

Pantheon Report

Generated at 2018-11-30 05:54:58 (UTC).

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

Repeated the test of 19 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:

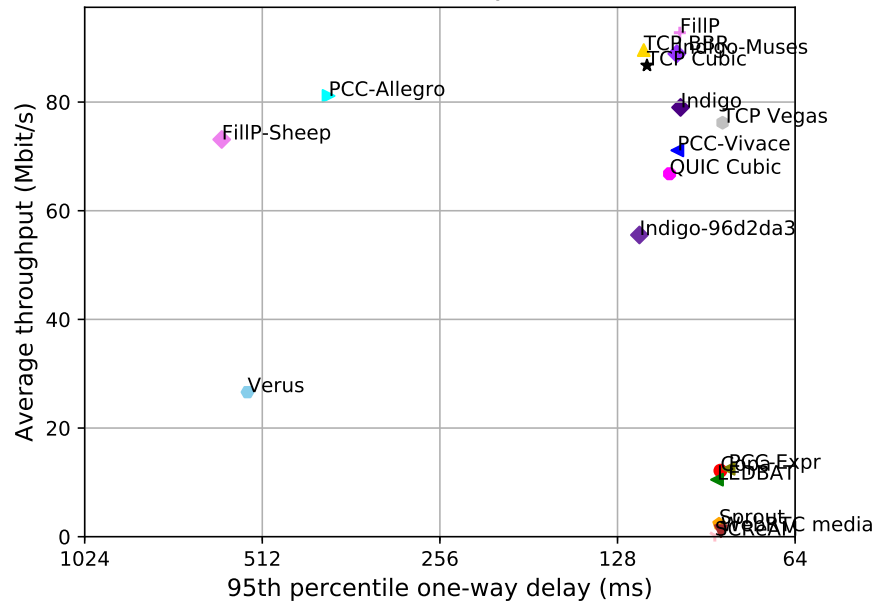
Linux 4.15.0-1027-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:

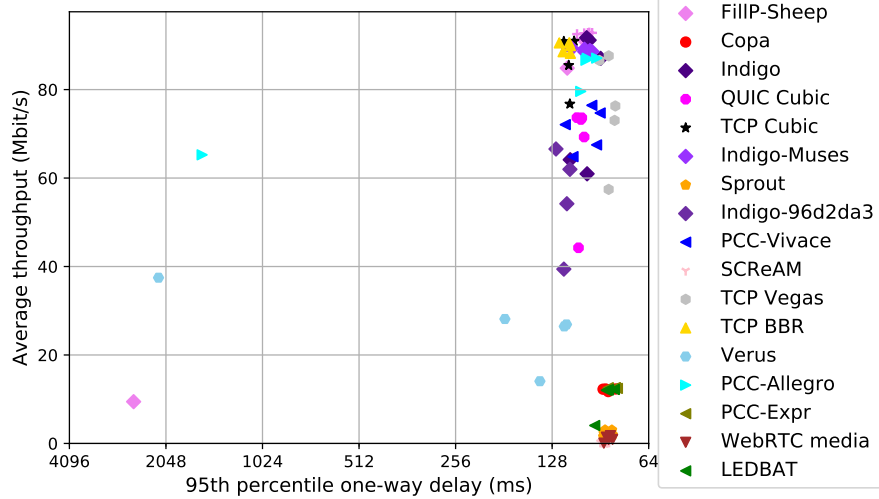
branch: muses @ 7b6dad87cde3ab65f7c4052140eb54098aa58e9d
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0bcb967ed7048b6a8f994abb95
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
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 AWS Brazil 2 to Colombia, 5 runs of 30s each per scheme
(mean of all runs by scheme)



test from AWS Brazil 2 to Colombia, 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	89.57	115.53	3.28
Copa	4	12.15	85.67	73.42
TCP Cubic	5	86.74	114.11	0.54
FillP	5	92.77	100.37	1.10
FillP-Sheep	5	73.11	599.84	15.04
Indigo	5	79.01	100.09	2.09
Indigo-96d2da3	4	55.53	117.51	47.75
LEDBAT	5	10.50	86.82	0.23
Indigo-Muses	5	88.90	101.56	2.36
PCC-Allegro	5	81.14	395.28	6.59
PCC-Expr	5	12.50	82.97	51.18
QUIC Cubic	5	66.81	104.47	0.39
SCReAM	5	0.21	87.55	0.00
Sprout	5	2.38	86.15	0.00
TaoVA-100x	0	N/A	N/A	N/A
TCP Vegas	5	76.20	84.95	0.60
Verus	5	26.61	542.46	41.96
PCC-Vivace	5	71.11	101.36	0.53
WebRTC media	5	1.01	85.50	0.00

Run 1: Statistics of TCP BBR

Start at: 2018-11-30 04:15:04

End at: 2018-11-30 04:15:34

Local clock offset: -6.26 ms

Remote clock offset: 11.823 ms

Below is generated by plot.py at 2018-11-30 05:48:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.20 Mbit/s

95th percentile per-packet one-way delay: 112.304 ms

Loss rate: 3.20%

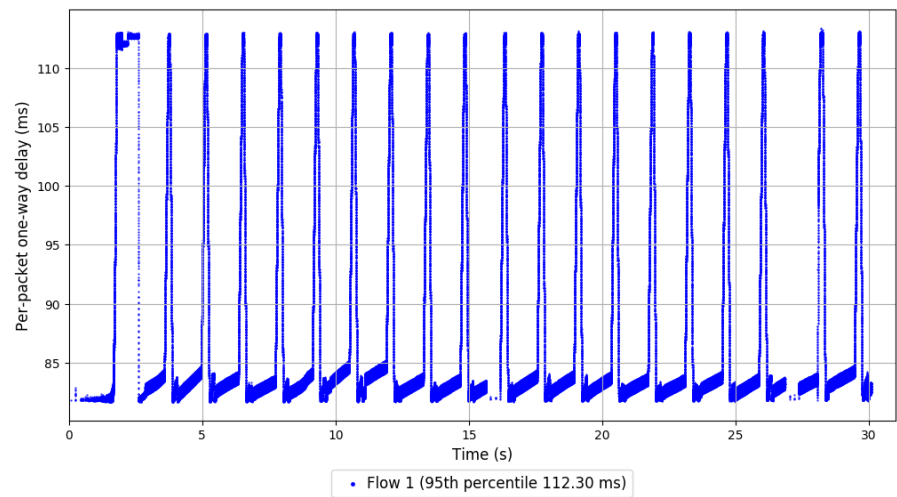
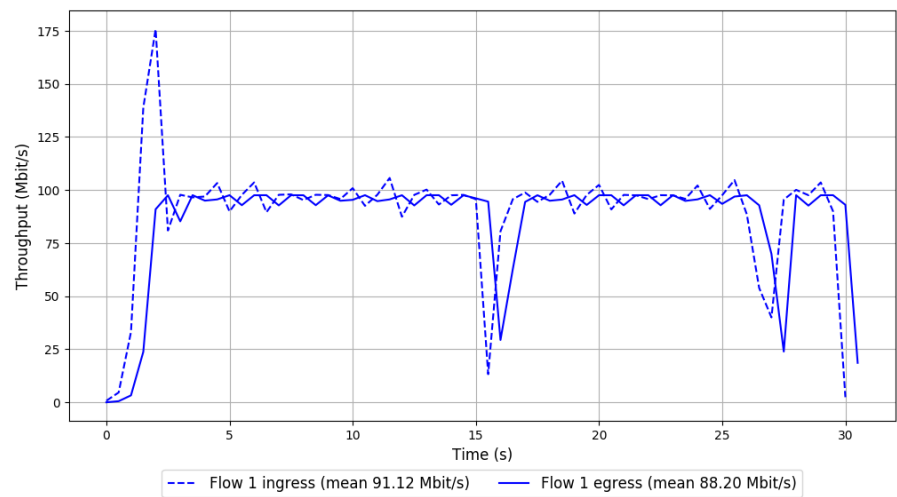
-- Flow 1:

Average throughput: 88.20 Mbit/s

95th percentile per-packet one-way delay: 112.304 ms

Loss rate: 3.20%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2018-11-30 04:37:18

End at: 2018-11-30 04:37:48

Local clock offset: -5.48 ms

Remote clock offset: -0.977 ms

Below is generated by plot.py at 2018-11-30 05:48:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.94 Mbit/s

95th percentile per-packet one-way delay: 112.284 ms

Loss rate: 3.06%

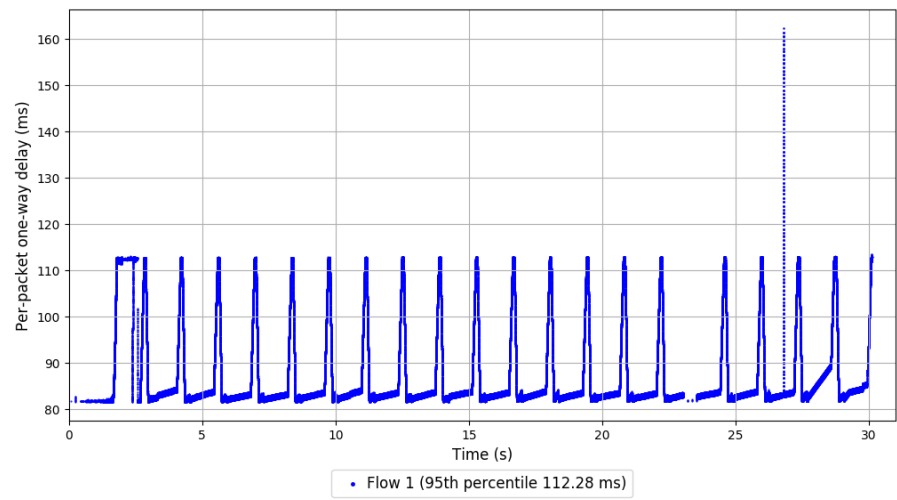
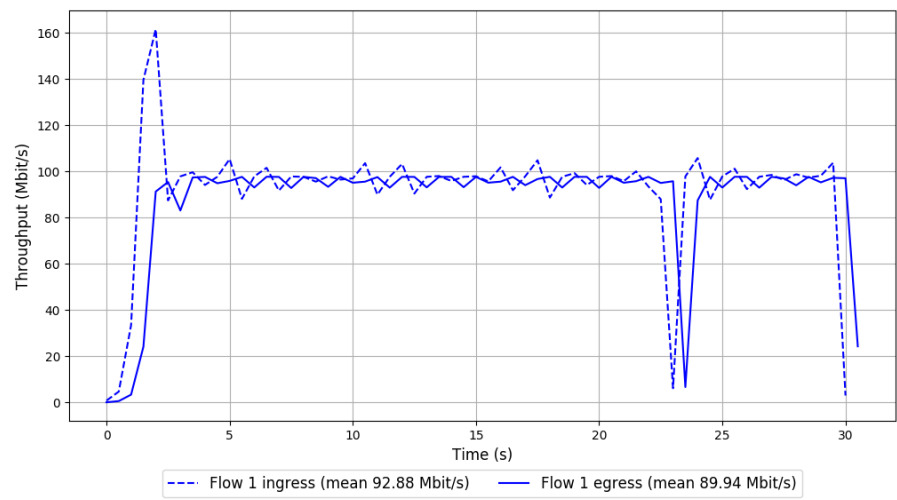
-- Flow 1:

Average throughput: 89.94 Mbit/s

95th percentile per-packet one-way delay: 112.284 ms

Loss rate: 3.06%

Run 2: Report of TCP BBR — Data Link

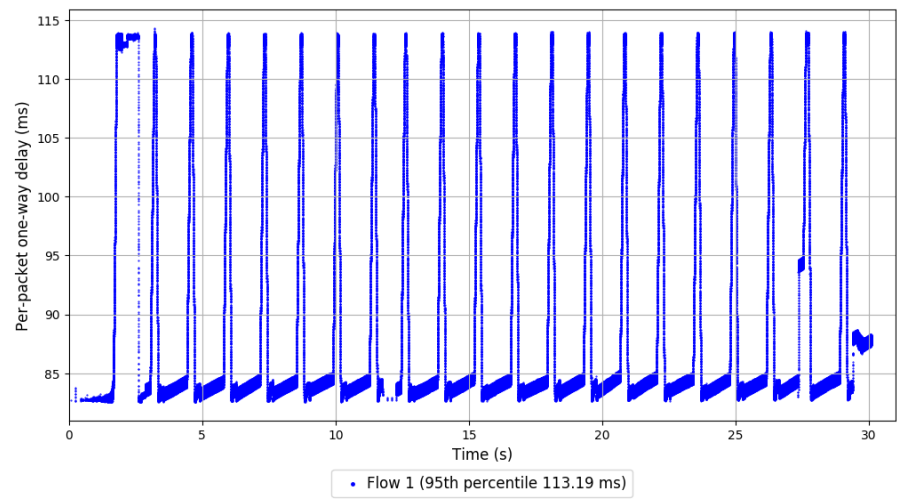
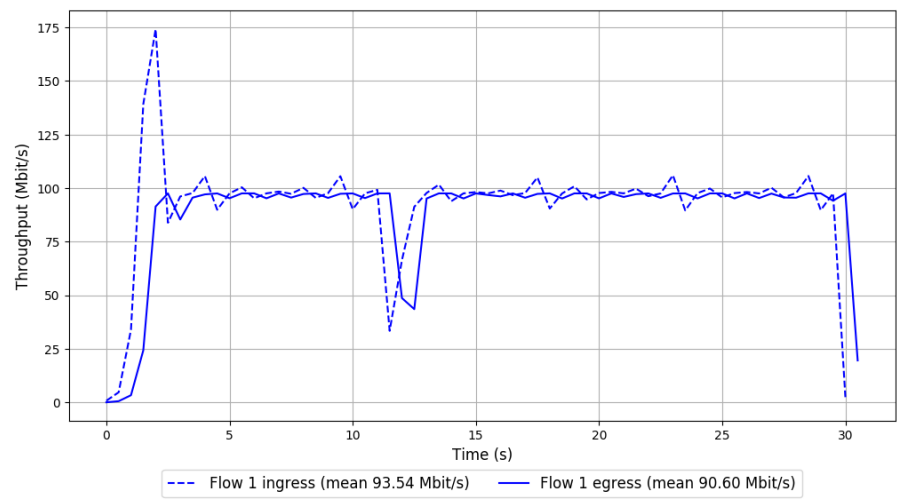


Run 3: Statistics of TCP BBR

Start at: 2018-11-30 04:59:35
End at: 2018-11-30 05:00:05
Local clock offset: -1.783 ms
Remote clock offset: -1.656 ms

Below is generated by plot.py at 2018-11-30 05:48:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.60 Mbit/s
95th percentile per-packet one-way delay: 113.188 ms
Loss rate: 3.12%
-- Flow 1:
Average throughput: 90.60 Mbit/s
95th percentile per-packet one-way delay: 113.188 ms
Loss rate: 3.12%

Run 3: Report of TCP BBR — Data Link

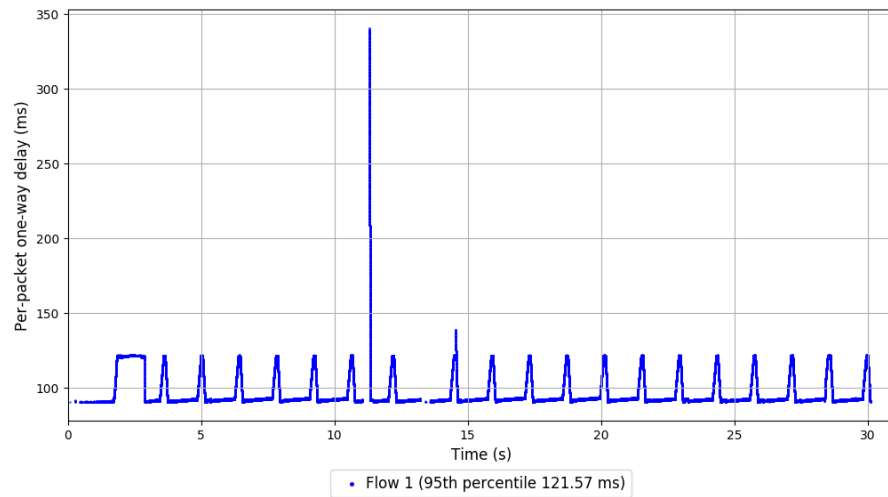
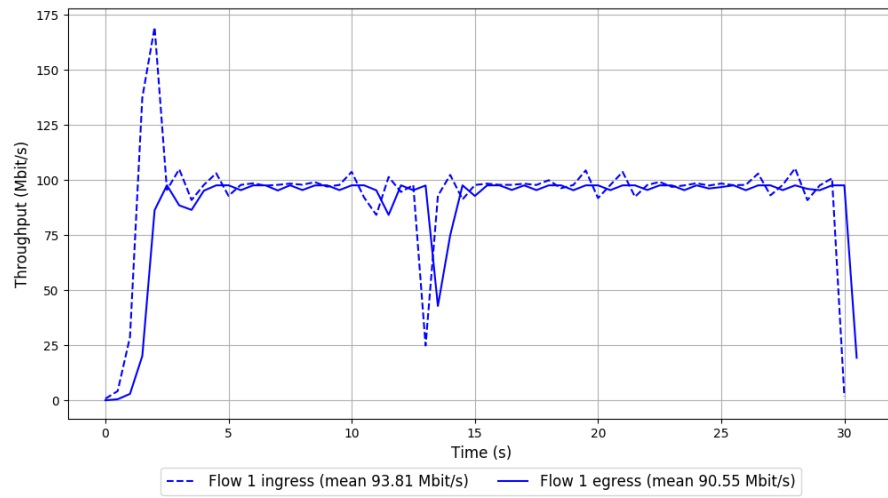


Run 4: Statistics of TCP BBR

Start at: 2018-11-30 05:21:55
End at: 2018-11-30 05:22:25
Local clock offset: -0.822 ms
Remote clock offset: -3.326 ms

Below is generated by plot.py at 2018-11-30 05:48:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.55 Mbit/s
95th percentile per-packet one-way delay: 121.569 ms
Loss rate: 3.48%
-- Flow 1:
Average throughput: 90.55 Mbit/s
95th percentile per-packet one-way delay: 121.569 ms
Loss rate: 3.48%

Run 4: Report of TCP BBR — Data Link

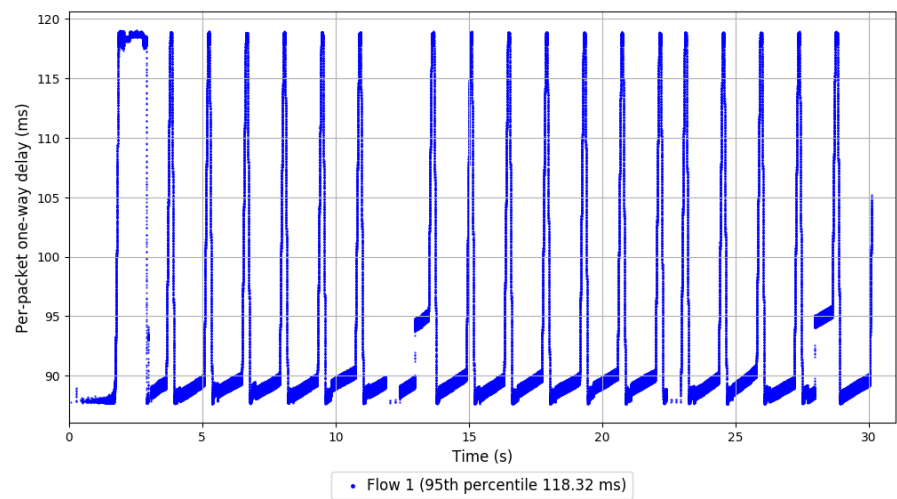
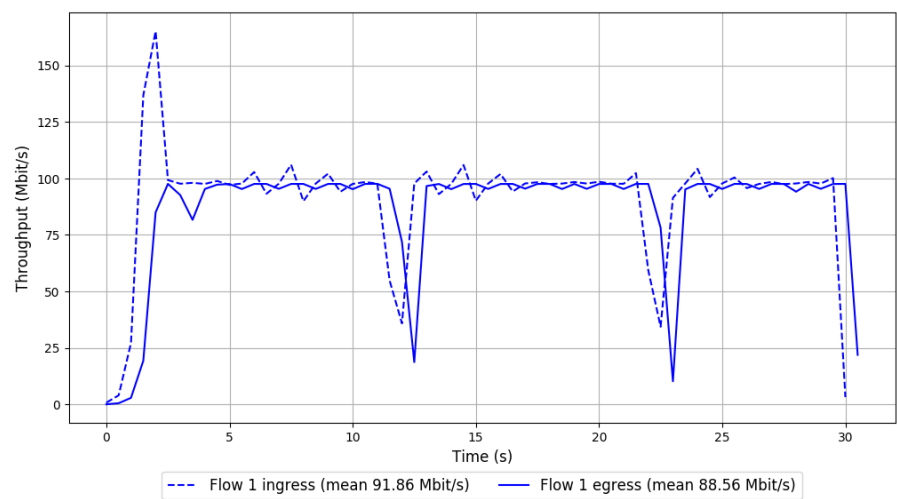


Run 5: Statistics of TCP BBR

Start at: 2018-11-30 05:44:20
End at: 2018-11-30 05:44:50
Local clock offset: 0.246 ms
Remote clock offset: -13.093 ms

Below is generated by plot.py at 2018-11-30 05:48:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.56 Mbit/s
95th percentile per-packet one-way delay: 118.324 ms
Loss rate: 3.55%
-- Flow 1:
Average throughput: 88.56 Mbit/s
95th percentile per-packet one-way delay: 118.324 ms
Loss rate: 3.55%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

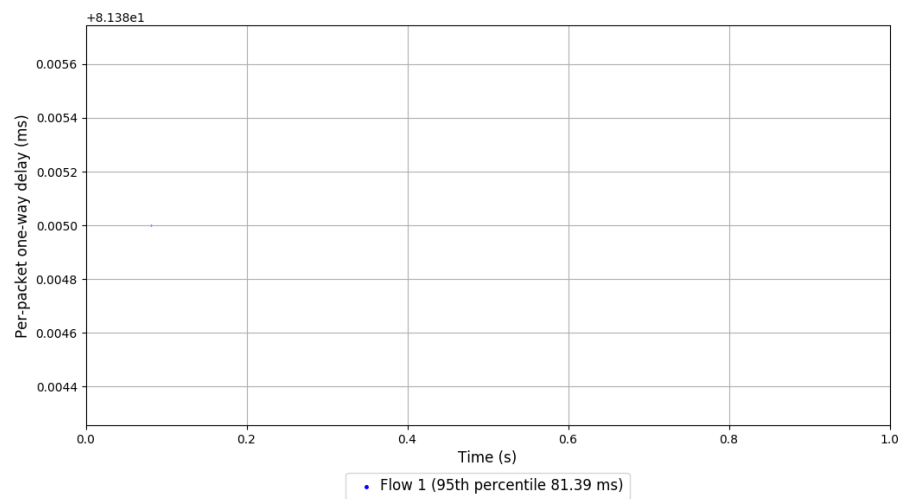
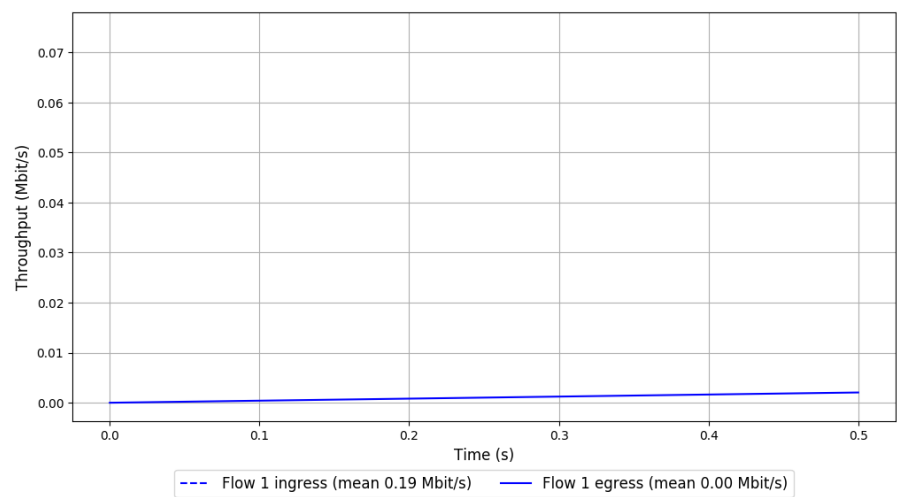
Start at: 2018-11-30 03:59:54

End at: 2018-11-30 04:00:24

Local clock offset: -6.394 ms

Remote clock offset: 9.889 ms

Run 1: Report of Copa — Data Link

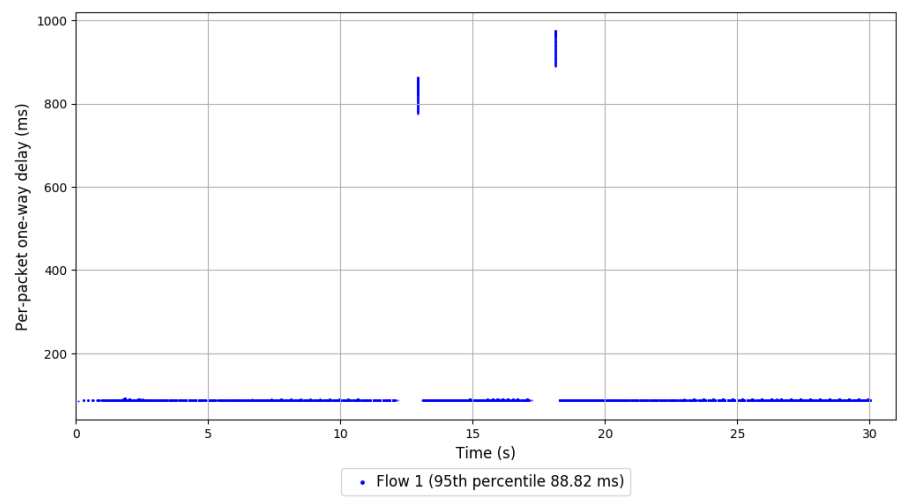
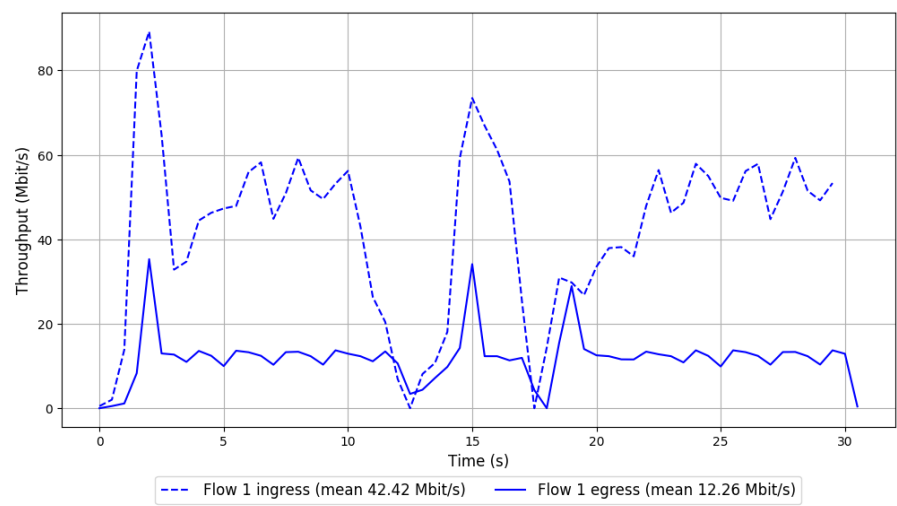


Run 2: Statistics of Copa

Start at: 2018-11-30 04:22:07
End at: 2018-11-30 04:22:37
Local clock offset: -6.63 ms
Remote clock offset: 13.877 ms

Below is generated by plot.py at 2018-11-30 05:48:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.26 Mbit/s
95th percentile per-packet one-way delay: 88.823 ms
Loss rate: 71.09%
-- Flow 1:
Average throughput: 12.26 Mbit/s
95th percentile per-packet one-way delay: 88.823 ms
Loss rate: 71.09%

Run 2: Report of Copa — Data Link

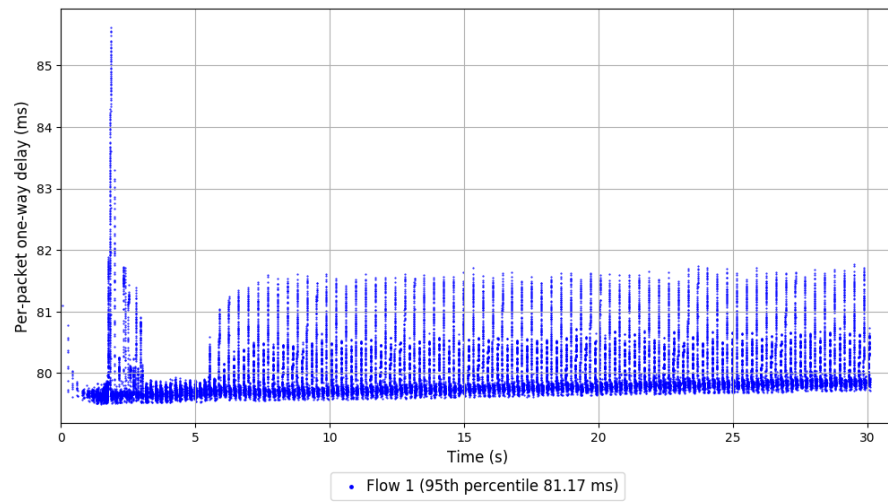
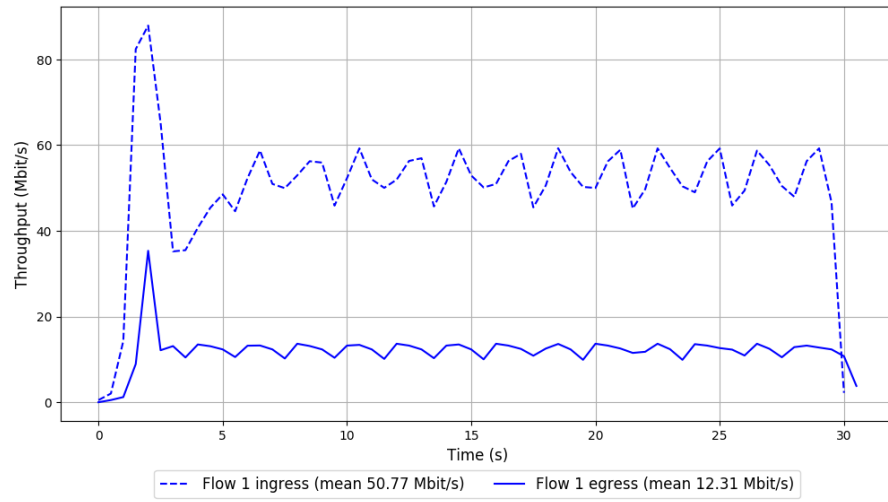


Run 3: Statistics of Copa

Start at: 2018-11-30 04:44:25
End at: 2018-11-30 04:44:55
Local clock offset: -6.124 ms
Remote clock offset: -1.63 ms

Below is generated by plot.py at 2018-11-30 05:48:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 81.170 ms
Loss rate: 75.76%
-- Flow 1:
Average throughput: 12.31 Mbit/s
95th percentile per-packet one-way delay: 81.170 ms
Loss rate: 75.76%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2018-11-30 05:06:39

End at: 2018-11-30 05:07:09

Local clock offset: -0.196 ms

Remote clock offset: 0.328 ms

Below is generated by plot.py at 2018-11-30 05:48:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 11.73 Mbit/s

95th percentile per-packet one-way delay: 85.552 ms

Loss rate: 74.98%

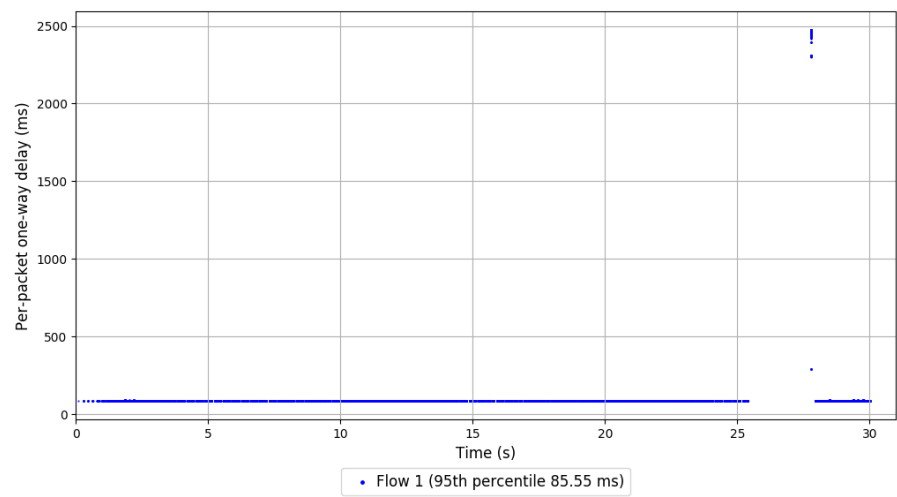
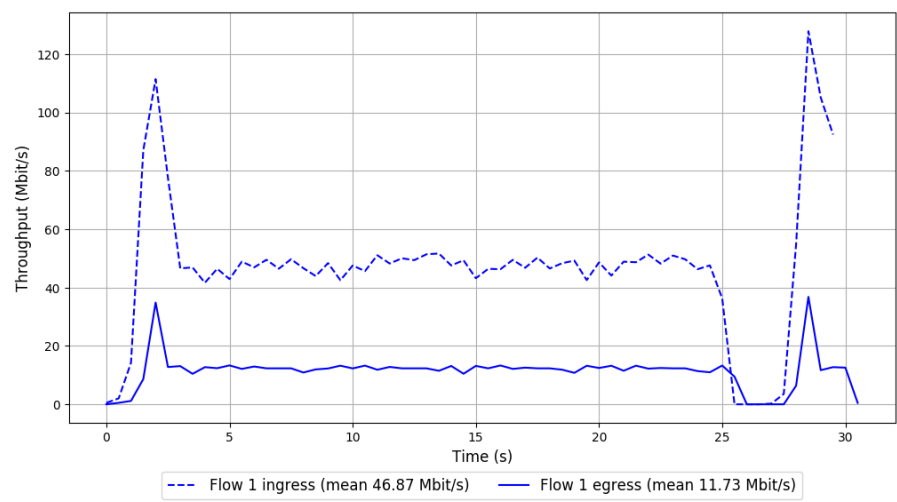
-- Flow 1:

Average throughput: 11.73 Mbit/s

95th percentile per-packet one-way delay: 85.552 ms

Loss rate: 74.98%

Run 4: Report of Copa — Data Link

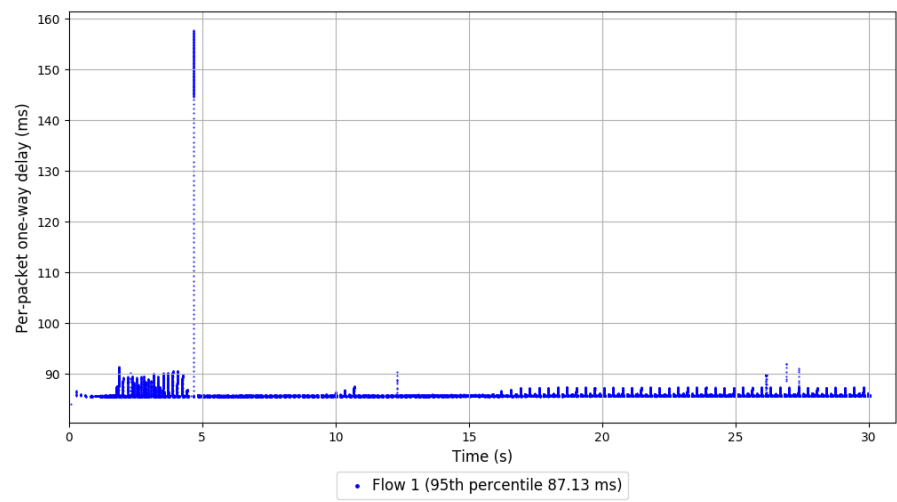
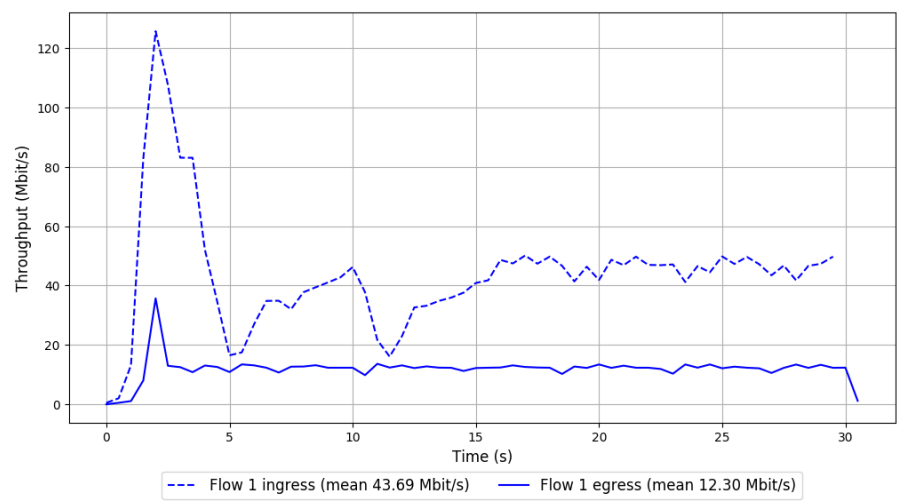


Run 5: Statistics of Copa

Start at: 2018-11-30 05:29:00
End at: 2018-11-30 05:29:30
Local clock offset: -0.164 ms
Remote clock offset: -5.325 ms

Below is generated by plot.py at 2018-11-30 05:48:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.30 Mbit/s
95th percentile per-packet one-way delay: 87.129 ms
Loss rate: 71.84%
-- Flow 1:
Average throughput: 12.30 Mbit/s
95th percentile per-packet one-way delay: 87.129 ms
Loss rate: 71.84%

