

## Pantheon Report

Generated at 2019-01-19 21:04:20 (UTC).

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

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

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

### System info:

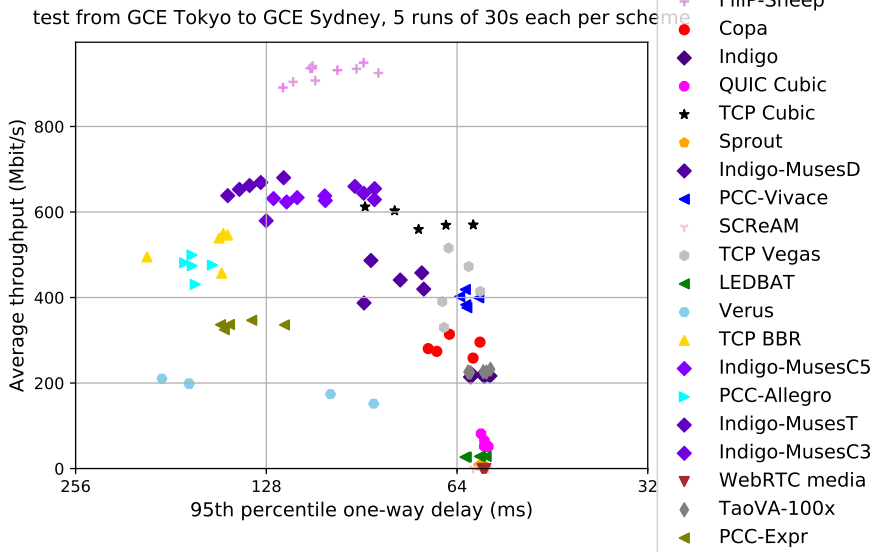
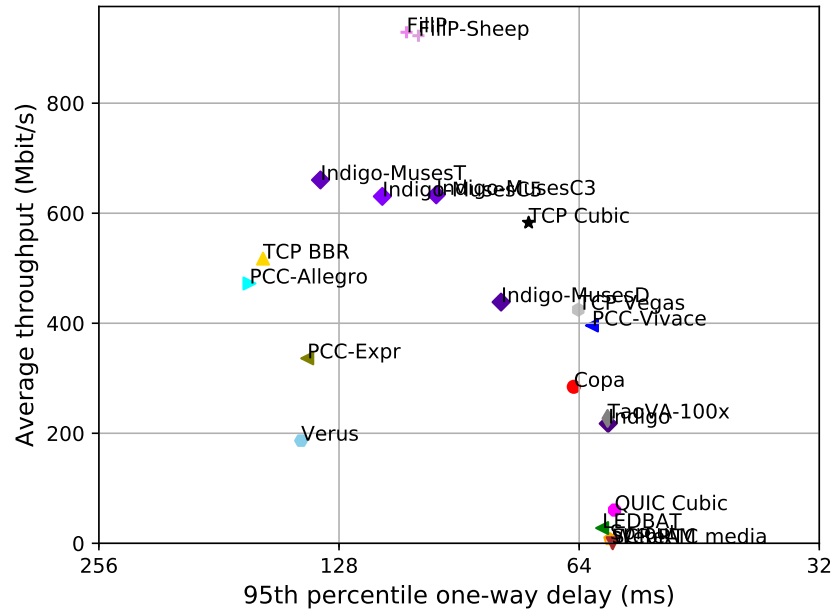
```
Linux 4.15.0-1026-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

