

Pantheon Report

Generated at 2019-03-27 08:50:51 (UTC).

Data path: Brazil on **p4p1** (*remote*) → AWS Brazil 1 on **ens5** (*local*).

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

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

System info:

```
Linux 4.15.0-1034-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 @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/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

Scatter plot showing Average throughput (Mbit/s) vs 95th percentile one-way delay (ms) for various protocols. The x-axis is logarithmic, ranging from 256 ms to 0 ms. The y-axis is linear, ranging from 0 to 100 Mbit/s. Protocols are labeled with their names and colored markers.

Protocol	95th percentile one-way delay (ms)	Average throughput (Mbit/s)
PCC-Expr	256	82
Verus	20	42
Sprout	10	50
Indigo-MusesC5	5	32
Indigo-MusesD	3	52
PCC-Vivade	2	68
Indigo-MusesC3	4	85
Indigo-MusesT	3	80
Indigo-MusesC1	6	95
Indigo-MusesC2	7	98
Indigo-MusesC4	8	95
Indigo-MusesC6	9	98
Indigo-MusesC7	10	98
Indigo-MusesC8	11	98
Indigo-MusesC9	12	98
Indigo-MusesC10	13	98
Indigo-MusesC11	14	98
Indigo-MusesC12	15	98
Indigo-MusesC13	16	98
Indigo-MusesC14	17	98
Indigo-MusesC15	18	98
Indigo-MusesC16	19	98
Indigo-MusesC17	20	98
Indigo-MusesC18	21	98
Indigo-MusesC19	22	98
Indigo-MusesC20	23	98
Indigo-MusesC21	24	98
Indigo-MusesC22	25	98
Indigo-MusesC23	26	98
Indigo-MusesC24	27	98
Indigo-MusesC25	28	98
Indigo-MusesC26	29	98
Indigo-MusesC27	30	98
Indigo-MusesC28	31	98
Indigo-MusesC29	32	98
Indigo-MusesC30	33	98
Indigo-MusesC31	34	98
Indigo-MusesC32	35	98
Indigo-MusesC33	36	98
Indigo-MusesC34	37	98
Indigo-MusesC35	38	98
Indigo-MusesC36	39	98
Indigo-MusesC37	40	98
Indigo-MusesC38	41	98
Indigo-MusesC39	42	98
Indigo-MusesC40	43	98
Indigo-MusesC41	44	98
Indigo-MusesC42	45	98
Indigo-MusesC43	46	98
Indigo-MusesC44	47	98
Indigo-MusesC45	48	98
Indigo-MusesC46	49	98
Indigo-MusesC47	50	98
Indigo-MusesC48	51	98
Indigo-MusesC49	52	98
Indigo-MusesC50	53	98
Indigo-MusesC51	54	98
Indigo-MusesC52	55	98
Indigo-MusesC53	56	98
Indigo-MusesC54	57	98
Indigo-MusesC55	58	98
Indigo-MusesC56	59	98
Indigo-MusesC57	60	98
Indigo-MusesC58	61	98
Indigo-MusesC59	62	98
Indigo-MusesC60	63	98
Indigo-MusesC61	64	98
Indigo-MusesC62	65	98
Indigo-MusesC63	66	98
Indigo-MusesC64	67	98
Indigo-MusesC65	68	98
Indigo-MusesC66	69	98
Indigo-MusesC67	70	98
Indigo-MusesC68	71	98
Indigo-MusesC69	72	98
Indigo-MusesC70	73	98
Indigo-MusesC71	74	98
Indigo-MusesC72	75	98
Indigo-MusesC73	76	98
Indigo-MusesC74	77	98
Indigo-MusesC75	78	98
Indigo-MusesC76	79	98
Indigo-MusesC77	80	98
Indigo-MusesC78	81	98
Indigo-MusesC79	82	98
Indigo-MusesC80	83	98
Indigo-MusesC81	84	98
Indigo-MusesC82	85	98
Indigo-MusesC83	86	98
Indigo-MusesC84	87	98
Indigo-MusesC85	88	98
Indigo-MusesC86	89	98
Indigo-MusesC87	90	98
Indigo-MusesC88	91	98
Indigo-MusesC89	92	98
Indigo-MusesC90	93	98
Indigo-MusesC91	94	98
Indigo-MusesC92	95	98
Indigo-MusesC93	96	98
Indigo-MusesC94	97	98
Indigo-MusesC95	98	98
Indigo-MusesC96	99	98
Indigo-MusesC97	100	98
Indigo-MusesC98	101	98
Indigo-MusesC99	102	98
Indigo-MusesC100	103	98
Indigo-MusesC101	104	98
Indigo-MusesC102	105	98
Indigo-MusesC103		



scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	96.32	8.73	0.07
Copa	5	84.28	4.80	0.02
TCP Cubic	5	97.46	9.14	0.06
FillP	5	95.92	9.70	0.04
FillP-Sheep	5	94.39	6.27	0.02
Indigo	5	97.20	5.02	0.02
Indigo-MusesC3	5	85.60	4.01	0.02
Indigo-MusesC5	5	32.06	4.00	0.01
Indigo-MusesD	5	51.42	3.01	0.01
Indigo-MusesT	5	78.49	3.13	0.02
LEDBAT	5	95.76	10.05	0.08
PCC-Allegro	5	92.81	2.53	0.02
PCC-Expr	5	81.60	247.78	1.90
QUIC Cubic	5	90.23	7.36	0.02
SCReAM	5	0.22	1.97	0.03
Sprout	5	50.32	10.73	0.03
TaoVA-100x	5	87.97	2.24	0.02
TCP Vegas	5	96.89	2.98	0.02
Verus	5	40.78	25.14	0.03
PCC-Vivace	5	67.10	2.17	0.02
WebRTC media	5	2.34	2.58	0.02

Run 1: Statistics of TCP BBR

Start at: 2019-03-27 06:35:30

End at: 2019-03-27 06:36:00

Local clock offset: -6.272 ms

Remote clock offset: 0.193 ms

Below is generated by plot.py at 2019-03-27 08:38:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.26 Mbit/s

95th percentile per-packet one-way delay: 9.992 ms

Loss rate: 0.14%

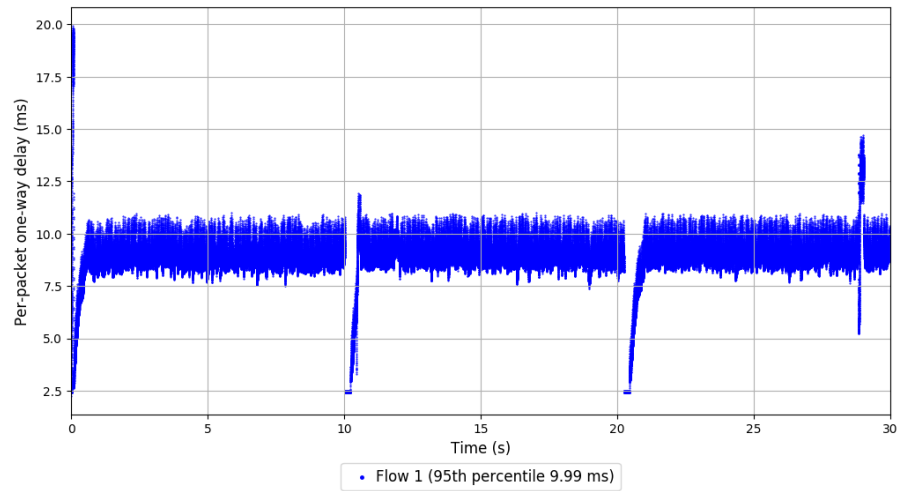
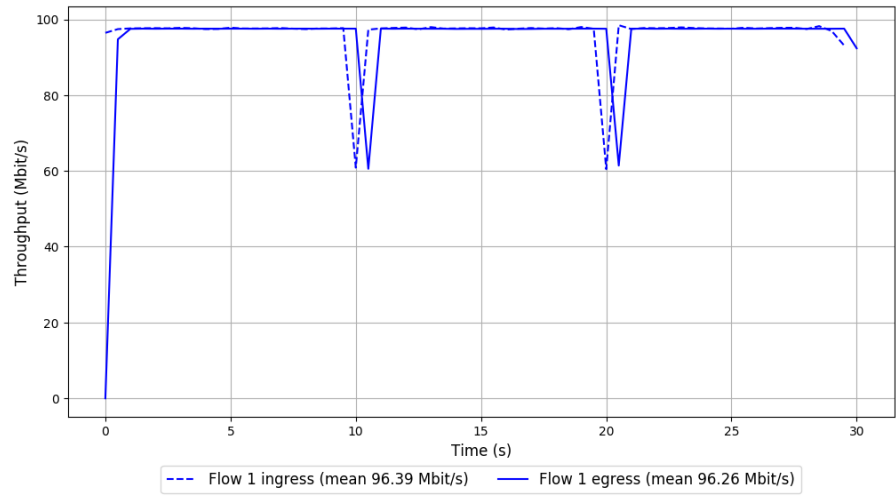
-- Flow 1:

Average throughput: 96.26 Mbit/s

95th percentile per-packet one-way delay: 9.992 ms

Loss rate: 0.14%

Run 1: Report of TCP BBR — Data Link



Run 2: Statistics of TCP BBR

Start at: 2019-03-27 06:59:10

End at: 2019-03-27 06:59:40

Local clock offset: -6.346 ms

Remote clock offset: 0.427 ms

Below is generated by plot.py at 2019-03-27 08:38:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.37 Mbit/s

95th percentile per-packet one-way delay: 7.558 ms

Loss rate: 0.03%

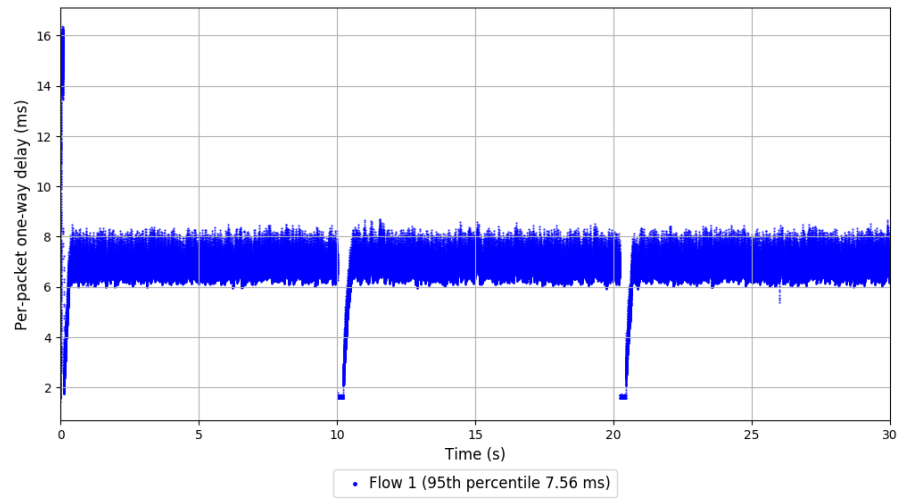
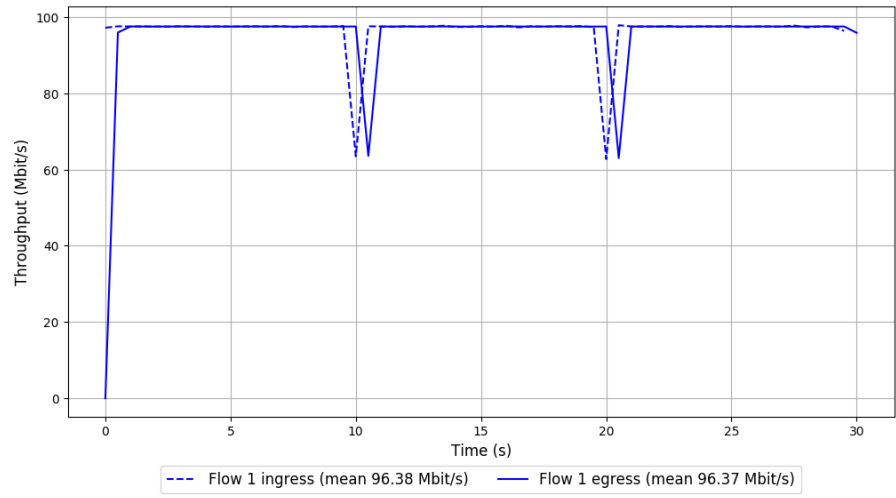
-- Flow 1:

Average throughput: 96.37 Mbit/s

95th percentile per-packet one-way delay: 7.558 ms

Loss rate: 0.03%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-03-27 07:22:48

End at: 2019-03-27 07:23:18

Local clock offset: -6.162 ms

Remote clock offset: 0.466 ms

Below is generated by plot.py at 2019-03-27 08:38:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.36 Mbit/s

95th percentile per-packet one-way delay: 8.516 ms

Loss rate: 0.03%

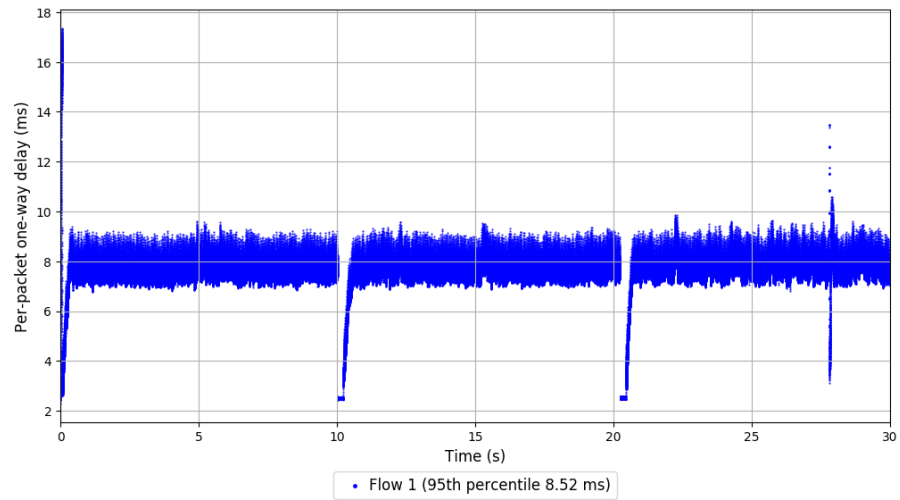
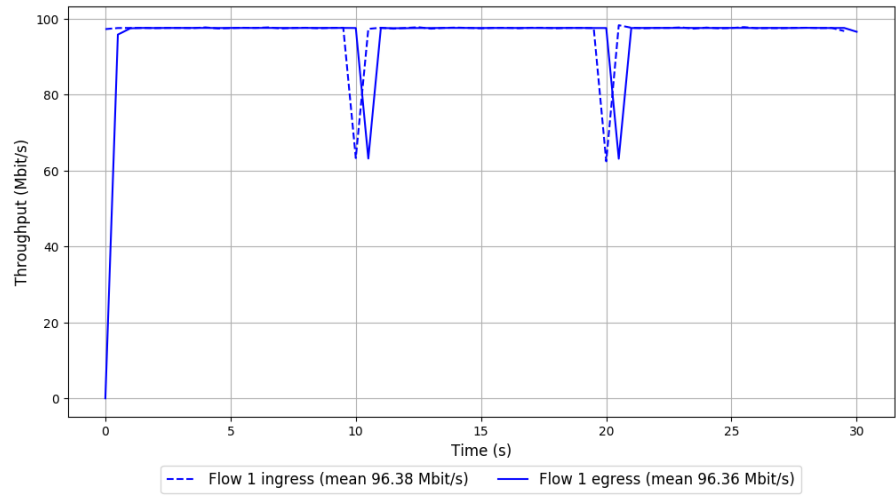
-- Flow 1:

Average throughput: 96.36 Mbit/s

95th percentile per-packet one-way delay: 8.516 ms

Loss rate: 0.03%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2019-03-27 07:53:08

End at: 2019-03-27 07:53:38

Local clock offset: -7.001 ms

Remote clock offset: 0.151 ms

Below is generated by plot.py at 2019-03-27 08:38:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.33 Mbit/s

95th percentile per-packet one-way delay: 7.585 ms

Loss rate: 0.03%

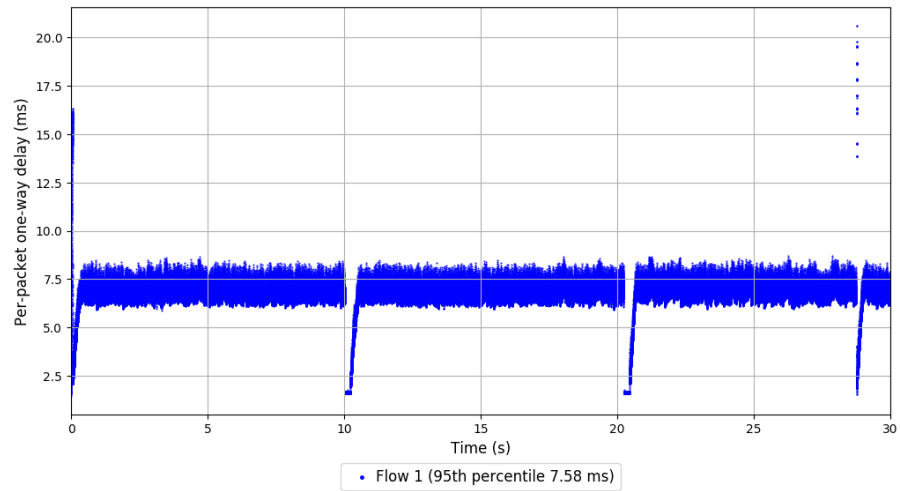
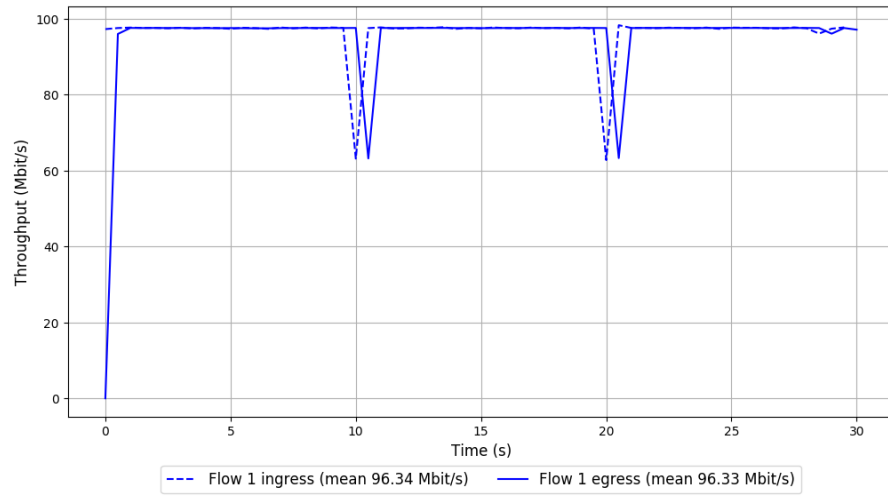
-- Flow 1:

Average throughput: 96.33 Mbit/s

95th percentile per-packet one-way delay: 7.585 ms

Loss rate: 0.03%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2019-03-27 08:16:48

End at: 2019-03-27 08:17:18

Local clock offset: -5.519 ms

Remote clock offset: 0.007 ms

Below is generated by plot.py at 2019-03-27 08:38:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.26 Mbit/s

95th percentile per-packet one-way delay: 10.010 ms

Loss rate: 0.13%

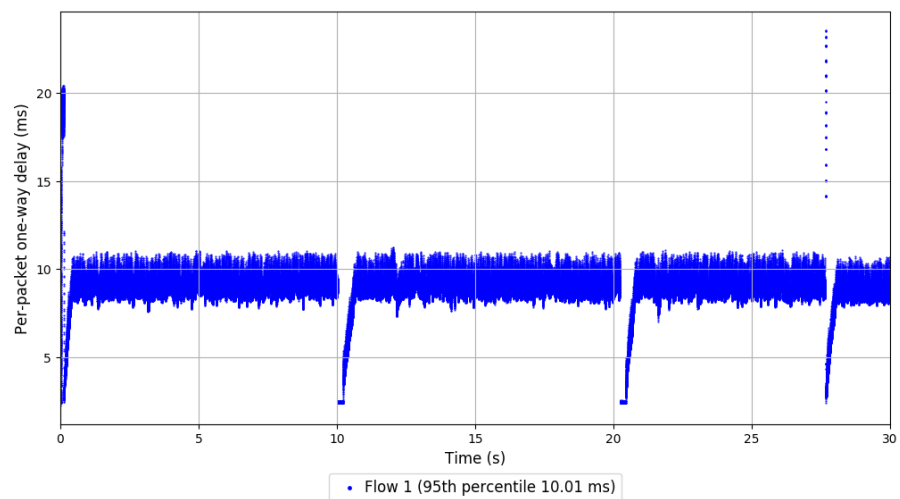
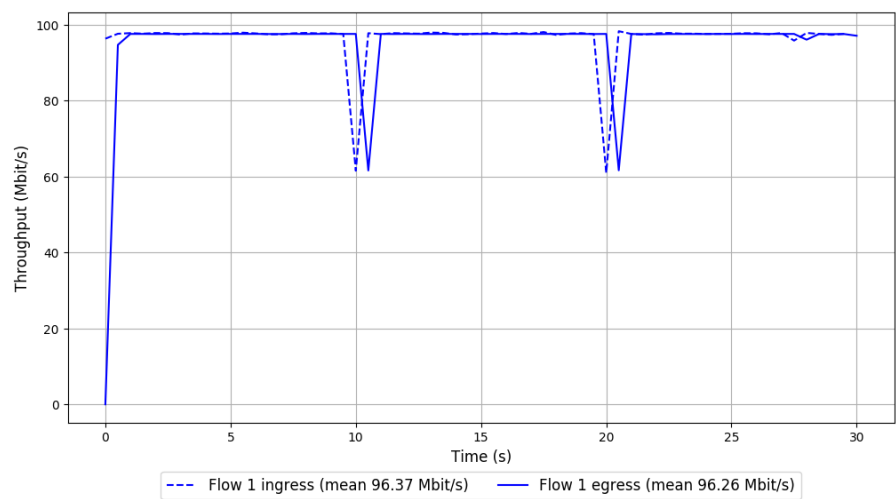
-- Flow 1:

Average throughput: 96.26 Mbit/s

95th percentile per-packet one-way delay: 10.010 ms

Loss rate: 0.13%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-03-27 06:51:16

End at: 2019-03-27 06:51:46

Local clock offset: -5.863 ms

Remote clock offset: 0.33 ms

Below is generated by plot.py at 2019-03-27 08:39:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.69 Mbit/s

95th percentile per-packet one-way delay: 4.077 ms

Loss rate: 0.02%

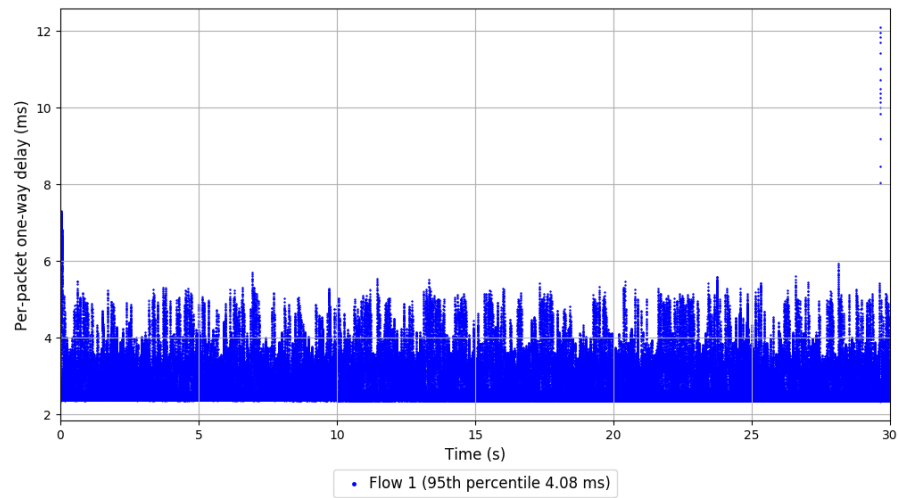
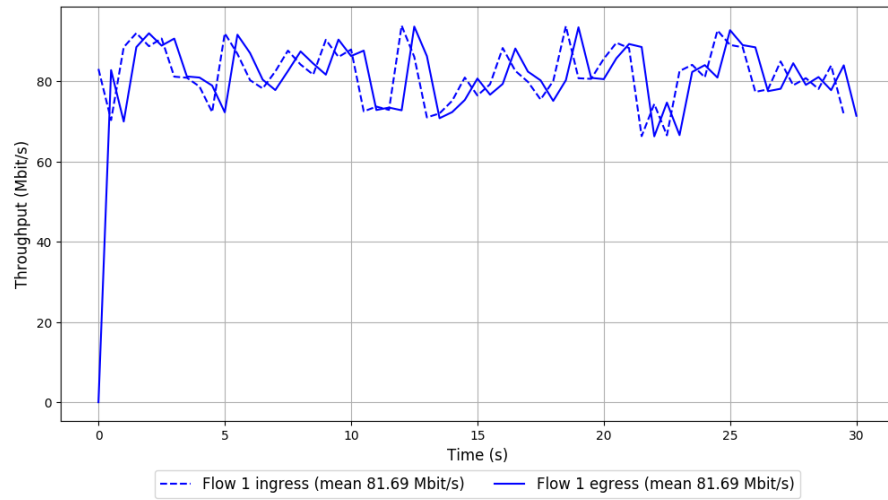
-- Flow 1:

Average throughput: 81.69 Mbit/s

95th percentile per-packet one-way delay: 4.077 ms

Loss rate: 0.02%

Run 1: Report of Copa — Data Link

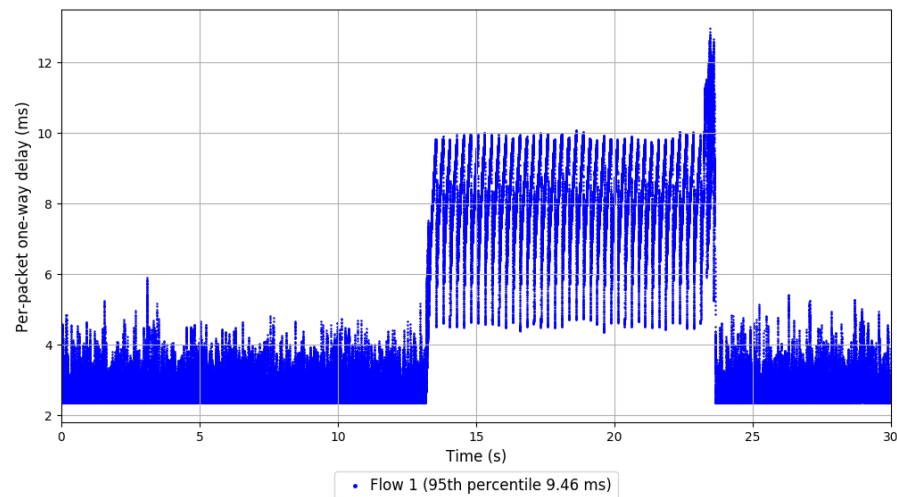
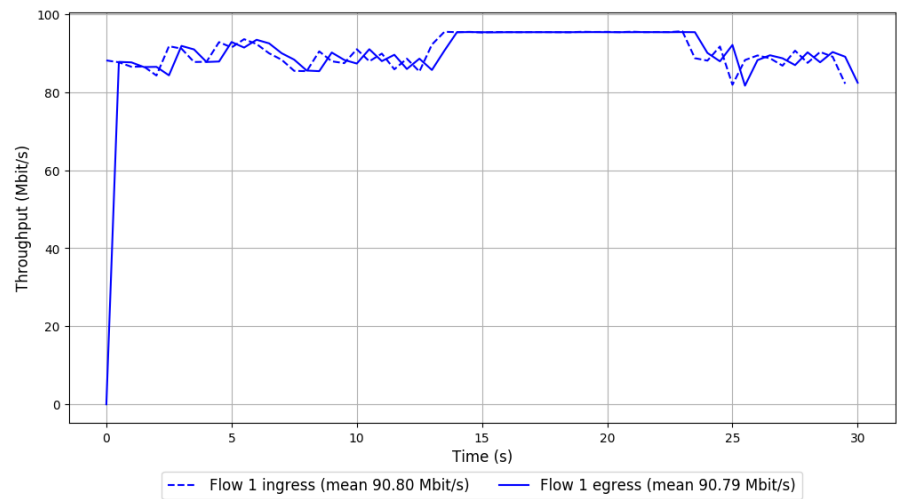


Run 2: Statistics of Copa

Start at: 2019-03-27 07:14:53
End at: 2019-03-27 07:15:23
Local clock offset: -5.439 ms
Remote clock offset: 0.458 ms

Below is generated by plot.py at 2019-03-27 08:39:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.79 Mbit/s
95th percentile per-packet one-way delay: 9.455 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 90.79 Mbit/s
95th percentile per-packet one-way delay: 9.455 ms
Loss rate: 0.02%

Run 2: Report of Copa — Data Link



Run 3: Statistics of Copa

Start at: 2019-03-27 07:45:13

End at: 2019-03-27 07:45:43

Local clock offset: -7.883 ms

Remote clock offset: 0.19 ms

Below is generated by plot.py at 2019-03-27 08:39:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.92 Mbit/s

95th percentile per-packet one-way delay: 3.378 ms

Loss rate: 0.01%

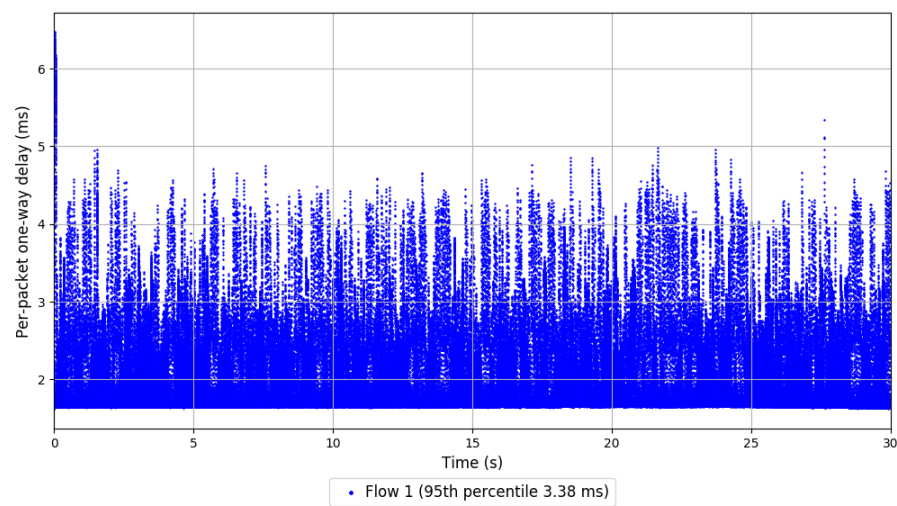
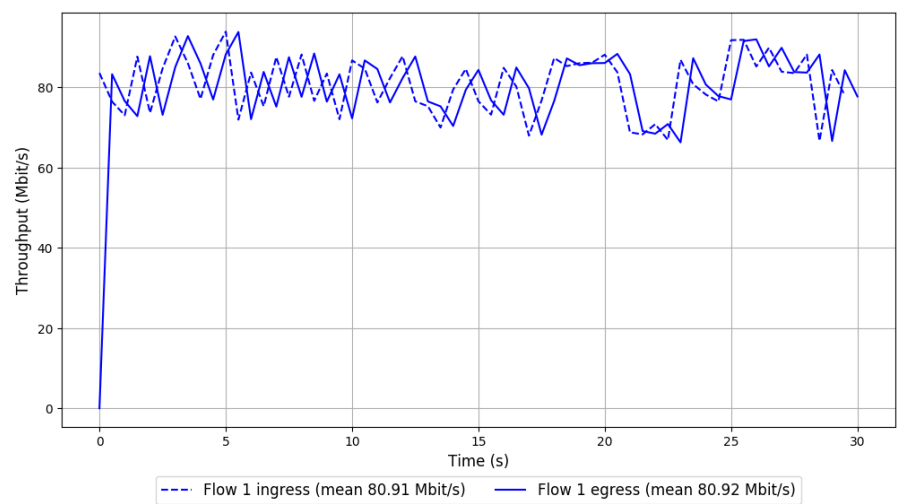
-- Flow 1:

Average throughput: 80.92 Mbit/s

95th percentile per-packet one-way delay: 3.378 ms

Loss rate: 0.01%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2019-03-27 08:08:54

End at: 2019-03-27 08:09:24

Local clock offset: -6.374 ms

Remote clock offset: 0.032 ms

Below is generated by plot.py at 2019-03-27 08:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.90 Mbit/s

95th percentile per-packet one-way delay: 2.998 ms

Loss rate: 0.01%

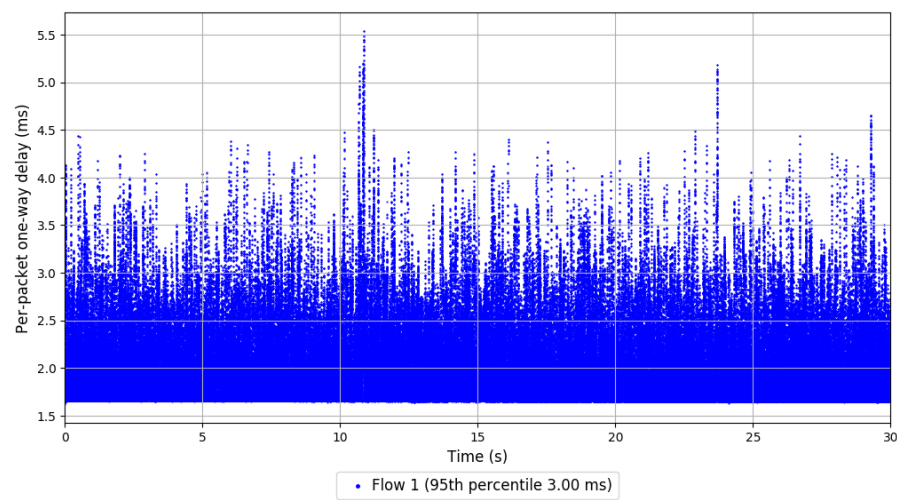
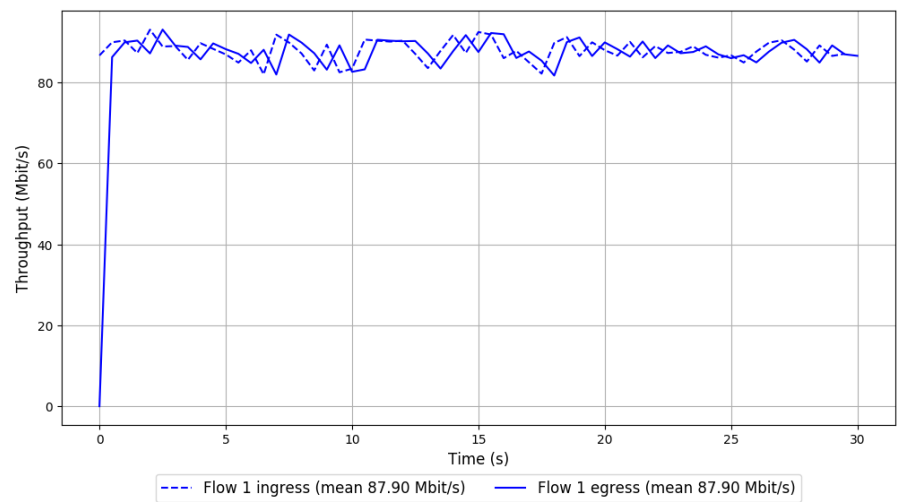
-- Flow 1:

Average throughput: 87.90 Mbit/s

95th percentile per-packet one-way delay: 2.998 ms

Loss rate: 0.01%

Run 4: Report of Copa — Data Link

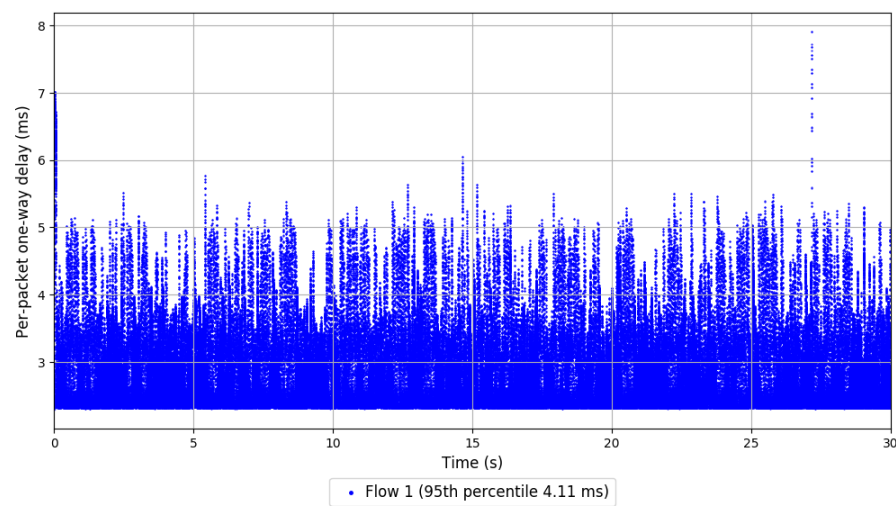
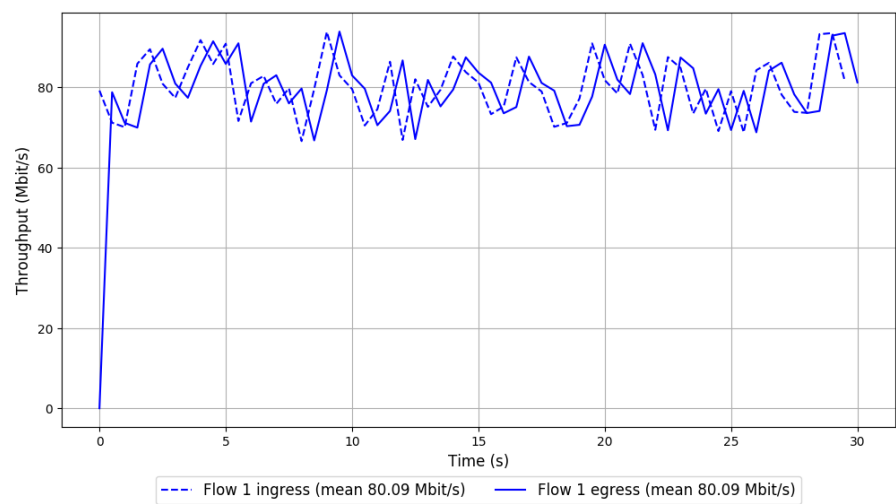


