

Pantheon Report

Generated at 2018-09-11 00:40:55 (UTC).

Data path: AWS California 2 on **ens5** (*local*) → Mexico on **em1** (*remote*).

Repeated the test of 18 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

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

System info:

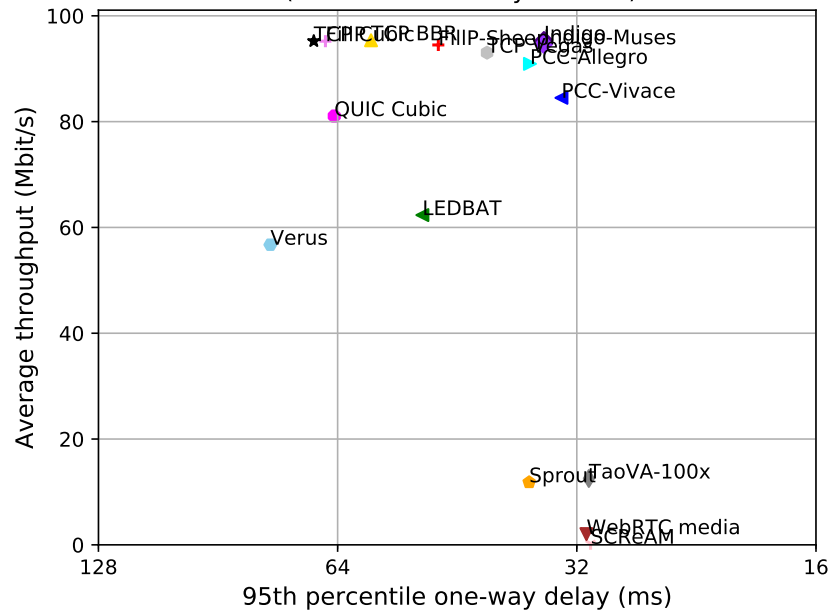
```
Linux 4.15.0-1020-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
net.ipv4.tcp_mem = 184101 245469 368202
```

Git summary:

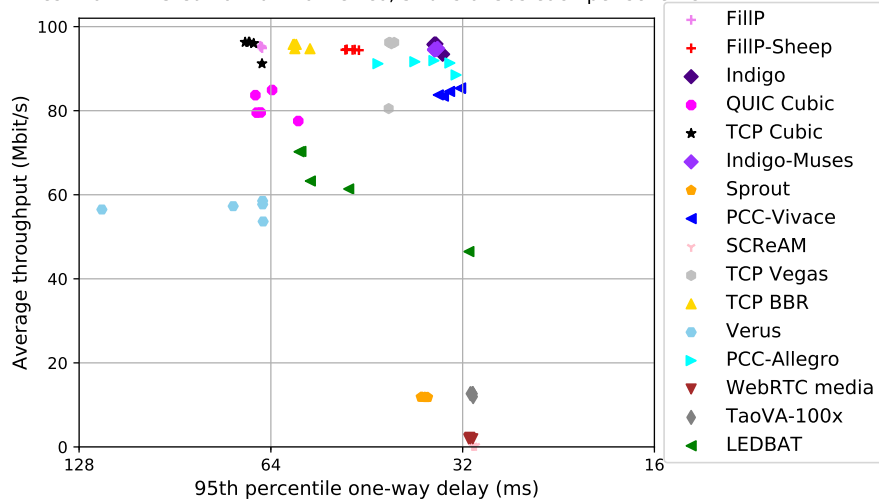
```
branch: muses @ f30bceca2aec2ef14a3cf71e25642f4a30905a03
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
third_party/pantheon-tunnel @ cbfce6db5ff5740dafa1771f813cd646339e1952
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 AWS California 2 to Mexico, 5 runs of 30s each per scheme
(mean of all runs by scheme)



test from AWS California 2 to Mexico, 5 runs of 30s each per scheme



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	95.38	58.09	1.02
Copa	0	N/A	N/A	N/A
TCP Cubic	5	95.22	68.58	0.58
FillP	5	95.21	66.30	9.14
FillP-Sheep	5	94.49	47.80	0.81
Indigo	5	95.34	35.20	0.00
LEDBAT	5	62.33	50.06	0.01
Indigo-Muses	5	94.63	35.23	0.41
PCC-Allegro	5	90.92	36.65	0.70
PCC-Expr	0	N/A	N/A	N/A
QUIC Cubic	5	81.06	64.63	1.28
SCReAM	5	0.21	30.75	0.00
Sprout	5	11.83	36.74	0.03
TaoVA-100x	5	12.54	30.90	63.50
TCP Vegas	5	93.03	41.51	0.28
Verus	5	56.73	77.78	42.78
PCC-Vivace	5	84.50	33.46	0.00
WebRTC media	5	2.02	31.12	0.01

Run 1: Statistics of TCP BBR

Start at: 2018-09-10 22:49:16

End at: 2018-09-10 22:49:46

Local clock offset: 0.27 ms

Remote clock offset: -7.226 ms

Below is generated by plot.py at 2018-09-11 00:32:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.81 Mbit/s

95th percentile per-packet one-way delay: 58.780 ms

Loss rate: 1.22%

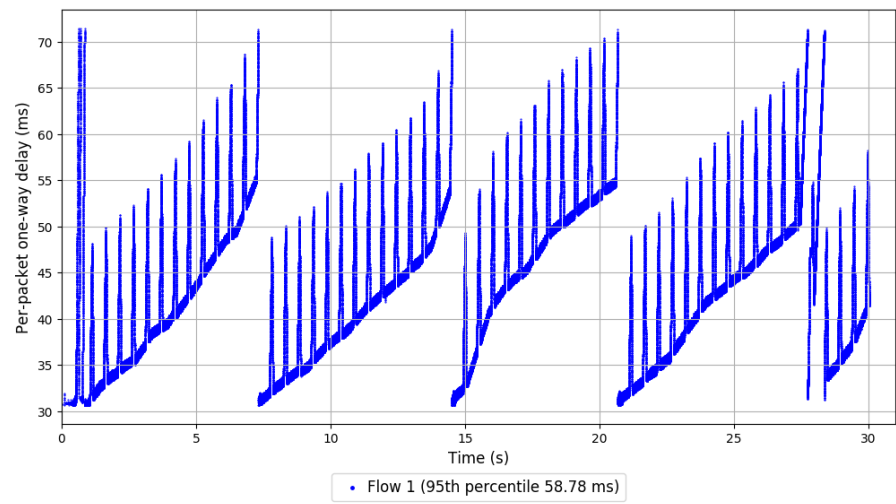
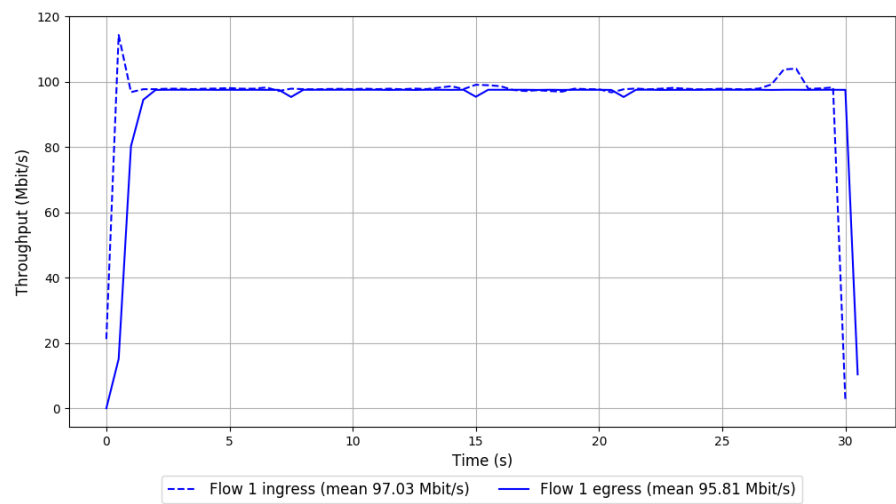
-- Flow 1:

Average throughput: 95.81 Mbit/s

95th percentile per-packet one-way delay: 58.780 ms

Loss rate: 1.22%

Run 1: Report of TCP BBR — Data Link

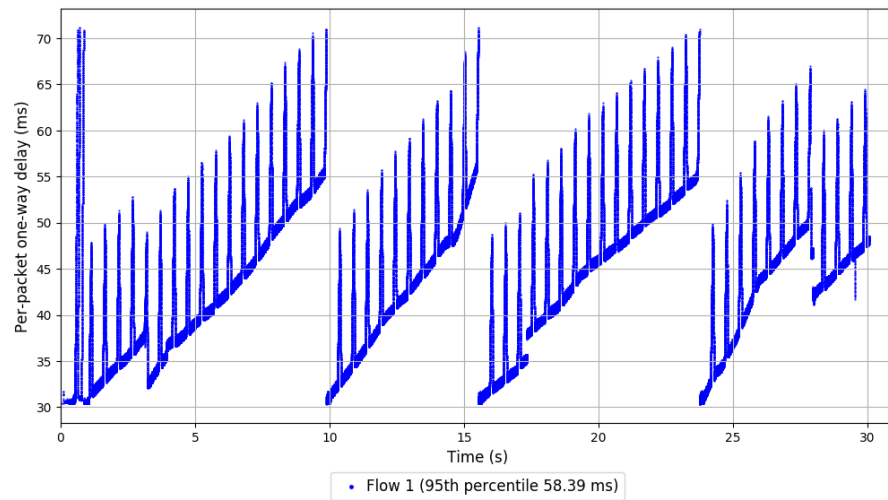
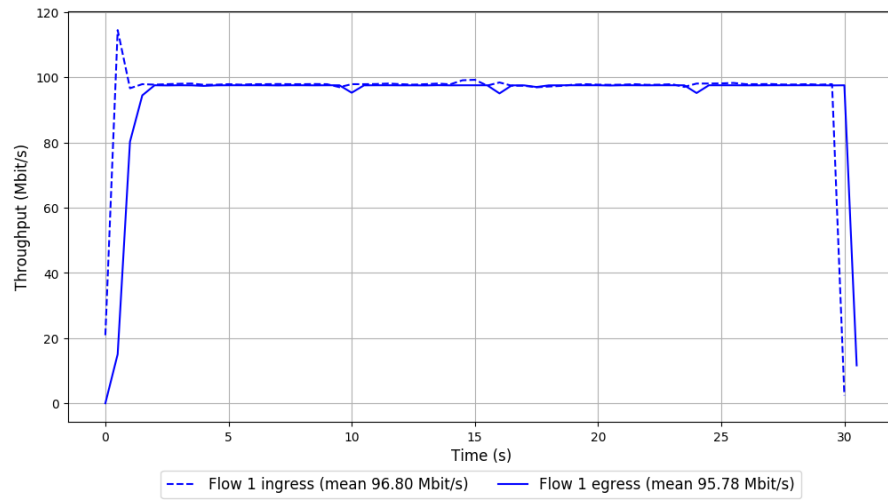


Run 2: Statistics of TCP BBR

Start at: 2018-09-10 23:12:55
End at: 2018-09-10 23:13:25
Local clock offset: 0.309 ms
Remote clock offset: -3.682 ms

Below is generated by plot.py at 2018-09-11 00:33:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 58.389 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 58.389 ms
Loss rate: 1.00%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2018-09-10 23:36:26

End at: 2018-09-10 23:36:56

Local clock offset: 0.038 ms

Remote clock offset: -1.008 ms

Below is generated by plot.py at 2018-09-11 00:33:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.75 Mbit/s

95th percentile per-packet one-way delay: 55.559 ms

Loss rate: 0.99%

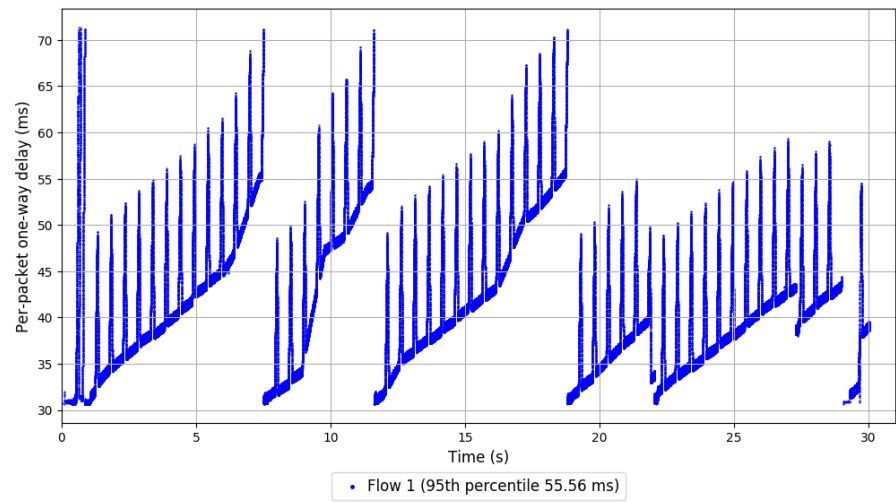
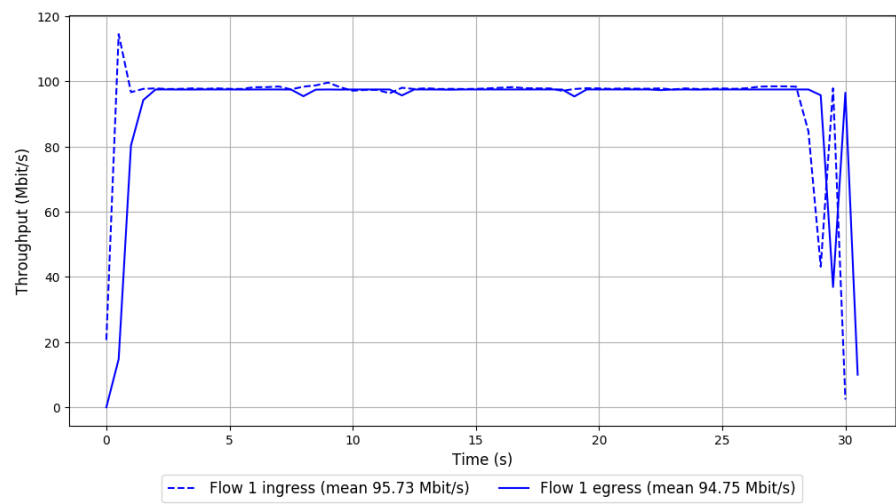
-- Flow 1:

Average throughput: 94.75 Mbit/s

95th percentile per-packet one-way delay: 55.559 ms

Loss rate: 0.99%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2018-09-10 23:59:54

End at: 2018-09-11 00:00:24

Local clock offset: -0.08 ms

Remote clock offset: -0.591 ms

Below is generated by plot.py at 2018-09-11 00:33:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.76 Mbit/s

95th percentile per-packet one-way delay: 58.690 ms

Loss rate: 0.87%

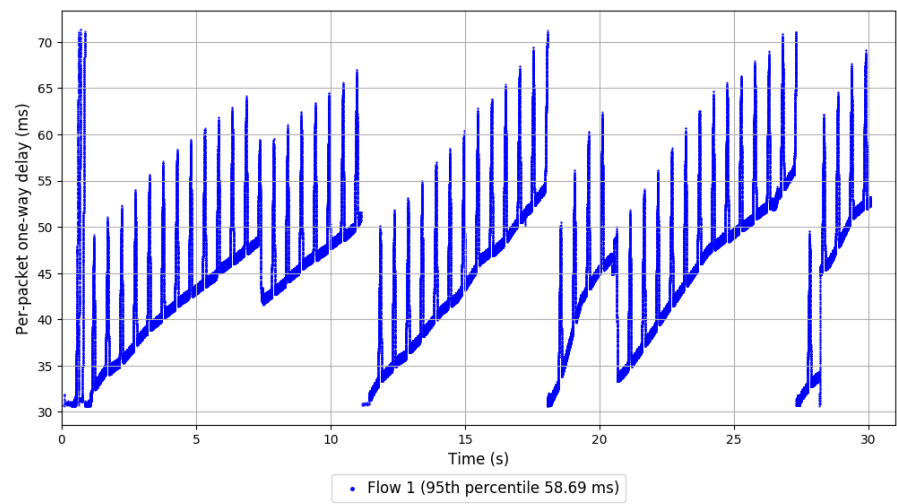
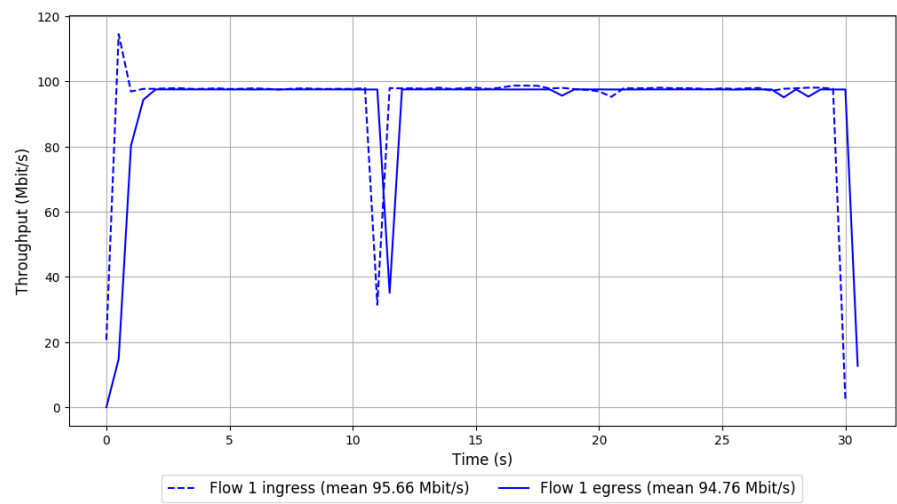
-- Flow 1:

Average throughput: 94.76 Mbit/s

95th percentile per-packet one-way delay: 58.690 ms

Loss rate: 0.87%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2018-09-11 00:23:28

End at: 2018-09-11 00:23:58

Local clock offset: 0.366 ms

Remote clock offset: -0.425 ms

Below is generated by plot.py at 2018-09-11 00:33:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.78 Mbit/s

95th percentile per-packet one-way delay: 59.047 ms

Loss rate: 1.03%

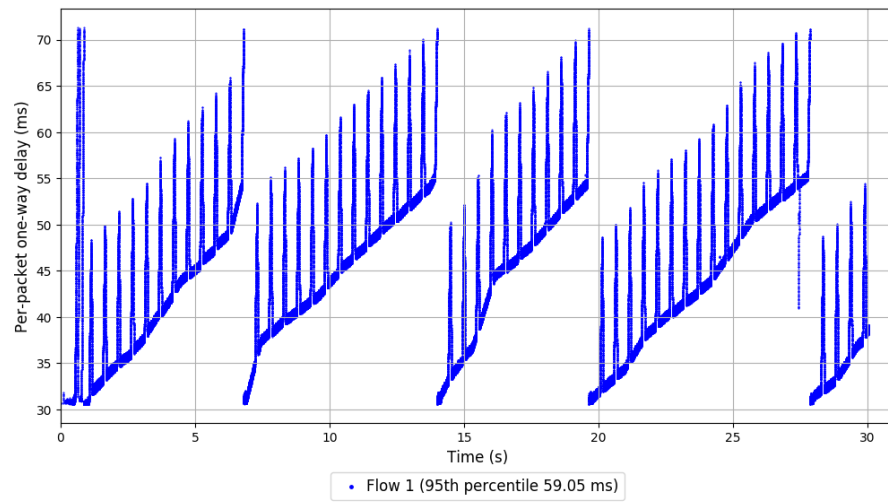
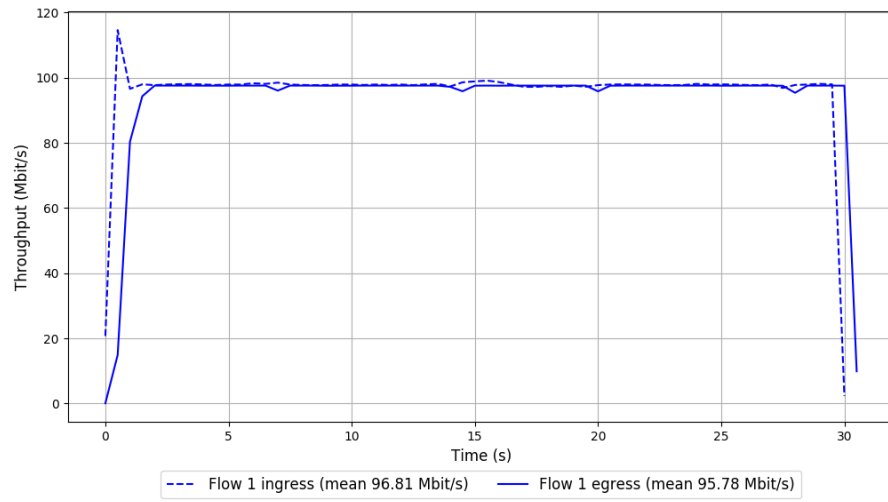
-- Flow 1:

Average throughput: 95.78 Mbit/s

95th percentile per-packet one-way delay: 59.047 ms

Loss rate: 1.03%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

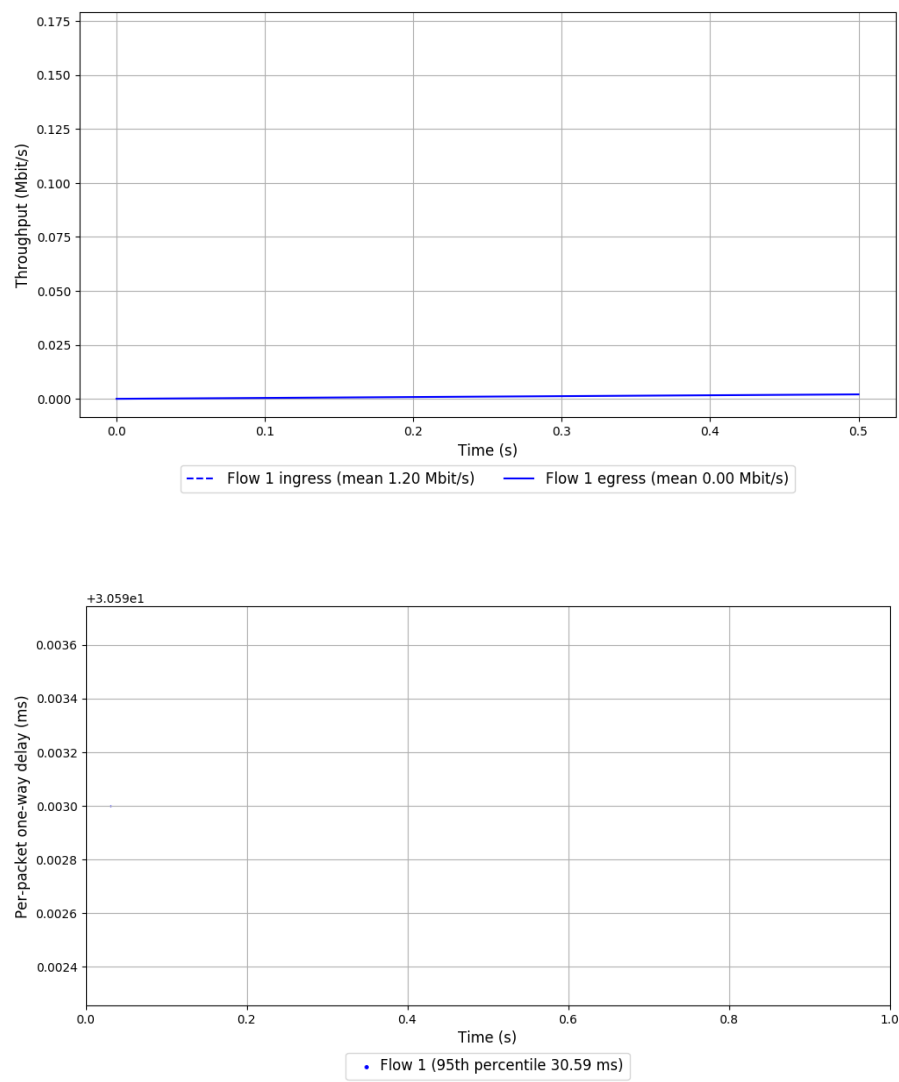
Start at: 2018-09-10 22:34:53

End at: 2018-09-10 22:35:23

Local clock offset: 0.621 ms

Remote clock offset: -7.243 ms

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

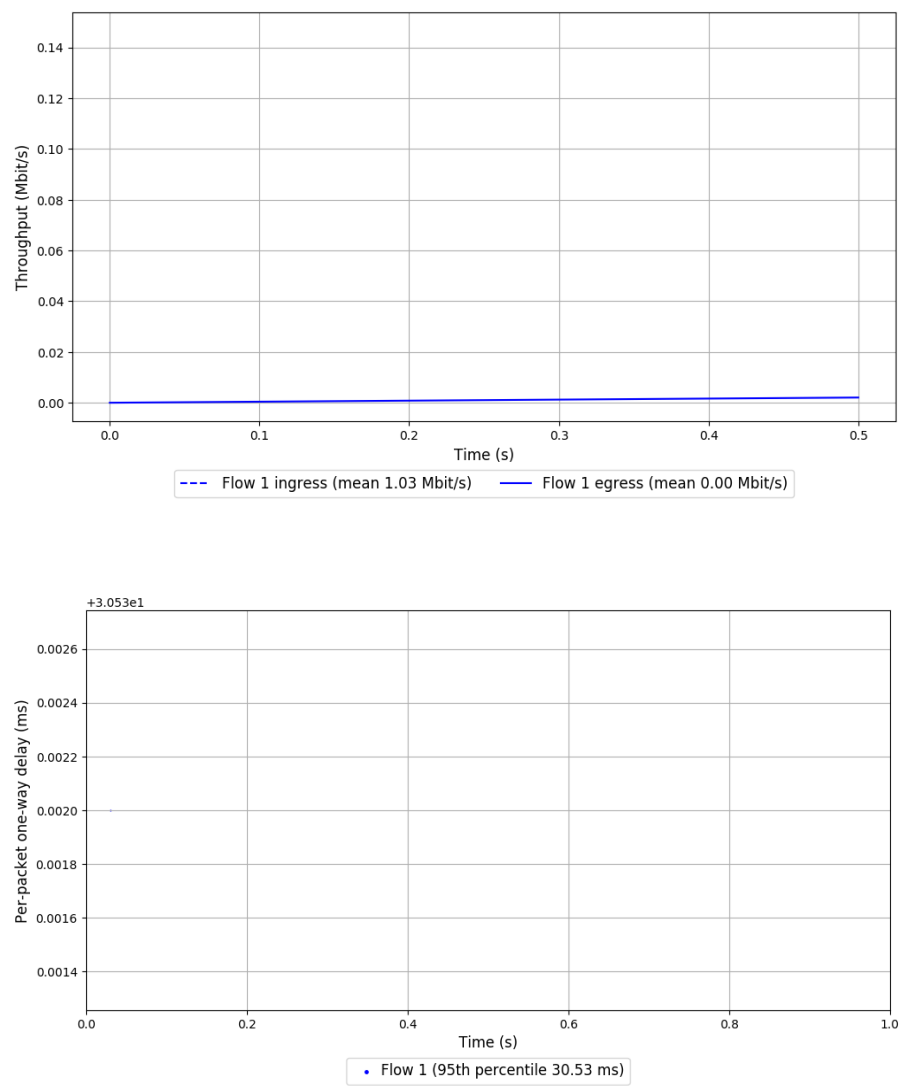
Start at: 2018-09-10 22:58:28

End at: 2018-09-10 22:58:58

Local clock offset: 0.353 ms

Remote clock offset: -6.422 ms

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

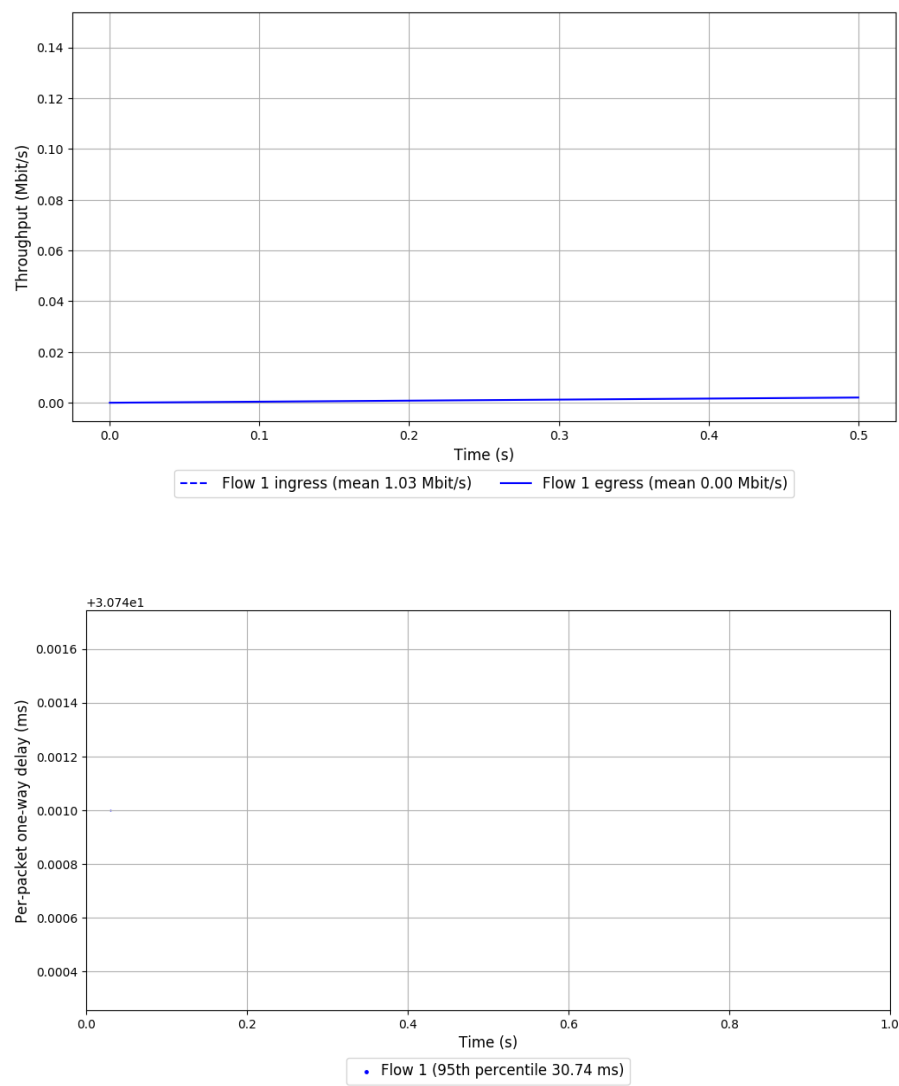
Start at: 2018-09-10 23:22:04

End at: 2018-09-10 23:22:34

Local clock offset: 0.304 ms

Remote clock offset: -1.947 ms

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

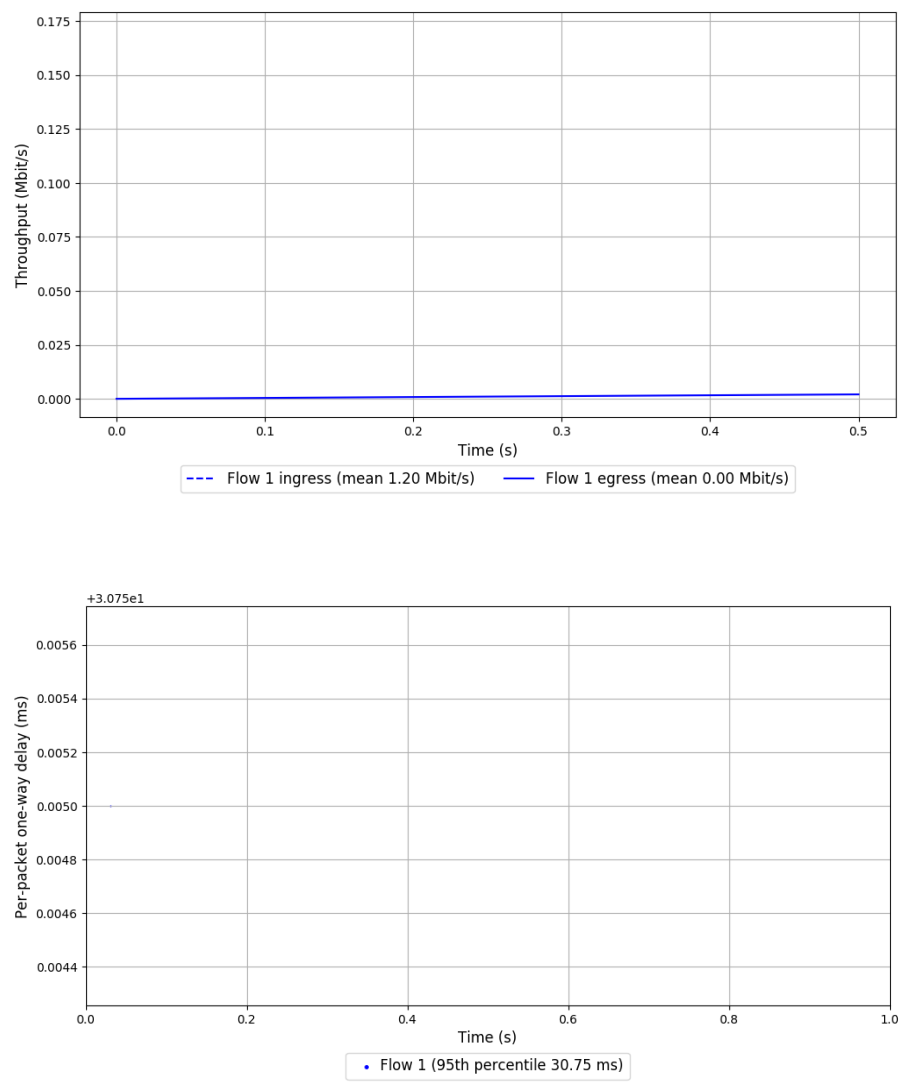
Start at: 2018-09-10 23:45:34

End at: 2018-09-10 23:46:04

Local clock offset: -0.075 ms

Remote clock offset: -0.806 ms

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

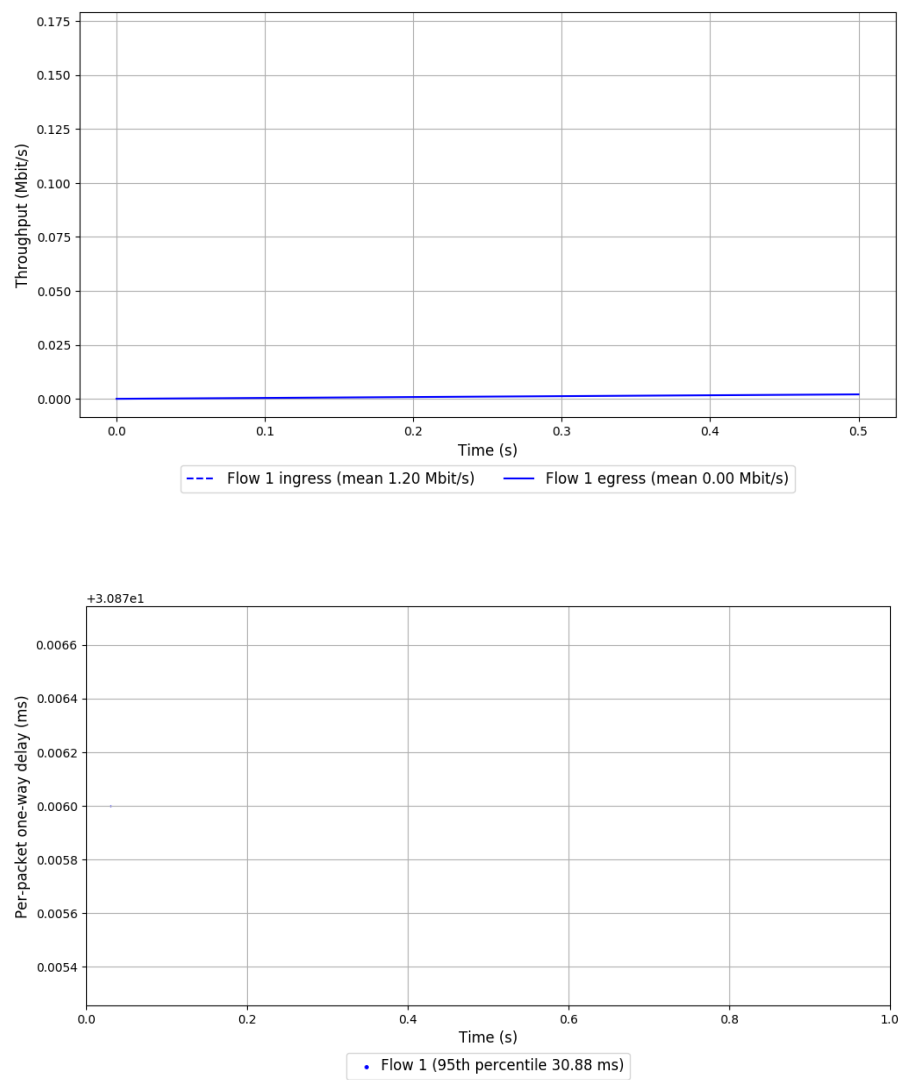
Start at: 2018-09-11 00:09:03

End at: 2018-09-11 00:09:34

Local clock offset: 0.102 ms

Remote clock offset: -0.33 ms

Run 5: Report of Copa — Data Link

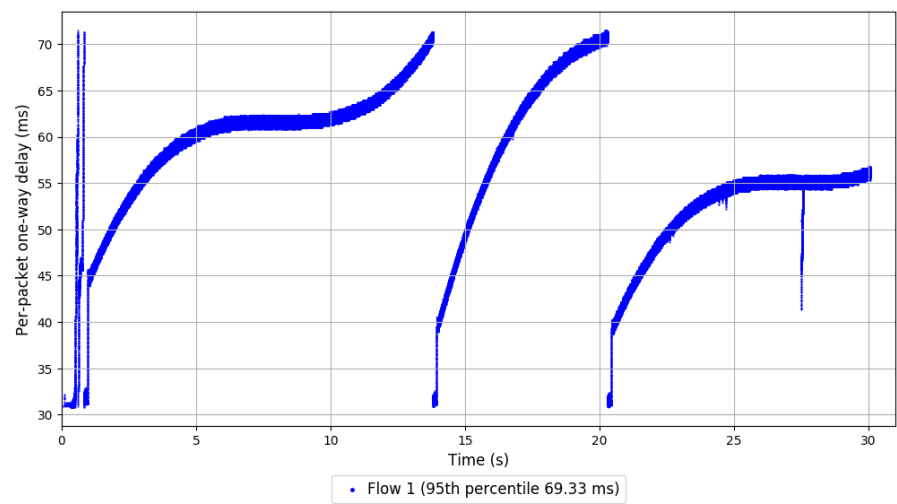
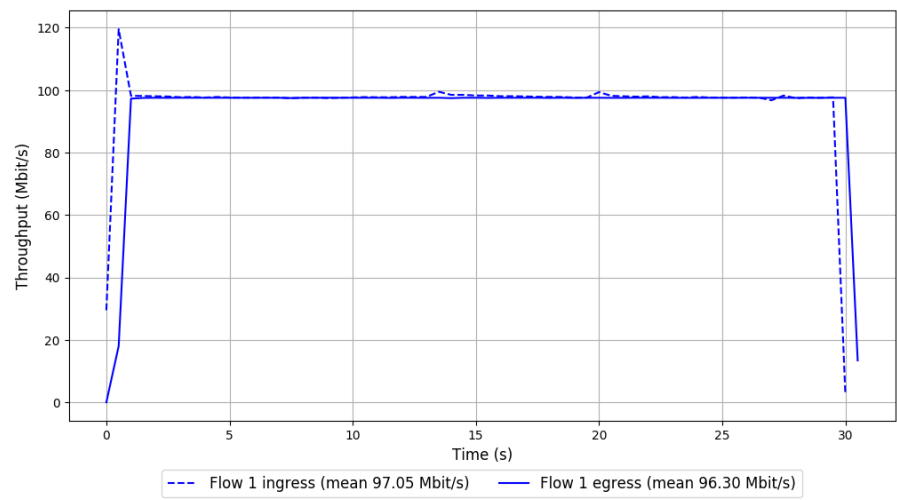


Run 1: Statistics of TCP Cubic

Start at: 2018-09-10 22:53:12
End at: 2018-09-10 22:53:42
Local clock offset: 0.256 ms
Remote clock offset: -6.668 ms

Below is generated by plot.py at 2018-09-11 00:33:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 69.326 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 69.326 ms
Loss rate: 0.69%

Run 1: Report of TCP Cubic — Data Link

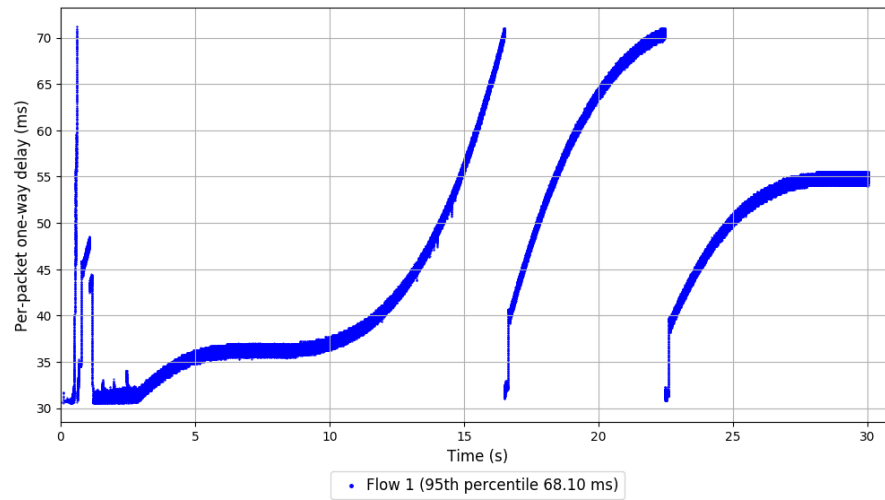
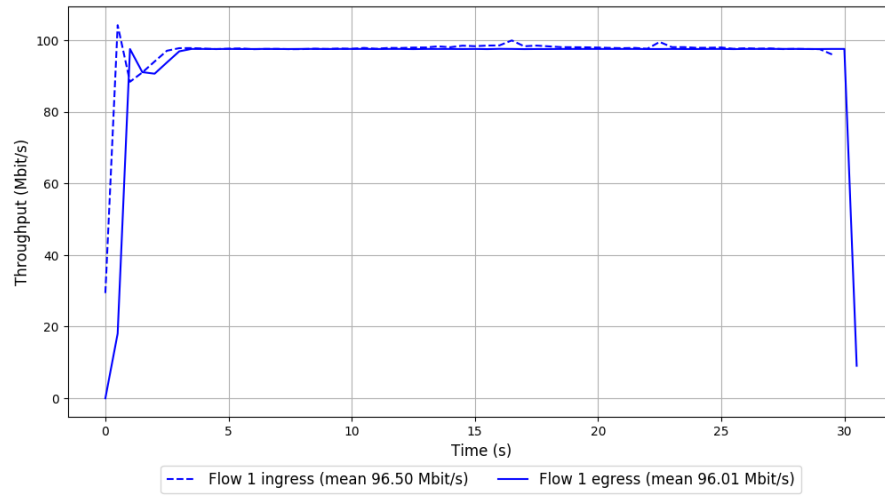


Run 2: Statistics of TCP Cubic

Start at: 2018-09-10 23:16:50
End at: 2018-09-10 23:17:20
Local clock offset: 0.312 ms
Remote clock offset: -2.821 ms

Below is generated by plot.py at 2018-09-11 00:33:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 68.102 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 68.102 ms
Loss rate: 0.43%

Run 2: Report of TCP Cubic — Data Link

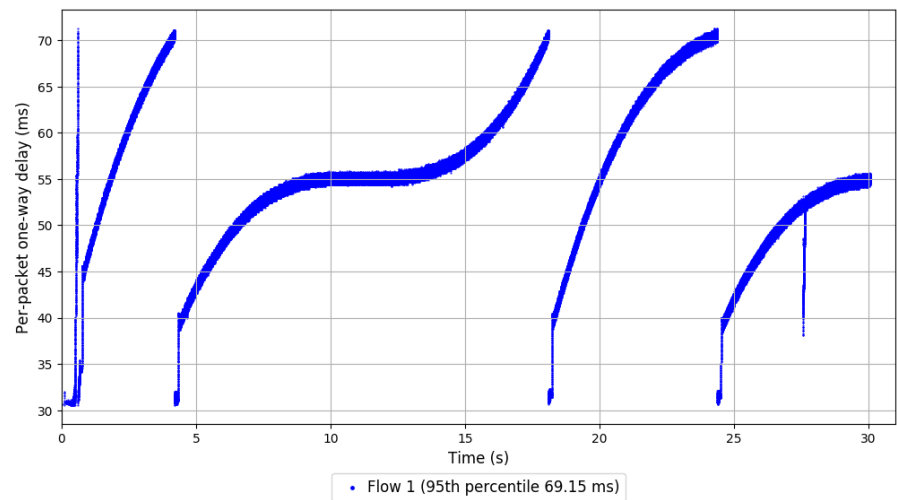
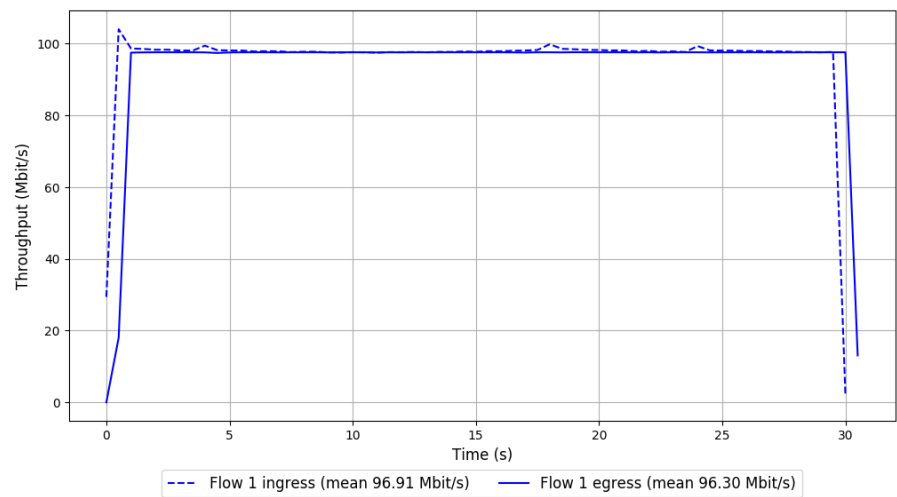


Run 3: Statistics of TCP Cubic

Start at: 2018-09-10 23:40:21
End at: 2018-09-10 23:40:51
Local clock offset: -0.013 ms
Remote clock offset: -0.968 ms

Below is generated by plot.py at 2018-09-11 00:33:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 69.151 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 69.151 ms
Loss rate: 0.55%

Run 3: Report of TCP Cubic — Data Link

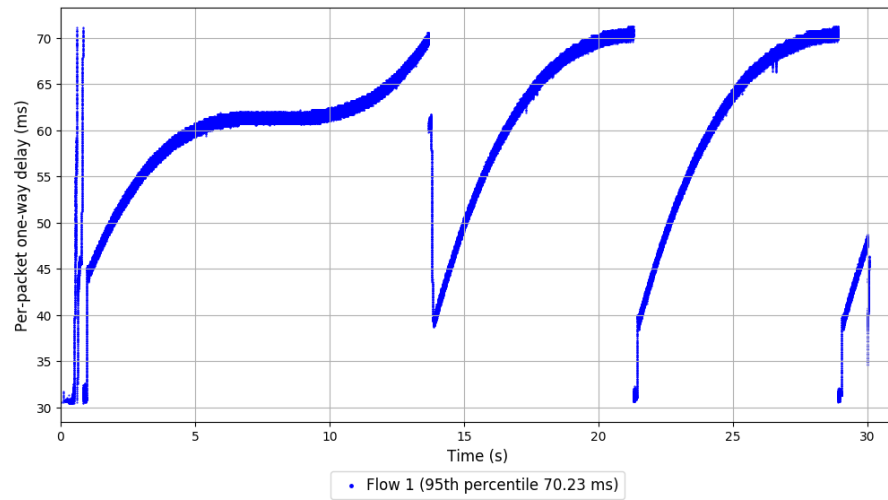
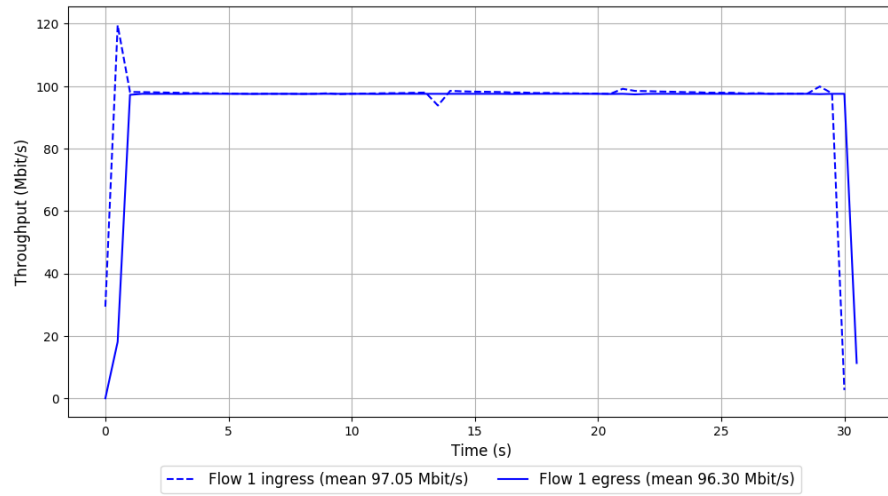


Run 4: Statistics of TCP Cubic

Start at: 2018-09-11 00:03:48
End at: 2018-09-11 00:04:19
Local clock offset: 0.08 ms
Remote clock offset: -0.673 ms

Below is generated by plot.py at 2018-09-11 00:34:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 70.230 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 70.230 ms
Loss rate: 0.72%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2018-09-11 00:27:24

End at: 2018-09-11 00:27:54

Local clock offset: 0.295 ms

Remote clock offset: -0.43 ms

Below is generated by plot.py at 2018-09-11 00:34:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.19 Mbit/s

95th percentile per-packet one-way delay: 66.084 ms

Loss rate: 0.49%

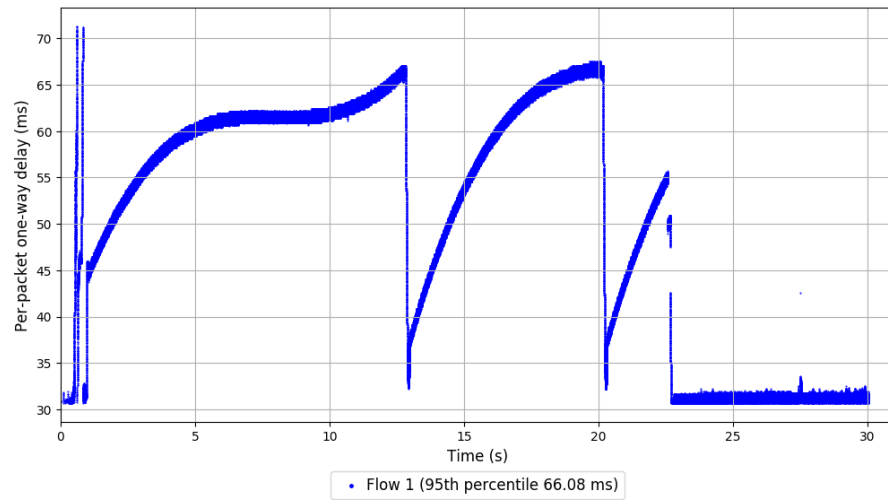
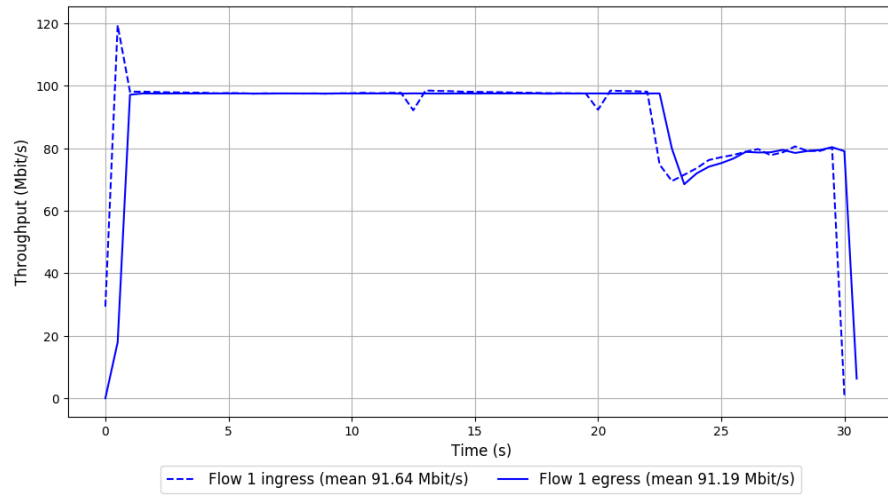
-- Flow 1:

Average throughput: 91.19 Mbit/s

95th percentile per-packet one-way delay: 66.084 ms

Loss rate: 0.49%

Run 5: Report of TCP Cubic — Data Link

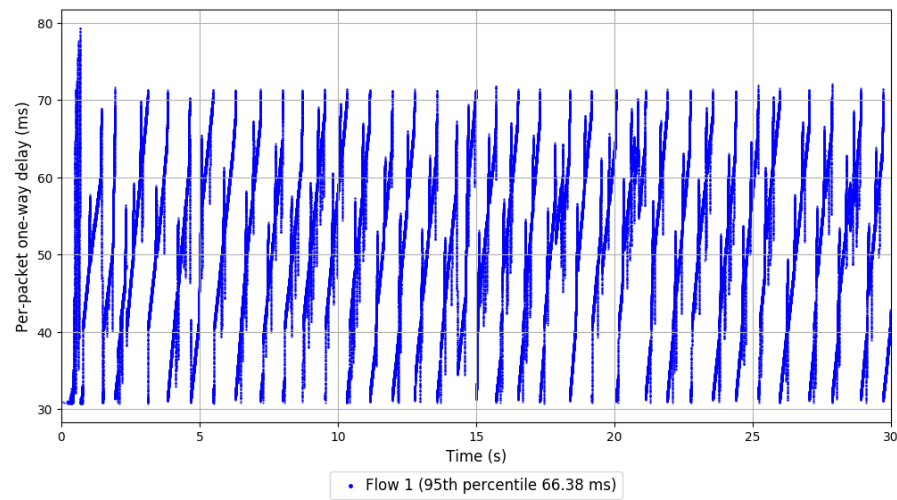
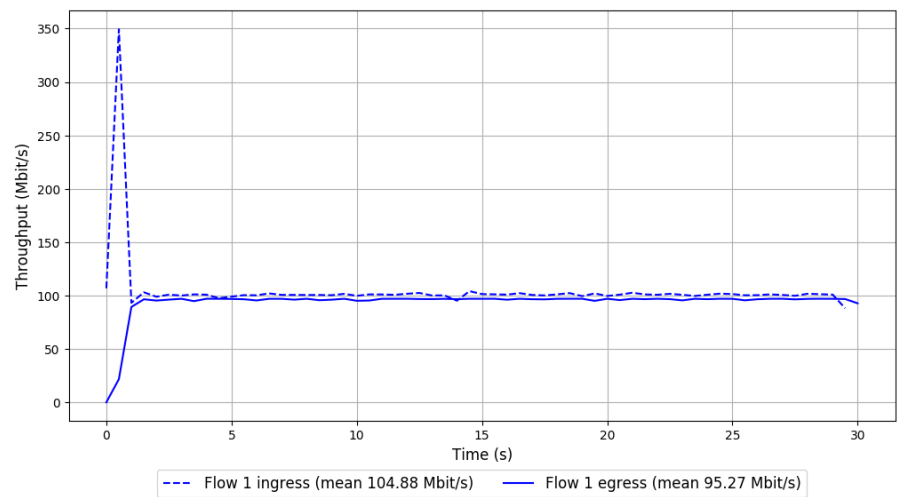


Run 1: Statistics of FillP

Start at: 2018-09-10 22:45:25
End at: 2018-09-10 22:45:55
Local clock offset: 0.293 ms
Remote clock offset: -7.414 ms

Below is generated by plot.py at 2018-09-11 00:34:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 66.380 ms
Loss rate: 9.13%
-- Flow 1:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 66.380 ms
Loss rate: 9.13%

Run 1: Report of FillP — Data Link

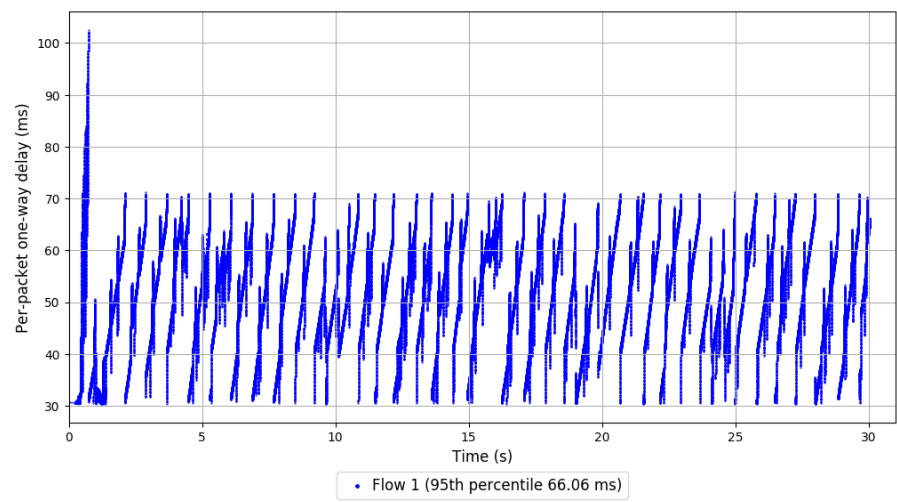
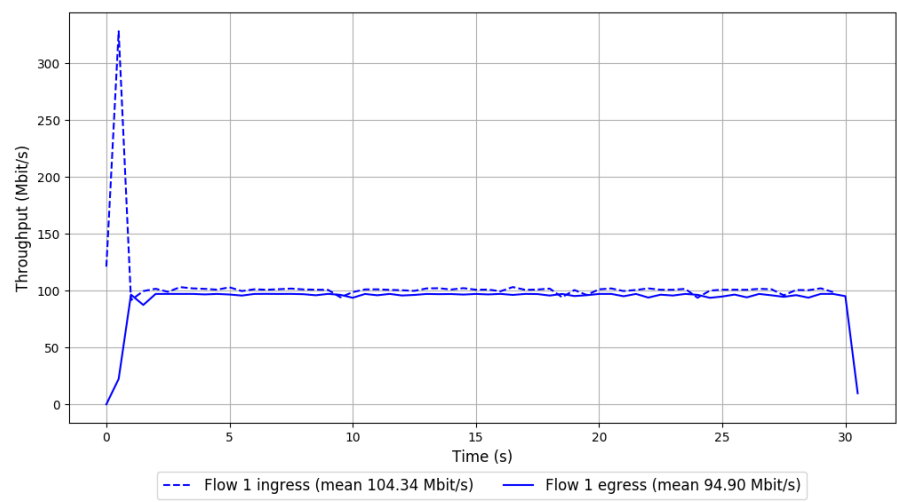


Run 2: Statistics of FillP

Start at: 2018-09-10 23:09:04