```
branch: muses @ c80a283586bf7b0cc1fe08c69c8f60d56498f81c
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ c3eee875824760ec5b2fd207fefe166e1afe2170
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
```

third\_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

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



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	517.49	159.39	1.45
Copa	5	284.50	65.00	0.37
TCP Cubic	5	582.78	74.05	0.44
FillP	5	928.89	105.33	0.84
FillP-Sheep	5	922.59	101.77	0.94
Indigo	5	217.58	58.86	0.40
Indigo-MusesC3	5	633.40	96.68	0.48
Indigo-MusesC5	5	630.58	112.96	0.59
Indigo-MusesD	5	438.45	80.18	0.54
Indigo-MusesT	5	660.46	135.05	0.69
LEDBAT	5	27.74	59.89	0.77
PCC-Allegro	5	472.28	165.76	2.39
PCC-Expr	5	336.20	140.30	1.29
QUIC Cubic	5	60.41	57.78	0.53
SCReAM	5	0.22	58.27	0.38
Sprout	5	7.49	58.55	0.41
TaoVA-100x	5	226.97	58.96	0.40
TCP Vegas	5	424.58	64.16	0.37
Verus	5	186.64	142.81	1.37
PCC-Vivace	5	395.91	61.68	0.44
WebRTC media	4	0.05	58.10	0.00



Run 1: Statistics of TCP BBR

Start at: 2019-01-19 16:02:12

End at: 2019-01-19 16:02:42

Local clock offset: 0.436 ms

Remote clock offset: -0.711 ms

# Below is generated by plot.py at 2019-01-19 19:10:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 457.00 Mbit/s

95th percentile per-packet one-way delay: 150.529 ms

Loss rate: 0.85%

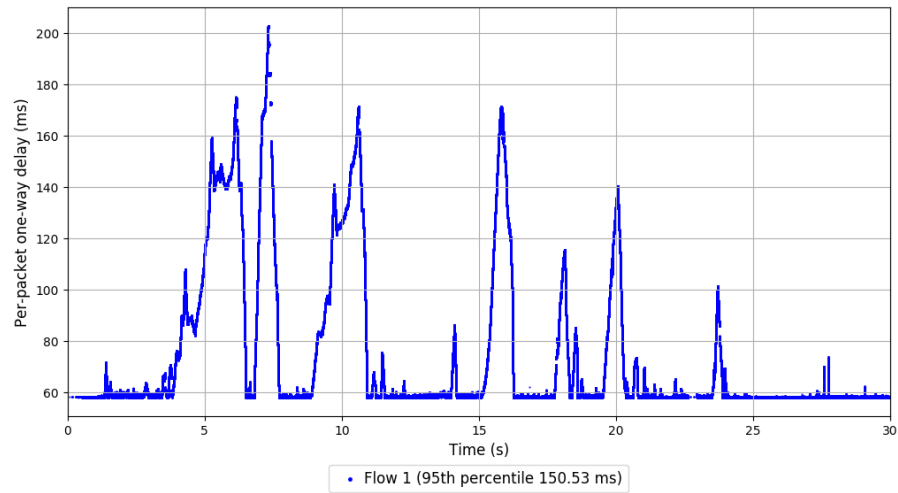
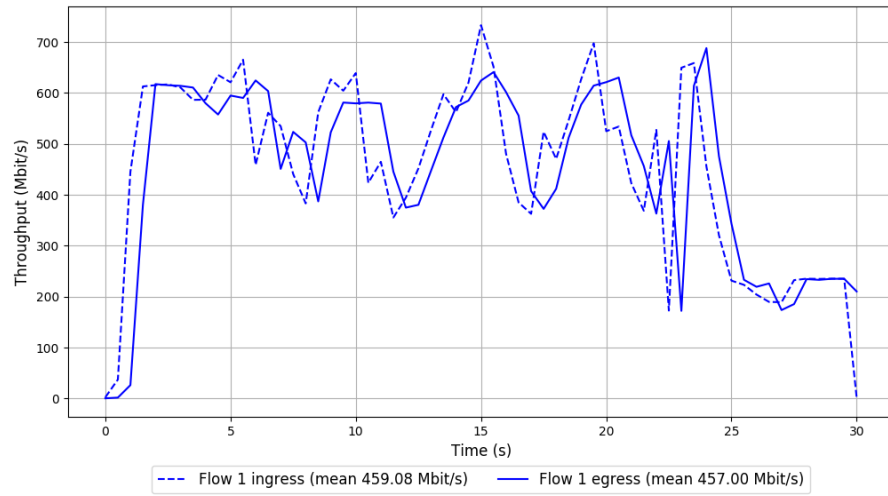
-- Flow 1:

Average throughput: 457.00 Mbit/s

95th percentile per-packet one-way delay: 150.529 ms

Loss rate: 0.85%

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



Run 2: Statistics of TCP BBR

Start at: 2019-01-19 16:35:48

End at: 2019-01-19 16:36:18

Local clock offset: -0.121 ms

Remote clock offset: 0.626 ms

# Below is generated by plot.py at 2019-01-19 19:12:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 549.76 Mbit/s

95th percentile per-packet one-way delay: 149.683 ms

Loss rate: 1.38%

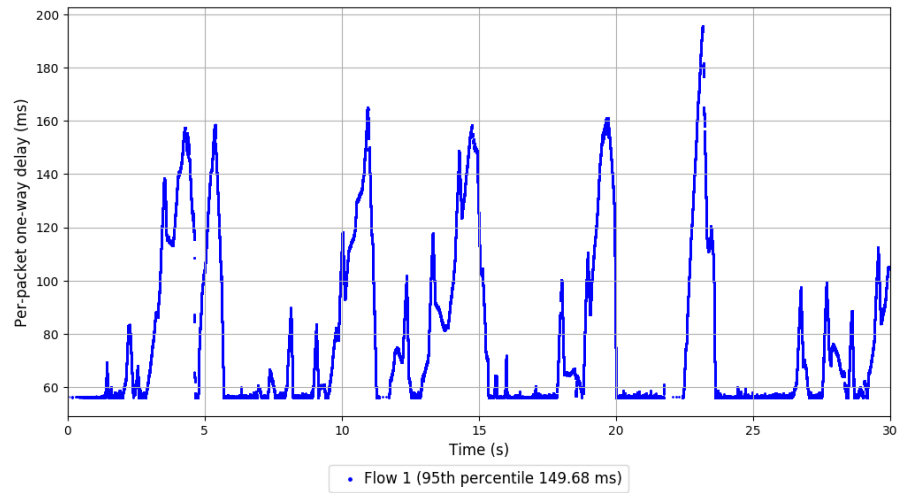
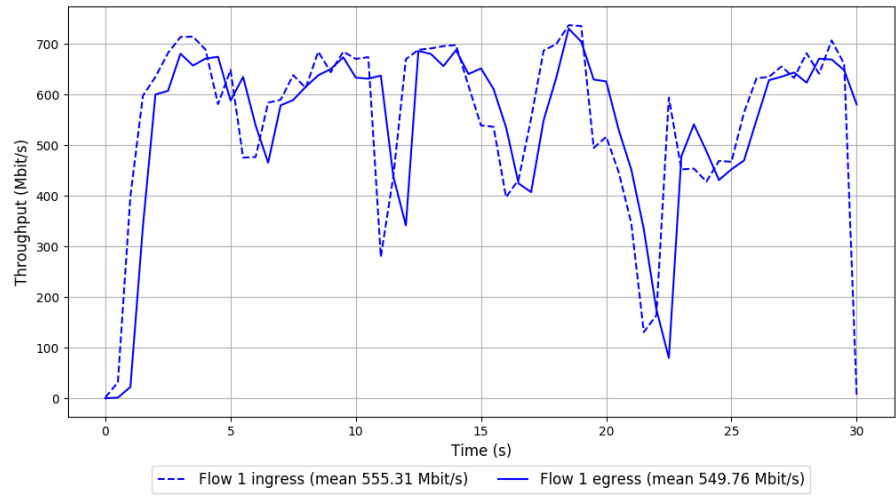
-- Flow 1:

Average throughput: 549.76 Mbit/s

95th percentile per-packet one-way delay: 149.683 ms

Loss rate: 1.38%

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

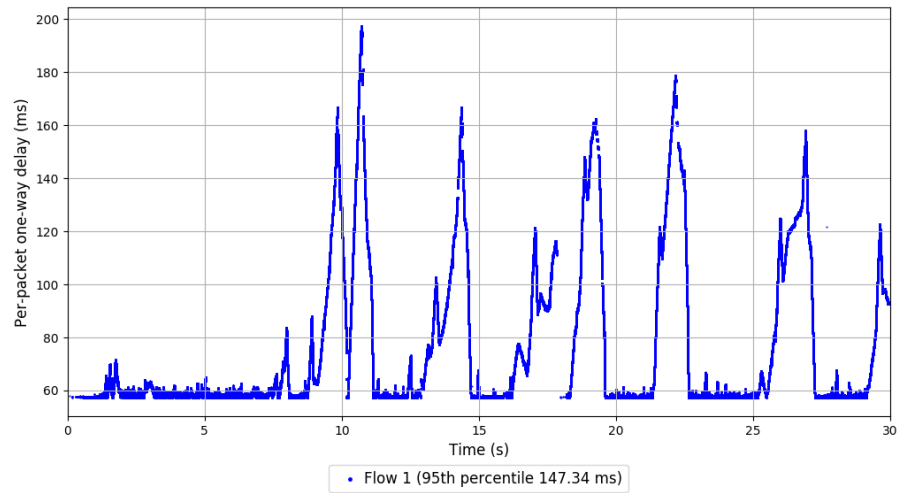
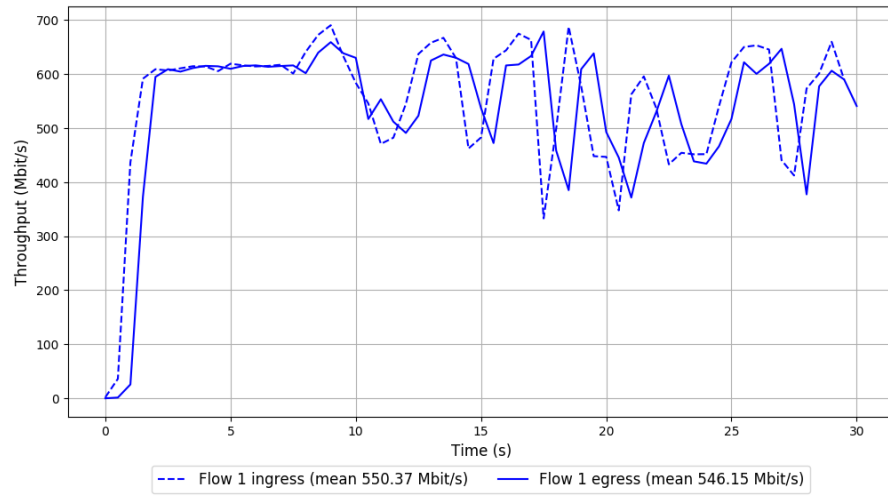


Run 3: Statistics of TCP BBR

Start at: 2019-01-19 17:09:50  
End at: 2019-01-19 17:10:20  
Local clock offset: 0.087 ms  
Remote clock offset: -0.139 ms

# Below is generated by plot.py at 2019-01-19 19:12:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 546.15 Mbit/s  
95th percentile per-packet one-way delay: 147.340 ms  
Loss rate: 1.15%  
-- Flow 1:  
Average throughput: 546.15 Mbit/s  
95th percentile per-packet one-way delay: 147.340 ms  
Loss rate: 1.15%

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

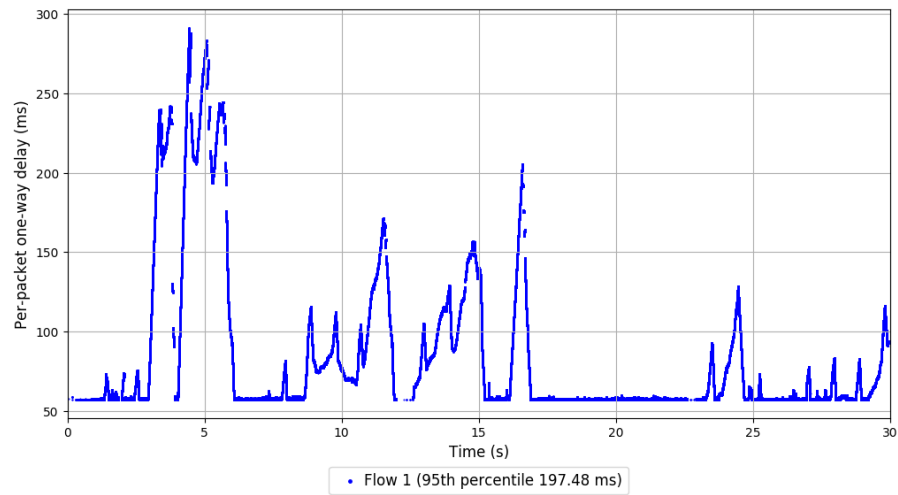
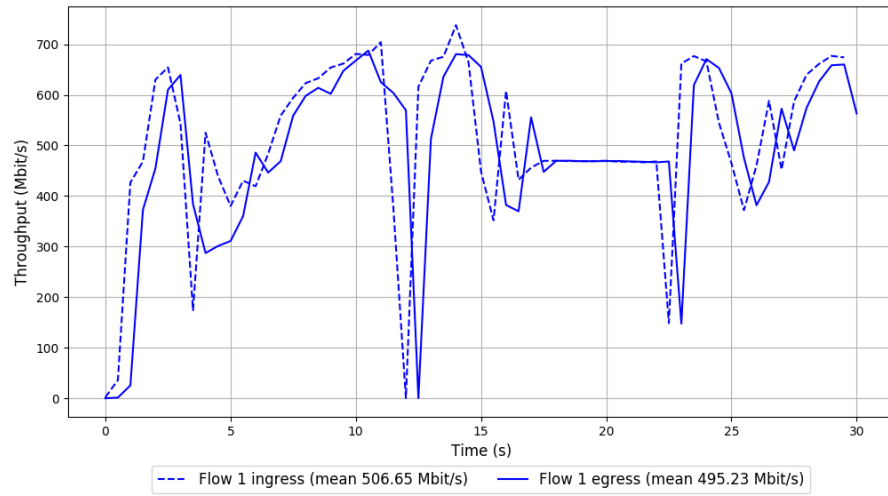


Run 4: Statistics of TCP BBR

Start at: 2019-01-19 17:44:33  
End at: 2019-01-19 17:45:03  
Local clock offset: 0.06 ms  
Remote clock offset: -0.207 ms

# Below is generated by plot.py at 2019-01-19 19:12:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 495.23 Mbit/s  
95th percentile per-packet one-way delay: 197.482 ms  
Loss rate: 2.63%  
-- Flow 1:  
Average throughput: 495.23 Mbit/s  
95th percentile per-packet one-way delay: 197.482 ms  
Loss rate: 2.63%

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



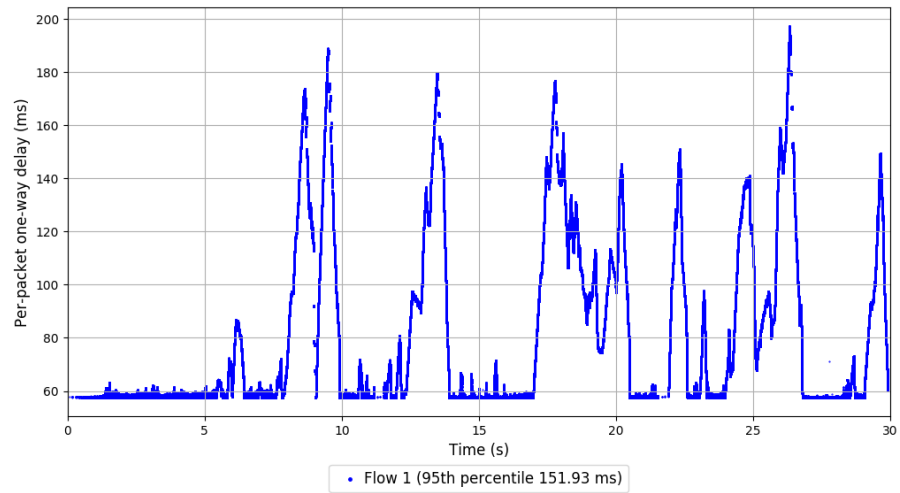
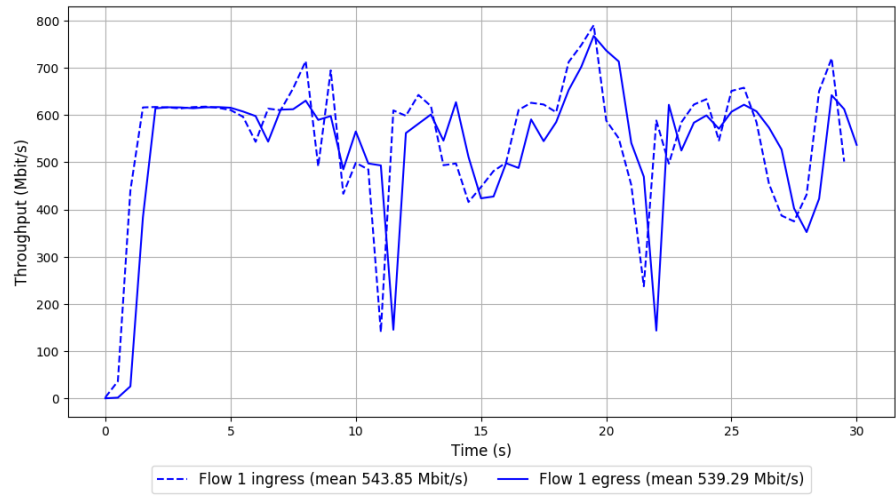


Run 5: Statistics of TCP BBR

Start at: 2019-01-19 18:18:58  
End at: 2019-01-19 18:19:28  
Local clock offset: 0.443 ms  
Remote clock offset: -0.283 ms

# Below is generated by plot.py at 2019-01-19 19:12:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 539.29 Mbit/s  
95th percentile per-packet one-way delay: 151.932 ms  
Loss rate: 1.22%  
-- Flow 1:  
Average throughput: 539.29 Mbit/s  
95th percentile per-packet one-way delay: 151.932 ms  
Loss rate: 1.22%

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



Run 1: Statistics of Copa

Start at: 2019-01-19 16:22:38

End at: 2019-01-19 16:23:08

Local clock offset: -0.284 ms

Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2019-01-19 19:12:02

# Datalink statistics

-- Total of 1 flow:

Average throughput: 258.36 Mbit/s

95th percentile per-packet one-way delay: 60.379 ms

Loss rate: 0.28%

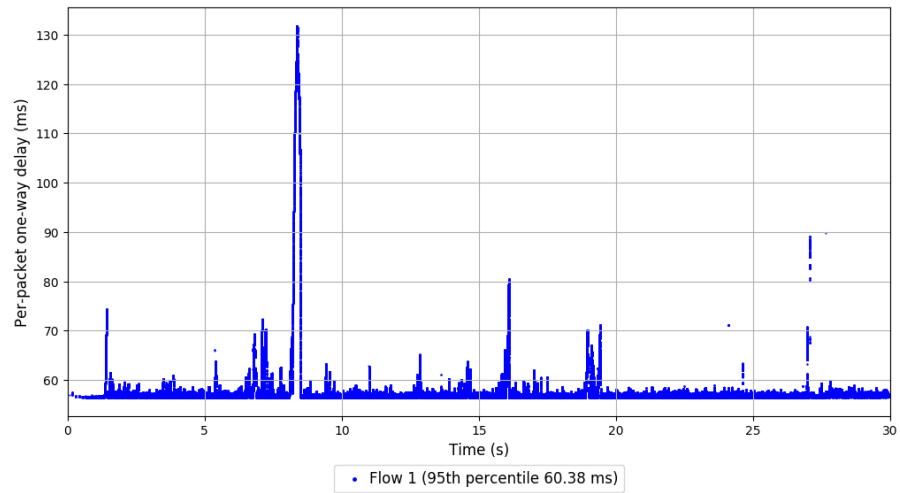
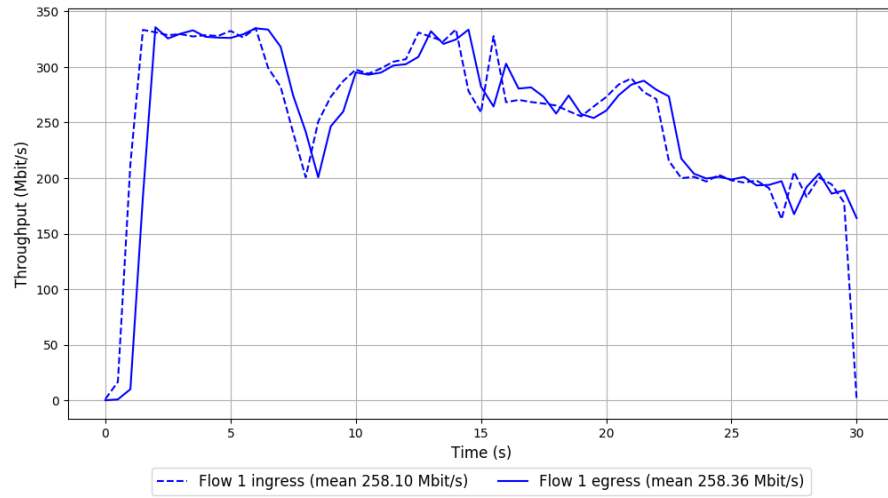
-- Flow 1:

Average throughput: 258.36 Mbit/s

95th percentile per-packet one-way delay: 60.379 ms

Loss rate: 0.28%

### Run 1: Report of Copa — Data Link

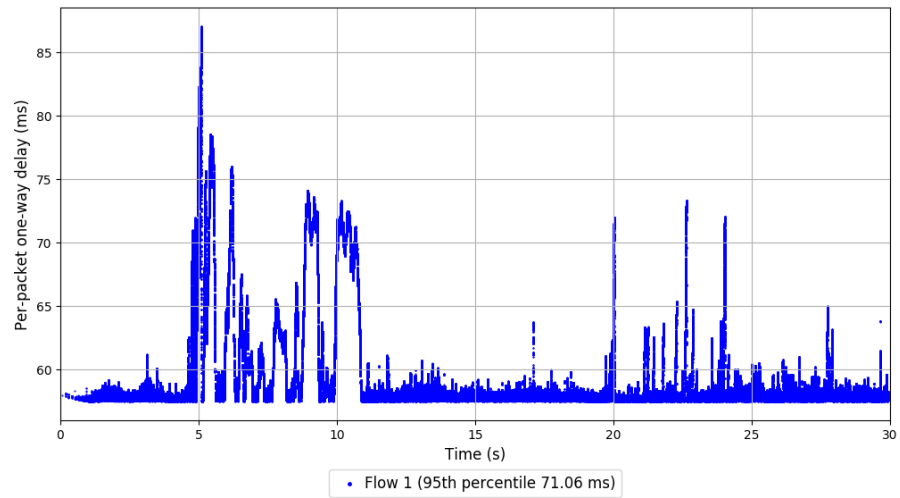
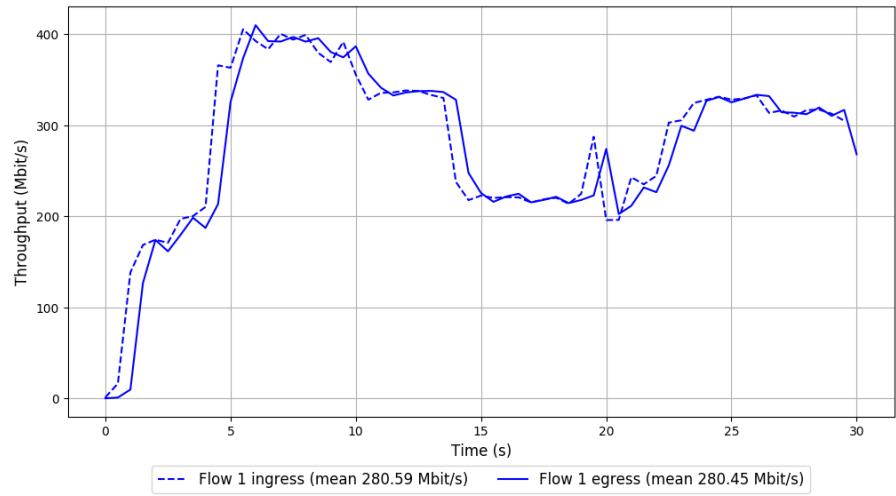


Run 2: Statistics of Copa

Start at: 2019-01-19 16:56:44  
End at: 2019-01-19 16:57:14  
Local clock offset: -0.109 ms  
Remote clock offset: -0.836 ms

# Below is generated by plot.py at 2019-01-19 19:12:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 280.45 Mbit/s  
95th percentile per-packet one-way delay: 71.062 ms  
Loss rate: 0.43%  
-- Flow 1:  
Average throughput: 280.45 Mbit/s  
95th percentile per-packet one-way delay: 71.062 ms  
Loss rate: 0.43%

## Run 2: Report of Copa — Data Link

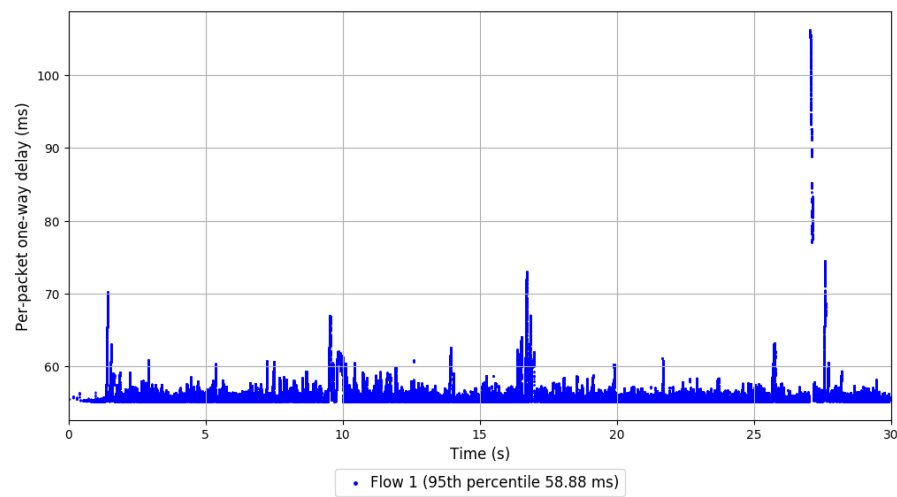
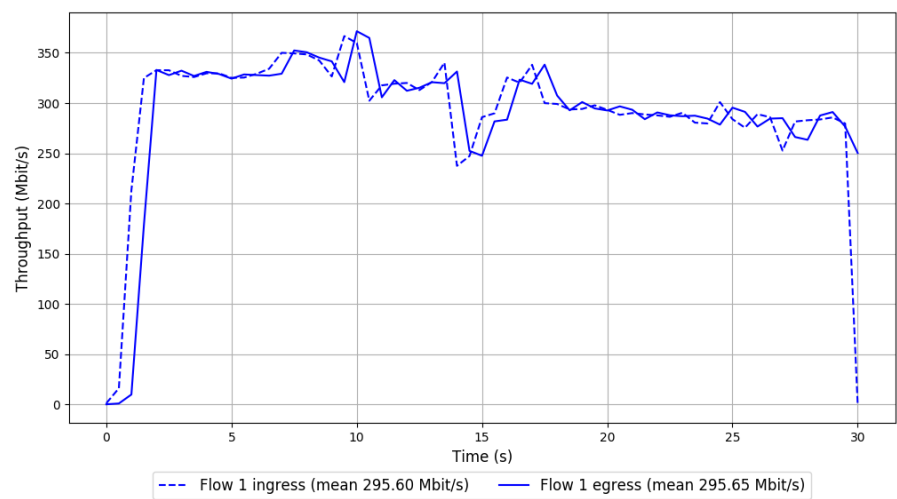


Run 3: Statistics of Copa

Start at: 2019-01-19 17:30:57  
End at: 2019-01-19 17:31:27  
Local clock offset: -0.435 ms  
Remote clock offset: 1.257 ms

# Below is generated by plot.py at 2019-01-19 19:12:05  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 295.65 Mbit/s  
95th percentile per-packet one-way delay: 58.880 ms  
Loss rate: 0.37%  
-- Flow 1:  
Average throughput: 295.65 Mbit/s  
95th percentile per-packet one-way delay: 58.880 ms  
Loss rate: 0.37%

Run 3: Report of Copa — Data Link



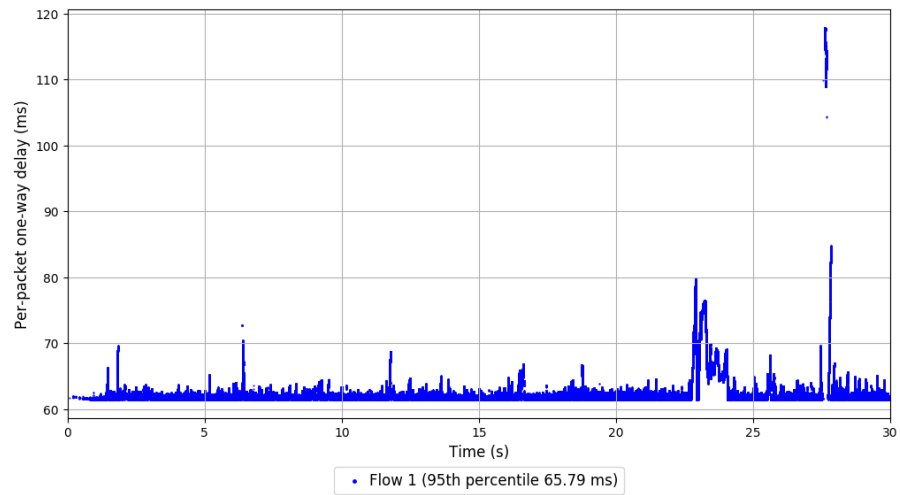
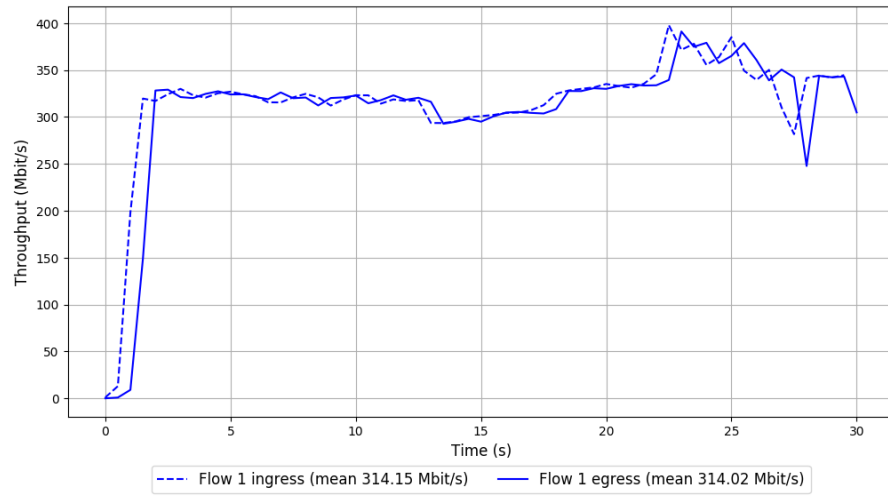


Run 4: Statistics of Copa

Start at: 2019-01-19 18:05:12  
End at: 2019-01-19 18:05:42  
Local clock offset: 0.252 ms  
Remote clock offset: -0.997 ms

# Below is generated by plot.py at 2019-01-19 19:21:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 314.02 Mbit/s  
95th percentile per-packet one-way delay: 65.791 ms  
Loss rate: 0.43%  
-- Flow 1:  
Average throughput: 314.02 Mbit/s  
95th percentile per-packet one-way delay: 65.791 ms  
Loss rate: 0.43%

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

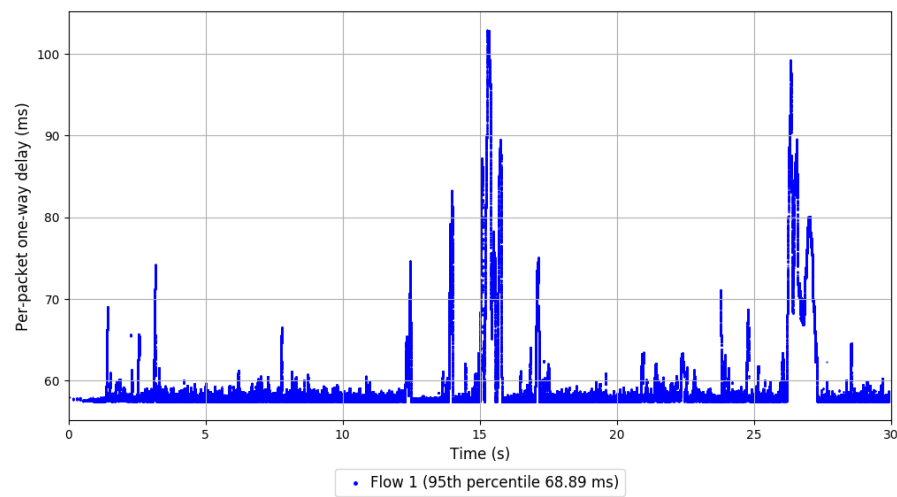
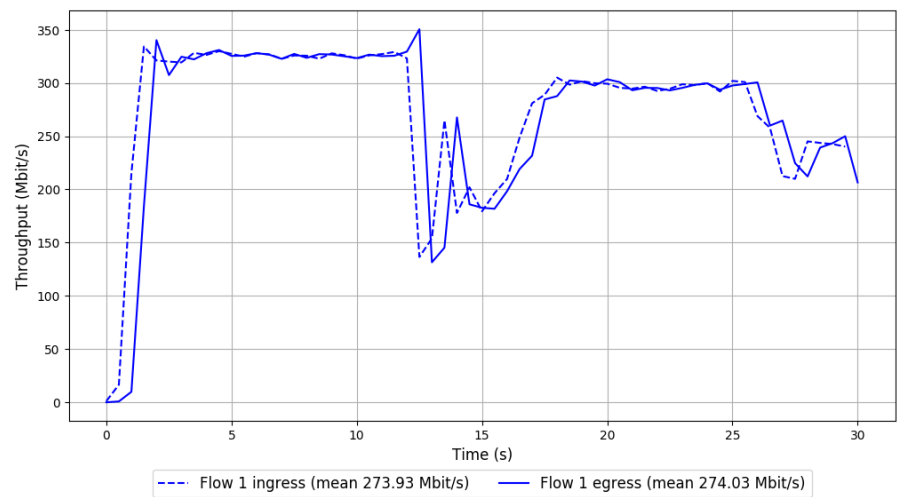


Run 5: Statistics of Copa

Start at: 2019-01-19 18:39:22  
End at: 2019-01-19 18:39:52  
Local clock offset: -0.112 ms  
Remote clock offset: -0.827 ms

# Below is generated by plot.py at 2019-01-19 19:21:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 274.03 Mbit/s  
95th percentile per-packet one-way delay: 68.895 ms  
Loss rate: 0.35%  
-- Flow 1:  
Average throughput: 274.03 Mbit/s  
95th percentile per-packet one-way delay: 68.895 ms  
Loss rate: 0.35%

Run 5: Report of Copa — Data Link

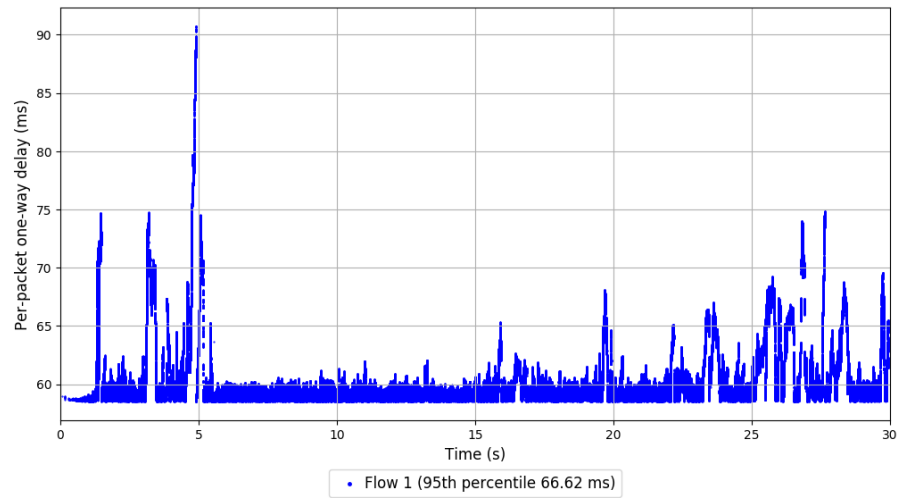
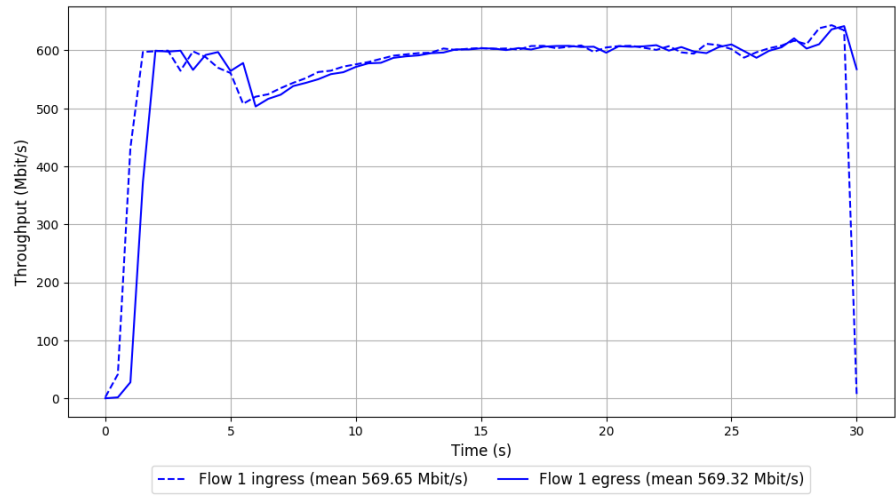


Run 1: Statistics of TCP Cubic

Start at: 2019-01-19 16:11:10  
End at: 2019-01-19 16:11:40  
Local clock offset: -0.137 ms  
Remote clock offset: -1.587 ms

# Below is generated by plot.py at 2019-01-19 19:22:04  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 569.32 Mbit/s  
95th percentile per-packet one-way delay: 66.625 ms  
Loss rate: 0.44%  
-- Flow 1:  
Average throughput: 569.32 Mbit/s  
95th percentile per-packet one-way delay: 66.625 ms  
Loss rate: 0.44%

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



Run 2: Statistics of TCP Cubic

Start at: 2019-01-19 16:45:18

End at: 2019-01-19 16:45:48

Local clock offset: -0.135 ms

Remote clock offset: 0.119 ms

# Below is generated by plot.py at 2019-01-19 19:22:24

# Datalink statistics

-- Total of 1 flow:

Average throughput: 570.05 Mbit/s

95th percentile per-packet one-way delay: 60.331 ms

Loss rate: 0.45%

