

## Pantheon Report

Generated at 2019-06-27 15:47:50 (UTC).

Data path: India on *em1 (remote)* → AWS India 1 on *ens5 (local)*.

Repeated the test of 22 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against **nets.org.sg** and have been applied to correct the timestamps in logs.

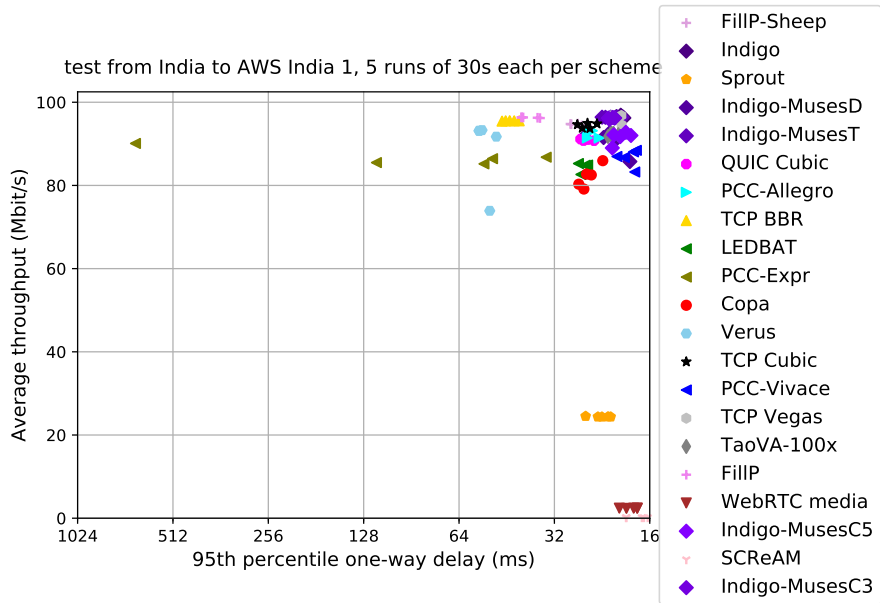
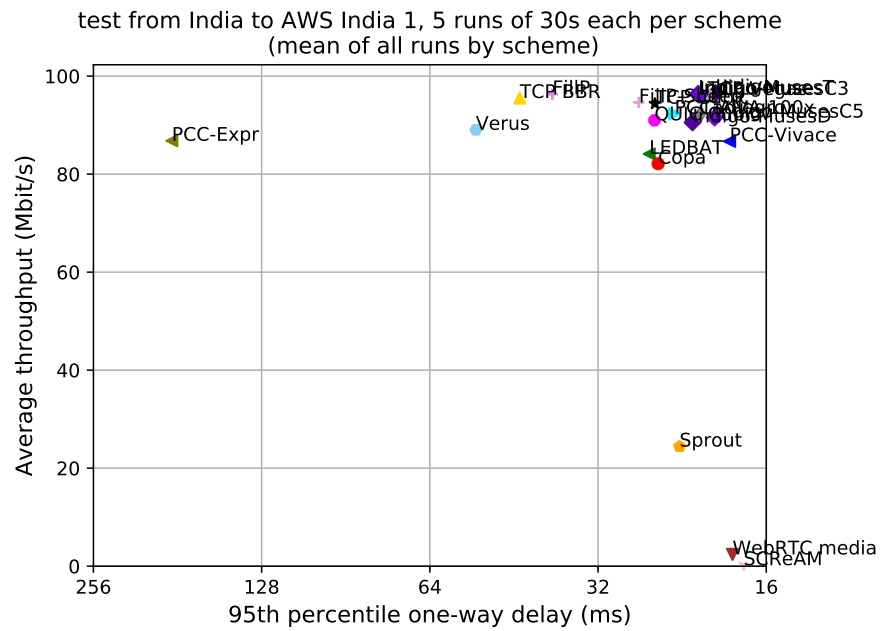
### System info:

```
Linux 4.15.0-1039-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

```
branch: muses @ c3953d08f32ec7ebbdede2d2f0cbdeed262571ef
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 11c9498ecb1596b02ccd896791a02d03172af7ed
M helpers/__init__.pyc
M helpers/context.pyc
M helpers/utils.pyc
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
```

```
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
```



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	95.53	44.18	1.55
Copa	5	82.12	24.99	0.08
TCP Cubic	5	94.37	25.31	0.11
FillP	5	96.31	38.62	0.28
FillP-Sheep	5	94.64	27.05	0.10
Indigo	5	96.57	19.73	0.09
Indigo-MusesC3	5	96.17	21.07	0.09
Indigo-MusesC5	5	91.54	19.80	0.09
Indigo-MusesD	5	90.54	21.68	0.09
Indigo-MusesT	5	96.41	21.18	0.09
LEDBAT	5	84.12	25.92	0.09
Muses_DecisionTree	0	N/A	N/A	N/A
PCC-Allegro	5	92.32	23.34	0.10
PCC-Expr	5	86.80	185.35	1.24
QUIC Cubic	5	90.97	25.37	0.12
SCReAM	5	0.21	17.57	0.13
Sprout	5	24.40	22.88	0.09
TaoVA-100x	5	92.28	20.98	0.09
TCP Vegas	5	96.15	20.39	0.09
Verus	5	89.04	52.96	0.31
PCC-Vivace	5	86.68	18.61	0.09
WebRTC media	5	2.40	18.39	0.10



Run 1: Statistics of TCP BBR

Start at: 2019-06-27 13:12:52

End at: 2019-06-27 13:13:22

Local clock offset: -0.152 ms

Remote clock offset: -2.949 ms

# Below is generated by plot.py at 2019-06-27 15:33:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 95.53 Mbit/s

95th percentile per-packet one-way delay: 41.326 ms

Loss rate: 1.38%

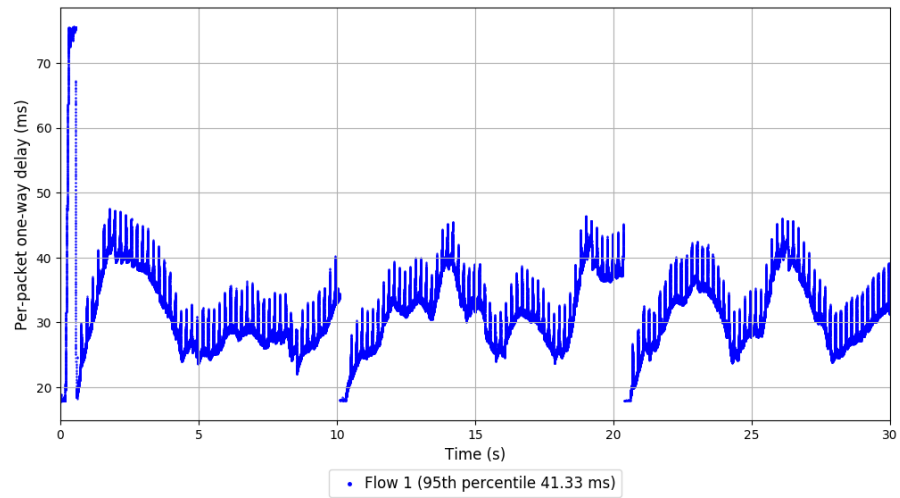
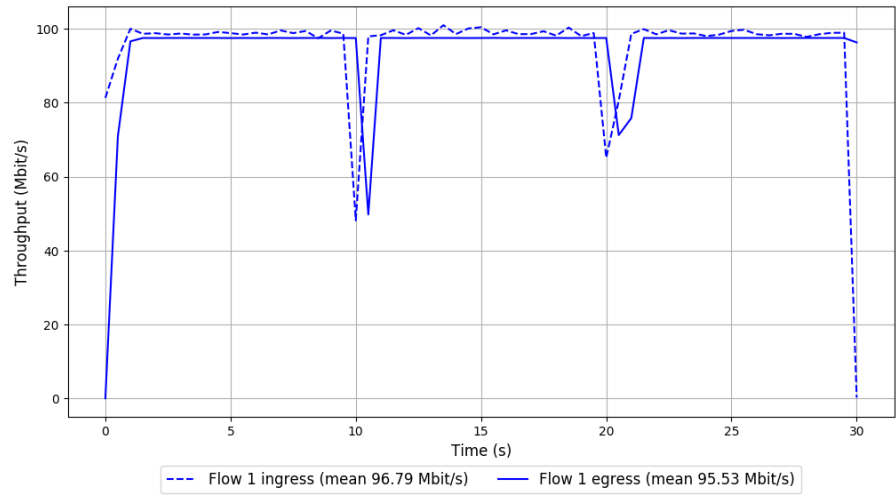
-- Flow 1:

Average throughput: 95.53 Mbit/s

95th percentile per-packet one-way delay: 41.326 ms

Loss rate: 1.38%

# Run 1: Report of TCP BBR — Data Link

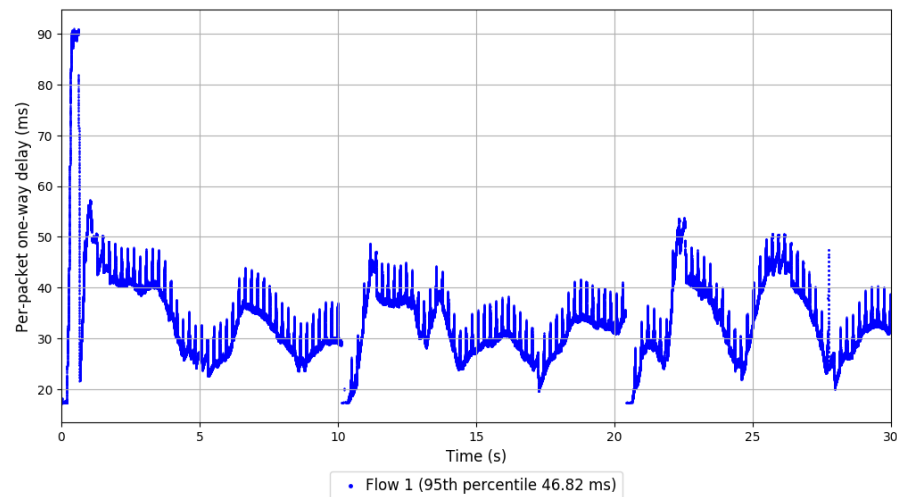
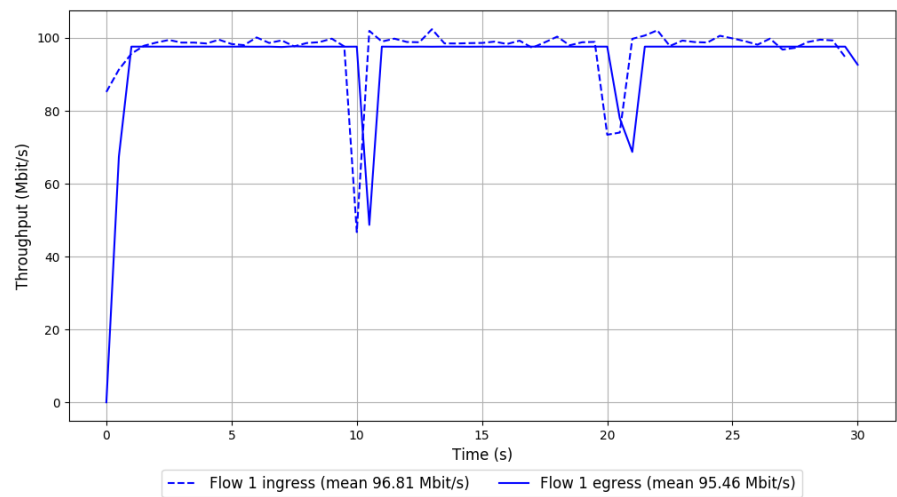


Run 2: Statistics of TCP BBR

Start at: 2019-06-27 13:40:11  
End at: 2019-06-27 13:40:41  
Local clock offset: -1.127 ms  
Remote clock offset: -4.409 ms

# Below is generated by plot.py at 2019-06-27 15:33:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.46 Mbit/s  
95th percentile per-packet one-way delay: 46.816 ms  
Loss rate: 1.48%  
-- Flow 1:  
Average throughput: 95.46 Mbit/s  
95th percentile per-packet one-way delay: 46.816 ms  
Loss rate: 1.48%

Run 2: Report of TCP BBR — Data Link

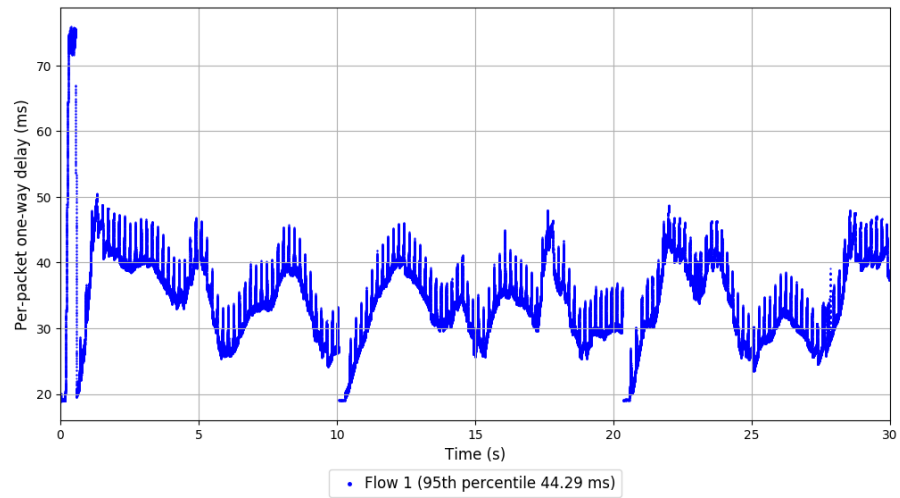
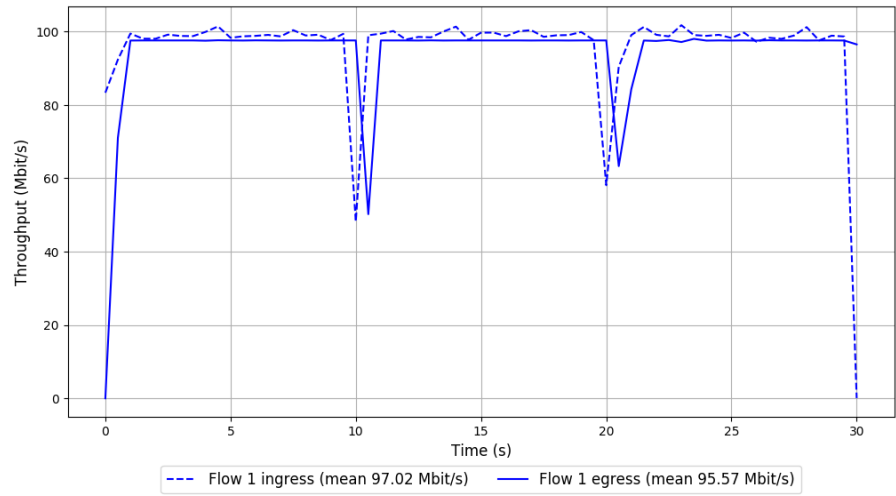


Run 3: Statistics of TCP BBR

Start at: 2019-06-27 14:08:10  
End at: 2019-06-27 14:08:40  
Local clock offset: -0.63 ms  
Remote clock offset: -6.294 ms

# Below is generated by plot.py at 2019-06-27 15:33:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.57 Mbit/s  
95th percentile per-packet one-way delay: 44.290 ms  
Loss rate: 1.58%  
-- Flow 1:  
Average throughput: 95.57 Mbit/s  
95th percentile per-packet one-way delay: 44.290 ms  
Loss rate: 1.58%

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

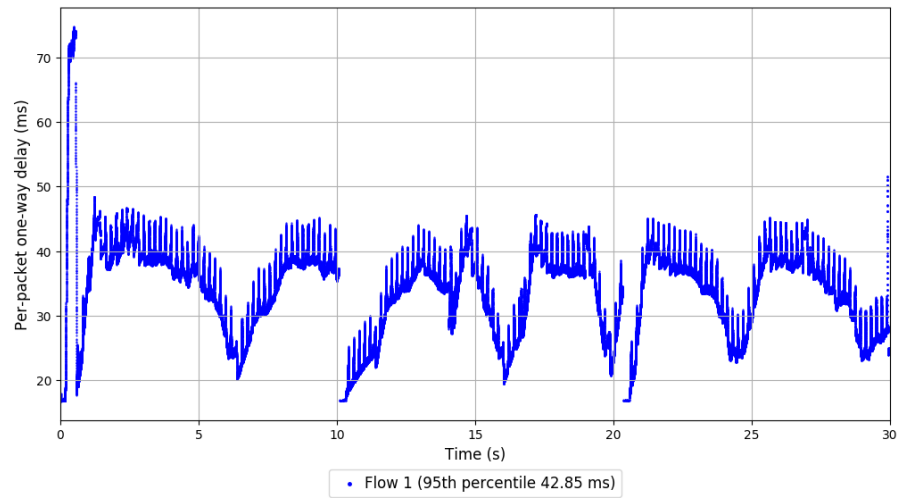
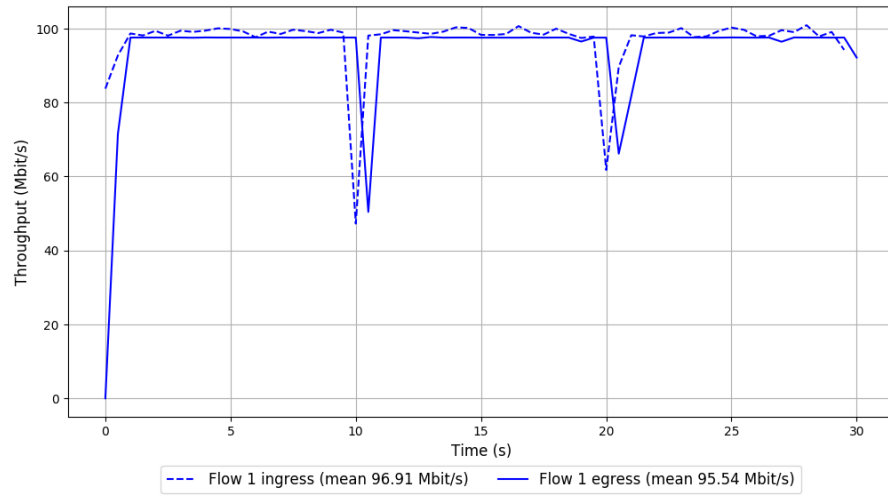


Run 4: Statistics of TCP BBR

Start at: 2019-06-27 14:36:04  
End at: 2019-06-27 14:36:34  
Local clock offset: -0.011 ms  
Remote clock offset: -3.765 ms

# Below is generated by plot.py at 2019-06-27 15:33:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.54 Mbit/s  
95th percentile per-packet one-way delay: 42.853 ms  
Loss rate: 1.50%  
-- Flow 1:  
Average throughput: 95.54 Mbit/s  
95th percentile per-packet one-way delay: 42.853 ms  
Loss rate: 1.50%

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





Run 5: Statistics of TCP BBR

Start at: 2019-06-27 15:03:54

End at: 2019-06-27 15:04:24

Local clock offset: -0.997 ms

Remote clock offset: -5.812 ms

# Below is generated by plot.py at 2019-06-27 15:33:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 95.54 Mbit/s

95th percentile per-packet one-way delay: 45.616 ms

Loss rate: 1.83%

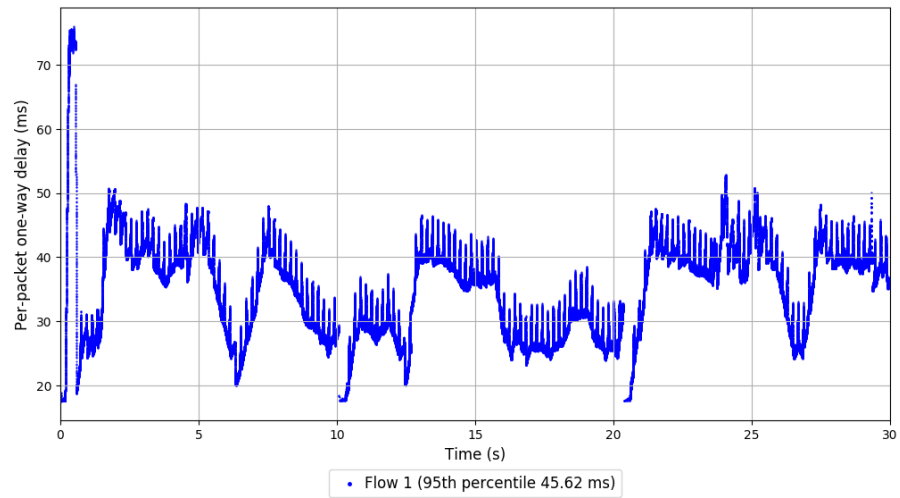
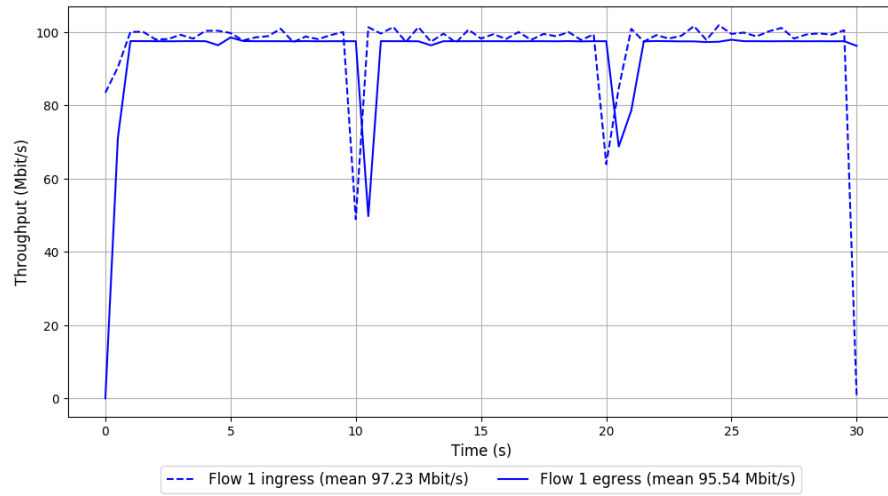
-- Flow 1:

Average throughput: 95.54 Mbit/s

95th percentile per-packet one-way delay: 45.616 ms

Loss rate: 1.83%

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

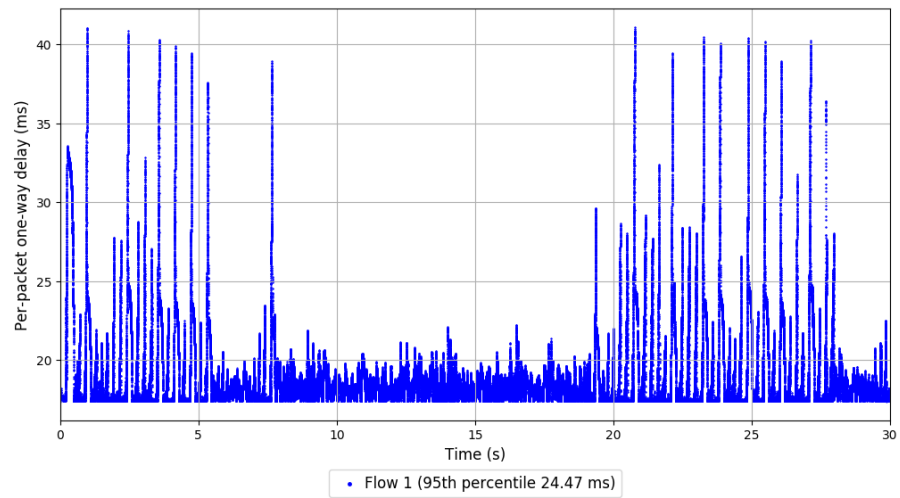
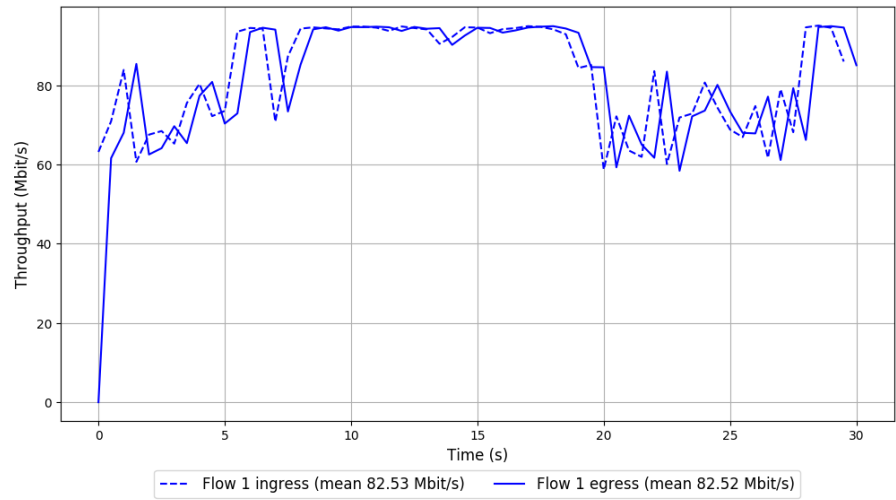


Run 1: Statistics of Copa

Start at: 2019-06-27 13:19:15  
End at: 2019-06-27 13:19:45  
Local clock offset: -1.155 ms  
Remote clock offset: -3.702 ms

# Below is generated by plot.py at 2019-06-27 15:34:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 82.52 Mbit/s  
95th percentile per-packet one-way delay: 24.474 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 82.52 Mbit/s  
95th percentile per-packet one-way delay: 24.474 ms  
Loss rate: 0.09%

### Run 1: Report of Copa — Data Link

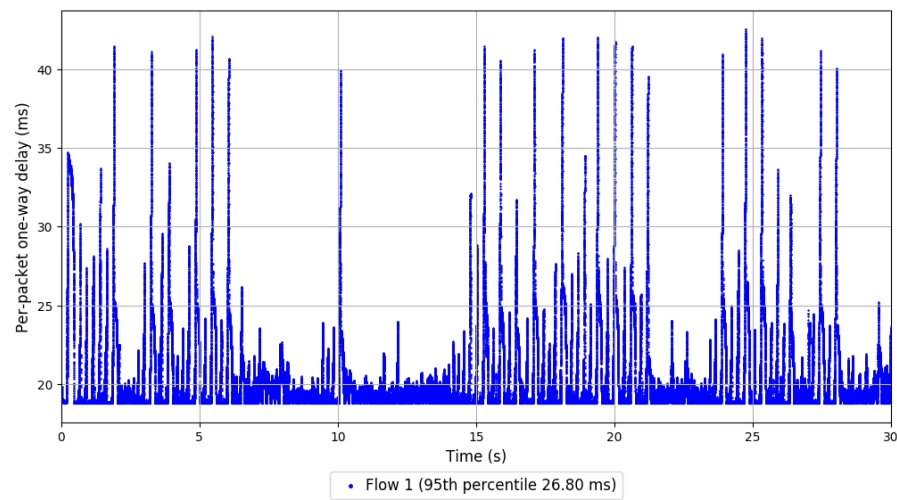
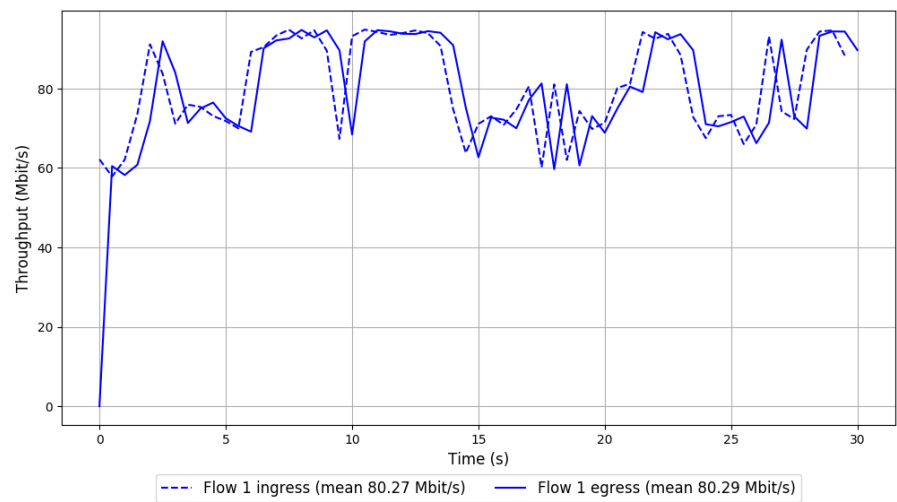


Run 2: Statistics of Copa

Start at: 2019-06-27 13:46:41  
End at: 2019-06-27 13:47:11  
Local clock offset: -0.443 ms  
Remote clock offset: -5.473 ms

# Below is generated by plot.py at 2019-06-27 15:34:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 80.29 Mbit/s  
95th percentile per-packet one-way delay: 26.804 ms  
Loss rate: 0.05%  
-- Flow 1:  
Average throughput: 80.29 Mbit/s  
95th percentile per-packet one-way delay: 26.804 ms  
Loss rate: 0.05%

Run 2: Report of Copa — Data Link

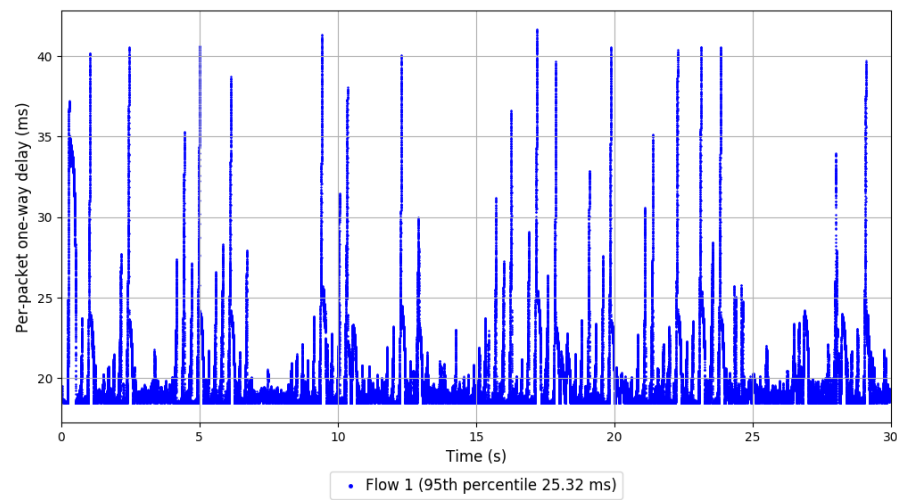
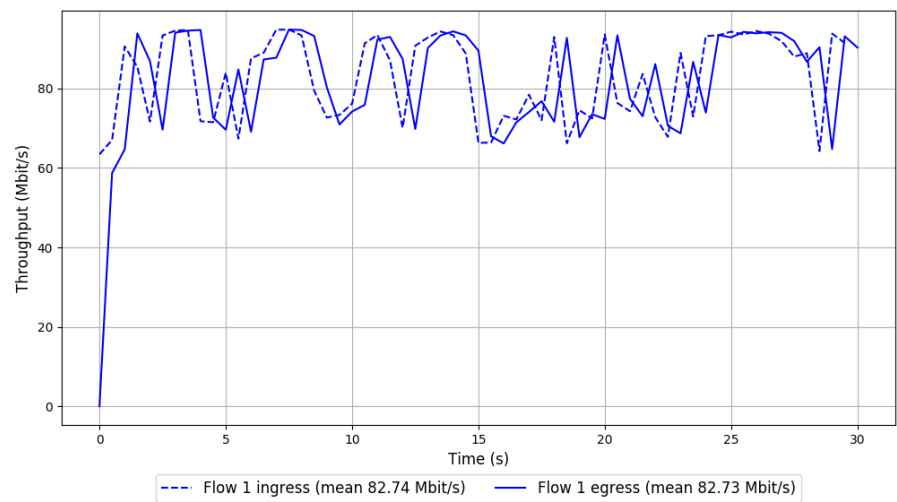


Run 3: Statistics of Copa

Start at: 2019-06-27 14:14:19  
End at: 2019-06-27 14:14:49  
Local clock offset: -0.983 ms  
Remote clock offset: -6.213 ms

# Below is generated by plot.py at 2019-06-27 15:34:24  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 82.73 Mbit/s  
95th percentile per-packet one-way delay: 25.320 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 82.73 Mbit/s  
95th percentile per-packet one-way delay: 25.320 ms  
Loss rate: 0.10%

Run 3: Report of Copa — Data Link



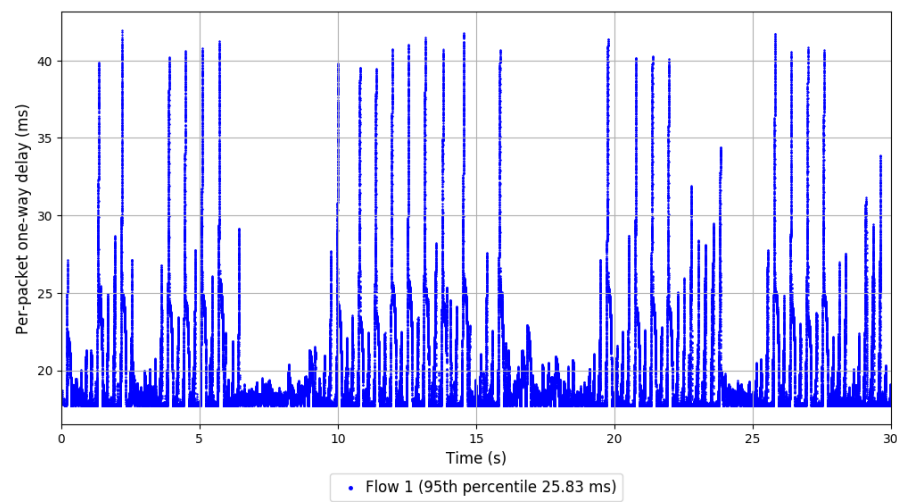
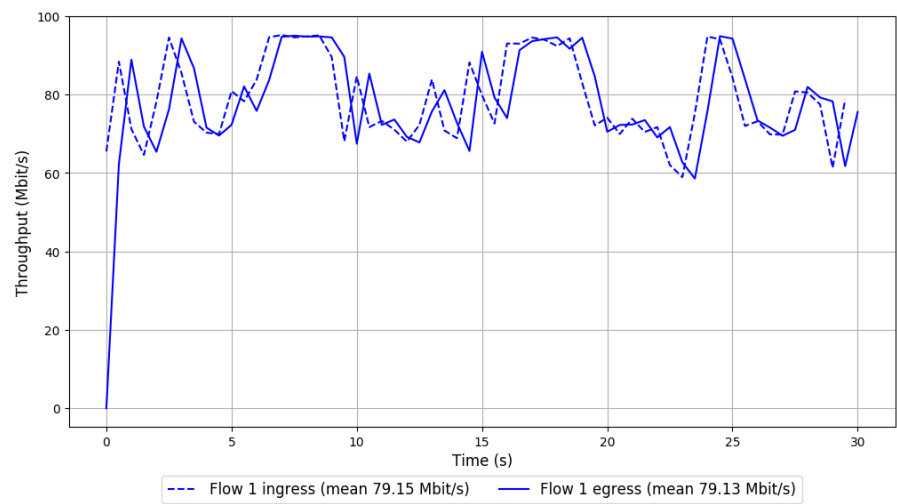


Run 4: Statistics of Copa

Start at: 2019-06-27 14:42:18  
End at: 2019-06-27 14:42:48  
Local clock offset: -0.837 ms  
Remote clock offset: -5.688 ms

# Below is generated by plot.py at 2019-06-27 15:35:32  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 79.13 Mbit/s  
95th percentile per-packet one-way delay: 25.829 ms  
Loss rate: 0.11%  
-- Flow 1:  
Average throughput: 79.13 Mbit/s  
95th percentile per-packet one-way delay: 25.829 ms  
Loss rate: 0.11%

Run 4: Report of Copa — Data Link

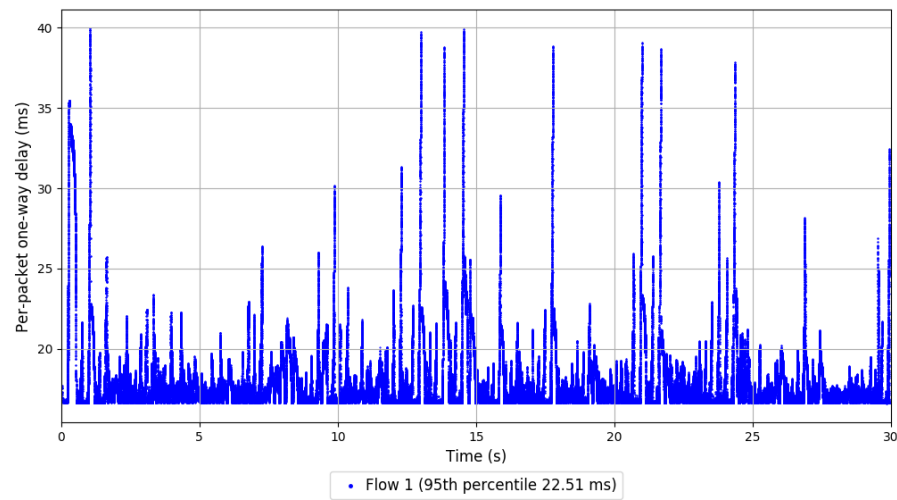
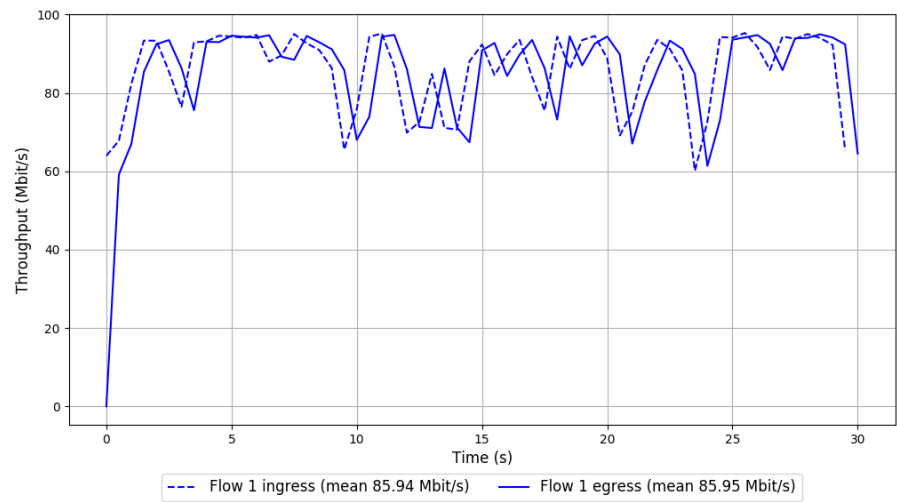


Run 5: Statistics of Copa

Start at: 2019-06-27 15:10:28  
End at: 2019-06-27 15:10:58  
Local clock offset: -0.69 ms  
Remote clock offset: -4.822 ms

# Below is generated by plot.py at 2019-06-27 15:35:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 85.95 Mbit/s  
95th percentile per-packet one-way delay: 22.514 ms  
Loss rate: 0.07%  
-- Flow 1:  
Average throughput: 85.95 Mbit/s  
95th percentile per-packet one-way delay: 22.514 ms  
Loss rate: 0.07%

Run 5: Report of Copa — Data Link

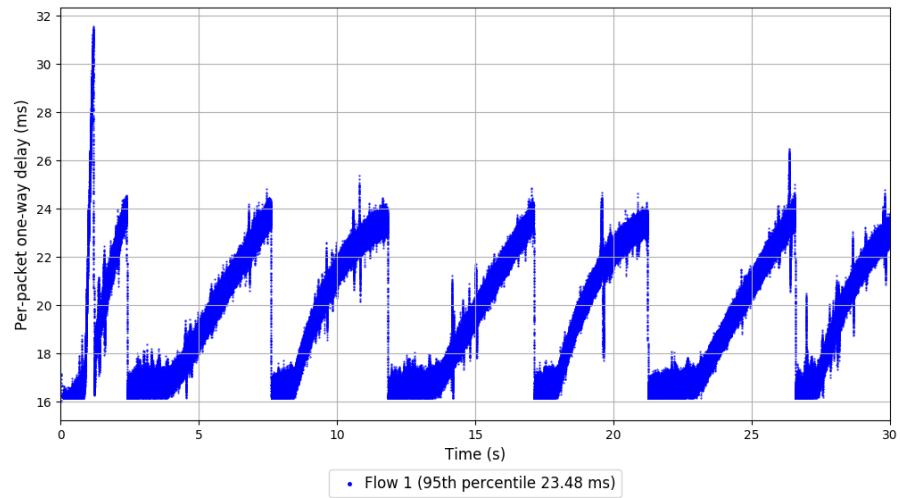
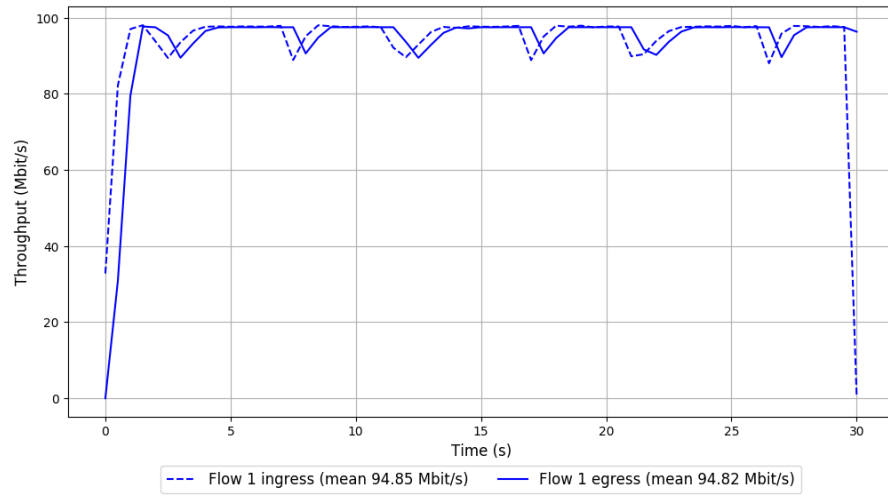


Run 1: Statistics of TCP Cubic

Start at: 2019-06-27 13:15:32  
End at: 2019-06-27 13:16:02  
Local clock offset: -1.433 ms  
Remote clock offset: -2.598 ms

# Below is generated by plot.py at 2019-06-27 15:35:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.82 Mbit/s  
95th percentile per-packet one-way delay: 23.478 ms  
Loss rate: 0.11%  
-- Flow 1:  
Average throughput: 94.82 Mbit/s  
95th percentile per-packet one-way delay: 23.478 ms  
Loss rate: 0.11%

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