Run 5: Report of Copa — Data Link

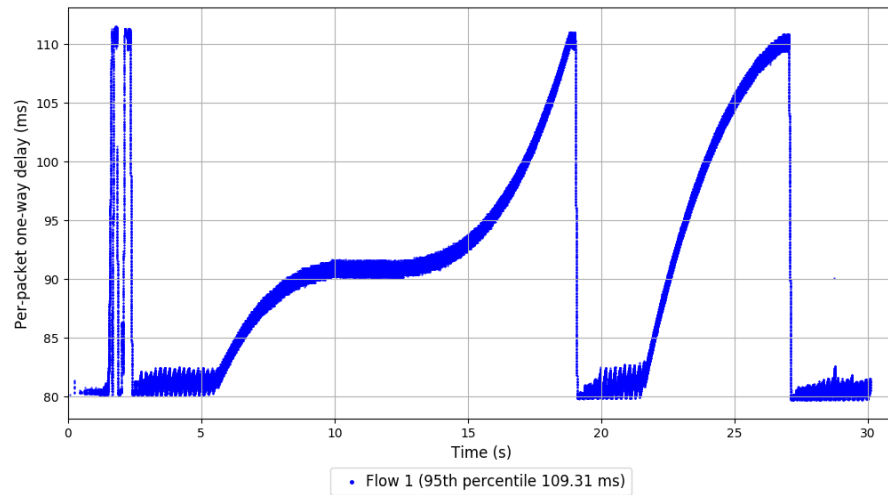
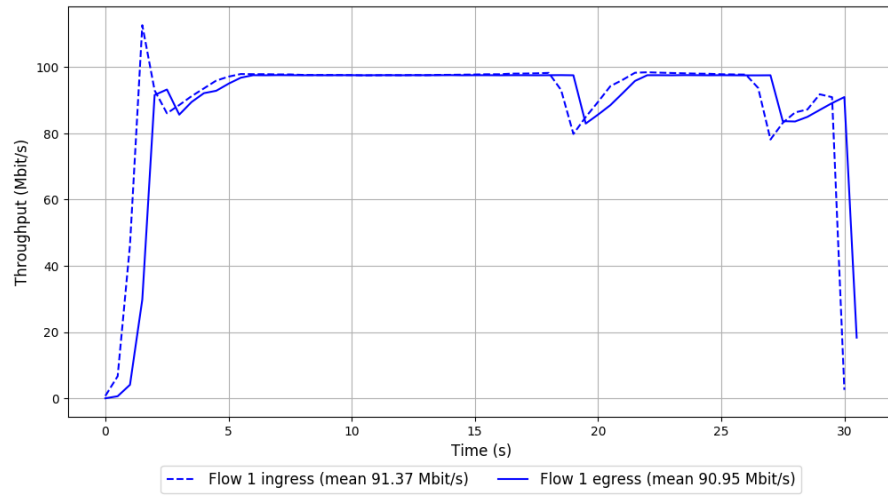


Run 1: Statistics of TCP Cubic

Start at: 2018-11-30 04:07:59
End at: 2018-11-30 04:08:29
Local clock offset: -6.303 ms
Remote clock offset: 12.662 ms

Below is generated by plot.py at 2018-11-30 05:48:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.95 Mbit/s
95th percentile per-packet one-way delay: 109.306 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 90.95 Mbit/s
95th percentile per-packet one-way delay: 109.306 ms
Loss rate: 0.46%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2018-11-30 04:30:17

End at: 2018-11-30 04:30:47

Local clock offset: -6.378 ms

Remote clock offset: 7.356 ms

Below is generated by plot.py at 2018-11-30 05:48:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.89 Mbit/s

95th percentile per-packet one-way delay: 117.703 ms

Loss rate: 0.45%

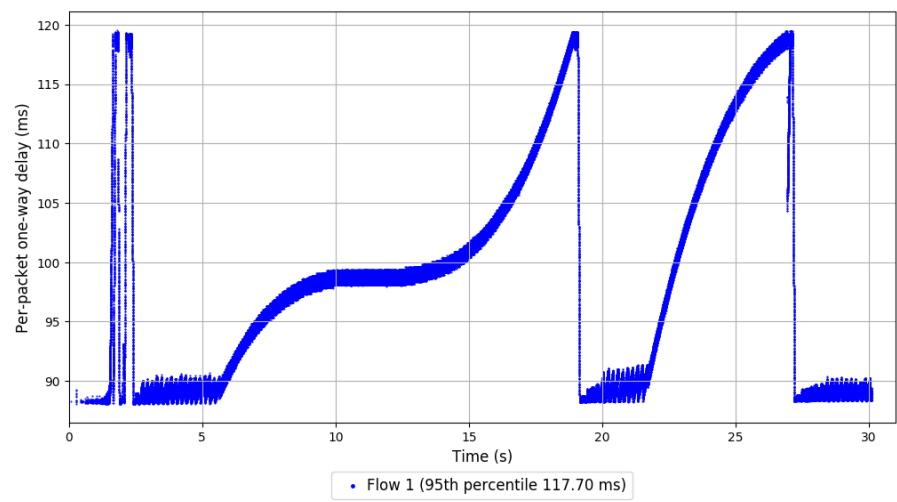
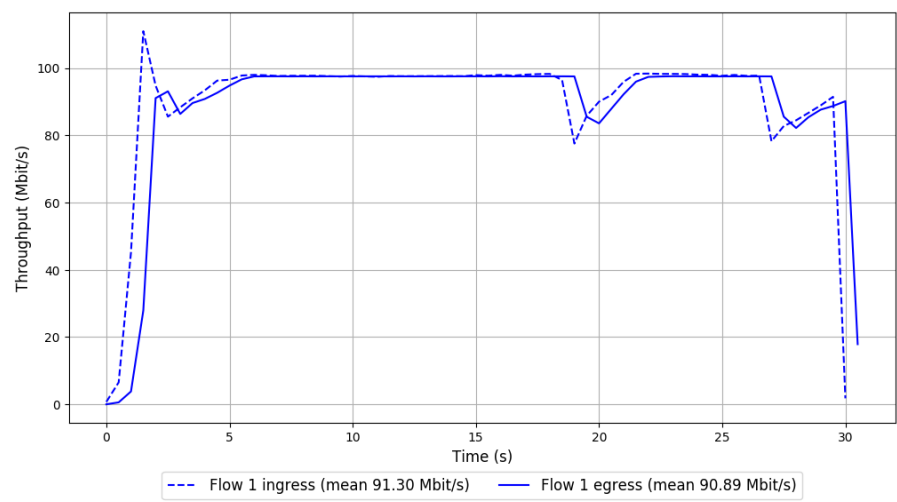
-- Flow 1:

Average throughput: 90.89 Mbit/s

95th percentile per-packet one-way delay: 117.703 ms

Loss rate: 0.45%

Run 2: Report of TCP Cubic — Data Link

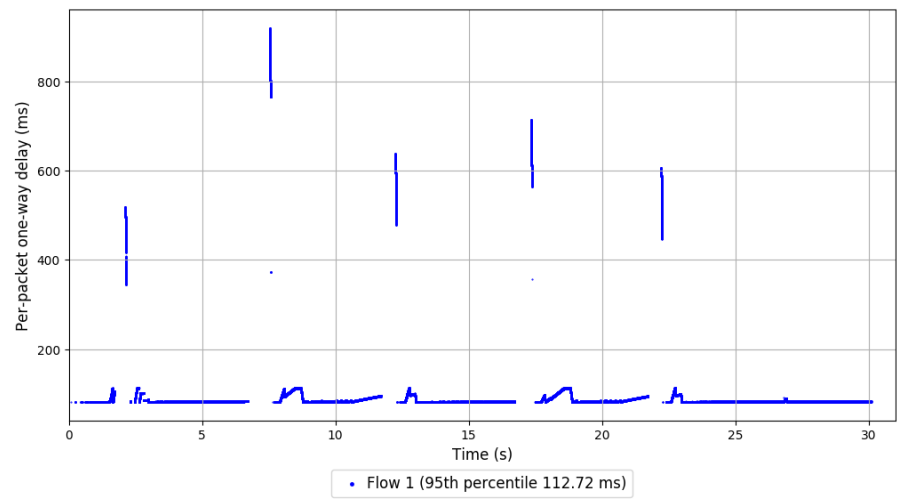
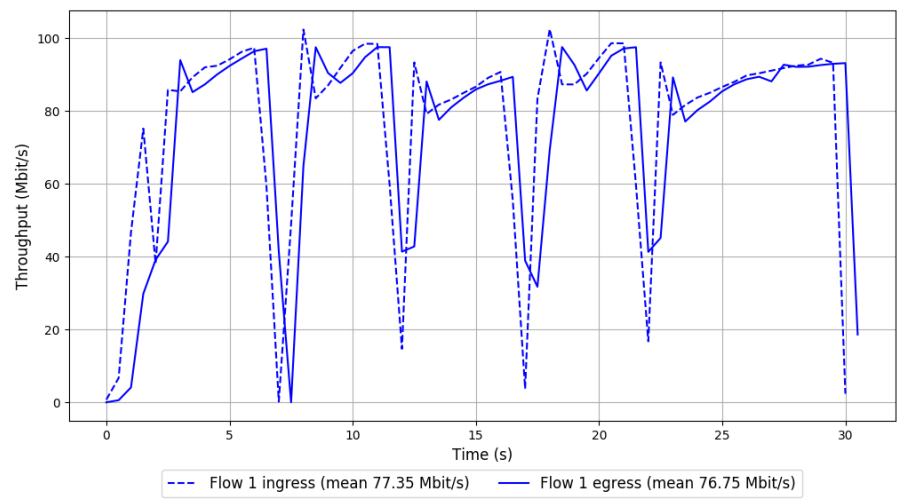


Run 3: Statistics of TCP Cubic

Start at: 2018-11-30 04:52:36
End at: 2018-11-30 04:53:06
Local clock offset: -3.296 ms
Remote clock offset: -1.622 ms

Below is generated by plot.py at 2018-11-30 05:48:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.75 Mbit/s
95th percentile per-packet one-way delay: 112.718 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 76.75 Mbit/s
95th percentile per-packet one-way delay: 112.718 ms
Loss rate: 0.77%

Run 3: Report of TCP Cubic — Data Link

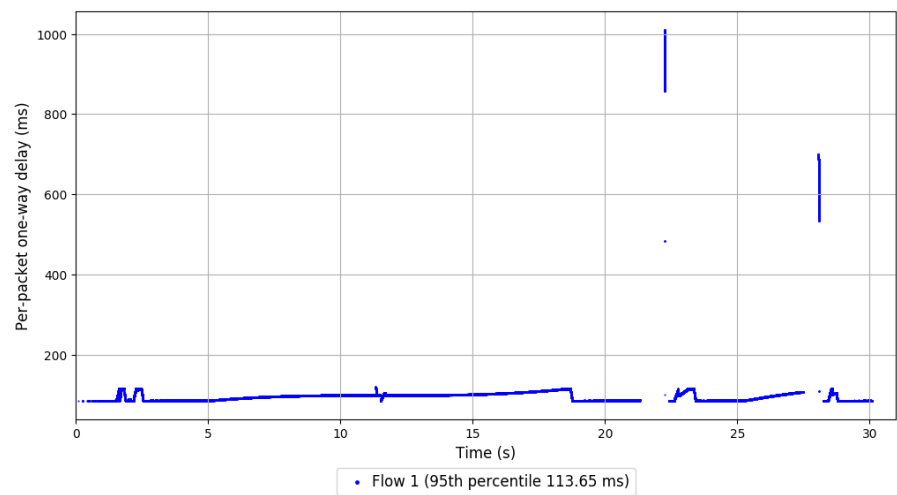
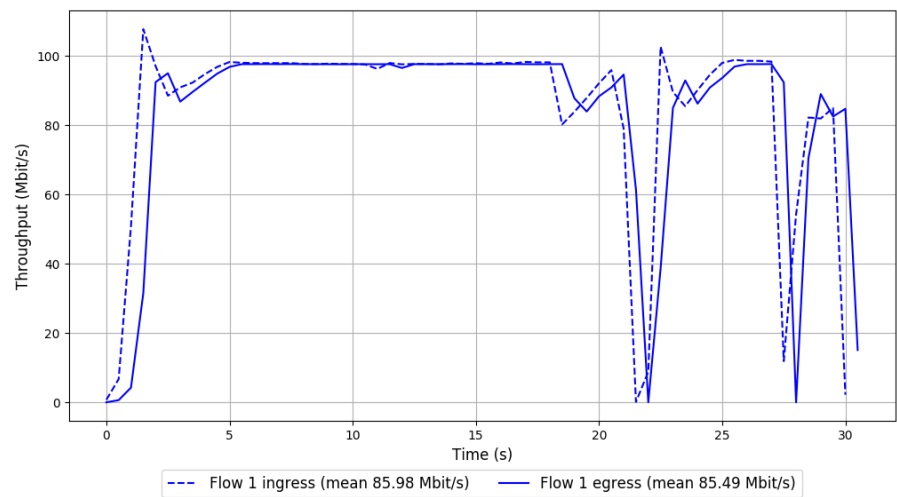


Run 4: Statistics of TCP Cubic

Start at: 2018-11-30 05:14:55
End at: 2018-11-30 05:15:25
Local clock offset: -0.137 ms
Remote clock offset: -1.597 ms

Below is generated by plot.py at 2018-11-30 05:49:08
Datalink statistics
-- Total of 1 flow:
Average throughput: 85.49 Mbit/s
95th percentile per-packet one-way delay: 113.648 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 85.49 Mbit/s
95th percentile per-packet one-way delay: 113.648 ms
Loss rate: 0.57%

Run 4: Report of TCP Cubic — Data Link

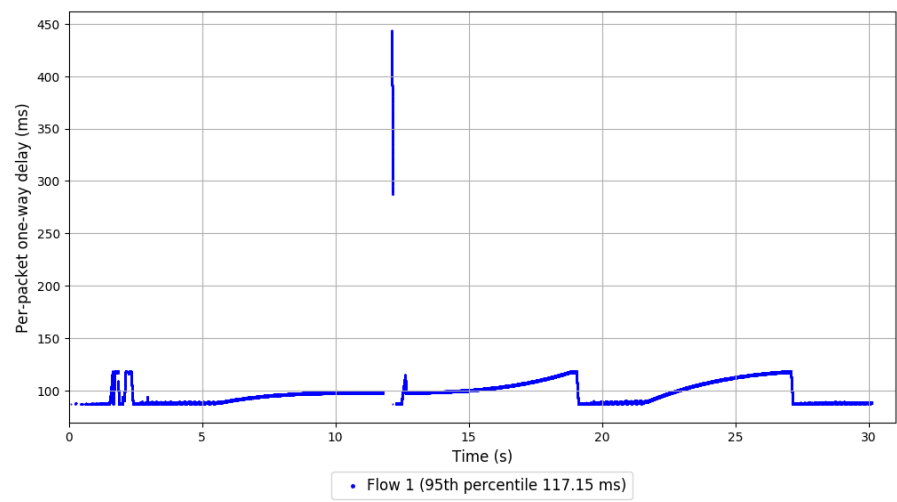
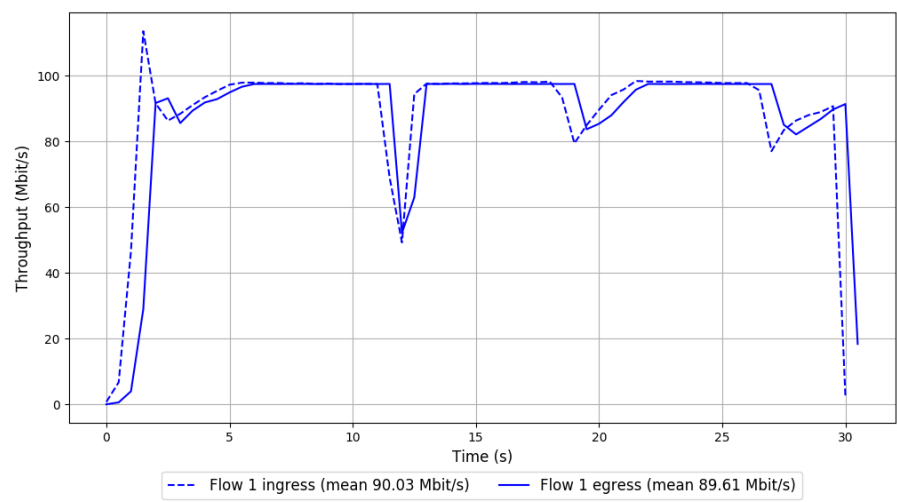


Run 5: Statistics of TCP Cubic

Start at: 2018-11-30 05:37:10
End at: 2018-11-30 05:37:40
Local clock offset: -0.004 ms
Remote clock offset: -6.231 ms

Below is generated by plot.py at 2018-11-30 05:49:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 89.61 Mbit/s
95th percentile per-packet one-way delay: 117.152 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 89.61 Mbit/s
95th percentile per-packet one-way delay: 117.152 ms
Loss rate: 0.46%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2018-11-30 03:56:23

End at: 2018-11-30 03:56:53

Local clock offset: -7.101 ms

Remote clock offset: 10.26 ms

Below is generated by plot.py at 2018-11-30 05:49:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.55 Mbit/s

95th percentile per-packet one-way delay: 107.043 ms

Loss rate: 1.45%

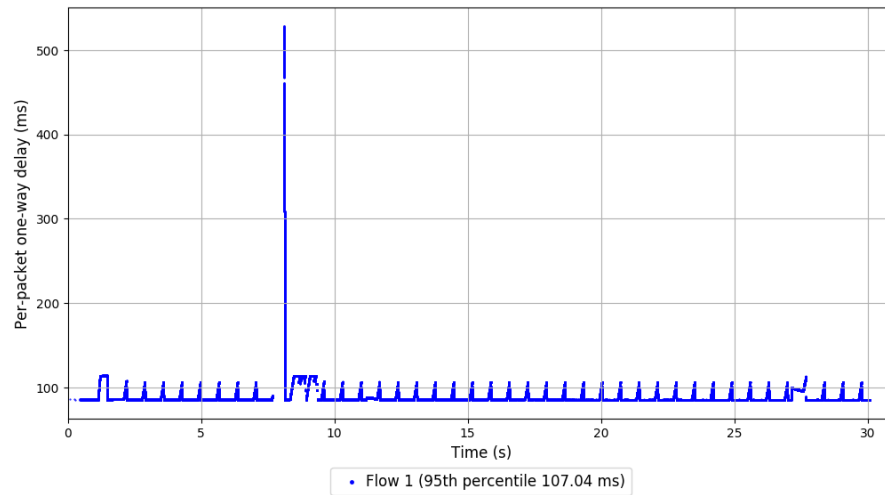
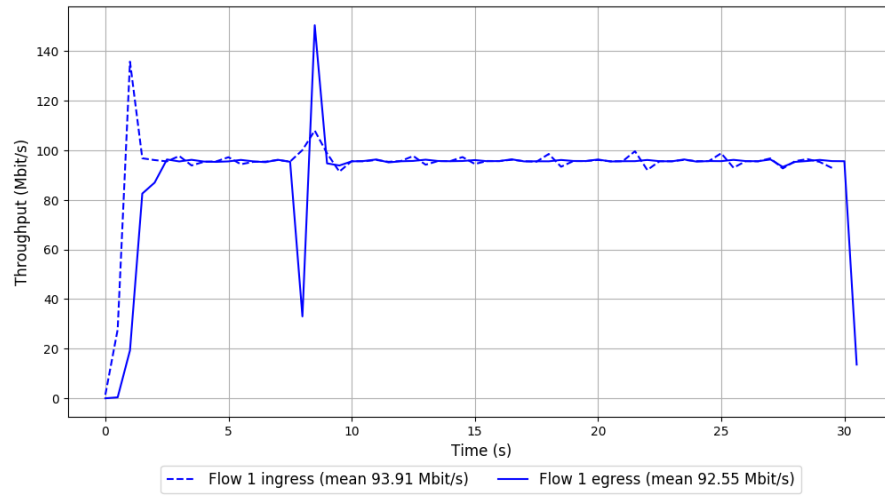
-- Flow 1:

Average throughput: 92.55 Mbit/s

95th percentile per-packet one-way delay: 107.043 ms

Loss rate: 1.45%

Run 1: Report of FillP — Data Link

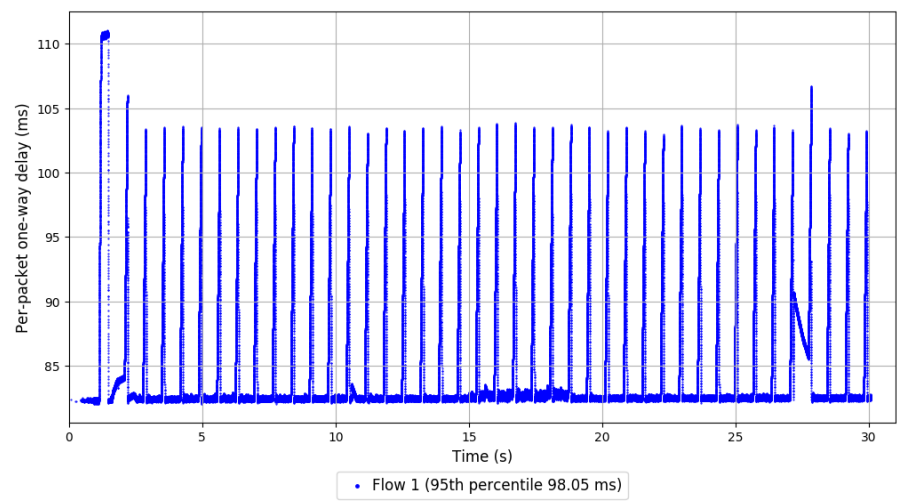
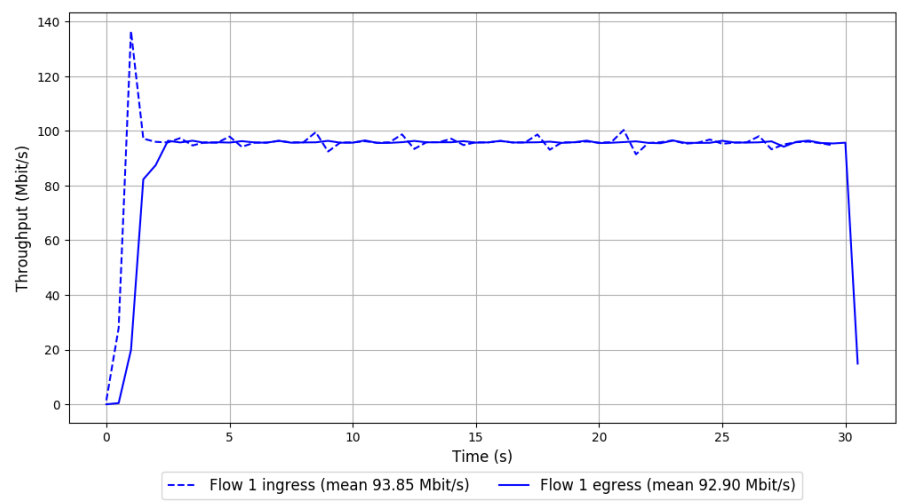


Run 2: Statistics of FillP

Start at: 2018-11-30 04:18:35
End at: 2018-11-30 04:19:05
Local clock offset: -6.023 ms
Remote clock offset: 11.308 ms

Below is generated by plot.py at 2018-11-30 05:49:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 92.90 Mbit/s
95th percentile per-packet one-way delay: 98.052 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 92.90 Mbit/s
95th percentile per-packet one-way delay: 98.052 ms
Loss rate: 1.01%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2018-11-30 04:40:48

End at: 2018-11-30 04:41:18

Local clock offset: -5.409 ms

Remote clock offset: 2.738 ms

Below is generated by plot.py at 2018-11-30 05:49:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.82 Mbit/s

95th percentile per-packet one-way delay: 99.004 ms

Loss rate: 0.99%

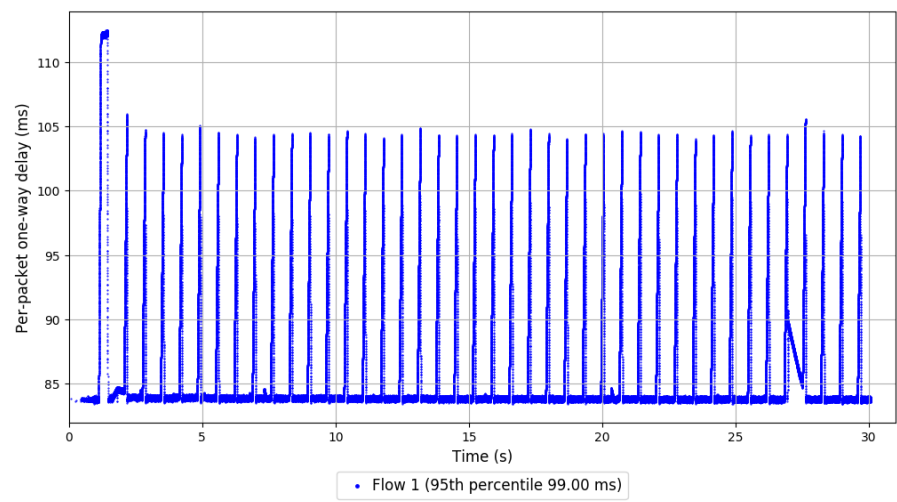
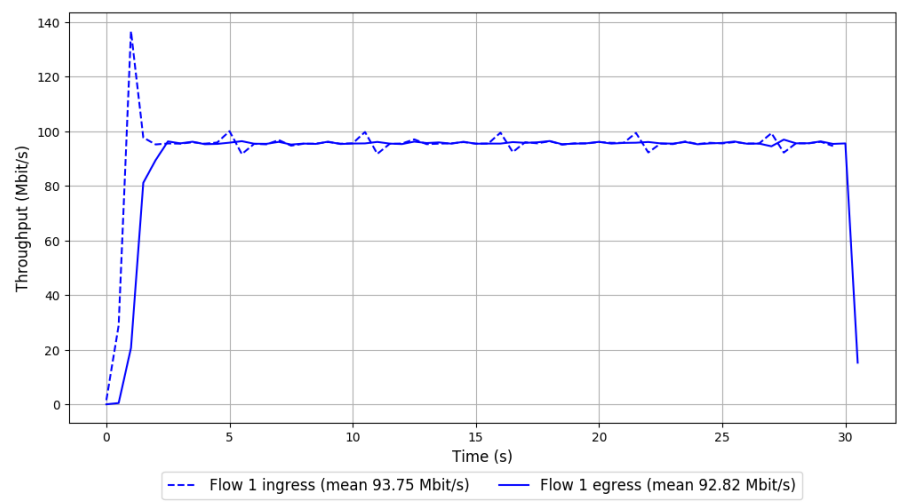
-- Flow 1:

Average throughput: 92.82 Mbit/s

95th percentile per-packet one-way delay: 99.004 ms

Loss rate: 0.99%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2018-11-30 05:03:06

End at: 2018-11-30 05:03:36

Local clock offset: -1.384 ms

Remote clock offset: 2.165 ms

Below is generated by plot.py at 2018-11-30 05:49:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.74 Mbit/s

95th percentile per-packet one-way delay: 101.700 ms

Loss rate: 1.02%

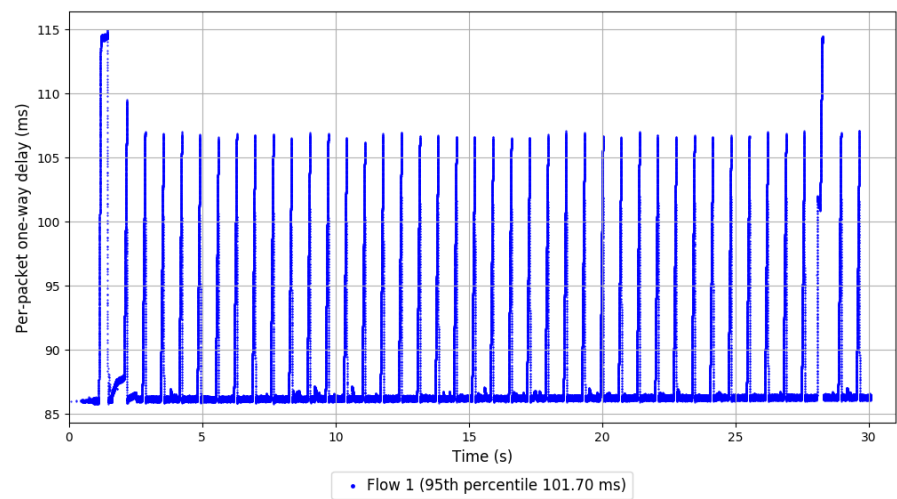
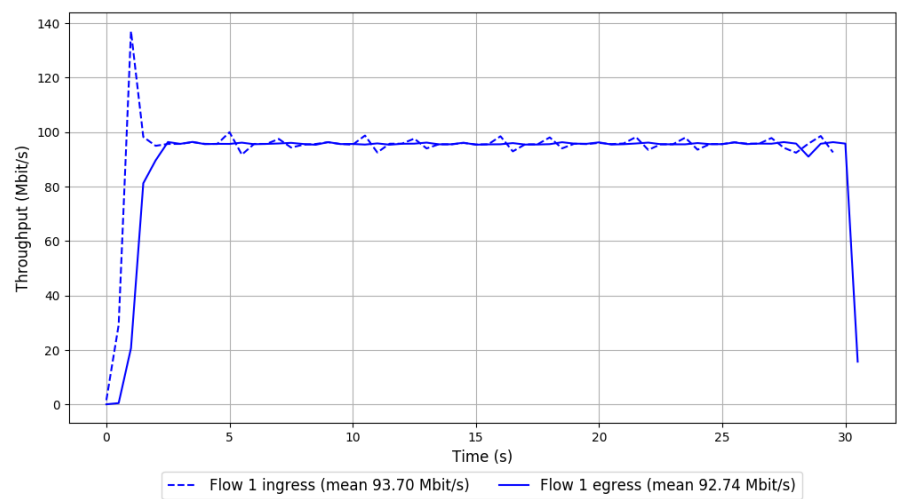
-- Flow 1:

Average throughput: 92.74 Mbit/s

95th percentile per-packet one-way delay: 101.700 ms

Loss rate: 1.02%

Run 4: Report of FillP — Data Link

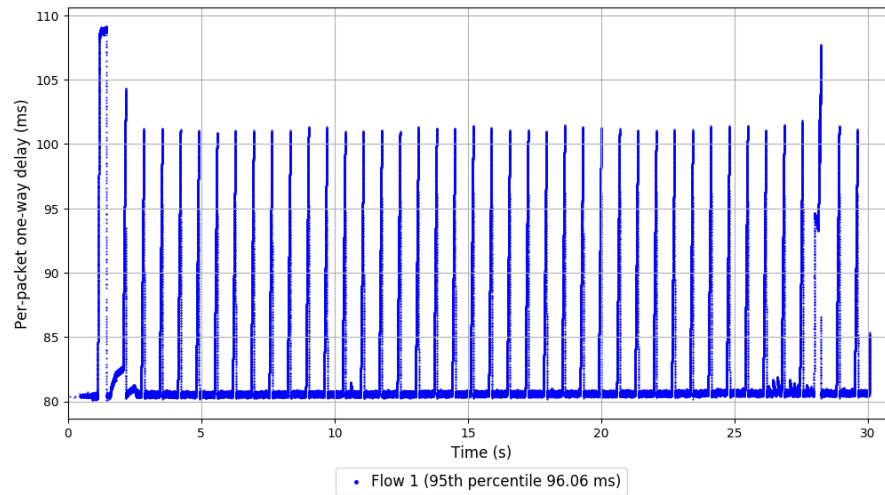
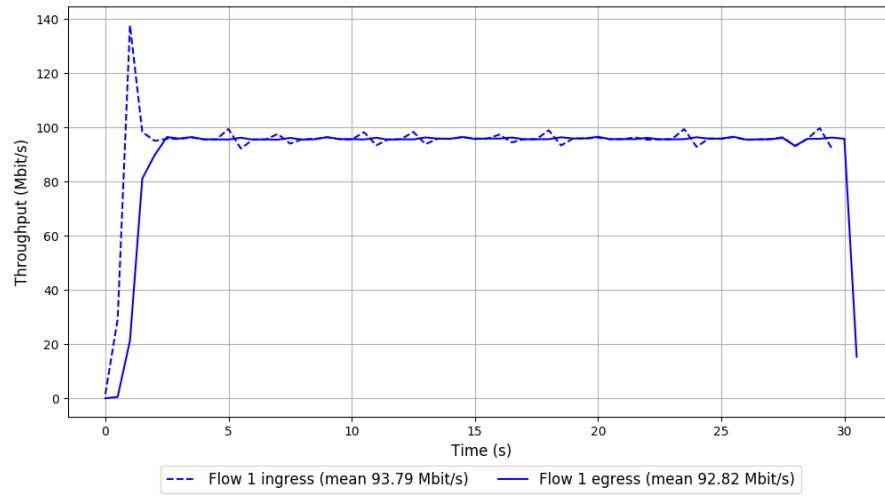


Run 5: Statistics of FillP

Start at: 2018-11-30 05:25:26
End at: 2018-11-30 05:25:56
Local clock offset: -0.232 ms
Remote clock offset: -8.132 ms

Below is generated by plot.py at 2018-11-30 05:49:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 96.061 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 92.82 Mbit/s
95th percentile per-packet one-way delay: 96.061 ms
Loss rate: 1.02%

Run 5: Report of FillP — Data Link

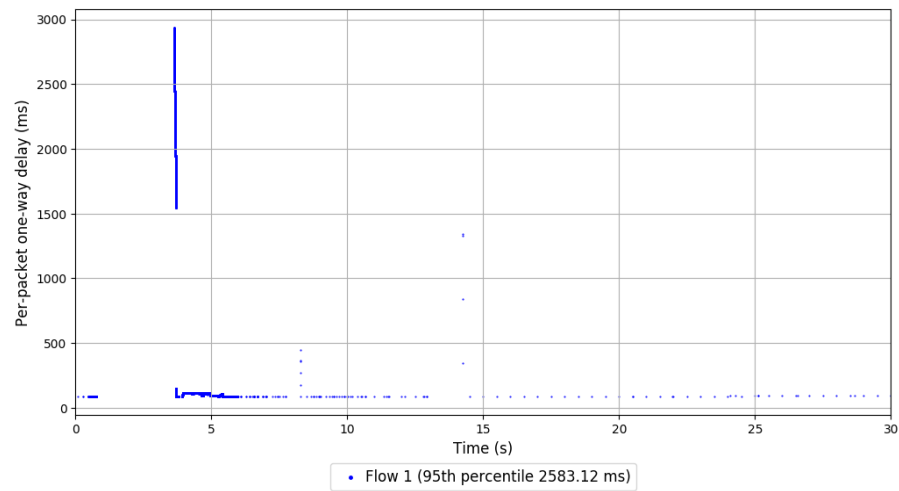
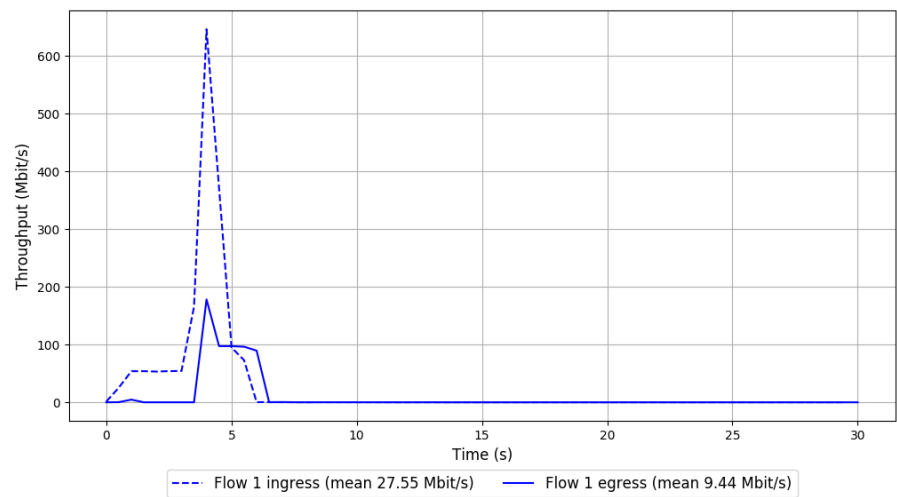


Run 1: Statistics of FillP-Sheep

Start at: 2018-11-30 04:06:50
End at: 2018-11-30 04:07:20
Local clock offset: -7.073 ms
Remote clock offset: 17.051 ms

Below is generated by plot.py at 2018-11-30 05:49:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 9.44 Mbit/s
95th percentile per-packet one-way delay: 2583.117 ms
Loss rate: 65.72%
-- Flow 1:
Average throughput: 9.44 Mbit/s
95th percentile per-packet one-way delay: 2583.117 ms
Loss rate: 65.72%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2018-11-30 04:29:06

End at: 2018-11-30 04:29:36

Local clock offset: -5.699 ms

Remote clock offset: 5.816 ms

Below is generated by plot.py at 2018-11-30 05:50:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.16 Mbit/s

95th percentile per-packet one-way delay: 101.606 ms

Loss rate: 1.08%

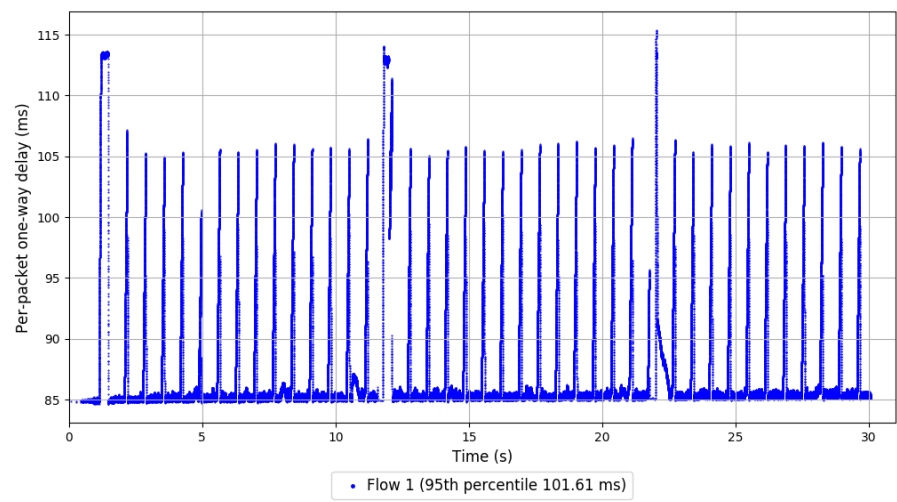
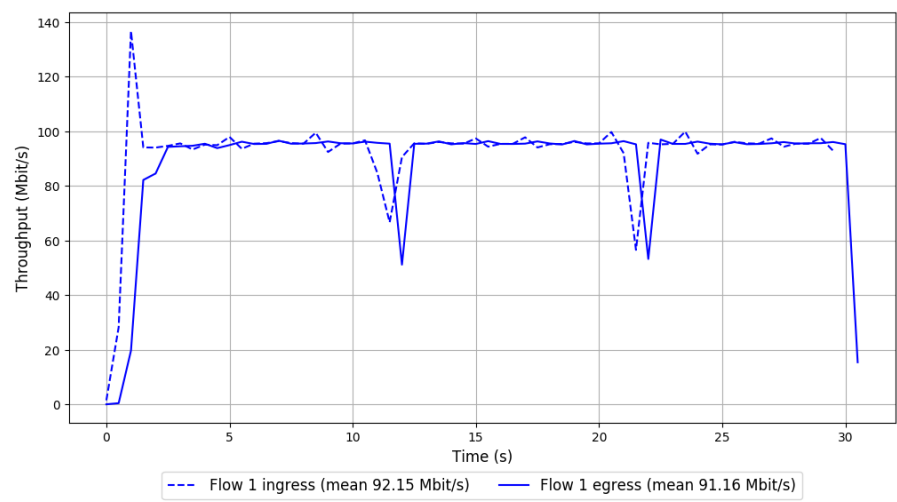
-- Flow 1:

Average throughput: 91.16 Mbit/s

95th percentile per-packet one-way delay: 101.606 ms

Loss rate: 1.08%

Run 2: Report of FillP-Sheep — Data Link

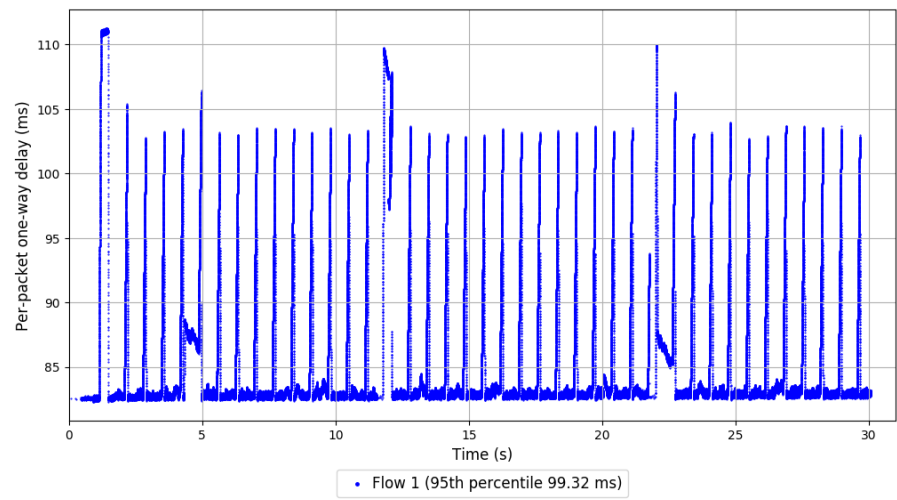
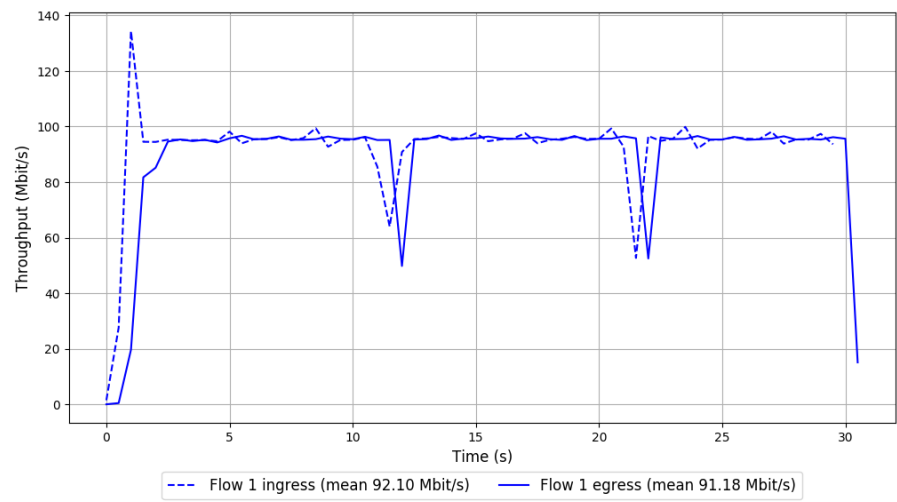


Run 3: Statistics of FillP-Sheep

Start at: 2018-11-30 04:51:25
End at: 2018-11-30 04:51:55
Local clock offset: -3.515 ms
Remote clock offset: -0.337 ms

Below is generated by plot.py at 2018-11-30 05:50:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.18 Mbit/s
95th percentile per-packet one-way delay: 99.322 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 91.18 Mbit/s
95th percentile per-packet one-way delay: 99.322 ms
Loss rate: 0.99%

Run 3: Report of FillP-Sheep — Data Link

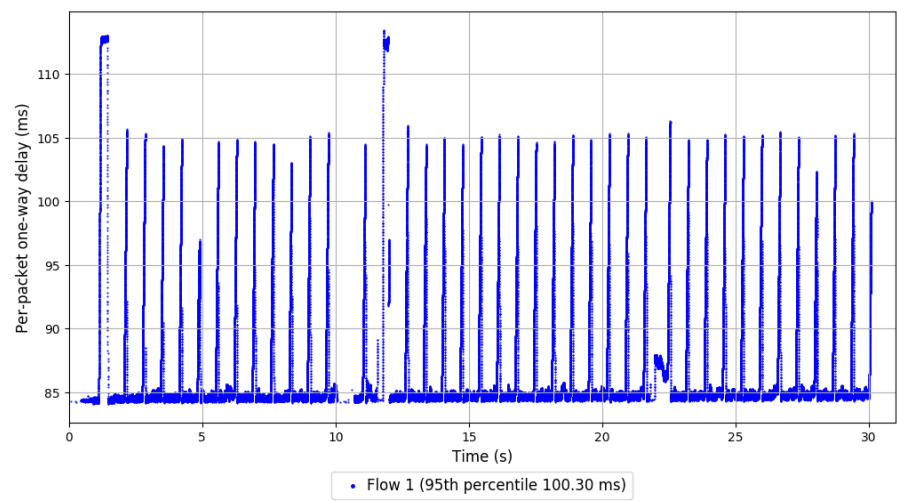
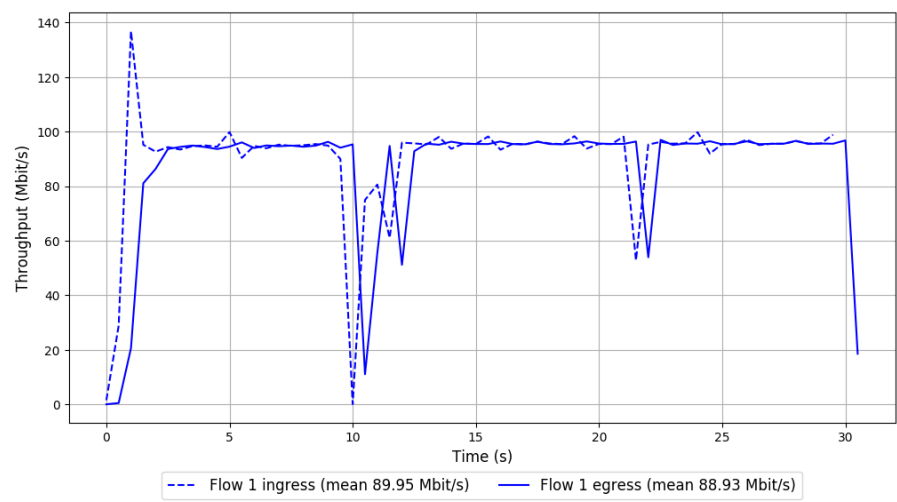


Run 4: Statistics of FillP-Sheep

Start at: 2018-11-30 05:13:44
End at: 2018-11-30 05:14:14
Local clock offset: 0.539 ms
Remote clock offset: -1.065 ms

Below is generated by plot.py at 2018-11-30 05:50:32
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.93 Mbit/s
95th percentile per-packet one-way delay: 100.303 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 88.93 Mbit/s
95th percentile per-packet one-way delay: 100.303 ms
Loss rate: 1.09%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2018-11-30 05:35:59

End at: 2018-11-30 05:36:29

Local clock offset: -0.043 ms

Remote clock offset: -10.939 ms

Below is generated by plot.py at 2018-11-30 05:50:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.85 Mbit/s

95th percentile per-packet one-way delay: 114.851 ms

Loss rate: 6.34%

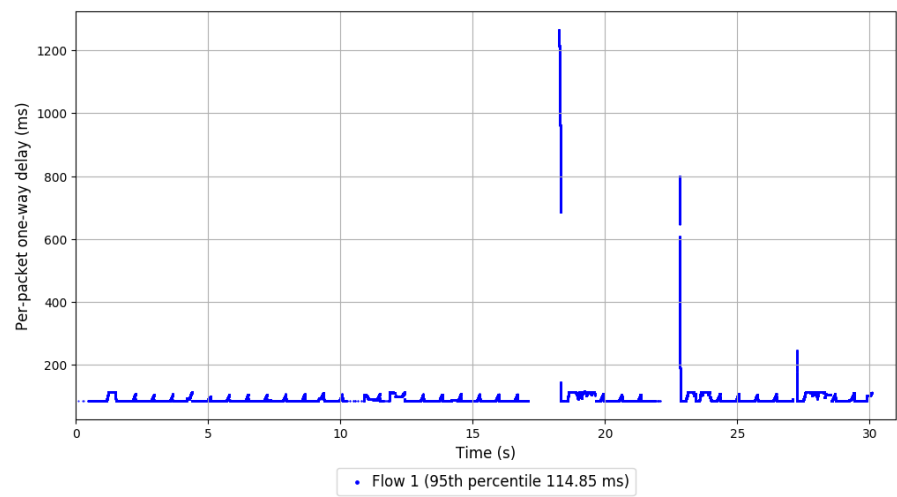
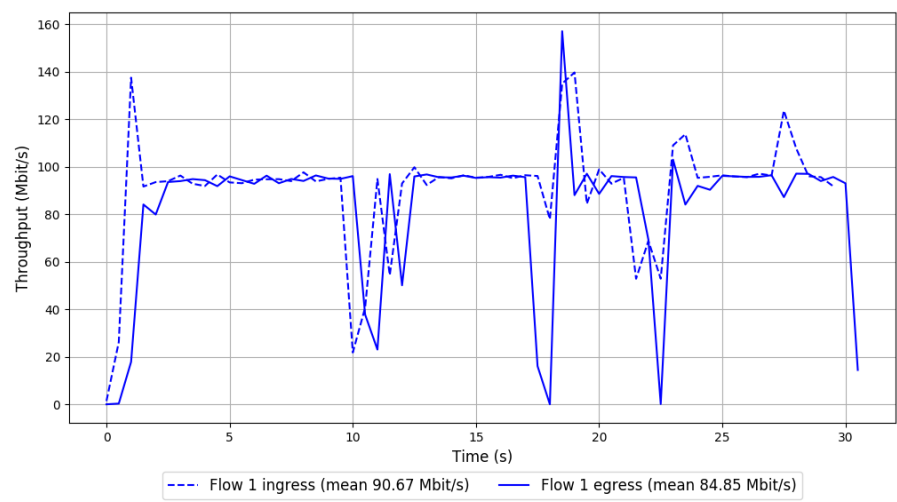
-- Flow 1:

Average throughput: 84.85 Mbit/s

95th percentile per-packet one-way delay: 114.851 ms

Loss rate: 6.34%

Run 5: Report of FillP-Sheep — Data Link

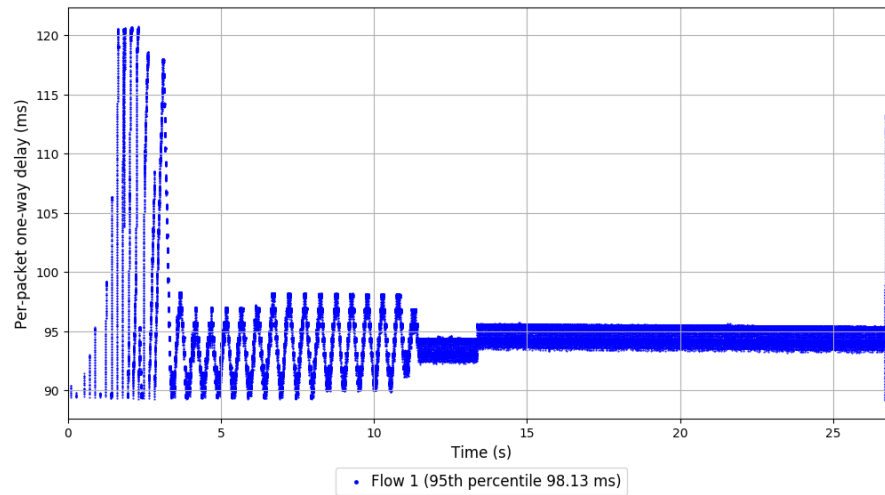
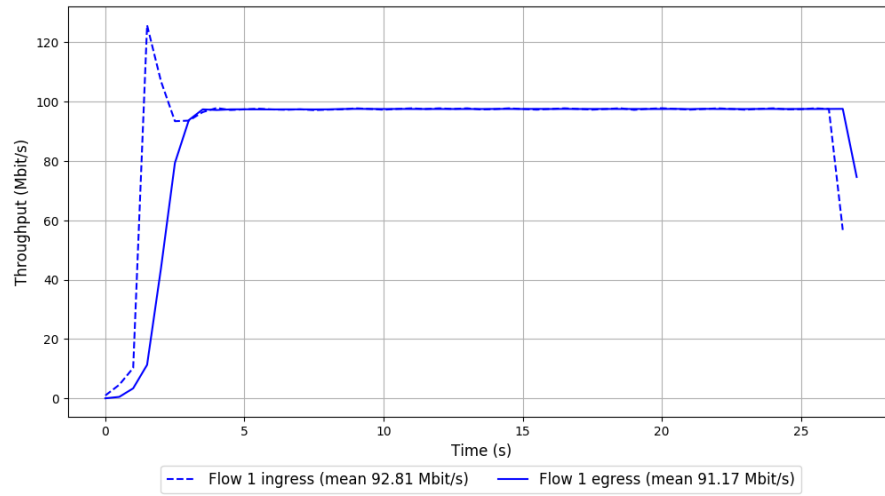


Run 1: Statistics of Indigo

Start at: 2018-11-30 04:03:21
End at: 2018-11-30 04:03:51
Local clock offset: -6.372 ms
Remote clock offset: 18.089 ms

Below is generated by plot.py at 2018-11-30 05:50:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.17 Mbit/s
95th percentile per-packet one-way delay: 98.131 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 91.17 Mbit/s
95th percentile per-packet one-way delay: 98.131 ms
Loss rate: 1.76%

Run 1: Report of Indigo — Data Link

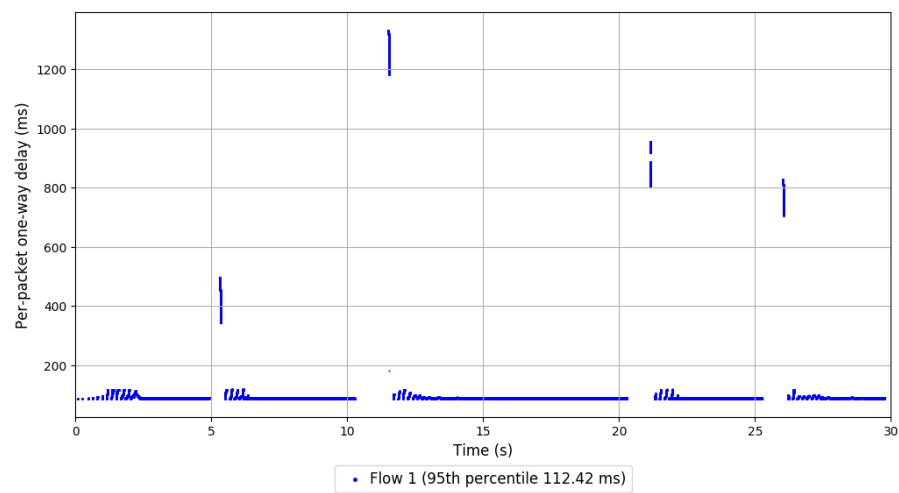
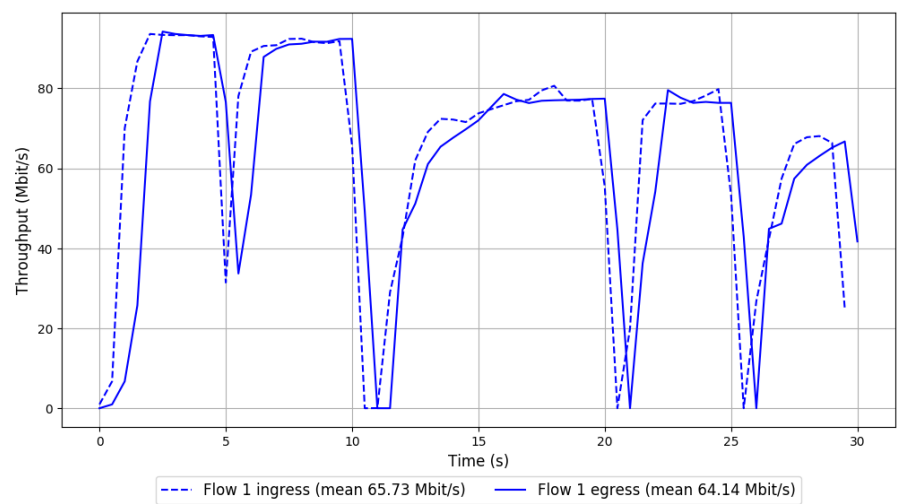


Run 2: Statistics of Indigo

Start at: 2018-11-30 04:25:37
End at: 2018-11-30 04:26:07
Local clock offset: -6.515 ms
Remote clock offset: 10.604 ms

Below is generated by plot.py at 2018-11-30 05:50:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 64.14 Mbit/s
95th percentile per-packet one-way delay: 112.419 ms
Loss rate: 2.41%
-- Flow 1:
Average throughput: 64.14 Mbit/s
95th percentile per-packet one-way delay: 112.419 ms
Loss rate: 2.41%

Run 2: Report of Indigo — Data Link

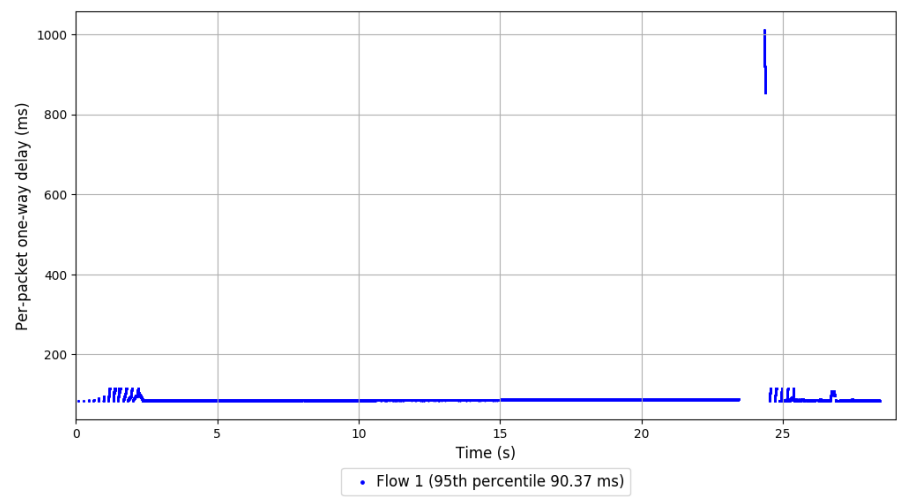
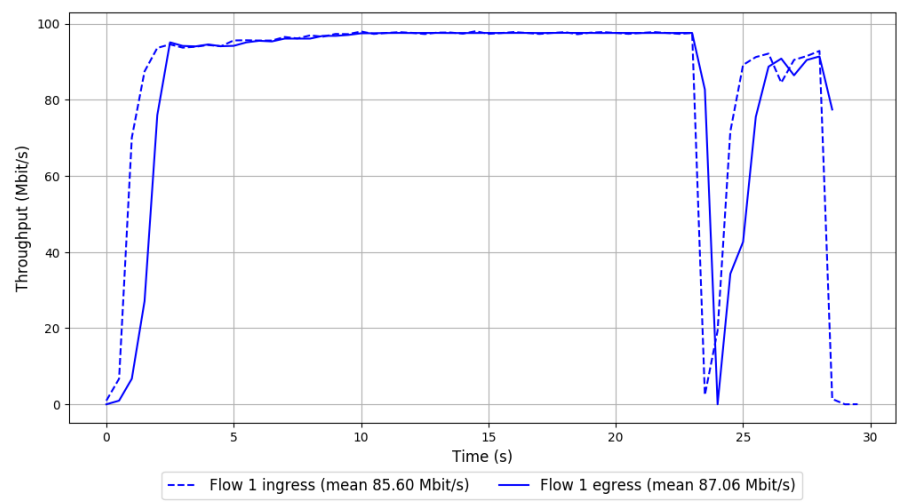


Run 3: Statistics of Indigo

Start at: 2018-11-30 04:47:54
End at: 2018-11-30 04:48:24
Local clock offset: -4.825 ms
Remote clock offset: 2.506 ms

Below is generated by plot.py at 2018-11-30 05:50:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 87.06 Mbit/s
95th percentile per-packet one-way delay: 90.374 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 87.06 Mbit/s
95th percentile per-packet one-way delay: 90.374 ms
Loss rate: 2.33%

Run 3: Report of Indigo — Data Link

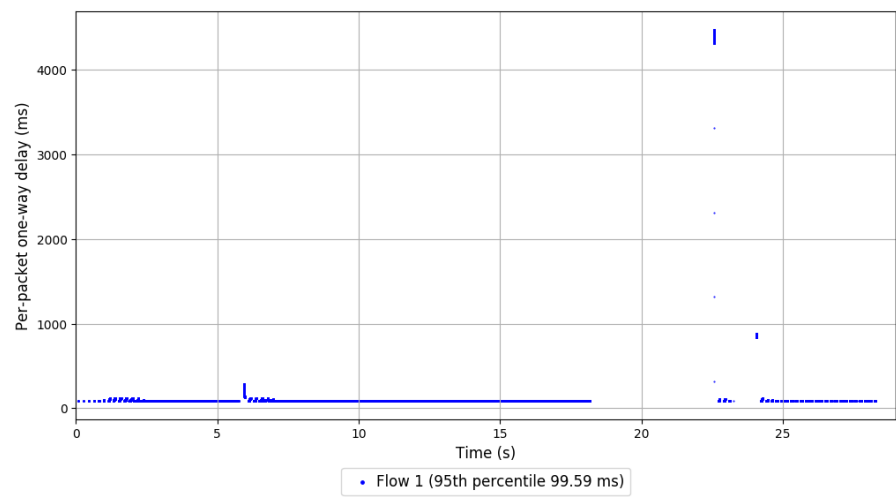
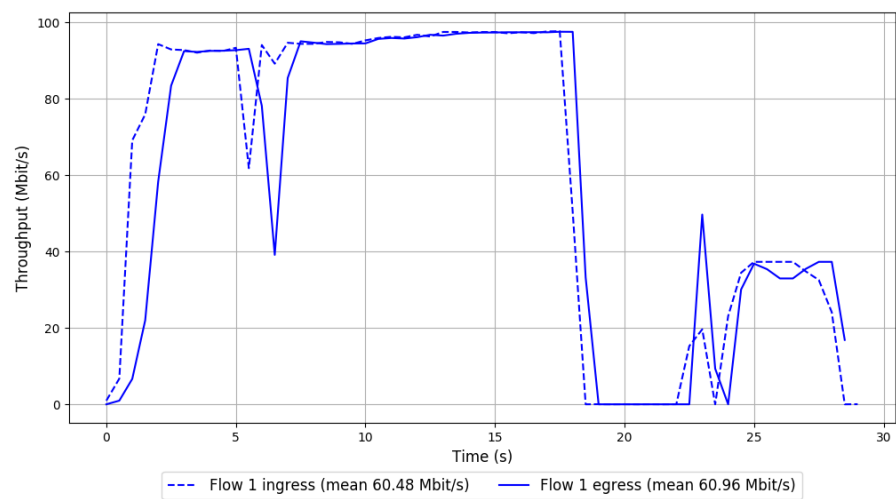


Run 4: Statistics of Indigo

Start at: 2018-11-30 05:10:13
End at: 2018-11-30 05:10:43
Local clock offset: -0.551 ms
Remote clock offset: -0.376 ms

Below is generated by plot.py at 2018-11-30 05:50:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 60.96 Mbit/s
95th percentile per-packet one-way delay: 99.589 ms
Loss rate: 3.25%
-- Flow 1:
Average throughput: 60.96 Mbit/s
95th percentile per-packet one-way delay: 99.589 ms
Loss rate: 3.25%

Run 4: Report of Indigo — Data Link

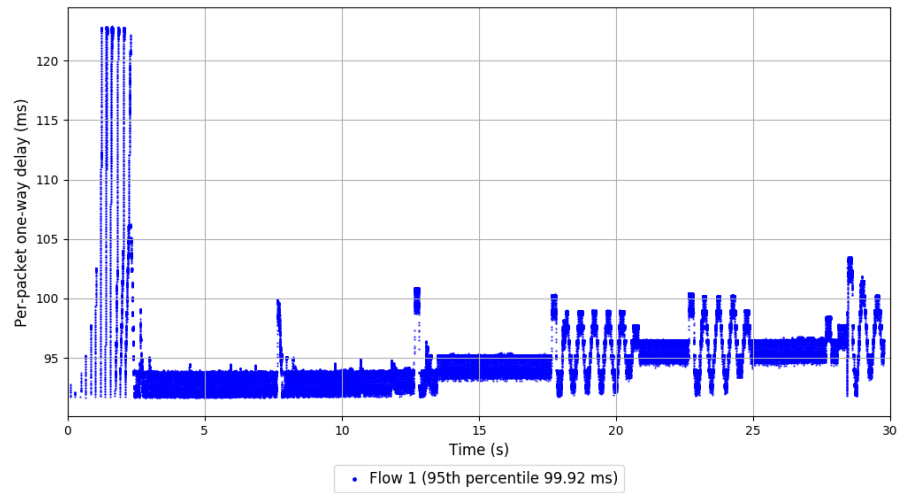
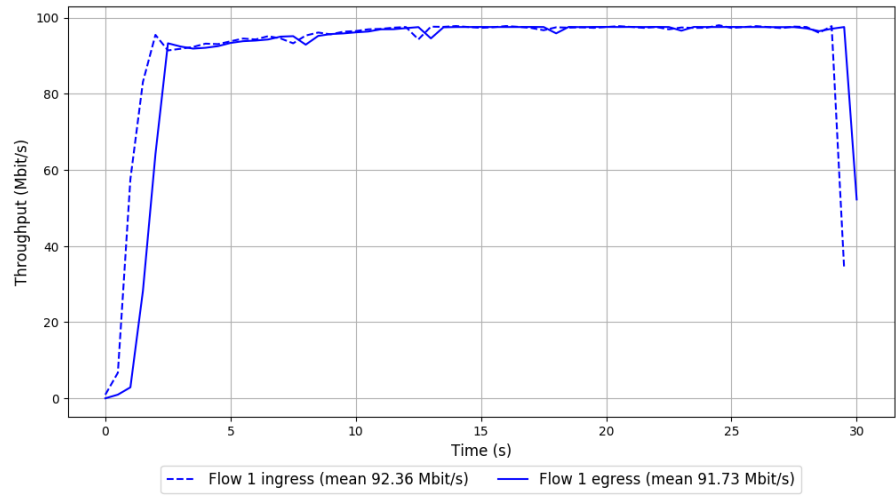


Run 5: Statistics of Indigo

Start at: 2018-11-30 05:32:30
End at: 2018-11-30 05:33:00
Local clock offset: -0.121 ms
Remote clock offset: -5.942 ms

Below is generated by plot.py at 2018-11-30 05:51:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.73 Mbit/s
95th percentile per-packet one-way delay: 99.920 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 91.73 Mbit/s
95th percentile per-packet one-way delay: 99.920 ms
Loss rate: 0.69%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-96d2da3

Start at: 2018-11-30 03:57:35

End at: 2018-11-30 03:58:05

Local clock offset: -6.35 ms

Remote clock offset: 8.405 ms

Run 1: Report of Indigo-96d2da3 — Data Link

Figure is missing

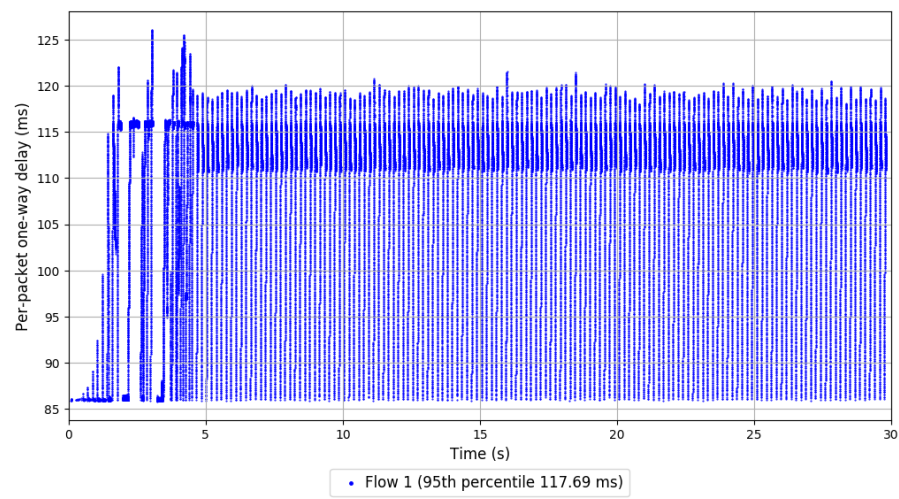
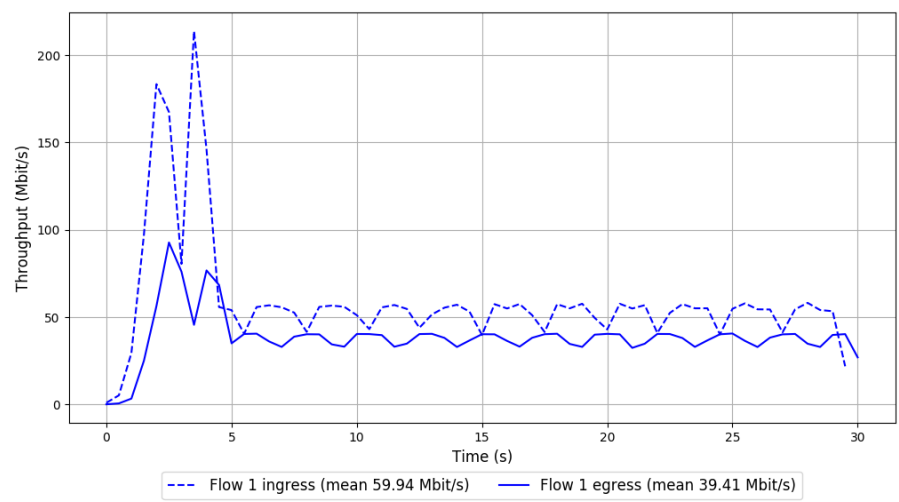
Figure is missing

Run 2: Statistics of Indigo-96d2da3

Start at: 2018-11-30 04:19:46
End at: 2018-11-30 04:20:16
Local clock offset: -5.98 ms
Remote clock offset: 11.119 ms

Below is generated by plot.py at 2018-11-30 05:51:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.41 Mbit/s
95th percentile per-packet one-way delay: 117.689 ms
Loss rate: 34.20%
-- Flow 1:
Average throughput: 39.41 Mbit/s
95th percentile per-packet one-way delay: 117.689 ms
Loss rate: 34.20%

Run 2: Report of Indigo-96d2da3 — Data Link

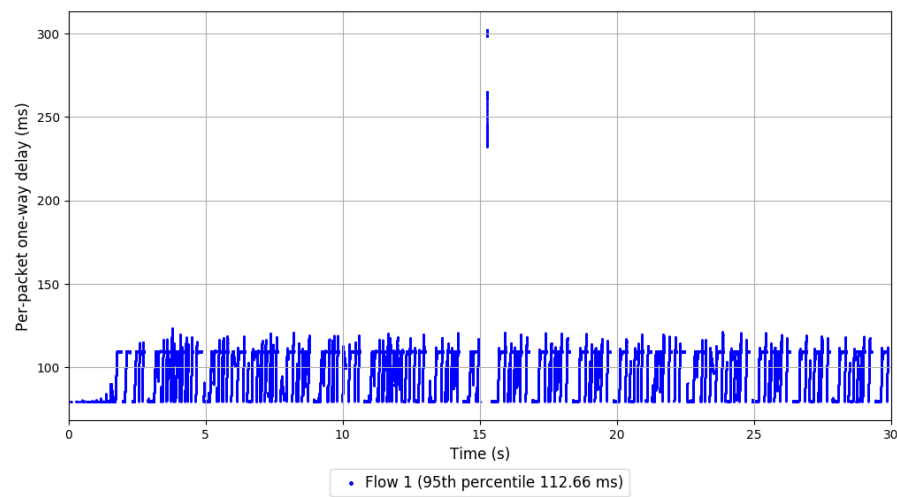
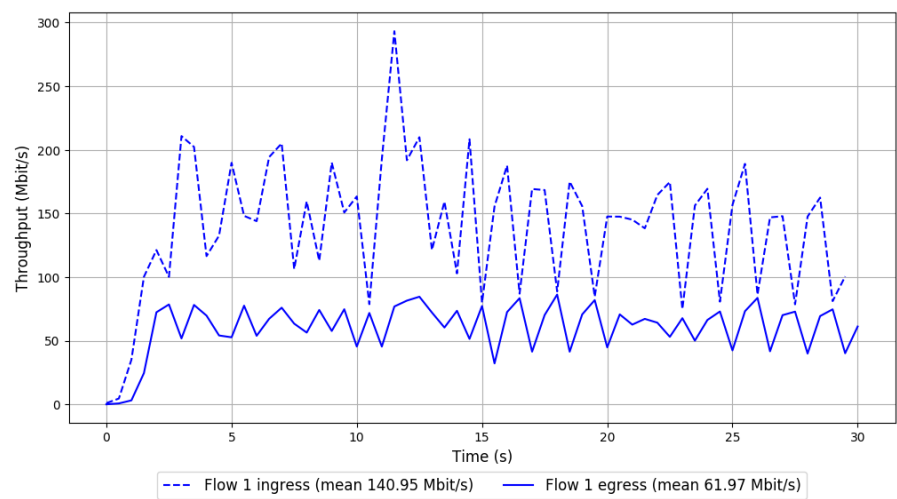


Run 3: Statistics of Indigo-96d2da3

Start at: 2018-11-30 04:42:02
End at: 2018-11-30 04:42:32
Local clock offset: -5.467 ms
Remote clock offset: -1.597 ms

Below is generated by plot.py at 2018-11-30 05:51:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 61.97 Mbit/s
95th percentile per-packet one-way delay: 112.661 ms
Loss rate: 55.99%
-- Flow 1:
Average throughput: 61.97 Mbit/s
95th percentile per-packet one-way delay: 112.661 ms
Loss rate: 55.99%

Run 3: Report of Indigo-96d2da3 — Data Link



Run 4: Statistics of Indigo-96d2da3

Start at: 2018-11-30 05:04:17

End at: 2018-11-30 05:04:47

Local clock offset: -0.378 ms

Remote clock offset: 1.386 ms

Below is generated by plot.py at 2018-11-30 05:51:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 66.57 Mbit/s

95th percentile per-packet one-way delay: 124.518 ms

Loss rate: 52.36%

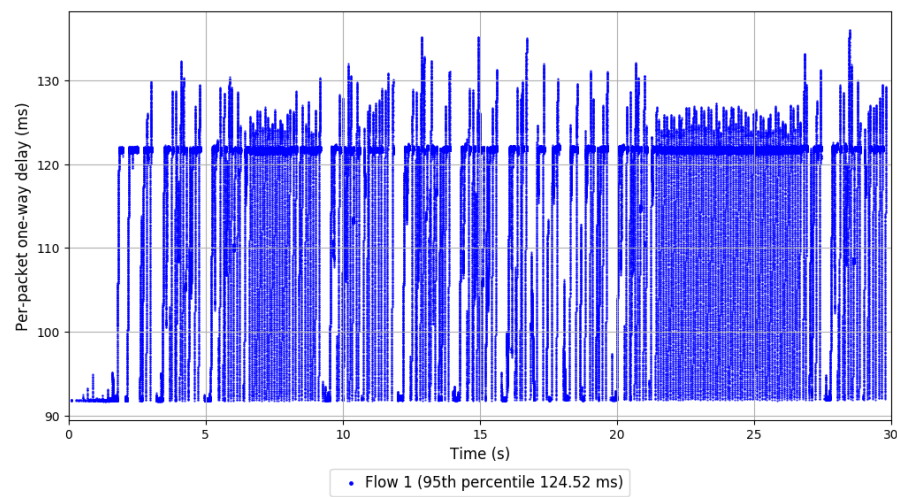
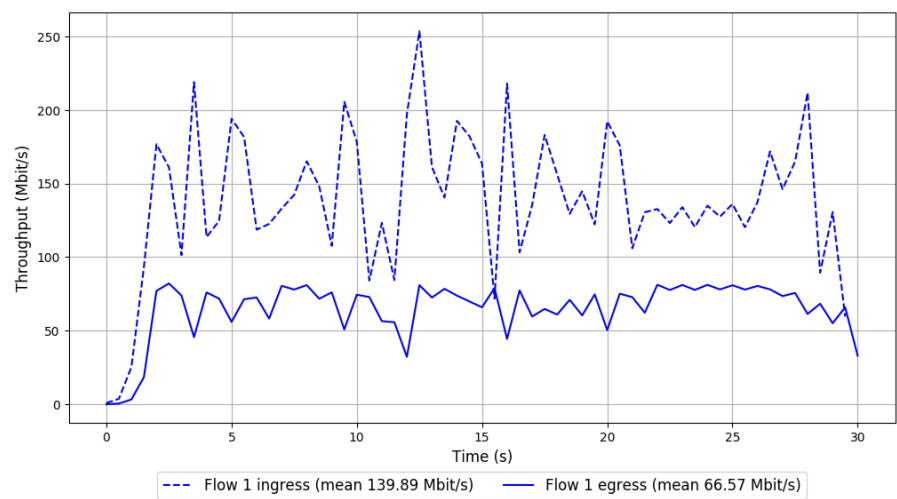
-- Flow 1:

Average throughput: 66.57 Mbit/s

95th percentile per-packet one-way delay: 124.518 ms

Loss rate: 52.36%

Run 4: Report of Indigo-96d2da3 — Data Link

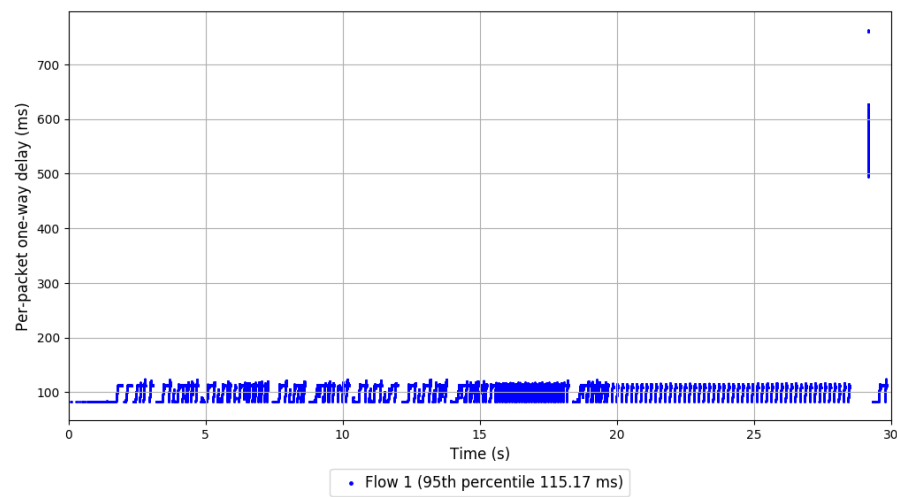
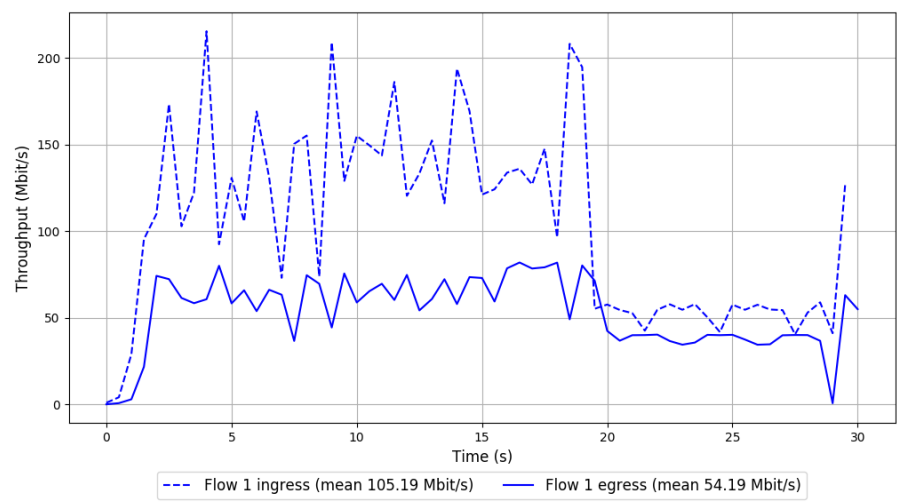


