:09  
Local clock offset: -0.474 ms  
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2019-04-24 06:55:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 379.83 Mbit/s  
95th percentile per-packet one-way delay: 148.340 ms  
Loss rate: 1.26%  
-- Flow 1:  
Average throughput: 379.83 Mbit/s  
95th percentile per-packet one-way delay: 148.340 ms  
Loss rate: 1.26%

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



Run 4: Statistics of TCP BBR

Start at: 2019-04-24 05:47:40

End at: 2019-04-24 05:48:10

Local clock offset: 0.083 ms

Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2019-04-24 06:55:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 324.13 Mbit/s

95th percentile per-packet one-way delay: 139.727 ms

Loss rate: 1.25%

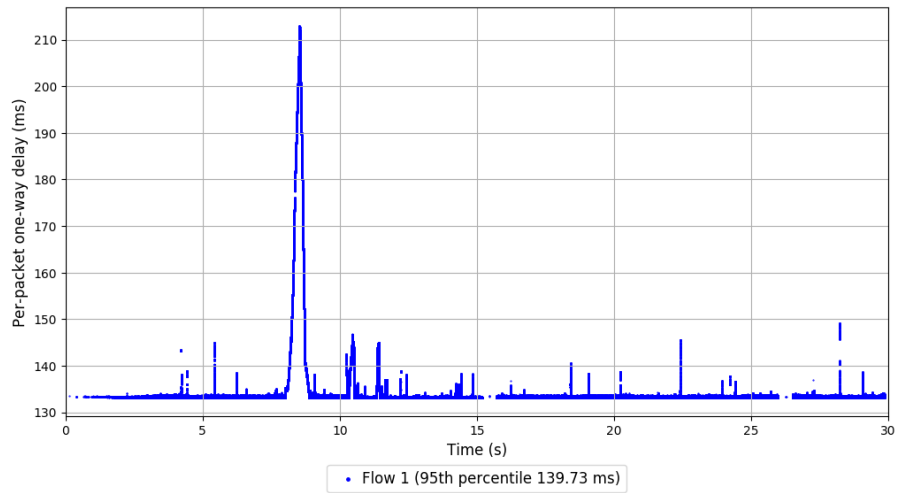
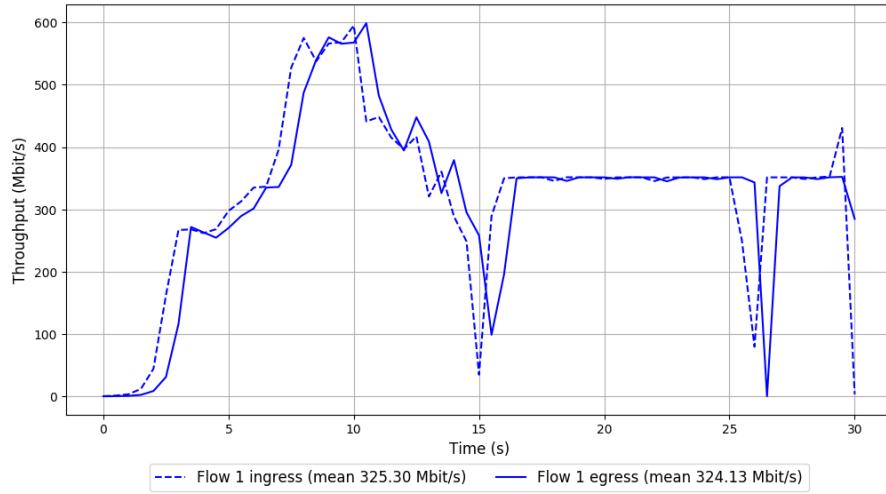
-- Flow 1:

Average throughput: 324.13 Mbit/s

95th percentile per-packet one-way delay: 139.727 ms

Loss rate: 1.25%

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





Run 5: Statistics of TCP BBR

Start at: 2019-04-24 06:19:11

End at: 2019-04-24 06:19:41

Local clock offset: -0.008 ms

Remote clock offset: 0.063 ms

# Below is generated by plot.py at 2019-04-24 06:55:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 347.59 Mbit/s

95th percentile per-packet one-way delay: 174.407 ms

Loss rate: 1.76%

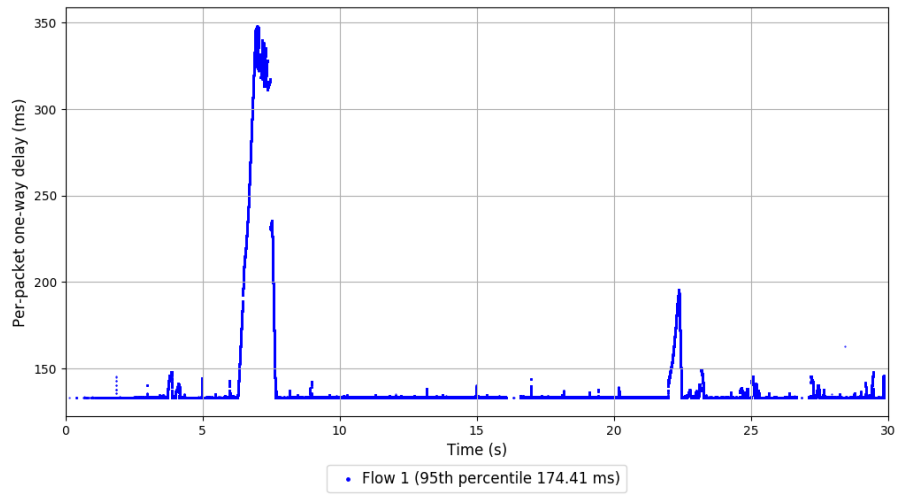
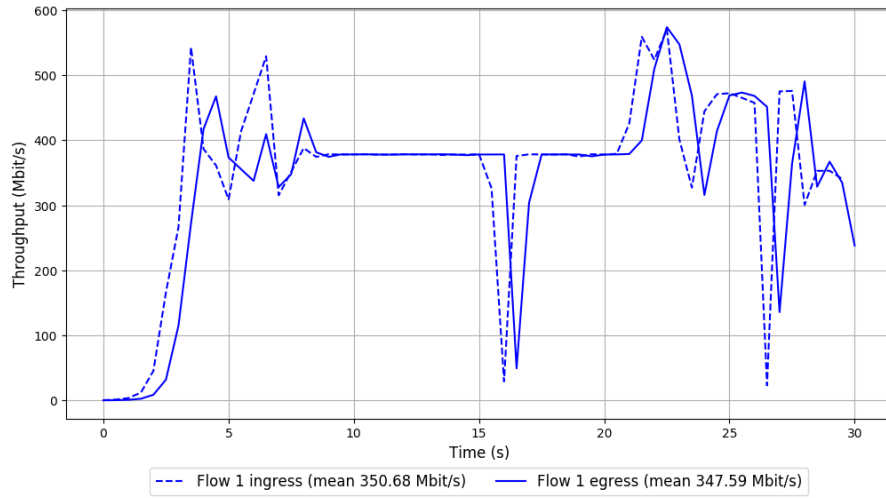
-- Flow 1:

Average throughput: 347.59 Mbit/s

95th percentile per-packet one-way delay: 174.407 ms

Loss rate: 1.76%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-04-24 04:20:41

End at: 2019-04-24 04:21:11

Local clock offset: 0.115 ms

Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2019-04-24 06:58:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 305.87 Mbit/s

95th percentile per-packet one-way delay: 192.630 ms

Loss rate: 0.98%

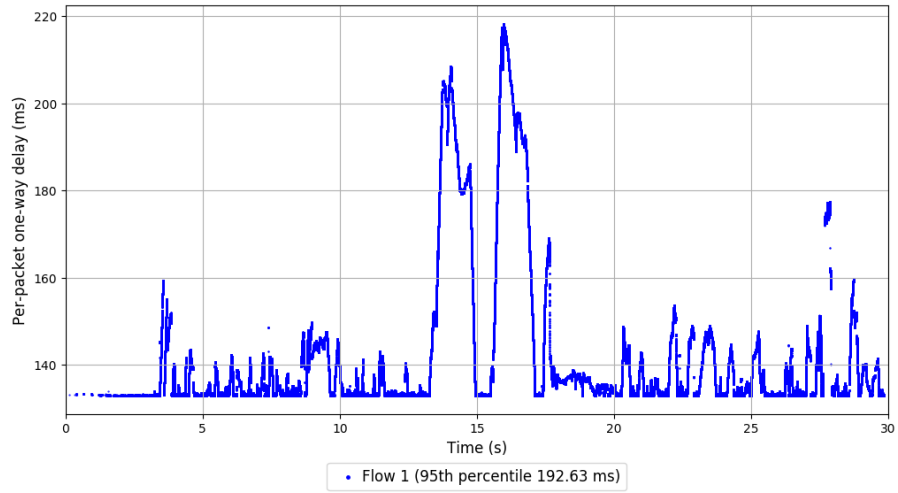
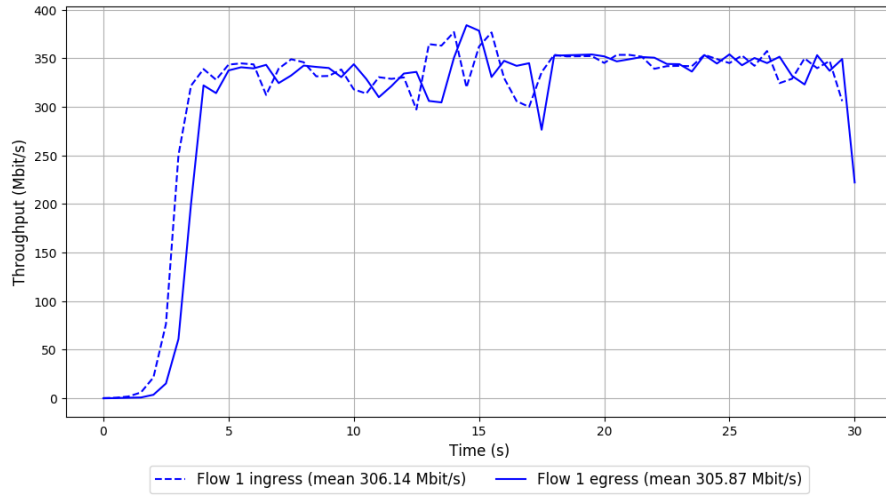
-- Flow 1:

Average throughput: 305.87 Mbit/s

95th percentile per-packet one-way delay: 192.630 ms

Loss rate: 0.98%

### Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

Start at: 2019-04-24 04:51:29

End at: 2019-04-24 04:51:59

Local clock offset: -0.347 ms

Remote clock offset: 0.015 ms

# Below is generated by plot.py at 2019-04-24 06:58:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 299.60 Mbit/s

95th percentile per-packet one-way delay: 152.382 ms

Loss rate: 1.02%

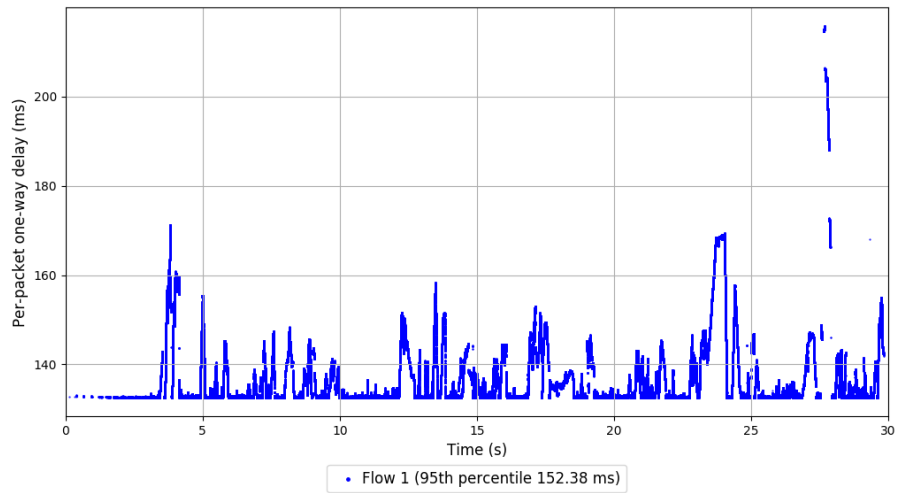
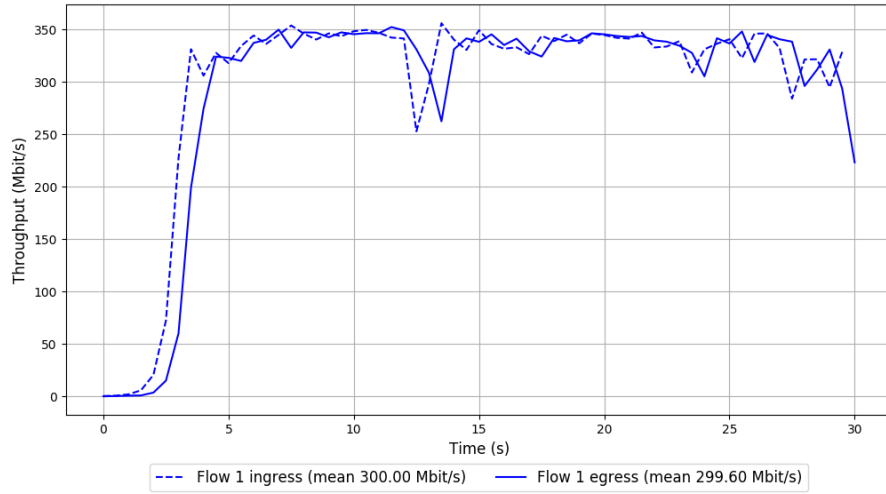
-- Flow 1:

Average throughput: 299.60 Mbit/s

95th percentile per-packet one-way delay: 152.382 ms

Loss rate: 1.02%

## Run 2: Report of Copa — Data Link

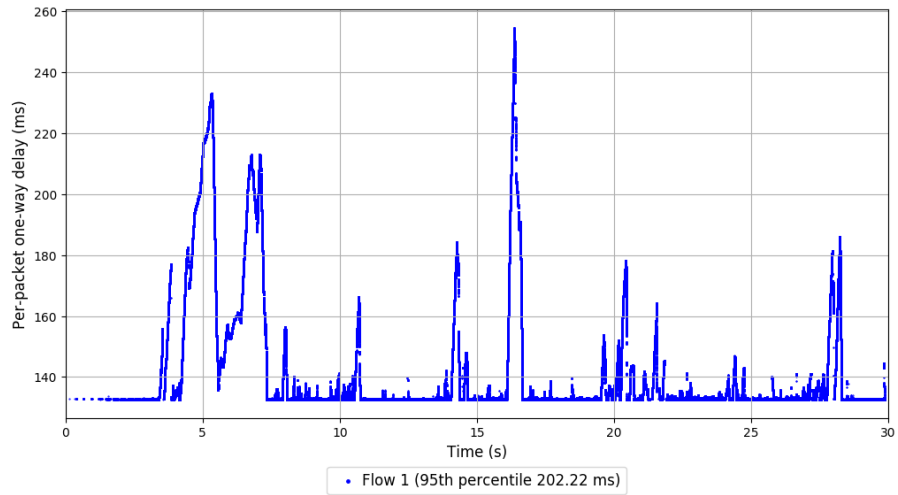
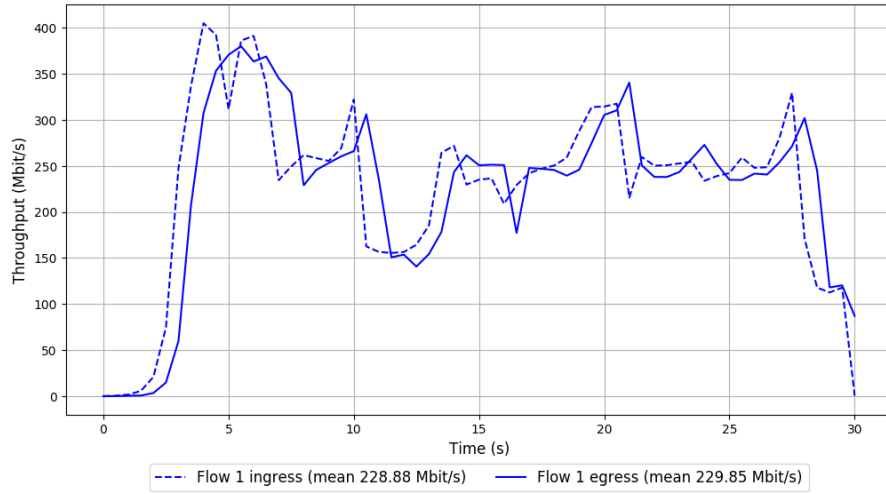


Run 3: Statistics of Copa

Start at: 2019-04-24 05:22:48  
End at: 2019-04-24 05:23:18  
Local clock offset: -0.134 ms  
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2019-04-24 06:58:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 229.85 Mbit/s  
95th percentile per-packet one-way delay: 202.223 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 229.85 Mbit/s  
95th percentile per-packet one-way delay: 202.223 ms  
Loss rate: 0.47%

### Run 3: Report of Copa — Data Link





Run 4: Statistics of Copa

Start at: 2019-04-24 05:53:57

End at: 2019-04-24 05:54:27

Local clock offset: -0.269 ms

Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2019-04-24 07:03:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 299.75 Mbit/s

95th percentile per-packet one-way delay: 147.549 ms

Loss rate: 1.02%

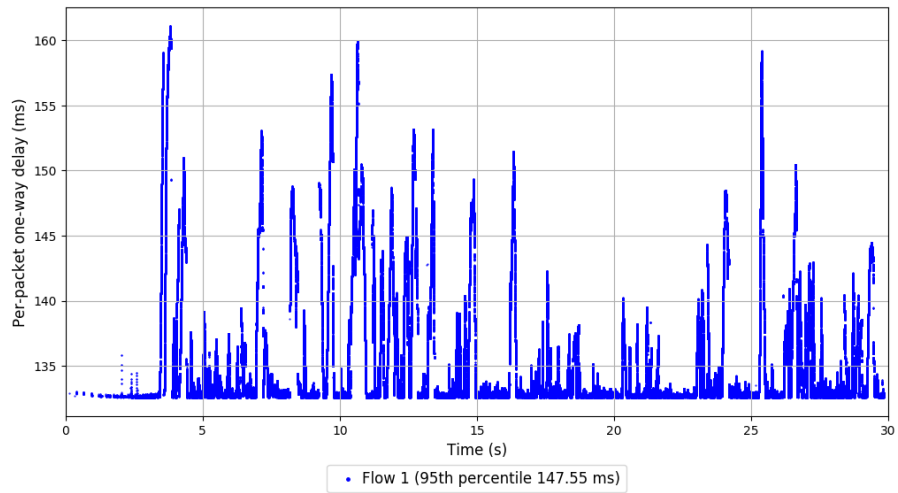
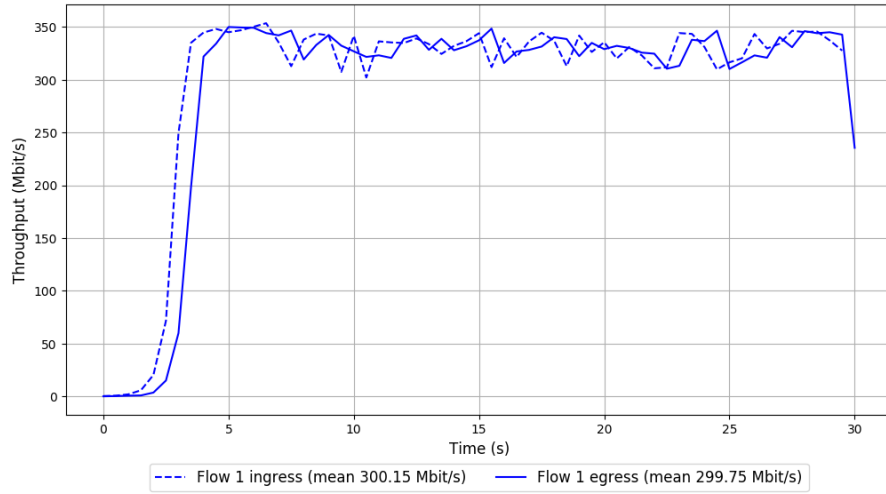
-- Flow 1:

Average throughput: 299.75 Mbit/s

95th percentile per-packet one-way delay: 147.549 ms

Loss rate: 1.02%

### Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-04-24 06:25:19

End at: 2019-04-24 06:25:49

Local clock offset: -0.1 ms

Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2019-04-24 07:03:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 273.97 Mbit/s

95th percentile per-packet one-way delay: 165.347 ms

Loss rate: 1.00%

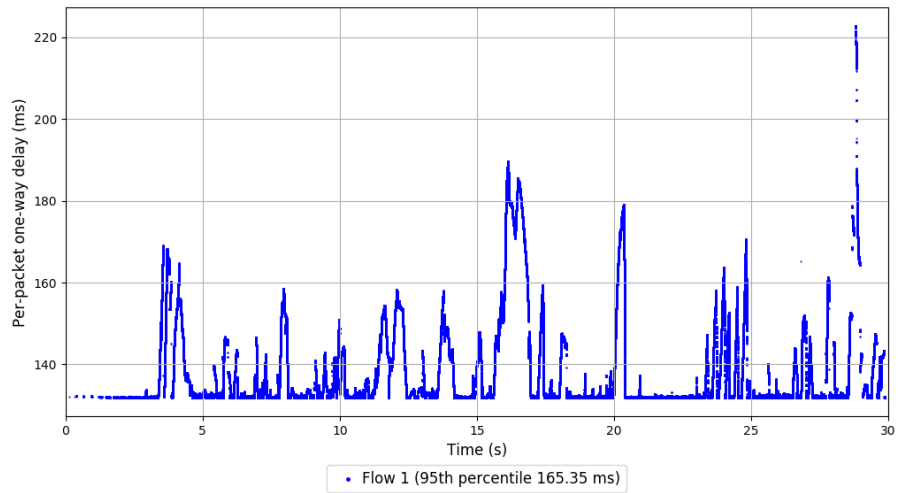
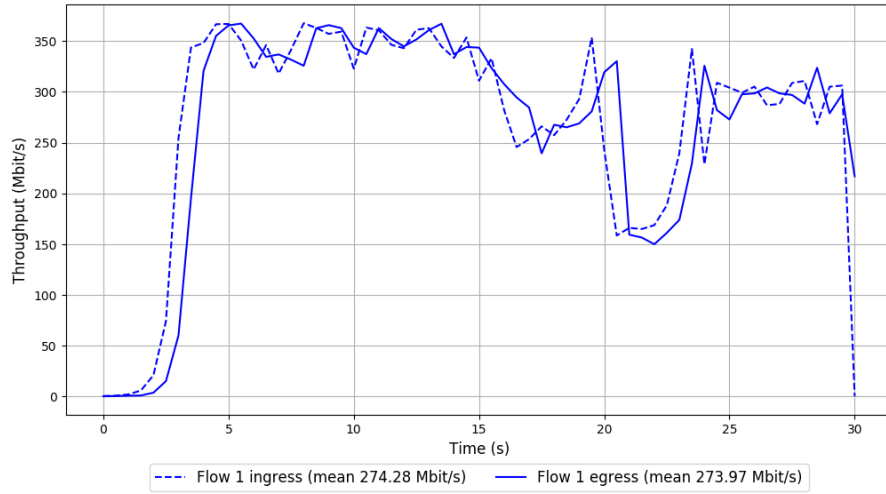
-- Flow 1:

Average throughput: 273.97 Mbit/s

95th percentile per-packet one-way delay: 165.347 ms

Loss rate: 1.00%

### Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-04-24 04:08:33

End at: 2019-04-24 04:09:03

Local clock offset: -0.11 ms

Remote clock offset: 0.084 ms

# Below is generated by plot.py at 2019-04-24 07:03:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 379.47 Mbit/s

95th percentile per-packet one-way delay: 137.730 ms

Loss rate: 1.07%

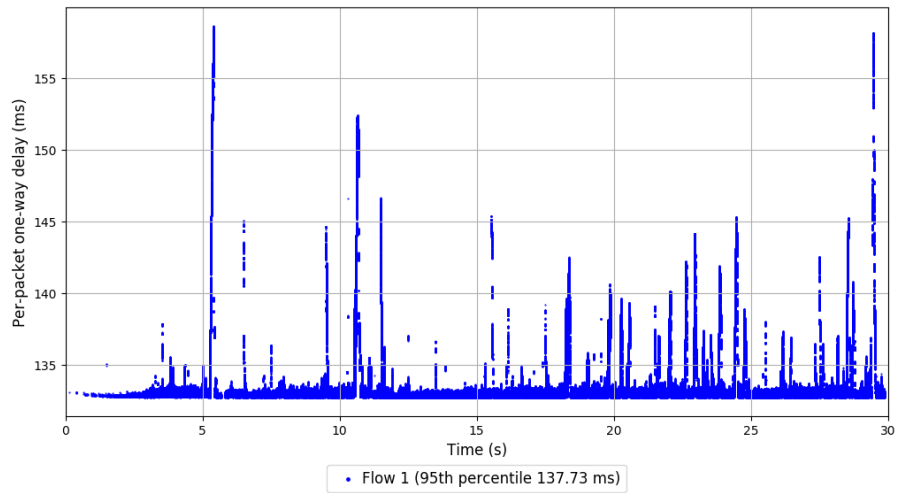
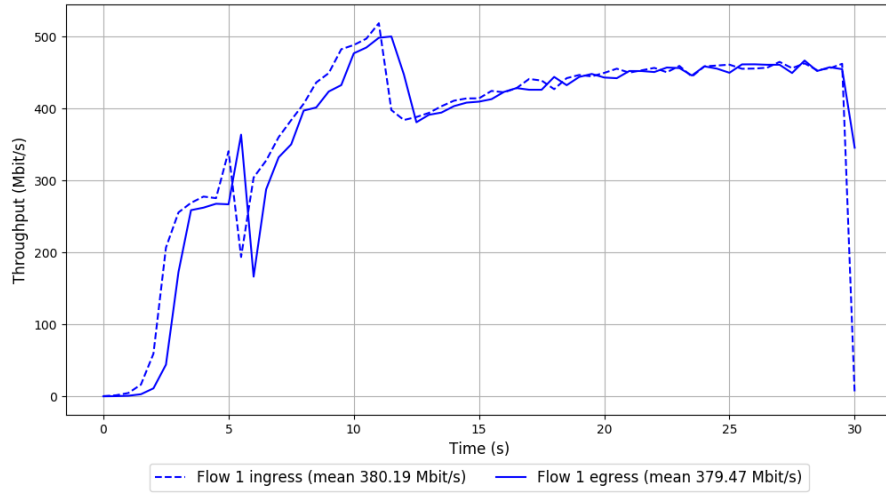
-- Flow 1:

Average throughput: 379.47 Mbit/s

95th percentile per-packet one-way delay: 137.730 ms

Loss rate: 1.07%

### Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-04-24 04:39:51

End at: 2019-04-24 04:40:21

Local clock offset: 0.144 ms

Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2019-04-24 07:03:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 338.72 Mbit/s

95th percentile per-packet one-way delay: 139.274 ms

Loss rate: 1.25%

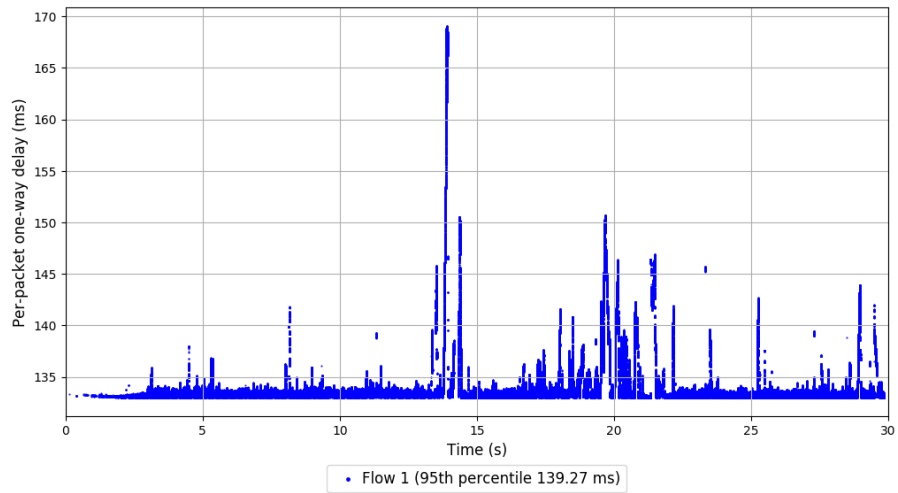
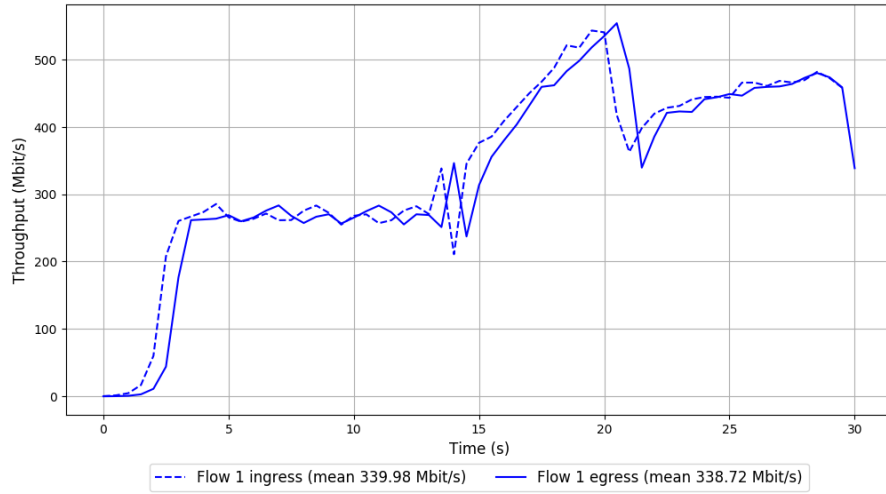
-- Flow 1:

Average throughput: 338.72 Mbit/s

95th percentile per-packet one-way delay: 139.274 ms

Loss rate: 1.25%

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



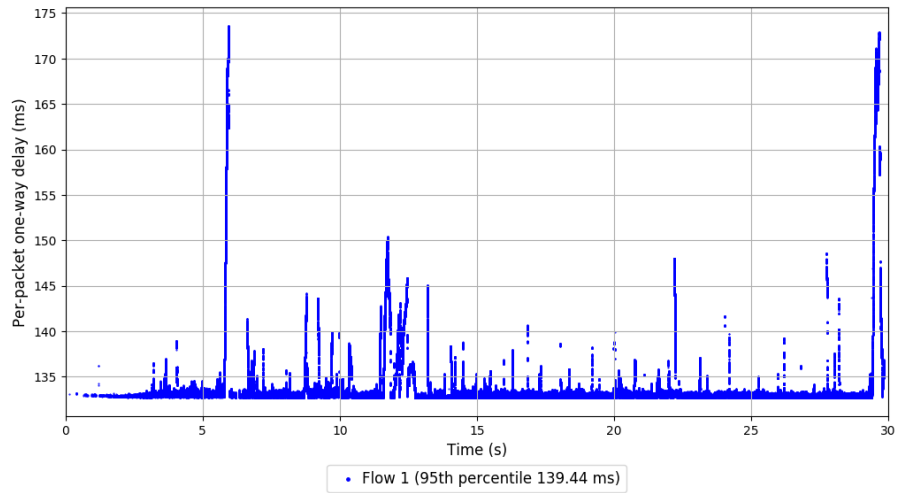
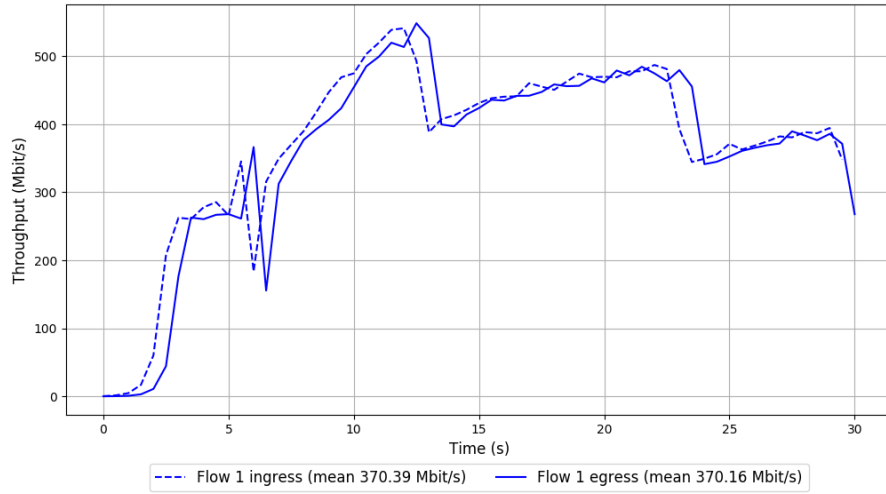


Run 3: Statistics of TCP Cubic

Start at: 2019-04-24 05:10:32  
End at: 2019-04-24 05:11:02  
Local clock offset: -0.066 ms  
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2019-04-24 07:03:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 370.16 Mbit/s  
95th percentile per-packet one-way delay: 139.438 ms  
Loss rate: 0.95%  
-- Flow 1:  
Average throughput: 370.16 Mbit/s  
95th percentile per-packet one-way delay: 139.438 ms  
Loss rate: 0.95%

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

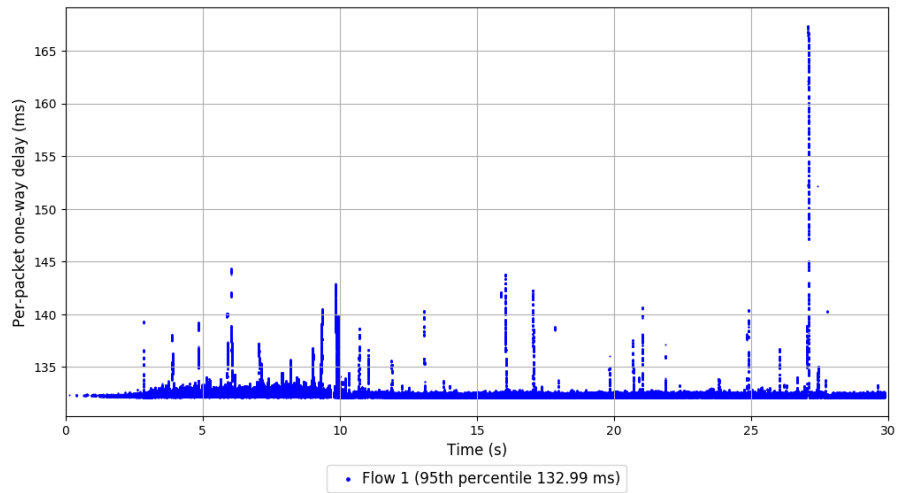
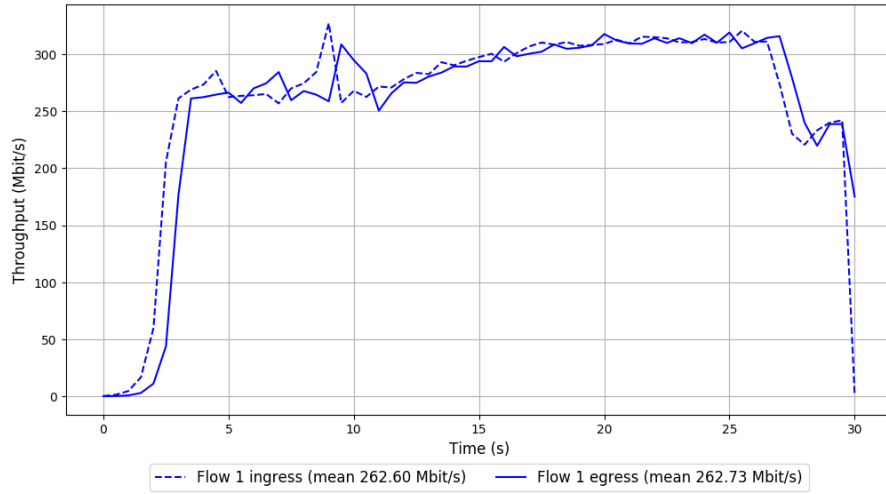


Run 4: Statistics of TCP Cubic

Start at: 2019-04-24 05:41:38  
End at: 2019-04-24 05:42:08  
Local clock offset: -0.204 ms  
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2019-04-24 07:03:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 262.73 Mbit/s  
95th percentile per-packet one-way delay: 132.991 ms  
Loss rate: 0.84%  
-- Flow 1:  
Average throughput: 262.73 Mbit/s  
95th percentile per-packet one-way delay: 132.991 ms  
Loss rate: 0.84%

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



Run 5: Statistics of TCP Cubic

Start at: 2019-04-24 06:13:03

End at: 2019-04-24 06:13:33

Local clock offset: 0.25 ms

Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2019-04-24 07:04:25

# Datalink statistics

-- Total of 1 flow:

Average throughput: 332.80 Mbit/s

95th percentile per-packet one-way delay: 133.732 ms

Loss rate: 0.97%

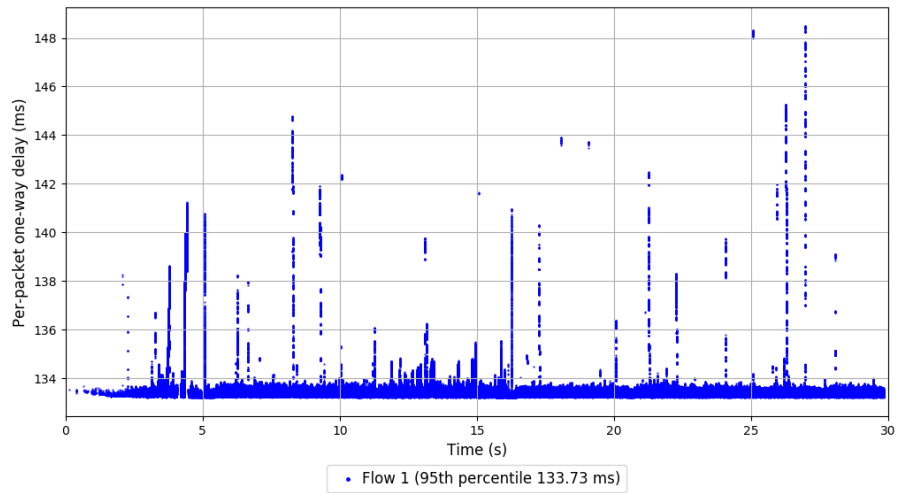
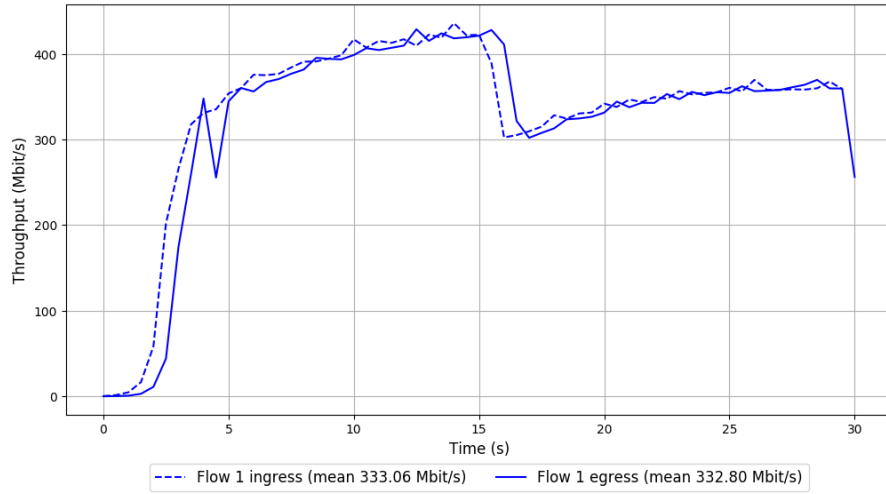
-- Flow 1:

Average throughput: 332.80 Mbit/s

95th percentile per-packet one-way delay: 133.732 ms

Loss rate: 0.97%

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



Run 1: Statistics of FillP

Start at: 2019-04-24 04:12:57

End at: 2019-04-24 04:13:27

Local clock offset: -0.03 ms

Remote clock offset: 0.122 ms

# Below is generated by plot.py at 2019-04-24 07:09:55

# Datalink statistics

-- Total of 1 flow:

Average throughput: 539.38 Mbit/s

95th percentile per-packet one-way delay: 187.704 ms

Loss rate: 0.66%

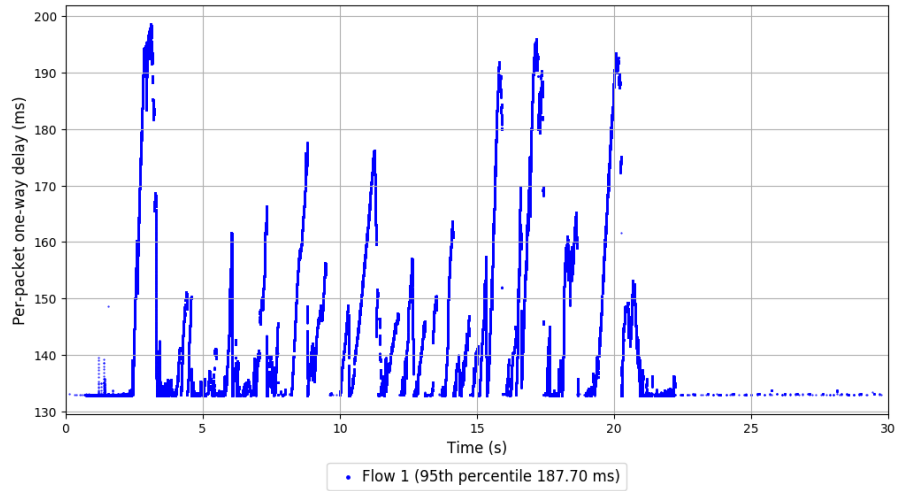
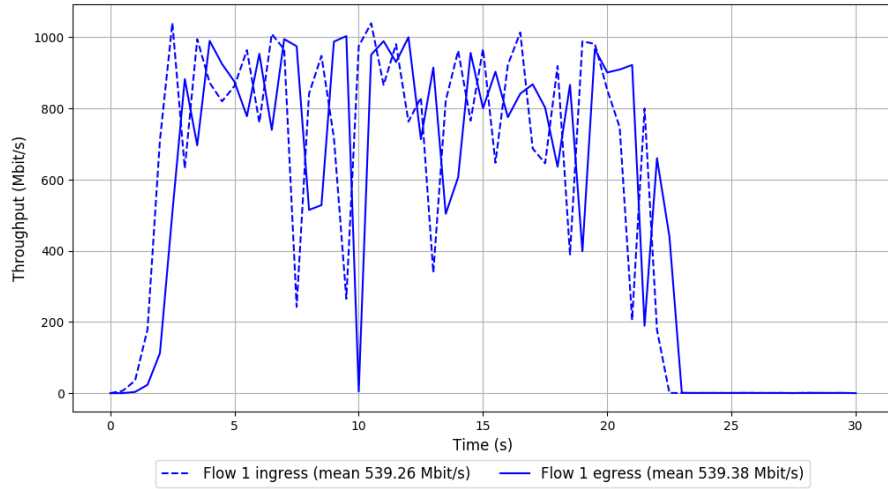
-- Flow 1:

Average throughput: 539.38 Mbit/s

95th percentile per-packet one-way delay: 187.704 ms

Loss rate: 0.66%

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





Run 2: Statistics of FillP

Start at: 2019-04-24 04:44:10

End at: 2019-04-24 04:44:40

Local clock offset: -0.274 ms

Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2019-04-24 07:09:55

# Datalink statistics

-- Total of 1 flow:

Average throughput: 130.09 Mbit/s

95th percentile per-packet one-way delay: 138.365 ms

Loss rate: 0.01%

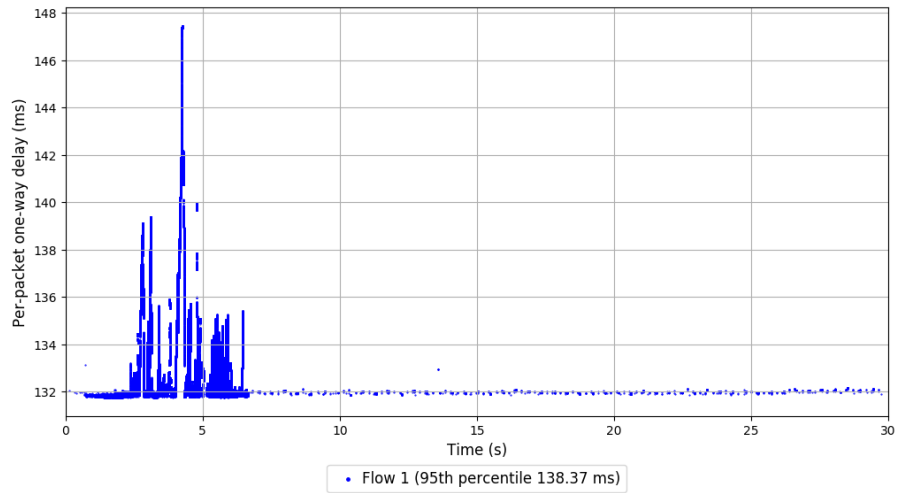
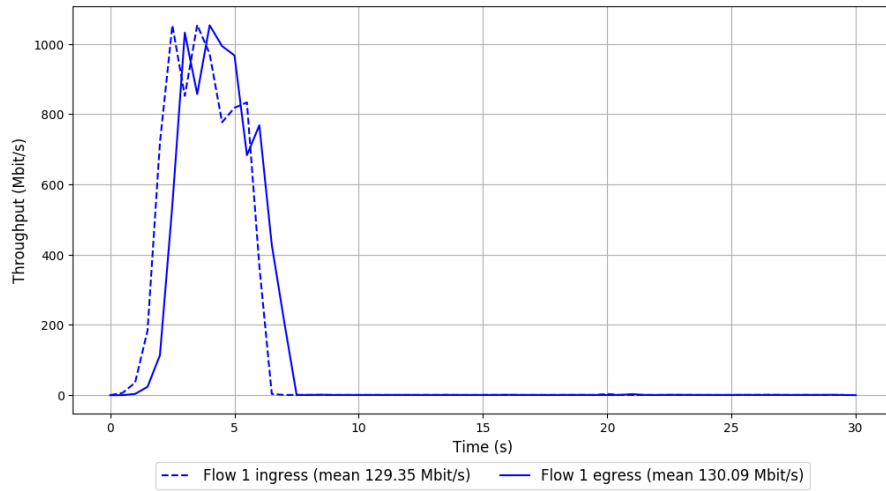
-- Flow 1:

Average throughput: 130.09 Mbit/s

95th percentile per-packet one-way delay: 138.365 ms

Loss rate: 0.01%

## Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-04-24 05:14:58

End at: 2019-04-24 05:15:28

Local clock offset: 0.351 ms

Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2019-04-24 07:14:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 610.37 Mbit/s

95th percentile per-packet one-way delay: 193.031 ms

Loss rate: 1.96%

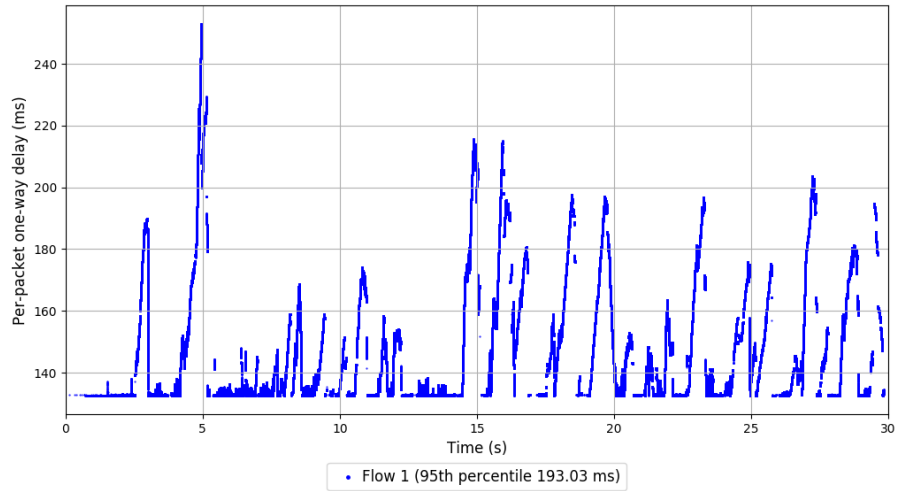
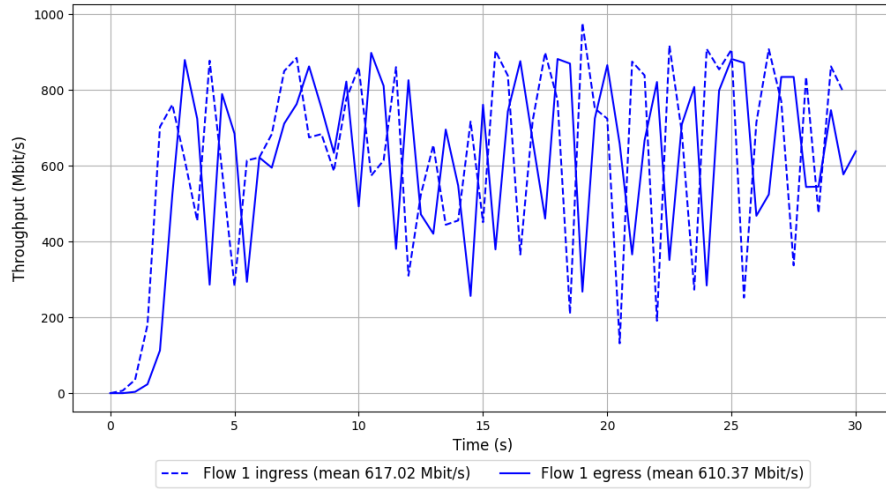
-- Flow 1:

Average throughput: 610.37 Mbit/s

95th percentile per-packet one-way delay: 193.031 ms

Loss rate: 1.96%

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

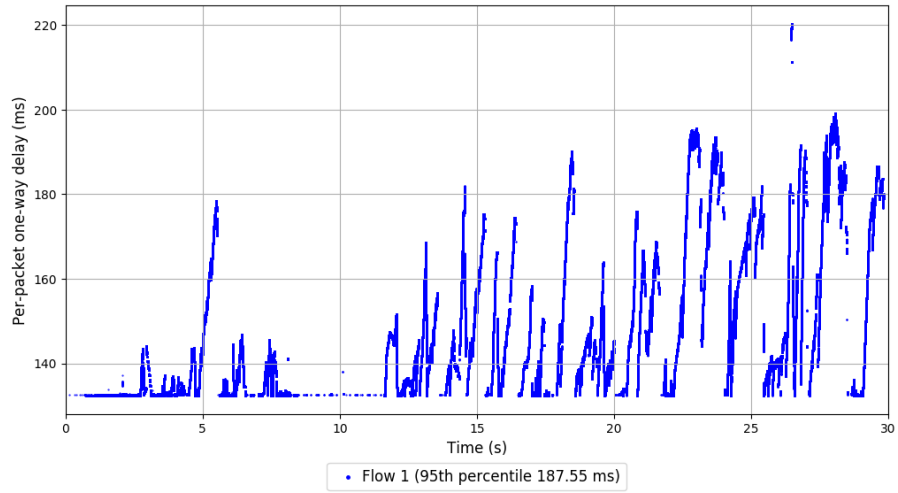
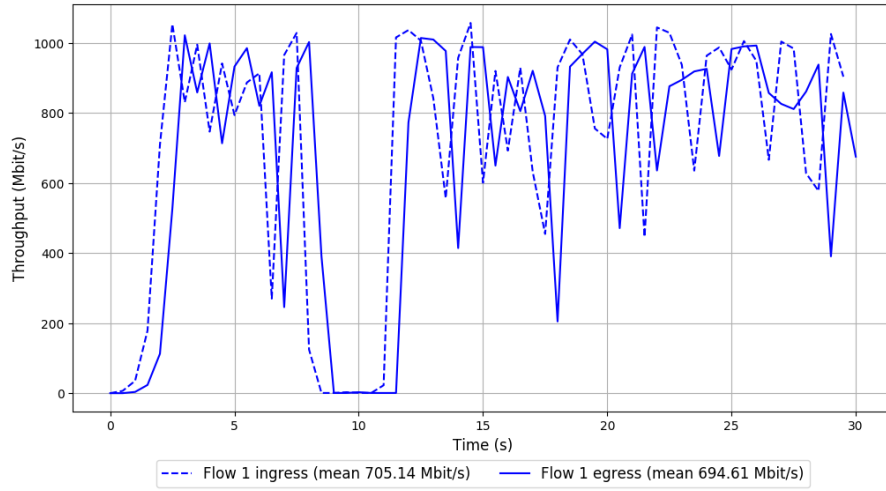


Run 4: Statistics of FillP

Start at: 2019-04-24 05:45:56  
End at: 2019-04-24 05:46:26  
Local clock offset: -0.413 ms  
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-04-24 07:16:00  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 694.61 Mbit/s  
95th percentile per-packet one-way delay: 187.552 ms  
Loss rate: 2.29%  
-- Flow 1:  
Average throughput: 694.61 Mbit/s  
95th percentile per-packet one-way delay: 187.552 ms  
Loss rate: 2.29%

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



Run 5: Statistics of FillP

Start at: 2019-04-24 06:17:25

End at: 2019-04-24 06:17:55

Local clock offset: -0.437 ms

Remote clock offset: 0.108 ms

# Below is generated by plot.py at 2019-04-24 07:18:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 746.52 Mbit/s

95th percentile per-packet one-way delay: 161.103 ms

Loss rate: 1.25%

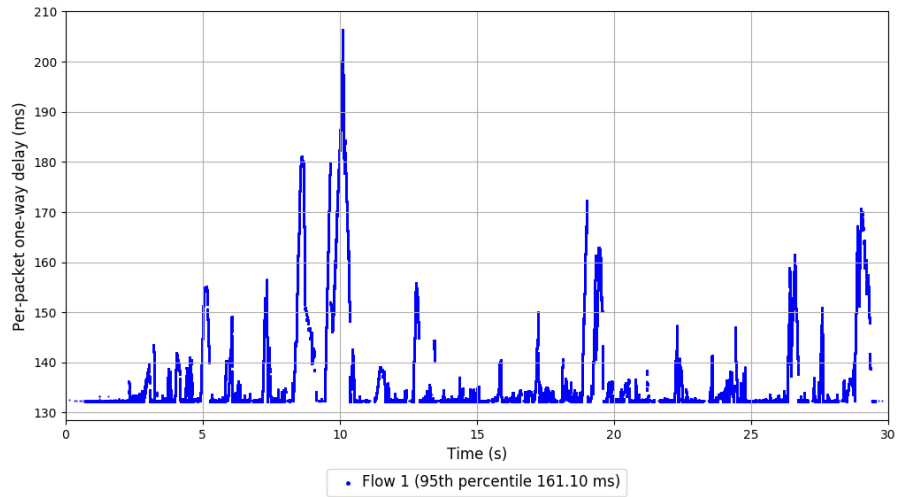
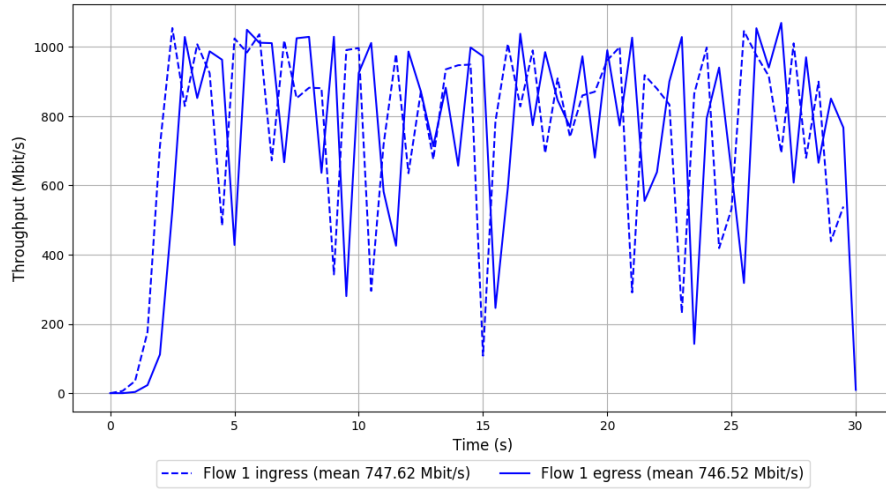
-- Flow 1:

Average throughput: 746.52 Mbit/s

95th percentile per-packet one-way delay: 161.103 ms

Loss rate: 1.25%

Run 5: Report of FillP — Data Link





Run 1: Statistics of FillP-Sheep

Start at: 2019-04-24 04:06:08

End at: 2019-04-24 04:06:38

Local clock offset: -0.379 ms

Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2019-04-24 07:18:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 63.32 Mbit/s

95th percentile per-packet one-way delay: 188.616 ms

Loss rate: 1.12%

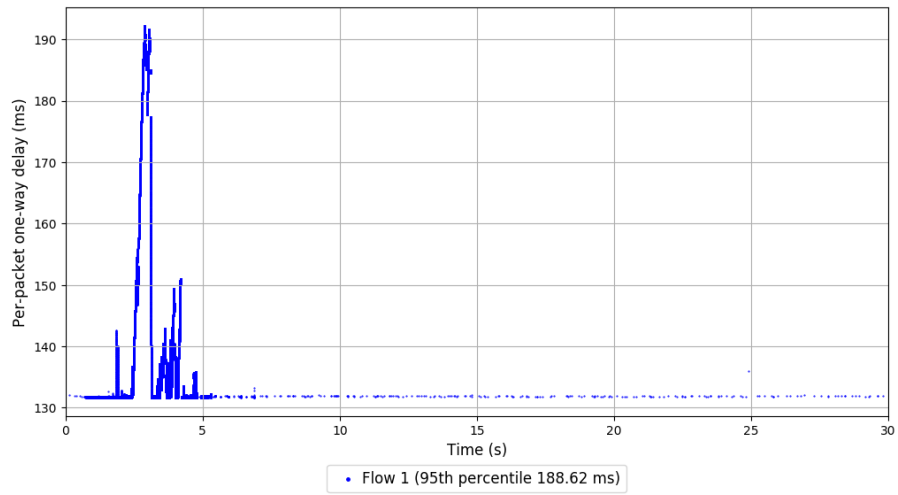
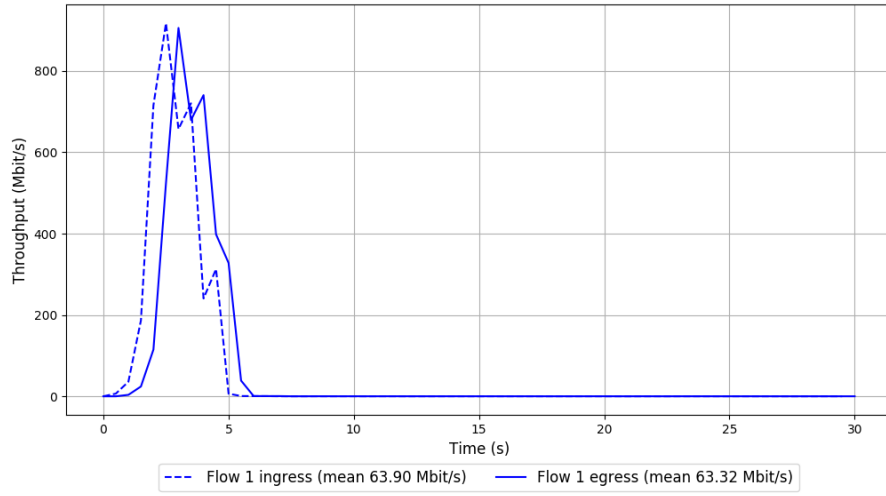
-- Flow 1:

Average throughput: 63.32 Mbit/s

95th percentile per-packet one-way delay: 188.616 ms

Loss rate: 1.12%

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



Run 2: Statistics of FillP-Sheep

Start at: 2019-04-24 04:37:07

End at: 2019-04-24 04:37:37

Local clock offset: 0.107 ms

Remote clock offset: 0.08 ms

# Below is generated by plot.py at 2019-04-24 07:18:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 488.39 Mbit/s

95th percentile per-packet one-way delay: 196.212 ms

Loss rate: 1.52%

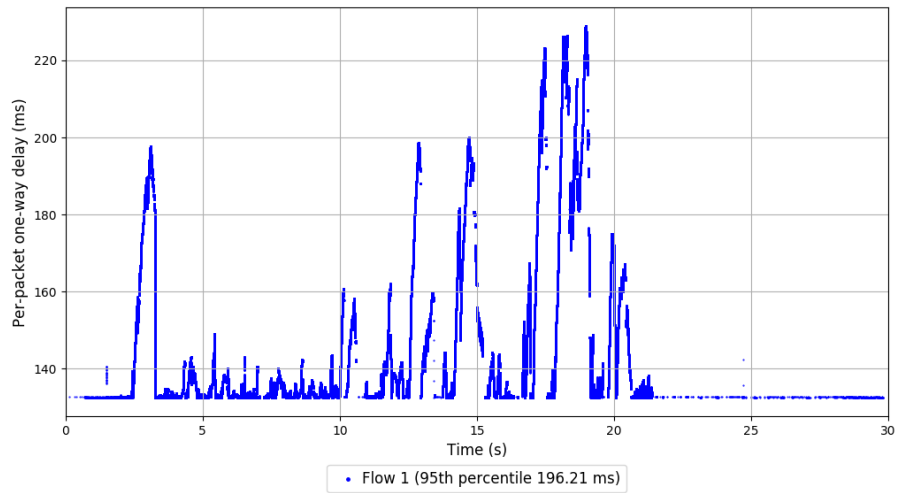
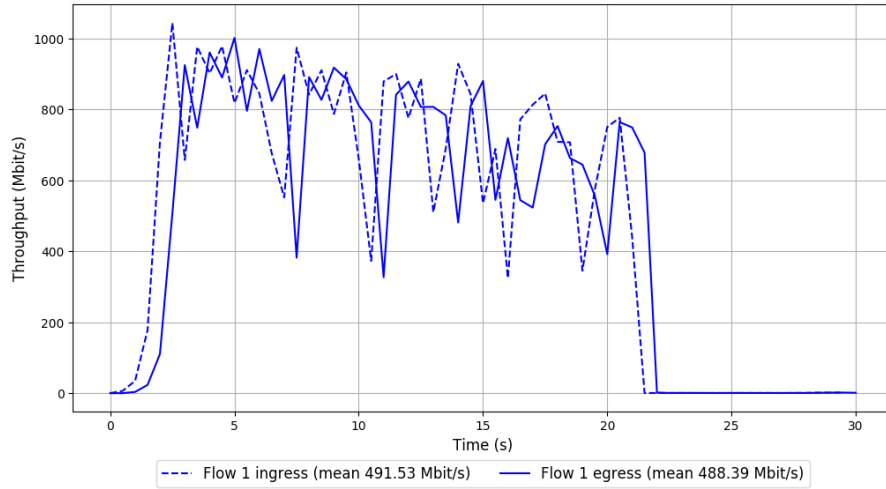
-- Flow 1:

Average throughput: 488.39 Mbit/s

95th percentile per-packet one-way delay: 196.212 ms

Loss rate: 1.52%

## Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-04-24 05:07:47

End at: 2019-04-24 05:08:17

Local clock offset: -0.037 ms

Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2019-04-24 07:18:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 536.32 Mbit/s

95th percentile per-packet one-way delay: 174.725 ms

Loss rate: 0.10%

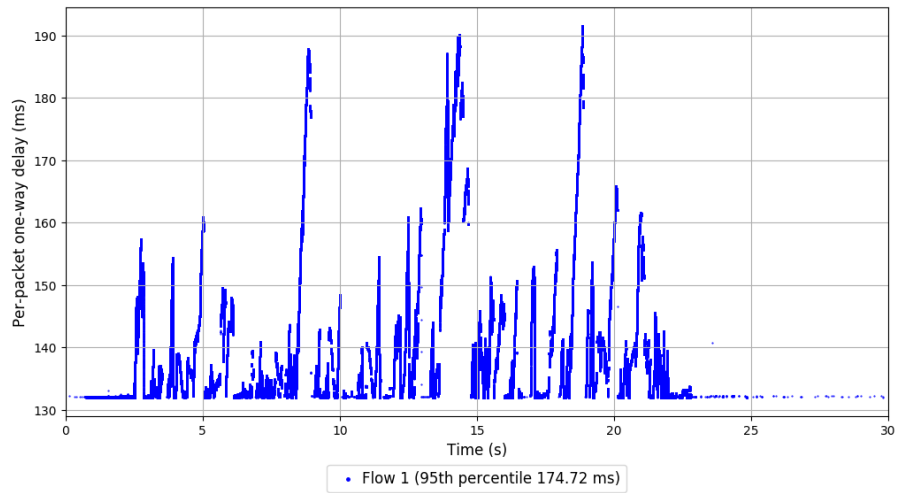
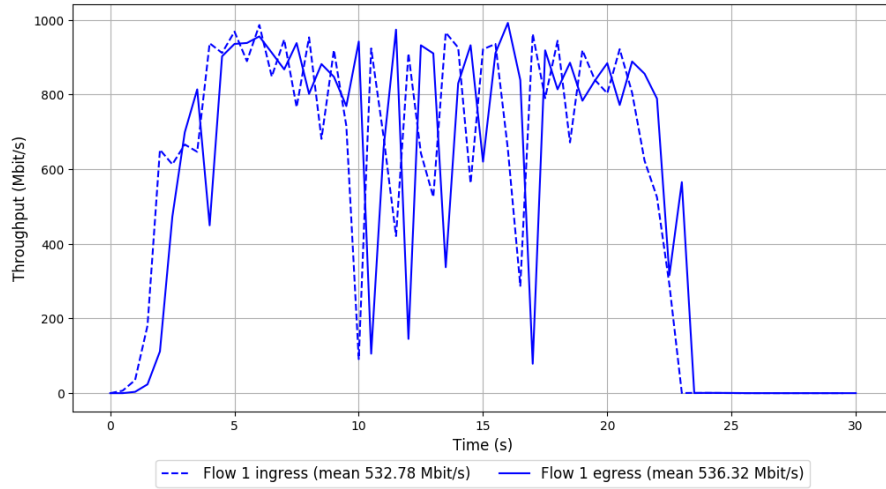
-- Flow 1:

Average throughput: 536.32 Mbit/s

95th percentile per-packet one-way delay: 174.725 ms

Loss rate: 0.10%

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



Run 4: Statistics of FillP-Sheep

Start at: 2019-04-24 05:39:03

End at: 2019-04-24 05:39:33

Local clock offset: 0.192 ms

Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2019-04-24 07:18:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 281.36 Mbit/s

95th percentile per-packet one-way delay: 174.468 ms

Loss rate: 2.79%

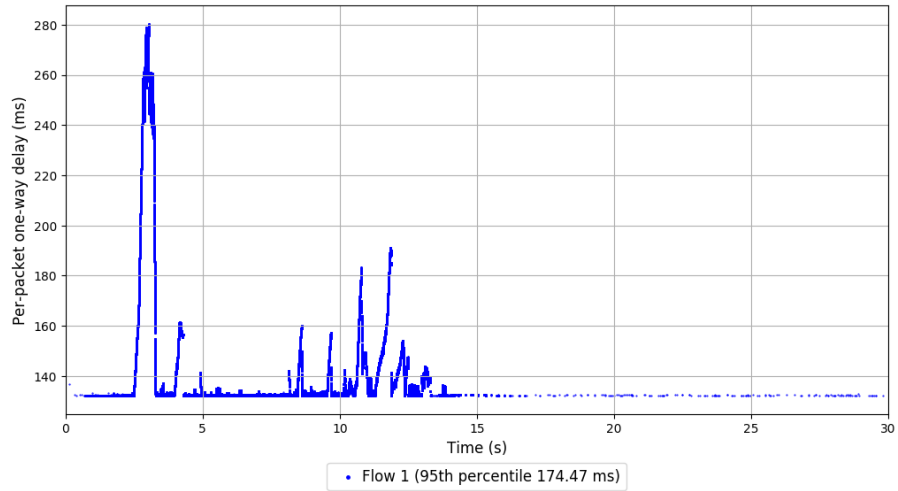
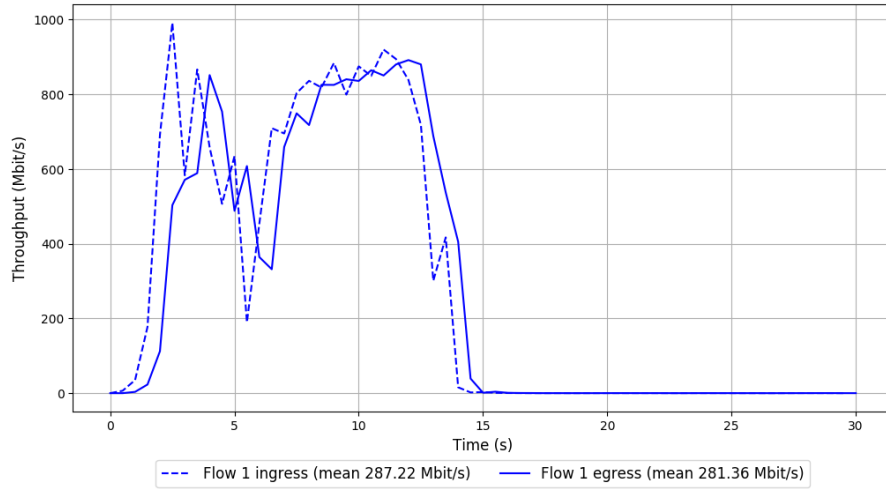
-- Flow 1:

Average throughput: 281.36 Mbit/s

95th percentile per-packet one-way delay: 174.468 ms

Loss rate: 2.79%

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





Run 5: Statistics of FillP-Sheep

Start at: 2019-04-24 06:10:23

End at: 2019-04-24 06:10:53

Local clock offset: -0.048 ms

Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2019-04-24 07:18:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 376.89 Mbit/s

95th percentile per-packet one-way delay: 188.155 ms

Loss rate: 0.76%

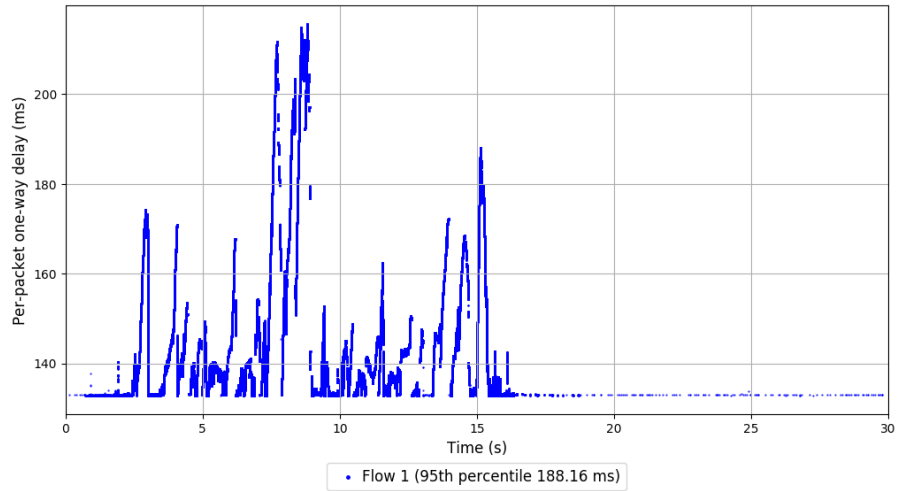
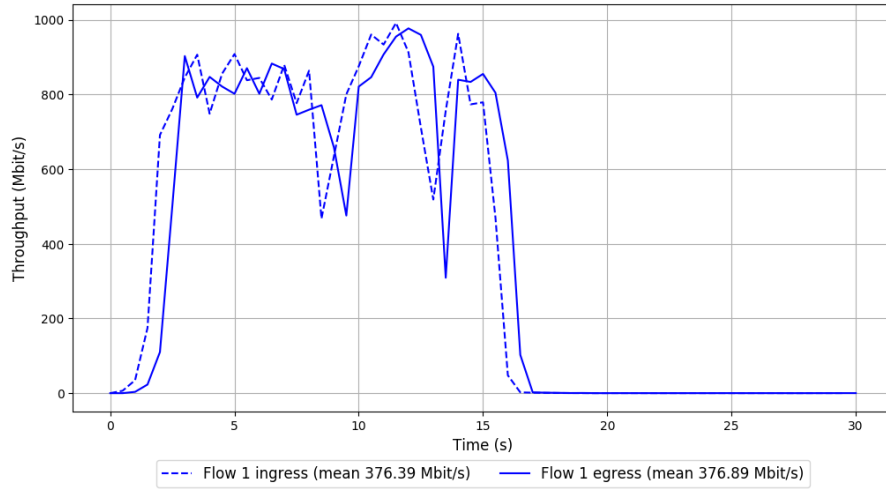
-- Flow 1:

Average throughput: 376.89 Mbit/s

95th percentile per-packet one-way delay: 188.155 ms

Loss rate: 0.76%

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



Run 1: Statistics of Indigo

Start at: 2019-04-24 04:10:06

End at: 2019-04-24 04:10:36

Local clock offset: 0.029 ms

Remote clock offset: 0.08 ms

# Below is generated by plot.py at 2019-04-24 07:18:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 157.24 Mbit/s

95th percentile per-packet one-way delay: 133.225 ms

Loss rate: 0.89%

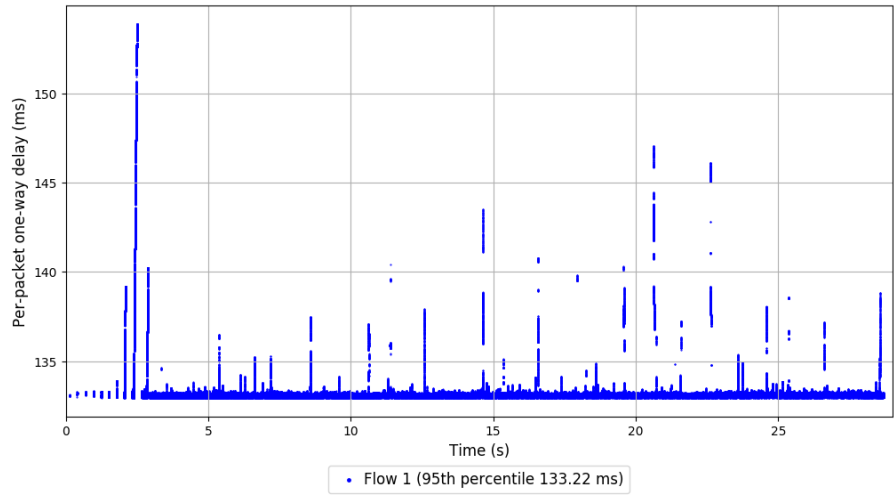
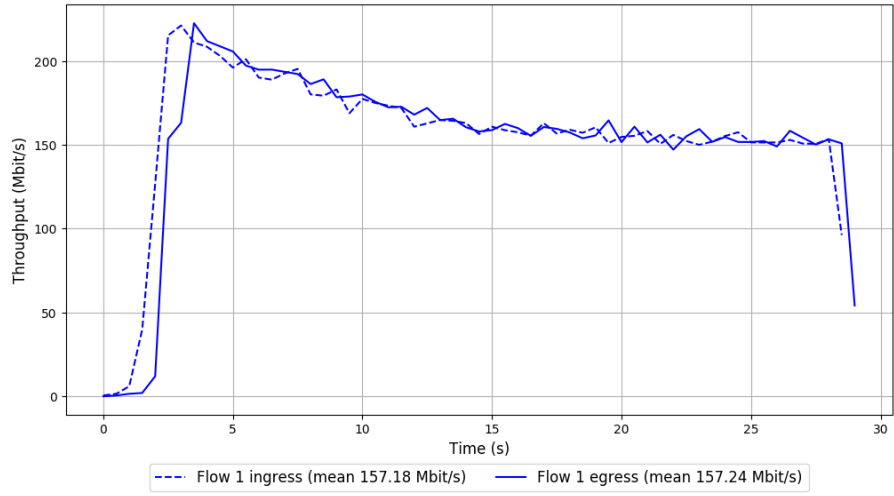
-- Flow 1:

Average throughput: 157.24 Mbit/s

95th percentile per-packet one-way delay: 133.225 ms

Loss rate: 0.89%

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



Run 2: Statistics of Indigo

Start at: 2019-04-24 04:41:22

End at: 2019-04-24 04:41:52

Local clock offset: 0.061 ms

Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2019-04-24 07:18:00

# Datalink statistics

-- Total of 1 flow:

Average throughput: 168.96 Mbit/s

95th percentile per-packet one-way delay: 133.278 ms

Loss rate: 0.82%

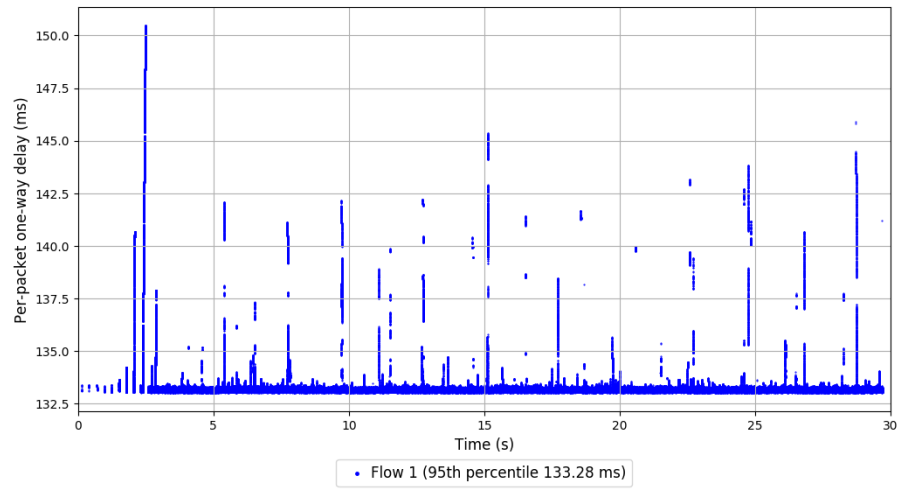
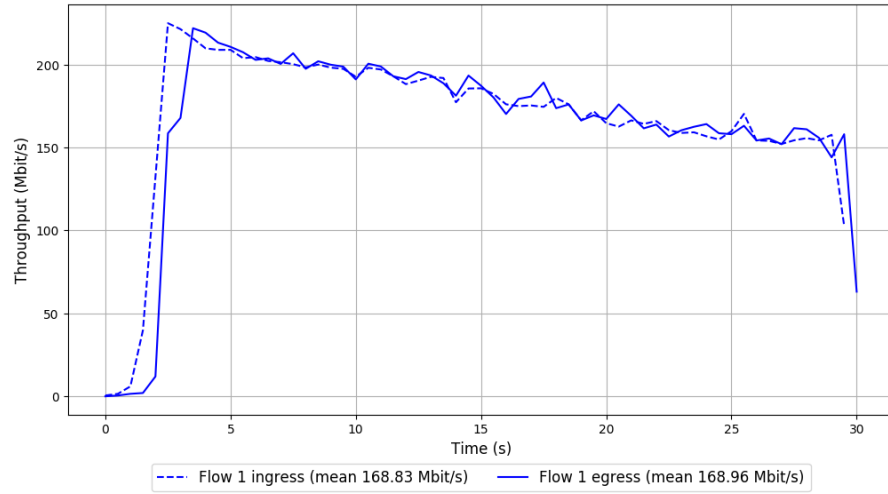
-- Flow 1:

Average throughput: 168.96 Mbit/s

95th percentile per-packet one-way delay: 133.278 ms

Loss rate: 0.82%

## Run 2: Report of Indigo — Data Link

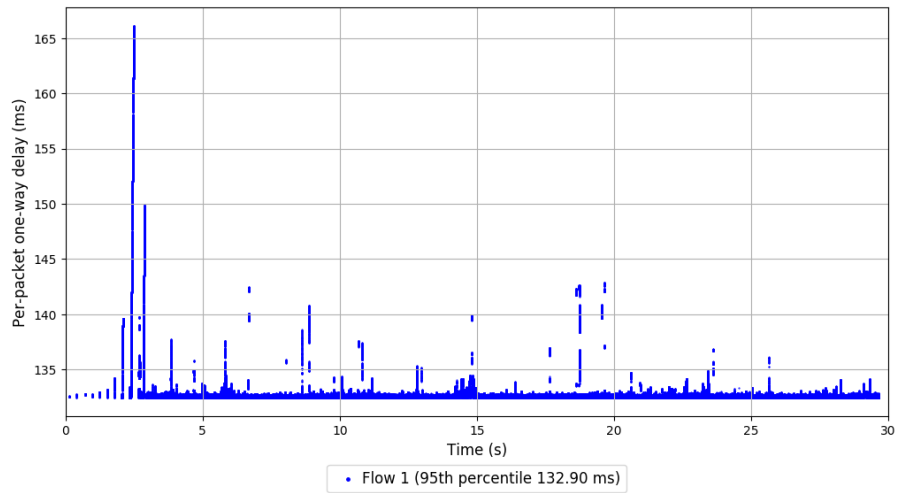
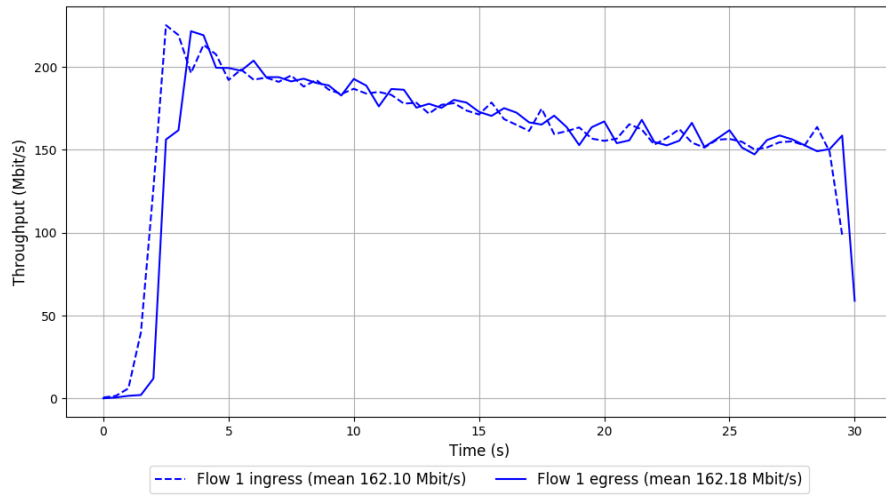


Run 3: Statistics of Indigo

Start at: 2019-04-24 05:12:04  
End at: 2019-04-24 05:12:35  
Local clock offset: -0.293 ms  
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2019-04-24 07:18:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 162.18 Mbit/s  
95th percentile per-packet one-way delay: 132.898 ms  
Loss rate: 0.85%  
-- Flow 1:  
Average throughput: 162.18 Mbit/s  
95th percentile per-packet one-way delay: 132.898 ms  
Loss rate: 0.85%