End at: 2018-09-10 23:09:34
Local clock offset: 0.325 ms
Remote clock offset: -4.292 ms

Below is generated by plot.py at 2018-09-11 00:34:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.90 Mbit/s
95th percentile per-packet one-way delay: 66.055 ms
Loss rate: 8.95%
-- Flow 1:
Average throughput: 94.90 Mbit/s
95th percentile per-packet one-way delay: 66.055 ms
Loss rate: 8.95%

Run 2: Report of FillP — Data Link

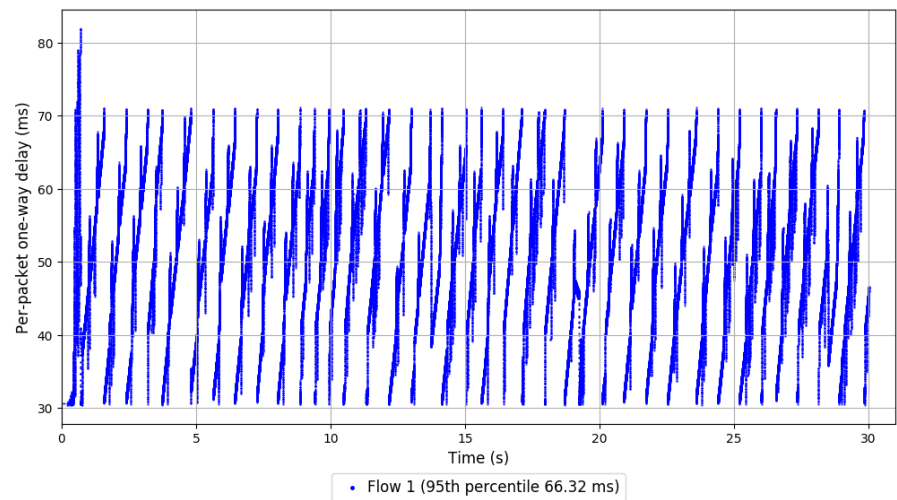
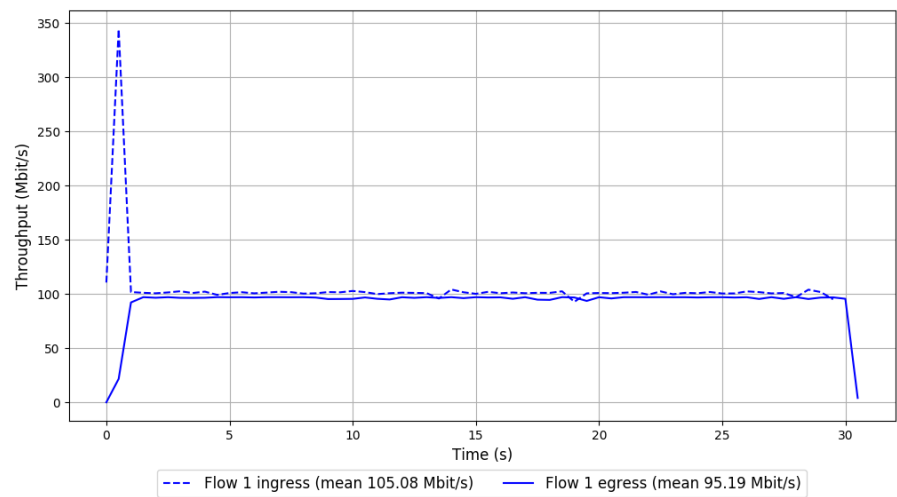


Run 3: Statistics of FillP

Start at: 2018-09-10 23:32:36
End at: 2018-09-10 23:33:06
Local clock offset: 0.132 ms
Remote clock offset: -1.196 ms

Below is generated by plot.py at 2018-09-11 00:34:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.19 Mbit/s
95th percentile per-packet one-way delay: 66.316 ms
Loss rate: 9.36%
-- Flow 1:
Average throughput: 95.19 Mbit/s
95th percentile per-packet one-way delay: 66.316 ms
Loss rate: 9.36%

Run 3: Report of FillP — Data Link

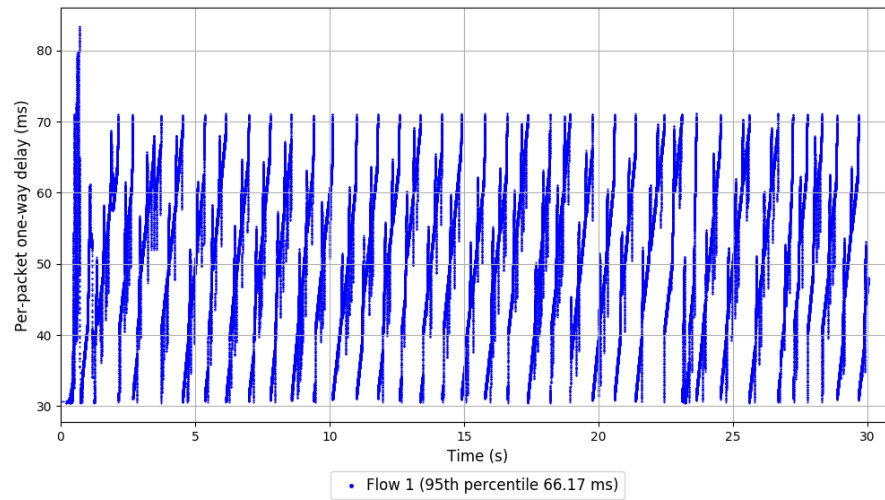
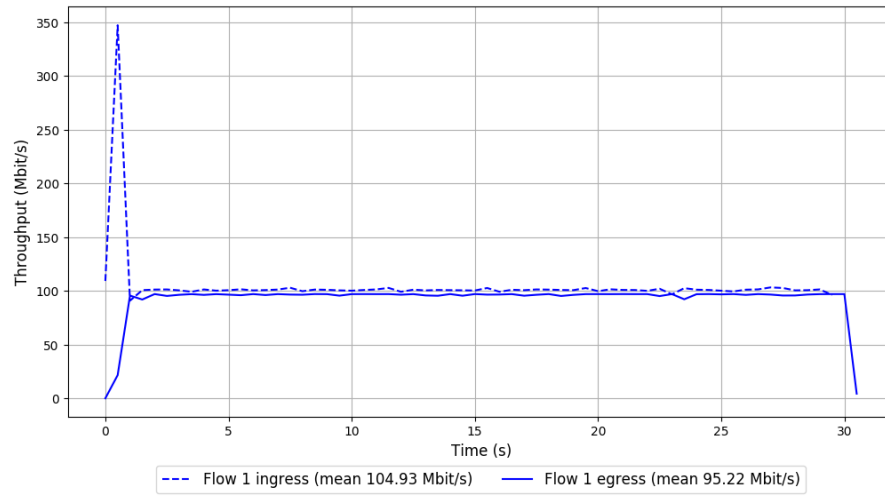


Run 4: Statistics of FillP

Start at: 2018-09-10 23:56:04
End at: 2018-09-10 23:56:34
Local clock offset: -0.132 ms
Remote clock offset: -0.655 ms

Below is generated by plot.py at 2018-09-11 00:34:27
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.22 Mbit/s
95th percentile per-packet one-way delay: 66.171 ms
Loss rate: 9.20%
-- Flow 1:
Average throughput: 95.22 Mbit/s
95th percentile per-packet one-way delay: 66.171 ms
Loss rate: 9.20%

Run 4: Report of FillP — Data Link

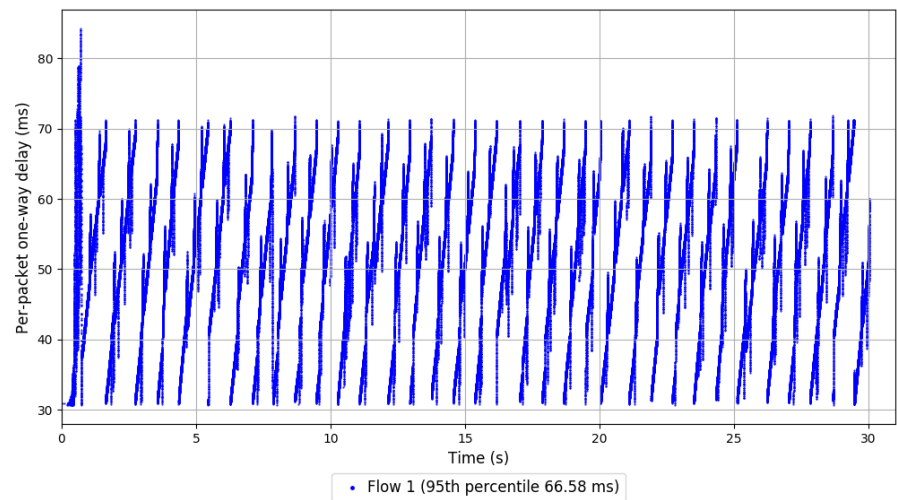
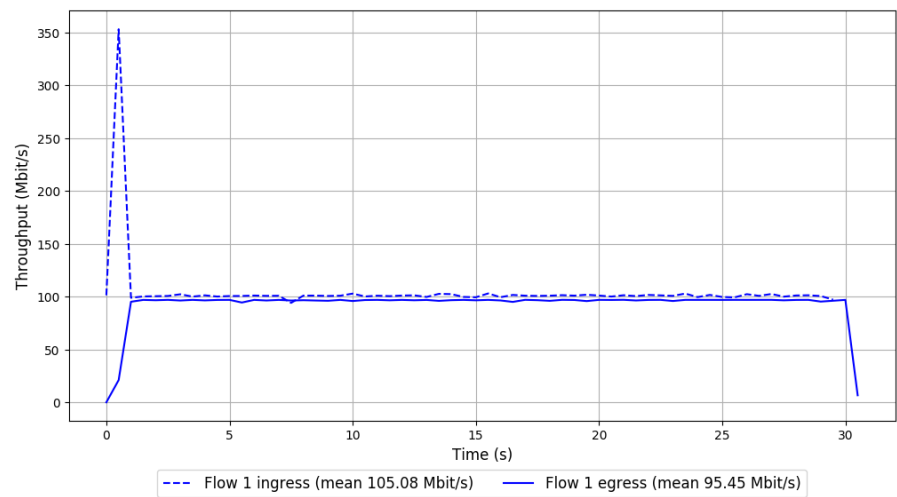


Run 5: Statistics of FillP

Start at: 2018-09-11 00:19:36
End at: 2018-09-11 00:20:06
Local clock offset: 0.34 ms
Remote clock offset: -0.209 ms

Below is generated by plot.py at 2018-09-11 00:34:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.45 Mbit/s
95th percentile per-packet one-way delay: 66.578 ms
Loss rate: 9.07%
-- Flow 1:
Average throughput: 95.45 Mbit/s
95th percentile per-packet one-way delay: 66.578 ms
Loss rate: 9.07%

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2018-09-10 22:40:07

End at: 2018-09-10 22:40:37

Local clock offset: 0.469 ms

Remote clock offset: -7.477 ms

Below is generated by plot.py at 2018-09-11 00:34:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.39 Mbit/s

95th percentile per-packet one-way delay: 46.552 ms

Loss rate: 0.79%

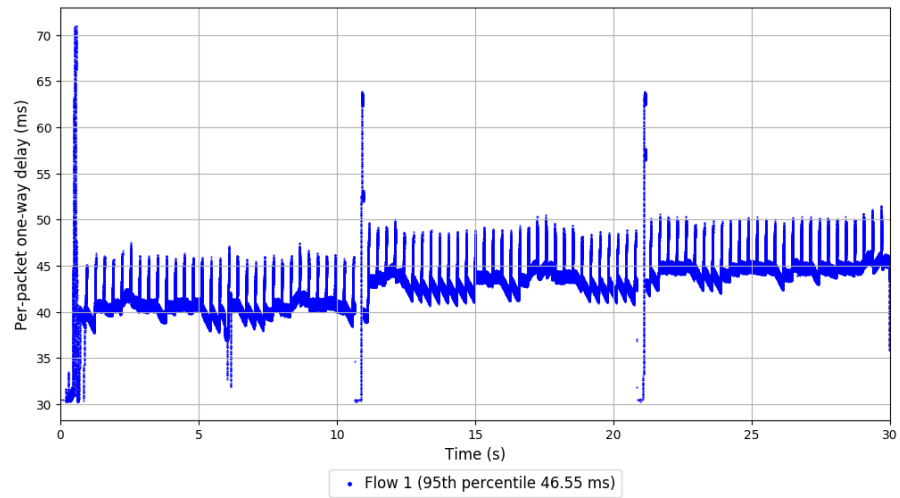
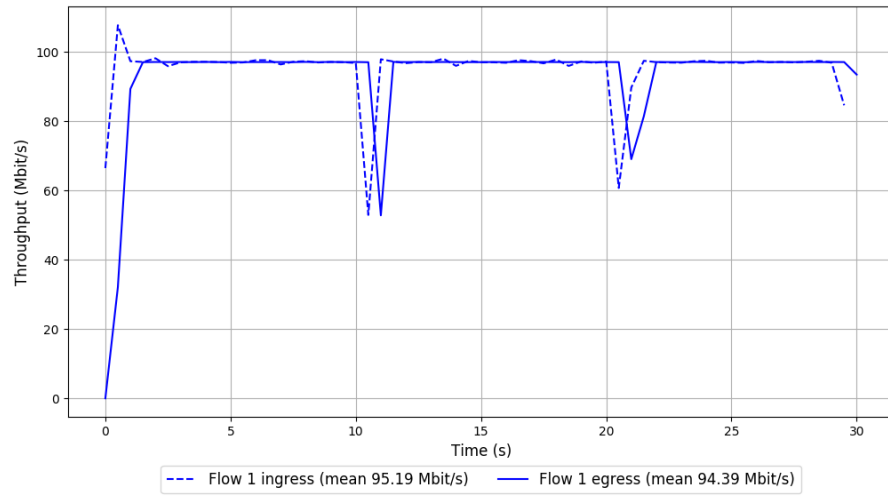
-- Flow 1:

Average throughput: 94.39 Mbit/s

95th percentile per-packet one-way delay: 46.552 ms

Loss rate: 0.79%

Run 1: Report of FillP-Sheep — Data Link

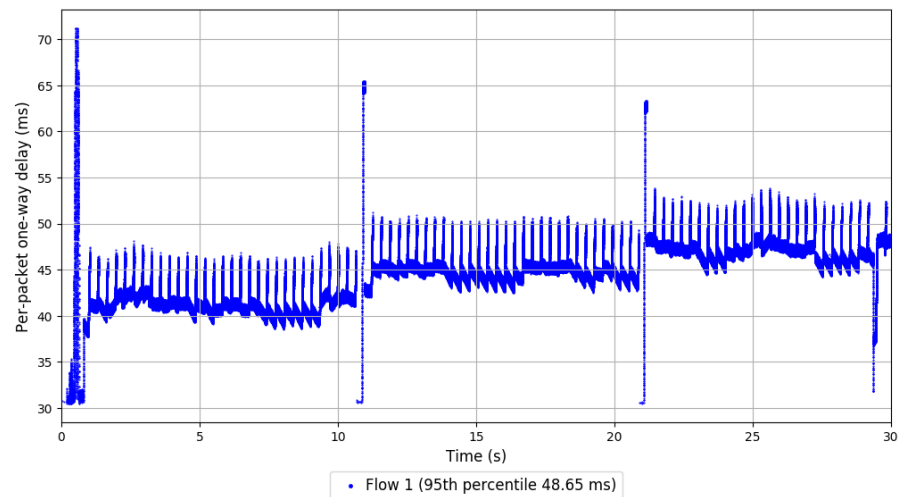
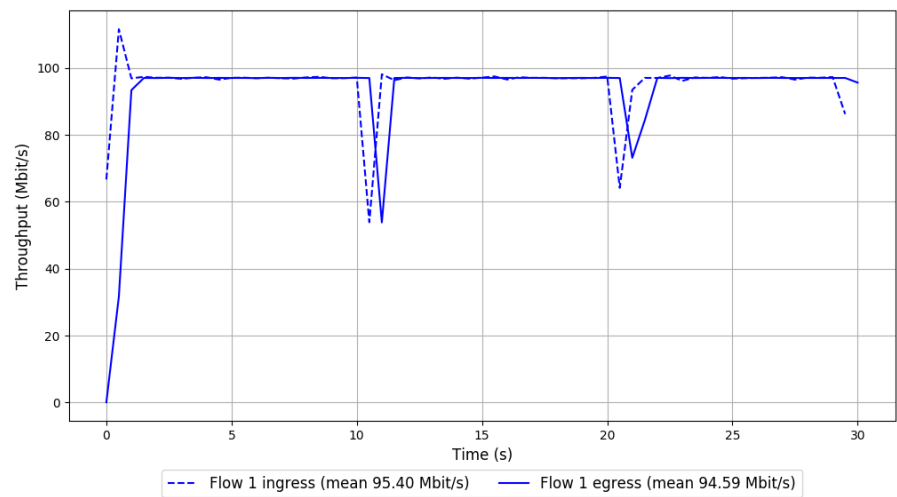


Run 2: Statistics of FillP-Sheep

Start at: 2018-09-10 23:03:46
End at: 2018-09-10 23:04:16
Local clock offset: 0.245 ms
Remote clock offset: -5.598 ms

Below is generated by plot.py at 2018-09-11 00:35:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 48.651 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 94.59 Mbit/s
95th percentile per-packet one-way delay: 48.651 ms
Loss rate: 0.79%

Run 2: Report of FillP-Sheep — Data Link

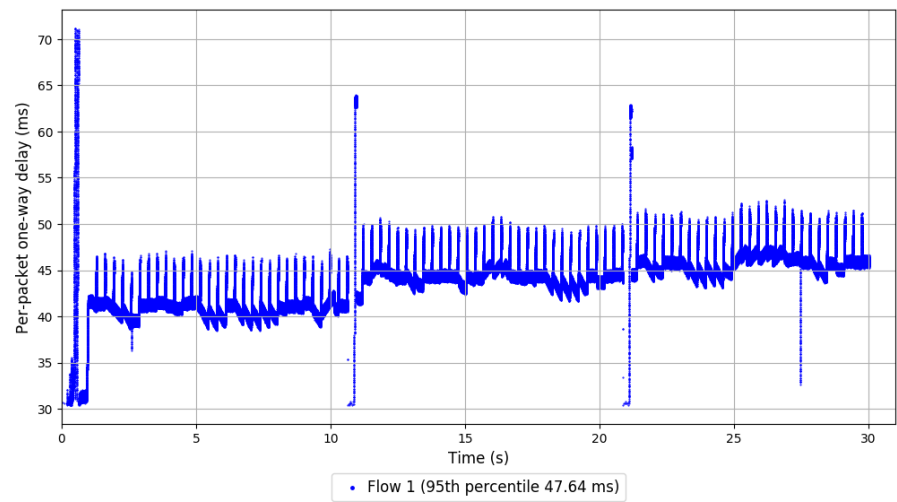
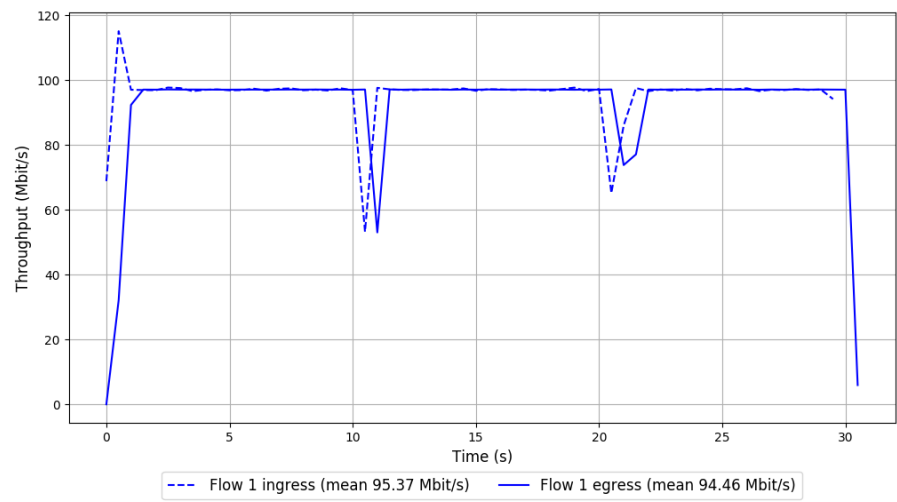


Run 3: Statistics of FillP-Sheep

Start at: 2018-09-10 23:27:17
End at: 2018-09-10 23:27:47
Local clock offset: 0.299 ms
Remote clock offset: -1.491 ms

Below is generated by plot.py at 2018-09-11 00:35:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.46 Mbit/s
95th percentile per-packet one-way delay: 47.638 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 94.46 Mbit/s
95th percentile per-packet one-way delay: 47.638 ms
Loss rate: 0.90%

Run 3: Report of FillP-Sheep — Data Link

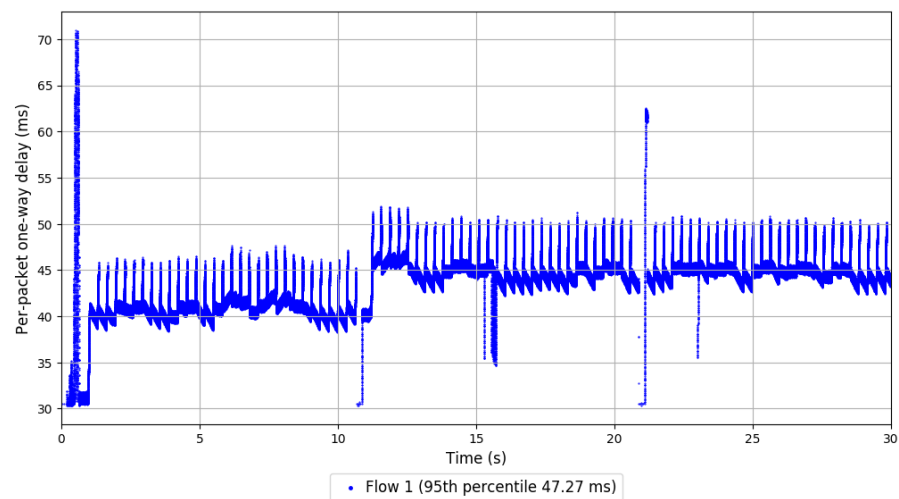
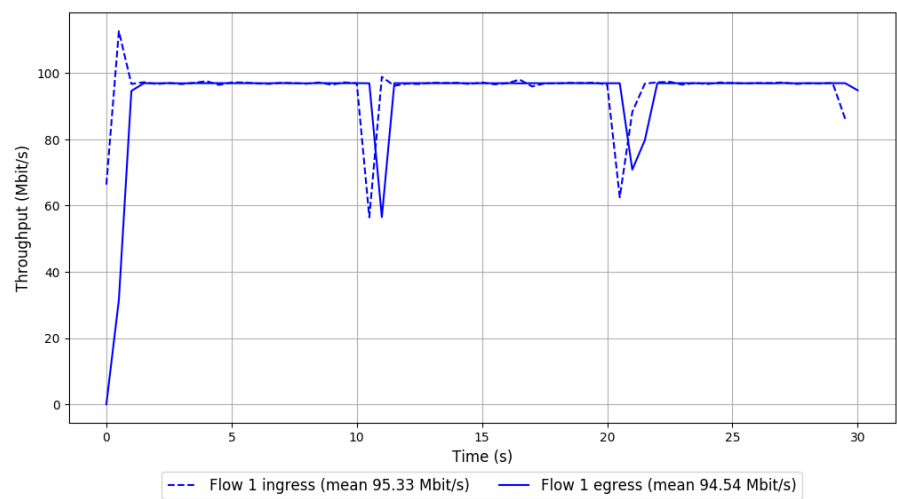


Run 4: Statistics of FillP-Sheep

Start at: 2018-09-10 23:50:45
End at: 2018-09-10 23:51:15
Local clock offset: -0.114 ms
Remote clock offset: -0.959 ms

Below is generated by plot.py at 2018-09-11 00:35:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.54 Mbit/s
95th percentile per-packet one-way delay: 47.269 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 94.54 Mbit/s
95th percentile per-packet one-way delay: 47.269 ms
Loss rate: 0.79%

Run 4: Report of FillP-Sheep — Data Link

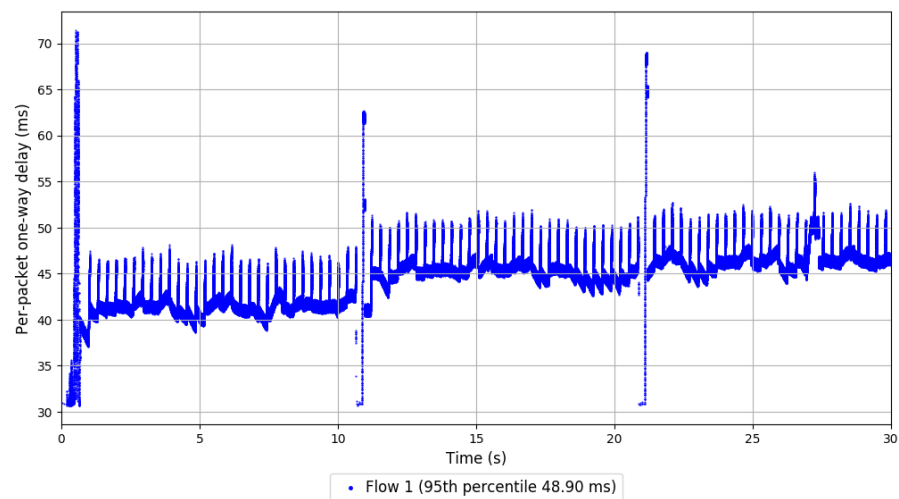
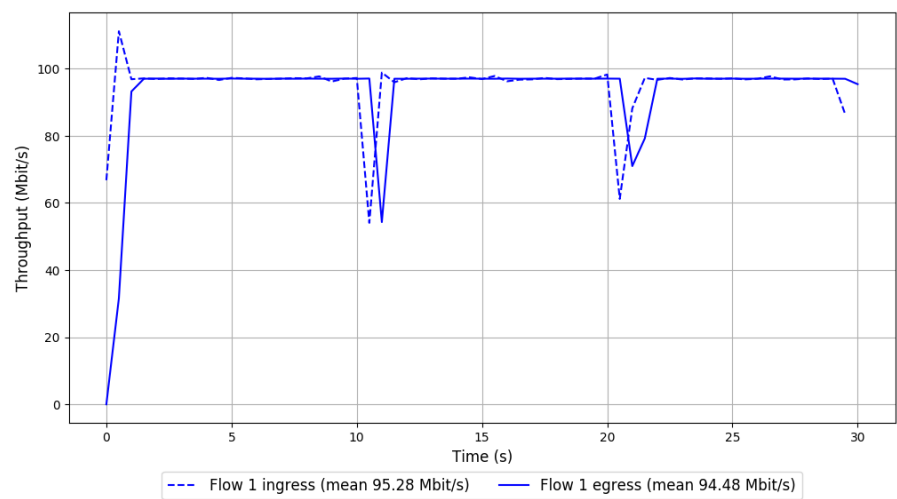


Run 5: Statistics of FillP-Sheep

Start at: 2018-09-11 00:14:17
End at: 2018-09-11 00:14:47
Local clock offset: 0.174 ms
Remote clock offset: -0.289 ms

Below is generated by plot.py at 2018-09-11 00:35:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.48 Mbit/s
95th percentile per-packet one-way delay: 48.901 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 94.48 Mbit/s
95th percentile per-packet one-way delay: 48.901 ms
Loss rate: 0.79%

Run 5: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

Start at: 2018-09-10 22:37:26

End at: 2018-09-10 22:37:56

Local clock offset: 0.447 ms

Remote clock offset: -7.184 ms

Below is generated by plot.py at 2018-09-11 00:35:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.42 Mbit/s

95th percentile per-packet one-way delay: 34.400 ms

Loss rate: 0.02%

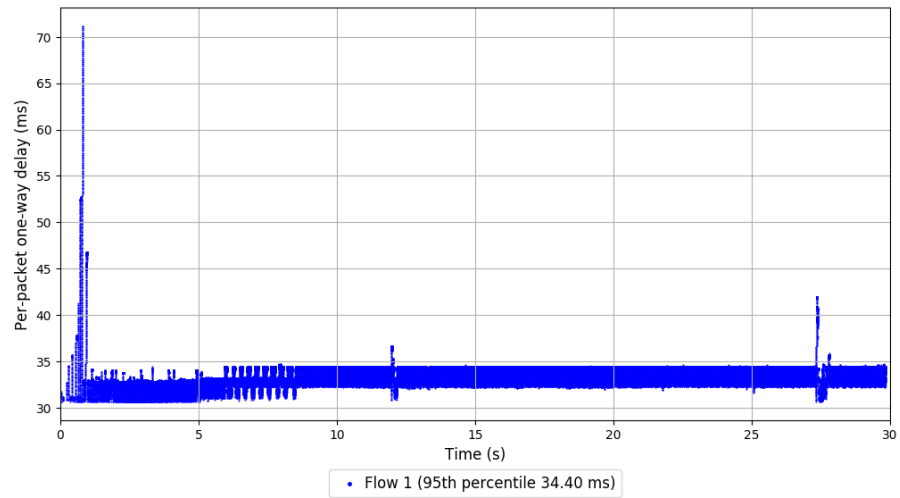
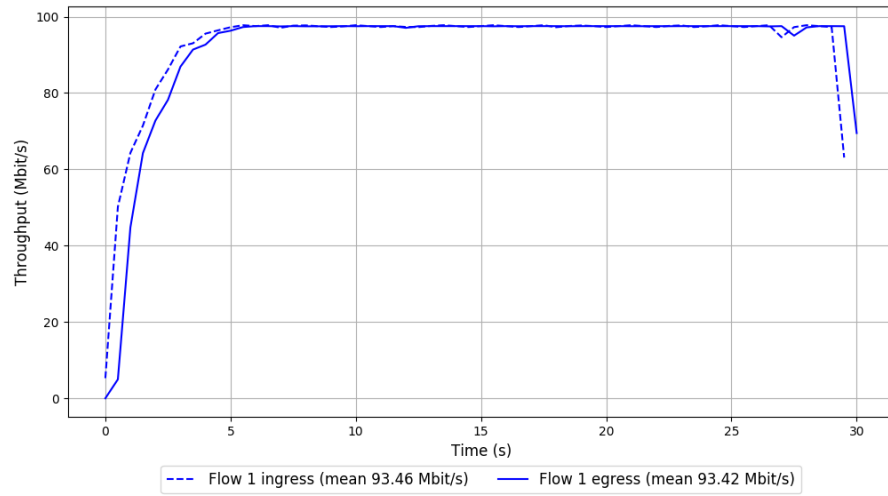
-- Flow 1:

Average throughput: 93.42 Mbit/s

95th percentile per-packet one-way delay: 34.400 ms

Loss rate: 0.02%

Run 1: Report of Indigo — Data Link

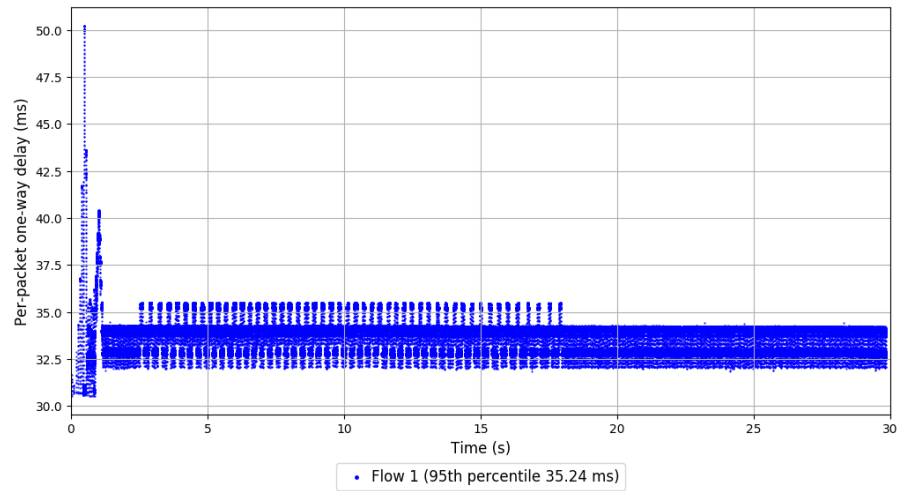
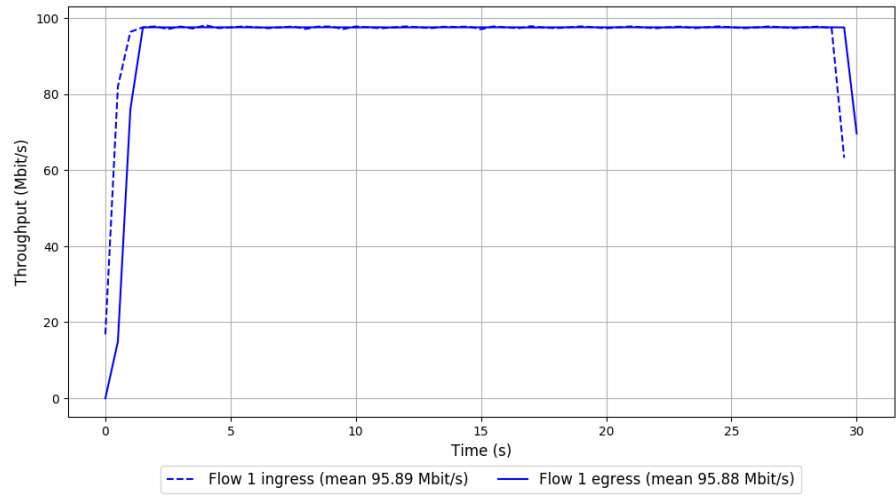


Run 2: Statistics of Indigo

Start at: 2018-09-10 23:01:00
End at: 2018-09-10 23:01:30
Local clock offset: 0.25 ms
Remote clock offset: -6.061 ms

Below is generated by plot.py at 2018-09-11 00:35:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.88 Mbit/s
95th percentile per-packet one-way delay: 35.240 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.88 Mbit/s
95th percentile per-packet one-way delay: 35.240 ms
Loss rate: 0.00%

Run 2: Report of Indigo — Data Link

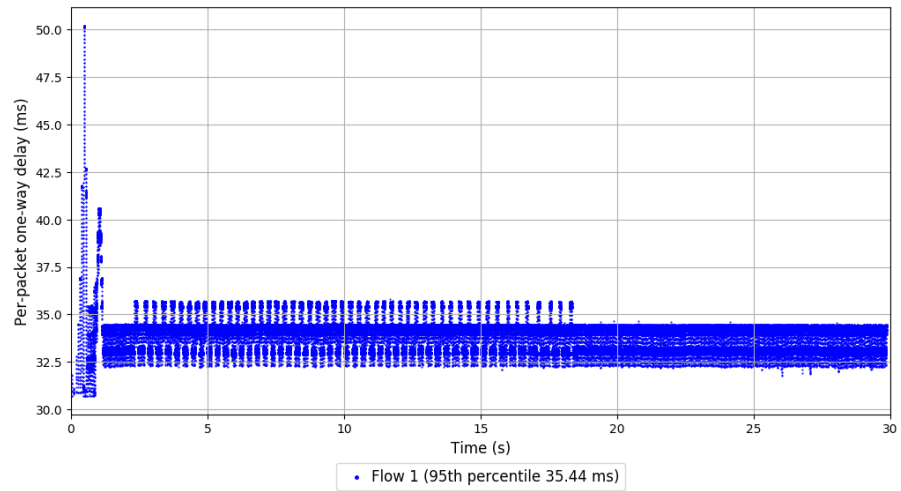
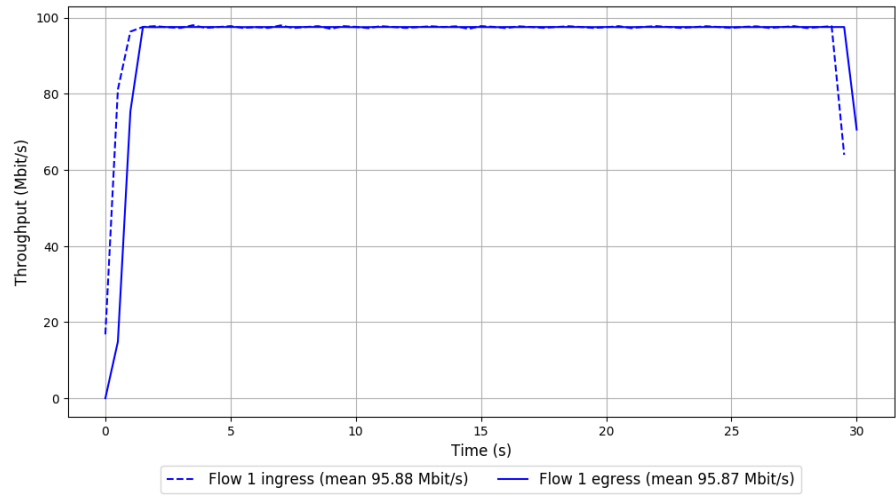


Run 3: Statistics of Indigo

Start at: 2018-09-10 23:24:37
End at: 2018-09-10 23:25:07
Local clock offset: 0.22 ms
Remote clock offset: -1.568 ms

Below is generated by plot.py at 2018-09-11 00:35:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.87 Mbit/s
95th percentile per-packet one-way delay: 35.438 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.87 Mbit/s
95th percentile per-packet one-way delay: 35.438 ms
Loss rate: 0.00%

Run 3: Report of Indigo — Data Link

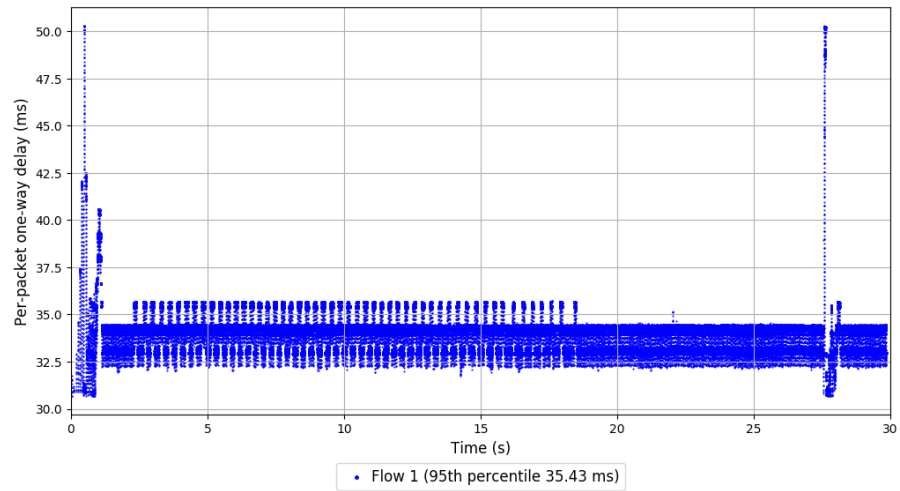
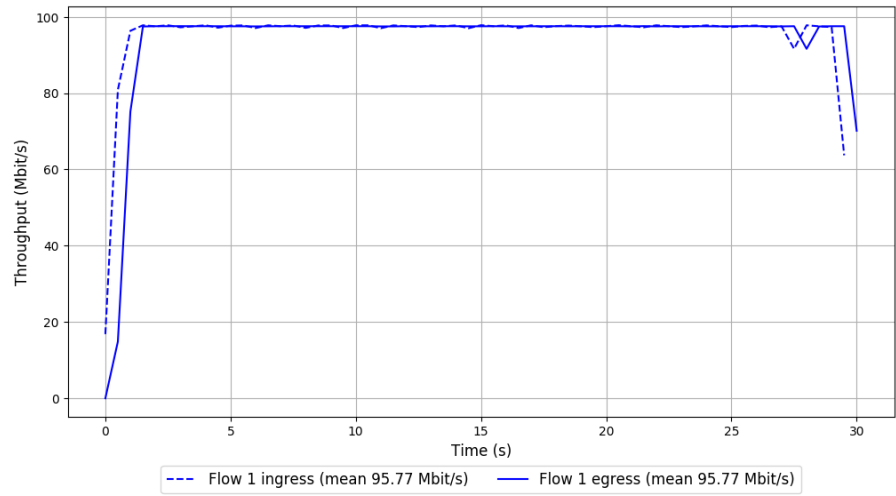


Run 4: Statistics of Indigo

Start at: 2018-09-10 23:48:05
End at: 2018-09-10 23:48:35
Local clock offset: -0.091 ms
Remote clock offset: -0.758 ms

Below is generated by plot.py at 2018-09-11 00:35:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.77 Mbit/s
95th percentile per-packet one-way delay: 35.427 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.77 Mbit/s
95th percentile per-packet one-way delay: 35.427 ms
Loss rate: 0.00%

Run 4: Report of Indigo — Data Link

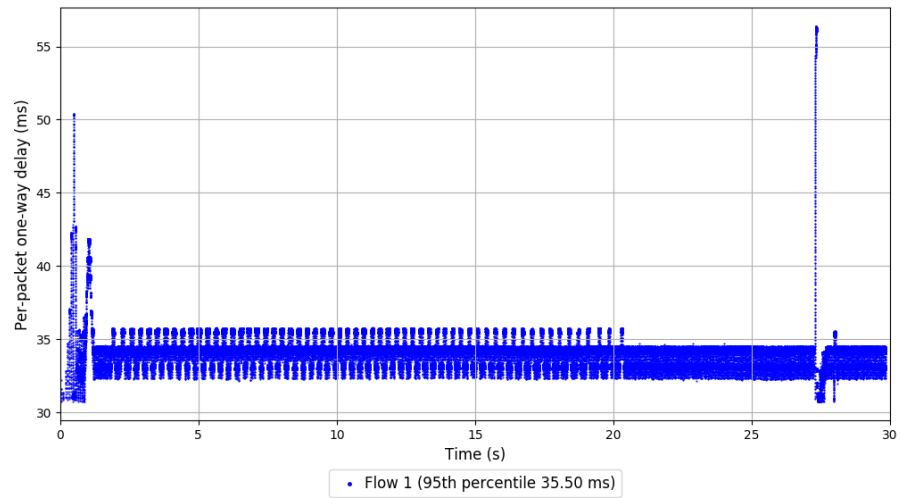
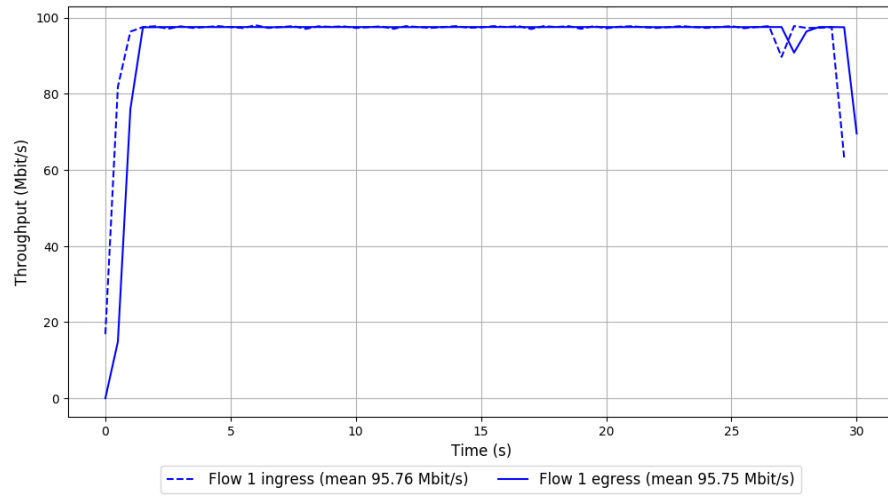


Run 5: Statistics of Indigo

Start at: 2018-09-11 00:11:36
End at: 2018-09-11 00:12:06
Local clock offset: 0.18 ms
Remote clock offset: -0.329 ms

Below is generated by plot.py at 2018-09-11 00:36:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 35.498 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 95.75 Mbit/s
95th percentile per-packet one-way delay: 35.498 ms
Loss rate: 0.00%

Run 5: Report of Indigo — Data Link

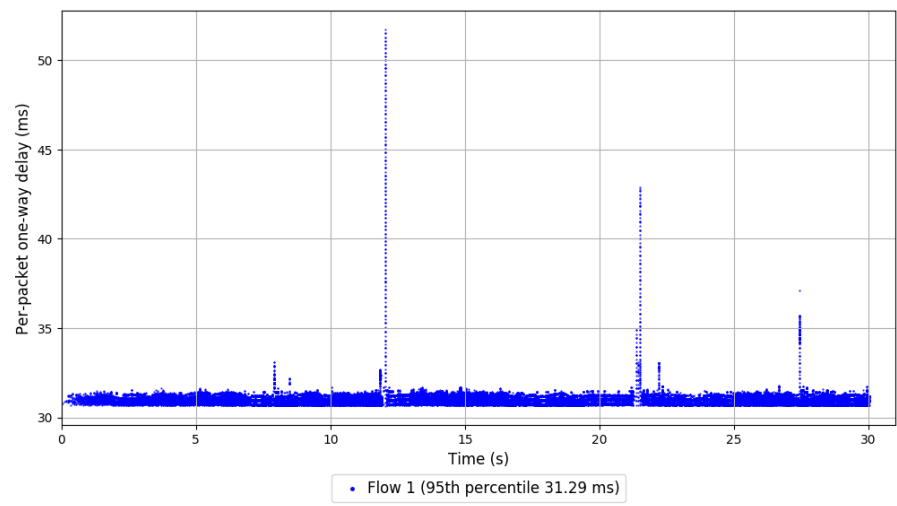
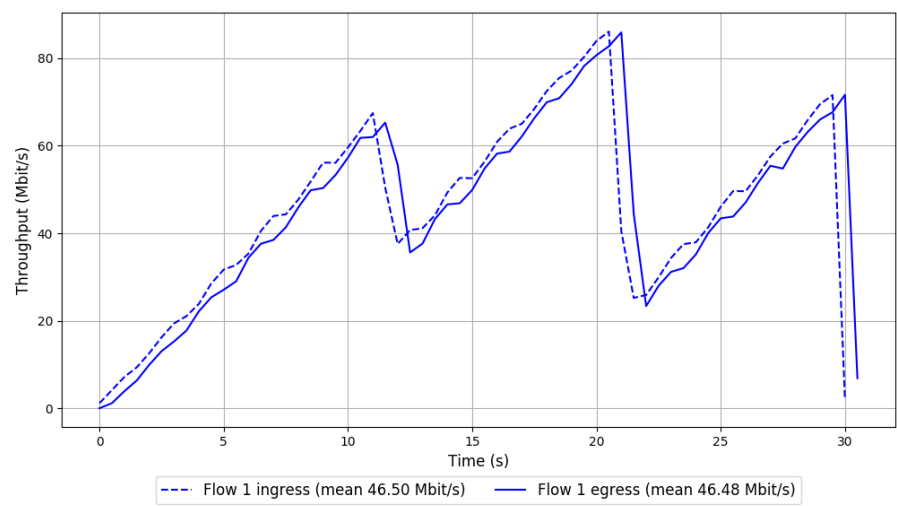