Run 5: Statistics of Indigo-96d2da3

Start at: 2018-11-30 05:26:37
End at: 2018-11-30 05:27:07
Local clock offset: -0.923 ms
Remote clock offset: -9.637 ms

Below is generated by plot.py at 2018-11-30 05:51:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 54.19 Mbit/s
95th percentile per-packet one-way delay: 115.170 ms
Loss rate: 48.43%
-- Flow 1:
Average throughput: 54.19 Mbit/s
95th percentile per-packet one-way delay: 115.170 ms
Loss rate: 48.43%

Run 5: Report of Indigo-96d2da3 — Data Link

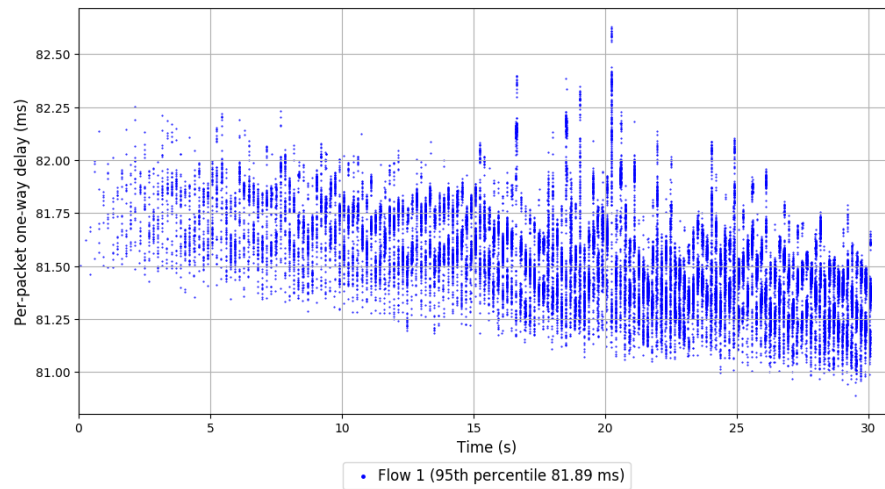
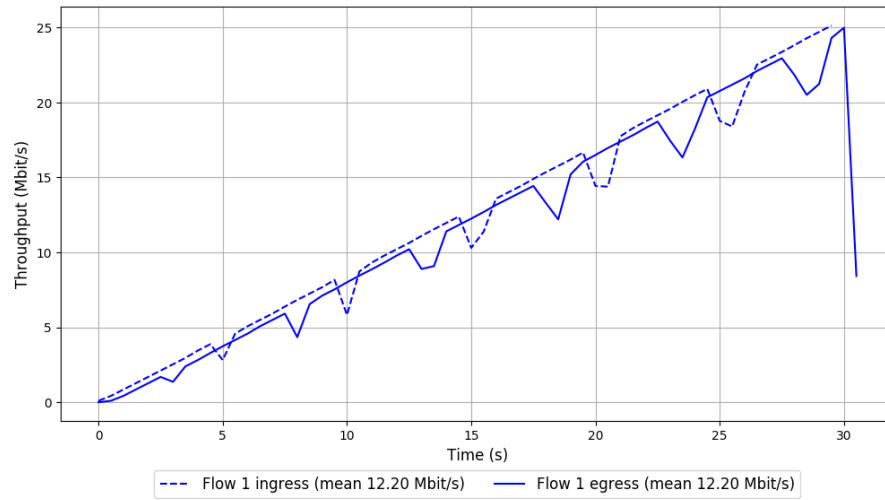


Run 1: Statistics of LEDBAT

Start at: 2018-11-30 04:05:41
End at: 2018-11-30 04:06:11
Local clock offset: -7.069 ms
Remote clock offset: 17.123 ms

Below is generated by plot.py at 2018-11-30 05:51:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.20 Mbit/s
95th percentile per-packet one-way delay: 81.893 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.20 Mbit/s
95th percentile per-packet one-way delay: 81.893 ms
Loss rate: 0.00%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2018-11-30 04:27:57

End at: 2018-11-30 04:28:27

Local clock offset: -5.676 ms

Remote clock offset: 7.475 ms

Below is generated by plot.py at 2018-11-30 05:51:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.15 Mbit/s

95th percentile per-packet one-way delay: 85.407 ms

Loss rate: 0.00%

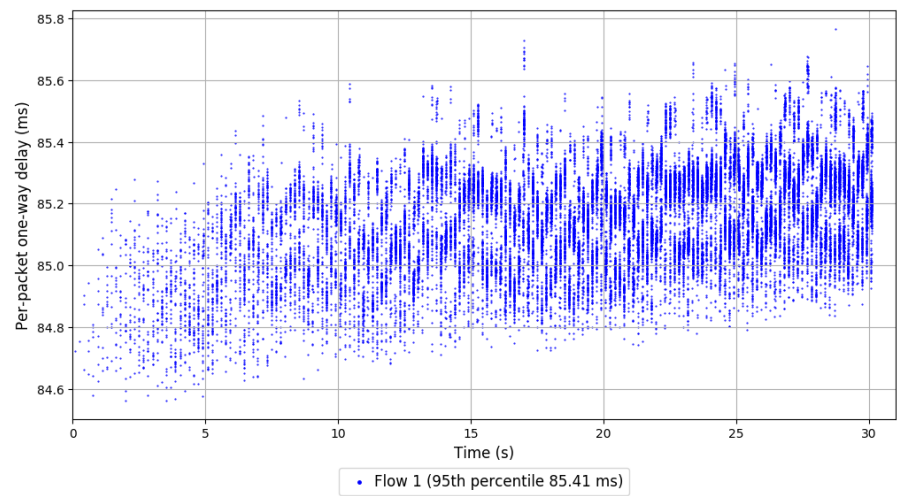
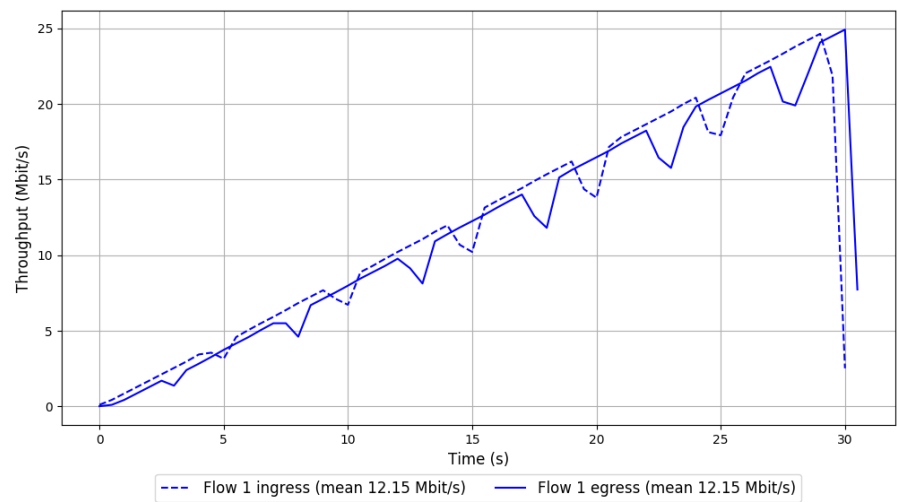
-- Flow 1:

Average throughput: 12.15 Mbit/s

95th percentile per-packet one-way delay: 85.407 ms

Loss rate: 0.00%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2018-11-30 04:50:16

End at: 2018-11-30 04:50:46

Local clock offset: -3.134 ms

Remote clock offset: 3.742 ms

Below is generated by plot.py at 2018-11-30 05:51:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.01 Mbit/s

95th percentile per-packet one-way delay: 86.751 ms

Loss rate: 0.00%

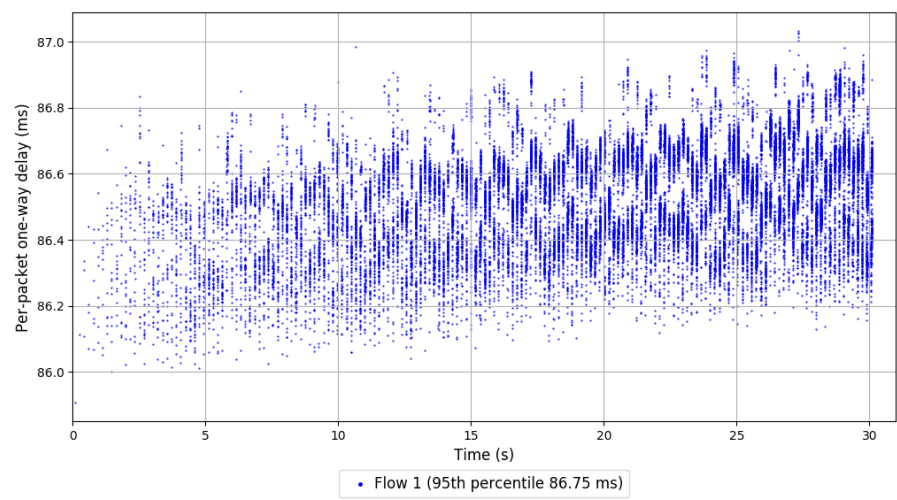
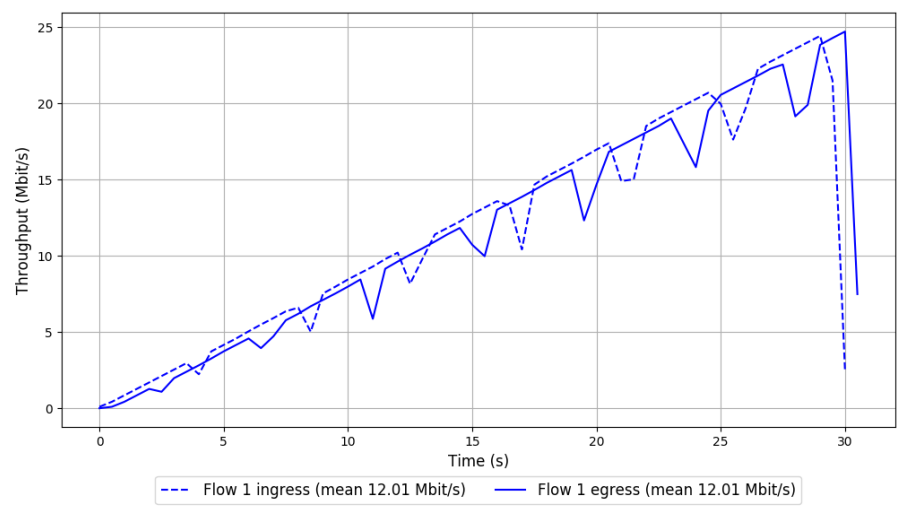
-- Flow 1:

Average throughput: 12.01 Mbit/s

95th percentile per-packet one-way delay: 86.751 ms

Loss rate: 0.00%

Run 3: Report of LEDBAT — Data Link

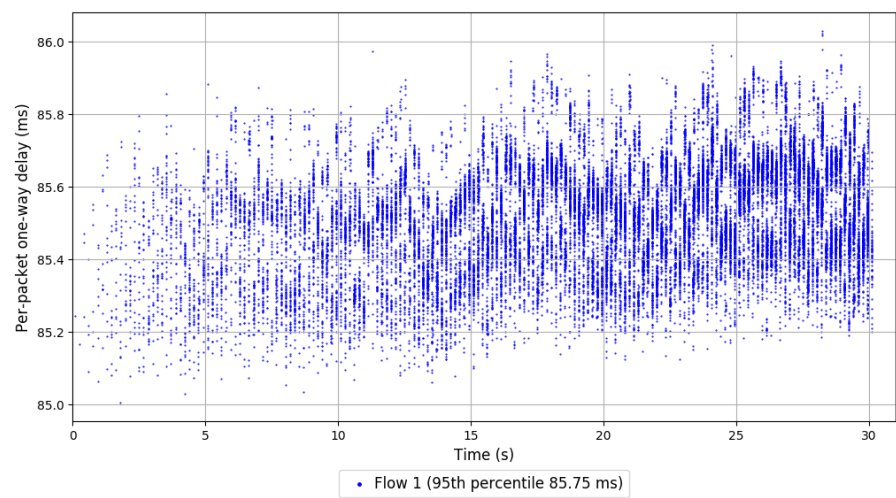
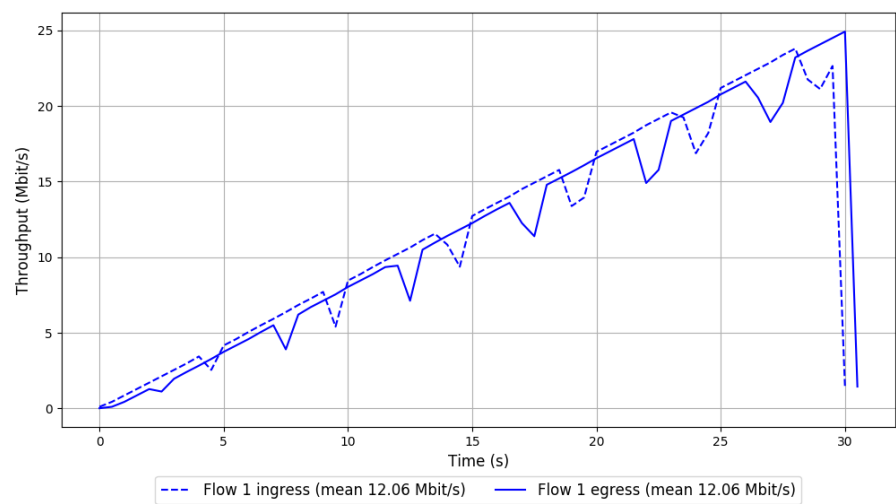


Run 4: Statistics of LEDBAT

Start at: 2018-11-30 05:12:35
End at: 2018-11-30 05:13:06
Local clock offset: -0.33 ms
Remote clock offset: -1.225 ms

Below is generated by plot.py at 2018-11-30 05:51:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 85.747 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 85.747 ms
Loss rate: 0.00%

Run 4: Report of LEDBAT — Data Link

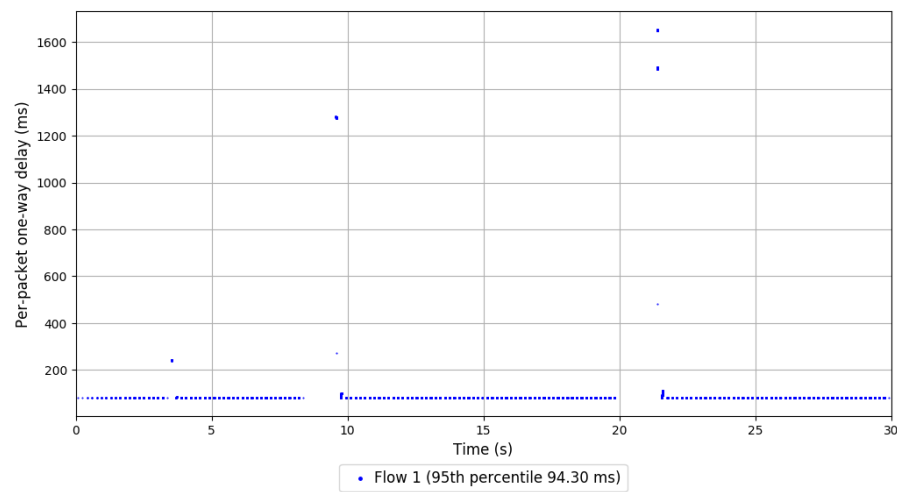
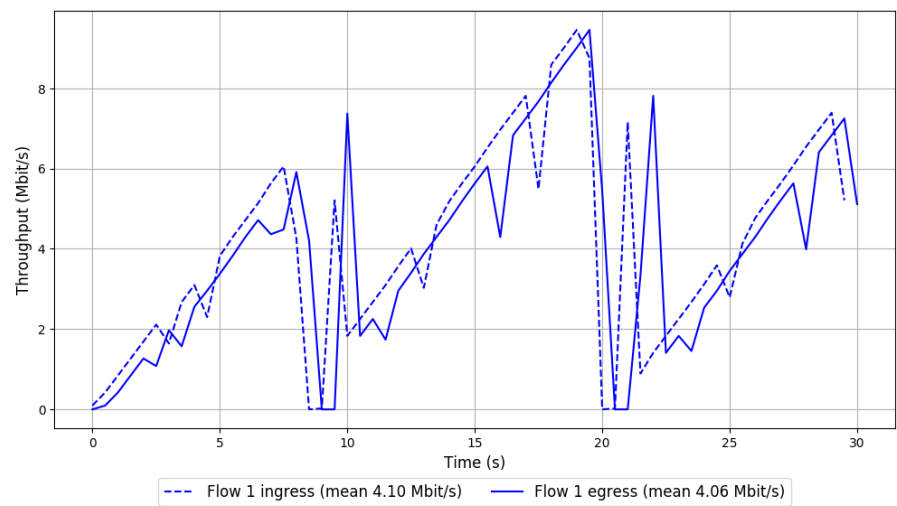


Run 5: Statistics of LEDBAT

Start at: 2018-11-30 05:34:51
End at: 2018-11-30 05:35:21
Local clock offset: -0.126 ms
Remote clock offset: -10.696 ms

Below is generated by plot.py at 2018-11-30 05:51:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.06 Mbit/s
95th percentile per-packet one-way delay: 94.304 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 4.06 Mbit/s
95th percentile per-packet one-way delay: 94.304 ms
Loss rate: 1.16%

Run 5: Report of LEDBAT — Data Link

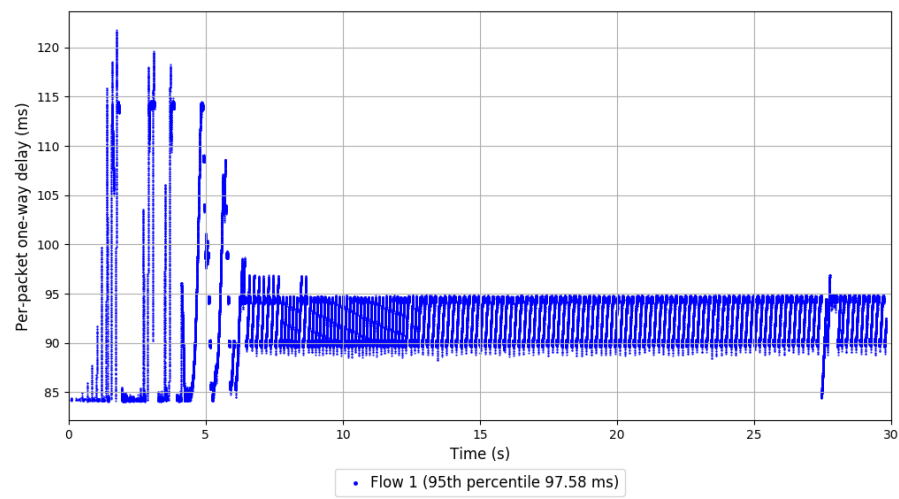
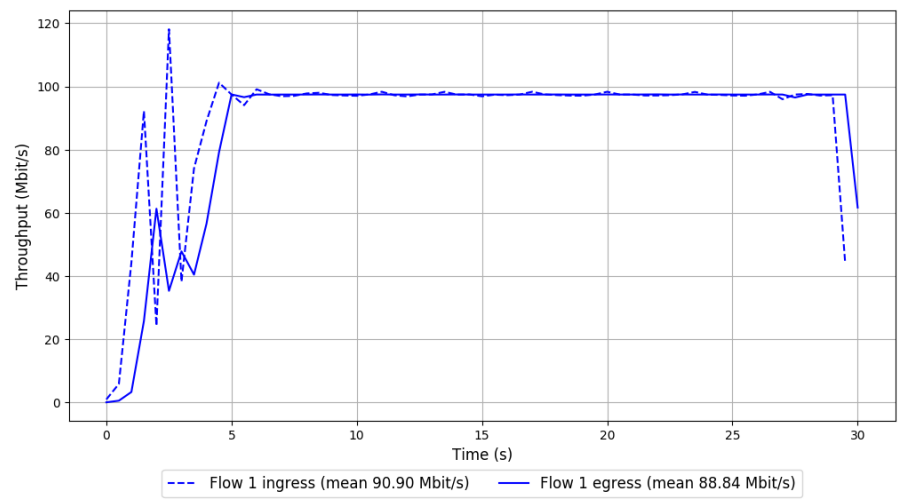



```
Run 1: Statistics of Indigo-Muses

Start at: 2018-11-30 04:10:18
End at: 2018-11-30 04:10:48
Local clock offset: -6.312 ms
Remote clock offset: 16.526 ms

# Below is generated by plot.py at 2018-11-30 05:51:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.84 Mbit/s
95th percentile per-packet one-way delay: 97.584 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 88.84 Mbit/s
95th percentile per-packet one-way delay: 97.584 ms
Loss rate: 2.24%
```

Run 1: Report of Indigo-Muses — Data Link



Run 2: Statistics of Indigo-Muses

Start at: 2018-11-30 04:32:36

End at: 2018-11-30 04:33:06

Local clock offset: -5.553 ms

Remote clock offset: 0.008 ms

Below is generated by plot.py at 2018-11-30 05:52:01

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.59 Mbit/s

95th percentile per-packet one-way delay: 96.182 ms

Loss rate: 2.22%

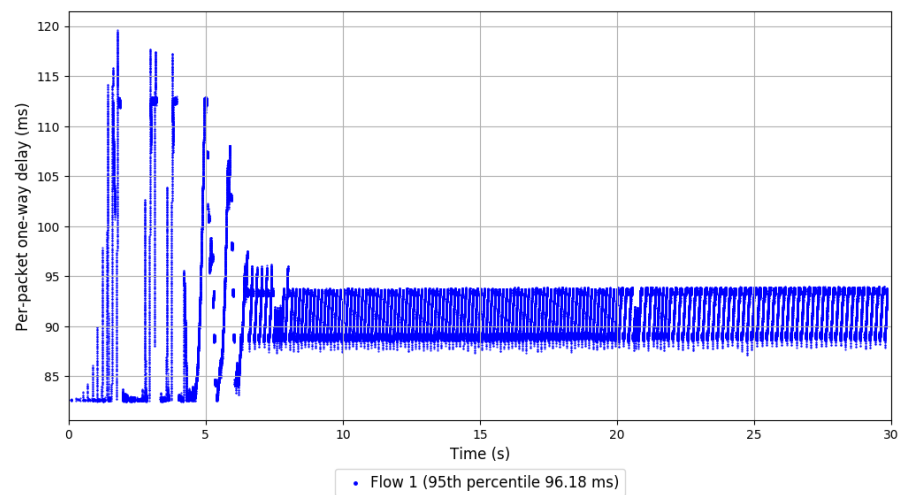
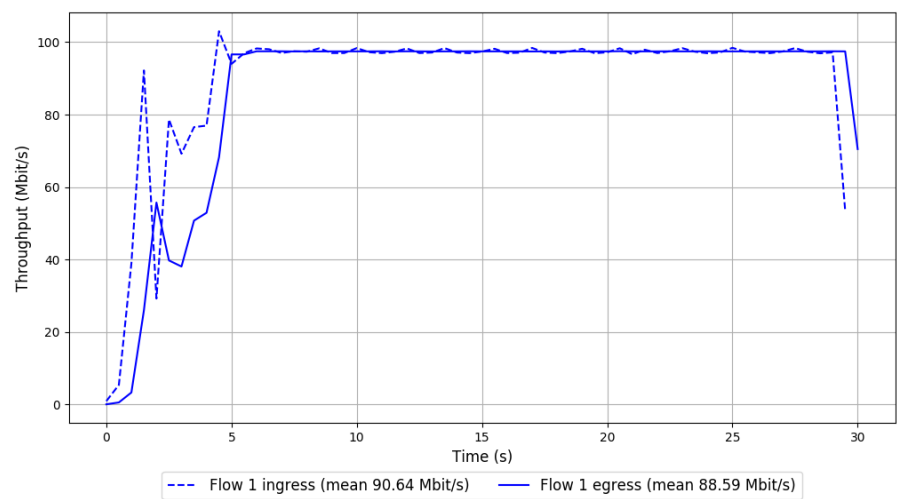
-- Flow 1:

Average throughput: 88.59 Mbit/s

95th percentile per-packet one-way delay: 96.182 ms

Loss rate: 2.22%

Run 2: Report of Indigo-Muses — Data Link



Run 3: Statistics of Indigo-Muses

Start at: 2018-11-30 04:54:54

End at: 2018-11-30 04:55:25

Local clock offset: -2.641 ms

Remote clock offset: 4.077 ms

Below is generated by plot.py at 2018-11-30 05:52:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.34 Mbit/s

95th percentile per-packet one-way delay: 111.258 ms

Loss rate: 3.42%

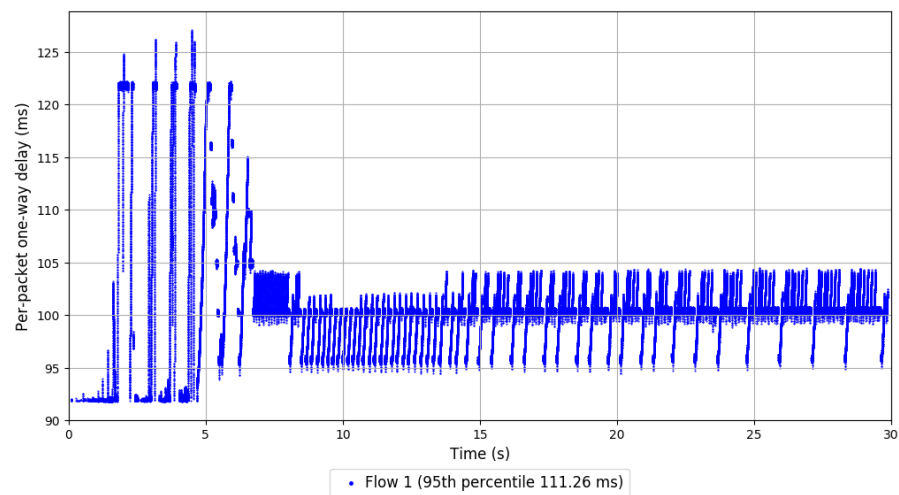
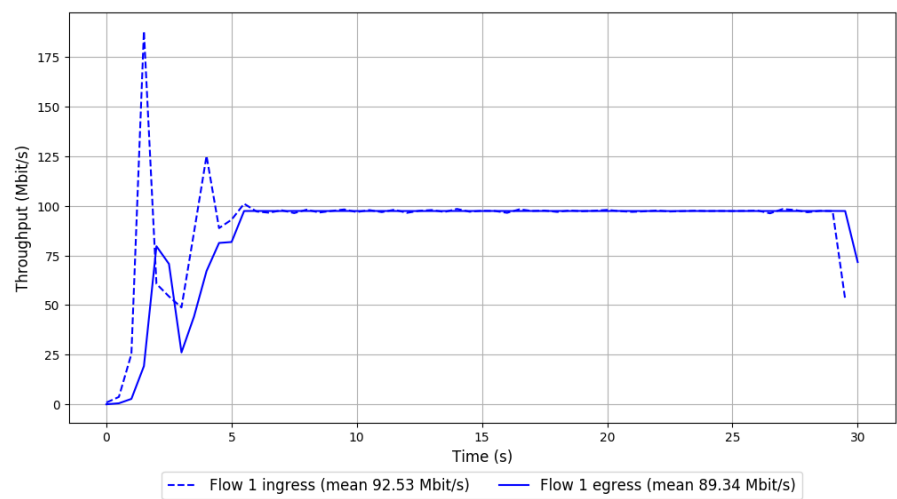
-- Flow 1:

Average throughput: 89.34 Mbit/s

95th percentile per-packet one-way delay: 111.258 ms

Loss rate: 3.42%

Run 3: Report of Indigo-Muses — Data Link

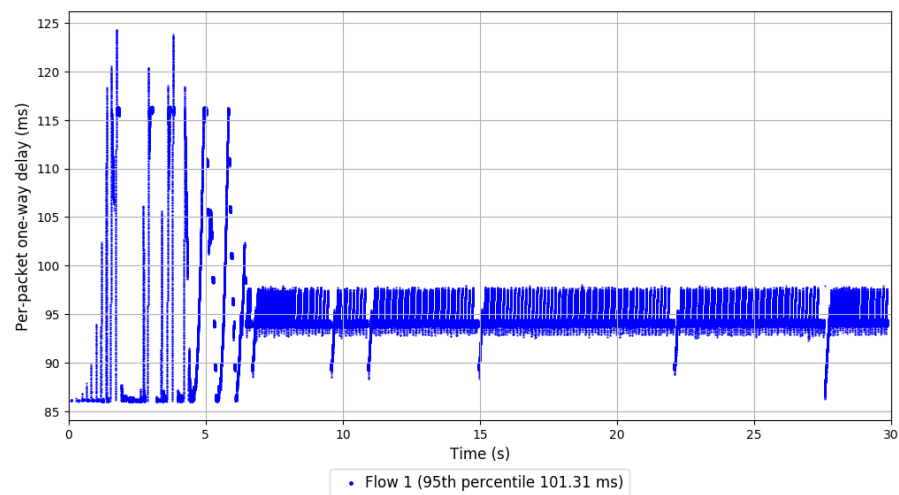
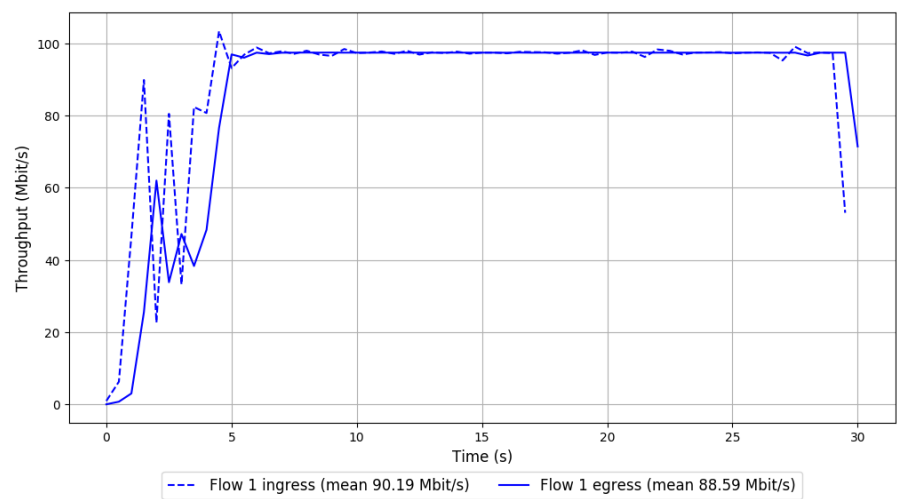


Run 4: Statistics of Indigo-Muses

Start at: 2018-11-30 05:17:14
End at: 2018-11-30 05:17:44
Local clock offset: 0.303 ms
Remote clock offset: -2.105 ms

Below is generated by plot.py at 2018-11-30 05:52:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 88.59 Mbit/s
95th percentile per-packet one-way delay: 101.310 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 88.59 Mbit/s
95th percentile per-packet one-way delay: 101.310 ms
Loss rate: 1.75%

Run 4: Report of Indigo-Muses — Data Link



Run 5: Statistics of Indigo-Muses

Start at: 2018-11-30 05:39:30

End at: 2018-11-30 05:40:00

Local clock offset: 0.008 ms

Remote clock offset: -9.01 ms

Below is generated by plot.py at 2018-11-30 05:52:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.12 Mbit/s

95th percentile per-packet one-way delay: 101.480 ms

Loss rate: 2.16%

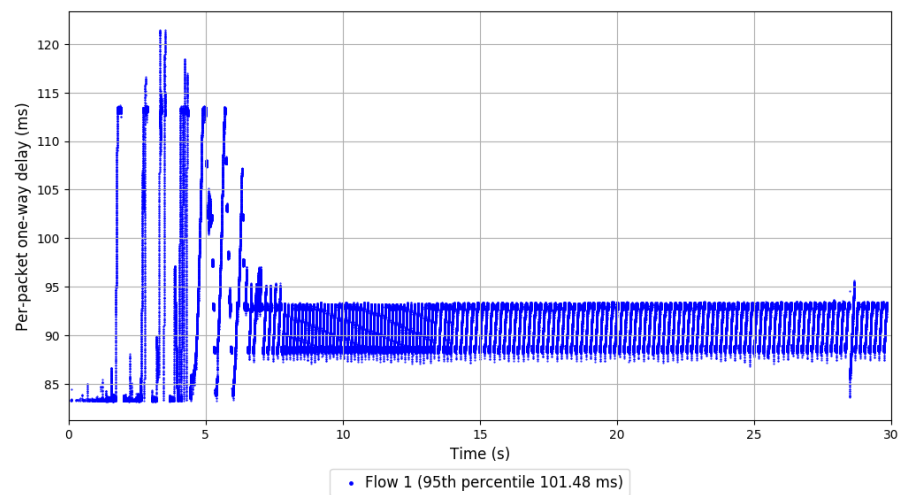
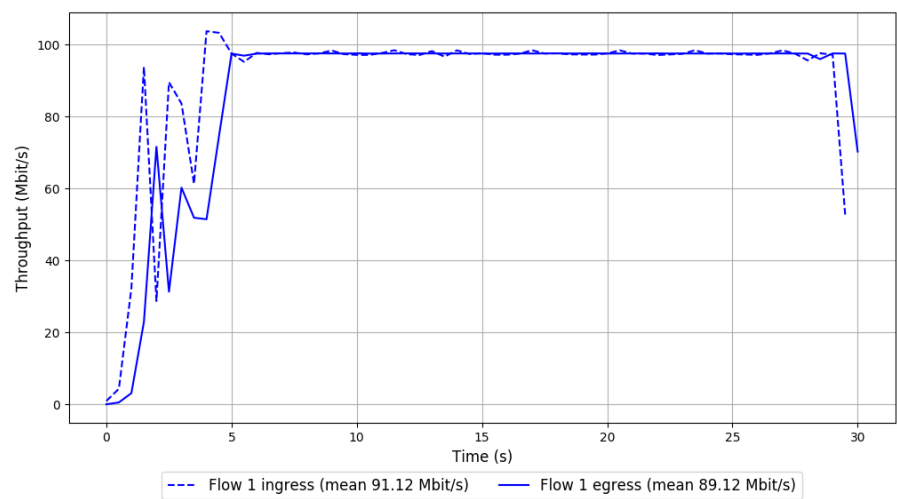
-- Flow 1:

Average throughput: 89.12 Mbit/s

95th percentile per-packet one-way delay: 101.480 ms

Loss rate: 2.16%

Run 5: Report of Indigo-Muses — Data Link

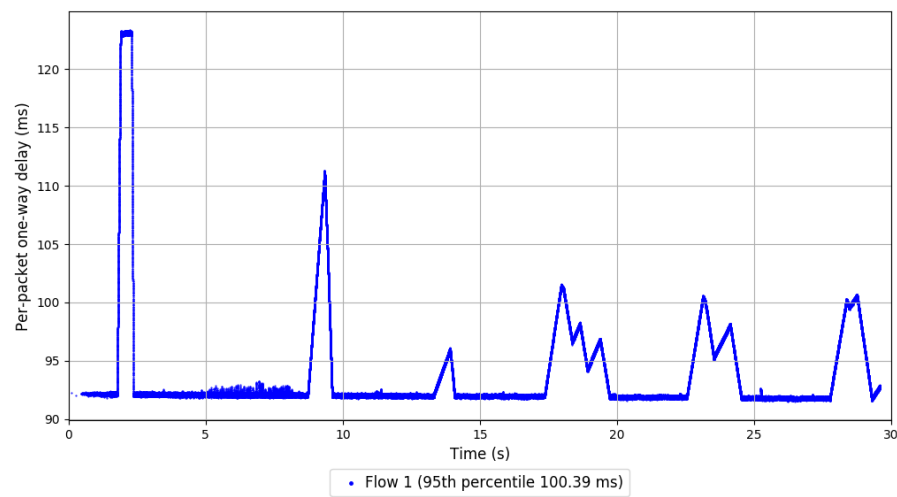
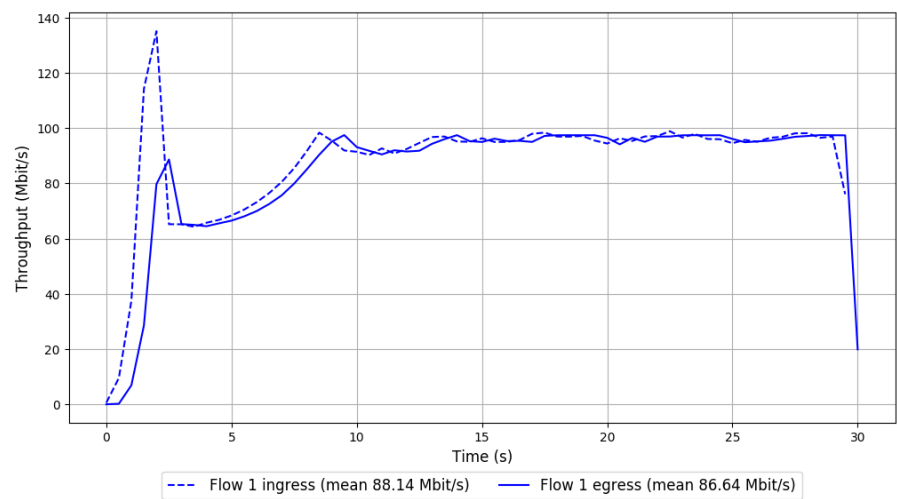


```
Run 1: Statistics of PCC-Allegro

Start at: 2018-11-30 03:58:42
End at: 2018-11-30 03:59:12
Local clock offset: -7.099 ms
Remote clock offset: 13.423 ms

# Below is generated by plot.py at 2018-11-30 05:52:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.64 Mbit/s
95th percentile per-packet one-way delay: 100.392 ms
Loss rate: 2.95%
-- Flow 1:
Average throughput: 86.64 Mbit/s
95th percentile per-packet one-way delay: 100.392 ms
Loss rate: 2.95%
```

