

## Pantheon Report

Generated at 2017-12-20 04:52:31 (UTC).

Data path: AWS California 1 Ethernet (*local*) → Stanford Ethernet (*remote*).

Repeated the test of 14 congestion control schemes 10 times.

Each test lasted for 30 seconds running 1 flow.

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

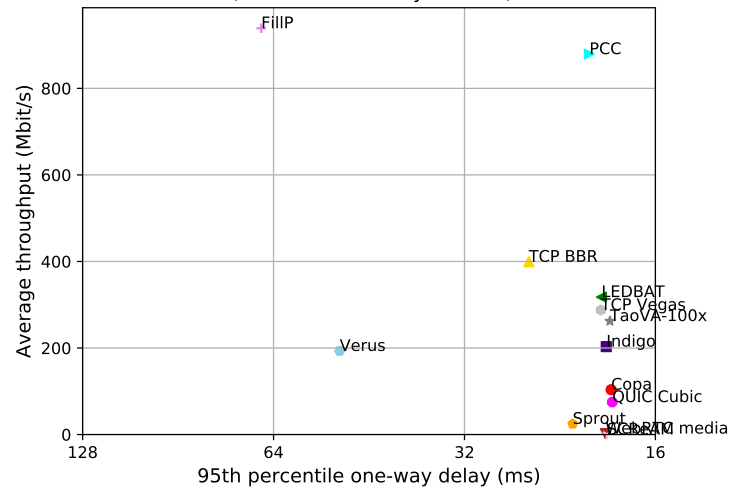
Tested BBR with qdisc of Fair Queuing (**fq**), and other schemes with the default Linux qdisc (**pfifo\_fast**).

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

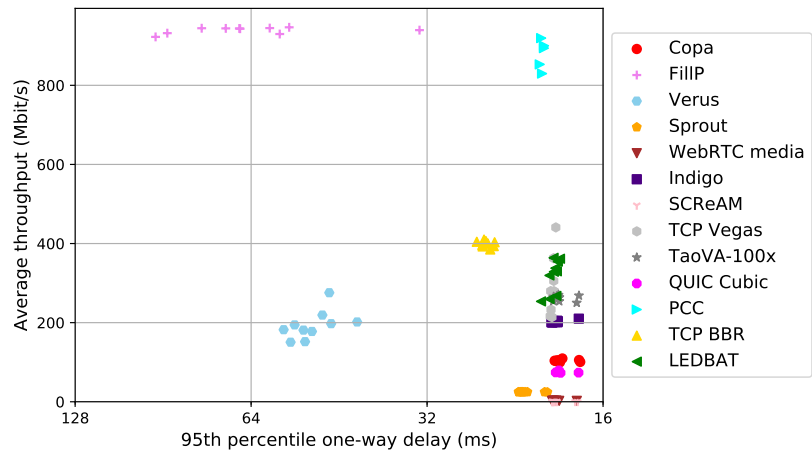
Git summary:

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

test from AWS California 1 Ethernet to Stanford Ethernet, 10 runs of 30s each per scheme  
(mean of all runs by scheme)



test from AWS California 1 Ethernet to Stanford Ethernet, 10 runs of 30s each per scheme



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	10	399.25	25.33	10.37
TCP Cubic	0	N/A	N/A	N/A
LEDBAT	10	317.63	19.46	0.01
PCC	5	879.16	20.34	0.40
QUIC Cubic	4	75.02	18.71	0.01
SCReAM	10	0.21	19.08	0.01
WebRTC media	10	2.32	19.19	0.00
Sprout	10	24.66	21.61	0.01
TaoVA-100x	10	262.27	18.87	0.00
TCP Vegas	10	287.68	19.51	0.03
Verus	10	193.21	50.34	22.41
Copa	10	103.65	18.79	0.00
FillP	10	938.99	66.94	5.07
Indigo	10	203.22	19.12	0.00

Run 1: Statistics of TCP BBR

Start at: 2017-12-19 22:59:44

End at: 2017-12-19 23:00:15

Local clock offset: 1.172 ms

Remote clock offset: -0.585 ms

# Below is generated by plot.py at 2017-12-20 03:51:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 406.28 Mbit/s

95th percentile per-packet one-way delay: 25.384 ms

Loss rate: 11.37%

-- Flow 1:

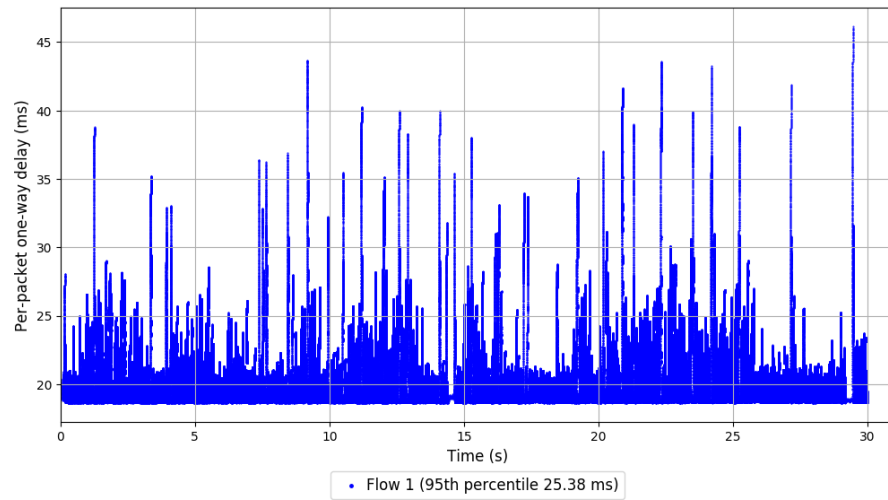
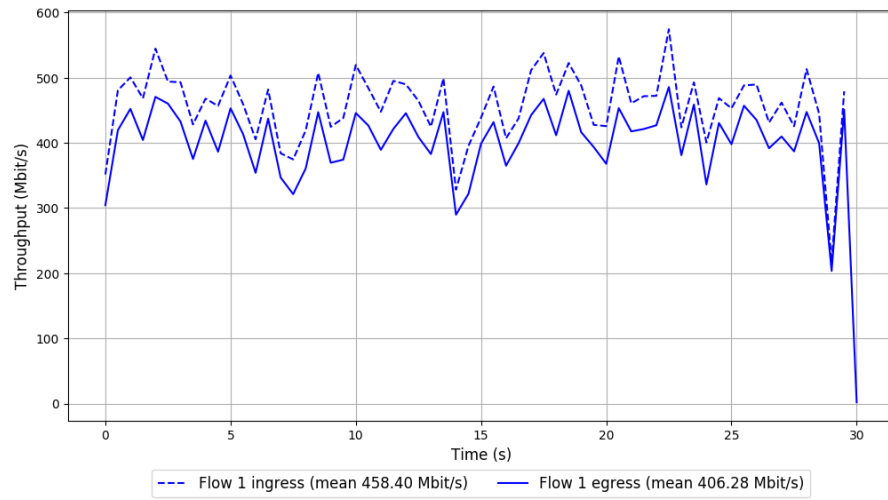
Average throughput: 406.28 Mbit/s

95th percentile per-packet one-way delay: 25.384 ms

Loss rate: 11.37%



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



Run 2: Statistics of TCP BBR

Start at: 2017-12-19 23:20:02

End at: 2017-12-19 23:20:32

Local clock offset: 0.491 ms

Remote clock offset: -0.924 ms

# Below is generated by plot.py at 2017-12-20 03:51:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 393.54 Mbit/s

95th percentile per-packet one-way delay: 24.613 ms

Loss rate: 10.70%

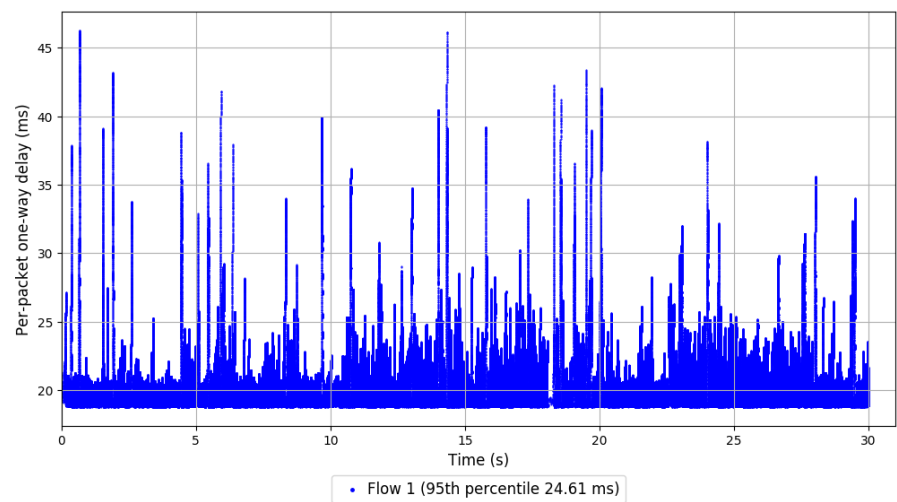
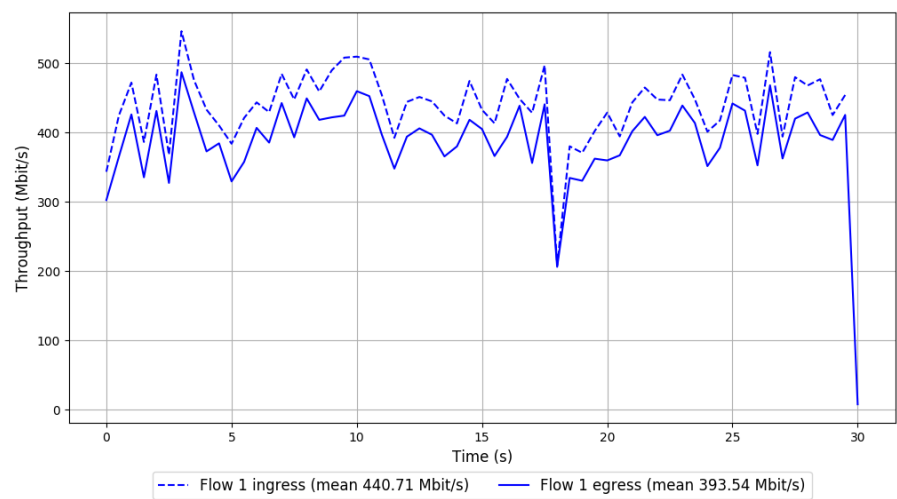
-- Flow 1:

Average throughput: 393.54 Mbit/s

95th percentile per-packet one-way delay: 24.613 ms

Loss rate: 10.70%

Run 2: Report of TCP BBR — Data Link

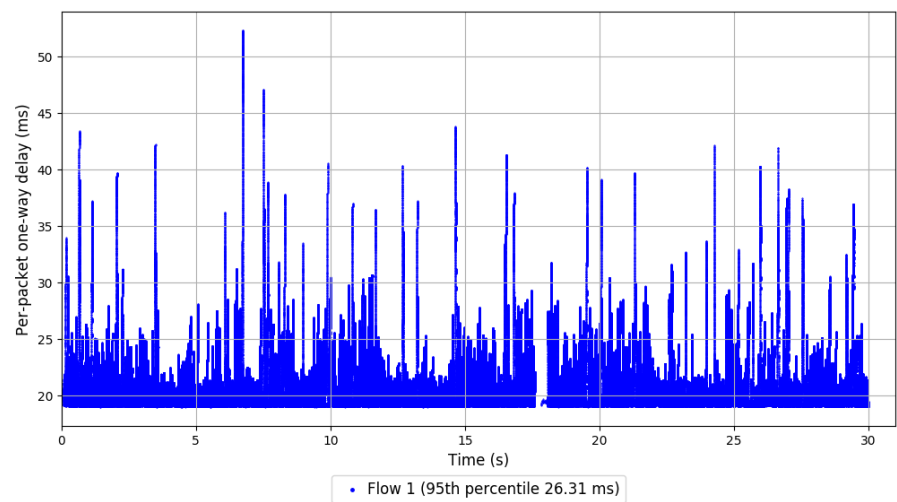
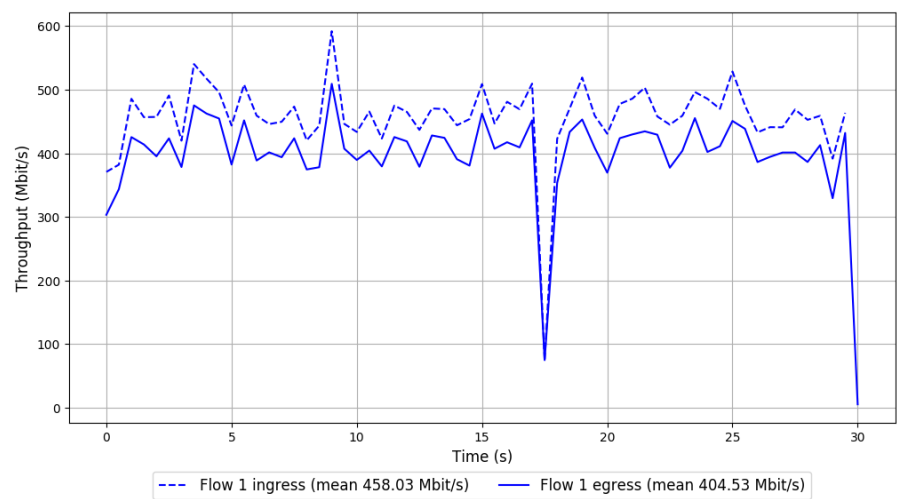


Run 3: Statistics of TCP BBR

Start at: 2017-12-19 23:40:18  
End at: 2017-12-19 23:40:48  
Local clock offset: 0.416 ms  
Remote clock offset: -1.124 ms

# Below is generated by plot.py at 2017-12-20 03:51:11  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 404.53 Mbit/s  
95th percentile per-packet one-way delay: 26.312 ms  
Loss rate: 11.68%  
-- Flow 1:  
Average throughput: 404.53 Mbit/s  
95th percentile per-packet one-way delay: 26.312 ms  
Loss rate: 11.68%

Run 3: Report of TCP BBR — Data Link

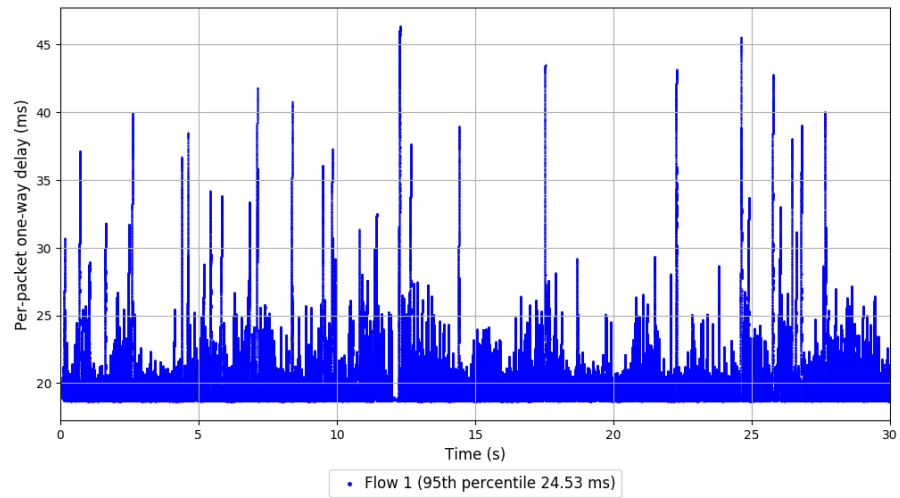
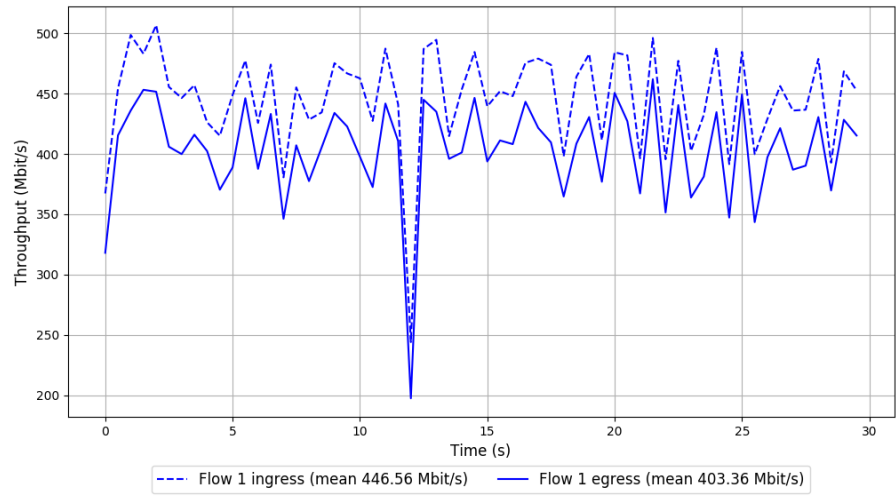


Run 4: Statistics of TCP BBR

Start at: 2017-12-20 00:00:19  
End at: 2017-12-20 00:00:49  
Local clock offset: 0.746 ms  
Remote clock offset: -1.539 ms

# Below is generated by plot.py at 2017-12-20 03:51:11  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 403.36 Mbit/s  
95th percentile per-packet one-way delay: 24.527 ms  
Loss rate: 9.67%  
-- Flow 1:  
Average throughput: 403.36 Mbit/s  
95th percentile per-packet one-way delay: 24.527 ms  
Loss rate: 9.67%

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



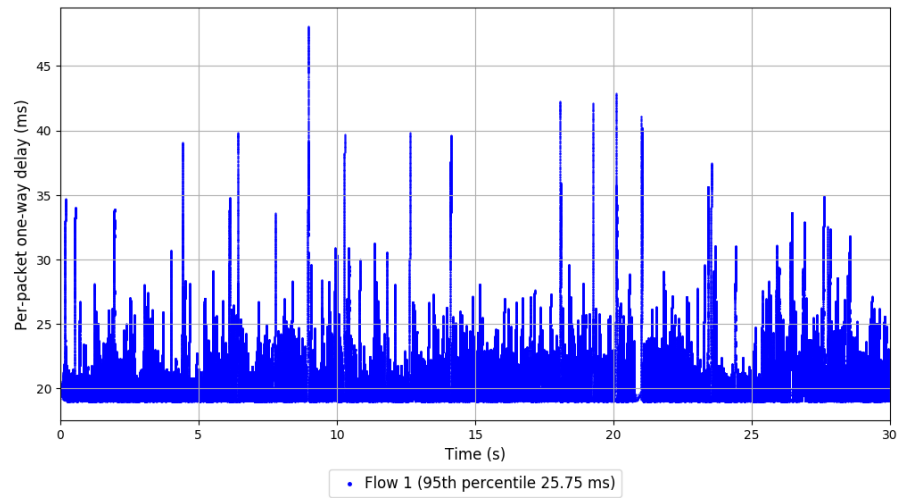
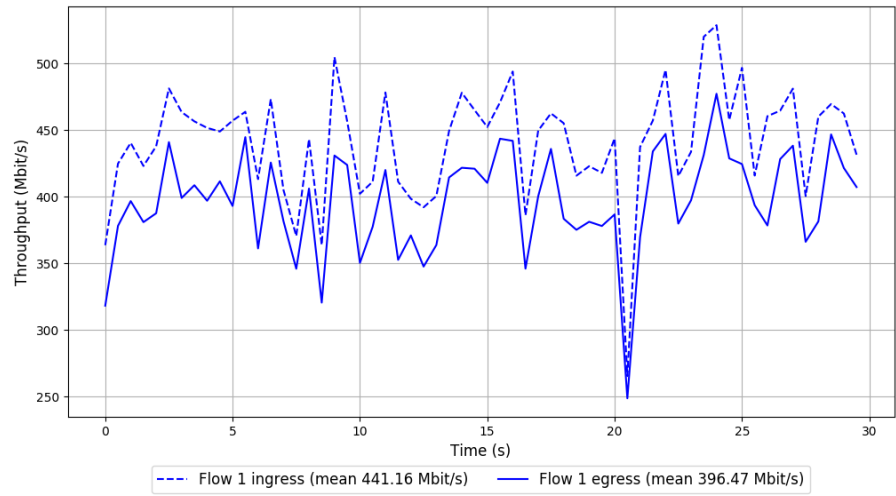
Run 5: Statistics of TCP BBR

Start at: 2017-12-20 00:20:12  
End at: 2017-12-20 00:20:42  
Local clock offset: 0.817 ms  
Remote clock offset: -1.588 ms

# Below is generated by plot.py at 2017-12-20 03:51:11  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 396.47 Mbit/s  
95th percentile per-packet one-way delay: 25.746 ms  
Loss rate: 10.13%  
-- Flow 1:  
Average throughput: 396.47 Mbit/s  
95th percentile per-packet one-way delay: 25.746 ms  
Loss rate: 10.13%



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



Run 6: Statistics of TCP BBR

Start at: 2017-12-20 00:40:24

End at: 2017-12-20 00:40:54

Local clock offset: 1.073 ms

Remote clock offset: -1.826 ms

# Below is generated by plot.py at 2017-12-20 03:51:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 392.73 Mbit/s

95th percentile per-packet one-way delay: 25.711 ms

Loss rate: 10.64%

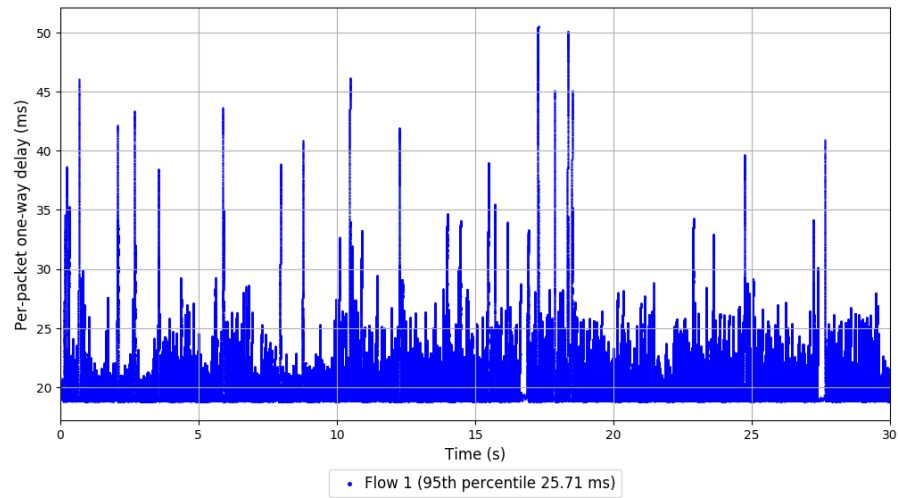
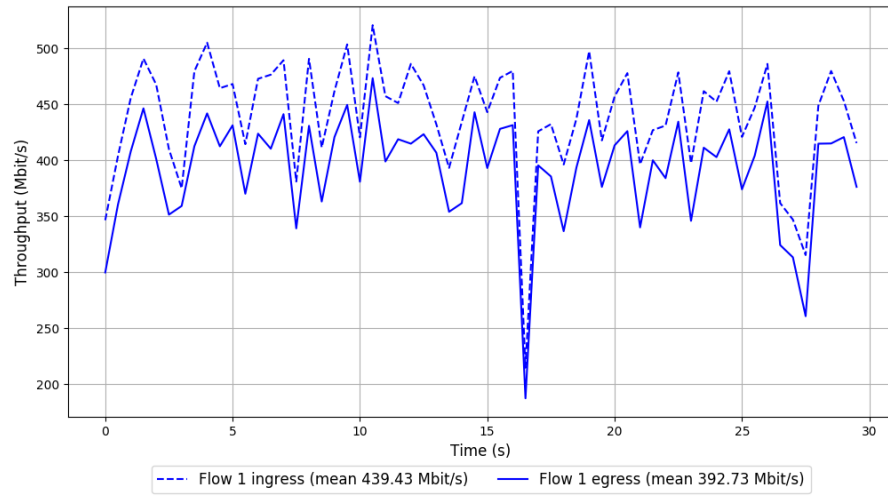
-- Flow 1:

Average throughput: 392.73 Mbit/s

95th percentile per-packet one-way delay: 25.711 ms

Loss rate: 10.64%

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

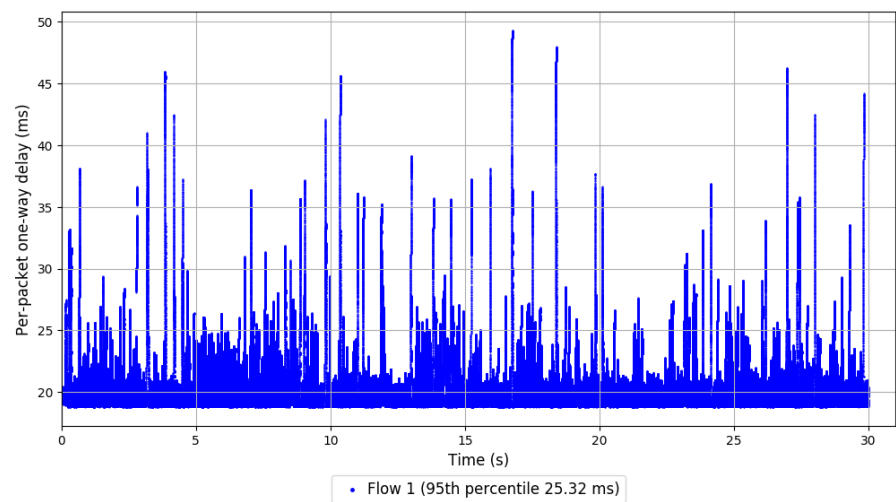
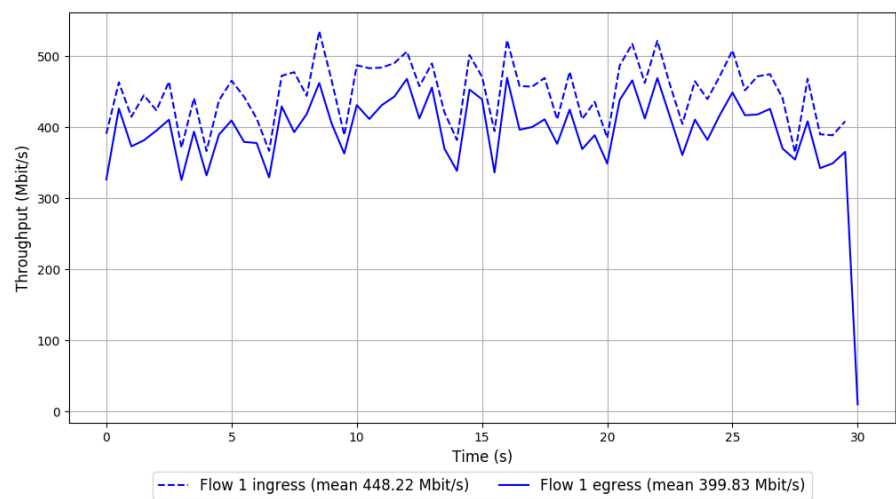


Run 7: Statistics of TCP BBR

Start at: 2017-12-20 01:00:17  
End at: 2017-12-20 01:00:47  
Local clock offset: 1.162 ms  
Remote clock offset: -1.942 ms

# Below is generated by plot.py at 2017-12-20 03:51:11  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 399.83 Mbit/s  
95th percentile per-packet one-way delay: 25.325 ms  
Loss rate: 10.80%  
-- Flow 1:  
Average throughput: 399.83 Mbit/s  
95th percentile per-packet one-way delay: 25.325 ms  
Loss rate: 10.80%

Run 7: Report of TCP BBR — Data Link

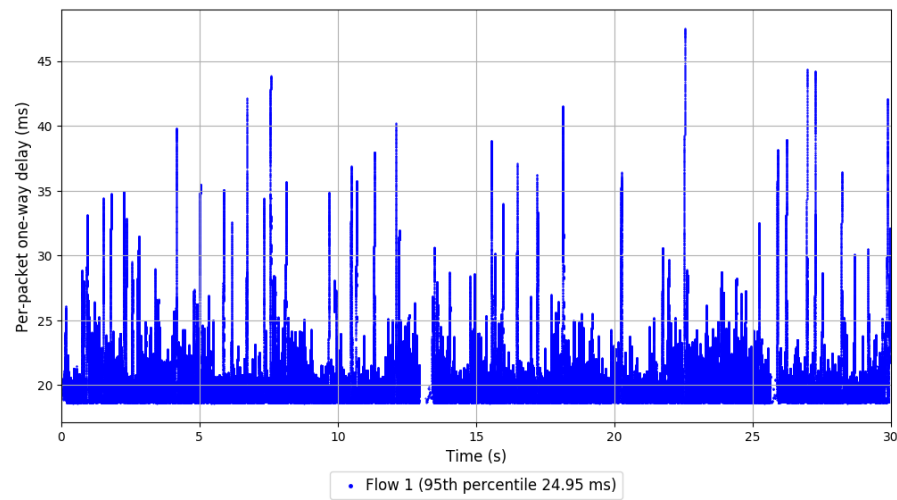
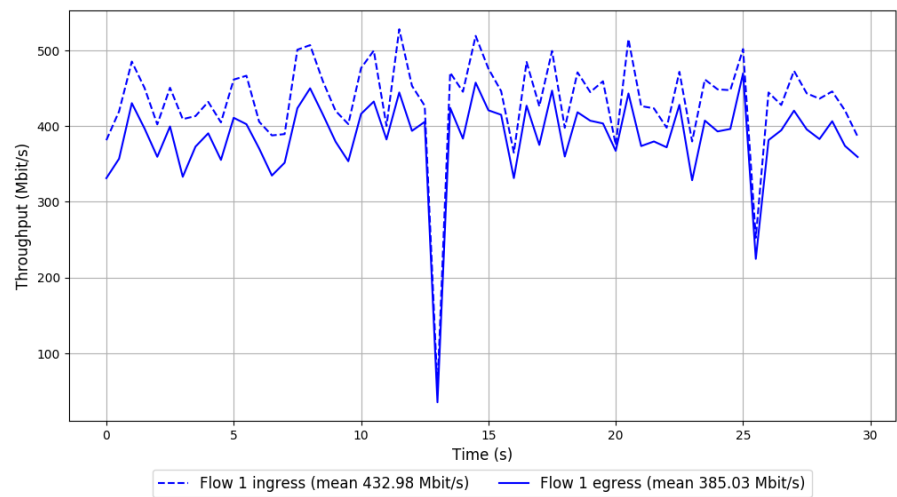


Run 8: Statistics of TCP BBR

Start at: 2017-12-20 01:20:30  
End at: 2017-12-20 01:21:00  
Local clock offset: 1.271 ms  
Remote clock offset: -2.052 ms

# Below is generated by plot.py at 2017-12-20 03:51:11  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 385.03 Mbit/s  
95th percentile per-packet one-way delay: 24.954 ms  
Loss rate: 11.07%  
-- Flow 1:  
Average throughput: 385.03 Mbit/s  
95th percentile per-packet one-way delay: 24.954 ms  
Loss rate: 11.07%

Run 8: Report of TCP BBR — Data Link



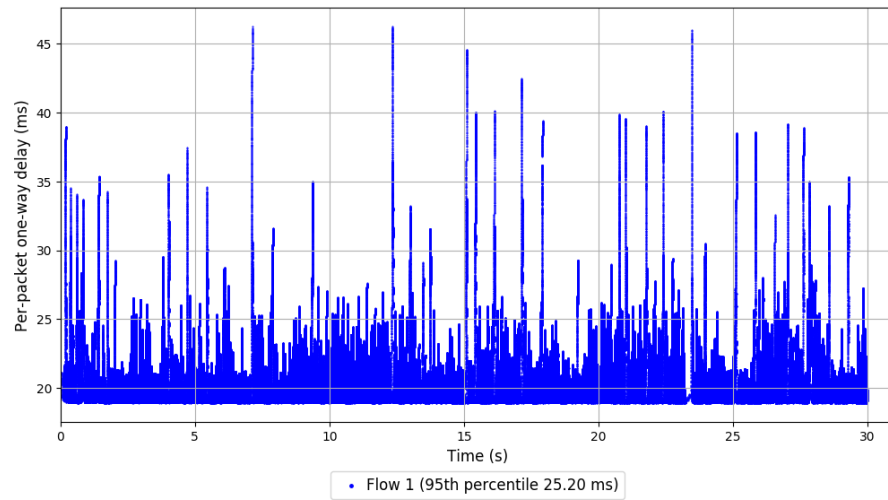
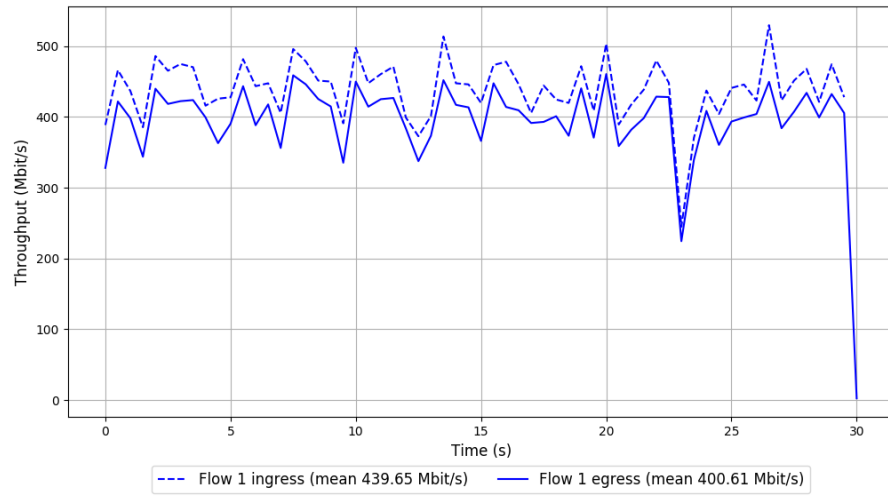
Run 9: Statistics of TCP BBR

Start at: 2017-12-20 01:40:32  
End at: 2017-12-20 01:41:02  
Local clock offset: 1.339 ms  
Remote clock offset: -1.808 ms

# Below is generated by plot.py at 2017-12-20 03:56:14  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 400.61 Mbit/s  
95th percentile per-packet one-way delay: 25.197 ms  
Loss rate: 8.88%  
-- Flow 1:  
Average throughput: 400.61 Mbit/s  
95th percentile per-packet one-way delay: 25.197 ms  
Loss rate: 8.88%



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



Run 10: Statistics of TCP BBR

Start at: 2017-12-20 02:00:43

End at: 2017-12-20 02:01:13

Local clock offset: 1.107 ms

Remote clock offset: -1.498 ms

# Below is generated by plot.py at 2017-12-20 03:56:32

# Datalink statistics

-- Total of 1 flow:

Average throughput: 410.16 Mbit/s

95th percentile per-packet one-way delay: 25.570 ms

Loss rate: 8.71%

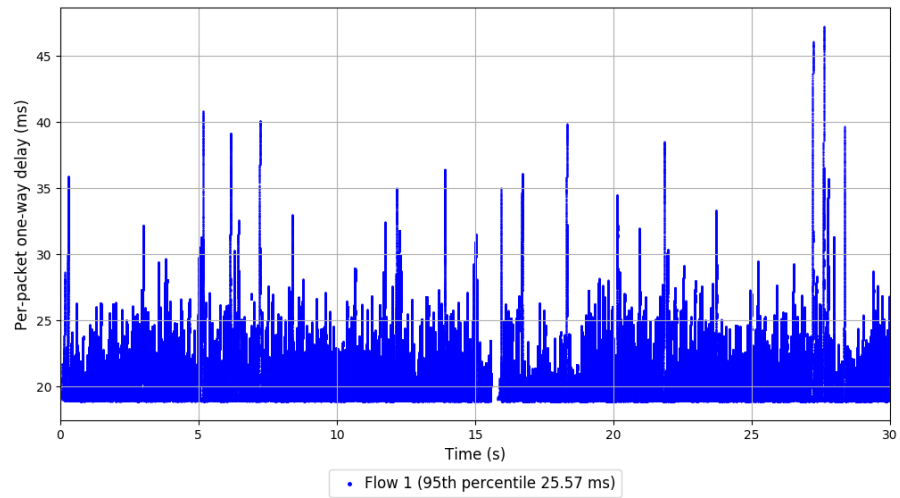
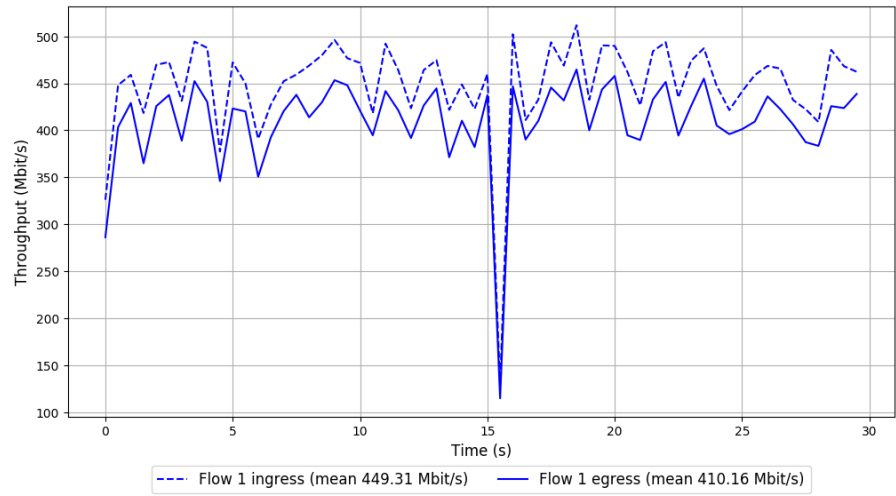
-- Flow 1:

Average throughput: 410.16 Mbit/s

95th percentile per-packet one-way delay: 25.570 ms

Loss rate: 8.71%

# Run 10: Report of TCP BBR — Data Link



Run 1: Statistics of TCP Cubic

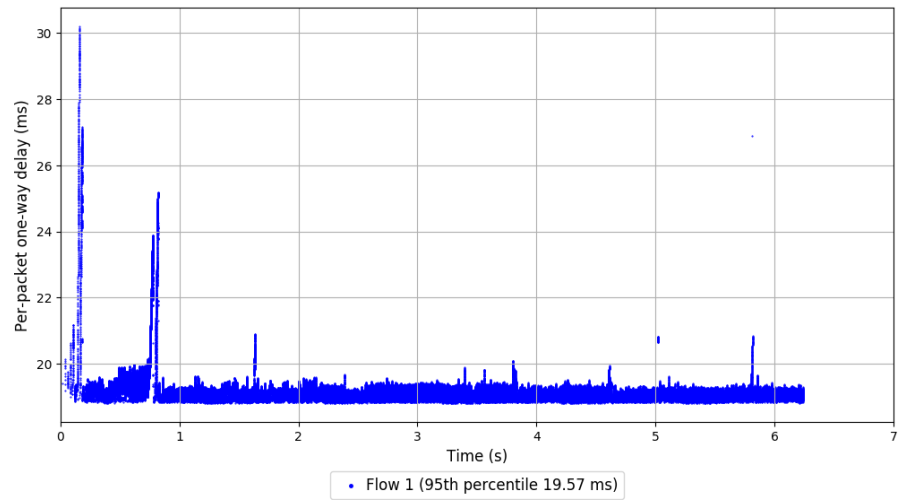
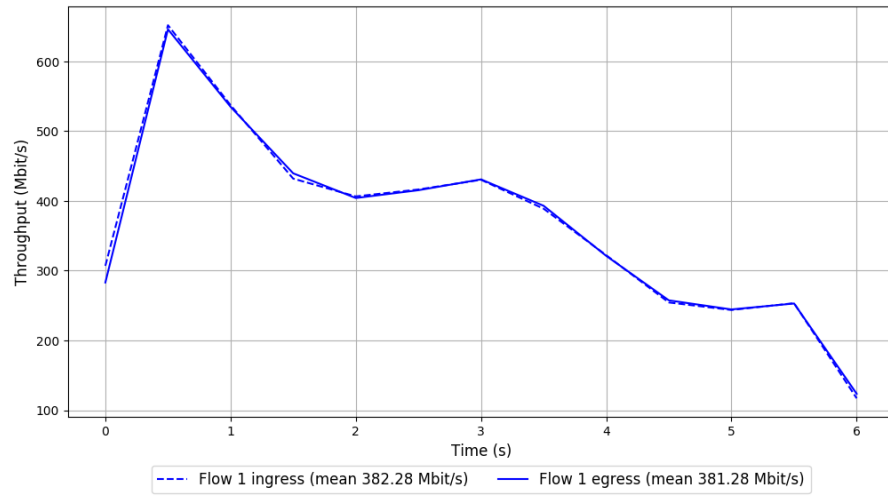
Start at: 2017-12-19 22:55:52

End at: 2017-12-19 22:56:22

Local clock offset: 1.129 ms

Remote clock offset: -0.609 ms

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



Run 2: Statistics of TCP Cubic

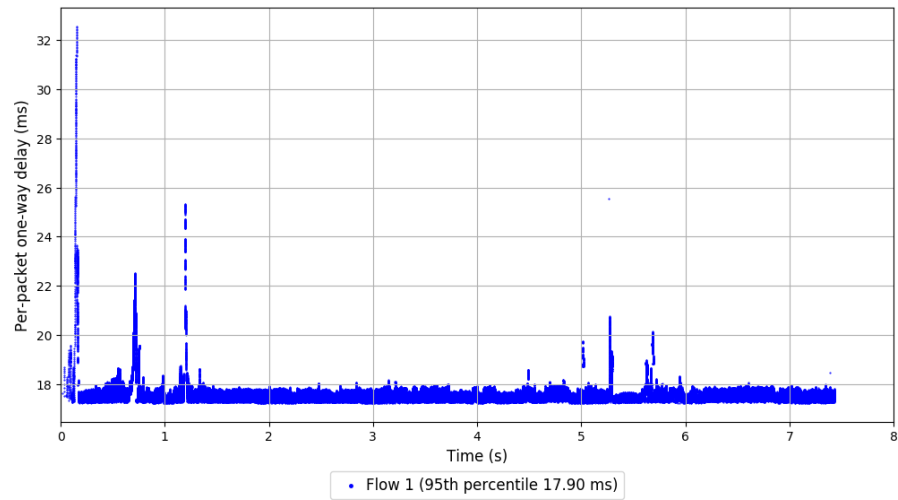
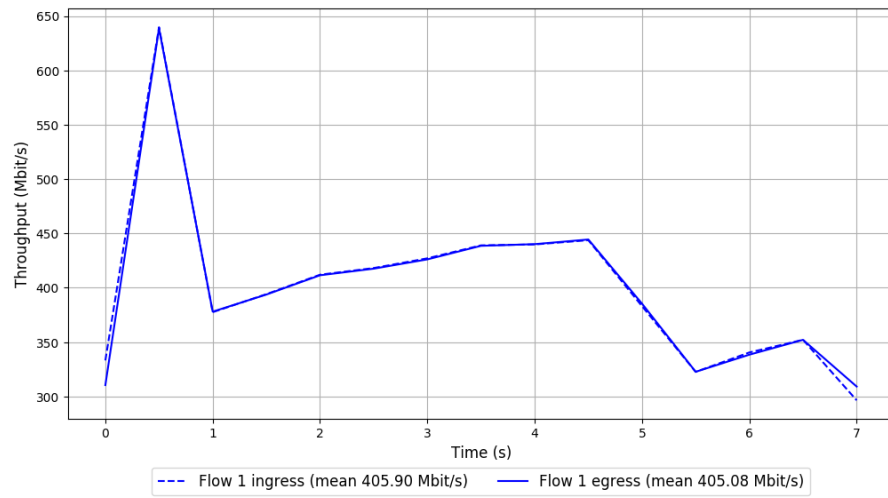
Start at: 2017-12-19 23:16:06

End at: 2017-12-19 23:16:36

Local clock offset: 0.553 ms

Remote clock offset: -0.711 ms

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



Run 3: Statistics of TCP Cubic

Start at: 2017-12-19 23:36:25

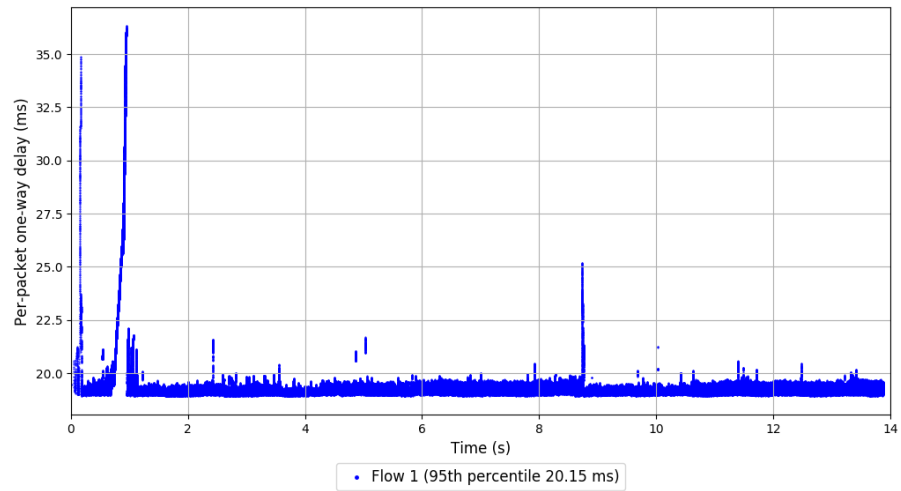
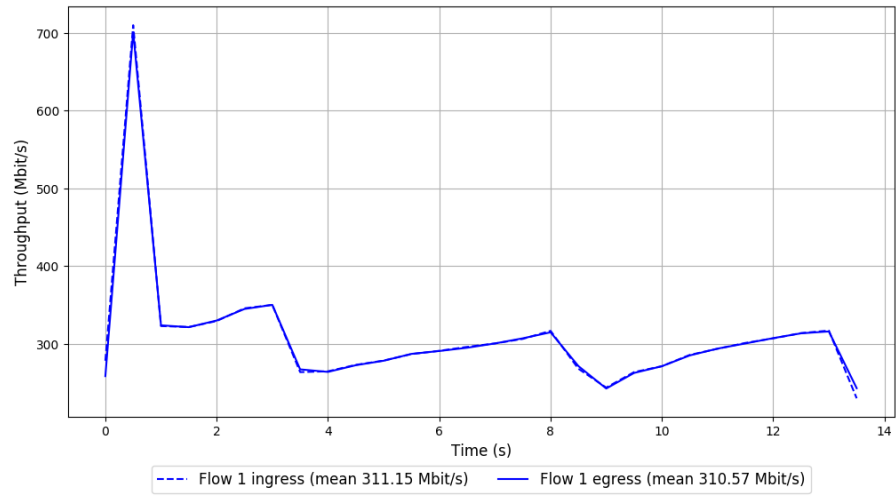
End at: 2017-12-19 23:36:55

Local clock offset: 0.465 ms

Remote clock offset: -1.048 ms



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



Run 4: Statistics of TCP Cubic

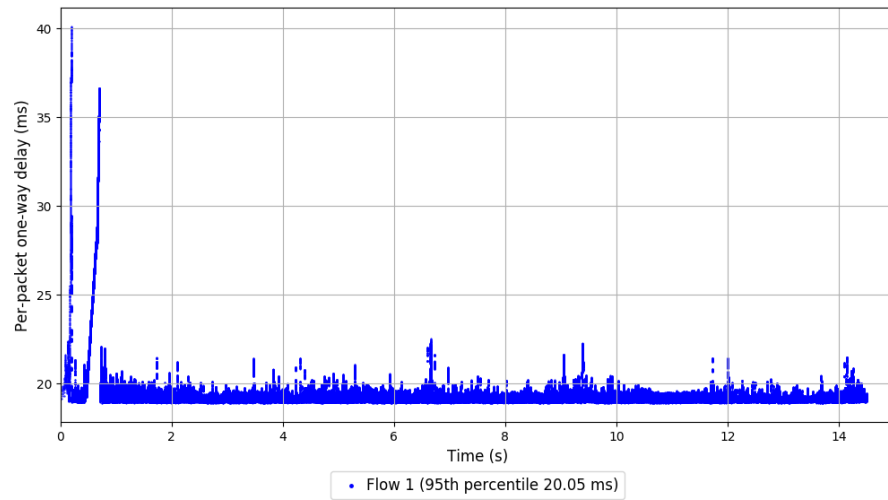
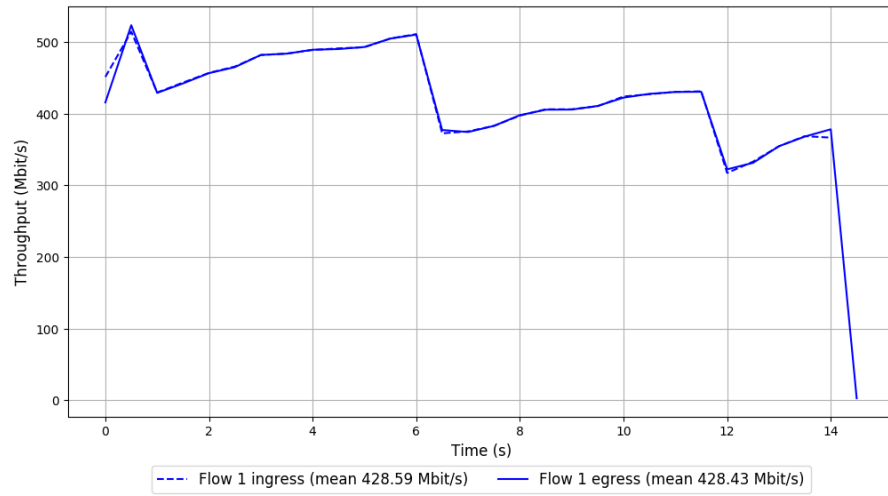
Start at: 2017-12-19 23:56:28

End at: 2017-12-19 23:56:58

Local clock offset: 0.711 ms

Remote clock offset: -1.478 ms

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



Run 5: Statistics of TCP Cubic

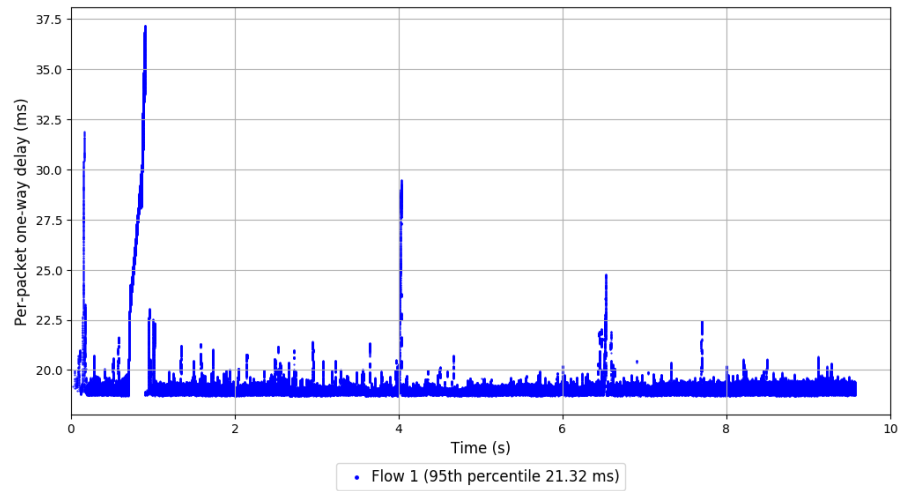
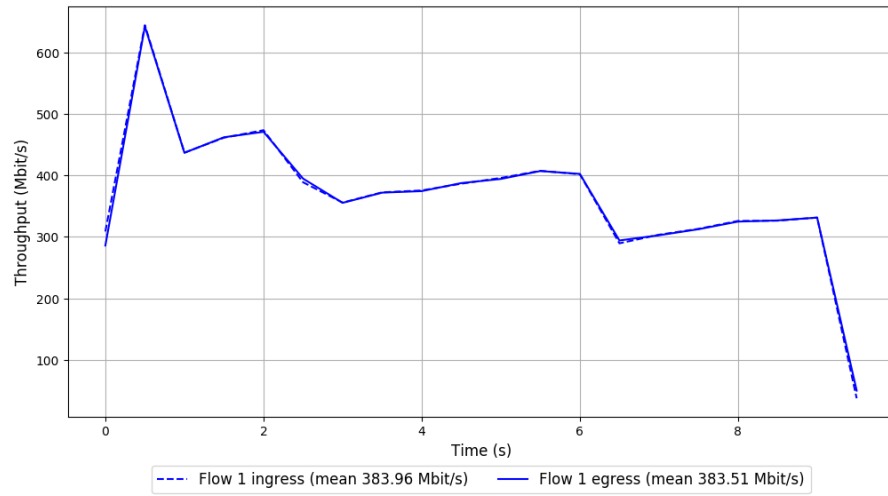
Start at: 2017-12-20 00:16:23

End at: 2017-12-20 00:16:53

Local clock offset: 0.95 ms

Remote clock offset: -1.571 ms

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



Run 6: Statistics of TCP Cubic

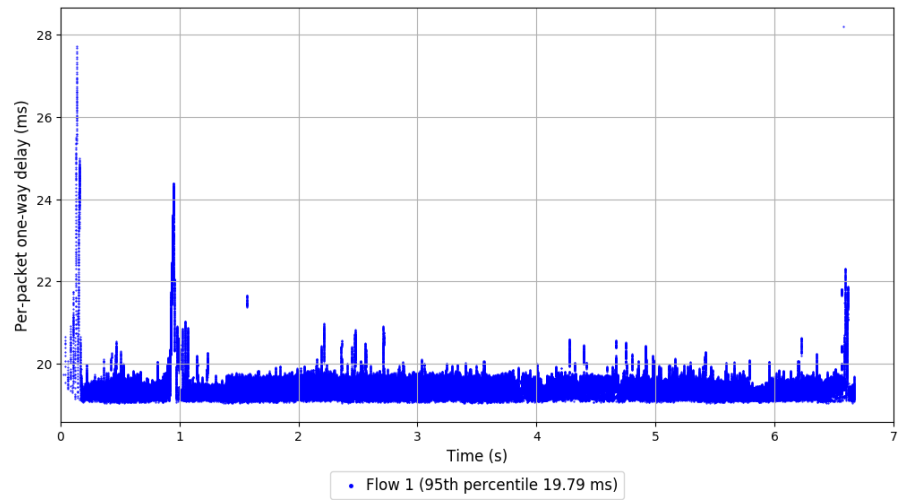
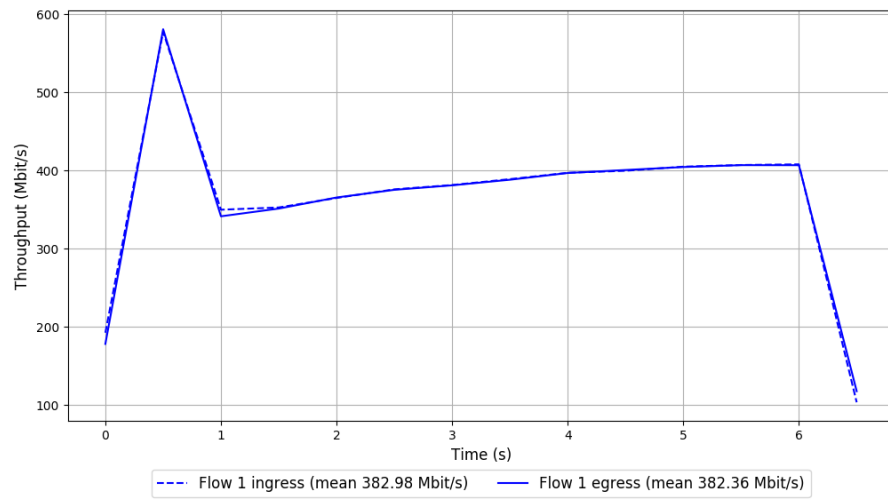
Start at: 2017-12-20 00:36:30

End at: 2017-12-20 00:37:00

Local clock offset: 0.883 ms

Remote clock offset: -1.654 ms

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



Run 7: Statistics of TCP Cubic

Start at: 2017-12-20 00:56:22

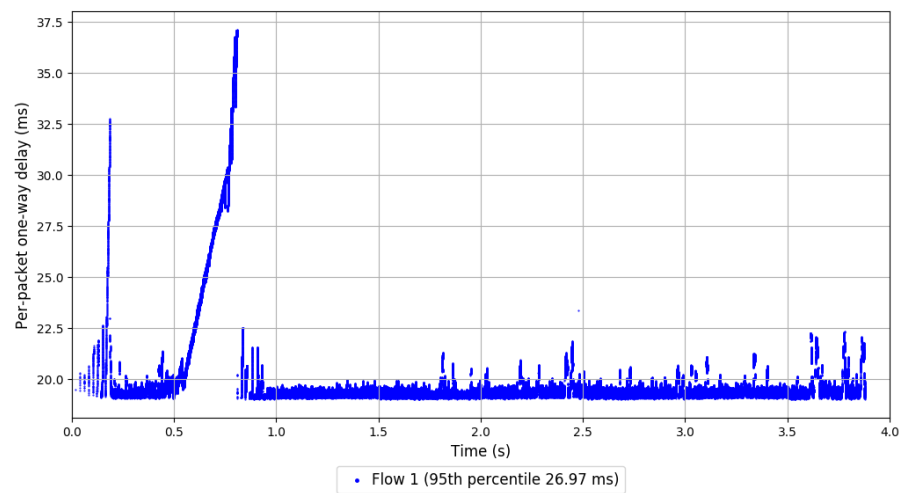
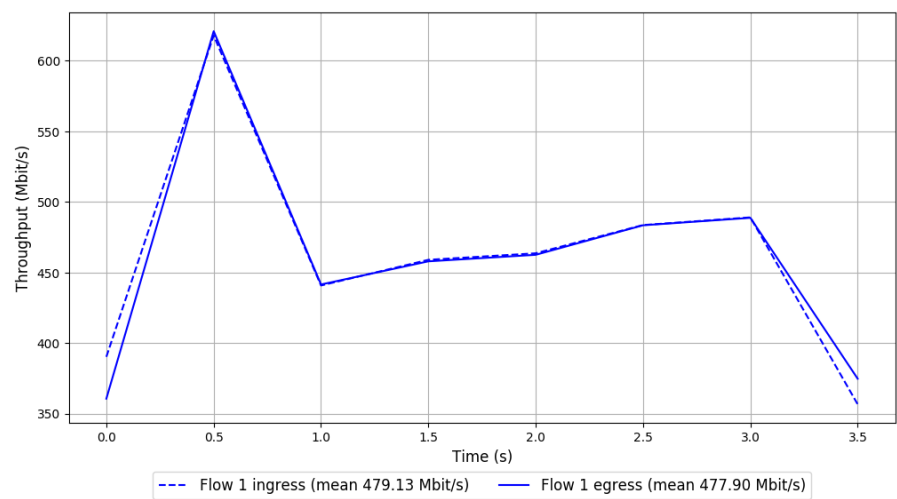
End at: 2017-12-20 00:56:52