Run 5: Statistics of Copa

Start at: 2019-03-27 08:32:36
End at: 2019-03-27 08:33:06
Local clock offset: -5.55 ms
Remote clock offset: -0.045 ms

Below is generated by plot.py at 2019-03-27 08:40:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 80.09 Mbit/s
95th percentile per-packet one-way delay: 4.105 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 80.09 Mbit/s
95th percentile per-packet one-way delay: 4.105 ms
Loss rate: 0.02%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-03-27 06:46:46

End at: 2019-03-27 06:47:16

Local clock offset: -6.931 ms

Remote clock offset: 0.253 ms

Below is generated by plot.py at 2019-03-27 08:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.44 Mbit/s

95th percentile per-packet one-way delay: 8.771 ms

Loss rate: 0.06%

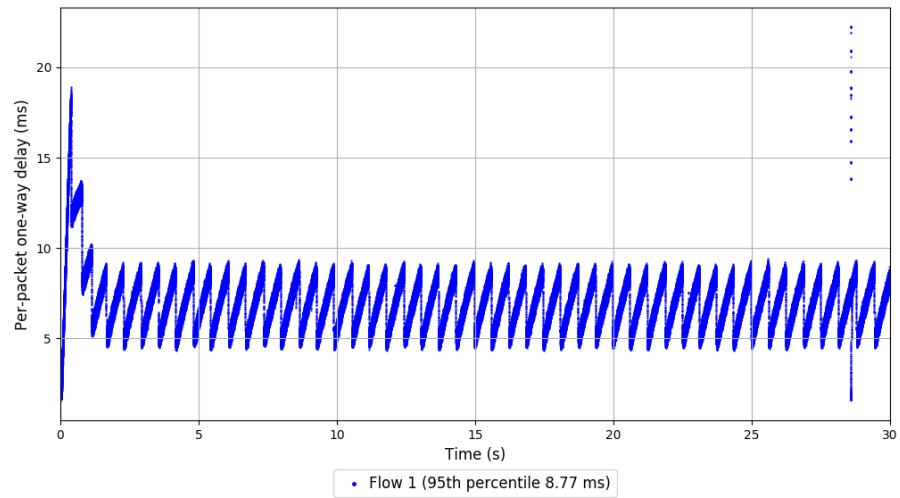
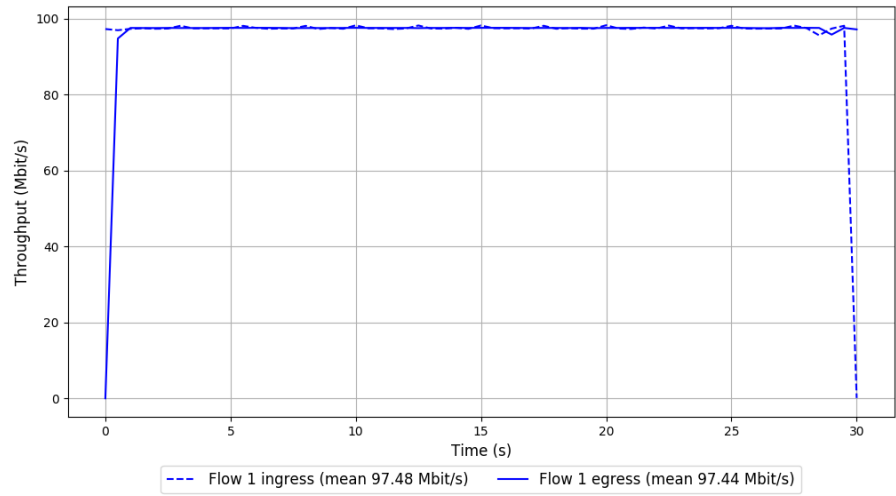
-- Flow 1:

Average throughput: 97.44 Mbit/s

95th percentile per-packet one-way delay: 8.771 ms

Loss rate: 0.06%

Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-03-27 07:10:22

End at: 2019-03-27 07:10:52

Local clock offset: -6.222 ms

Remote clock offset: 0.419 ms

Below is generated by plot.py at 2019-03-27 08:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.47 Mbit/s

95th percentile per-packet one-way delay: 8.768 ms

Loss rate: 0.06%

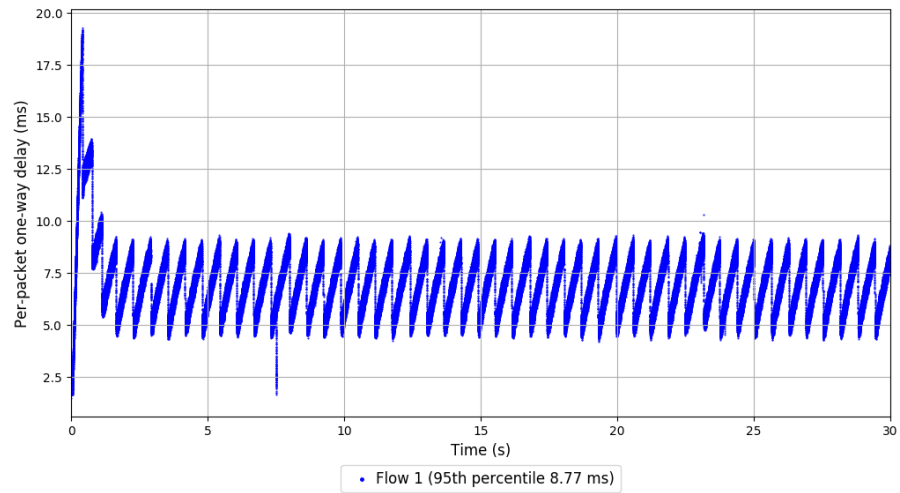
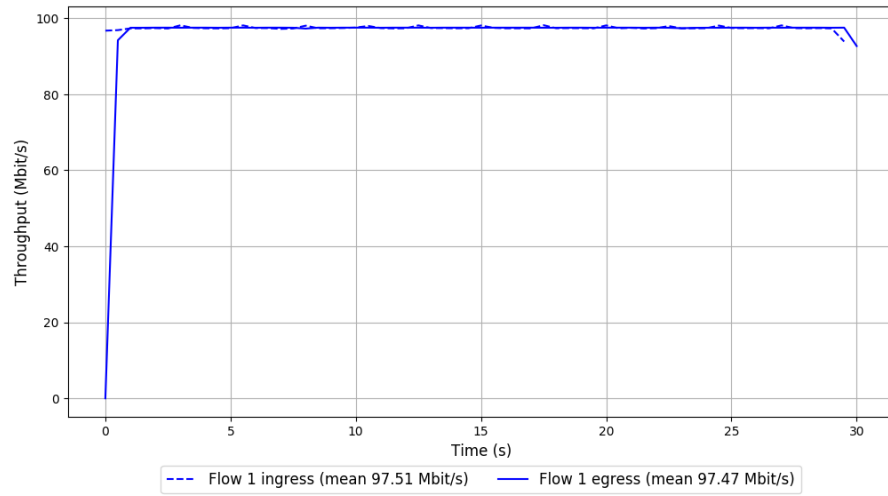
-- Flow 1:

Average throughput: 97.47 Mbit/s

95th percentile per-packet one-way delay: 8.768 ms

Loss rate: 0.06%

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

Start at: 2019-03-27 07:40:42

End at: 2019-03-27 07:41:12

Local clock offset: -6.977 ms

Remote clock offset: 0.331 ms

Below is generated by plot.py at 2019-03-27 08:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.47 Mbit/s

95th percentile per-packet one-way delay: 9.606 ms

Loss rate: 0.07%

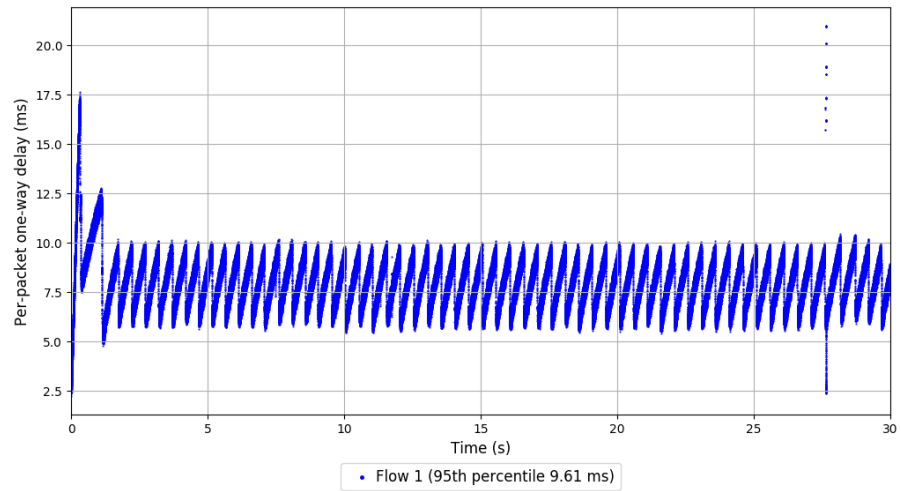
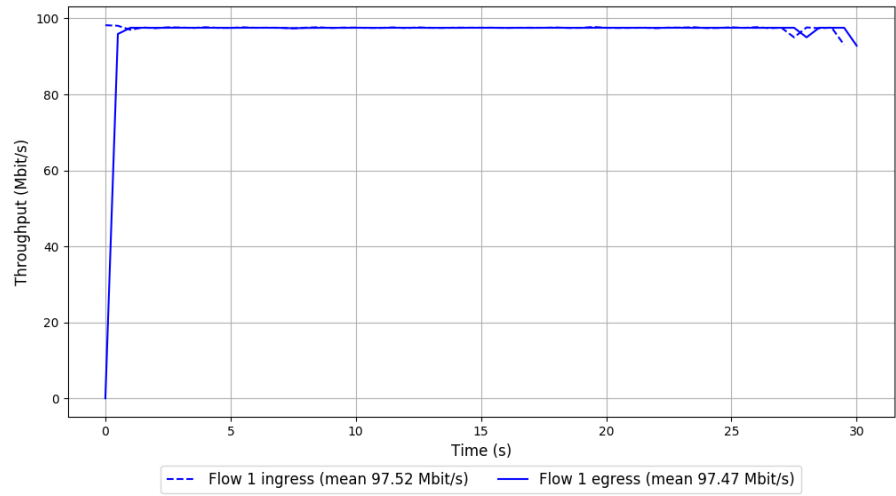
-- Flow 1:

Average throughput: 97.47 Mbit/s

95th percentile per-packet one-way delay: 9.606 ms

Loss rate: 0.07%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-03-27 08:04:23

End at: 2019-03-27 08:04:53

Local clock offset: -5.679 ms

Remote clock offset: 0.045 ms

Below is generated by plot.py at 2019-03-27 08:40:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.46 Mbit/s

95th percentile per-packet one-way delay: 9.703 ms

Loss rate: 0.05%

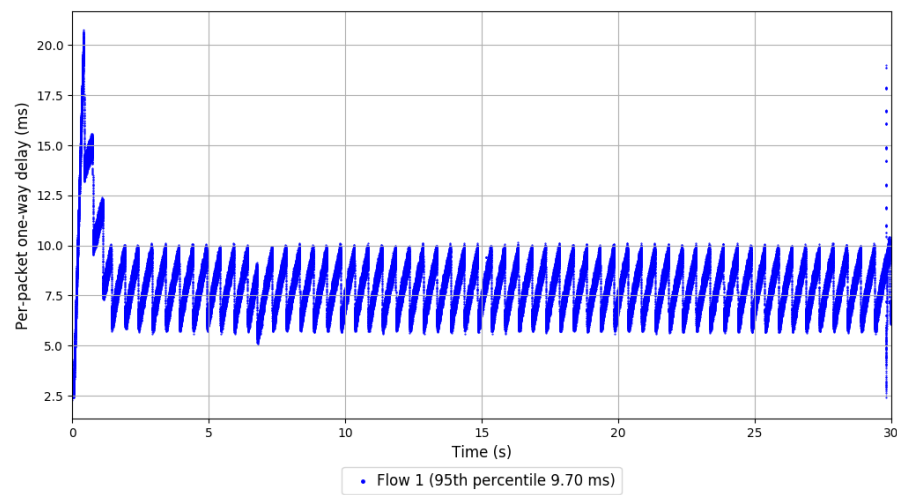
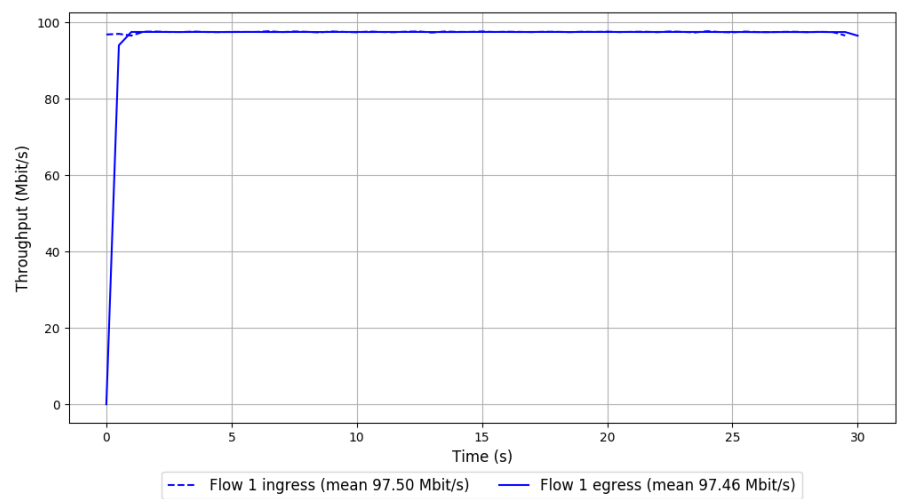
-- Flow 1:

Average throughput: 97.46 Mbit/s

95th percentile per-packet one-way delay: 9.703 ms

Loss rate: 0.05%

Run 4: Report of TCP Cubic — Data Link

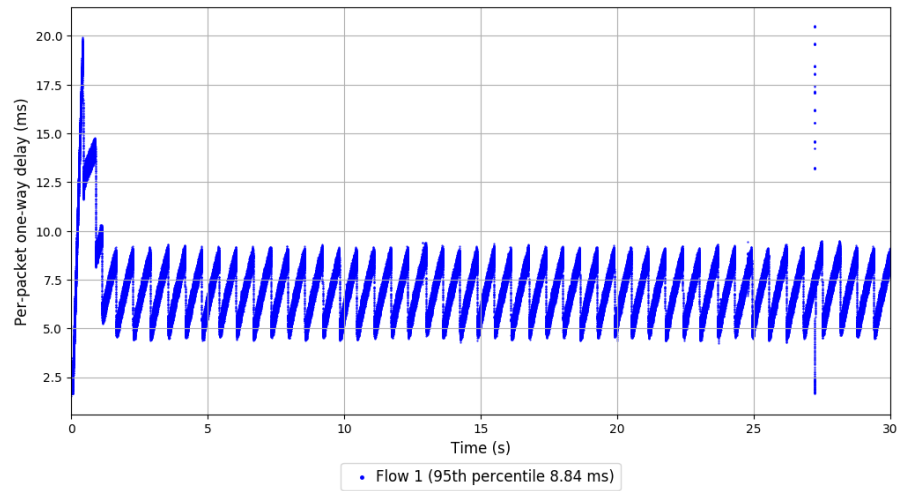
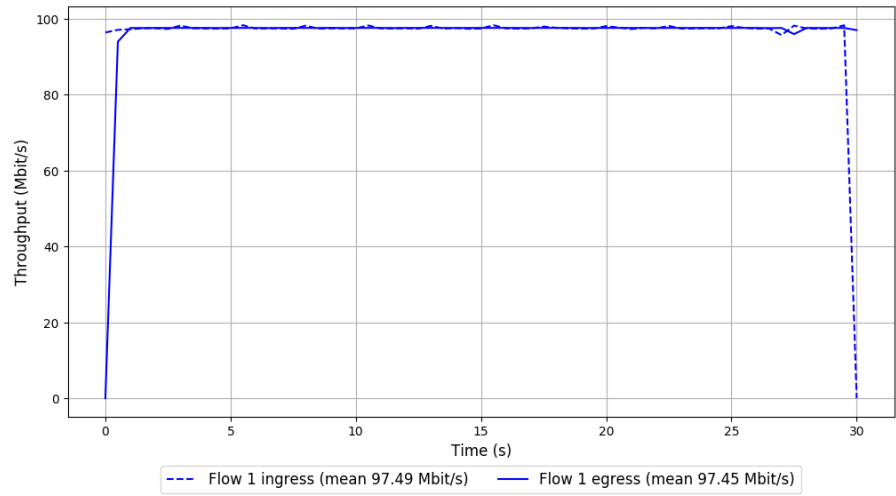


Run 5: Statistics of TCP Cubic

Start at: 2019-03-27 08:28:04
End at: 2019-03-27 08:28:34
Local clock offset: -6.275 ms
Remote clock offset: -0.065 ms

Below is generated by plot.py at 2019-03-27 08:40:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 97.45 Mbit/s
95th percentile per-packet one-way delay: 8.839 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 97.45 Mbit/s
95th percentile per-packet one-way delay: 8.839 ms
Loss rate: 0.06%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-03-27 06:34:23

End at: 2019-03-27 06:34:53

Local clock offset: -6.282 ms

Remote clock offset: 0.192 ms

Below is generated by plot.py at 2019-03-27 08:40:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.94 Mbit/s

95th percentile per-packet one-way delay: 9.794 ms

Loss rate: 0.04%

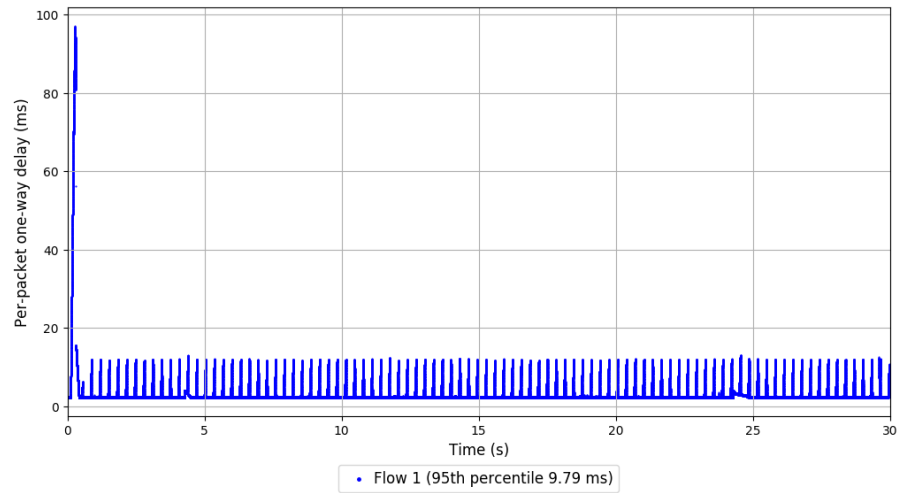
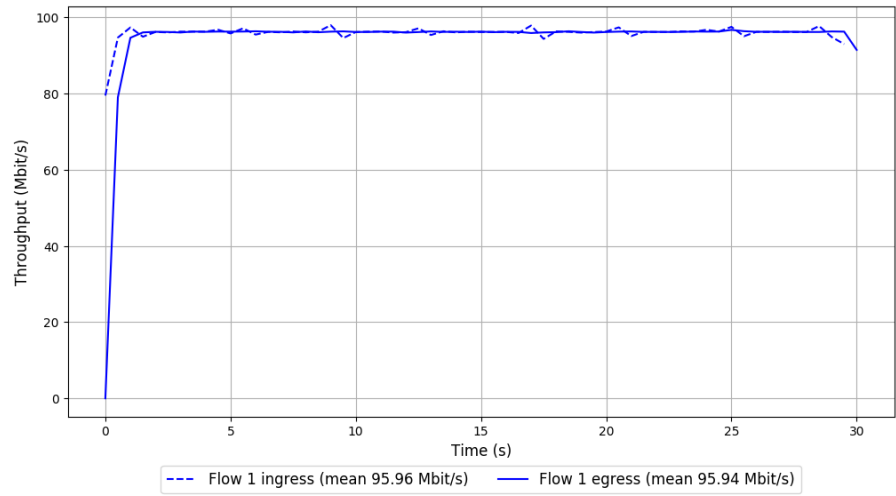
-- Flow 1:

Average throughput: 95.94 Mbit/s

95th percentile per-packet one-way delay: 9.794 ms

Loss rate: 0.04%

Run 1: Report of FillP — Data Link



Run 2: Statistics of FillP

Start at: 2019-03-27 06:58:03

End at: 2019-03-27 06:58:33

Local clock offset: -6.439 ms

Remote clock offset: 0.431 ms

Below is generated by plot.py at 2019-03-27 08:40:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.92 Mbit/s

95th percentile per-packet one-way delay: 10.120 ms

Loss rate: 0.05%

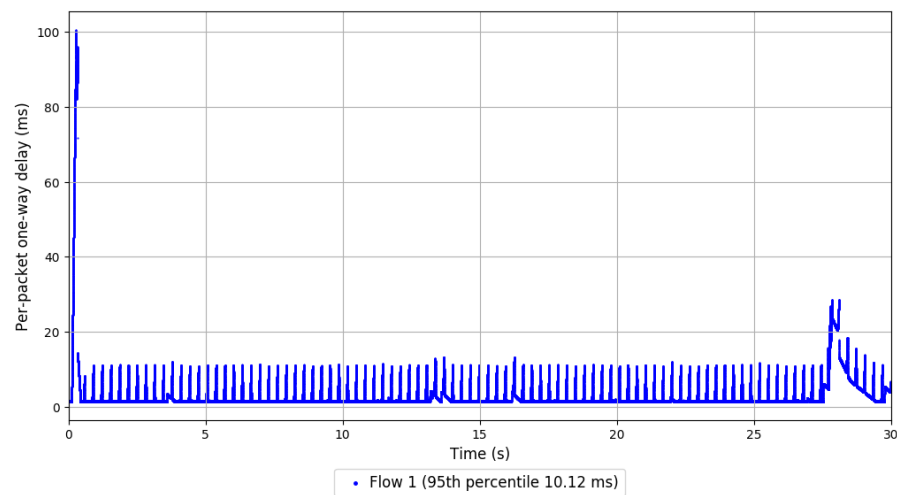
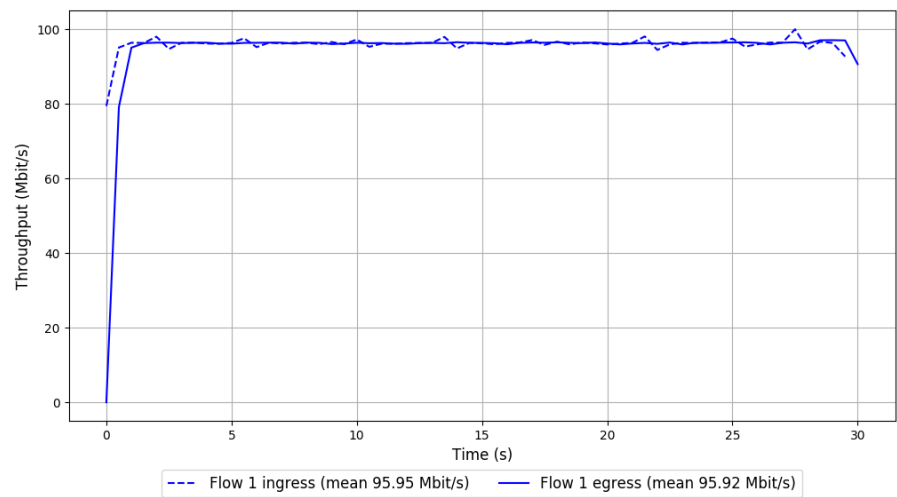
-- Flow 1:

Average throughput: 95.92 Mbit/s

95th percentile per-packet one-way delay: 10.120 ms

Loss rate: 0.05%

Run 2: Report of FillP — Data Link



Run 3: Statistics of FillP

Start at: 2019-03-27 07:21:41

End at: 2019-03-27 07:22:11

Local clock offset: -6.842 ms

Remote clock offset: 0.494 ms

Below is generated by plot.py at 2019-03-27 08:40:54

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.90 Mbit/s

95th percentile per-packet one-way delay: 9.068 ms

Loss rate: 0.04%

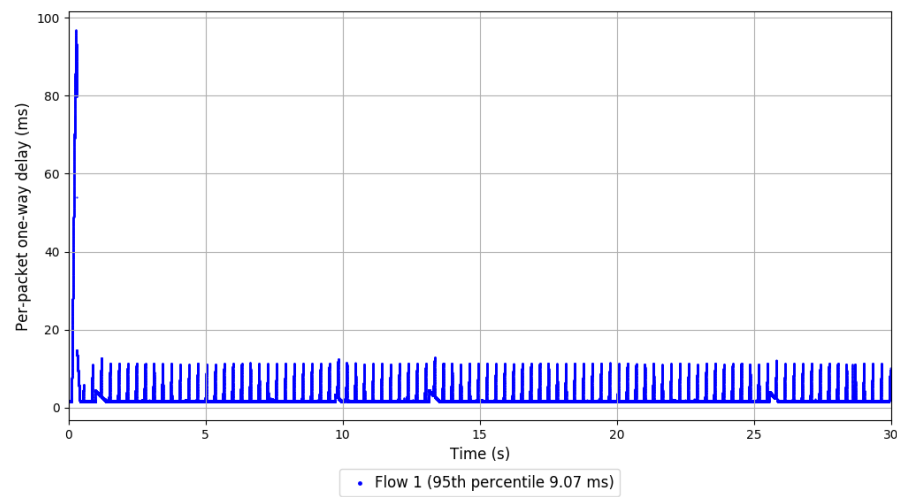
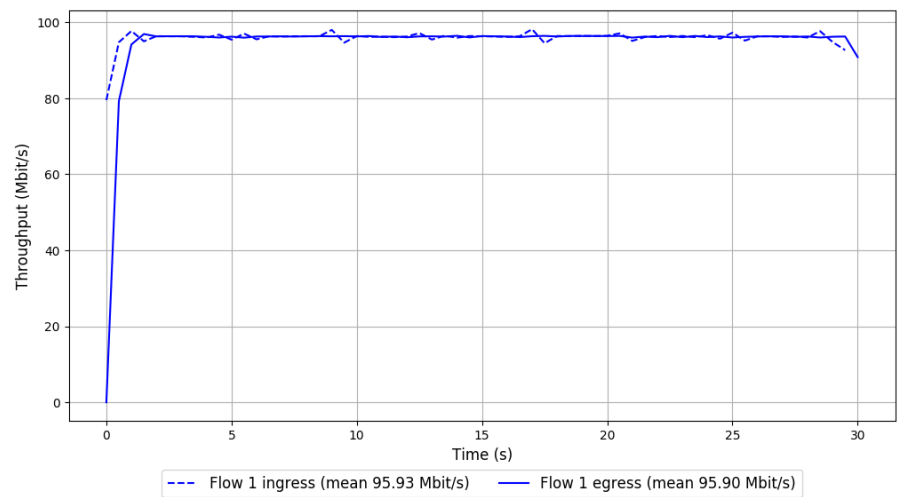
-- Flow 1:

Average throughput: 95.90 Mbit/s

95th percentile per-packet one-way delay: 9.068 ms

Loss rate: 0.04%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2019-03-27 07:52:01

End at: 2019-03-27 07:52:31

Local clock offset: -7.178 ms

Remote clock offset: 0.203 ms

Below is generated by plot.py at 2019-03-27 08:40:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.91 Mbit/s

95th percentile per-packet one-way delay: 9.022 ms

Loss rate: 0.03%

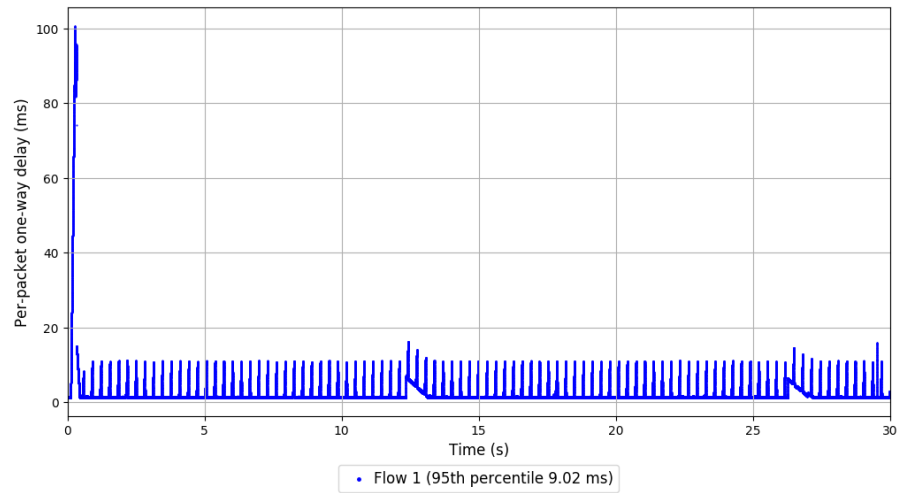
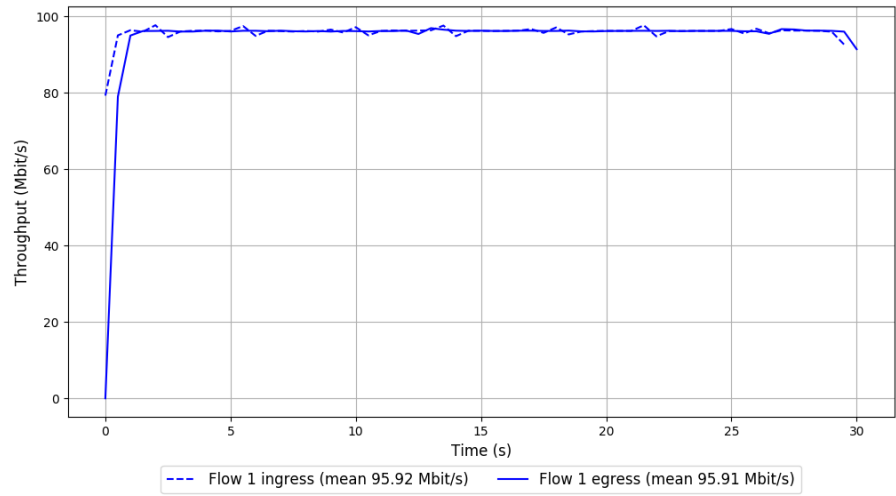
-- Flow 1:

Average throughput: 95.91 Mbit/s

95th percentile per-packet one-way delay: 9.022 ms

Loss rate: 0.03%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2019-03-27 08:15:41

End at: 2019-03-27 08:16:11

Local clock offset: -5.521 ms

Remote clock offset: 0.075 ms

Below is generated by plot.py at 2019-03-27 08:41:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.95 Mbit/s

95th percentile per-packet one-way delay: 10.518 ms

Loss rate: 0.03%

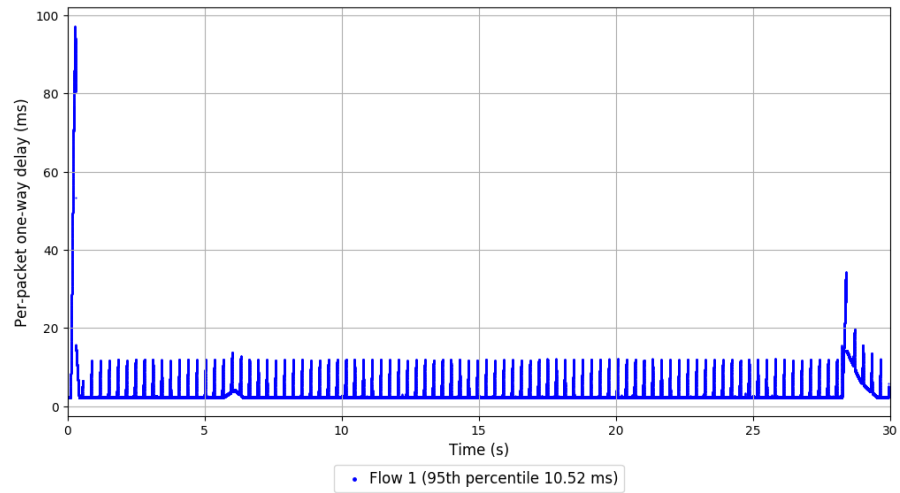
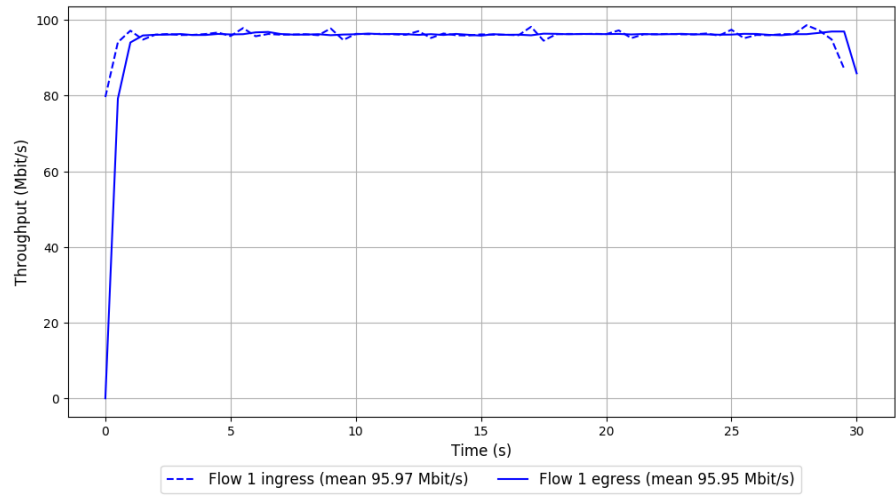
-- Flow 1:

Average throughput: 95.95 Mbit/s

95th percentile per-packet one-way delay: 10.518 ms

Loss rate: 0.03%

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-03-27 06:41:08

End at: 2019-03-27 06:41:38

Local clock offset: -6.225 ms

Remote clock offset: 0.254 ms

Below is generated by plot.py at 2019-03-27 08:41:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.41 Mbit/s

95th percentile per-packet one-way delay: 6.612 ms

Loss rate: 0.02%

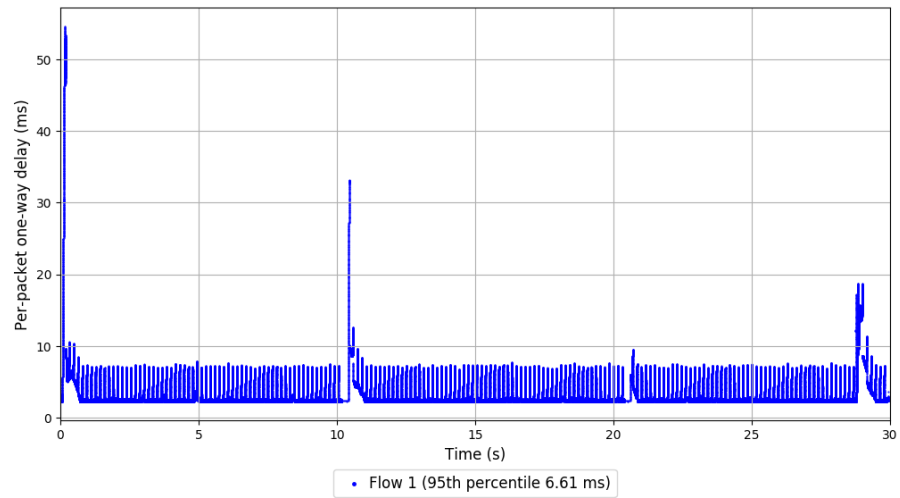
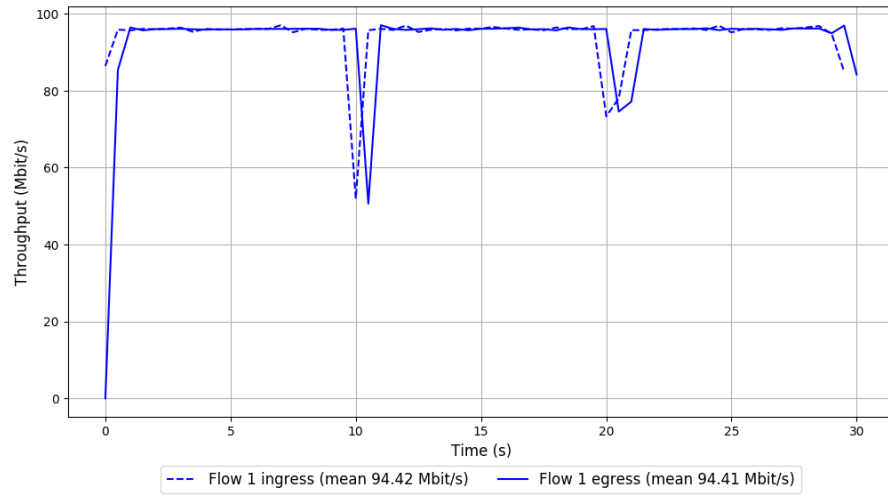
-- Flow 1:

Average throughput: 94.41 Mbit/s

95th percentile per-packet one-way delay: 6.612 ms

Loss rate: 0.02%

Run 1: Report of FillP-Sheep — Data Link



Run 2: Statistics of FillP-Sheep

Start at: 2019-03-27 07:04:48

End at: 2019-03-27 07:05:18

Local clock offset: -5.499 ms

Remote clock offset: 0.375 ms

Below is generated by plot.py at 2019-03-27 08:41:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.37 Mbit/s

95th percentile per-packet one-way delay: 6.406 ms

Loss rate: 0.02%

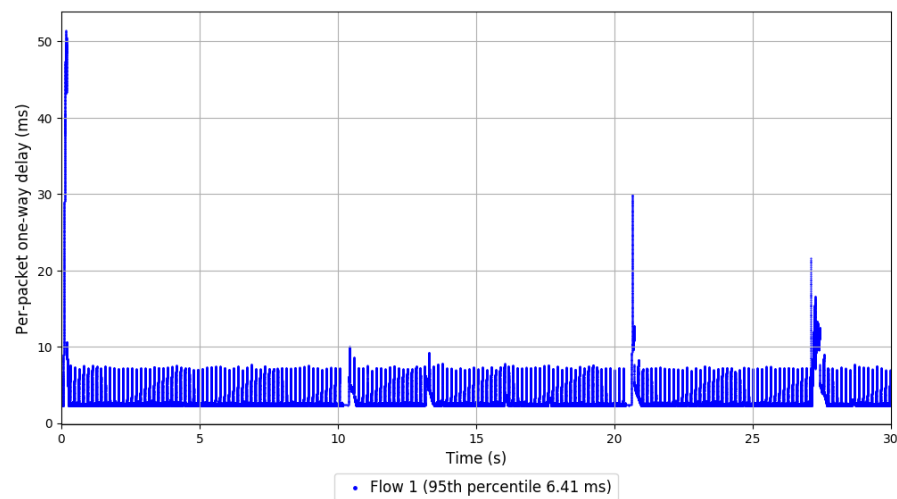
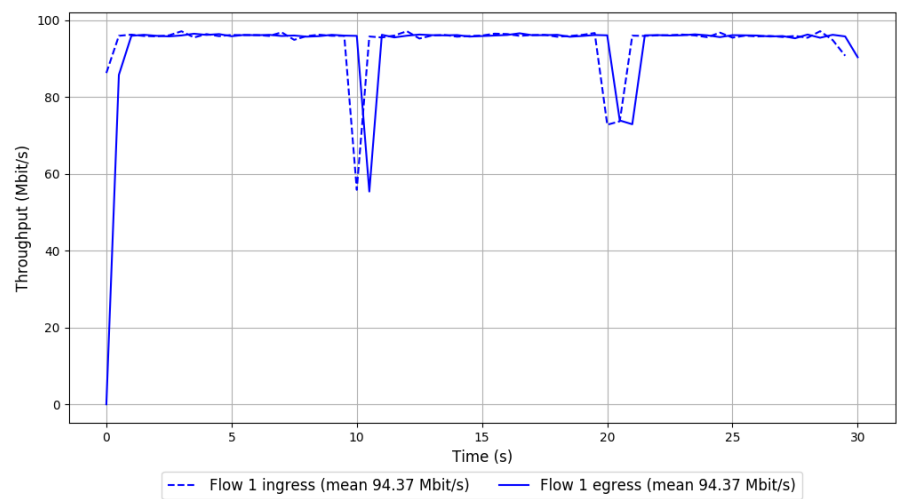
-- Flow 1:

Average throughput: 94.37 Mbit/s

95th percentile per-packet one-way delay: 6.406 ms

Loss rate: 0.02%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-03-27 07:35:04

End at: 2019-03-27 07:35:34

Local clock offset: -6.607 ms

Remote clock offset: 0.337 ms

Below is generated by plot.py at 2019-03-27 08:41:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.39 Mbit/s

95th percentile per-packet one-way delay: 6.867 ms

Loss rate: 0.03%

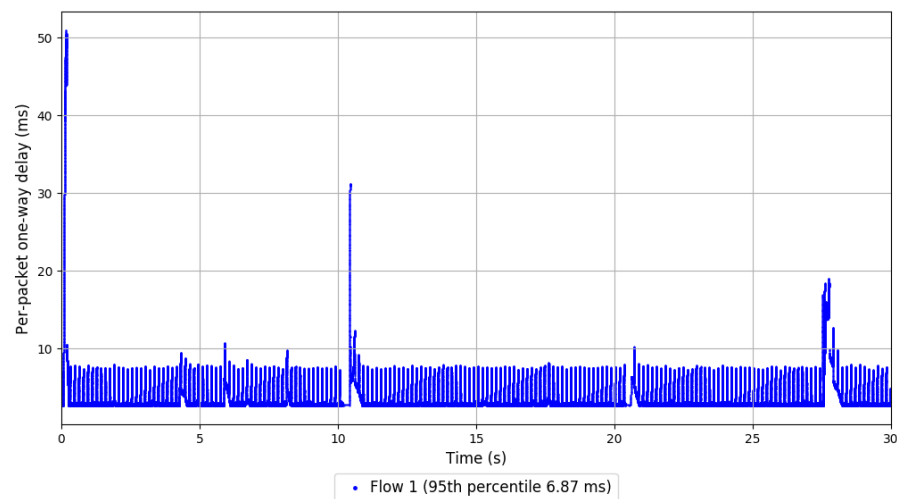
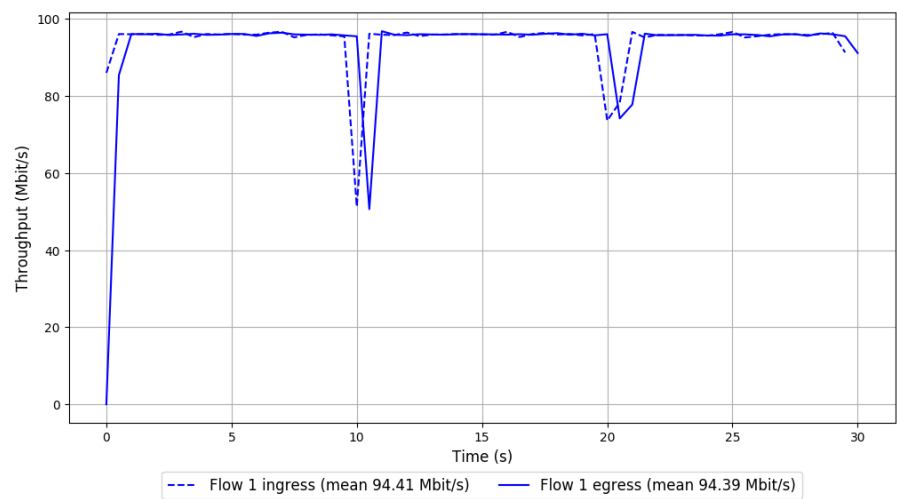
-- Flow 1:

Average throughput: 94.39 Mbit/s

95th percentile per-packet one-way delay: 6.867 ms

Loss rate: 0.03%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-03-27 07:58:47

End at: 2019-03-27 07:59:17

Local clock offset: -6.637 ms

Remote clock offset: 0.112 ms

Below is generated by plot.py at 2019-03-27 08:42:08

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.38 Mbit/s

95th percentile per-packet one-way delay: 5.636 ms

Loss rate: 0.02%

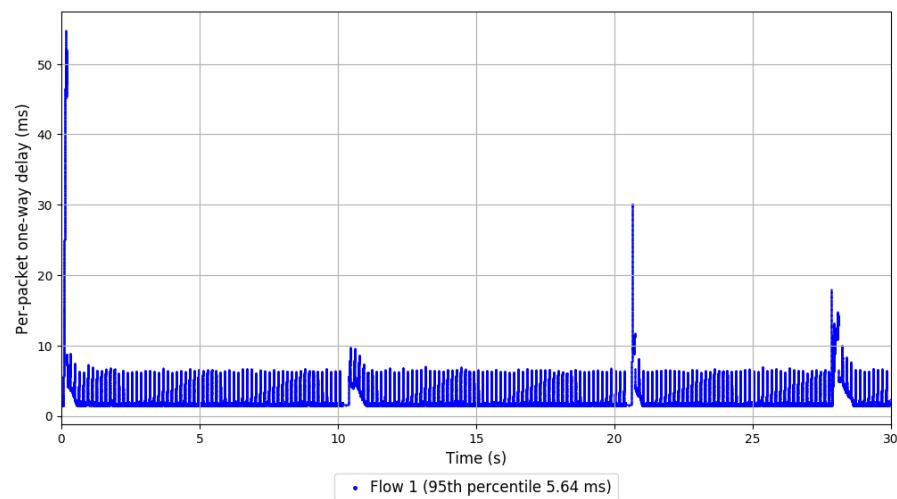
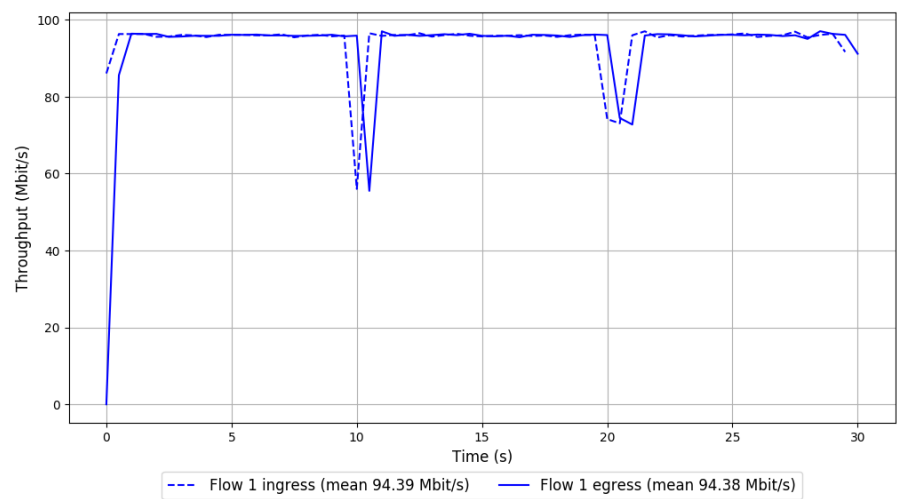
-- Flow 1:

Average throughput: 94.38 Mbit/s

95th percentile per-packet one-way delay: 5.636 ms

Loss rate: 0.02%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2019-03-27 08:22:26

End at: 2019-03-27 08:22:56

Local clock offset: -6.292 ms

Remote clock offset: -0.028 ms

Below is generated by plot.py at 2019-03-27 08:42:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 94.41 Mbit/s

95th percentile per-packet one-way delay: 5.852 ms

Loss rate: 0.02%

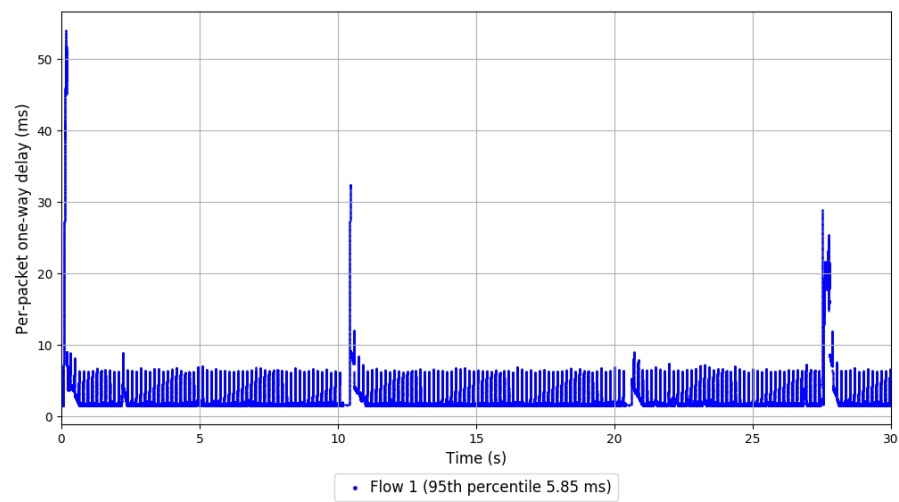
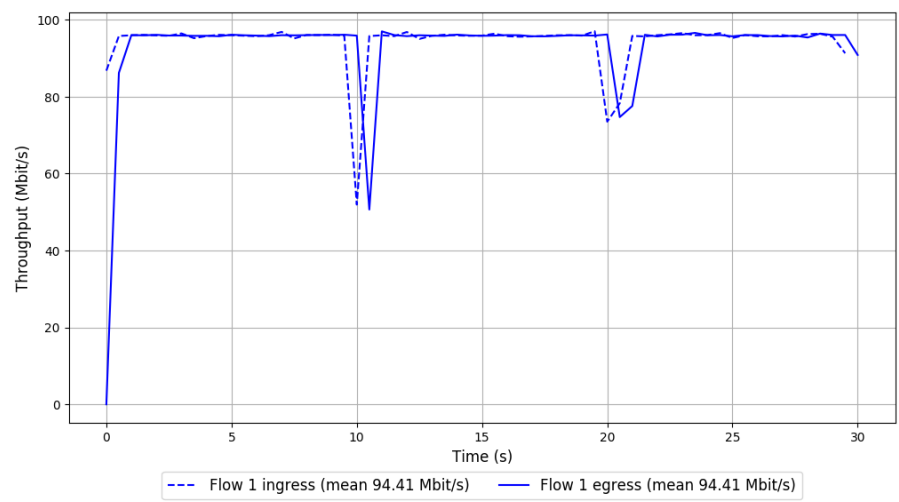
-- Flow 1:

Average throughput: 94.41 Mbit/s

95th percentile per-packet one-way delay: 5.852 ms

Loss rate: 0.02%

Run 5: Report of FillP-Sheep — Data Link

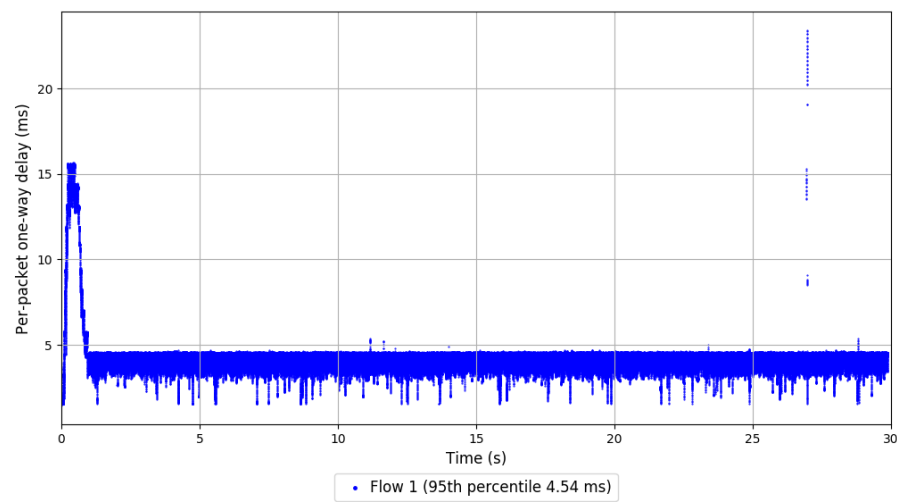
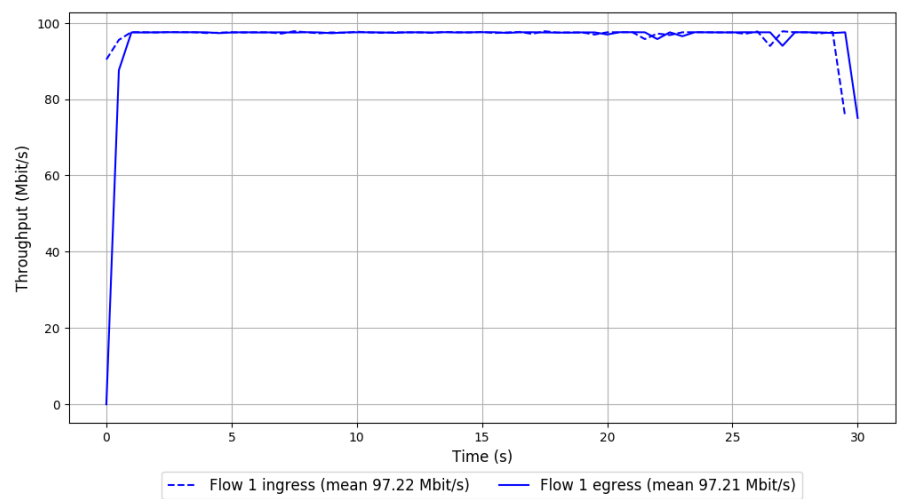