Run 1: Report of PCC-Allegro — Data Link

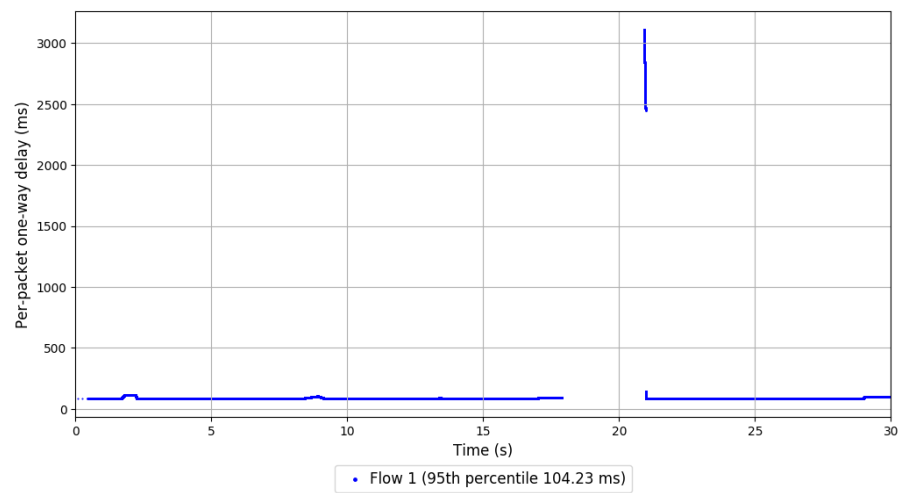
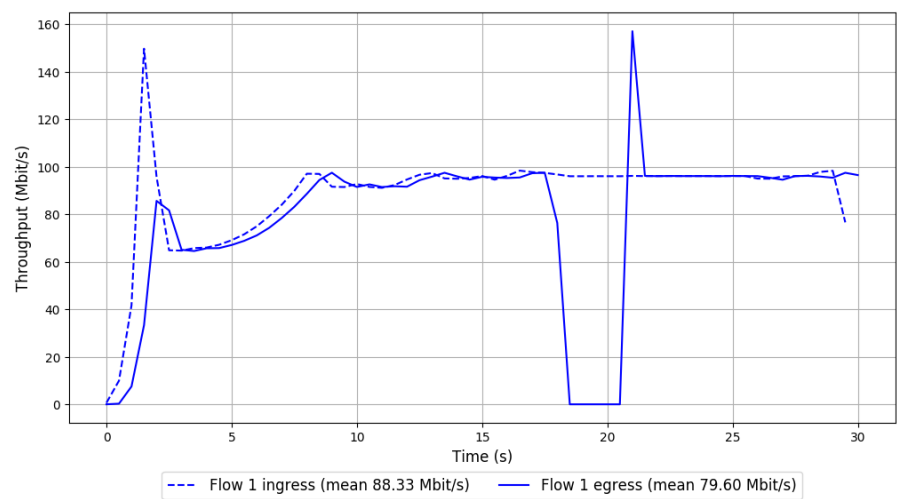


Run 2: Statistics of PCC-Allegro

Start at: 2018-11-30 04:20:57
End at: 2018-11-30 04:21:27
Local clock offset: -6.672 ms
Remote clock offset: 13.588 ms

Below is generated by plot.py at 2018-11-30 05:52:36
Datalink statistics
-- Total of 1 flow:
Average throughput: 79.60 Mbit/s
95th percentile per-packet one-way delay: 104.234 ms
Loss rate: 9.85%
-- Flow 1:
Average throughput: 79.60 Mbit/s
95th percentile per-packet one-way delay: 104.234 ms
Loss rate: 9.85%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2018-11-30 04:43:14

End at: 2018-11-30 04:43:44

Local clock offset: -6.21 ms

Remote clock offset: -0.328 ms

Below is generated by plot.py at 2018-11-30 05:52:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.08 Mbit/s

95th percentile per-packet one-way delay: 99.510 ms

Loss rate: 1.49%

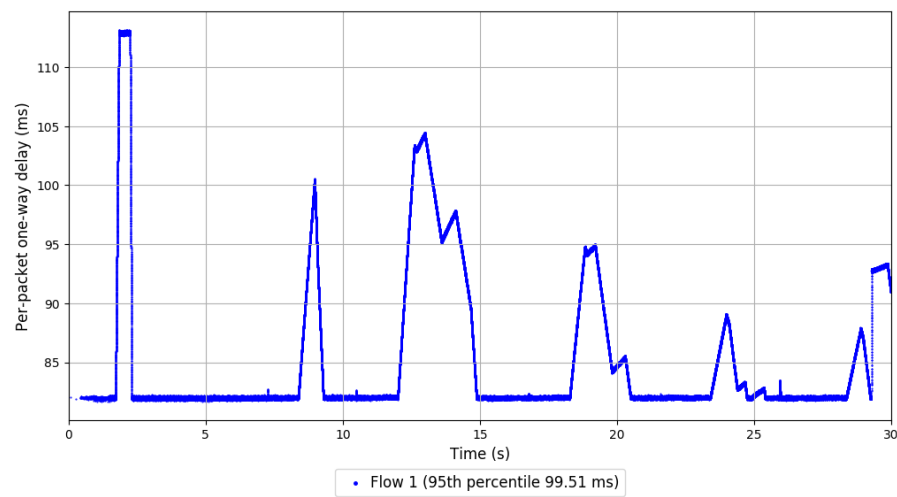
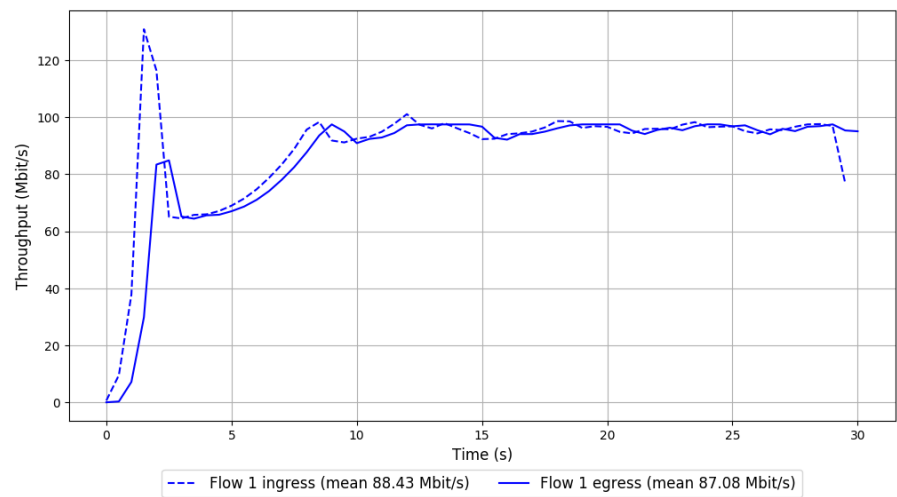
-- Flow 1:

Average throughput: 87.08 Mbit/s

95th percentile per-packet one-way delay: 99.510 ms

Loss rate: 1.49%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2018-11-30 05:05:29

End at: 2018-11-30 05:05:59

Local clock offset: -1.025 ms

Remote clock offset: -0.392 ms

Below is generated by plot.py at 2018-11-30 05:53:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.11 Mbit/s

95th percentile per-packet one-way delay: 92.922 ms

Loss rate: 1.50%

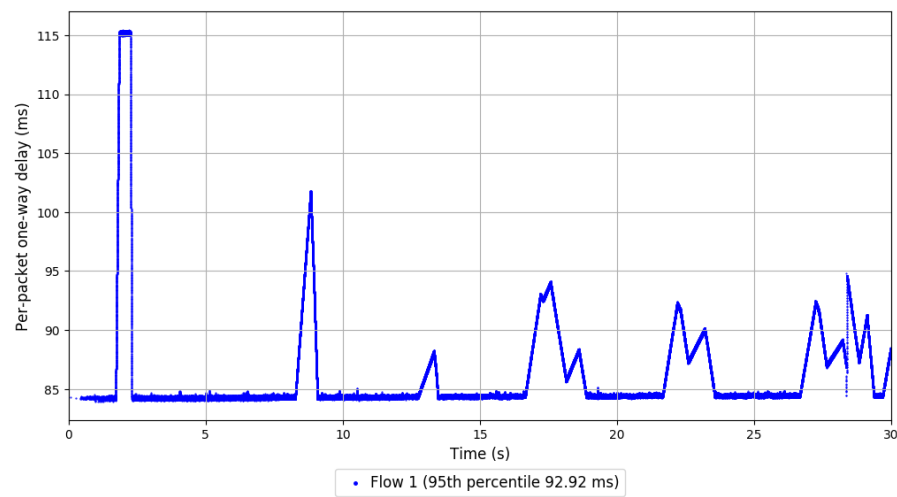
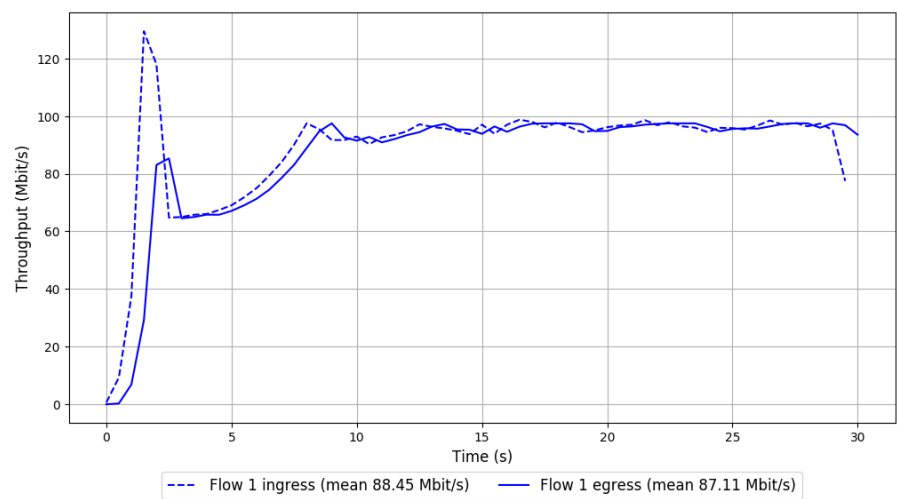
-- Flow 1:

Average throughput: 87.11 Mbit/s

95th percentile per-packet one-way delay: 92.922 ms

Loss rate: 1.50%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2018-11-30 05:27:50

End at: 2018-11-30 05:28:20

Local clock offset: -0.924 ms

Remote clock offset: -4.957 ms

Below is generated by plot.py at 2018-11-30 05:53:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 65.25 Mbit/s

95th percentile per-packet one-way delay: 1579.324 ms

Loss rate: 17.18%

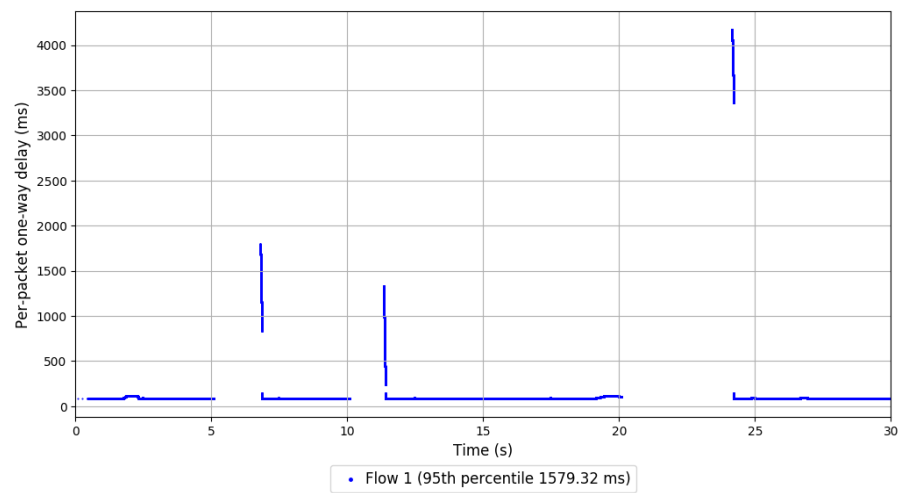
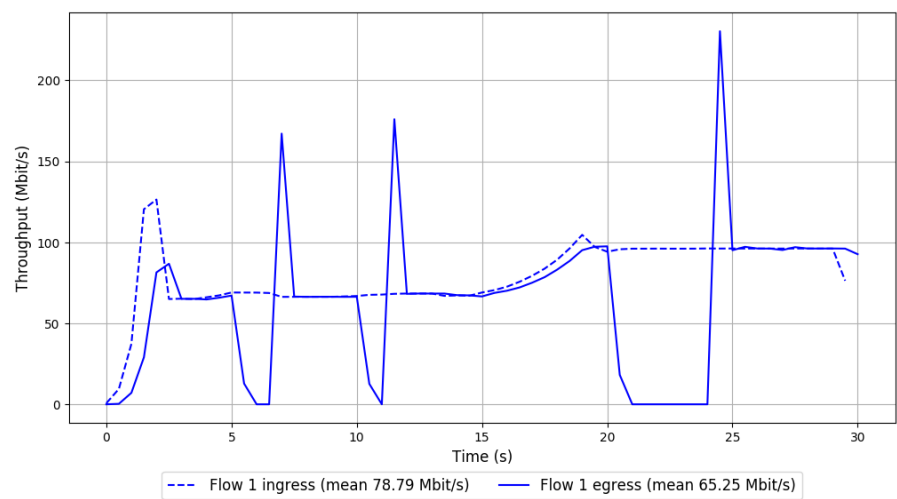
-- Flow 1:

Average throughput: 65.25 Mbit/s

95th percentile per-packet one-way delay: 1579.324 ms

Loss rate: 17.18%

Run 5: Report of PCC-Allegro — Data Link

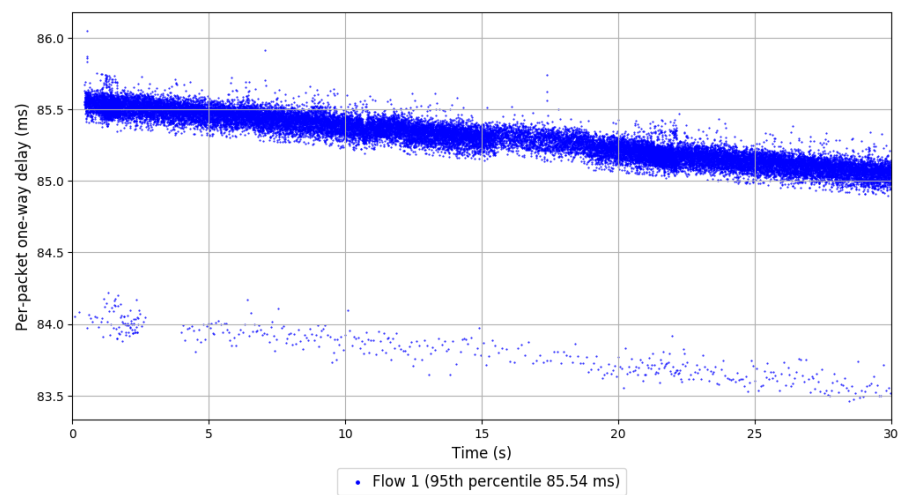
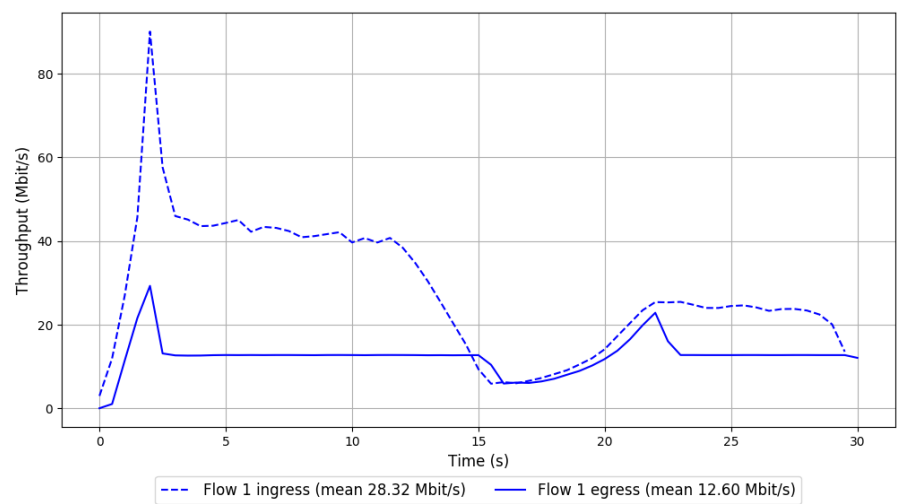


Run 1: Statistics of PCC-Expr

Start at: 2018-11-30 04:02:12
End at: 2018-11-30 04:02:42
Local clock offset: -6.385 ms
Remote clock offset: 17.242 ms

Below is generated by plot.py at 2018-11-30 05:53:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.60 Mbit/s
95th percentile per-packet one-way delay: 85.542 ms
Loss rate: 55.50%
-- Flow 1:
Average throughput: 12.60 Mbit/s
95th percentile per-packet one-way delay: 85.542 ms
Loss rate: 55.50%

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2018-11-30 04:24:28

End at: 2018-11-30 04:24:58

Local clock offset: -6.614 ms

Remote clock offset: 5.537 ms

Below is generated by plot.py at 2018-11-30 05:53:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.41 Mbit/s

95th percentile per-packet one-way delay: 82.206 ms

Loss rate: 44.41%

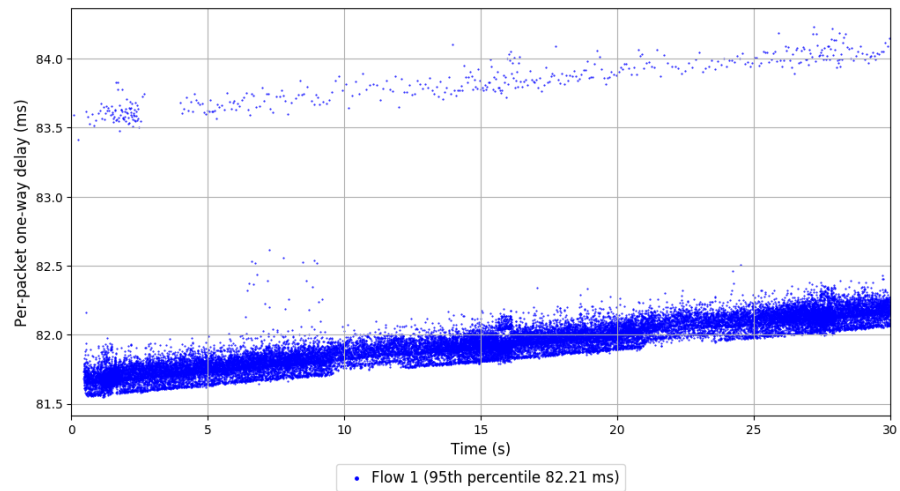
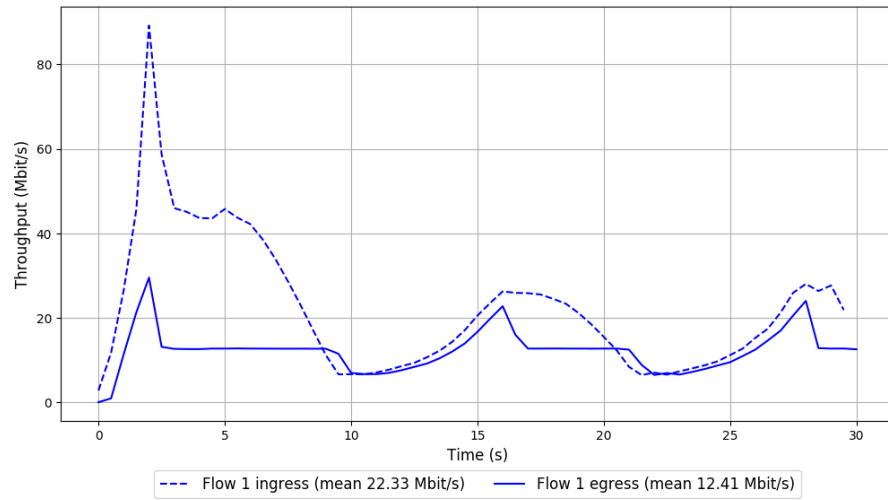
-- Flow 1:

Average throughput: 12.41 Mbit/s

95th percentile per-packet one-way delay: 82.206 ms

Loss rate: 44.41%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2018-11-30 04:46:45

End at: 2018-11-30 04:47:15

Local clock offset: -4.477 ms

Remote clock offset: 4.822 ms

Below is generated by plot.py at 2018-11-30 05:53:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.43 Mbit/s

95th percentile per-packet one-way delay: 85.680 ms

Loss rate: 44.20%

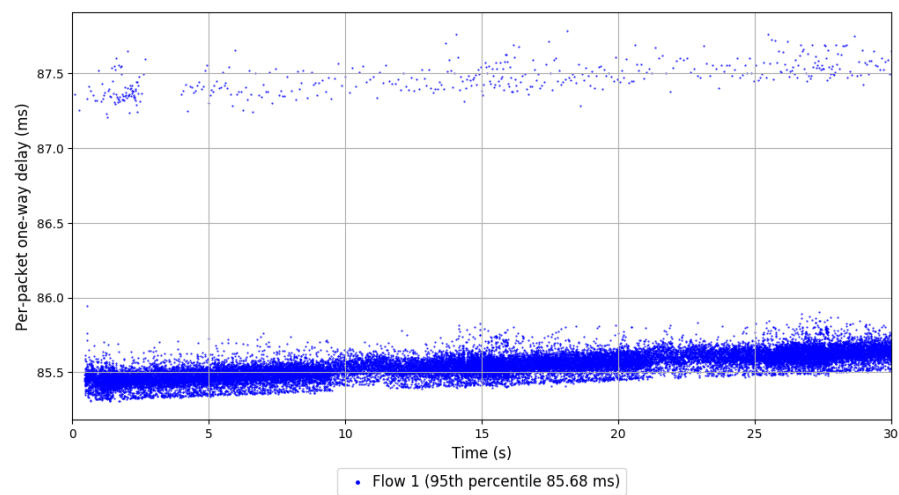
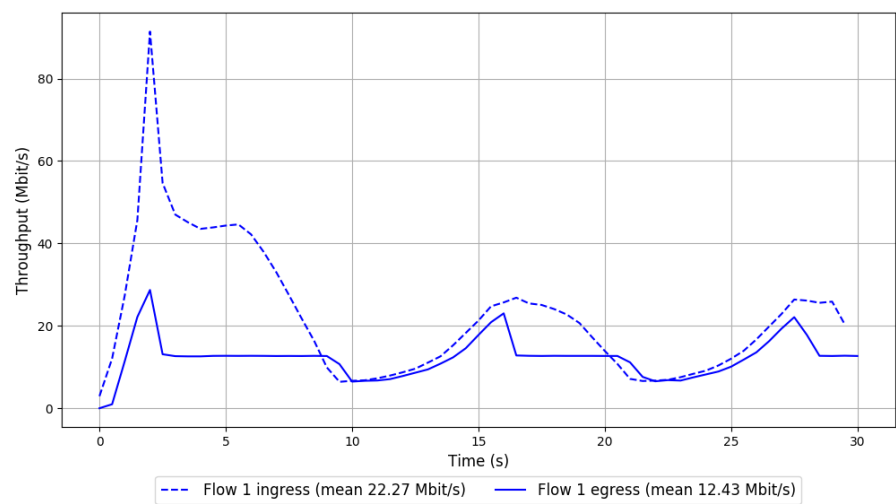
-- Flow 1:

Average throughput: 12.43 Mbit/s

95th percentile per-packet one-way delay: 85.680 ms

Loss rate: 44.20%

Run 3: Report of PCC-Expr — Data Link

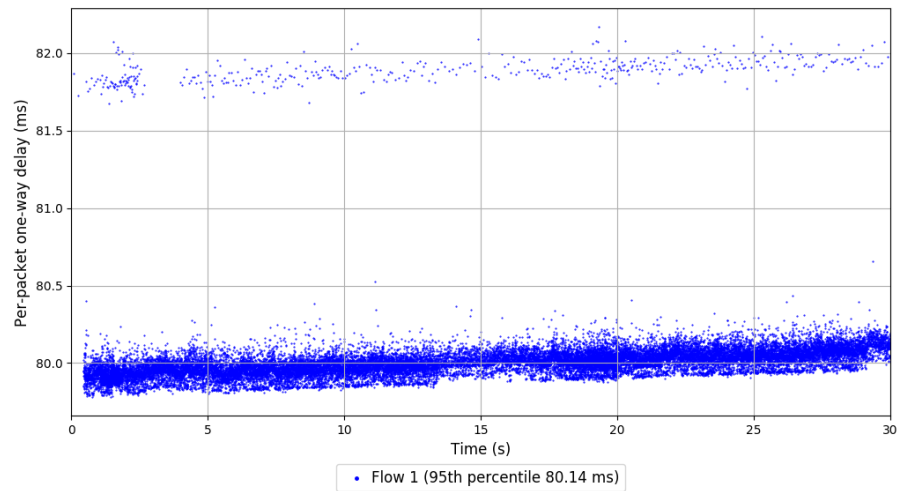
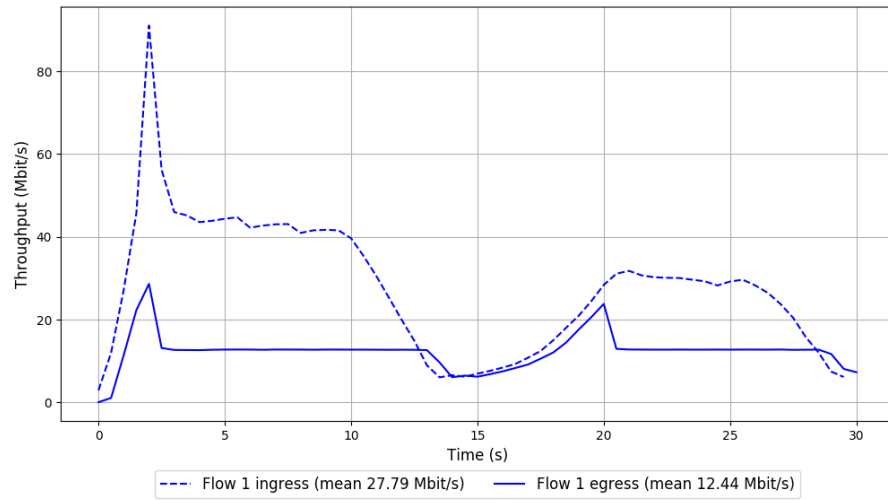


Run 4: Statistics of PCC-Expr

Start at: 2018-11-30 05:09:04
End at: 2018-11-30 05:09:34
Local clock offset: -0.702 ms
Remote clock offset: -5.146 ms

Below is generated by plot.py at 2018-11-30 05:53:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.44 Mbit/s
95th percentile per-packet one-way delay: 80.139 ms
Loss rate: 55.23%
-- Flow 1:
Average throughput: 12.44 Mbit/s
95th percentile per-packet one-way delay: 80.139 ms
Loss rate: 55.23%

Run 4: Report of PCC-Expr — Data Link

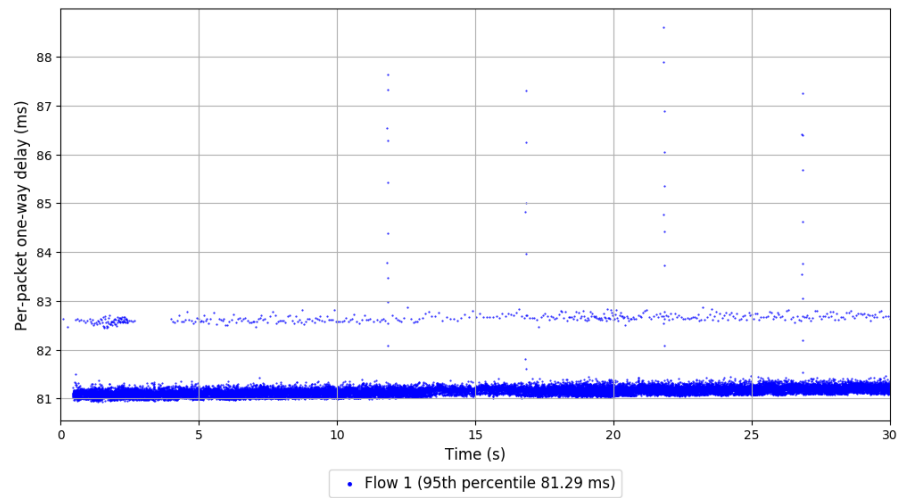
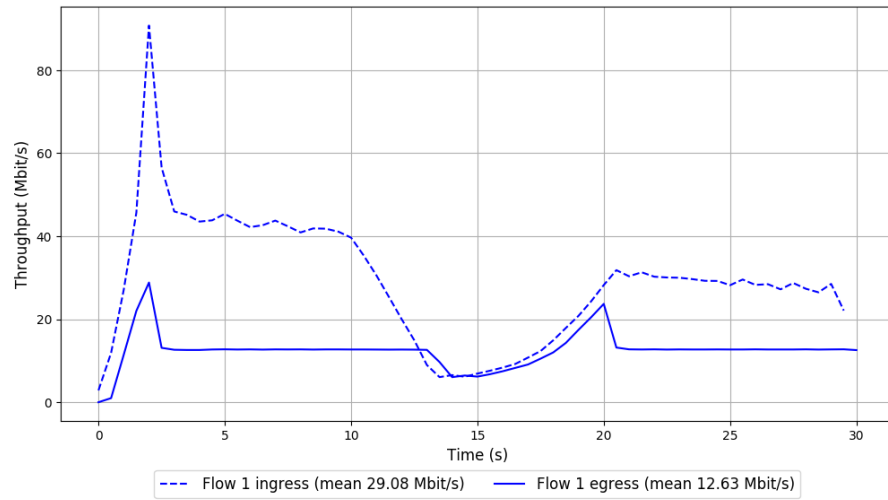


Run 5: Statistics of PCC-Expr

Start at: 2018-11-30 05:31:21
End at: 2018-11-30 05:31:51
Local clock offset: -0.896 ms
Remote clock offset: -9.719 ms

Below is generated by plot.py at 2018-11-30 05:53:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.63 Mbit/s
95th percentile per-packet one-way delay: 81.290 ms
Loss rate: 56.58%
-- Flow 1:
Average throughput: 12.63 Mbit/s
95th percentile per-packet one-way delay: 81.290 ms
Loss rate: 56.58%

Run 5: Report of PCC-Expr — Data Link

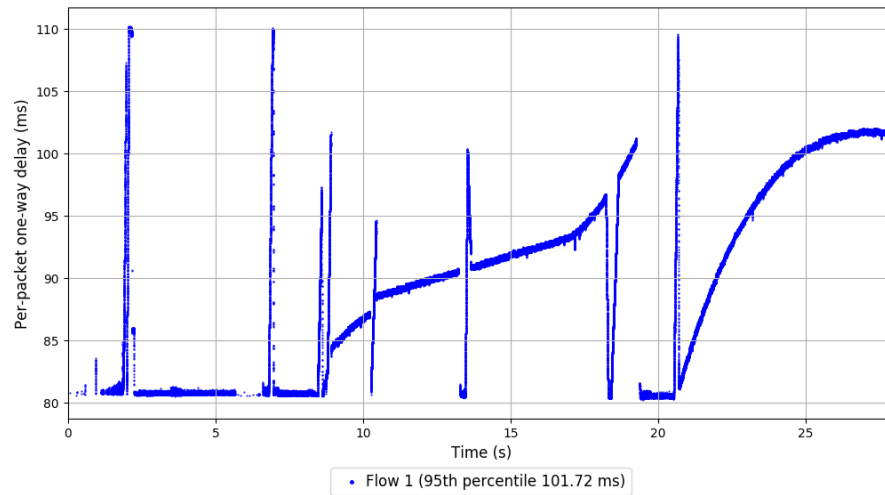
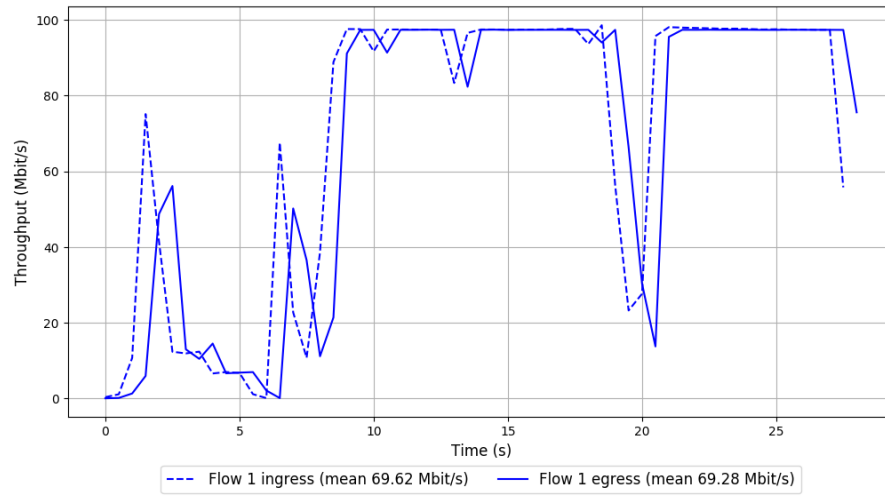


Run 1: Statistics of QUIC Cubic

Start at: 2018-11-30 04:01:01
End at: 2018-11-30 04:01:31
Local clock offset: -6.314 ms
Remote clock offset: 11.029 ms

Below is generated by plot.py at 2018-11-30 05:53:27
Datalink statistics
-- Total of 1 flow:
Average throughput: 69.28 Mbit/s
95th percentile per-packet one-way delay: 101.722 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 69.28 Mbit/s
95th percentile per-packet one-way delay: 101.722 ms
Loss rate: 0.40%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2018-11-30 04:23:16

End at: 2018-11-30 04:23:46

Local clock offset: -5.881 ms

Remote clock offset: 7.769 ms

Below is generated by plot.py at 2018-11-30 05:53:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.63 Mbit/s

95th percentile per-packet one-way delay: 103.453 ms

Loss rate: 0.33%

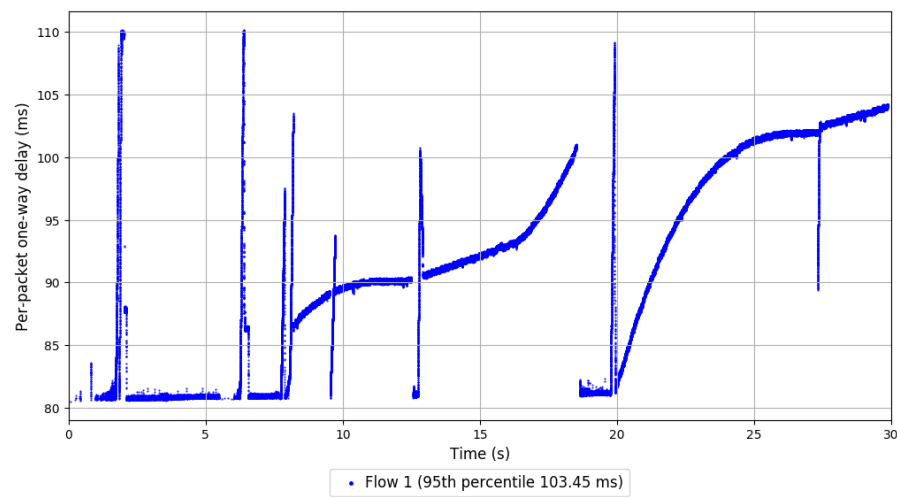
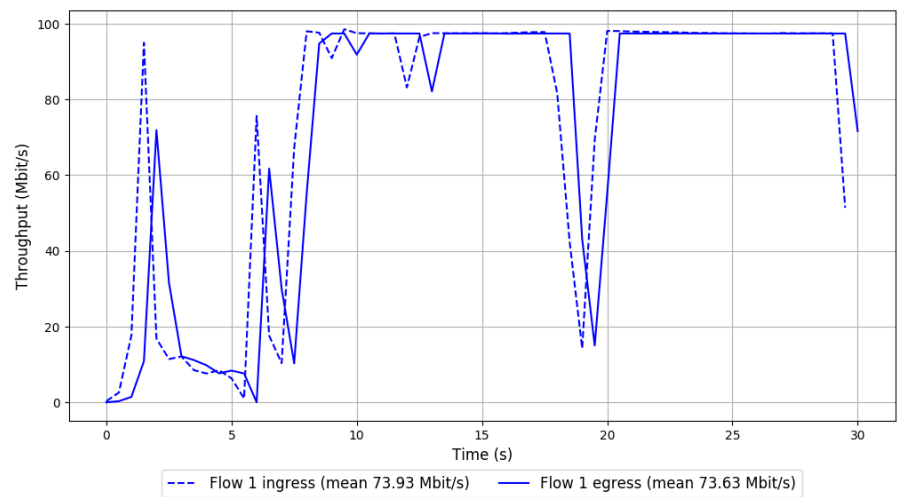
-- Flow 1:

Average throughput: 73.63 Mbit/s

95th percentile per-packet one-way delay: 103.453 ms

Loss rate: 0.33%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2018-11-30 04:45:34

End at: 2018-11-30 04:46:04

Local clock offset: -4.926 ms

Remote clock offset: 4.625 ms

Below is generated by plot.py at 2018-11-30 05:53:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.66 Mbit/s

95th percentile per-packet one-way delay: 107.110 ms

Loss rate: 0.34%

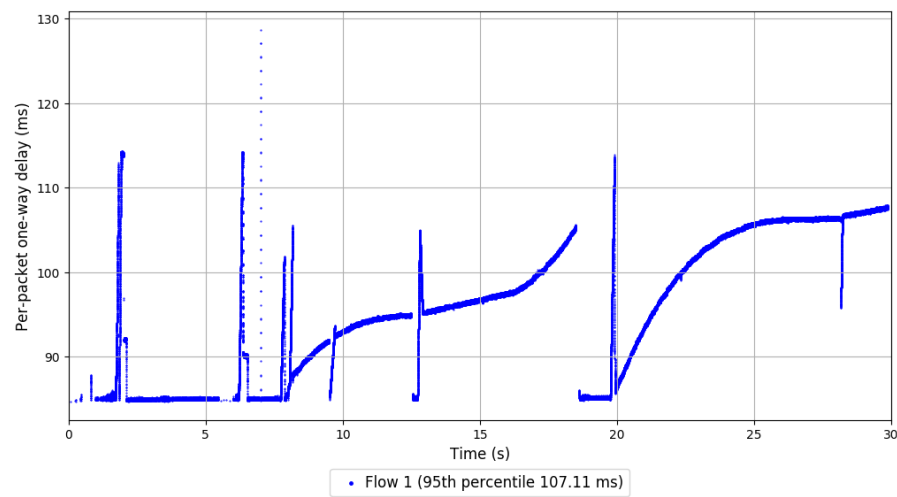
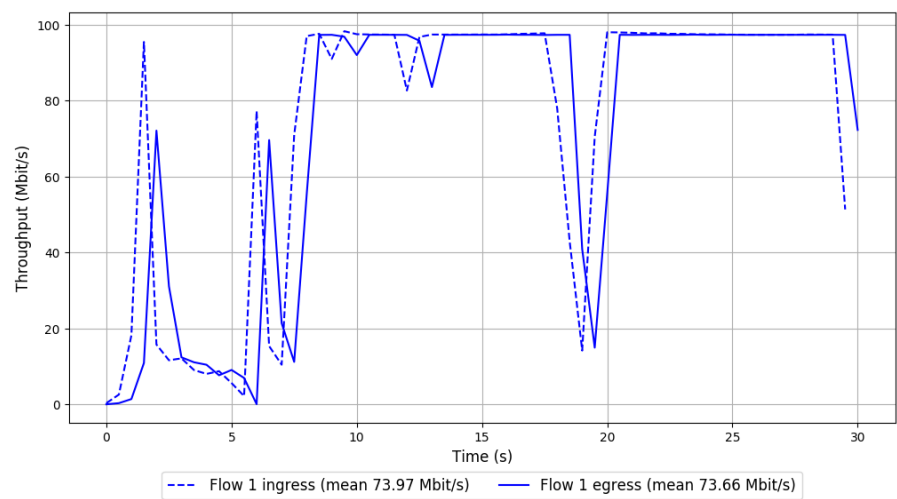
-- Flow 1:

Average throughput: 73.66 Mbit/s

95th percentile per-packet one-way delay: 107.110 ms

Loss rate: 0.34%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2018-11-30 05:07:48

End at: 2018-11-30 05:08:19

Local clock offset: -0.776 ms

Remote clock offset: -3.718 ms

Below is generated by plot.py at 2018-11-30 05:53:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 44.24 Mbit/s