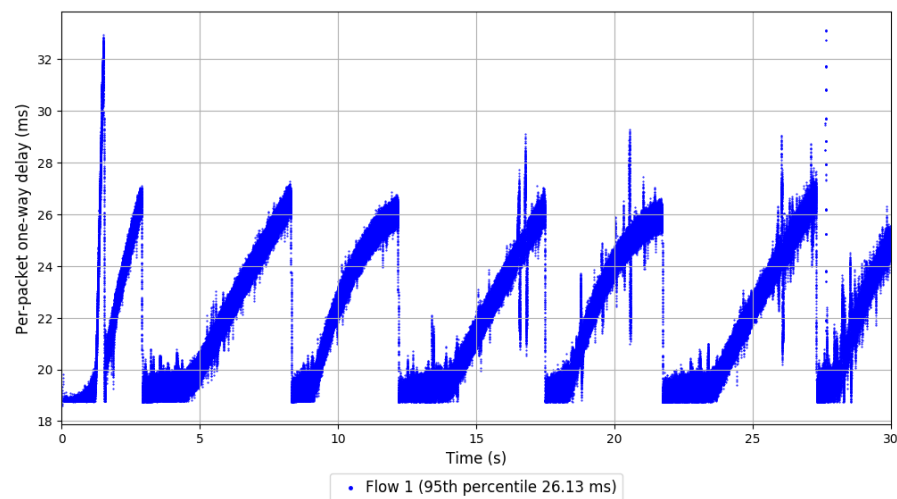
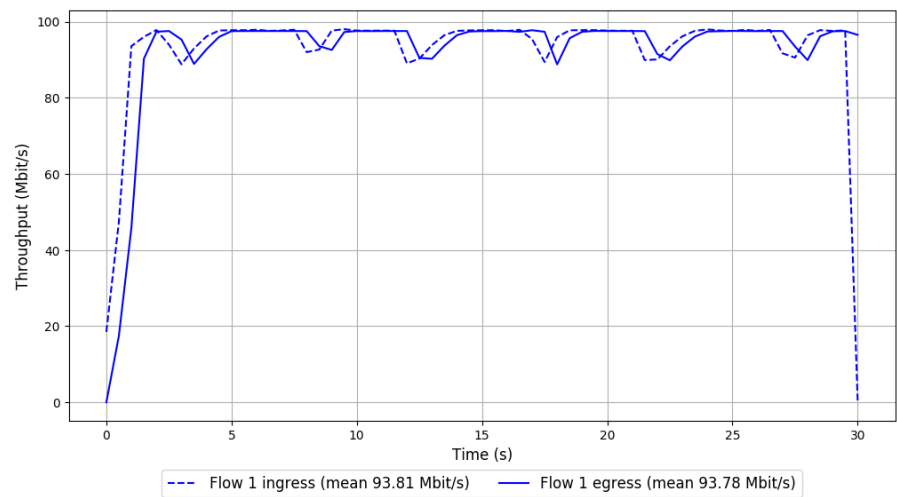


Run 2: Statistics of TCP Cubic

Start at: 2019-06-27 13:42:45  
End at: 2019-06-27 13:43:15  
Local clock offset: -0.721 ms  
Remote clock offset: -5.529 ms

# Below is generated by plot.py at 2019-06-27 15:35:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.78 Mbit/s  
95th percentile per-packet one-way delay: 26.127 ms  
Loss rate: 0.11%  
-- Flow 1:  
Average throughput: 93.78 Mbit/s  
95th percentile per-packet one-way delay: 26.127 ms  
Loss rate: 0.11%

Run 2: Report of TCP Cubic — Data Link



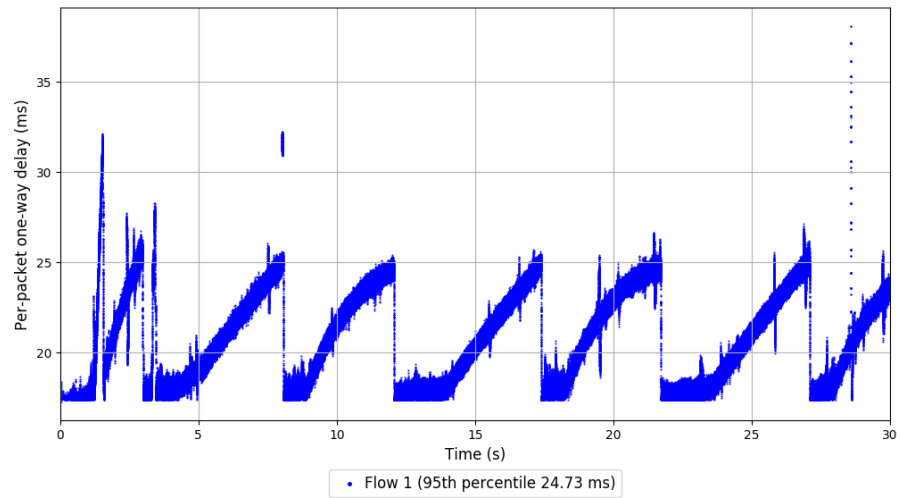
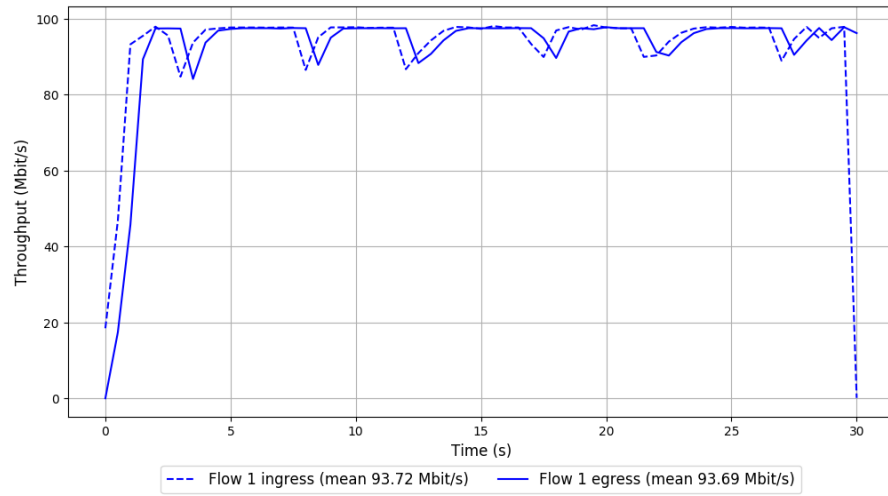


Run 3: Statistics of TCP Cubic

Start at: 2019-06-27 14:10:38  
End at: 2019-06-27 14:11:08  
Local clock offset: -0.458 ms  
Remote clock offset: -4.521 ms

# Below is generated by plot.py at 2019-06-27 15:35:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.69 Mbit/s  
95th percentile per-packet one-way delay: 24.729 ms  
Loss rate: 0.11%  
-- Flow 1:  
Average throughput: 93.69 Mbit/s  
95th percentile per-packet one-way delay: 24.729 ms  
Loss rate: 0.11%

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

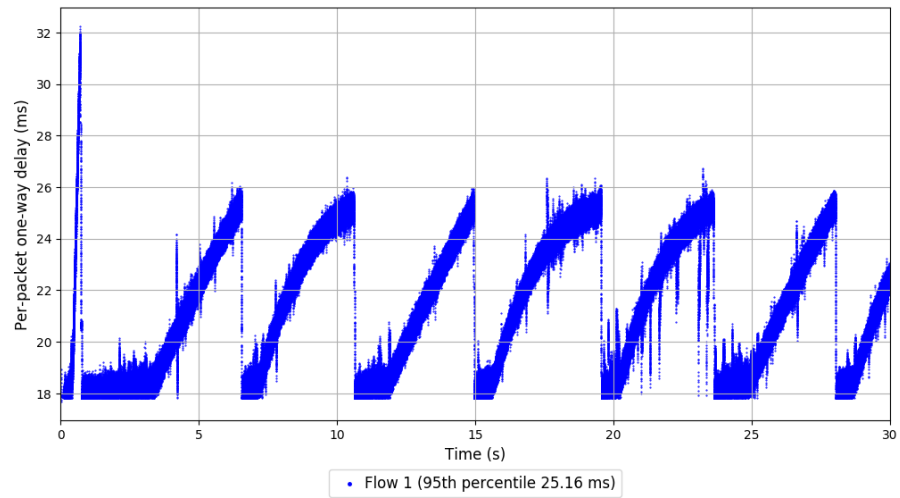
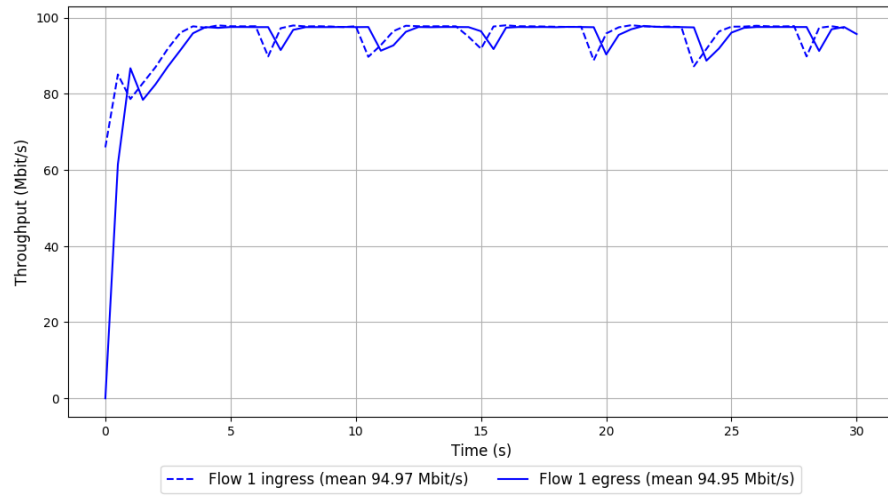


Run 4: Statistics of TCP Cubic

Start at: 2019-06-27 14:38:41  
End at: 2019-06-27 14:39:11  
Local clock offset: -0.182 ms  
Remote clock offset: -5.003 ms

# Below is generated by plot.py at 2019-06-27 15:35:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.95 Mbit/s  
95th percentile per-packet one-way delay: 25.159 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 94.95 Mbit/s  
95th percentile per-packet one-way delay: 25.159 ms  
Loss rate: 0.10%

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

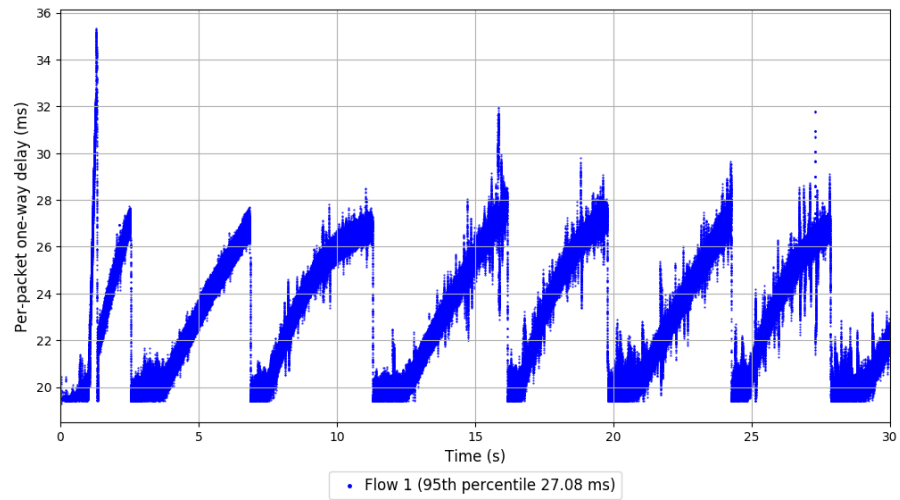
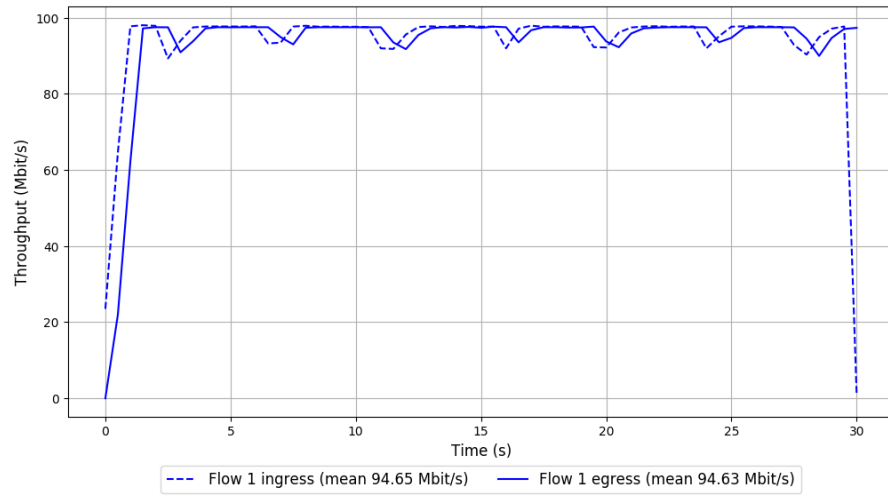


Run 5: Statistics of TCP Cubic

Start at: 2019-06-27 15:06:45  
End at: 2019-06-27 15:07:15  
Local clock offset: -0.156 ms  
Remote clock offset: -6.878 ms

# Below is generated by plot.py at 2019-06-27 15:35:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.63 Mbit/s  
95th percentile per-packet one-way delay: 27.078 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 94.63 Mbit/s  
95th percentile per-packet one-way delay: 27.078 ms  
Loss rate: 0.10%

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

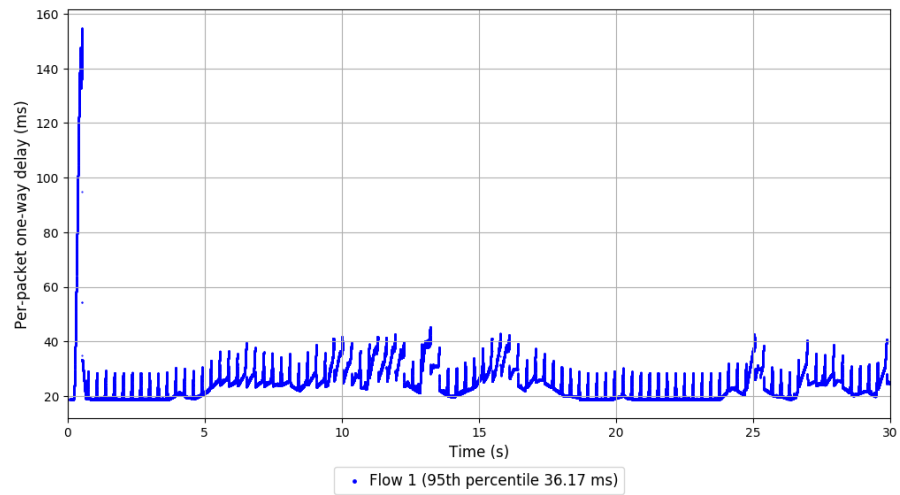
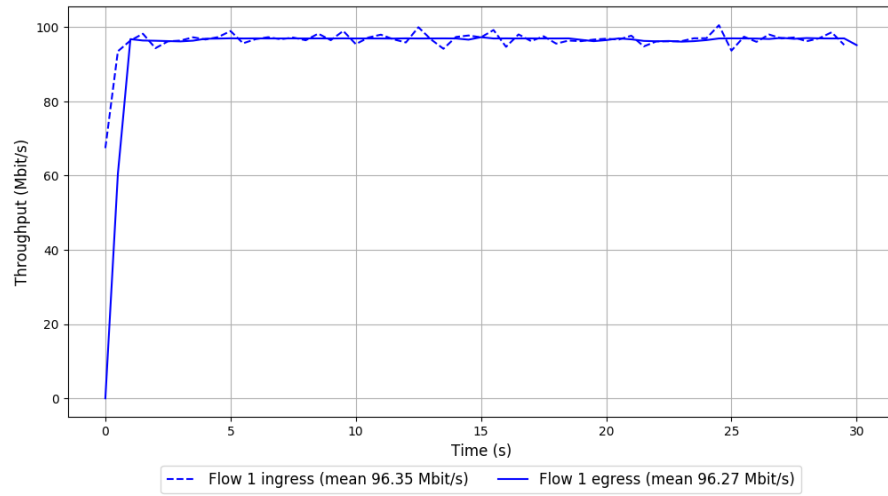


Run 1: Statistics of FillP

Start at: 2019-06-27 13:30:03  
End at: 2019-06-27 13:30:33  
Local clock offset: -0.614 ms  
Remote clock offset: -5.225 ms

# Below is generated by plot.py at 2019-06-27 15:36:00  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.27 Mbit/s  
95th percentile per-packet one-way delay: 36.171 ms  
Loss rate: 0.16%  
-- Flow 1:  
Average throughput: 96.27 Mbit/s  
95th percentile per-packet one-way delay: 36.171 ms  
Loss rate: 0.16%

## Run 1: Report of FillP — Data Link



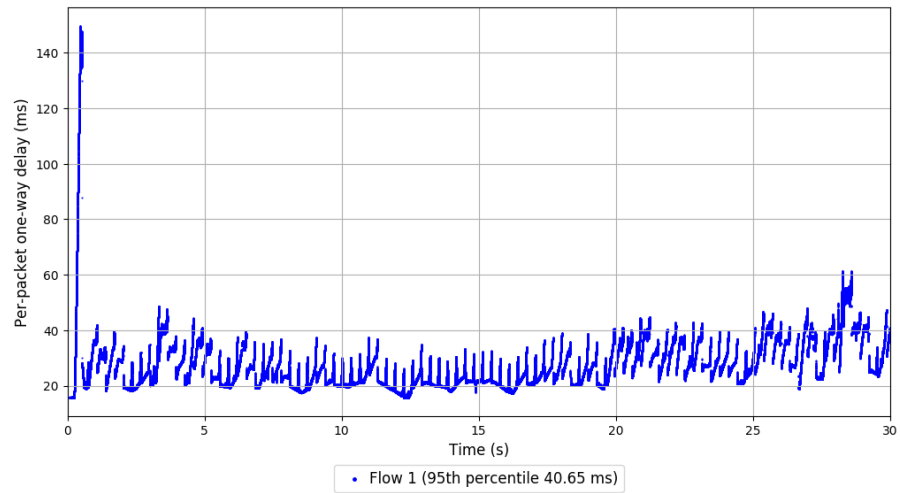
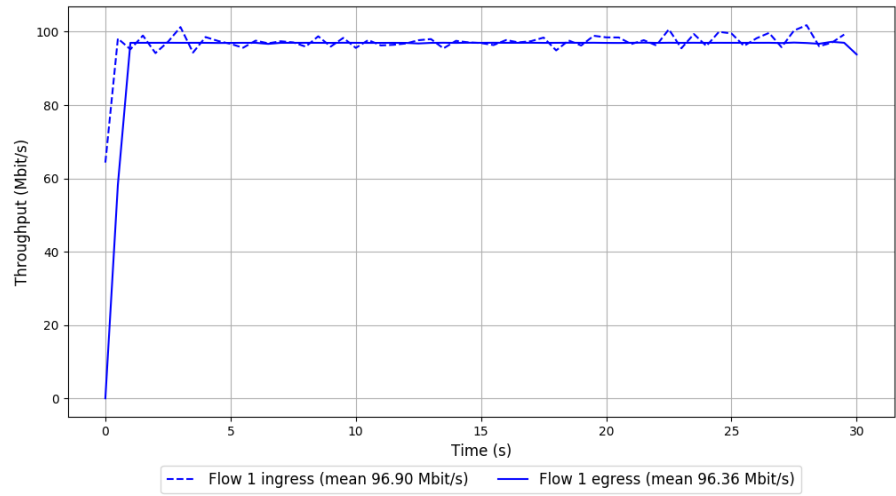


Run 2: Statistics of FillP

Start at: 2019-06-27 13:57:50  
End at: 2019-06-27 13:58:20  
Local clock offset: -1.206 ms  
Remote clock offset: -3.536 ms

# Below is generated by plot.py at 2019-06-27 15:36:13  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.36 Mbit/s  
95th percentile per-packet one-way delay: 40.652 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 96.36 Mbit/s  
95th percentile per-packet one-way delay: 40.652 ms  
Loss rate: 0.63%

## Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-06-27 14:25:19

End at: 2019-06-27 14:25:49

Local clock offset: -0.545 ms

Remote clock offset: -5.95 ms

# Below is generated by plot.py at 2019-06-27 15:36:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 96.35 Mbit/s

95th percentile per-packet one-way delay: 40.143 ms

Loss rate: 0.33%

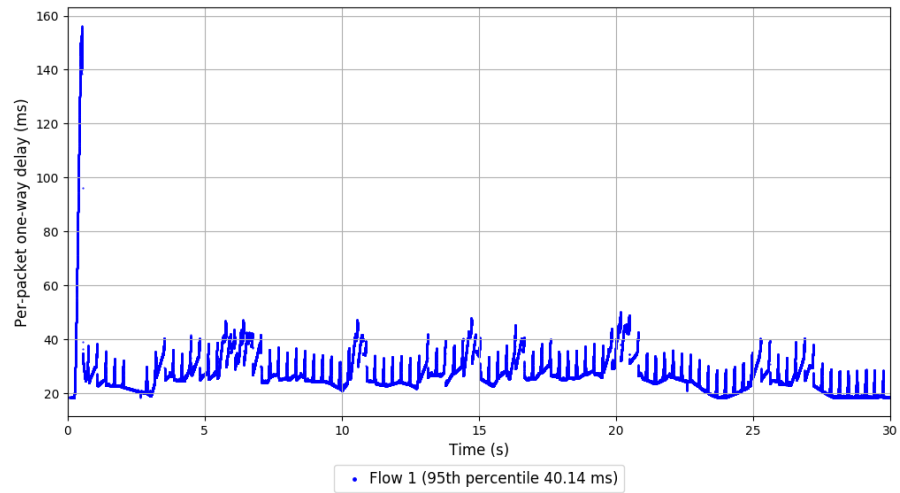
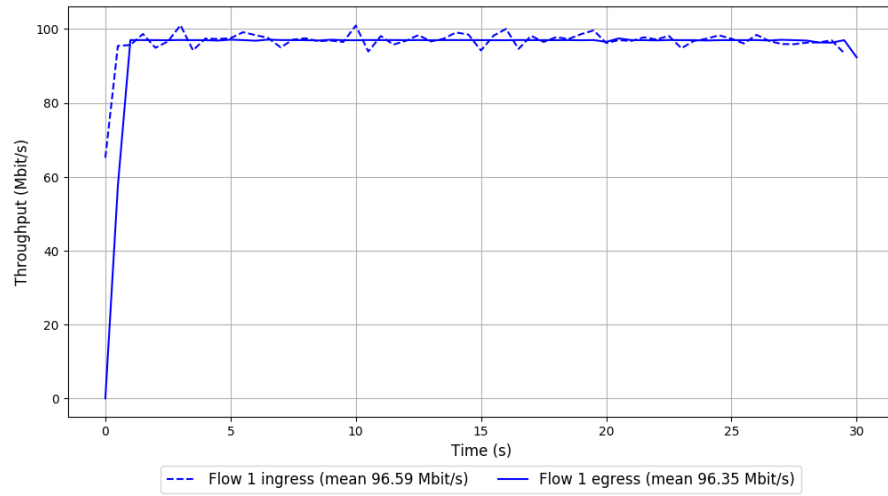
-- Flow 1:

Average throughput: 96.35 Mbit/s

95th percentile per-packet one-way delay: 40.143 ms

Loss rate: 0.33%

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

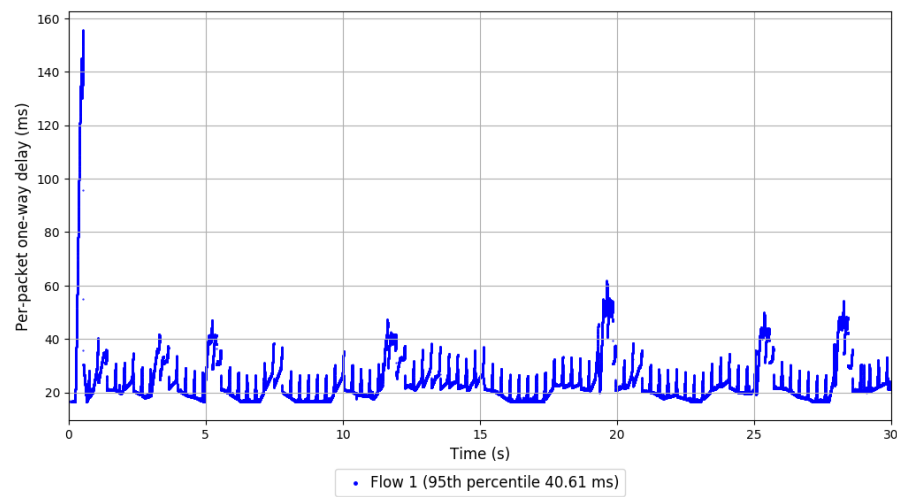
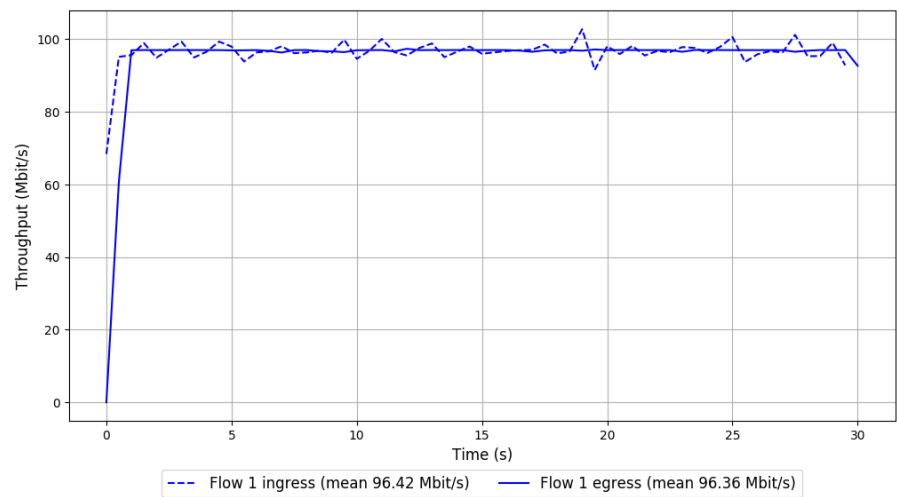


Run 4: Statistics of FillP

Start at: 2019-06-27 14:53:14  
End at: 2019-06-27 14:53:44  
Local clock offset: -0.817 ms  
Remote clock offset: -4.695 ms

# Below is generated by plot.py at 2019-06-27 15:36:14  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.36 Mbit/s  
95th percentile per-packet one-way delay: 40.613 ms  
Loss rate: 0.15%  
-- Flow 1:  
Average throughput: 96.36 Mbit/s  
95th percentile per-packet one-way delay: 40.613 ms  
Loss rate: 0.15%

Run 4: Report of FillP — Data Link

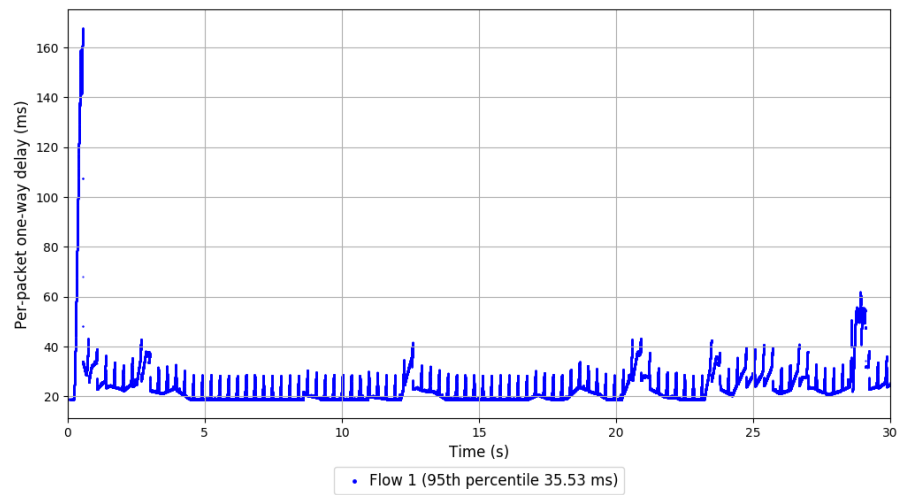
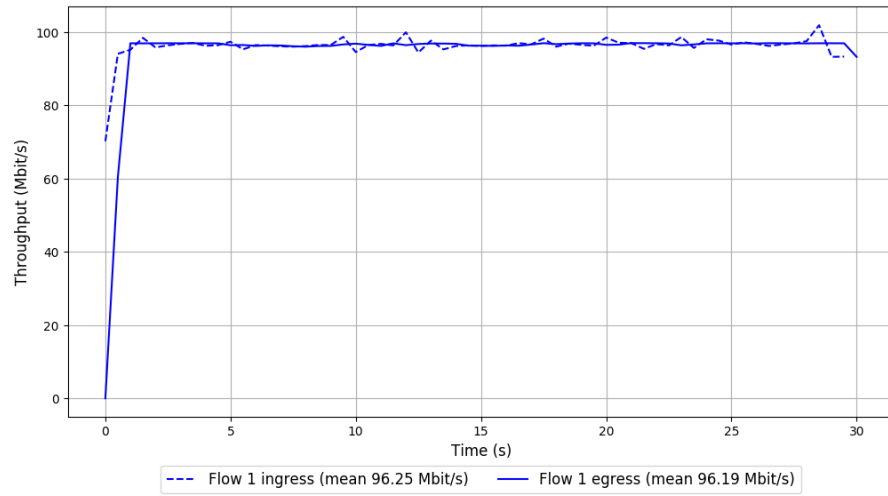


Run 5: Statistics of FillP

Start at: 2019-06-27 15:23:26  
End at: 2019-06-27 15:23:56  
Local clock offset: 0.52 ms  
Remote clock offset: -6.197 ms

# Below is generated by plot.py at 2019-06-27 15:36:58  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.19 Mbit/s  
95th percentile per-packet one-way delay: 35.528 ms  
Loss rate: 0.13%  
-- Flow 1:  
Average throughput: 96.19 Mbit/s  
95th percentile per-packet one-way delay: 35.528 ms  
Loss rate: 0.13%

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





Run 1: Statistics of FillP-Sheep

Start at: 2019-06-27 13:31:14

End at: 2019-06-27 13:31:44

Local clock offset: -0.85 ms

Remote clock offset: -5.753 ms

# Below is generated by plot.py at 2019-06-27 15:36:58

# Datalink statistics

-- Total of 1 flow:

Average throughput: 94.42 Mbit/s

95th percentile per-packet one-way delay: 26.205 ms

Loss rate: 0.09%

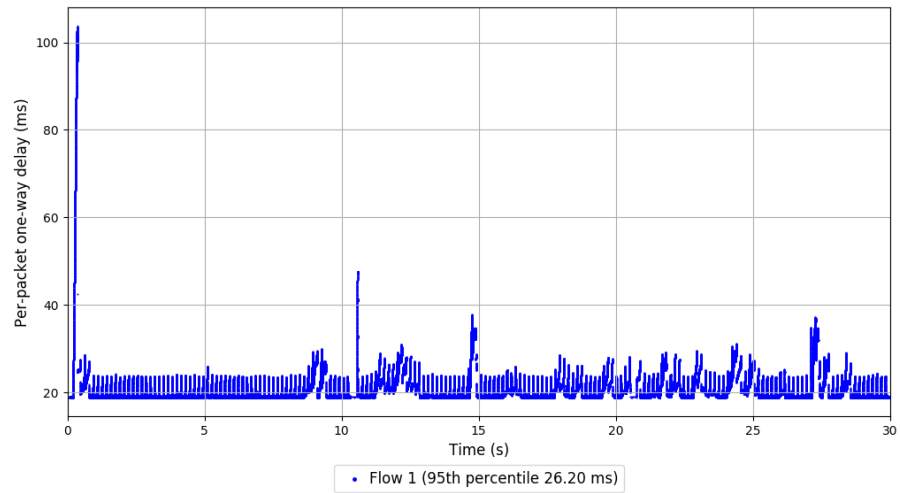
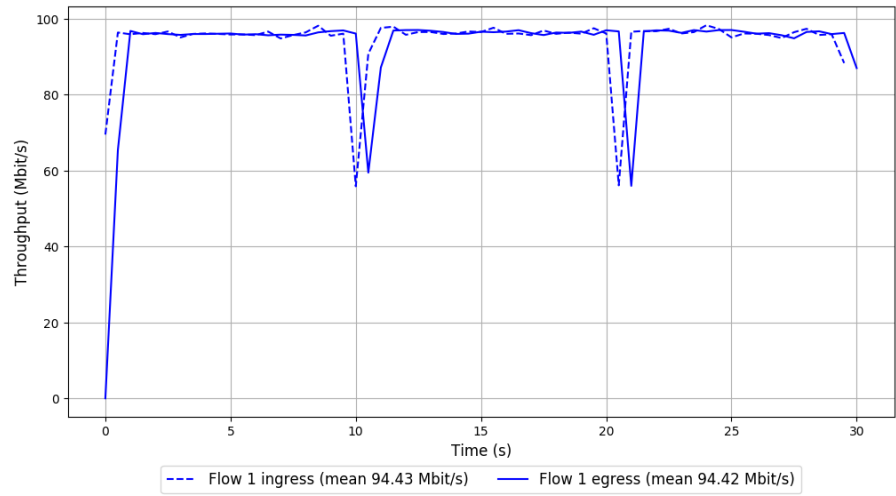
-- Flow 1:

Average throughput: 94.42 Mbit/s

95th percentile per-packet one-way delay: 26.205 ms

Loss rate: 0.09%

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

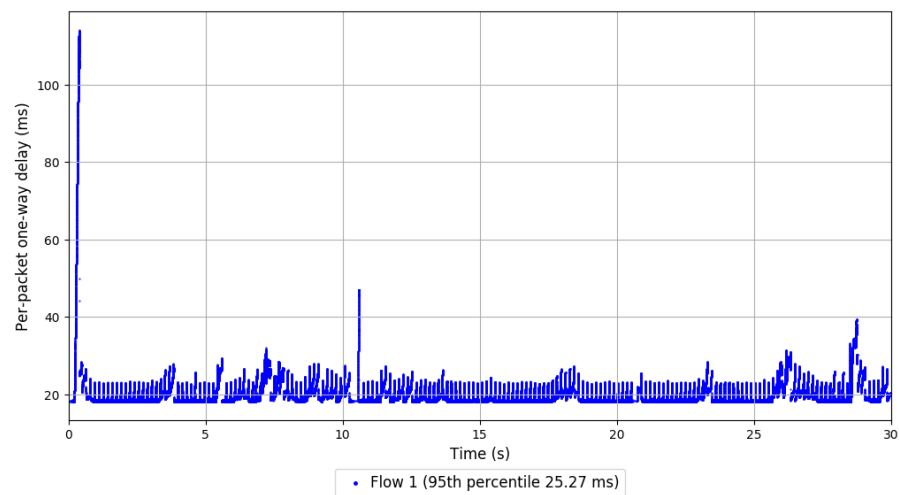
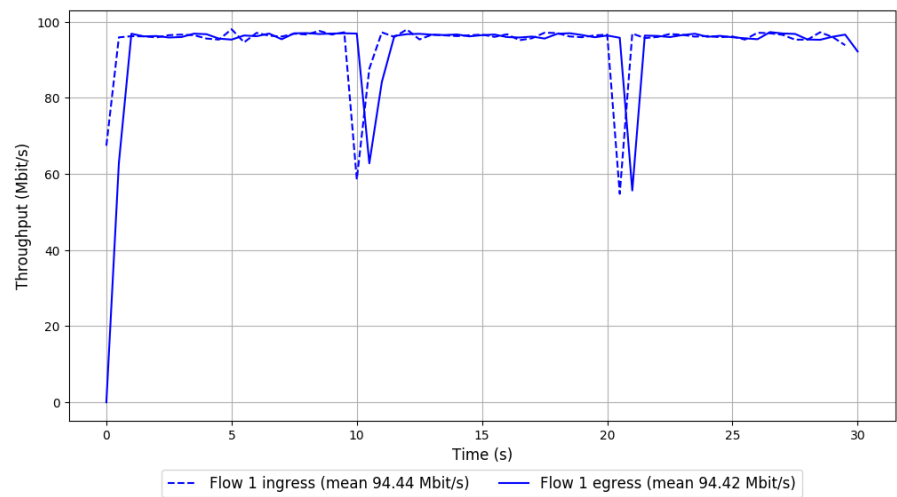


Run 2: Statistics of FillP-Sheep

Start at: 2019-06-27 13:59:07  
End at: 2019-06-27 13:59:37  
Local clock offset: -0.994 ms  
Remote clock offset: -5.772 ms

# Below is generated by plot.py at 2019-06-27 15:36:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.42 Mbit/s  
95th percentile per-packet one-way delay: 25.268 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 94.42 Mbit/s  
95th percentile per-packet one-way delay: 25.268 ms  
Loss rate: 0.10%

Run 2: Report of FillP-Sheep — Data Link

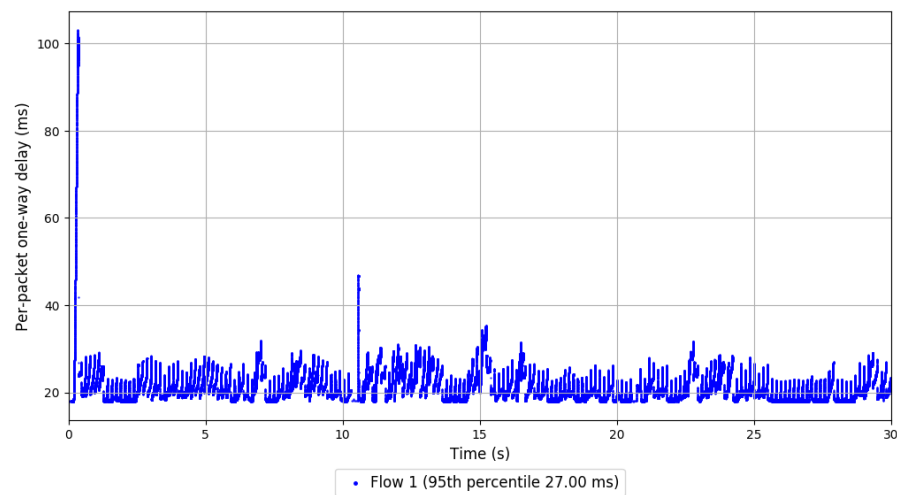
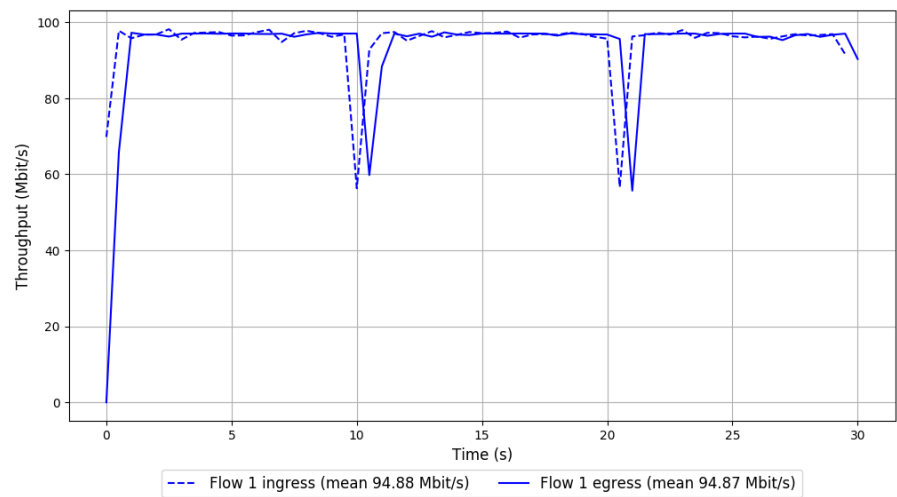


Run 3: Statistics of FillP-Sheep

Start at: 2019-06-27 14:26:35  
End at: 2019-06-27 14:27:05  
Local clock offset: -0.807 ms  
Remote clock offset: -5.721 ms

# Below is generated by plot.py at 2019-06-27 15:37:04  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.87 Mbit/s  
95th percentile per-packet one-way delay: 27.003 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 94.87 Mbit/s  
95th percentile per-packet one-way delay: 27.003 ms  
Loss rate: 0.09%

Run 3: Report of FillP-Sheep — Data Link

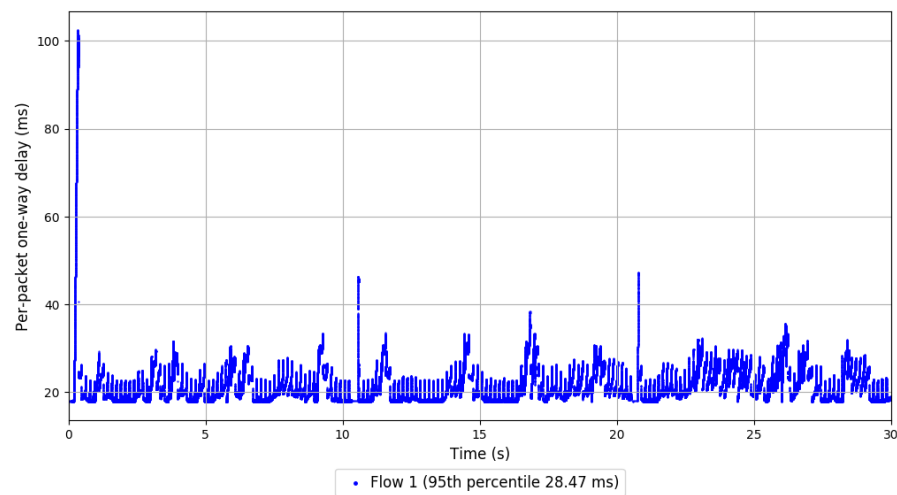
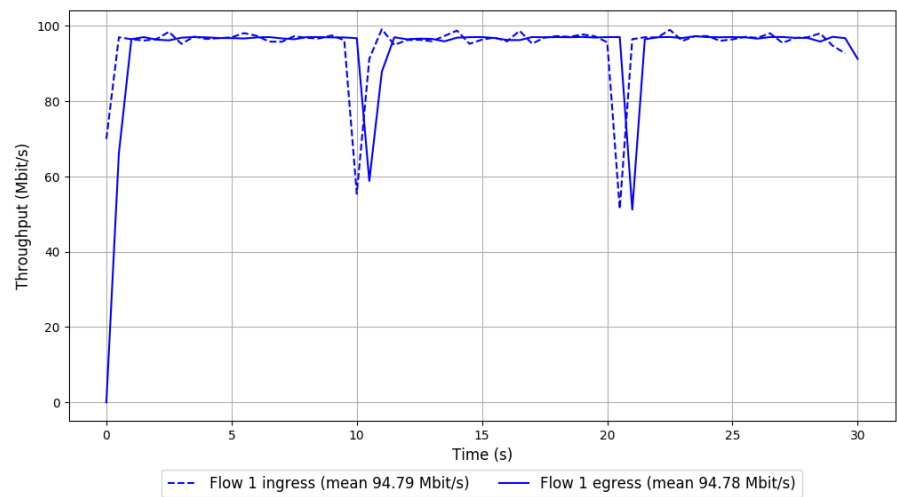


Run 4: Statistics of FillP-Sheep

Start at: 2019-06-27 14:54:26  
End at: 2019-06-27 14:54:56  
Local clock offset: 0.37 ms  
Remote clock offset: -4.917 ms

# Below is generated by plot.py at 2019-06-27 15:37:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.78 Mbit/s  
95th percentile per-packet one-way delay: 28.473 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 94.78 Mbit/s  
95th percentile per-packet one-way delay: 28.473 ms  
Loss rate: 0.09%

Run 4: Report of FillP-Sheep — Data Link



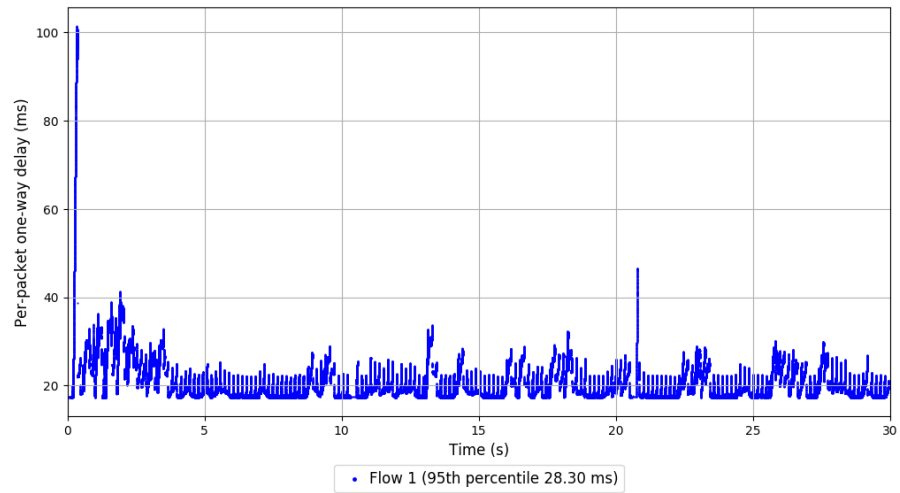
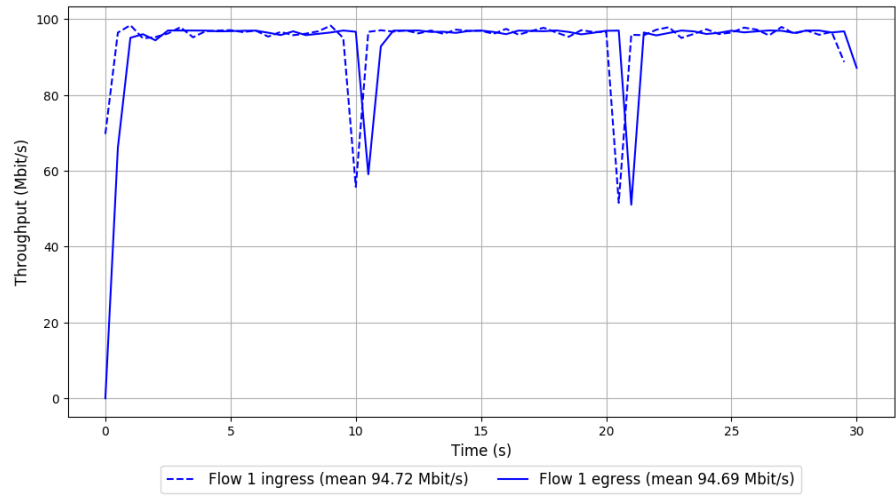


Run 5: Statistics of FillP-Sheep

Start at: 2019-06-27 15:24:35  
End at: 2019-06-27 15:25:05  
Local clock offset: -0.729 ms  
Remote clock offset: -6.227 ms