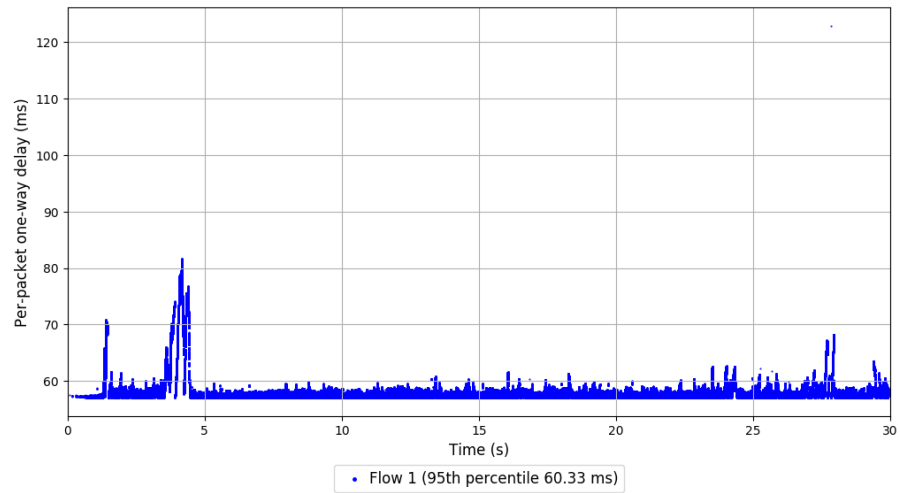
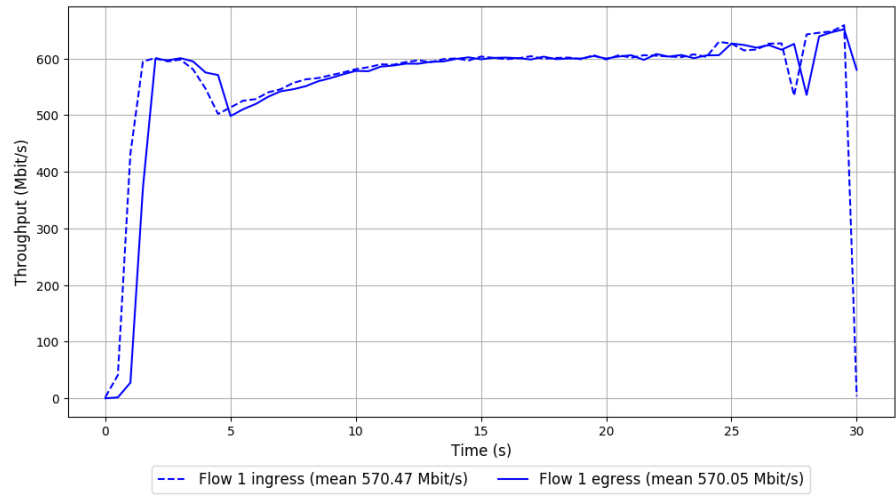
-- Flow 1:

Average throughput: 570.05 Mbit/s

95th percentile per-packet one-way delay: 60.331 ms

Loss rate: 0.45%

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



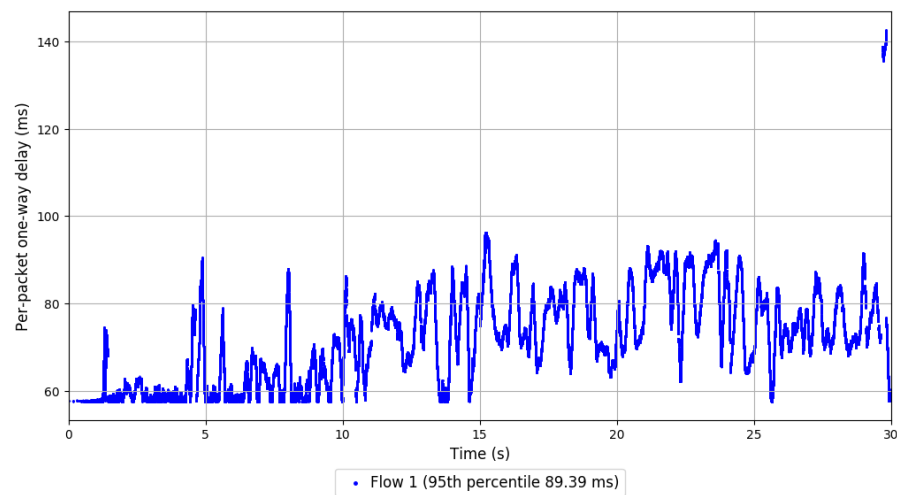
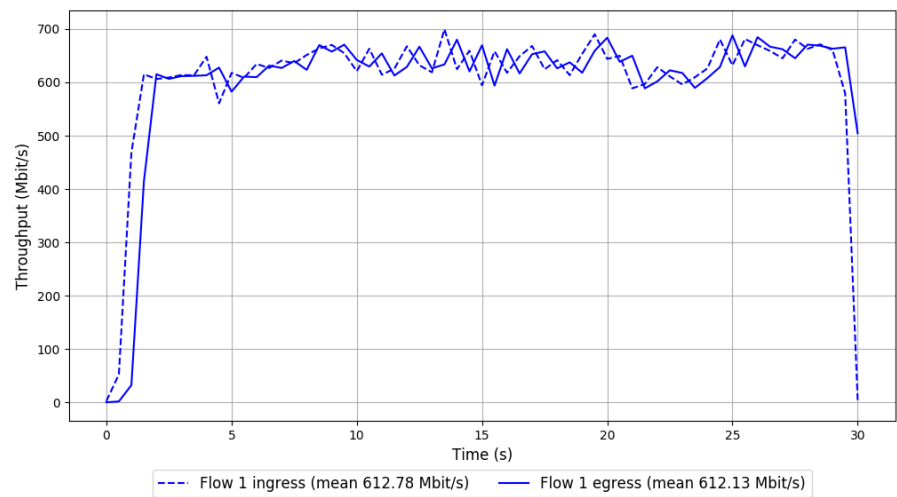


Run 3: Statistics of TCP Cubic

Start at: 2019-01-19 17:19:03  
End at: 2019-01-19 17:19:33  
Local clock offset: -0.439 ms  
Remote clock offset: -0.673 ms

# Below is generated by plot.py at 2019-01-19 19:23:14  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 612.13 Mbit/s  
95th percentile per-packet one-way delay: 89.395 ms  
Loss rate: 0.49%  
-- Flow 1:  
Average throughput: 612.13 Mbit/s  
95th percentile per-packet one-way delay: 89.395 ms  
Loss rate: 0.49%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-01-19 17:53:44

End at: 2019-01-19 17:54:14

Local clock offset: -0.377 ms

Remote clock offset: 0.457 ms

# Below is generated by plot.py at 2019-01-19 19:23:14

# Datalink statistics

-- Total of 1 flow:

Average throughput: 559.43 Mbit/s

95th percentile per-packet one-way delay: 73.601 ms

Loss rate: 0.49%

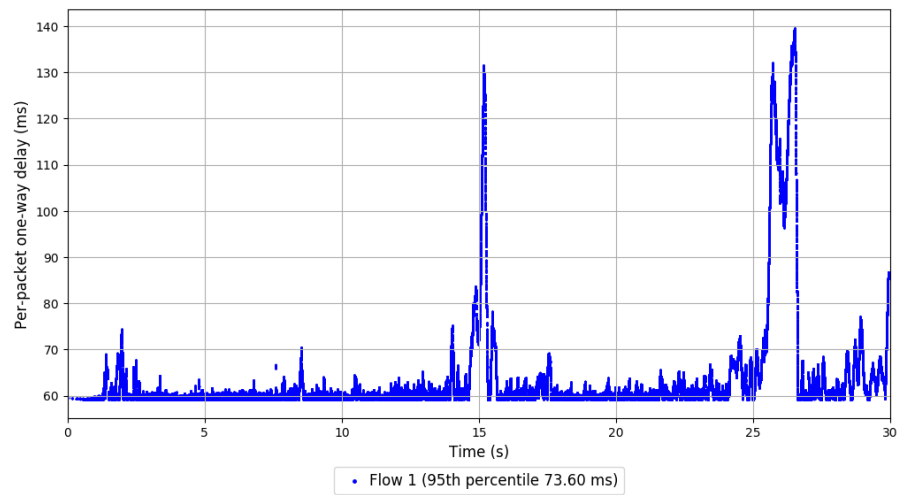
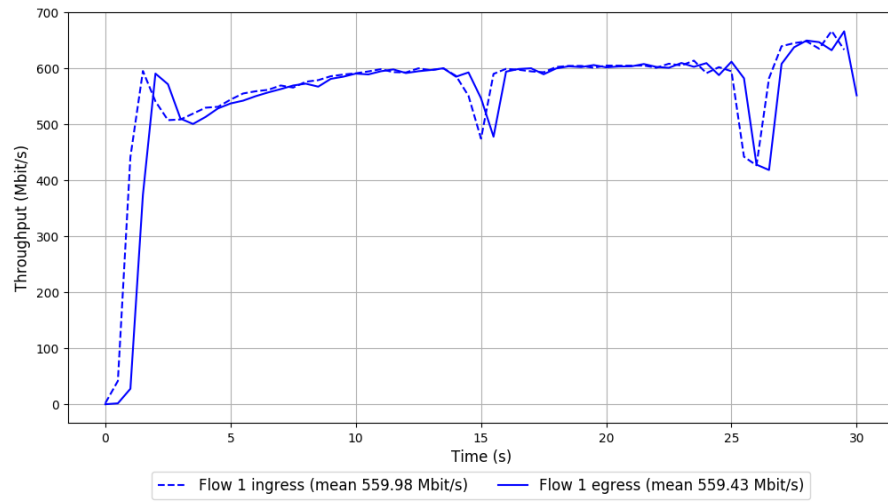
-- Flow 1:

Average throughput: 559.43 Mbit/s

95th percentile per-packet one-way delay: 73.601 ms

Loss rate: 0.49%

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



Run 5: Statistics of TCP Cubic

Start at: 2019-01-19 18:27:52

End at: 2019-01-19 18:28:22

Local clock offset: 0.355 ms

Remote clock offset: 0.582 ms

# Below is generated by plot.py at 2019-01-19 19:23:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 602.96 Mbit/s

95th percentile per-packet one-way delay: 80.274 ms

Loss rate: 0.32%

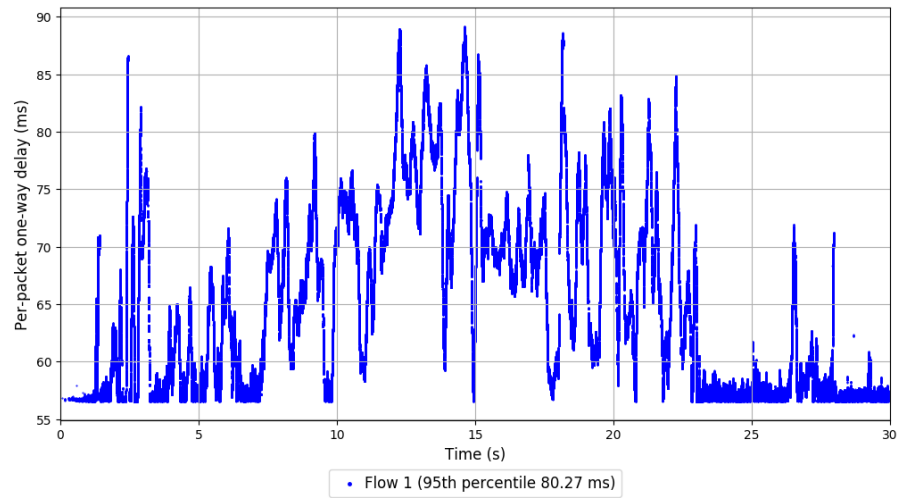
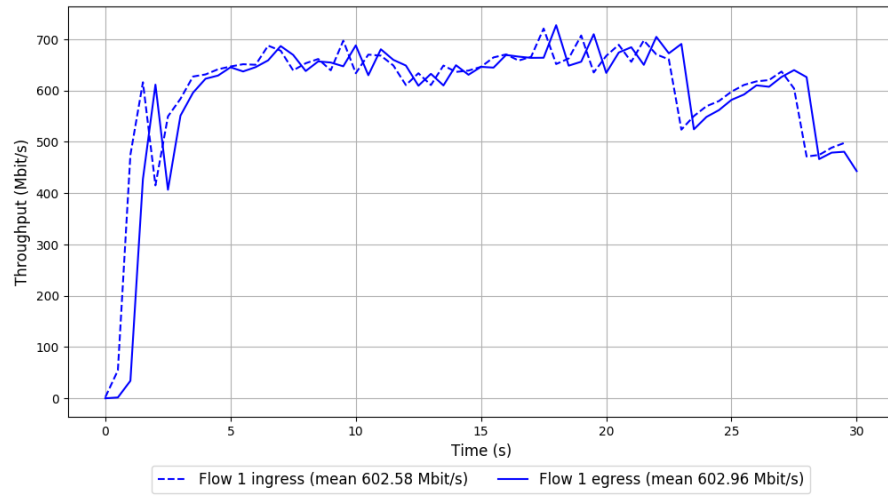
-- Flow 1:

Average throughput: 602.96 Mbit/s

95th percentile per-packet one-way delay: 80.274 ms

Loss rate: 0.32%

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

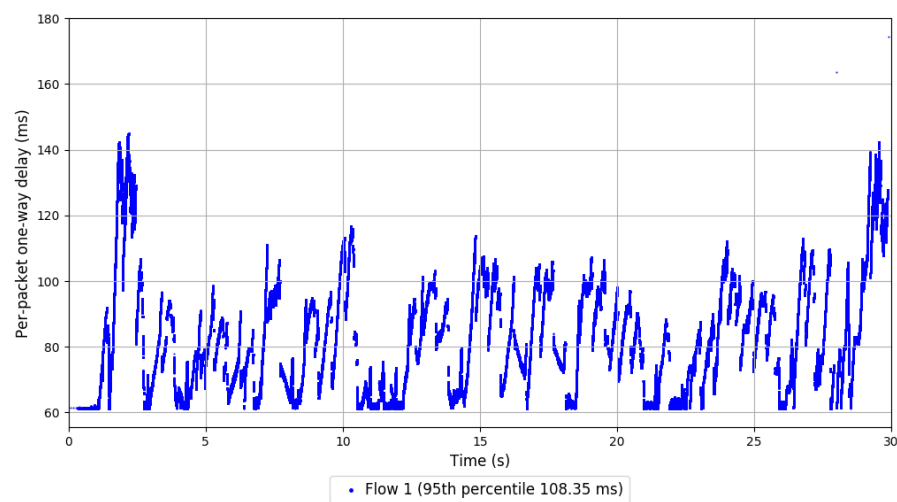
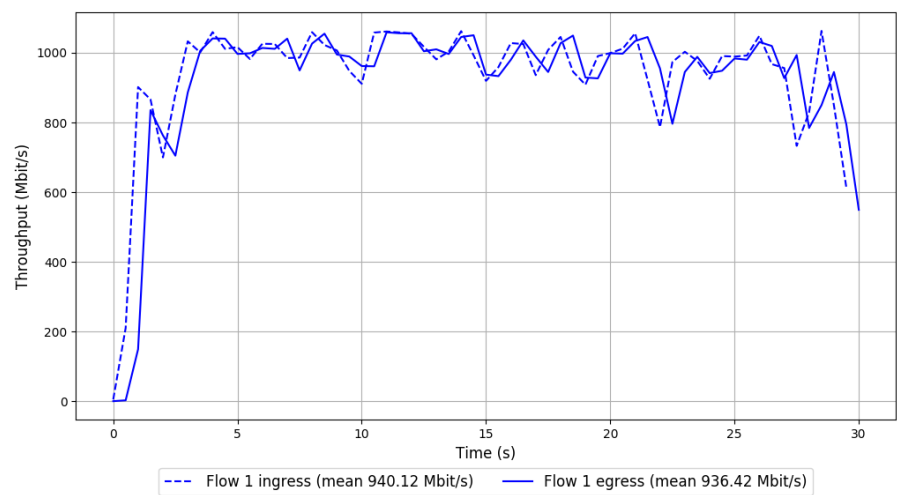


Run 1: Statistics of FillP

Start at: 2019-01-19 16:09:10  
End at: 2019-01-19 16:09:40  
Local clock offset: 0.221 ms  
Remote clock offset: -0.764 ms

# Below is generated by plot.py at 2019-01-19 19:31:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 936.42 Mbit/s  
95th percentile per-packet one-way delay: 108.353 ms  
Loss rate: 0.73%  
-- Flow 1:  
Average throughput: 936.42 Mbit/s  
95th percentile per-packet one-way delay: 108.353 ms  
Loss rate: 0.73%

Run 1: Report of FillP — Data Link





Run 2: Statistics of FillP

Start at: 2019-01-19 16:43:10

End at: 2019-01-19 16:43:40

Local clock offset: -0.136 ms

Remote clock offset: 0.193 ms

# Below is generated by plot.py at 2019-01-19 19:43:22

# Datalink statistics

-- Total of 1 flow:

Average throughput: 949.21 Mbit/s

95th percentile per-packet one-way delay: 89.889 ms

Loss rate: 0.67%

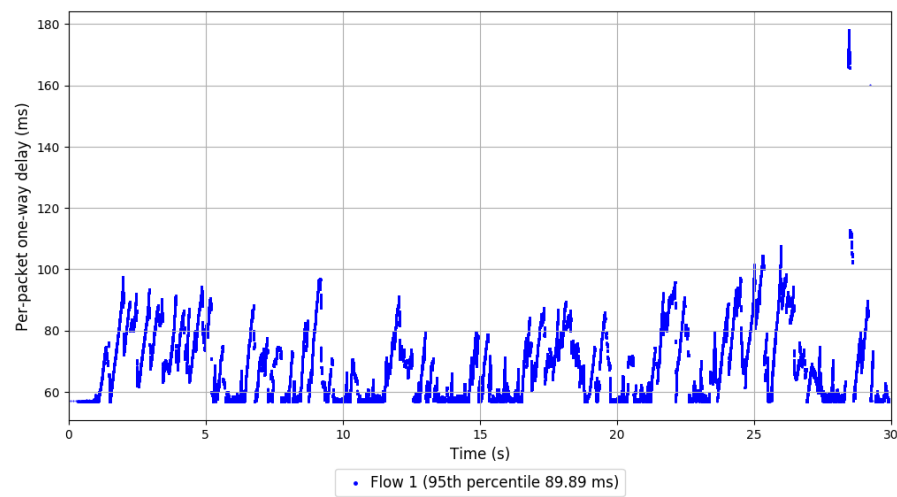
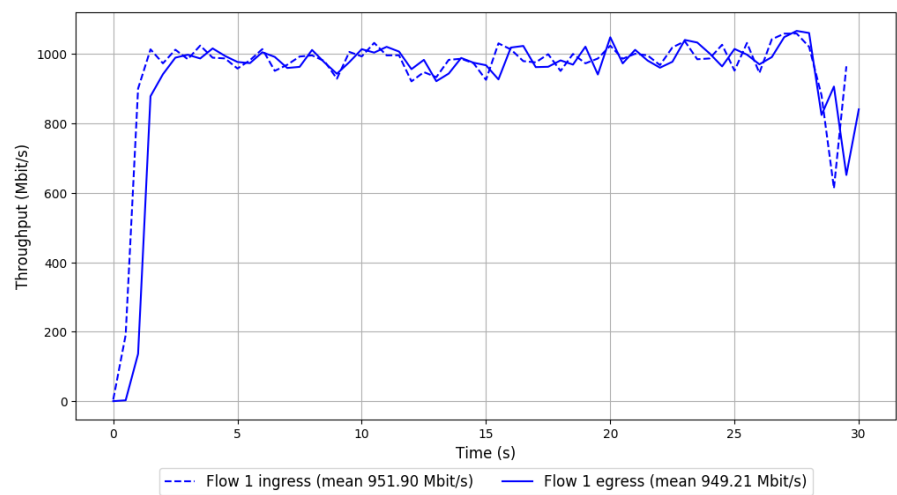
-- Flow 1:

Average throughput: 949.21 Mbit/s

95th percentile per-packet one-way delay: 89.889 ms

Loss rate: 0.67%

Run 2: Report of FillP — Data Link

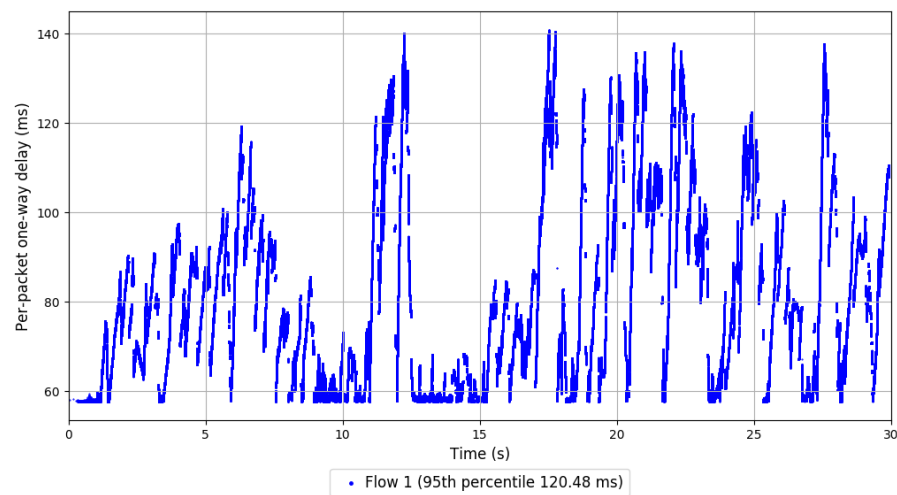
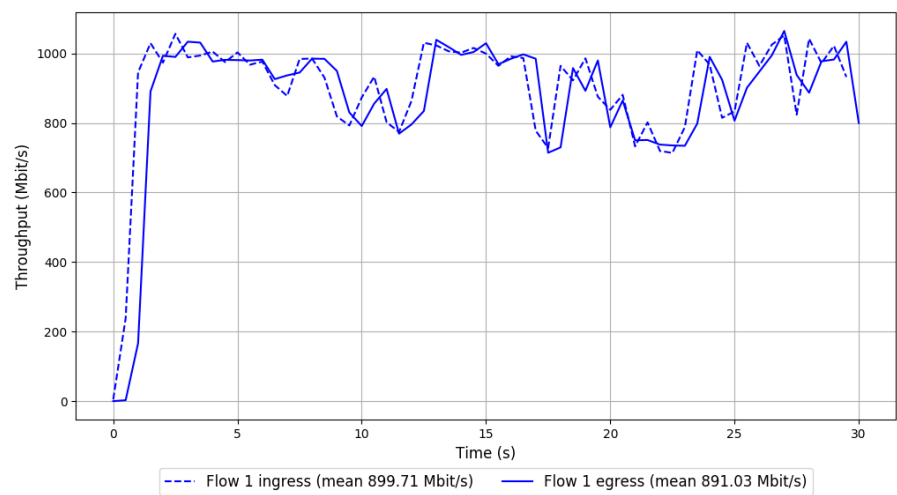


Run 3: Statistics of FillP

Start at: 2019-01-19 17:17:01  
End at: 2019-01-19 17:17:31  
Local clock offset: 0.158 ms  
Remote clock offset: -0.626 ms

# Below is generated by plot.py at 2019-01-19 19:43:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 891.03 Mbit/s  
95th percentile per-packet one-way delay: 120.479 ms  
Loss rate: 1.35%  
-- Flow 1:  
Average throughput: 891.03 Mbit/s  
95th percentile per-packet one-way delay: 120.479 ms  
Loss rate: 1.35%

Run 3: Report of FillP — Data Link

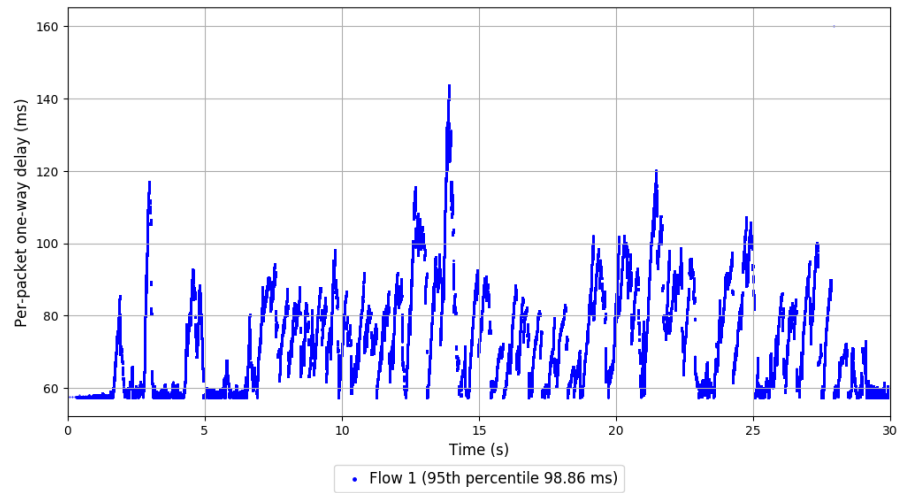
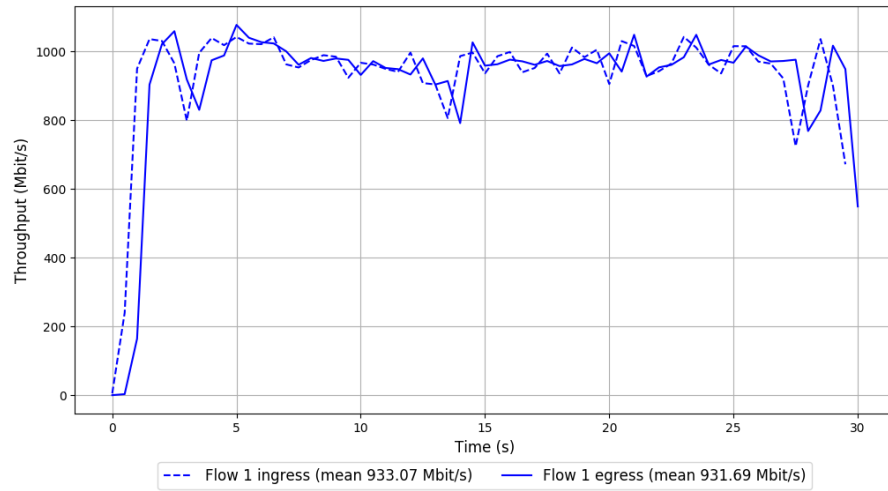


Run 4: Statistics of FillP

Start at: 2019-01-19 17:51:44  
End at: 2019-01-19 17:52:14  
Local clock offset: 0.047 ms  
Remote clock offset: -0.558 ms

# Below is generated by plot.py at 2019-01-19 19:43:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 931.69 Mbit/s  
95th percentile per-packet one-way delay: 98.858 ms  
Loss rate: 0.53%  
-- Flow 1:  
Average throughput: 931.69 Mbit/s  
95th percentile per-packet one-way delay: 98.858 ms  
Loss rate: 0.53%

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

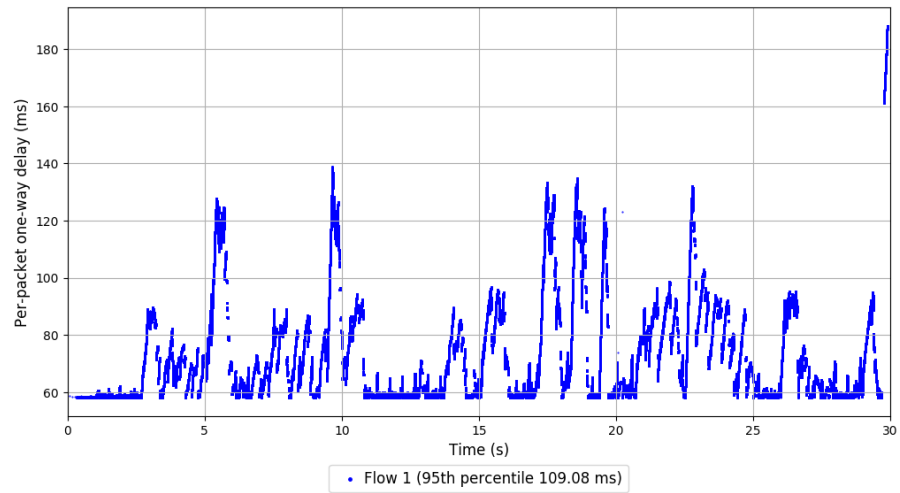
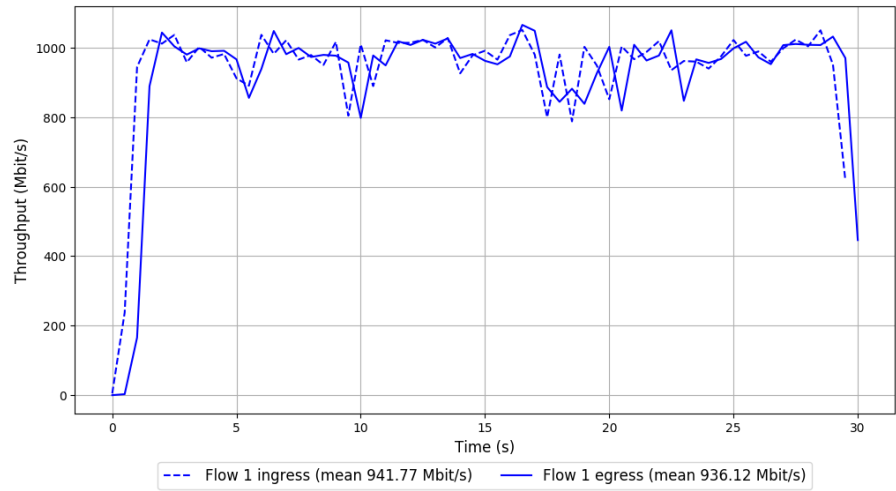


Run 5: Statistics of FillP

Start at: 2019-01-19 18:25:53  
End at: 2019-01-19 18:26:23  
Local clock offset: 0.352 ms  
Remote clock offset: -1.011 ms

# Below is generated by plot.py at 2019-01-19 19:44:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 936.12 Mbit/s  
95th percentile per-packet one-way delay: 109.078 ms  
Loss rate: 0.90%  
-- Flow 1:  
Average throughput: 936.12 Mbit/s  
95th percentile per-packet one-way delay: 109.078 ms  
Loss rate: 0.90%

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





Run 1: Statistics of FillP-Sheep

Start at: 2019-01-19 16:03:51

End at: 2019-01-19 16:04:21

Local clock offset: 0.208 ms

Remote clock offset: -0.99 ms

# Below is generated by plot.py at 2019-01-19 19:44:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 934.69 Mbit/s

95th percentile per-packet one-way delay: 92.231 ms

Loss rate: 0.66%

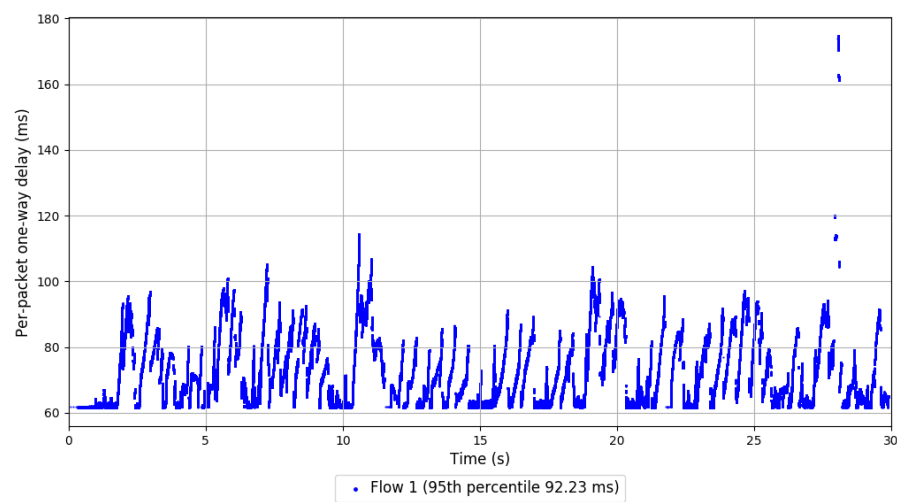
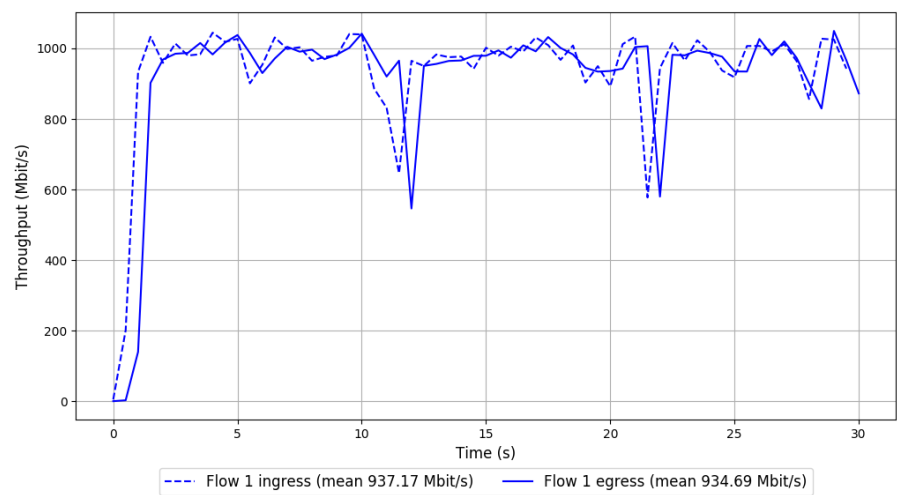
-- Flow 1:

Average throughput: 934.69 Mbit/s

95th percentile per-packet one-way delay: 92.231 ms

Loss rate: 0.66%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-01-19 16:37:45

End at: 2019-01-19 16:38:15

Local clock offset: -0.289 ms

Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2019-01-19 19:44:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 904.42 Mbit/s

95th percentile per-packet one-way delay: 116.099 ms

Loss rate: 1.53%

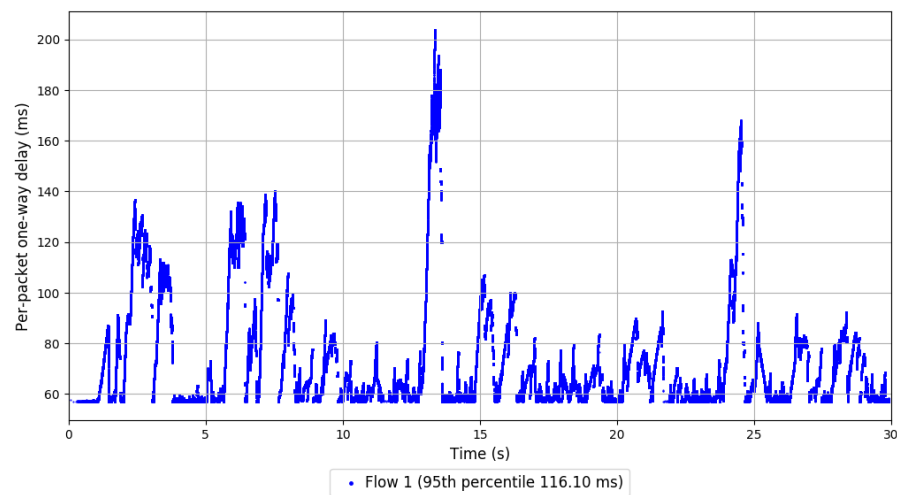
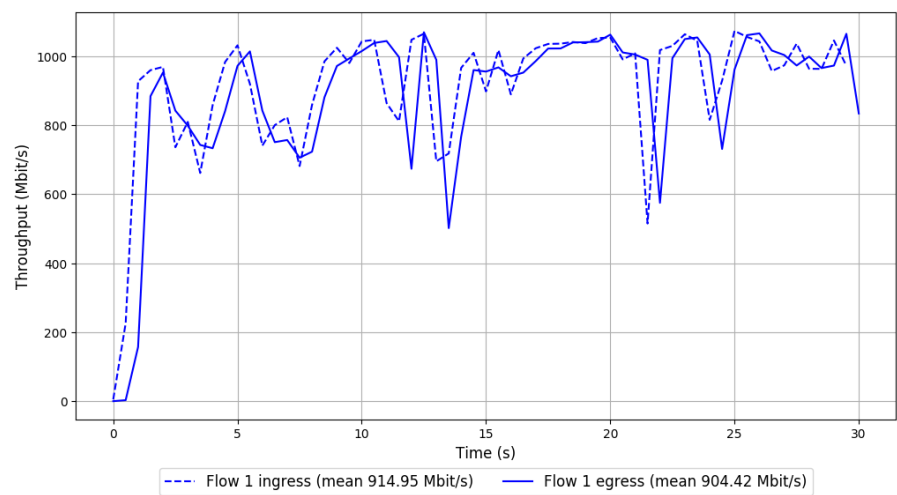
-- Flow 1:

Average throughput: 904.42 Mbit/s

95th percentile per-packet one-way delay: 116.099 ms

Loss rate: 1.53%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-01-19 17:11:37

End at: 2019-01-19 17:12:07

Local clock offset: 0.077 ms

Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2019-01-19 19:45:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 925.03 Mbit/s

95th percentile per-packet one-way delay: 85.179 ms

Loss rate: 0.69%

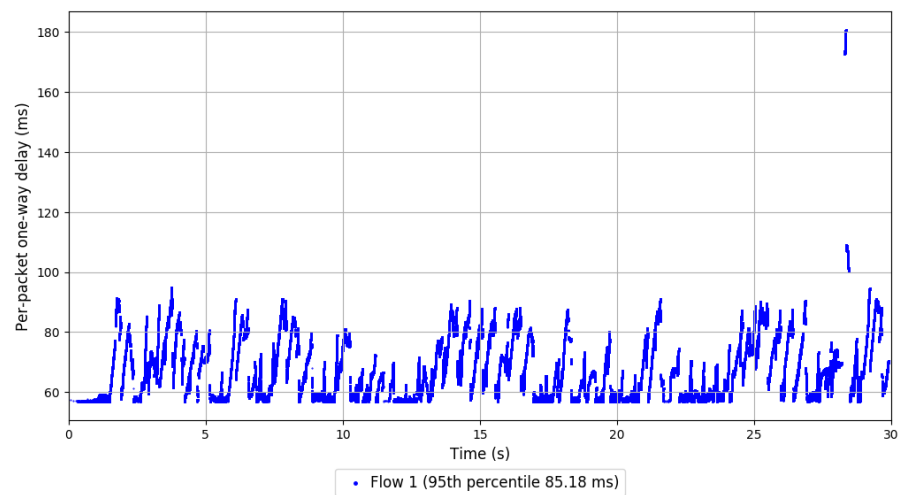
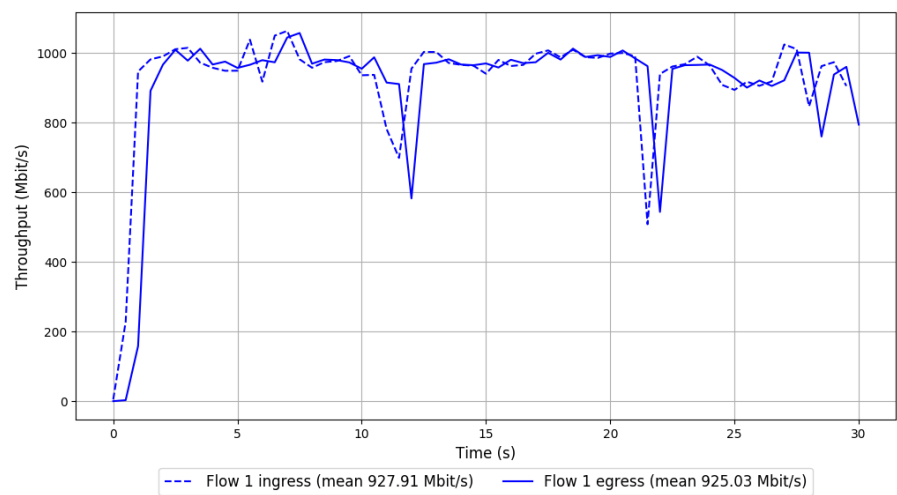
-- Flow 1:

Average throughput: 925.03 Mbit/s

95th percentile per-packet one-way delay: 85.179 ms

Loss rate: 0.69%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-01-19 17:46:20

End at: 2019-01-19 17:46:50

Local clock offset: 0.278 ms

Remote clock offset: 1.285 ms

# Below is generated by plot.py at 2019-01-19 19:56:20

# Datalink statistics

-- Total of 1 flow:

Average throughput: 941.49 Mbit/s

95th percentile per-packet one-way delay: 108.227 ms

Loss rate: 0.80%

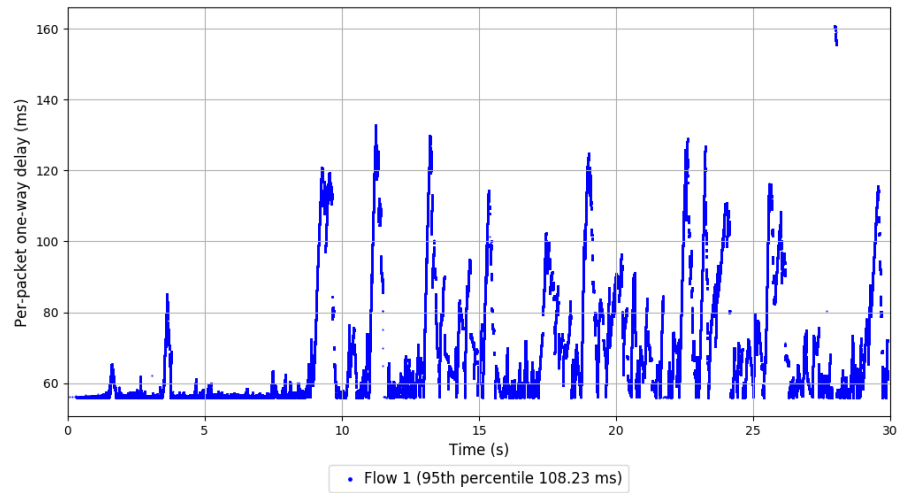
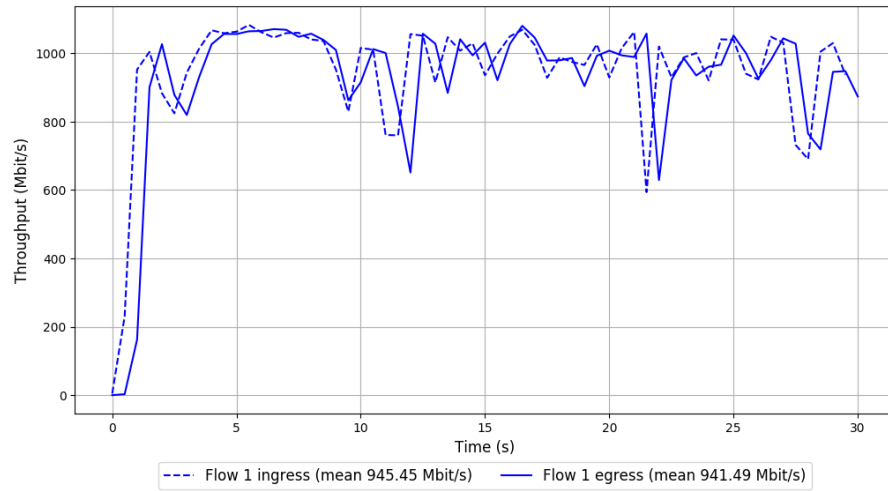
-- Flow 1:

Average throughput: 941.49 Mbit/s

95th percentile per-packet one-way delay: 108.227 ms

Loss rate: 0.80%

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



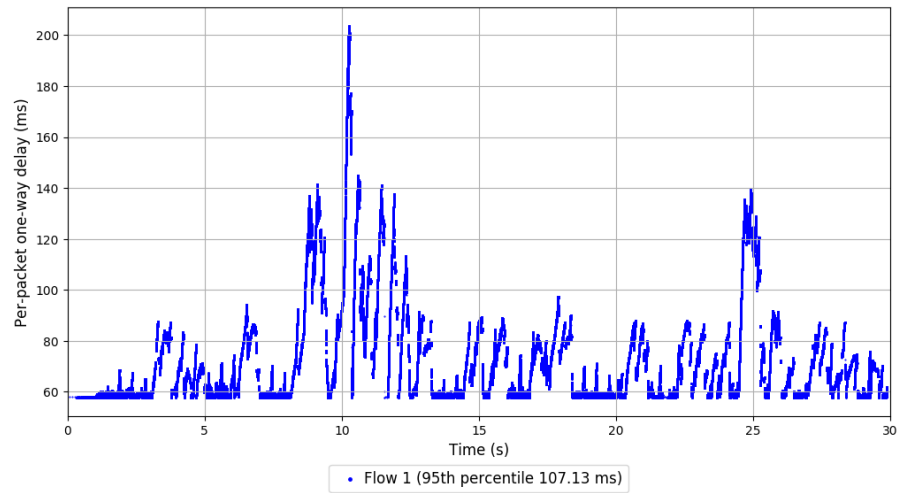
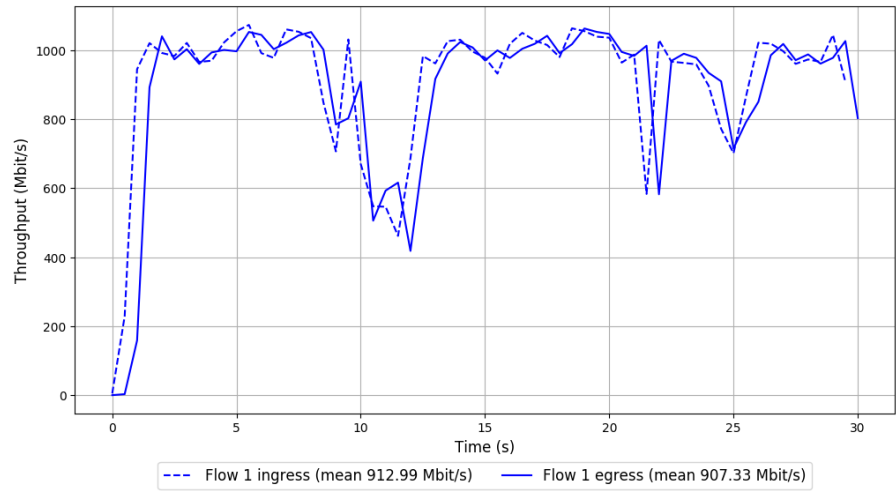


Run 5: Statistics of FillP-Sheep

Start at: 2019-01-19 18:20:46  
End at: 2019-01-19 18:21:16  
Local clock offset: -0.335 ms  
Remote clock offset: -1.397 ms

# Below is generated by plot.py at 2019-01-19 20:04:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 907.33 Mbit/s  
95th percentile per-packet one-way delay: 107.133 ms  
Loss rate: 1.00%  
-- Flow 1:  
Average throughput: 907.33 Mbit/s  
95th percentile per-packet one-way delay: 107.133 ms  
Loss rate: 1.00%

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

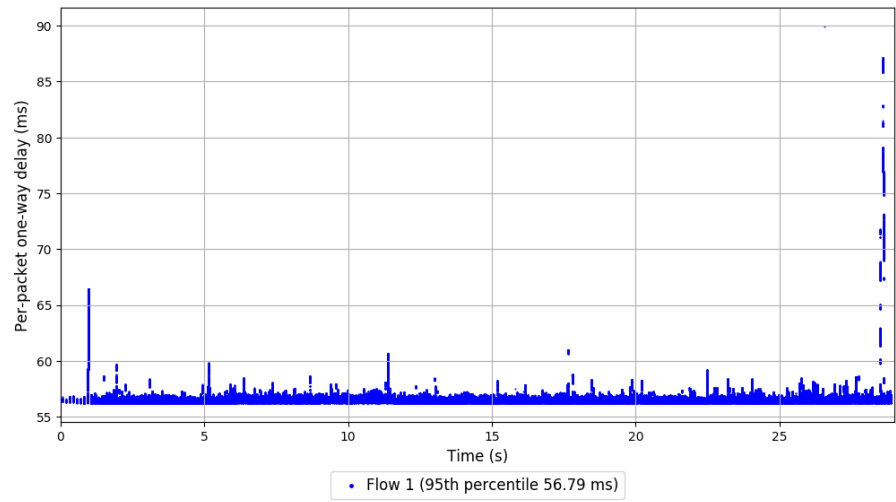
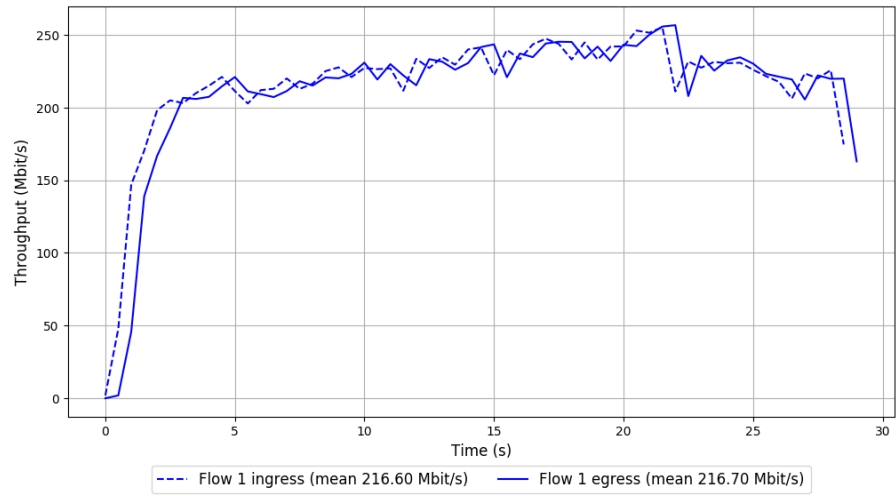


