

Pantheon Report

Generated at 2019-07-17 20:57:48 (UTC).

Data path: GCE London on *ens4 (remote)* → GCE Tokyo on *ens4 (local)*.

Repeated the test of 24 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against `time.google.com` and have been applied to correct the timestamps in logs.

System info:

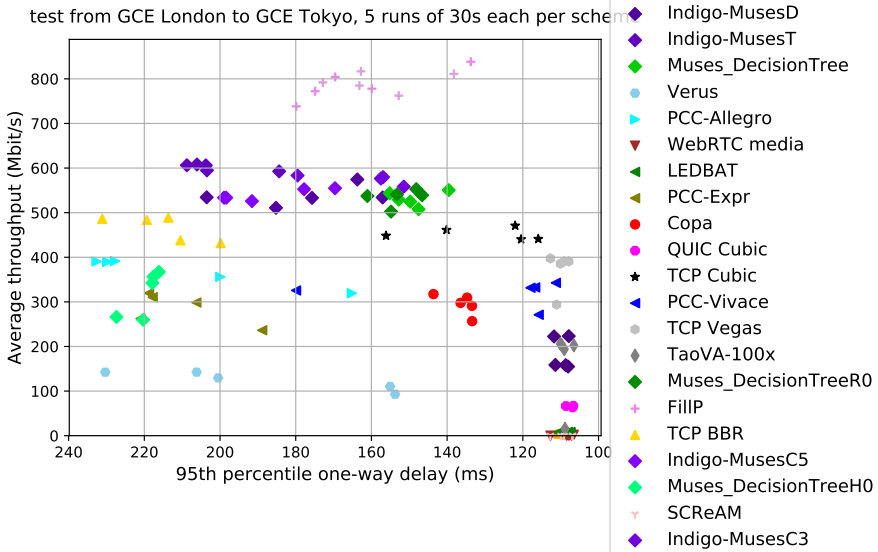
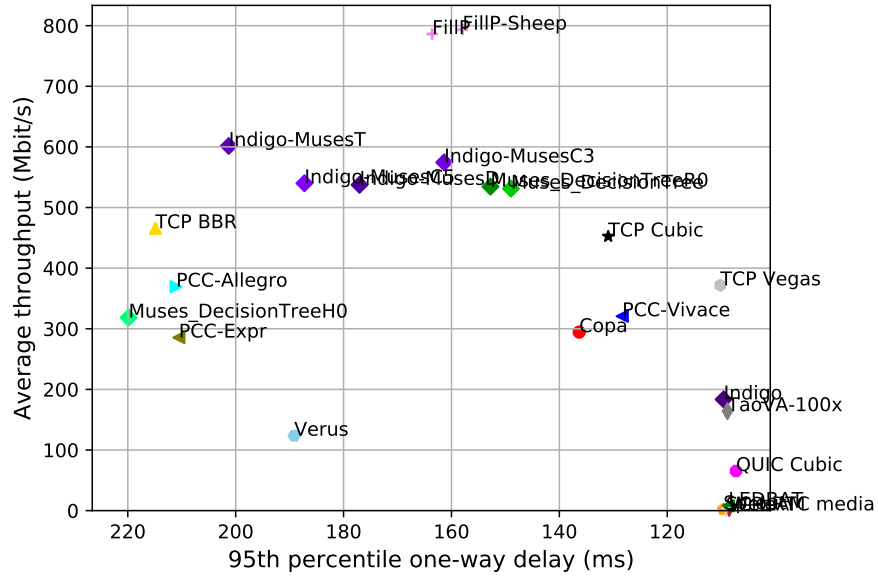
```
Linux 4.15.0-1036-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

```
branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
```

third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from GCE London to GCE Tokyo, 5 runs of 30s each per scheme
(mean of all runs by scheme)



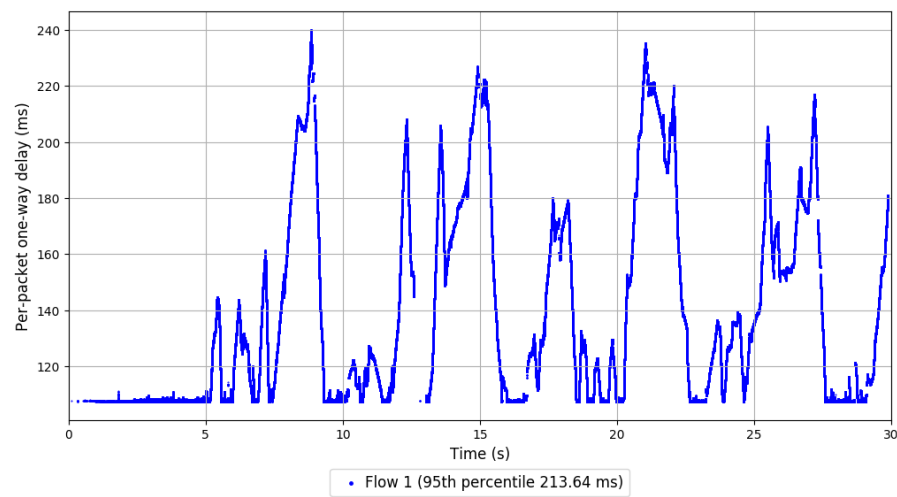
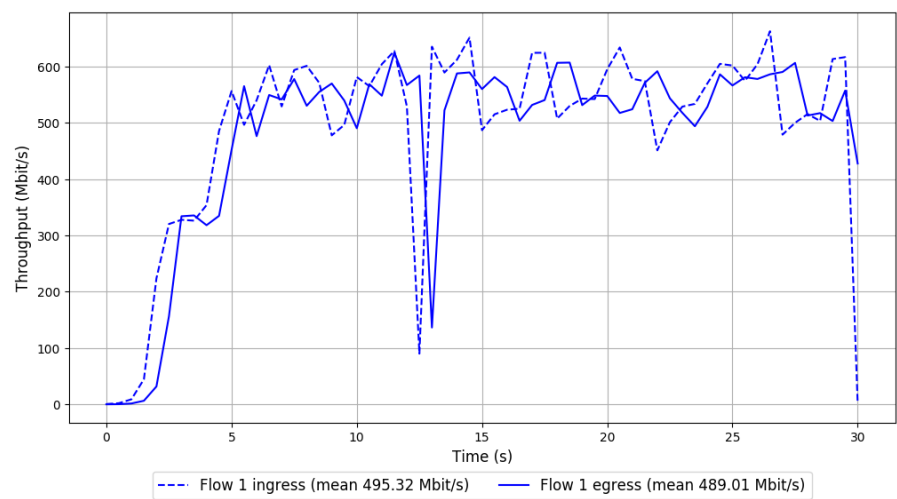
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	465.82	214.88	1.95
Copa	5	294.50	136.32	0.82
TCP Cubic	5	452.35	130.94	0.89
FillP	5	786.25	163.58	1.86
FillP-Sheep	5	793.43	157.96	1.17
Indigo	5	183.50	109.55	0.77
Indigo-MusesC3	4	574.48	161.35	0.99
Indigo-MusesC5	5	540.08	187.25	1.12
Indigo-MusesD	5	537.40	177.04	0.97
Indigo-MusesT	5	601.54	201.29	1.32
LEDBAT	5	7.92	108.67	1.45
Muses_DecisionTree	5	531.18	148.97	0.98
Muses_DecisionTreeH0	5	318.47	219.85	11.43
Muses_DecisionTreeR0	5	534.50	152.77	0.87
PCC-Allegro	5	369.42	211.04	5.62
PCC-Expr	5	285.48	210.54	3.89
QUIC Cubic	4	65.38	107.25	1.06
SCReAM	5	0.22	109.11	0.69
Sprout	5	2.18	109.60	0.90
TaoVA-100x	5	164.11	108.84	0.69
TCP Vegas	5	371.71	110.16	0.74
Verus	5	123.56	189.16	0.98
PCC-Vivace	5	320.69	128.34	0.97
WebRTC media	5	0.43	108.52	0.26

Run 1: Statistics of TCP BBR

Start at: 2019-07-17 16:28:51
End at: 2019-07-17 16:29:21
Local clock offset: 27.447 ms
Remote clock offset: 25.856 ms

Below is generated by plot.py at 2019-07-17 19:17:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 489.01 Mbit/s
95th percentile per-packet one-way delay: 213.640 ms
Loss rate: 1.99%
-- Flow 1:
Average throughput: 489.01 Mbit/s
95th percentile per-packet one-way delay: 213.640 ms
Loss rate: 1.99%

Run 1: Report of TCP BBR — Data Link

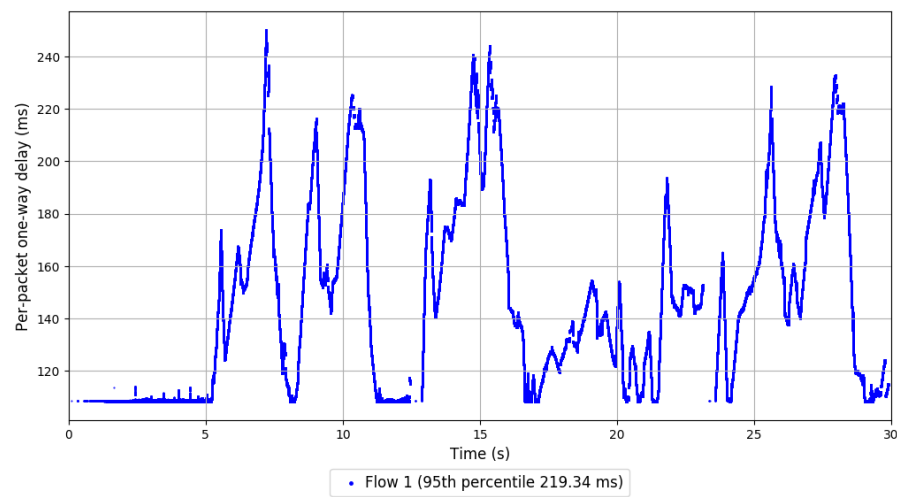
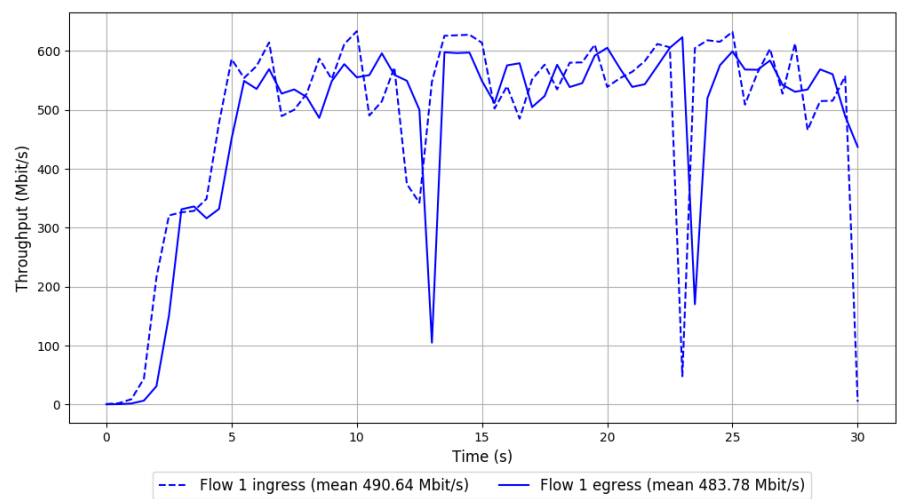


Run 2: Statistics of TCP BBR

Start at: 2019-07-17 17:04:51
End at: 2019-07-17 17:05:21
Local clock offset: 34.655 ms
Remote clock offset: 31.092 ms

Below is generated by plot.py at 2019-07-17 19:17:24
Datalink statistics
-- Total of 1 flow:
Average throughput: 483.78 Mbit/s
95th percentile per-packet one-way delay: 219.343 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 483.78 Mbit/s