95th percentile per-packet one-way delay: 105.930 ms

Loss rate: 0.55%

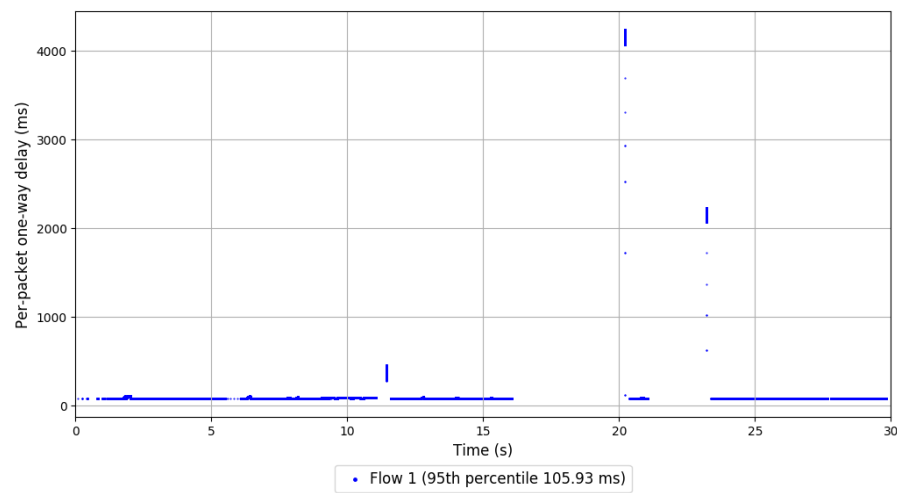
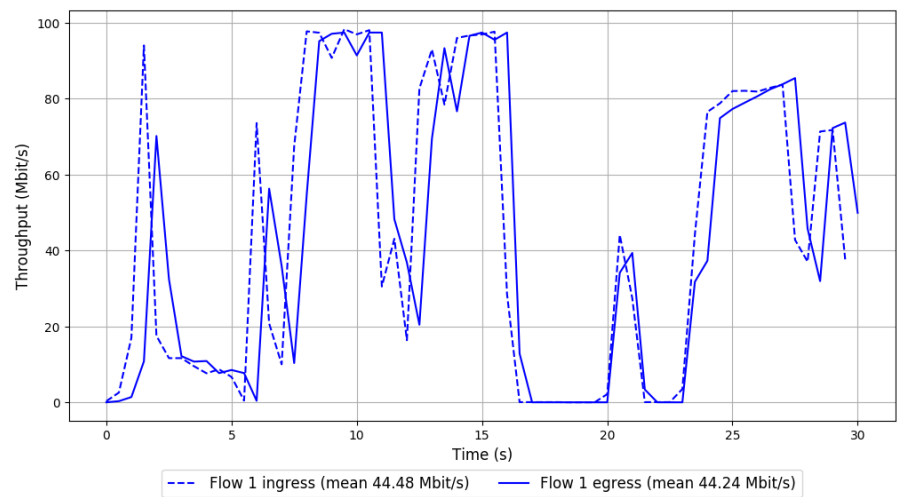
-- Flow 1:

Average throughput: 44.24 Mbit/s

95th percentile per-packet one-way delay: 105.930 ms

Loss rate: 0.55%

Run 4: Report of QUIC Cubic — Data Link

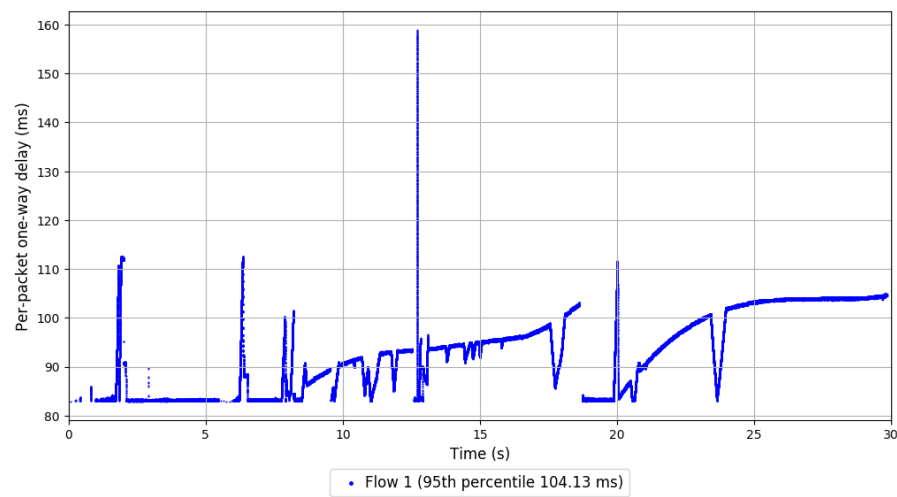
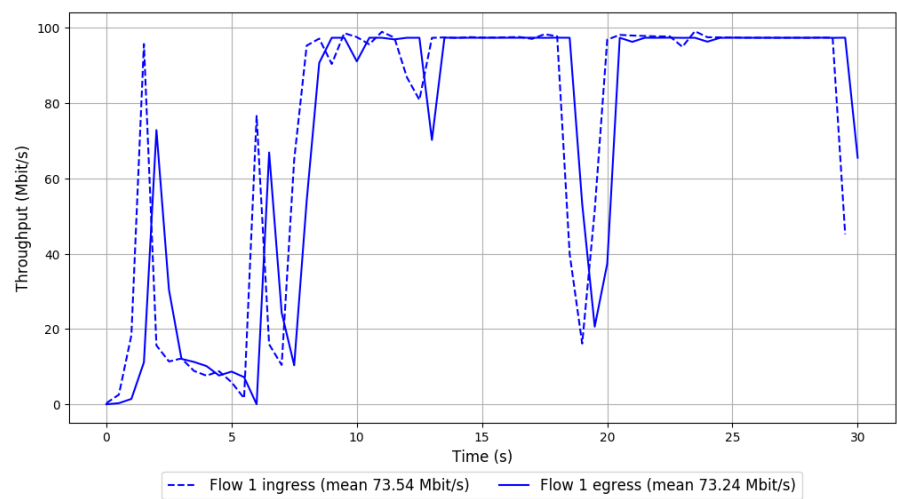


Run 5: Statistics of QUIC Cubic

Start at: 2018-11-30 05:30:10
End at: 2018-11-30 05:30:40
Local clock offset: -0.22 ms
Remote clock offset: -6.717 ms

Below is generated by plot.py at 2018-11-30 05:53:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 73.24 Mbit/s
95th percentile per-packet one-way delay: 104.131 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 73.24 Mbit/s
95th percentile per-packet one-way delay: 104.131 ms
Loss rate: 0.34%

Run 5: Report of QUIC Cubic — Data Link

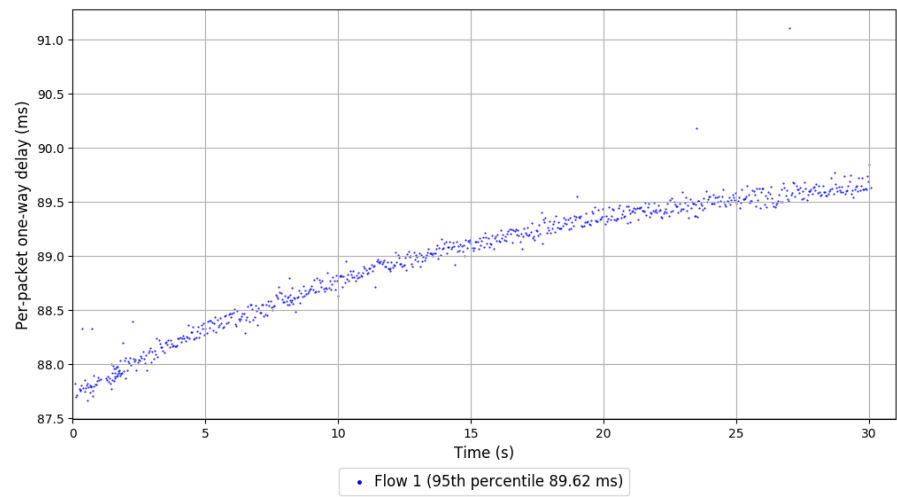
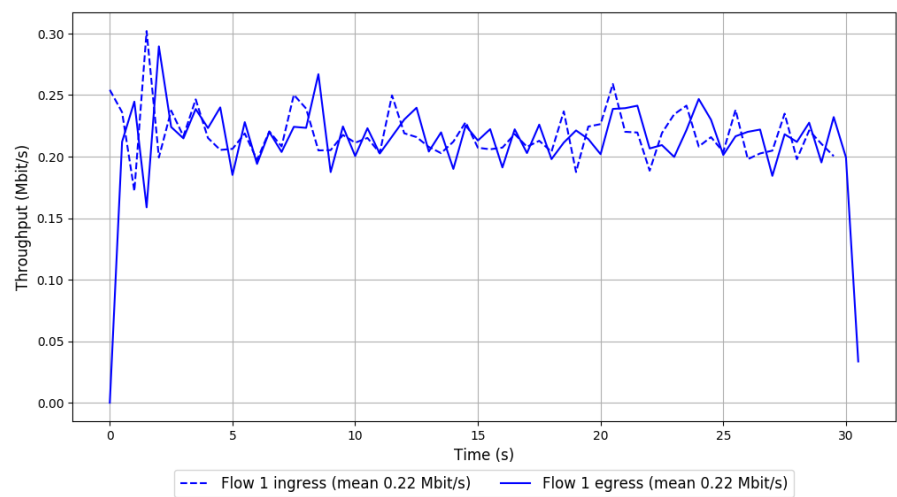


Run 1: Statistics of SCReAM

Start at: 2018-11-30 04:09:11
End at: 2018-11-30 04:09:41
Local clock offset: -6.319 ms
Remote clock offset: 15.099 ms

Below is generated by plot.py at 2018-11-30 05:53:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.622 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 89.622 ms
Loss rate: 0.00%

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2018-11-30 04:31:29

End at: 2018-11-30 04:31:59

Local clock offset: -5.594 ms

Remote clock offset: 5.275 ms

Below is generated by plot.py at 2018-11-30 05:53:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.044 ms

Loss rate: 0.00%

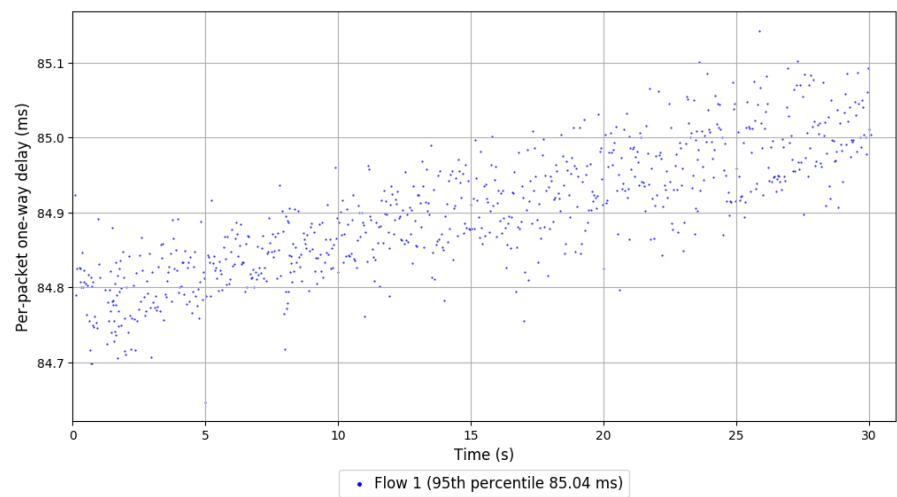
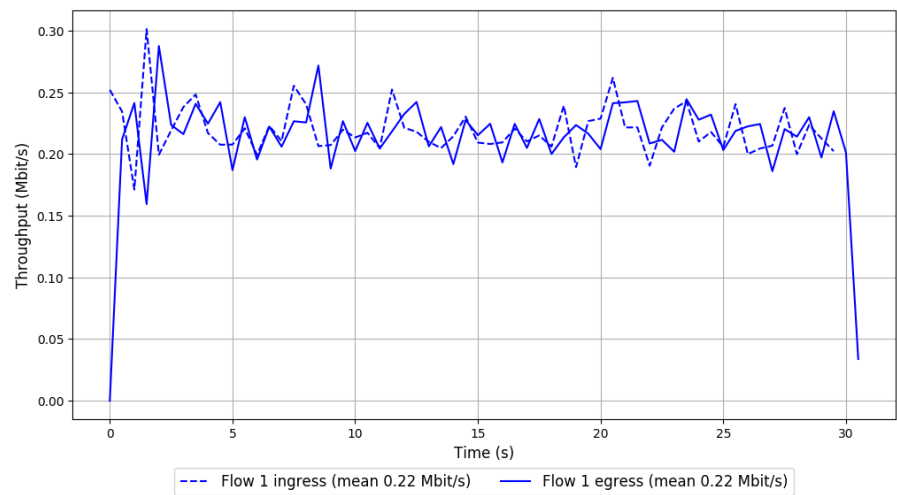
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.044 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2018-11-30 04:53:47

End at: 2018-11-30 04:54:17

Local clock offset: -2.898 ms

Remote clock offset: 2.956 ms

Below is generated by plot.py at 2018-11-30 05:53:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 90.541 ms

Loss rate: 0.00%

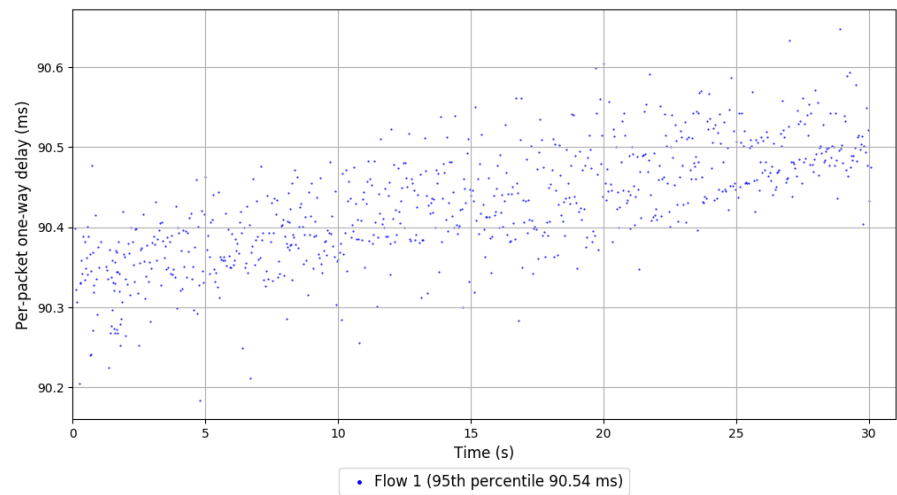
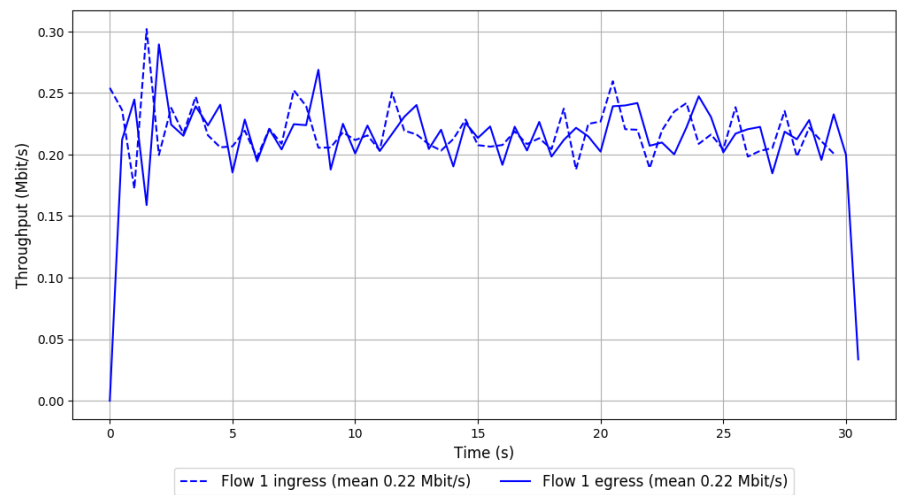
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 90.541 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link

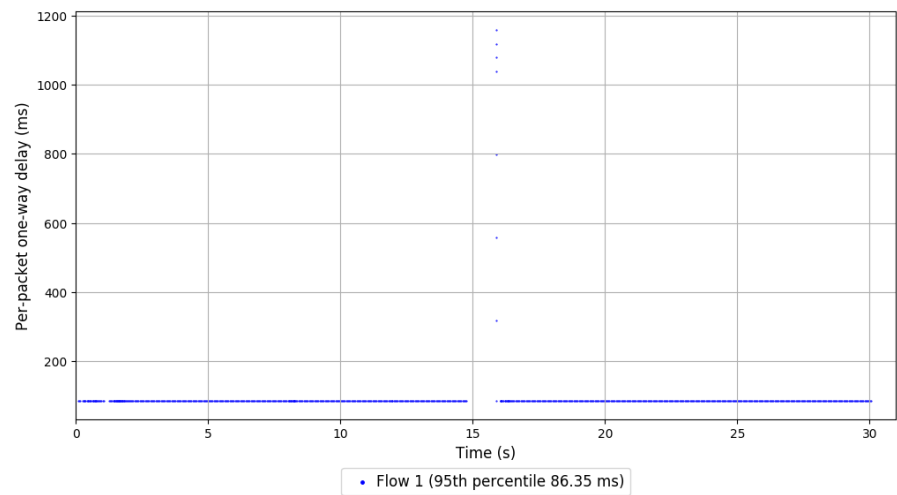
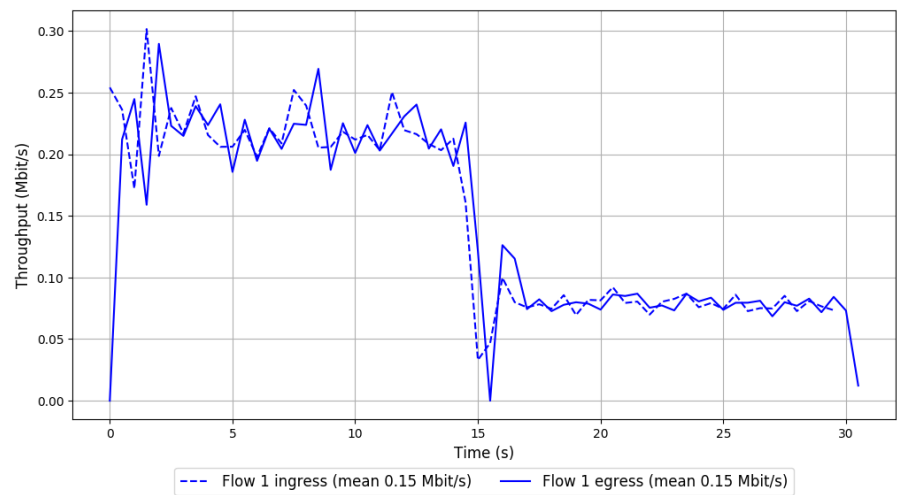


Run 4: Statistics of SCReAM

Start at: 2018-11-30 05:16:07
End at: 2018-11-30 05:16:37
Local clock offset: 0.366 ms
Remote clock offset: -5.588 ms

Below is generated by plot.py at 2018-11-30 05:53:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 86.350 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 86.350 ms
Loss rate: 0.00%

Run 4: Report of SReAM — Data Link

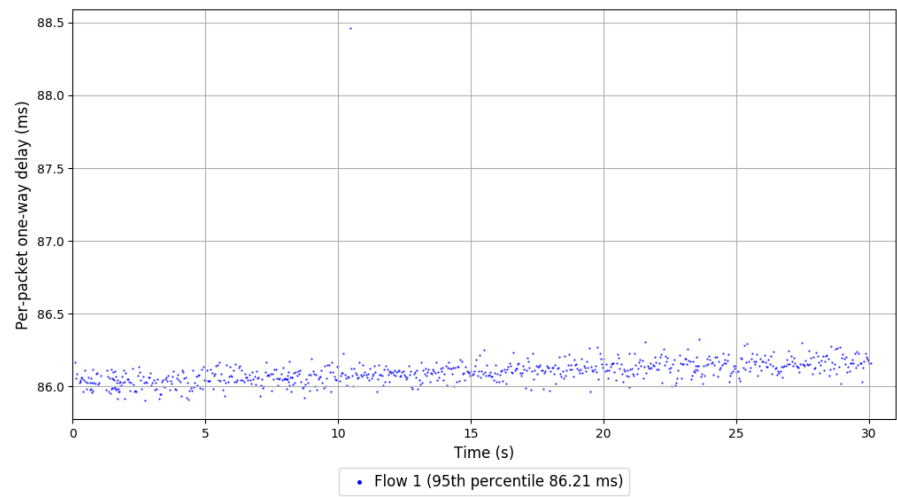
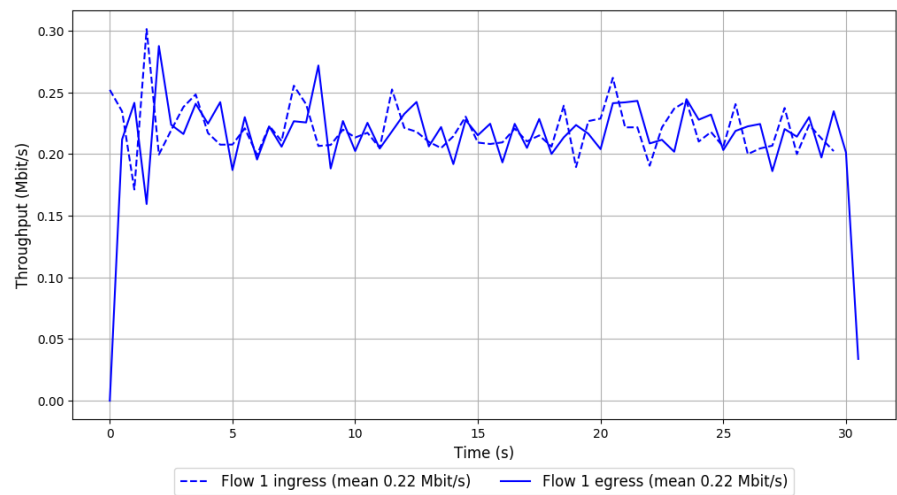


Run 5: Statistics of SCReAM

Start at: 2018-11-30 05:38:22
End at: 2018-11-30 05:38:52
Local clock offset: -0.72 ms
Remote clock offset: -6.878 ms

Below is generated by plot.py at 2018-11-30 05:53:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.213 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.213 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link

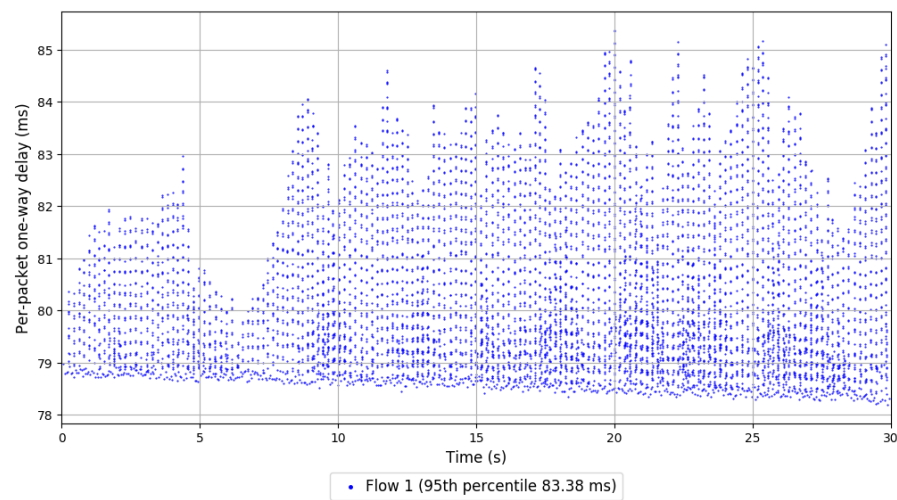
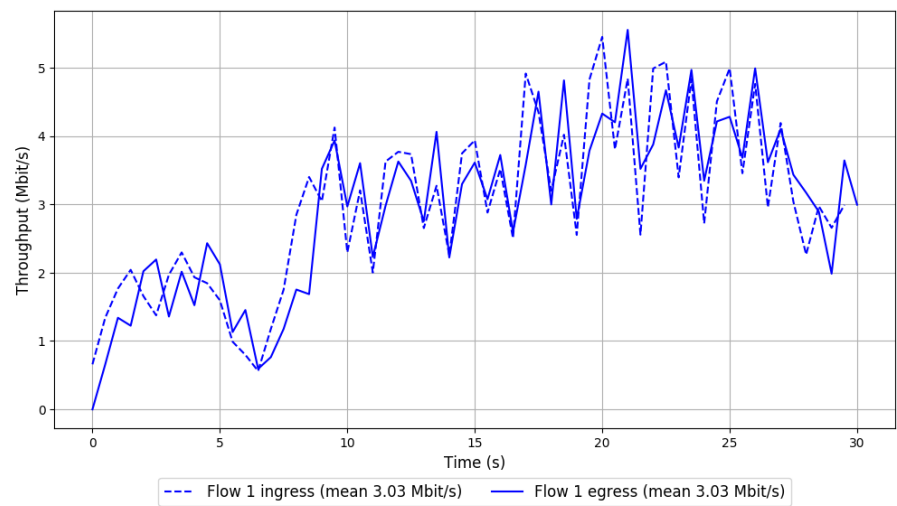


Run 1: Statistics of Sprout

Start at: 2018-11-30 04:04:34
End at: 2018-11-30 04:05:04
Local clock offset: -6.321 ms
Remote clock offset: 14.586 ms

Below is generated by plot.py at 2018-11-30 05:53:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.03 Mbit/s
95th percentile per-packet one-way delay: 83.382 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.03 Mbit/s
95th percentile per-packet one-way delay: 83.382 ms
Loss rate: 0.00%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

Start at: 2018-11-30 04:26:49

End at: 2018-11-30 04:27:20

Local clock offset: -5.708 ms

Remote clock offset: 4.583 ms

Below is generated by plot.py at 2018-11-30 05:53:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.05 Mbit/s

95th percentile per-packet one-way delay: 87.527 ms

Loss rate: 0.00%

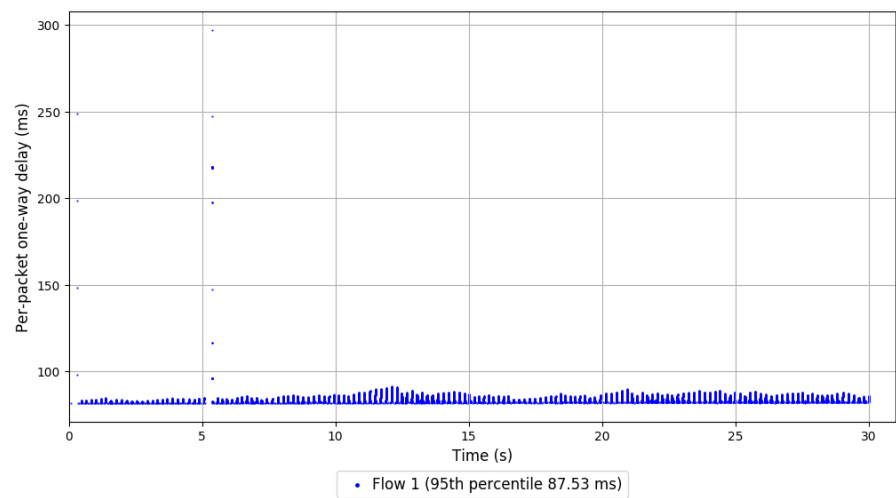
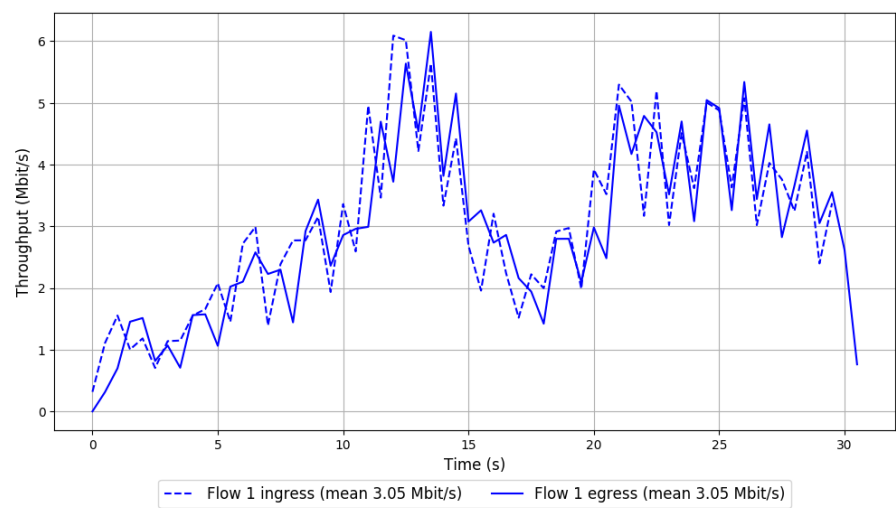
-- Flow 1:

Average throughput: 3.05 Mbit/s

95th percentile per-packet one-way delay: 87.527 ms

Loss rate: 0.00%

Run 2: Report of Sprout — Data Link

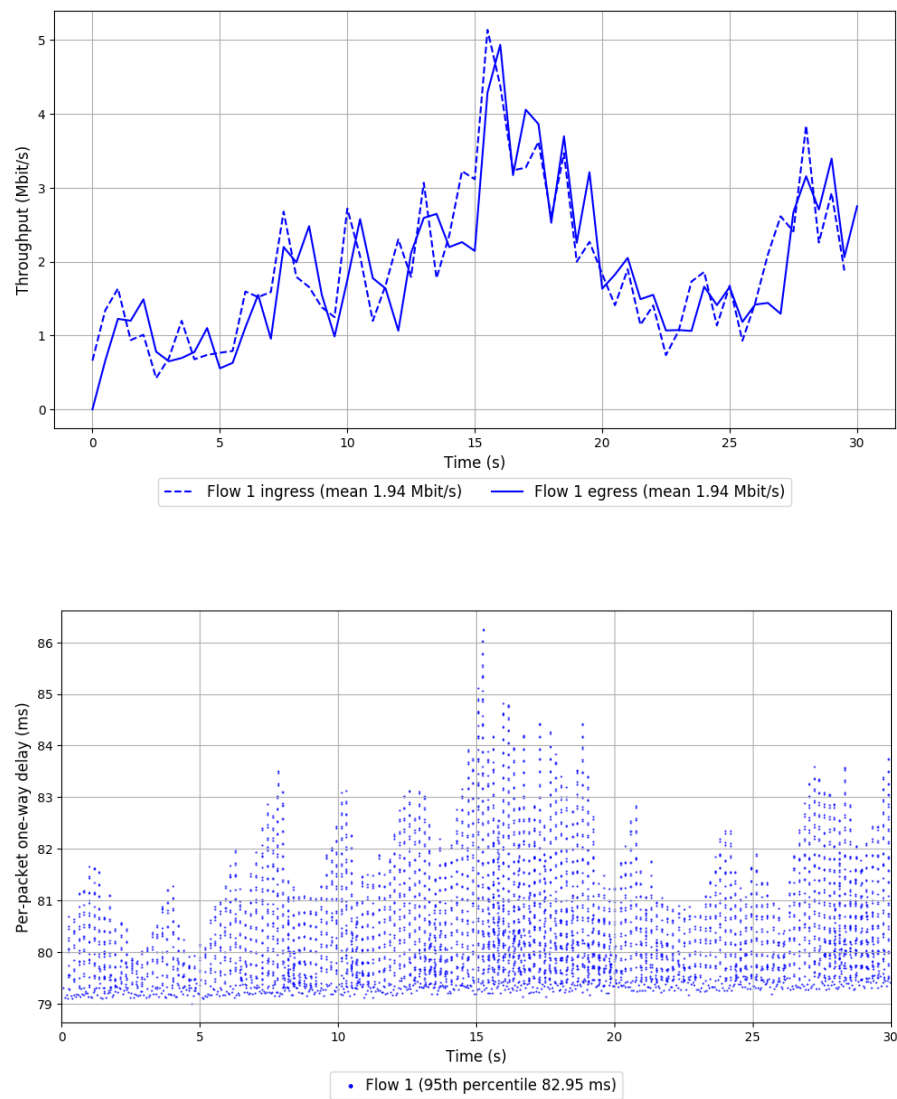


Run 3: Statistics of Sprout

Start at: 2018-11-30 04:49:08
End at: 2018-11-30 04:49:38
Local clock offset: -3.482 ms
Remote clock offset: -1.321 ms

Below is generated by plot.py at 2018-11-30 05:53:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 82.952 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 82.952 ms
Loss rate: 0.00%

Run 3: Report of Sprout — Data Link

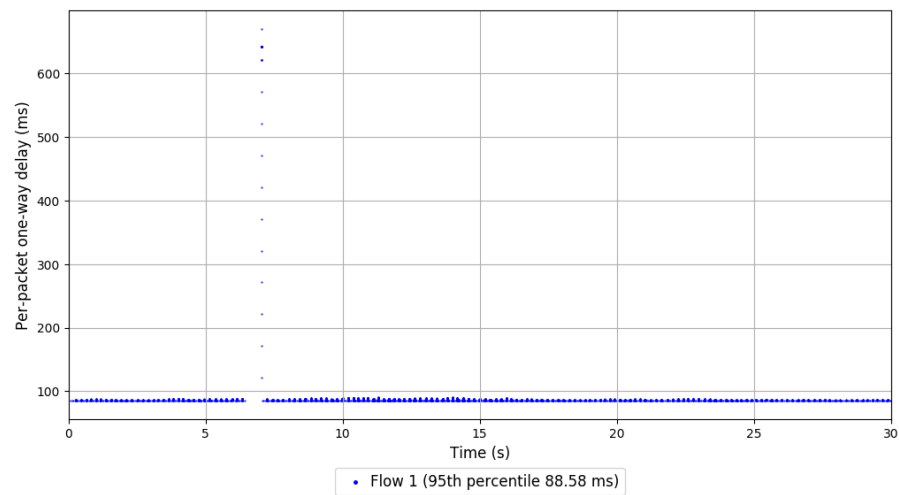
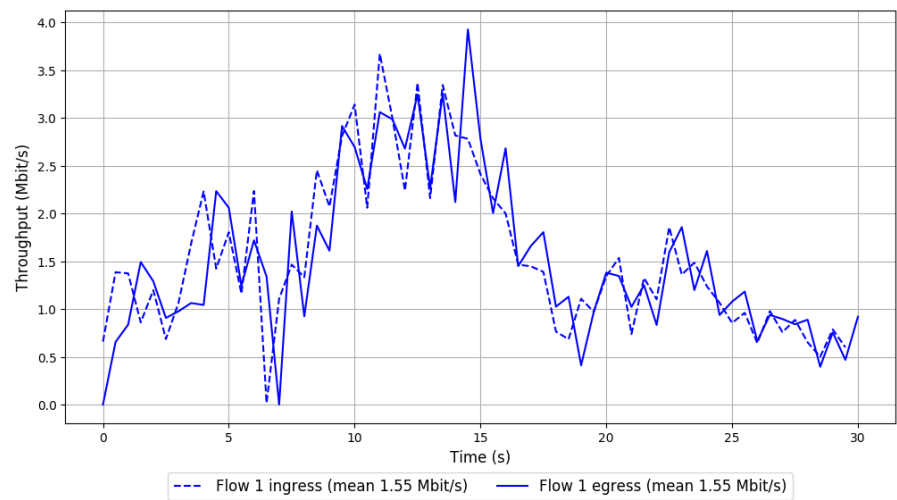


Run 4: Statistics of Sprout

Start at: 2018-11-30 05:11:28
End at: 2018-11-30 05:11:58
Local clock offset: 0.347 ms
Remote clock offset: -0.992 ms

Below is generated by plot.py at 2018-11-30 05:53:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 88.579 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 88.579 ms
Loss rate: 0.00%

Run 4: Report of Sprout — Data Link

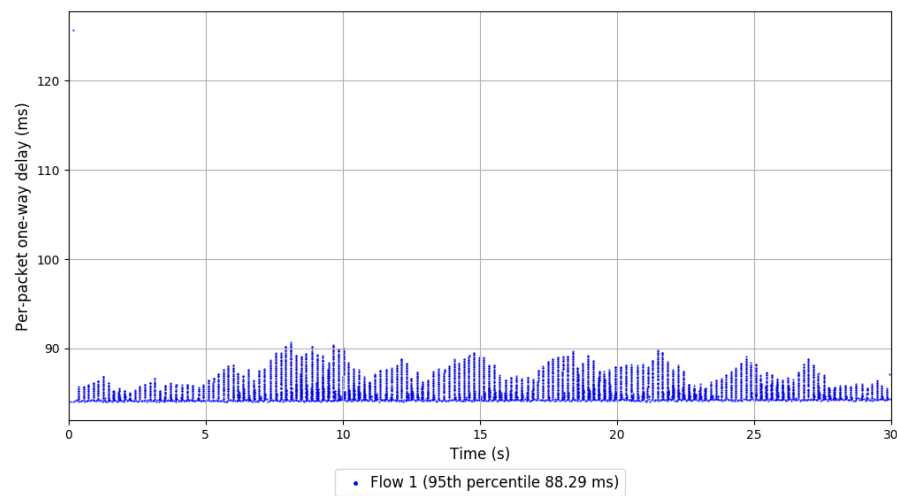
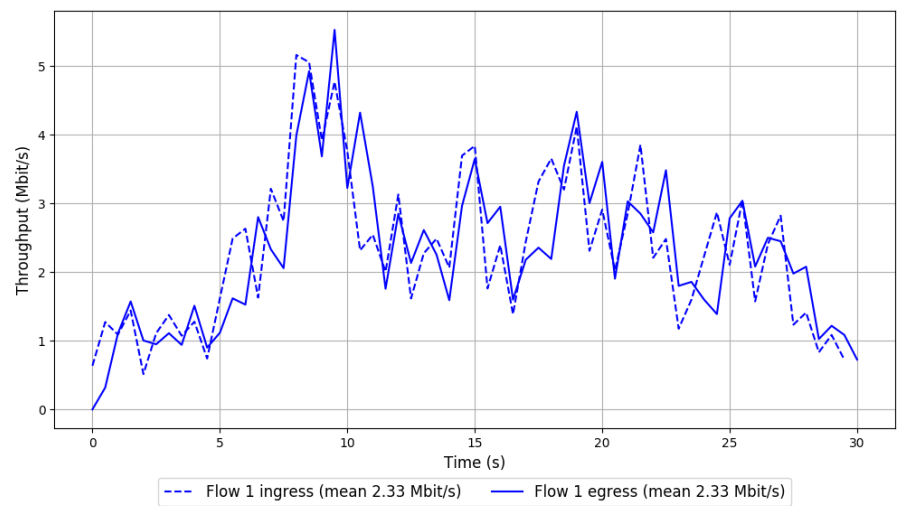


Run 5: Statistics of Sprout

Start at: 2018-11-30 05:33:43
End at: 2018-11-30 05:34:13
Local clock offset: -0.1 ms
Remote clock offset: -6.476 ms

Below is generated by plot.py at 2018-11-30 05:53:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 88.291 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 88.291 ms
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