# Below is generated by plot.py at 2019-06-27 15:37:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.69 Mbit/s  
95th percentile per-packet one-way delay: 28.303 ms  
Loss rate: 0.11%  
-- Flow 1:  
Average throughput: 94.69 Mbit/s  
95th percentile per-packet one-way delay: 28.303 ms  
Loss rate: 0.11%

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

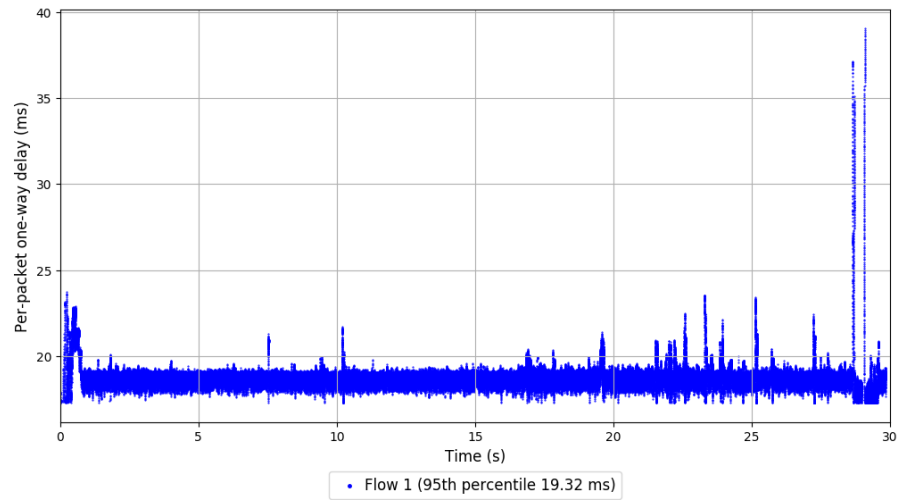
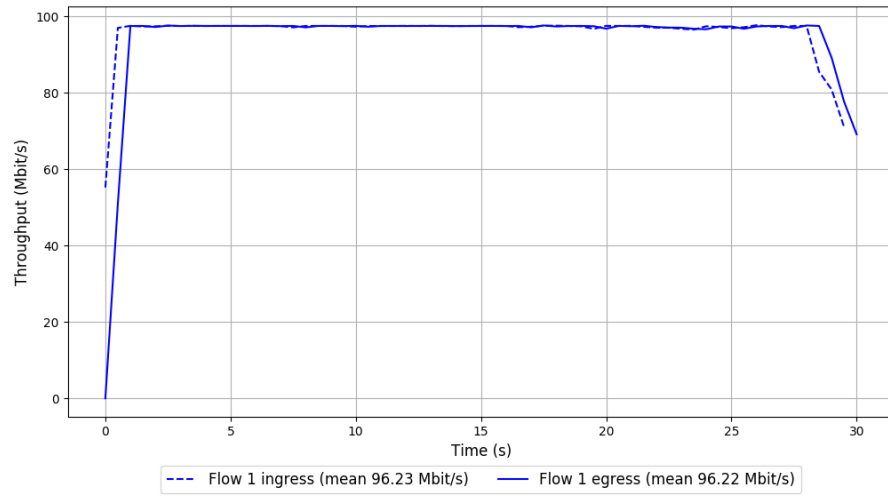


Run 1: Statistics of Indigo

Start at: 2019-06-27 13:14:12  
End at: 2019-06-27 13:14:42  
Local clock offset: -1.177 ms  
Remote clock offset: -3.385 ms

# Below is generated by plot.py at 2019-06-27 15:37:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.22 Mbit/s  
95th percentile per-packet one-way delay: 19.315 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 96.22 Mbit/s  
95th percentile per-packet one-way delay: 19.315 ms  
Loss rate: 0.09%

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

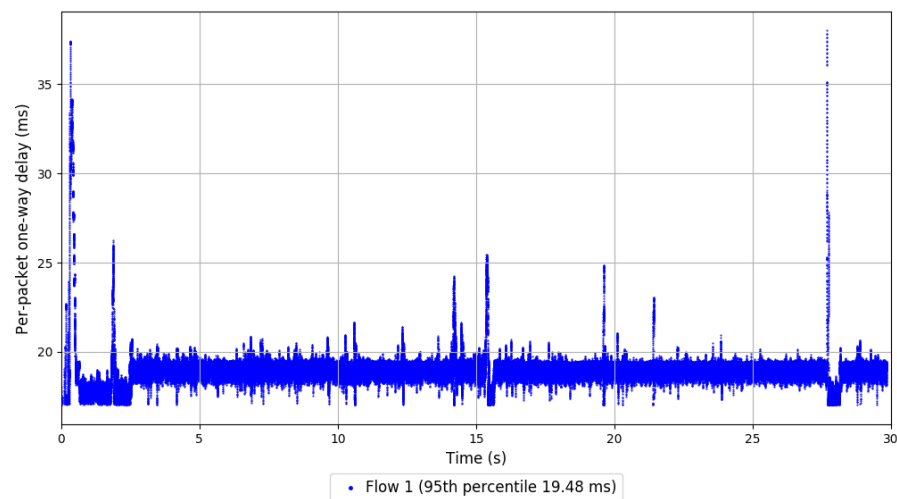
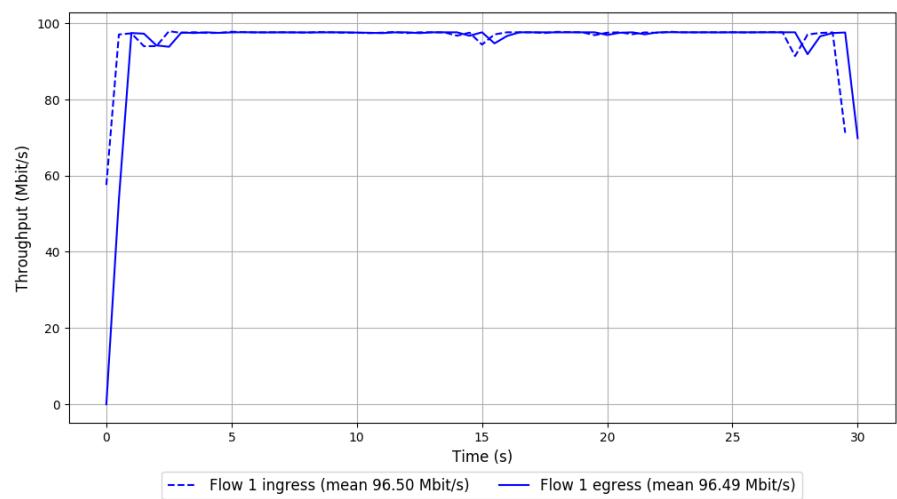


Run 2: Statistics of Indigo

Start at: 2019-06-27 13:41:28  
End at: 2019-06-27 13:41:58  
Local clock offset: -0.491 ms  
Remote clock offset: -3.608 ms

# Below is generated by plot.py at 2019-06-27 15:37:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.49 Mbit/s  
95th percentile per-packet one-way delay: 19.484 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 96.49 Mbit/s  
95th percentile per-packet one-way delay: 19.484 ms  
Loss rate: 0.09%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-06-27 14:09:24

End at: 2019-06-27 14:09:54

Local clock offset: -0.848 ms

Remote clock offset: -4.786 ms

# Below is generated by plot.py at 2019-06-27 15:38:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 96.87 Mbit/s

95th percentile per-packet one-way delay: 19.762 ms

Loss rate: 0.09%

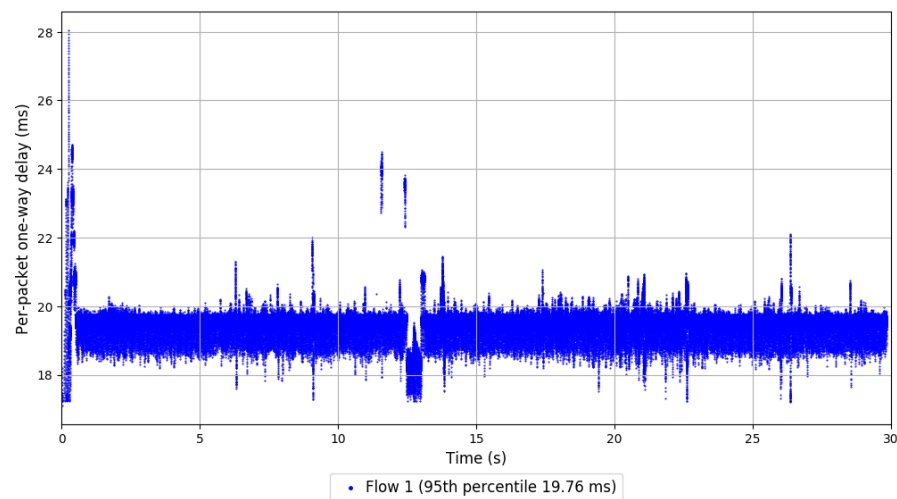
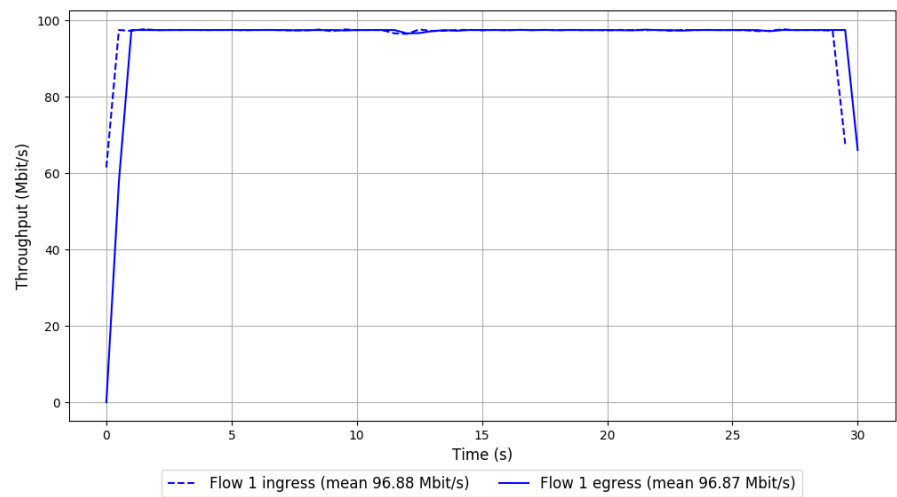
-- Flow 1:

Average throughput: 96.87 Mbit/s

95th percentile per-packet one-way delay: 19.762 ms

Loss rate: 0.09%

Run 3: Report of Indigo — Data Link



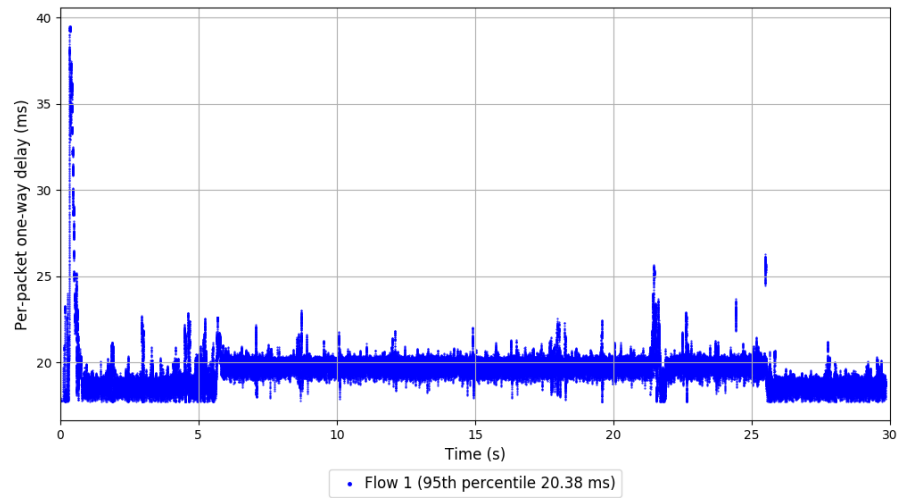
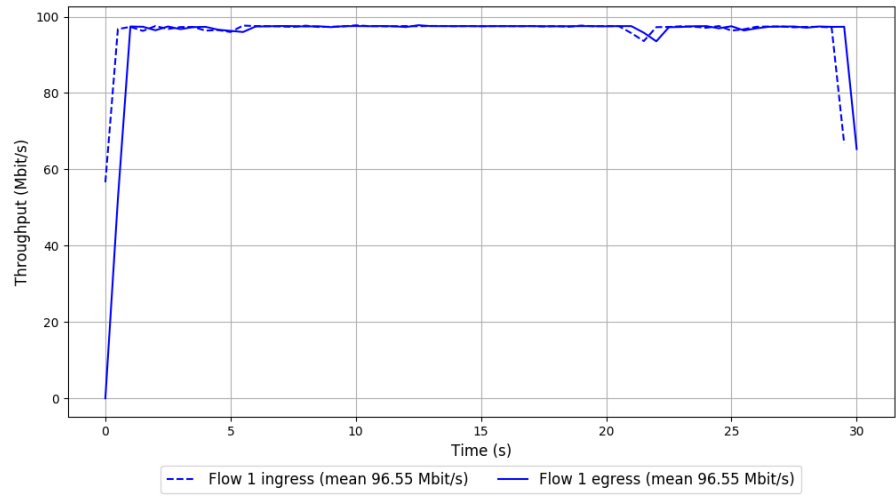


Run 4: Statistics of Indigo

Start at: 2019-06-27 14:37:20  
End at: 2019-06-27 14:37:50  
Local clock offset: 0.034 ms  
Remote clock offset: -4.703 ms

# Below is generated by plot.py at 2019-06-27 15:38:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.55 Mbit/s  
95th percentile per-packet one-way delay: 20.382 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 96.55 Mbit/s  
95th percentile per-packet one-way delay: 20.382 ms  
Loss rate: 0.09%

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

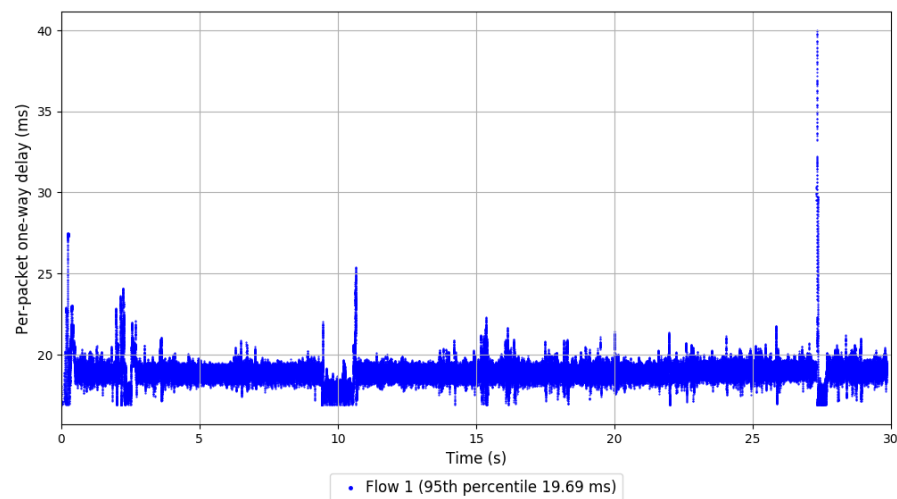
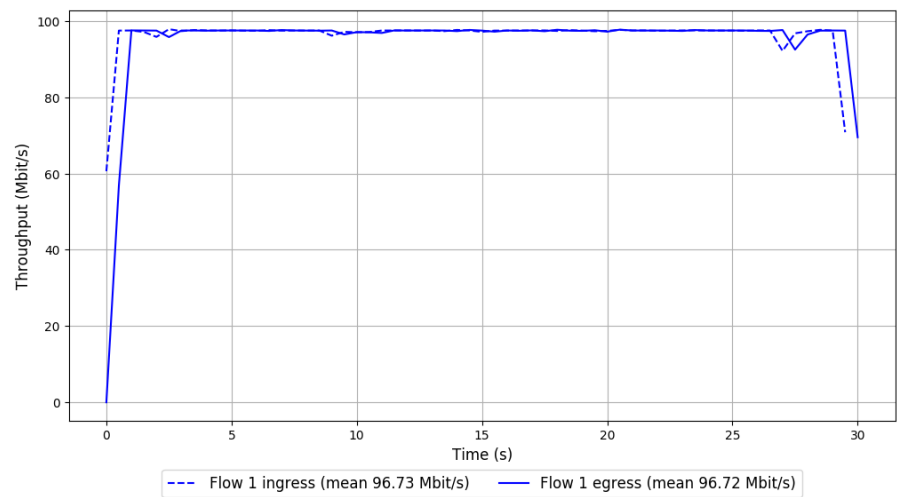


Run 5: Statistics of Indigo

Start at: 2019-06-27 15:05:22  
End at: 2019-06-27 15:05:52  
Local clock offset: -0.332 ms  
Remote clock offset: -4.472 ms

# Below is generated by plot.py at 2019-06-27 15:38:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.72 Mbit/s  
95th percentile per-packet one-way delay: 19.691 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 96.72 Mbit/s  
95th percentile per-packet one-way delay: 19.691 ms  
Loss rate: 0.09%

Run 5: Report of Indigo — Data Link

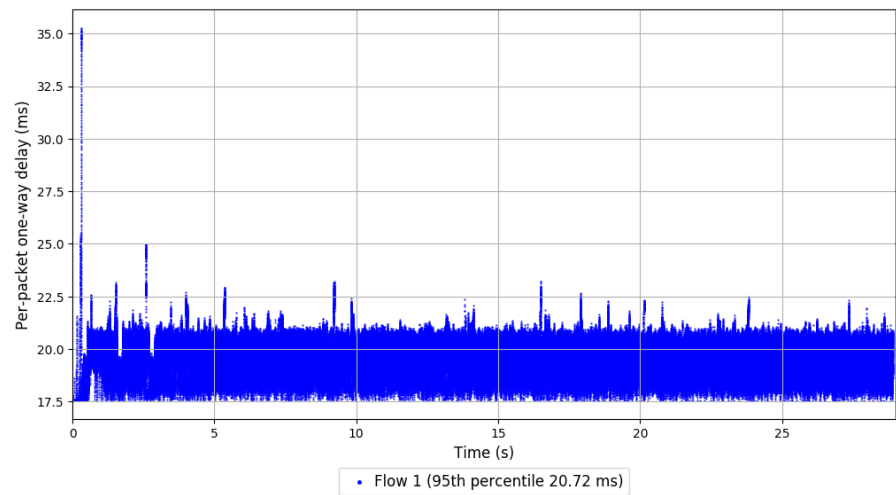
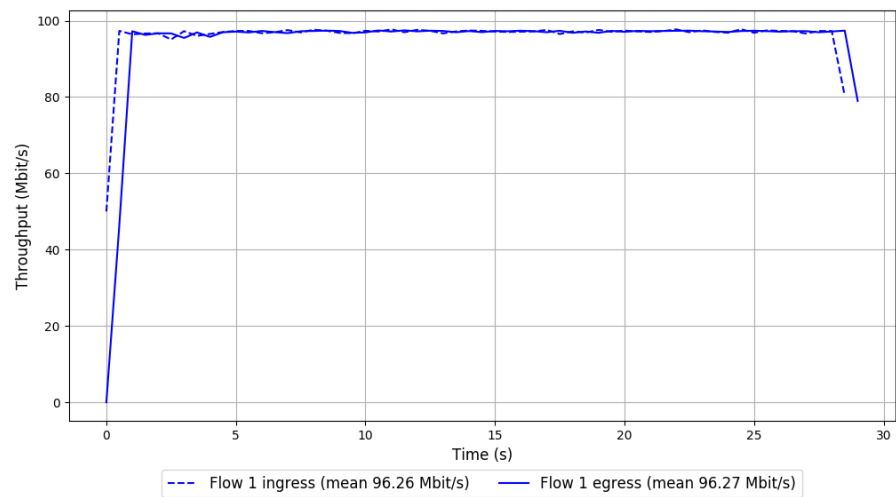


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-06-27 13:24:10  
End at: 2019-06-27 13:24:40  
Local clock offset: -1.293 ms  
Remote clock offset: -4.328 ms

# Below is generated by plot.py at 2019-06-27 15:38:14  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.27 Mbit/s  
95th percentile per-packet one-way delay: 20.722 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 96.27 Mbit/s  
95th percentile per-packet one-way delay: 20.722 ms  
Loss rate: 0.09%

Run 1: Report of Indigo-MusesC3 — Data Link

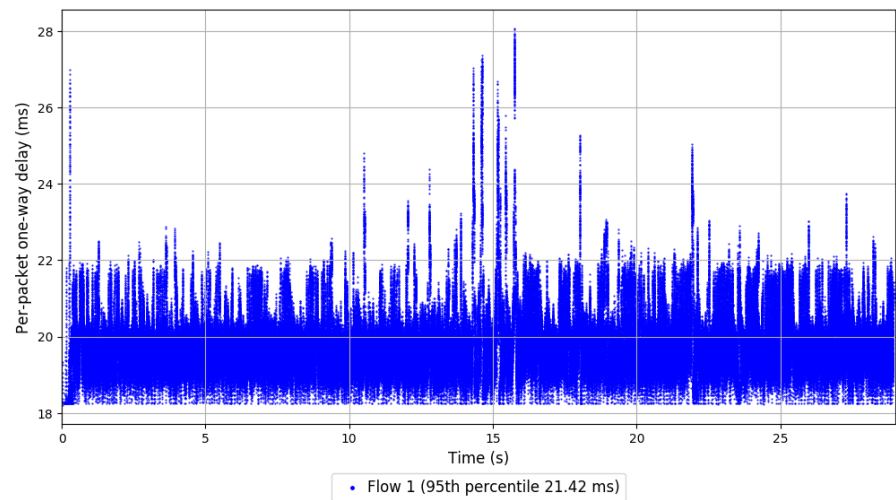
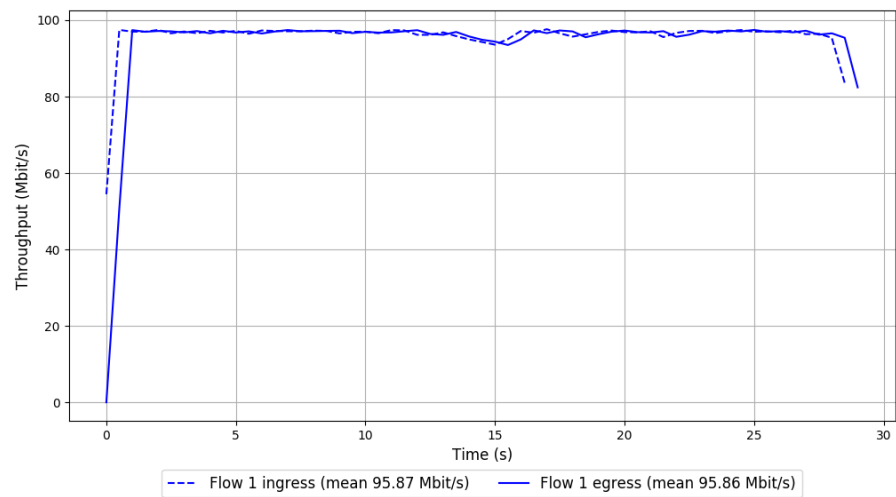


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-06-27 13:51:45  
End at: 2019-06-27 13:52:15  
Local clock offset: -0.699 ms  
Remote clock offset: -5.284 ms

# Below is generated by plot.py at 2019-06-27 15:38:31  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.86 Mbit/s  
95th percentile per-packet one-way delay: 21.416 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 95.86 Mbit/s  
95th percentile per-packet one-way delay: 21.416 ms  
Loss rate: 0.09%

Run 2: Report of Indigo-MusesC3 — Data Link



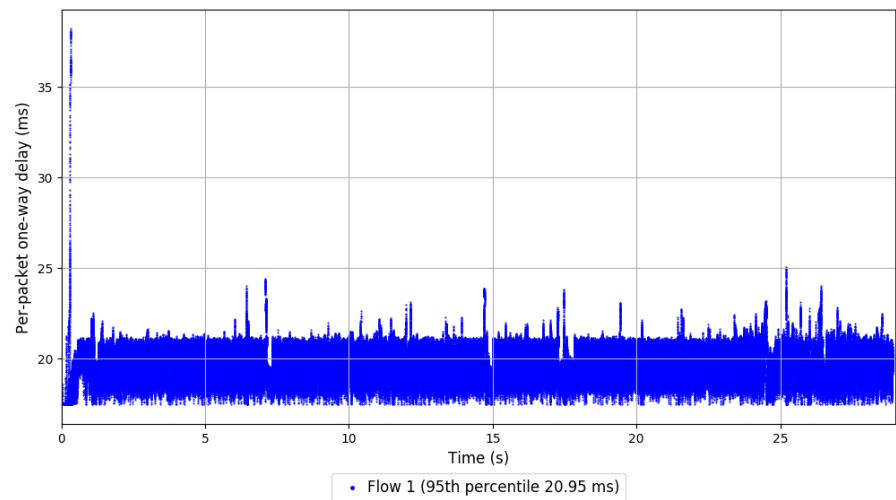
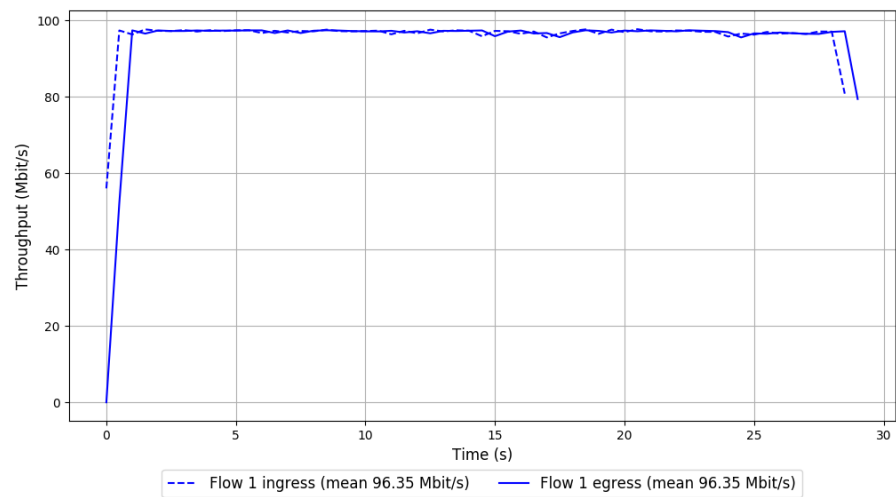


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-06-27 14:19:19  
End at: 2019-06-27 14:19:49  
Local clock offset: 0.074 ms  
Remote clock offset: -4.266 ms

# Below is generated by plot.py at 2019-06-27 15:38:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.35 Mbit/s  
95th percentile per-packet one-way delay: 20.947 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 96.35 Mbit/s  
95th percentile per-packet one-way delay: 20.947 ms  
Loss rate: 0.09%

Run 3: Report of Indigo-MusesC3 — Data Link

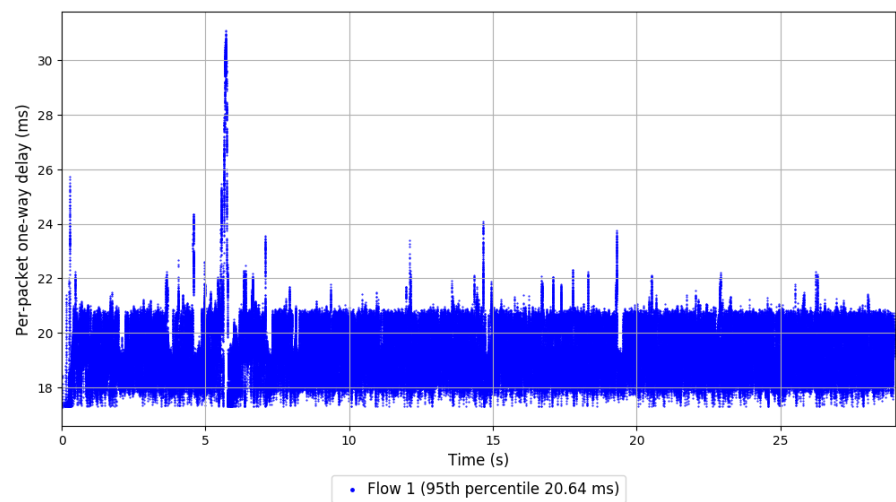
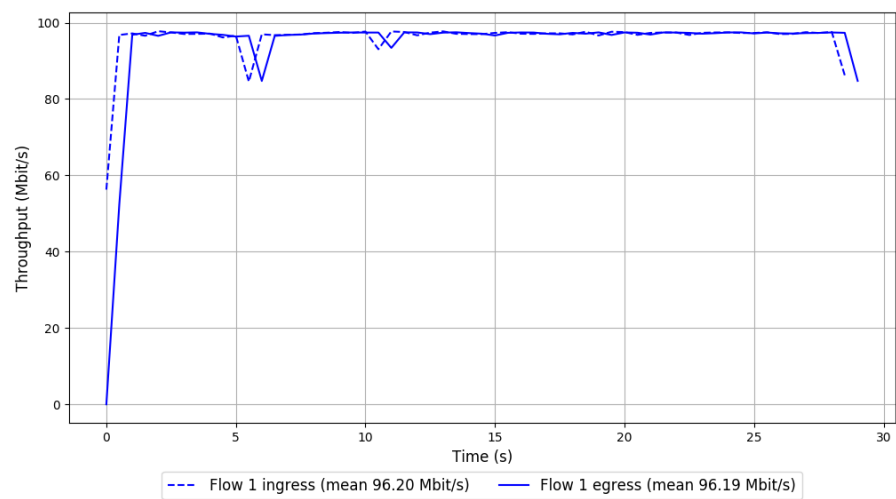


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-06-27 14:47:18  
End at: 2019-06-27 14:47:48  
Local clock offset: -0.342 ms  
Remote clock offset: -4.877 ms

# Below is generated by plot.py at 2019-06-27 15:38:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.19 Mbit/s  
95th percentile per-packet one-way delay: 20.645 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 96.19 Mbit/s  
95th percentile per-packet one-way delay: 20.645 ms  
Loss rate: 0.10%

Run 4: Report of Indigo-MusesC3 — Data Link

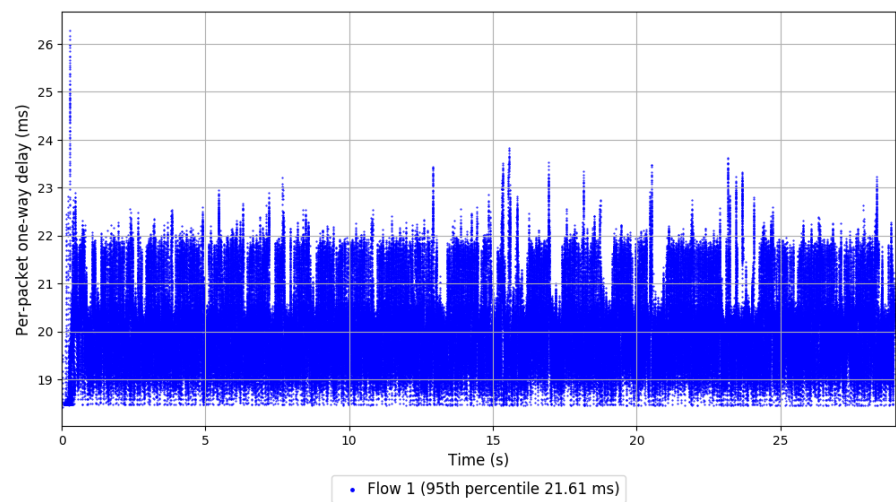
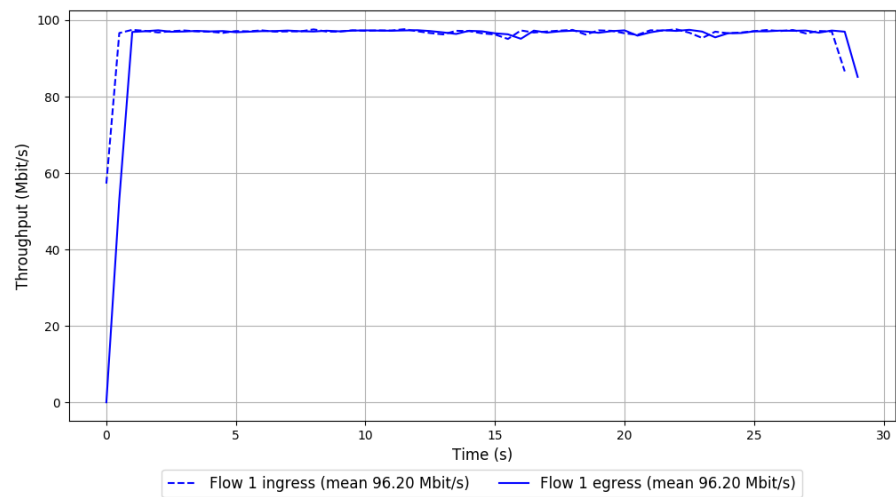


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-06-27 15:15:33  
End at: 2019-06-27 15:16:03  
Local clock offset: -1.016 ms  
Remote clock offset: -7.167 ms

# Below is generated by plot.py at 2019-06-27 15:38:50  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.20 Mbit/s  
95th percentile per-packet one-way delay: 21.615 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 96.20 Mbit/s  
95th percentile per-packet one-way delay: 21.615 ms  
Loss rate: 0.09%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-06-27 13:20:36

End at: 2019-06-27 13:21:06

Local clock offset: -1.236 ms

Remote clock offset: -4.547 ms

# Below is generated by plot.py at 2019-06-27 15:39:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.74 Mbit/s

95th percentile per-packet one-way delay: 19.821 ms

Loss rate: 0.09%

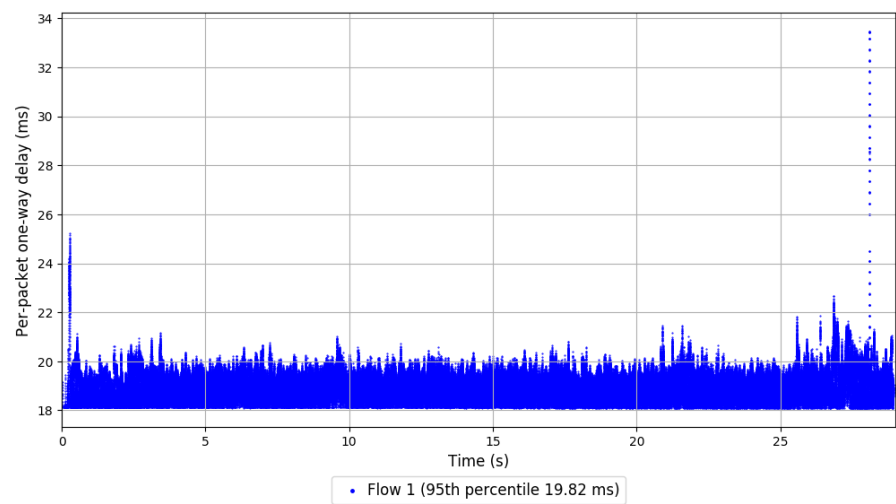
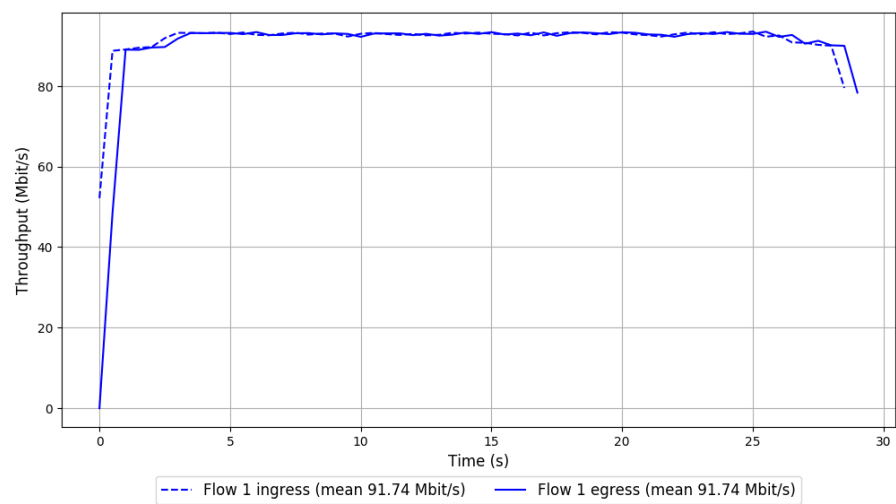
-- Flow 1:

Average throughput: 91.74 Mbit/s

95th percentile per-packet one-way delay: 19.821 ms

Loss rate: 0.09%

Run 1: Report of Indigo-MusesC5 — Data Link



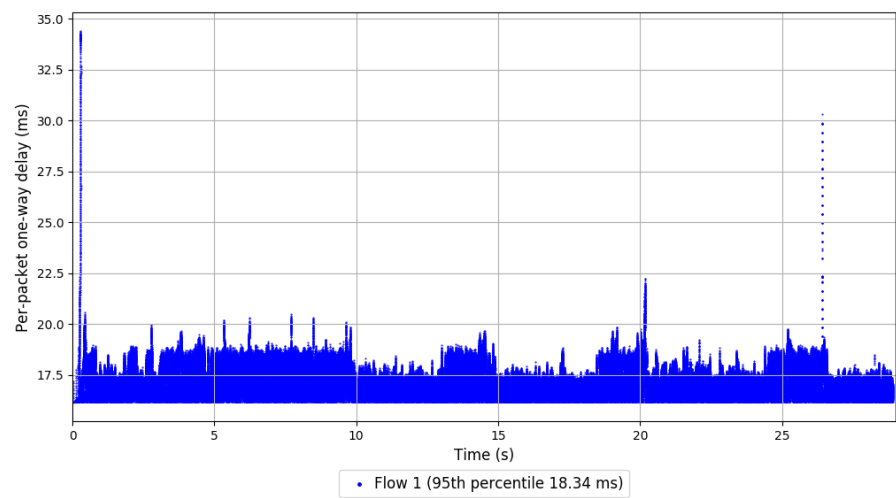
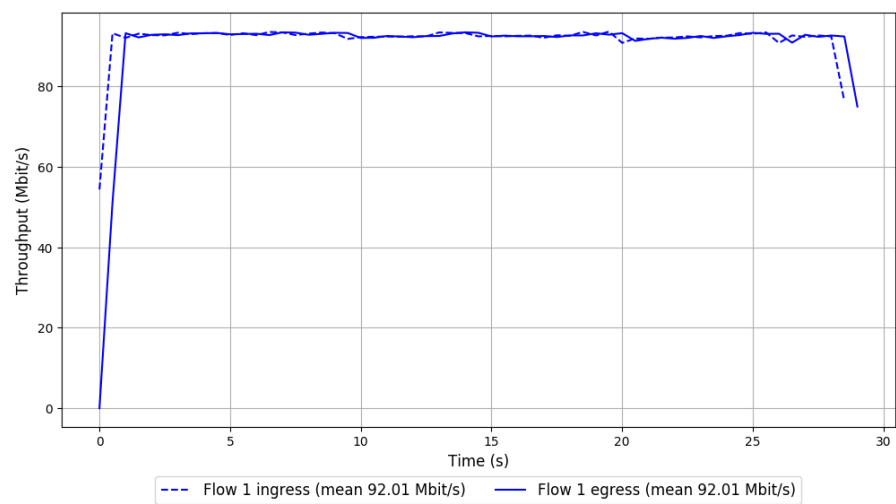


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-06-27 13:48:02  
End at: 2019-06-27 13:48:32  
Local clock offset: -1.135 ms  
Remote clock offset: -3.474 ms

# Below is generated by plot.py at 2019-06-27 15:39:15  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 92.01 Mbit/s  
95th percentile per-packet one-way delay: 18.342 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 92.01 Mbit/s  
95th percentile per-packet one-way delay: 18.342 ms  
Loss rate: 0.09%

Run 2: Report of Indigo-MusesC5 — Data Link

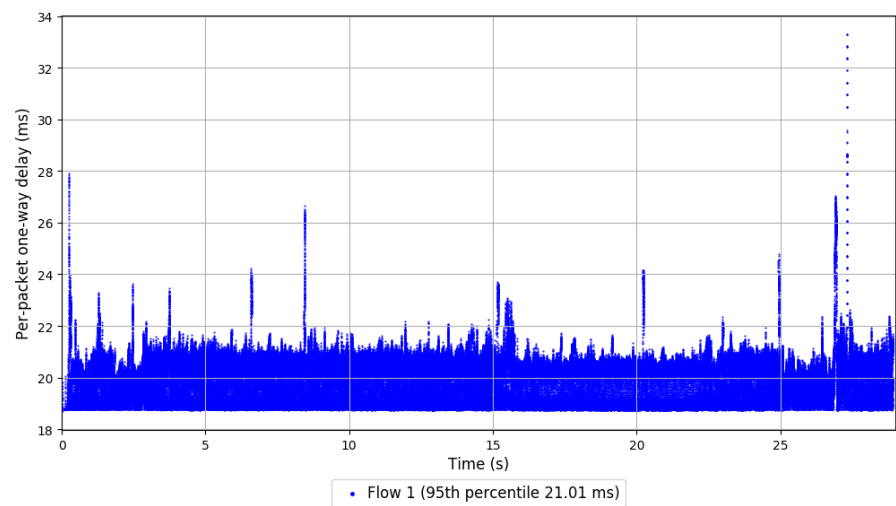
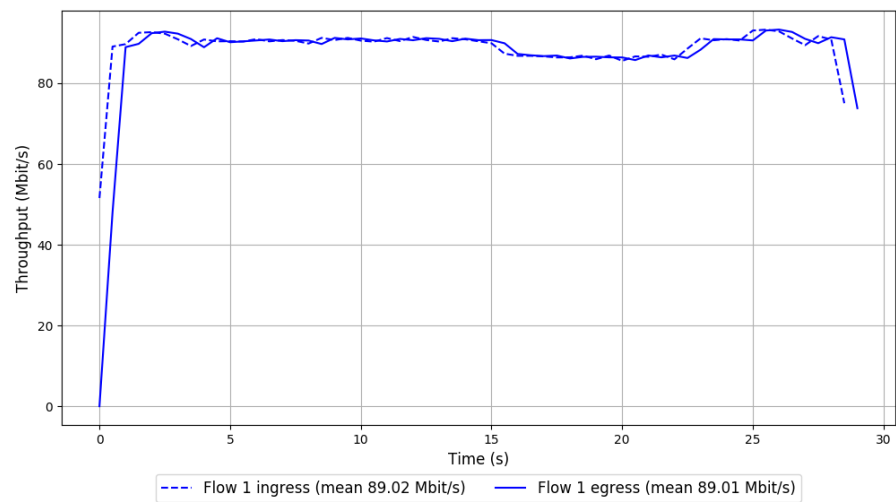


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-06-27 14:15:40  
End at: 2019-06-27 14:16:10  
Local clock offset: -0.613 ms  
Remote clock offset: -6.173 ms

# Below is generated by plot.py at 2019-06-27 15:39:15  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 89.01 Mbit/s  
95th percentile per-packet one-way delay: 21.007 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 89.01 Mbit/s  
95th percentile per-packet one-way delay: 21.007 ms  
Loss rate: 0.09%

