

## Pantheon Report

Generated at 2019-12-11 13:22:42 (UTC).

Data path: Colombia on **p4p1** (*remote*) → AWS Brazil 2 on **ens5** (*local*).

Repeated the test of 24 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against **gps.ntp.br** and have been applied to correct the timestamps in logs.

### System info:

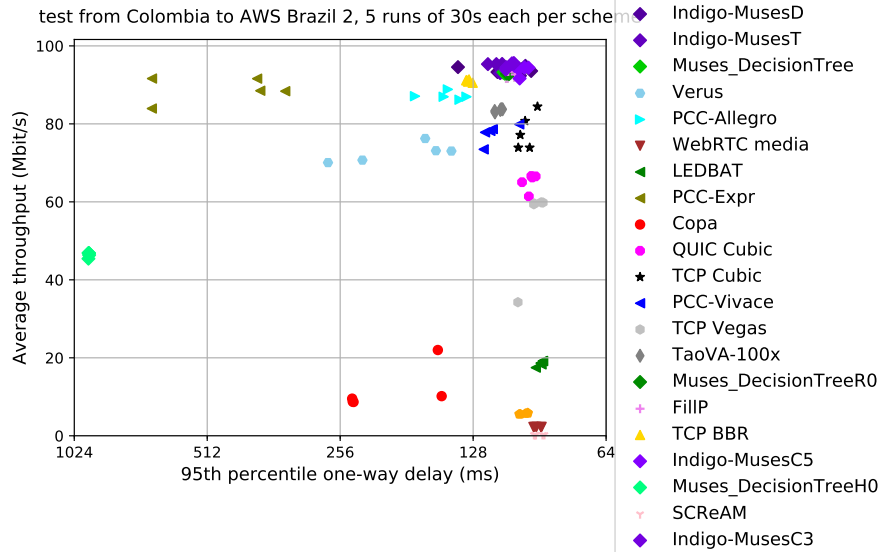
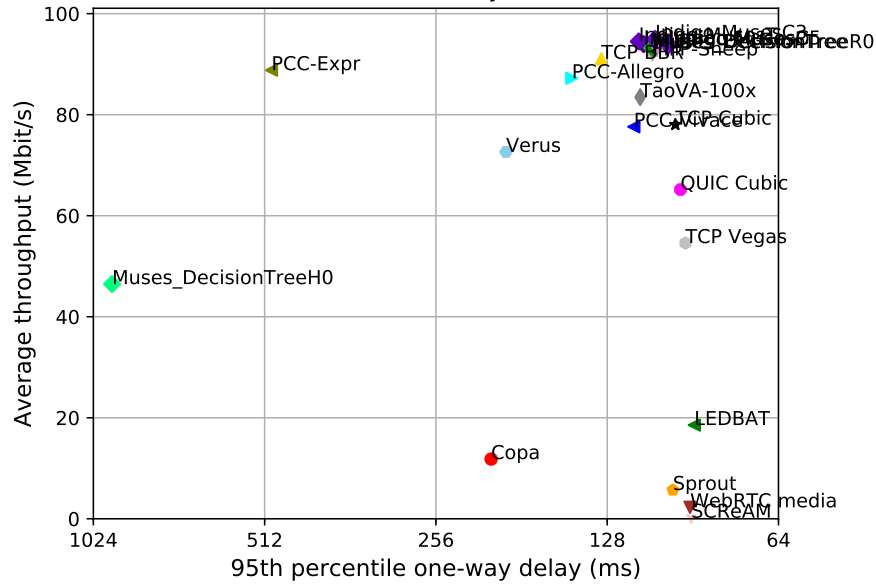
```
Linux 4.15.0-1054-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### Git summary:

```
branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
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 Colombia to AWS Brazil 2, 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	91.04	131.12	0.87
Copa	5	11.83	204.75	0.28
TCP Cubic	5	78.03	97.15	0.53
FillP	5	93.31	104.44	0.50
FillP-Sheep	5	91.73	106.57	0.50
Indigo	5	93.97	110.44	0.72
Indigo-MusesC3	5	95.01	105.44	2.24
Indigo-MusesC5	5	93.90	99.72	1.21
Indigo-MusesD	5	93.74	100.03	0.72
Indigo-MusesT	5	94.50	112.67	8.02
LEDBAT	5	18.56	90.00	0.92
Muses_DecisionTree	5	93.20	106.74	3.17
Muses_DecisionTreeH0	5	46.46	949.22	1.86
Muses_DecisionTreeR0	5	93.18	105.91	2.14
PCC-Allegro	5	87.21	147.71	0.60
PCC-Expr	5	88.81	498.10	3.92
QUIC Cubic	5	65.17	95.18	0.65
SCReAM	5	0.22	91.12	0.46
Sprout	5	5.70	98.13	0.62
TaoVA-100x	5	83.47	112.02	0.48
TCP Vegas	5	54.58	93.28	0.57
Verus	5	72.63	192.77	0.68
PCC-Vivace	5	77.61	114.94	0.54
WebRTC media	5	2.27	91.55	0.40

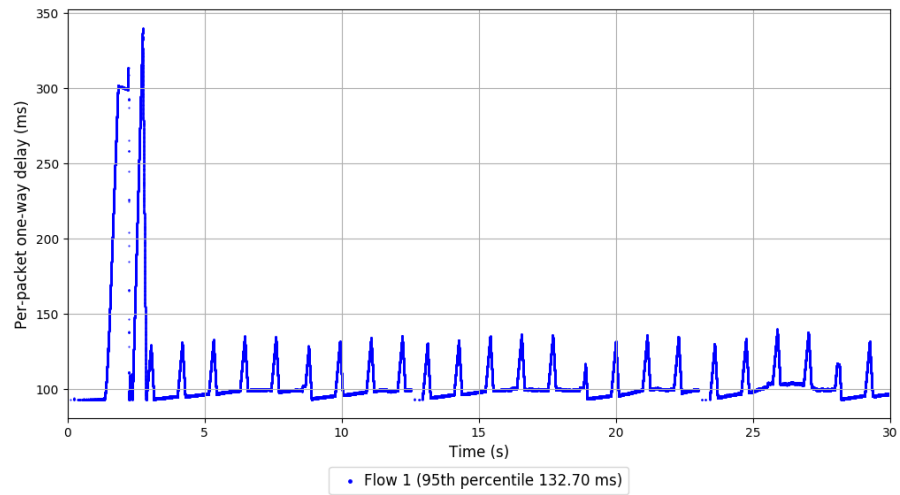
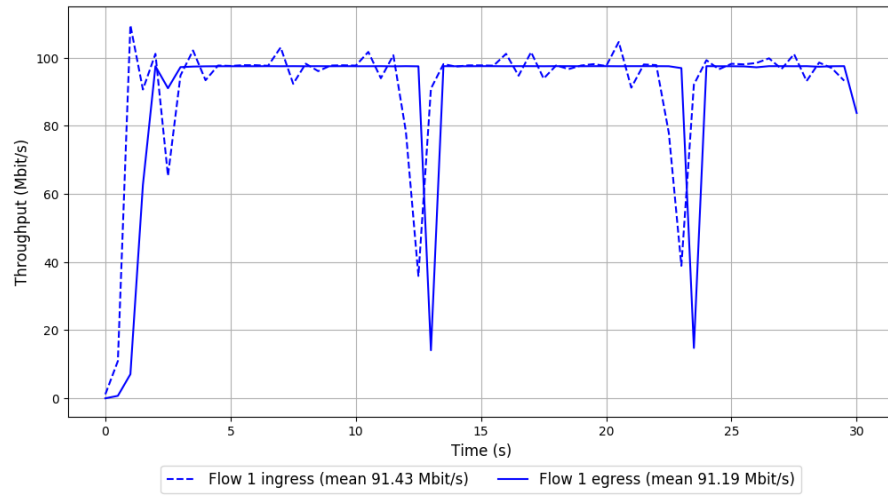


Run 1: Statistics of TCP BBR

Start at: 2019-12-11 10:57:31  
End at: 2019-12-11 10:58:01  
Local clock offset: -6.479 ms  
Remote clock offset: -9.341 ms

# Below is generated by plot.py at 2019-12-11 13:10:13  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.19 Mbit/s  
95th percentile per-packet one-way delay: 132.704 ms  
Loss rate: 0.73%  
-- Flow 1:  
Average throughput: 91.19 Mbit/s  
95th percentile per-packet one-way delay: 132.704 ms  
Loss rate: 0.73%

# Run 1: Report of TCP BBR — Data Link

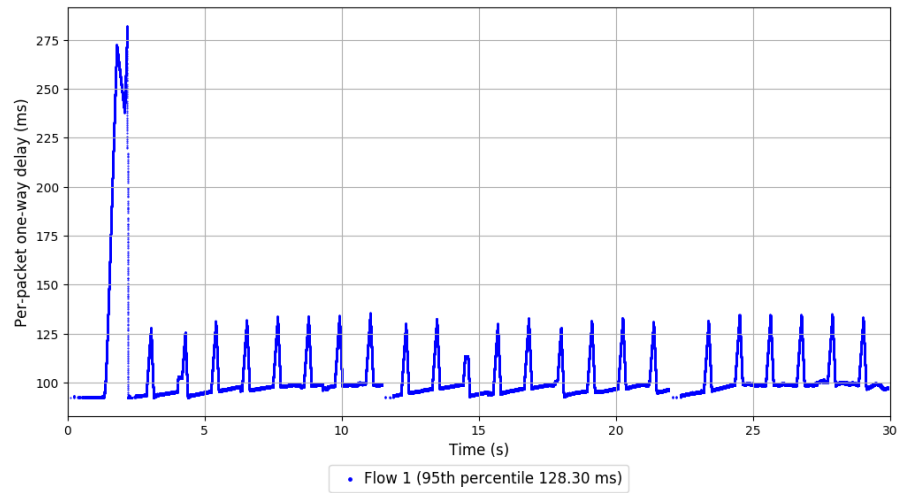
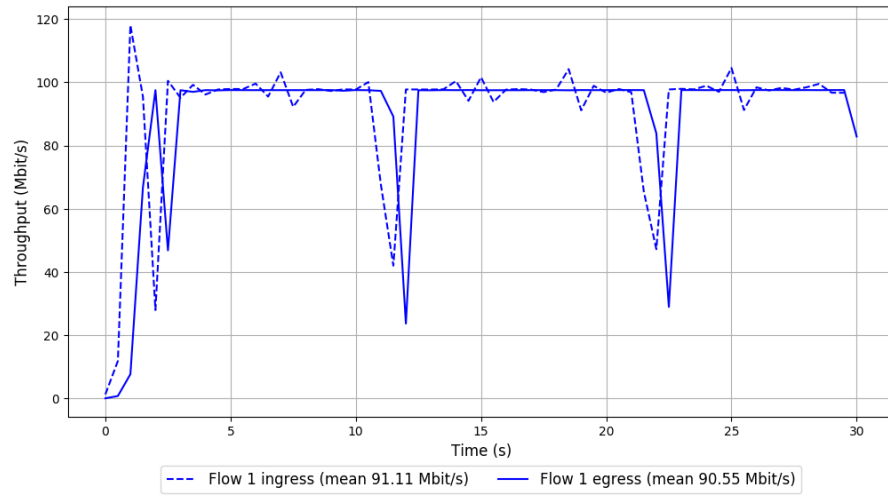


Run 2: Statistics of TCP BBR

Start at: 2019-12-11 11:25:41  
End at: 2019-12-11 11:26:11  
Local clock offset: -5.27 ms  
Remote clock offset: -7.682 ms

# Below is generated by plot.py at 2019-12-11 13:10:13  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 90.55 Mbit/s  
95th percentile per-packet one-way delay: 128.298 ms  
Loss rate: 1.09%  
-- Flow 1:  
Average throughput: 90.55 Mbit/s  
95th percentile per-packet one-way delay: 128.298 ms  
Loss rate: 1.09%

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

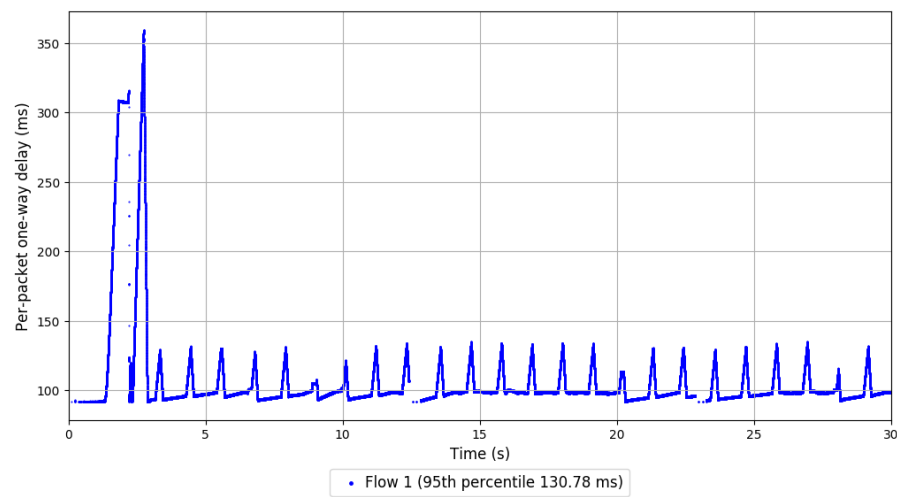
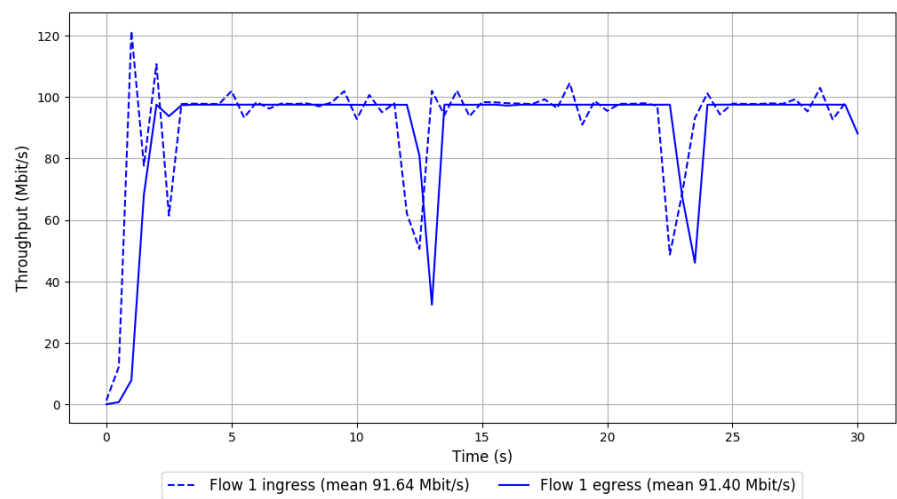


Run 3: Statistics of TCP BBR

Start at: 2019-12-11 11:53:52  
End at: 2019-12-11 11:54:22  
Local clock offset: -6.111 ms  
Remote clock offset: -7.888 ms

# Below is generated by plot.py at 2019-12-11 13:10:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.40 Mbit/s  
95th percentile per-packet one-way delay: 130.778 ms  
Loss rate: 0.73%  
-- Flow 1:  
Average throughput: 91.40 Mbit/s  
95th percentile per-packet one-way delay: 130.778 ms  
Loss rate: 0.73%

Run 3: Report of TCP BBR — Data Link

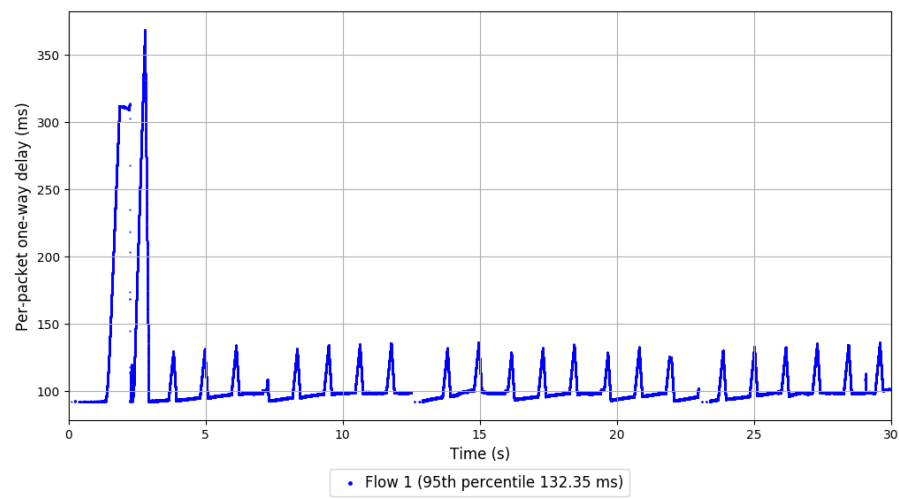
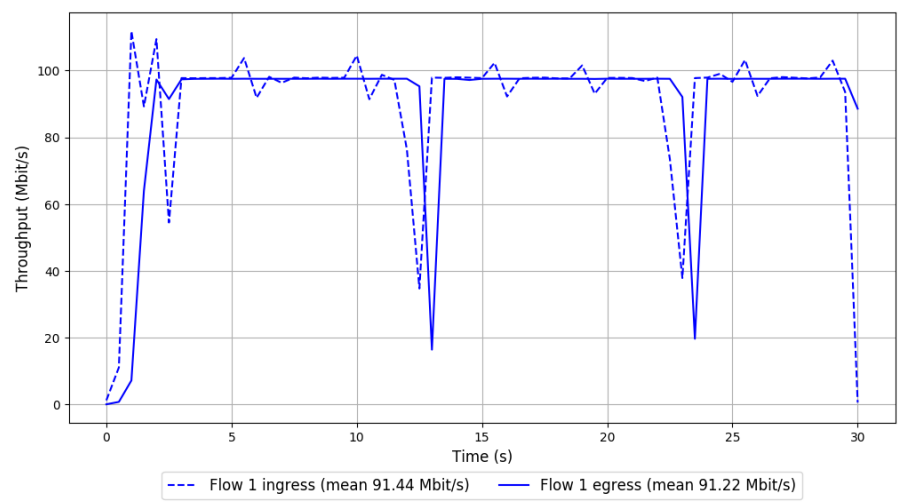


Run 4: Statistics of TCP BBR

Start at: 2019-12-11 12:22:01  
End at: 2019-12-11 12:22:31  
Local clock offset: -6.132 ms  
Remote clock offset: -9.272 ms

# Below is generated by plot.py at 2019-12-11 13:10:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.22 Mbit/s  
95th percentile per-packet one-way delay: 132.347 ms  
Loss rate: 0.71%  
-- Flow 1:  
Average throughput: 91.22 Mbit/s  
95th percentile per-packet one-way delay: 132.347 ms  
Loss rate: 0.71%

Run 4: Report of TCP BBR — Data Link



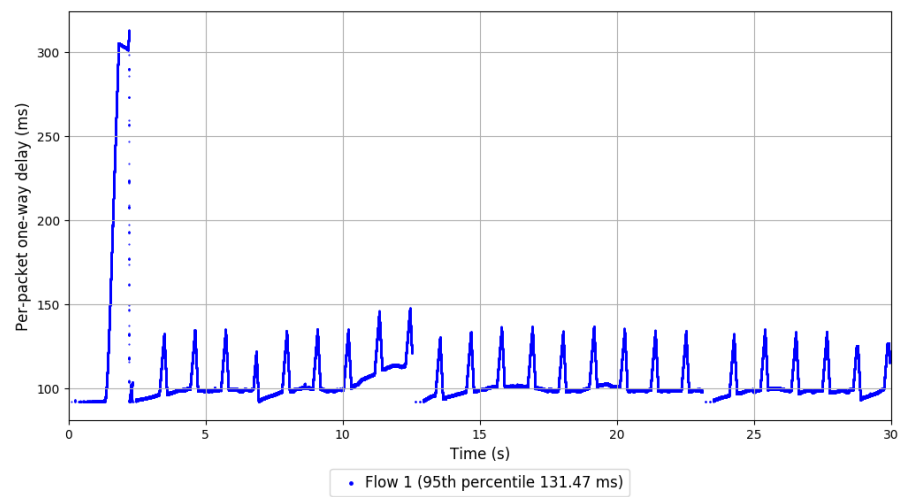
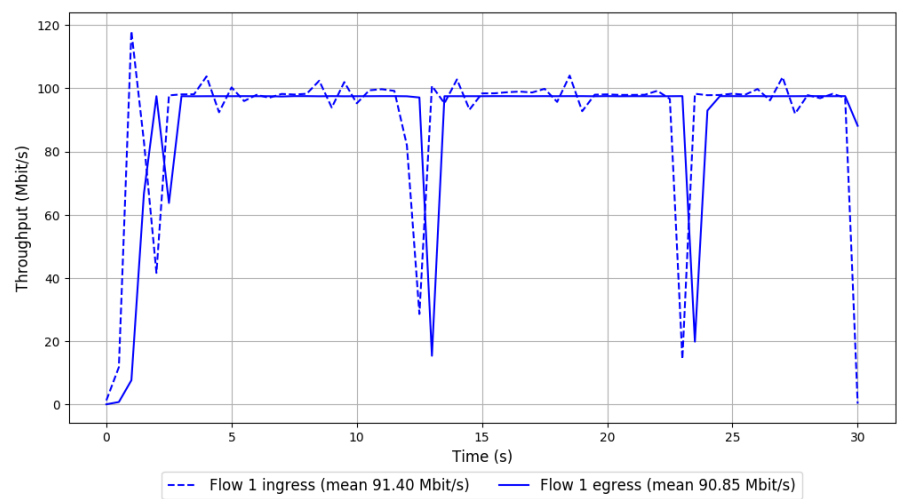


Run 5: Statistics of TCP BBR

Start at: 2019-12-11 12:50:11  
End at: 2019-12-11 12:50:41  
Local clock offset: -5.617 ms  
Remote clock offset: -9.164 ms

# Below is generated by plot.py at 2019-12-11 13:10:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 90.85 Mbit/s  
95th percentile per-packet one-way delay: 131.468 ms  
Loss rate: 1.07%  
-- Flow 1:  
Average throughput: 90.85 Mbit/s  
95th percentile per-packet one-way delay: 131.468 ms  
Loss rate: 1.07%

Run 5: Report of TCP BBR — Data Link

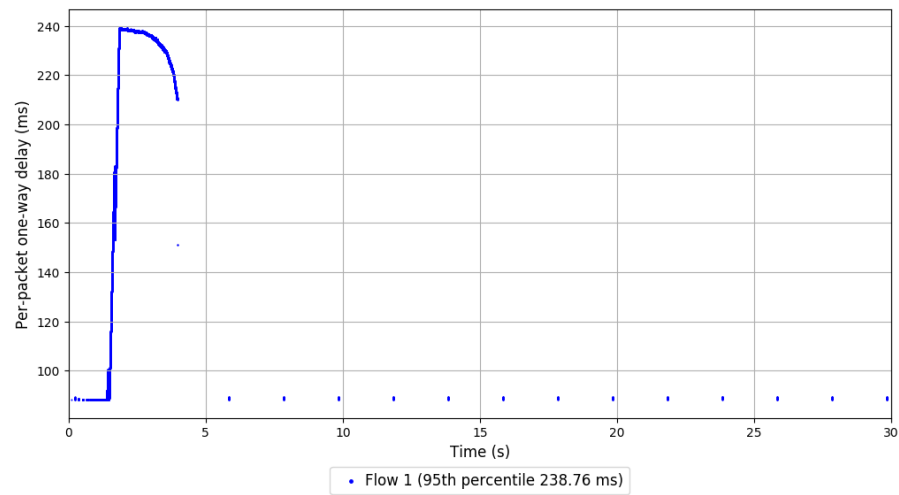
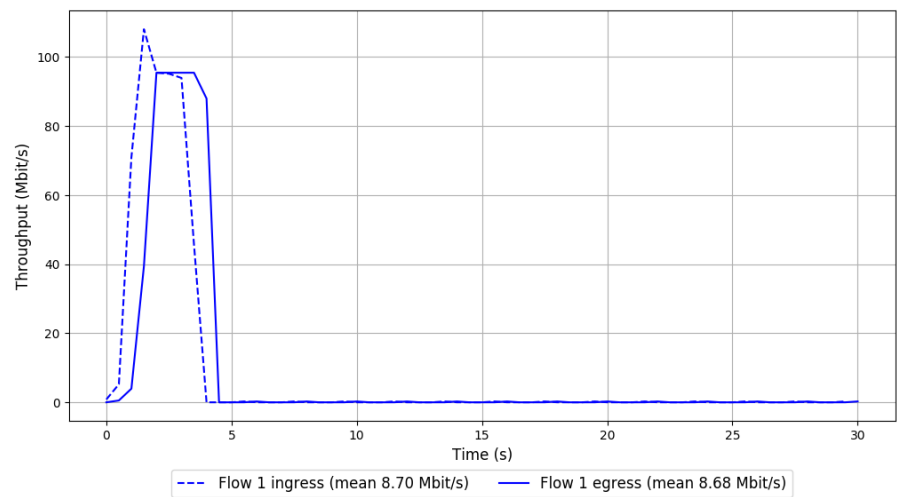


Run 1: Statistics of Copa

Start at: 2019-12-11 11:02:17  
End at: 2019-12-11 11:02:47  
Local clock offset: -7.181 ms  
Remote clock offset: -8.804 ms

# Below is generated by plot.py at 2019-12-11 13:10:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 8.68 Mbit/s  
95th percentile per-packet one-way delay: 238.764 ms  
Loss rate: 0.29%  
-- Flow 1:  
Average throughput: 8.68 Mbit/s  
95th percentile per-packet one-way delay: 238.764 ms  
Loss rate: 0.29%

Run 1: Report of Copa — Data Link

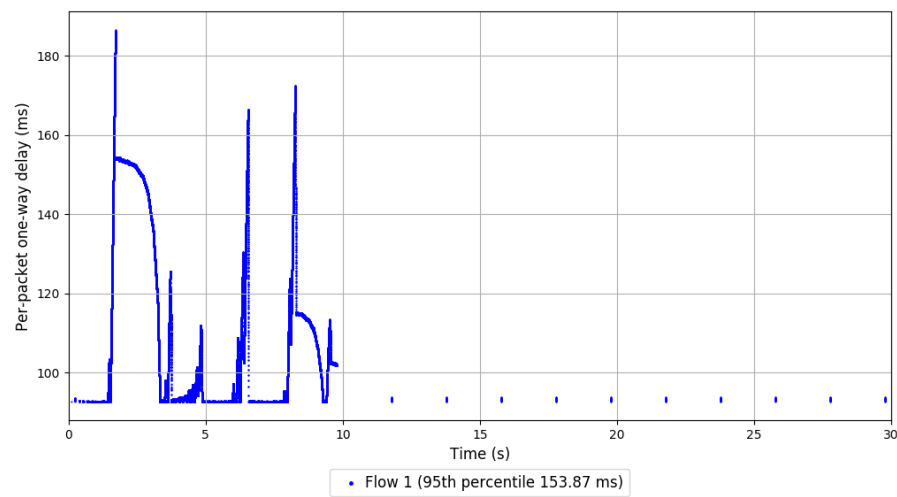
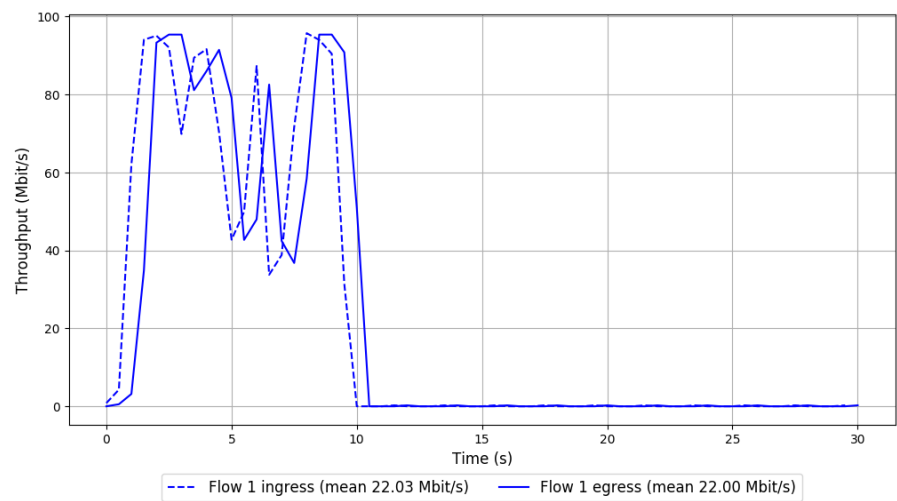


Run 2: Statistics of Copa

Start at: 2019-12-11 11:30:27  
End at: 2019-12-11 11:30:57  
Local clock offset: -5.14 ms  
Remote clock offset: -7.651 ms

# Below is generated by plot.py at 2019-12-11 13:10:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 22.00 Mbit/s  
95th percentile per-packet one-way delay: 153.869 ms  
Loss rate: 0.13%  
-- Flow 1:  
Average throughput: 22.00 Mbit/s  
95th percentile per-packet one-way delay: 153.869 ms  
Loss rate: 0.13%

Run 2: Report of Copa — Data Link

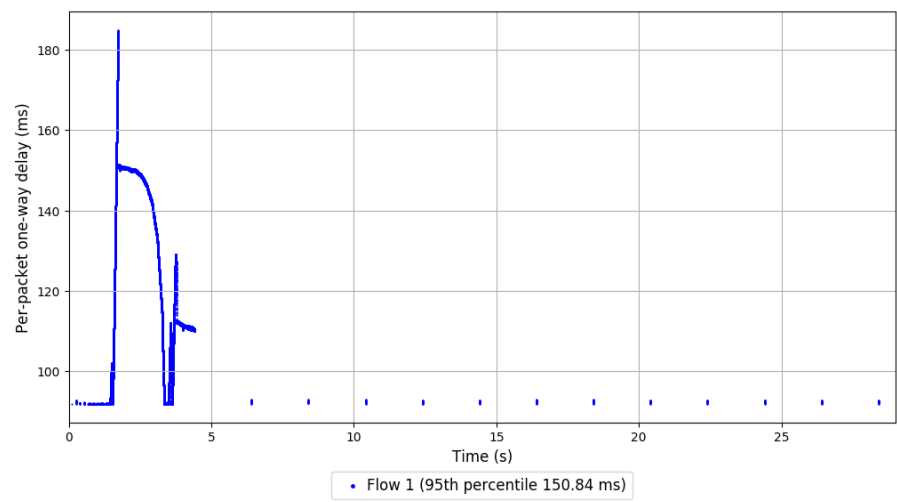
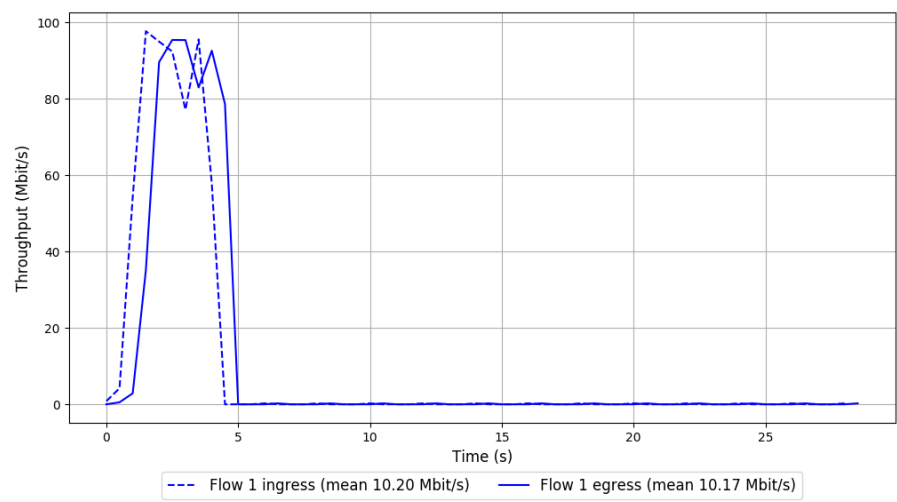


Run 3: Statistics of Copa

Start at: 2019-12-11 11:58:37  
End at: 2019-12-11 11:59:07  
Local clock offset: -6.129 ms  
Remote clock offset: -8.285 ms

# Below is generated by plot.py at 2019-12-11 13:10:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 10.17 Mbit/s  
95th percentile per-packet one-way delay: 150.842 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 10.17 Mbit/s  
95th percentile per-packet one-way delay: 150.842 ms  
Loss rate: 0.28%

Run 3: Report of Copa — Data Link



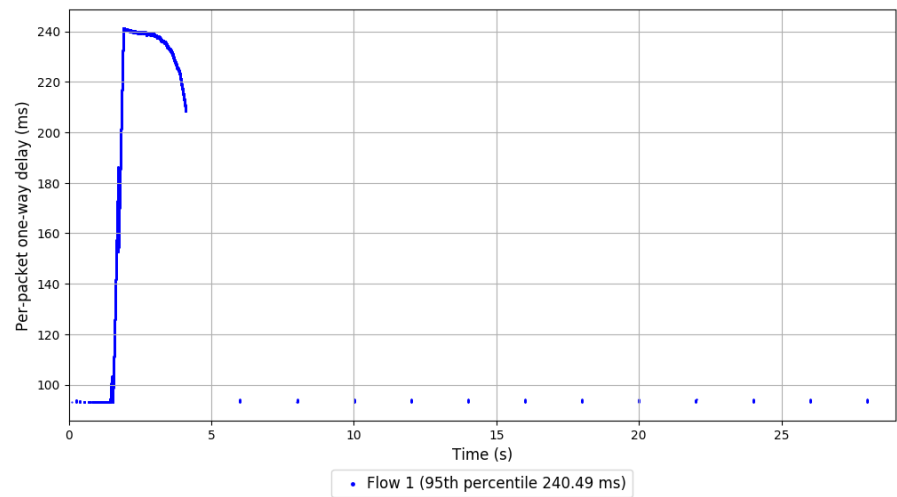
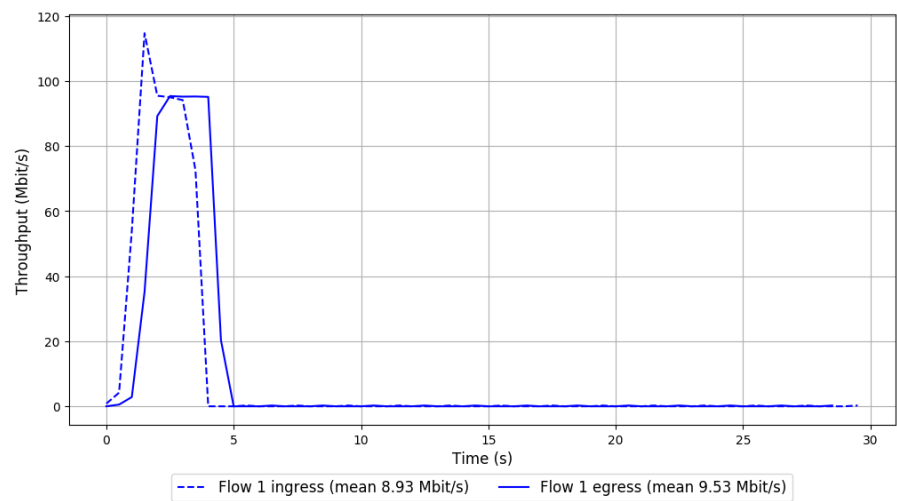


Run 4: Statistics of Copa

Start at: 2019-12-11 12:26:46  
End at: 2019-12-11 12:27:16  
Local clock offset: -5.409 ms  
Remote clock offset: -9.332 ms

# Below is generated by plot.py at 2019-12-11 13:10:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 9.53 Mbit/s  
95th percentile per-packet one-way delay: 240.494 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 9.53 Mbit/s  
95th percentile per-packet one-way delay: 240.494 ms  
Loss rate: 0.39%

Run 4: Report of Copa — Data Link

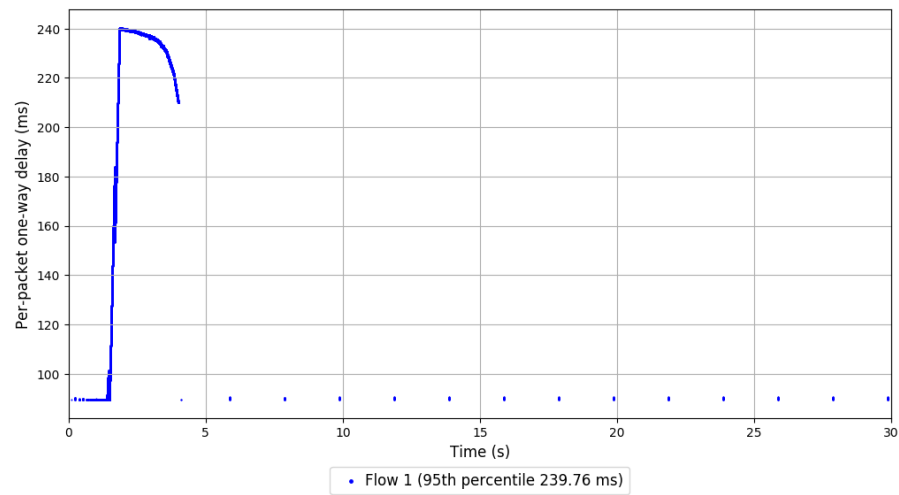
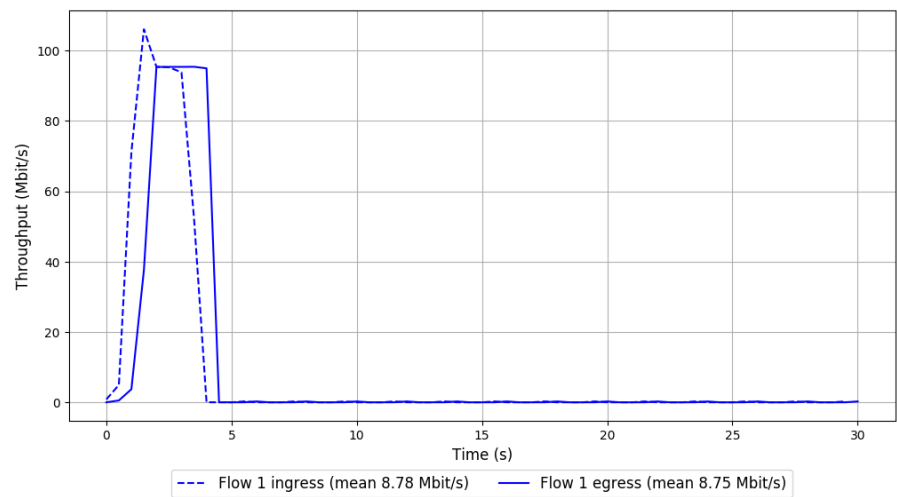


Run 5: Statistics of Copa

Start at: 2019-12-11 12:54:56  
End at: 2019-12-11 12:55:26  
Local clock offset: -4.821 ms  
Remote clock offset: -9.175 ms

# Below is generated by plot.py at 2019-12-11 13:10:16  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 8.75 Mbit/s  
95th percentile per-packet one-way delay: 239.762 ms  
Loss rate: 0.30%  
-- Flow 1:  
Average throughput: 8.75 Mbit/s  
95th percentile per-packet one-way delay: 239.762 ms  
Loss rate: 0.30%

Run 5: Report of Copa — Data Link

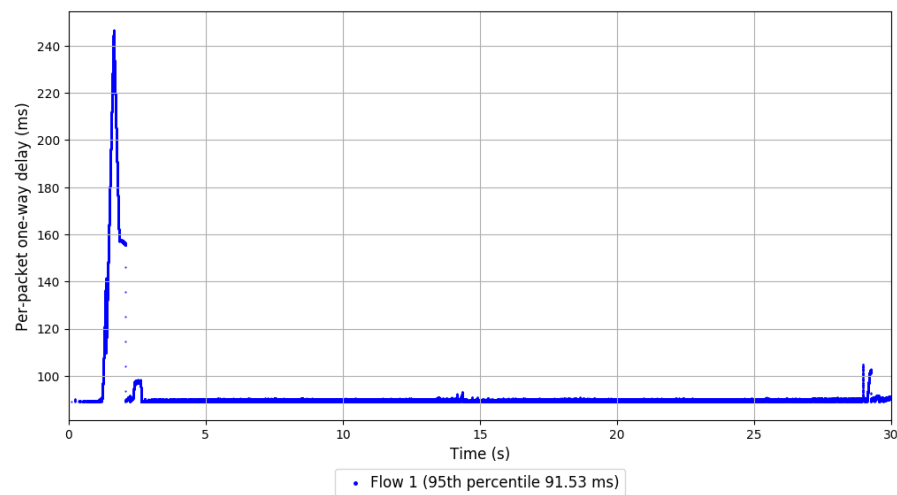
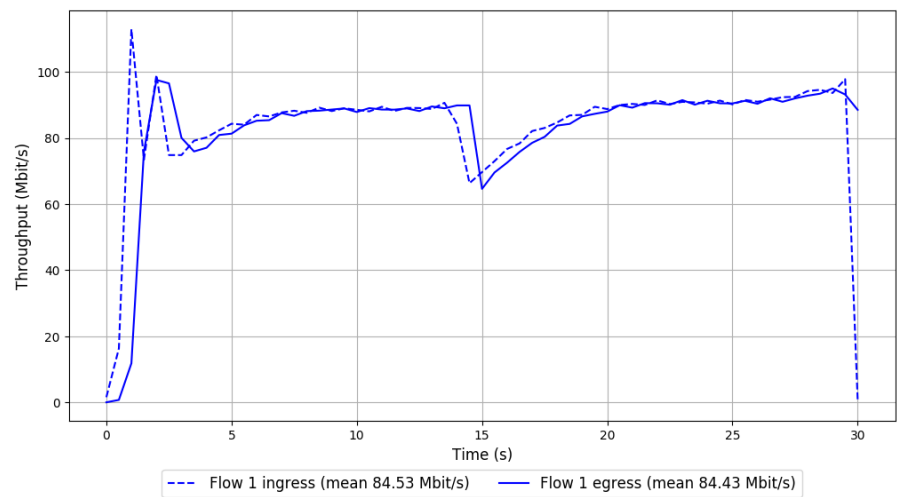


Run 1: Statistics of TCP Cubic

Start at: 2019-12-11 10:48:09  
End at: 2019-12-11 10:48:39  
Local clock offset: -6.414 ms  
Remote clock offset: -9.355 ms

# Below is generated by plot.py at 2019-12-11 13:10:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 84.43 Mbit/s  
95th percentile per-packet one-way delay: 91.528 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 84.43 Mbit/s  
95th percentile per-packet one-way delay: 91.528 ms  
Loss rate: 0.58%

Run 1: Report of TCP Cubic — Data Link

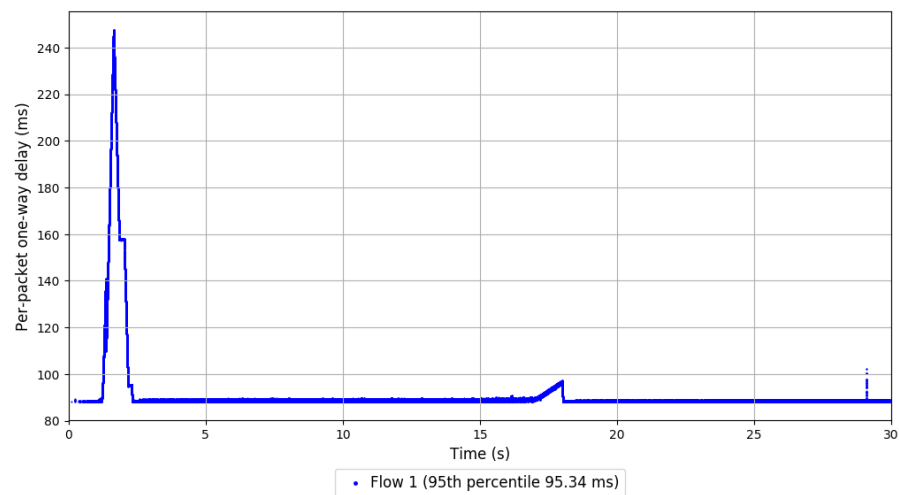
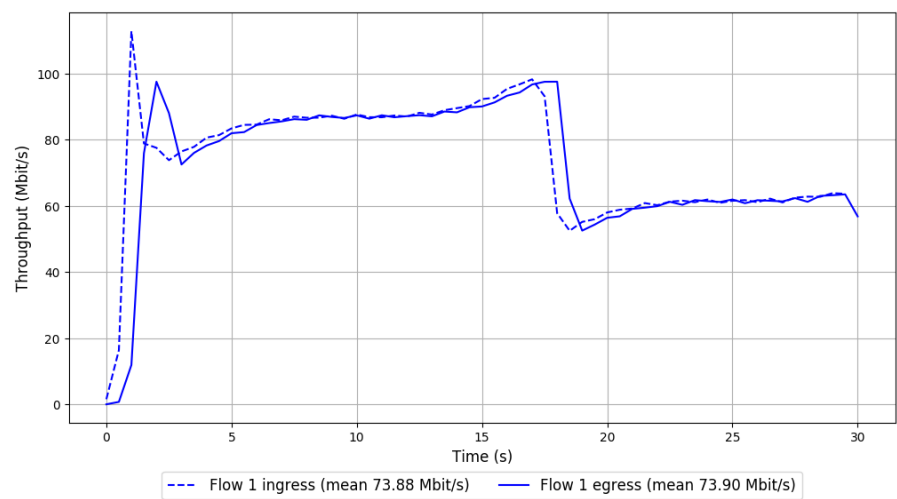


Run 2: Statistics of TCP Cubic

Start at: 2019-12-11 11:16:20  
End at: 2019-12-11 11:16:50  
Local clock offset: -6.4 ms  
Remote clock offset: -8.343 ms

# Below is generated by plot.py at 2019-12-11 13:10:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 73.90 Mbit/s  
95th percentile per-packet one-way delay: 95.337 ms  
Loss rate: 0.43%  
-- Flow 1:  
Average throughput: 73.90 Mbit/s  
95th percentile per-packet one-way delay: 95.337 ms  
Loss rate: 0.43%

Run 2: Report of TCP Cubic — Data Link



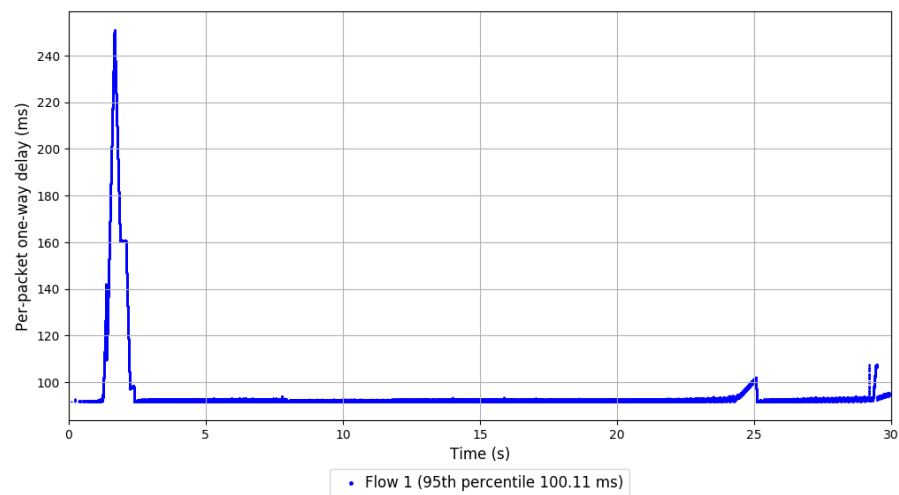
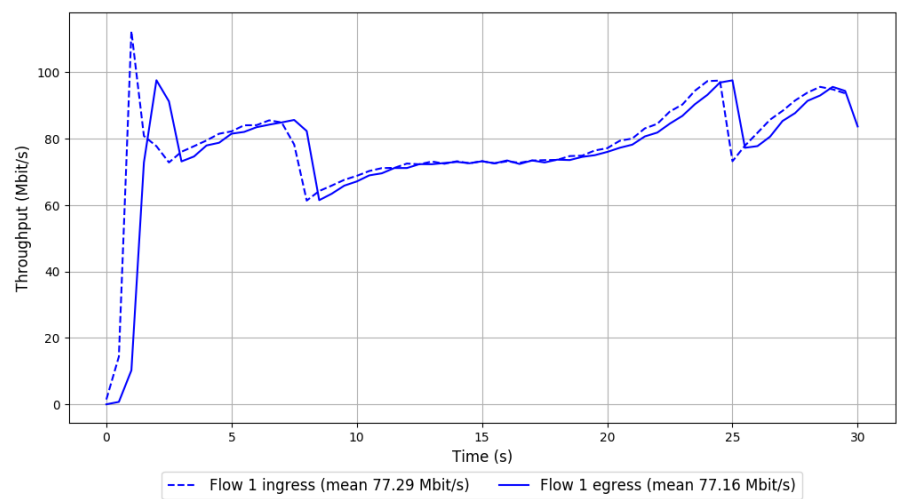


Run 3: Statistics of TCP Cubic

Start at: 2019-12-11 11:44:31  
End at: 2019-12-11 11:45:01  
Local clock offset: -5.93 ms  
Remote clock offset: -6.958 ms

# Below is generated by plot.py at 2019-12-11 13:10:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 77.16 Mbit/s  
95th percentile per-packet one-way delay: 100.113 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 77.16 Mbit/s  
95th percentile per-packet one-way delay: 100.113 ms  
Loss rate: 0.63%

Run 3: Report of TCP Cubic — Data Link

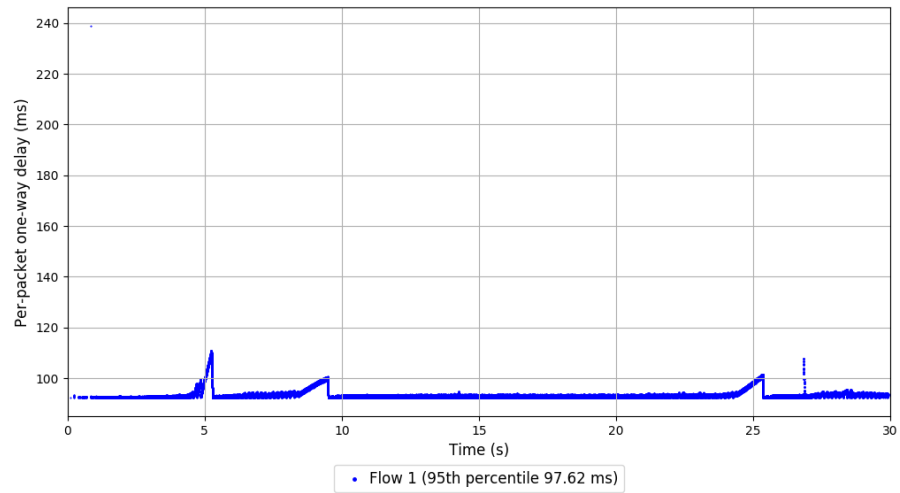
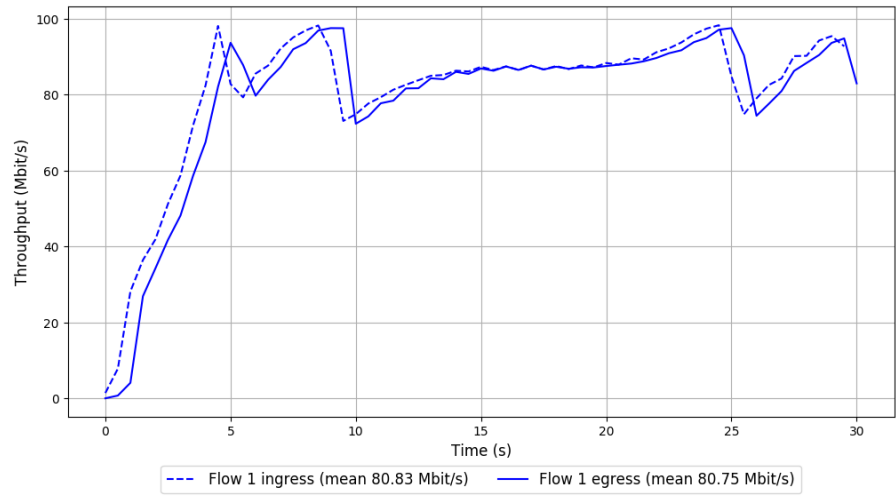