```
Run 1: Statistics of LEDBAT

Start at: 2018-09-10 22:33:35
End at: 2018-09-10 22:34:05
Local clock offset: 0.687 ms
Remote clock offset: -7.021 ms

# Below is generated by plot.py at 2018-09-11 00:36:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.48 Mbit/s
95th percentile per-packet one-way delay: 31.289 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 46.48 Mbit/s
95th percentile per-packet one-way delay: 31.289 ms
Loss rate: 0.03%
```

Run 1: Report of LEDBAT — Data Link

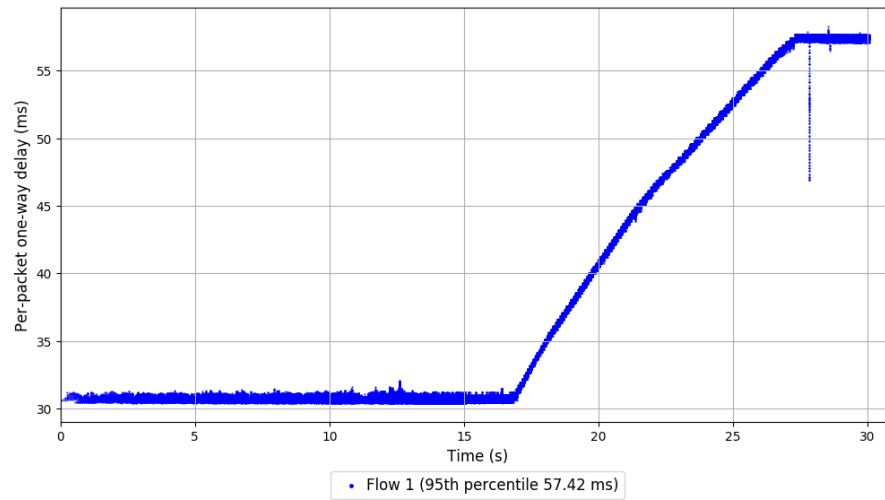
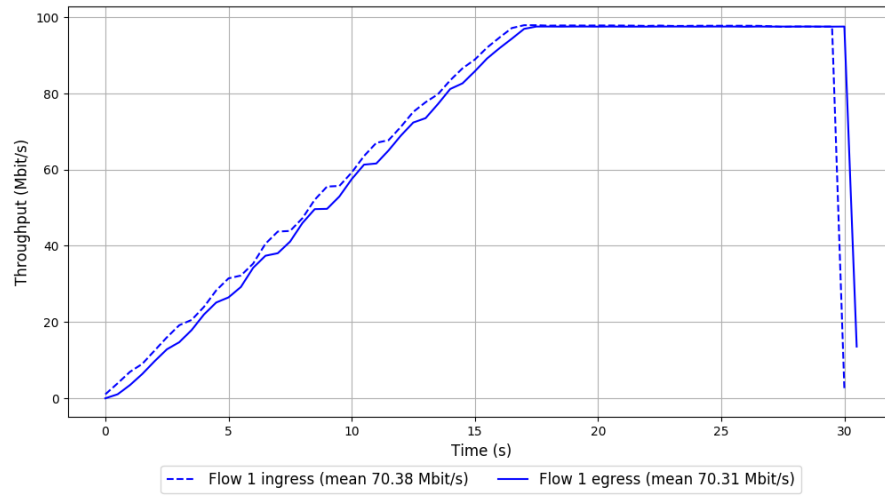


Run 2: Statistics of LEDBAT

Start at: 2018-09-10 22:57:08
End at: 2018-09-10 22:57:38
Local clock offset: 0.364 ms
Remote clock offset: -6.504 ms

Below is generated by plot.py at 2018-09-11 00:36:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 70.31 Mbit/s
95th percentile per-packet one-way delay: 57.423 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.31 Mbit/s
95th percentile per-packet one-way delay: 57.423 ms
Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link

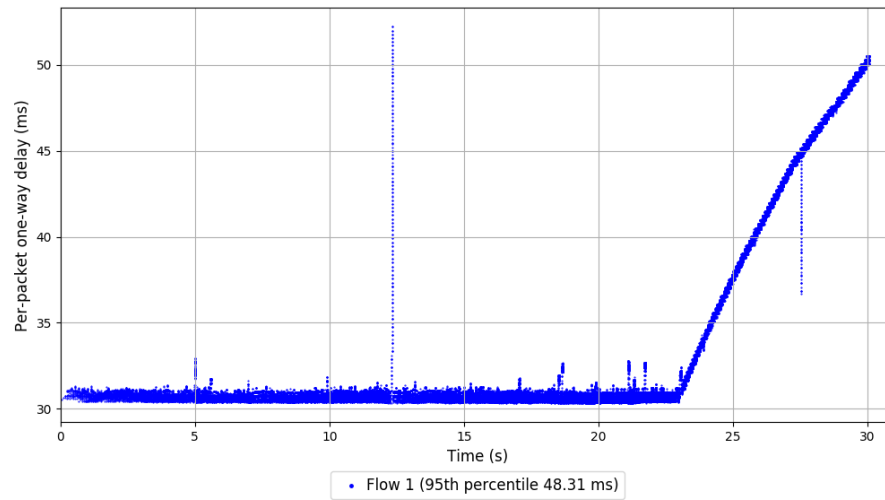
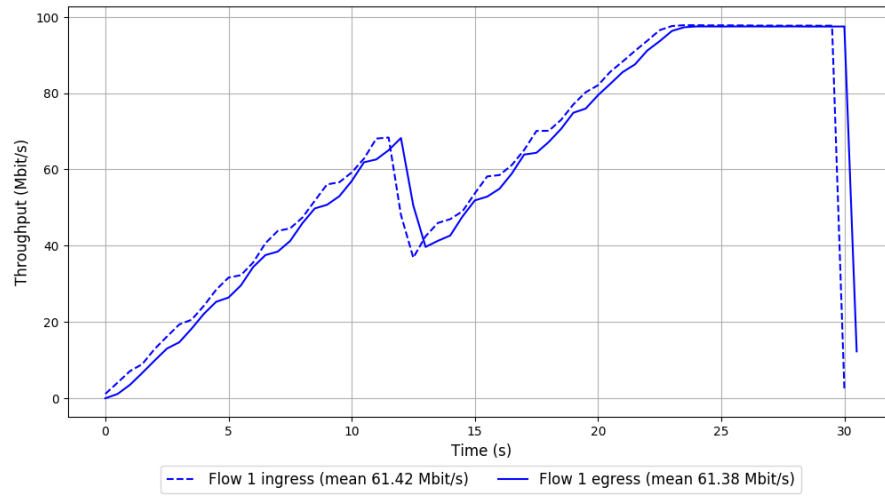


Run 3: Statistics of LEDBAT

Start at: 2018-09-10 23:20:46
End at: 2018-09-10 23:21:16
Local clock offset: 0.304 ms
Remote clock offset: -2.313 ms

Below is generated by plot.py at 2018-09-11 00:36:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 61.38 Mbit/s
95th percentile per-packet one-way delay: 48.311 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.38 Mbit/s
95th percentile per-packet one-way delay: 48.311 ms
Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

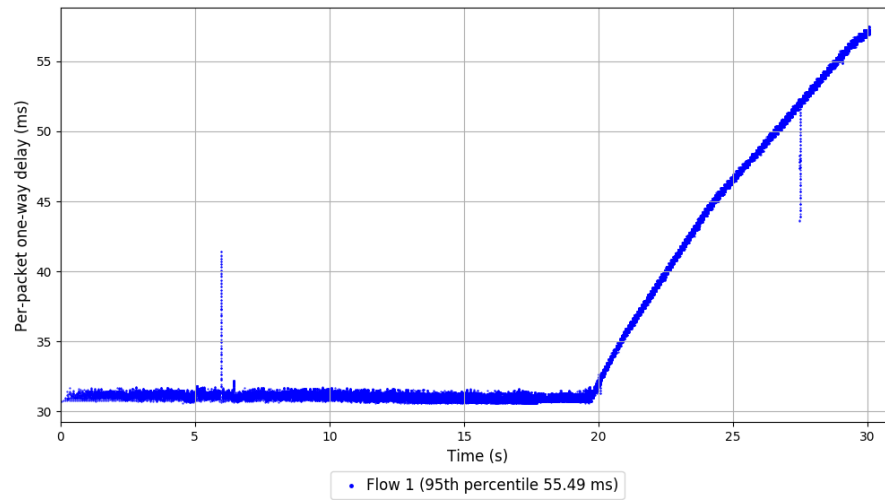
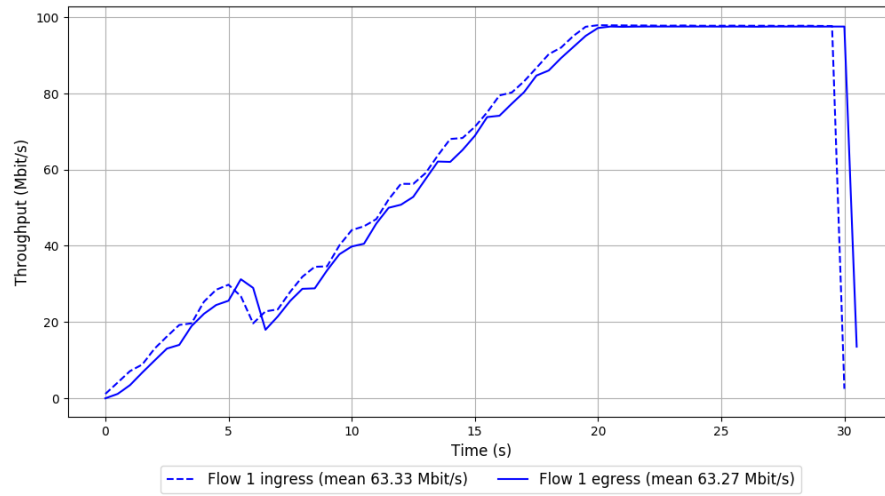


Run 4: Statistics of LEDBAT

Start at: 2018-09-10 23:44:15
End at: 2018-09-10 23:44:45
Local clock offset: -0.065 ms
Remote clock offset: -0.896 ms

Below is generated by plot.py at 2018-09-11 00:36:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 63.27 Mbit/s
95th percentile per-packet one-way delay: 55.495 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.27 Mbit/s
95th percentile per-packet one-way delay: 55.495 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

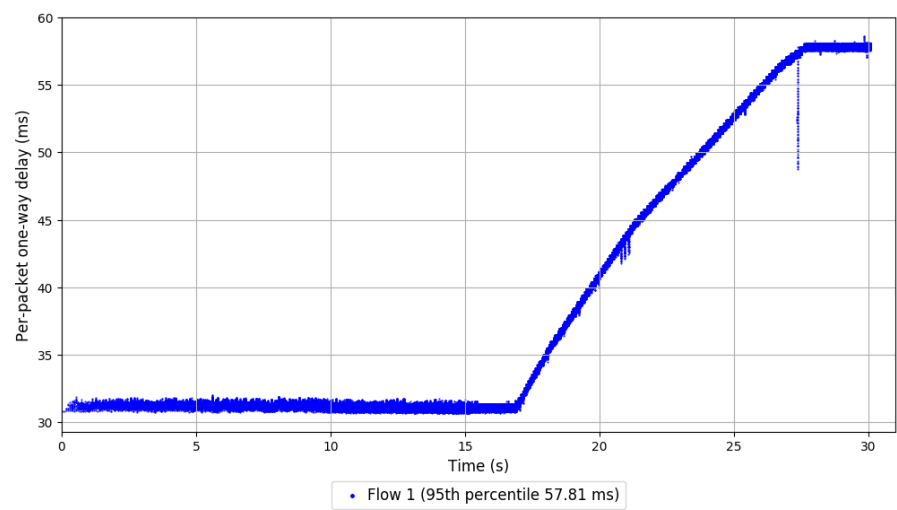
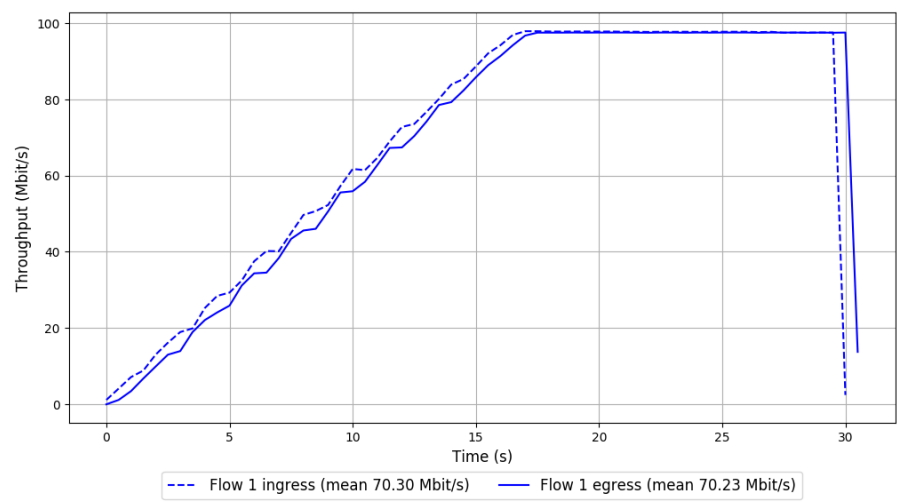


Run 5: Statistics of LEDBAT

Start at: 2018-09-11 00:07:44
End at: 2018-09-11 00:08:14
Local clock offset: 0.173 ms
Remote clock offset: -0.401 ms

Below is generated by plot.py at 2018-09-11 00:36:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 70.23 Mbit/s
95th percentile per-packet one-way delay: 57.807 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.23 Mbit/s
95th percentile per-packet one-way delay: 57.807 ms
Loss rate: 0.00%

Run 5: Report of LEDBAT — Data Link

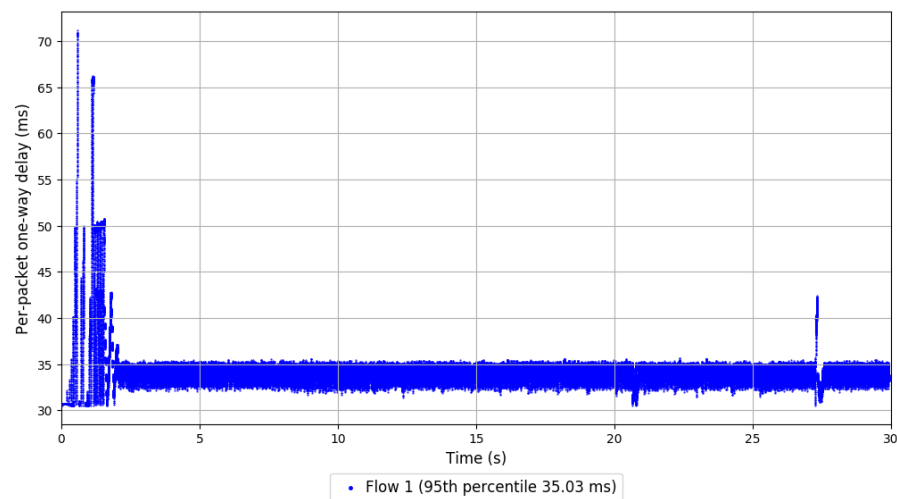
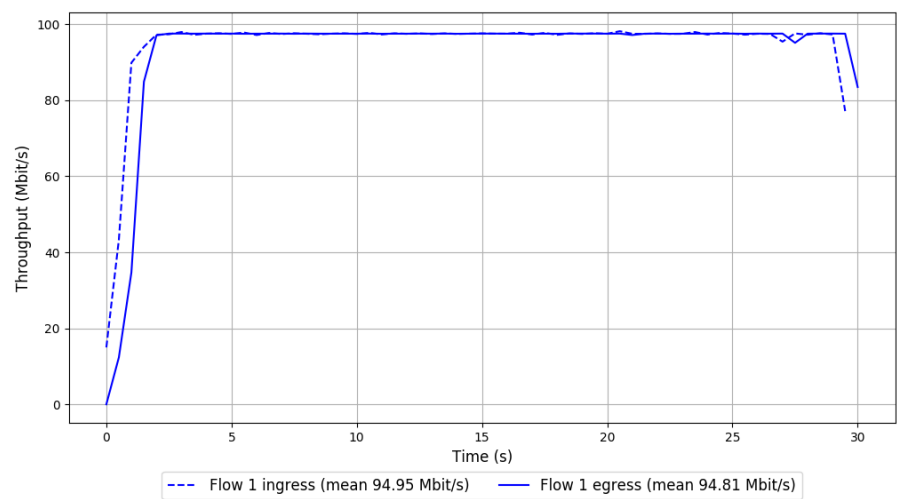


```
Run 1: Statistics of Indigo-Muses

Start at: 2018-09-10 22:51:52
End at: 2018-09-10 22:52:22
Local clock offset: 0.364 ms
Remote clock offset: -7.013 ms