Local clock offset: 1.025 ms

Remote clock offset: -1.828 ms



Run 7: Report of TCP Cubic — Data Link



Run 8: Statistics of TCP Cubic

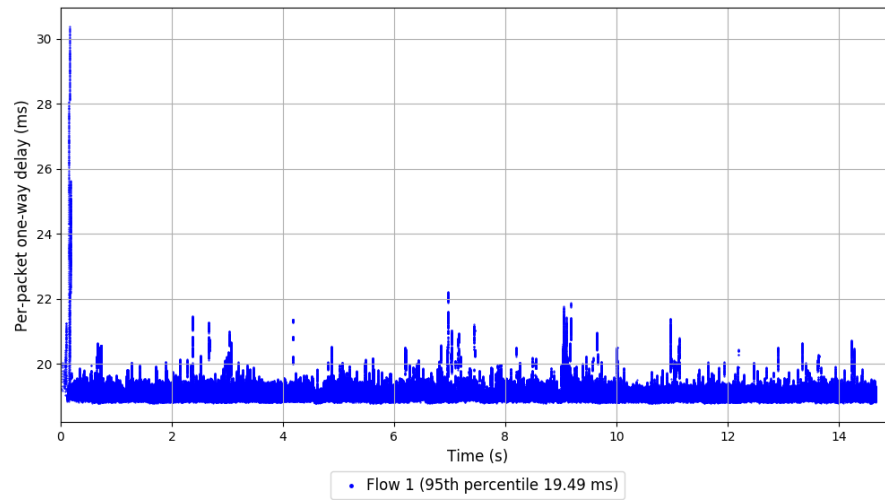
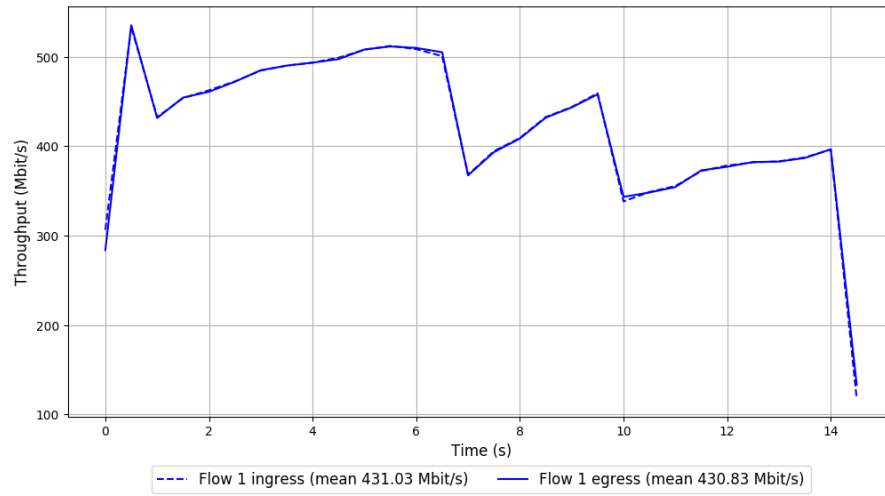
Start at: 2017-12-20 01:16:30

End at: 2017-12-20 01:17:00

Local clock offset: 1.242 ms

Remote clock offset: -2.111 ms

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



Run 9: Statistics of TCP Cubic

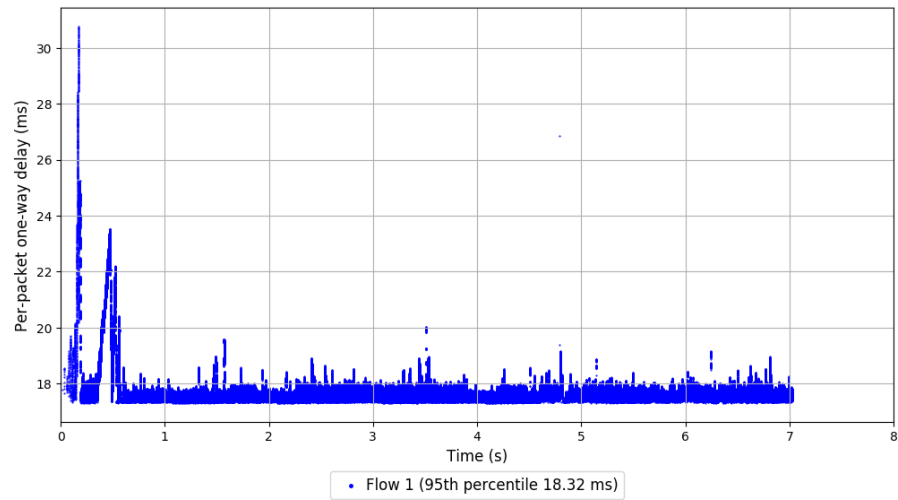
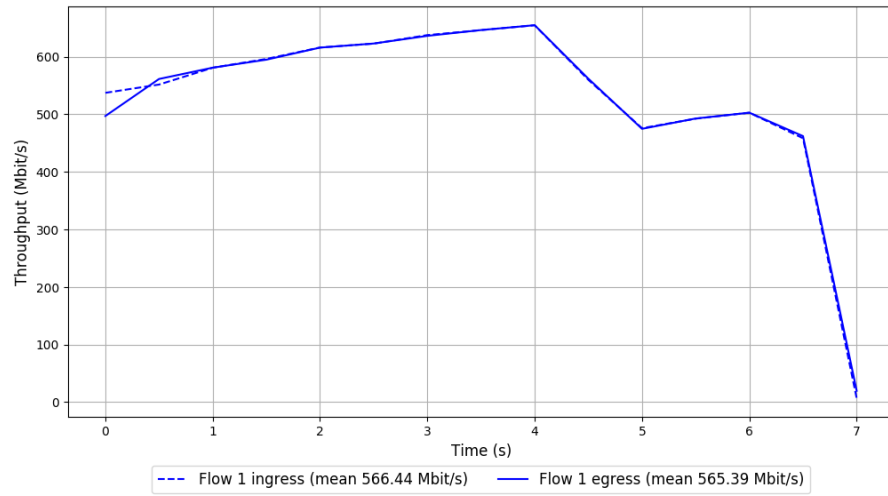
Start at: 2017-12-20 01:36:43

End at: 2017-12-20 01:37:13

Local clock offset: 1.347 ms

Remote clock offset: -1.883 ms

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



Run 10: Statistics of TCP Cubic

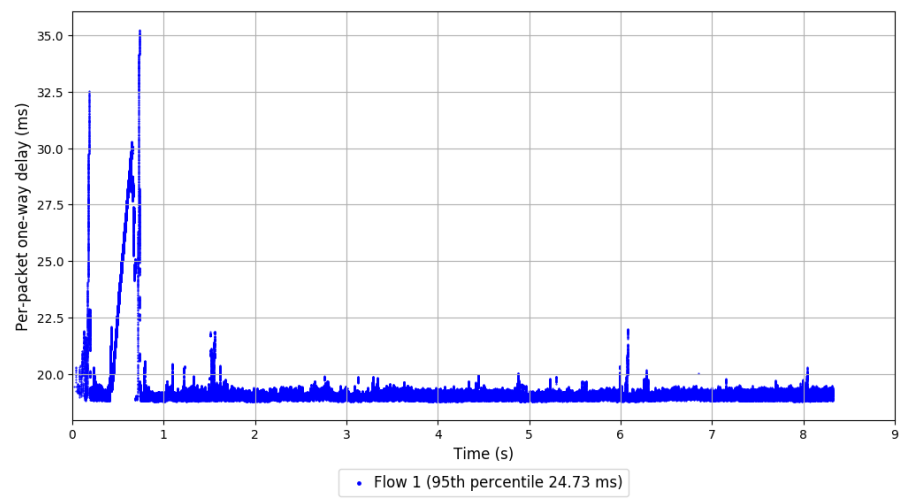
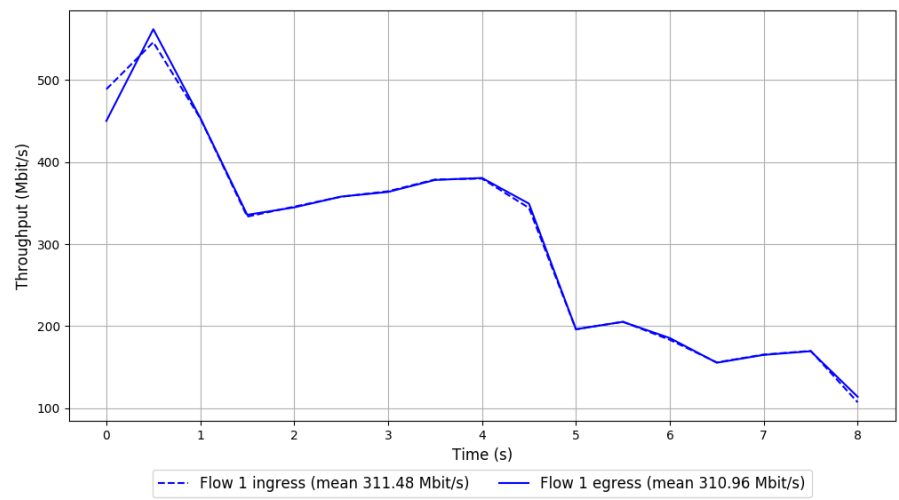
Start at: 2017-12-20 01:56:53

End at: 2017-12-20 01:57:23

Local clock offset: 1.103 ms

Remote clock offset: -1.447 ms

Run 10: Report of TCP Cubic — Data Link



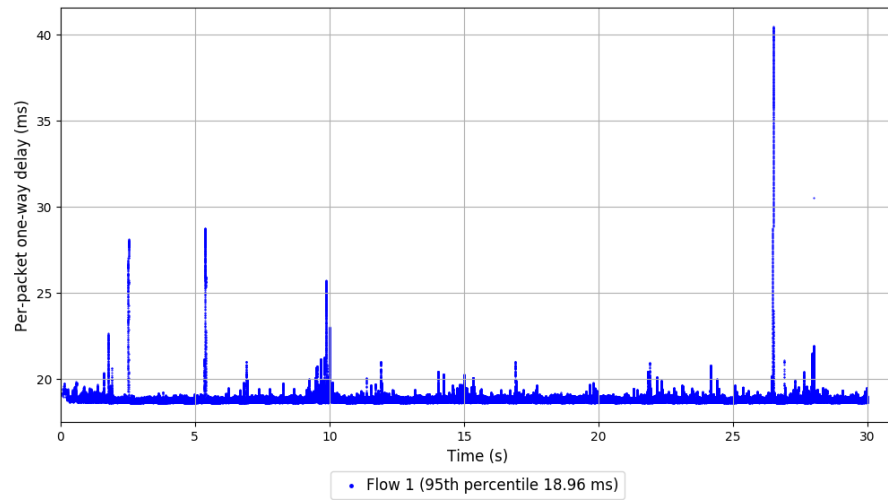
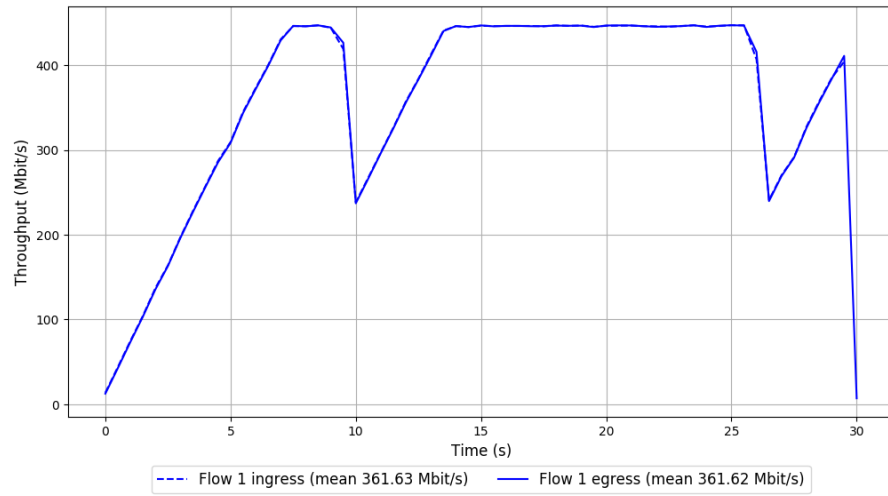
```
Run 1: Statistics of LEDBAT

Start at: 2017-12-19 22:57:06
End at: 2017-12-19 22:57:36
Local clock offset: 1.146 ms
Remote clock offset: -0.588 ms

# Below is generated by plot.py at 2017-12-20 03:58:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 361.62 Mbit/s
95th percentile per-packet one-way delay: 18.961 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 361.62 Mbit/s
95th percentile per-packet one-way delay: 18.961 ms
Loss rate: 0.01%
```



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

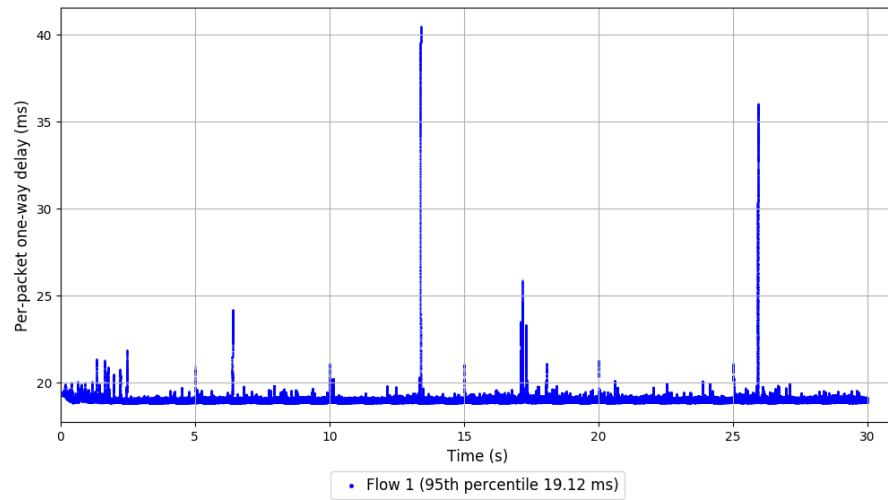
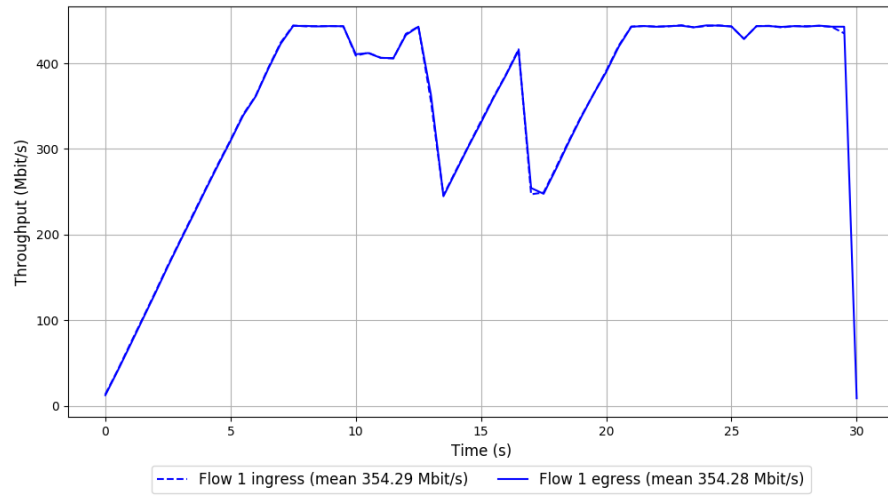


Run 2: Statistics of LEDBAT

Start at: 2017-12-19 23:17:20  
End at: 2017-12-19 23:17:50  
Local clock offset: 0.525 ms  
Remote clock offset: -0.818 ms

# Below is generated by plot.py at 2017-12-20 03:58:09  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 354.28 Mbit/s  
95th percentile per-packet one-way delay: 19.125 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 354.28 Mbit/s  
95th percentile per-packet one-way delay: 19.125 ms  
Loss rate: 0.00%

## Run 2: Report of LEDBAT — Data Link

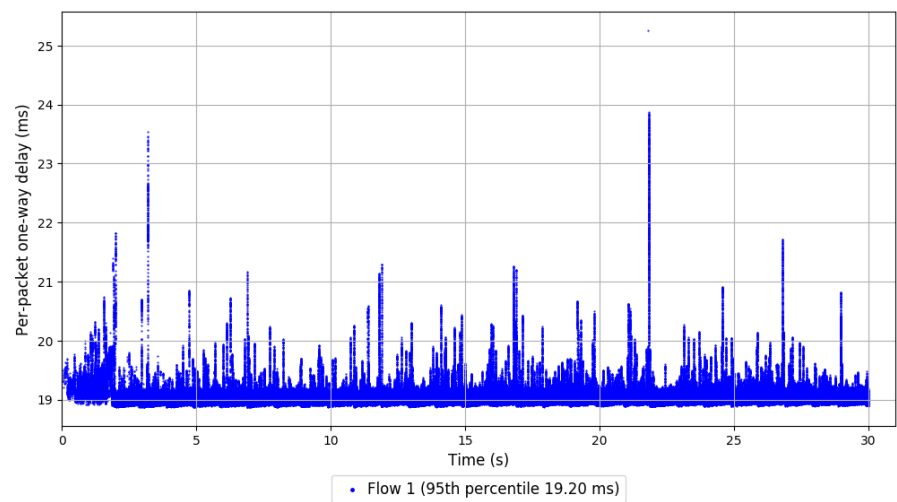
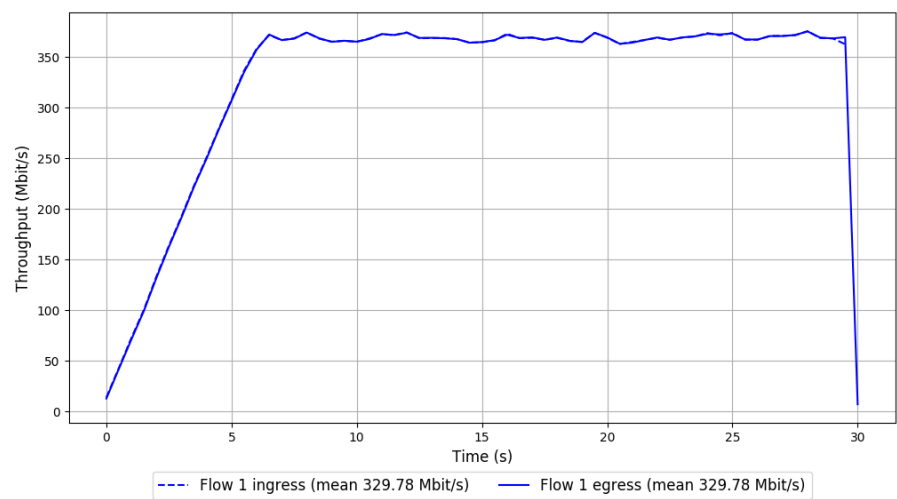


Run 3: Statistics of LEDBAT

Start at: 2017-12-19 23:37:41  
End at: 2017-12-19 23:38:11  
Local clock offset: 0.453 ms  
Remote clock offset: -1.122 ms

# Below is generated by plot.py at 2017-12-20 03:58:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 329.78 Mbit/s  
95th percentile per-packet one-way delay: 19.196 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 329.78 Mbit/s  
95th percentile per-packet one-way delay: 19.196 ms  
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2017-12-19 23:57:46

End at: 2017-12-19 23:58:16

Local clock offset: 0.636 ms

Remote clock offset: -1.52 ms

# Below is generated by plot.py at 2017-12-20 03:58:34

# Datalink statistics

-- Total of 1 flow:

Average throughput: 253.75 Mbit/s

95th percentile per-packet one-way delay: 20.431 ms

Loss rate: 0.02%

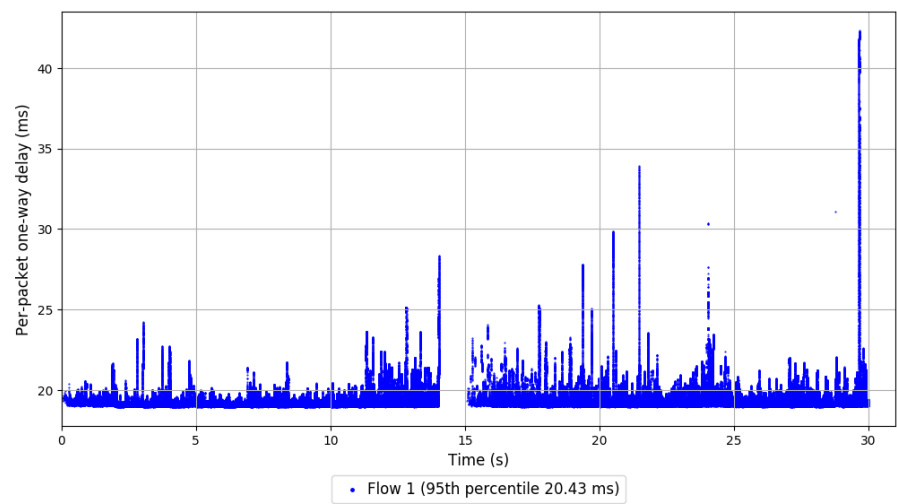
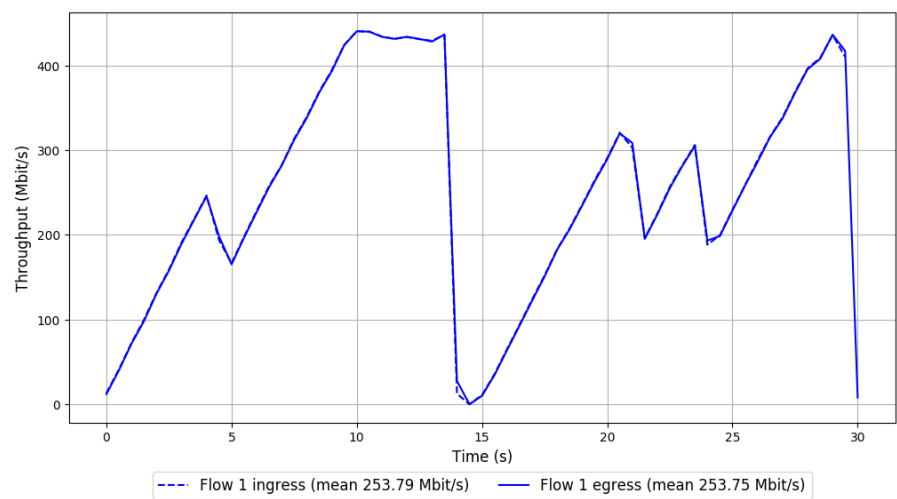
-- Flow 1:

Average throughput: 253.75 Mbit/s

95th percentile per-packet one-way delay: 20.431 ms

Loss rate: 0.02%

Run 4: Report of LEDBAT — Data Link



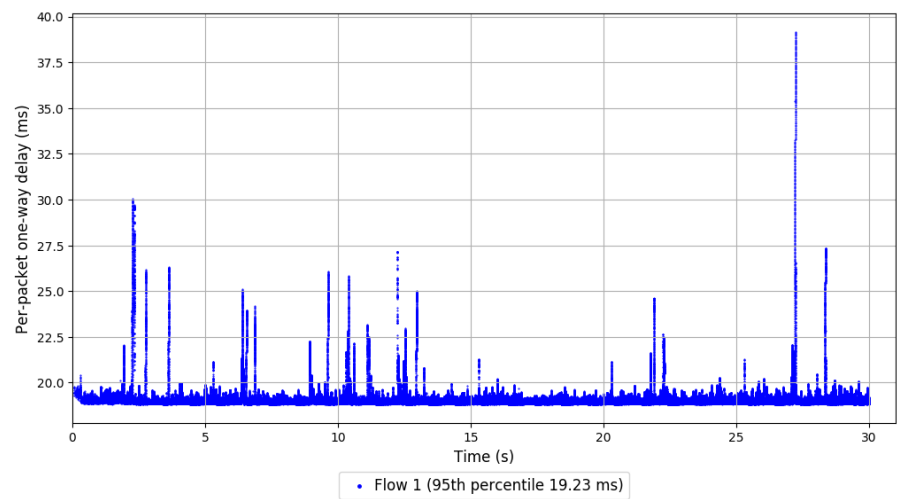
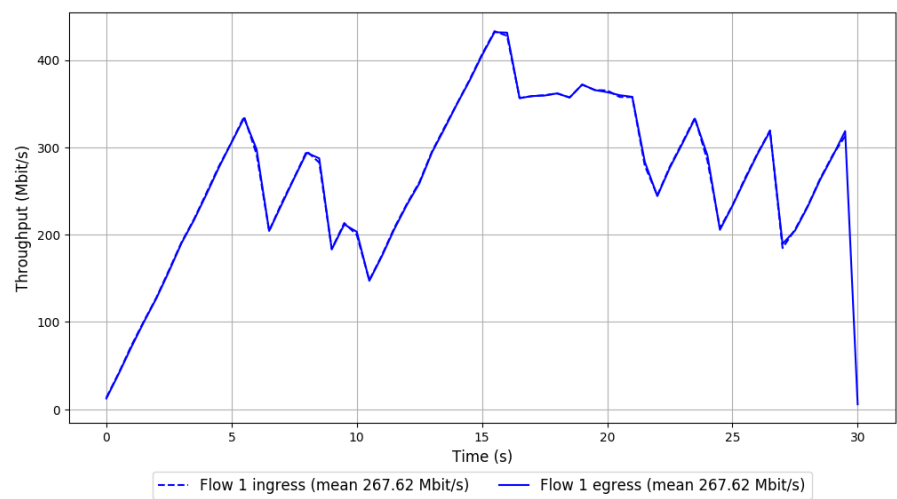
Run 5: Statistics of LEDBAT

Start at: 2017-12-20 00:17:38  
End at: 2017-12-20 00:18:08  
Local clock offset: 0.94 ms  
Remote clock offset: -1.644 ms

# Below is generated by plot.py at 2017-12-20 03:58:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 267.62 Mbit/s  
95th percentile per-packet one-way delay: 19.232 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 267.62 Mbit/s  
95th percentile per-packet one-way delay: 19.232 ms  
Loss rate: 0.00%



Run 5: Report of LEDBAT — Data Link

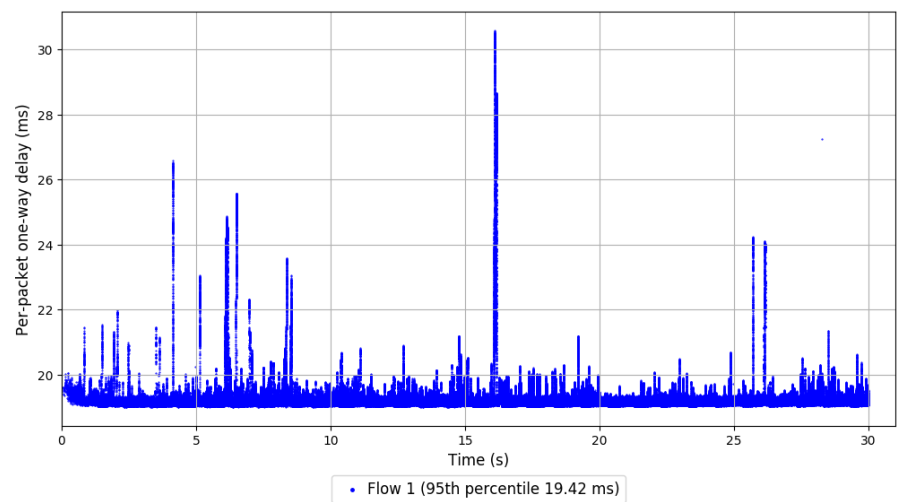
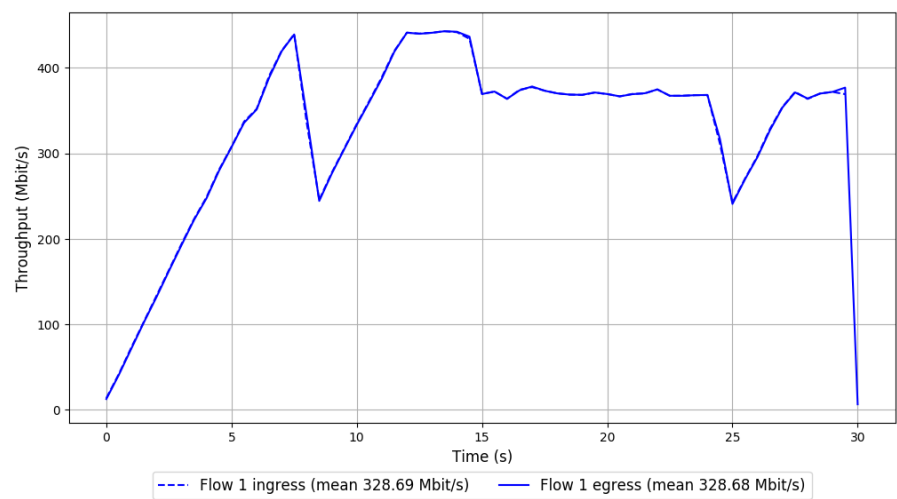


Run 6: Statistics of LEDBAT

Start at: 2017-12-20 00:37:44  
End at: 2017-12-20 00:38:14  
Local clock offset: 0.928 ms  
Remote clock offset: -1.662 ms

# Below is generated by plot.py at 2017-12-20 03:59:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 328.68 Mbit/s  
95th percentile per-packet one-way delay: 19.424 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 328.68 Mbit/s  
95th percentile per-packet one-way delay: 19.424 ms  
Loss rate: 0.00%

Run 6: Report of LEDBAT — Data Link



Run 7: Statistics of LEDBAT

Start at: 2017-12-20 00:57:34

End at: 2017-12-20 00:58:04

Local clock offset: 1.127 ms

Remote clock offset: -1.9 ms

# Below is generated by plot.py at 2017-12-20 04:01:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 363.96 Mbit/s

95th percentile per-packet one-way delay: 19.447 ms

Loss rate: 0.01%

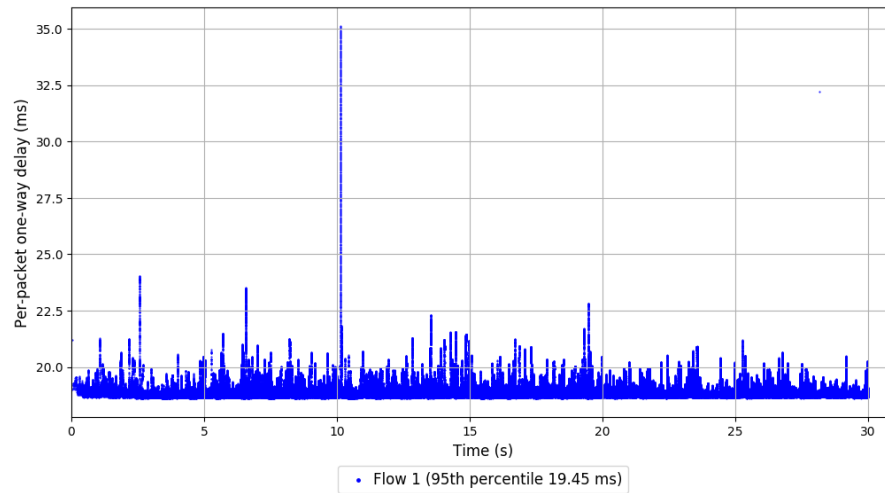
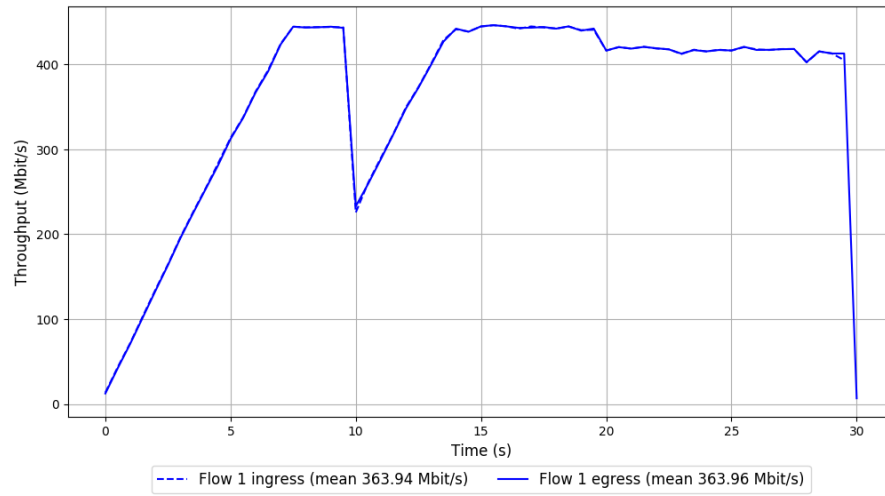
-- Flow 1:

Average throughput: 363.96 Mbit/s

95th percentile per-packet one-way delay: 19.447 ms

Loss rate: 0.01%

## Run 7: Report of LEDBAT — Data Link

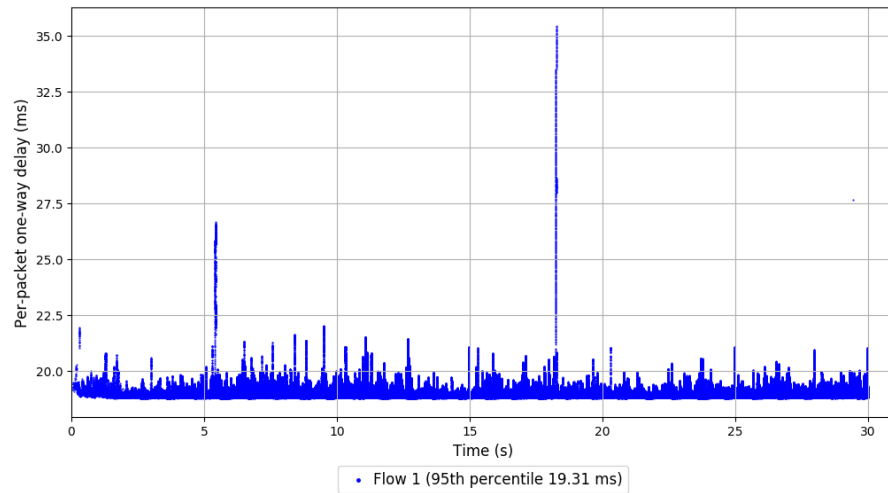
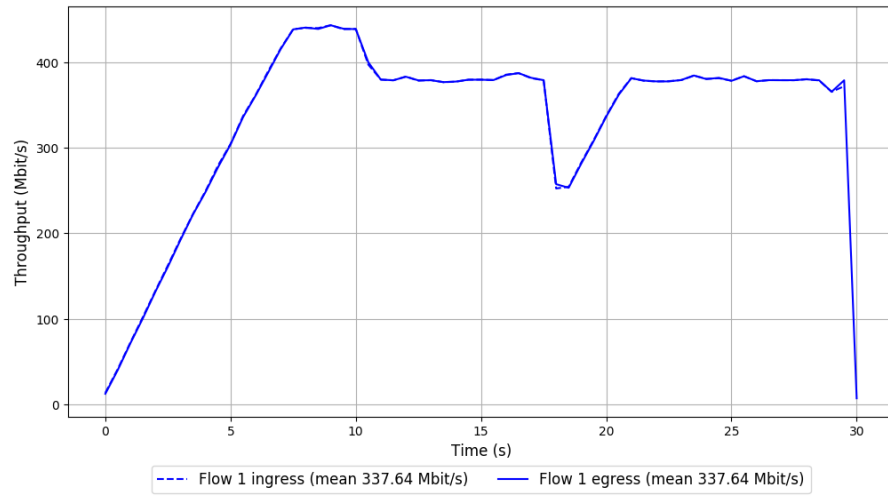


Run 8: Statistics of LEDBAT

Start at: 2017-12-20 01:17:49  
End at: 2017-12-20 01:18:19  
Local clock offset: 1.253 ms  
Remote clock offset: -2.084 ms

# Below is generated by plot.py at 2017-12-20 04:01:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 337.64 Mbit/s  
95th percentile per-packet one-way delay: 19.311 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 337.64 Mbit/s  
95th percentile per-packet one-way delay: 19.311 ms  
Loss rate: 0.00%

## Run 8: Report of LEDBAT — Data Link



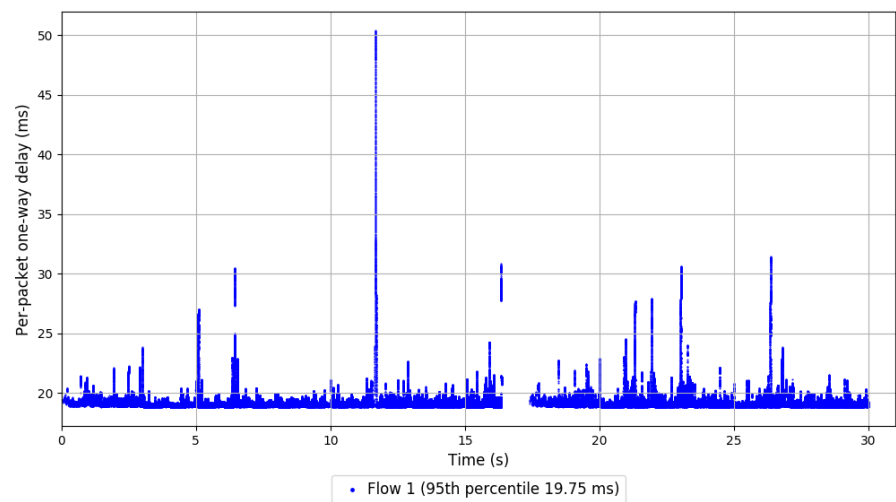
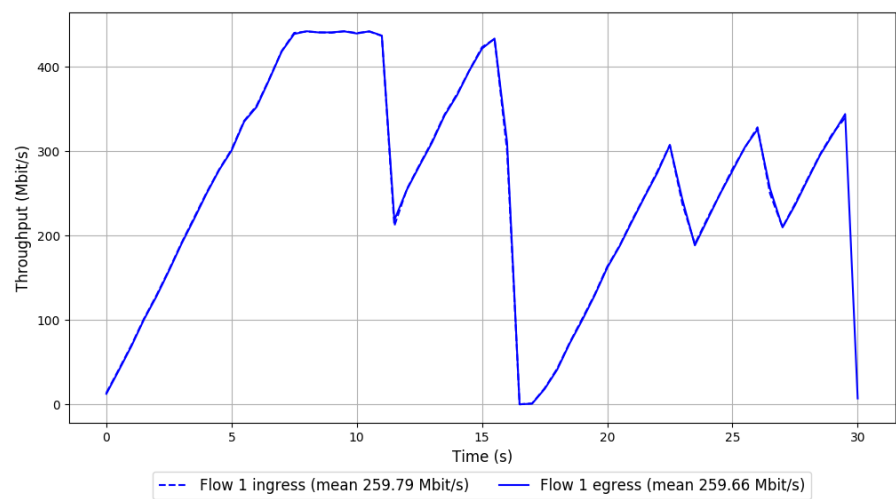
Run 9: Statistics of LEDBAT

Start at: 2017-12-20 01:37:58  
End at: 2017-12-20 01:38:28  
Local clock offset: 1.392 ms  
Remote clock offset: -1.943 ms

# Below is generated by plot.py at 2017-12-20 04:01:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 259.66 Mbit/s  
95th percentile per-packet one-way delay: 19.753 ms  
Loss rate: 0.06%  
-- Flow 1:  
Average throughput: 259.66 Mbit/s  
95th percentile per-packet one-way delay: 19.753 ms  
Loss rate: 0.06%



Run 9: Report of LEDBAT — Data Link



Run 10: Statistics of LEDBAT

Start at: 2017-12-20 01:58:06

End at: 2017-12-20 01:58:36

Local clock offset: 1.178 ms

Remote clock offset: -1.446 ms

# Below is generated by plot.py at 2017-12-20 04:02:32

# Datalink statistics

-- Total of 1 flow:

Average throughput: 319.35 Mbit/s

95th percentile per-packet one-way delay: 19.765 ms

Loss rate: 0.01%

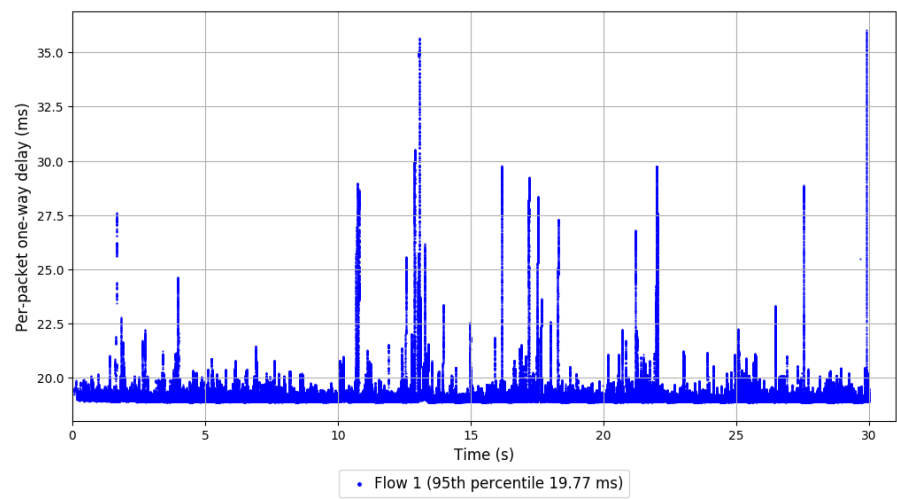
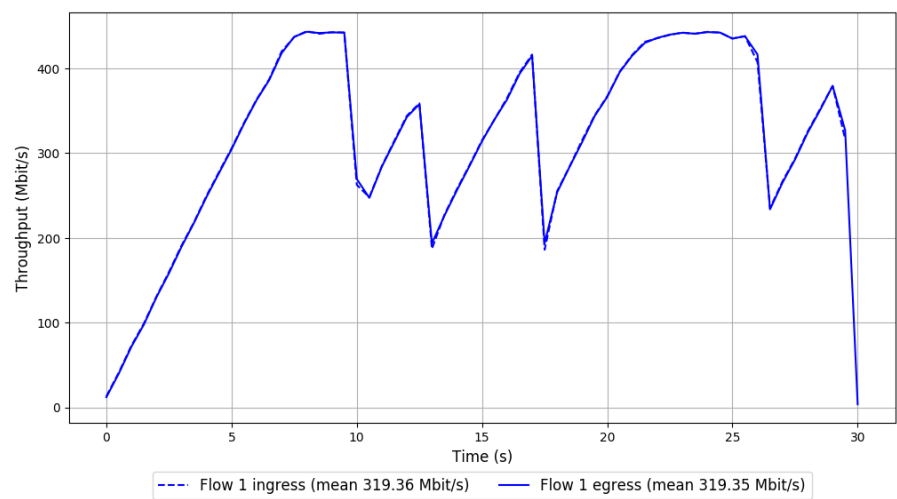
-- Flow 1:

Average throughput: 319.35 Mbit/s

95th percentile per-packet one-way delay: 19.765 ms

Loss rate: 0.01%

Run 10: Report of LEDBAT — Data Link

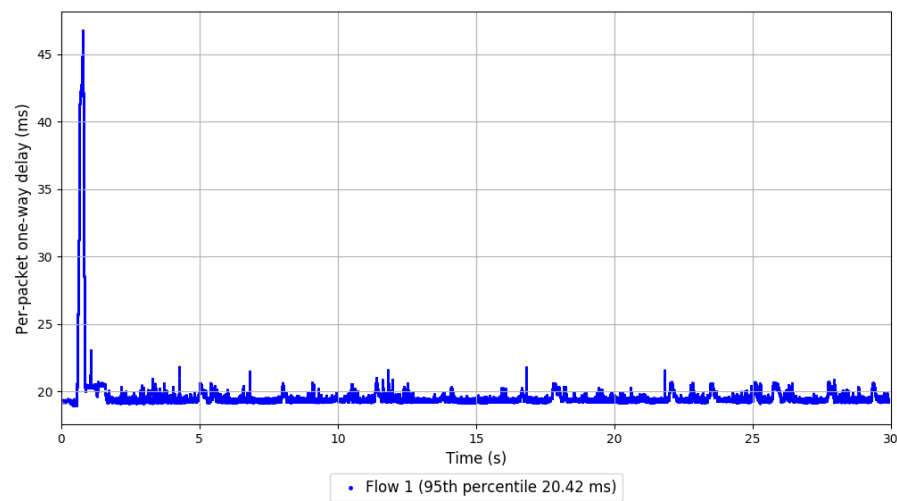
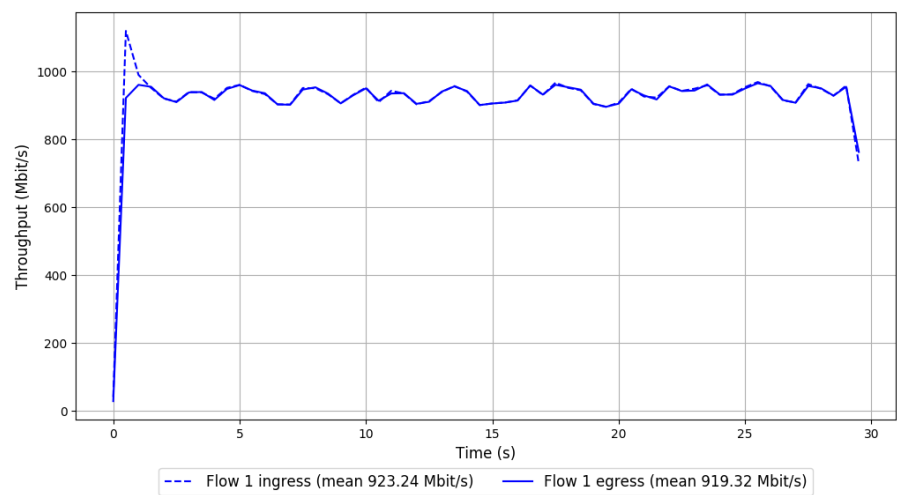


```
Run 1: Statistics of PCC

Start at: 2017-12-19 23:02:25
End at: 2017-12-19 23:02:55
Local clock offset: 1.163 ms
Remote clock offset: -0.694 ms

# Below is generated by plot.py at 2017-12-20 04:11:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 919.32 Mbit/s
95th percentile per-packet one-way delay: 20.417 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 919.32 Mbit/s
95th percentile per-packet one-way delay: 20.417 ms
Loss rate: 0.43%
```

Run 1: Report of PCC — Data Link

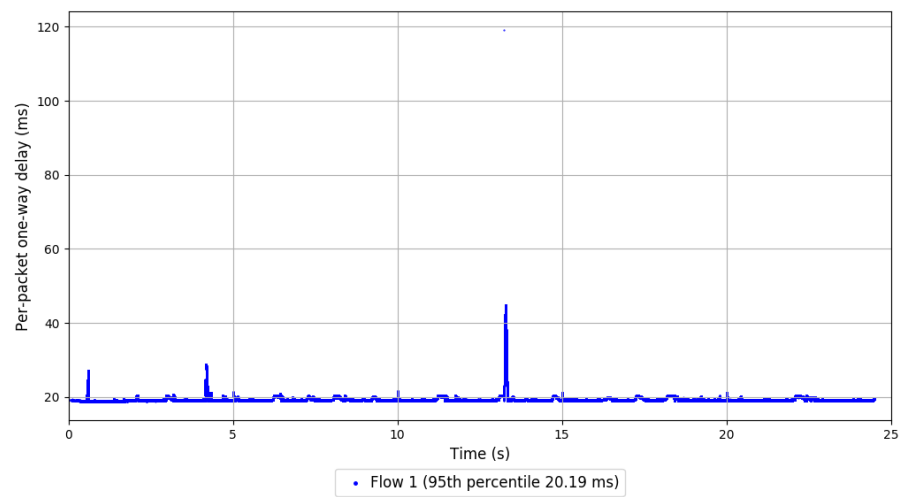
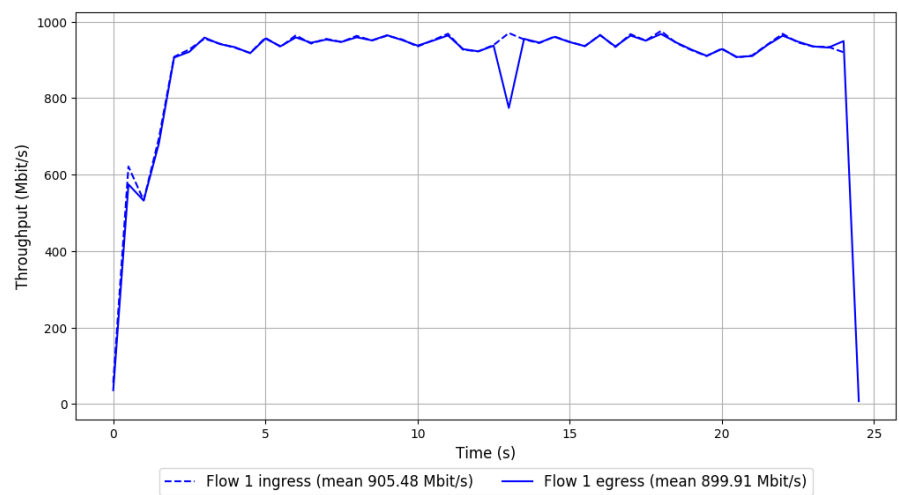


Run 2: Statistics of PCC

Start at: 2017-12-19 23:22:43  
End at: 2017-12-19 23:23:13  
Local clock offset: 0.324 ms  
Remote clock offset: -0.975 ms

# Below is generated by plot.py at 2017-12-20 04:11:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 899.91 Mbit/s  
95th percentile per-packet one-way delay: 20.187 ms  
Loss rate: 0.61%  
-- Flow 1:  
Average throughput: 899.91 Mbit/s  
95th percentile per-packet one-way delay: 20.187 ms  
Loss rate: 0.61%

Run 2: Report of PCC — Data Link



Run 3: Statistics of PCC

Start at: 2017-12-19 23:42:59

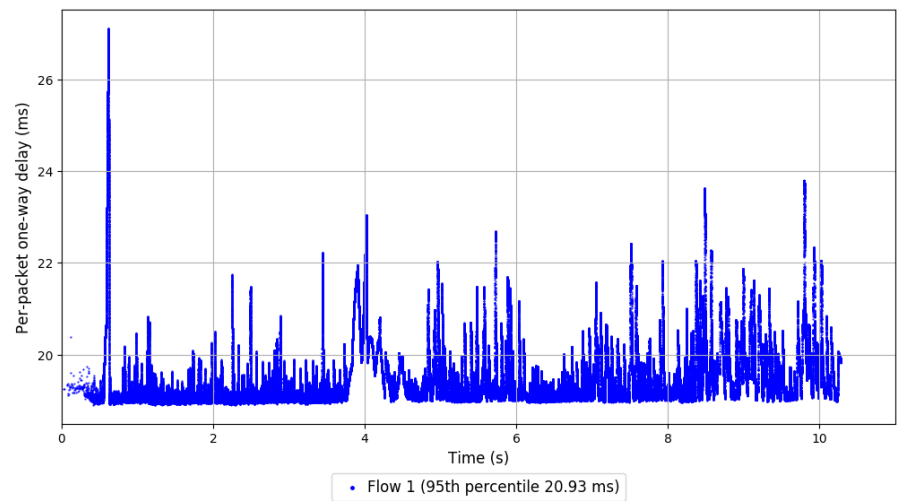
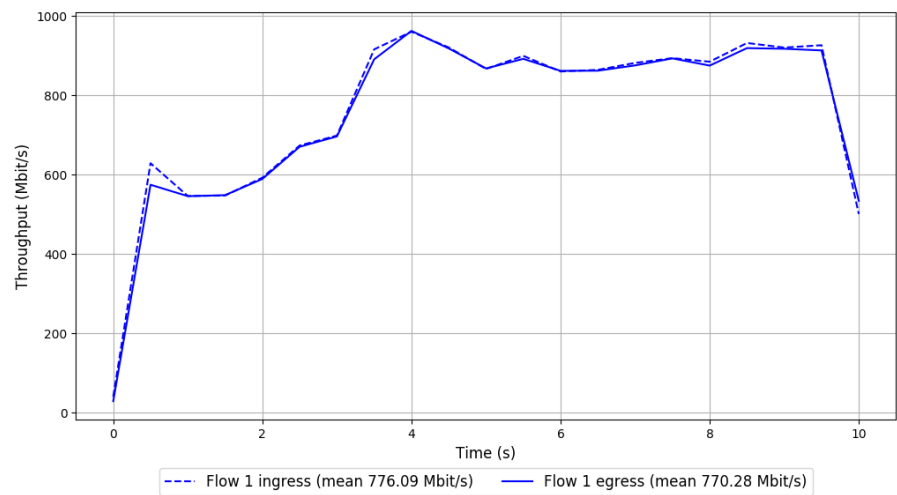
End at: 2017-12-19 23:43:29

Local clock offset: 0.427 ms

Remote clock offset: -1.321 ms



Run 3: Report of PCC — Data Link



Run 4: Statistics of PCC

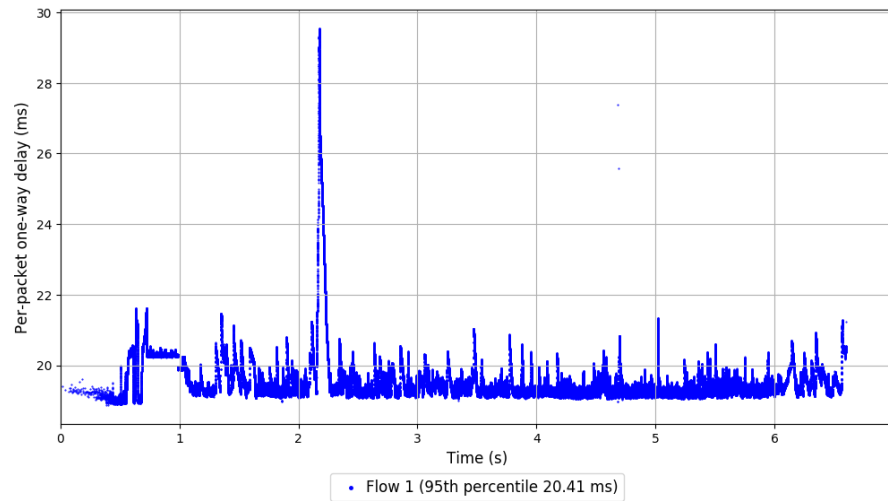
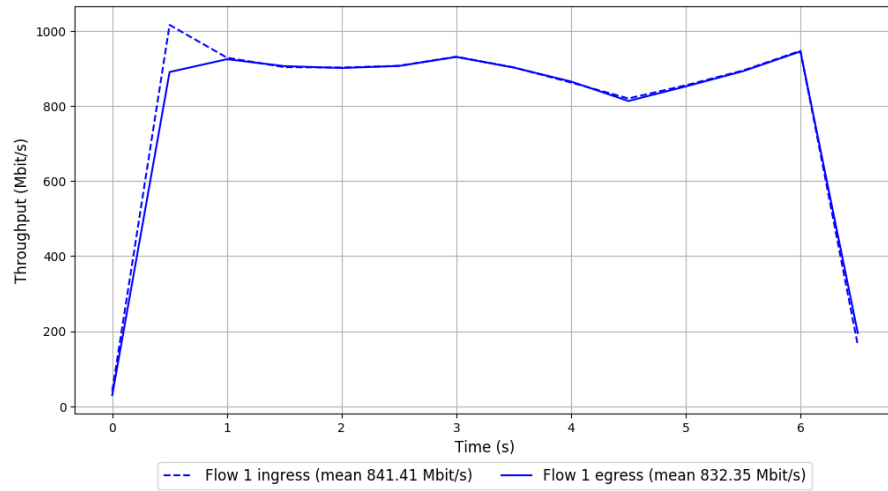
Start at: 2017-12-20 00:02:59

End at: 2017-12-20 00:03:29

Local clock offset: 0.79 ms

Remote clock offset: -1.513 ms

#### Run 4: Report of PCC — Data Link

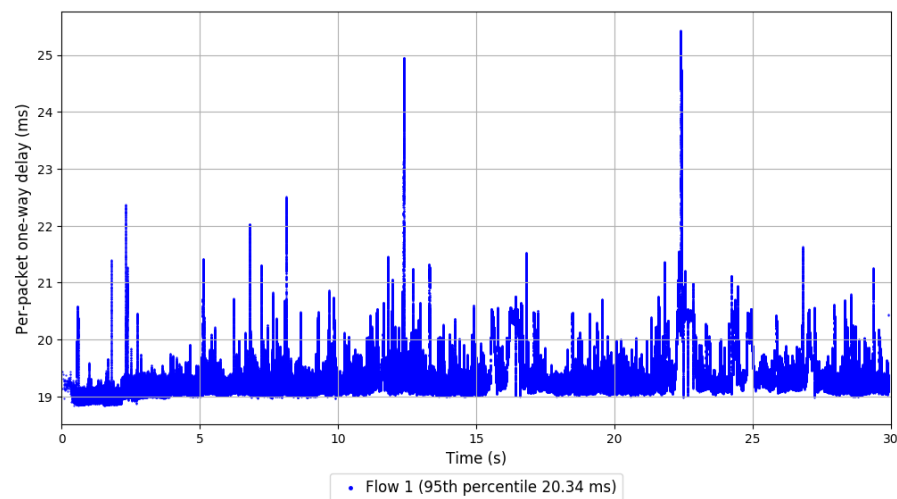
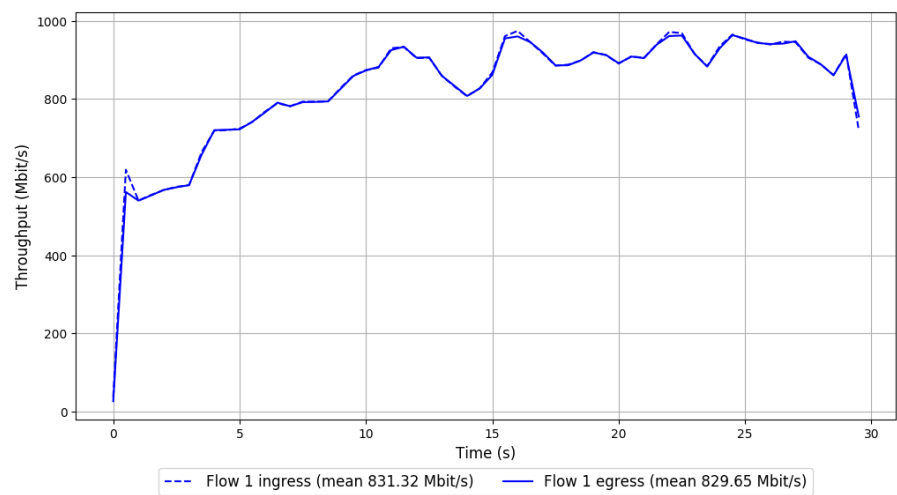