Run 4: Statistics of TCP Cubic

Start at: 2019-12-11 12:12:39  
End at: 2019-12-11 12:13:09  
Local clock offset: -6.186 ms  
Remote clock offset: -9.231 ms

# Below is generated by plot.py at 2019-12-11 13:11:01  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 80.75 Mbit/s  
95th percentile per-packet one-way delay: 97.619 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 80.75 Mbit/s  
95th percentile per-packet one-way delay: 97.619 ms  
Loss rate: 0.58%

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



Run 5: Statistics of TCP Cubic

Start at: 2019-12-11 12:40:49

End at: 2019-12-11 12:41:19

Local clock offset: -5.264 ms

Remote clock offset: -9.3 ms

# Below is generated by plot.py at 2019-12-11 13:11:01

# Datalink statistics

-- Total of 1 flow:

Average throughput: 73.90 Mbit/s

95th percentile per-packet one-way delay: 101.150 ms

Loss rate: 0.45%

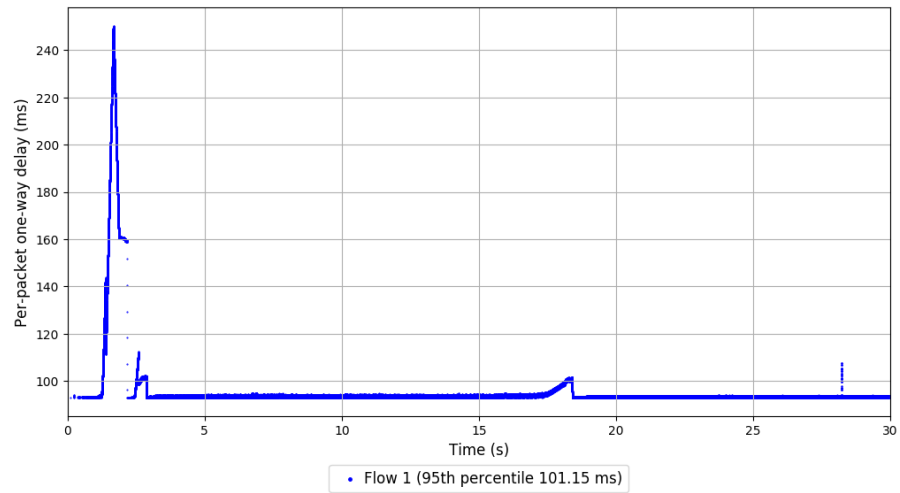
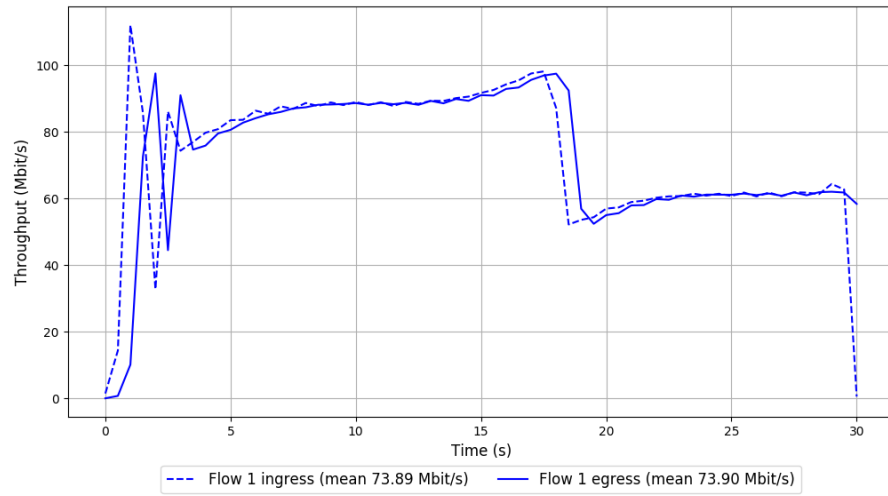
-- Flow 1:

Average throughput: 73.90 Mbit/s

95th percentile per-packet one-way delay: 101.150 ms

Loss rate: 0.45%

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

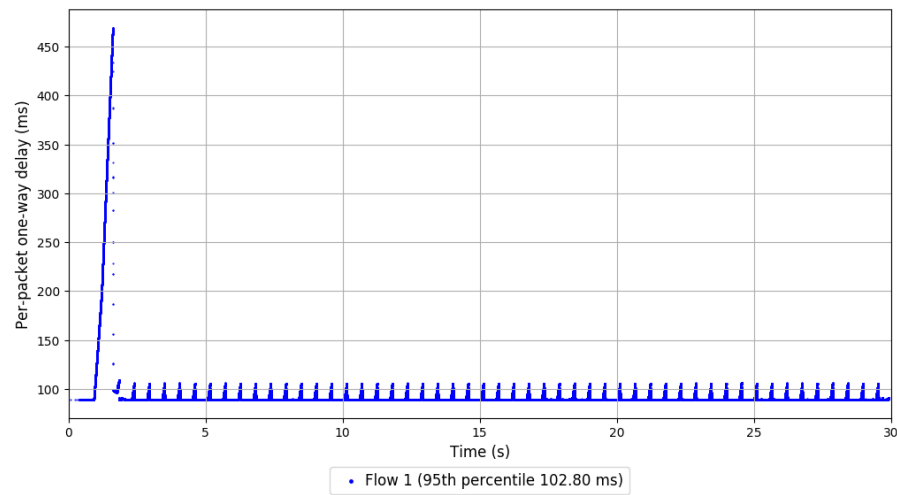
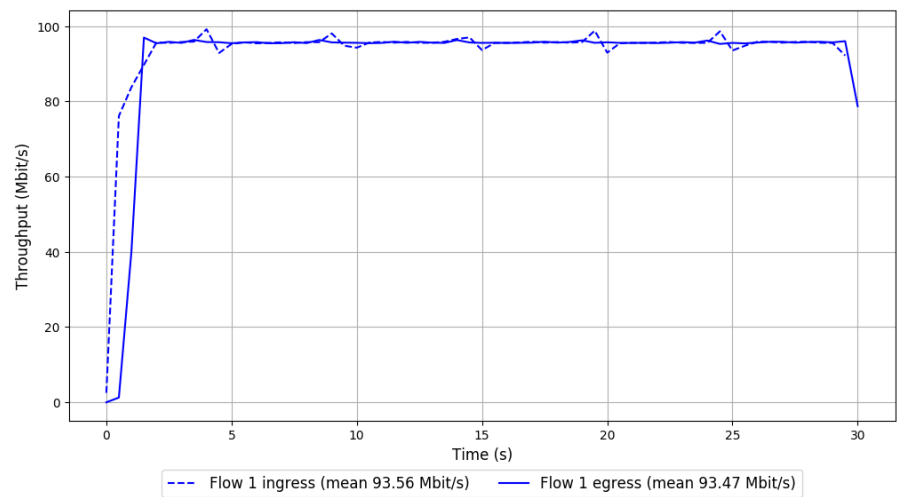


Run 1: Statistics of FillP

Start at: 2019-12-11 11:06:54  
End at: 2019-12-11 11:07:24  
Local clock offset: -6.51 ms  
Remote clock offset: -8.849 ms

# Below is generated by plot.py at 2019-12-11 13:11:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.47 Mbit/s  
95th percentile per-packet one-way delay: 102.798 ms  
Loss rate: 0.56%  
-- Flow 1:  
Average throughput: 93.47 Mbit/s  
95th percentile per-packet one-way delay: 102.798 ms  
Loss rate: 0.56%

Run 1: Report of FillP — Data Link



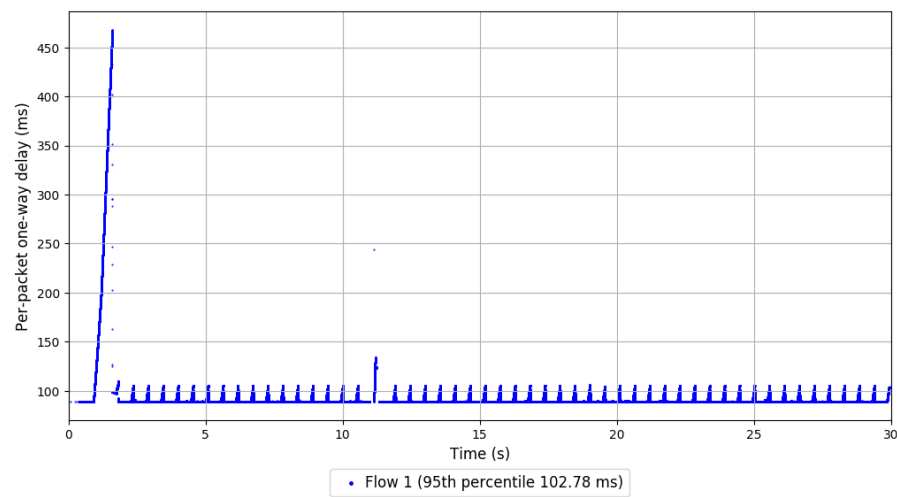
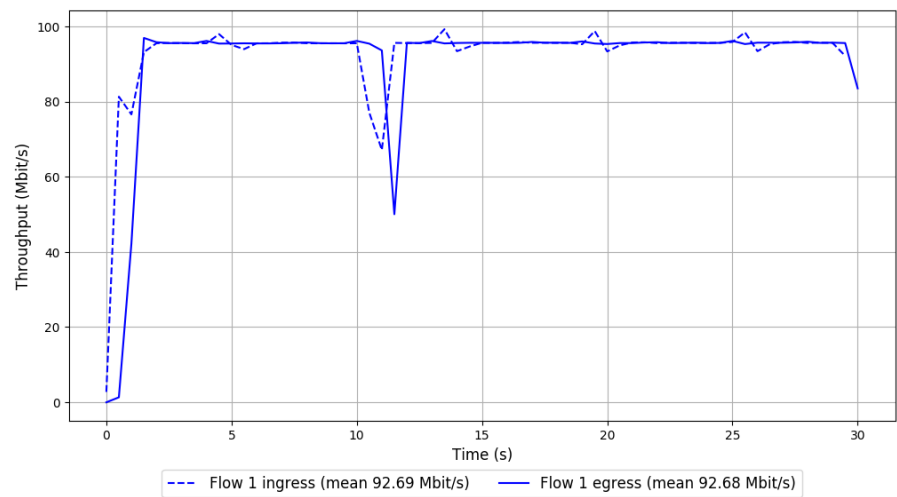


Run 2: Statistics of FillP

Start at: 2019-12-11 11:35:05  
End at: 2019-12-11 11:35:35  
Local clock offset: -5.111 ms  
Remote clock offset: -7.453 ms

# Below is generated by plot.py at 2019-12-11 13:11:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 92.68 Mbit/s  
95th percentile per-packet one-way delay: 102.783 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 92.68 Mbit/s  
95th percentile per-packet one-way delay: 102.783 ms  
Loss rate: 0.47%

Run 2: Report of FillP — Data Link

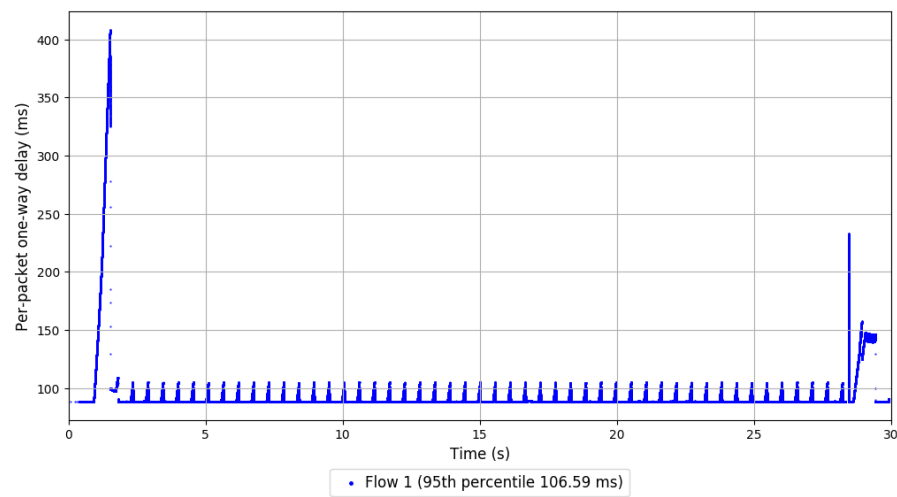
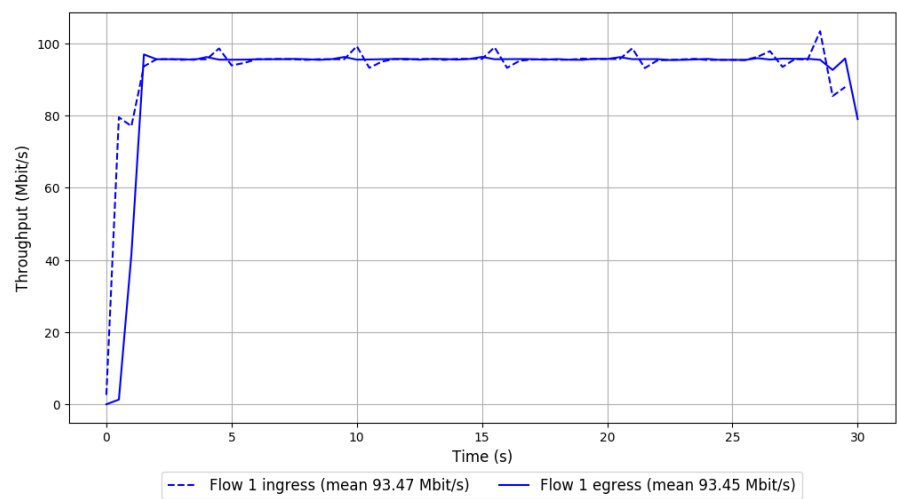


Run 3: Statistics of FillP

Start at: 2019-12-11 12:03:14  
End at: 2019-12-11 12:03:44  
Local clock offset: -6.143 ms  
Remote clock offset: -8.667 ms

# Below is generated by plot.py at 2019-12-11 13:11:36  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.45 Mbit/s  
95th percentile per-packet one-way delay: 106.586 ms  
Loss rate: 0.48%  
-- Flow 1:  
Average throughput: 93.45 Mbit/s  
95th percentile per-packet one-way delay: 106.586 ms  
Loss rate: 0.48%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2019-12-11 12:31:24

End at: 2019-12-11 12:31:54

Local clock offset: -5.465 ms

Remote clock offset: -9.2 ms

# Below is generated by plot.py at 2019-12-11 13:11:45

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.46 Mbit/s

95th percentile per-packet one-way delay: 103.006 ms

Loss rate: 0.48%

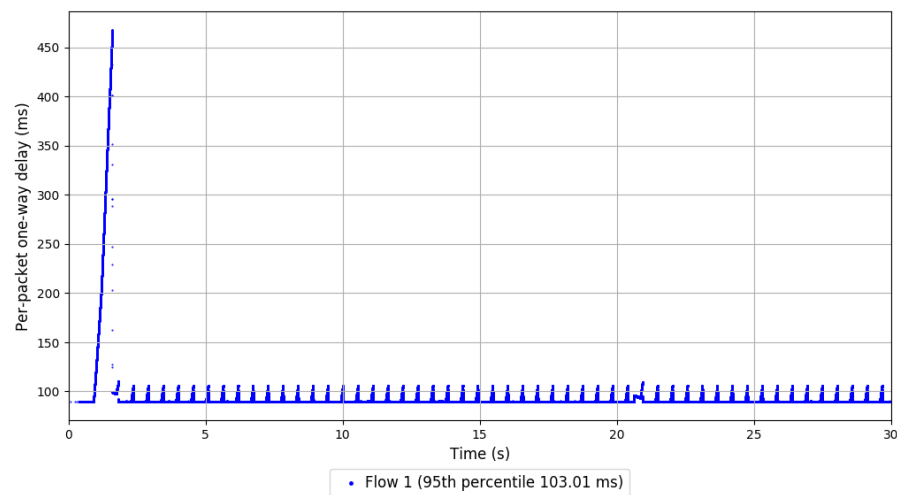
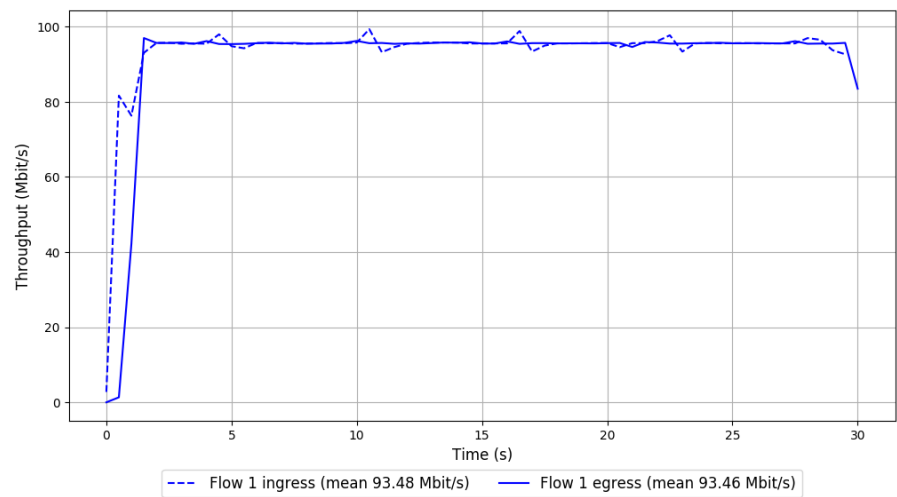
-- Flow 1:

Average throughput: 93.46 Mbit/s

95th percentile per-packet one-way delay: 103.006 ms

Loss rate: 0.48%

Run 4: Report of FillP — Data Link

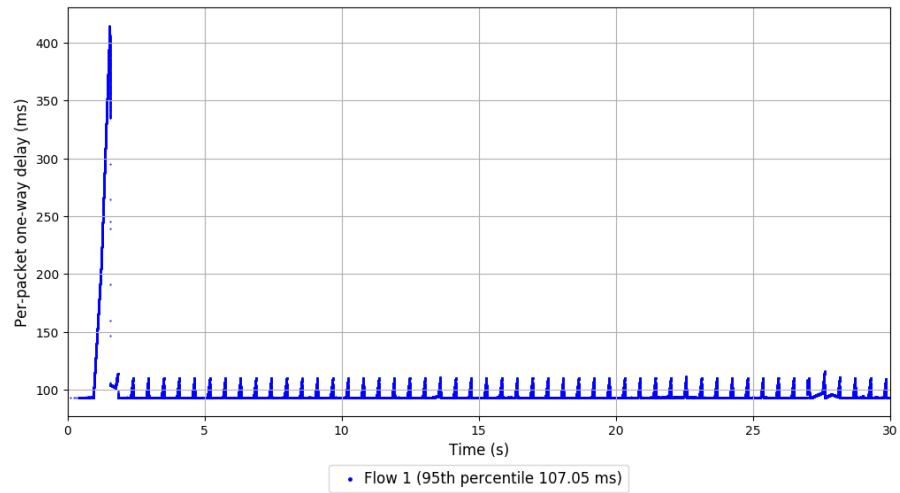
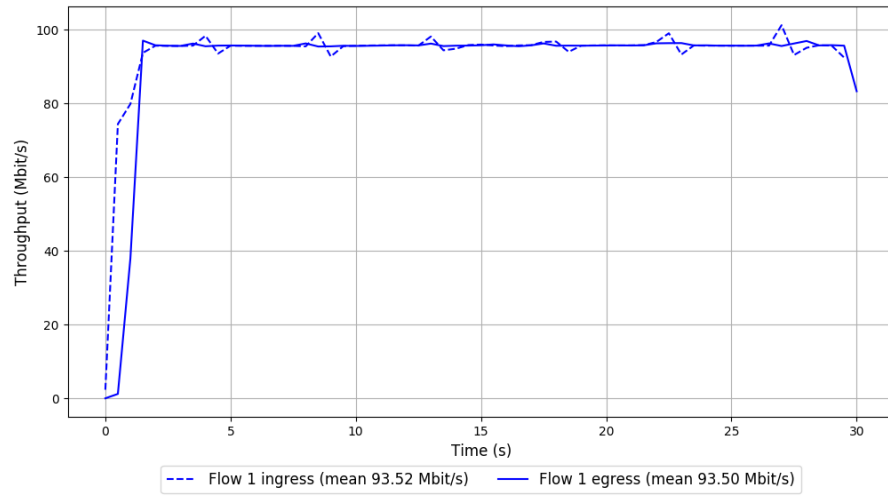


Run 5: Statistics of FillP

Start at: 2019-12-11 12:59:34  
End at: 2019-12-11 13:00:04  
Local clock offset: -4.749 ms  
Remote clock offset: -9.465 ms

# Below is generated by plot.py at 2019-12-11 13:11:50  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.50 Mbit/s  
95th percentile per-packet one-way delay: 107.051 ms  
Loss rate: 0.49%  
-- Flow 1:  
Average throughput: 93.50 Mbit/s  
95th percentile per-packet one-way delay: 107.051 ms  
Loss rate: 0.49%

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



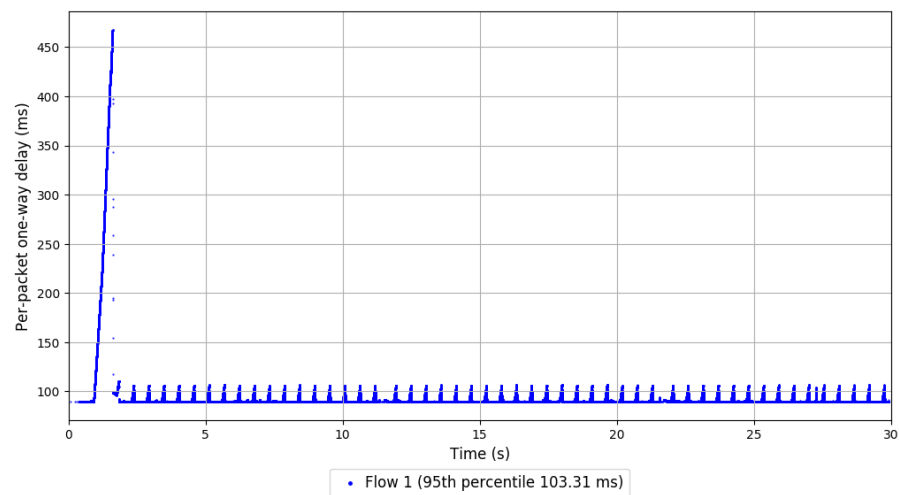
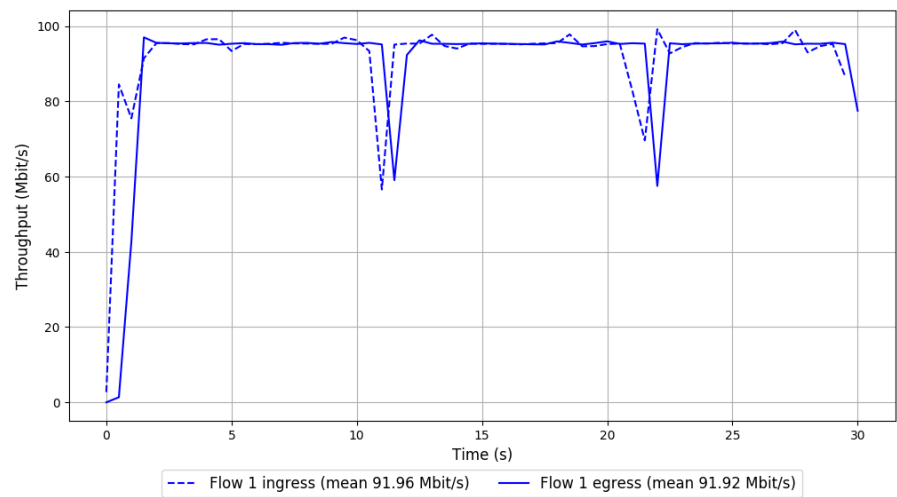


Run 1: Statistics of FillP-Sheep

Start at: 2019-12-11 10:50:29  
End at: 2019-12-11 10:50:59  
Local clock offset: -6.433 ms  
Remote clock offset: -9.757 ms

# Below is generated by plot.py at 2019-12-11 13:11:50  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.92 Mbit/s  
95th percentile per-packet one-way delay: 103.309 ms  
Loss rate: 0.49%  
-- Flow 1:  
Average throughput: 91.92 Mbit/s  
95th percentile per-packet one-way delay: 103.309 ms  
Loss rate: 0.49%

Run 1: Report of FillP-Sheep — Data Link

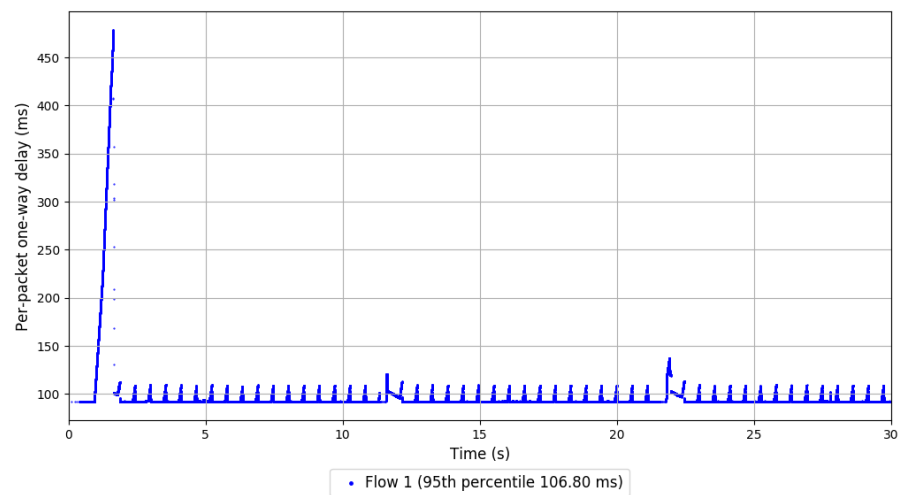
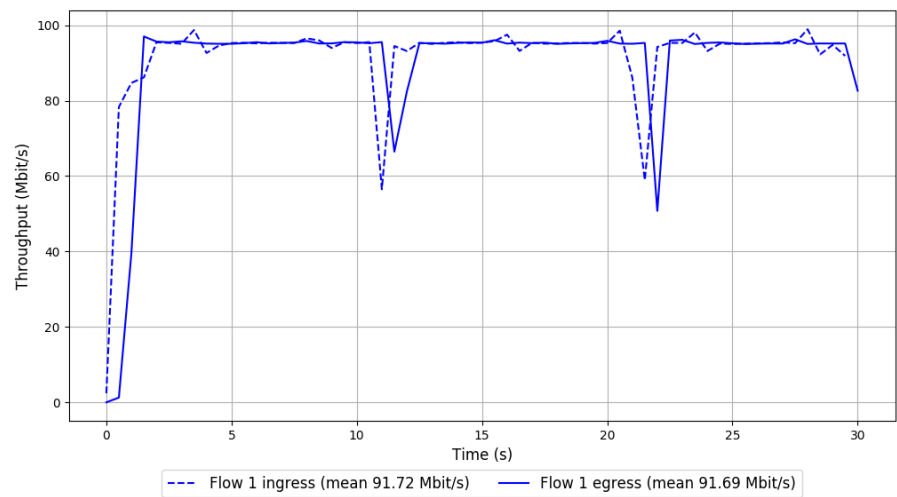


Run 2: Statistics of FillP-Sheep

Start at: 2019-12-11 11:18:39  
End at: 2019-12-11 11:19:09  
Local clock offset: -6.262 ms  
Remote clock offset: -8.337 ms

# Below is generated by plot.py at 2019-12-11 13:12:17  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.69 Mbit/s  
95th percentile per-packet one-way delay: 106.795 ms  
Loss rate: 0.50%  
-- Flow 1:  
Average throughput: 91.69 Mbit/s  
95th percentile per-packet one-way delay: 106.795 ms  
Loss rate: 0.50%

Run 2: Report of FillP-Sheep — Data Link

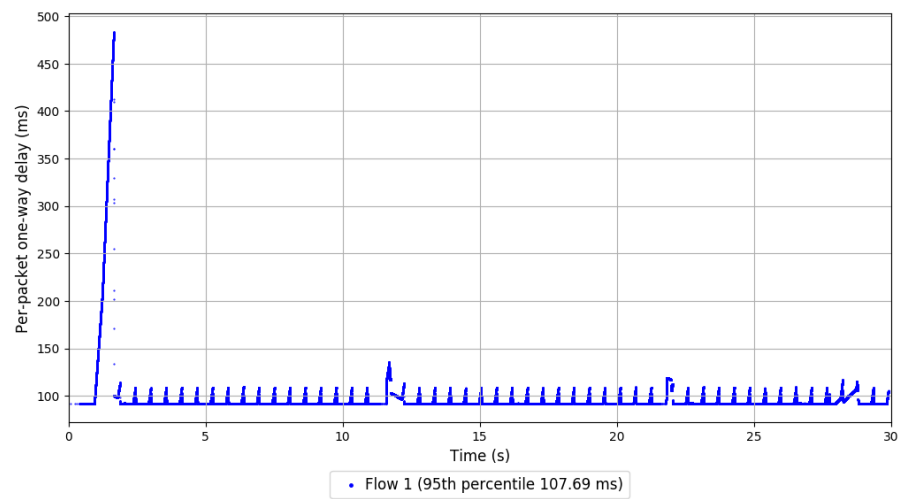
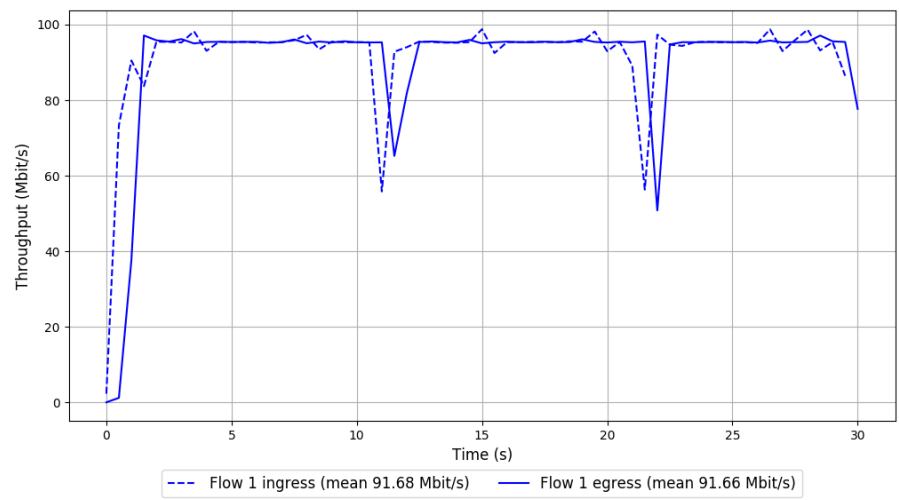


Run 3: Statistics of FillP-Sheep

Start at: 2019-12-11 11:46:51  
End at: 2019-12-11 11:47:21  
Local clock offset: -6.004 ms  
Remote clock offset: -6.884 ms

# Below is generated by plot.py at 2019-12-11 13:12:20  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.66 Mbit/s  
95th percentile per-packet one-way delay: 107.688 ms  
Loss rate: 0.49%  
-- Flow 1:  
Average throughput: 91.66 Mbit/s  
95th percentile per-packet one-way delay: 107.688 ms  
Loss rate: 0.49%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-12-11 12:14:59

End at: 2019-12-11 12:15:29

Local clock offset: -6.121 ms

Remote clock offset: -9.32 ms

# Below is generated by plot.py at 2019-12-11 13:12:48

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.73 Mbit/s

95th percentile per-packet one-way delay: 107.188 ms

Loss rate: 0.50%

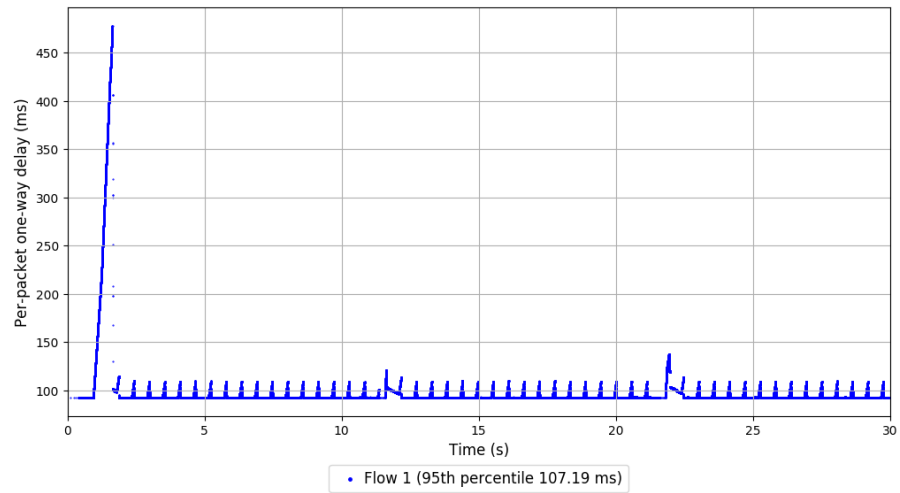
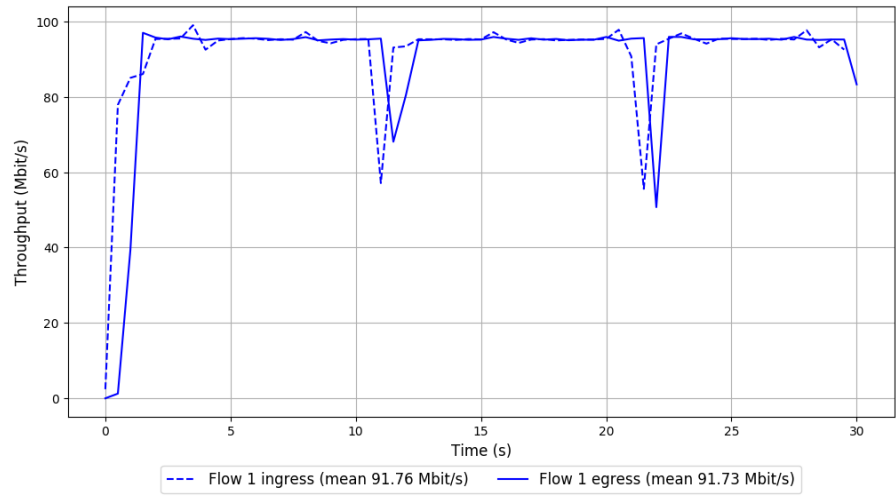
-- Flow 1:

Average throughput: 91.73 Mbit/s

95th percentile per-packet one-way delay: 107.188 ms

Loss rate: 0.50%

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



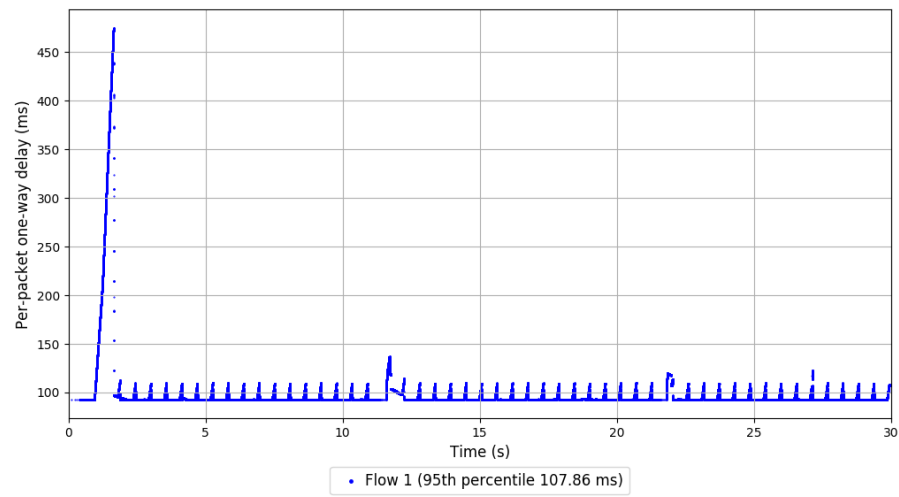
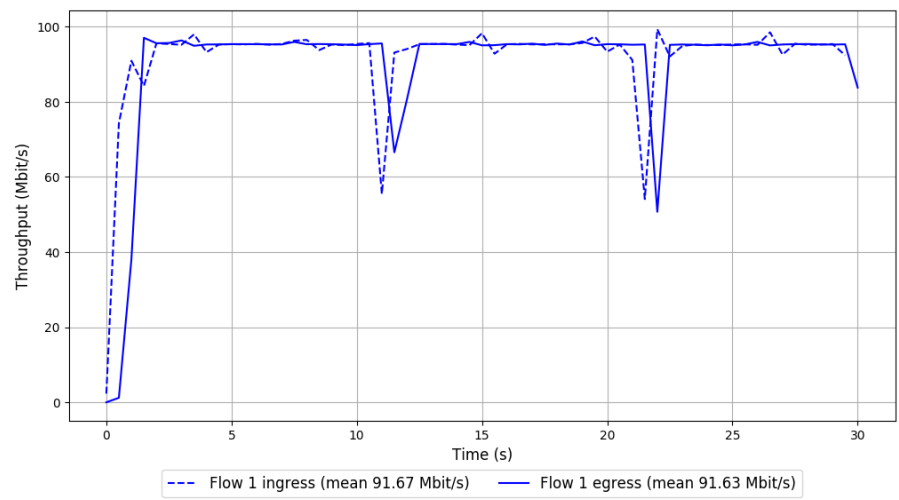


Run 5: Statistics of FillP-Sheep

Start at: 2019-12-11 12:43:09  
End at: 2019-12-11 12:43:39  
Local clock offset: -5.143 ms  
Remote clock offset: -8.597 ms

# Below is generated by plot.py at 2019-12-11 13:12:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.63 Mbit/s  
95th percentile per-packet one-way delay: 107.863 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 91.63 Mbit/s  
95th percentile per-packet one-way delay: 107.863 ms  
Loss rate: 0.52%

Run 5: Report of FillP-Sheep — Data Link

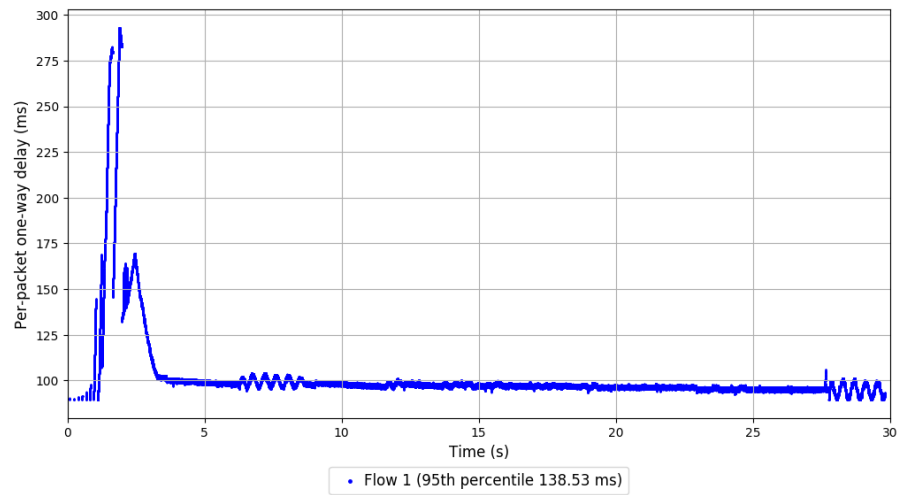
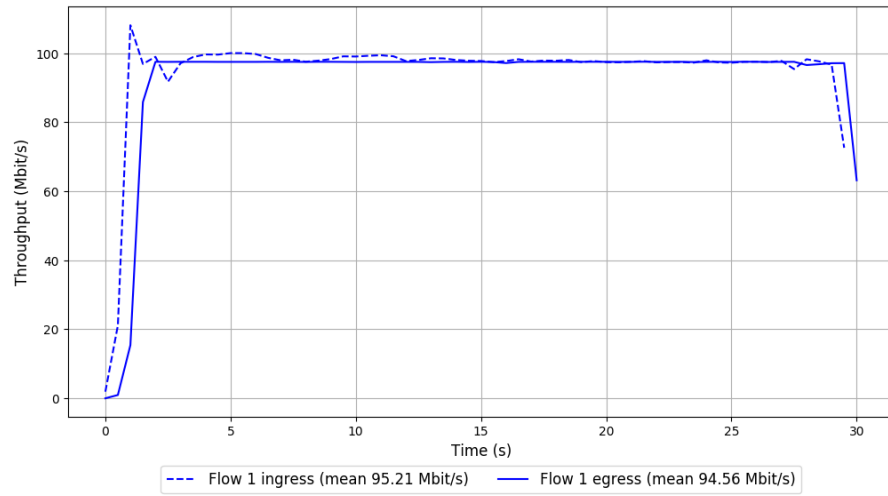


Run 1: Statistics of Indigo

Start at: 2019-12-11 10:52:47  
End at: 2019-12-11 10:53:17  
Local clock offset: -6.437 ms  
Remote clock offset: -9.543 ms

# Below is generated by plot.py at 2019-12-11 13:12:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.56 Mbit/s  
95th percentile per-packet one-way delay: 138.529 ms  
Loss rate: 1.14%  
-- Flow 1:  
Average throughput: 94.56 Mbit/s  
95th percentile per-packet one-way delay: 138.529 ms  
Loss rate: 1.14%

## Run 1: Report of Indigo — Data Link

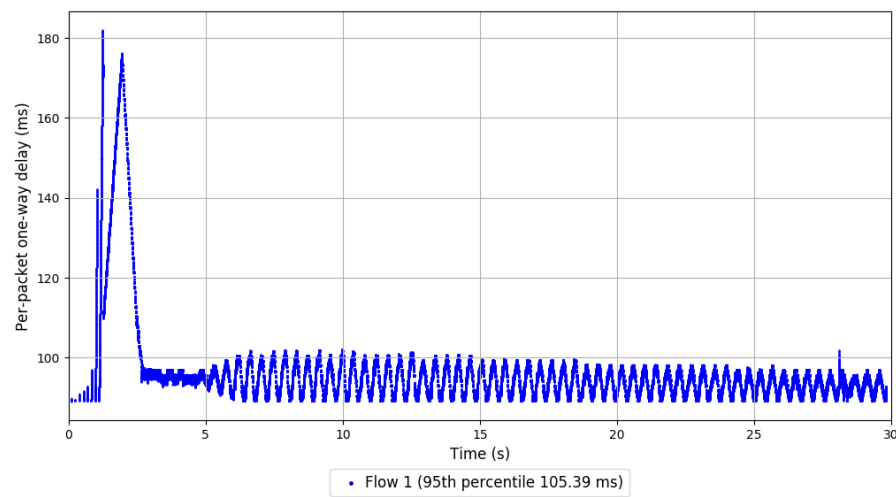
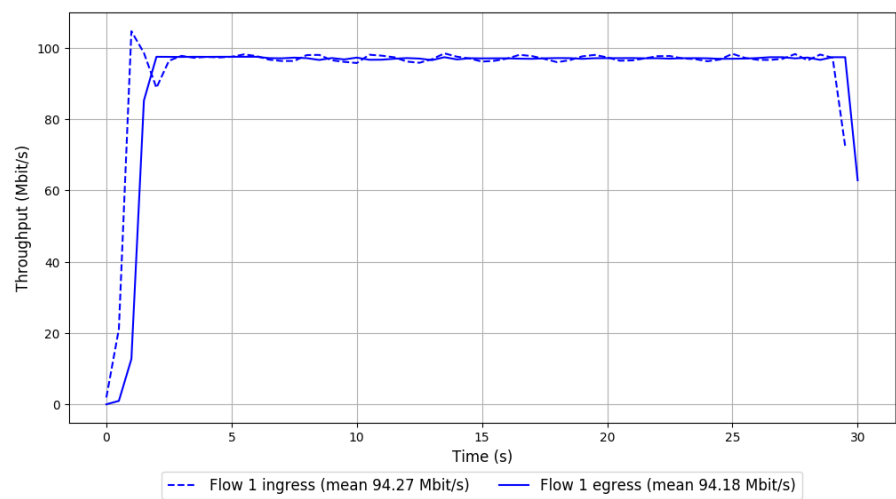


Run 2: Statistics of Indigo

Start at: 2019-12-11 11:20:57  
End at: 2019-12-11 11:21:27  
Local clock offset: -5.466 ms  
Remote clock offset: -8.037 ms

# Below is generated by plot.py at 2019-12-11 13:12:51  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.18 Mbit/s  
95th percentile per-packet one-way delay: 105.392 ms  
Loss rate: 0.55%  
-- Flow 1:  
Average throughput: 94.18 Mbit/s  
95th percentile per-packet one-way delay: 105.392 ms  
Loss rate: 0.55%

Run 2: Report of Indigo — Data Link

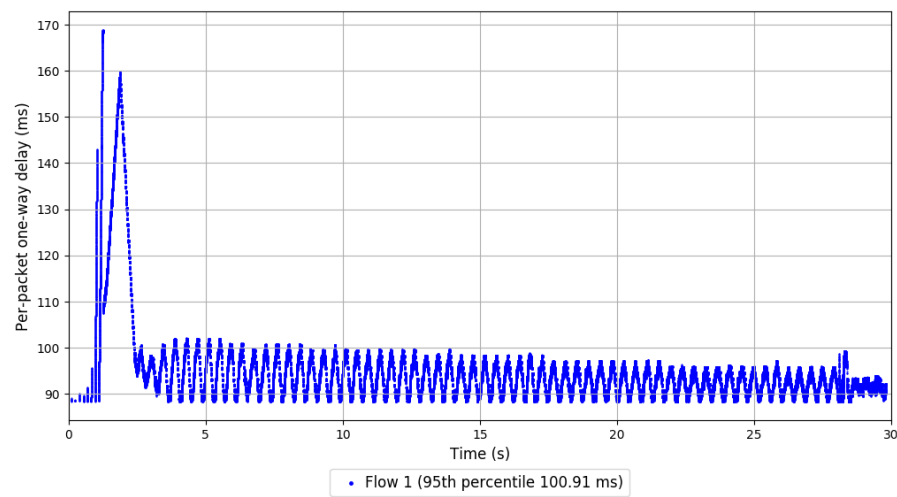
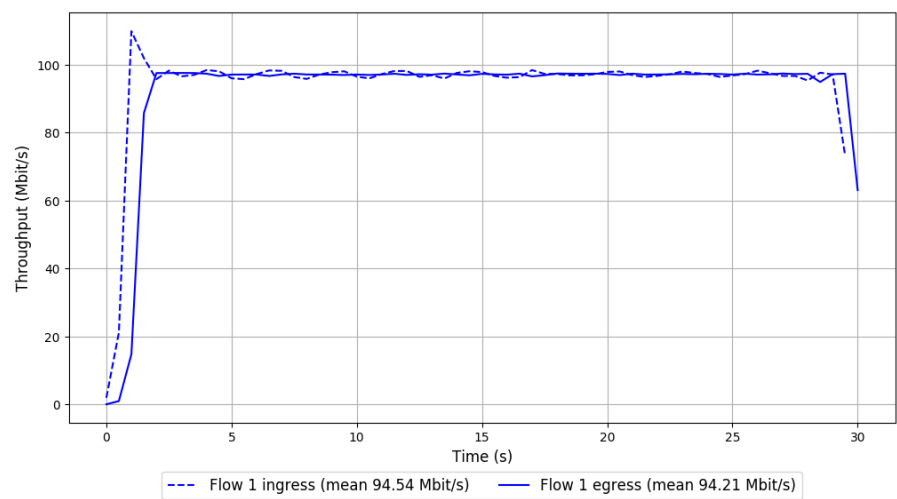


Run 3: Statistics of Indigo

Start at: 2019-12-11 11:49:09  
End at: 2019-12-11 11:49:39  
Local clock offset: -6.053 ms  
Remote clock offset: -6.885 ms

# Below is generated by plot.py at 2019-12-11 13:12:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.21 Mbit/s  
95th percentile per-packet one-way delay: 100.907 ms  
Loss rate: 0.80%  
-- Flow 1:  
Average throughput: 94.21 Mbit/s  
95th percentile per-packet one-way delay: 100.907 ms  
Loss rate: 0.80%

Run 3: Report of Indigo — Data Link



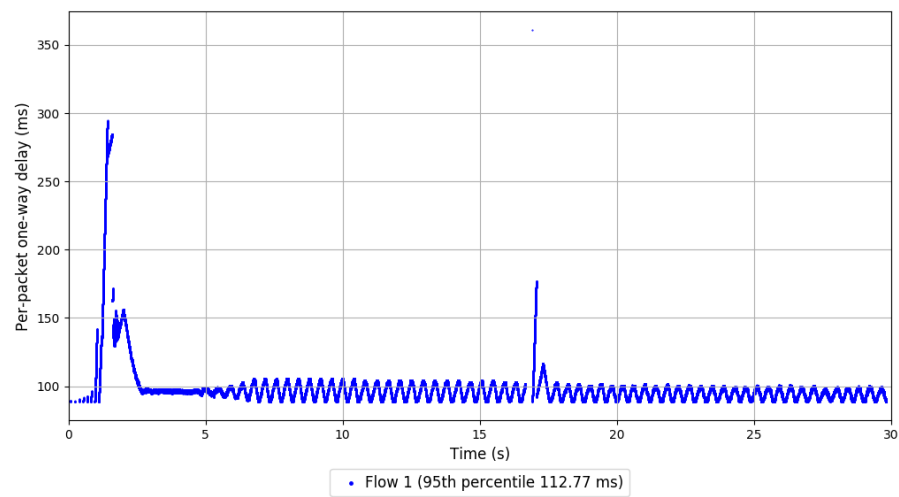
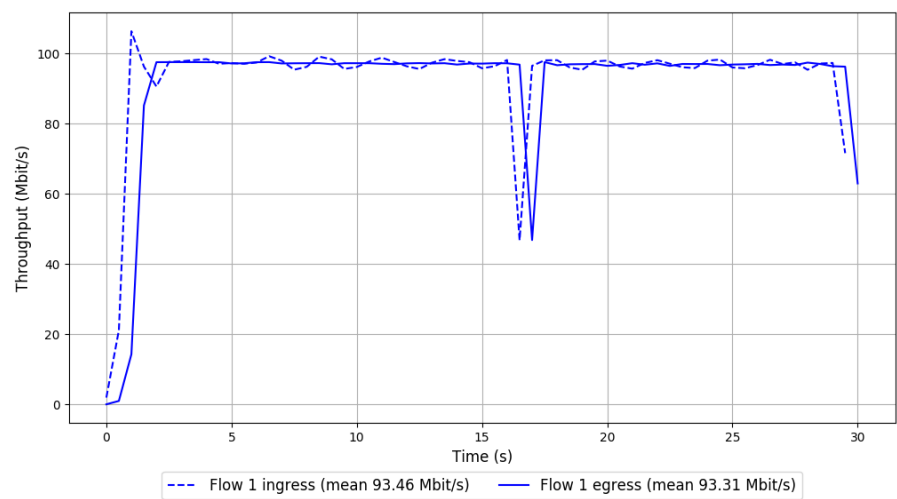