95th percentile per-packet one-way delay: 219.343 ms
Loss rate: 2.11%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-07-17 17:40:54

End at: 2019-07-17 17:41:24

Local clock offset: 14.203 ms

Remote clock offset: 6.661 ms

Below is generated by plot.py at 2019-07-17 19:17:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 486.47 Mbit/s

95th percentile per-packet one-way delay: 231.111 ms

Loss rate: 2.94%

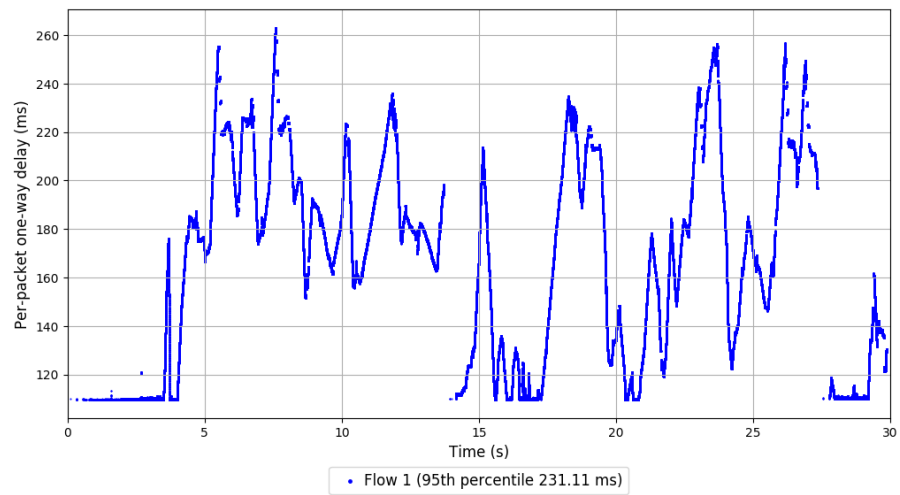
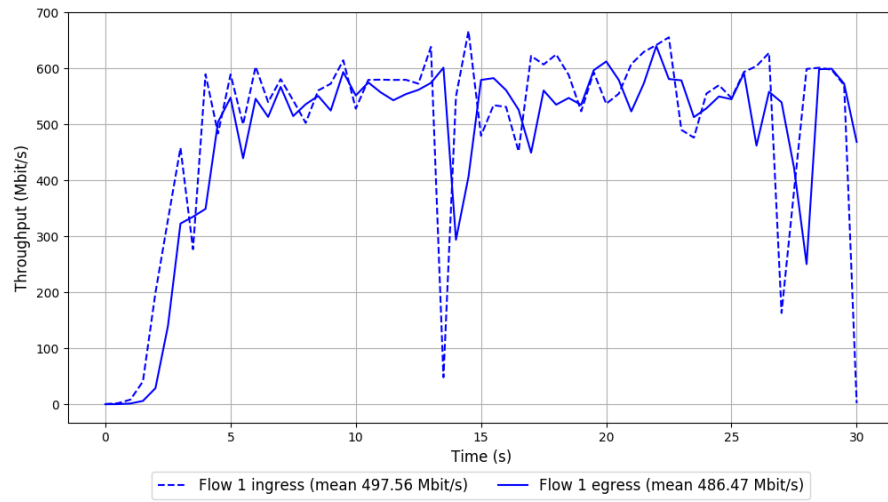
-- Flow 1:

Average throughput: 486.47 Mbit/s

95th percentile per-packet one-way delay: 231.111 ms

Loss rate: 2.94%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2019-07-17 18:17:16

End at: 2019-07-17 18:17:46

Local clock offset: 5.363 ms

Remote clock offset: 2.497 ms

Below is generated by plot.py at 2019-07-17 19:17:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 437.96 Mbit/s

95th percentile per-packet one-way delay: 210.464 ms

Loss rate: 1.77%

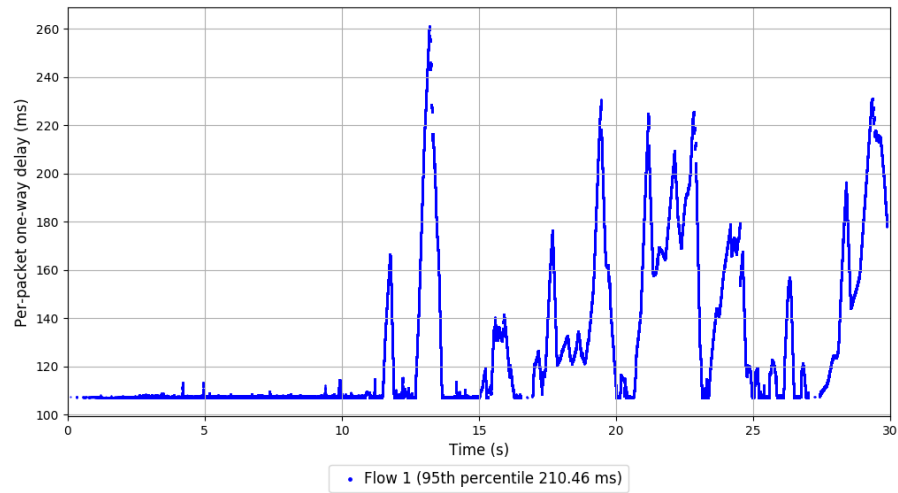
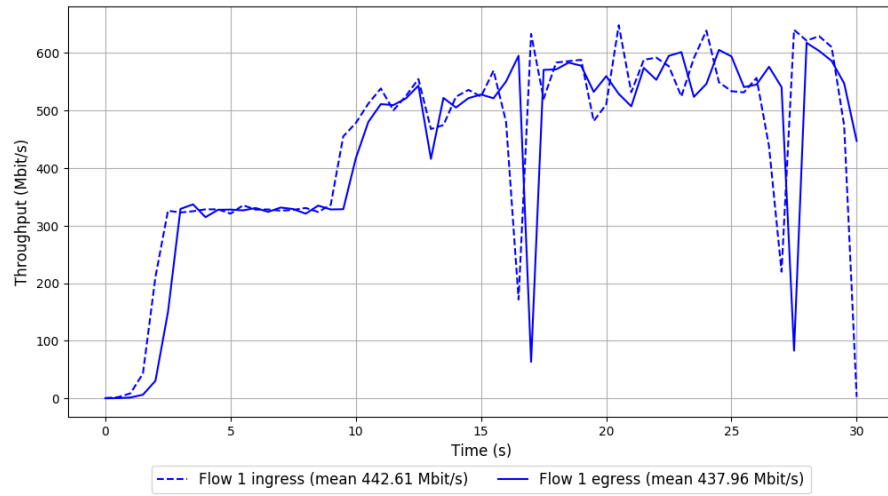
-- Flow 1:

Average throughput: 437.96 Mbit/s

95th percentile per-packet one-way delay: 210.464 ms

Loss rate: 1.77%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2019-07-17 18:53:33

End at: 2019-07-17 18:54:03

Local clock offset: 1.187 ms

Remote clock offset: 0.996 ms

Below is generated by plot.py at 2019-07-17 19:17:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 431.90 Mbit/s

95th percentile per-packet one-way delay: 199.837 ms

Loss rate: 0.95%

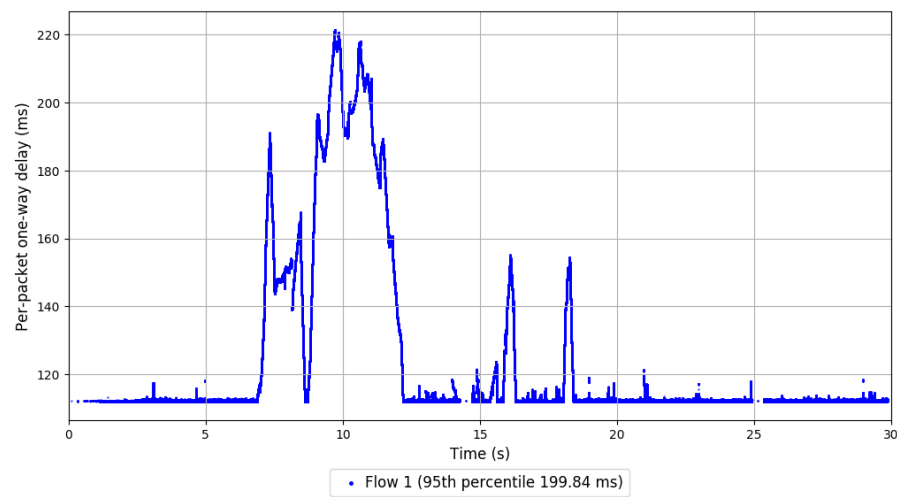
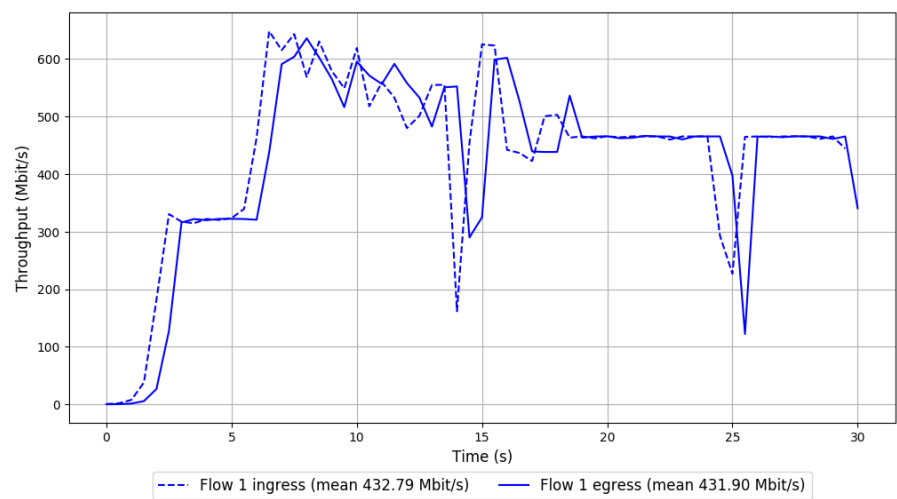
-- Flow 1:

Average throughput: 431.90 Mbit/s

95th percentile per-packet one-way delay: 199.837 ms

Loss rate: 0.95%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

Start at: 2019-07-17 16:03:43

End at: 2019-07-17 16:04:13

Local clock offset: 10.633 ms

Remote clock offset: 9.93 ms

Below is generated by plot.py at 2019-07-17 19:18:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 317.44 Mbit/s

95th percentile per-packet one-way delay: 143.610 ms

Loss rate: 0.81%

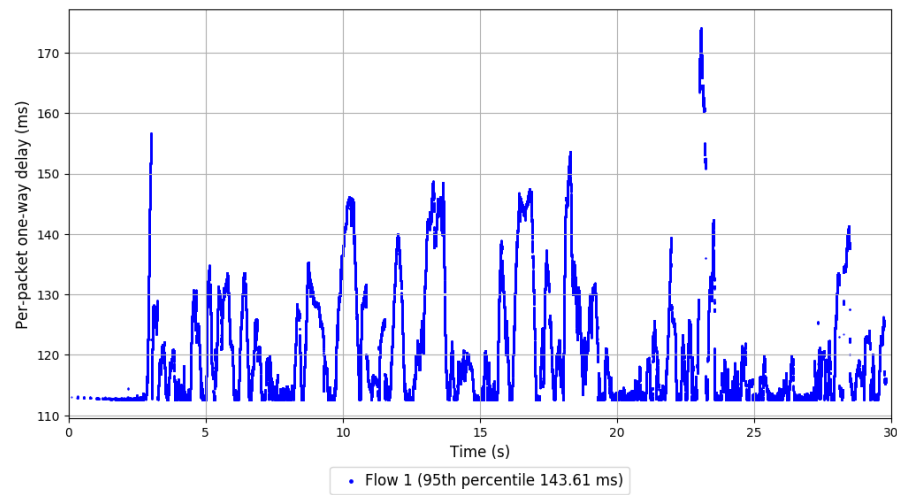
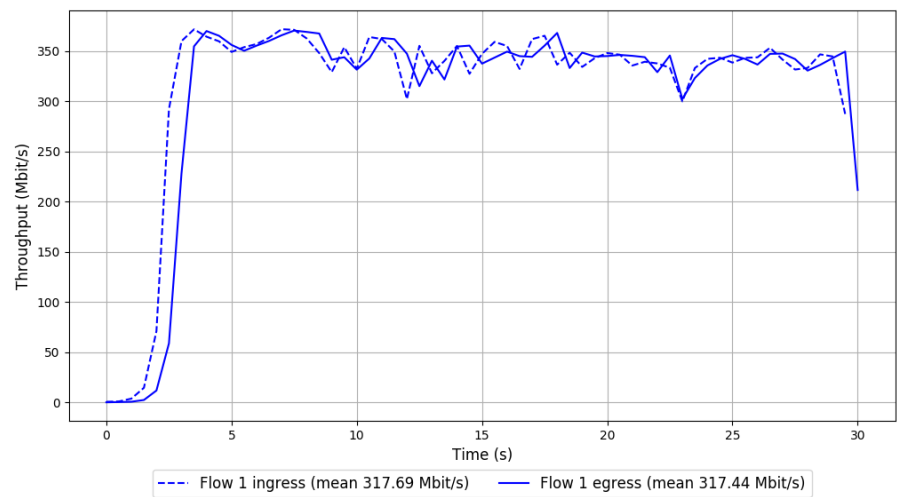
-- Flow 1:

Average throughput: 317.44 Mbit/s

95th percentile per-packet one-way delay: 143.610 ms

Loss rate: 0.81%

Run 1: Report of Copa — Data Link

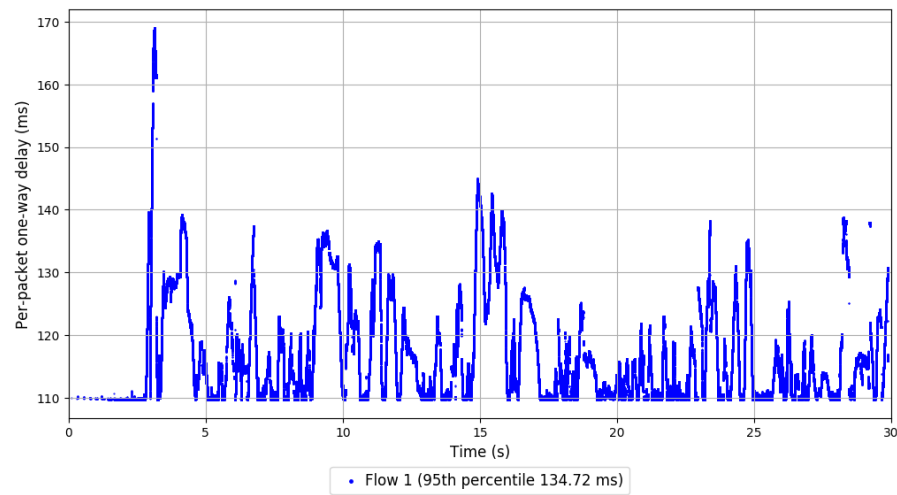
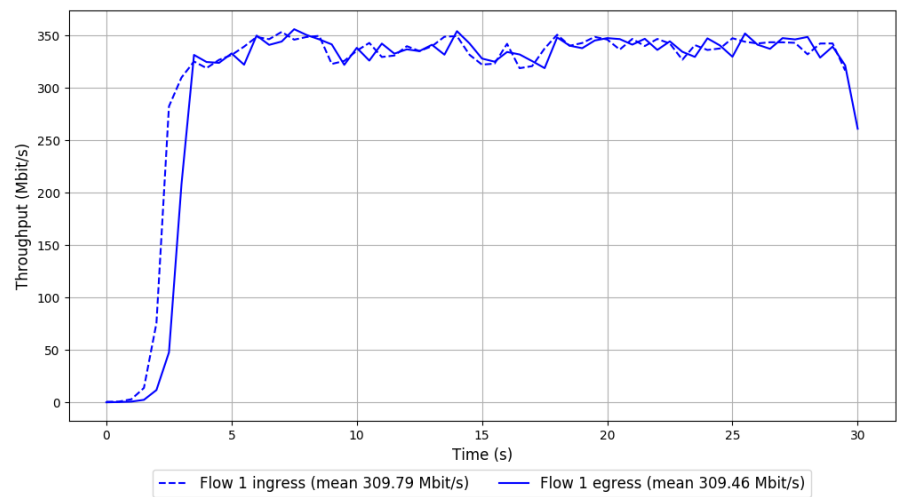


Run 2: Statistics of Copa

Start at: 2019-07-17 16:39:42
End at: 2019-07-17 16:40:12
Local clock offset: 21.482 ms
Remote clock offset: 20.05 ms