# Below is generated by plot.py at 2018-09-11 00:36:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.81 Mbit/s
95th percentile per-packet one-way delay: 35.027 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 94.81 Mbit/s
95th percentile per-packet one-way delay: 35.027 ms
Loss rate: 0.13%
```

Run 1: Report of Indigo-Muses — Data Link

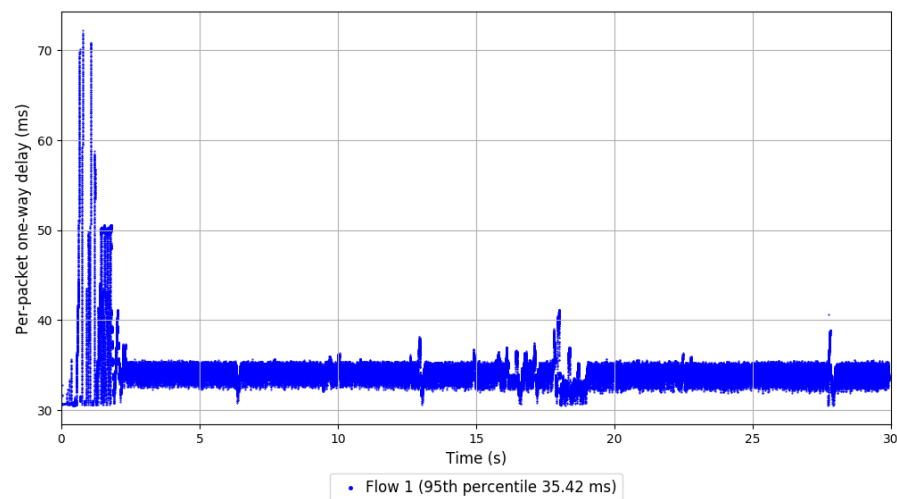
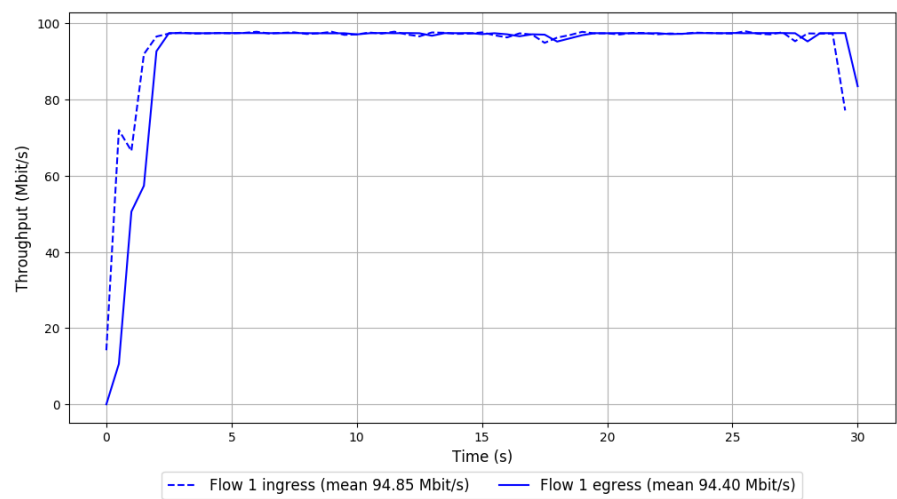


Run 2: Statistics of Indigo-Muses

Start at: 2018-09-10 23:15:30
End at: 2018-09-10 23:16:00
Local clock offset: 0.316 ms
Remote clock offset: -2.986 ms

Below is generated by plot.py at 2018-09-11 00:36:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.40 Mbit/s
95th percentile per-packet one-way delay: 35.417 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 94.40 Mbit/s
95th percentile per-packet one-way delay: 35.417 ms
Loss rate: 0.46%

Run 2: Report of Indigo-Muses — Data Link

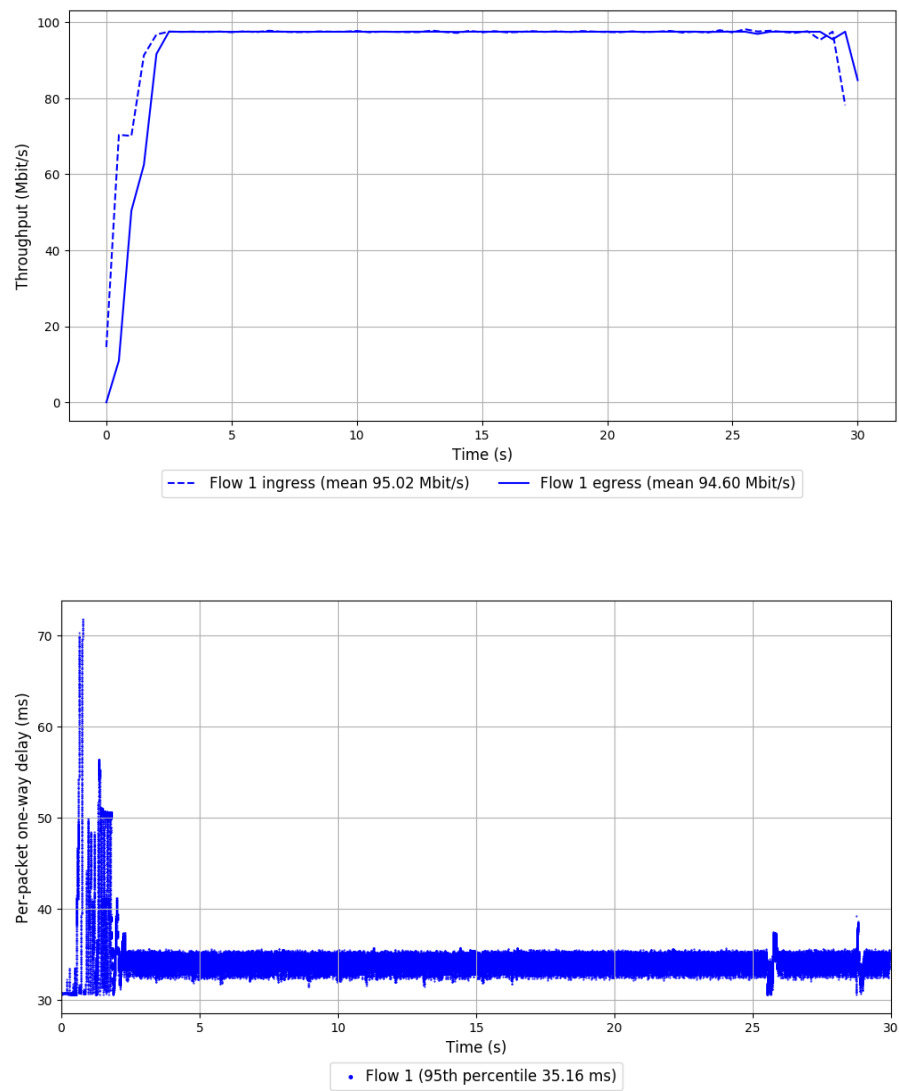


Run 3: Statistics of Indigo-Muses

Start at: 2018-09-10 23:39:01
End at: 2018-09-10 23:39:31
Local clock offset: -0.085 ms
Remote clock offset: -1.128 ms

Below is generated by plot.py at 2018-09-11 00:37:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.60 Mbit/s
95th percentile per-packet one-way delay: 35.160 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 94.60 Mbit/s
95th percentile per-packet one-way delay: 35.160 ms
Loss rate: 0.44%

Run 3: Report of Indigo-Muses — Data Link

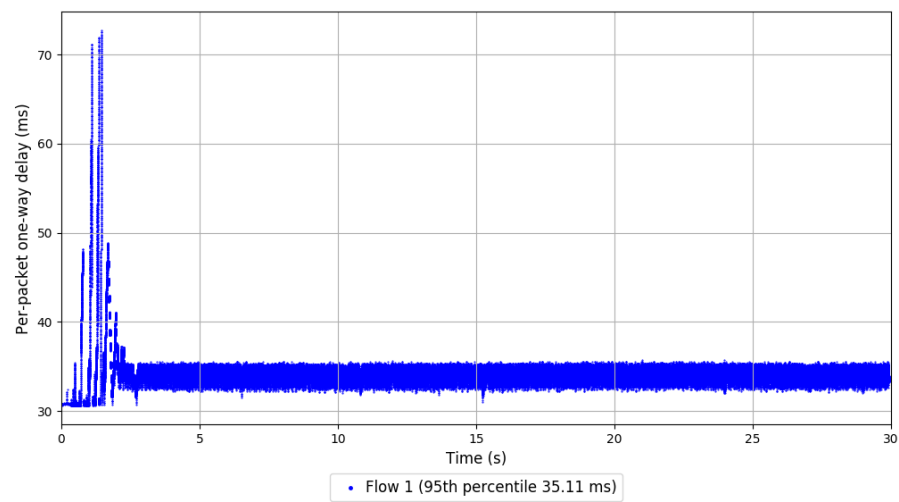
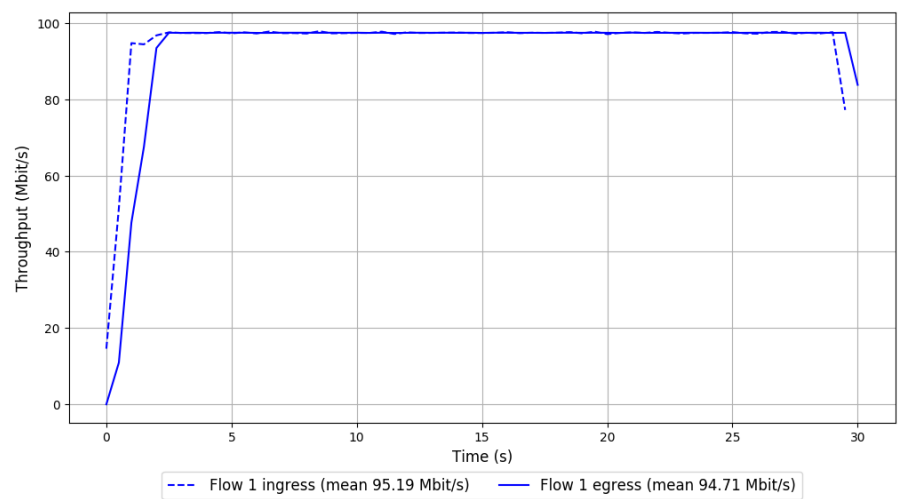


Run 4: Statistics of Indigo-Muses

Start at: 2018-09-11 00:02:29
End at: 2018-09-11 00:02:59
Local clock offset: 0.006 ms
Remote clock offset: -0.544 ms

Below is generated by plot.py at 2018-09-11 00:37:35
Datalink statistics
-- Total of 1 flow:
Average throughput: 94.71 Mbit/s
95th percentile per-packet one-way delay: 35.108 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 94.71 Mbit/s
95th percentile per-packet one-way delay: 35.108 ms
Loss rate: 0.50%

Run 4: Report of Indigo-Muses — Data Link



Run 5: Statistics of Indigo-Muses

Start at: 2018-09-11 00:26:04

End at: 2018-09-11 00:26:34

Local clock offset: 0.283 ms

Remote clock offset: -0.206 ms

Below is generated by plot.py at 2018-09-11 00:37:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.62 Mbit/s

95th percentile per-packet one-way delay: 35.432 ms

Loss rate: 0.50%

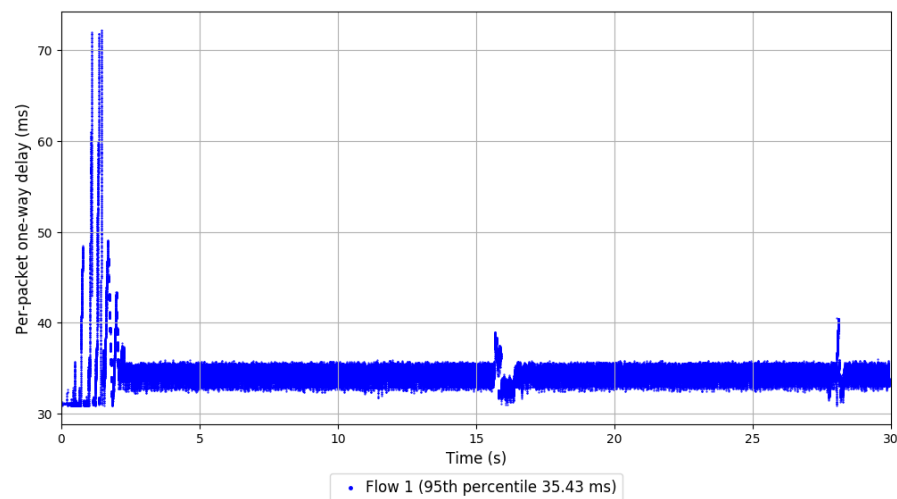
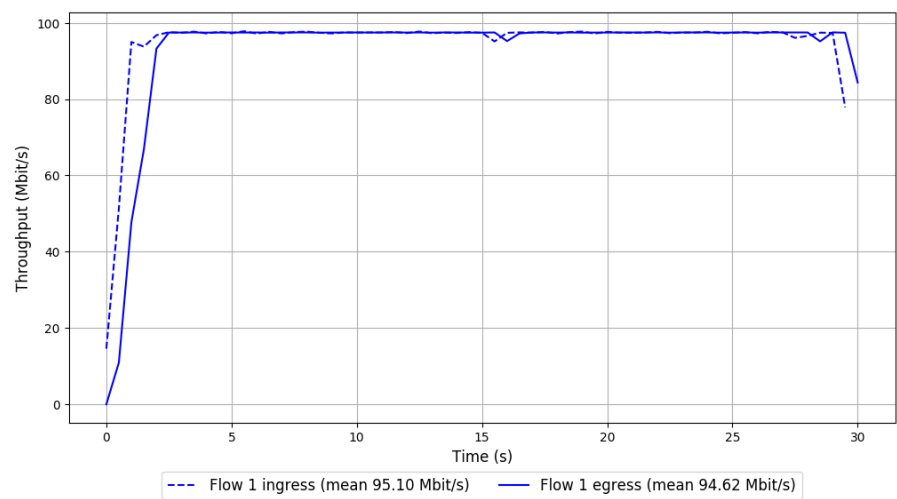
-- Flow 1:

Average throughput: 94.62 Mbit/s

95th percentile per-packet one-way delay: 35.432 ms

Loss rate: 0.50%

Run 5: Report of Indigo-Muses — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2018-09-10 22:41:26

End at: 2018-09-10 22:41:56

Local clock offset: 0.438 ms

Remote clock offset: -7.346 ms

Below is generated by plot.py at 2018-09-11 00:37:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.35 Mbit/s

95th percentile per-packet one-way delay: 33.507 ms

Loss rate: 0.68%

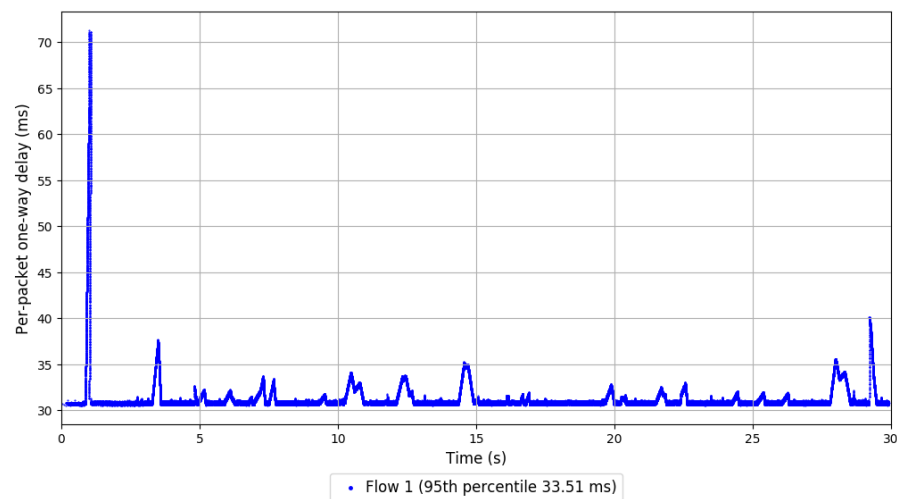
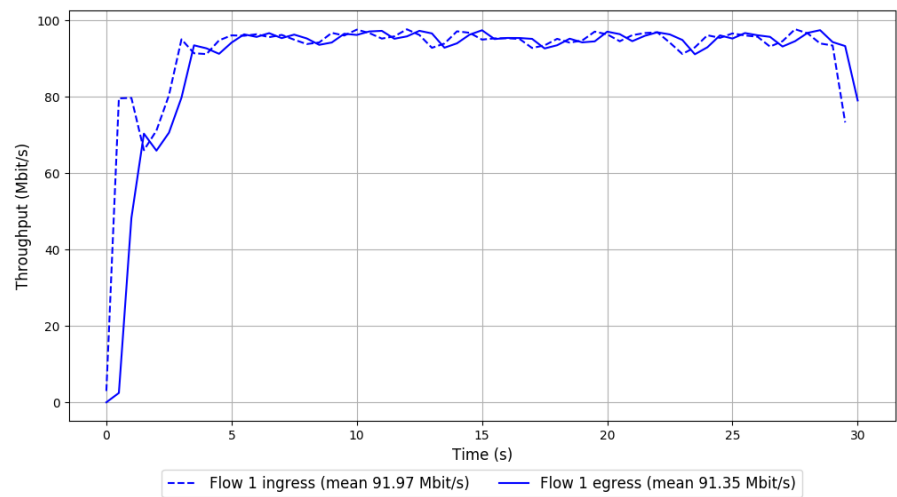
-- Flow 1:

Average throughput: 91.35 Mbit/s

95th percentile per-packet one-way delay: 33.507 ms

Loss rate: 0.68%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2018-09-10 23:05:05

End at: 2018-09-10 23:05:35

Local clock offset: 0.349 ms

Remote clock offset: -5.281 ms

Below is generated by plot.py at 2018-09-11 00:37:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.18 Mbit/s

95th percentile per-packet one-way delay: 43.460 ms

Loss rate: 0.72%

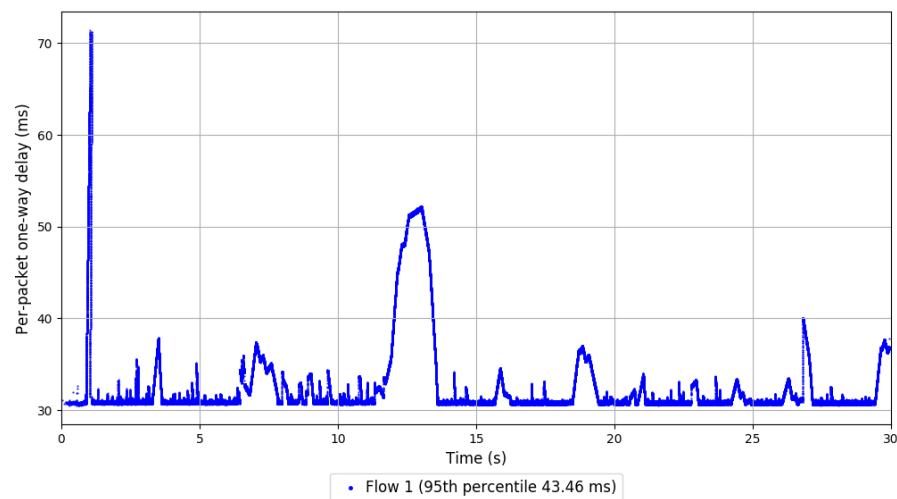
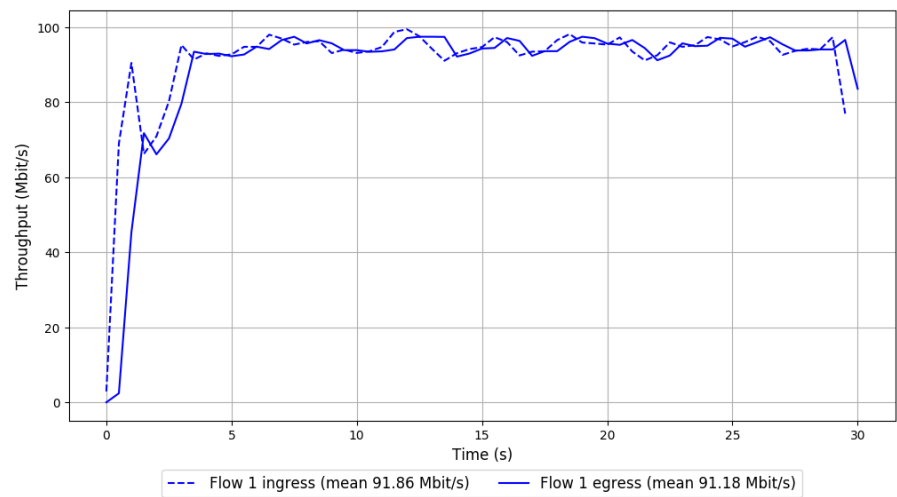
-- Flow 1:

Average throughput: 91.18 Mbit/s

95th percentile per-packet one-way delay: 43.460 ms

Loss rate: 0.72%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-09-10 23:28:36

End at: 2018-09-10 23:29:06

Local clock offset: 0.211 ms

Remote clock offset: -1.408 ms

Below is generated by plot.py at 2018-09-11 00:37:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.50 Mbit/s

95th percentile per-packet one-way delay: 32.766 ms

Loss rate: 0.75%

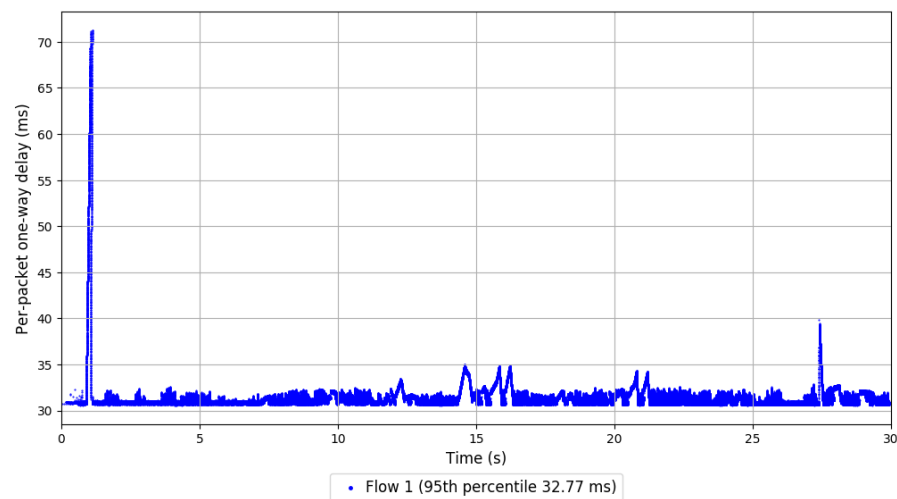
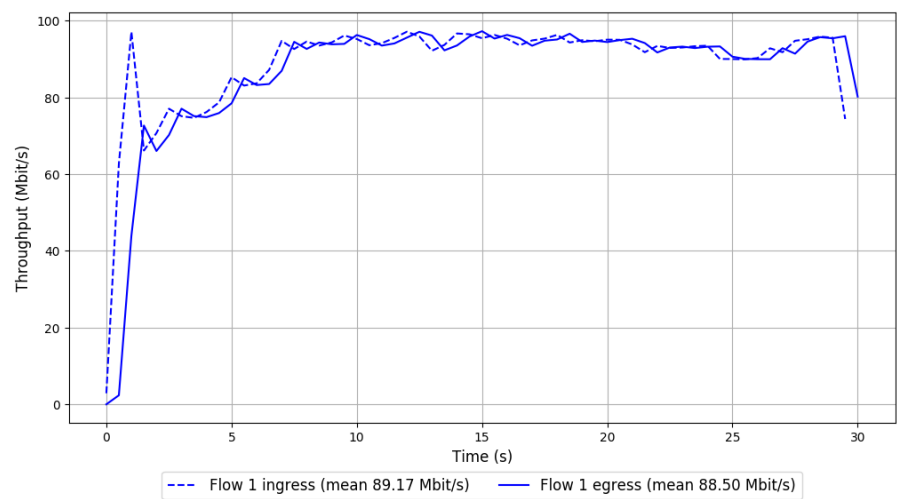
-- Flow 1:

Average throughput: 88.50 Mbit/s

95th percentile per-packet one-way delay: 32.766 ms

Loss rate: 0.75%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-09-10 23:52:04

End at: 2018-09-10 23:52:34

Local clock offset: -0.108 ms

Remote clock offset: -0.957 ms

Below is generated by plot.py at 2018-09-11 00:38:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.92 Mbit/s

95th percentile per-packet one-way delay: 35.495 ms

Loss rate: 0.69%

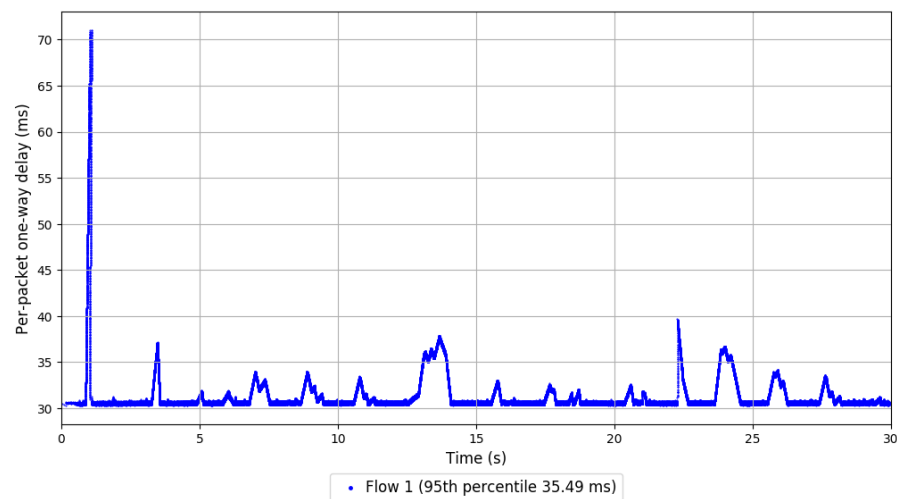
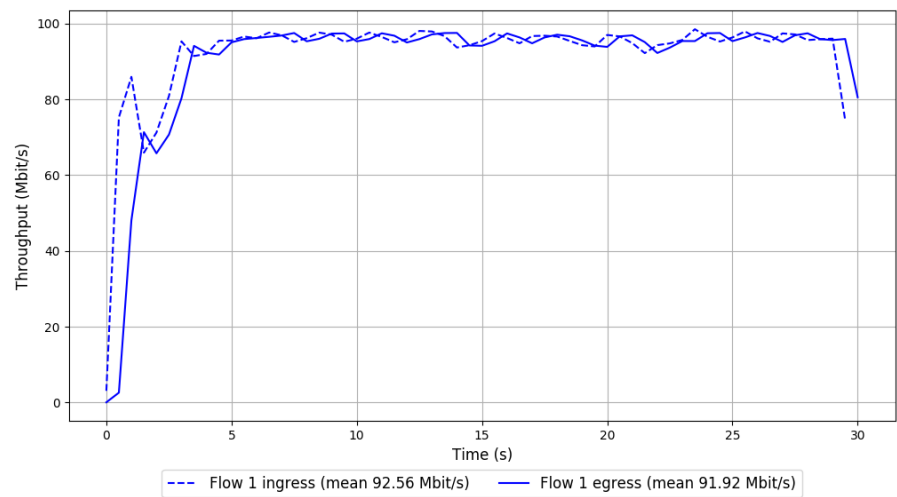
-- Flow 1:

Average throughput: 91.92 Mbit/s

95th percentile per-packet one-way delay: 35.495 ms

Loss rate: 0.69%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-09-11 00:15:37

End at: 2018-09-11 00:16:07

Local clock offset: 0.208 ms

Remote clock offset: -0.122 ms

Below is generated by plot.py at 2018-09-11 00:38:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.65 Mbit/s

95th percentile per-packet one-way delay: 38.029 ms

Loss rate: 0.67%

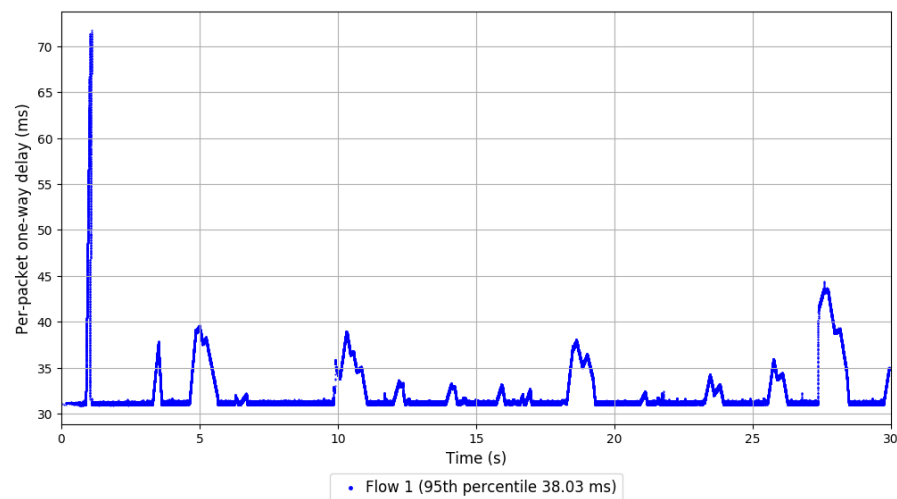
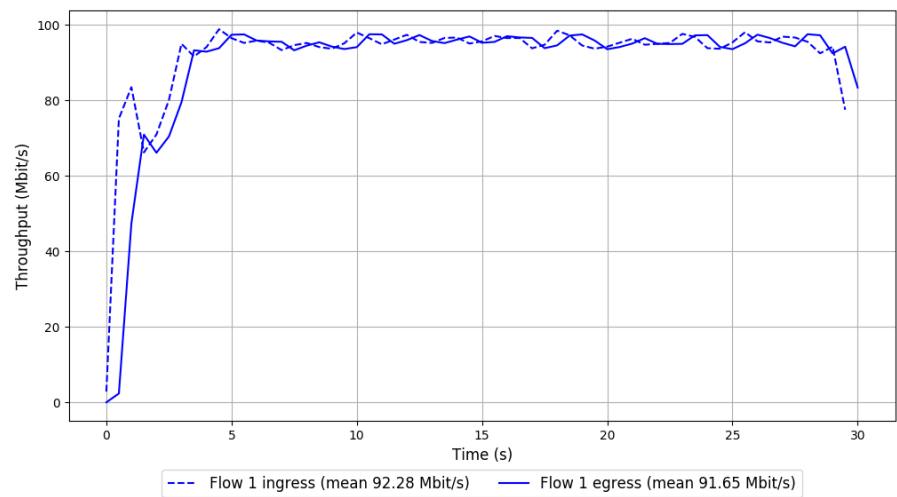
-- Flow 1:

Average throughput: 91.65 Mbit/s

95th percentile per-packet one-way delay: 38.029 ms

Loss rate: 0.67%

Run 5: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

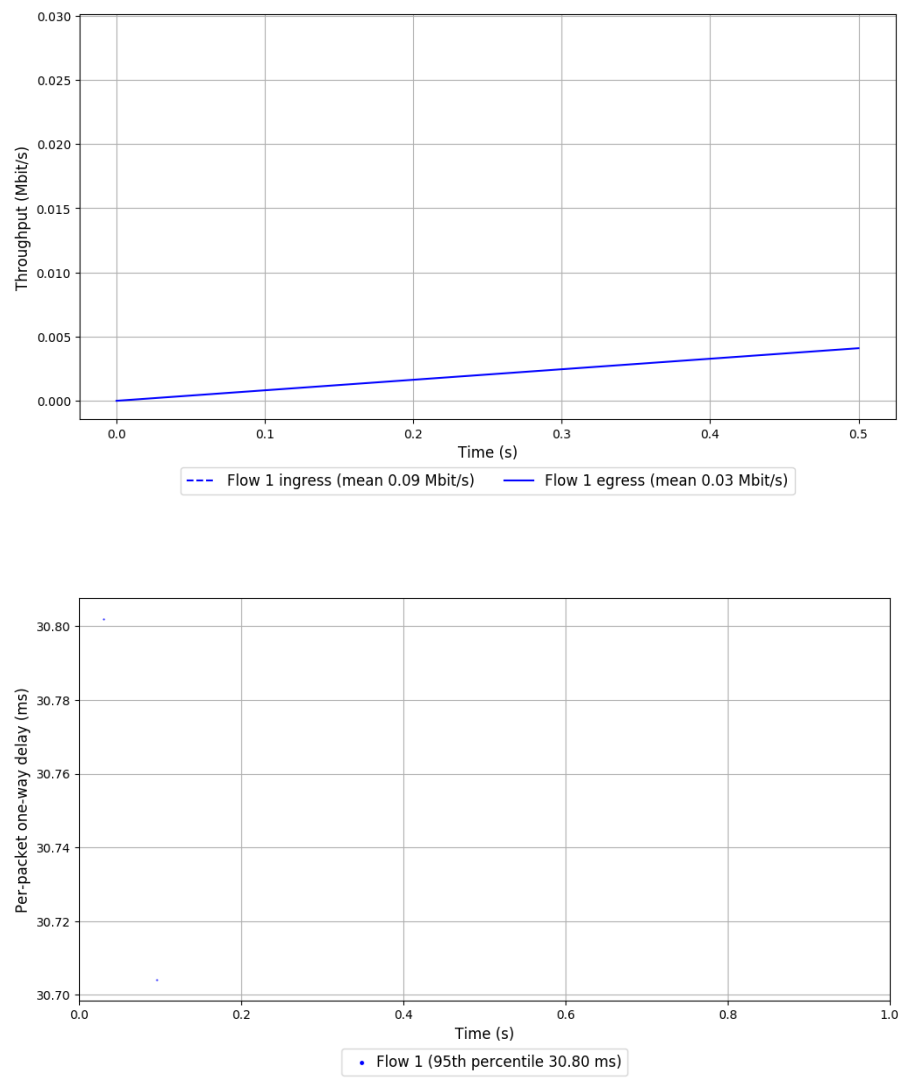
Start at: 2018-09-10 22:46:44

End at: 2018-09-10 22:47:14

Local clock offset: 0.369 ms

Remote clock offset: -7.593 ms

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

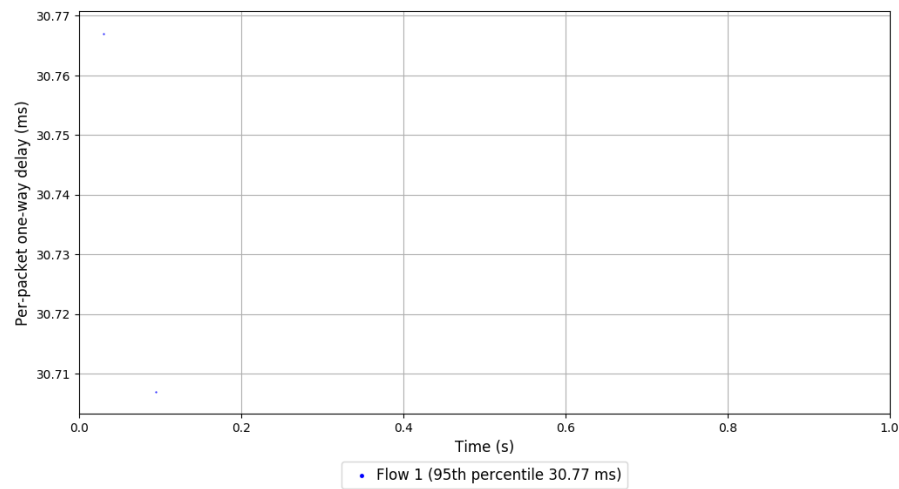
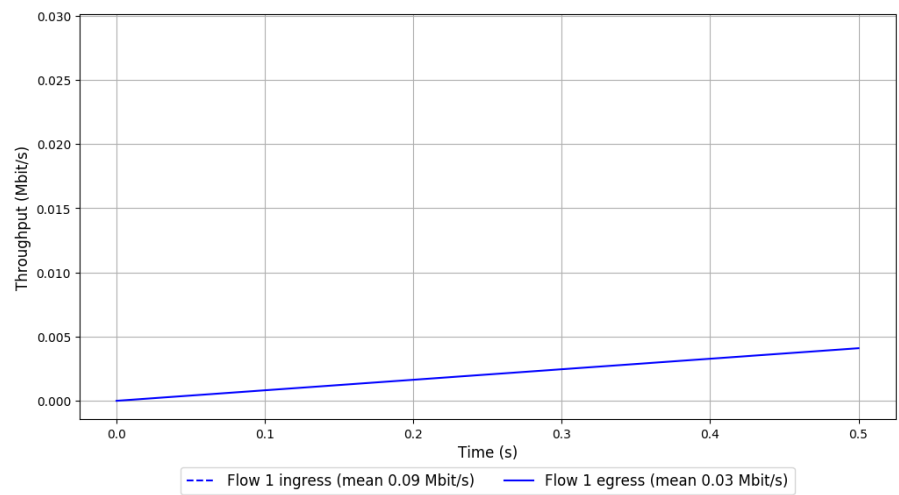
Start at: 2018-09-10 23:10:23

End at: 2018-09-10 23:10:53

Local clock offset: 0.229 ms

Remote clock offset: -4.022 ms

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

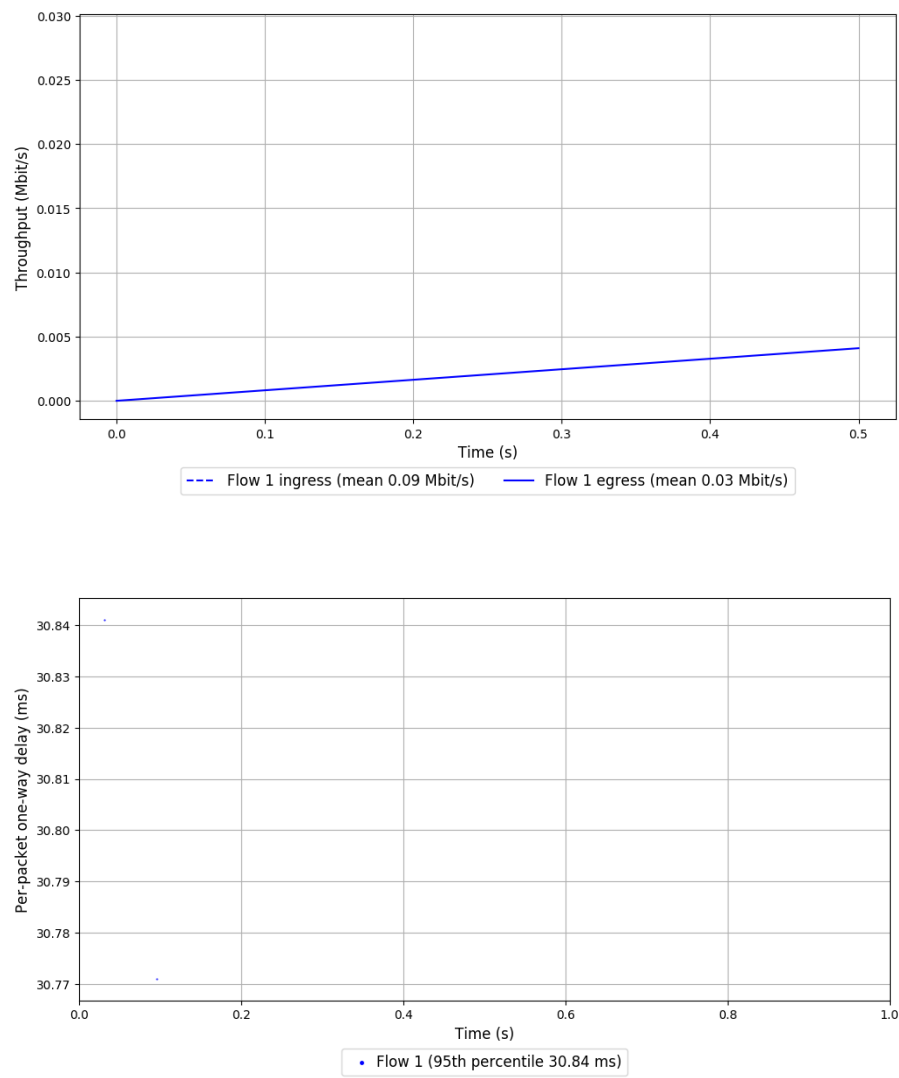
Start at: 2018-09-10 23:33:55

End at: 2018-09-10 23:34:25

Local clock offset: 0.107 ms

Remote clock offset: -0.972 ms

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

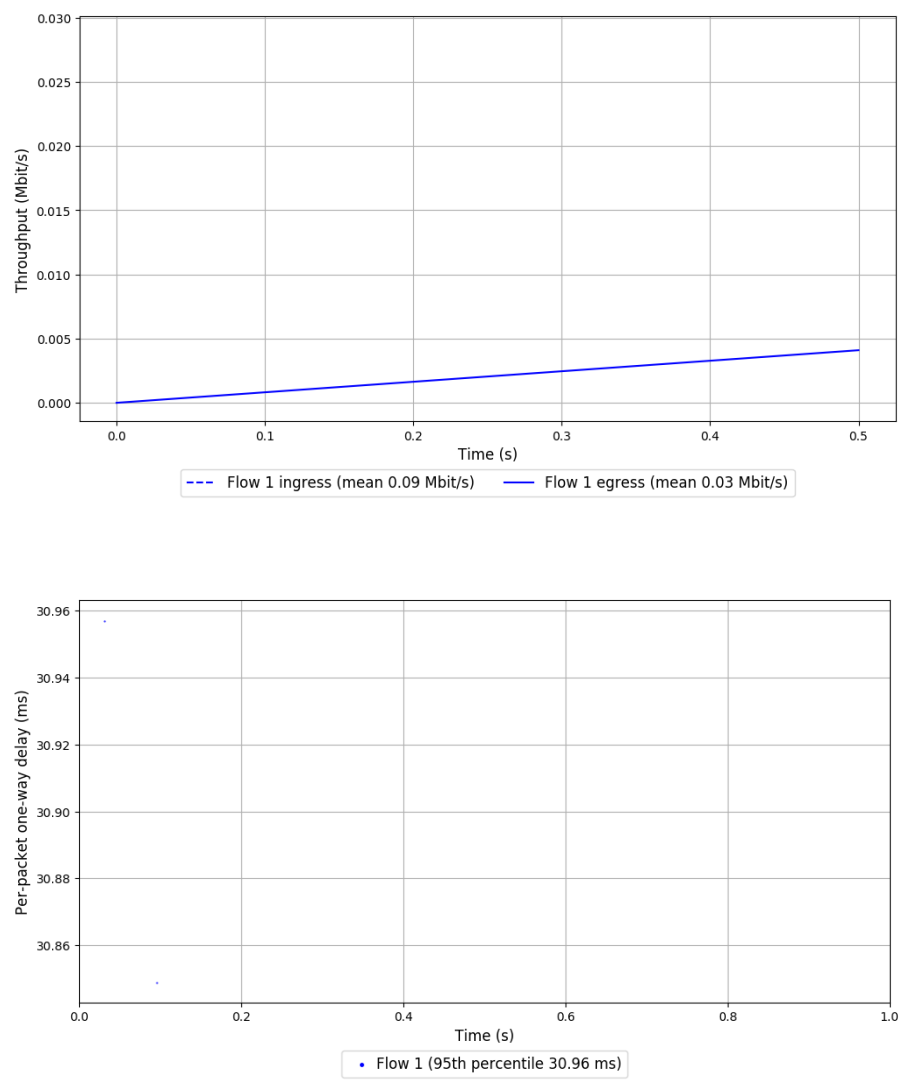
Start at: 2018-09-10 23:57:23

End at: 2018-09-10 23:57:53

Local clock offset: -0.24 ms

Remote clock offset: -0.576 ms

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

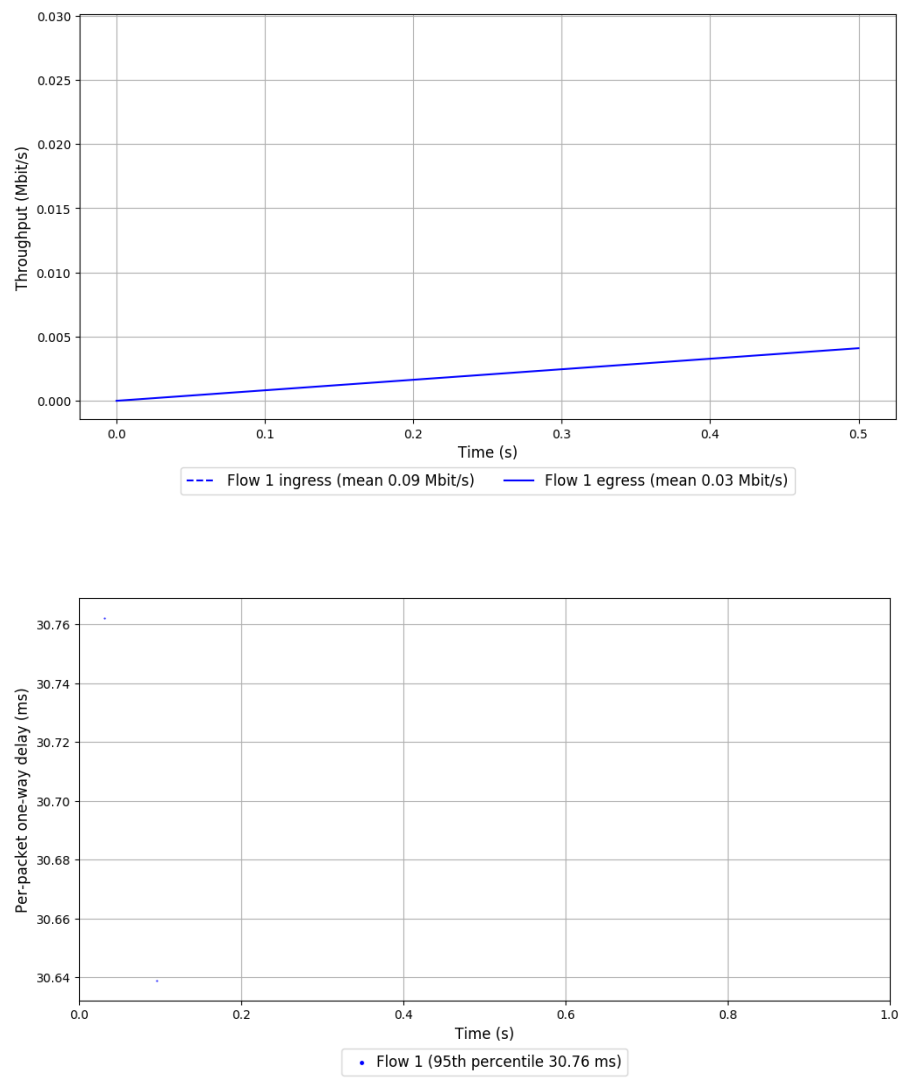
Start at: 2018-09-11 00:20:56

End at: 2018-09-11 00:21:26

Local clock offset: 0.35 ms

Remote clock offset: -0.29 ms

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2018-09-10 22:38:47

End at: 2018-09-10 22:39:17

Local clock offset: 0.398 ms

Remote clock offset: -7.264 ms

Below is generated by plot.py at 2018-09-11 00:38:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.54 Mbit/s

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

Loss rate: 1.03%

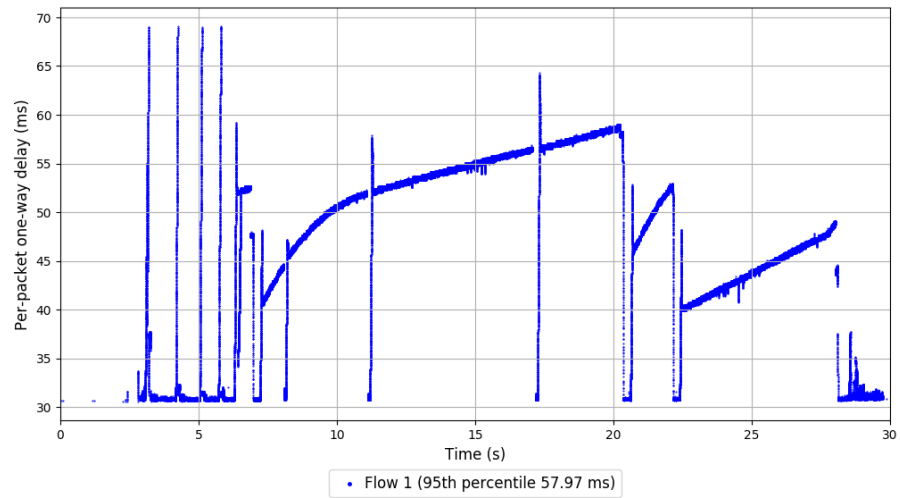