Run 4: Statistics of Indigo

Start at: 2019-12-11 12:17:17  
End at: 2019-12-11 12:17:47  
Local clock offset: -6.127 ms  
Remote clock offset: -9.125 ms

# Below is generated by plot.py at 2019-12-11 13:12:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.31 Mbit/s  
95th percentile per-packet one-way delay: 112.773 ms  
Loss rate: 0.62%  
-- Flow 1:  
Average throughput: 93.31 Mbit/s  
95th percentile per-packet one-way delay: 112.773 ms  
Loss rate: 0.62%

Run 4: Report of Indigo — Data Link

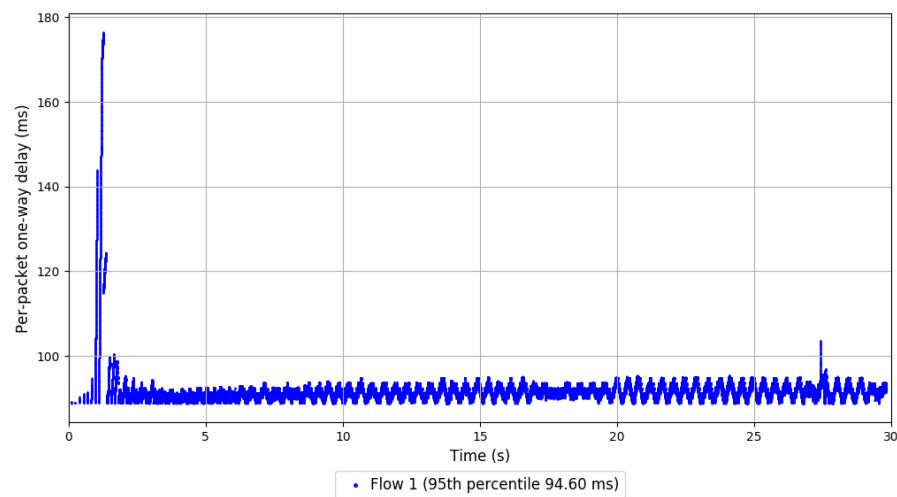
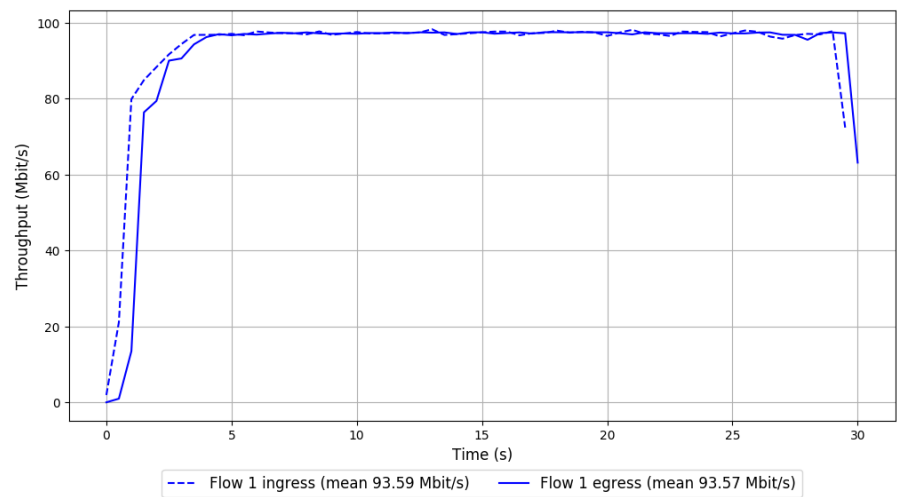


Run 5: Statistics of Indigo

Start at: 2019-12-11 12:45:27  
End at: 2019-12-11 12:45:57  
Local clock offset: -5.806 ms  
Remote clock offset: -9.296 ms

# Below is generated by plot.py at 2019-12-11 13:13:23  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.57 Mbit/s  
95th percentile per-packet one-way delay: 94.603 ms  
Loss rate: 0.49%  
-- Flow 1:  
Average throughput: 93.57 Mbit/s  
95th percentile per-packet one-way delay: 94.603 ms  
Loss rate: 0.49%

Run 5: Report of Indigo — Data Link

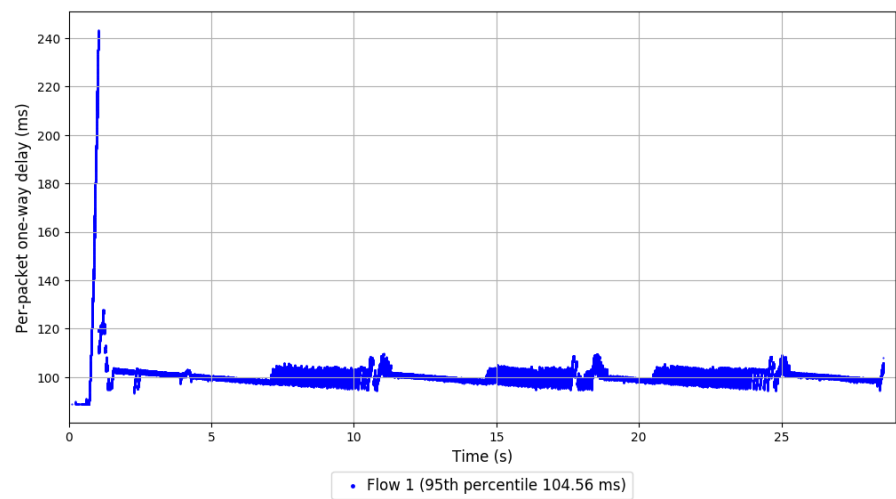
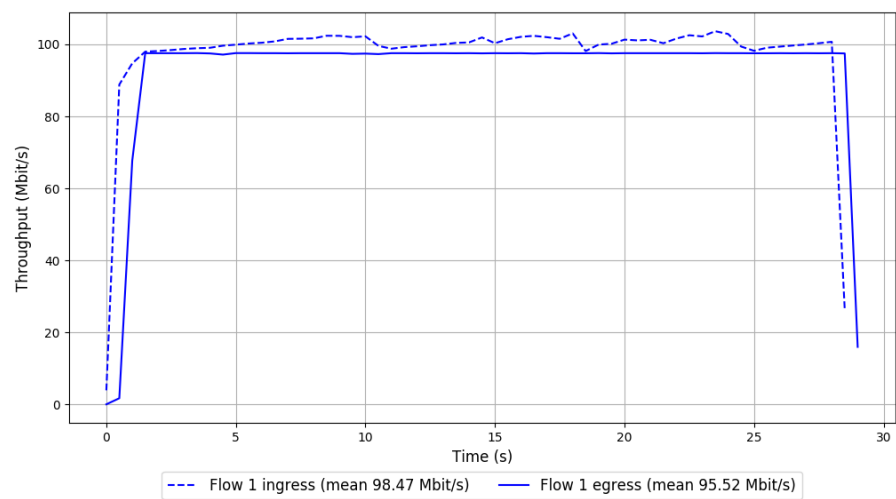


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-12-11 11:01:05  
End at: 2019-12-11 11:01:35  
Local clock offset: -6.539 ms  
Remote clock offset: -8.838 ms

# Below is generated by plot.py at 2019-12-11 13:13:26  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.52 Mbit/s  
95th percentile per-packet one-way delay: 104.557 ms  
Loss rate: 3.45%  
-- Flow 1:  
Average throughput: 95.52 Mbit/s  
95th percentile per-packet one-way delay: 104.557 ms  
Loss rate: 3.45%

Run 1: Report of Indigo-MusesC3 — Data Link

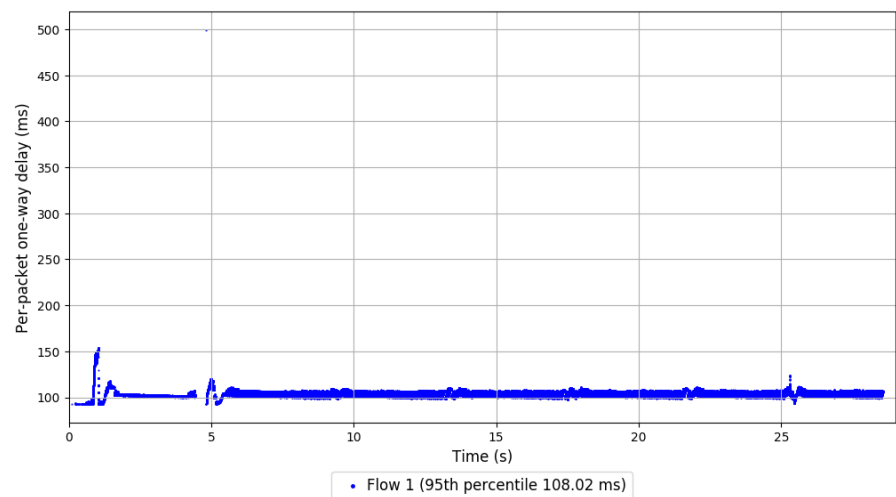
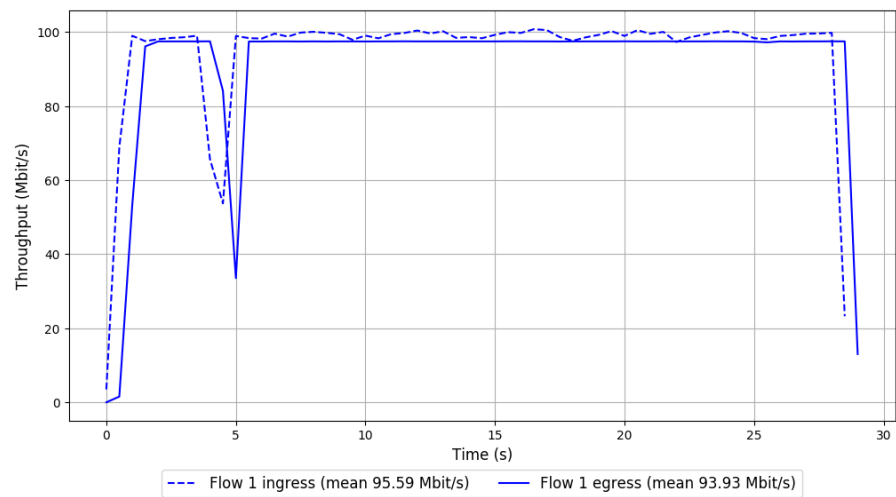


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-12-11 11:29:16  
End at: 2019-12-11 11:29:46  
Local clock offset: -5.182 ms  
Remote clock offset: -7.796 ms

# Below is generated by plot.py at 2019-12-11 13:13:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.93 Mbit/s  
95th percentile per-packet one-way delay: 108.016 ms  
Loss rate: 2.21%  
-- Flow 1:  
Average throughput: 93.93 Mbit/s  
95th percentile per-packet one-way delay: 108.016 ms  
Loss rate: 2.21%

Run 2: Report of Indigo-MusesC3 — Data Link



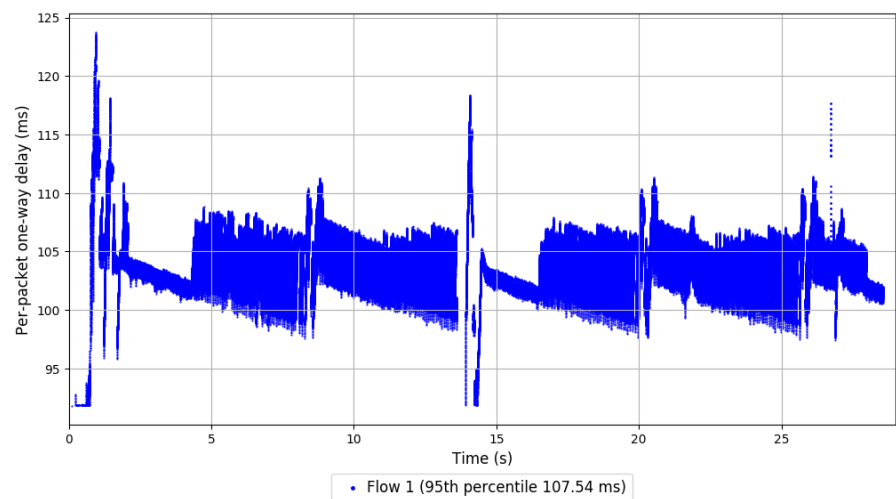
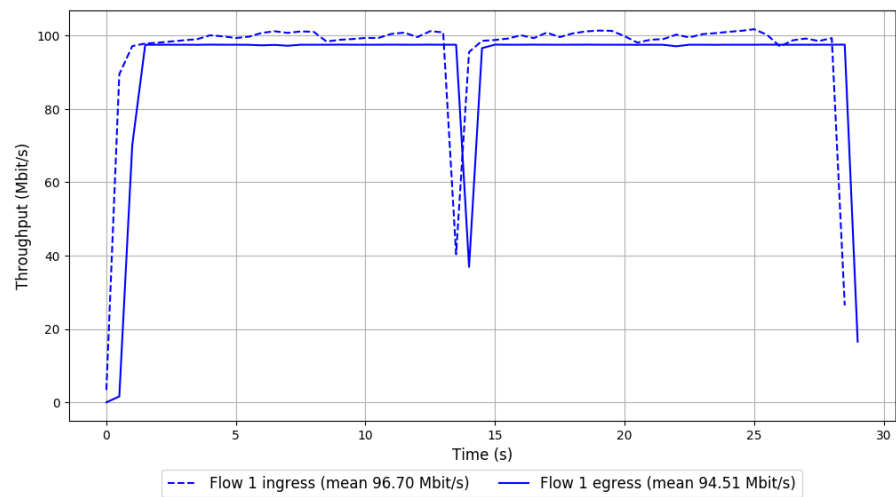


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-12-11 11:57:26  
End at: 2019-12-11 11:57:56  
Local clock offset: -6.192 ms  
Remote clock offset: -8.193 ms

# Below is generated by plot.py at 2019-12-11 13:13:52  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.51 Mbit/s  
95th percentile per-packet one-way delay: 107.544 ms  
Loss rate: 2.73%  
-- Flow 1:  
Average throughput: 94.51 Mbit/s  
95th percentile per-packet one-way delay: 107.544 ms  
Loss rate: 2.73%

Run 3: Report of Indigo-MusesC3 — Data Link



Run 4: Statistics of Indigo-MusesC3

Start at: 2019-12-11 12:25:35

End at: 2019-12-11 12:26:05

Local clock offset: -5.481 ms

Remote clock offset: -8.7 ms

# Below is generated by plot.py at 2019-12-11 13:13:53

# Datalink statistics

-- Total of 1 flow:

Average throughput: 95.54 Mbit/s

95th percentile per-packet one-way delay: 103.432 ms

Loss rate: 1.62%

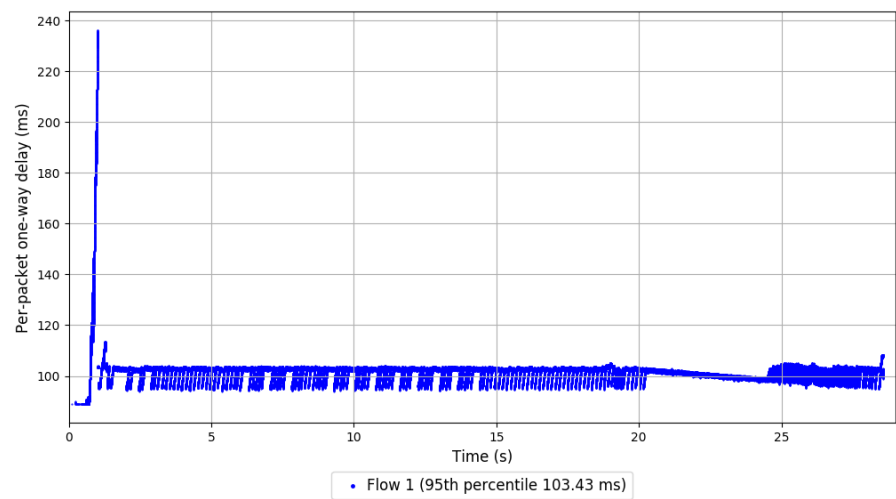
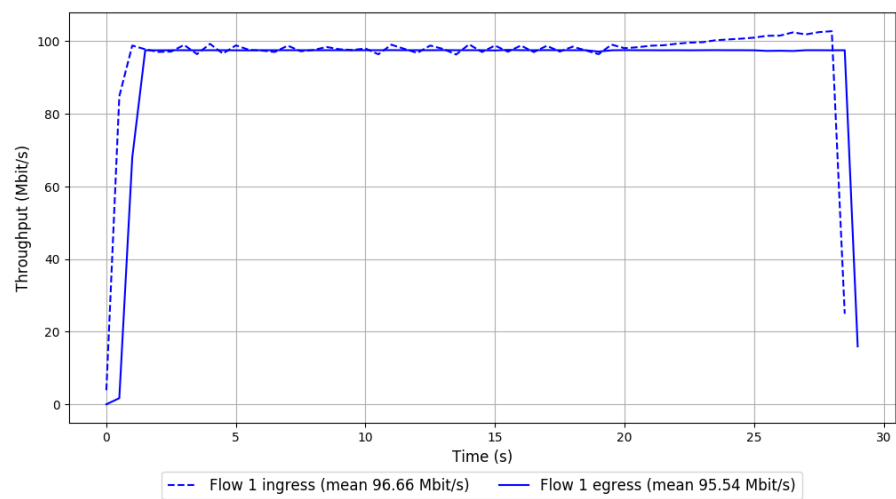
-- Flow 1:

Average throughput: 95.54 Mbit/s

95th percentile per-packet one-way delay: 103.432 ms

Loss rate: 1.62%

Run 4: Report of Indigo-MusesC3 — Data Link

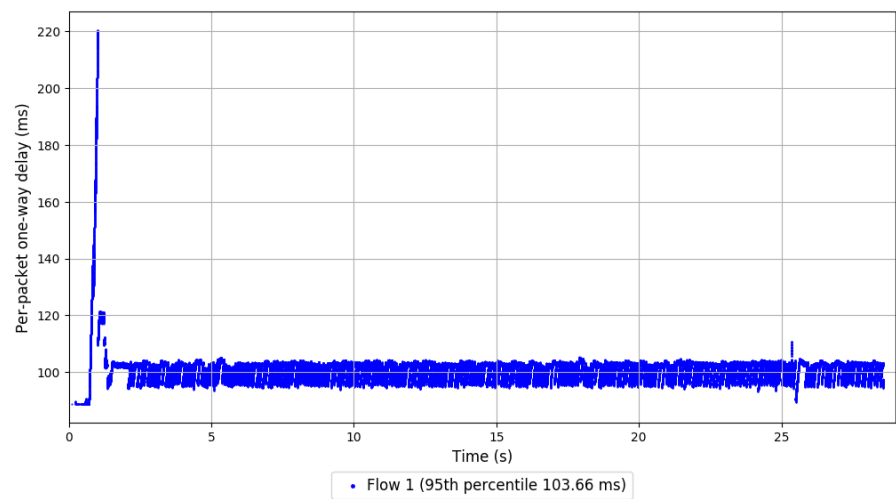
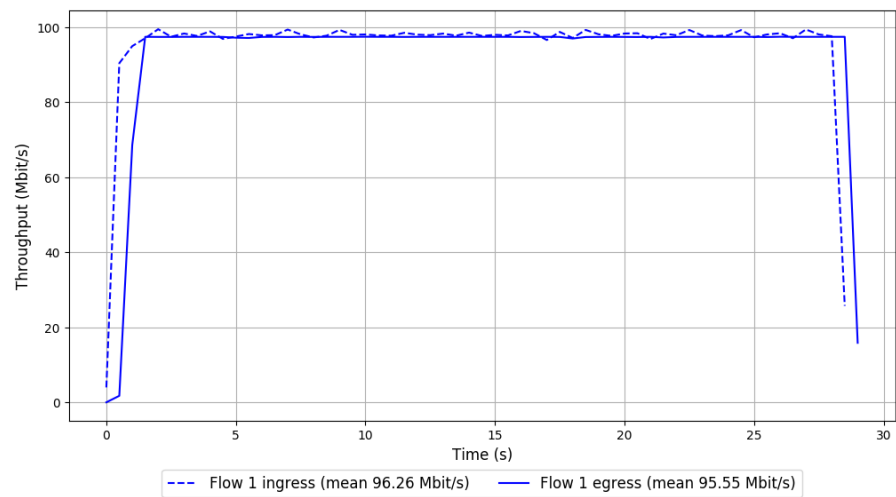


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-12-11 12:53:45  
End at: 2019-12-11 12:54:15  
Local clock offset: -5.557 ms  
Remote clock offset: -9.159 ms

# Below is generated by plot.py at 2019-12-11 13:13:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.55 Mbit/s  
95th percentile per-packet one-way delay: 103.656 ms  
Loss rate: 1.21%  
-- Flow 1:  
Average throughput: 95.55 Mbit/s  
95th percentile per-packet one-way delay: 103.656 ms  
Loss rate: 1.21%

Run 5: Report of Indigo-MusesC3 — Data Link

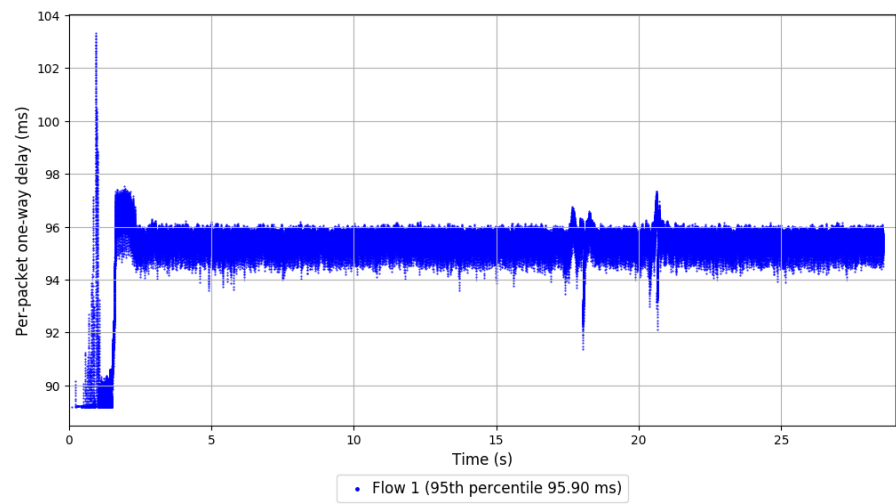
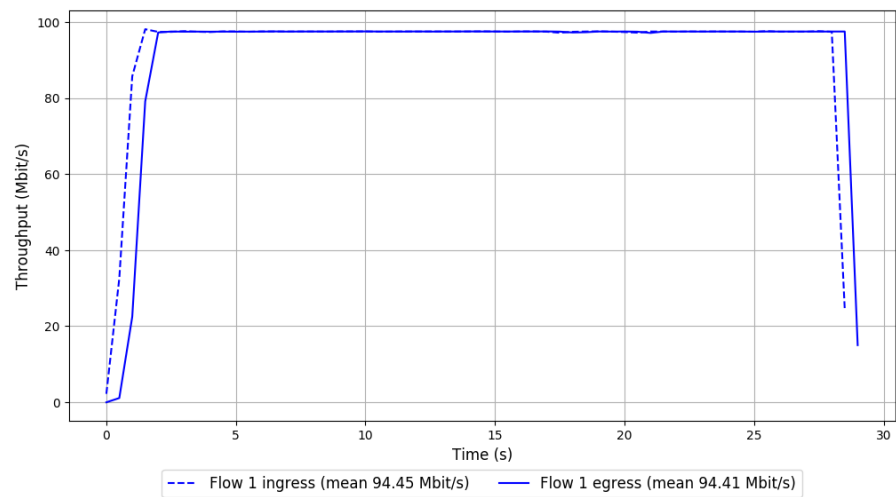


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-12-11 11:05:43  
End at: 2019-12-11 11:06:13  
Local clock offset: -6.509 ms  
Remote clock offset: -8.936 ms

# Below is generated by plot.py at 2019-12-11 13:13:58  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.41 Mbit/s  
95th percentile per-packet one-way delay: 95.898 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 94.41 Mbit/s  
95th percentile per-packet one-way delay: 95.898 ms  
Loss rate: 0.52%

Run 1: Report of Indigo-MusesC5 — Data Link



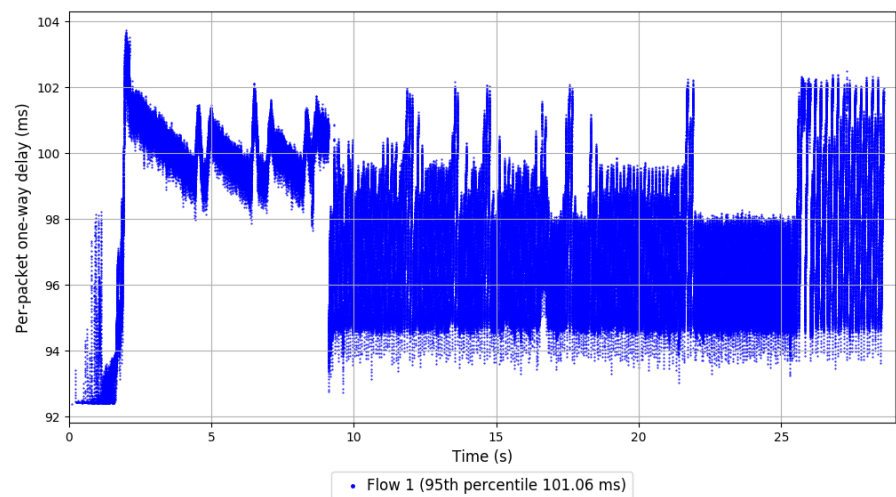
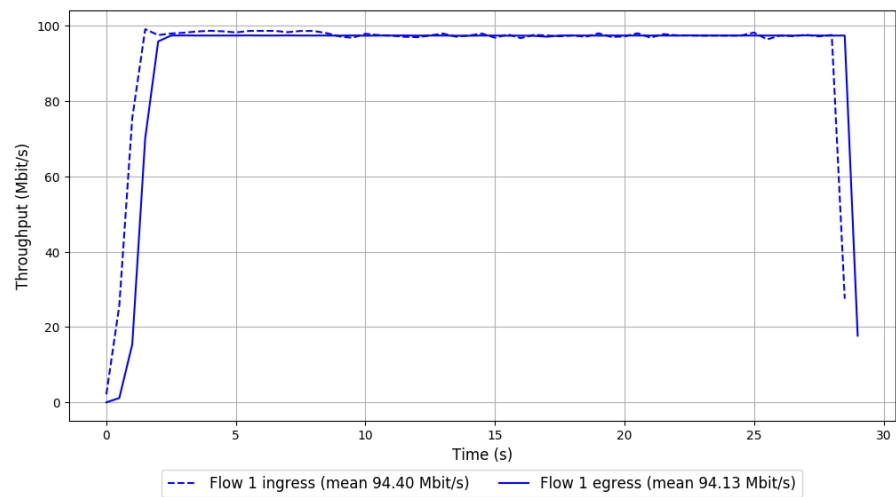


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-12-11 11:33:54  
End at: 2019-12-11 11:34:24  
Local clock offset: -5.062 ms  
Remote clock offset: -7.255 ms

# Below is generated by plot.py at 2019-12-11 13:13:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.13 Mbit/s  
95th percentile per-packet one-way delay: 101.062 ms  
Loss rate: 0.78%  
-- Flow 1:  
Average throughput: 94.13 Mbit/s  
95th percentile per-packet one-way delay: 101.062 ms  
Loss rate: 0.78%

Run 2: Report of Indigo-MusesC5 — Data Link

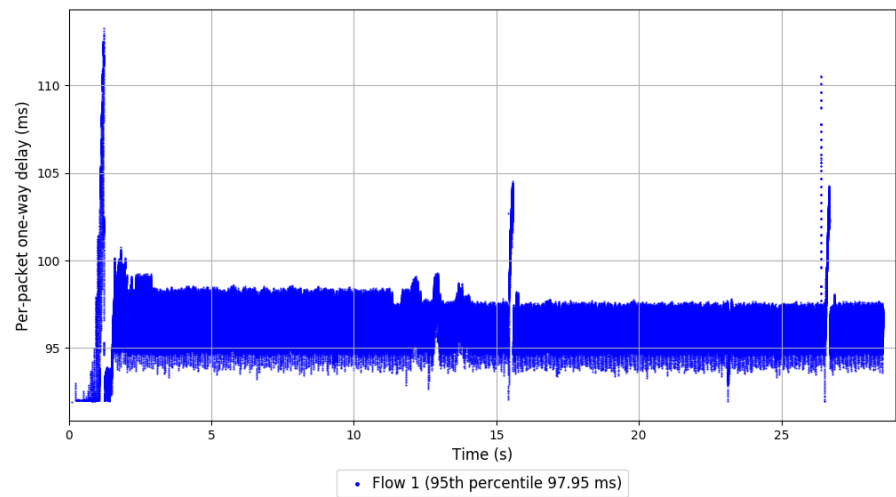
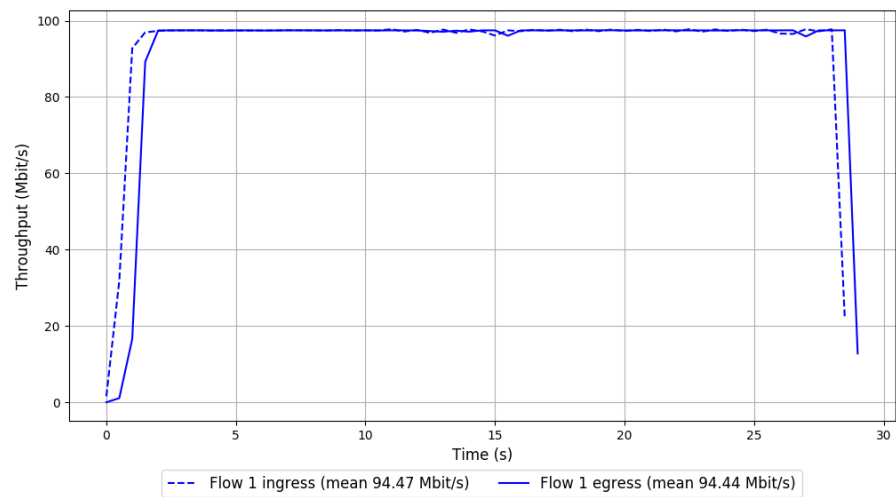


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-12-11 12:02:03  
End at: 2019-12-11 12:02:33  
Local clock offset: -6.136 ms  
Remote clock offset: -8.557 ms

# Below is generated by plot.py at 2019-12-11 13:14:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.44 Mbit/s  
95th percentile per-packet one-way delay: 97.954 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 94.44 Mbit/s  
95th percentile per-packet one-way delay: 97.954 ms  
Loss rate: 0.52%

Run 3: Report of Indigo-MusesC5 — Data Link

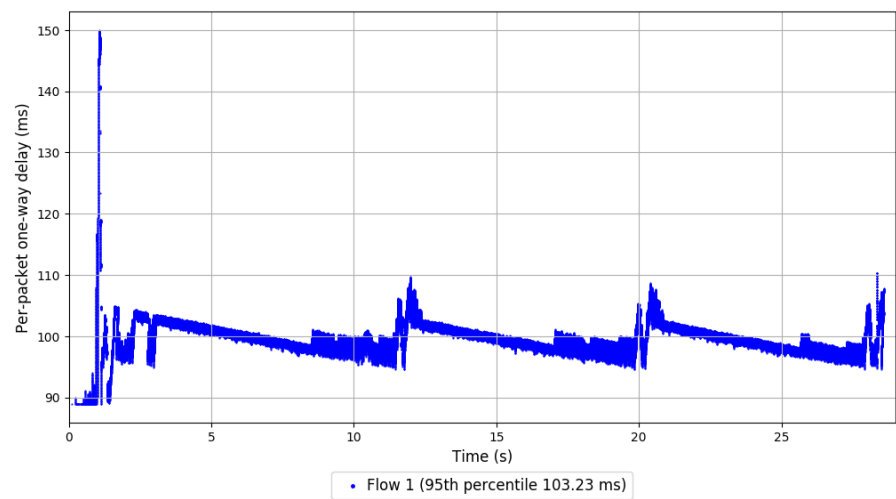
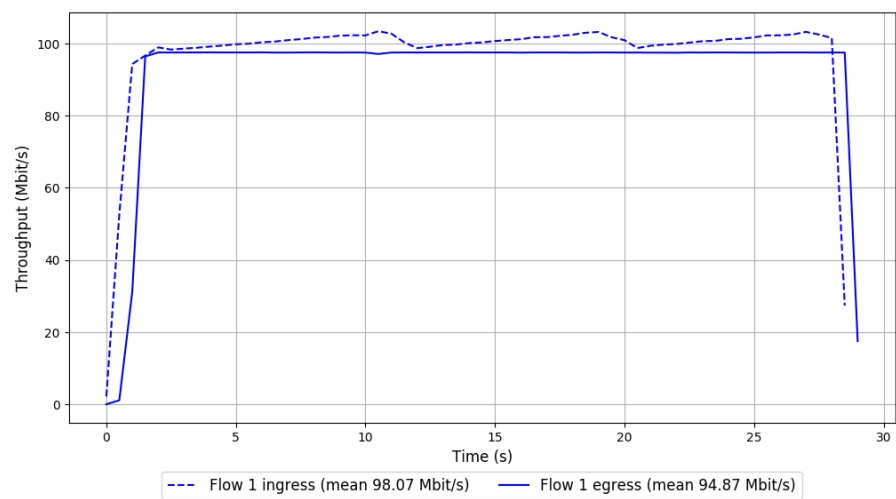


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-12-11 12:30:13  
End at: 2019-12-11 12:30:43  
Local clock offset: -5.413 ms  
Remote clock offset: -8.667 ms

# Below is generated by plot.py at 2019-12-11 13:14:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.87 Mbit/s  
95th percentile per-packet one-way delay: 103.230 ms  
Loss rate: 3.72%  
-- Flow 1:  
Average throughput: 94.87 Mbit/s  
95th percentile per-packet one-way delay: 103.230 ms  
Loss rate: 3.72%

Run 4: Report of Indigo-MusesC5 — Data Link



Run 5: Statistics of Indigo-MusesC5

Start at: 2019-12-11 12:58:23

End at: 2019-12-11 12:58:53

Local clock offset: -5.48 ms

Remote clock offset: -9.459 ms

# Below is generated by plot.py at 2019-12-11 13:14:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.64 Mbit/s

95th percentile per-packet one-way delay: 100.446 ms

Loss rate: 0.53%

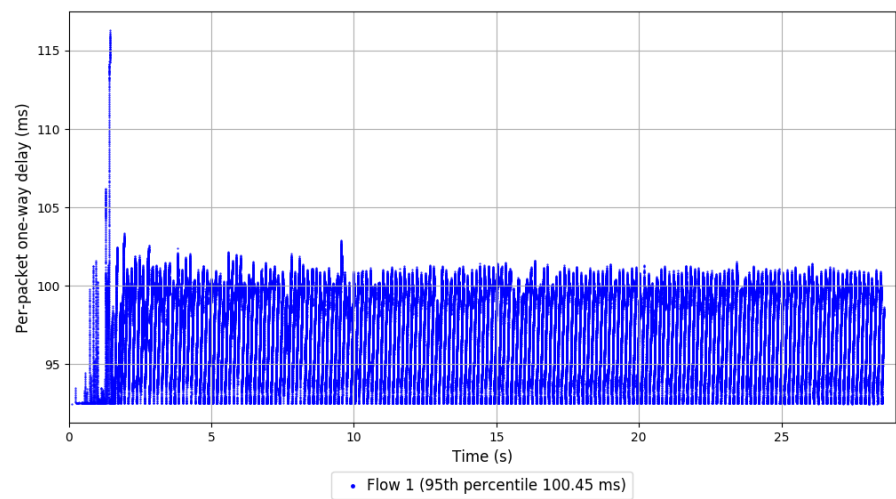
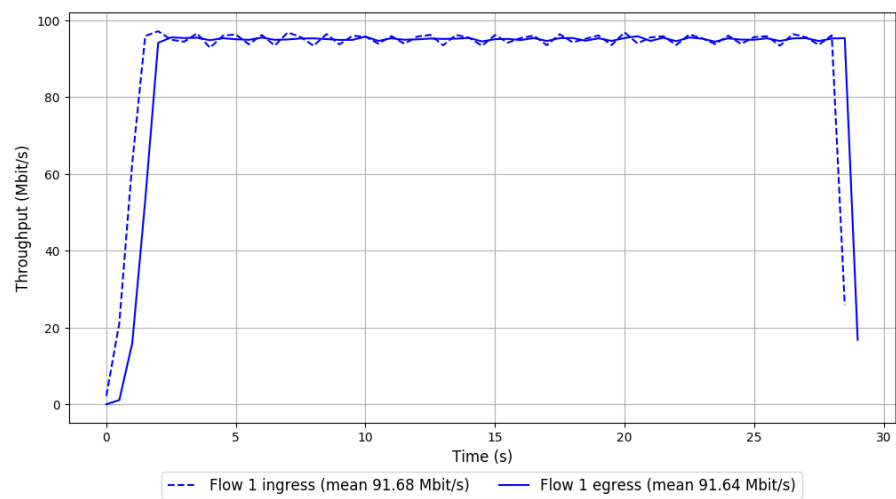
-- Flow 1:

Average throughput: 91.64 Mbit/s

95th percentile per-packet one-way delay: 100.446 ms

Loss rate: 0.53%

Run 5: Report of Indigo-MusesC5 — Data Link





Run 1: Statistics of Indigo-MusesD

Start at: 2019-12-11 10:46:58

End at: 2019-12-11 10:47:28

Local clock offset: -7.106 ms

Remote clock offset: -9.861 ms

# Below is generated by plot.py at 2019-12-11 13:14:54

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.36 Mbit/s

95th percentile per-packet one-way delay: 100.264 ms

Loss rate: 0.54%

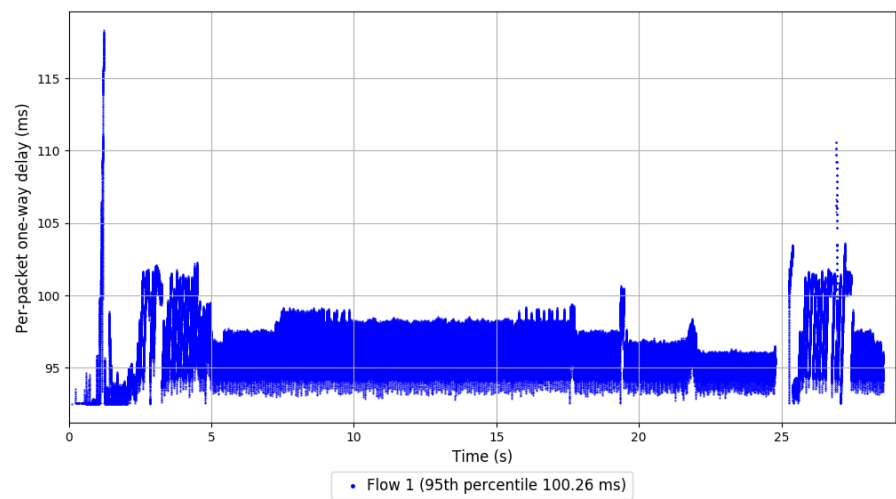
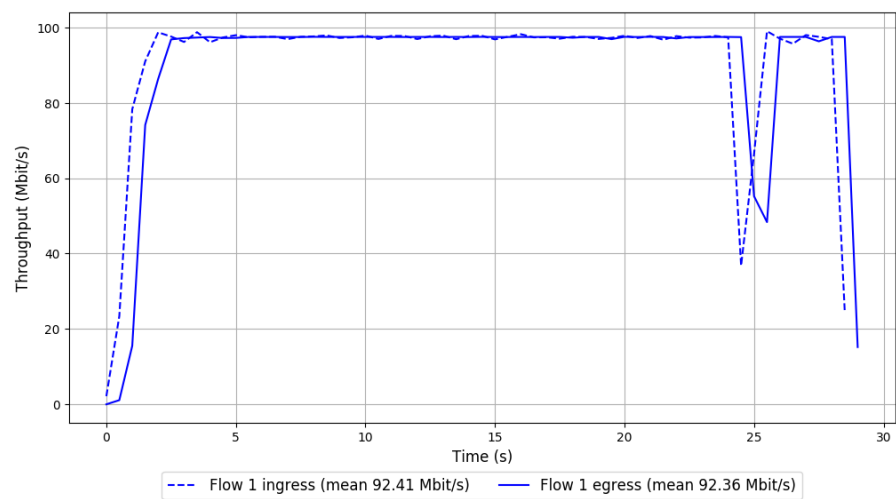
-- Flow 1:

Average throughput: 92.36 Mbit/s

95th percentile per-packet one-way delay: 100.264 ms

Loss rate: 0.54%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-12-11 11:15:08

End at: 2019-12-11 11:15:38

Local clock offset: -5.799 ms

Remote clock offset: -8.46 ms

# Below is generated by plot.py at 2019-12-11 13:14:56

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.97 Mbit/s

95th percentile per-packet one-way delay: 99.289 ms

Loss rate: 0.54%

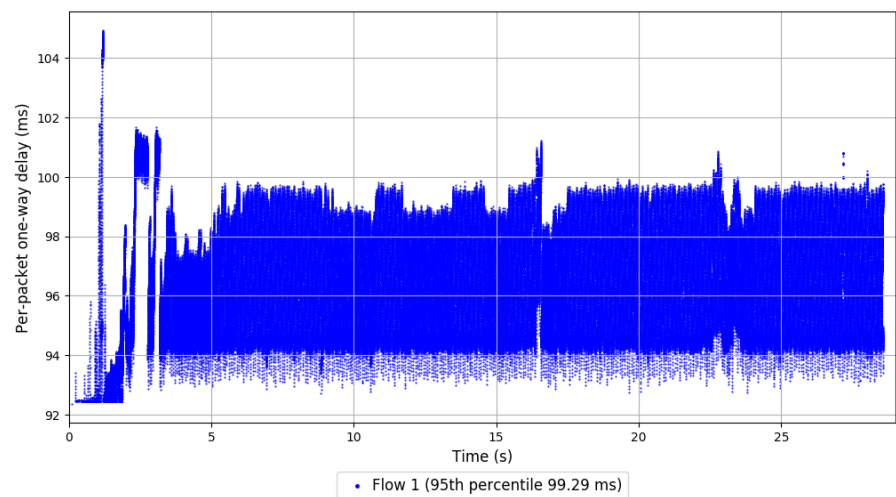
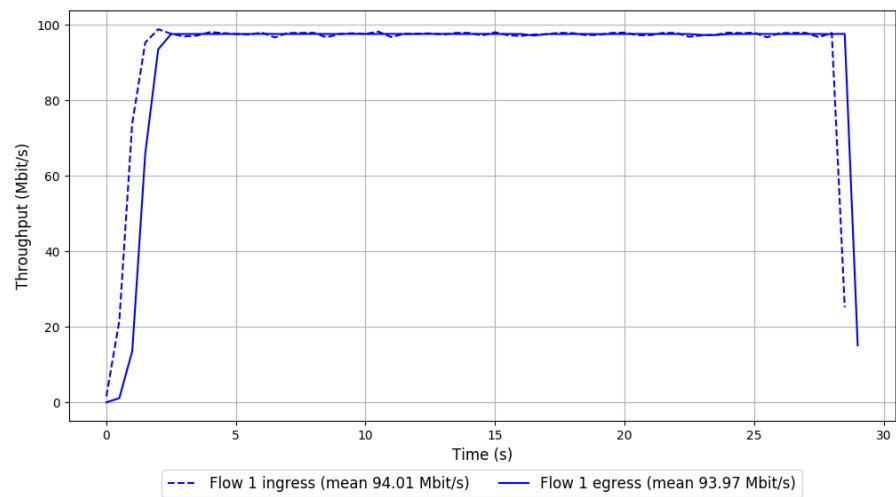
-- Flow 1:

Average throughput: 93.97 Mbit/s

95th percentile per-packet one-way delay: 99.289 ms

Loss rate: 0.54%

Run 2: Report of Indigo-MusesD — Data Link

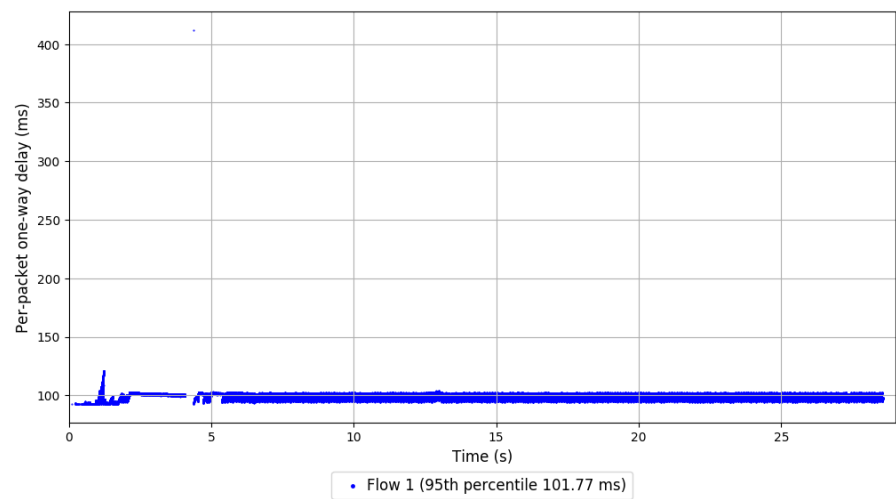
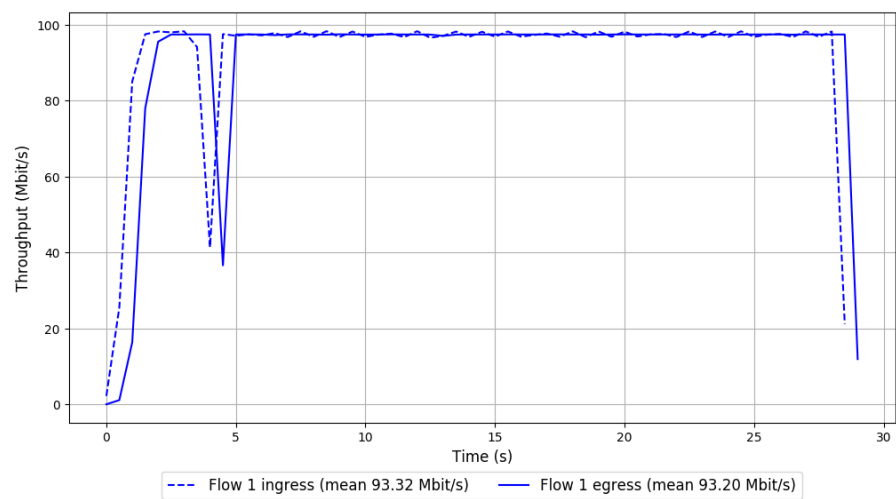


Run 3: Statistics of Indigo-MusesD

Start at: 2019-12-11 11:43:20  
End at: 2019-12-11 11:43:50  
Local clock offset: -5.212 ms  
Remote clock offset: -7.105 ms

# Below is generated by plot.py at 2019-12-11 13:14:58  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.20 Mbit/s  
95th percentile per-packet one-way delay: 101.774 ms  
Loss rate: 0.61%  
-- Flow 1:  
Average throughput: 93.20 Mbit/s  
95th percentile per-packet one-way delay: 101.774 ms  
Loss rate: 0.61%

Run 3: Report of Indigo-MusesD — Data Link

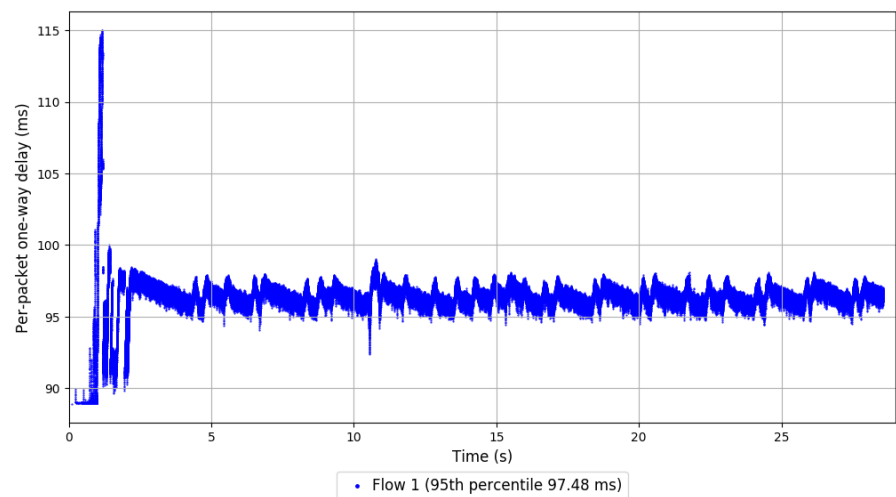
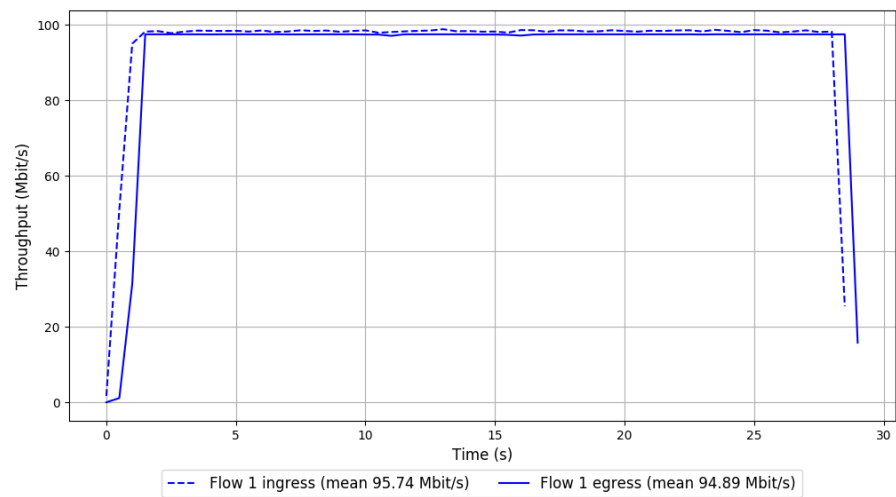


Run 4: Statistics of Indigo-MusesD

Start at: 2019-12-11 12:11:28  
End at: 2019-12-11 12:11:58  
Local clock offset: -6.144 ms  
Remote clock offset: -9.282 ms

# Below is generated by plot.py at 2019-12-11 13:15:02  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.89 Mbit/s  
95th percentile per-packet one-way delay: 97.480 ms  
Loss rate: 1.36%  
-- Flow 1:  
Average throughput: 94.89 Mbit/s  
95th percentile per-packet one-way delay: 97.480 ms  
Loss rate: 1.36%