Below is generated by plot.py at 2019-07-17 19:18:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 309.46 Mbit/s
95th percentile per-packet one-way delay: 134.718 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 309.46 Mbit/s
95th percentile per-packet one-way delay: 134.718 ms
Loss rate: 0.83%

Run 2: Report of Copa — Data Link

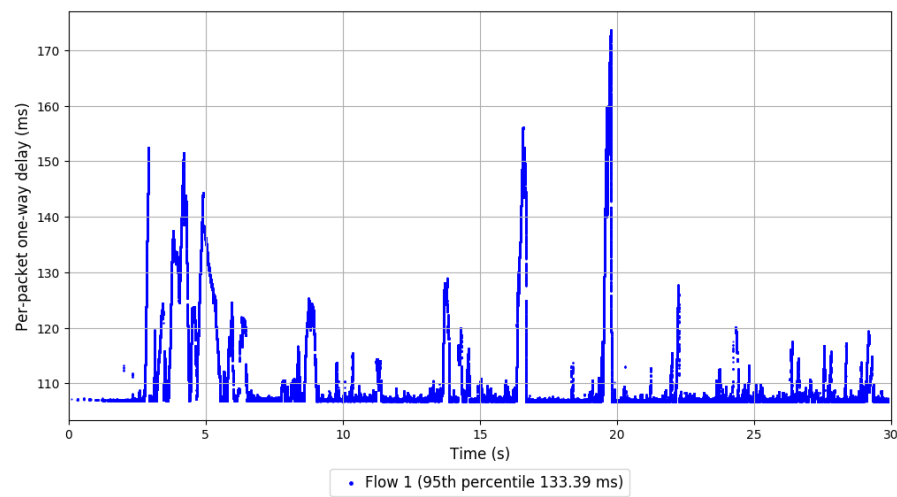
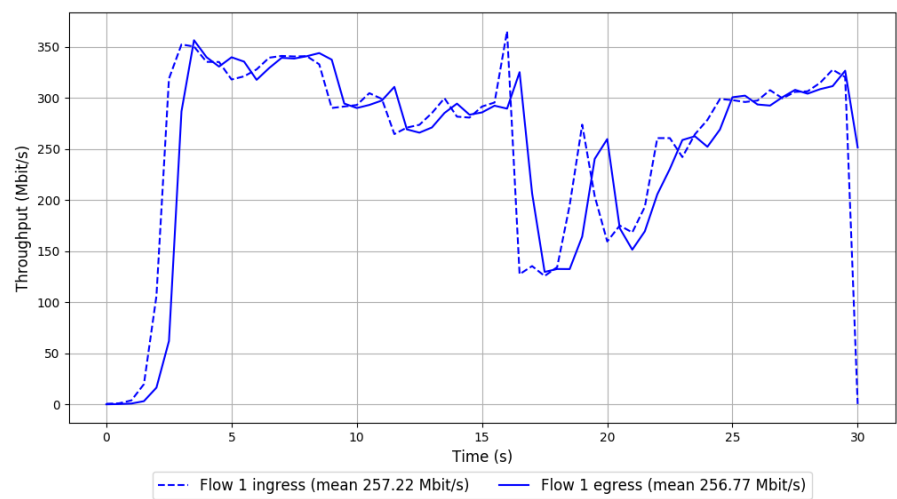


Run 3: Statistics of Copa

Start at: 2019-07-17 17:15:36
End at: 2019-07-17 17:16:06
Local clock offset: 16.714 ms
Remote clock offset: 12.148 ms

Below is generated by plot.py at 2019-07-17 19:18:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 256.77 Mbit/s
95th percentile per-packet one-way delay: 133.389 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 256.77 Mbit/s
95th percentile per-packet one-way delay: 133.389 ms
Loss rate: 0.90%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2019-07-17 17:51:49

End at: 2019-07-17 17:52:19

Local clock offset: 7.886 ms

Remote clock offset: 3.672 ms

Below is generated by plot.py at 2019-07-17 19:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 297.81 Mbit/s

95th percentile per-packet one-way delay: 136.447 ms

Loss rate: 0.79%

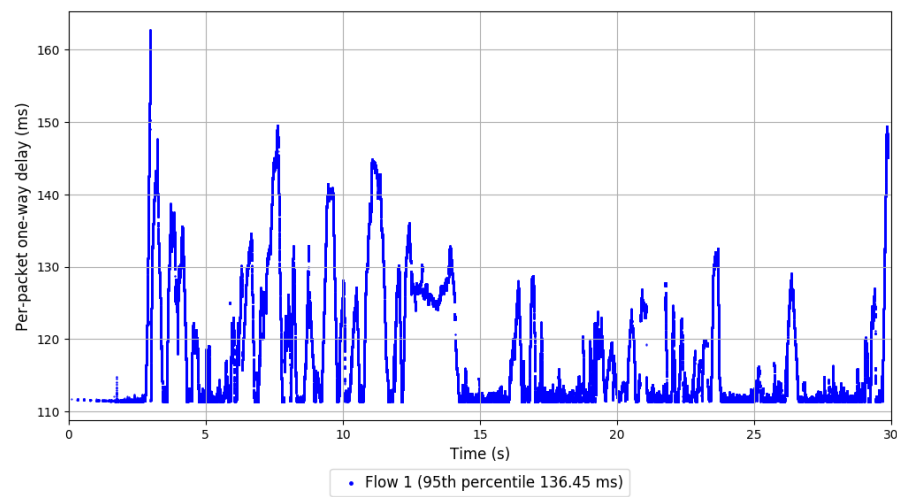
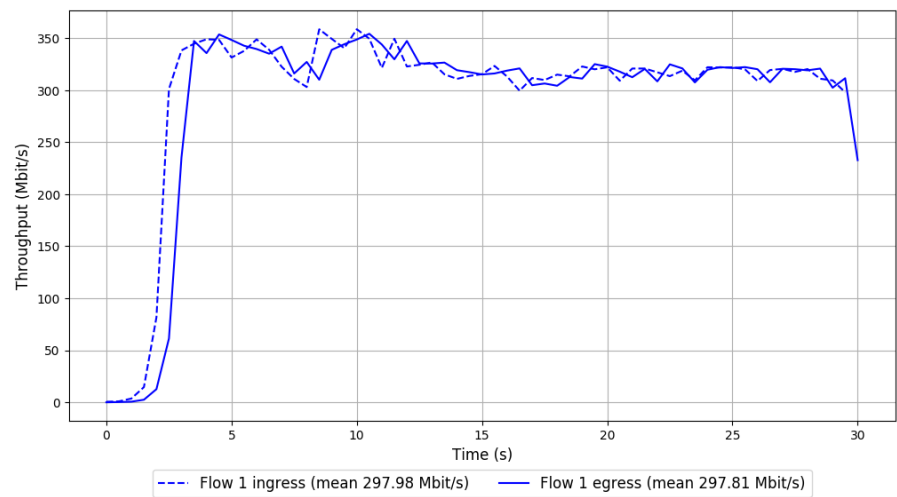
-- Flow 1:

Average throughput: 297.81 Mbit/s

95th percentile per-packet one-way delay: 136.447 ms

Loss rate: 0.79%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-07-17 18:28:05

End at: 2019-07-17 18:28:35

Local clock offset: 2.041 ms

Remote clock offset: 1.622 ms

Below is generated by plot.py at 2019-07-17 19:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 291.04 Mbit/s

95th percentile per-packet one-way delay: 133.430 ms

Loss rate: 0.75%

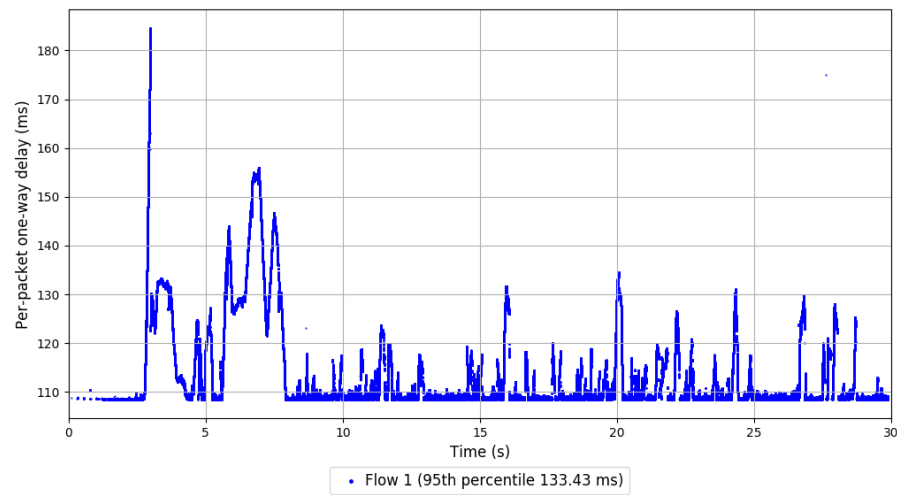
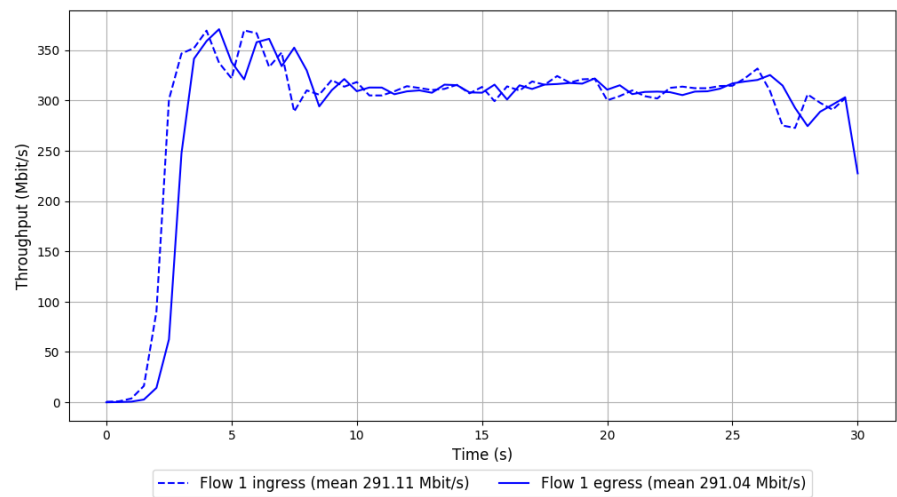
-- Flow 1:

Average throughput: 291.04 Mbit/s

95th percentile per-packet one-way delay: 133.430 ms

Loss rate: 0.75%

Run 5: Report of Copa — Data Link

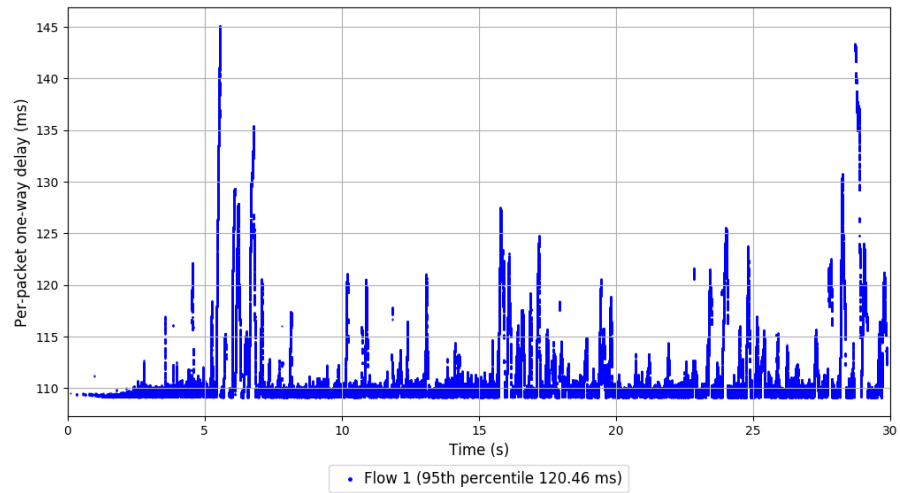
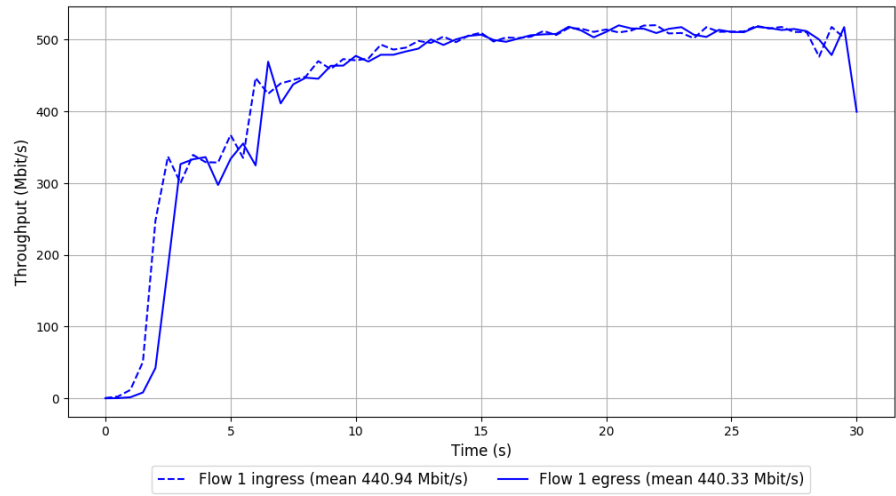


Run 1: Statistics of TCP Cubic

Start at: 2019-07-17 16:02:10
End at: 2019-07-17 16:02:40
Local clock offset: 9.732 ms
Remote clock offset: 10.012 ms

Below is generated by plot.py at 2019-07-17 19:25:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 440.33 Mbit/s
95th percentile per-packet one-way delay: 120.458 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 440.33 Mbit/s
95th percentile per-packet one-way delay: 120.458 ms
Loss rate: 0.86%