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



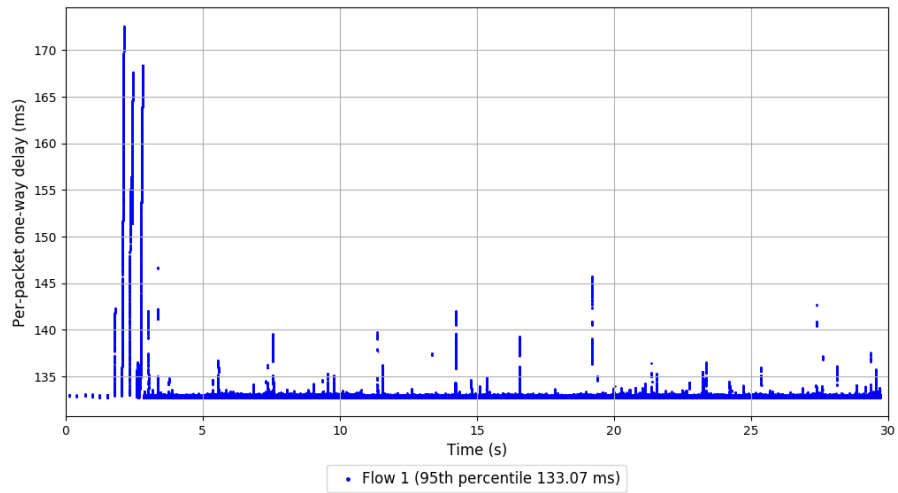
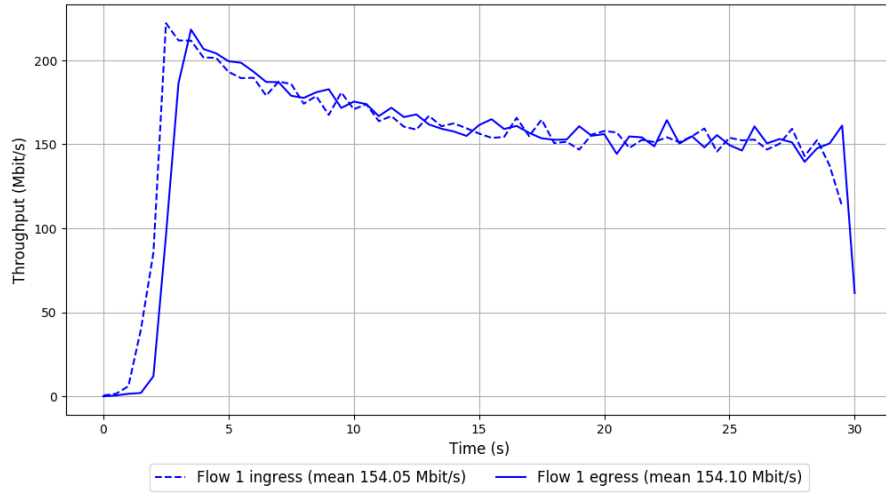


Run 4: Statistics of Indigo

Start at: 2019-04-24 05:43:05  
End at: 2019-04-24 05:43:35  
Local clock offset: -0.277 ms  
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2019-04-24 07:18:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 154.10 Mbit/s  
95th percentile per-packet one-way delay: 133.069 ms  
Loss rate: 0.86%  
-- Flow 1:  
Average throughput: 154.10 Mbit/s  
95th percentile per-packet one-way delay: 133.069 ms  
Loss rate: 0.86%

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



Run 5: Statistics of Indigo

Start at: 2019-04-24 06:14:34

End at: 2019-04-24 06:15:04

Local clock offset: -0.469 ms

Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2019-04-24 07:19:10

# Datalink statistics

-- Total of 1 flow:

Average throughput: 170.56 Mbit/s

95th percentile per-packet one-way delay: 132.600 ms

Loss rate: 0.82%

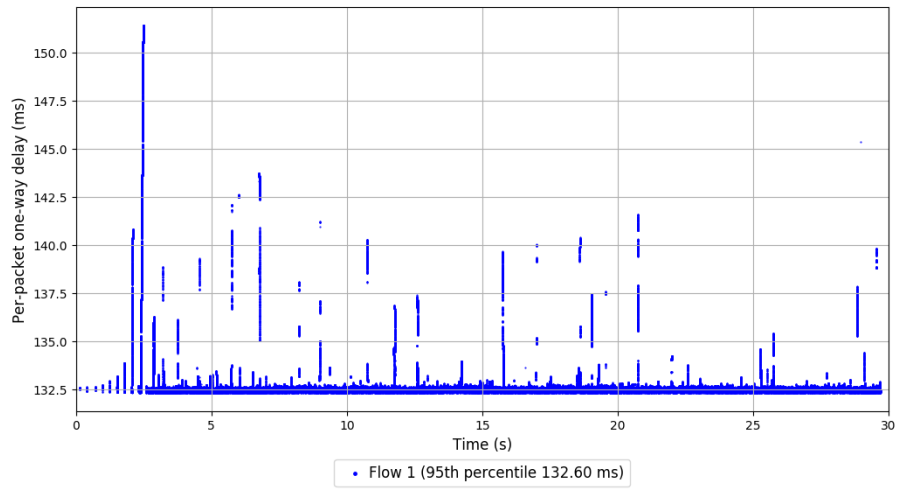
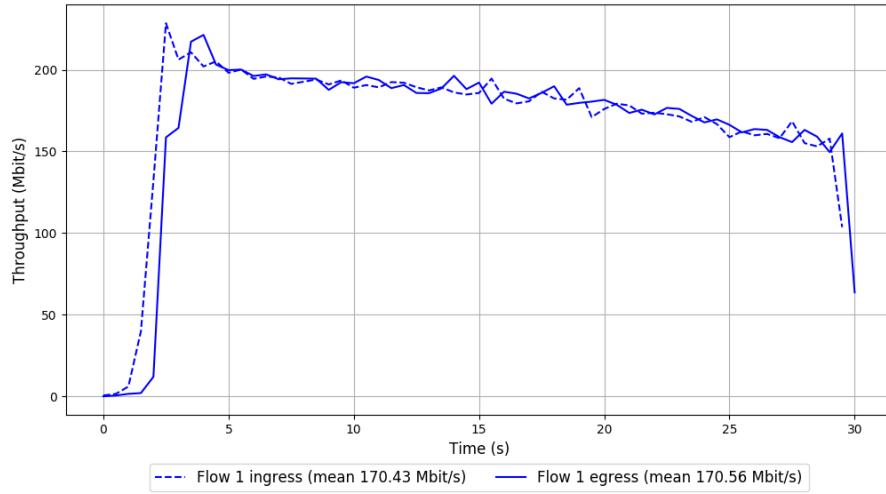
-- Flow 1:

Average throughput: 170.56 Mbit/s

95th percentile per-packet one-way delay: 132.600 ms

Loss rate: 0.82%

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



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-04-24 04:34:19

End at: 2019-04-24 04:34:49

Local clock offset: -0.093 ms

Remote clock offset: 0.063 ms

# Below is generated by plot.py at 2019-04-24 07:23:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 505.32 Mbit/s

95th percentile per-packet one-way delay: 142.032 ms

Loss rate: 1.17%

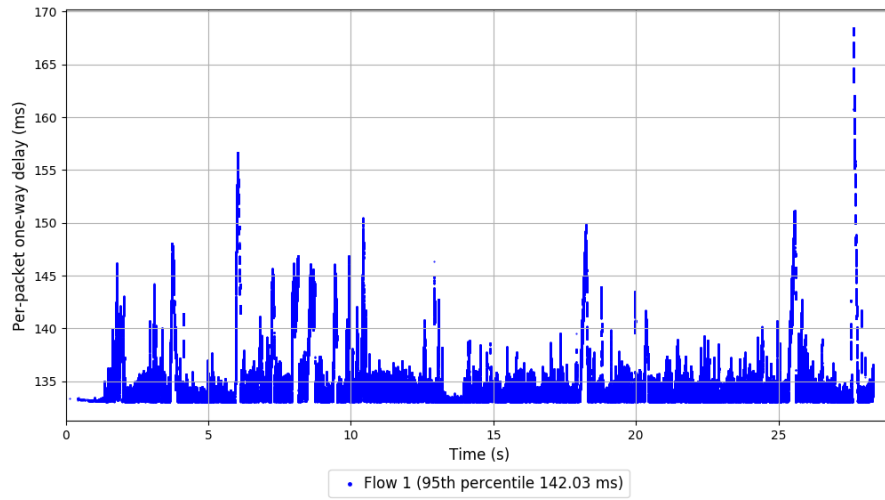
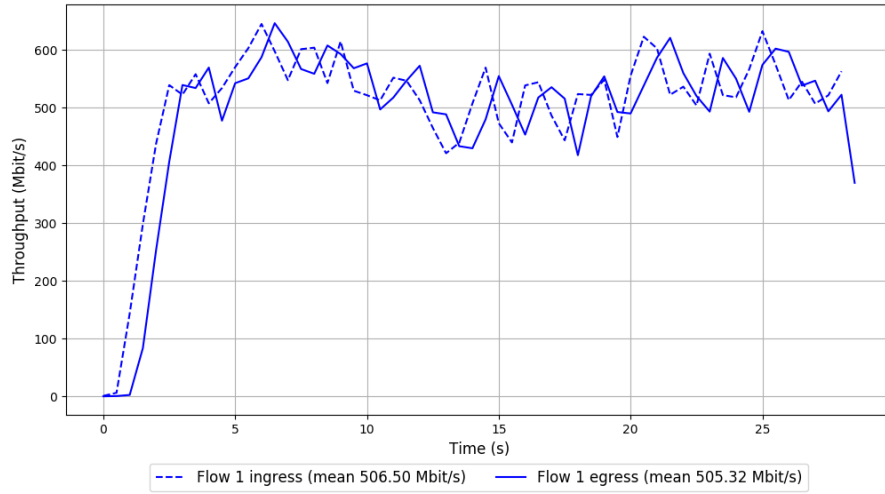
-- Flow 1:

Average throughput: 505.32 Mbit/s

95th percentile per-packet one-way delay: 142.032 ms

Loss rate: 1.17%

### Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

Start at: 2019-04-24 05:04:56

End at: 2019-04-24 05:05:26

Local clock offset: -0.348 ms

Remote clock offset: 0.374 ms

# Below is generated by plot.py at 2019-04-24 07:25:03

# Datalink statistics

-- Total of 1 flow:

Average throughput: 562.68 Mbit/s

95th percentile per-packet one-way delay: 159.910 ms

Loss rate: 1.06%

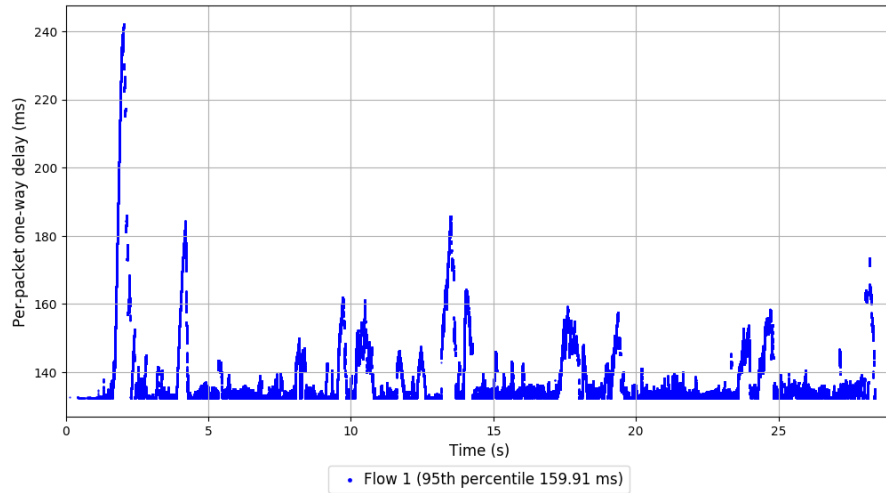
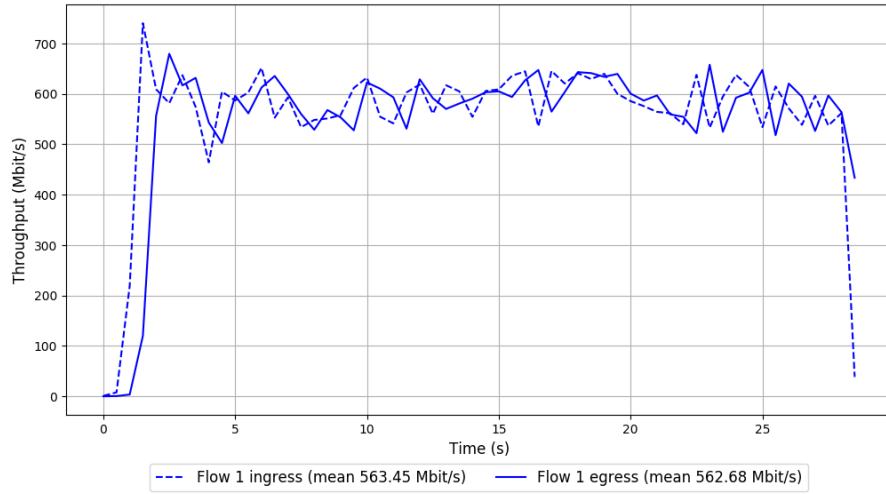
-- Flow 1:

Average throughput: 562.68 Mbit/s

95th percentile per-packet one-way delay: 159.910 ms

Loss rate: 1.06%

## Run 2: Report of Indigo-MusesC3 — Data Link



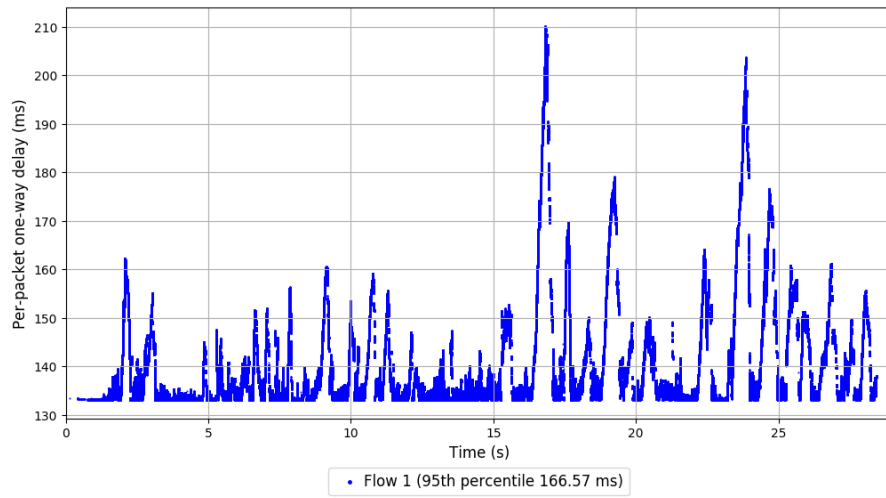
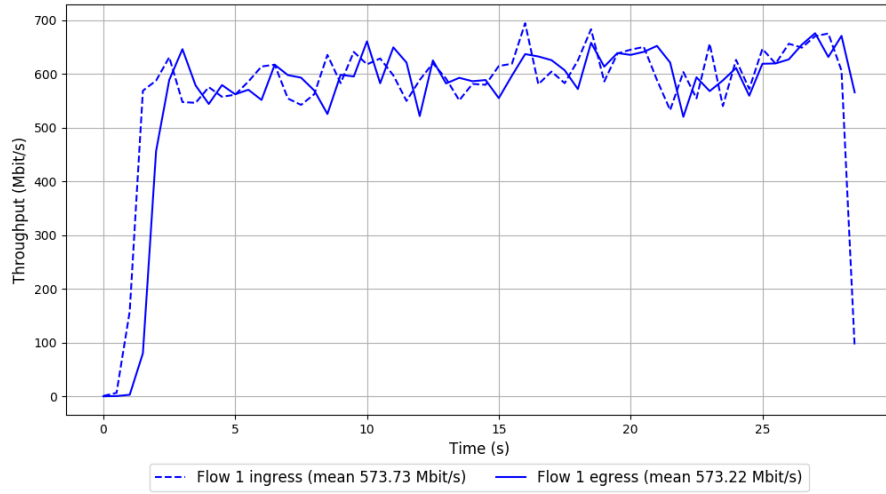


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-04-24 05:36:12  
End at: 2019-04-24 05:36:42  
Local clock offset: 0.24 ms  
Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2019-04-24 07:25:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 573.22 Mbit/s  
95th percentile per-packet one-way delay: 166.570 ms  
Loss rate: 1.02%  
-- Flow 1:  
Average throughput: 573.22 Mbit/s  
95th percentile per-packet one-way delay: 166.570 ms  
Loss rate: 1.02%

### Run 3: Report of Indigo-MusesC3 — Data Link



Run 4: Statistics of Indigo-MusesC3

Start at: 2019-04-24 06:07:33

End at: 2019-04-24 06:08:03

Local clock offset: -0.293 ms

Remote clock offset: 0.096 ms

# Below is generated by plot.py at 2019-04-24 07:25:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 547.37 Mbit/s

95th percentile per-packet one-way delay: 166.751 ms

Loss rate: 0.99%

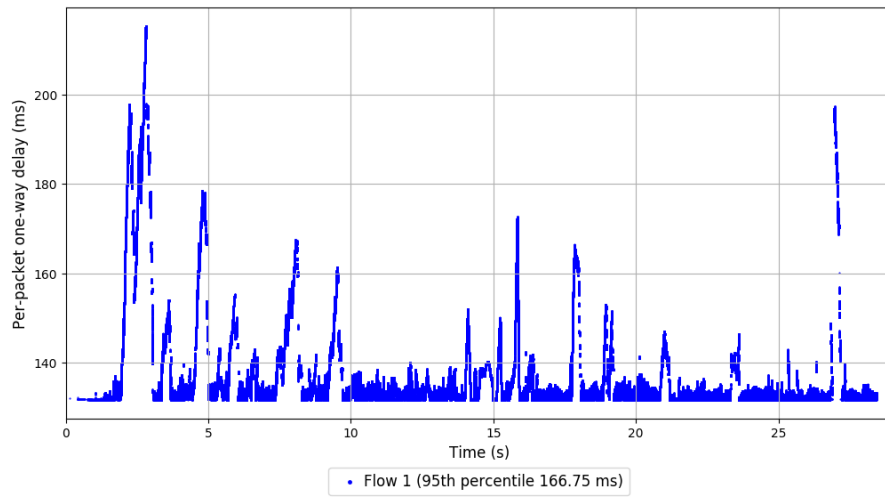
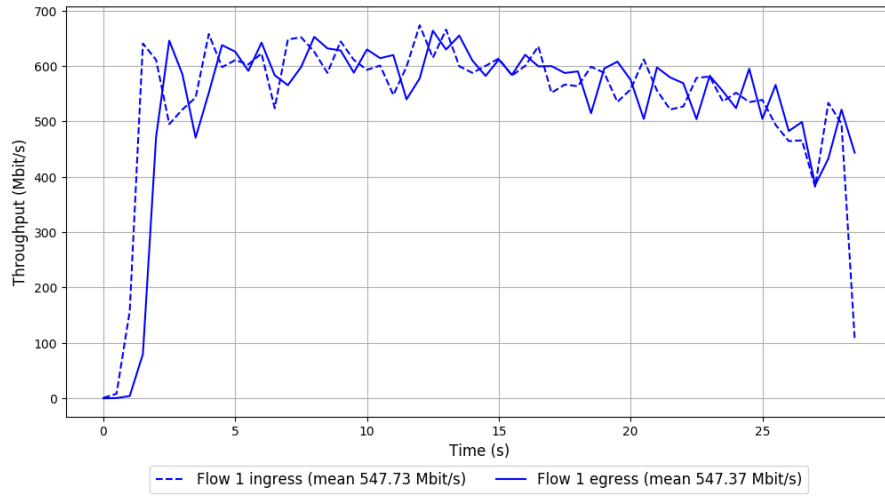
-- Flow 1:

Average throughput: 547.37 Mbit/s

95th percentile per-packet one-way delay: 166.751 ms

Loss rate: 0.99%

### Run 4: Report of Indigo-MusesC3 — Data Link



Run 5: Statistics of Indigo-MusesC3

Start at: 2019-04-24 06:39:06

End at: 2019-04-24 06:39:36

Local clock offset: -0.156 ms

Remote clock offset: 0.334 ms

# Below is generated by plot.py at 2019-04-24 07:27:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 528.44 Mbit/s

95th percentile per-packet one-way delay: 176.342 ms

Loss rate: 1.07%

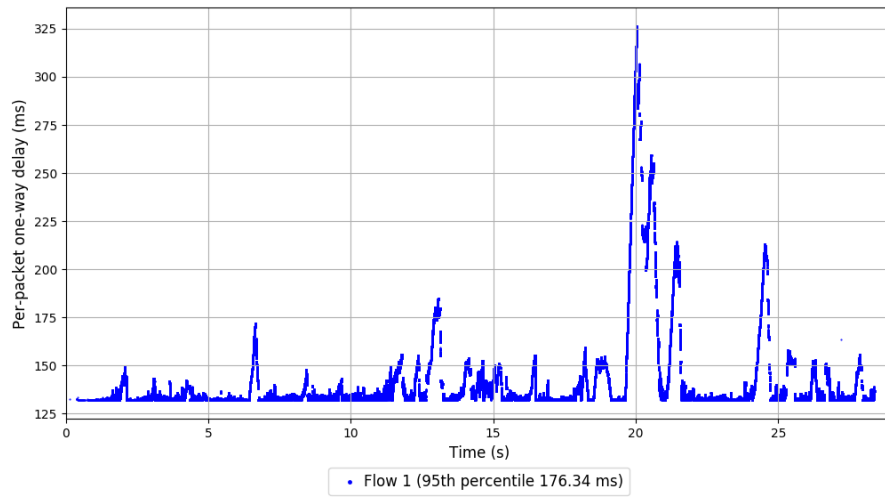
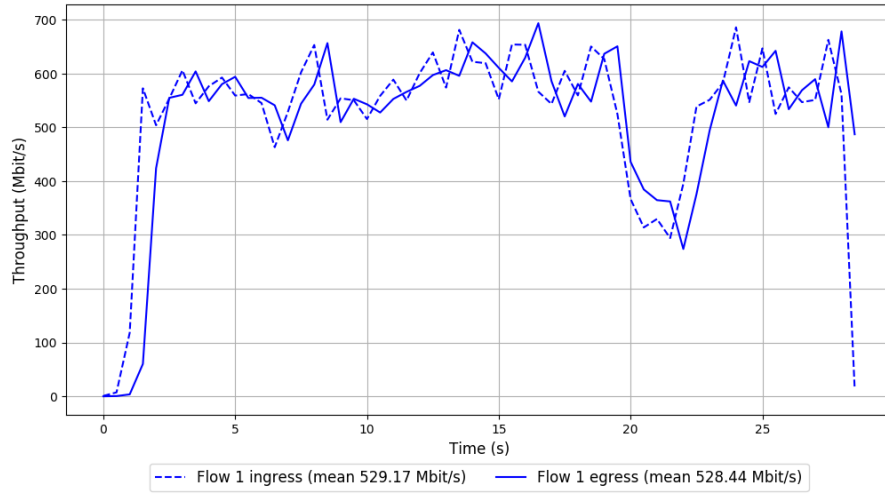
-- Flow 1:

Average throughput: 528.44 Mbit/s

95th percentile per-packet one-way delay: 176.342 ms

Loss rate: 1.07%

### Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-04-24 04:28:16

End at: 2019-04-24 04:28:46

Local clock offset: -0.363 ms

Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2019-04-24 07:27:10

# Datalink statistics

-- Total of 1 flow:

Average throughput: 521.28 Mbit/s

95th percentile per-packet one-way delay: 184.715 ms

Loss rate: 1.14%

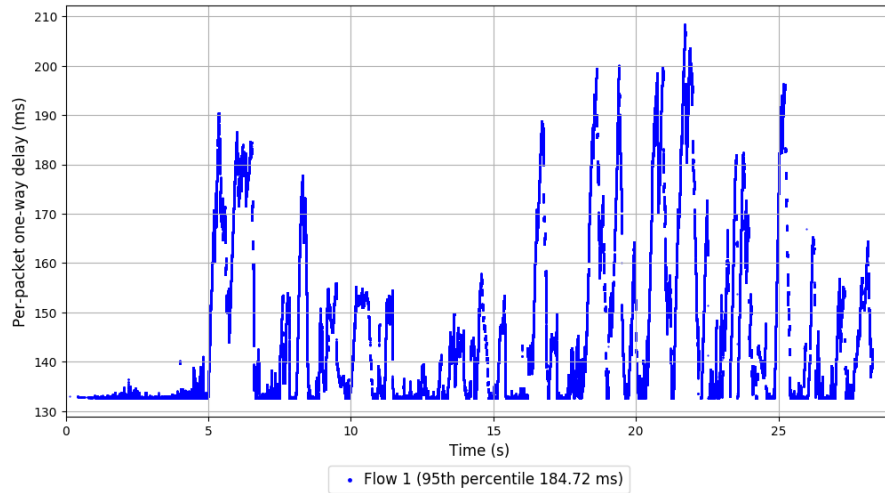
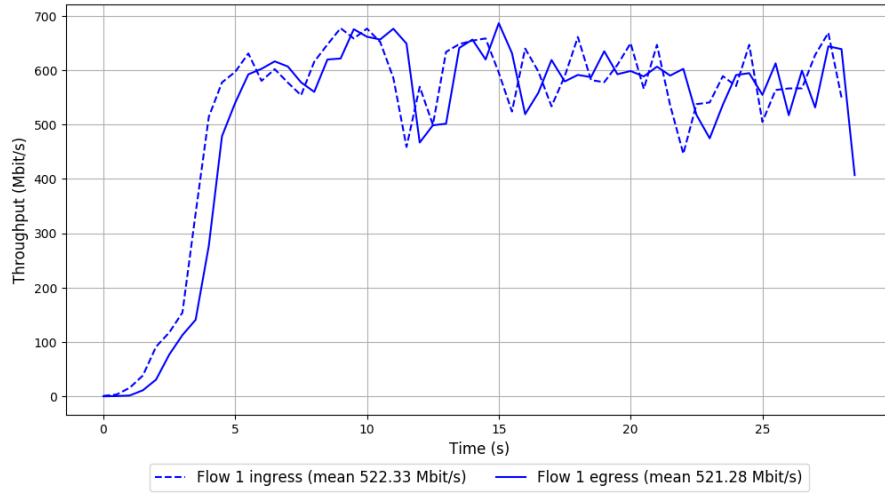
-- Flow 1:

Average throughput: 521.28 Mbit/s

95th percentile per-packet one-way delay: 184.715 ms

Loss rate: 1.14%

### Run 1: Report of Indigo-MusesC5 — Data Link





Run 2: Statistics of Indigo-MusesC5

Start at: 2019-04-24 04:59:00

End at: 2019-04-24 04:59:30

Local clock offset: 0.261 ms

Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2019-04-24 07:27:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 518.45 Mbit/s

95th percentile per-packet one-way delay: 214.445 ms

Loss rate: 1.08%

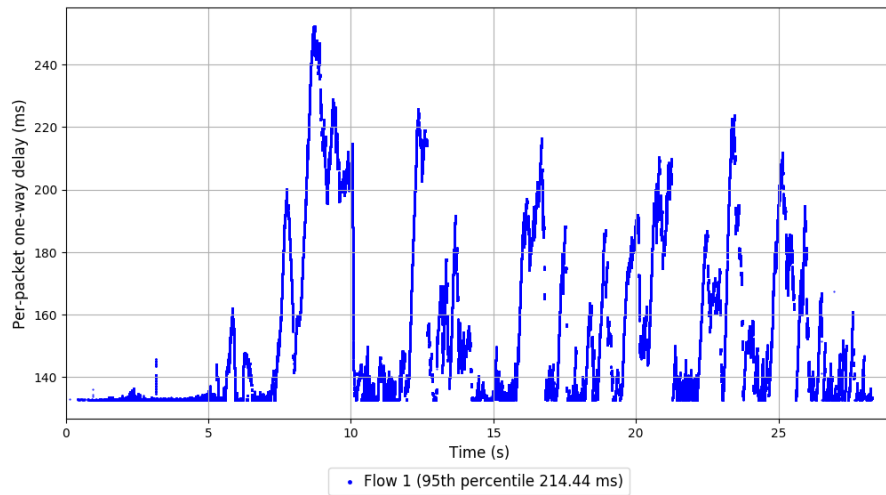
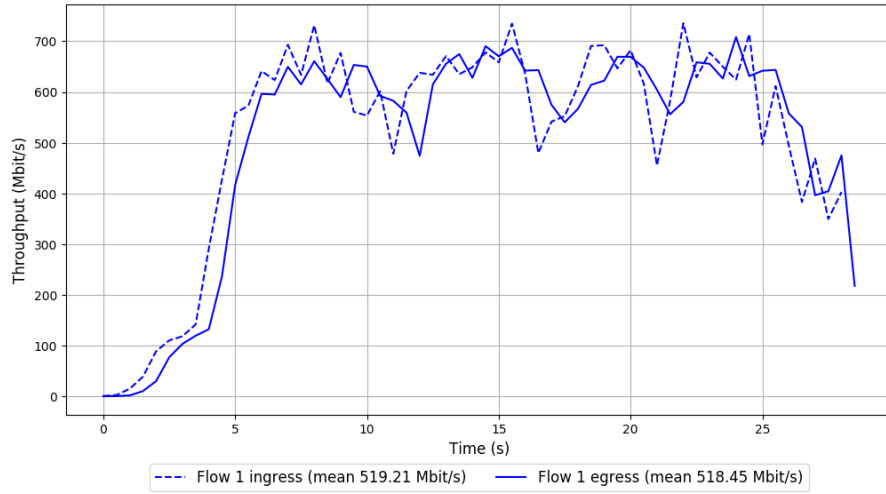
-- Flow 1:

Average throughput: 518.45 Mbit/s

95th percentile per-packet one-way delay: 214.445 ms

Loss rate: 1.08%

## Run 2: Report of Indigo-MusesC5 — Data Link

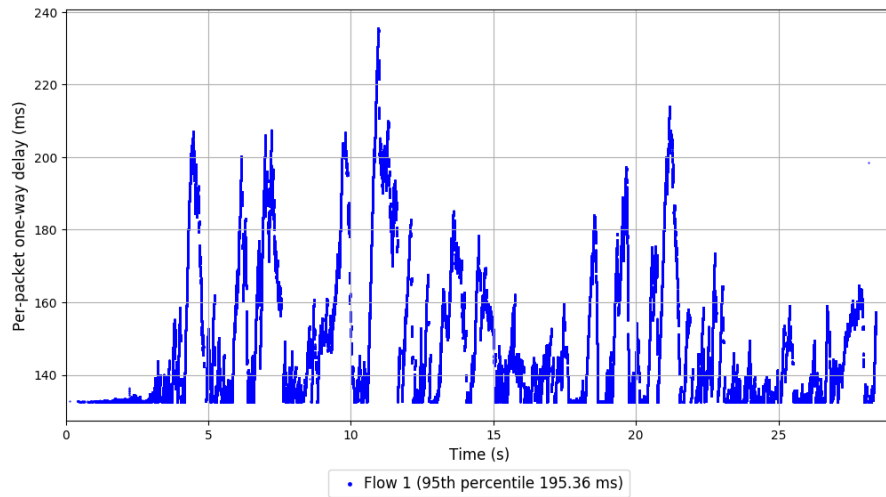
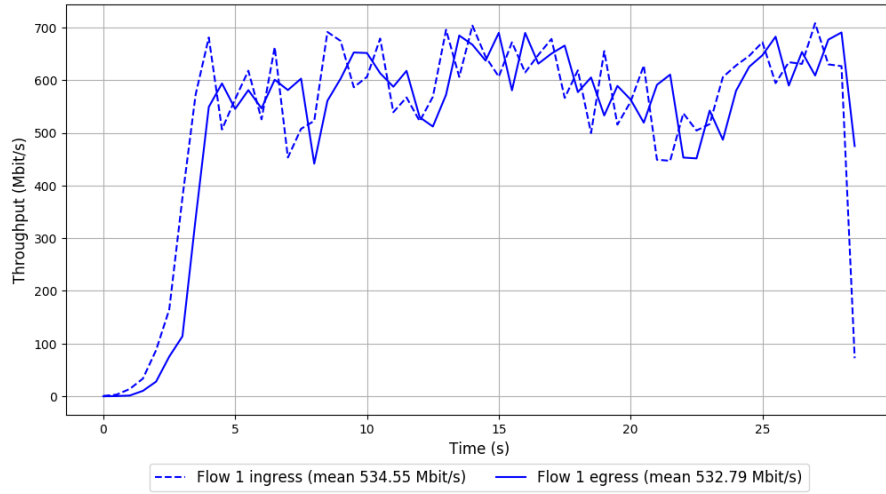


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-04-24 05:30:22  
End at: 2019-04-24 05:30:52  
Local clock offset: 0.211 ms  
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2019-04-24 07:28:25  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 532.79 Mbit/s  
95th percentile per-packet one-way delay: 195.362 ms  
Loss rate: 1.26%  
-- Flow 1:  
Average throughput: 532.79 Mbit/s  
95th percentile per-packet one-way delay: 195.362 ms  
Loss rate: 1.26%

### Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-04-24 06:01:40

End at: 2019-04-24 06:02:10

Local clock offset: 0.245 ms

Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2019-04-24 07:32:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 500.23 Mbit/s

95th percentile per-packet one-way delay: 207.019 ms

Loss rate: 1.42%

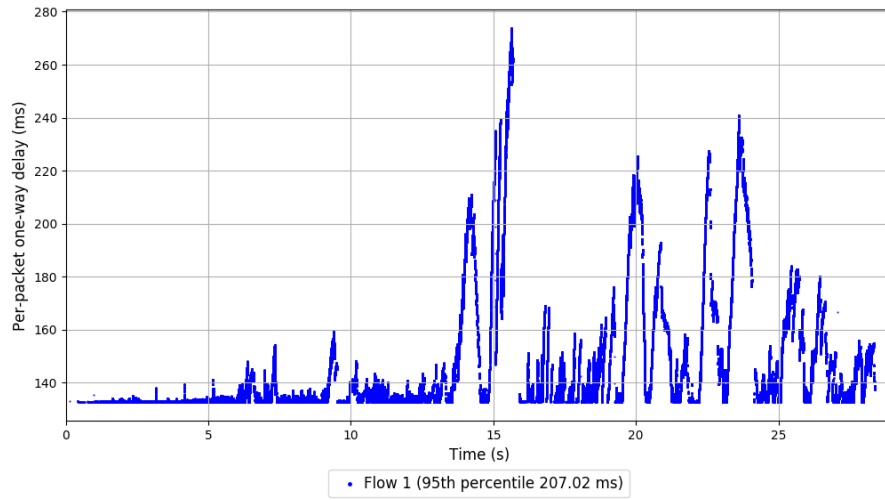
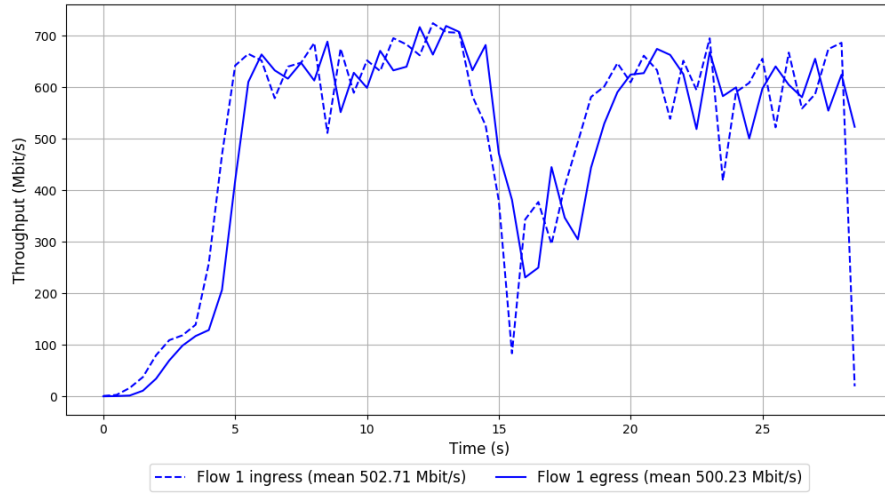
-- Flow 1:

Average throughput: 500.23 Mbit/s

95th percentile per-packet one-way delay: 207.019 ms

Loss rate: 1.42%

### Run 4: Report of Indigo-MusesC5 — Data Link



Run 5: Statistics of Indigo-MusesC5

Start at: 2019-04-24 06:32:54

End at: 2019-04-24 06:33:24

Local clock offset: -0.256 ms

Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2019-04-24 07:34:51

# Datalink statistics

-- Total of 1 flow:

Average throughput: 564.26 Mbit/s

95th percentile per-packet one-way delay: 161.450 ms

Loss rate: 1.23%

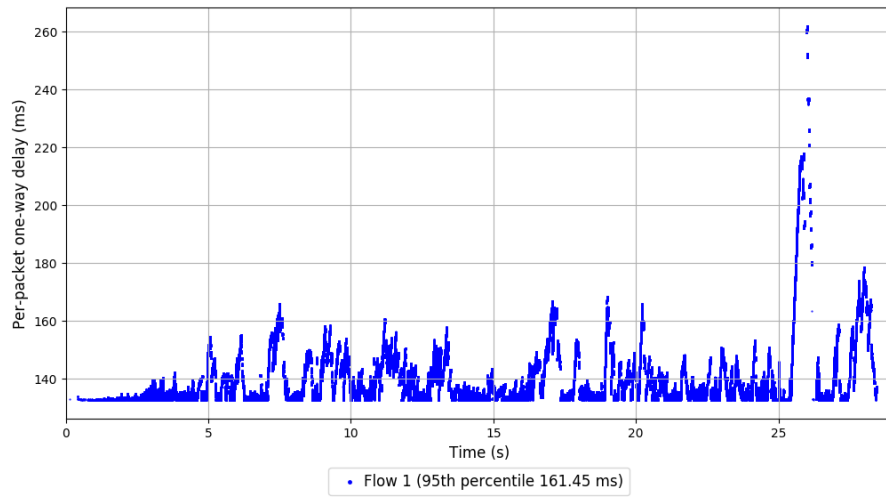
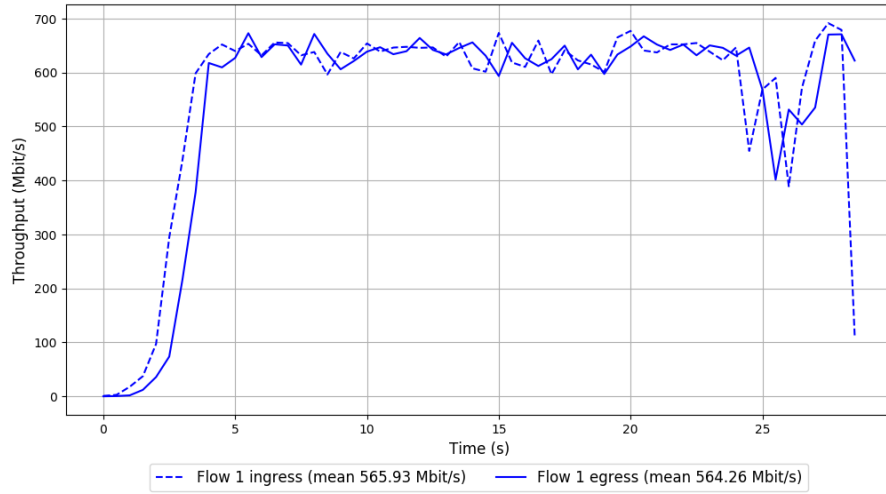
-- Flow 1:

Average throughput: 564.26 Mbit/s

95th percentile per-packet one-way delay: 161.450 ms

Loss rate: 1.23%

### Run 5: Report of Indigo-MusesC5 — Data Link





Run 1: Statistics of Indigo-MusesD

Start at: 2019-04-24 04:17:50

End at: 2019-04-24 04:18:20

Local clock offset: -0.119 ms

Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2019-04-24 07:34:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 542.48 Mbit/s

95th percentile per-packet one-way delay: 187.064 ms

Loss rate: 1.00%

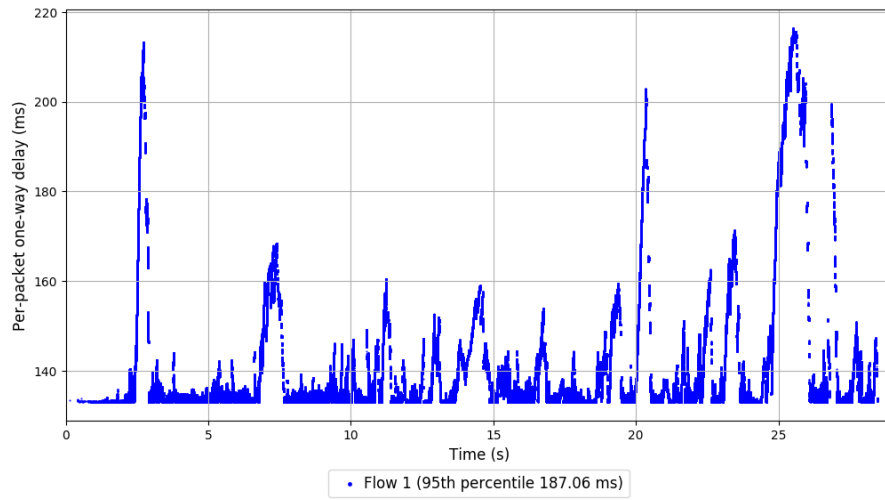
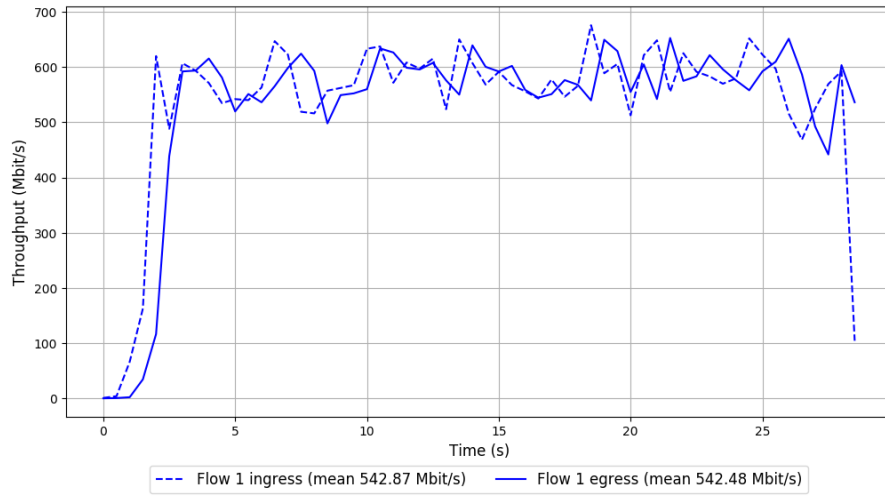
-- Flow 1:

Average throughput: 542.48 Mbit/s

95th percentile per-packet one-way delay: 187.064 ms

Loss rate: 1.00%

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



Run 2: Statistics of Indigo-MusesD

Start at: 2019-04-24 04:48:41

End at: 2019-04-24 04:49:11

Local clock offset: -0.547 ms

Remote clock offset: 0.098 ms

# Below is generated by plot.py at 2019-04-24 07:34:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 517.42 Mbit/s

95th percentile per-packet one-way delay: 177.110 ms

Loss rate: 1.19%

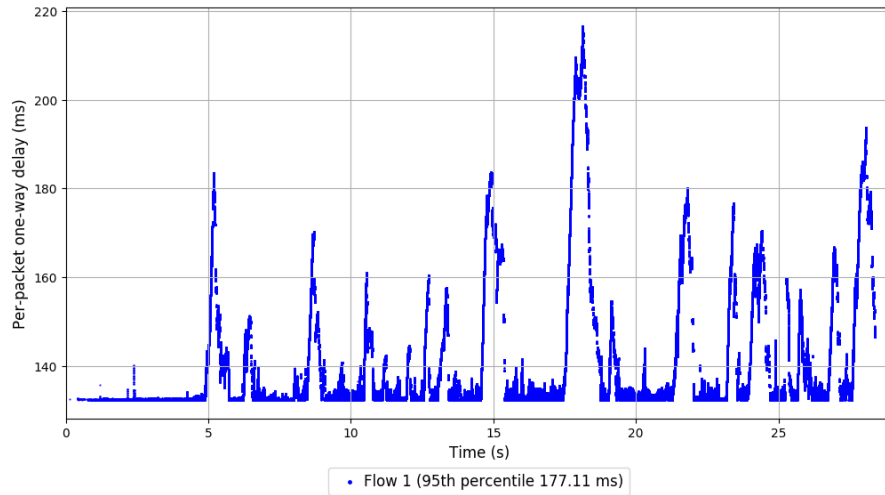
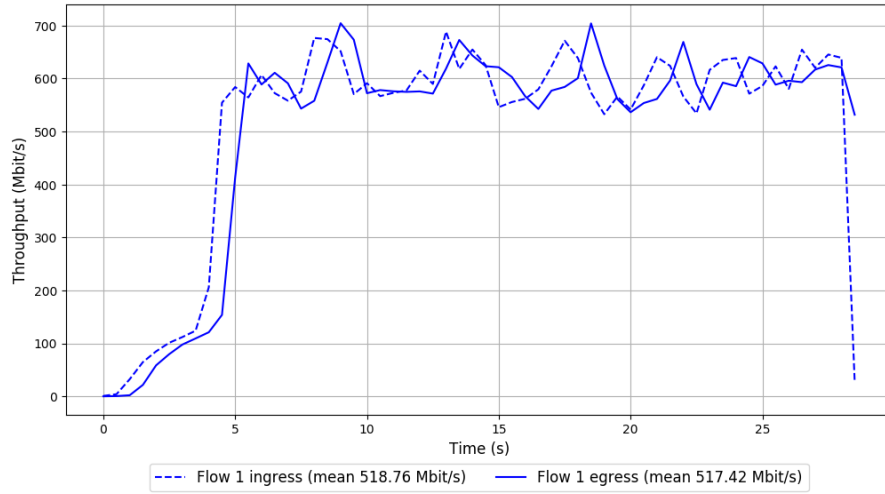
-- Flow 1:

Average throughput: 517.42 Mbit/s

95th percentile per-packet one-way delay: 177.110 ms

Loss rate: 1.19%

Run 2: Report of Indigo-MusesD — Data Link

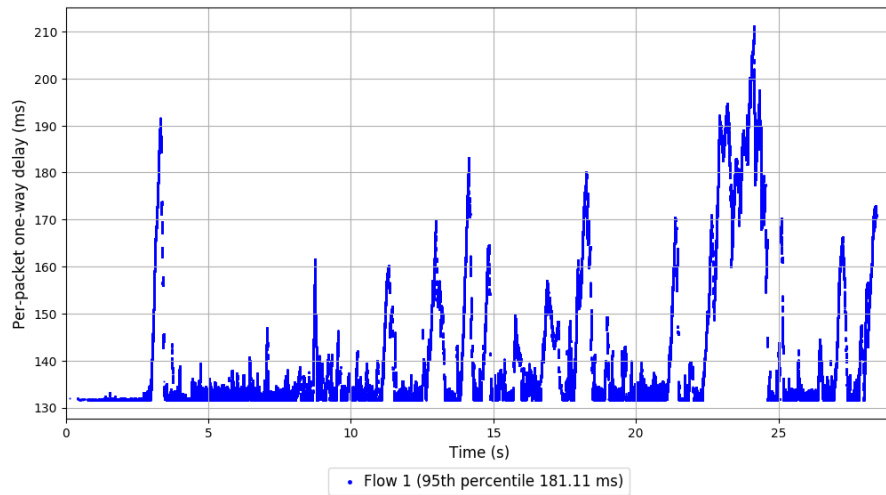
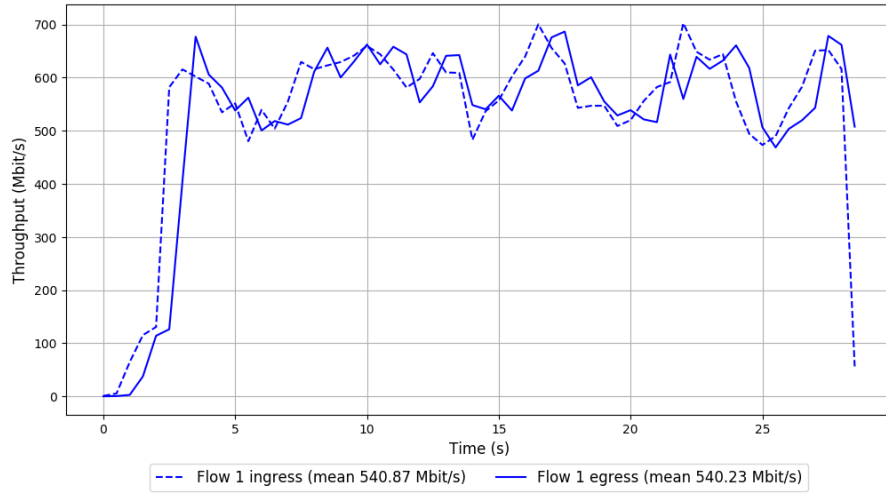


Run 3: Statistics of Indigo-MusesD

Start at: 2019-04-24 05:19:57  
End at: 2019-04-24 05:20:27  
Local clock offset: -0.305 ms  
Remote clock offset: -0.019 ms

# Below is generated by plot.py at 2019-04-24 07:36:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 540.23 Mbit/s  
95th percentile per-packet one-way delay: 181.112 ms  
Loss rate: 1.06%  
-- Flow 1:  
Average throughput: 540.23 Mbit/s  
95th percentile per-packet one-way delay: 181.112 ms  
Loss rate: 1.06%

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



Run 4: Statistics of Indigo-MusesD

Start at: 2019-04-24 05:50:53

End at: 2019-04-24 05:51:23

Local clock offset: -0.037 ms

Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-04-24 07:36:17

# Datalink statistics

-- Total of 1 flow:

Average throughput: 532.57 Mbit/s

95th percentile per-packet one-way delay: 177.585 ms

Loss rate: 1.09%

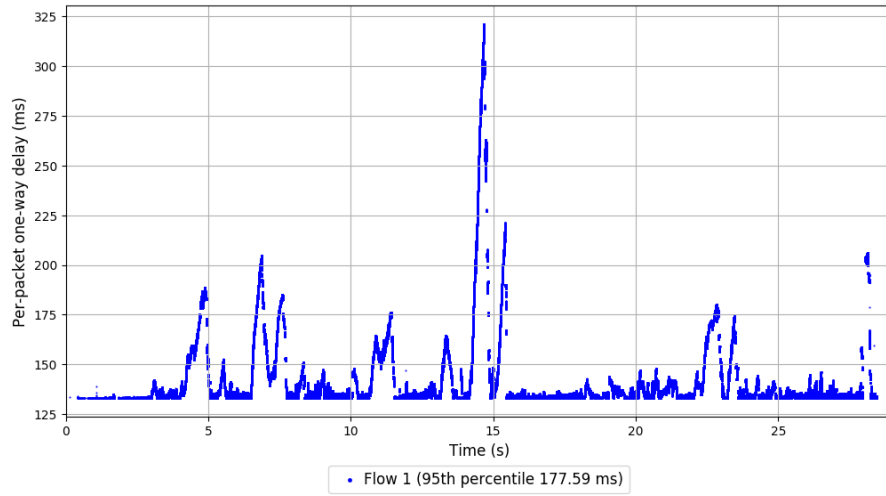
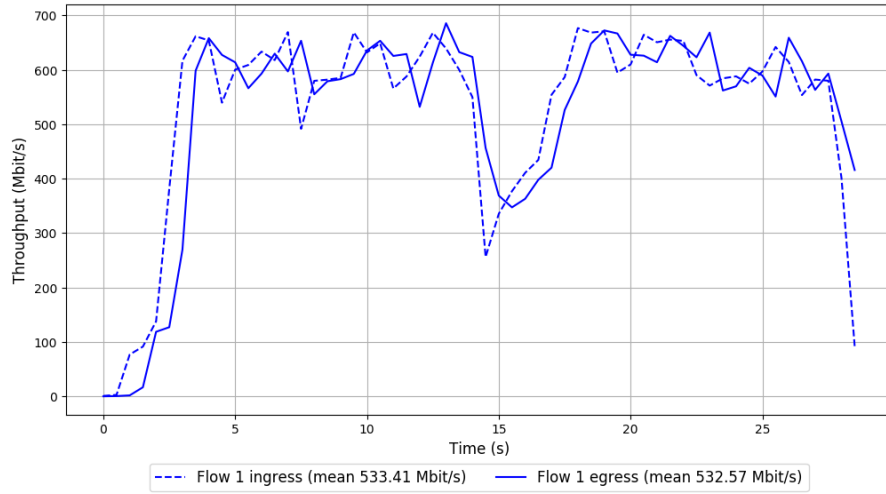
-- Flow 1:

Average throughput: 532.57 Mbit/s

95th percentile per-packet one-way delay: 177.585 ms

Loss rate: 1.09%

#### Run 4: Report of Indigo-MusesD — Data Link





Run 5: Statistics of Indigo-MusesD

Start at: 2019-04-24 06:22:29

End at: 2019-04-24 06:22:59

Local clock offset: -0.279 ms

Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2019-04-24 07:36:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 503.42 Mbit/s

95th percentile per-packet one-way delay: 174.808 ms

Loss rate: 1.09%

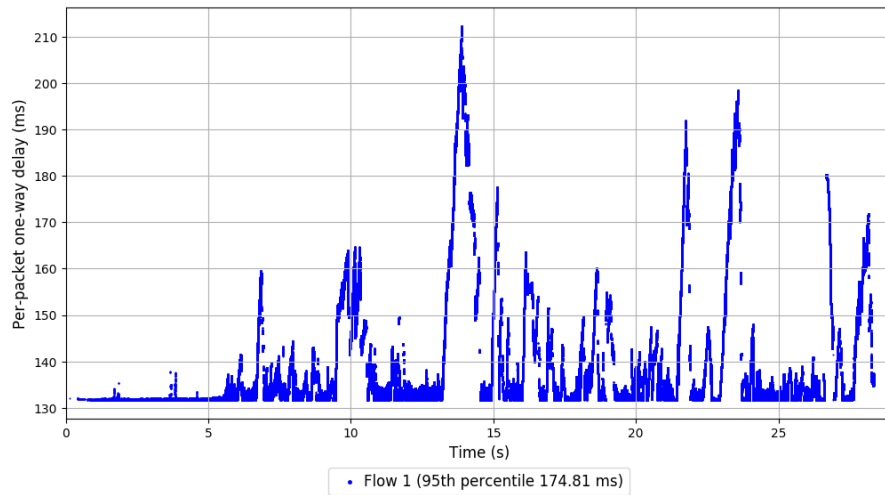
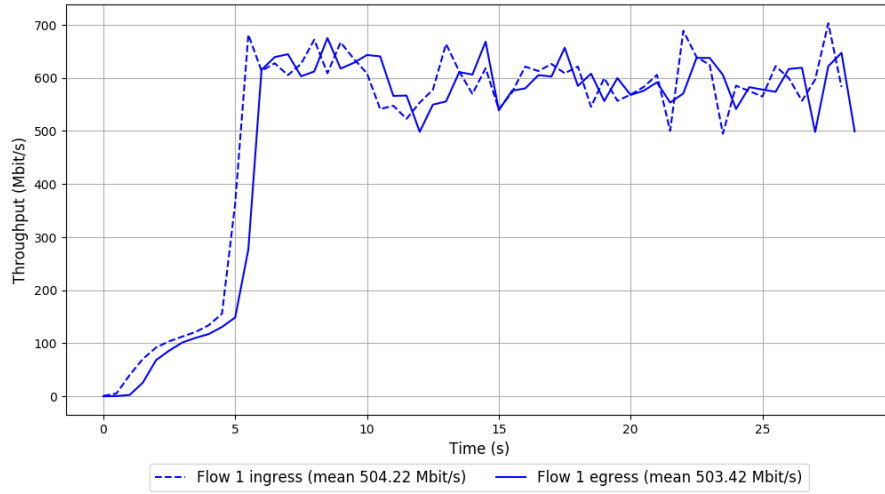
-- Flow 1:

Average throughput: 503.42 Mbit/s

95th percentile per-packet one-way delay: 174.808 ms

Loss rate: 1.09%

### Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MuseST

Start at: 2019-04-24 04:16:07

End at: 2019-04-24 04:16:37

Local clock offset: -0.379 ms

Remote clock offset: 0.081 ms

# Below is generated by plot.py at 2019-04-24 07:37:52

# Datalink statistics

-- Total of 1 flow:

Average throughput: 544.31 Mbit/s

95th percentile per-packet one-way delay: 184.499 ms

Loss rate: 1.24%

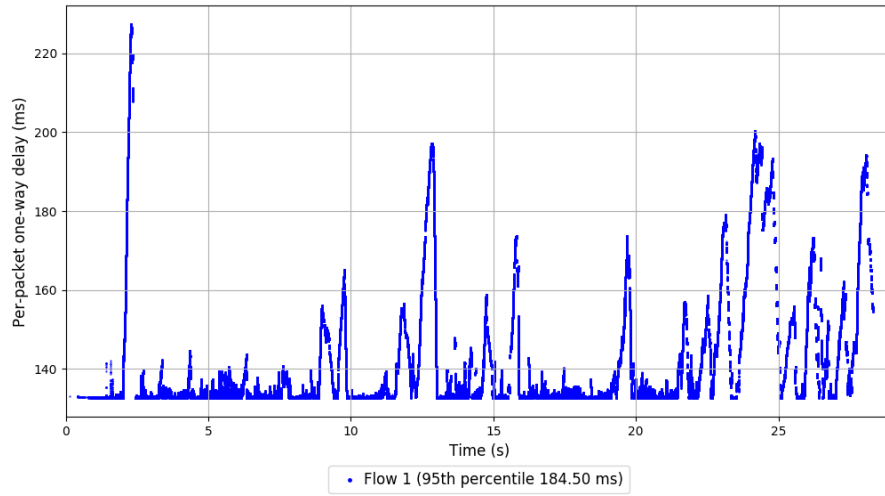
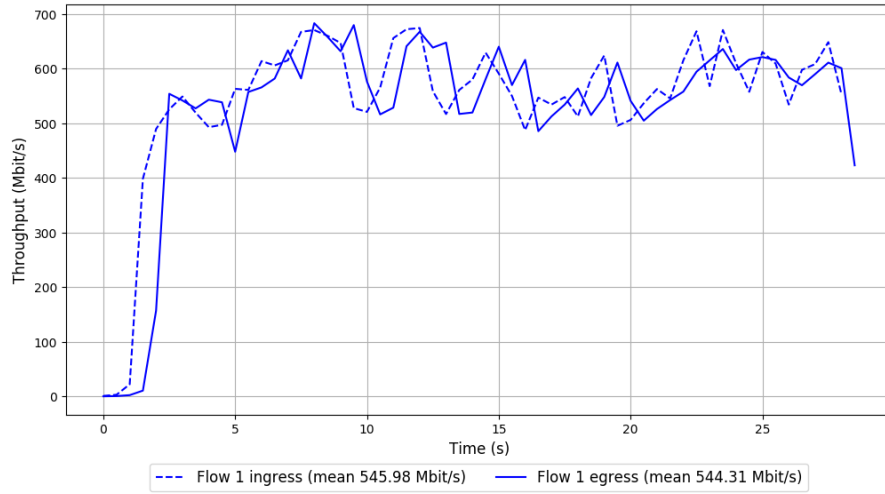
-- Flow 1:

Average throughput: 544.31 Mbit/s

95th percentile per-packet one-way delay: 184.499 ms

Loss rate: 1.24%

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



Run 2: Statistics of Indigo-MuseST

Start at: 2019-04-24 04:46:58

End at: 2019-04-24 04:47:28

Local clock offset: -0.311 ms

Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2019-04-24 07:42:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 594.86 Mbit/s

95th percentile per-packet one-way delay: 222.061 ms

Loss rate: 1.16%

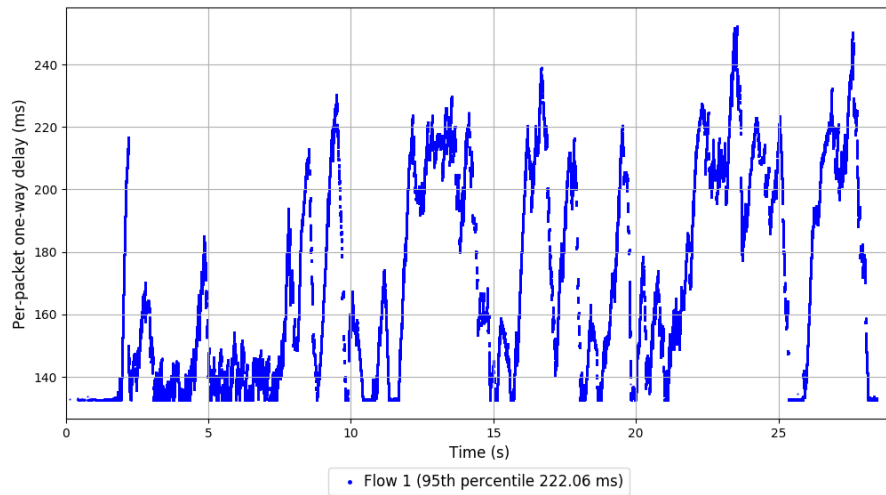
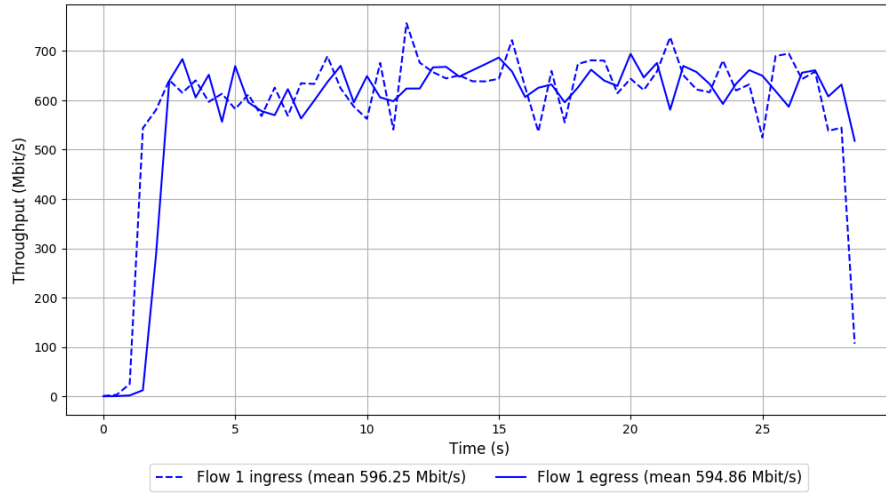
-- Flow 1:

Average throughput: 594.86 Mbit/s

95th percentile per-packet one-way delay: 222.061 ms

Loss rate: 1.16%

## Run 2: Report of Indigo-MusesT — Data Link

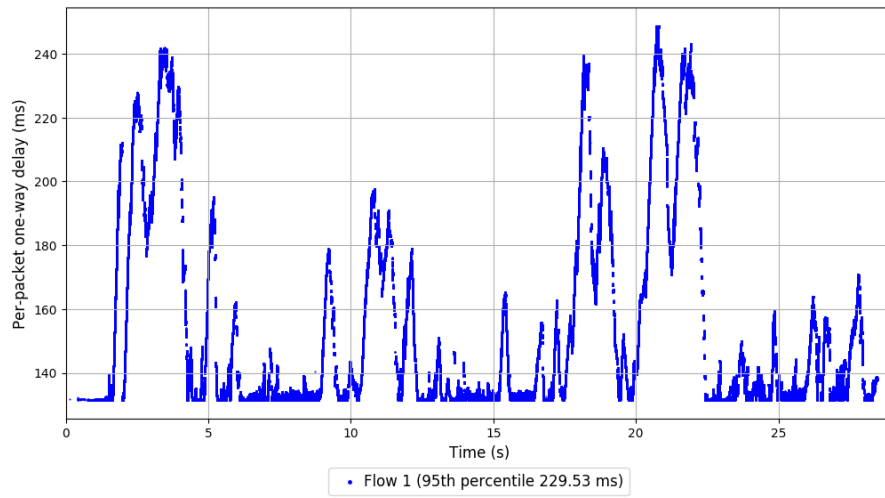
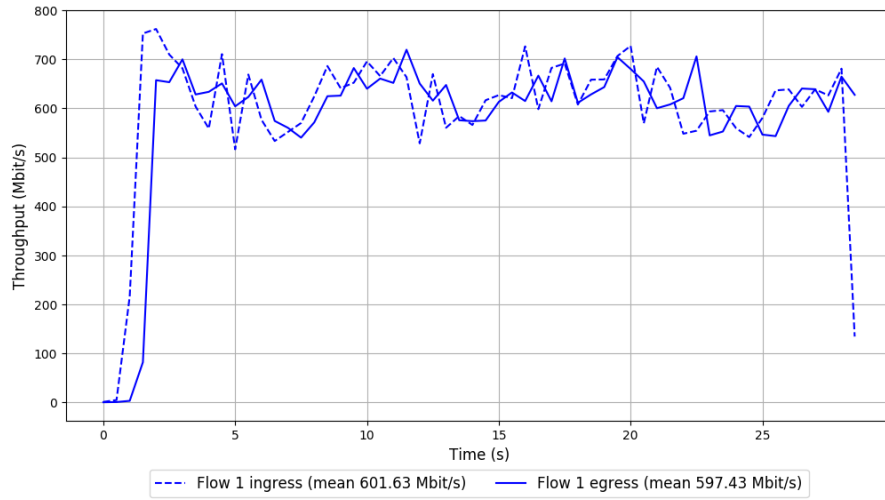


Run 3: Statistics of Indigo-MuseST

Start at: 2019-04-24 05:18:14  
End at: 2019-04-24 05:18:44  
Local clock offset: -0.439 ms  
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2019-04-24 07:44:31  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 597.43 Mbit/s  
95th percentile per-packet one-way delay: 229.535 ms  
Loss rate: 1.62%  
-- Flow 1:  
Average throughput: 597.43 Mbit/s  
95th percentile per-packet one-way delay: 229.535 ms  
Loss rate: 1.62%

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





Run 4: Statistics of Indigo-MuseST

Start at: 2019-04-24 05:49:10

End at: 2019-04-24 05:49:40

Local clock offset: 0.223 ms

Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-04-24 07:44:36

# Datalink statistics

-- Total of 1 flow:

Average throughput: 593.68 Mbit/s

95th percentile per-packet one-way delay: 209.932 ms

Loss rate: 1.24%

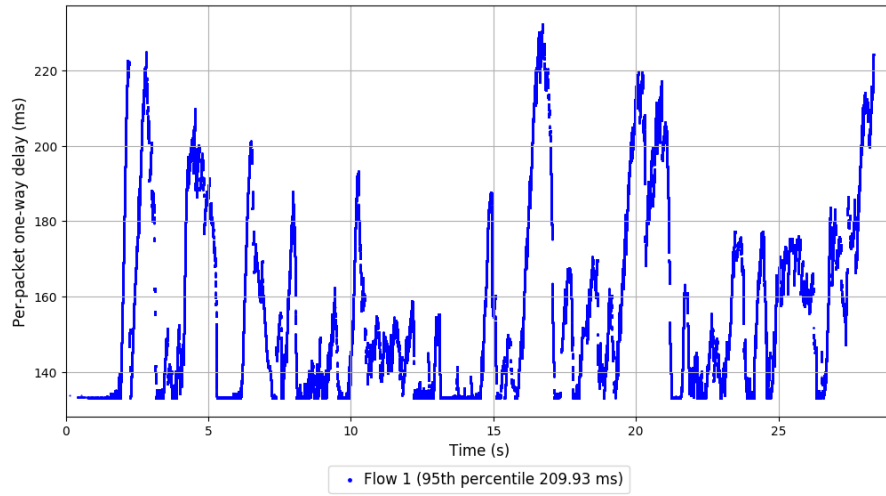
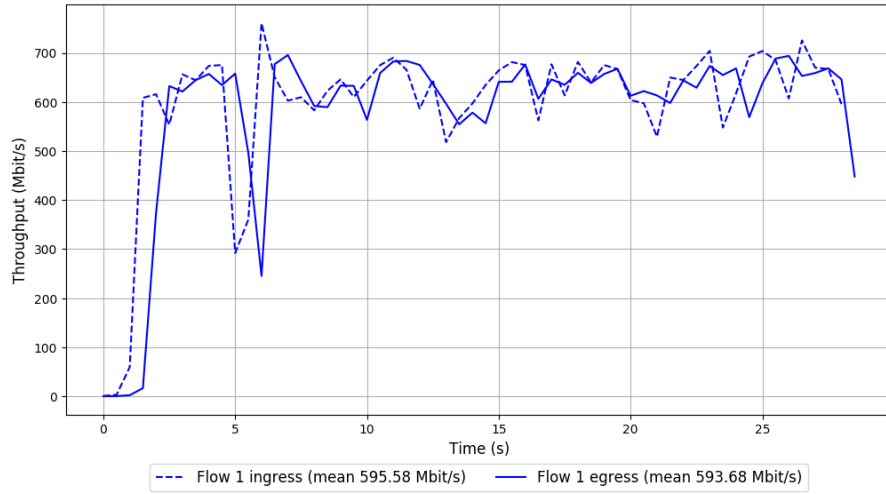
-- Flow 1:

Average throughput: 593.68 Mbit/s

95th percentile per-packet one-way delay: 209.932 ms

Loss rate: 1.24%

### Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MuseST

Start at: 2019-04-24 06:20:44

End at: 2019-04-24 06:21:14

Local clock offset: -0.031 ms

Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2019-04-24 07:45:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 628.20 Mbit/s

95th percentile per-packet one-way delay: 222.976 ms

Loss rate: 1.82%

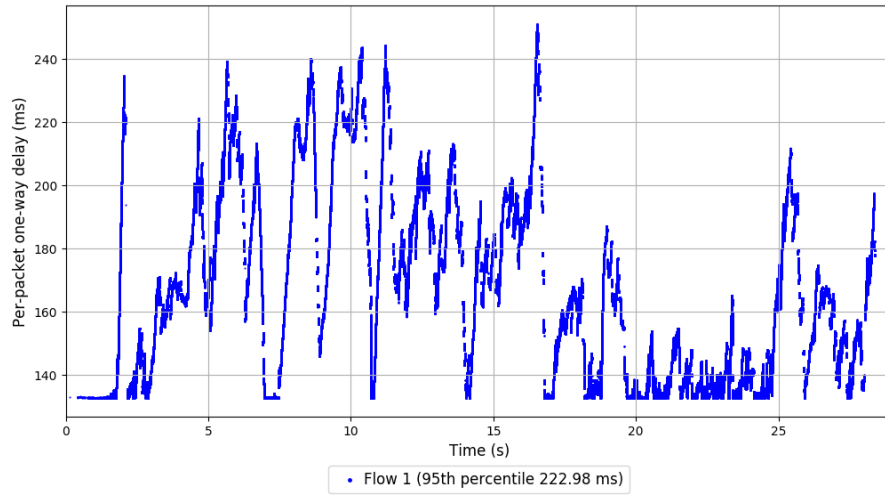
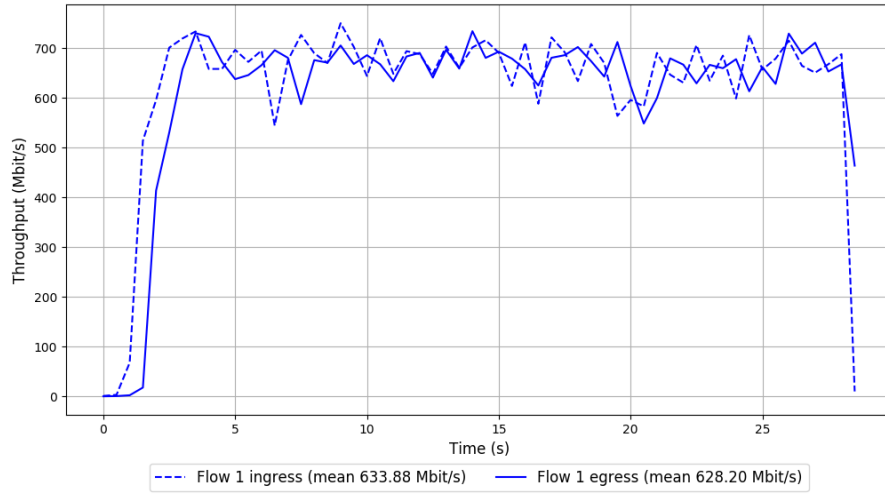
-- Flow 1:

Average throughput: 628.20 Mbit/s

95th percentile per-packet one-way delay: 222.976 ms

Loss rate: 1.82%

### Run 5: Report of Indigo-MusesT — Data Link



Run 1: Statistics of LEDBAT

Start at: 2019-04-24 04:25:32

End at: 2019-04-24 04:26:02

Local clock offset: -0.208 ms

Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2019-04-24 07:45:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 134.068 ms

Loss rate: 1.79%

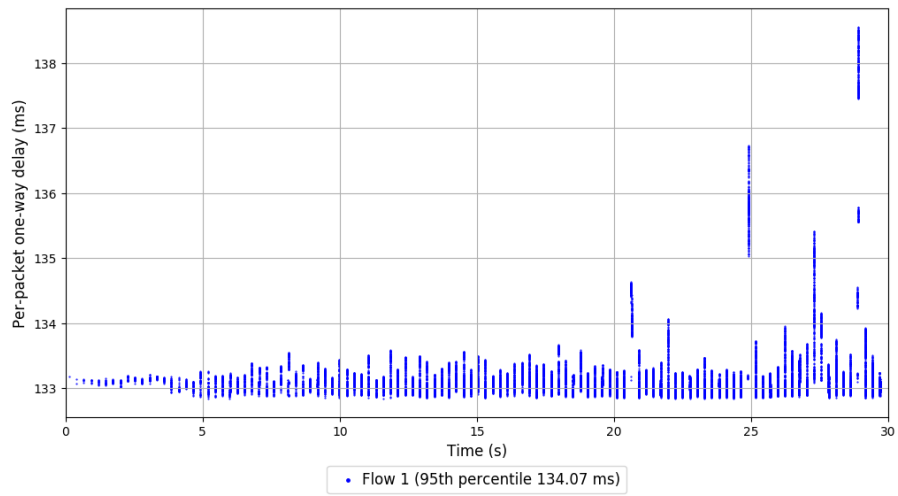
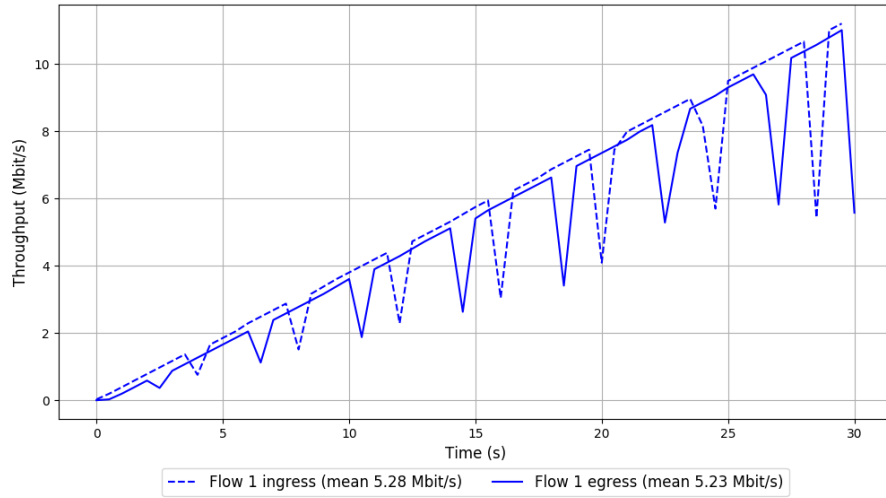
-- Flow 1:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 134.068 ms

Loss rate: 1.79%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-04-24 04:56:16

End at: 2019-04-24 04:56:46

Local clock offset: 0.143 ms

Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2019-04-24 07:45:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 134.237 ms

Loss rate: 1.79%

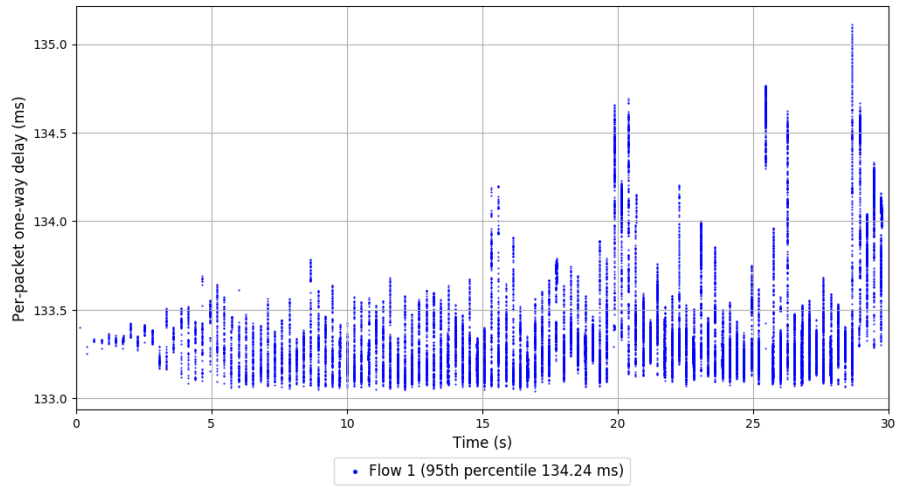
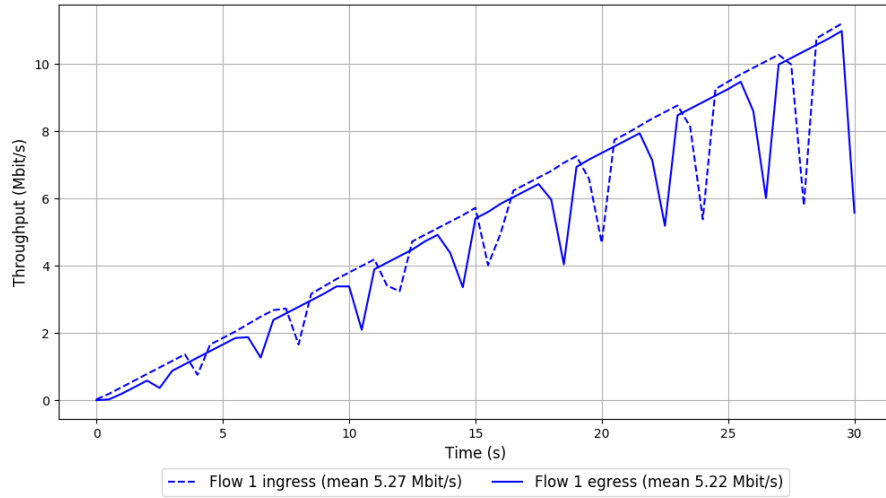
-- Flow 1:

Average throughput: 5.22 Mbit/s

95th percentile per-packet one-way delay: 134.237 ms

Loss rate: 1.79%

Run 2: Report of LEDBAT — Data Link



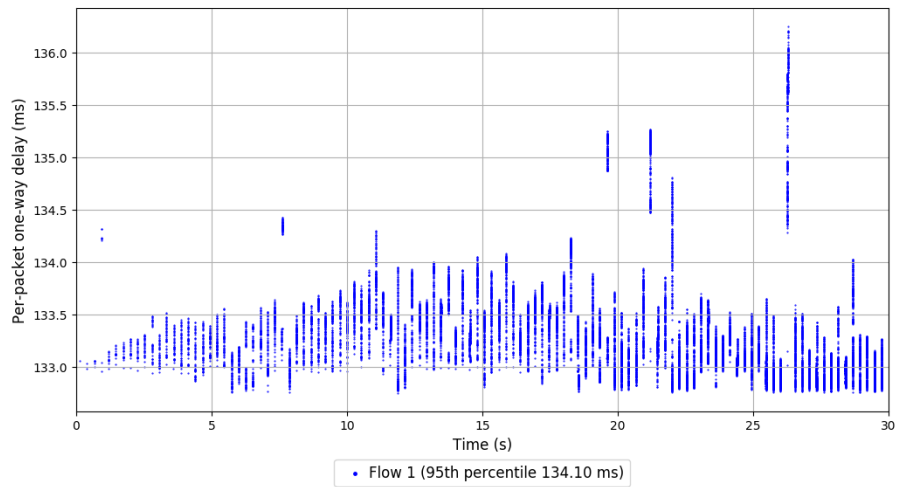
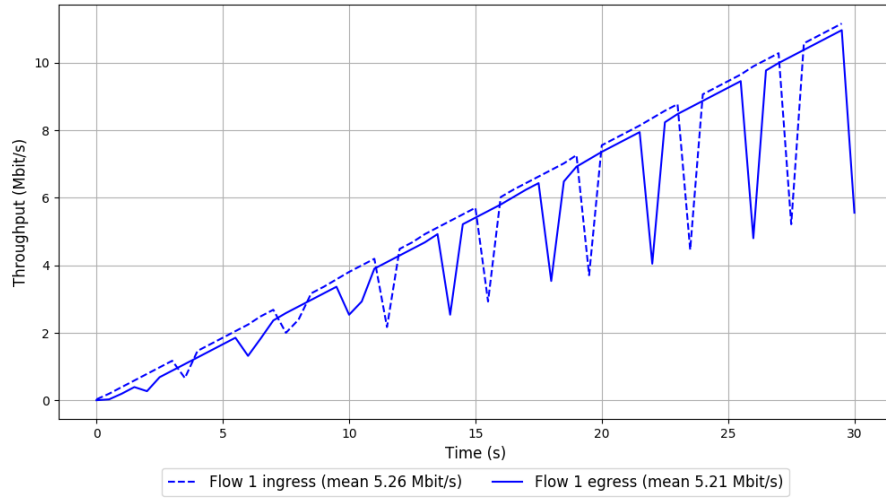


Run 3: Statistics of LEDBAT

Start at: 2019-04-24 05:27:34  
End at: 2019-04-24 05:28:04  
Local clock offset: -0.043 ms  
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2019-04-24 07:45:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 5.21 Mbit/s  
95th percentile per-packet one-way delay: 134.102 ms  
Loss rate: 1.78%  
-- Flow 1:  
Average throughput: 5.21 Mbit/s  
95th percentile per-packet one-way delay: 134.102 ms  
Loss rate: 1.78%

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



Run 4: Statistics of LEDBAT

Start at: 2019-04-24 05:58:50

End at: 2019-04-24 05:59:20

Local clock offset: 0.205 ms

Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2019-04-24 07:45:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.24 Mbit/s