Run 4: Report of Indigo-MusesD — Data Link



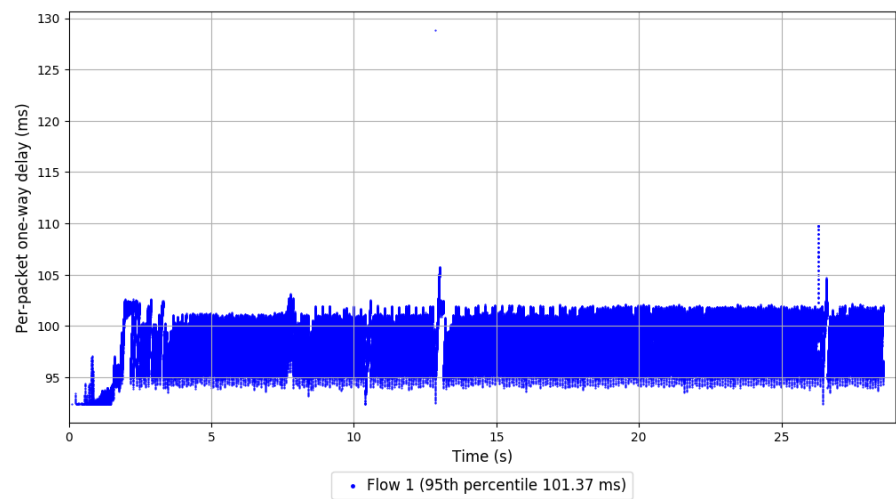
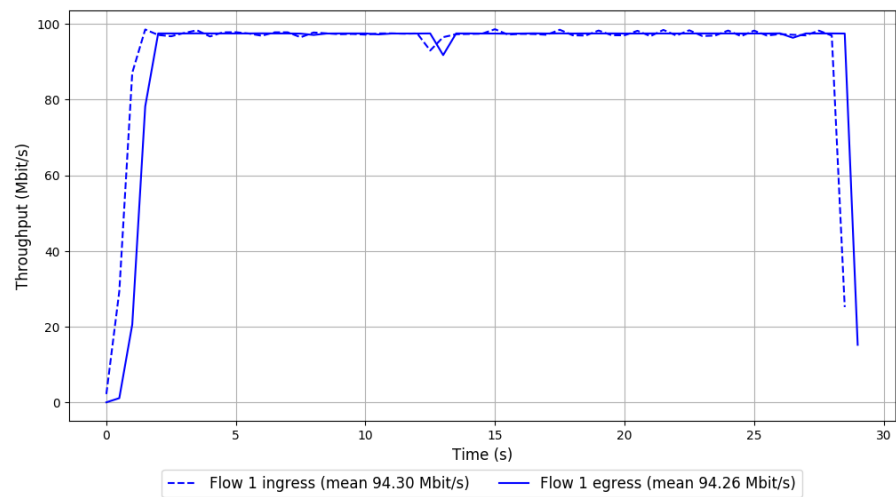


Run 5: Statistics of Indigo-MusesD

Start at: 2019-12-11 12:39:38  
End at: 2019-12-11 12:40:08  
Local clock offset: -6.027 ms  
Remote clock offset: -9.306 ms

# Below is generated by plot.py at 2019-12-11 13:15:03  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.26 Mbit/s  
95th percentile per-packet one-way delay: 101.366 ms  
Loss rate: 0.54%  
-- Flow 1:  
Average throughput: 94.26 Mbit/s  
95th percentile per-packet one-way delay: 101.366 ms  
Loss rate: 0.54%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-12-11 11:13:57

End at: 2019-12-11 11:14:27

Local clock offset: -5.959 ms

Remote clock offset: -8.685 ms

# Below is generated by plot.py at 2019-12-11 13:15:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 95.32 Mbit/s

95th percentile per-packet one-way delay: 118.513 ms

Loss rate: 7.69%

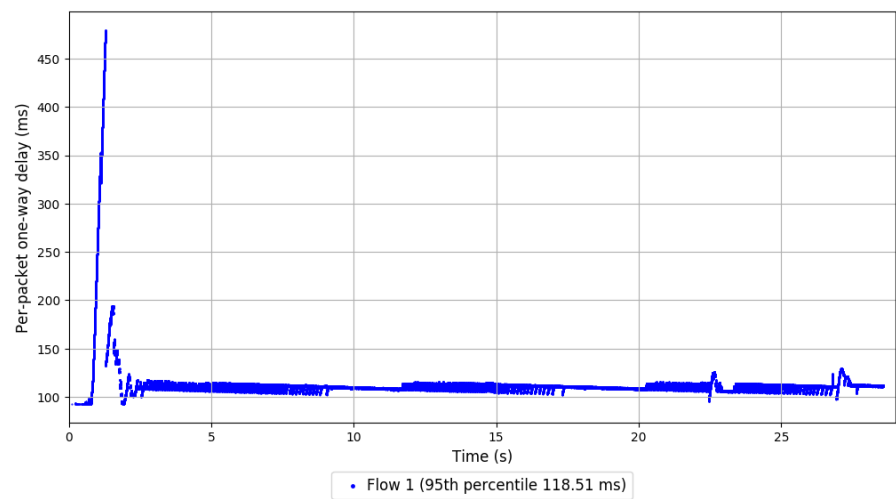
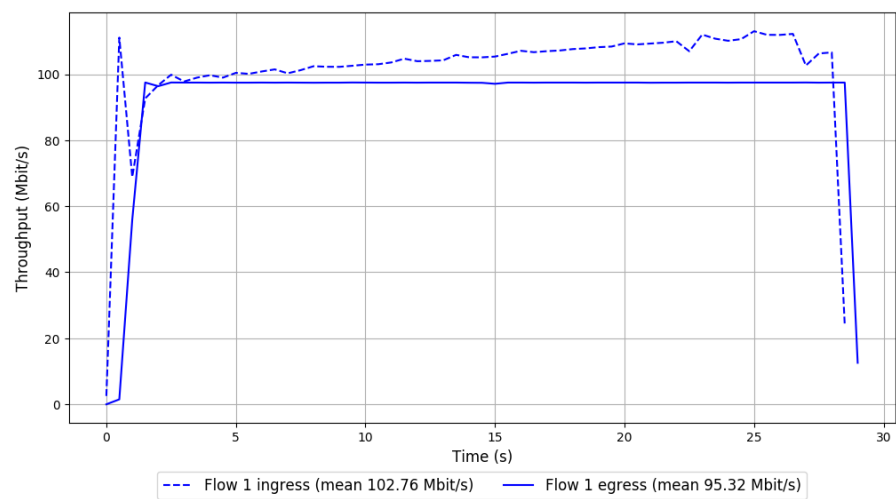
-- Flow 1:

Average throughput: 95.32 Mbit/s

95th percentile per-packet one-way delay: 118.513 ms

Loss rate: 7.69%

Run 1: Report of Indigo-MusesT — Data Link

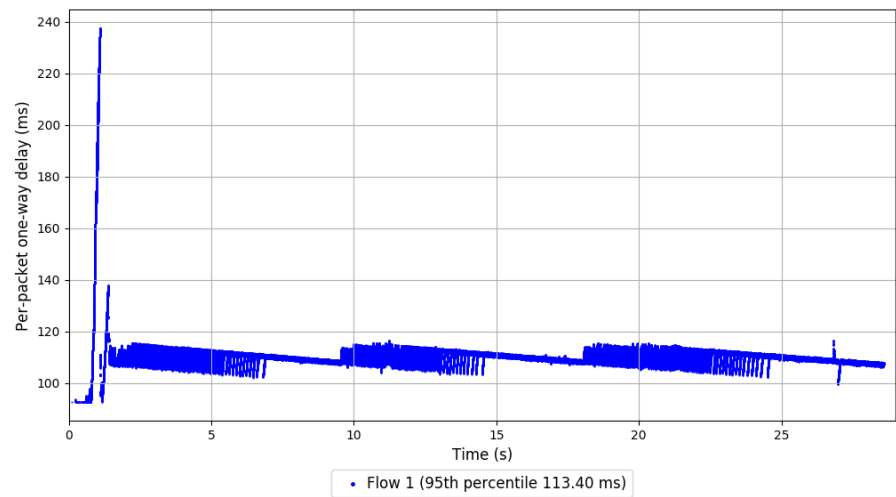
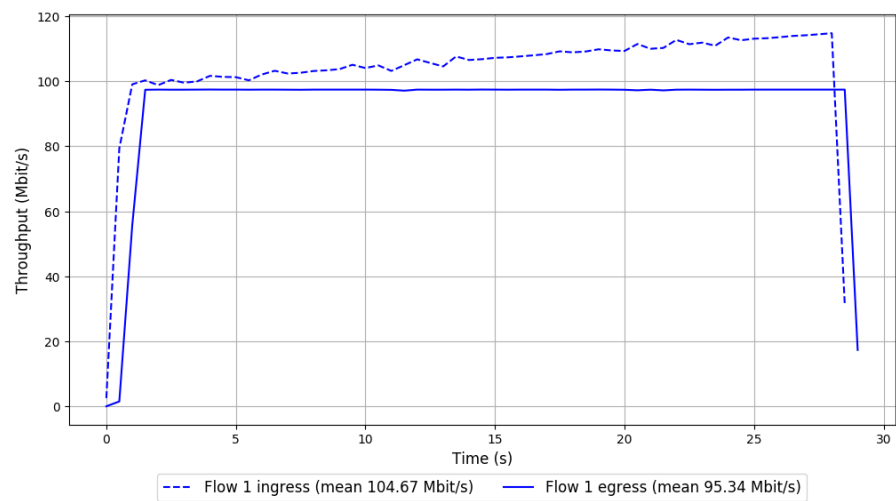


Run 2: Statistics of Indigo-MusesT

Start at: 2019-12-11 11:42:08  
End at: 2019-12-11 11:42:39  
Local clock offset: -5.168 ms  
Remote clock offset: -7.164 ms

# Below is generated by plot.py at 2019-12-11 13:15:47  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.34 Mbit/s  
95th percentile per-packet one-way delay: 113.396 ms  
Loss rate: 9.36%  
-- Flow 1:  
Average throughput: 95.34 Mbit/s  
95th percentile per-packet one-way delay: 113.396 ms  
Loss rate: 9.36%

Run 2: Report of Indigo-MusesT — Data Link

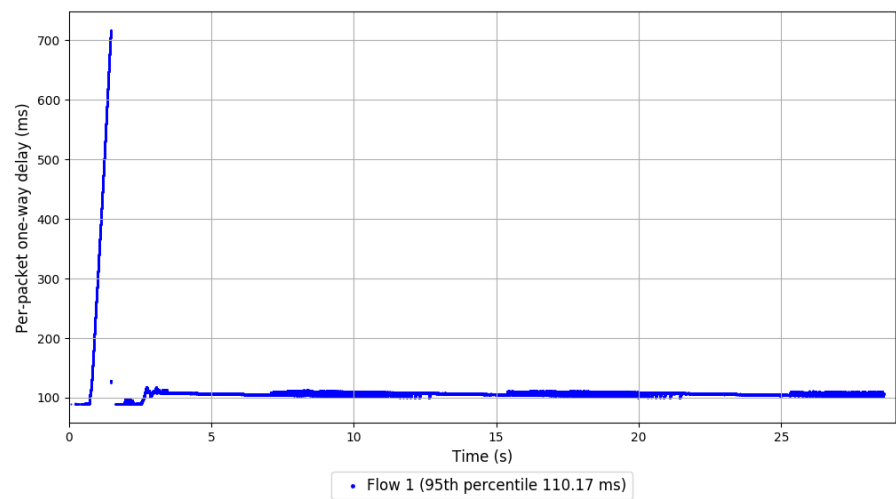
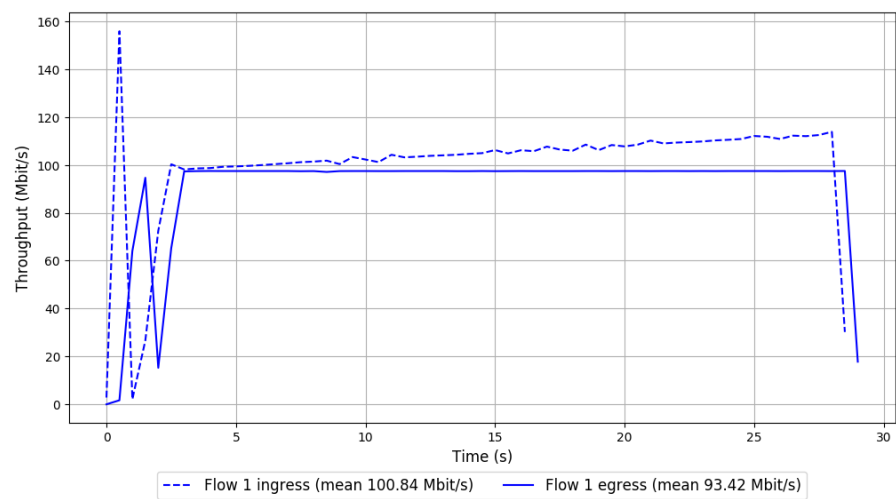


Run 3: Statistics of Indigo-MusesT

Start at: 2019-12-11 12:10:17  
End at: 2019-12-11 12:10:47  
Local clock offset: -6.131 ms  
Remote clock offset: -9.114 ms

# Below is generated by plot.py at 2019-12-11 13:15:51  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.42 Mbit/s  
95th percentile per-packet one-way delay: 110.165 ms  
Loss rate: 7.80%  
-- Flow 1:  
Average throughput: 93.42 Mbit/s  
95th percentile per-packet one-way delay: 110.165 ms  
Loss rate: 7.80%

Run 3: Report of Indigo-MusesT — Data Link



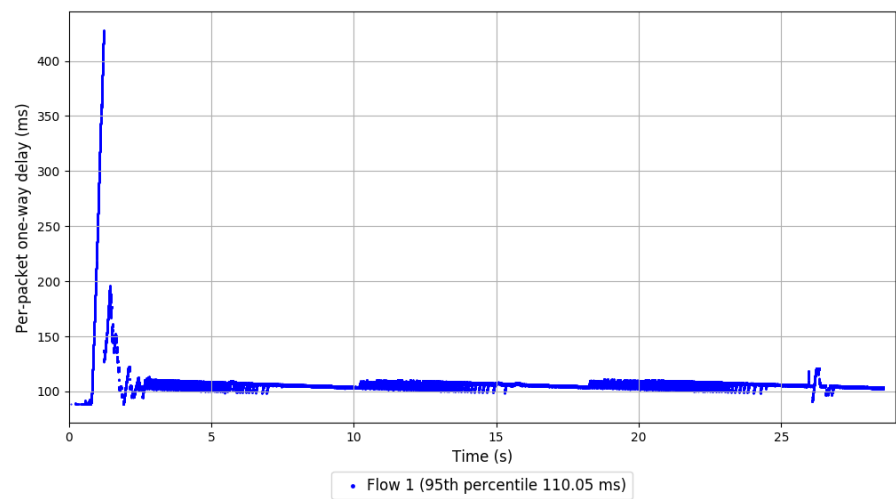
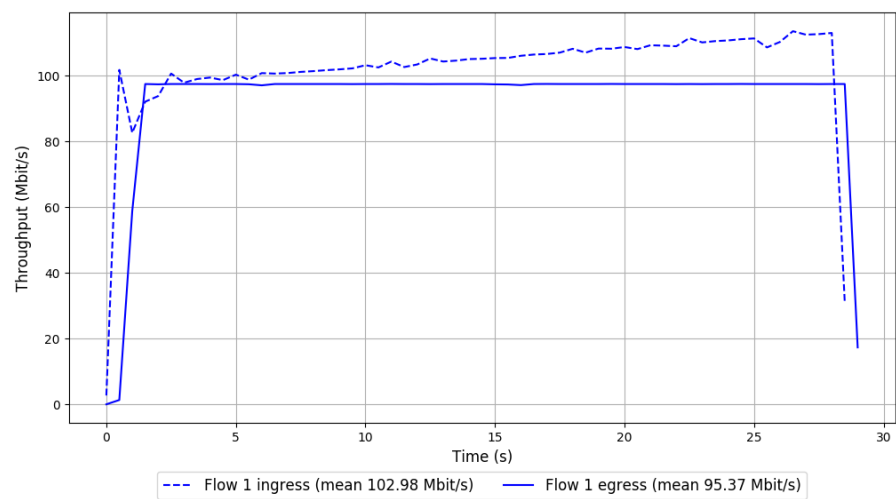


Run 4: Statistics of Indigo-MusesT

Start at: 2019-12-11 12:38:27  
End at: 2019-12-11 12:38:57  
Local clock offset: -6.081 ms  
Remote clock offset: -8.616 ms

# Below is generated by plot.py at 2019-12-11 13:15:58  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.37 Mbit/s  
95th percentile per-packet one-way delay: 110.047 ms  
Loss rate: 7.82%  
-- Flow 1:  
Average throughput: 95.37 Mbit/s  
95th percentile per-packet one-way delay: 110.047 ms  
Loss rate: 7.82%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-12-11 13:06:37

End at: 2019-12-11 13:07:07

Local clock offset: -4.653 ms

Remote clock offset: -9.555 ms

# Below is generated by plot.py at 2019-12-11 13:15:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.03 Mbit/s

95th percentile per-packet one-way delay: 111.206 ms

Loss rate: 7.41%

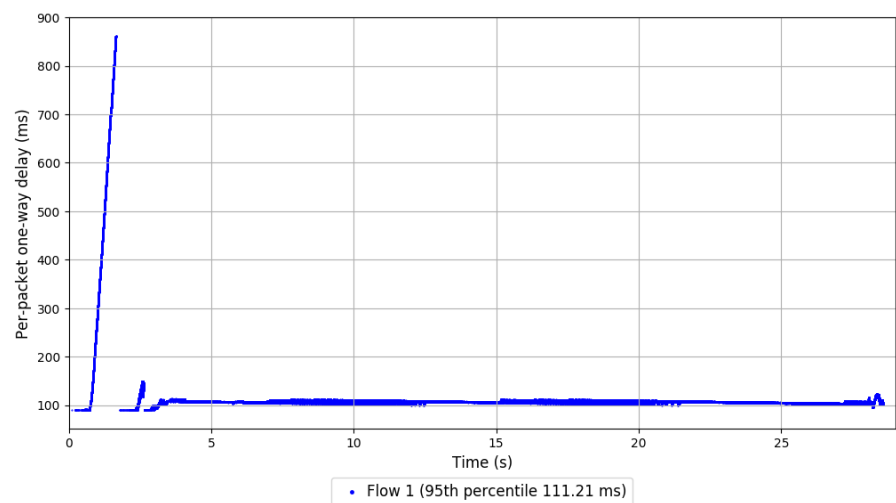
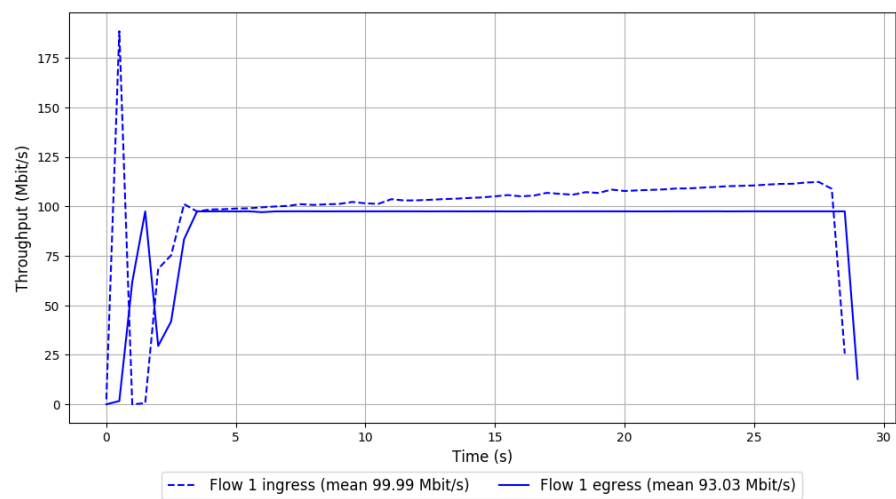
-- Flow 1:

Average throughput: 93.03 Mbit/s

95th percentile per-packet one-way delay: 111.206 ms

Loss rate: 7.41%

Run 5: Report of Indigo-MusesT — Data Link

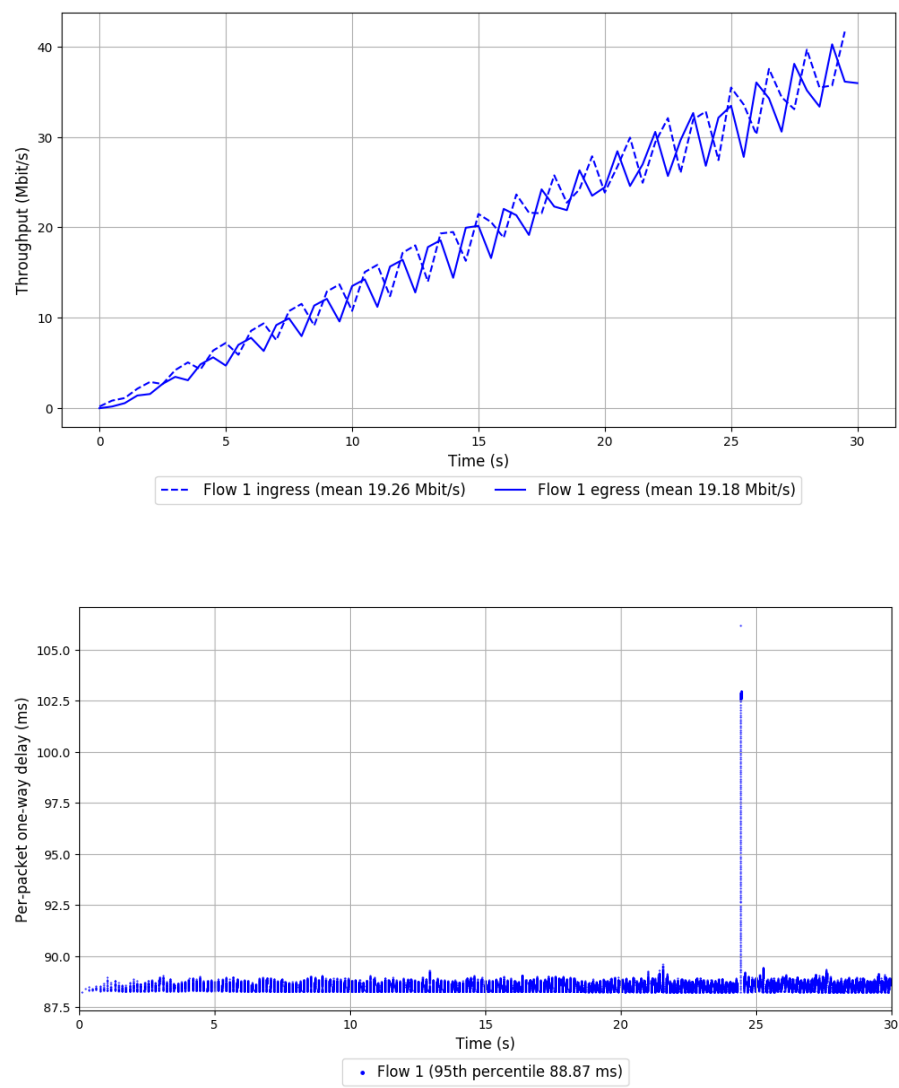


Run 1: Statistics of LEDBAT

Start at: 2019-12-11 11:08:04  
End at: 2019-12-11 11:08:34  
Local clock offset: -7.223 ms  
Remote clock offset: -8.679 ms

# Below is generated by plot.py at 2019-12-11 13:15:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 19.18 Mbit/s  
95th percentile per-packet one-way delay: 88.867 ms  
Loss rate: 0.91%  
-- Flow 1:  
Average throughput: 19.18 Mbit/s  
95th percentile per-packet one-way delay: 88.867 ms  
Loss rate: 0.91%

Run 1: Report of LEDBAT — Data Link

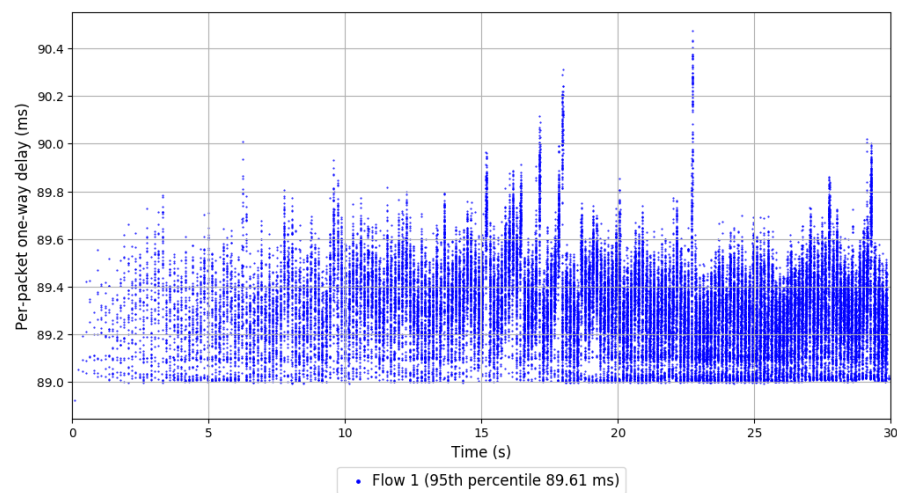
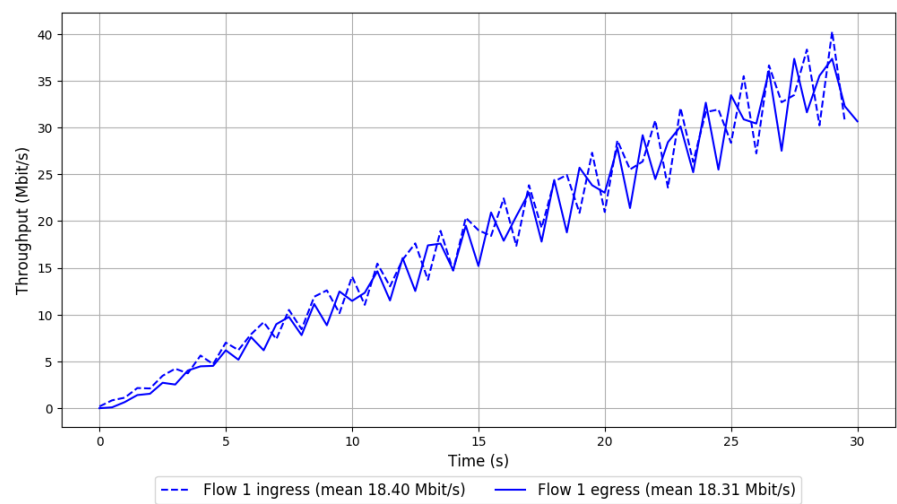


Run 2: Statistics of LEDBAT

Start at: 2019-12-11 11:36:16  
End at: 2019-12-11 11:36:46  
Local clock offset: -5.031 ms  
Remote clock offset: -7.243 ms

# Below is generated by plot.py at 2019-12-11 13:15:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 18.31 Mbit/s  
95th percentile per-packet one-way delay: 89.612 ms  
Loss rate: 0.92%  
-- Flow 1:  
Average throughput: 18.31 Mbit/s  
95th percentile per-packet one-way delay: 89.612 ms  
Loss rate: 0.92%

Run 2: Report of LEDBAT — Data Link



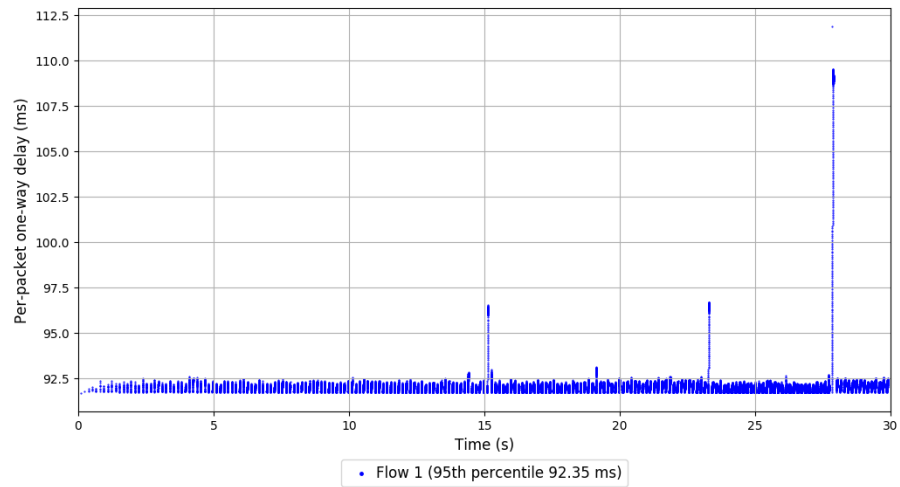
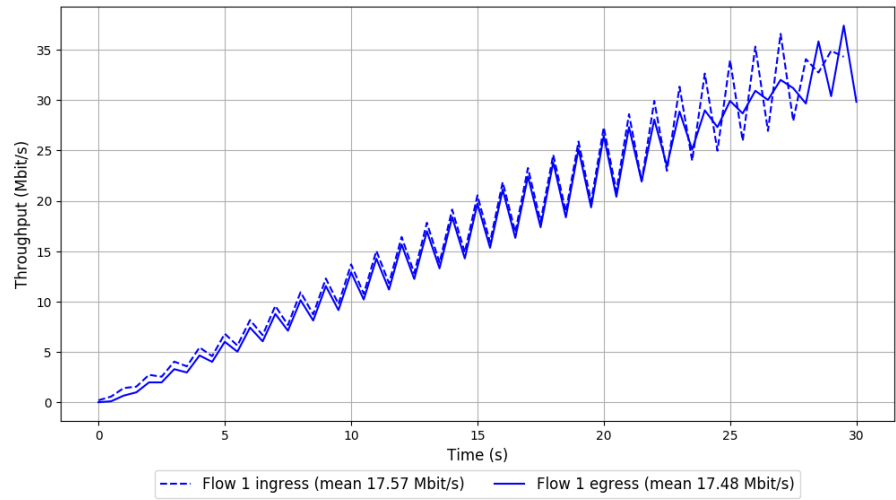


Run 3: Statistics of LEDBAT

Start at: 2019-12-11 12:04:25  
End at: 2019-12-11 12:04:55  
Local clock offset: -6.214 ms  
Remote clock offset: -8.501 ms

# Below is generated by plot.py at 2019-12-11 13:15:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 17.48 Mbit/s  
95th percentile per-packet one-way delay: 92.350 ms  
Loss rate: 0.95%  
-- Flow 1:  
Average throughput: 17.48 Mbit/s  
95th percentile per-packet one-way delay: 92.350 ms  
Loss rate: 0.95%

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

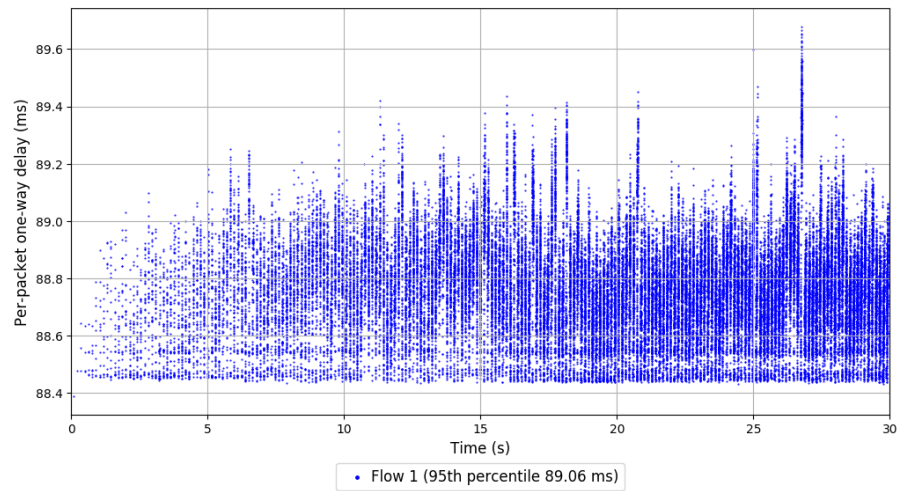
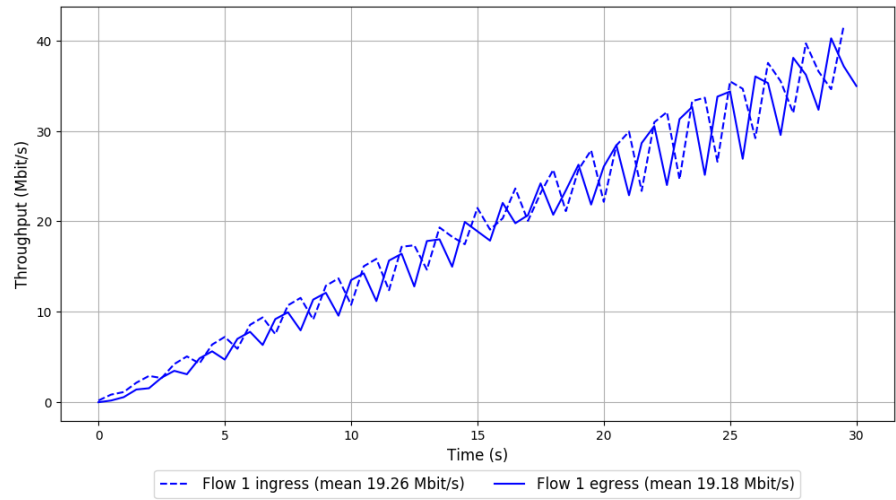


Run 4: Statistics of LEDBAT

Start at: 2019-12-11 12:32:34  
End at: 2019-12-11 12:33:04  
Local clock offset: -6.094 ms  
Remote clock offset: -8.794 ms

# Below is generated by plot.py at 2019-12-11 13:15:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 19.18 Mbit/s  
95th percentile per-packet one-way delay: 89.061 ms  
Loss rate: 0.91%  
-- Flow 1:  
Average throughput: 19.18 Mbit/s  
95th percentile per-packet one-way delay: 89.061 ms  
Loss rate: 0.91%

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

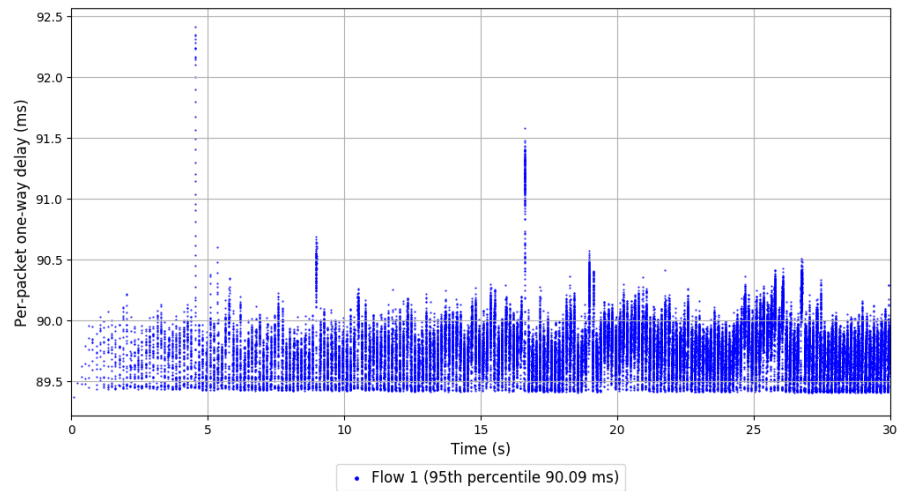
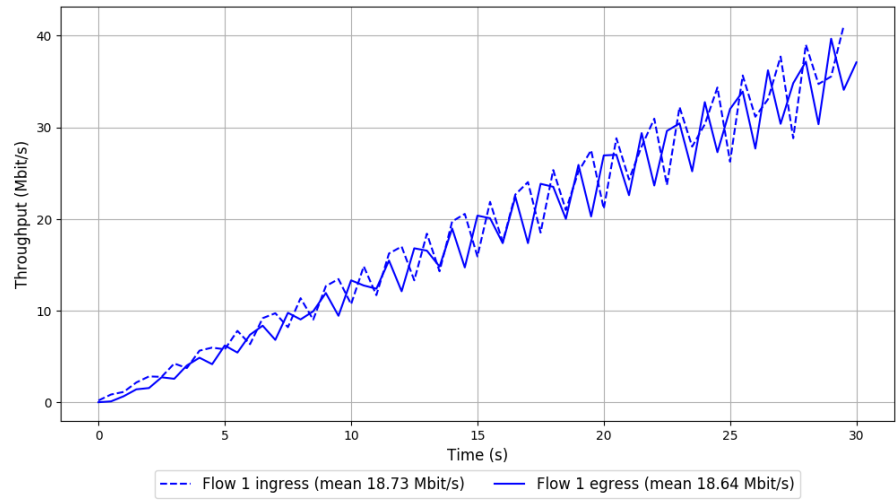


Run 5: Statistics of LEDBAT

Start at: 2019-12-11 13:00:44  
End at: 2019-12-11 13:01:14  
Local clock offset: -4.817 ms  
Remote clock offset: -9.214 ms

# Below is generated by plot.py at 2019-12-11 13:15:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 18.64 Mbit/s  
95th percentile per-packet one-way delay: 90.087 ms  
Loss rate: 0.92%  
-- Flow 1:  
Average throughput: 18.64 Mbit/s  
95th percentile per-packet one-way delay: 90.087 ms  
Loss rate: 0.92%

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

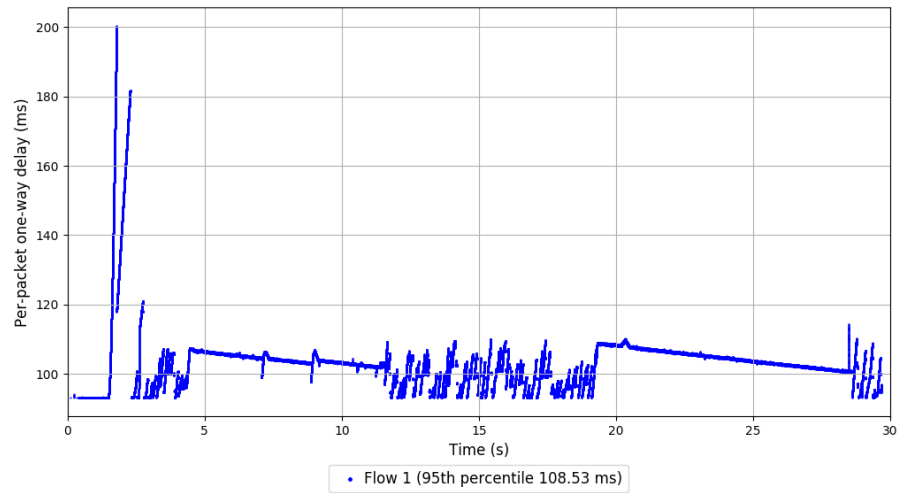
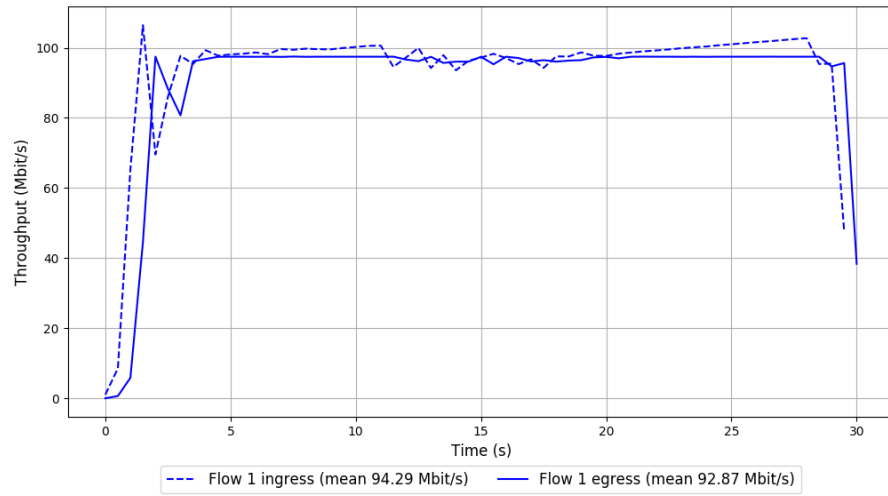


```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-12-11 10:55:09
End at: 2019-12-11 10:55:39
Local clock offset: -6.446 ms
Remote clock offset: -9.611 ms

# Below is generated by plot.py at 2019-12-11 13:16:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.87 Mbit/s
95th percentile per-packet one-way delay: 108.525 ms
Loss rate: 1.97%
-- Flow 1:
Average throughput: 92.87 Mbit/s
95th percentile per-packet one-way delay: 108.525 ms
Loss rate: 1.97%
```

# Run 1: Report of Muses\_DecisionTree — Data Link



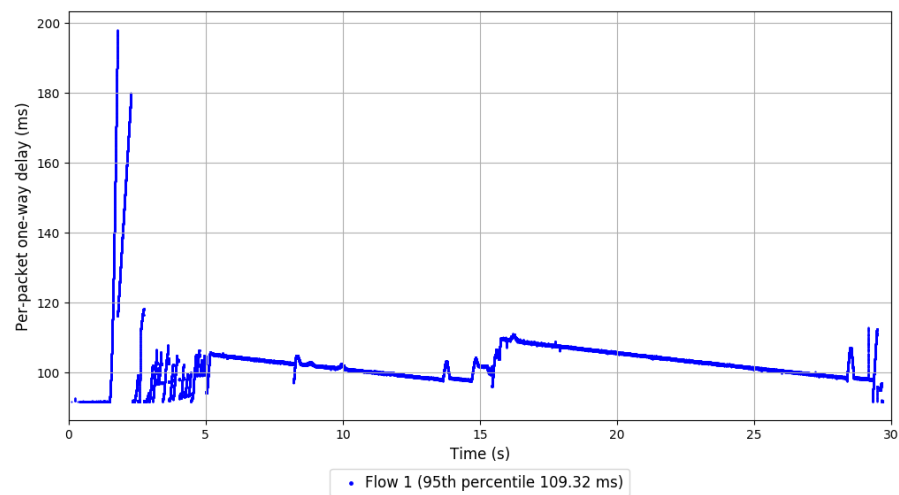
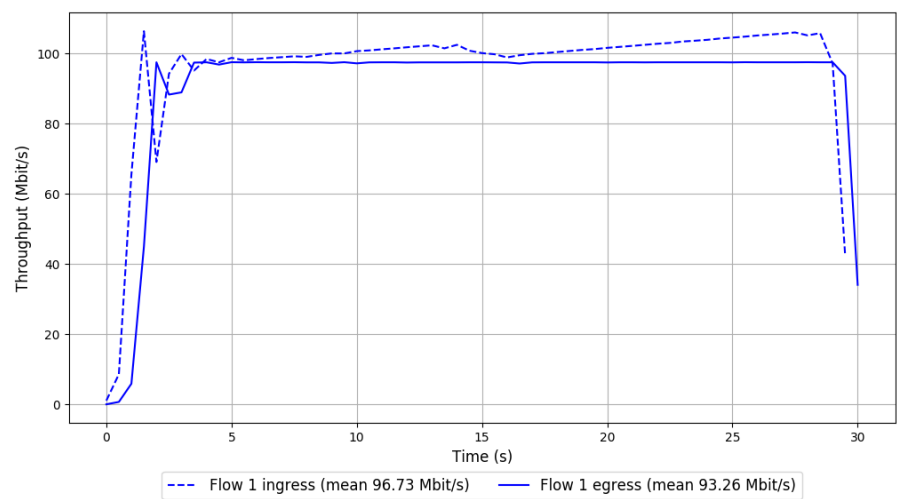


Run 2: Statistics of Muses\\_DecisionTree

Start at: 2019-12-11 11:23:20  
End at: 2019-12-11 11:23:50  
Local clock offset: -6.053 ms  
Remote clock offset: -7.728 ms

# Below is generated by plot.py at 2019-12-11 13:16:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.26 Mbit/s  
95th percentile per-packet one-way delay: 109.316 ms  
Loss rate: 4.04%  
-- Flow 1:  
Average throughput: 93.26 Mbit/s  
95th percentile per-packet one-way delay: 109.316 ms  
Loss rate: 4.04%

Run 2: Report of Muses\_DecisionTree — Data Link

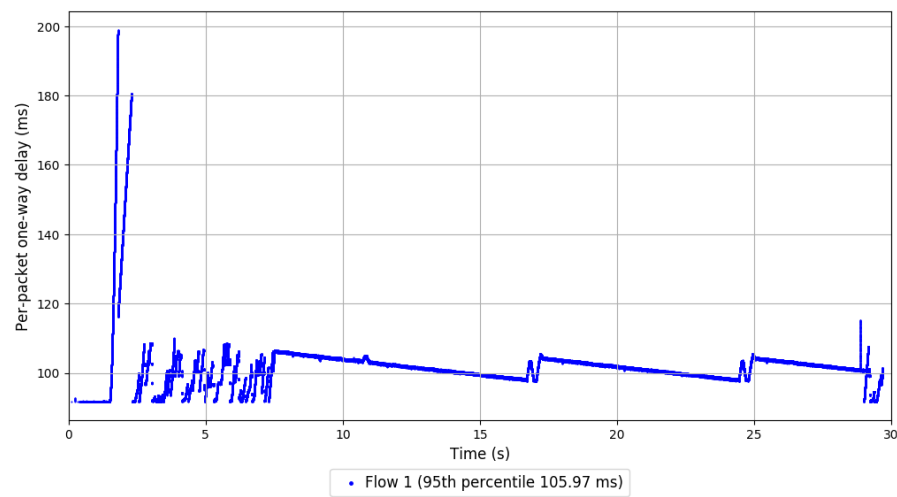
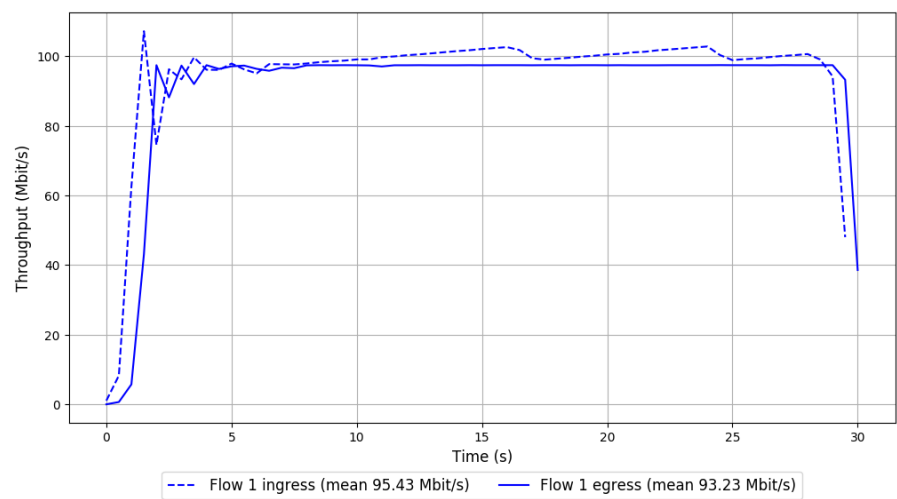


Run 3: Statistics of Muses\\_DecisionTree

Start at: 2019-12-11 11:51:31  
End at: 2019-12-11 11:52:01  
Local clock offset: -6.084 ms  
Remote clock offset: -7.336 ms

# Below is generated by plot.py at 2019-12-11 13:16:41  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.23 Mbit/s  
95th percentile per-packet one-way delay: 105.972 ms  
Loss rate: 2.77%  
-- Flow 1:  
Average throughput: 93.23 Mbit/s  
95th percentile per-packet one-way delay: 105.972 ms  
Loss rate: 2.77%

Run 3: Report of Muses\_DecisionTree — Data Link

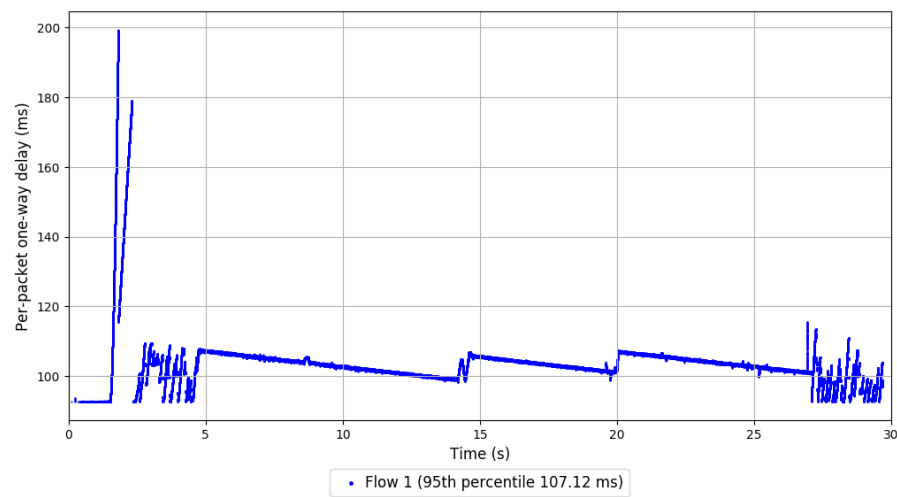
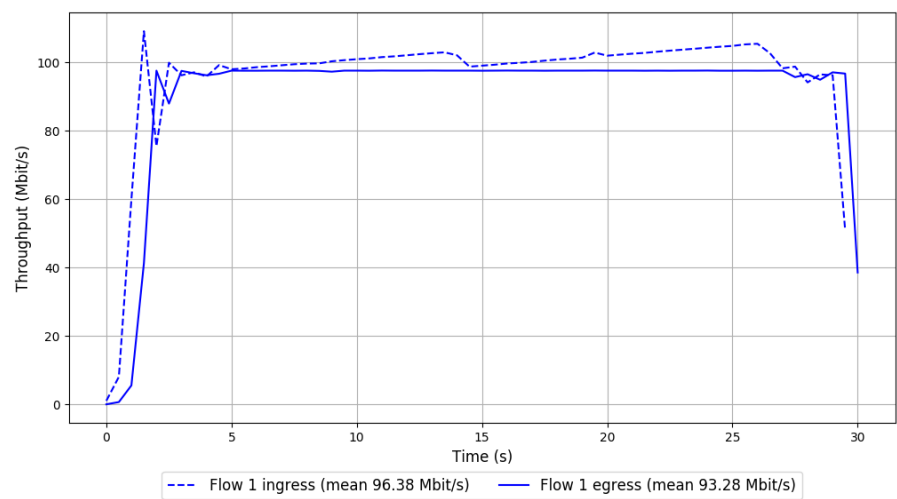


Run 4: Statistics of Muses\\_DecisionTree

Start at: 2019-12-11 12:19:40  
End at: 2019-12-11 12:20:10  
Local clock offset: -5.434 ms  
Remote clock offset: -8.914 ms

# Below is generated by plot.py at 2019-12-11 13:16:48  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.28 Mbit/s  
95th percentile per-packet one-way delay: 107.116 ms  
Loss rate: 3.67%  
-- Flow 1:  
Average throughput: 93.28 Mbit/s  
95th percentile per-packet one-way delay: 107.116 ms  
Loss rate: 3.67%

