

## Pantheon Report

Generated at 2019-09-18 18:08:09 (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:

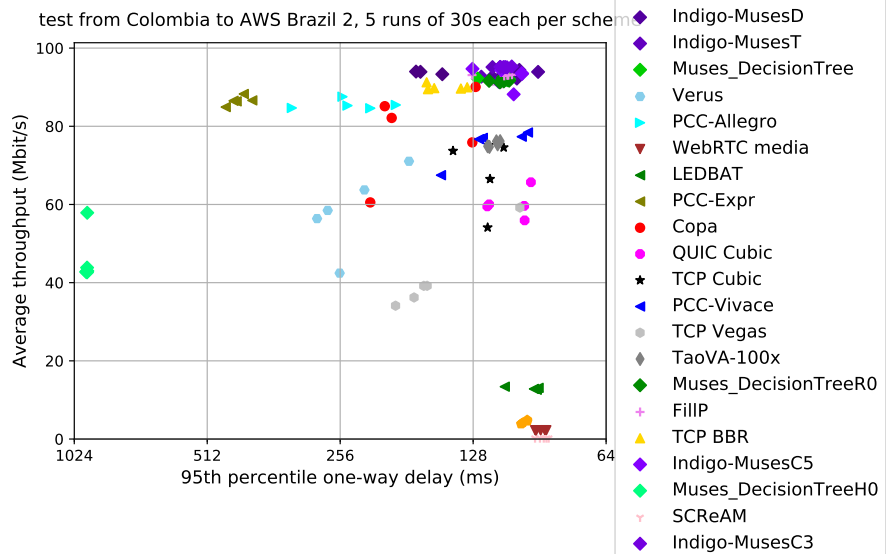
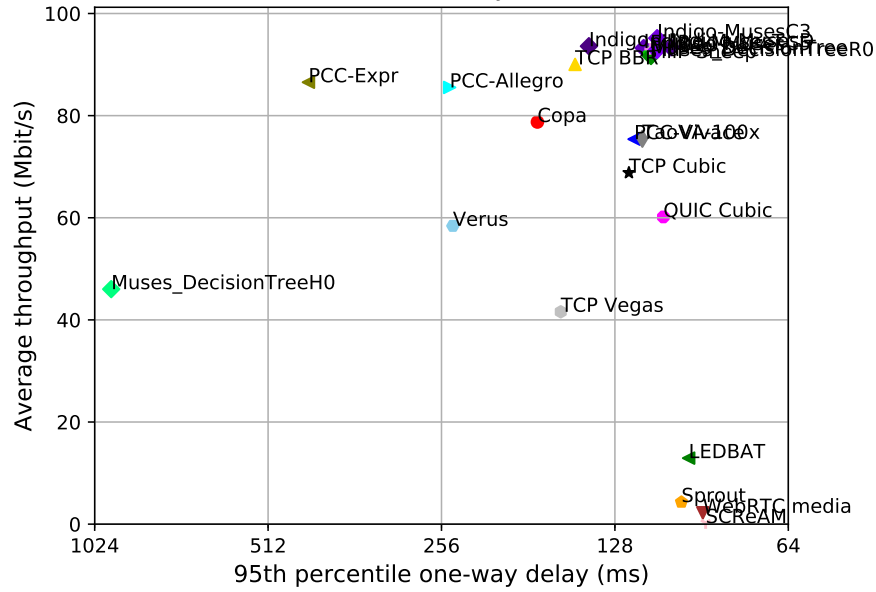
```
Linux 4.15.0-1045-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

### 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)



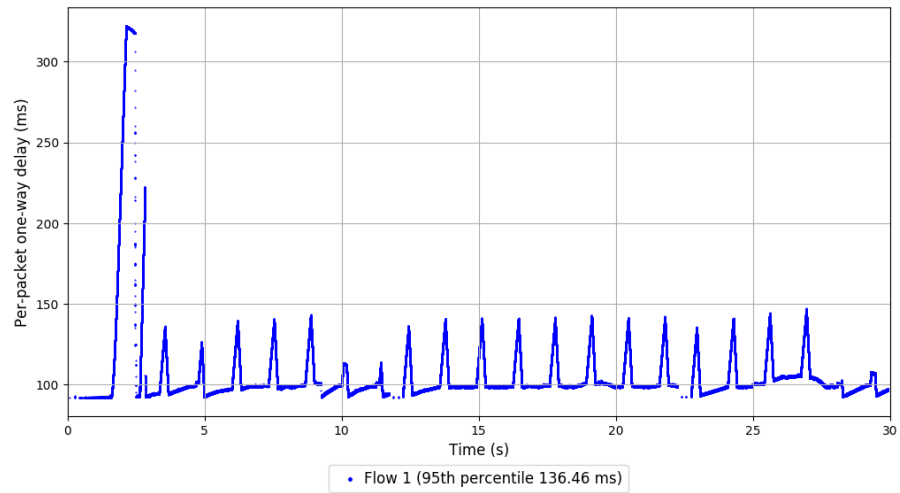
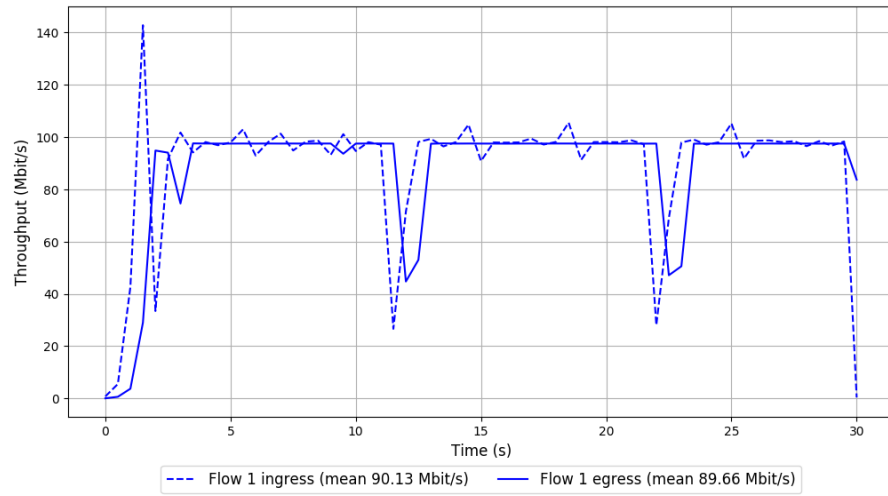
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	90.03	150.08	1.12
Copa	5	78.75	174.48	0.62
TCP Cubic	5	68.81	121.03	0.75
FillP	5	93.06	111.15	0.60
FillP-Sheep	5	91.28	111.32	0.61
Indigo	5	93.60	142.01	1.78
Indigo-MusesC3	5	95.17	108.12	6.28
Indigo-MusesC5	5	92.85	108.22	3.28
Indigo-MusesD	5	93.38	102.32	0.71
Indigo-MusesT	5	93.24	114.10	7.16
LEDBAT	5	12.93	95.32	1.11
Muses_DecisionTree	5	92.09	111.17	2.45
Muses_DecisionTreeH0	5	46.02	958.52	3.69
Muses_DecisionTreeR0	5	91.68	110.82	2.41
PCC-Allegro	5	85.52	247.80	0.70
PCC-Expr	5	86.54	435.76	1.34
QUIC Cubic	5	60.16	105.47	0.81
SCReAM	5	0.22	89.07	0.54
Sprout	5	4.33	98.12	0.63
TaoVA-100x	5	75.47	114.70	0.58
TCP Vegas	5	41.58	158.92	0.56
Verus	5	58.42	244.63	0.89
PCC-Vivace	5	75.39	118.55	0.73
WebRTC media	5	2.22	90.07	0.35

Run 1: Statistics of TCP BBR

Start at: 2019-09-18 15:36:05  
End at: 2019-09-18 15:36:35  
Local clock offset: -0.412 ms  
Remote clock offset: 38.567 ms

# Below is generated by plot.py at 2019-09-18 17:54:42  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 89.66 Mbit/s  
95th percentile per-packet one-way delay: 136.462 ms  
Loss rate: 1.07%  
-- Flow 1:  
Average throughput: 89.66 Mbit/s  
95th percentile per-packet one-way delay: 136.462 ms  
Loss rate: 1.07%

# Run 1: Report of TCP BBR — Data Link

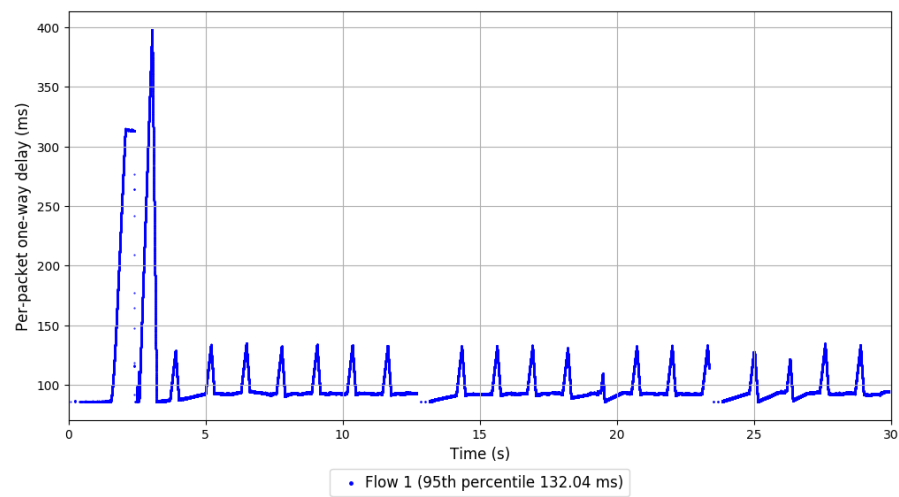
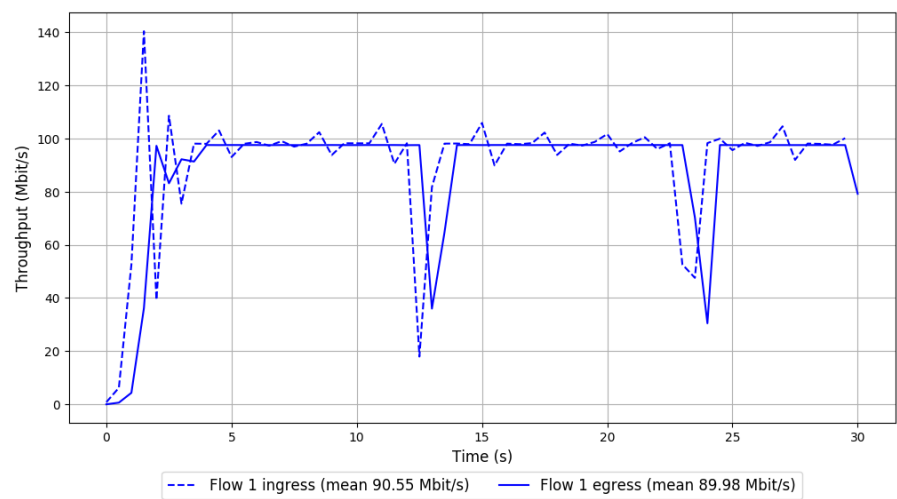


Run 2: Statistics of TCP BBR

Start at: 2019-09-18 16:04:32  
End at: 2019-09-18 16:05:02  
Local clock offset: -2.987 ms  
Remote clock offset: 47.807 ms

# Below is generated by plot.py at 2019-09-18 17:54:43  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 89.98 Mbit/s  
95th percentile per-packet one-way delay: 132.038 ms  
Loss rate: 1.17%  
-- Flow 1:  
Average throughput: 89.98 Mbit/s  
95th percentile per-packet one-way delay: 132.038 ms  
Loss rate: 1.17%

Run 2: Report of TCP BBR — Data Link

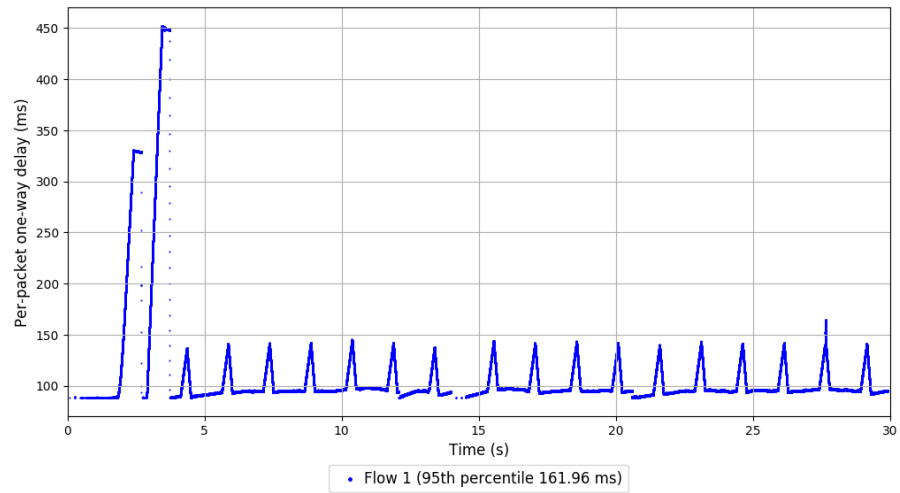
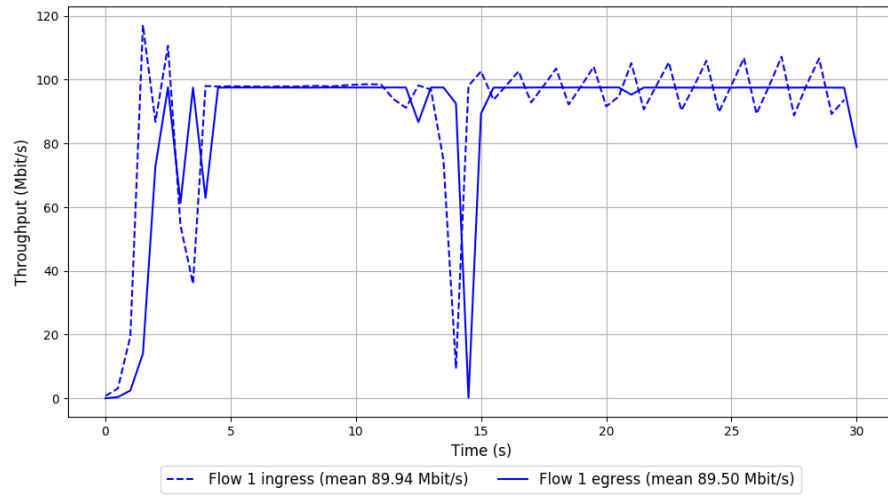


Run 3: Statistics of TCP BBR

Start at: 2019-09-18 16:33:00  
End at: 2019-09-18 16:33:30  
Local clock offset: 4.569 ms  
Remote clock offset: 51.987 ms

# Below is generated by plot.py at 2019-09-18 17:54:43  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 89.50 Mbit/s  
95th percentile per-packet one-way delay: 161.960 ms  
Loss rate: 1.02%  
-- Flow 1:  
Average throughput: 89.50 Mbit/s  
95th percentile per-packet one-way delay: 161.960 ms  
Loss rate: 1.02%

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



Run 4: Statistics of TCP BBR

Start at: 2019-09-18 17:01:26

End at: 2019-09-18 17:01:56

Local clock offset: 4.384 ms

Remote clock offset: 56.881 ms

# Below is generated by plot.py at 2019-09-18 17:54:43

# Datalink statistics

-- Total of 1 flow:

Average throughput: 89.76 Mbit/s

95th percentile per-packet one-way delay: 156.818 ms

Loss rate: 1.28%

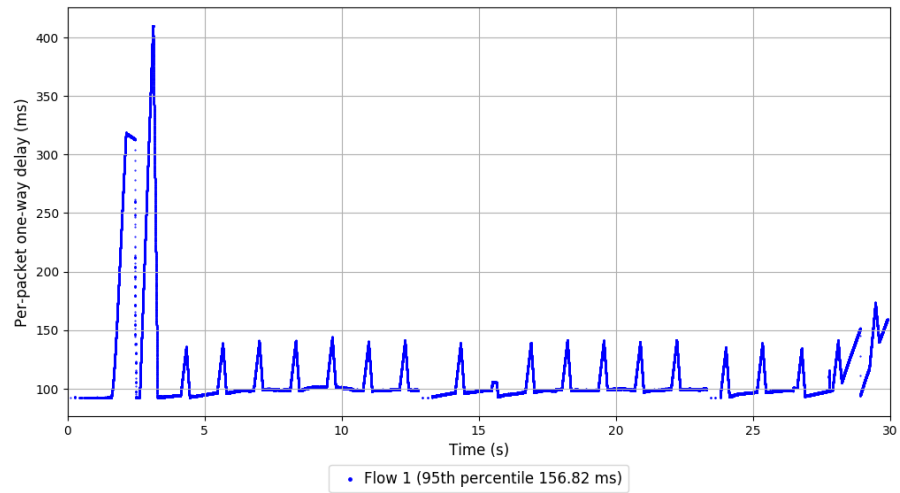
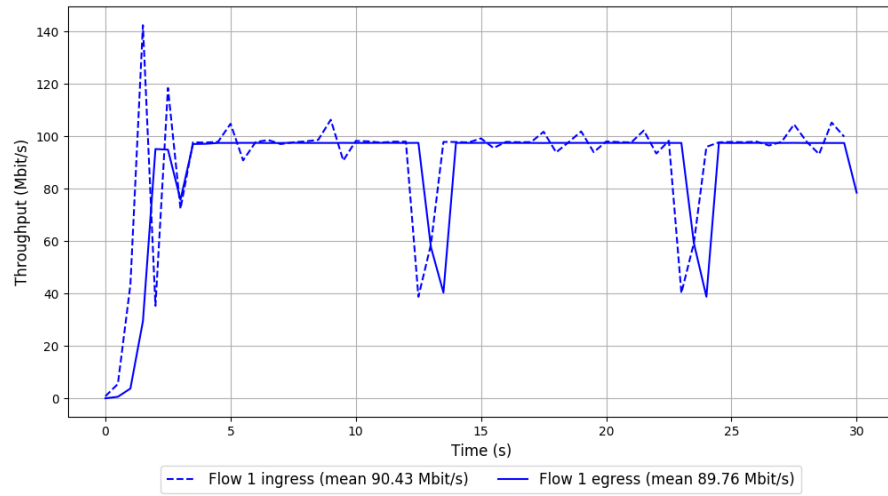
-- Flow 1:

Average throughput: 89.76 Mbit/s

95th percentile per-packet one-way delay: 156.818 ms

Loss rate: 1.28%

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

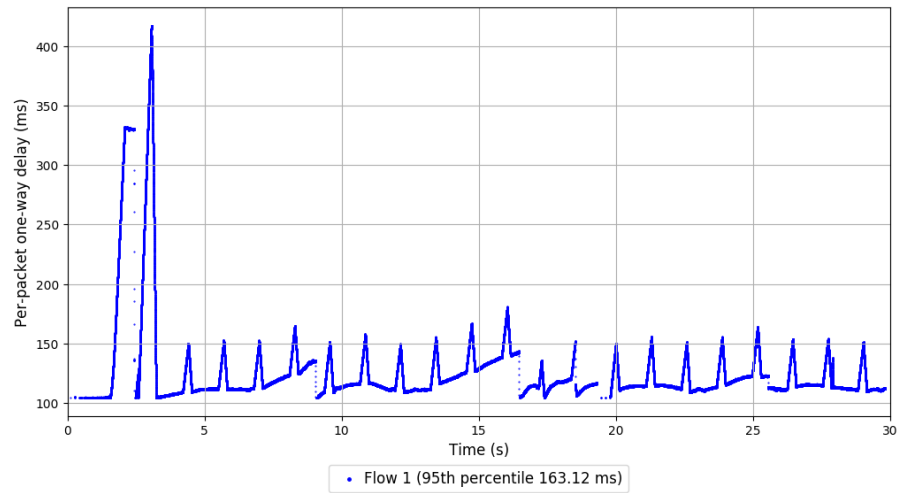
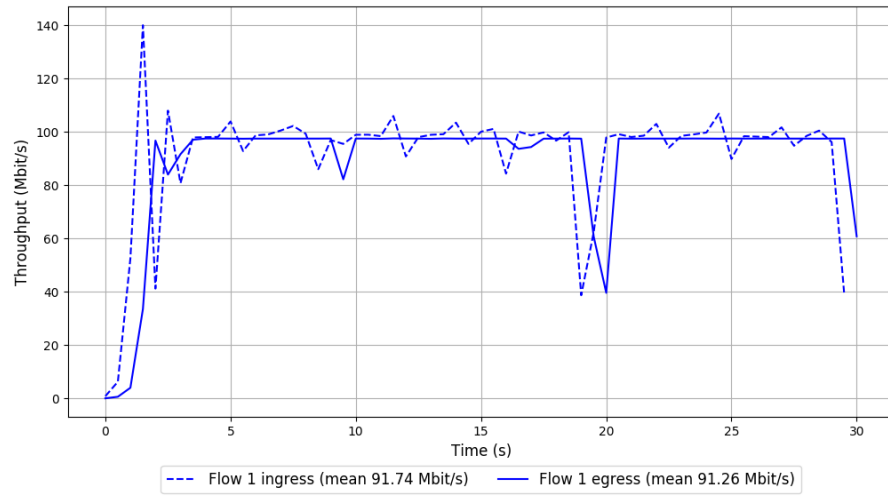


Run 5: Statistics of TCP BBR

Start at: 2019-09-18 17:29:52  
End at: 2019-09-18 17:30:22  
Local clock offset: 21.788 ms  
Remote clock offset: 63.507 ms

# Below is generated by plot.py at 2019-09-18 17:54:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.26 Mbit/s  
95th percentile per-packet one-way delay: 163.117 ms  
Loss rate: 1.06%  
-- Flow 1:  
Average throughput: 91.26 Mbit/s  
95th percentile per-packet one-way delay: 163.117 ms  
Loss rate: 1.06%

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

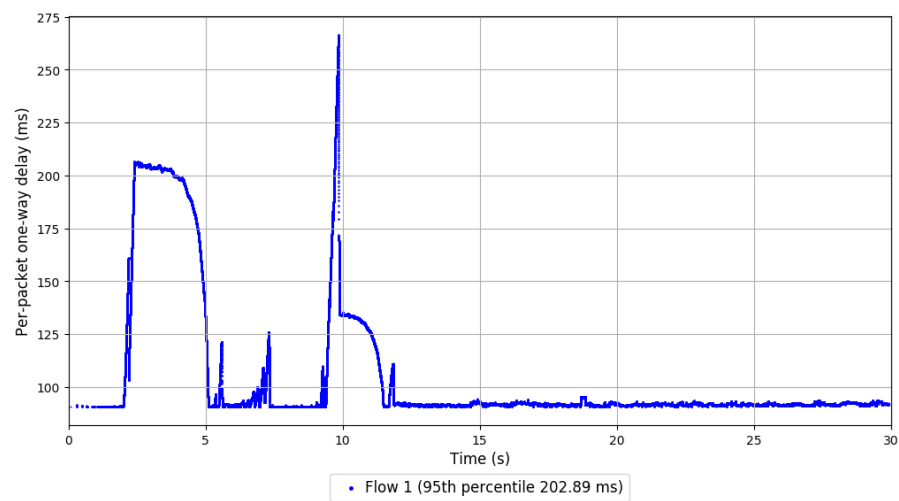
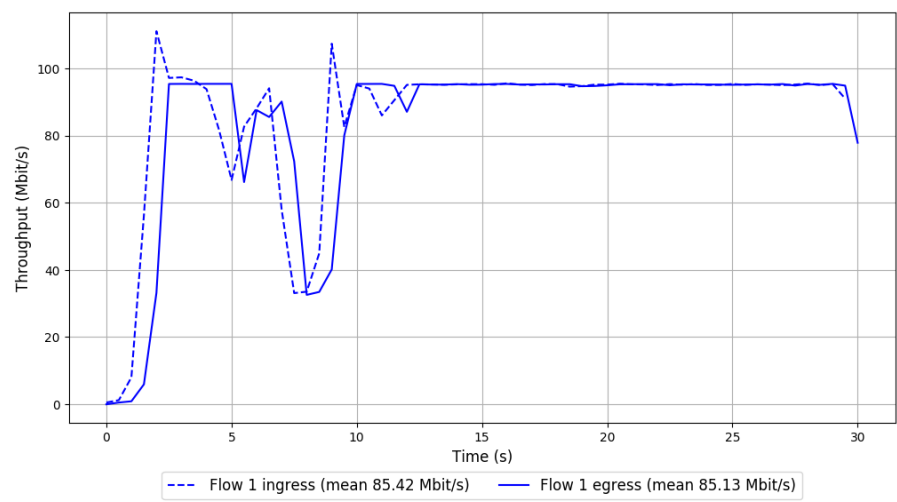


Run 1: Statistics of Copa

Start at: 2019-09-18 15:43:09  
End at: 2019-09-18 15:43:39  
Local clock offset: -2.733 ms  
Remote clock offset: 39.131 ms

# Below is generated by plot.py at 2019-09-18 17:55:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 85.13 Mbit/s  
95th percentile per-packet one-way delay: 202.894 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 85.13 Mbit/s  
95th percentile per-packet one-way delay: 202.894 ms  
Loss rate: 0.87%

Run 1: Report of Copa — Data Link

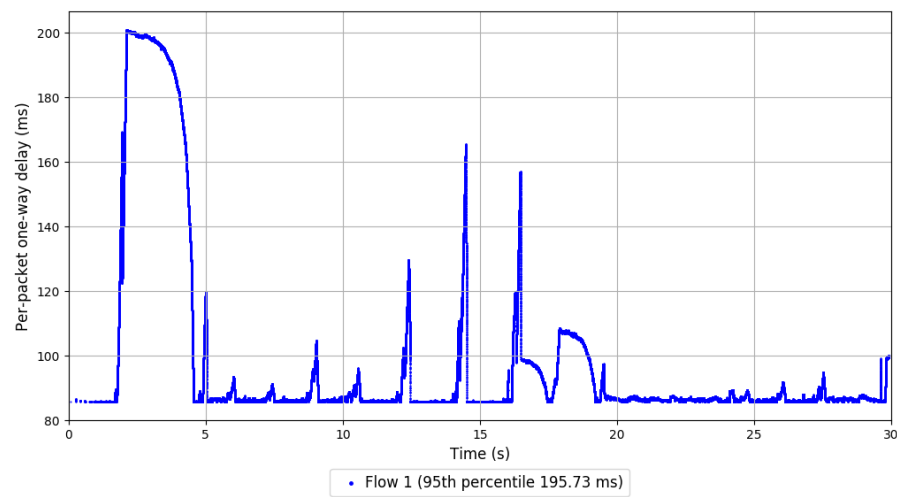
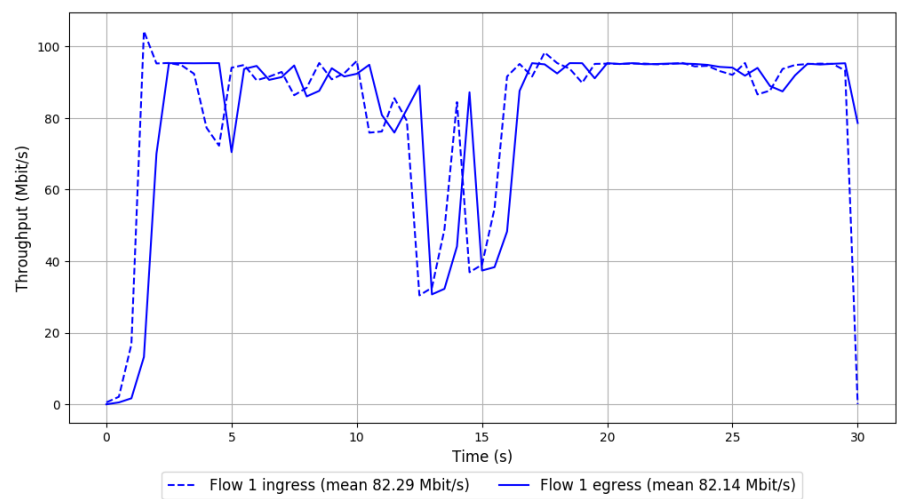


Run 2: Statistics of Copa

Start at: 2019-09-18 16:11:38  
End at: 2019-09-18 16:12:08  
Local clock offset: 1.341 ms  
Remote clock offset: 49.485 ms

# Below is generated by plot.py at 2019-09-18 17:55:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 82.14 Mbit/s  
95th percentile per-packet one-way delay: 195.727 ms  
Loss rate: 0.72%  
-- Flow 1:  
Average throughput: 82.14 Mbit/s  
95th percentile per-packet one-way delay: 195.727 ms  
Loss rate: 0.72%

Run 2: Report of Copa — Data Link

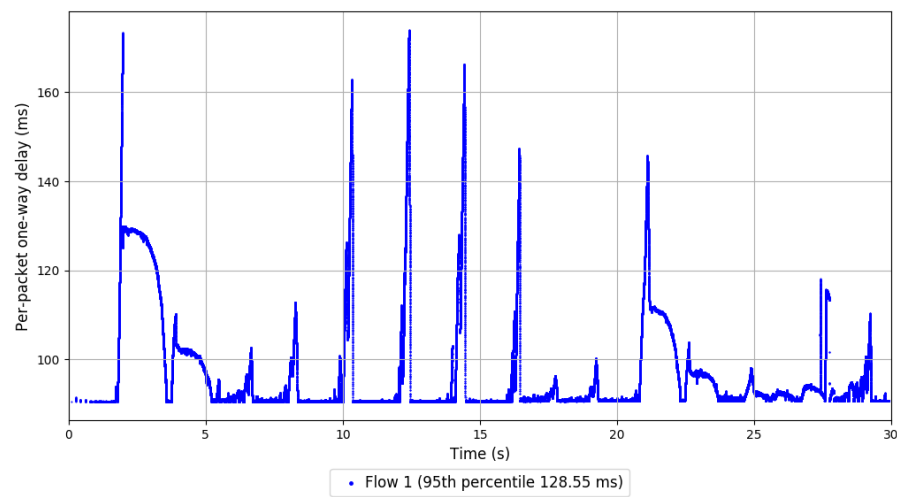
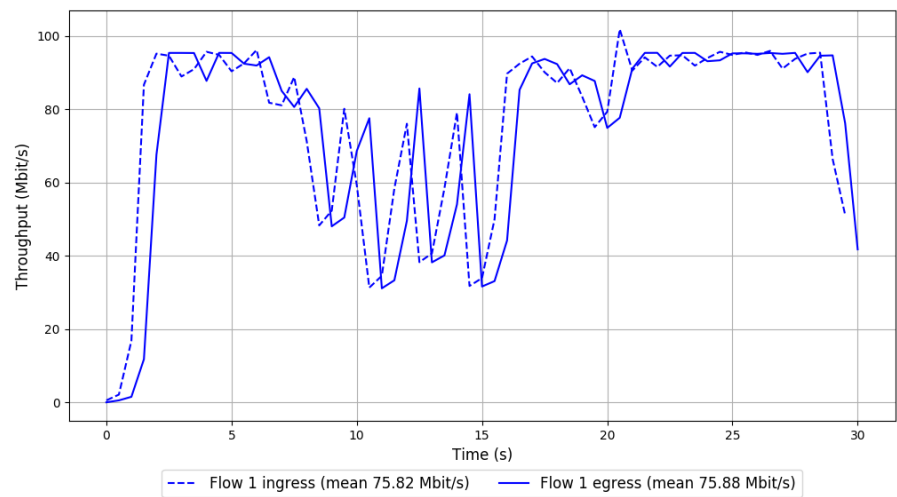


Run 3: Statistics of Copa

Start at: 2019-09-18 16:40:05  
End at: 2019-09-18 16:40:35  
Local clock offset: 4.637 ms  
Remote clock offset: 54.849 ms

# Below is generated by plot.py at 2019-09-18 17:55:38  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 75.88 Mbit/s  
95th percentile per-packet one-way delay: 128.552 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 75.88 Mbit/s  
95th percentile per-packet one-way delay: 128.552 ms  
Loss rate: 0.47%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2019-09-18 17:08:32

End at: 2019-09-18 17:09:02

Local clock offset: 3.325 ms

Remote clock offset: 59.49 ms

# Below is generated by plot.py at 2019-09-18 17:56:05

# Datalink statistics

-- Total of 1 flow:

Average throughput: 60.52 Mbit/s

95th percentile per-packet one-way delay: 218.845 ms

Loss rate: 0.41%

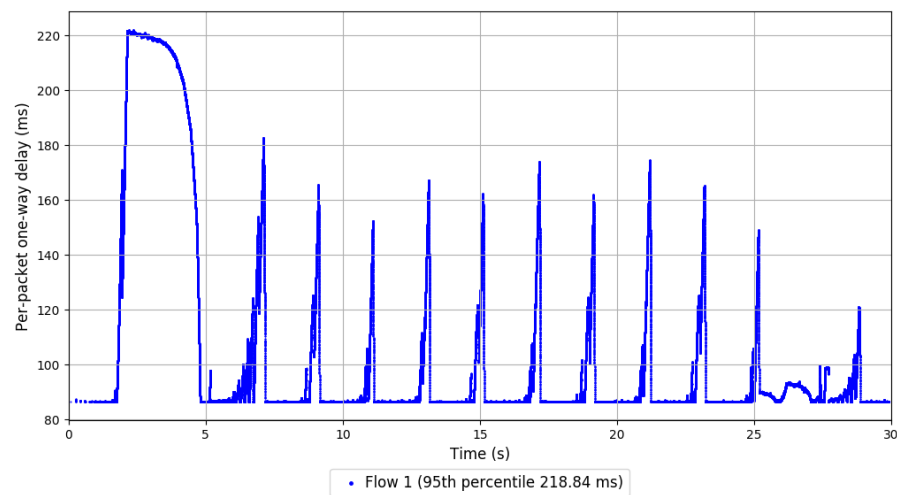
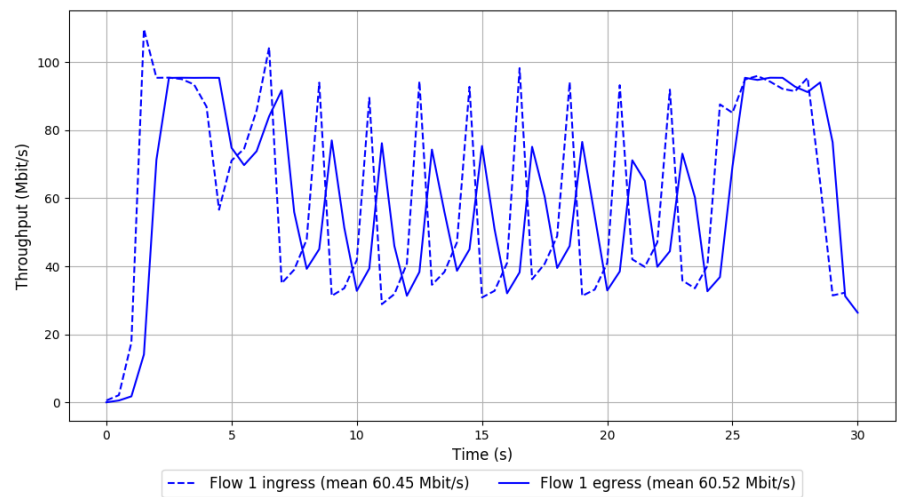
-- Flow 1:

Average throughput: 60.52 Mbit/s

95th percentile per-packet one-way delay: 218.845 ms

Loss rate: 0.41%

Run 4: Report of Copa — Data Link

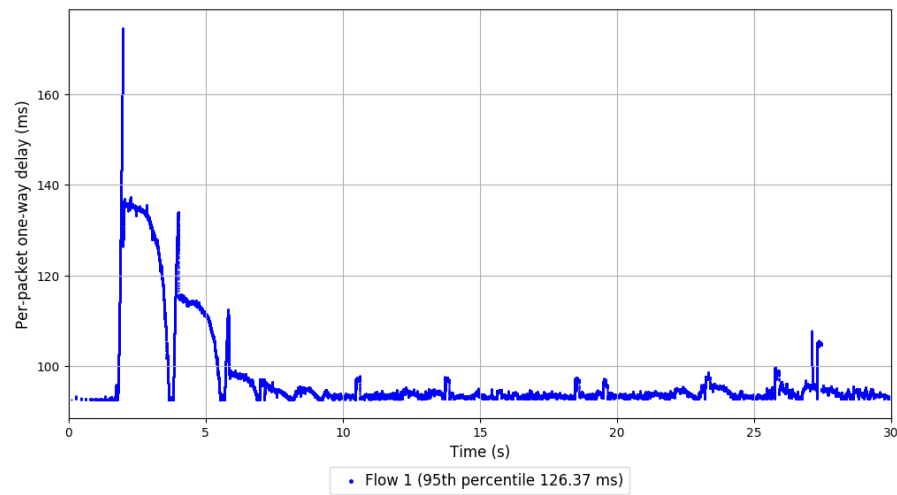
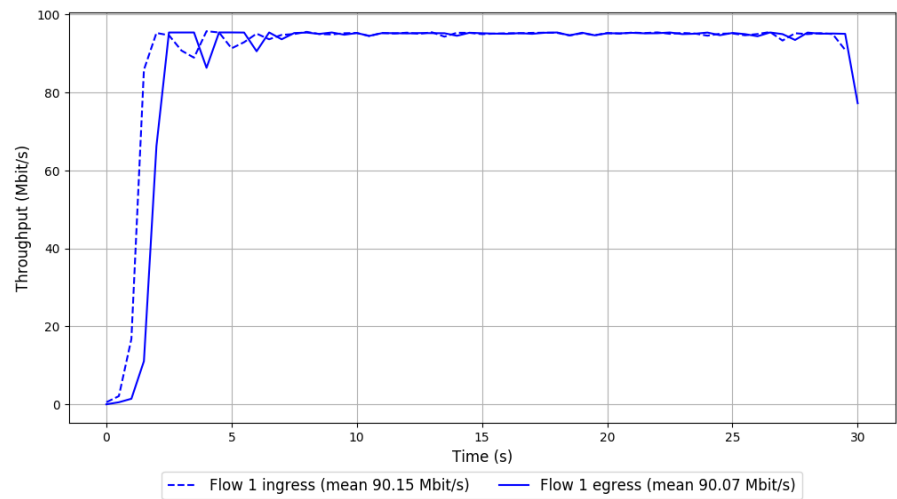


Run 5: Statistics of Copa

Start at: 2019-09-18 17:36:58  
End at: 2019-09-18 17:37:28  
Local clock offset: 3.174 ms  
Remote clock offset: 63.226 ms

# Below is generated by plot.py at 2019-09-18 17:56:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 90.07 Mbit/s  
95th percentile per-packet one-way delay: 126.374 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 90.07 Mbit/s  
95th percentile per-packet one-way delay: 126.374 ms  
Loss rate: 0.64%

Run 5: Report of Copa — Data Link

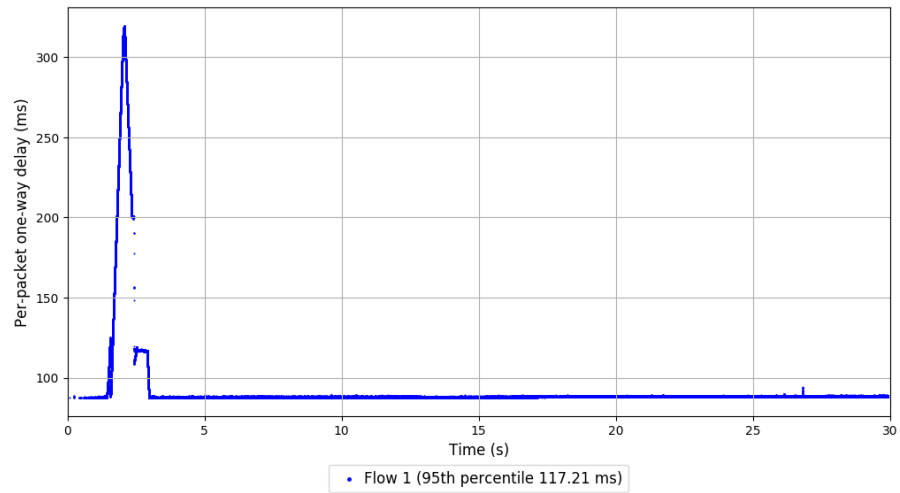
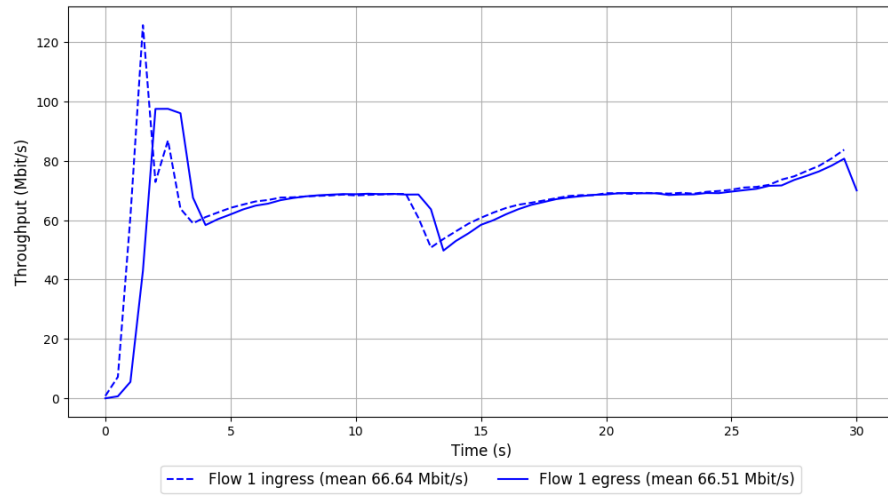


Run 1: Statistics of TCP Cubic

Start at: 2019-09-18 15:40:51  
End at: 2019-09-18 15:41:21  
Local clock offset: -1.98 ms  
Remote clock offset: 41.426 ms

# Below is generated by plot.py at 2019-09-18 17:56:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 66.51 Mbit/s  
95th percentile per-packet one-way delay: 117.212 ms  
Loss rate: 0.72%  
-- Flow 1:  
Average throughput: 66.51 Mbit/s  
95th percentile per-packet one-way delay: 117.212 ms  
Loss rate: 0.72%

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

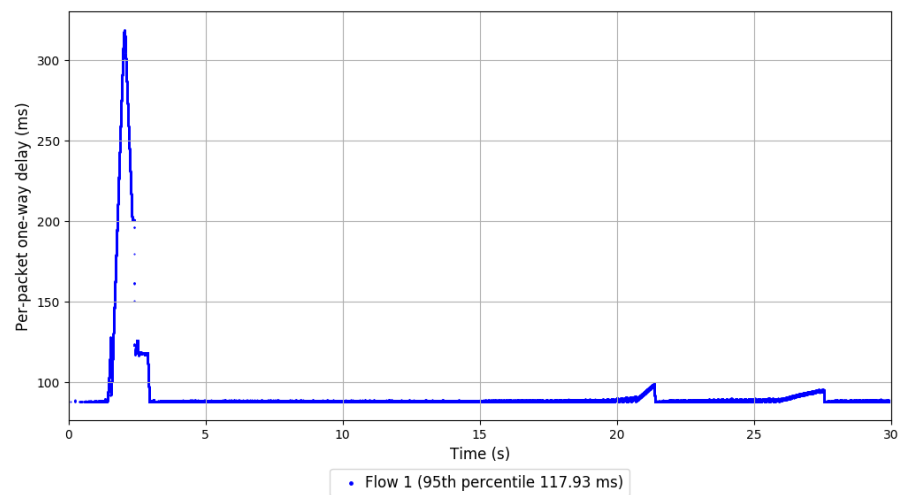
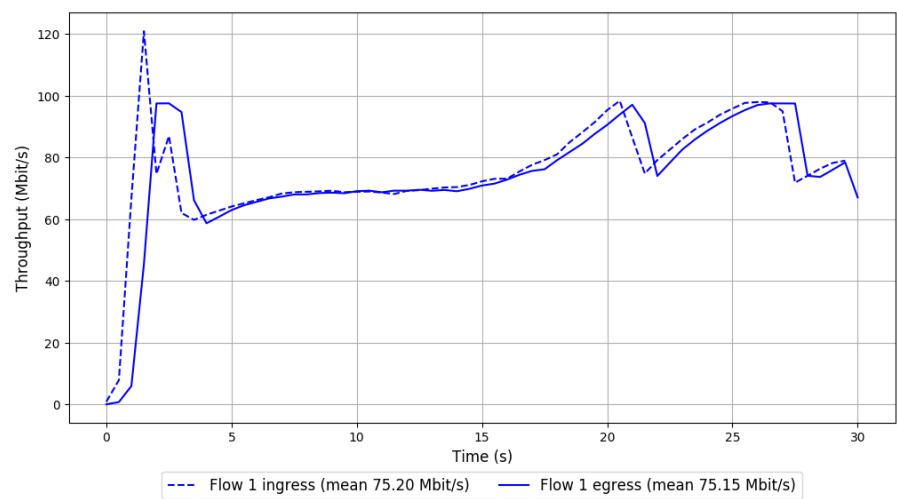


Run 2: Statistics of TCP Cubic

Start at: 2019-09-18 16:09:19  
End at: 2019-09-18 16:09:49  
Local clock offset: 1.042 ms  
Remote clock offset: 47.634 ms

# Below is generated by plot.py at 2019-09-18 17:56:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 75.15 Mbit/s  
95th percentile per-packet one-way delay: 117.929 ms  
Loss rate: 0.61%  
-- Flow 1:  
Average throughput: 75.15 Mbit/s  
95th percentile per-packet one-way delay: 117.929 ms  
Loss rate: 0.61%

Run 2: Report of TCP Cubic — Data Link

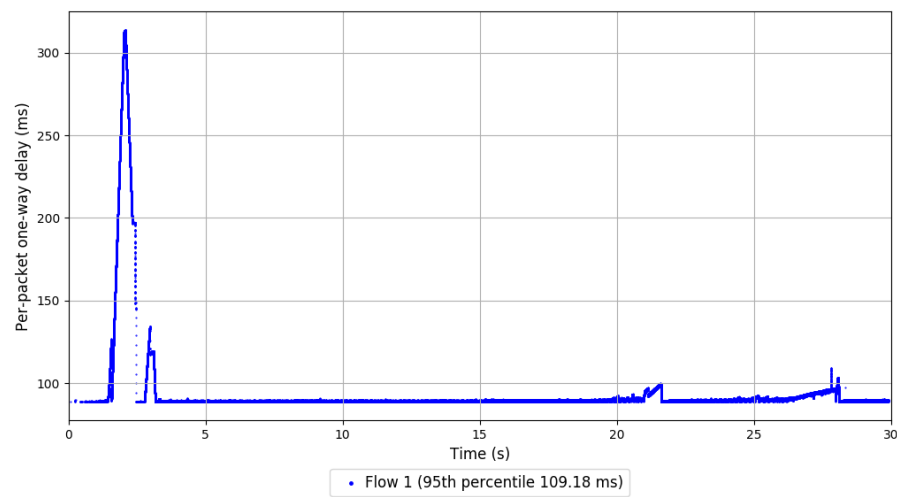
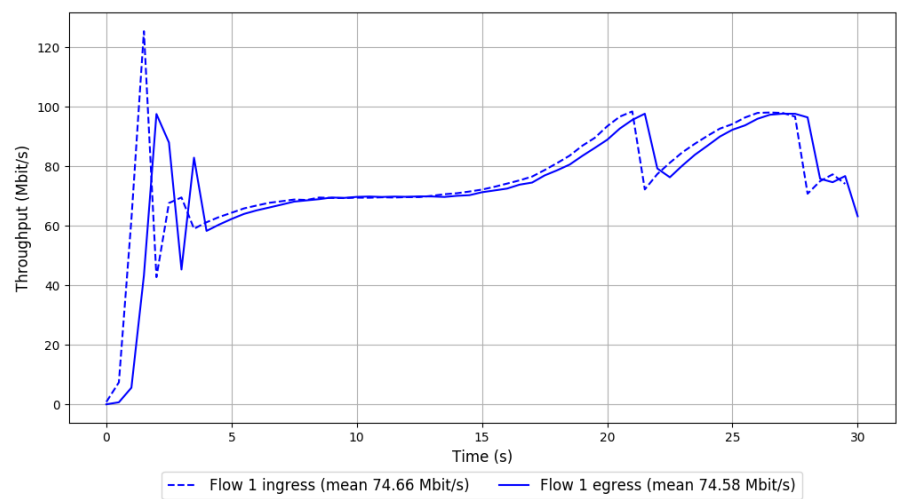


Run 3: Statistics of TCP Cubic

Start at: 2019-09-18 16:37:47  
End at: 2019-09-18 16:38:17  
Local clock offset: 4.802 ms  
Remote clock offset: 52.769 ms

# Below is generated by plot.py at 2019-09-18 17:56:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 74.58 Mbit/s  
95th percentile per-packet one-way delay: 109.180 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 74.58 Mbit/s  
95th percentile per-packet one-way delay: 109.180 ms  
Loss rate: 0.65%

Run 3: Report of TCP Cubic — Data Link

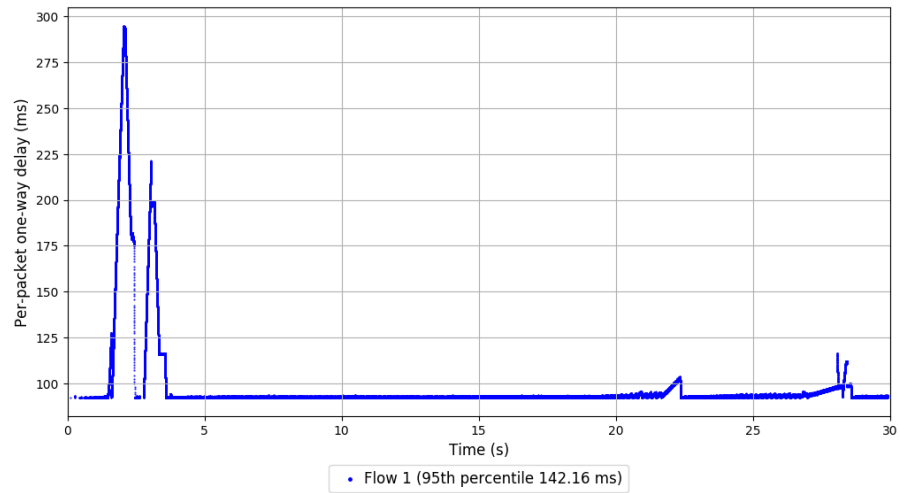
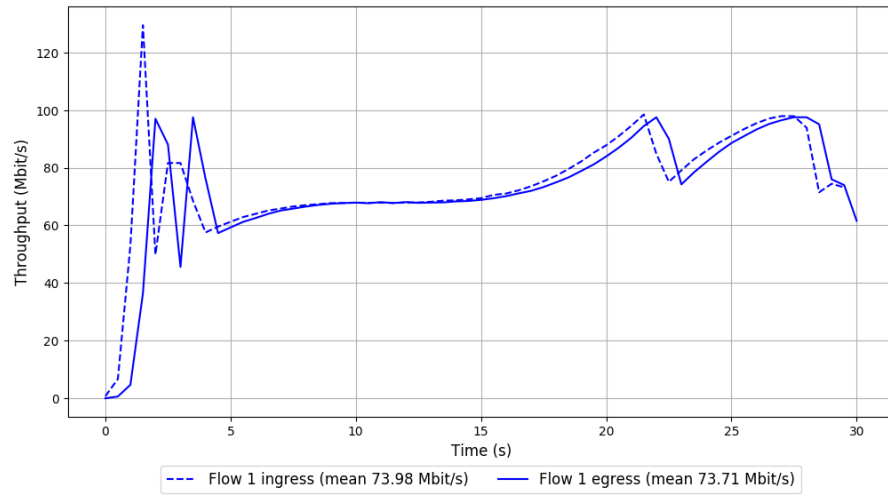