```
Run 1: Statistics of Indigo

Start at: 2019-03-27 06:44:29
End at: 2019-03-27 06:44:59
Local clock offset: -7.063 ms
Remote clock offset: 0.324 ms

# Below is generated by plot.py at 2019-03-27 08:42:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 4.542 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 4.542 ms
Loss rate: 0.02%
```

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-03-27 07:08:07

End at: 2019-03-27 07:08:37

Local clock offset: -5.457 ms

Remote clock offset: 0.44 ms

Below is generated by plot.py at 2019-03-27 08:42:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.25 Mbit/s

95th percentile per-packet one-way delay: 5.070 ms

Loss rate: 0.02%

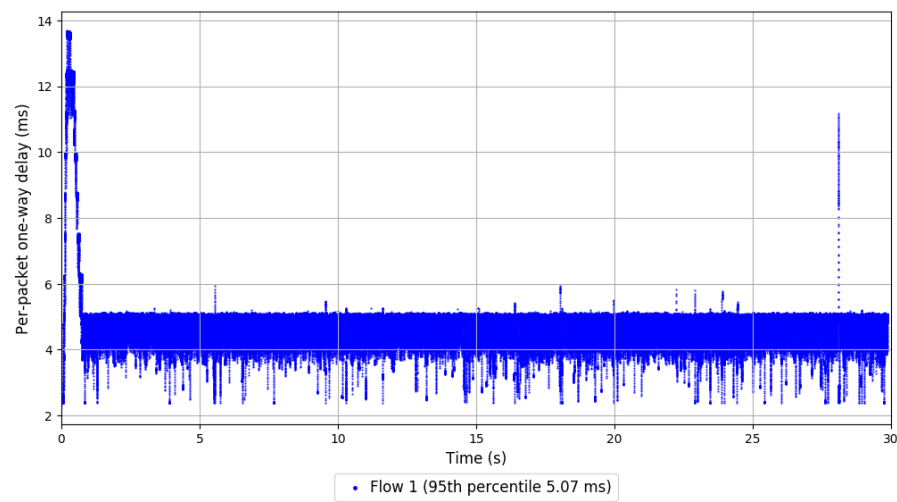
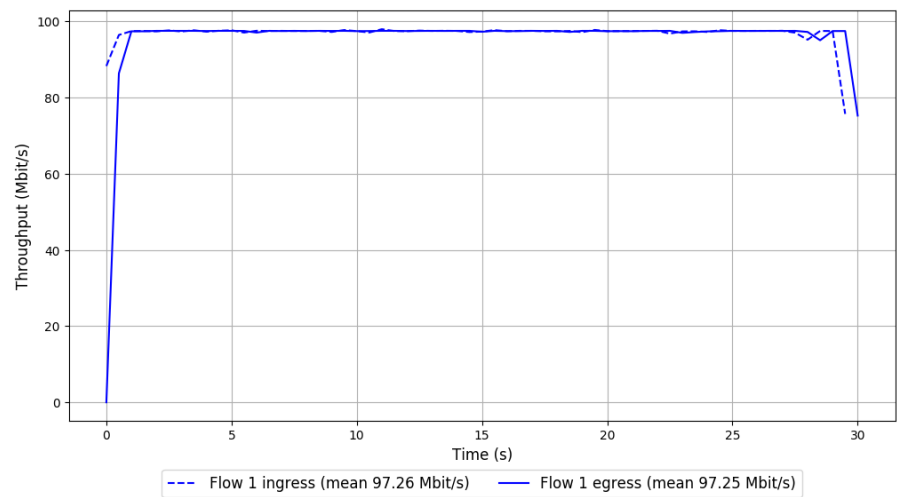
-- Flow 1:

Average throughput: 97.25 Mbit/s

95th percentile per-packet one-way delay: 5.070 ms

Loss rate: 0.02%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-03-27 07:38:26

End at: 2019-03-27 07:38:56

Local clock offset: -6.907 ms

Remote clock offset: 0.283 ms

Below is generated by plot.py at 2019-03-27 08:42:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.03 Mbit/s

95th percentile per-packet one-way delay: 5.049 ms

Loss rate: 0.02%

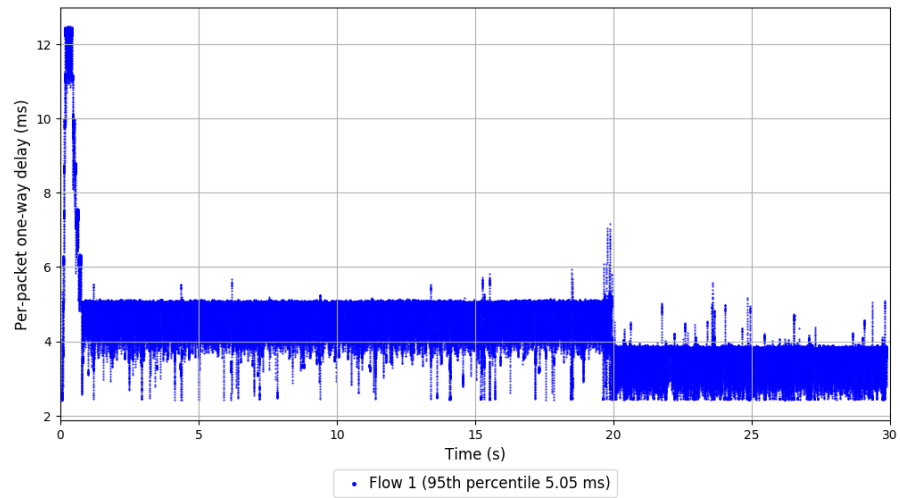
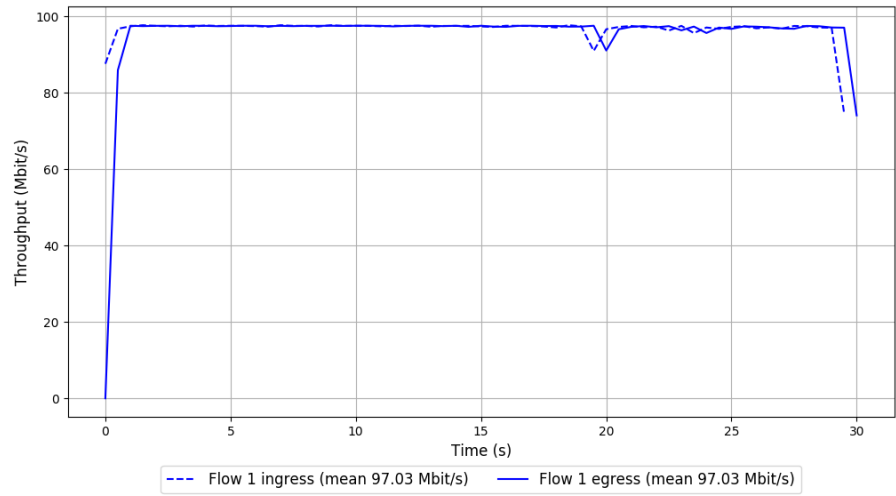
-- Flow 1:

Average throughput: 97.03 Mbit/s

95th percentile per-packet one-way delay: 5.049 ms

Loss rate: 0.02%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2019-03-27 08:02:08

End at: 2019-03-27 08:02:38

Local clock offset: -5.736 ms

Remote clock offset: 0.179 ms

Below is generated by plot.py at 2019-03-27 08:42:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.21 Mbit/s

95th percentile per-packet one-way delay: 5.012 ms

Loss rate: 0.02%

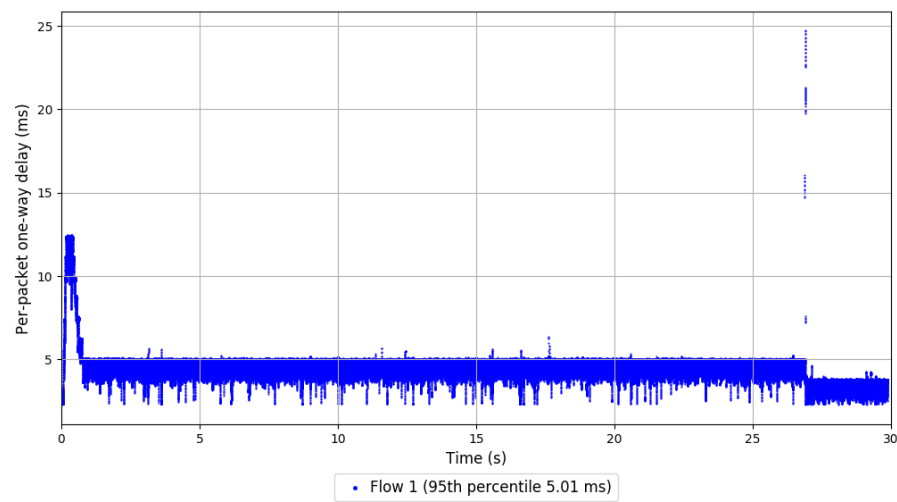
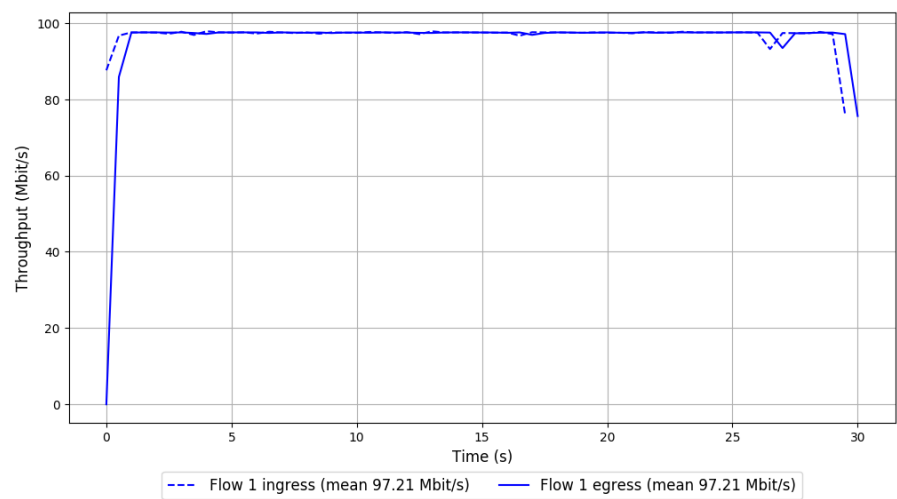
-- Flow 1:

Average throughput: 97.21 Mbit/s

95th percentile per-packet one-way delay: 5.012 ms

Loss rate: 0.02%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2019-03-27 08:25:48

End at: 2019-03-27 08:26:18

Local clock offset: -5.505 ms

Remote clock offset: -0.041 ms

Below is generated by plot.py at 2019-03-27 08:42:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.32 Mbit/s

95th percentile per-packet one-way delay: 5.421 ms

Loss rate: 0.02%

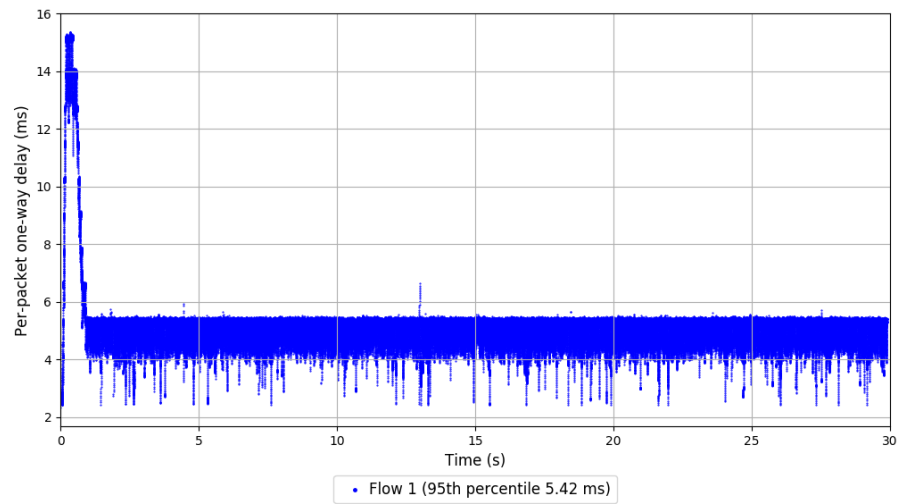
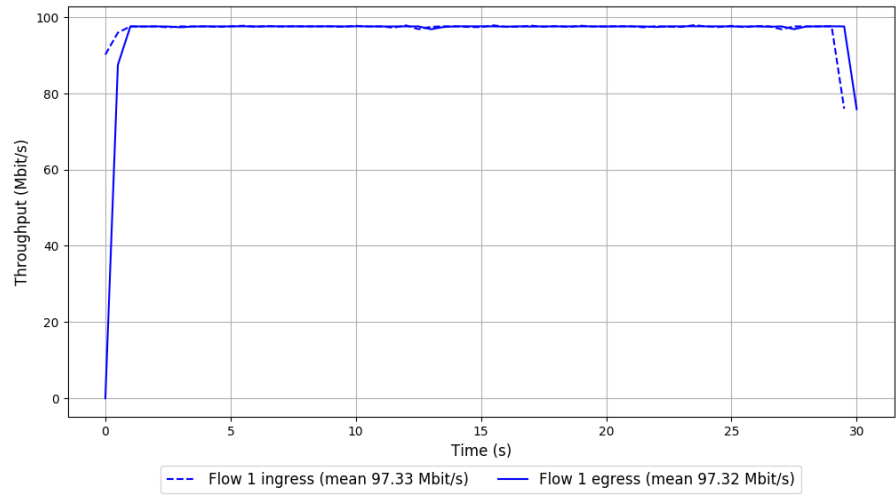
-- Flow 1:

Average throughput: 97.32 Mbit/s

95th percentile per-packet one-way delay: 5.421 ms

Loss rate: 0.02%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

Start at: 2019-03-27 06:32:09

End at: 2019-03-27 06:32:39

Local clock offset: -6.33 ms

Remote clock offset: 0.164 ms

Below is generated by plot.py at 2019-03-27 08:42:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.44 Mbit/s

95th percentile per-packet one-way delay: 4.523 ms

Loss rate: 0.02%

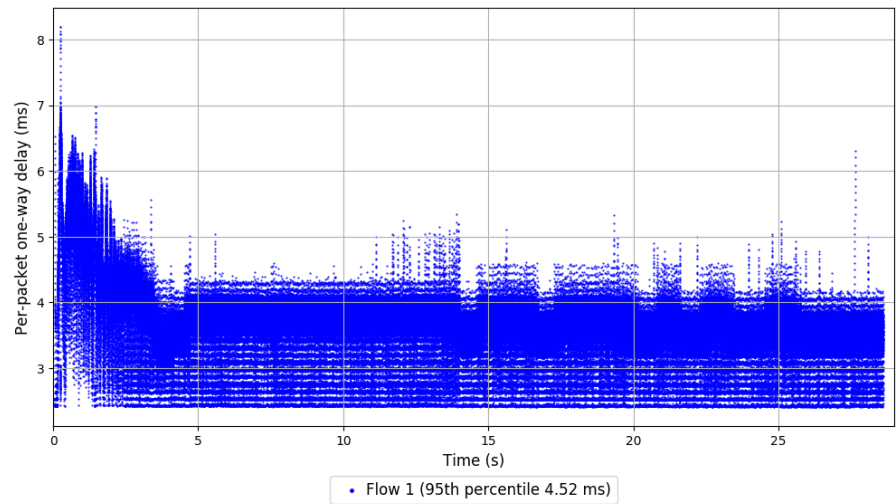
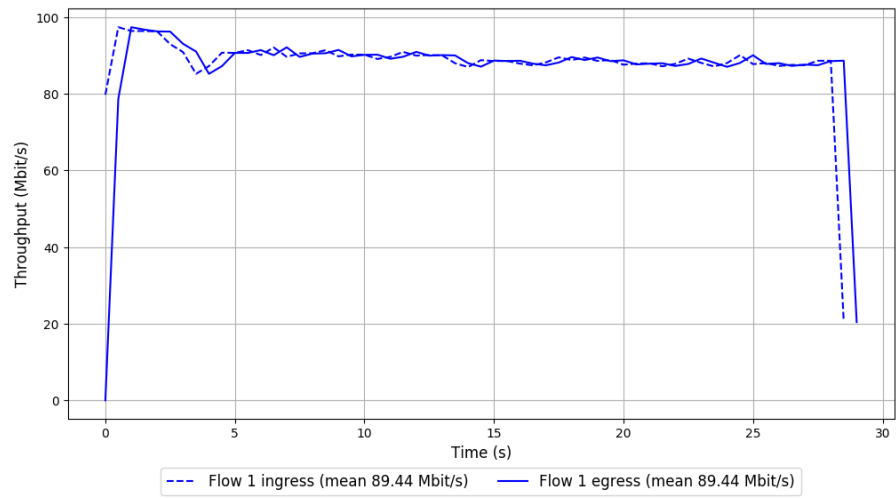
-- Flow 1:

Average throughput: 89.44 Mbit/s

95th percentile per-packet one-way delay: 4.523 ms

Loss rate: 0.02%

Run 1: Report of Indigo-MusesC3 — Data Link



Run 2: Statistics of Indigo-MusesC3

Start at: 2019-03-27 06:55:50

End at: 2019-03-27 06:56:20

Local clock offset: -5.657 ms

Remote clock offset: 0.419 ms

Below is generated by plot.py at 2019-03-27 08:43:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.94 Mbit/s

95th percentile per-packet one-way delay: 3.728 ms

Loss rate: 0.02%

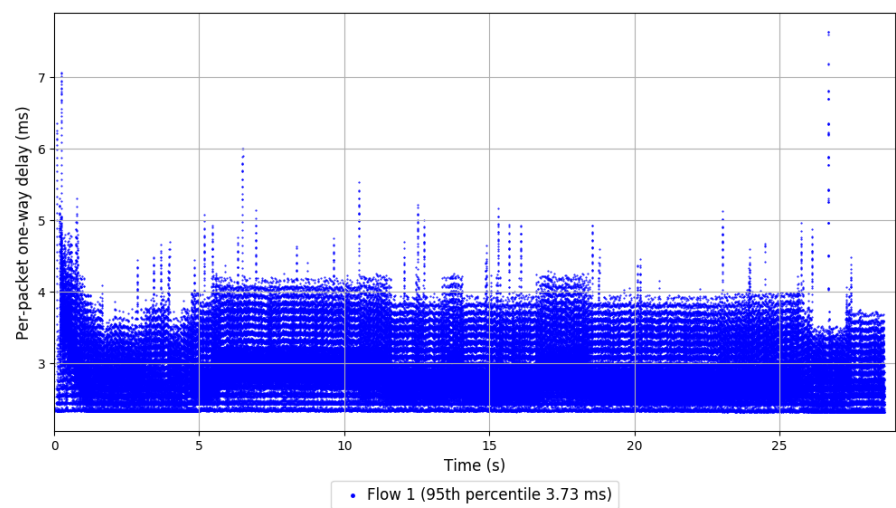
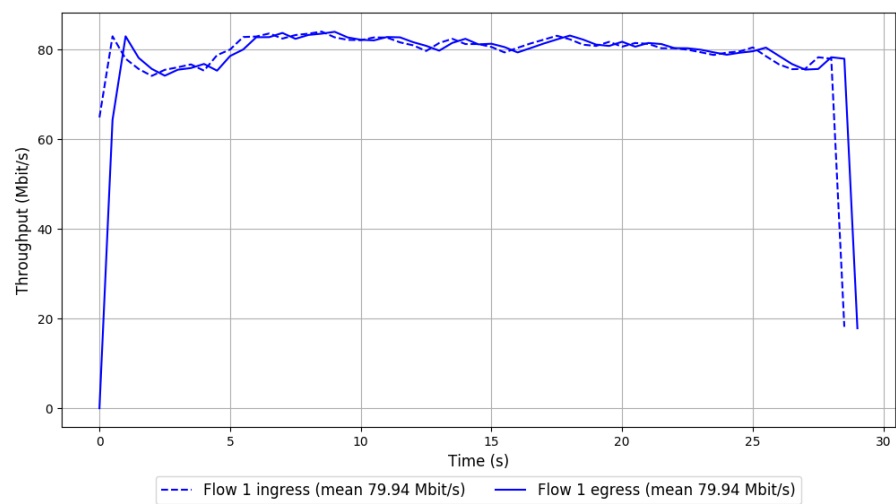
-- Flow 1:

Average throughput: 79.94 Mbit/s

95th percentile per-packet one-way delay: 3.728 ms

Loss rate: 0.02%

Run 2: Report of Indigo-MusesC3 — Data Link



Run 3: Statistics of Indigo-MusesC3

Start at: 2019-03-27 07:19:27

End at: 2019-03-27 07:19:57

Local clock offset: -5.933 ms

Remote clock offset: 0.484 ms

Below is generated by plot.py at 2019-03-27 08:43:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.71 Mbit/s

95th percentile per-packet one-way delay: 4.574 ms

Loss rate: 0.02%

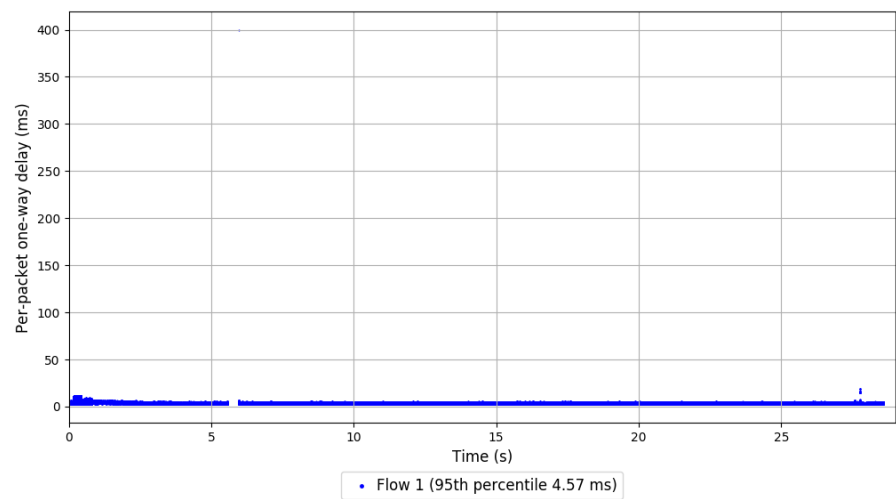
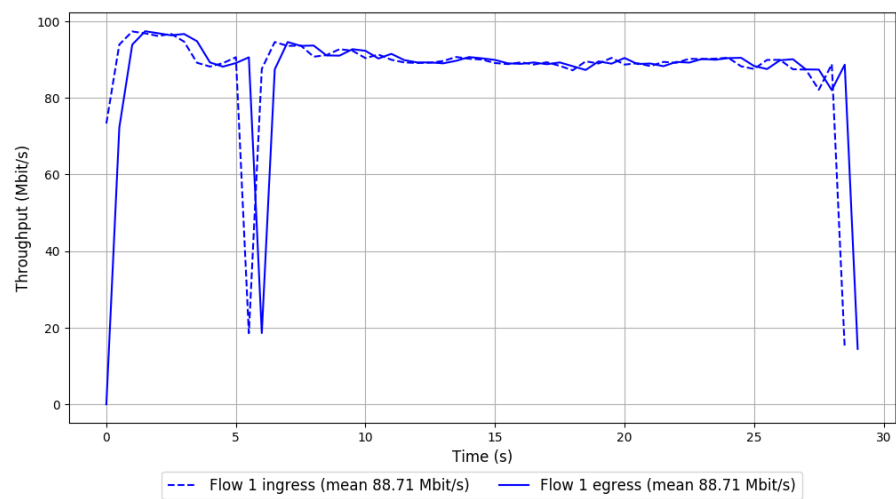
-- Flow 1:

Average throughput: 88.71 Mbit/s

95th percentile per-packet one-way delay: 4.574 ms

Loss rate: 0.02%

Run 3: Report of Indigo-MusesC3 — Data Link



Run 4: Statistics of Indigo-MusesC3

Start at: 2019-03-27 07:49:46

End at: 2019-03-27 07:50:16

Local clock offset: -6.627 ms

Remote clock offset: 0.169 ms

Below is generated by plot.py at 2019-03-27 08:43:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 81.90 Mbit/s

95th percentile per-packet one-way delay: 3.691 ms

Loss rate: 0.02%

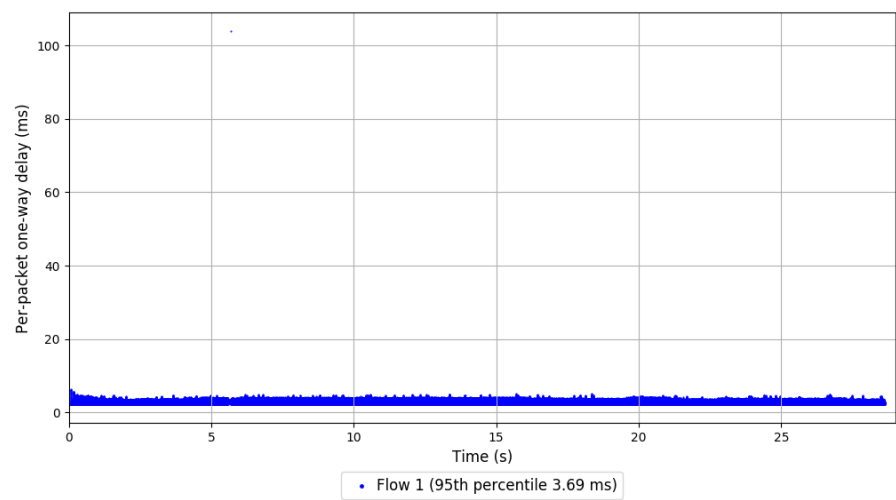
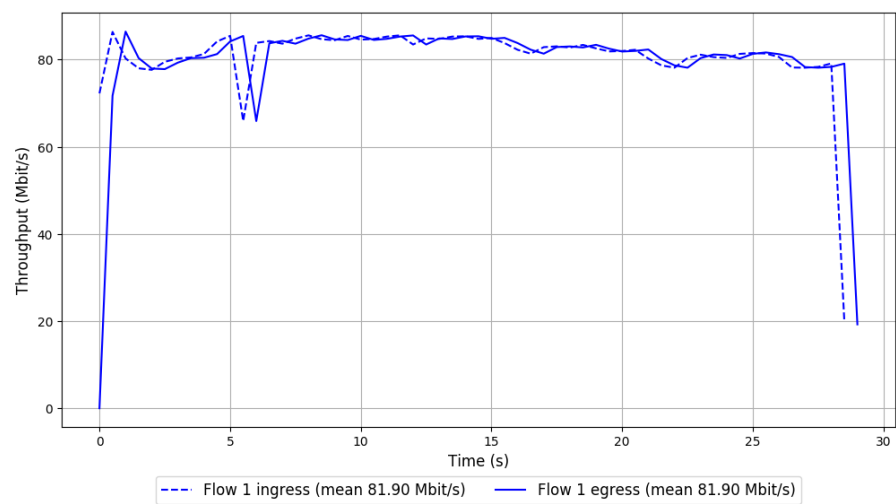
-- Flow 1:

Average throughput: 81.90 Mbit/s

95th percentile per-packet one-way delay: 3.691 ms

Loss rate: 0.02%

Run 4: Report of Indigo-MusesC3 — Data Link



Run 5: Statistics of Indigo-MusesC3

Start at: 2019-03-27 08:13:27

End at: 2019-03-27 08:13:57

Local clock offset: -6.301 ms

Remote clock offset: 0.097 ms

Below is generated by plot.py at 2019-03-27 08:43:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.01 Mbit/s

95th percentile per-packet one-way delay: 3.534 ms

Loss rate: 0.02%

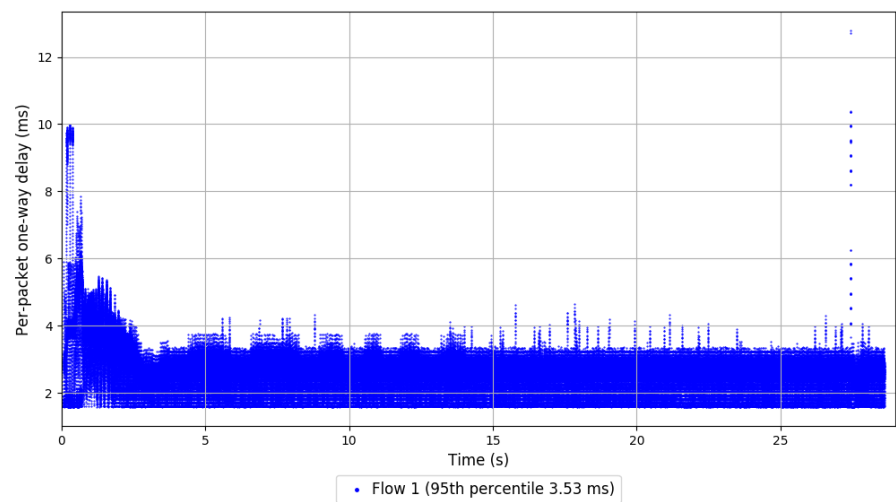
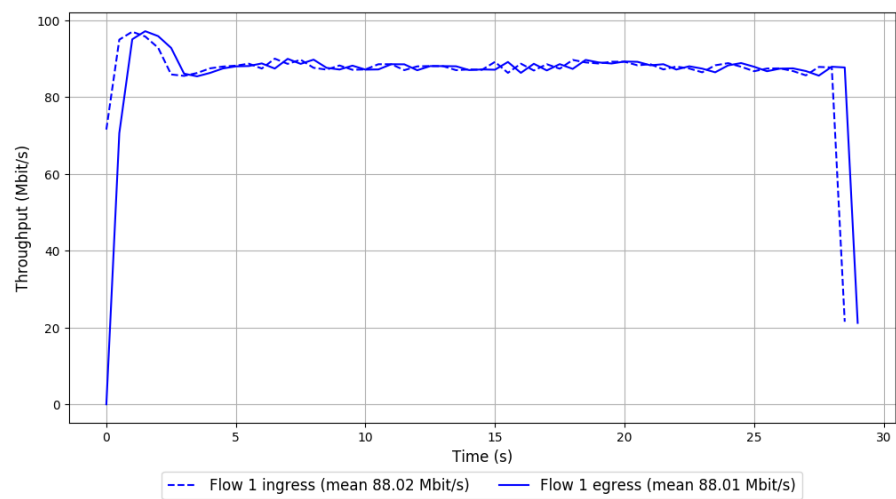
-- Flow 1:

Average throughput: 88.01 Mbit/s

95th percentile per-packet one-way delay: 3.534 ms

Loss rate: 0.02%

Run 5: Report of Indigo-MusesC3 — Data Link



Run 1: Statistics of Indigo-MusesC5

Start at: 2019-03-27 06:36:38

End at: 2019-03-27 06:37:08

Local clock offset: -7.018 ms

Remote clock offset: 0.139 ms

Below is generated by plot.py at 2019-03-27 08:43:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 24.86 Mbit/s

95th percentile per-packet one-way delay: 3.630 ms

Loss rate: 0.01%

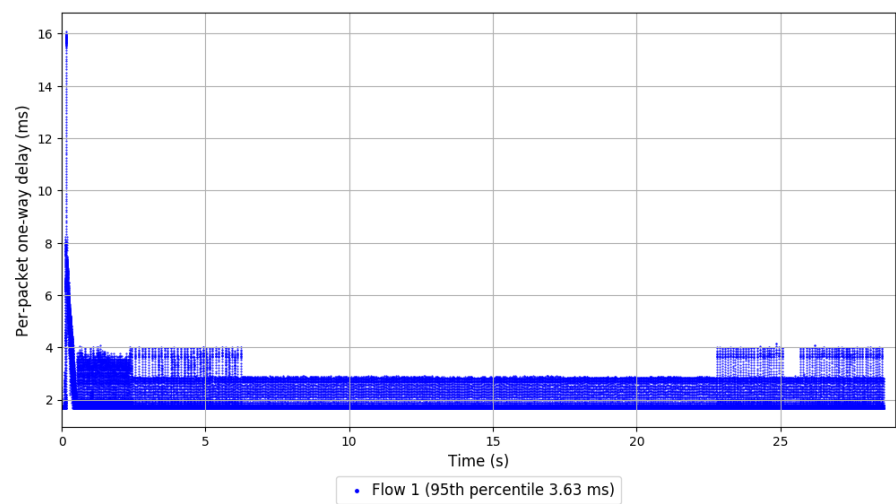
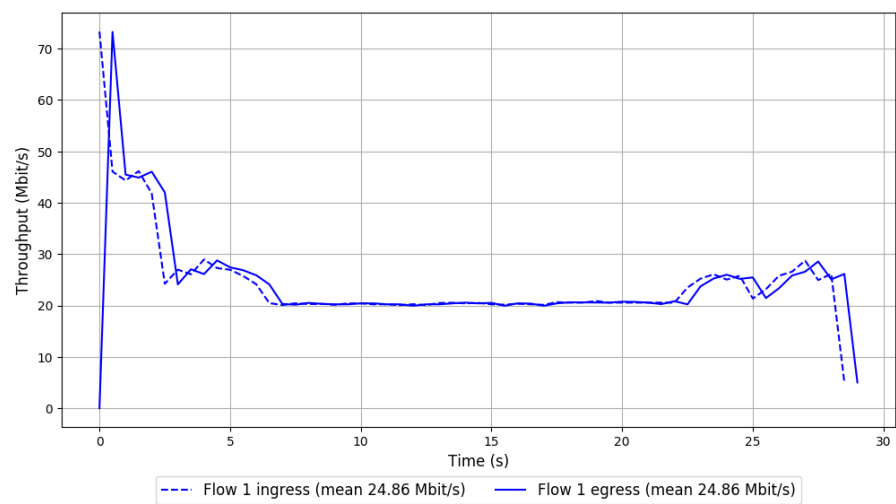
-- Flow 1:

Average throughput: 24.86 Mbit/s

95th percentile per-packet one-way delay: 3.630 ms

Loss rate: 0.01%

Run 1: Report of Indigo-MusesC5 — Data Link



Run 2: Statistics of Indigo-MusesC5

Start at: 2019-03-27 07:00:18

End at: 2019-03-27 07:00:48

Local clock offset: -5.558 ms

Remote clock offset: 0.382 ms

Below is generated by plot.py at 2019-03-27 08:43:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.59 Mbit/s

95th percentile per-packet one-way delay: 4.100 ms

Loss rate: 0.01%

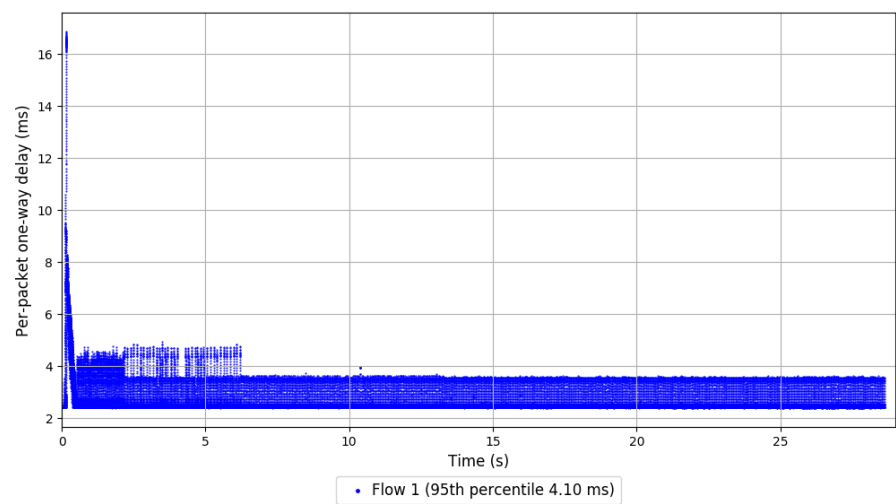
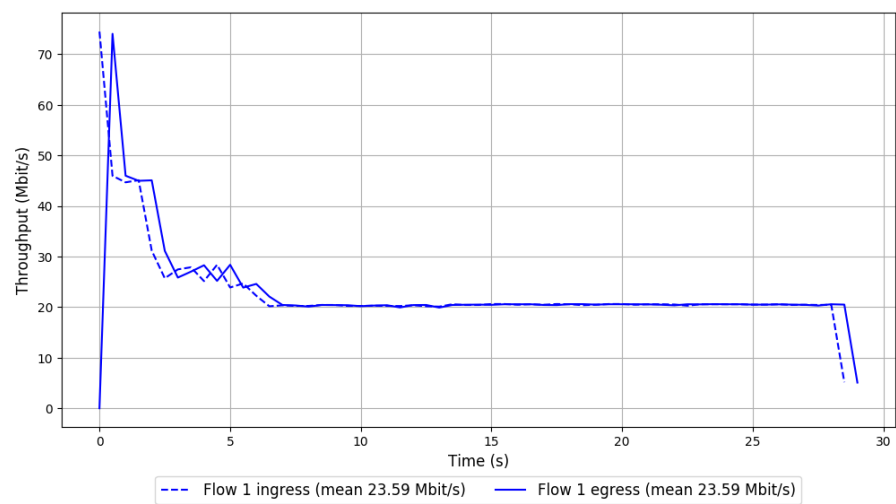
-- Flow 1:

Average throughput: 23.59 Mbit/s

95th percentile per-packet one-way delay: 4.100 ms

Loss rate: 0.01%

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

Start at: 2019-03-27 07:23:56

End at: 2019-03-27 07:24:26

Local clock offset: -6.317 ms

Remote clock offset: 0.398 ms

Below is generated by plot.py at 2019-03-27 08:43:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.77 Mbit/s

95th percentile per-packet one-way delay: 4.214 ms

Loss rate: 0.01%

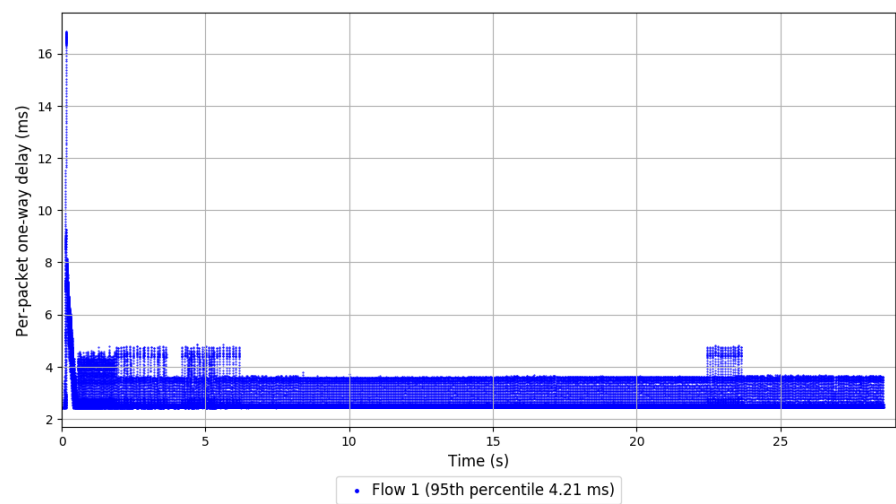
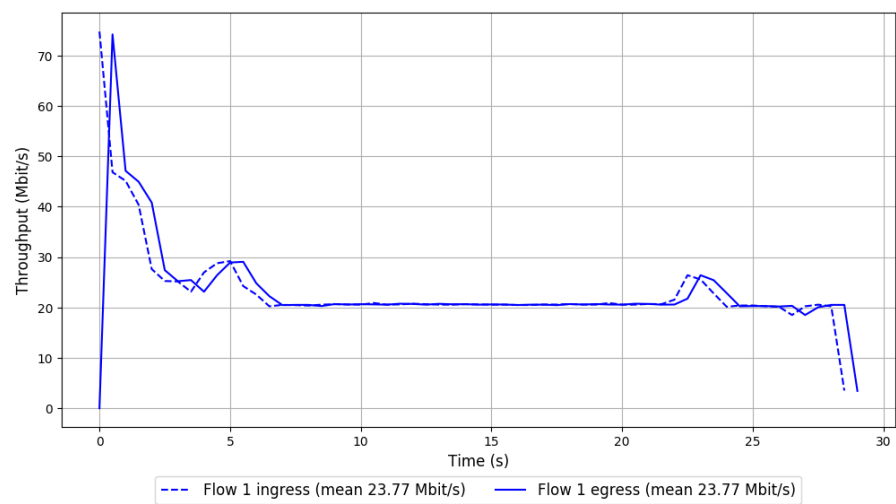
-- Flow 1:

Average throughput: 23.77 Mbit/s

95th percentile per-packet one-way delay: 4.214 ms

Loss rate: 0.01%

Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-03-27 07:54:16

End at: 2019-03-27 07:54:46

Local clock offset: -6.946 ms

Remote clock offset: 0.202 ms

Below is generated by plot.py at 2019-03-27 08:43:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.55 Mbit/s

95th percentile per-packet one-way delay: 3.540 ms

Loss rate: 0.01%

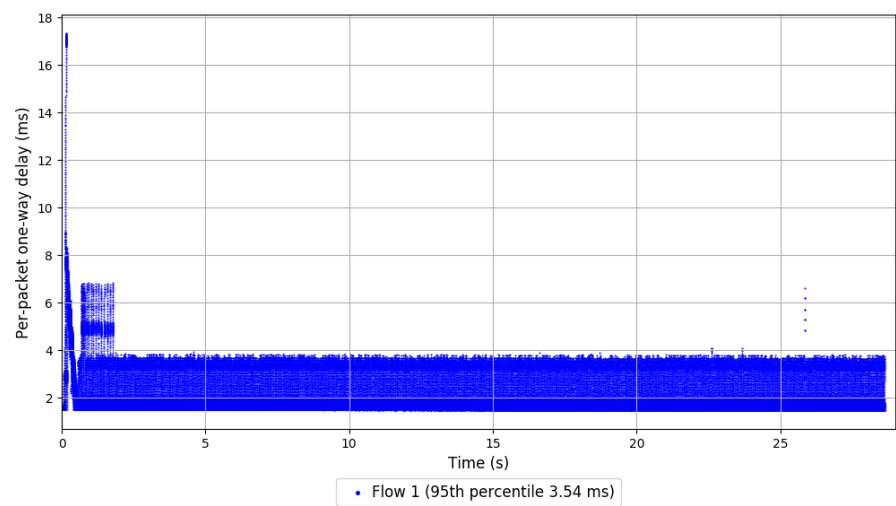
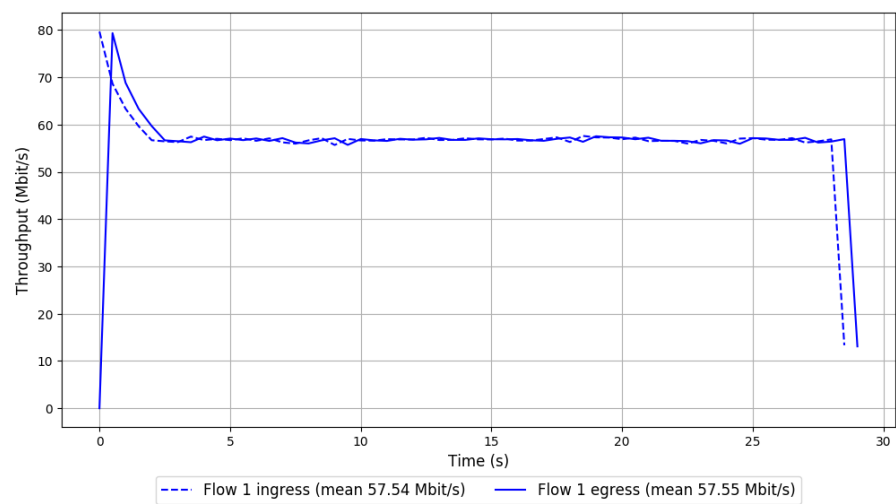
-- Flow 1:

Average throughput: 57.55 Mbit/s

95th percentile per-packet one-way delay: 3.540 ms

Loss rate: 0.01%

Run 4: Report of Indigo-MusesC5 — Data Link

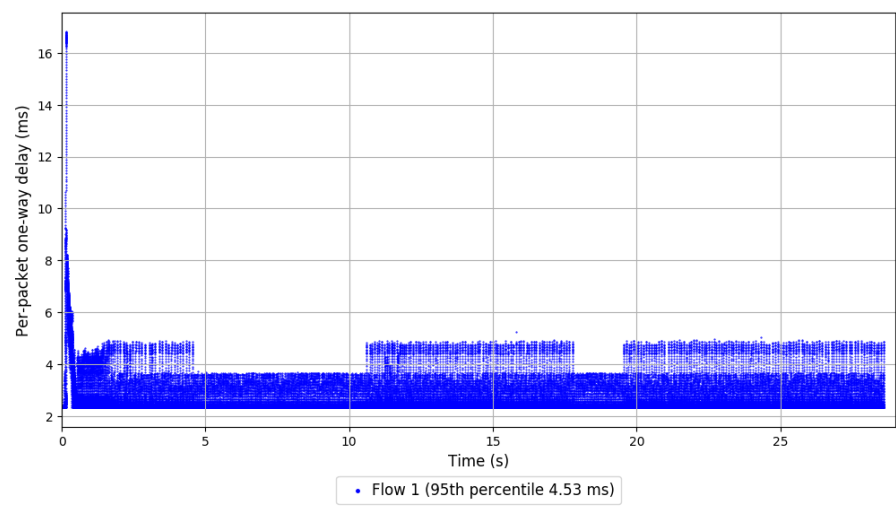
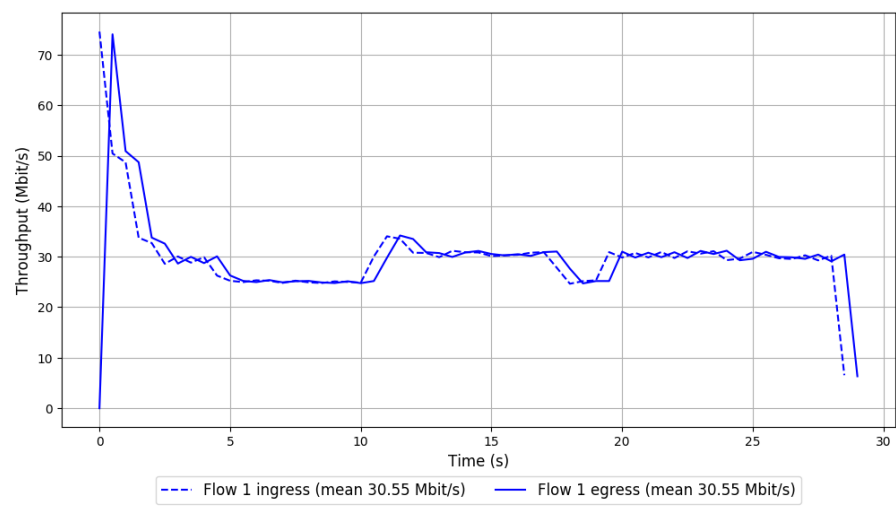


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-03-27 08:17:56
End at: 2019-03-27 08:18:26
Local clock offset: -5.584 ms
Remote clock offset: -0.003 ms

Below is generated by plot.py at 2019-03-27 08:43:33
Datalink statistics
-- Total of 1 flow:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 4.531 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 4.531 ms
Loss rate: 0.02%

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-03-27 06:33:17