Run 3: Report of Indigo-MusesC5 — Data Link

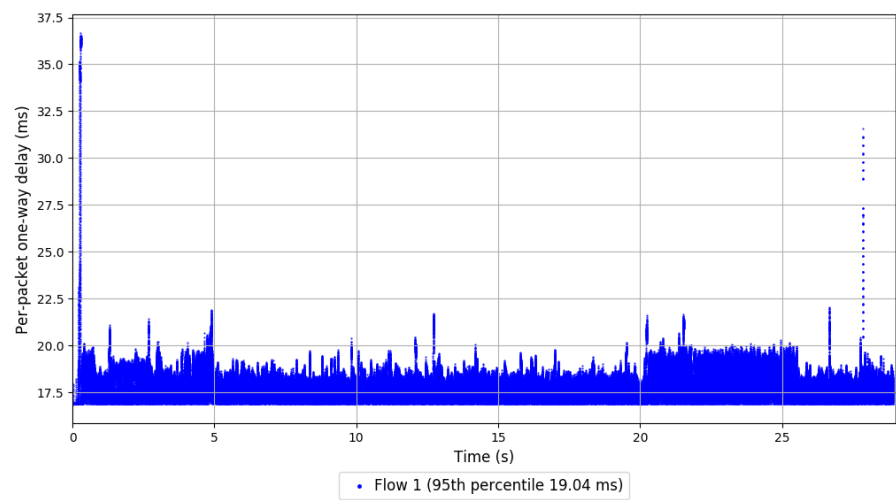
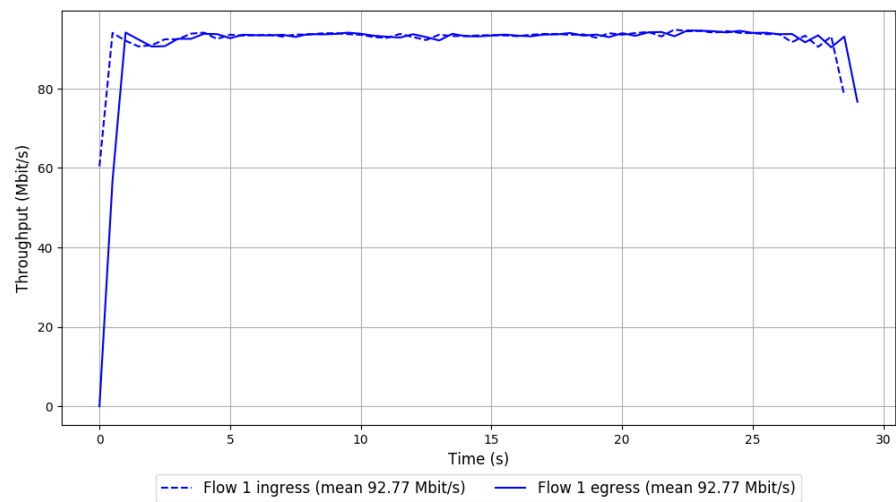


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-06-27 14:43:41  
End at: 2019-06-27 14:44:11  
Local clock offset: -1.257 ms  
Remote clock offset: -5.265 ms

# Below is generated by plot.py at 2019-06-27 15:39:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 92.77 Mbit/s  
95th percentile per-packet one-way delay: 19.035 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 92.77 Mbit/s  
95th percentile per-packet one-way delay: 19.035 ms  
Loss rate: 0.09%

Run 4: Report of Indigo-MusesC5 — Data Link

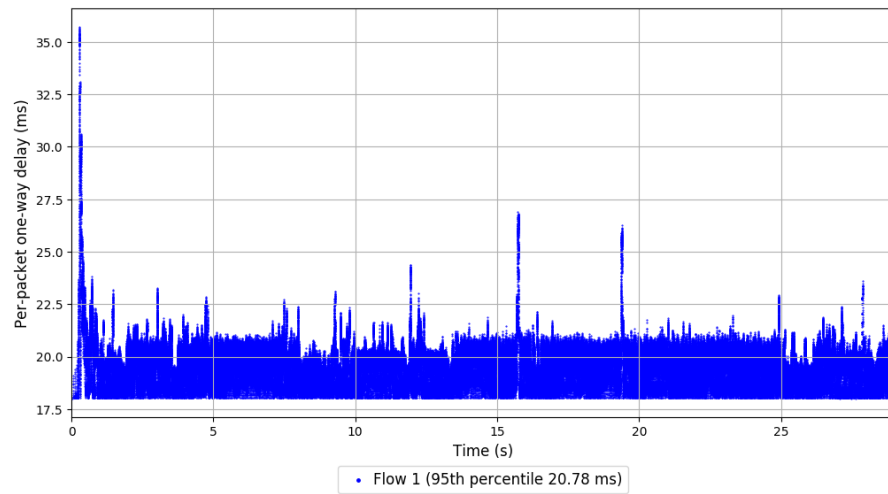
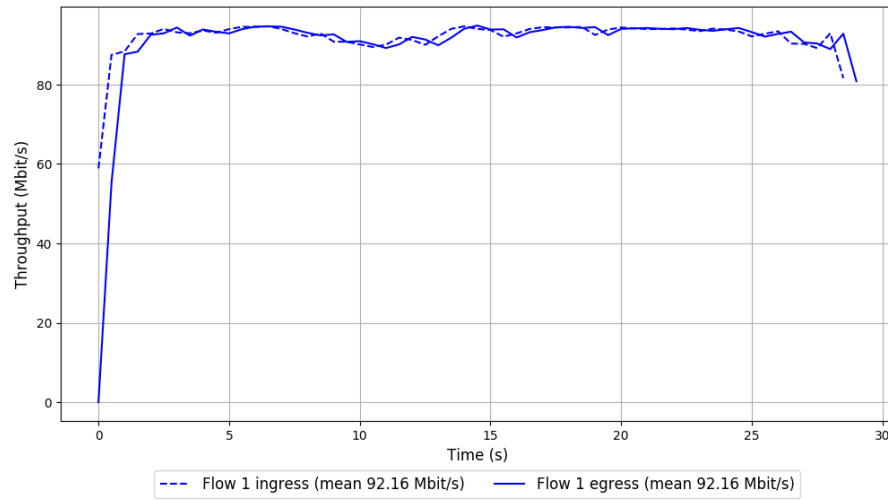


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-06-27 15:11:50  
End at: 2019-06-27 15:12:20  
Local clock offset: 0.277 ms  
Remote clock offset: -5.339 ms

# Below is generated by plot.py at 2019-06-27 15:39:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 92.16 Mbit/s  
95th percentile per-packet one-way delay: 20.779 ms  
Loss rate: 0.08%  
-- Flow 1:  
Average throughput: 92.16 Mbit/s  
95th percentile per-packet one-way delay: 20.779 ms  
Loss rate: 0.08%

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





Run 1: Statistics of Indigo-MusesD

Start at: 2019-06-27 13:27:44

End at: 2019-06-27 13:28:14

Local clock offset: -0.73 ms

Remote clock offset: -5.276 ms

# Below is generated by plot.py at 2019-06-27 15:39:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.75 Mbit/s

95th percentile per-packet one-way delay: 21.363 ms

Loss rate: 0.09%

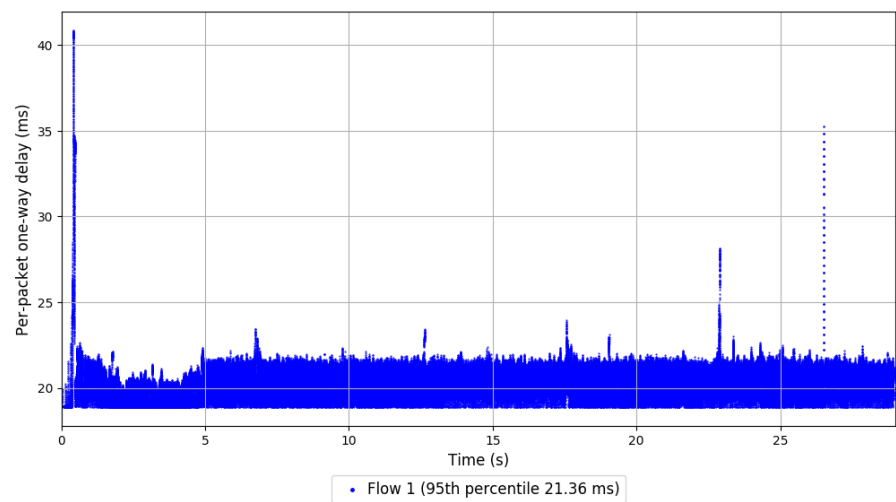
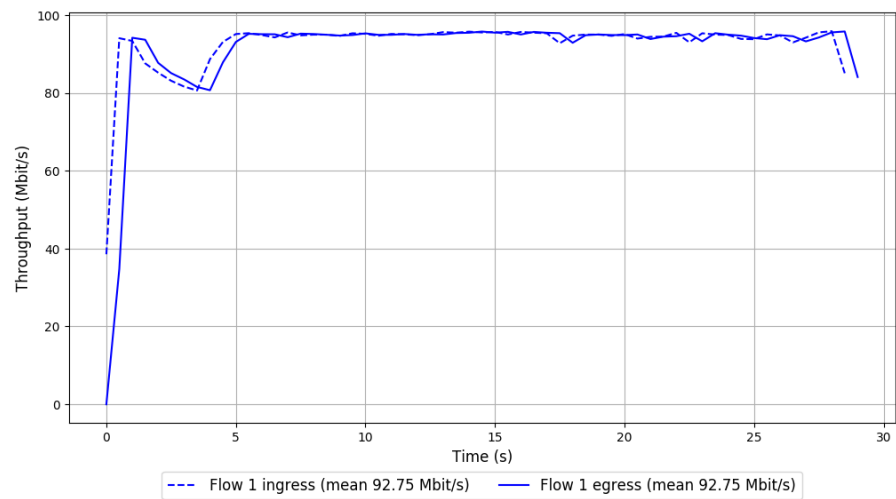
-- Flow 1:

Average throughput: 92.75 Mbit/s

95th percentile per-packet one-way delay: 21.363 ms

Loss rate: 0.09%

Run 1: Report of Indigo-MusesD — Data Link

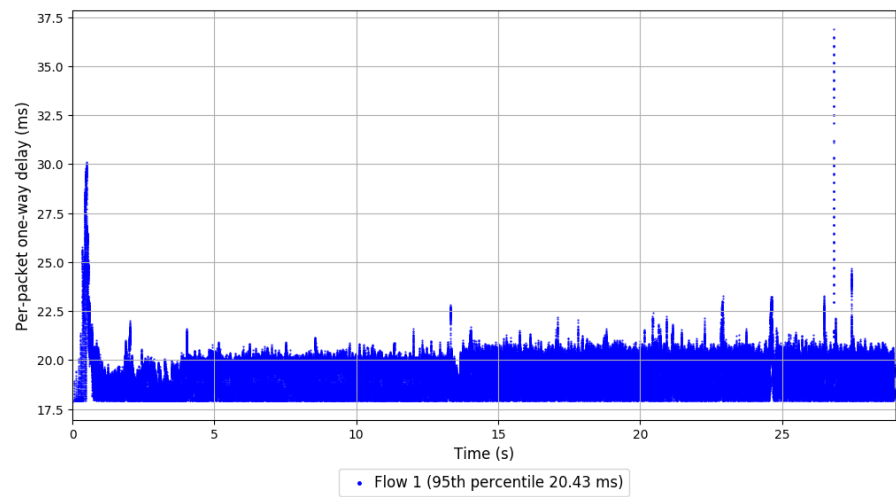
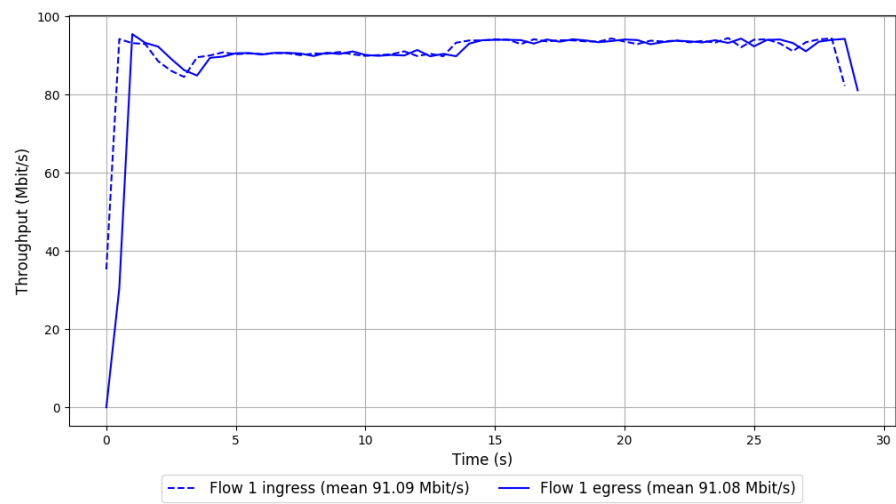


Run 2: Statistics of Indigo-MusesD

Start at: 2019-06-27 13:55:27  
End at: 2019-06-27 13:55:57  
Local clock offset: -0.157 ms  
Remote clock offset: -4.518 ms

# Below is generated by plot.py at 2019-06-27 15:39:45  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.08 Mbit/s  
95th percentile per-packet one-way delay: 20.432 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 91.08 Mbit/s  
95th percentile per-packet one-way delay: 20.432 ms  
Loss rate: 0.09%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-06-27 14:22:57

End at: 2019-06-27 14:23:27

Local clock offset: 0.541 ms

Remote clock offset: -6.548 ms

# Below is generated by plot.py at 2019-06-27 15:40:03

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.63 Mbit/s

95th percentile per-packet one-way delay: 25.762 ms

Loss rate: 0.09%

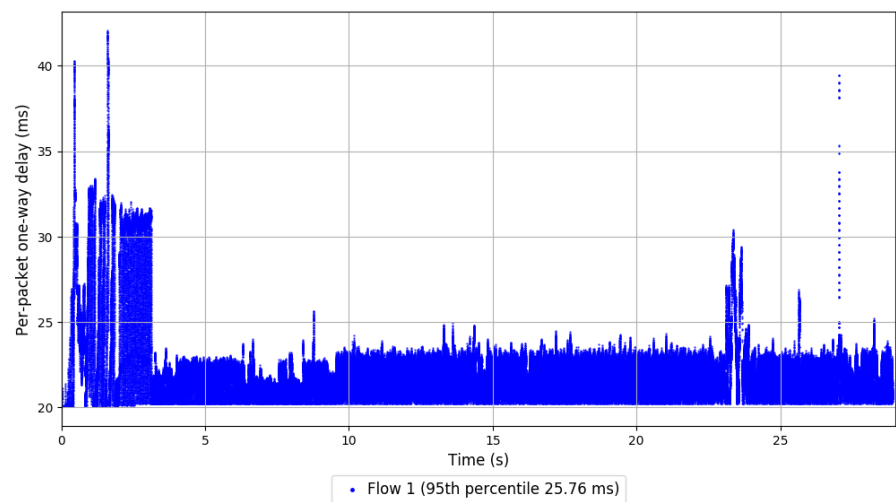
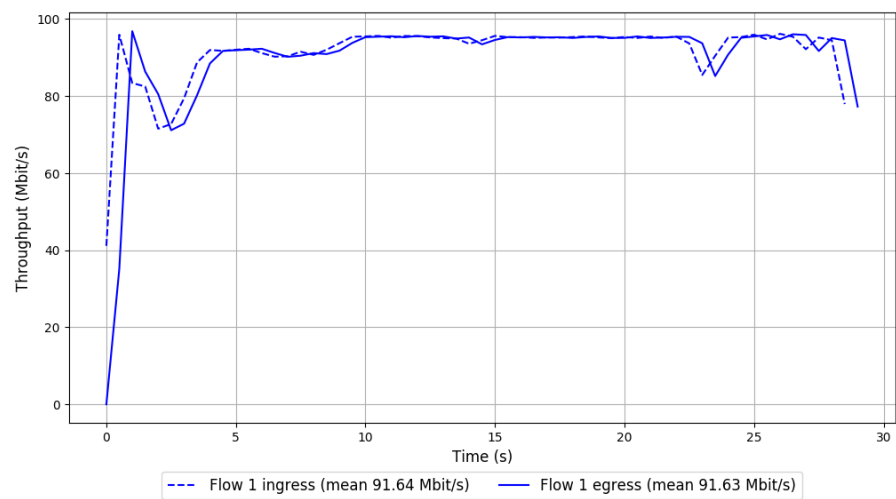
-- Flow 1:

Average throughput: 91.63 Mbit/s

95th percentile per-packet one-way delay: 25.762 ms

Loss rate: 0.09%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-06-27 14:50:53

End at: 2019-06-27 14:51:23

Local clock offset: 0.439 ms

Remote clock offset: -6.474 ms

# Below is generated by plot.py at 2019-06-27 15:40:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.51 Mbit/s

95th percentile per-packet one-way delay: 22.381 ms

Loss rate: 0.09%

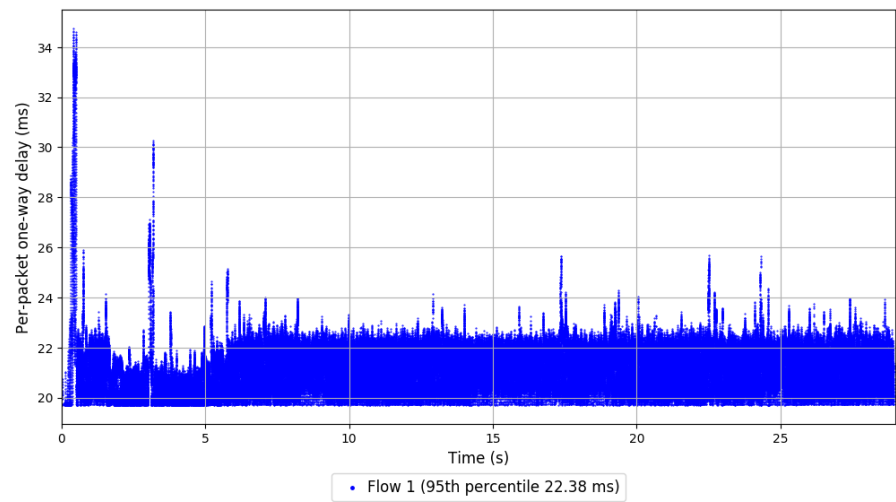
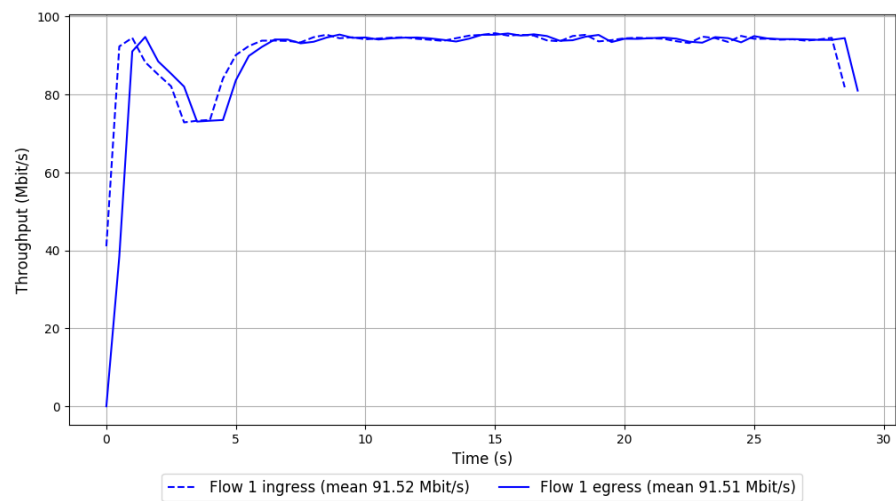
-- Flow 1:

Average throughput: 91.51 Mbit/s

95th percentile per-packet one-way delay: 22.381 ms

Loss rate: 0.09%

Run 4: Report of Indigo-MusesD — Data Link



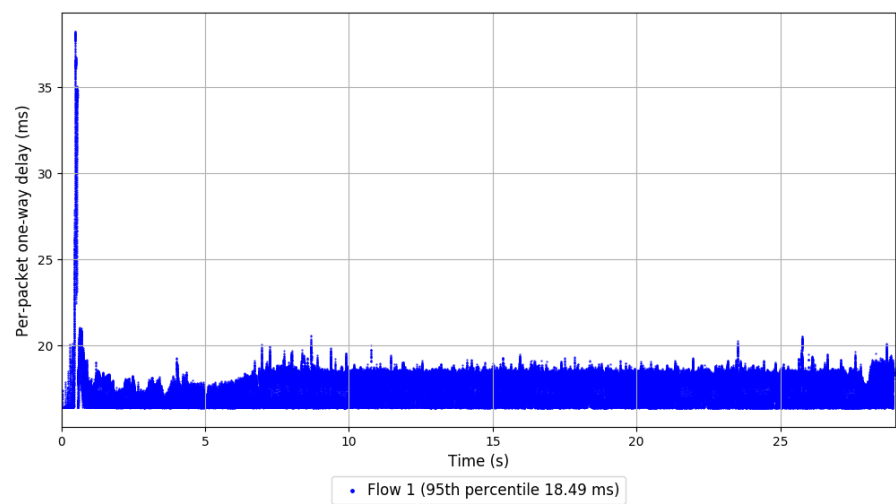
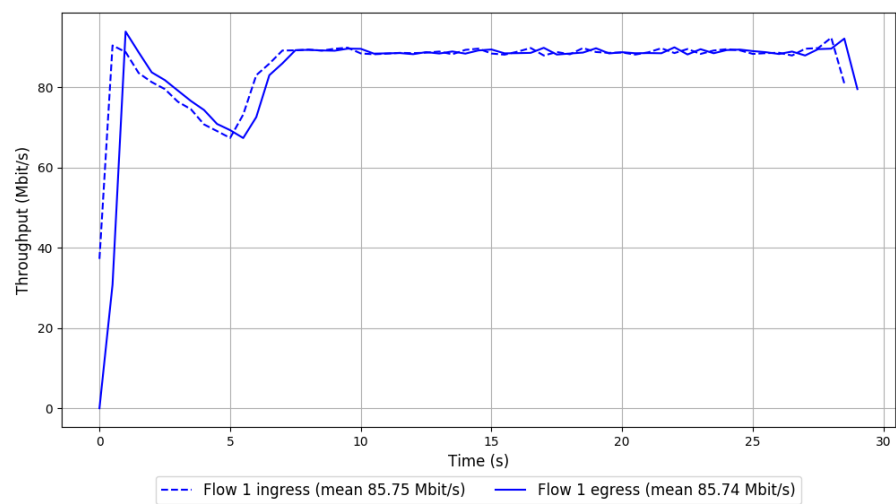


Run 5: Statistics of Indigo-MusesD

Start at: 2019-06-27 15:21:10  
End at: 2019-06-27 15:21:40  
Local clock offset: -1.074 ms  
Remote clock offset: -5.281 ms

# Below is generated by plot.py at 2019-06-27 15:40:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 85.74 Mbit/s  
95th percentile per-packet one-way delay: 18.487 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 85.74 Mbit/s  
95th percentile per-packet one-way delay: 18.487 ms  
Loss rate: 0.10%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-06-27 13:36:36

End at: 2019-06-27 13:37:06

Local clock offset: -0.888 ms

Remote clock offset: -6.239 ms

# Below is generated by plot.py at 2019-06-27 15:40:25

# Datalink statistics

-- Total of 1 flow:

Average throughput: 96.41 Mbit/s

95th percentile per-packet one-way delay: 22.627 ms

Loss rate: 0.09%

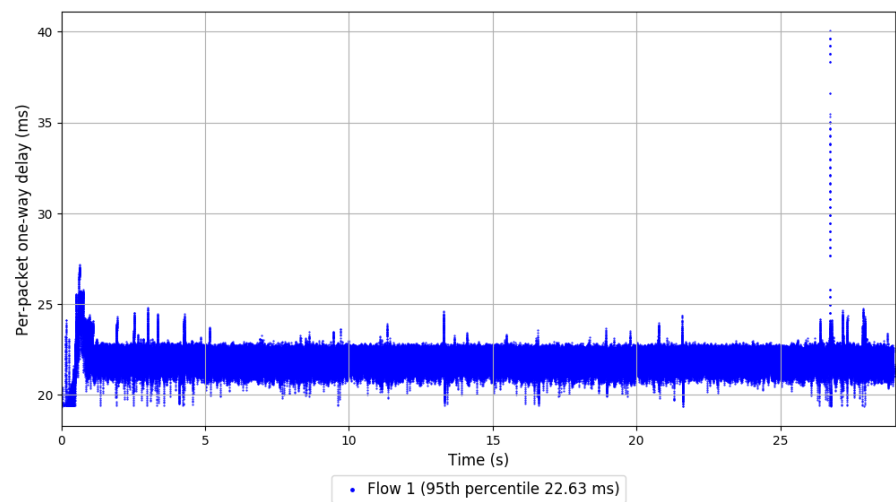
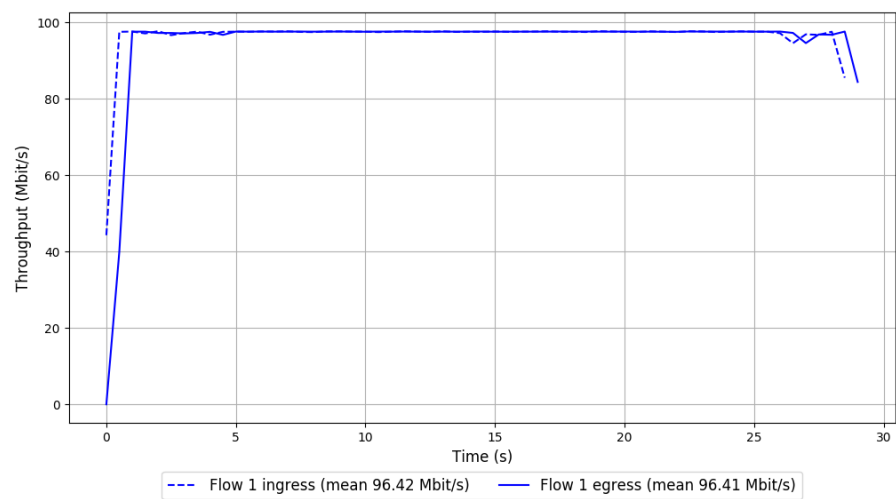
-- Flow 1:

Average throughput: 96.41 Mbit/s

95th percentile per-packet one-way delay: 22.627 ms

Loss rate: 0.09%

Run 1: Report of Indigo-MusesT — Data Link

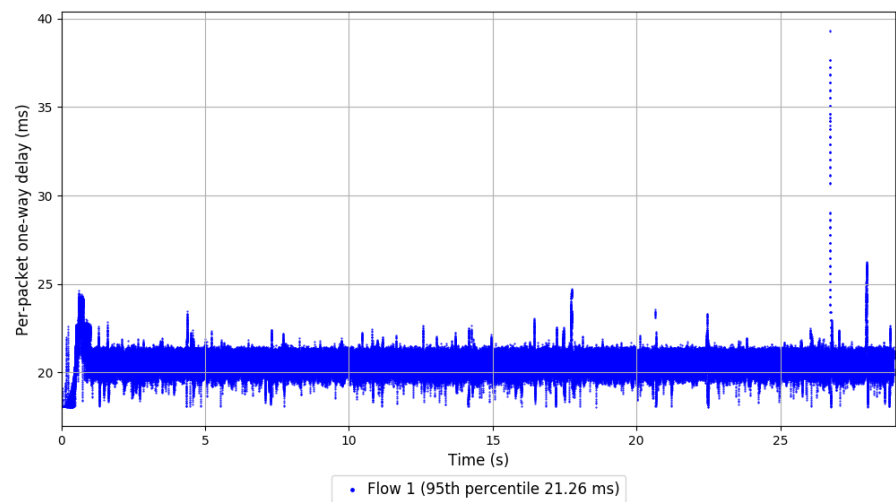
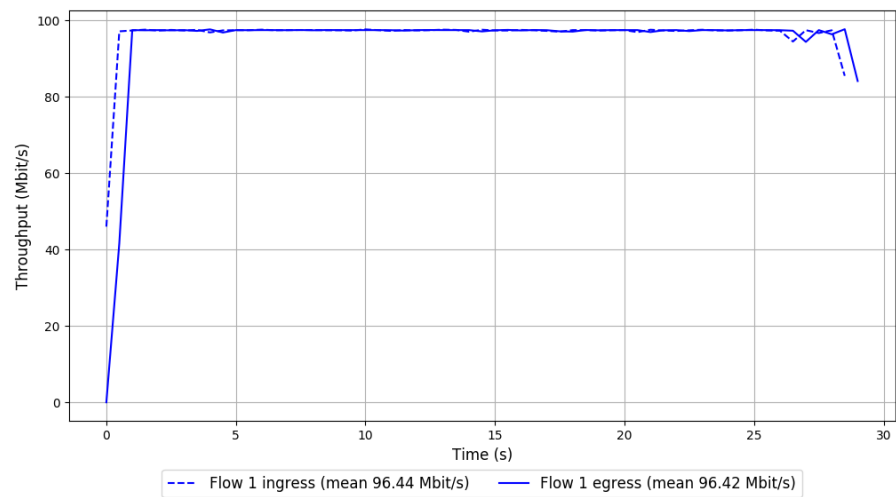


Run 2: Statistics of Indigo-MusesT

Start at: 2019-06-27 14:04:30  
End at: 2019-06-27 14:05:00  
Local clock offset: -1.064 ms  
Remote clock offset: -5.724 ms

# Below is generated by plot.py at 2019-06-27 15:40:32  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.42 Mbit/s  
95th percentile per-packet one-way delay: 21.263 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 96.42 Mbit/s  
95th percentile per-packet one-way delay: 21.263 ms  
Loss rate: 0.10%

Run 2: Report of Indigo-MusesT — Data Link

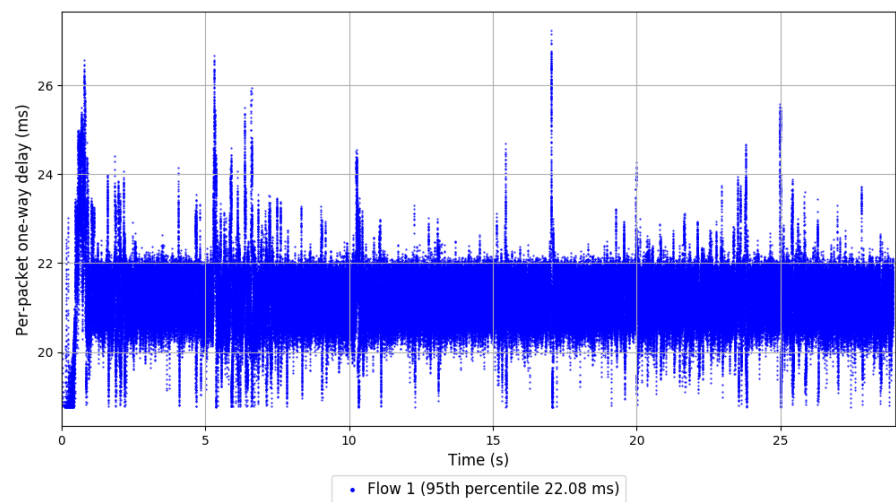
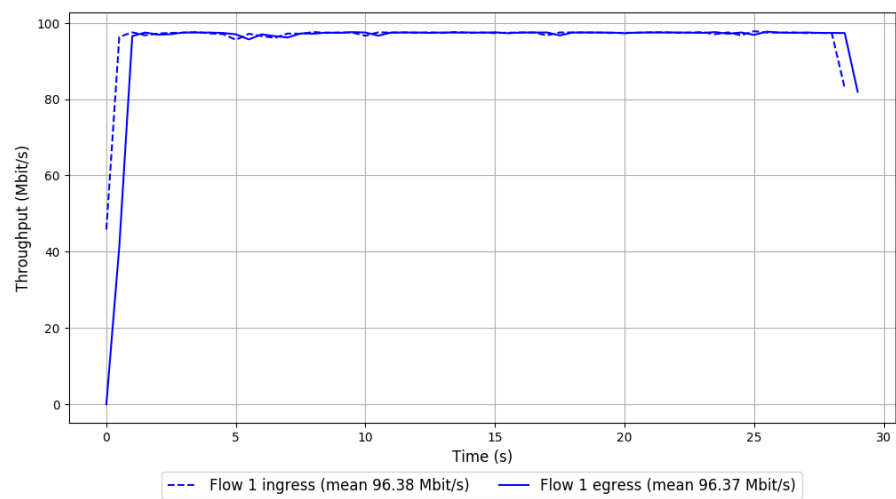


Run 3: Statistics of Indigo-MusesT

Start at: 2019-06-27 14:32:22  
End at: 2019-06-27 14:32:52  
Local clock offset: -0.493 ms  
Remote clock offset: -6.128 ms

# Below is generated by plot.py at 2019-06-27 15:40:51  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.37 Mbit/s  
95th percentile per-packet one-way delay: 22.079 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 96.37 Mbit/s  
95th percentile per-packet one-way delay: 22.079 ms  
Loss rate: 0.09%

Run 3: Report of Indigo-MusesT — Data Link





Run 4: Statistics of Indigo-MusesT

Start at: 2019-06-27 15:00:03

End at: 2019-06-27 15:00:33

Local clock offset: -0.416 ms

Remote clock offset: -4.97 ms

# Below is generated by plot.py at 2019-06-27 15:40:55

# Datalink statistics

-- Total of 1 flow:

Average throughput: 96.48 Mbit/s

95th percentile per-packet one-way delay: 20.348 ms

Loss rate: 0.09%

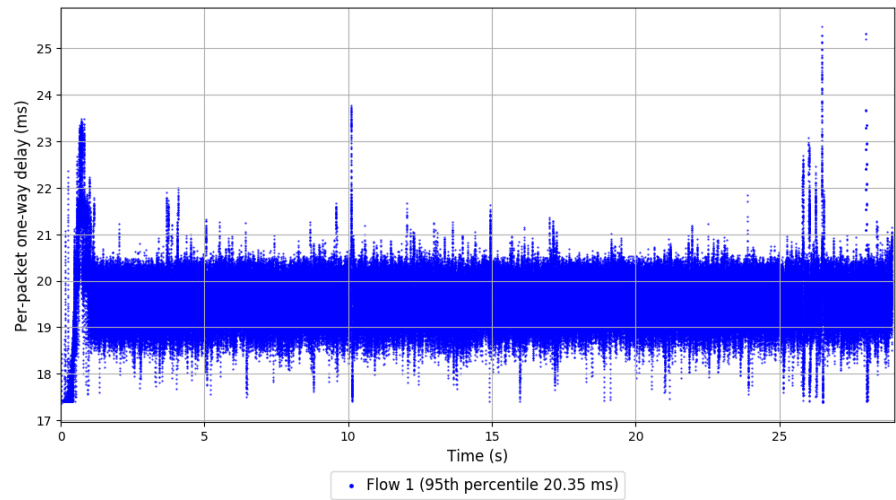
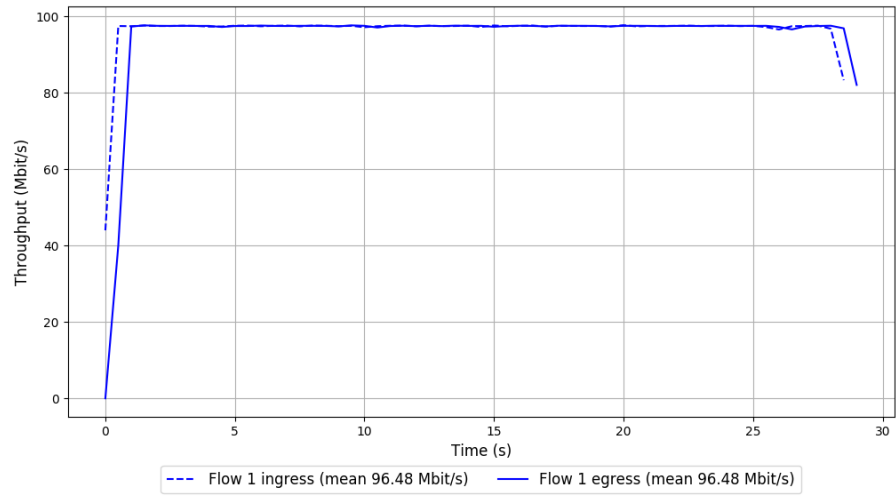
-- Flow 1:

Average throughput: 96.48 Mbit/s

95th percentile per-packet one-way delay: 20.348 ms

Loss rate: 0.09%

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



Run 5: Statistics of Indigo-MusesT

Start at: 2019-06-27 15:29:38

End at: 2019-06-27 15:30:08

Local clock offset: -0.417 ms

Remote clock offset: -5.185 ms

# Below is generated by plot.py at 2019-06-27 15:40:55

# Datalink statistics

-- Total of 1 flow:

Average throughput: 96.38 Mbit/s

95th percentile per-packet one-way delay: 19.580 ms

Loss rate: 0.09%

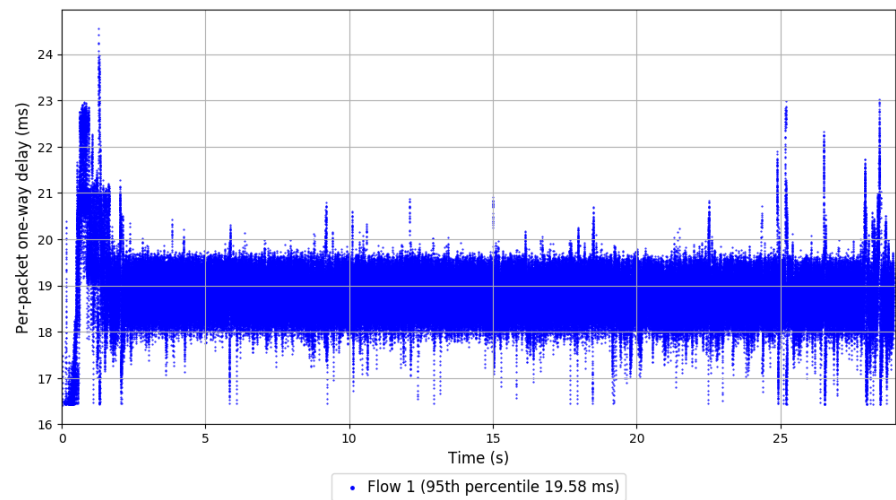
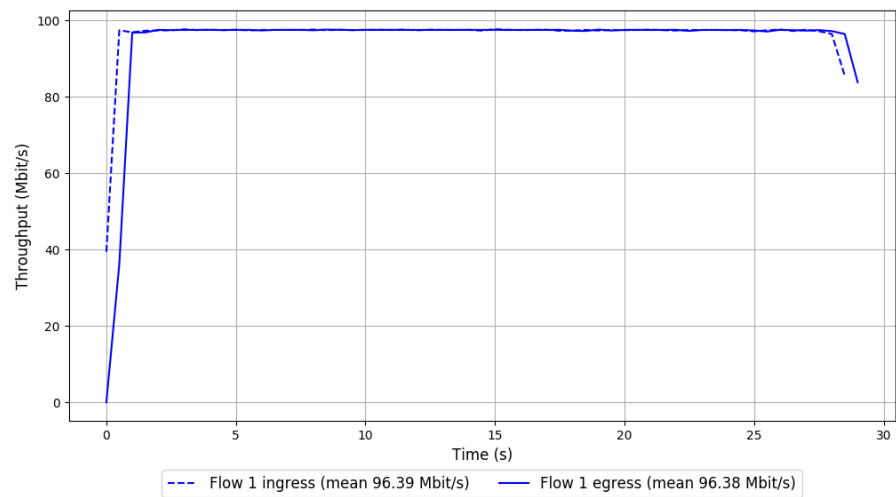
-- Flow 1:

Average throughput: 96.38 Mbit/s

95th percentile per-packet one-way delay: 19.580 ms

Loss rate: 0.09%

Run 5: Report of Indigo-MusesT — Data Link

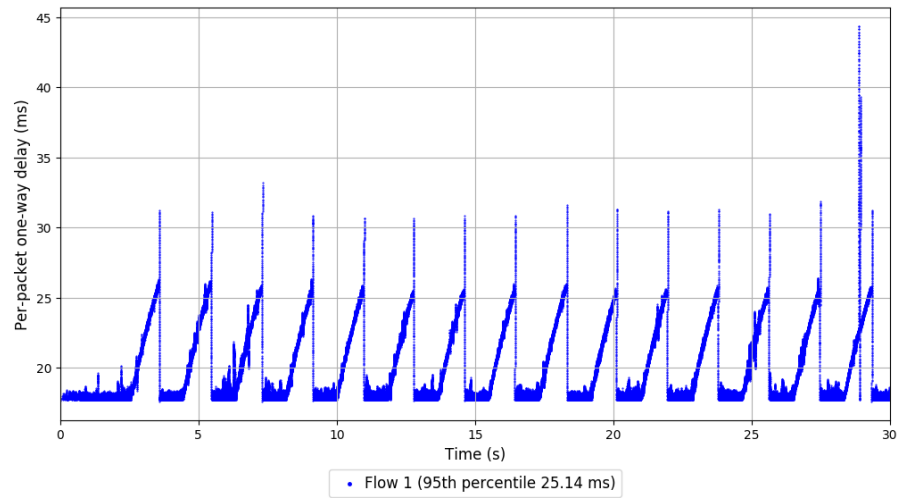
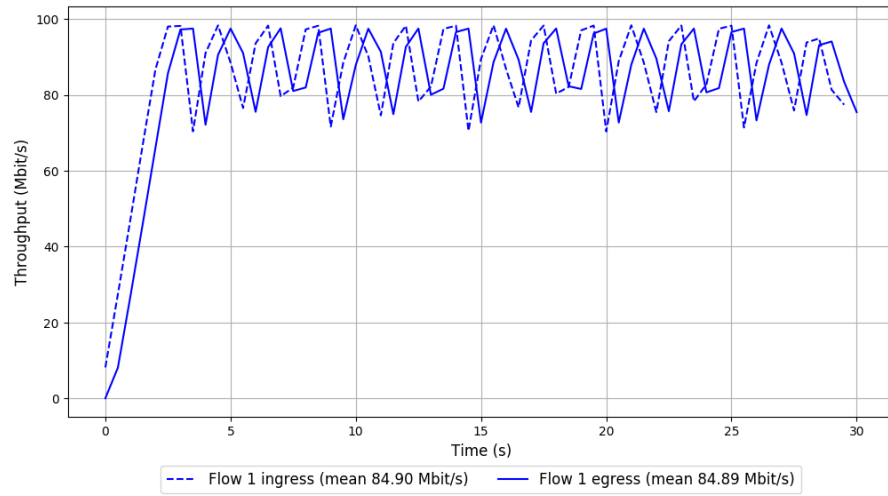


Run 1: Statistics of LEDBAT

Start at: 2019-06-27 13:21:53  
End at: 2019-06-27 13:22:23  
Local clock offset: -0.983 ms  
Remote clock offset: -4.045 ms

# Below is generated by plot.py at 2019-06-27 15:41:10  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 84.89 Mbit/s  
95th percentile per-packet one-way delay: 25.138 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 84.89 Mbit/s  
95th percentile per-packet one-way delay: 25.138 ms  
Loss rate: 0.09%

# Run 1: Report of LEDBAT — Data Link

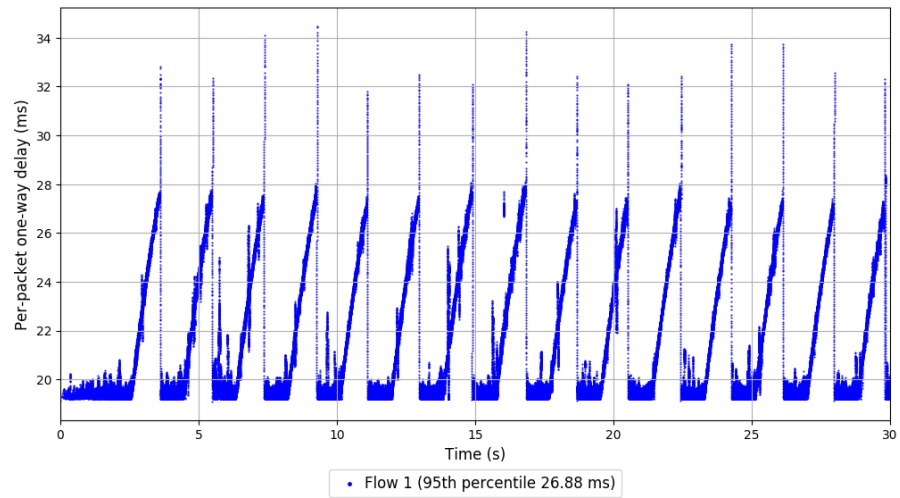
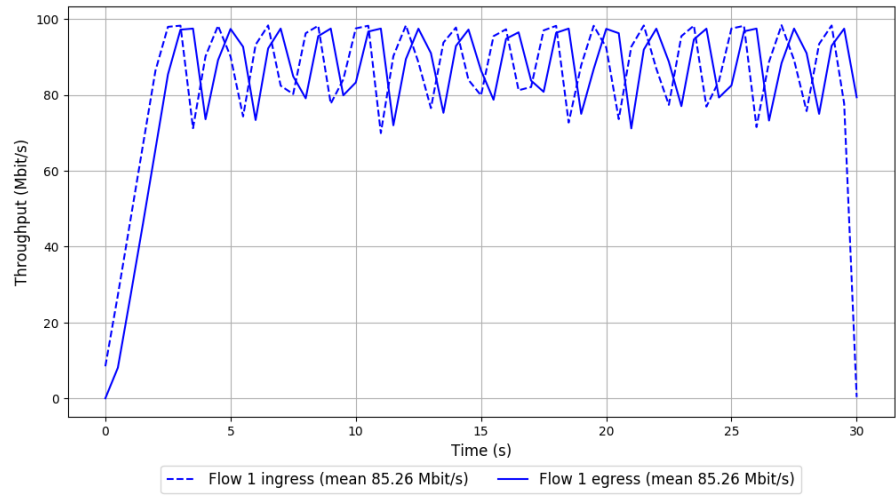


Run 2: Statistics of LEDBAT

Start at: 2019-06-27 13:49:21  
End at: 2019-06-27 13:49:51  
Local clock offset: -0.473 ms  
Remote clock offset: -5.946 ms