Run 4: Statistics of TCP Cubic

Start at: 2019-09-18 17:06:13  
End at: 2019-09-18 17:06:43  
Local clock offset: 4.18 ms  
Remote clock offset: 57.977 ms

# Below is generated by plot.py at 2019-09-18 17:56:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 73.71 Mbit/s  
95th percentile per-packet one-way delay: 142.155 ms  
Loss rate: 0.91%  
-- Flow 1:  
Average throughput: 73.71 Mbit/s  
95th percentile per-packet one-way delay: 142.155 ms  
Loss rate: 0.91%

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

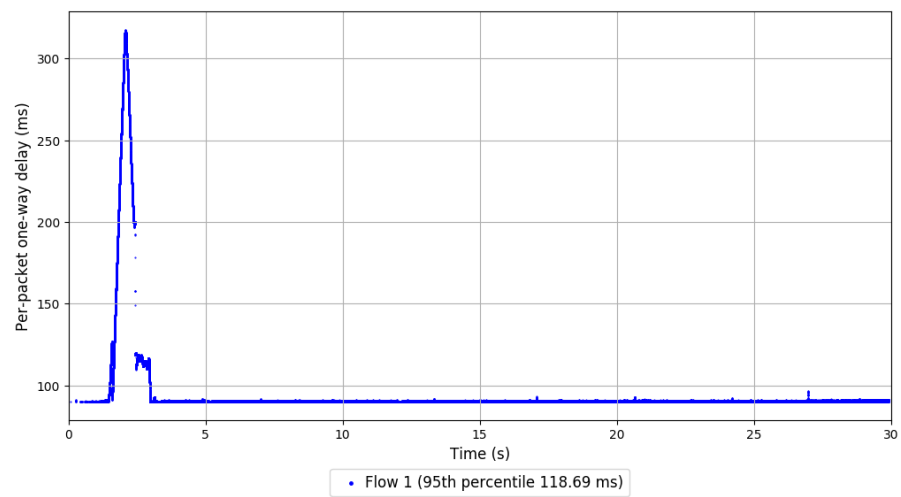
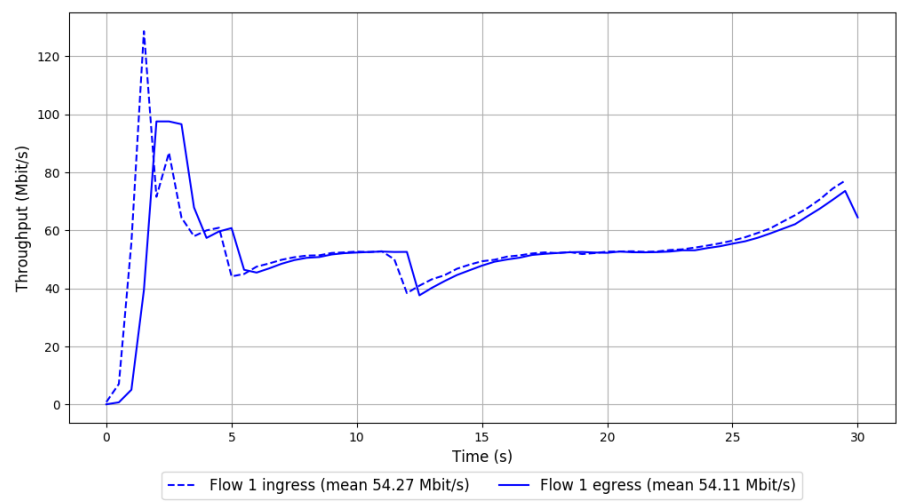


Run 5: Statistics of TCP Cubic

Start at: 2019-09-18 17:34:40  
End at: 2019-09-18 17:35:10  
Local clock offset: 2.588 ms  
Remote clock offset: 64.406 ms

# Below is generated by plot.py at 2019-09-18 17:56:49  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 54.11 Mbit/s  
95th percentile per-packet one-way delay: 118.686 ms  
Loss rate: 0.85%  
-- Flow 1:  
Average throughput: 54.11 Mbit/s  
95th percentile per-packet one-way delay: 118.686 ms  
Loss rate: 0.85%

Run 5: Report of TCP Cubic — Data Link

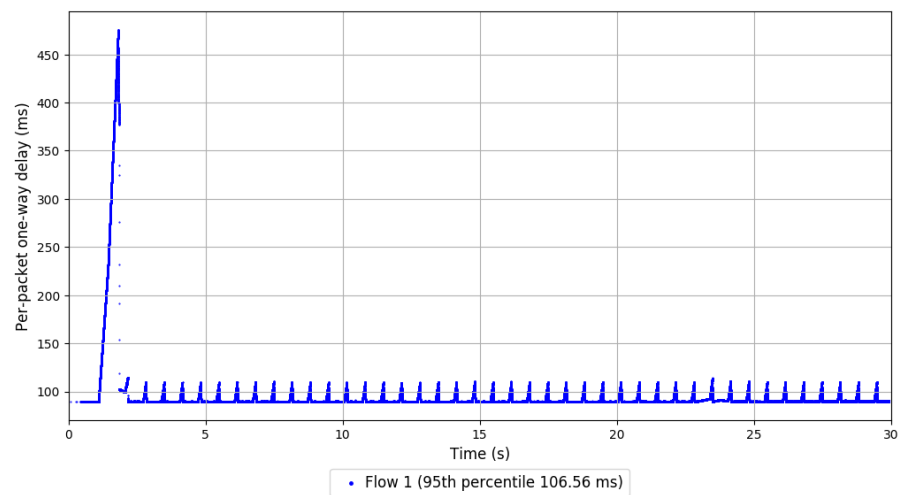
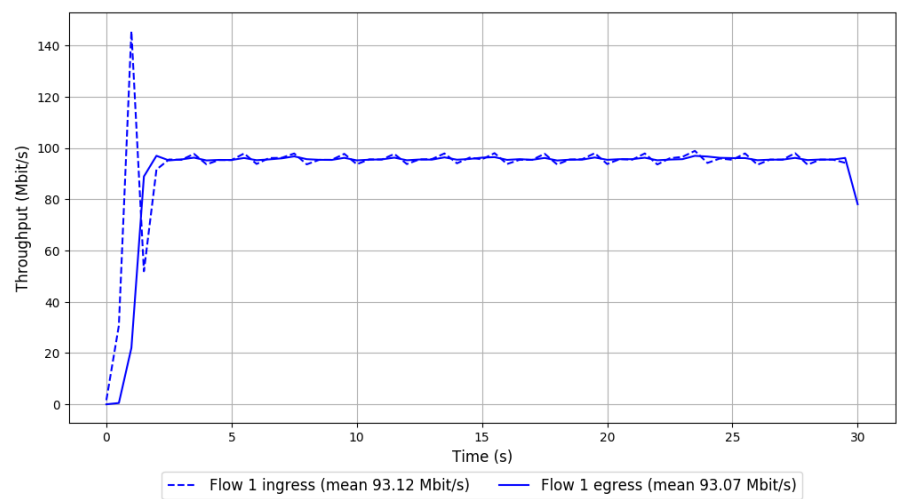


Run 1: Statistics of FillP

Start at: 2019-09-18 15:38:28  
End at: 2019-09-18 15:38:58  
Local clock offset: -1.656 ms  
Remote clock offset: 41.424 ms

# Below is generated by plot.py at 2019-09-18 17:56:53  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.07 Mbit/s  
95th percentile per-packet one-way delay: 106.556 ms  
Loss rate: 0.60%  
-- Flow 1:  
Average throughput: 93.07 Mbit/s  
95th percentile per-packet one-way delay: 106.556 ms  
Loss rate: 0.60%

Run 1: Report of FillP — Data Link

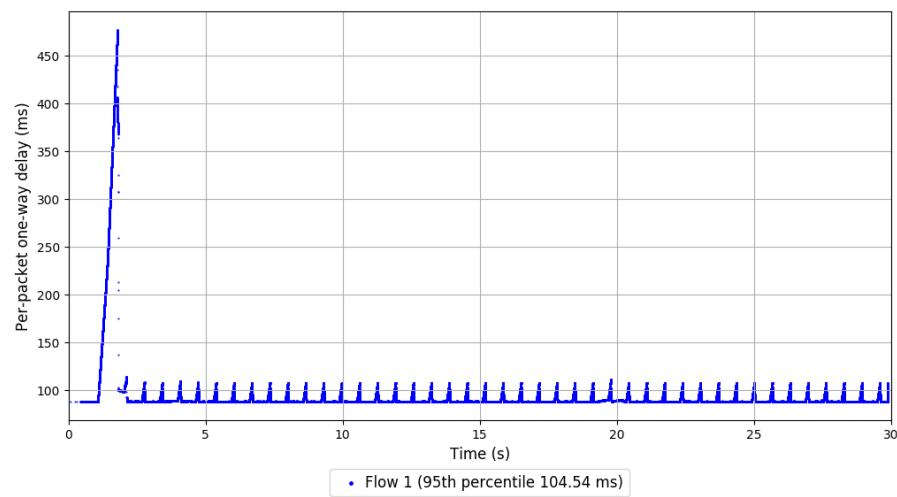
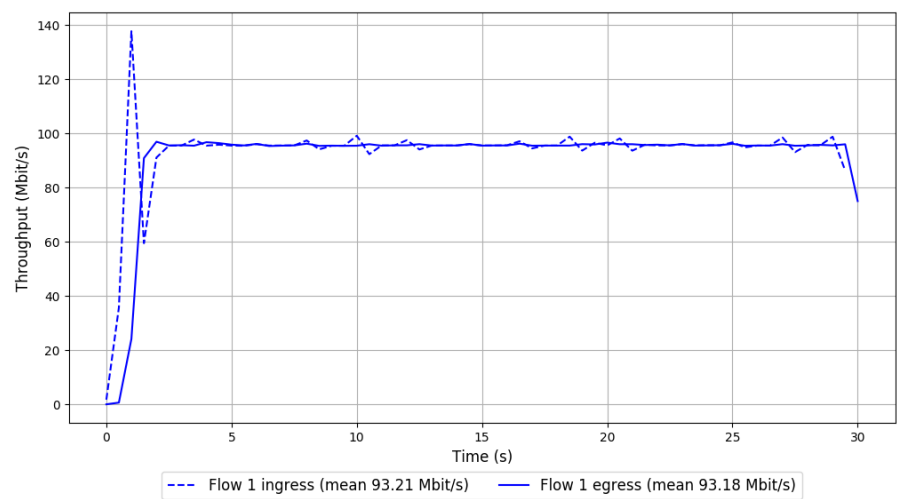


Run 2: Statistics of FillP

Start at: 2019-09-18 16:06:56  
End at: 2019-09-18 16:07:26  
Local clock offset: -1.142 ms  
Remote clock offset: 46.702 ms

# Below is generated by plot.py at 2019-09-18 17:56:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.18 Mbit/s  
95th percentile per-packet one-way delay: 104.536 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 93.18 Mbit/s  
95th percentile per-packet one-way delay: 104.536 ms  
Loss rate: 0.57%

Run 2: Report of FillP — Data Link

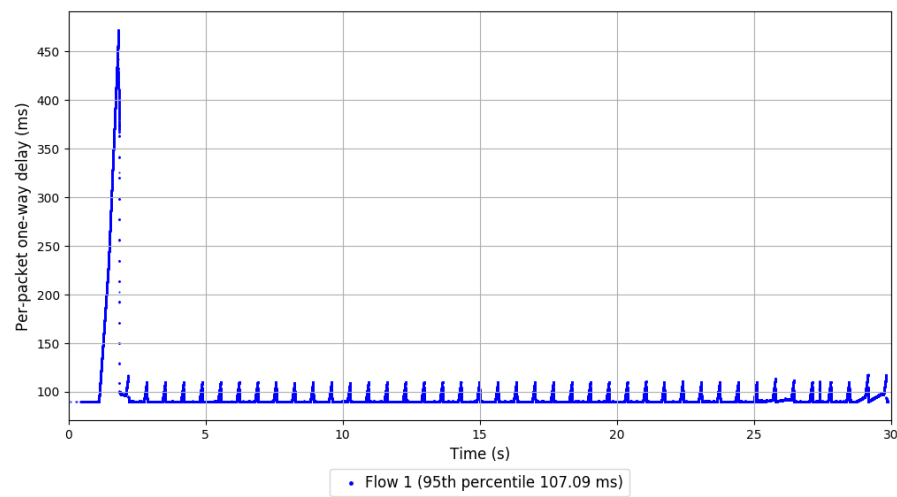
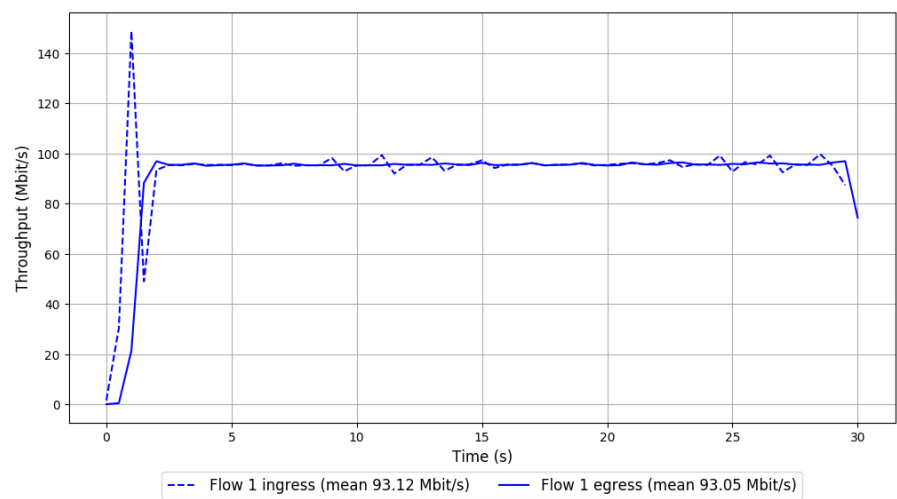


Run 3: Statistics of FillP

Start at: 2019-09-18 16:35:24  
End at: 2019-09-18 16:35:54  
Local clock offset: 4.236 ms  
Remote clock offset: 54.479 ms

# Below is generated by plot.py at 2019-09-18 17:56:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.05 Mbit/s  
95th percentile per-packet one-way delay: 107.087 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 93.05 Mbit/s  
95th percentile per-packet one-way delay: 107.087 ms  
Loss rate: 0.63%

Run 3: Report of FillP — Data Link

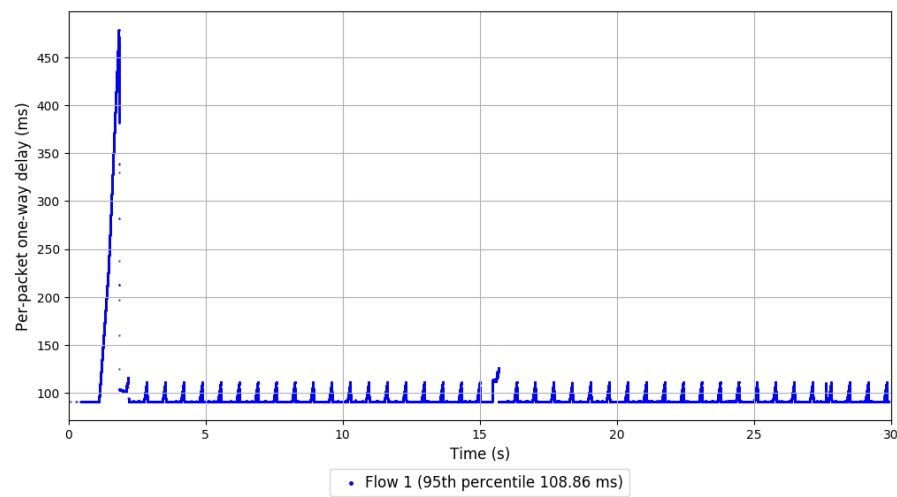
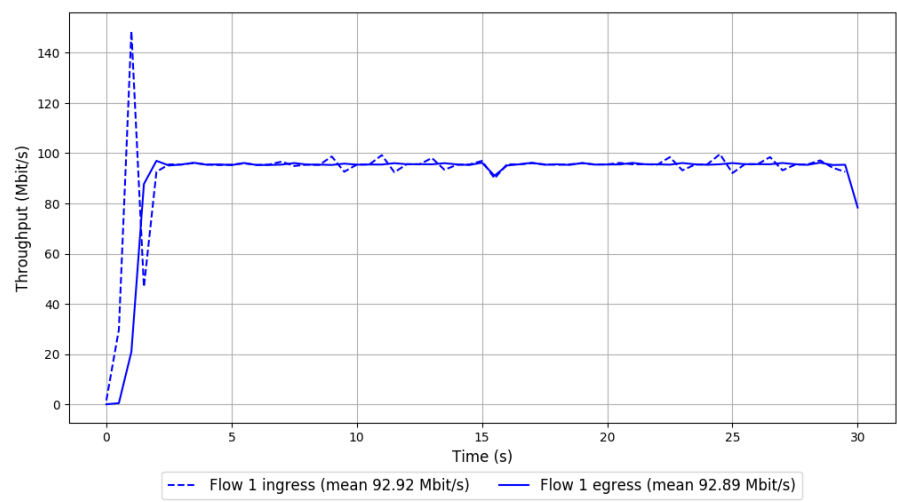


Run 4: Statistics of FillP

Start at: 2019-09-18 17:03:50  
End at: 2019-09-18 17:04:20  
Local clock offset: 3.406 ms  
Remote clock offset: 58.224 ms

# Below is generated by plot.py at 2019-09-18 17:56:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 92.89 Mbit/s  
95th percentile per-packet one-way delay: 108.859 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 92.89 Mbit/s  
95th percentile per-packet one-way delay: 108.859 ms  
Loss rate: 0.58%

Run 4: Report of FillP — Data Link

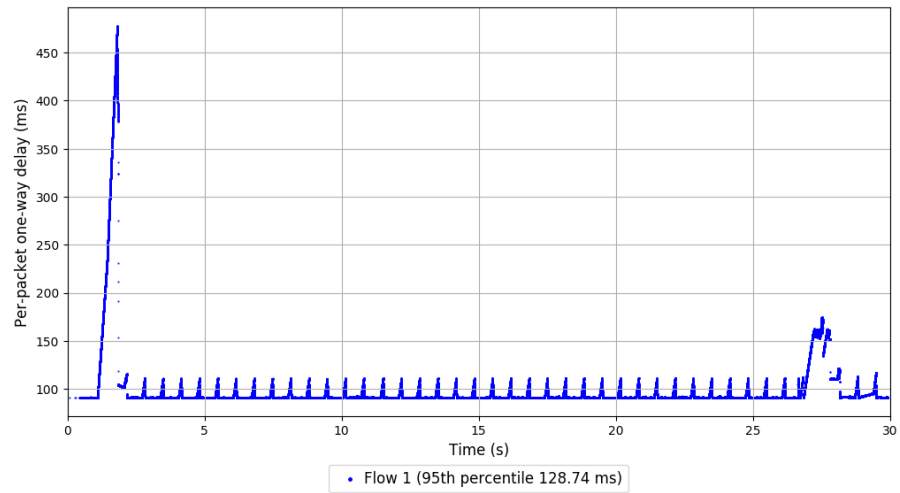
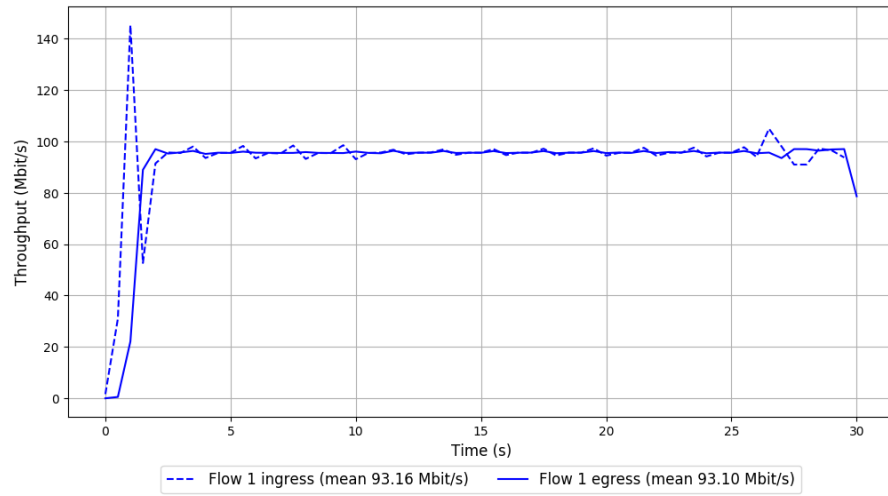


Run 5: Statistics of FillP

Start at: 2019-09-18 17:32:17  
End at: 2019-09-18 17:32:47  
Local clock offset: 3.026 ms  
Remote clock offset: 62.757 ms

# Below is generated by plot.py at 2019-09-18 17:57:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.10 Mbit/s  
95th percentile per-packet one-way delay: 128.735 ms  
Loss rate: 0.61%  
-- Flow 1:  
Average throughput: 93.10 Mbit/s  
95th percentile per-packet one-way delay: 128.735 ms  
Loss rate: 0.61%

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

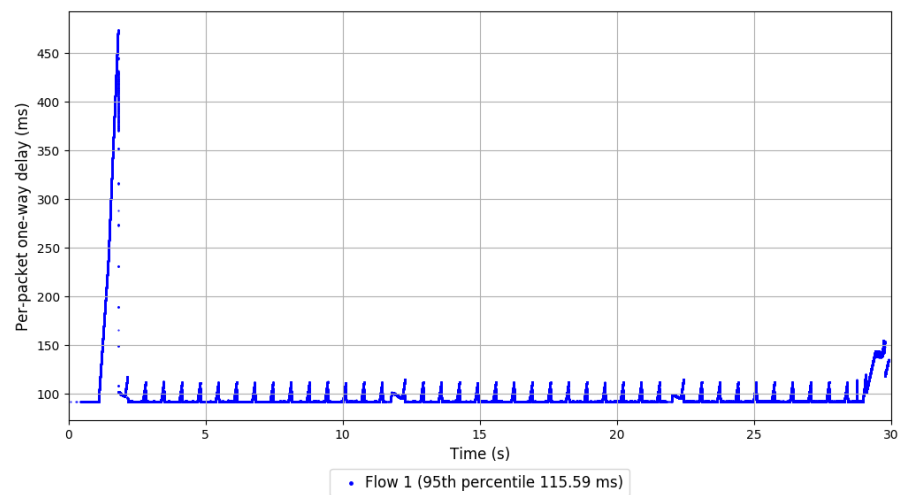
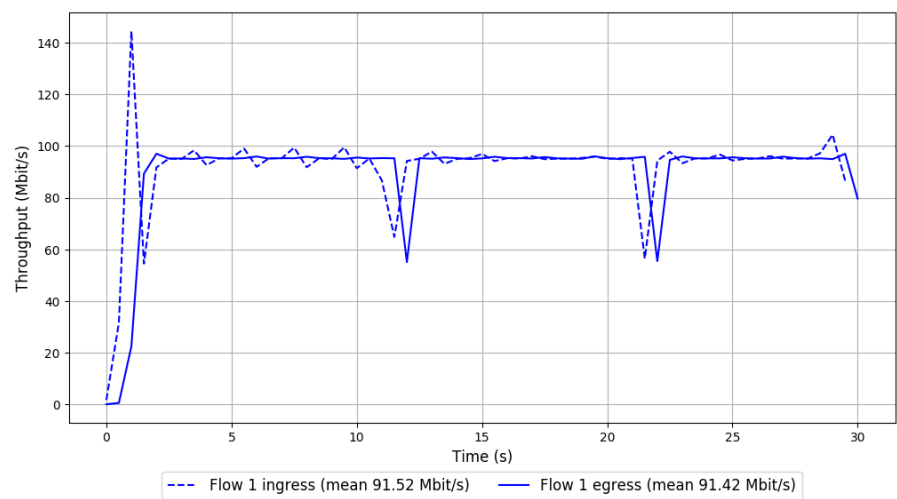


Run 1: Statistics of FillP-Sheep

Start at: 2019-09-18 15:44:24  
End at: 2019-09-18 15:44:54  
Local clock offset: -3.168 ms  
Remote clock offset: 41.864 ms

# Below is generated by plot.py at 2019-09-18 17:57:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.42 Mbit/s  
95th percentile per-packet one-way delay: 115.595 ms  
Loss rate: 0.66%  
-- Flow 1:  
Average throughput: 91.42 Mbit/s  
95th percentile per-packet one-way delay: 115.595 ms  
Loss rate: 0.66%

Run 1: Report of FillP-Sheep — Data Link

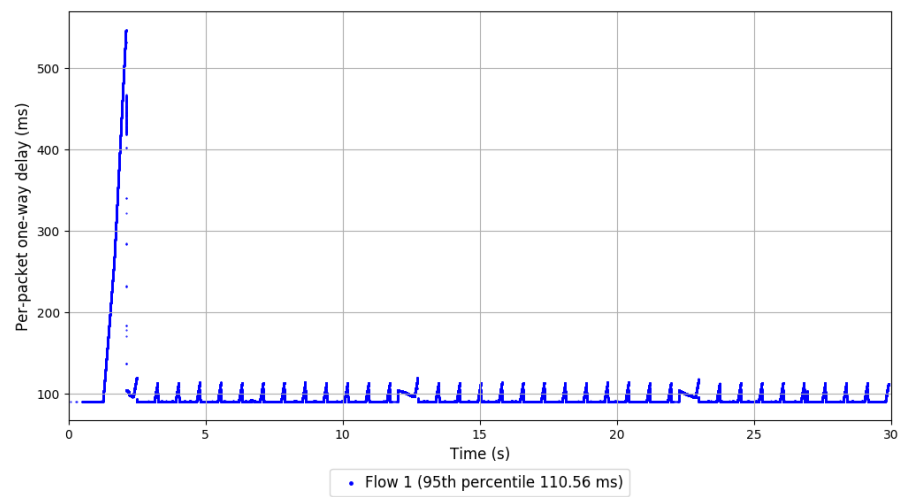
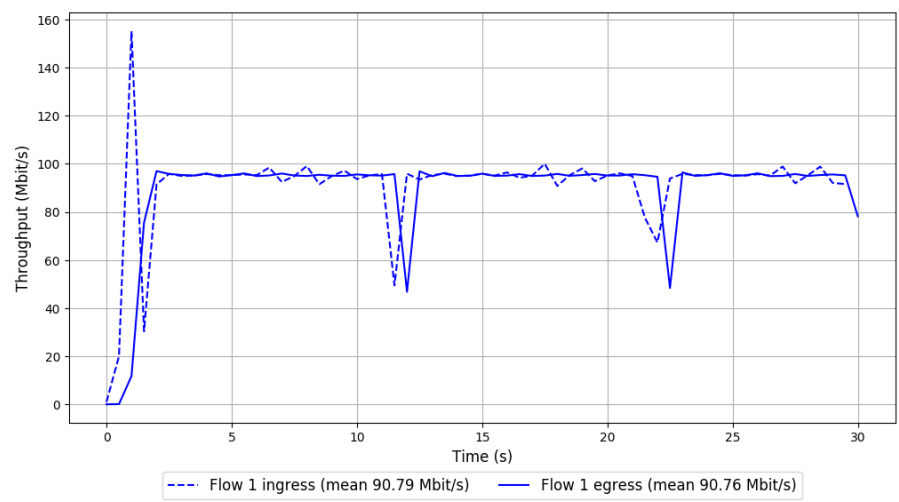


Run 2: Statistics of FillP-Sheep

Start at: 2019-09-18 16:12:52  
End at: 2019-09-18 16:13:22  
Local clock offset: 2.571 ms  
Remote clock offset: 50.096 ms

# Below is generated by plot.py at 2019-09-18 17:57:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 90.76 Mbit/s  
95th percentile per-packet one-way delay: 110.561 ms  
Loss rate: 0.59%  
-- Flow 1:  
Average throughput: 90.76 Mbit/s  
95th percentile per-packet one-way delay: 110.561 ms  
Loss rate: 0.59%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-09-18 16:41:19

End at: 2019-09-18 16:41:49

Local clock offset: 4.579 ms

Remote clock offset: 53.12 ms

# Below is generated by plot.py at 2019-09-18 17:58:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.37 Mbit/s

95th percentile per-packet one-way delay: 109.244 ms

Loss rate: 0.58%

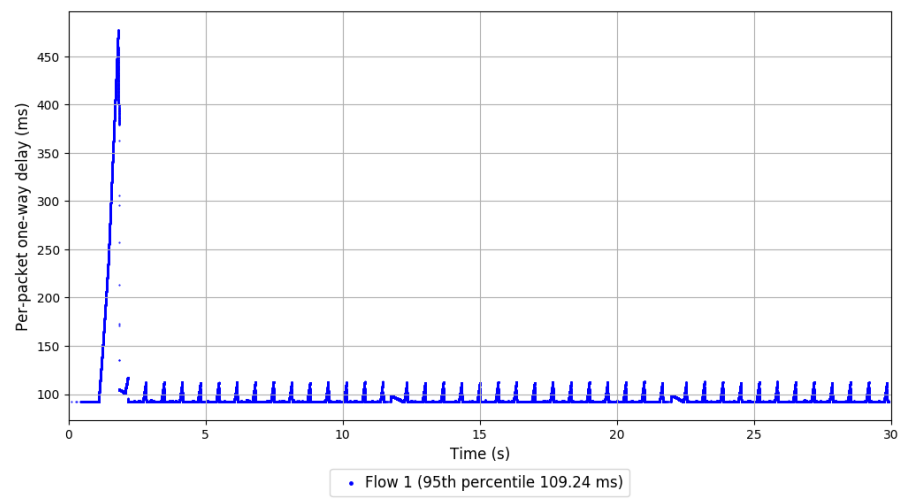
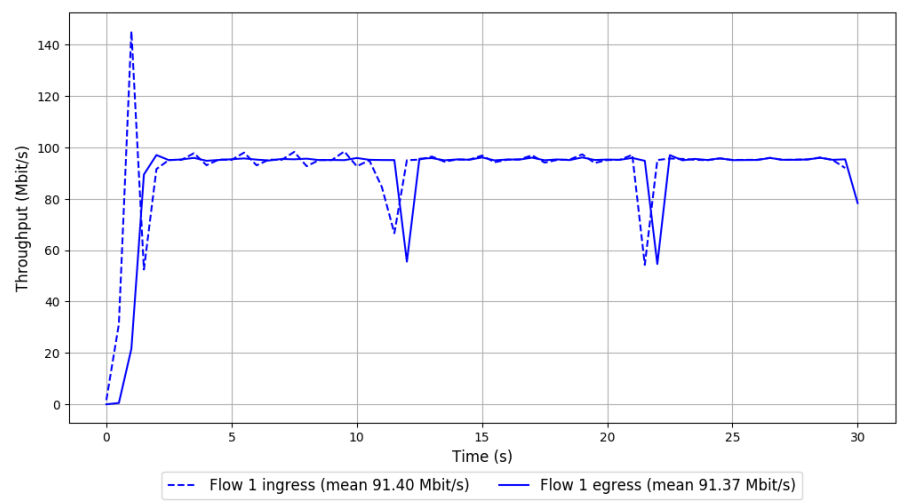
-- Flow 1:

Average throughput: 91.37 Mbit/s

95th percentile per-packet one-way delay: 109.244 ms

Loss rate: 0.58%

Run 3: Report of FillP-Sheep — Data Link

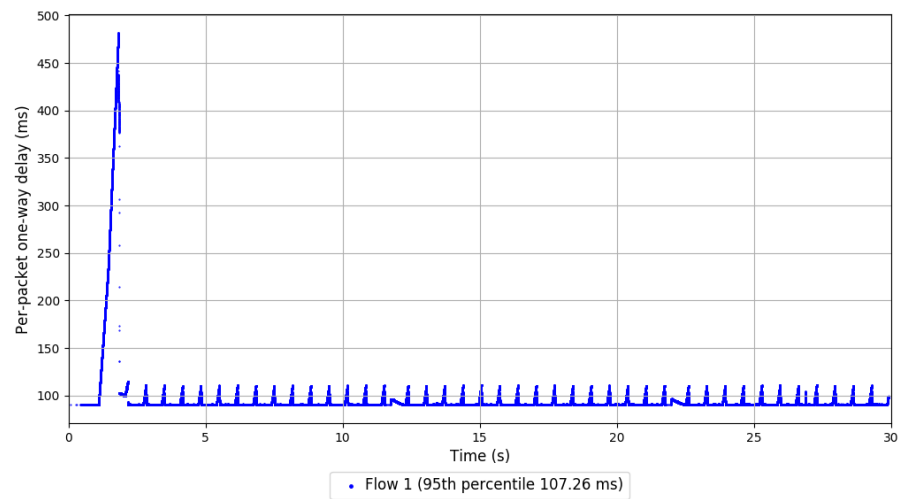
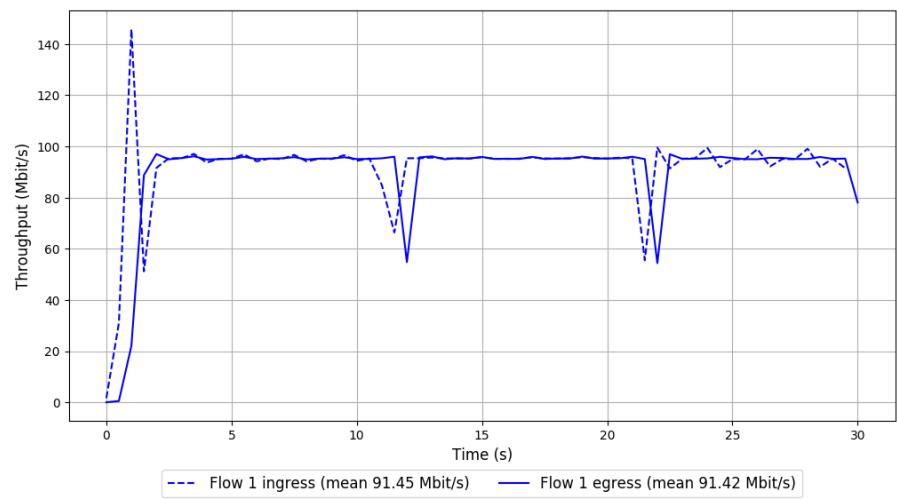


Run 4: Statistics of FillP-Sheep

Start at: 2019-09-18 17:09:44  
End at: 2019-09-18 17:10:14  
Local clock offset: 4.076 ms  
Remote clock offset: 60.014 ms

# Below is generated by plot.py at 2019-09-18 17:58:13  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.42 Mbit/s  
95th percentile per-packet one-way delay: 107.262 ms  
Loss rate: 0.57%  
-- Flow 1:  
Average throughput: 91.42 Mbit/s  
95th percentile per-packet one-way delay: 107.262 ms  
Loss rate: 0.57%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2019-09-18 17:38:13

End at: 2019-09-18 17:38:43

Local clock offset: 2.988 ms

Remote clock offset: 59.998 ms

# Below is generated by plot.py at 2019-09-18 17:58:21

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.41 Mbit/s

95th percentile per-packet one-way delay: 113.955 ms

Loss rate: 0.66%

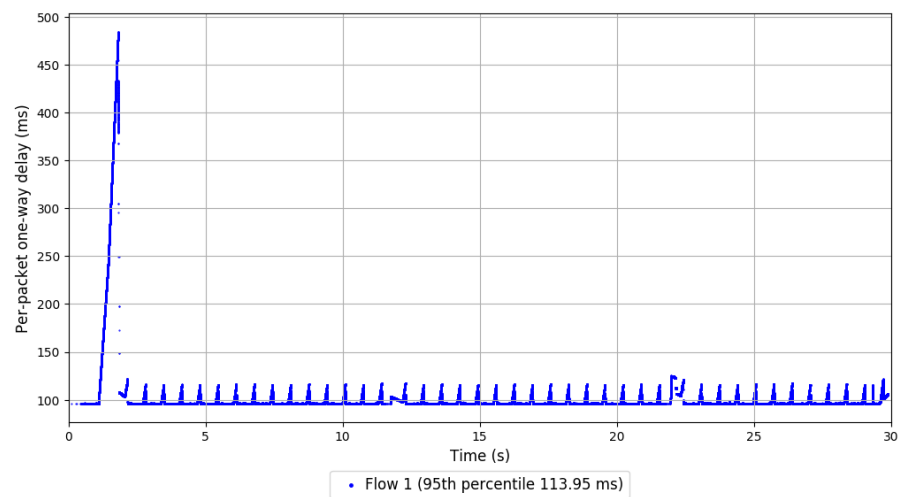
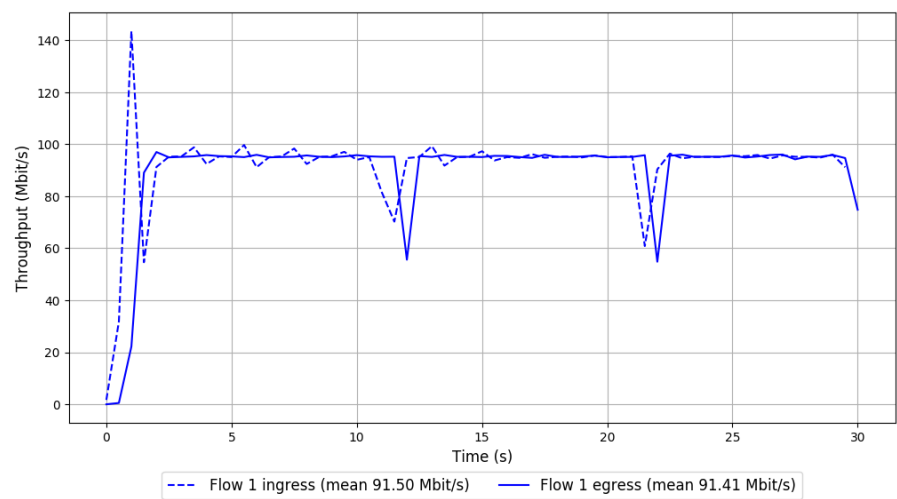
-- Flow 1:

Average throughput: 91.41 Mbit/s

95th percentile per-packet one-way delay: 113.955 ms

Loss rate: 0.66%

Run 5: Report of FillP-Sheep — Data Link

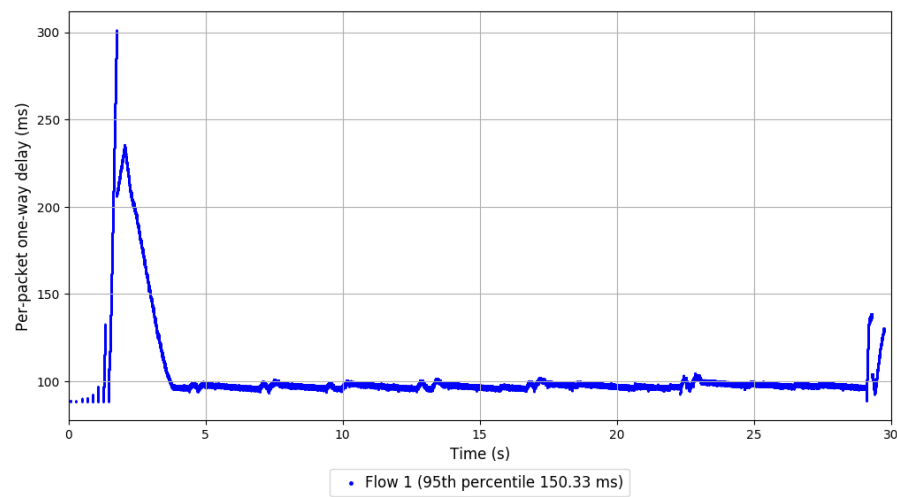
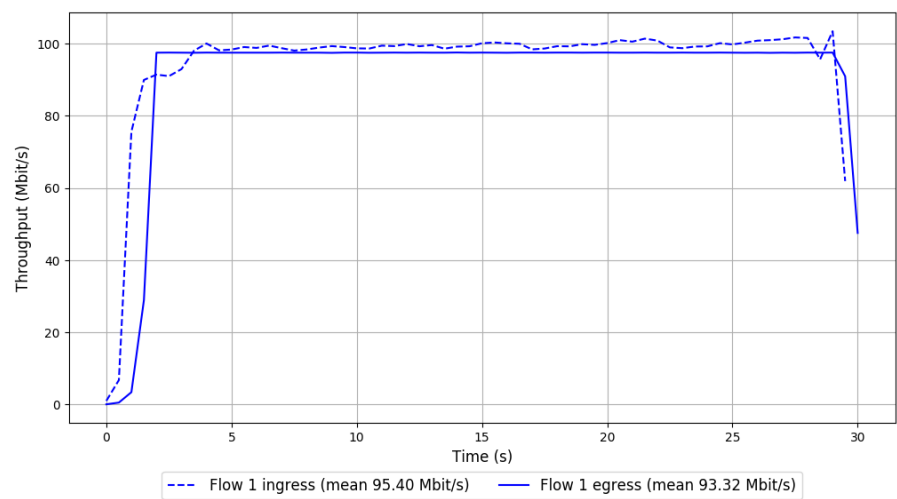


Run 1: Statistics of Indigo

Start at: 2019-09-18 15:50:15  
End at: 2019-09-18 15:50:45  
Local clock offset: -4.573 ms  
Remote clock offset: 42.693 ms

# Below is generated by plot.py at 2019-09-18 17:58:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.32 Mbit/s  
95th percentile per-packet one-way delay: 150.331 ms  
Loss rate: 2.71%  
-- Flow 1:  
Average throughput: 93.32 Mbit/s  
95th percentile per-packet one-way delay: 150.331 ms  
Loss rate: 2.71%

Run 1: Report of Indigo — Data Link

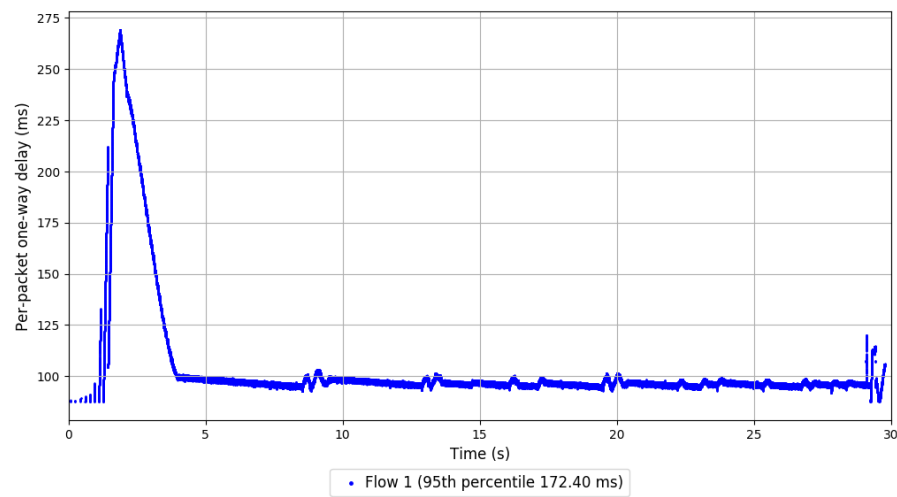
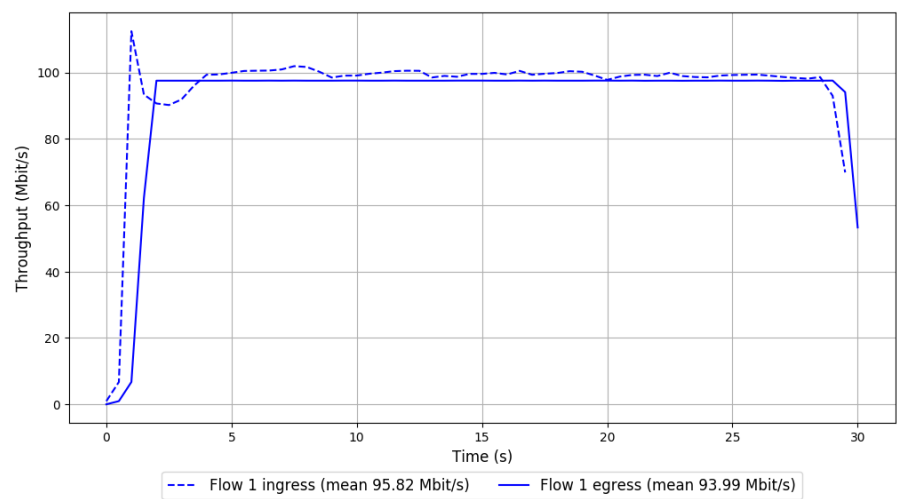


Run 2: Statistics of Indigo

Start at: 2019-09-18 16:18:43  
End at: 2019-09-18 16:19:13  
Local clock offset: 4.154 ms  
Remote clock offset: 50.163 ms

# Below is generated by plot.py at 2019-09-18 17:58:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.99 Mbit/s  
95th percentile per-packet one-way delay: 172.397 ms  
Loss rate: 2.43%  
-- Flow 1:  
Average throughput: 93.99 Mbit/s  
95th percentile per-packet one-way delay: 172.397 ms  
Loss rate: 2.43%

Run 2: Report of Indigo — Data Link

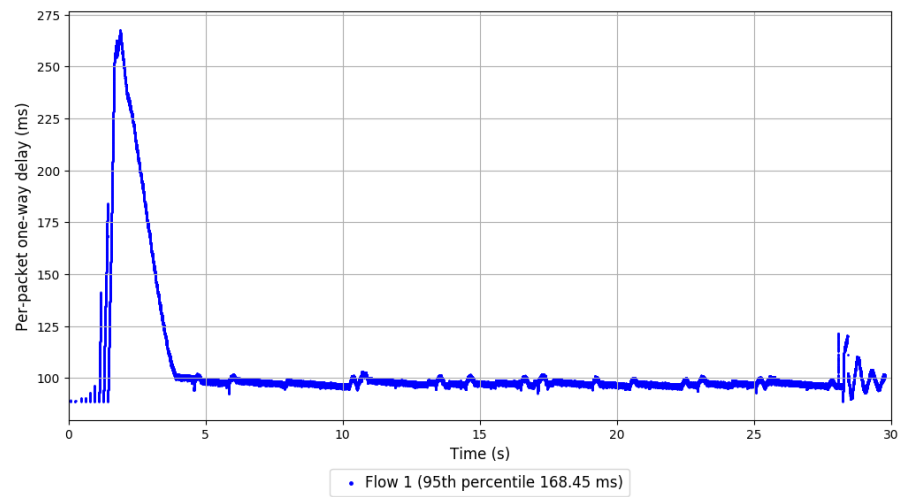
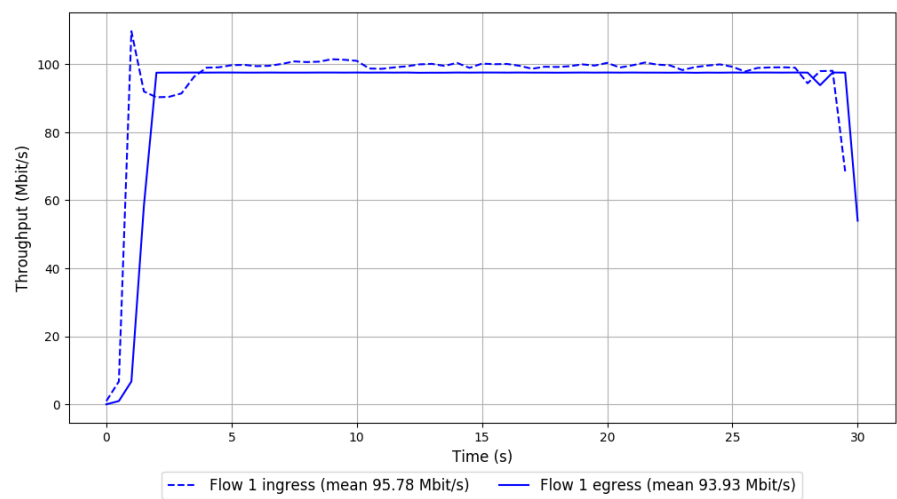


Run 3: Statistics of Indigo

Start at: 2019-09-18 16:47:10  
End at: 2019-09-18 16:47:40  
Local clock offset: 4.415 ms  
Remote clock offset: 54.512 ms

# Below is generated by plot.py at 2019-09-18 17:58:36  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.93 Mbit/s  
95th percentile per-packet one-way delay: 168.451 ms  
Loss rate: 2.46%  
-- Flow 1:  
Average throughput: 93.93 Mbit/s  
95th percentile per-packet one-way delay: 168.451 ms  
Loss rate: 2.46%

Run 3: Report of Indigo — Data Link

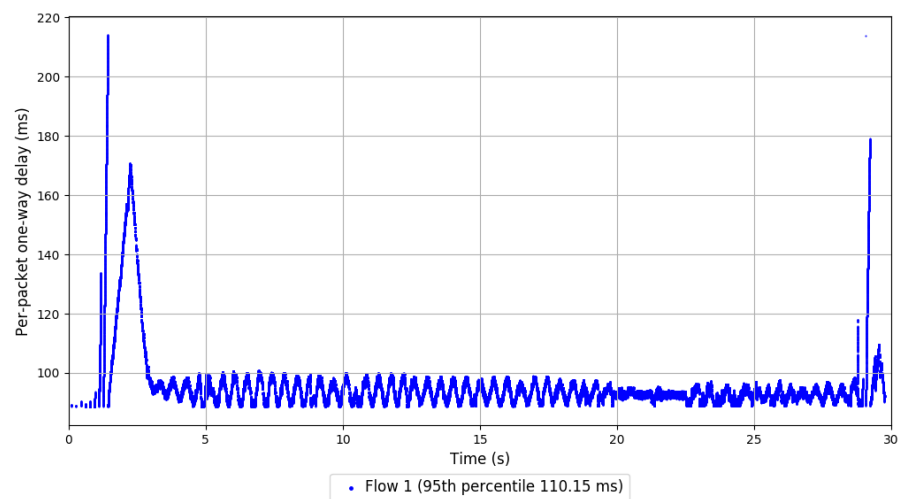
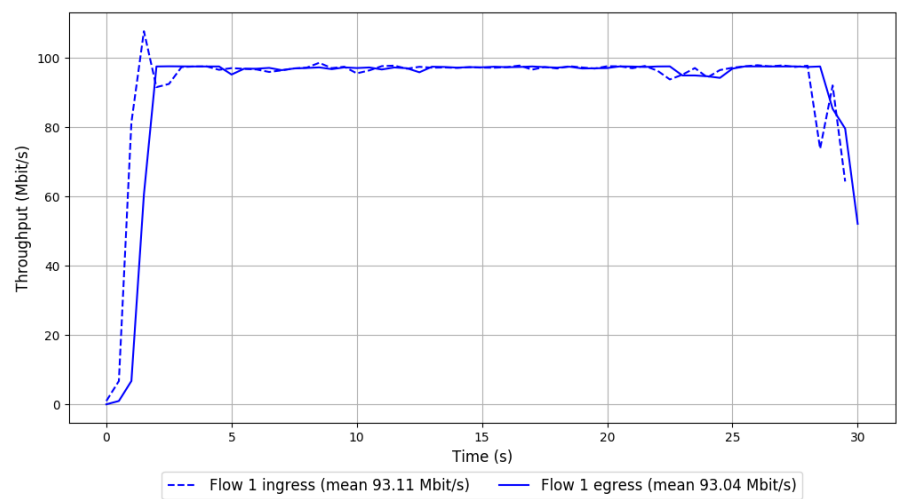


Run 4: Statistics of Indigo

Start at: 2019-09-18 17:15:36  
End at: 2019-09-18 17:16:06  