95th percentile per-packet one-way delay: 134.536 ms

Loss rate: 1.79%

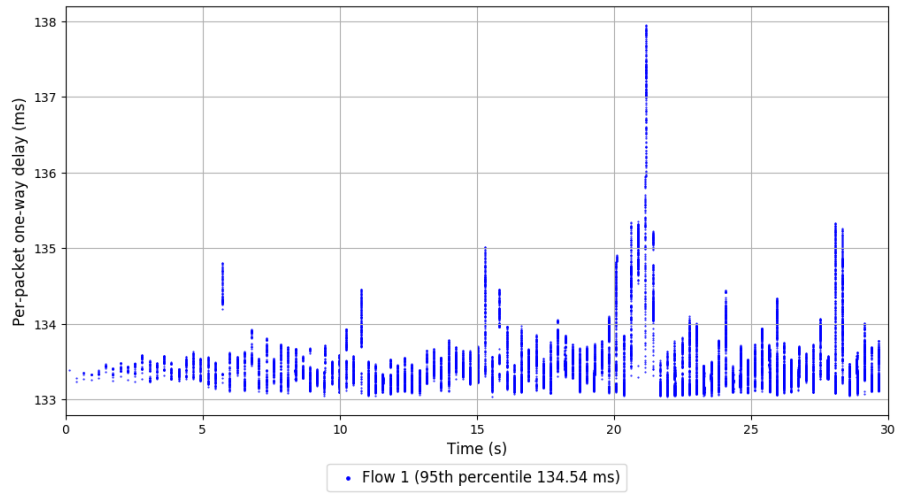
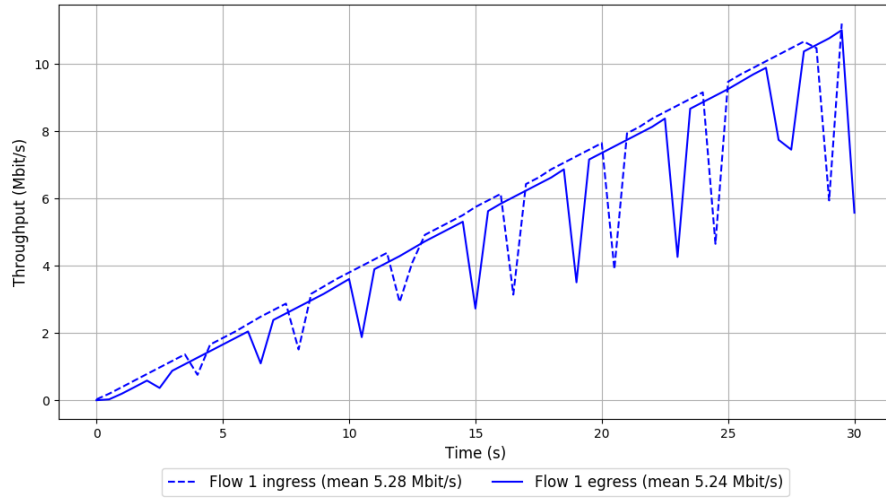
-- Flow 1:

Average throughput: 5.24 Mbit/s

95th percentile per-packet one-way delay: 134.536 ms

Loss rate: 1.79%

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



Run 5: Statistics of LEDBAT

Start at: 2019-04-24 06:30:07

End at: 2019-04-24 06:30:37

Local clock offset: -0.02 ms

Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2019-04-24 07:45:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 133.874 ms

Loss rate: 1.79%

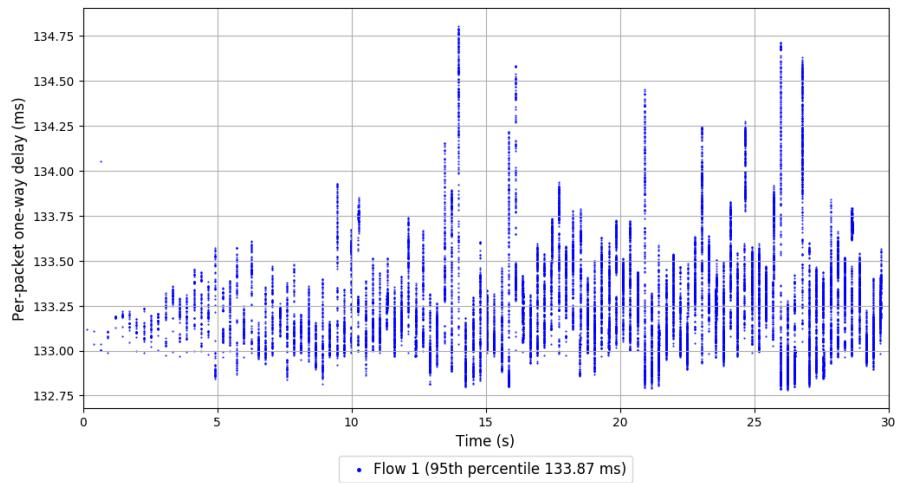
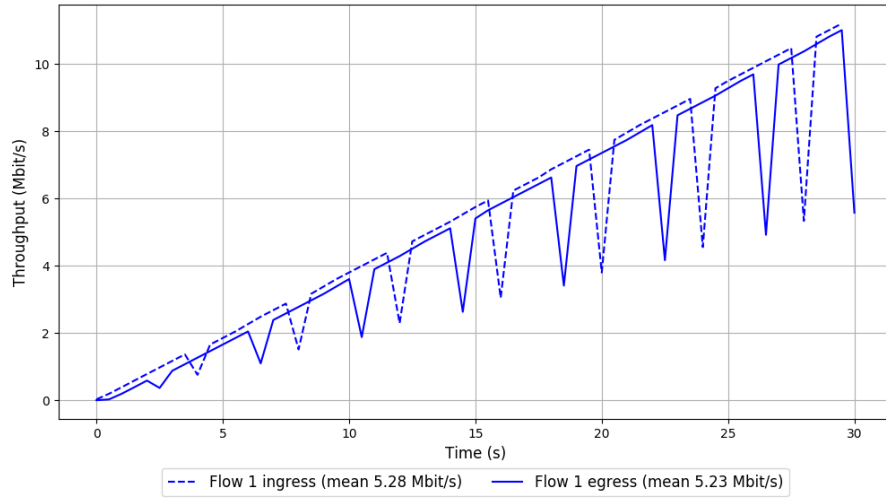
-- Flow 1:

Average throughput: 5.23 Mbit/s

95th percentile per-packet one-way delay: 133.874 ms

Loss rate: 1.79%

Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-04-24 04:23:53

End at: 2019-04-24 04:24:23

Local clock offset: -0.404 ms

Remote clock offset: 0.081 ms

# Below is generated by plot.py at 2019-04-24 07:48:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 360.23 Mbit/s

95th percentile per-packet one-way delay: 191.752 ms

Loss rate: 1.96%

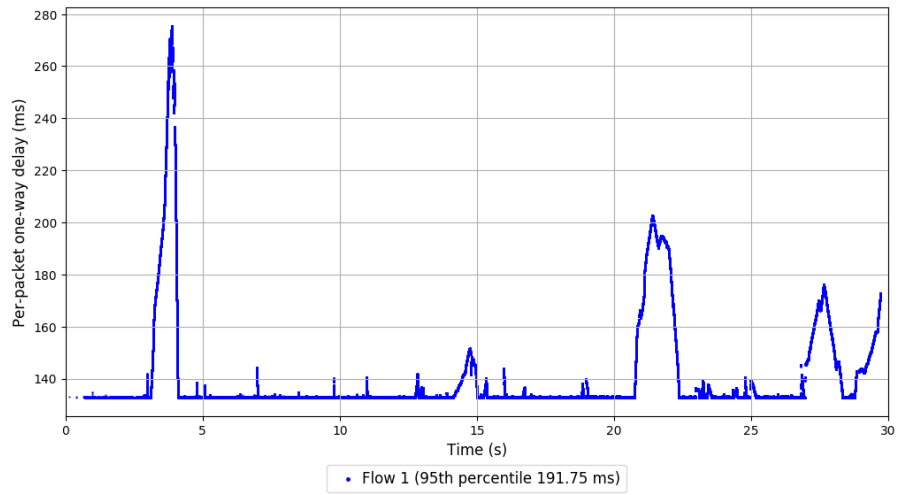
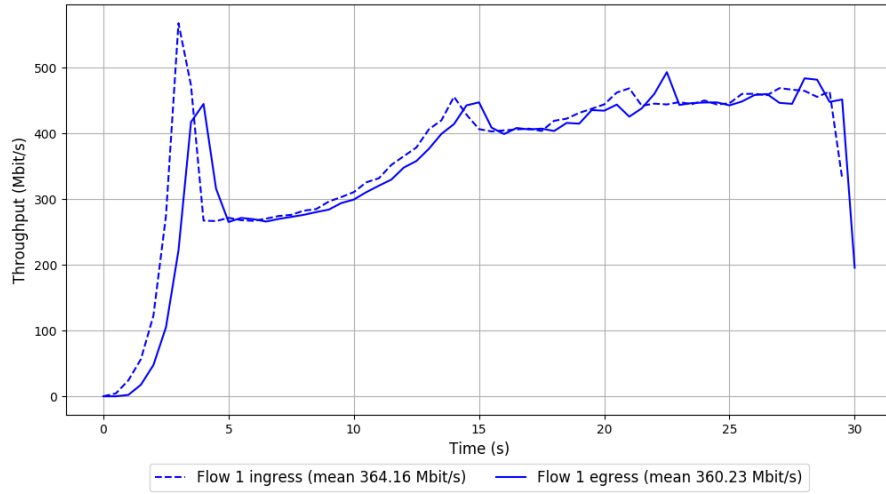
-- Flow 1:

Average throughput: 360.23 Mbit/s

95th percentile per-packet one-way delay: 191.752 ms

Loss rate: 1.96%

Run 1: Report of PCC-Allegro — Data Link





Run 2: Statistics of PCC-Allegro

Start at: 2019-04-24 04:54:43

End at: 2019-04-24 04:55:13

Local clock offset: 0.31 ms

Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2019-04-24 07:48:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 296.06 Mbit/s

95th percentile per-packet one-way delay: 226.615 ms

Loss rate: 2.77%

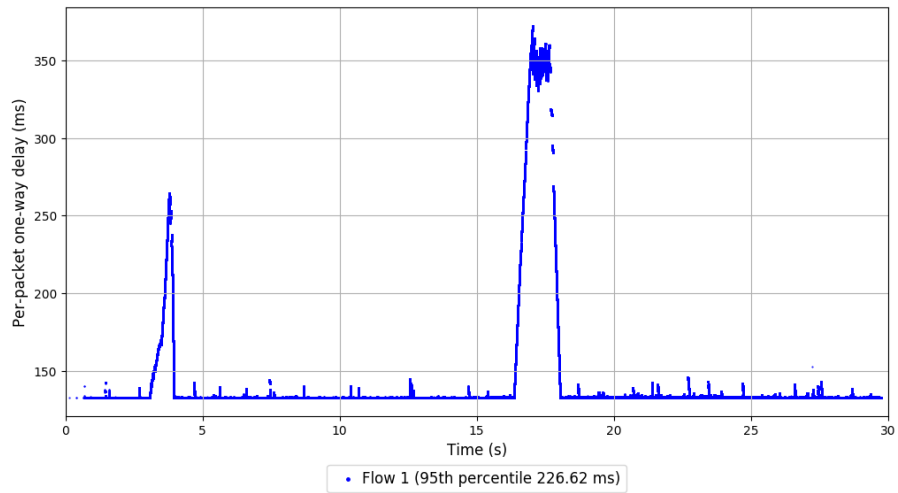
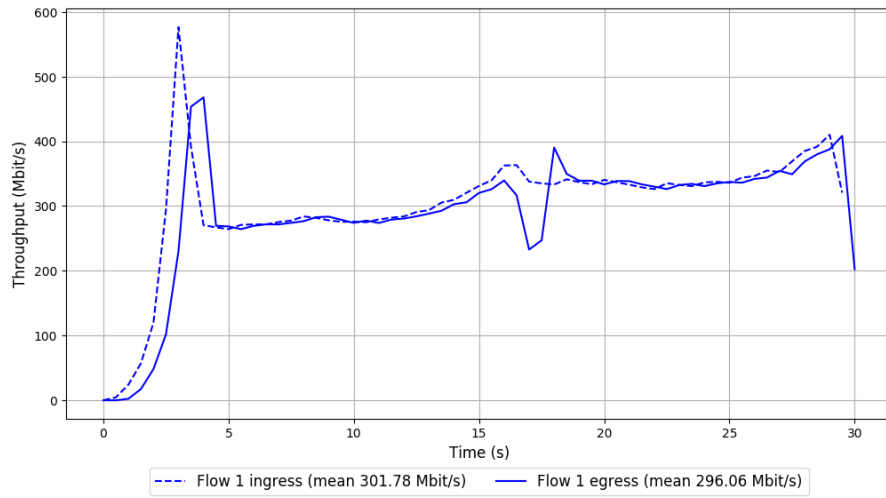
-- Flow 1:

Average throughput: 296.06 Mbit/s

95th percentile per-packet one-way delay: 226.615 ms

Loss rate: 2.77%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-04-24 05:25:58

End at: 2019-04-24 05:26:28

Local clock offset: -0.244 ms

Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2019-04-24 07:48:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 335.66 Mbit/s

95th percentile per-packet one-way delay: 219.471 ms

Loss rate: 1.94%

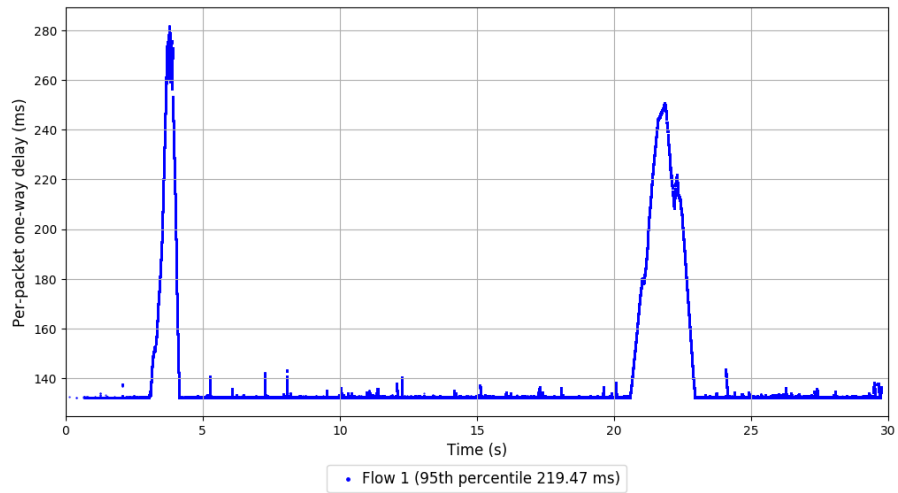
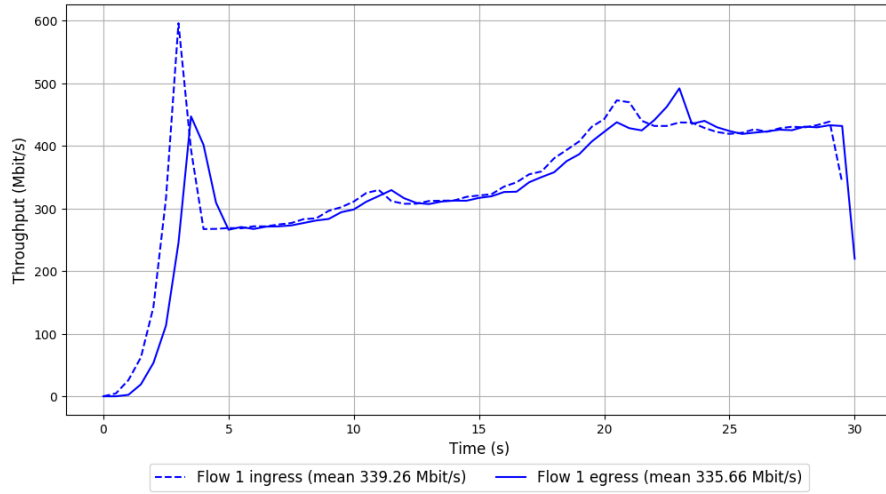
-- Flow 1:

Average throughput: 335.66 Mbit/s

95th percentile per-packet one-way delay: 219.471 ms

Loss rate: 1.94%

### Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-04-24 05:57:15

End at: 2019-04-24 05:57:45

Local clock offset: -0.033 ms

Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2019-04-24 07:48:32

# Datalink statistics

-- Total of 1 flow:

Average throughput: 320.64 Mbit/s

95th percentile per-packet one-way delay: 163.467 ms

Loss rate: 1.95%

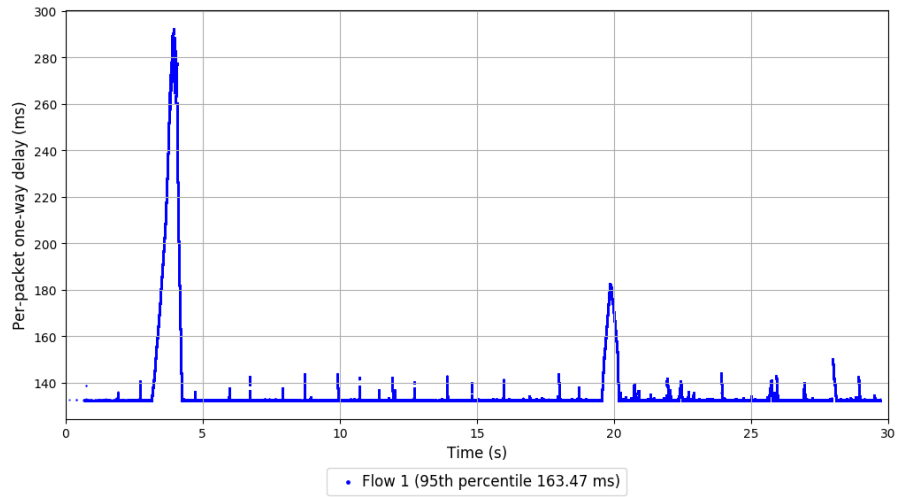
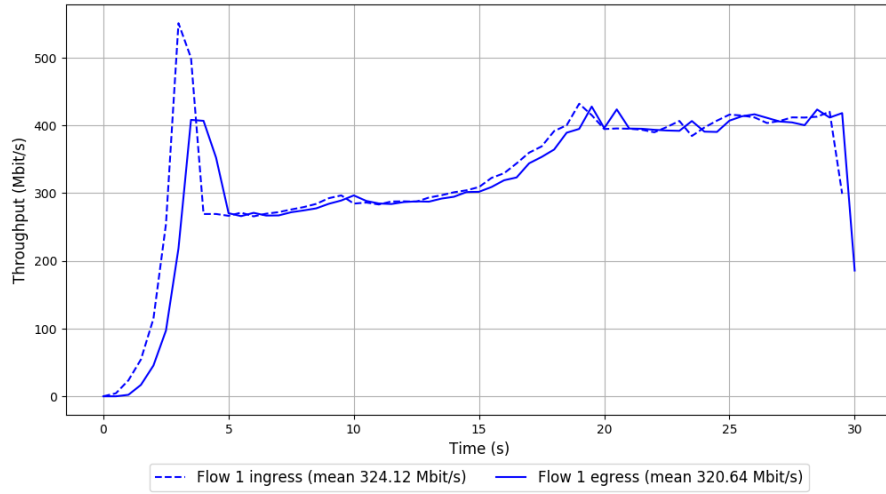
-- Flow 1:

Average throughput: 320.64 Mbit/s

95th percentile per-packet one-way delay: 163.467 ms

Loss rate: 1.95%

### Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-04-24 06:28:26

End at: 2019-04-24 06:28:56

Local clock offset: 0.125 ms

Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2019-04-24 07:57:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 408.88 Mbit/s

95th percentile per-packet one-way delay: 249.251 ms

Loss rate: 1.98%

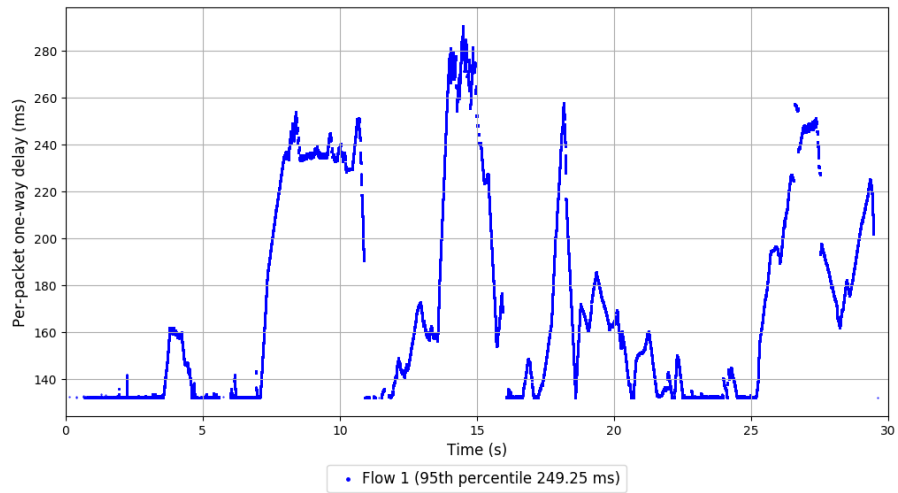
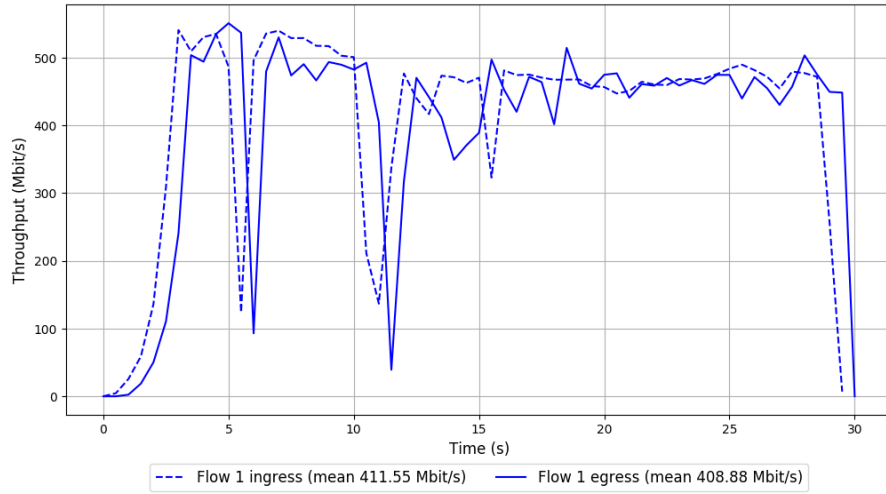
-- Flow 1:

Average throughput: 408.88 Mbit/s

95th percentile per-packet one-way delay: 249.251 ms

Loss rate: 1.98%

### Run 5: Report of PCC-Allegro — Data Link





Run 1: Statistics of PCC-Expr

Start at: 2019-04-24 04:26:43

End at: 2019-04-24 04:27:13

Local clock offset: 0.293 ms

Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2019-04-24 07:57:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 208.97 Mbit/s

95th percentile per-packet one-way delay: 135.226 ms

Loss rate: 1.08%

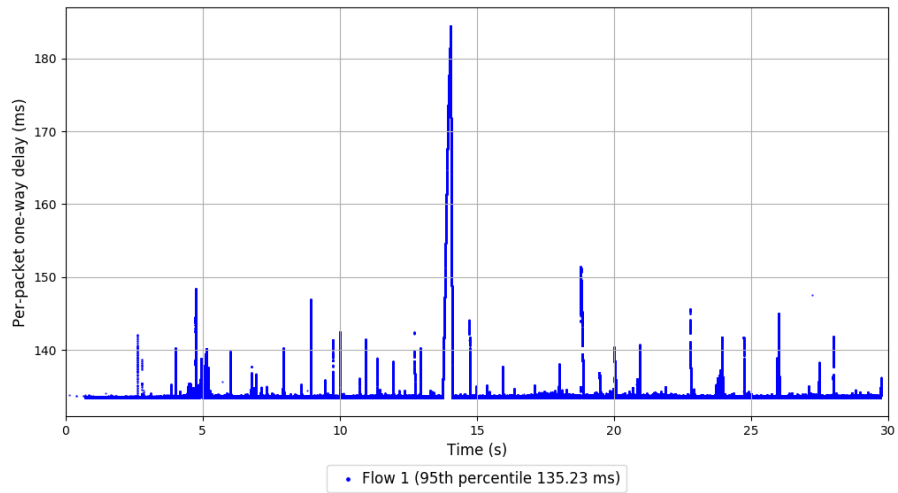
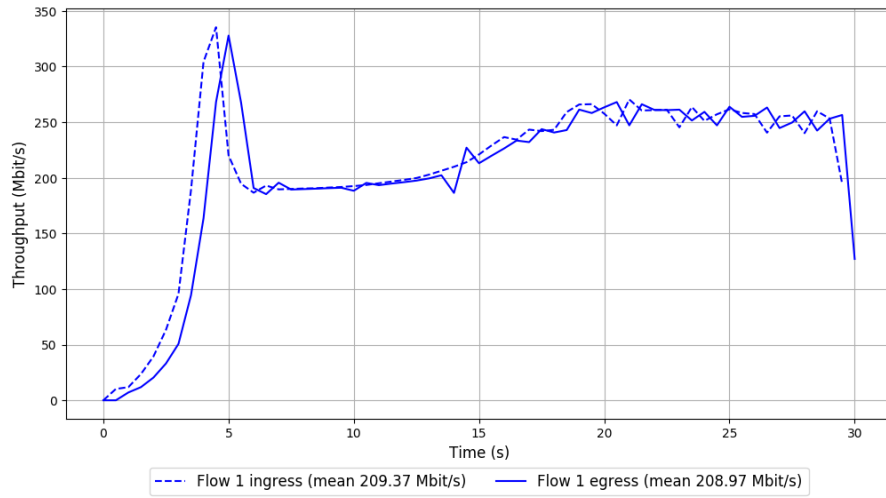
-- Flow 1:

Average throughput: 208.97 Mbit/s

95th percentile per-packet one-way delay: 135.226 ms

Loss rate: 1.08%

### Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2019-04-24 04:57:28

End at: 2019-04-24 04:57:58

Local clock offset: -0.517 ms

Remote clock offset: 0.054 ms

# Below is generated by plot.py at 2019-04-24 07:57:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 204.26 Mbit/s

95th percentile per-packet one-way delay: 135.015 ms

Loss rate: 1.44%

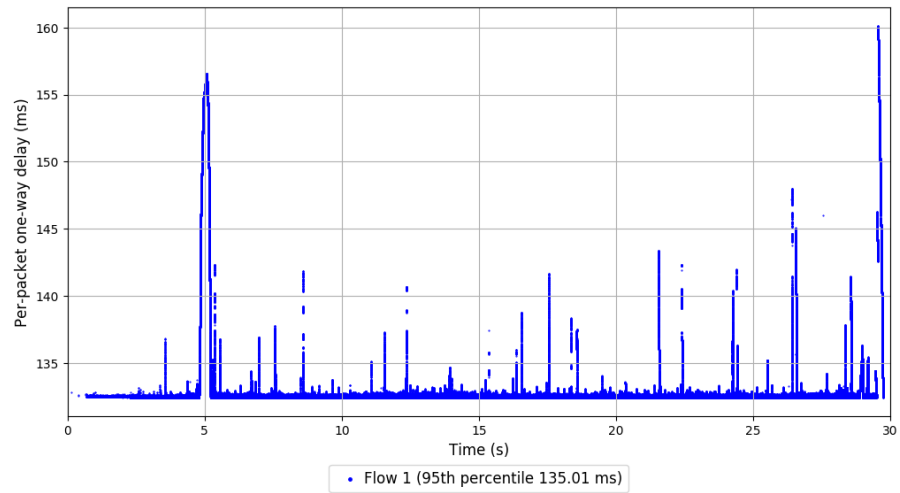
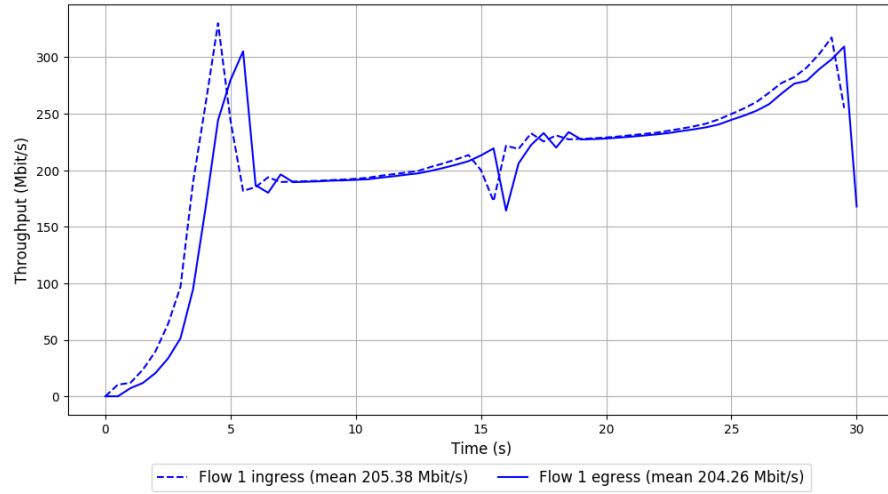
-- Flow 1:

Average throughput: 204.26 Mbit/s

95th percentile per-packet one-way delay: 135.015 ms

Loss rate: 1.44%

## Run 2: Report of PCC-Expr — Data Link

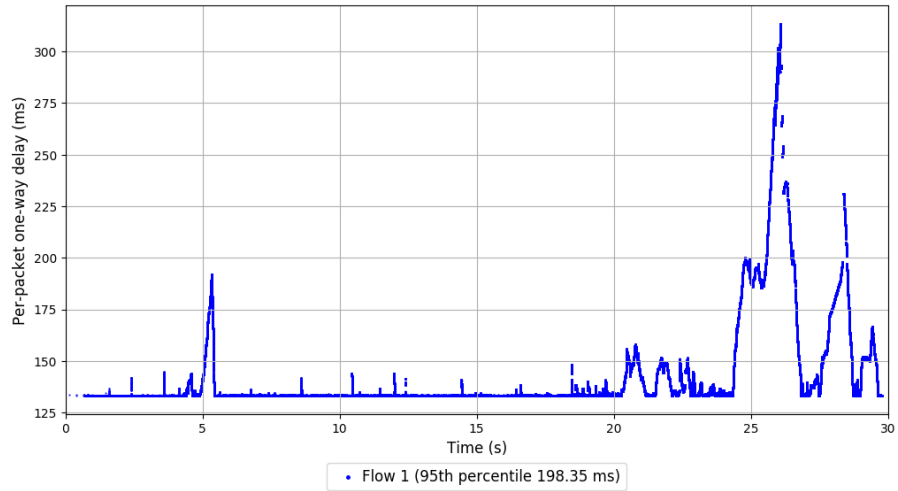
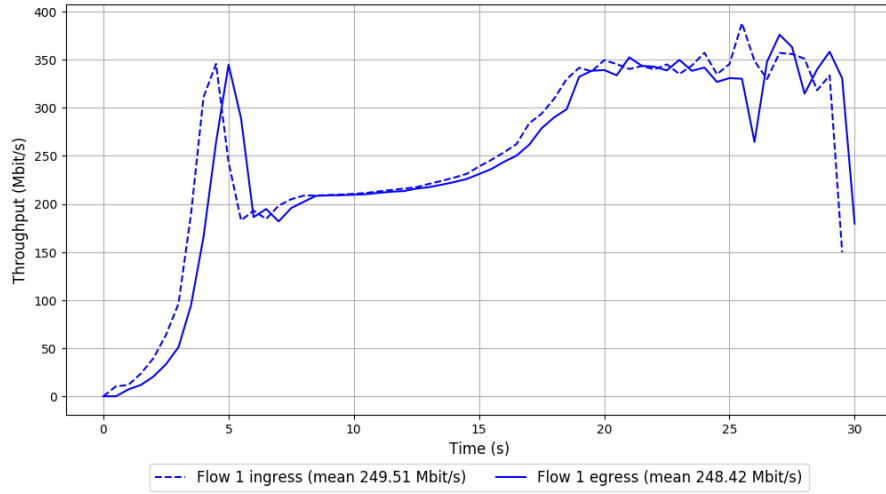


Run 3: Statistics of PCC-Expr

Start at: 2019-04-24 05:28:46  
End at: 2019-04-24 05:29:16  
Local clock offset: -0.069 ms  
Remote clock offset: -0.423 ms

# Below is generated by plot.py at 2019-04-24 07:57:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 248.42 Mbit/s  
95th percentile per-packet one-way delay: 198.346 ms  
Loss rate: 1.33%  
-- Flow 1:  
Average throughput: 248.42 Mbit/s  
95th percentile per-packet one-way delay: 198.346 ms  
Loss rate: 1.33%

### Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2019-04-24 06:00:02

End at: 2019-04-24 06:00:32

Local clock offset: -0.001 ms

Remote clock offset: 0.062 ms

# Below is generated by plot.py at 2019-04-24 07:57:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 259.93 Mbit/s

95th percentile per-packet one-way delay: 195.547 ms

Loss rate: 1.05%

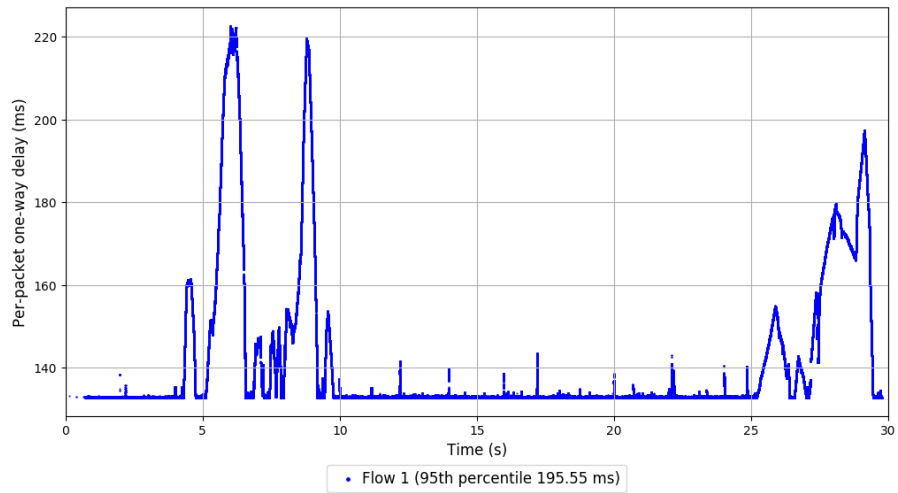
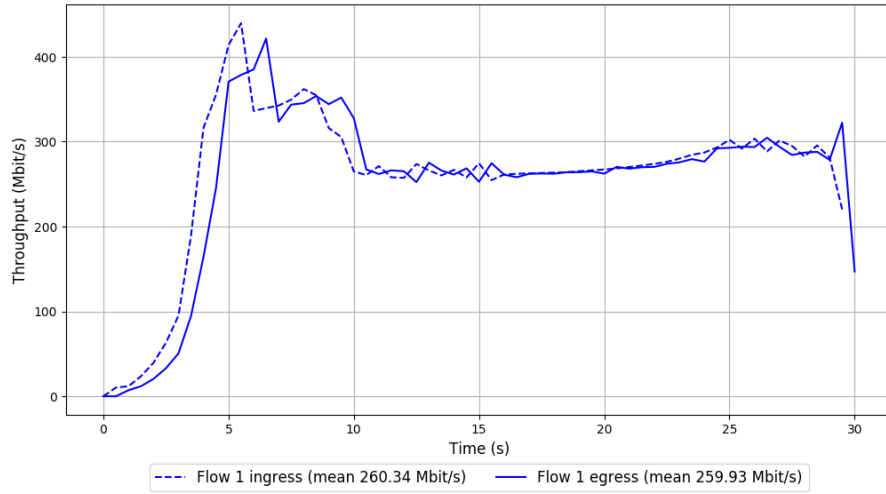
-- Flow 1:

Average throughput: 259.93 Mbit/s

95th percentile per-packet one-way delay: 195.547 ms

Loss rate: 1.05%

#### Run 4: Report of PCC-Expr — Data Link



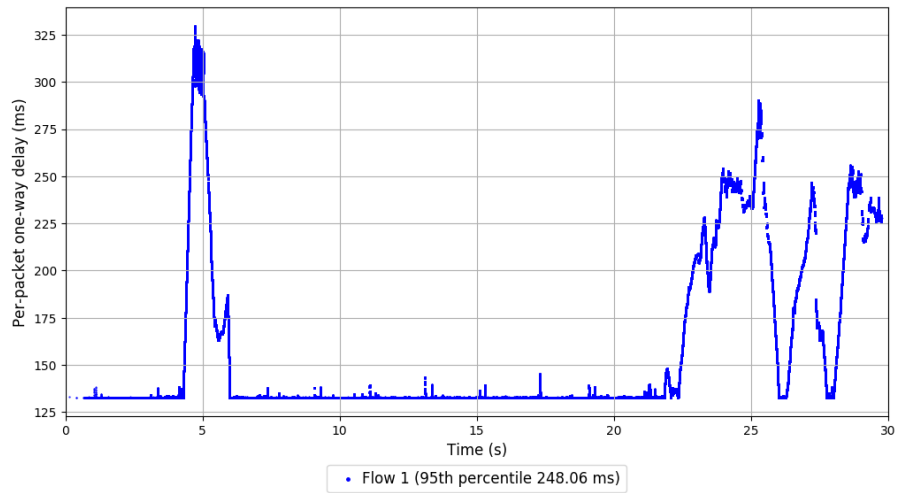
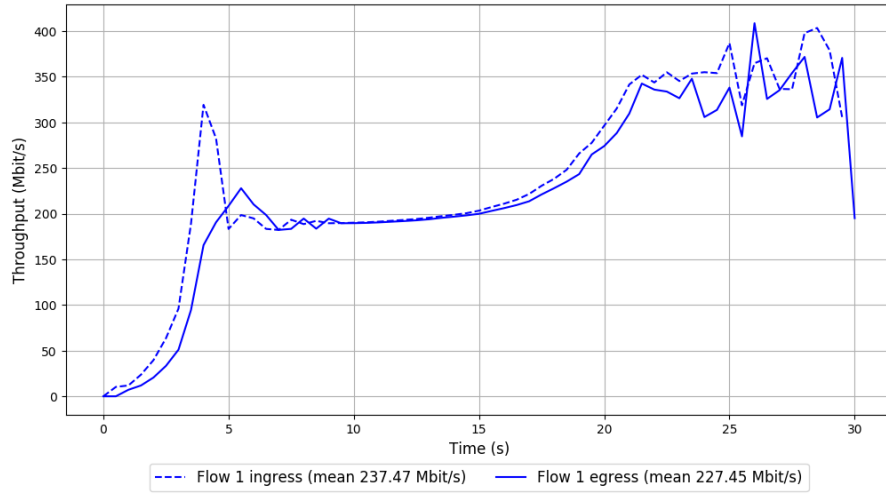


Run 5: Statistics of PCC-Expr

Start at: 2019-04-24 06:31:19  
End at: 2019-04-24 06:31:49  
Local clock offset: -0.318 ms  
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-04-24 07:57:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 227.45 Mbit/s  
95th percentile per-packet one-way delay: 248.061 ms  
Loss rate: 5.08%  
-- Flow 1:  
Average throughput: 227.45 Mbit/s  
95th percentile per-packet one-way delay: 248.061 ms  
Loss rate: 5.08%

### Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-04-24 04:33:04

End at: 2019-04-24 04:33:34

Local clock offset: -0.056 ms

Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2019-04-24 07:57:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 59.49 Mbit/s

95th percentile per-packet one-way delay: 133.031 ms

Loss rate: 1.19%

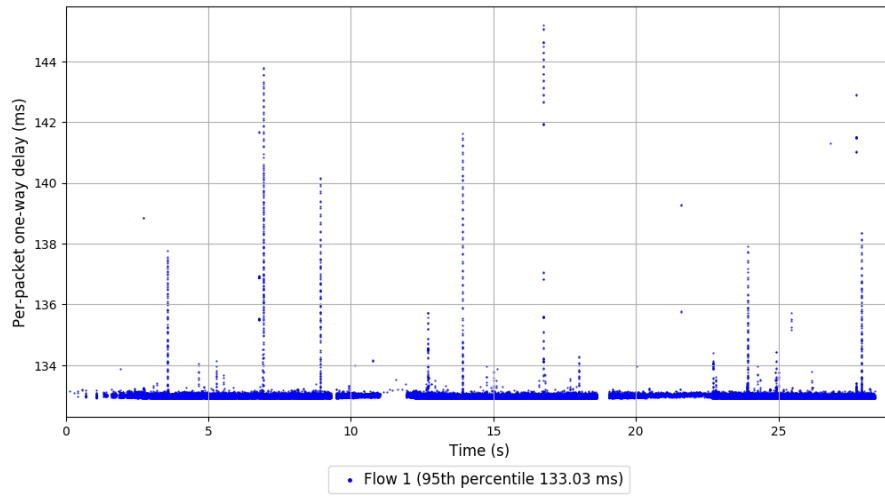
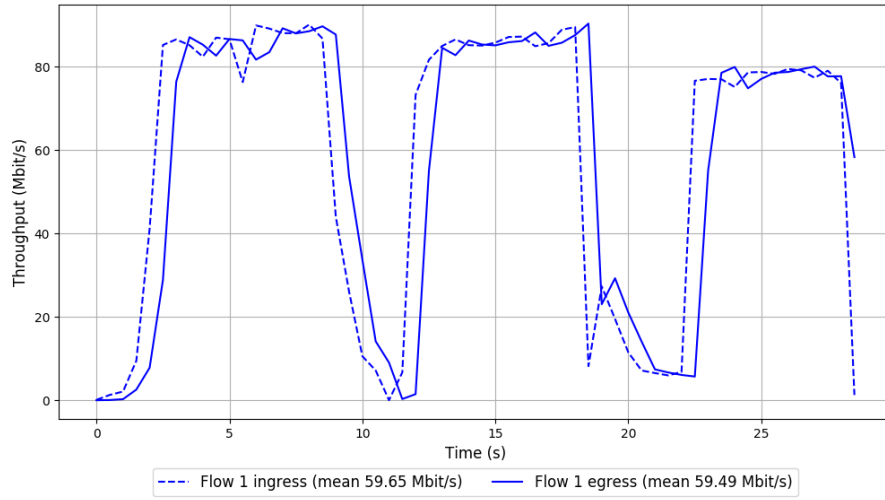
-- Flow 1:

Average throughput: 59.49 Mbit/s

95th percentile per-packet one-way delay: 133.031 ms

Loss rate: 1.19%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-04-24 05:03:41

End at: 2019-04-24 05:04:11

Local clock offset: -0.103 ms

Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2019-04-24 07:57:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 53.85 Mbit/s

95th percentile per-packet one-way delay: 132.920 ms

Loss rate: 1.28%

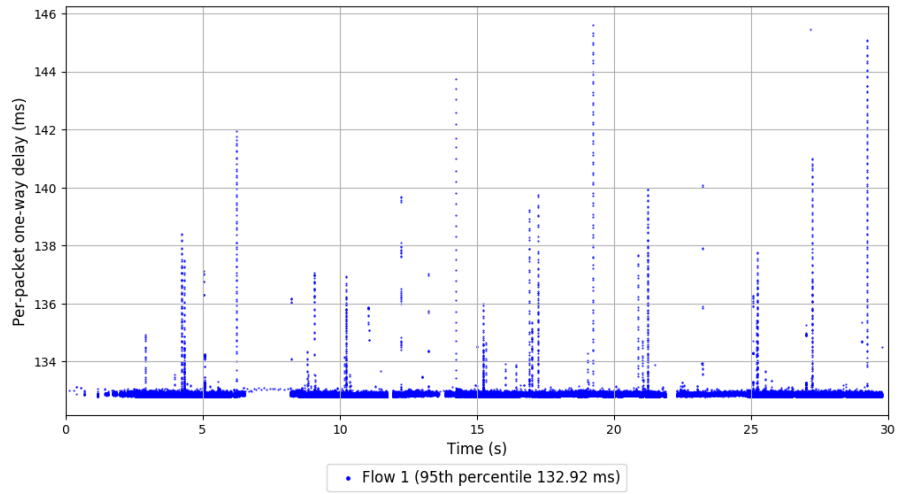
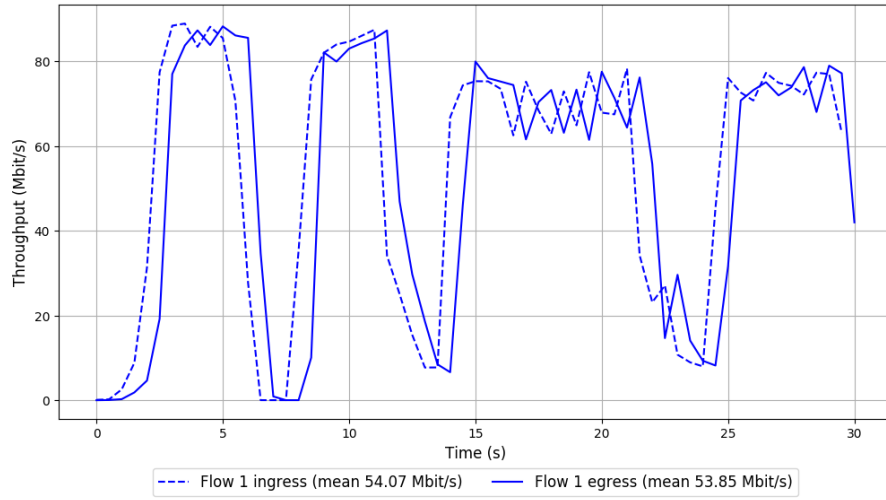
-- Flow 1:

Average throughput: 53.85 Mbit/s

95th percentile per-packet one-way delay: 132.920 ms

Loss rate: 1.28%

Run 2: Report of QUIC Cubic — Data Link

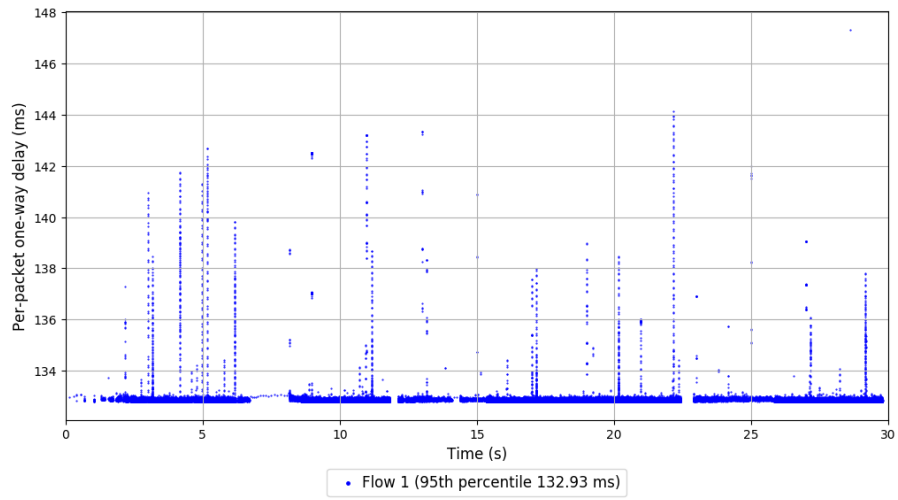
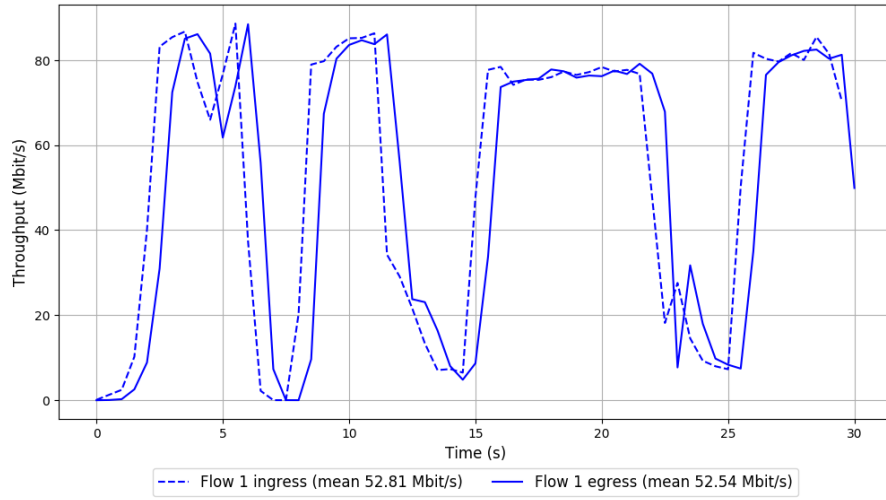


Run 3: Statistics of QUIC Cubic

Start at: 2019-04-24 05:34:57  
End at: 2019-04-24 05:35:27  
Local clock offset: -0.03 ms  
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2019-04-24 07:57:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 52.54 Mbit/s  
95th percentile per-packet one-way delay: 132.926 ms  
Loss rate: 1.41%  
-- Flow 1:  
Average throughput: 52.54 Mbit/s  
95th percentile per-packet one-way delay: 132.926 ms  
Loss rate: 1.41%

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





Run 4: Statistics of QUIC Cubic

Start at: 2019-04-24 06:06:19

End at: 2019-04-24 06:06:49

Local clock offset: -0.267 ms

Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2019-04-24 07:57:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 50.37 Mbit/s

95th percentile per-packet one-way delay: 132.787 ms

Loss rate: 1.43%

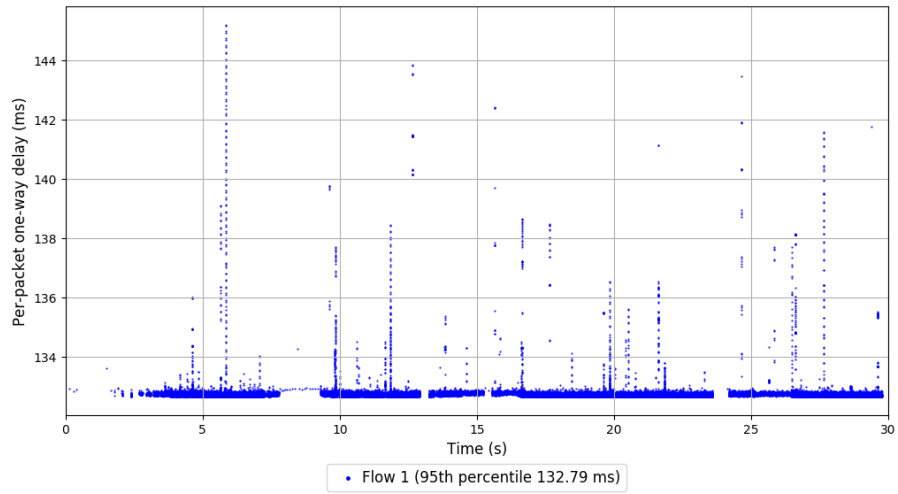
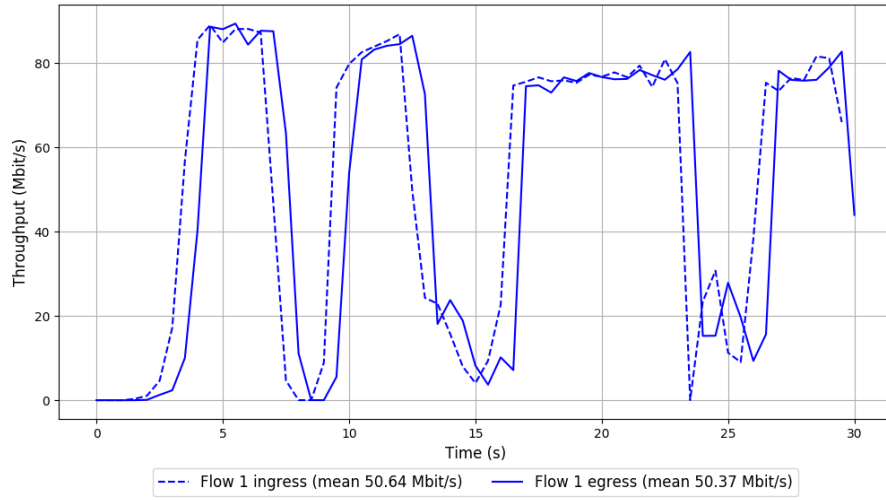
-- Flow 1:

Average throughput: 50.37 Mbit/s

95th percentile per-packet one-way delay: 132.787 ms

Loss rate: 1.43%

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



Run 5: Statistics of QUIC Cubic

Start at: 2019-04-24 06:37:51

End at: 2019-04-24 06:38:21

Local clock offset: -0.041 ms

Remote clock offset: 0.34 ms

# Below is generated by plot.py at 2019-04-24 07:57:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 57.56 Mbit/s

95th percentile per-packet one-way delay: 131.725 ms

Loss rate: 1.35%

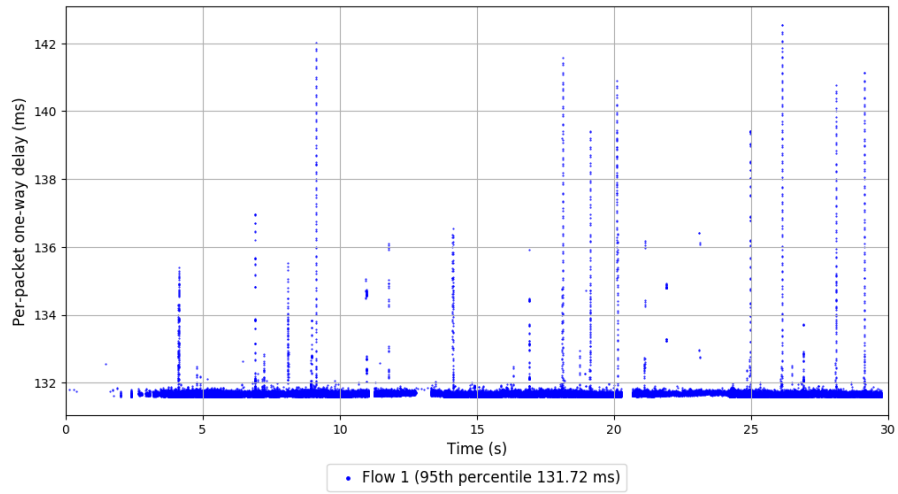
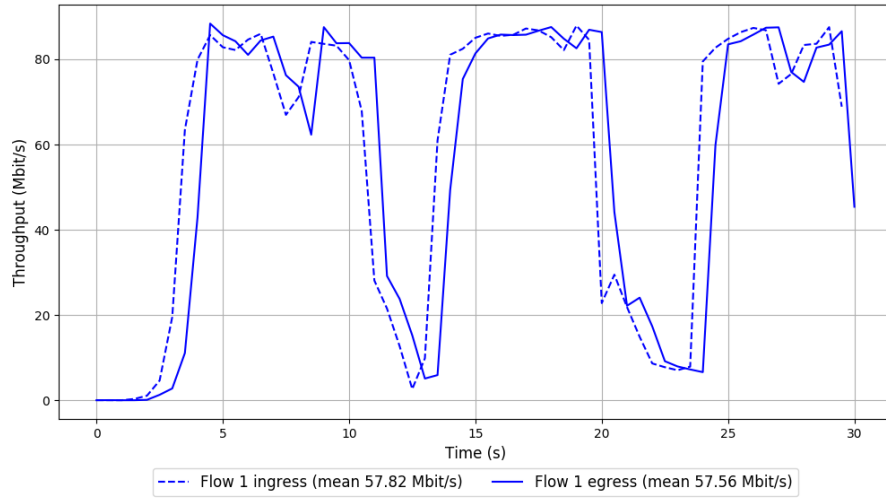
-- Flow 1:

Average throughput: 57.56 Mbit/s

95th percentile per-packet one-way delay: 131.725 ms

Loss rate: 1.35%

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



Run 1: Statistics of SCReAM

Start at: 2019-04-24 04:19:30

End at: 2019-04-24 04:20:00

Local clock offset: -0.102 ms

Remote clock offset: 0.097 ms

# Below is generated by plot.py at 2019-04-24 07:57:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 133.060 ms

Loss rate: 0.90%

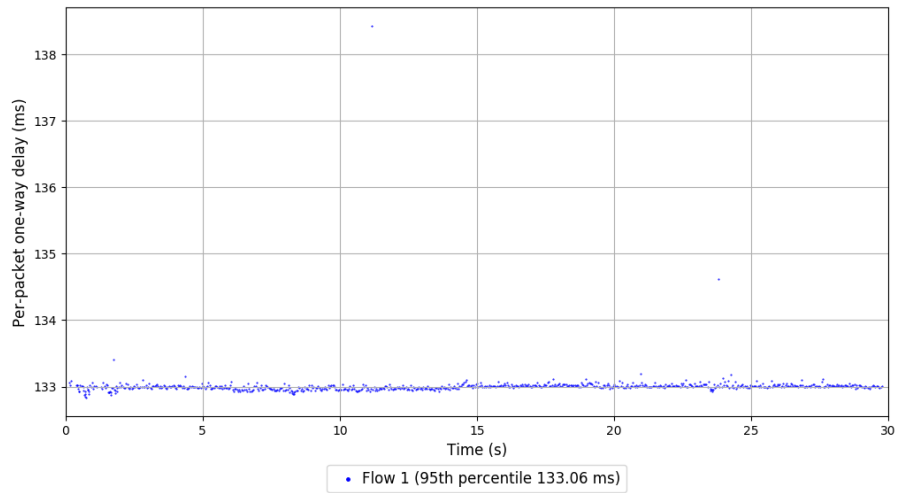
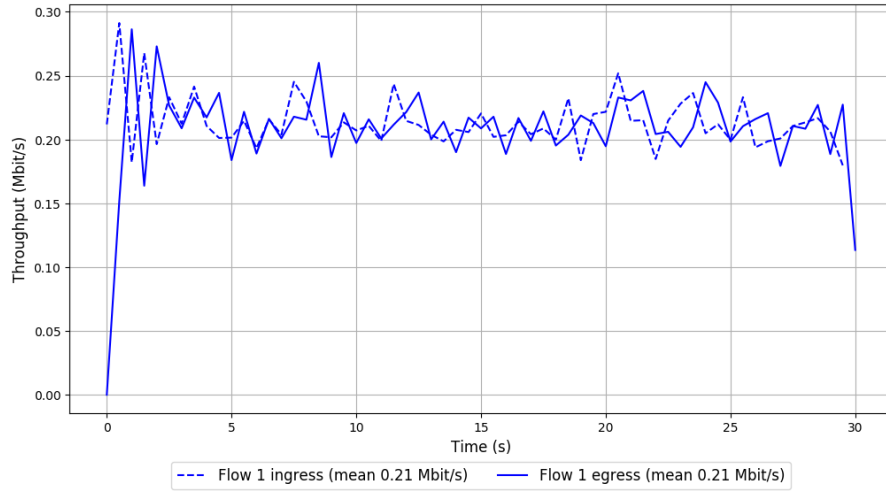
-- Flow 1:

Average throughput: 0.21 Mbit/s

95th percentile per-packet one-way delay: 133.060 ms

Loss rate: 0.90%

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



Run 2: Statistics of SCReAM

Start at: 2019-04-24 04:50:19

End at: 2019-04-24 04:50:49

Local clock offset: 0.109 ms

Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2019-04-24 07:57:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 132.431 ms

Loss rate: 0.75%

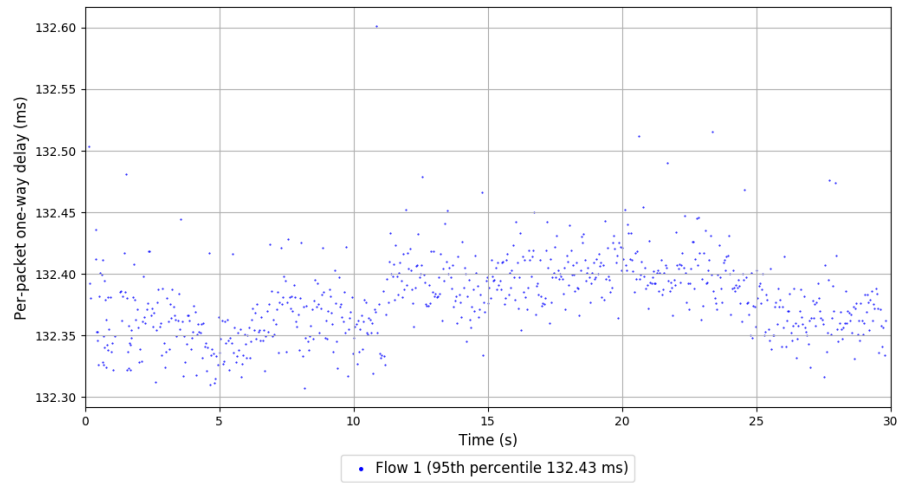
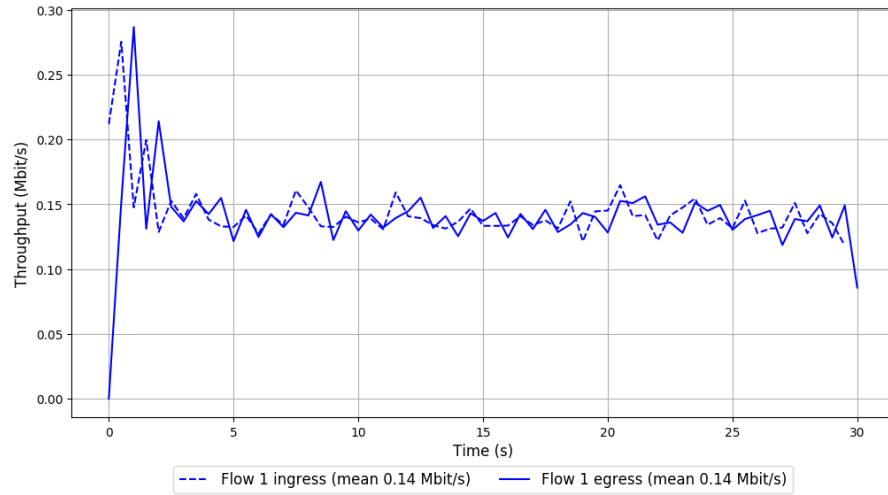
-- Flow 1:

Average throughput: 0.14 Mbit/s

95th percentile per-packet one-way delay: 132.431 ms

Loss rate: 0.75%

## Run 2: Report of SCReAM — Data Link





Run 3: Statistics of SCReAM

Start at: 2019-04-24 05:21:37

End at: 2019-04-24 05:22:07

Local clock offset: -0.295 ms

Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2019-04-24 07:57:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 132.320 ms

Loss rate: 0.88%

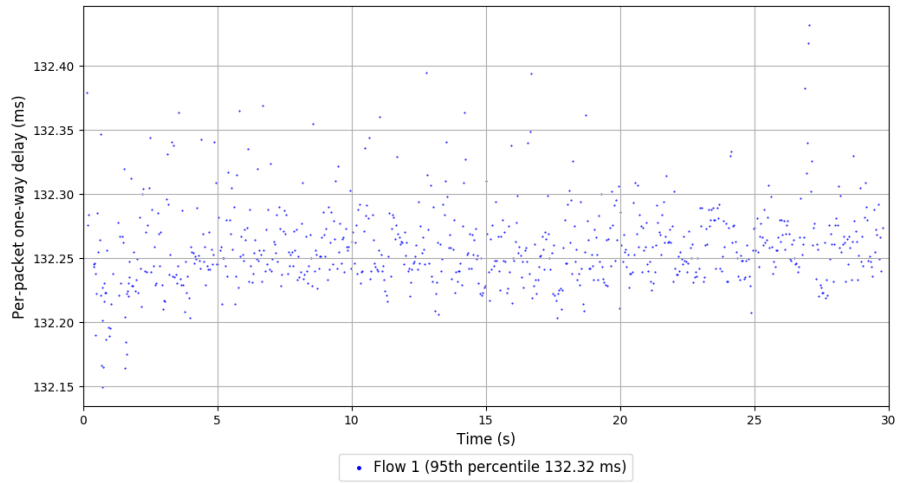
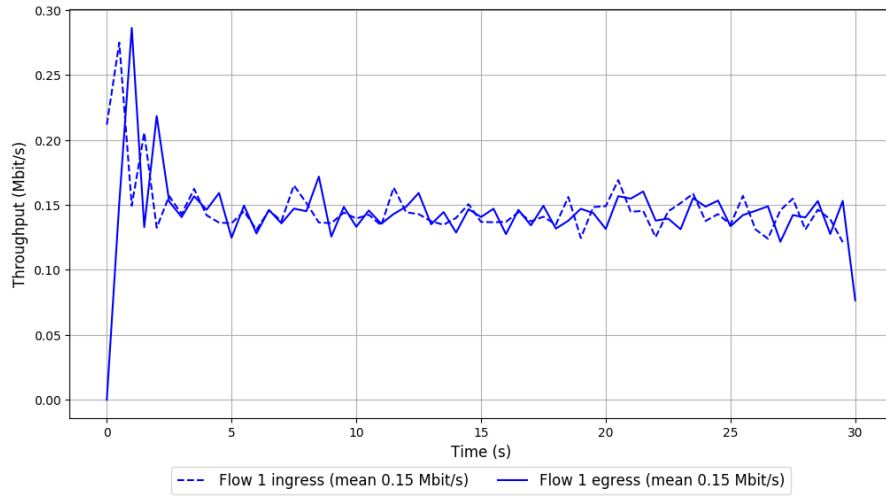
-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 132.320 ms

Loss rate: 0.88%

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



Run 4: Statistics of SCReAM

Start at: 2019-04-24 05:52:47

End at: 2019-04-24 05:53:17

Local clock offset: -0.072 ms

Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2019-04-24 07:57:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 133.003 ms

Loss rate: 0.88%

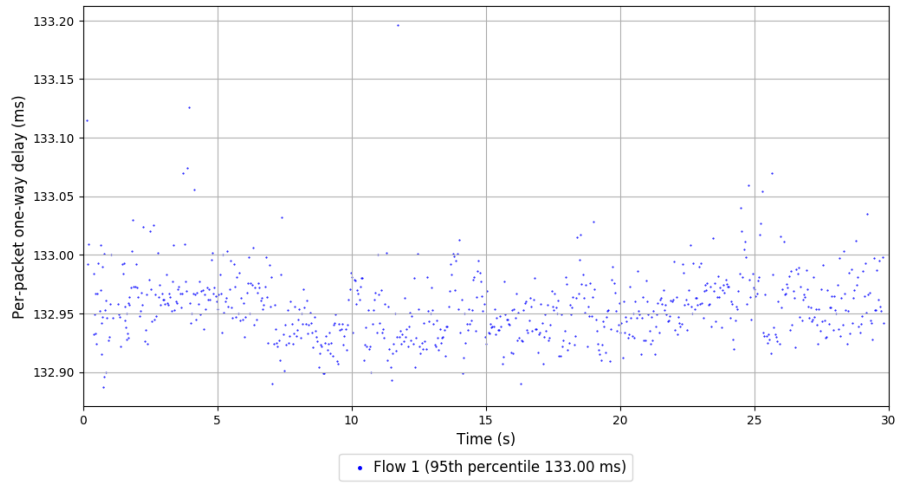
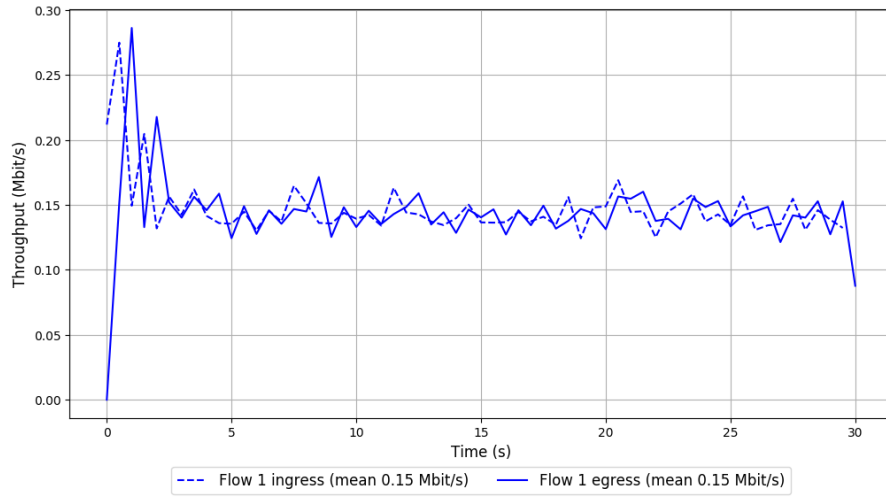
-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 133.003 ms

Loss rate: 0.88%

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



Run 5: Statistics of SCReAM

Start at: 2019-04-24 06:24:08

End at: 2019-04-24 06:24:38

Local clock offset: -0.075 ms

Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2019-04-24 07:57:22

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 132.872 ms

Loss rate: 0.75%

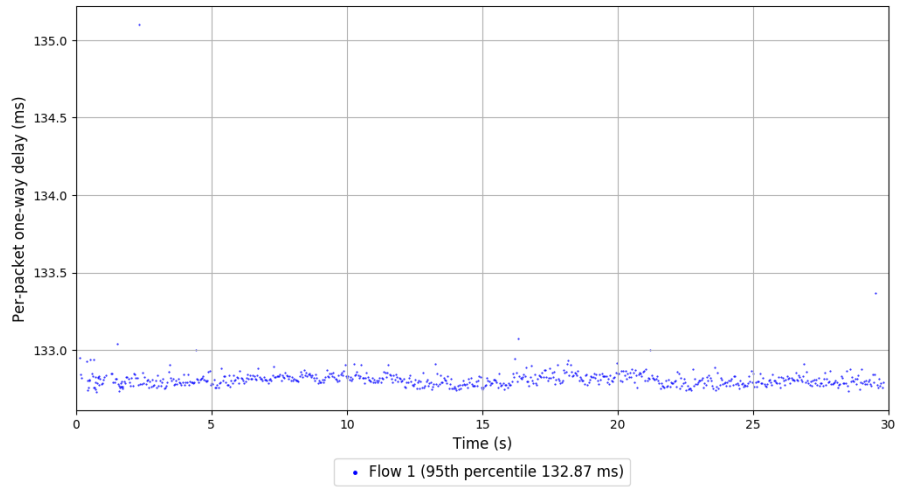
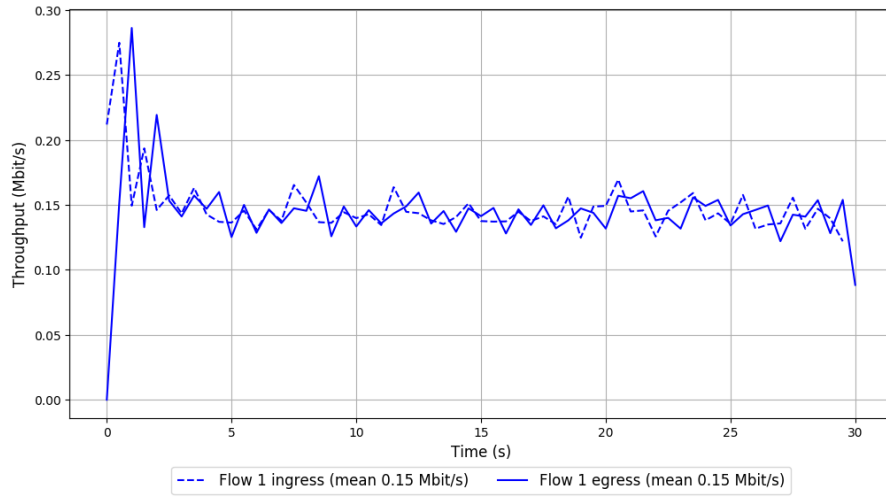
-- Flow 1:

Average throughput: 0.15 Mbit/s

95th percentile per-packet one-way delay: 132.872 ms

Loss rate: 0.75%

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



Run 1: Statistics of Sprout

Start at: 2019-04-24 04:07:22

End at: 2019-04-24 04:07:52

Local clock offset: -0.567 ms

Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2019-04-24 07:57:22

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 132.807 ms

Loss rate: 1.00%

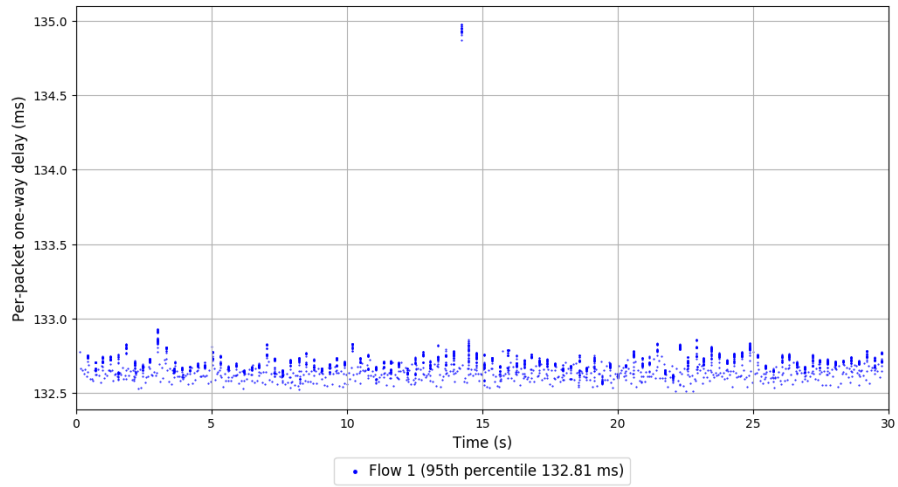
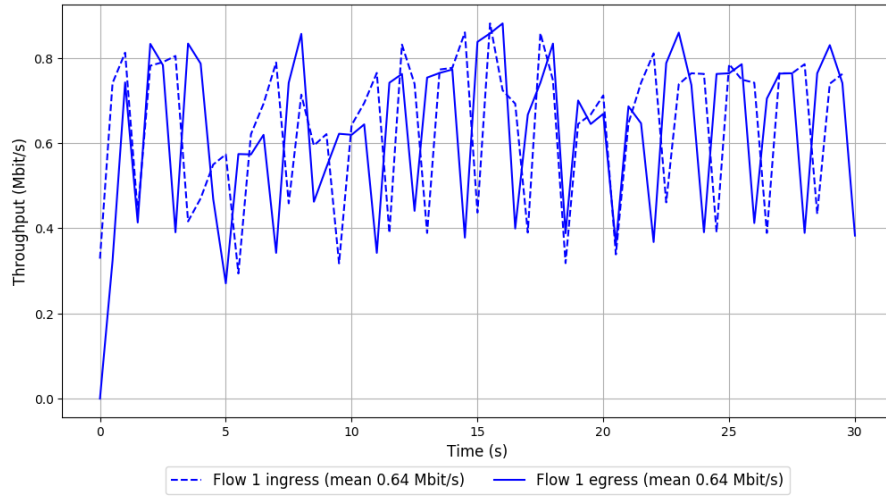
-- Flow 1:

Average throughput: 0.64 Mbit/s

95th percentile per-packet one-way delay: 132.807 ms

Loss rate: 1.00%

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





Run 2: Statistics of Sprout

Start at: 2019-04-24 04:38:40

End at: 2019-04-24 04:39:10

Local clock offset: -0.334 ms

Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-04-24 07:57:22

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 132.899 ms

Loss rate: 0.93%

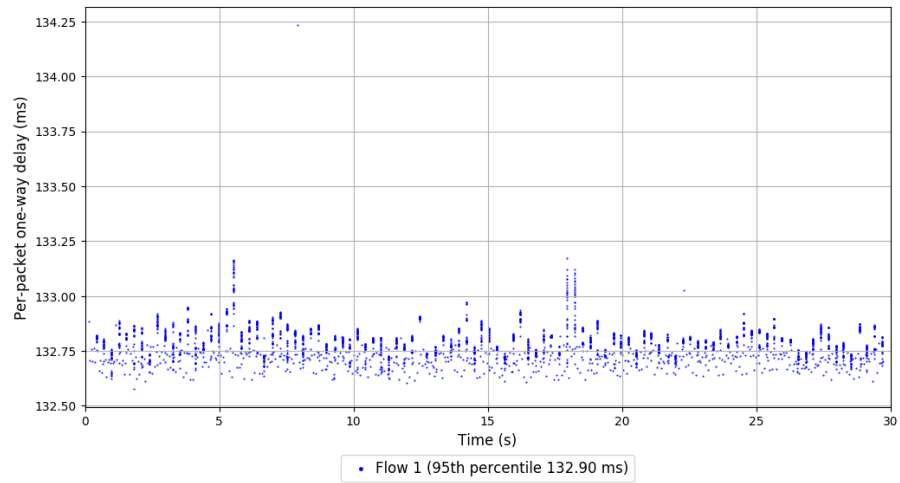
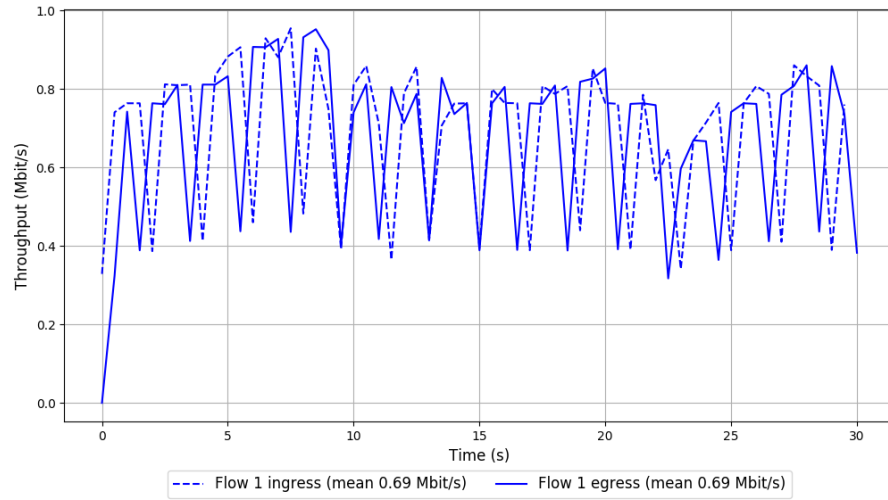
-- Flow 1:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 132.899 ms

Loss rate: 0.93%

## Run 2: Report of Sprout — Data Link

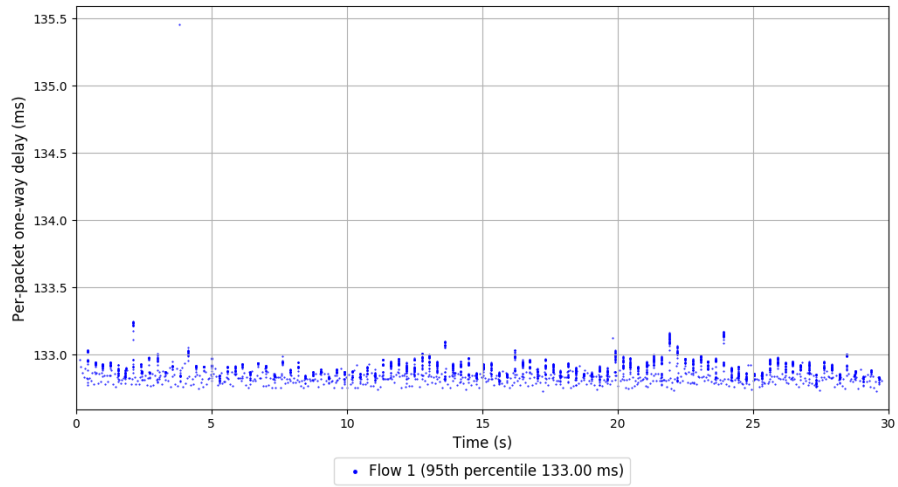
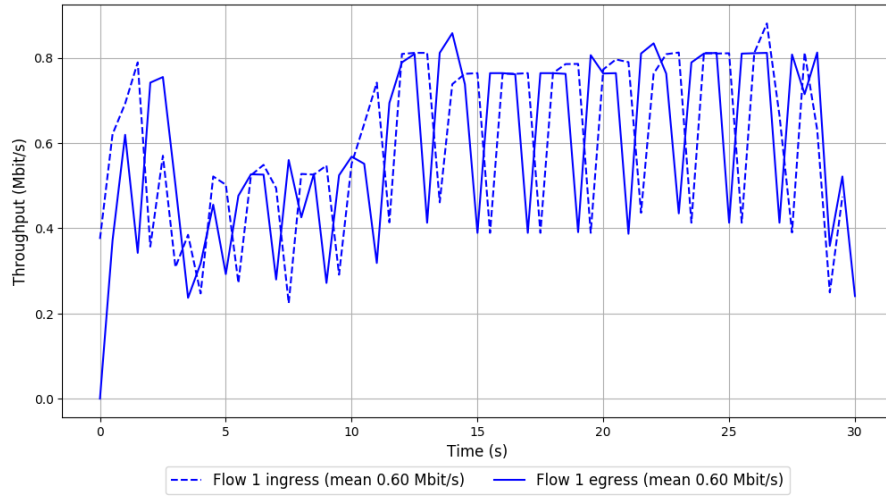


Run 3: Statistics of Sprout

Start at: 2019-04-24 05:09:22  
End at: 2019-04-24 05:09:52  
Local clock offset: -0.264 ms  
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-04-24 07:57:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.60 Mbit/s  
95th percentile per-packet one-way delay: 132.998 ms  
Loss rate: 0.66%  
-- Flow 1:  
Average throughput: 0.60 Mbit/s  
95th percentile per-packet one-way delay: 132.998 ms  
Loss rate: 0.66%

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



Run 4: Statistics of Sprout

Start at: 2019-04-24 05:40:28

End at: 2019-04-24 05:40:58

Local clock offset: 0.26 ms

Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2019-04-24 07:57:22

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 132.937 ms

Loss rate: 1.04%

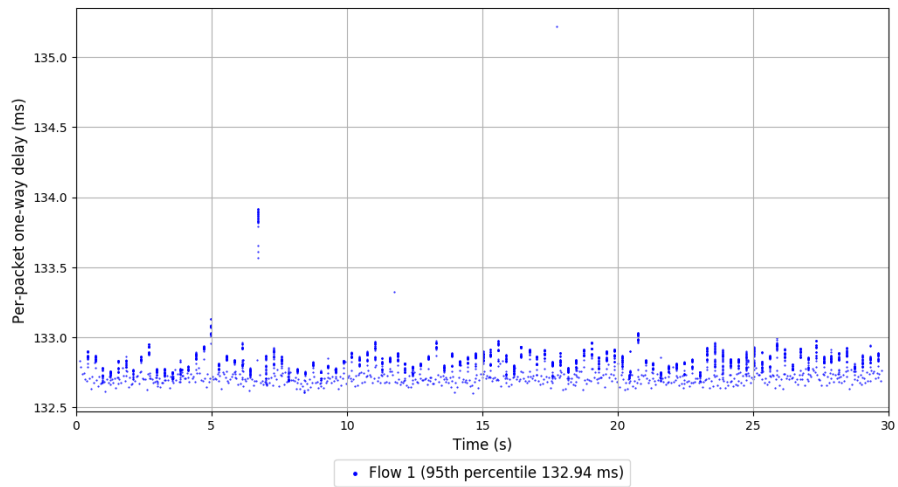
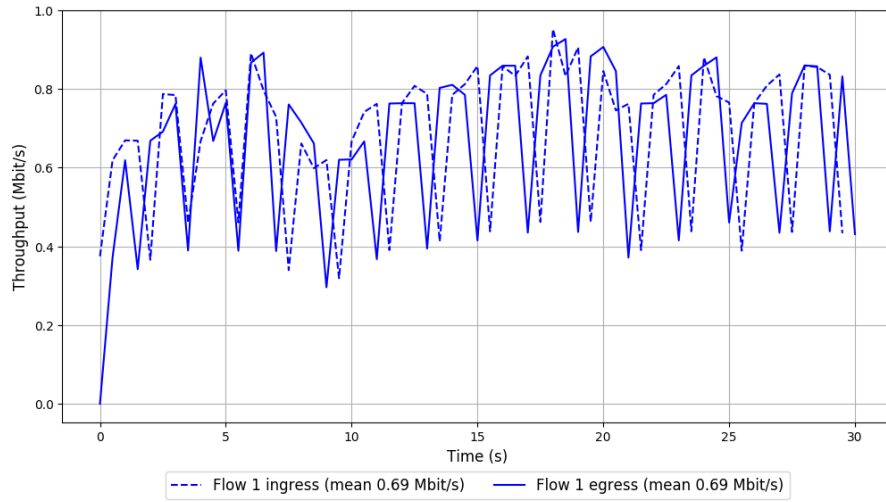
-- Flow 1:

Average throughput: 0.69 Mbit/s

95th percentile per-packet one-way delay: 132.937 ms

Loss rate: 1.04%

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



Run 5: Statistics of Sprout

Start at: 2019-04-24 06:11:52

End at: 2019-04-24 06:12:22

Local clock offset: 0.138 ms

Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2019-04-24 07:57:22

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 132.809 ms

Loss rate: 1.04%

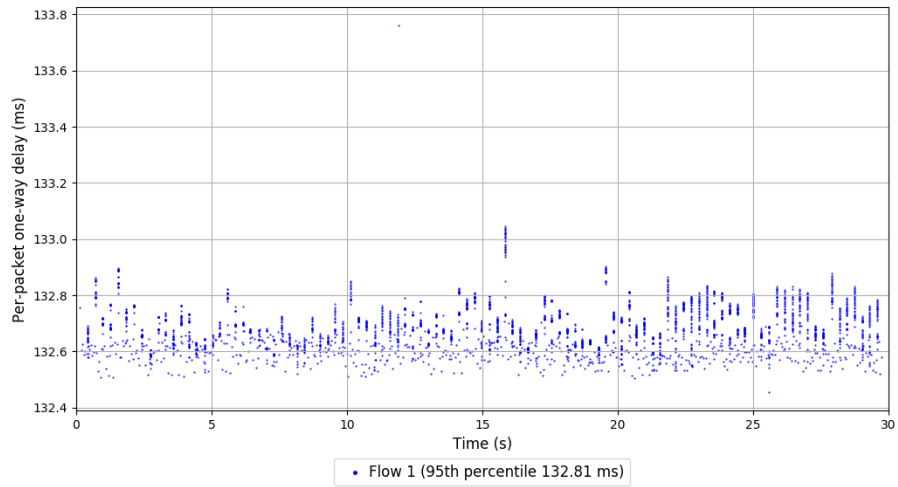
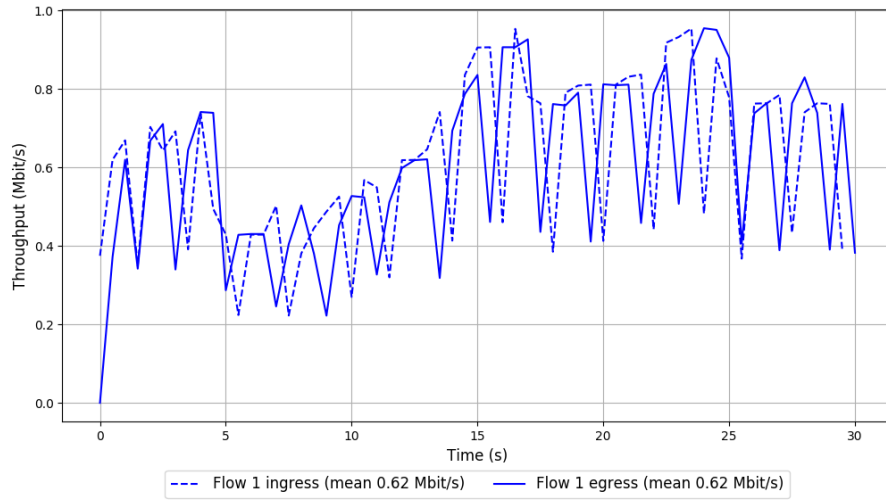
-- Flow 1:

Average throughput: 0.62 Mbit/s

95th percentile per-packet one-way delay: 132.809 ms

Loss rate: 1.04%

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





Run 1: Statistics of TaoVA-100x

Start at: 2019-04-24 04:29:55

End at: 2019-04-24 04:30:25

Local clock offset: -0.333 ms

Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2019-04-24 07:58:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 218.10 Mbit/s

95th percentile per-packet one-way delay: 132.918 ms

Loss rate: 0.92%

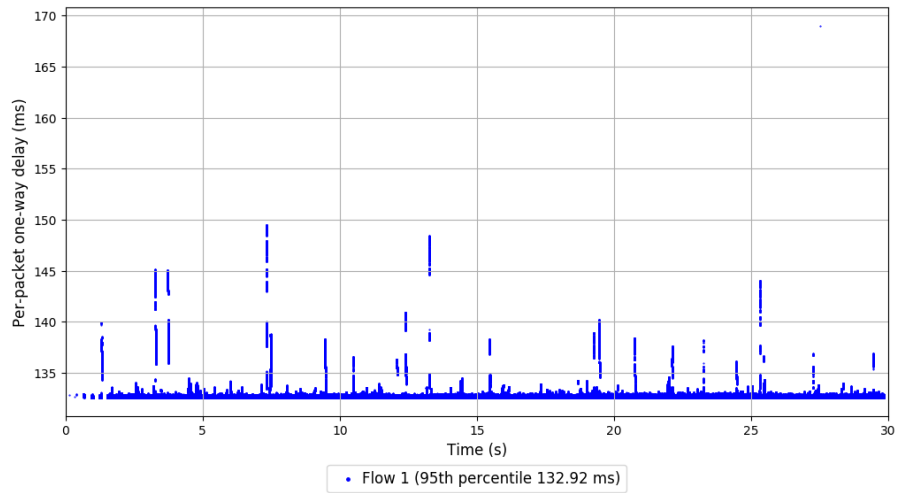
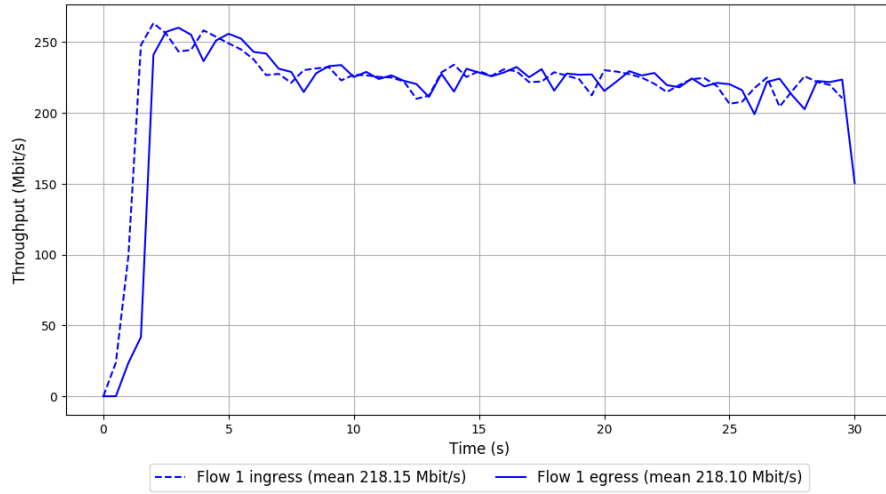
-- Flow 1:

Average throughput: 218.10 Mbit/s

95th percentile per-packet one-way delay: 132.918 ms

Loss rate: 0.92%

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-04-24 05:00:39

End at: 2019-04-24 05:01:09

Local clock offset: -0.489 ms

Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2019-04-24 07:58:53

# Datalink statistics

-- Total of 1 flow:

Average throughput: 219.24 Mbit/s

95th percentile per-packet one-way delay: 133.276 ms

Loss rate: 0.94%

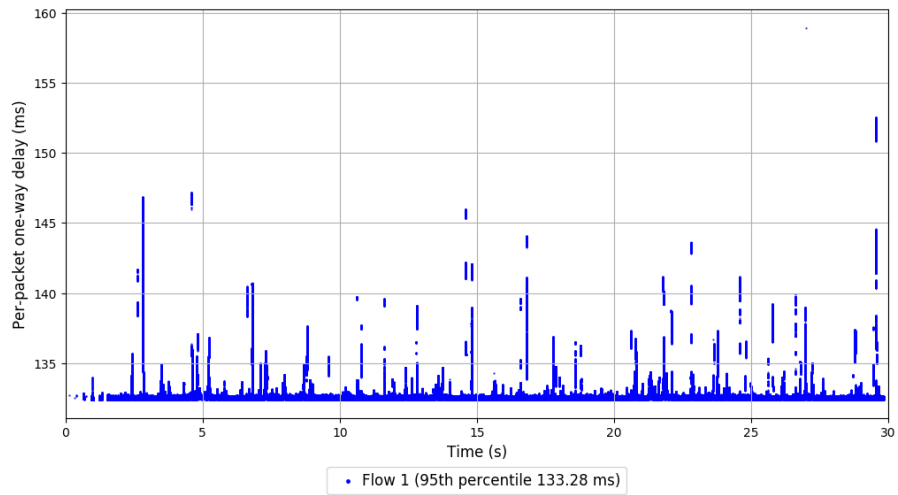
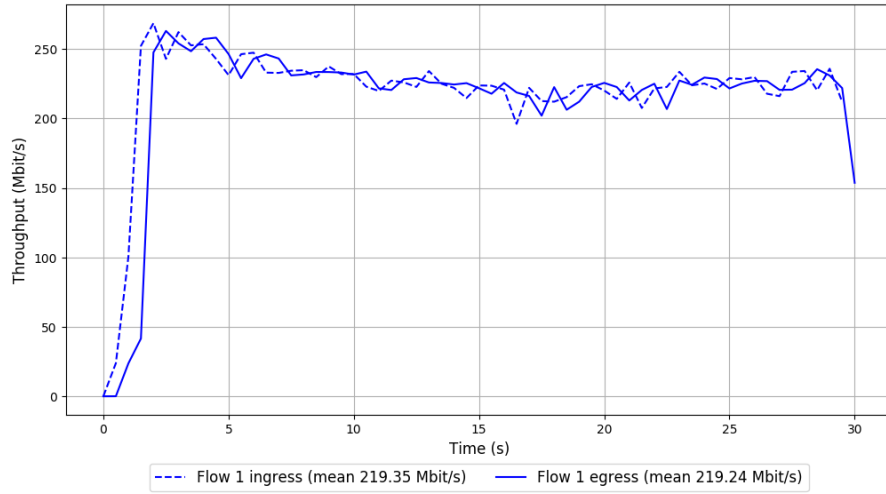
-- Flow 1:

Average throughput: 219.24 Mbit/s

95th percentile per-packet one-way delay: 133.276 ms

Loss rate: 0.94%

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

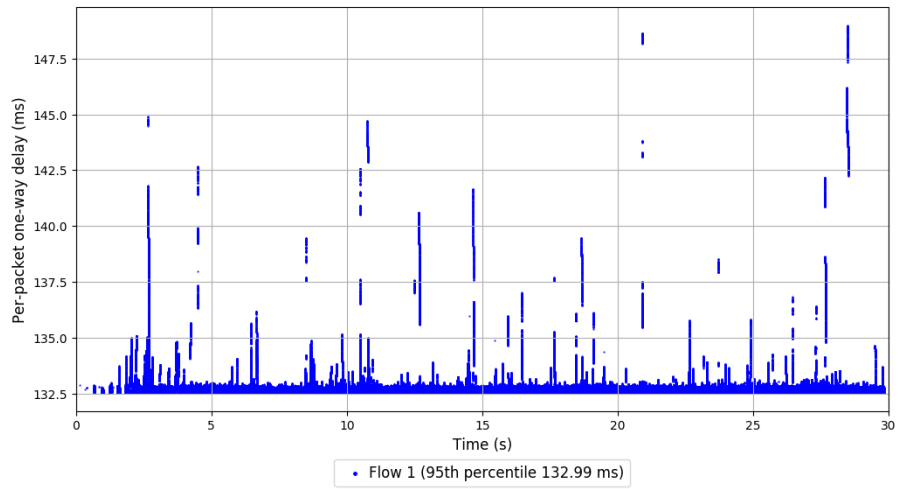
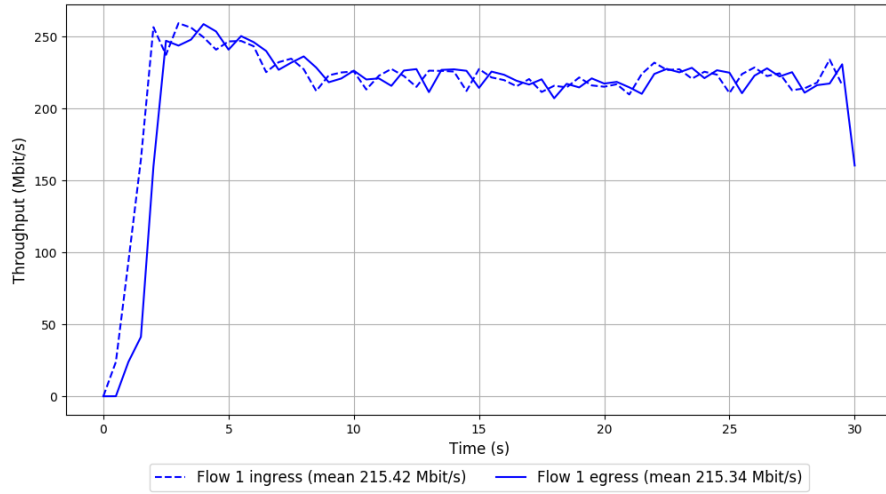


Run 3: Statistics of TaoVA-100x

Start at: 2019-04-24 05:32:02  
End at: 2019-04-24 05:32:32  
Local clock offset: -0.312 ms  
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2019-04-24 07:58:53  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 215.34 Mbit/s  
95th percentile per-packet one-way delay: 132.990 ms  
Loss rate: 0.93%  
-- Flow 1:  
Average throughput: 215.34 Mbit/s  
95th percentile per-packet one-way delay: 132.990 ms  
Loss rate: 0.93%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-04-24 06:03:18

End at: 2019-04-24 06:03:48

Local clock offset: -0.206 ms

Remote clock offset: -0.312 ms

# Below is generated by plot.py at 2019-04-24 07:58:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 215.74 Mbit/s

95th percentile per-packet one-way delay: 133.595 ms

Loss rate: 0.86%

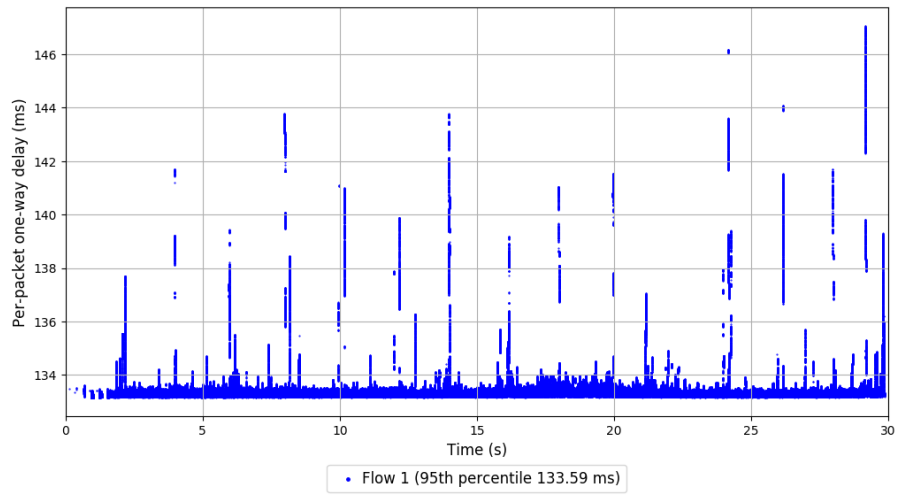
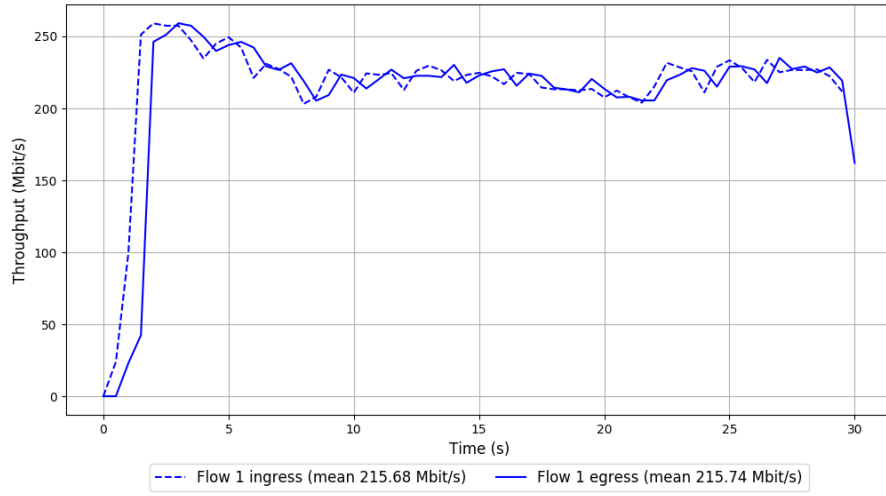
-- Flow 1:

Average throughput: 215.74 Mbit/s

95th percentile per-packet one-way delay: 133.595 ms

Loss rate: 0.86%

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





Run 5: Statistics of TaoVA-100x

Start at: 2019-04-24 06:34:36

End at: 2019-04-24 06:35:06

Local clock offset: -0.343 ms

Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-04-24 08:01:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 216.32 Mbit/s

95th percentile per-packet one-way delay: 133.417 ms

Loss rate: 0.96%

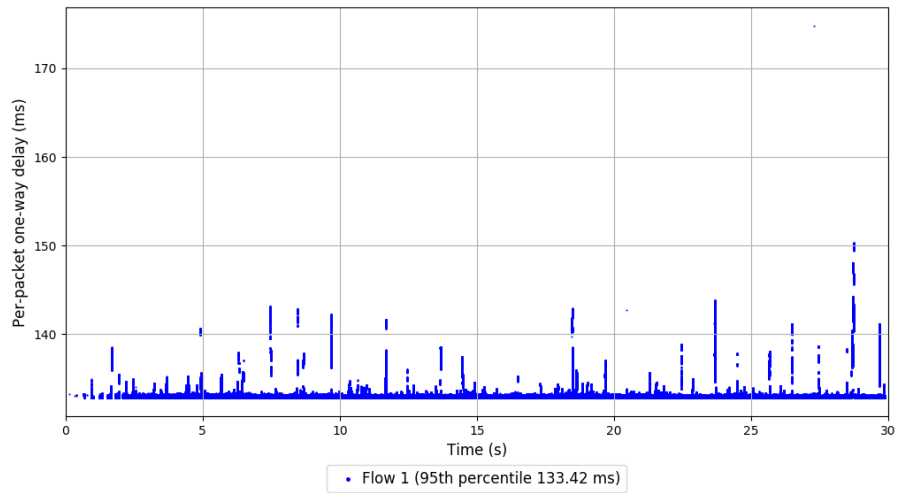
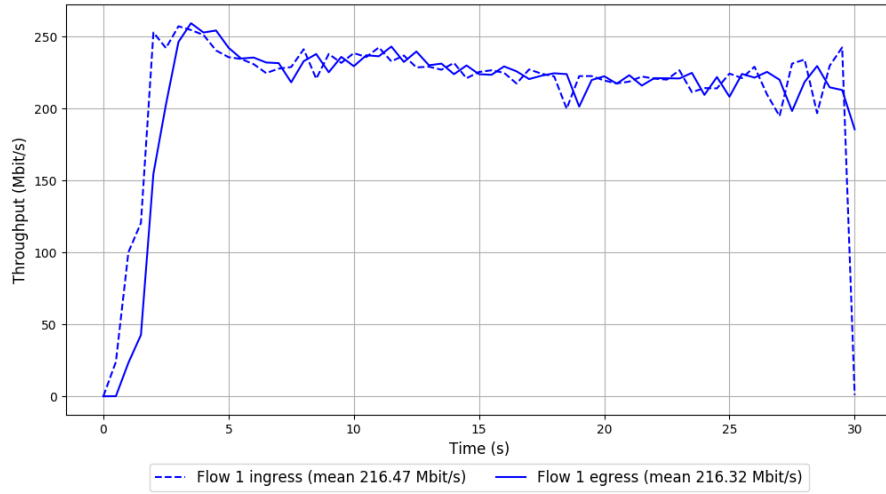
-- Flow 1:

Average throughput: 216.32 Mbit/s

95th percentile per-packet one-way delay: 133.417 ms

Loss rate: 0.96%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-04-24 04:31:29

End at: 2019-04-24 04:31:59

Local clock offset: -0.136 ms

Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2019-04-24 08:02:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 428.38 Mbit/s

95th percentile per-packet one-way delay: 141.583 ms

Loss rate: 1.00%

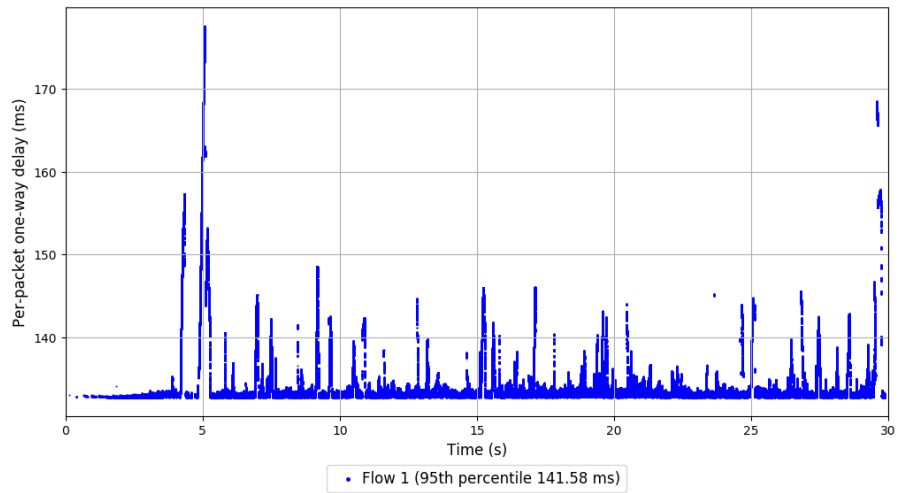
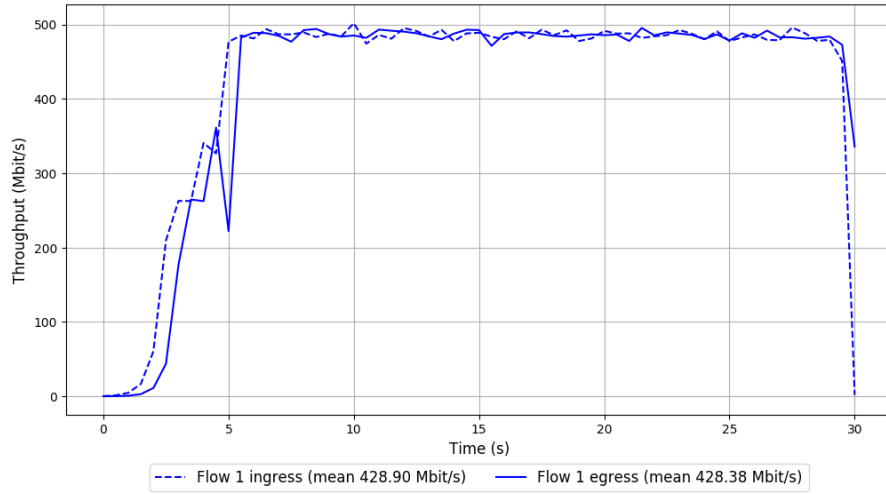
-- Flow 1:

Average throughput: 428.38 Mbit/s

95th percentile per-packet one-way delay: 141.583 ms

Loss rate: 1.00%

### Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-04-24 05:02:13

End at: 2019-04-24 05:02:43

Local clock offset: 0.306 ms

Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2019-04-24 08:02:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 294.16 Mbit/s

95th percentile per-packet one-way delay: 140.149 ms

Loss rate: 0.95%

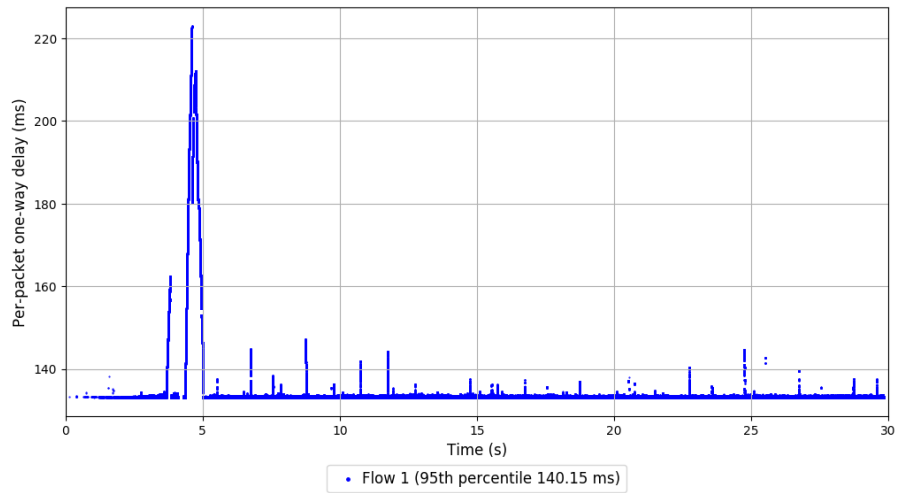
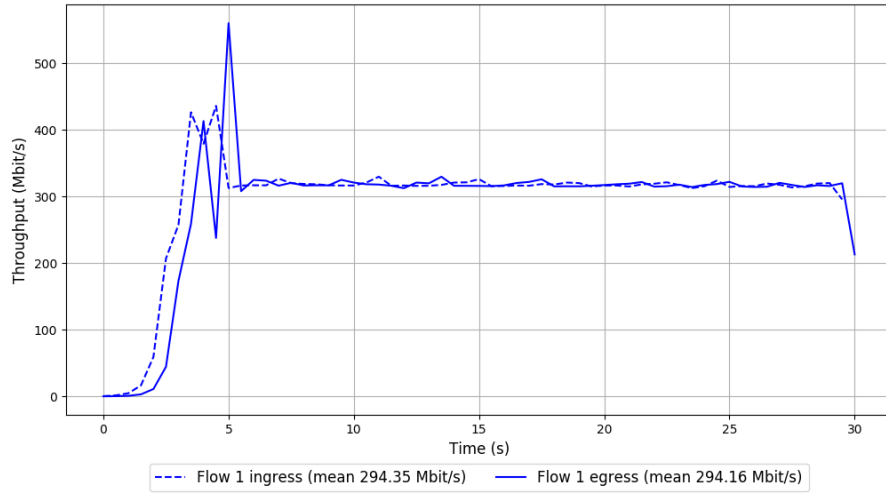
-- Flow 1:

Average throughput: 294.16 Mbit/s

95th percentile per-packet one-way delay: 140.149 ms

Loss rate: 0.95%

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

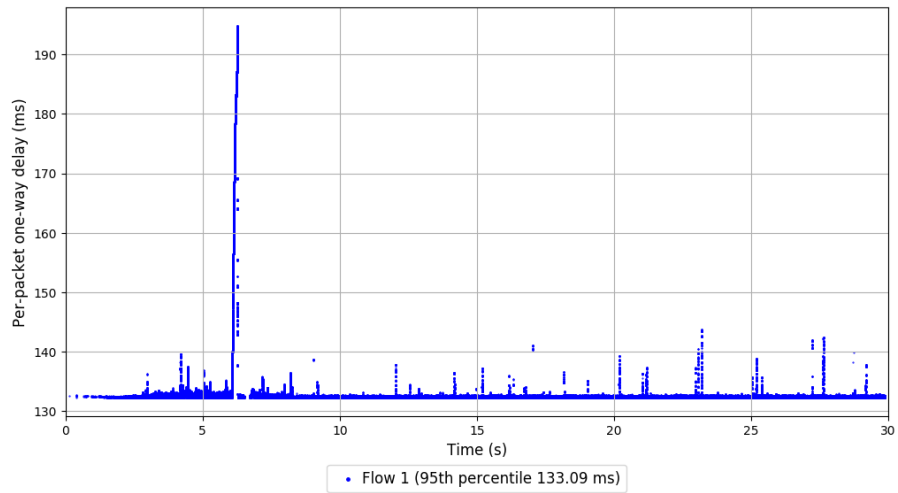
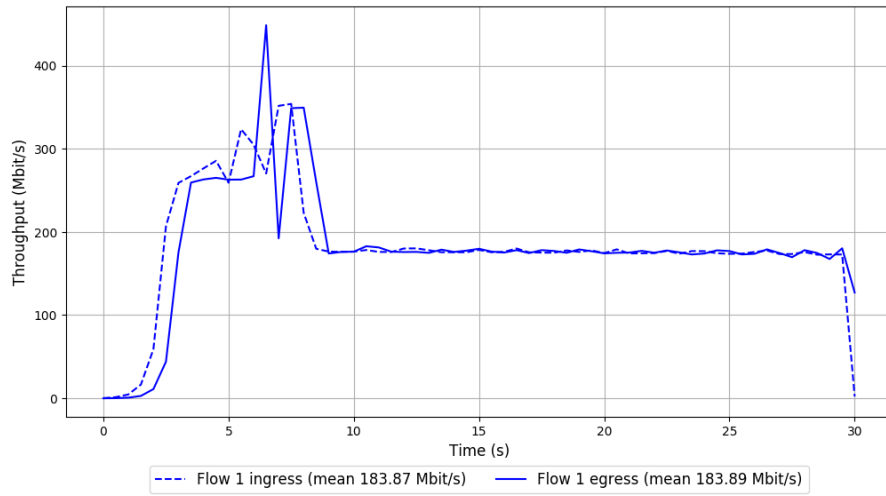


Run 3: Statistics of TCP Vegas

Start at: 2019-04-24 05:33:35  
End at: 2019-04-24 05:34:05  
Local clock offset: -0.469 ms  
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2019-04-24 08:02:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 183.89 Mbit/s  
95th percentile per-packet one-way delay: 133.095 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 183.89 Mbit/s  
95th percentile per-packet one-way delay: 133.095 ms  
Loss rate: 0.87%

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





Run 4: Statistics of TCP Vegas

Start at: 2019-04-24 06:04:52

End at: 2019-04-24 06:05:22

Local clock offset: -0.408 ms

Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-04-24 08:03:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 268.16 Mbit/s

95th percentile per-packet one-way delay: 133.320 ms

Loss rate: 0.58%

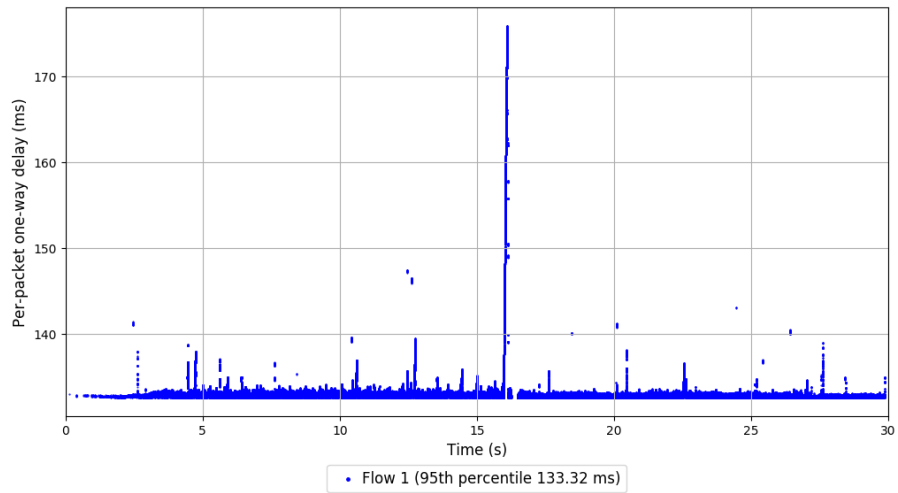
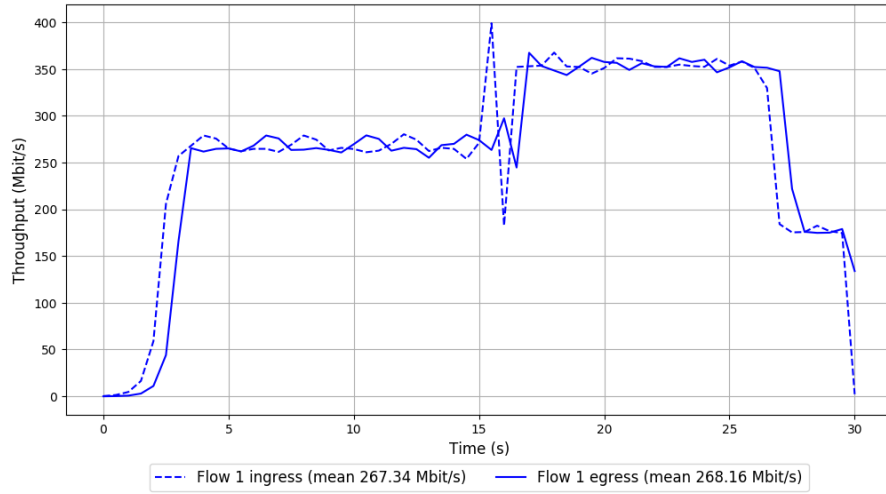
-- Flow 1:

Average throughput: 268.16 Mbit/s

95th percentile per-packet one-way delay: 133.320 ms

Loss rate: 0.58%

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



Run 5: Statistics of TCP Vegas

Start at: 2019-04-24 06:36:10

End at: 2019-04-24 06:36:40

Local clock offset: -0.197 ms

Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-04-24 08:04:32

# Datalink statistics

-- Total of 1 flow:

Average throughput: 319.80 Mbit/s

95th percentile per-packet one-way delay: 132.685 ms

Loss rate: 0.99%

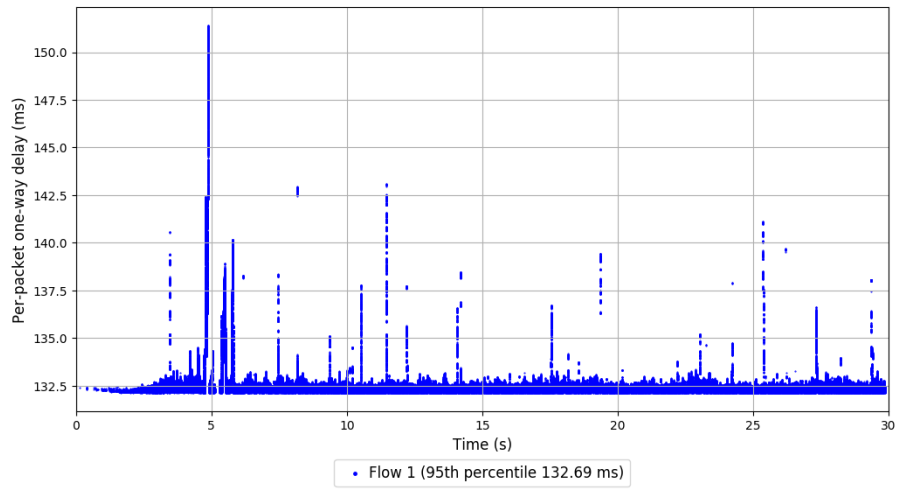
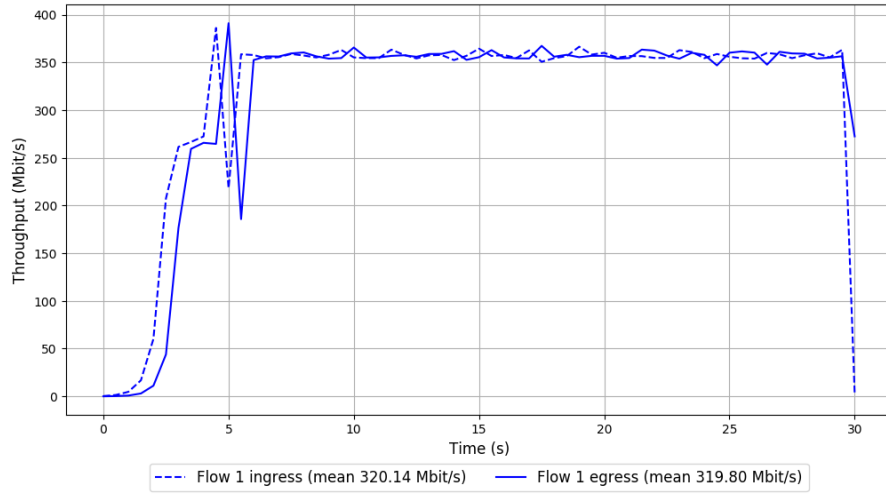
-- Flow 1:

Average throughput: 319.80 Mbit/s

95th percentile per-packet one-way delay: 132.685 ms

Loss rate: 0.99%

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



Run 1: Statistics of Verus

Start at: 2019-04-24 04:11:33

End at: 2019-04-24 04:12:03

Local clock offset: -0.26 ms

Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2019-04-24 08:04:32

# Datalink statistics

-- Total of 1 flow:

Average throughput: 109.94 Mbit/s

95th percentile per-packet one-way delay: 306.916 ms

Loss rate: 19.05%

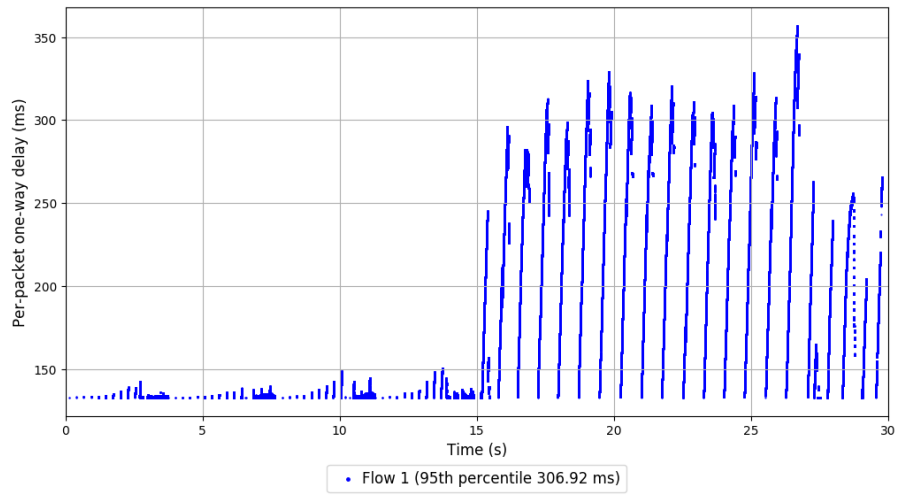
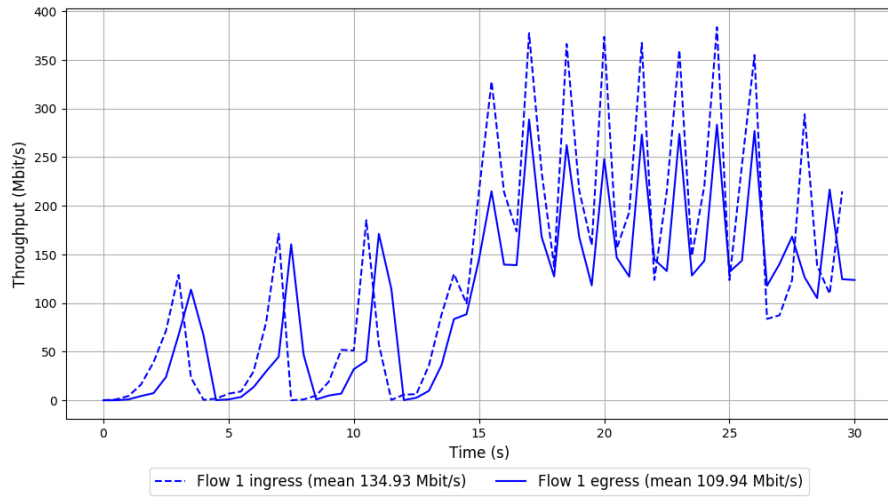
-- Flow 1:

Average throughput: 109.94 Mbit/s

95th percentile per-packet one-way delay: 306.916 ms

Loss rate: 19.05%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-04-24 04:42:50

End at: 2019-04-24 04:43:20

Local clock offset: -0.506 ms

Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2019-04-24 08:04:32

# Datalink statistics

-- Total of 1 flow:

Average throughput: 72.94 Mbit/s

95th percentile per-packet one-way delay: 265.314 ms

Loss rate: 5.59%

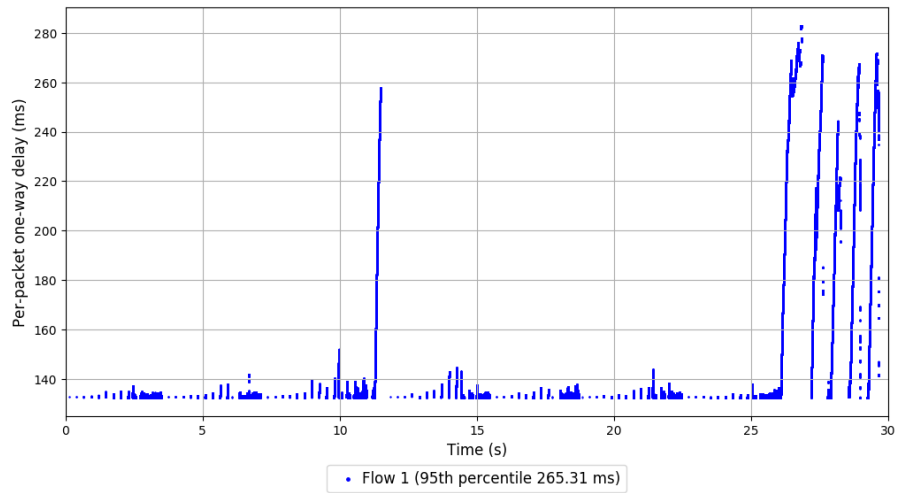
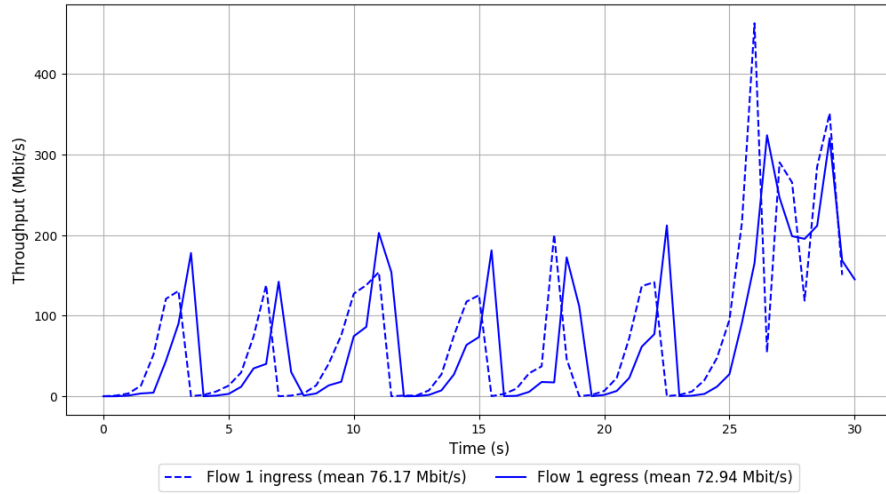
-- Flow 1:

Average throughput: 72.94 Mbit/s

95th percentile per-packet one-way delay: 265.314 ms

Loss rate: 5.59%

## Run 2: Report of Verus — Data Link





Run 3: Statistics of Verus

Start at: 2019-04-24 05:13:32

End at: 2019-04-24 05:14:02

Local clock offset: 0.1 ms

Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2019-04-24 08:05:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 136.24 Mbit/s

95th percentile per-packet one-way delay: 262.483 ms

Loss rate: 2.65%

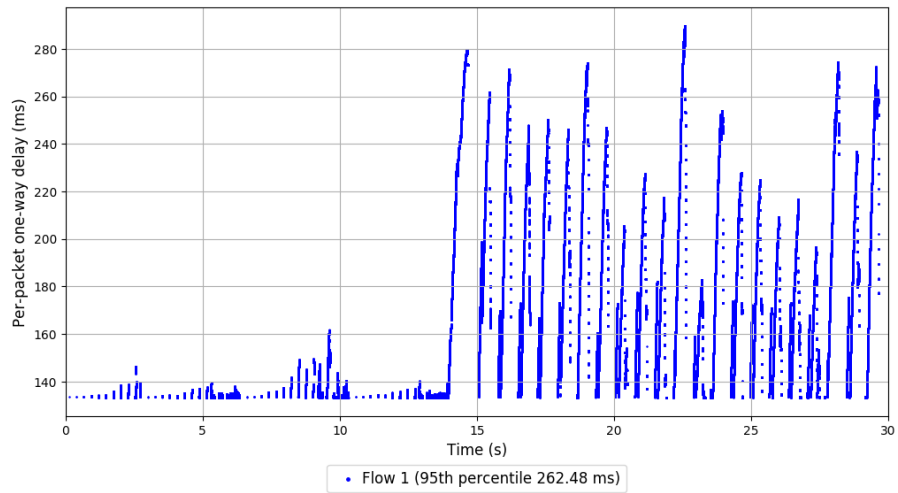
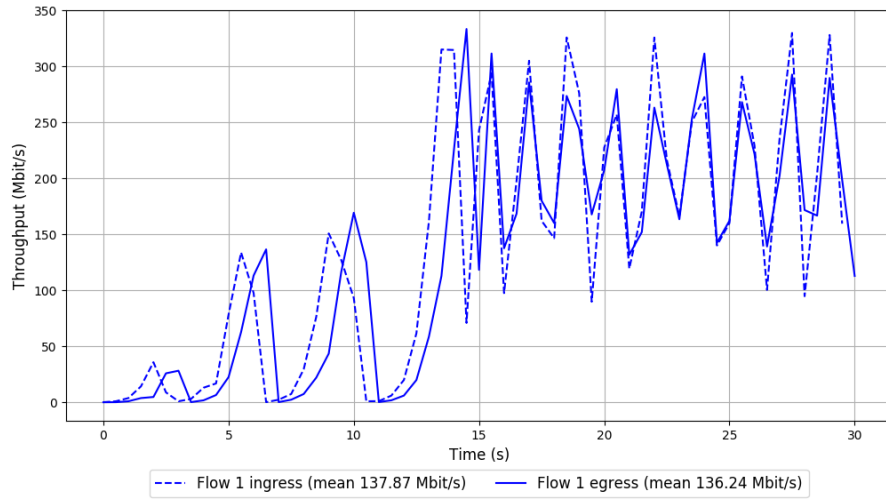
-- Flow 1:

Average throughput: 136.24 Mbit/s

95th percentile per-packet one-way delay: 262.483 ms

Loss rate: 2.65%

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

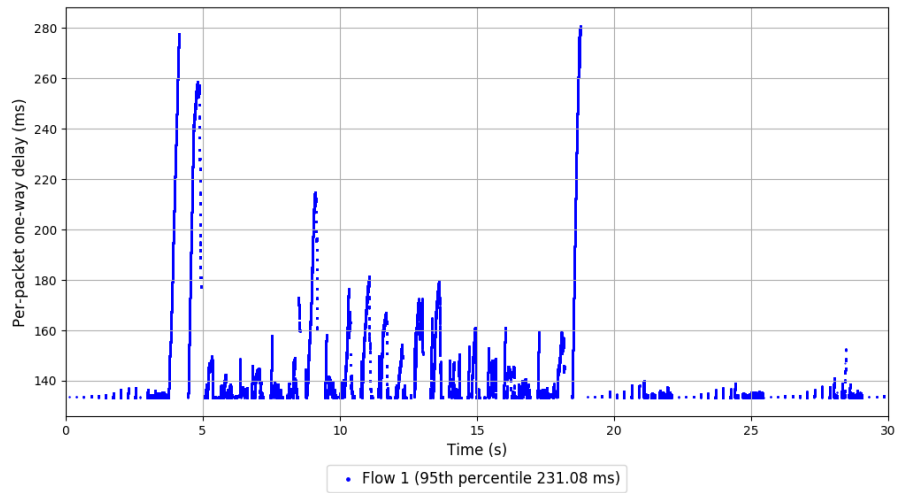
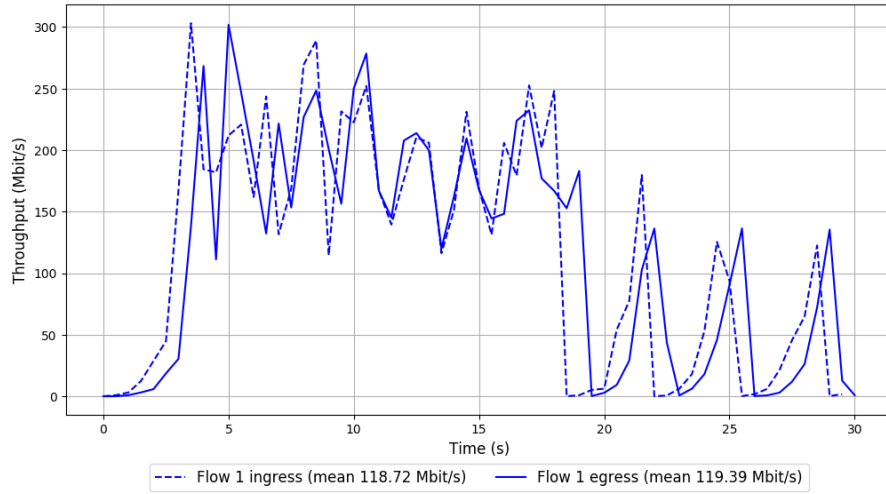


Run 4: Statistics of Verus

Start at: 2019-04-24 05:44:32  
End at: 2019-04-24 05:45:02  
Local clock offset: -0.036 ms  
Remote clock offset: -0.419 ms

```
# Below is generated by plot.py at 2019-04-24 08:05:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 119.39 Mbit/s
95th percentile per-packet one-way delay: 231.084 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 119.39 Mbit/s
95th percentile per-packet one-way delay: 231.084 ms
Loss rate: 0.33%
```

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



Run 5: Statistics of Verus

Start at: 2019-04-24 06:16:04

End at: 2019-04-24 06:16:34

Local clock offset: -0.184 ms

Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2019-04-24 08:05:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 88.86 Mbit/s

95th percentile per-packet one-way delay: 303.929 ms

Loss rate: 12.79%

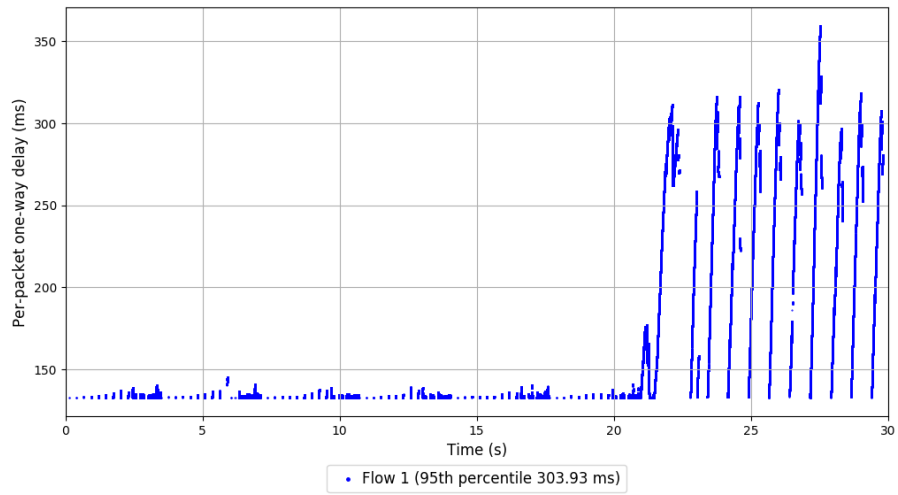
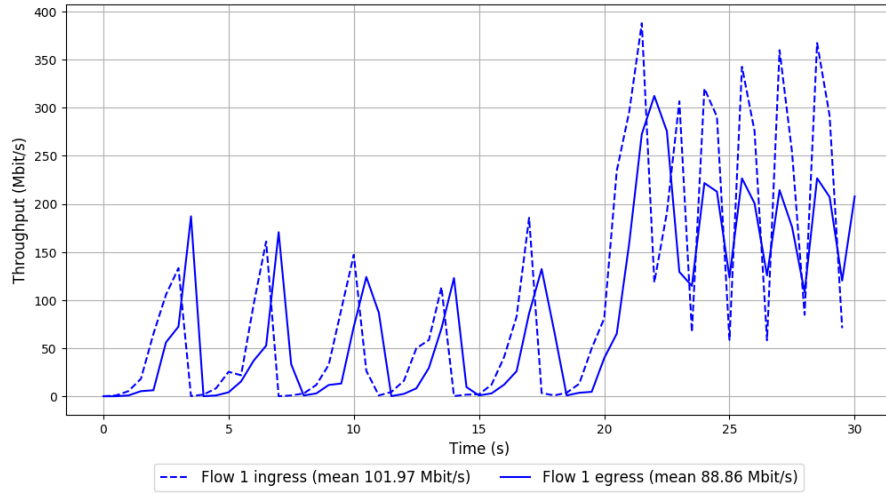
-- Flow 1:

Average throughput: 88.86 Mbit/s

95th percentile per-packet one-way delay: 303.929 ms

Loss rate: 12.79%

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



Run 1: Statistics of PCC-Vivace

Start at: 2019-04-24 04:22:24

End at: 2019-04-24 04:22:54

Local clock offset: -0.524 ms

Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2019-04-24 08:05:25

# Datalink statistics

-- Total of 1 flow:

Average throughput: 240.15 Mbit/s

95th percentile per-packet one-way delay: 131.628 ms

Loss rate: 1.09%

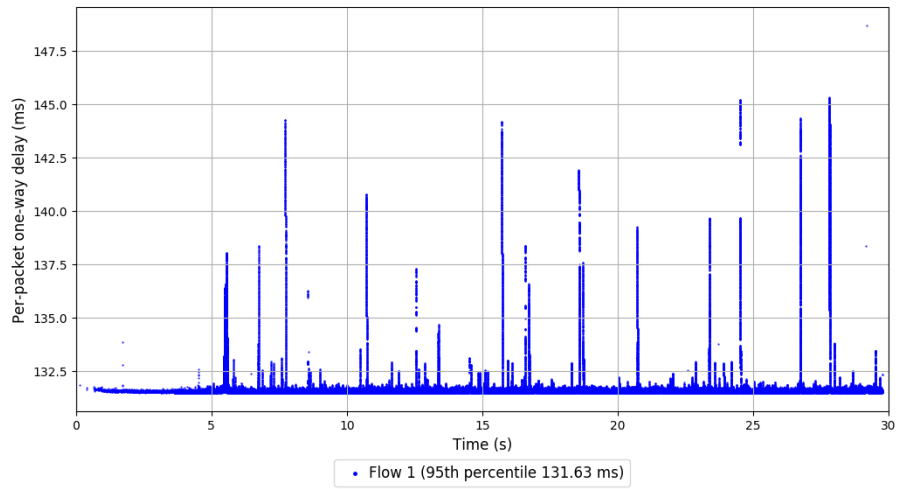
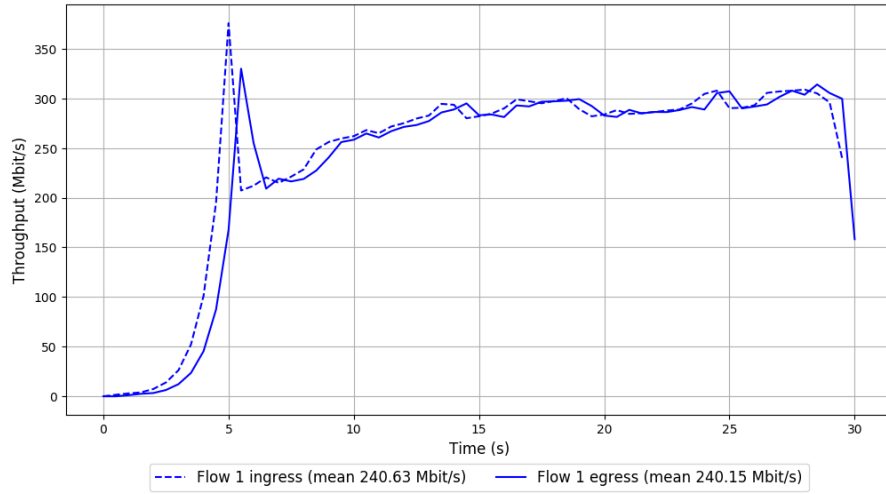
-- Flow 1:

Average throughput: 240.15 Mbit/s

95th percentile per-packet one-way delay: 131.628 ms

Loss rate: 1.09%

Run 1: Report of PCC-Vivace — Data Link





Run 2: Statistics of PCC-Vivace

Start at: 2019-04-24 04:53:12

End at: 2019-04-24 04:53:42

Local clock offset: -0.083 ms

Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2019-04-24 08:06:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 255.15 Mbit/s

95th percentile per-packet one-way delay: 133.085 ms

Loss rate: 1.33%

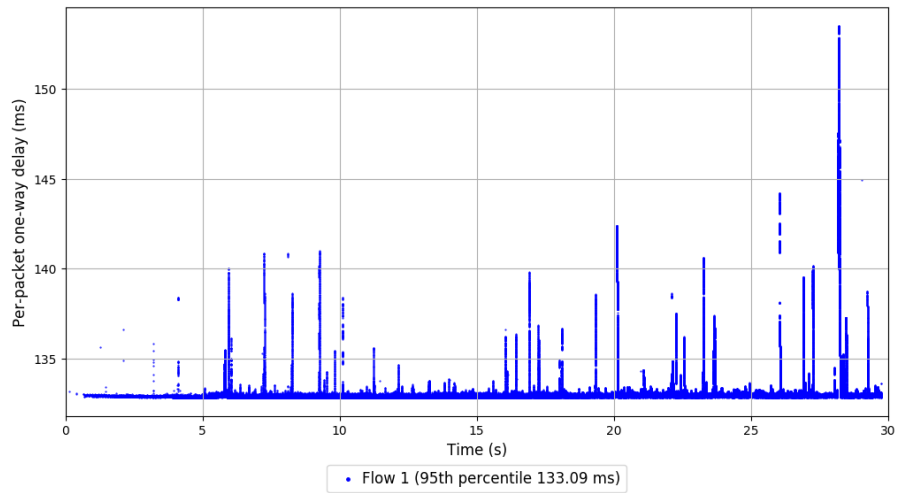
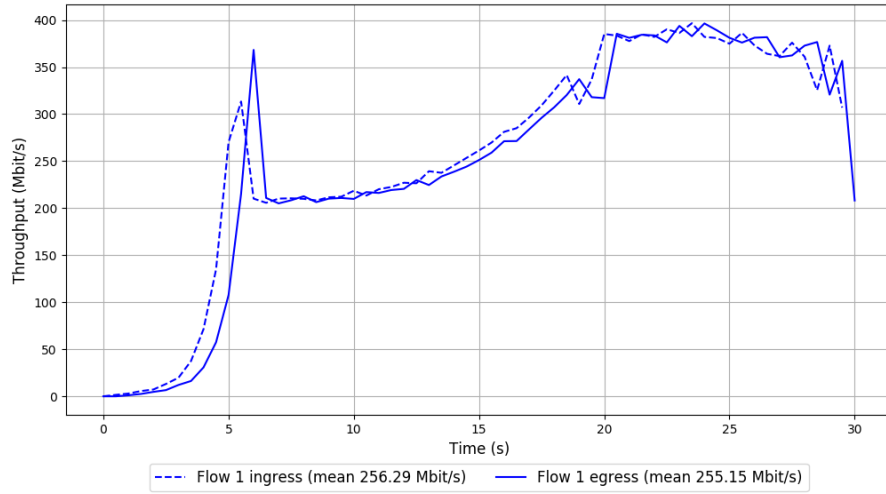
-- Flow 1:

Average throughput: 255.15 Mbit/s

95th percentile per-packet one-way delay: 133.085 ms

Loss rate: 1.33%

## Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-04-24 05:24:23

End at: 2019-04-24 05:24:53

Local clock offset: -0.238 ms

Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2019-04-24 08:06:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 312.73 Mbit/s

95th percentile per-packet one-way delay: 133.010 ms

Loss rate: 0.71%

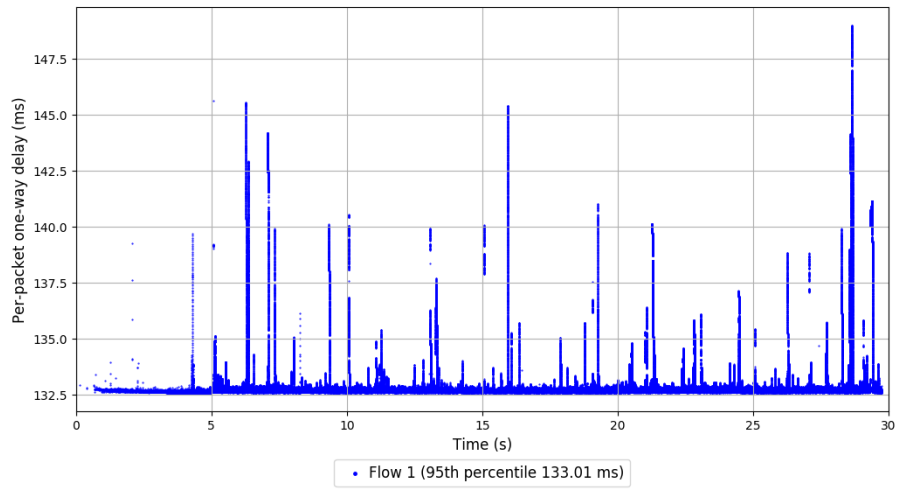
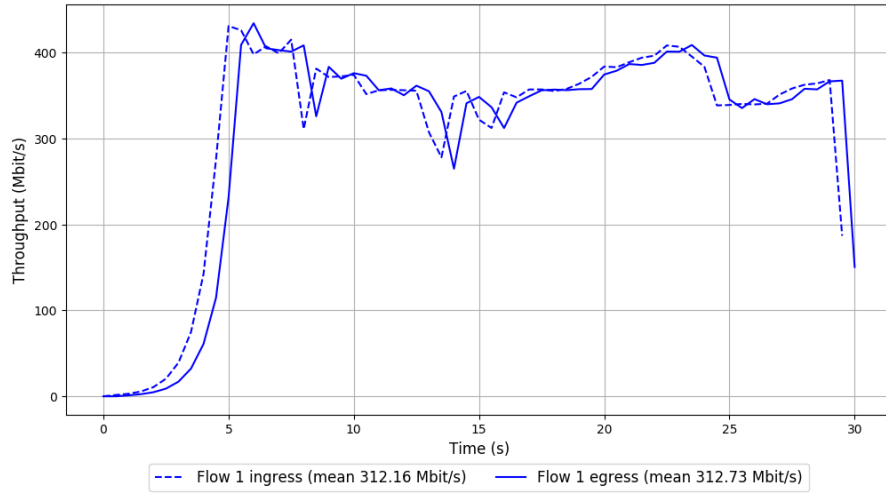
-- Flow 1:

Average throughput: 312.73 Mbit/s

95th percentile per-packet one-way delay: 133.010 ms

Loss rate: 0.71%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-04-24 05:55:40

End at: 2019-04-24 05:56:10

Local clock offset: -0.39 ms

Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-04-24 08:06:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 322.30 Mbit/s

95th percentile per-packet one-way delay: 133.405 ms

Loss rate: 0.98%

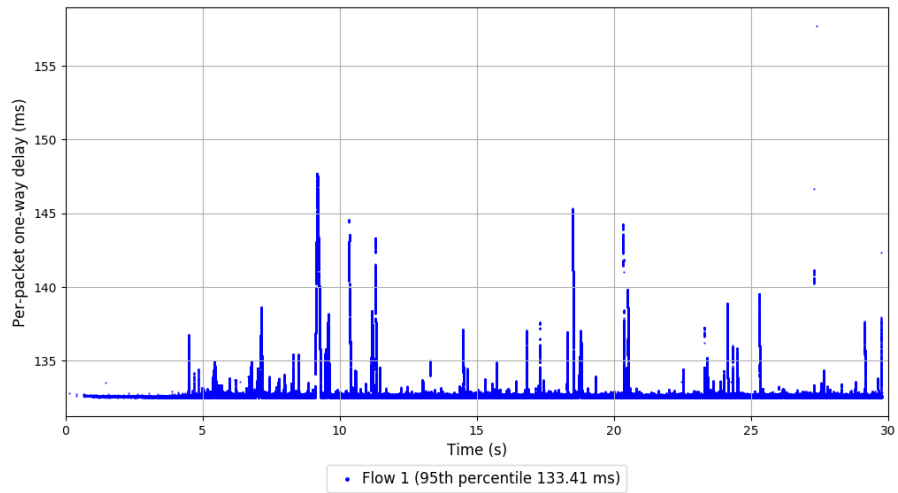
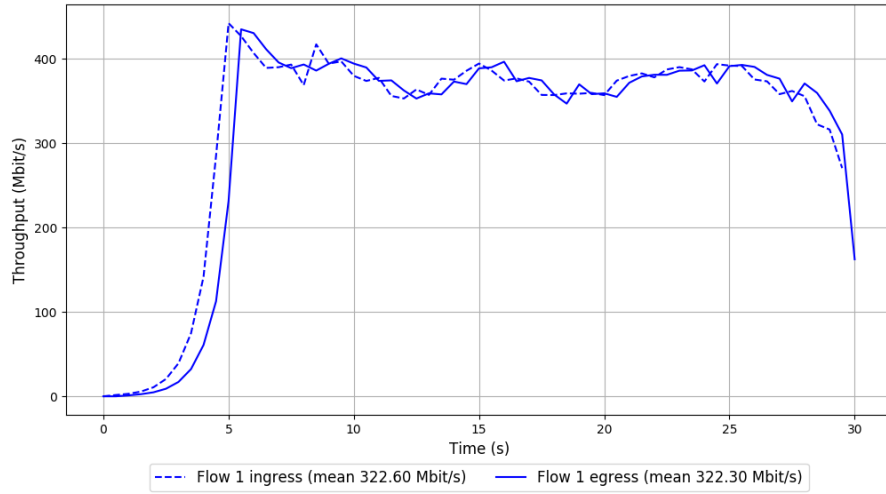
-- Flow 1:

Average throughput: 322.30 Mbit/s

95th percentile per-packet one-way delay: 133.405 ms

Loss rate: 0.98%

#### Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-04-24 06:26:58

End at: 2019-04-24 06:27:28

Local clock offset: 0.314 ms

Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2019-04-24 08:06:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 222.48 Mbit/s

95th percentile per-packet one-way delay: 133.965 ms

Loss rate: 1.04%

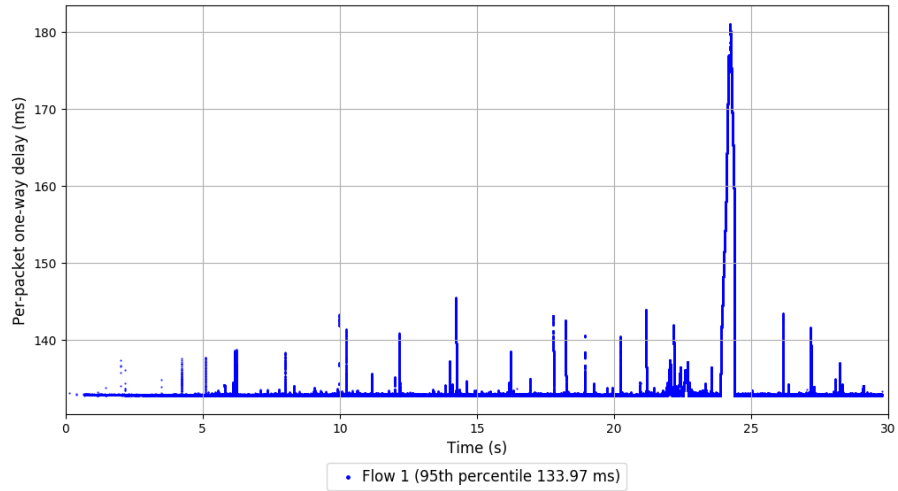
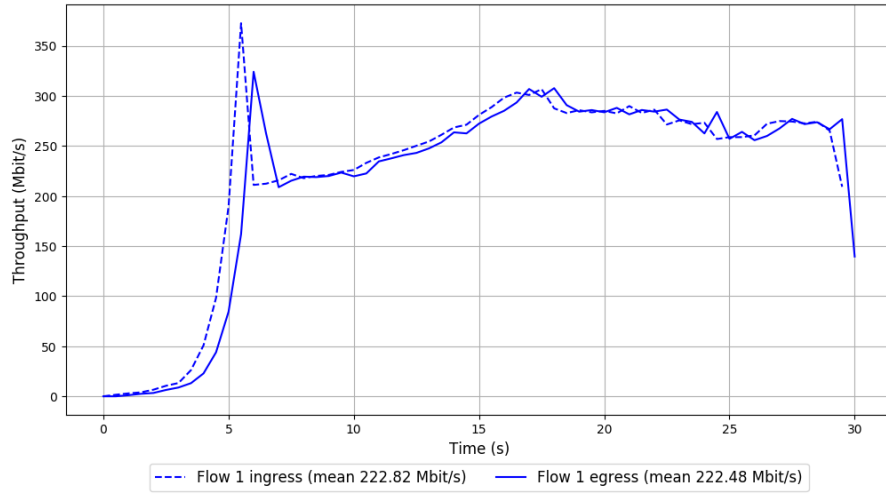
-- Flow 1:

Average throughput: 222.48 Mbit/s

95th percentile per-packet one-way delay: 133.965 ms

Loss rate: 1.04%

Run 5: Report of PCC-Vivace — Data Link





Run 1: Statistics of WebRTC media

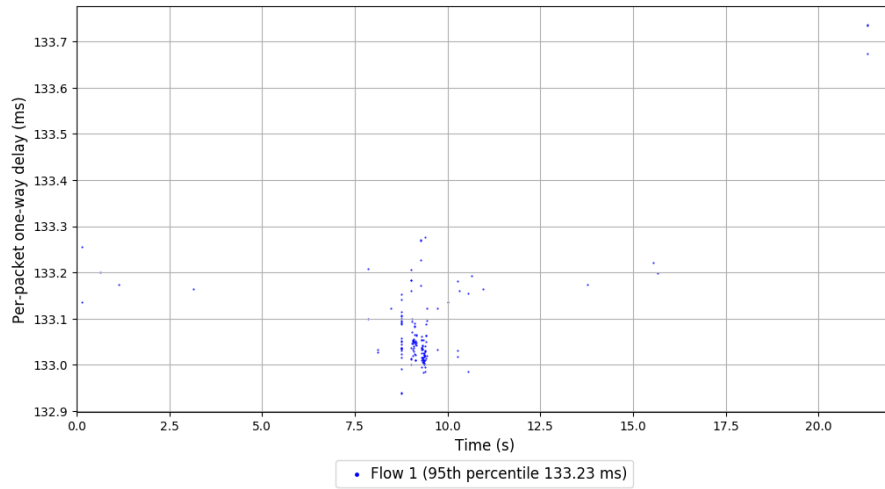
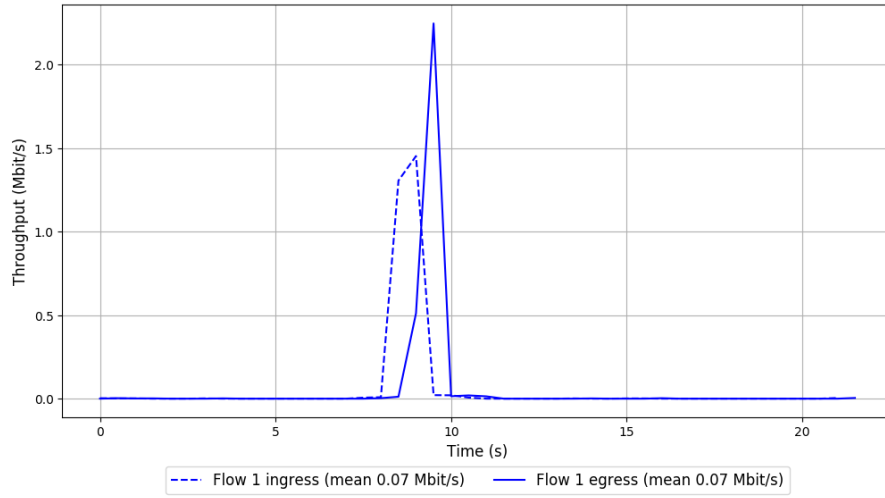
Start at: 2019-04-24 04:04:57

End at: 2019-04-24 04:05:27

Local clock offset: 0.045 ms

Remote clock offset: 0.084 ms

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-04-24 04:35:57

End at: 2019-04-24 04:36:27

Local clock offset: -0.177 ms

Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2019-04-24 08:06:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 132.550 ms

Loss rate: 0.00%

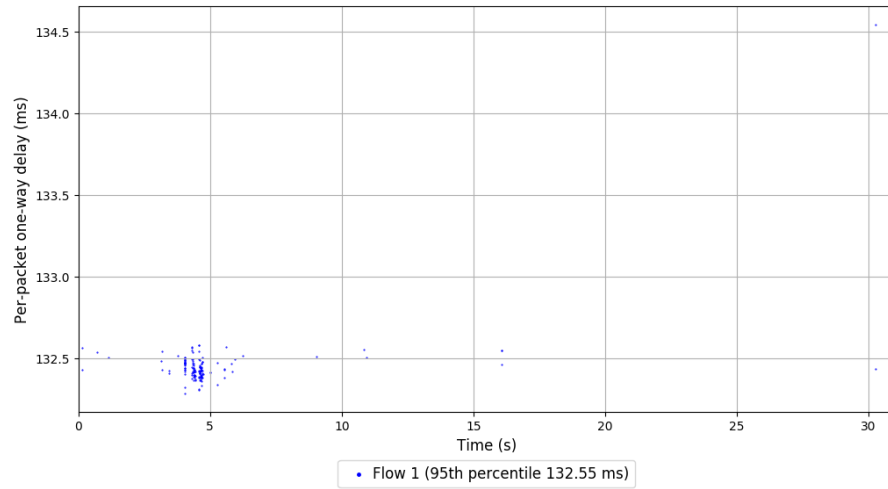
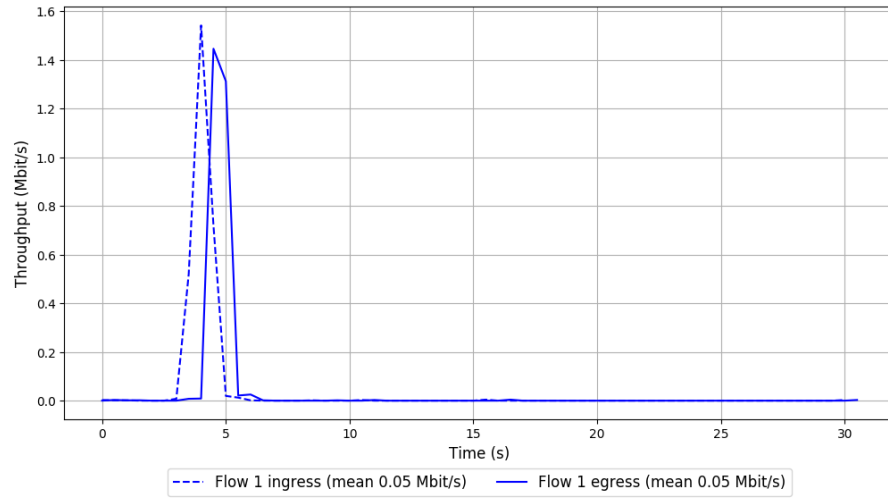
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 132.550 ms

Loss rate: 0.00%

## Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-04-24 05:06:37

End at: 2019-04-24 05:07:07

Local clock offset: 0.128 ms

Remote clock offset: 0.059 ms

# Below is generated by plot.py at 2019-04-24 08:06:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 133.362 ms

Loss rate: 0.00%

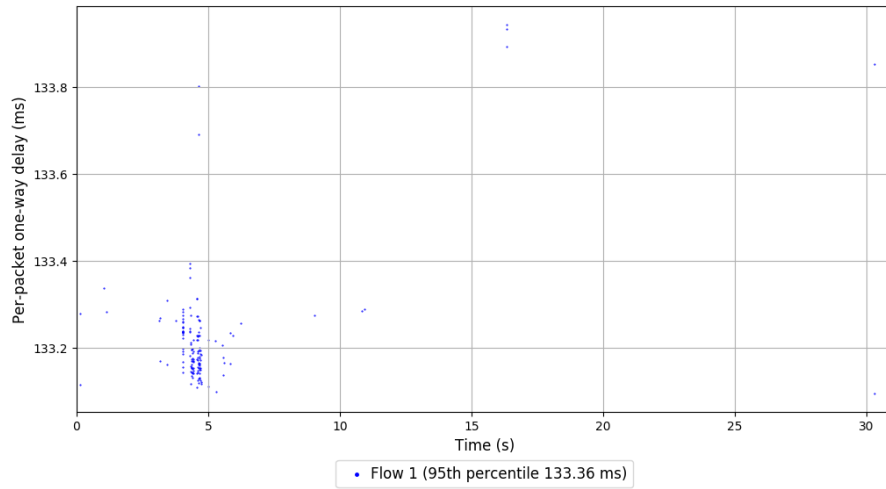
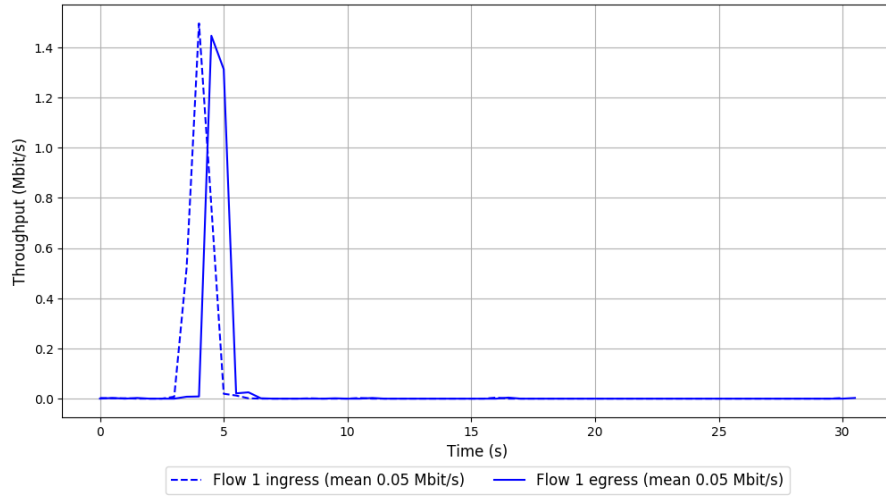
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 133.362 ms

Loss rate: 0.00%

### Run 3: Report of WebRTC media — Data Link

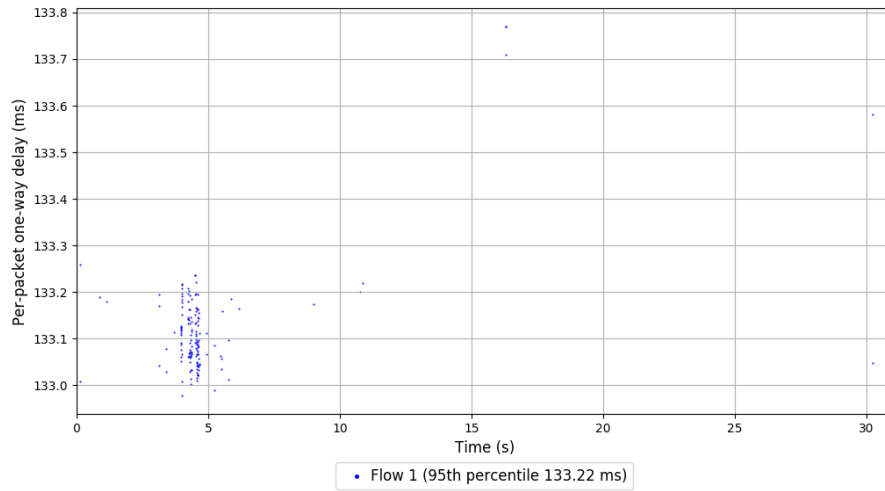
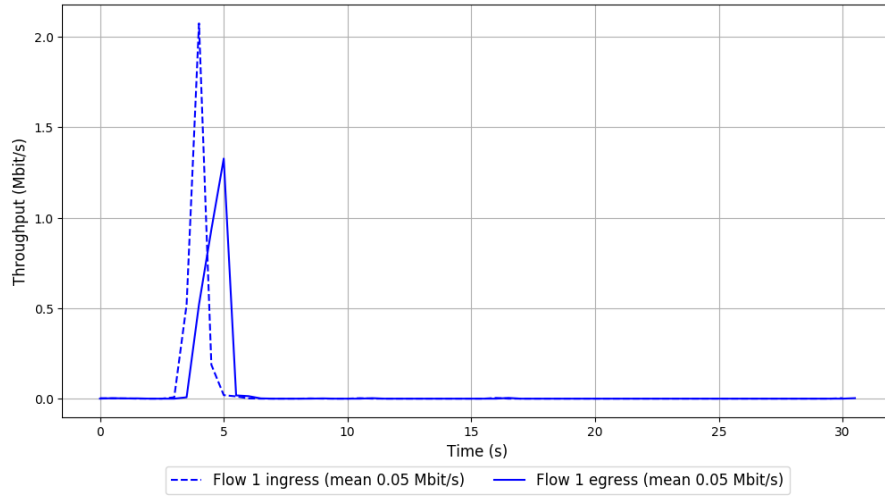


Run 4: Statistics of WebRTC media

Start at: 2019-04-24 05:37:53  
End at: 2019-04-24 05:38:23  
Local clock offset: 0.201 ms  
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2019-04-24 08:06:45  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 133.218 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 133.218 ms  
Loss rate: 0.00%

### Run 4: Report of WebRTC media — Data Link





Run 5: Statistics of WebRTC media

Start at: 2019-04-24 06:09:13

End at: 2019-04-24 06:09:43

Local clock offset: 0.375 ms

Remote clock offset: 0.092 ms

# Below is generated by plot.py at 2019-04-24 08:06:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 133.694 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 133.694 ms

Loss rate: 0.00%

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