Run 5: Statistics of PCC

Start at: 2017-12-20 00:22:52  
End at: 2017-12-20 00:23:22  
Local clock offset: 0.886 ms  
Remote clock offset: -1.604 ms

# Below is generated by plot.py at 2017-12-20 04:13:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 829.65 Mbit/s  
95th percentile per-packet one-way delay: 20.344 ms  
Loss rate: 0.20%  
-- Flow 1:  
Average throughput: 829.65 Mbit/s  
95th percentile per-packet one-way delay: 20.344 ms  
Loss rate: 0.20%

Run 5: Report of PCC — Data Link



Run 6: Statistics of PCC

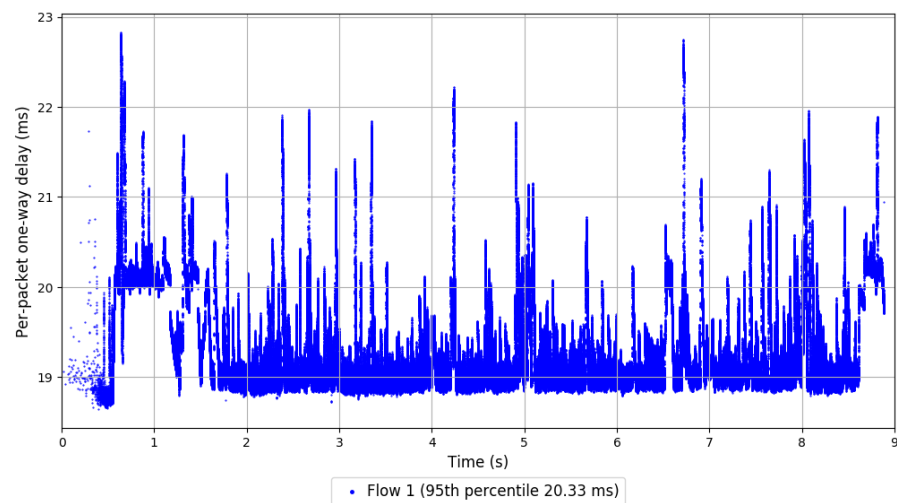
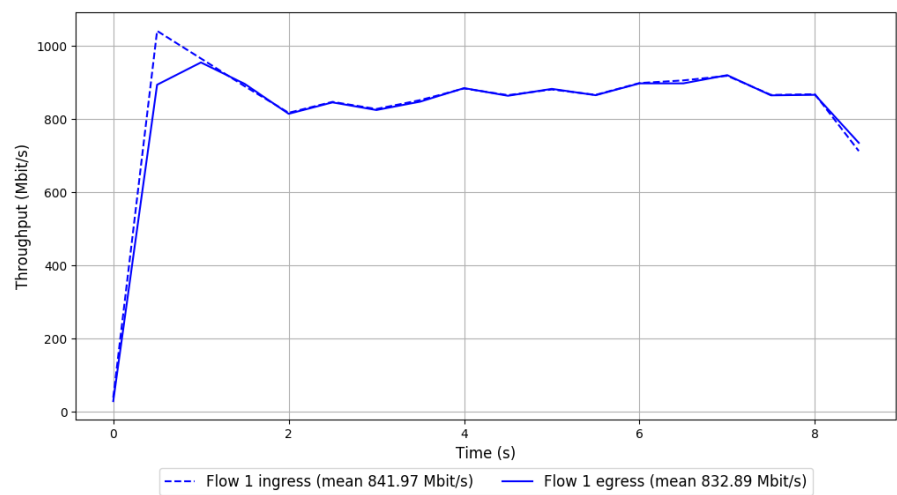
Start at: 2017-12-20 00:43:04

End at: 2017-12-20 00:43:34

Local clock offset: 1.104 ms

Remote clock offset: -1.818 ms

Run 6: Report of PCC — Data Link



Run 7: Statistics of PCC

Start at: 2017-12-20 01:02:58

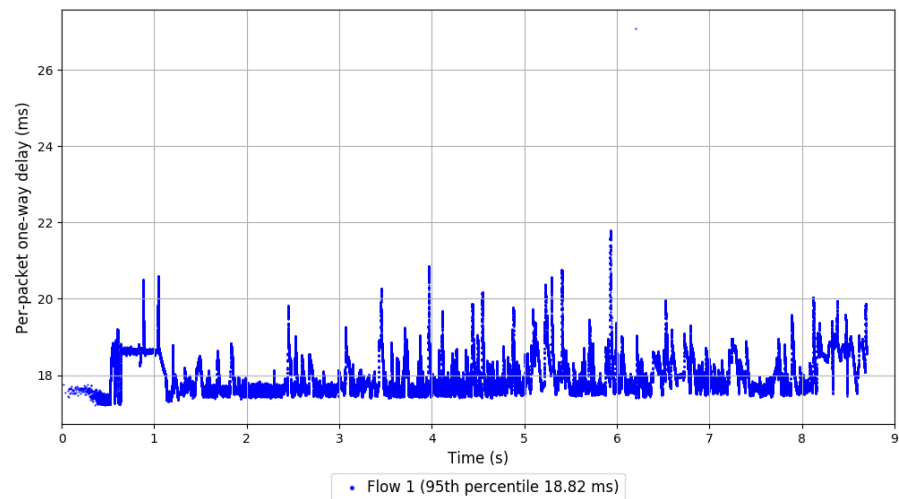
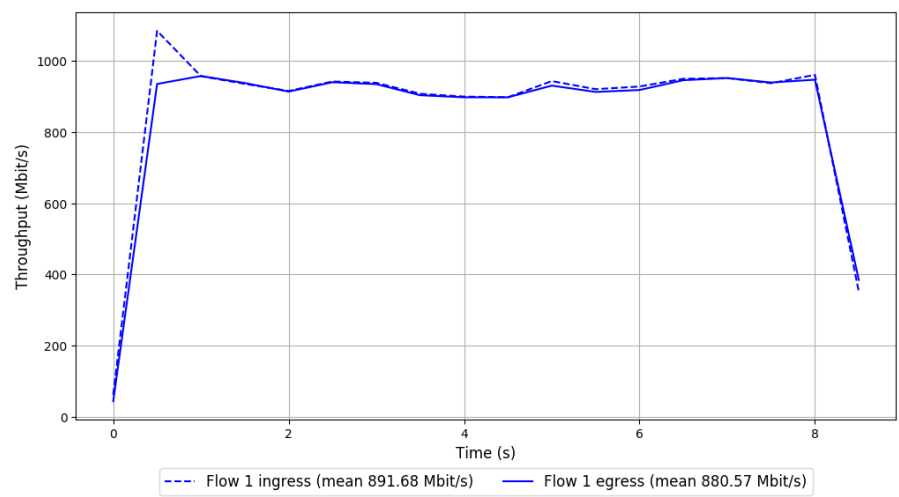
End at: 2017-12-20 01:03:28

Local clock offset: 1.118 ms

Remote clock offset: -1.976 ms



Run 7: Report of PCC — Data Link



Run 8: Statistics of PCC

Start at: 2017-12-20 01:23:09

End at: 2017-12-20 01:23:39

Local clock offset: 1.236 ms

Remote clock offset: -1.96 ms

# Below is generated by plot.py at 2017-12-20 04:13:57

# Datalink statistics

-- Total of 1 flow:

Average throughput: 852.91 Mbit/s

95th percentile per-packet one-way delay: 20.532 ms

Loss rate: 0.45%

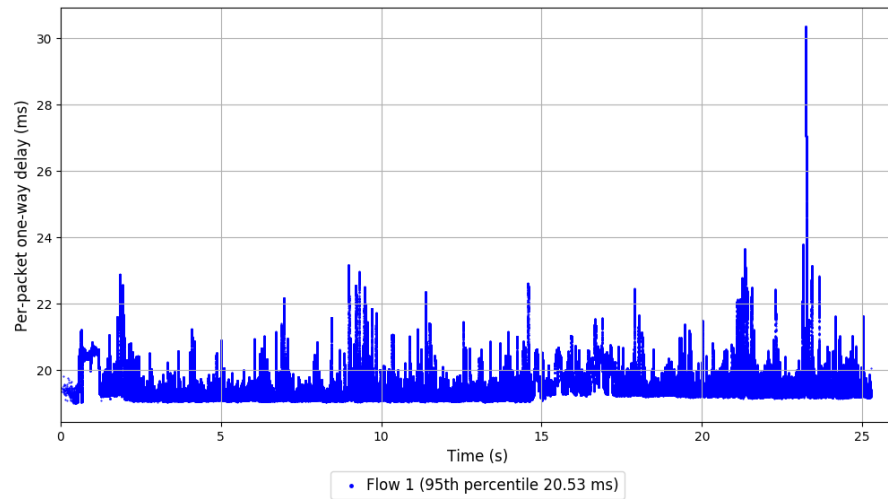
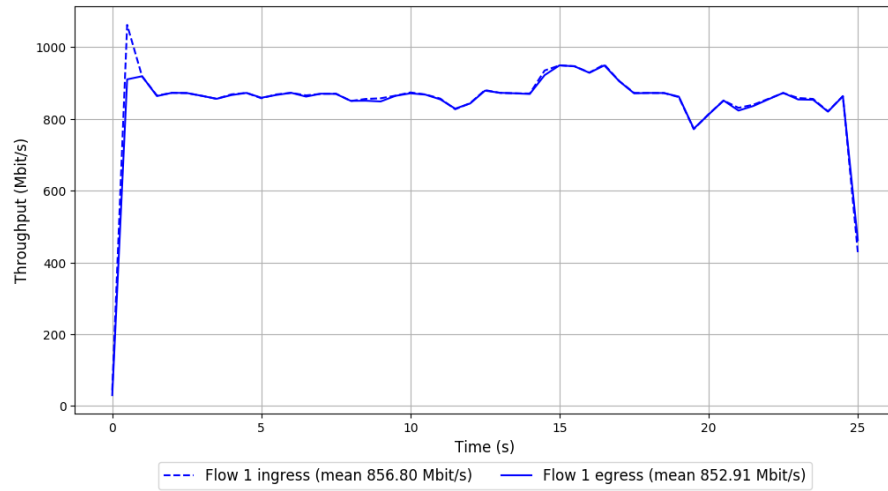
-- Flow 1:

Average throughput: 852.91 Mbit/s

95th percentile per-packet one-way delay: 20.532 ms

Loss rate: 0.45%

## Run 8: Report of PCC — Data Link



Run 9: Statistics of PCC

Start at: 2017-12-20 01:43:12

End at: 2017-12-20 01:43:42

Local clock offset: 1.338 ms

Remote clock offset: -1.77 ms

# Below is generated by plot.py at 2017-12-20 04:15:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 894.03 Mbit/s

95th percentile per-packet one-way delay: 20.198 ms

Loss rate: 0.30%

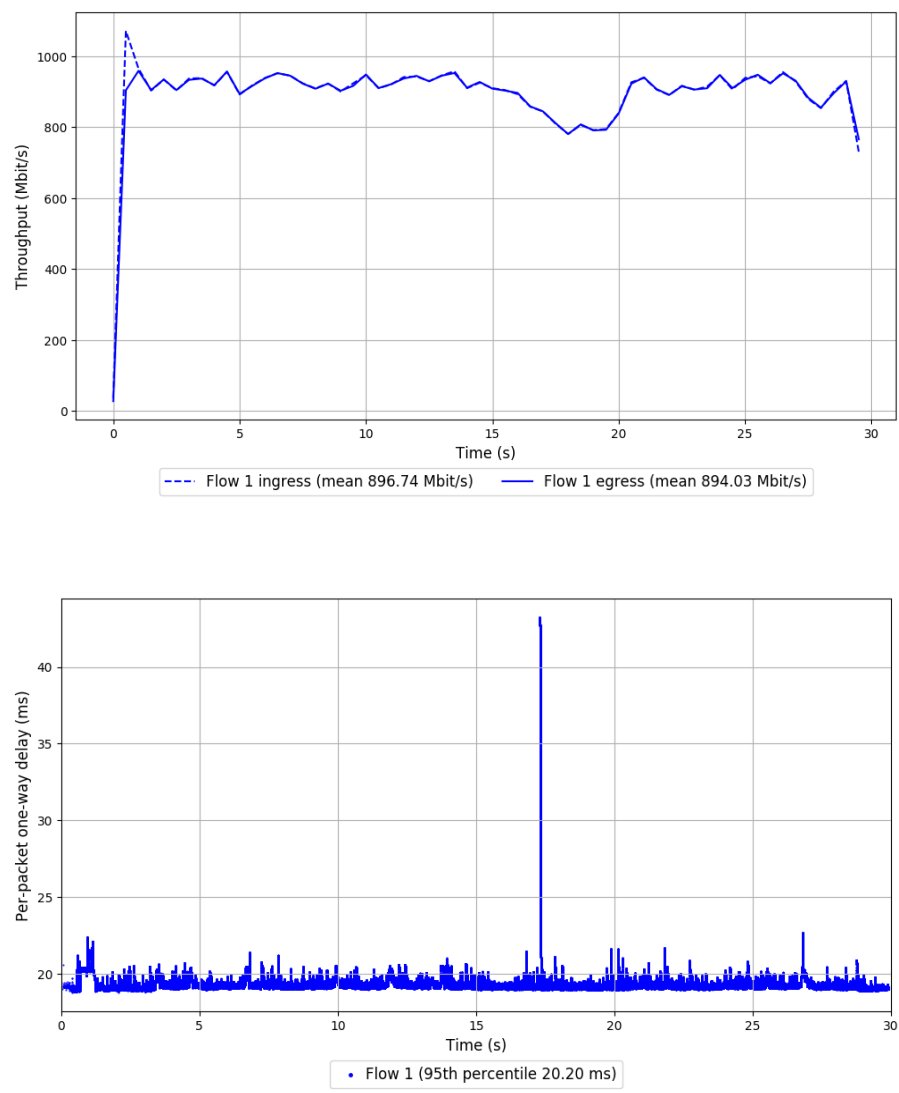
-- Flow 1:

Average throughput: 894.03 Mbit/s

95th percentile per-packet one-way delay: 20.198 ms

Loss rate: 0.30%

Run 9: Report of PCC — Data Link



Run 10: Statistics of PCC

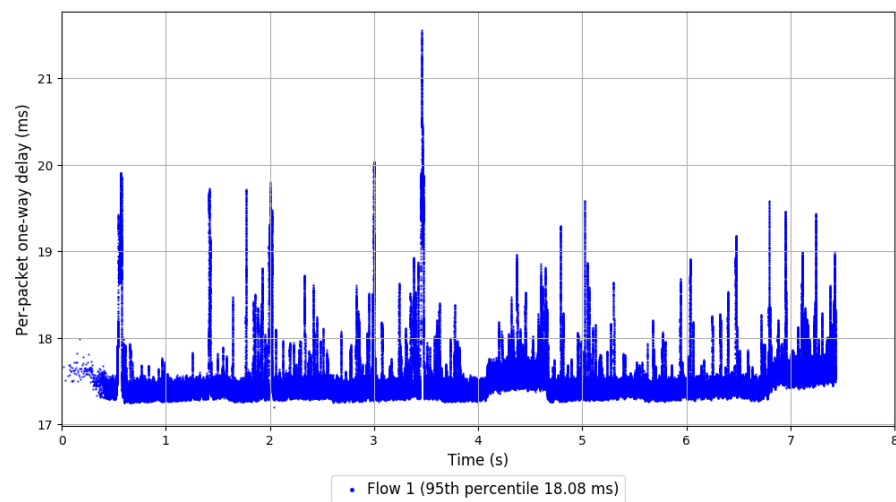
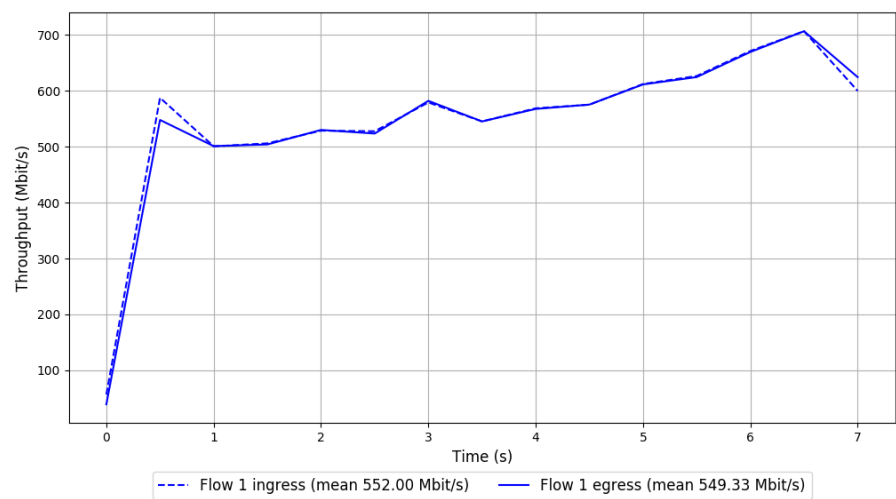
Start at: 2017-12-20 02:03:23

End at: 2017-12-20 02:03:54

Local clock offset: 1.199 ms

Remote clock offset: -1.353 ms

Run 10: Report of PCC — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2017-12-19 22:58:35

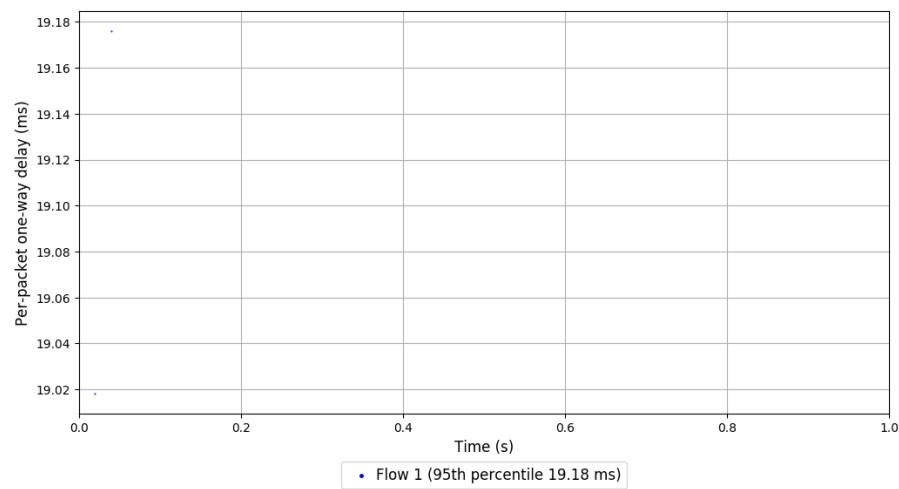
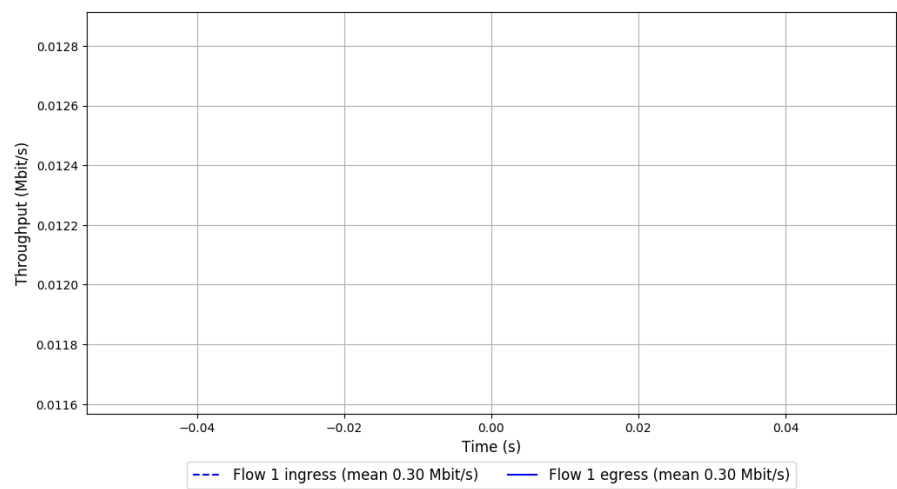
End at: 2017-12-19 22:59:05

Local clock offset: 1.179 ms

Remote clock offset: -0.465 ms



Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2017-12-19 23:18:49

End at: 2017-12-19 23:19:19

Local clock offset: 0.485 ms

Remote clock offset: -0.764 ms

# Below is generated by plot.py at 2017-12-20 04:15:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 73.07 Mbit/s

95th percentile per-packet one-way delay: 18.914 ms

Loss rate: 0.00%

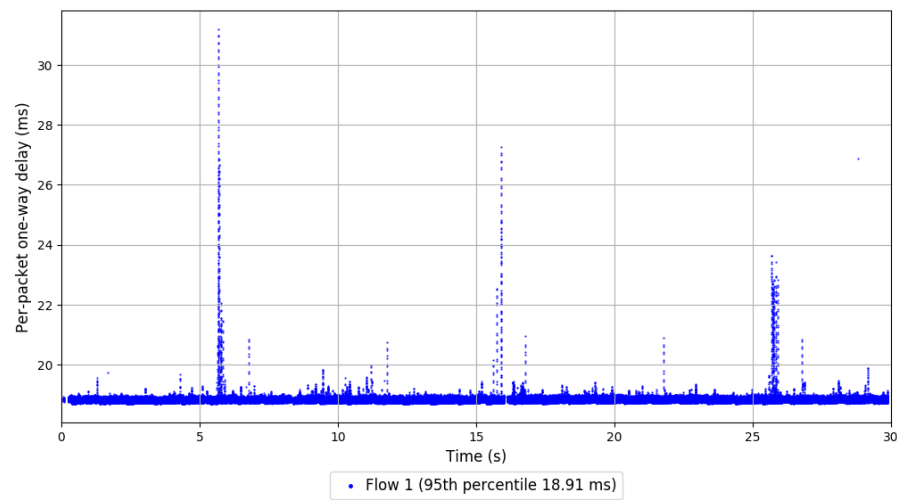
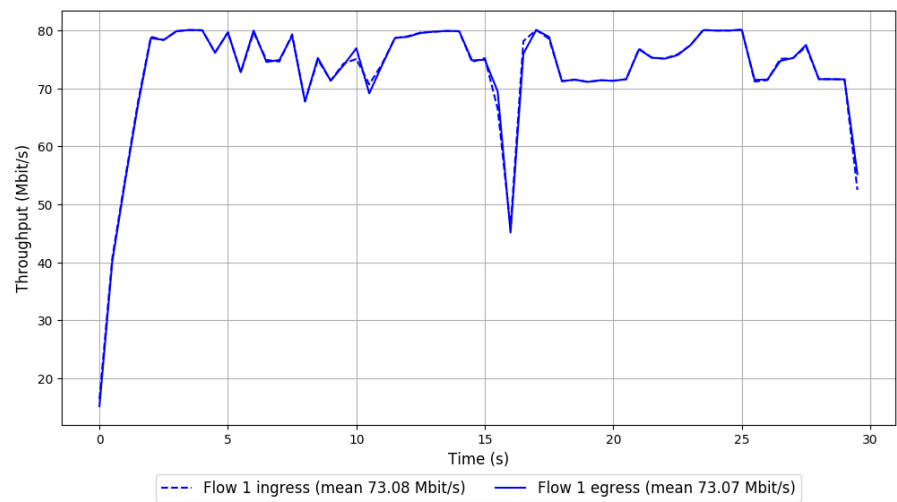
-- Flow 1:

Average throughput: 73.07 Mbit/s

95th percentile per-packet one-way delay: 18.914 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

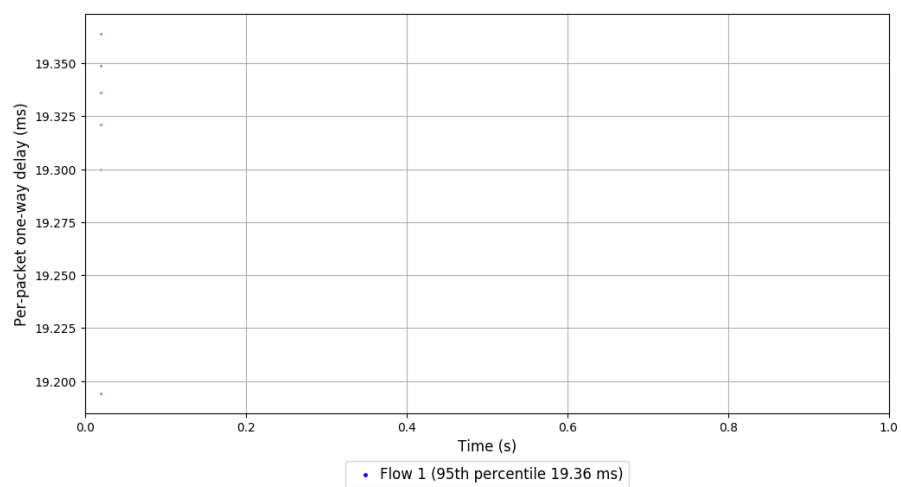
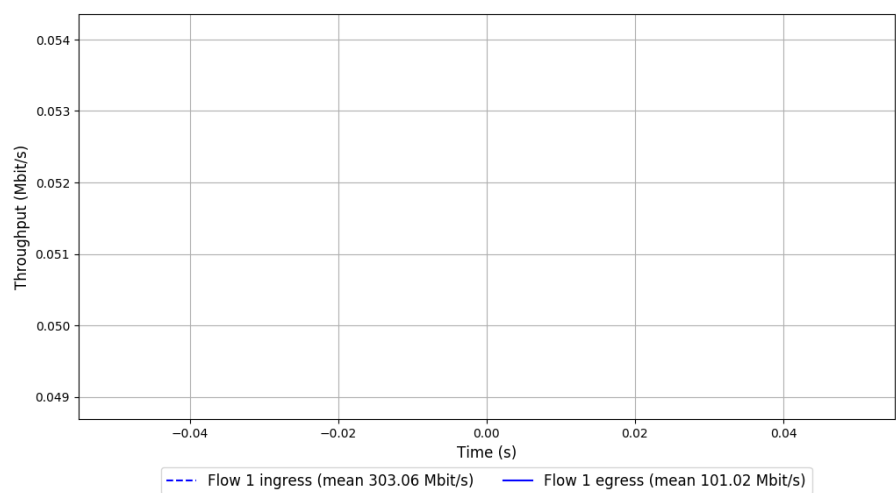
Start at: 2017-12-19 23:39:08

End at: 2017-12-19 23:39:38

Local clock offset: 0.386 ms

Remote clock offset: -1.119 ms

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



Run 4: Statistics of QUIC Cubic

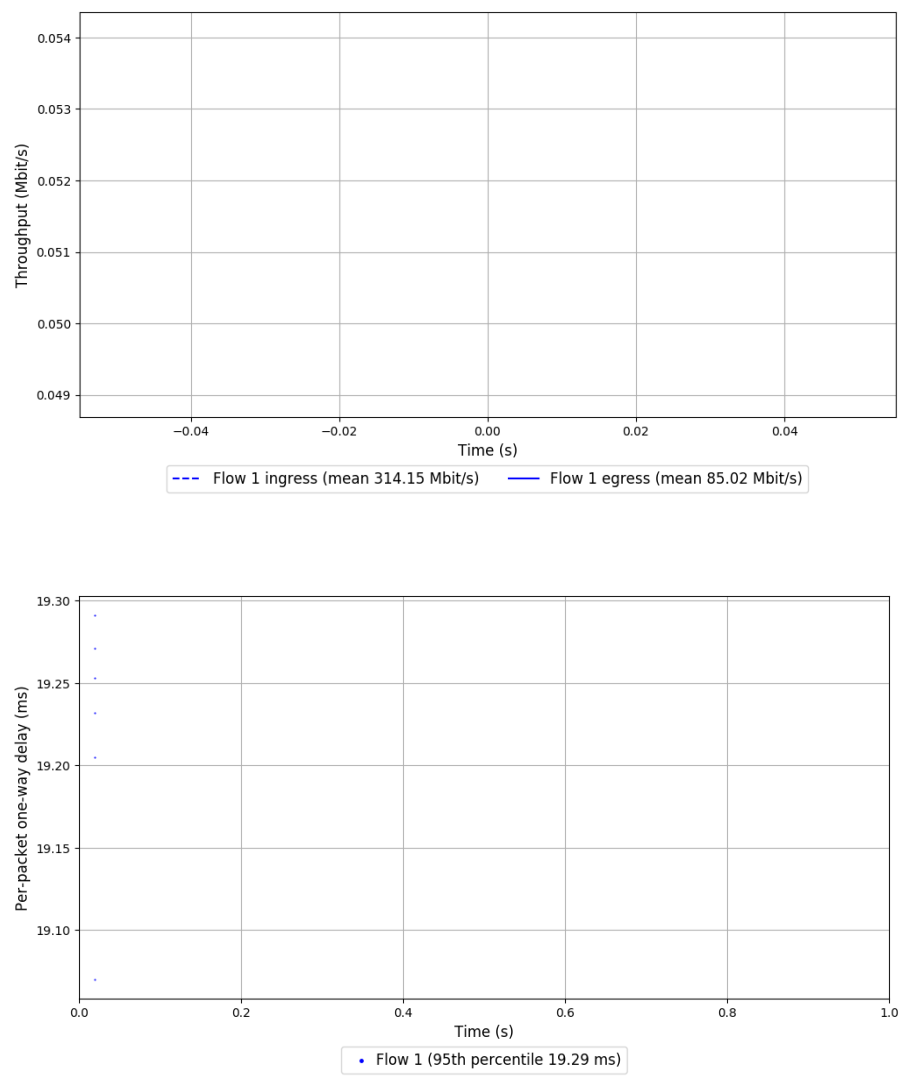
Start at: 2017-12-19 23:59:09

End at: 2017-12-19 23:59:39

Local clock offset: 0.679 ms

Remote clock offset: -1.491 ms

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2017-12-20 00:19:02

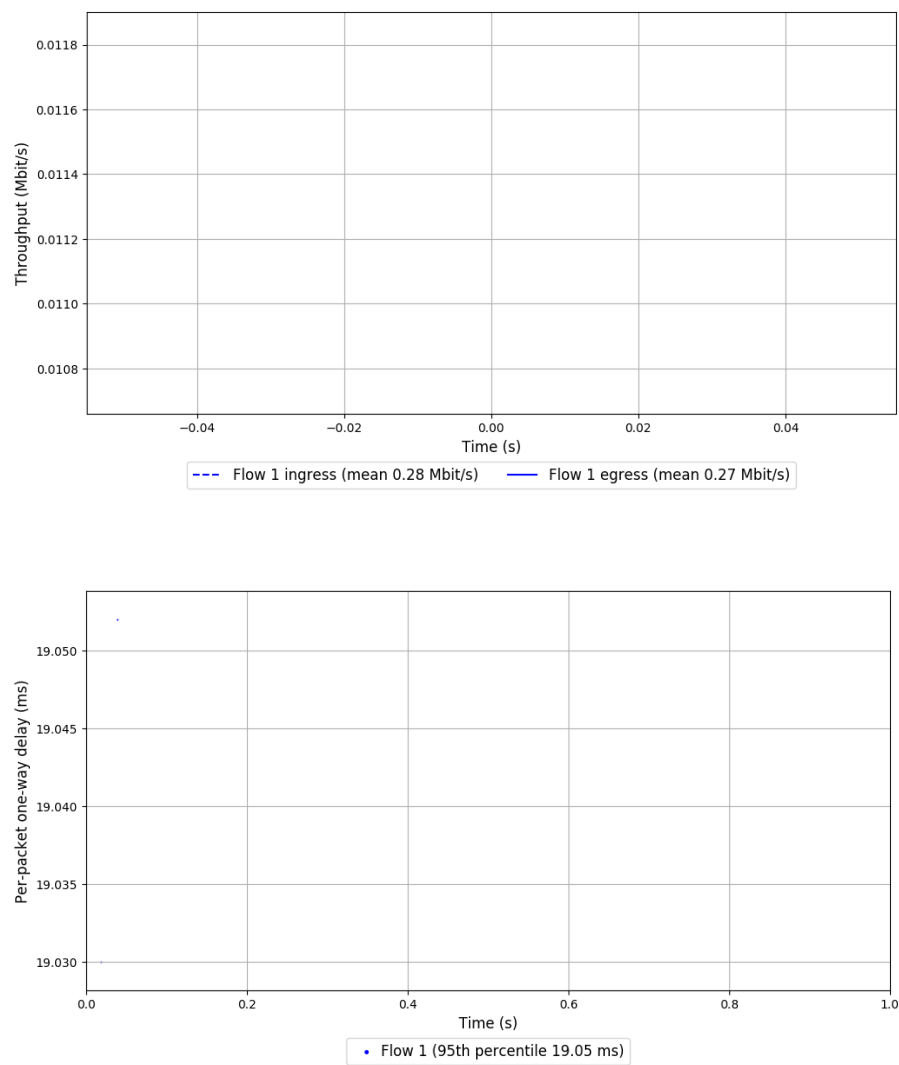
End at: 2017-12-20 00:19:32

Local clock offset: 0.808 ms

Remote clock offset: -1.659 ms



Run 5: Report of QUIC Cubic — Data Link

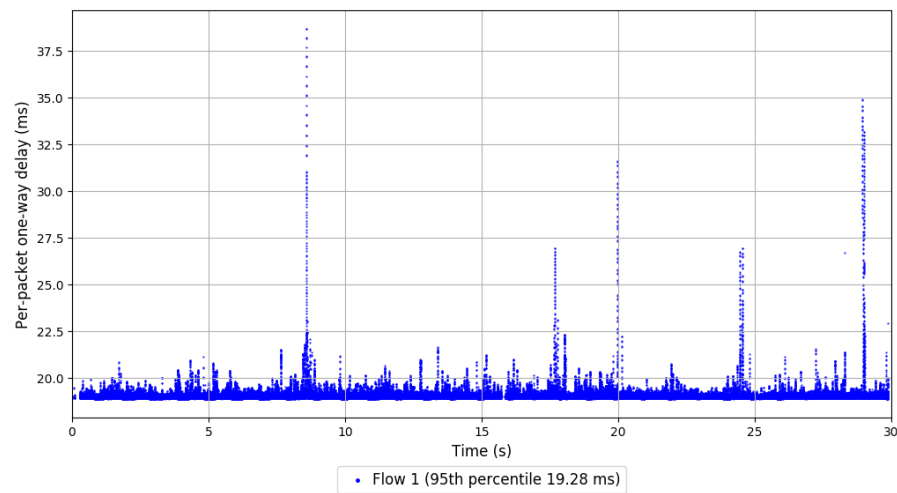
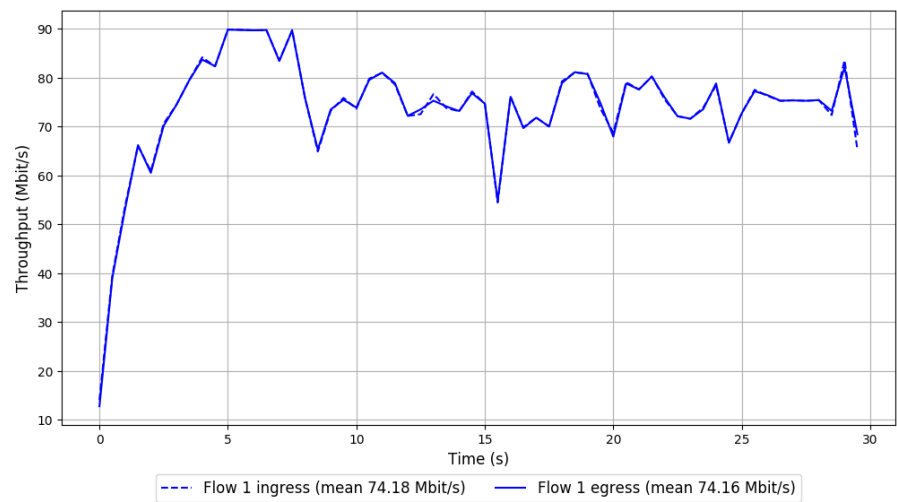


Run 6: Statistics of QUIC Cubic

Start at: 2017-12-20 00:39:11  
End at: 2017-12-20 00:39:41  
Local clock offset: 1.019 ms  
Remote clock offset: -1.742 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 74.16 Mbit/s  
95th percentile per-packet one-way delay: 19.282 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 74.16 Mbit/s  
95th percentile per-packet one-way delay: 19.282 ms  
Loss rate: 0.02%

Run 6: Report of QUIC Cubic — Data Link

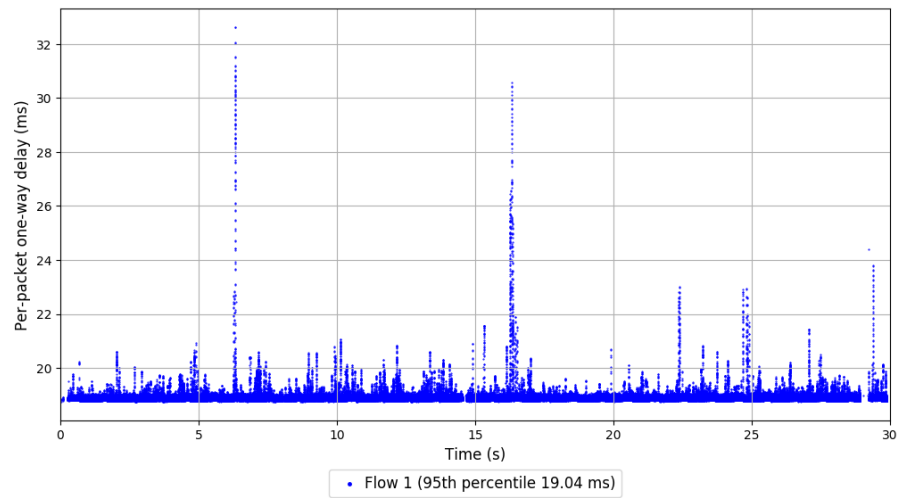
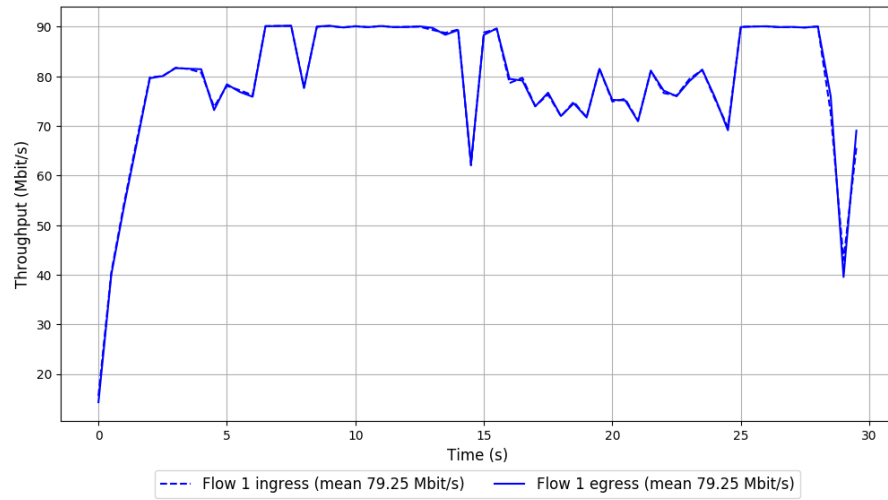


Run 7: Statistics of QUIC Cubic

Start at: 2017-12-20 00:59:03  
End at: 2017-12-20 00:59:33  
Local clock offset: 1.049 ms  
Remote clock offset: -1.836 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 79.25 Mbit/s  
95th percentile per-packet one-way delay: 19.041 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 79.25 Mbit/s  
95th percentile per-packet one-way delay: 19.041 ms  
Loss rate: 0.00%

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

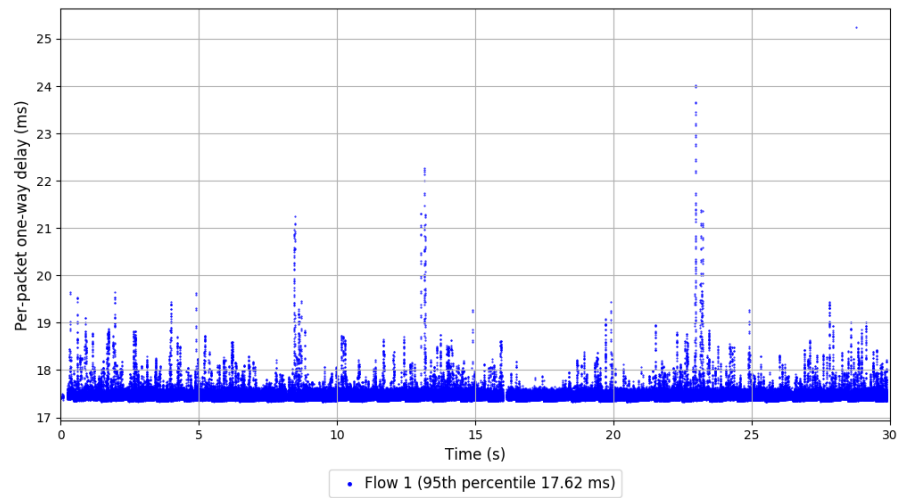
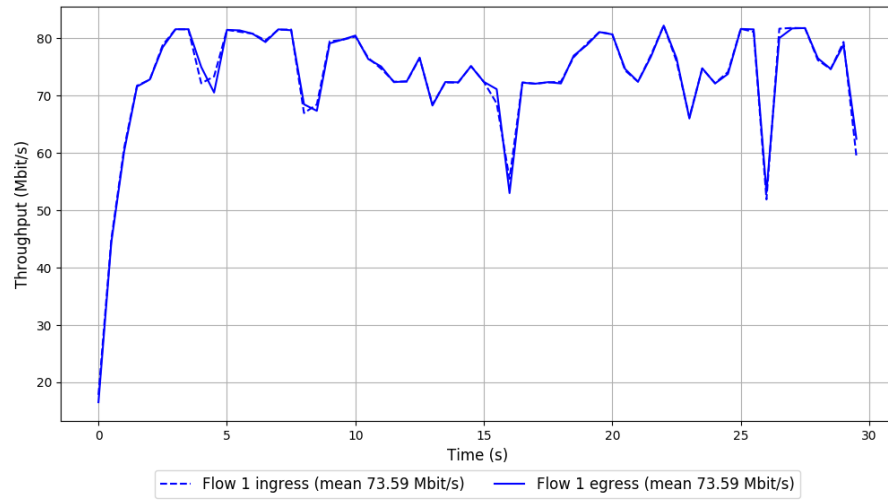


Run 8: Statistics of QUIC Cubic

Start at: 2017-12-20 01:19:17  
End at: 2017-12-20 01:19:47  
Local clock offset: 1.182 ms  
Remote clock offset: -1.983 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 73.59 Mbit/s  
95th percentile per-packet one-way delay: 17.621 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 73.59 Mbit/s  
95th percentile per-packet one-way delay: 17.621 ms  
Loss rate: 0.00%

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



Run 9: Statistics of QUIC Cubic

Start at: 2017-12-20 01:39:22

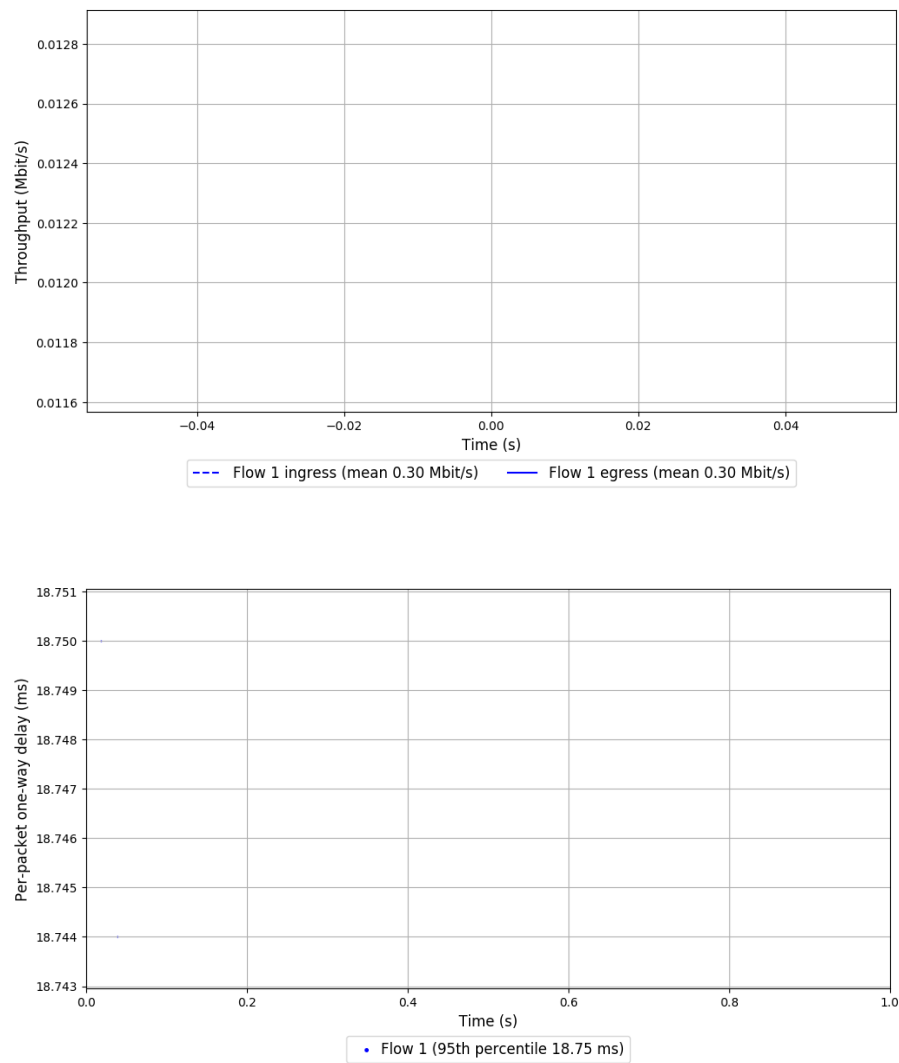
End at: 2017-12-20 01:39:52

Local clock offset: 1.287 ms

Remote clock offset: -1.901 ms



Run 9: Report of QUIC Cubic — Data Link



Run 10: Statistics of QUIC Cubic

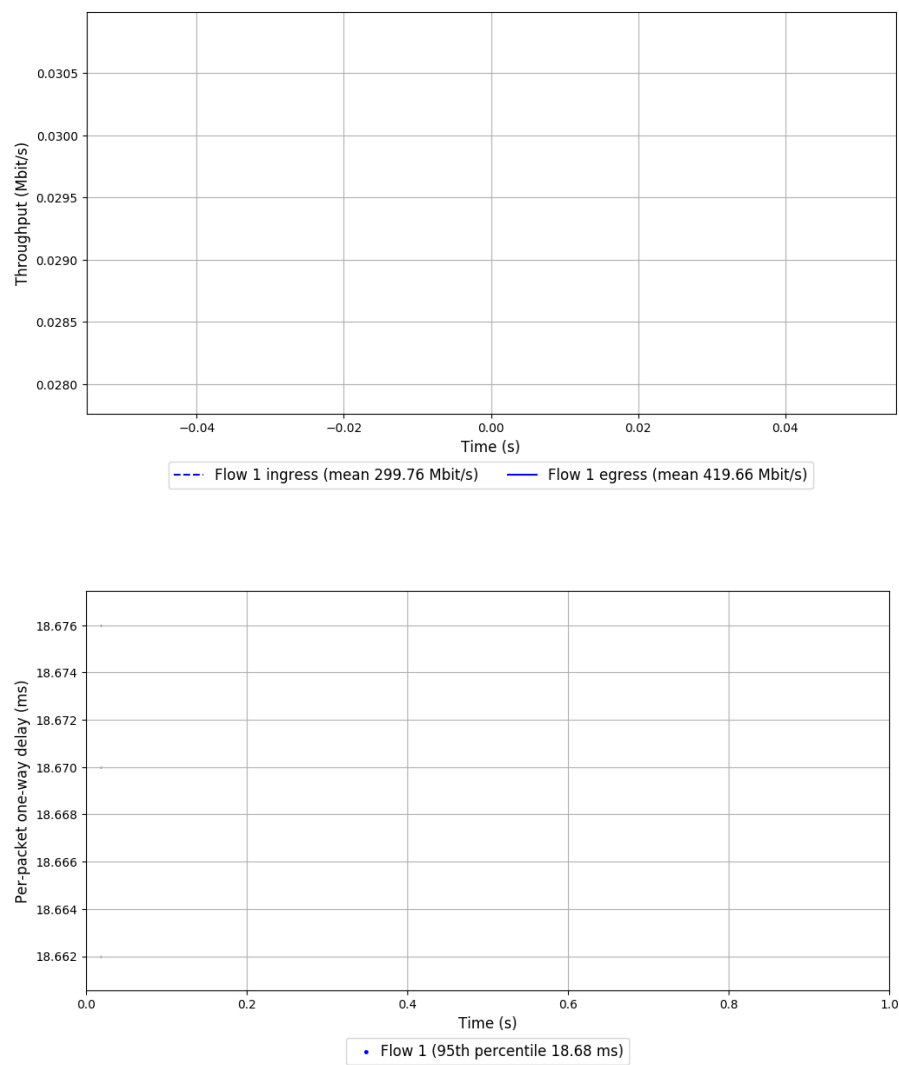
Start at: 2017-12-20 01:59:33

End at: 2017-12-20 02:00:03

Local clock offset: 1.187 ms

Remote clock offset: -1.482 ms

Run 10: Report of QUIC Cubic — Data Link

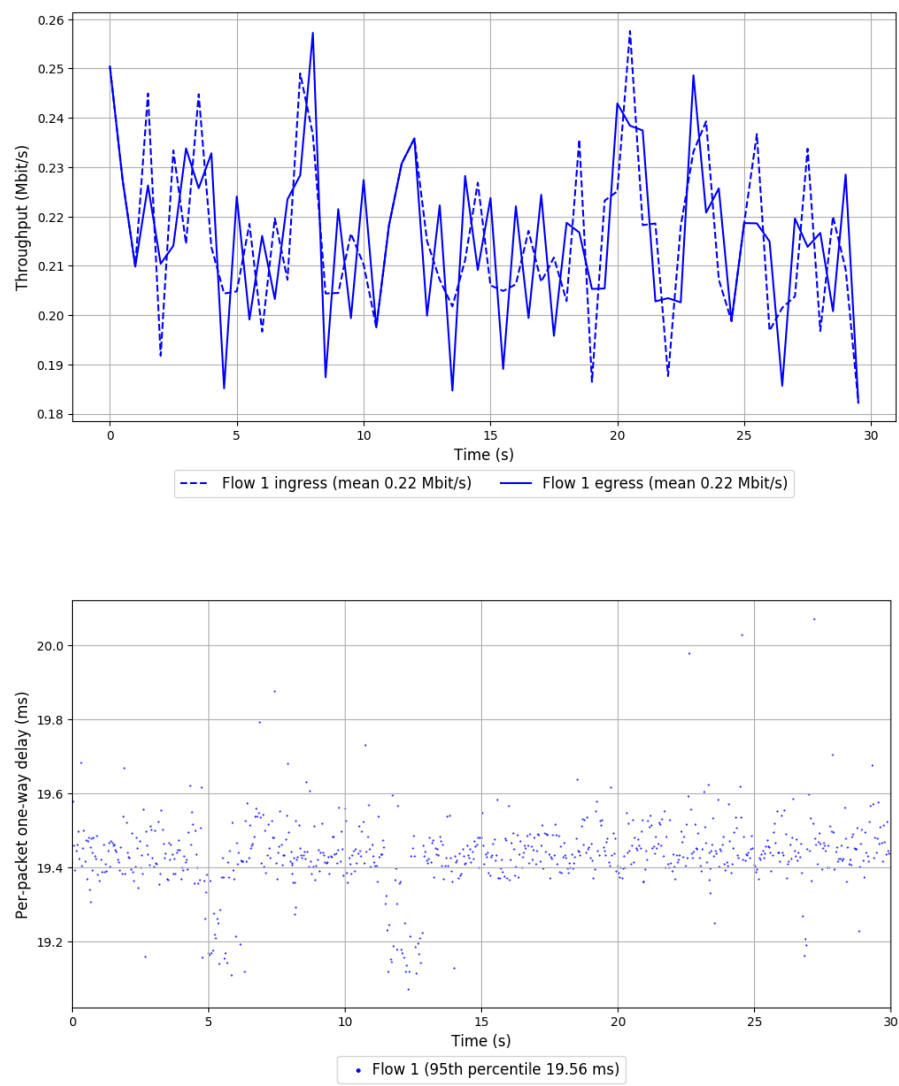


Run 1: Statistics of SCReAM

Start at: 2017-12-19 23:01:15  
End at: 2017-12-19 23:01:46  
Local clock offset: 1.107 ms  
Remote clock offset: -0.562 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.561 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.561 ms  
Loss rate: 0.00%

Run 1: Report of SReAM — Data Link

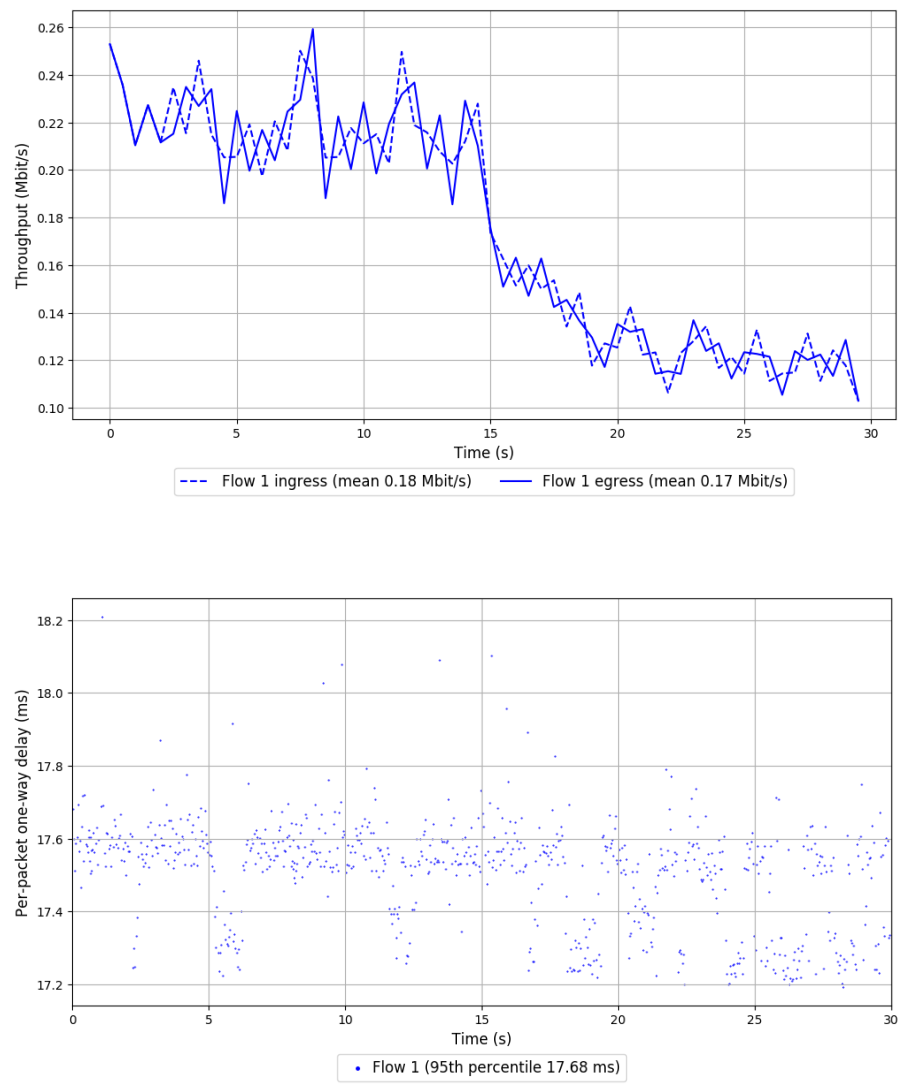


Run 2: Statistics of SCReAM

Start at: 2017-12-19 23:21:33  
End at: 2017-12-19 23:22:03  
Local clock offset: 0.429 ms  
Remote clock offset: -0.918 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.17 Mbit/s  
95th percentile per-packet one-way delay: 17.683 ms  
Loss rate: 0.15%  
-- Flow 1:  
Average throughput: 0.17 Mbit/s  
95th percentile per-packet one-way delay: 17.683 ms  
Loss rate: 0.15%