Run 4: Report of Muses\_DecisionTree — Data Link

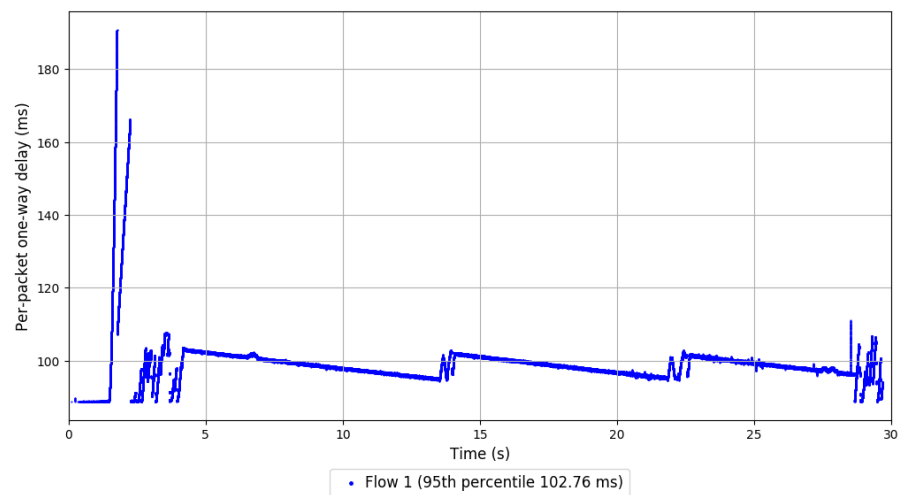
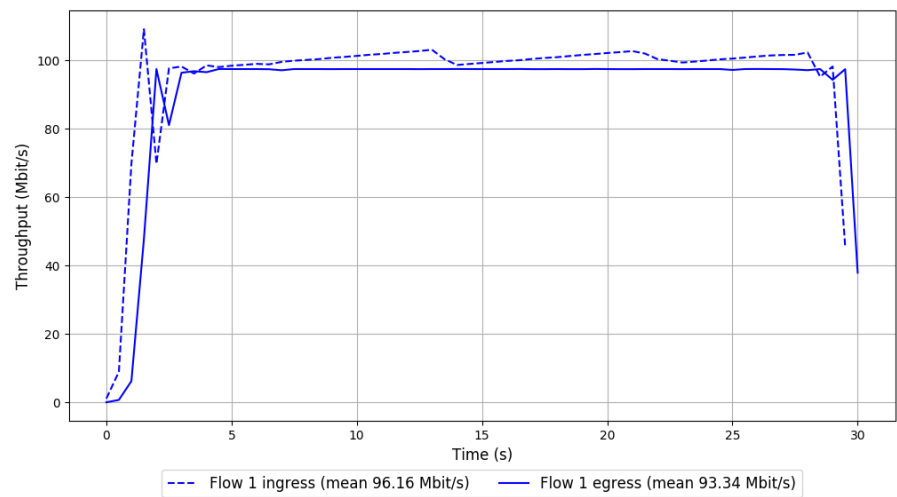


Run 5: Statistics of Muses\\_DecisionTree

Start at: 2019-12-11 12:47:49  
End at: 2019-12-11 12:48:19  
Local clock offset: -5.726 ms  
Remote clock offset: -9.271 ms

# Below is generated by plot.py at 2019-12-11 13:16:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.34 Mbit/s  
95th percentile per-packet one-way delay: 102.758 ms  
Loss rate: 3.38%  
-- Flow 1:  
Average throughput: 93.34 Mbit/s  
95th percentile per-packet one-way delay: 102.758 ms  
Loss rate: 3.38%

Run 5: Report of Muses\_DecisionTree — Data Link



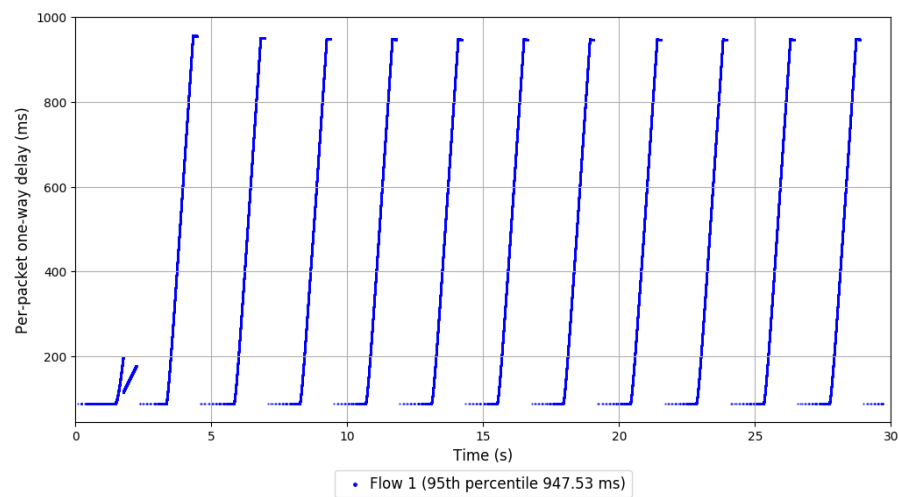
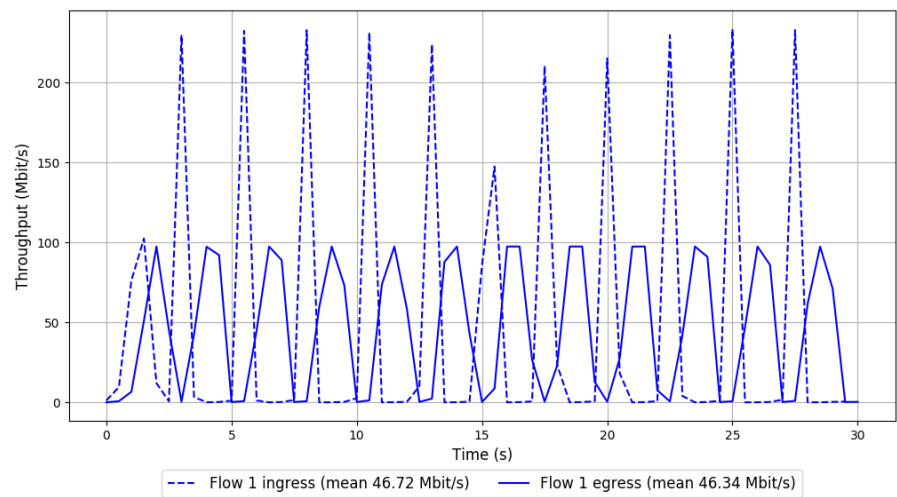


Run 1: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-12-11 10:49:20  
End at: 2019-12-11 10:49:50  
Local clock offset: -6.485 ms  
Remote clock offset: -9.018 ms

# Below is generated by plot.py at 2019-12-11 13:16:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 46.34 Mbit/s  
95th percentile per-packet one-way delay: 947.534 ms  
Loss rate: 1.29%  
-- Flow 1:  
Average throughput: 46.34 Mbit/s  
95th percentile per-packet one-way delay: 947.534 ms  
Loss rate: 1.29%

Run 1: Report of Muses\_DecisionTreeH0 — Data Link

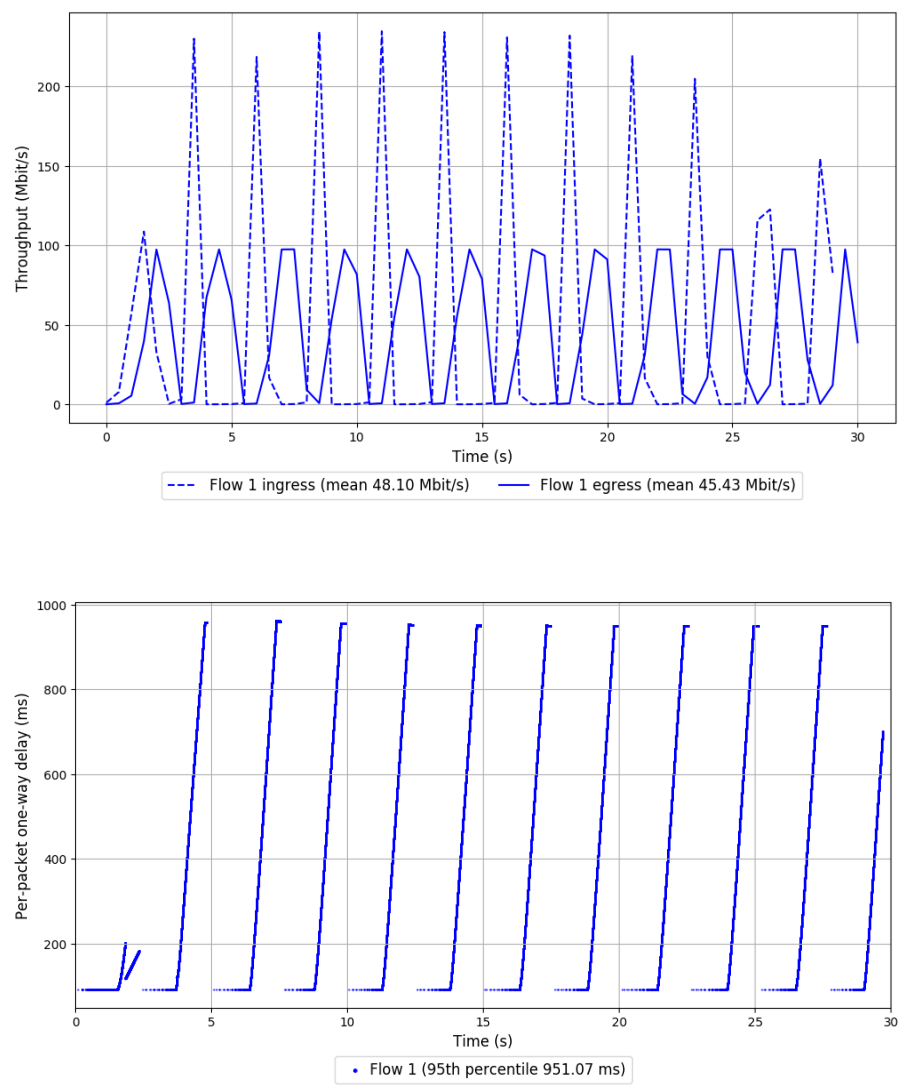


Run 2: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-12-11 11:17:30  
End at: 2019-12-11 11:18:00  
Local clock offset: -6.317 ms  
Remote clock offset: -8.139 ms

# Below is generated by plot.py at 2019-12-11 13:16:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 45.43 Mbit/s  
95th percentile per-packet one-way delay: 951.072 ms  
Loss rate: 4.19%  
-- Flow 1:  
Average throughput: 45.43 Mbit/s  
95th percentile per-packet one-way delay: 951.072 ms  
Loss rate: 4.19%

Run 2: Report of Muses\_DecisionTreeH0 — Data Link

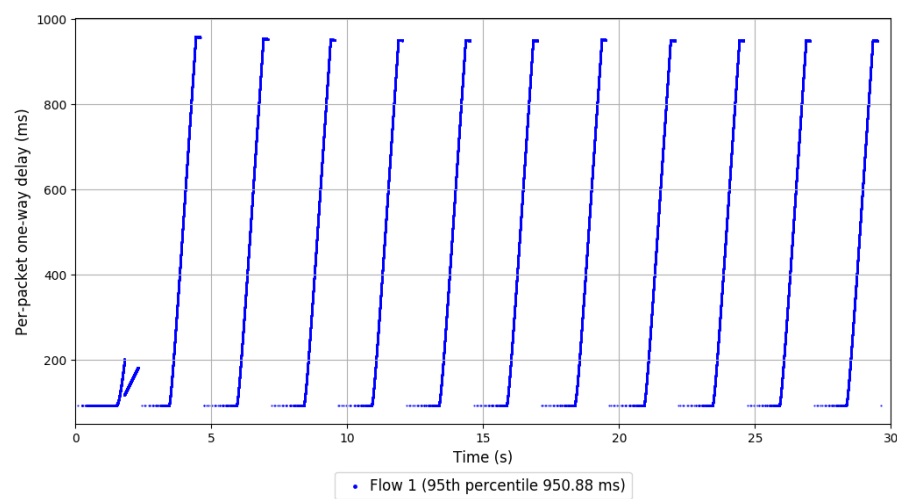
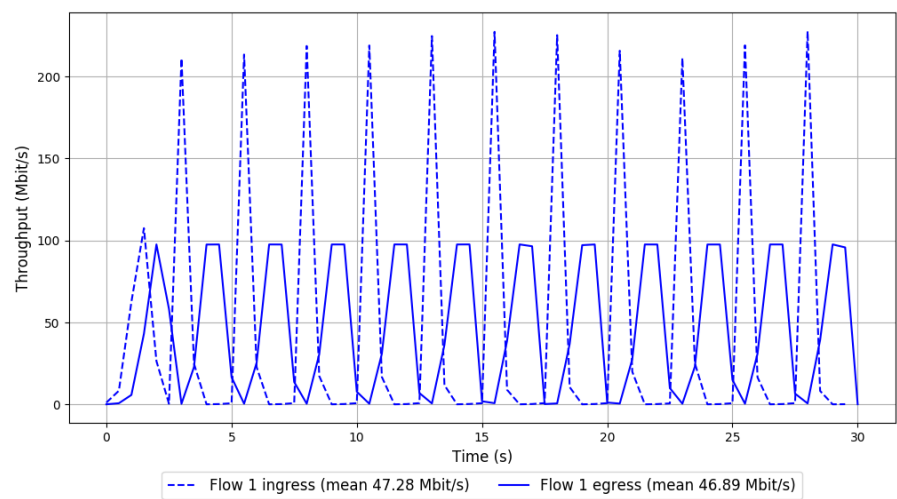


Run 3: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-12-11 11:45:41  
End at: 2019-12-11 11:46:11  
Local clock offset: -5.968 ms  
Remote clock offset: -7.177 ms

# Below is generated by plot.py at 2019-12-11 13:16:54  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 46.89 Mbit/s  
95th percentile per-packet one-way delay: 950.881 ms  
Loss rate: 1.29%  
-- Flow 1:  
Average throughput: 46.89 Mbit/s  
95th percentile per-packet one-way delay: 950.881 ms  
Loss rate: 1.29%

Run 3: Report of Muses\_DecisionTreeH0 — Data Link

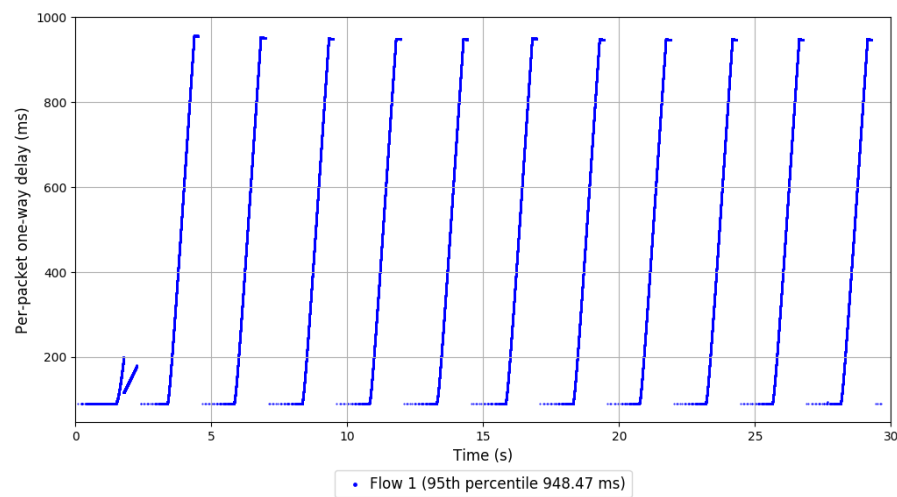
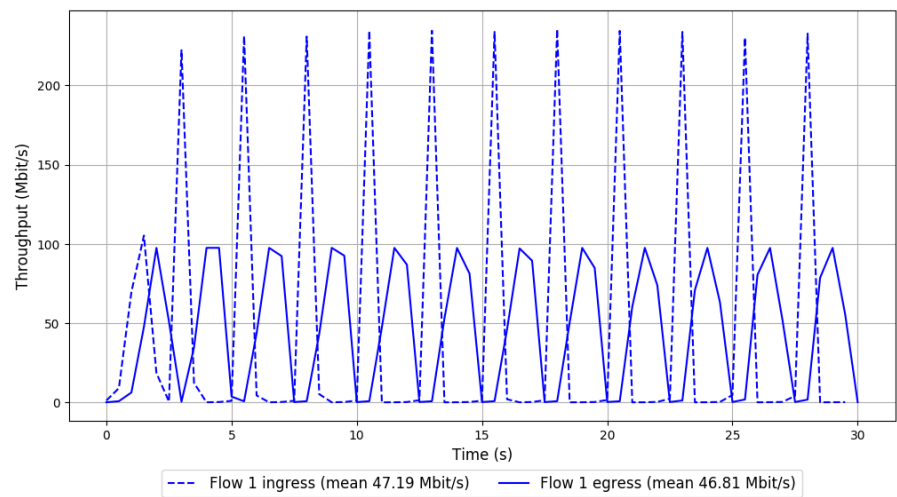


Run 4: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-12-11 12:13:50  
End at: 2019-12-11 12:14:20  
Local clock offset: -5.456 ms  
Remote clock offset: -9.122 ms

# Below is generated by plot.py at 2019-12-11 13:16:56  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 46.81 Mbit/s  
95th percentile per-packet one-way delay: 948.472 ms  
Loss rate: 1.27%  
-- Flow 1:  
Average throughput: 46.81 Mbit/s  
95th percentile per-packet one-way delay: 948.472 ms  
Loss rate: 1.27%

Run 4: Report of Muses\_DecisionTreeH0 — Data Link



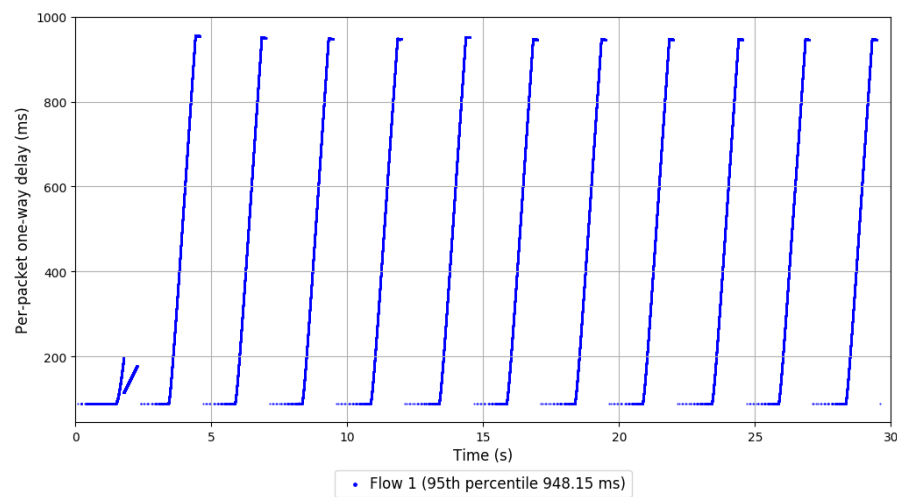
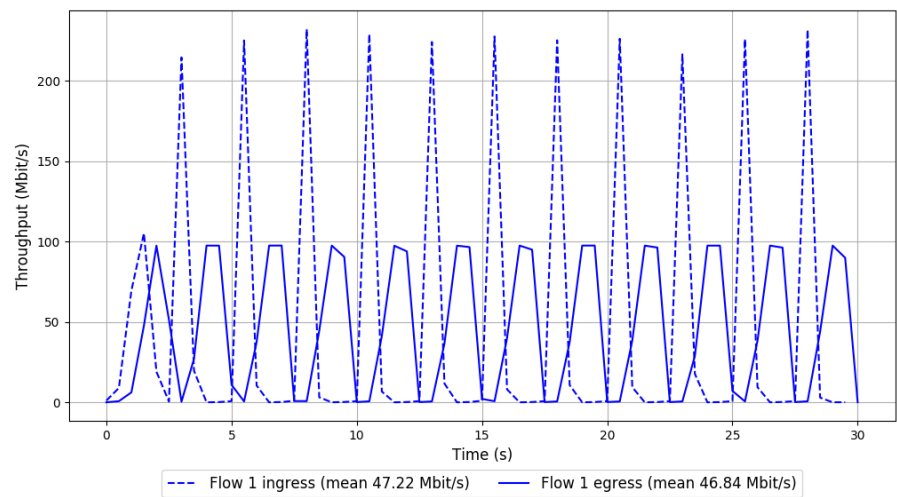


Run 5: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-12-11 12:42:00  
End at: 2019-12-11 12:42:30  
Local clock offset: -5.965 ms  
Remote clock offset: -9.093 ms

# Below is generated by plot.py at 2019-12-11 13:16:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 46.84 Mbit/s  
95th percentile per-packet one-way delay: 948.148 ms  
Loss rate: 1.28%  
-- Flow 1:  
Average throughput: 46.84 Mbit/s  
95th percentile per-packet one-way delay: 948.148 ms  
Loss rate: 1.28%

Run 5: Report of Muses\_DecisionTreeH0 — Data Link

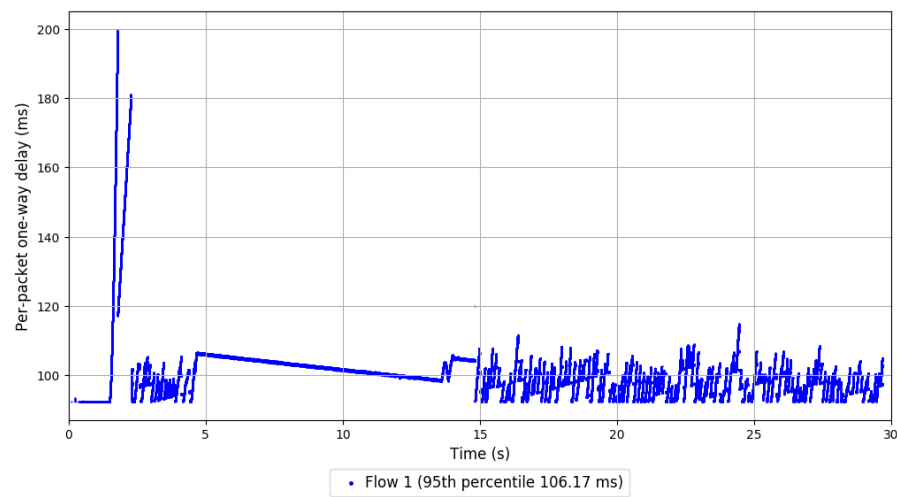
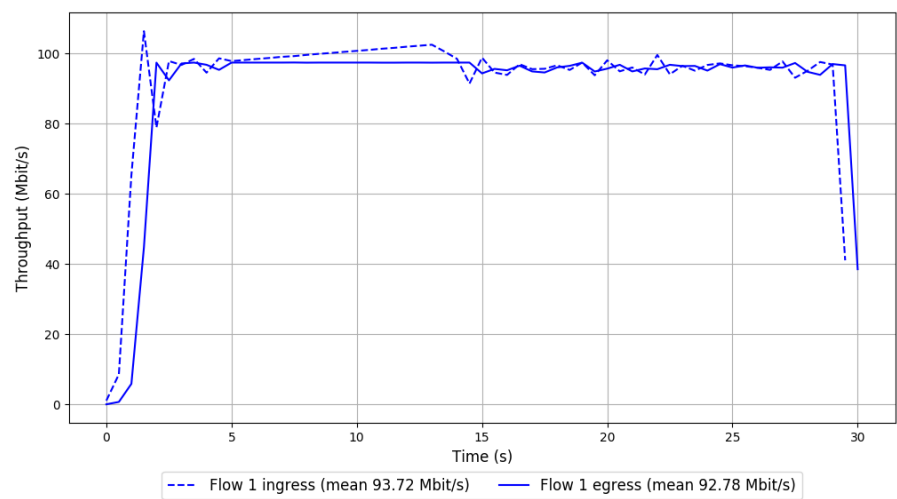


```
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2019-12-11 11:04:31
End at: 2019-12-11 11:05:01
Local clock offset: -7.211 ms
Remote clock offset: -9.472 ms

# Below is generated by plot.py at 2019-12-11 13:17:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.78 Mbit/s
95th percentile per-packet one-way delay: 106.167 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 92.78 Mbit/s
95th percentile per-packet one-way delay: 106.167 ms
Loss rate: 1.36%
```

Run 1: Report of Muses\_DecisionTreeR0 — Data Link

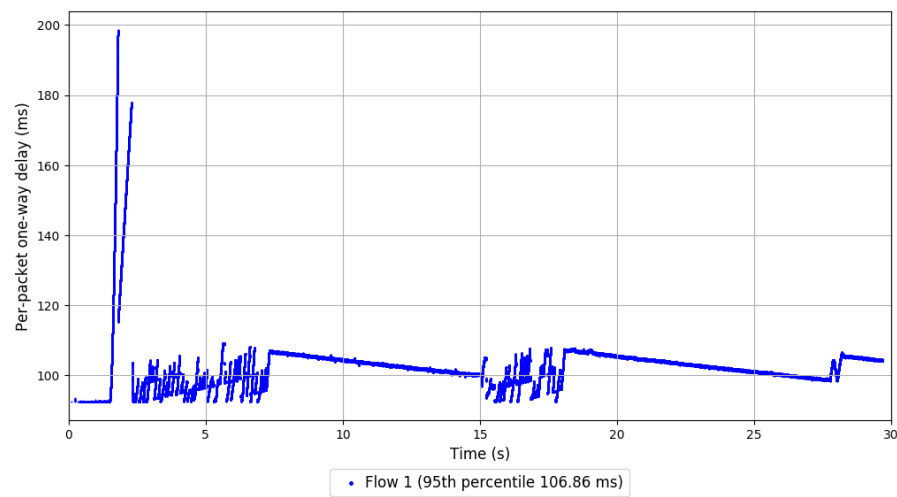
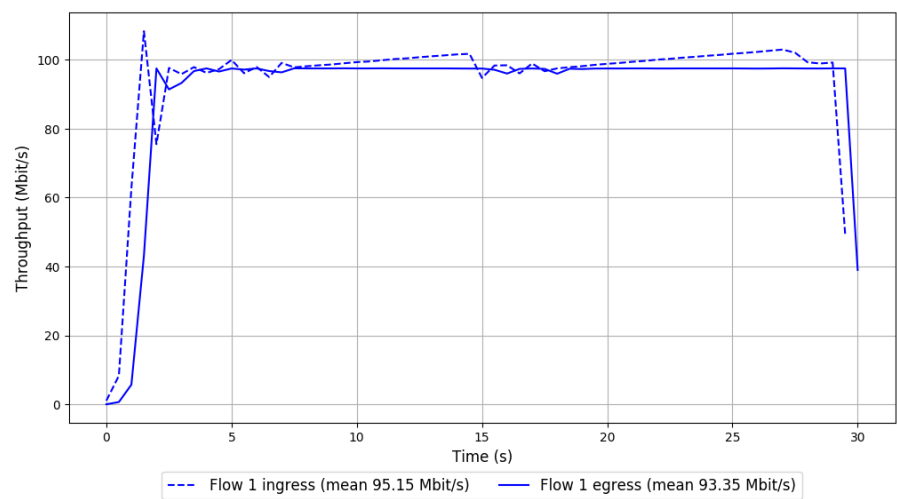


Run 2: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-12-11 11:32:43  
End at: 2019-12-11 11:33:13  
Local clock offset: -5.151 ms  
Remote clock offset: -7.418 ms

# Below is generated by plot.py at 2019-12-11 13:17:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.35 Mbit/s  
95th percentile per-packet one-way delay: 106.857 ms  
Loss rate: 2.36%  
-- Flow 1:  
Average throughput: 93.35 Mbit/s  
95th percentile per-packet one-way delay: 106.857 ms  
Loss rate: 2.36%

Run 2: Report of Muses\_DecisionTreeR0 — Data Link

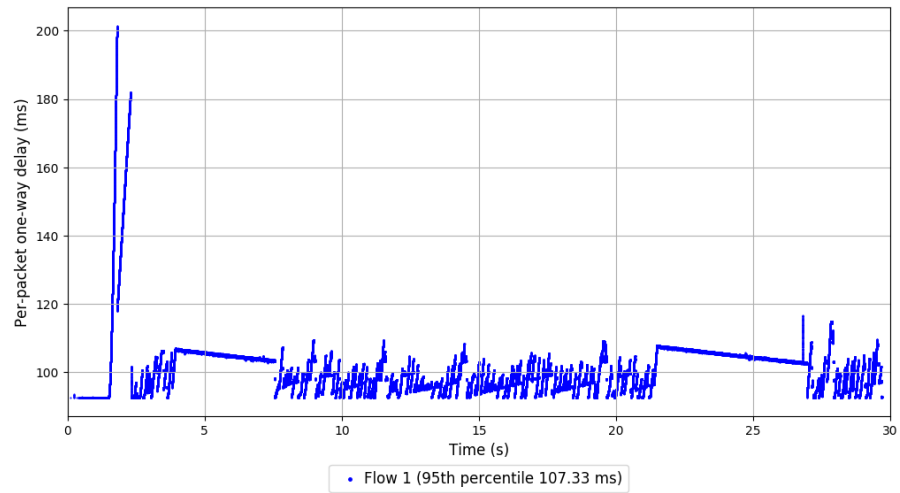
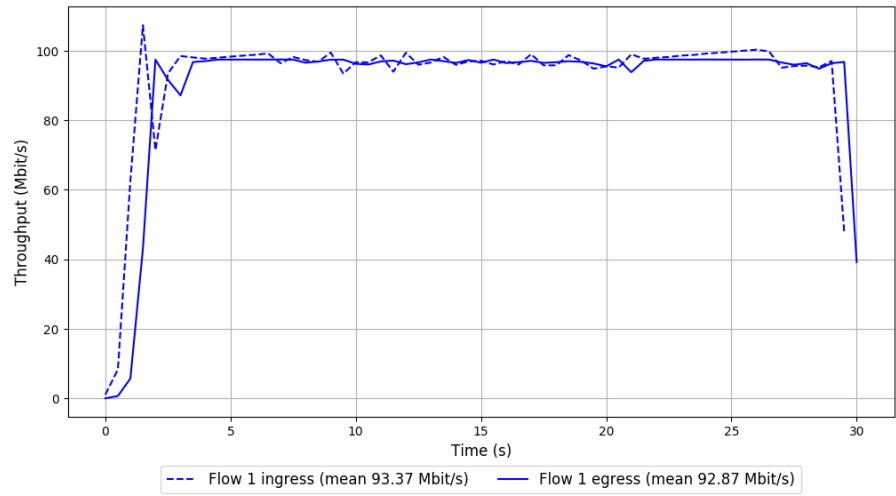


Run 3: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-12-11 12:00:52  
End at: 2019-12-11 12:01:22  
Local clock offset: -5.445 ms  
Remote clock offset: -8.438 ms

# Below is generated by plot.py at 2019-12-11 13:17:41  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 92.87 Mbit/s  
95th percentile per-packet one-way delay: 107.332 ms  
Loss rate: 1.01%  
-- Flow 1:  
Average throughput: 92.87 Mbit/s  
95th percentile per-packet one-way delay: 107.332 ms  
Loss rate: 1.01%

### Run 3: Report of Muses\_DecisionTreeR0 — Data Link



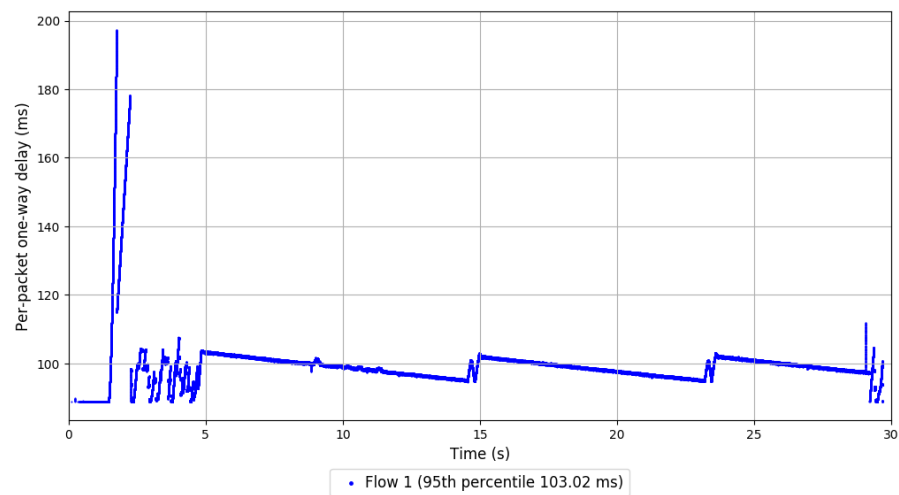
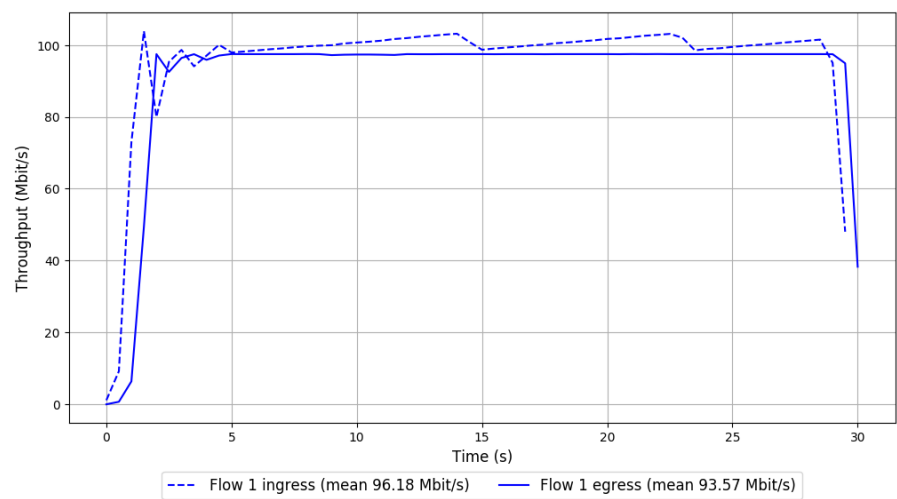


Run 4: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-12-11 12:29:01  
End at: 2019-12-11 12:29:31  
Local clock offset: -6.103 ms  
Remote clock offset: -9.225 ms

# Below is generated by plot.py at 2019-12-11 13:17:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.57 Mbit/s  
95th percentile per-packet one-way delay: 103.022 ms  
Loss rate: 3.16%  
-- Flow 1:  
Average throughput: 93.57 Mbit/s  
95th percentile per-packet one-way delay: 103.022 ms  
Loss rate: 3.16%

Run 4: Report of Muses\_DecisionTreeR0 — Data Link

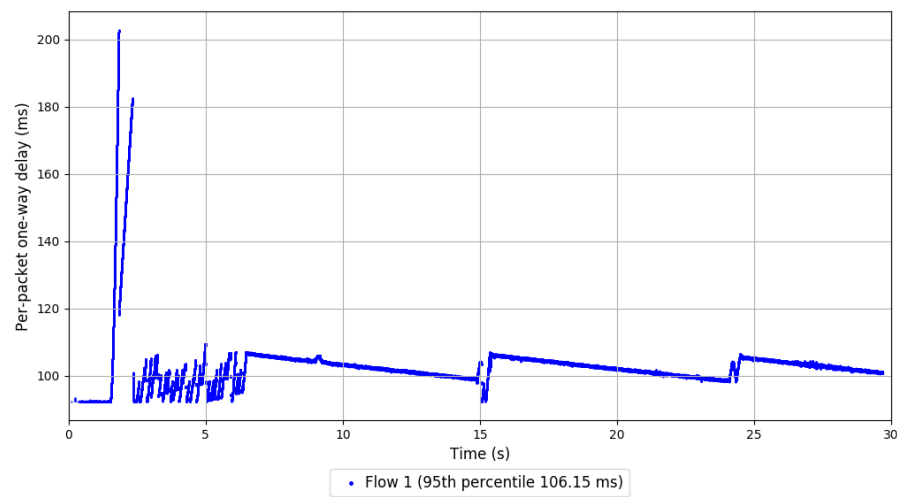
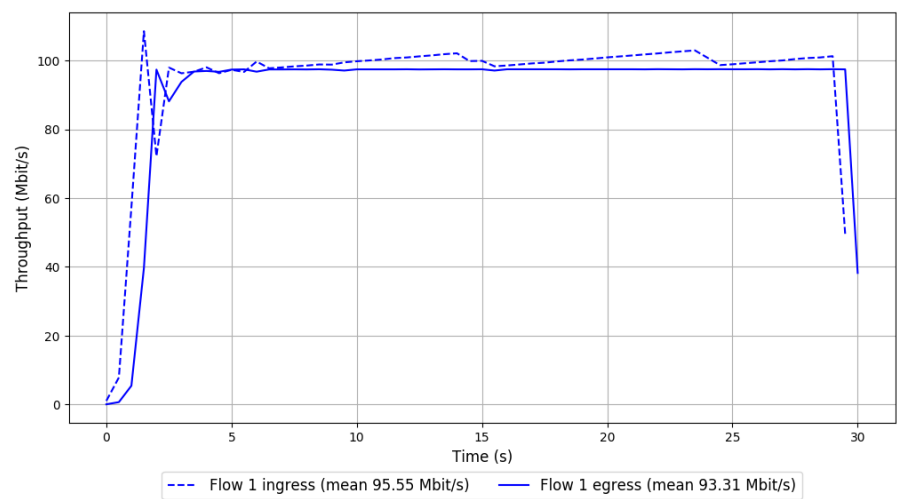


Run 5: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-12-11 12:57:11  
End at: 2019-12-11 12:57:41  
Local clock offset: -5.479 ms  
Remote clock offset: -9.214 ms

# Below is generated by plot.py at 2019-12-11 13:17:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.31 Mbit/s  
95th percentile per-packet one-way delay: 106.147 ms  
Loss rate: 2.80%  
-- Flow 1:  
Average throughput: 93.31 Mbit/s  
95th percentile per-packet one-way delay: 106.147 ms  
Loss rate: 2.80%