# Below is generated by plot.py at 2019-06-27 15:41:24  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 85.26 Mbit/s  
95th percentile per-packet one-way delay: 26.876 ms  
Loss rate: 0.08%  
-- Flow 1:  
Average throughput: 85.26 Mbit/s  
95th percentile per-packet one-way delay: 26.876 ms  
Loss rate: 0.08%

## Run 2: Report of LEDBAT — Data Link



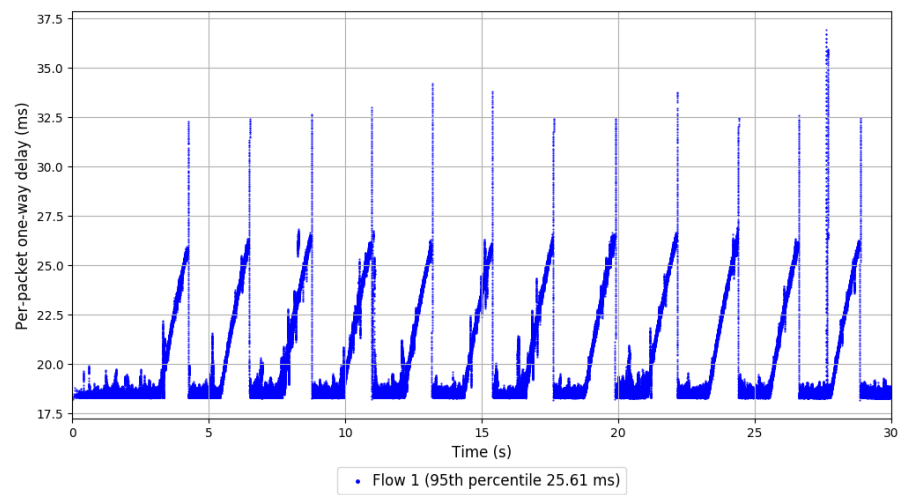
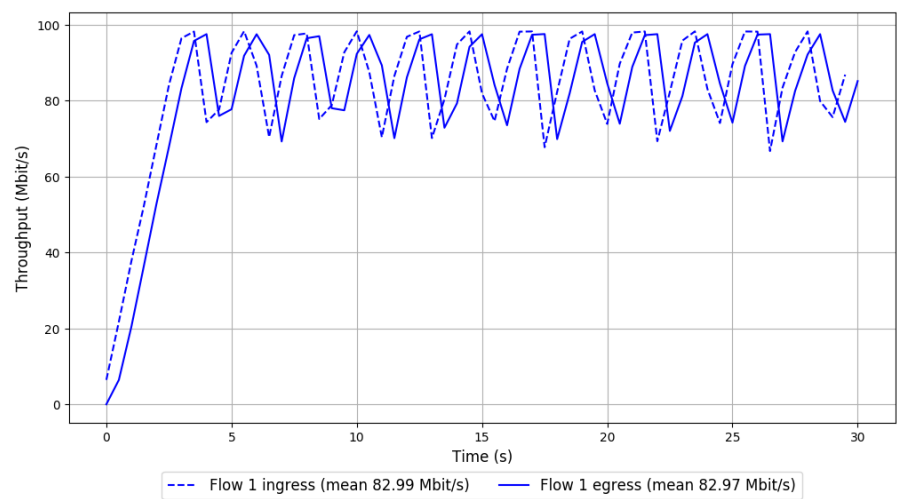


Run 3: Statistics of LEDBAT

Start at: 2019-06-27 14:16:58  
End at: 2019-06-27 14:17:28  
Local clock offset: -0.764 ms  
Remote clock offset: -5.851 ms

# Below is generated by plot.py at 2019-06-27 15:41:24  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 82.97 Mbit/s  
95th percentile per-packet one-way delay: 25.606 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 82.97 Mbit/s  
95th percentile per-packet one-way delay: 25.606 ms  
Loss rate: 0.10%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2019-06-27 14:44:54

End at: 2019-06-27 14:45:24

Local clock offset: -0.402 ms

Remote clock offset: -5.52 ms

# Below is generated by plot.py at 2019-06-27 15:41:30

# Datalink statistics

-- Total of 1 flow:

Average throughput: 84.85 Mbit/s

95th percentile per-packet one-way delay: 25.582 ms

Loss rate: 0.09%

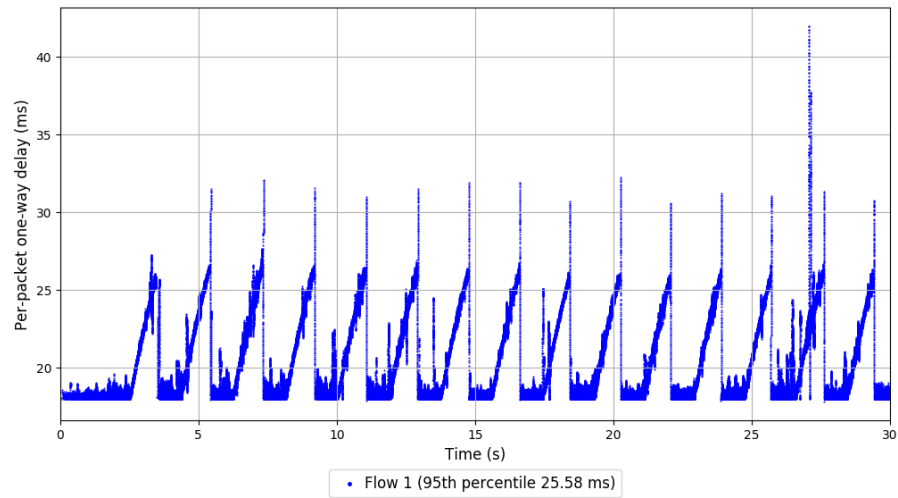
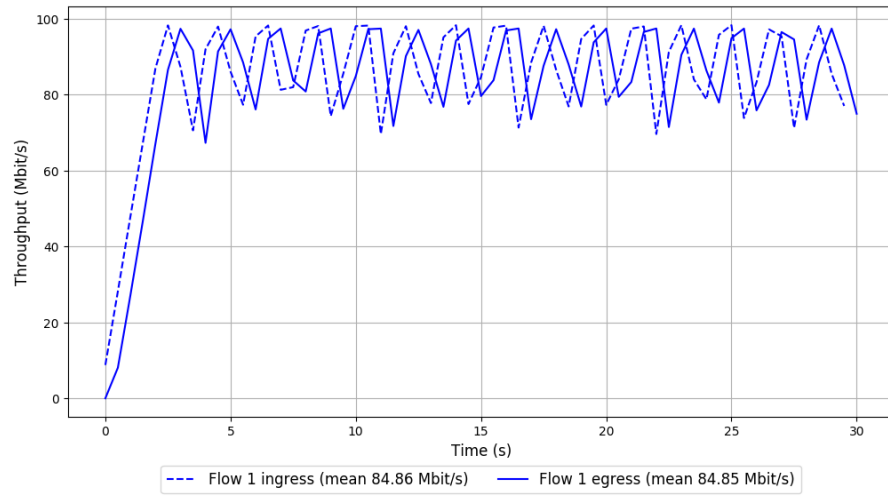
-- Flow 1:

Average throughput: 84.85 Mbit/s

95th percentile per-packet one-way delay: 25.582 ms

Loss rate: 0.09%

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

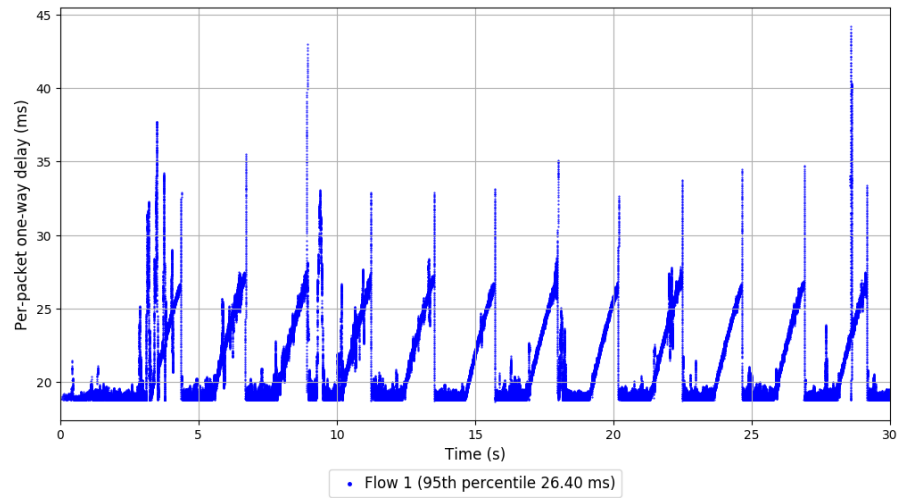
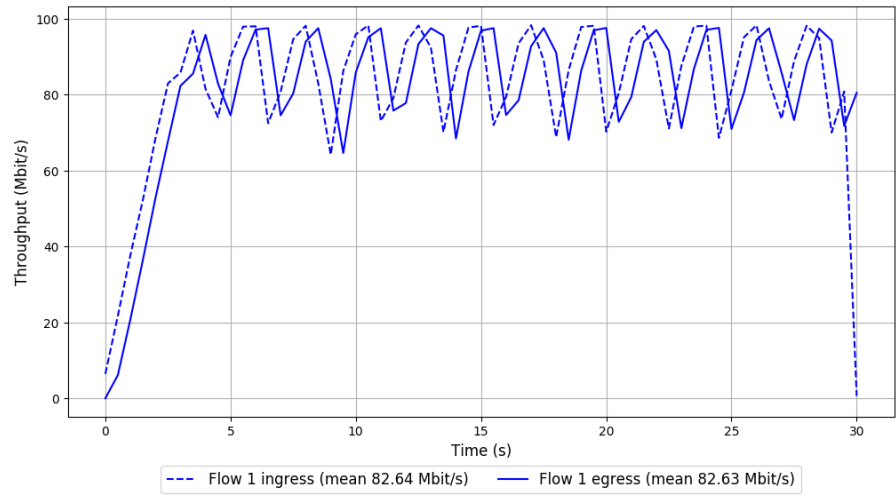


Run 5: Statistics of LEDBAT

Start at: 2019-06-27 15:13:13  
End at: 2019-06-27 15:13:43  
Local clock offset: -0.113 ms  
Remote clock offset: -6.495 ms

# Below is generated by plot.py at 2019-06-27 15:41:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 82.63 Mbit/s  
95th percentile per-packet one-way delay: 26.404 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 82.63 Mbit/s  
95th percentile per-packet one-way delay: 26.404 ms  
Loss rate: 0.09%

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



Run 1: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 13:23:05

End at: 2019-06-27 13:23:35

Local clock offset: -0.862 ms

Remote clock offset: -3.656 ms

Run 1: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing



Run 2: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 13:50:40

End at: 2019-06-27 13:51:10

Local clock offset: -1.379 ms

Remote clock offset: -3.745 ms

Run 2: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 3: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 14:18:14

End at: 2019-06-27 14:18:44

Local clock offset: -0.917 ms

Remote clock offset: -5.649 ms

Run 3: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 4: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 14:46:13

End at: 2019-06-27 14:46:43

Local clock offset: 0.201 ms

Remote clock offset: -4.917 ms

Run 4: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing

Run 5: Statistics of Muses\\_DecisionTree

Start at: 2019-06-27 15:14:28

End at: 2019-06-27 15:14:58

Local clock offset: -0.93 ms

Remote clock offset: -6.662 ms

Run 5: Report of Muses\_DecisionTree — Data Link

Figure is missing

Figure is missing



Run 1: Statistics of PCC-Allegro

Start at: 2019-06-27 13:16:49

End at: 2019-06-27 13:17:19

Local clock offset: -0.074 ms

Remote clock offset: -3.921 ms

# Below is generated by plot.py at 2019-06-27 15:42:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.39 Mbit/s

95th percentile per-packet one-way delay: 23.122 ms

Loss rate: 0.09%

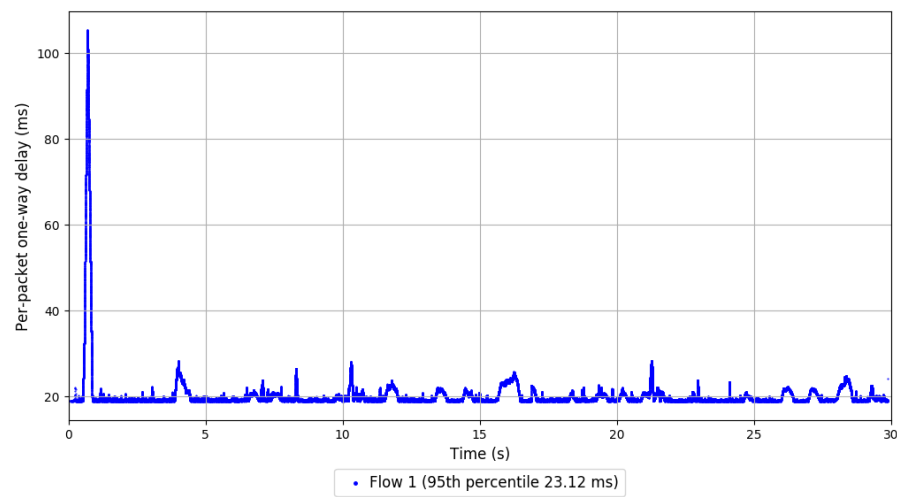
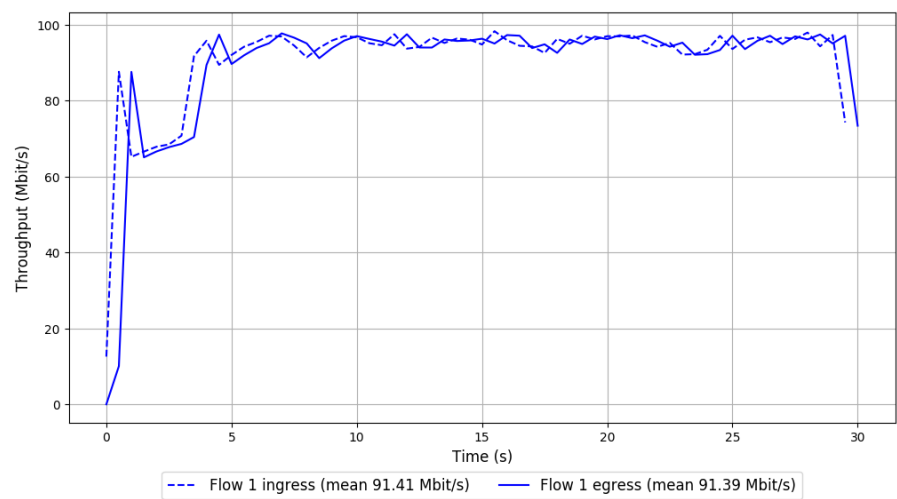
-- Flow 1:

Average throughput: 91.39 Mbit/s

95th percentile per-packet one-way delay: 23.122 ms

Loss rate: 0.09%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-06-27 13:44:07

End at: 2019-06-27 13:44:37

Local clock offset: -0.309 ms

Remote clock offset: -3.663 ms

# Below is generated by plot.py at 2019-06-27 15:42:05

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.94 Mbit/s

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

Loss rate: 0.08%

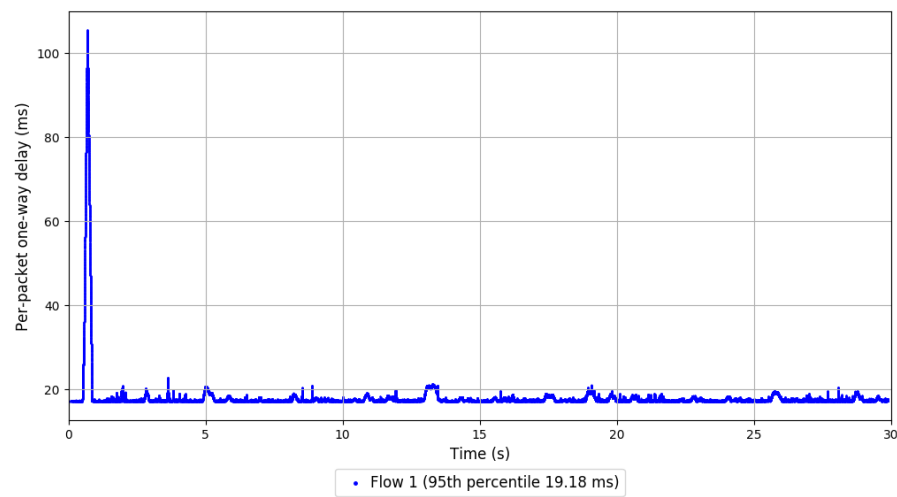
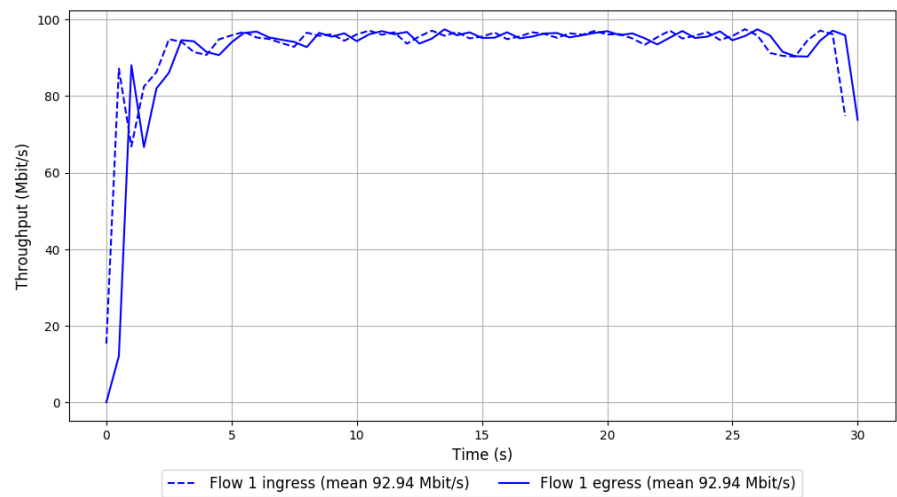
-- Flow 1:

Average throughput: 92.94 Mbit/s

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

Loss rate: 0.08%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-06-27 14:11:49

End at: 2019-06-27 14:12:19

Local clock offset: -0.526 ms

Remote clock offset: -5.696 ms

# Below is generated by plot.py at 2019-06-27 15:42:05

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.72 Mbit/s

95th percentile per-packet one-way delay: 24.965 ms

Loss rate: 0.09%

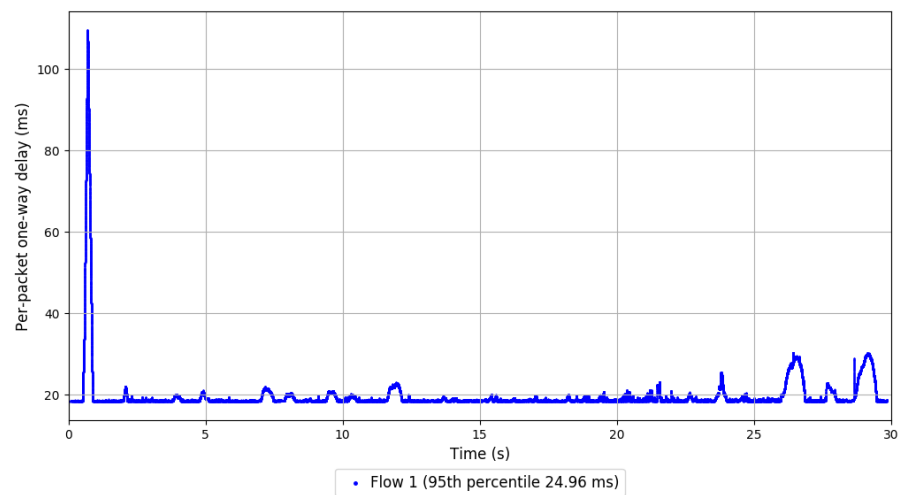
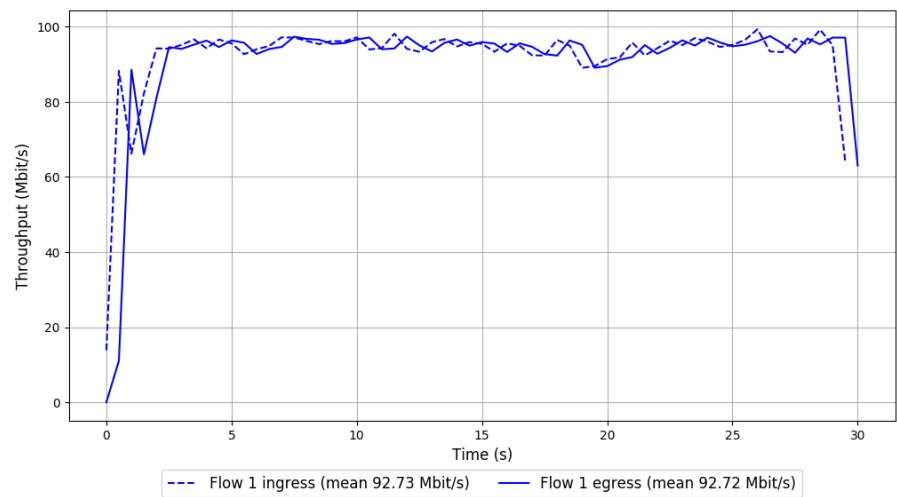
-- Flow 1:

Average throughput: 92.72 Mbit/s

95th percentile per-packet one-way delay: 24.965 ms

Loss rate: 0.09%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-06-27 14:39:56

End at: 2019-06-27 14:40:26

Local clock offset: -0.832 ms

Remote clock offset: -6.325 ms

# Below is generated by plot.py at 2019-06-27 15:42:18

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.41 Mbit/s

95th percentile per-packet one-way delay: 25.181 ms

Loss rate: 0.10%

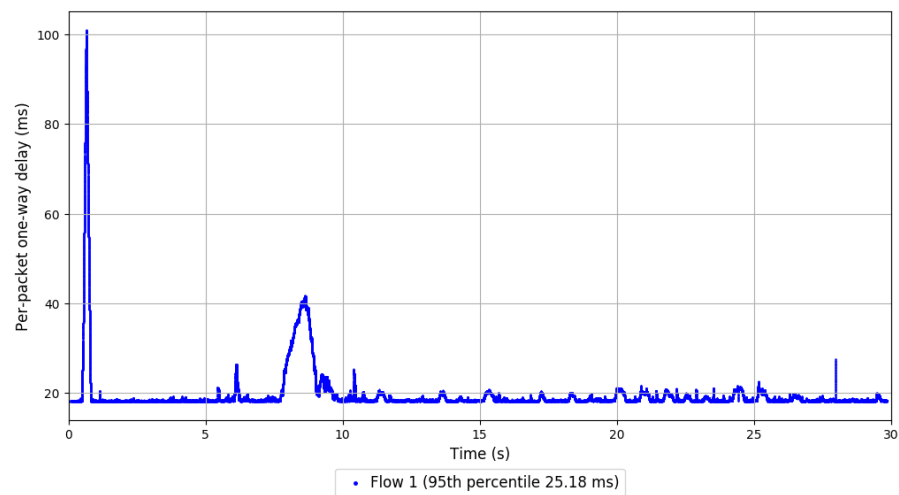
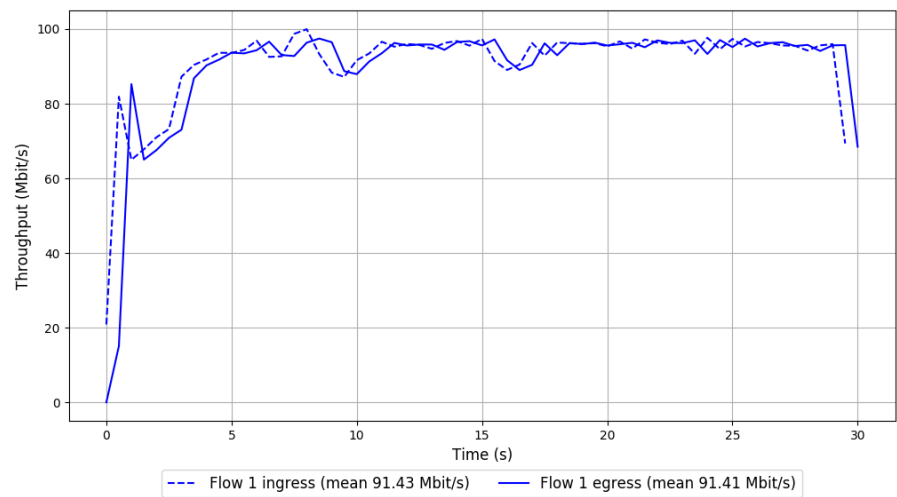
-- Flow 1:

Average throughput: 91.41 Mbit/s

95th percentile per-packet one-way delay: 25.181 ms

Loss rate: 0.10%

Run 4: Report of PCC-Allegro — Data Link





Run 5: Statistics of PCC-Allegro

Start at: 2019-06-27 15:08:00

End at: 2019-06-27 15:08:30

Local clock offset: -0.903 ms

Remote clock offset: -6.14 ms

# Below is generated by plot.py at 2019-06-27 15:42:28

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.15 Mbit/s

95th percentile per-packet one-way delay: 24.276 ms

Loss rate: 0.12%

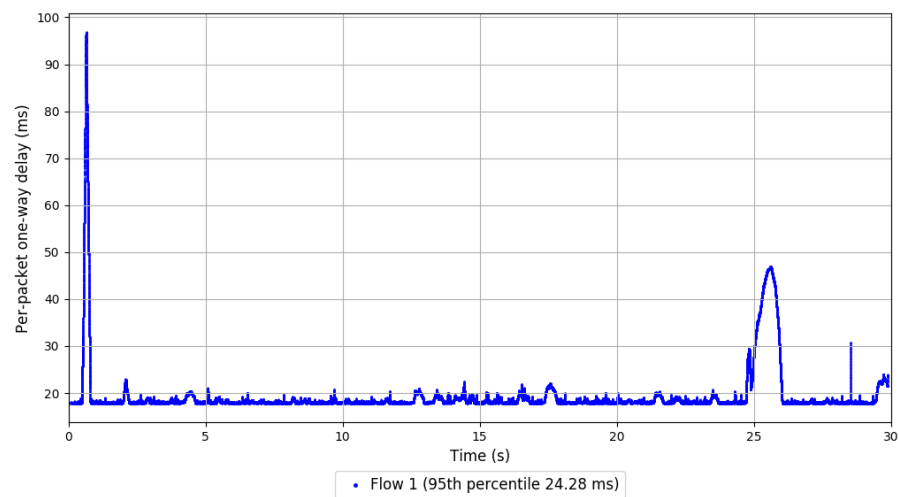
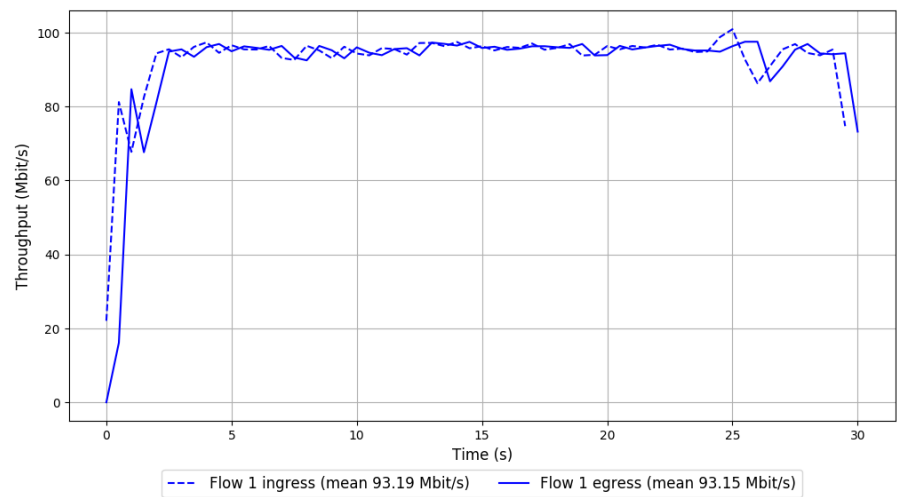
-- Flow 1:

Average throughput: 93.15 Mbit/s

95th percentile per-packet one-way delay: 24.276 ms

Loss rate: 0.12%

Run 5: Report of PCC-Allegro — Data Link

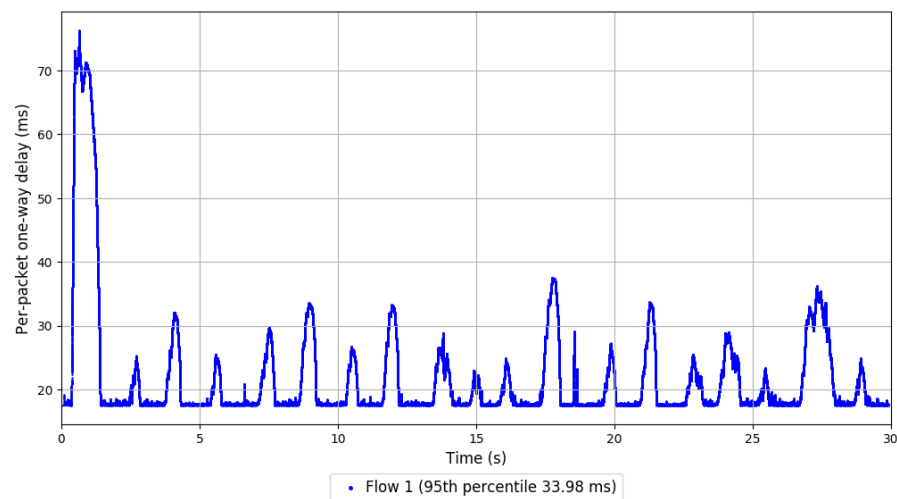
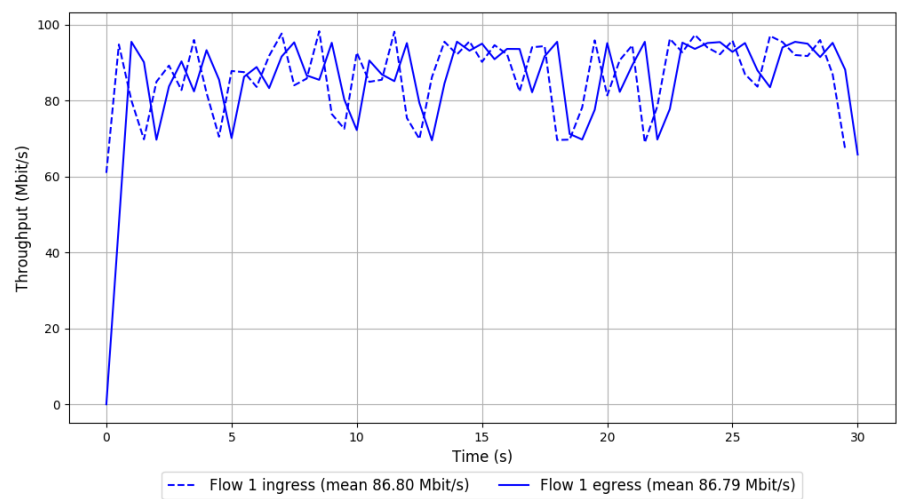


Run 1: Statistics of PCC-Expr

Start at: 2019-06-27 13:35:16  
End at: 2019-06-27 13:35:46  
Local clock offset: -4.335 ms  
Remote clock offset: -7.862 ms

# Below is generated by plot.py at 2019-06-27 15:43:17  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 86.79 Mbit/s  
95th percentile per-packet one-way delay: 33.977 ms  
Loss rate: 0.10%  
-- Flow 1:  
Average throughput: 86.79 Mbit/s  
95th percentile per-packet one-way delay: 33.977 ms  
Loss rate: 0.10%

Run 1: Report of PCC-Expr — Data Link

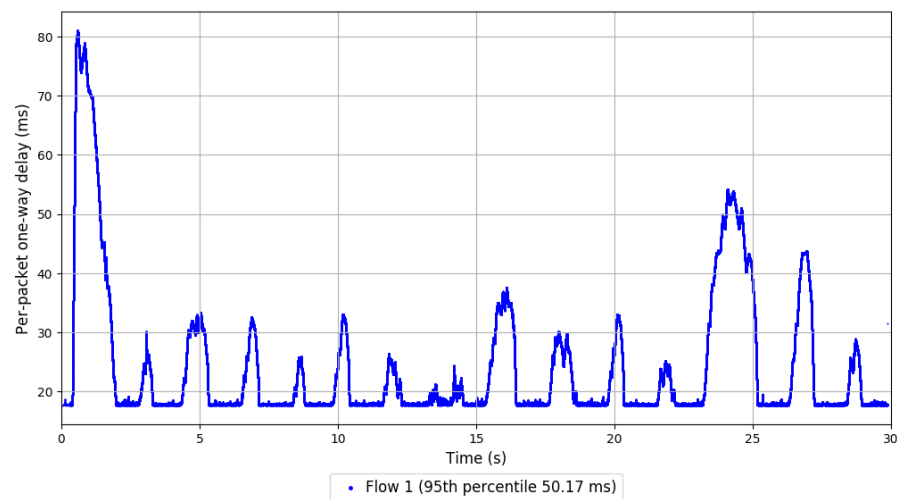
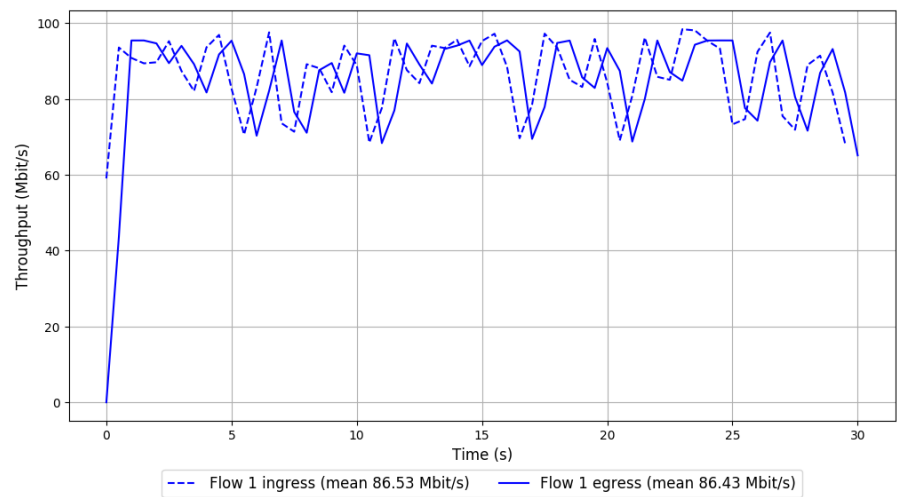


Run 2: Statistics of PCC-Expr

Start at: 2019-06-27 14:03:11  
End at: 2019-06-27 14:03:41  
Local clock offset: -1.165 ms  
Remote clock offset: -5.484 ms

# Below is generated by plot.py at 2019-06-27 15:43:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 86.43 Mbit/s  
95th percentile per-packet one-way delay: 50.171 ms  
Loss rate: 0.17%  
-- Flow 1:  
Average throughput: 86.43 Mbit/s  
95th percentile per-packet one-way delay: 50.171 ms  
Loss rate: 0.17%

Run 2: Report of PCC-Expr — Data Link

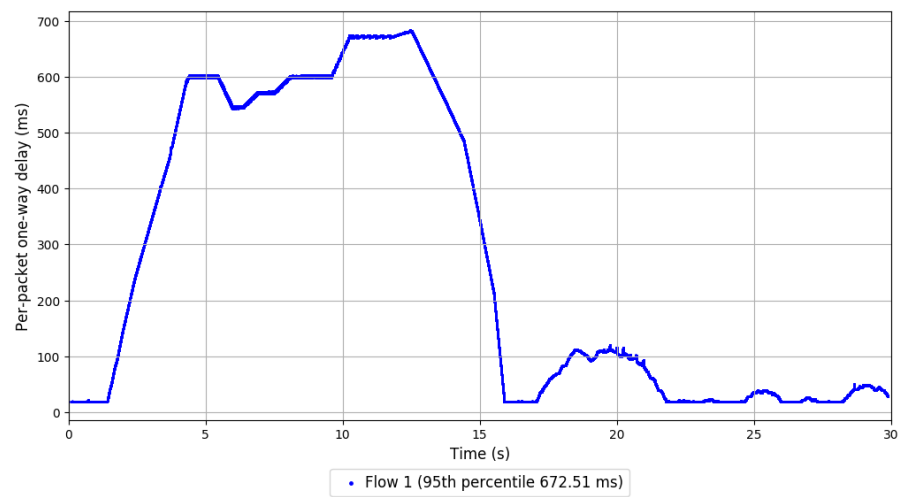
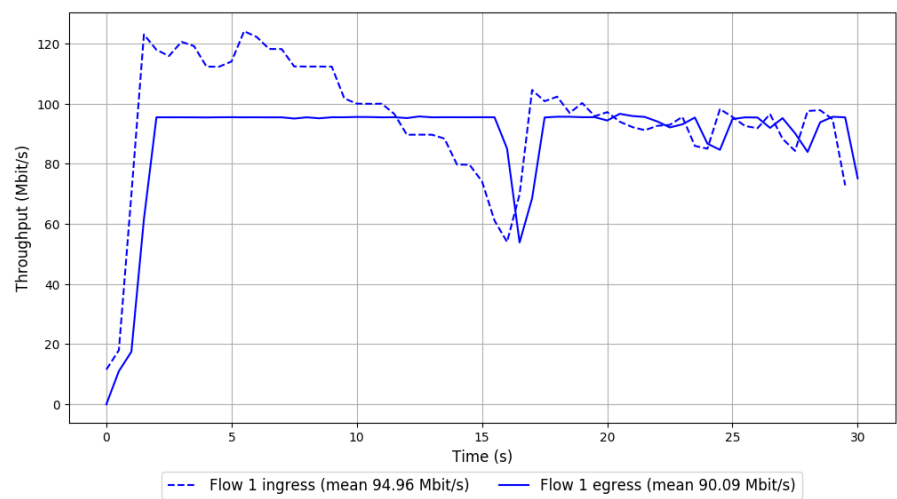


Run 3: Statistics of PCC-Expr

Start at: 2019-06-27 14:30:58  
End at: 2019-06-27 14:31:28  
Local clock offset: 0.078 ms  
Remote clock offset: -5.734 ms

# Below is generated by plot.py at 2019-06-27 15:43:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 90.09 Mbit/s  
95th percentile per-packet one-way delay: 672.513 ms  
Loss rate: 5.20%  
-- Flow 1:  
Average throughput: 90.09 Mbit/s  
95th percentile per-packet one-way delay: 672.513 ms  
Loss rate: 5.20%

Run 3: Report of PCC-Expr — Data Link



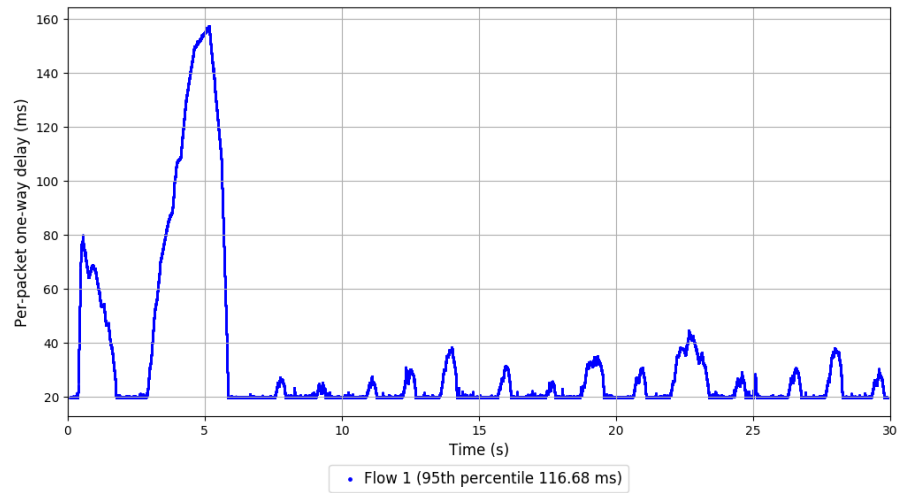
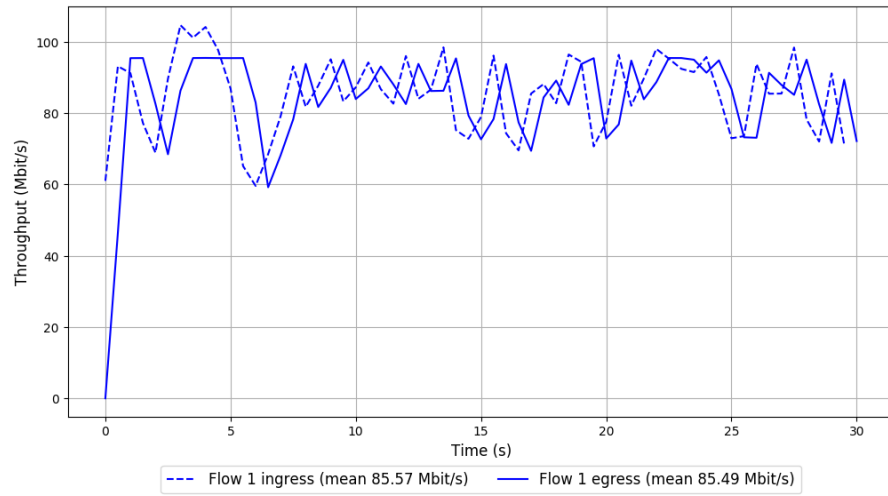


Run 4: Statistics of PCC-Expr

Start at: 2019-06-27 14:58:29  
End at: 2019-06-27 14:58:59  