Local clock offset: 4.001 ms  
Remote clock offset: 59.671 ms

# Below is generated by plot.py at 2019-09-18 17:58:36  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.04 Mbit/s  
95th percentile per-packet one-way delay: 110.146 ms  
Loss rate: 0.62%  
-- Flow 1:  
Average throughput: 93.04 Mbit/s  
95th percentile per-packet one-way delay: 110.146 ms  
Loss rate: 0.62%

Run 4: Report of Indigo — Data Link

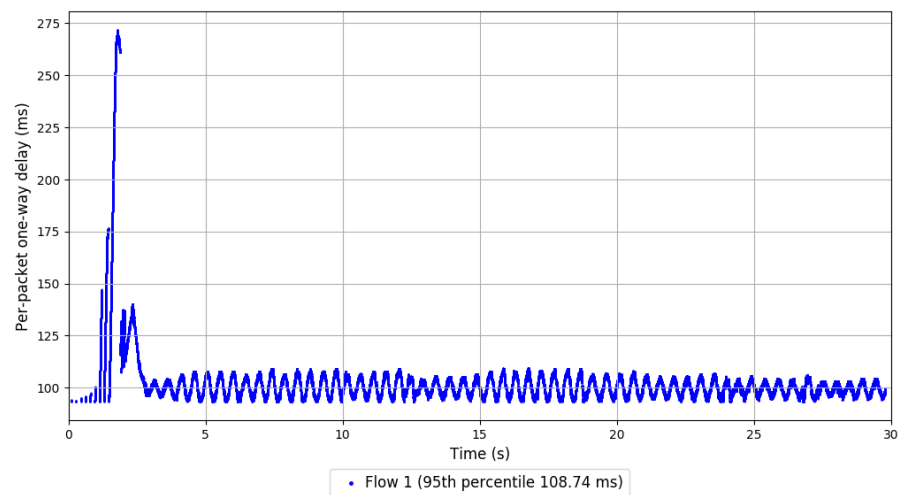
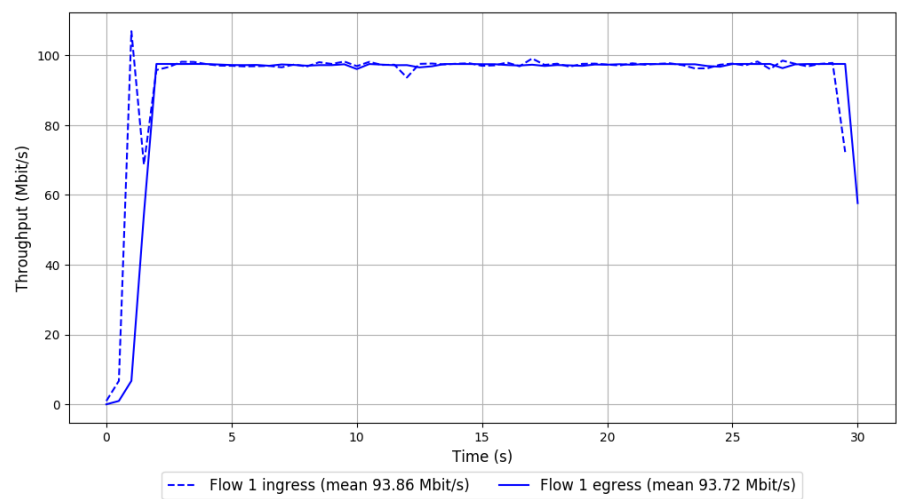


Run 5: Statistics of Indigo

Start at: 2019-09-18 17:44:04  
End at: 2019-09-18 17:44:34  
Local clock offset: 2.582 ms  
Remote clock offset: 63.715 ms

# Below is generated by plot.py at 2019-09-18 17:58:43  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.72 Mbit/s  
95th percentile per-packet one-way delay: 108.738 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 93.72 Mbit/s  
95th percentile per-packet one-way delay: 108.738 ms  
Loss rate: 0.69%

Run 5: Report of Indigo — Data Link

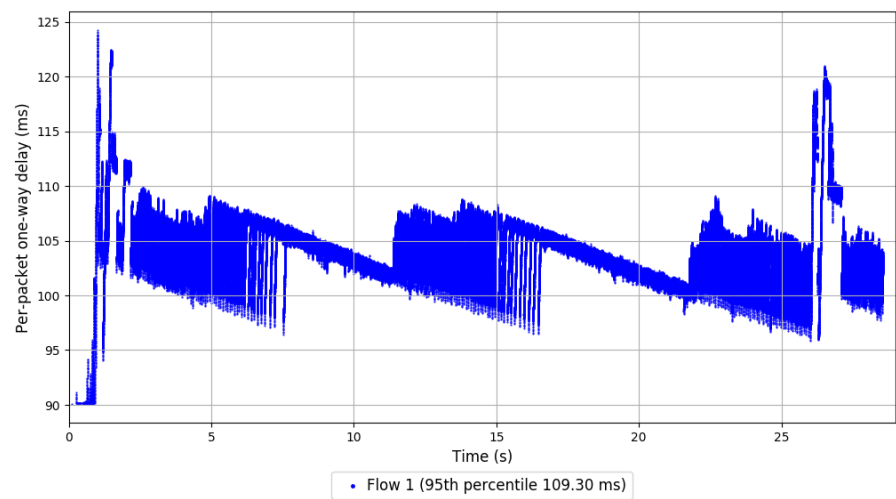
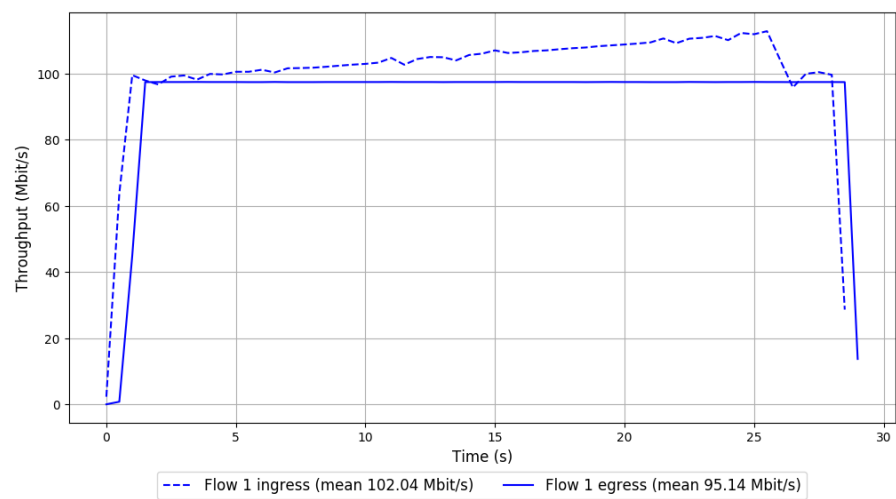


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-09-18 15:51:28  
End at: 2019-09-18 15:51:58  
Local clock offset: -5.531 ms  
Remote clock offset: 40.621 ms

# Below is generated by plot.py at 2019-09-18 17:59:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.14 Mbit/s  
95th percentile per-packet one-way delay: 109.295 ms  
Loss rate: 7.28%  
-- Flow 1:  
Average throughput: 95.14 Mbit/s  
95th percentile per-packet one-way delay: 109.295 ms  
Loss rate: 7.28%

Run 1: Report of Indigo-MusesC3 — Data Link

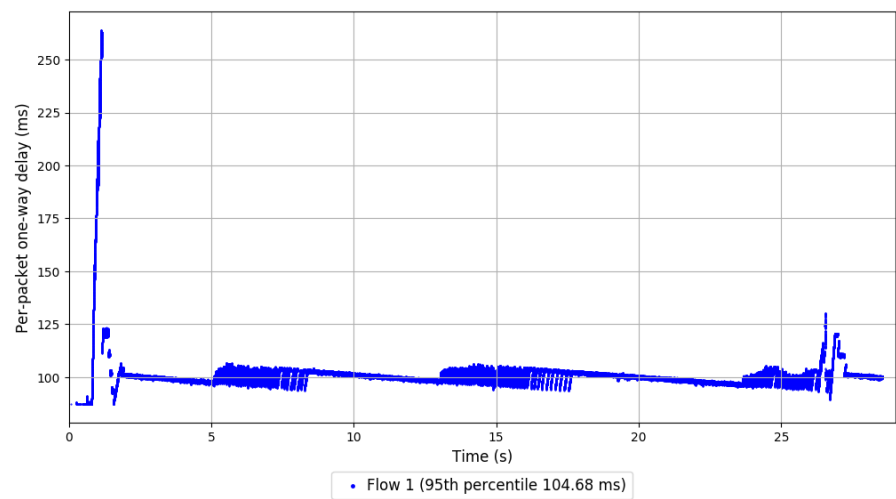
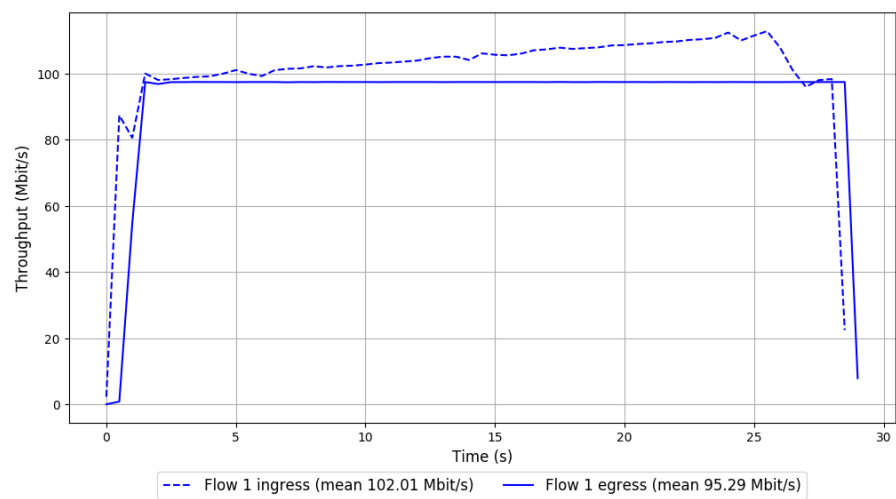


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-09-18 16:19:56  
End at: 2019-09-18 16:20:26  
Local clock offset: 4.422 ms  
Remote clock offset: 51.244 ms

# Below is generated by plot.py at 2019-09-18 17:59:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.29 Mbit/s  
95th percentile per-packet one-way delay: 104.681 ms  
Loss rate: 7.11%  
-- Flow 1:  
Average throughput: 95.29 Mbit/s  
95th percentile per-packet one-way delay: 104.681 ms  
Loss rate: 7.11%

Run 2: Report of Indigo-MusesC3 — Data Link

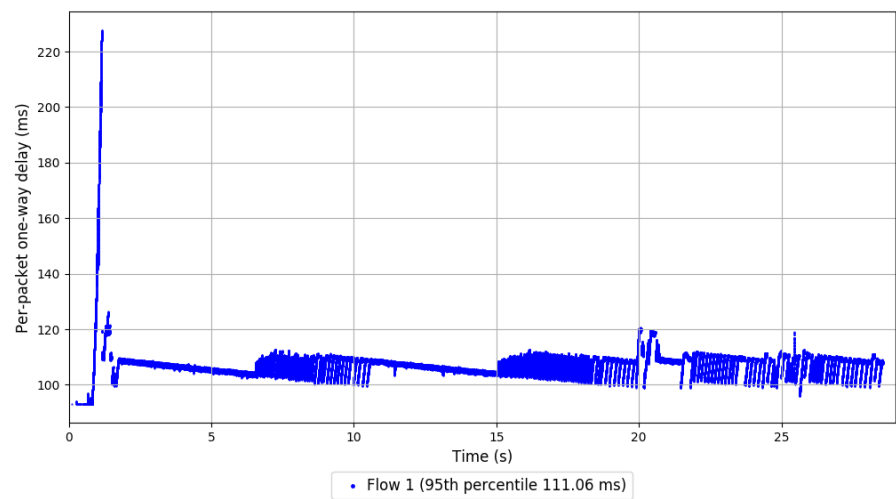
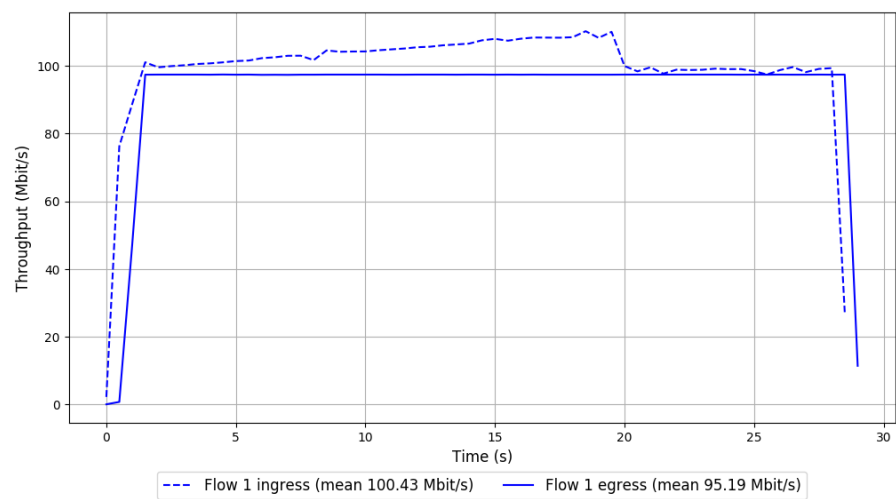


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-09-18 16:48:23  
End at: 2019-09-18 16:48:53  
Local clock offset: 3.628 ms  
Remote clock offset: 53.006 ms

# Below is generated by plot.py at 2019-09-18 17:59:14  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.19 Mbit/s  
95th percentile per-packet one-way delay: 111.064 ms  
Loss rate: 5.76%  
-- Flow 1:  
Average throughput: 95.19 Mbit/s  
95th percentile per-packet one-way delay: 111.064 ms  
Loss rate: 5.76%

Run 3: Report of Indigo-MusesC3 — Data Link

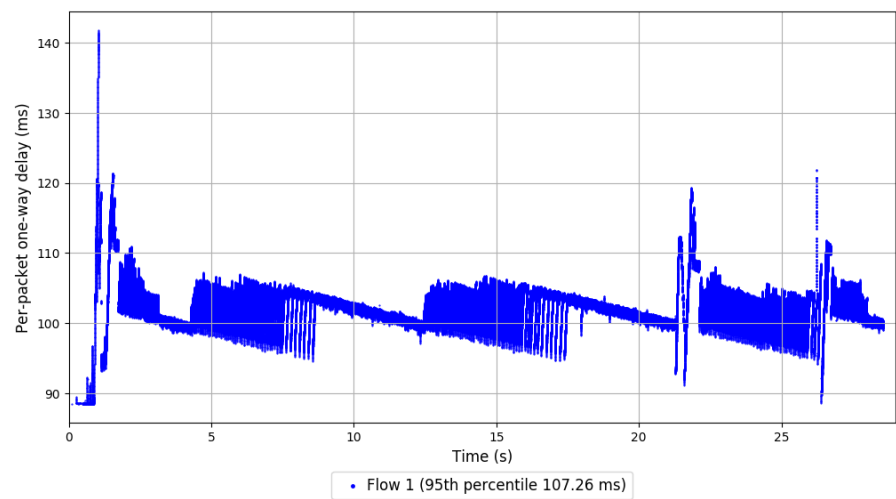
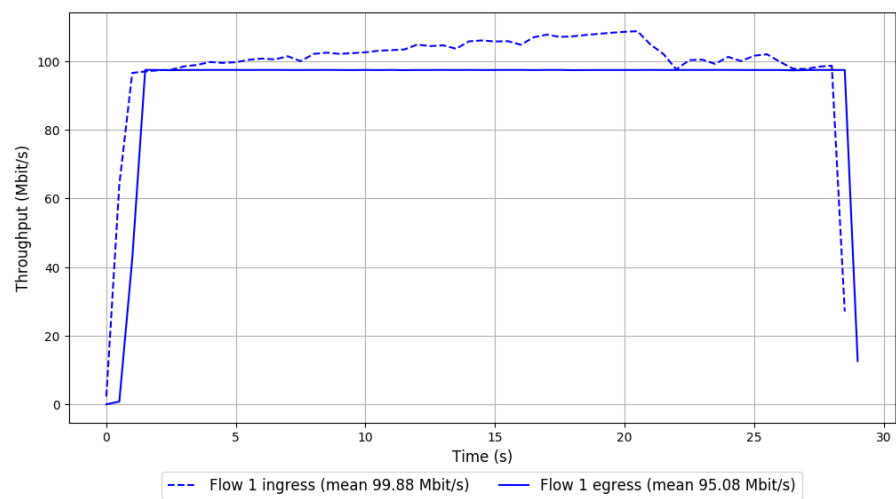


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-09-18 17:16:49  
End at: 2019-09-18 17:17:19  
Local clock offset: 3.16 ms  
Remote clock offset: 58.597 ms

# Below is generated by plot.py at 2019-09-18 17:59:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.08 Mbit/s  
95th percentile per-packet one-way delay: 107.260 ms  
Loss rate: 5.34%  
-- Flow 1:  
Average throughput: 95.08 Mbit/s  
95th percentile per-packet one-way delay: 107.260 ms  
Loss rate: 5.34%

Run 4: Report of Indigo-MusesC3 — Data Link

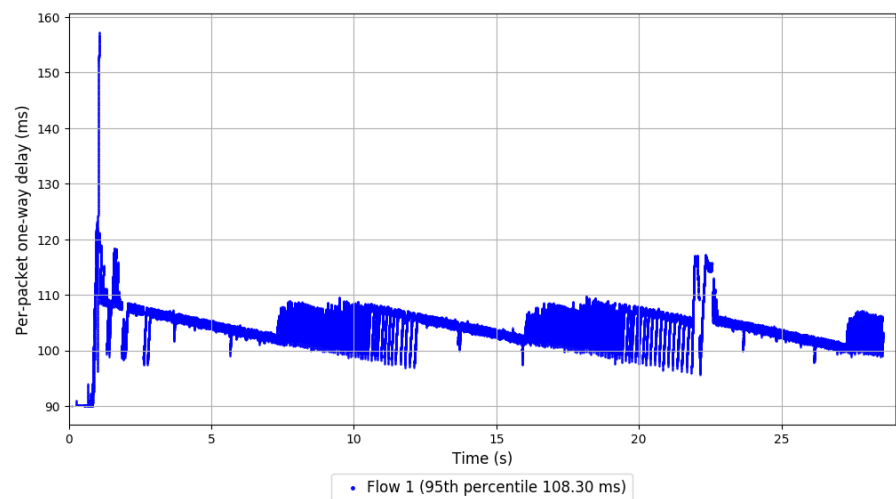
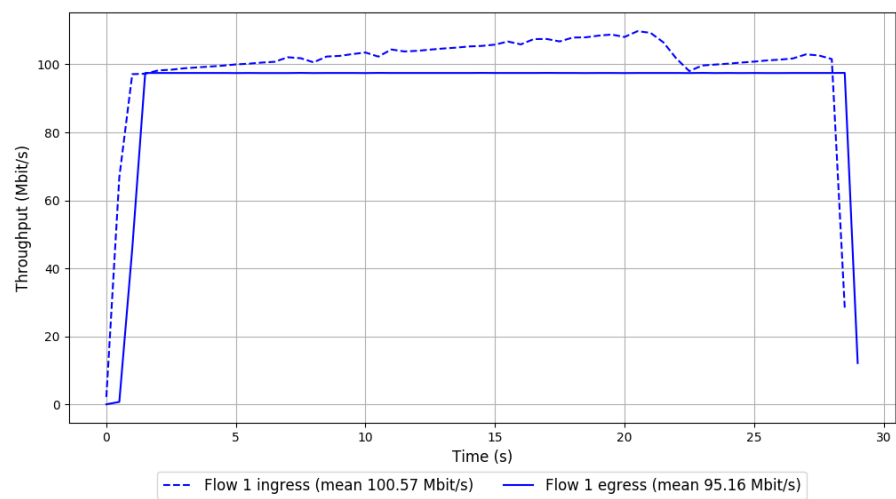


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-09-18 17:45:17  
End at: 2019-09-18 17:45:47  
Local clock offset: 1.82 ms  
Remote clock offset: 66.661 ms

# Below is generated by plot.py at 2019-09-18 17:59:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 95.16 Mbit/s  
95th percentile per-packet one-way delay: 108.298 ms  
Loss rate: 5.93%  
-- Flow 1:  
Average throughput: 95.16 Mbit/s  
95th percentile per-packet one-way delay: 108.298 ms  
Loss rate: 5.93%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-09-18 15:34:54

End at: 2019-09-18 15:35:24

Local clock offset: 0.219 ms

Remote clock offset: 35.305 ms

# Below is generated by plot.py at 2019-09-18 17:59:39

# Datalink statistics

-- Total of 1 flow:

Average throughput: 88.17 Mbit/s

95th percentile per-packet one-way delay: 103.627 ms

Loss rate: 0.65%

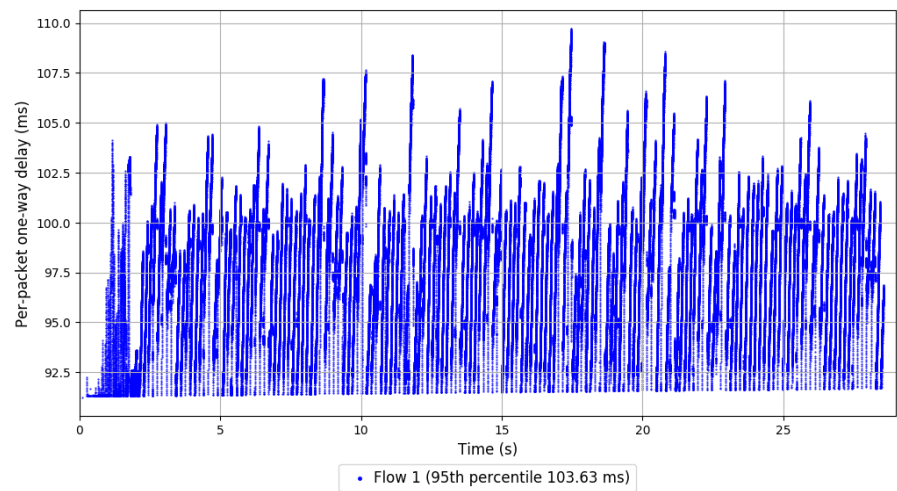
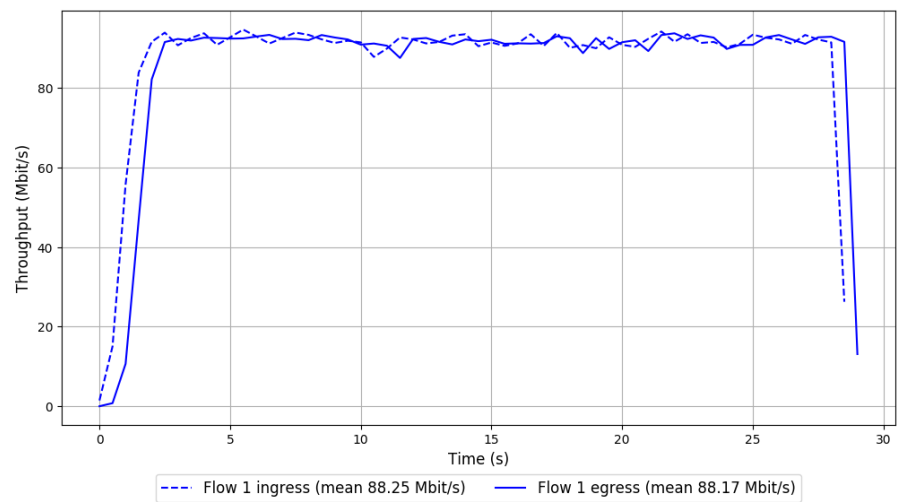
-- Flow 1:

Average throughput: 88.17 Mbit/s

95th percentile per-packet one-way delay: 103.627 ms

Loss rate: 0.65%

Run 1: Report of Indigo-MusesC5 — Data Link

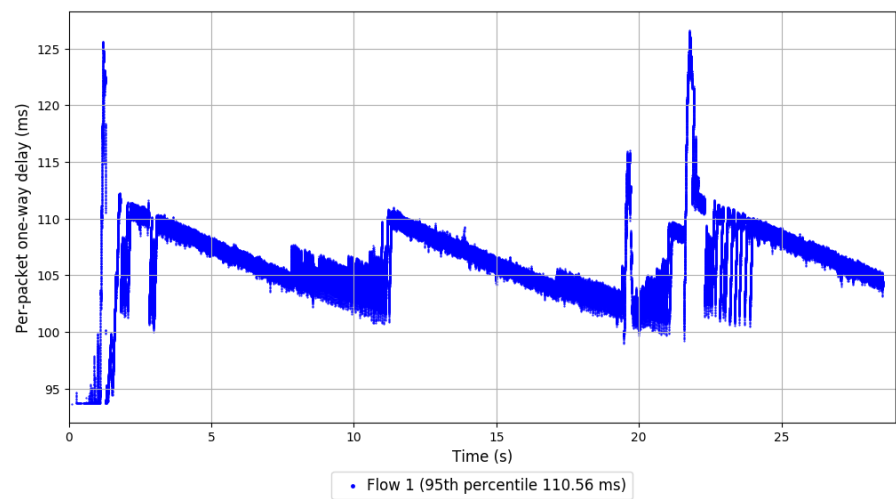
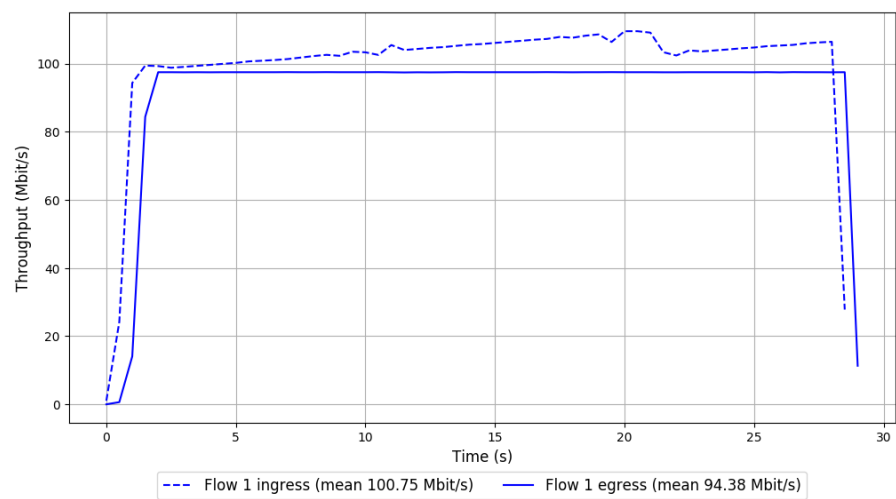


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-09-18 16:03:20  
End at: 2019-09-18 16:03:50  
Local clock offset: -3.356 ms  
Remote clock offset: 44.233 ms

# Below is generated by plot.py at 2019-09-18 17:59:44  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.38 Mbit/s  
95th percentile per-packet one-way delay: 110.561 ms  
Loss rate: 6.86%  
-- Flow 1:  
Average throughput: 94.38 Mbit/s  
95th percentile per-packet one-way delay: 110.561 ms  
Loss rate: 6.86%

Run 2: Report of Indigo-MusesC5 — Data Link

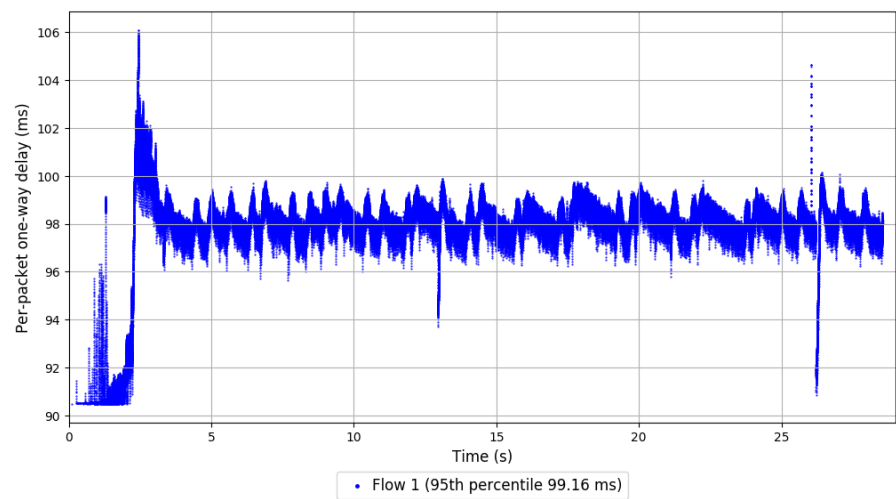
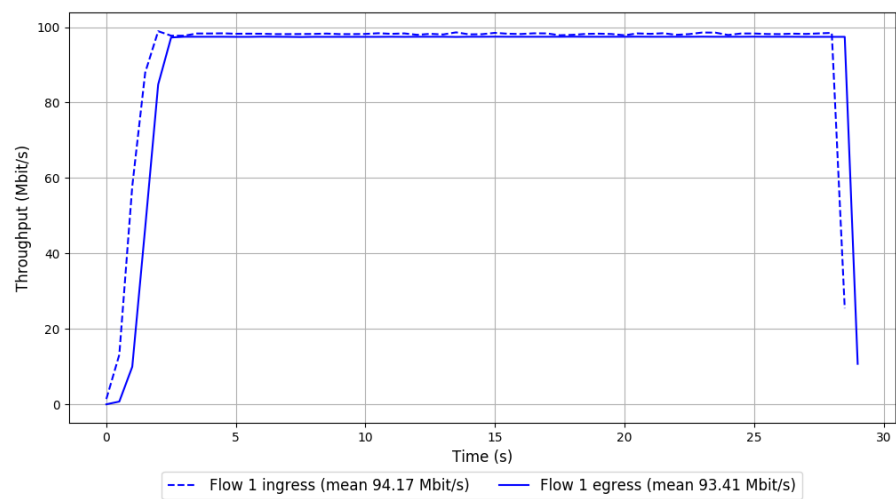


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-09-18 16:31:48  
End at: 2019-09-18 16:32:18  
Local clock offset: 5.476 ms  
Remote clock offset: 53.943 ms

# Below is generated by plot.py at 2019-09-18 17:59:50  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.41 Mbit/s  
95th percentile per-packet one-way delay: 99.164 ms  
Loss rate: 1.38%  
-- Flow 1:  
Average throughput: 93.41 Mbit/s  
95th percentile per-packet one-way delay: 99.164 ms  
Loss rate: 1.38%

Run 3: Report of Indigo-MusesC5 — Data Link

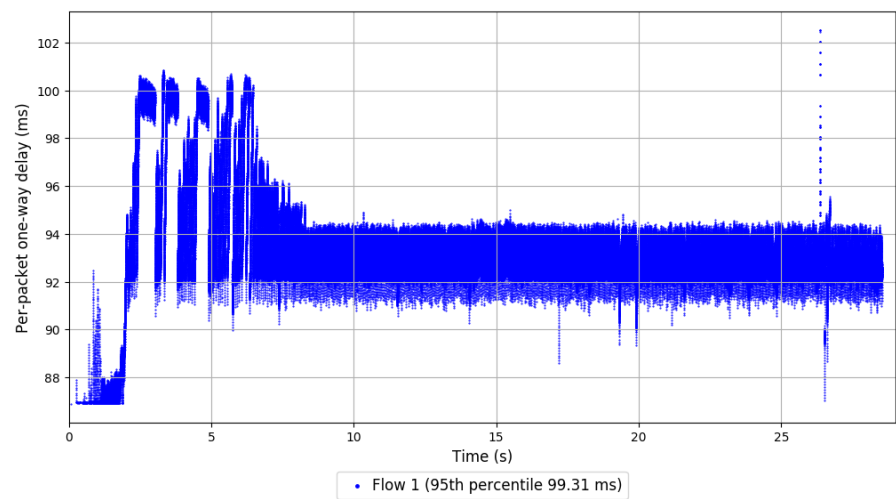
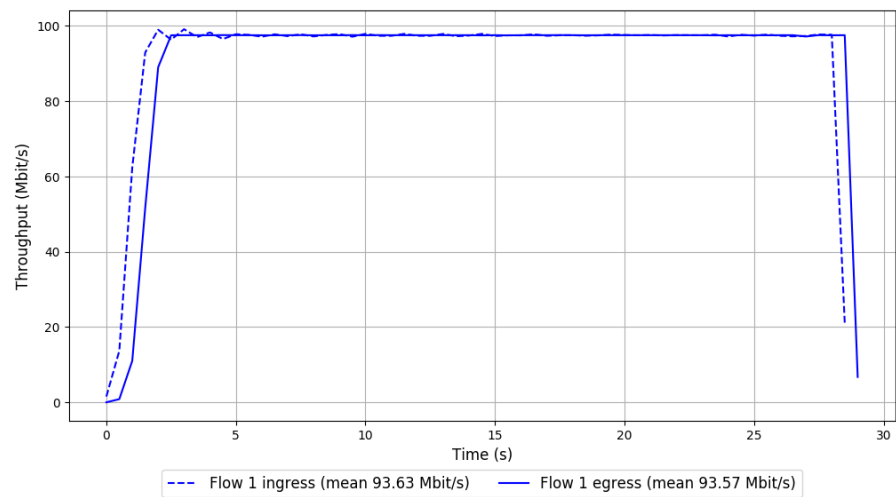


Run 4: Statistics of Indigo-MusesC5

Start at: 2019-09-18 17:00:15  
End at: 2019-09-18 17:00:45  
Local clock offset: 4.376 ms  
Remote clock offset: 58.468 ms

# Below is generated by plot.py at 2019-09-18 18:00:17  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 93.57 Mbit/s  
95th percentile per-packet one-way delay: 99.306 ms  
Loss rate: 0.62%  
-- Flow 1:  
Average throughput: 93.57 Mbit/s  
95th percentile per-packet one-way delay: 99.306 ms  
Loss rate: 0.62%

Run 4: Report of Indigo-MusesC5 — Data Link

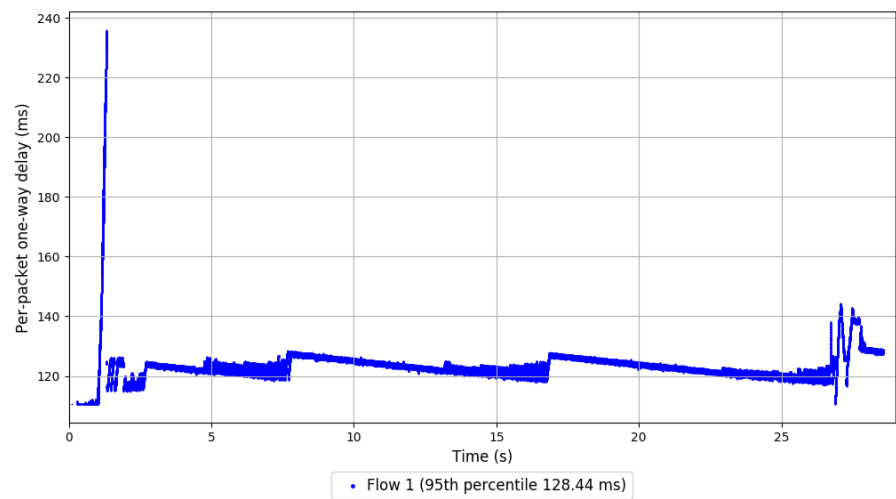
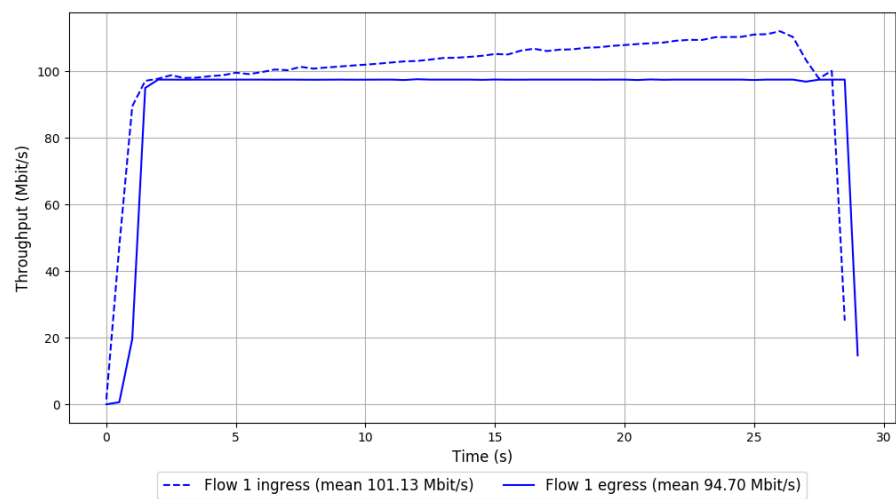


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-09-18 17:28:40  
End at: 2019-09-18 17:29:10  
Local clock offset: 22.123 ms  
Remote clock offset: 58.022 ms

# Below is generated by plot.py at 2019-09-18 18:00:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.70 Mbit/s  
95th percentile per-packet one-way delay: 128.436 ms  
Loss rate: 6.88%  
-- Flow 1:  
Average throughput: 94.70 Mbit/s  
95th percentile per-packet one-way delay: 128.436 ms  
Loss rate: 6.88%

Run 5: Report of Indigo-MusesC5 — Data Link

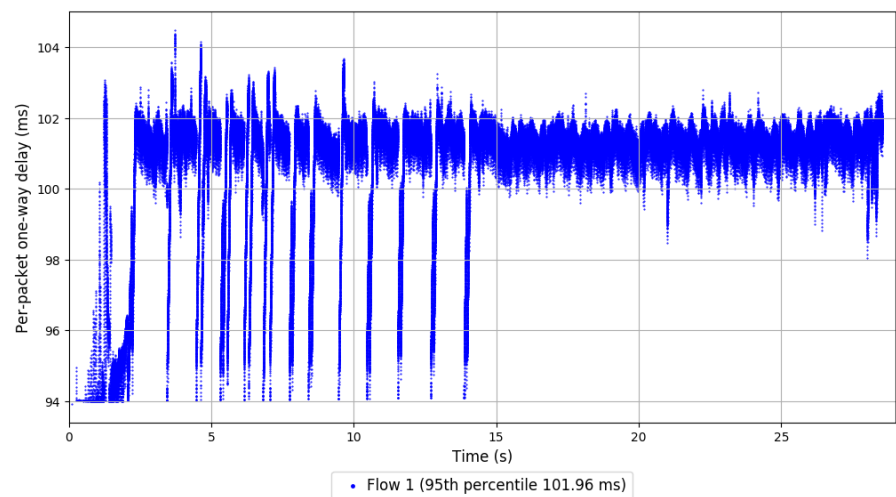
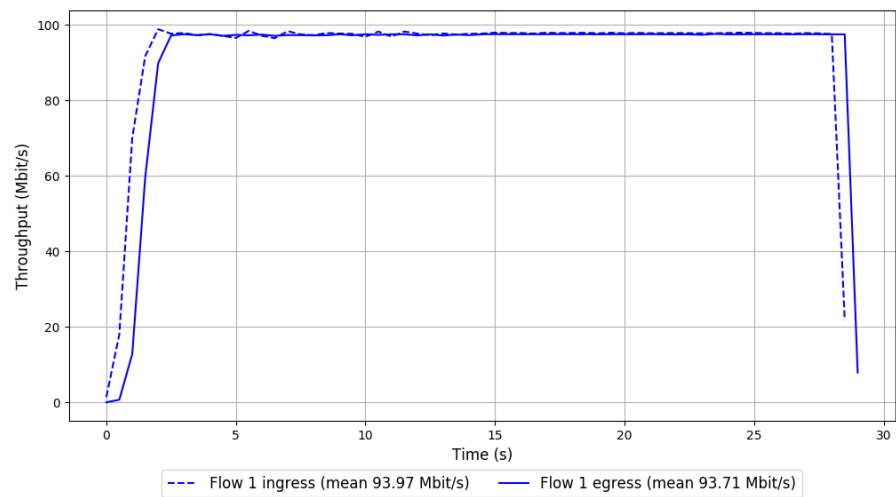


```
Run 1: Statistics of Indigo-MusesD

Start at: 2019-09-18 15:52:40
End at: 2019-09-18 15:53:10
Local clock offset: -5.064 ms
Remote clock offset: 41.633 ms

# Below is generated by plot.py at 2019-09-18 18:00:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.71 Mbit/s
95th percentile per-packet one-way delay: 101.959 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 93.71 Mbit/s
95th percentile per-packet one-way delay: 101.959 ms
Loss rate: 0.85%
```

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-09-18 16:21:08

End at: 2019-09-18 16:21:38

Local clock offset: 4.639 ms

Remote clock offset: 51.456 ms

# Below is generated by plot.py at 2019-09-18 18:00:28

# Datalink statistics

-- Total of 1 flow:

Average throughput: 93.91 Mbit/s

95th percentile per-packet one-way delay: 91.233 ms

Loss rate: 0.60%

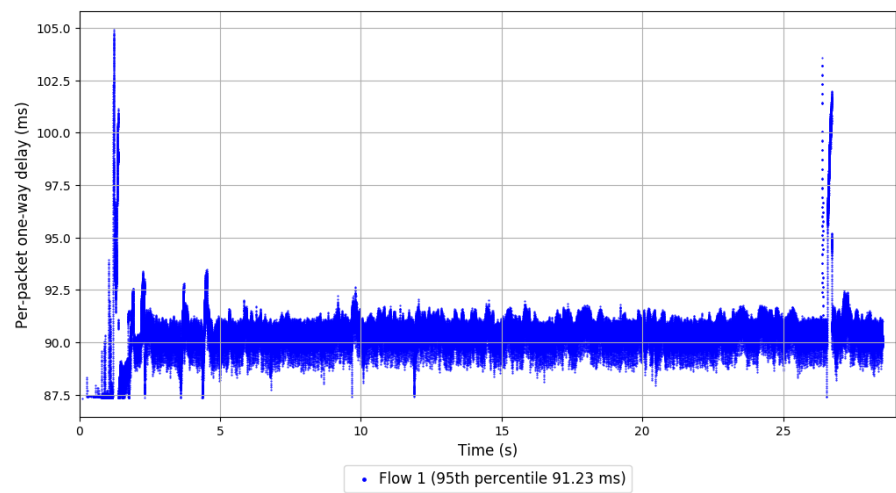
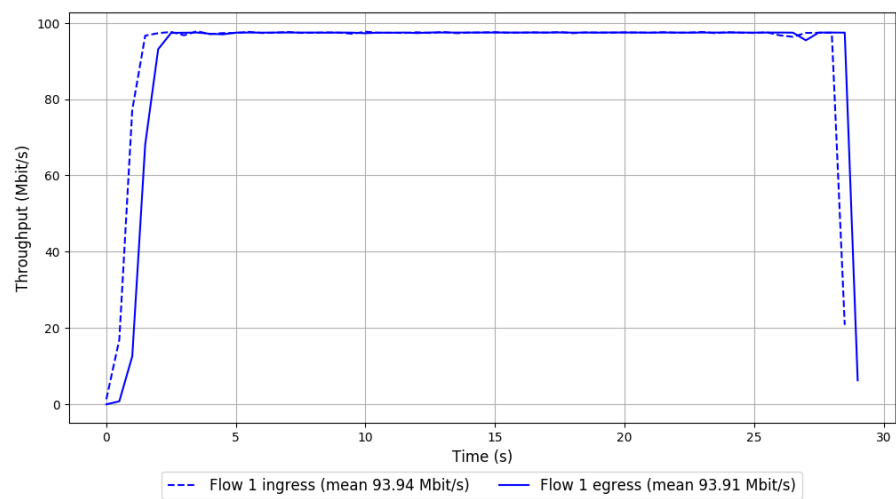
-- Flow 1:

Average throughput: 93.91 Mbit/s

95th percentile per-packet one-way delay: 91.233 ms

Loss rate: 0.60%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-09-18 16:49:35

End at: 2019-09-18 16:50:05

Local clock offset: 4.377 ms

Remote clock offset: 54.049 ms

# Below is generated by plot.py at 2019-09-18 18:00:35

# Datalink statistics

-- Total of 1 flow:

Average throughput: 94.42 Mbit/s

95th percentile per-packet one-way delay: 100.607 ms

Loss rate: 0.83%

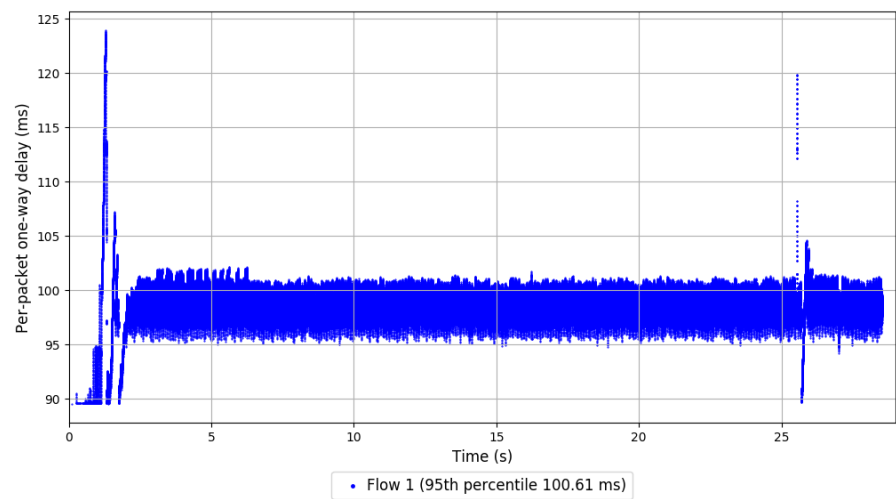
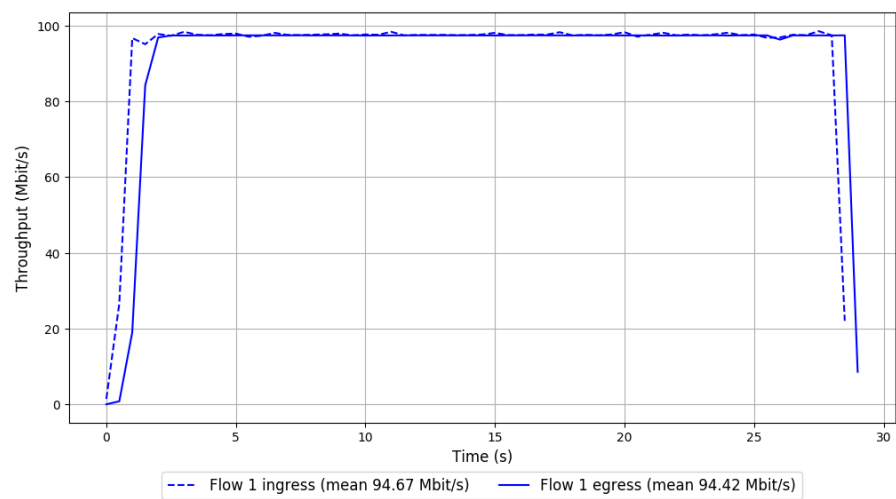
-- Flow 1:

Average throughput: 94.42 Mbit/s

95th percentile per-packet one-way delay: 100.607 ms

Loss rate: 0.83%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-09-18 17:18:00

End at: 2019-09-18 17:18:31

Local clock offset: 3.244 ms

Remote clock offset: 57.947 ms

# Below is generated by plot.py at 2019-09-18 18:00:46

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.21 Mbit/s