```
Run 1: Statistics of Indigo

Start at: 2019-01-19 16:00:42
End at: 2019-01-19 16:01:12
Local clock offset: -0.013 ms
Remote clock offset: 0.664 ms

# Below is generated by plot.py at 2019-01-19 20:04:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.70 Mbit/s
95th percentile per-packet one-way delay: 56.794 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 216.70 Mbit/s
95th percentile per-packet one-way delay: 56.794 ms
Loss rate: 0.36%
```

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

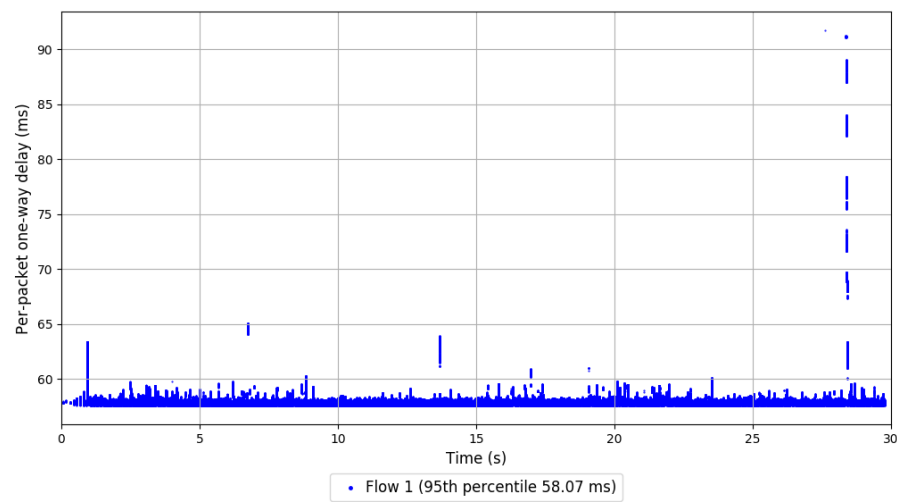
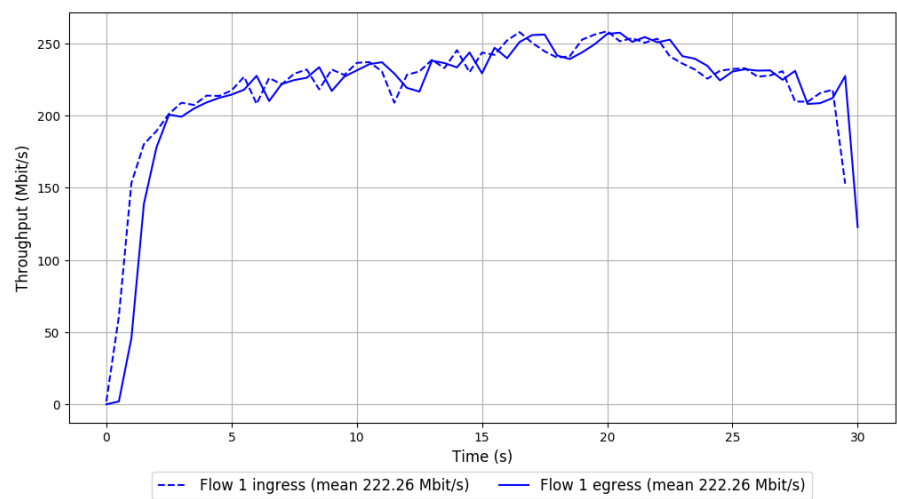


Run 2: Statistics of Indigo

Start at: 2019-01-19 16:34:15  
End at: 2019-01-19 16:34:45  
Local clock offset: 0.259 ms  
Remote clock offset: -0.355 ms

# Below is generated by plot.py at 2019-01-19 20:04:30  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 222.26 Mbit/s  
95th percentile per-packet one-way delay: 58.066 ms  
Loss rate: 0.40%  
-- Flow 1:  
Average throughput: 222.26 Mbit/s  
95th percentile per-packet one-way delay: 58.066 ms  
Loss rate: 0.40%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-01-19 17:08:16

End at: 2019-01-19 17:08:46

Local clock offset: 0.349 ms

Remote clock offset: 1.323 ms

# Below is generated by plot.py at 2019-01-19 20:04:30

# Datalink statistics

-- Total of 1 flow:

Average throughput: 214.24 Mbit/s

95th percentile per-packet one-way delay: 60.945 ms

Loss rate: 0.41%

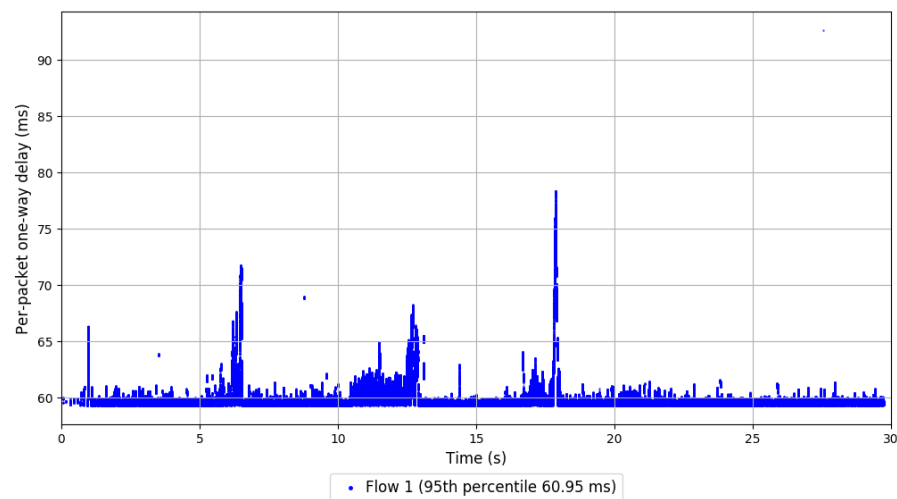
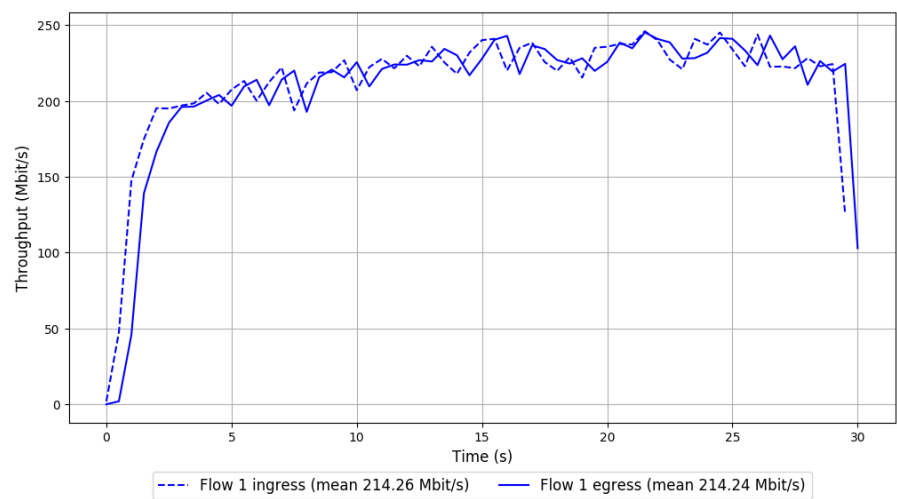
-- Flow 1:

Average throughput: 214.24 Mbit/s

95th percentile per-packet one-way delay: 60.945 ms

Loss rate: 0.41%

Run 3: Report of Indigo — Data Link



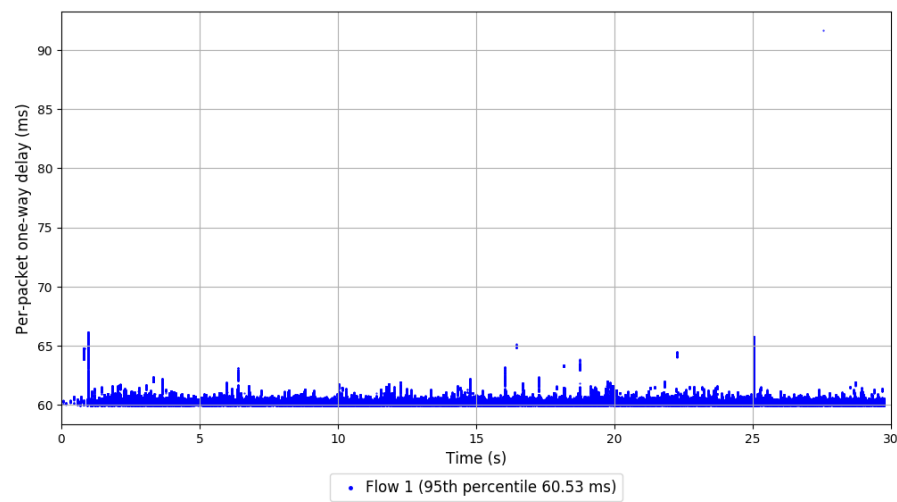
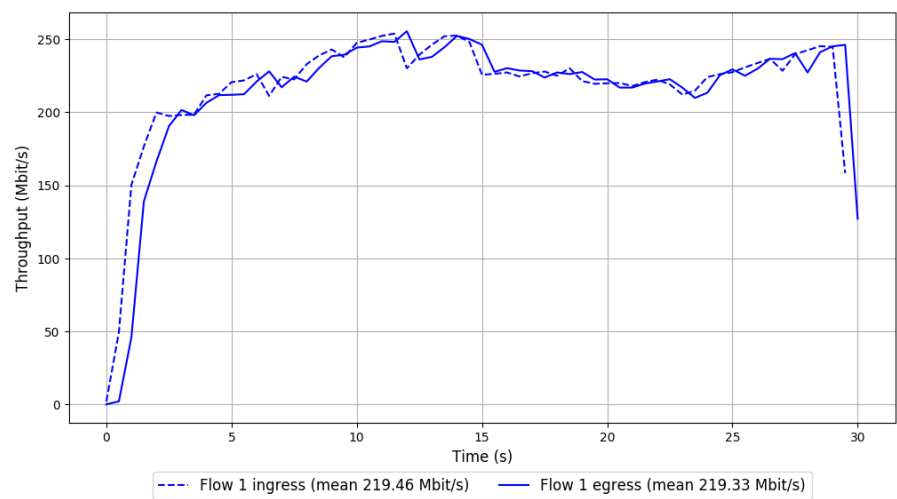


Run 4: Statistics of Indigo

Start at: 2019-01-19 17:42:59  
End at: 2019-01-19 17:43:29  
Local clock offset: -0.384 ms  
Remote clock offset: -0.285 ms

# Below is generated by plot.py at 2019-01-19 20:04:31  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 219.33 Mbit/s  
95th percentile per-packet one-way delay: 60.531 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 219.33 Mbit/s  
95th percentile per-packet one-way delay: 60.531 ms  
Loss rate: 0.46%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2019-01-19 18:17:05

End at: 2019-01-19 18:17:35

Local clock offset: 0.056 ms

Remote clock offset: 0.441 ms

# Below is generated by plot.py at 2019-01-19 20:04:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 215.37 Mbit/s

95th percentile per-packet one-way delay: 57.969 ms

Loss rate: 0.36%

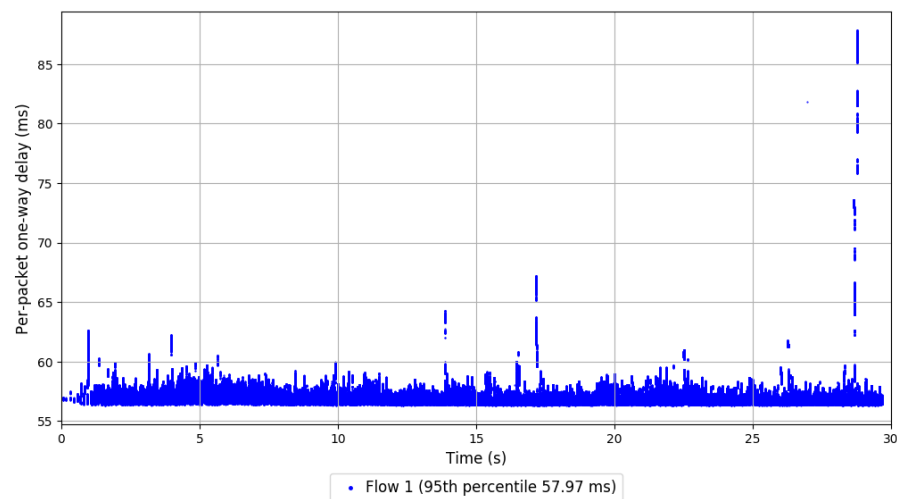
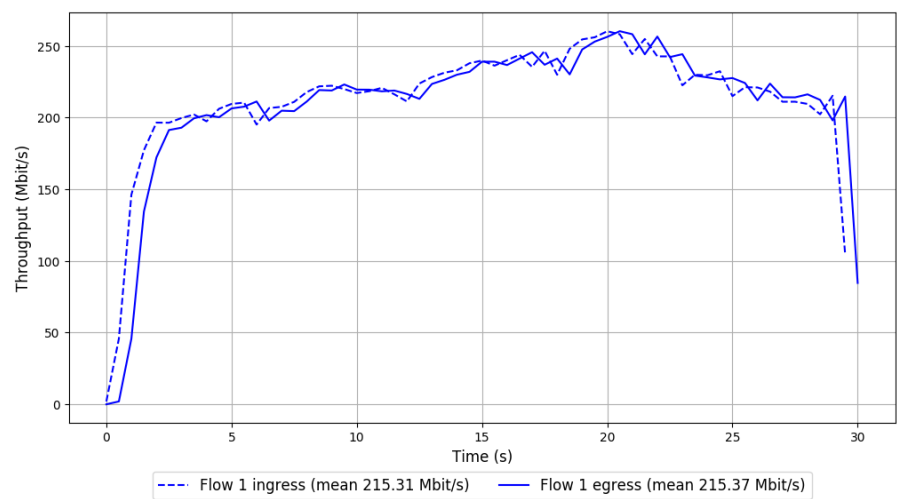
-- Flow 1:

Average throughput: 215.37 Mbit/s

95th percentile per-packet one-way delay: 57.969 ms

Loss rate: 0.36%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-19 16:20:54

End at: 2019-01-19 16:21:24

Local clock offset: -0.02 ms

Remote clock offset: -0.55 ms

# Below is generated by plot.py at 2019-01-19 20:04:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 579.52 Mbit/s

95th percentile per-packet one-way delay: 128.045 ms

Loss rate: 0.53%

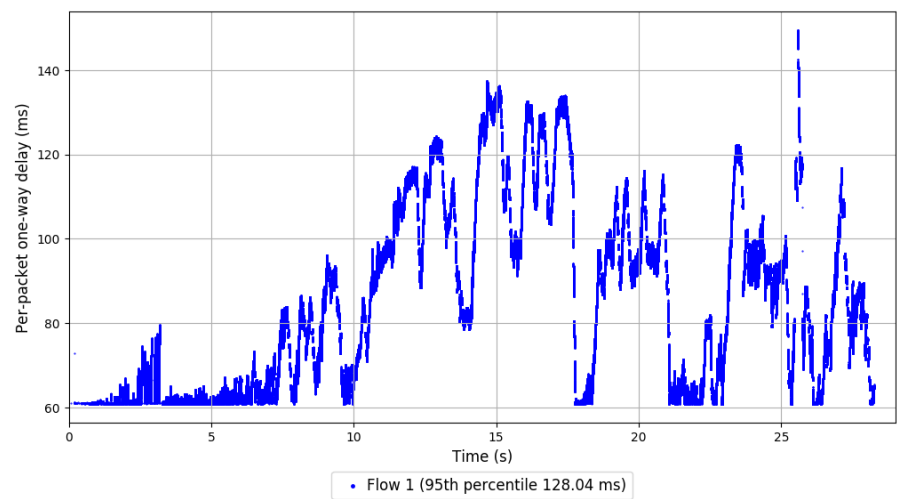
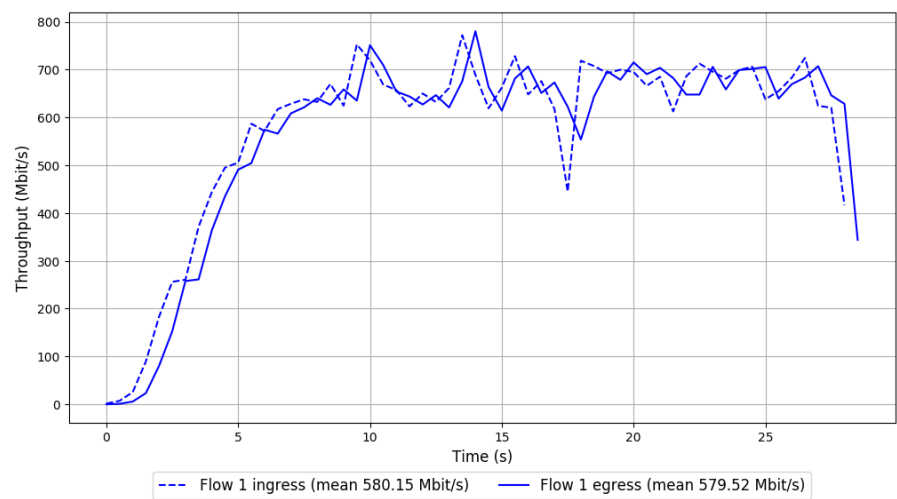
-- Flow 1:

Average throughput: 579.52 Mbit/s

95th percentile per-packet one-way delay: 128.045 ms

Loss rate: 0.53%

Run 1: Report of Indigo-MusesC3 — Data Link

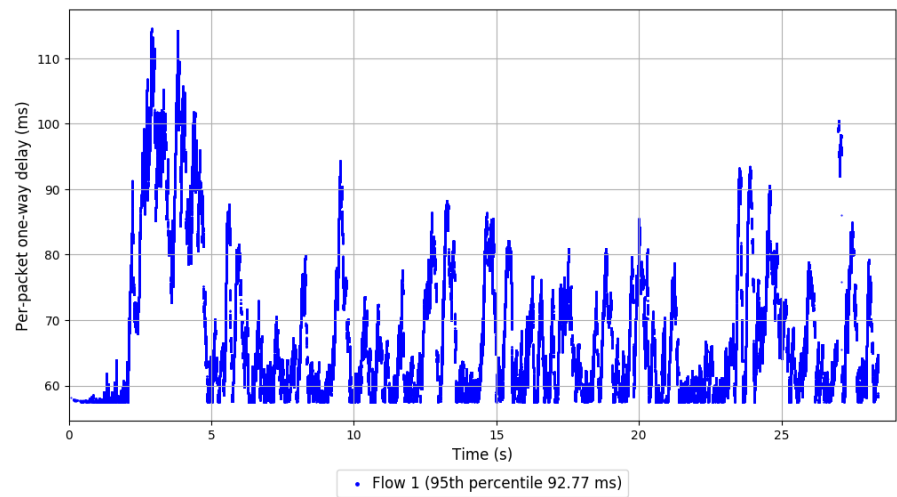
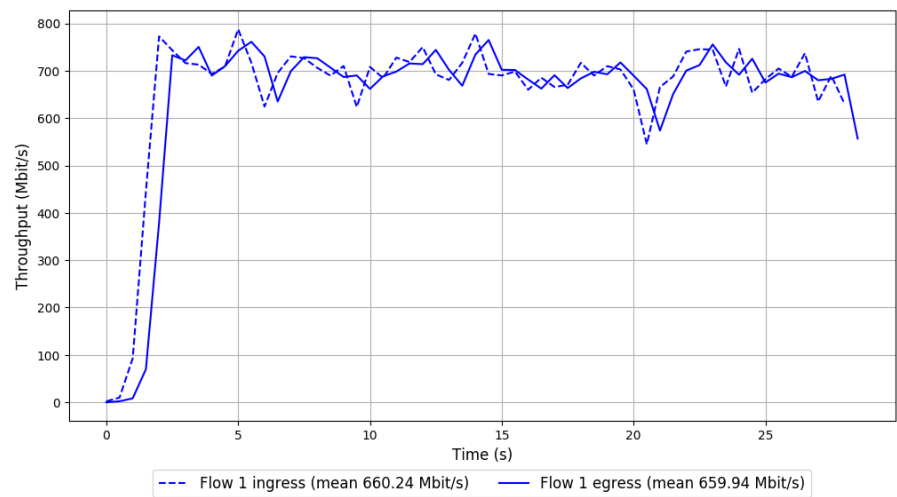


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-19 16:54:51  
End at: 2019-01-19 16:55:21  
Local clock offset: -0.136 ms  
Remote clock offset: -0.624 ms

# Below is generated by plot.py at 2019-01-19 20:04:31  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 659.94 Mbit/s  
95th percentile per-packet one-way delay: 92.767 ms  
Loss rate: 0.45%  
-- Flow 1:  
Average throughput: 659.94 Mbit/s  
95th percentile per-packet one-way delay: 92.767 ms  
Loss rate: 0.45%

Run 2: Report of Indigo-MusesC3 — Data Link





Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-19 17:29:03

End at: 2019-01-19 17:29:33

Local clock offset: 0.406 ms

Remote clock offset: 0.991 ms

# Below is generated by plot.py at 2019-01-19 20:04:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 629.01 Mbit/s

95th percentile per-packet one-way delay: 86.399 ms

Loss rate: 0.48%

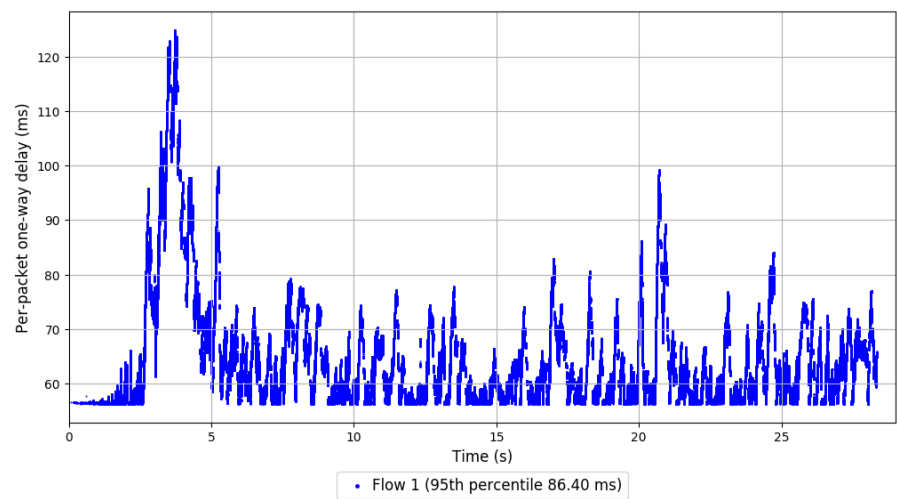
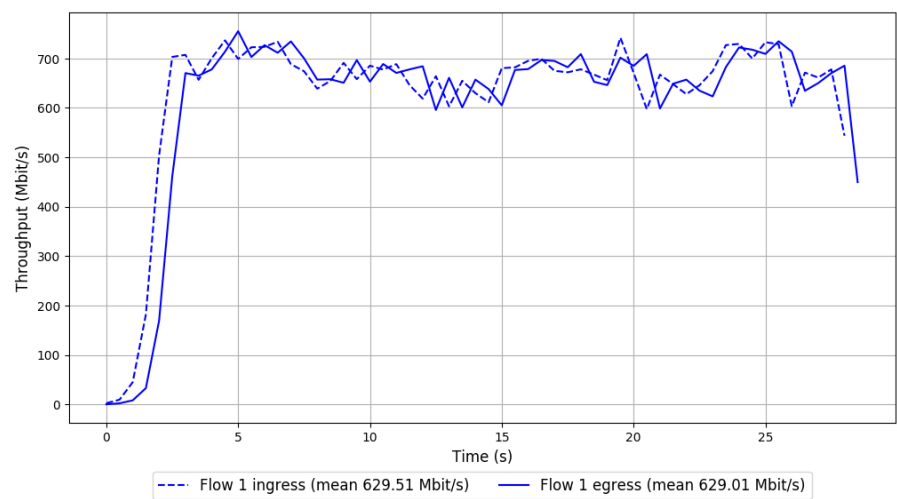
-- Flow 1:

Average throughput: 629.01 Mbit/s

95th percentile per-packet one-way delay: 86.399 ms

Loss rate: 0.48%

Run 3: Report of Indigo-MusesC3 — Data Link

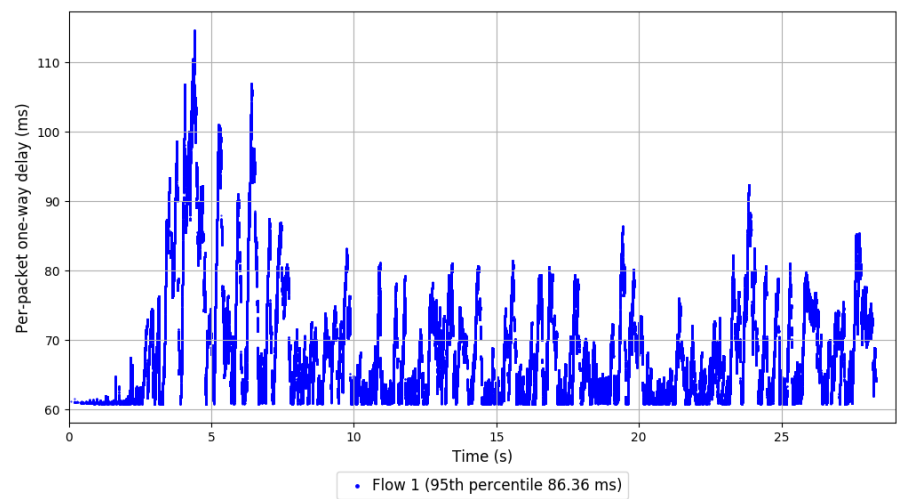
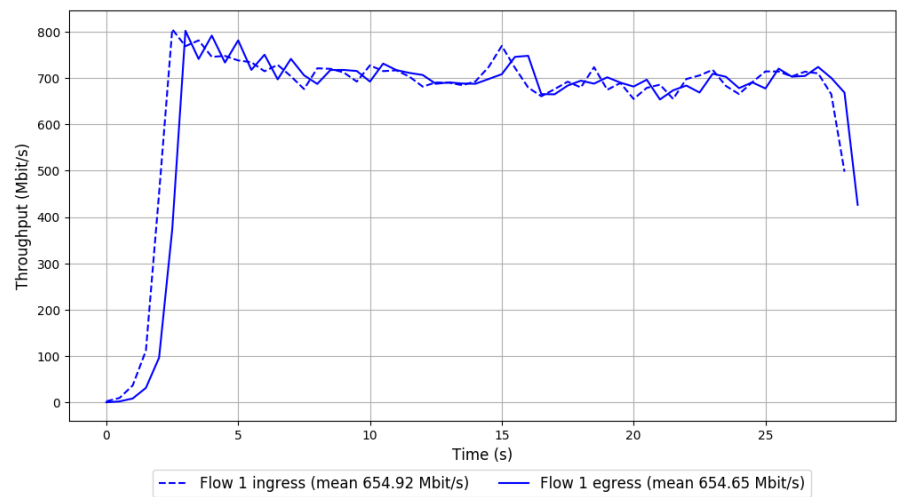


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-19 18:03:24  
End at: 2019-01-19 18:03:54  
Local clock offset: -0.207 ms  
Remote clock offset: -0.674 ms

# Below is generated by plot.py at 2019-01-19 20:04:50  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 654.65 Mbit/s  
95th percentile per-packet one-way delay: 86.359 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 654.65 Mbit/s  
95th percentile per-packet one-way delay: 86.359 ms  
Loss rate: 0.46%

Run 4: Report of Indigo-MusesC3 — Data Link

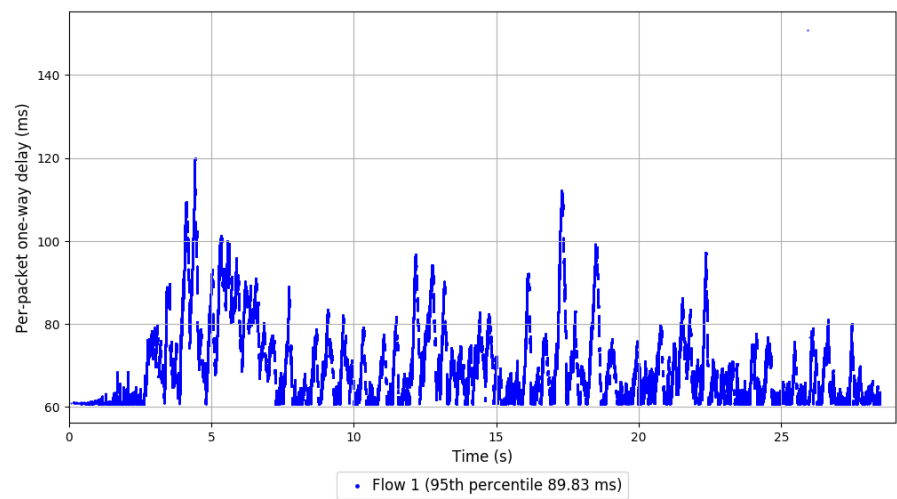
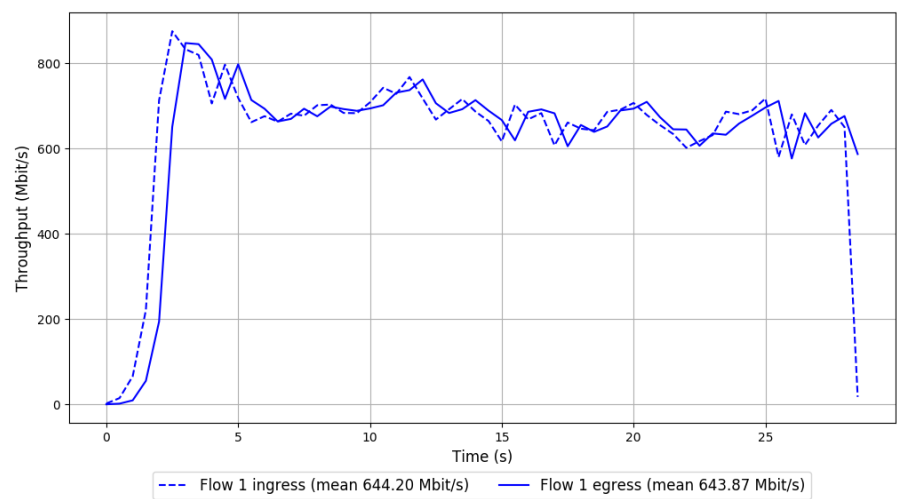


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-19 18:37:33  
End at: 2019-01-19 18:38:03  
Local clock offset: -0.172 ms  
Remote clock offset: -1.057 ms

# Below is generated by plot.py at 2019-01-19 20:05:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 643.87 Mbit/s  
95th percentile per-packet one-way delay: 89.834 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 643.87 Mbit/s  
95th percentile per-packet one-way delay: 89.834 ms  
Loss rate: 0.47%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-19 16:25:34

End at: 2019-01-19 16:26:04

Local clock offset: -0.242 ms

Remote clock offset: 0.112 ms

# Below is generated by plot.py at 2019-01-19 20:05:49

# Datalink statistics

-- Total of 1 flow:

Average throughput: 623.45 Mbit/s

95th percentile per-packet one-way delay: 118.910 ms

Loss rate: 0.64%

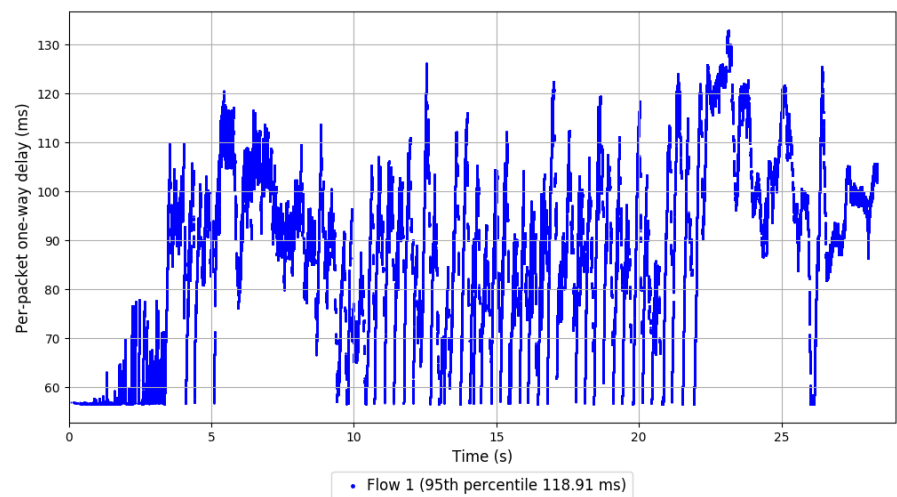
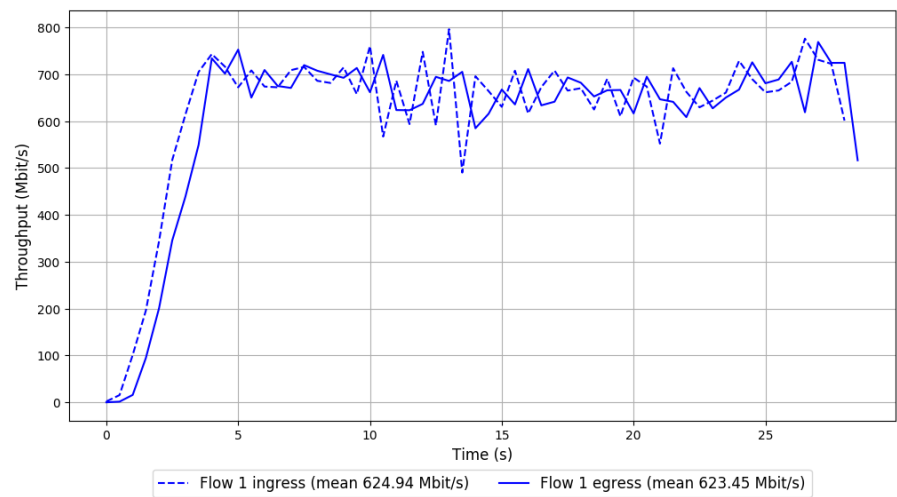
-- Flow 1:

Average throughput: 623.45 Mbit/s

95th percentile per-packet one-way delay: 118.910 ms

Loss rate: 0.64%

Run 1: Report of Indigo-MusesC5 — Data Link



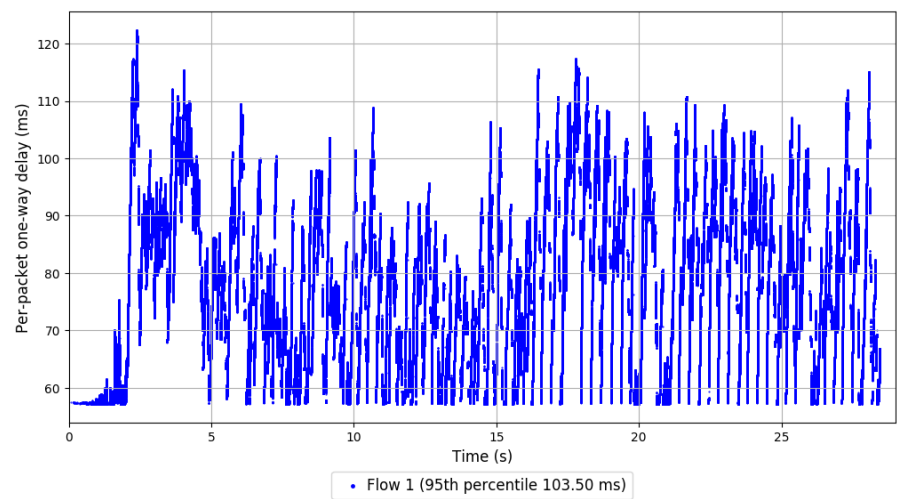
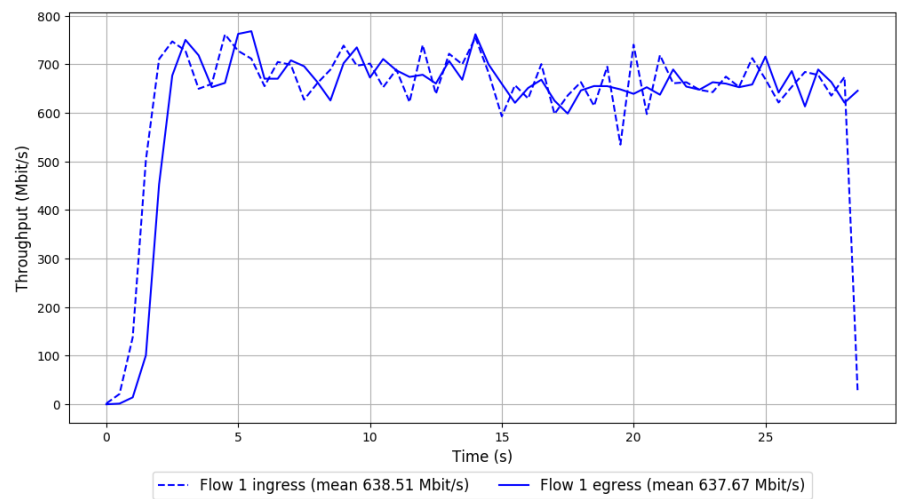


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-19 16:59:37  
End at: 2019-01-19 17:00:07  
Local clock offset: 0.105 ms  
Remote clock offset: -0.207 ms

# Below is generated by plot.py at 2019-01-19 20:08:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 637.67 Mbit/s  
95th percentile per-packet one-way delay: 103.501 ms  
Loss rate: 0.53%  
-- Flow 1:  
Average throughput: 637.67 Mbit/s  
95th percentile per-packet one-way delay: 103.501 ms  
Loss rate: 0.53%

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-19 17:33:59

End at: 2019-01-19 17:34:29

Local clock offset: 0.402 ms

Remote clock offset: 0.517 ms

# Below is generated by plot.py at 2019-01-19 20:08:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 626.79 Mbit/s

95th percentile per-packet one-way delay: 103.296 ms

Loss rate: 0.55%

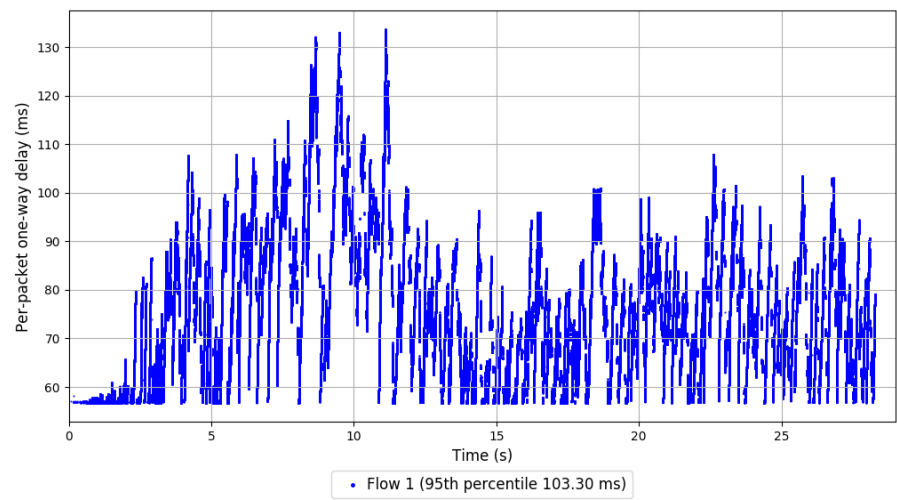
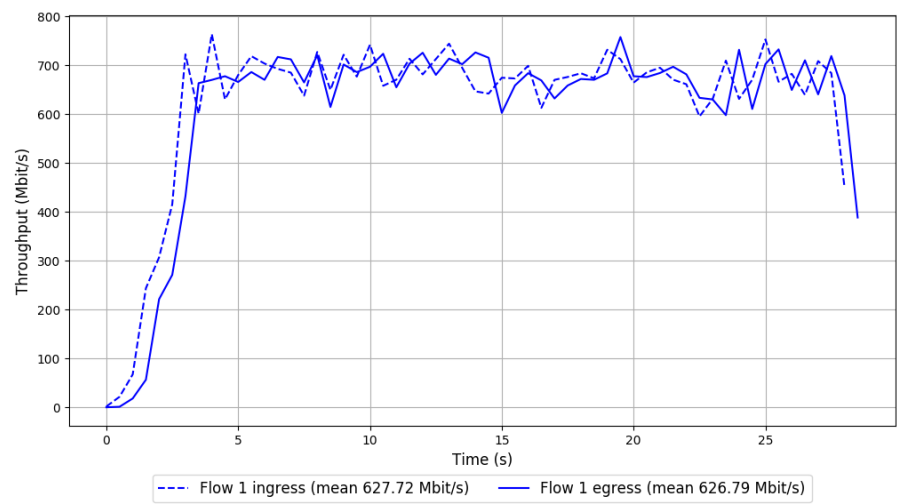
-- Flow 1:

Average throughput: 626.79 Mbit/s

95th percentile per-packet one-way delay: 103.296 ms

Loss rate: 0.55%

Run 3: Report of Indigo-MusesC5 — Data Link

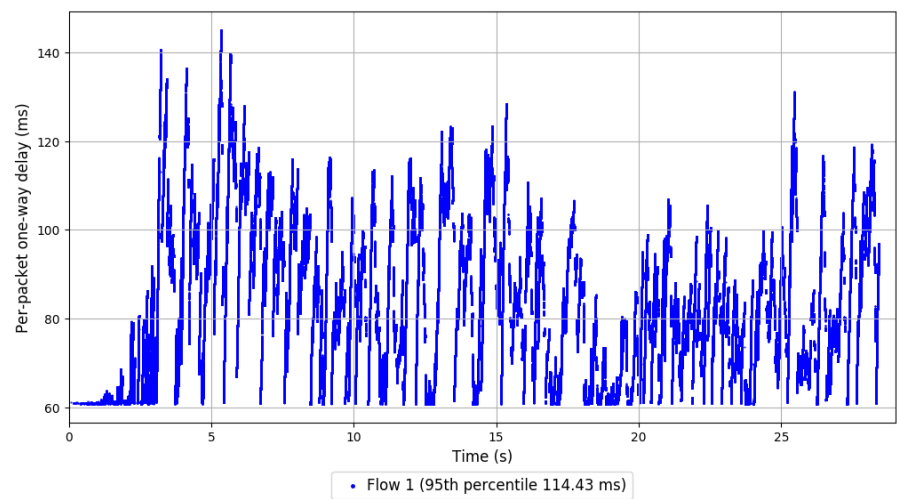
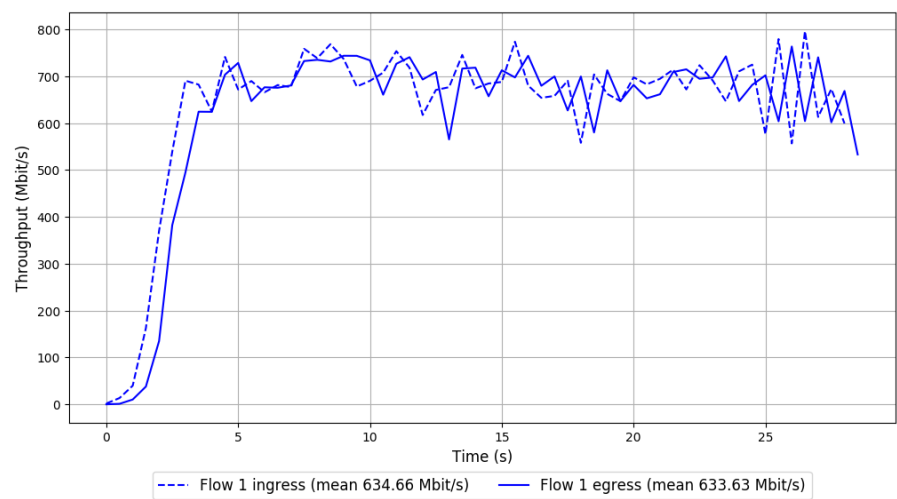


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-19 18:08:04  
End at: 2019-01-19 18:08:34  
Local clock offset: -0.164 ms  
Remote clock offset: -0.857 ms

# Below is generated by plot.py at 2019-01-19 20:16:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 633.63 Mbit/s  
95th percentile per-packet one-way delay: 114.427 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 633.63 Mbit/s  
95th percentile per-packet one-way delay: 114.427 ms  
Loss rate: 0.58%

Run 4: Report of Indigo-MusesC5 — Data Link

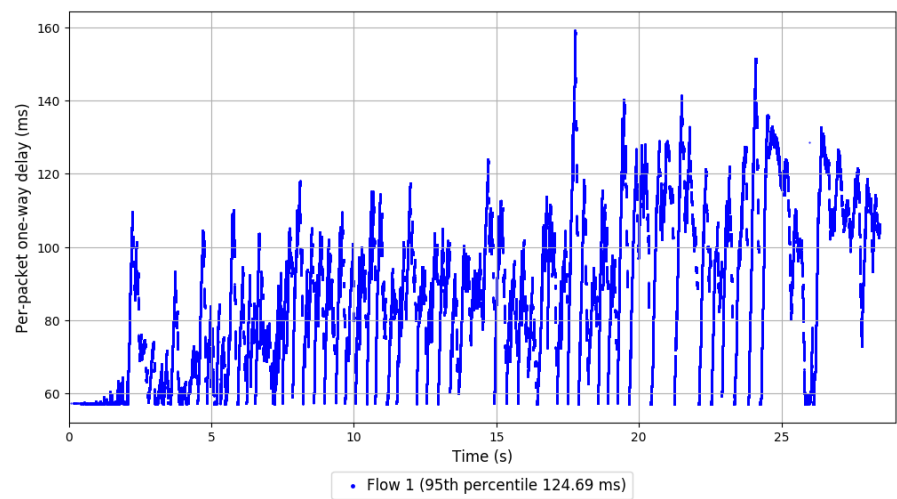
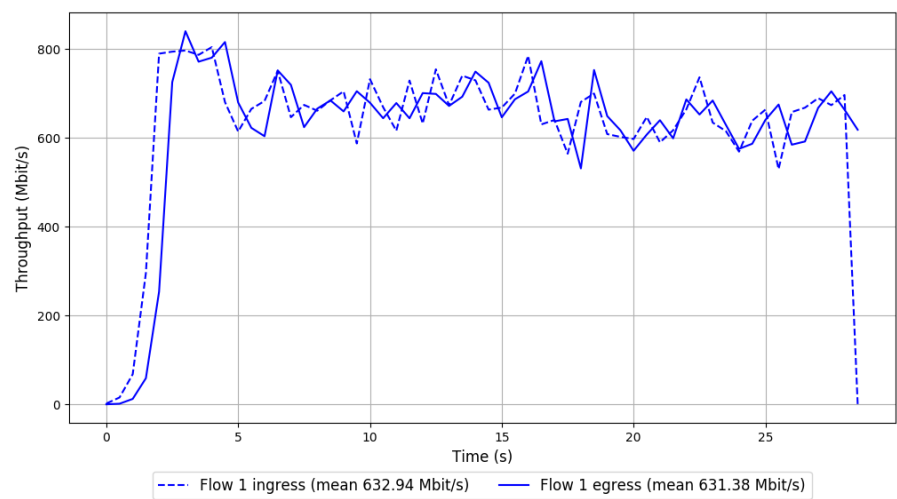


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-19 18:42:15  
End at: 2019-01-19 18:42:45  
Local clock offset: 0.418 ms  
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2019-01-19 20:16:31  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 631.38 Mbit/s  
95th percentile per-packet one-way delay: 124.687 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 631.38 Mbit/s  
95th percentile per-packet one-way delay: 124.687 ms  
Loss rate: 0.65%

Run 5: Report of Indigo-MusesC5 — Data Link



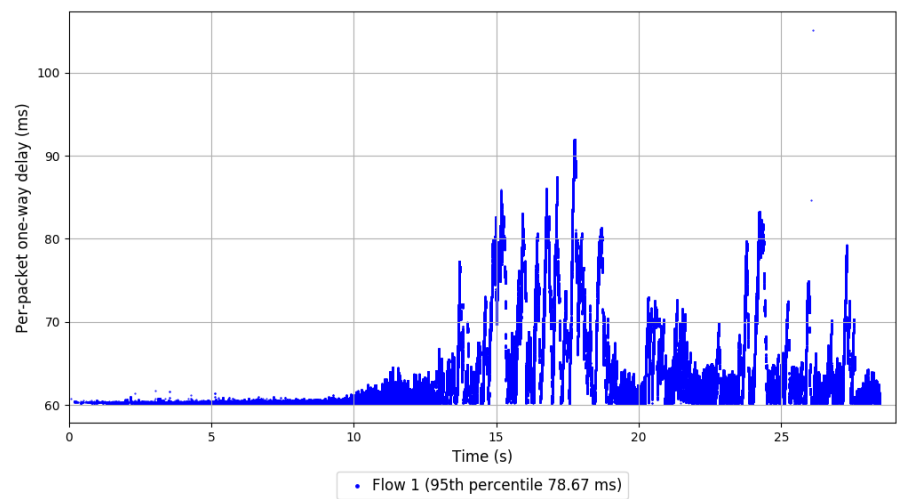
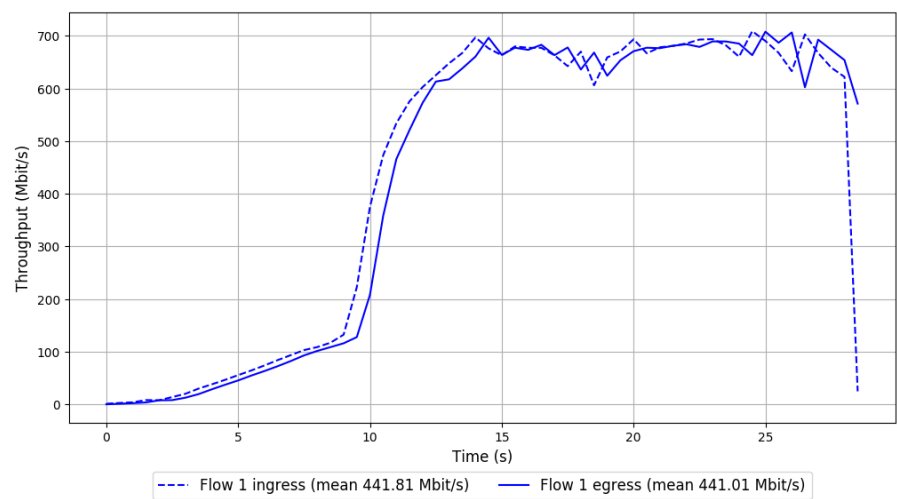