End at: 2019-03-27 06:33:47

Local clock offset: -6.375 ms

Remote clock offset: 0.098 ms

Below is generated by plot.py at 2019-03-27 08:43:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.58 Mbit/s

95th percentile per-packet one-way delay: 2.962 ms

Loss rate: 0.00%

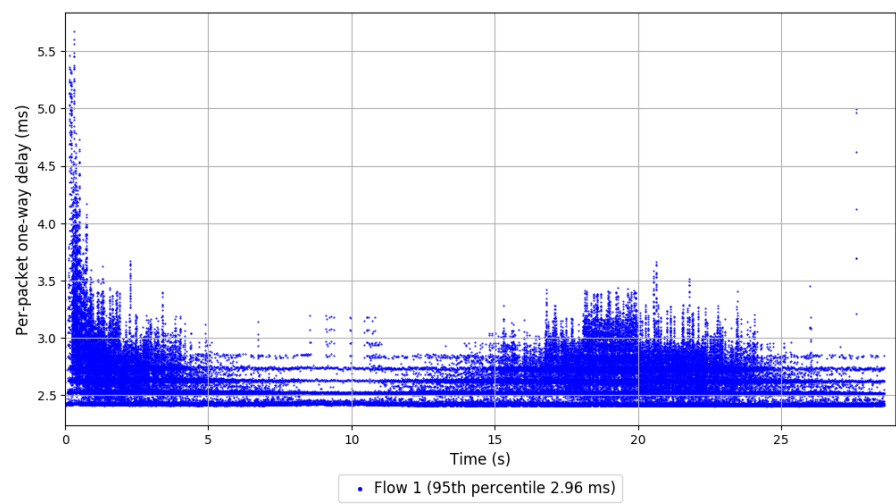
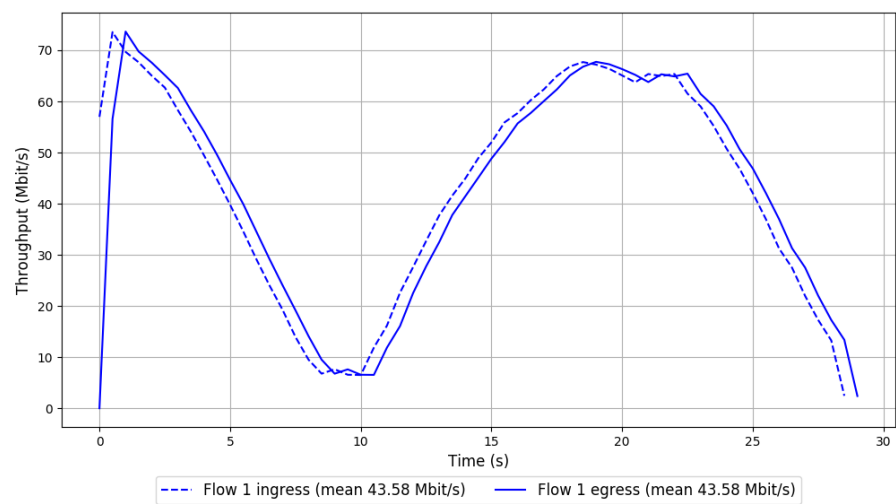
-- Flow 1:

Average throughput: 43.58 Mbit/s

95th percentile per-packet one-way delay: 2.962 ms

Loss rate: 0.00%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-03-27 06:56:57

End at: 2019-03-27 06:57:27

Local clock offset: -5.615 ms

Remote clock offset: 0.293 ms

Below is generated by plot.py at 2019-03-27 08:43:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 45.84 Mbit/s

95th percentile per-packet one-way delay: 2.997 ms

Loss rate: 0.01%

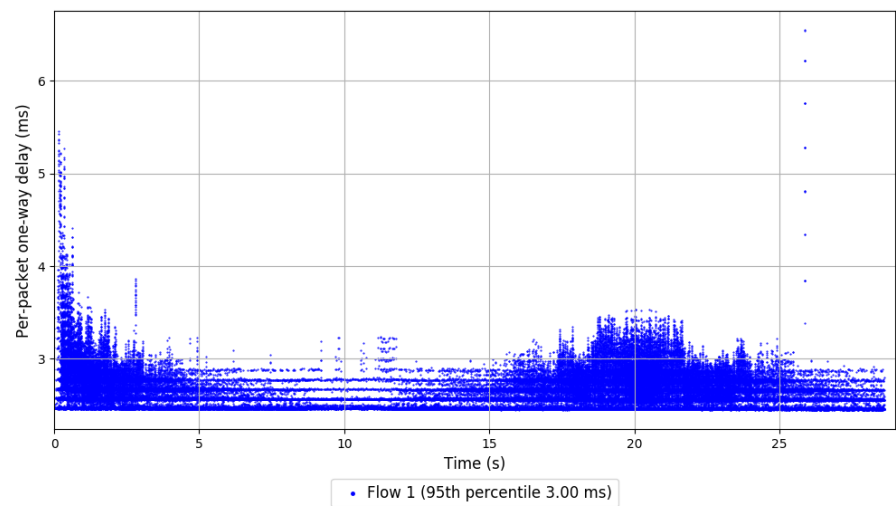
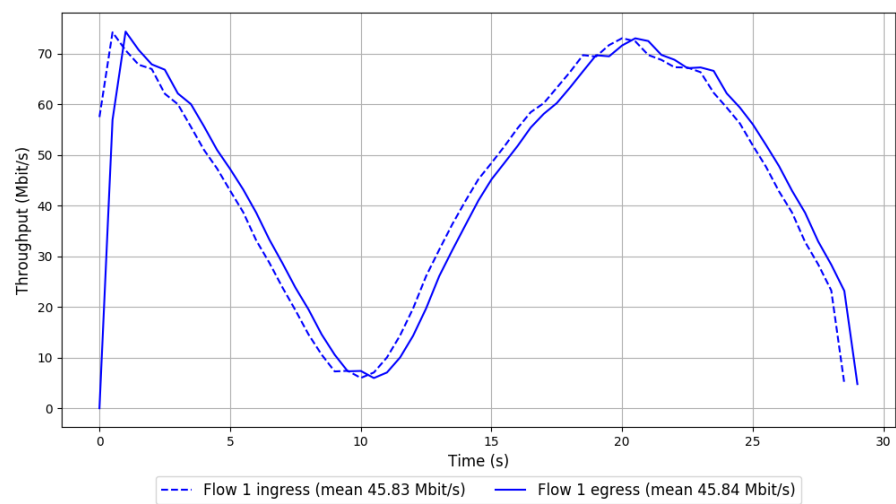
-- Flow 1:

Average throughput: 45.84 Mbit/s

95th percentile per-packet one-way delay: 2.997 ms

Loss rate: 0.01%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-03-27 07:20:35

End at: 2019-03-27 07:21:05

Local clock offset: -6.064 ms

Remote clock offset: 0.489 ms

Below is generated by plot.py at 2019-03-27 08:43:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.85 Mbit/s

95th percentile per-packet one-way delay: 2.882 ms

Loss rate: 0.00%

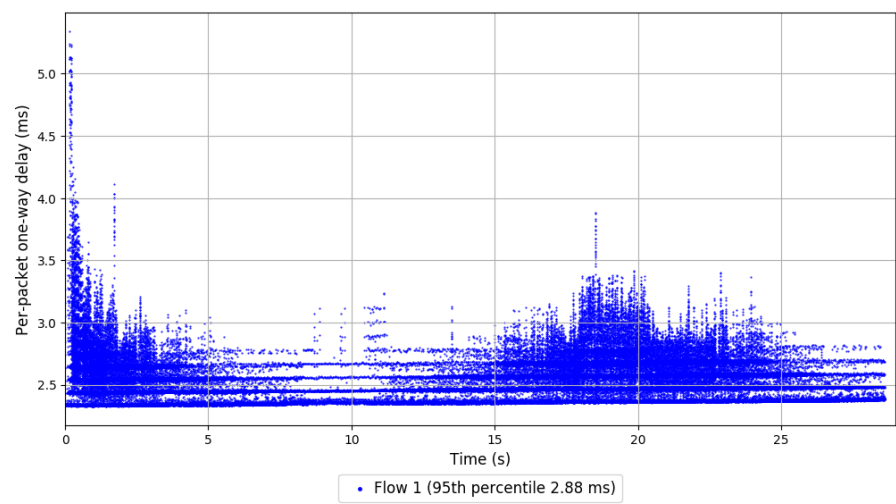
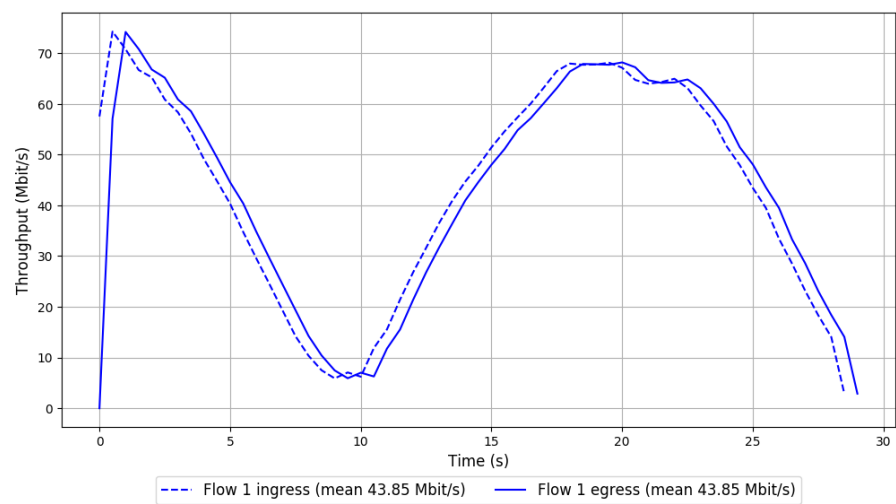
-- Flow 1:

Average throughput: 43.85 Mbit/s

95th percentile per-packet one-way delay: 2.882 ms

Loss rate: 0.00%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-03-27 07:50:53

End at: 2019-03-27 07:51:23

Local clock offset: -6.423 ms

Remote clock offset: 0.14 ms

Below is generated by plot.py at 2019-03-27 08:44:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 80.16 Mbit/s

95th percentile per-packet one-way delay: 4.078 ms

Loss rate: 0.02%

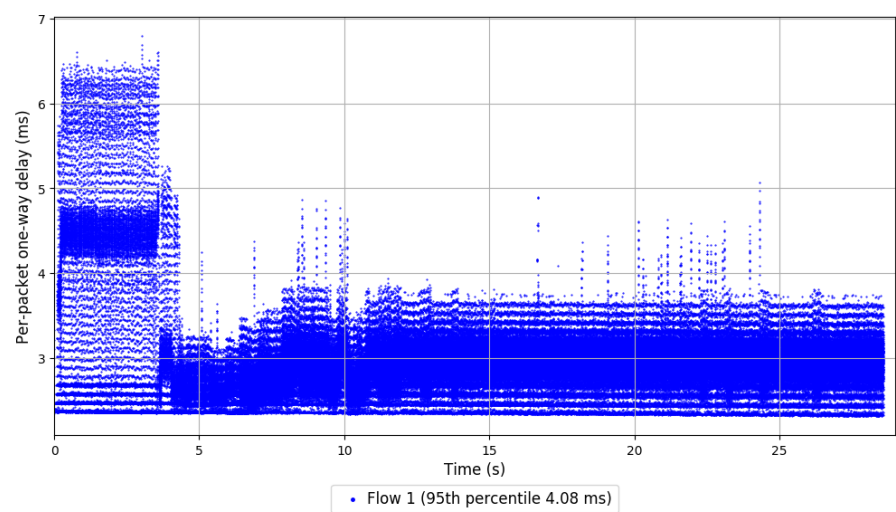
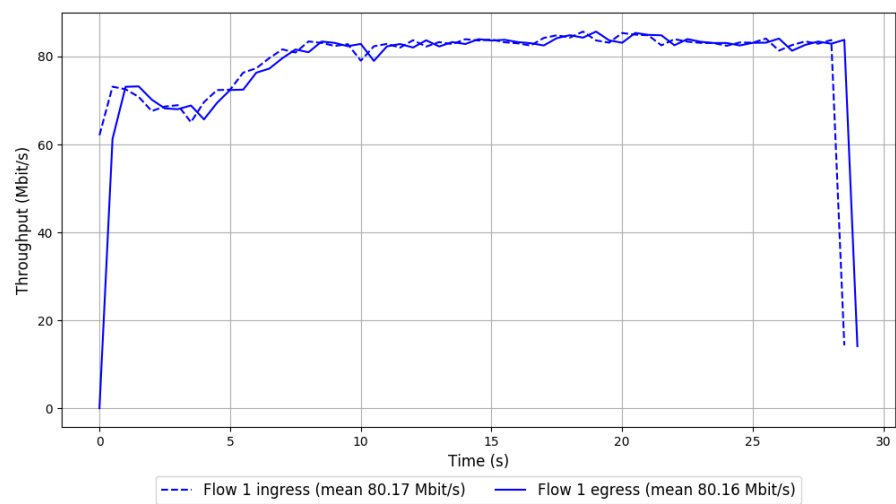
-- Flow 1:

Average throughput: 80.16 Mbit/s

95th percentile per-packet one-way delay: 4.078 ms

Loss rate: 0.02%

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2019-03-27 08:14:35

End at: 2019-03-27 08:15:05

Local clock offset: -6.295 ms

Remote clock offset: 0.044 ms

Below is generated by plot.py at 2019-03-27 08:44:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.66 Mbit/s

95th percentile per-packet one-way delay: 2.142 ms

Loss rate: 0.00%

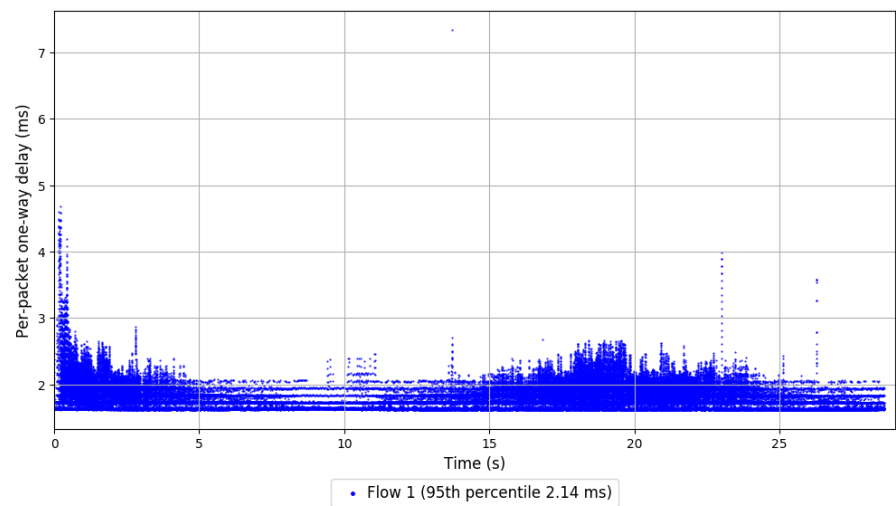
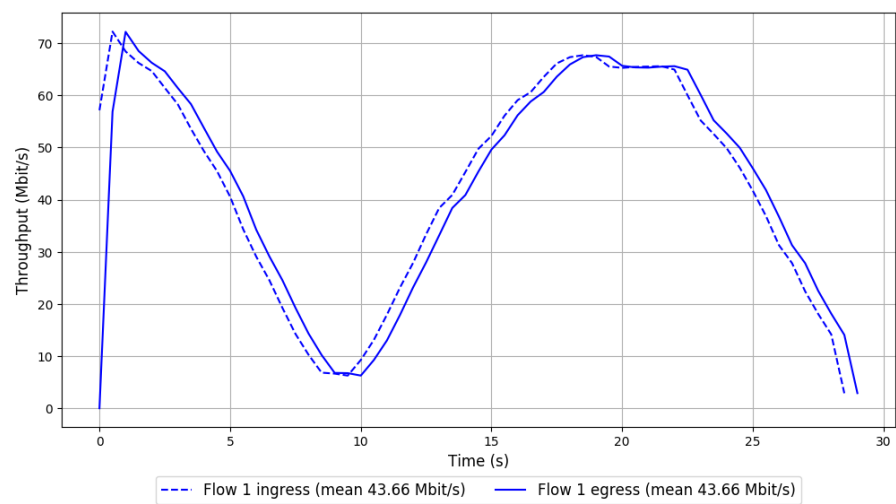
-- Flow 1:

Average throughput: 43.66 Mbit/s

95th percentile per-packet one-way delay: 2.142 ms

Loss rate: 0.00%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-03-27 06:31:02

End at: 2019-03-27 06:31:32

Local clock offset: -6.387 ms

Remote clock offset: 0.144 ms

Below is generated by plot.py at 2019-03-27 08:44:17

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.43 Mbit/s

95th percentile per-packet one-way delay: 3.497 ms

Loss rate: 0.02%

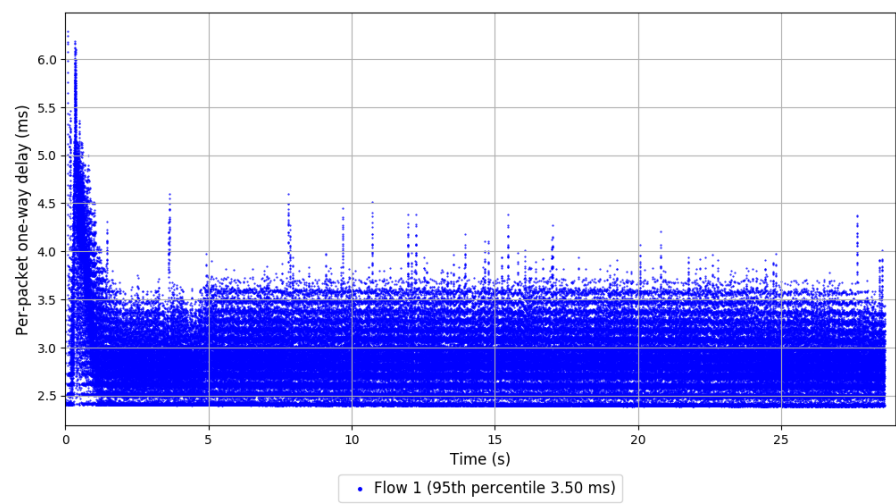
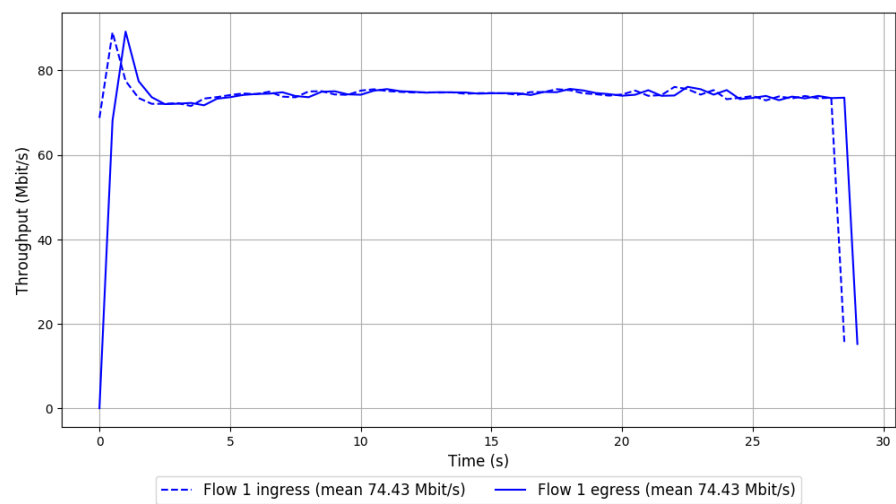
-- Flow 1:

Average throughput: 74.43 Mbit/s

95th percentile per-packet one-way delay: 3.497 ms

Loss rate: 0.02%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-03-27 06:54:42

End at: 2019-03-27 06:55:12

Local clock offset: -5.688 ms

Remote clock offset: 0.347 ms

Below is generated by plot.py at 2019-03-27 08:44:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.82 Mbit/s

95th percentile per-packet one-way delay: 3.846 ms

Loss rate: 0.01%

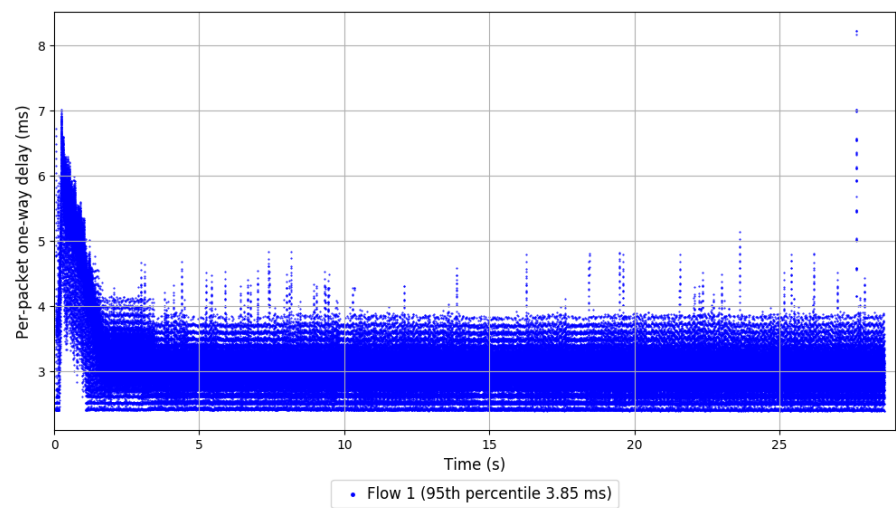
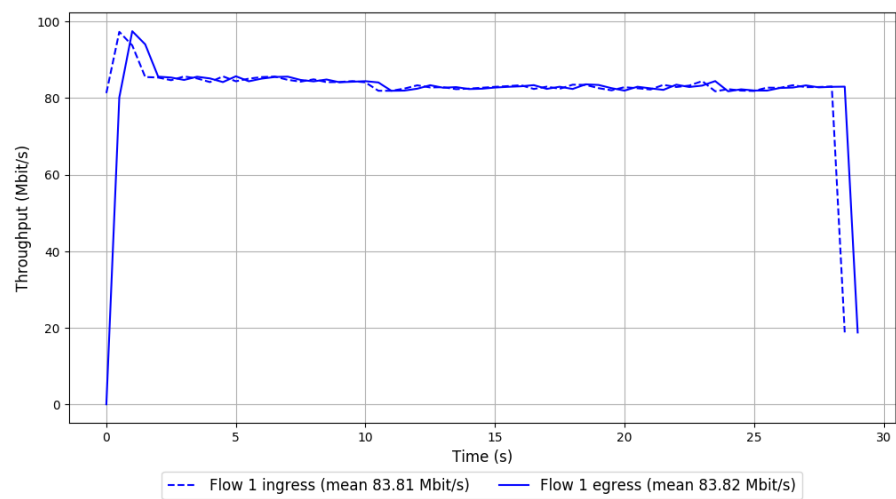
-- Flow 1:

Average throughput: 83.82 Mbit/s

95th percentile per-packet one-way delay: 3.846 ms

Loss rate: 0.01%

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

Start at: 2019-03-27 07:18:20

End at: 2019-03-27 07:18:50

Local clock offset: -6.509 ms

Remote clock offset: 0.483 ms

Below is generated by plot.py at 2019-03-27 08:44:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.36 Mbit/s

95th percentile per-packet one-way delay: 2.709 ms

Loss rate: 0.01%

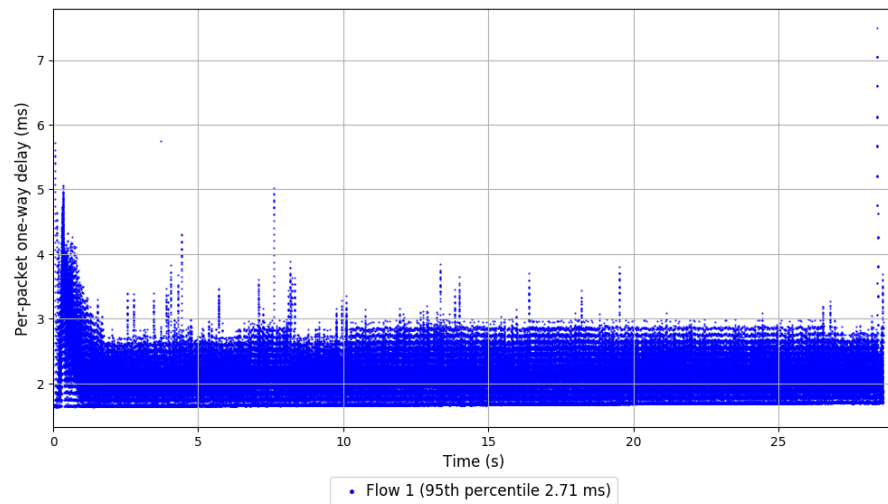
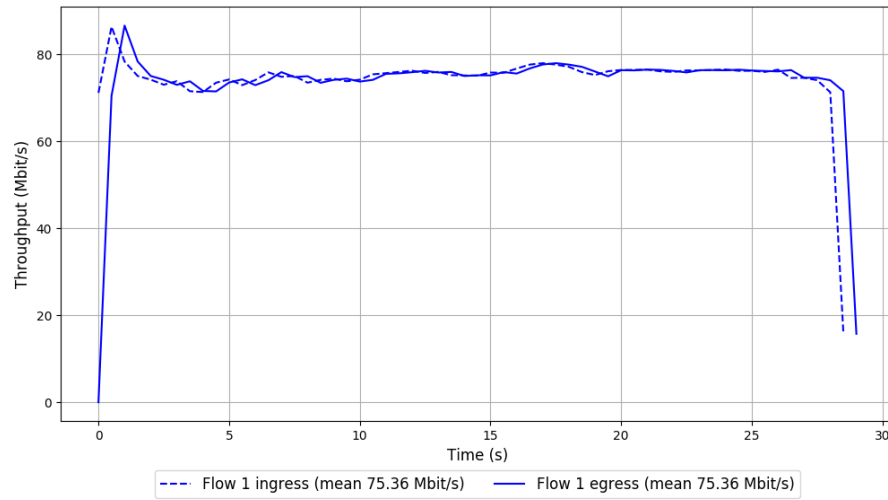
-- Flow 1:

Average throughput: 75.36 Mbit/s

95th percentile per-packet one-way delay: 2.709 ms

Loss rate: 0.01%

Run 3: Report of Indigo-MusesT — Data Link



Run 4: Statistics of Indigo-MusesT

Start at: 2019-03-27 07:48:38

End at: 2019-03-27 07:49:08

Local clock offset: -7.488 ms

Remote clock offset: 0.247 ms

Below is generated by plot.py at 2019-03-27 08:44:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 83.40 Mbit/s

95th percentile per-packet one-way delay: 2.908 ms

Loss rate: 0.02%

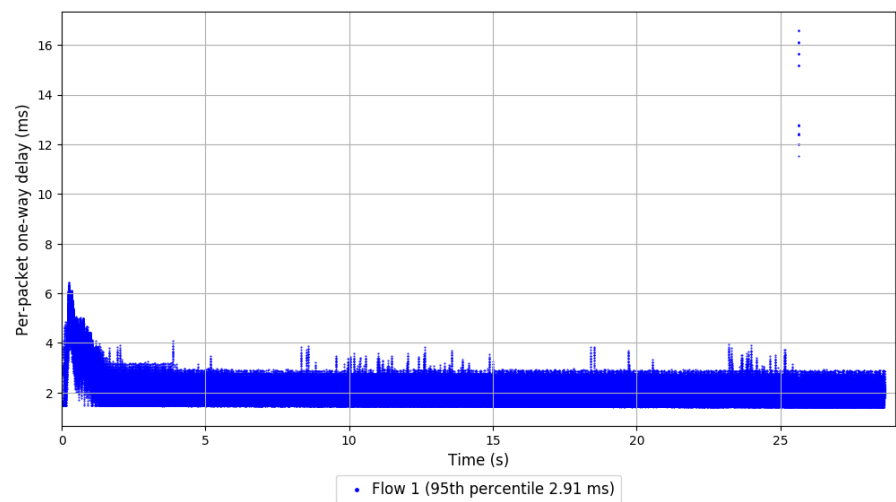
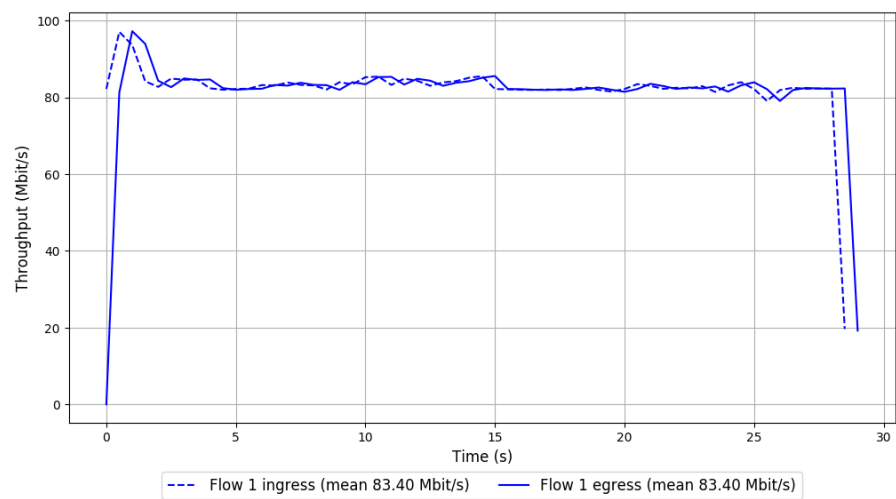
-- Flow 1:

Average throughput: 83.40 Mbit/s

95th percentile per-packet one-way delay: 2.908 ms

Loss rate: 0.02%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-03-27 08:12:20

End at: 2019-03-27 08:12:50

Local clock offset: -6.383 ms

Remote clock offset: 0.033 ms

Below is generated by plot.py at 2019-03-27 08:44:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.42 Mbit/s

95th percentile per-packet one-way delay: 2.697 ms

Loss rate: 0.02%

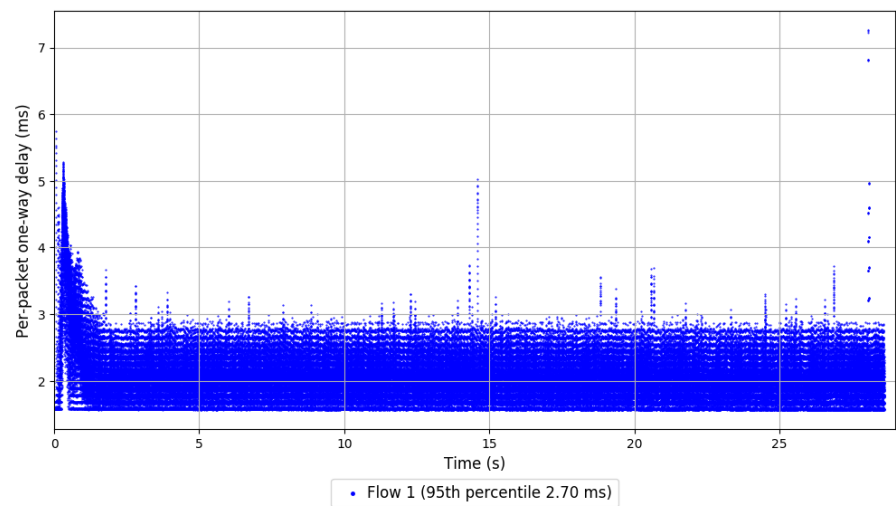
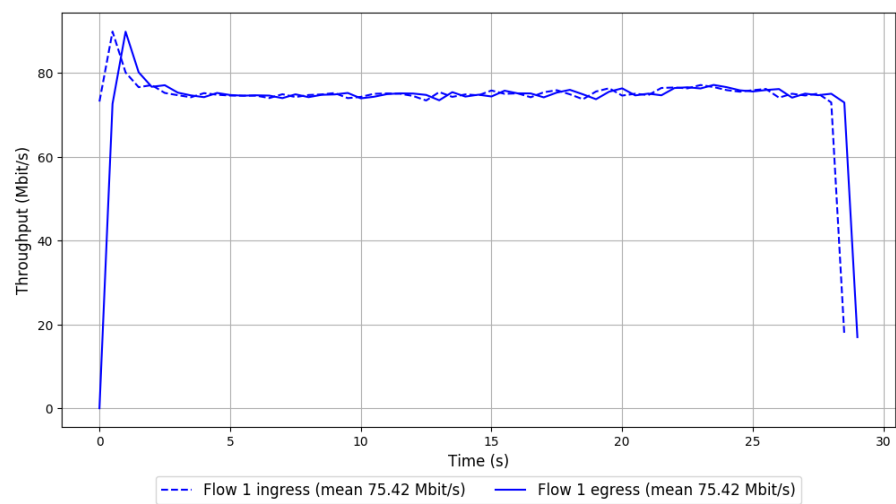
-- Flow 1:

Average throughput: 75.42 Mbit/s

95th percentile per-packet one-way delay: 2.697 ms

Loss rate: 0.02%

Run 5: Report of Indigo-MusesT — Data Link



Run 1: Statistics of LEDBAT

Start at: 2019-03-27 06:37:43

End at: 2019-03-27 06:38:14

Local clock offset: -7.003 ms

Remote clock offset: 0.192 ms

Below is generated by plot.py at 2019-03-27 08:44:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.68 Mbit/s

95th percentile per-packet one-way delay: 9.843 ms

Loss rate: 0.07%

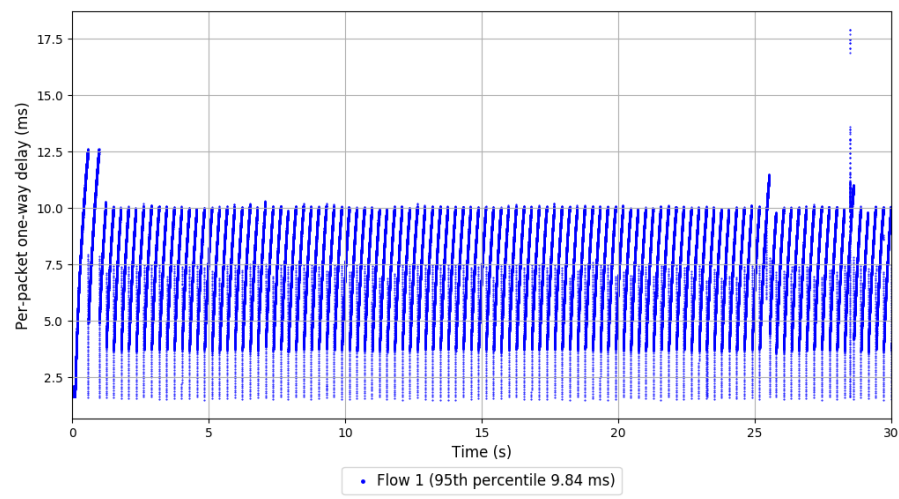
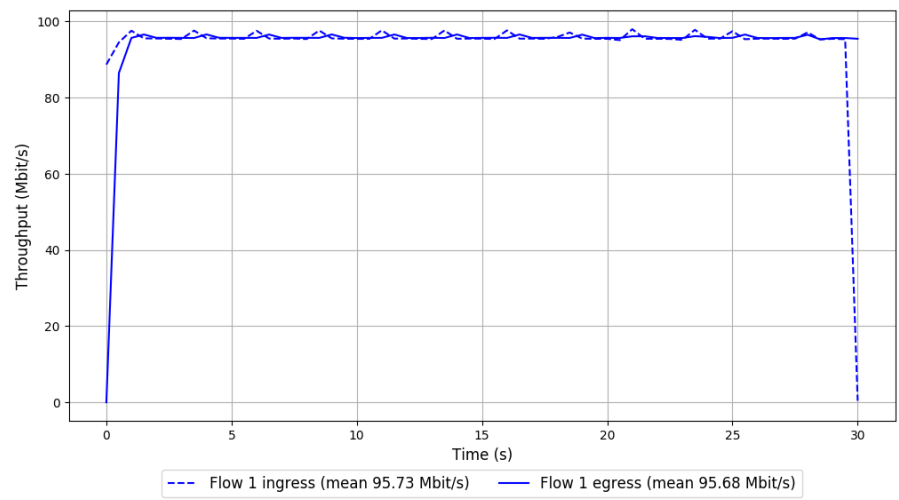
-- Flow 1:

Average throughput: 95.68 Mbit/s

95th percentile per-packet one-way delay: 9.843 ms

Loss rate: 0.07%

Run 1: Report of LEDBAT — Data Link



Run 2: Statistics of LEDBAT

Start at: 2019-03-27 07:01:24

End at: 2019-03-27 07:01:54

Local clock offset: -5.526 ms

Remote clock offset: 0.441 ms

Below is generated by plot.py at 2019-03-27 08:44:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.05 Mbit/s

95th percentile per-packet one-way delay: 10.763 ms

Loss rate: 0.09%

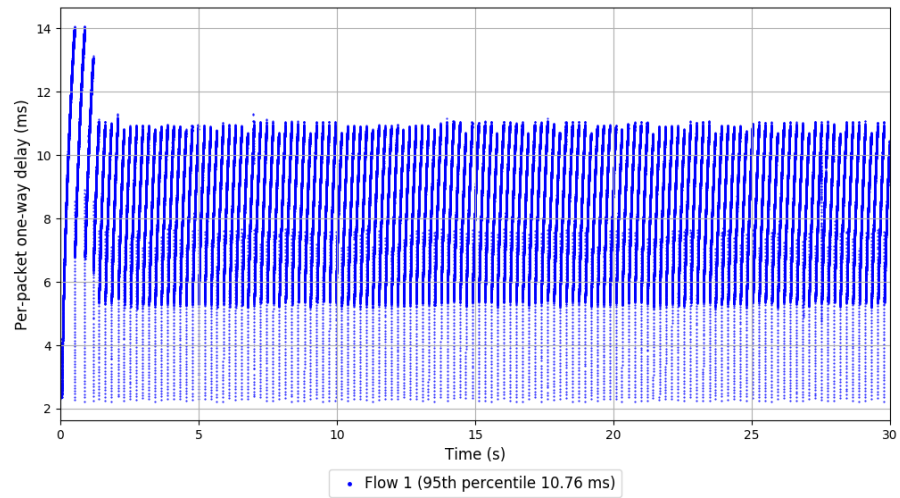
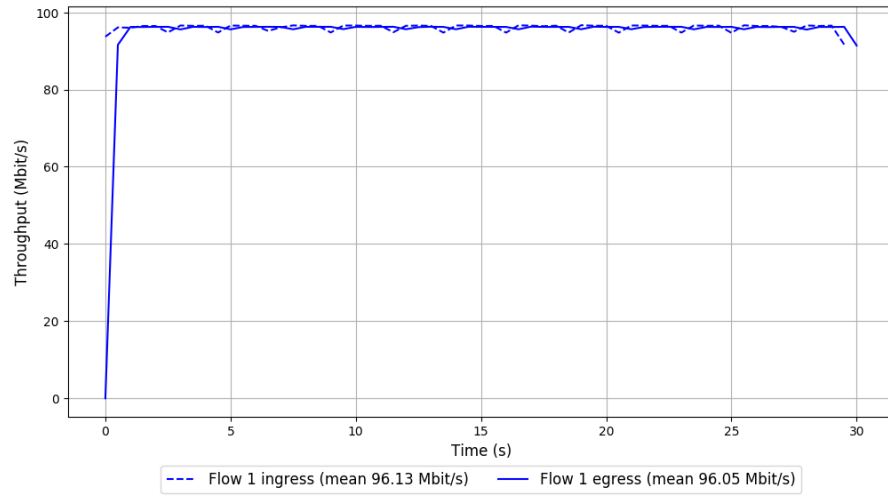
-- Flow 1:

Average throughput: 96.05 Mbit/s

95th percentile per-packet one-way delay: 10.763 ms

Loss rate: 0.09%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2019-03-27 07:25:01

End at: 2019-03-27 07:25:31

Local clock offset: -7.124 ms

Remote clock offset: 0.37 ms

Below is generated by plot.py at 2019-03-27 08:45:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.47 Mbit/s

95th percentile per-packet one-way delay: 9.913 ms

Loss rate: 0.09%

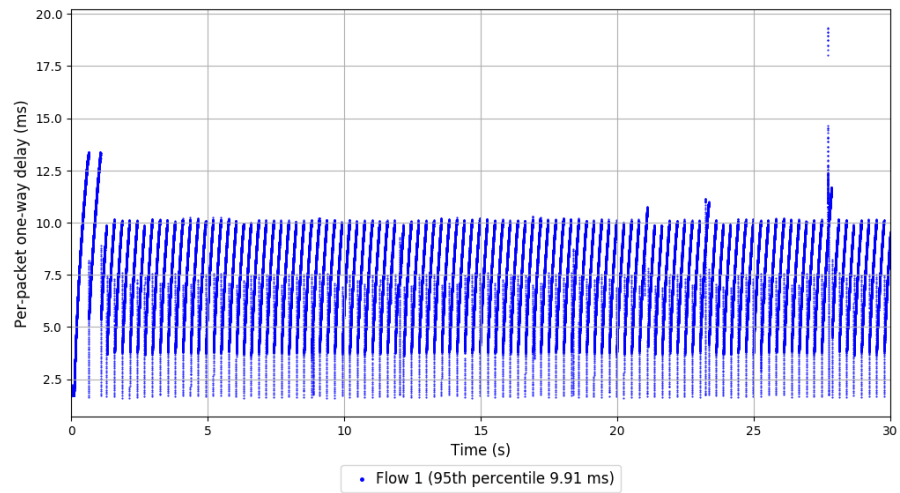
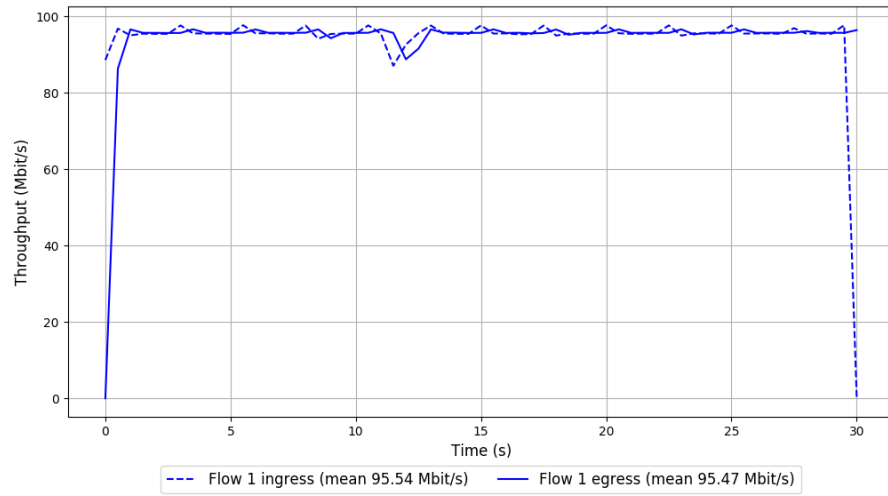
-- Flow 1:

Average throughput: 95.47 Mbit/s

95th percentile per-packet one-way delay: 9.913 ms

Loss rate: 0.09%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2019-03-27 07:55:23

End at: 2019-03-27 07:55:53

Local clock offset: -6.819 ms

Remote clock offset: 0.201 ms

Below is generated by plot.py at 2019-03-27 08:45:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.00 Mbit/s

95th percentile per-packet one-way delay: 9.963 ms

Loss rate: 0.09%

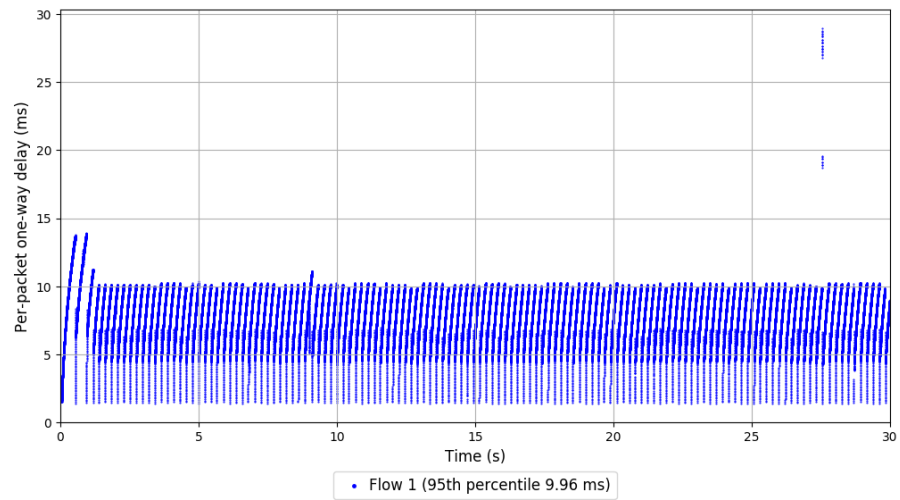
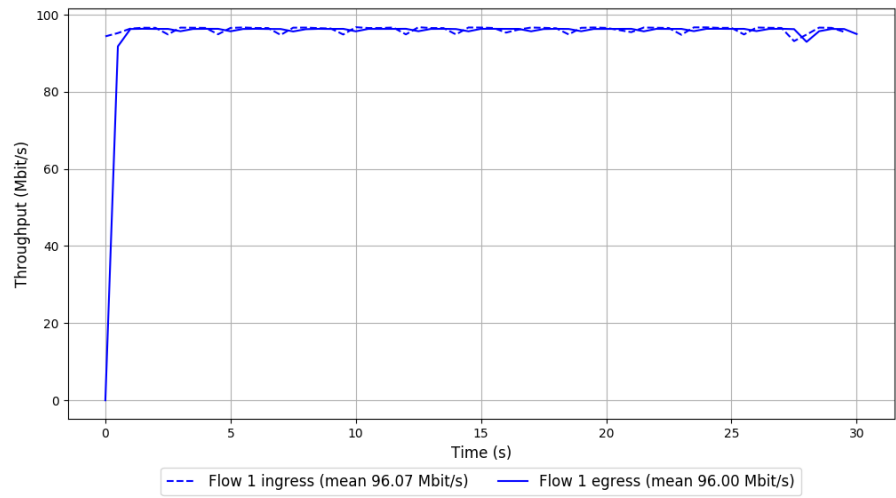
-- Flow 1:

Average throughput: 96.00 Mbit/s

95th percentile per-packet one-way delay: 9.963 ms

Loss rate: 0.09%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2019-03-27 08:19:02

End at: 2019-03-27 08:19:32

Local clock offset: -6.28 ms

Remote clock offset: 0.069 ms

Below is generated by plot.py at 2019-03-27 08:45:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 95.62 Mbit/s

95th percentile per-packet one-way delay: 9.755 ms

Loss rate: 0.07%

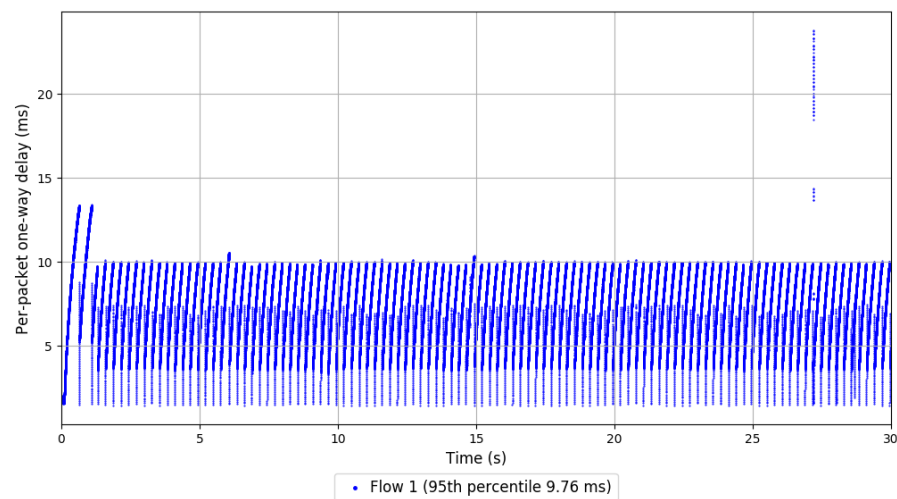
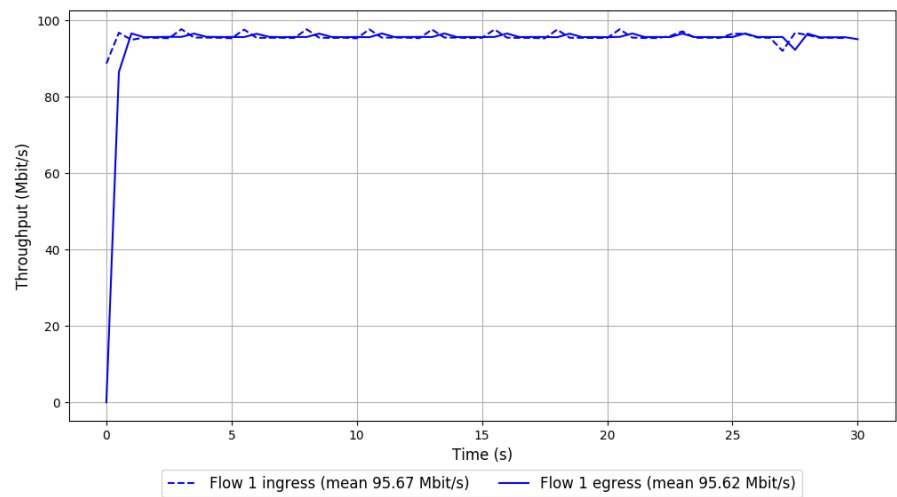
-- Flow 1:

Average throughput: 95.62 Mbit/s

95th percentile per-packet one-way delay: 9.755 ms

Loss rate: 0.07%

Run 5: Report of LEDBAT — Data Link

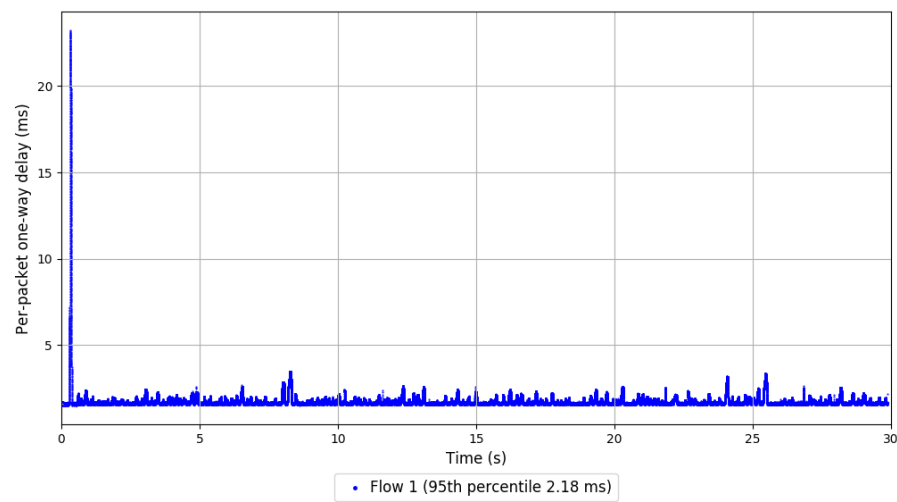
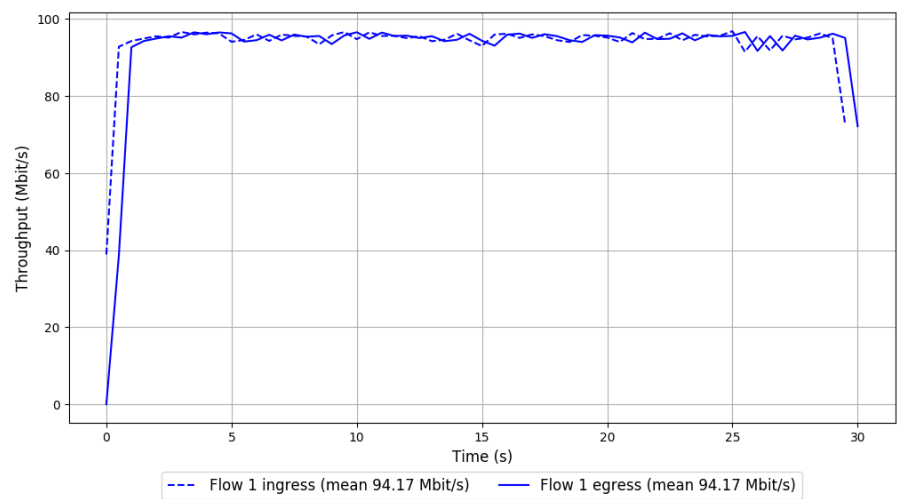