95th percentile per-packet one-way delay: 101.913 ms

Loss rate: 0.65%

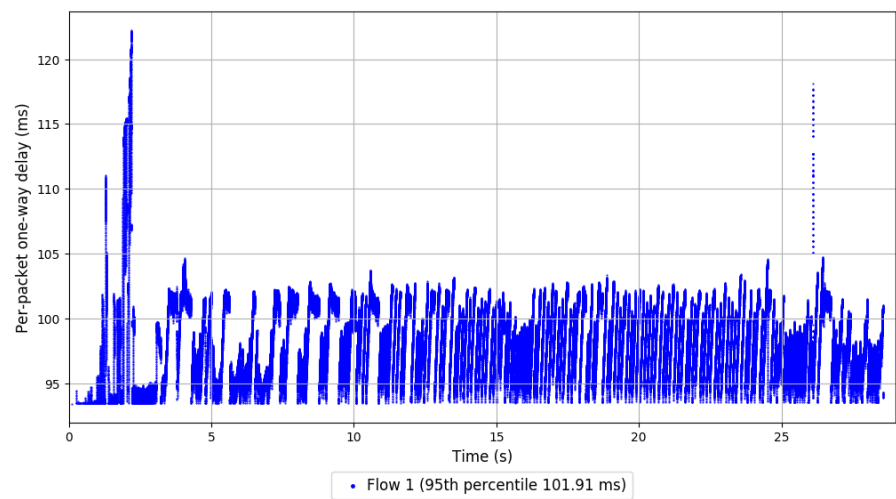
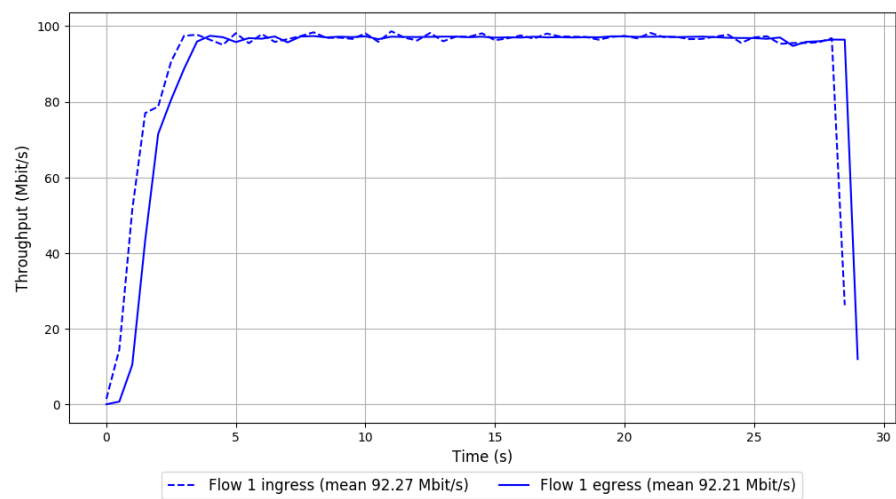
-- Flow 1:

Average throughput: 92.21 Mbit/s

95th percentile per-packet one-way delay: 101.913 ms

Loss rate: 0.65%

Run 4: Report of Indigo-MusesD — Data Link

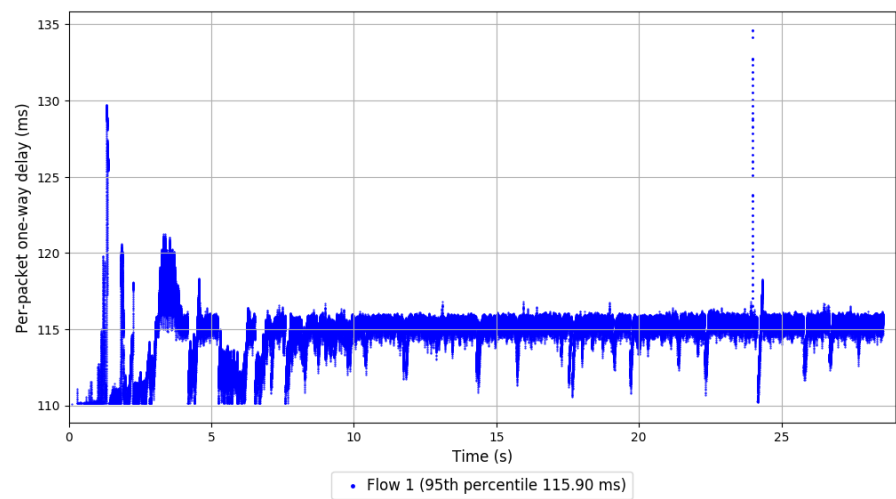
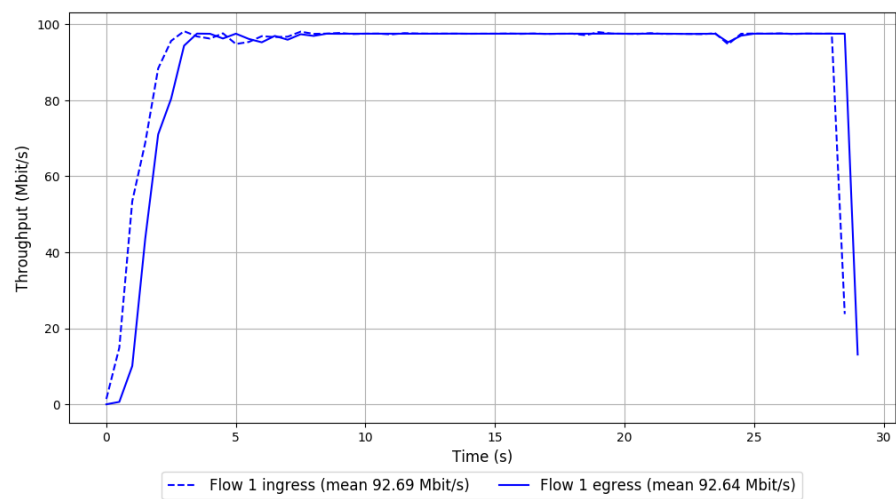


Run 5: Statistics of Indigo-MusesD

Start at: 2019-09-18 17:46:29  
End at: 2019-09-18 17:46:59  
Local clock offset: 21.364 ms  
Remote clock offset: 66.433 ms

# Below is generated by plot.py at 2019-09-18 18:00:51  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 92.64 Mbit/s  
95th percentile per-packet one-way delay: 115.896 ms  
Loss rate: 0.63%  
-- Flow 1:  
Average throughput: 92.64 Mbit/s  
95th percentile per-packet one-way delay: 115.896 ms  
Loss rate: 0.63%

Run 5: Report of Indigo-MusesD — Data Link

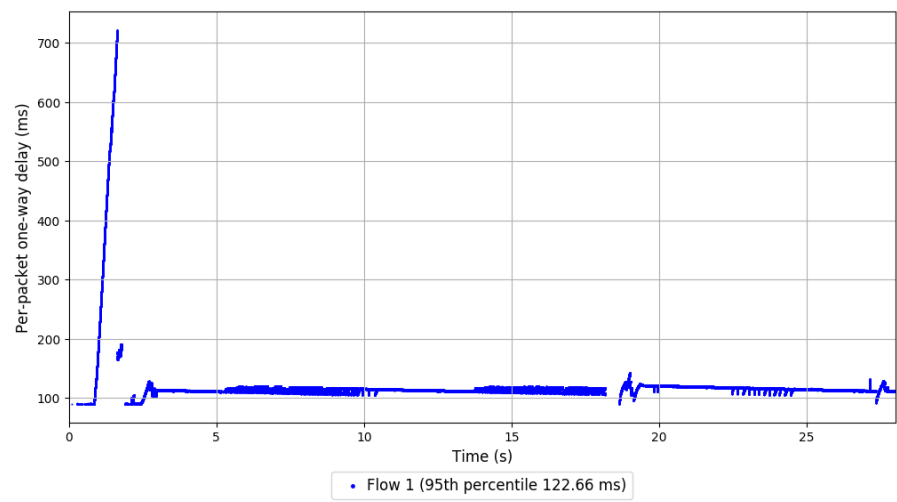
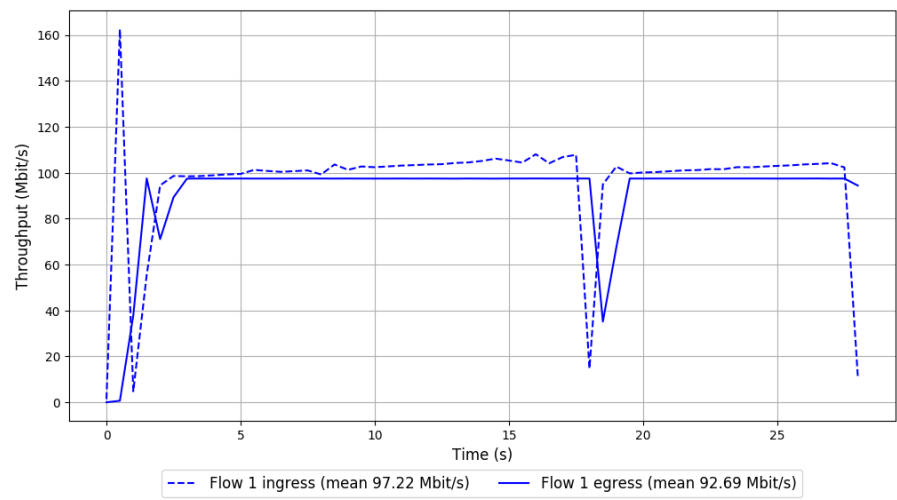


```
Run 1: Statistics of Indigo-MusesT

Start at: 2019-09-18 15:31:19
End at: 2019-09-18 15:31:49
Local clock offset: 3.823 ms
Remote clock offset: 37.041 ms

# Below is generated by plot.py at 2019-09-18 18:00:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.69 Mbit/s
95th percentile per-packet one-way delay: 122.660 ms
Loss rate: 5.21%
-- Flow 1:
Average throughput: 92.69 Mbit/s
95th percentile per-packet one-way delay: 122.660 ms
Loss rate: 5.21%
```

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-09-18 15:59:46

End at: 2019-09-18 16:00:16

Local clock offset: -6.941 ms

Remote clock offset: 45.161 ms

# Below is generated by plot.py at 2019-09-18 18:01:25

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.39 Mbit/s

95th percentile per-packet one-way delay: 112.077 ms

Loss rate: 7.25%

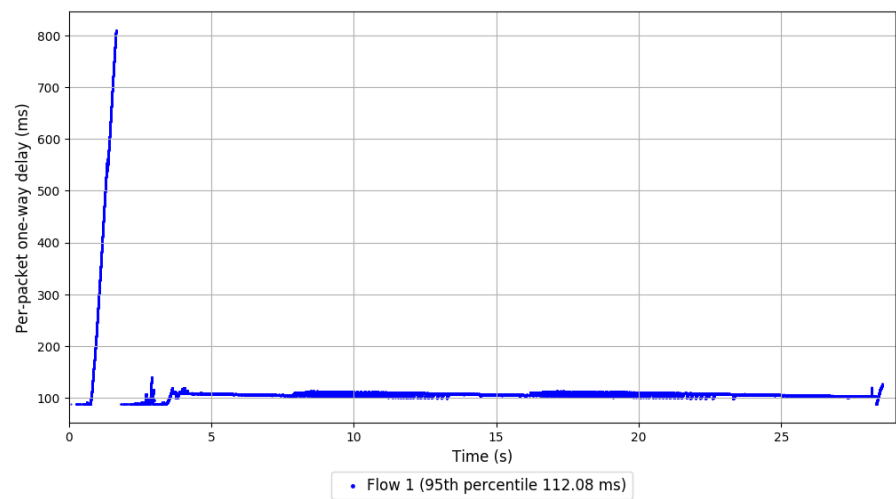
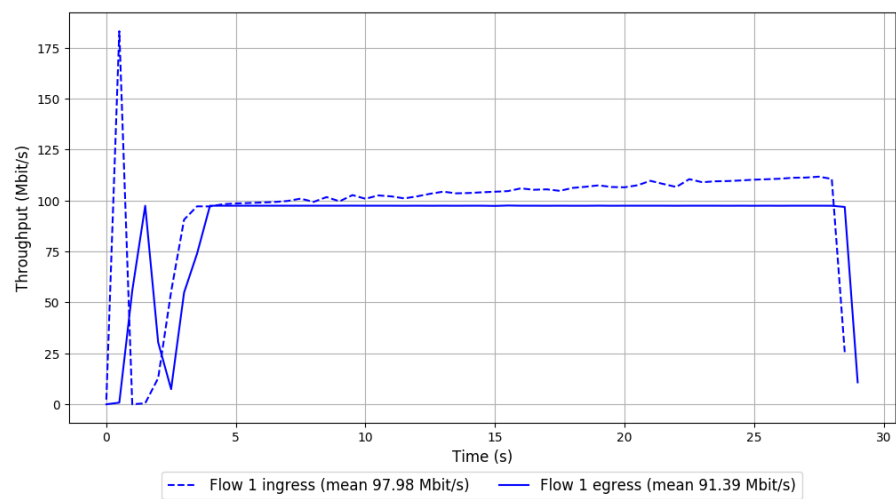
-- Flow 1:

Average throughput: 91.39 Mbit/s

95th percentile per-packet one-way delay: 112.077 ms

Loss rate: 7.25%

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

Start at: 2019-09-18 16:28:14

End at: 2019-09-18 16:28:44

Local clock offset: 5.512 ms

Remote clock offset: 52.814 ms

# Below is generated by plot.py at 2019-09-18 18:01:29

# Datalink statistics

-- Total of 1 flow:

Average throughput: 95.17 Mbit/s

95th percentile per-packet one-way delay: 111.261 ms

Loss rate: 8.11%

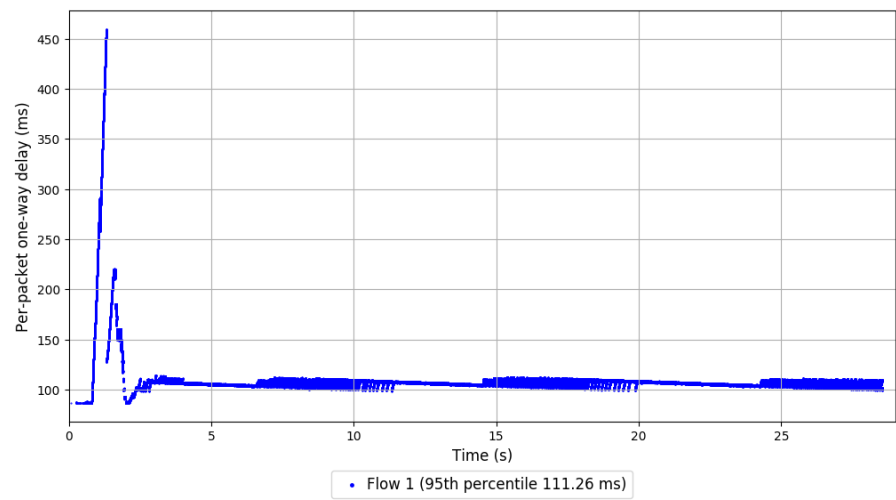
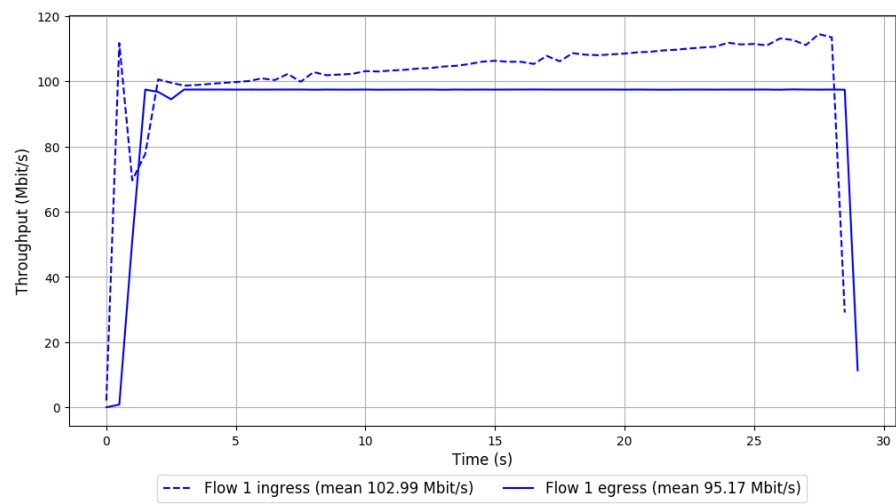
-- Flow 1:

Average throughput: 95.17 Mbit/s

95th percentile per-packet one-way delay: 111.261 ms

Loss rate: 8.11%

Run 3: Report of Indigo-MusesT — Data Link

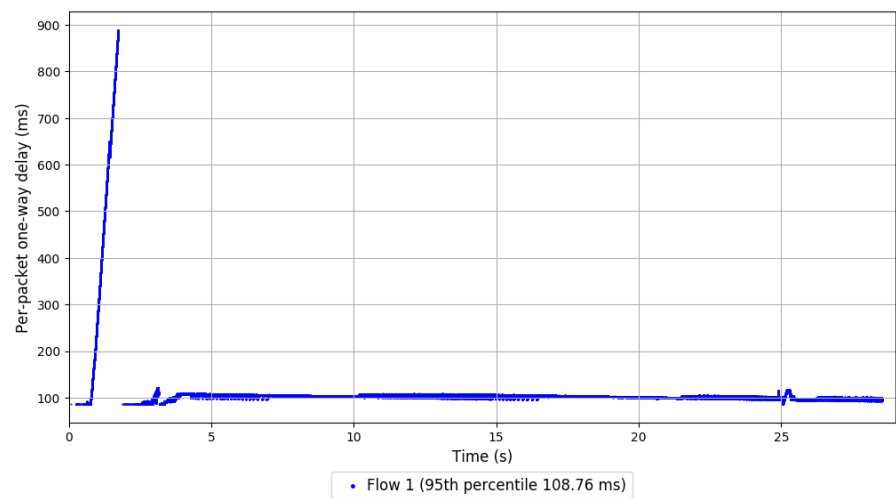
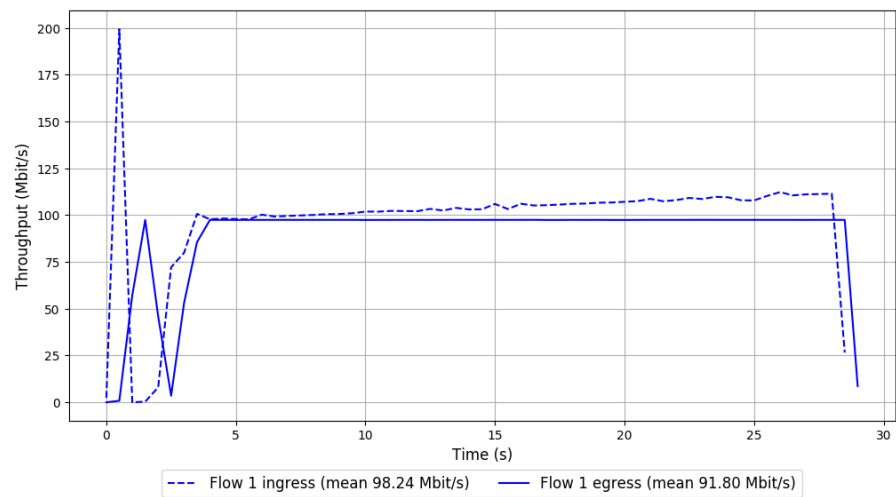


Run 4: Statistics of Indigo-MusesT

Start at: 2019-09-18 16:56:41  
End at: 2019-09-18 16:57:11  
Local clock offset: 3.627 ms  
Remote clock offset: 57.825 ms

# Below is generated by plot.py at 2019-09-18 18:01:29  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.80 Mbit/s  
95th percentile per-packet one-way delay: 108.763 ms  
Loss rate: 7.09%  
-- Flow 1:  
Average throughput: 91.80 Mbit/s  
95th percentile per-packet one-way delay: 108.763 ms  
Loss rate: 7.09%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-09-18 17:25:06

End at: 2019-09-18 17:25:36

Local clock offset: 4.025 ms

Remote clock offset: 63.052 ms

# Below is generated by plot.py at 2019-09-18 18:01:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 95.13 Mbit/s

95th percentile per-packet one-way delay: 115.725 ms

Loss rate: 8.12%

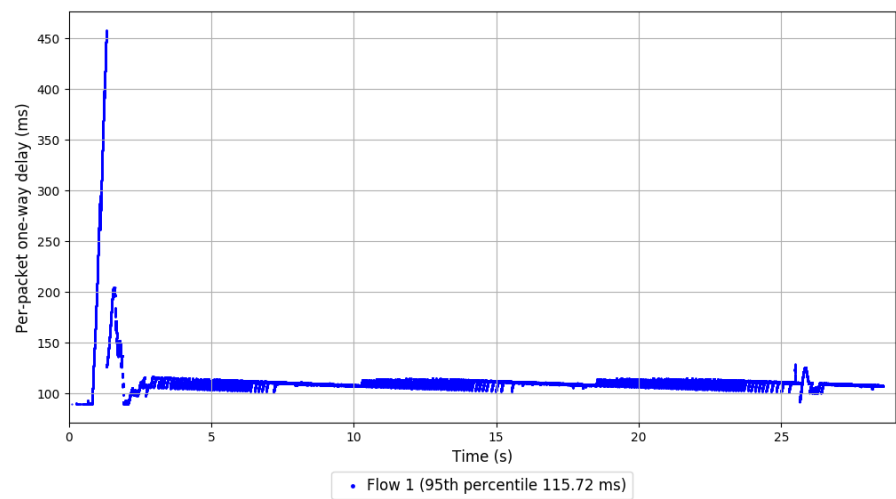
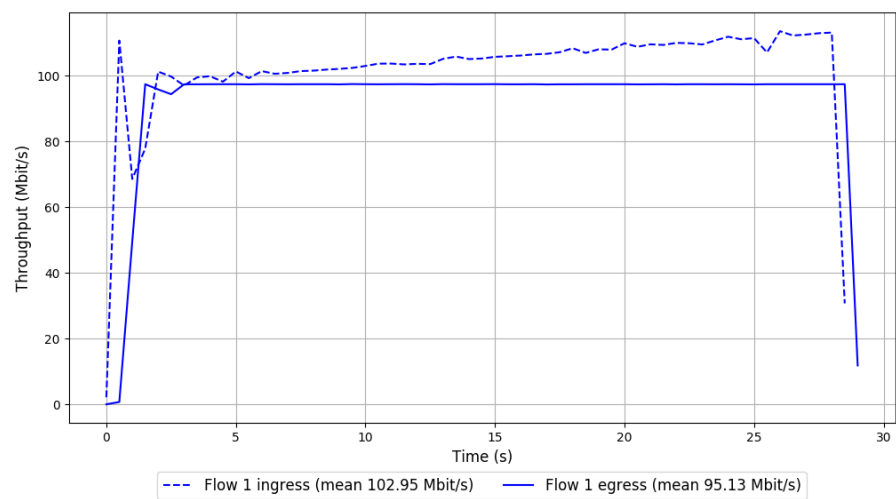
-- Flow 1:

Average throughput: 95.13 Mbit/s

95th percentile per-packet one-way delay: 115.725 ms

Loss rate: 8.12%

Run 5: Report of Indigo-MusesT — Data Link

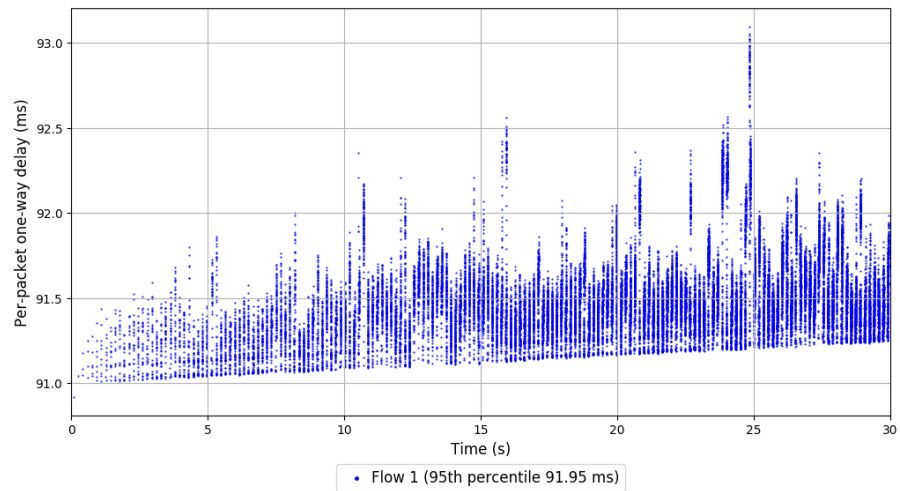
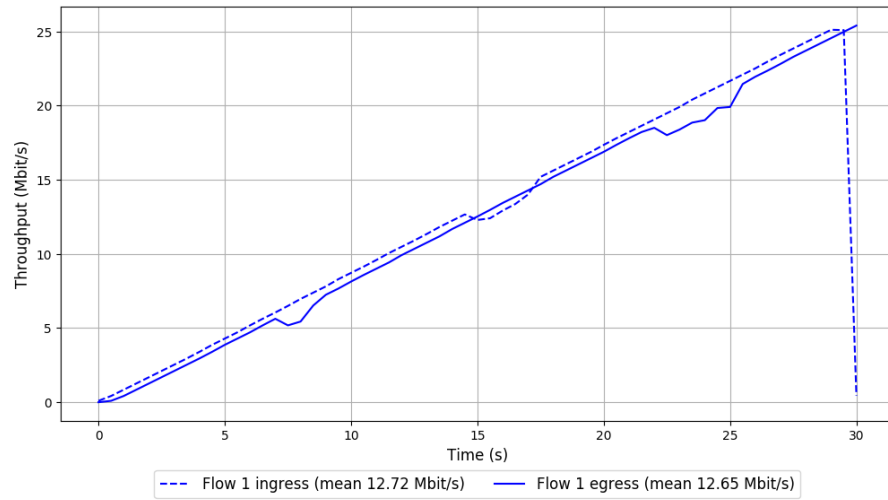


Run 1: Statistics of LEDBAT

Start at: 2019-09-18 15:45:35  
End at: 2019-09-18 15:46:05  
Local clock offset: -4.202 ms  
Remote clock offset: 41.708 ms

# Below is generated by plot.py at 2019-09-18 18:01:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 12.65 Mbit/s  
95th percentile per-packet one-way delay: 91.948 ms  
Loss rate: 1.12%  
-- Flow 1:  
Average throughput: 12.65 Mbit/s  
95th percentile per-packet one-way delay: 91.948 ms  
Loss rate: 1.12%

# Run 1: Report of LEDBAT — Data Link

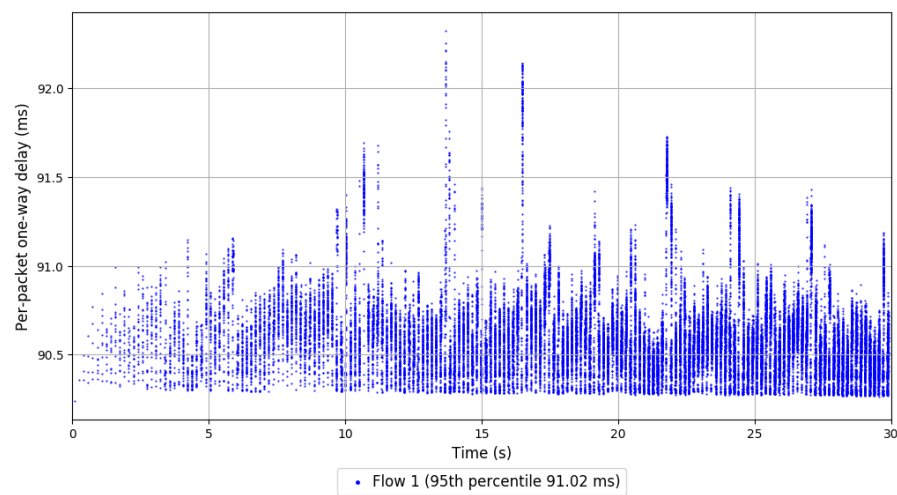
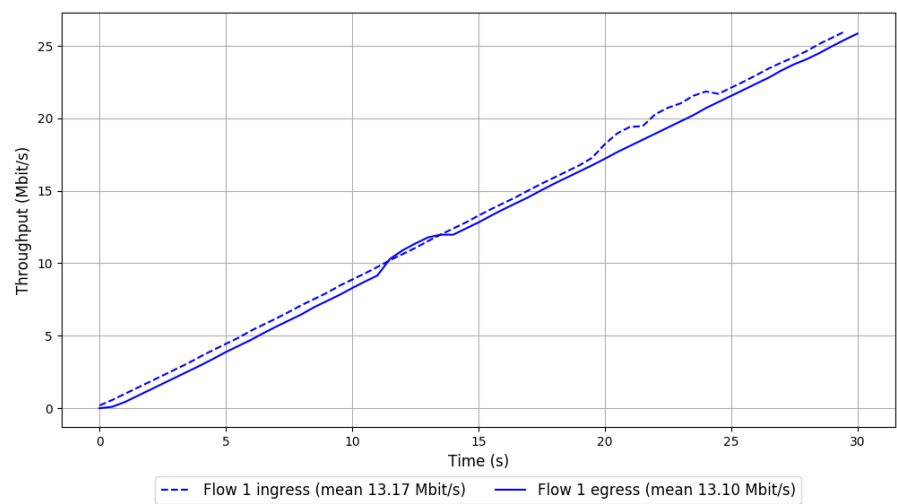


Run 2: Statistics of LEDBAT

Start at: 2019-09-18 16:14:03  
End at: 2019-09-18 16:14:33  
Local clock offset: 2.934 ms  
Remote clock offset: 50.409 ms

# Below is generated by plot.py at 2019-09-18 18:01:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 13.10 Mbit/s  
95th percentile per-packet one-way delay: 91.015 ms  
Loss rate: 1.10%  
-- Flow 1:  
Average throughput: 13.10 Mbit/s  
95th percentile per-packet one-way delay: 91.015 ms  
Loss rate: 1.10%

Run 2: Report of LEDBAT — Data Link

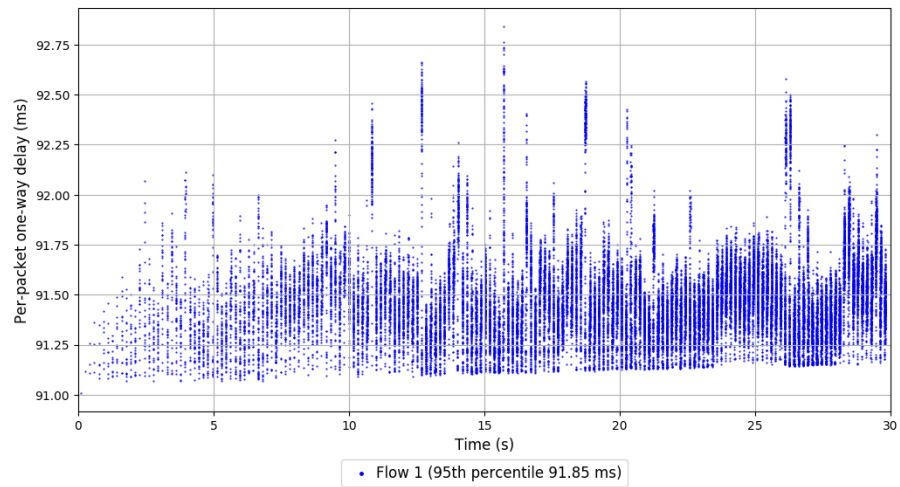
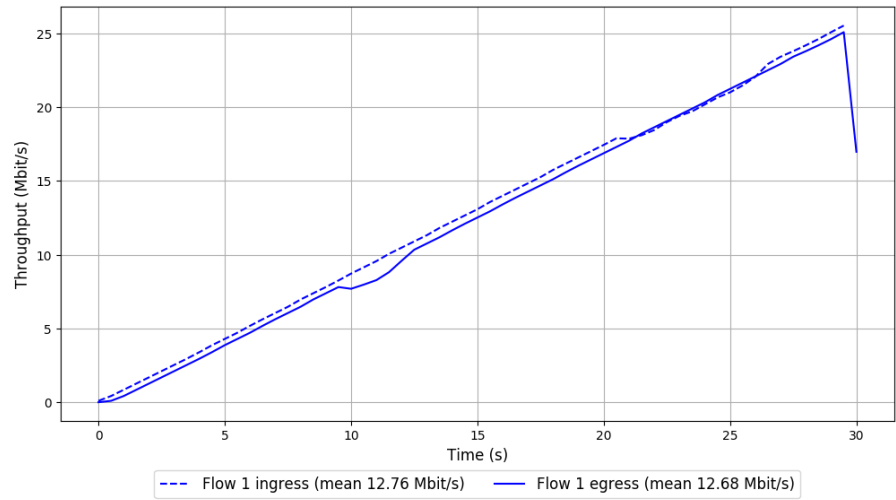


Run 3: Statistics of LEDBAT

Start at: 2019-09-18 16:42:30  
End at: 2019-09-18 16:43:00  
Local clock offset: 3.76 ms  
Remote clock offset: 54.487 ms

# Below is generated by plot.py at 2019-09-18 18:01:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 12.68 Mbit/s  
95th percentile per-packet one-way delay: 91.847 ms  
Loss rate: 1.12%  
-- Flow 1:  
Average throughput: 12.68 Mbit/s  
95th percentile per-packet one-way delay: 91.847 ms  
Loss rate: 1.12%

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

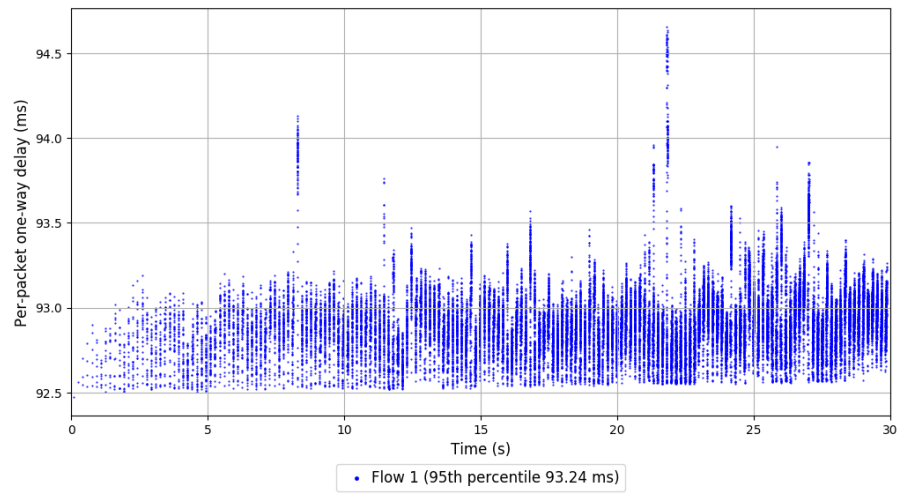
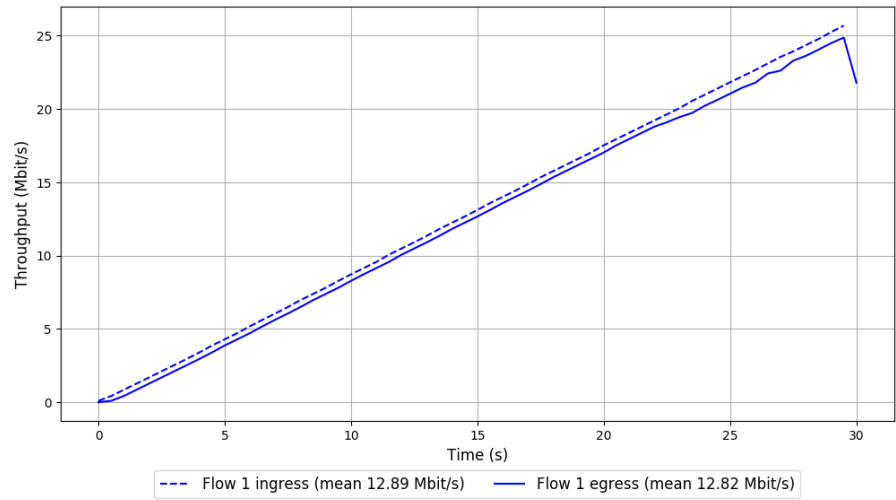


Run 4: Statistics of LEDBAT

Start at: 2019-09-18 17:10:55  
End at: 2019-09-18 17:11:25  
Local clock offset: 4.006 ms  
Remote clock offset: 58.536 ms

# Below is generated by plot.py at 2019-09-18 18:01:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 12.82 Mbit/s  
95th percentile per-packet one-way delay: 93.241 ms  
Loss rate: 1.12%  
-- Flow 1:  
Average throughput: 12.82 Mbit/s  
95th percentile per-packet one-way delay: 93.241 ms  
Loss rate: 1.12%

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

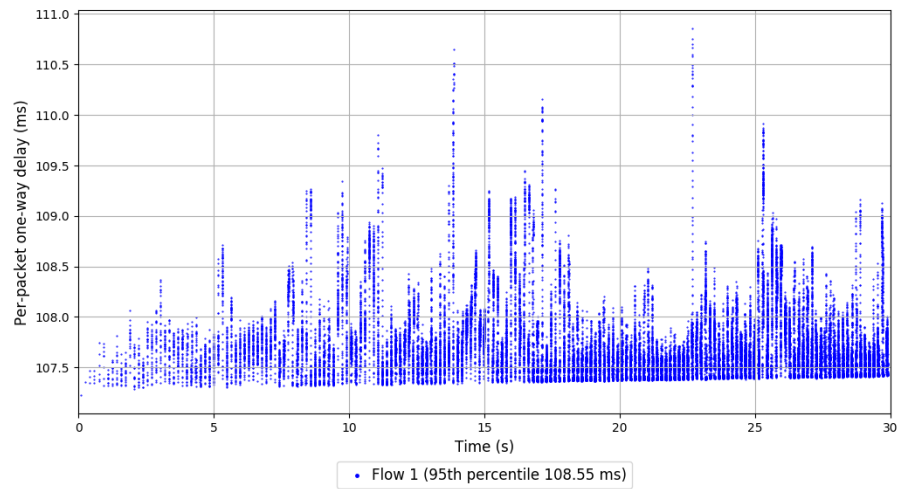
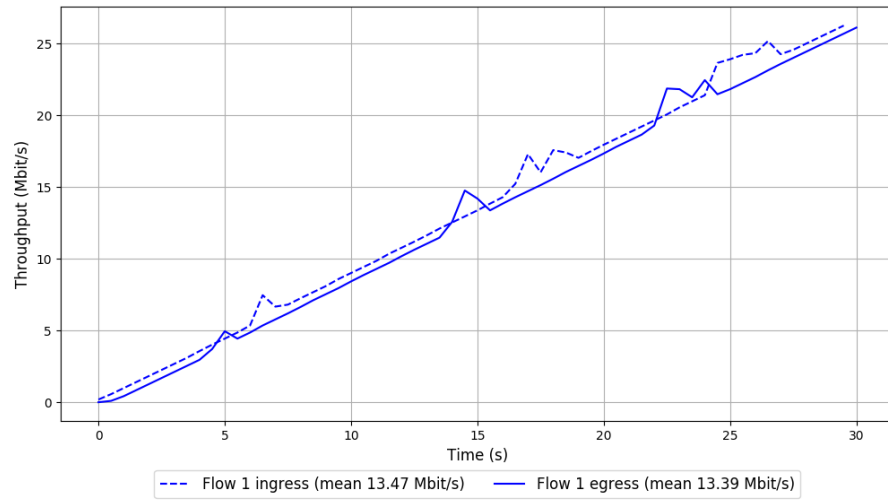


Run 5: Statistics of LEDBAT

Start at: 2019-09-18 17:39:24  
End at: 2019-09-18 17:39:54  
Local clock offset: 20.914 ms  
Remote clock offset: 63.499 ms

# Below is generated by plot.py at 2019-09-18 18:01:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 13.39 Mbit/s  
95th percentile per-packet one-way delay: 108.552 ms  
Loss rate: 1.09%  
-- Flow 1:  
Average throughput: 13.39 Mbit/s  
95th percentile per-packet one-way delay: 108.552 ms  
Loss rate: 1.09%

## Run 5: Report of LEDBAT — Data Link

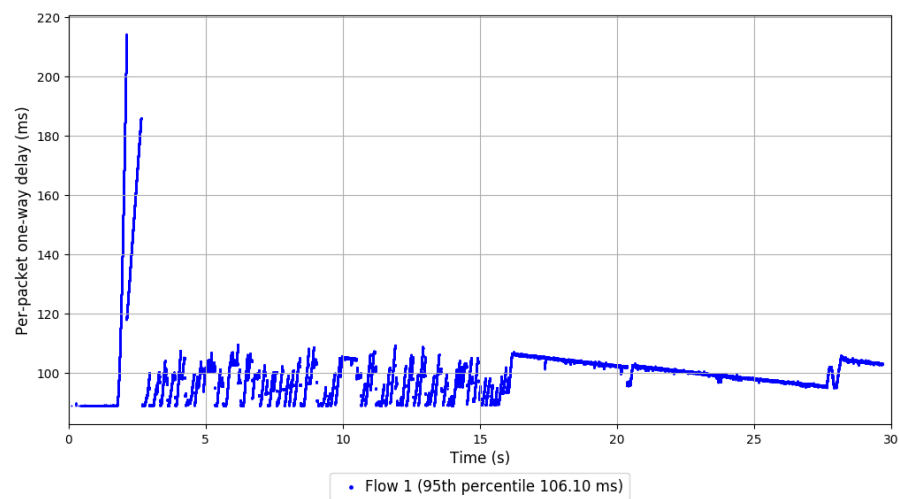
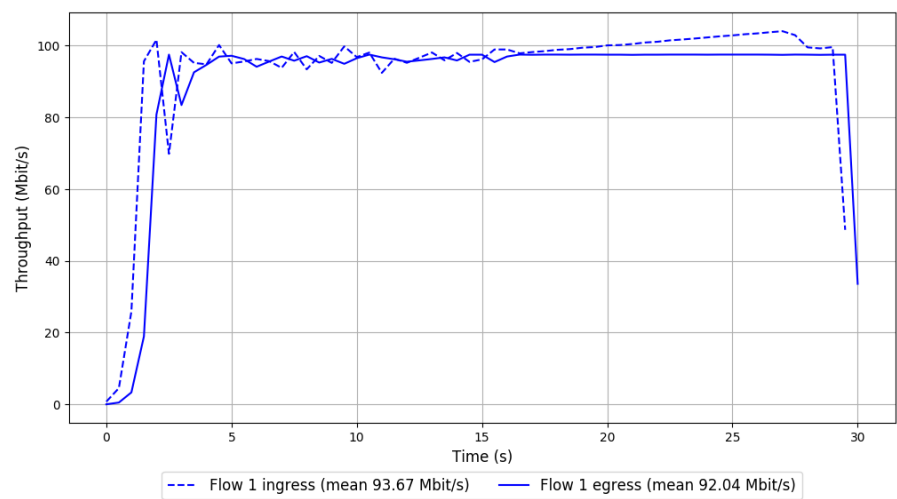


```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-09-18 15:53:52
End at: 2019-09-18 15:54:22
Local clock offset: -5.215 ms
Remote clock offset: 42.855 ms

# Below is generated by plot.py at 2019-09-18 18:02:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.04 Mbit/s
95th percentile per-packet one-way delay: 106.103 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 92.04 Mbit/s
95th percentile per-packet one-way delay: 106.103 ms
Loss rate: 2.27%
```

Run 1: Report of Muses\_DecisionTree — Data Link



Run 2: Statistics of Muses\\_DecisionTree

Start at: 2019-09-18 16:22:19

End at: 2019-09-18 16:22:49

Local clock offset: 4.825 ms

Remote clock offset: 52.19 ms

# Below is generated by plot.py at 2019-09-18 18:02:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.02 Mbit/s

95th percentile per-packet one-way delay: 109.175 ms

Loss rate: 2.11%

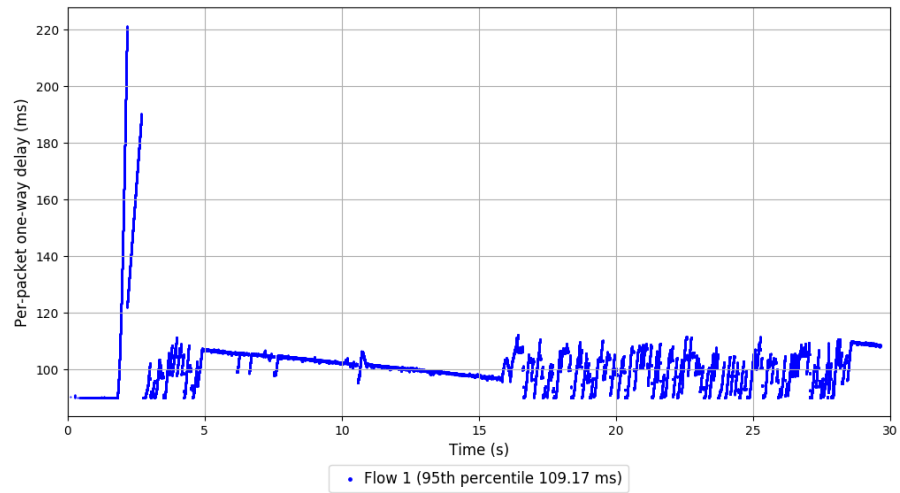
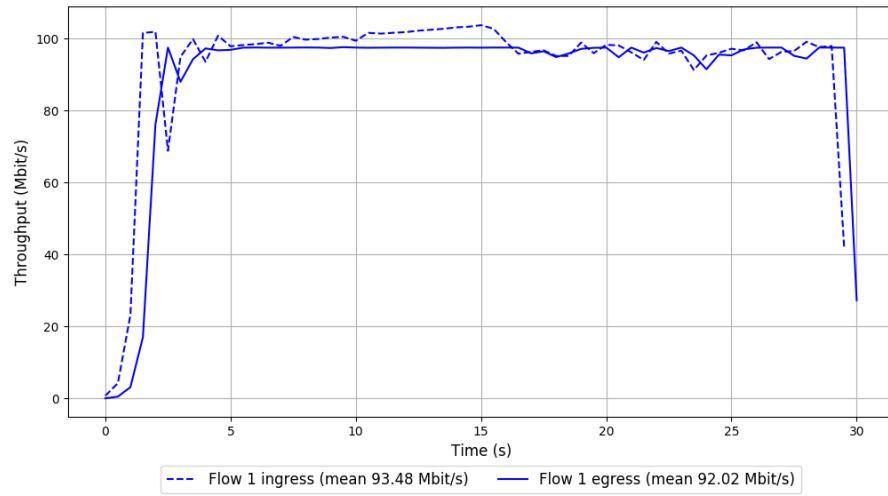
-- Flow 1:

Average throughput: 92.02 Mbit/s

95th percentile per-packet one-way delay: 109.175 ms

Loss rate: 2.11%

## Run 2: Report of Muses\_DecisionTree — Data Link



Run 3: Statistics of Muses\\_DecisionTree

Start at: 2019-09-18 16:50:47

End at: 2019-09-18 16:51:17

Local clock offset: 3.599 ms

Remote clock offset: 55.14 ms

# Below is generated by plot.py at 2019-09-18 18:02:13

# Datalink statistics

-- Total of 1 flow:

Average throughput: 92.39 Mbit/s

95th percentile per-packet one-way delay: 108.522 ms

Loss rate: 3.76%

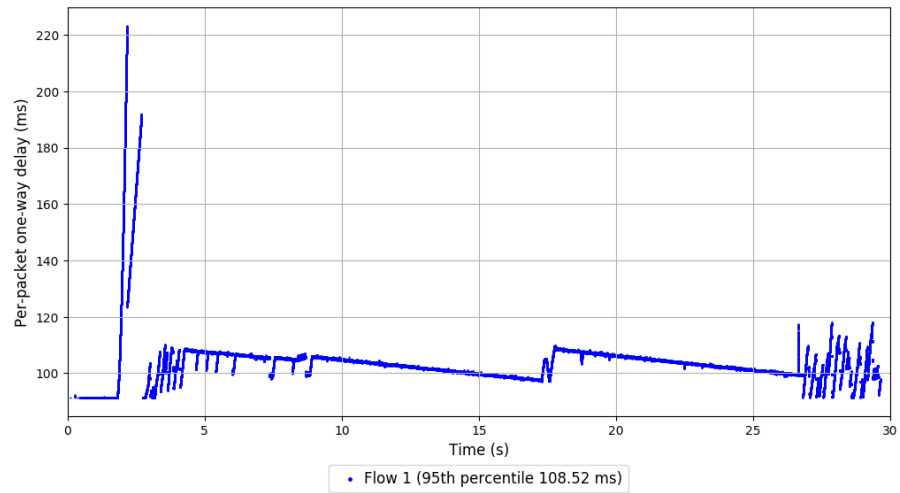
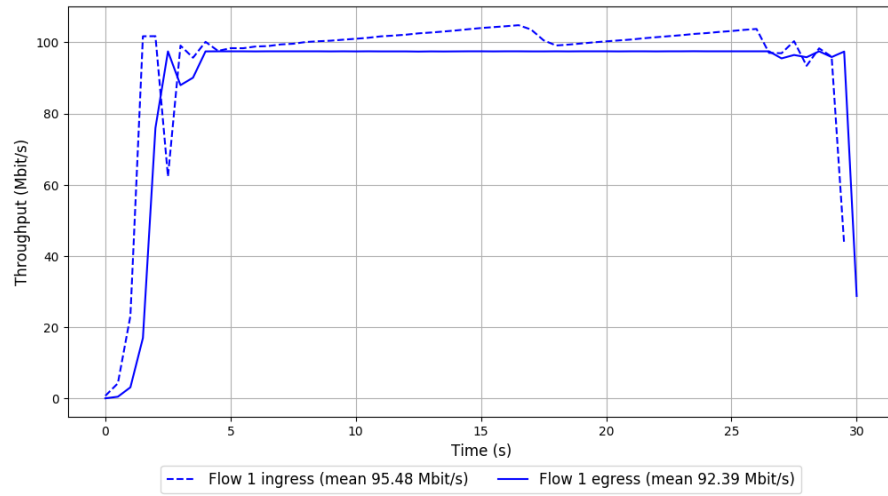
-- Flow 1:

Average throughput: 92.39 Mbit/s

95th percentile per-packet one-way delay: 108.522 ms

Loss rate: 3.76%

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

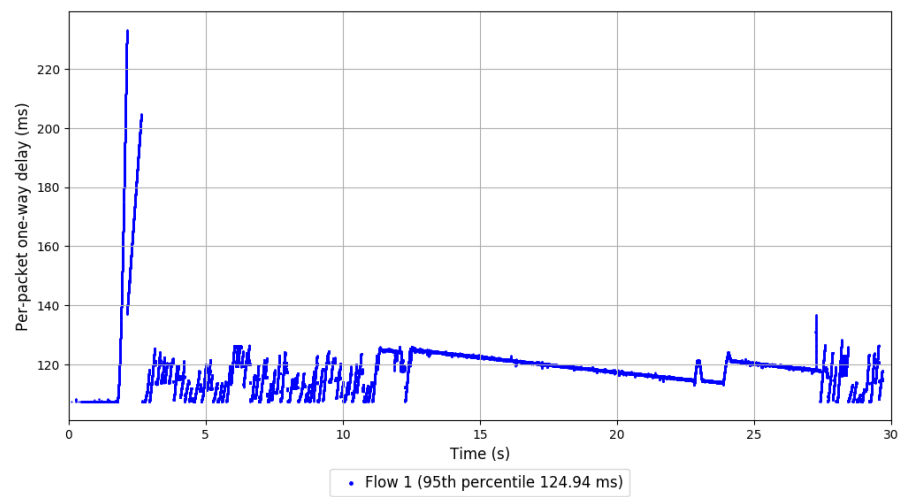
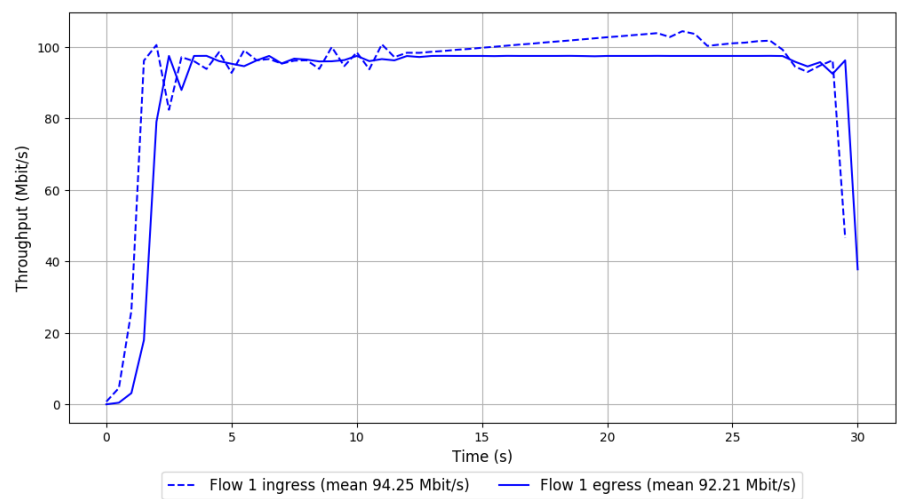


Run 4: Statistics of Muses\\_DecisionTree

Start at: 2019-09-18 17:19:12  
End at: 2019-09-18 17:19:42  
Local clock offset: 24.411 ms  
Remote clock offset: 61.486 ms