```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-19 16:30:57
End at: 2019-01-19 16:31:27
Local clock offset: -0.449 ms
Remote clock offset: -0.136 ms

# Below is generated by plot.py at 2019-01-19 20:16:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 441.01 Mbit/s
95th percentile per-packet one-way delay: 78.670 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 441.01 Mbit/s
95th percentile per-packet one-way delay: 78.670 ms
Loss rate: 0.60%
```

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-01-19 17:04:47

End at: 2019-01-19 17:05:17

Local clock offset: 0.104 ms

Remote clock offset: -0.78 ms

# Below is generated by plot.py at 2019-01-19 20:16:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 486.66 Mbit/s

95th percentile per-packet one-way delay: 87.518 ms

Loss rate: 0.39%

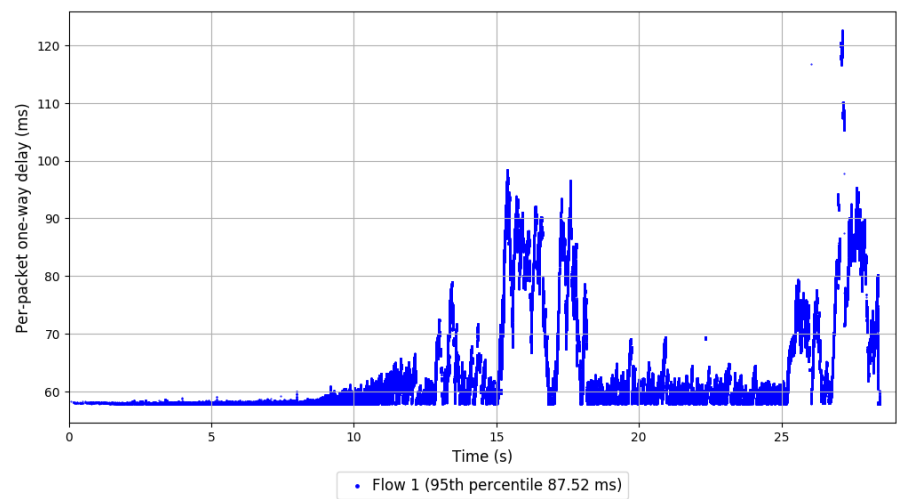
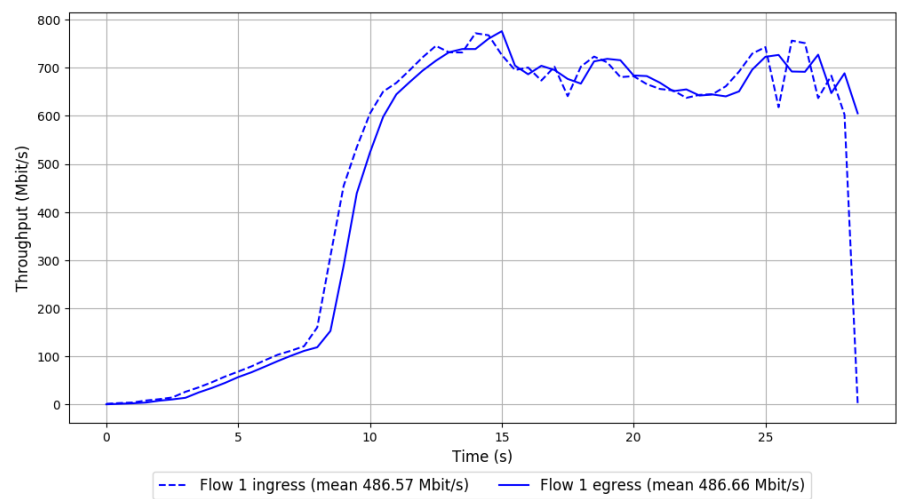
-- Flow 1:

Average throughput: 486.66 Mbit/s

95th percentile per-packet one-way delay: 87.518 ms

Loss rate: 0.39%

Run 2: Report of Indigo-MusesD — Data Link

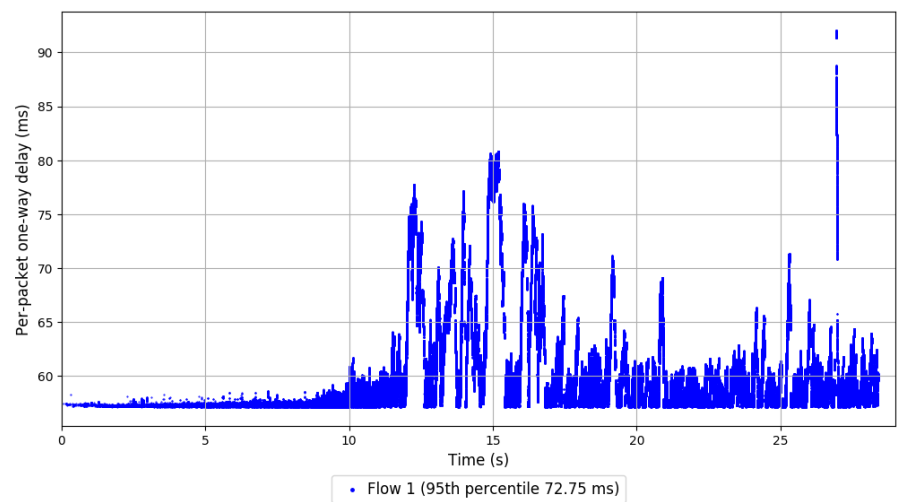
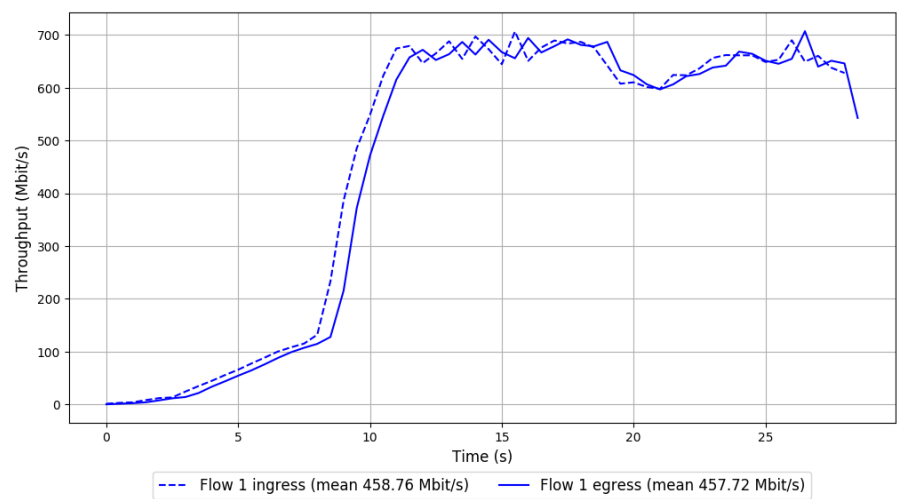


Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-19 17:39:30  
End at: 2019-01-19 17:40:00  
Local clock offset: -0.189 ms  
Remote clock offset: -0.485 ms

# Below is generated by plot.py at 2019-01-19 20:16:31  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 457.72 Mbit/s  
95th percentile per-packet one-way delay: 72.750 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 457.72 Mbit/s  
95th percentile per-packet one-way delay: 72.750 ms  
Loss rate: 0.63%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-19 18:13:35

End at: 2019-01-19 18:14:05

Local clock offset: 0.209 ms

Remote clock offset: 0.614 ms

# Below is generated by plot.py at 2019-01-19 20:16:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 387.19 Mbit/s

95th percentile per-packet one-way delay: 89.733 ms

Loss rate: 0.60%

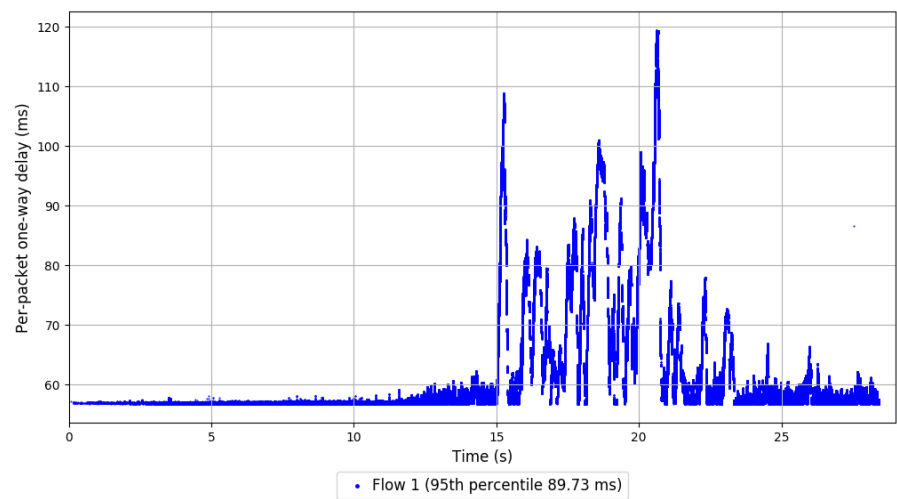
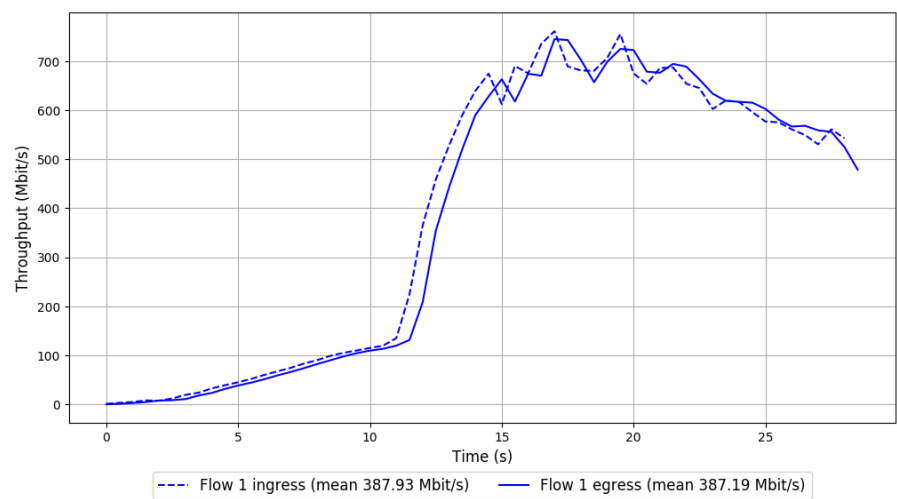
-- Flow 1:

Average throughput: 387.19 Mbit/s

95th percentile per-packet one-way delay: 89.733 ms

Loss rate: 0.60%

Run 4: Report of Indigo-MusesD — Data Link



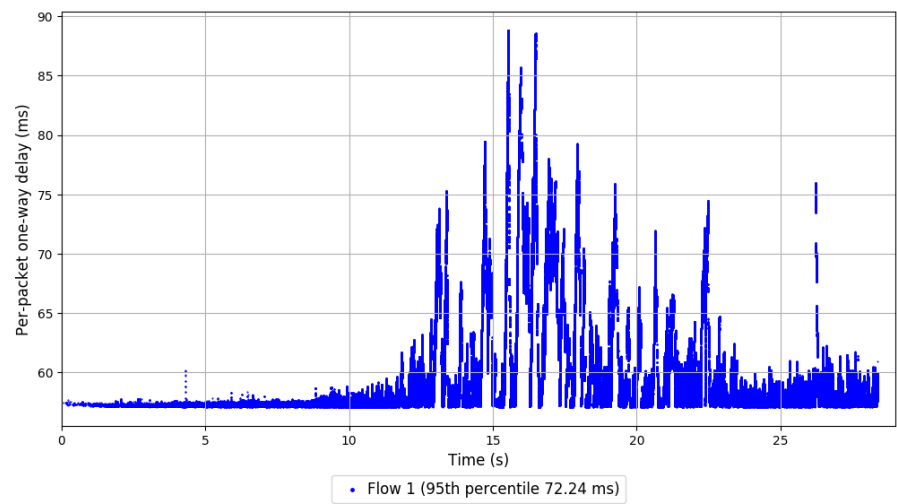
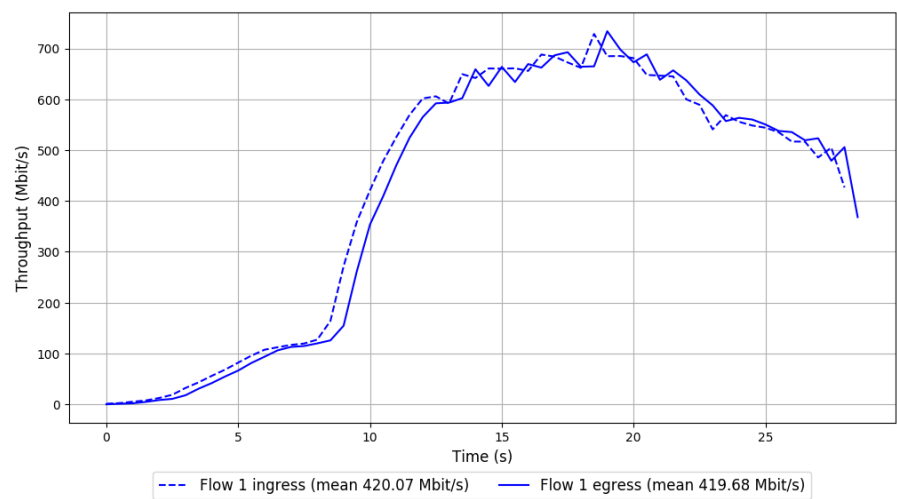


Run 5: Statistics of Indigo-MusesD

Start at: 2019-01-19 18:47:46  
End at: 2019-01-19 18:48:16  
Local clock offset: 0.015 ms  
Remote clock offset: -0.309 ms

# Below is generated by plot.py at 2019-01-19 20:17:10  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 419.68 Mbit/s  
95th percentile per-packet one-way delay: 72.238 ms  
Loss rate: 0.50%  
-- Flow 1:  
Average throughput: 419.68 Mbit/s  
95th percentile per-packet one-way delay: 72.238 ms  
Loss rate: 0.50%

Run 5: Report of Indigo-MusesD — Data Link

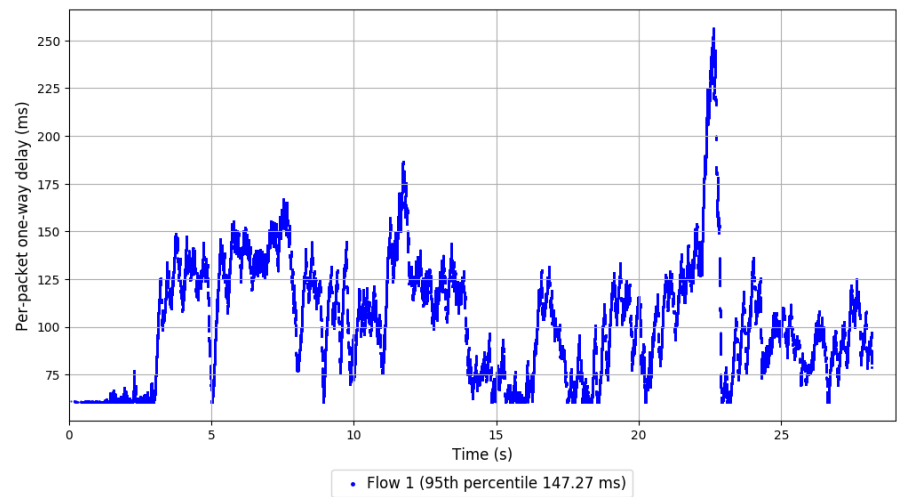
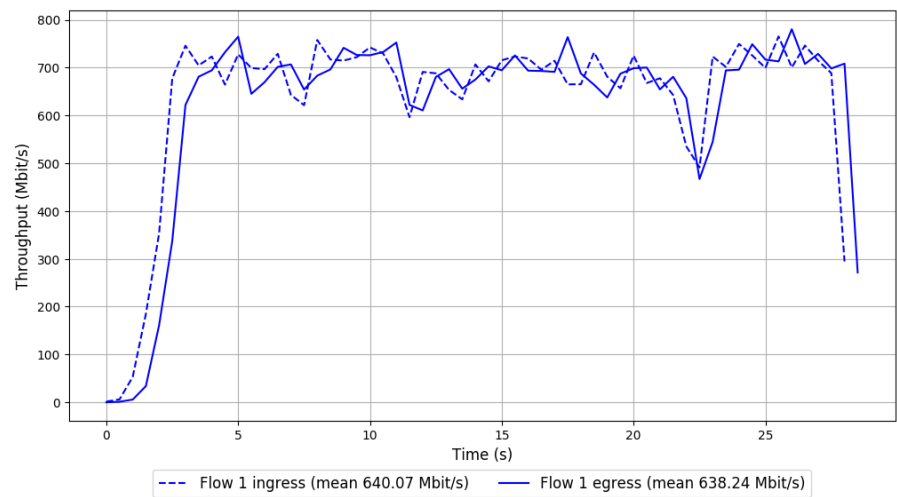


Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-19 16:07:20  
End at: 2019-01-19 16:07:50  
Local clock offset: 0.21 ms  
Remote clock offset: -0.529 ms

# Below is generated by plot.py at 2019-01-19 20:20:53  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 638.24 Mbit/s  
95th percentile per-packet one-way delay: 147.266 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 638.24 Mbit/s  
95th percentile per-packet one-way delay: 147.266 ms  
Loss rate: 0.70%

Run 1: Report of Indigo-MusesT — Data Link

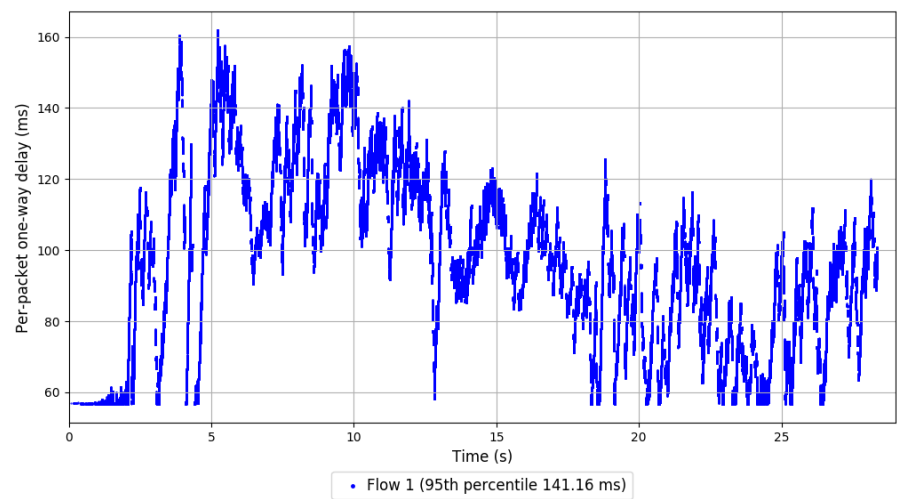
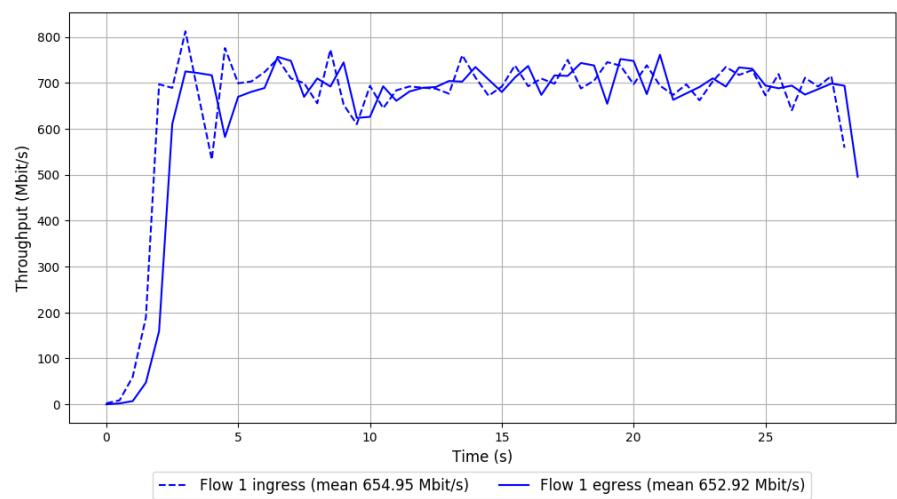


Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-19 16:41:16  
End at: 2019-01-19 16:41:46  
Local clock offset: -0.557 ms  
Remote clock offset: -0.217 ms

# Below is generated by plot.py at 2019-01-19 20:25:32  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 652.92 Mbit/s  
95th percentile per-packet one-way delay: 141.162 ms  
Loss rate: 0.71%  
-- Flow 1:  
Average throughput: 652.92 Mbit/s  
95th percentile per-packet one-way delay: 141.162 ms  
Loss rate: 0.71%

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-19 17:15:10

End at: 2019-01-19 17:15:40

Local clock offset: 0.156 ms

Remote clock offset: 1.105 ms

# Below is generated by plot.py at 2019-01-19 20:25:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 661.96 Mbit/s

95th percentile per-packet one-way delay: 136.034 ms

Loss rate: 0.76%

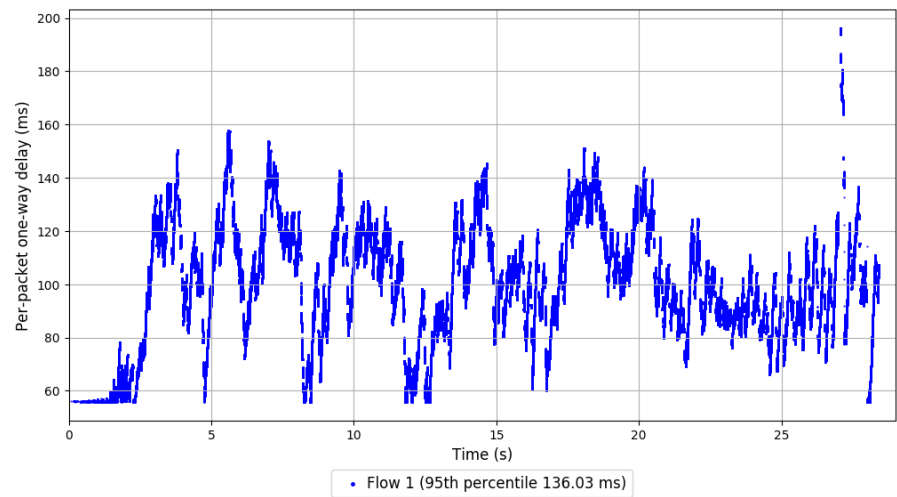
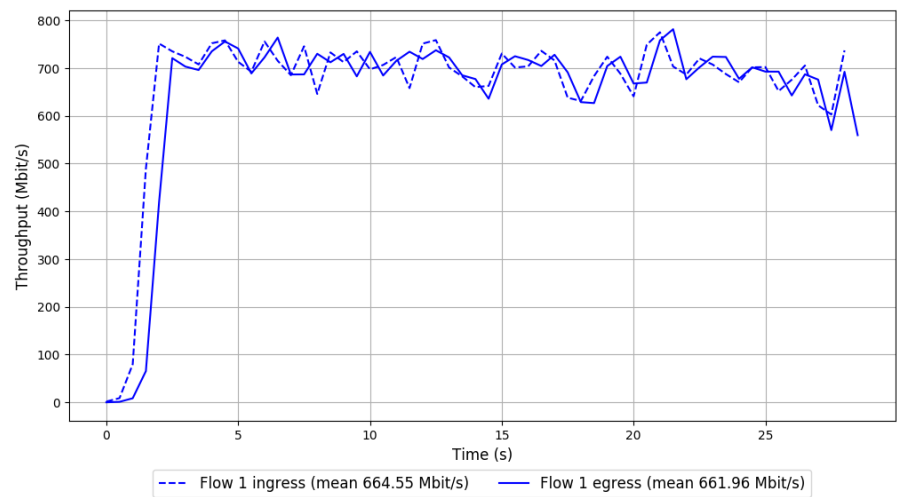
-- Flow 1:

Average throughput: 661.96 Mbit/s

95th percentile per-packet one-way delay: 136.034 ms

Loss rate: 0.76%

Run 3: Report of Indigo-MusesT — Data Link





Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-19 17:49:52

End at: 2019-01-19 17:50:22

Local clock offset: 0.415 ms

Remote clock offset: -0.486 ms

# Below is generated by plot.py at 2019-01-19 20:26:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 680.13 Mbit/s

95th percentile per-packet one-way delay: 120.183 ms

Loss rate: 0.60%

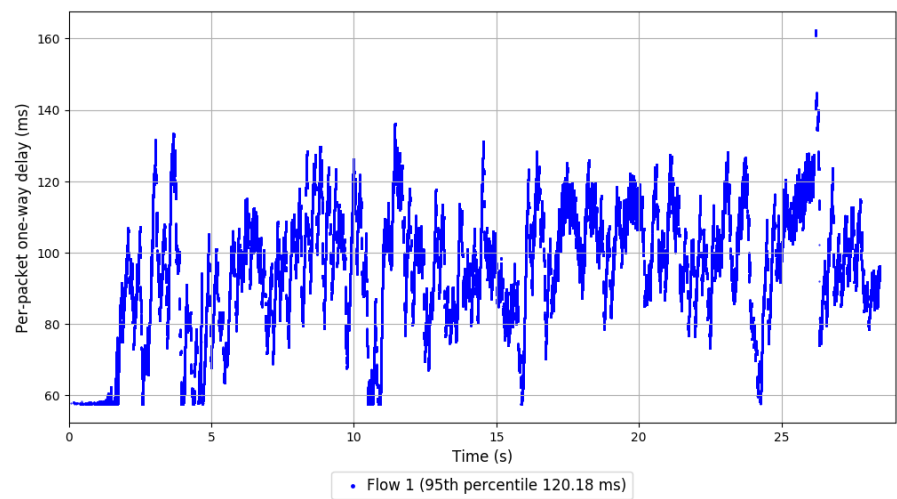
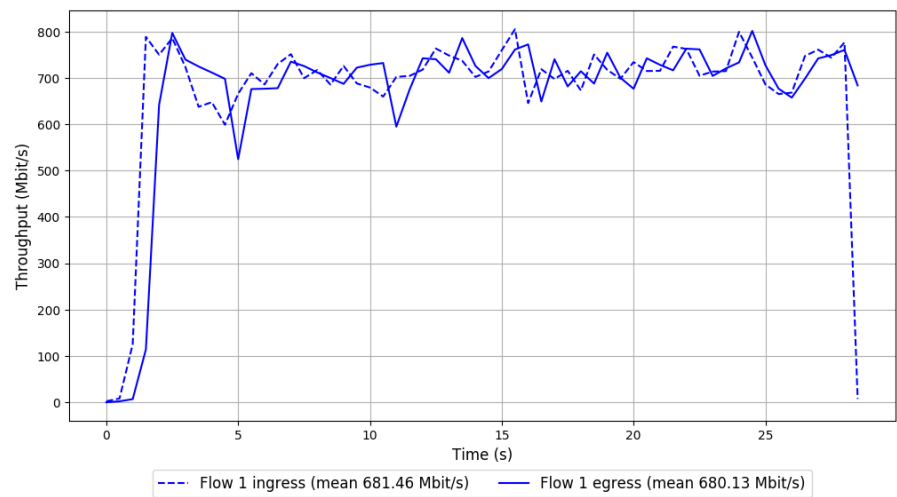
-- Flow 1:

Average throughput: 680.13 Mbit/s

95th percentile per-packet one-way delay: 120.183 ms

Loss rate: 0.60%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-19 18:24:03

End at: 2019-01-19 18:24:33

Local clock offset: 0.205 ms

Remote clock offset: 1.349 ms

# Below is generated by plot.py at 2019-01-19 20:26:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 669.03 Mbit/s

95th percentile per-packet one-way delay: 130.599 ms

Loss rate: 0.66%

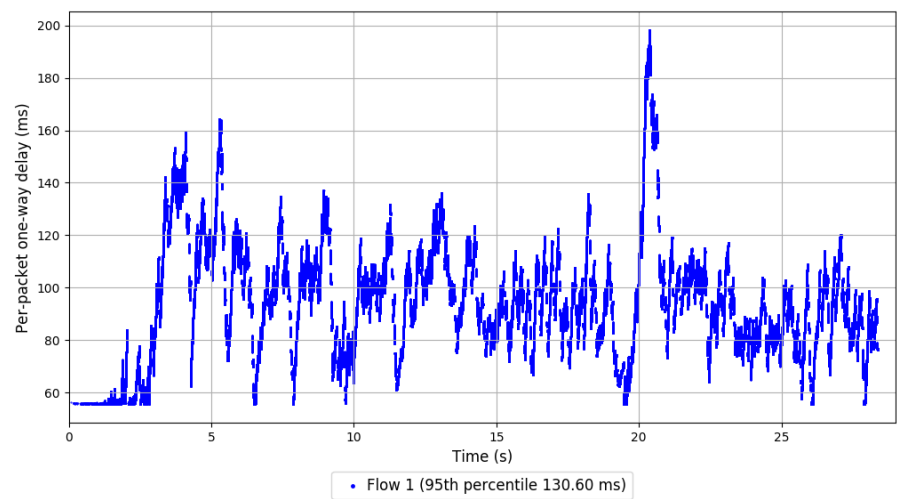
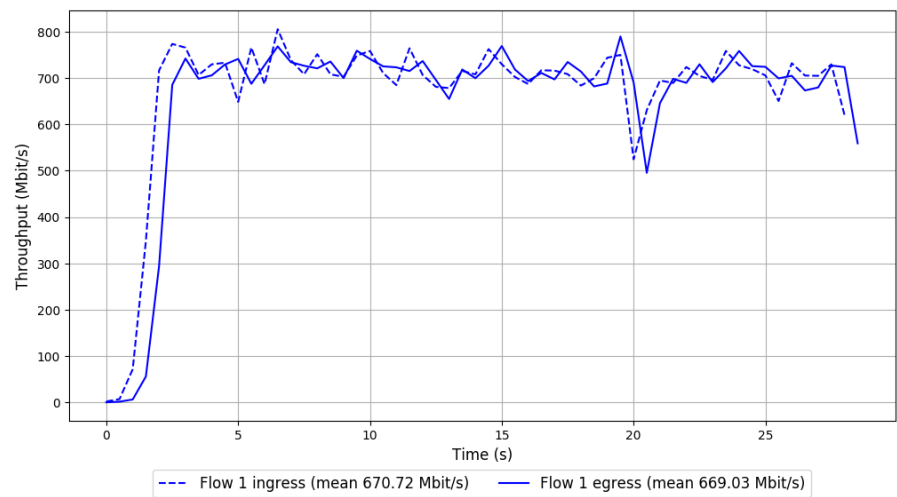
-- Flow 1:

Average throughput: 669.03 Mbit/s

95th percentile per-packet one-way delay: 130.599 ms

Loss rate: 0.66%

Run 5: Report of Indigo-MusesT — Data Link

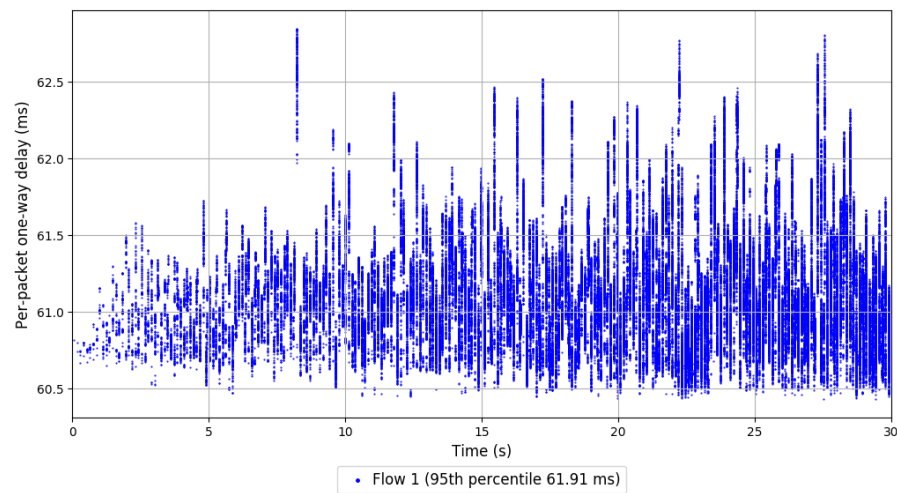
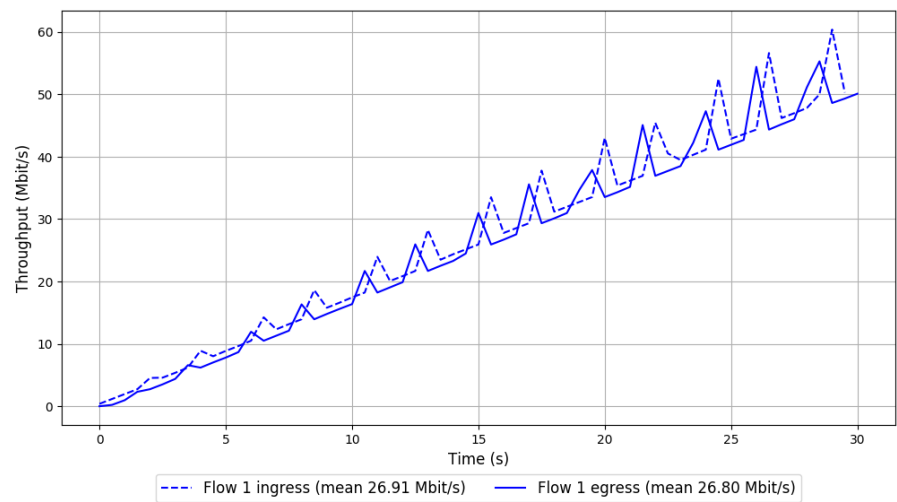


Run 1: Statistics of LEDBAT

Start at: 2019-01-19 16:15:18  
End at: 2019-01-19 16:15:48  
Local clock offset: 0.011 ms  
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2019-01-19 20:26:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 26.80 Mbit/s  
95th percentile per-packet one-way delay: 61.905 ms  
Loss rate: 0.78%  
-- Flow 1:  
Average throughput: 26.80 Mbit/s  
95th percentile per-packet one-way delay: 61.905 ms  
Loss rate: 0.78%

Run 1: Report of LEDBAT — Data Link

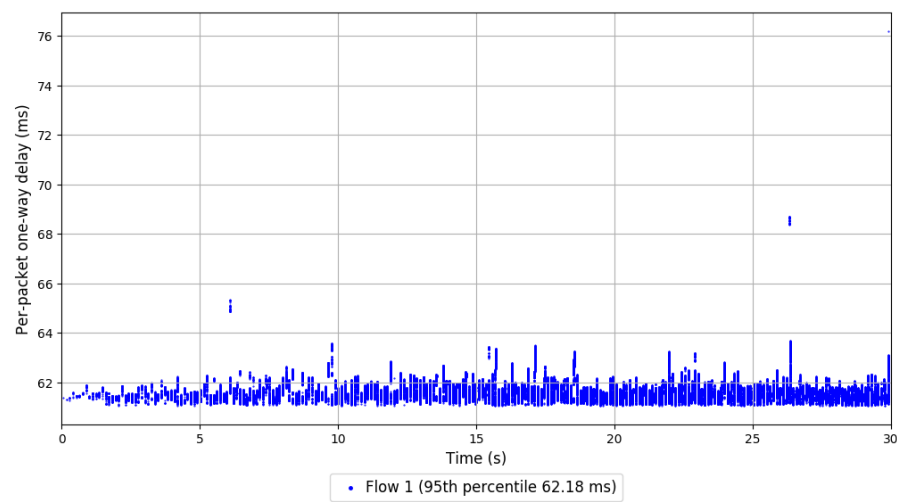
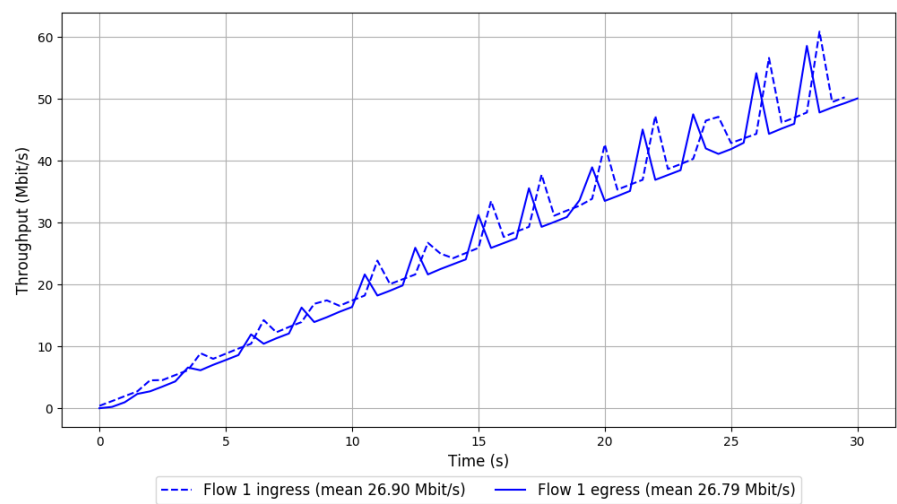


Run 2: Statistics of LEDBAT

Start at: 2019-01-19 16:49:16  
End at: 2019-01-19 16:49:46  
Local clock offset: 0.052 ms  
Remote clock offset: -0.745 ms

# Below is generated by plot.py at 2019-01-19 20:26:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 26.79 Mbit/s  
95th percentile per-packet one-way delay: 62.180 ms  
Loss rate: 0.78%  
-- Flow 1:  
Average throughput: 26.79 Mbit/s  
95th percentile per-packet one-way delay: 62.180 ms  
Loss rate: 0.78%

Run 2: Report of LEDBAT — Data Link



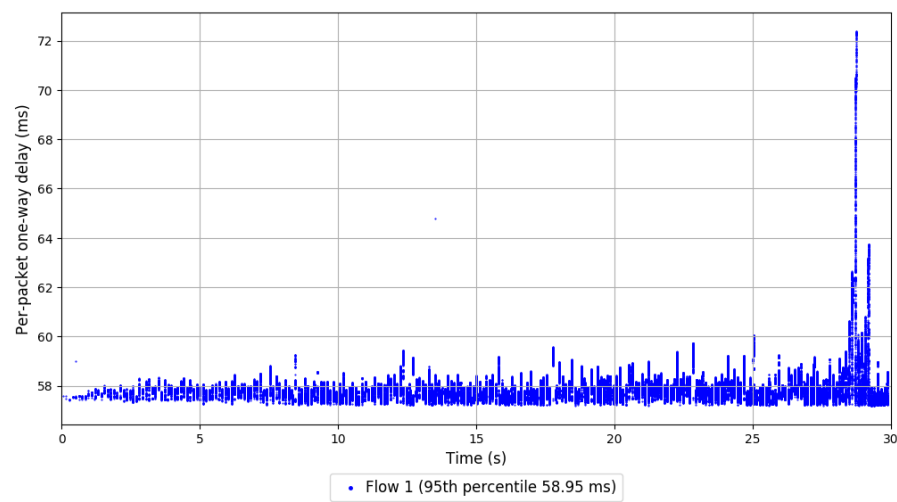
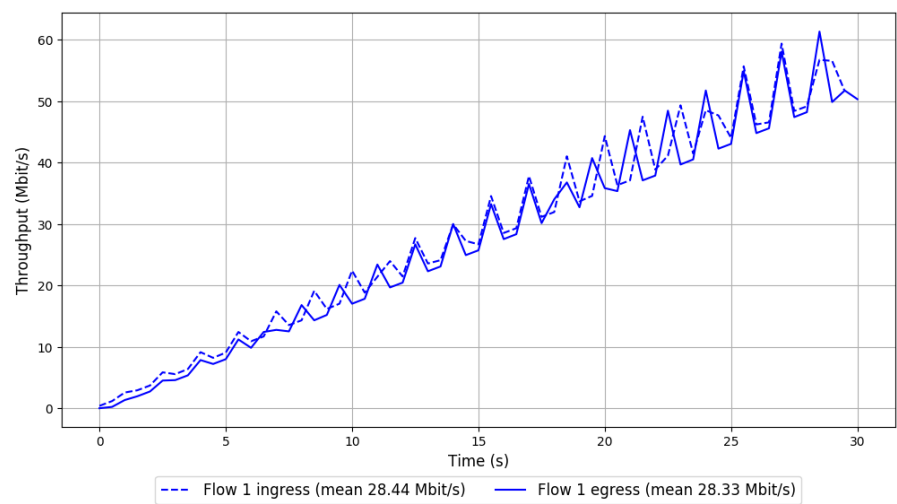


Run 3: Statistics of LEDBAT

Start at: 2019-01-19 17:23:07  
End at: 2019-01-19 17:23:37  
Local clock offset: -0.024 ms  
Remote clock offset: -0.278 ms

# Below is generated by plot.py at 2019-01-19 20:26:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 28.33 Mbit/s  
95th percentile per-packet one-way delay: 58.952 ms  
Loss rate: 0.76%  
-- Flow 1:  
Average throughput: 28.33 Mbit/s  
95th percentile per-packet one-way delay: 58.952 ms  
Loss rate: 0.76%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2019-01-19 17:57:51

End at: 2019-01-19 17:58:21

Local clock offset: 0.043 ms

Remote clock offset: 0.618 ms

# Below is generated by plot.py at 2019-01-19 20:26:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 28.34 Mbit/s

95th percentile per-packet one-way delay: 57.583 ms

Loss rate: 0.76%

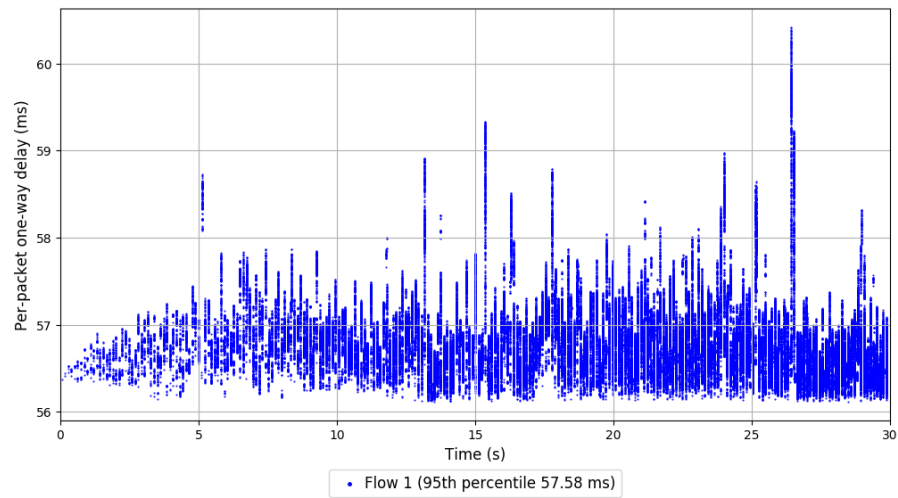
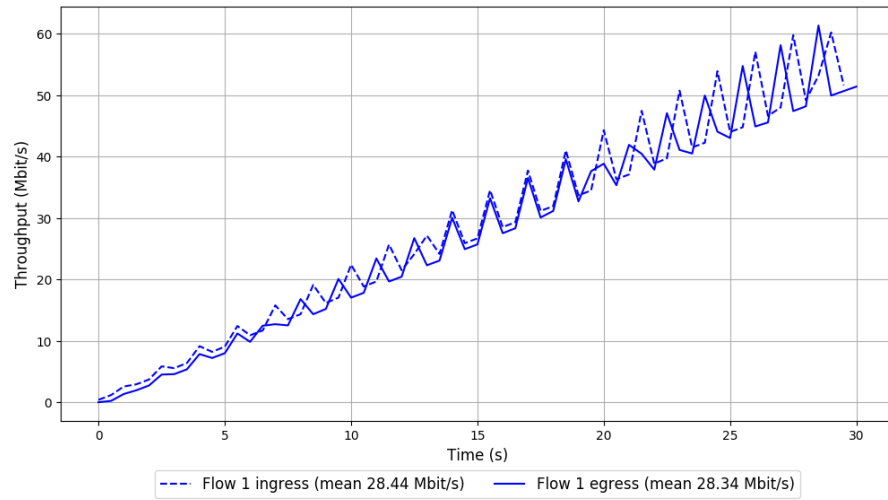
-- Flow 1:

Average throughput: 28.34 Mbit/s

95th percentile per-packet one-way delay: 57.583 ms

Loss rate: 0.76%

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

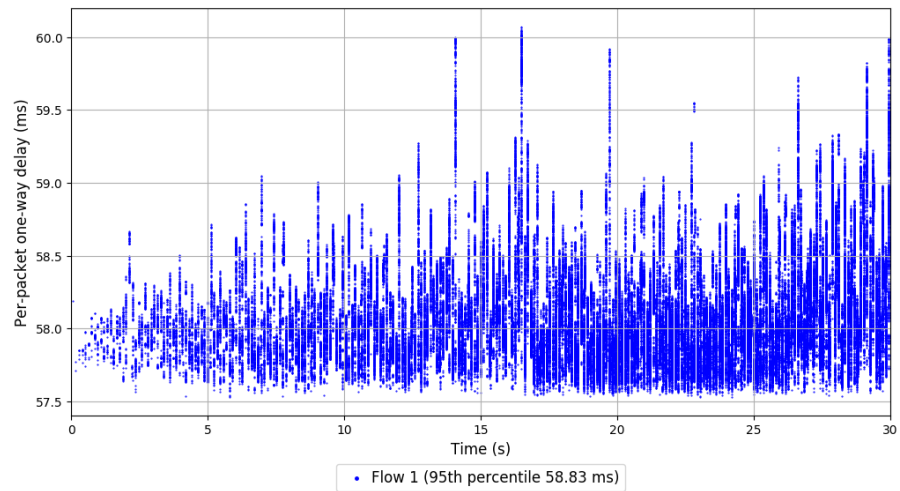
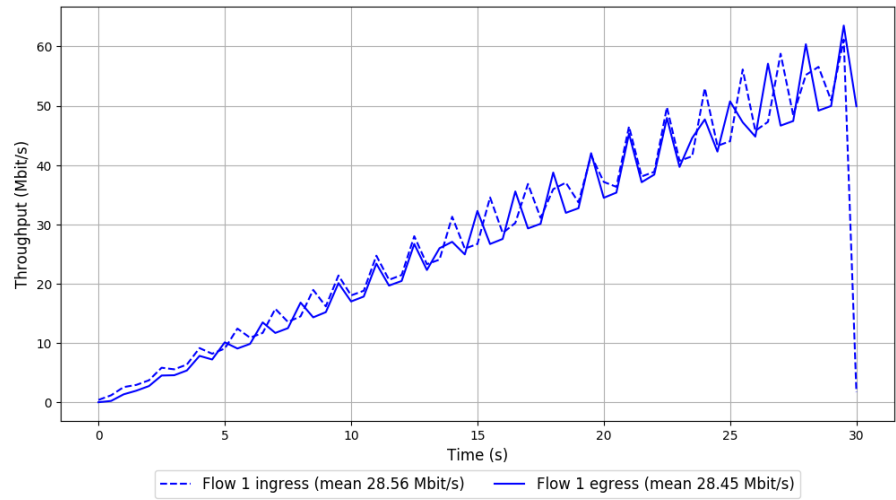


Run 5: Statistics of LEDBAT

Start at: 2019-01-19 18:31:55  
End at: 2019-01-19 18:32:25  
Local clock offset: 0.037 ms  
Remote clock offset: -0.873 ms

# Below is generated by plot.py at 2019-01-19 20:26:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 28.45 Mbit/s  
95th percentile per-packet one-way delay: 58.834 ms  
Loss rate: 0.75%  
-- Flow 1:  
Average throughput: 28.45 Mbit/s  
95th percentile per-packet one-way delay: 58.834 ms  
Loss rate: 0.75%

## Run 5: Report of LEDBAT — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-01-19 16:27:24

End at: 2019-01-19 16:27:54

Local clock offset: -0.062 ms

Remote clock offset: -0.791 ms

# Below is generated by plot.py at 2019-01-19 20:36:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 474.01 Mbit/s

95th percentile per-packet one-way delay: 167.496 ms

Loss rate: 2.42%

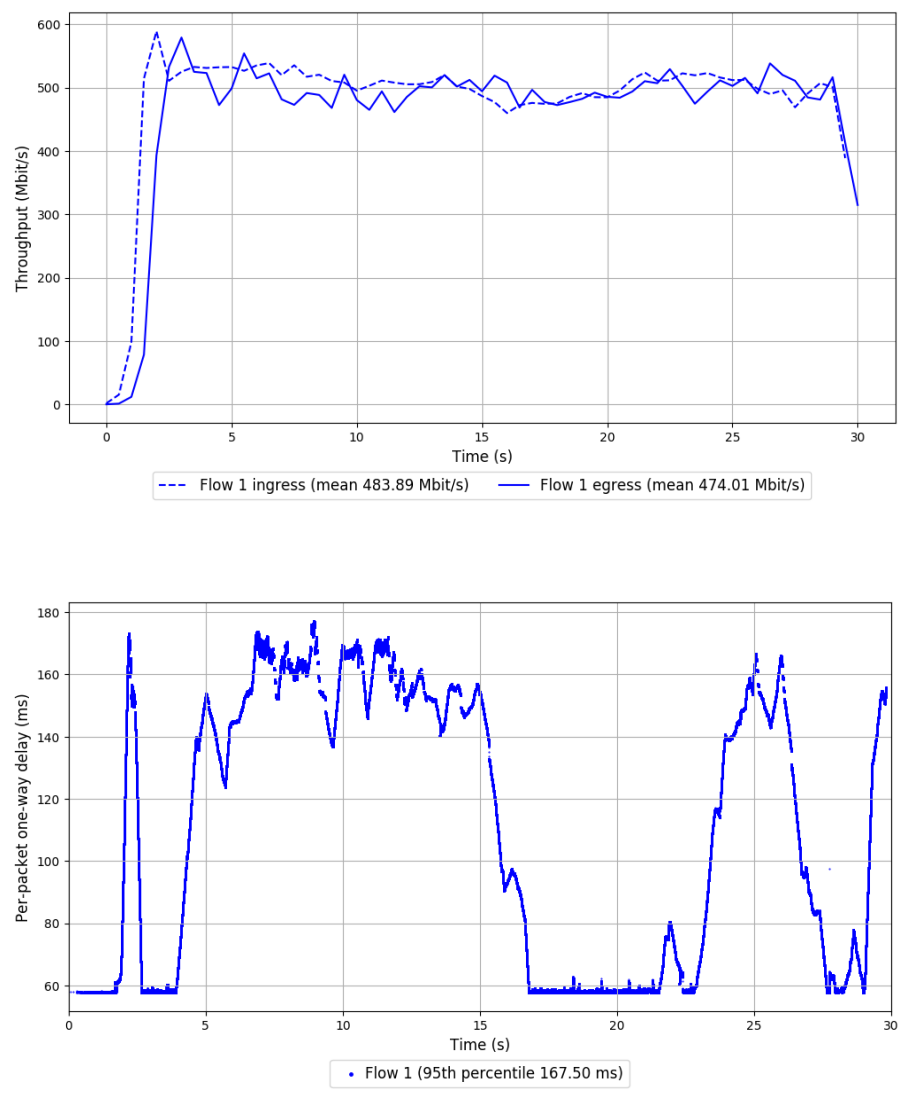
-- Flow 1:

Average throughput: 474.01 Mbit/s

95th percentile per-packet one-way delay: 167.496 ms

Loss rate: 2.42%

Run 1: Report of PCC-Allegro — Data Link





Run 2: Statistics of PCC-Allegro

Start at: 2019-01-19 17:01:21

End at: 2019-01-19 17:01:51

Local clock offset: 0.385 ms

Remote clock offset: 0.601 ms

# Below is generated by plot.py at 2019-01-19 20:36:41

# Datalink statistics

-- Total of 1 flow:

Average throughput: 430.77 Mbit/s

95th percentile per-packet one-way delay: 165.693 ms

Loss rate: 1.52%

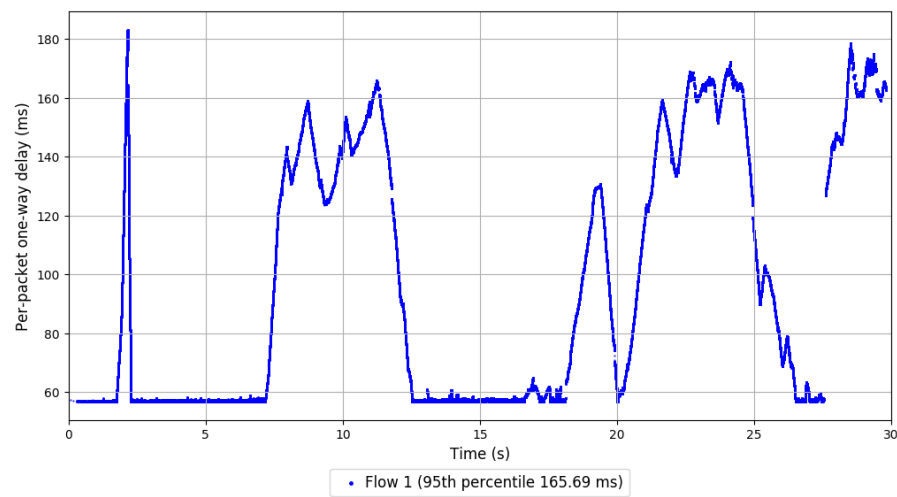
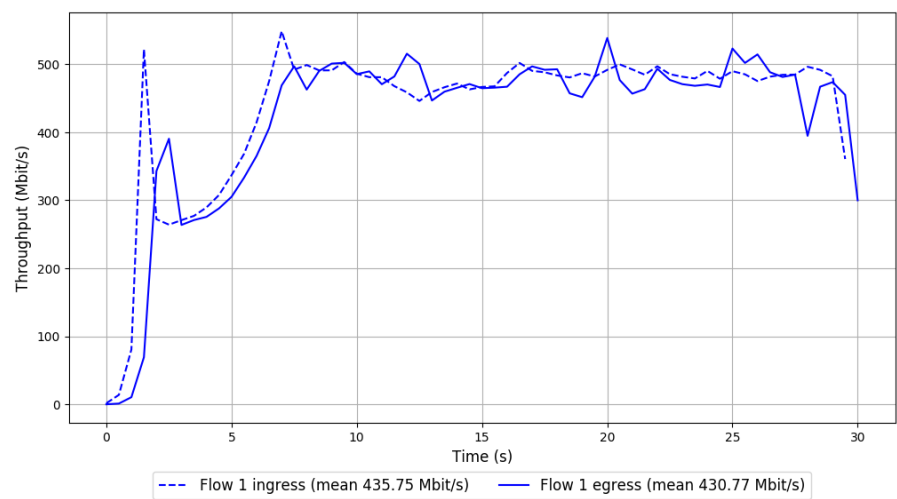
-- Flow 1:

Average throughput: 430.77 Mbit/s

95th percentile per-packet one-way delay: 165.693 ms

Loss rate: 1.52%

Run 2: Report of PCC-Allegro — Data Link

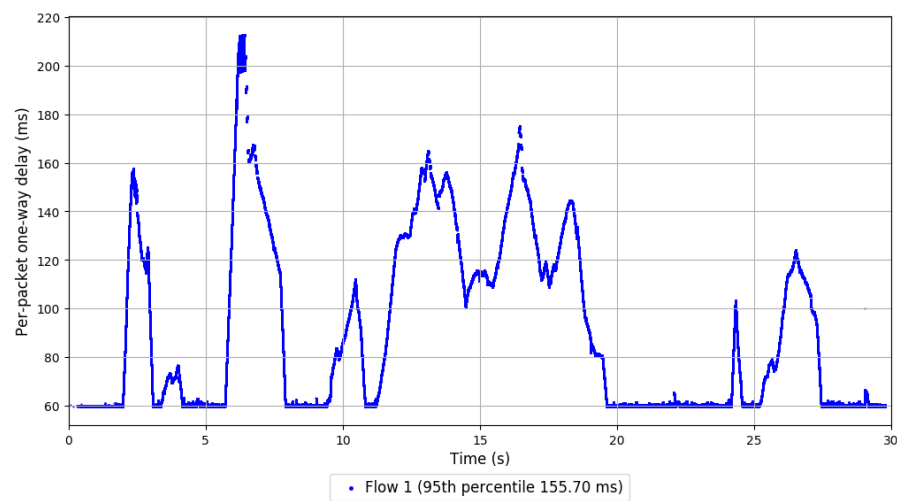
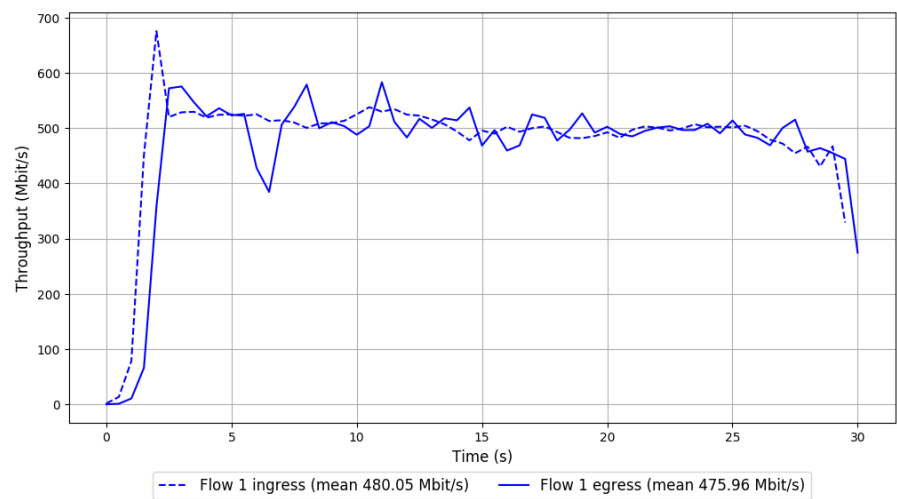


Run 3: Statistics of PCC-Allegro

Start at: 2019-01-19 17:35:50  
End at: 2019-01-19 17:36:20  
Local clock offset: -0.253 ms  
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2019-01-19 20:37:41  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 475.96 Mbit/s  
95th percentile per-packet one-way delay: 155.702 ms  
Loss rate: 1.25%  
-- Flow 1:  
Average throughput: 475.96 Mbit/s  
95th percentile per-packet one-way delay: 155.702 ms  
Loss rate: 1.25%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-01-19 18:09:49

End at: 2019-01-19 18:10:19

Local clock offset: 0.034 ms

Remote clock offset: -1.505 ms

# Below is generated by plot.py at 2019-01-19 20:41:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 499.49 Mbit/s

95th percentile per-packet one-way delay: 167.673 ms

Loss rate: 3.21%

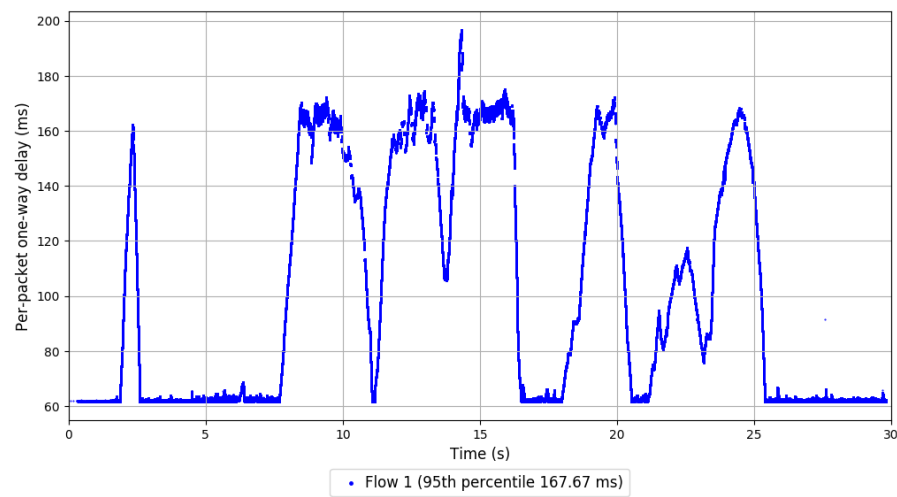
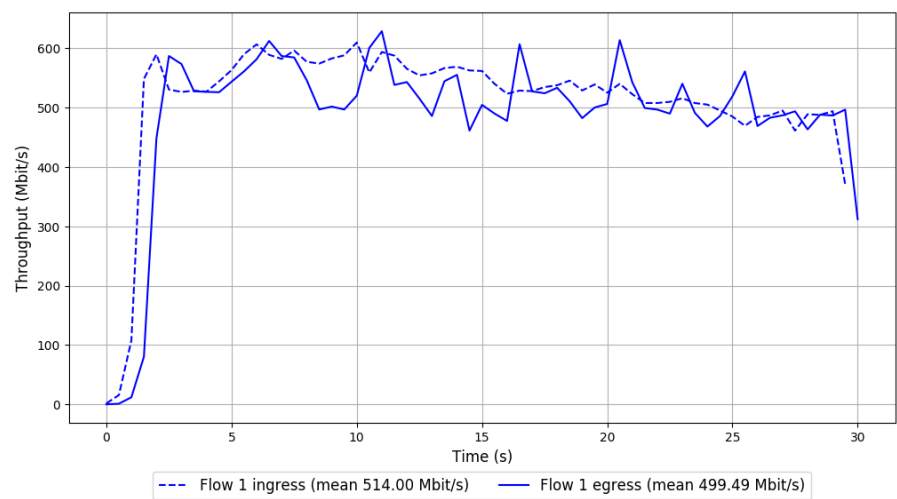
-- Flow 1:

Average throughput: 499.49 Mbit/s

95th percentile per-packet one-way delay: 167.673 ms

Loss rate: 3.21%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-01-19 18:44:06

End at: 2019-01-19 18:44:36

Local clock offset: 0.172 ms

Remote clock offset: -0.094 ms

# Below is generated by plot.py at 2019-01-19 20:44:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 481.15 Mbit/s

95th percentile per-packet one-way delay: 172.213 ms

Loss rate: 3.53%

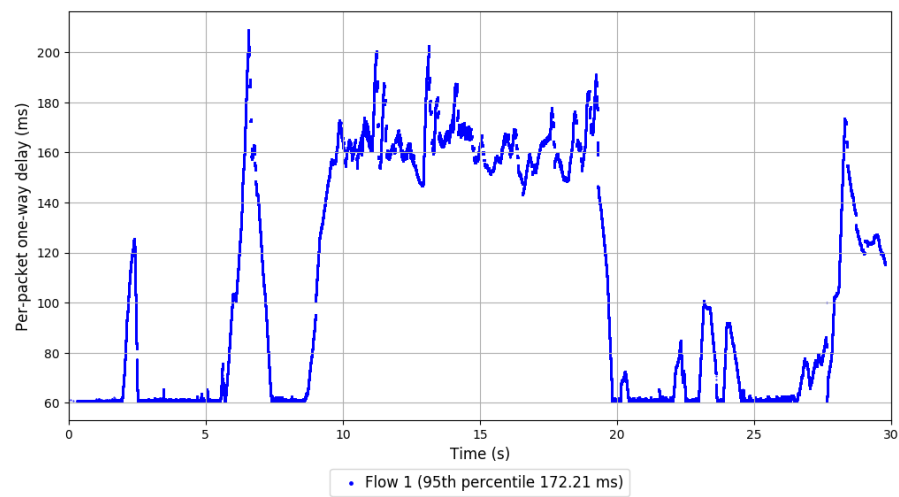
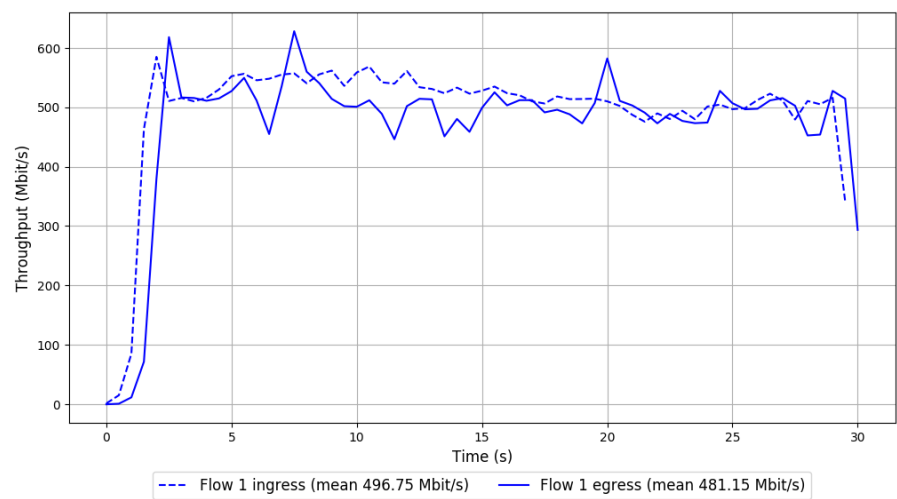
-- Flow 1:

Average throughput: 481.15 Mbit/s

95th percentile per-packet one-way delay: 172.213 ms

Loss rate: 3.53%

Run 5: Report of PCC-Allegro — Data Link



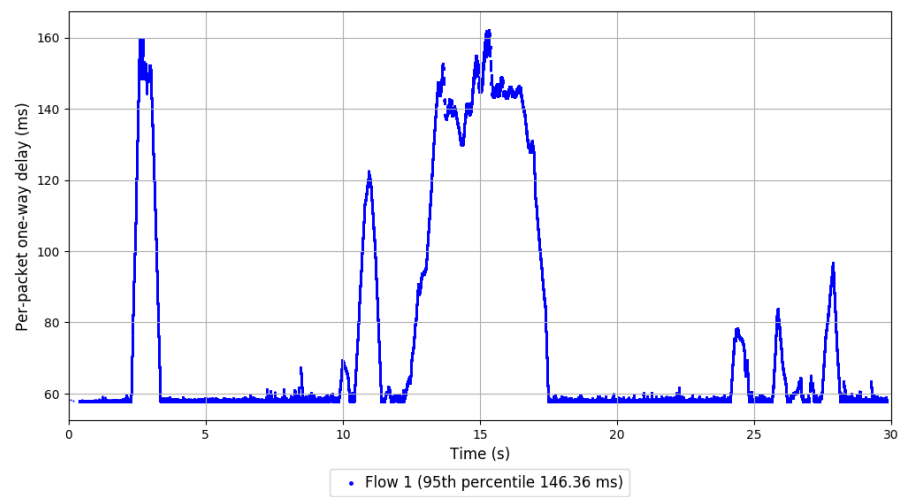
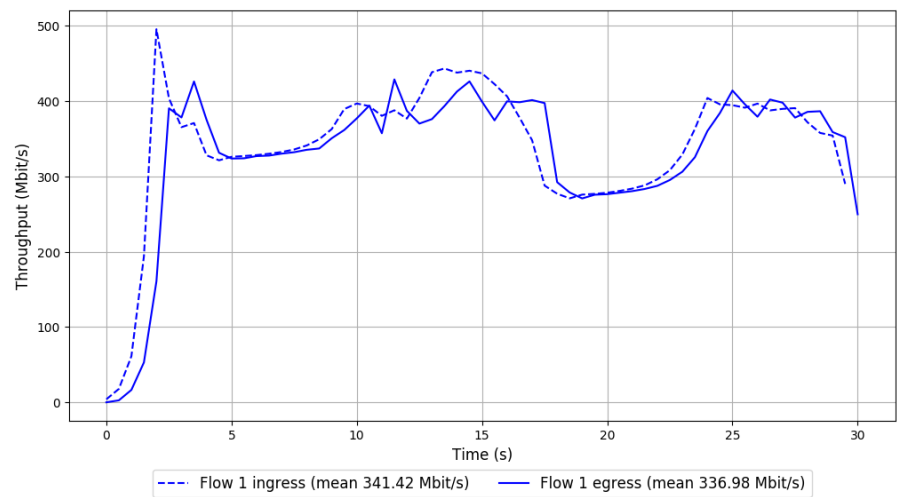