Local clock offset: 0.411 ms  
Remote clock offset: -6.527 ms

# Below is generated by plot.py at 2019-06-27 15:44:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 85.49 Mbit/s  
95th percentile per-packet one-way delay: 116.682 ms  
Loss rate: 0.17%  
-- Flow 1:  
Average throughput: 85.49 Mbit/s  
95th percentile per-packet one-way delay: 116.682 ms  
Loss rate: 0.17%

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

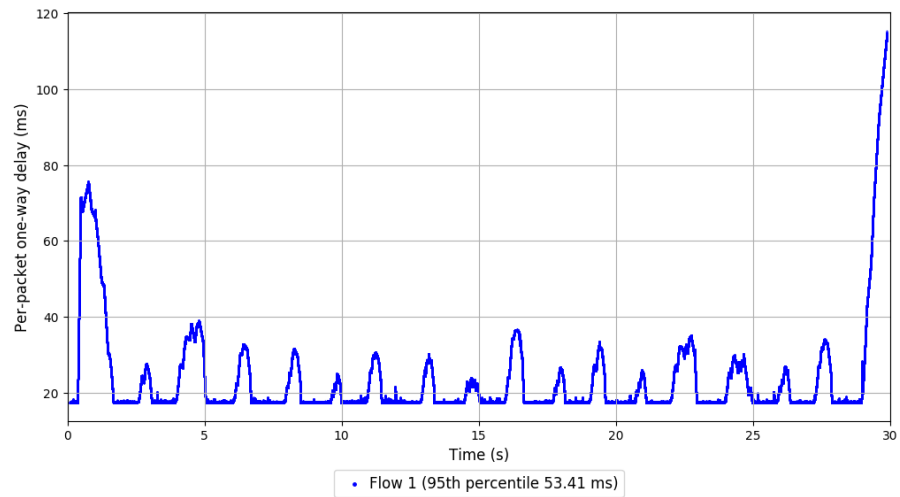
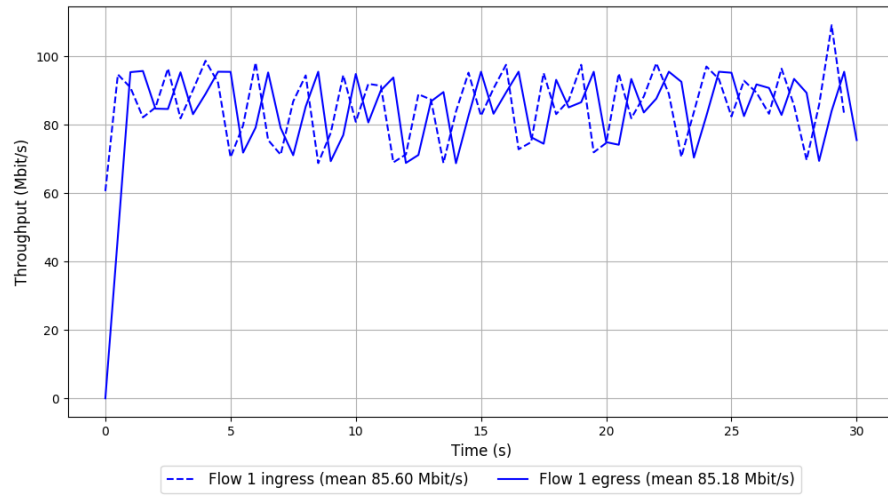


Run 5: Statistics of PCC-Expr

Start at: 2019-06-27 15:28:22  
End at: 2019-06-27 15:28:52  
Local clock offset: -0.153 ms  
Remote clock offset: -5.791 ms

# Below is generated by plot.py at 2019-06-27 15:44:08  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 85.18 Mbit/s  
95th percentile per-packet one-way delay: 53.414 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 85.18 Mbit/s  
95th percentile per-packet one-way delay: 53.414 ms  
Loss rate: 0.57%

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



Run 1: Statistics of QUIC Cubic

Start at: 2019-06-27 13:10:37

End at: 2019-06-27 13:11:07

Local clock offset: -1.473 ms

Remote clock offset: -4.559 ms

# Below is generated by plot.py at 2019-06-27 15:44:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 90.77 Mbit/s

95th percentile per-packet one-way delay: 25.904 ms

Loss rate: 0.12%

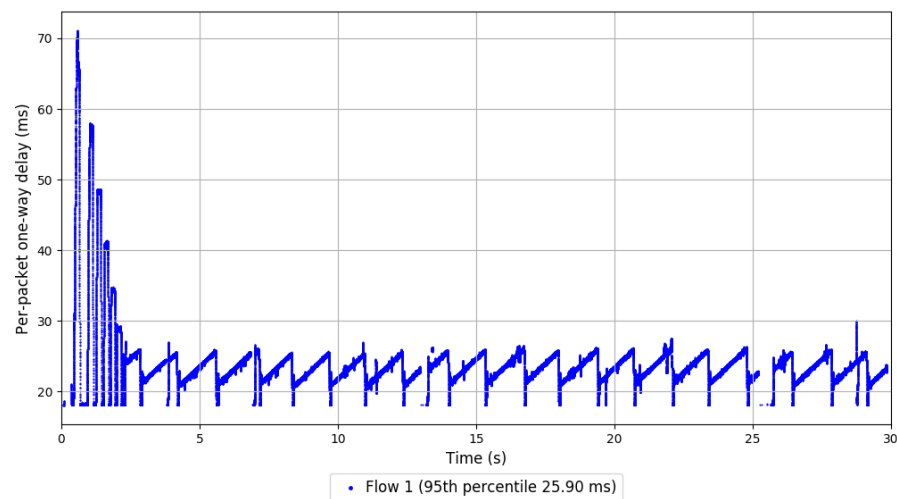
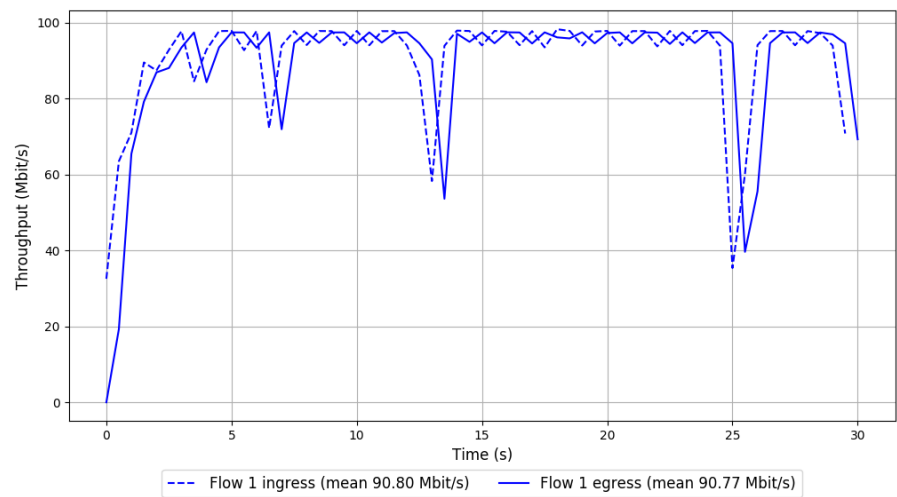
-- Flow 1:

Average throughput: 90.77 Mbit/s

95th percentile per-packet one-way delay: 25.904 ms

Loss rate: 0.12%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-06-27 13:37:49

End at: 2019-06-27 13:38:19

Local clock offset: -1.048 ms

Remote clock offset: -3.647 ms

# Below is generated by plot.py at 2019-06-27 15:44:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 90.75 Mbit/s

95th percentile per-packet one-way delay: 23.991 ms

Loss rate: 0.11%

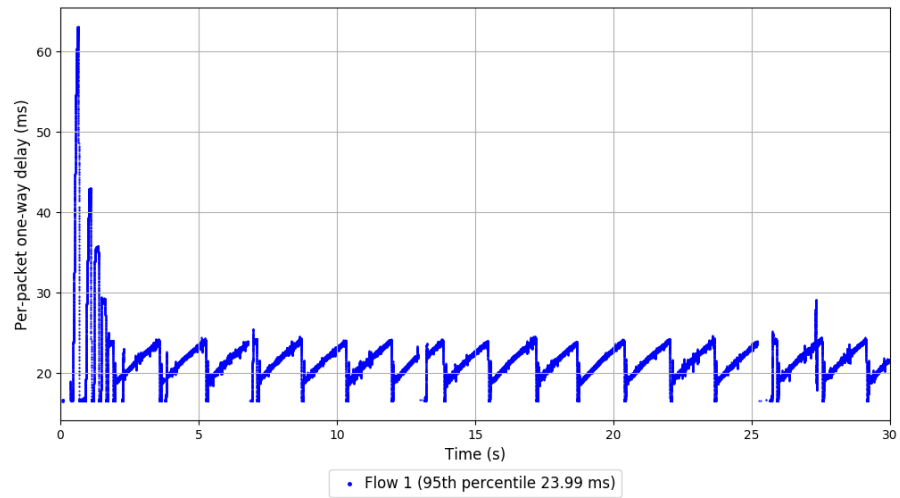
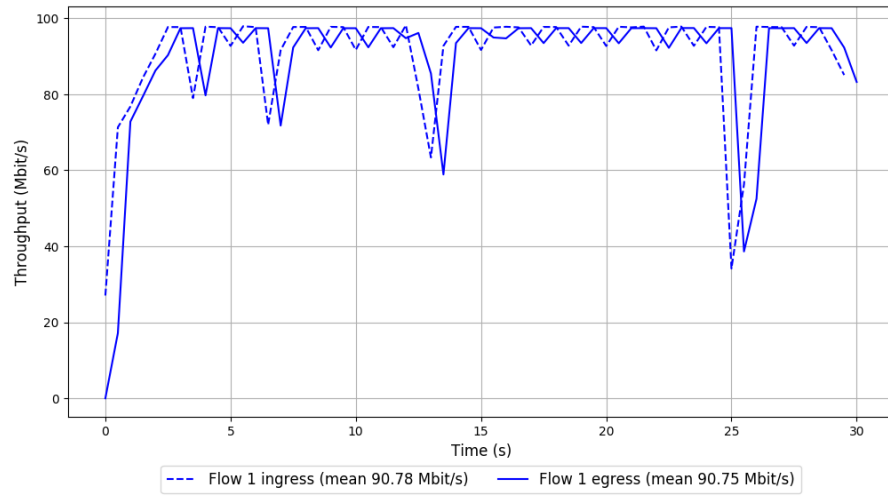
-- Flow 1:

Average throughput: 90.75 Mbit/s

95th percentile per-packet one-way delay: 23.991 ms

Loss rate: 0.11%

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





Run 3: Statistics of QUIC Cubic

Start at: 2019-06-27 14:05:46

End at: 2019-06-27 14:06:16

Local clock offset: -0.734 ms

Remote clock offset: -6.331 ms

# Below is generated by plot.py at 2019-06-27 15:44:08

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.14 Mbit/s

95th percentile per-packet one-way delay: 26.470 ms

Loss rate: 0.12%

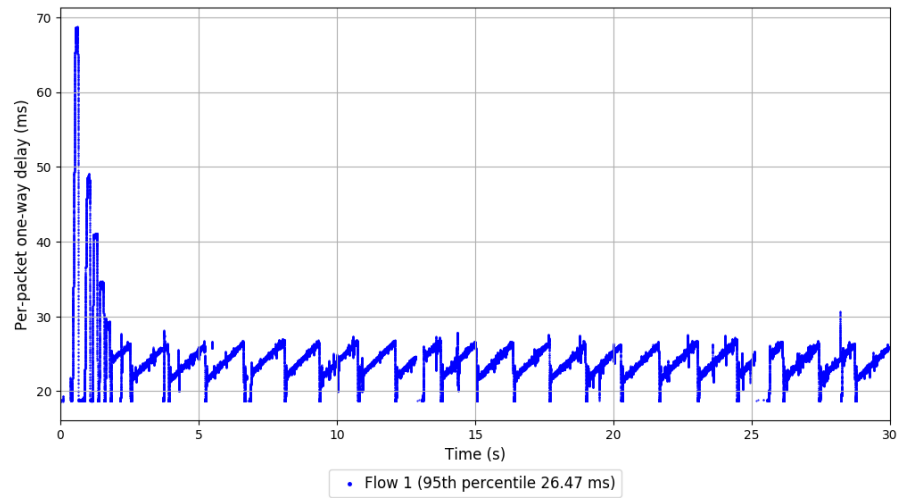
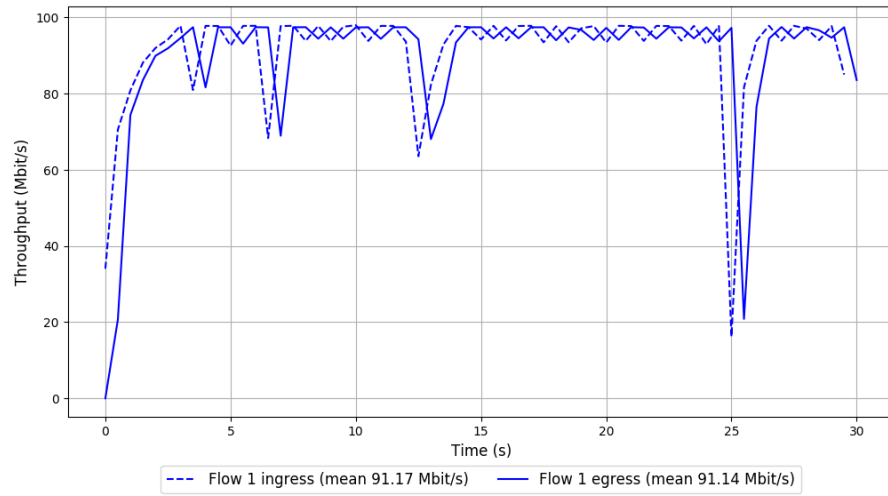
-- Flow 1:

Average throughput: 91.14 Mbit/s

95th percentile per-packet one-way delay: 26.470 ms

Loss rate: 0.12%

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

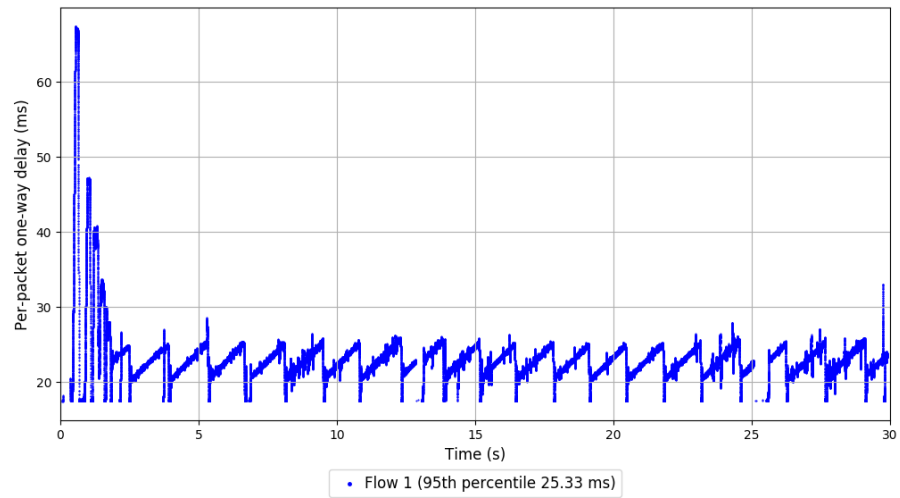
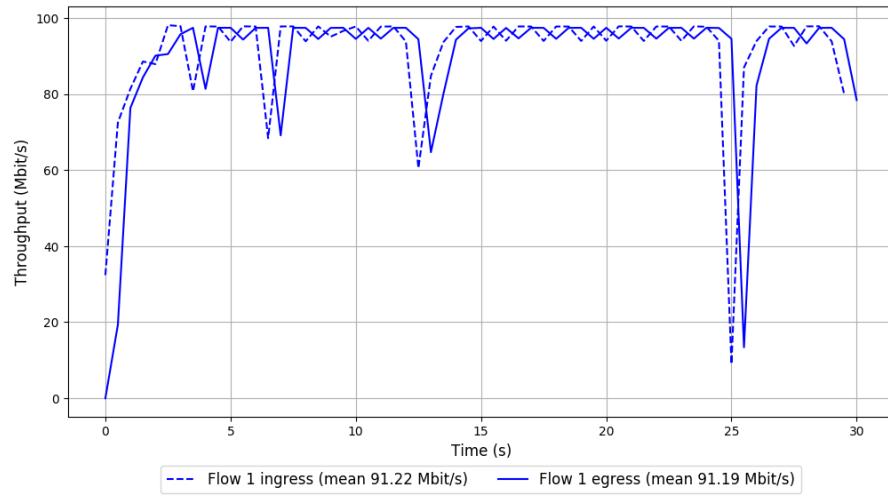


Run 4: Statistics of QUIC Cubic

Start at: 2019-06-27 14:33:41  
End at: 2019-06-27 14:34:11  
Local clock offset: -0.259 ms  
Remote clock offset: -4.726 ms

# Below is generated by plot.py at 2019-06-27 15:44:31  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.19 Mbit/s  
95th percentile per-packet one-way delay: 25.333 ms  
Loss rate: 0.12%  
-- Flow 1:  
Average throughput: 91.19 Mbit/s  
95th percentile per-packet one-way delay: 25.333 ms  
Loss rate: 0.12%

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



Run 5: Statistics of QUIC Cubic

Start at: 2019-06-27 15:01:27

End at: 2019-06-27 15:01:57

Local clock offset: -0.4 ms

Remote clock offset: -5.135 ms

# Below is generated by plot.py at 2019-06-27 15:44:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.01 Mbit/s

95th percentile per-packet one-way delay: 25.149 ms

Loss rate: 0.12%

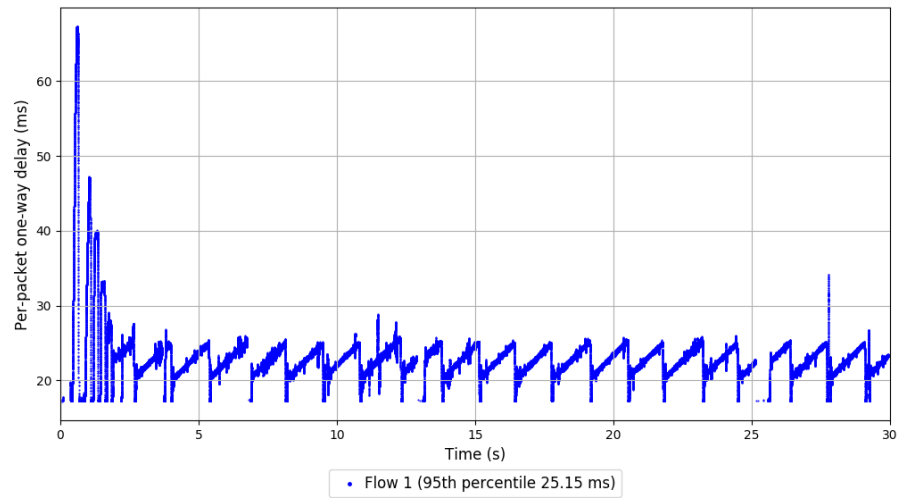
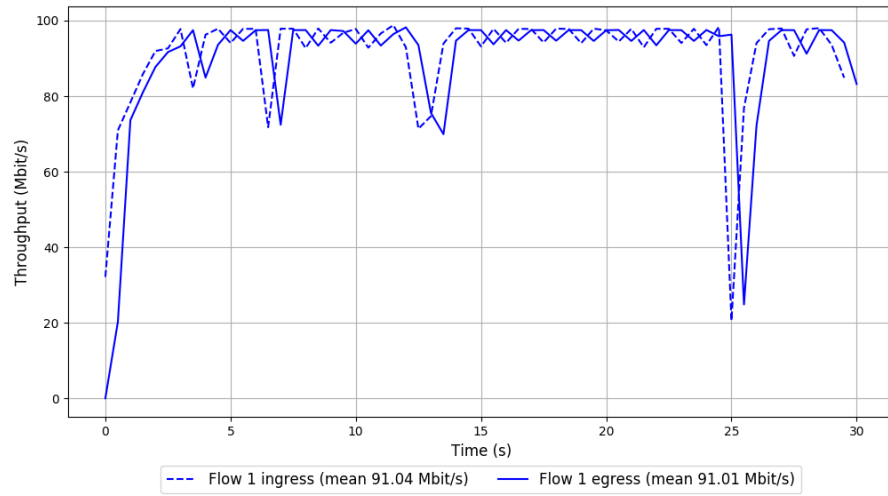
-- Flow 1:

Average throughput: 91.01 Mbit/s

95th percentile per-packet one-way delay: 25.149 ms

Loss rate: 0.12%

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

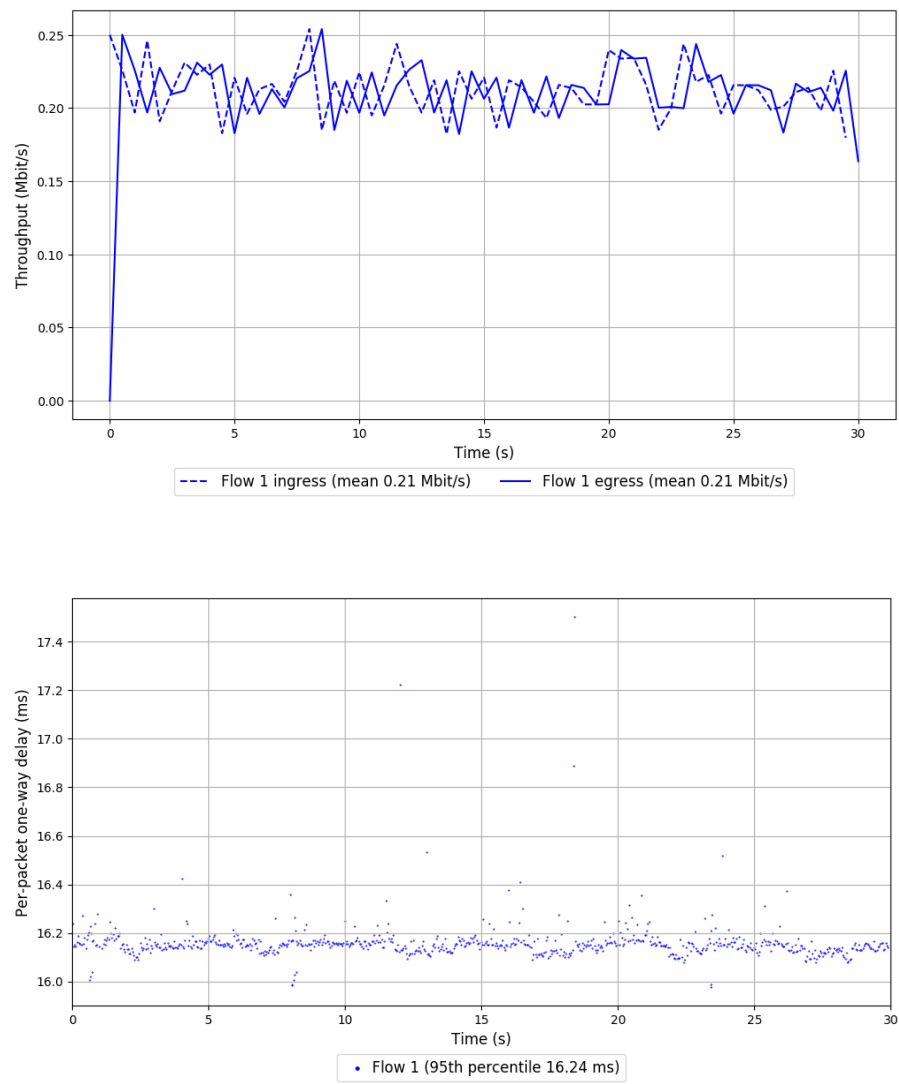


```
Run 1: Statistics of SCReAM

Start at: 2019-06-27 13:25:21
End at: 2019-06-27 13:25:51
Local clock offset: -1.083 ms
Remote clock offset: -2.9 ms

# Below is generated by plot.py at 2019-06-27 15:44:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 16.238 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 16.238 ms
Loss rate: 0.13%
```

Run 1: Report of SReAM — Data Link



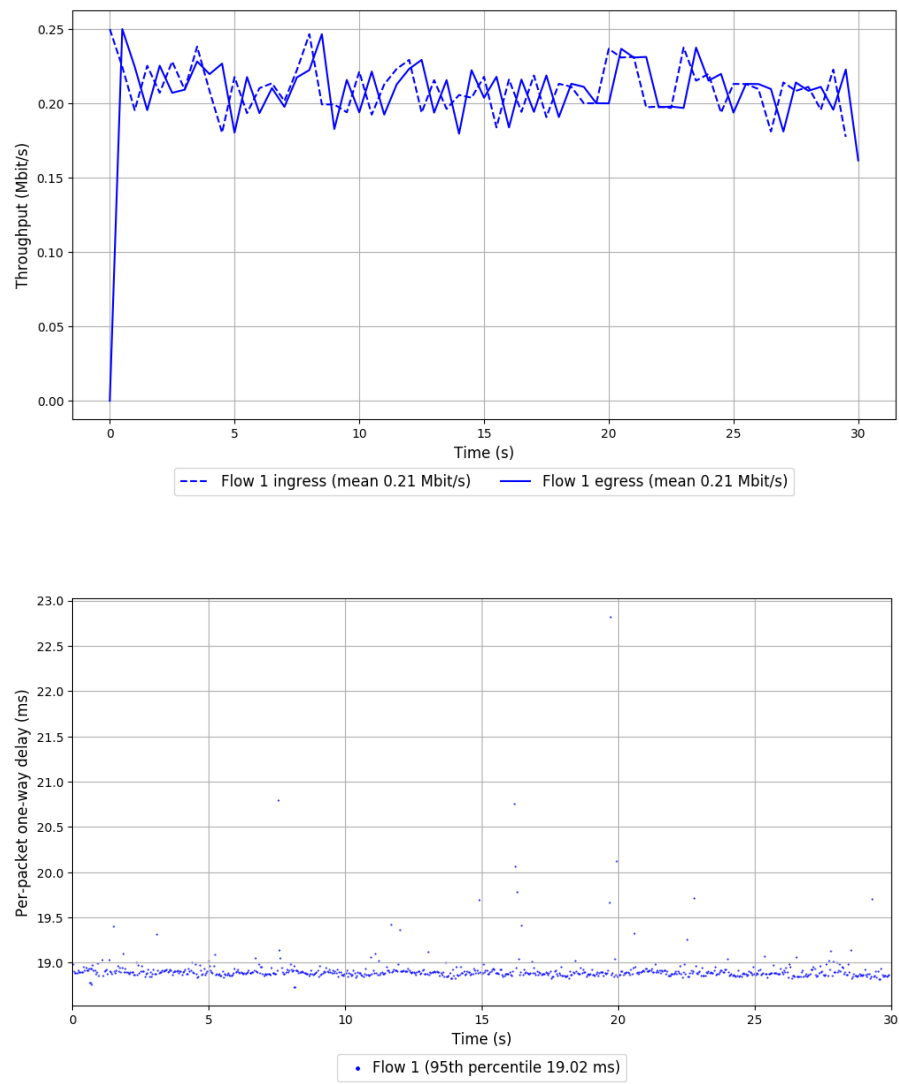


Run 2: Statistics of SReAM

Start at: 2019-06-27 13:53:02  
End at: 2019-06-27 13:53:32  
Local clock offset: -0.604 ms  
Remote clock offset: -5.824 ms

# Below is generated by plot.py at 2019-06-27 15:44:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 19.017 ms  
Loss rate: 0.13%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 19.017 ms  
Loss rate: 0.13%

Run 2: Report of SReAM — Data Link

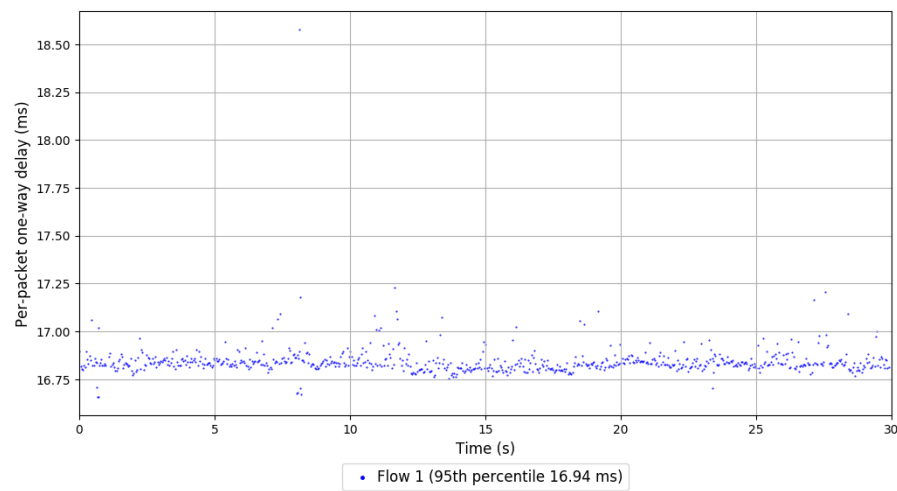
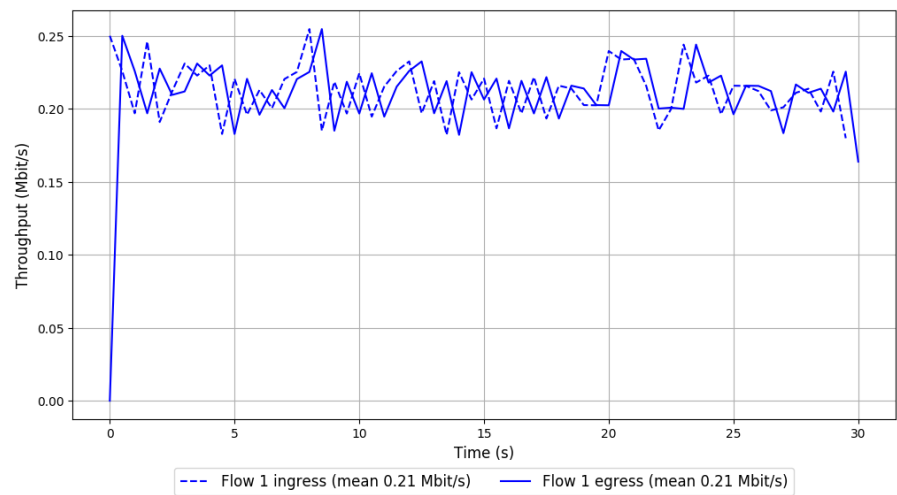


Run 3: Statistics of SCReAM

Start at: 2019-06-27 14:20:34  
End at: 2019-06-27 14:21:04  
Local clock offset: -0.809 ms  
Remote clock offset: -4.395 ms

# Below is generated by plot.py at 2019-06-27 15:44:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 16.942 ms  
Loss rate: 0.13%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 16.942 ms  
Loss rate: 0.13%

Run 3: Report of SReAM — Data Link

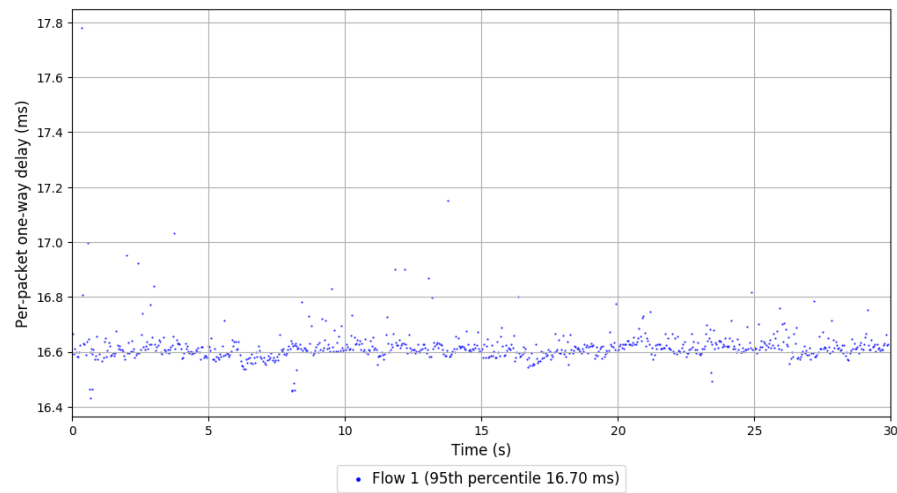
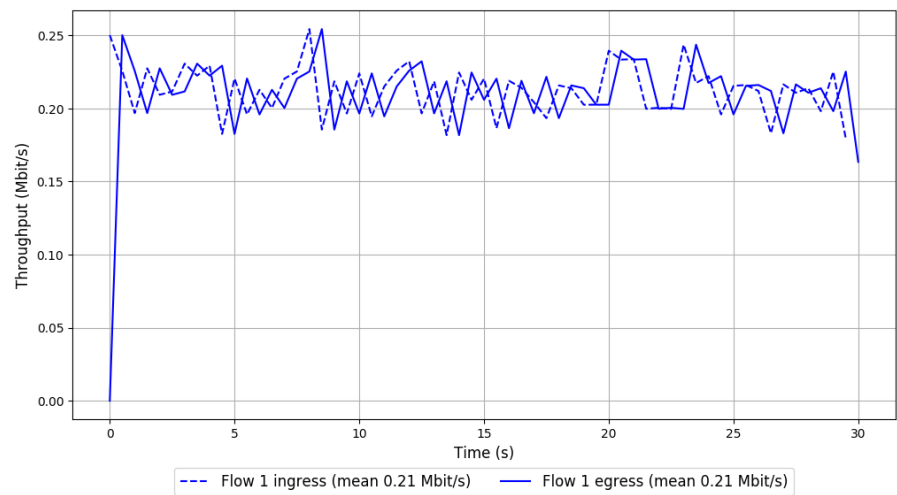


Run 4: Statistics of SCReAM

Start at: 2019-06-27 14:48:32  
End at: 2019-06-27 14:49:02  
Local clock offset: -0.577 ms  
Remote clock offset: -4.357 ms

# Below is generated by plot.py at 2019-06-27 15:44:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 16.695 ms  
Loss rate: 0.13%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 16.695 ms  
Loss rate: 0.13%

Run 4: Report of SReAM — Data Link

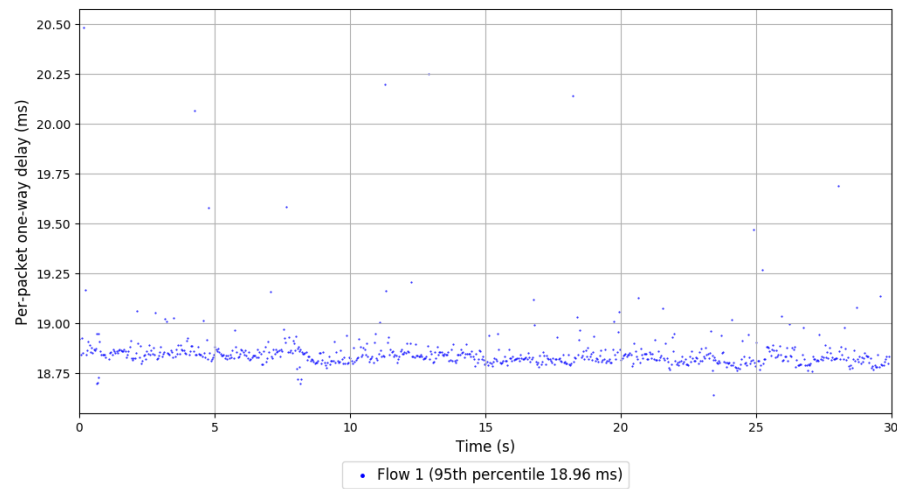
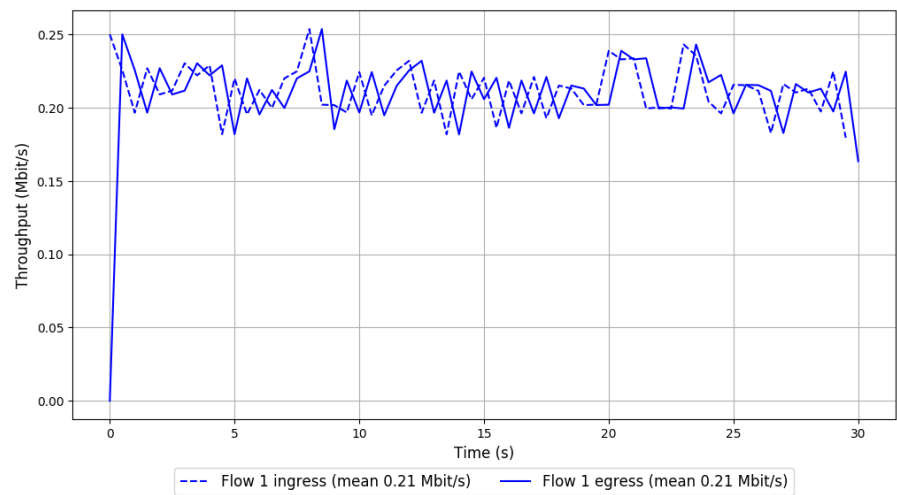


Run 5: Statistics of SCReAM

Start at: 2019-06-27 15:16:46  
End at: 2019-06-27 15:17:16  
Local clock offset: -0.841 ms  
Remote clock offset: -7.351 ms

# Below is generated by plot.py at 2019-06-27 15:44:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 18.962 ms  
Loss rate: 0.13%  
-- Flow 1:  
Average throughput: 0.21 Mbit/s  
95th percentile per-packet one-way delay: 18.962 ms  
Loss rate: 0.13%

Run 5: Report of SReAM — Data Link





Run 1: Statistics of Sprout

Start at: 2019-06-27 13:11:46

End at: 2019-06-27 13:12:16

Local clock offset: -1.87 ms

Remote clock offset: -2.667 ms

# Below is generated by plot.py at 2019-06-27 15:44:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 24.40 Mbit/s

95th percentile per-packet one-way delay: 21.664 ms

Loss rate: 0.10%

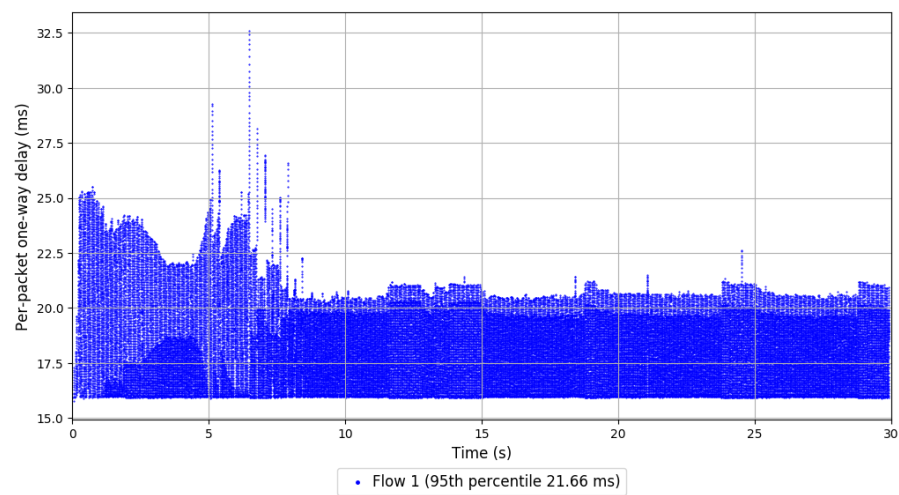
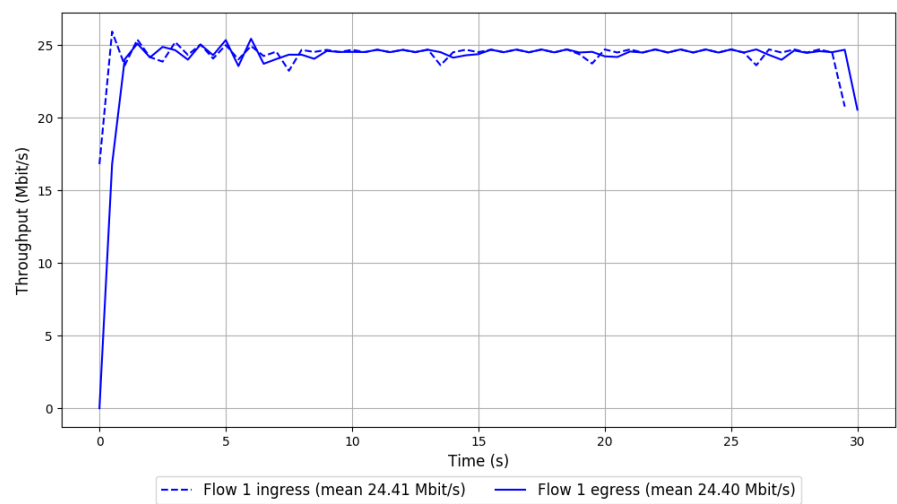
-- Flow 1:

Average throughput: 24.40 Mbit/s

95th percentile per-packet one-way delay: 21.664 ms

Loss rate: 0.10%

Run 1: Report of Sprout — Data Link

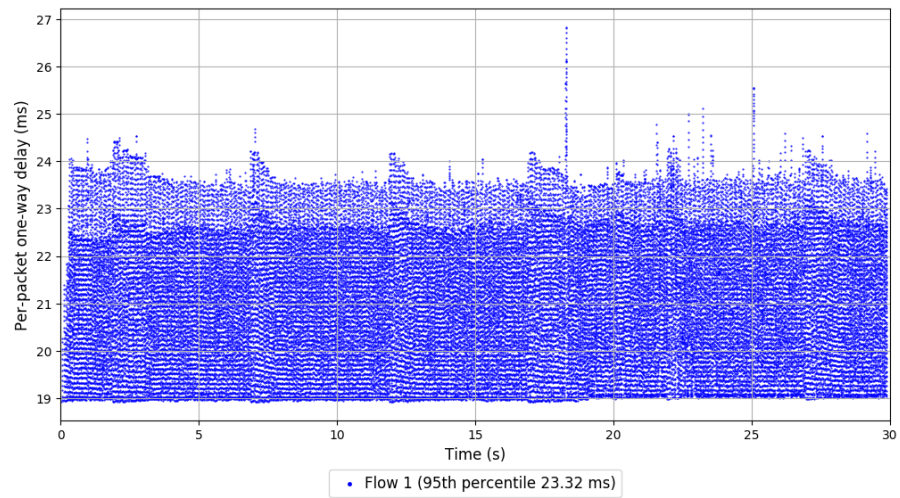
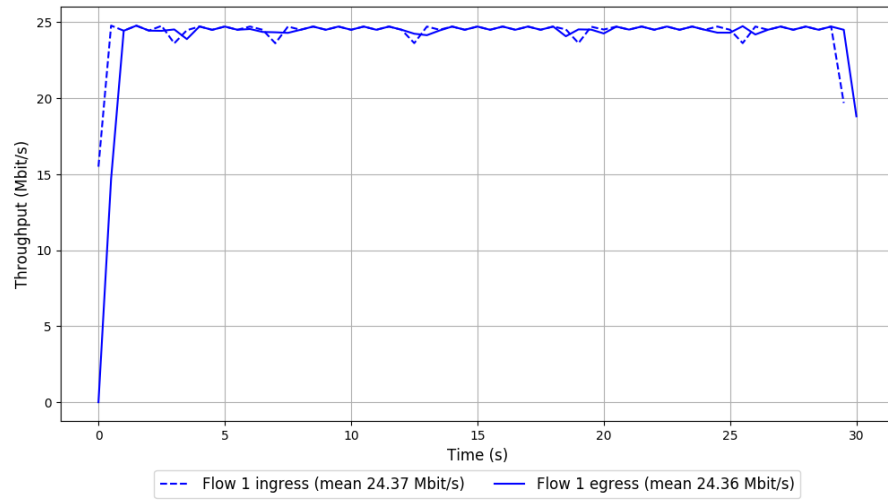


Run 2: Statistics of Sprout

Start at: 2019-06-27 13:39:02  
End at: 2019-06-27 13:39:32  
Local clock offset: -0.88 ms  
Remote clock offset: -5.967 ms

# Below is generated by plot.py at 2019-06-27 15:44:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.36 Mbit/s  
95th percentile per-packet one-way delay: 23.320 ms  
Loss rate: 0.14%  
-- Flow 1:  
Average throughput: 24.36 Mbit/s  
95th percentile per-packet one-way delay: 23.320 ms  
Loss rate: 0.14%

## Run 2: Report of Sprout — Data Link

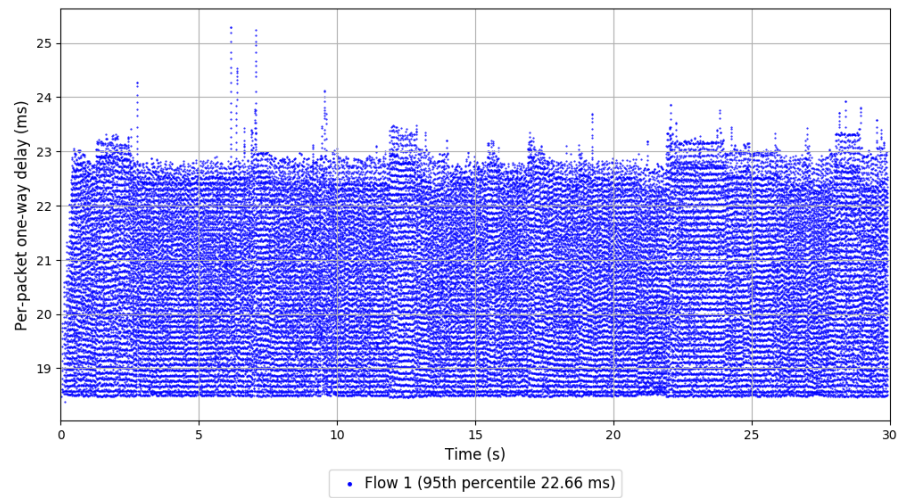
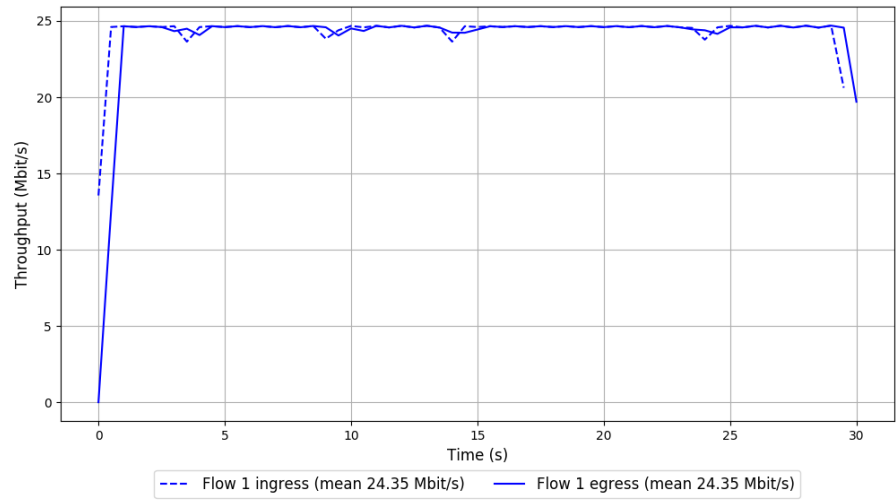


Run 3: Statistics of Sprout

Start at: 2019-06-27 14:07:03  
End at: 2019-06-27 14:07:33  
Local clock offset: 0.409 ms  
Remote clock offset: -4.732 ms

# Below is generated by plot.py at 2019-06-27 15:44:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.35 Mbit/s  
95th percentile per-packet one-way delay: 22.657 ms  
Loss rate: 0.14%  