# Below is generated by plot.py at 2019-09-18 18:02:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 92.21 Mbit/s  
95th percentile per-packet one-way delay: 124.942 ms  
Loss rate: 2.69%  
-- Flow 1:  
Average throughput: 92.21 Mbit/s  
95th percentile per-packet one-way delay: 124.942 ms  
Loss rate: 2.69%

Run 4: Report of Muses\_DecisionTree — Data Link

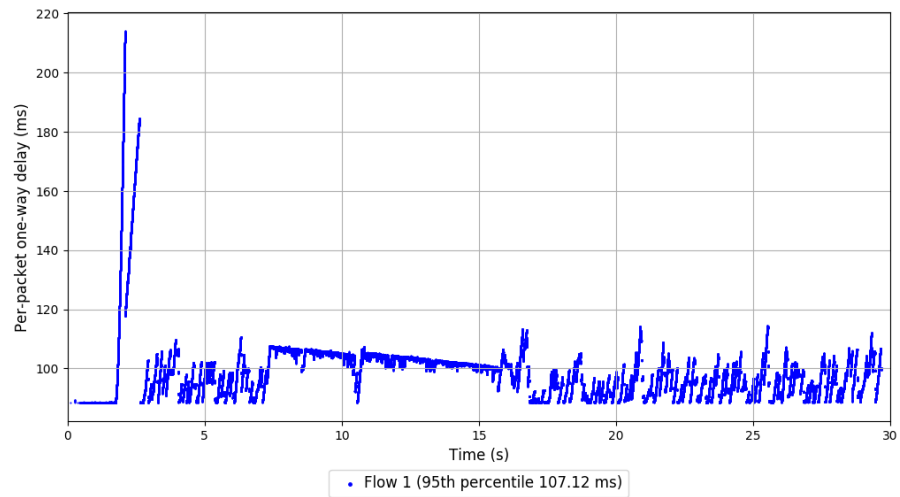
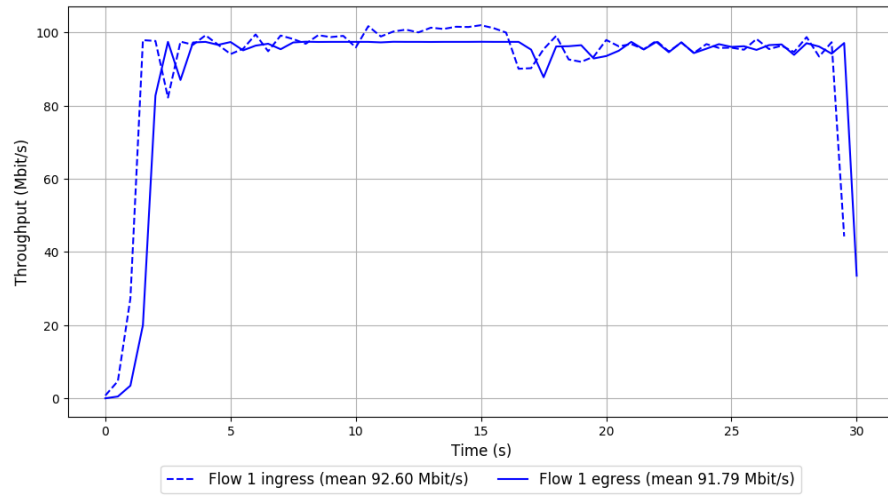


Run 5: Statistics of Muses\\_DecisionTree

Start at: 2019-09-18 17:47:40  
End at: 2019-09-18 17:48:10  
Local clock offset: 1.726 ms  
Remote clock offset: 65.184 ms

# Below is generated by plot.py at 2019-09-18 18:02:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.79 Mbit/s  
95th percentile per-packet one-way delay: 107.125 ms  
Loss rate: 1.41%  
-- Flow 1:  
Average throughput: 91.79 Mbit/s  
95th percentile per-packet one-way delay: 107.125 ms  
Loss rate: 1.41%

# Run 5: Report of Muses\_DecisionTree — Data Link

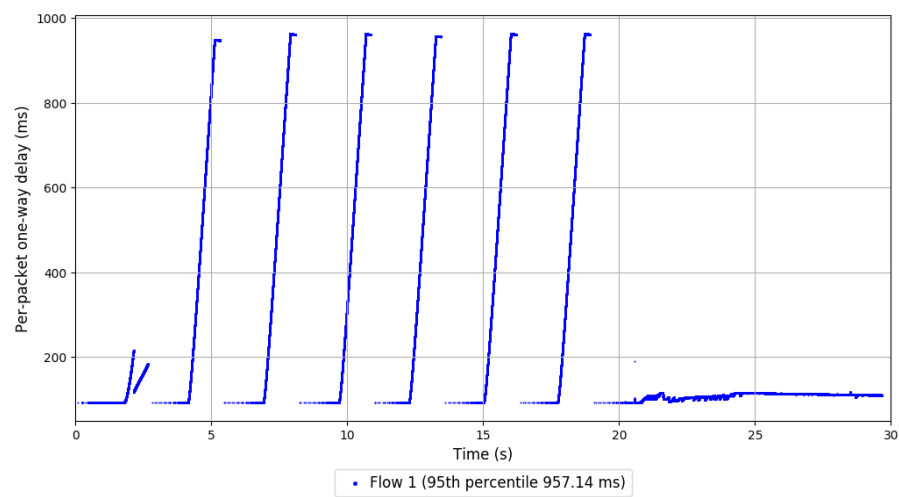
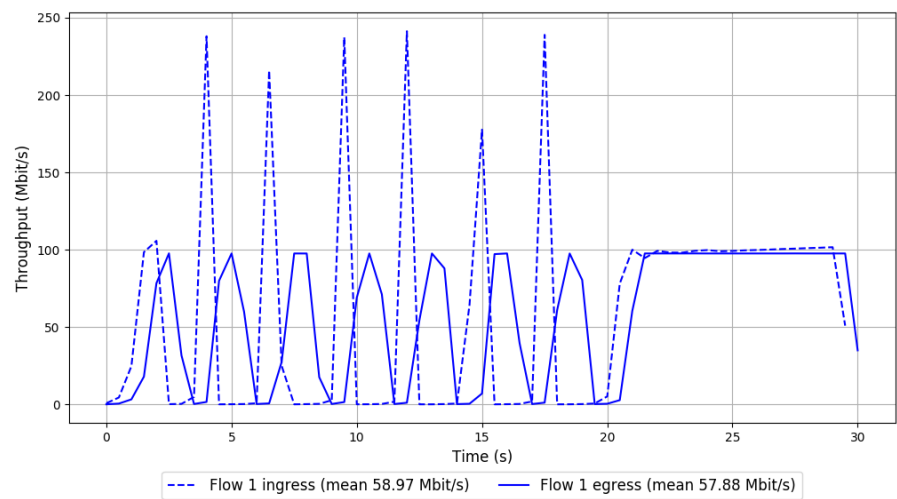


Run 1: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-09-18 15:33:43  
End at: 2019-09-18 15:34:13  
Local clock offset: 1.917 ms  
Remote clock offset: 37.913 ms

# Below is generated by plot.py at 2019-09-18 18:02:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 57.88 Mbit/s  
95th percentile per-packet one-way delay: 957.145 ms  
Loss rate: 2.40%  
-- Flow 1:  
Average throughput: 57.88 Mbit/s  
95th percentile per-packet one-way delay: 957.145 ms  
Loss rate: 2.40%

Run 1: Report of Muses\_DecisionTreeH0 — Data Link

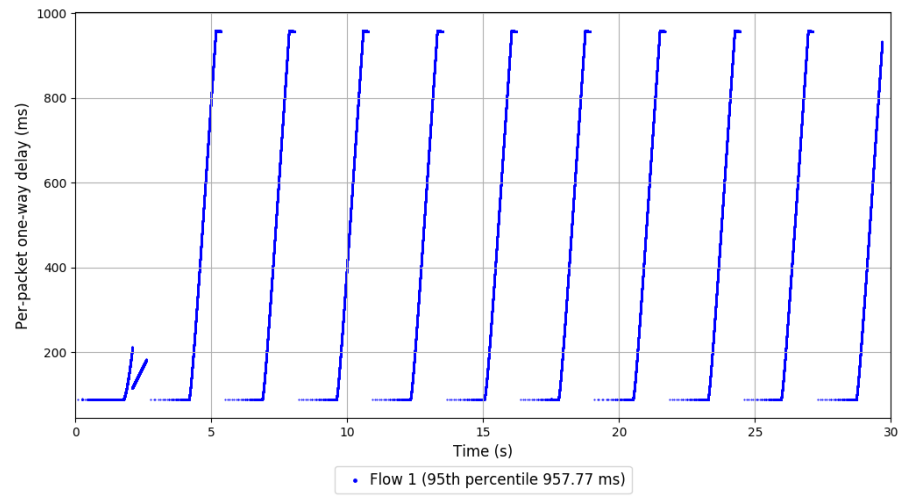
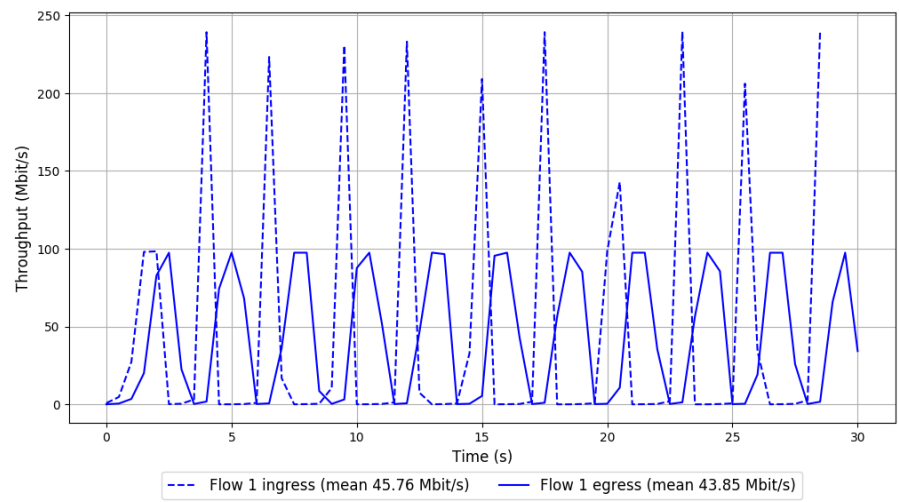


Run 2: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-09-18 16:02:10  
End at: 2019-09-18 16:02:40  
Local clock offset: -5.283 ms  
Remote clock offset: 45.023 ms

# Below is generated by plot.py at 2019-09-18 18:02:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 43.85 Mbit/s  
95th percentile per-packet one-way delay: 957.771 ms  
Loss rate: 2.03%  
-- Flow 1:  
Average throughput: 43.85 Mbit/s  
95th percentile per-packet one-way delay: 957.771 ms  
Loss rate: 2.03%

Run 2: Report of Muses\_DecisionTreeH0 — Data Link

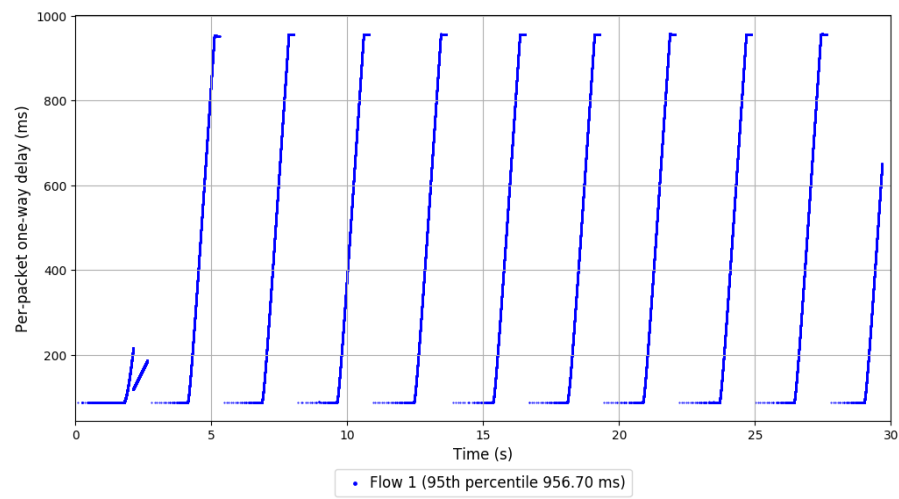
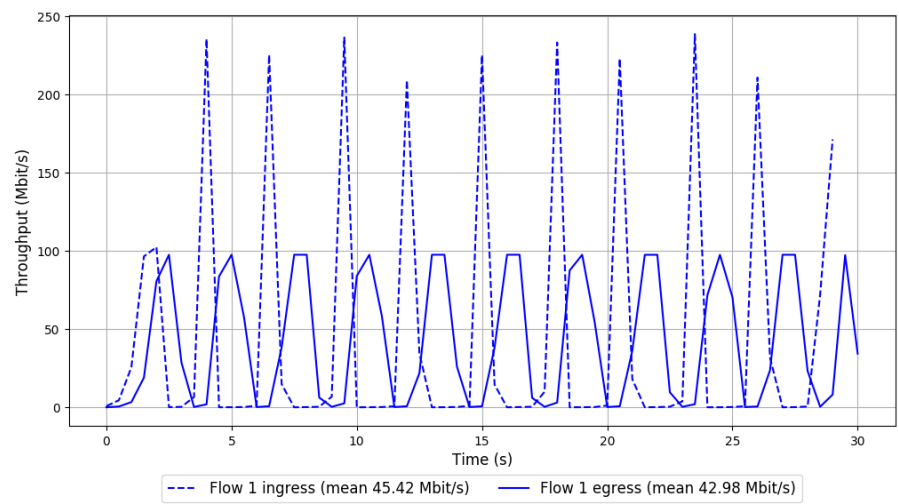


Run 3: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-09-18 16:30:38  
End at: 2019-09-18 16:31:08  
Local clock offset: 4.953 ms  
Remote clock offset: 53.044 ms

# Below is generated by plot.py at 2019-09-18 18:02:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 42.98 Mbit/s  
95th percentile per-packet one-way delay: 956.696 ms  
Loss rate: 4.25%  
-- Flow 1:  
Average throughput: 42.98 Mbit/s  
95th percentile per-packet one-way delay: 956.696 ms  
Loss rate: 4.25%

Run 3: Report of Muses\_DecisionTreeH0 — Data Link

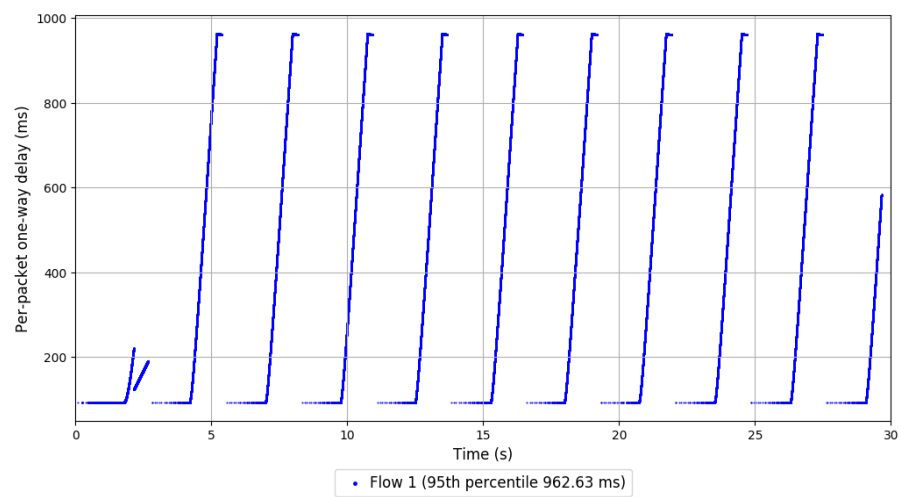
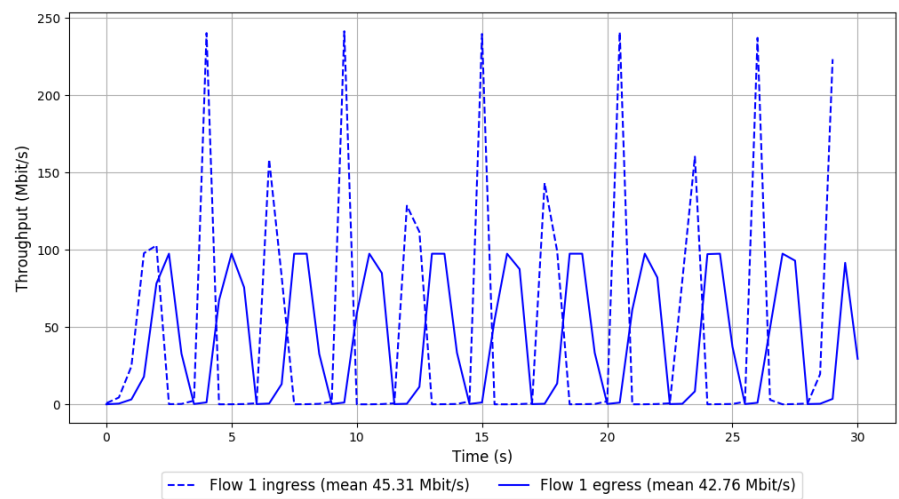


Run 4: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-09-18 16:59:05  
End at: 2019-09-18 16:59:35  
Local clock offset: 4.403 ms  
Remote clock offset: 55.701 ms

# Below is generated by plot.py at 2019-09-18 18:02:34  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 42.76 Mbit/s  
95th percentile per-packet one-way delay: 962.635 ms  
Loss rate: 4.79%  
-- Flow 1:  
Average throughput: 42.76 Mbit/s  
95th percentile per-packet one-way delay: 962.635 ms  
Loss rate: 4.79%

Run 4: Report of Muses\_DecisionTreeH0 — Data Link

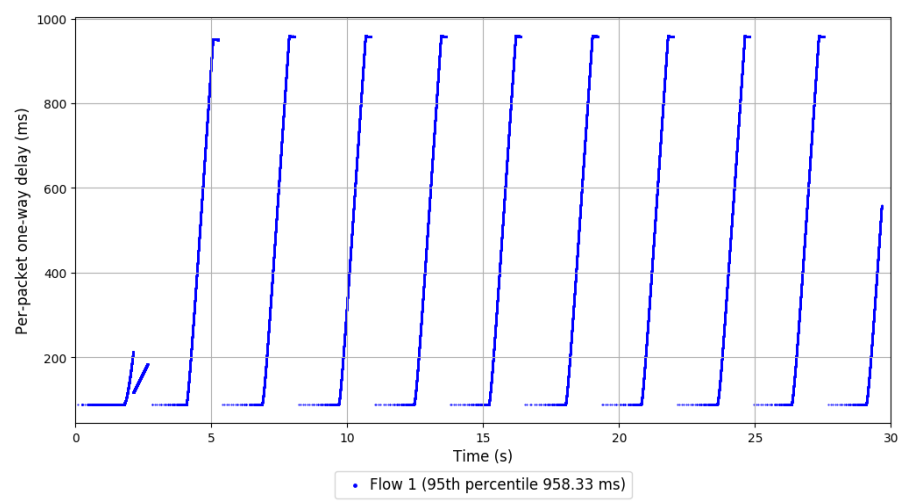
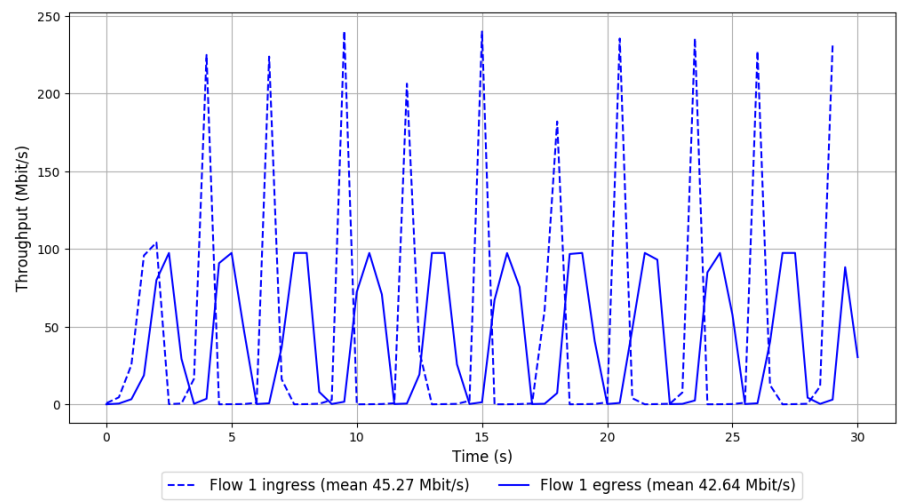


Run 5: Statistics of Muses\\_DecisionTreeH0

Start at: 2019-09-18 17:27:30  
End at: 2019-09-18 17:28:00  
Local clock offset: 3.269 ms  
Remote clock offset: 60.929 ms

# Below is generated by plot.py at 2019-09-18 18:02:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 42.64 Mbit/s  
95th percentile per-packet one-way delay: 958.333 ms  
Loss rate: 5.00%  
-- Flow 1:  
Average throughput: 42.64 Mbit/s  
95th percentile per-packet one-way delay: 958.333 ms  
Loss rate: 5.00%

Run 5: Report of Muses\_DecisionTreeH0 — Data Link

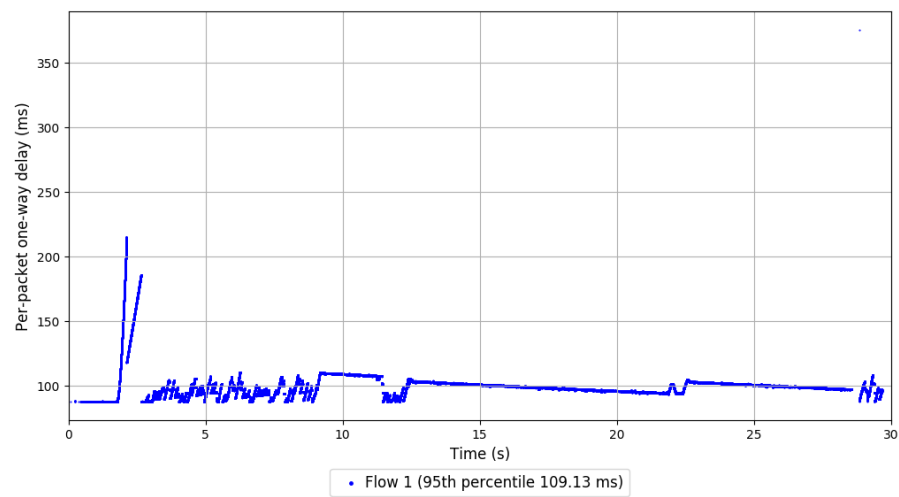
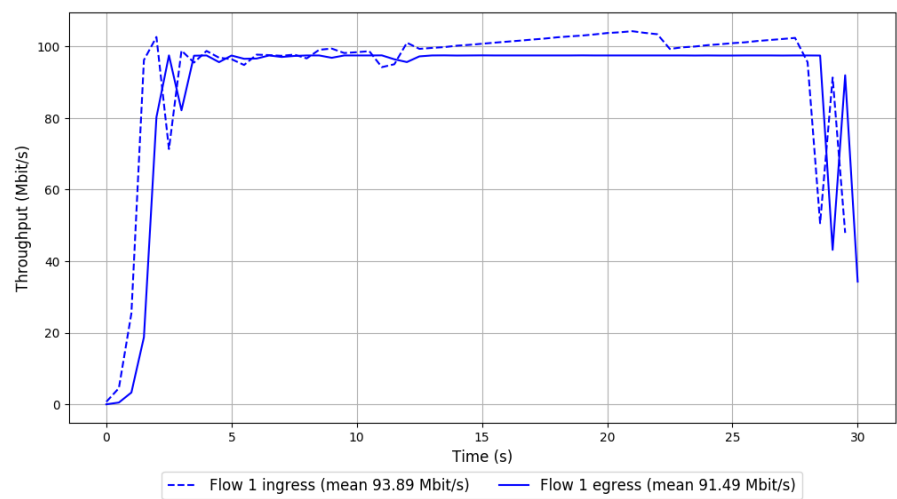


Run 1: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-09-18 15:39:39  
End at: 2019-09-18 15:40:09  
Local clock offset: -1.449 ms  
Remote clock offset: 41.477 ms

# Below is generated by plot.py at 2019-09-18 18:03:15  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.49 Mbit/s  
95th percentile per-packet one-way delay: 109.127 ms  
Loss rate: 3.08%  
-- Flow 1:  
Average throughput: 91.49 Mbit/s  
95th percentile per-packet one-way delay: 109.127 ms  
Loss rate: 3.08%

Run 1: Report of Muses\_DecisionTreeR0 — Data Link

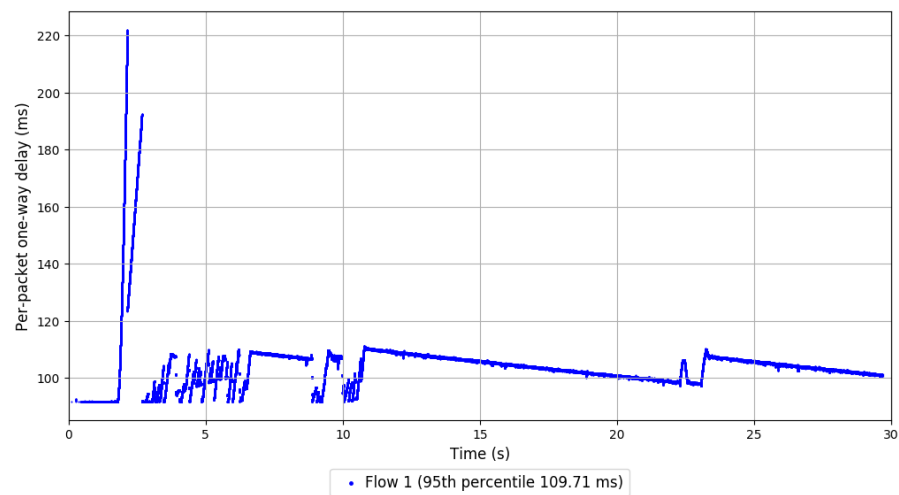
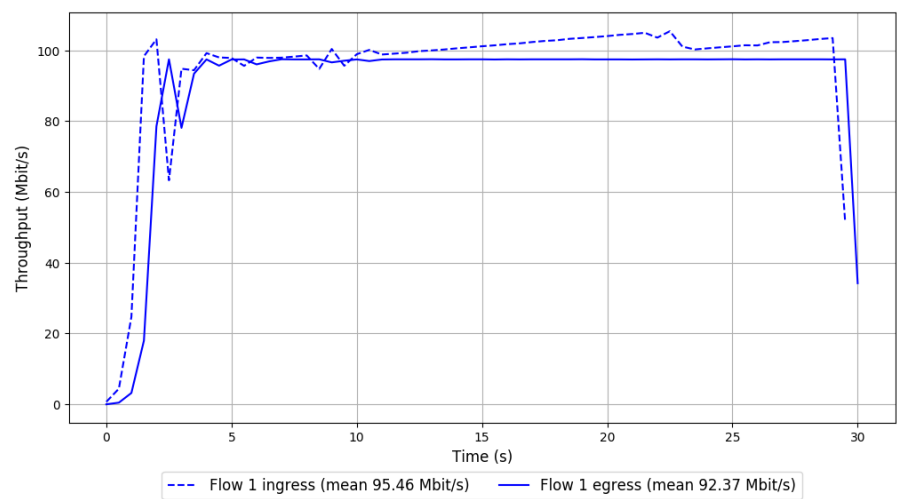


Run 2: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-09-18 16:08:07  
End at: 2019-09-18 16:08:37  
Local clock offset: 0.365 ms  
Remote clock offset: 46.882 ms

# Below is generated by plot.py at 2019-09-18 18:03:17  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 92.37 Mbit/s  
95th percentile per-packet one-way delay: 109.708 ms  
Loss rate: 3.78%  
-- Flow 1:  
Average throughput: 92.37 Mbit/s  
95th percentile per-packet one-way delay: 109.708 ms  
Loss rate: 3.78%

Run 2: Report of Muses\_DecisionTreeR0 — Data Link



Run 3: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-09-18 16:36:35

End at: 2019-09-18 16:37:05

Local clock offset: 4.837 ms

Remote clock offset: 52.39 ms

# Below is generated by plot.py at 2019-09-18 18:03:17

# Datalink statistics

-- Total of 1 flow:

Average throughput: 91.23 Mbit/s

95th percentile per-packet one-way delay: 111.357 ms

Loss rate: 2.85%

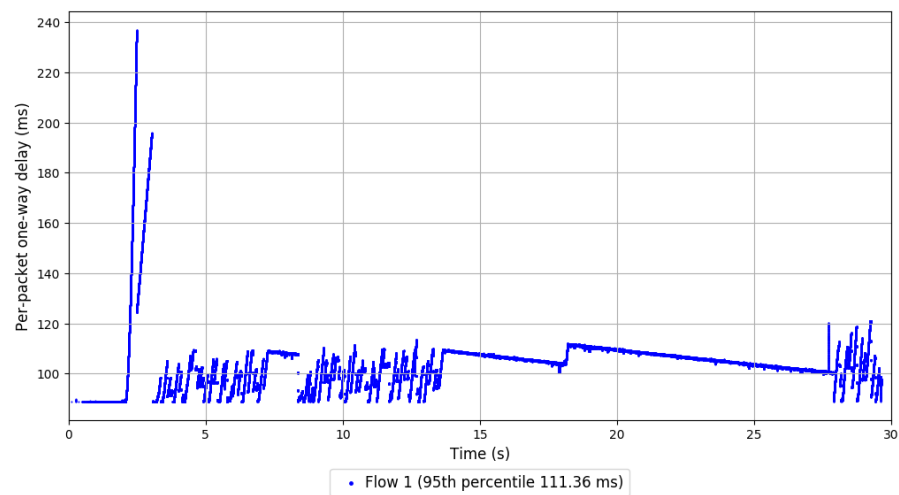
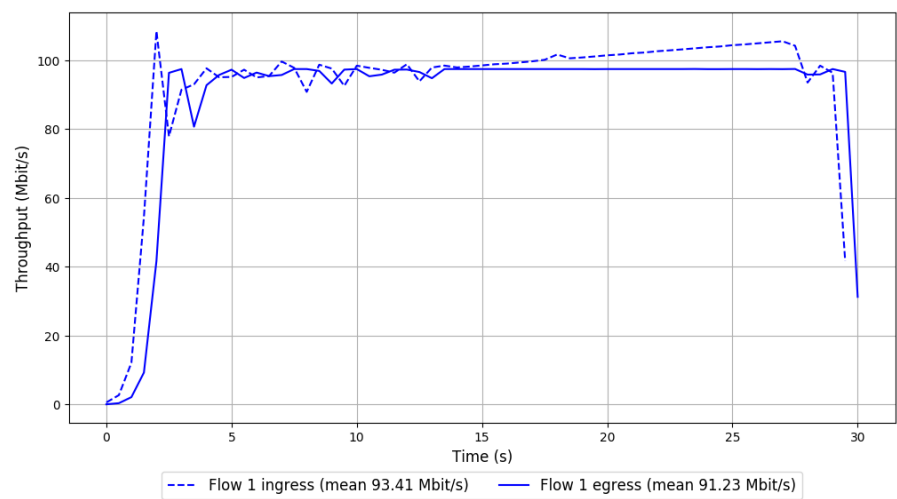
-- Flow 1:

Average throughput: 91.23 Mbit/s

95th percentile per-packet one-way delay: 111.357 ms

Loss rate: 2.85%

Run 3: Report of Muses\_DecisionTreeR0 — Data Link

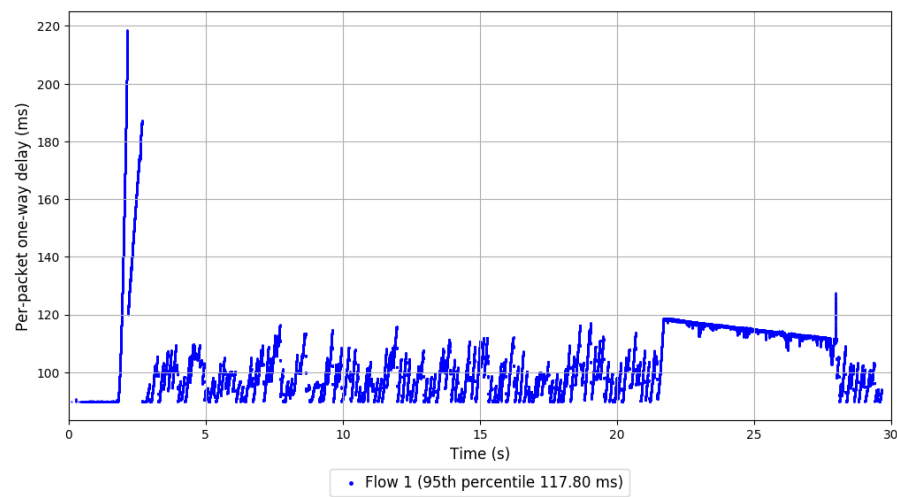
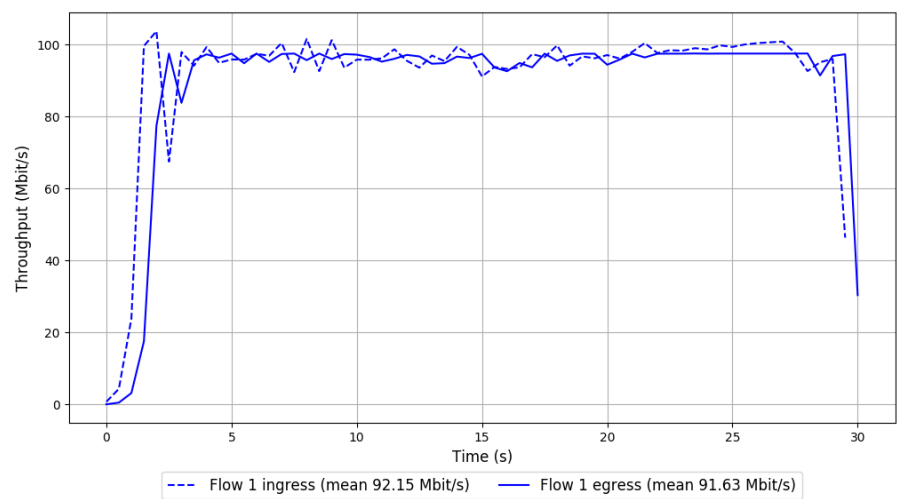


Run 4: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-09-18 17:05:01  
End at: 2019-09-18 17:05:31  
Local clock offset: 3.437 ms  
Remote clock offset: 59.552 ms

# Below is generated by plot.py at 2019-09-18 18:03:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.63 Mbit/s  
95th percentile per-packet one-way delay: 117.802 ms  
Loss rate: 1.12%  
-- Flow 1:  
Average throughput: 91.63 Mbit/s  
95th percentile per-packet one-way delay: 117.802 ms  
Loss rate: 1.12%

Run 4: Report of Muses\_DecisionTreeR0 — Data Link

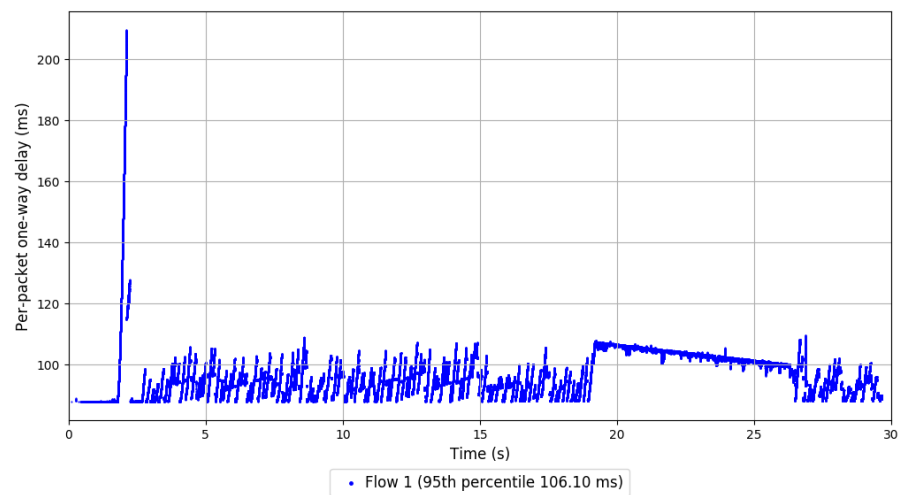
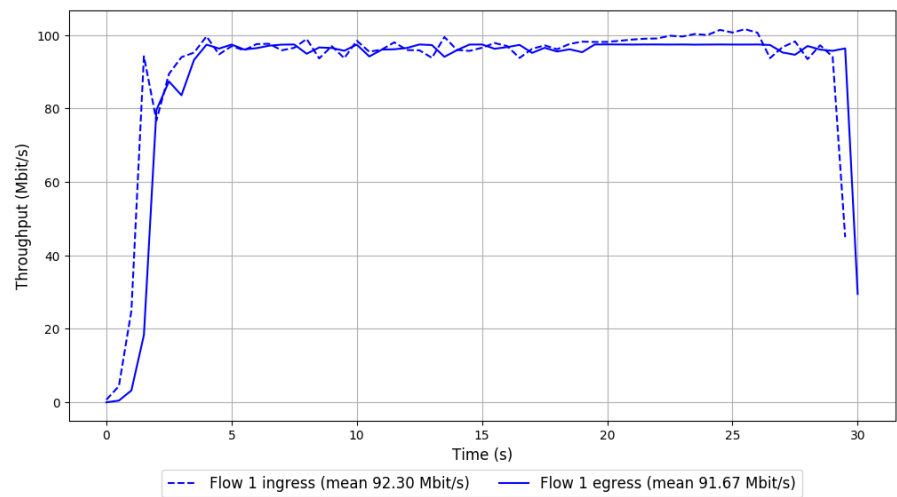


Run 5: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-09-18 17:33:28  
End at: 2019-09-18 17:33:58  
Local clock offset: 2.801 ms  
Remote clock offset: 62.547 ms

# Below is generated by plot.py at 2019-09-18 18:03:25  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 91.67 Mbit/s  
95th percentile per-packet one-way delay: 106.096 ms  
Loss rate: 1.22%  
-- Flow 1:  
Average throughput: 91.67 Mbit/s  
95th percentile per-packet one-way delay: 106.096 ms  
Loss rate: 1.22%

Run 5: Report of Muses\_DecisionTreeR0 — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-09-18 15:56:13

End at: 2019-09-18 15:56:43

Local clock offset: -5.607 ms

Remote clock offset: 44.372 ms

# Below is generated by plot.py at 2019-09-18 18:03:37

# Datalink statistics

-- Total of 1 flow:

Average throughput: 84.69 Mbit/s

95th percentile per-packet one-way delay: 329.359 ms

Loss rate: 0.72%

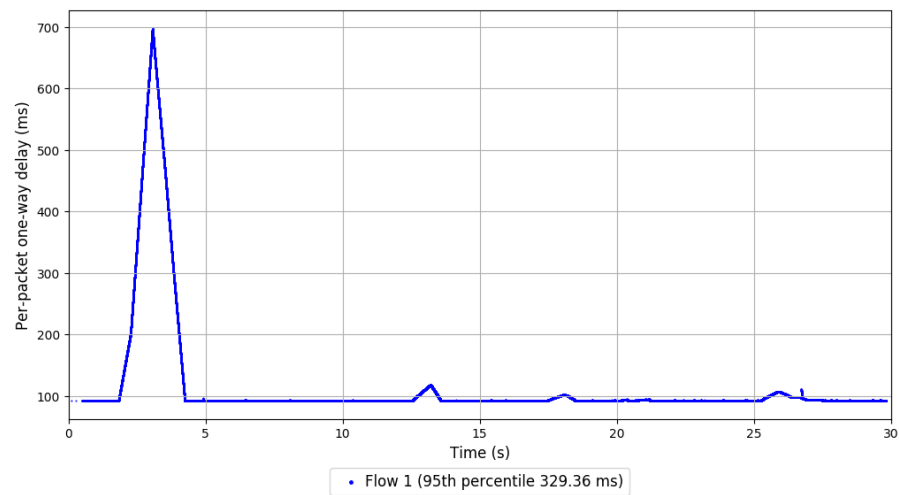
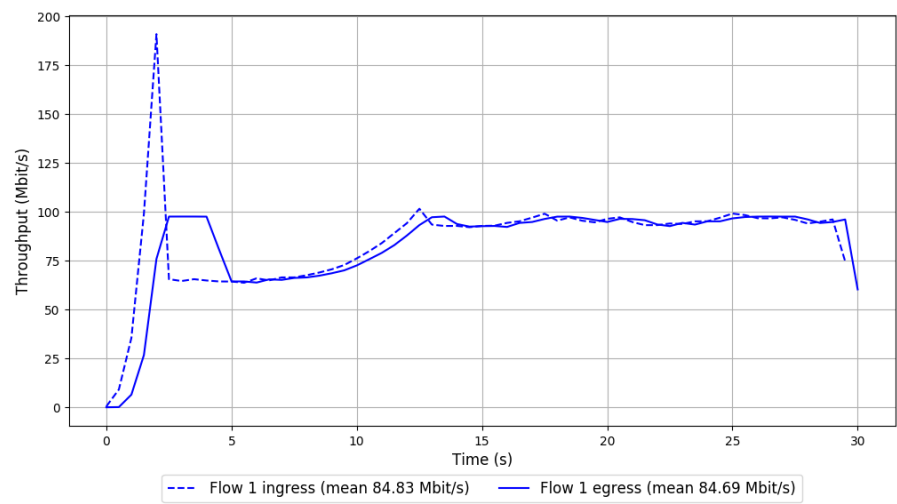
-- Flow 1:

Average throughput: 84.69 Mbit/s

95th percentile per-packet one-way delay: 329.359 ms

Loss rate: 0.72%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-09-18 16:24:42

End at: 2019-09-18 16:25:12

Local clock offset: 4.357 ms

Remote clock offset: 49.555 ms

# Below is generated by plot.py at 2019-09-18 18:03:38

# Datalink statistics

-- Total of 1 flow:

Average throughput: 84.61 Mbit/s

95th percentile per-packet one-way delay: 218.795 ms

Loss rate: 0.66%

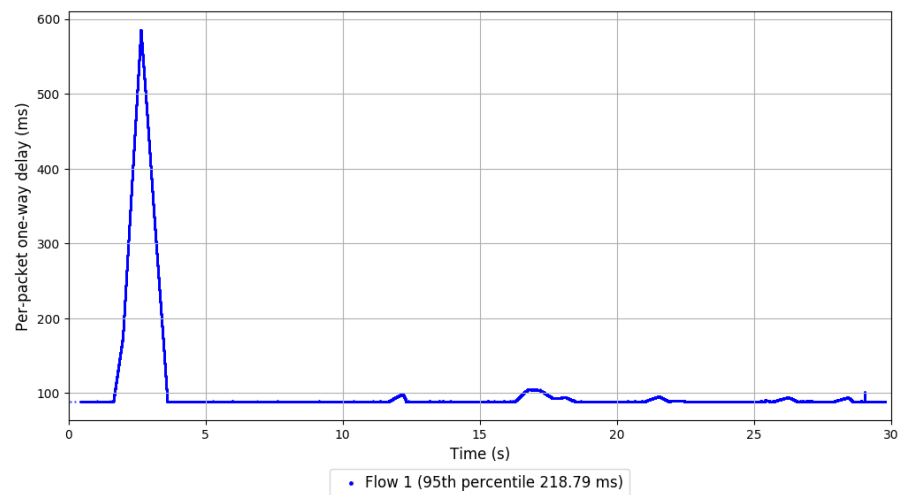
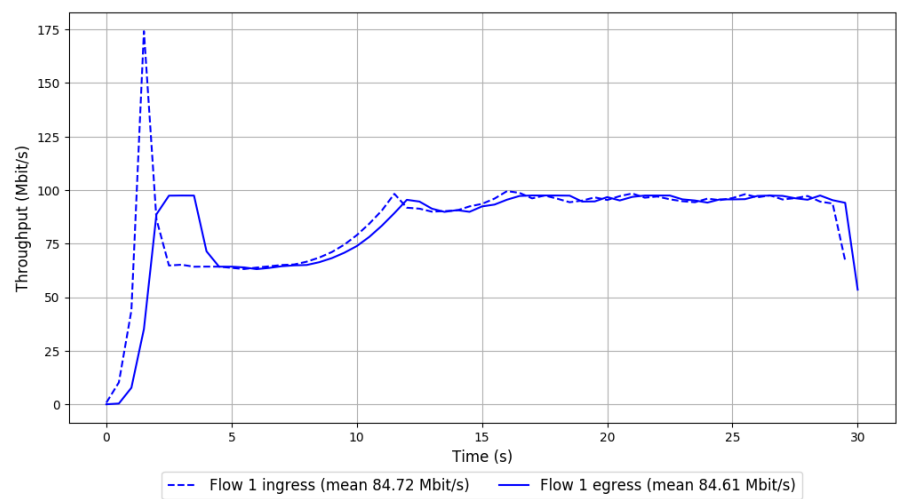
-- Flow 1:

Average throughput: 84.61 Mbit/s

95th percentile per-packet one-way delay: 218.795 ms

Loss rate: 0.66%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-09-18 16:53:08

End at: 2019-09-18 16:53:38

Local clock offset: 4.376 ms

Remote clock offset: 57.055 ms

# Below is generated by plot.py at 2019-09-18 18:03:42

# Datalink statistics

-- Total of 1 flow:

Average throughput: 85.45 Mbit/s

95th percentile per-packet one-way delay: 191.532 ms

Loss rate: 0.76%

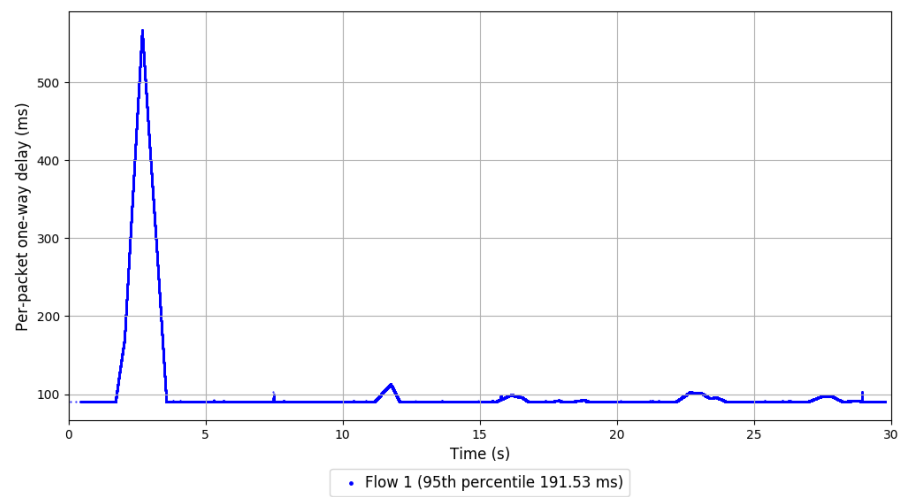
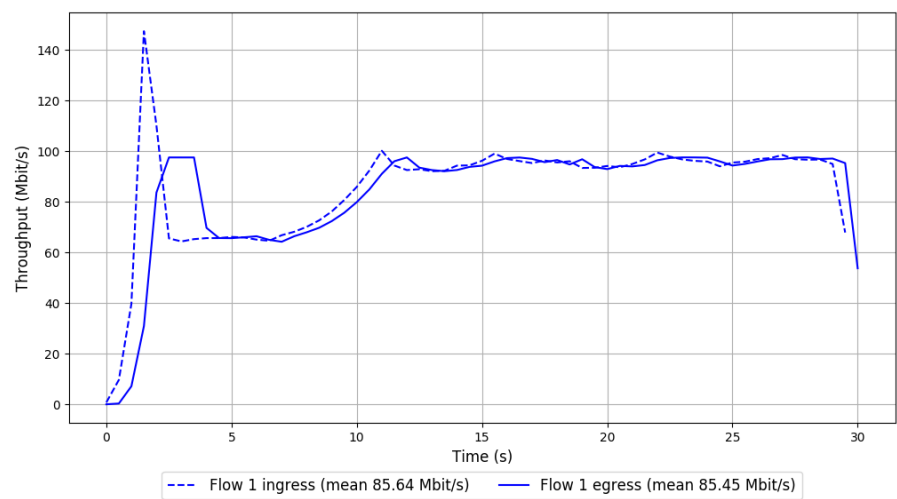
-- Flow 1:

Average throughput: 85.45 Mbit/s

95th percentile per-packet one-way delay: 191.532 ms

Loss rate: 0.76%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-09-18 17:21:33