```
Run 1: Statistics of PCC-Expr

Start at: 2019-01-19 15:59:02
End at: 2019-01-19 15:59:32
Local clock offset: 0.121 ms
Remote clock offset: -0.77 ms

# Below is generated by plot.py at 2019-01-19 20:44:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 336.98 Mbit/s
95th percentile per-packet one-way delay: 146.358 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 336.98 Mbit/s
95th percentile per-packet one-way delay: 146.358 ms
Loss rate: 1.68%
```

Run 1: Report of PCC-Expr — Data Link

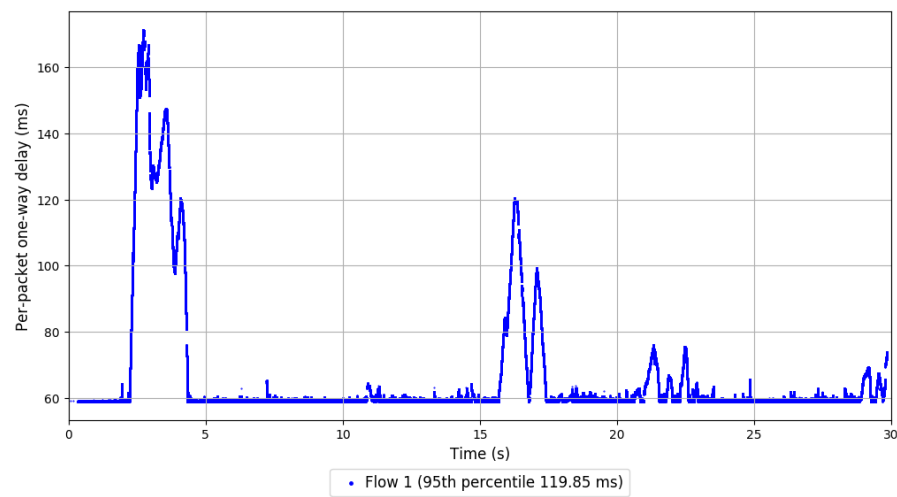
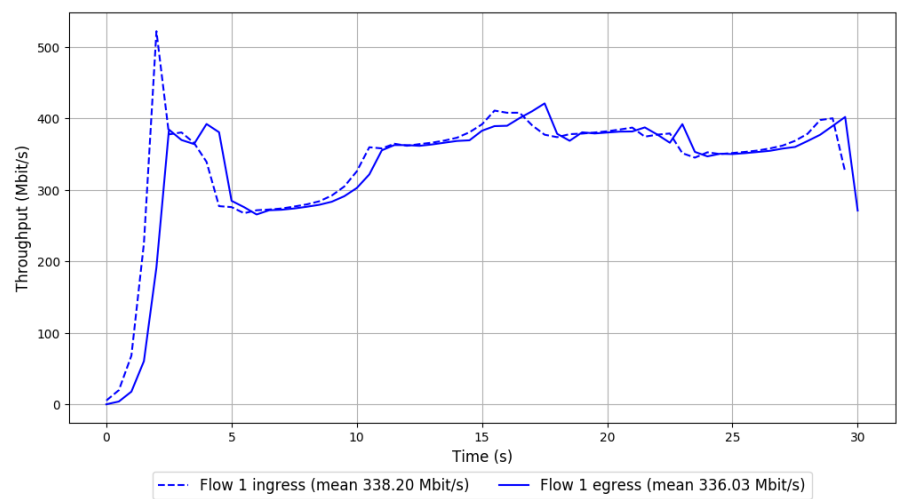


Run 2: Statistics of PCC-Expr

Start at: 2019-01-19 16:32:30  
End at: 2019-01-19 16:33:00  
Local clock offset: 0.446 ms  
Remote clock offset: -1.421 ms

# Below is generated by plot.py at 2019-01-19 20:44:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 336.03 Mbit/s  
95th percentile per-packet one-way delay: 119.848 ms  
Loss rate: 1.03%  
-- Flow 1:  
Average throughput: 336.03 Mbit/s  
95th percentile per-packet one-way delay: 119.848 ms  
Loss rate: 1.03%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-01-19 17:06:27

End at: 2019-01-19 17:06:57

Local clock offset: 0.191 ms

Remote clock offset: 0.288 ms

# Below is generated by plot.py at 2019-01-19 20:44:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 336.43 Mbit/s

95th percentile per-packet one-way delay: 151.193 ms

Loss rate: 1.88%

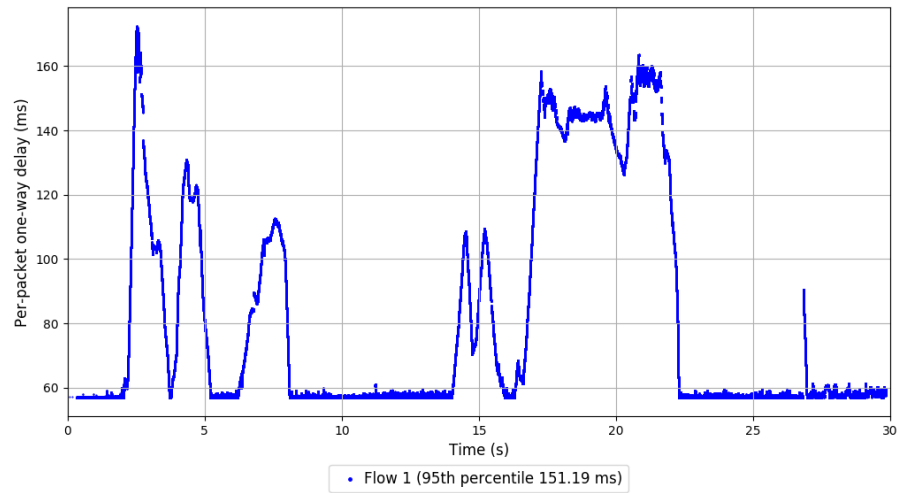
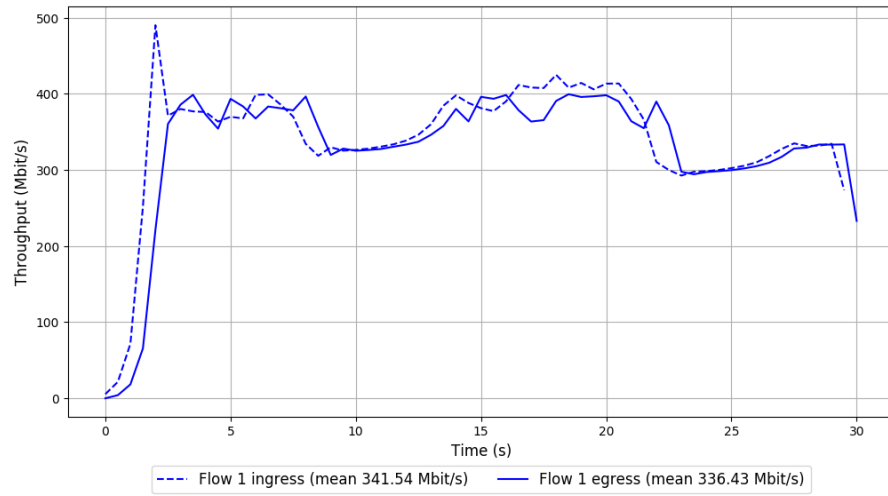
-- Flow 1:

Average throughput: 336.43 Mbit/s

95th percentile per-packet one-way delay: 151.193 ms

Loss rate: 1.88%

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

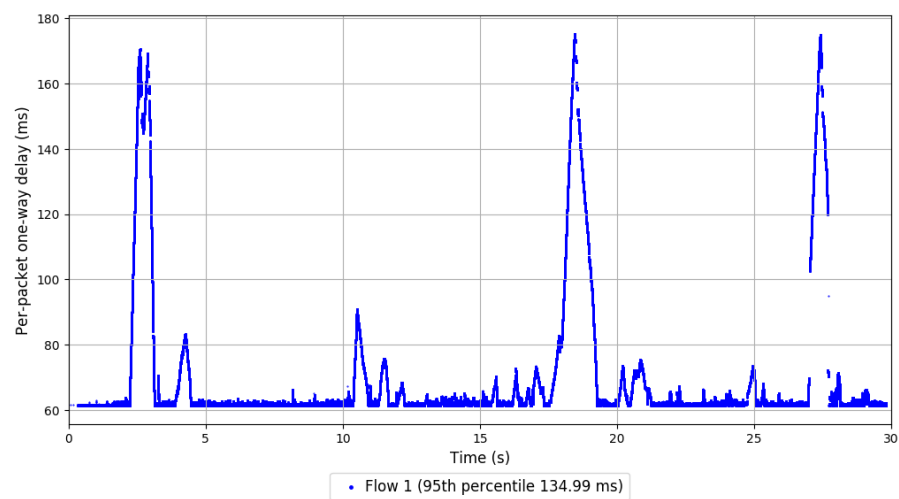
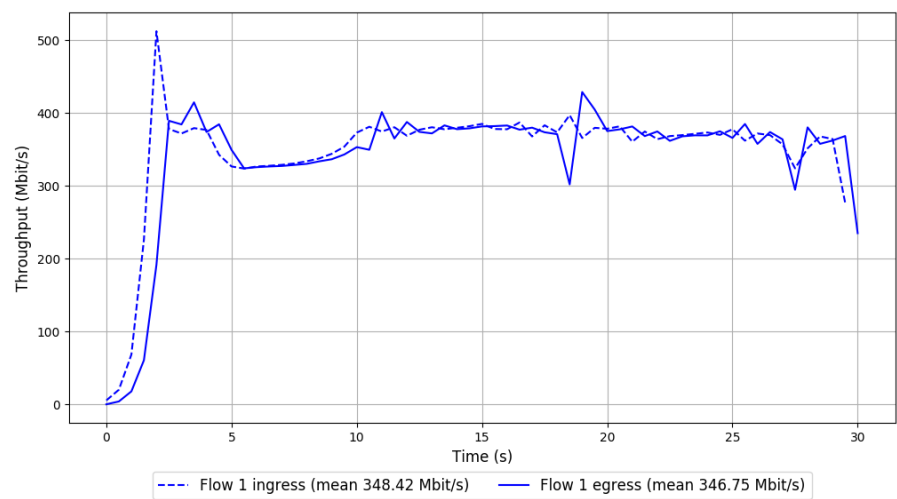


Run 4: Statistics of PCC-Expr

Start at: 2019-01-19 17:41:15  
End at: 2019-01-19 17:41:45  
Local clock offset: 0.243 ms  
Remote clock offset: -0.797 ms

# Below is generated by plot.py at 2019-01-19 20:49:03  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 346.75 Mbit/s  
95th percentile per-packet one-way delay: 134.993 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 346.75 Mbit/s  
95th percentile per-packet one-way delay: 134.993 ms  
Loss rate: 0.87%

Run 4: Report of PCC-Expr — Data Link



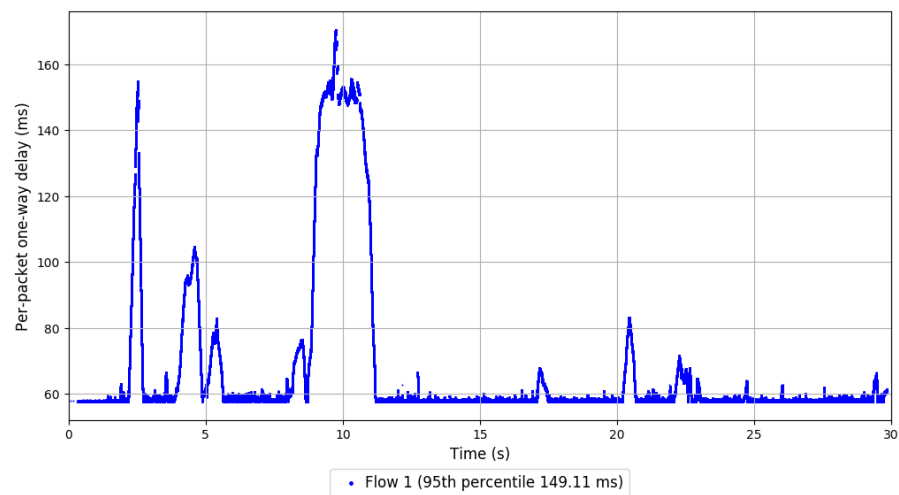
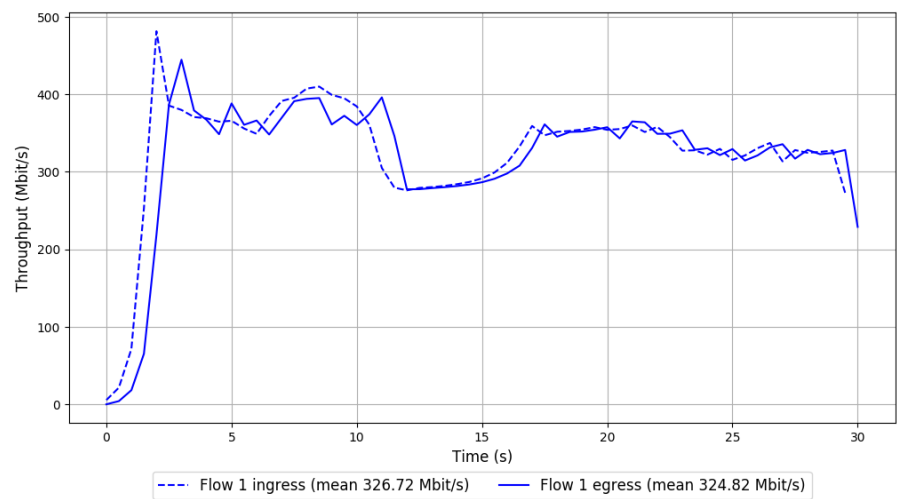


Run 5: Statistics of PCC-Expr

Start at: 2019-01-19 18:15:09  
End at: 2019-01-19 18:15:39  
Local clock offset: 0.066 ms  
Remote clock offset: -0.841 ms

# Below is generated by plot.py at 2019-01-19 20:49:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 324.82 Mbit/s  
95th percentile per-packet one-way delay: 149.109 ms  
Loss rate: 0.97%  
-- Flow 1:  
Average throughput: 324.82 Mbit/s  
95th percentile per-packet one-way delay: 149.109 ms  
Loss rate: 0.97%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-01-19 16:24:21

End at: 2019-01-19 16:24:51

Local clock offset: 0.379 ms

Remote clock offset: -1.426 ms

# Below is generated by plot.py at 2019-01-19 20:49:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 81.53 Mbit/s

95th percentile per-packet one-way delay: 58.663 ms

Loss rate: 0.00%

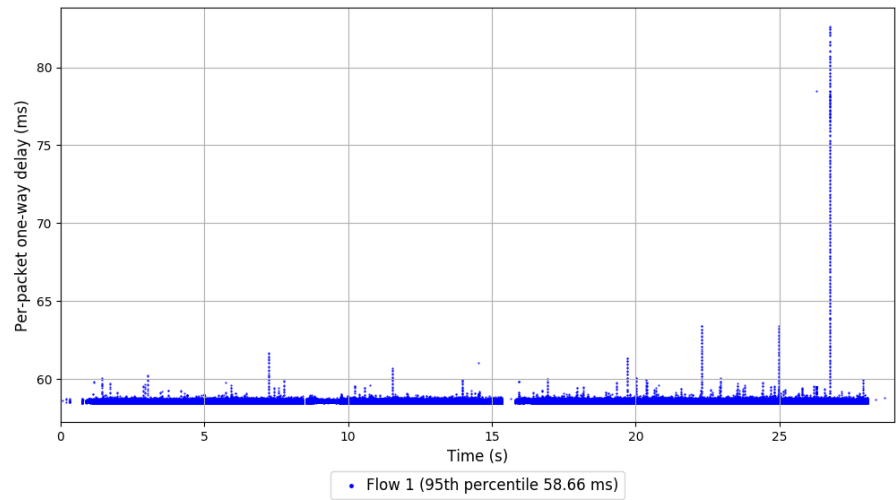
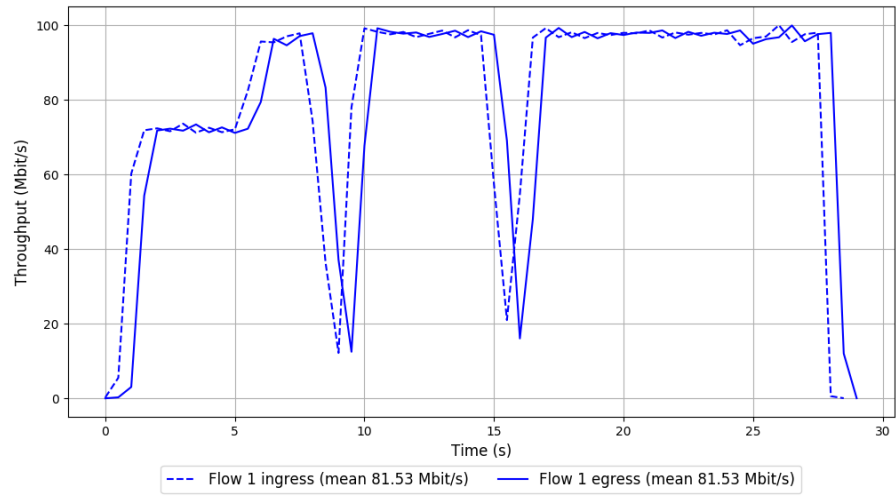
-- Flow 1:

Average throughput: 81.53 Mbit/s

95th percentile per-packet one-way delay: 58.663 ms

Loss rate: 0.00%

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



Run 2: Statistics of QUIC Cubic

Start at: 2019-01-19 16:58:25

End at: 2019-01-19 16:58:55

Local clock offset: 0.086 ms

Remote clock offset: -0.927 ms

# Below is generated by plot.py at 2019-01-19 20:49:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 65.42 Mbit/s

95th percentile per-packet one-way delay: 57.942 ms

Loss rate: 0.56%

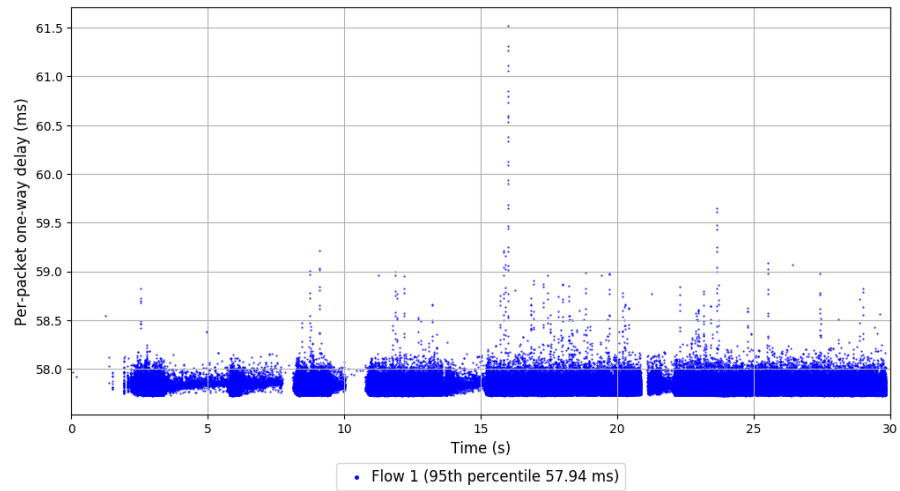
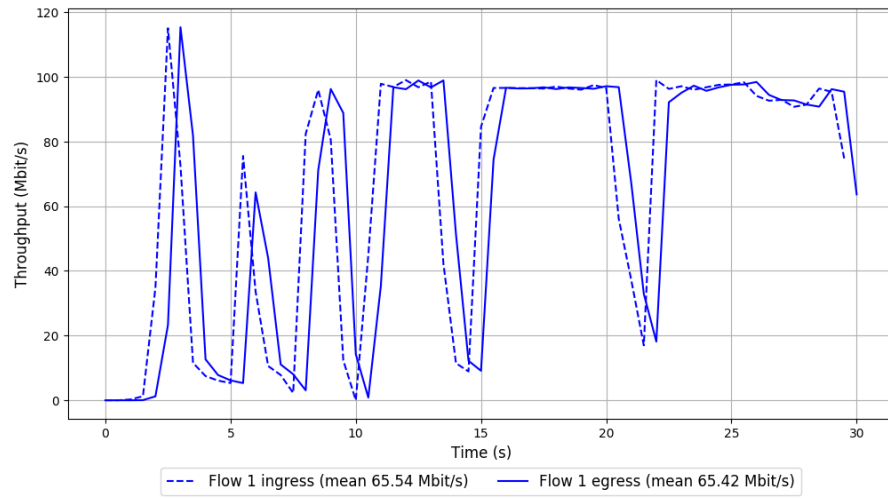
-- Flow 1:

Average throughput: 65.42 Mbit/s

95th percentile per-packet one-way delay: 57.942 ms

Loss rate: 0.56%

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



Run 3: Statistics of QUIC Cubic

Start at: 2019-01-19 17:32:47

End at: 2019-01-19 17:33:17

Local clock offset: 0.172 ms

Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2019-01-19 20:49:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 51.12 Mbit/s

95th percentile per-packet one-way delay: 57.179 ms

Loss rate: 0.70%

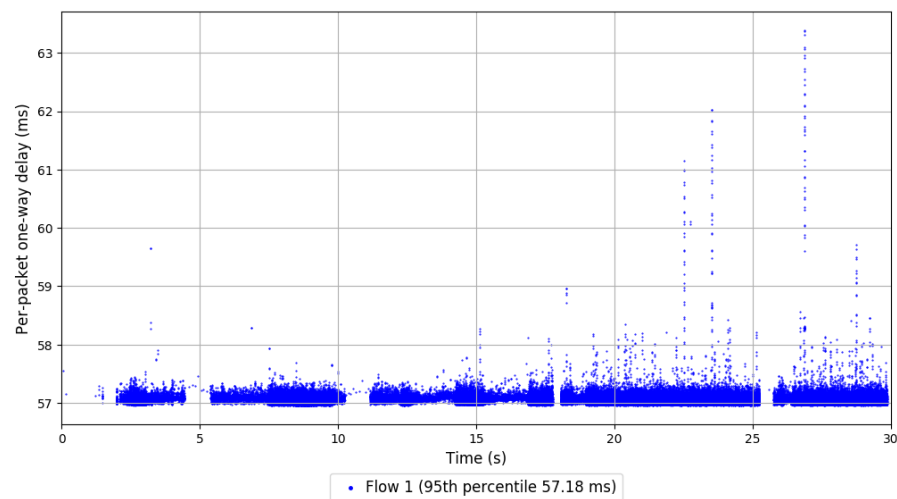
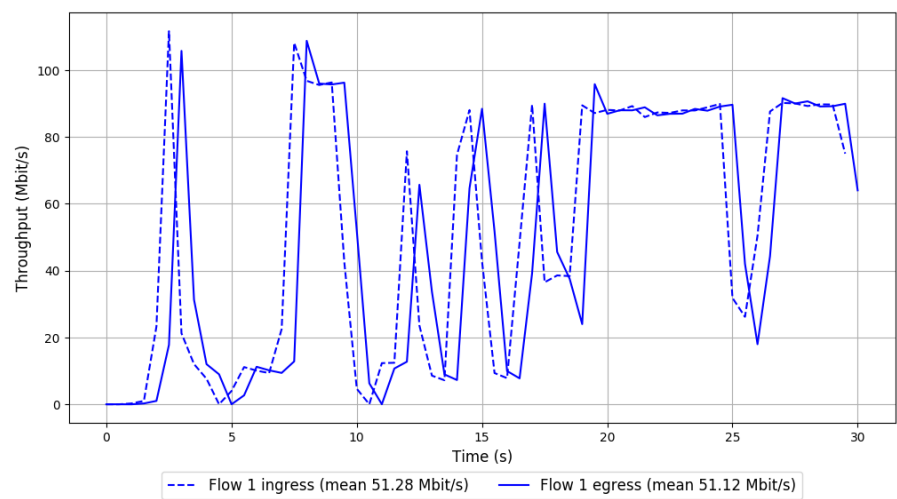
-- Flow 1:

Average throughput: 51.12 Mbit/s

95th percentile per-packet one-way delay: 57.179 ms

Loss rate: 0.70%

Run 3: Report of QUIC Cubic — Data Link





Run 4: Statistics of QUIC Cubic

Start at: 2019-01-19 18:06:53

End at: 2019-01-19 18:07:23

Local clock offset: 0.096 ms

Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2019-01-19 20:49:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 52.07 Mbit/s

95th percentile per-packet one-way delay: 57.157 ms

Loss rate: 0.66%

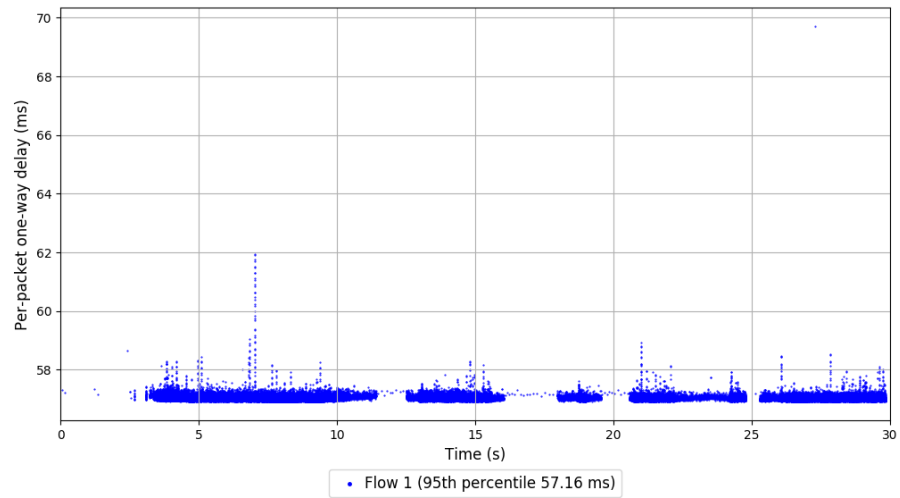
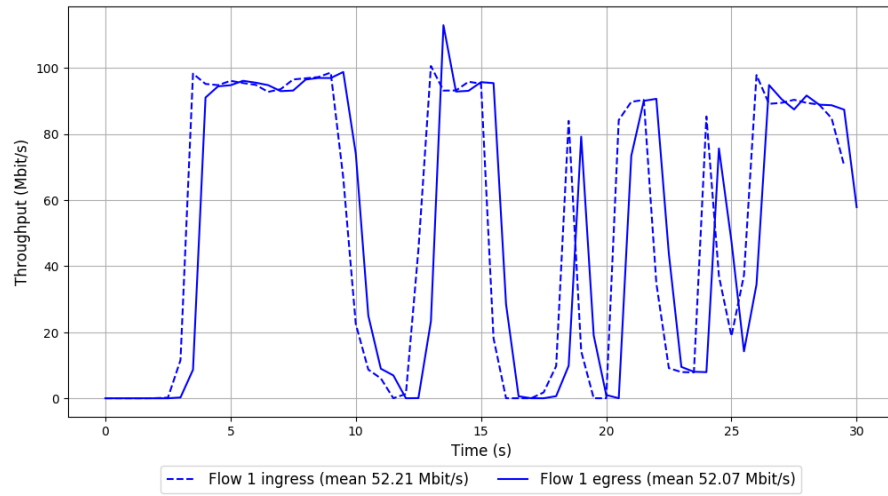
-- Flow 1:

Average throughput: 52.07 Mbit/s

95th percentile per-packet one-way delay: 57.157 ms

Loss rate: 0.66%

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

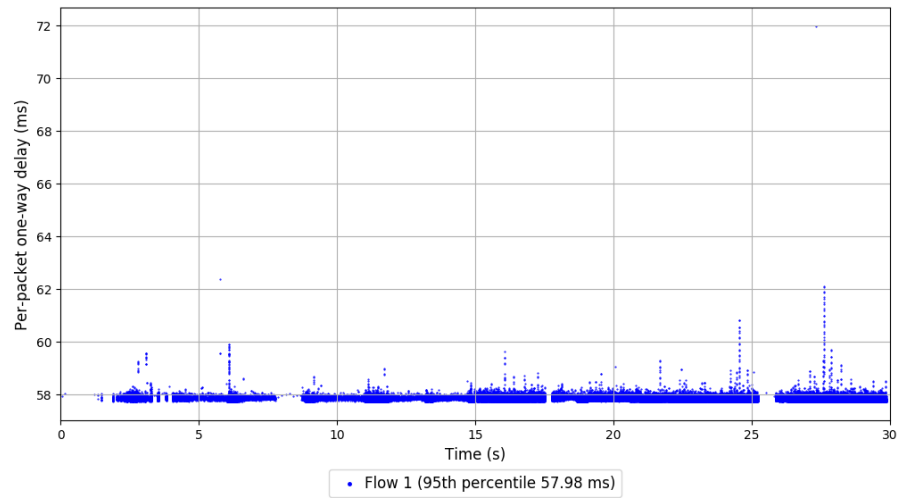
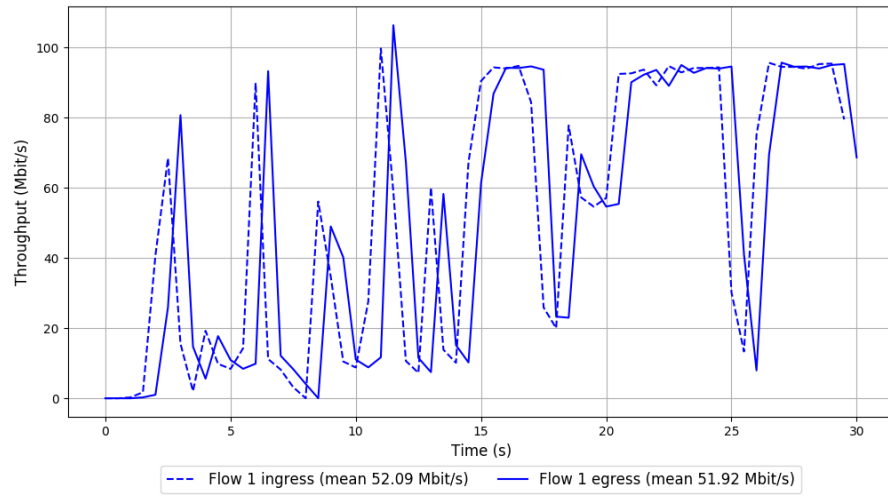


Run 5: Statistics of QUIC Cubic

Start at: 2019-01-19 18:41:03  
End at: 2019-01-19 18:41:33  
Local clock offset: 0.013 ms  
Remote clock offset: -0.864 ms

# Below is generated by plot.py at 2019-01-19 20:49:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 51.92 Mbit/s  
95th percentile per-packet one-way delay: 57.979 ms  
Loss rate: 0.71%  
-- Flow 1:  
Average throughput: 51.92 Mbit/s  
95th percentile per-packet one-way delay: 57.979 ms  
Loss rate: 0.71%

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

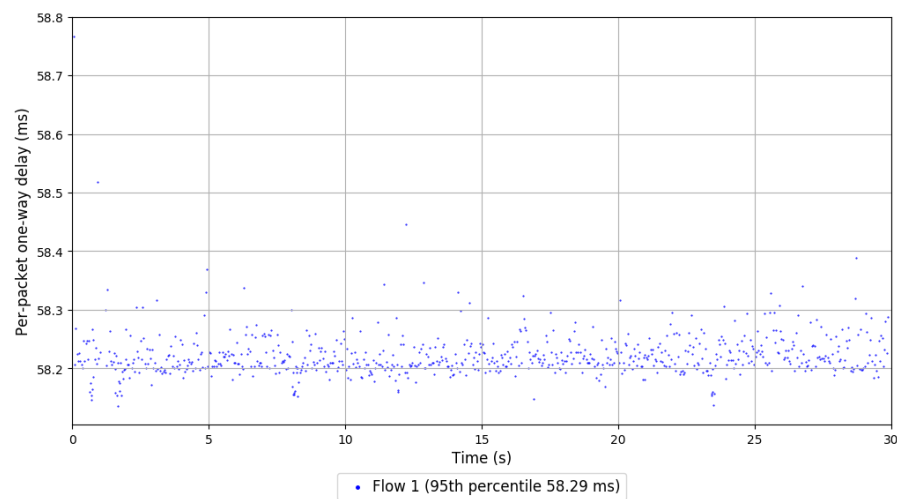
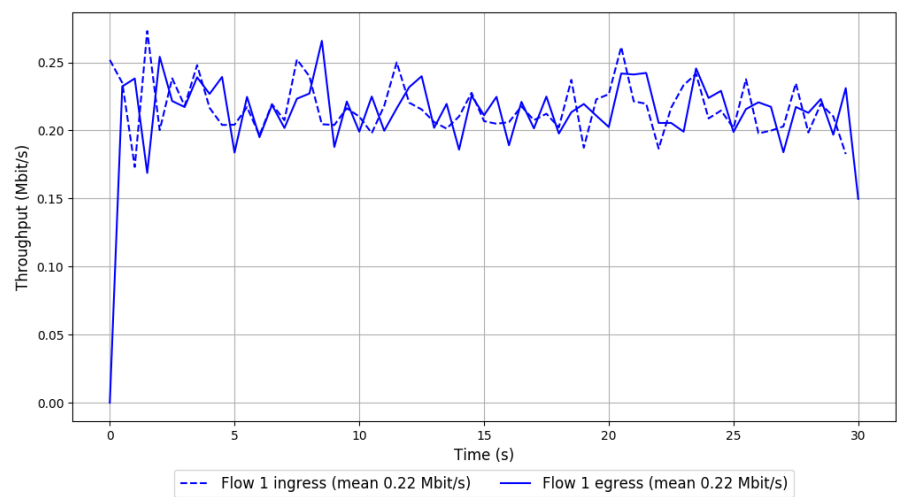


Run 1: Statistics of SCReAM

Start at: 2019-01-19 16:18:10  
End at: 2019-01-19 16:18:40  
Local clock offset: 0.411 ms  
Remote clock offset: -0.872 ms

# Below is generated by plot.py at 2019-01-19 20:49:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 58.286 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 58.286 ms  
Loss rate: 0.38%

Run 1: Report of SReAM — Data Link

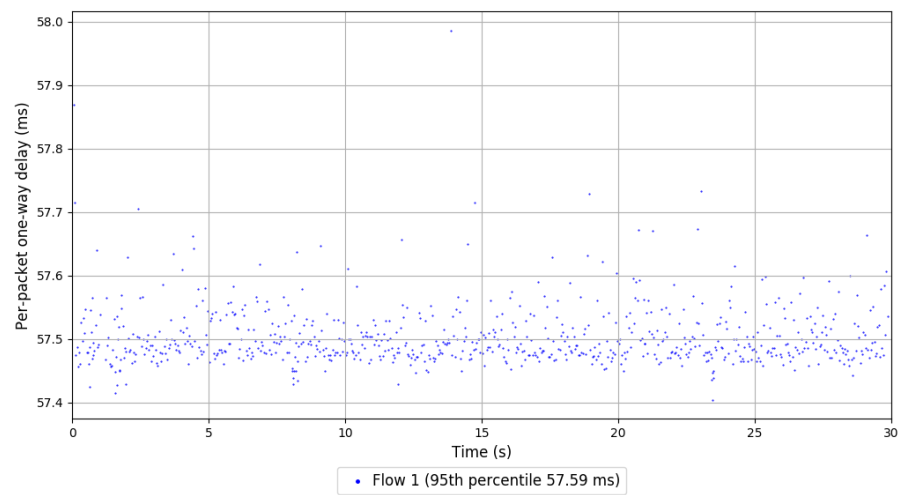
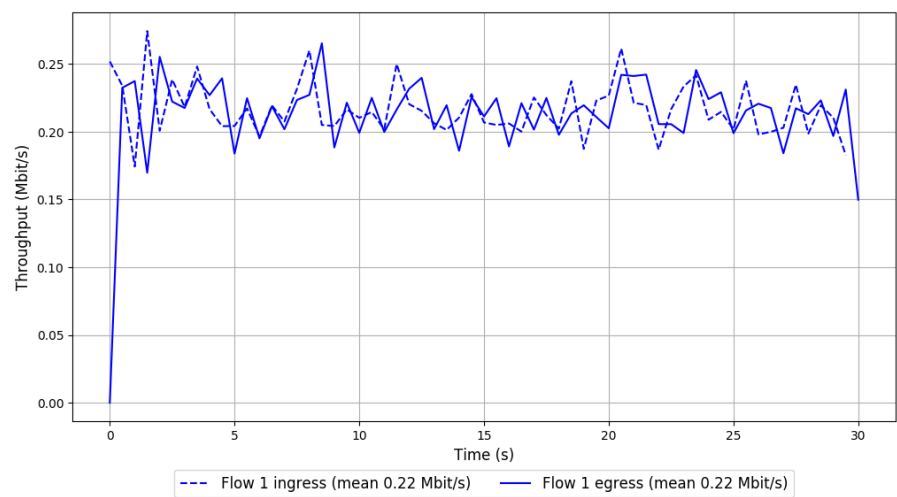


Run 2: Statistics of SCReAM

Start at: 2019-01-19 16:52:02  
End at: 2019-01-19 16:52:32  
Local clock offset: -0.04 ms  
Remote clock offset: -0.312 ms

# Below is generated by plot.py at 2019-01-19 20:49:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.588 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.588 ms  
Loss rate: 0.38%

Run 2: Report of SReAM — Data Link





Run 3: Statistics of SCReAM

Start at: 2019-01-19 17:25:59

End at: 2019-01-19 17:26:29

Local clock offset: 0.281 ms

Remote clock offset: 0.52 ms

# Below is generated by plot.py at 2019-01-19 20:49:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 60.377 ms

Loss rate: 0.38%

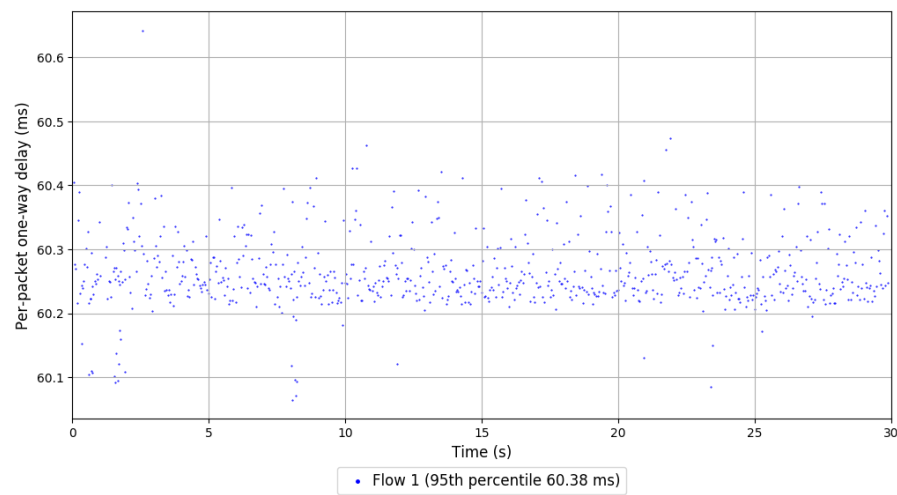
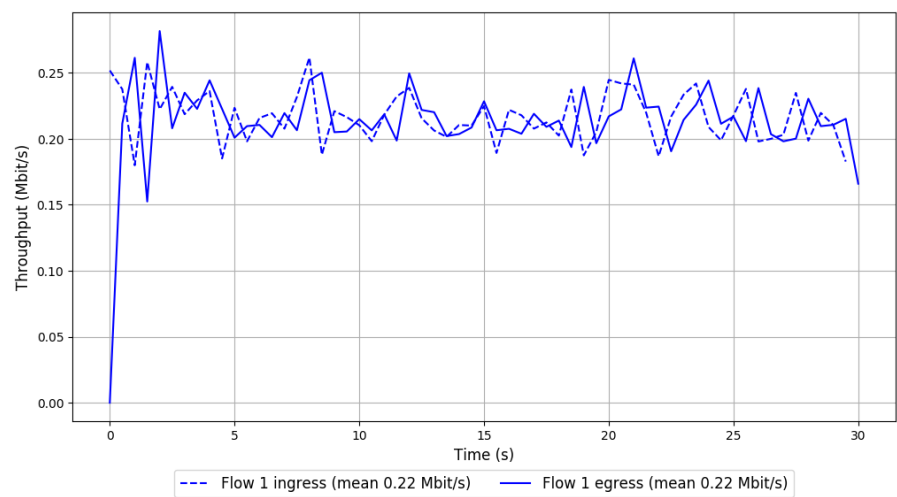
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 60.377 ms

Loss rate: 0.38%

Run 3: Report of SReAM — Data Link

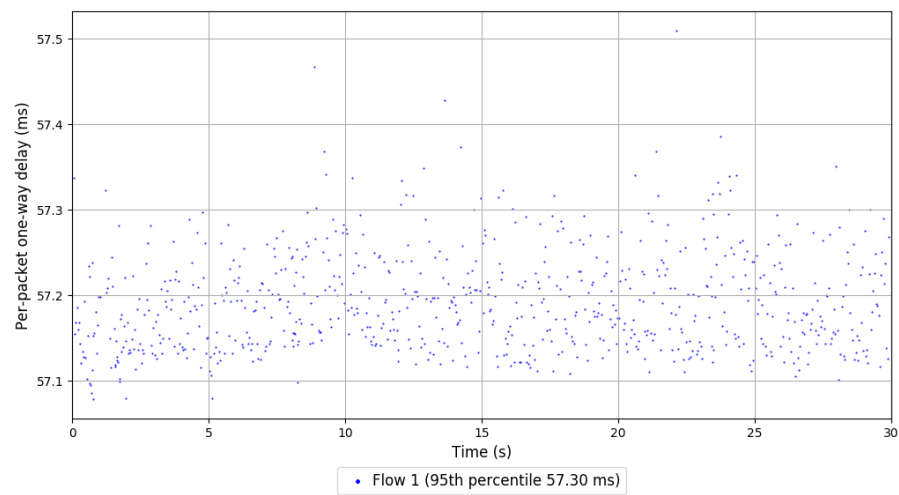
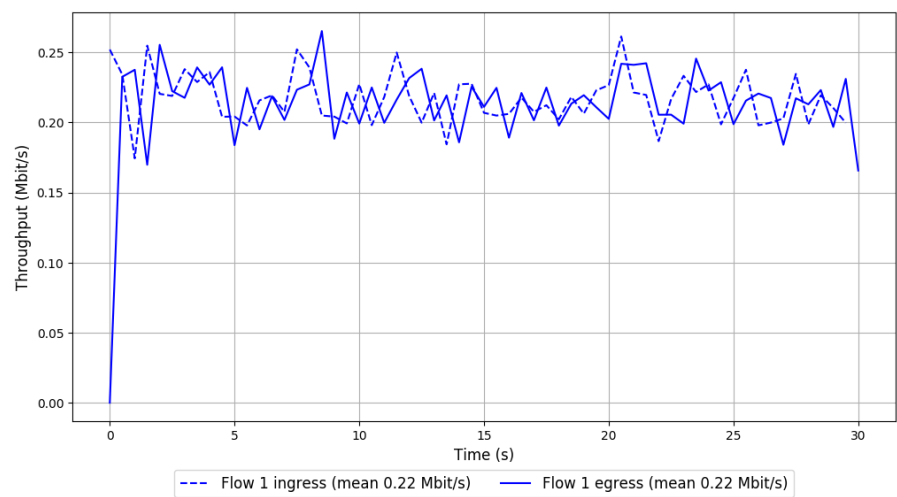


Run 4: Statistics of SCReAM

Start at: 2019-01-19 18:00:37  
End at: 2019-01-19 18:01:07  
Local clock offset: -0.186 ms  
Remote clock offset: -0.625 ms

# Below is generated by plot.py at 2019-01-19 20:49:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.295 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.295 ms  
Loss rate: 0.39%

Run 4: Report of SReAM — Data Link

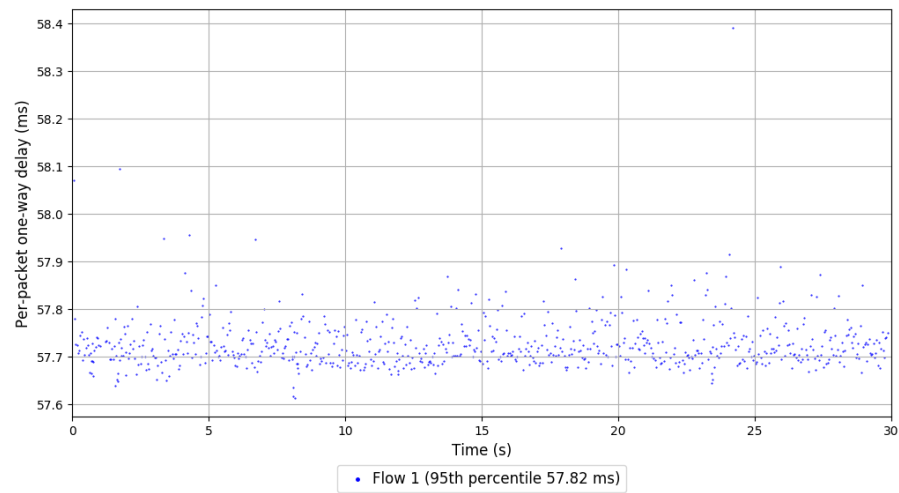
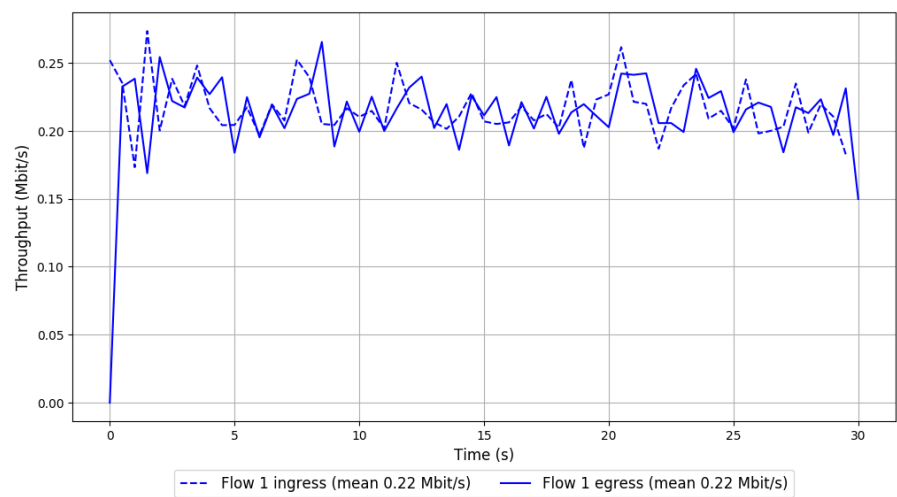


Run 5: Statistics of SCReAM

Start at: 2019-01-19 18:34:47  
End at: 2019-01-19 18:35:17  
Local clock offset: 0.481 ms  
Remote clock offset: -0.422 ms

# Below is generated by plot.py at 2019-01-19 20:49:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.821 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 57.821 ms  
Loss rate: 0.38%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-01-19 16:13:02

End at: 2019-01-19 16:13:32

Local clock offset: 0.081 ms

Remote clock offset: -1.39 ms

# Below is generated by plot.py at 2019-01-19 20:49:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 6.92 Mbit/s

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

Loss rate: 0.50%

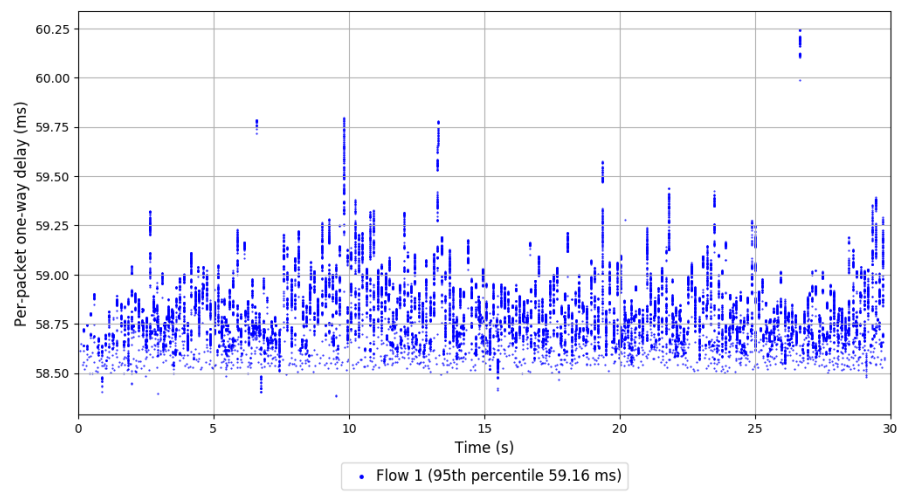
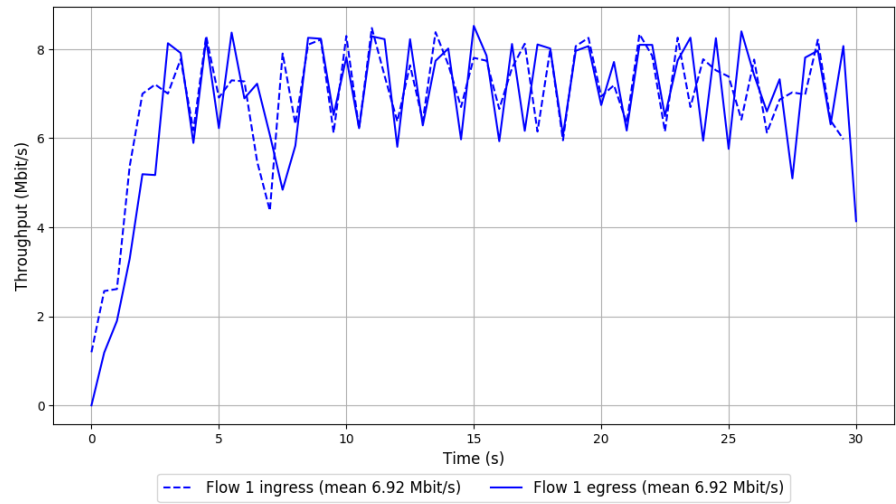
-- Flow 1:

Average throughput: 6.92 Mbit/s

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

Loss rate: 0.50%

# Run 1: Report of Sprout — Data Link



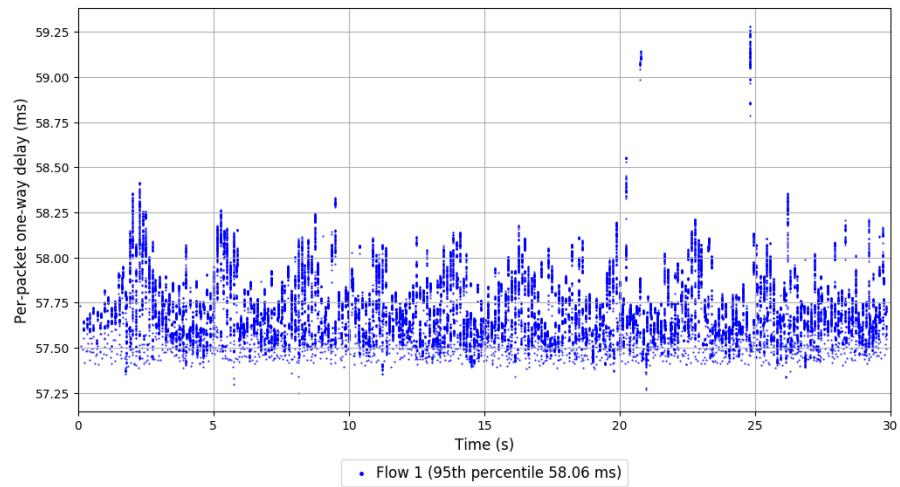
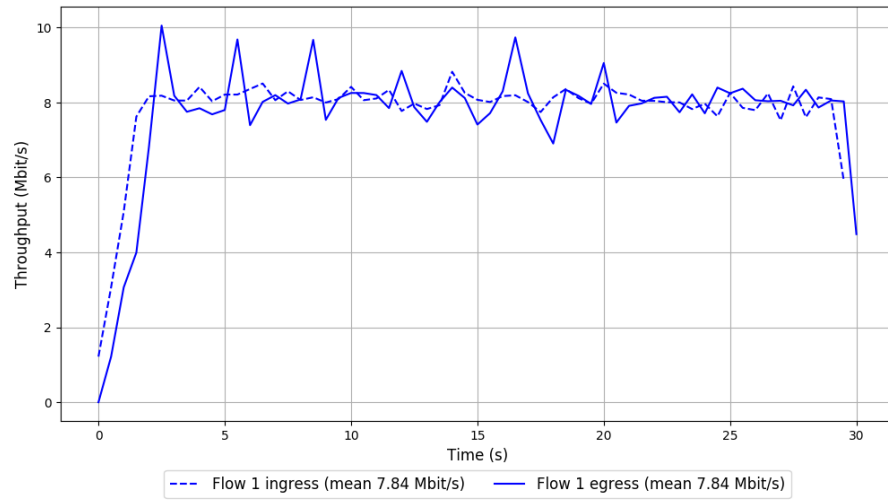


Run 2: Statistics of Sprout

Start at: 2019-01-19 16:46:59  
End at: 2019-01-19 16:47:29  
Local clock offset: 0.126 ms  
Remote clock offset: -0.369 ms

# Below is generated by plot.py at 2019-01-19 20:49:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 7.84 Mbit/s  
95th percentile per-packet one-way delay: 58.065 ms  
Loss rate: 0.34%  
-- Flow 1:  
Average throughput: 7.84 Mbit/s  
95th percentile per-packet one-way delay: 58.065 ms  
Loss rate: 0.34%

## Run 2: Report of Sprout — Data Link

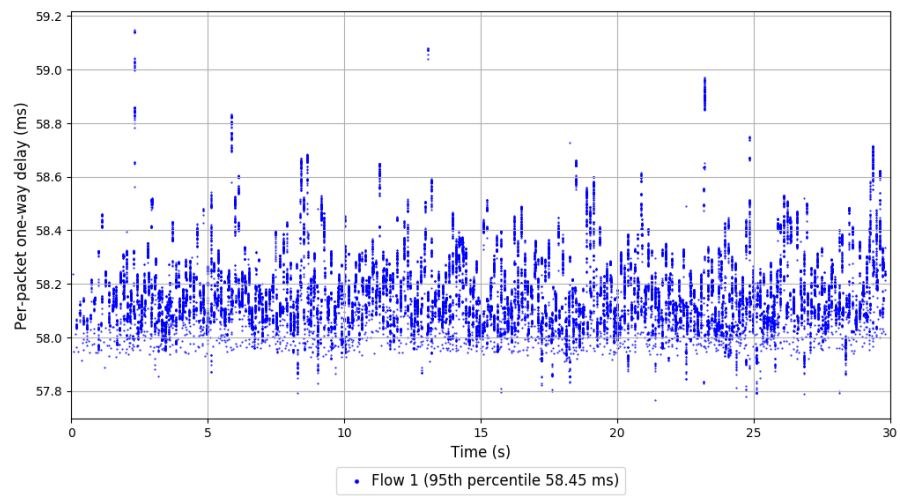
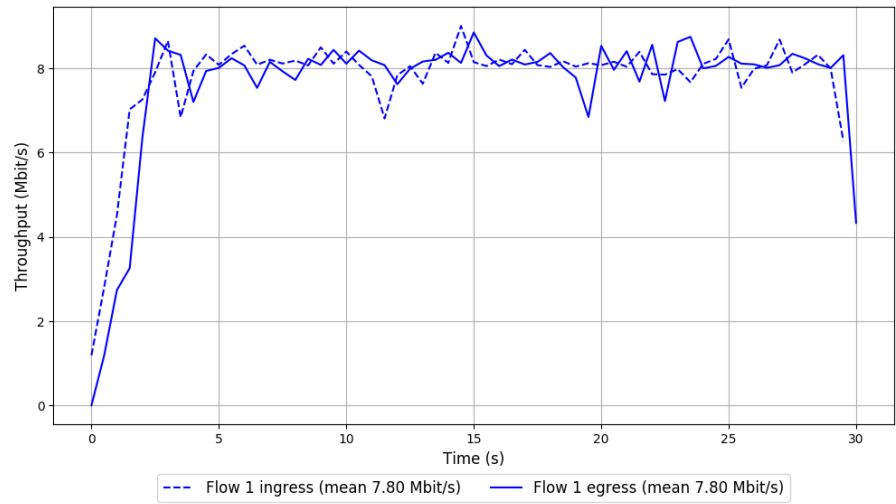


Run 3: Statistics of Sprout

Start at: 2019-01-19 17:20:50  
End at: 2019-01-19 17:21:20  
Local clock offset: 0.053 ms  
Remote clock offset: -0.422 ms

# Below is generated by plot.py at 2019-01-19 20:49:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 7.80 Mbit/s  
95th percentile per-packet one-way delay: 58.447 ms  
Loss rate: 0.42%  
-- Flow 1:  
Average throughput: 7.80 Mbit/s  
95th percentile per-packet one-way delay: 58.447 ms  
Loss rate: 0.42%

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

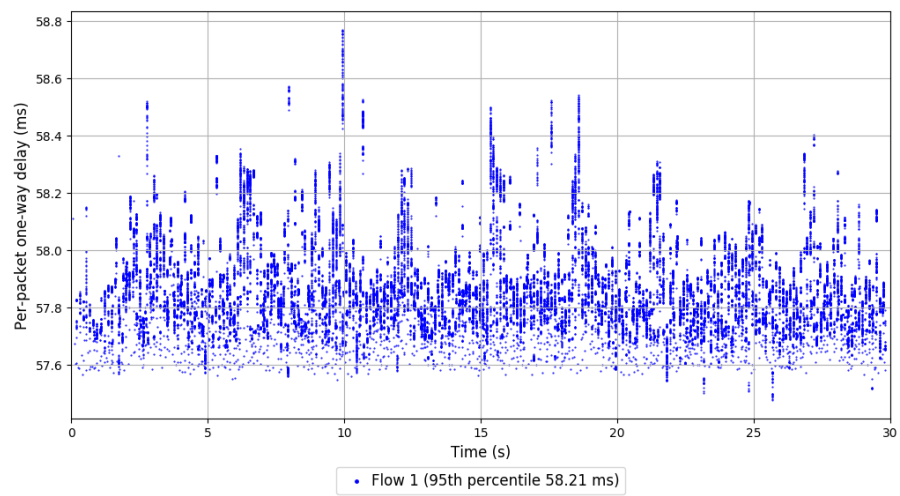
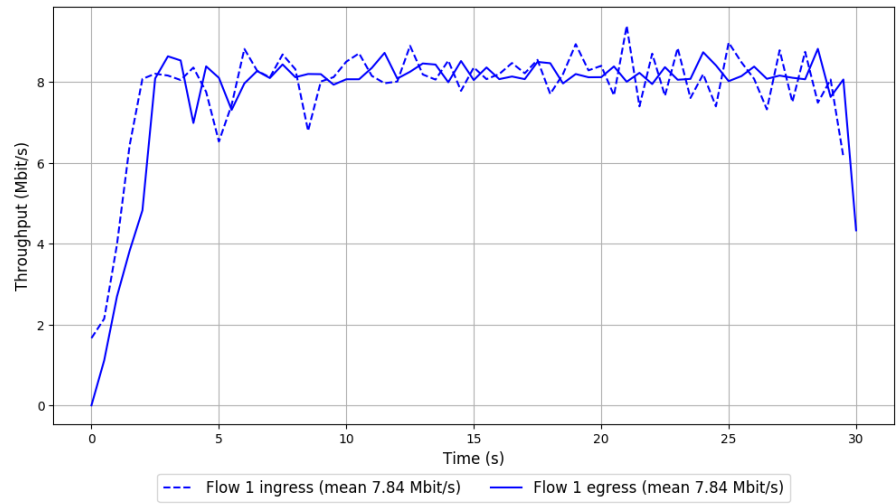


Run 4: Statistics of Sprout

Start at: 2019-01-19 17:55:34  
End at: 2019-01-19 17:56:04  
Local clock offset: -0.36 ms  
Remote clock offset: -0.802 ms

# Below is generated by plot.py at 2019-01-19 20:49:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 7.84 Mbit/s  
95th percentile per-packet one-way delay: 58.210 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 7.84 Mbit/s  
95th percentile per-packet one-way delay: 58.210 ms  
Loss rate: 0.39%

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

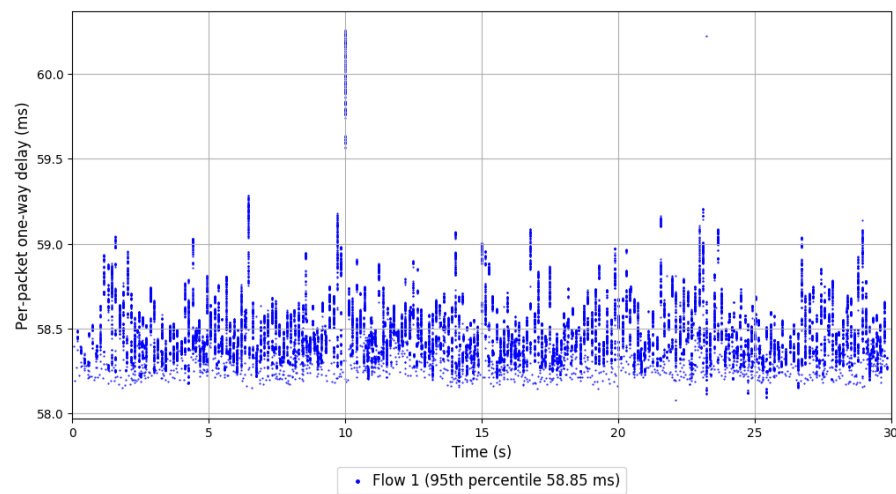
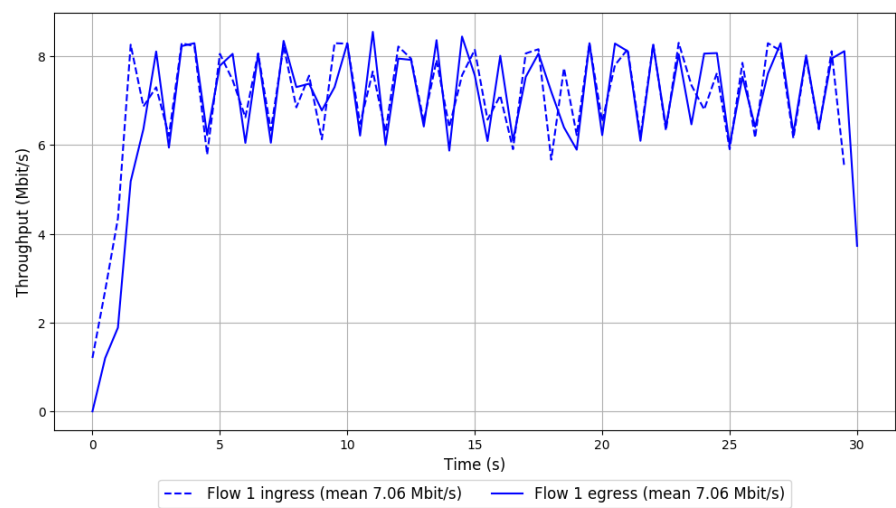


Run 5: Statistics of Sprout

Start at: 2019-01-19 18:29:38  
End at: 2019-01-19 18:30:08  
Local clock offset: 0.092 ms  
Remote clock offset: -0.862 ms

# Below is generated by plot.py at 2019-01-19 20:49:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 7.06 Mbit/s  
95th percentile per-packet one-way delay: 58.847 ms  
Loss rate: 0.42%  
-- Flow 1:  
Average throughput: 7.06 Mbit/s  
95th percentile per-packet one-way delay: 58.847 ms  
Loss rate: 0.42%

Run 5: Report of Sprout — Data Link



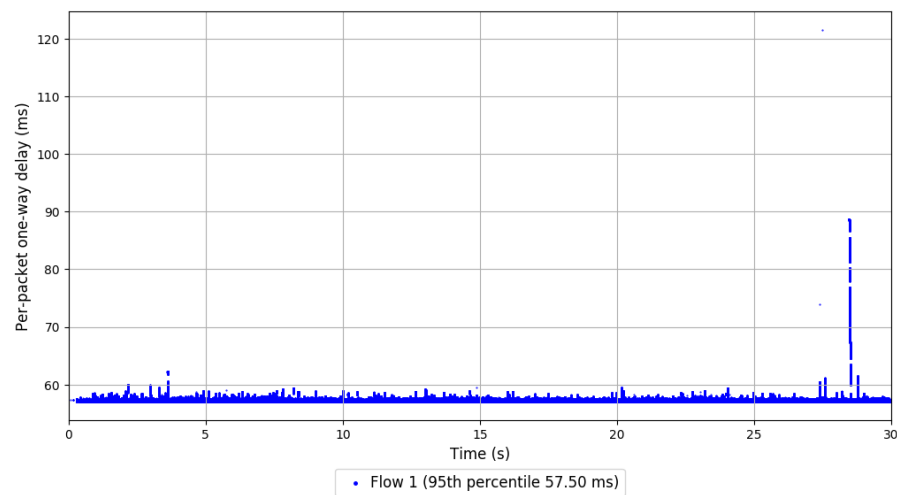
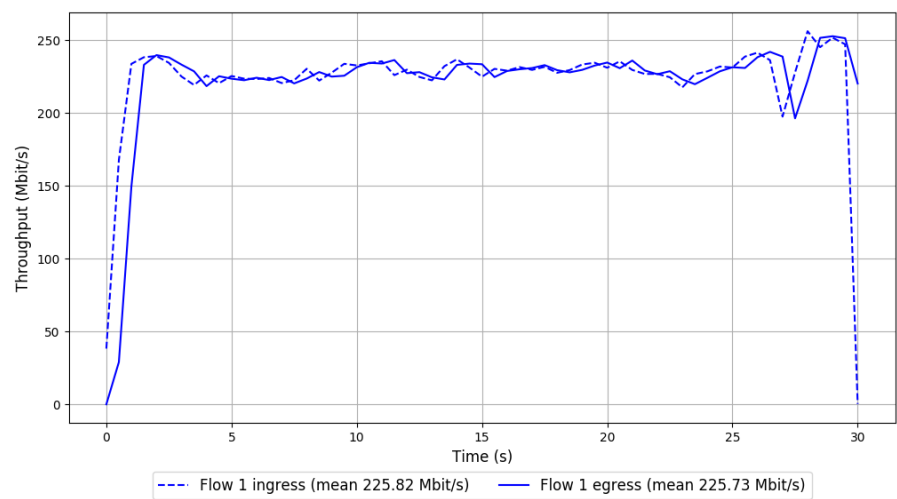