Run 2: Report of SReAM — Data Link



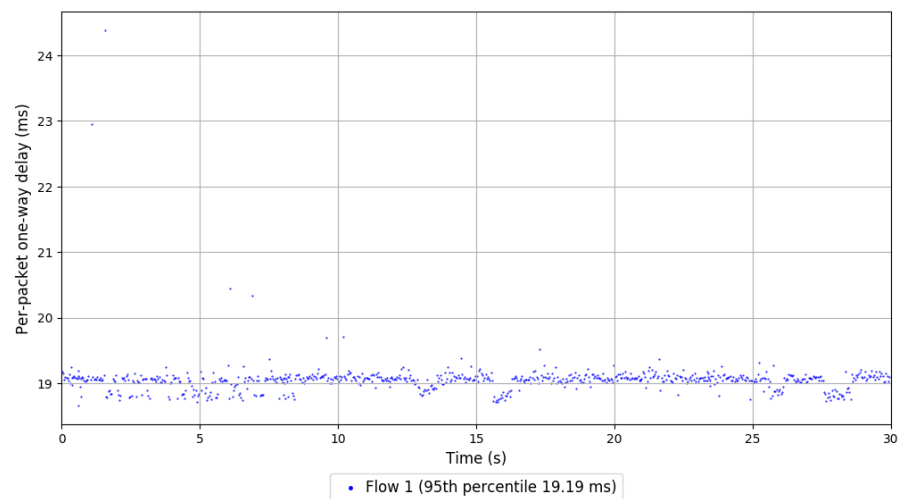
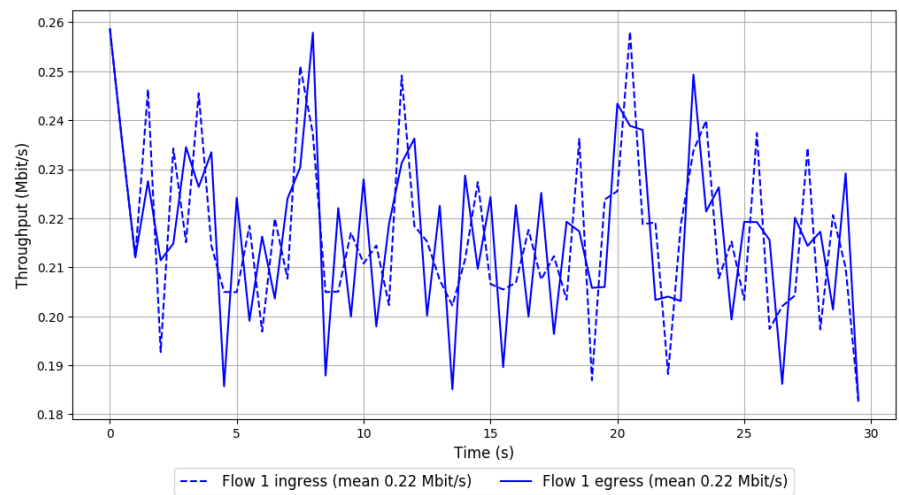
Run 3: Statistics of SCReAM

Start at: 2017-12-19 23:41:49  
End at: 2017-12-19 23:42:19  
Local clock offset: 0.409 ms  
Remote clock offset: -1.278 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.189 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.189 ms  
Loss rate: 0.00%



Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2017-12-20 00:01:49

End at: 2017-12-20 00:02:19

Local clock offset: 0.794 ms

Remote clock offset: -1.45 ms

# Below is generated by plot.py at 2017-12-20 04:15:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 17.863 ms

Loss rate: 0.00%

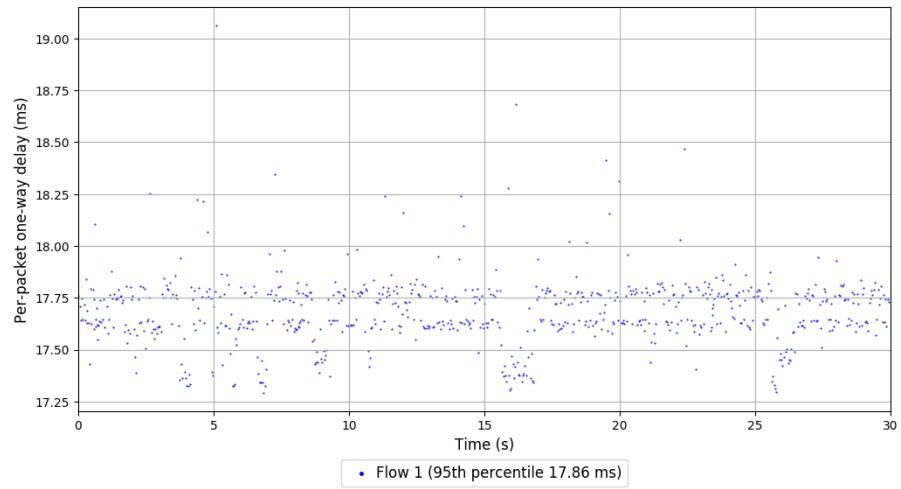
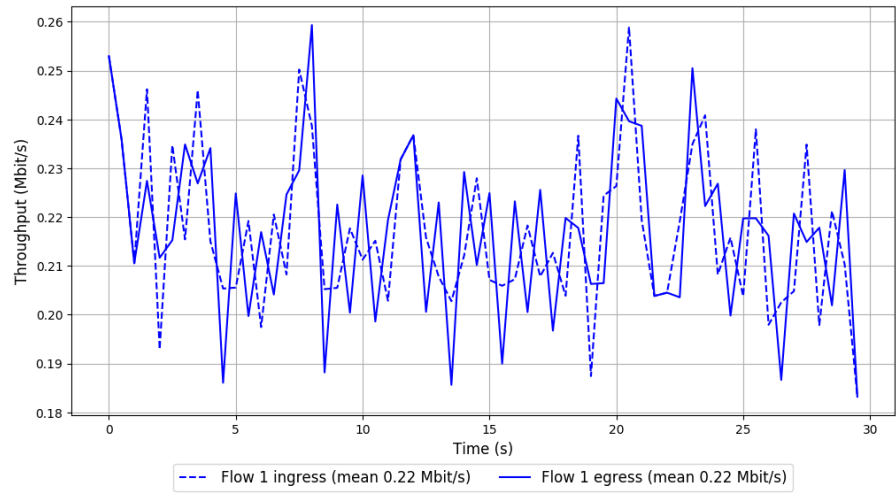
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 17.863 ms

Loss rate: 0.00%

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

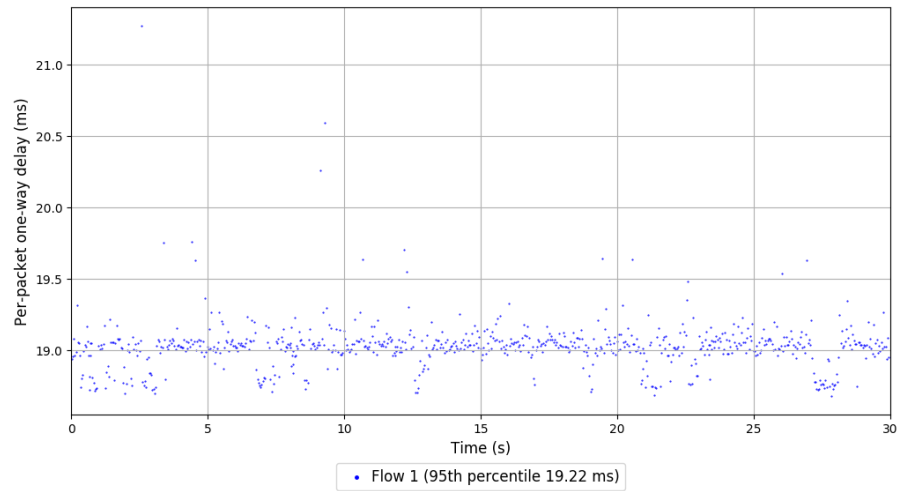
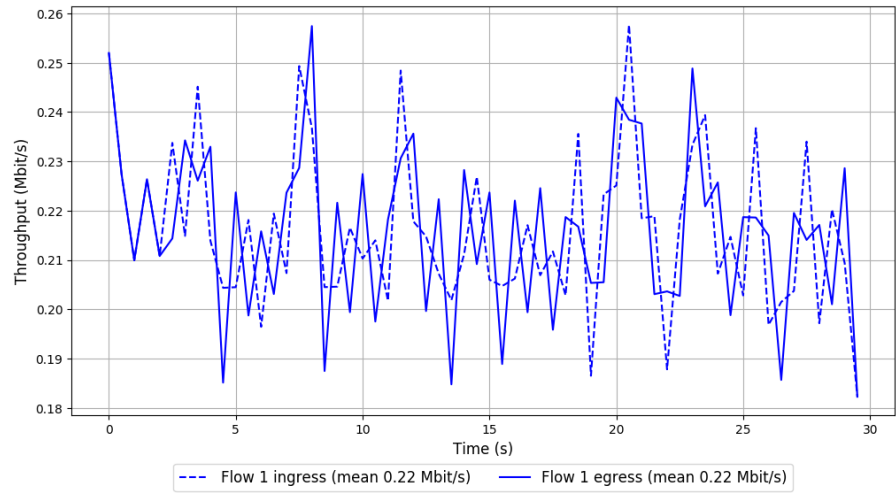


Run 5: Statistics of SCReAM

Start at: 2017-12-20 00:21:42  
End at: 2017-12-20 00:22:12  
Local clock offset: 0.825 ms  
Remote clock offset: -1.663 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.219 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.219 ms  
Loss rate: 0.00%

## Run 5: Report of SReAM — Data Link

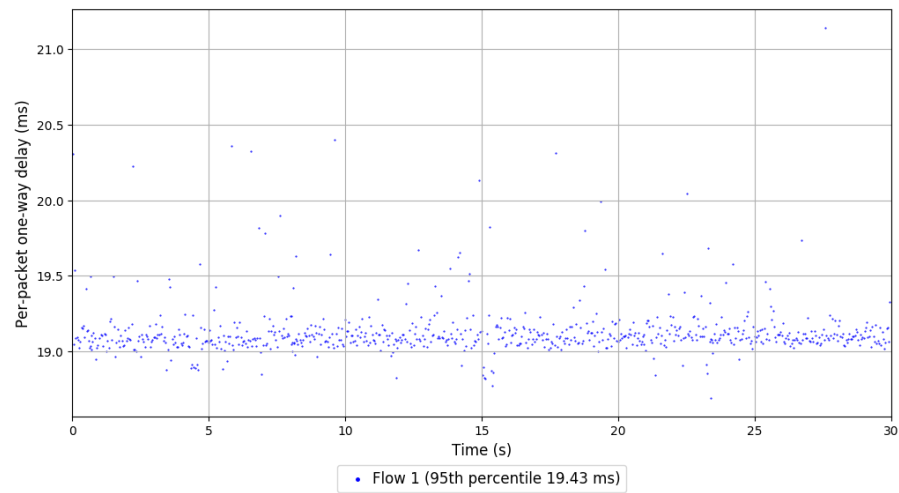
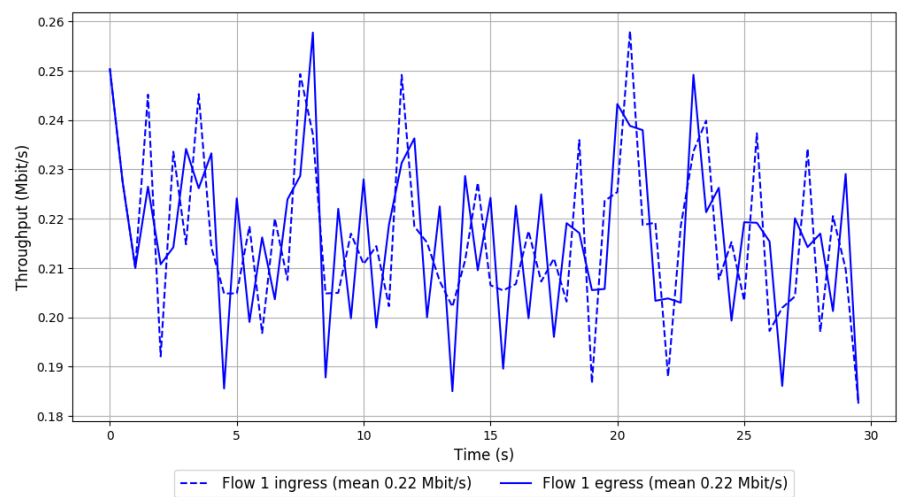


Run 6: Statistics of SCReAM

Start at: 2017-12-20 00:41:54  
End at: 2017-12-20 00:42:24  
Local clock offset: 0.977 ms  
Remote clock offset: -1.844 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.435 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.435 ms  
Loss rate: 0.00%

Run 6: Report of SReAM — Data Link



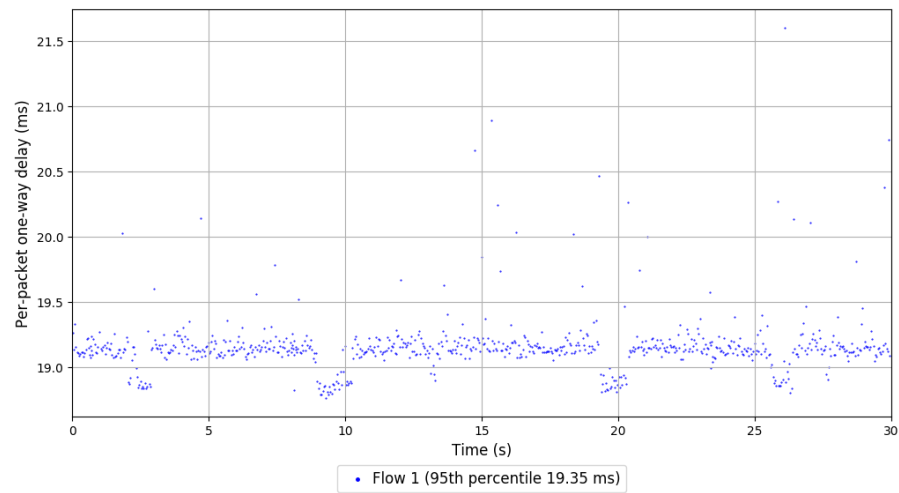
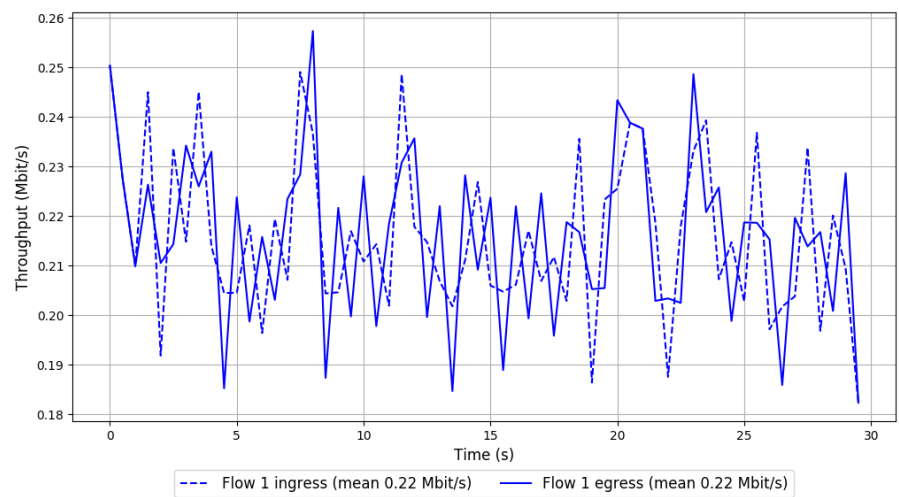
Run 7: Statistics of SCReAM

Start at: 2017-12-20 01:01:48  
End at: 2017-12-20 01:02:18  
Local clock offset: 1.061 ms  
Remote clock offset: -1.886 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.354 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.354 ms  
Loss rate: 0.00%



Run 7: Report of SReAM — Data Link

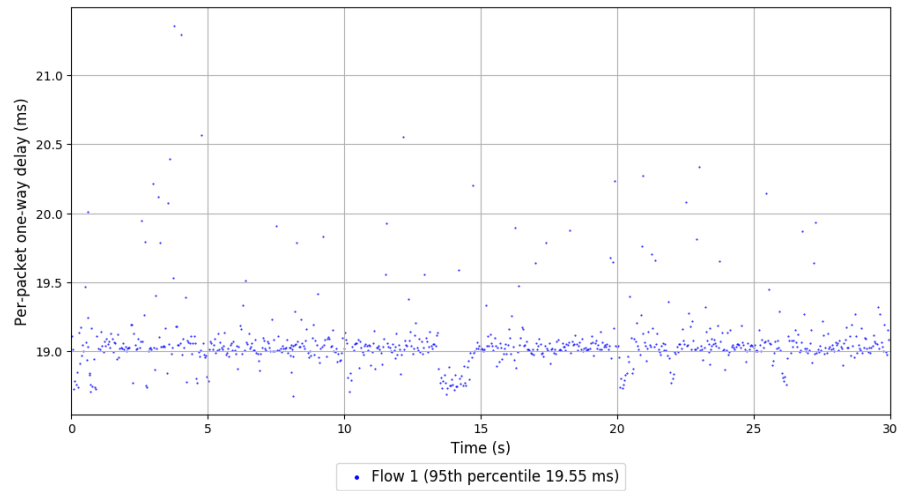
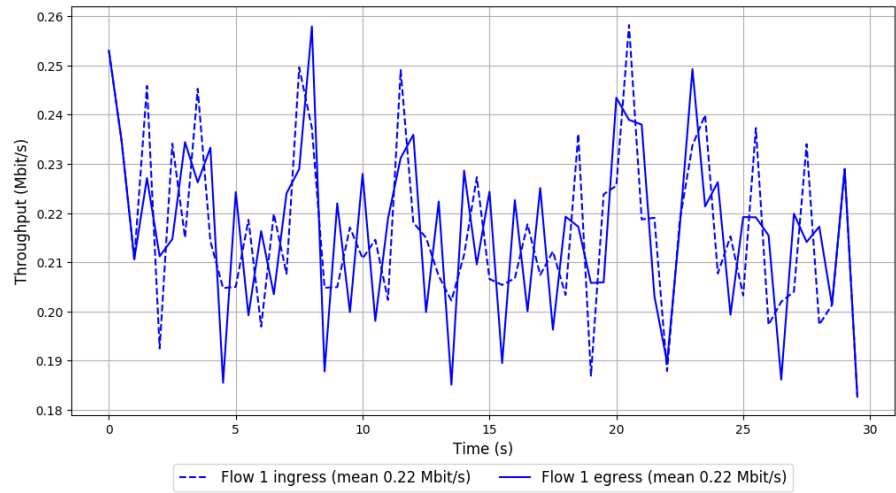


Run 8: Statistics of SCReAM

Start at: 2017-12-20 01:22:00  
End at: 2017-12-20 01:22:30  
Local clock offset: 1.287 ms  
Remote clock offset: -1.997 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.555 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.555 ms  
Loss rate: 0.00%

## Run 8: Report of SReAM — Data Link

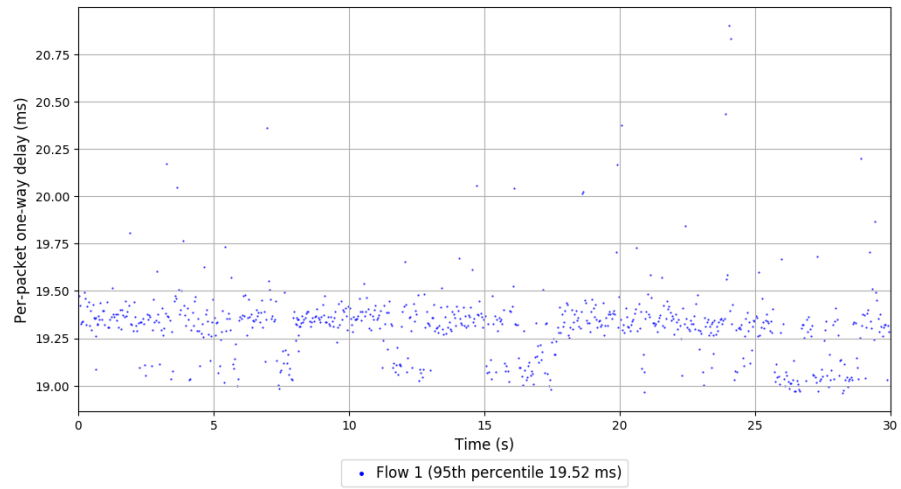
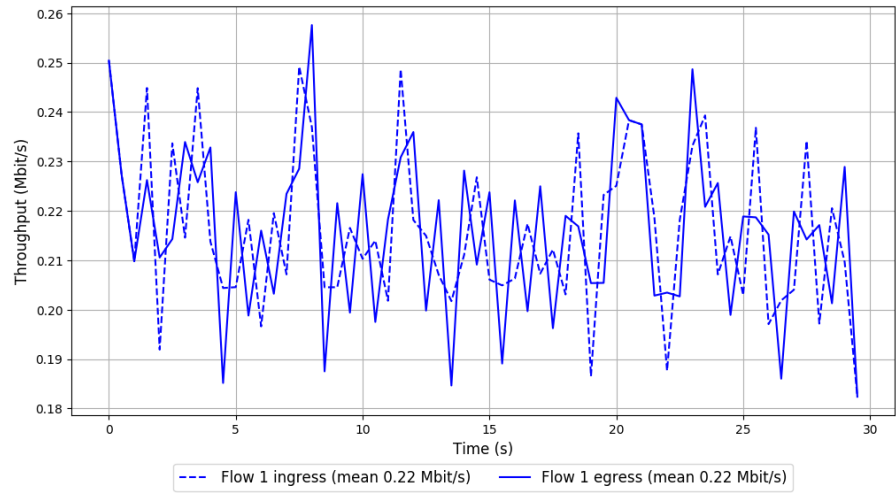


Run 9: Statistics of SCReAM

Start at: 2017-12-20 01:42:02  
End at: 2017-12-20 01:42:32  
Local clock offset: 1.252 ms  
Remote clock offset: -1.799 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.516 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 19.516 ms  
Loss rate: 0.00%

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



Run 10: Statistics of SCReAM

Start at: 2017-12-20 02:02:13

End at: 2017-12-20 02:02:43

Local clock offset: 1.085 ms

Remote clock offset: -1.471 ms

# Below is generated by plot.py at 2017-12-20 04:15:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.463 ms

Loss rate: 0.00%

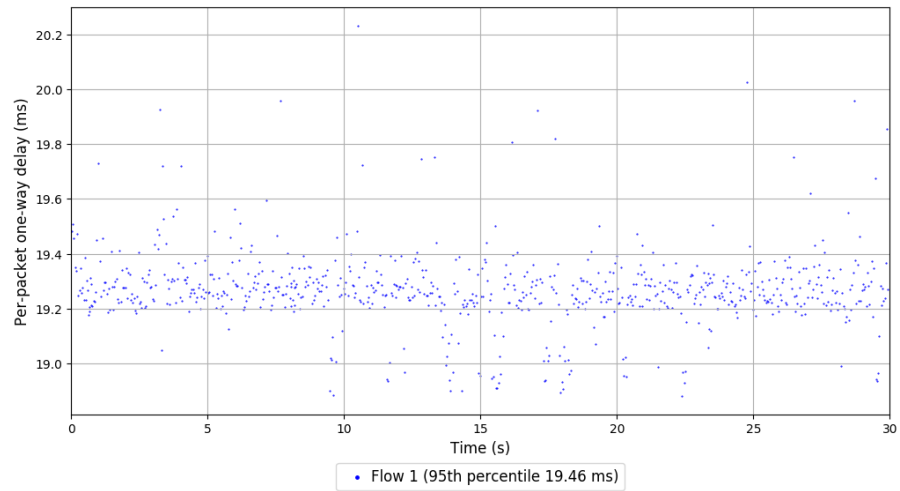
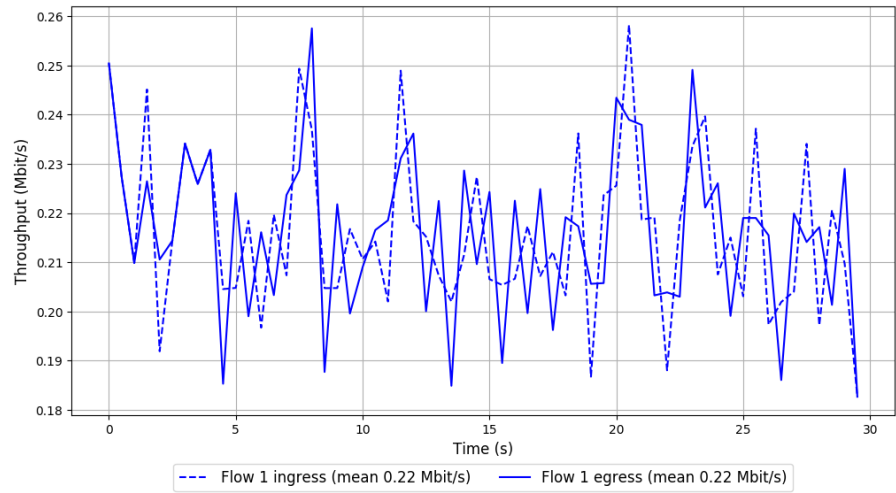
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.463 ms

Loss rate: 0.00%

## Run 10: Report of SReAM — Data Link



Run 1: Statistics of WebRTC media

Start at: 2017-12-19 22:52:04

End at: 2017-12-19 22:52:34

Local clock offset: 1.253 ms

Remote clock offset: -0.642 ms

# Below is generated by plot.py at 2017-12-20 04:15:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 19.020 ms

Loss rate: 0.00%

-- Flow 1:

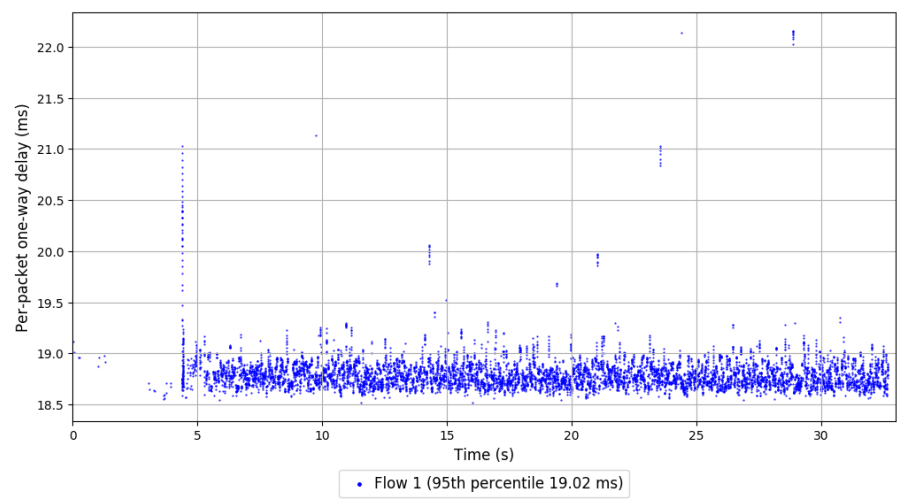
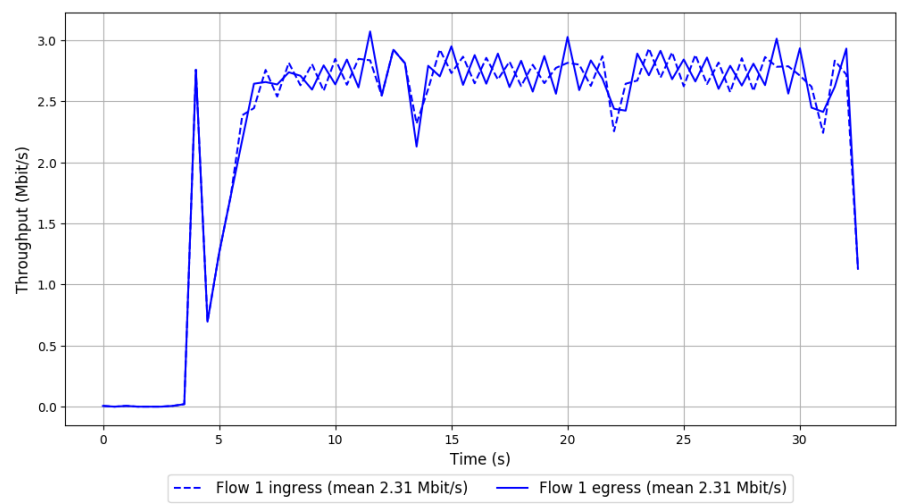
Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 19.020 ms

Loss rate: 0.00%



Run 1: Report of WebRTC media — Data Link

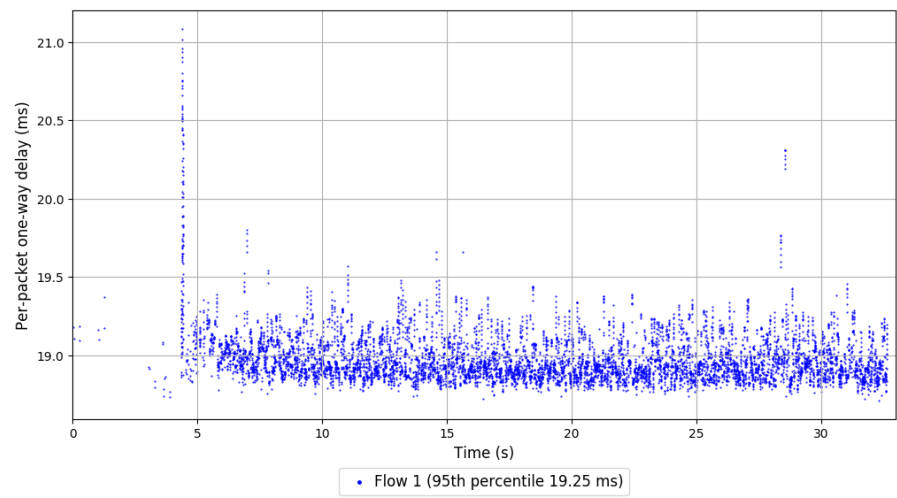
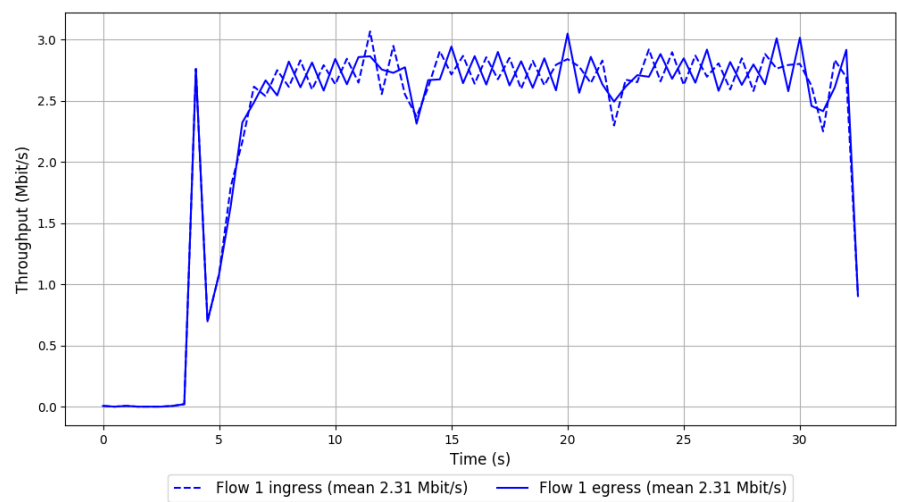


Run 2: Statistics of WebRTC media

Start at: 2017-12-19 23:12:17  
End at: 2017-12-19 23:12:47  
Local clock offset: 0.724 ms  
Remote clock offset: -0.851 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 19.249 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 19.249 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

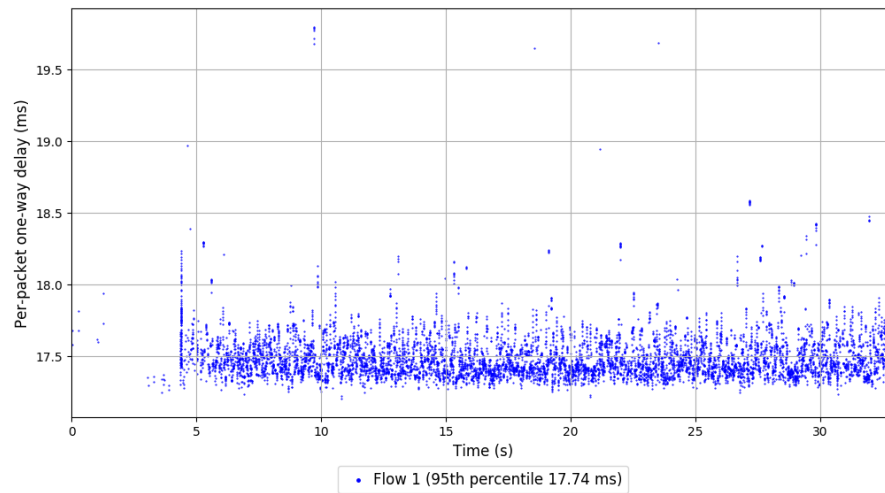
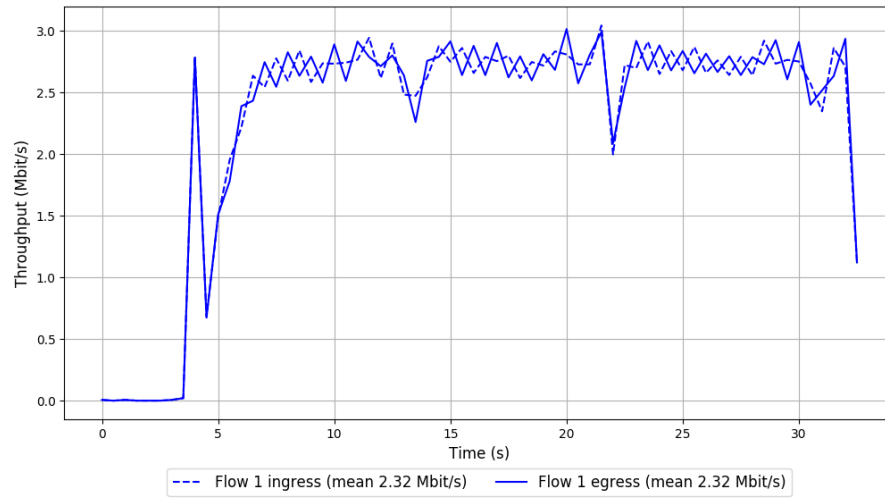


Run 3: Statistics of WebRTC media

Start at: 2017-12-19 23:32:30  
End at: 2017-12-19 23:33:00  
Local clock offset: 0.307 ms  
Remote clock offset: -1.087 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.32 Mbit/s  
95th percentile per-packet one-way delay: 17.744 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.32 Mbit/s  
95th percentile per-packet one-way delay: 17.744 ms  
Loss rate: 0.00%

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



Run 4: Statistics of WebRTC media

Start at: 2017-12-19 23:52:31

End at: 2017-12-19 23:53:01

Local clock offset: 0.562 ms

Remote clock offset: -1.42 ms

# Below is generated by plot.py at 2017-12-20 04:15:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 19.244 ms

Loss rate: 0.00%

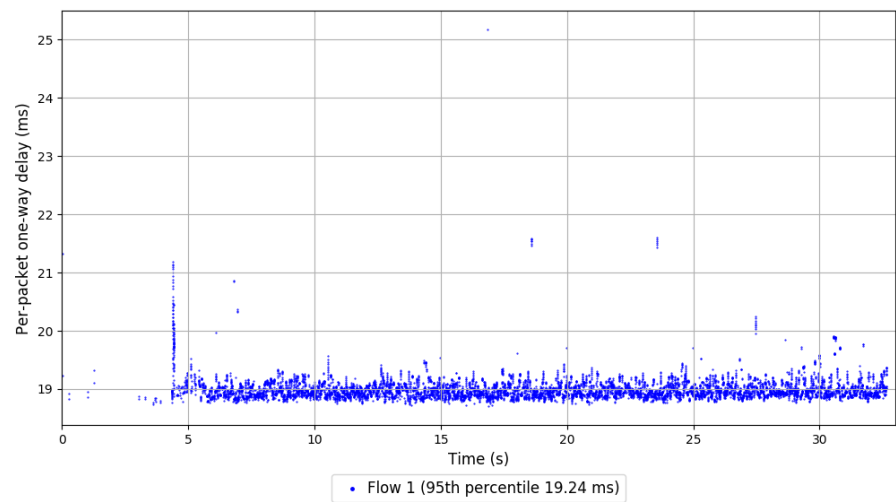
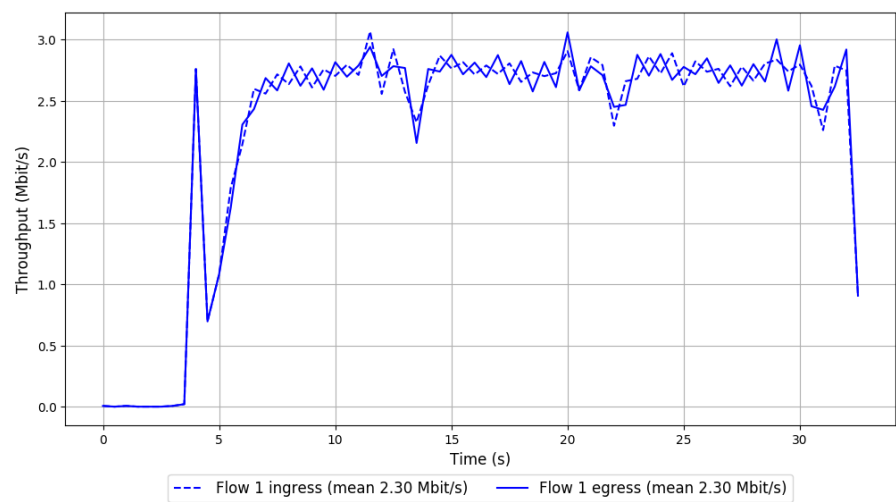
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 19.244 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



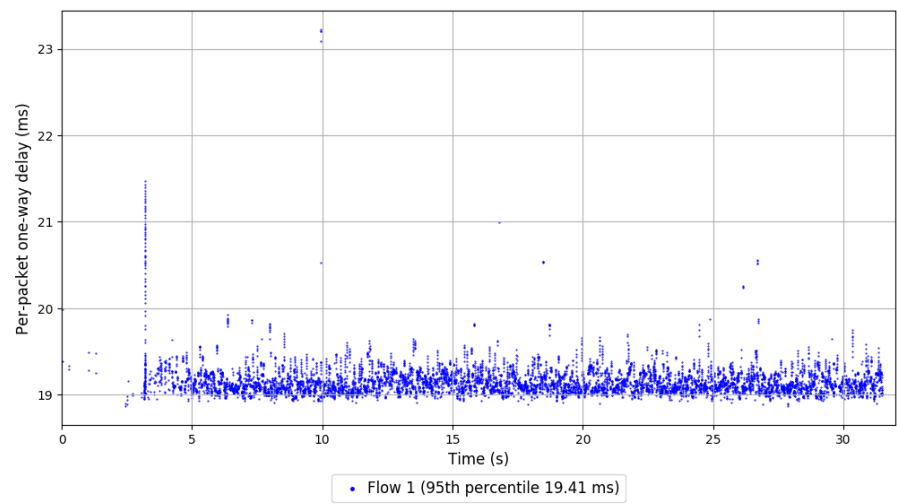
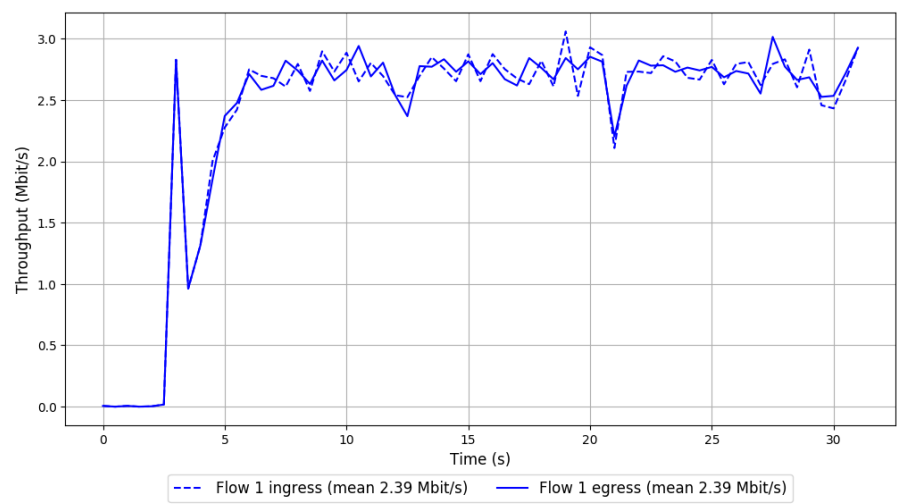
Run 5: Statistics of WebRTC media

Start at: 2017-12-20 00:12:30  
End at: 2017-12-20 00:13:00  
Local clock offset: 0.963 ms  
Remote clock offset: -1.547 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.39 Mbit/s  
95th percentile per-packet one-way delay: 19.413 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.39 Mbit/s  
95th percentile per-packet one-way delay: 19.413 ms  
Loss rate: 0.00%



Run 5: Report of WebRTC media — Data Link

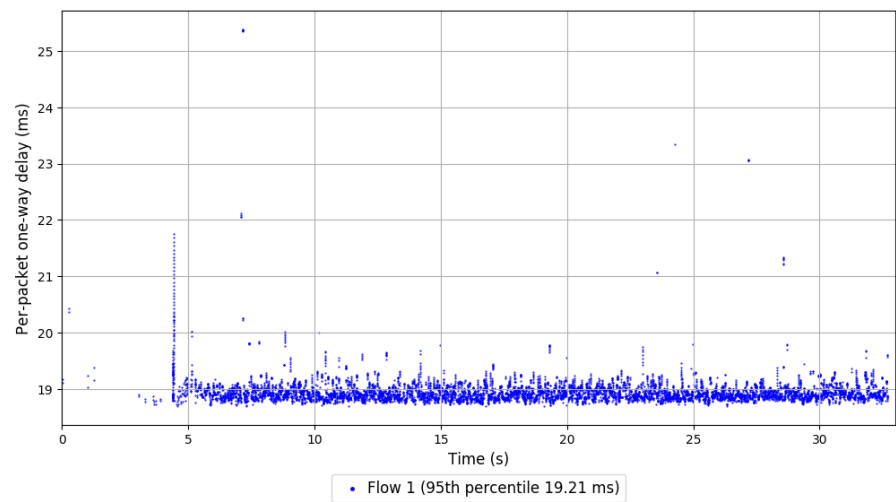
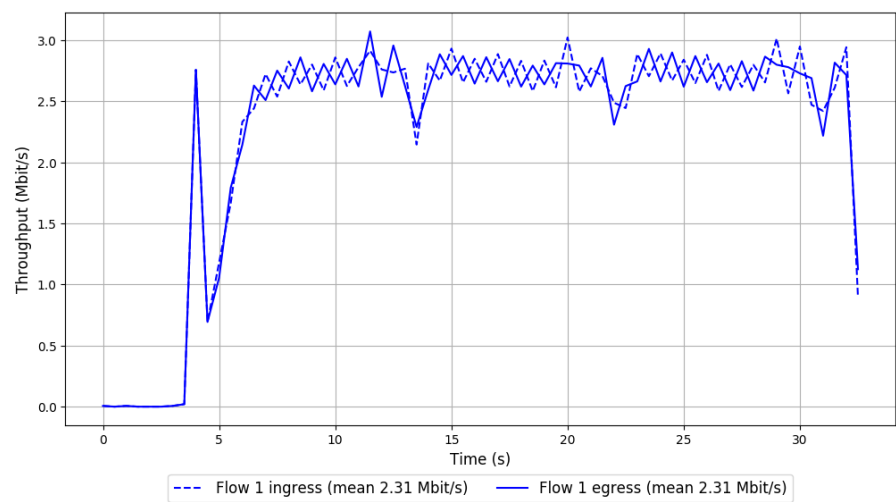


Run 6: Statistics of WebRTC media

Start at: 2017-12-20 00:32:40  
End at: 2017-12-20 00:33:10  
Local clock offset: 0.826 ms  
Remote clock offset: -1.668 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 19.213 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 19.213 ms  
Loss rate: 0.00%

Run 6: Report of WebRTC media — Data Link

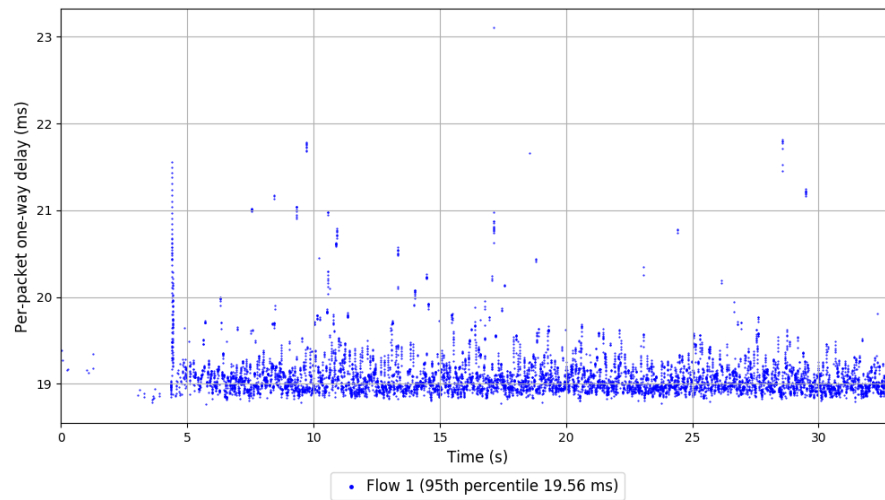
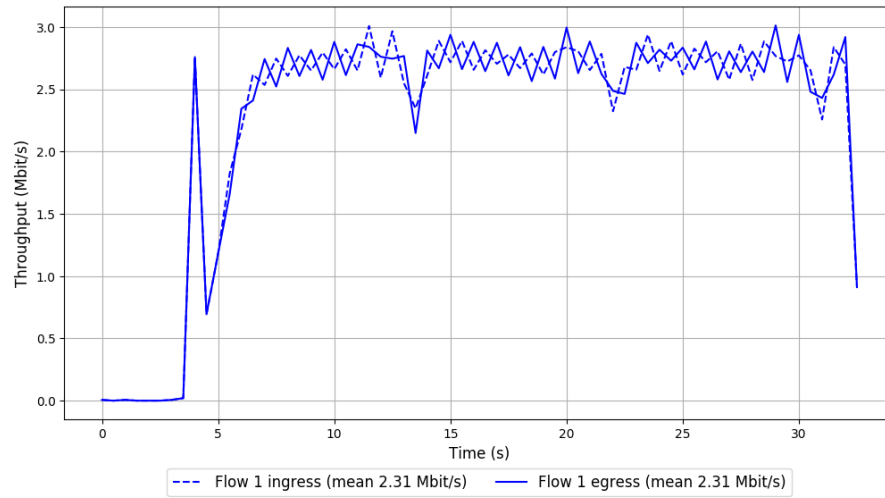


Run 7: Statistics of WebRTC media

Start at: 2017-12-20 00:52:34  
End at: 2017-12-20 00:53:04  
Local clock offset: 1.158 ms  
Remote clock offset: -1.811 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 19.562 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 19.562 ms  
Loss rate: 0.00%

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

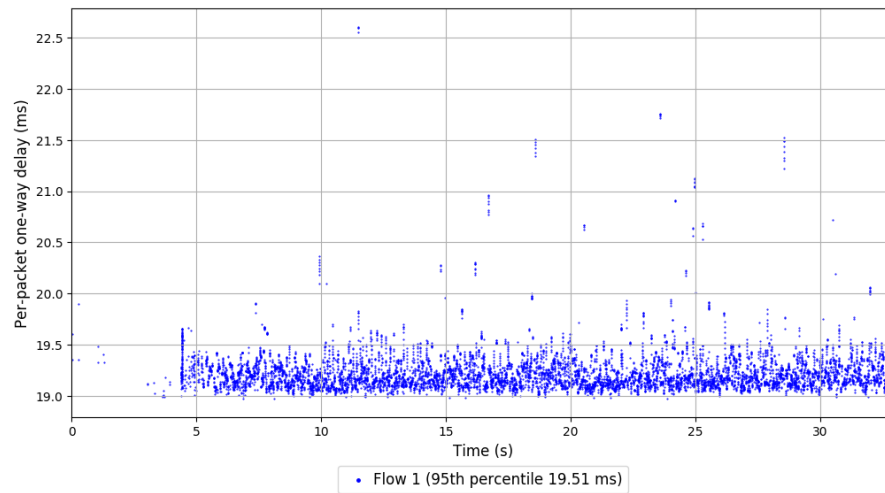
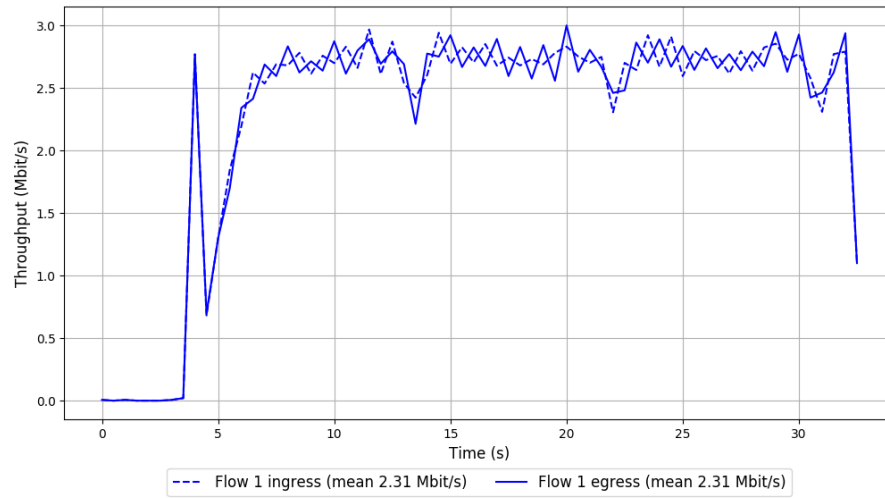


Run 8: Statistics of WebRTC media

Start at: 2017-12-20 01:12:32  
End at: 2017-12-20 01:13:02  
Local clock offset: 1.085 ms  
Remote clock offset: -2.067 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 19.507 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 19.507 ms  
Loss rate: 0.00%

### Run 8: Report of WebRTC media — Data Link



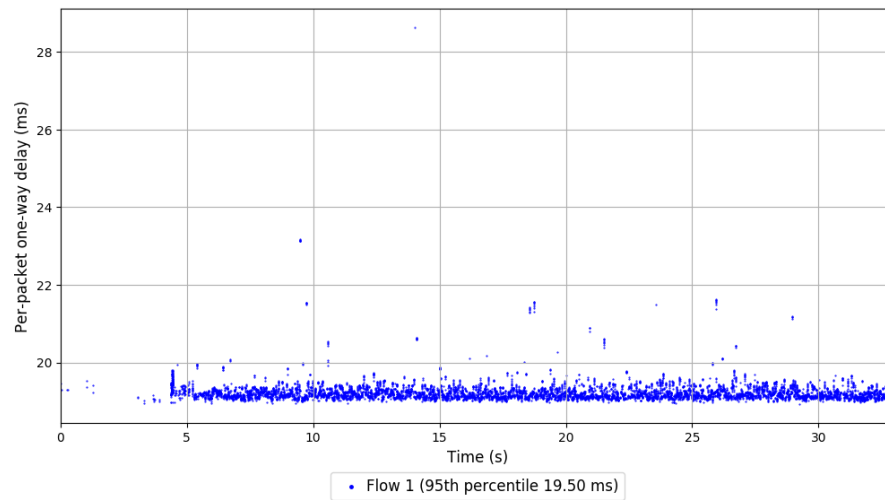
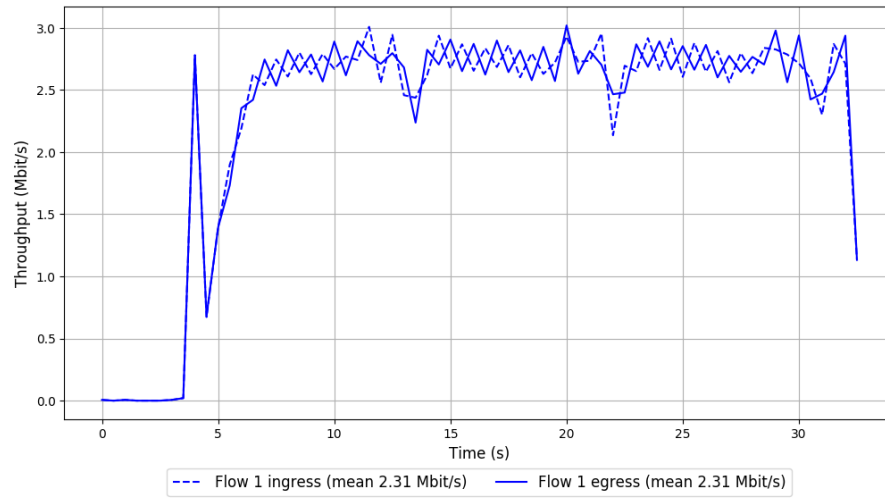
Run 9: Statistics of WebRTC media

Start at: 2017-12-20 01:32:53  
End at: 2017-12-20 01:33:23  
Local clock offset: 1.376 ms  
Remote clock offset: -2.011 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 19.503 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 2.31 Mbit/s  
95th percentile per-packet one-way delay: 19.503 ms  
Loss rate: 0.00%



### Run 9: Report of WebRTC media — Data Link



Run 10: Statistics of WebRTC media

Start at: 2017-12-20 01:53:02

End at: 2017-12-20 01:53:32

Local clock offset: 1.242 ms

Remote clock offset: -1.501 ms

# Below is generated by plot.py at 2017-12-20 04:15:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 19.401 ms

Loss rate: 0.00%

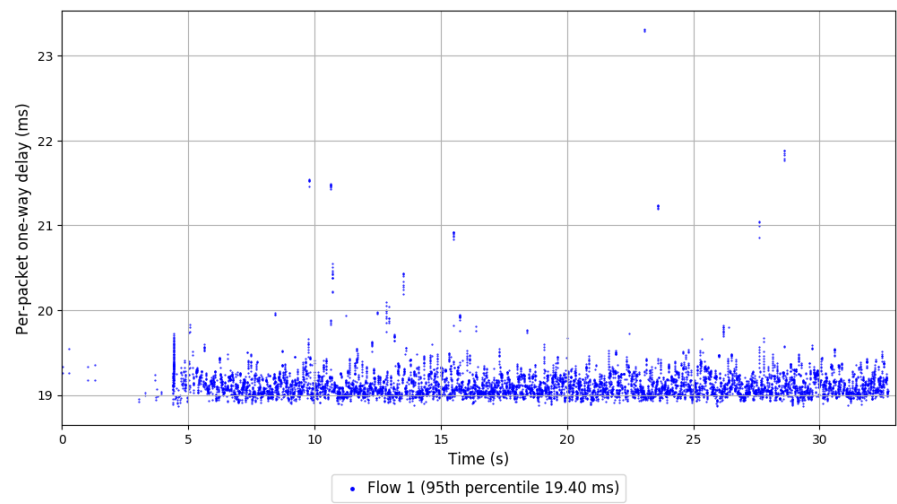
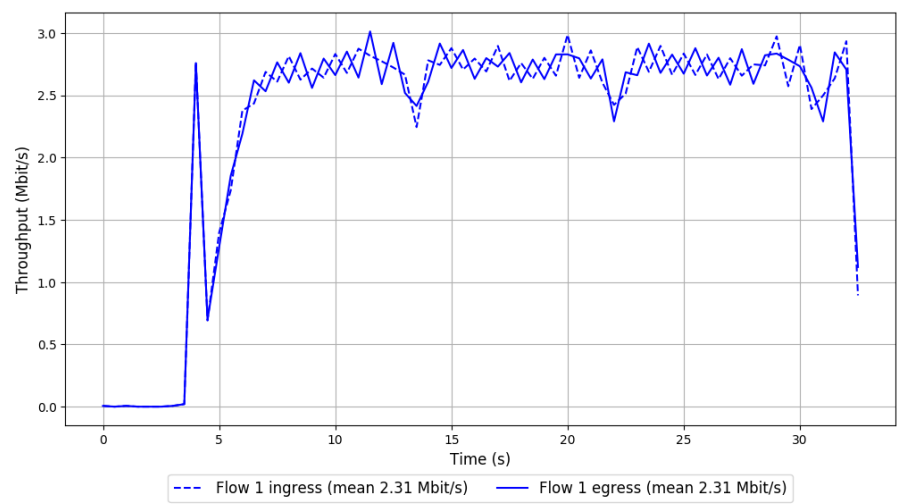
-- Flow 1:

Average throughput: 2.31 Mbit/s

95th percentile per-packet one-way delay: 19.401 ms

Loss rate: 0.00%

Run 10: Report of WebRTC media — Data Link

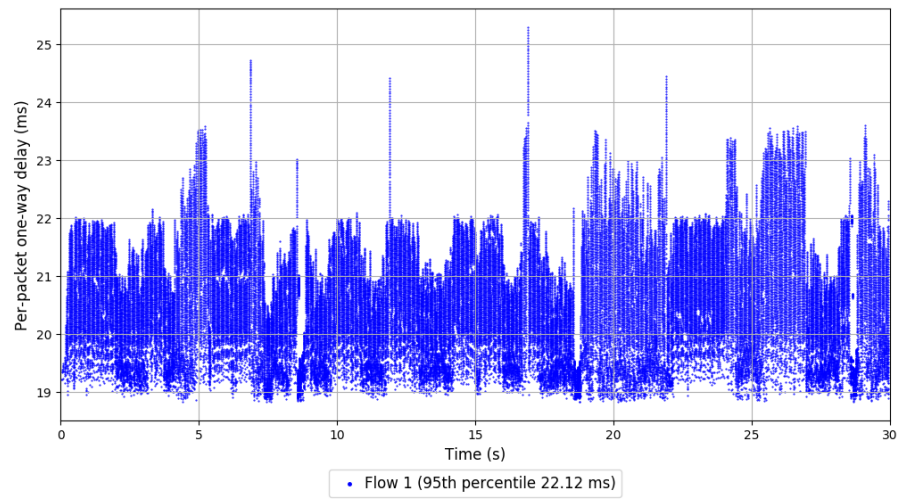
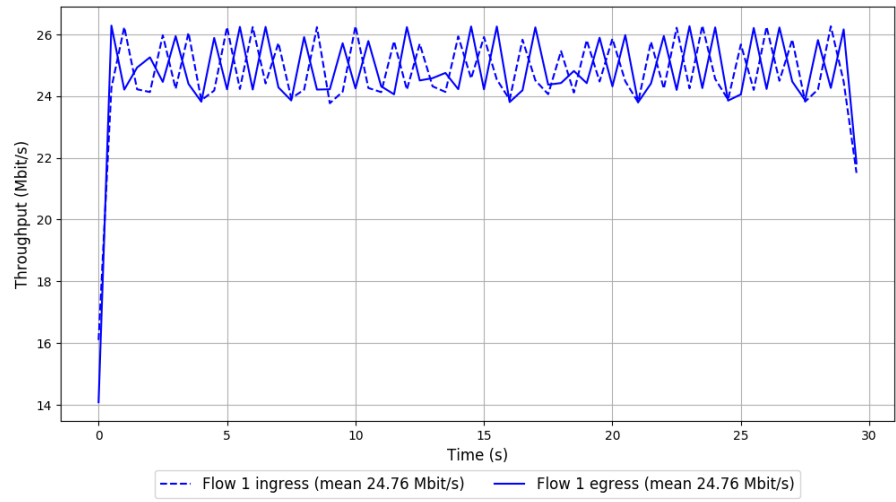