```
Run 1: Statistics of PCC-Allegro

Start at: 2019-03-27 06:38:53
End at: 2019-03-27 06:39:23
Local clock offset: -6.998 ms
Remote clock offset: 0.193 ms

# Below is generated by plot.py at 2019-03-27 08:45:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 2.182 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 2.182 ms
Loss rate: 0.01%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-03-27 07:02:33

End at: 2019-03-27 07:03:03

Local clock offset: -6.363 ms

Remote clock offset: 0.401 ms

Below is generated by plot.py at 2019-03-27 08:45:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.45 Mbit/s

95th percentile per-packet one-way delay: 2.126 ms

Loss rate: 0.02%

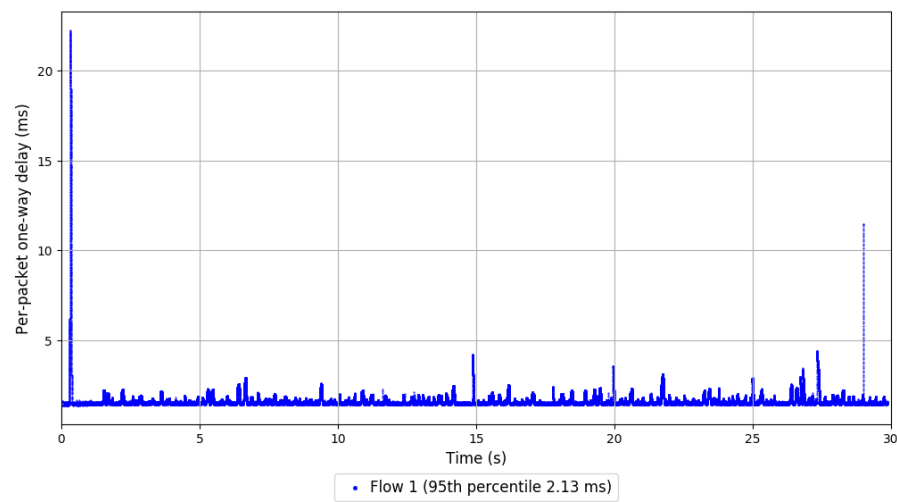
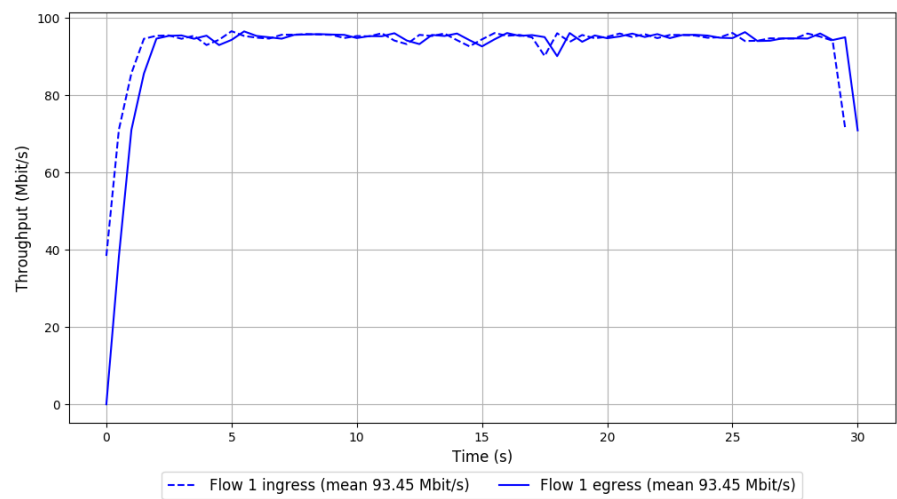
-- Flow 1:

Average throughput: 93.45 Mbit/s

95th percentile per-packet one-way delay: 2.126 ms

Loss rate: 0.02%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-03-27 07:26:11

End at: 2019-03-27 07:26:41

Local clock offset: -6.421 ms

Remote clock offset: 0.365 ms

Below is generated by plot.py at 2019-03-27 08:45:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 90.35 Mbit/s

95th percentile per-packet one-way delay: 3.266 ms

Loss rate: 0.02%

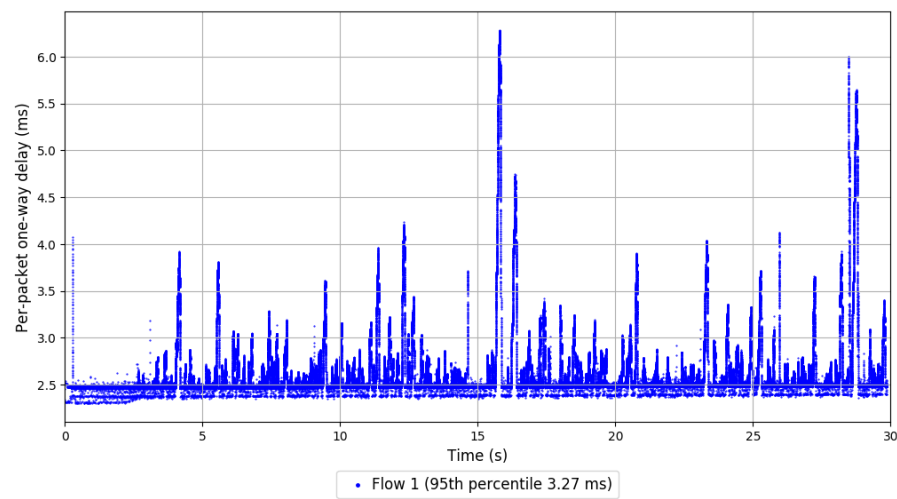
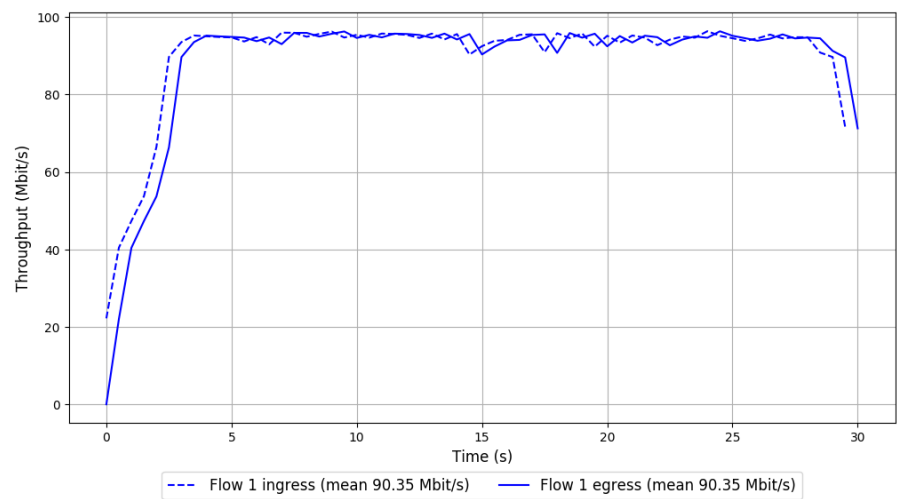
-- Flow 1:

Average throughput: 90.35 Mbit/s

95th percentile per-packet one-way delay: 3.266 ms

Loss rate: 0.02%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-03-27 07:56:32

End at: 2019-03-27 07:57:02

Local clock offset: -6.809 ms

Remote clock offset: 0.142 ms

Below is generated by plot.py at 2019-03-27 08:45:56

Datalink statistics

-- Total of 1 flow:

Average throughput: 93.31 Mbit/s

95th percentile per-packet one-way delay: 2.403 ms

Loss rate: 0.02%

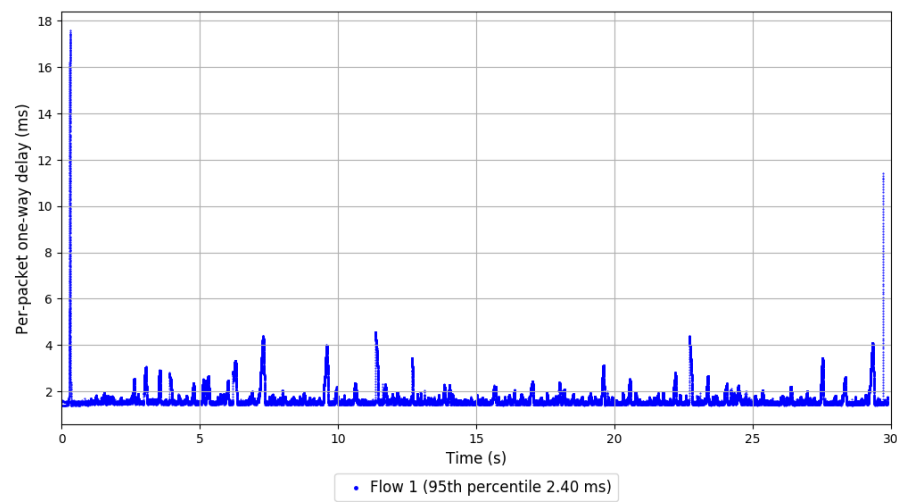
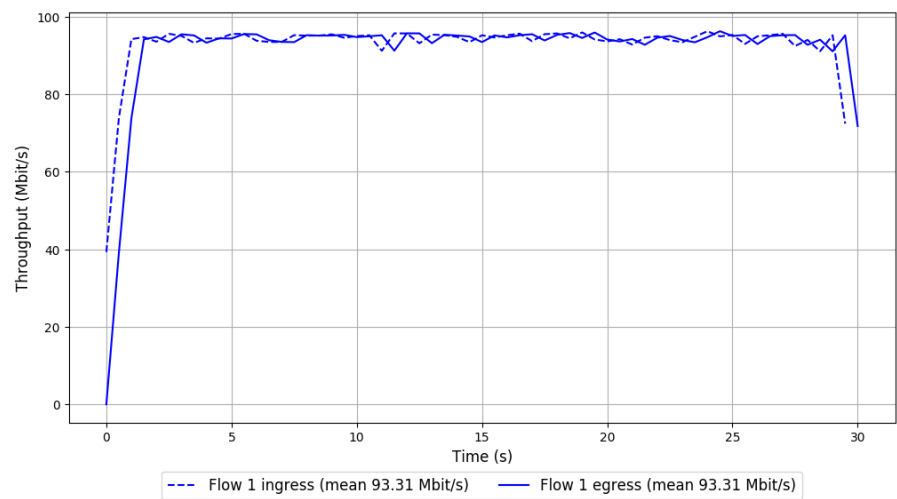
-- Flow 1:

Average throughput: 93.31 Mbit/s

95th percentile per-packet one-way delay: 2.403 ms

Loss rate: 0.02%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-03-27 08:20:11

End at: 2019-03-27 08:20:41

Local clock offset: -6.277 ms

Remote clock offset: -0.08 ms

Below is generated by plot.py at 2019-03-27 08:45:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.78 Mbit/s

95th percentile per-packet one-way delay: 2.658 ms

Loss rate: 0.02%

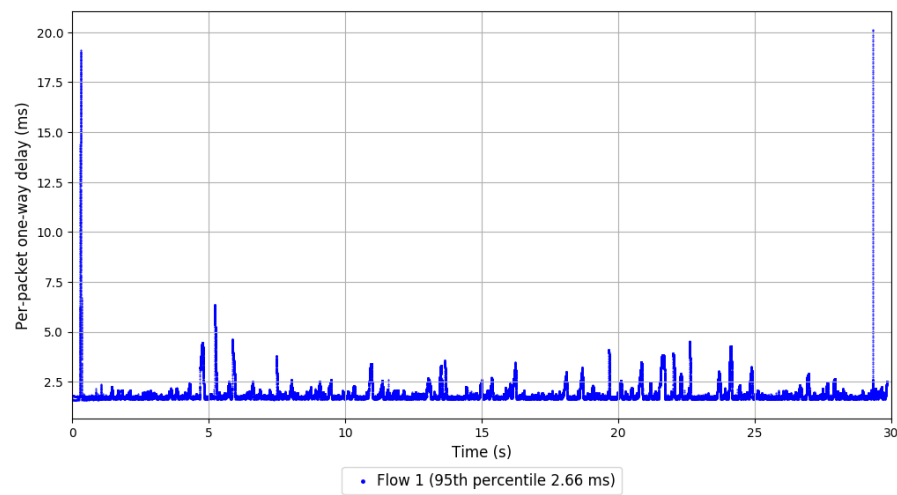
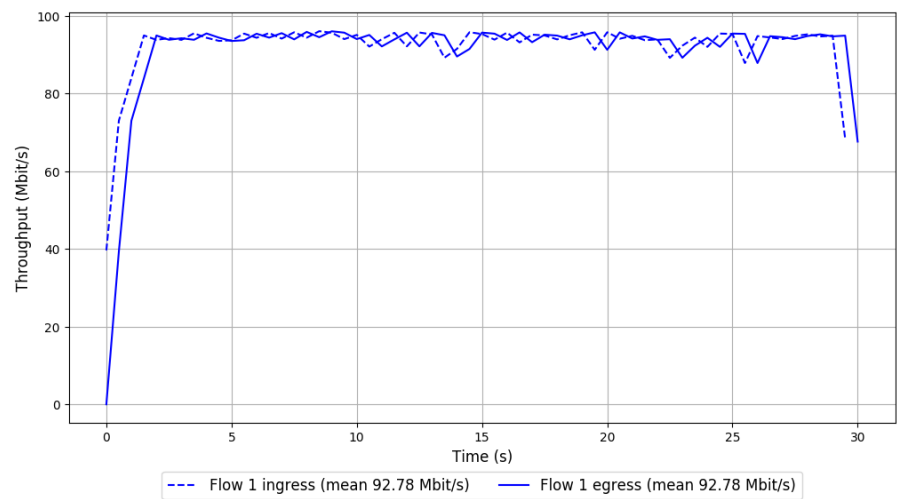
-- Flow 1:

Average throughput: 92.78 Mbit/s

95th percentile per-packet one-way delay: 2.658 ms

Loss rate: 0.02%

Run 5: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2019-03-27 06:50:07

End at: 2019-03-27 06:50:37

Local clock offset: -5.929 ms

Remote clock offset: 0.313 ms

Below is generated by plot.py at 2019-03-27 08:46:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.69 Mbit/s

95th percentile per-packet one-way delay: 18.144 ms

Loss rate: 0.02%

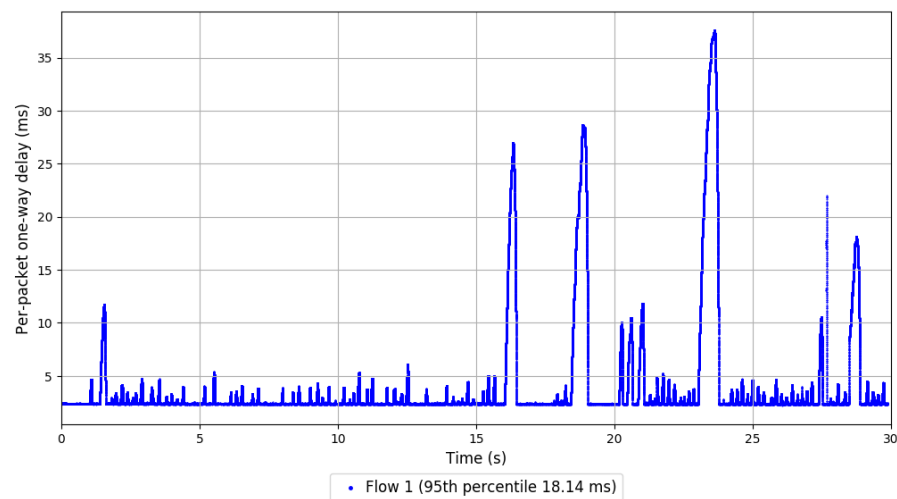
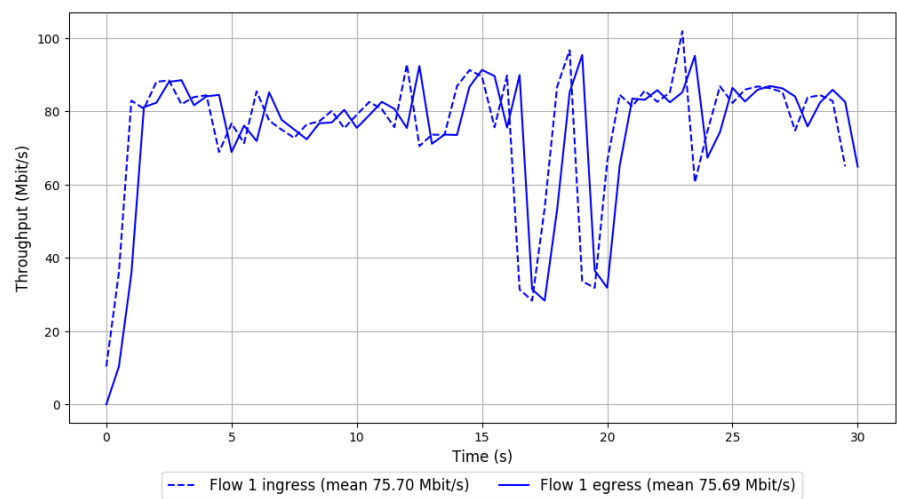
-- Flow 1:

Average throughput: 75.69 Mbit/s

95th percentile per-packet one-way delay: 18.144 ms

Loss rate: 0.02%

Run 1: Report of PCC-Expr — Data Link



Run 2: Statistics of PCC-Expr

Start at: 2019-03-27 07:13:43

End at: 2019-03-27 07:14:13

Local clock offset: -5.451 ms

Remote clock offset: 0.466 ms

Below is generated by plot.py at 2019-03-27 08:47:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 84.64 Mbit/s

95th percentile per-packet one-way delay: 16.595 ms

Loss rate: 0.01%

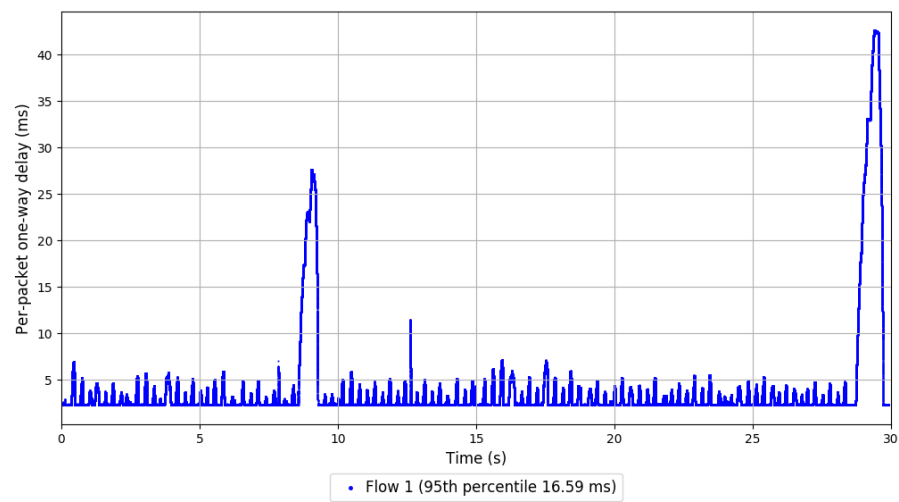
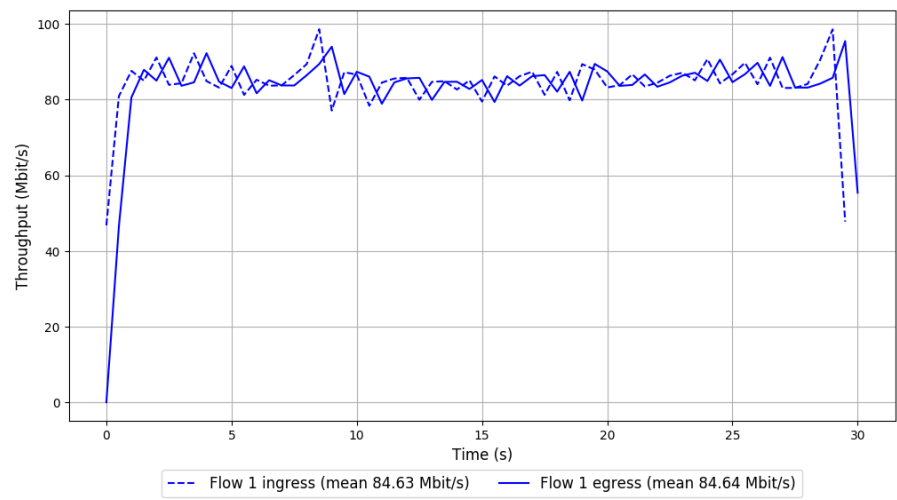
-- Flow 1:

Average throughput: 84.64 Mbit/s

95th percentile per-packet one-way delay: 16.595 ms

Loss rate: 0.01%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-03-27 07:44:02

End at: 2019-03-27 07:44:32

Local clock offset: -7.072 ms

Remote clock offset: 0.233 ms

Below is generated by plot.py at 2019-03-27 08:47:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.82 Mbit/s

95th percentile per-packet one-way delay: 543.343 ms

Loss rate: 4.05%

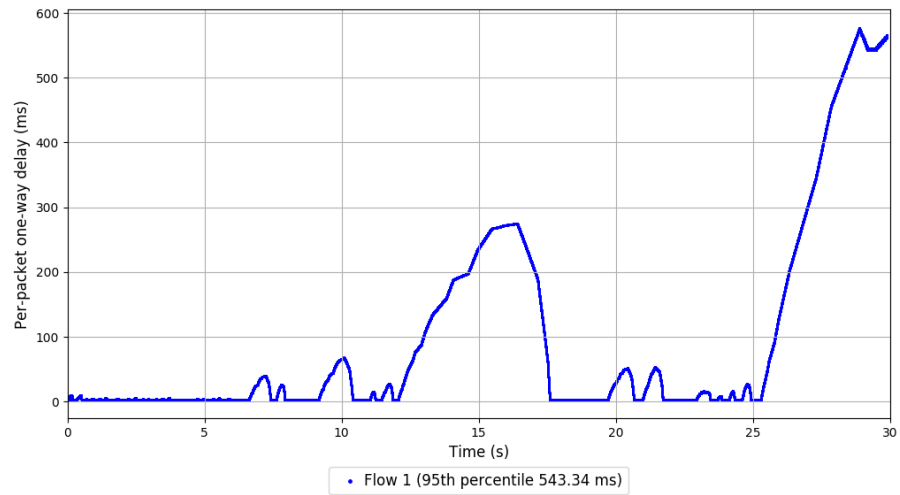
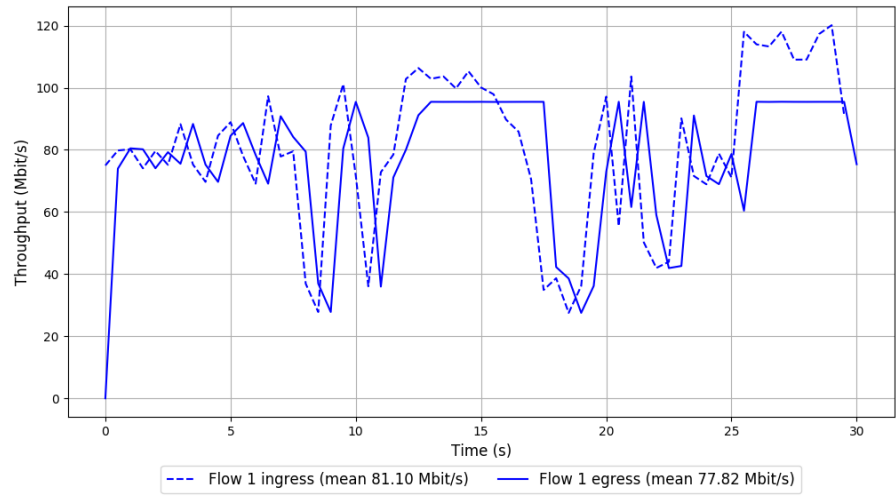
-- Flow 1:

Average throughput: 77.82 Mbit/s

95th percentile per-packet one-way delay: 543.343 ms

Loss rate: 4.05%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2019-03-27 08:07:44

End at: 2019-03-27 08:08:14

Local clock offset: -5.609 ms

Remote clock offset: 0.042 ms

Below is generated by plot.py at 2019-03-27 08:47:22

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.78 Mbit/s

95th percentile per-packet one-way delay: 13.177 ms

Loss rate: 0.02%

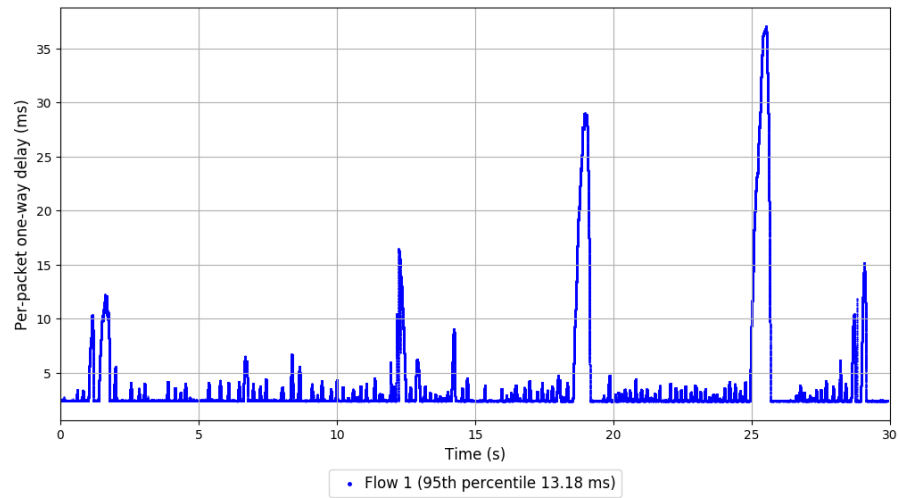
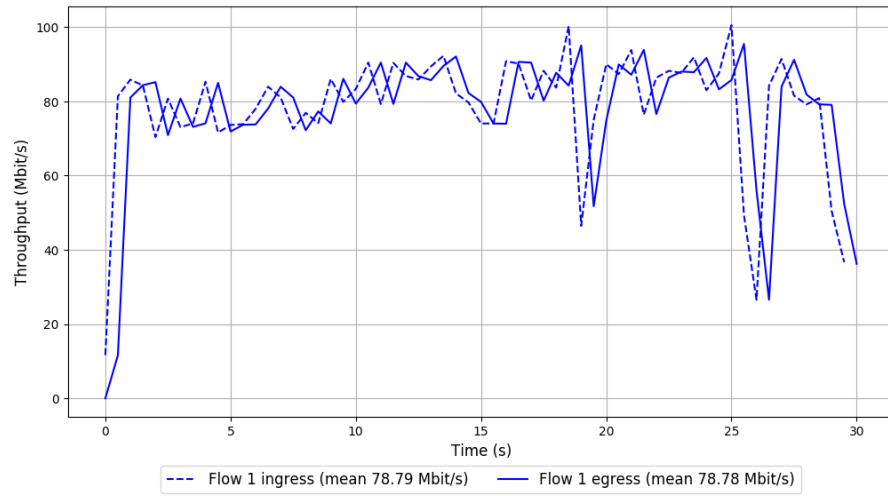
-- Flow 1:

Average throughput: 78.78 Mbit/s

95th percentile per-packet one-way delay: 13.177 ms

Loss rate: 0.02%

Run 4: Report of PCC-Expr — Data Link

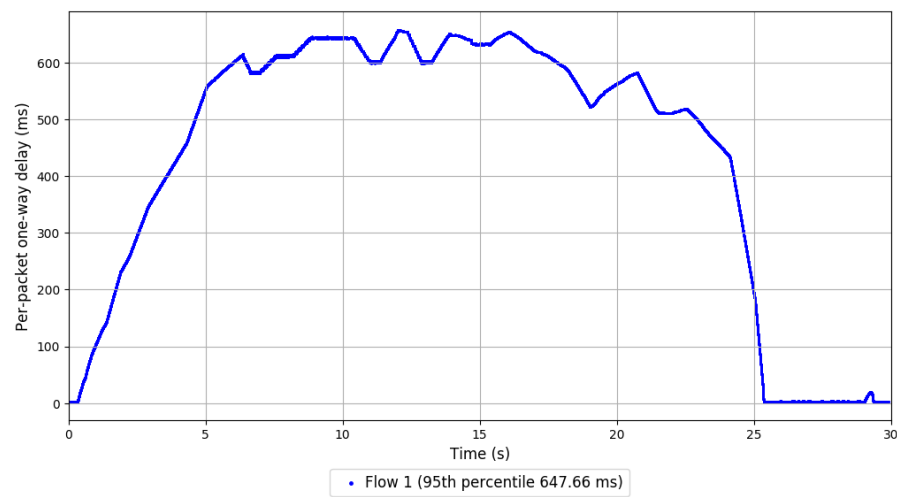
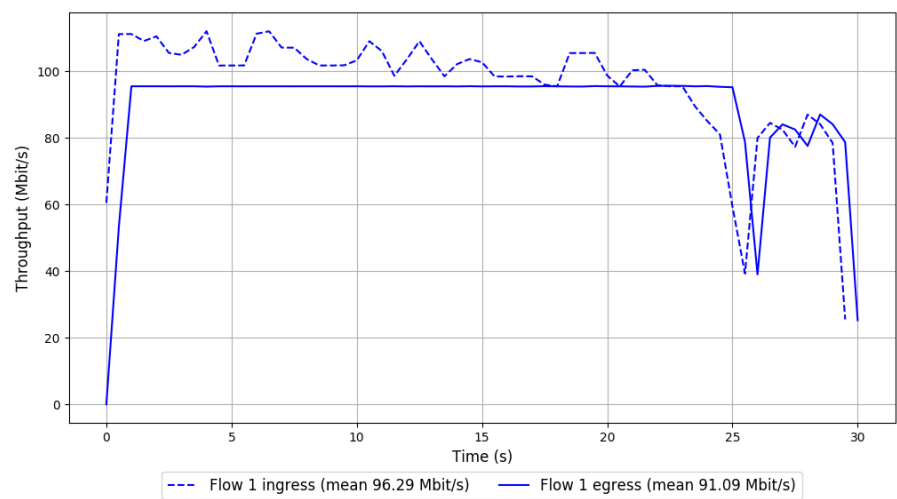


Run 5: Statistics of PCC-Expr

Start at: 2019-03-27 08:31:25
End at: 2019-03-27 08:31:55
Local clock offset: -5.488 ms
Remote clock offset: -0.143 ms

Below is generated by plot.py at 2019-03-27 08:47:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 91.09 Mbit/s
95th percentile per-packet one-way delay: 647.663 ms
Loss rate: 5.42%
-- Flow 1:
Average throughput: 91.09 Mbit/s
95th percentile per-packet one-way delay: 647.663 ms
Loss rate: 5.42%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

Start at: 2019-03-27 06:47:54

End at: 2019-03-27 06:48:24

Local clock offset: -6.831 ms

Remote clock offset: 0.283 ms

Below is generated by plot.py at 2019-03-27 08:47:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.61 Mbit/s

95th percentile per-packet one-way delay: 8.775 ms

Loss rate: 0.02%

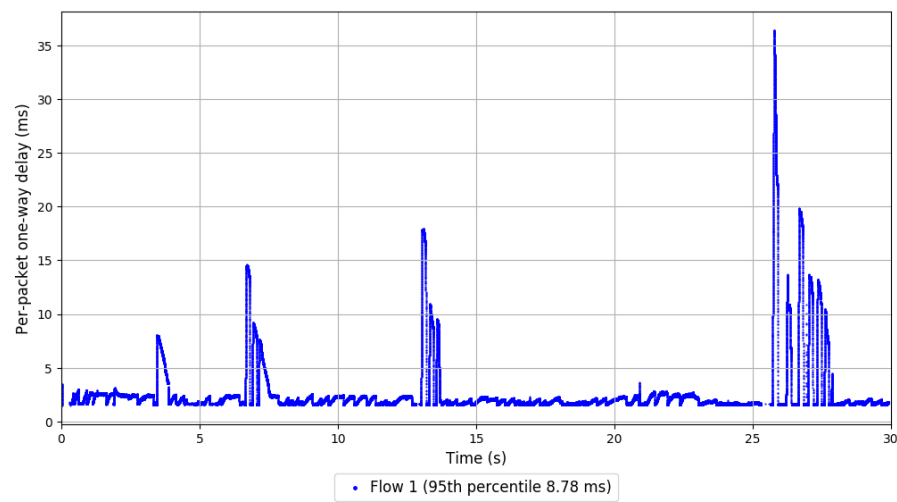
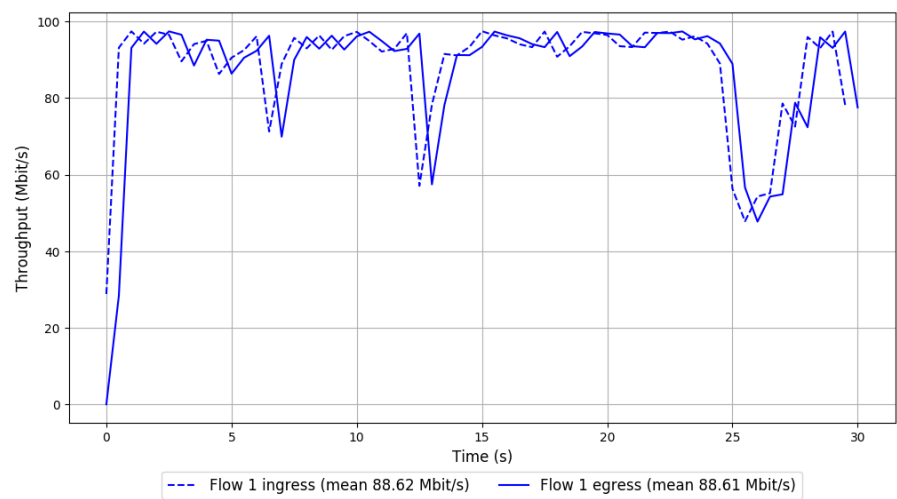
-- Flow 1:

Average throughput: 88.61 Mbit/s

95th percentile per-packet one-way delay: 8.775 ms

Loss rate: 0.02%

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-03-27 07:11:30

End at: 2019-03-27 07:12:00

Local clock offset: -6.211 ms

Remote clock offset: 0.384 ms

Below is generated by plot.py at 2019-03-27 08:47:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.08 Mbit/s

95th percentile per-packet one-way delay: 7.978 ms

Loss rate: 0.02%

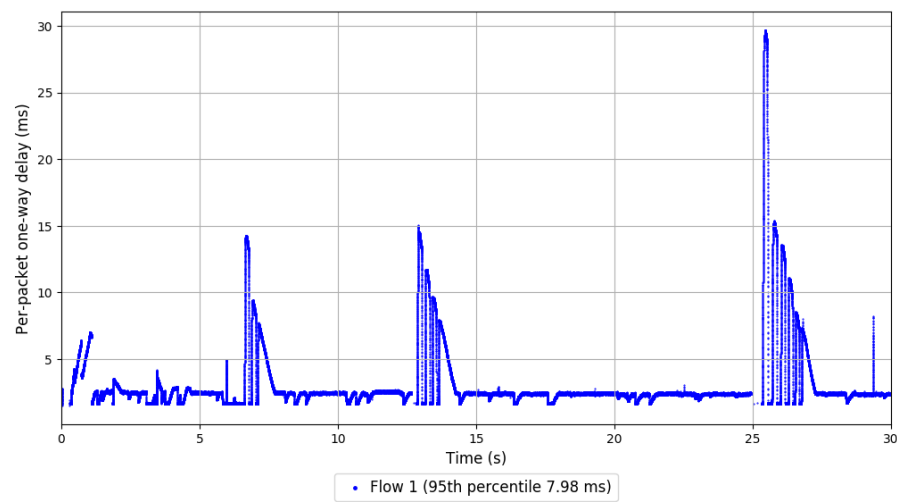
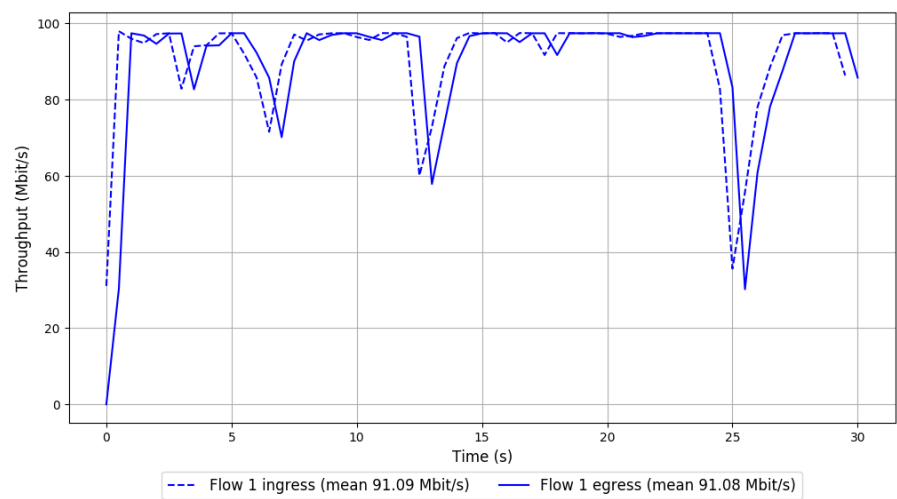
-- Flow 1:

Average throughput: 91.08 Mbit/s

95th percentile per-packet one-way delay: 7.978 ms

Loss rate: 0.02%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-03-27 07:41:50

End at: 2019-03-27 07:42:20

Local clock offset: -7.01 ms

Remote clock offset: 0.349 ms

Below is generated by plot.py at 2019-03-27 08:47:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 91.13 Mbit/s

95th percentile per-packet one-way delay: 7.066 ms

Loss rate: 0.02%

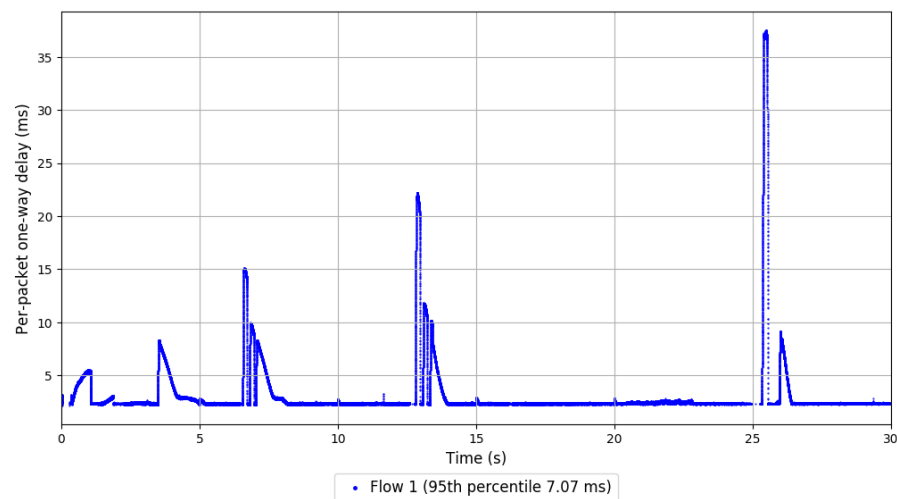
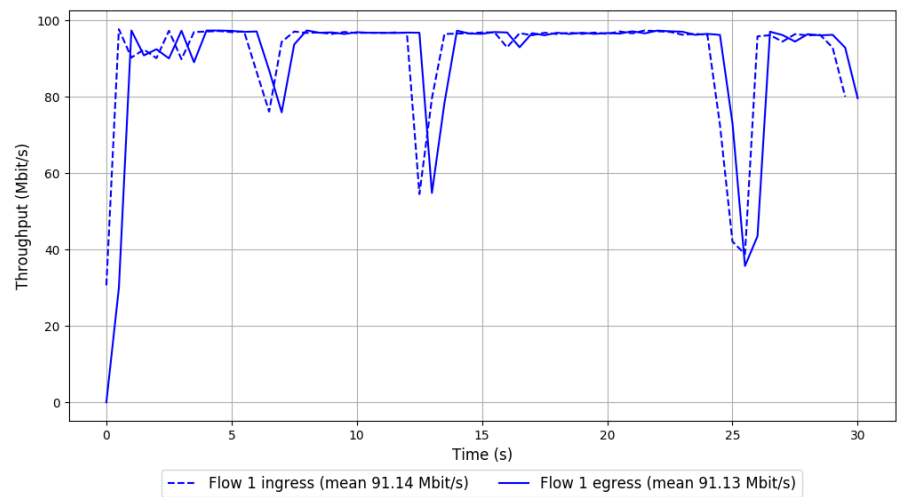
-- Flow 1:

Average throughput: 91.13 Mbit/s

95th percentile per-packet one-way delay: 7.066 ms

Loss rate: 0.02%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2019-03-27 08:05:31

End at: 2019-03-27 08:06:01

Local clock offset: -6.426 ms

Remote clock offset: 0.092 ms

Below is generated by plot.py at 2019-03-27 08:48:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.39 Mbit/s

95th percentile per-packet one-way delay: 4.745 ms

Loss rate: 0.02%

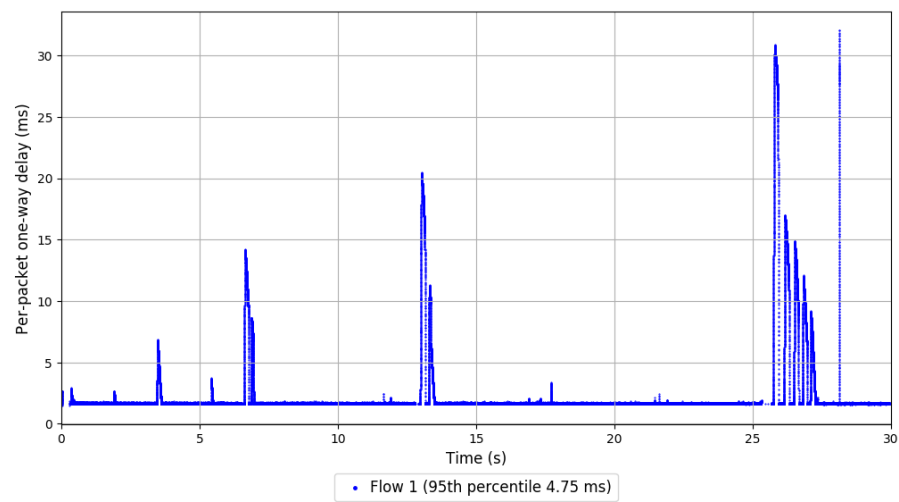
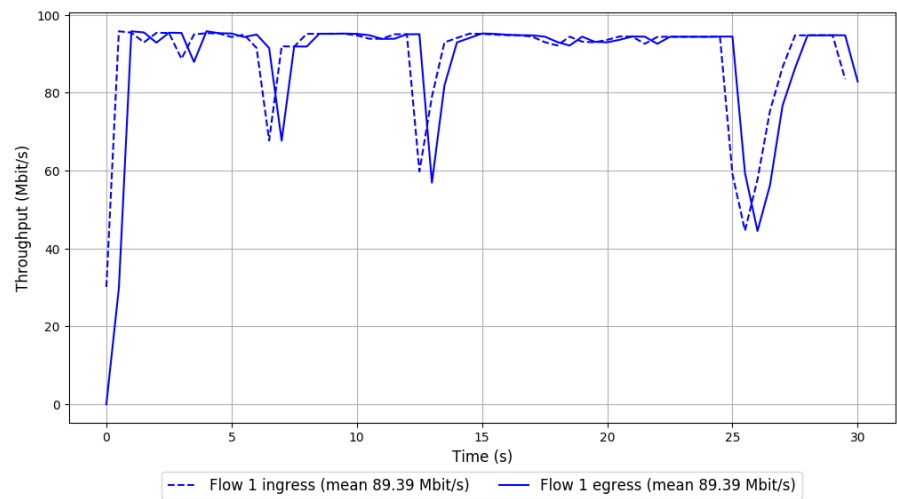
-- Flow 1:

Average throughput: 89.39 Mbit/s

95th percentile per-packet one-way delay: 4.745 ms

Loss rate: 0.02%

Run 4: Report of QUIC Cubic — Data Link

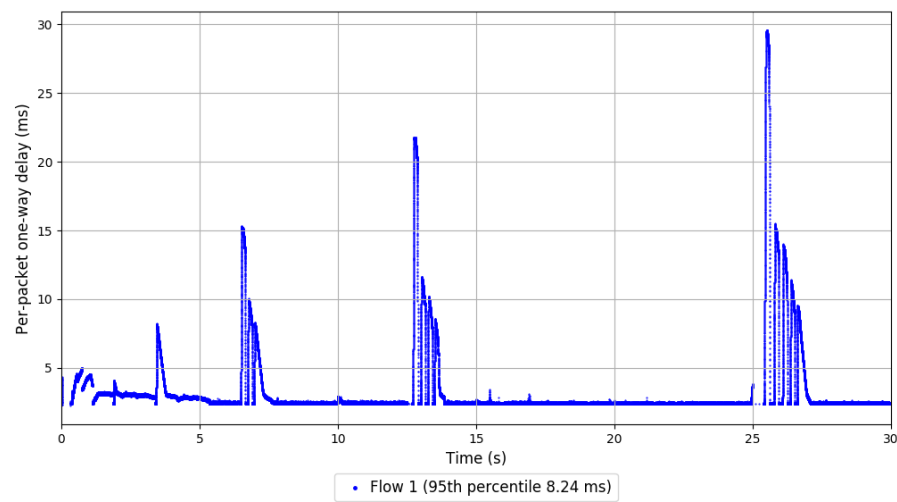
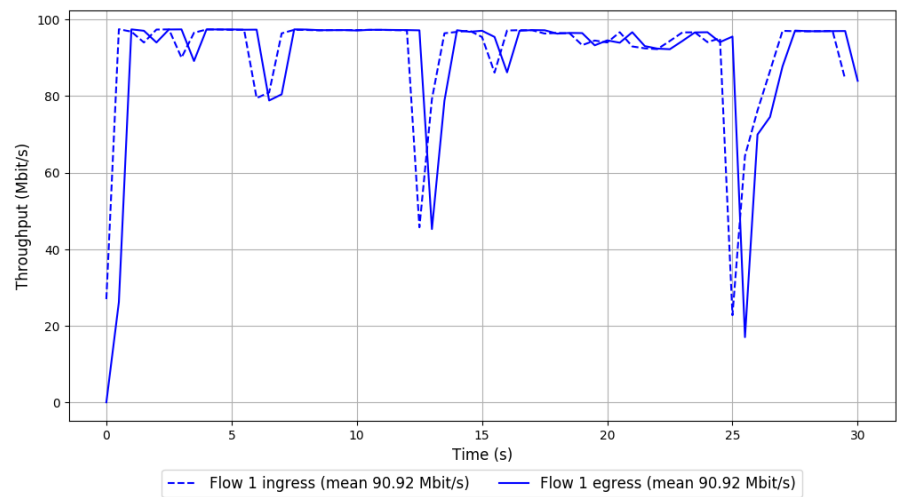


Run 5: Statistics of QUIC Cubic

Start at: 2019-03-27 08:29:13
End at: 2019-03-27 08:29:43
Local clock offset: -5.498 ms
Remote clock offset: -0.021 ms

Below is generated by plot.py at 2019-03-27 08:48:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 90.92 Mbit/s
95th percentile per-packet one-way delay: 8.239 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 90.92 Mbit/s
95th percentile per-packet one-way delay: 8.239 ms
Loss rate: 0.02%

Run 5: Report of QUIC Cubic — Data Link

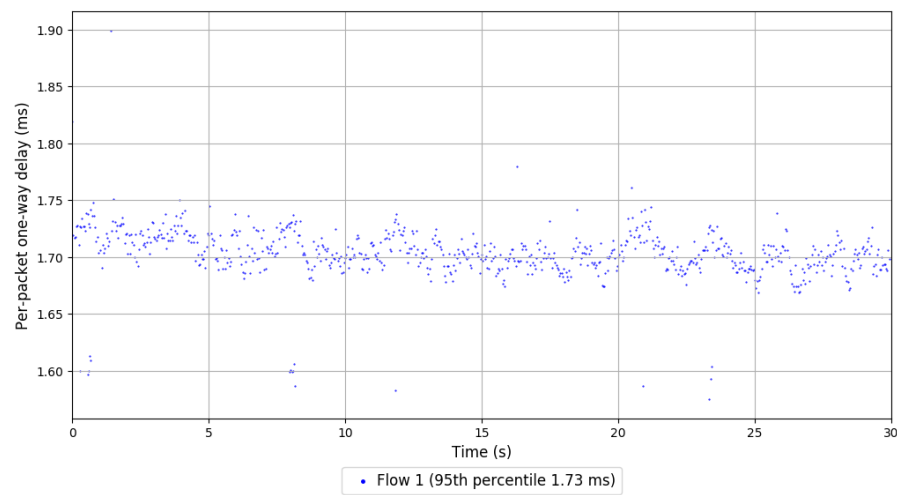
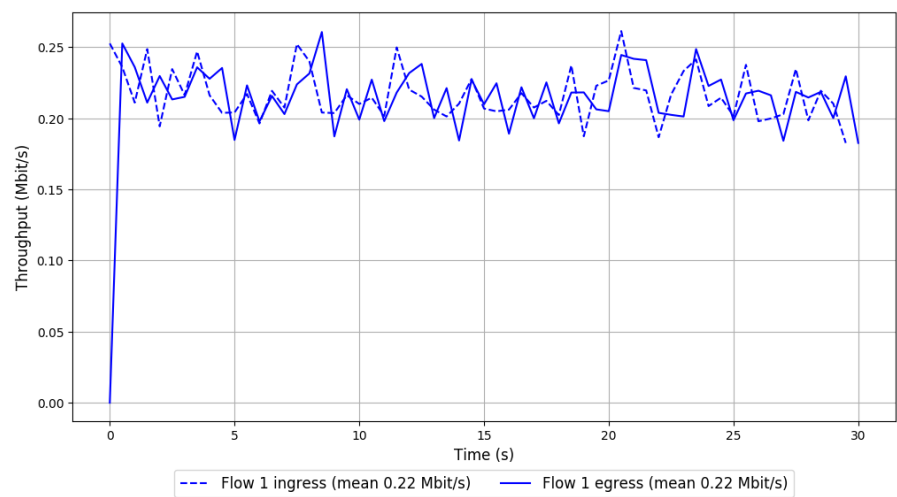


```
Run 1: Statistics of SCReAM

Start at: 2019-03-27 06:53:38
End at: 2019-03-27 06:54:08
Local clock offset: -6.514 ms
Remote clock offset: 0.251 ms

# Below is generated by plot.py at 2019-03-27 08:48:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.731 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.731 ms
Loss rate: 0.00%
```

Run 1: Report of SReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2019-03-27 07:17:15

End at: 2019-03-27 07:17:45

Local clock offset: -6.377 ms

Remote clock offset: 0.426 ms

Below is generated by plot.py at 2019-03-27 08:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.747 ms

Loss rate: 0.00%

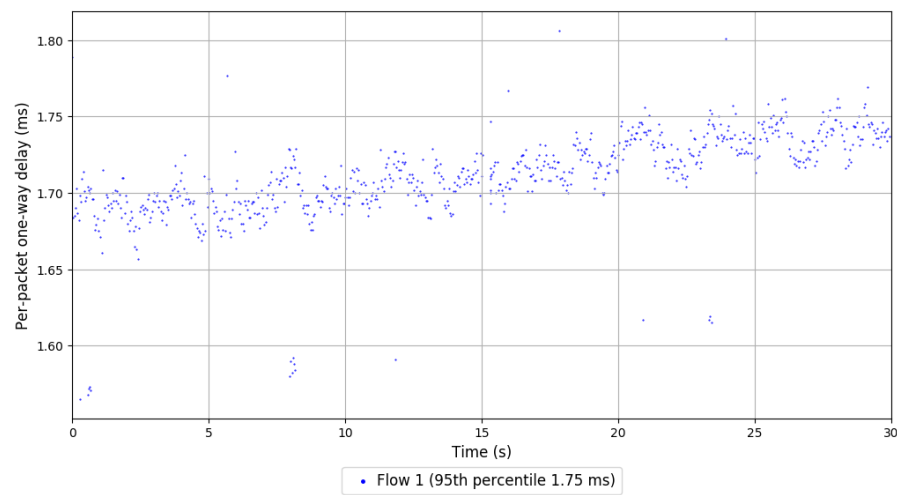
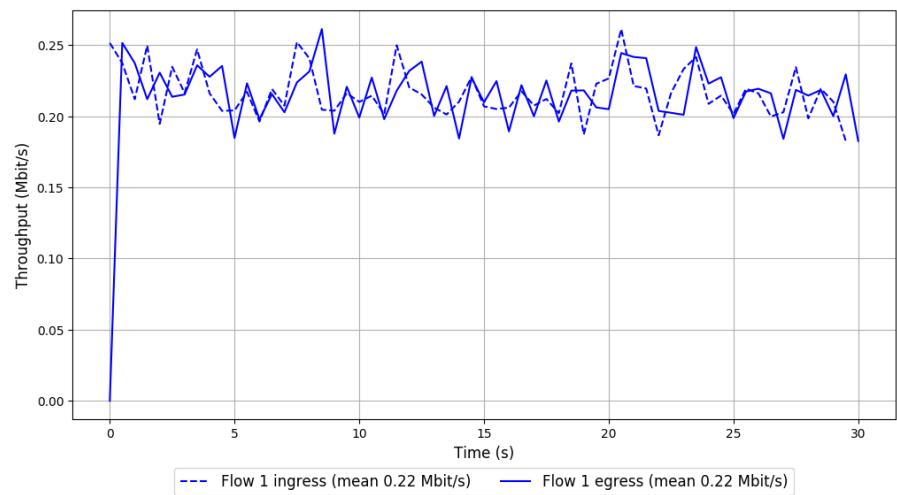
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 1.747 ms

Loss rate: 0.00%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2019-03-27 07:47:34

End at: 2019-03-27 07:48:04

Local clock offset: -6.833 ms

Remote clock offset: 0.139 ms

Below is generated by plot.py at 2019-03-27 08:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.421 ms

Loss rate: 0.00%

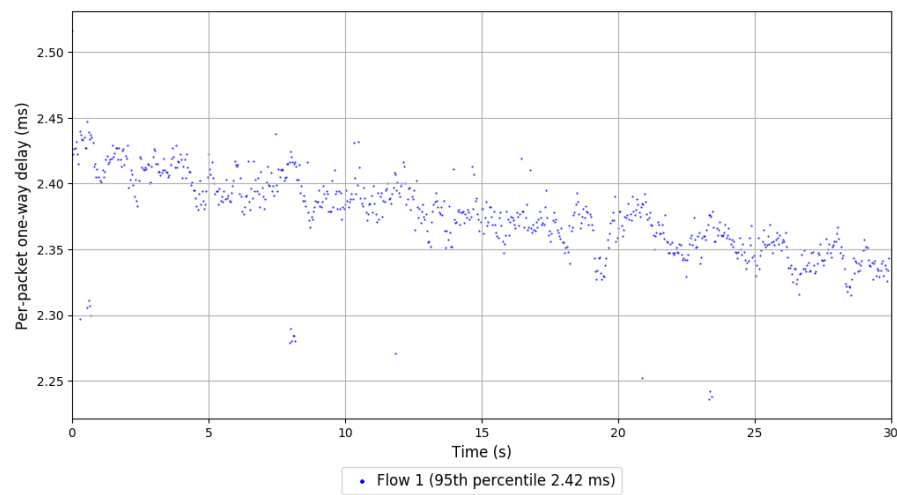
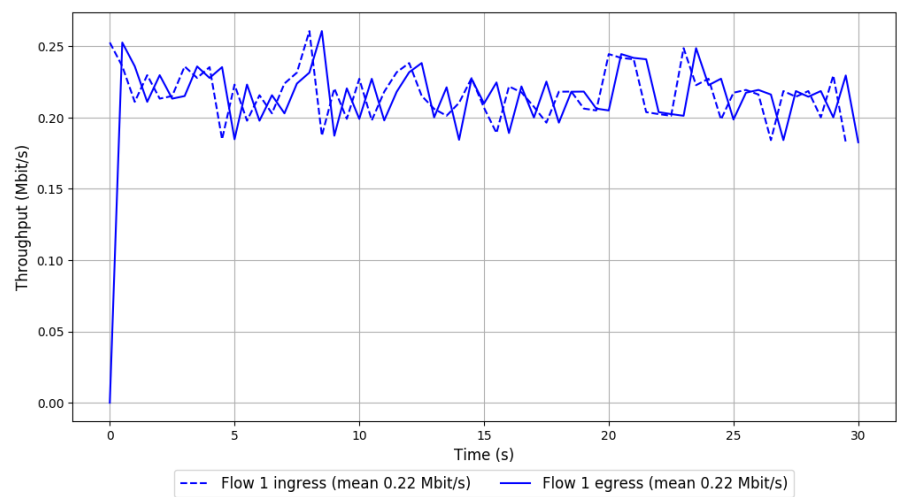
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.421 ms

Loss rate: 0.00%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2019-03-27 08:11:16

End at: 2019-03-27 08:11:46

Local clock offset: -5.632 ms

Remote clock offset: 0.101 ms

Below is generated by plot.py at 2019-03-27 08:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.290 ms

Loss rate: 0.13%

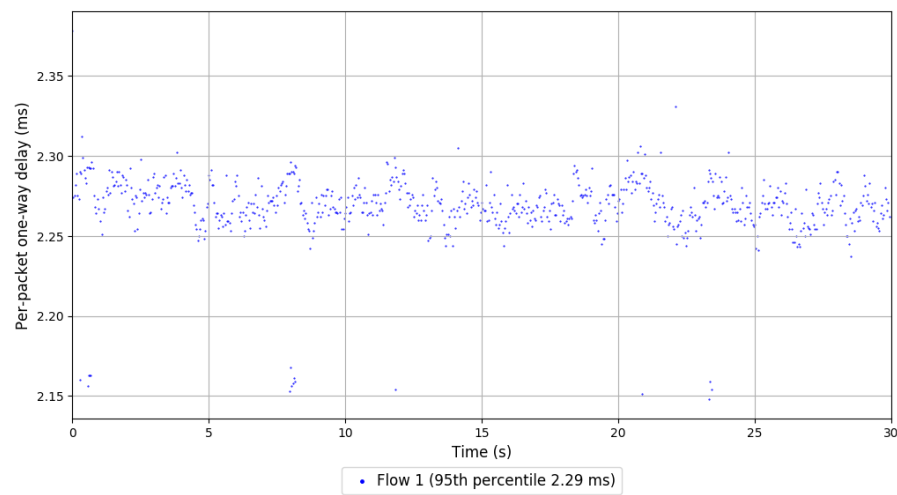
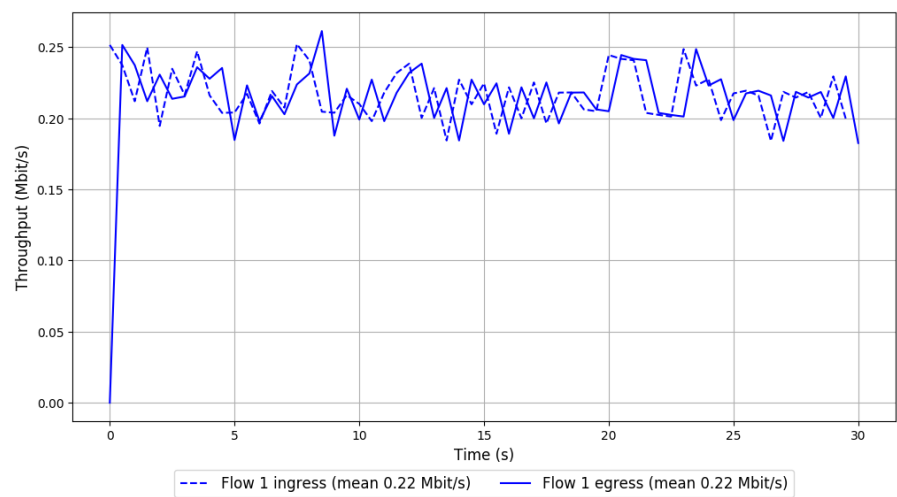
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 2.290 ms

Loss rate: 0.13%

Run 4: Report of SReAM — Data Link

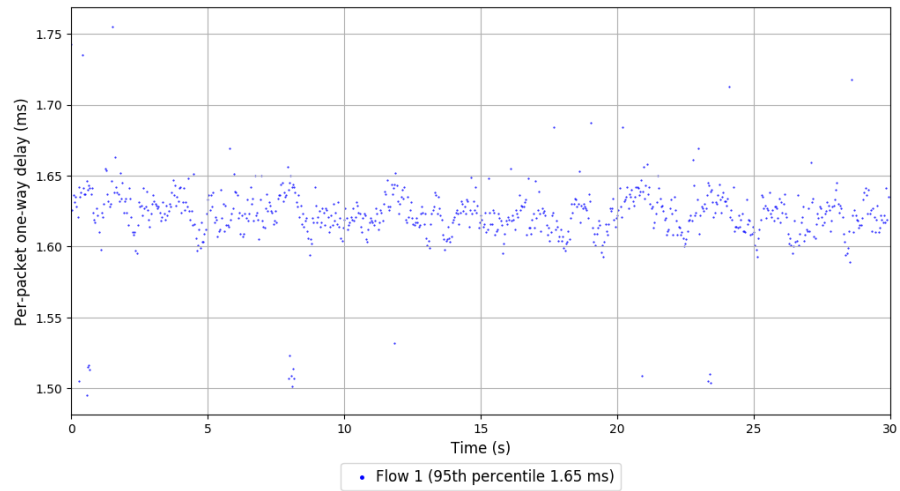
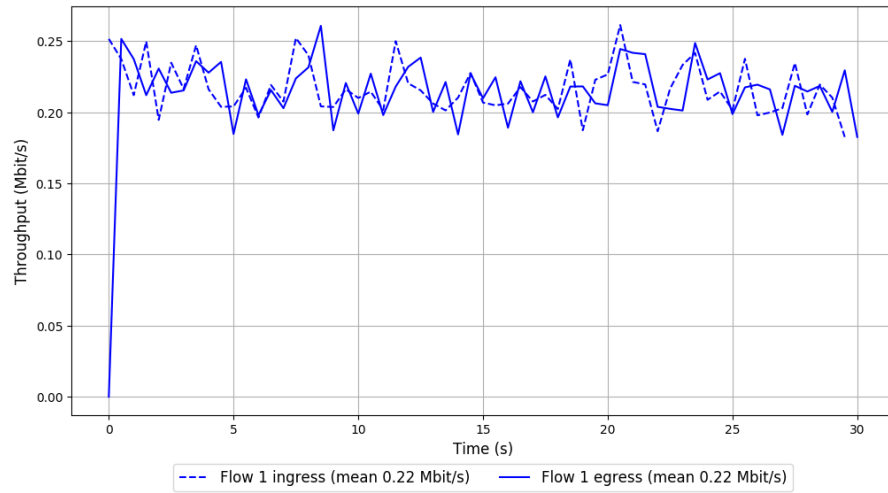


Run 5: Statistics of SCReAM

Start at: 2019-03-27 08:34:57
End at: 2019-03-27 08:35:27
Local clock offset: -6.251 ms
Remote clock offset: -0.071 ms

Below is generated by plot.py at 2019-03-27 08:48:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.645 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.645 ms
Loss rate: 0.00%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-03-27 06:42:15

End at: 2019-03-27 06:42:45

Local clock offset: -6.217 ms

Remote clock offset: 0.261 ms

Below is generated by plot.py at 2019-03-27 08:48:10

Datalink statistics

-- Total of 1 flow:

Average throughput: 50.33 Mbit/s

95th percentile per-packet one-way delay: 10.884 ms

Loss rate: 0.00%

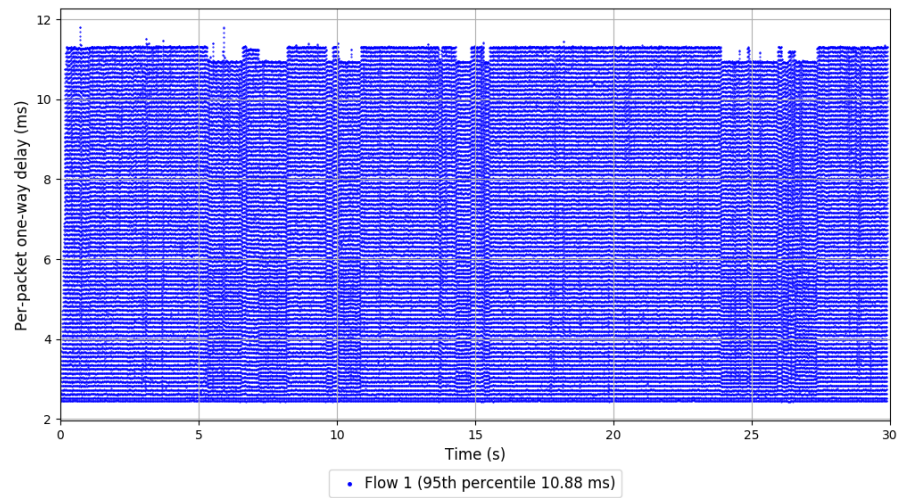
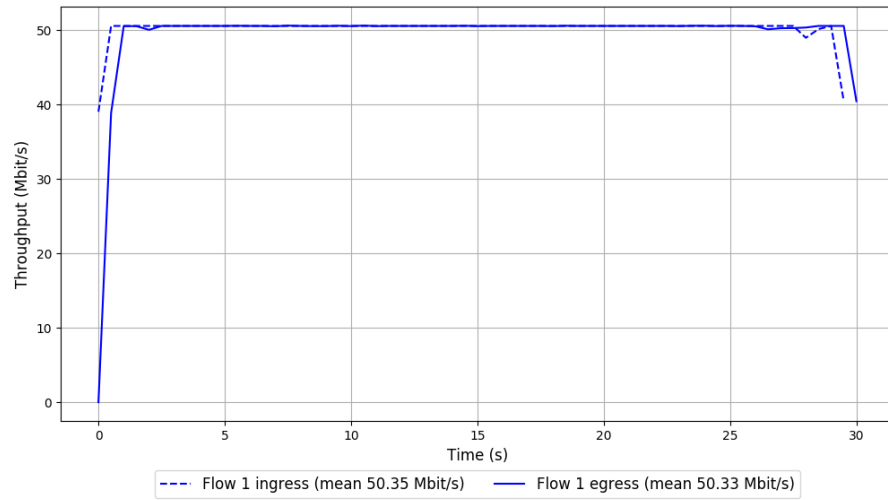
-- Flow 1:

Average throughput: 50.33 Mbit/s

95th percentile per-packet one-way delay: 10.884 ms

Loss rate: 0.00%

Run 1: Report of Sprout — Data Link

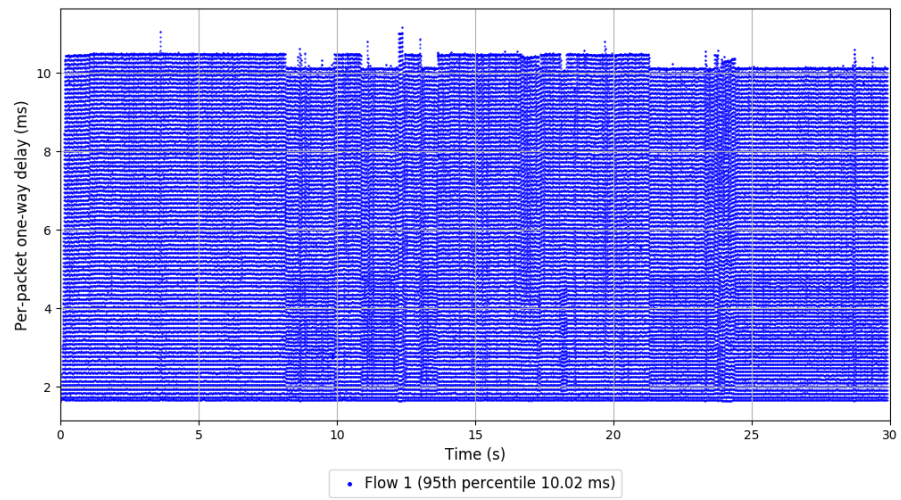
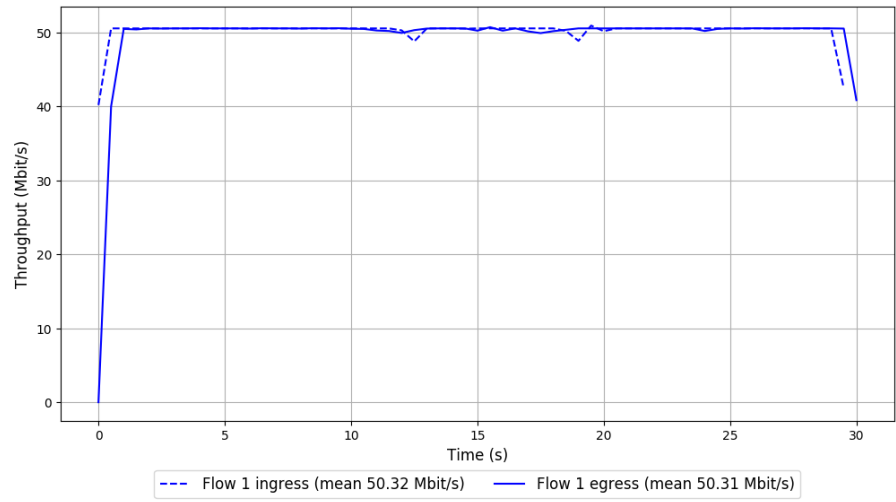


Run 2: Statistics of Sprout

Start at: 2019-03-27 07:05:55
End at: 2019-03-27 07:06:25
Local clock offset: -6.253 ms
Remote clock offset: 0.39 ms

Below is generated by plot.py at 2019-03-27 08:48:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 50.31 Mbit/s
95th percentile per-packet one-way delay: 10.022 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 50.31 Mbit/s
95th percentile per-packet one-way delay: 10.022 ms
Loss rate: 0.07%

Run 2: Report of Sprout — Data Link

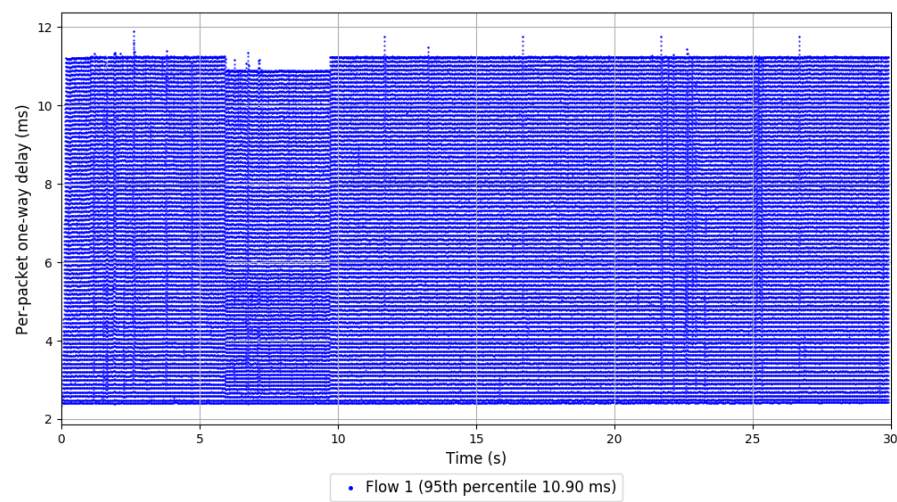
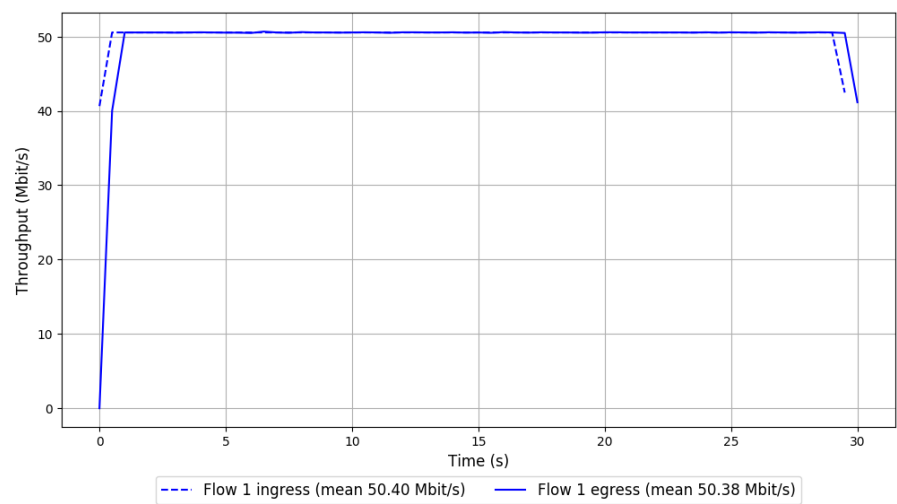