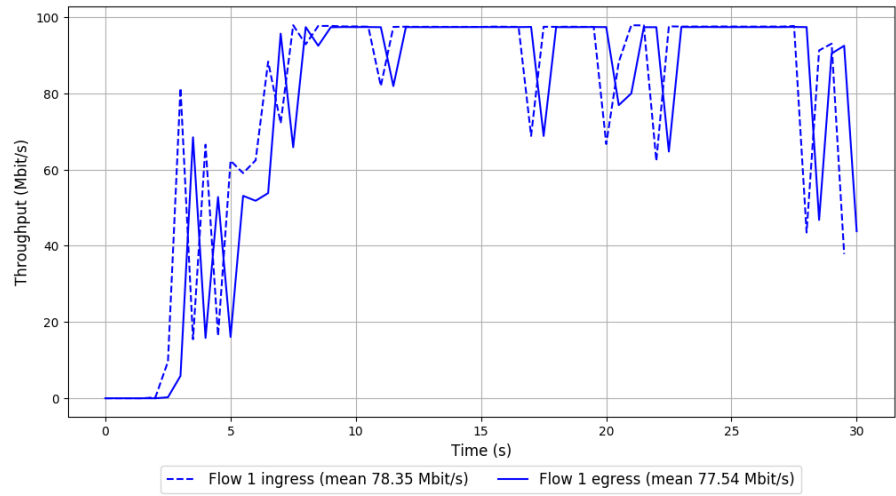
-- Flow 1:

Average throughput: 77.54 Mbit/s

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

Loss rate: 1.03%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-09-10 23:02:22

End at: 2018-09-10 23:02:52

Local clock offset: 0.346 ms

Remote clock offset: -5.716 ms

Below is generated by plot.py at 2018-09-11 00:38:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.93 Mbit/s

95th percentile per-packet one-way delay: 63.719 ms

Loss rate: 0.97%

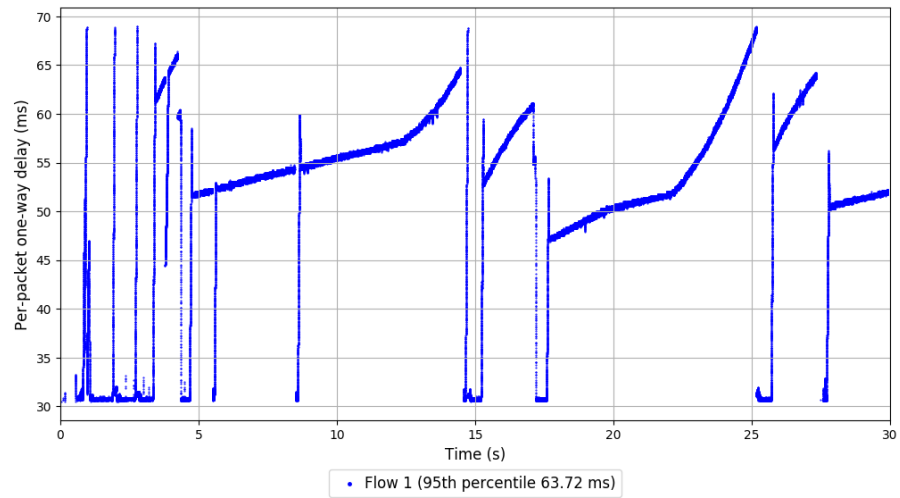
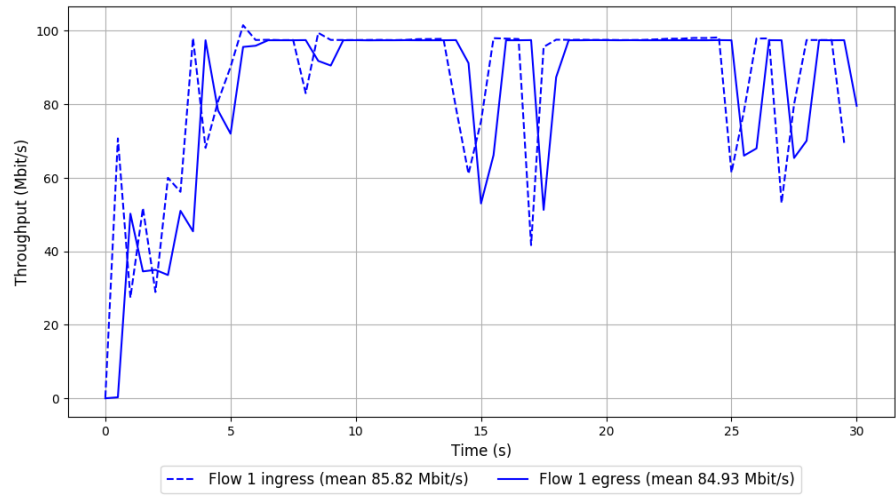
-- Flow 1:

Average throughput: 84.93 Mbit/s

95th percentile per-packet one-way delay: 63.719 ms

Loss rate: 0.97%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-09-10 23:25:57

End at: 2018-09-10 23:26:27

Local clock offset: 0.305 ms

Remote clock offset: -1.625 ms

Below is generated by plot.py at 2018-09-11 00:38:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.58 Mbit/s

95th percentile per-packet one-way delay: 66.401 ms

Loss rate: 1.78%

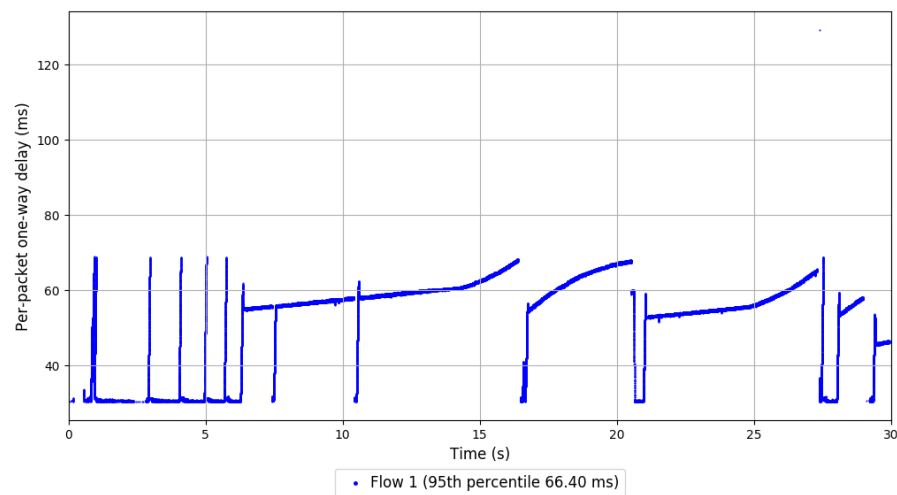
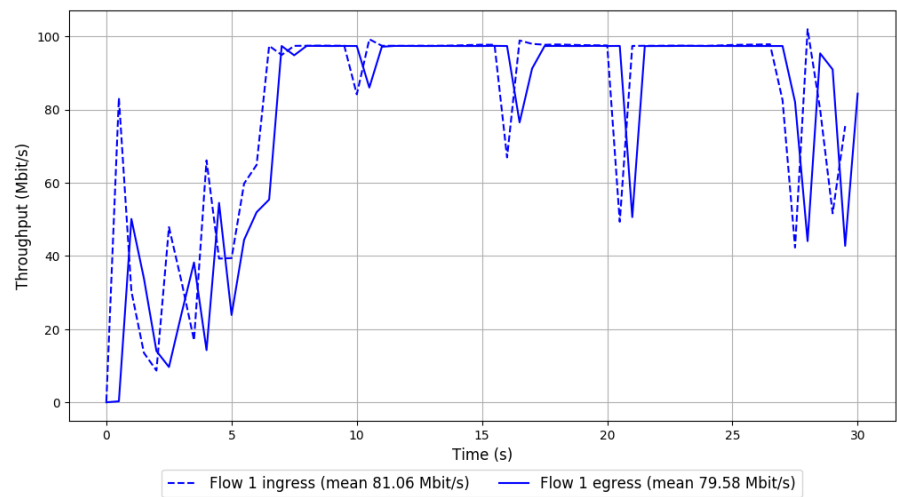
-- Flow 1:

Average throughput: 79.58 Mbit/s

95th percentile per-packet one-way delay: 66.401 ms

Loss rate: 1.78%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-09-10 23:49:26

End at: 2018-09-10 23:49:56

Local clock offset: -0.186 ms

Remote clock offset: -0.661 ms

Below is generated by plot.py at 2018-09-11 00:38:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.54 Mbit/s

95th percentile per-packet one-way delay: 67.364 ms

Loss rate: 1.70%

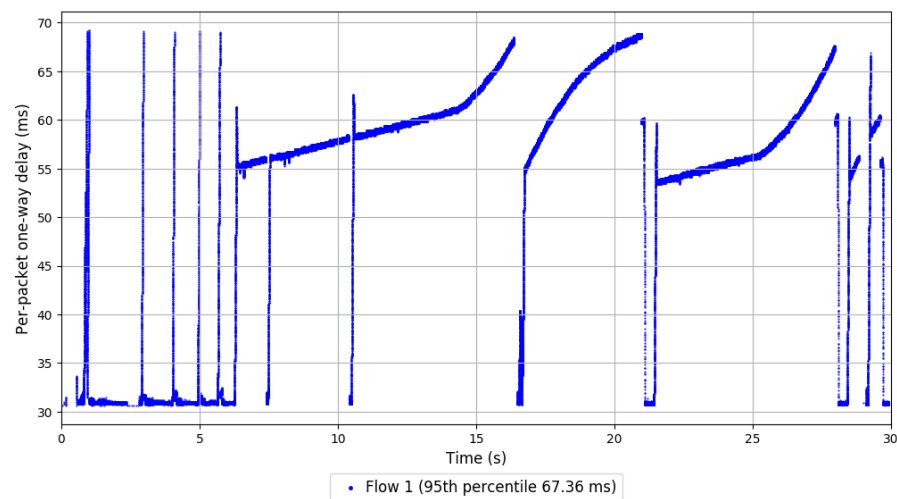
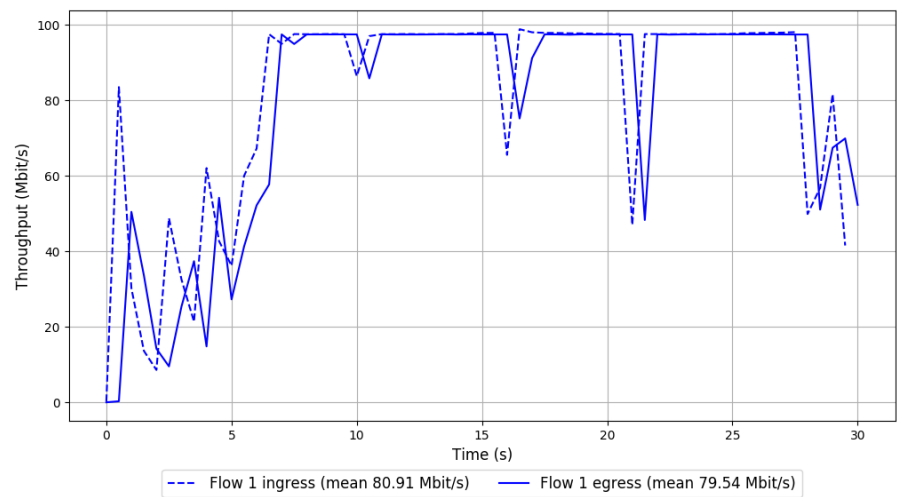
-- Flow 1:

Average throughput: 79.54 Mbit/s

95th percentile per-packet one-way delay: 67.364 ms

Loss rate: 1.70%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2018-09-11 00:12:58

End at: 2018-09-11 00:13:28

Local clock offset: 0.178 ms

Remote clock offset: -0.347 ms

Below is generated by plot.py at 2018-09-11 00:38:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.69 Mbit/s

95th percentile per-packet one-way delay: 67.682 ms

Loss rate: 0.93%

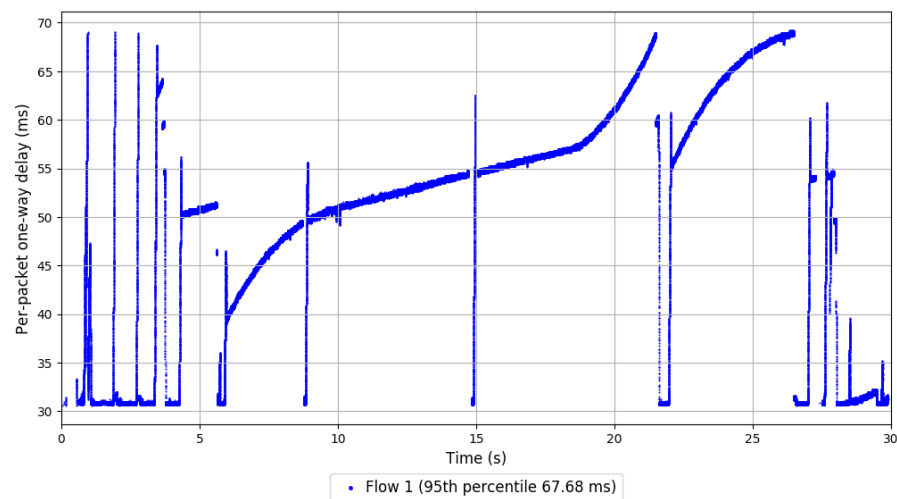
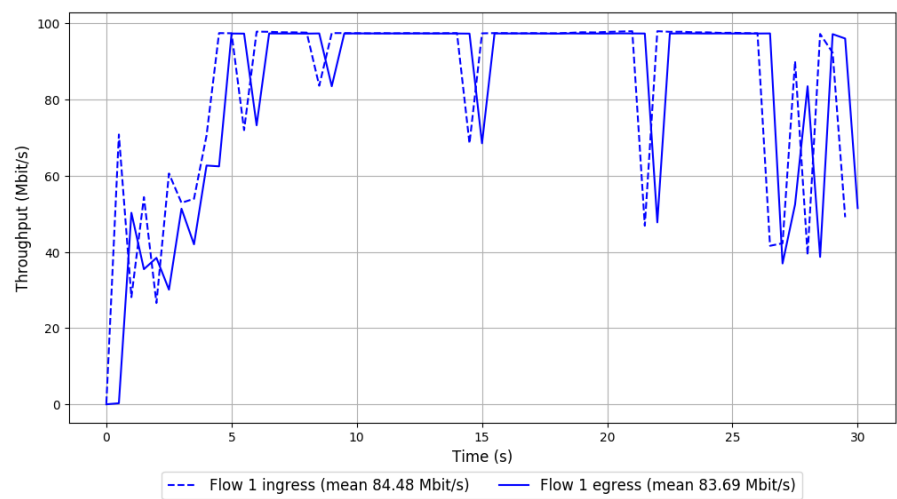
-- Flow 1:

Average throughput: 83.69 Mbit/s

95th percentile per-packet one-way delay: 67.682 ms

Loss rate: 0.93%

Run 5: Report of QUIC Cubic — Data Link

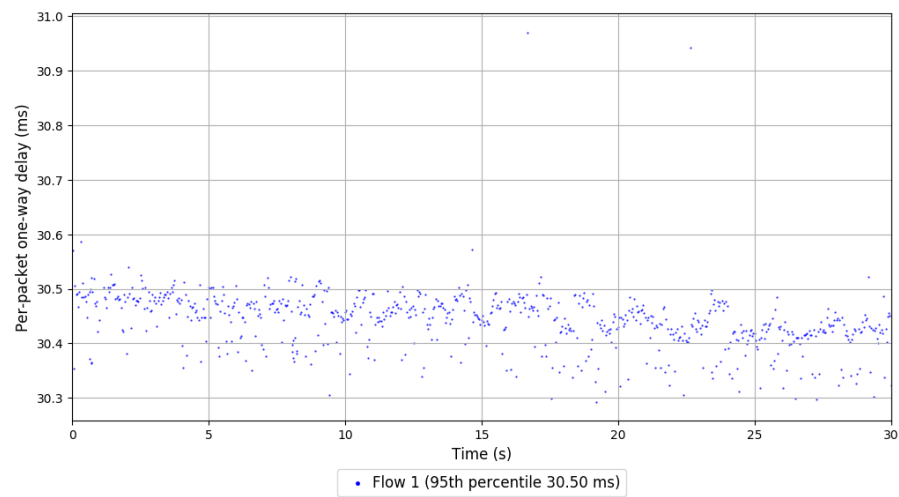
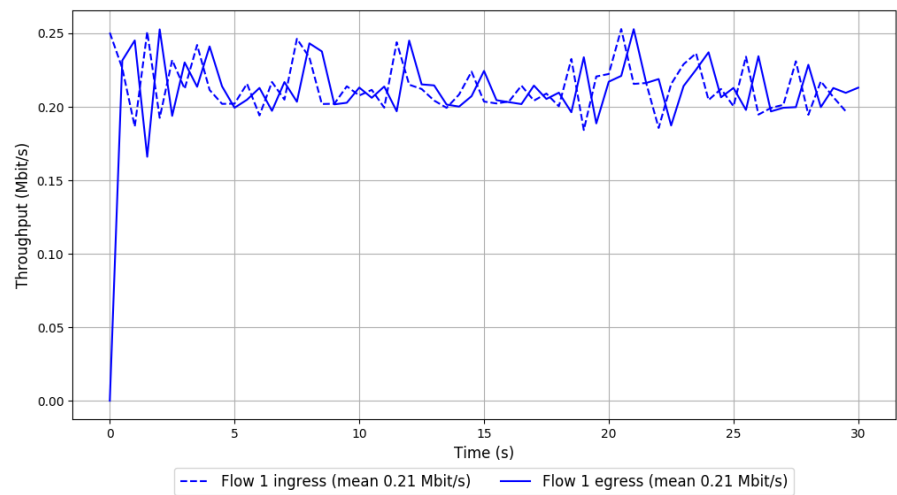


Run 1: Statistics of SCReAM

Start at: 2018-09-10 22:50:36
End at: 2018-09-10 22:51:06
Local clock offset: 0.375 ms
Remote clock offset: -7.279 ms

Below is generated by plot.py at 2018-09-11 00:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.503 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.503 ms
Loss rate: 0.00%

Run 1: Report of SReAM — Data Link

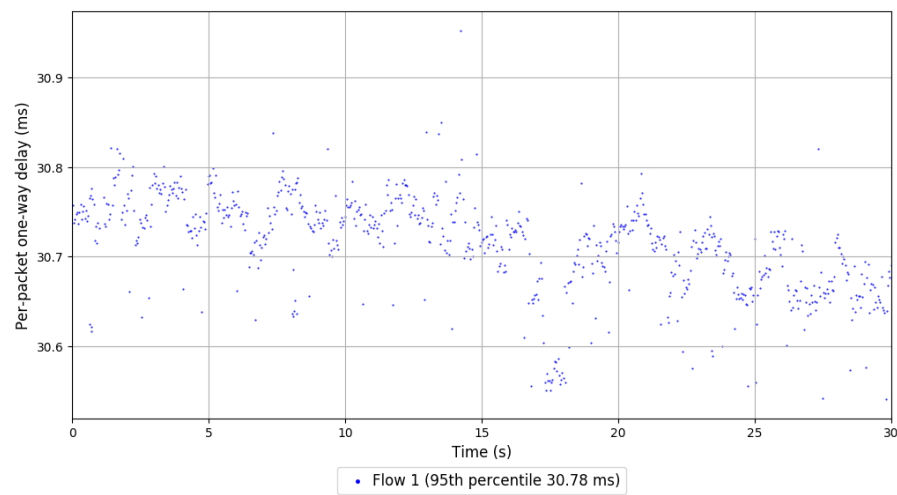
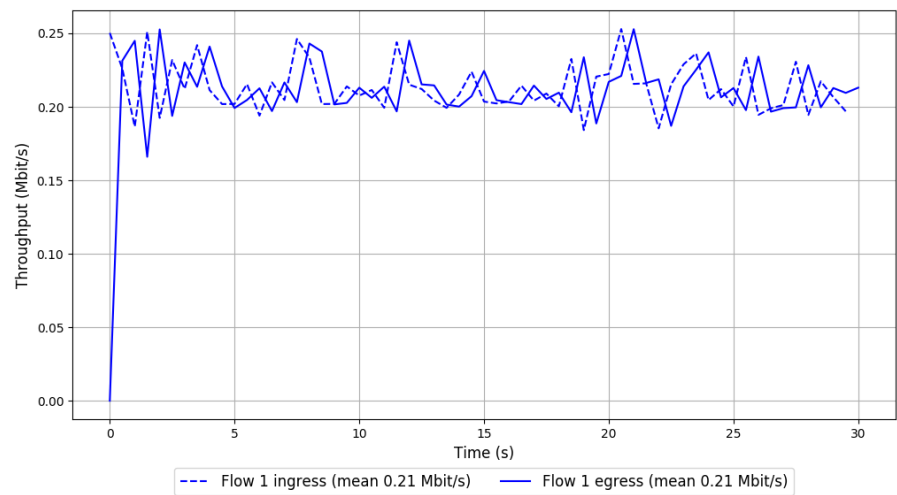


Run 2: Statistics of SCReAM

Start at: 2018-09-10 23:14:14
End at: 2018-09-10 23:14:44
Local clock offset: 0.314 ms
Remote clock offset: -3.187 ms

Below is generated by plot.py at 2018-09-11 00:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.783 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.783 ms
Loss rate: 0.00%

Run 2: Report of SReAM — Data Link

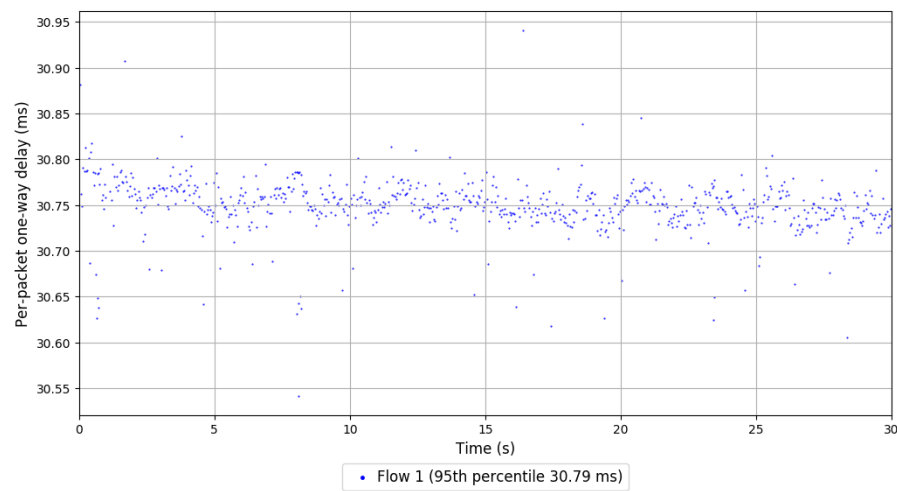
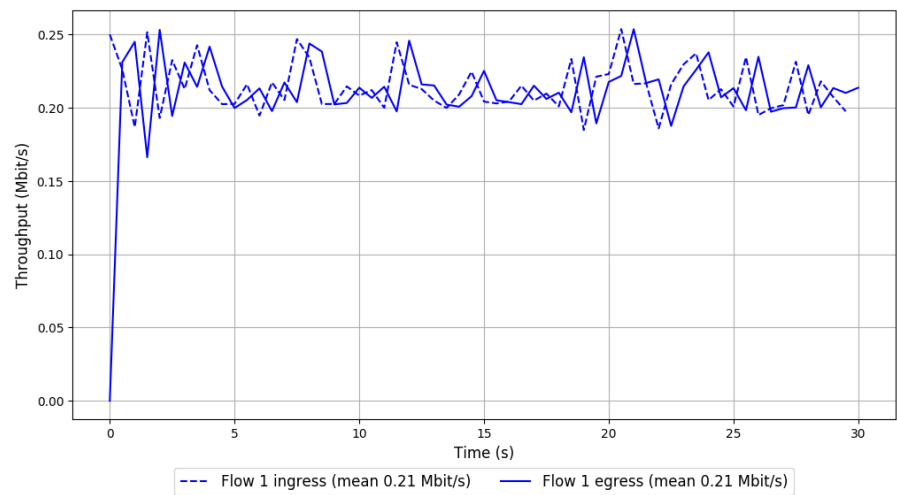


Run 3: Statistics of SCReAM

Start at: 2018-09-10 23:37:46
End at: 2018-09-10 23:38:16
Local clock offset: 0.016 ms
Remote clock offset: -0.988 ms

Below is generated by plot.py at 2018-09-11 00:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.785 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.785 ms
Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

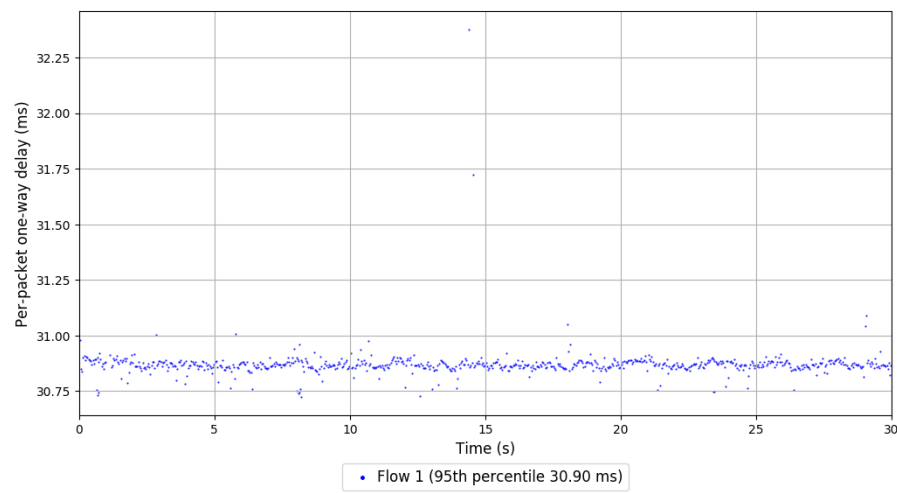
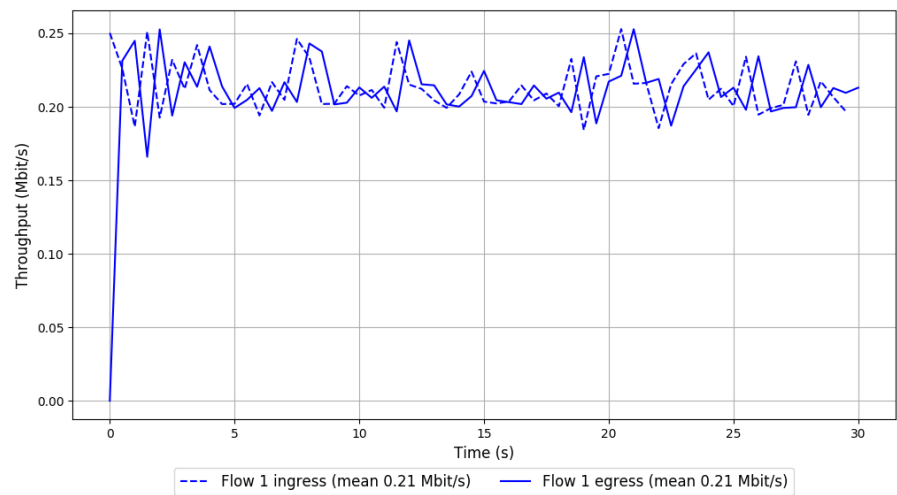


Run 4: Statistics of SCReAM

Start at: 2018-09-11 00:01:14
End at: 2018-09-11 00:01:44
Local clock offset: -0.008 ms
Remote clock offset: -0.511 ms

Below is generated by plot.py at 2018-09-11 00:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.901 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.901 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

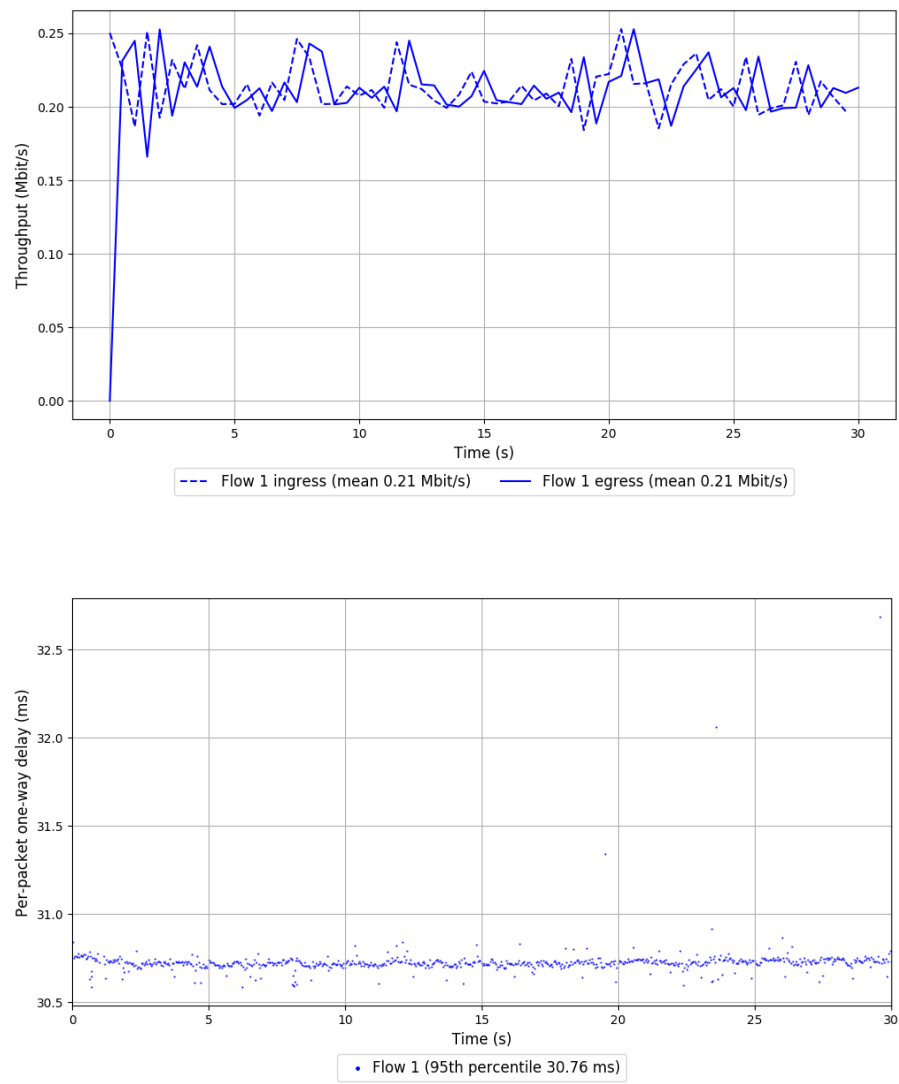


Run 5: Statistics of SCReAM

Start at: 2018-09-11 00:24:48
End at: 2018-09-11 00:25:18
Local clock offset: 0.373 ms
Remote clock offset: -0.454 ms

Below is generated by plot.py at 2018-09-11 00:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.763 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.763 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

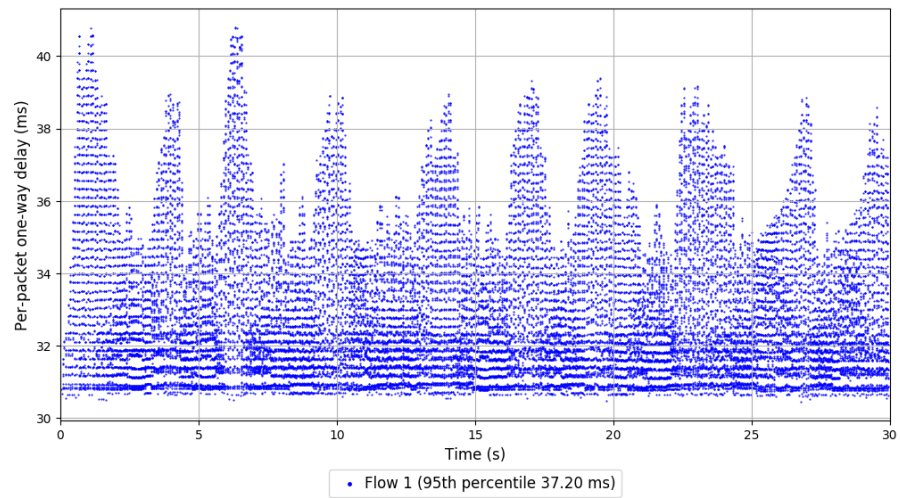
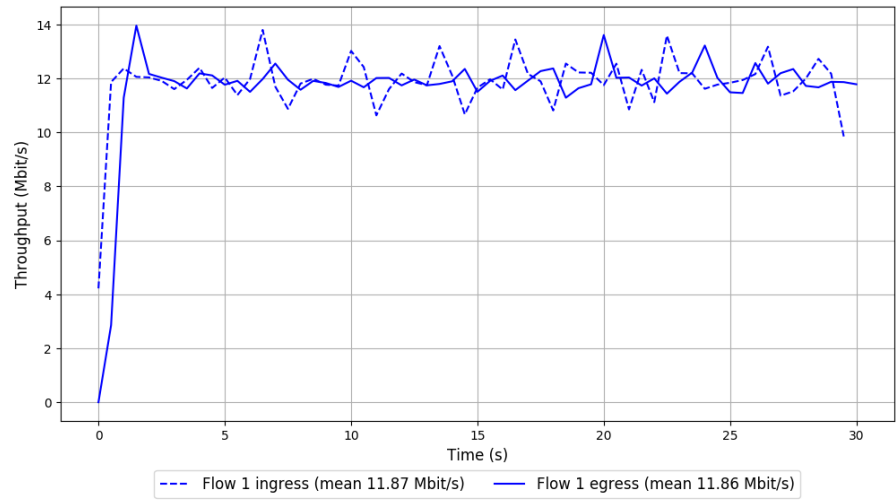


Run 1: Statistics of Sprout

Start at: 2018-09-10 22:48:00
End at: 2018-09-10 22:48:30
Local clock offset: 0.288 ms
Remote clock offset: -7.446 ms

Below is generated by plot.py at 2018-09-11 00:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 37.201 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 37.201 ms
Loss rate: 0.08%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-09-10 23:11:39

End at: 2018-09-10 23:12:09

Local clock offset: 0.316 ms

Remote clock offset: -3.75 ms

Below is generated by plot.py at 2018-09-11 00:38:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.85 Mbit/s

95th percentile per-packet one-way delay: 37.007 ms

Loss rate: 0.04%

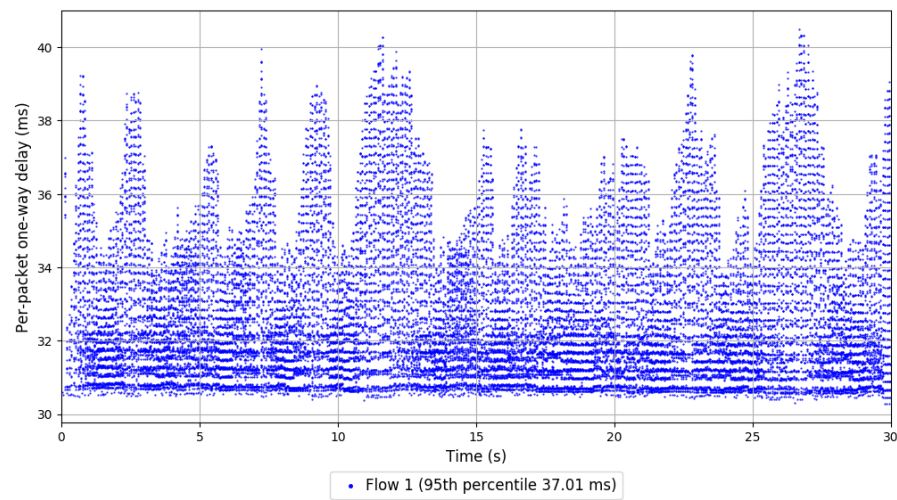
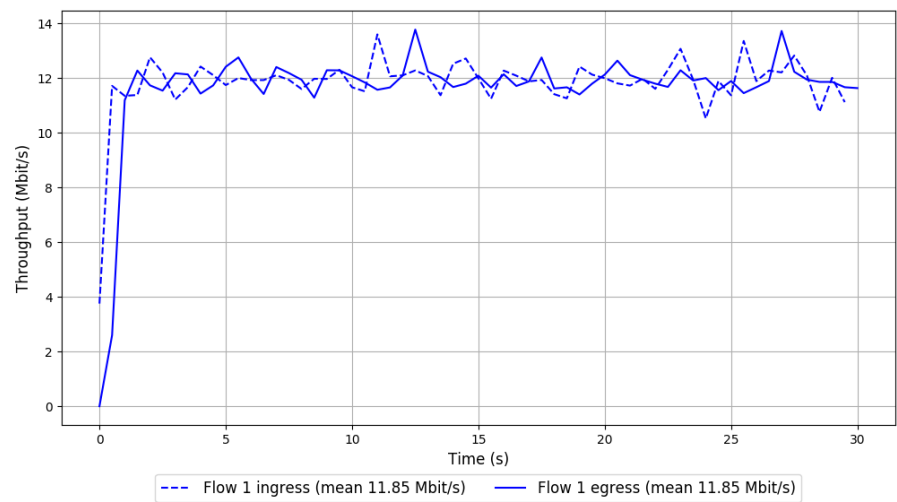
-- Flow 1:

Average throughput: 11.85 Mbit/s

95th percentile per-packet one-way delay: 37.007 ms

Loss rate: 0.04%

Run 2: Report of Sprout — Data Link

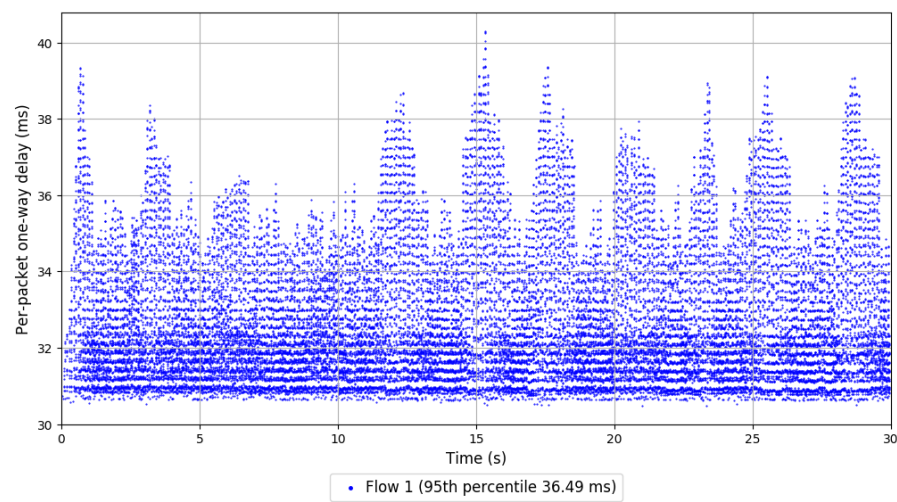
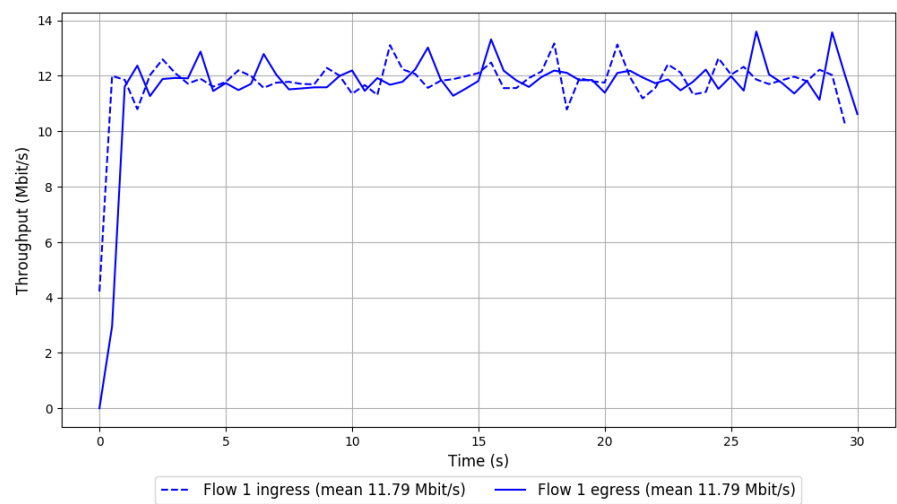


Run 3: Statistics of Sprout

Start at: 2018-09-10 23:35:10
End at: 2018-09-10 23:35:40
Local clock offset: -0.001 ms
Remote clock offset: -1.102 ms

Below is generated by plot.py at 2018-09-11 00:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 36.493 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 36.493 ms
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

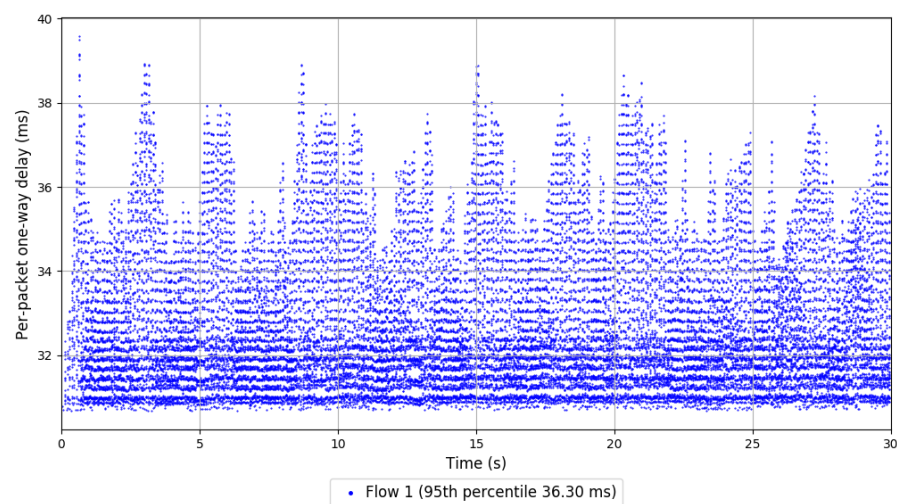
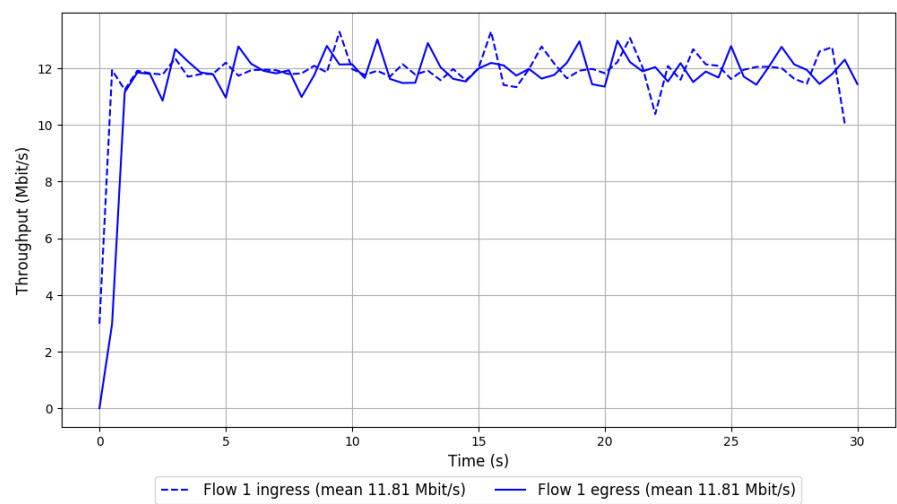


Run 4: Statistics of Sprout

Start at: 2018-09-10 23:58:38
End at: 2018-09-10 23:59:08
Local clock offset: -0.145 ms
Remote clock offset: -0.597 ms

Below is generated by plot.py at 2018-09-11 00:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.81 Mbit/s
95th percentile per-packet one-way delay: 36.298 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.81 Mbit/s
95th percentile per-packet one-way delay: 36.298 ms
Loss rate: 0.00%

Run 4: Report of Sprout — Data Link

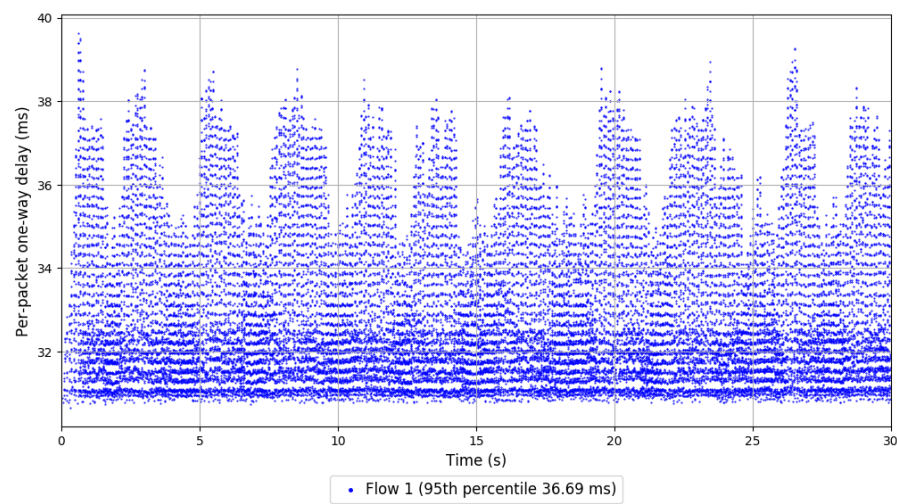
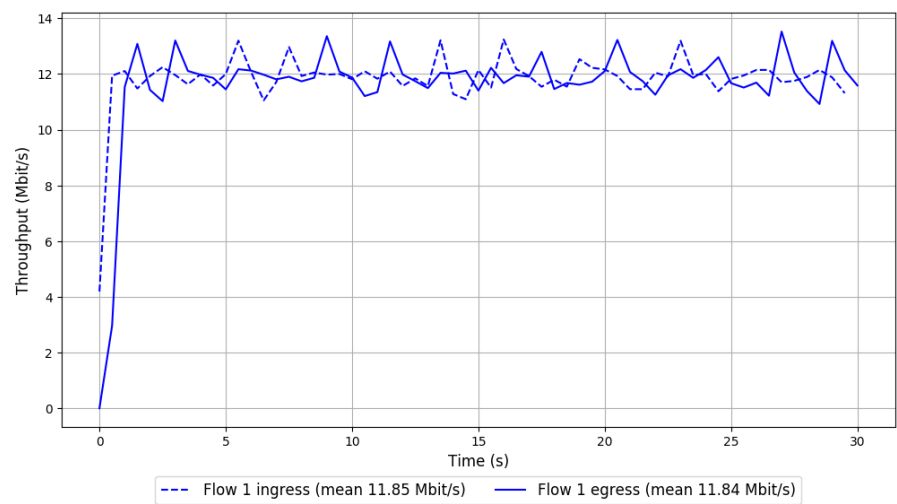


Run 5: Statistics of Sprout

Start at: 2018-09-11 00:22:12
End at: 2018-09-11 00:22:42
Local clock offset: 0.349 ms
Remote clock offset: -0.222 ms