Run 5: Report of Muses\_DecisionTreeR0 — Data Link

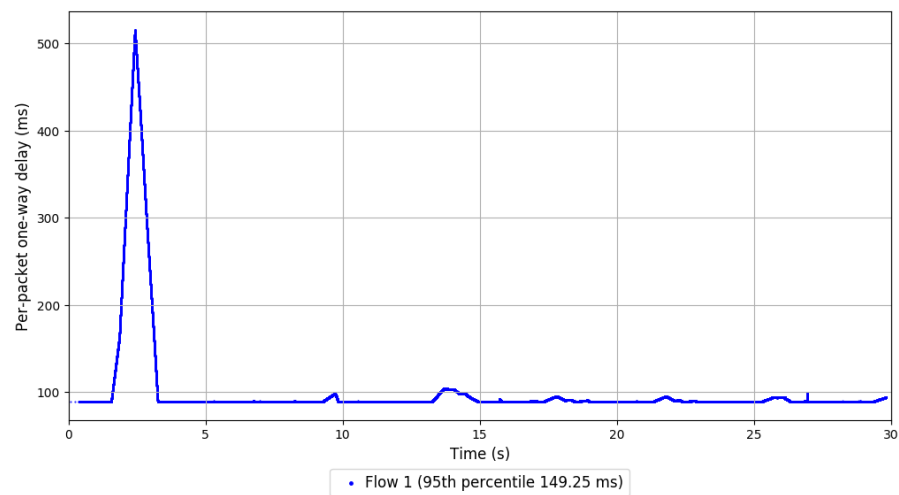
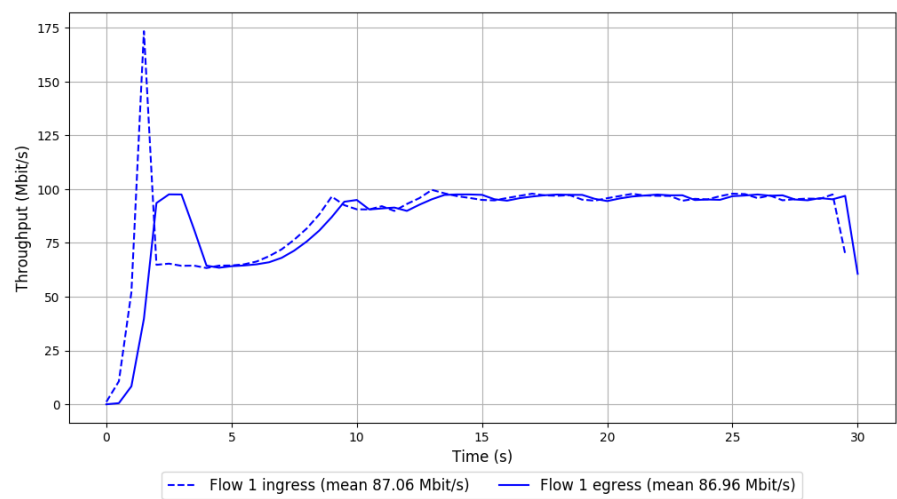


```
Run 1: Statistics of PCC-Allegro

Start at: 2019-12-11 10:53:59
End at: 2019-12-11 10:54:29
Local clock offset: -6.445 ms
Remote clock offset: -9.121 ms

# Below is generated by plot.py at 2019-12-11 13:17:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.96 Mbit/s
95th percentile per-packet one-way delay: 149.250 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 86.96 Mbit/s
95th percentile per-packet one-way delay: 149.250 ms
Loss rate: 0.58%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-12-11 11:22:10

End at: 2019-12-11 11:22:40

Local clock offset: -6.086 ms

Remote clock offset: -7.85 ms

# Below is generated by plot.py at 2019-12-11 13:17:59

# Datalink statistics

-- Total of 1 flow:

Average throughput: 87.10 Mbit/s

95th percentile per-packet one-way delay: 173.328 ms

Loss rate: 0.56%

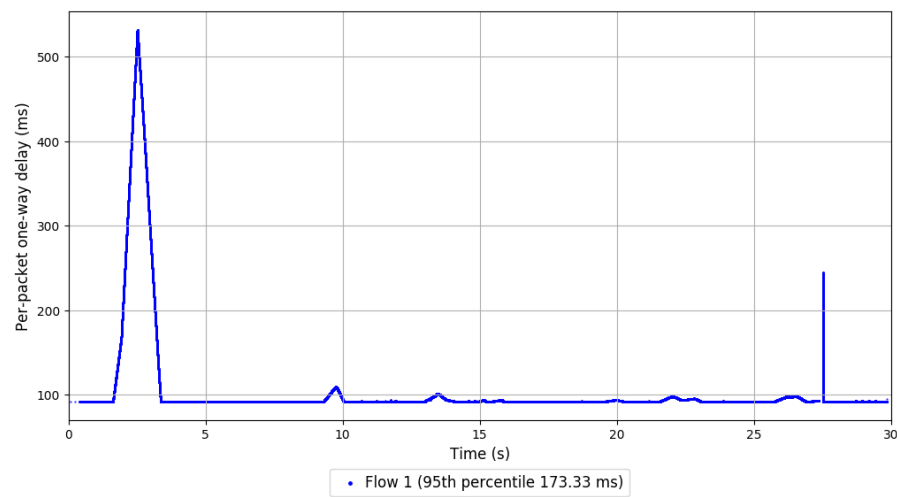
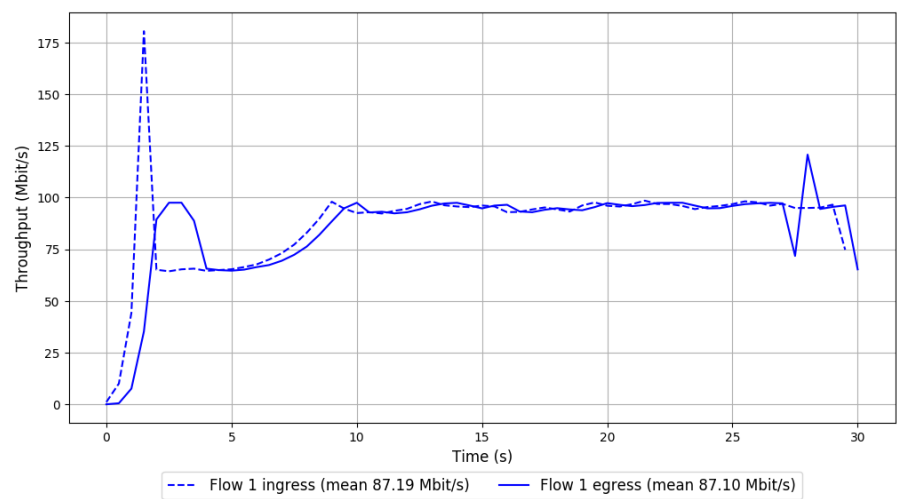
-- Flow 1:

Average throughput: 87.10 Mbit/s

95th percentile per-packet one-way delay: 173.328 ms

Loss rate: 0.56%

Run 2: Report of PCC-Allegro — Data Link



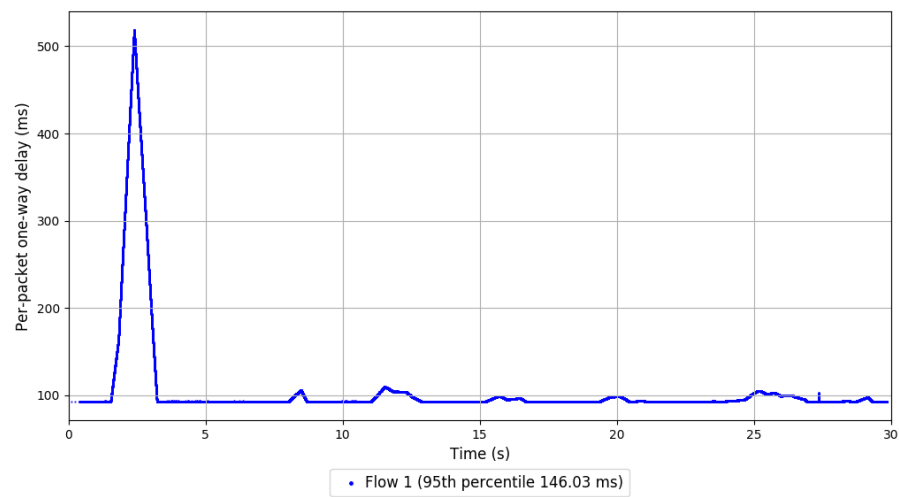
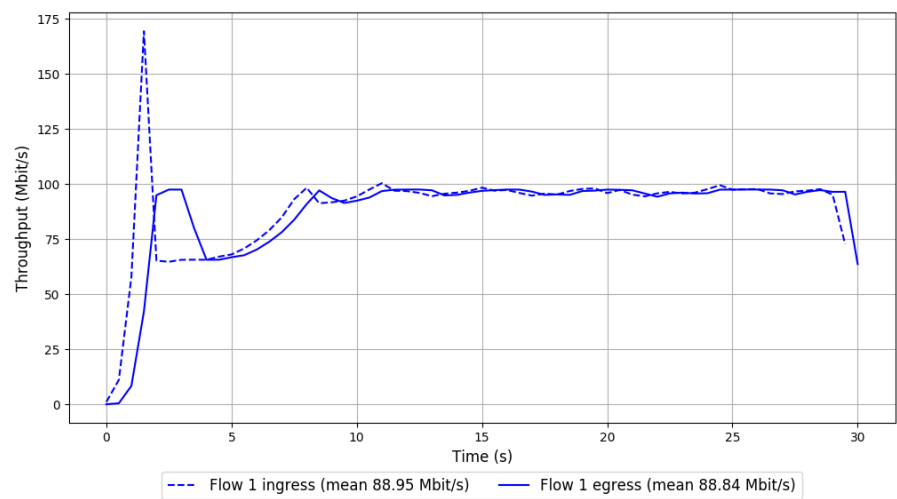


Run 3: Statistics of PCC-Allegro

Start at: 2019-12-11 11:50:21  
End at: 2019-12-11 11:50:51  
Local clock offset: -5.441 ms  
Remote clock offset: -7.405 ms

# Below is generated by plot.py at 2019-12-11 13:18:03  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 88.84 Mbit/s  
95th percentile per-packet one-way delay: 146.034 ms  
Loss rate: 0.59%  
-- Flow 1:  
Average throughput: 88.84 Mbit/s  
95th percentile per-packet one-way delay: 146.034 ms  
Loss rate: 0.59%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-12-11 12:18:30

End at: 2019-12-11 12:19:00

Local clock offset: -5.432 ms

Remote clock offset: -8.54 ms

# Below is generated by plot.py at 2019-12-11 13:18:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 86.97 Mbit/s

95th percentile per-packet one-way delay: 132.536 ms

Loss rate: 0.72%

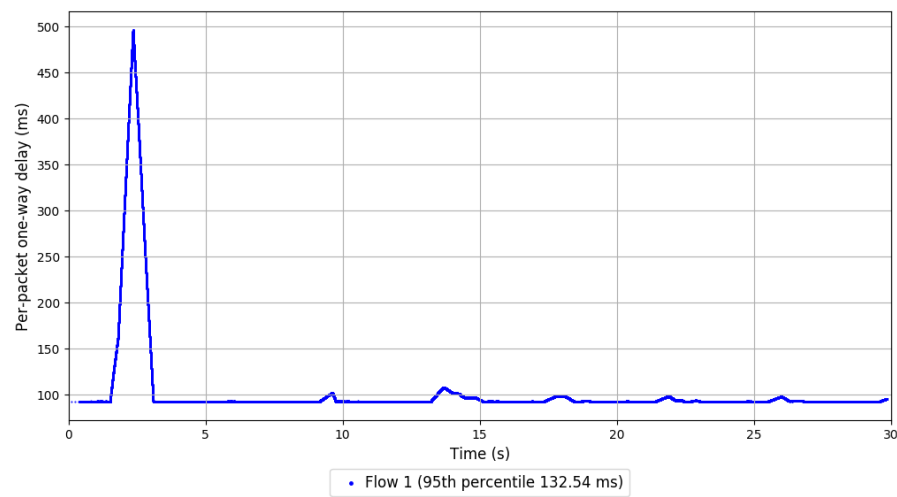
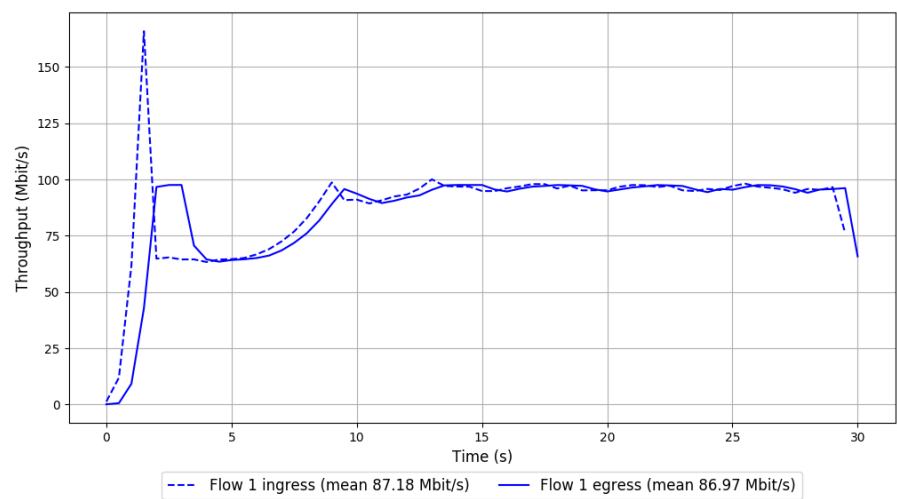
-- Flow 1:

Average throughput: 86.97 Mbit/s

95th percentile per-packet one-way delay: 132.536 ms

Loss rate: 0.72%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-12-11 12:46:39

End at: 2019-12-11 12:47:09

Local clock offset: -5.017 ms

Remote clock offset: -9.29 ms

# Below is generated by plot.py at 2019-12-11 13:18:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 86.20 Mbit/s

95th percentile per-packet one-way delay: 137.412 ms

Loss rate: 0.56%

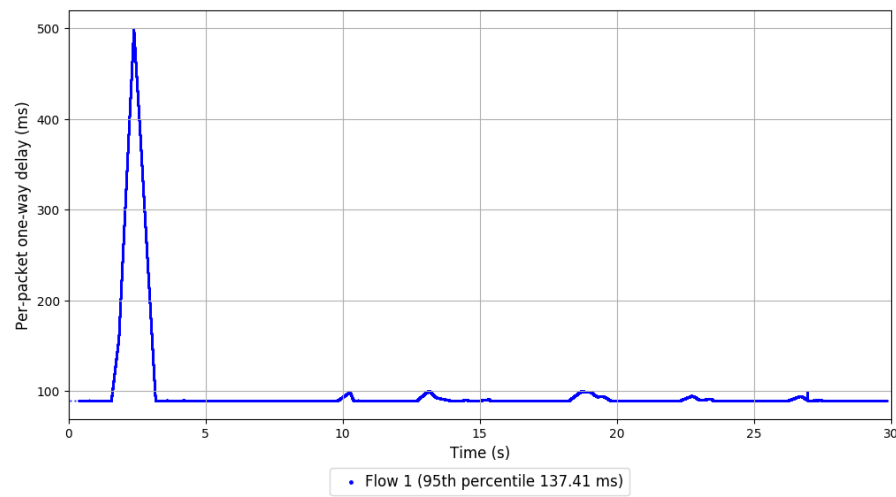
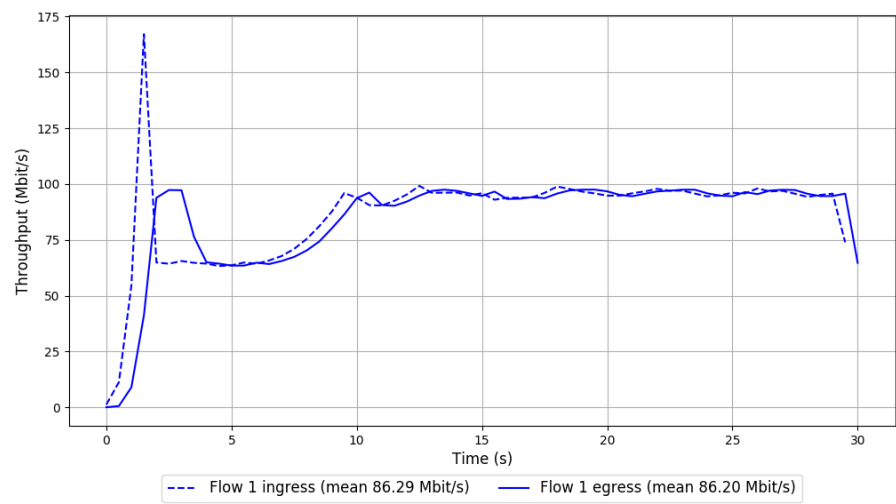
-- Flow 1:

Average throughput: 86.20 Mbit/s

95th percentile per-packet one-way delay: 137.412 ms

Loss rate: 0.56%

Run 5: Report of PCC-Allegro — Data Link

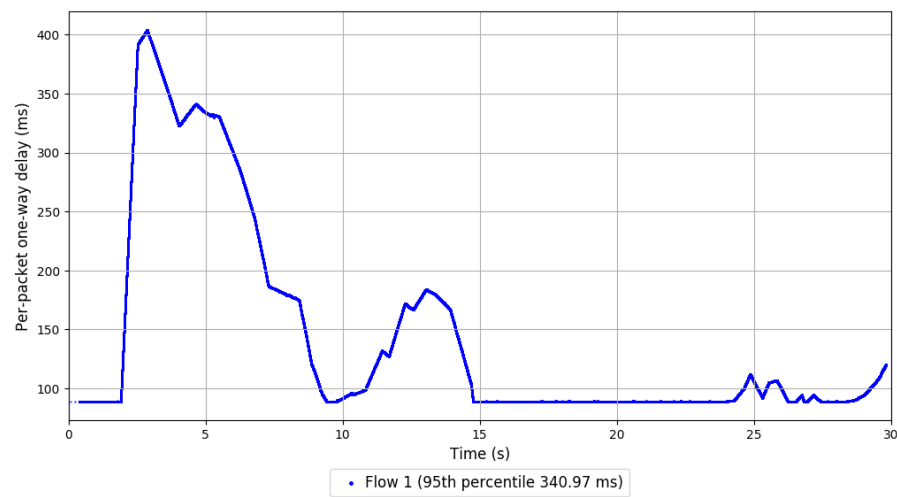
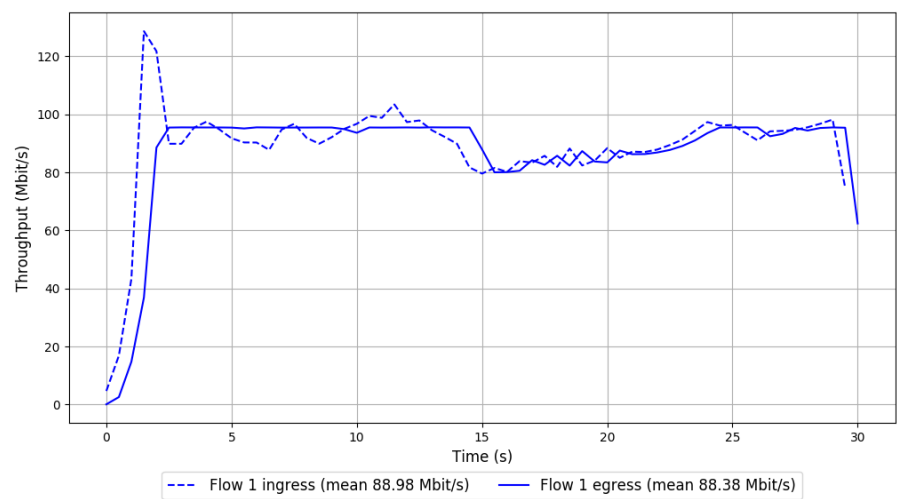


Run 1: Statistics of PCC-Expr

Start at: 2019-12-11 10:59:52  
End at: 2019-12-11 11:00:22  
Local clock offset: -6.539 ms  
Remote clock offset: -8.771 ms

# Below is generated by plot.py at 2019-12-11 13:19:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 88.38 Mbit/s  
95th percentile per-packet one-way delay: 340.970 ms  
Loss rate: 1.13%  
-- Flow 1:  
Average throughput: 88.38 Mbit/s  
95th percentile per-packet one-way delay: 340.970 ms  
Loss rate: 1.13%

Run 1: Report of PCC-Expr — Data Link



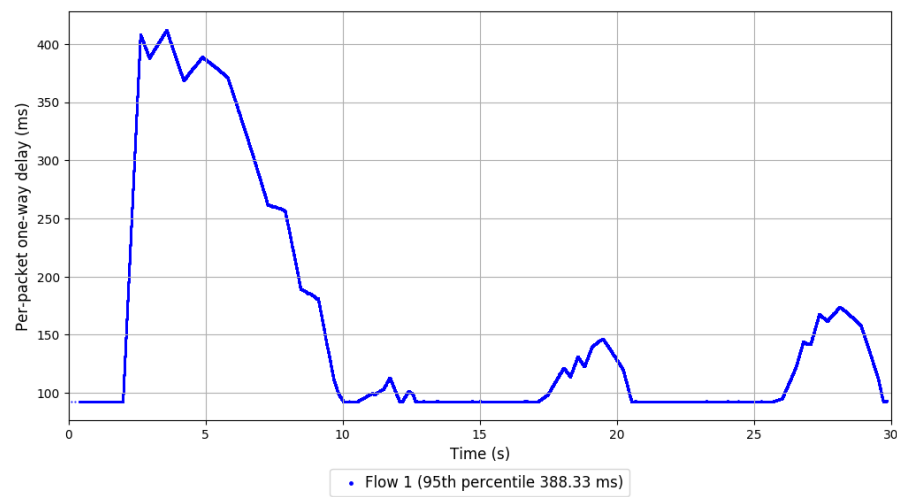
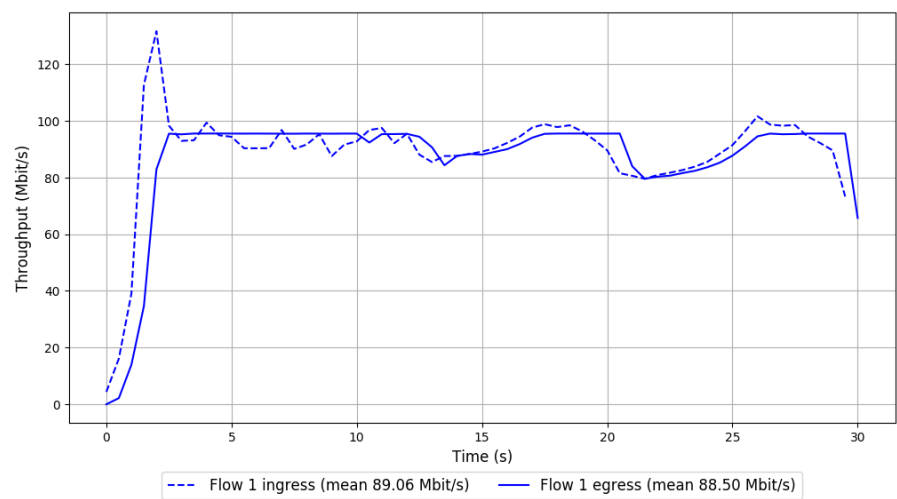


Run 2: Statistics of PCC-Expr

Start at: 2019-12-11 11:28:03  
End at: 2019-12-11 11:28:33  
Local clock offset: -5.278 ms  
Remote clock offset: -7.594 ms

# Below is generated by plot.py at 2019-12-11 13:19:43  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 88.50 Mbit/s  
95th percentile per-packet one-way delay: 388.328 ms  
Loss rate: 1.09%  
-- Flow 1:  
Average throughput: 88.50 Mbit/s  
95th percentile per-packet one-way delay: 388.328 ms  
Loss rate: 1.09%

Run 2: Report of PCC-Expr — Data Link

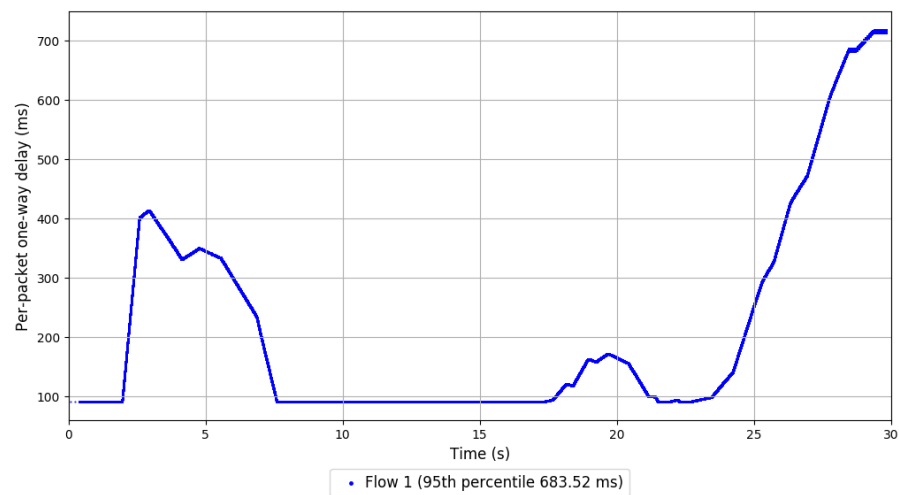
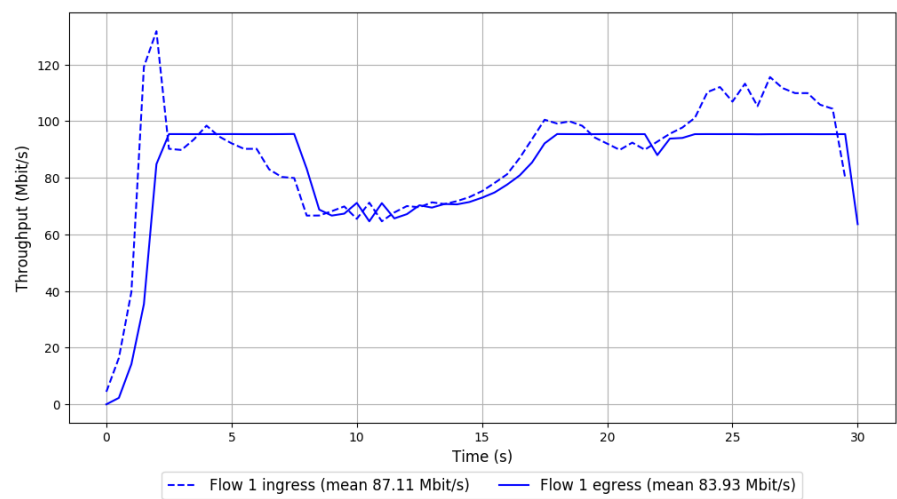


Run 3: Statistics of PCC-Expr

Start at: 2019-12-11 11:56:13  
End at: 2019-12-11 11:56:43  
Local clock offset: -6.177 ms  
Remote clock offset: -7.988 ms

# Below is generated by plot.py at 2019-12-11 13:19:50  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 83.93 Mbit/s  
95th percentile per-packet one-way delay: 683.519 ms  
Loss rate: 4.10%  
-- Flow 1:  
Average throughput: 83.93 Mbit/s  
95th percentile per-packet one-way delay: 683.519 ms  
Loss rate: 4.10%

Run 3: Report of PCC-Expr — Data Link

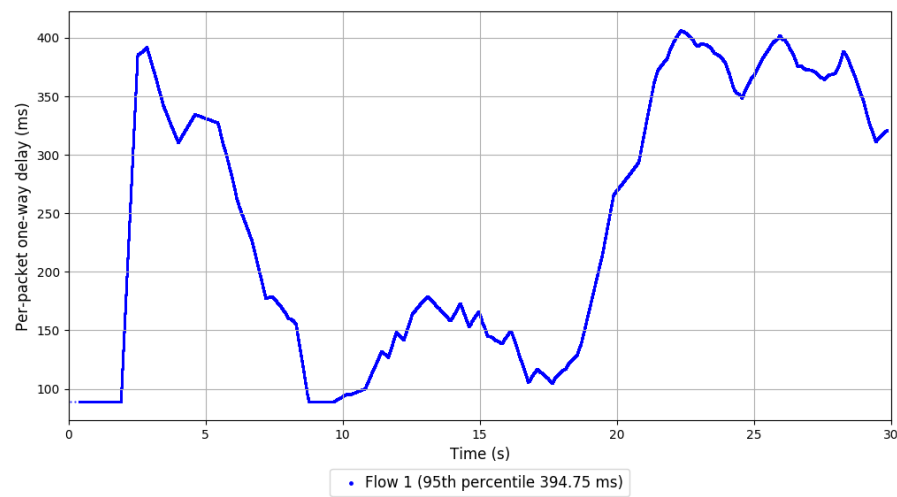
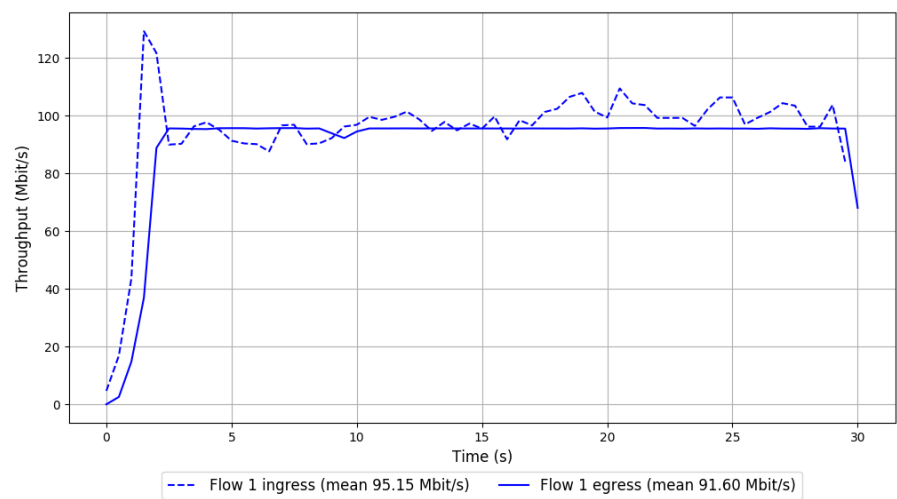


Run 4: Statistics of PCC-Expr

Start at: 2019-12-11 12:24:23  
End at: 2019-12-11 12:24:53  
Local clock offset: -5.504 ms  
Remote clock offset: -8.926 ms

# Below is generated by plot.py at 2019-12-11 13:19:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.60 Mbit/s  
95th percentile per-packet one-way delay: 394.745 ms  
Loss rate: 4.18%  
-- Flow 1:  
Average throughput: 91.60 Mbit/s  
95th percentile per-packet one-way delay: 394.745 ms  
Loss rate: 4.18%

Run 4: Report of PCC-Expr — Data Link

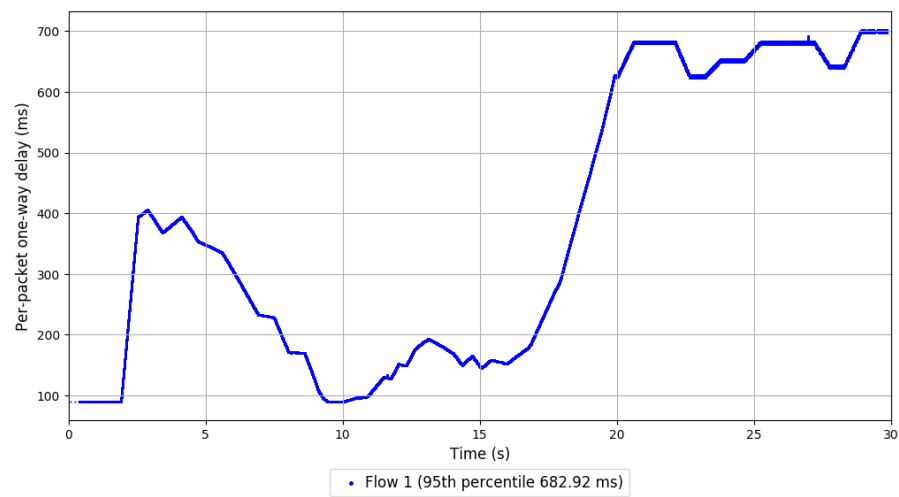
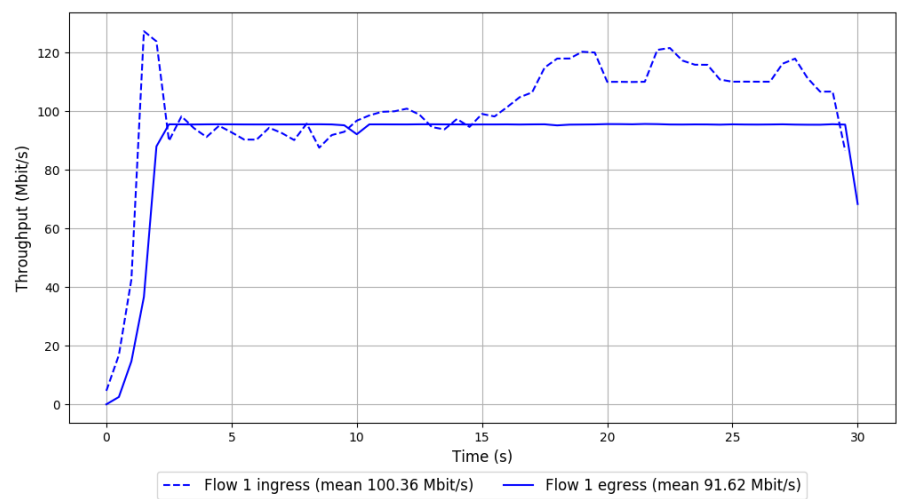


Run 5: Statistics of PCC-Expr

Start at: 2019-12-11 12:52:33  
End at: 2019-12-11 12:53:03  
Local clock offset: -4.869 ms  
Remote clock offset: -9.083 ms

# Below is generated by plot.py at 2019-12-11 13:20:04  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.62 Mbit/s  
95th percentile per-packet one-way delay: 682.925 ms  
Loss rate: 9.12%  
-- Flow 1:  
Average throughput: 91.62 Mbit/s  
95th percentile per-packet one-way delay: 682.925 ms  
Loss rate: 9.12%

Run 5: Report of PCC-Expr — Data Link





Run 1: Statistics of QUIC Cubic

Start at: 2019-12-11 10:56:21

End at: 2019-12-11 10:56:51

Local clock offset: -7.15 ms

Remote clock offset: -9.631 ms

# Below is generated by plot.py at 2019-12-11 13:20:04

# Datalink statistics

-- Total of 1 flow:

Average throughput: 61.39 Mbit/s

95th percentile per-packet one-way delay: 95.738 ms

Loss rate: 0.65%

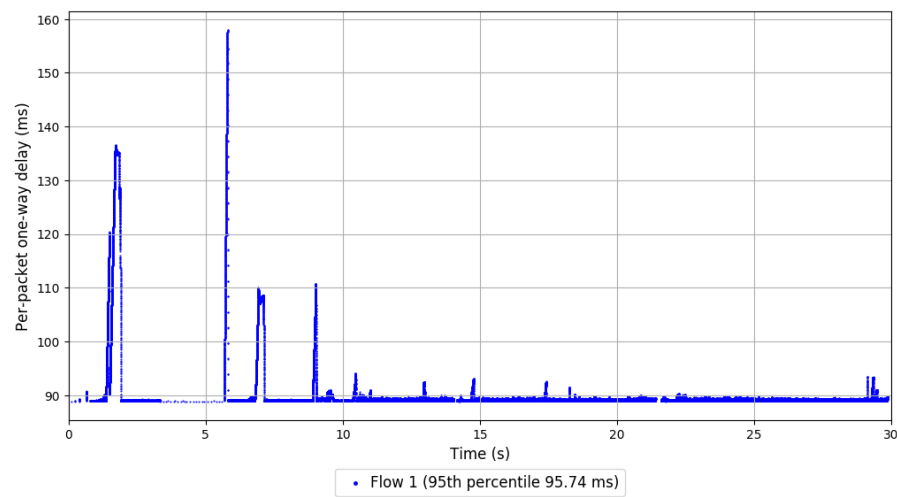
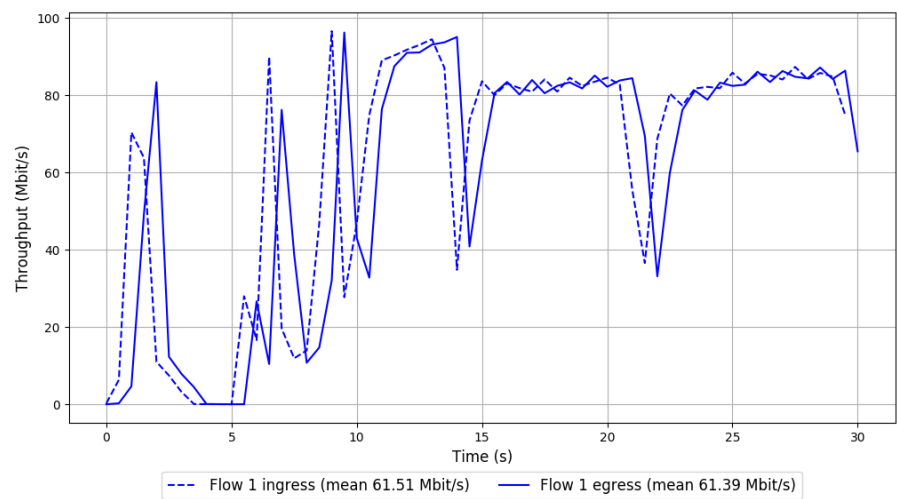
-- Flow 1:

Average throughput: 61.39 Mbit/s

95th percentile per-packet one-way delay: 95.738 ms

Loss rate: 0.65%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-12-11 11:24:31

End at: 2019-12-11 11:25:01

Local clock offset: -5.308 ms

Remote clock offset: -7.71 ms

# Below is generated by plot.py at 2019-12-11 13:20:04

# Datalink statistics

-- Total of 1 flow:

Average throughput: 66.54 Mbit/s

95th percentile per-packet one-way delay: 92.384 ms

Loss rate: 0.67%

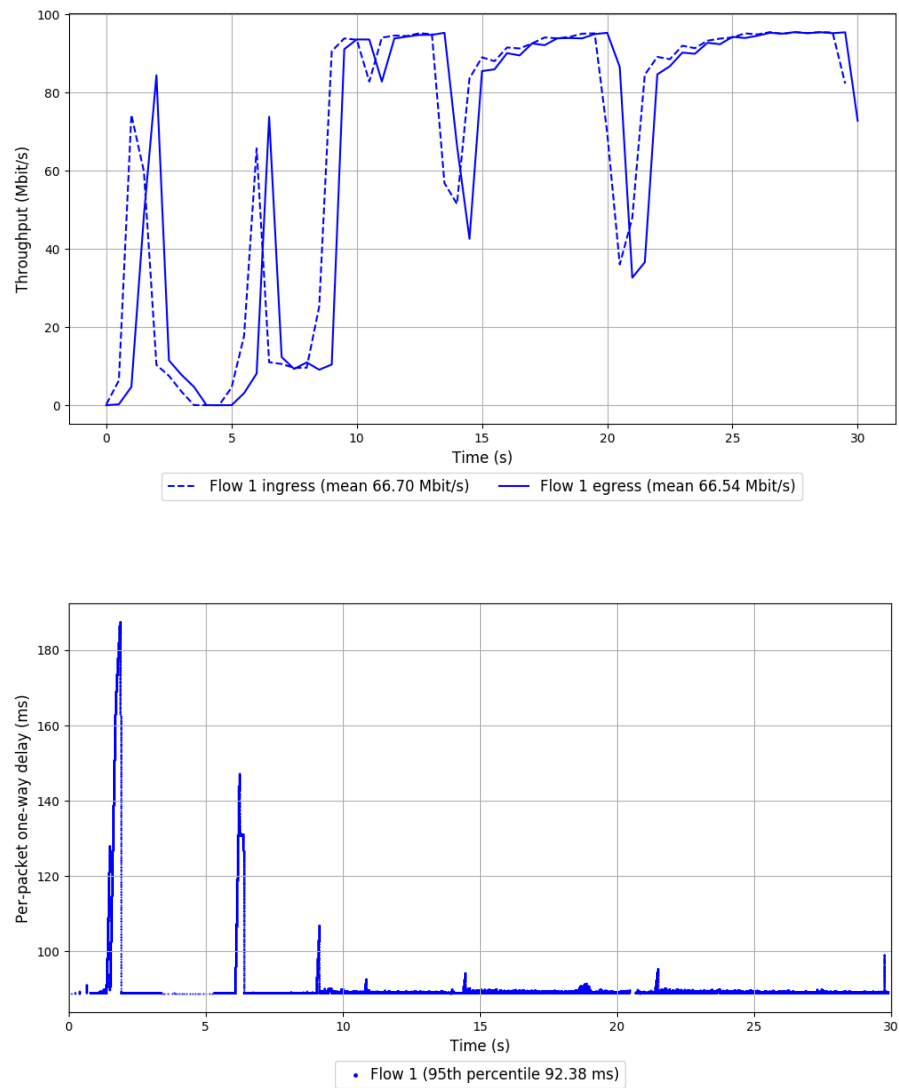
-- Flow 1:

Average throughput: 66.54 Mbit/s

95th percentile per-packet one-way delay: 92.384 ms

Loss rate: 0.67%

Run 2: Report of QUIC Cubic — Data Link

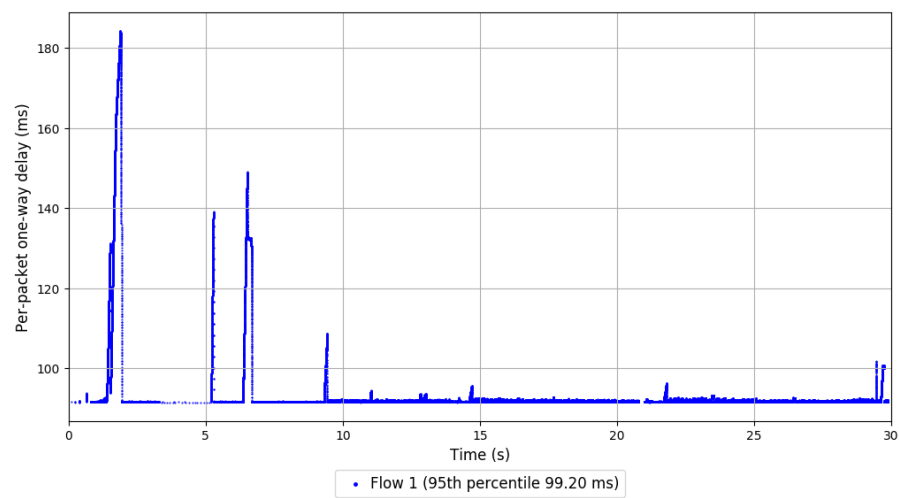
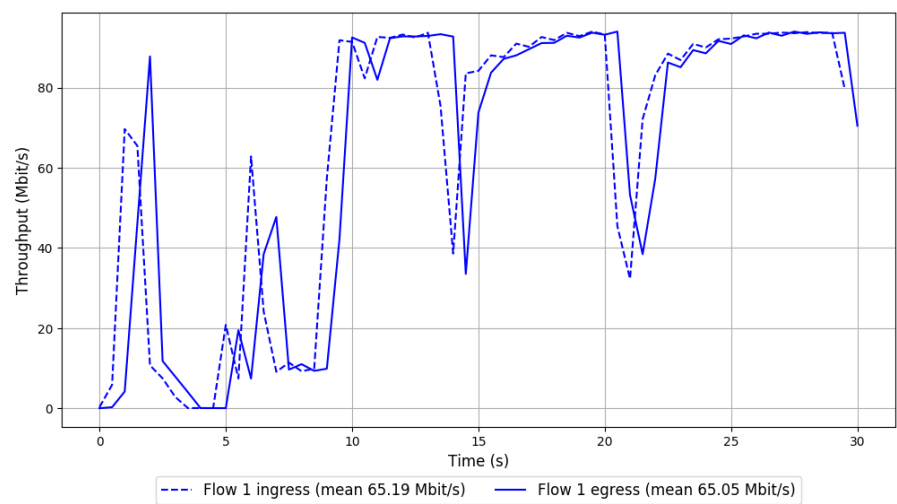


Run 3: Statistics of QUIC Cubic

Start at: 2019-12-11 11:52:42  
End at: 2019-12-11 11:53:12  
Local clock offset: -6.091 ms  
Remote clock offset: -7.407 ms

# Below is generated by plot.py at 2019-12-11 13:20:04  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 65.05 Mbit/s  
95th percentile per-packet one-way delay: 99.201 ms  
Loss rate: 0.68%  
-- Flow 1:  
Average throughput: 65.05 Mbit/s  
95th percentile per-packet one-way delay: 99.201 ms  
Loss rate: 0.68%

Run 3: Report of QUIC Cubic — Data Link

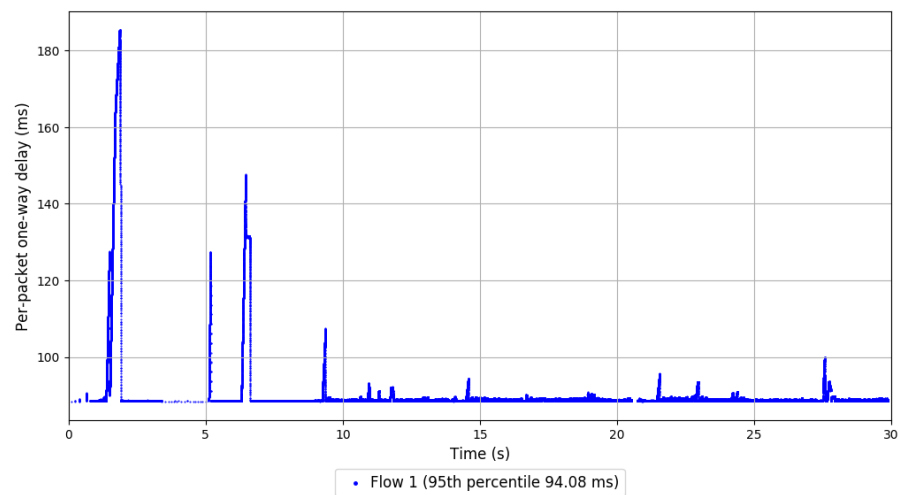
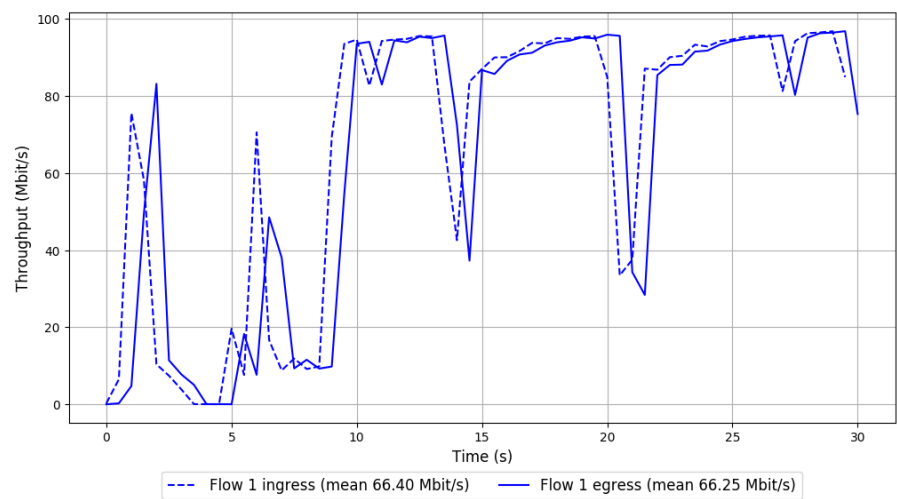


Run 4: Statistics of QUIC Cubic

Start at: 2019-12-11 12:20:51  
End at: 2019-12-11 12:21:21  
Local clock offset: -6.109 ms  
Remote clock offset: -8.845 ms

# Below is generated by plot.py at 2019-12-11 13:20:04  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 66.25 Mbit/s  
95th percentile per-packet one-way delay: 94.085 ms  
Loss rate: 0.68%  
-- Flow 1:  
Average throughput: 66.25 Mbit/s  
95th percentile per-packet one-way delay: 94.085 ms  
Loss rate: 0.68%

Run 4: Report of QUIC Cubic — Data Link



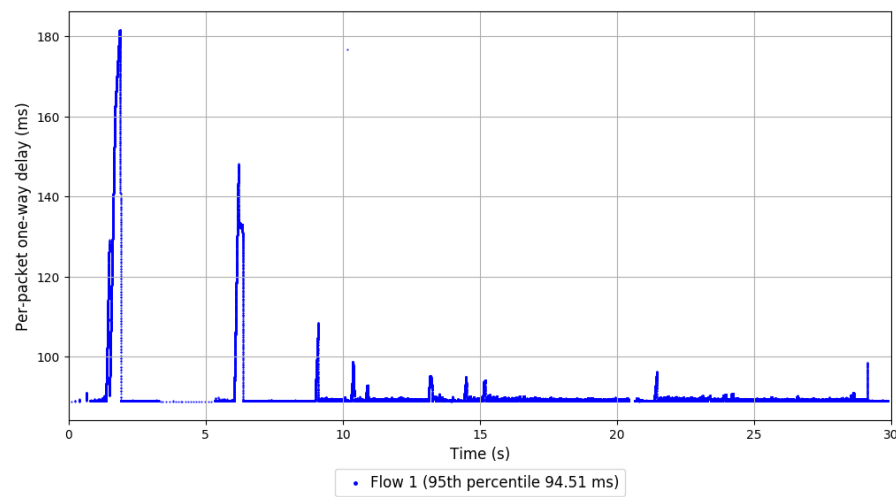
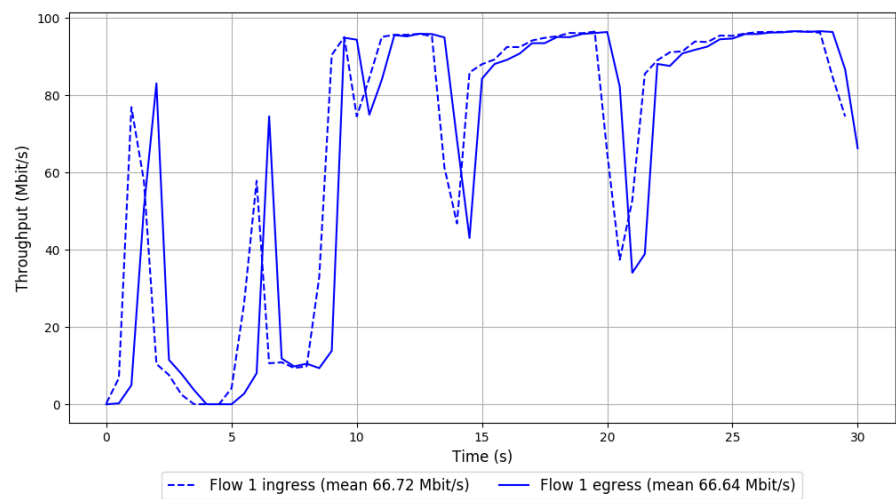


Run 5: Statistics of QUIC Cubic

Start at: 2019-12-11 12:49:01  
End at: 2019-12-11 12:49:31  
Local clock offset: -5.65 ms  
Remote clock offset: -9.294 ms

# Below is generated by plot.py at 2019-12-11 13:20:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 66.64 Mbit/s  
95th percentile per-packet one-way delay: 94.509 ms  
Loss rate: 0.59%  
-- Flow 1:  
Average throughput: 66.64 Mbit/s  
95th percentile per-packet one-way delay: 94.509 ms  
Loss rate: 0.59%

Run 5: Report of QUIC Cubic — Data Link

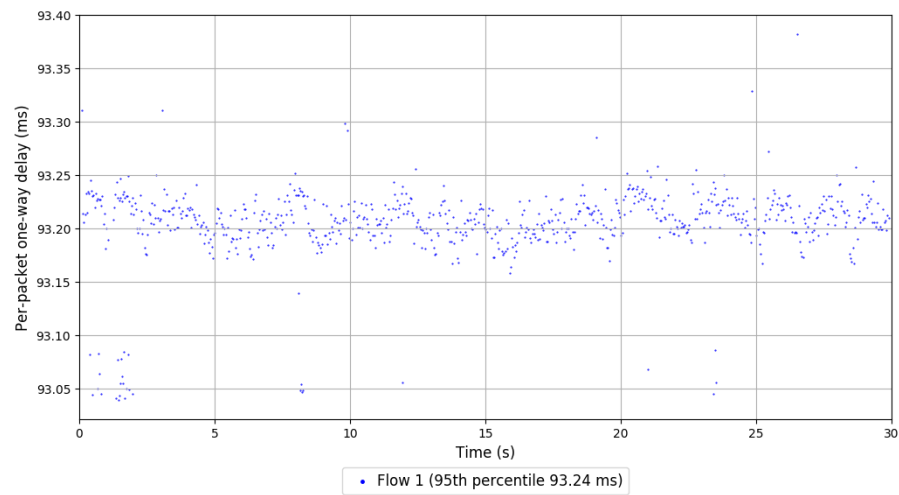
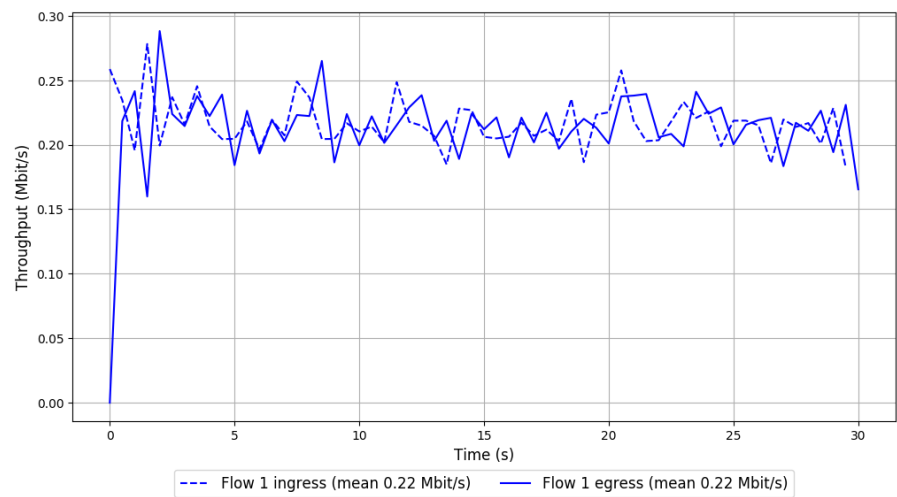


Run 1: Statistics of SCReAM

Start at: 2019-12-11 11:03:25  
End at: 2019-12-11 11:03:55  
Local clock offset: -6.495 ms  
Remote clock offset: -9.457 ms

# Below is generated by plot.py at 2019-12-11 13:20:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 93.238 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 93.238 ms  
Loss rate: 0.38%

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2019-12-11 11:31:36

End at: 2019-12-11 11:32:06

Local clock offset: -5.126 ms

Remote clock offset: -7.56 ms

# Below is generated by plot.py at 2019-12-11 13:20:18

# Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 89.152 ms

Loss rate: 0.38%

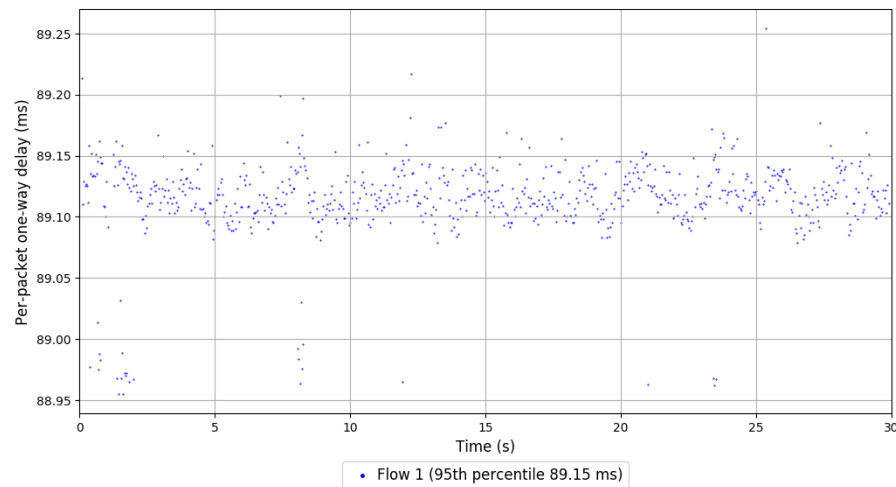