Run 1: Report of TCP Cubic — Data Link

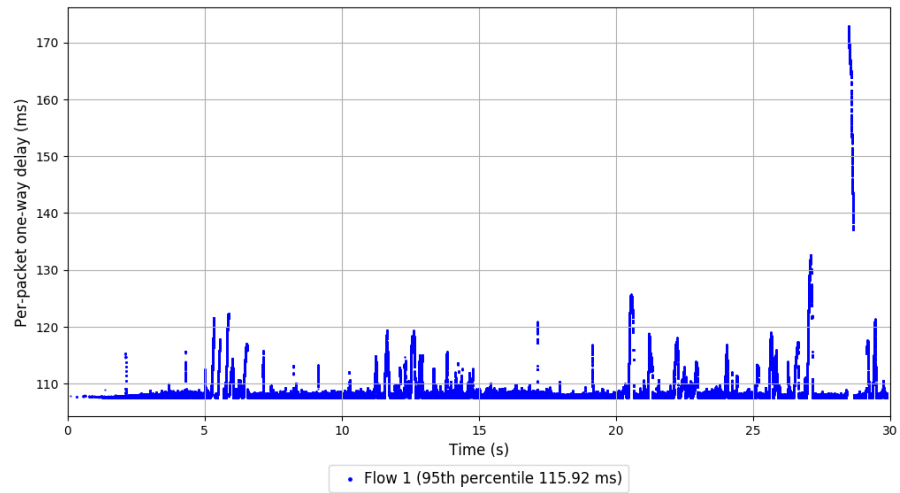
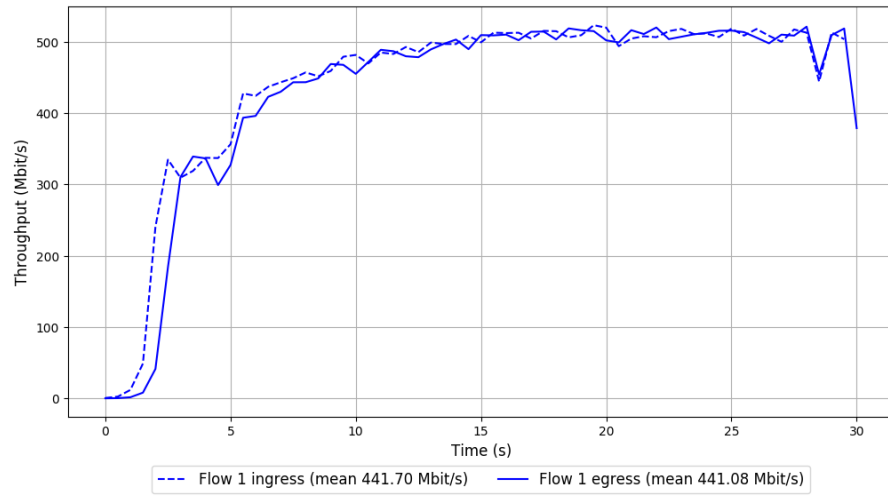


Run 2: Statistics of TCP Cubic

Start at: 2019-07-17 16:38:08
End at: 2019-07-17 16:38:38
Local clock offset: 21.203 ms
Remote clock offset: 19.675 ms

Below is generated by plot.py at 2019-07-17 19:25:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 441.08 Mbit/s
95th percentile per-packet one-way delay: 115.919 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 441.08 Mbit/s
95th percentile per-packet one-way delay: 115.919 ms
Loss rate: 0.86%

Run 2: Report of TCP Cubic — Data Link

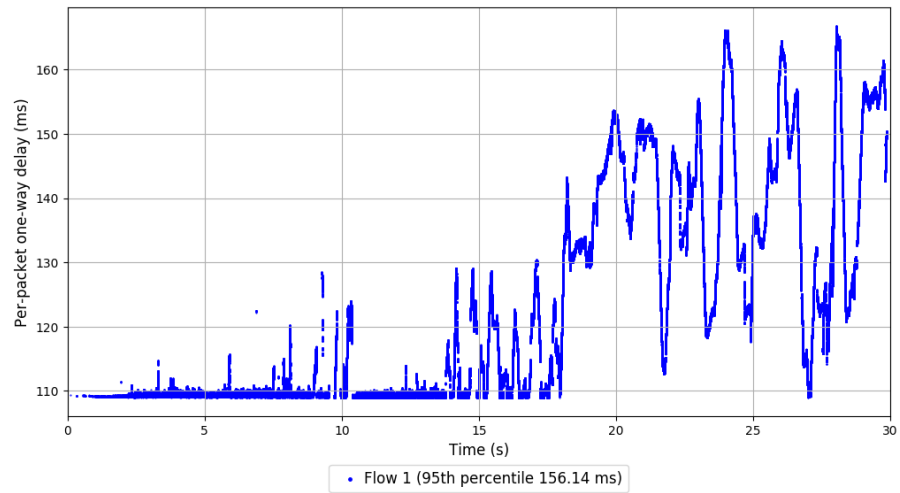
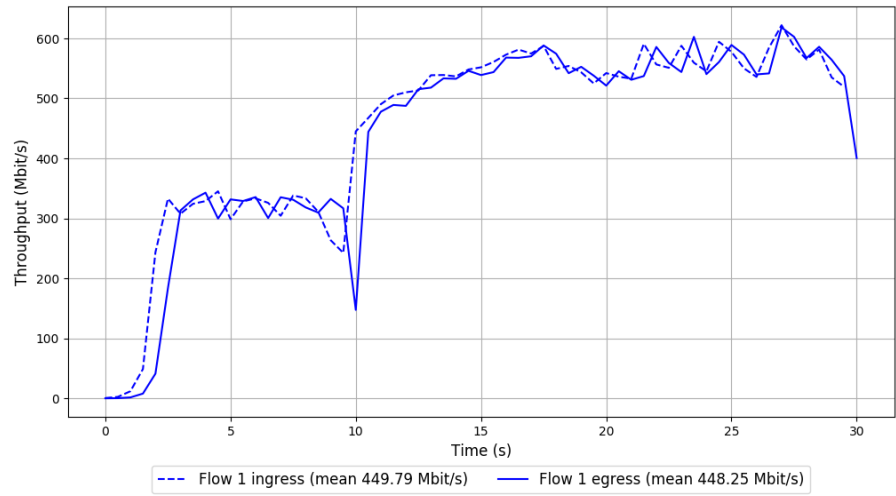


Run 3: Statistics of TCP Cubic

Start at: 2019-07-17 17:14:03
End at: 2019-07-17 17:14:33
Local clock offset: 17.403 ms
Remote clock offset: 13.325 ms

Below is generated by plot.py at 2019-07-17 19:25:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 448.25 Mbit/s
95th percentile per-packet one-way delay: 156.140 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 448.25 Mbit/s
95th percentile per-packet one-way delay: 156.140 ms
Loss rate: 1.07%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-07-17 17:50:13

End at: 2019-07-17 17:50:43

Local clock offset: 8.269 ms

Remote clock offset: 3.823 ms

Below is generated by plot.py at 2019-07-17 19:25:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 461.33 Mbit/s

95th percentile per-packet one-way delay: 140.170 ms

Loss rate: 0.78%

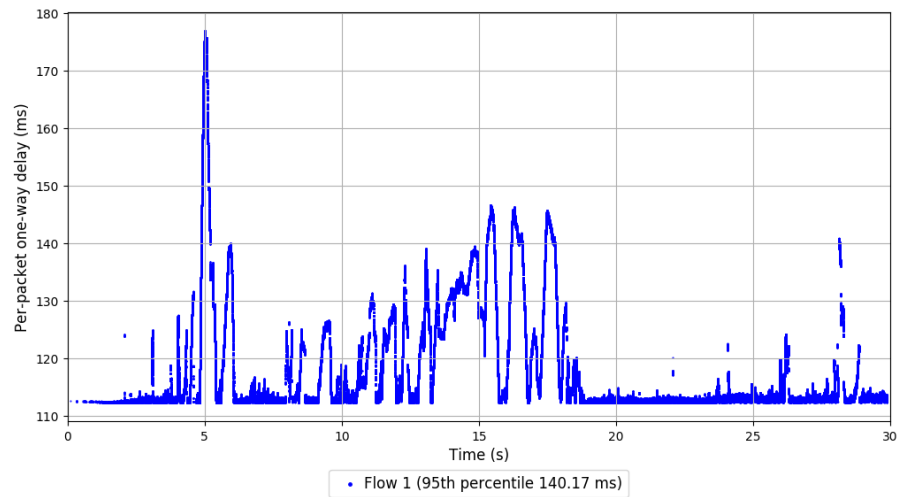
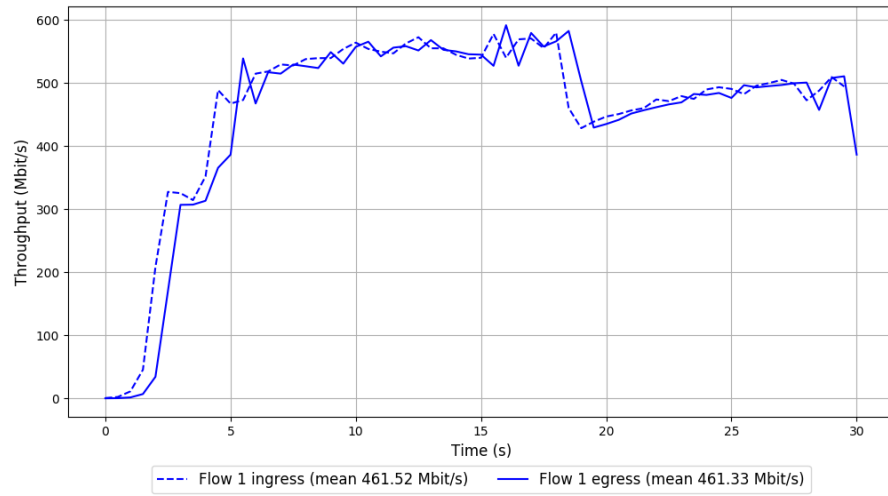
-- Flow 1:

Average throughput: 461.33 Mbit/s

95th percentile per-packet one-way delay: 140.170 ms

Loss rate: 0.78%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2019-07-17 18:26:29

End at: 2019-07-17 18:26:59

Local clock offset: 2.781 ms

Remote clock offset: 1.625 ms

Below is generated by plot.py at 2019-07-17 19:26:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 470.77 Mbit/s

95th percentile per-packet one-way delay: 122.023 ms

Loss rate: 0.86%

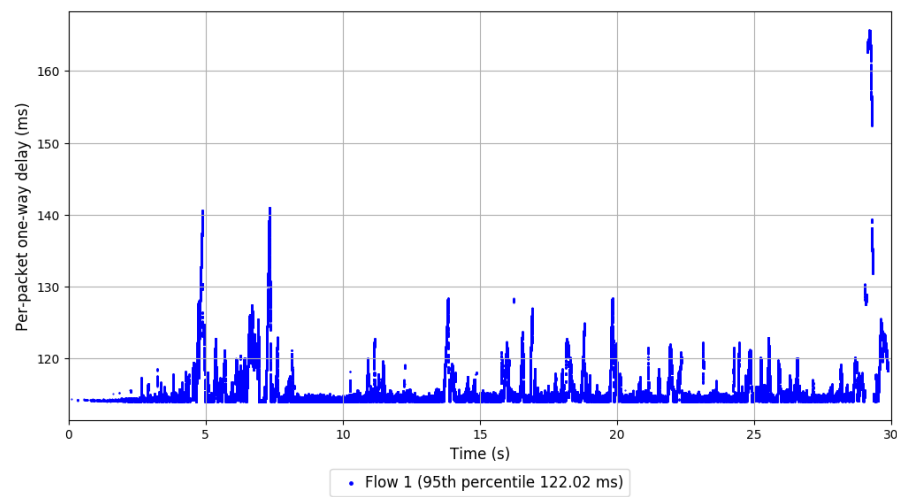
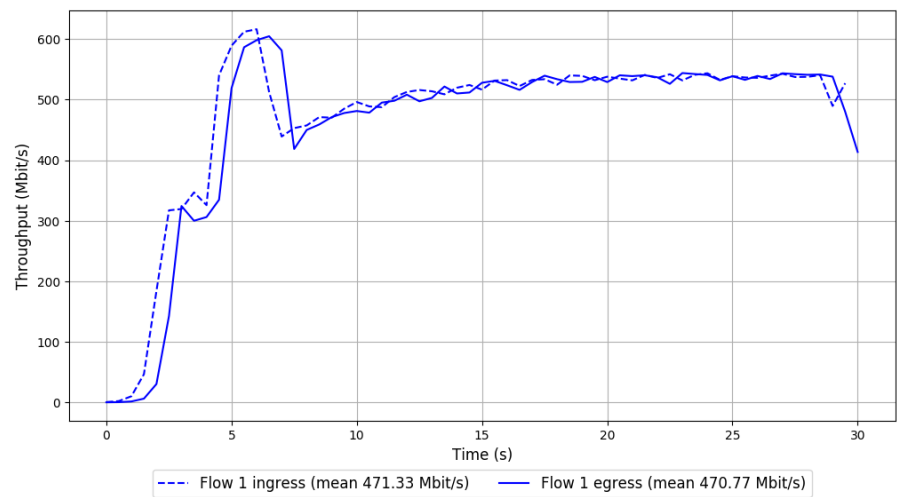
-- Flow 1:

Average throughput: 470.77 Mbit/s

95th percentile per-packet one-way delay: 122.023 ms

Loss rate: 0.86%

Run 5: Report of TCP Cubic — Data Link

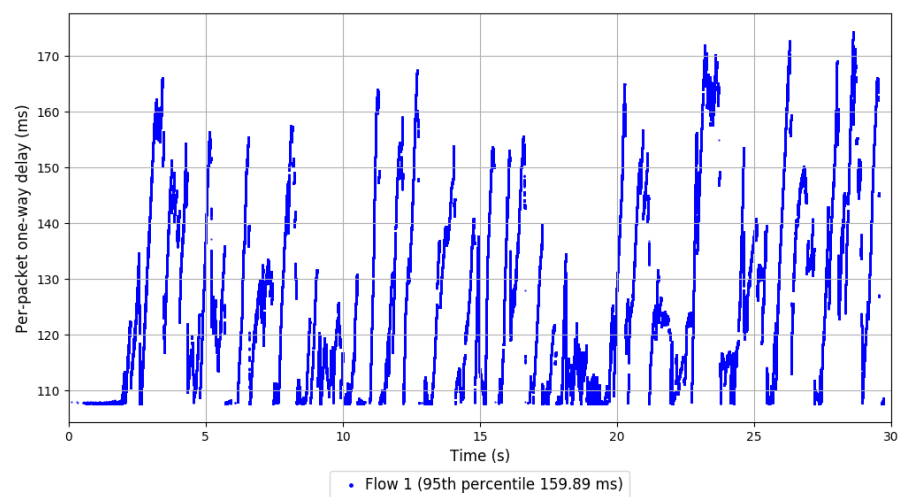
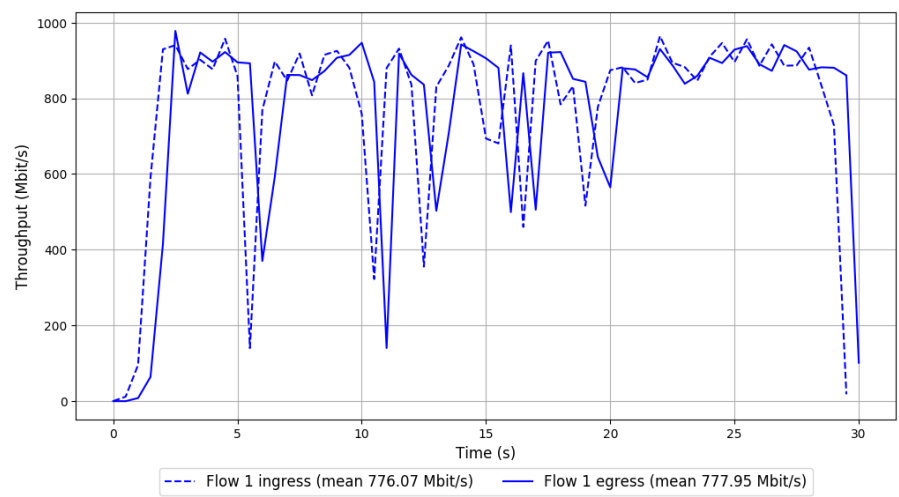


Run 1: Statistics of FillP

Start at: 2019-07-17 16:24:15
End at: 2019-07-17 16:24:45
Local clock offset: 21.043 ms
Remote clock offset: 20.882 ms