End at: 2019-09-18 17:22:03

Local clock offset: 4.014 ms

Remote clock offset: 58.34 ms

# Below is generated by plot.py at 2019-09-18 18:04:15

# Datalink statistics

-- Total of 1 flow:

Average throughput: 85.29 Mbit/s

95th percentile per-packet one-way delay: 246.408 ms

Loss rate: 0.69%

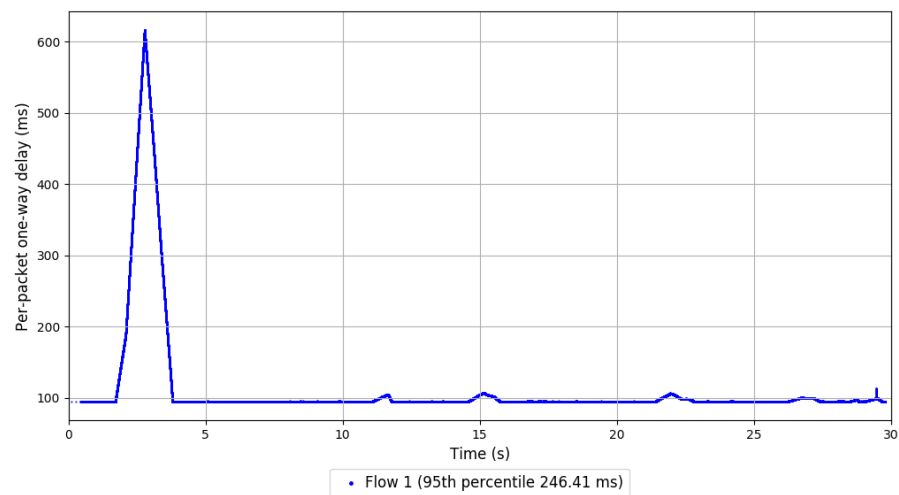
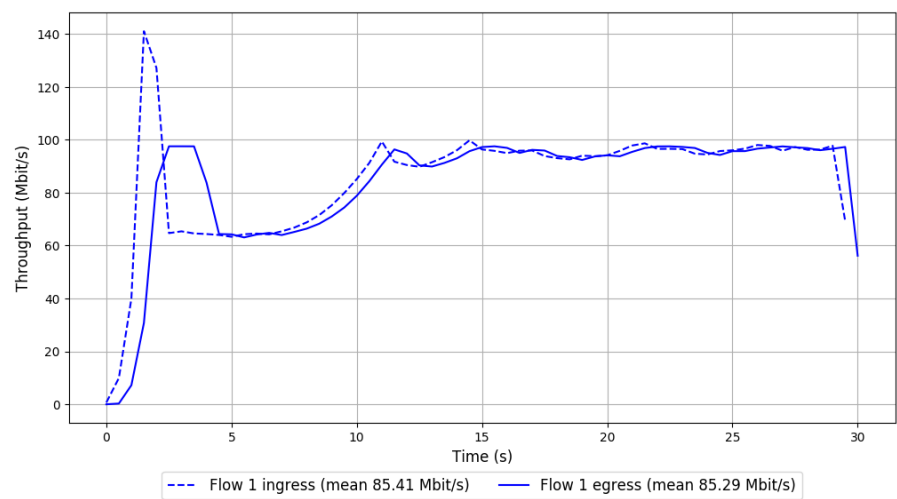
-- Flow 1:

Average throughput: 85.29 Mbit/s

95th percentile per-packet one-way delay: 246.408 ms

Loss rate: 0.69%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-09-18 17:50:02

End at: 2019-09-18 17:50:32

Local clock offset: 18.028 ms

Remote clock offset: 65.355 ms

# Below is generated by plot.py at 2019-09-18 18:04:17

# Datalink statistics

-- Total of 1 flow:

Average throughput: 87.57 Mbit/s

95th percentile per-packet one-way delay: 252.928 ms

Loss rate: 0.66%

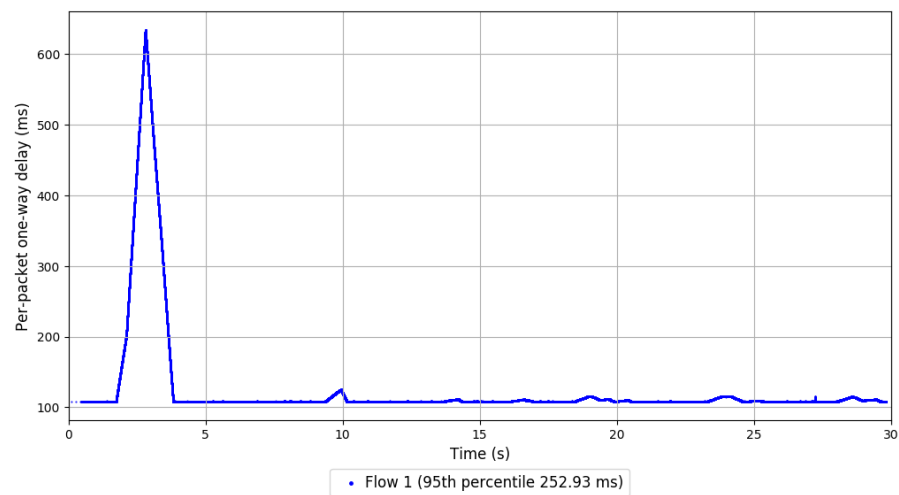
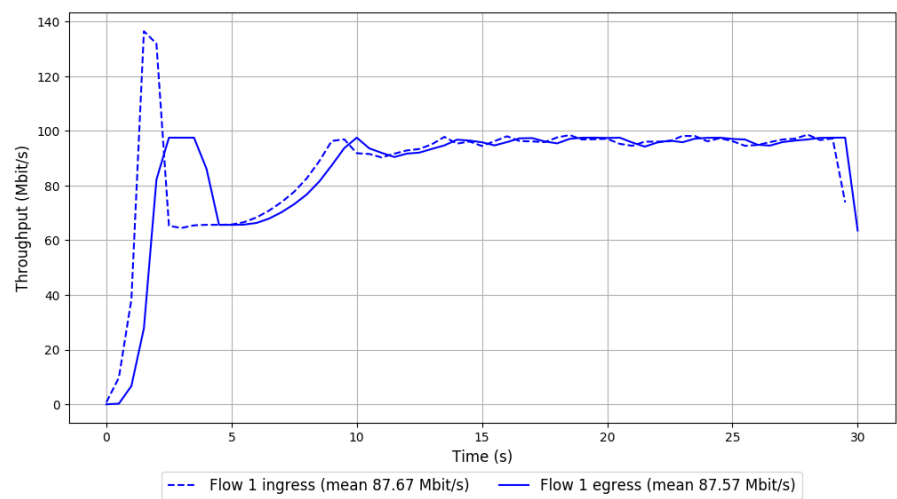
-- Flow 1:

Average throughput: 87.57 Mbit/s

95th percentile per-packet one-way delay: 252.928 ms

Loss rate: 0.66%

Run 5: Report of PCC-Allegro — Data Link

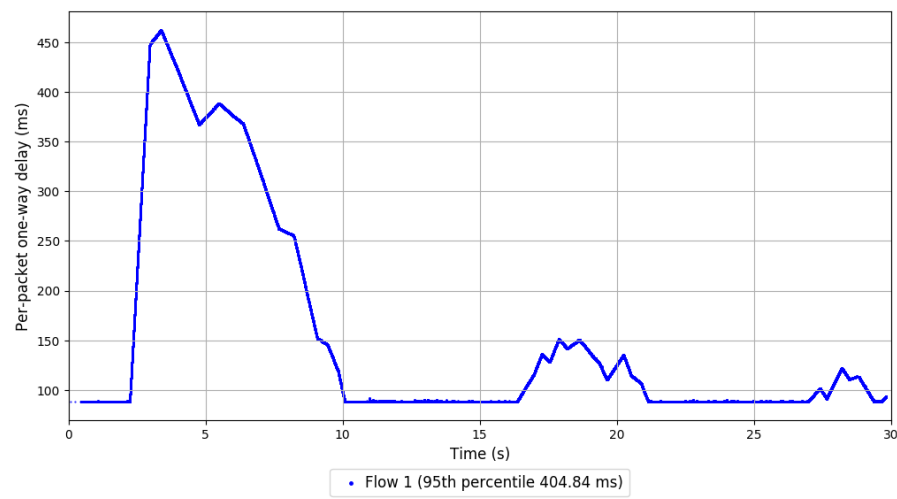
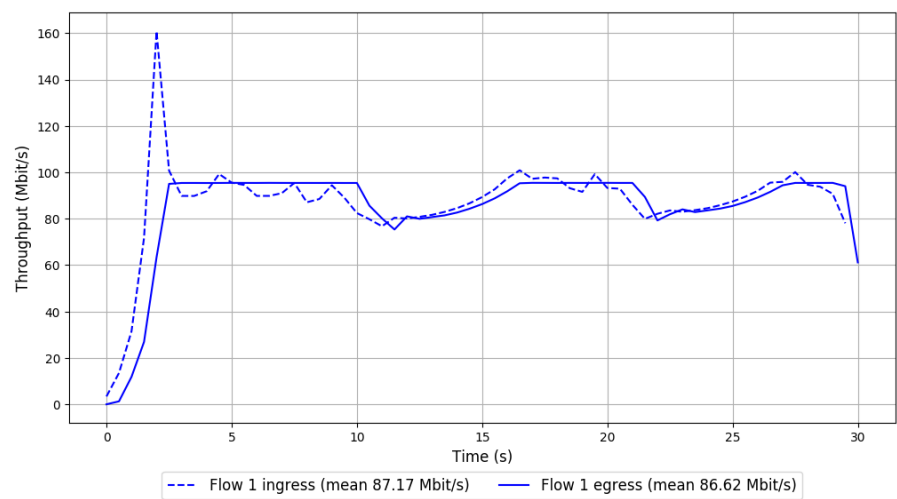


```
Run 1: Statistics of PCC-Expr

Start at: 2019-09-18 15:30:05
End at: 2019-09-18 15:30:35
Local clock offset: 3.537 ms
Remote clock offset: 36.807 ms

# Below is generated by plot.py at 2019-09-18 18:05:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.62 Mbit/s
95th percentile per-packet one-way delay: 404.838 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 86.62 Mbit/s
95th percentile per-packet one-way delay: 404.838 ms
Loss rate: 1.16%
```

Run 1: Report of PCC-Expr — Data Link

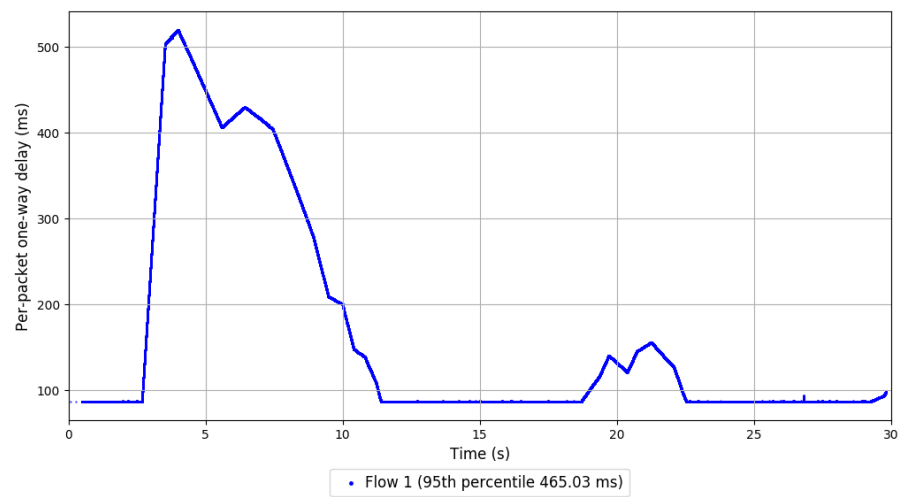
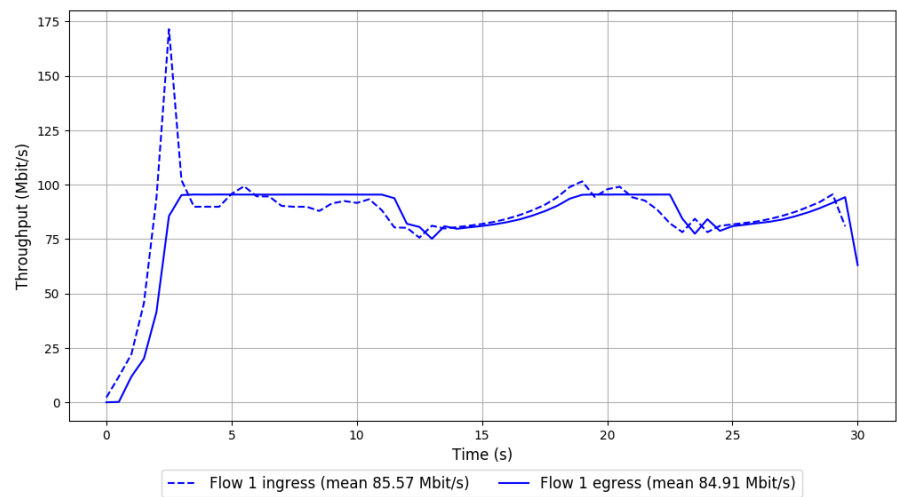


Run 2: Statistics of PCC-Expr

Start at: 2019-09-18 15:58:32  
End at: 2019-09-18 15:59:02  
Local clock offset: -6.752 ms  
Remote clock offset: 46.148 ms

# Below is generated by plot.py at 2019-09-18 18:05:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 84.91 Mbit/s  
95th percentile per-packet one-way delay: 465.027 ms  
Loss rate: 1.31%  
-- Flow 1:  
Average throughput: 84.91 Mbit/s  
95th percentile per-packet one-way delay: 465.027 ms  
Loss rate: 1.31%

Run 2: Report of PCC-Expr — Data Link

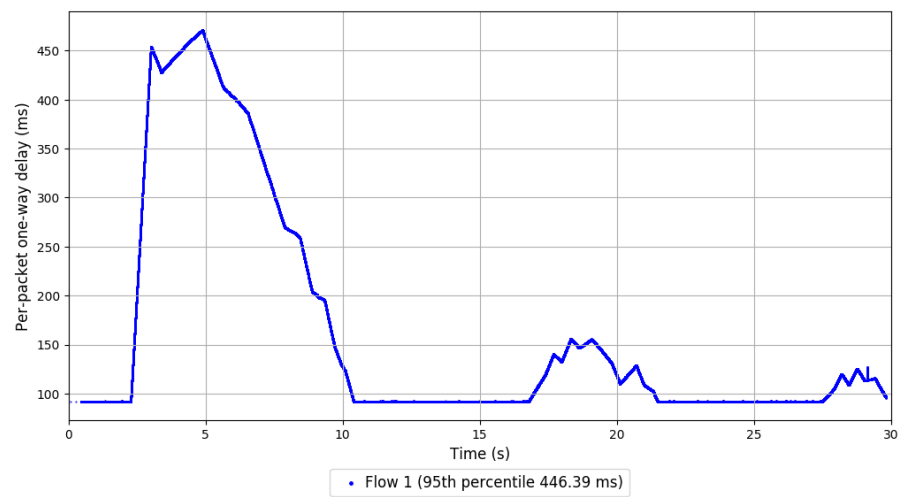
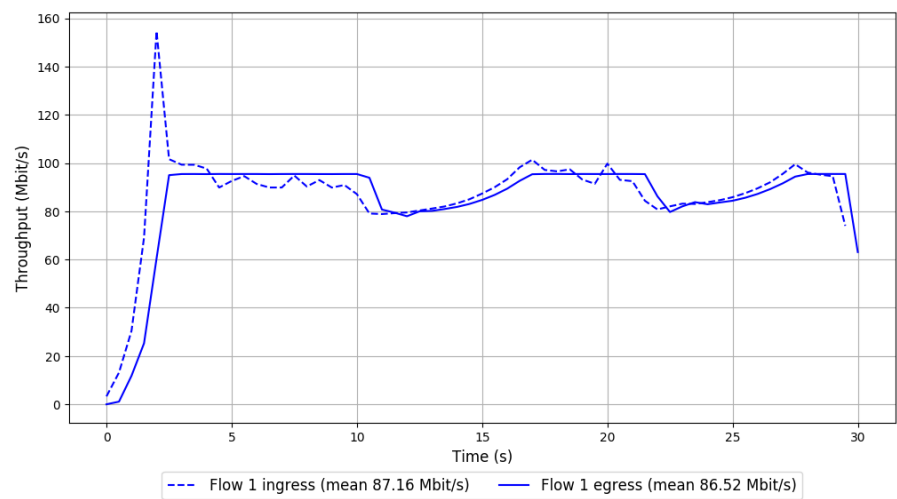


Run 3: Statistics of PCC-Expr

Start at: 2019-09-18 16:27:00  
End at: 2019-09-18 16:27:30  
Local clock offset: 4.611 ms  
Remote clock offset: 50.864 ms

# Below is generated by plot.py at 2019-09-18 18:05:26  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 86.52 Mbit/s  
95th percentile per-packet one-way delay: 446.391 ms  
Loss rate: 1.28%  
-- Flow 1:  
Average throughput: 86.52 Mbit/s  
95th percentile per-packet one-way delay: 446.391 ms  
Loss rate: 1.28%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2019-09-18 16:55:26

End at: 2019-09-18 16:55:56

Local clock offset: 3.623 ms

Remote clock offset: 56.72 ms

# Below is generated by plot.py at 2019-09-18 18:05:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 88.26 Mbit/s

95th percentile per-packet one-way delay: 423.234 ms

Loss rate: 1.45%

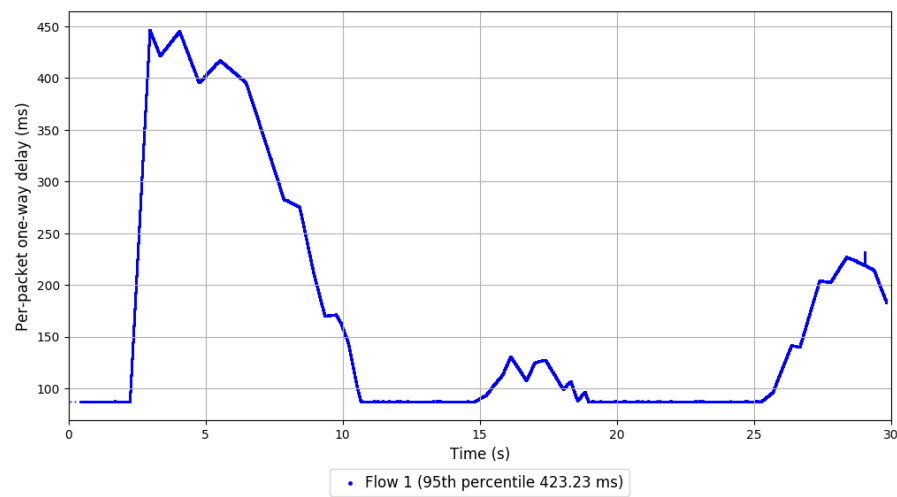
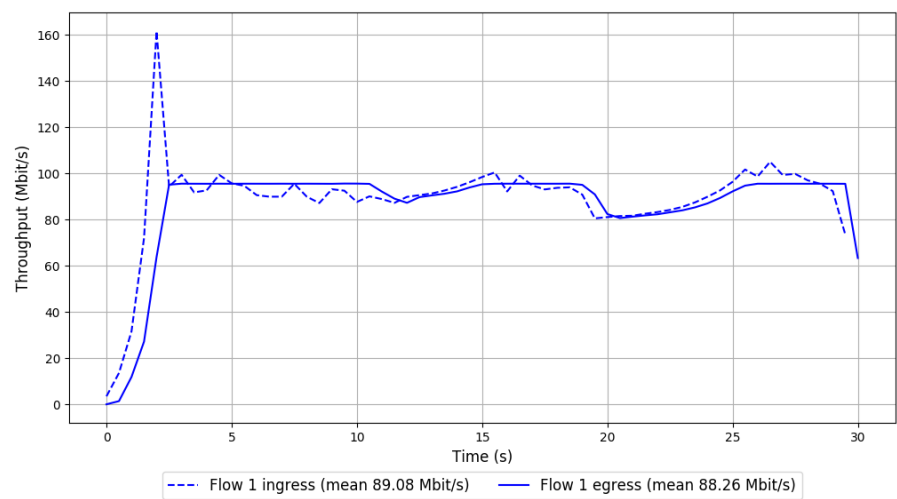
-- Flow 1:

Average throughput: 88.26 Mbit/s

95th percentile per-packet one-way delay: 423.234 ms

Loss rate: 1.45%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2019-09-18 17:23:52

End at: 2019-09-18 17:24:22

Local clock offset: 3.246 ms

Remote clock offset: 62.78 ms

# Below is generated by plot.py at 2019-09-18 18:05:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 86.38 Mbit/s

95th percentile per-packet one-way delay: 439.294 ms

Loss rate: 1.51%

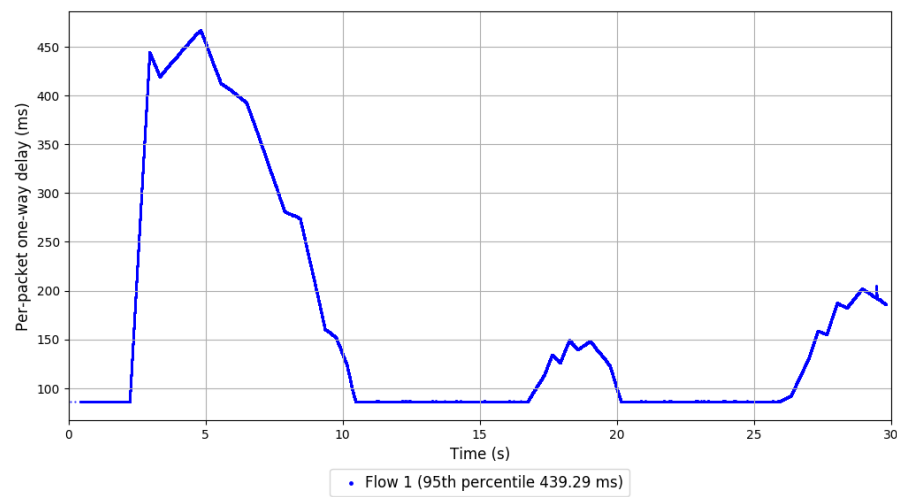
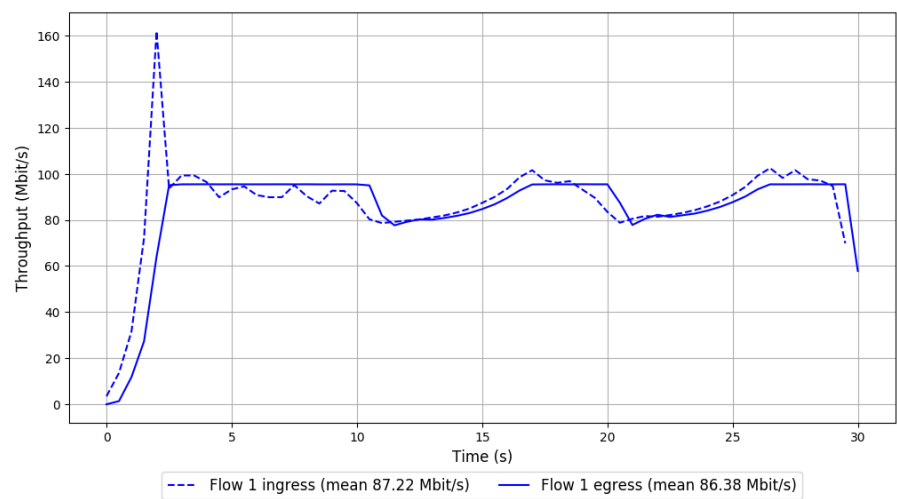
-- Flow 1:

Average throughput: 86.38 Mbit/s

95th percentile per-packet one-way delay: 439.294 ms

Loss rate: 1.51%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-09-18 15:49:04

End at: 2019-09-18 15:49:34

Local clock offset: -5.136 ms

Remote clock offset: 41.93 ms

# Below is generated by plot.py at 2019-09-18 18:05:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 65.69 Mbit/s

95th percentile per-packet one-way delay: 94.712 ms

Loss rate: 0.77%

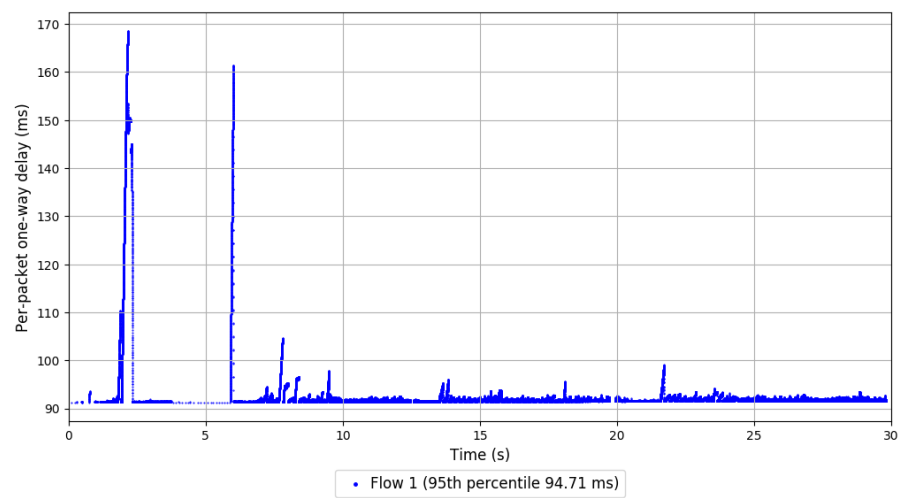
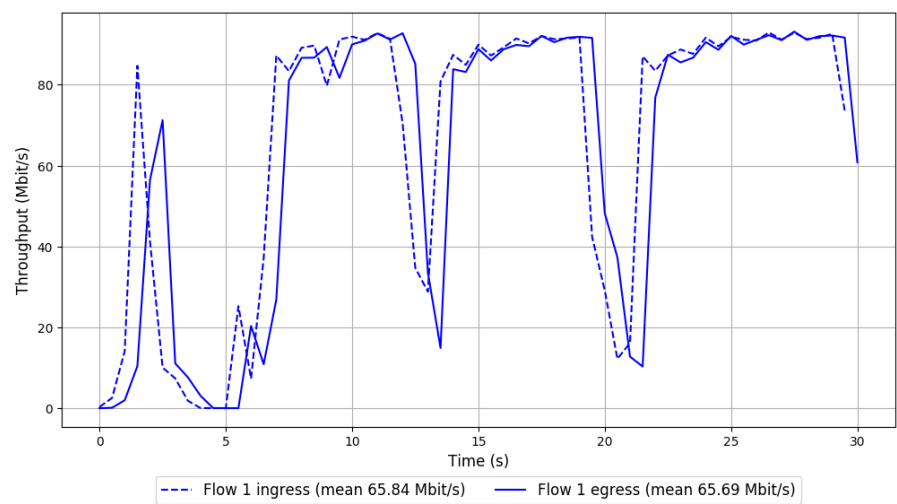
-- Flow 1:

Average throughput: 65.69 Mbit/s

95th percentile per-packet one-way delay: 94.712 ms

Loss rate: 0.77%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-09-18 16:17:32

End at: 2019-09-18 16:18:02

Local clock offset: 3.181 ms

Remote clock offset: 50.681 ms

# Below is generated by plot.py at 2019-09-18 18:05:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 59.64 Mbit/s

95th percentile per-packet one-way delay: 98.076 ms

Loss rate: 0.82%

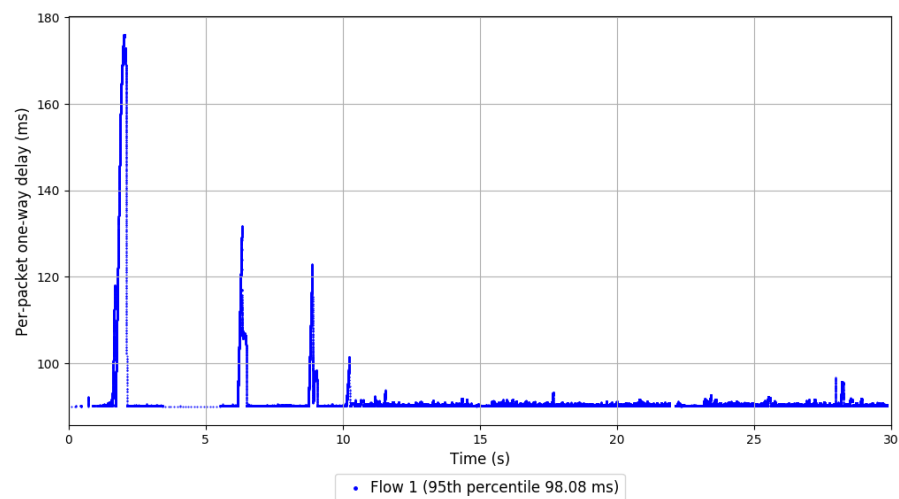
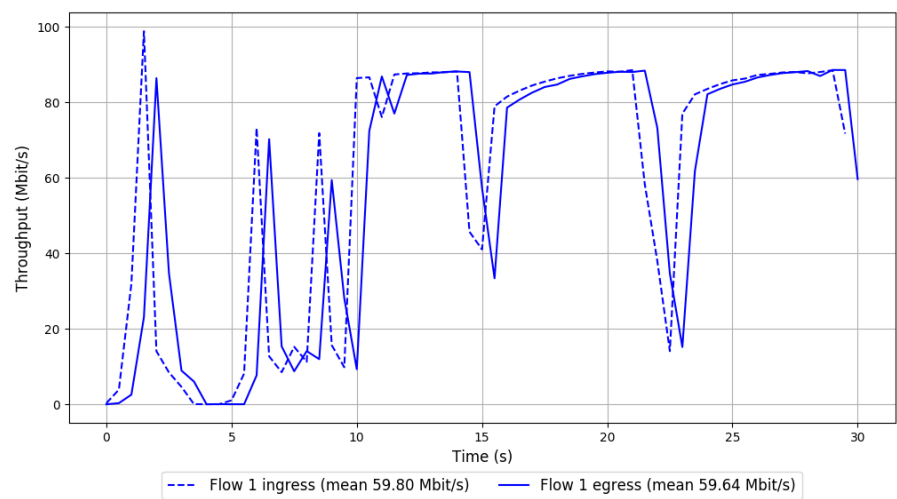
-- Flow 1:

Average throughput: 59.64 Mbit/s

95th percentile per-packet one-way delay: 98.076 ms

Loss rate: 0.82%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-09-18 16:46:00

End at: 2019-09-18 16:46:30

Local clock offset: 3.665 ms

Remote clock offset: 54.286 ms

# Below is generated by plot.py at 2019-09-18 18:05:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 55.94 Mbit/s

95th percentile per-packet one-way delay: 97.865 ms

Loss rate: 0.86%

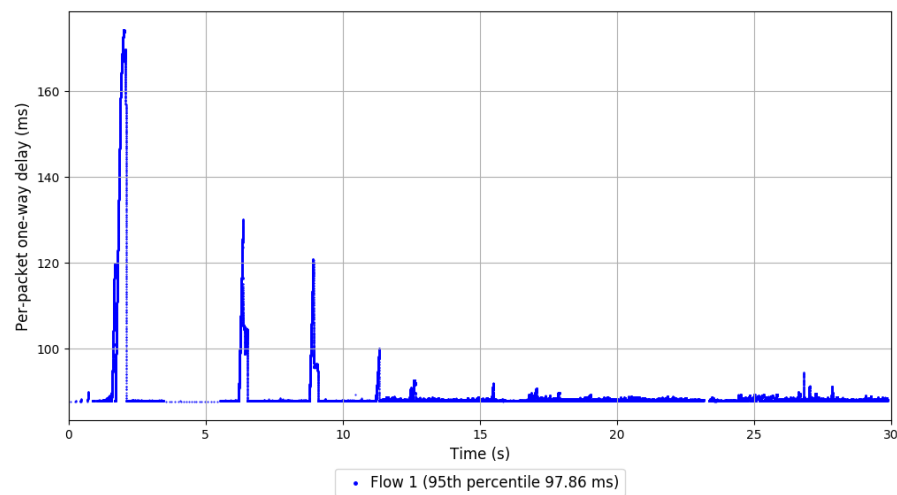
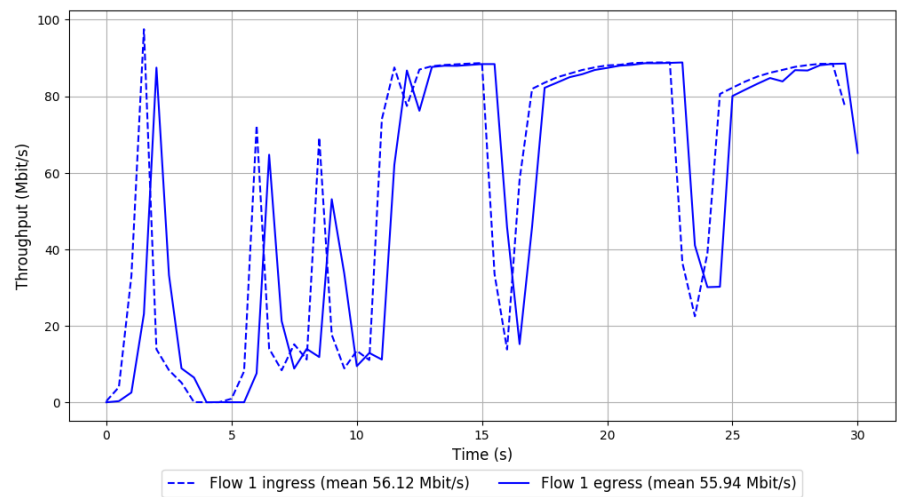
-- Flow 1:

Average throughput: 55.94 Mbit/s

95th percentile per-packet one-way delay: 97.865 ms

Loss rate: 0.86%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2019-09-18 17:14:25

End at: 2019-09-18 17:14:55

Local clock offset: 25.592 ms

Remote clock offset: 60.404 ms

# Below is generated by plot.py at 2019-09-18 18:05:40

# Datalink statistics

-- Total of 1 flow:

Average throughput: 60.03 Mbit/s

95th percentile per-packet one-way delay: 117.783 ms

Loss rate: 0.81%

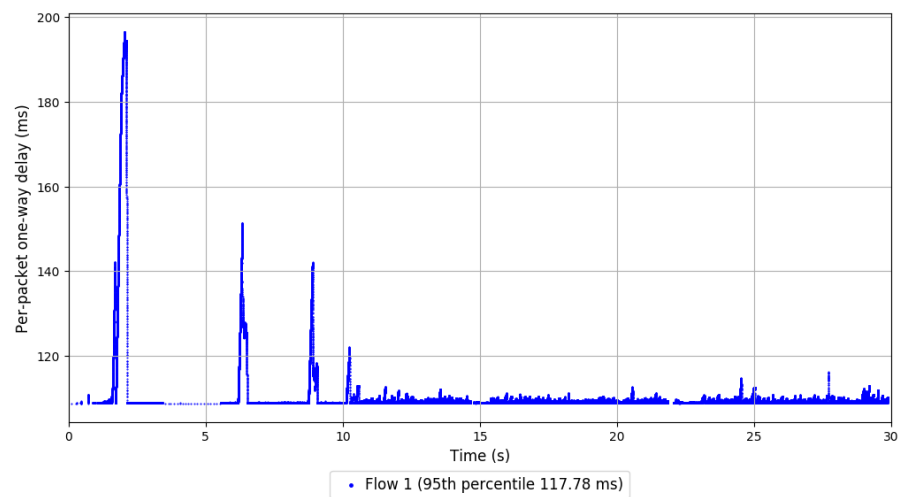
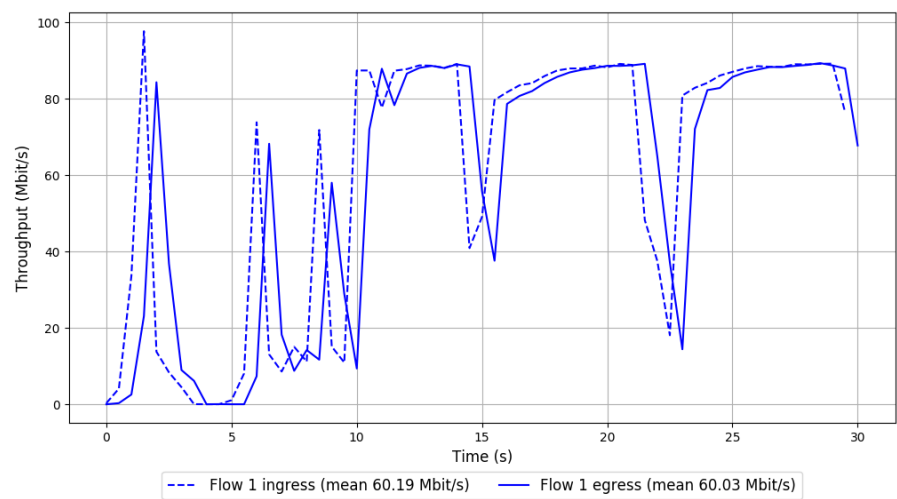
-- Flow 1:

Average throughput: 60.03 Mbit/s

95th percentile per-packet one-way delay: 117.783 ms

Loss rate: 0.81%

Run 4: Report of QUIC Cubic — Data Link

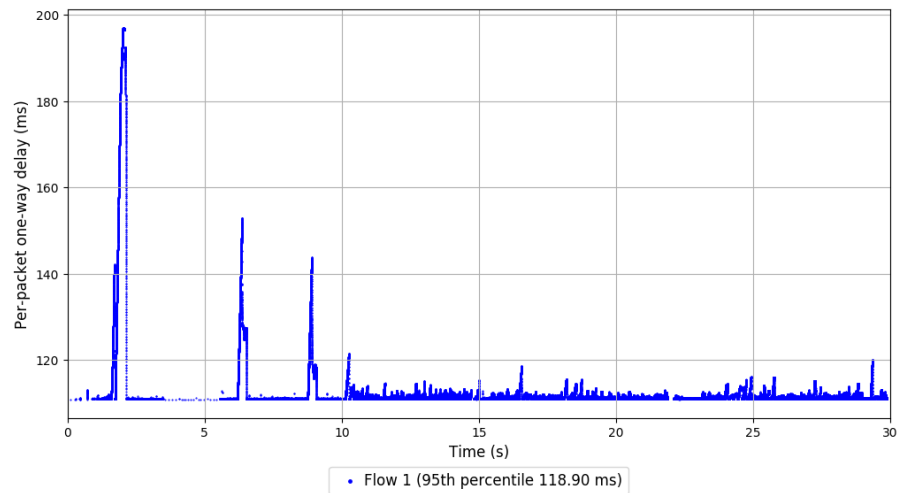
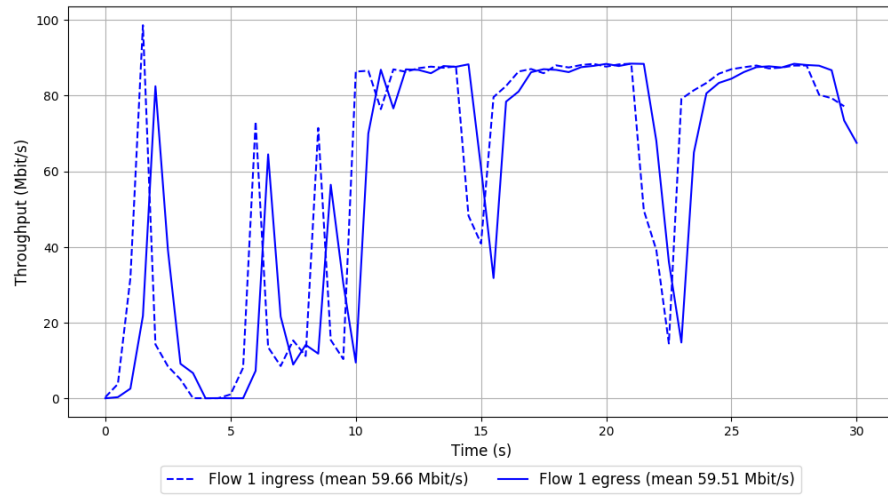


Run 5: Statistics of QUIC Cubic

Start at: 2019-09-18 17:42:53  
End at: 2019-09-18 17:43:23  
Local clock offset: 22.025 ms  
Remote clock offset: 64.702 ms

# Below is generated by plot.py at 2019-09-18 18:05:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 59.51 Mbit/s  
95th percentile per-packet one-way delay: 118.904 ms  
Loss rate: 0.80%  
-- Flow 1:  
Average throughput: 59.51 Mbit/s  
95th percentile per-packet one-way delay: 118.904 ms  
Loss rate: 0.80%

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

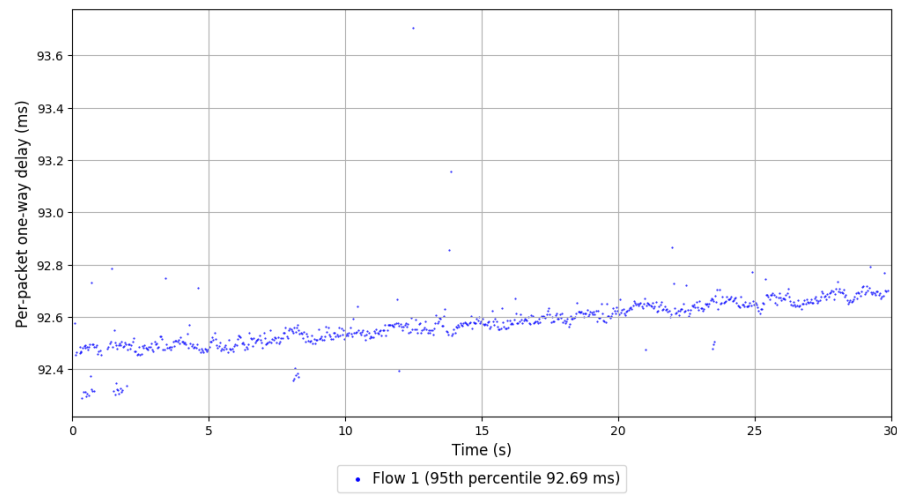
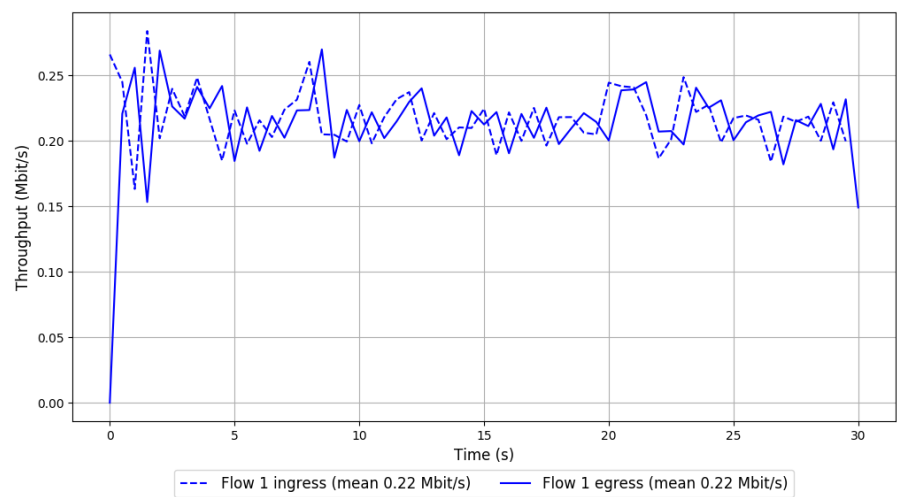


Run 1: Statistics of SCReAM

Start at: 2019-09-18 15:46:43  
End at: 2019-09-18 15:47:13  
Local clock offset: -3.821 ms  
Remote clock offset: 41.212 ms

# Below is generated by plot.py at 2019-09-18 18:05:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 92.695 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 92.695 ms  
Loss rate: 0.64%

Run 1: Report of SReAM — Data Link

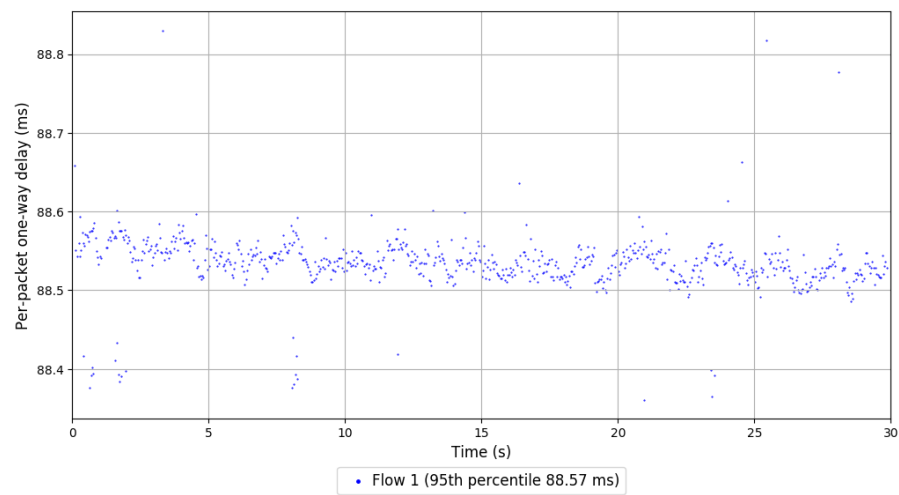
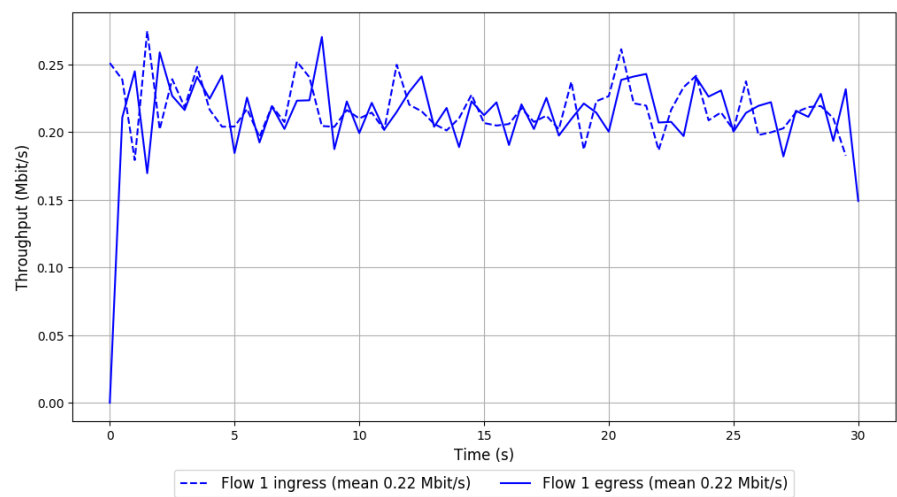


Run 2: Statistics of SCReAM

Start at: 2019-09-18 16:15:11  
End at: 2019-09-18 16:15:41  
Local clock offset: 2.571 ms  
Remote clock offset: 47.778 ms

# Below is generated by plot.py at 2019-09-18 18:05:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 88.573 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 88.573 ms  
Loss rate: 0.51%

Run 2: Report of SCReAM — Data Link

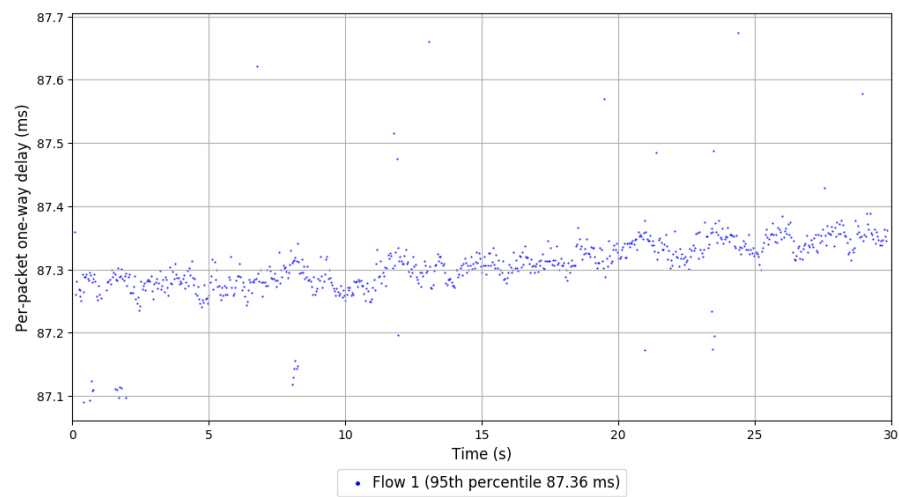
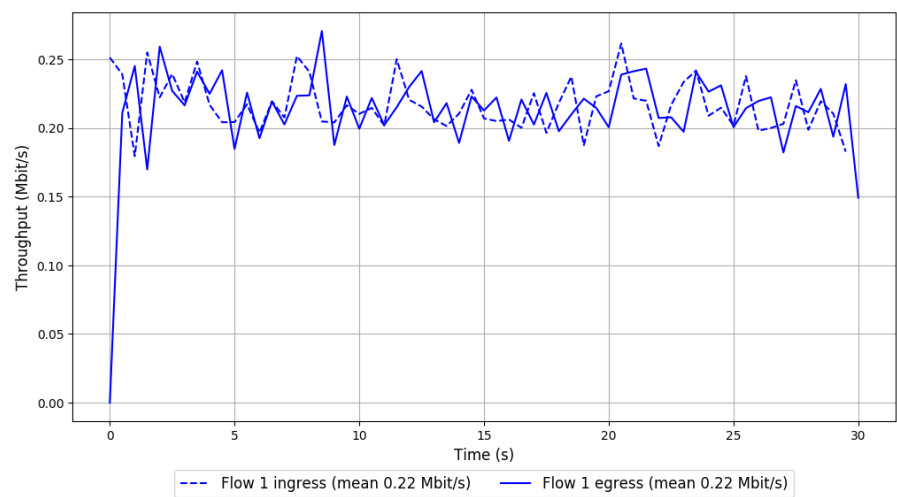


Run 3: Statistics of SCReAM

Start at: 2019-09-18 16:43:39  
End at: 2019-09-18 16:44:09  
Local clock offset: 3.705 ms  
Remote clock offset: 54.976 ms

# Below is generated by plot.py at 2019-09-18 18:05:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 87.363 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 87.363 ms  
Loss rate: 0.51%

Run 3: Report of SReAM — Data Link

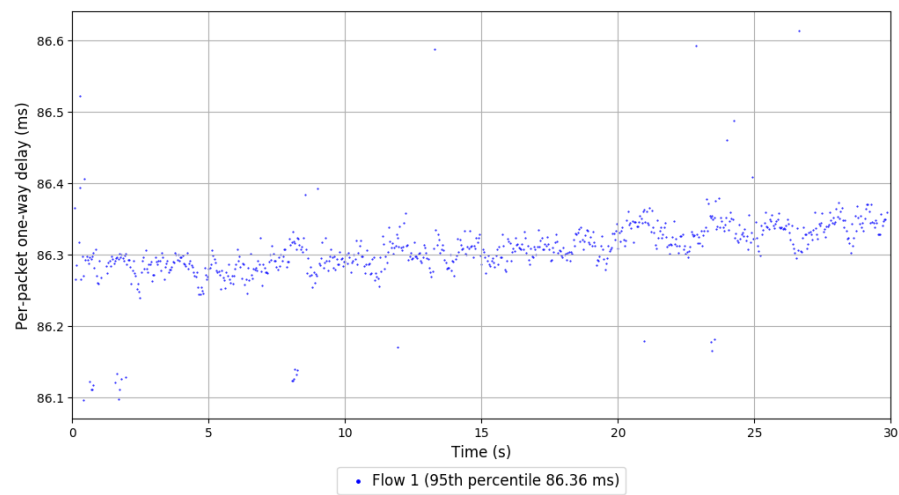
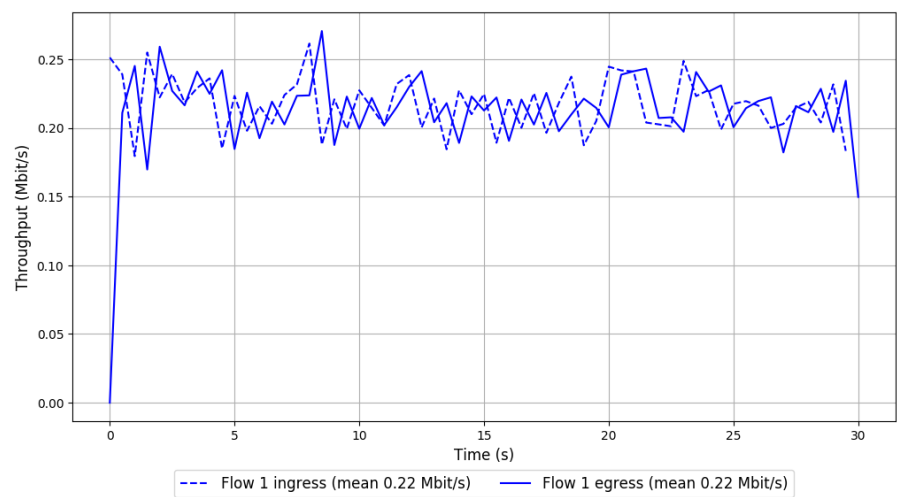


Run 4: Statistics of SCReAM

Start at: 2019-09-18 17:12:04  
End at: 2019-09-18 17:12:34  
Local clock offset: 3.295 ms  
Remote clock offset: 60.224 ms

# Below is generated by plot.py at 2019-09-18 18:05:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.358 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 86.358 ms  
Loss rate: 0.51%

Run 4: Report of SReAM — Data Link

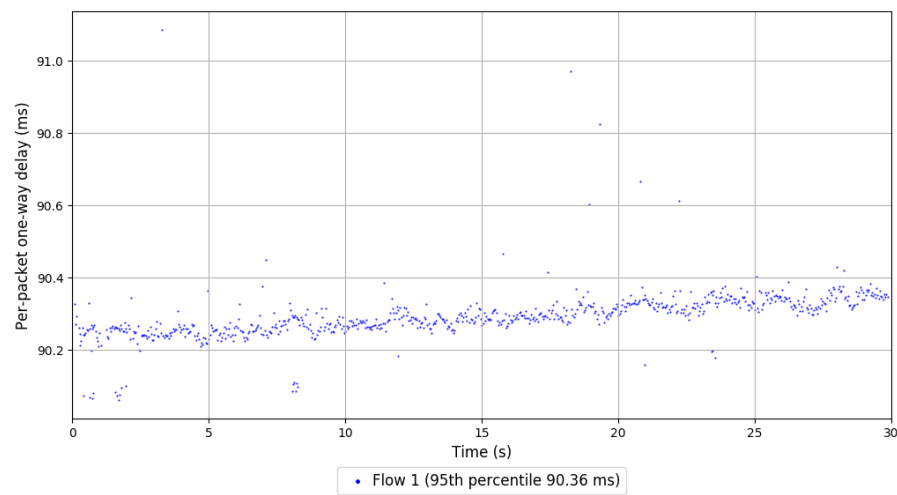
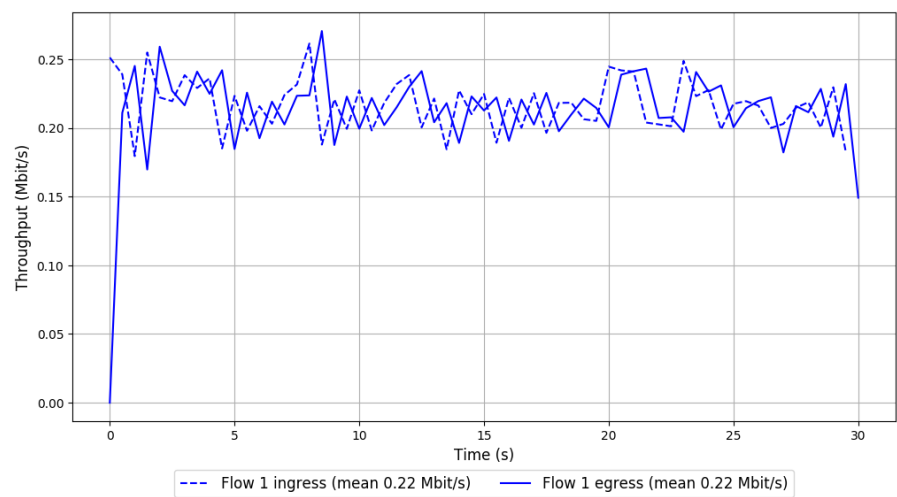


Run 5: Statistics of SCReAM

Start at: 2019-09-18 17:40:32  
End at: 2019-09-18 17:41:02  
Local clock offset: 2.845 ms  