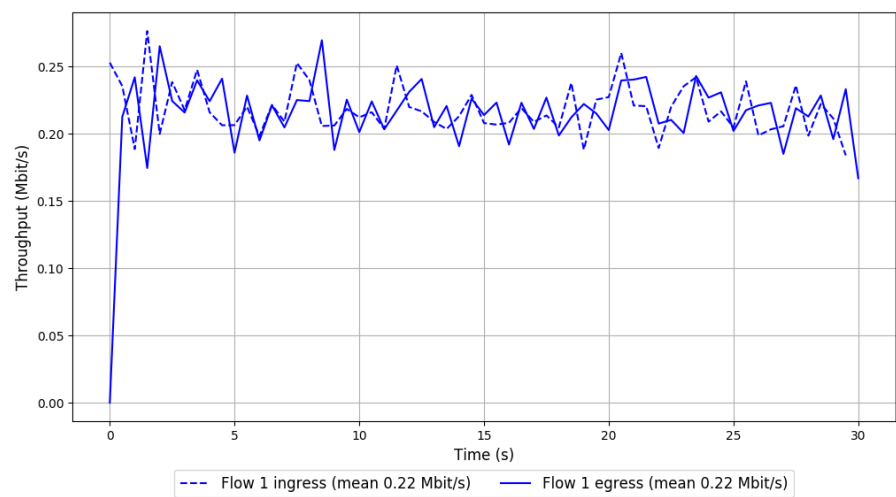
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 89.152 ms

Loss rate: 0.38%

Run 2: Report of SReAM — Data Link

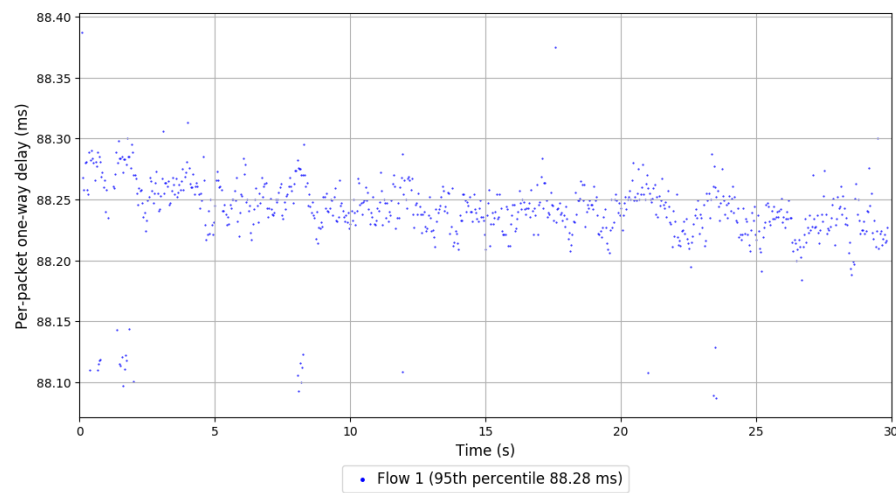
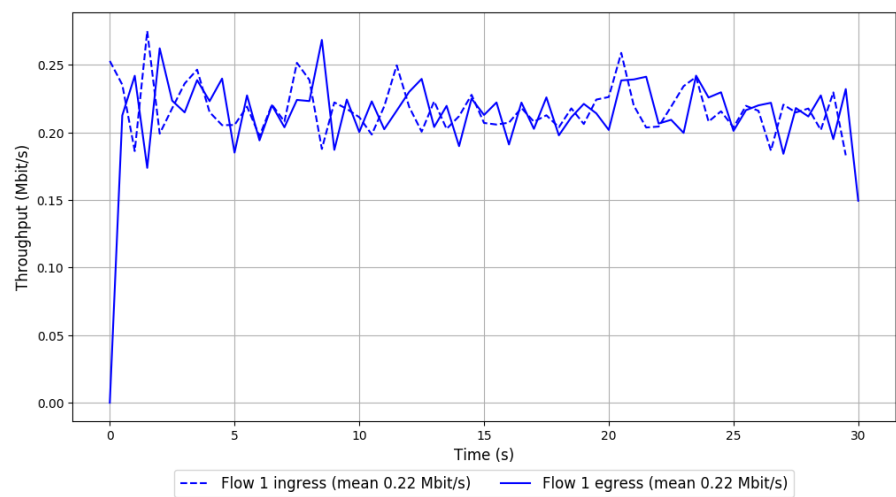


Run 3: Statistics of SCReAM

Start at: 2019-12-11 11:59:45  
End at: 2019-12-11 12:00:15  
Local clock offset: -6.133 ms  
Remote clock offset: -8.194 ms

# Below is generated by plot.py at 2019-12-11 13:20:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 88.279 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 88.279 ms  
Loss rate: 0.51%

Run 3: Report of SReAM — Data Link



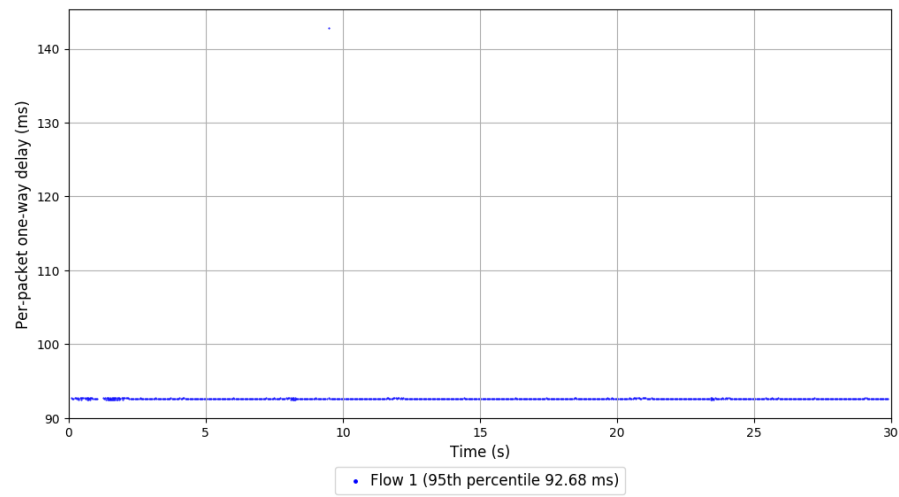
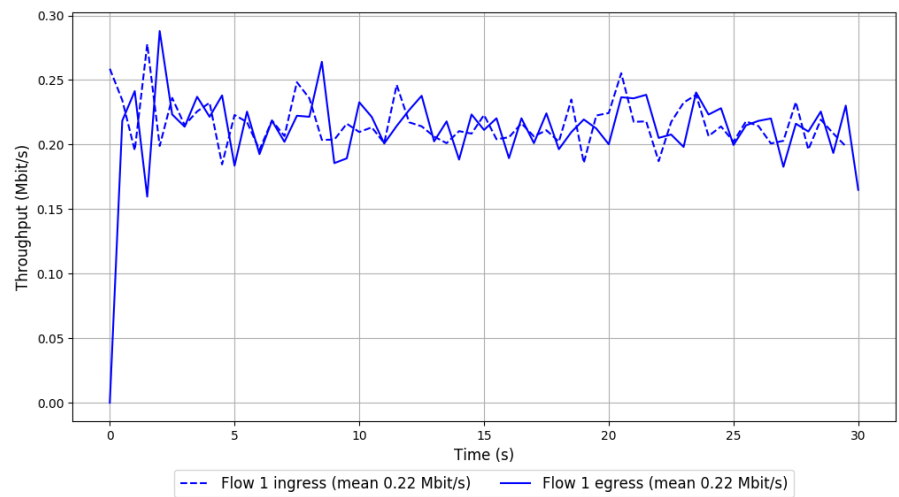


Run 4: Statistics of SCReAM

Start at: 2019-12-11 12:27:54  
End at: 2019-12-11 12:28:24  
Local clock offset: -5.42 ms  
Remote clock offset: -8.855 ms

# Below is generated by plot.py at 2019-12-11 13:20:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 92.679 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 92.679 ms  
Loss rate: 0.51%

Run 4: Report of SReAM — Data Link

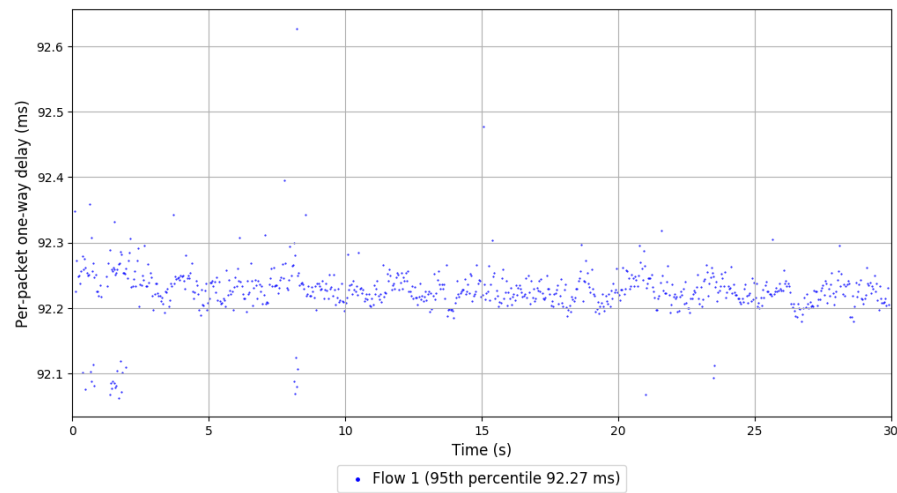
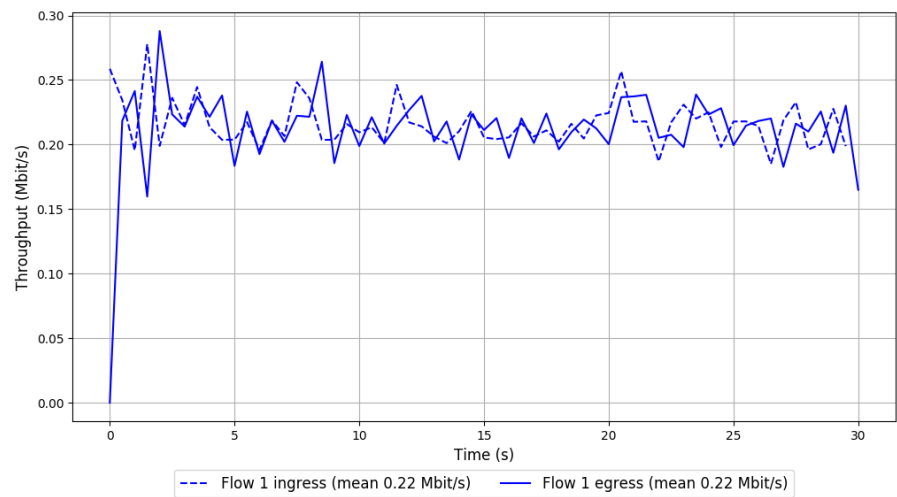


Run 5: Statistics of SCReAM

Start at: 2019-12-11 12:56:04  
End at: 2019-12-11 12:56:34  
Local clock offset: -5.501 ms  
Remote clock offset: -9.054 ms

# Below is generated by plot.py at 2019-12-11 13:20:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 92.269 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 92.269 ms  
Loss rate: 0.51%

Run 5: Report of SReAM — Data Link

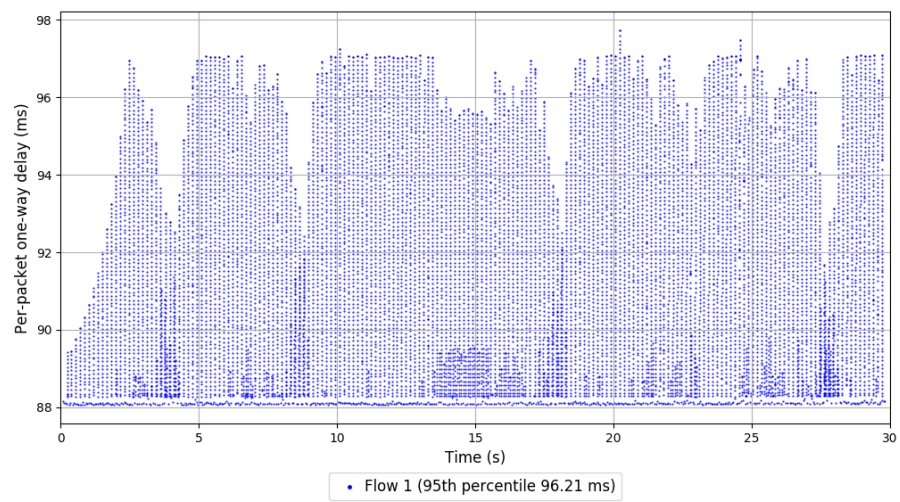
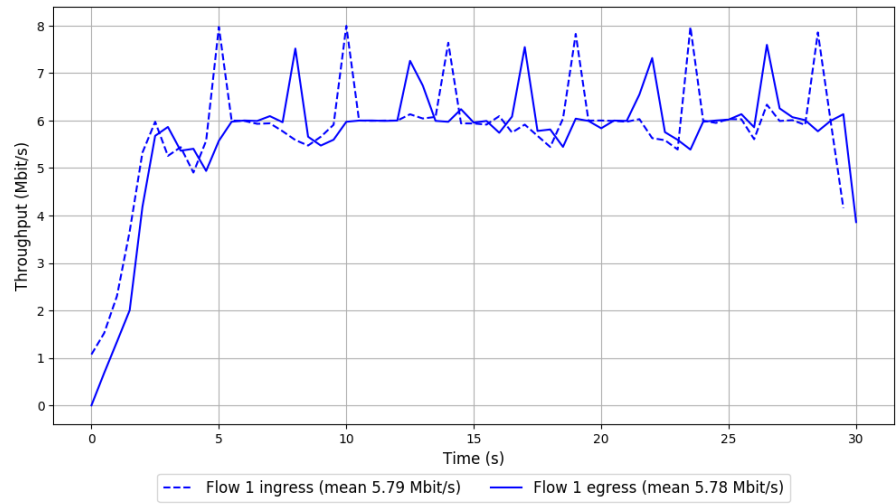


Run 1: Statistics of Sprout

Start at: 2019-12-11 10:51:40  
End at: 2019-12-11 10:52:10  
Local clock offset: -7.134 ms  
Remote clock offset: -9.013 ms

# Below is generated by plot.py at 2019-12-11 13:20:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 5.78 Mbit/s  
95th percentile per-packet one-way delay: 96.208 ms  
Loss rate: 0.62%  
-- Flow 1:  
Average throughput: 5.78 Mbit/s  
95th percentile per-packet one-way delay: 96.208 ms  
Loss rate: 0.62%

# Run 1: Report of Sprout — Data Link

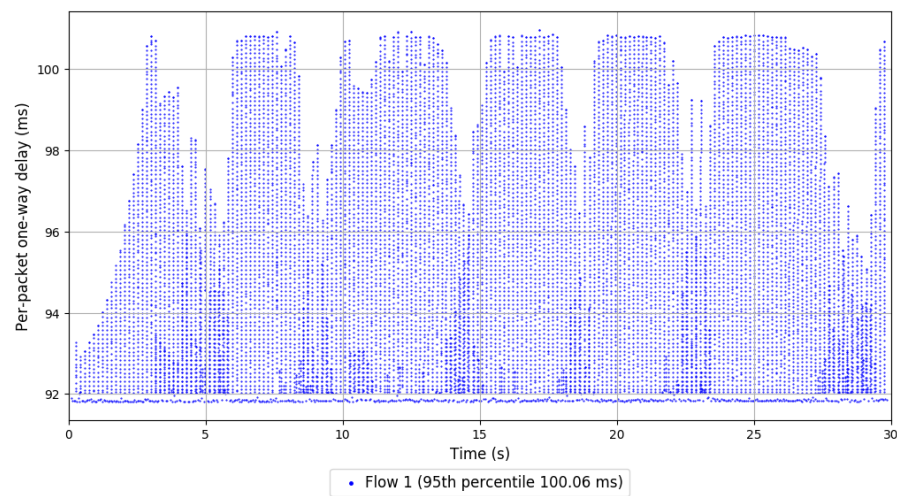
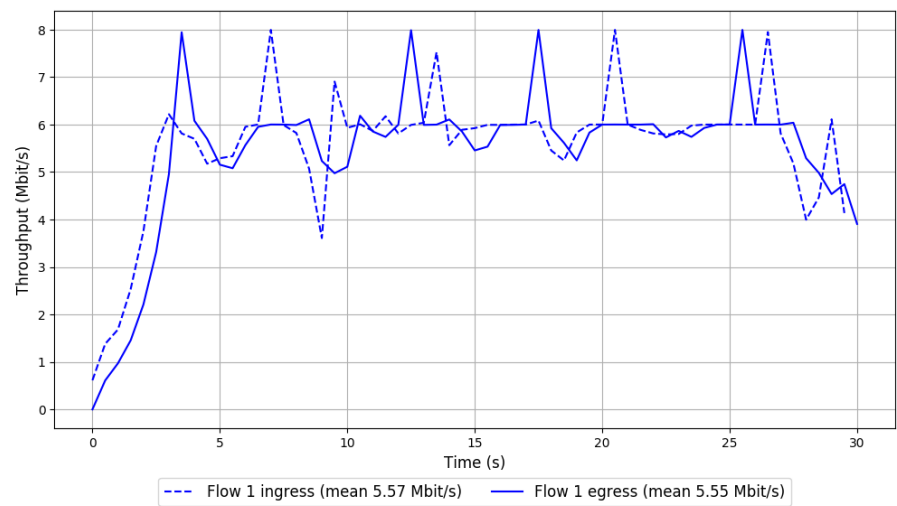


Run 2: Statistics of Sprout

Start at: 2019-12-11 11:19:50  
End at: 2019-12-11 11:20:20  
Local clock offset: -6.2 ms  
Remote clock offset: -8.196 ms

# Below is generated by plot.py at 2019-12-11 13:20:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 5.55 Mbit/s  
95th percentile per-packet one-way delay: 100.056 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 5.55 Mbit/s  
95th percentile per-packet one-way delay: 100.056 ms  
Loss rate: 0.65%

Run 2: Report of Sprout — Data Link



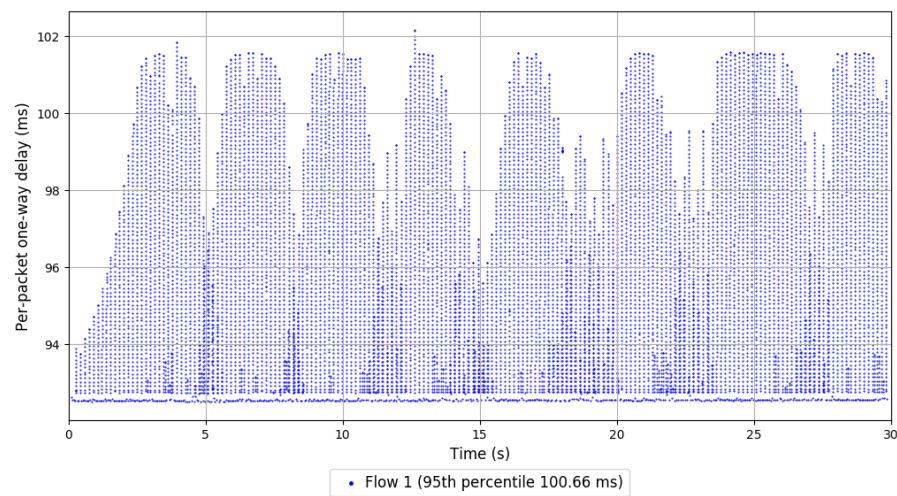
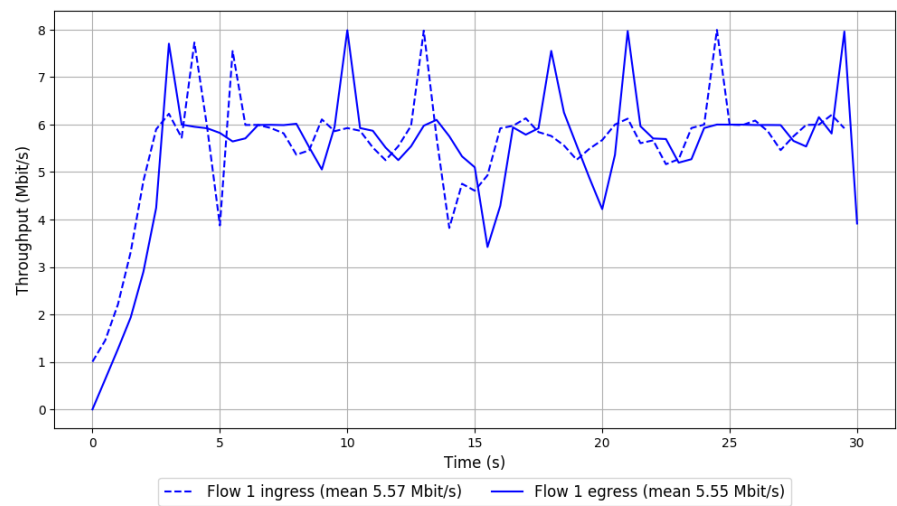


Run 3: Statistics of Sprout

Start at: 2019-12-11 11:48:01  
End at: 2019-12-11 11:48:31  
Local clock offset: -5.332 ms  
Remote clock offset: -7.022 ms

# Below is generated by plot.py at 2019-12-11 13:20:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 5.55 Mbit/s  
95th percentile per-packet one-way delay: 100.661 ms  
Loss rate: 0.68%  
-- Flow 1:  
Average throughput: 5.55 Mbit/s  
95th percentile per-packet one-way delay: 100.661 ms  
Loss rate: 0.68%

Run 3: Report of Sprout — Data Link

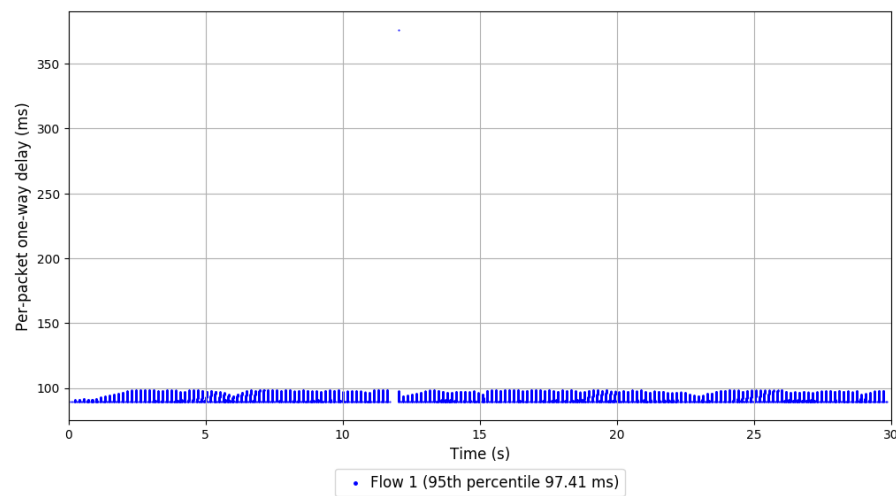
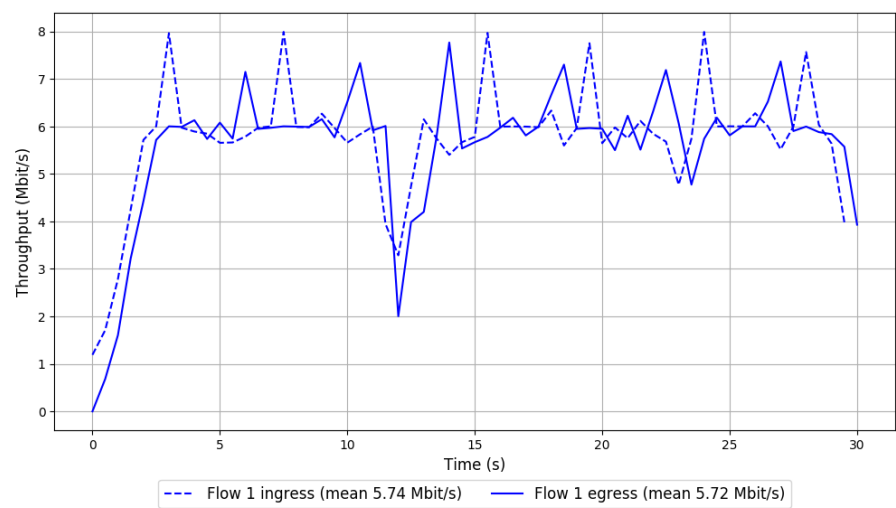


Run 4: Statistics of Sprout

Start at: 2019-12-11 12:16:10  
End at: 2019-12-11 12:16:40  
Local clock offset: -5.5 ms  
Remote clock offset: -9.227 ms

# Below is generated by plot.py at 2019-12-11 13:20:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 5.72 Mbit/s  
95th percentile per-packet one-way delay: 97.406 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 5.72 Mbit/s  
95th percentile per-packet one-way delay: 97.406 ms  
Loss rate: 0.58%

Run 4: Report of Sprout — Data Link

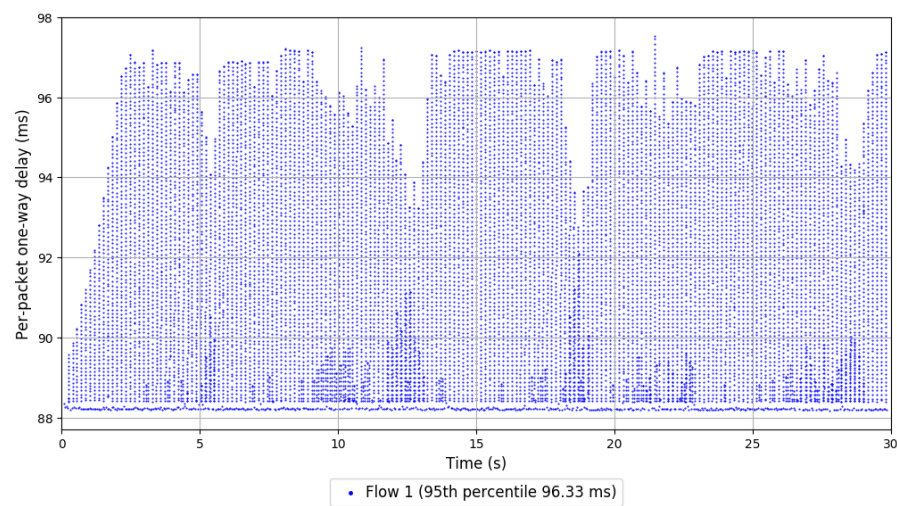
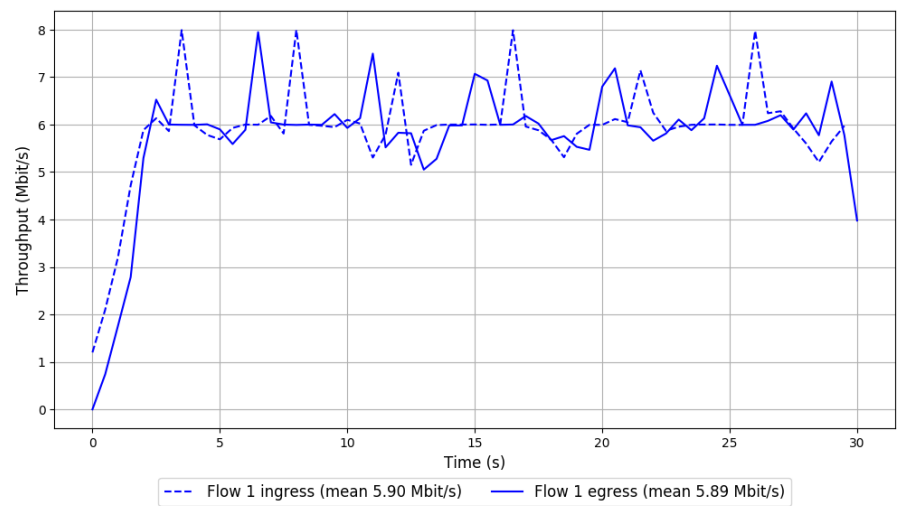


Run 5: Statistics of Sprout

Start at: 2019-12-11 12:44:19  
End at: 2019-12-11 12:44:50  
Local clock offset: -5.797 ms  
Remote clock offset: -8.713 ms

# Below is generated by plot.py at 2019-12-11 13:20:18  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 5.89 Mbit/s  
95th percentile per-packet one-way delay: 96.333 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 5.89 Mbit/s  
95th percentile per-packet one-way delay: 96.333 ms  
Loss rate: 0.57%

Run 5: Report of Sprout — Data Link

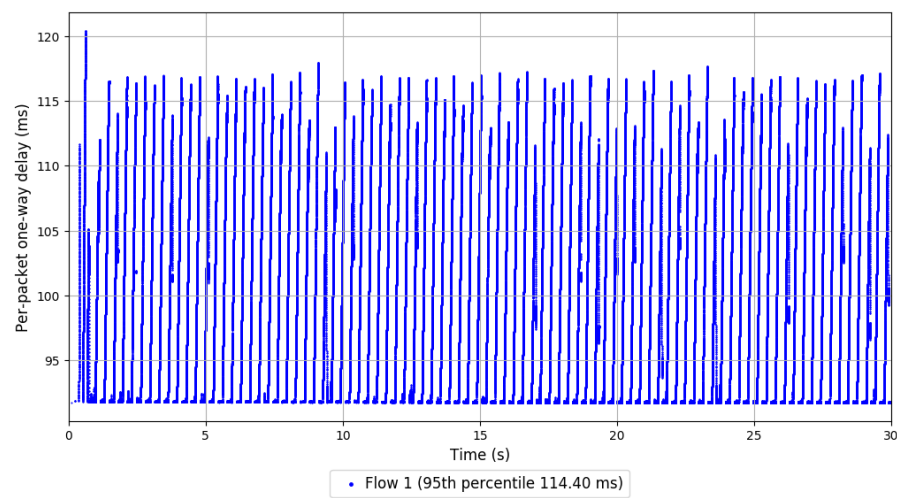
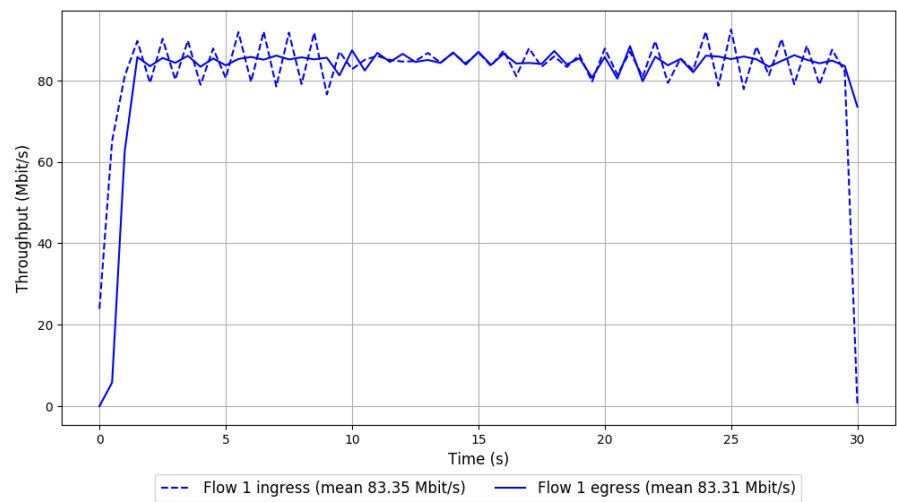


Run 1: Statistics of TaoVA-100x

Start at: 2019-12-11 11:10:25  
End at: 2019-12-11 11:10:55  
Local clock offset: -6.975 ms  
Remote clock offset: -8.723 ms

# Below is generated by plot.py at 2019-12-11 13:21:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 83.31 Mbit/s  
95th percentile per-packet one-way delay: 114.398 ms  
Loss rate: 0.52%  
-- Flow 1:  
Average throughput: 83.31 Mbit/s  
95th percentile per-packet one-way delay: 114.398 ms  
Loss rate: 0.52%

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



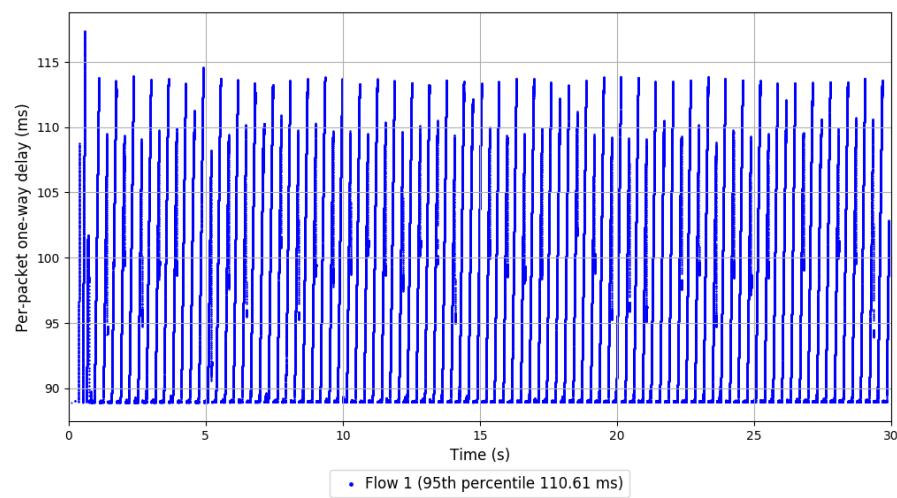
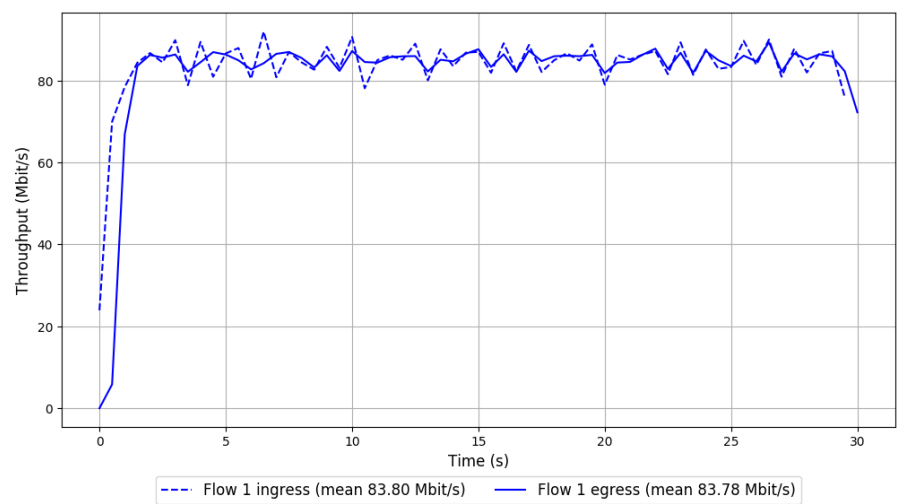


Run 2: Statistics of TaoVA-100x

Start at: 2019-12-11 11:38:36  
End at: 2019-12-11 11:39:06  
Local clock offset: -5.045 ms  
Remote clock offset: -7.133 ms

# Below is generated by plot.py at 2019-12-11 13:21:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 83.78 Mbit/s  
95th percentile per-packet one-way delay: 110.614 ms  
Loss rate: 0.48%  
-- Flow 1:  
Average throughput: 83.78 Mbit/s  
95th percentile per-packet one-way delay: 110.614 ms  
Loss rate: 0.48%

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

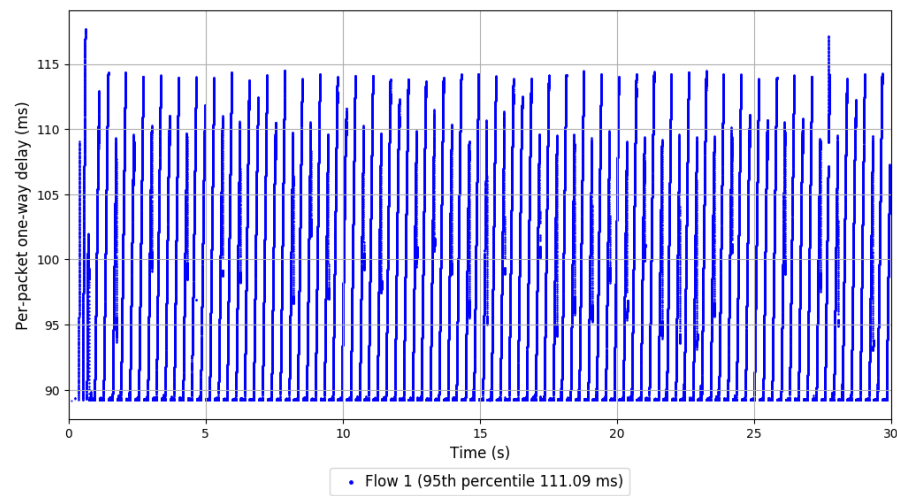
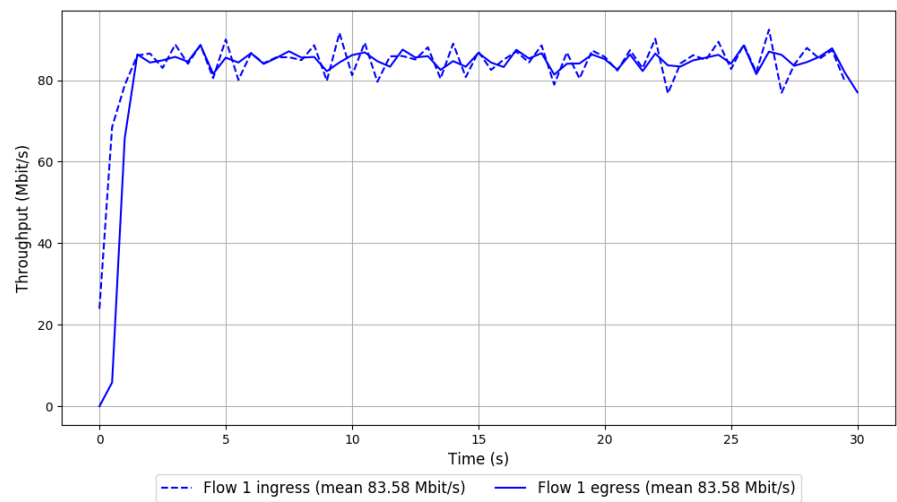


Run 3: Statistics of TaoVA-100x

Start at: 2019-12-11 12:06:45  
End at: 2019-12-11 12:07:15  
Local clock offset: -5.495 ms  
Remote clock offset: -8.773 ms

# Below is generated by plot.py at 2019-12-11 13:21:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 83.58 Mbit/s  
95th percentile per-packet one-way delay: 111.089 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 83.58 Mbit/s  
95th percentile per-packet one-way delay: 111.089 ms  
Loss rate: 0.46%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-12-11 12:34:55

End at: 2019-12-11 12:35:25

Local clock offset: -6.162 ms

Remote clock offset: -8.69 ms

# Below is generated by plot.py at 2019-12-11 13:21:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 83.75 Mbit/s

95th percentile per-packet one-way delay: 109.781 ms

Loss rate: 0.47%

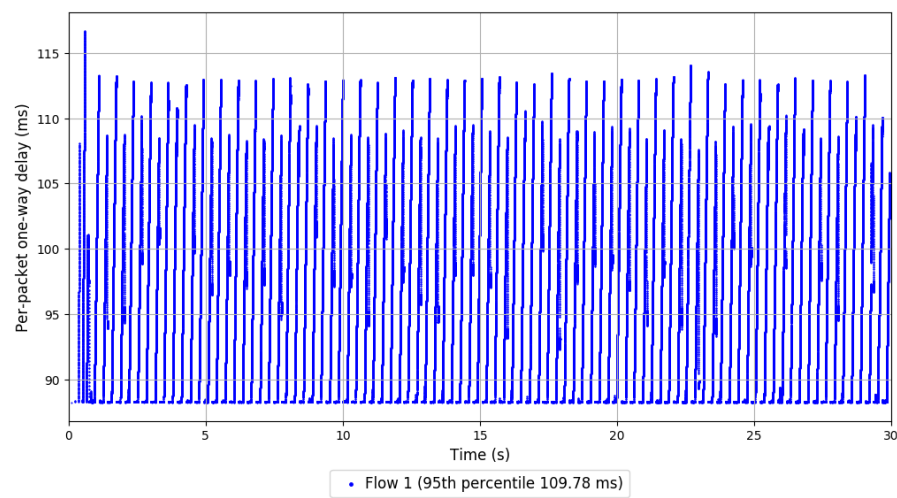
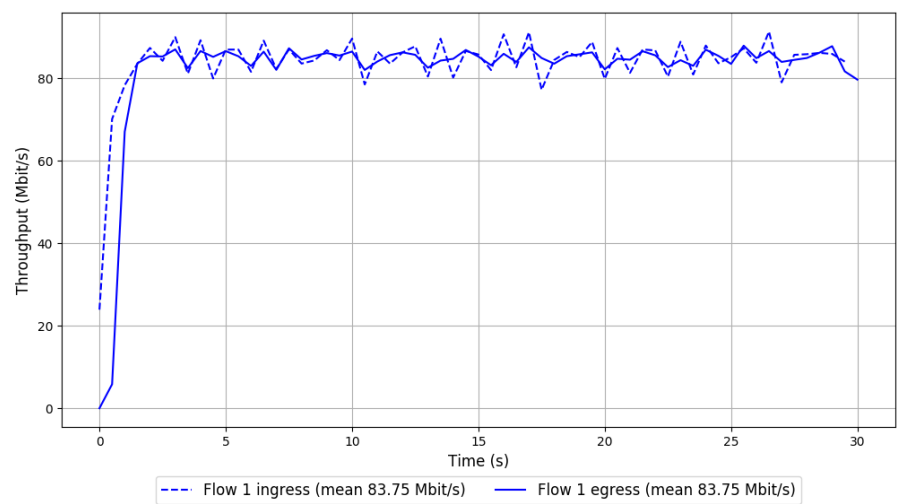
-- Flow 1:

Average throughput: 83.75 Mbit/s

95th percentile per-packet one-way delay: 109.781 ms

Loss rate: 0.47%

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



Run 5: Statistics of TaoVA-100x

Start at: 2019-12-11 13:03:04

End at: 2019-12-11 13:03:34

Local clock offset: -5.396 ms

Remote clock offset: -9.484 ms

# Below is generated by plot.py at 2019-12-11 13:21:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 82.94 Mbit/s

95th percentile per-packet one-way delay: 114.242 ms

Loss rate: 0.49%

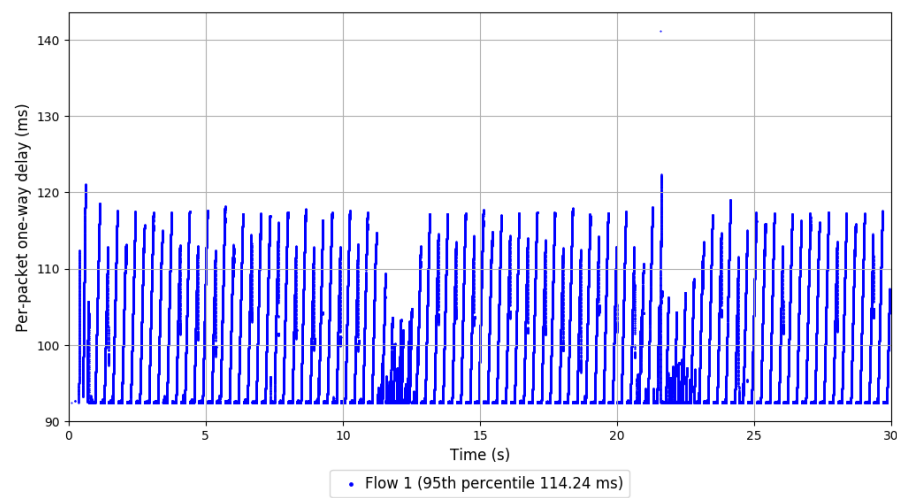
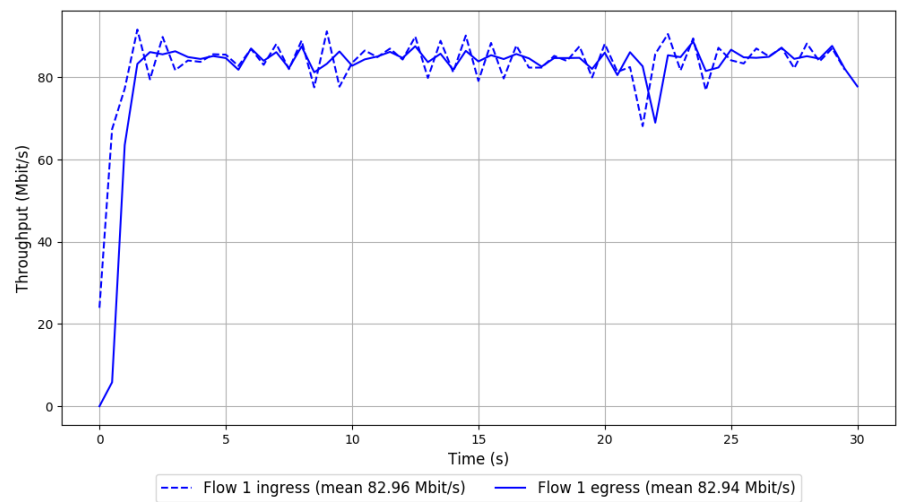
-- Flow 1:

Average throughput: 82.94 Mbit/s

95th percentile per-packet one-way delay: 114.242 ms

Loss rate: 0.49%

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



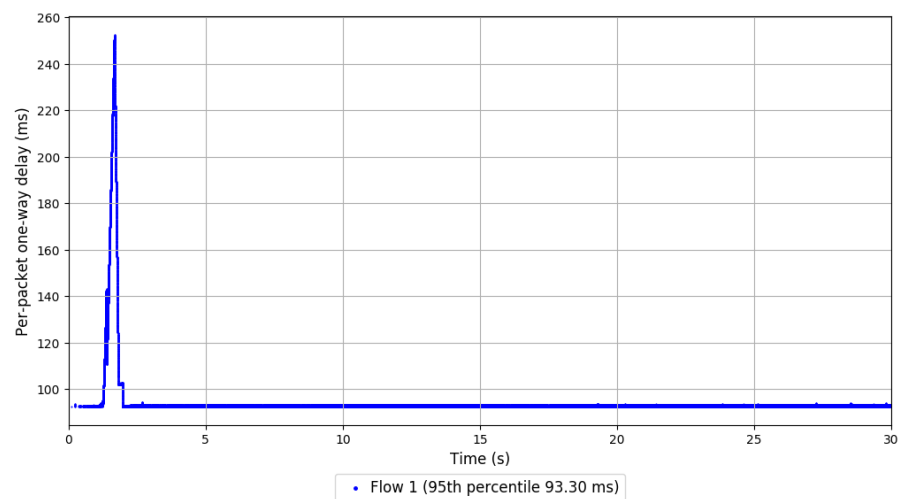
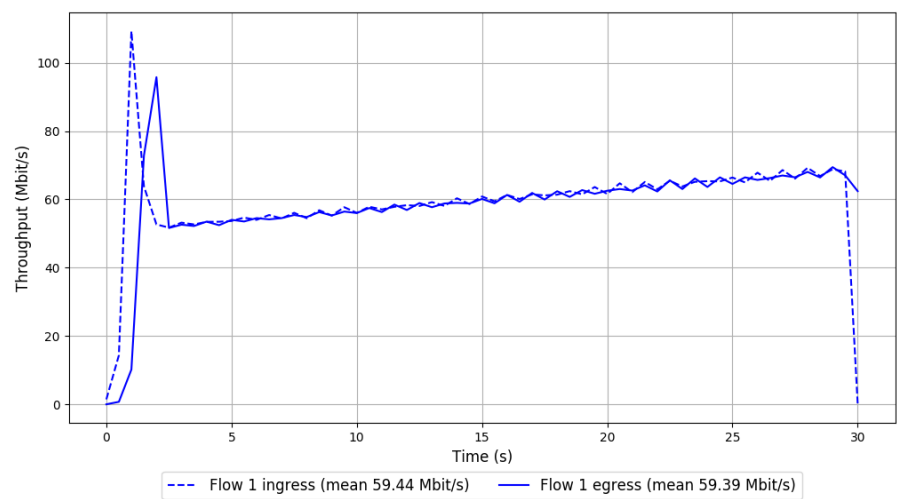


Run 1: Statistics of TCP Vegas

Start at: 2019-12-11 10:58:42  
End at: 2019-12-11 10:59:12  
Local clock offset: -6.529 ms  
Remote clock offset: -9.125 ms

# Below is generated by plot.py at 2019-12-11 13:21:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 59.39 Mbit/s  
95th percentile per-packet one-way delay: 93.301 ms  
Loss rate: 0.56%  
-- Flow 1:  
Average throughput: 59.39 Mbit/s  
95th percentile per-packet one-way delay: 93.301 ms  
Loss rate: 0.56%

Run 1: Report of TCP Vegas — Data Link

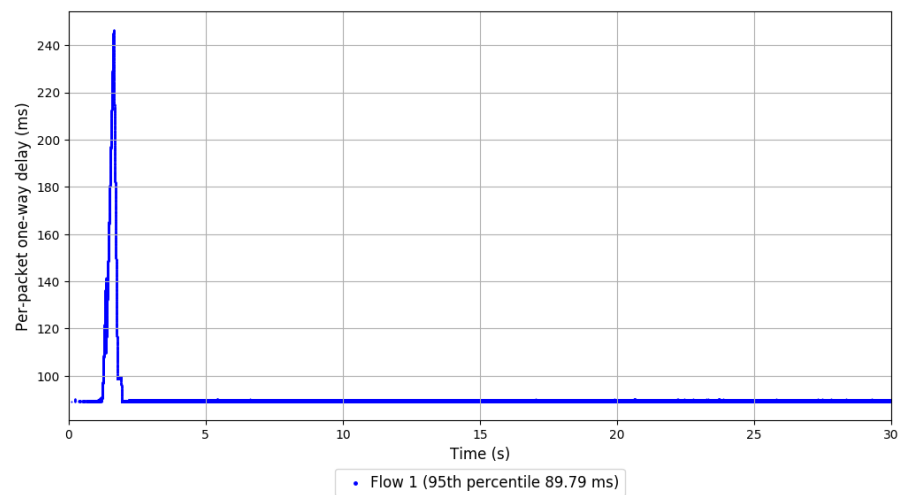
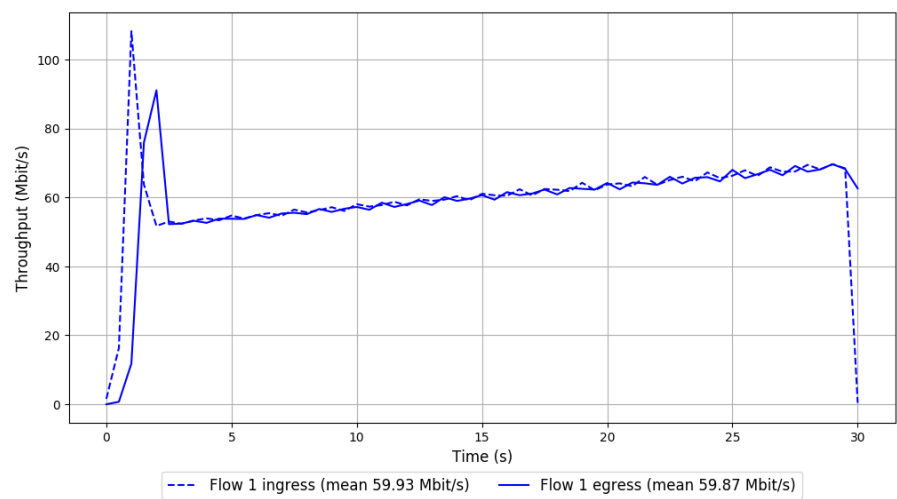


Run 2: Statistics of TCP Vegas

Start at: 2019-12-11 11:26:53  
End at: 2019-12-11 11:27:23  
Local clock offset: -5.309 ms  
Remote clock offset: -7.883 ms

# Below is generated by plot.py at 2019-12-11 13:21:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 59.87 Mbit/s  
95th percentile per-packet one-way delay: 89.793 ms  
Loss rate: 0.55%  
-- Flow 1:  
Average throughput: 59.87 Mbit/s  
95th percentile per-packet one-way delay: 89.793 ms  
Loss rate: 0.55%

Run 2: Report of TCP Vegas — Data Link

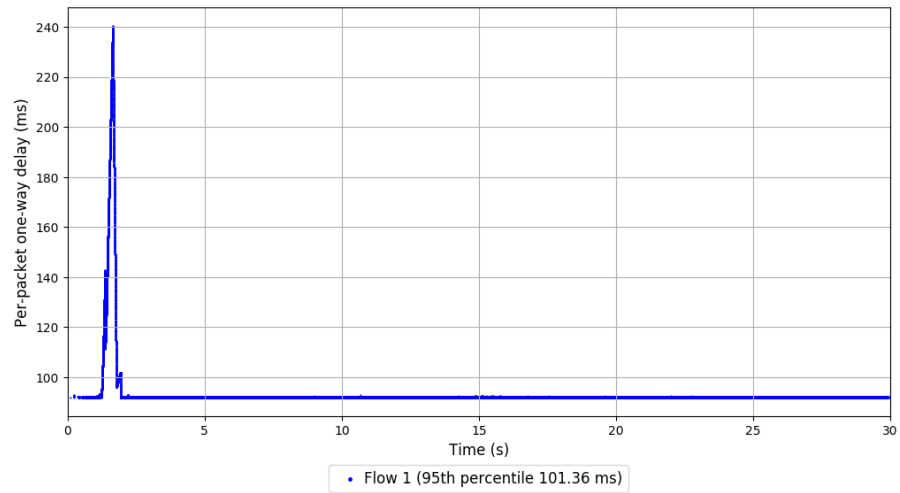
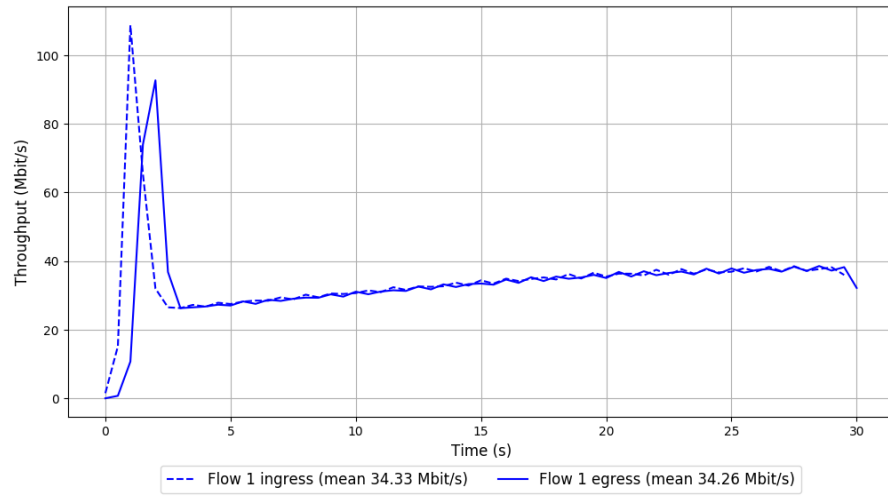


Run 3: Statistics of TCP Vegas

Start at: 2019-12-11 11:55:04  
End at: 2019-12-11 11:55:34  
Local clock offset: -6.122 ms  
Remote clock offset: -7.994 ms

# Below is generated by plot.py at 2019-12-11 13:21:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 34.26 Mbit/s  
95th percentile per-packet one-way delay: 101.356 ms  
Loss rate: 0.67%  
-- Flow 1:  
Average throughput: 34.26 Mbit/s  
95th percentile per-packet one-way delay: 101.356 ms  
Loss rate: 0.67%

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

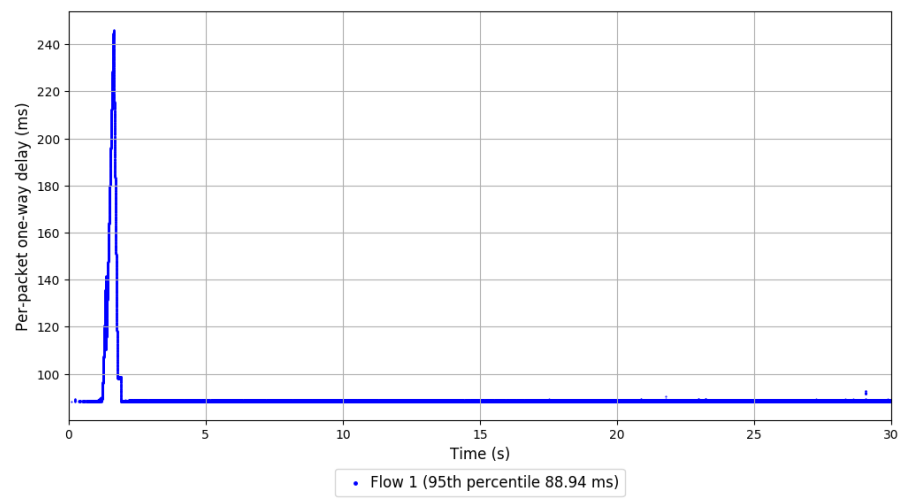
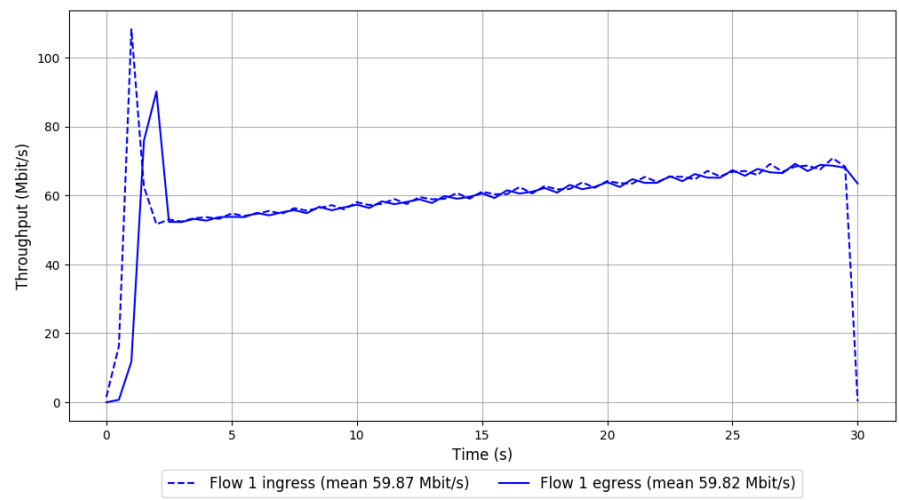


Run 4: Statistics of TCP Vegas

Start at: 2019-12-11 12:23:13  
End at: 2019-12-11 12:23:43  
Local clock offset: -6.178 ms  
Remote clock offset: -8.732 ms