Below is generated by plot.py at 2019-07-17 19:33:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 777.95 Mbit/s
95th percentile per-packet one-way delay: 159.888 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 777.95 Mbit/s
95th percentile per-packet one-way delay: 159.888 ms
Loss rate: 0.22%

Run 1: Report of FillP — Data Link

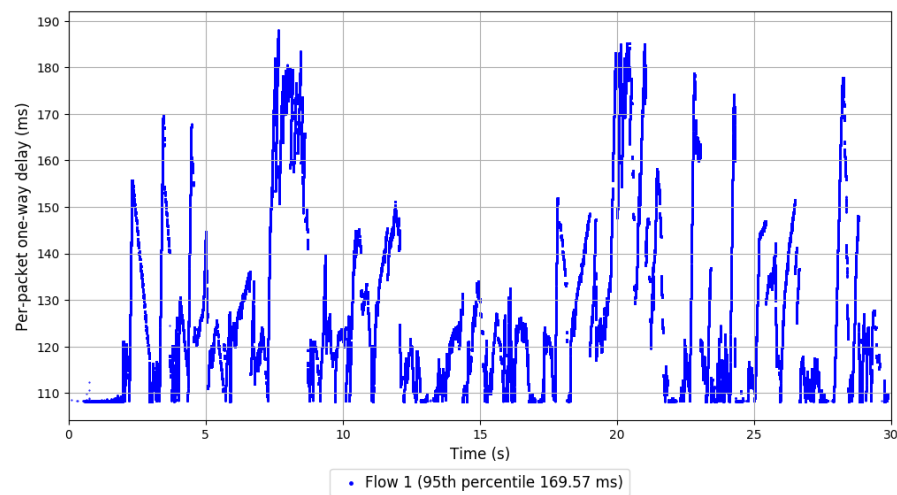
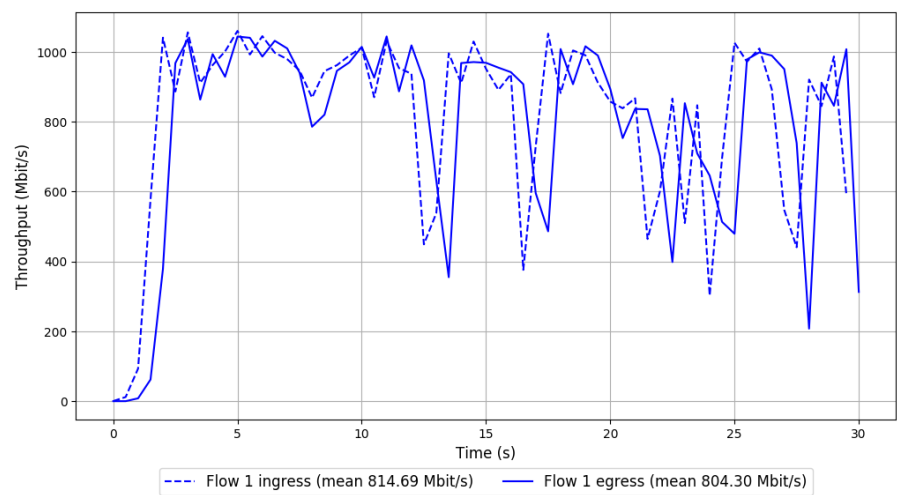


Run 2: Statistics of FillP

Start at: 2019-07-17 17:00:12
End at: 2019-07-17 17:00:42
Local clock offset: 37.927 ms
Remote clock offset: 37.258 ms

Below is generated by plot.py at 2019-07-17 19:41:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 804.30 Mbit/s
95th percentile per-packet one-way delay: 169.574 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 804.30 Mbit/s
95th percentile per-packet one-way delay: 169.574 ms
Loss rate: 2.00%

Run 2: Report of FillP — Data Link

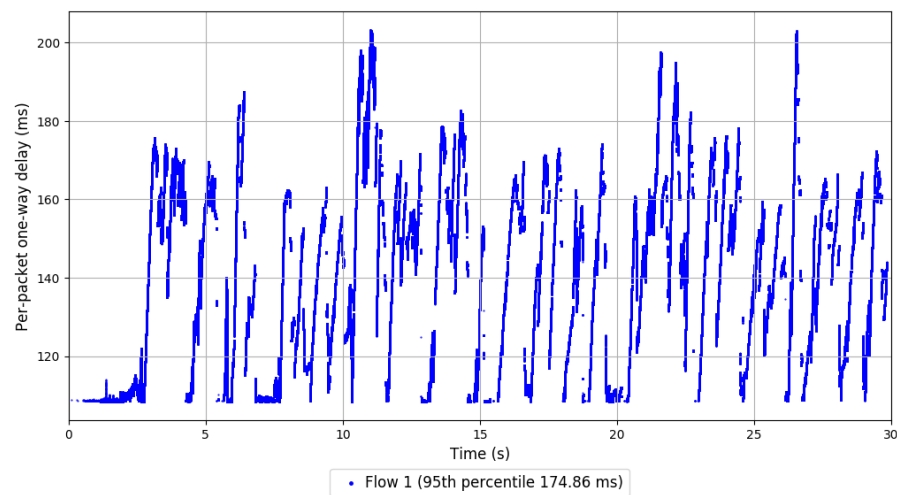
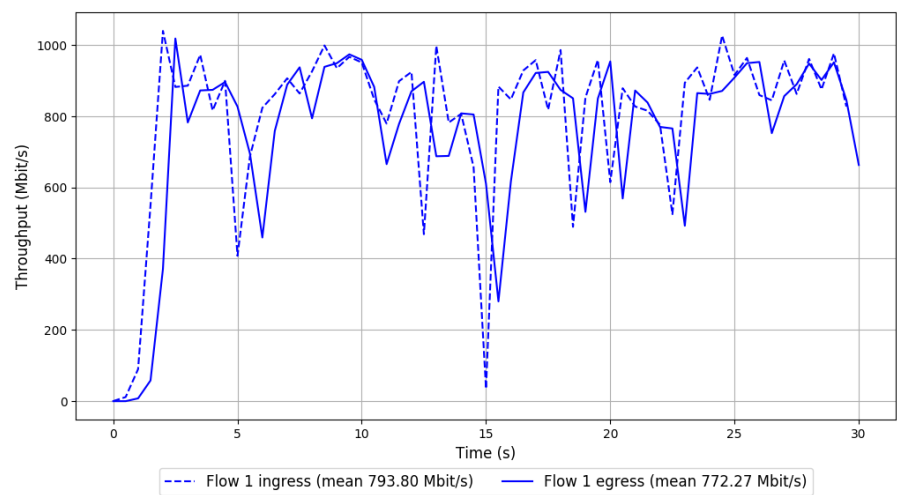


Run 3: Statistics of FillP

Start at: 2019-07-17 17:36:16
End at: 2019-07-17 17:36:46
Local clock offset: 20.132 ms
Remote clock offset: 10.012 ms

Below is generated by plot.py at 2019-07-17 19:41:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 772.27 Mbit/s
95th percentile per-packet one-way delay: 174.863 ms
Loss rate: 3.42%
-- Flow 1:
Average throughput: 772.27 Mbit/s
95th percentile per-packet one-way delay: 174.863 ms
Loss rate: 3.42%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2019-07-17 18:12:35

End at: 2019-07-17 18:13:05

Local clock offset: 8.476 ms

Remote clock offset: 3.848 ms

Below is generated by plot.py at 2019-07-17 19:42:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 838.44 Mbit/s

95th percentile per-packet one-way delay: 133.743 ms

Loss rate: 0.96%

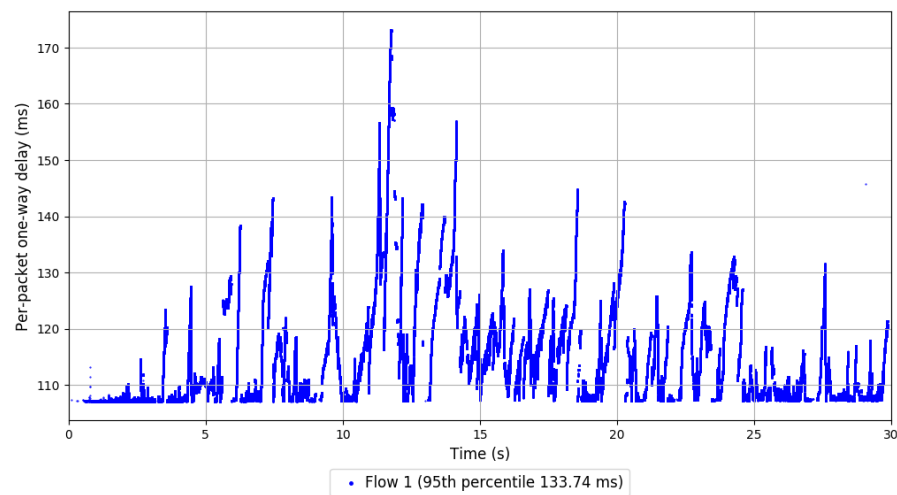
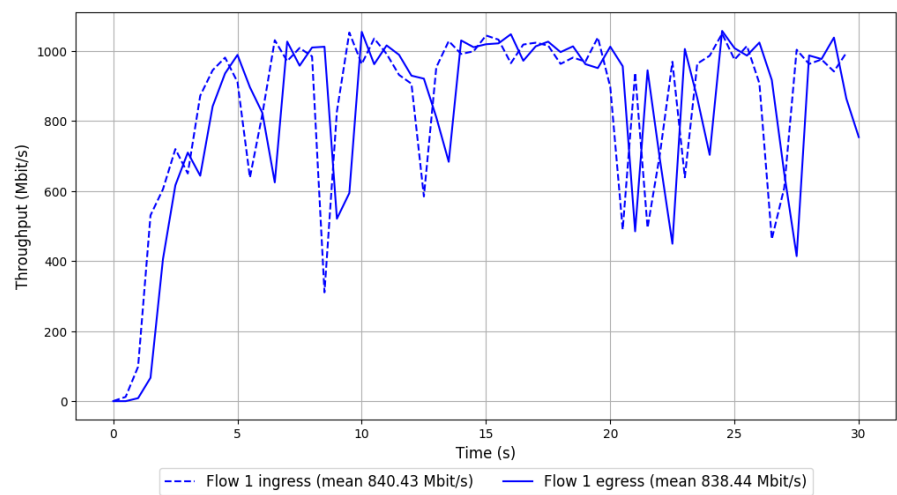
-- Flow 1:

Average throughput: 838.44 Mbit/s

95th percentile per-packet one-way delay: 133.743 ms

Loss rate: 0.96%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2019-07-17 18:48:54

End at: 2019-07-17 18:49:24

Local clock offset: 1.831 ms

Remote clock offset: 1.391 ms

Below is generated by plot.py at 2019-07-17 19:42:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 738.27 Mbit/s

95th percentile per-packet one-way delay: 179.854 ms

Loss rate: 2.70%

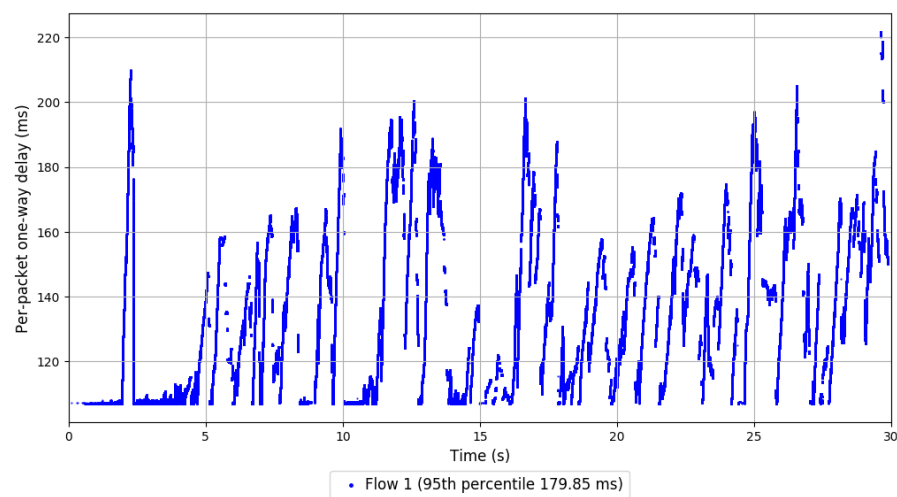
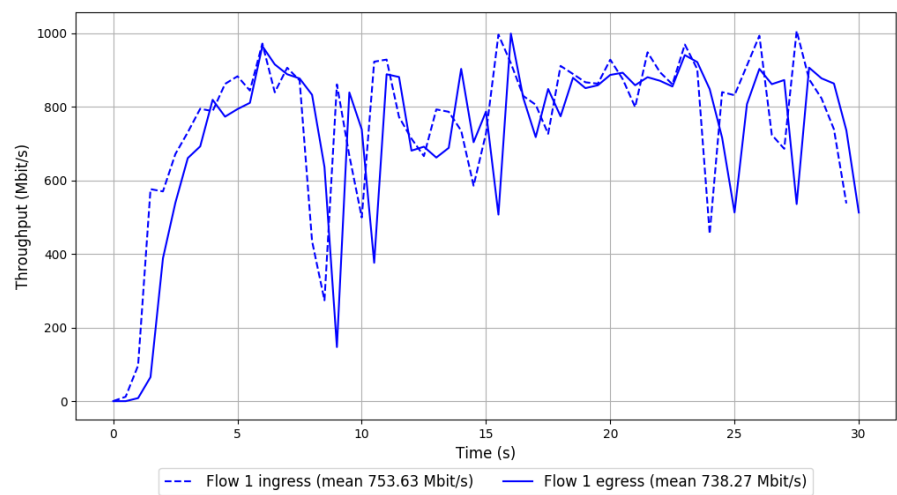
-- Flow 1:

Average throughput: 738.27 Mbit/s

95th percentile per-packet one-way delay: 179.854 ms

Loss rate: 2.70%