```
Run 1: Statistics of TaoVA-100x

Start at: 2019-01-19 16:16:31
End at: 2019-01-19 16:17:01
Local clock offset: -0.009 ms
Remote clock offset: -0.463 ms

# Below is generated by plot.py at 2019-01-19 20:49:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.73 Mbit/s
95th percentile per-packet one-way delay: 57.504 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 225.73 Mbit/s
95th percentile per-packet one-way delay: 57.504 ms
Loss rate: 0.42%
```

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

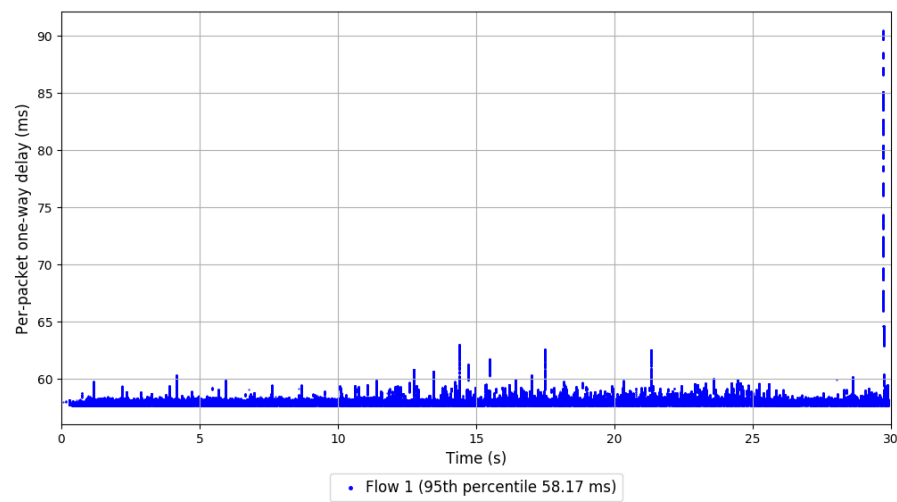
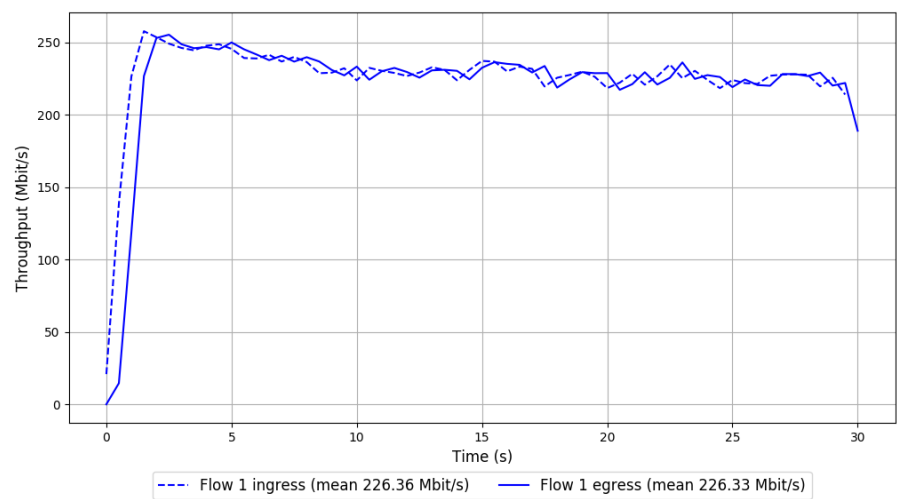


Run 2: Statistics of TaoVA-100x

Start at: 2019-01-19 16:50:27  
End at: 2019-01-19 16:50:57  
Local clock offset: -0.117 ms  
Remote clock offset: -0.839 ms

# Below is generated by plot.py at 2019-01-19 20:50:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 226.33 Mbit/s  
95th percentile per-packet one-way delay: 58.171 ms  
Loss rate: 0.40%  
-- Flow 1:  
Average throughput: 226.33 Mbit/s  
95th percentile per-packet one-way delay: 58.171 ms  
Loss rate: 0.40%

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

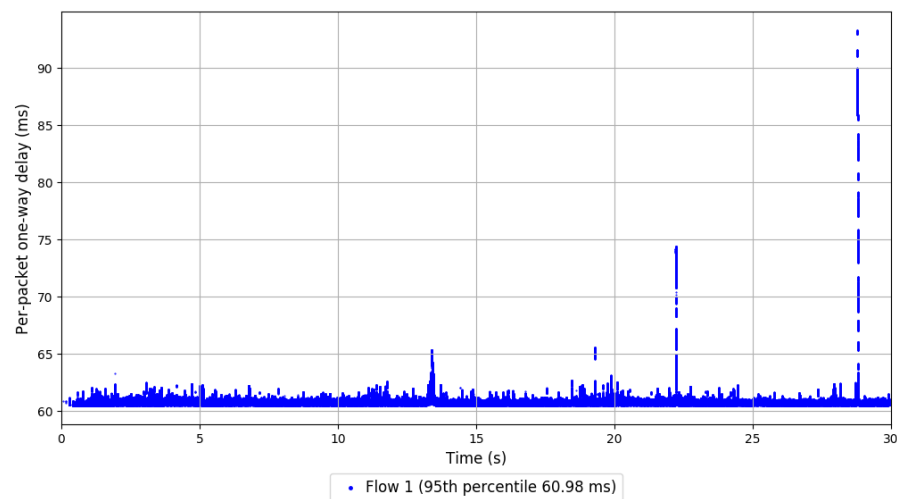
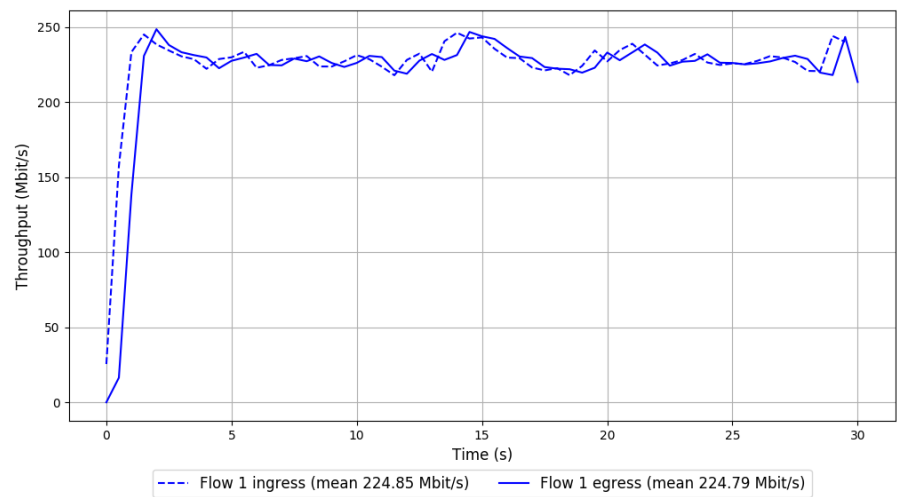


Run 3: Statistics of TaoVA-100x

Start at: 2019-01-19 17:24:18  
End at: 2019-01-19 17:24:48  
Local clock offset: -0.192 ms  
Remote clock offset: -0.292 ms

# Below is generated by plot.py at 2019-01-19 20:50:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 224.79 Mbit/s  
95th percentile per-packet one-way delay: 60.975 ms  
Loss rate: 0.42%  
-- Flow 1:  
Average throughput: 224.79 Mbit/s  
95th percentile per-packet one-way delay: 60.975 ms  
Loss rate: 0.42%

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

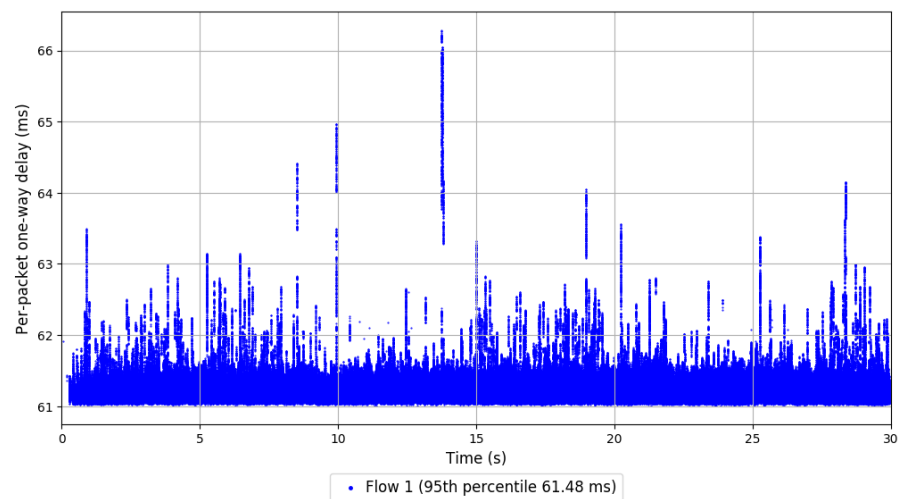
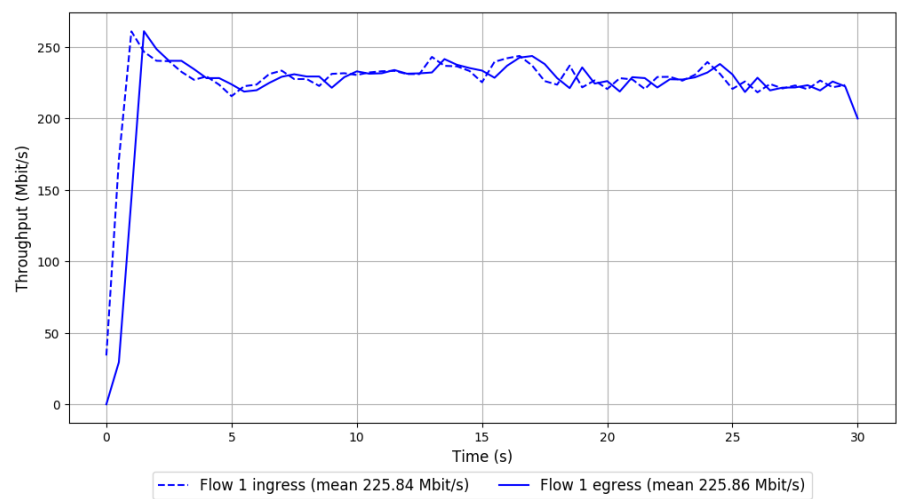


Run 4: Statistics of TaoVA-100x

Start at: 2019-01-19 17:59:02  
End at: 2019-01-19 17:59:32  
Local clock offset: 0.069 ms  
Remote clock offset: -0.811 ms

# Below is generated by plot.py at 2019-01-19 20:50:05  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 225.86 Mbit/s  
95th percentile per-packet one-way delay: 61.482 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 225.86 Mbit/s  
95th percentile per-packet one-way delay: 61.482 ms  
Loss rate: 0.39%

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





Run 5: Statistics of TaoVA-100x

Start at: 2019-01-19 18:33:06

End at: 2019-01-19 18:33:36

Local clock offset: 0.321 ms

Remote clock offset: 0.585 ms

# Below is generated by plot.py at 2019-01-19 20:50:31

# Datalink statistics

-- Total of 1 flow:

Average throughput: 232.12 Mbit/s

95th percentile per-packet one-way delay: 56.671 ms

Loss rate: 0.38%

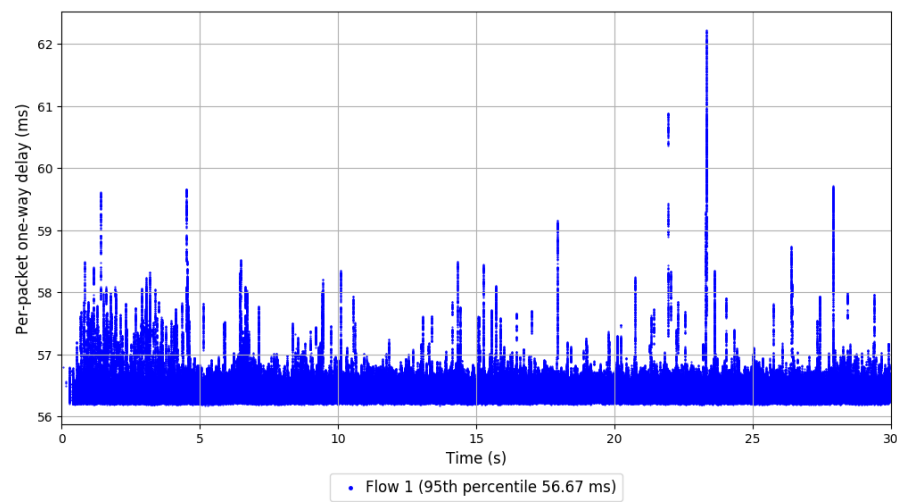
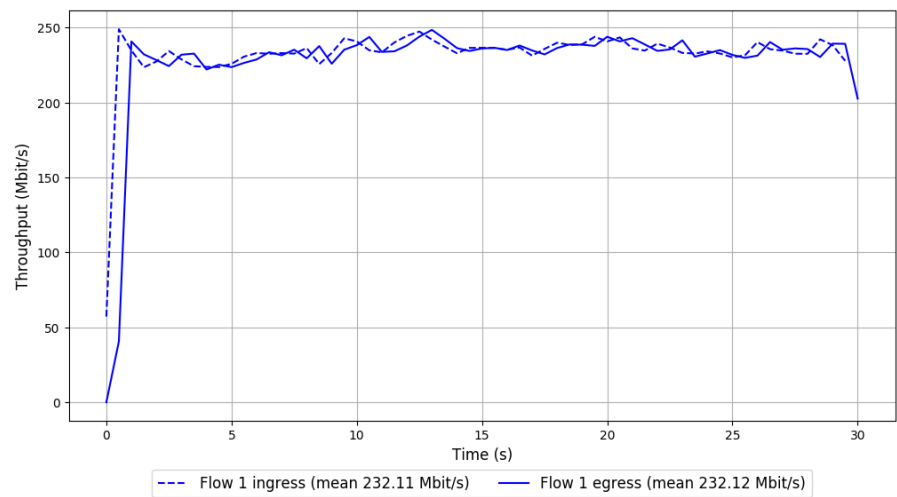
-- Flow 1:

Average throughput: 232.12 Mbit/s

95th percentile per-packet one-way delay: 56.671 ms

Loss rate: 0.38%

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

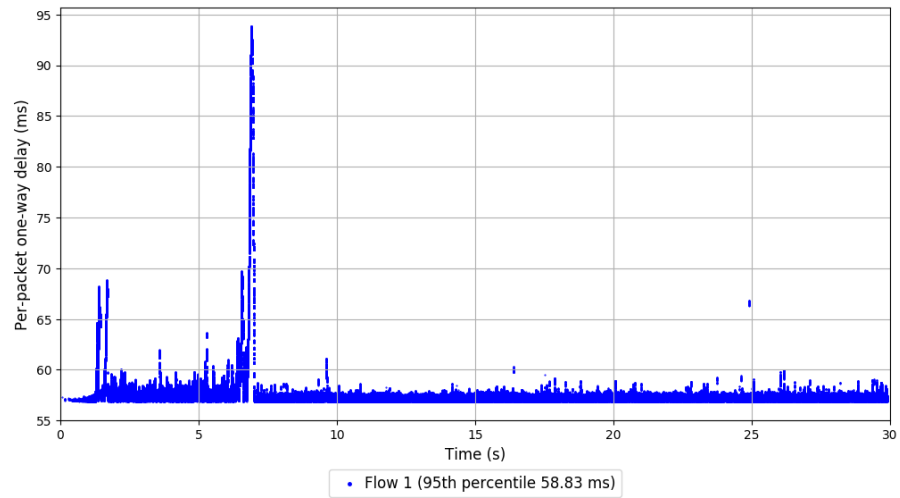
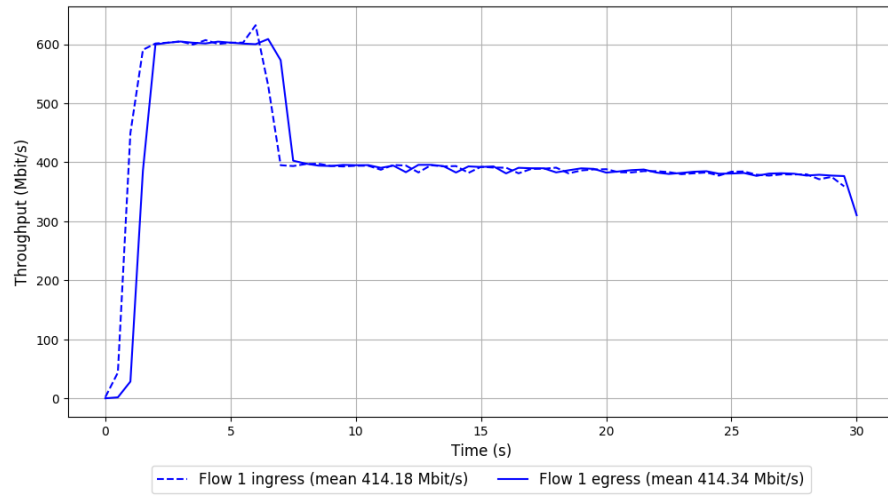


Run 1: Statistics of TCP Vegas

Start at: 2019-01-19 16:19:18  
End at: 2019-01-19 16:19:48  
Local clock offset: 0.026 ms  
Remote clock offset: -0.254 ms

# Below is generated by plot.py at 2019-01-19 20:52:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 414.34 Mbit/s  
95th percentile per-packet one-way delay: 58.829 ms  
Loss rate: 0.35%  
-- Flow 1:  
Average throughput: 414.34 Mbit/s  
95th percentile per-packet one-way delay: 58.829 ms  
Loss rate: 0.35%

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

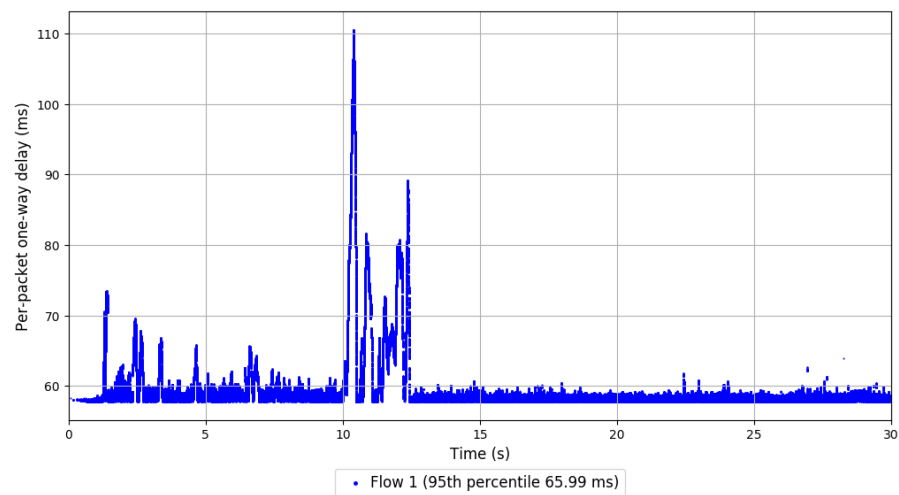
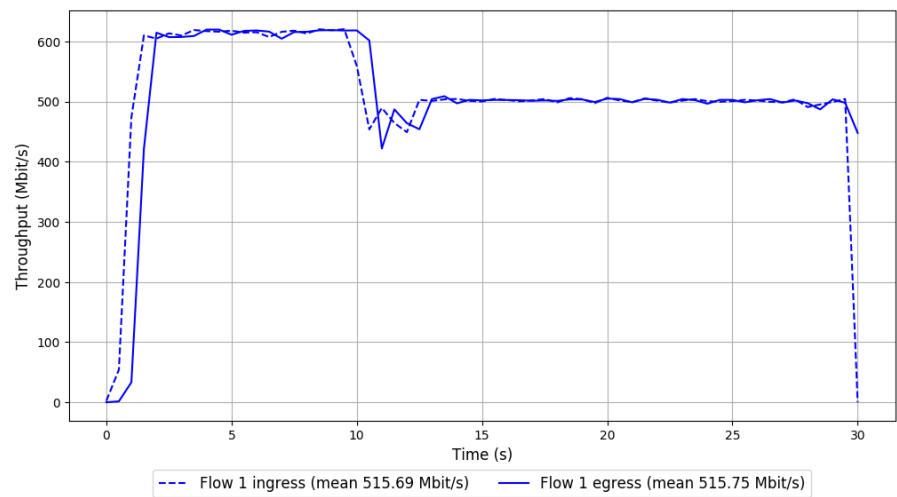


Run 2: Statistics of TCP Vegas

Start at: 2019-01-19 16:53:10  
End at: 2019-01-19 16:53:40  
Local clock offset: -0.58 ms  
Remote clock offset: -1.387 ms

# Below is generated by plot.py at 2019-01-19 20:59:15  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 515.75 Mbit/s  
95th percentile per-packet one-way delay: 65.993 ms  
Loss rate: 0.37%  
-- Flow 1:  
Average throughput: 515.75 Mbit/s  
95th percentile per-packet one-way delay: 65.993 ms  
Loss rate: 0.37%

Run 2: Report of TCP Vegas — Data Link



Run 3: Statistics of TCP Vegas

Start at: 2019-01-19 17:27:07

End at: 2019-01-19 17:27:37

Local clock offset: 0.149 ms

Remote clock offset: 0.15 ms

# Below is generated by plot.py at 2019-01-19 20:59:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 472.46 Mbit/s

95th percentile per-packet one-way delay: 61.343 ms

Loss rate: 0.41%

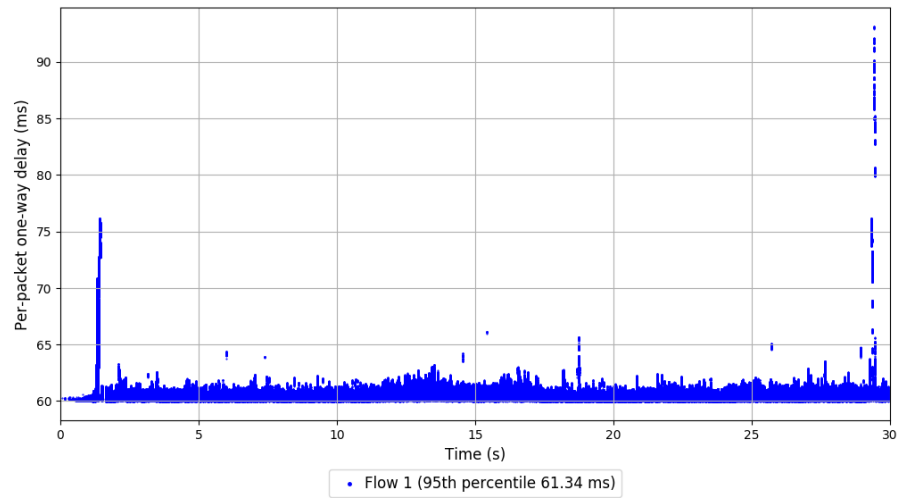
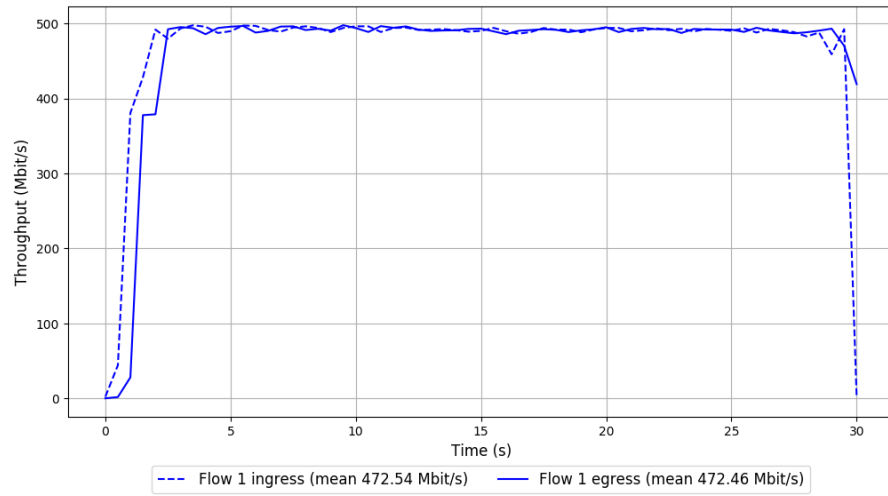
-- Flow 1:

Average throughput: 472.46 Mbit/s

95th percentile per-packet one-way delay: 61.343 ms

Loss rate: 0.41%

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





Run 4: Statistics of TCP Vegas

Start at: 2019-01-19 18:01:45

End at: 2019-01-19 18:02:15

Local clock offset: 0.253 ms

Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2019-01-19 20:59:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 390.44 Mbit/s

95th percentile per-packet one-way delay: 67.521 ms

Loss rate: 0.40%

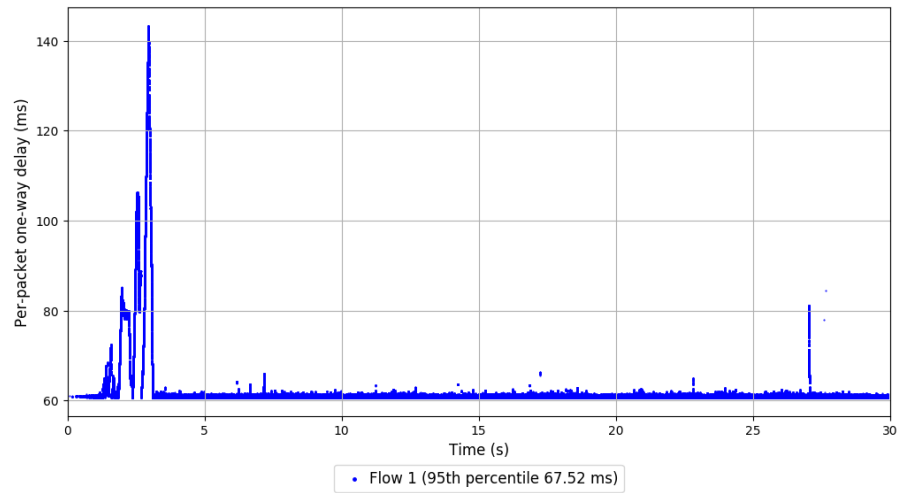
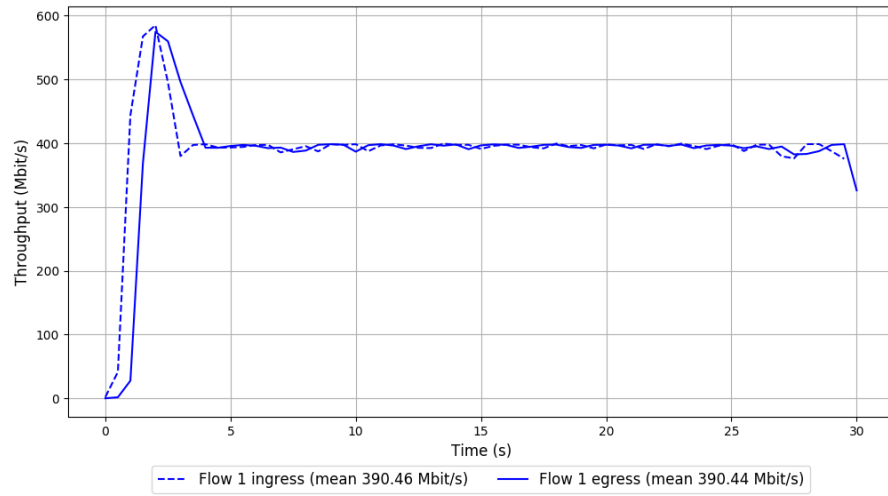
-- Flow 1:

Average throughput: 390.44 Mbit/s

95th percentile per-packet one-way delay: 67.521 ms

Loss rate: 0.40%

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



Run 5: Statistics of TCP Vegas

Start at: 2019-01-19 18:35:55

End at: 2019-01-19 18:36:25

Local clock offset: 0.254 ms

Remote clock offset: 0.47 ms

# Below is generated by plot.py at 2019-01-19 20:59:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 329.92 Mbit/s

95th percentile per-packet one-way delay: 67.113 ms

Loss rate: 0.30%

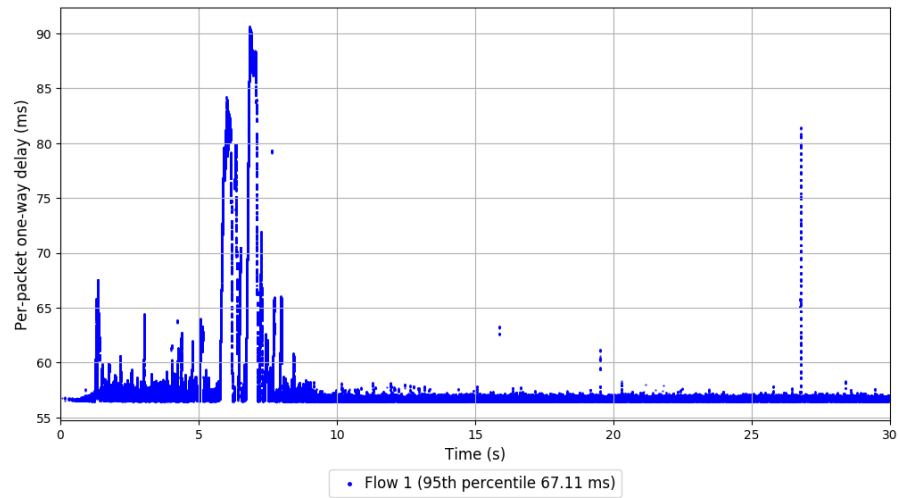
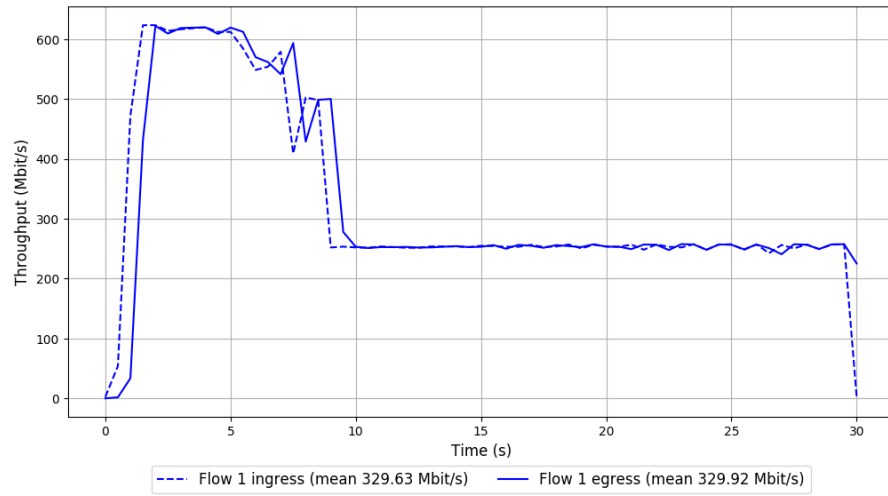
-- Flow 1:

Average throughput: 329.92 Mbit/s

95th percentile per-packet one-way delay: 67.113 ms

Loss rate: 0.30%

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

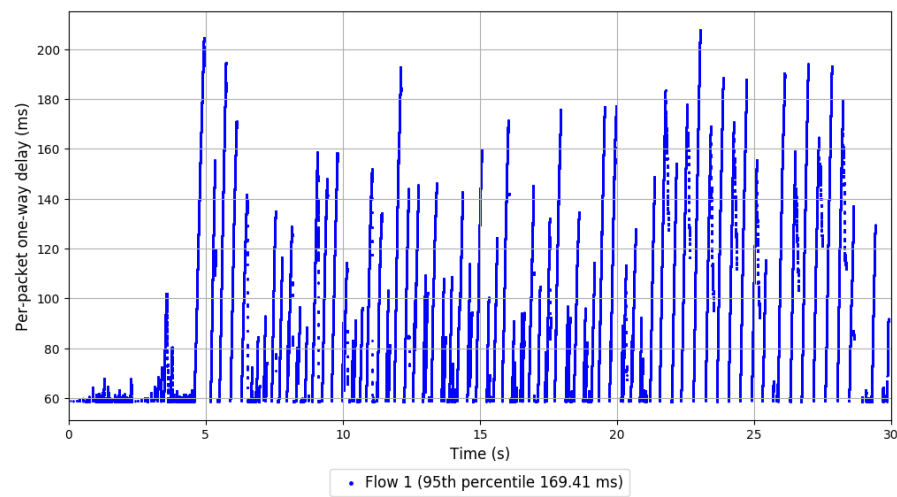
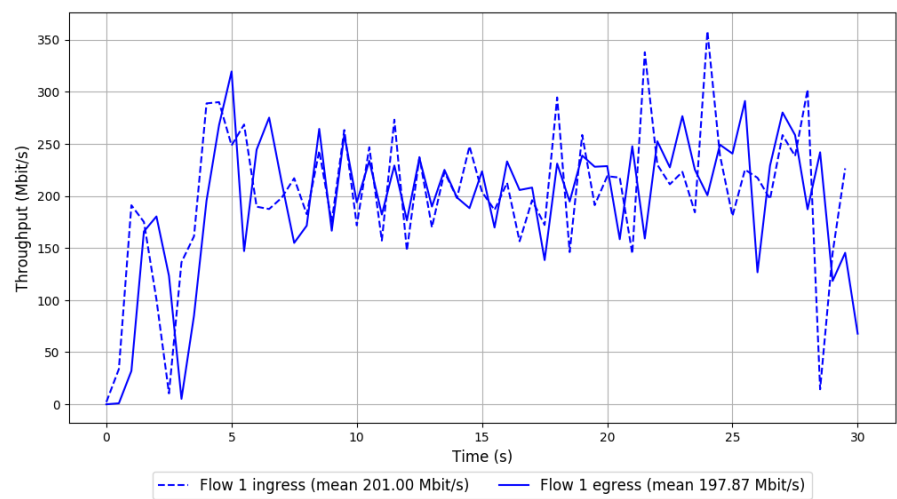


Run 1: Statistics of Verus

Start at: 2019-01-19 16:05:49  
End at: 2019-01-19 16:06:19  
Local clock offset: -0.037 ms  
Remote clock offset: -1.398 ms

# Below is generated by plot.py at 2019-01-19 20:59:15  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 197.87 Mbit/s  
95th percentile per-packet one-way delay: 169.410 ms  
Loss rate: 1.79%  
-- Flow 1:  
Average throughput: 197.87 Mbit/s  
95th percentile per-packet one-way delay: 169.410 ms  
Loss rate: 1.79%

Run 1: Report of Verus — Data Link

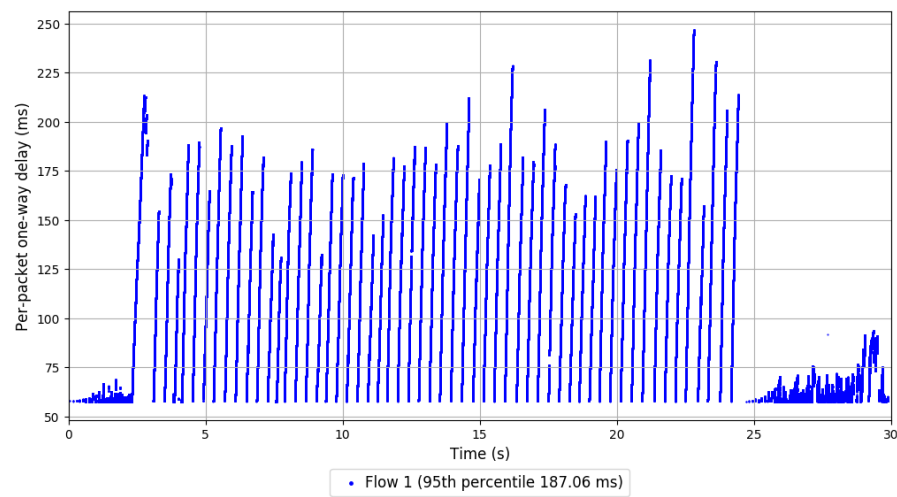
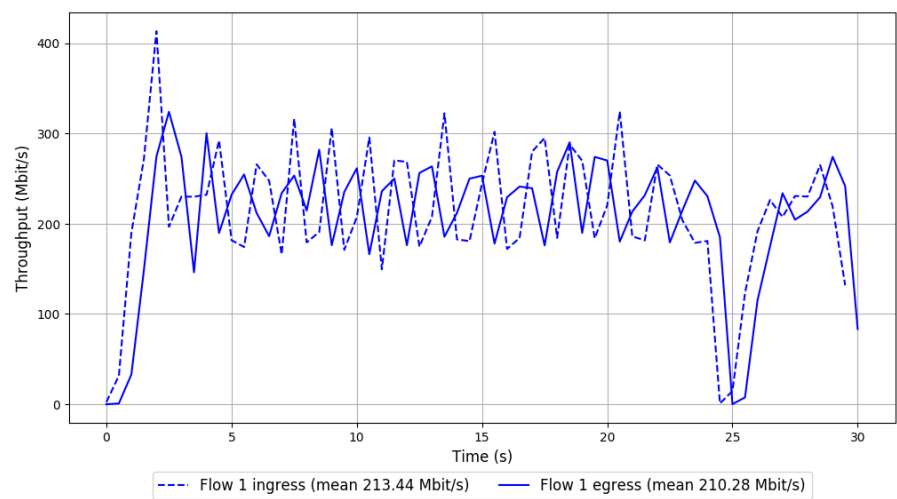


Run 2: Statistics of Verus

Start at: 2019-01-19 16:39:40  
End at: 2019-01-19 16:40:10  
Local clock offset: -0.364 ms  
Remote clock offset: -1.179 ms

# Below is generated by plot.py at 2019-01-19 20:59:15  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 210.28 Mbit/s  
95th percentile per-packet one-way delay: 187.056 ms  
Loss rate: 1.85%  
-- Flow 1:  