-- Flow 1:  
Average throughput: 24.35 Mbit/s  
95th percentile per-packet one-way delay: 22.657 ms  
Loss rate: 0.14%

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

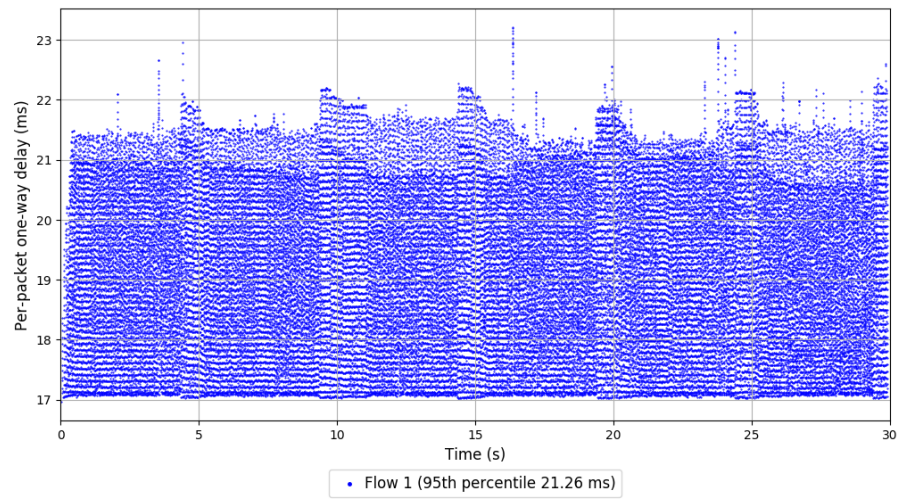
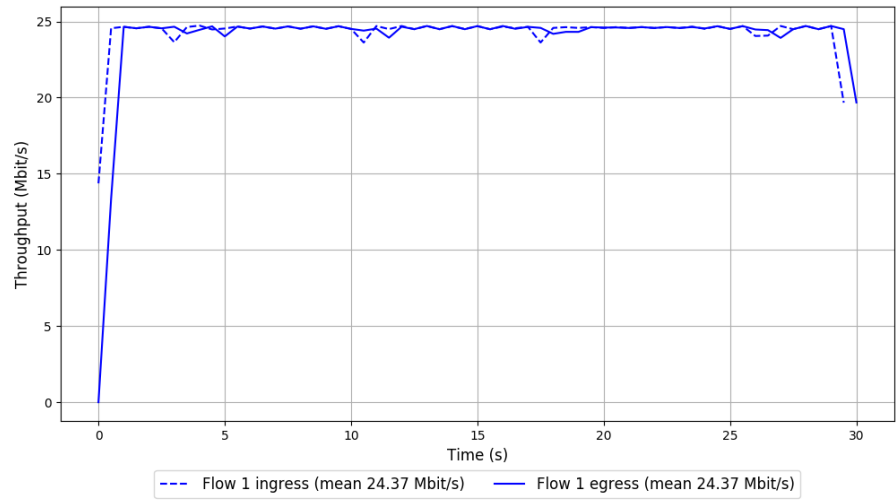


Run 4: Statistics of Sprout

Start at: 2019-06-27 14:34:57  
End at: 2019-06-27 14:35:27  
Local clock offset: -0.62 ms  
Remote clock offset: -4.531 ms

# Below is generated by plot.py at 2019-06-27 15:44:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.37 Mbit/s  
95th percentile per-packet one-way delay: 21.262 ms  
Loss rate: 0.07%  
-- Flow 1:  
Average throughput: 24.37 Mbit/s  
95th percentile per-packet one-way delay: 21.262 ms  
Loss rate: 0.07%

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



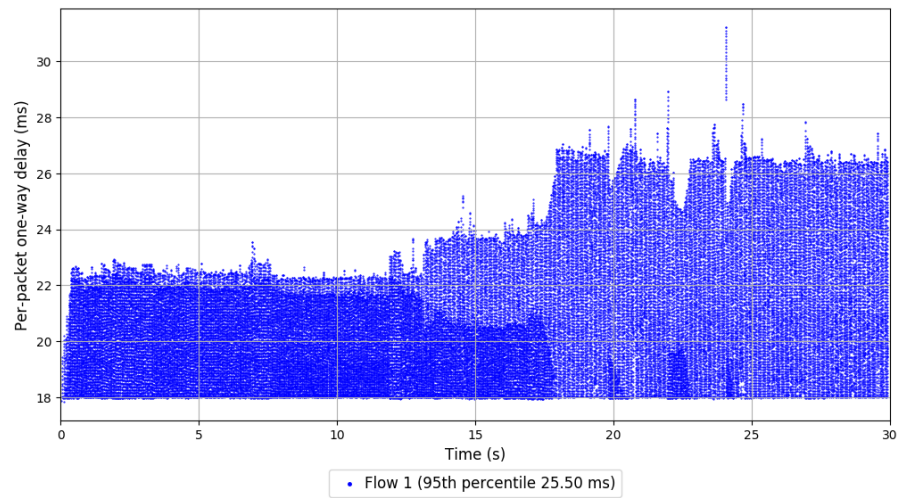
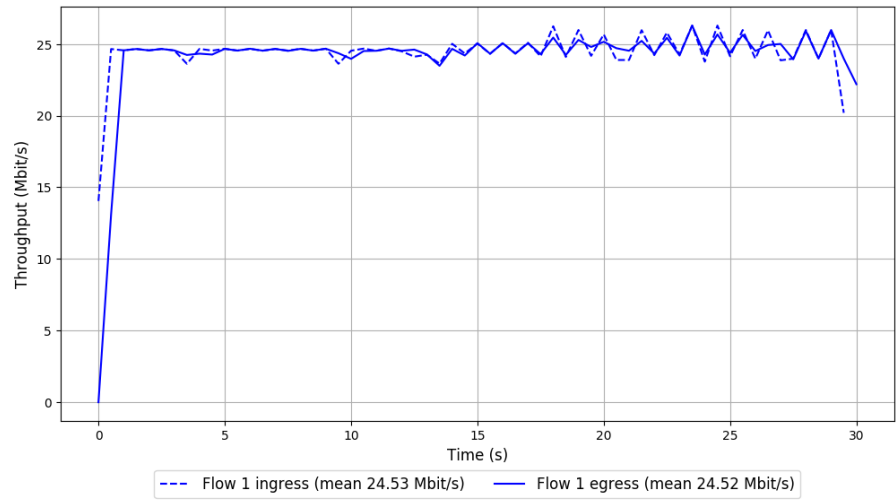


Run 5: Statistics of Sprout

Start at: 2019-06-27 15:02:46  
End at: 2019-06-27 15:03:16  
Local clock offset: -1.344 ms  
Remote clock offset: -6.528 ms

# Below is generated by plot.py at 2019-06-27 15:44:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 24.52 Mbit/s  
95th percentile per-packet one-way delay: 25.501 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 24.52 Mbit/s  
95th percentile per-packet one-way delay: 25.501 ms  
Loss rate: 0.01%

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



Run 1: Statistics of TaoVA-100x

Start at: 2019-06-27 13:33:56

End at: 2019-06-27 13:34:26

Local clock offset: -0.691 ms

Remote clock offset: -4.317 ms

# Below is generated by plot.py at 2019-06-27 15:46:04

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.51 Mbit/s

95th percentile per-packet one-way delay: 21.231 ms

Loss rate: 0.08%

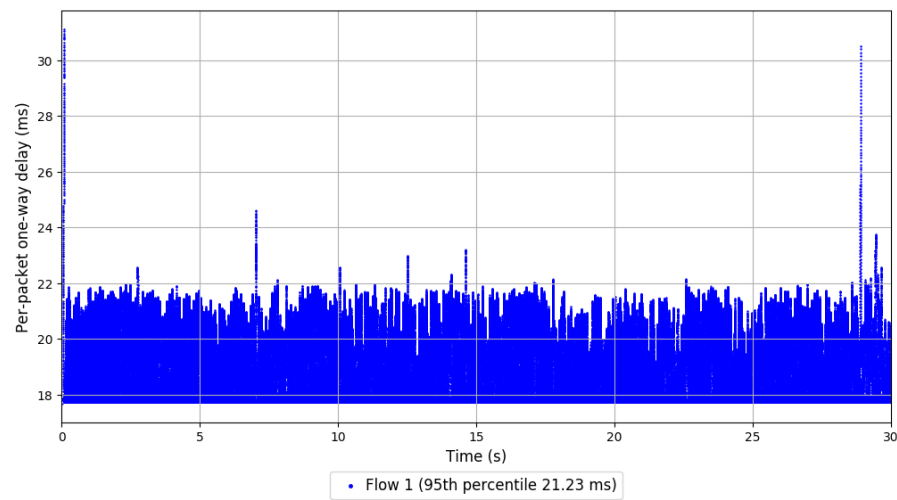
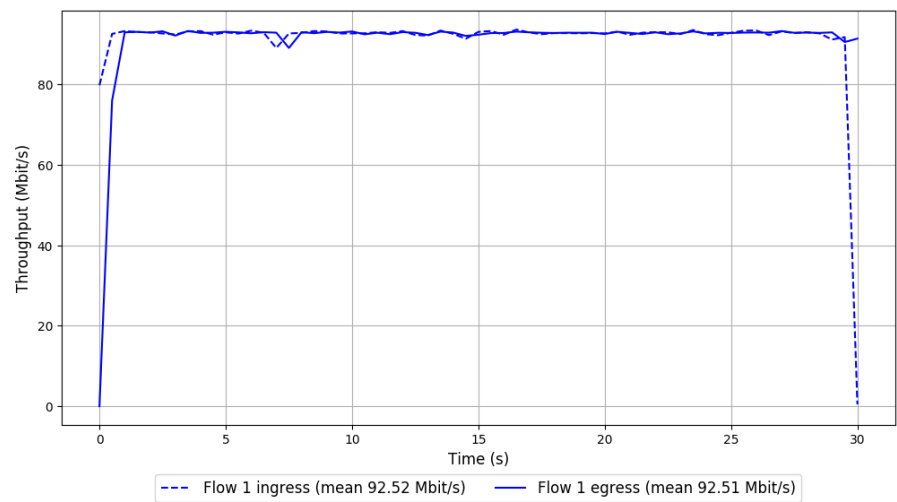
-- Flow 1:

Average throughput: 92.51 Mbit/s

95th percentile per-packet one-way delay: 21.231 ms

Loss rate: 0.08%

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-06-27 14:01:38

End at: 2019-06-27 14:02:08

Local clock offset: 0.141 ms

Remote clock offset: -4.368 ms

# Below is generated by plot.py at 2019-06-27 15:46:09

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.43 Mbit/s

95th percentile per-packet one-way delay: 21.059 ms

Loss rate: 0.09%

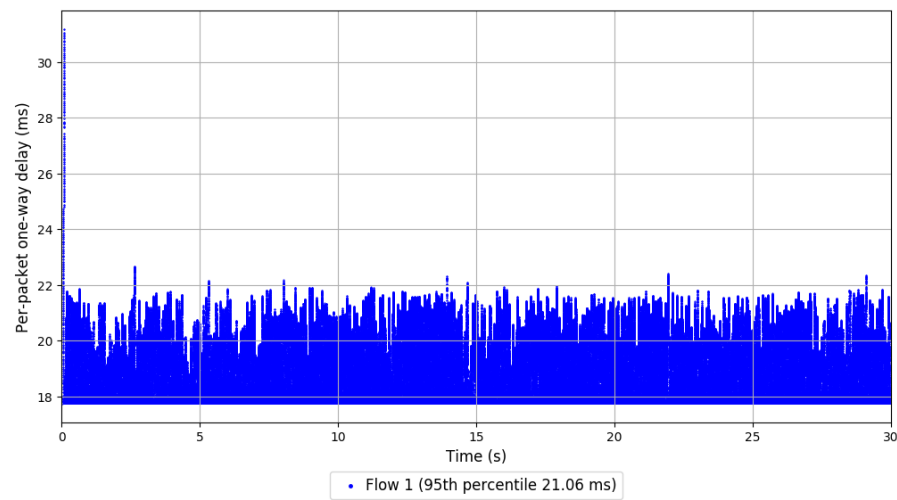
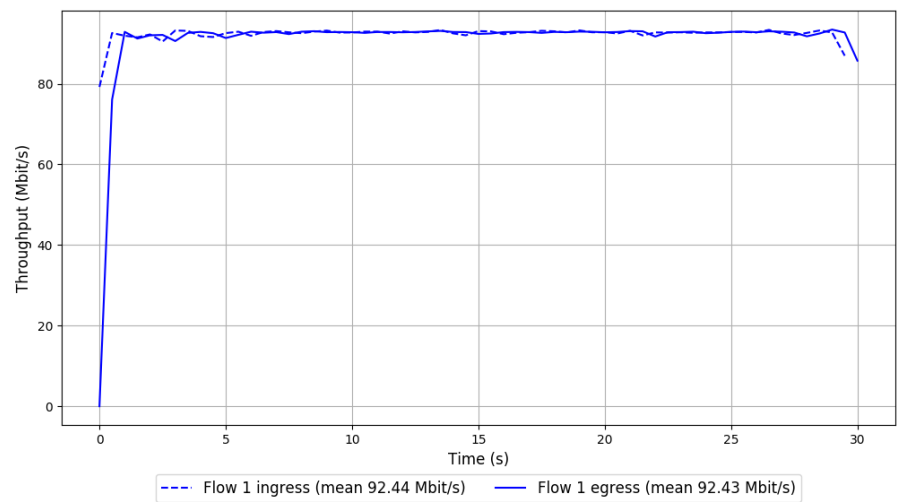
-- Flow 1:

Average throughput: 92.43 Mbit/s

95th percentile per-packet one-way delay: 21.059 ms

Loss rate: 0.09%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-06-27 14:29:18

End at: 2019-06-27 14:29:48

Local clock offset: -0.977 ms

Remote clock offset: -5.243 ms

# Below is generated by plot.py at 2019-06-27 15:46:11

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.50 Mbit/s

95th percentile per-packet one-way delay: 20.818 ms

Loss rate: 0.10%

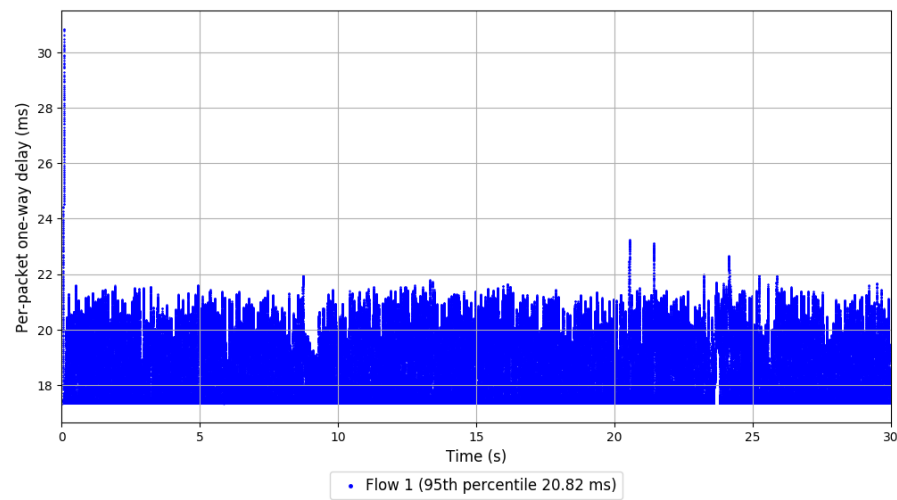
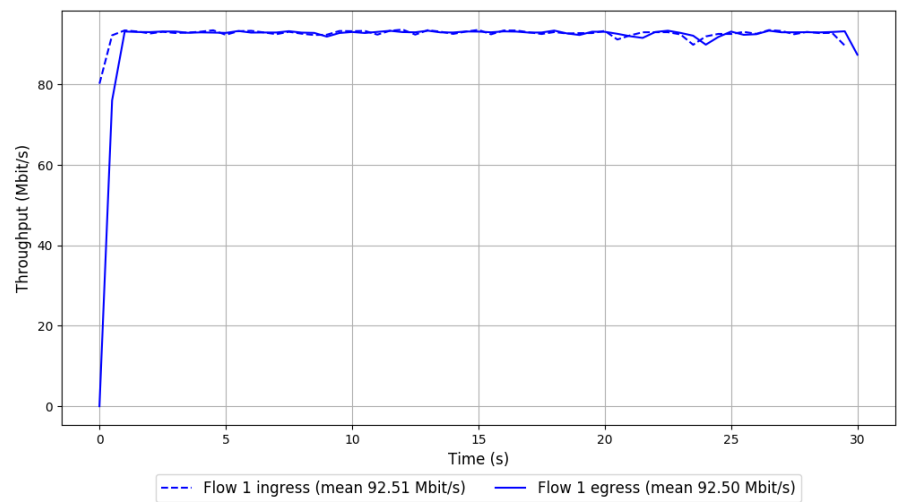
-- Flow 1:

Average throughput: 92.50 Mbit/s

95th percentile per-packet one-way delay: 20.818 ms

Loss rate: 0.10%

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





Run 4: Statistics of TaoVA-100x

Start at: 2019-06-27 14:56:58

End at: 2019-06-27 14:57:28

Local clock offset: -0.723 ms

Remote clock offset: -6.142 ms

# Below is generated by plot.py at 2019-06-27 15:46:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.77 Mbit/s

95th percentile per-packet one-way delay: 21.669 ms

Loss rate: 0.10%

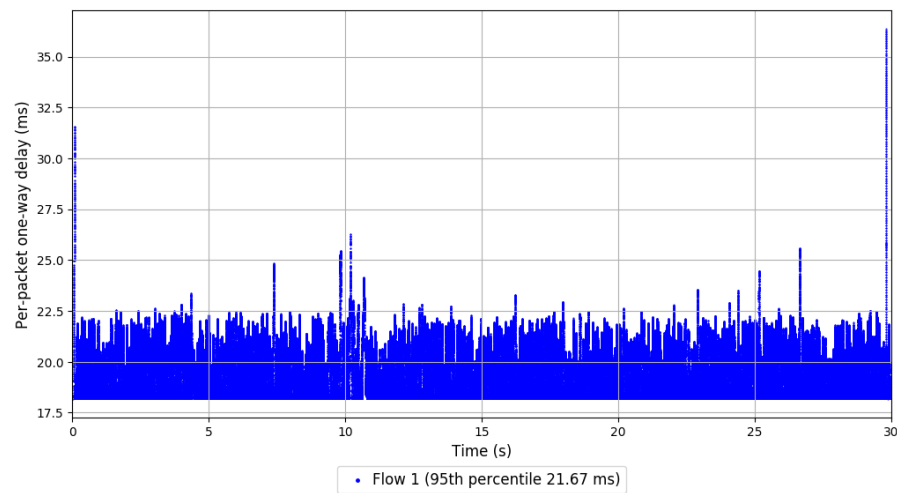
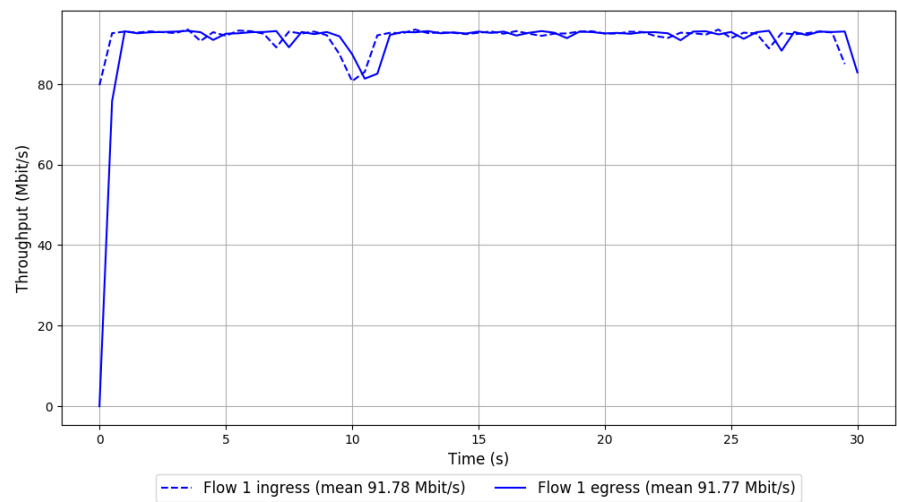
-- Flow 1:

Average throughput: 91.77 Mbit/s

95th percentile per-packet one-way delay: 21.669 ms

Loss rate: 0.10%

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

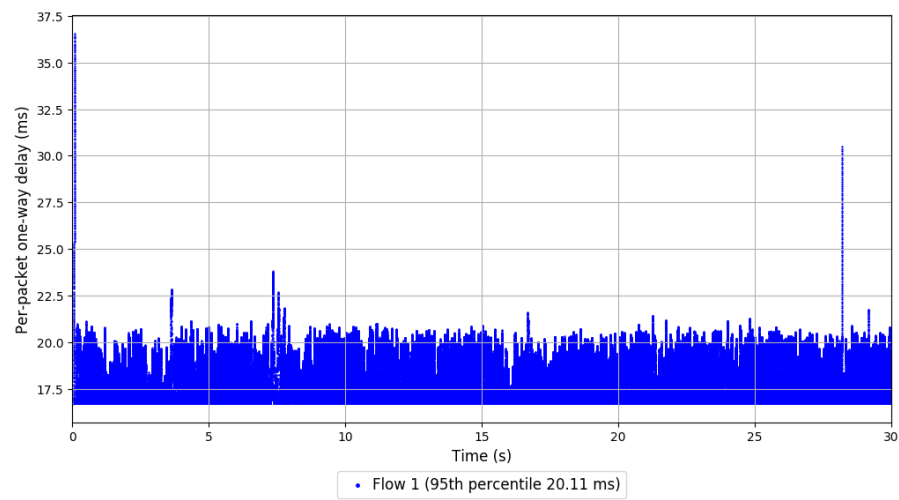
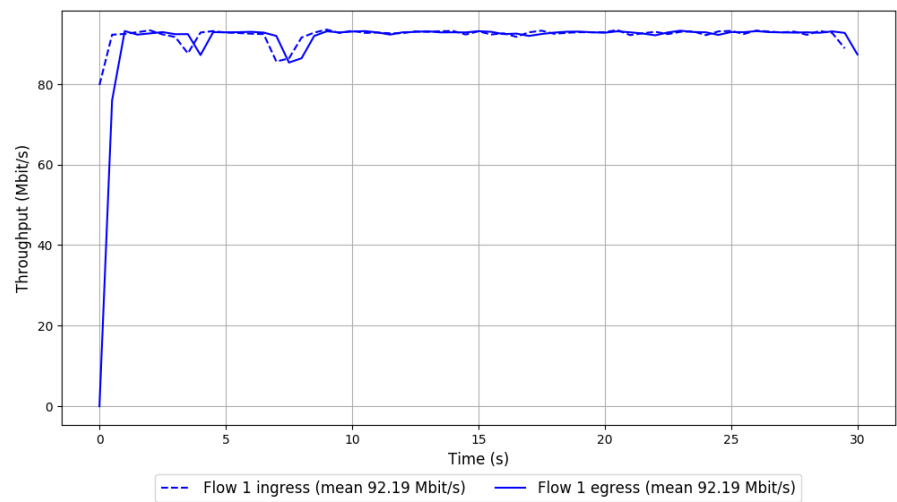


Run 5: Statistics of TaoVA-100x

Start at: 2019-06-27 15:27:01  
End at: 2019-06-27 15:27:31  
Local clock offset: -1.027 ms  
Remote clock offset: -5.764 ms

# Below is generated by plot.py at 2019-06-27 15:46:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 92.19 Mbit/s  
95th percentile per-packet one-way delay: 20.106 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 92.19 Mbit/s  
95th percentile per-packet one-way delay: 20.106 ms  
Loss rate: 0.09%

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

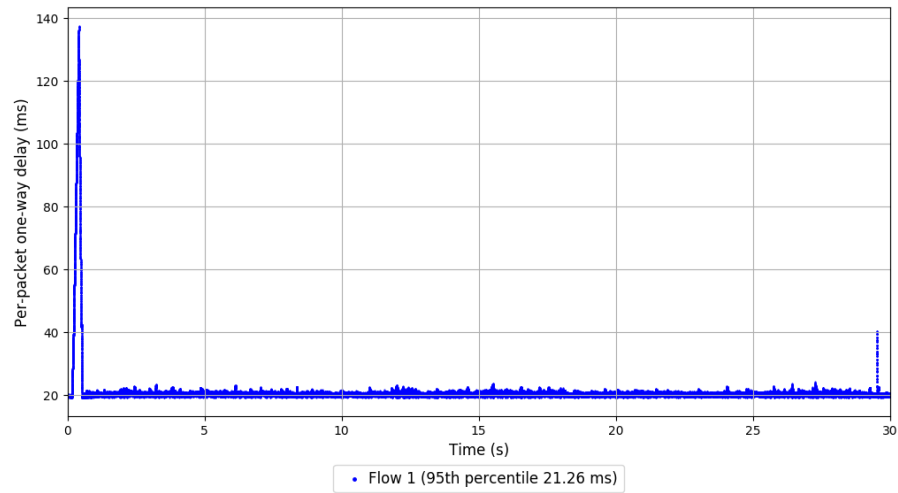
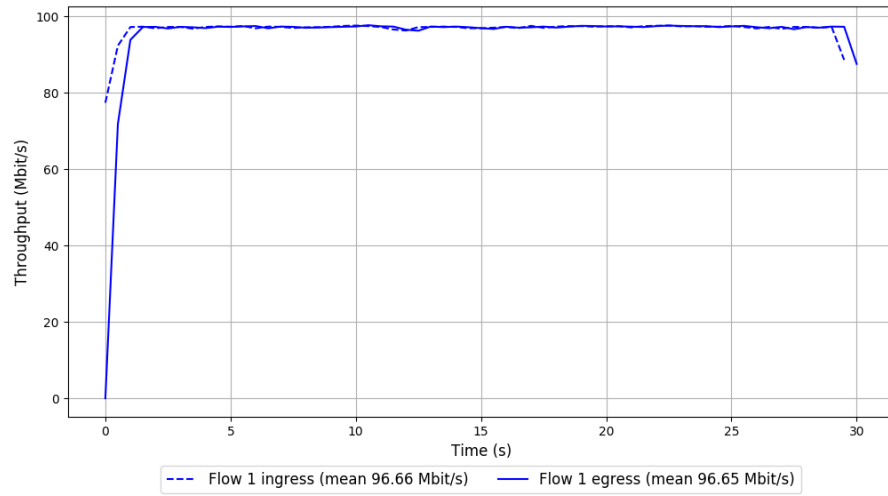


Run 1: Statistics of TCP Vegas

Start at: 2019-06-27 13:18:02  
End at: 2019-06-27 13:18:32  
Local clock offset: -1.128 ms  
Remote clock offset: -5.712 ms

# Below is generated by plot.py at 2019-06-27 15:46:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.65 Mbit/s  
95th percentile per-packet one-way delay: 21.259 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 96.65 Mbit/s  
95th percentile per-packet one-way delay: 21.259 ms  
Loss rate: 0.09%

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

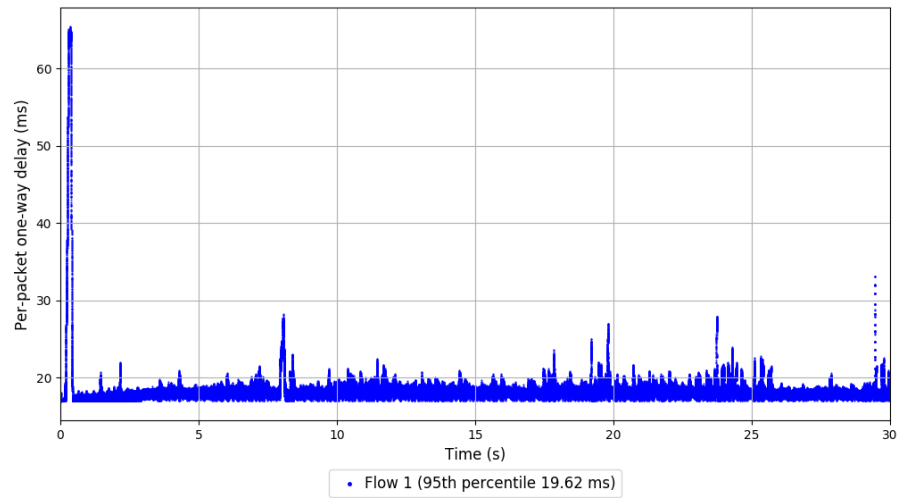
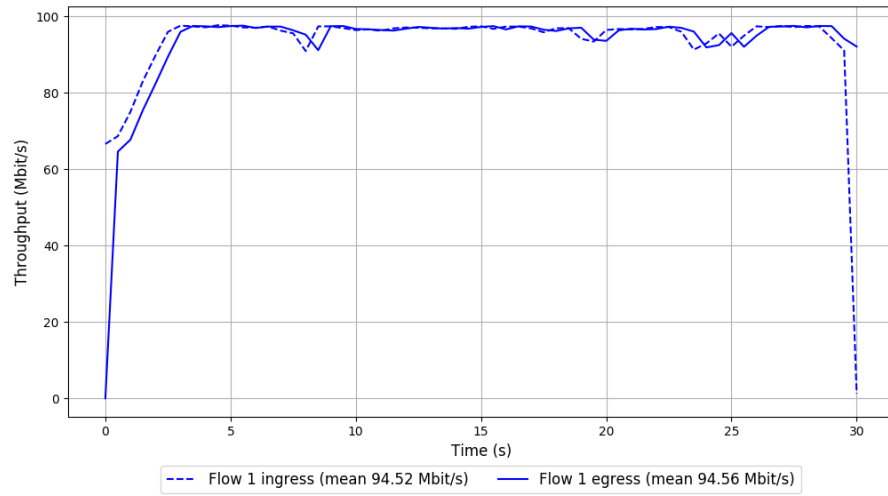


Run 2: Statistics of TCP Vegas

Start at: 2019-06-27 13:45:21  
End at: 2019-06-27 13:45:52  
Local clock offset: -0.813 ms  
Remote clock offset: -3.983 ms

# Below is generated by plot.py at 2019-06-27 15:46:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.56 Mbit/s  
95th percentile per-packet one-way delay: 19.621 ms  
Loss rate: 0.07%  
-- Flow 1:  
Average throughput: 94.56 Mbit/s  
95th percentile per-packet one-way delay: 19.621 ms  
Loss rate: 0.07%

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



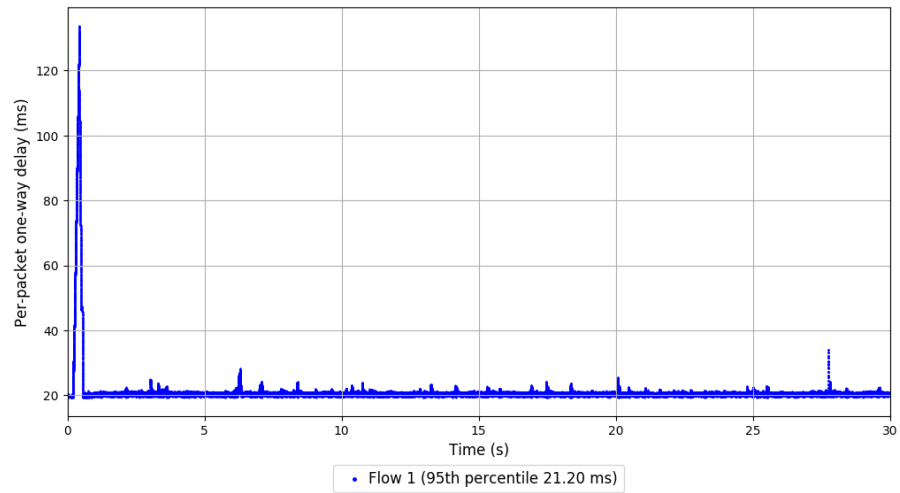
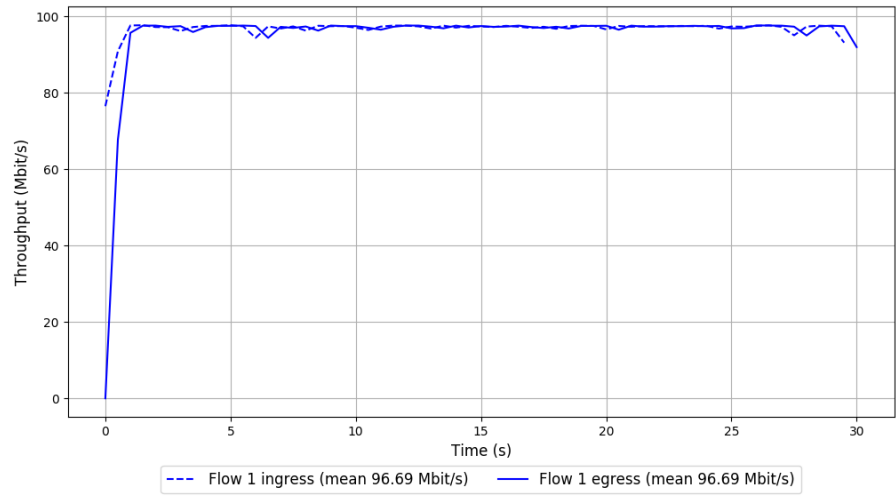


Run 3: Statistics of TCP Vegas

Start at: 2019-06-27 14:13:02  
End at: 2019-06-27 14:13:32  
Local clock offset: 0.566 ms  
Remote clock offset: -5.599 ms

# Below is generated by plot.py at 2019-06-27 15:46:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.69 Mbit/s  
95th percentile per-packet one-way delay: 21.200 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 96.69 Mbit/s  
95th percentile per-packet one-way delay: 21.200 ms  
Loss rate: 0.09%

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

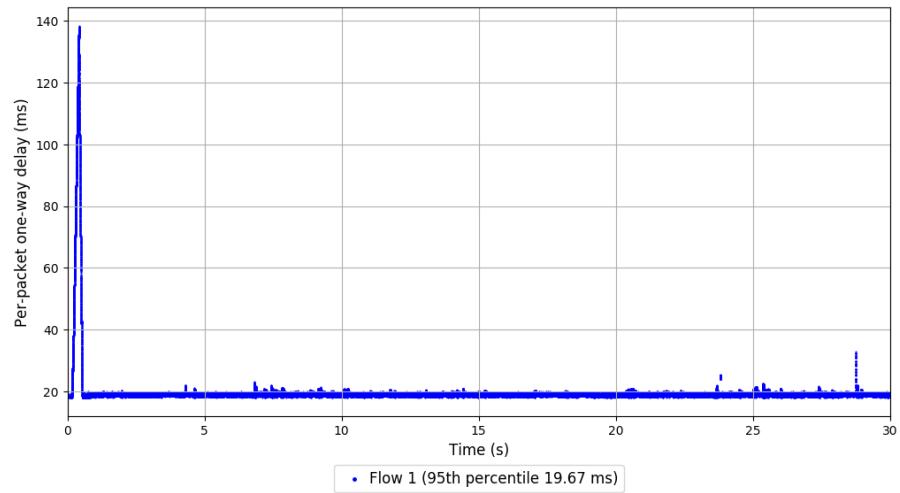
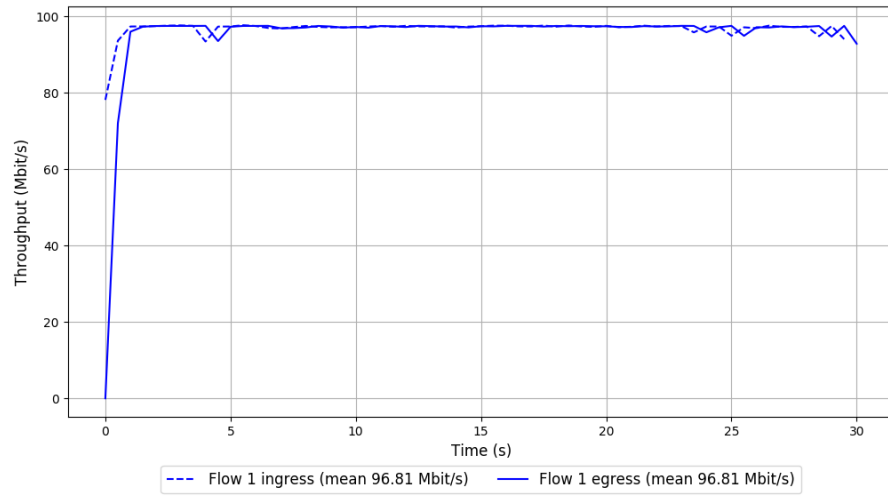


Run 4: Statistics of TCP Vegas

Start at: 2019-06-27 14:41:07  
End at: 2019-06-27 14:41:37  
Local clock offset: -0.566 ms  
Remote clock offset: -5.698 ms

# Below is generated by plot.py at 2019-06-27 15:46:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.81 Mbit/s  
95th percentile per-packet one-way delay: 19.670 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 96.81 Mbit/s  
95th percentile per-packet one-way delay: 19.670 ms  
Loss rate: 0.09%

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

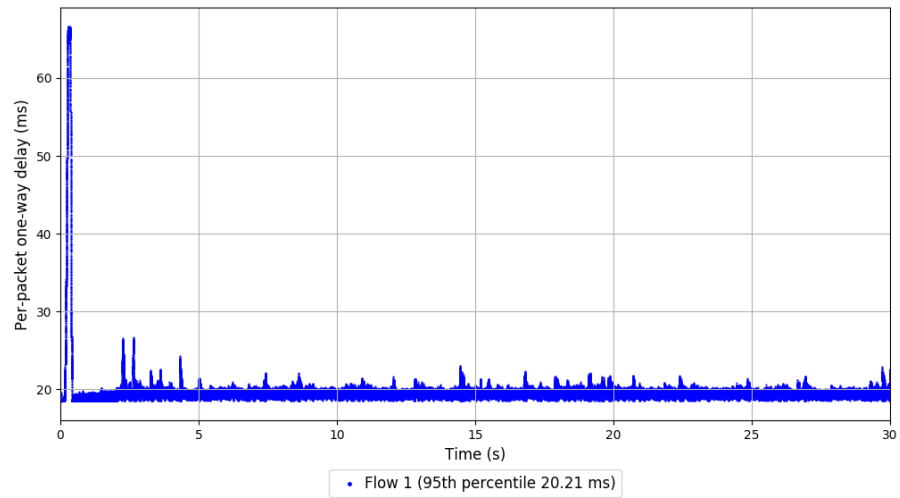
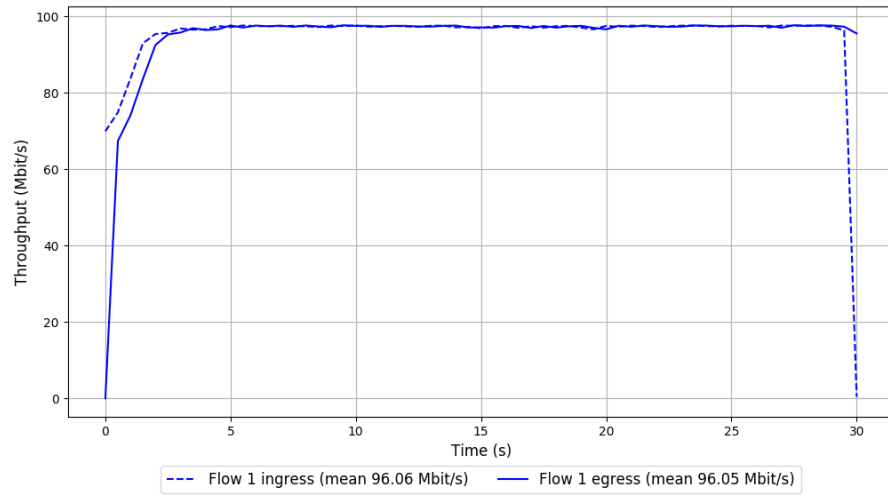


Run 5: Statistics of TCP Vegas

Start at: 2019-06-27 15:09:15  
End at: 2019-06-27 15:09:45  
Local clock offset: -1.137 ms  
Remote clock offset: -7.097 ms

# Below is generated by plot.py at 2019-06-27 15:46:51  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 96.05 Mbit/s  
95th percentile per-packet one-way delay: 20.206 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 96.05 Mbit/s  
95th percentile per-packet one-way delay: 20.206 ms  
Loss rate: 0.09%

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

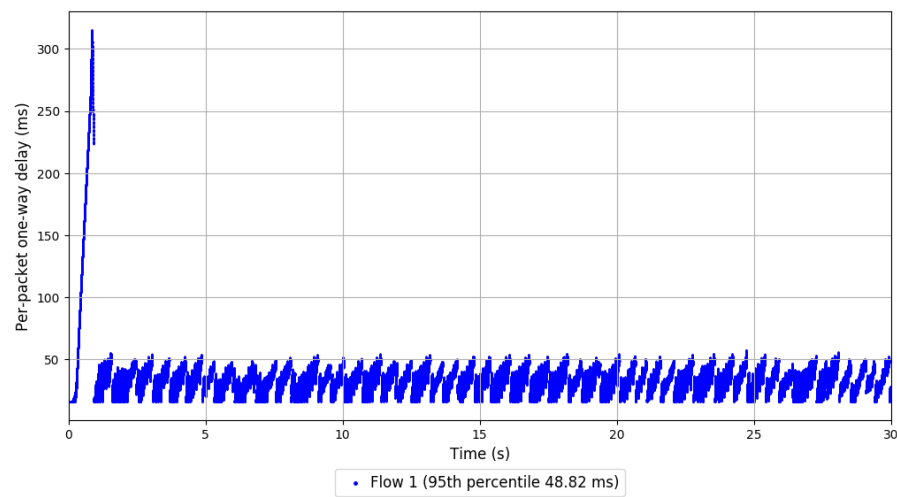
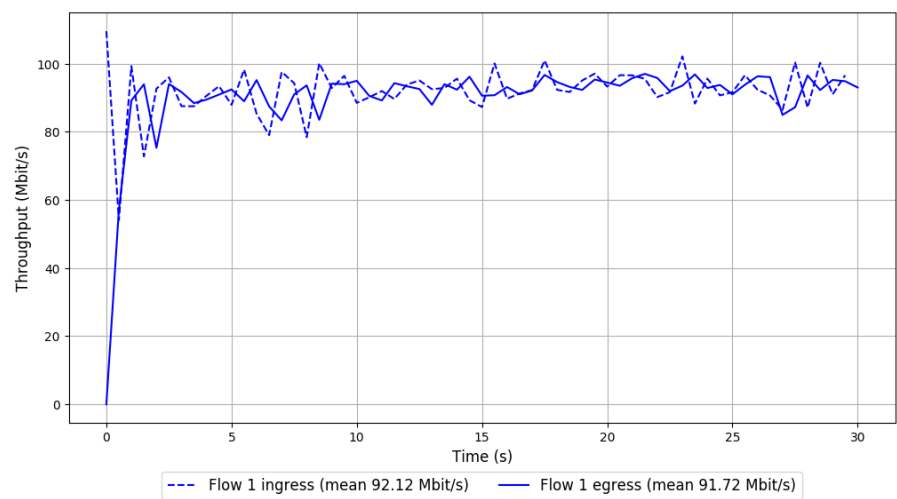


Run 1: Statistics of Verus

Start at: 2019-06-27 13:26:26  
End at: 2019-06-27 13:26:56  
Local clock offset: -1.762 ms  
Remote clock offset: -3.343 ms

# Below is generated by plot.py at 2019-06-27 15:46:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.72 Mbit/s  
95th percentile per-packet one-way delay: 48.816 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 91.72 Mbit/s  
95th percentile per-packet one-way delay: 48.816 ms  
Loss rate: 0.52%

Run 1: Report of Verus — Data Link



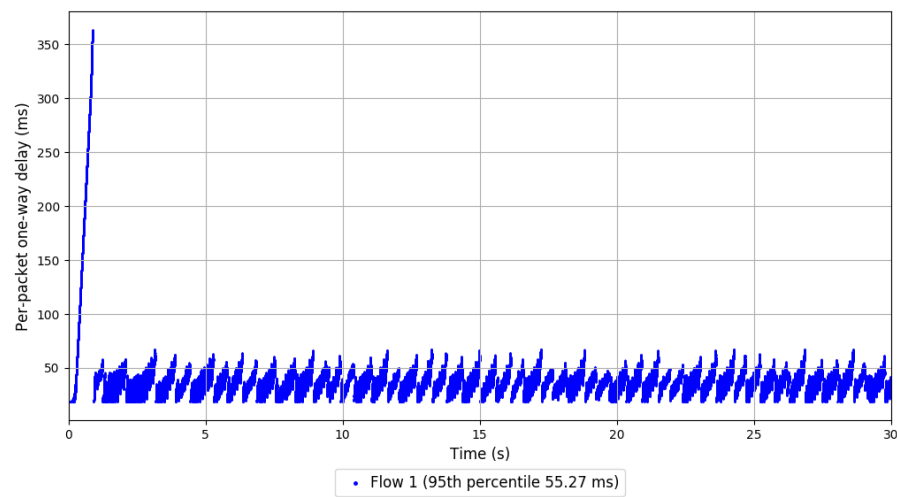
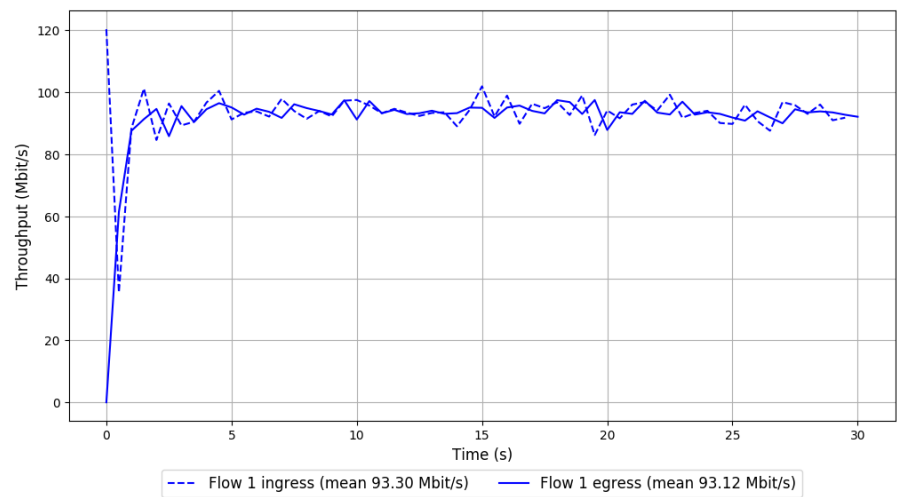


Run 2: Statistics of Verus