Run 5: Report of FillP — Data Link

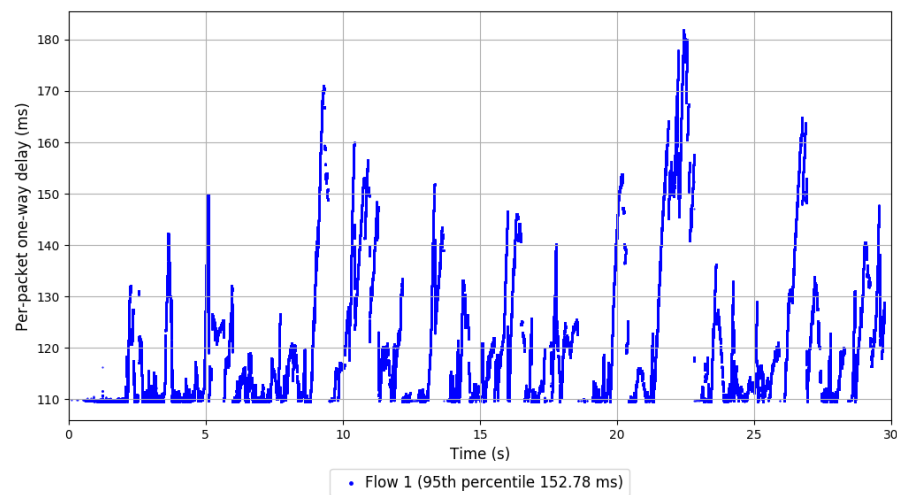
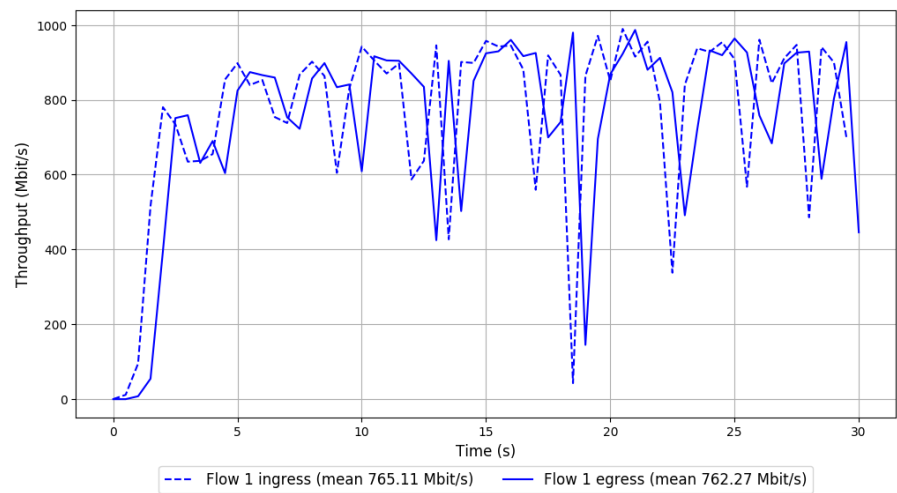


Run 1: Statistics of FillP-Sheep

Start at: 2019-07-17 16:25:58
End at: 2019-07-17 16:26:28
Local clock offset: 23.251 ms
Remote clock offset: 22.835 ms

Below is generated by plot.py at 2019-07-17 19:42:16
Datalink statistics
-- Total of 1 flow:
Average throughput: 762.27 Mbit/s
95th percentile per-packet one-way delay: 152.782 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 762.27 Mbit/s
95th percentile per-packet one-way delay: 152.782 ms
Loss rate: 1.11%

Run 1: Report of FillP-Sheep — Data Link

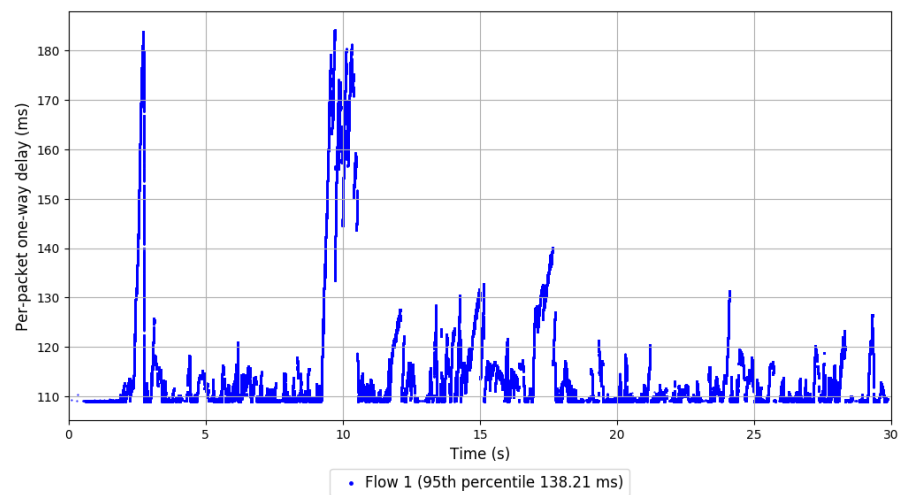
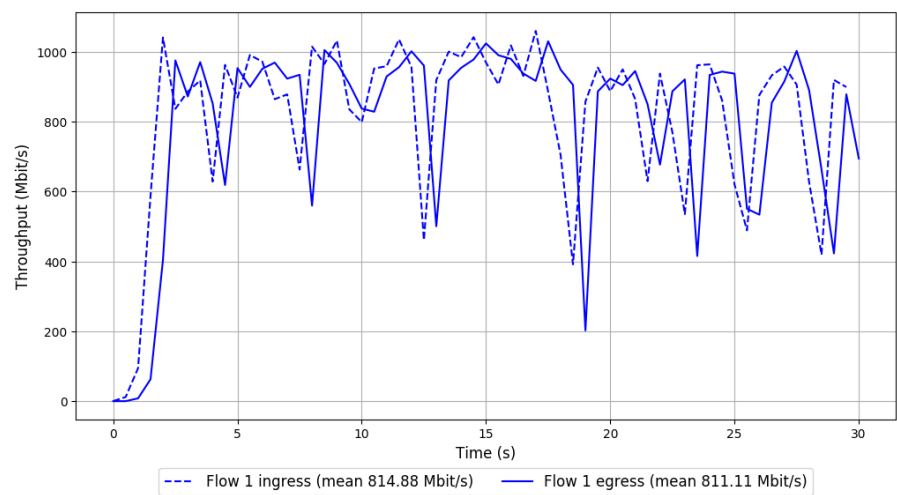


Run 2: Statistics of FillP-Sheep

Start at: 2019-07-17 17:01:57
End at: 2019-07-17 17:02:27
Local clock offset: 40.42 ms
Remote clock offset: 39.079 ms

Below is generated by plot.py at 2019-07-17 19:42:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 811.11 Mbit/s
95th percentile per-packet one-way delay: 138.213 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 811.11 Mbit/s
95th percentile per-packet one-way delay: 138.213 ms
Loss rate: 1.19%

Run 2: Report of FillP-Sheep — Data Link



Run 3: Statistics of FillP-Sheep

Start at: 2019-07-17 17:38:00

End at: 2019-07-17 17:38:30

Local clock offset: 19.14 ms

Remote clock offset: 8.862 ms

Below is generated by plot.py at 2019-07-17 19:44:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 816.84 Mbit/s

95th percentile per-packet one-way delay: 162.774 ms

Loss rate: 1.00%

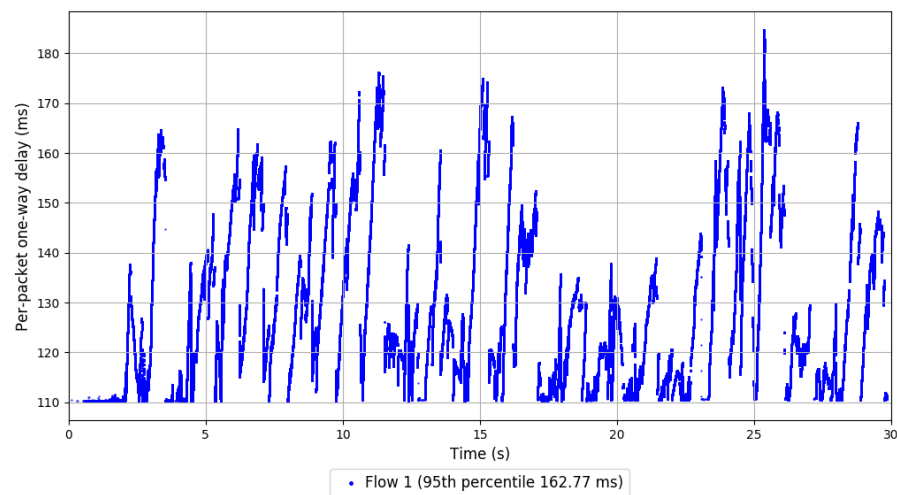
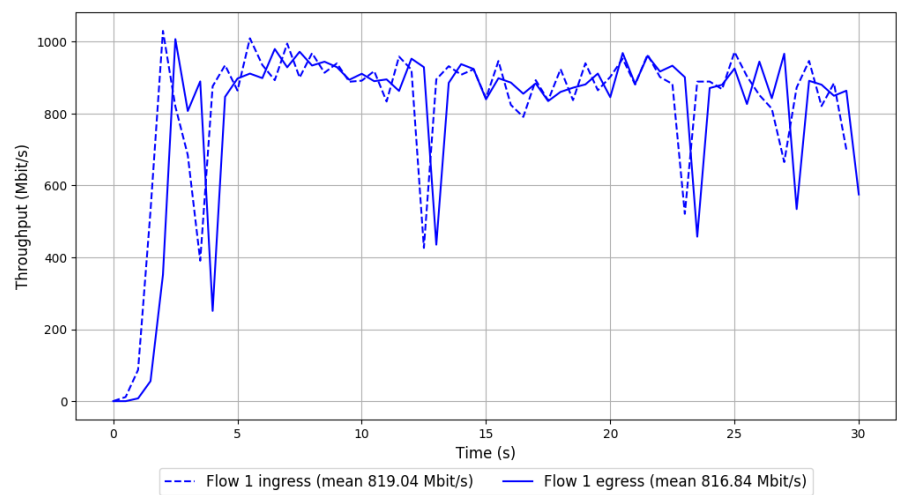
-- Flow 1:

Average throughput: 816.84 Mbit/s

95th percentile per-packet one-way delay: 162.774 ms

Loss rate: 1.00%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-07-17 18:14:22

End at: 2019-07-17 18:14:52

Local clock offset: 7.109 ms

Remote clock offset: 2.881 ms

Below is generated by plot.py at 2019-07-17 19:52:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 784.97 Mbit/s

95th percentile per-packet one-way delay: 163.184 ms

Loss rate: 1.10%

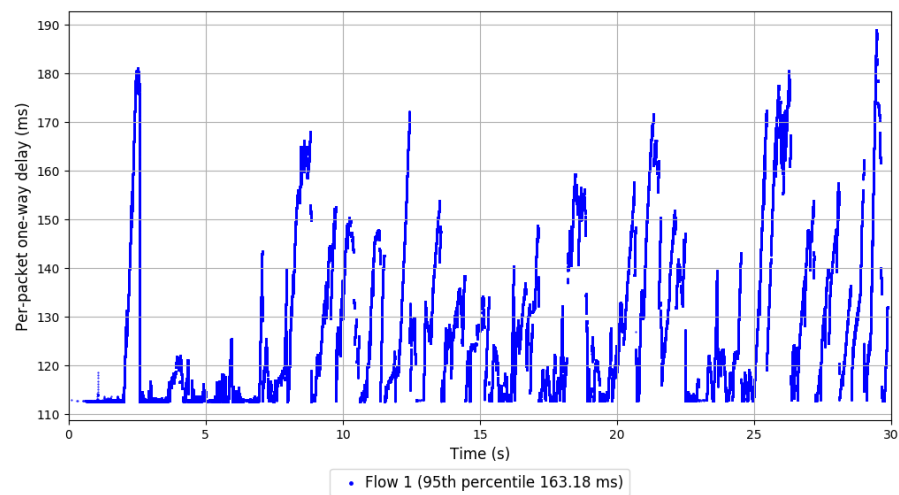
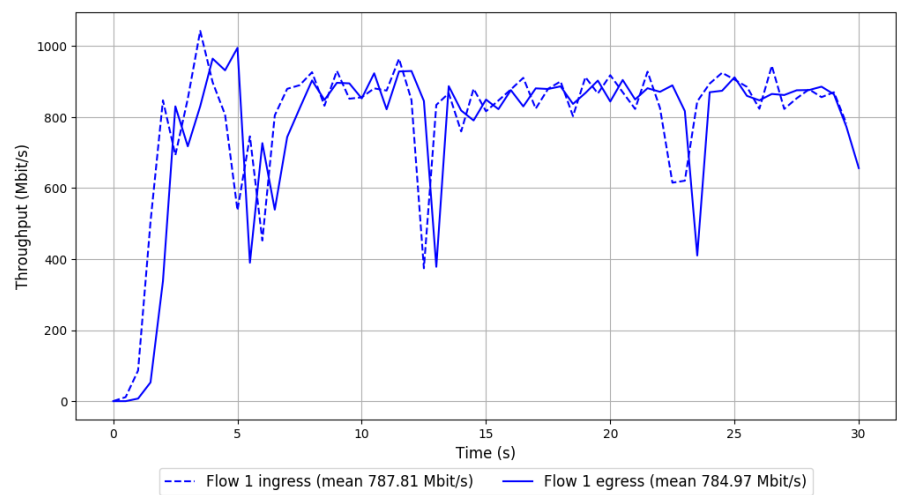
-- Flow 1:

Average throughput: 784.97 Mbit/s

95th percentile per-packet one-way delay: 163.184 ms

Loss rate: 1.10%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2019-07-17 18:50:38

End at: 2019-07-17 18:51:08

Local clock offset: 1.567 ms

Remote clock offset: 1.27 ms

Below is generated by plot.py at 2019-07-17 19:57:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 791.94 Mbit/s