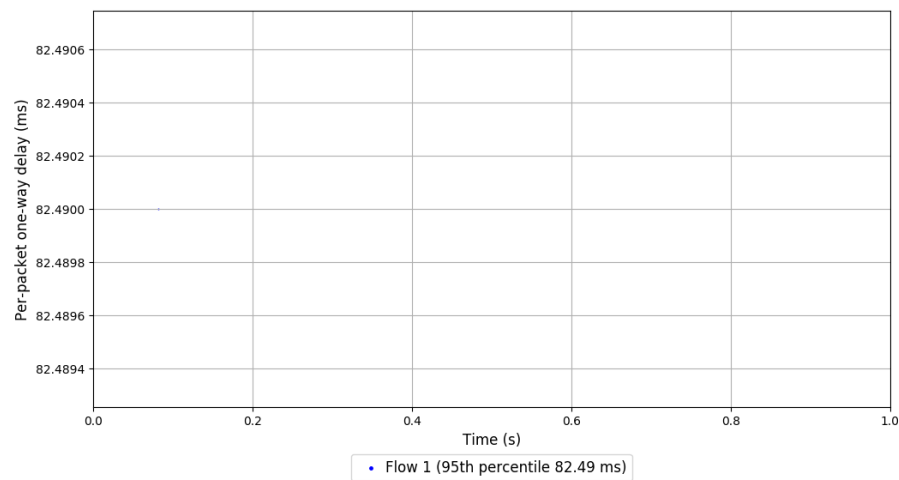
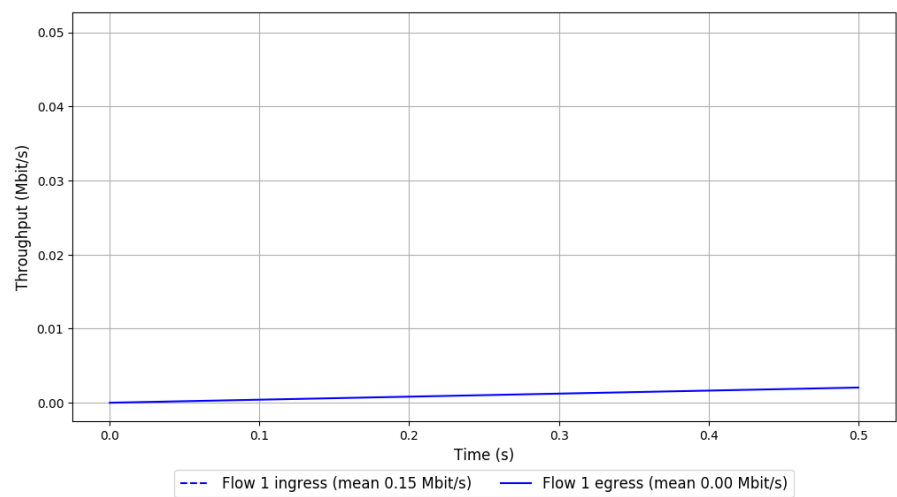
Start at: 2018-11-30 04:16:16

End at: 2018-11-30 04:16:46

Local clock offset: -6.181 ms

Remote clock offset: 14.16 ms

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



Run 2: Statistics of TaoVA-100x

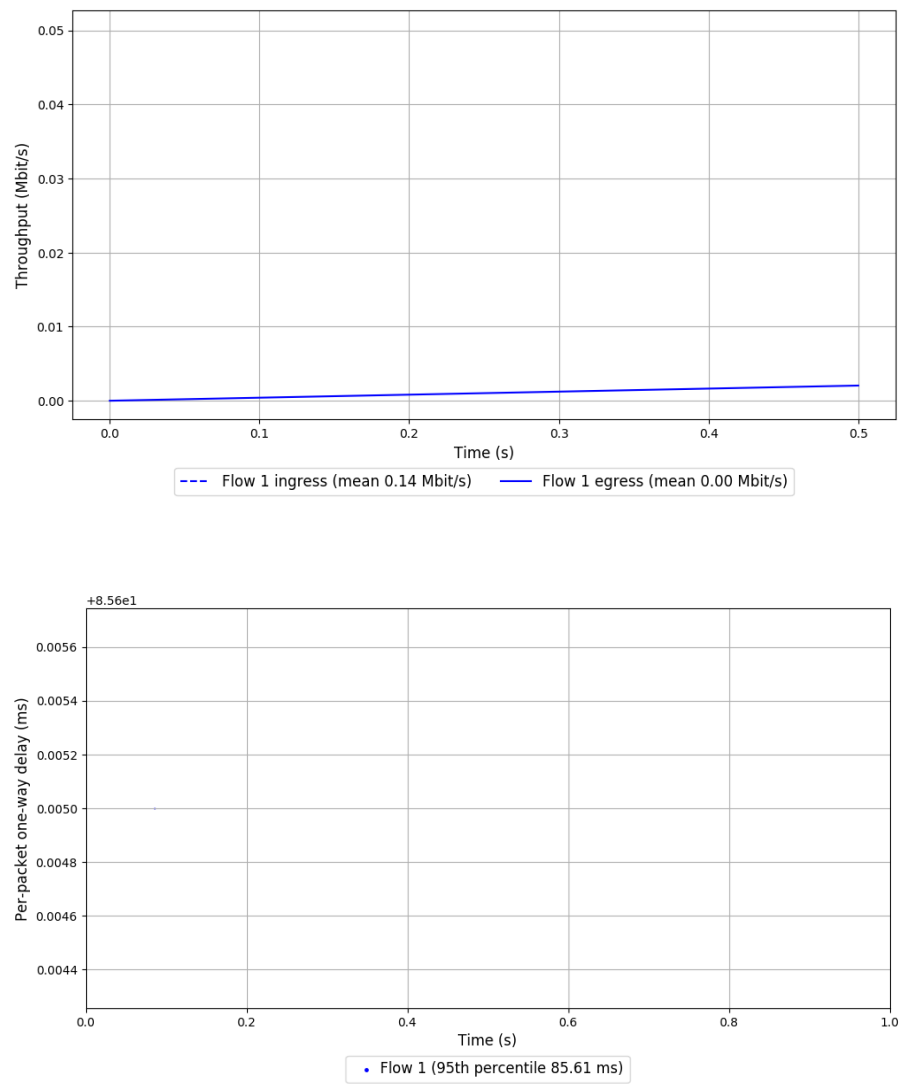
Start at: 2018-11-30 04:38:30

End at: 2018-11-30 04:39:00

Local clock offset: -6.218 ms

Remote clock offset: -2.378 ms

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



Run 3: Statistics of TaoVA-100x

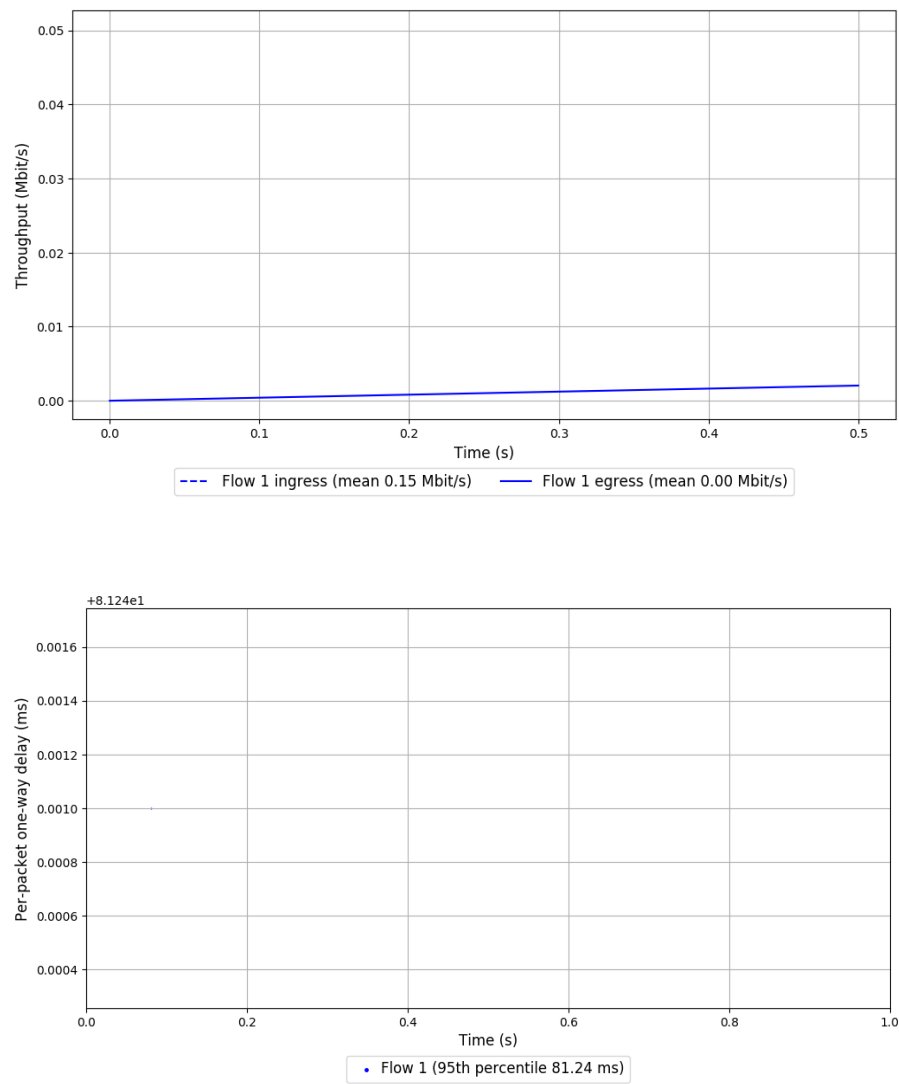
Start at: 2018-11-30 05:00:47

End at: 2018-11-30 05:01:17

Local clock offset: -1.624 ms

Remote clock offset: -1.899 ms

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



Run 4: Statistics of TaoVA-100x

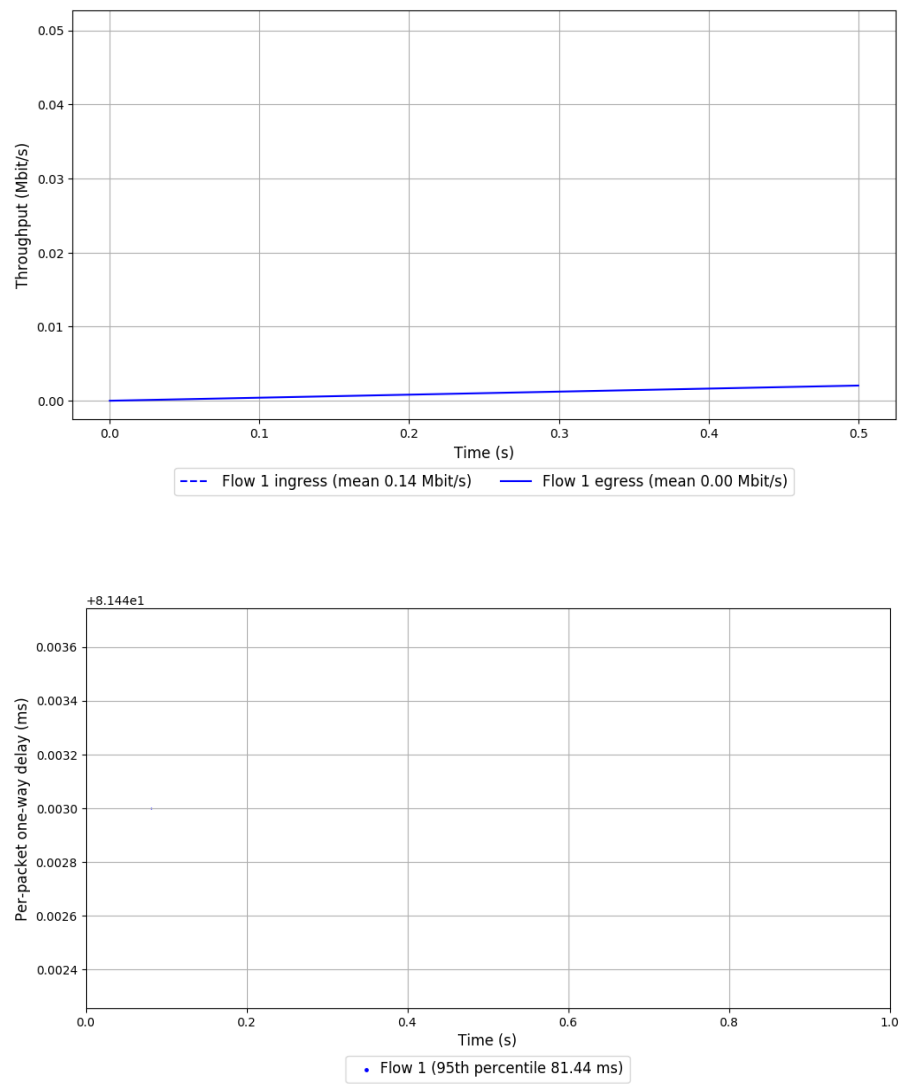
Start at: 2018-11-30 05:23:07

End at: 2018-11-30 05:23:37

Local clock offset: -0.936 ms

Remote clock offset: -8.668 ms

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



Run 5: Statistics of TaoVA-100x

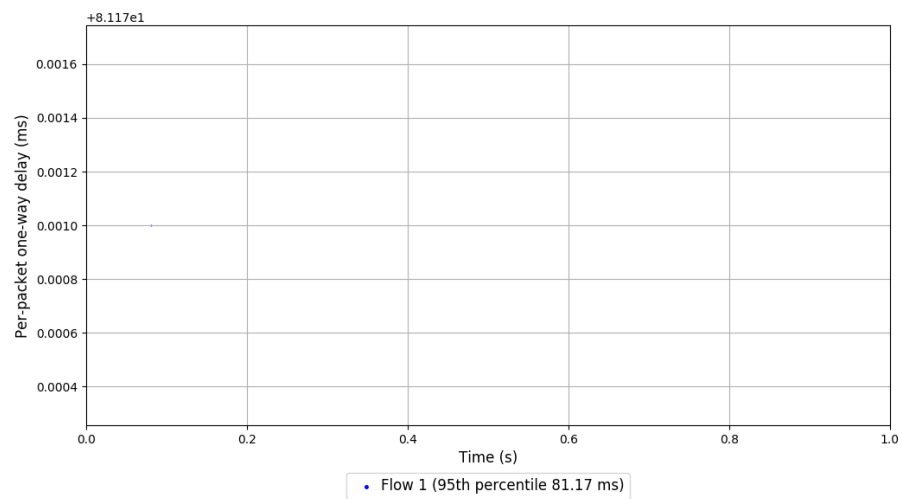
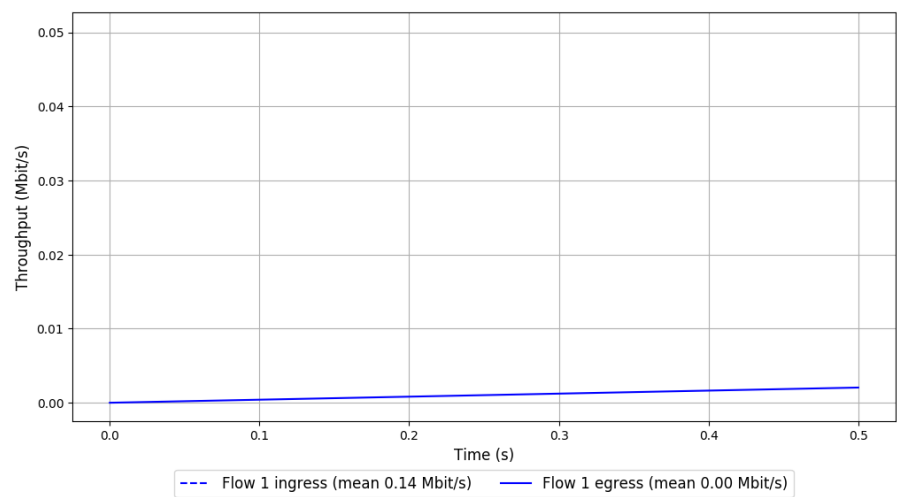
Start at: 2018-11-30 05:45:32

End at: 2018-11-30 05:46:02

Local clock offset: -0.789 ms

Remote clock offset: -14.865 ms

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

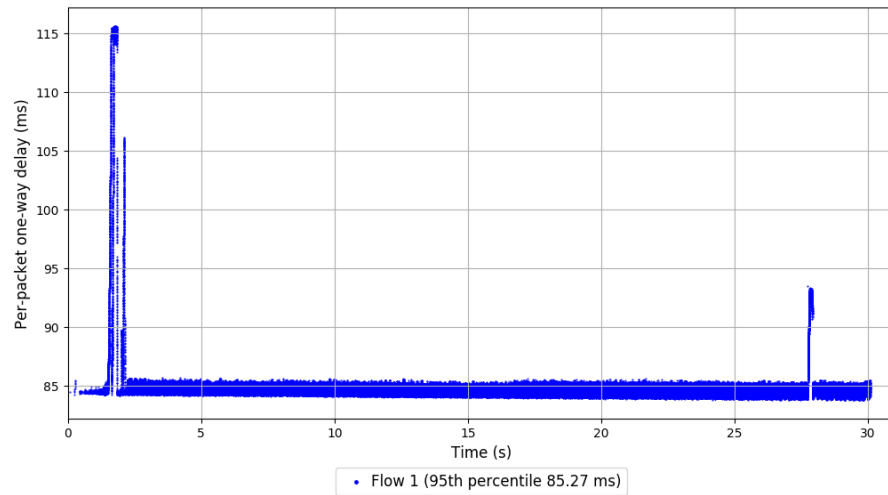
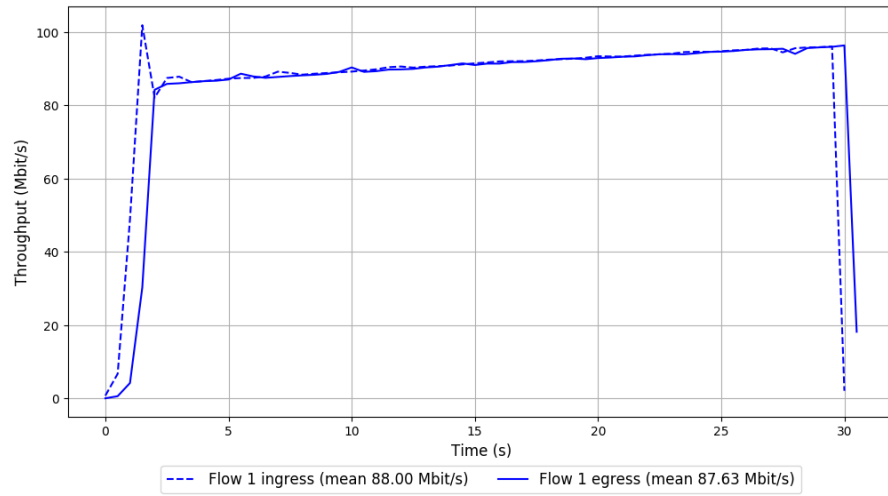


Run 1: Statistics of TCP Vegas

Start at: 2018-11-30 03:55:10
End at: 2018-11-30 03:55:40
Local clock offset: -6.335 ms
Remote clock offset: 10.231 ms

Below is generated by plot.py at 2018-11-30 05:54:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 87.63 Mbit/s
95th percentile per-packet one-way delay: 85.271 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 87.63 Mbit/s
95th percentile per-packet one-way delay: 85.271 ms
Loss rate: 0.41%

Run 1: Report of TCP Vegas — Data Link

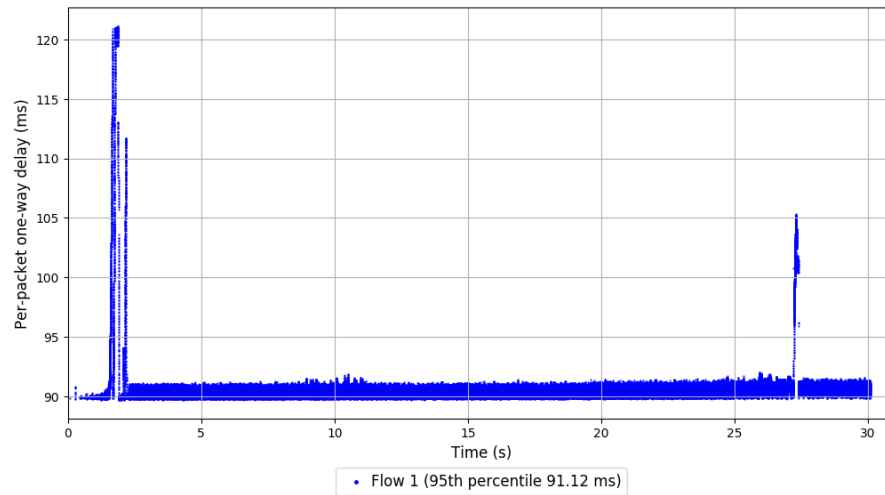
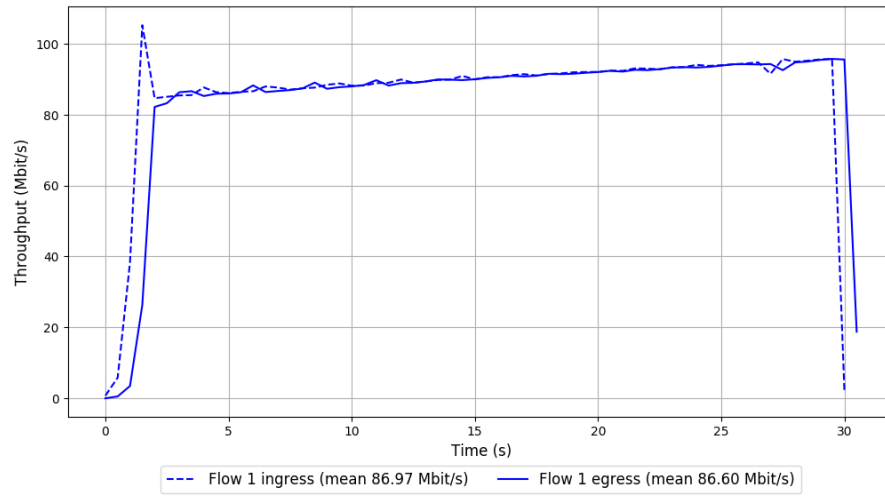


Run 2: Statistics of TCP Vegas

Start at: 2018-11-30 04:17:23
End at: 2018-11-30 04:17:53
Local clock offset: -6.112 ms
Remote clock offset: 15.129 ms

Below is generated by plot.py at 2018-11-30 05:54:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 86.60 Mbit/s
95th percentile per-packet one-way delay: 91.123 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 86.60 Mbit/s
95th percentile per-packet one-way delay: 91.123 ms
Loss rate: 0.44%

Run 2: Report of TCP Vegas — Data Link

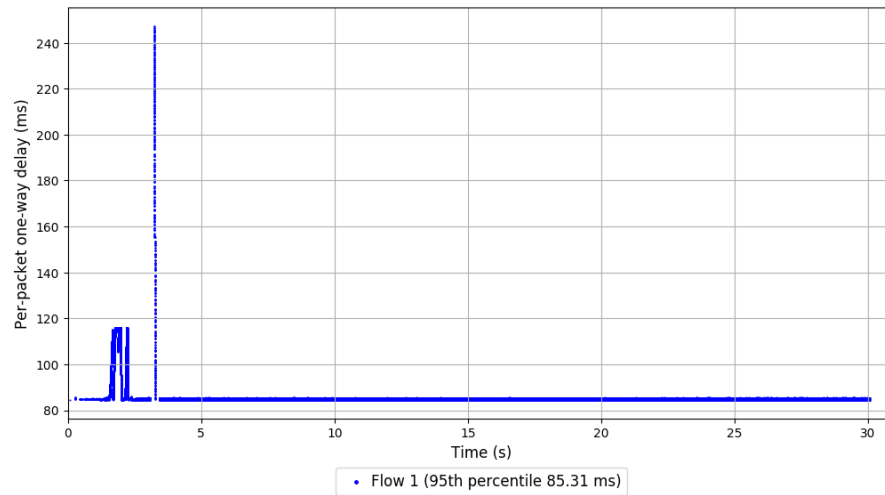
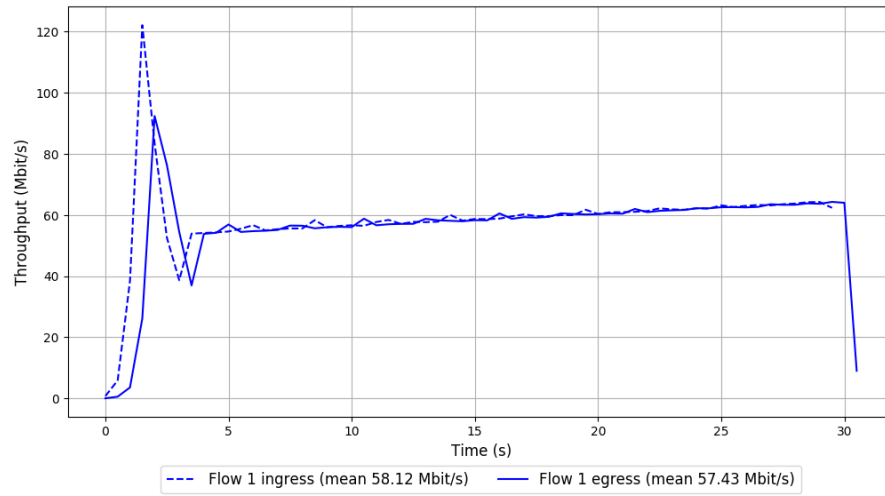


Run 3: Statistics of TCP Vegas

Start at: 2018-11-30 04:39:37
End at: 2018-11-30 04:40:07
Local clock offset: -5.435 ms
Remote clock offset: -2.383 ms

Below is generated by plot.py at 2018-11-30 05:54:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 57.43 Mbit/s
95th percentile per-packet one-way delay: 85.307 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 57.43 Mbit/s
95th percentile per-packet one-way delay: 85.307 ms
Loss rate: 1.19%

Run 3: Report of TCP Vegas — Data Link

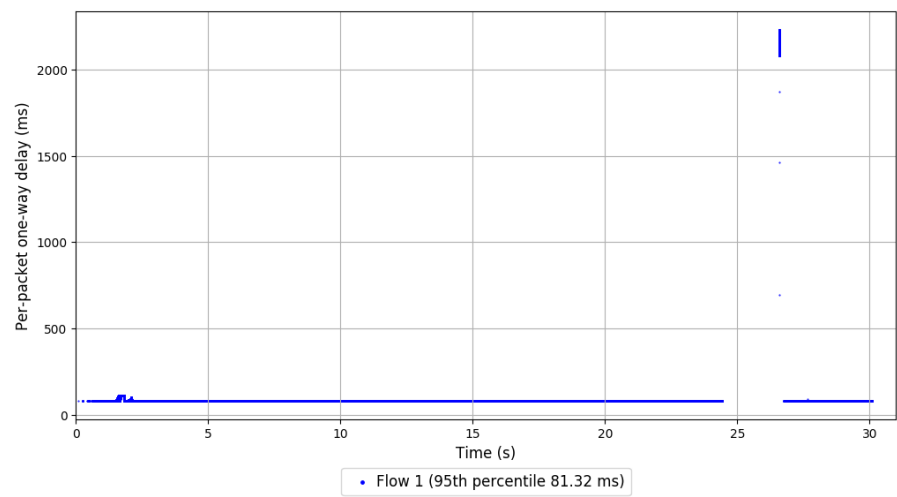
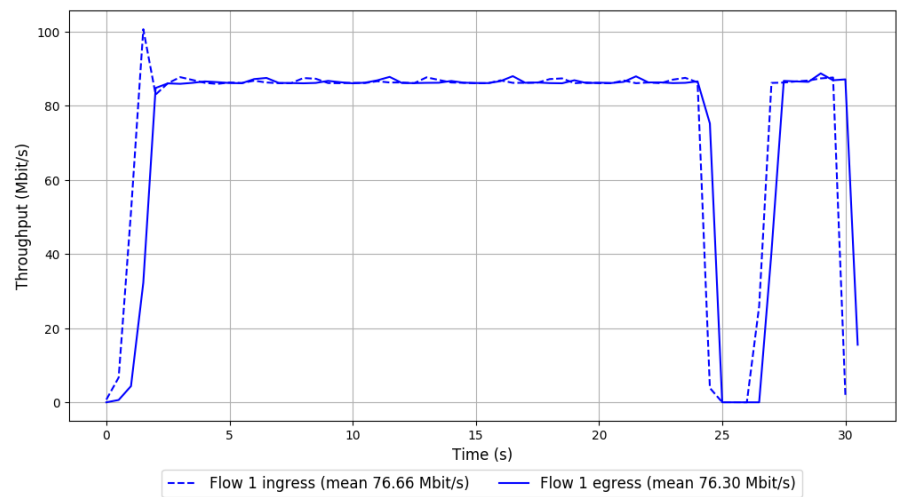


Run 4: Statistics of TCP Vegas

Start at: 2018-11-30 05:01:54
End at: 2018-11-30 05:02:24
Local clock offset: -1.531 ms
Remote clock offset: -3.254 ms

Below is generated by plot.py at 2018-11-30 05:54:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.30 Mbit/s
95th percentile per-packet one-way delay: 81.323 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 76.30 Mbit/s
95th percentile per-packet one-way delay: 81.323 ms
Loss rate: 0.47%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2018-11-30 05:24:14

End at: 2018-11-30 05:24:44

Local clock offset: -0.887 ms

Remote clock offset: -8.13 ms

Below is generated by plot.py at 2018-11-30 05:54:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 73.03 Mbit/s

95th percentile per-packet one-way delay: 81.739 ms

Loss rate: 0.48%

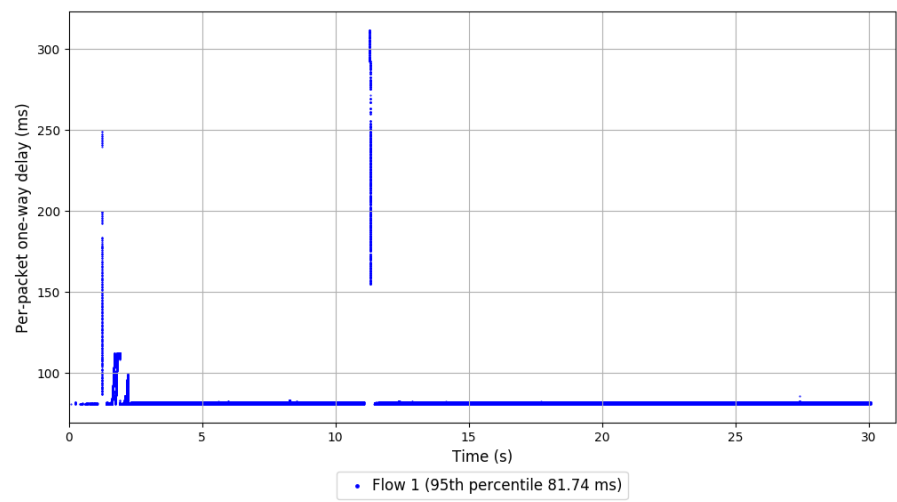
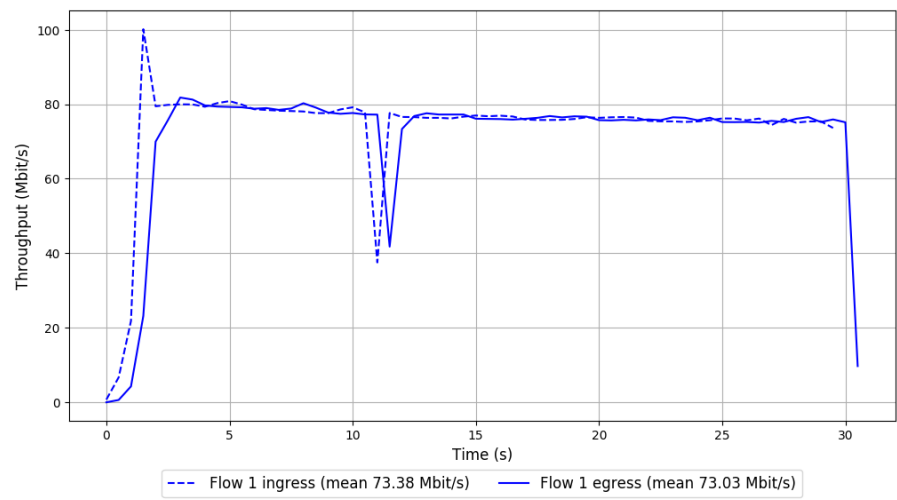
-- Flow 1:

Average throughput: 73.03 Mbit/s

95th percentile per-packet one-way delay: 81.739 ms

Loss rate: 0.48%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2018-11-30 04:12:47

End at: 2018-11-30 04:13:17

Local clock offset: -7.05 ms

Remote clock offset: 12.04 ms

Below is generated by plot.py at 2018-11-30 05:54:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 28.13 Mbit/s

95th percentile per-packet one-way delay: 179.691 ms

Loss rate: 60.07%

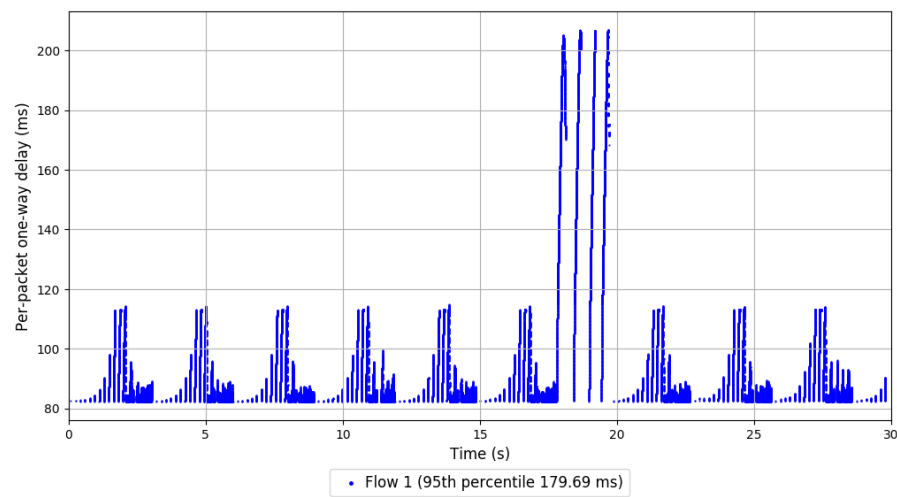
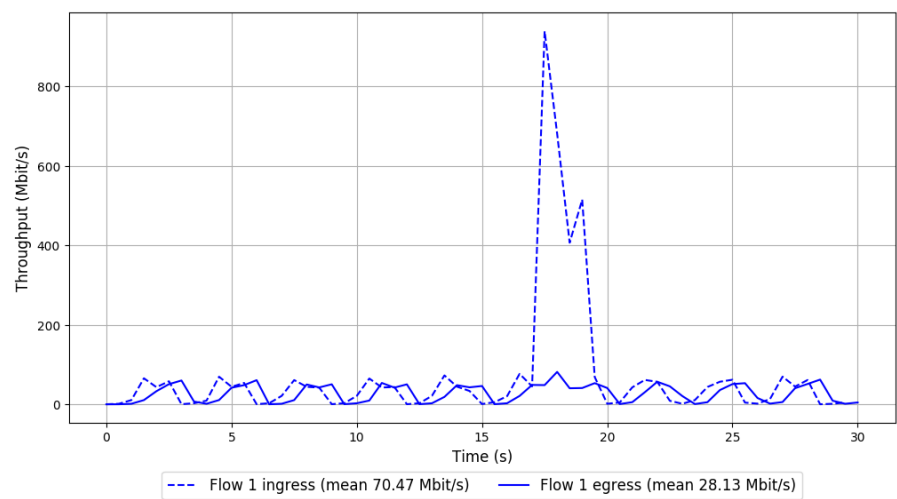
-- Flow 1:

Average throughput: 28.13 Mbit/s

95th percentile per-packet one-way delay: 179.691 ms

Loss rate: 60.07%

Run 1: Report of Verus — Data Link

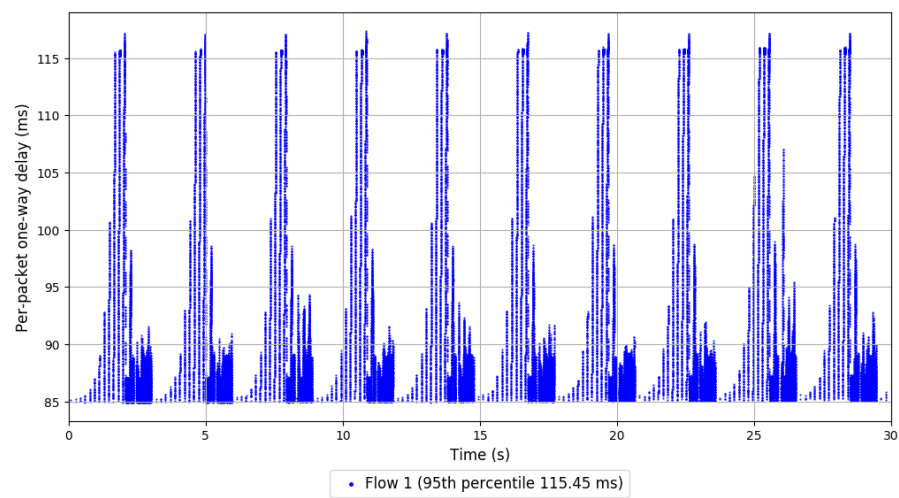
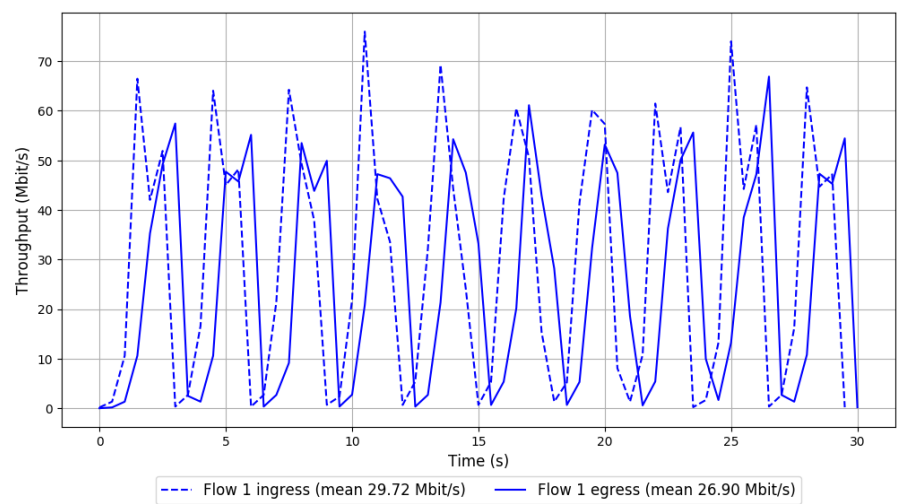


Run 2: Statistics of Verus

Start at: 2018-11-30 04:35:00
End at: 2018-11-30 04:35:30
Local clock offset: -6.281 ms
Remote clock offset: 4.006 ms

Below is generated by plot.py at 2018-11-30 05:54:21
Datalink statistics
-- Total of 1 flow:
Average throughput: 26.90 Mbit/s
95th percentile per-packet one-way delay: 115.455 ms
Loss rate: 9.47%
-- Flow 1:
Average throughput: 26.90 Mbit/s
95th percentile per-packet one-way delay: 115.455 ms
Loss rate: 9.47%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2018-11-30 04:57:19

End at: 2018-11-30 04:57:49

Local clock offset: -1.4 ms

Remote clock offset: 3.83 ms

Below is generated by plot.py at 2018-11-30 05:54:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 14.07 Mbit/s