Remote clock offset: 62.398 ms

# Below is generated by plot.py at 2019-09-18 18:05:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 90.363 ms  
Loss rate: 0.51%  
-- Flow 1:  
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 90.363 ms  
Loss rate: 0.51%

Run 5: Report of SReAM — Data Link

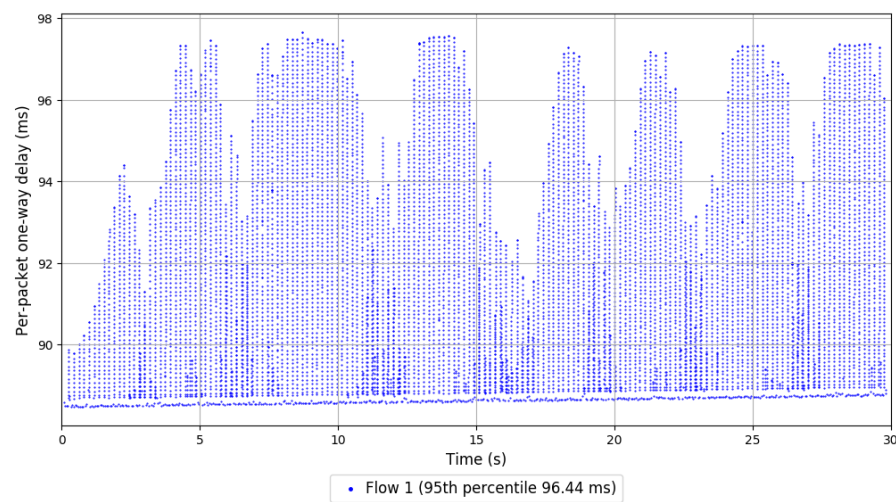
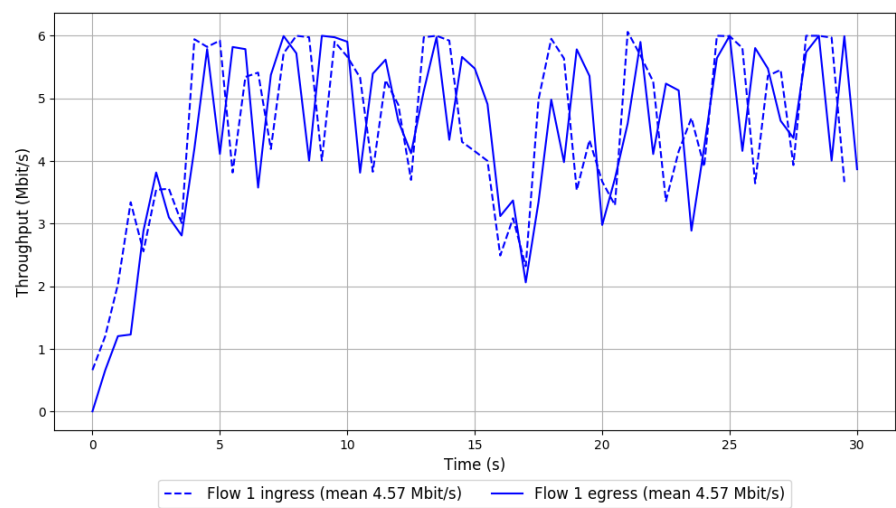


Run 1: Statistics of Sprout

Start at: 2019-09-18 15:42:02  
End at: 2019-09-18 15:42:32  
Local clock offset: -3.12 ms  
Remote clock offset: 40.125 ms

# Below is generated by plot.py at 2019-09-18 18:05:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.57 Mbit/s  
95th percentile per-packet one-way delay: 96.436 ms  
Loss rate: 0.65%  
-- Flow 1:  
Average throughput: 4.57 Mbit/s  
95th percentile per-packet one-way delay: 96.436 ms  
Loss rate: 0.65%

Run 1: Report of Sprout — Data Link

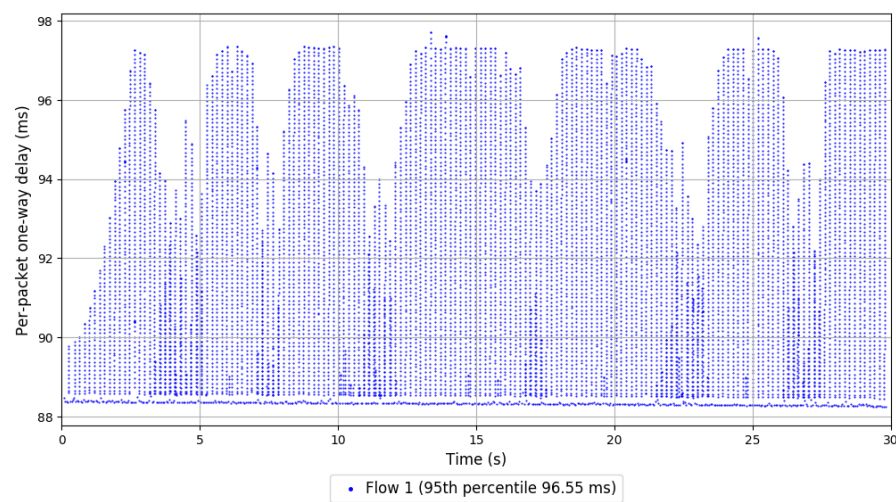
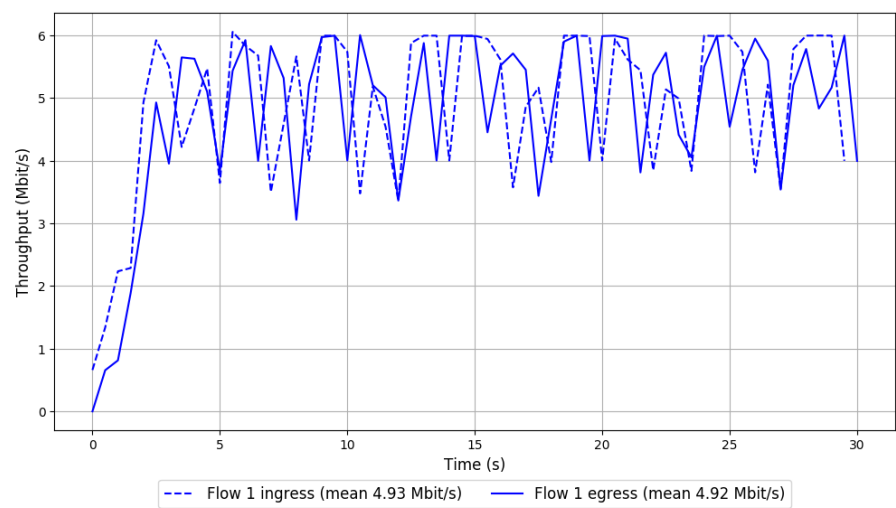


Run 2: Statistics of Sprout

Start at: 2019-09-18 16:10:30  
End at: 2019-09-18 16:11:00  
Local clock offset: 0.842 ms  
Remote clock offset: 46.536 ms

# Below is generated by plot.py at 2019-09-18 18:05:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.92 Mbit/s  
95th percentile per-packet one-way delay: 96.549 ms  
Loss rate: 0.68%  
-- Flow 1:  
Average throughput: 4.92 Mbit/s  
95th percentile per-packet one-way delay: 96.549 ms  
Loss rate: 0.68%

Run 2: Report of Sprout — Data Link

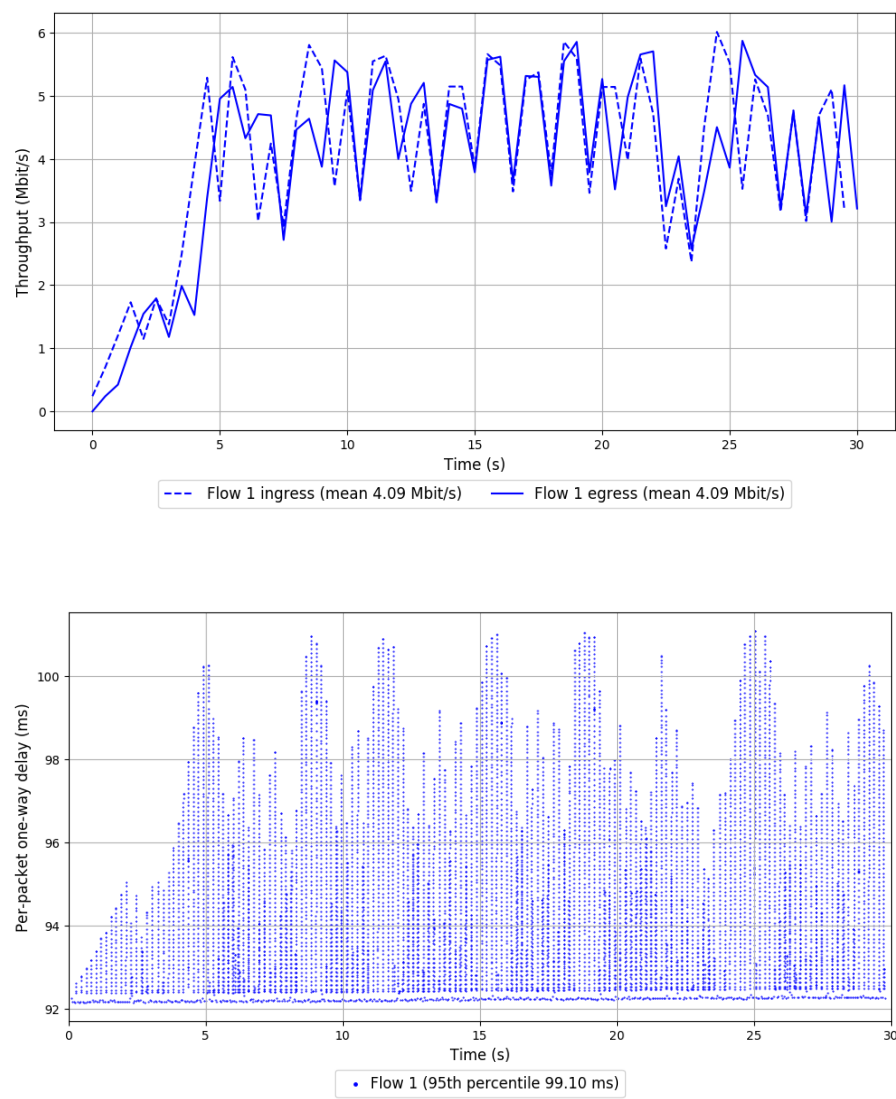


Run 3: Statistics of Sprout

Start at: 2019-09-18 16:38:58  
End at: 2019-09-18 16:39:28  
Local clock offset: 4.725 ms  
Remote clock offset: 52.7 ms

# Below is generated by plot.py at 2019-09-18 18:05:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.09 Mbit/s  
95th percentile per-packet one-way delay: 99.097 ms  
Loss rate: 0.66%  
-- Flow 1:  
Average throughput: 4.09 Mbit/s  
95th percentile per-packet one-way delay: 99.097 ms  
Loss rate: 0.66%

Run 3: Report of Sprout — Data Link

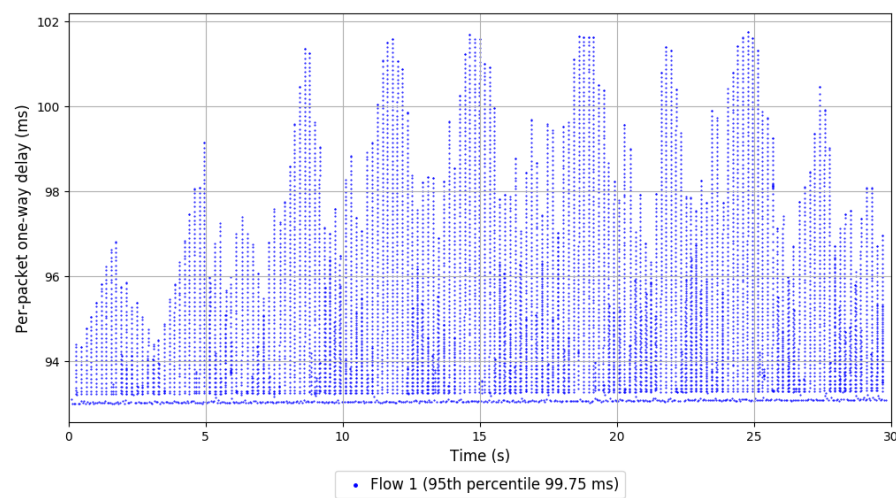
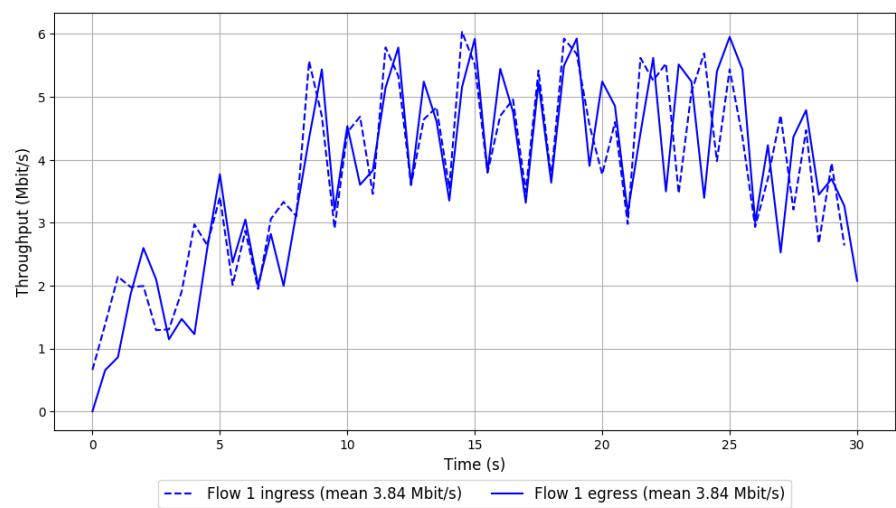


Run 4: Statistics of Sprout

Start at: 2019-09-18 17:07:24  
End at: 2019-09-18 17:07:54  
Local clock offset: 4.119 ms  
Remote clock offset: 57.354 ms

# Below is generated by plot.py at 2019-09-18 18:05:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 3.84 Mbit/s  
95th percentile per-packet one-way delay: 99.754 ms  
Loss rate: 0.54%  
-- Flow 1:  
Average throughput: 3.84 Mbit/s  
95th percentile per-packet one-way delay: 99.754 ms  
Loss rate: 0.54%

Run 4: Report of Sprout — Data Link

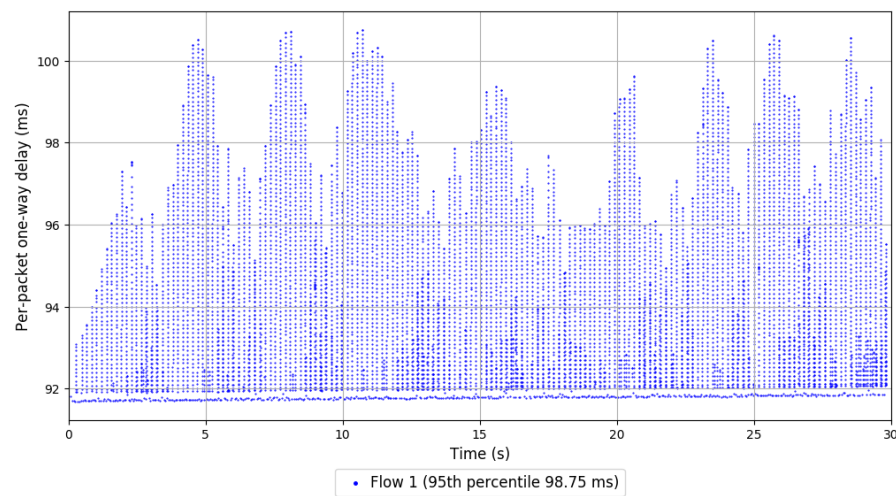
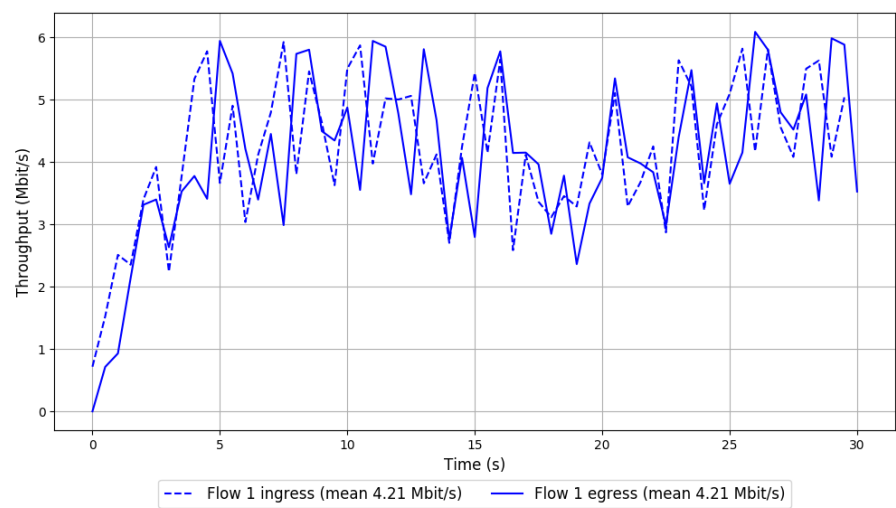


Run 5: Statistics of Sprout

Start at: 2019-09-18 17:35:50  
End at: 2019-09-18 17:36:20  
Local clock offset: 2.522 ms  
Remote clock offset: 63.021 ms

# Below is generated by plot.py at 2019-09-18 18:05:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 4.21 Mbit/s  
95th percentile per-packet one-way delay: 98.755 ms  
Loss rate: 0.60%  
-- Flow 1:  
Average throughput: 4.21 Mbit/s  
95th percentile per-packet one-way delay: 98.755 ms  
Loss rate: 0.60%

Run 5: Report of Sprout — Data Link

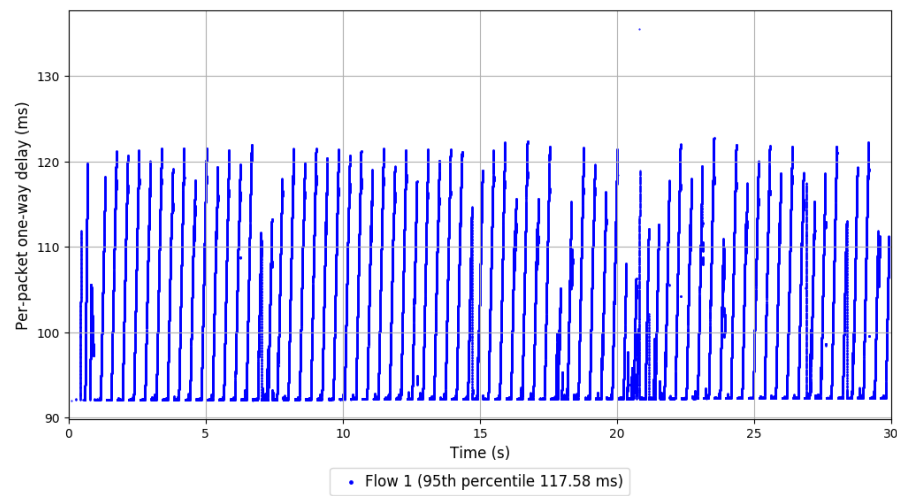
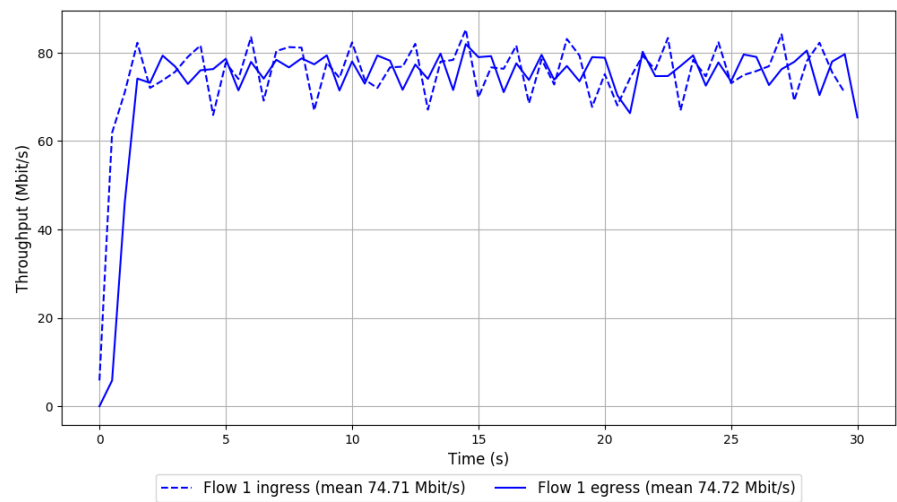


Run 1: Statistics of TaoVA-100x

Start at: 2019-09-18 15:47:51  
End at: 2019-09-18 15:48:21  
Local clock offset: -4.05 ms  
Remote clock offset: 41.907 ms

# Below is generated by plot.py at 2019-09-18 18:07:04  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 74.72 Mbit/s  
95th percentile per-packet one-way delay: 117.578 ms  
Loss rate: 0.53%  
-- Flow 1:  
Average throughput: 74.72 Mbit/s  
95th percentile per-packet one-way delay: 117.578 ms  
Loss rate: 0.53%

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

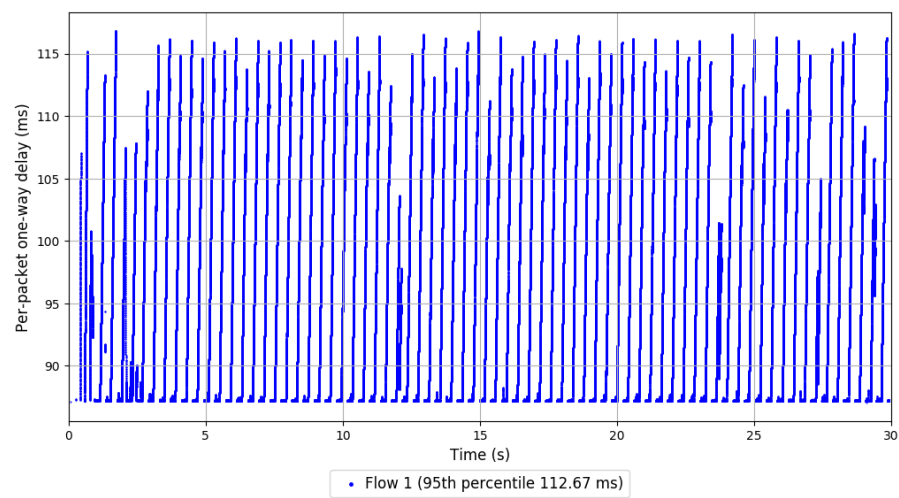
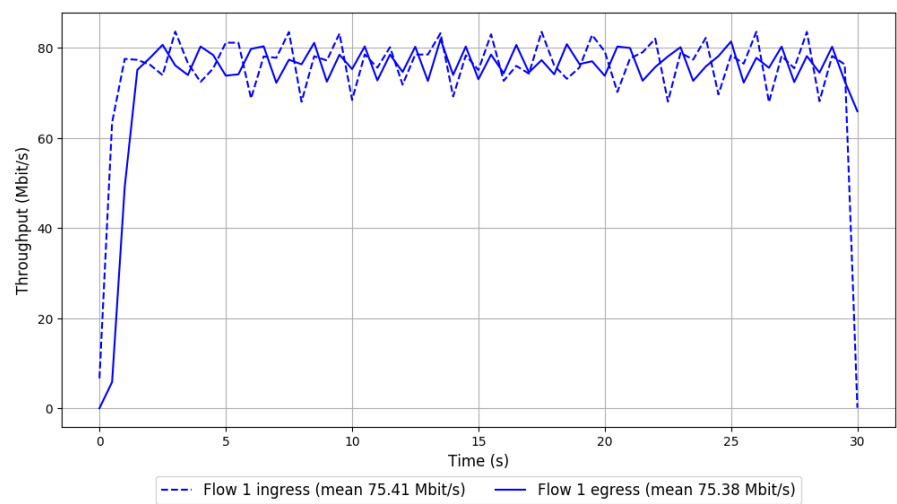


Run 2: Statistics of TaoVA-100x

Start at: 2019-09-18 16:16:19  
End at: 2019-09-18 16:16:49  
Local clock offset: 2.783 ms  
Remote clock offset: 49.709 ms

# Below is generated by plot.py at 2019-09-18 18:07:05  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 75.38 Mbit/s  
95th percentile per-packet one-way delay: 112.673 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 75.38 Mbit/s  
95th percentile per-packet one-way delay: 112.673 ms  
Loss rate: 0.58%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-09-18 16:44:46

End at: 2019-09-18 16:45:16

Local clock offset: 3.686 ms

Remote clock offset: 53.971 ms

# Below is generated by plot.py at 2019-09-18 18:07:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.16 Mbit/s

95th percentile per-packet one-way delay: 113.370 ms

Loss rate: 0.63%

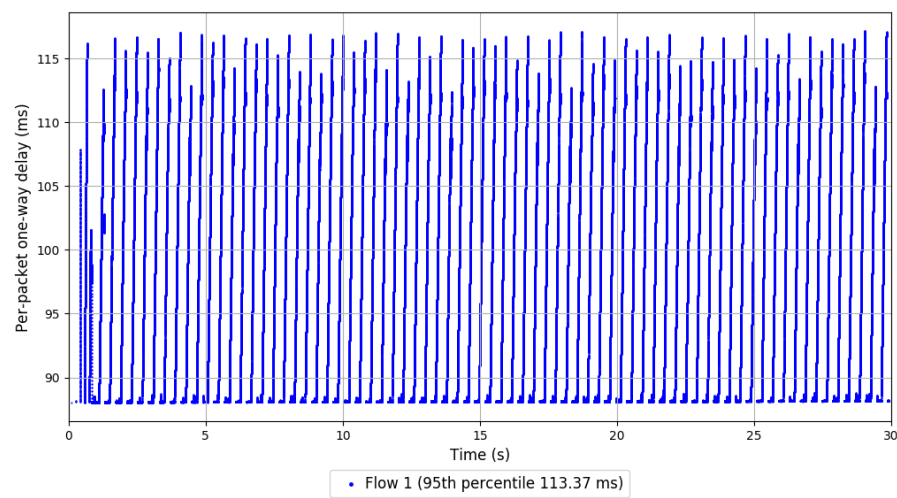
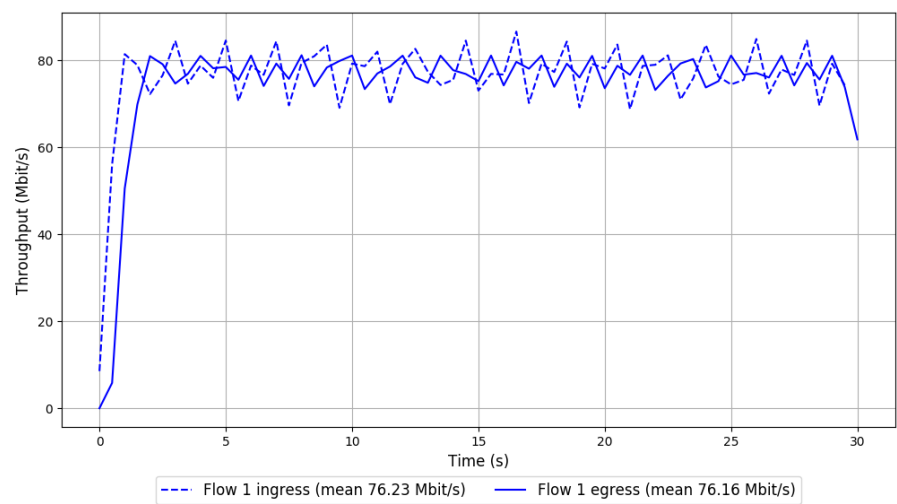
-- Flow 1:

Average throughput: 76.16 Mbit/s

95th percentile per-packet one-way delay: 113.370 ms

Loss rate: 0.63%

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

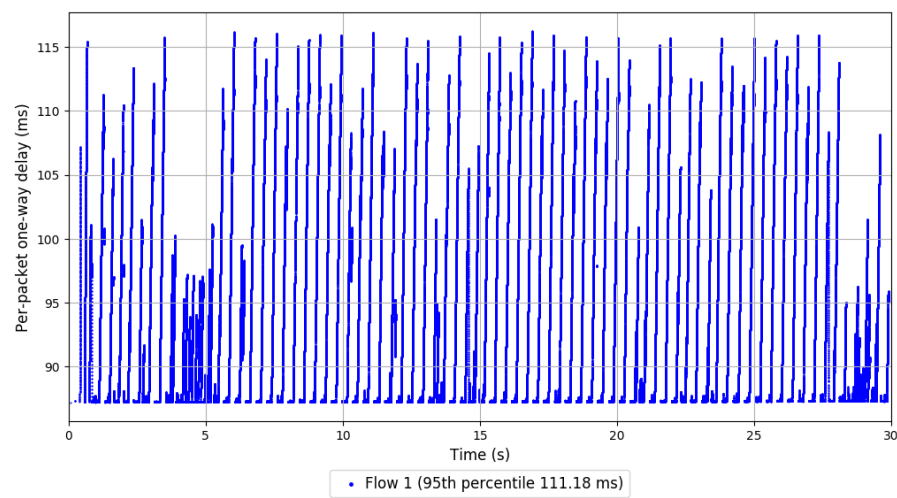
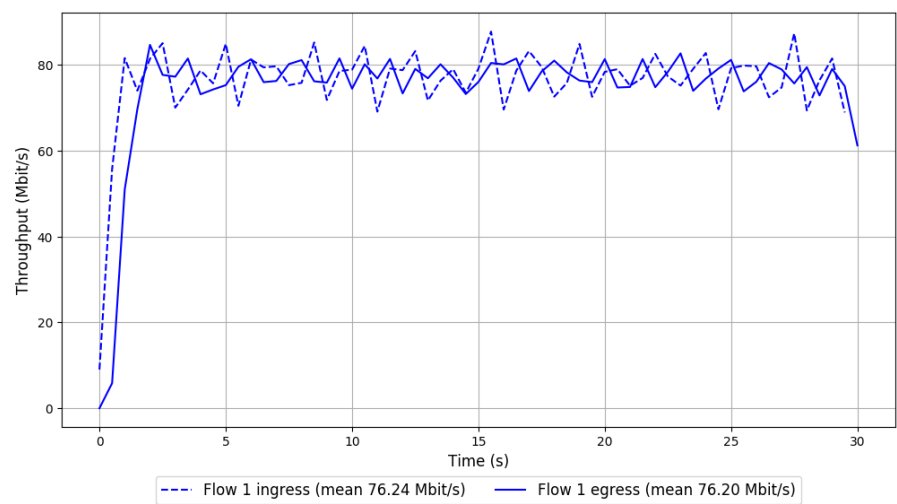


Run 4: Statistics of TaoVA-100x

Start at: 2019-09-18 17:13:11  
End at: 2019-09-18 17:13:41  
Local clock offset: 3.265 ms  
Remote clock offset: 59.338 ms

# Below is generated by plot.py at 2019-09-18 18:07:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 76.20 Mbit/s  
95th percentile per-packet one-way delay: 111.182 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 76.20 Mbit/s  
95th percentile per-packet one-way delay: 111.182 ms  
Loss rate: 0.58%

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



Run 5: Statistics of TaoVA-100x

Start at: 2019-09-18 17:41:39

End at: 2019-09-18 17:42:09

Local clock offset: 2.021 ms

Remote clock offset: 62.411 ms

# Below is generated by plot.py at 2019-09-18 18:07:12

# Datalink statistics

-- Total of 1 flow:

Average throughput: 74.89 Mbit/s

95th percentile per-packet one-way delay: 118.676 ms

Loss rate: 0.59%

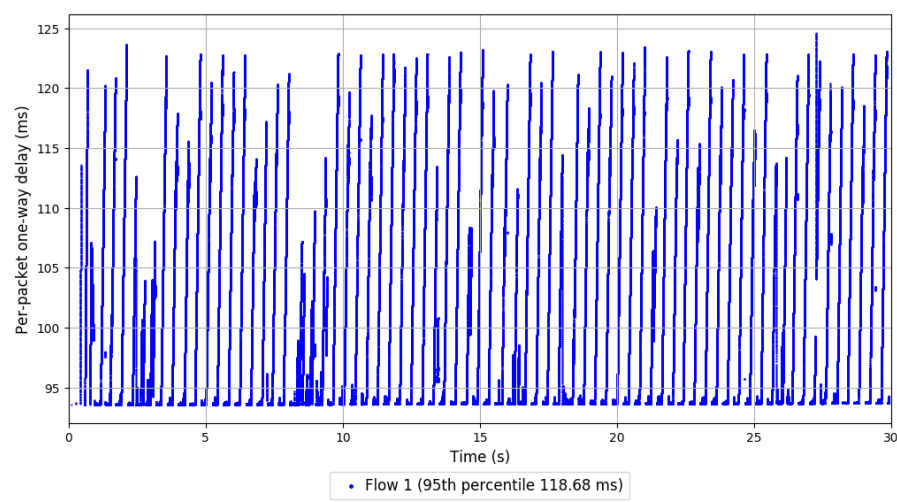
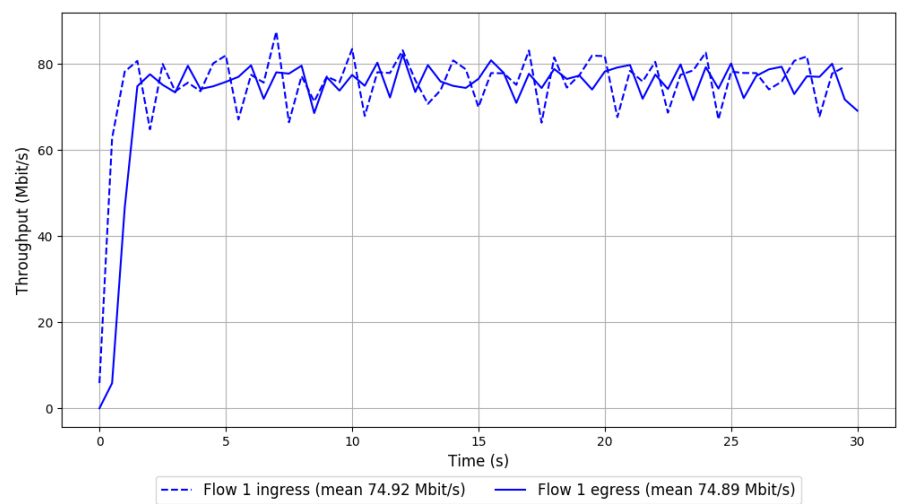
-- Flow 1:

Average throughput: 74.89 Mbit/s

95th percentile per-packet one-way delay: 118.676 ms

Loss rate: 0.59%

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

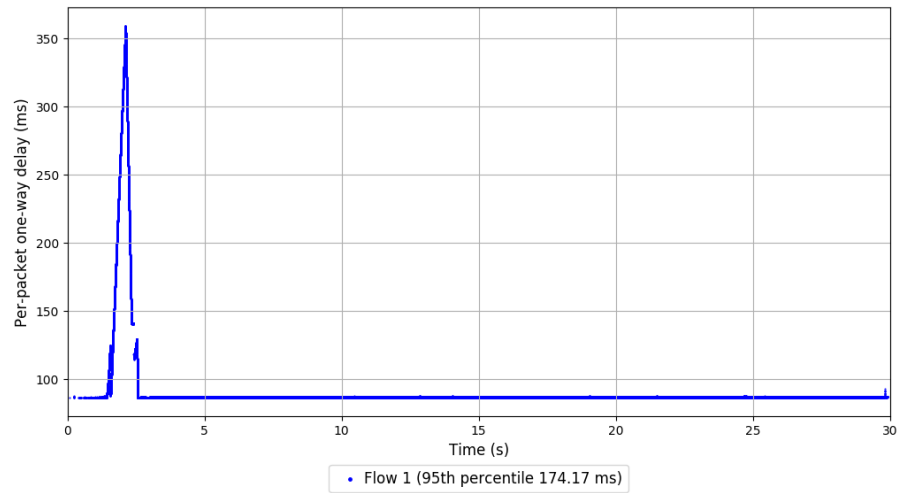
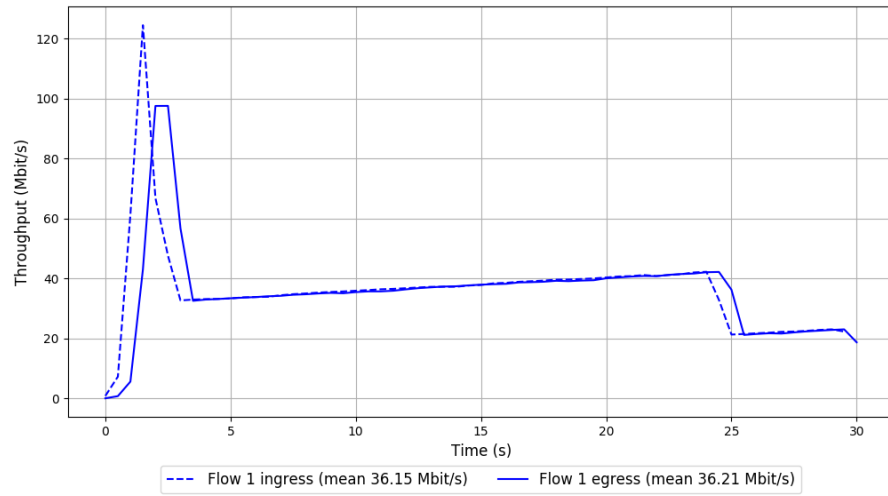


Run 1: Statistics of TCP Vegas

Start at: 2019-09-18 15:55:04  
End at: 2019-09-18 15:55:34  
Local clock offset: -5.431 ms  
Remote clock offset: 45.568 ms

# Below is generated by plot.py at 2019-09-18 18:07:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 36.21 Mbit/s  
95th percentile per-packet one-way delay: 174.169 ms  
Loss rate: 0.38%  
-- Flow 1:  
Average throughput: 36.21 Mbit/s  
95th percentile per-packet one-way delay: 174.169 ms  
Loss rate: 0.38%

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

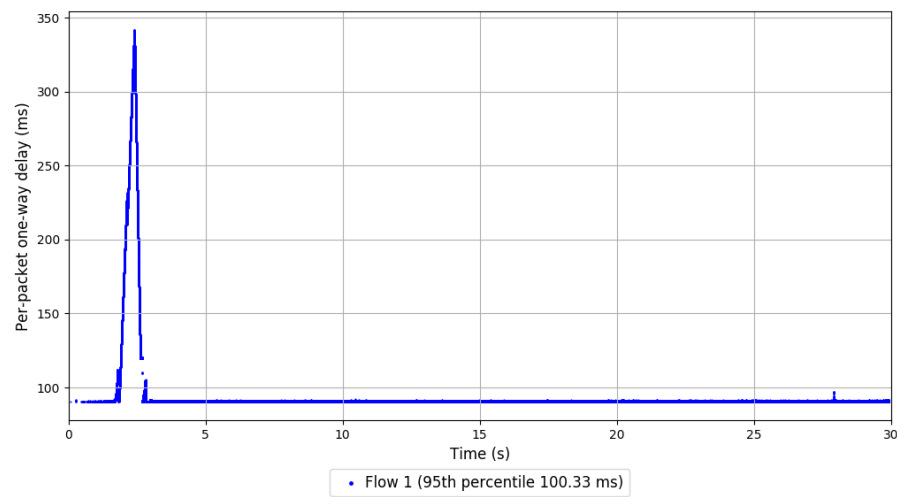
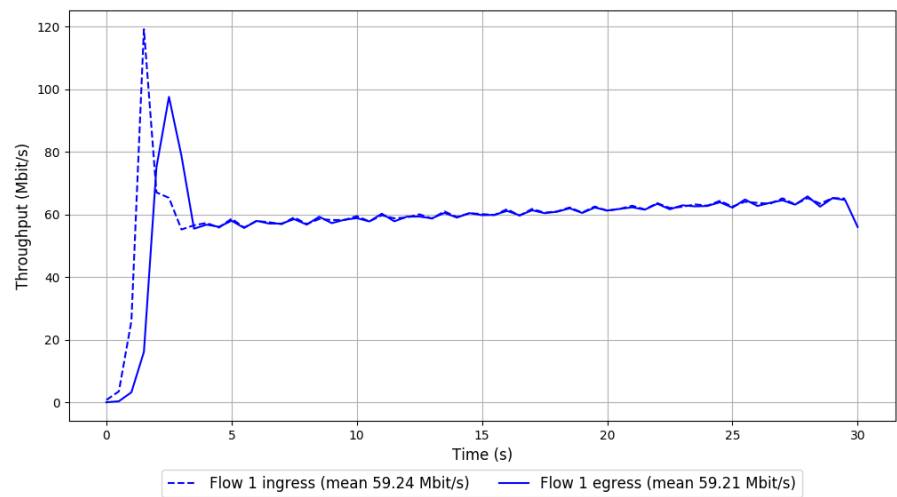


Run 2: Statistics of TCP Vegas

Start at: 2019-09-18 16:23:31  
End at: 2019-09-18 16:24:01  
Local clock offset: 4.968 ms  
Remote clock offset: 52.431 ms

# Below is generated by plot.py at 2019-09-18 18:07:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 59.21 Mbit/s  
95th percentile per-packet one-way delay: 100.330 ms  
Loss rate: 0.60%  
-- Flow 1:  
Average throughput: 59.21 Mbit/s  
95th percentile per-packet one-way delay: 100.330 ms  
Loss rate: 0.60%

Run 2: Report of TCP Vegas — Data Link

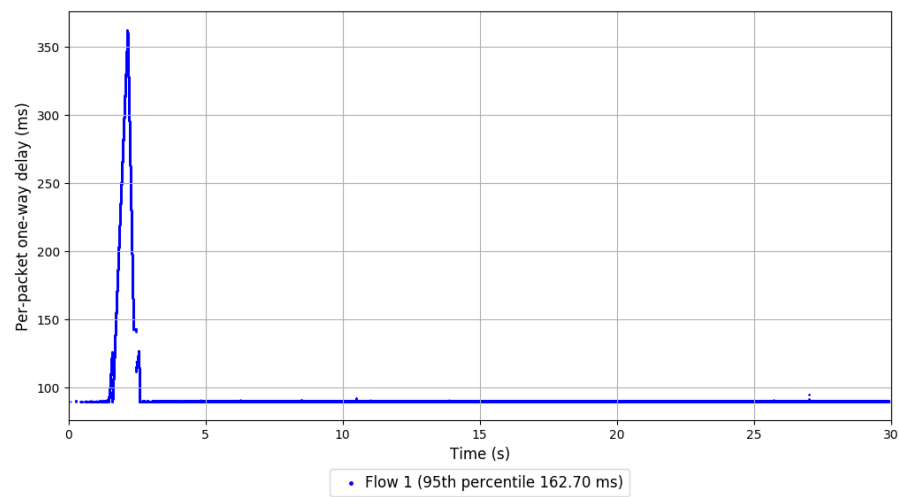
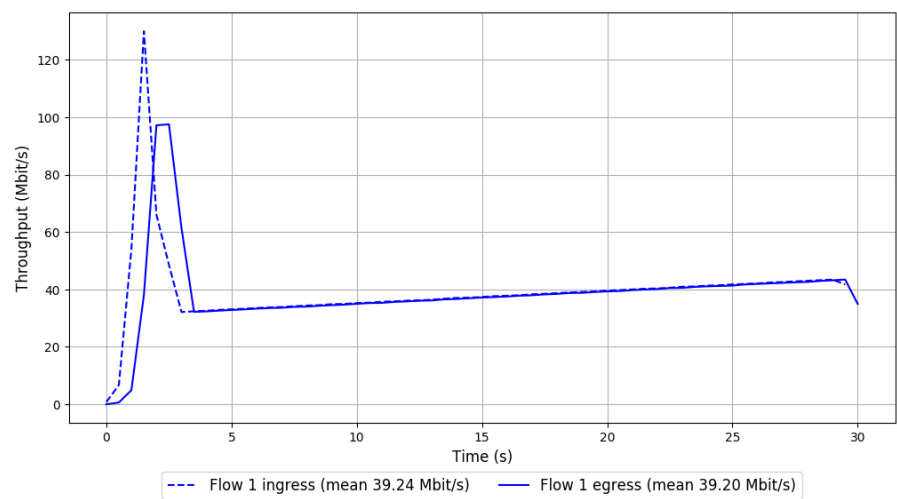


Run 3: Statistics of TCP Vegas

Start at: 2019-09-18 16:51:59  
End at: 2019-09-18 16:52:29  
Local clock offset: 4.399 ms  
Remote clock offset: 57.627 ms

# Below is generated by plot.py at 2019-09-18 18:07:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 39.20 Mbit/s  
95th percentile per-packet one-way delay: 162.700 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 39.20 Mbit/s  
95th percentile per-packet one-way delay: 162.700 ms  
Loss rate: 0.64%

Run 3: Report of TCP Vegas — Data Link

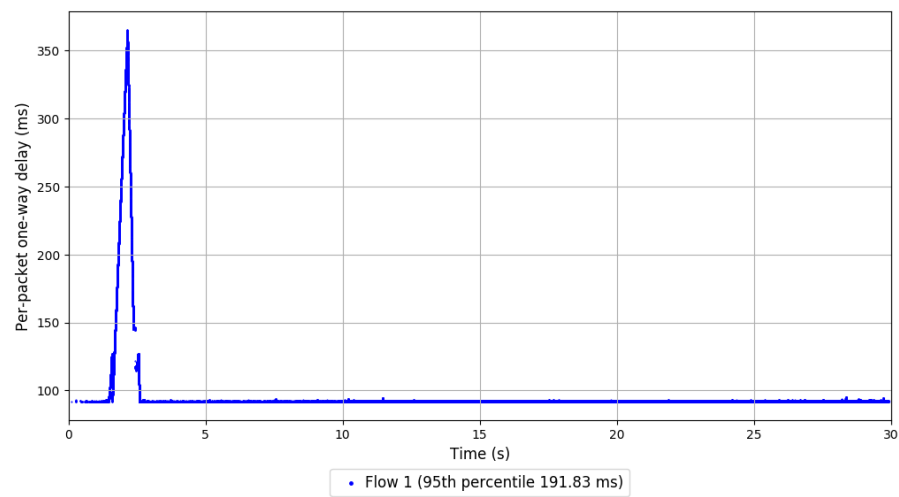
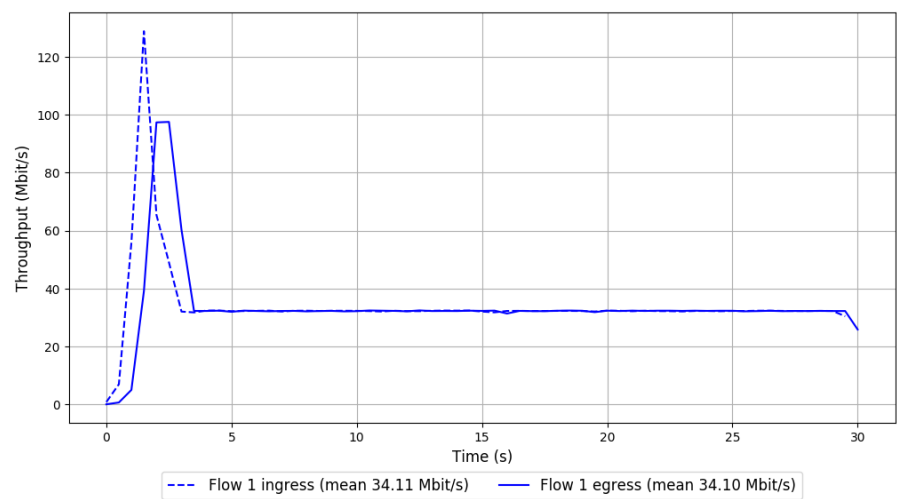


Run 4: Statistics of TCP Vegas

Start at: 2019-09-18 17:20:24  
End at: 2019-09-18 17:20:54  
Local clock offset: 3.222 ms  
Remote clock offset: 59.979 ms

# Below is generated by plot.py at 2019-09-18 18:07:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 34.10 Mbit/s  
95th percentile per-packet one-way delay: 191.827 ms  
Loss rate: 0.55%  
-- Flow 1:  
Average throughput: 34.10 Mbit/s  
95th percentile per-packet one-way delay: 191.827 ms  
Loss rate: 0.55%

Run 4: Report of TCP Vegas — Data Link

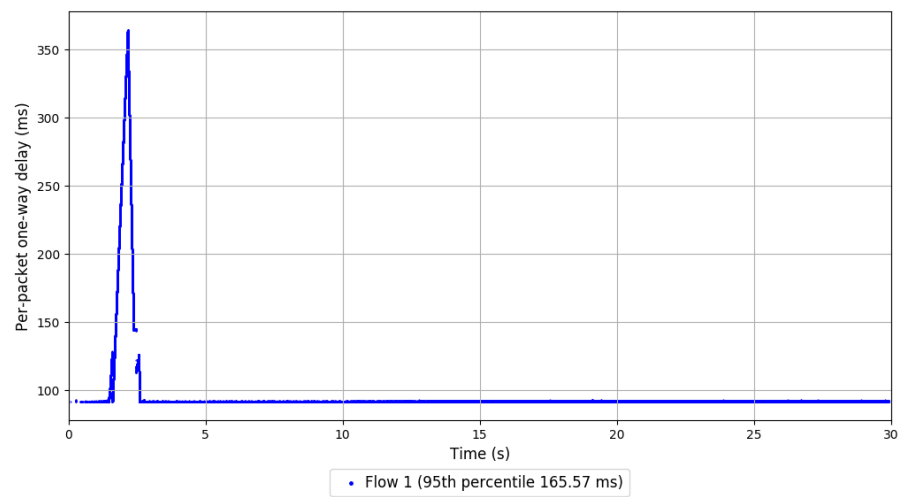
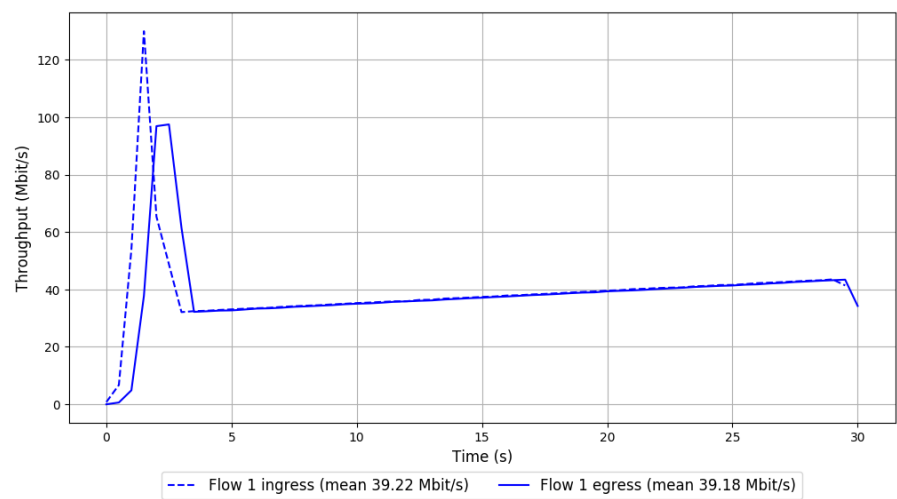


Run 5: Statistics of TCP Vegas

Start at: 2019-09-18 17:48:52  
End at: 2019-09-18 17:49:22  
Local clock offset: 1.589 ms  
Remote clock offset: 65.339 ms

# Below is generated by plot.py at 2019-09-18 18:07:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 39.18 Mbit/s  
95th percentile per-packet one-way delay: 165.575 ms  