95th percentile per-packet one-way delay: 172.837 ms

Loss rate: 1.46%

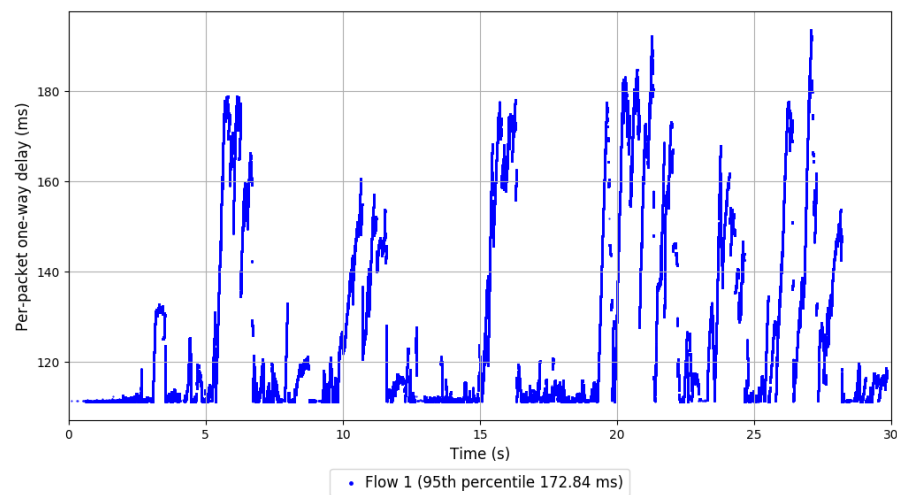
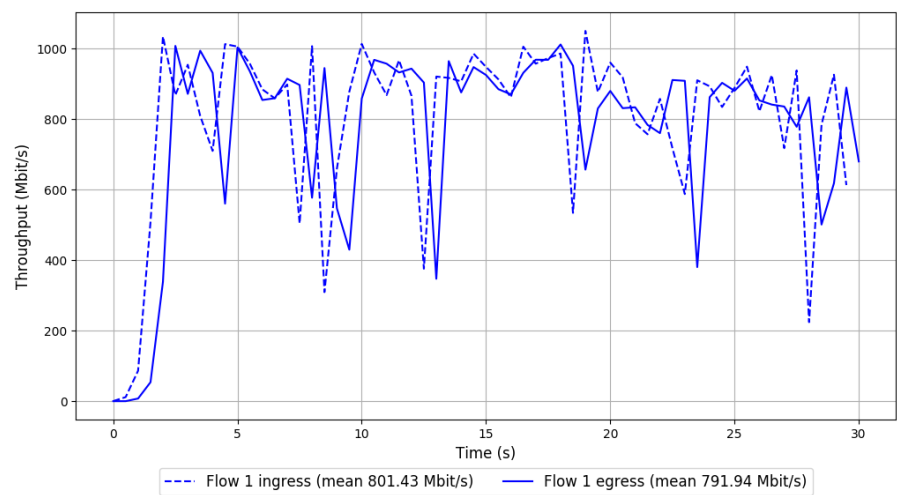
-- Flow 1:

Average throughput: 791.94 Mbit/s

95th percentile per-packet one-way delay: 172.837 ms

Loss rate: 1.46%

Run 5: Report of FillP-Sheep — Data Link

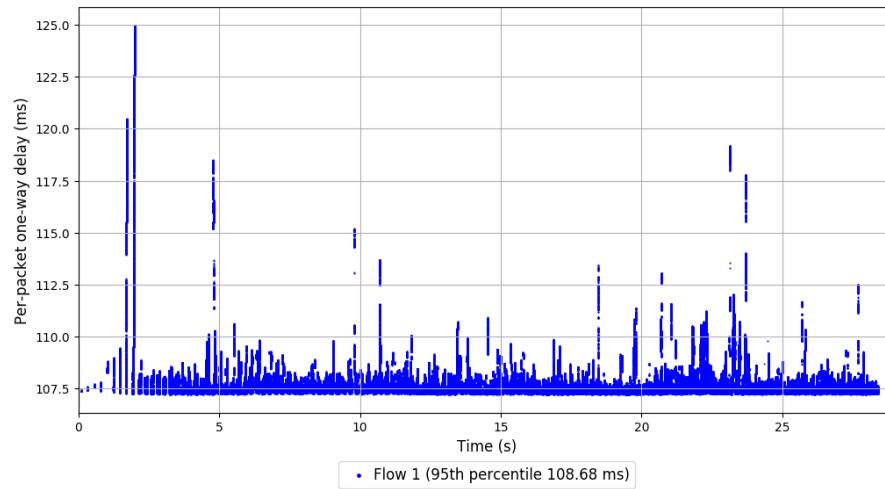
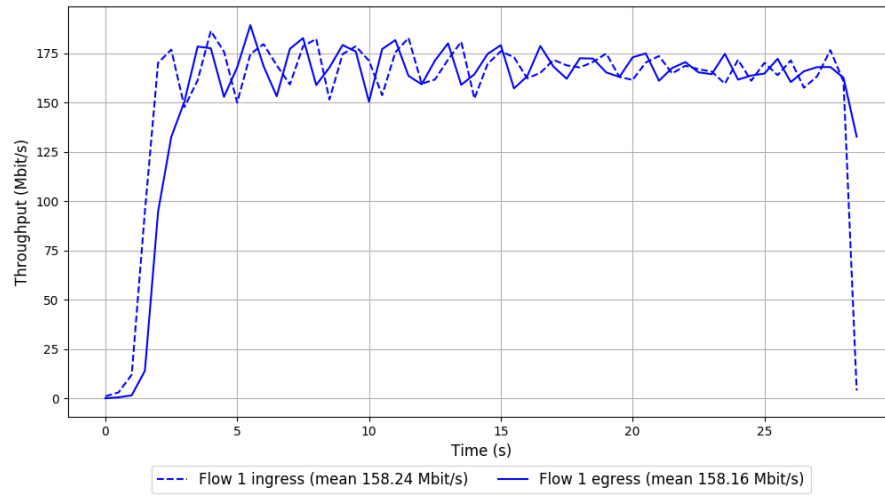


Run 1: Statistics of Indigo

Start at: 2019-07-17 16:15:35
End at: 2019-07-17 16:16:05
Local clock offset: 13.678 ms
Remote clock offset: 12.714 ms

Below is generated by plot.py at 2019-07-17 19:57:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 158.16 Mbit/s
95th percentile per-packet one-way delay: 108.677 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 158.16 Mbit/s
95th percentile per-packet one-way delay: 108.677 ms
Loss rate: 0.80%

Run 1: Report of Indigo — Data Link



Run 2: Statistics of Indigo

Start at: 2019-07-17 16:51:20

End at: 2019-07-17 16:51:50

Local clock offset: 28.827 ms

Remote clock offset: 28.02 ms

Below is generated by plot.py at 2019-07-17 19:57:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 222.51 Mbit/s

95th percentile per-packet one-way delay: 111.752 ms

Loss rate: 0.73%

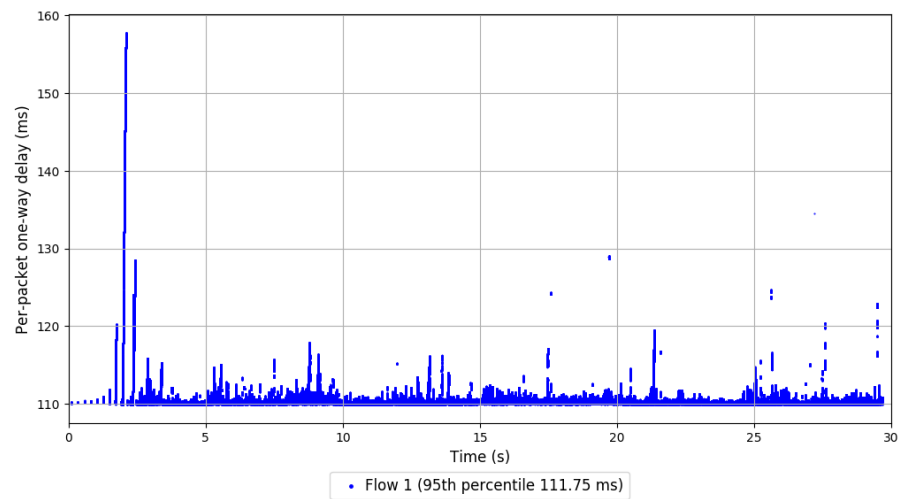
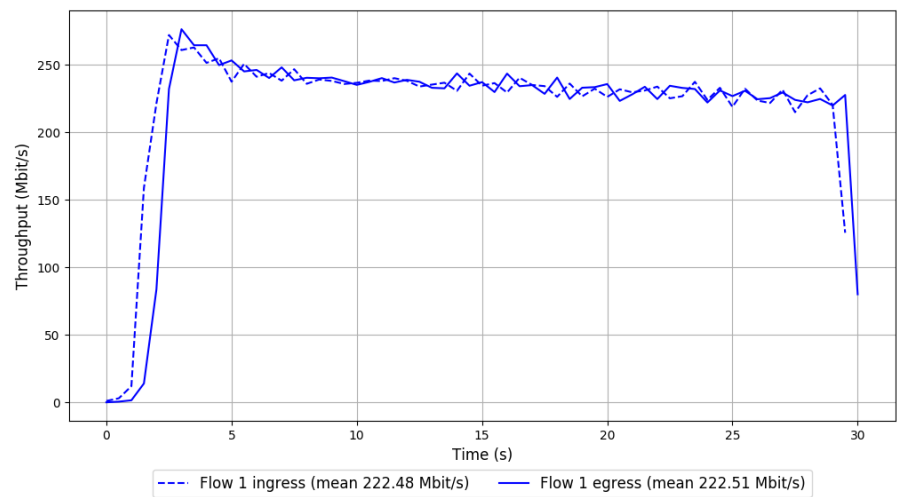
-- Flow 1:

Average throughput: 222.51 Mbit/s

95th percentile per-packet one-way delay: 111.752 ms

Loss rate: 0.73%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-07-17 17:27:23

End at: 2019-07-17 17:27:53

Local clock offset: 16.539 ms

Remote clock offset: 8.951 ms

Below is generated by plot.py at 2019-07-17 19:57:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 223.17 Mbit/s

95th percentile per-packet one-way delay: 107.868 ms

Loss rate: 0.73%

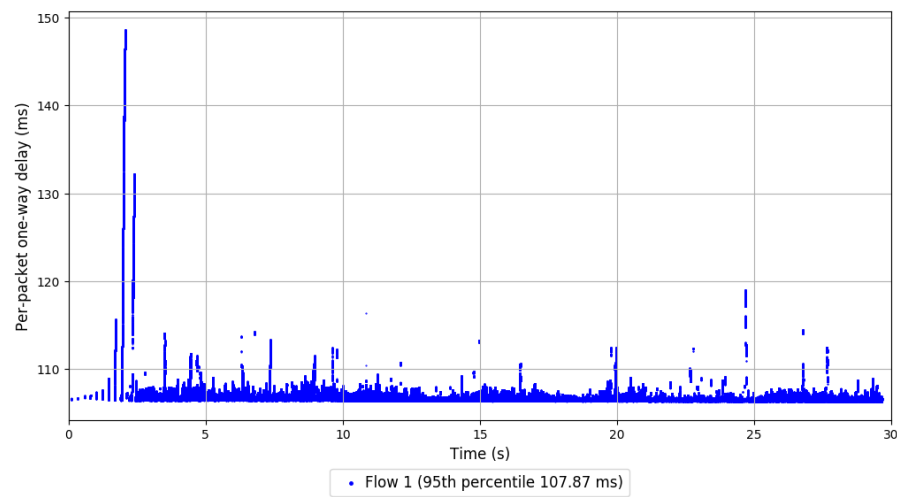
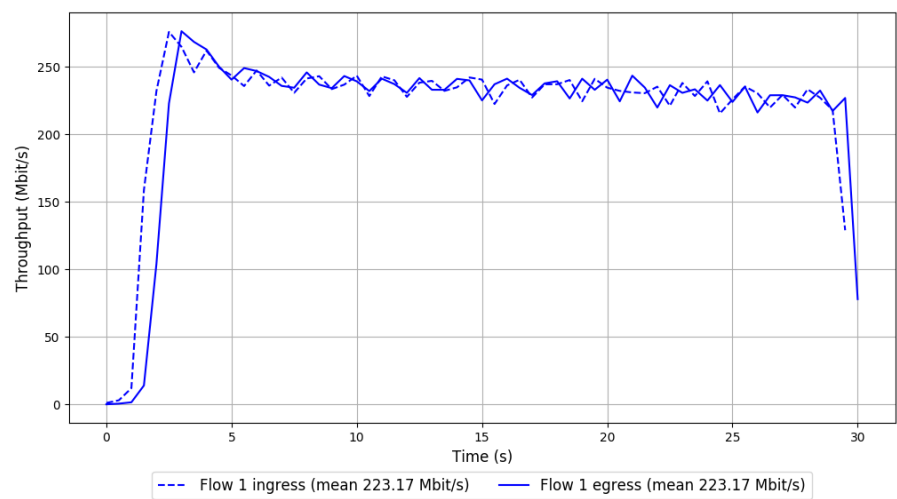
-- Flow 1:

Average throughput: 223.17 Mbit/s

95th percentile per-packet one-way delay: 107.868 ms

Loss rate: 0.73%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2019-07-17 18:03:44

End at: 2019-07-17 18:04:14

Local clock offset: 8.201 ms

Remote clock offset: 3.86 ms

Below is generated by plot.py at 2019-07-17 19:57:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 158.65 Mbit/s

95th percentile per-packet one-way delay: 111.402 ms

Loss rate: 0.80%

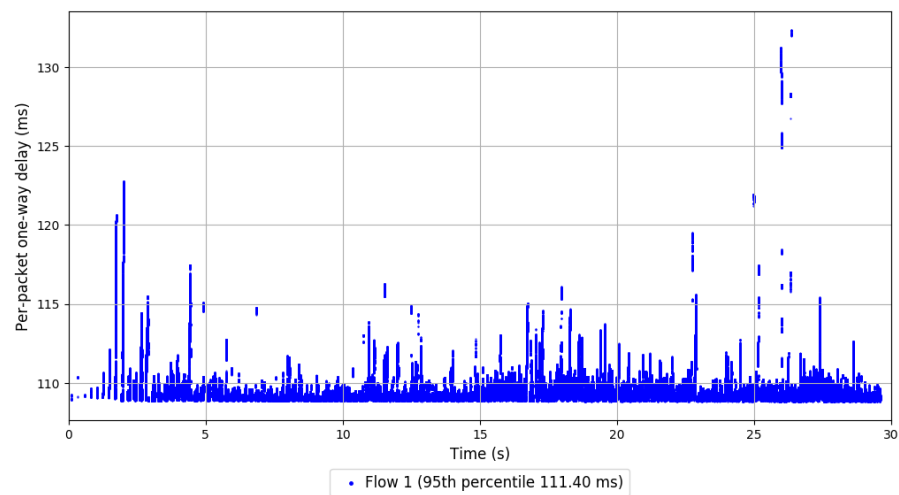
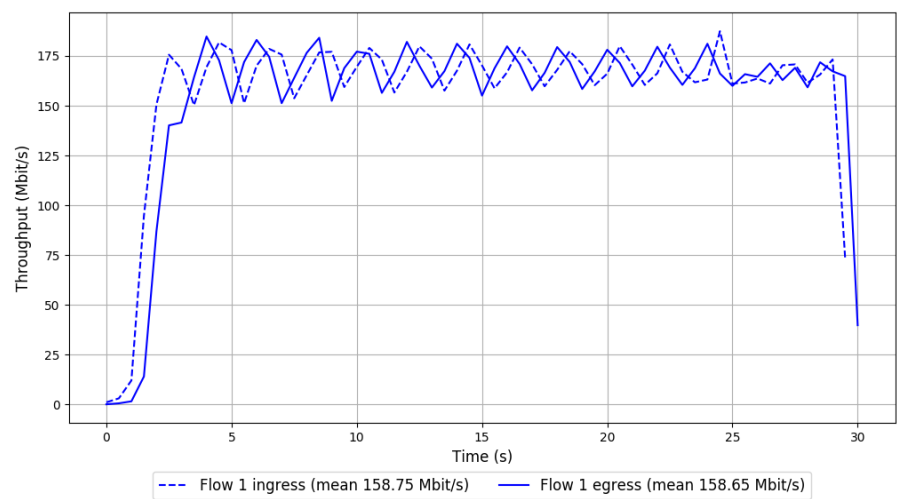
-- Flow 1:

Average throughput: 158.65 Mbit/s

95th percentile per-packet one-way delay: 111.402 ms