# Below is generated by plot.py at 2019-12-11 13:21:39  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 59.82 Mbit/s  
95th percentile per-packet one-way delay: 88.945 ms  
Loss rate: 0.54%  
-- Flow 1:  
Average throughput: 59.82 Mbit/s  
95th percentile per-packet one-way delay: 88.945 ms  
Loss rate: 0.54%

Run 4: Report of TCP Vegas — Data Link





Run 5: Statistics of TCP Vegas

Start at: 2019-12-11 12:51:23

End at: 2019-12-11 12:51:53

Local clock offset: -5.676 ms

Remote clock offset: -9.33 ms

# Below is generated by plot.py at 2019-12-11 13:21:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 59.56 Mbit/s

95th percentile per-packet one-way delay: 92.987 ms

Loss rate: 0.55%

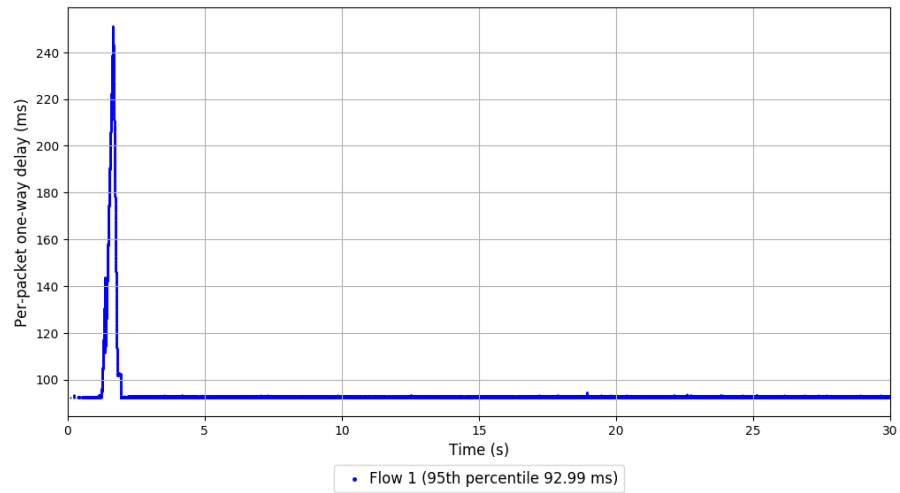
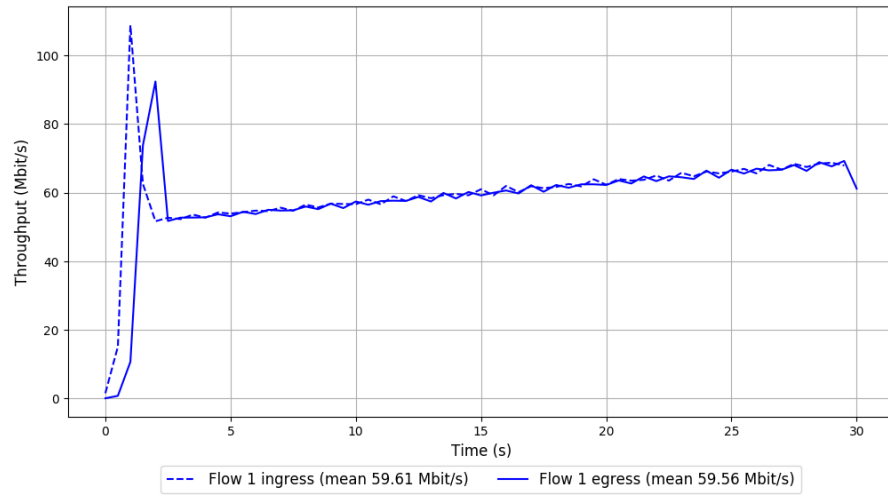
-- Flow 1:

Average throughput: 59.56 Mbit/s

95th percentile per-packet one-way delay: 92.987 ms

Loss rate: 0.55%

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

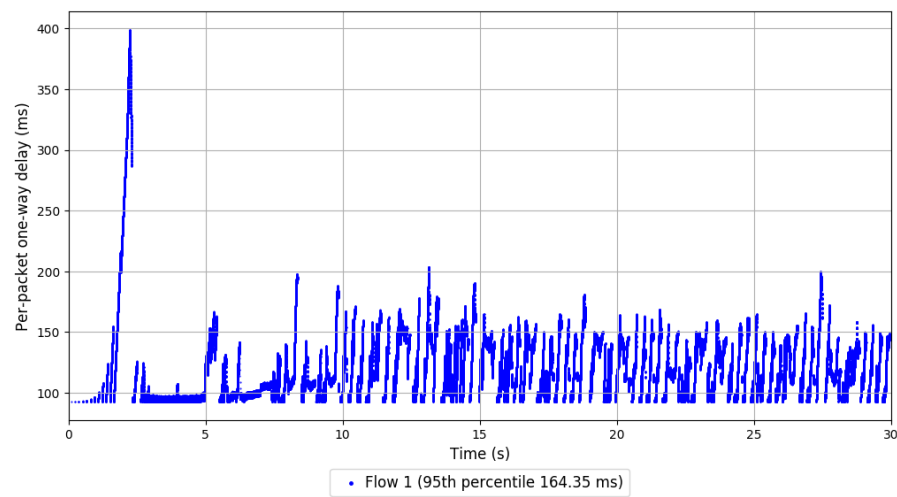
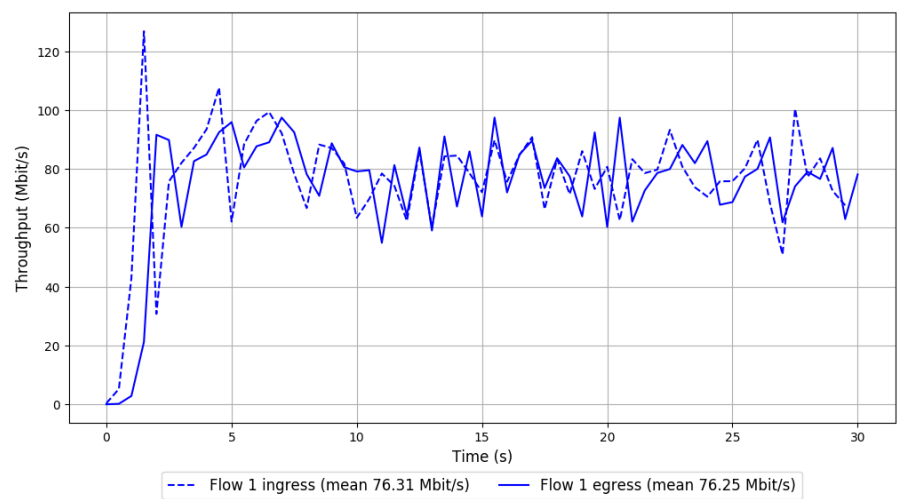


Run 1: Statistics of Verus

Start at: 2019-12-11 11:11:38  
End at: 2019-12-11 11:12:08  
Local clock offset: -6.129 ms  
Remote clock offset: -8.832 ms

# Below is generated by plot.py at 2019-12-11 13:21:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 76.25 Mbit/s  
95th percentile per-packet one-way delay: 164.351 ms  
Loss rate: 0.50%  
-- Flow 1:  
Average throughput: 76.25 Mbit/s  
95th percentile per-packet one-way delay: 164.351 ms  
Loss rate: 0.50%

Run 1: Report of Verus — Data Link

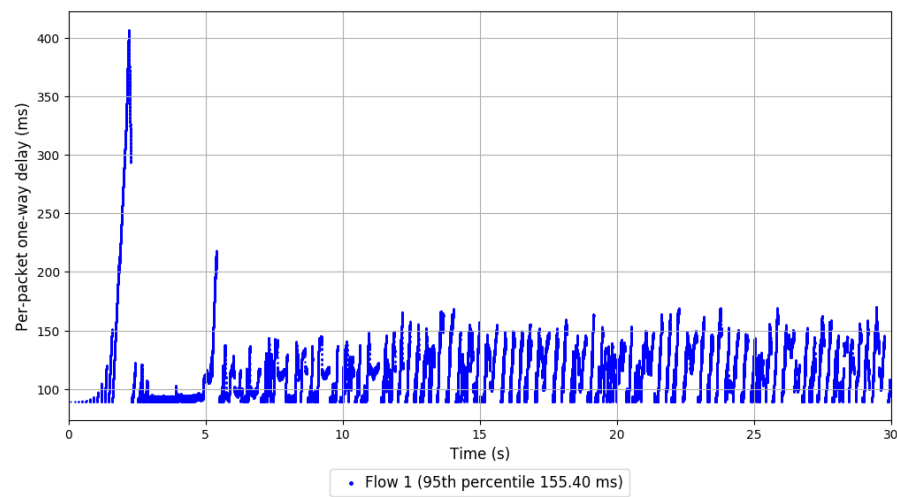
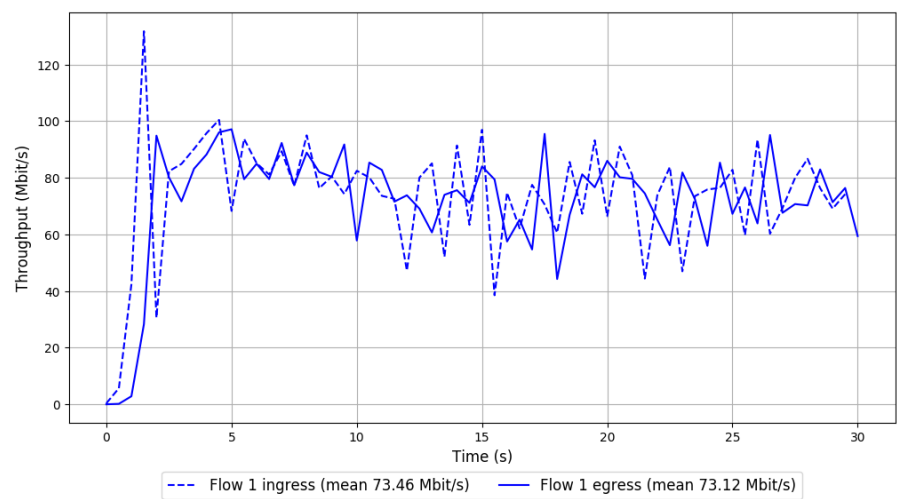


Run 2: Statistics of Verus

Start at: 2019-12-11 11:39:50  
End at: 2019-12-11 11:40:20  
Local clock offset: -5.065 ms  
Remote clock offset: -7.311 ms

# Below is generated by plot.py at 2019-12-11 13:22:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 73.12 Mbit/s  
95th percentile per-packet one-way delay: 155.396 ms  
Loss rate: 0.91%  
-- Flow 1:  
Average throughput: 73.12 Mbit/s  
95th percentile per-packet one-way delay: 155.396 ms  
Loss rate: 0.91%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-12-11 12:07:59

End at: 2019-12-11 12:08:29

Local clock offset: -6.19 ms

Remote clock offset: -9.23 ms

# Below is generated by plot.py at 2019-12-11 13:22:23

# Datalink statistics

-- Total of 1 flow:

Average throughput: 73.03 Mbit/s

95th percentile per-packet one-way delay: 143.353 ms

Loss rate: 0.68%

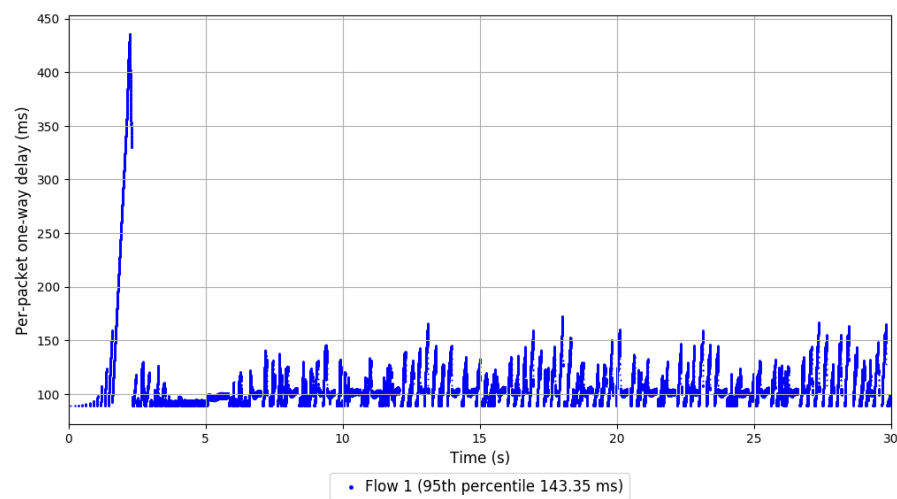
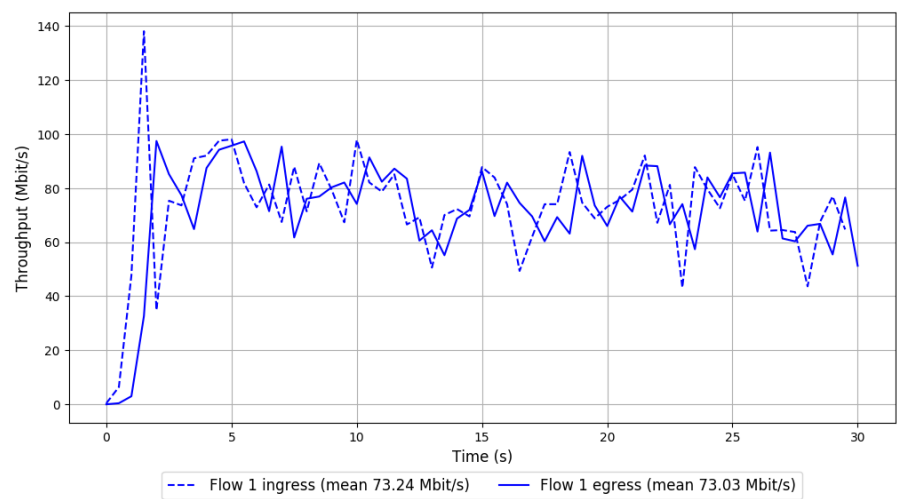
-- Flow 1:

Average throughput: 73.03 Mbit/s

95th percentile per-packet one-way delay: 143.353 ms

Loss rate: 0.68%

Run 3: Report of Verus — Data Link



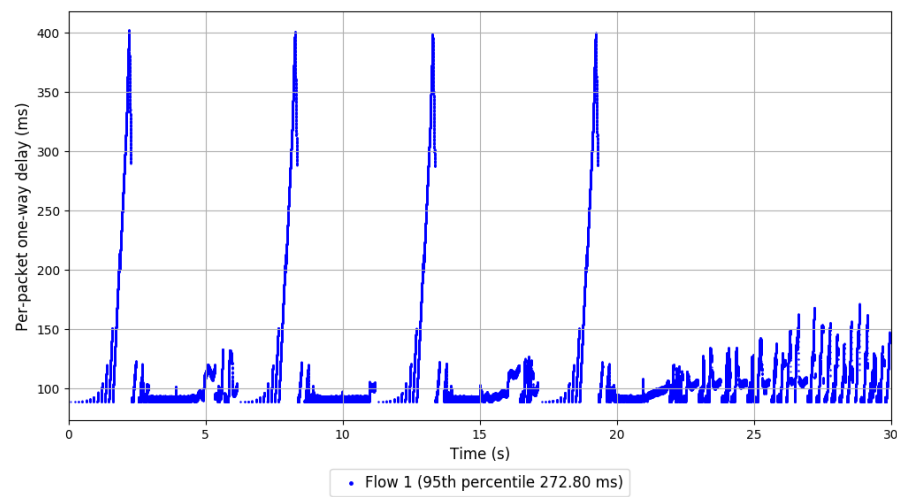
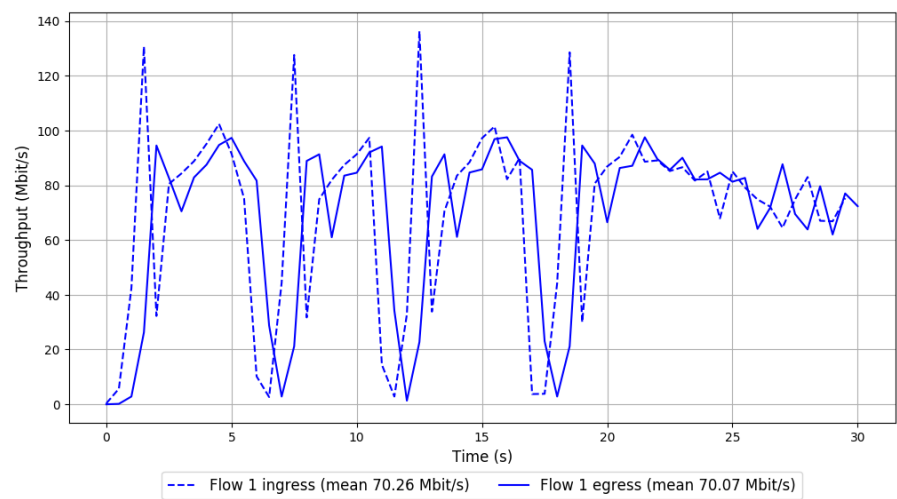


Run 4: Statistics of Verus

Start at: 2019-12-11 12:36:08  
End at: 2019-12-11 12:36:38  
Local clock offset: -6.087 ms  
Remote clock offset: -9.348 ms

# Below is generated by plot.py at 2019-12-11 13:22:24  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 70.07 Mbit/s  
95th percentile per-packet one-way delay: 272.797 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 70.07 Mbit/s  
95th percentile per-packet one-way delay: 272.797 ms  
Loss rate: 0.51%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2019-12-11 13:04:18

End at: 2019-12-11 13:04:48

Local clock offset: -5.372 ms

Remote clock offset: -9.35 ms

# Below is generated by plot.py at 2019-12-11 13:22:28

# Datalink statistics

-- Total of 1 flow:

Average throughput: 70.70 Mbit/s

95th percentile per-packet one-way delay: 227.974 ms

Loss rate: 0.78%

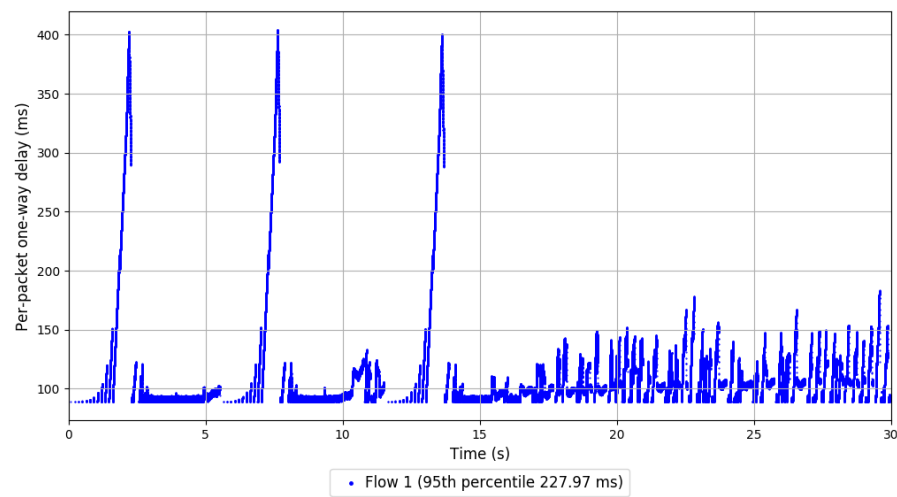
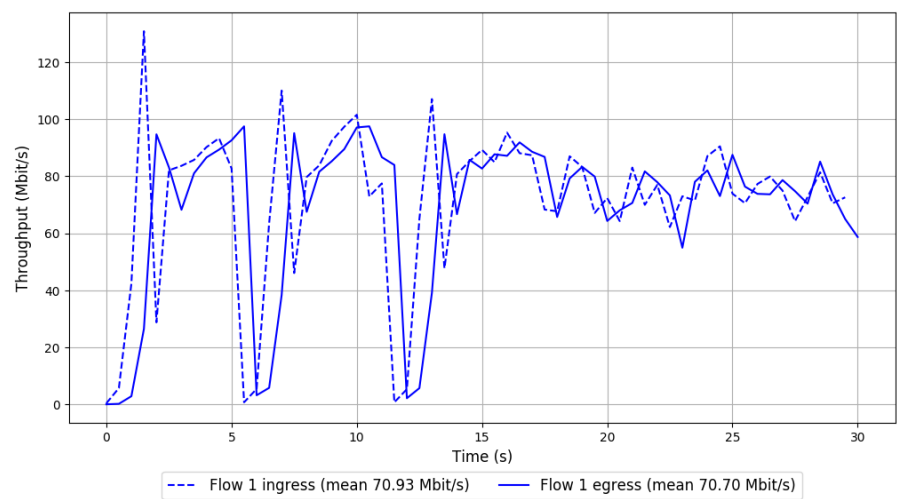
-- Flow 1:

Average throughput: 70.70 Mbit/s

95th percentile per-packet one-way delay: 227.974 ms

Loss rate: 0.78%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-12-11 11:09:13

End at: 2019-12-11 11:09:43

Local clock offset: -7.133 ms

Remote clock offset: -8.93 ms

# Below is generated by plot.py at 2019-12-11 13:22:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 73.46 Mbit/s

95th percentile per-packet one-way delay: 121.180 ms

Loss rate: 0.37%

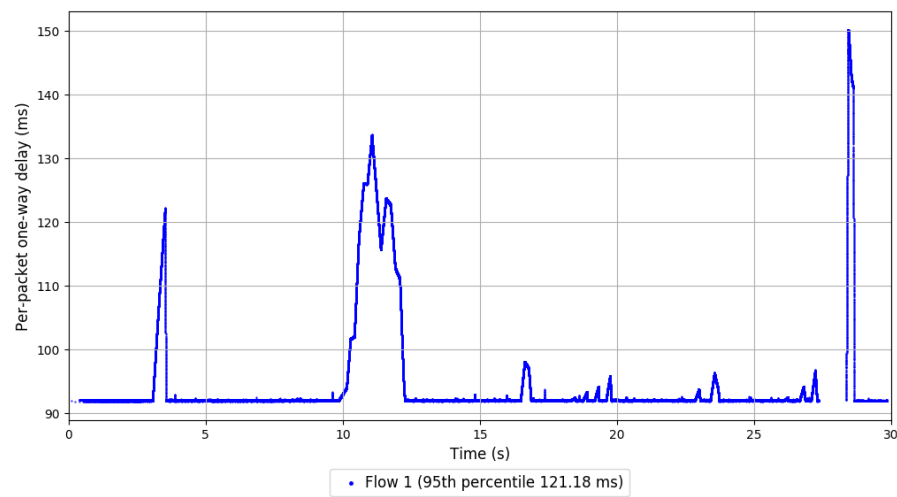
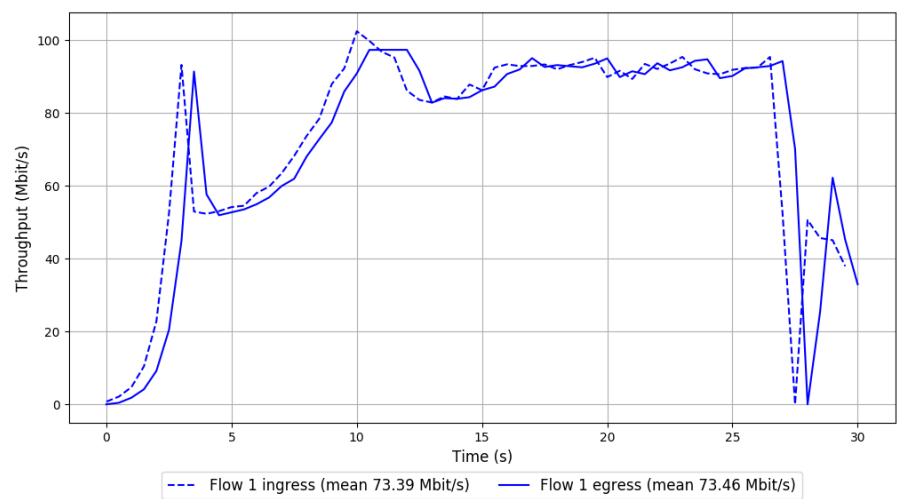
-- Flow 1:

Average throughput: 73.46 Mbit/s

95th percentile per-packet one-way delay: 121.180 ms

Loss rate: 0.37%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-12-11 11:37:24

End at: 2019-12-11 11:37:54

Local clock offset: -5.004 ms

Remote clock offset: -7.287 ms

# Below is generated by plot.py at 2019-12-11 13:22:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 78.19 Mbit/s

95th percentile per-packet one-way delay: 117.021 ms

Loss rate: 0.61%

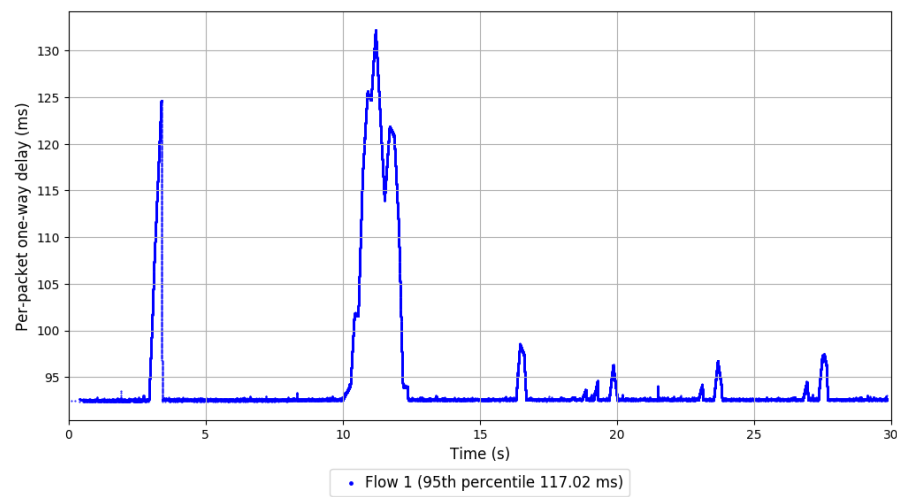
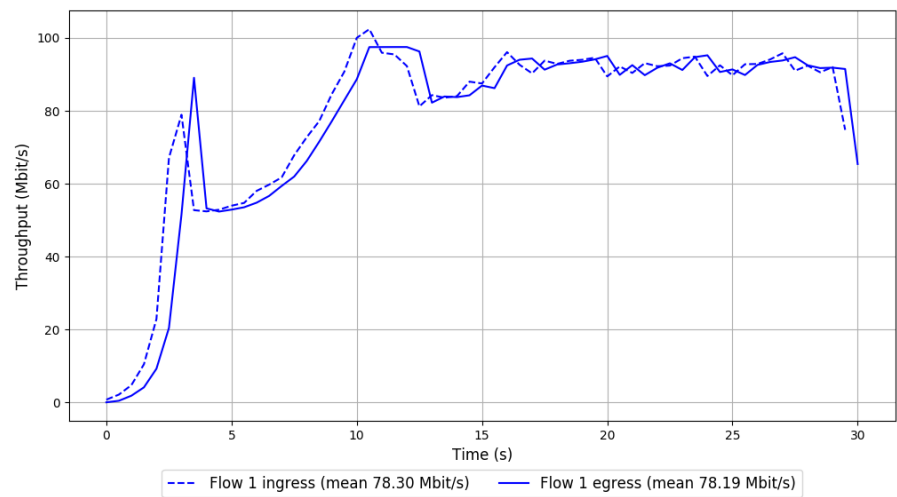
-- Flow 1:

Average throughput: 78.19 Mbit/s

95th percentile per-packet one-way delay: 117.021 ms

Loss rate: 0.61%

Run 2: Report of PCC-Vivace — Data Link



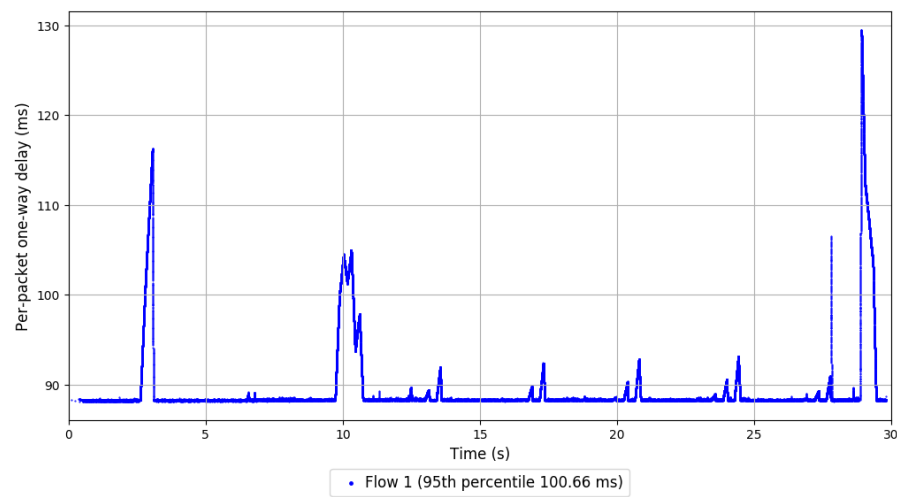
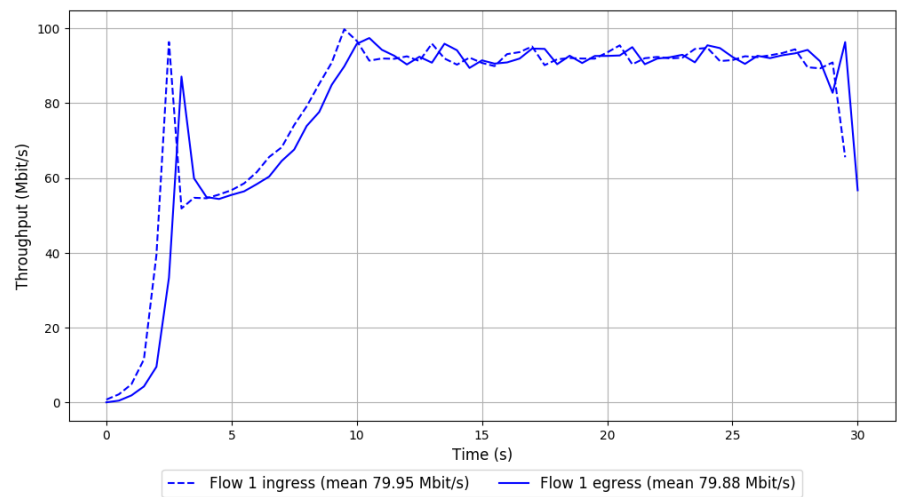


Run 3: Statistics of PCC-Vivace

Start at: 2019-12-11 12:05:33  
End at: 2019-12-11 12:06:03  
Local clock offset: -6.141 ms  
Remote clock offset: -8.507 ms

# Below is generated by plot.py at 2019-12-11 13:22:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 79.88 Mbit/s  
95th percentile per-packet one-way delay: 100.657 ms  
Loss rate: 0.55%  
-- Flow 1:  
Average throughput: 79.88 Mbit/s  
95th percentile per-packet one-way delay: 100.657 ms  
Loss rate: 0.55%

Run 3: Report of PCC-Vivace — Data Link

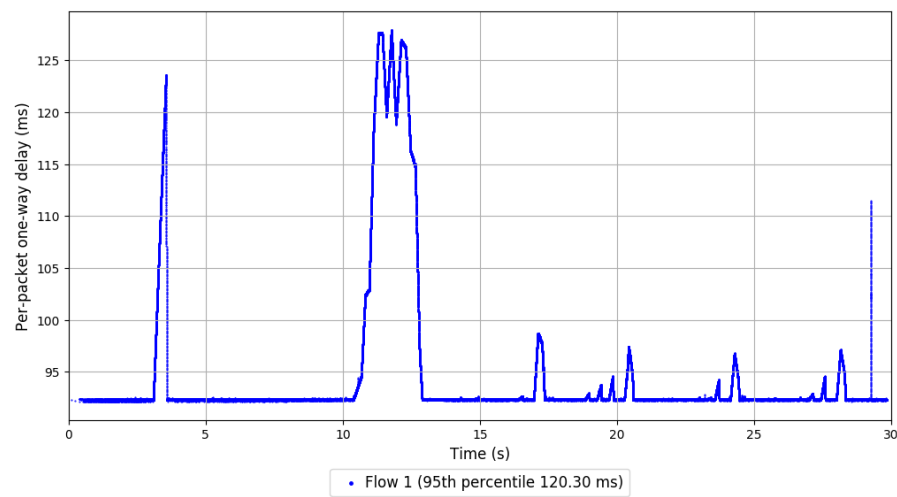
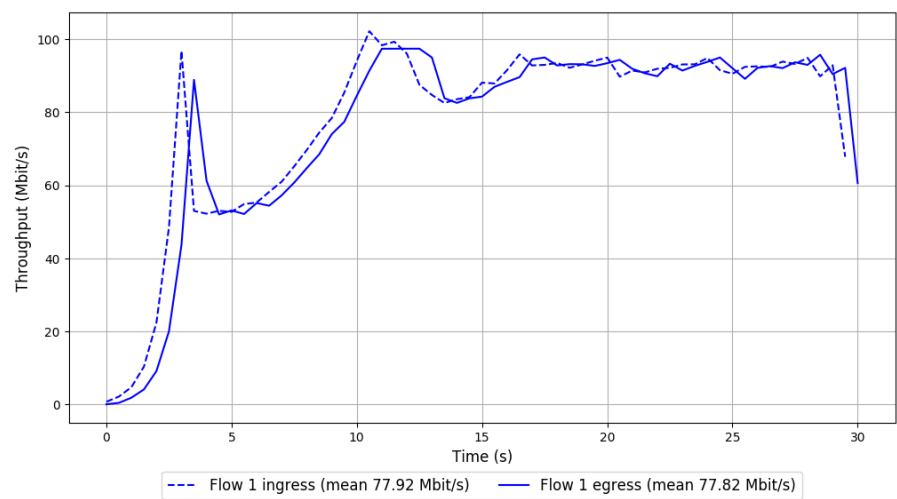


Run 4: Statistics of PCC-Vivace

Start at: 2019-12-11 12:33:43  
End at: 2019-12-11 12:34:13  
Local clock offset: -6.092 ms  
Remote clock offset: -9.225 ms

# Below is generated by plot.py at 2019-12-11 13:22:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 77.82 Mbit/s  
95th percentile per-packet one-way delay: 120.303 ms  
Loss rate: 0.59%  
-- Flow 1:  
Average throughput: 77.82 Mbit/s  
95th percentile per-packet one-way delay: 120.303 ms  
Loss rate: 0.59%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-12-11 13:01:53

End at: 2019-12-11 13:02:23

Local clock offset: -4.722 ms

Remote clock offset: -9.391 ms

# Below is generated by plot.py at 2019-12-11 13:22:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 78.68 Mbit/s

95th percentile per-packet one-way delay: 115.545 ms

Loss rate: 0.59%

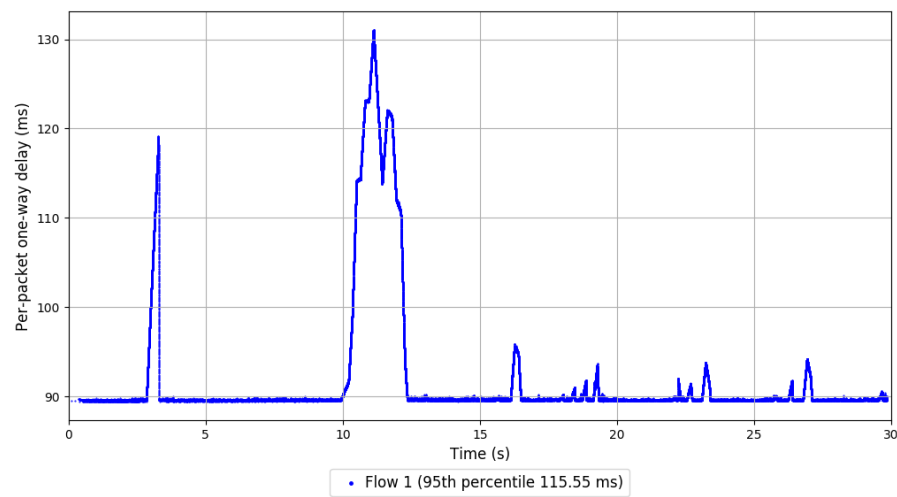
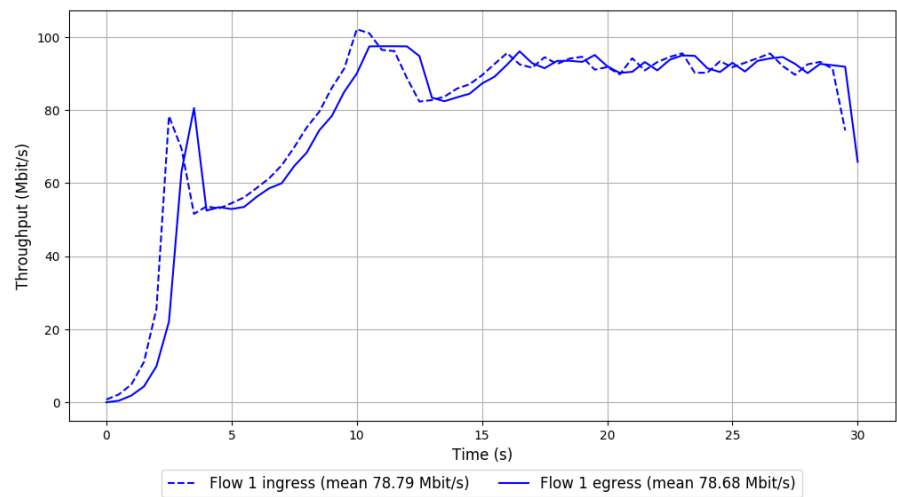
-- Flow 1:

Average throughput: 78.68 Mbit/s

95th percentile per-packet one-way delay: 115.545 ms

Loss rate: 0.59%

Run 5: Report of PCC-Vivace — Data Link

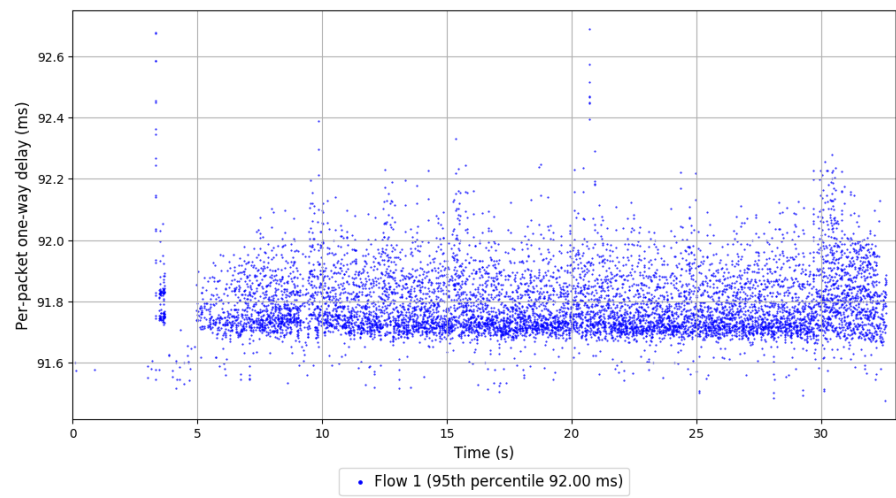
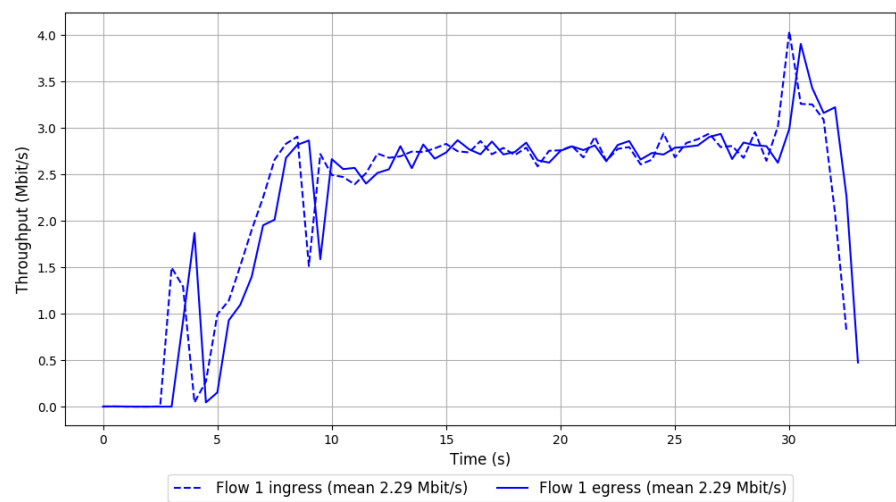


Run 1: Statistics of WebRTC media

Start at: 2019-12-11 11:12:50  
End at: 2019-12-11 11:13:20  
Local clock offset: -6.711 ms  
Remote clock offset: -8.607 ms

# Below is generated by plot.py at 2019-12-11 13:22:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.29 Mbit/s  
95th percentile per-packet one-way delay: 91.999 ms  
Loss rate: 0.44%  
-- Flow 1:  
Average throughput: 2.29 Mbit/s  
95th percentile per-packet one-way delay: 91.999 ms  
Loss rate: 0.44%

Run 1: Report of WebRTC media — Data Link



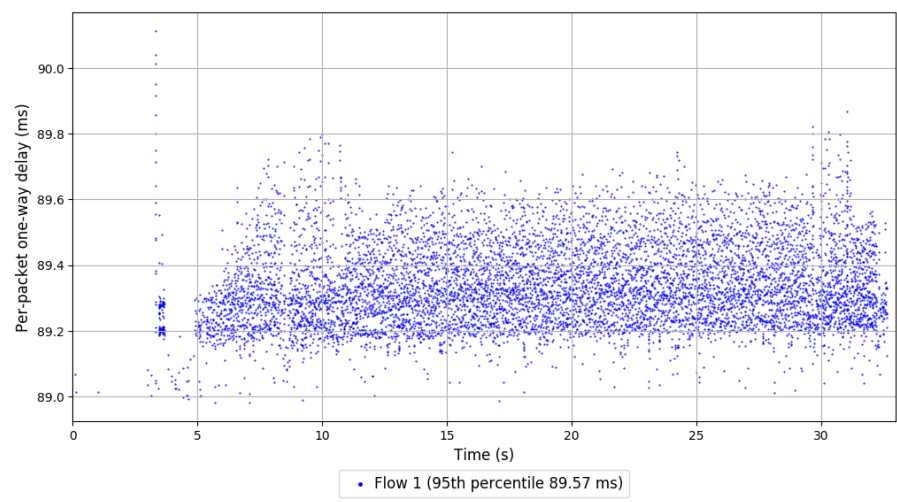
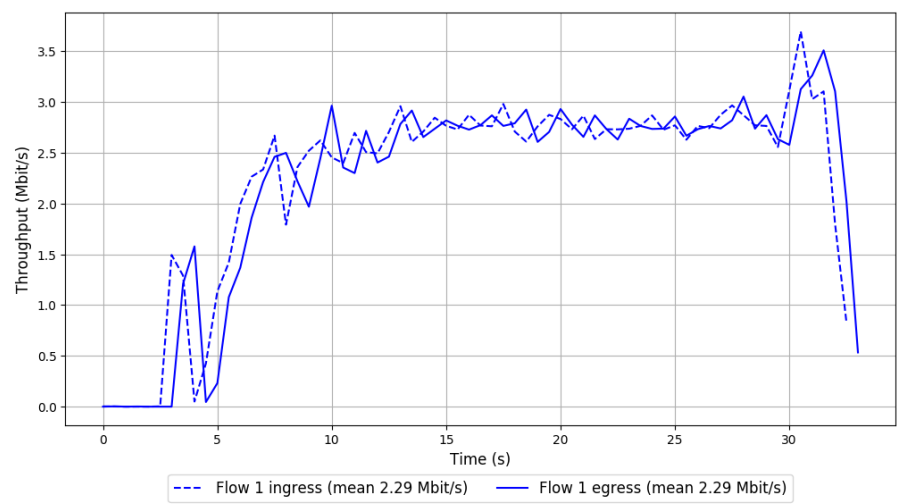


Run 2: Statistics of WebRTC media

Start at: 2019-12-11 11:41:01  
End at: 2019-12-11 11:41:31  
Local clock offset: -5.13 ms  
Remote clock offset: -7.231 ms

# Below is generated by plot.py at 2019-12-11 13:22:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.29 Mbit/s  
95th percentile per-packet one-way delay: 89.573 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 2.29 Mbit/s  
95th percentile per-packet one-way delay: 89.573 ms  
Loss rate: 0.39%

Run 2: Report of WebRTC media — Data Link

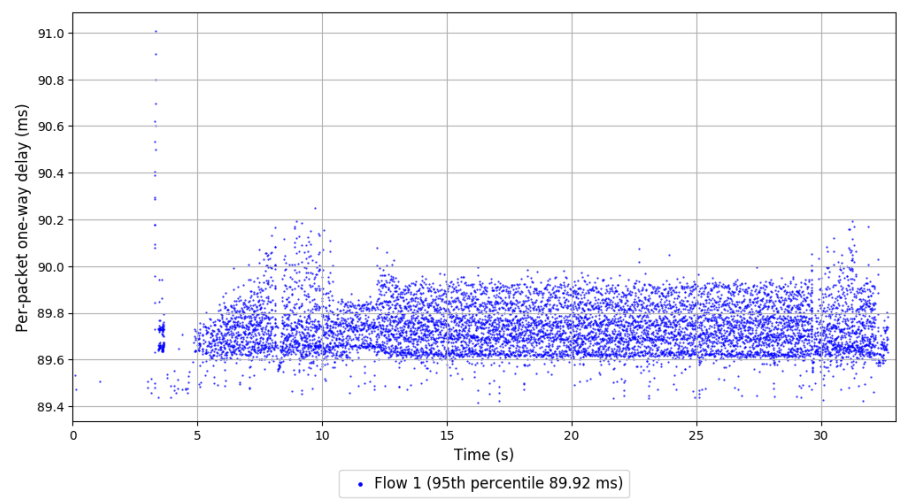
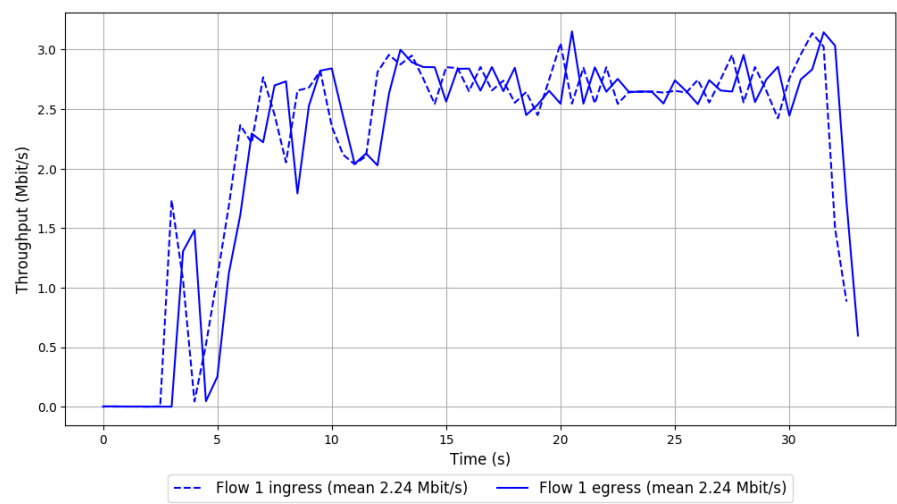


Run 3: Statistics of WebRTC media

Start at: 2019-12-11 12:09:10  
End at: 2019-12-11 12:09:40  
Local clock offset: -5.423 ms  
Remote clock offset: -9.206 ms

# Below is generated by plot.py at 2019-12-11 13:22:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.24 Mbit/s  
95th percentile per-packet one-way delay: 89.918 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 2.24 Mbit/s  
95th percentile per-packet one-way delay: 89.918 ms  
Loss rate: 0.39%

Run 3: Report of WebRTC media — Data Link

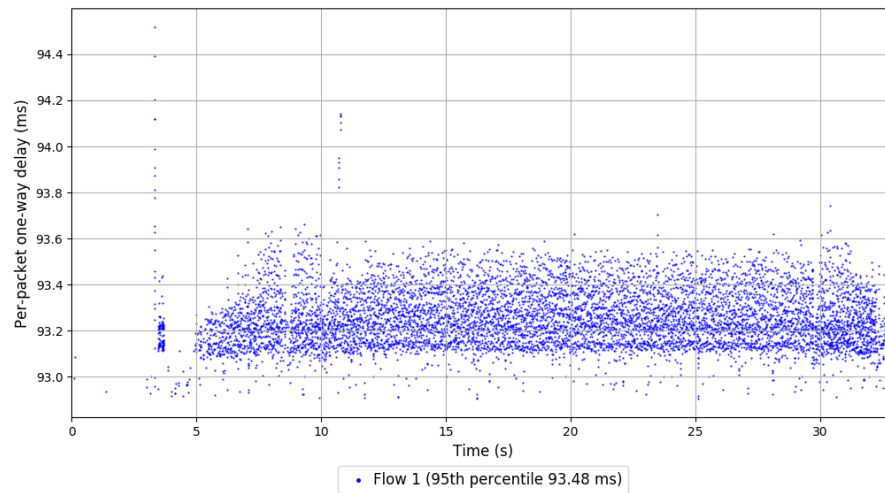
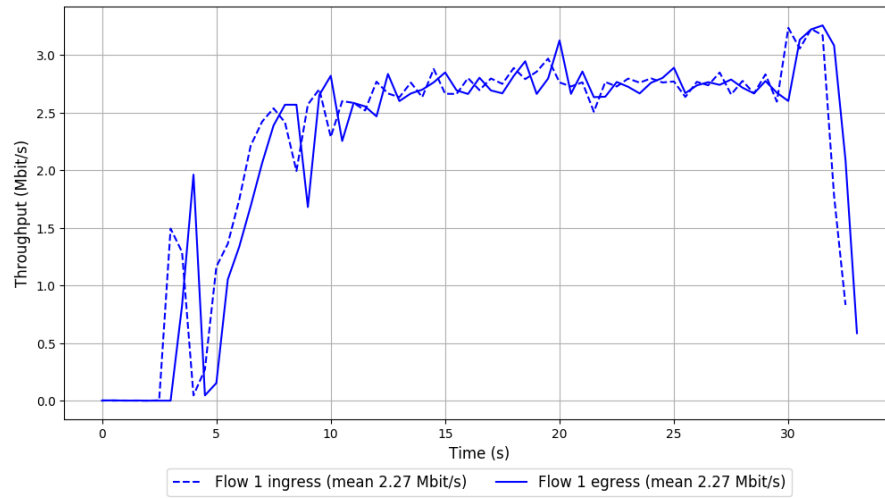


Run 4: Statistics of WebRTC media

Start at: 2019-12-11 12:37:20  
End at: 2019-12-11 12:37:50  
Local clock offset: -5.388 ms  
Remote clock offset: -9.291 ms

# Below is generated by plot.py at 2019-12-11 13:22:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.27 Mbit/s  
95th percentile per-packet one-way delay: 93.477 ms  
Loss rate: 0.36%  
-- Flow 1:  
Average throughput: 2.27 Mbit/s  
95th percentile per-packet one-way delay: 93.477 ms  
Loss rate: 0.36%

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



Run 5: Statistics of WebRTC media

Start at: 2019-12-11 13:05:29  
End at: 2019-12-11 13:05:59  
Local clock offset: -5.429 ms  
Remote clock offset: -9.502 ms

# Below is generated by plot.py at 2019-12-11 13:22:40  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.27 Mbit/s  
95th percentile per-packet one-way delay: 92.771 ms  
Loss rate: 0.43%  
-- Flow 1:  
Average throughput: 2.27 Mbit/s  
95th percentile per-packet one-way delay: 92.771 ms  
Loss rate: 0.43%

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