95th percentile per-packet one-way delay: 139.744 ms

Loss rate: 49.52%

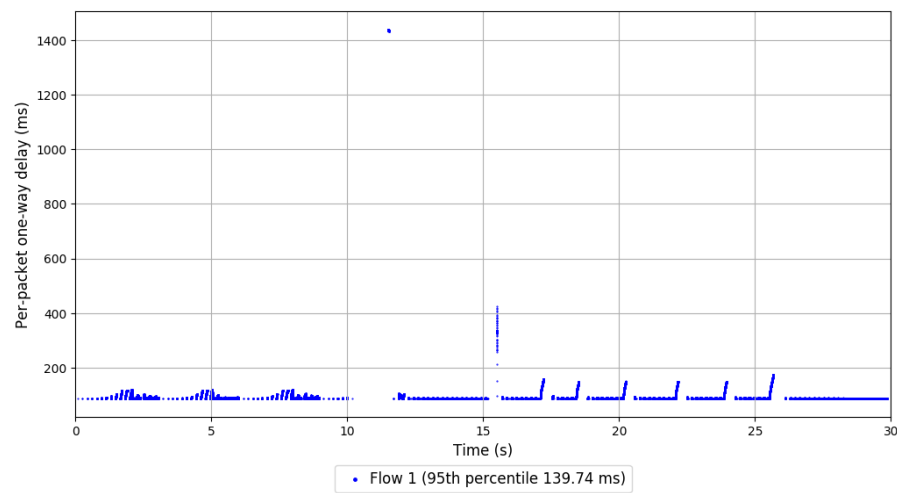
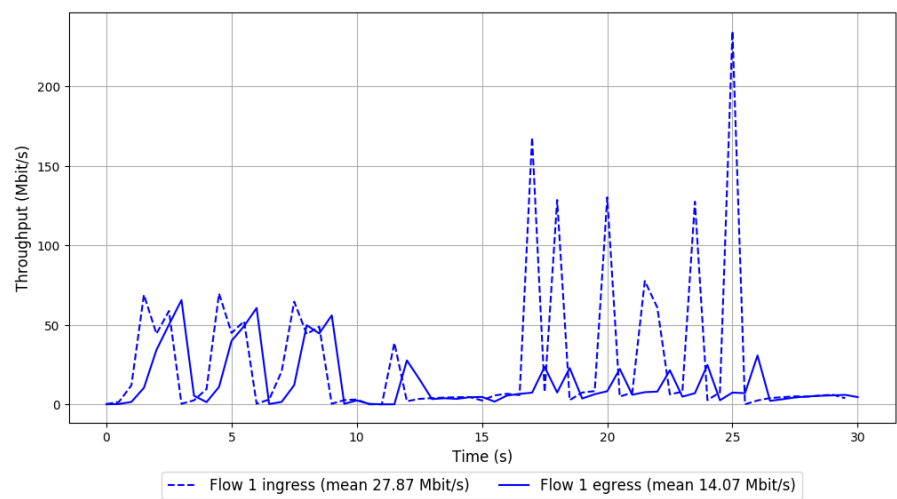
-- Flow 1:

Average throughput: 14.07 Mbit/s

95th percentile per-packet one-way delay: 139.744 ms

Loss rate: 49.52%

Run 3: Report of Verus — Data Link

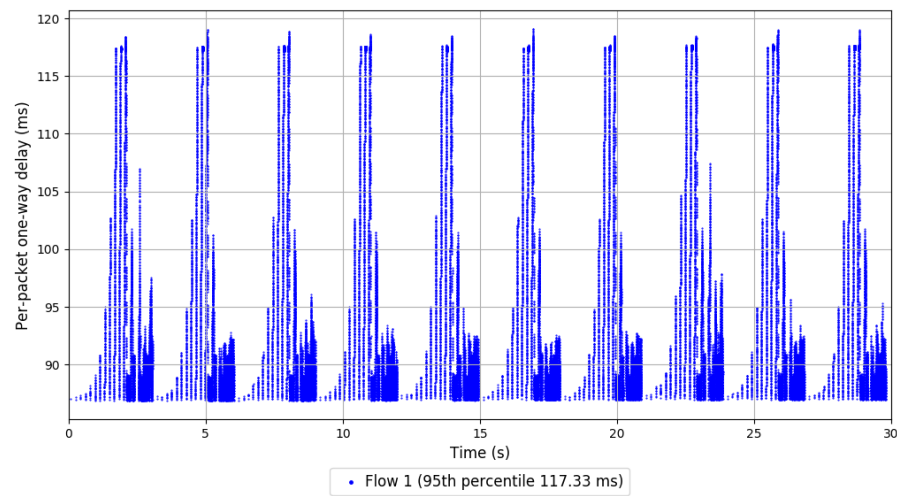
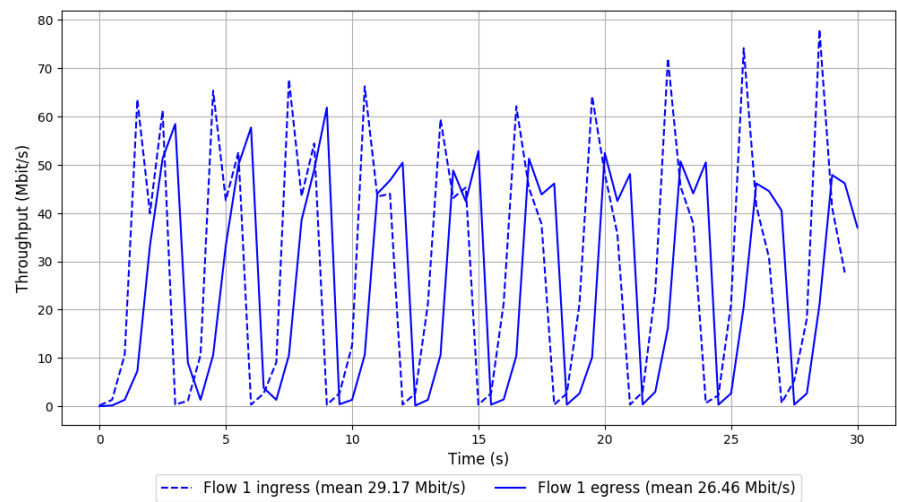


Run 4: Statistics of Verus

Start at: 2018-11-30 05:19:38
End at: 2018-11-30 05:20:08
Local clock offset: -0.672 ms
Remote clock offset: -4.114 ms

Below is generated by plot.py at 2018-11-30 05:54:21
Datalink statistics
-- Total of 1 flow:
Average throughput: 26.46 Mbit/s
95th percentile per-packet one-way delay: 117.328 ms
Loss rate: 9.30%
-- Flow 1:
Average throughput: 26.46 Mbit/s
95th percentile per-packet one-way delay: 117.328 ms
Loss rate: 9.30%

Run 4: Report of Verus — Data Link

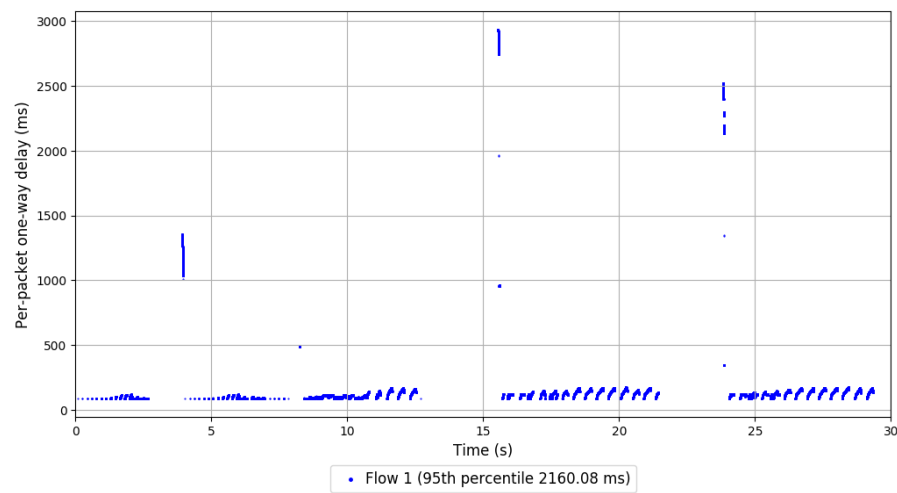
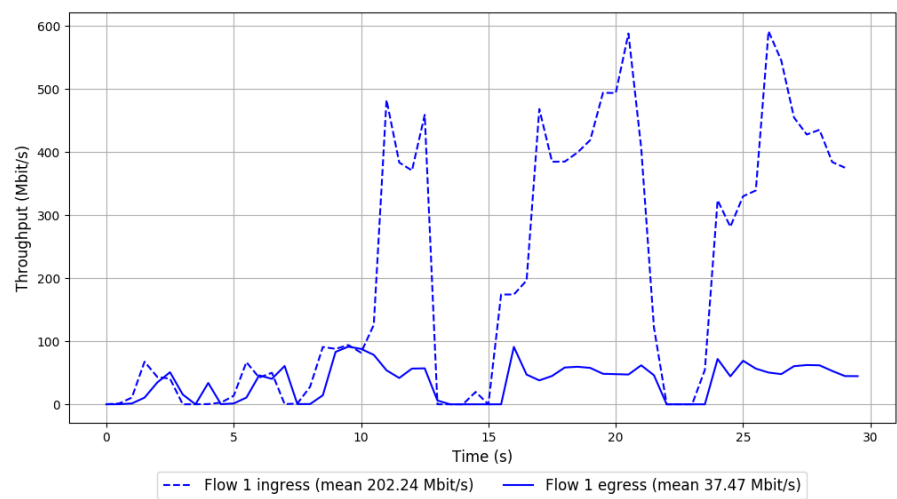


Run 5: Statistics of Verus

Start at: 2018-11-30 05:41:59
End at: 2018-11-30 05:42:29
Local clock offset: -0.597 ms
Remote clock offset: -7.682 ms

Below is generated by plot.py at 2018-11-30 05:54:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 37.47 Mbit/s
95th percentile per-packet one-way delay: 2160.084 ms
Loss rate: 81.44%
-- Flow 1:
Average throughput: 37.47 Mbit/s
95th percentile per-packet one-way delay: 2160.084 ms
Loss rate: 81.44%

Run 5: Report of Verus — Data Link

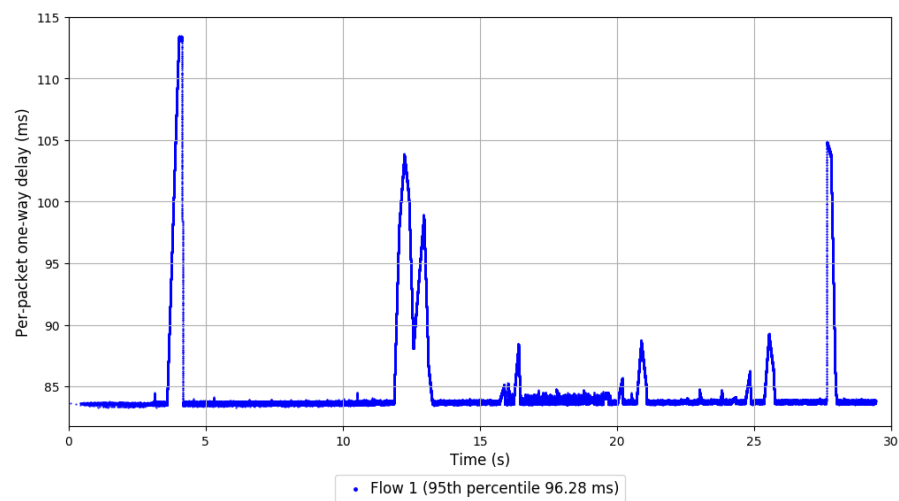
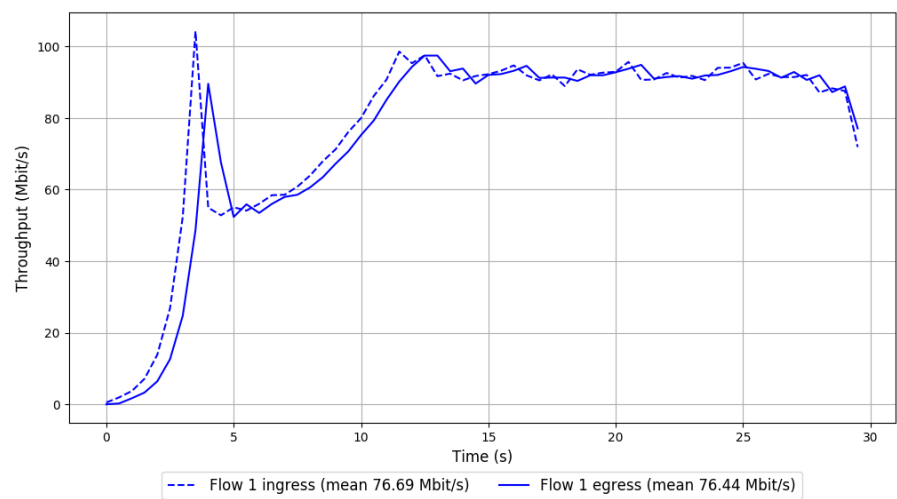


Run 1: Statistics of PCC-Vivace

Start at: 2018-11-30 04:11:30
End at: 2018-11-30 04:12:00
Local clock offset: -7.061 ms
Remote clock offset: 15.102 ms

Below is generated by plot.py at 2018-11-30 05:54:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 76.44 Mbit/s
95th percentile per-packet one-way delay: 96.285 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 76.44 Mbit/s
95th percentile per-packet one-way delay: 96.285 ms
Loss rate: 2.15%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2018-11-30 04:33:48

End at: 2018-11-30 04:34:18

Local clock offset: -5.554 ms

Remote clock offset: 0.737 ms

Below is generated by plot.py at 2018-11-30 05:54:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.49 Mbit/s

95th percentile per-packet one-way delay: 93.052 ms

Loss rate: 0.00%

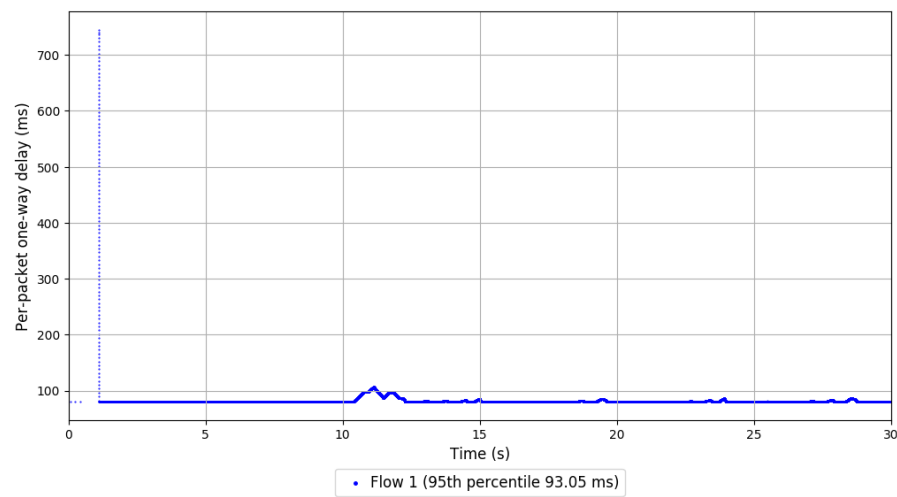
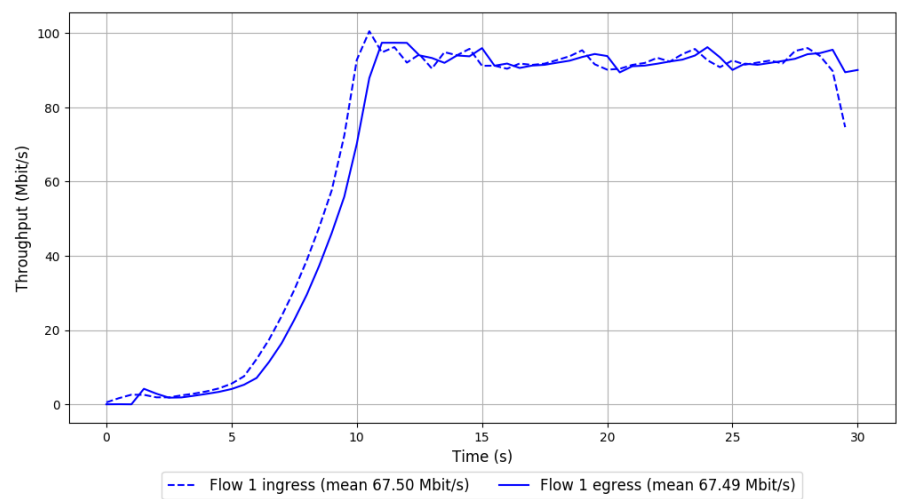
-- Flow 1:

Average throughput: 67.49 Mbit/s

95th percentile per-packet one-way delay: 93.052 ms

Loss rate: 0.00%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2018-11-30 04:56:06

End at: 2018-11-30 04:56:36

Local clock offset: -2.433 ms

Remote clock offset: 1.646 ms

Below is generated by plot.py at 2018-11-30 05:54:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.71 Mbit/s

95th percentile per-packet one-way delay: 90.696 ms

Loss rate: 0.04%

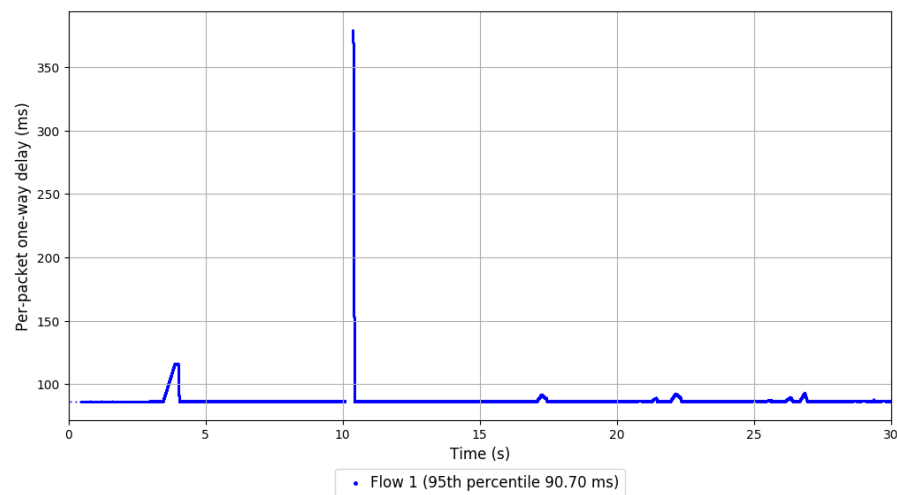
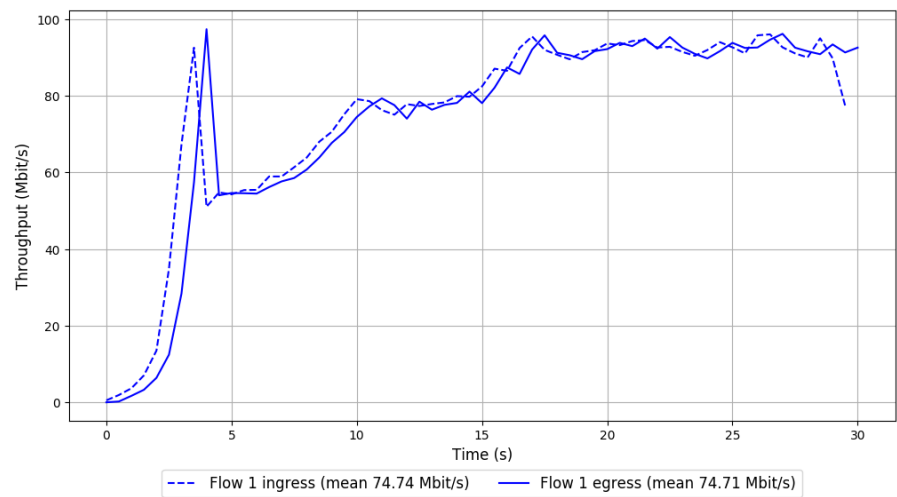
-- Flow 1:

Average throughput: 74.71 Mbit/s

95th percentile per-packet one-way delay: 90.696 ms

Loss rate: 0.04%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2018-11-30 05:18:26

End at: 2018-11-30 05:18:56

Local clock offset: -0.59 ms

Remote clock offset: -3.651 ms

Below is generated by plot.py at 2018-11-30 05:54:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 72.08 Mbit/s

95th percentile per-packet one-way delay: 116.528 ms

Loss rate: 0.15%

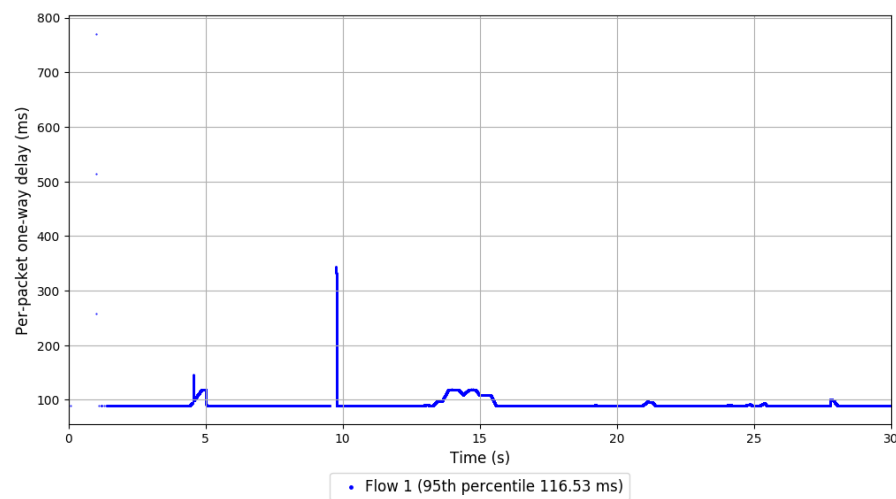
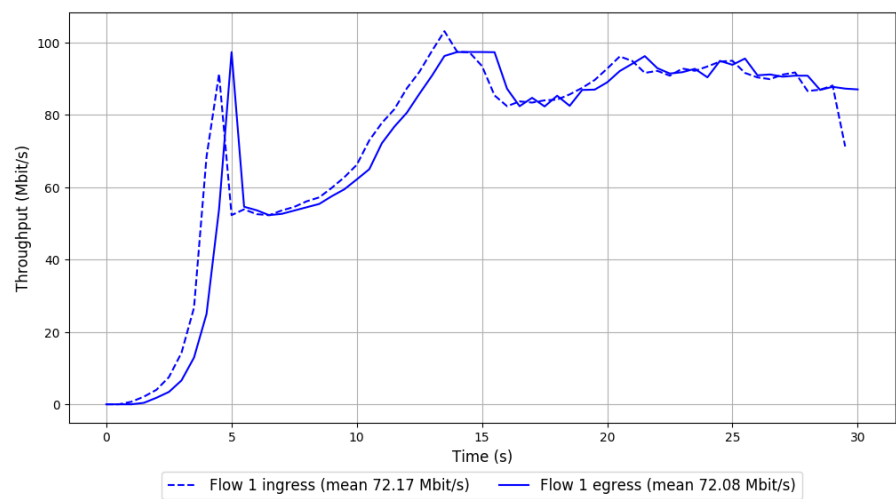
-- Flow 1:

Average throughput: 72.08 Mbit/s

95th percentile per-packet one-way delay: 116.528 ms

Loss rate: 0.15%

Run 4: Report of PCC-Vivace — Data Link

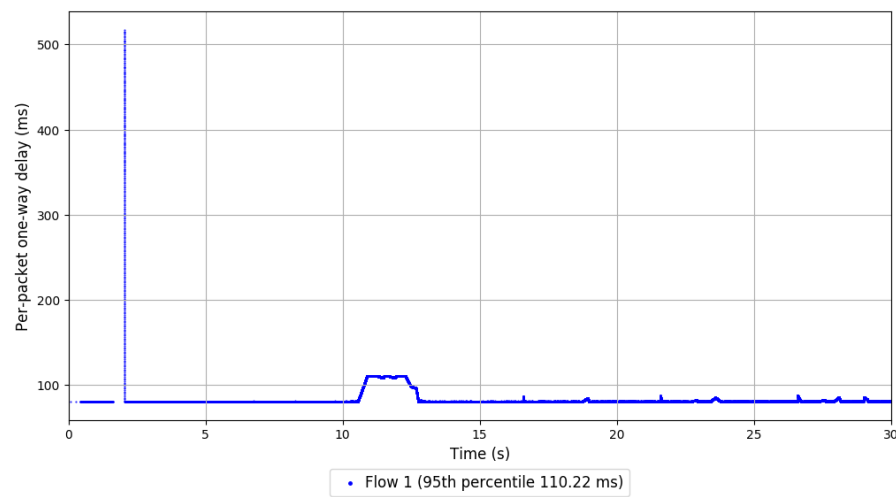
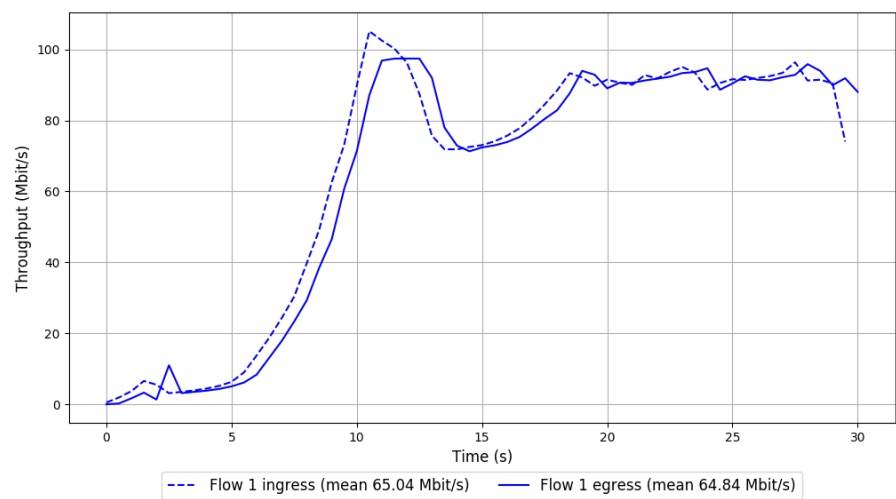


Run 5: Statistics of PCC-Vivace

Start at: 2018-11-30 05:40:46
End at: 2018-11-30 05:41:16
Local clock offset: 0.054 ms
Remote clock offset: -12.404 ms

Below is generated by plot.py at 2018-11-30 05:54:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 64.84 Mbit/s
95th percentile per-packet one-way delay: 110.215 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 64.84 Mbit/s
95th percentile per-packet one-way delay: 110.215 ms
Loss rate: 0.30%

Run 5: Report of PCC-Vivace — Data Link

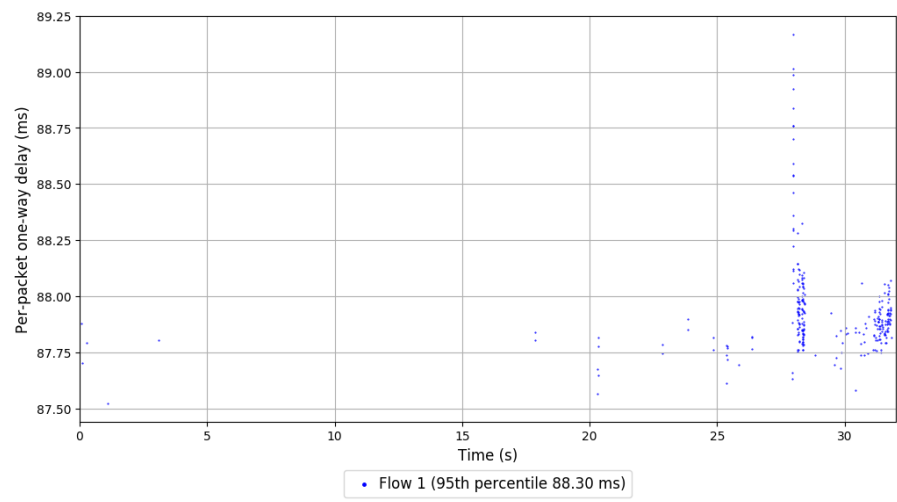
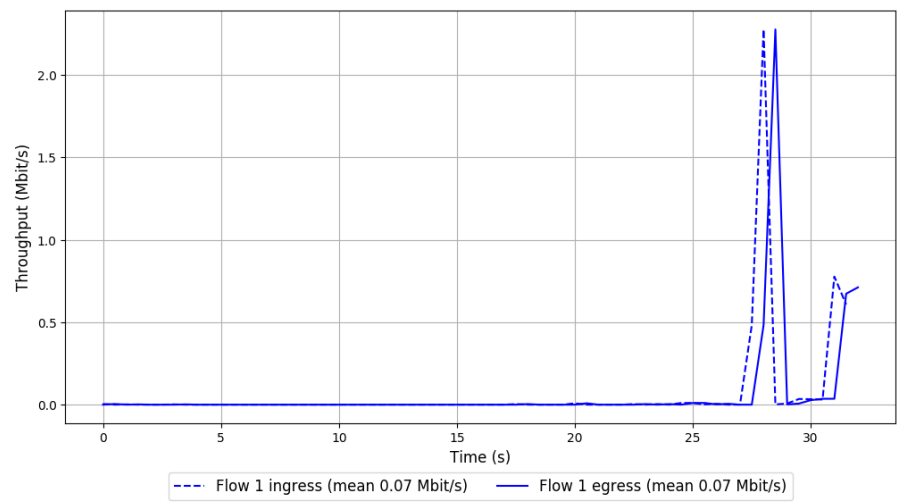


Run 1: Statistics of WebRTC media

Start at: 2018-11-30 04:13:57
End at: 2018-11-30 04:14:27
Local clock offset: -6.284 ms
Remote clock offset: 12.183 ms

Below is generated by plot.py at 2018-11-30 05:54:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 88.300 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 88.300 ms
Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link

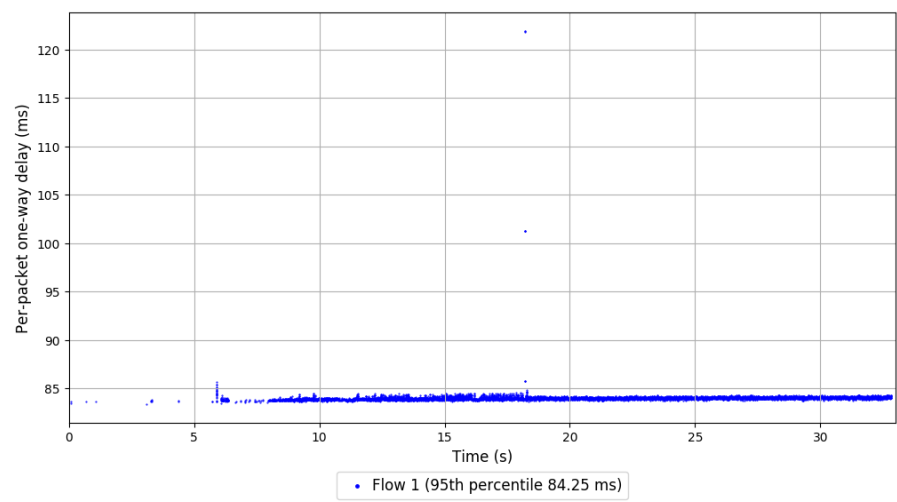
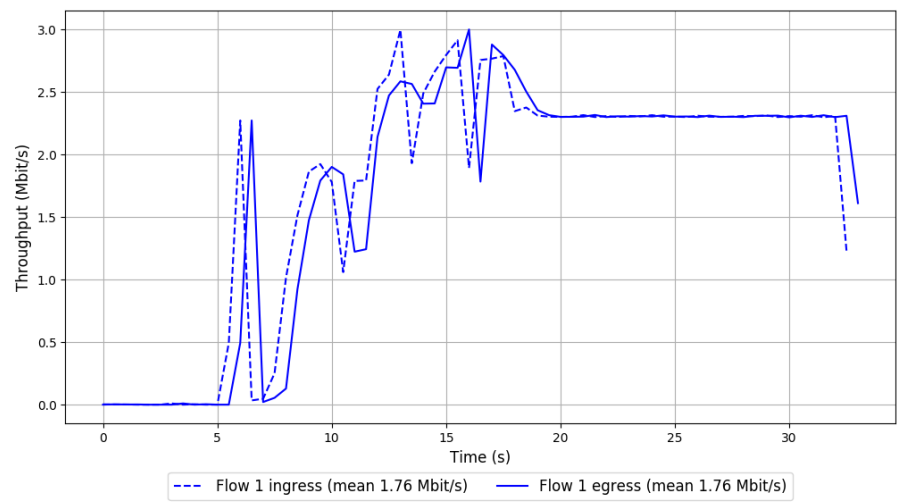


Run 2: Statistics of WebRTC media

Start at: 2018-11-30 04:36:10
End at: 2018-11-30 04:36:40
Local clock offset: -6.25 ms
Remote clock offset: -0.342 ms

Below is generated by plot.py at 2018-11-30 05:54:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 84.246 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 84.246 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

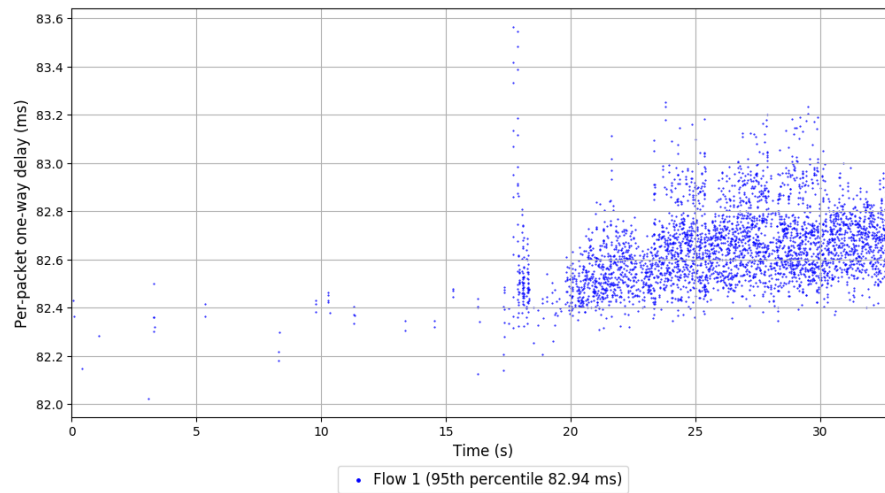
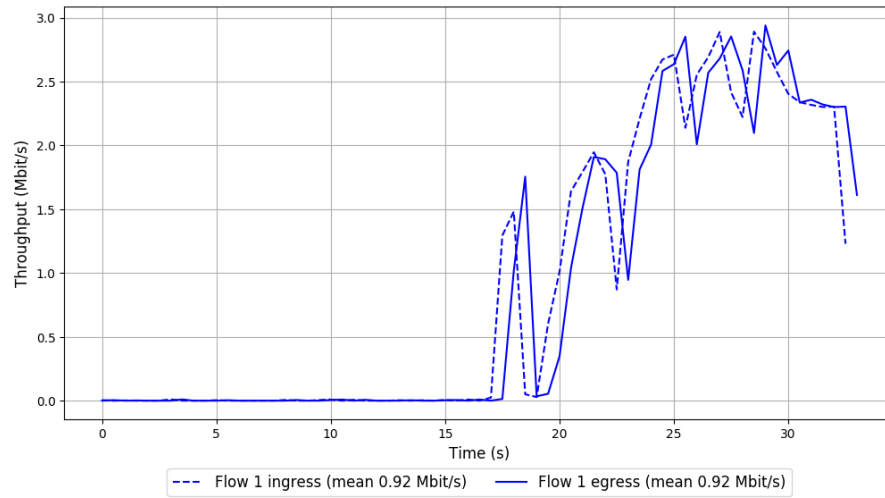


Run 3: Statistics of WebRTC media

Start at: 2018-11-30 04:58:28
End at: 2018-11-30 04:58:58
Local clock offset: -1.209 ms
Remote clock offset: -1.491 ms

Below is generated by plot.py at 2018-11-30 05:54:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 82.937 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 82.937 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

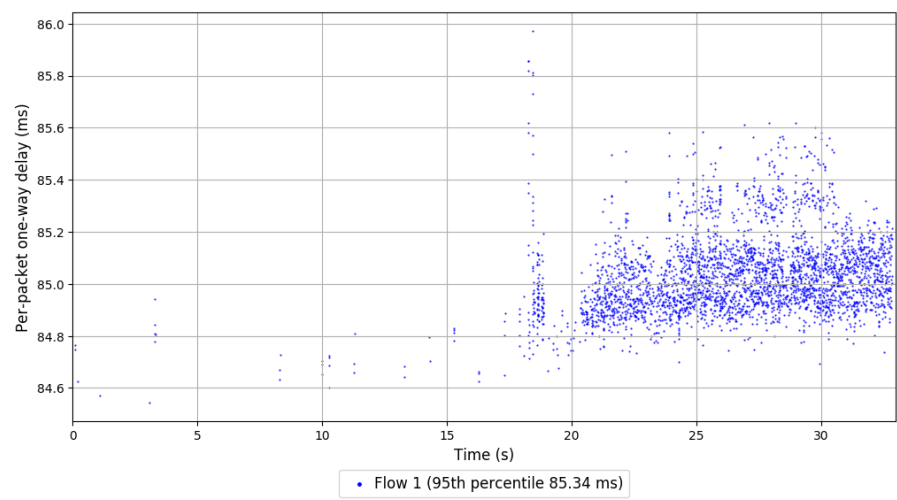
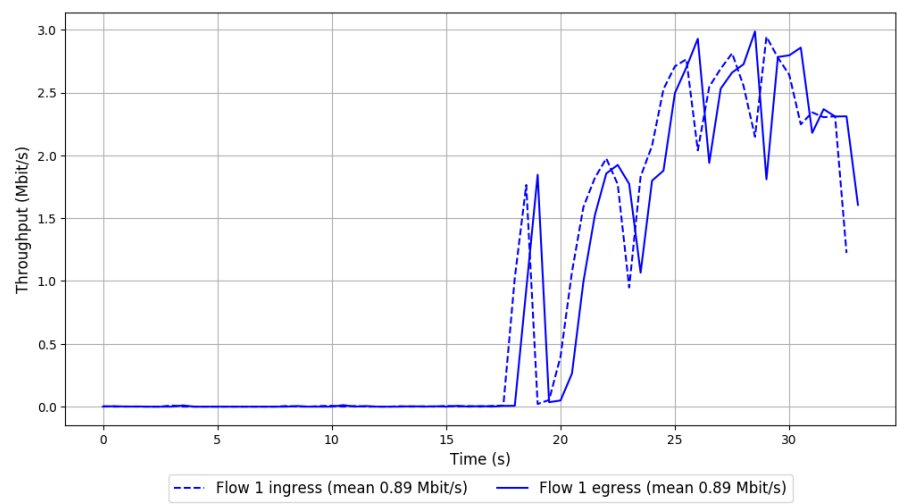


Run 4: Statistics of WebRTC media

Start at: 2018-11-30 05:20:48
End at: 2018-11-30 05:21:18
Local clock offset: -0.059 ms
Remote clock offset: -3.986 ms

Below is generated by plot.py at 2018-11-30 05:54:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 85.339 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 85.339 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2018-11-30 05:43:12
End at: 2018-11-30 05:43:42
Local clock offset: 0.203 ms
Remote clock offset: -9.138 ms

Below is generated by plot.py at 2018-11-30 05:54:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 86.677 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 86.677 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