Below is generated by plot.py at 2018-09-11 00:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.84 Mbit/s
95th percentile per-packet one-way delay: 36.690 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 11.84 Mbit/s
95th percentile per-packet one-way delay: 36.690 ms
Loss rate: 0.03%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2018-09-10 22:36:09

End at: 2018-09-10 22:36:39

Local clock offset: 0.505 ms

Remote clock offset: -7.181 ms

Below is generated by plot.py at 2018-09-11 00:38:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.68 Mbit/s

95th percentile per-packet one-way delay: 30.860 ms

Loss rate: 63.42%

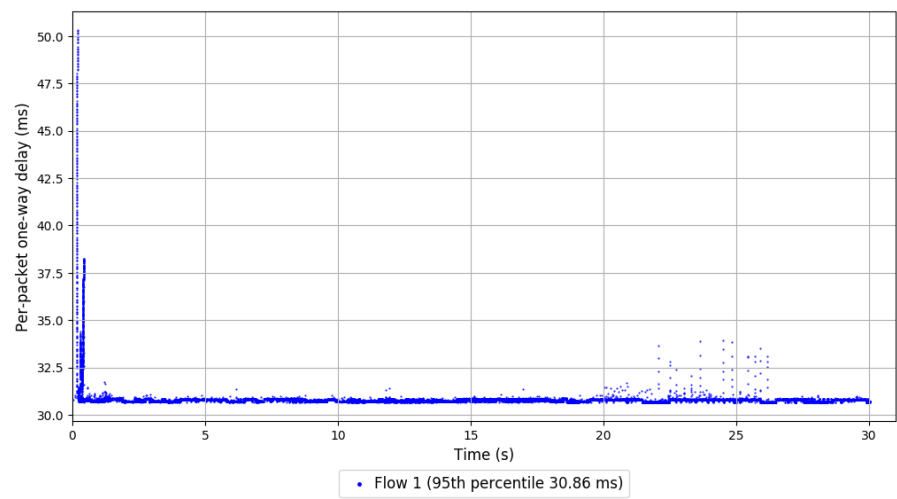
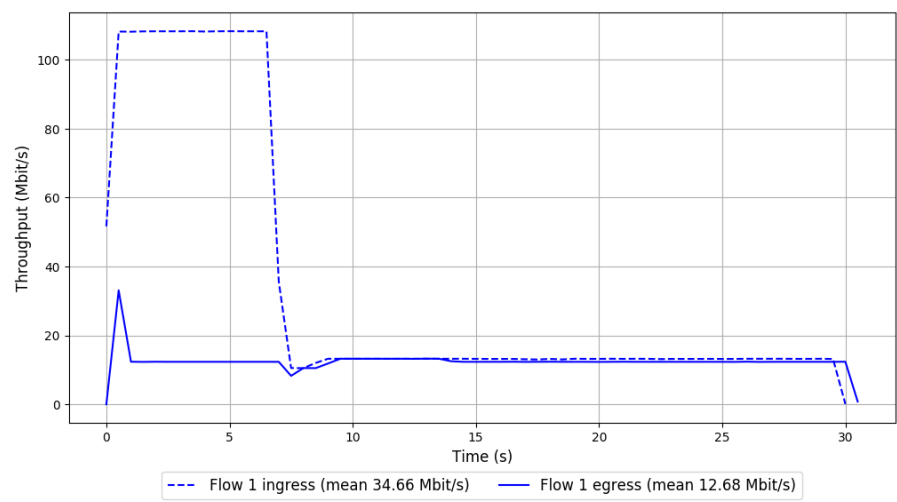
-- Flow 1:

Average throughput: 12.68 Mbit/s

95th percentile per-packet one-way delay: 30.860 ms

Loss rate: 63.42%

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



Run 2: Statistics of TaoVA-100x

Start at: 2018-09-10 22:59:44

End at: 2018-09-10 23:00:14

Local clock offset: 0.271 ms

Remote clock offset: -6.062 ms

Below is generated by plot.py at 2018-09-11 00:38:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.68 Mbit/s

95th percentile per-packet one-way delay: 30.845 ms

Loss rate: 63.31%

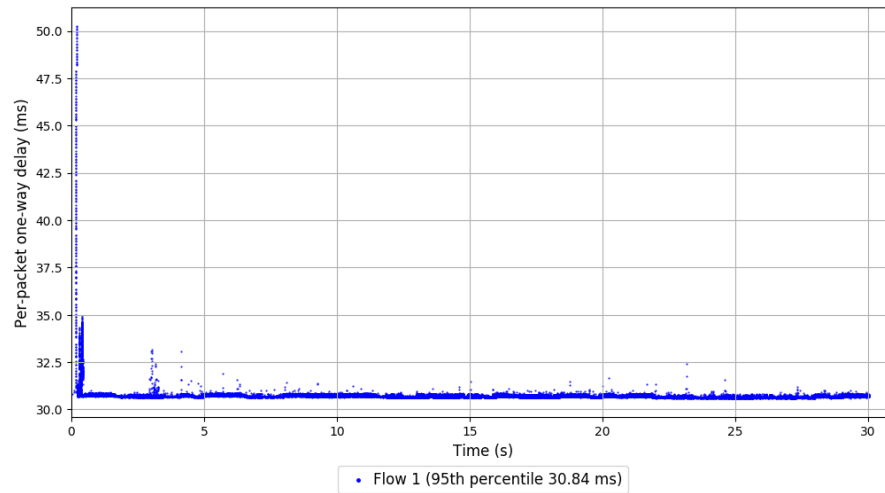
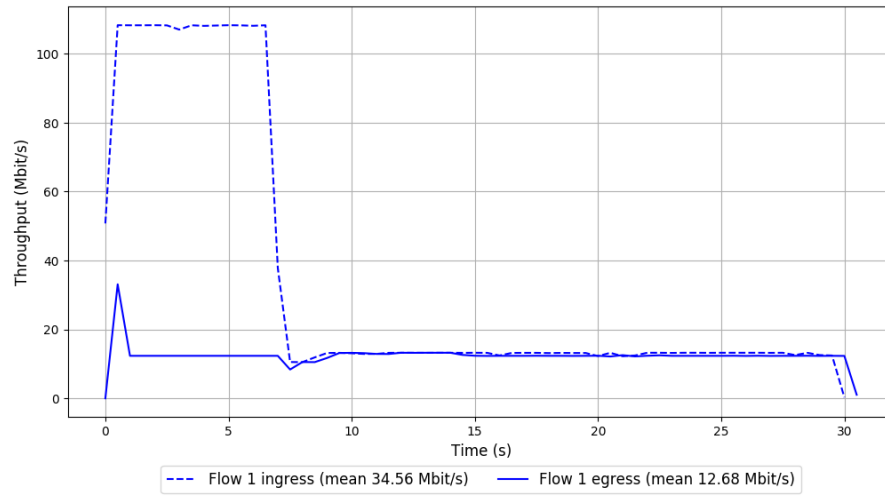
-- Flow 1:

Average throughput: 12.68 Mbit/s

95th percentile per-packet one-way delay: 30.845 ms

Loss rate: 63.31%

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



Run 3: Statistics of TaoVA-100x

Start at: 2018-09-10 23:23:20

End at: 2018-09-10 23:23:50

Local clock offset: 0.305 ms

Remote clock offset: -1.735 ms

Below is generated by plot.py at 2018-09-11 00:38:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.97 Mbit/s

95th percentile per-packet one-way delay: 30.808 ms

Loss rate: 64.25%

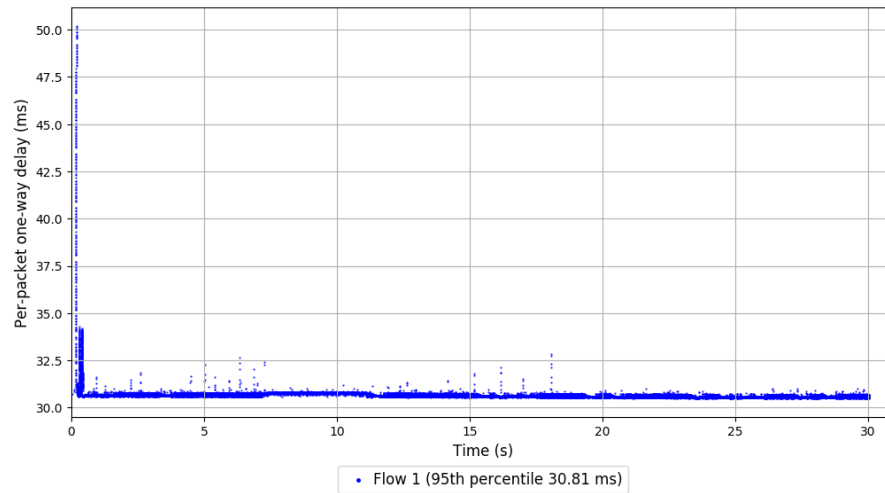
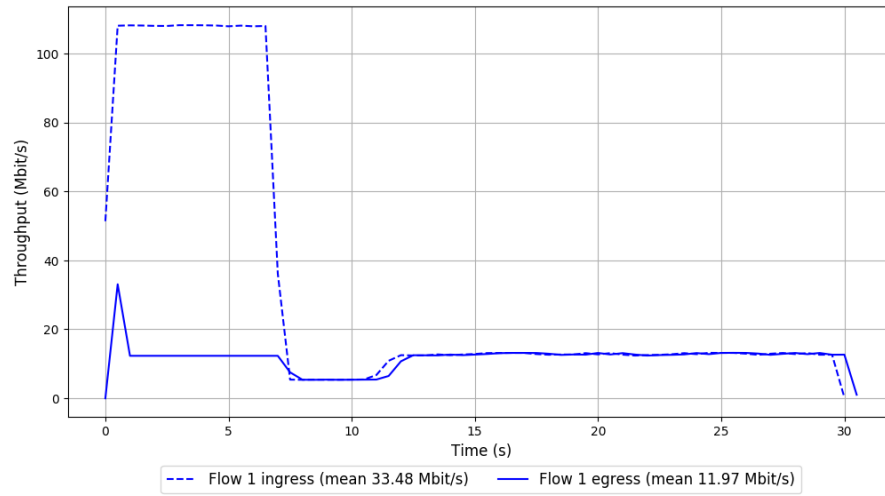
-- Flow 1:

Average throughput: 11.97 Mbit/s

95th percentile per-packet one-way delay: 30.808 ms

Loss rate: 64.25%

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

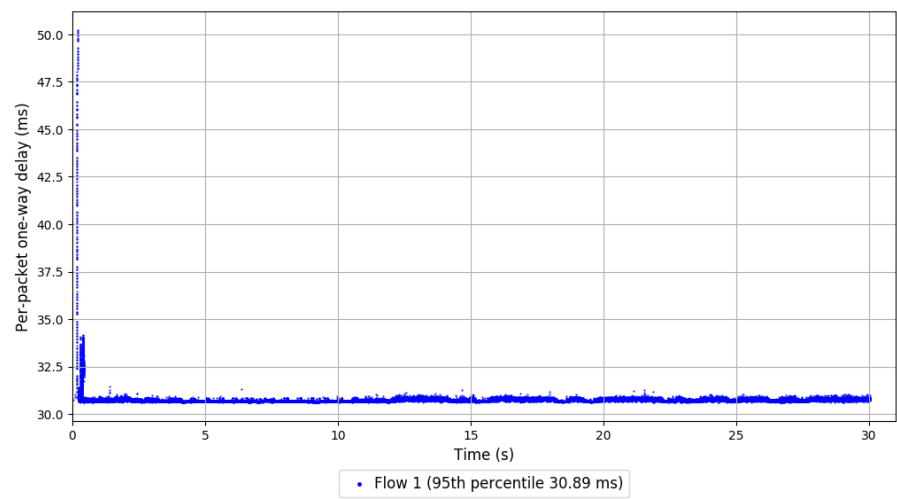
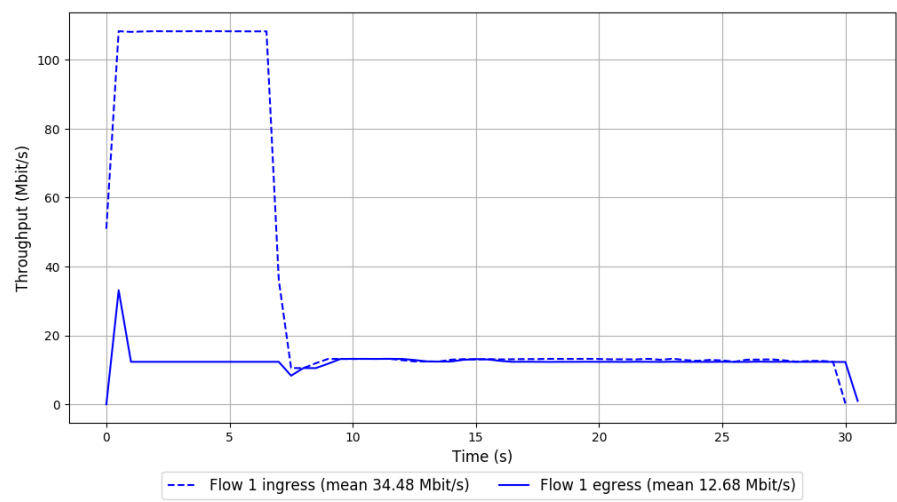


Run 4: Statistics of TaoVA-100x

Start at: 2018-09-10 23:46:49
End at: 2018-09-10 23:47:19
Local clock offset: -0.085 ms
Remote clock offset: -0.805 ms

Below is generated by plot.py at 2018-09-11 00:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 30.886 ms
Loss rate: 63.23%
-- Flow 1:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 30.886 ms
Loss rate: 63.23%

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

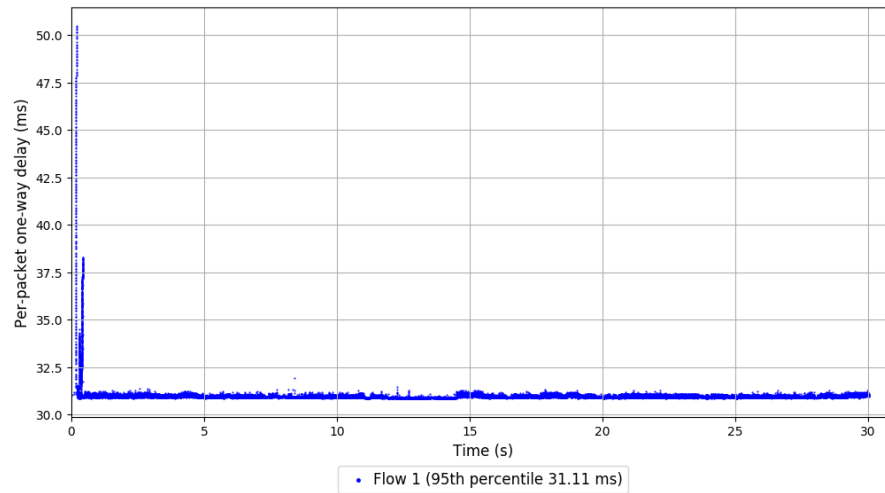
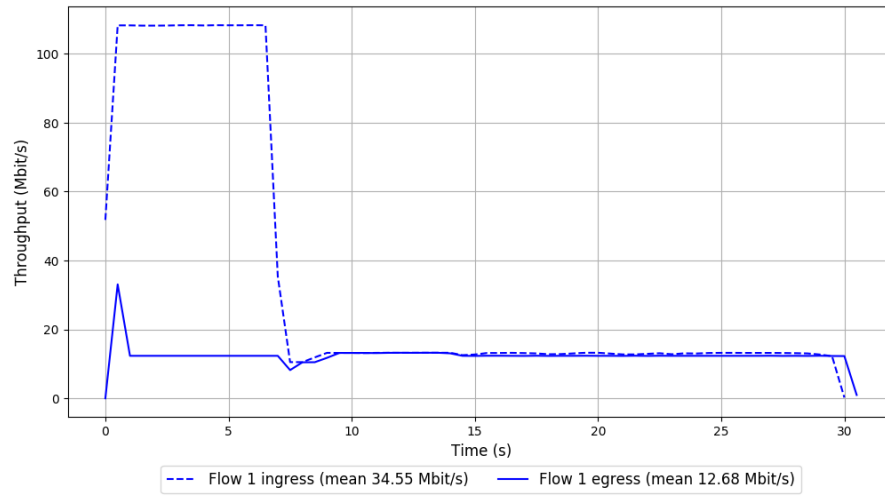


Run 5: Statistics of TaoVA-100x

Start at: 2018-09-11 00:10:19
End at: 2018-09-11 00:10:49
Local clock offset: 0.224 ms
Remote clock offset: -0.194 ms

Below is generated by plot.py at 2018-09-11 00:38:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 31.113 ms
Loss rate: 63.31%
-- Flow 1:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 31.113 ms
Loss rate: 63.31%

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

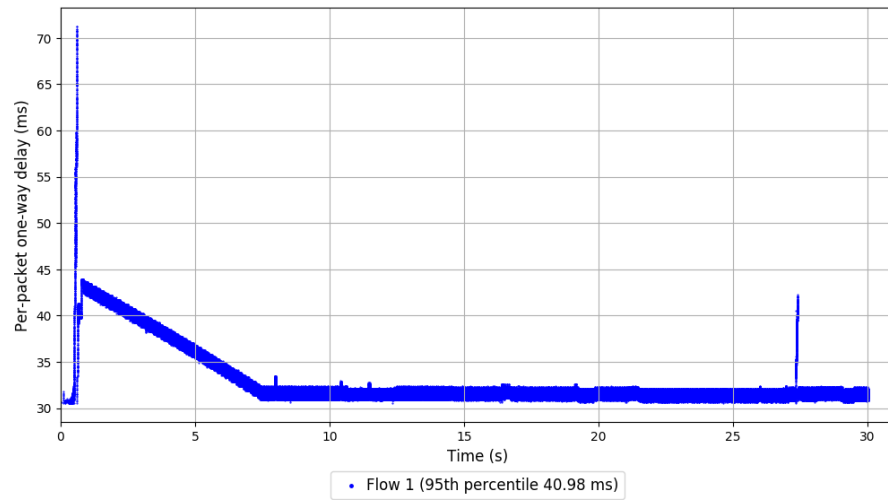
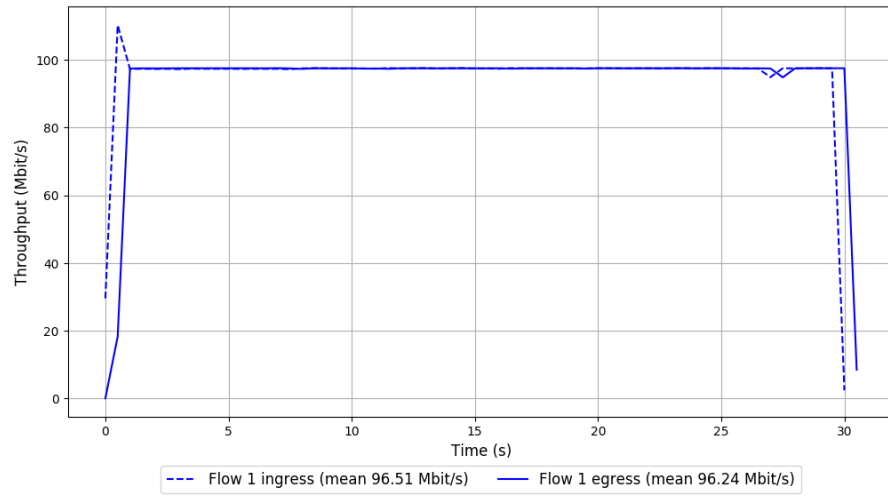


Run 1: Statistics of TCP Vegas

Start at: 2018-09-10 22:54:32
End at: 2018-09-10 22:55:02
Local clock offset: 0.347 ms
Remote clock offset: -6.712 ms

Below is generated by plot.py at 2018-09-11 00:39:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.24 Mbit/s
95th percentile per-packet one-way delay: 40.985 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.24 Mbit/s
95th percentile per-packet one-way delay: 40.985 ms
Loss rate: 0.27%

Run 1: Report of TCP Vegas — Data Link

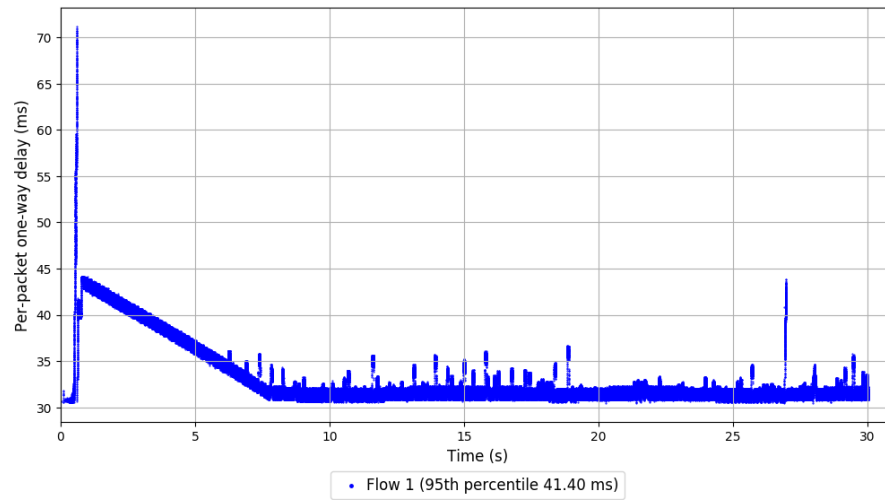
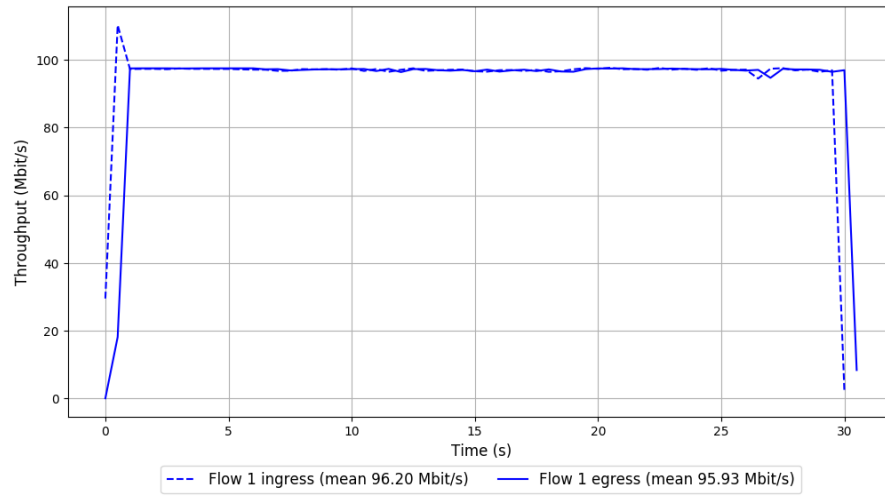


Run 2: Statistics of TCP Vegas

Start at: 2018-09-10 23:18:10
End at: 2018-09-10 23:18:40
Local clock offset: 0.321 ms
Remote clock offset: -2.628 ms

Below is generated by plot.py at 2018-09-11 00:39:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 95.93 Mbit/s
95th percentile per-packet one-way delay: 41.396 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 95.93 Mbit/s
95th percentile per-packet one-way delay: 41.396 ms
Loss rate: 0.27%

Run 2: Report of TCP Vegas — Data Link

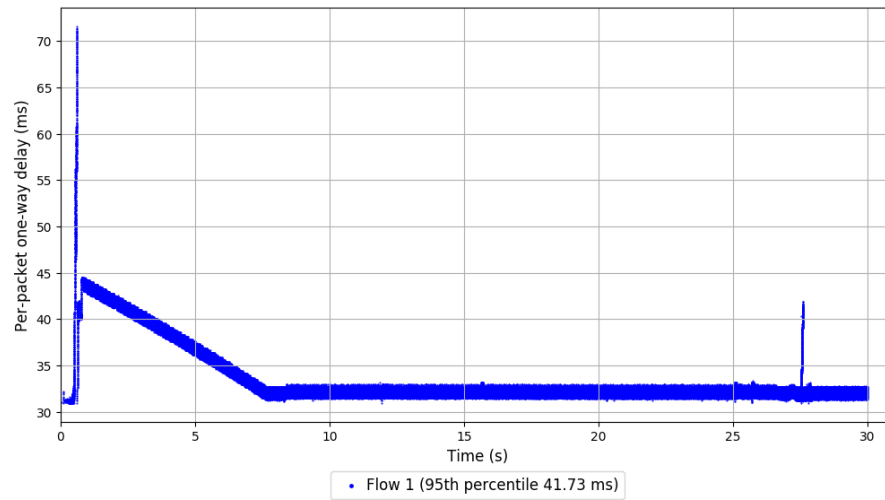
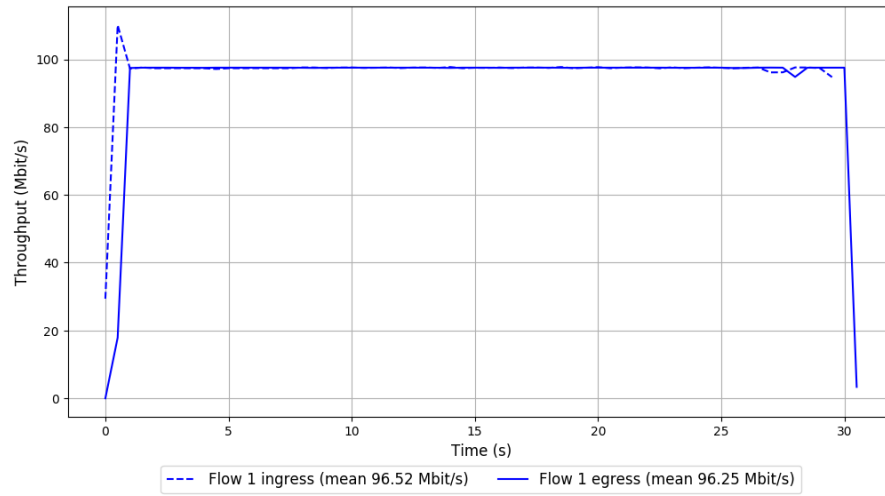


Run 3: Statistics of TCP Vegas

Start at: 2018-09-10 23:41:40
End at: 2018-09-10 23:42:10
Local clock offset: -0.132 ms
Remote clock offset: -0.766 ms

Below is generated by plot.py at 2018-09-11 00:39:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.25 Mbit/s
95th percentile per-packet one-way delay: 41.734 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.25 Mbit/s
95th percentile per-packet one-way delay: 41.734 ms
Loss rate: 0.27%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2018-09-11 00:05:08

End at: 2018-09-11 00:05:38

Local clock offset: 0.111 ms

Remote clock offset: -0.43 ms

Below is generated by plot.py at 2018-09-11 00:39:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.50 Mbit/s

95th percentile per-packet one-way delay: 41.808 ms

Loss rate: 0.34%

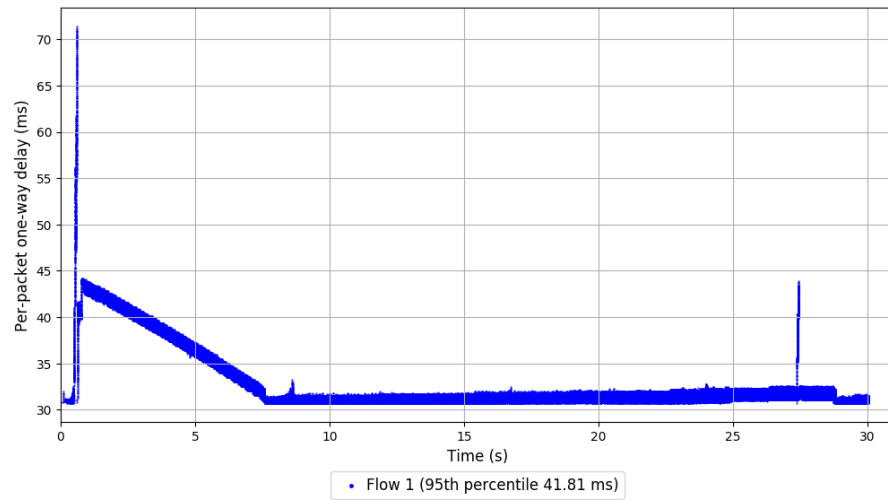
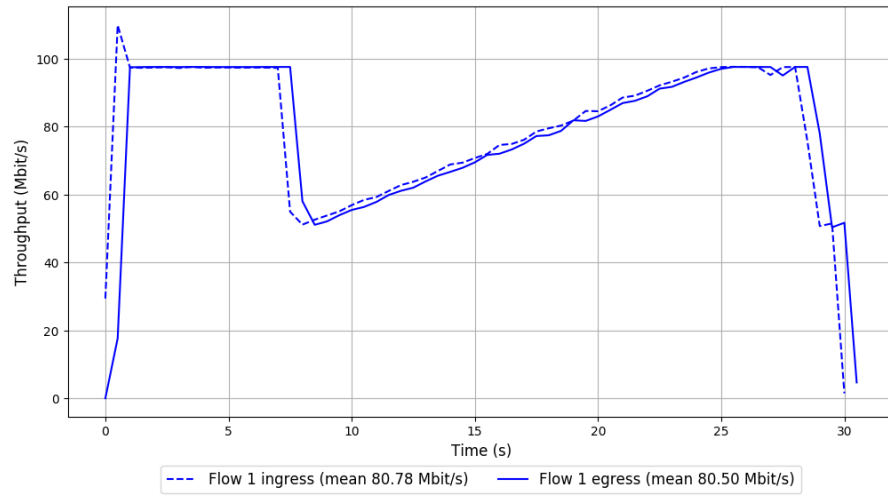
-- Flow 1:

Average throughput: 80.50 Mbit/s

95th percentile per-packet one-way delay: 41.808 ms

Loss rate: 0.34%

Run 4: Report of TCP Vegas — Data Link

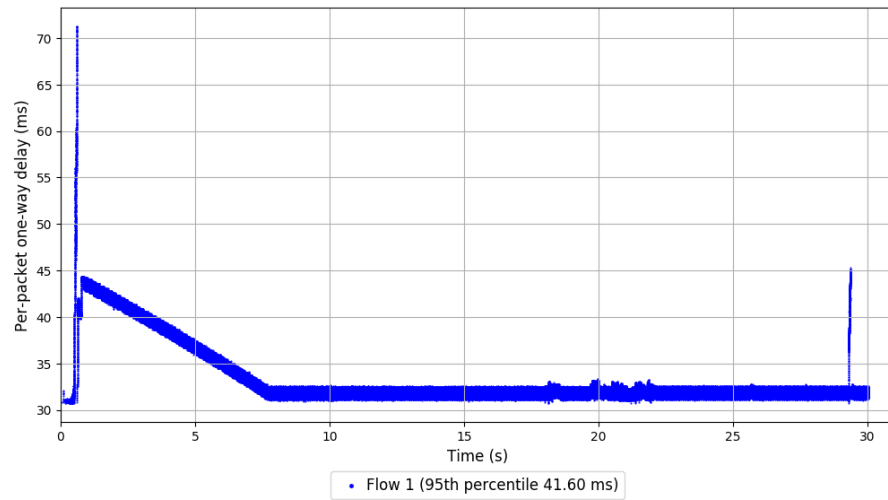
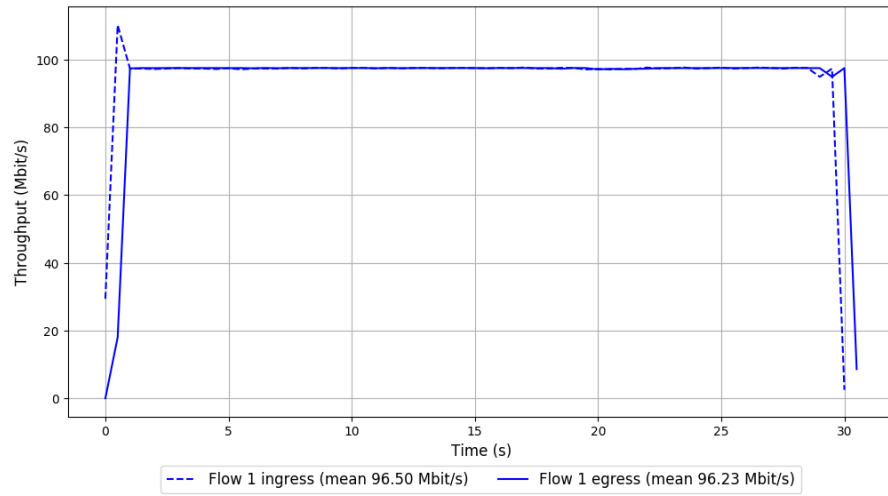


Run 5: Statistics of TCP Vegas

Start at: 2018-09-11 00:28:44
End at: 2018-09-11 00:29:14
Local clock offset: 0.292 ms
Remote clock offset: -0.363 ms

Below is generated by plot.py at 2018-09-11 00:39:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 96.23 Mbit/s
95th percentile per-packet one-way delay: 41.603 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 96.23 Mbit/s
95th percentile per-packet one-way delay: 41.603 ms
Loss rate: 0.27%

Run 5: Report of TCP Vegas — Data Link

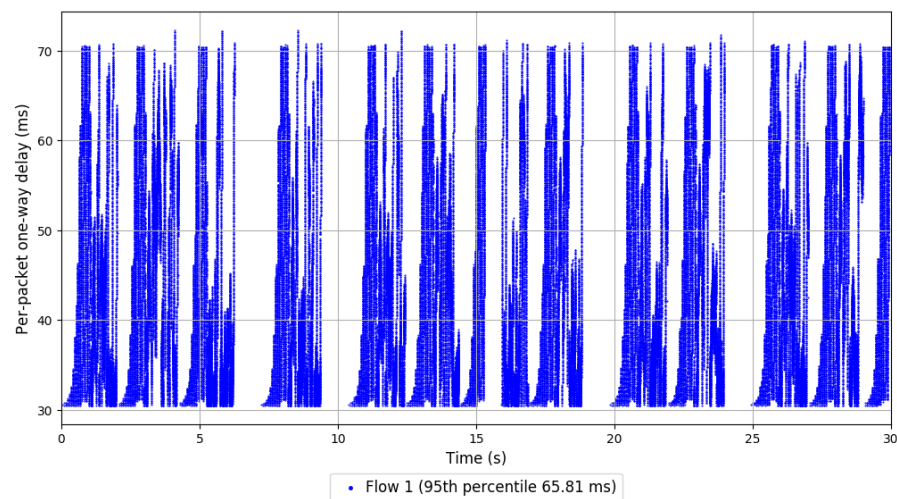
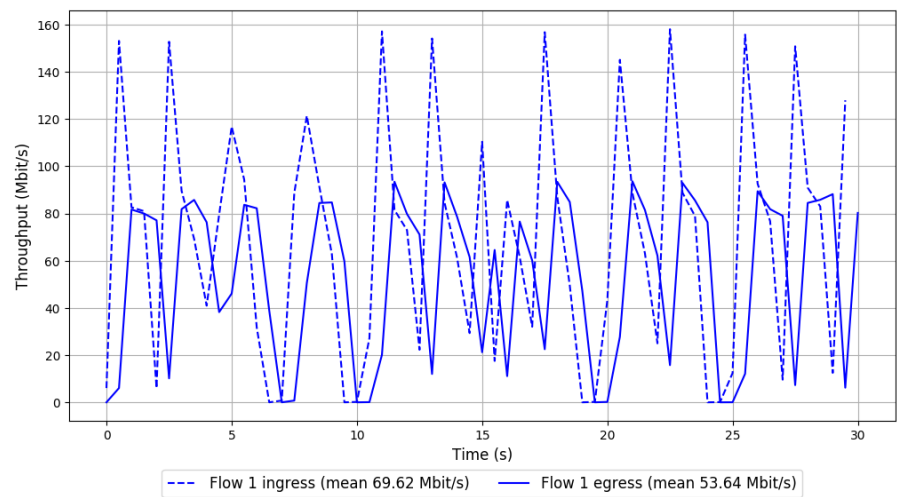


Run 1: Statistics of Verus

Start at: 2018-09-10 22:42:44
End at: 2018-09-10 22:43:14
Local clock offset: 0.428 ms
Remote clock offset: -7.595 ms

Below is generated by plot.py at 2018-09-11 00:39:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 53.64 Mbit/s
95th percentile per-packet one-way delay: 65.812 ms
Loss rate: 22.91%
-- Flow 1:
Average throughput: 53.64 Mbit/s
95th percentile per-packet one-way delay: 65.812 ms
Loss rate: 22.91%

Run 1: Report of Verus — Data Link

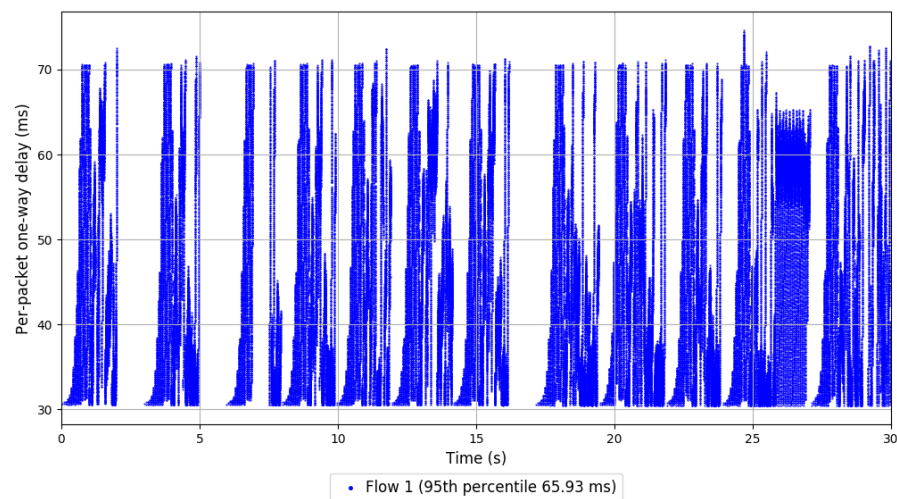
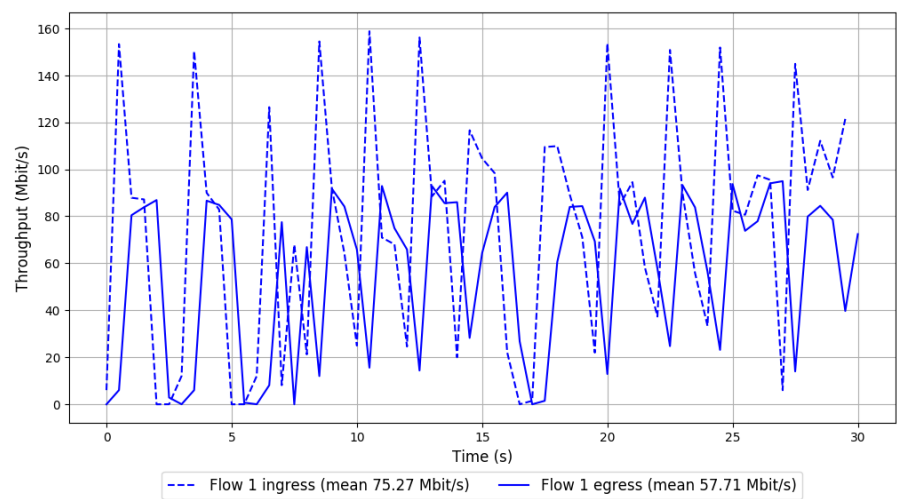


Run 2: Statistics of Verus

Start at: 2018-09-10 23:06:24
End at: 2018-09-10 23:06:54
Local clock offset: 0.326 ms
Remote clock offset: -5.014 ms

Below is generated by plot.py at 2018-09-11 00:39:57
Datalink statistics
-- Total of 1 flow:
Average throughput: 57.71 Mbit/s
95th percentile per-packet one-way delay: 65.931 ms