Average throughput: 210.28 Mbit/s  
95th percentile per-packet one-way delay: 187.056 ms  
Loss rate: 1.85%

Run 2: Report of Verus — Data Link



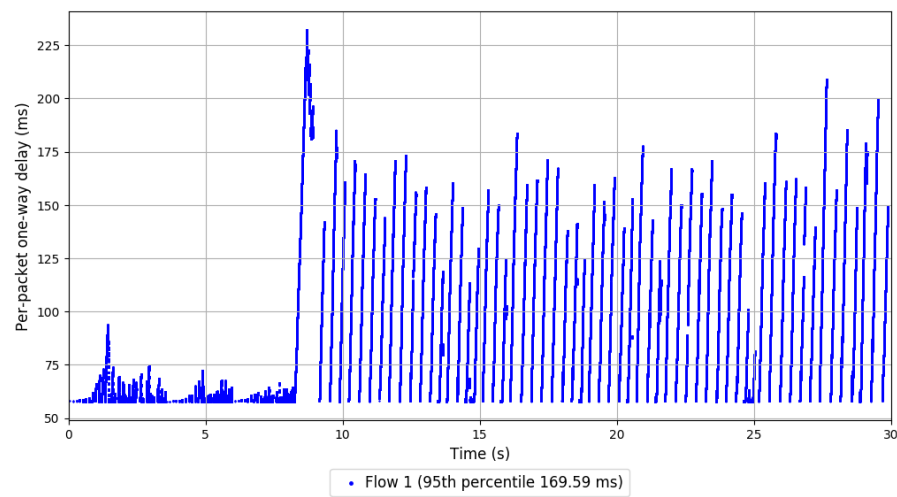
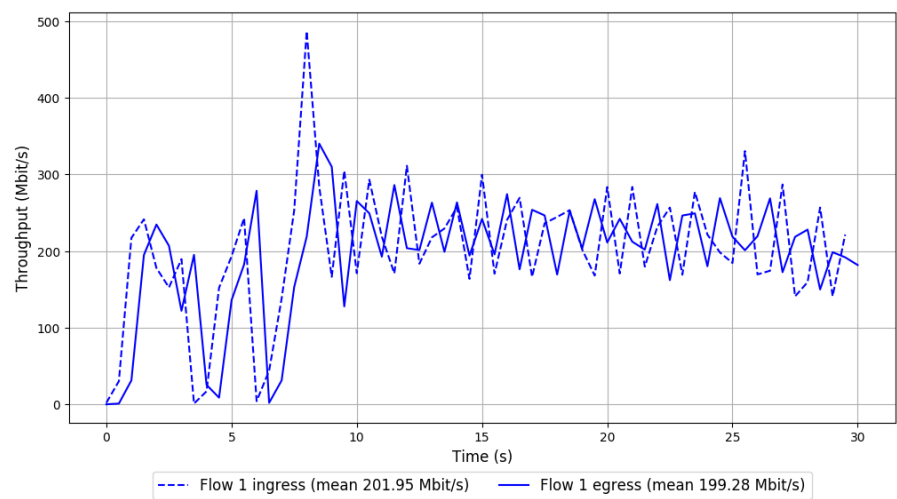


Run 3: Statistics of Verus

Start at: 2019-01-19 17:13:38  
End at: 2019-01-19 17:14:08  
Local clock offset: 0.131 ms  
Remote clock offset: -0.605 ms

# Below is generated by plot.py at 2019-01-19 20:59:15  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 199.28 Mbit/s  
95th percentile per-packet one-way delay: 169.588 ms  
Loss rate: 1.81%  
-- Flow 1:  
Average throughput: 199.28 Mbit/s  
95th percentile per-packet one-way delay: 169.588 ms  
Loss rate: 1.81%

Run 3: Report of Verus — Data Link

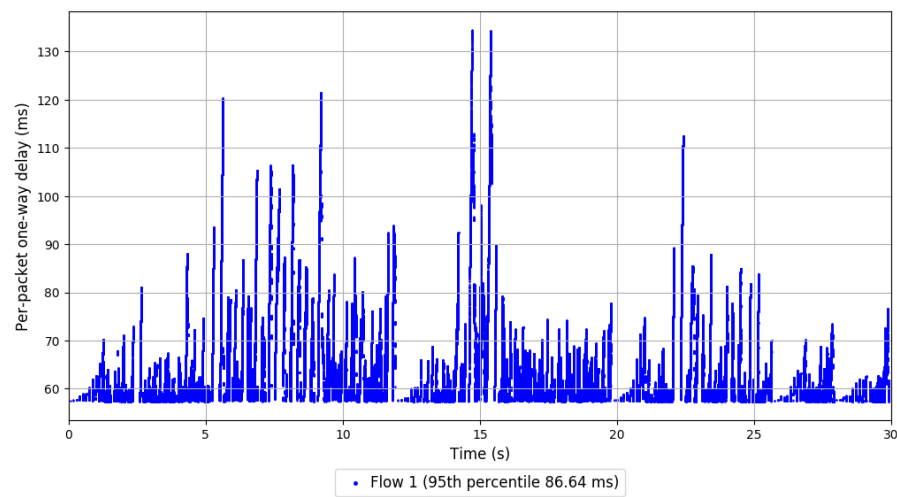
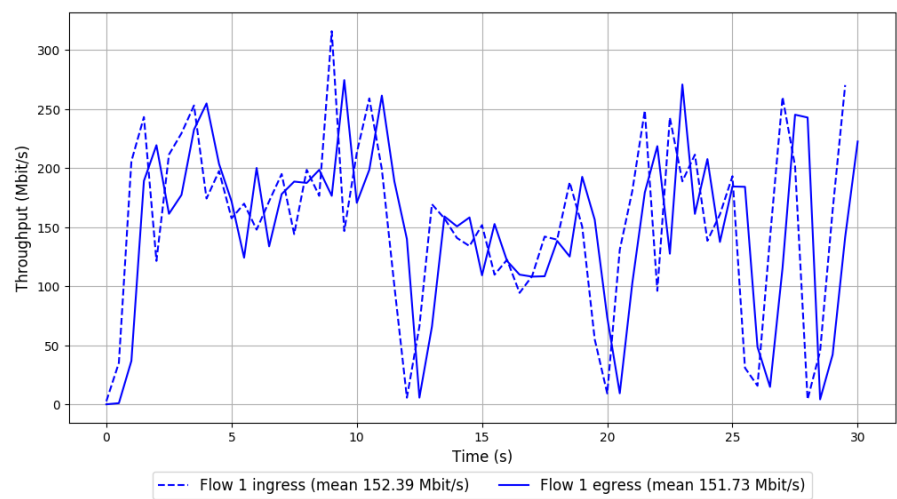


Run 4: Statistics of Verus

Start at: 2019-01-19 17:48:24  
End at: 2019-01-19 17:48:54  
Local clock offset: 0.452 ms  
Remote clock offset: -0.223 ms

# Below is generated by plot.py at 2019-01-19 20:59:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 151.73 Mbit/s  
95th percentile per-packet one-way delay: 86.636 ms  
Loss rate: 0.81%  
-- Flow 1:  
Average throughput: 151.73 Mbit/s  
95th percentile per-packet one-way delay: 86.636 ms  
Loss rate: 0.81%

Run 4: Report of Verus — Data Link

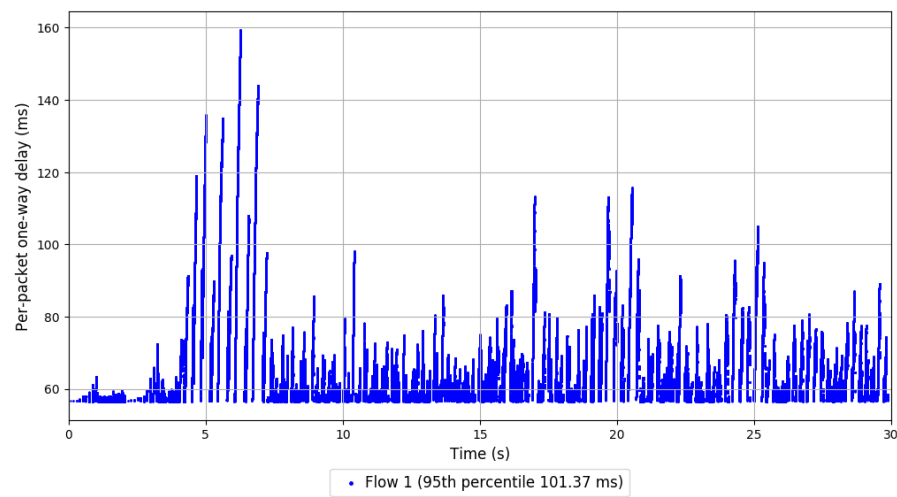
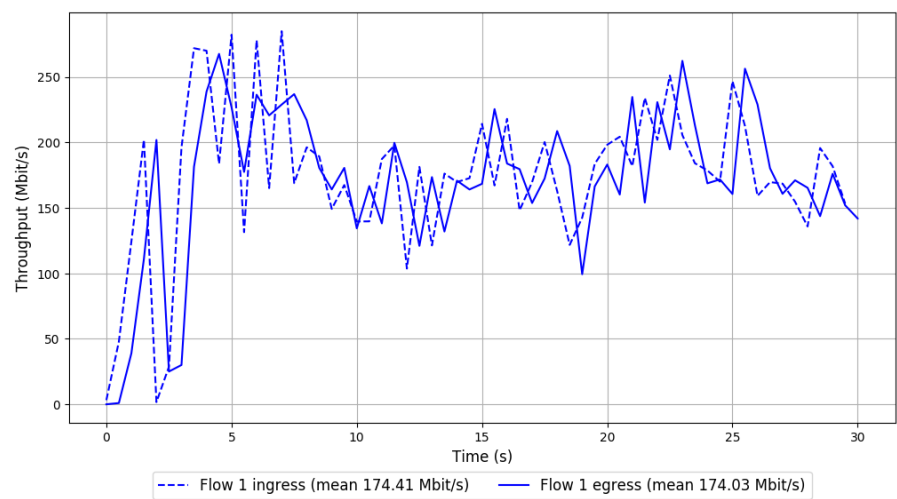


Run 5: Statistics of Verus

Start at: 2019-01-19 18:22:35  
End at: 2019-01-19 18:23:05  
Local clock offset: -0.195 ms  
Remote clock offset: -0.155 ms

# Below is generated by plot.py at 2019-01-19 21:01:41  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 174.03 Mbit/s  
95th percentile per-packet one-way delay: 101.373 ms  
Loss rate: 0.60%  
-- Flow 1:  
Average throughput: 174.03 Mbit/s  
95th percentile per-packet one-way delay: 101.373 ms  
Loss rate: 0.60%

Run 5: Report of Verus — Data Link

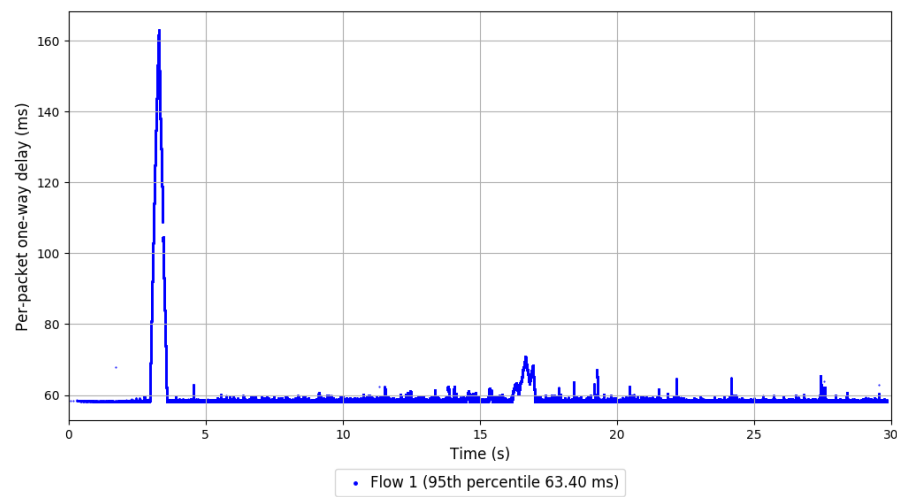
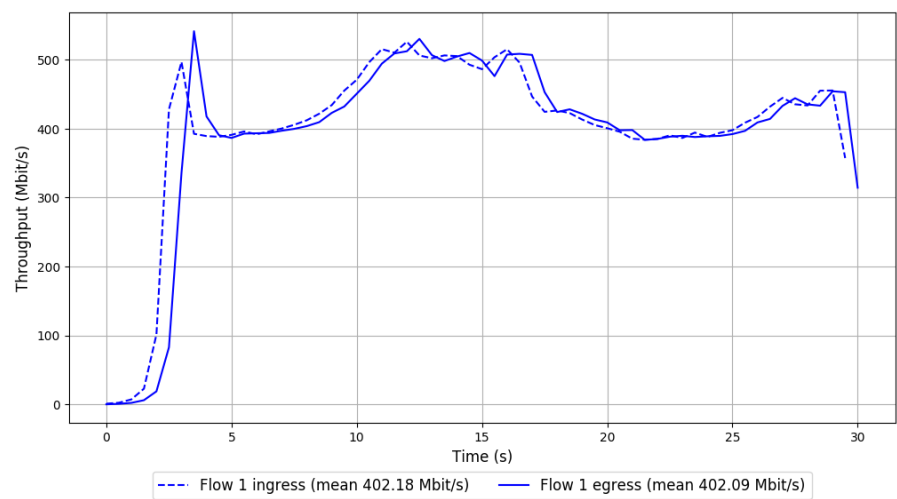


Run 1: Statistics of PCC-Vivace

Start at: 2019-01-19 16:29:13  
End at: 2019-01-19 16:29:43  
Local clock offset: -0.082 ms  
Remote clock offset: -1.404 ms

# Below is generated by plot.py at 2019-01-19 21:04:09  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 402.09 Mbit/s  
95th percentile per-packet one-way delay: 63.396 ms  
Loss rate: 0.40%  
-- Flow 1:  
Average throughput: 402.09 Mbit/s  
95th percentile per-packet one-way delay: 63.396 ms  
Loss rate: 0.40%

Run 1: Report of PCC-Vivace — Data Link





Run 2: Statistics of PCC-Vivace

Start at: 2019-01-19 17:03:02

End at: 2019-01-19 17:03:32

Local clock offset: 0.345 ms

Remote clock offset: -0.248 ms

# Below is generated by plot.py at 2019-01-19 21:04:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 418.76 Mbit/s

95th percentile per-packet one-way delay: 62.104 ms

Loss rate: 0.46%

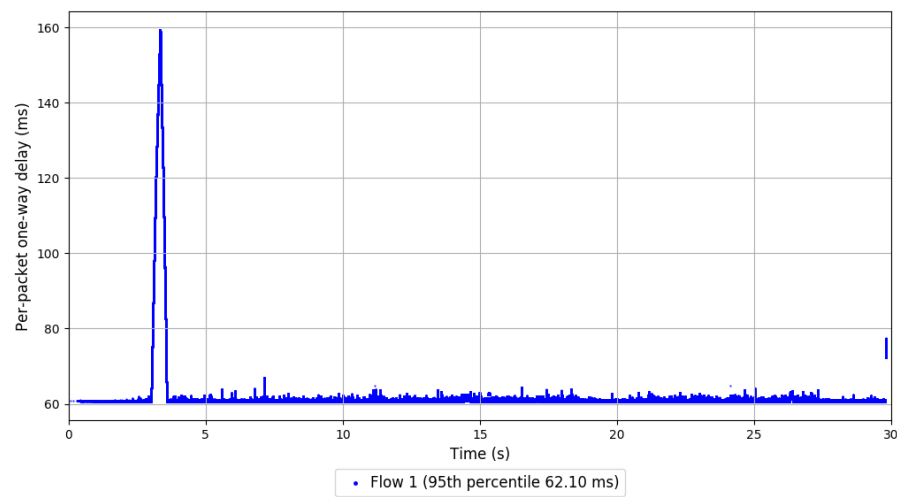
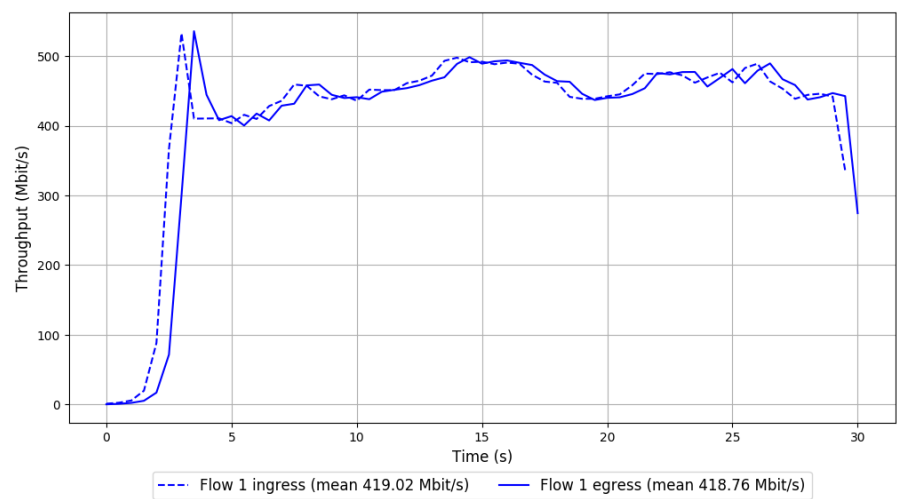
-- Flow 1:

Average throughput: 418.76 Mbit/s

95th percentile per-packet one-way delay: 62.104 ms

Loss rate: 0.46%

Run 2: Report of PCC-Vivace — Data Link

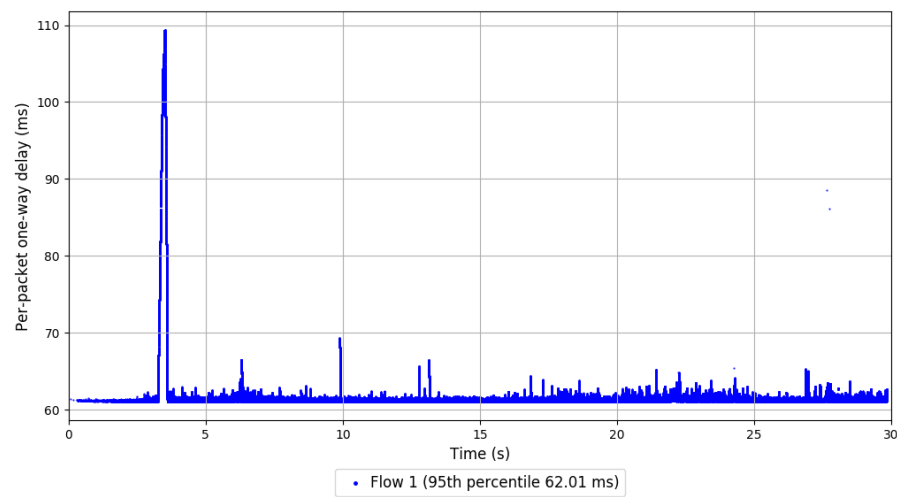
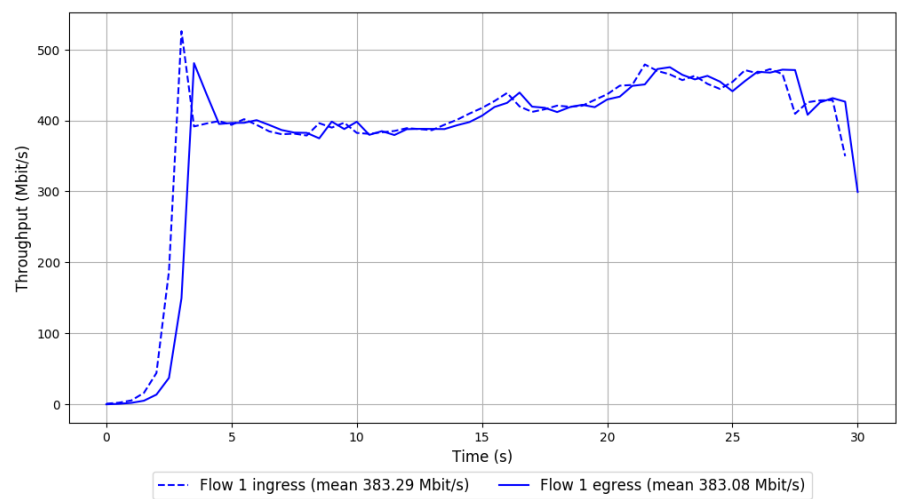


Run 3: Statistics of PCC-Vivace

Start at: 2019-01-19 17:37:43  
End at: 2019-01-19 17:38:13  
Local clock offset: 0.266 ms  
Remote clock offset: -0.673 ms

# Below is generated by plot.py at 2019-01-19 21:04:15  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 383.08 Mbit/s  
95th percentile per-packet one-way delay: 62.008 ms  
Loss rate: 0.45%  
-- Flow 1:  
Average throughput: 383.08 Mbit/s  
95th percentile per-packet one-way delay: 62.008 ms  
Loss rate: 0.45%

Run 3: Report of PCC-Vivace — Data Link

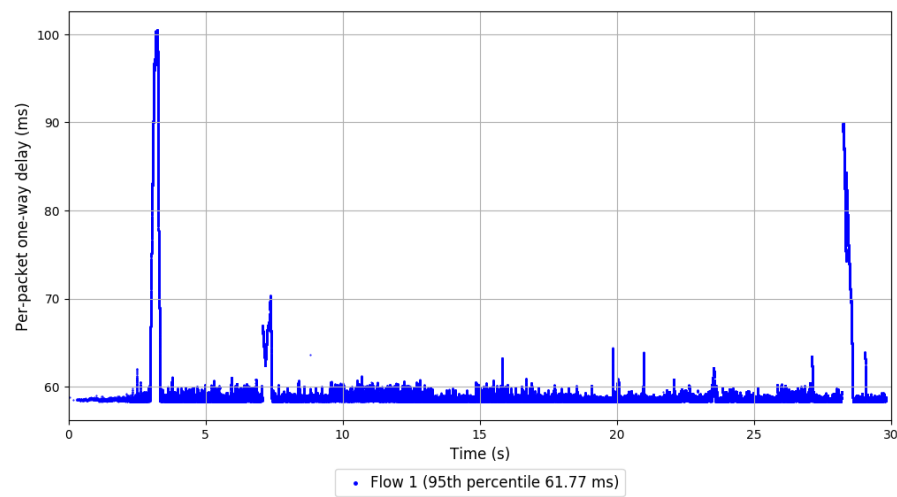
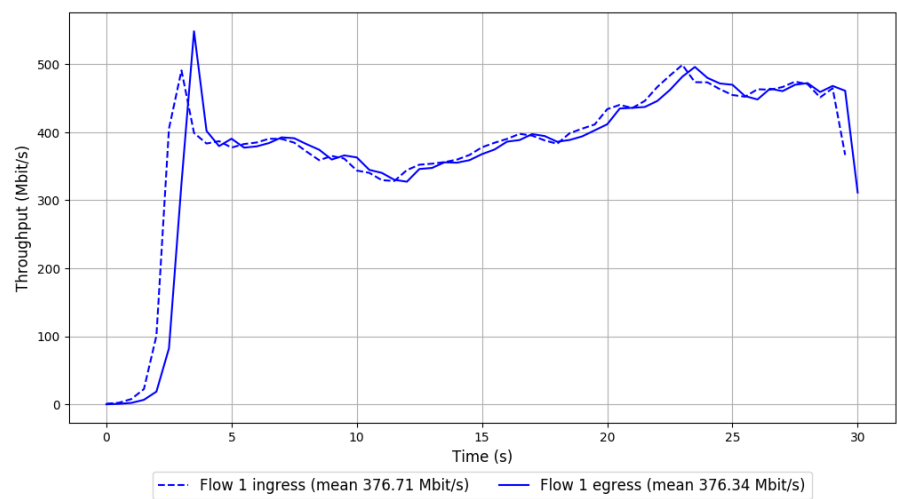


Run 4: Statistics of PCC-Vivace

Start at: 2019-01-19 18:11:50  
End at: 2019-01-19 18:12:20  
Local clock offset: 0.212 ms  
Remote clock offset: -1.374 ms

# Below is generated by plot.py at 2019-01-19 21:04:15  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 376.34 Mbit/s  
95th percentile per-packet one-way delay: 61.769 ms  
Loss rate: 0.49%  
-- Flow 1:  
Average throughput: 376.34 Mbit/s  
95th percentile per-packet one-way delay: 61.769 ms  
Loss rate: 0.49%

Run 4: Report of PCC-Vivace — Data Link

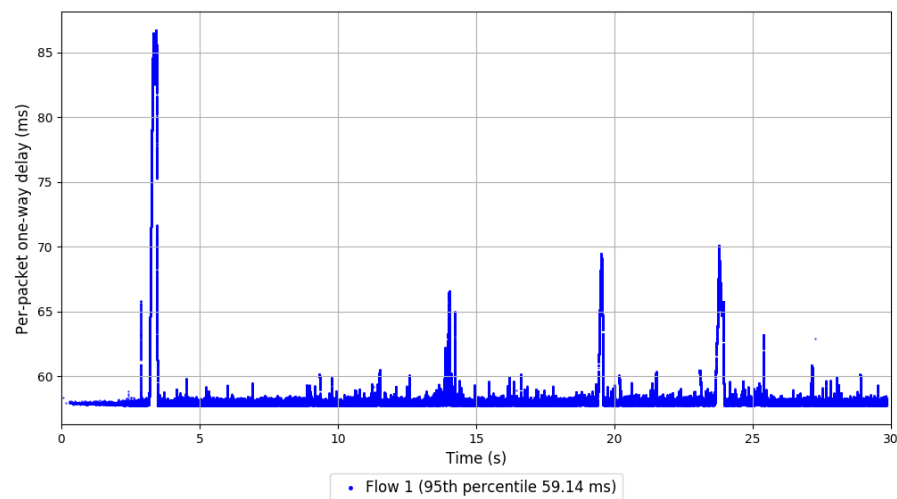
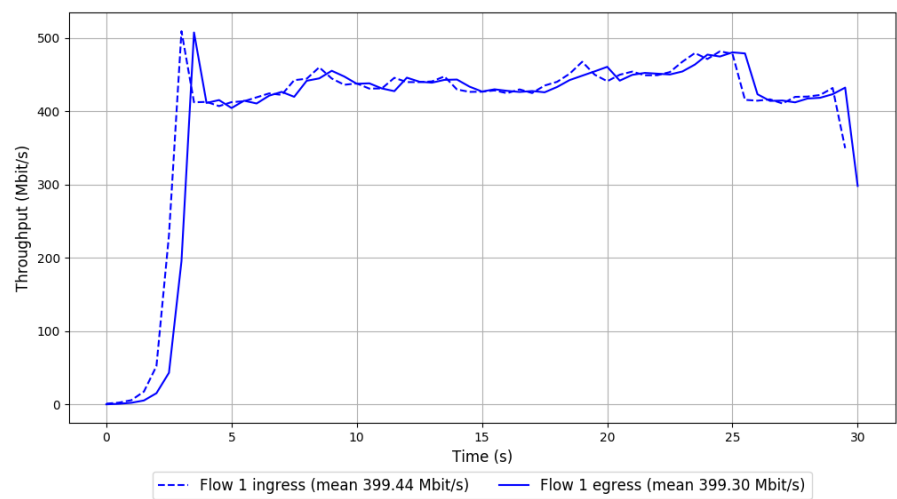


Run 5: Statistics of PCC-Vivace

Start at: 2019-01-19 18:45:59  
End at: 2019-01-19 18:46:29  
Local clock offset: 0.084 ms  
Remote clock offset: -0.825 ms

# Below is generated by plot.py at 2019-01-19 21:04:17  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 399.30 Mbit/s  
95th percentile per-packet one-way delay: 59.141 ms  
Loss rate: 0.42%  
-- Flow 1:  
Average throughput: 399.30 Mbit/s  
95th percentile per-packet one-way delay: 59.141 ms  
Loss rate: 0.42%

Run 5: Report of PCC-Vivace — Data Link





Run 1: Statistics of WebRTC media

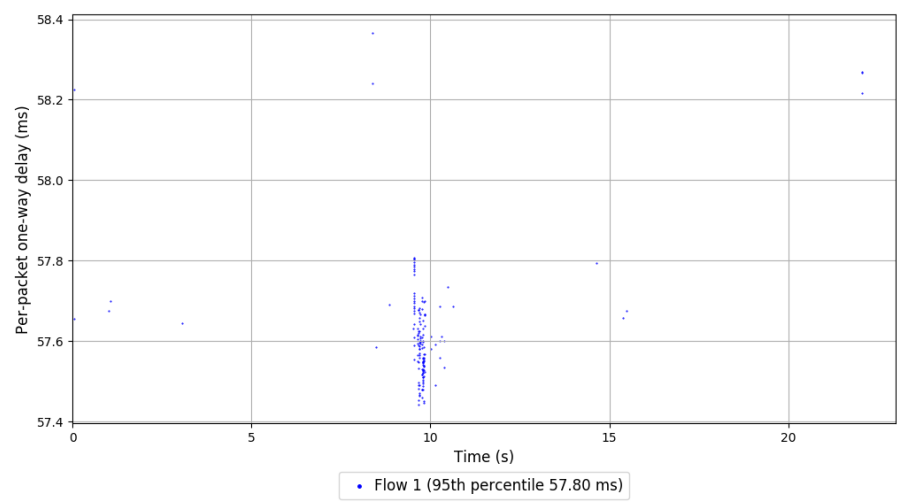
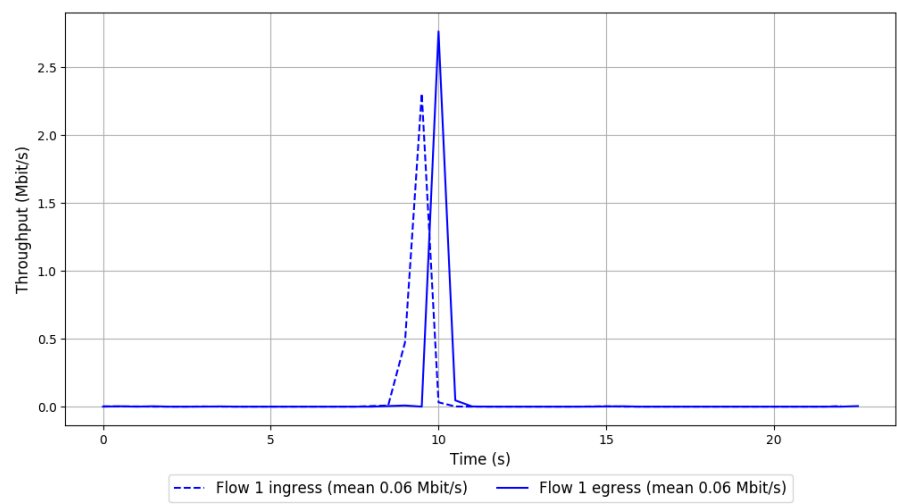
Start at: 2019-01-19 16:14:10

End at: 2019-01-19 16:14:40

Local clock offset: -0.209 ms

Remote clock offset: -0.778 ms

Run 1: Report of WebRTC media — Data Link

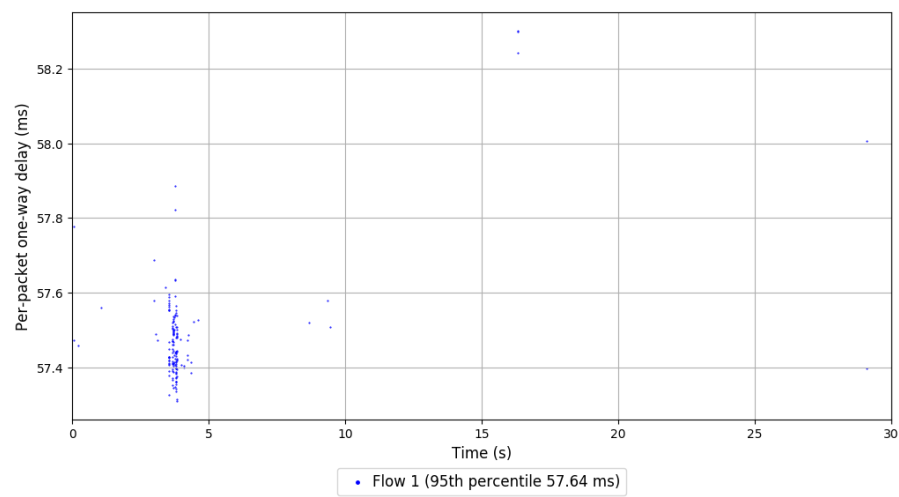
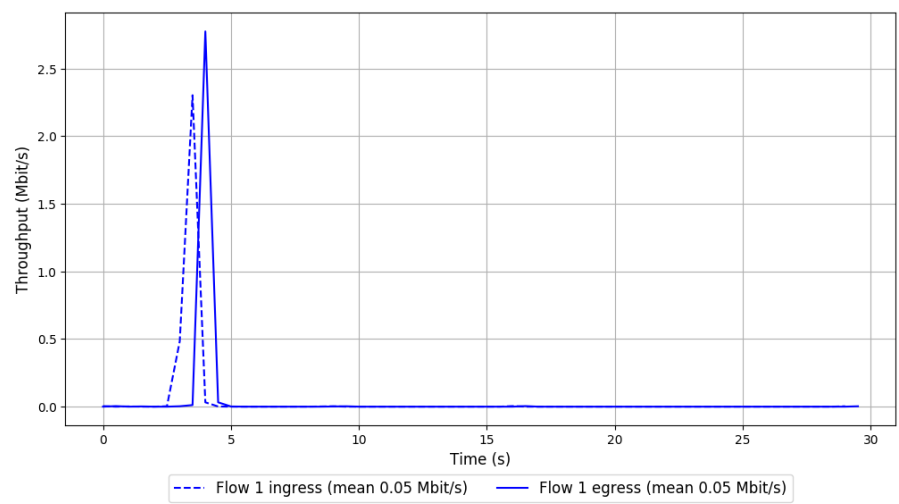


Run 2: Statistics of WebRTC media

Start at: 2019-01-19 16:48:08  
End at: 2019-01-19 16:48:38  
Local clock offset: 0.259 ms  
Remote clock offset: -0.234 ms

# Below is generated by plot.py at 2019-01-19 21:04:17  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 57.636 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 57.636 ms  
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

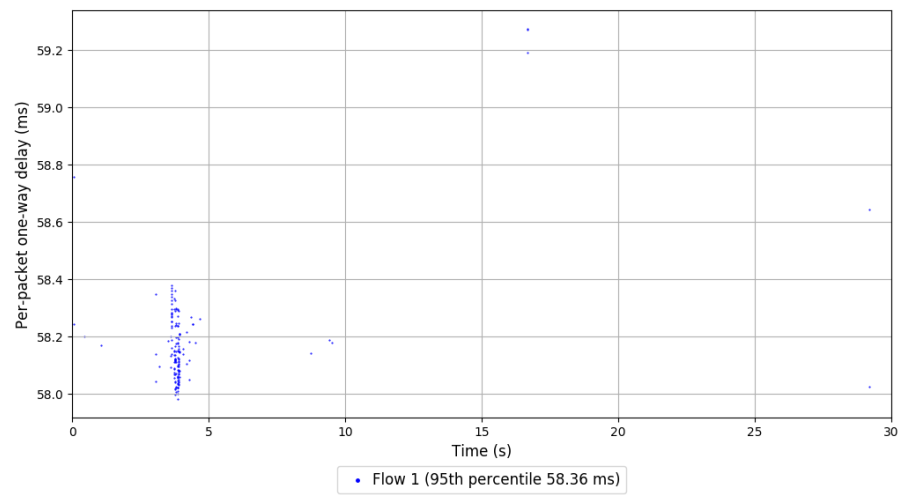
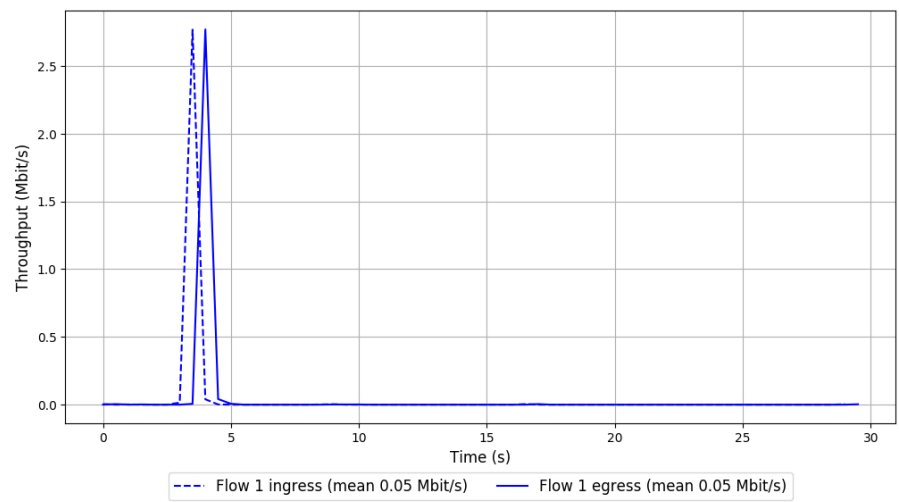


Run 3: Statistics of WebRTC media

Start at: 2019-01-19 17:21:59  
End at: 2019-01-19 17:22:29  
Local clock offset: 0.374 ms  
Remote clock offset: -0.761 ms

# Below is generated by plot.py at 2019-01-19 21:04:17  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 58.360 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 58.360 ms  
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

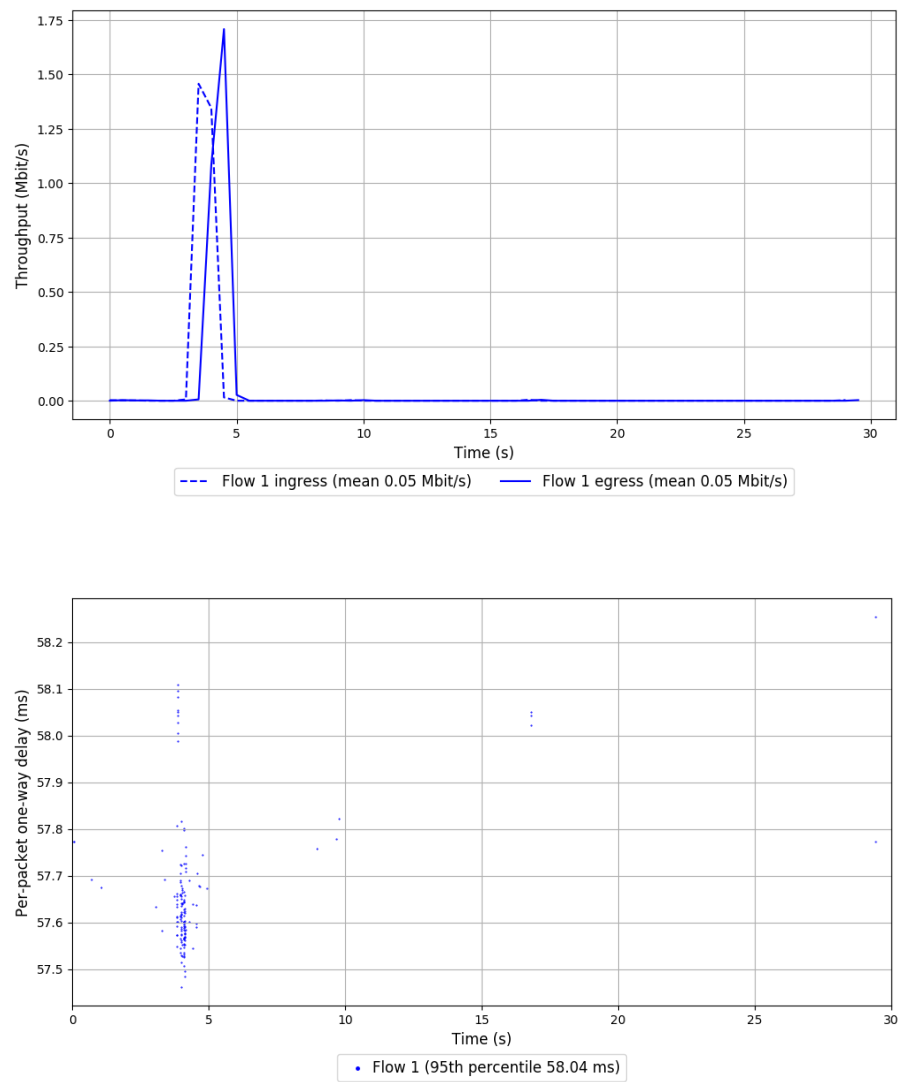


Run 4: Statistics of WebRTC media

Start at: 2019-01-19 17:56:43  
End at: 2019-01-19 17:57:13  
Local clock offset: -0.193 ms  
Remote clock offset: -0.881 ms

# Below is generated by plot.py at 2019-01-19 21:04:17  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 58.043 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 58.043 ms  
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link





Run 5: Statistics of WebRTC media

Start at: 2019-01-19 18:30:47  
End at: 2019-01-19 18:31:17  
Local clock offset: 0.201 ms  
Remote clock offset: -1.035 ms

# Below is generated by plot.py at 2019-01-19 21:04:17  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 58.344 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 58.344 ms  
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