Run 1: Statistics of Sprout

Start at: 2017-12-19 22:49:36  
End at: 2017-12-19 22:50:06  
Local clock offset: 1.119 ms  
Remote clock offset: -0.587 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.76 Mbit/s  
95th percentile per-packet one-way delay: 22.118 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 24.76 Mbit/s  
95th percentile per-packet one-way delay: 22.118 ms  
Loss rate: 0.00%

# Run 1: Report of Sprout — Data Link

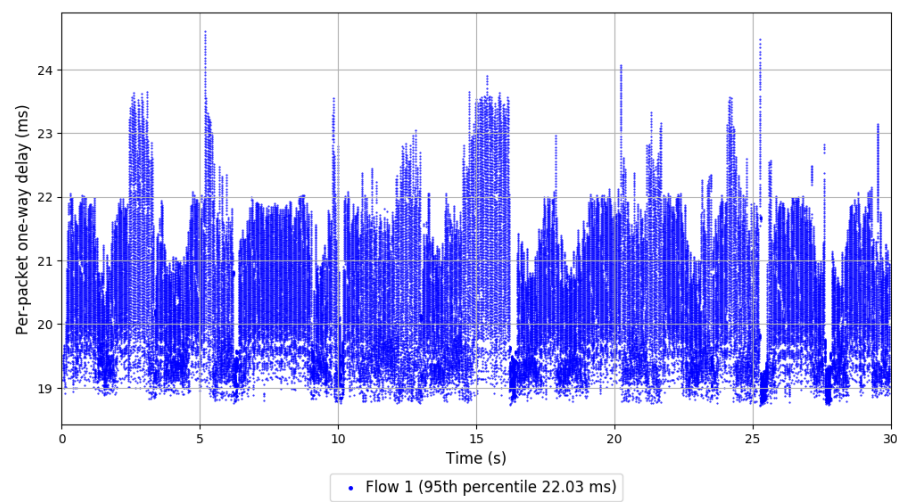
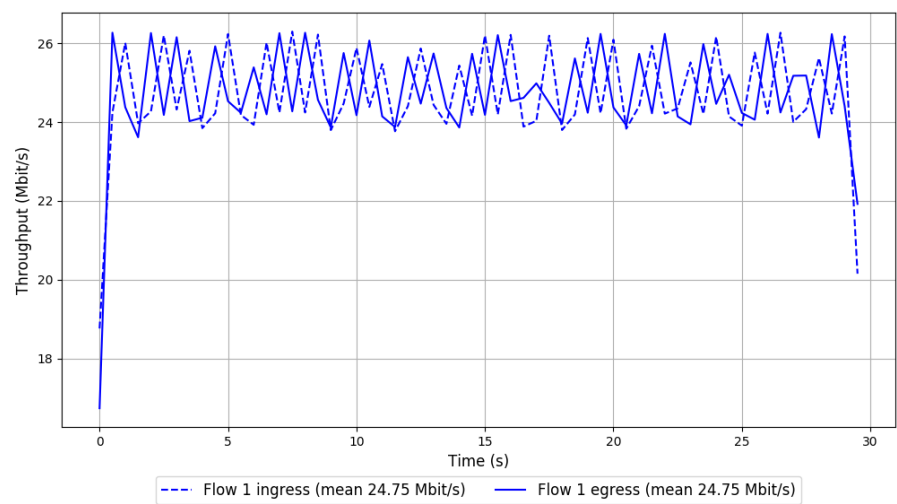


Run 2: Statistics of Sprout

Start at: 2017-12-19 23:09:49  
End at: 2017-12-19 23:10:19  
Local clock offset: 0.888 ms  
Remote clock offset: -0.769 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.75 Mbit/s  
95th percentile per-packet one-way delay: 22.030 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 24.75 Mbit/s  
95th percentile per-packet one-way delay: 22.030 ms  
Loss rate: 0.00%

Run 2: Report of Sprout — Data Link



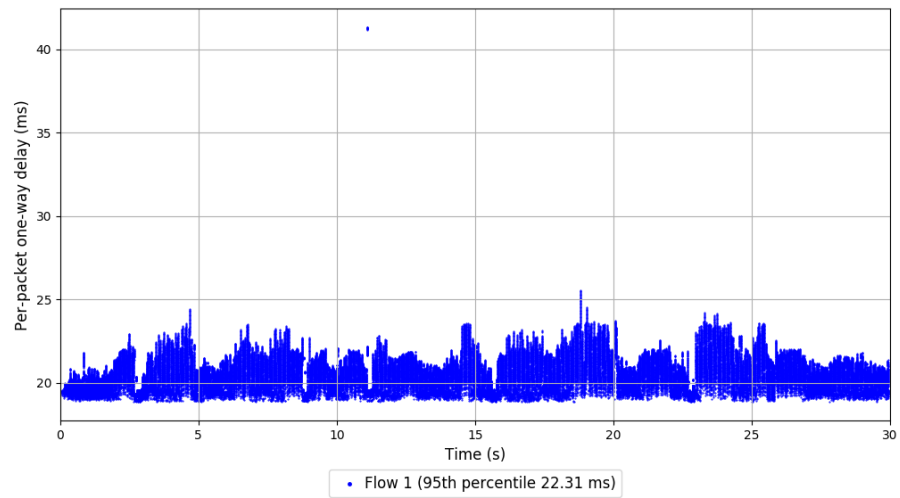
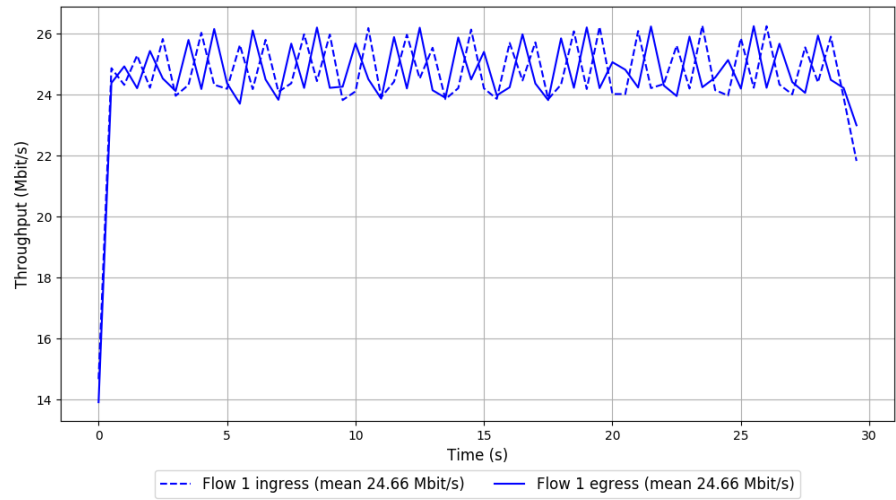
Run 3: Statistics of Sprout

Start at: 2017-12-19 23:30:02  
End at: 2017-12-19 23:30:32  
Local clock offset: 0.386 ms  
Remote clock offset: -1.101 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.66 Mbit/s  
95th percentile per-packet one-way delay: 22.311 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 24.66 Mbit/s  
95th percentile per-packet one-way delay: 22.311 ms  
Loss rate: 0.02%



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

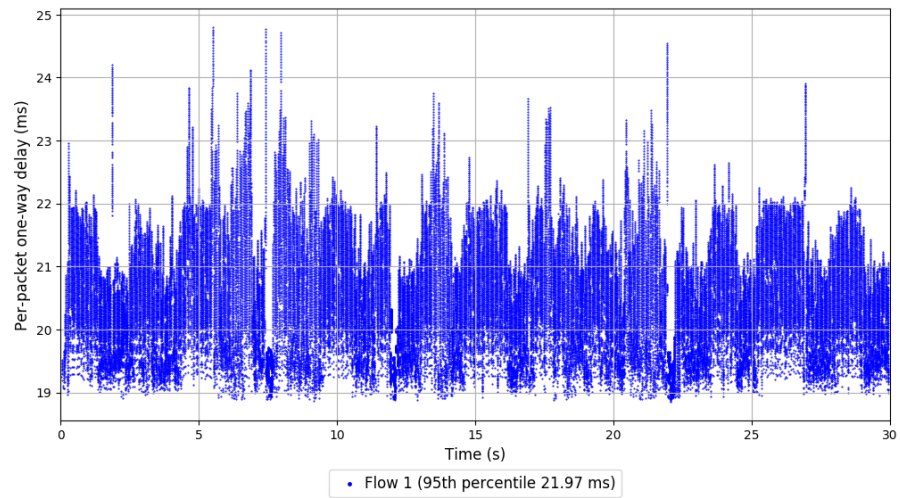
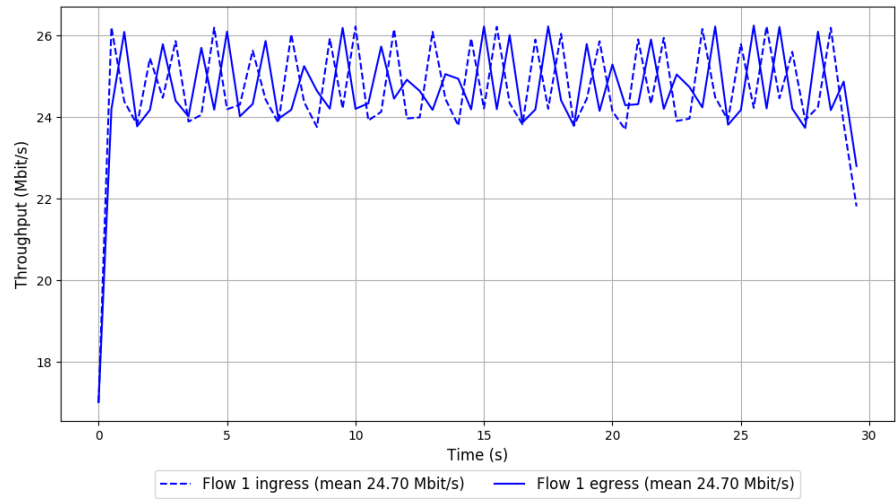


Run 4: Statistics of Sprout

Start at: 2017-12-19 23:50:03  
End at: 2017-12-19 23:50:33  
Local clock offset: 0.596 ms  
Remote clock offset: -1.478 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.70 Mbit/s  
95th percentile per-packet one-way delay: 21.970 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 24.70 Mbit/s  
95th percentile per-packet one-way delay: 21.970 ms  
Loss rate: 0.00%

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

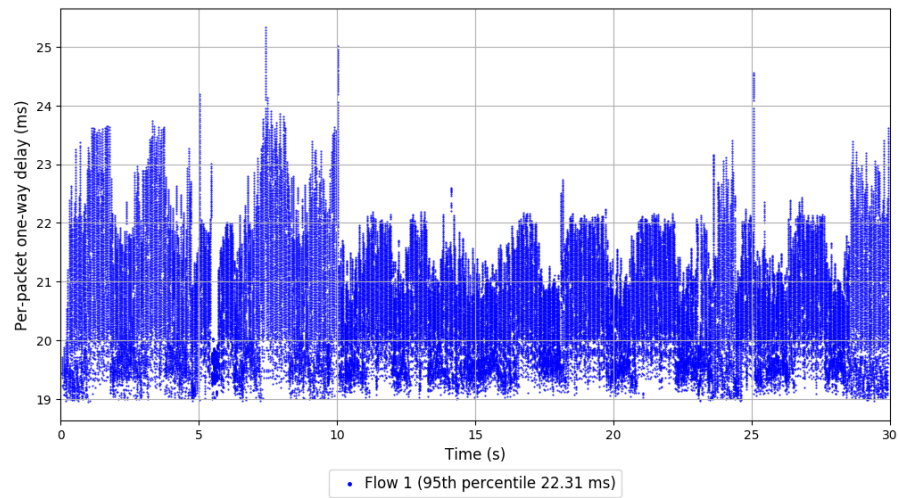
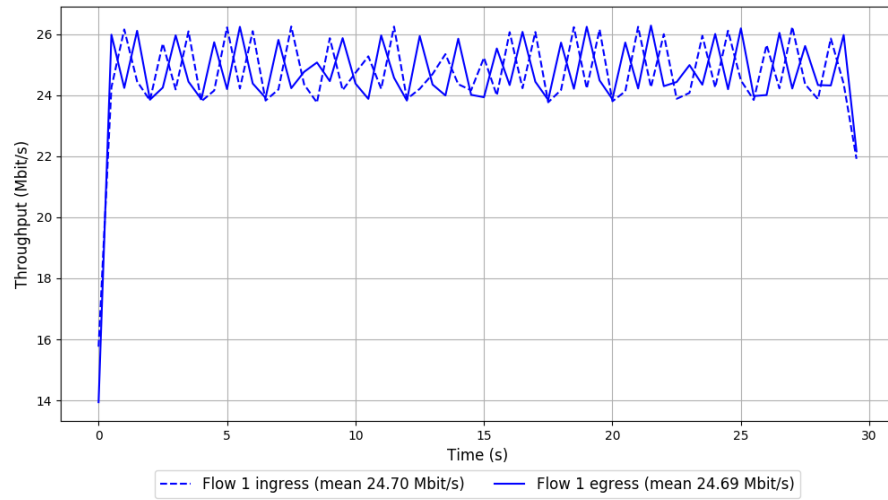


Run 5: Statistics of Sprout

Start at: 2017-12-20 00:10:02  
End at: 2017-12-20 00:10:32  
Local clock offset: 0.813 ms  
Remote clock offset: -1.623 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.69 Mbit/s  
95th percentile per-packet one-way delay: 22.306 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 24.69 Mbit/s  
95th percentile per-packet one-way delay: 22.306 ms  
Loss rate: 0.00%

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

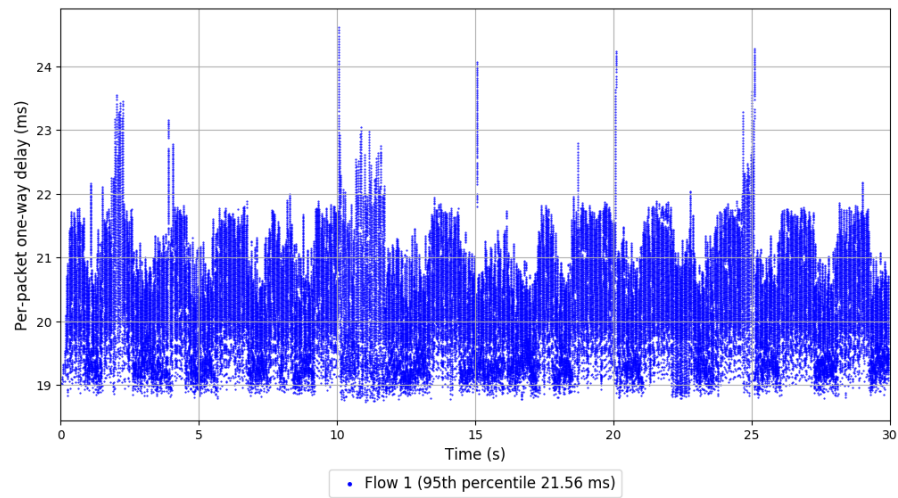
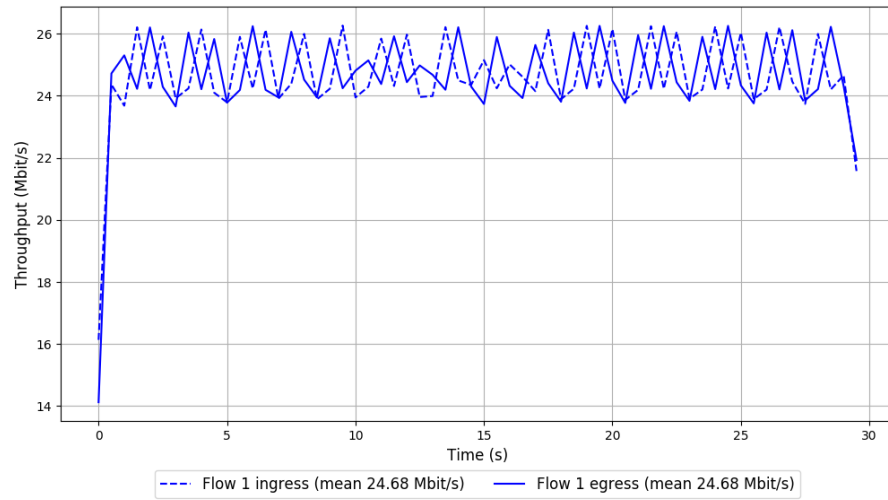


Run 6: Statistics of Sprout

Start at: 2017-12-20 00:30:13  
End at: 2017-12-20 00:30:43  
Local clock offset: 0.927 ms  
Remote clock offset: -1.535 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.68 Mbit/s  
95th percentile per-packet one-way delay: 21.558 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 24.68 Mbit/s  
95th percentile per-packet one-way delay: 21.558 ms  
Loss rate: 0.00%

## Run 6: Report of Sprout — Data Link



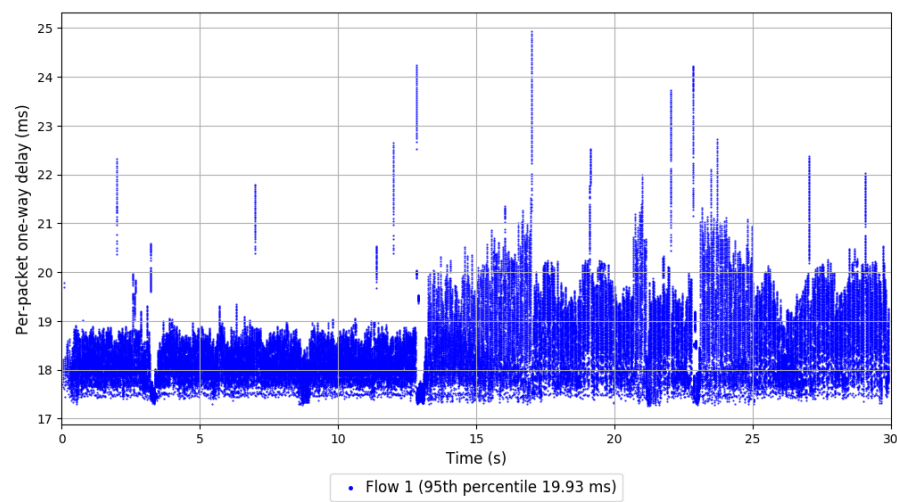
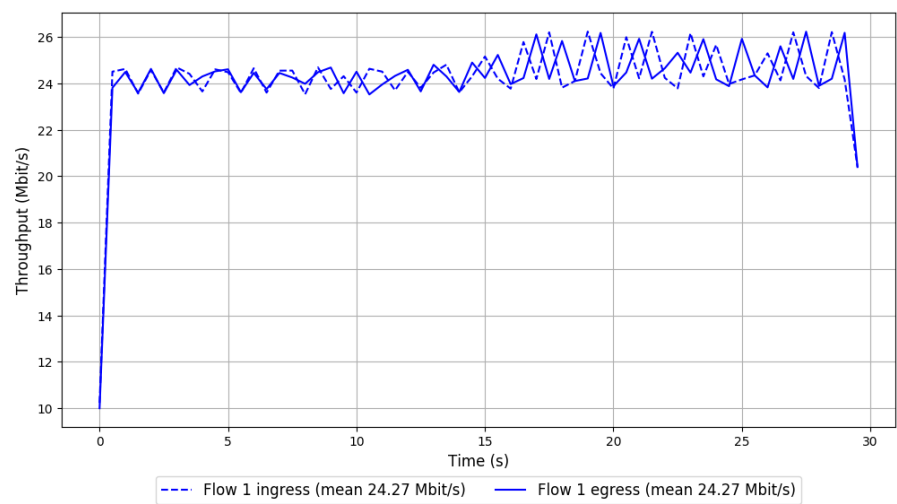
Run 7: Statistics of Sprout

Start at: 2017-12-20 00:50:07  
End at: 2017-12-20 00:50:37  
Local clock offset: 1.054 ms  
Remote clock offset: -1.873 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.27 Mbit/s  
95th percentile per-packet one-way delay: 19.925 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 24.27 Mbit/s  
95th percentile per-packet one-way delay: 19.925 ms  
Loss rate: 0.00%



Run 7: Report of Sprout — Data Link

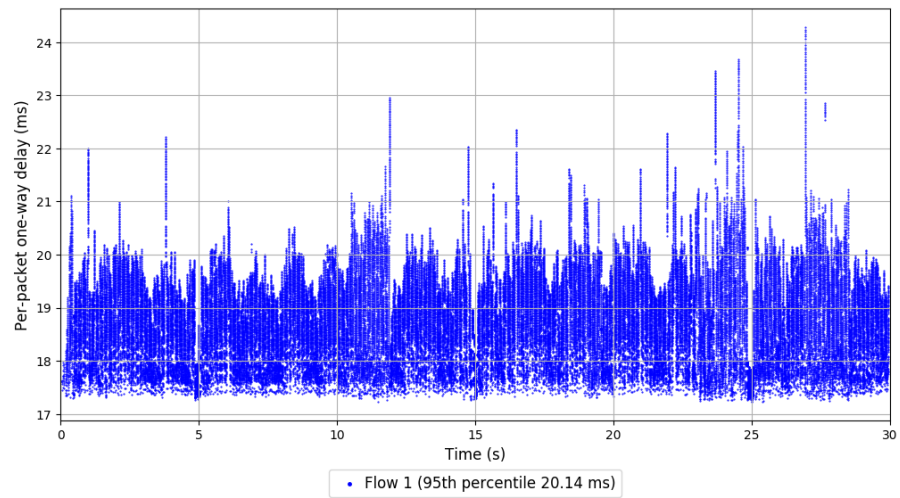
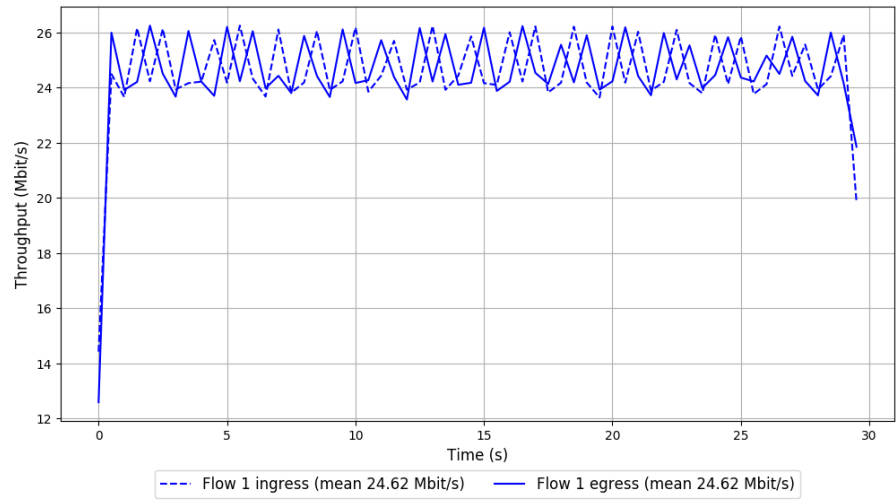


Run 8: Statistics of Sprout

Start at: 2017-12-20 01:10:05  
End at: 2017-12-20 01:10:35  
Local clock offset: 1.196 ms  
Remote clock offset: -2.071 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.62 Mbit/s  
95th percentile per-packet one-way delay: 20.140 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 24.62 Mbit/s  
95th percentile per-packet one-way delay: 20.140 ms  
Loss rate: 0.00%

# Run 8: Report of Sprout — Data Link

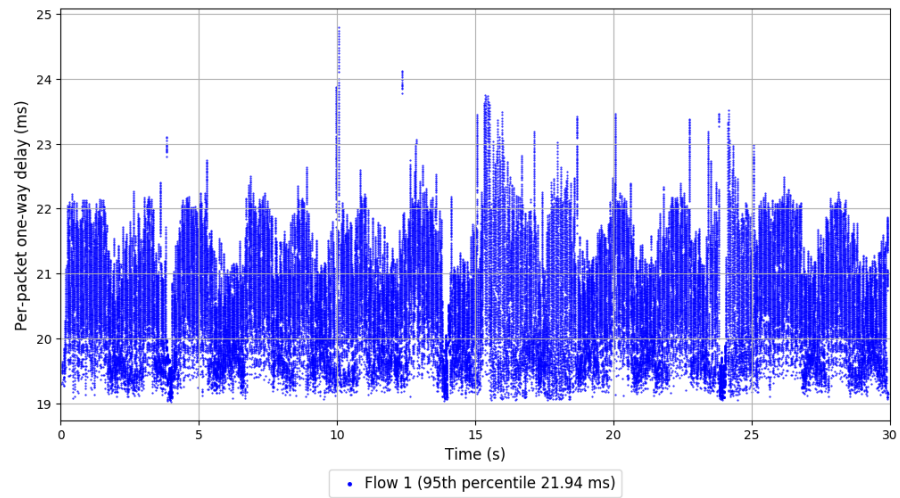
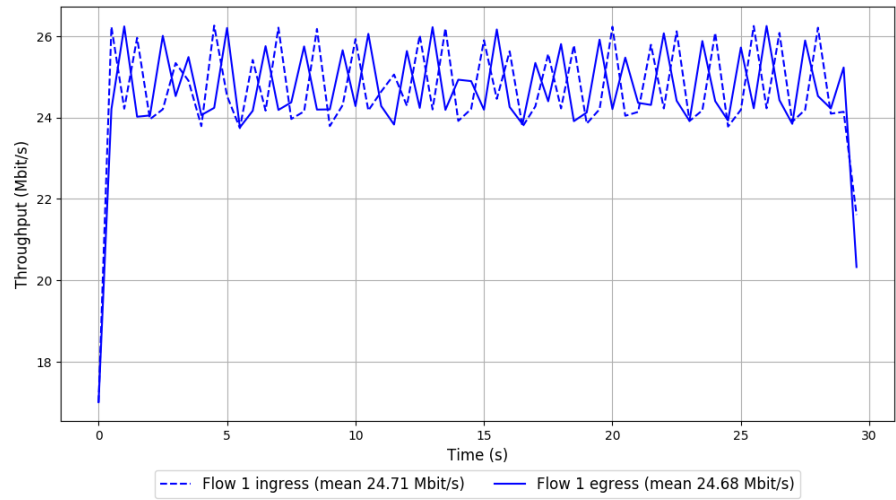


Run 9: Statistics of Sprout

Start at: 2017-12-20 01:30:26  
End at: 2017-12-20 01:30:56  
Local clock offset: 1.348 ms  
Remote clock offset: -1.955 ms

# Below is generated by plot.py at 2017-12-20 04:15:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.68 Mbit/s  
95th percentile per-packet one-way delay: 21.943 ms  
Loss rate: 0.12%  
-- Flow 1:  
Average throughput: 24.68 Mbit/s  
95th percentile per-packet one-way delay: 21.943 ms  
Loss rate: 0.12%

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



Run 10: Statistics of Sprout

Start at: 2017-12-20 01:50:34

End at: 2017-12-20 01:51:04

Local clock offset: 1.235 ms

Remote clock offset: -1.7 ms

# Below is generated by plot.py at 2017-12-20 04:15:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 24.75 Mbit/s

95th percentile per-packet one-way delay: 21.755 ms

Loss rate: 0.00%

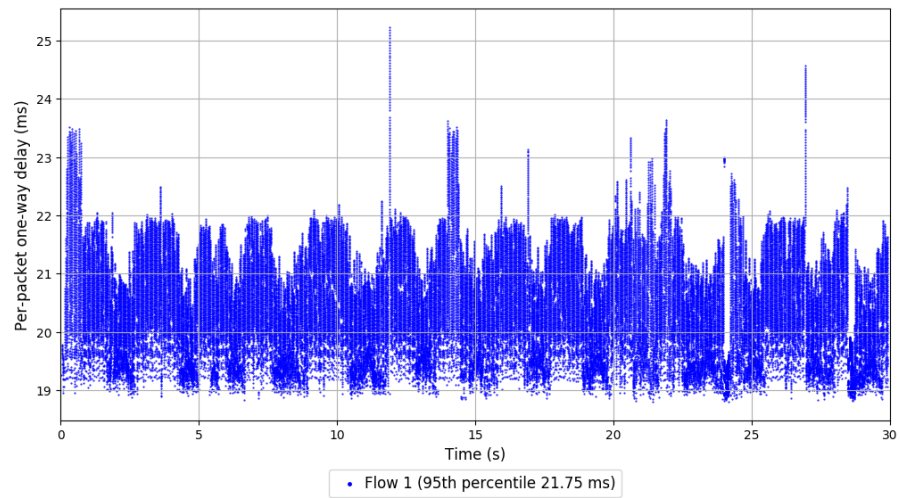
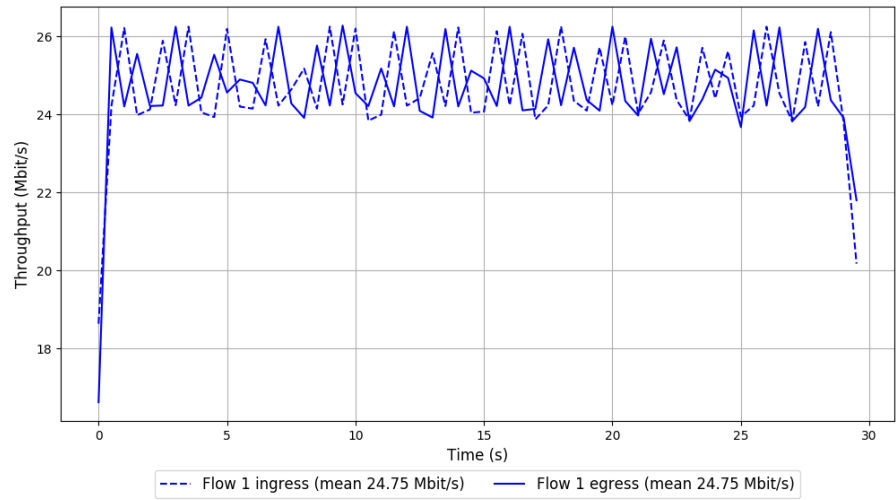
-- Flow 1:

Average throughput: 24.75 Mbit/s

95th percentile per-packet one-way delay: 21.755 ms

Loss rate: 0.00%

# Run 10: Report of Sprout — Data Link



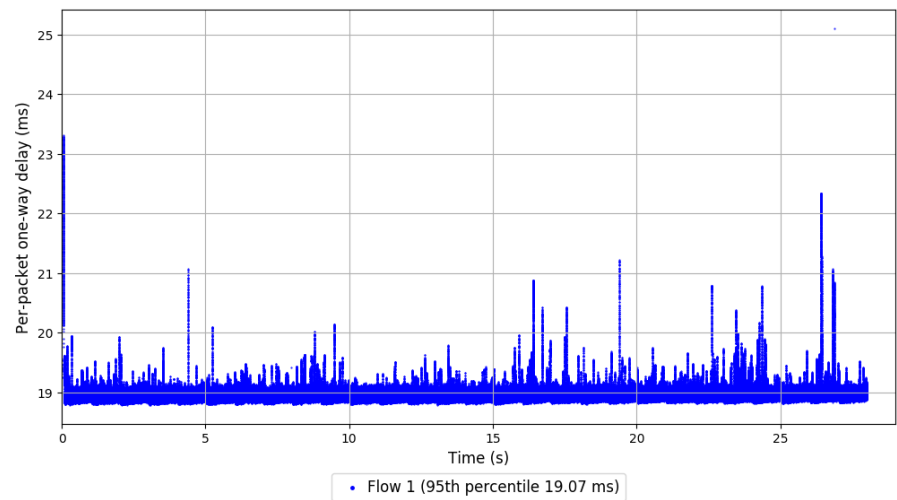
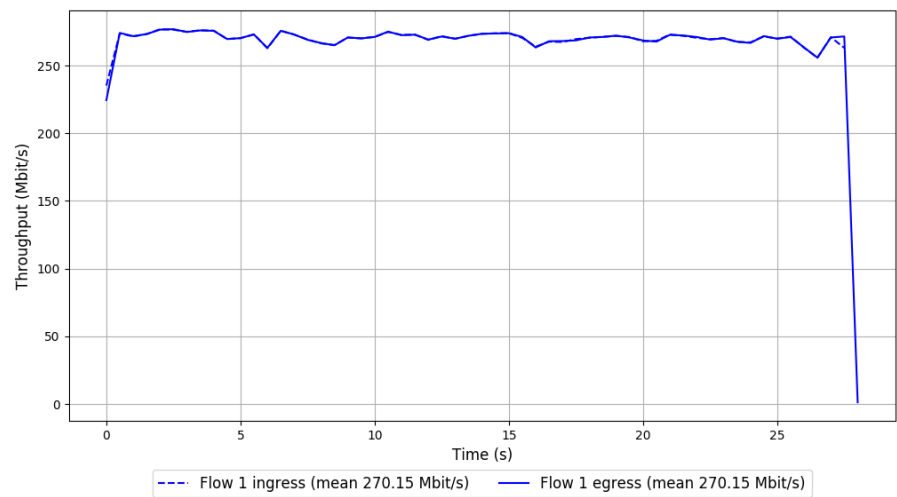
```
Run 1: Statistics of TaoVA-100x

Start at: 2017-12-19 23:04:01
End at: 2017-12-19 23:04:31
Local clock offset: 1.305 ms
Remote clock offset: -0.749 ms

# Below is generated by plot.py at 2017-12-20 04:15:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 270.15 Mbit/s
95th percentile per-packet one-way delay: 19.068 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 270.15 Mbit/s
95th percentile per-packet one-way delay: 19.068 ms
Loss rate: 0.01%
```



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



Run 2: Statistics of TaoVA-100x

Start at: 2017-12-19 23:24:14

End at: 2017-12-19 23:24:44

Local clock offset: 0.314 ms

Remote clock offset: -0.922 ms

# Below is generated by plot.py at 2017-12-20 04:15:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 268.42 Mbit/s

95th percentile per-packet one-way delay: 17.594 ms

Loss rate: 0.00%

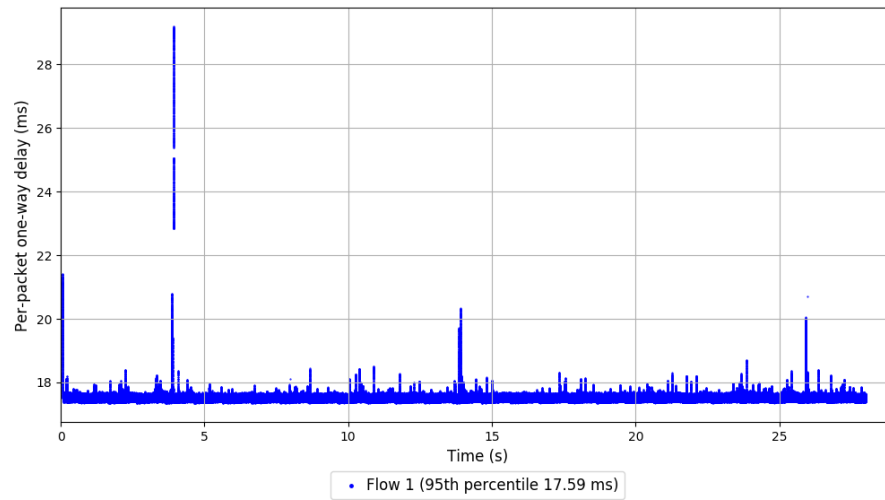
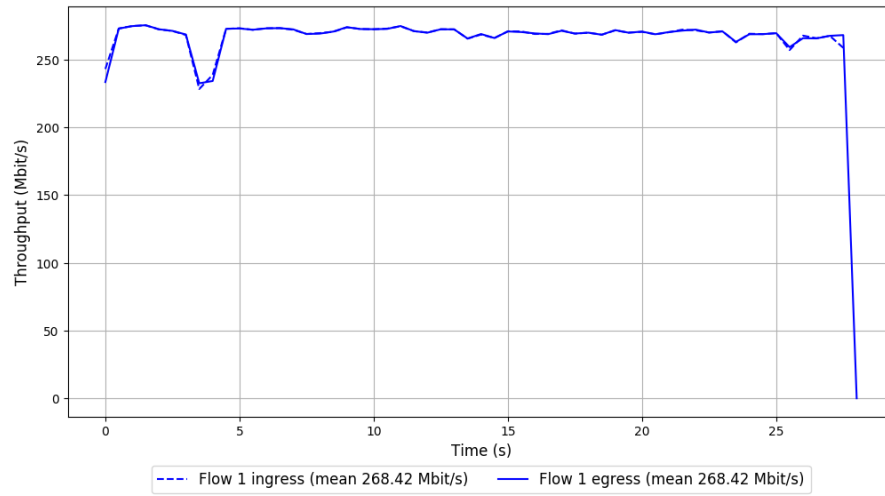
-- Flow 1:

Average throughput: 268.42 Mbit/s

95th percentile per-packet one-way delay: 17.594 ms

Loss rate: 0.00%

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



Run 3: Statistics of TaoVA-100x

Start at: 2017-12-19 23:44:17

End at: 2017-12-19 23:44:47

Local clock offset: 0.515 ms

Remote clock offset: -1.303 ms

# Below is generated by plot.py at 2017-12-20 04:15:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 266.82 Mbit/s

95th percentile per-packet one-way delay: 19.198 ms

Loss rate: 0.00%

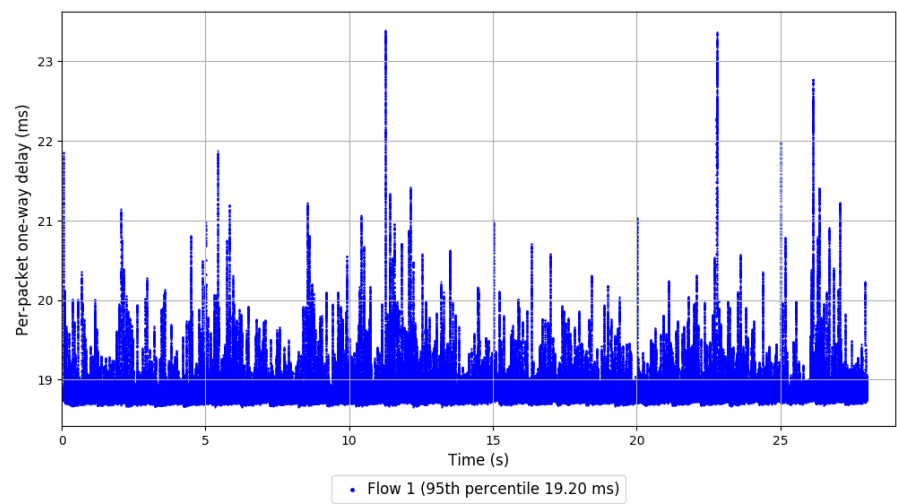
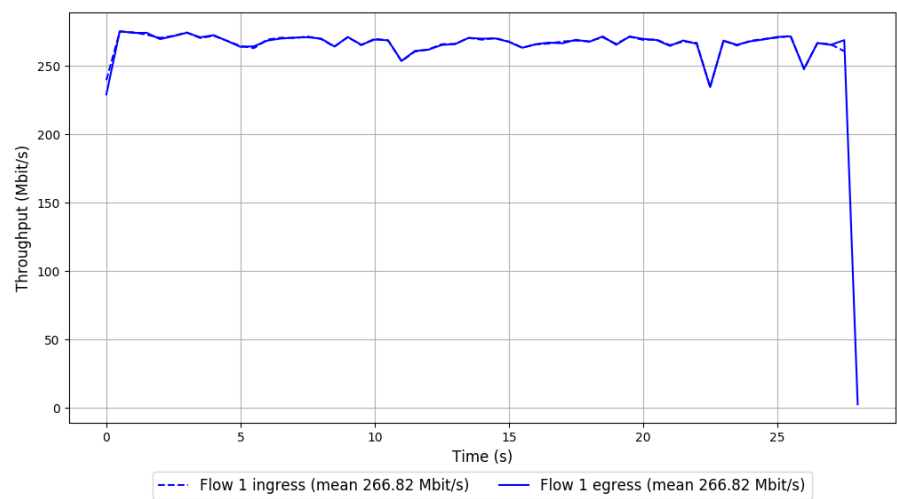
-- Flow 1:

Average throughput: 266.82 Mbit/s

95th percentile per-packet one-way delay: 19.198 ms

Loss rate: 0.00%

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



Run 4: Statistics of TaoVA-100x

Start at: 2017-12-20 00:04:15

End at: 2017-12-20 00:04:45

Local clock offset: 0.699 ms

Remote clock offset: -1.587 ms

# Below is generated by plot.py at 2017-12-20 04:15:44

# Datalink statistics

-- Total of 1 flow:

Average throughput: 265.53 Mbit/s

95th percentile per-packet one-way delay: 19.443 ms

Loss rate: 0.01%

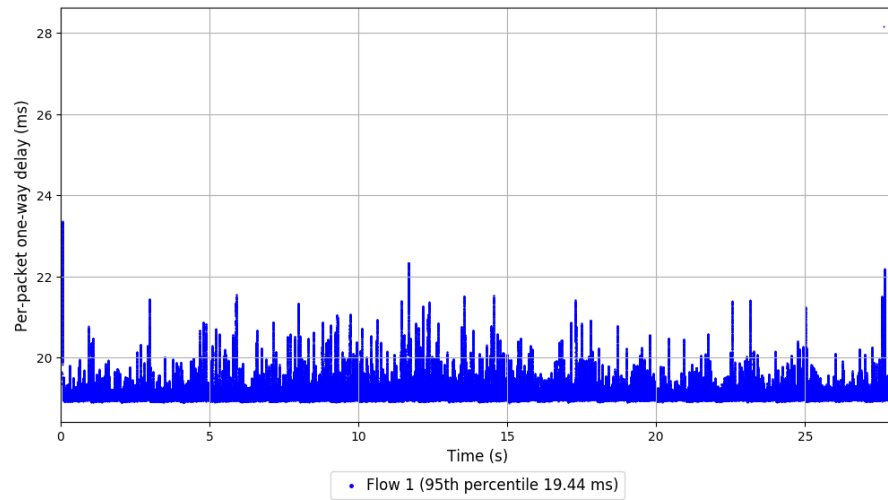
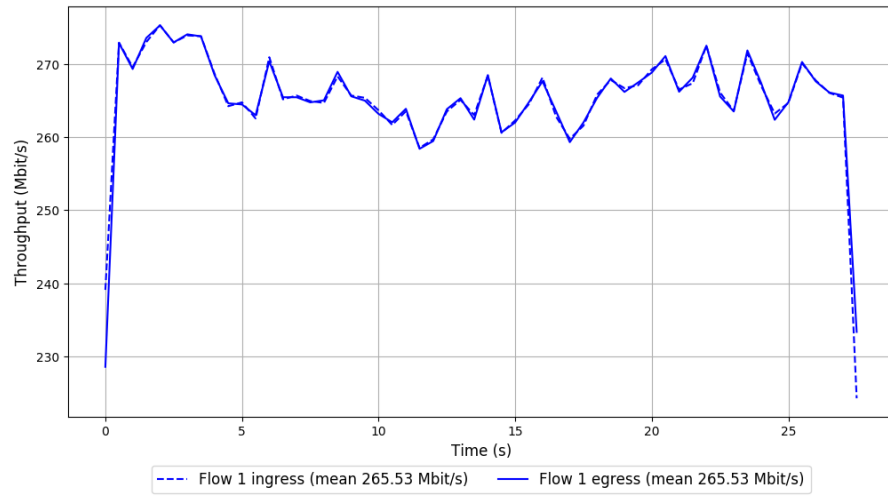
-- Flow 1:

Average throughput: 265.53 Mbit/s

95th percentile per-packet one-way delay: 19.443 ms

Loss rate: 0.01%

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



Run 5: Statistics of TaoVA-100x

Start at: 2017-12-20 00:24:26

End at: 2017-12-20 00:24:56

Local clock offset: 0.803 ms

Remote clock offset: -1.62 ms

# Below is generated by plot.py at 2017-12-20 04:17:53

# Datalink statistics

-- Total of 1 flow:

Average throughput: 266.70 Mbit/s

95th percentile per-packet one-way delay: 19.150 ms

Loss rate: 0.00%

-- Flow 1:

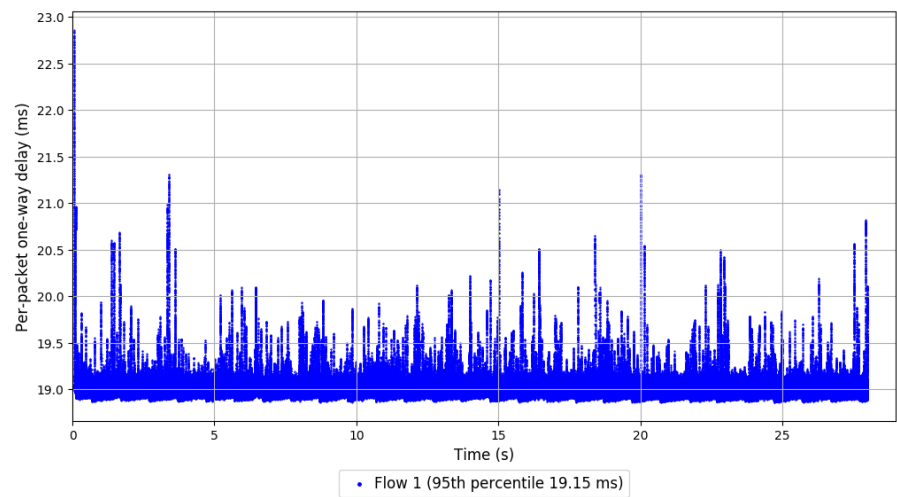
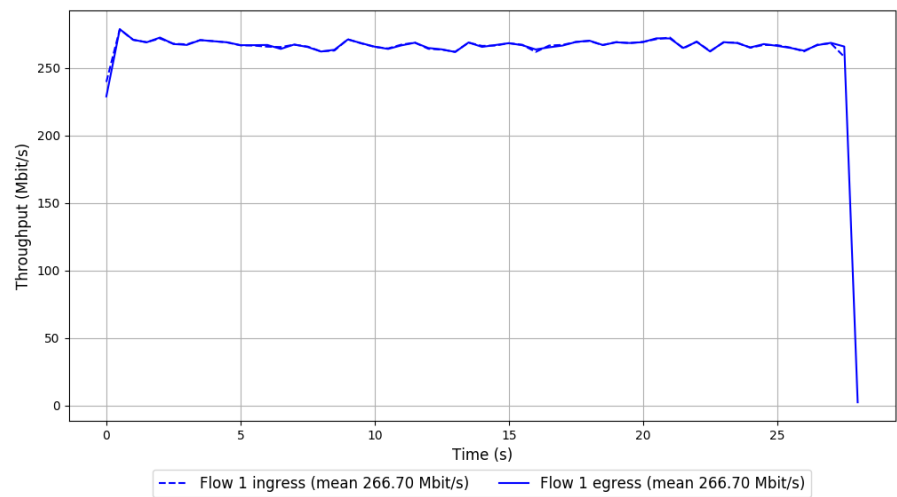
Average throughput: 266.70 Mbit/s

95th percentile per-packet one-way delay: 19.150 ms

Loss rate: 0.00%



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

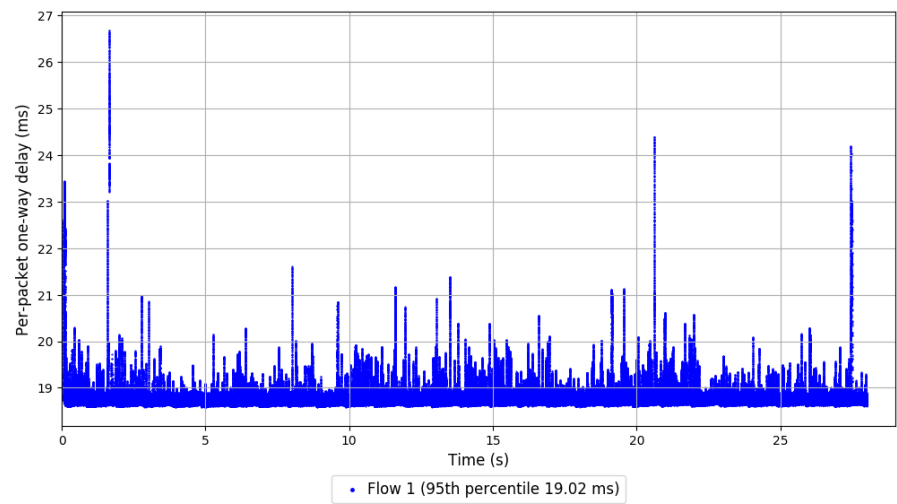
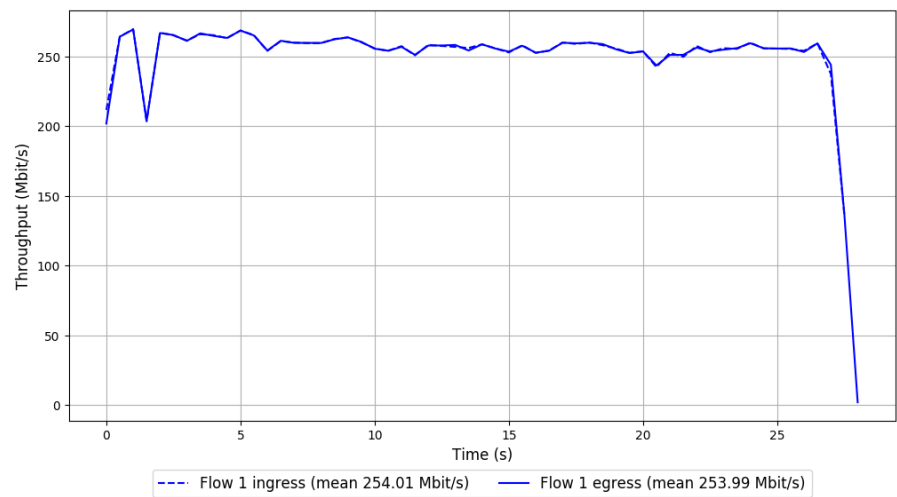


Run 6: Statistics of TaoVA-100x

Start at: 2017-12-20 00:44:21  
End at: 2017-12-20 00:44:51  
Local clock offset: 1.127 ms  
Remote clock offset: -1.889 ms

# Below is generated by plot.py at 2017-12-20 04:19:17  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 253.99 Mbit/s  
95th percentile per-packet one-way delay: 19.015 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 253.99 Mbit/s  
95th percentile per-packet one-way delay: 19.015 ms  
Loss rate: 0.01%

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

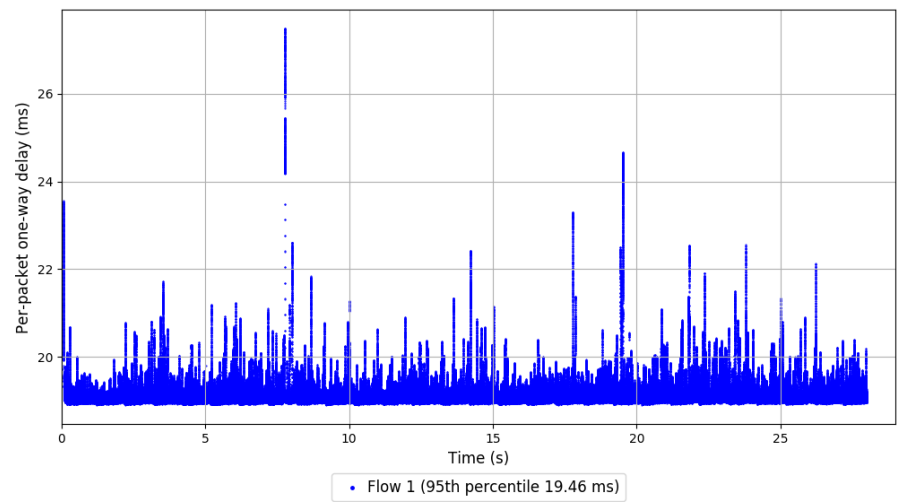
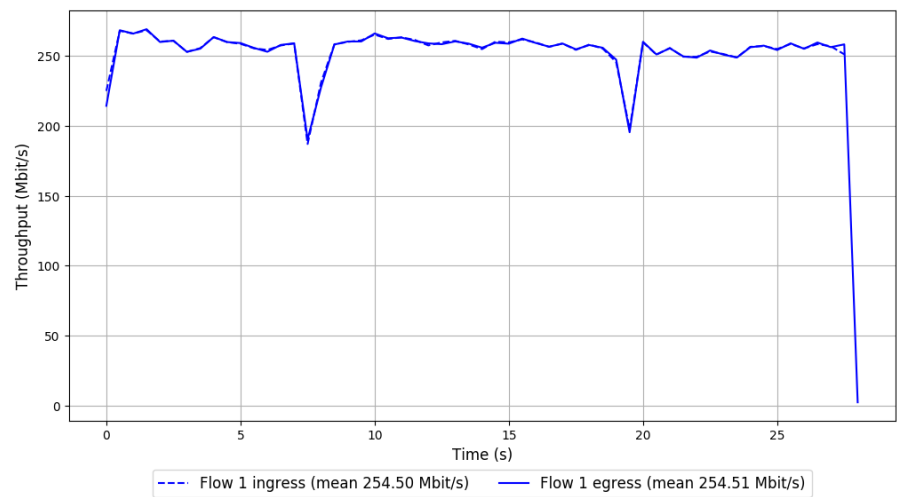


Run 7: Statistics of TaoVA-100x

Start at: 2017-12-20 01:04:15  
End at: 2017-12-20 01:04:45  
Local clock offset: 1.078 ms  
Remote clock offset: -1.977 ms

# Below is generated by plot.py at 2017-12-20 04:20:04  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 254.51 Mbit/s  
95th percentile per-packet one-way delay: 19.463 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 254.51 Mbit/s  
95th percentile per-packet one-way delay: 19.463 ms  
Loss rate: 0.00%

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



Run 8: Statistics of TaoVA-100x

Start at: 2017-12-20 01:24:40

End at: 2017-12-20 01:25:10

Local clock offset: 1.225 ms

Remote clock offset: -1.957 ms

# Below is generated by plot.py at 2017-12-20 04:21:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 250.21 Mbit/s

95th percentile per-packet one-way delay: 17.750 ms

Loss rate: 0.00%

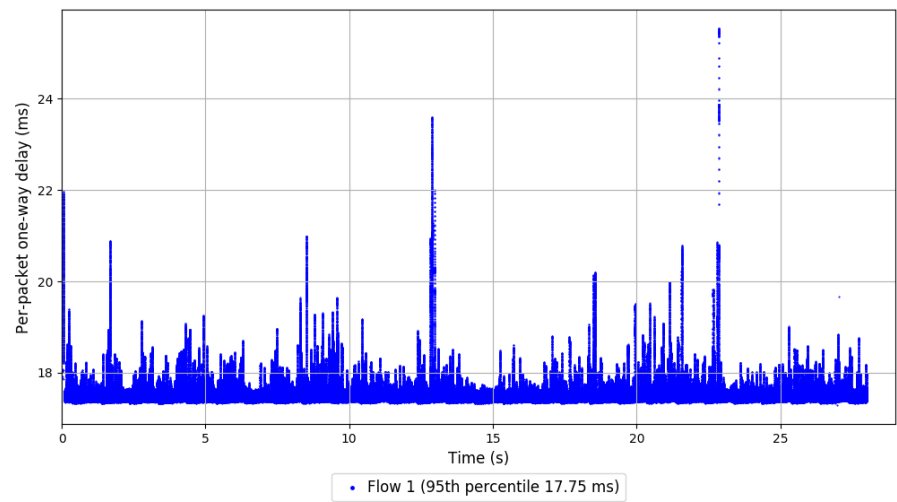
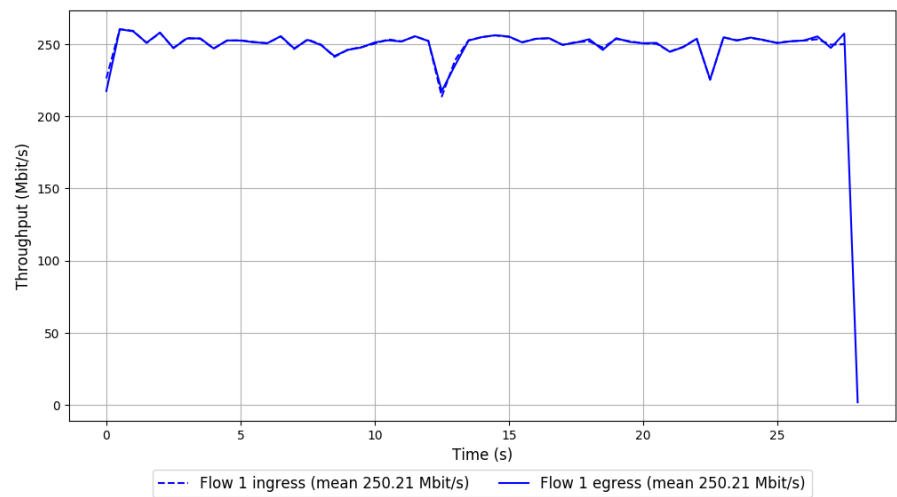
-- Flow 1:

Average throughput: 250.21 Mbit/s

95th percentile per-packet one-way delay: 17.750 ms

Loss rate: 0.00%

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



Run 9: Statistics of TaoVA-100x

Start at: 2017-12-20 01:44:48

End at: 2017-12-20 01:45:18

Local clock offset: 1.315 ms

Remote clock offset: -1.803 ms

# Below is generated by plot.py at 2017-12-20 04:21:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 262.36 Mbit/s

95th percentile per-packet one-way delay: 19.055 ms

Loss rate: 0.00%

-- Flow 1:

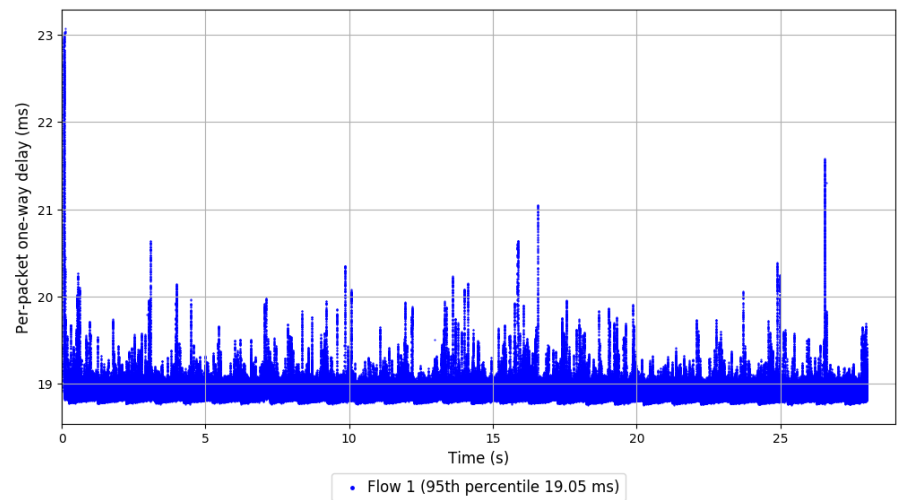
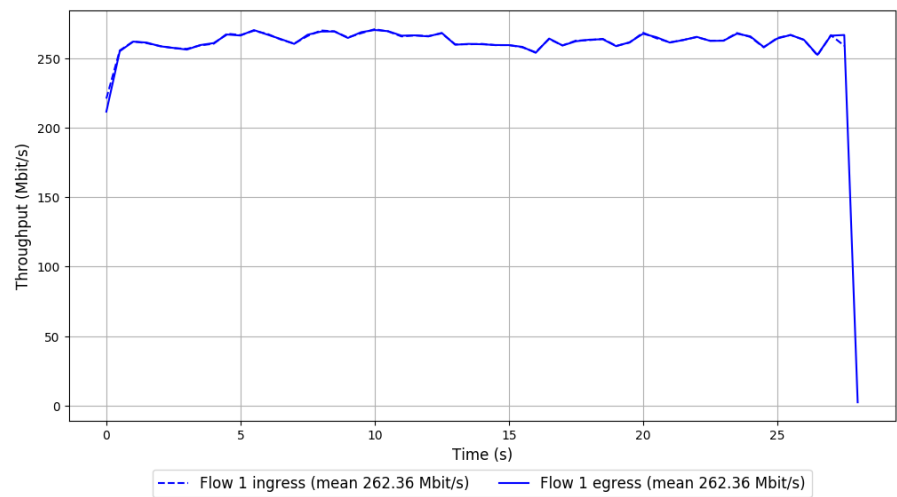
Average throughput: 262.36 Mbit/s

95th percentile per-packet one-way delay: 19.055 ms

Loss rate: 0.00%



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



Run 10: Statistics of TaoVA-100x

Start at: 2017-12-20 02:04:37

End at: 2017-12-20 02:05:07

Local clock offset: 1.085 ms

Remote clock offset: -1.414 ms

# Below is generated by plot.py at 2017-12-20 04:21:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 263.99 Mbit/s

95th percentile per-packet one-way delay: 19.008 ms

Loss rate: 0.00%

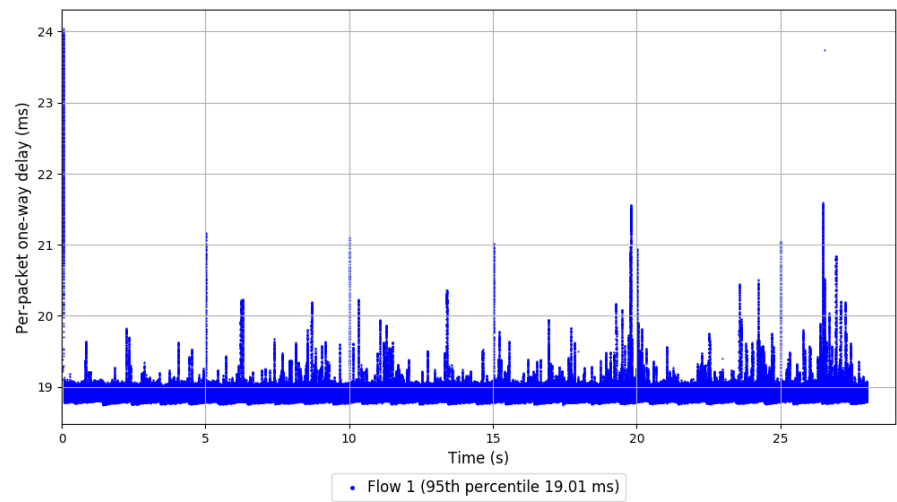
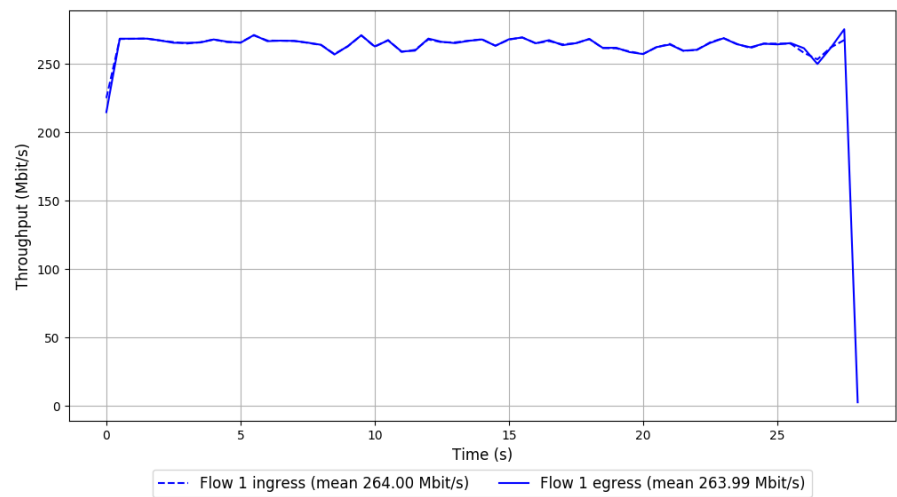
-- Flow 1:

Average throughput: 263.99 Mbit/s

95th percentile per-packet one-way delay: 19.008 ms

Loss rate: 0.00%

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

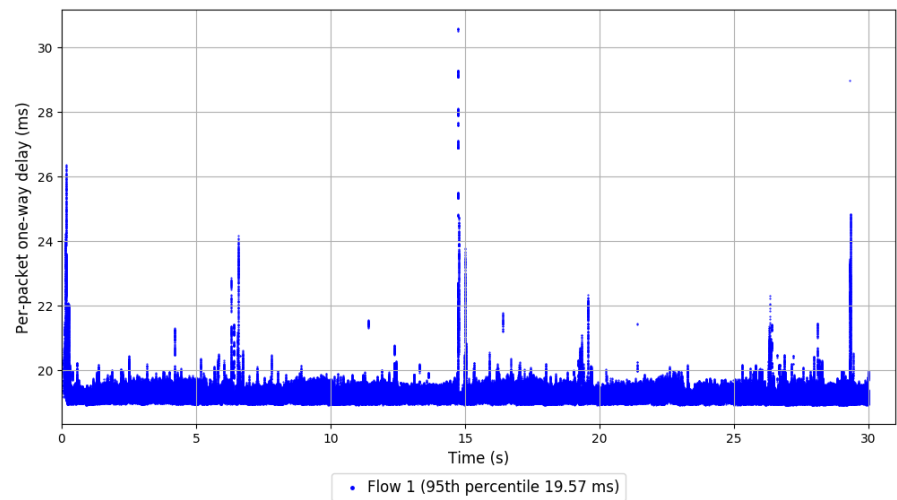
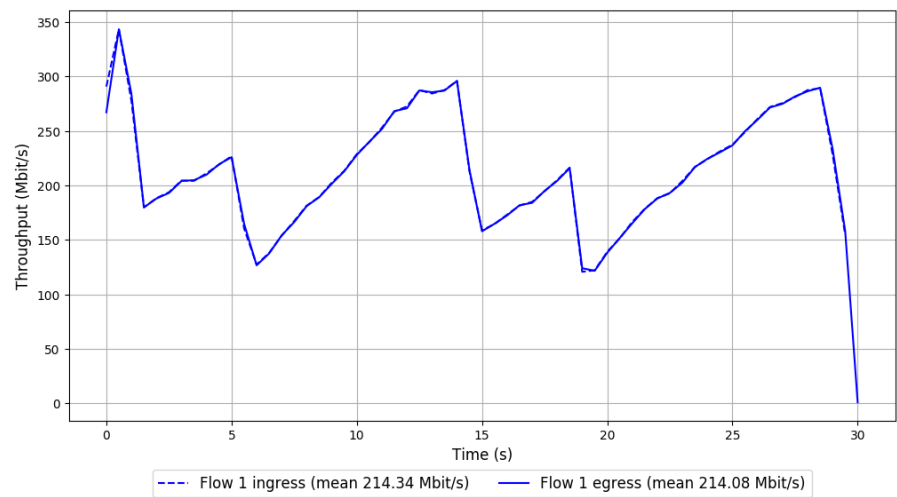


Run 1: Statistics of TCP Vegas

Start at: 2017-12-19 22:53:14  
End at: 2017-12-19 22:53:44  
Local clock offset: 1.206 ms  
Remote clock offset: -0.505 ms

# Below is generated by plot.py at 2017-12-20 04:21:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 214.08 Mbit/s  
95th percentile per-packet one-way delay: 19.569 ms  
Loss rate: 0.13%  
-- Flow 1:  
Average throughput: 214.08 Mbit/s  
95th percentile per-packet one-way delay: 19.569 ms  
Loss rate: 0.13%

Run 1: Report of TCP Vegas — Data Link

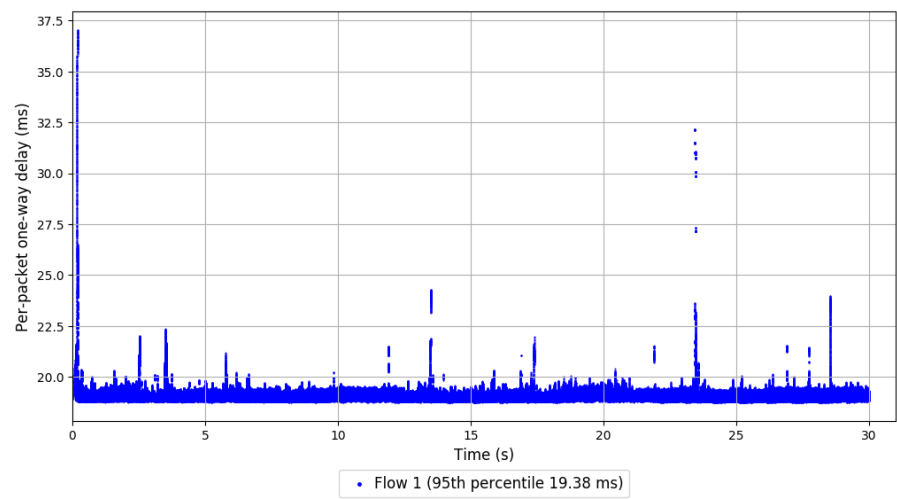
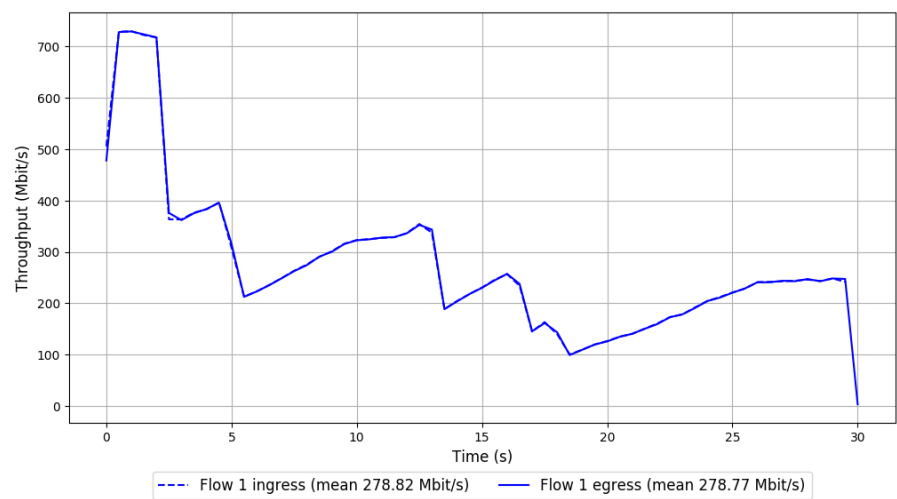


Run 2: Statistics of TCP Vegas

Start at: 2017-12-19 23:13:26  
End at: 2017-12-19 23:13:56  
Local clock offset: 0.672 ms  
Remote clock offset: -0.836 ms

# Below is generated by plot.py at 2017-12-20 04:21:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 278.77 Mbit/s  
95th percentile per-packet one-way delay: 19.377 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 278.77 Mbit/s  
95th percentile per-packet one-way delay: 19.377 ms  
Loss rate: 0.02%

Run 2: Report of TCP Vegas — Data Link



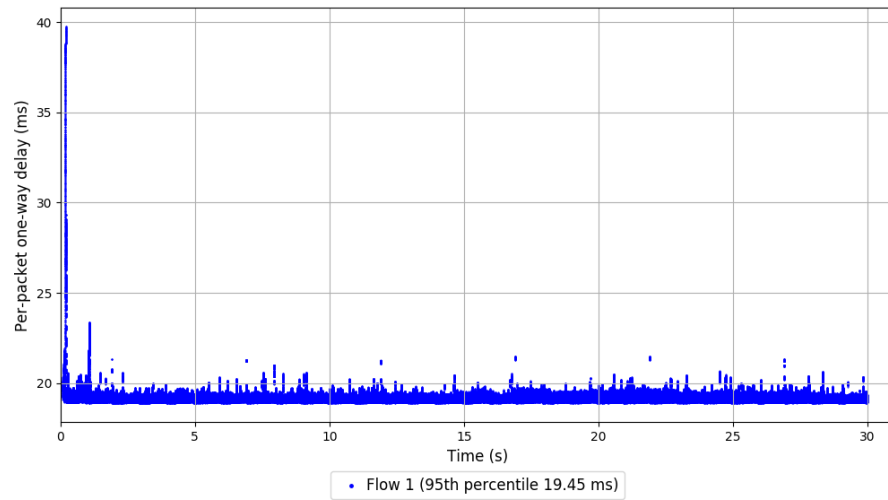
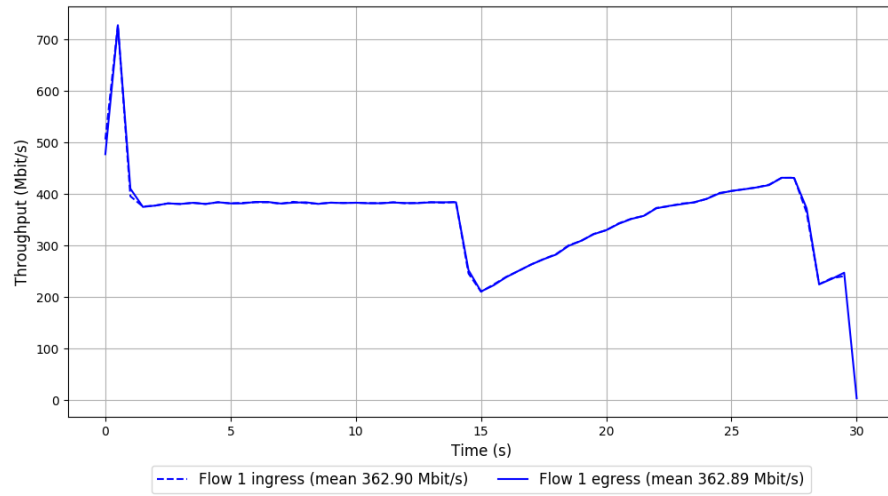
Run 3: Statistics of TCP Vegas

Start at: 2017-12-19 23:33:40  
End at: 2017-12-19 23:34:10  
Local clock offset: 0.313 ms  
Remote clock offset: -1.069 ms

# Below is generated by plot.py at 2017-12-20 04:23:10  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 362.89 Mbit/s  
95th percentile per-packet one-way delay: 19.446 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 362.89 Mbit/s  
95th percentile per-packet one-way delay: 19.446 ms  
Loss rate: 0.00%



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

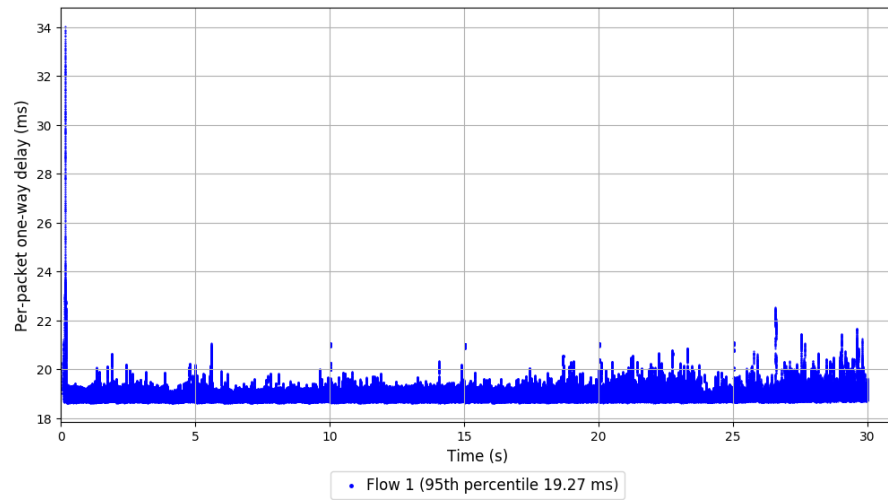
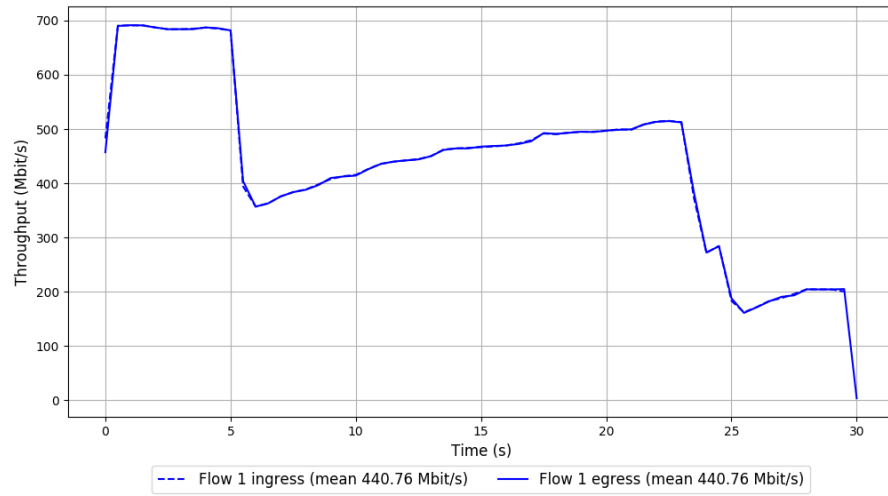


Run 4: Statistics of TCP Vegas

Start at: 2017-12-19 23:53:41  
End at: 2017-12-19 23:54:11  
Local clock offset: 0.638 ms  
Remote clock offset: -1.512 ms

# Below is generated by plot.py at 2017-12-20 04:24:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 440.76 Mbit/s  
95th percentile per-packet one-way delay: 19.273 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 440.76 Mbit/s  
95th percentile per-packet one-way delay: 19.273 ms  
Loss rate: 0.01%

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

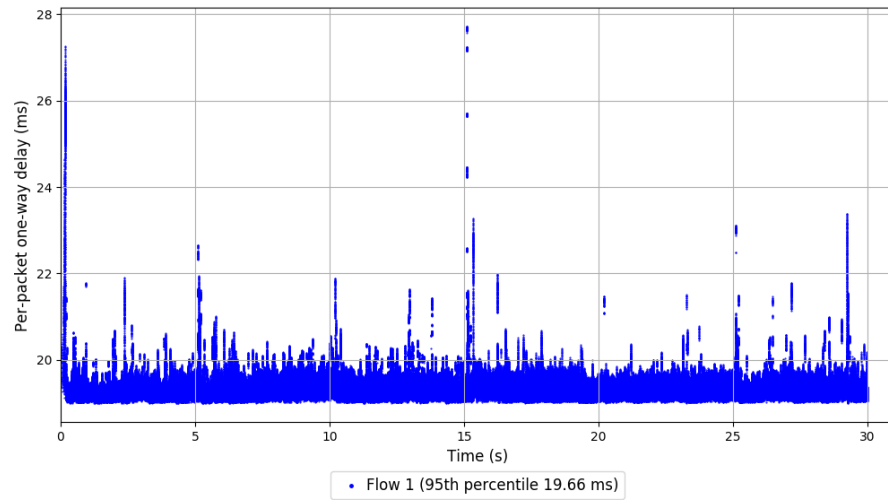
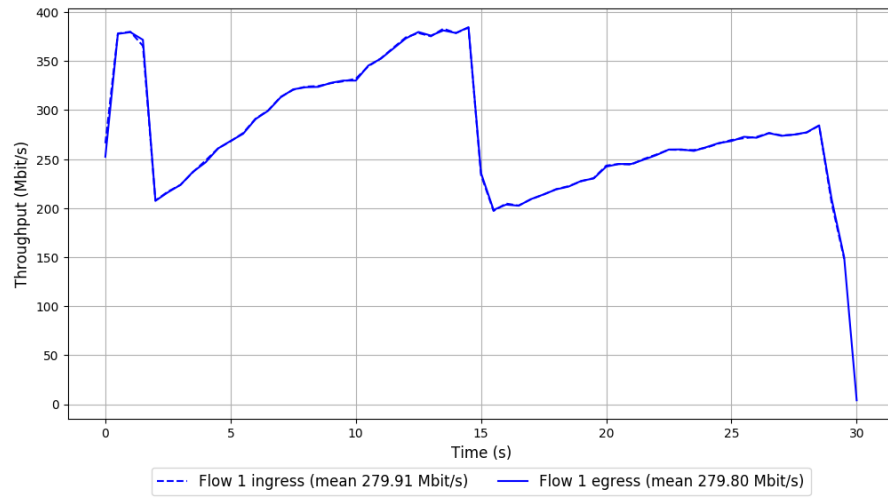


Run 5: Statistics of TCP Vegas

Start at: 2017-12-20 00:13:40  
End at: 2017-12-20 00:14:10  
Local clock offset: 0.913 ms  
Remote clock offset: -1.552 ms

# Below is generated by plot.py at 2017-12-20 04:24:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 279.80 Mbit/s  
95th percentile per-packet one-way delay: 19.664 ms  
Loss rate: 0.04%  
-- Flow 1:  
Average throughput: 279.80 Mbit/s  
95th percentile per-packet one-way delay: 19.664 ms  
Loss rate: 0.04%

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



Run 6: Statistics of TCP Vegas

Start at: 2017-12-20 00:33:51

End at: 2017-12-20 00:34:21

Local clock offset: 0.865 ms

Remote clock offset: -1.69 ms

# Below is generated by plot.py at 2017-12-20 04:24:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 216.23 Mbit/s

95th percentile per-packet one-way delay: 19.705 ms

Loss rate: 0.01%

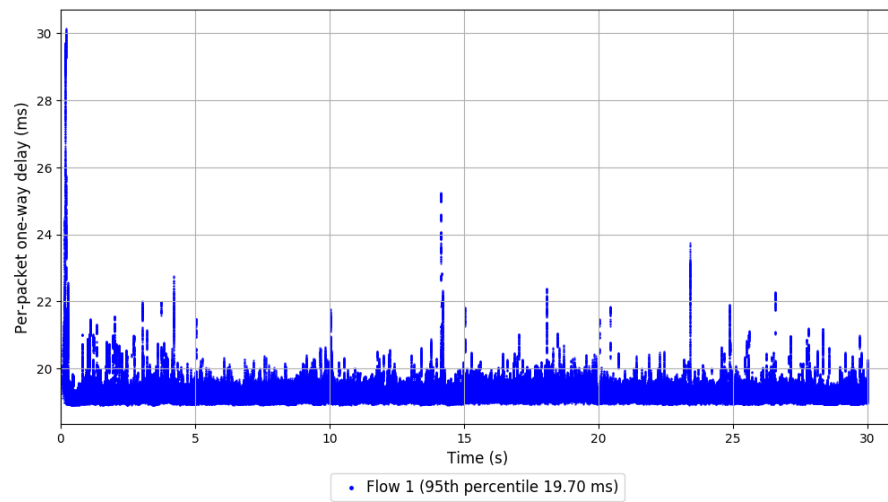
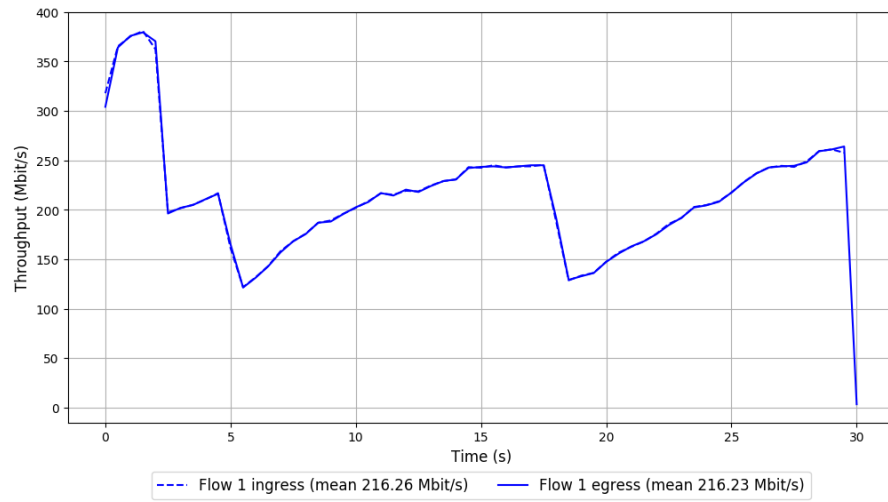
-- Flow 1:

Average throughput: 216.23 Mbit/s

95th percentile per-packet one-way delay: 19.705 ms

Loss rate: 0.01%

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



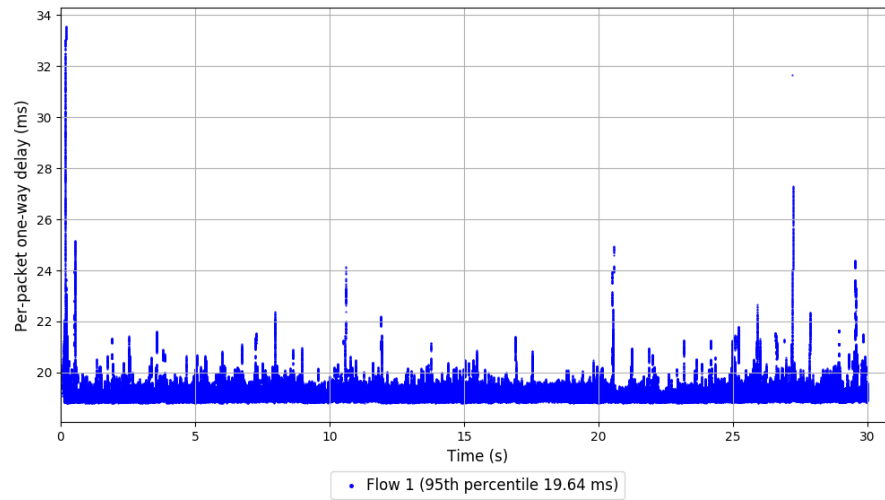
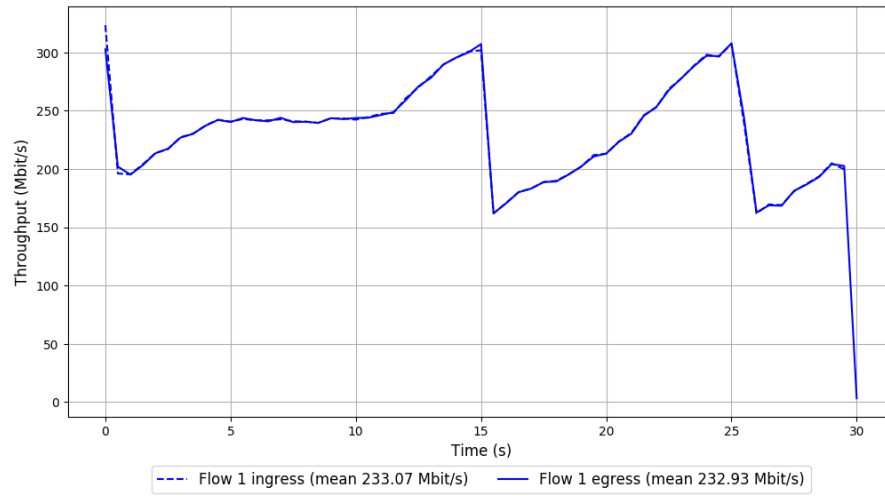
Run 7: Statistics of TCP Vegas

Start at: 2017-12-20 00:53:44  
End at: 2017-12-20 00:54:14  
Local clock offset: 1.149 ms  
Remote clock offset: -1.835 ms

# Below is generated by plot.py at 2017-12-20 04:24:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 232.93 Mbit/s  
95th percentile per-packet one-way delay: 19.641 ms  
Loss rate: 0.07%  
-- Flow 1:  
Average throughput: 232.93 Mbit/s  
95th percentile per-packet one-way delay: 19.641 ms  
Loss rate: 0.07%



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

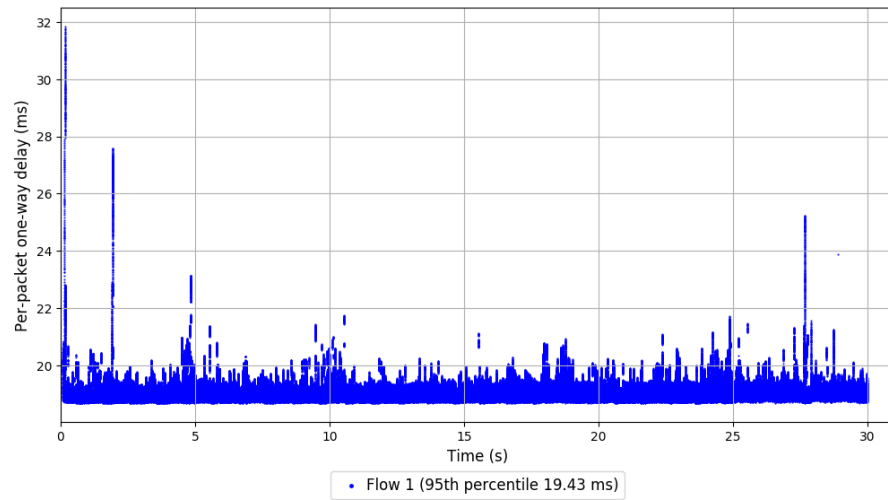
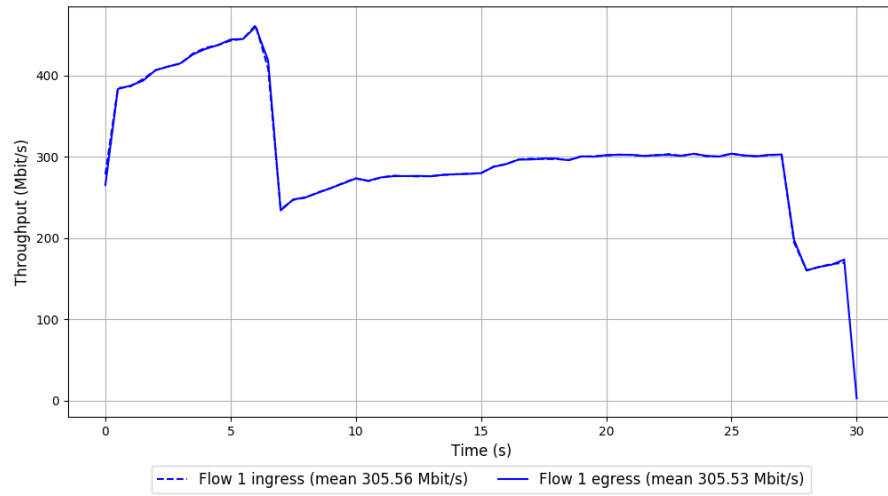


Run 8: Statistics of TCP Vegas

Start at: 2017-12-20 01:13:43  
End at: 2017-12-20 01:14:13  
Local clock offset: 1.127 ms  
Remote clock offset: -2.137 ms

# Below is generated by plot.py at 2017-12-20 04:25:36  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 305.53 Mbit/s  
95th percentile per-packet one-way delay: 19.431 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 305.53 Mbit/s  
95th percentile per-packet one-way delay: 19.431 ms  
Loss rate: 0.01%

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

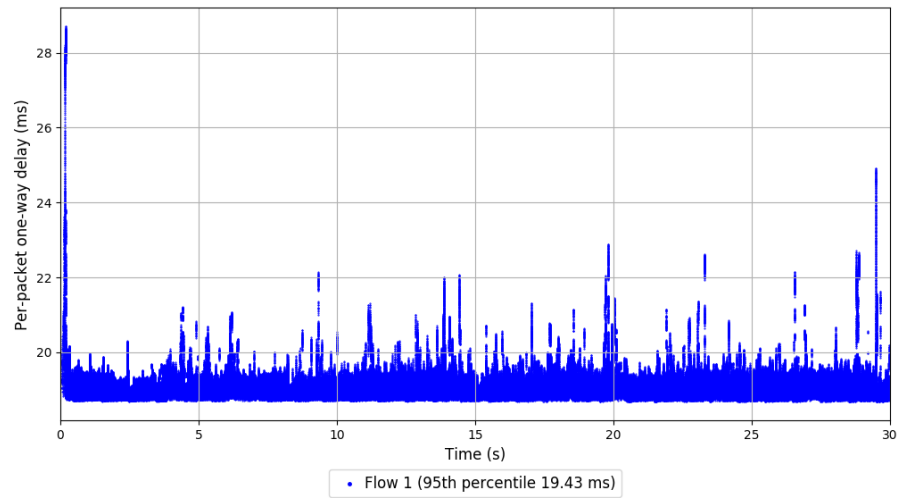
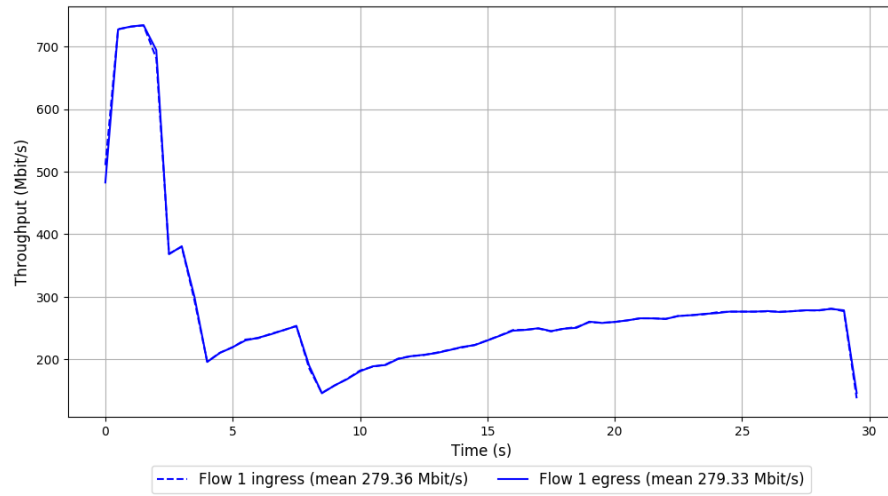


Run 9: Statistics of TCP Vegas

Start at: 2017-12-20 01:34:03  
End at: 2017-12-20 01:34:33  
Local clock offset: 1.403 ms  
Remote clock offset: -2.001 ms

# Below is generated by plot.py at 2017-12-20 04:25:36  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 279.33 Mbit/s  
95th percentile per-packet one-way delay: 19.432 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 279.33 Mbit/s  
95th percentile per-packet one-way delay: 19.432 ms  
Loss rate: 0.01%

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



Run 10: Statistics of TCP Vegas

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

End at: 2017-12-20 01:54:42

Local clock offset: 1.199 ms

Remote clock offset: -1.548 ms

# Below is generated by plot.py at 2017-12-20 04:25:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 266.48 Mbit/s

95th percentile per-packet one-way delay: 19.530 ms

Loss rate: 0.02%

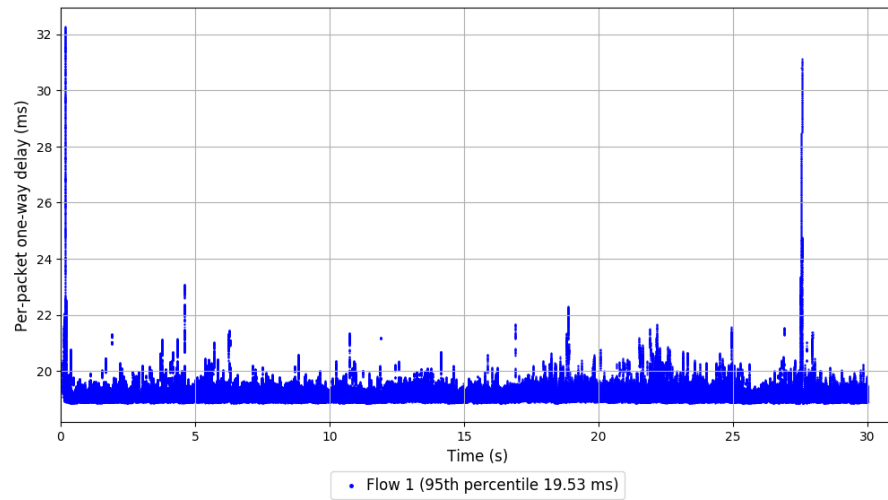
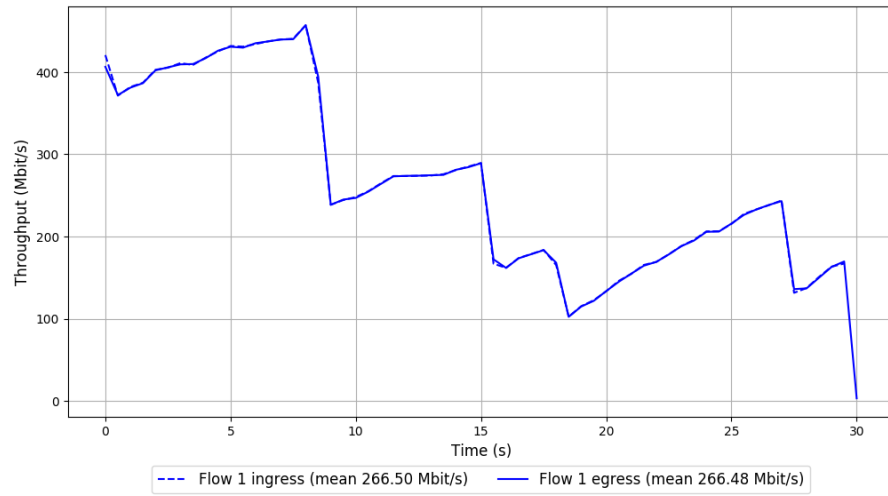
-- Flow 1:

Average throughput: 266.48 Mbit/s

95th percentile per-packet one-way delay: 19.530 ms

Loss rate: 0.02%

# Run 10: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2017-12-19 22:54:32

End at: 2017-12-19 22:55:02

Local clock offset: 1.101 ms

Remote clock offset: -0.61 ms

# Below is generated by plot.py at 2017-12-20 04:26:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 197.43 Mbit/s

95th percentile per-packet one-way delay: 46.695 ms

Loss rate: 14.95%

-- Flow 1:

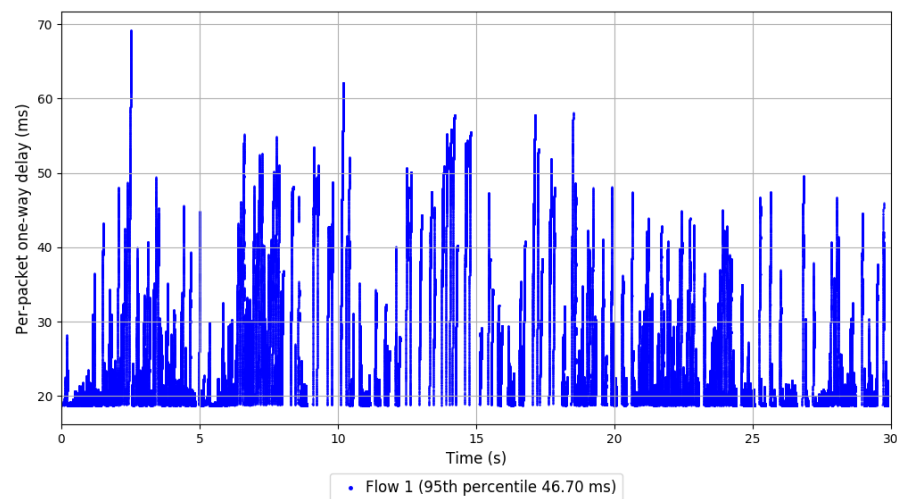
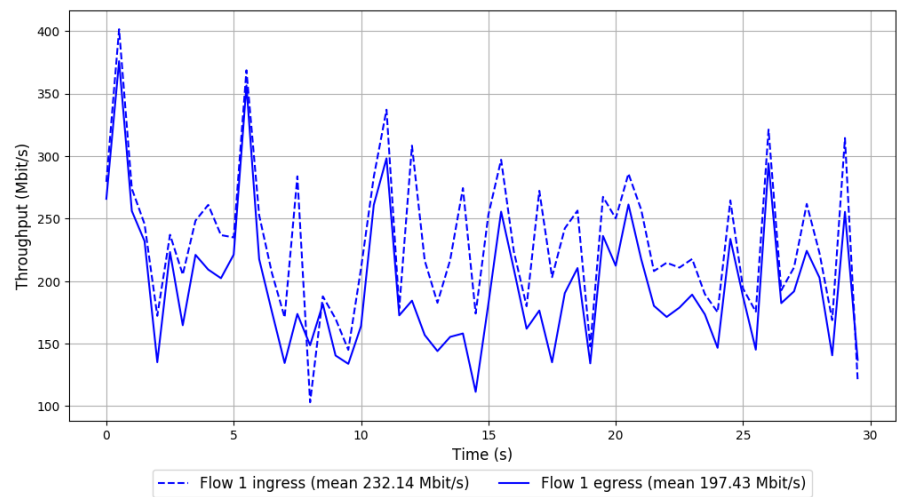
Average throughput: 197.43 Mbit/s

95th percentile per-packet one-way delay: 46.695 ms

Loss rate: 14.95%



Run 1: Report of Verus — Data Link

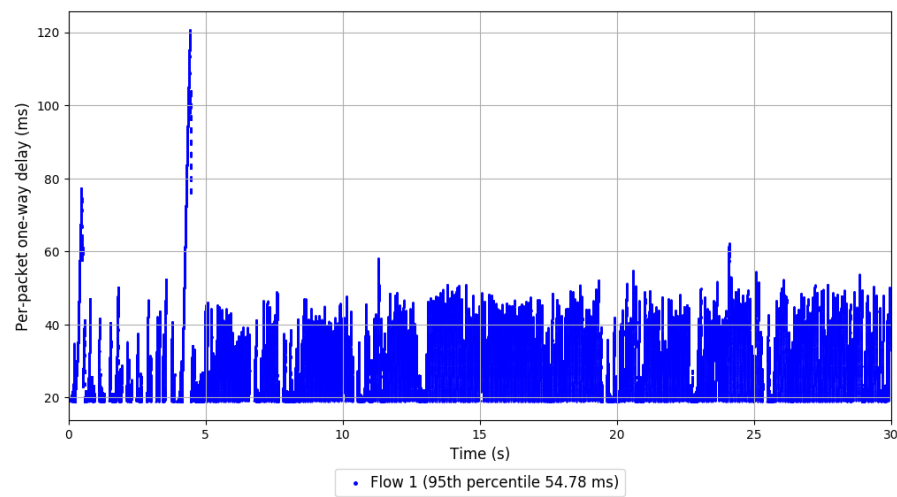
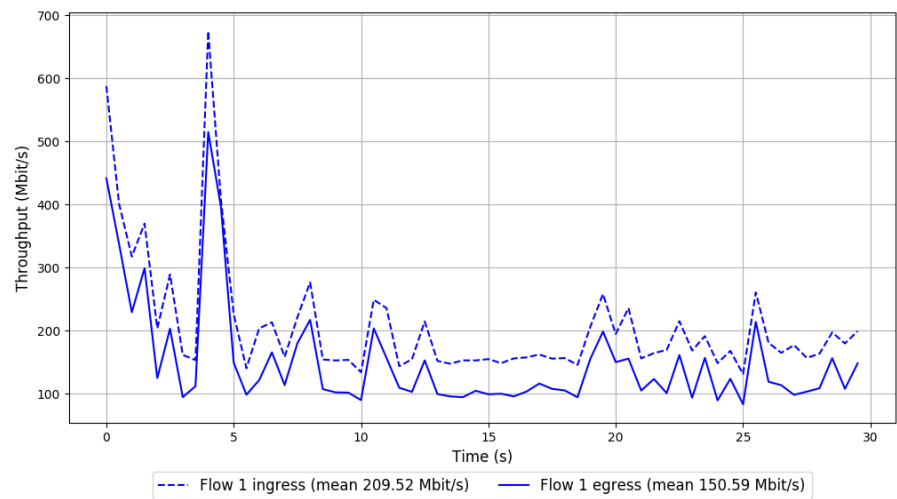


Run 2: Statistics of Verus

Start at: 2017-12-19 23:14:47  
End at: 2017-12-19 23:15:17  
Local clock offset: 0.579 ms  
Remote clock offset: -0.814 ms

# Below is generated by plot.py at 2017-12-20 04:26:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 150.59 Mbit/s  
95th percentile per-packet one-way delay: 54.784 ms  
Loss rate: 28.08%  
-- Flow 1:  
Average throughput: 150.59 Mbit/s  
95th percentile per-packet one-way delay: 54.784 ms  
Loss rate: 28.08%

Run 2: Report of Verus — Data Link

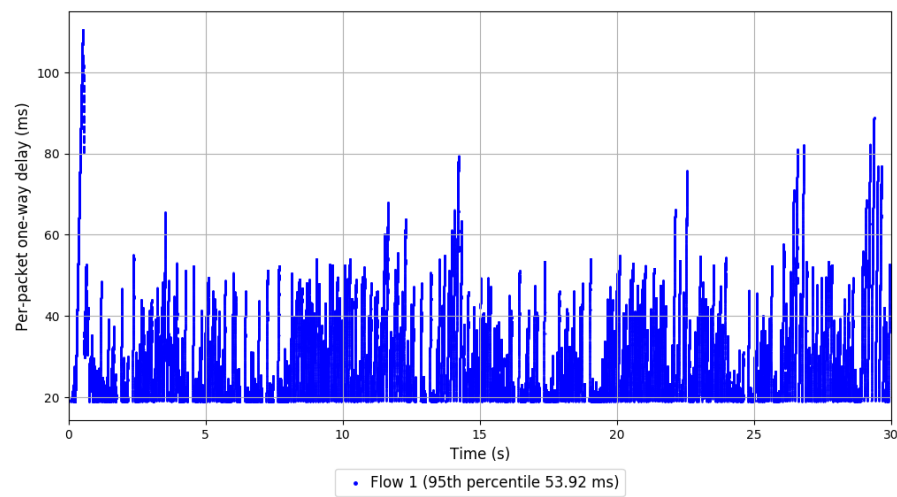
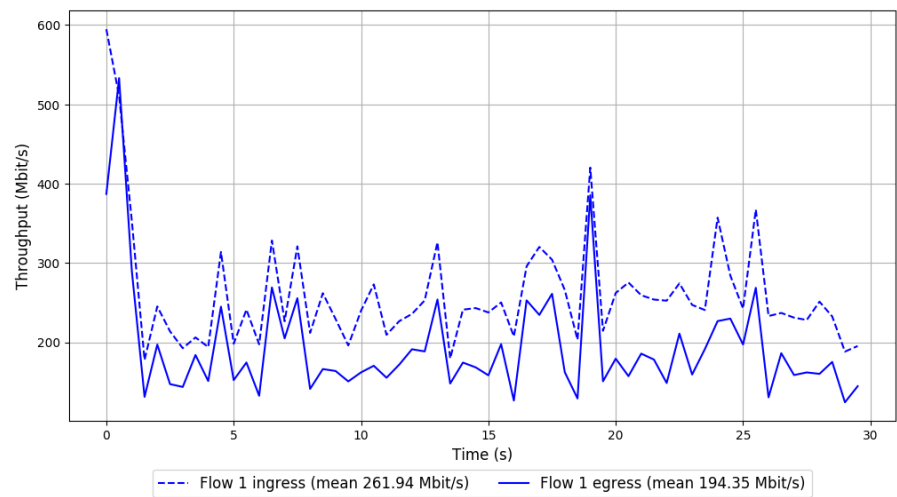


Run 3: Statistics of Verus

Start at: 2017-12-19 23:35:04  
End at: 2017-12-19 23:35:34  
Local clock offset: 0.342 ms  
Remote clock offset: -1.047 ms

# Below is generated by plot.py at 2017-12-20 04:26:32  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 194.35 Mbit/s  
95th percentile per-packet one-way delay: 53.923 ms  
Loss rate: 25.74%  
-- Flow 1:  
Average throughput: 194.35 Mbit/s  
95th percentile per-packet one-way delay: 53.923 ms  
Loss rate: 25.74%

Run 3: Report of Verus — Data Link

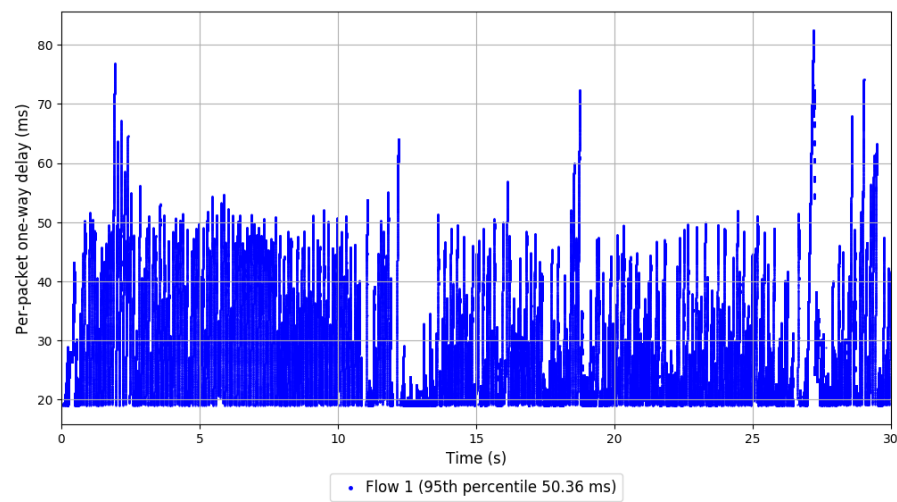
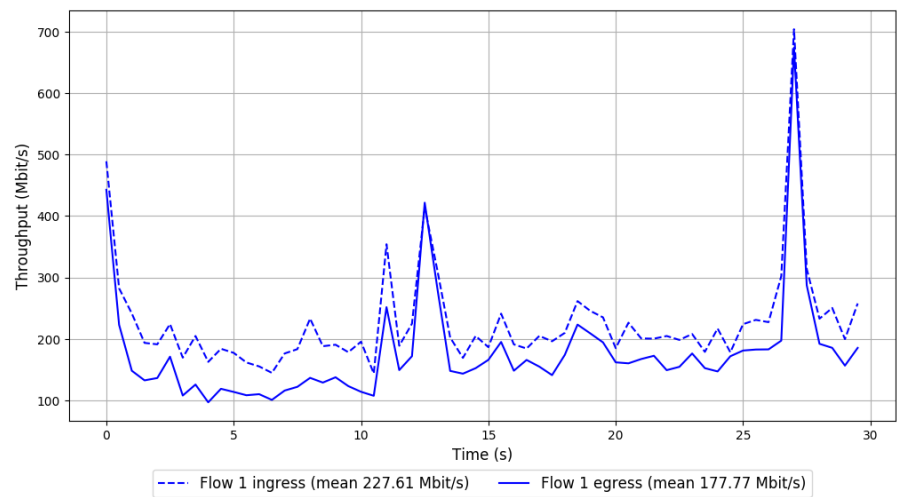


Run 4: Statistics of Verus

Start at: 2017-12-19 23:55:08  
End at: 2017-12-19 23:55:38  
Local clock offset: 0.569 ms  
Remote clock offset: -1.521 ms

# Below is generated by plot.py at 2017-12-20 04:26:32  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 177.77 Mbit/s  
95th percentile per-packet one-way delay: 50.359 ms  
Loss rate: 21.89%  
-- Flow 1:  
Average throughput: 177.77 Mbit/s  
95th percentile per-packet one-way delay: 50.359 ms  
Loss rate: 21.89%

Run 4: Report of Verus — Data Link



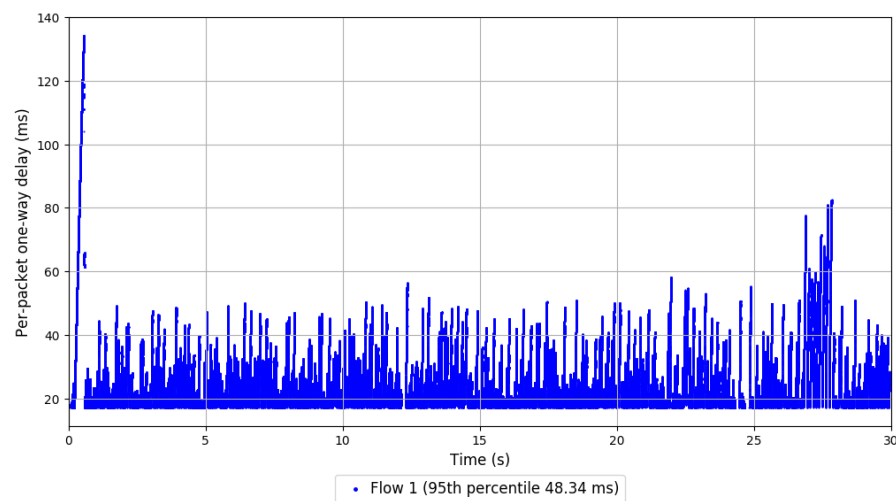
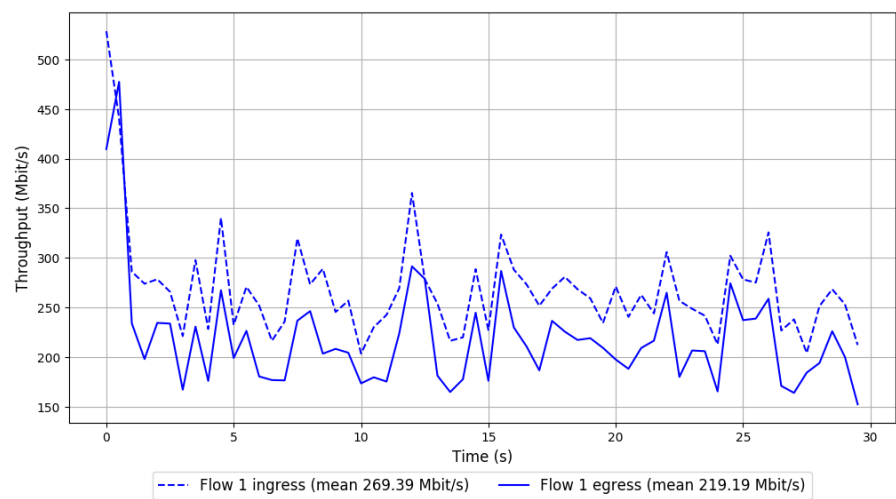
Run 5: Statistics of Verus

Start at: 2017-12-20 00:15:01  
End at: 2017-12-20 00:15:31  
Local clock offset: 1.032 ms  
Remote clock offset: -1.662 ms

# Below is generated by plot.py at 2017-12-20 04:28:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 219.19 Mbit/s  
95th percentile per-packet one-way delay: 48.335 ms  
Loss rate: 18.63%  
-- Flow 1:  
Average throughput: 219.19 Mbit/s  
95th percentile per-packet one-way delay: 48.335 ms  
Loss rate: 18.63%