Loss rate: 23.30%
-- Flow 1:
Average throughput: 57.71 Mbit/s
95th percentile per-packet one-way delay: 65.931 ms
Loss rate: 23.30%

Run 2: Report of Verus — Data Link

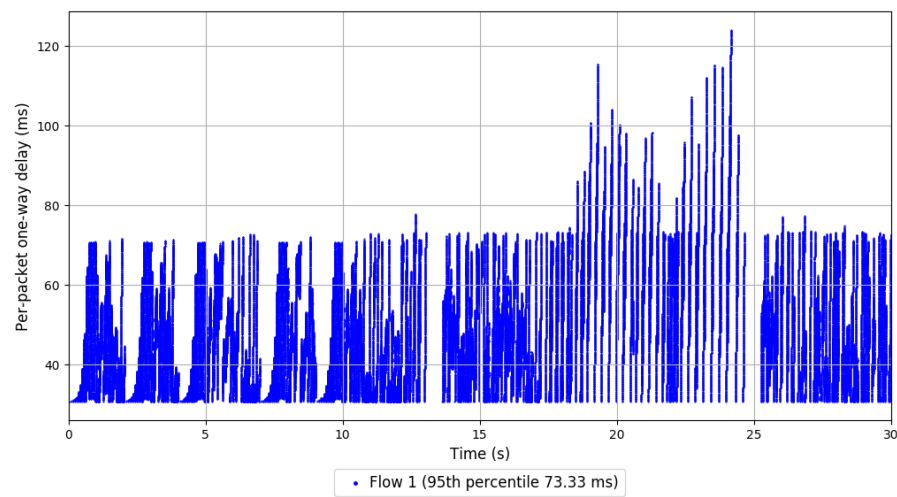
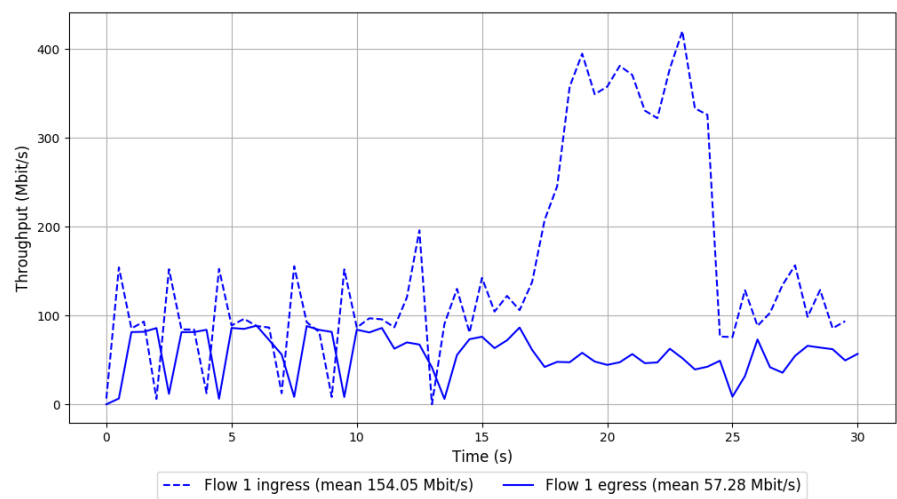


Run 3: Statistics of Verus

Start at: 2018-09-10 23:29:54
End at: 2018-09-10 23:30:24
Local clock offset: 0.253 ms
Remote clock offset: -1.173 ms

Below is generated by plot.py at 2018-09-11 00:40:02
Datalink statistics
-- Total of 1 flow:
Average throughput: 57.28 Mbit/s
95th percentile per-packet one-way delay: 73.334 ms
Loss rate: 62.77%
-- Flow 1:
Average throughput: 57.28 Mbit/s
95th percentile per-packet one-way delay: 73.334 ms
Loss rate: 62.77%

Run 3: Report of Verus — Data Link

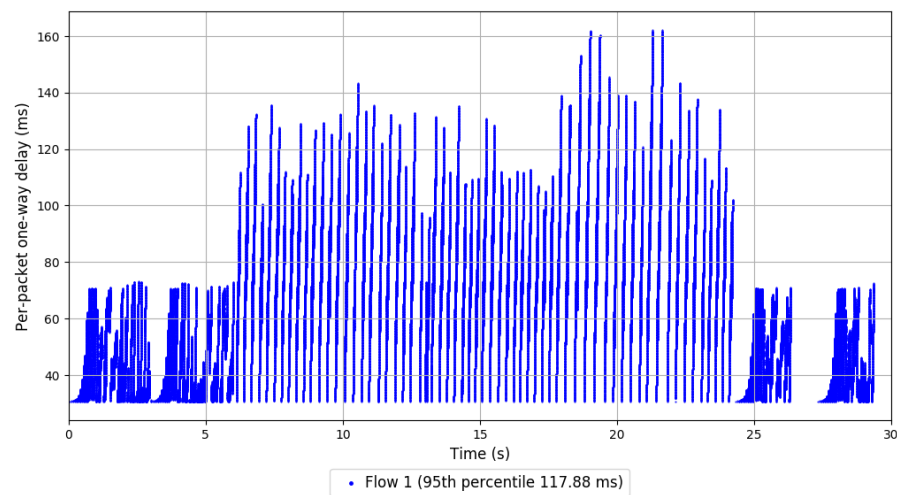
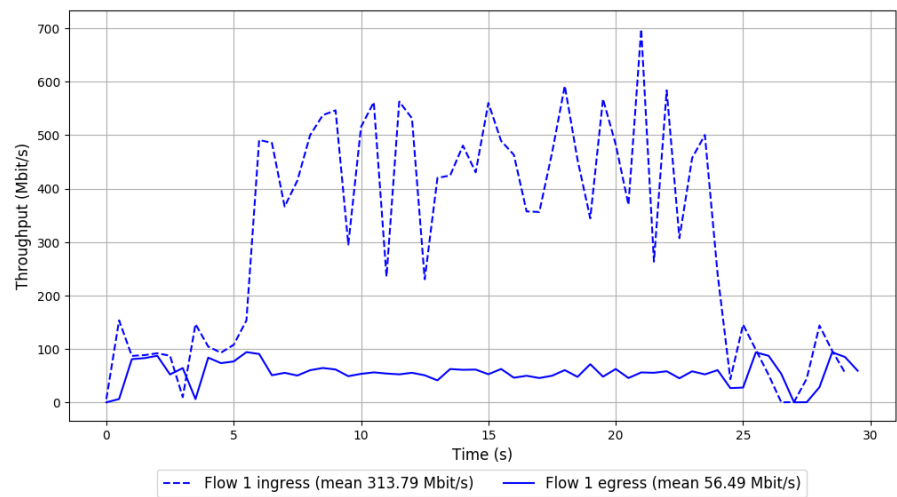


Run 4: Statistics of Verus

Start at: 2018-09-10 23:53:22
End at: 2018-09-10 23:53:52
Local clock offset: -0.106 ms
Remote clock offset: -0.716 ms

Below is generated by plot.py at 2018-09-11 00:40:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 56.49 Mbit/s
95th percentile per-packet one-way delay: 117.882 ms
Loss rate: 81.98%
-- Flow 1:
Average throughput: 56.49 Mbit/s
95th percentile per-packet one-way delay: 117.882 ms
Loss rate: 81.98%

Run 4: Report of Verus — Data Link

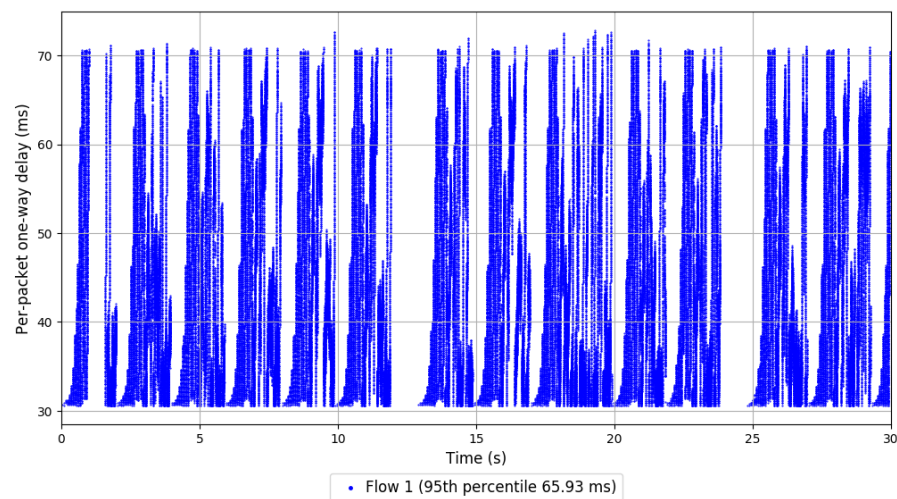
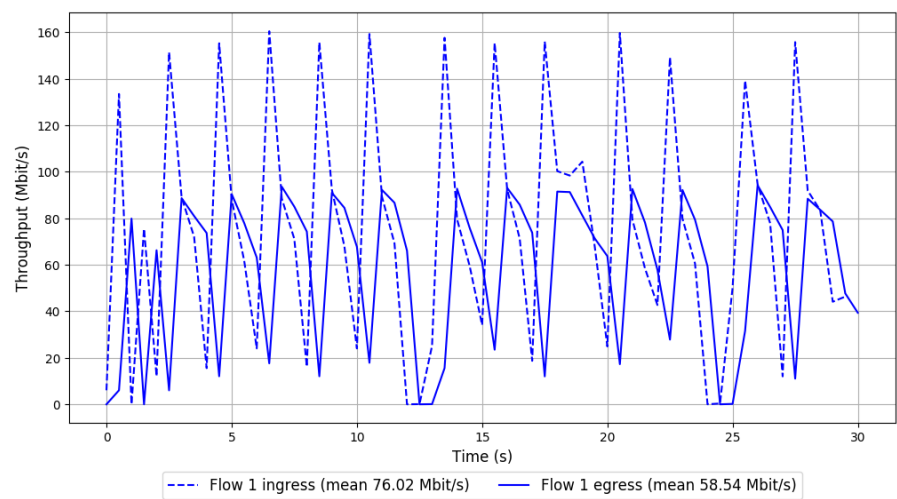


Run 5: Statistics of Verus

Start at: 2018-09-11 00:16:55
End at: 2018-09-11 00:17:25
Local clock offset: 0.31 ms
Remote clock offset: -0.395 ms

Below is generated by plot.py at 2018-09-11 00:40:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 58.54 Mbit/s
95th percentile per-packet one-way delay: 65.931 ms
Loss rate: 22.94%
-- Flow 1:
Average throughput: 58.54 Mbit/s
95th percentile per-packet one-way delay: 65.931 ms
Loss rate: 22.94%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2018-09-10 22:44:04

End at: 2018-09-10 22:44:34

Local clock offset: 0.41 ms

Remote clock offset: -7.44 ms

Below is generated by plot.py at 2018-09-11 00:40:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.58 Mbit/s

95th percentile per-packet one-way delay: 33.547 ms

Loss rate: 0.00%

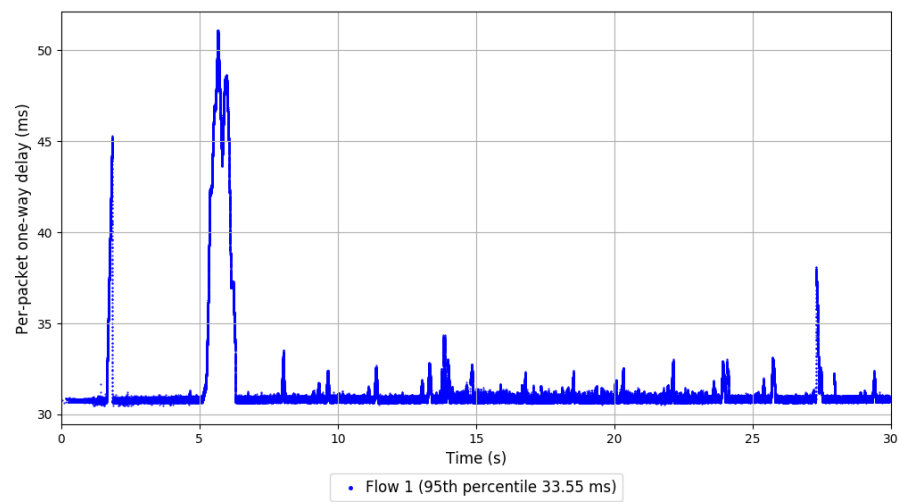
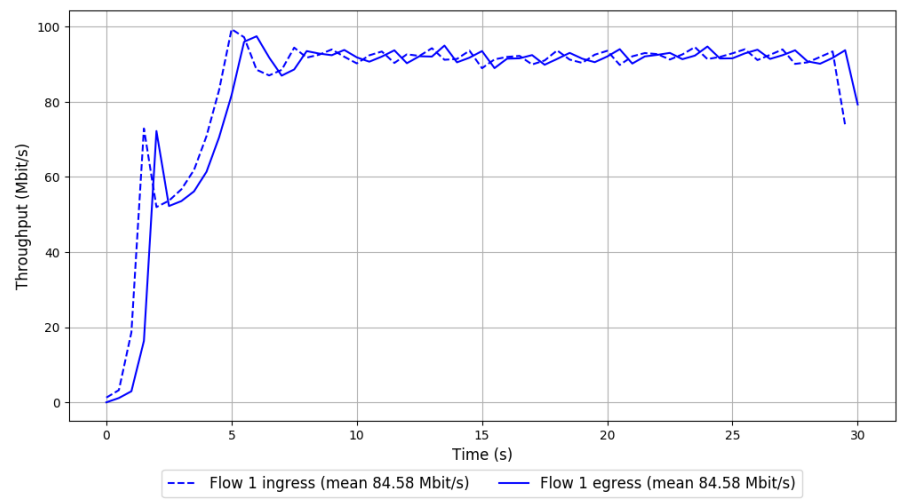
-- Flow 1:

Average throughput: 84.58 Mbit/s

95th percentile per-packet one-way delay: 33.547 ms

Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-09-10 23:07:43

End at: 2018-09-10 23:08:13

Local clock offset: 0.336 ms

Remote clock offset: -4.814 ms

Below is generated by plot.py at 2018-09-11 00:40:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.75 Mbit/s

95th percentile per-packet one-way delay: 34.947 ms

Loss rate: 0.01%

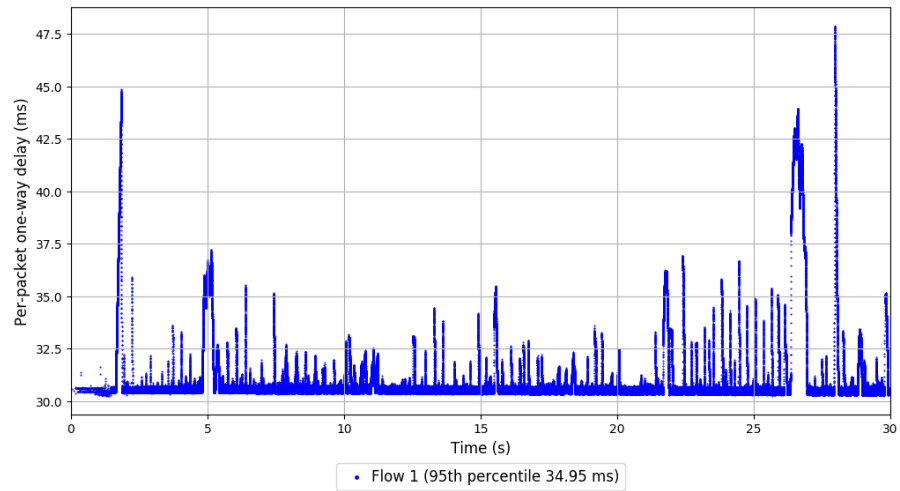
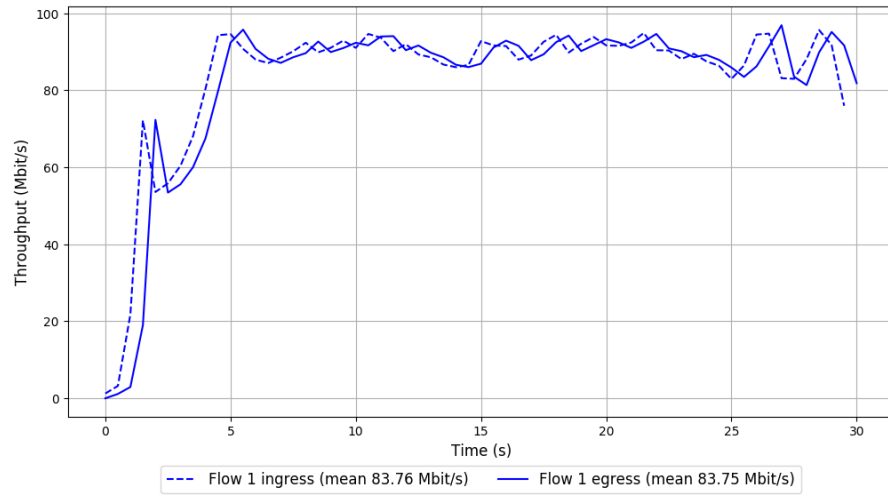
-- Flow 1:

Average throughput: 83.75 Mbit/s

95th percentile per-packet one-way delay: 34.947 ms

Loss rate: 0.01%

Run 2: Report of PCC-Vivace — Data Link

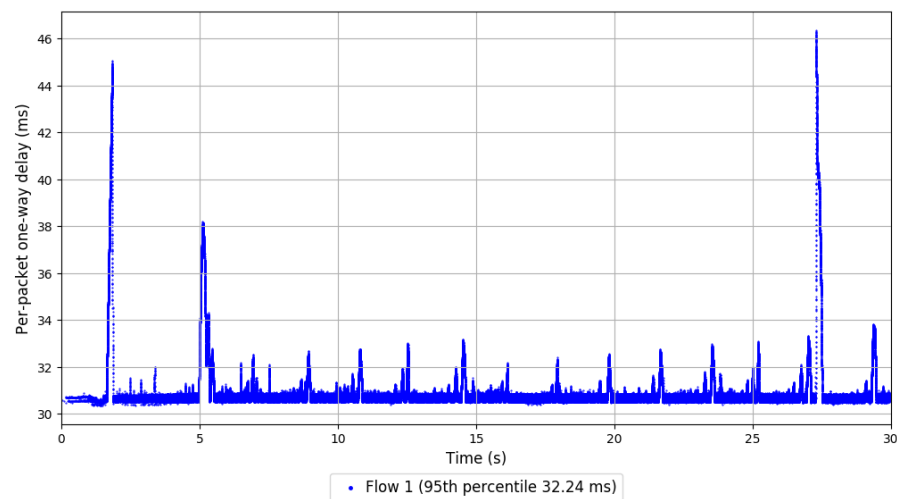
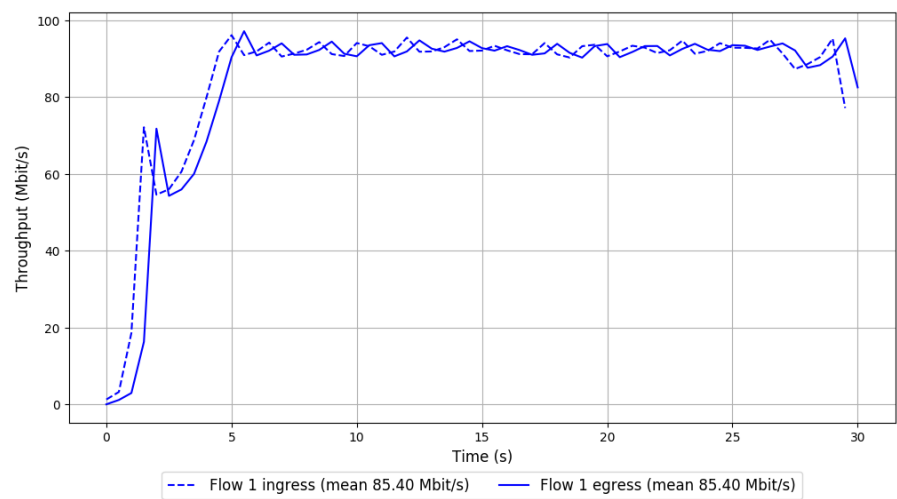


Run 3: Statistics of PCC-Vivace

Start at: 2018-09-10 23:31:15
End at: 2018-09-10 23:31:45
Local clock offset: 0.202 ms
Remote clock offset: -1.239 ms

Below is generated by plot.py at 2018-09-11 00:40:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.40 Mbit/s
95th percentile per-packet one-way delay: 32.236 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.40 Mbit/s
95th percentile per-packet one-way delay: 32.236 ms
Loss rate: 0.00%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-09-10 23:54:44

End at: 2018-09-10 23:55:14

Local clock offset: -0.215 ms

Remote clock offset: -0.702 ms

Below is generated by plot.py at 2018-09-11 00:40:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.46 Mbit/s

95th percentile per-packet one-way delay: 34.303 ms

Loss rate: 0.00%

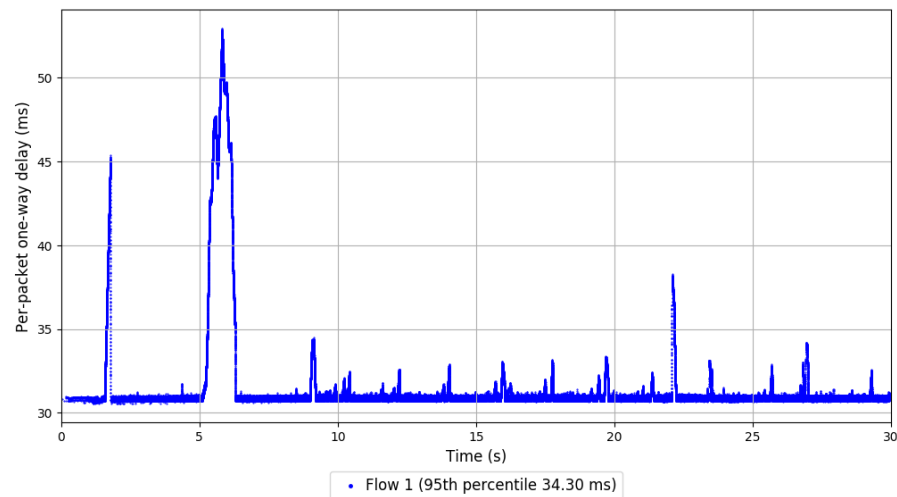
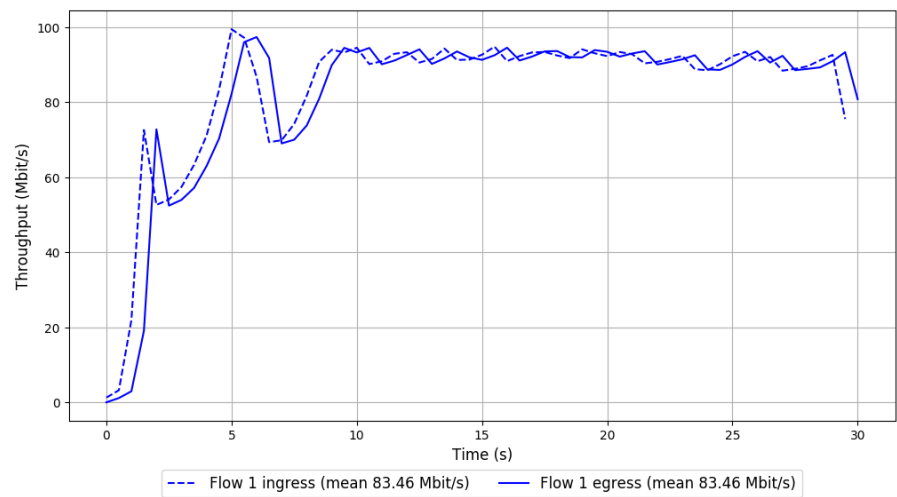
-- Flow 1:

Average throughput: 83.46 Mbit/s

95th percentile per-packet one-way delay: 34.303 ms

Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link

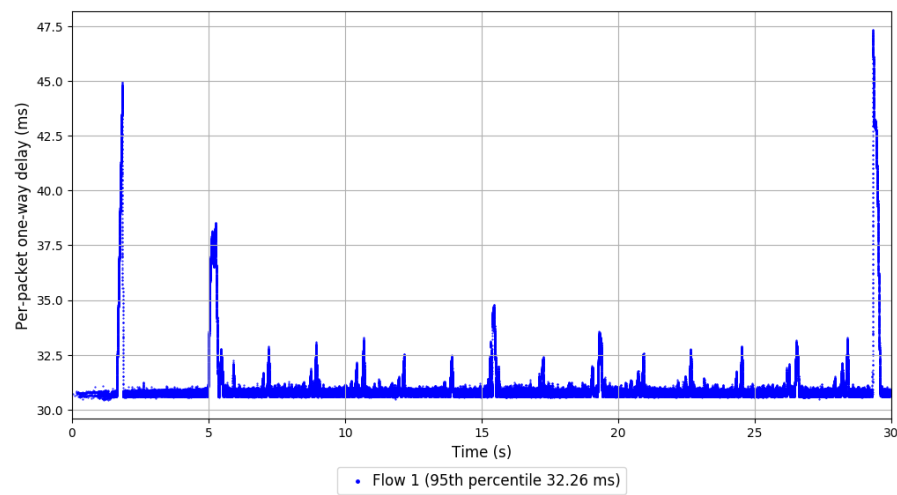
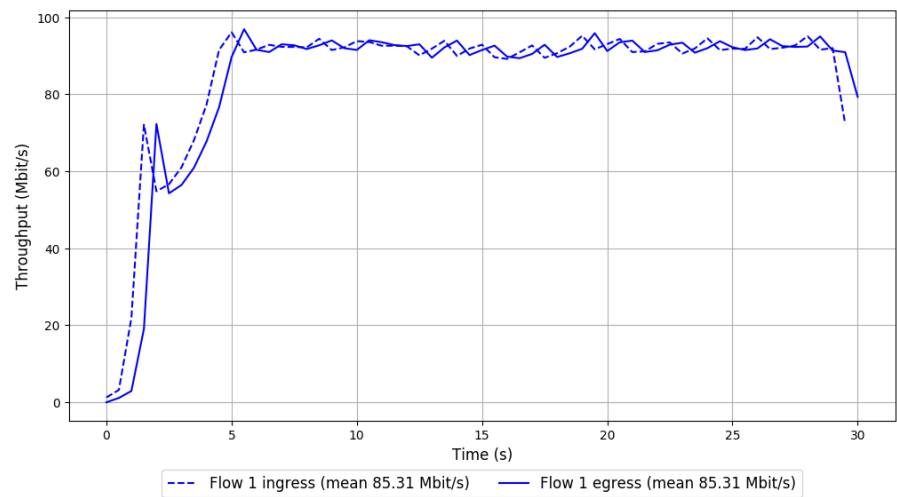


Run 5: Statistics of PCC-Vivace

Start at: 2018-09-11 00:18:15
End at: 2018-09-11 00:18:45
Local clock offset: 0.322 ms
Remote clock offset: -0.364 ms

Below is generated by plot.py at 2018-09-11 00:40:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.31 Mbit/s
95th percentile per-packet one-way delay: 32.263 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.31 Mbit/s
95th percentile per-packet one-way delay: 32.263 ms
Loss rate: 0.00%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2018-09-10 22:55:52

End at: 2018-09-10 22:56:22

Local clock offset: 0.242 ms

Remote clock offset: -6.564 ms

Below is generated by plot.py at 2018-09-11 00:40:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 31.140 ms

Loss rate: 0.00%

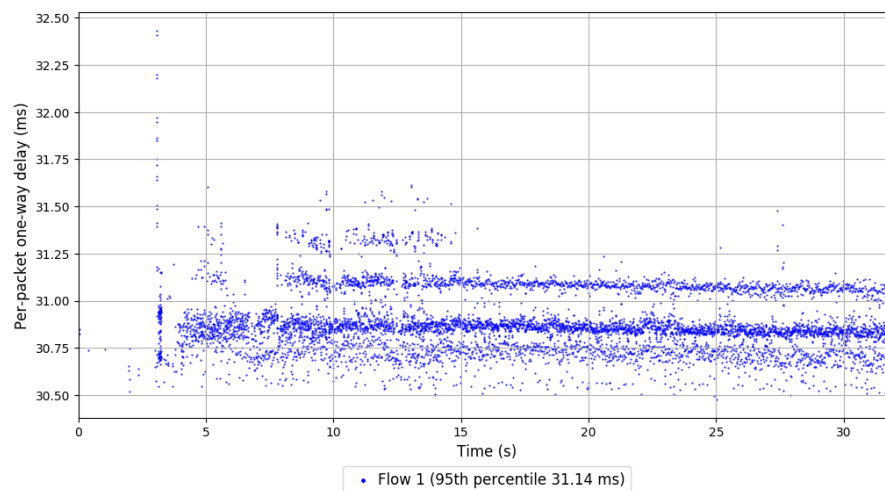
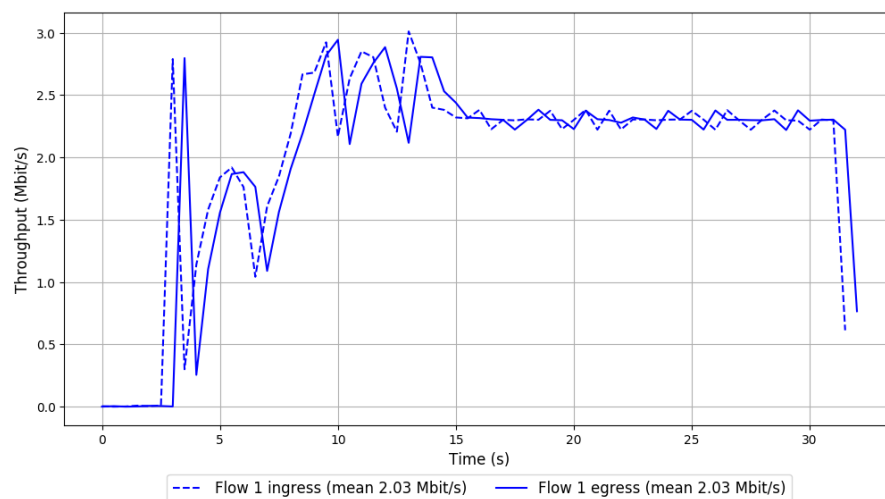
-- Flow 1:

Average throughput: 2.03 Mbit/s

95th percentile per-packet one-way delay: 31.140 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

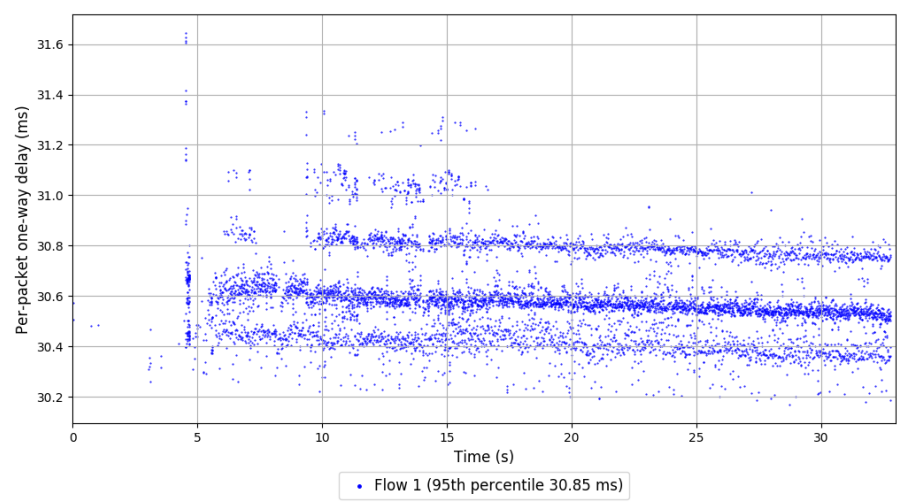
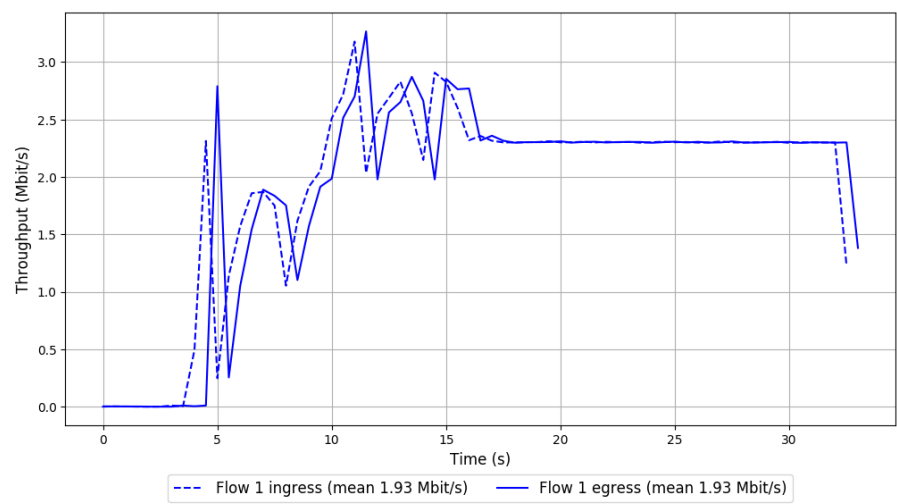


Run 2: Statistics of WebRTC media

Start at: 2018-09-10 23:19:30
End at: 2018-09-10 23:20:00
Local clock offset: 0.312 ms
Remote clock offset: -2.621 ms

Below is generated by plot.py at 2018-09-11 00:40:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 30.851 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 30.851 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

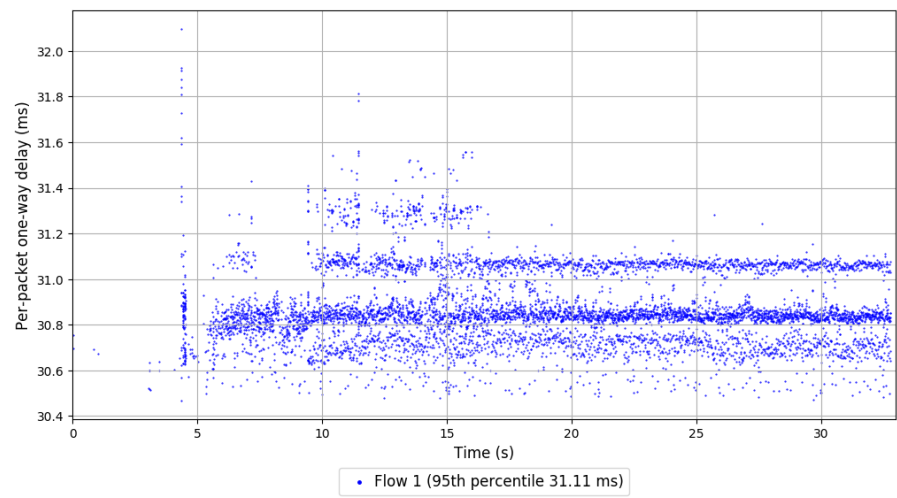
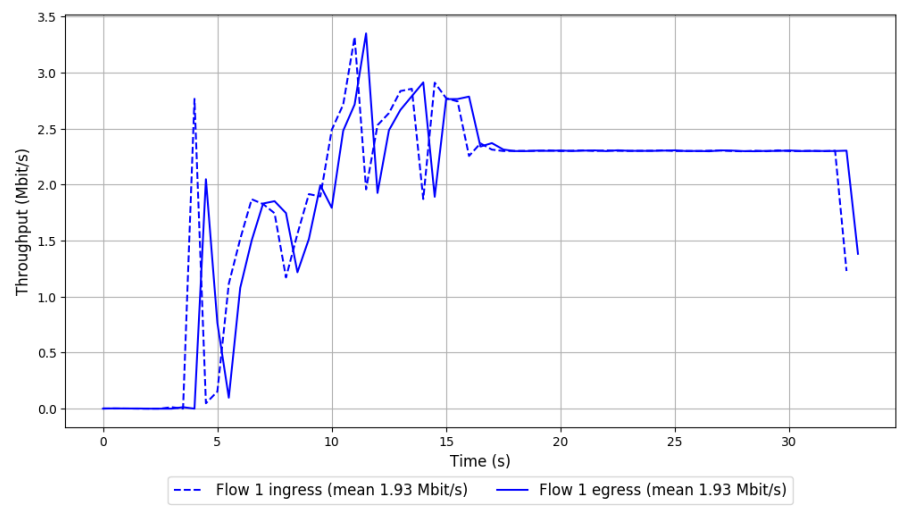


Run 3: Statistics of WebRTC media

Start at: 2018-09-10 23:42:59
End at: 2018-09-10 23:43:29
Local clock offset: -0.124 ms
Remote clock offset: -0.911 ms

Below is generated by plot.py at 2018-09-11 00:40:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 31.115 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 31.115 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

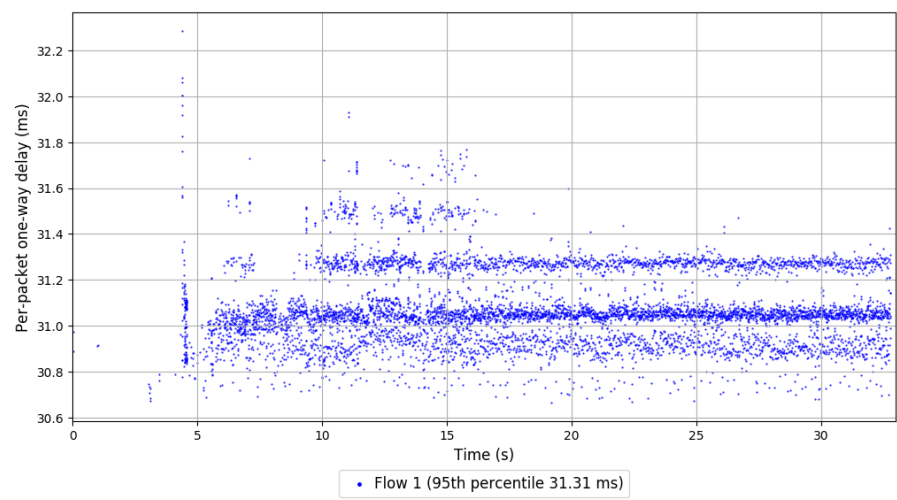
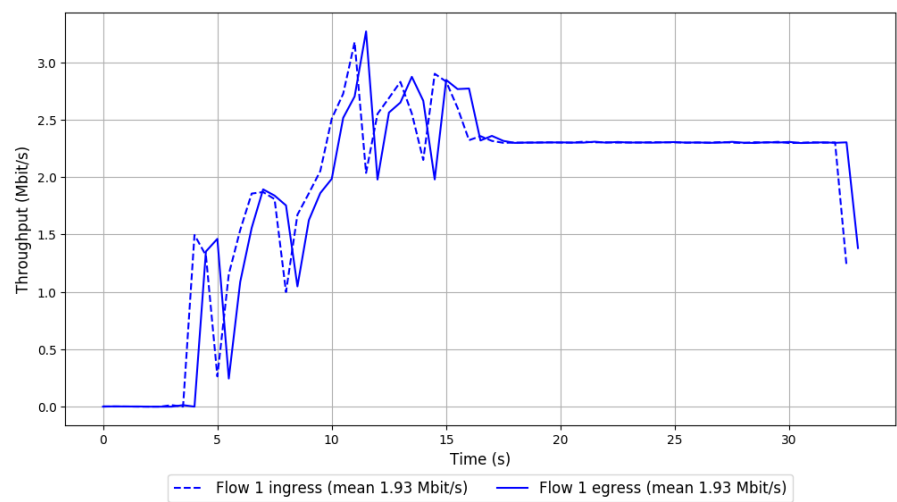


Run 4: Statistics of WebRTC media

Start at: 2018-09-11 00:06:28
End at: 2018-09-11 00:06:58
Local clock offset: 0.069 ms
Remote clock offset: -0.397 ms

Below is generated by plot.py at 2018-09-11 00:40:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 31.314 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 31.314 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-09-11 00:30:05
End at: 2018-09-11 00:30:35
Local clock offset: 0.373 ms
Remote clock offset: -0.491 ms

Below is generated by plot.py at 2018-09-11 00:40:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 31.188 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 31.188 ms
Loss rate: 0.07%

Run 5: Report of WebRTC media — Data Link