Loss rate: 0.64%  
-- Flow 1:  
Average throughput: 39.18 Mbit/s  
95th percentile per-packet one-way delay: 165.575 ms  
Loss rate: 0.64%

Run 5: Report of TCP Vegas — Data Link

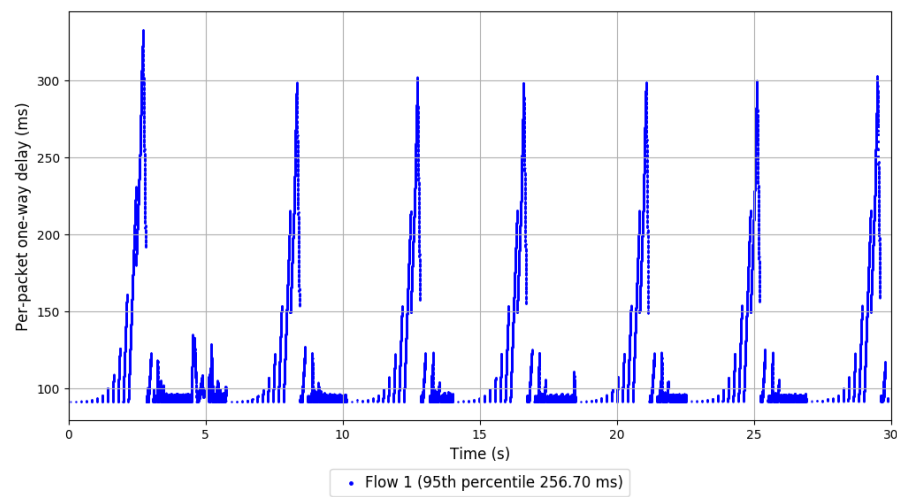
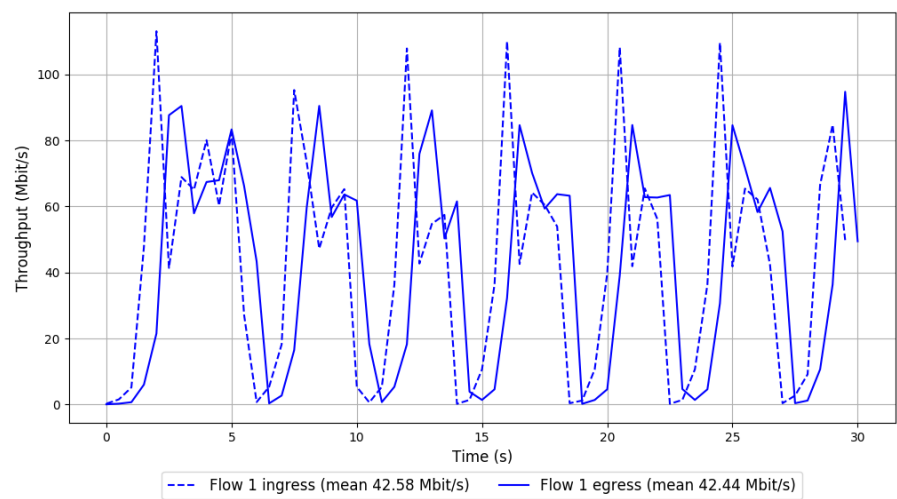


Run 1: Statistics of Verus

Start at: 2019-09-18 15:37:18  
End at: 2019-09-18 15:37:48  
Local clock offset: -0.434 ms  
Remote clock offset: 40.164 ms

# Below is generated by plot.py at 2019-09-18 18:07:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 42.44 Mbit/s  
95th percentile per-packet one-way delay: 256.703 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 42.44 Mbit/s  
95th percentile per-packet one-way delay: 256.703 ms  
Loss rate: 0.87%

Run 1: Report of Verus — Data Link

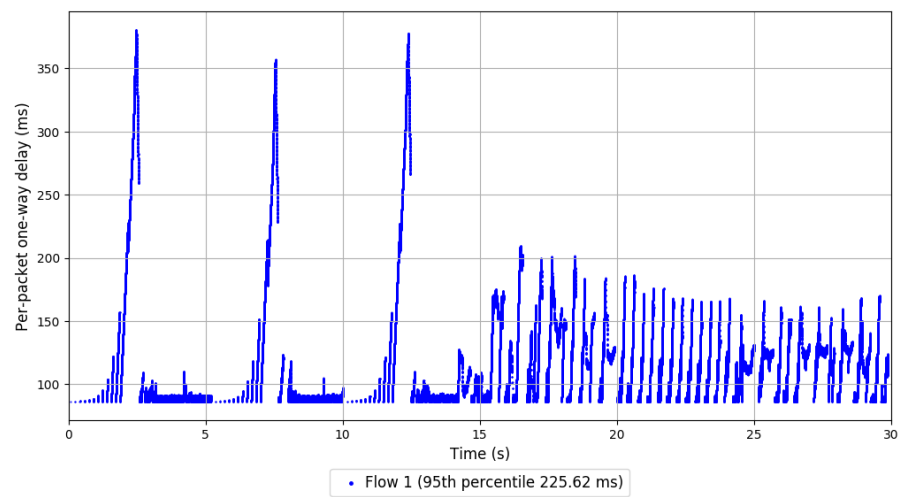
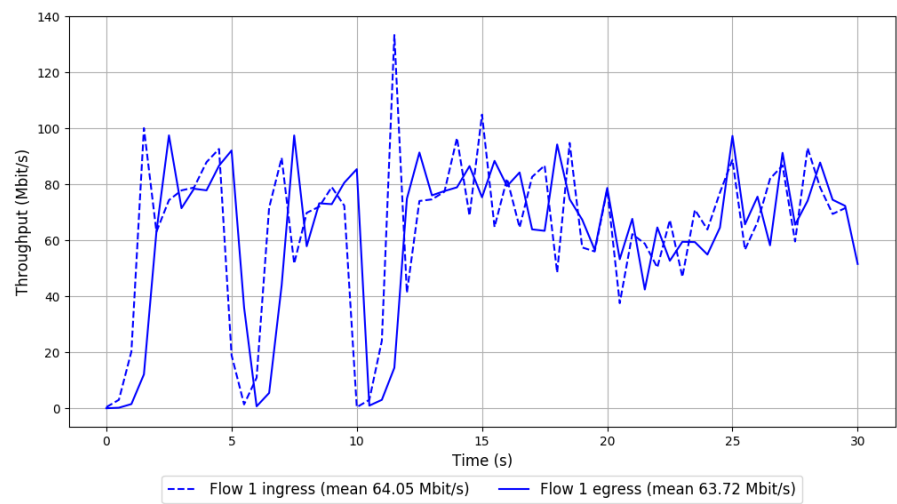


Run 2: Statistics of Verus

Start at: 2019-09-18 16:05:44  
End at: 2019-09-18 16:06:14  
Local clock offset: -1.948 ms  
Remote clock offset: 48.035 ms

# Below is generated by plot.py at 2019-09-18 18:07:19  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 63.72 Mbit/s  
95th percentile per-packet one-way delay: 225.620 ms  
Loss rate: 1.05%  
-- Flow 1:  
Average throughput: 63.72 Mbit/s  
95th percentile per-packet one-way delay: 225.620 ms  
Loss rate: 1.05%

Run 2: Report of Verus — Data Link

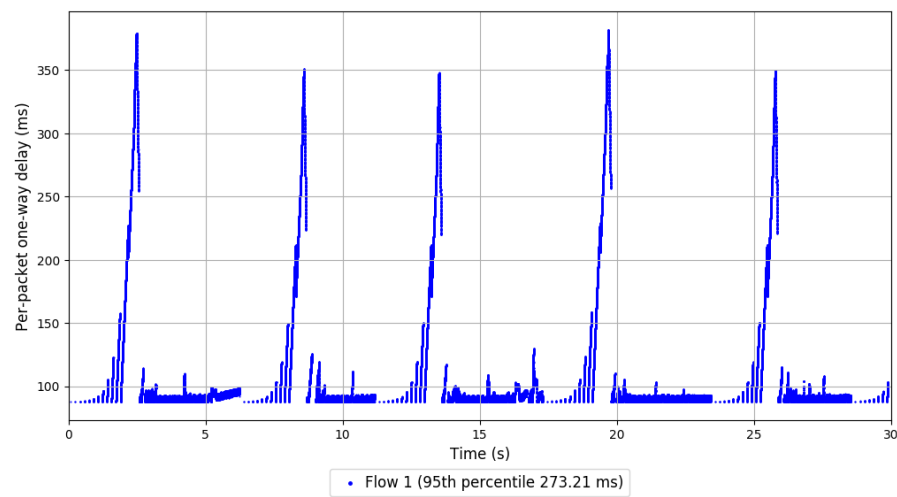
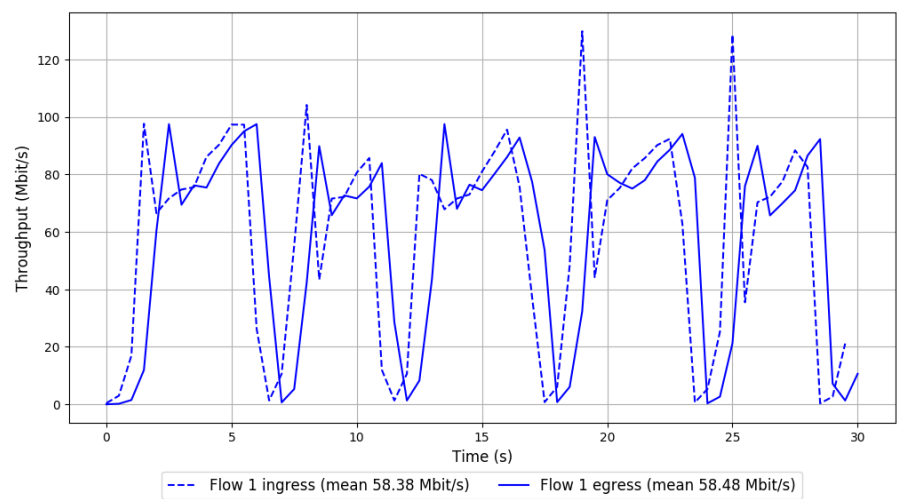


Run 3: Statistics of Verus

Start at: 2019-09-18 16:34:13  
End at: 2019-09-18 16:34:43  
Local clock offset: 5.153 ms  
Remote clock offset: 53.208 ms

# Below is generated by plot.py at 2019-09-18 18:07:33  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 58.48 Mbit/s  
95th percentile per-packet one-way delay: 273.208 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 58.48 Mbit/s  
95th percentile per-packet one-way delay: 273.208 ms  
Loss rate: 0.39%

Run 3: Report of Verus — Data Link

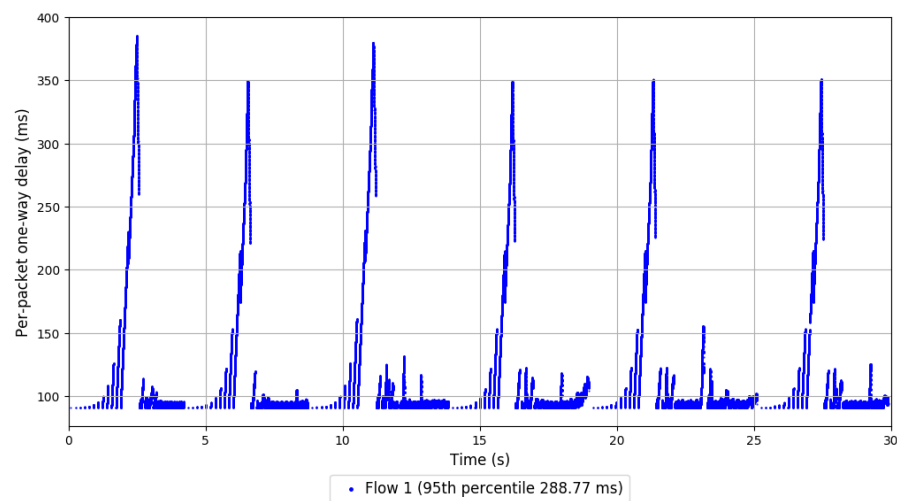
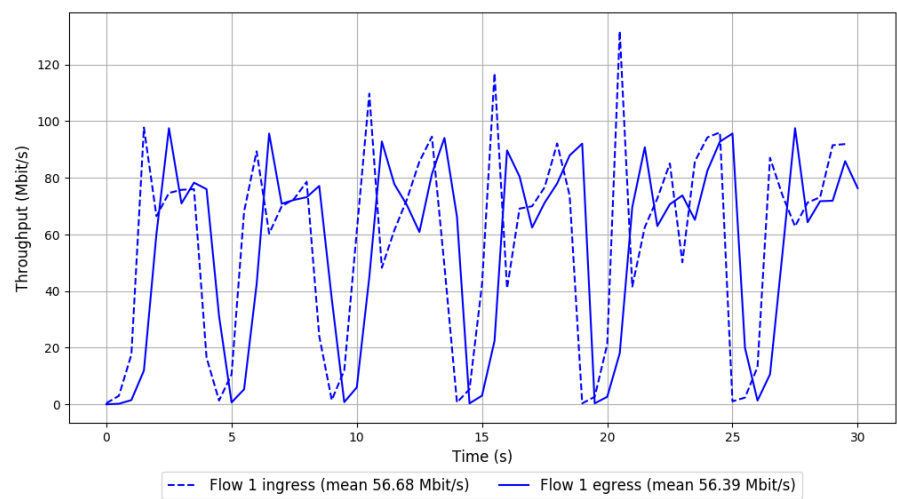


Run 4: Statistics of Verus

Start at: 2019-09-18 17:02:39  
End at: 2019-09-18 17:03:09  
Local clock offset: 3.54 ms  
Remote clock offset: 57.695 ms

# Below is generated by plot.py at 2019-09-18 18:07:37  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 56.39 Mbit/s  
95th percentile per-packet one-way delay: 288.775 ms  
Loss rate: 1.04%  
-- Flow 1:  
Average throughput: 56.39 Mbit/s  
95th percentile per-packet one-way delay: 288.775 ms  
Loss rate: 1.04%

Run 4: Report of Verus — Data Link

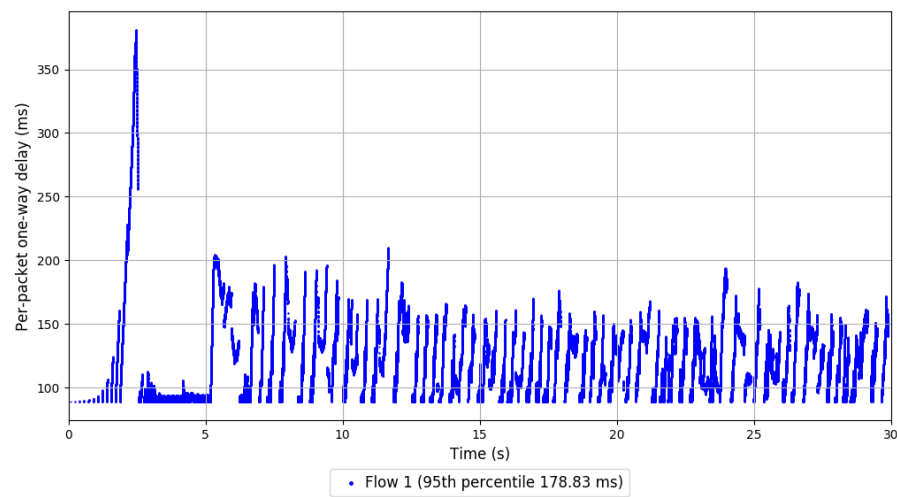
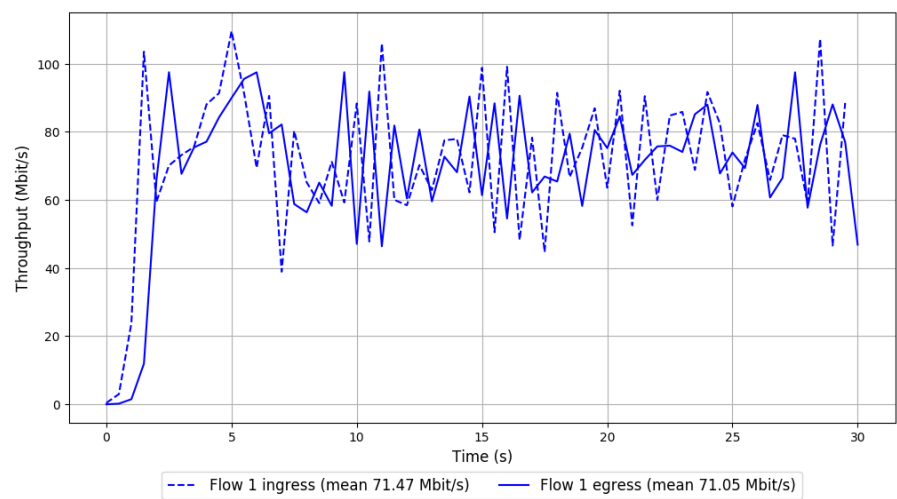


Run 5: Statistics of Verus

Start at: 2019-09-18 17:31:05  
End at: 2019-09-18 17:31:35  
Local clock offset: 3.234 ms  
Remote clock offset: 61.156 ms

# Below is generated by plot.py at 2019-09-18 18:07:59  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 71.05 Mbit/s  
95th percentile per-packet one-way delay: 178.834 ms  
Loss rate: 1.11%  
-- Flow 1:  
Average throughput: 71.05 Mbit/s  
95th percentile per-packet one-way delay: 178.834 ms  
Loss rate: 1.11%

Run 5: Report of Verus — Data Link

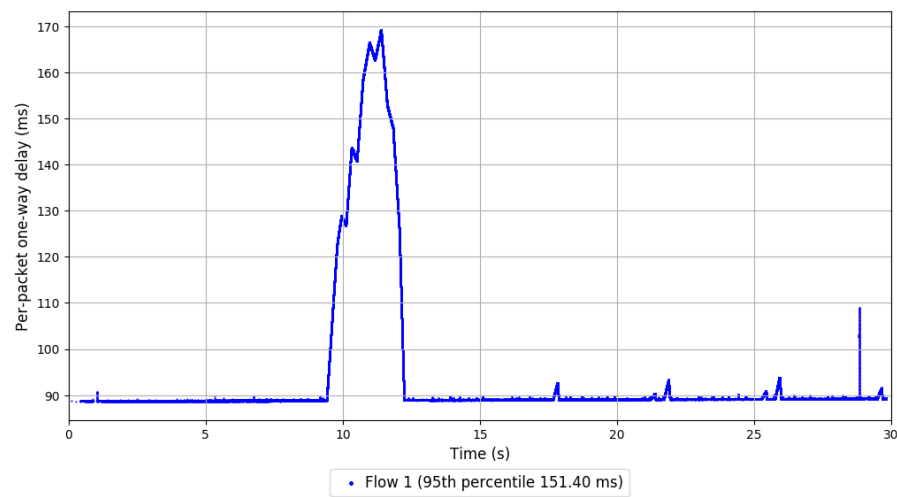
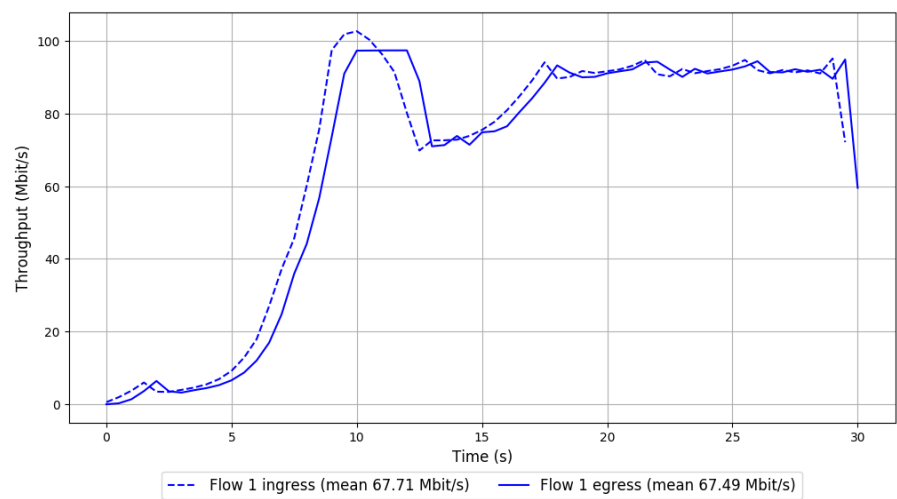


Run 1: Statistics of PCC-Vivace

Start at: 2019-09-18 15:32:31  
End at: 2019-09-18 15:33:01  
Local clock offset: 1.928 ms  
Remote clock offset: 37.251 ms

# Below is generated by plot.py at 2019-09-18 18:08:00  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 67.49 Mbit/s  
95th percentile per-packet one-way delay: 151.395 ms  
Loss rate: 0.86%  
-- Flow 1:  
Average throughput: 67.49 Mbit/s  
95th percentile per-packet one-way delay: 151.395 ms  
Loss rate: 0.86%

Run 1: Report of PCC-Vivace — Data Link

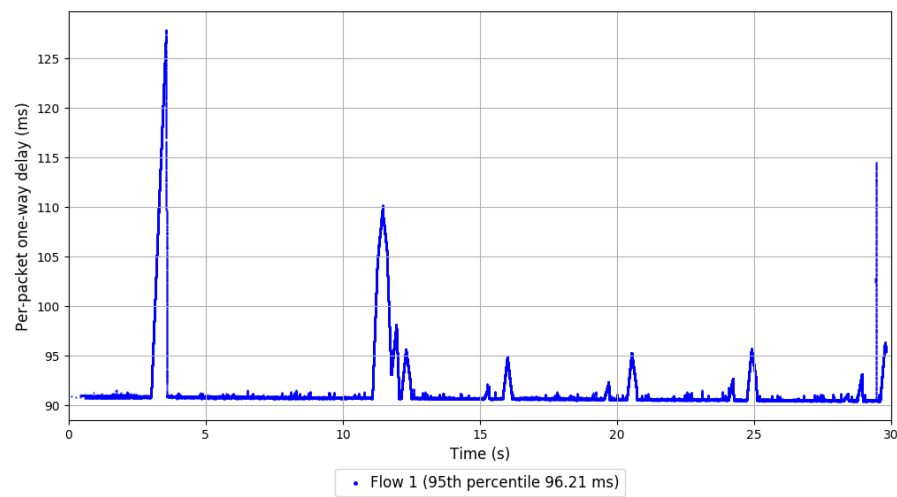
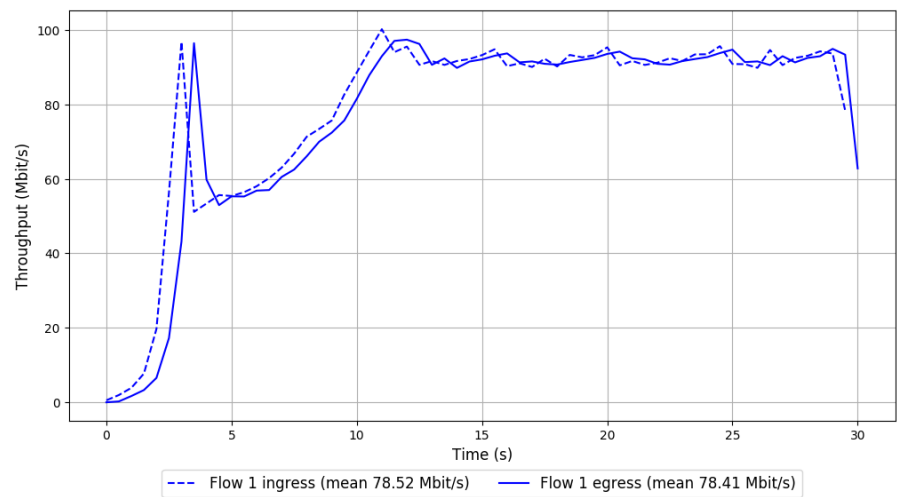


Run 2: Statistics of PCC-Vivace

Start at: 2019-09-18 16:00:58  
End at: 2019-09-18 16:01:28  
Local clock offset: -6.623 ms  
Remote clock offset: 45.652 ms

# Below is generated by plot.py at 2019-09-18 18:08:03  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 78.41 Mbit/s  
95th percentile per-packet one-way delay: 96.209 ms  
Loss rate: 0.69%  
-- Flow 1:  
Average throughput: 78.41 Mbit/s  
95th percentile per-packet one-way delay: 96.209 ms  
Loss rate: 0.69%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-09-18 16:29:26

End at: 2019-09-18 16:29:56

Local clock offset: 5.589 ms

Remote clock offset: 51.171 ms

# Below is generated by plot.py at 2019-09-18 18:08:06

# Datalink statistics

-- Total of 1 flow:

Average throughput: 77.02 Mbit/s

95th percentile per-packet one-way delay: 121.721 ms

Loss rate: 0.73%

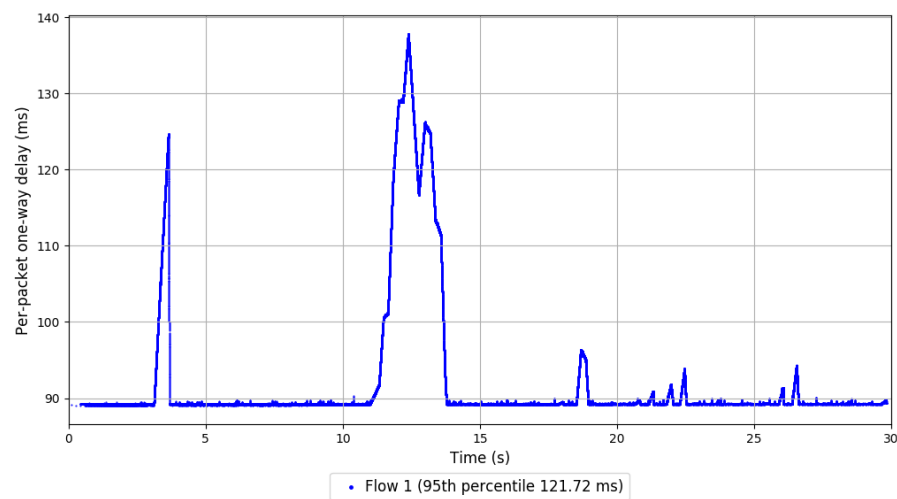
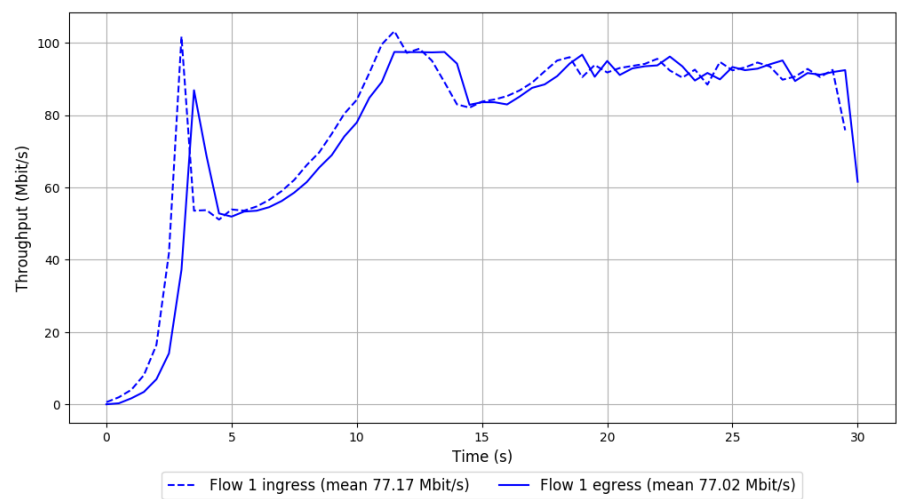
-- Flow 1:

Average throughput: 77.02 Mbit/s

95th percentile per-packet one-way delay: 121.721 ms

Loss rate: 0.73%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-09-18 16:57:53

End at: 2019-09-18 16:58:23

Local clock offset: 3.642 ms

Remote clock offset: 56.36 ms

# Below is generated by plot.py at 2019-09-18 18:08:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 76.70 Mbit/s

95th percentile per-packet one-way delay: 124.059 ms

Loss rate: 0.71%

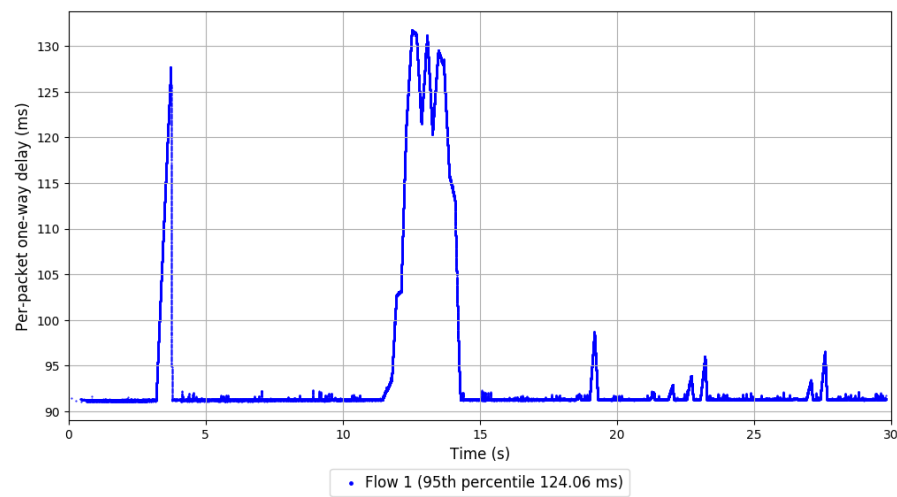
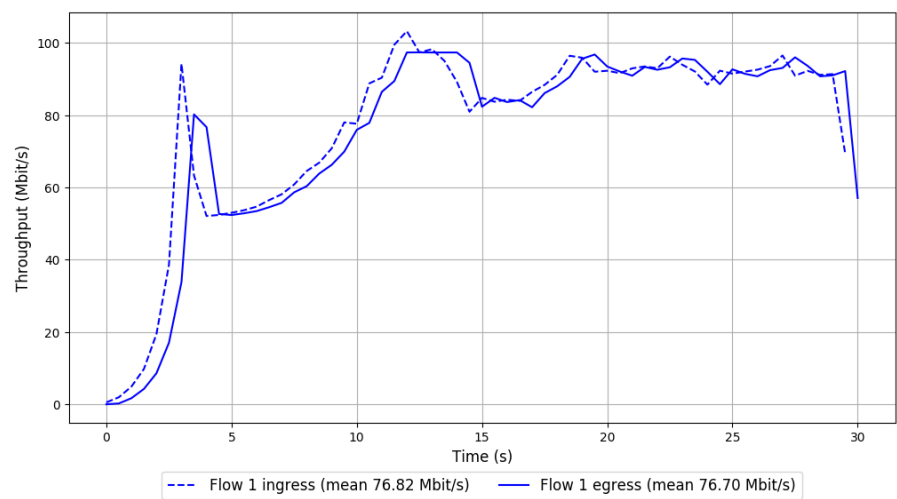
-- Flow 1:

Average throughput: 76.70 Mbit/s

95th percentile per-packet one-way delay: 124.059 ms

Loss rate: 0.71%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-09-18 17:26:18

End at: 2019-09-18 17:26:48

Local clock offset: 3.268 ms

Remote clock offset: 61.371 ms

# Below is generated by plot.py at 2019-09-18 18:08:07

# Datalink statistics

-- Total of 1 flow:

Average throughput: 77.34 Mbit/s

95th percentile per-packet one-way delay: 99.369 ms

Loss rate: 0.68%

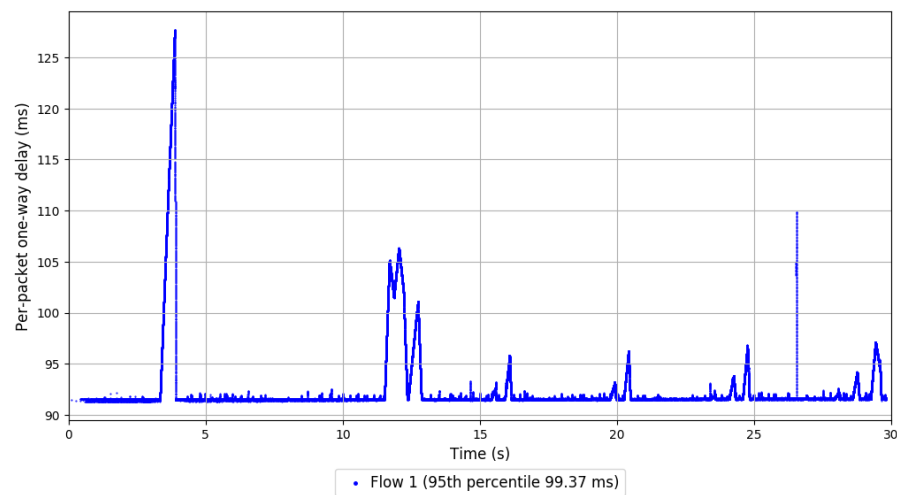
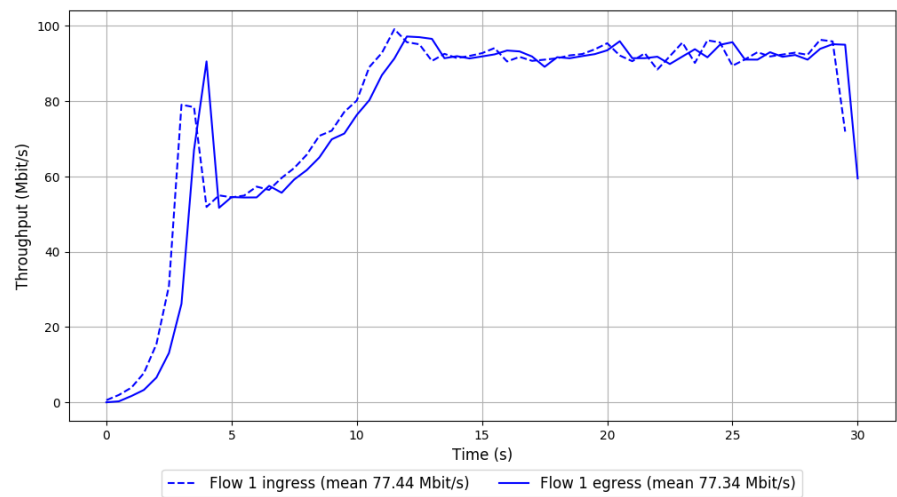
-- Flow 1:

Average throughput: 77.34 Mbit/s

95th percentile per-packet one-way delay: 99.369 ms

Loss rate: 0.68%

Run 5: Report of PCC-Vivace — Data Link

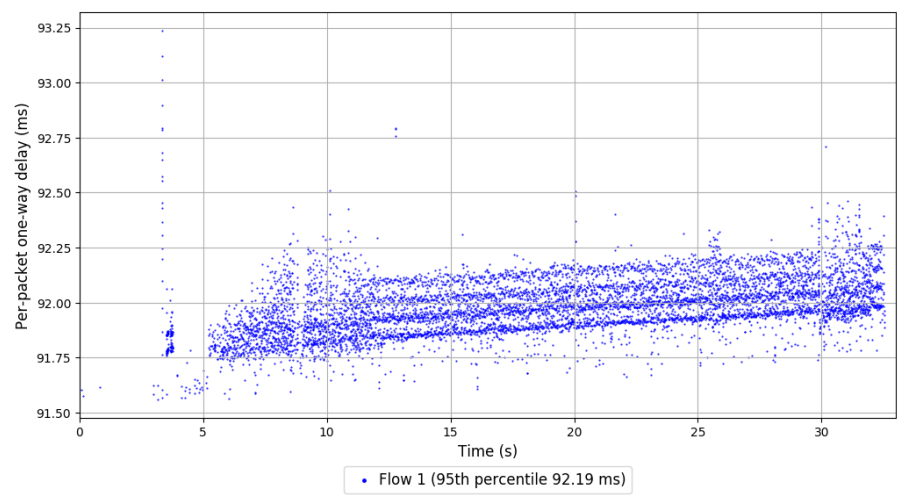
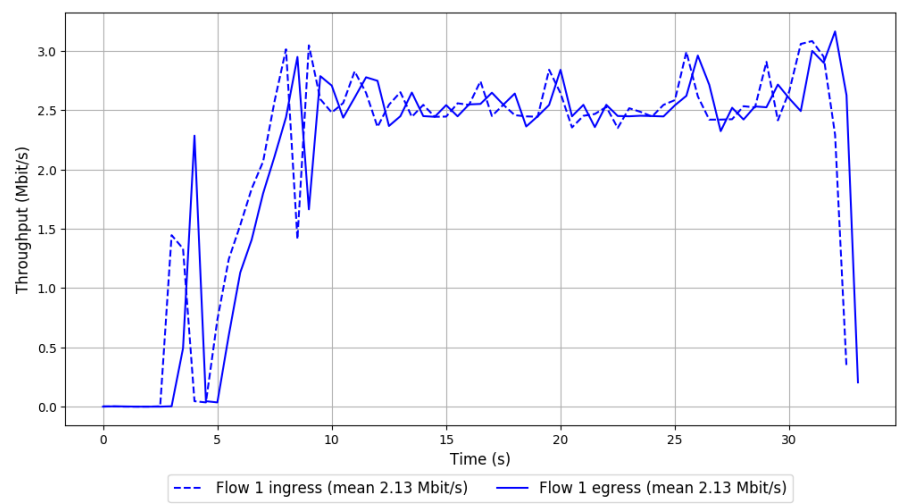


Run 1: Statistics of WebRTC media

Start at: 2019-09-18 15:57:24  
End at: 2019-09-18 15:57:54  
Local clock offset: -5.783 ms  
Remote clock offset: 44.858 ms

# Below is generated by plot.py at 2019-09-18 18:08:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.13 Mbit/s  
95th percentile per-packet one-way delay: 92.188 ms  
Loss rate: 0.28%  
-- Flow 1:  
Average throughput: 2.13 Mbit/s  
95th percentile per-packet one-way delay: 92.188 ms  
Loss rate: 0.28%

Run 1: Report of WebRTC media — Data Link

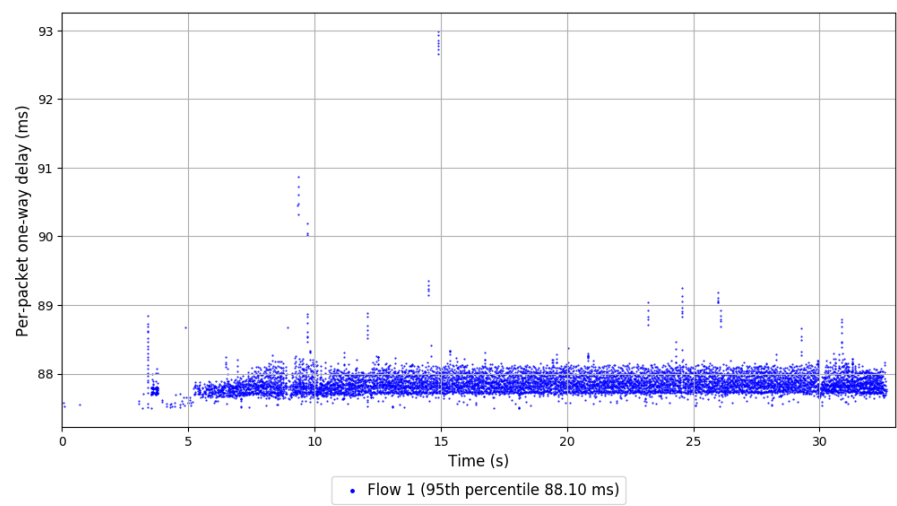
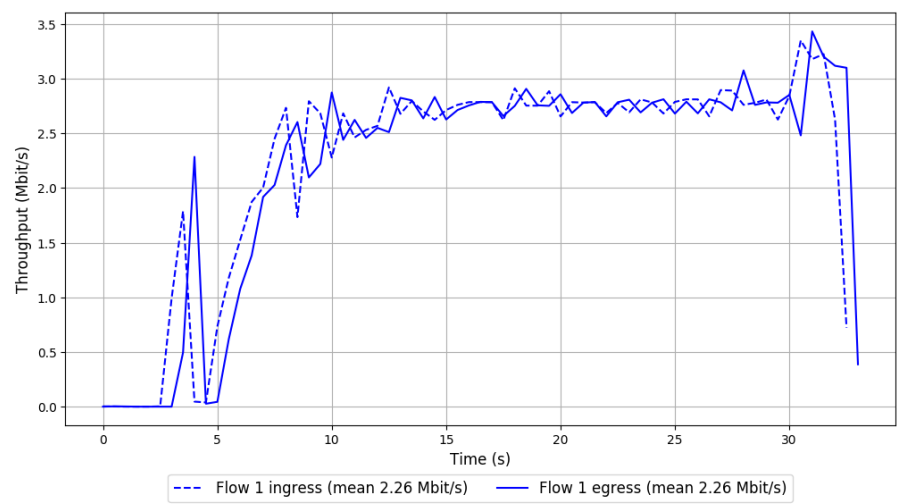


Run 2: Statistics of WebRTC media

Start at: 2019-09-18 16:25:52  
End at: 2019-09-18 16:26:22  
Local clock offset: 5.217 ms  
Remote clock offset: 52.006 ms

# Below is generated by plot.py at 2019-09-18 18:08:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.26 Mbit/s  
95th percentile per-packet one-way delay: 88.099 ms  
Loss rate: 0.32%  
-- Flow 1:  
Average throughput: 2.26 Mbit/s  
95th percentile per-packet one-way delay: 88.099 ms  
Loss rate: 0.32%

Run 2: Report of WebRTC media — Data Link

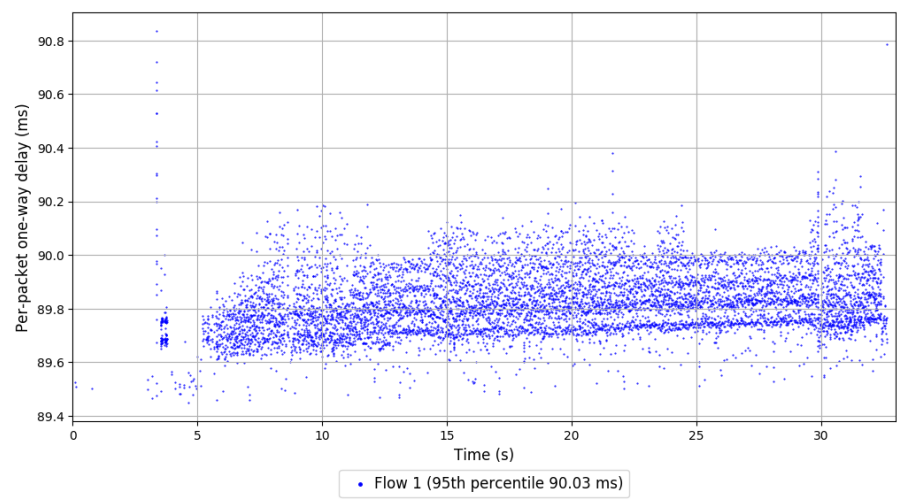
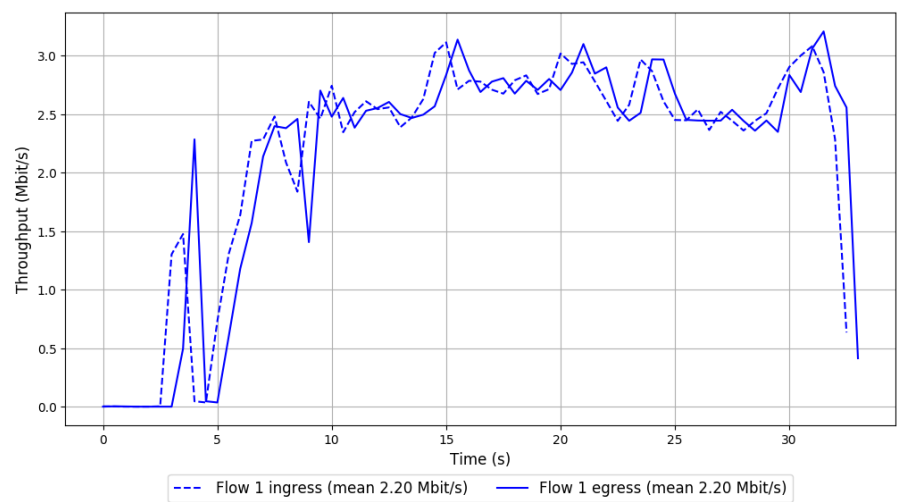


Run 3: Statistics of WebRTC media

Start at: 2019-09-18 16:54:19  
End at: 2019-09-18 16:54:49  
Local clock offset: 4.404 ms  
Remote clock offset: 54.833 ms

# Below is generated by plot.py at 2019-09-18 18:08:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.20 Mbit/s  
95th percentile per-packet one-way delay: 90.031 ms  
Loss rate: 0.37%  
-- Flow 1:  
Average throughput: 2.20 Mbit/s  
95th percentile per-packet one-way delay: 90.031 ms  
Loss rate: 0.37%

Run 3: Report of WebRTC media — Data Link

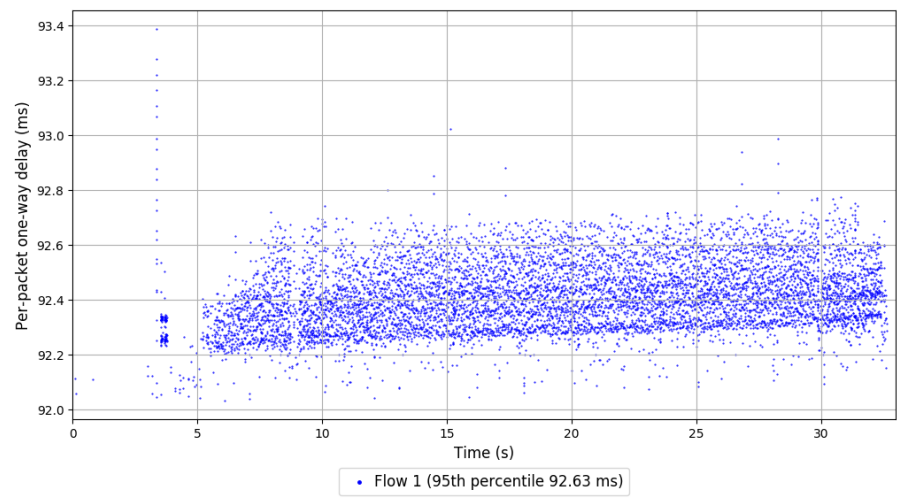
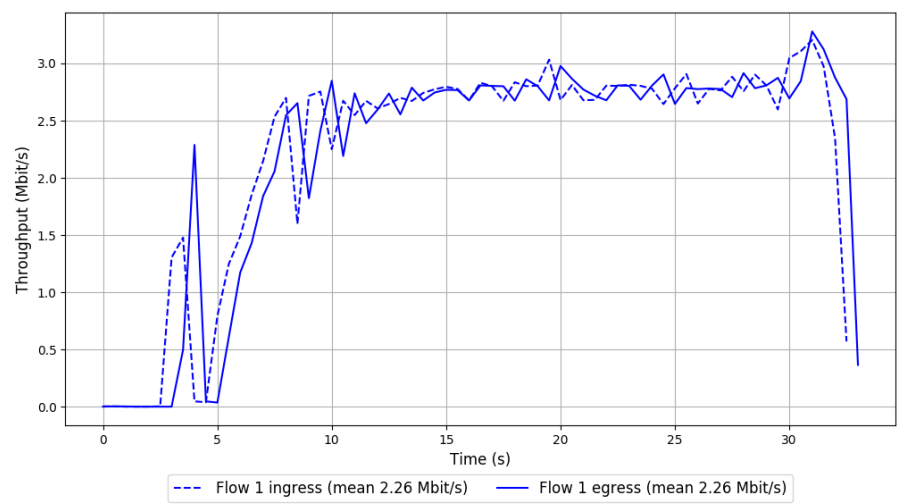


Run 4: Statistics of WebRTC media

Start at: 2019-09-18 17:22:44  
End at: 2019-09-18 17:23:14  
Local clock offset: 4.033 ms  
Remote clock offset: 57.407 ms

# Below is generated by plot.py at 2019-09-18 18:08:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.26 Mbit/s  
95th percentile per-packet one-way delay: 92.630 ms  
Loss rate: 0.31%  
-- Flow 1:  
Average throughput: 2.26 Mbit/s  
95th percentile per-packet one-way delay: 92.630 ms  
Loss rate: 0.31%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-09-18 17:51:13  
End at: 2019-09-18 17:51:43  
Local clock offset: 2.375 ms  
Remote clock offset: 67.843 ms

# Below is generated by plot.py at 2019-09-18 18:08:07  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 2.23 Mbit/s  
95th percentile per-packet one-way delay: 87.405 ms  
Loss rate: 0.45%  
-- Flow 1:  
Average throughput: 2.23 Mbit/s  
95th percentile per-packet one-way delay: 87.405 ms  
Loss rate: 0.45%

Run 5: Report of WebRTC media — Data Link