Run 5: Report of Verus — Data Link

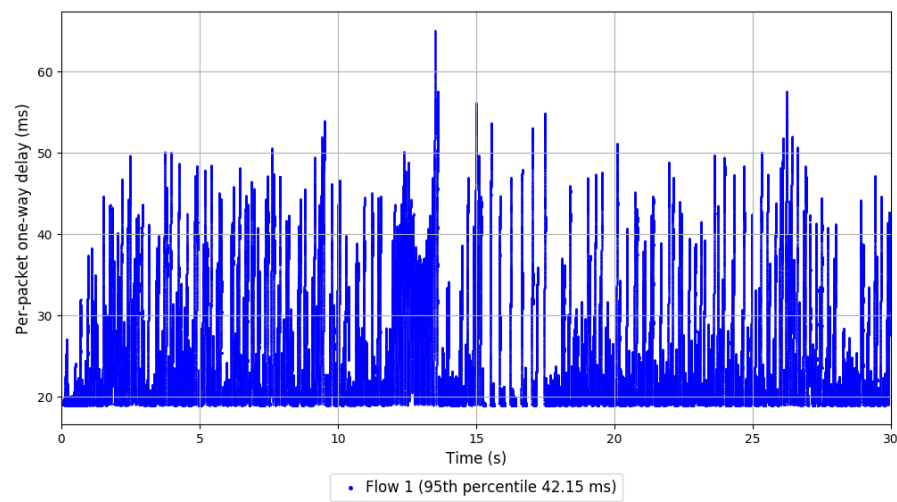
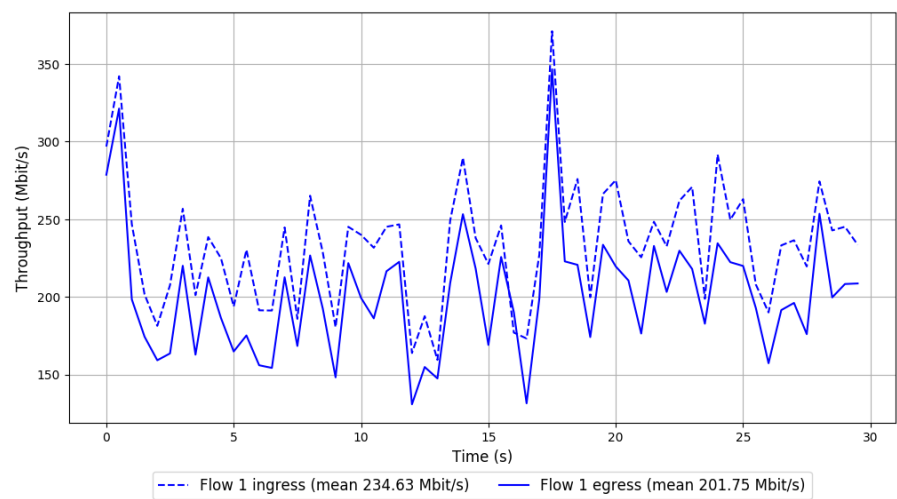


Run 6: Statistics of Verus

Start at: 2017-12-20 00:35:09  
End at: 2017-12-20 00:35:39  
Local clock offset: 0.977 ms  
Remote clock offset: -1.683 ms

# Below is generated by plot.py at 2017-12-20 04:28:33  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 201.75 Mbit/s  
95th percentile per-packet one-way delay: 42.150 ms  
Loss rate: 13.99%  
-- Flow 1:  
Average throughput: 201.75 Mbit/s  
95th percentile per-packet one-way delay: 42.150 ms  
Loss rate: 13.99%

Run 6: Report of Verus — Data Link

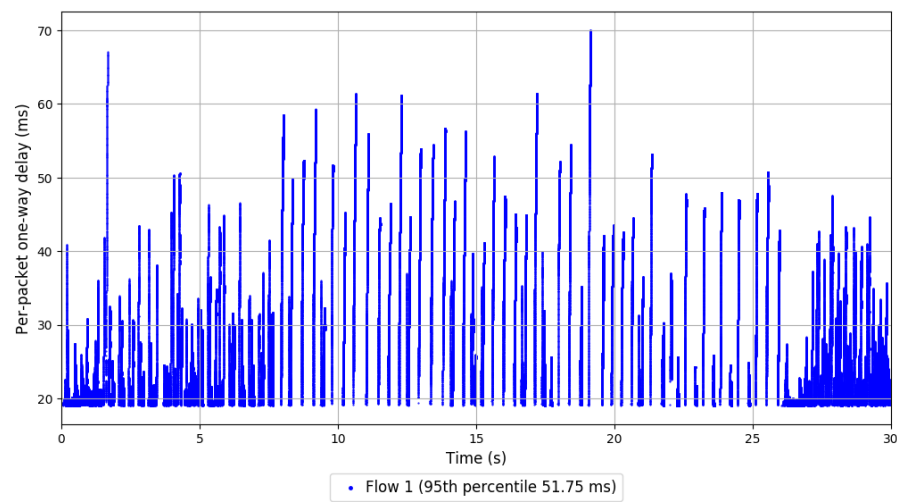
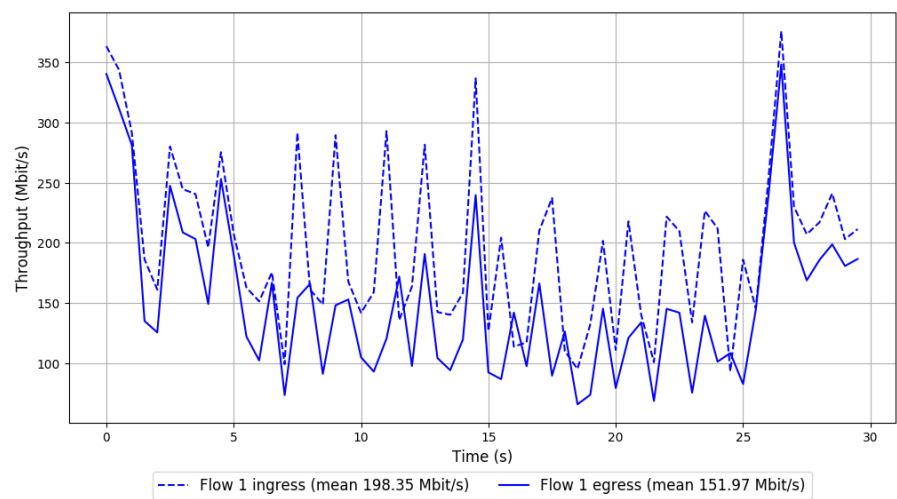


Run 7: Statistics of Verus

Start at: 2017-12-20 00:55:03  
End at: 2017-12-20 00:55:33  
Local clock offset: 1.053 ms  
Remote clock offset: -1.749 ms

# Below is generated by plot.py at 2017-12-20 04:28:33  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 151.97 Mbit/s  
95th percentile per-packet one-way delay: 51.754 ms  
Loss rate: 23.38%  
-- Flow 1:  
Average throughput: 151.97 Mbit/s  
95th percentile per-packet one-way delay: 51.754 ms  
Loss rate: 23.38%

Run 7: Report of Verus — Data Link

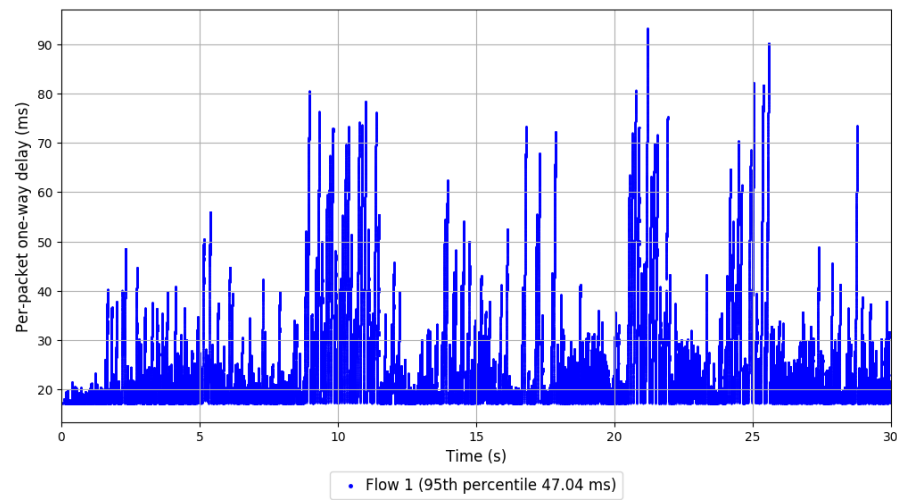
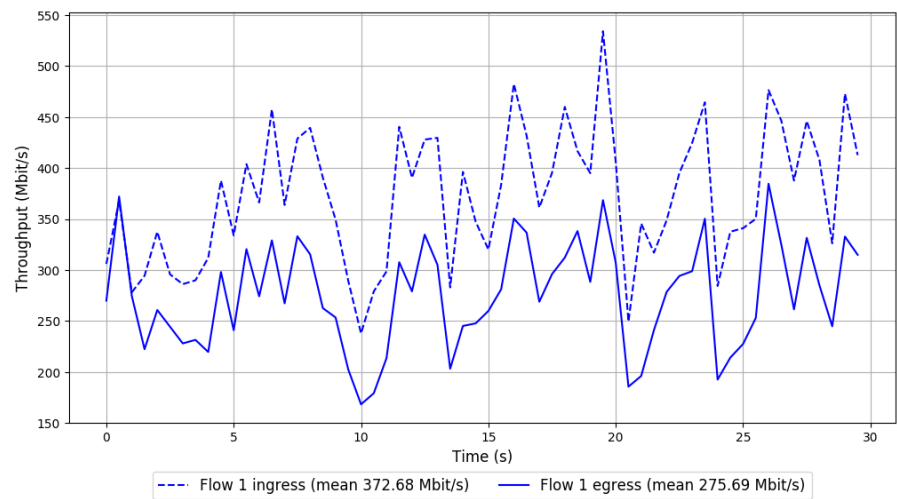


Run 8: Statistics of Verus

Start at: 2017-12-20 01:15:05  
End at: 2017-12-20 01:15:35  
Local clock offset: 1.231 ms  
Remote clock offset: -2.146 ms

# Below is generated by plot.py at 2017-12-20 04:29:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 275.69 Mbit/s  
95th percentile per-packet one-way delay: 47.038 ms  
Loss rate: 26.02%  
-- Flow 1:  
Average throughput: 275.69 Mbit/s  
95th percentile per-packet one-way delay: 47.038 ms  
Loss rate: 26.02%

Run 8: Report of Verus — Data Link



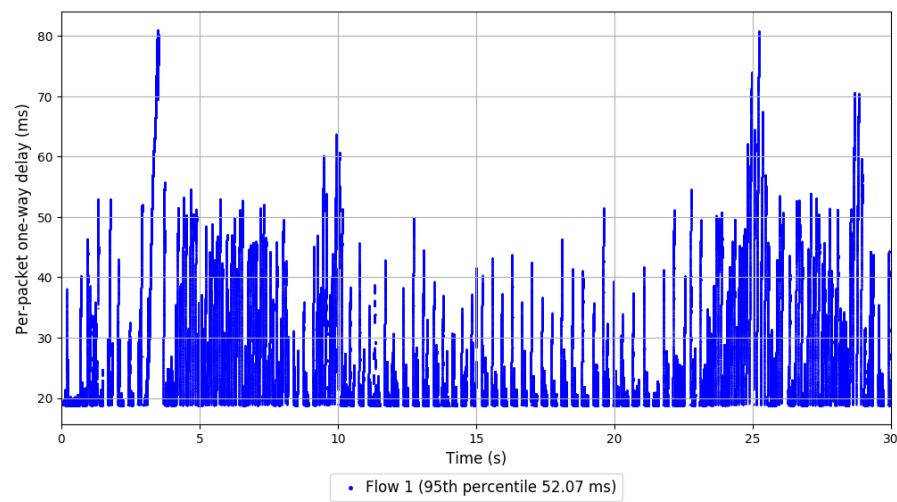
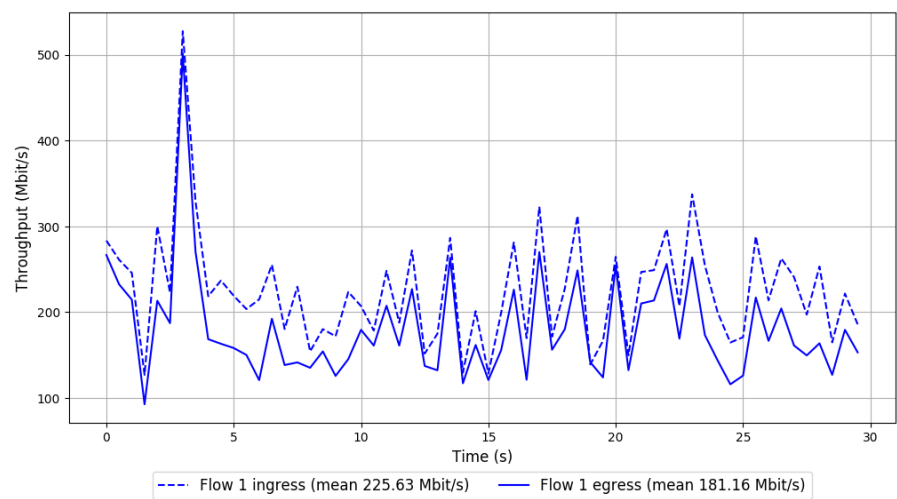
Run 9: Statistics of Verus

Start at: 2017-12-20 01:35:23  
End at: 2017-12-20 01:35:54  
Local clock offset: 1.374 ms  
Remote clock offset: -1.931 ms

# Below is generated by plot.py at 2017-12-20 04:29:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 181.16 Mbit/s  
95th percentile per-packet one-way delay: 52.074 ms  
Loss rate: 19.71%  
-- Flow 1:  
Average throughput: 181.16 Mbit/s  
95th percentile per-packet one-way delay: 52.074 ms  
Loss rate: 19.71%



Run 9: Report of Verus — Data Link



Run 10: Statistics of Verus

Start at: 2017-12-20 01:55:33

End at: 2017-12-20 01:56:03

Local clock offset: 1.182 ms

Remote clock offset: -1.54 ms

# Below is generated by plot.py at 2017-12-20 04:29:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 182.23 Mbit/s

95th percentile per-packet one-way delay: 56.301 ms

Loss rate: 31.67%

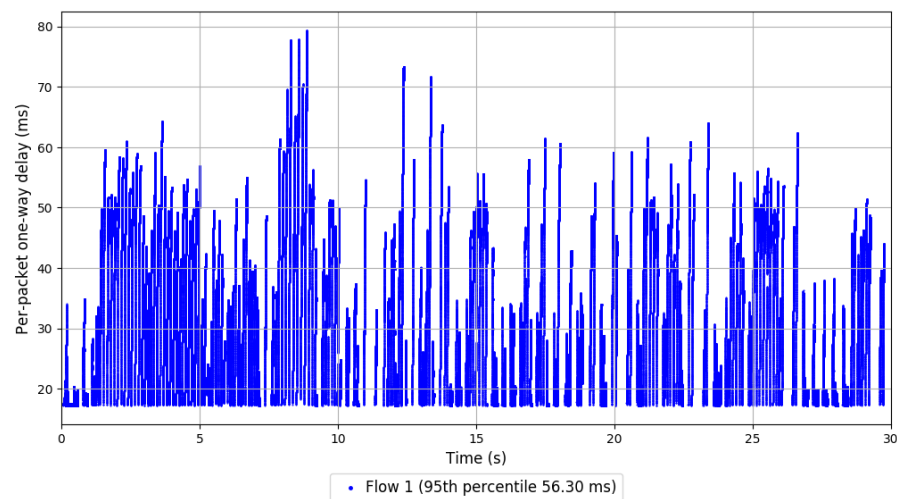
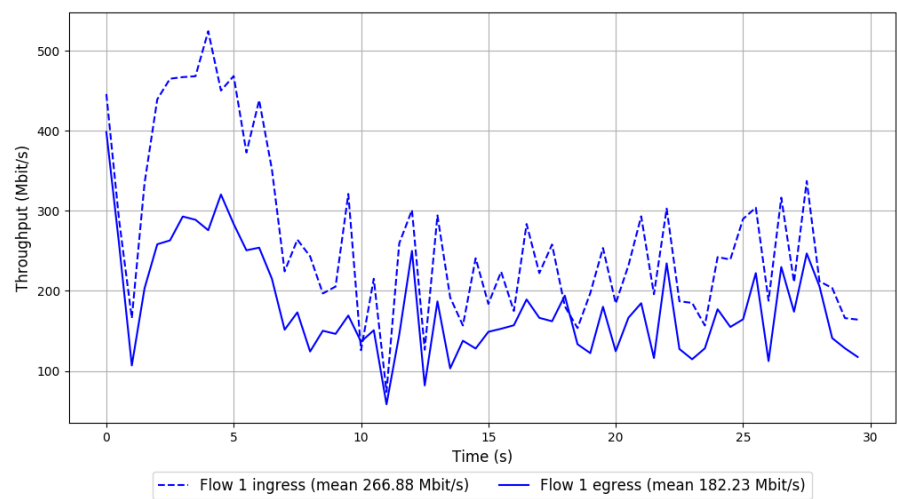
-- Flow 1:

Average throughput: 182.23 Mbit/s

95th percentile per-packet one-way delay: 56.301 ms

Loss rate: 31.67%

Run 10: Report of Verus — Data Link

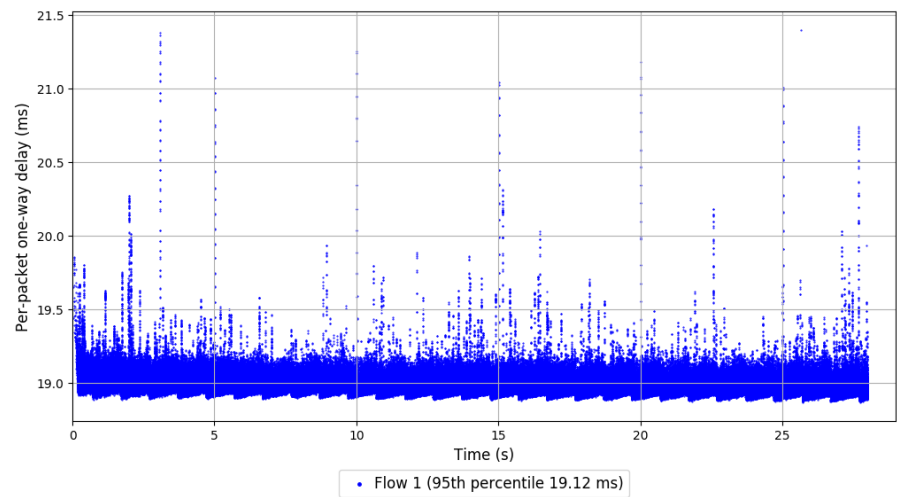
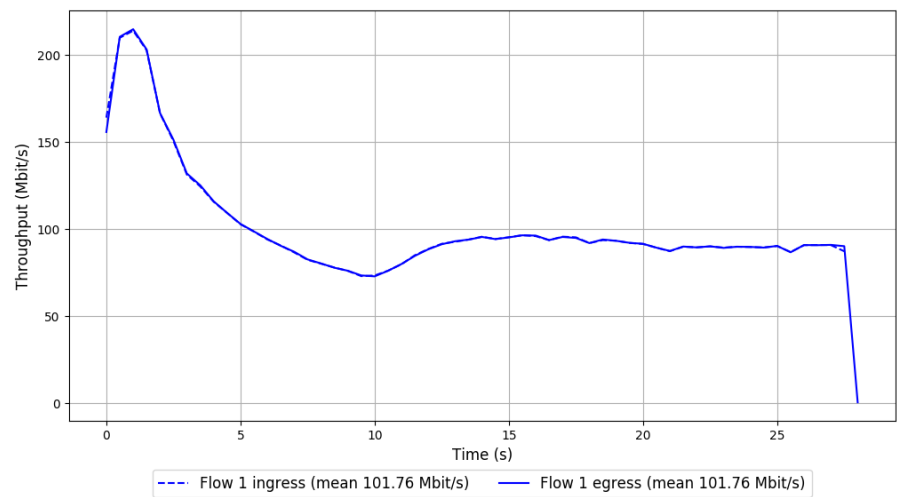


Run 1: Statistics of Copa

Start at: 2017-12-19 22:50:47  
End at: 2017-12-19 22:51:17  
Local clock offset: 1.179 ms  
Remote clock offset: -0.652 ms

# Below is generated by plot.py at 2017-12-20 04:29:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 101.76 Mbit/s  
95th percentile per-packet one-way delay: 19.118 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 101.76 Mbit/s  
95th percentile per-packet one-way delay: 19.118 ms  
Loss rate: 0.00%

Run 1: Report of Copa — Data Link

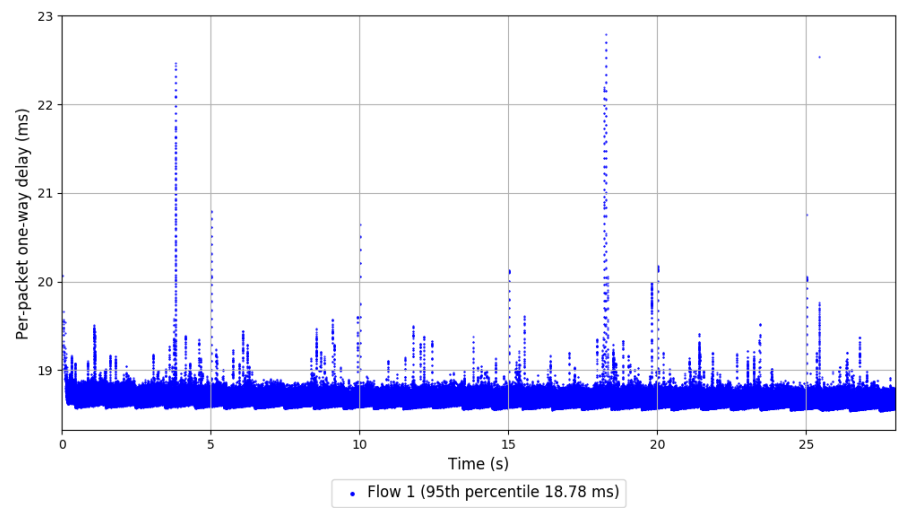
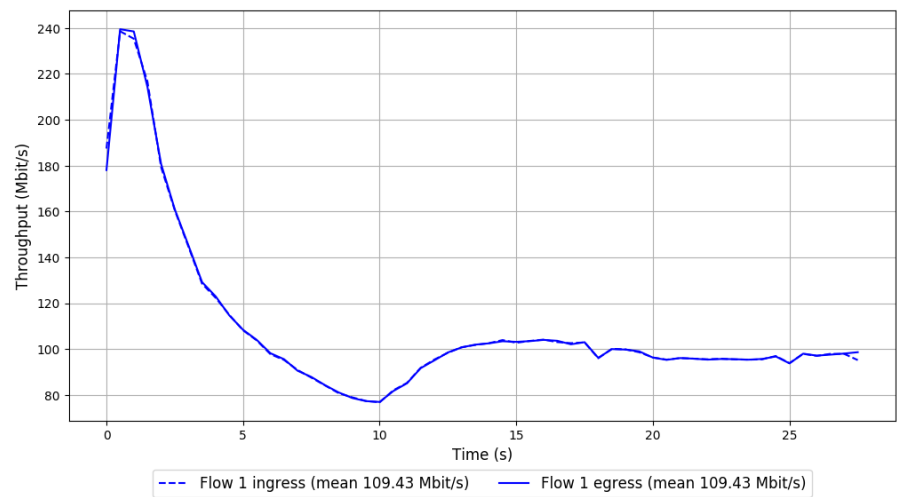


Run 2: Statistics of Copa

Start at: 2017-12-19 23:10:59  
End at: 2017-12-19 23:11:29  
Local clock offset: 0.82 ms  
Remote clock offset: -0.836 ms

# Below is generated by plot.py at 2017-12-20 04:29:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 109.43 Mbit/s  
95th percentile per-packet one-way delay: 18.781 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 109.43 Mbit/s  
95th percentile per-packet one-way delay: 18.781 ms  
Loss rate: 0.01%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2017-12-19 23:31:13

End at: 2017-12-19 23:31:43

Local clock offset: 0.303 ms

Remote clock offset: -1.08 ms

# Below is generated by plot.py at 2017-12-20 04:30:30

# Datalink statistics

-- Total of 1 flow:

Average throughput: 104.50 Mbit/s

95th percentile per-packet one-way delay: 19.175 ms

Loss rate: 0.00%

-- Flow 1:

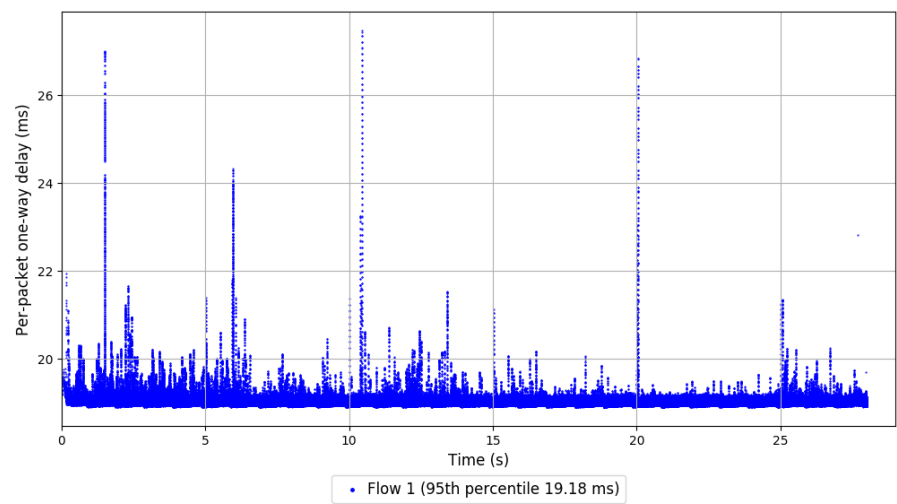
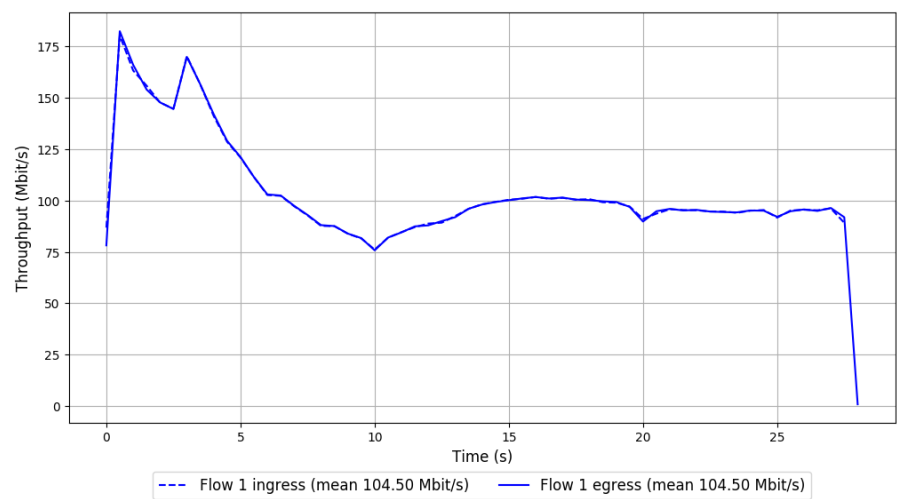
Average throughput: 104.50 Mbit/s

95th percentile per-packet one-way delay: 19.175 ms

Loss rate: 0.00%



Run 3: Report of Copa — Data Link

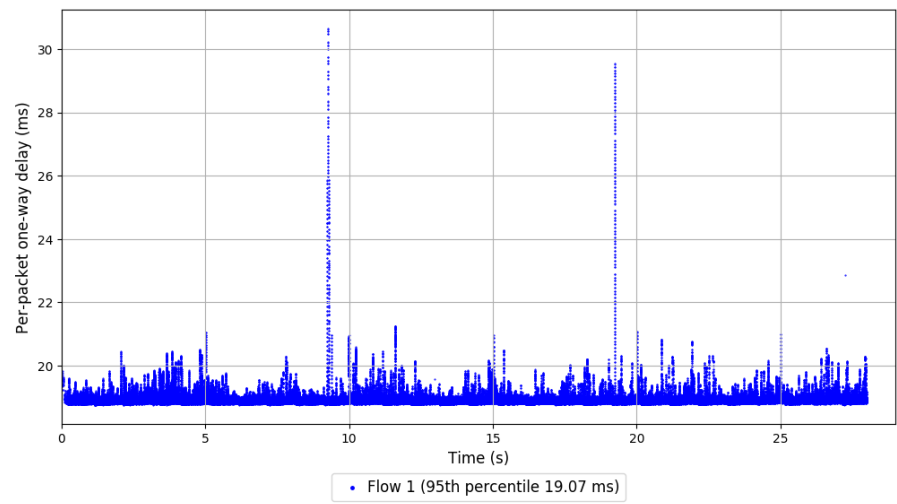
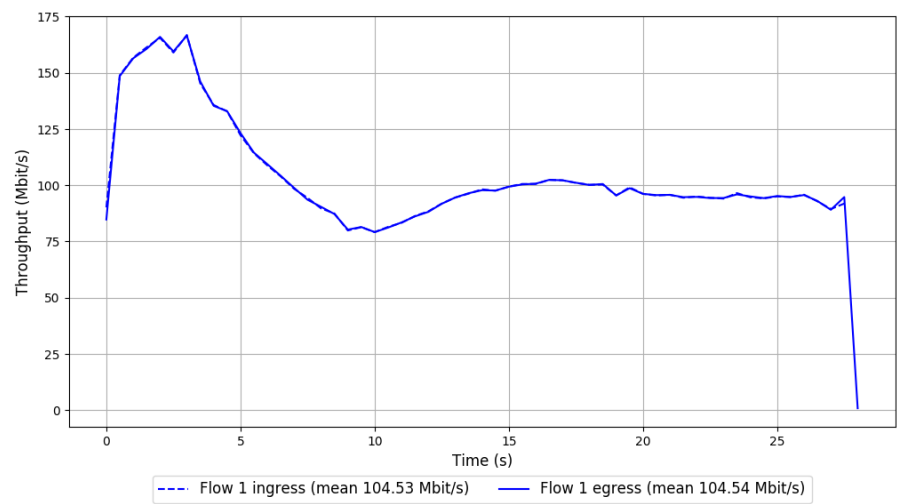


Run 4: Statistics of Copa

Start at: 2017-12-19 23:51:14  
End at: 2017-12-19 23:51:44  
Local clock offset: 0.539 ms  
Remote clock offset: -1.386 ms

# Below is generated by plot.py at 2017-12-20 04:30:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 104.54 Mbit/s  
95th percentile per-packet one-way delay: 19.070 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 104.54 Mbit/s  
95th percentile per-packet one-way delay: 19.070 ms  
Loss rate: 0.00%

Run 4: Report of Copa — Data Link

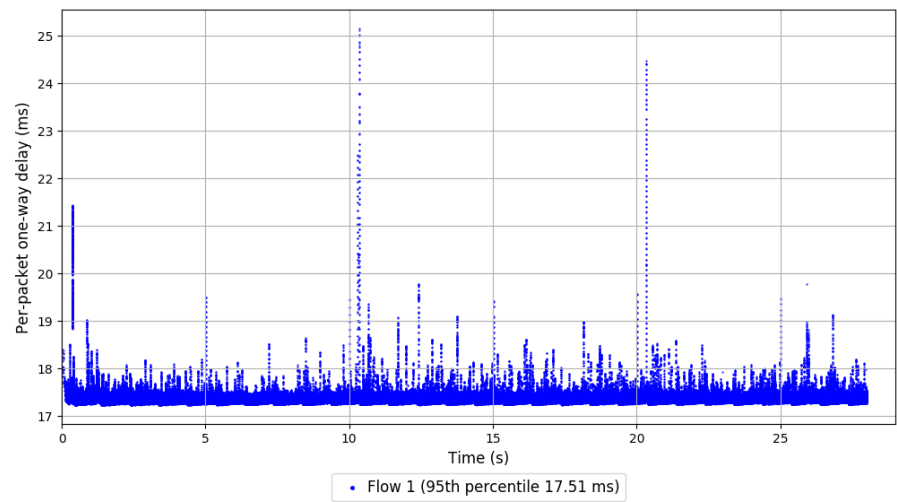
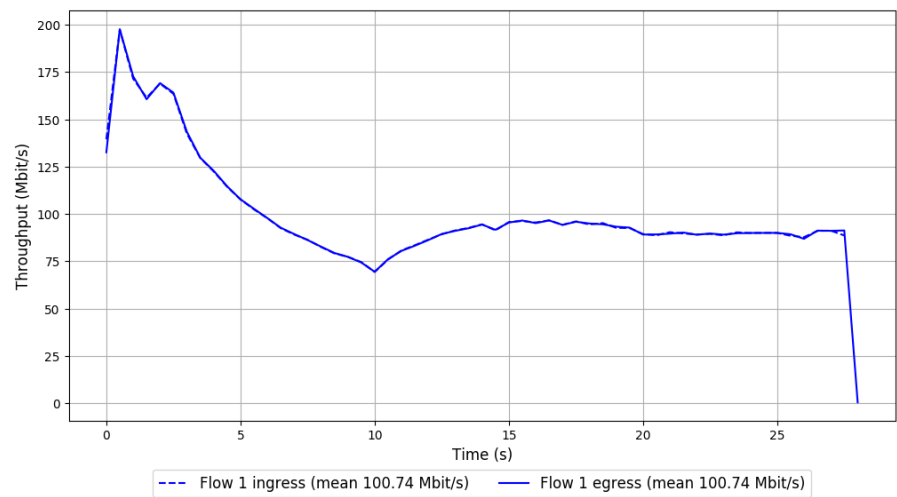


Run 5: Statistics of Copa

Start at: 2017-12-20 00:11:13  
End at: 2017-12-20 00:11:43  
Local clock offset: 0.849 ms  
Remote clock offset: -1.642 ms

# Below is generated by plot.py at 2017-12-20 04:31:09  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 100.74 Mbit/s  
95th percentile per-packet one-way delay: 17.508 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 100.74 Mbit/s  
95th percentile per-packet one-way delay: 17.508 ms  
Loss rate: 0.00%

Run 5: Report of Copa — Data Link

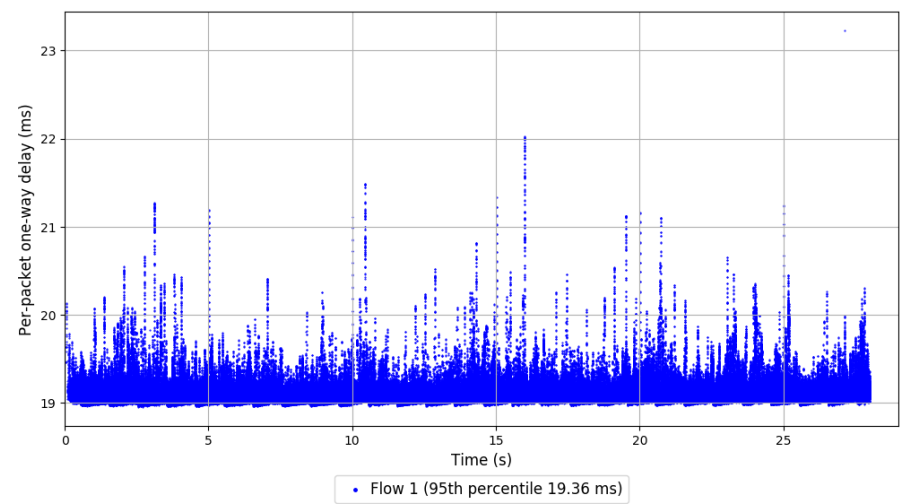
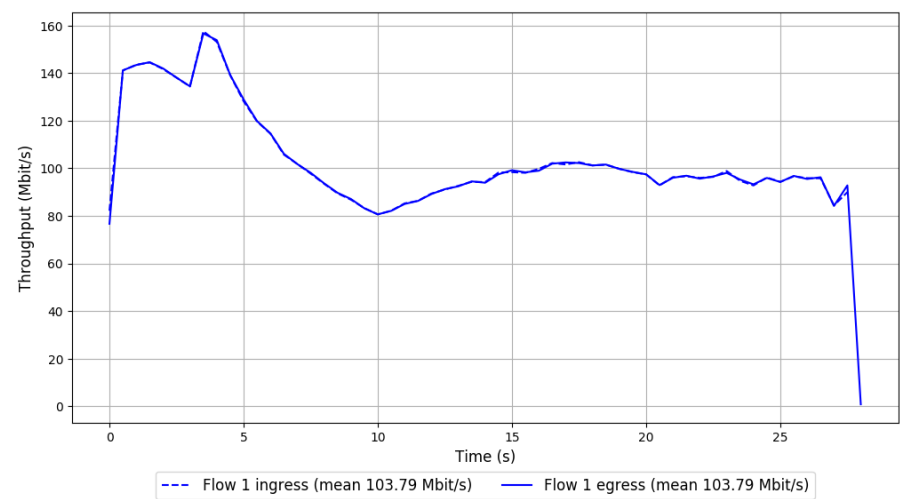


Run 6: Statistics of Copa

Start at: 2017-12-20 00:31:23  
End at: 2017-12-20 00:31:54  
Local clock offset: 0.801 ms  
Remote clock offset: -1.607 ms

# Below is generated by plot.py at 2017-12-20 04:31:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 103.79 Mbit/s  
95th percentile per-packet one-way delay: 19.362 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 103.79 Mbit/s  
95th percentile per-packet one-way delay: 19.362 ms  
Loss rate: 0.00%

Run 6: Report of Copa — Data Link



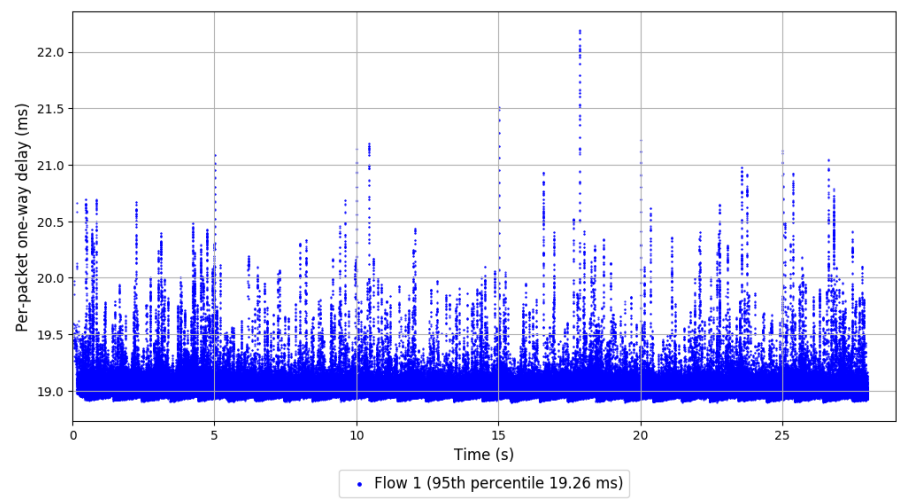
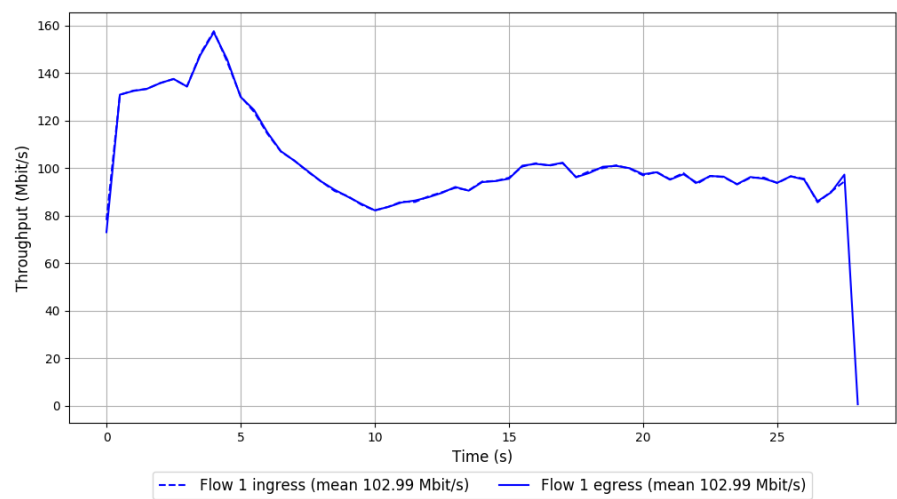
Run 7: Statistics of Copa

Start at: 2017-12-20 00:51:18  
End at: 2017-12-20 00:51:48  
Local clock offset: 1.145 ms  
Remote clock offset: -1.721 ms

# Below is generated by plot.py at 2017-12-20 04:31:33  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 102.99 Mbit/s  
95th percentile per-packet one-way delay: 19.258 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 102.99 Mbit/s  
95th percentile per-packet one-way delay: 19.258 ms  
Loss rate: 0.01%



Run 7: Report of Copa — Data Link

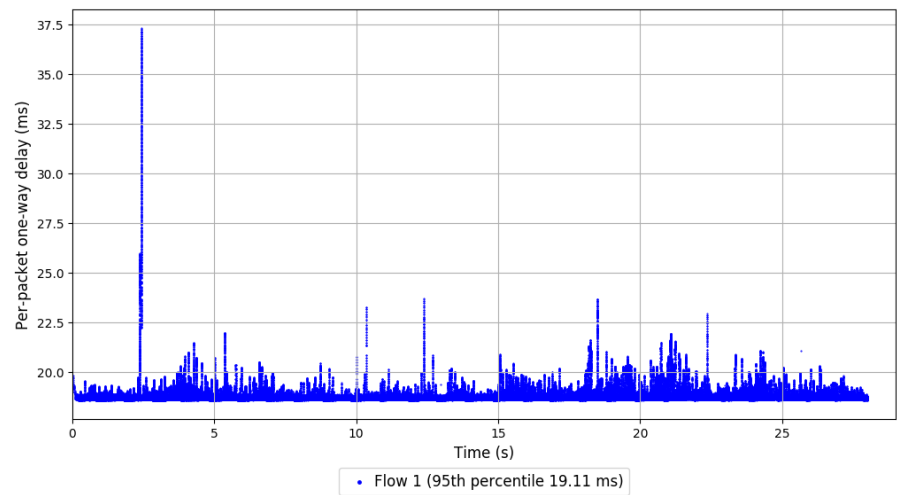
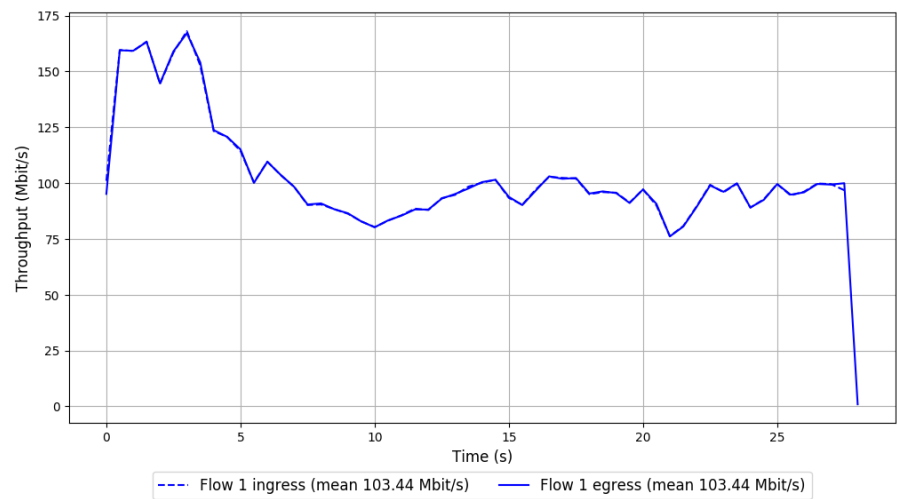


Run 8: Statistics of Copa

Start at: 2017-12-20 01:11:15  
End at: 2017-12-20 01:11:45  
Local clock offset: 1.205 ms  
Remote clock offset: -2.075 ms

# Below is generated by plot.py at 2017-12-20 04:31:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 103.44 Mbit/s  
95th percentile per-packet one-way delay: 19.107 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 103.44 Mbit/s  
95th percentile per-packet one-way delay: 19.107 ms  
Loss rate: 0.00%

Run 8: Report of Copa — Data Link

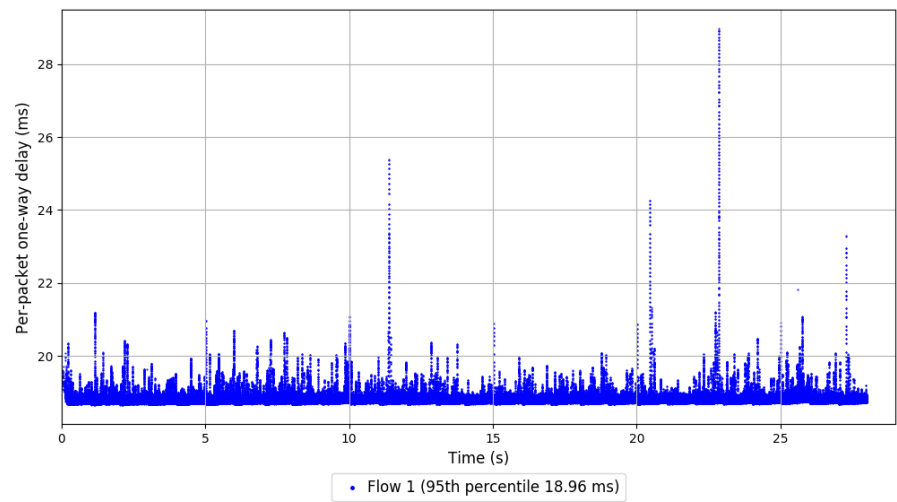
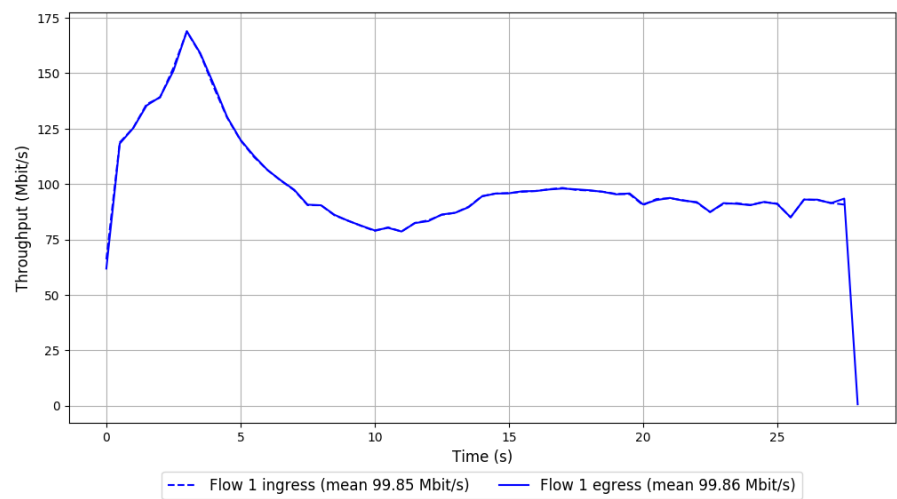


Run 9: Statistics of Copa

Start at: 2017-12-20 01:31:36  
End at: 2017-12-20 01:32:06  
Local clock offset: 1.37 ms  
Remote clock offset: -2.058 ms

# Below is generated by plot.py at 2017-12-20 04:31:43  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 99.86 Mbit/s  
95th percentile per-packet one-way delay: 18.960 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 99.86 Mbit/s  
95th percentile per-packet one-way delay: 18.960 ms  
Loss rate: 0.00%

Run 9: Report of Copa — Data Link



Run 10: Statistics of Copa

Start at: 2017-12-20 01:51:45

End at: 2017-12-20 01:52:15

Local clock offset: 1.146 ms

Remote clock offset: -1.66 ms

# Below is generated by plot.py at 2017-12-20 04:32:30

# Datalink statistics

-- Total of 1 flow:

Average throughput: 105.47 Mbit/s

95th percentile per-packet one-way delay: 17.587 ms

Loss rate: 0.01%

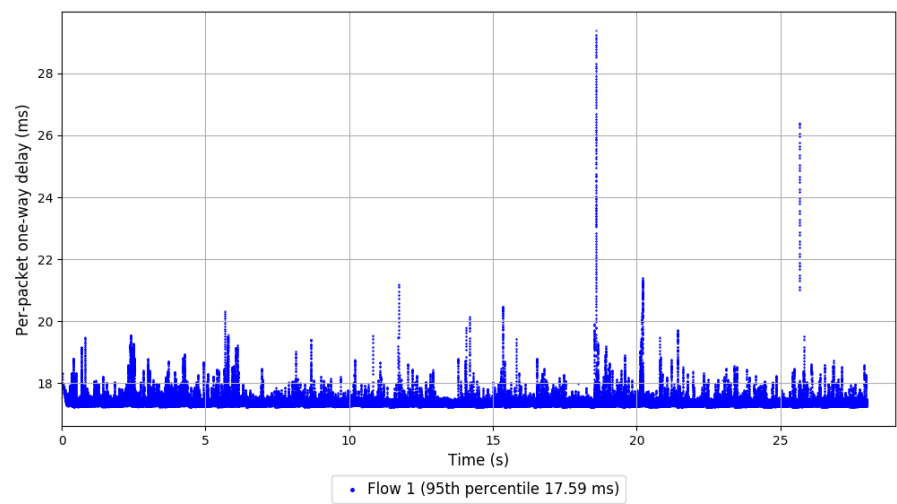
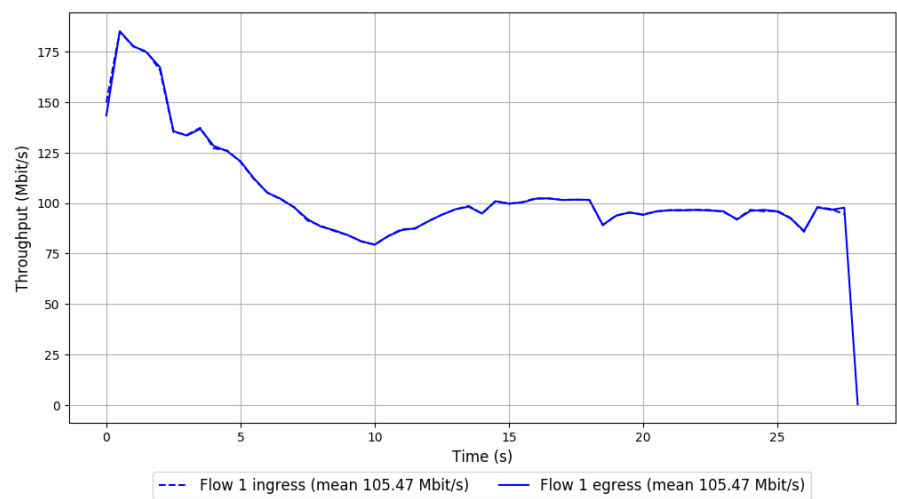
-- Flow 1:

Average throughput: 105.47 Mbit/s

95th percentile per-packet one-way delay: 17.587 ms

Loss rate: 0.01%

Run 10: Report of Copa — Data Link



Run 1: Statistics of FillP

Start at: 2017-12-19 22:47:54

End at: 2017-12-19 22:48:24

Local clock offset: 1.083 ms

Remote clock offset: -0.671 ms

# Below is generated by plot.py at 2017-12-20 04:45:32

# Datalink statistics

-- Total of 1 flow:

Average throughput: 946.65 Mbit/s

95th percentile per-packet one-way delay: 55.087 ms

Loss rate: 4.50%

-- Flow 1:

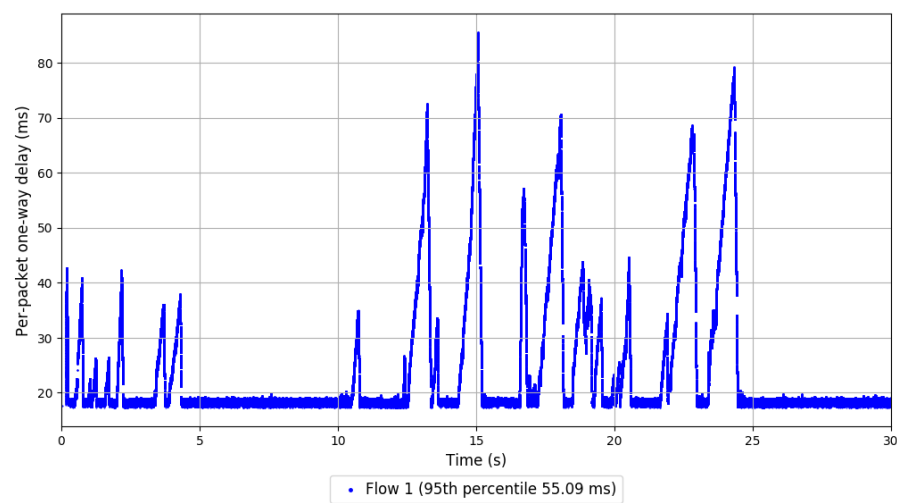
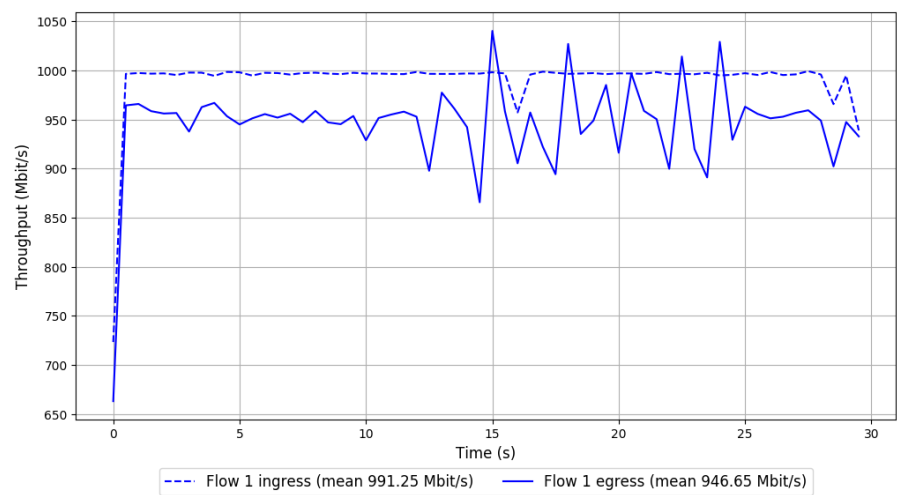
Average throughput: 946.65 Mbit/s

95th percentile per-packet one-way delay: 55.087 ms

Loss rate: 4.50%



Run 1: Report of FillP — Data Link

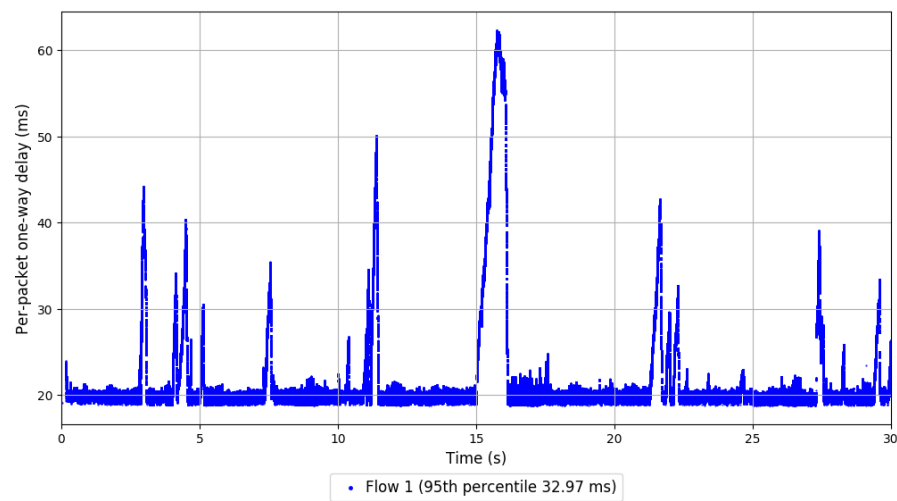
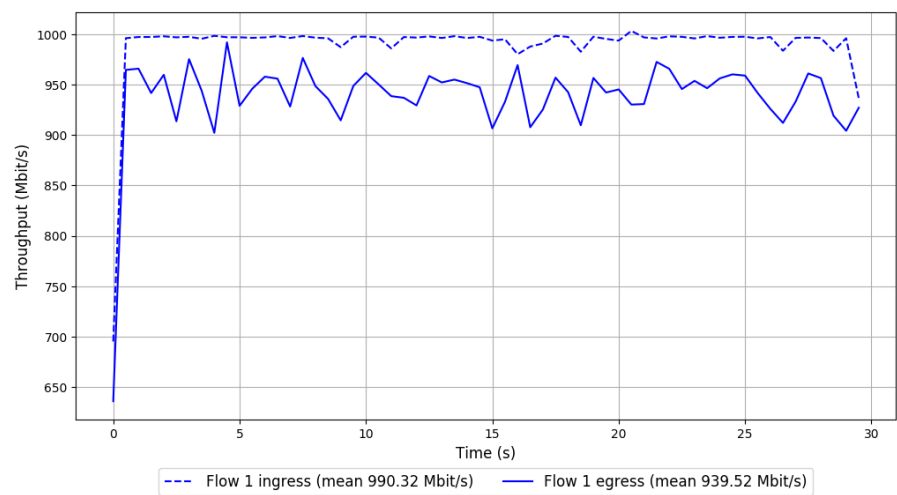


Run 2: Statistics of FillP

Start at: 2017-12-19 23:08:08  
End at: 2017-12-19 23:08:38  
Local clock offset: 1.08 ms  
Remote clock offset: -0.849 ms

# Below is generated by plot.py at 2017-12-20 04:45:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 939.52 Mbit/s  
95th percentile per-packet one-way delay: 32.972 ms  
Loss rate: 5.13%  
-- Flow 1:  
Average throughput: 939.52 Mbit/s  
95th percentile per-packet one-way delay: 32.972 ms  
Loss rate: 5.13%