Run 3: Statistics of Sprout

Start at: 2019-03-27 07:36:11
End at: 2019-03-27 07:36:41
Local clock offset: -6.858 ms
Remote clock offset: 0.357 ms

Below is generated by plot.py at 2019-03-27 08:48:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 50.38 Mbit/s
95th percentile per-packet one-way delay: 10.899 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 50.38 Mbit/s
95th percentile per-packet one-way delay: 10.899 ms
Loss rate: 0.07%

Run 3: Report of Sprout — Data Link

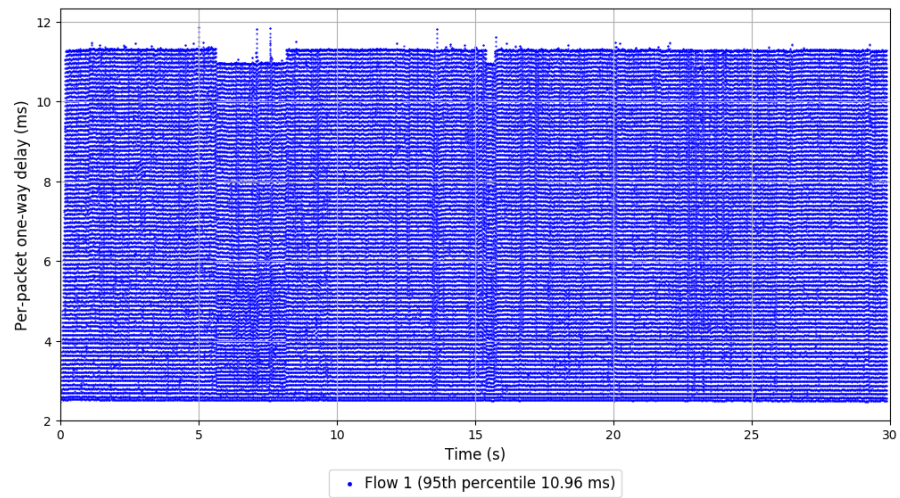
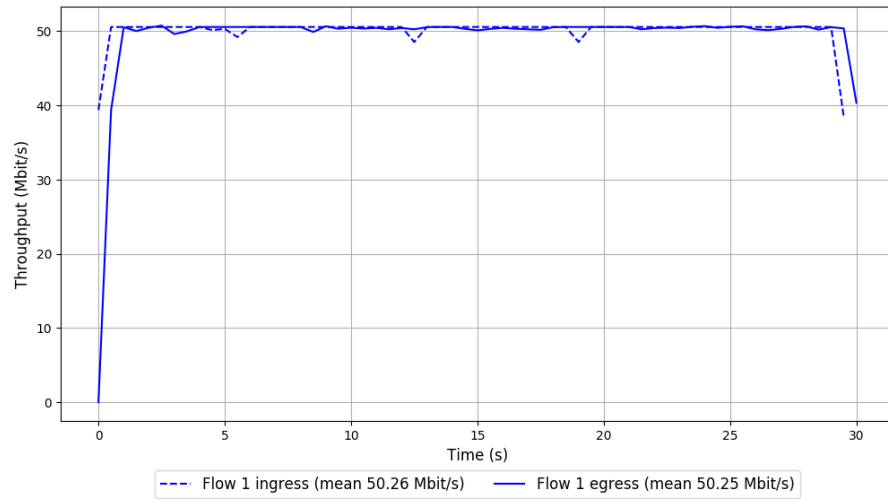


Run 4: Statistics of Sprout

Start at: 2019-03-27 07:59:54
End at: 2019-03-27 08:00:24
Local clock offset: -5.811 ms
Remote clock offset: 0.03 ms

Below is generated by plot.py at 2019-03-27 08:48:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 50.25 Mbit/s
95th percentile per-packet one-way delay: 10.963 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.25 Mbit/s
95th percentile per-packet one-way delay: 10.963 ms
Loss rate: 0.00%

Run 4: Report of Sprout — Data Link

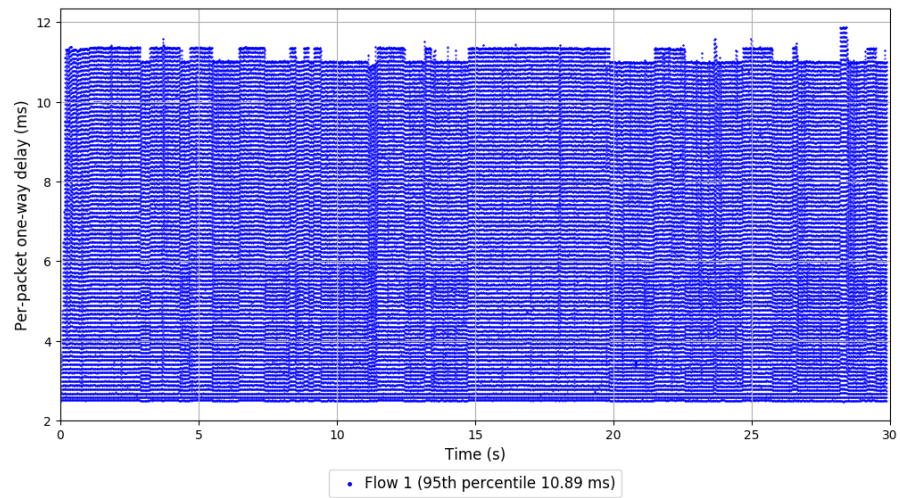
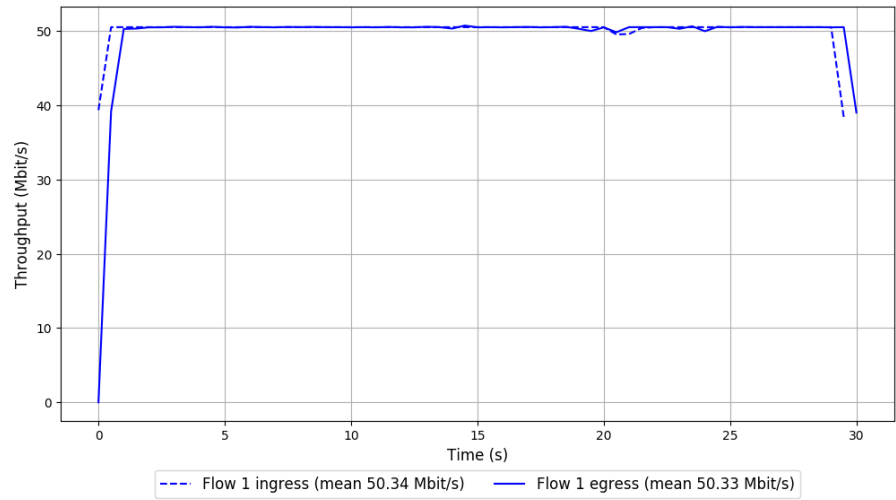


Run 5: Statistics of Sprout

Start at: 2019-03-27 08:23:33
End at: 2019-03-27 08:24:04
Local clock offset: -5.508 ms
Remote clock offset: -0.093 ms

Below is generated by plot.py at 2019-03-27 08:48:10
Datalink statistics
-- Total of 1 flow:
Average throughput: 50.33 Mbit/s
95th percentile per-packet one-way delay: 10.894 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.33 Mbit/s
95th percentile per-packet one-way delay: 10.894 ms
Loss rate: 0.00%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-03-27 06:52:27

End at: 2019-03-27 06:52:57

Local clock offset: -6.569 ms

Remote clock offset: 0.34 ms

Below is generated by plot.py at 2019-03-27 08:49:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.14 Mbit/s

95th percentile per-packet one-way delay: 1.632 ms

Loss rate: 0.02%

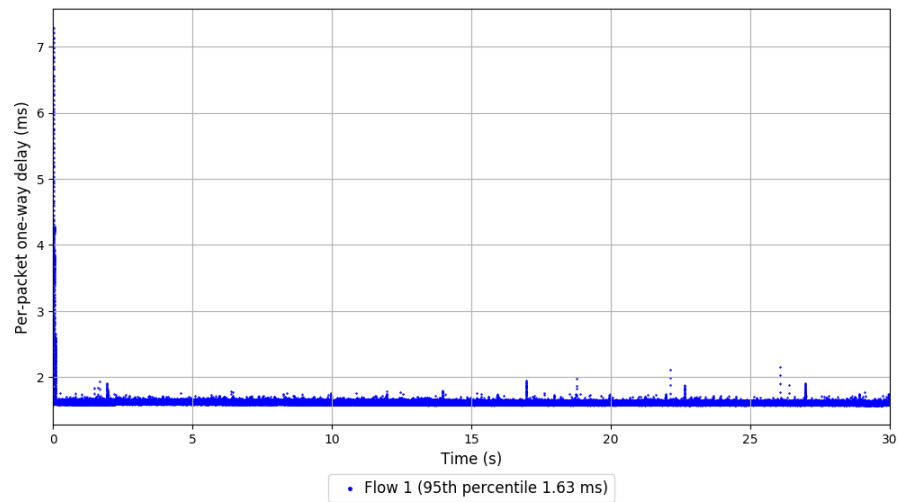
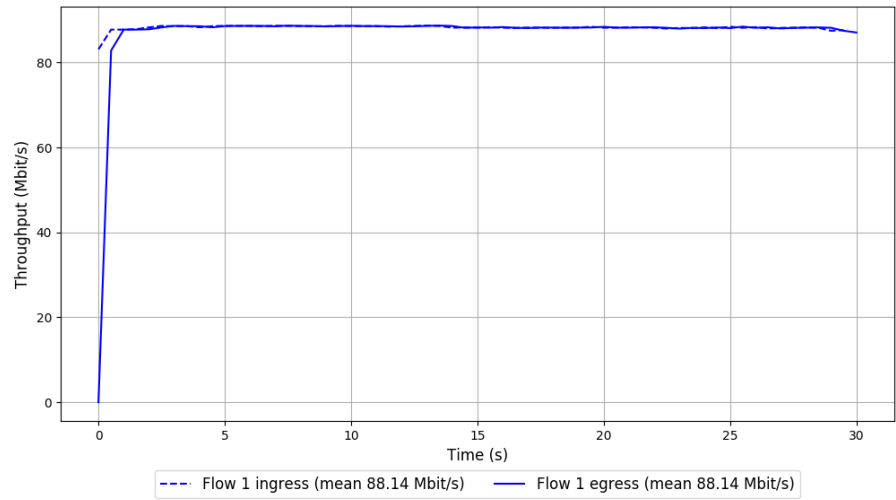
-- Flow 1:

Average throughput: 88.14 Mbit/s

95th percentile per-packet one-way delay: 1.632 ms

Loss rate: 0.02%

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



Run 2: Statistics of TaoVA-100x

Start at: 2019-03-27 07:16:05

End at: 2019-03-27 07:16:35

Local clock offset: -5.522 ms

Remote clock offset: 0.468 ms

Below is generated by plot.py at 2019-03-27 08:49:44

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.46 Mbit/s

95th percentile per-packet one-way delay: 2.433 ms

Loss rate: 0.02%

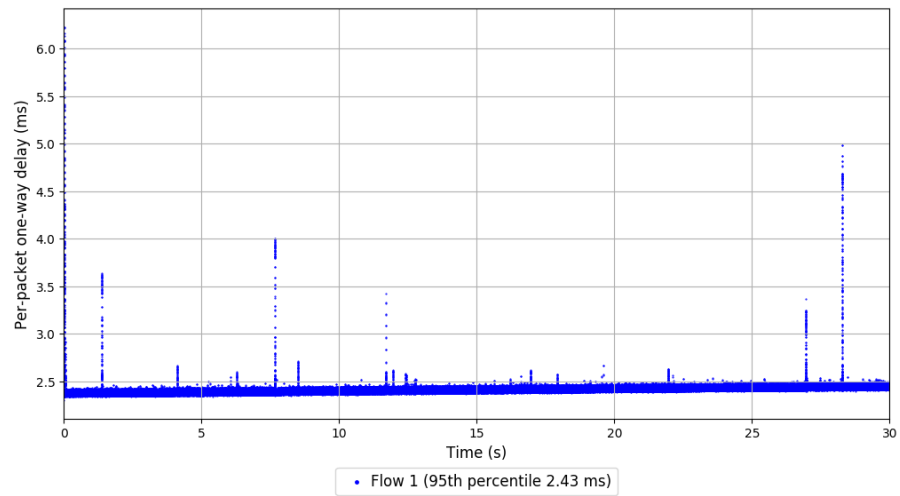
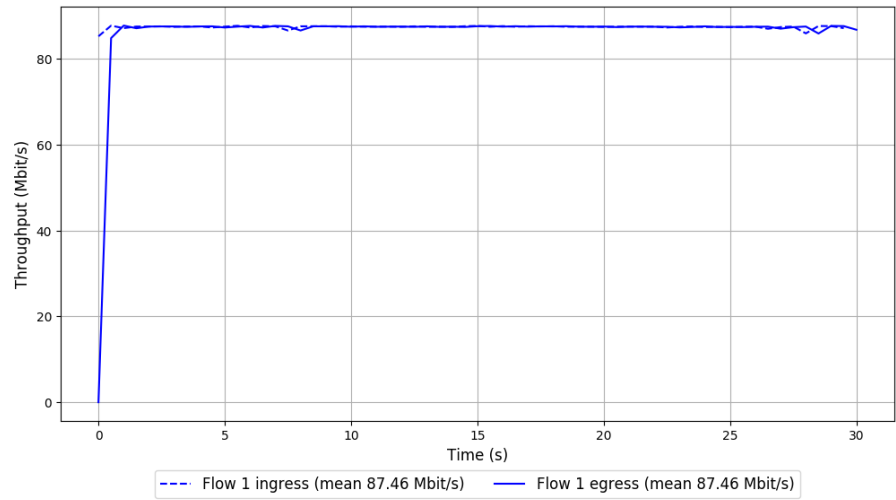
-- Flow 1:

Average throughput: 87.46 Mbit/s

95th percentile per-packet one-way delay: 2.433 ms

Loss rate: 0.02%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-03-27 07:46:23

End at: 2019-03-27 07:46:53

Local clock offset: -7.03 ms

Remote clock offset: 0.186 ms

Below is generated by plot.py at 2019-03-27 08:49:47

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.31 Mbit/s

95th percentile per-packet one-way delay: 2.371 ms

Loss rate: 0.02%

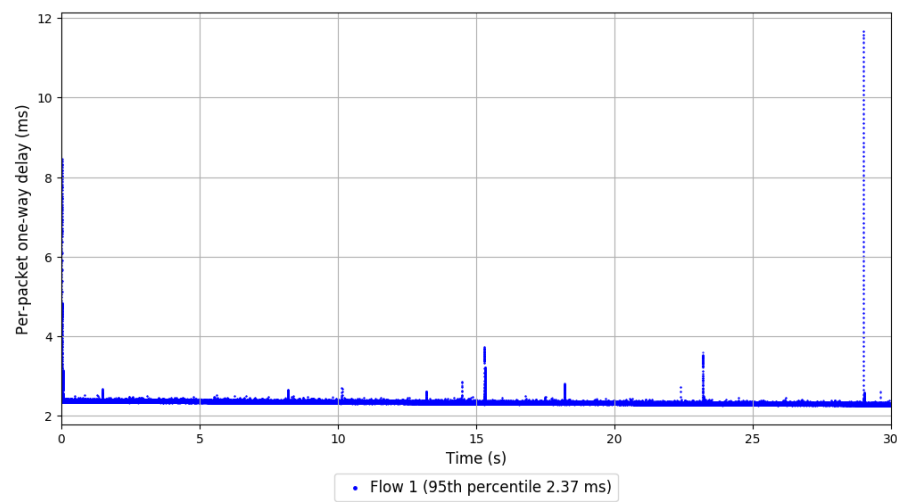
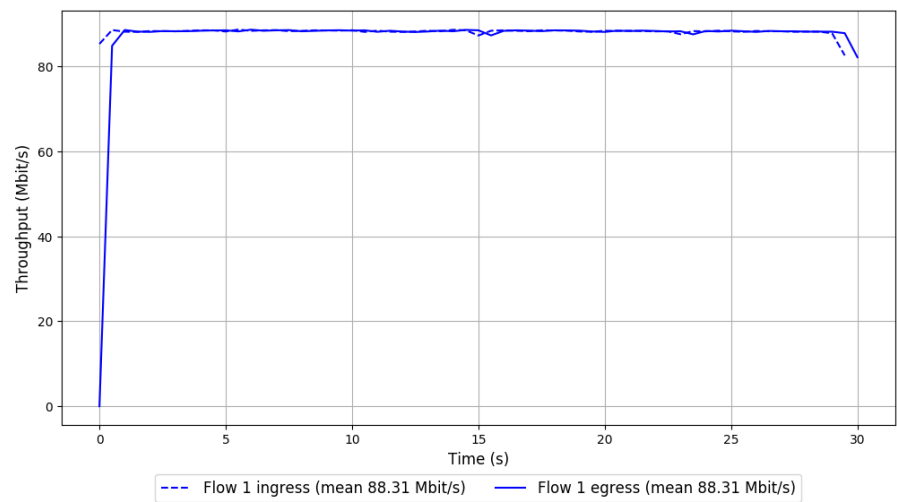
-- Flow 1:

Average throughput: 88.31 Mbit/s

95th percentile per-packet one-way delay: 2.371 ms

Loss rate: 0.02%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-03-27 08:10:05

End at: 2019-03-27 08:10:35

Local clock offset: -5.569 ms

Remote clock offset: 0.098 ms

Below is generated by plot.py at 2019-03-27 08:49:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 88.22 Mbit/s

95th percentile per-packet one-way delay: 2.393 ms

Loss rate: 0.02%

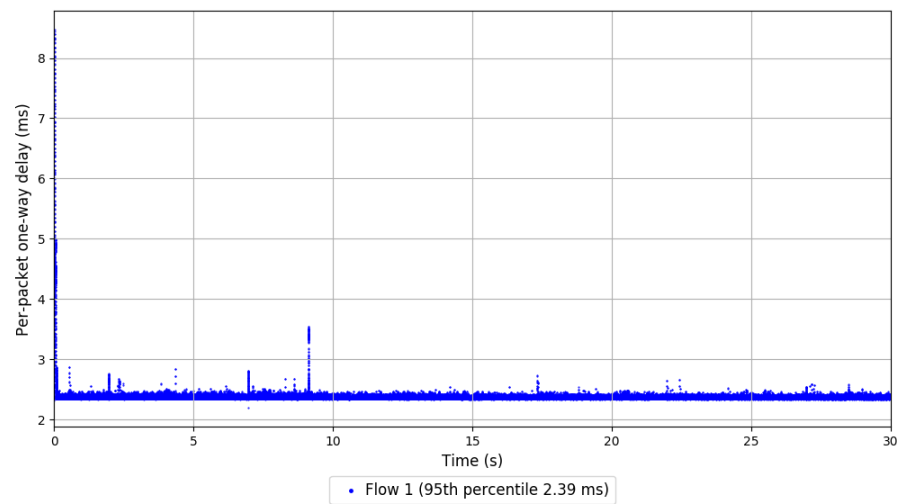
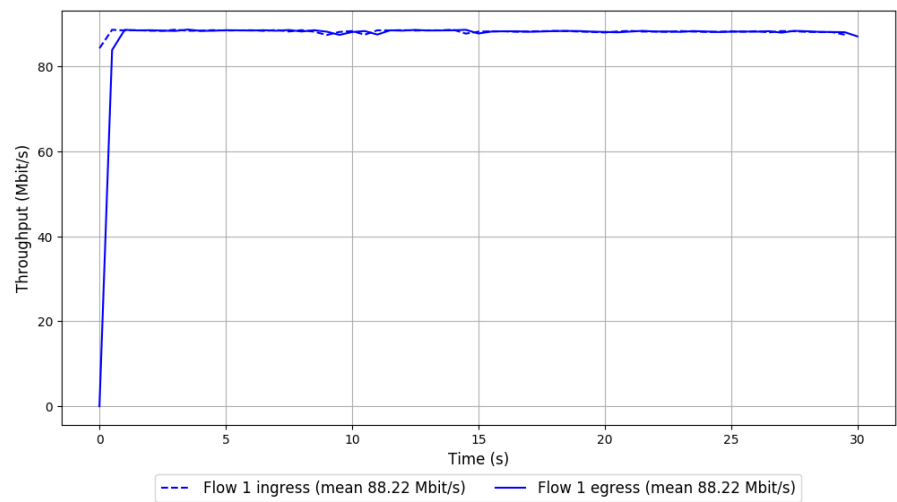
-- Flow 1:

Average throughput: 88.22 Mbit/s

95th percentile per-packet one-way delay: 2.393 ms

Loss rate: 0.02%

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



Run 5: Statistics of TaoVA-100x

Start at: 2019-03-27 08:33:46

End at: 2019-03-27 08:34:16

Local clock offset: -5.548 ms

Remote clock offset: -0.058 ms

Below is generated by plot.py at 2019-03-27 08:49:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 87.72 Mbit/s

95th percentile per-packet one-way delay: 2.378 ms

Loss rate: 0.02%

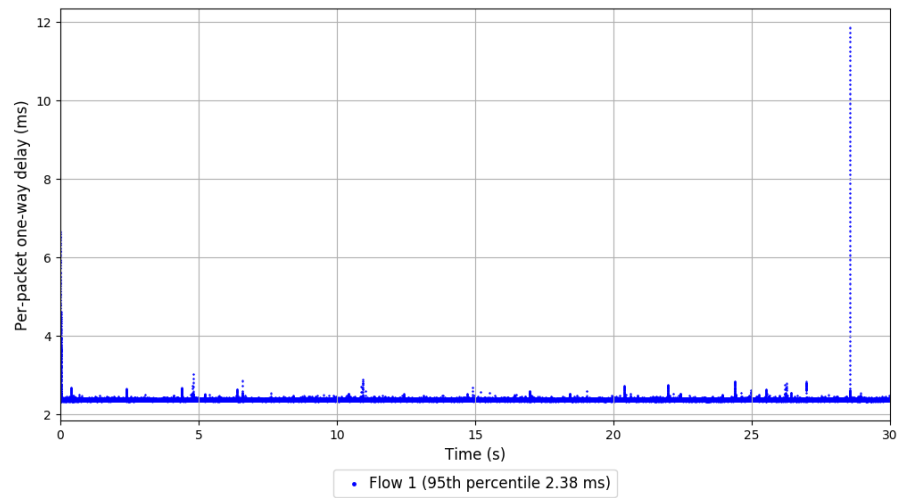
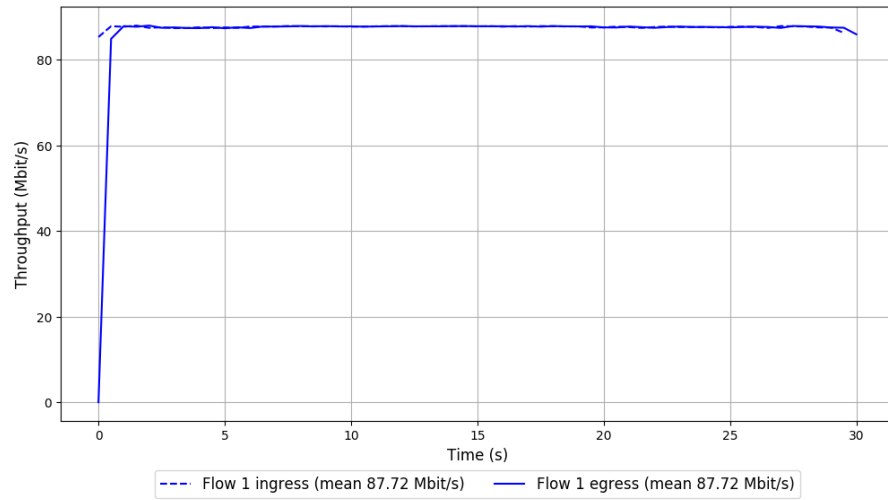
-- Flow 1:

Average throughput: 87.72 Mbit/s

95th percentile per-packet one-way delay: 2.378 ms

Loss rate: 0.02%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-03-27 06:40:00

End at: 2019-03-27 06:40:30

Local clock offset: -6.995 ms

Remote clock offset: 0.284 ms

Below is generated by plot.py at 2019-03-27 08:49:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 97.06 Mbit/s

95th percentile per-packet one-way delay: 2.725 ms

Loss rate: 0.02%

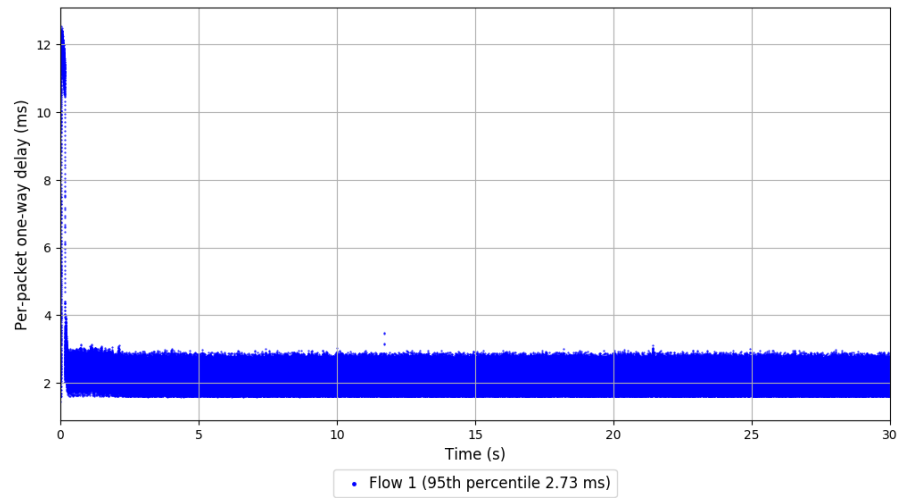
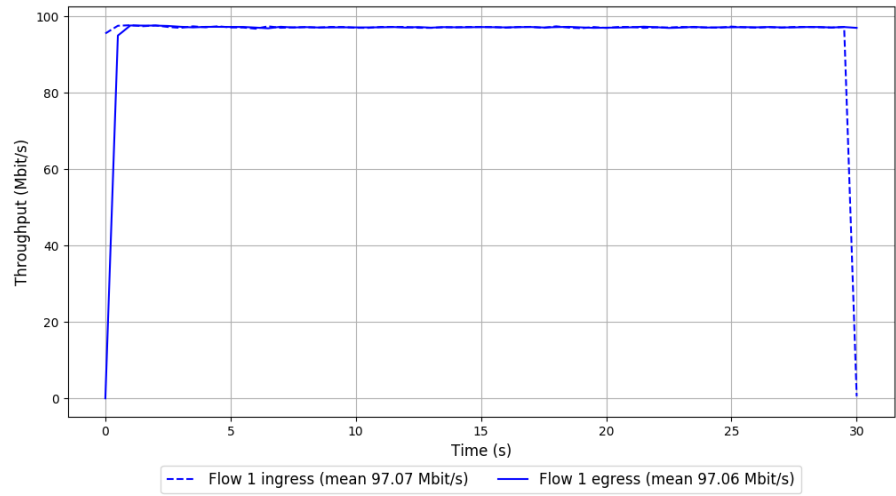
-- Flow 1:

Average throughput: 97.06 Mbit/s

95th percentile per-packet one-way delay: 2.725 ms

Loss rate: 0.02%

Run 1: Report of TCP Vegas — Data Link



Run 2: Statistics of TCP Vegas

Start at: 2019-03-27 07:03:40

End at: 2019-03-27 07:04:10

Local clock offset: -6.268 ms

Remote clock offset: 0.362 ms

Below is generated by plot.py at 2019-03-27 08:49:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.70 Mbit/s

95th percentile per-packet one-way delay: 2.888 ms

Loss rate: 0.01%

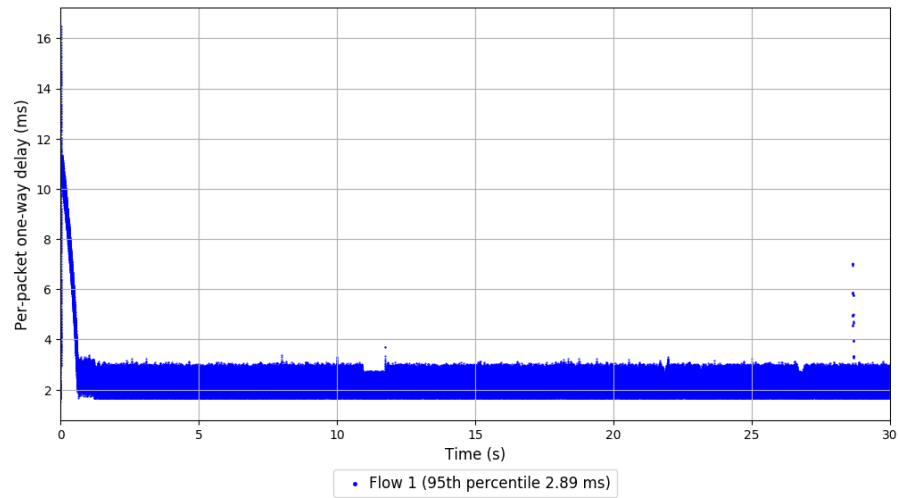
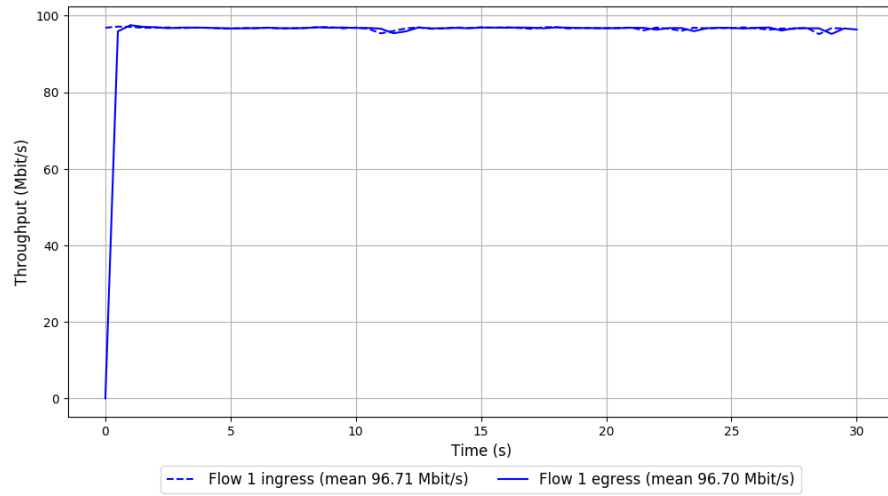
-- Flow 1:

Average throughput: 96.70 Mbit/s

95th percentile per-packet one-way delay: 2.888 ms

Loss rate: 0.01%

Run 2: Report of TCP Vegas — Data Link

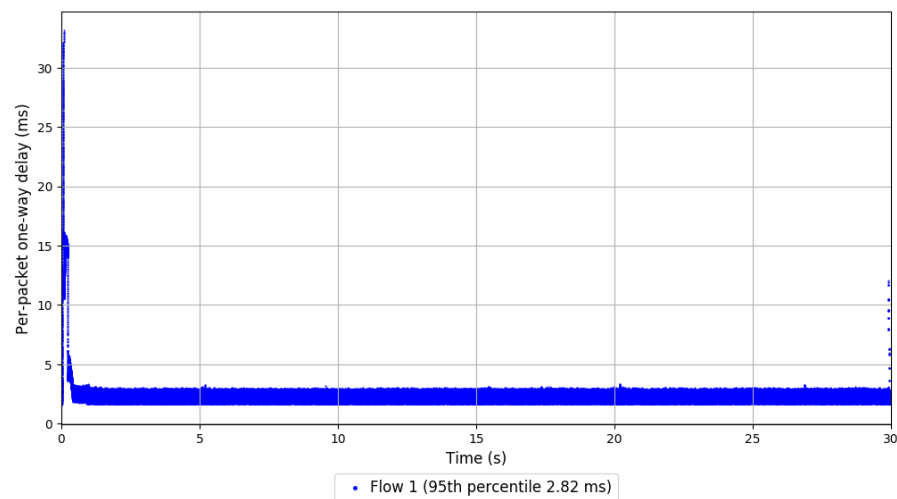
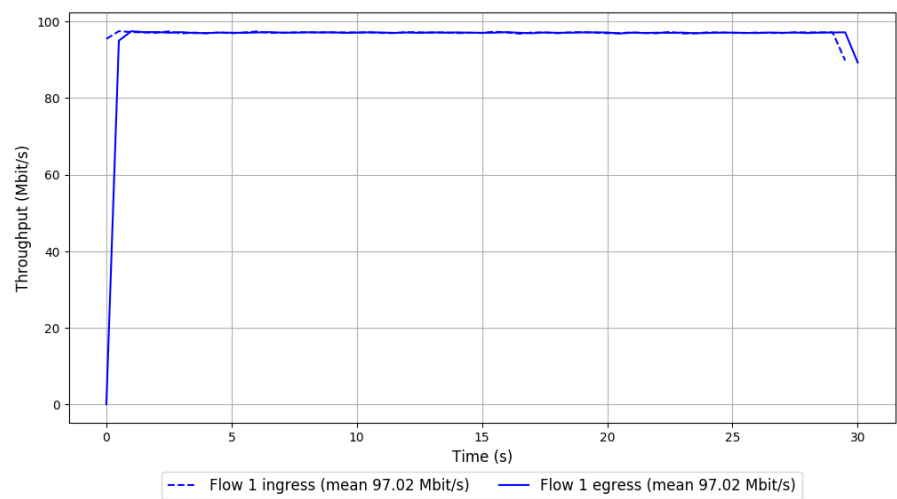


Run 3: Statistics of TCP Vegas

Start at: 2019-03-27 07:27:18
End at: 2019-03-27 07:27:48
Local clock offset: -7.244 ms
Remote clock offset: 0.417 ms

Below is generated by plot.py at 2019-03-27 08:49:52
Datalink statistics
-- Total of 1 flow:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 2.823 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 97.02 Mbit/s
95th percentile per-packet one-way delay: 2.823 ms
Loss rate: 0.02%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-03-27 07:57:39

End at: 2019-03-27 07:58:09

Local clock offset: -5.901 ms

Remote clock offset: 0.147 ms

Below is generated by plot.py at 2019-03-27 08:50:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 96.63 Mbit/s

95th percentile per-packet one-way delay: 3.592 ms

Loss rate: 0.01%

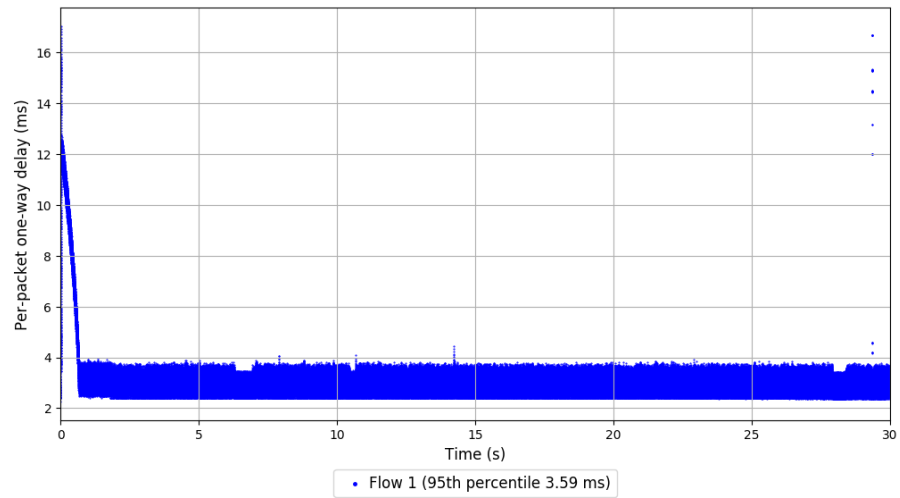
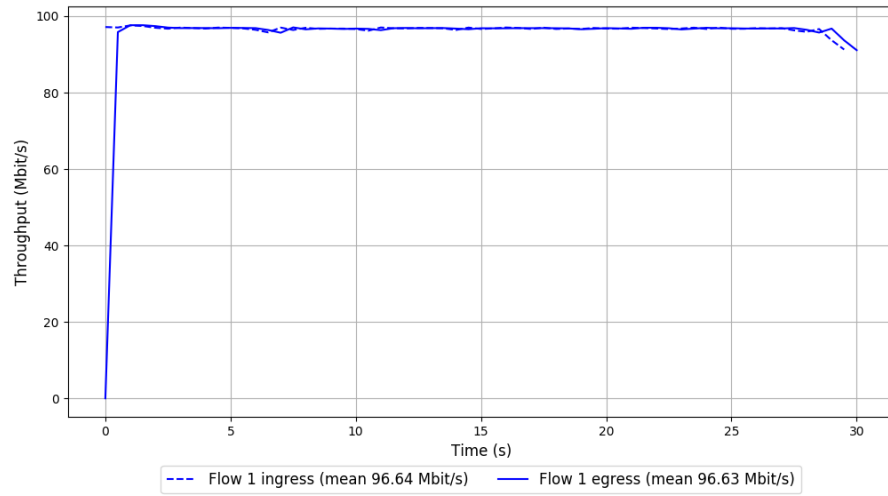
-- Flow 1:

Average throughput: 96.63 Mbit/s

95th percentile per-packet one-way delay: 3.592 ms

Loss rate: 0.01%

Run 4: Report of TCP Vegas — Data Link

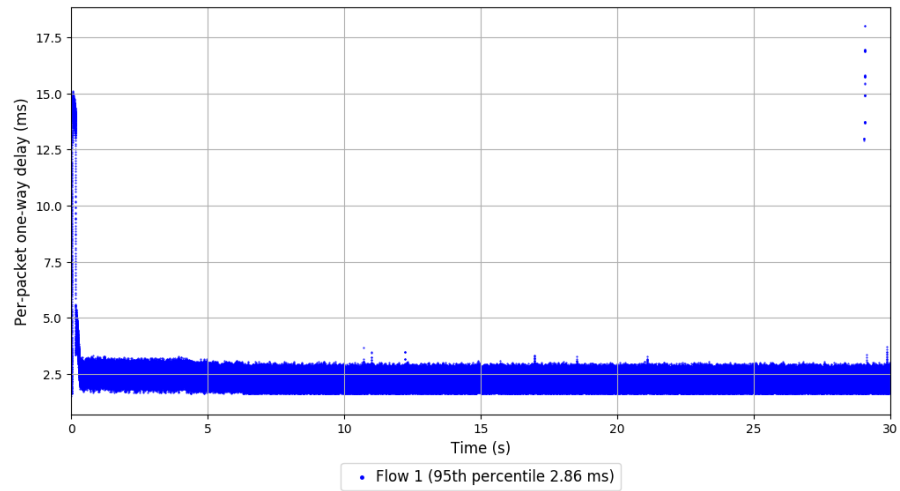
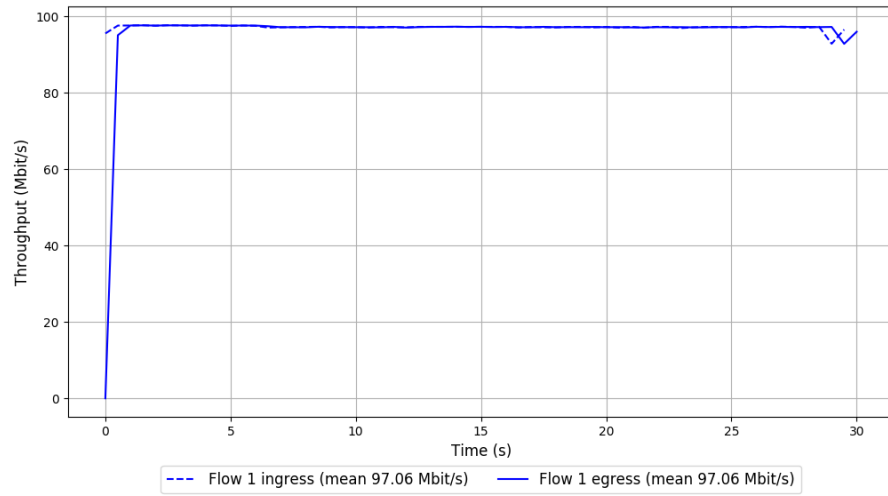


Run 5: Statistics of TCP Vegas

Start at: 2019-03-27 08:21:18
End at: 2019-03-27 08:21:48
Local clock offset: -6.271 ms
Remote clock offset: -0.015 ms

Below is generated by plot.py at 2019-03-27 08:50:20
Datalink statistics
-- Total of 1 flow:
Average throughput: 97.06 Mbit/s
95th percentile per-packet one-way delay: 2.858 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 97.06 Mbit/s
95th percentile per-packet one-way delay: 2.858 ms
Loss rate: 0.02%

Run 5: Report of TCP Vegas — Data Link



Run 1: Statistics of Verus

Start at: 2019-03-27 06:45:39

End at: 2019-03-27 06:46:09

Local clock offset: -7.066 ms

Remote clock offset: 0.252 ms

Below is generated by plot.py at 2019-03-27 08:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 58.30 Mbit/s

95th percentile per-packet one-way delay: 14.507 ms

Loss rate: 0.03%

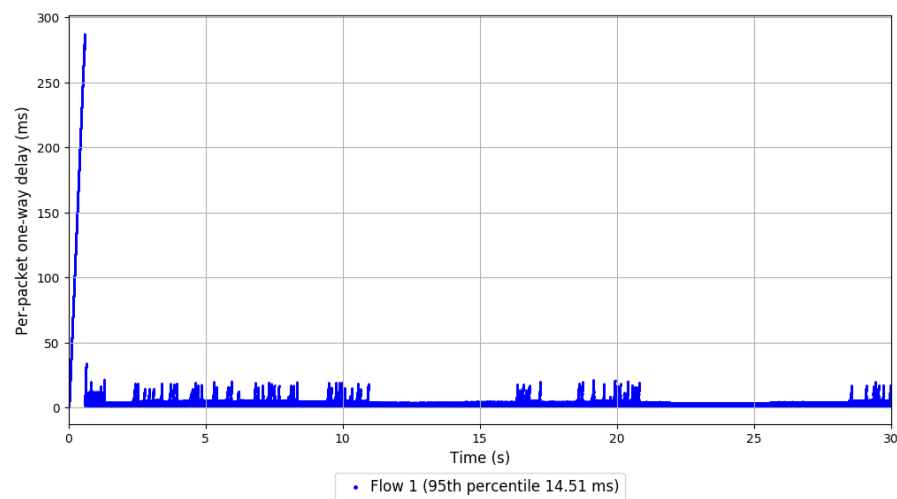
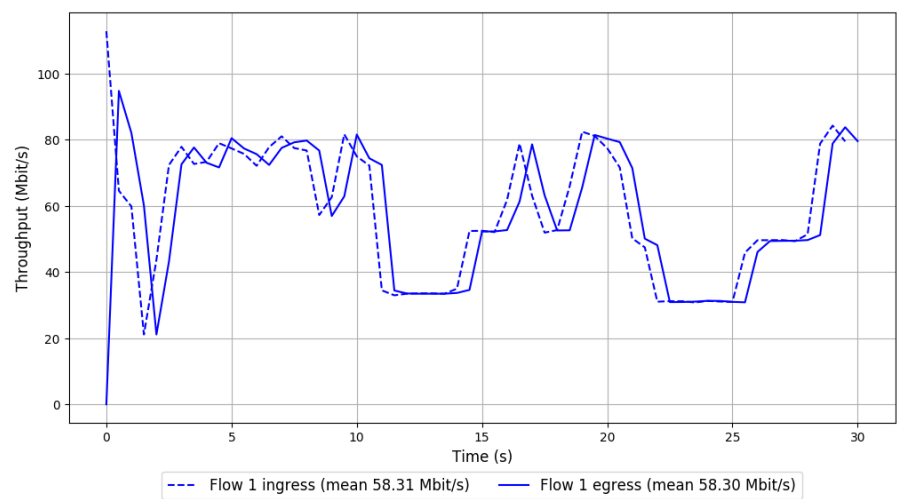
-- Flow 1:

Average throughput: 58.30 Mbit/s

95th percentile per-packet one-way delay: 14.507 ms

Loss rate: 0.03%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-03-27 07:09:16

End at: 2019-03-27 07:09:46

Local clock offset: -5.452 ms

Remote clock offset: 0.389 ms

Below is generated by plot.py at 2019-03-27 08:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.06 Mbit/s

95th percentile per-packet one-way delay: 48.421 ms

Loss rate: 0.02%

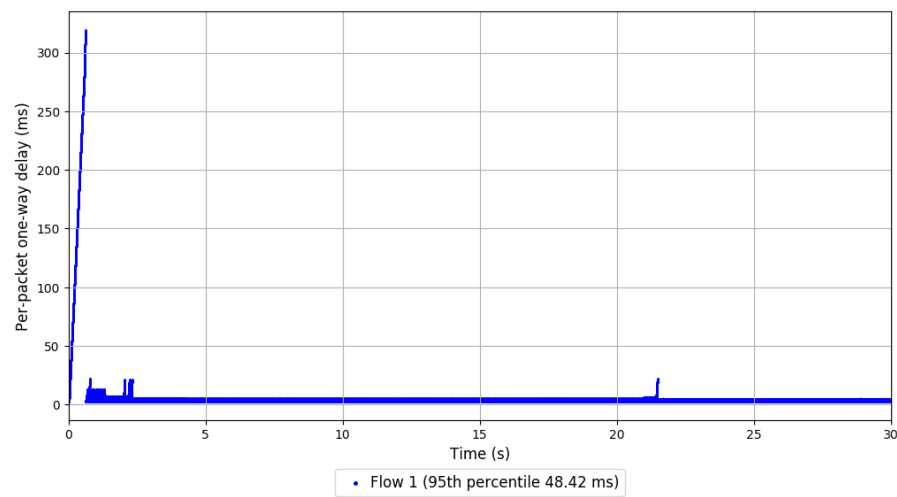
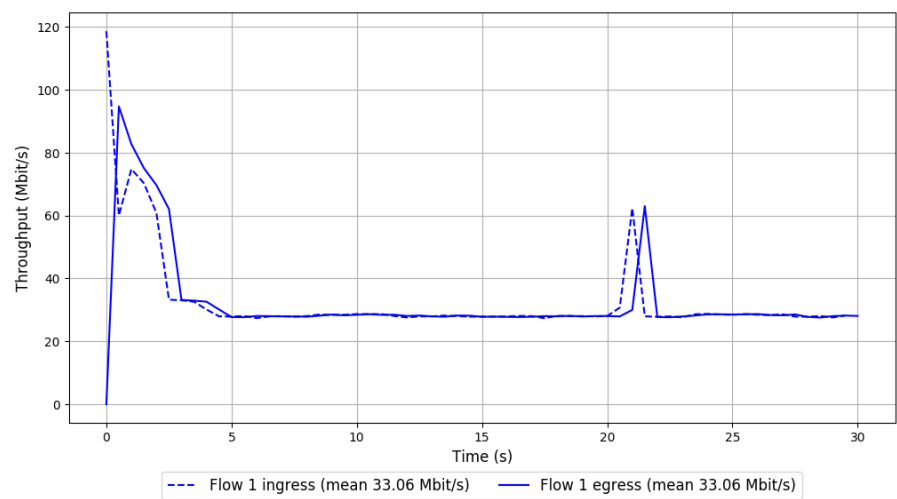
-- Flow 1:

Average throughput: 33.06 Mbit/s

95th percentile per-packet one-way delay: 48.421 ms

Loss rate: 0.02%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-03-27 07:39:35

End at: 2019-03-27 07:40:05

Local clock offset: -7.002 ms

Remote clock offset: 0.27 ms

Below is generated by plot.py at 2019-03-27 08:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 35.74 Mbit/s

95th percentile per-packet one-way delay: 24.421 ms

Loss rate: 0.02%

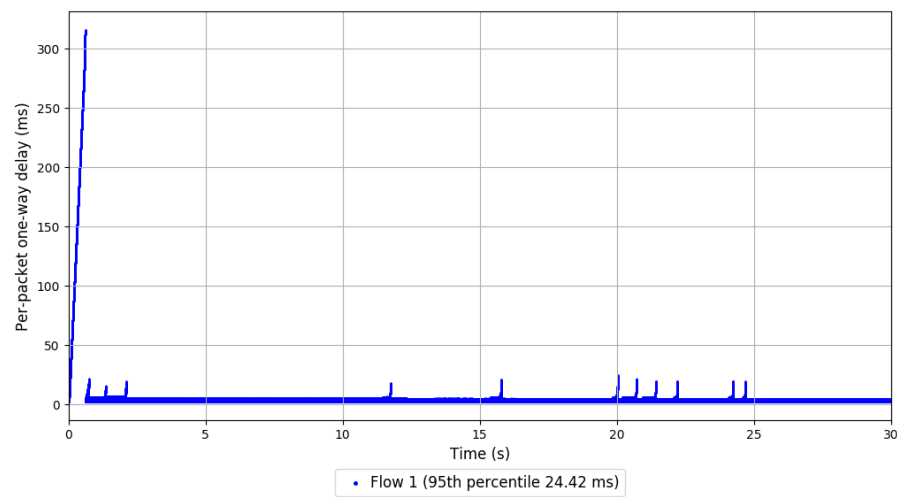
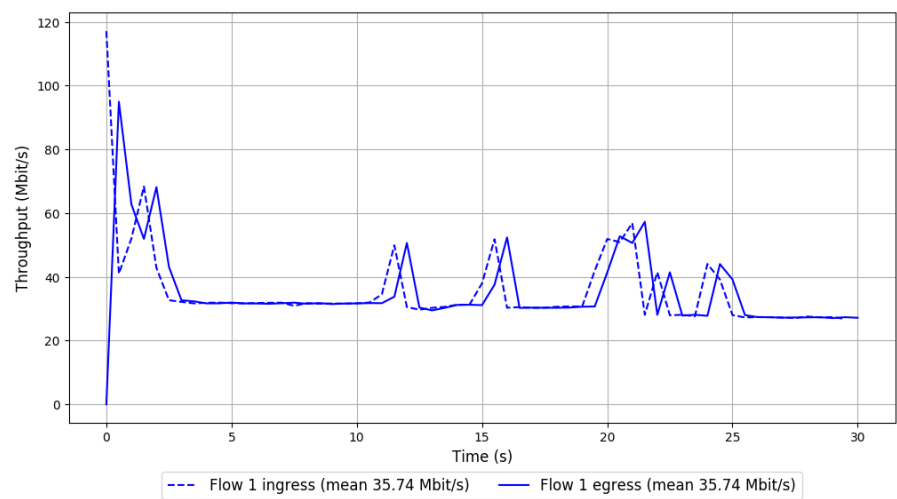
-- Flow 1:

Average throughput: 35.74 Mbit/s

95th percentile per-packet one-way delay: 24.421 ms

Loss rate: 0.02%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2019-03-27 08:03:17

End at: 2019-03-27 08:03:47

Local clock offset: -5.699 ms

Remote clock offset: 0.099 ms

Below is generated by plot.py at 2019-03-27 08:50:20

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.35 Mbit/s

95th percentile per-packet one-way delay: 24.789 ms

Loss rate: 0.03%

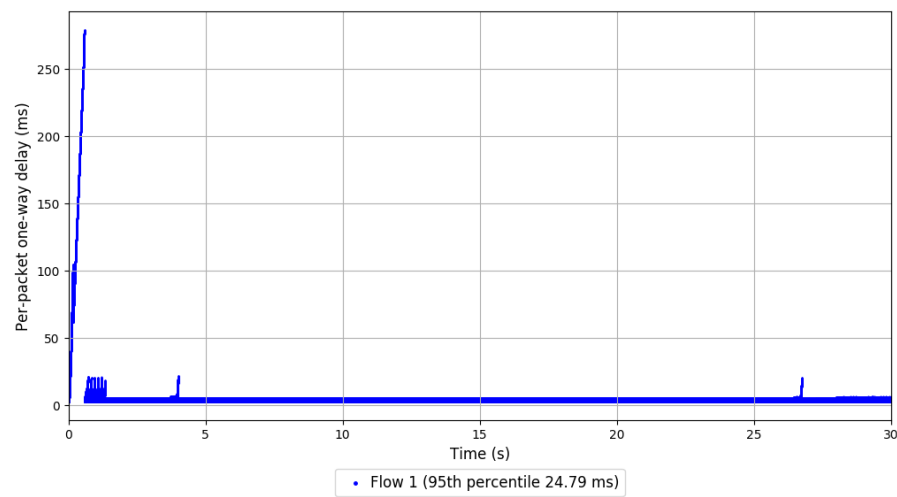
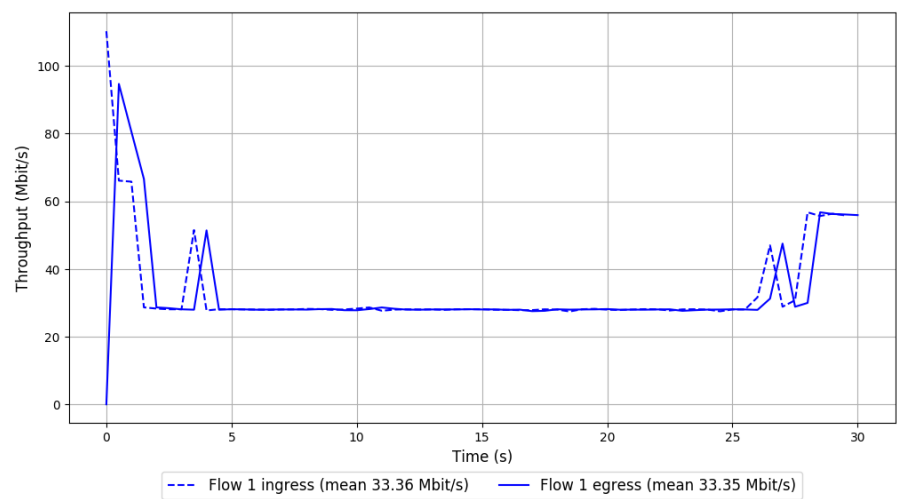
-- Flow 1:

Average throughput: 33.35 Mbit/s

95th percentile per-packet one-way delay: 24.789 ms

Loss rate: 0.03%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2019-03-27 08:26:58

End at: 2019-03-27 08:27:28

Local clock offset: -5.5 ms

Remote clock offset: 0.031 ms

Below is generated by plot.py at 2019-03-27 08:50:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 43.46 Mbit/s

95th percentile per-packet one-way delay: 13.566 ms

Loss rate: 0.04%

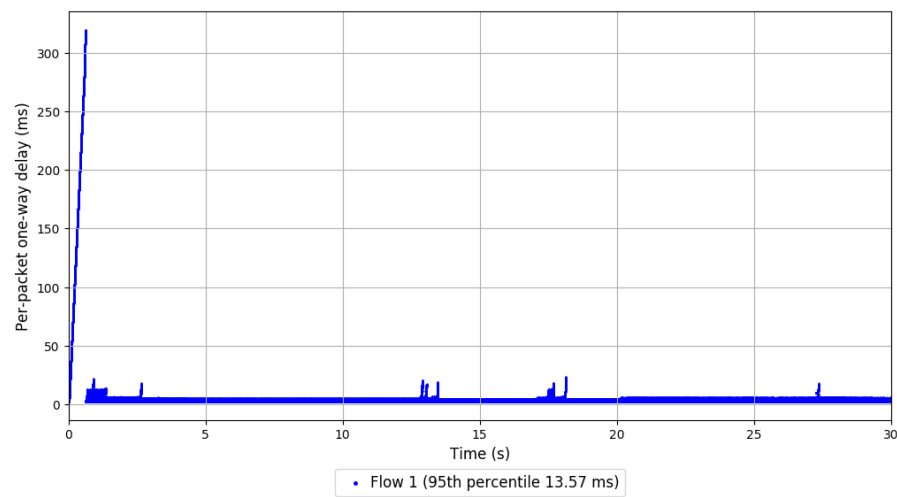
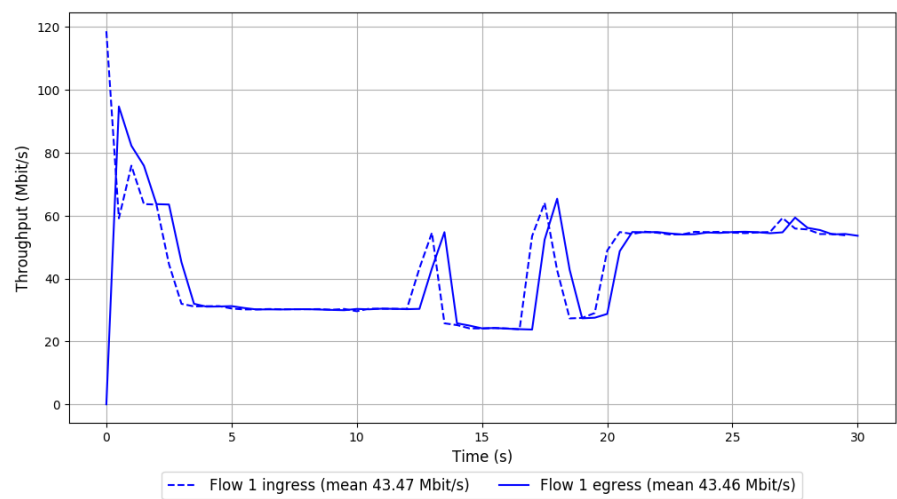
-- Flow 1:

Average throughput: 43.46 Mbit/s

95th percentile per-packet one-way delay: 13.566 ms

Loss rate: 0.04%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-03-27 06:43:21

End at: 2019-03-27 06:43:51

Local clock offset: -6.276 ms

Remote clock offset: 0.238 ms

Below is generated by plot.py at 2019-03-27 08:50:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 74.75 Mbit/s

95th percentile per-packet one-way delay: 2.607 ms

Loss rate: 0.00%

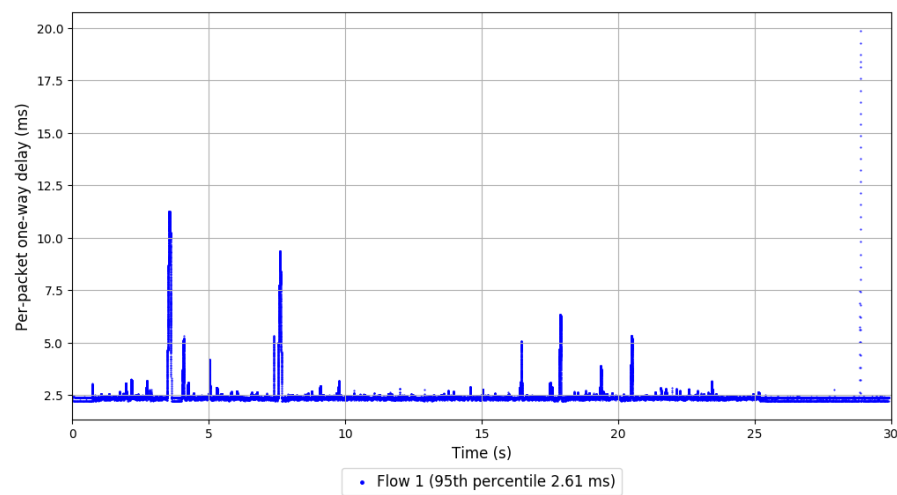
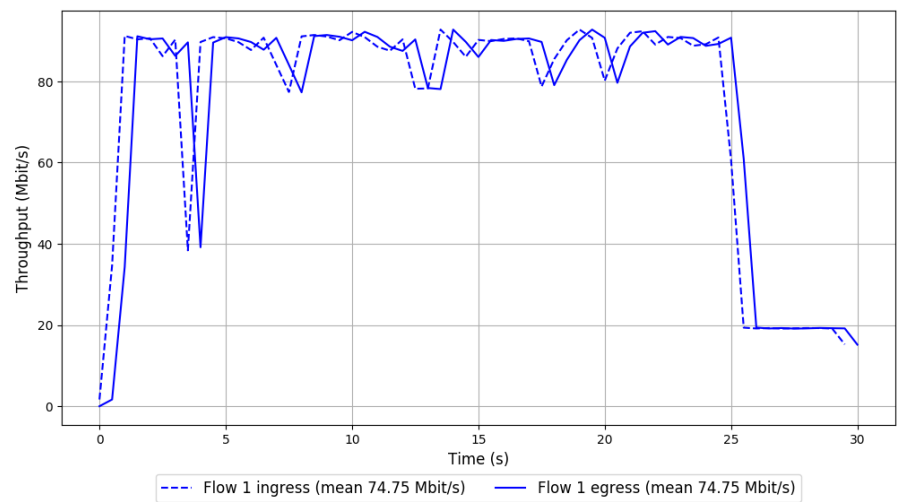
-- Flow 1:

Average throughput: 74.75 Mbit/s

95th percentile per-packet one-way delay: 2.607 ms

Loss rate: 0.00%

Run 1: Report of PCC-Vivace — Data Link



Run 2: Statistics of PCC-Vivace

Start at: 2019-03-27 07:07:01

End at: 2019-03-27 07:07:31

Local clock offset: -5.474 ms

Remote clock offset: 0.459 ms

Below is generated by plot.py at 2019-03-27 08:50:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 23.95 Mbit/s

95th percentile per-packet one-way delay: 2.348 ms

Loss rate: 0.06%

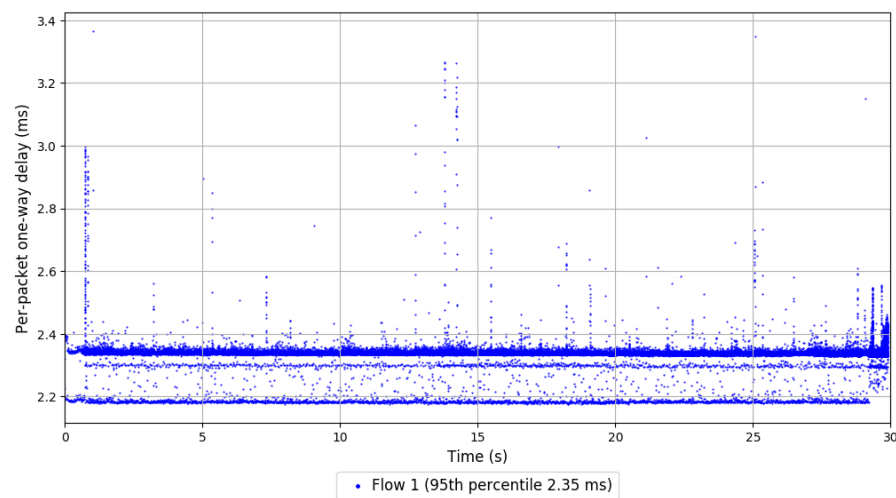
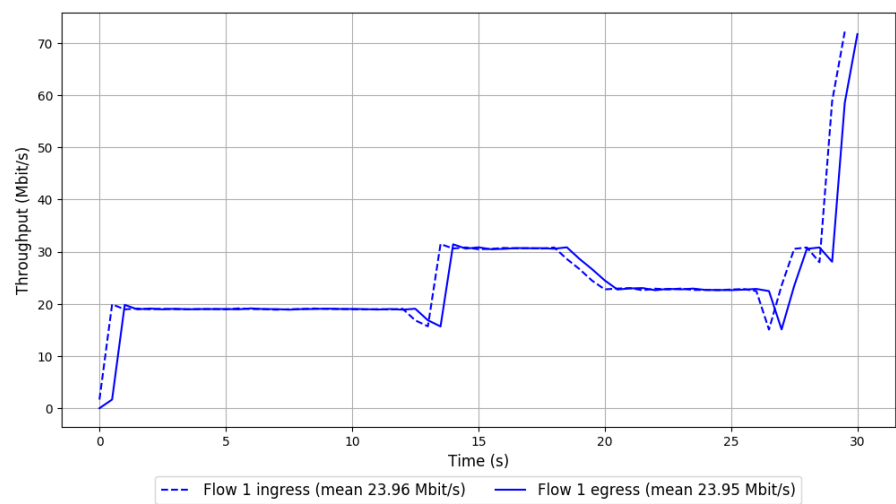
-- Flow 1:

Average throughput: 23.95 Mbit/s

95th percentile per-packet one-way delay: 2.348 ms

Loss rate: 0.06%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-03-27 07:37:17

End at: 2019-03-27 07:37:47

Local clock offset: -7.698 ms

Remote clock offset: 0.349 ms

Below is generated by plot.py at 2019-03-27 08:50:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 89.53 Mbit/s

95th percentile per-packet one-way delay: 1.736 ms

Loss rate: 0.02%

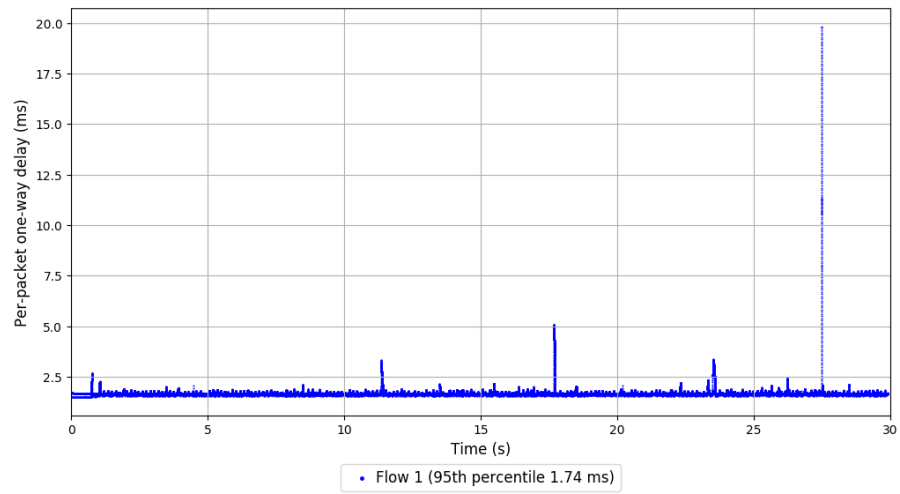
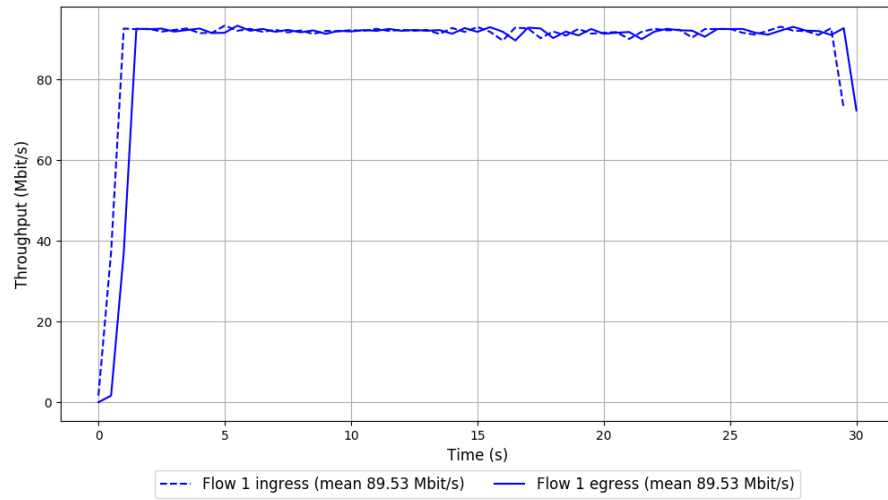
-- Flow 1:

Average throughput: 89.53 Mbit/s

95th percentile per-packet one-way delay: 1.736 ms

Loss rate: 0.02%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-03-27 08:01:00

End at: 2019-03-27 08:01:30

Local clock offset: -6.542 ms

Remote clock offset: 0.135 ms

Below is generated by plot.py at 2019-03-27 08:50:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 57.98 Mbit/s

95th percentile per-packet one-way delay: 1.646 ms

Loss rate: 0.00%

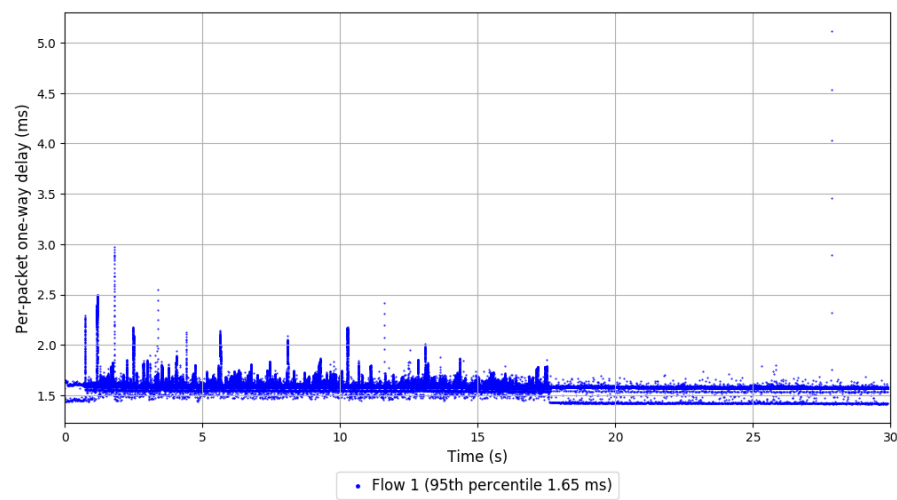
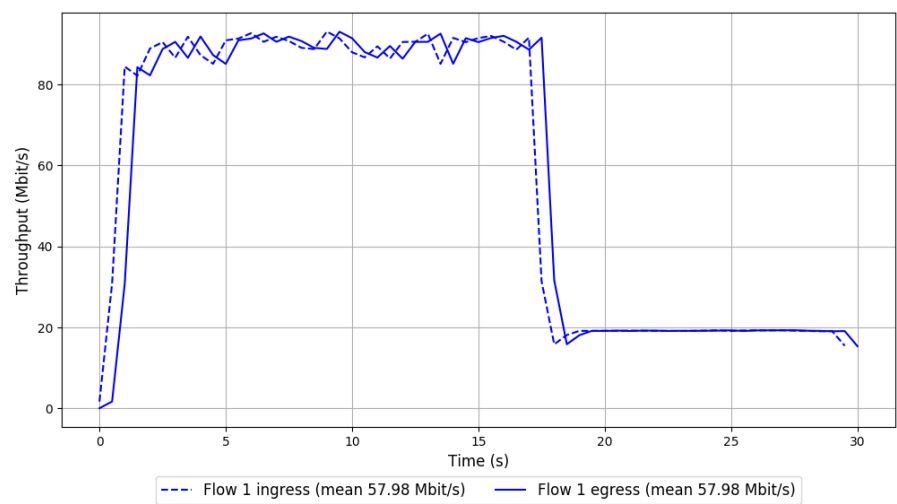
-- Flow 1:

Average throughput: 57.98 Mbit/s

95th percentile per-packet one-way delay: 1.646 ms

Loss rate: 0.00%

Run 4: Report of PCC-Vivace — Data Link

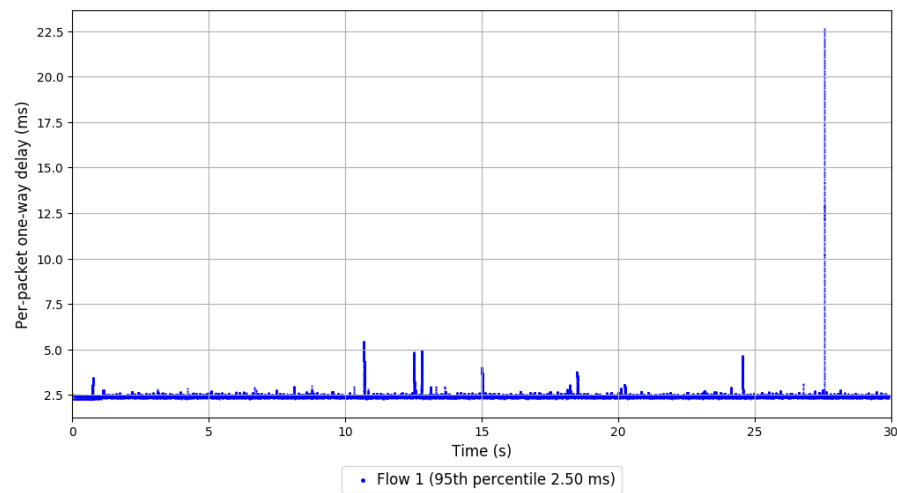
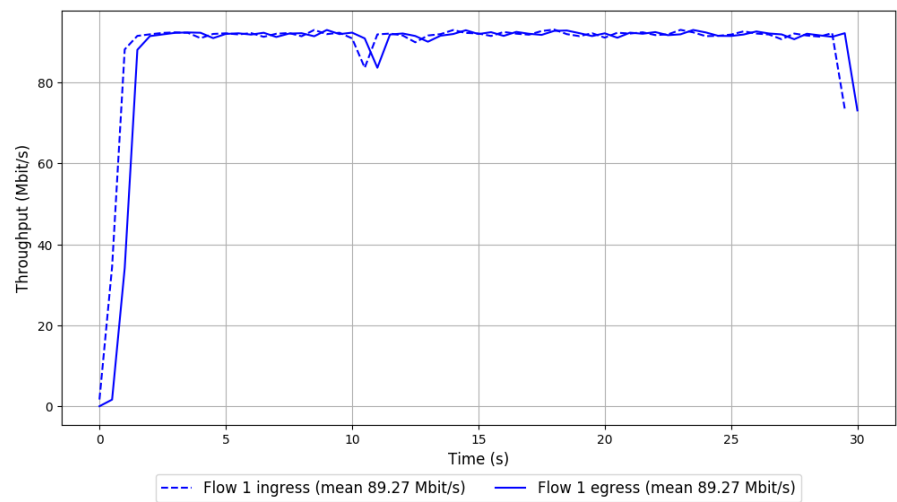


Run 5: Statistics of PCC-Vivace

Start at: 2019-03-27 08:24:39
End at: 2019-03-27 08:25:09
Local clock offset: -5.507 ms
Remote clock offset: -0.058 ms

Below is generated by plot.py at 2019-03-27 08:50:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 89.27 Mbit/s
95th percentile per-packet one-way delay: 2.498 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 89.27 Mbit/s
95th percentile per-packet one-way delay: 2.498 ms
Loss rate: 0.02%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

Start at: 2019-03-27 06:49:02

End at: 2019-03-27 06:49:32

Local clock offset: -6.04 ms

Remote clock offset: 0.352 ms

Below is generated by plot.py at 2019-03-27 08:50:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 2.754 ms

Loss rate: 0.00%

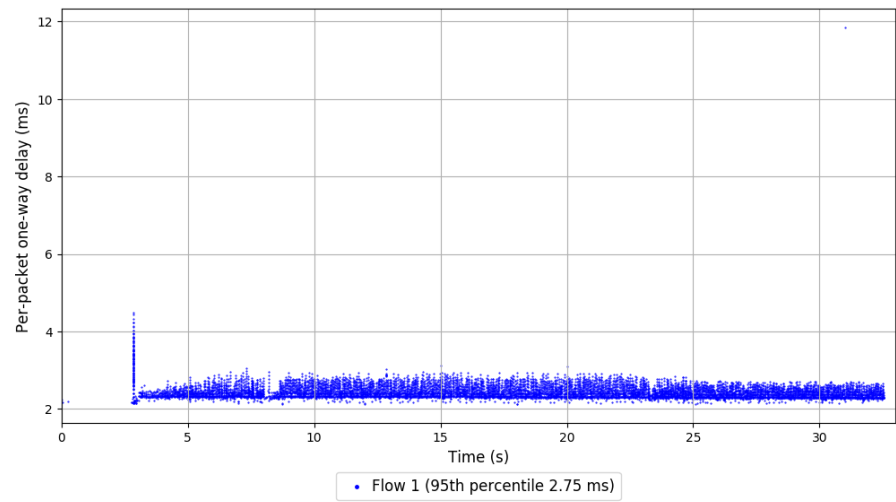
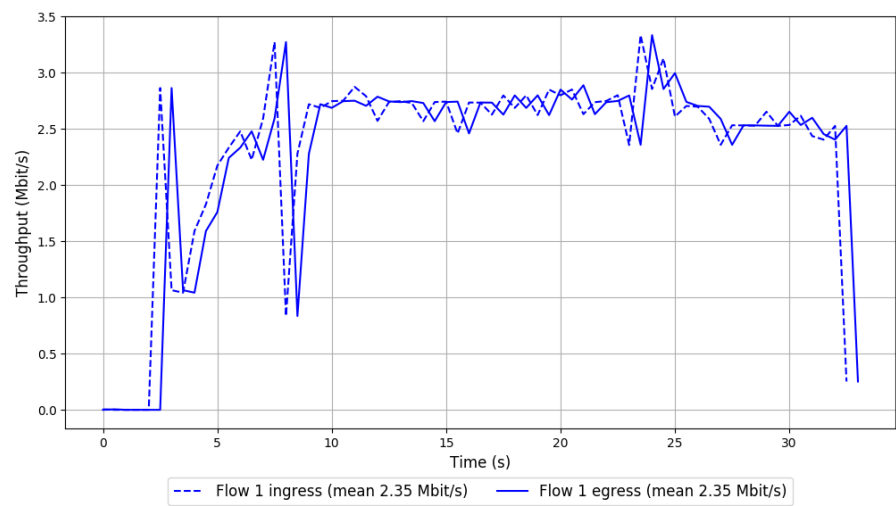
-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 2.754 ms

Loss rate: 0.00%

Run 1: Report of WebRTC media — Data Link



Run 2: Statistics of WebRTC media

Start at: 2019-03-27 07:12:38

End at: 2019-03-27 07:13:08

Local clock offset: -5.448 ms

Remote clock offset: 0.34 ms

Below is generated by plot.py at 2019-03-27 08:50:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 2.912 ms

Loss rate: 0.00%

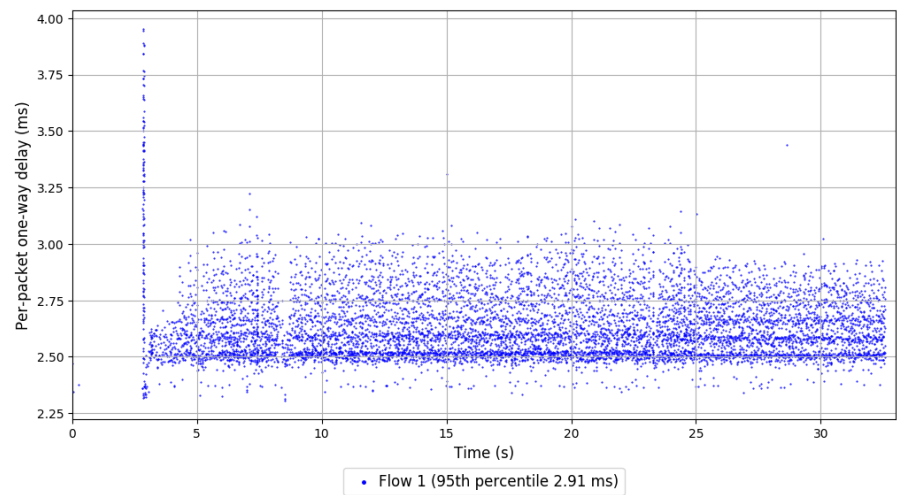
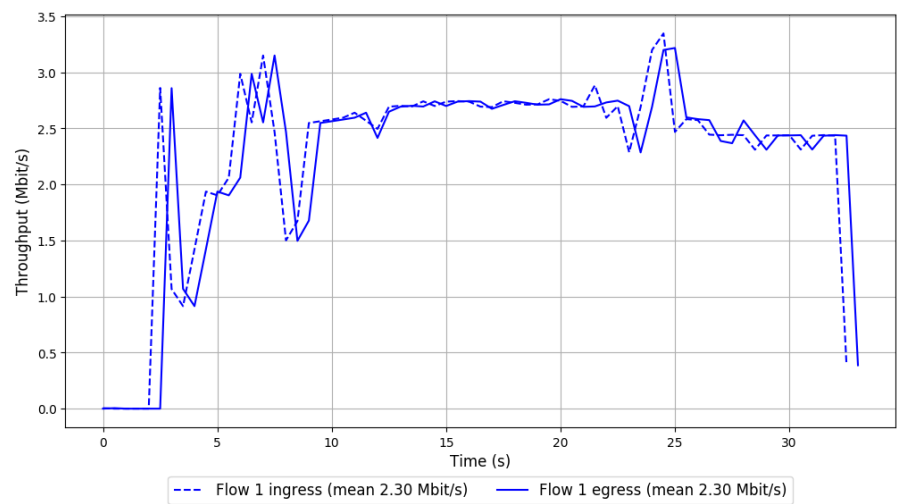
-- Flow 1:

Average throughput: 2.30 Mbit/s

95th percentile per-packet one-way delay: 2.912 ms

Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-03-27 07:42:58

End at: 2019-03-27 07:43:28

Local clock offset: -7.862 ms

Remote clock offset: 0.153 ms

Below is generated by plot.py at 2019-03-27 08:50:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 2.164 ms

Loss rate: 0.00%

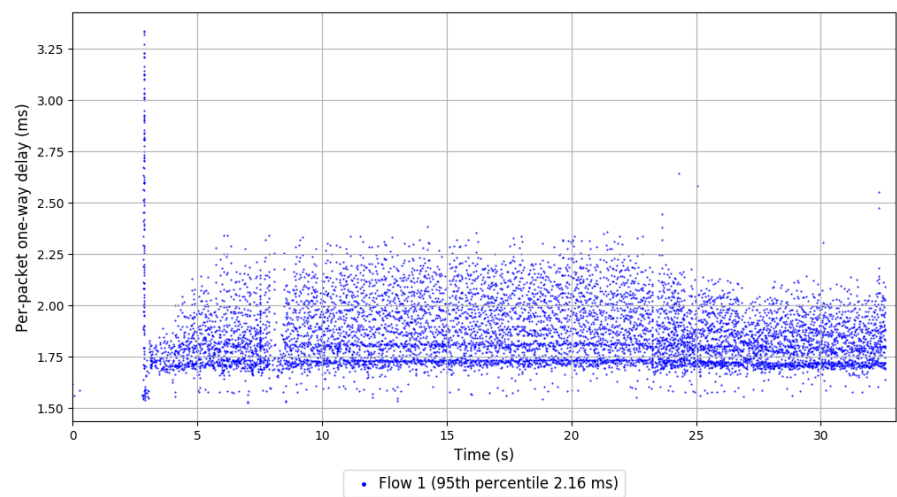
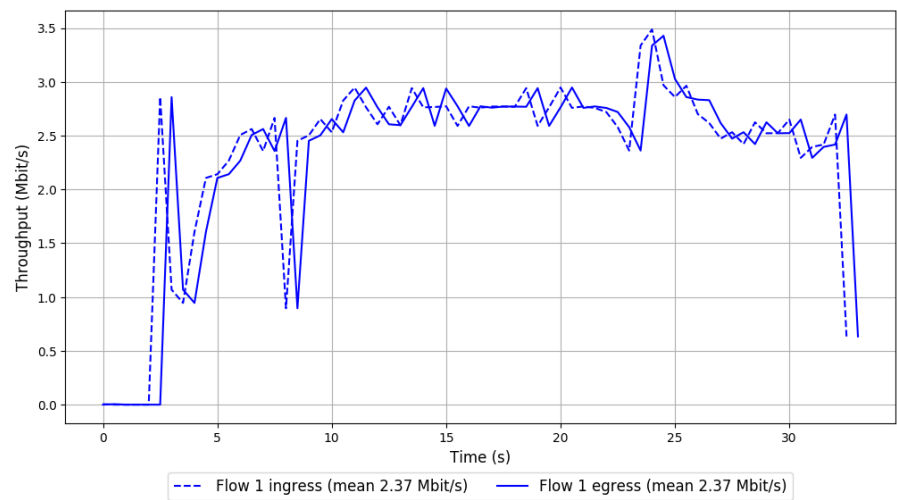
-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 2.164 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2019-03-27 08:06:39

End at: 2019-03-27 08:07:09

Local clock offset: -5.629 ms

Remote clock offset: 0.053 ms

Below is generated by plot.py at 2019-03-27 08:50:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 2.901 ms

Loss rate: 0.08%

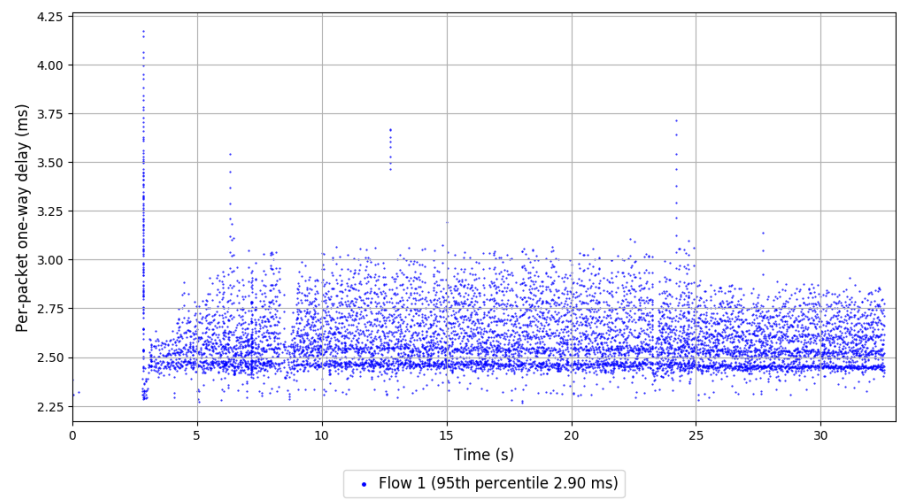
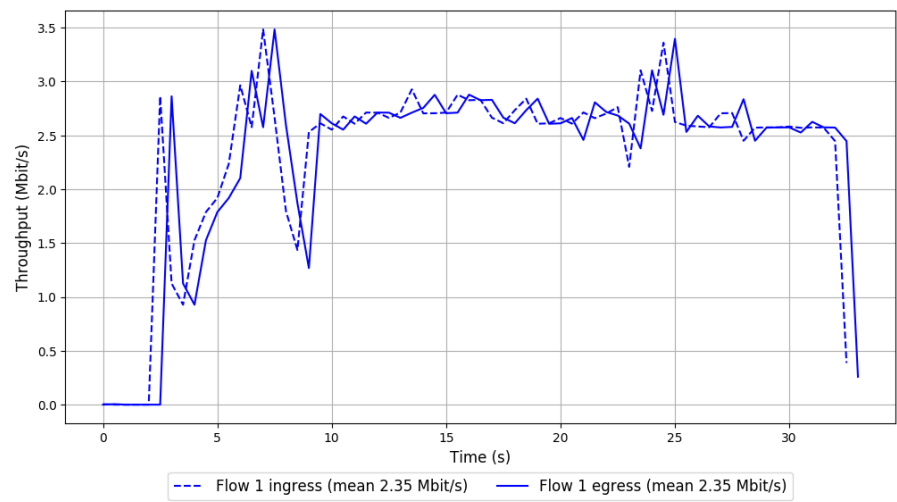
-- Flow 1:

Average throughput: 2.35 Mbit/s

95th percentile per-packet one-way delay: 2.901 ms

Loss rate: 0.08%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-03-27 08:30:21
End at: 2019-03-27 08:30:51
Local clock offset: -6.261 ms
Remote clock offset: -0.037 ms

Below is generated by plot.py at 2019-03-27 08:50:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 2.153 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 2.153 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