Start at: 2019-06-27 13:54:07  
End at: 2019-06-27 13:54:37  
Local clock offset: -0.193 ms  
Remote clock offset: -4.927 ms

# Below is generated by plot.py at 2019-06-27 15:47:14  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.12 Mbit/s  
95th percentile per-packet one-way delay: 55.275 ms  
Loss rate: 0.27%  
-- Flow 1:  
Average throughput: 93.12 Mbit/s  
95th percentile per-packet one-way delay: 55.275 ms  
Loss rate: 0.27%

Run 2: Report of Verus — Data Link

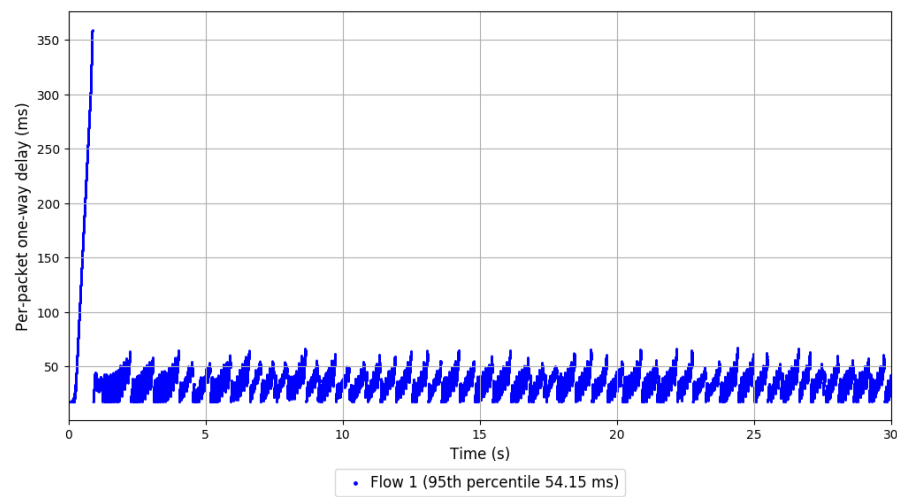
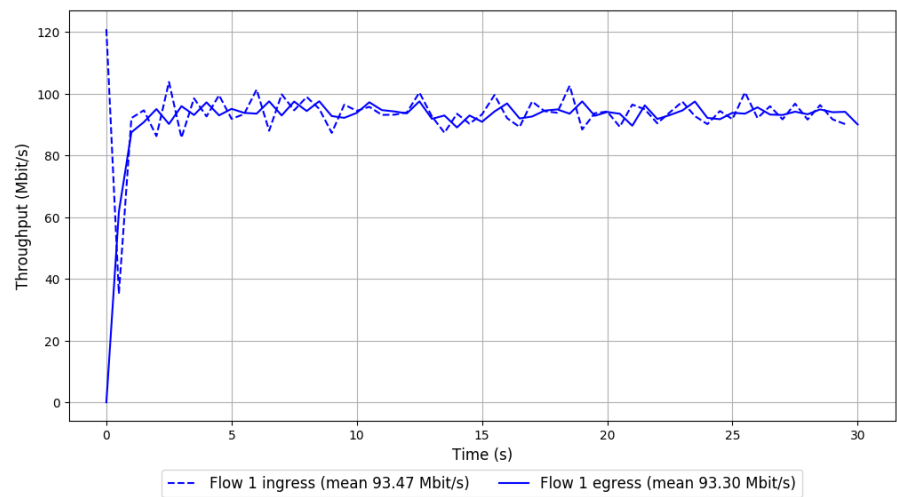


Run 3: Statistics of Verus

Start at: 2019-06-27 14:21:39  
End at: 2019-06-27 14:22:09  
Local clock offset: -0.543 ms  
Remote clock offset: -5.153 ms

# Below is generated by plot.py at 2019-06-27 15:47:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.30 Mbit/s  
95th percentile per-packet one-way delay: 54.147 ms  
Loss rate: 0.25%  
-- Flow 1:  
Average throughput: 93.30 Mbit/s  
95th percentile per-packet one-way delay: 54.147 ms  
Loss rate: 0.25%

Run 3: Report of Verus — Data Link

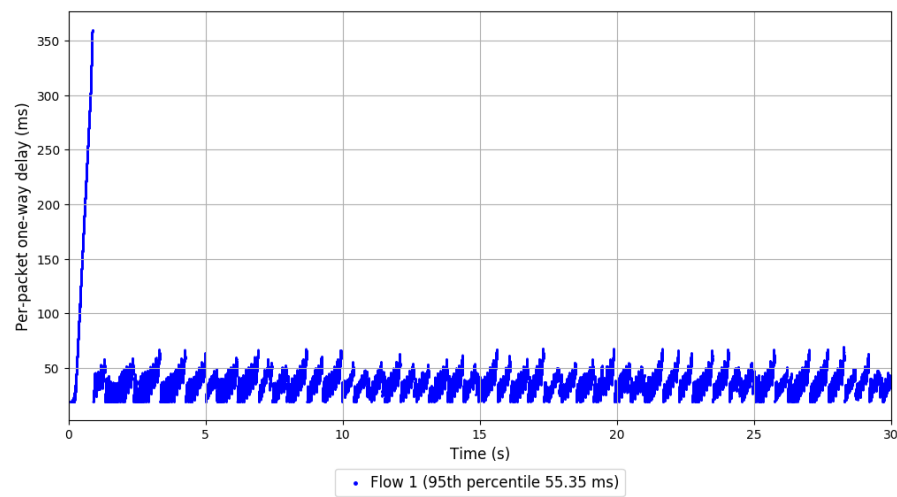
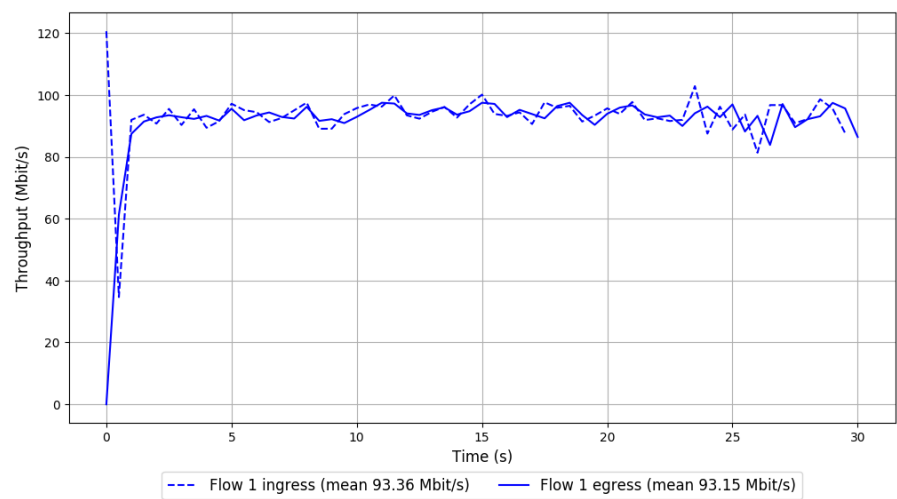


Run 4: Statistics of Verus

Start at: 2019-06-27 14:49:37  
End at: 2019-06-27 14:50:07  
Local clock offset: -5.971 ms  
Remote clock offset: -12.26 ms

# Below is generated by plot.py at 2019-06-27 15:47:24  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.15 Mbit/s  
95th percentile per-packet one-way delay: 55.350 ms  
Loss rate: 0.31%  
-- Flow 1:  
Average throughput: 93.15 Mbit/s  
95th percentile per-packet one-way delay: 55.350 ms  
Loss rate: 0.31%

Run 4: Report of Verus — Data Link

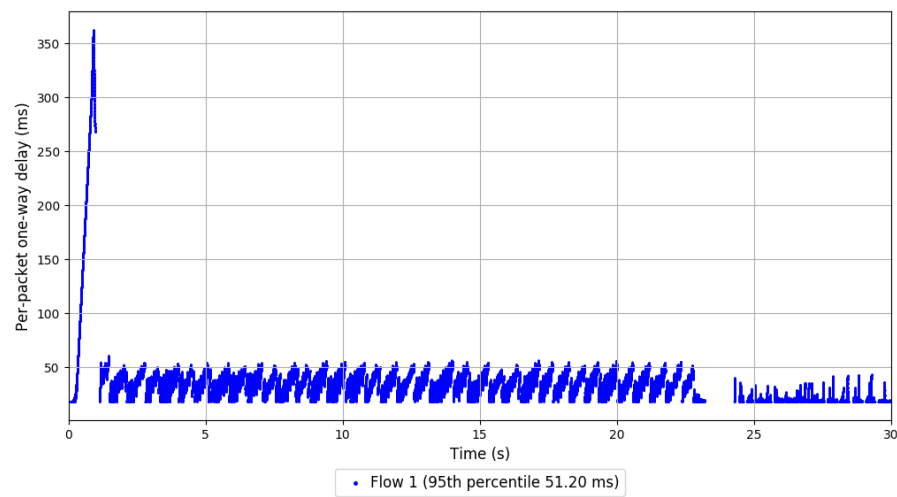
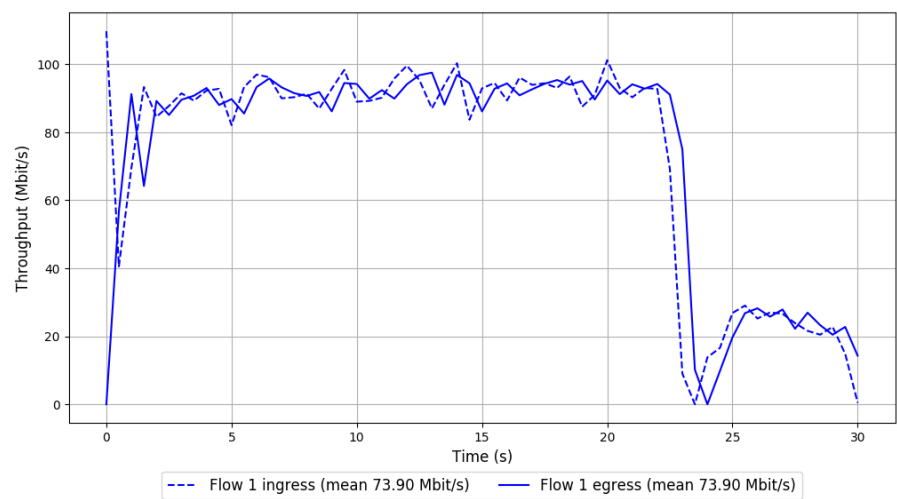


Run 5: Statistics of Verus

Start at: 2019-06-27 15:17:51  
End at: 2019-06-27 15:18:21  
Local clock offset: -0.6 ms  
Remote clock offset: -6.487 ms

# Below is generated by plot.py at 2019-06-27 15:47:24  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 73.90 Mbit/s  
95th percentile per-packet one-way delay: 51.200 ms  
Loss rate: 0.20%  
-- Flow 1:  
Average throughput: 73.90 Mbit/s  
95th percentile per-packet one-way delay: 51.200 ms  
Loss rate: 0.20%

Run 5: Report of Verus — Data Link





Run 1: Statistics of PCC-Vivace

Start at: 2019-06-27 13:32:30

End at: 2019-06-27 13:33:00

Local clock offset: -1.73 ms

Remote clock offset: -6.069 ms

# Below is generated by plot.py at 2019-06-27 15:47:27

# Datalink statistics

-- Total of 1 flow:

Average throughput: 86.72 Mbit/s

95th percentile per-packet one-way delay: 19.248 ms

Loss rate: 0.09%

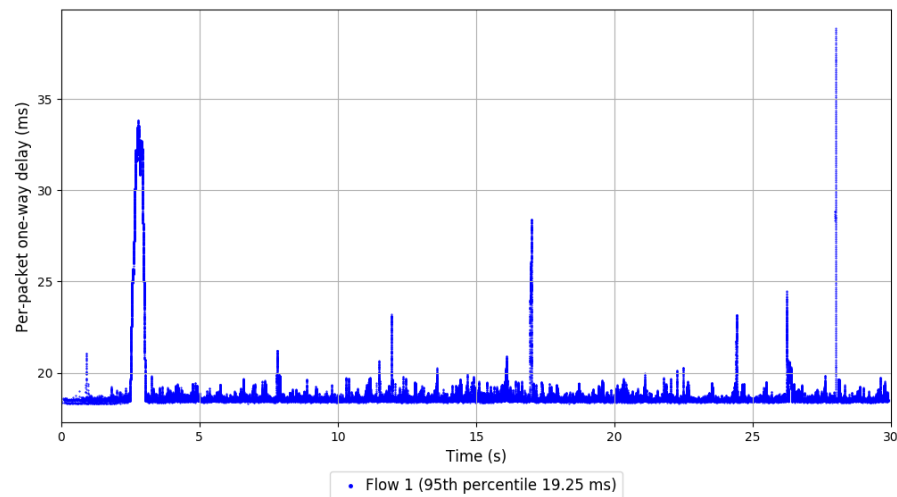
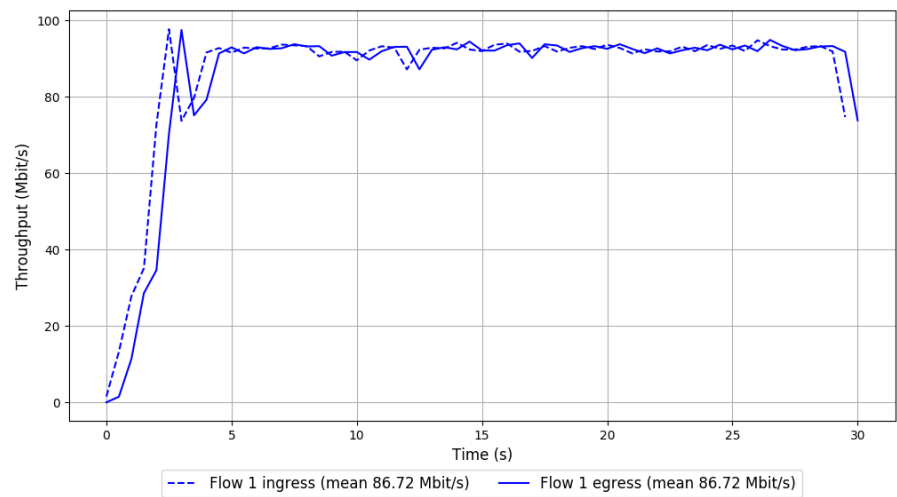
-- Flow 1:

Average throughput: 86.72 Mbit/s

95th percentile per-packet one-way delay: 19.248 ms

Loss rate: 0.09%

Run 1: Report of PCC-Vivace — Data Link

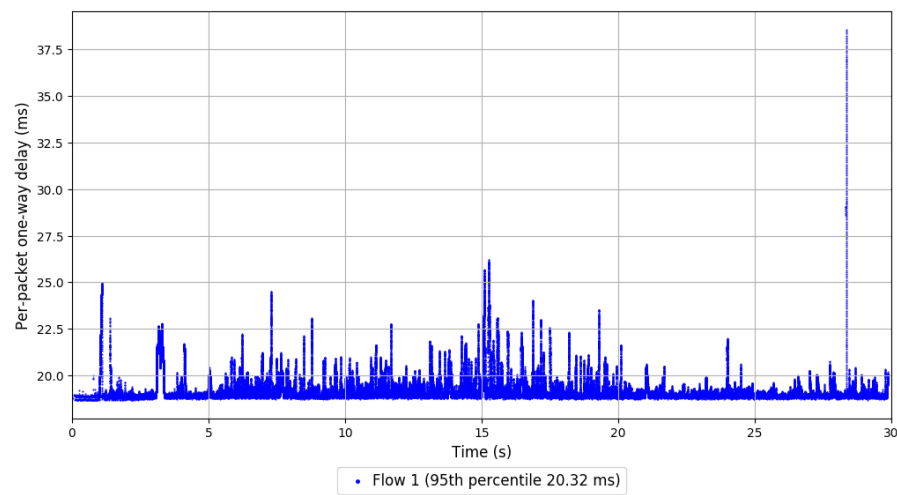
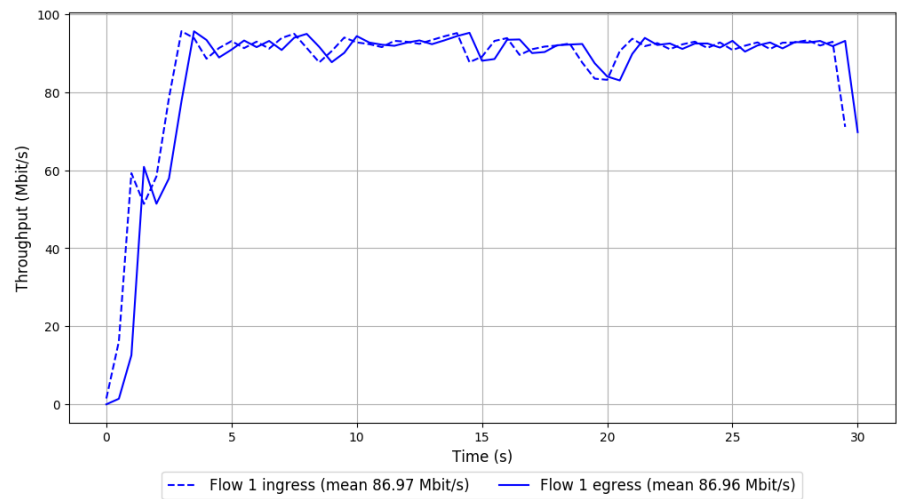


Run 2: Statistics of PCC-Vivace

Start at: 2019-06-27 14:00:18  
End at: 2019-06-27 14:00:48  
Local clock offset: -0.297 ms  
Remote clock offset: -5.793 ms

# Below is generated by plot.py at 2019-06-27 15:47:42  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 86.96 Mbit/s  
95th percentile per-packet one-way delay: 20.318 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 86.96 Mbit/s  
95th percentile per-packet one-way delay: 20.318 ms  
Loss rate: 0.09%

Run 2: Report of PCC-Vivace — Data Link

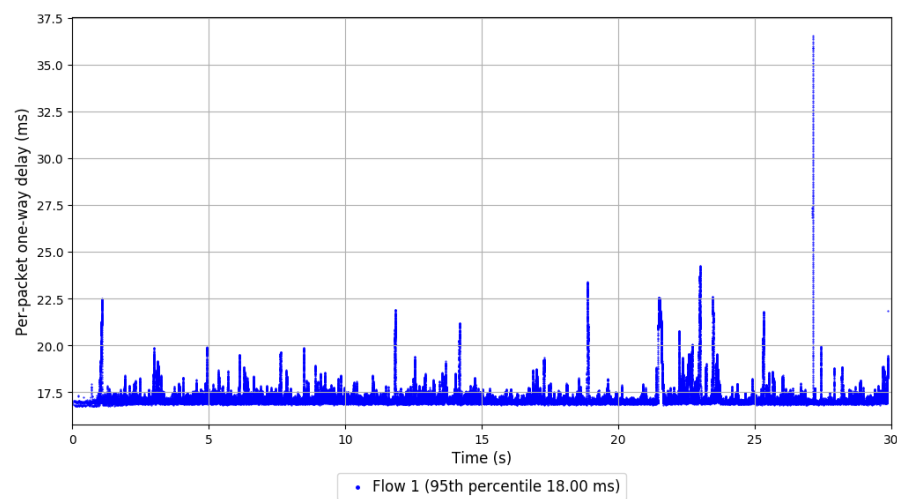
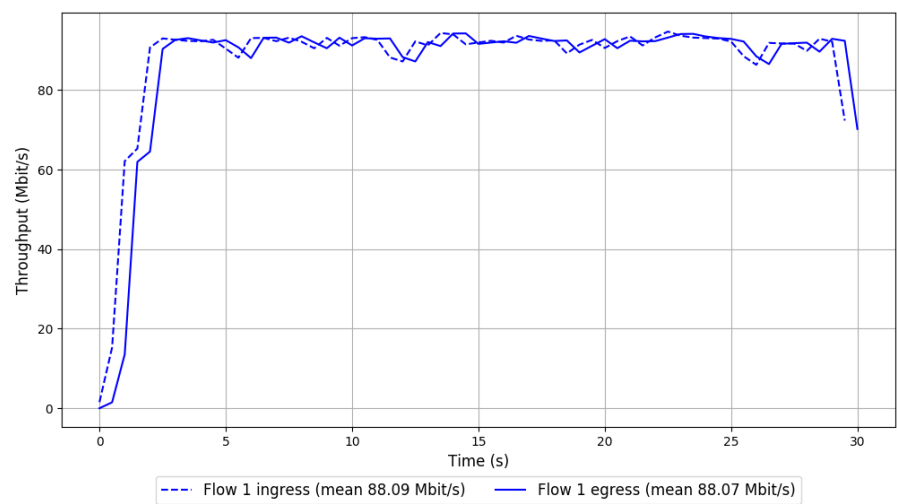


Run 3: Statistics of PCC-Vivace

Start at: 2019-06-27 14:27:55  
End at: 2019-06-27 14:28:25  
Local clock offset: -0.732 ms  
Remote clock offset: -4.511 ms

# Below is generated by plot.py at 2019-06-27 15:47:47  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 88.07 Mbit/s  
95th percentile per-packet one-way delay: 18.004 ms  
Loss rate: 0.09%  
-- Flow 1:  
Average throughput: 88.07 Mbit/s  
95th percentile per-packet one-way delay: 18.004 ms  
Loss rate: 0.09%

Run 3: Report of PCC-Vivace — Data Link

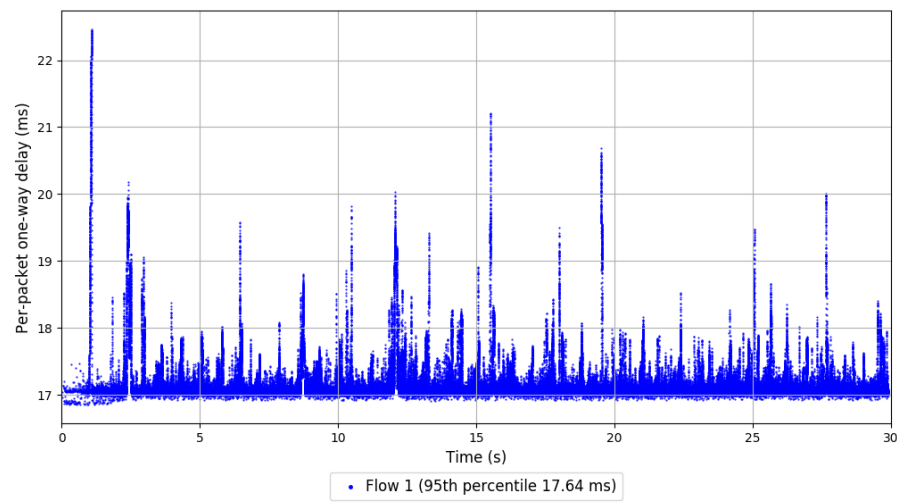
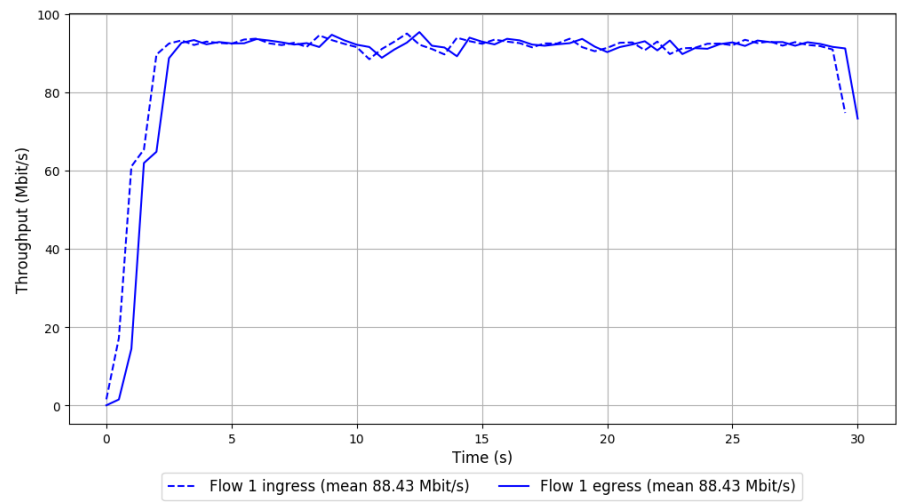


Run 4: Statistics of PCC-Vivace

Start at: 2019-06-27 14:55:41  
End at: 2019-06-27 14:56:11  
Local clock offset: -0.726 ms  
Remote clock offset: -4.964 ms

# Below is generated by plot.py at 2019-06-27 15:47:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 88.43 Mbit/s  
95th percentile per-packet one-way delay: 17.642 ms  
Loss rate: 0.08%  
-- Flow 1:  
Average throughput: 88.43 Mbit/s  
95th percentile per-packet one-way delay: 17.642 ms  
Loss rate: 0.08%

Run 4: Report of PCC-Vivace — Data Link





Run 5: Statistics of PCC-Vivace

Start at: 2019-06-27 15:25:47

End at: 2019-06-27 15:26:18

Local clock offset: 0.037 ms

Remote clock offset: -5.421 ms

# Below is generated by plot.py at 2019-06-27 15:47:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 83.23 Mbit/s

95th percentile per-packet one-way delay: 17.844 ms

Loss rate: 0.08%

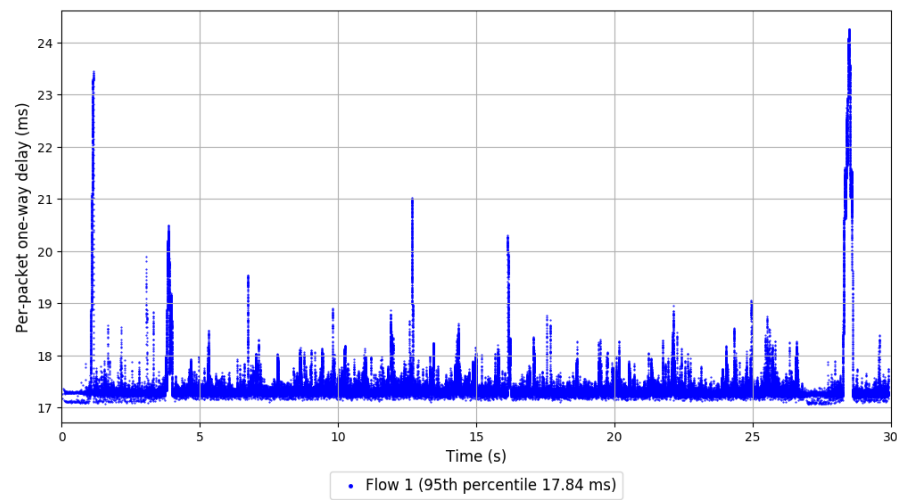
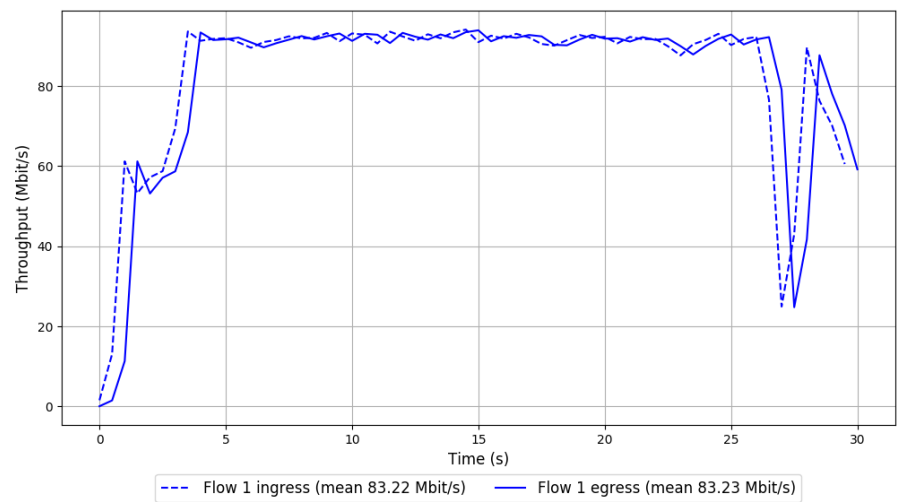
-- Flow 1:

Average throughput: 83.23 Mbit/s

95th percentile per-packet one-way delay: 17.844 ms

Loss rate: 0.08%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-06-27 13:28:57

End at: 2019-06-27 13:29:27

Local clock offset: 0.274 ms

Remote clock offset: -3.904 ms

# Below is generated by plot.py at 2019-06-27 15:47:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 18.956 ms

Loss rate: 0.07%

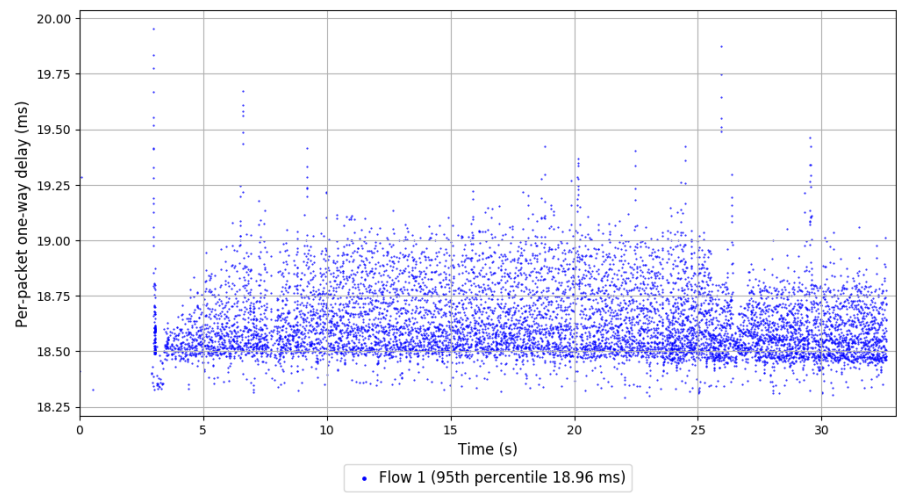
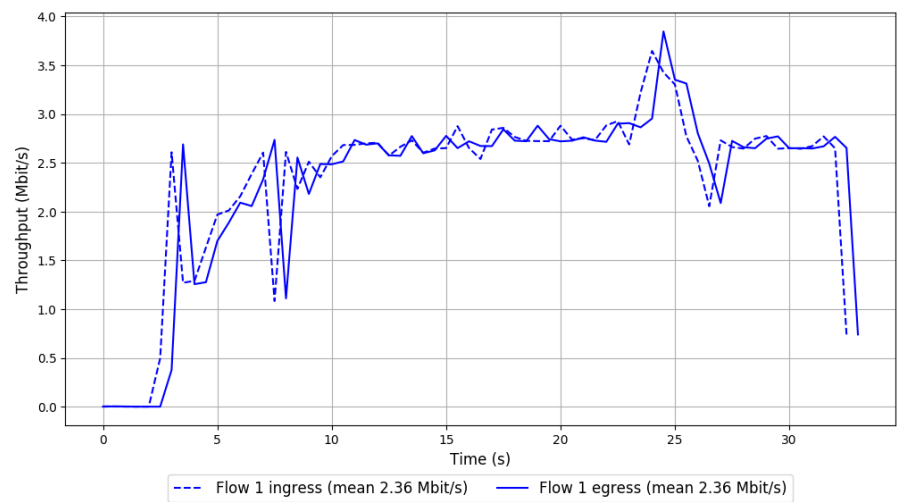
-- Flow 1:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 18.956 ms

Loss rate: 0.07%

Run 1: Report of WebRTC media — Data Link

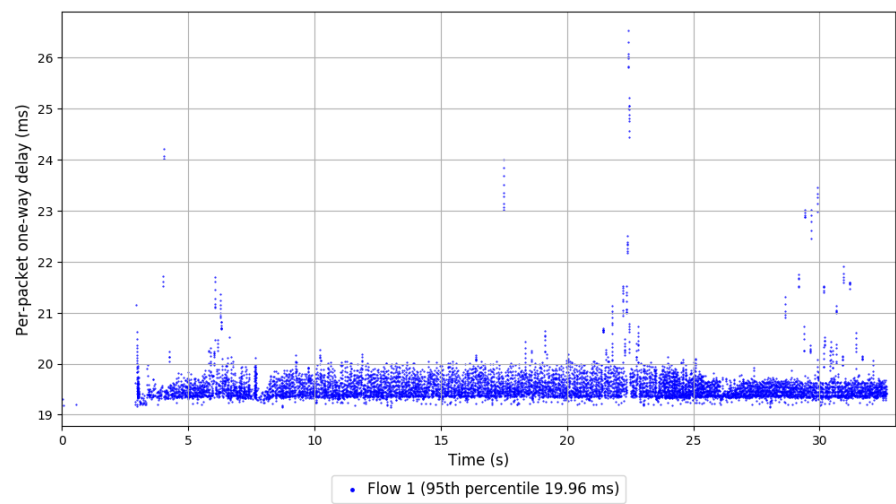
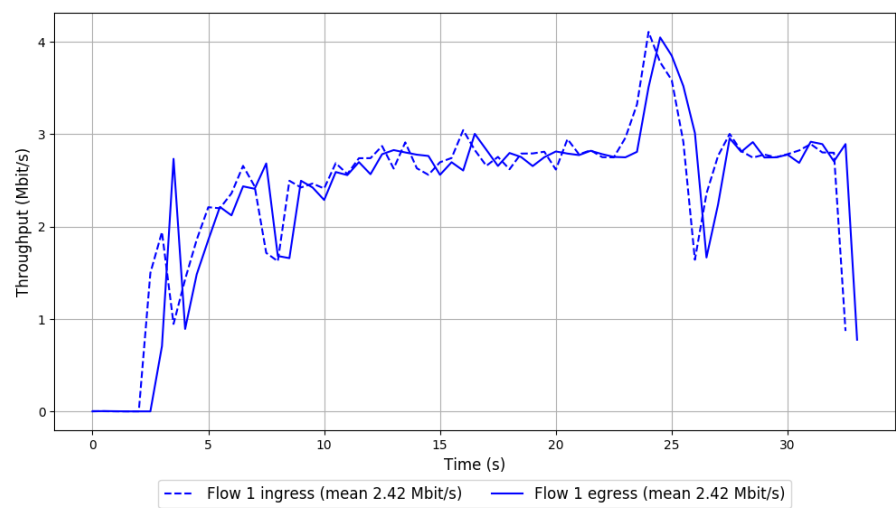


Run 2: Statistics of WebRTC media

Start at: 2019-06-27 13:56:45  
End at: 2019-06-27 13:57:15  
Local clock offset: 0.037 ms  
Remote clock offset: -5.748 ms

# Below is generated by plot.py at 2019-06-27 15:47:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.42 Mbit/s  
95th percentile per-packet one-way delay: 19.957 ms  
Loss rate: 0.12%  
-- Flow 1:  
Average throughput: 2.42 Mbit/s  
95th percentile per-packet one-way delay: 19.957 ms  
Loss rate: 0.12%

Run 2: Report of WebRTC media — Data Link

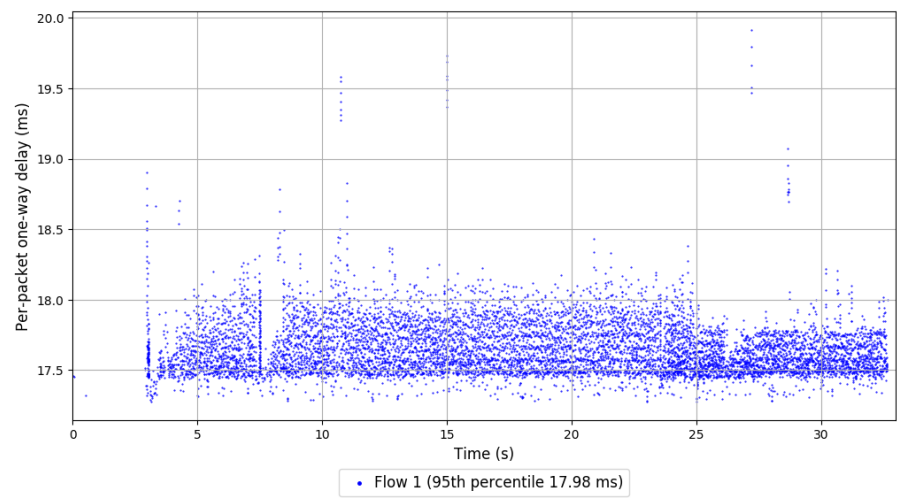
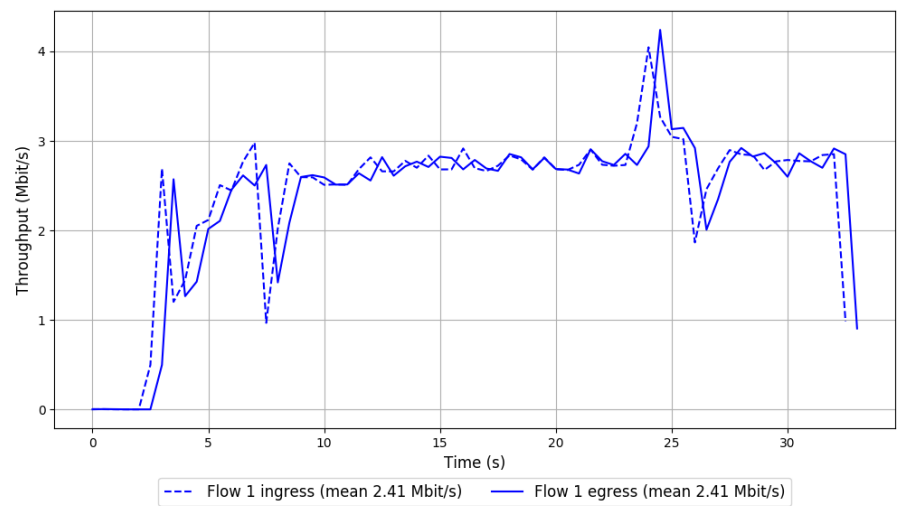


Run 3: Statistics of WebRTC media

Start at: 2019-06-27 14:24:14  
End at: 2019-06-27 14:24:44  
Local clock offset: -1.284 ms  
Remote clock offset: -5.605 ms

# Below is generated by plot.py at 2019-06-27 15:47:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.41 Mbit/s  
95th percentile per-packet one-way delay: 17.985 ms  
Loss rate: 0.11%  
-- Flow 1:  
Average throughput: 2.41 Mbit/s  
95th percentile per-packet one-way delay: 17.985 ms  
Loss rate: 0.11%

Run 3: Report of WebRTC media — Data Link



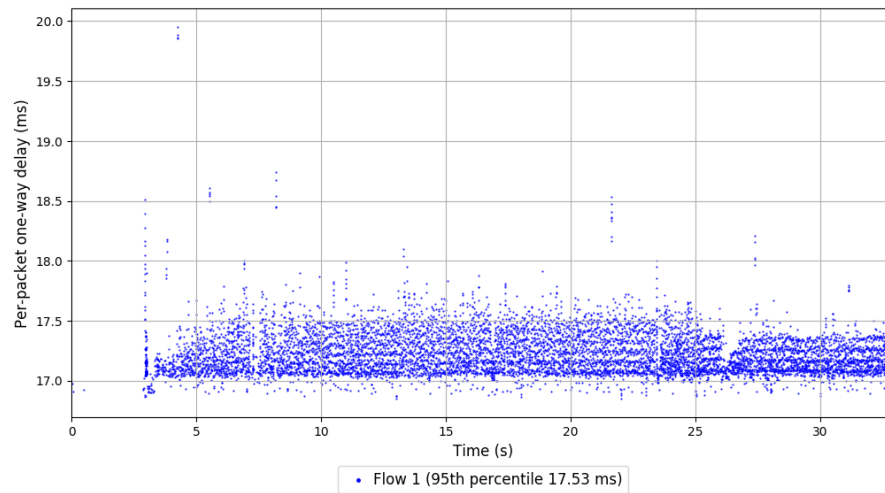
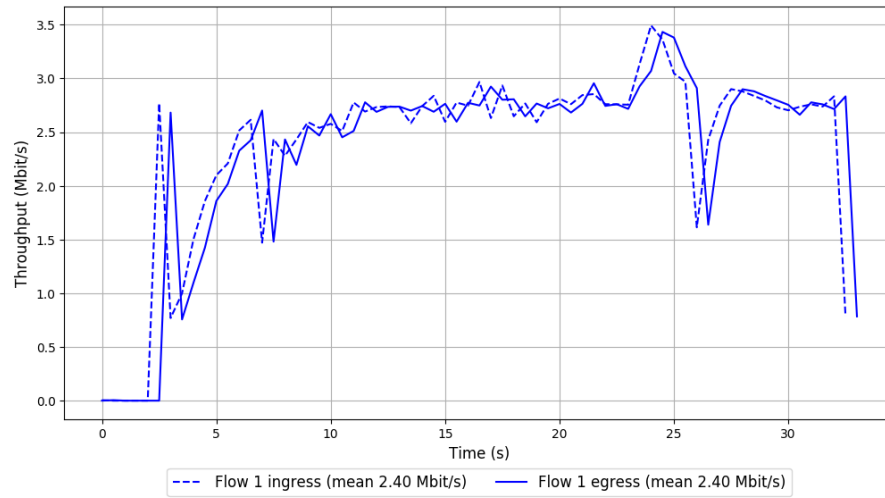


Run 4: Statistics of WebRTC media

Start at: 2019-06-27 14:52:09  
End at: 2019-06-27 14:52:39  
Local clock offset: -0.22 ms  
Remote clock offset: -4.601 ms

# Below is generated by plot.py at 2019-06-27 15:47:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.40 Mbit/s  
95th percentile per-packet one-way delay: 17.527 ms  
Loss rate: 0.06%  
-- Flow 1:  
Average throughput: 2.40 Mbit/s  
95th percentile per-packet one-way delay: 17.527 ms  
Loss rate: 0.06%

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



Run 5: Statistics of WebRTC media

Start at: 2019-06-27 15:22:21  
End at: 2019-06-27 15:22:51  
Local clock offset: -0.885 ms  
Remote clock offset: -5.852 ms

# Below is generated by plot.py at 2019-06-27 15:47:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.42 Mbit/s  
95th percentile per-packet one-way delay: 17.528 ms  
Loss rate: 0.13%  
-- Flow 1:  
Average throughput: 2.42 Mbit/s  
95th percentile per-packet one-way delay: 17.528 ms  
Loss rate: 0.13%

Run 5: Report of WebRTC media — Data Link