Run 2: Report of FillP — Data Link

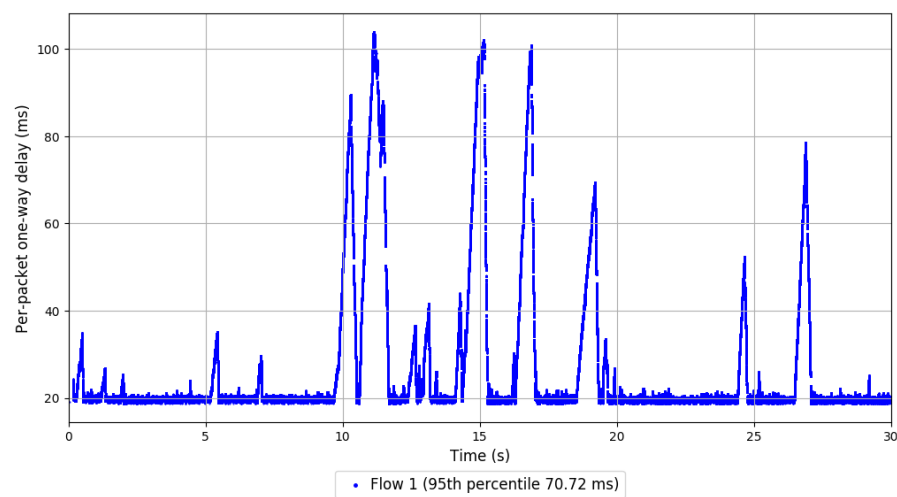
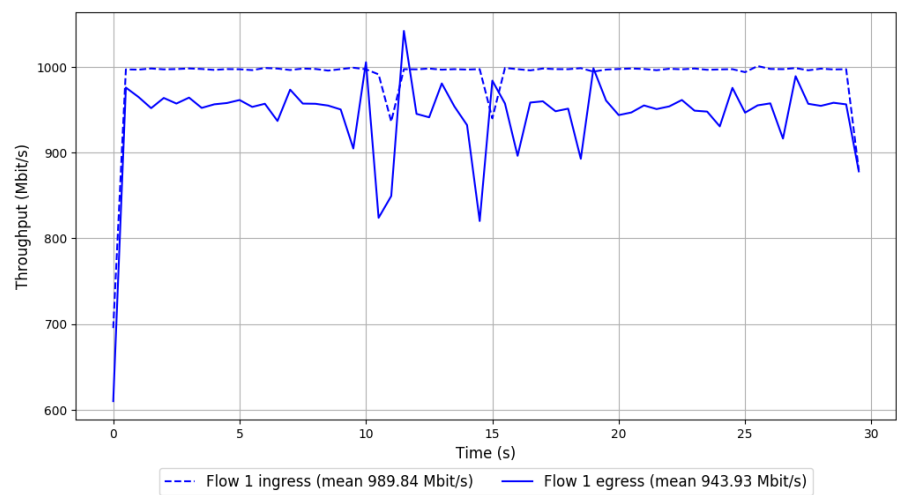


Run 3: Statistics of FillP

Start at: 2017-12-19 23:28:21  
End at: 2017-12-19 23:28:51  
Local clock offset: 0.384 ms  
Remote clock offset: -1.026 ms

# Below is generated by plot.py at 2017-12-20 04:45:58  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 943.93 Mbit/s  
95th percentile per-packet one-way delay: 70.718 ms  
Loss rate: 4.64%  
-- Flow 1:  
Average throughput: 943.93 Mbit/s  
95th percentile per-packet one-way delay: 70.718 ms  
Loss rate: 4.64%

Run 3: Report of FillP — Data Link

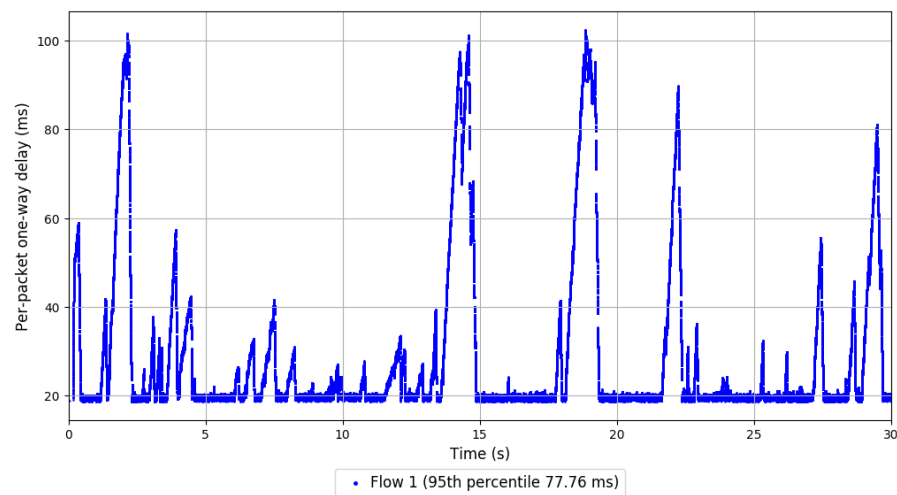
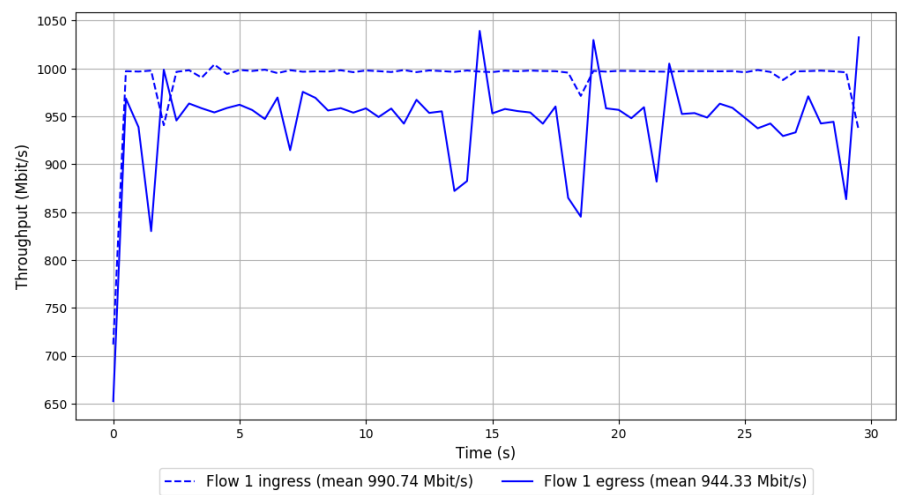


Run 4: Statistics of FillP

Start at: 2017-12-19 23:48:22  
End at: 2017-12-19 23:48:52  
Local clock offset: 0.564 ms  
Remote clock offset: -1.389 ms

# Below is generated by plot.py at 2017-12-20 04:46:04  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 944.33 Mbit/s  
95th percentile per-packet one-way delay: 77.756 ms  
Loss rate: 4.68%  
-- Flow 1:  
Average throughput: 944.33 Mbit/s  
95th percentile per-packet one-way delay: 77.756 ms  
Loss rate: 4.68%

Run 4: Report of FillP — Data Link



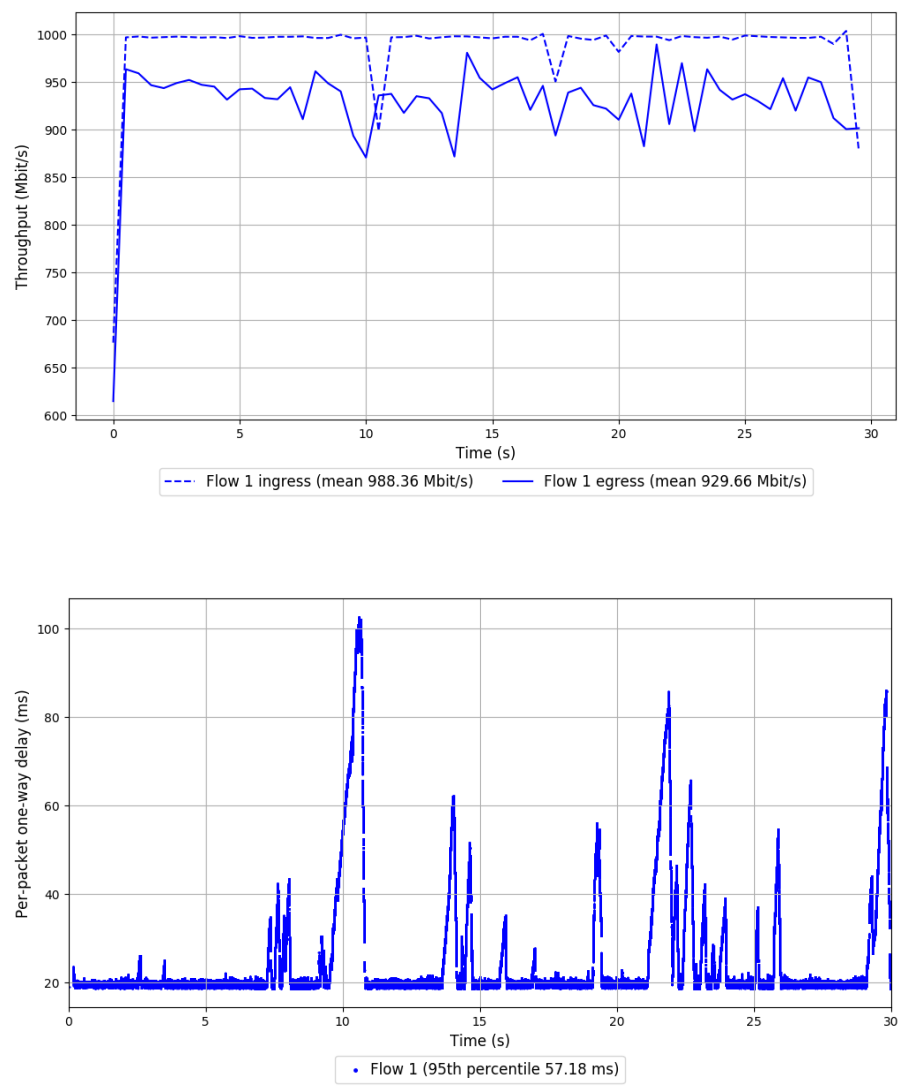
Run 5: Statistics of FillP

Start at: 2017-12-20 00:08:21  
End at: 2017-12-20 00:08:51  
Local clock offset: 0.797 ms  
Remote clock offset: -1.629 ms

# Below is generated by plot.py at 2017-12-20 04:46:14  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 929.66 Mbit/s  
95th percentile per-packet one-way delay: 57.179 ms  
Loss rate: 5.94%  
-- Flow 1:  
Average throughput: 929.66 Mbit/s  
95th percentile per-packet one-way delay: 57.179 ms  
Loss rate: 5.94%



Run 5: Report of FillP — Data Link

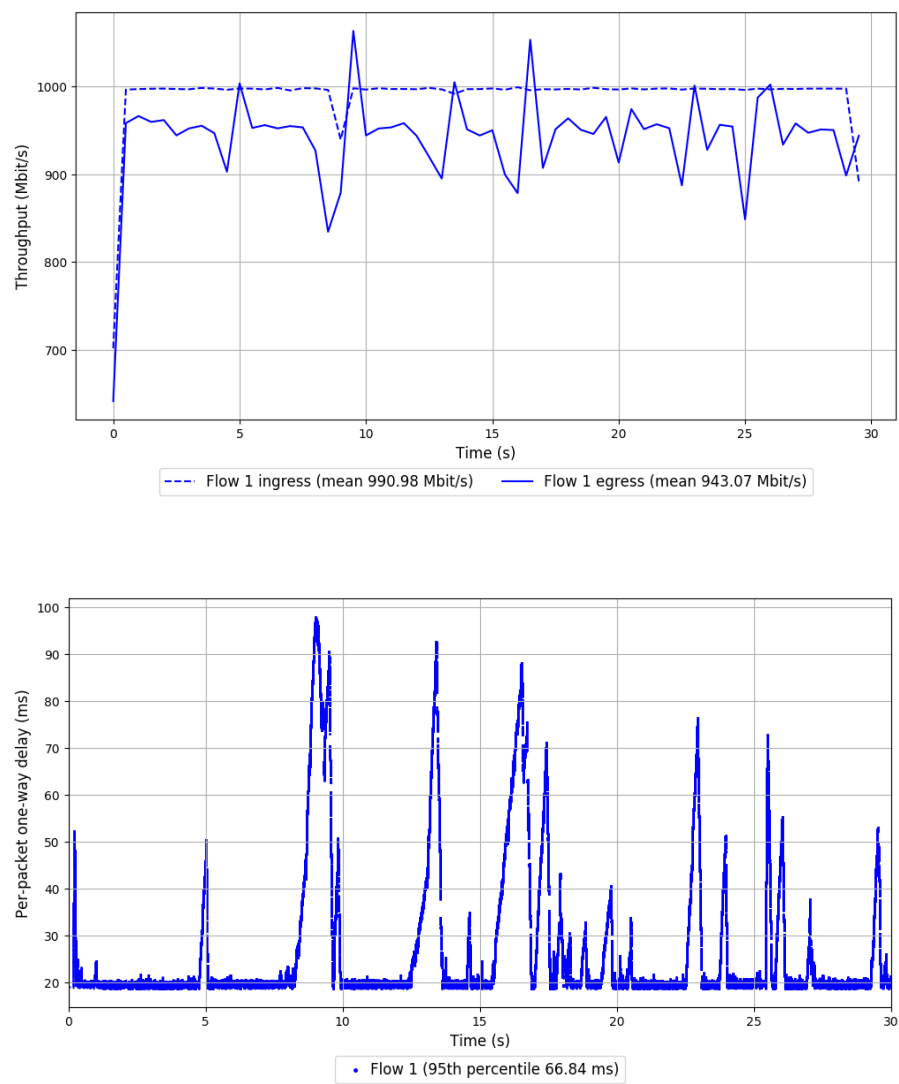


Run 6: Statistics of FillP

Start at: 2017-12-20 00:28:32  
End at: 2017-12-20 00:29:02  
Local clock offset: 0.909 ms  
Remote clock offset: -1.603 ms

# Below is generated by plot.py at 2017-12-20 04:46:26  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 943.07 Mbit/s  
95th percentile per-packet one-way delay: 66.841 ms  
Loss rate: 4.83%  
-- Flow 1:  
Average throughput: 943.07 Mbit/s  
95th percentile per-packet one-way delay: 66.841 ms  
Loss rate: 4.83%

Run 6: Report of FillP — Data Link

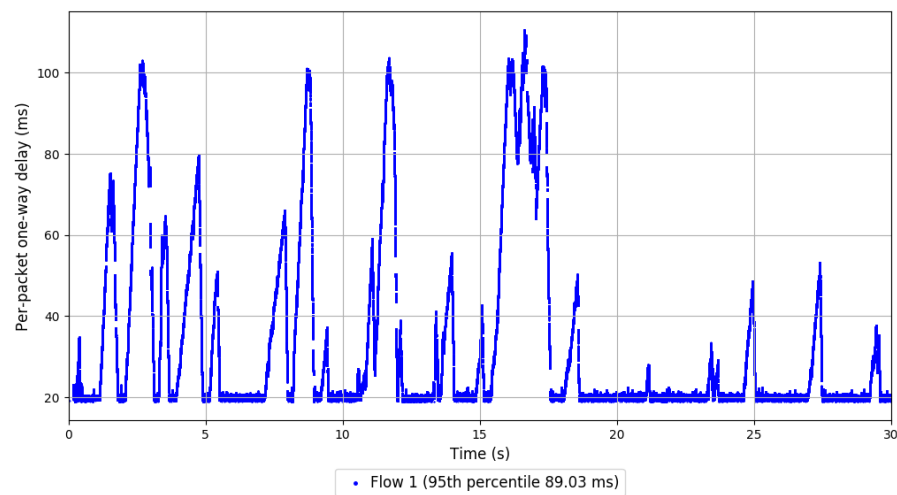
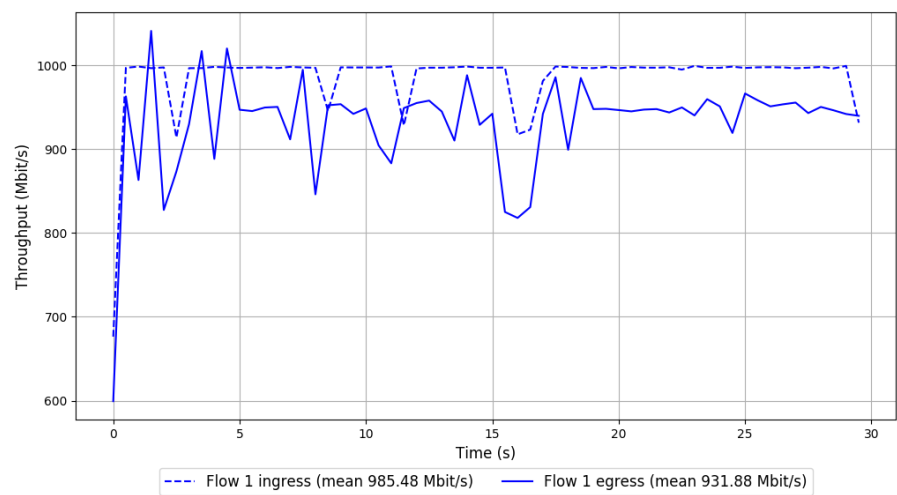


Run 7: Statistics of FillP

Start at: 2017-12-20 00:48:27  
End at: 2017-12-20 00:48:57  
Local clock offset: 1.05 ms  
Remote clock offset: -1.883 ms

# Below is generated by plot.py at 2017-12-20 04:46:26  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 931.88 Mbit/s  
95th percentile per-packet one-way delay: 89.033 ms  
Loss rate: 5.44%  
-- Flow 1:  
Average throughput: 931.88 Mbit/s  
95th percentile per-packet one-way delay: 89.033 ms  
Loss rate: 5.44%

Run 7: Report of FillP — Data Link

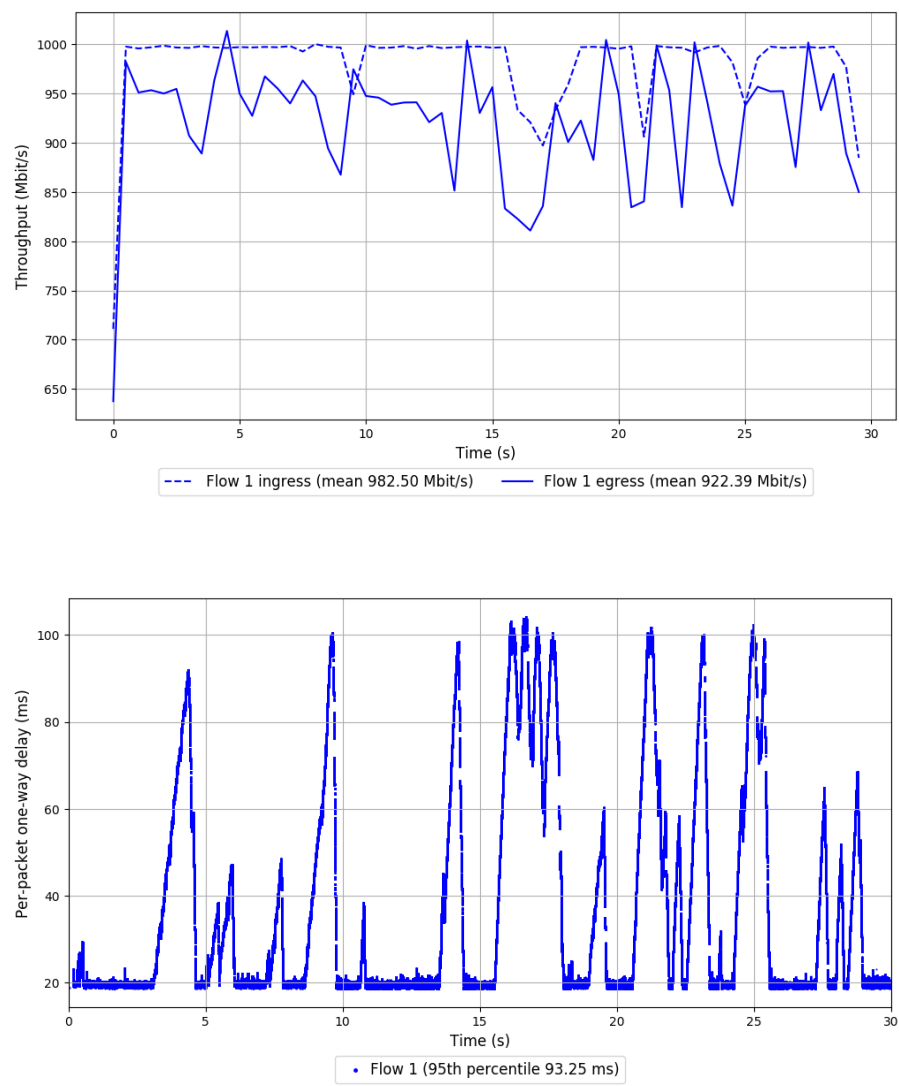


Run 8: Statistics of FillP

Start at: 2017-12-20 01:08:24  
End at: 2017-12-20 01:08:54  
Local clock offset: 1.16 ms  
Remote clock offset: -2.062 ms

# Below is generated by plot.py at 2017-12-20 04:47:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 922.39 Mbit/s  
95th percentile per-packet one-way delay: 93.247 ms  
Loss rate: 6.11%  
-- Flow 1:  
Average throughput: 922.39 Mbit/s  
95th percentile per-packet one-way delay: 93.247 ms  
Loss rate: 6.11%

Run 8: Report of FillP — Data Link



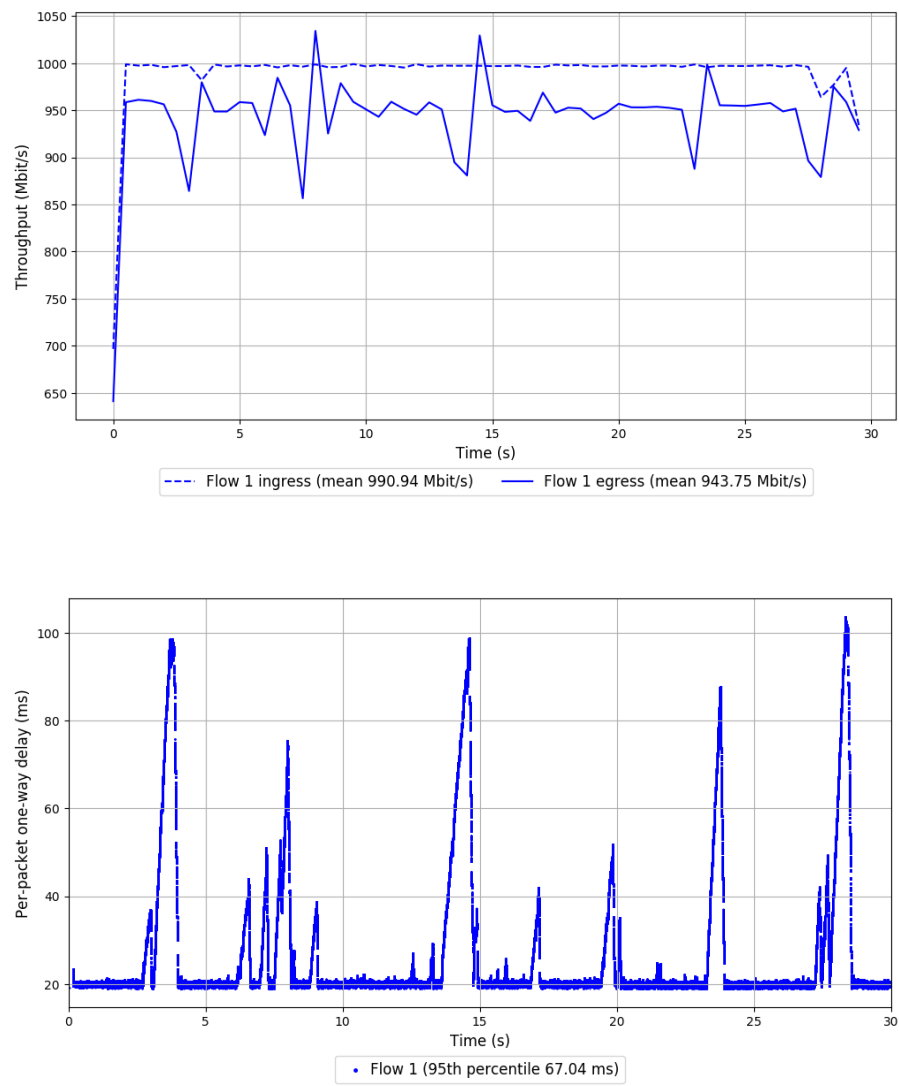
Run 9: Statistics of FillP

Start at: 2017-12-20 01:28:45  
End at: 2017-12-20 01:29:15  
Local clock offset: 1.397 ms  
Remote clock offset: -1.932 ms

# Below is generated by plot.py at 2017-12-20 04:52:26  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 943.75 Mbit/s  
95th percentile per-packet one-way delay: 67.038 ms  
Loss rate: 4.76%  
-- Flow 1:  
Average throughput: 943.75 Mbit/s  
95th percentile per-packet one-way delay: 67.038 ms  
Loss rate: 4.76%



Run 9: Report of FillP — Data Link



Run 10: Statistics of FillP

Start at: 2017-12-20 01:48:53

End at: 2017-12-20 01:49:23

Local clock offset: 1.184 ms

Remote clock offset: -1.709 ms

# Below is generated by plot.py at 2017-12-20 04:52:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 944.67 Mbit/s

95th percentile per-packet one-way delay: 59.480 ms

Loss rate: 4.70%

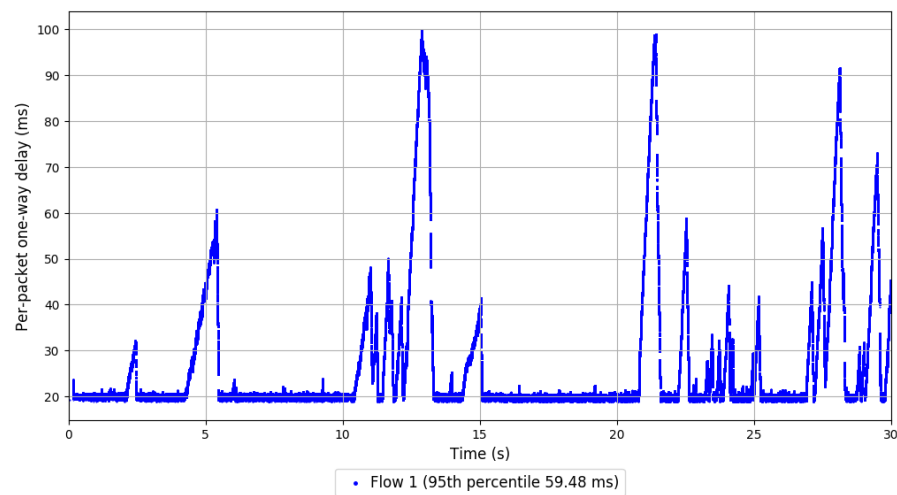
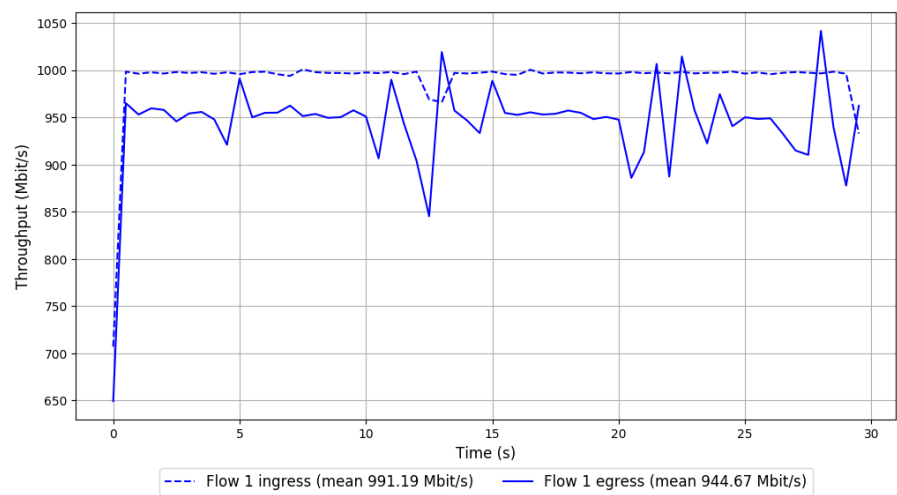
-- Flow 1:

Average throughput: 944.67 Mbit/s

95th percentile per-packet one-way delay: 59.480 ms

Loss rate: 4.70%

Run 10: Report of FillP — Data Link

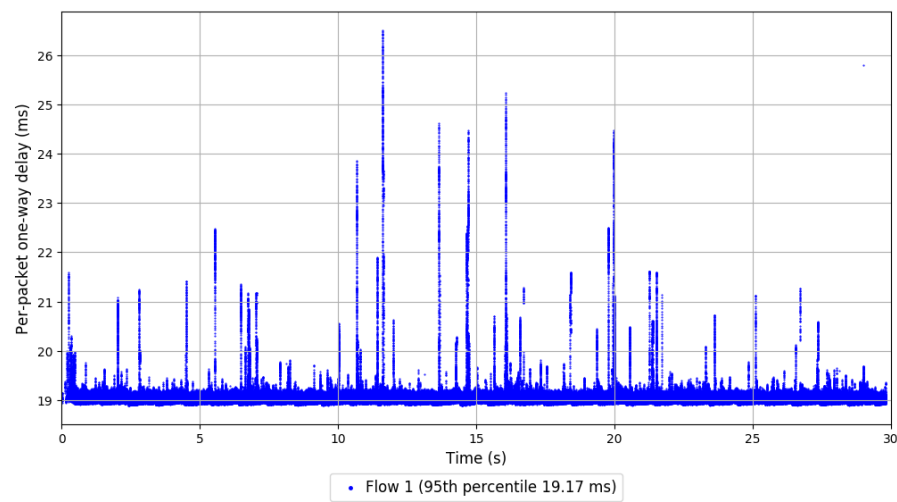
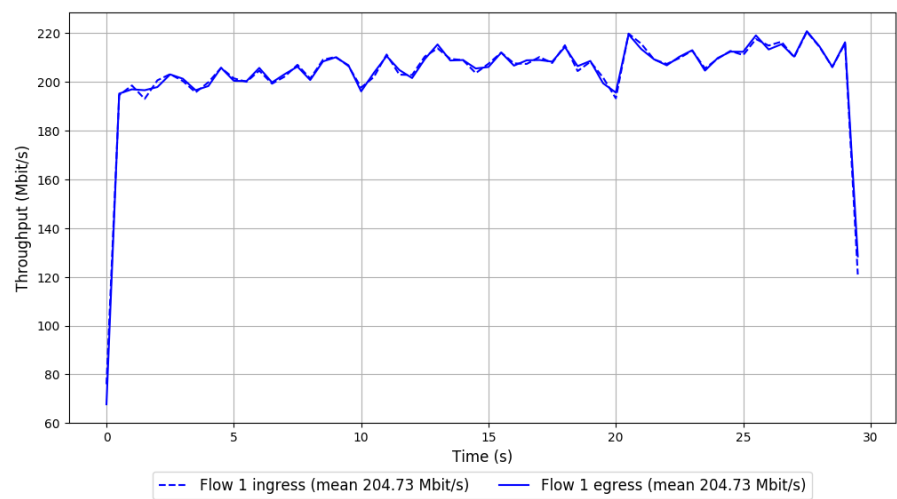


```
Run 1: Statistics of Indigo

Start at: 2017-12-19 22:45:18
End at: 2017-12-19 22:45:48
Local clock offset: 1.125 ms
Remote clock offset: -0.581 ms

# Below is generated by plot.py at 2017-12-20 04:52:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 204.73 Mbit/s
95th percentile per-packet one-way delay: 19.171 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 204.73 Mbit/s
95th percentile per-packet one-way delay: 19.171 ms
Loss rate: 0.00%
```

Run 1: Report of Indigo — Data Link

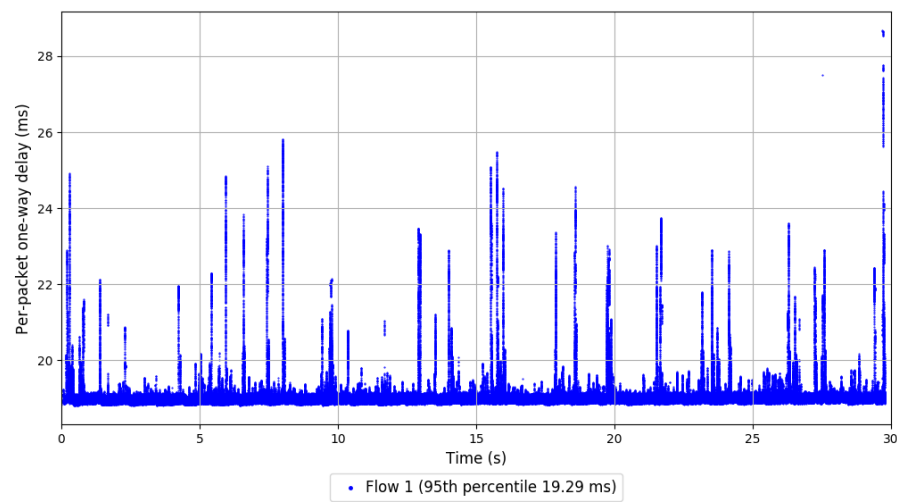
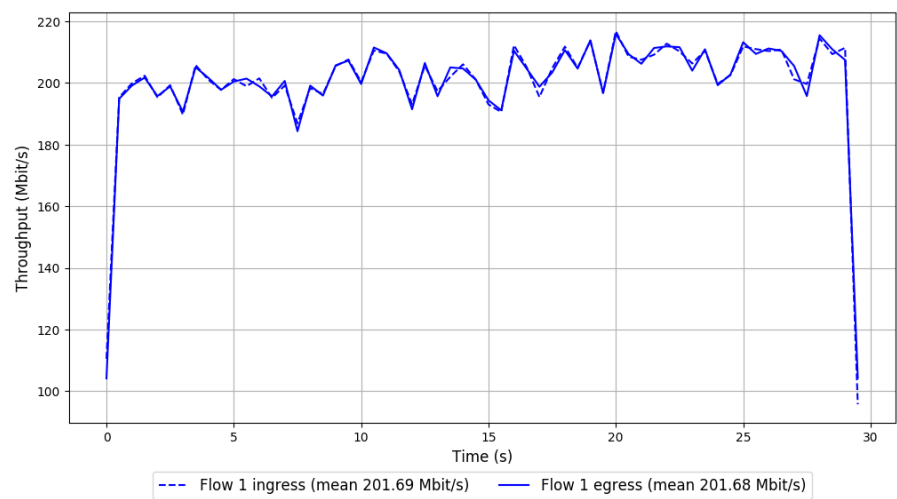


Run 2: Statistics of Indigo

Start at: 2017-12-19 23:05:30  
End at: 2017-12-19 23:06:00  
Local clock offset: 1.357 ms  
Remote clock offset: -0.772 ms

# Below is generated by plot.py at 2017-12-20 04:52:29  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 201.68 Mbit/s  
95th percentile per-packet one-way delay: 19.294 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 201.68 Mbit/s  
95th percentile per-packet one-way delay: 19.294 ms  
Loss rate: 0.01%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2017-12-19 23:25:42

End at: 2017-12-19 23:26:12

Local clock offset: 0.392 ms

Remote clock offset: -1.021 ms

# Below is generated by plot.py at 2017-12-20 04:52:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 200.96 Mbit/s

95th percentile per-packet one-way delay: 19.152 ms

Loss rate: 0.00%

-- Flow 1:

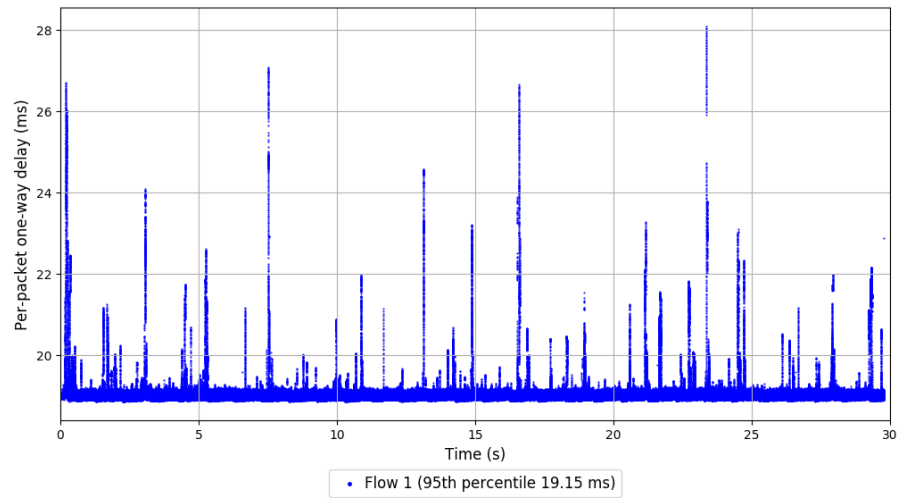
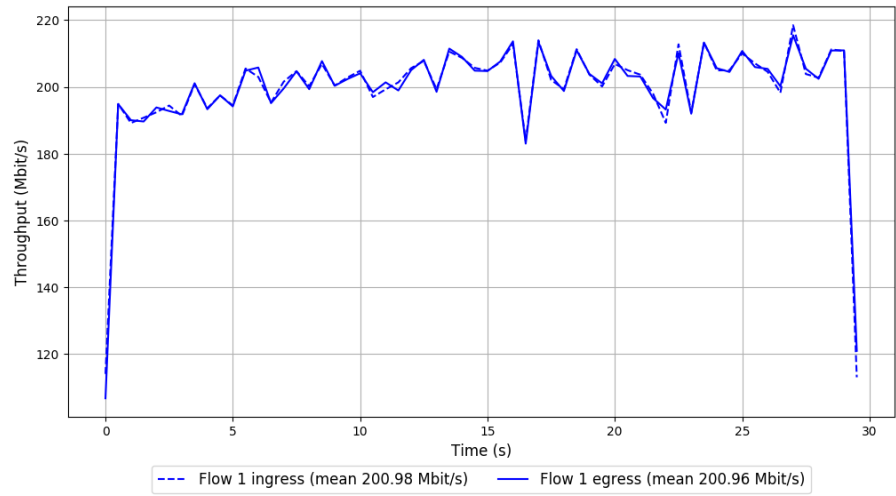
Average throughput: 200.96 Mbit/s

95th percentile per-packet one-way delay: 19.152 ms

Loss rate: 0.00%



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

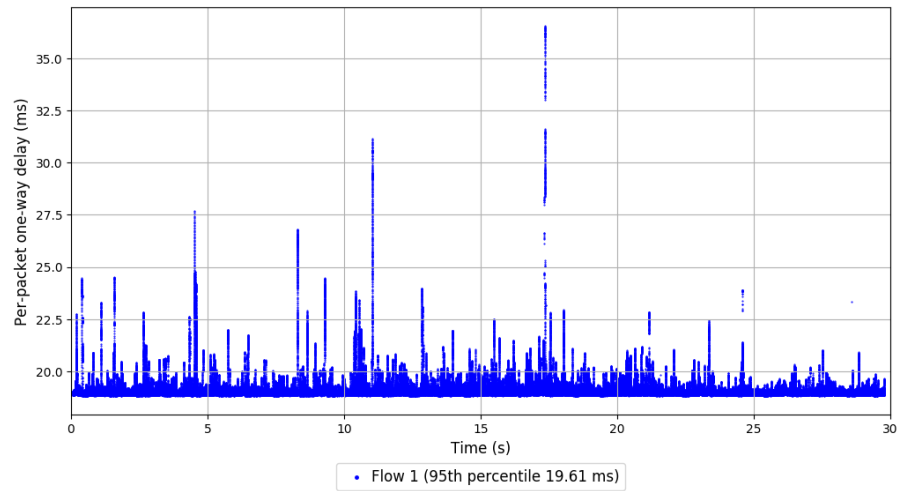
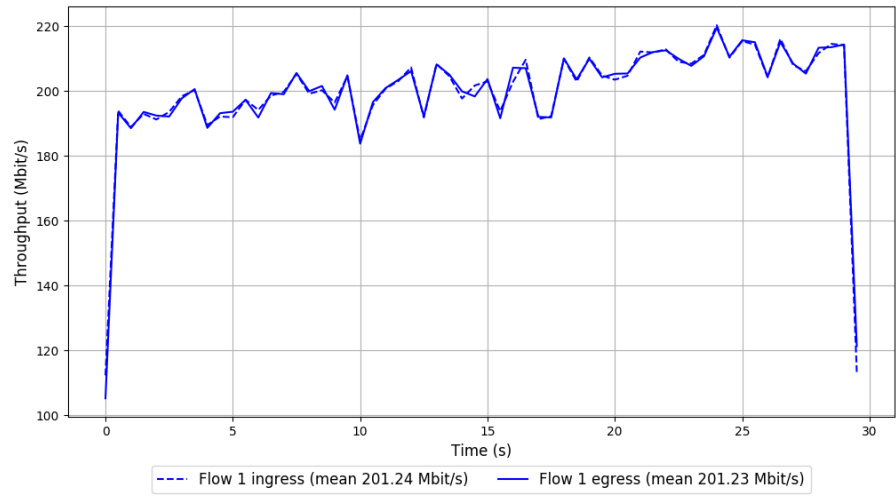


Run 4: Statistics of Indigo

Start at: 2017-12-19 23:45:45  
End at: 2017-12-19 23:46:15  
Local clock offset: 0.524 ms  
Remote clock offset: -1.385 ms

# Below is generated by plot.py at 2017-12-20 04:52:29  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 201.23 Mbit/s  
95th percentile per-packet one-way delay: 19.613 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 201.23 Mbit/s  
95th percentile per-packet one-way delay: 19.613 ms  
Loss rate: 0.00%

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



Run 5: Statistics of Indigo

Start at: 2017-12-20 00:05:43

End at: 2017-12-20 00:06:13

Local clock offset: 0.743 ms

Remote clock offset: -1.62 ms

# Below is generated by plot.py at 2017-12-20 04:52:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 203.98 Mbit/s

95th percentile per-packet one-way delay: 19.155 ms

Loss rate: 0.00%

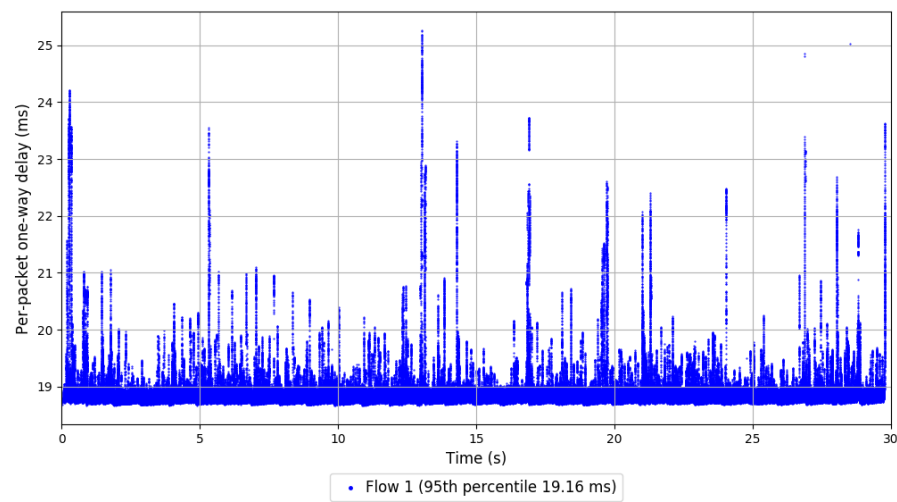
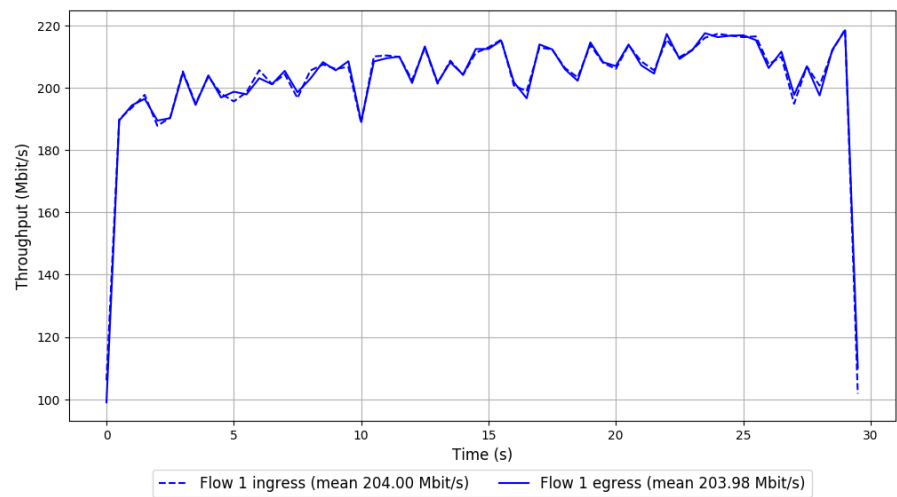
-- Flow 1:

Average throughput: 203.98 Mbit/s

95th percentile per-packet one-way delay: 19.155 ms

Loss rate: 0.00%

Run 5: Report of Indigo — Data Link



Run 6: Statistics of Indigo

Start at: 2017-12-20 00:25:55

End at: 2017-12-20 00:26:25

Local clock offset: 0.814 ms

Remote clock offset: -1.563 ms

# Below is generated by plot.py at 2017-12-20 04:52:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 210.02 Mbit/s

95th percentile per-packet one-way delay: 17.605 ms

Loss rate: 0.01%

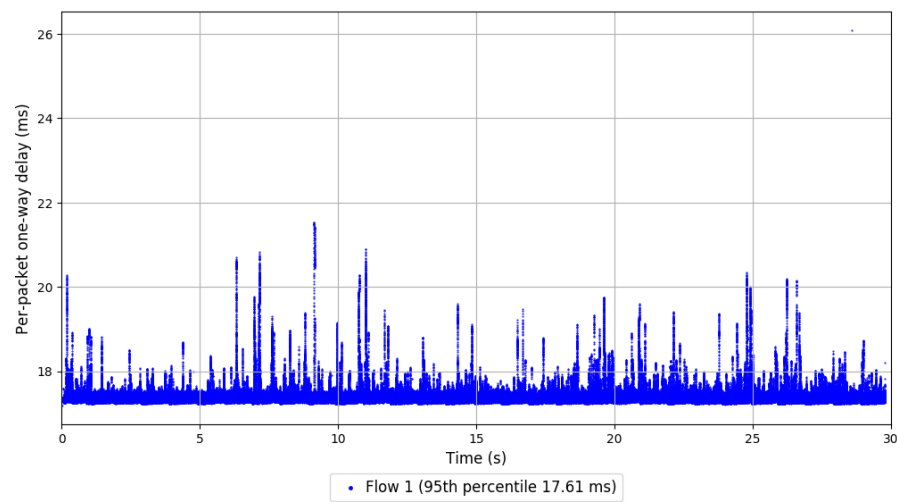
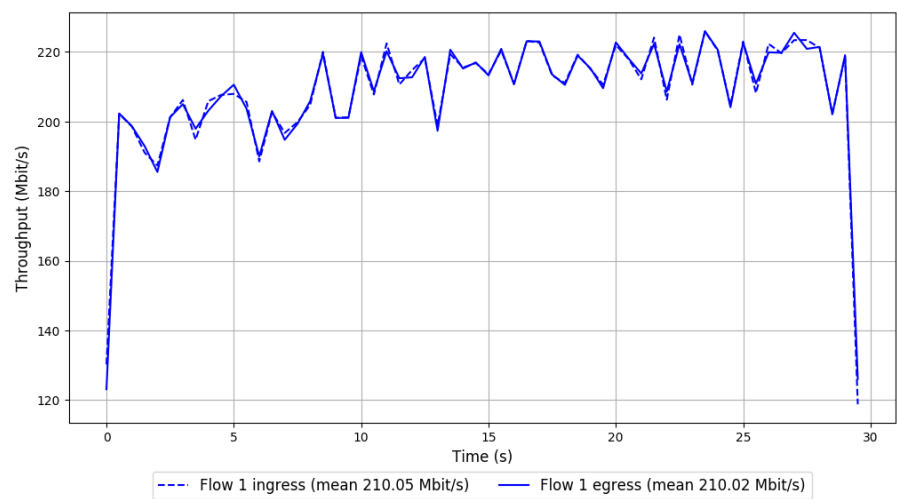
-- Flow 1:

Average throughput: 210.02 Mbit/s

95th percentile per-packet one-way delay: 17.605 ms

Loss rate: 0.01%

Run 6: Report of Indigo — Data Link



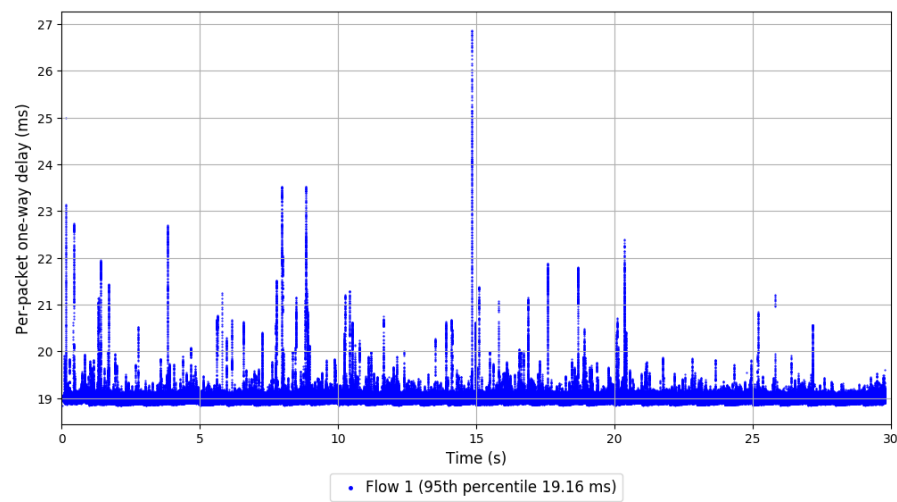
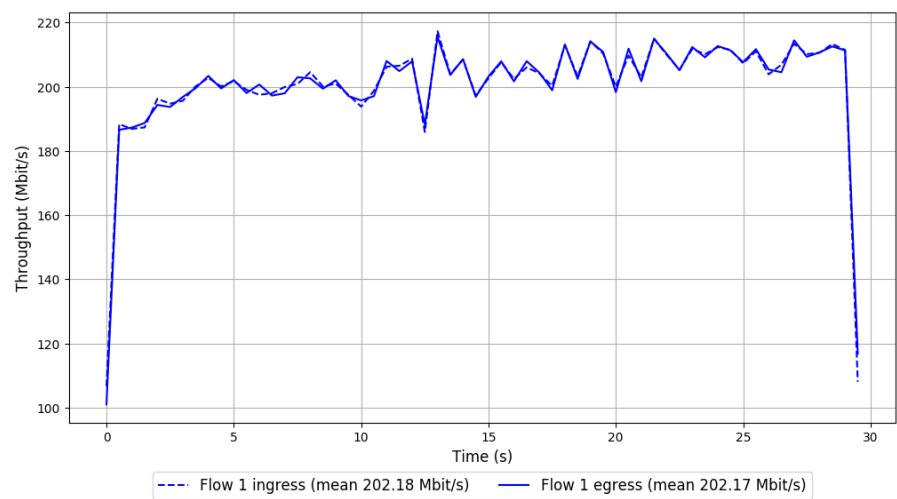
Run 7: Statistics of Indigo

Start at: 2017-12-20 00:45:49  
End at: 2017-12-20 00:46:19  
Local clock offset: 1.148 ms  
Remote clock offset: -1.857 ms

# Below is generated by plot.py at 2017-12-20 04:52:29  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 202.17 Mbit/s  
95th percentile per-packet one-way delay: 19.156 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 202.17 Mbit/s  
95th percentile per-packet one-way delay: 19.156 ms  
Loss rate: 0.00%



Run 7: Report of Indigo — Data Link



Run 8: Statistics of Indigo

Start at: 2017-12-20 01:05:43

End at: 2017-12-20 01:06:13

Local clock offset: 1.045 ms

Remote clock offset: -2.02 ms

# Below is generated by plot.py at 2017-12-20 04:52:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 204.21 Mbit/s

95th percentile per-packet one-way delay: 19.431 ms

Loss rate: 0.00%

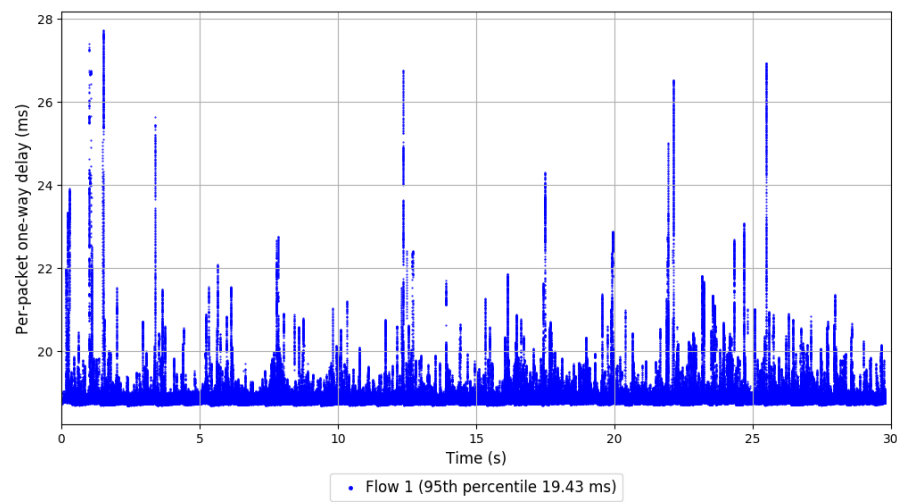
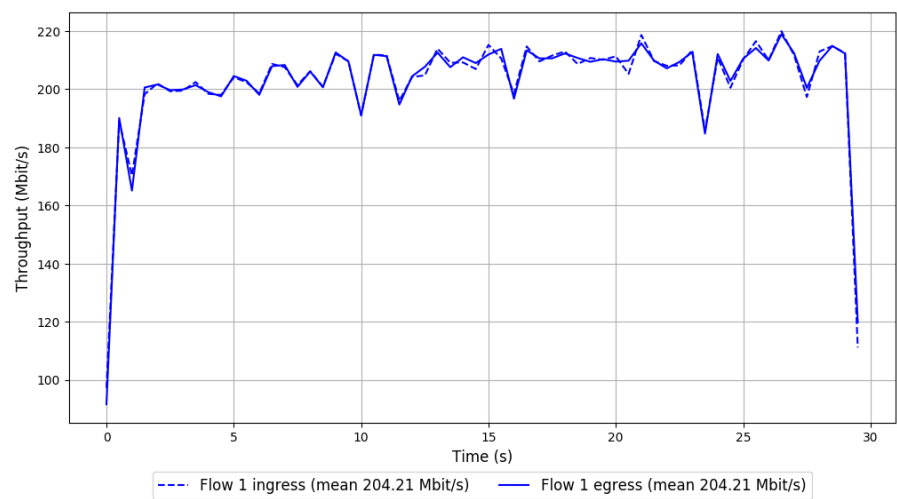
-- Flow 1:

Average throughput: 204.21 Mbit/s

95th percentile per-packet one-way delay: 19.431 ms

Loss rate: 0.00%

Run 8: Report of Indigo — Data Link

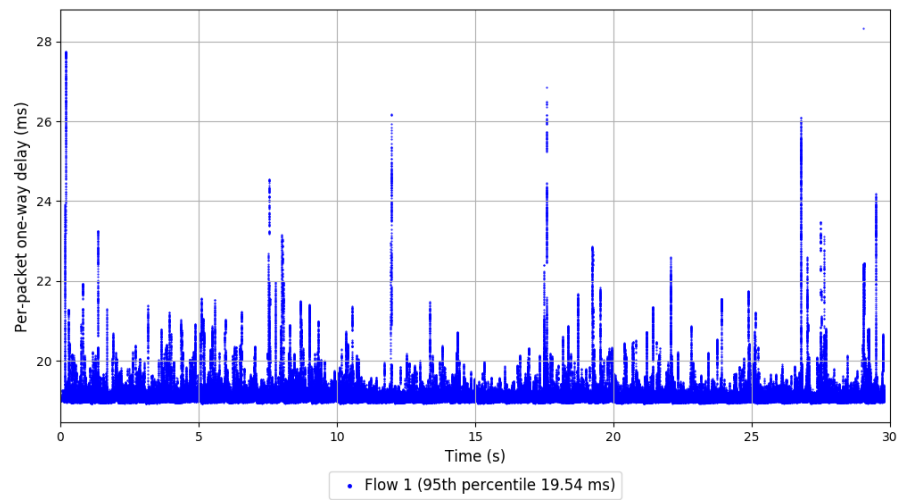
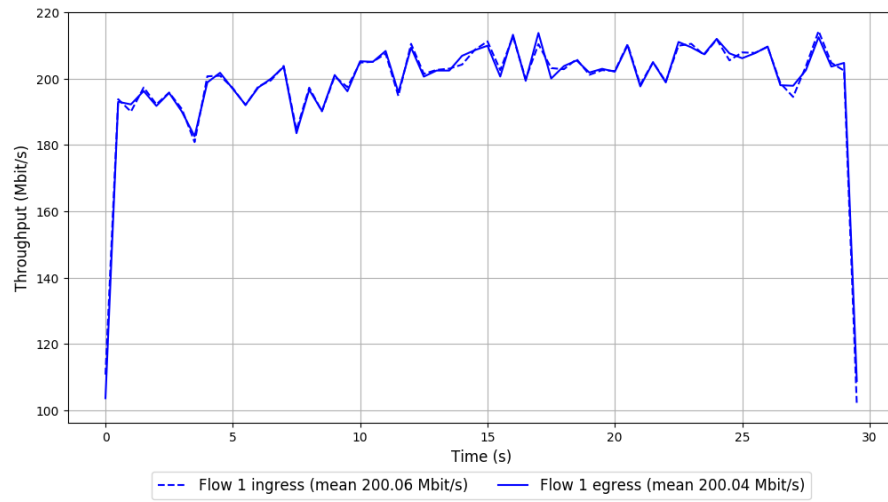


Run 9: Statistics of Indigo

Start at: 2017-12-20 01:26:07  
End at: 2017-12-20 01:26:37  
Local clock offset: 1.262 ms  
Remote clock offset: -1.981 ms

# Below is generated by plot.py at 2017-12-20 04:52:29  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 200.04 Mbit/s  
95th percentile per-packet one-way delay: 19.542 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 200.04 Mbit/s  
95th percentile per-packet one-way delay: 19.542 ms  
Loss rate: 0.01%

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



Run 10: Statistics of Indigo

Start at: 2017-12-20 01:46:16

End at: 2017-12-20 01:46:46

Local clock offset: 1.256 ms

Remote clock offset: -1.758 ms

# Below is generated by plot.py at 2017-12-20 04:52:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 203.14 Mbit/s

95th percentile per-packet one-way delay: 19.120 ms

Loss rate: 0.01%

-- Flow 1:

Average throughput: 203.14 Mbit/s

95th percentile per-packet one-way delay: 19.120 ms

Loss rate: 0.01%

Run 10: Report of Indigo — Data Link