Loss rate: 0.80%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2019-07-17 18:40:02

End at: 2019-07-17 18:40:32

Local clock offset: 2.372 ms

Remote clock offset: 1.901 ms

Below is generated by plot.py at 2019-07-17 19:57:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 155.00 Mbit/s

95th percentile per-packet one-way delay: 108.040 ms

Loss rate: 0.77%

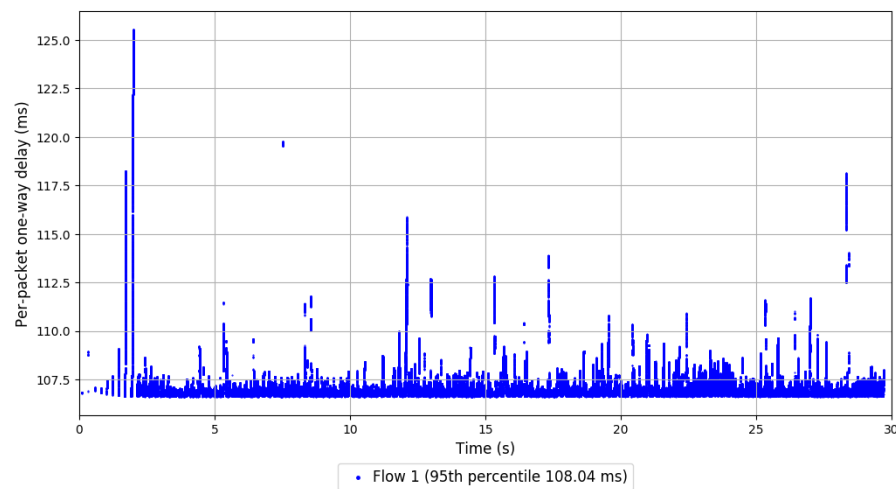
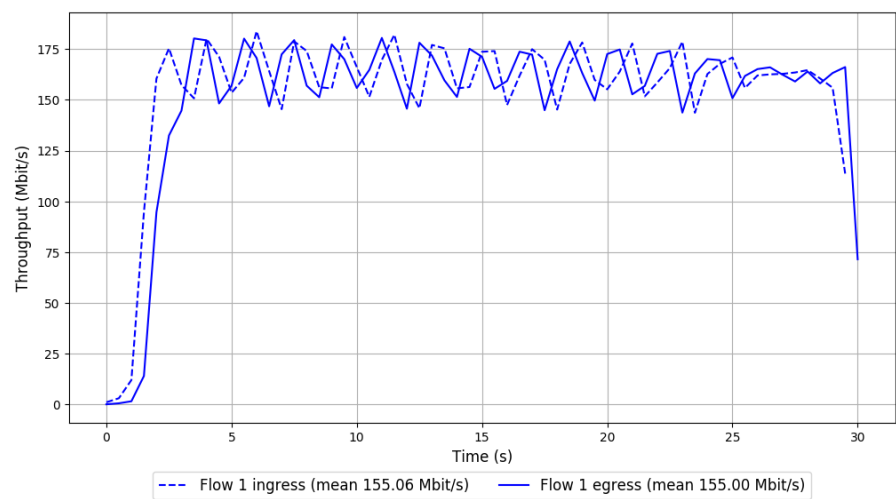
-- Flow 1:

Average throughput: 155.00 Mbit/s

95th percentile per-packet one-way delay: 108.040 ms

Loss rate: 0.77%

Run 5: Report of Indigo — Data Link



Run 1: Statistics of Indigo-MusesC3

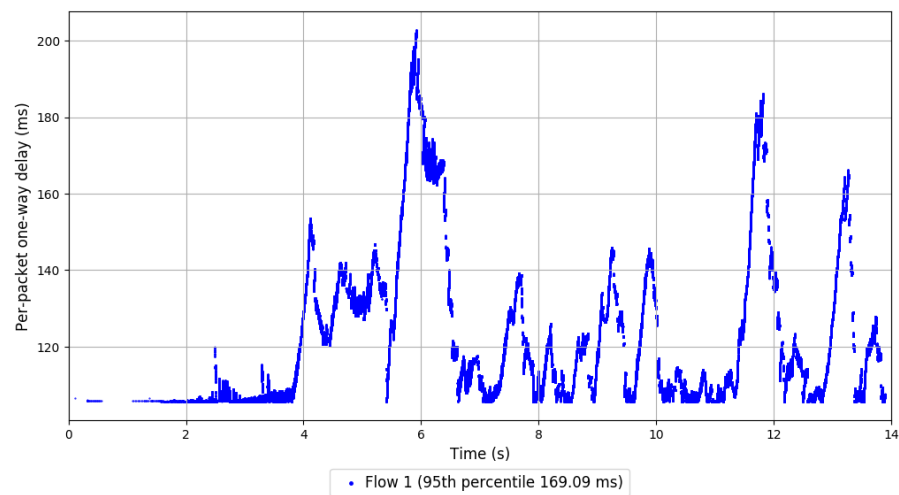
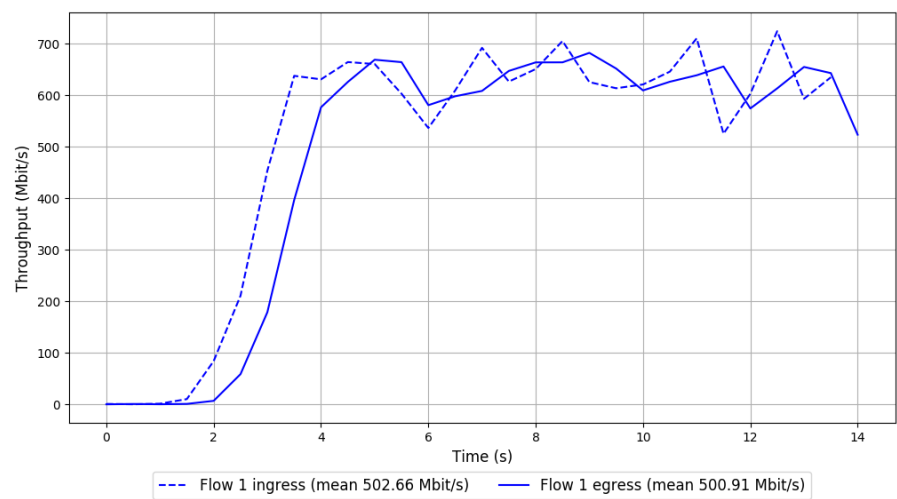
Start at: 2019-07-17 15:56:21

End at: 2019-07-17 15:56:51

Local clock offset: 4.269 ms

Remote clock offset: 4.584 ms

Run 1: Report of Indigo-MusesC3 — Data Link

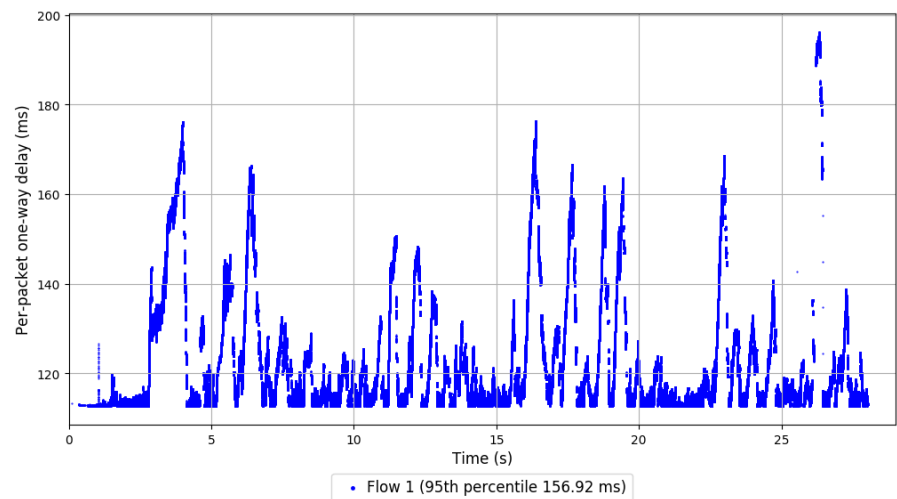
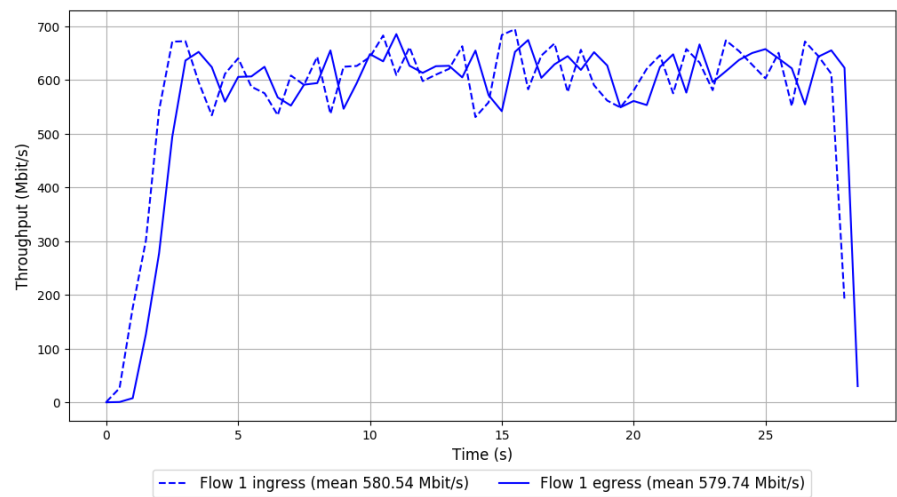


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-07-17 16:32:08
End at: 2019-07-17 16:32:38
Local clock offset: 22.611 ms
Remote clock offset: 21.437 ms

Below is generated by plot.py at 2019-07-17 19:57:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 579.74 Mbit/s
95th percentile per-packet one-way delay: 156.918 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 579.74 Mbit/s
95th percentile per-packet one-way delay: 156.918 ms
Loss rate: 0.93%

Run 2: Report of Indigo-MusesC3 — Data Link

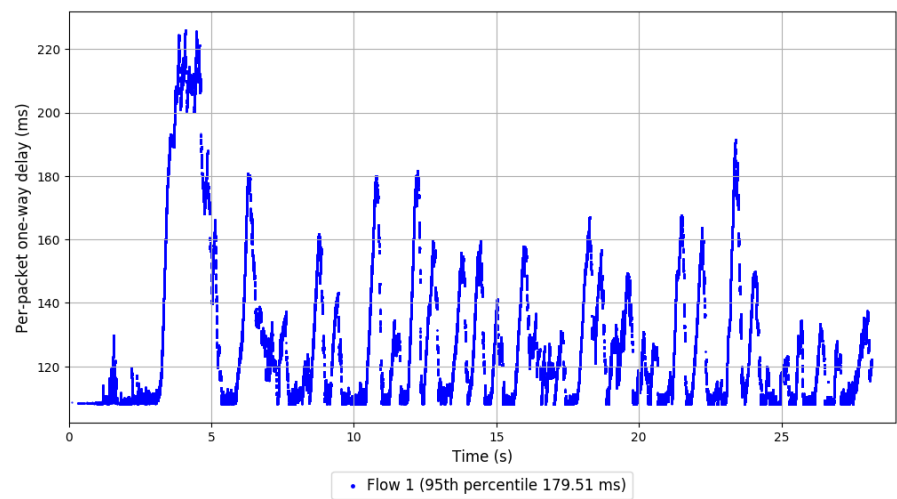
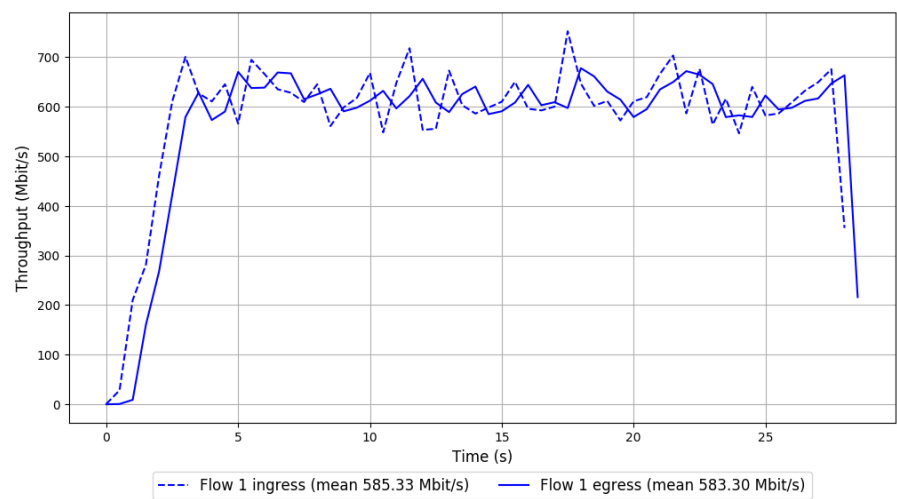


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-07-17 17:08:07
End at: 2019-07-17 17:08:37
Local clock offset: 26.423 ms
Remote clock offset: 22.477 ms

Below is generated by plot.py at 2019-07-17 19:57:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 583.30 Mbit/s
95th percentile per-packet one-way delay: 179.512 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 583.30 Mbit/s
95th percentile per-packet one-way delay: 179.512 ms
Loss rate: 1.11%

Run 3: Report of Indigo-MusesC3 — Data Link



Run 4: Statistics of Indigo-MusesC3

Start at: 2019-07-17 17:44:11

End at: 2019-07-17 17:44:41

Local clock offset: 10.821 ms

Remote clock offset: 5.167 ms

Below is generated by plot.py at 2019-07-17 19:57:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 558.39 Mbit/s

95th percentile per-packet one-way delay: 151.453 ms

Loss rate: 0.96%

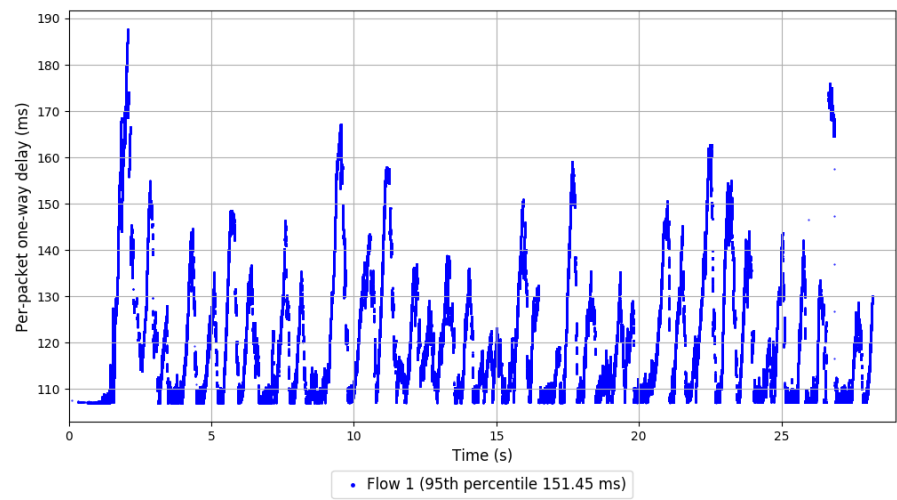
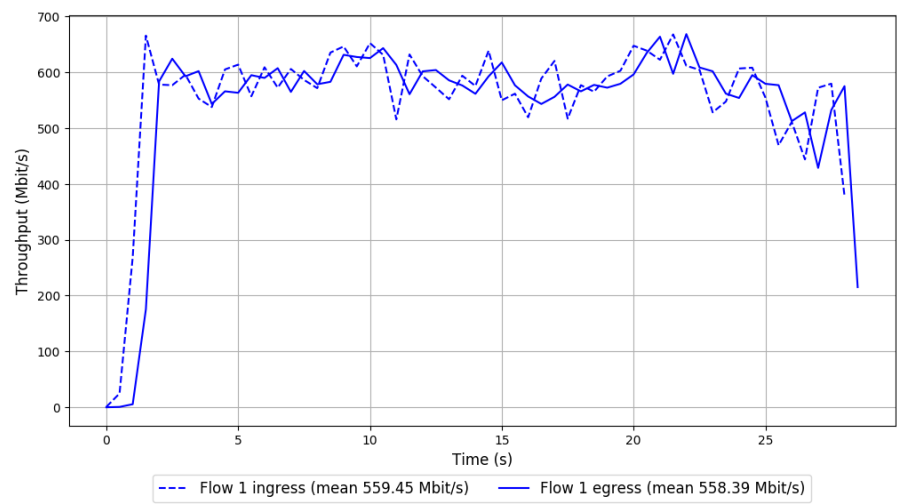
-- Flow 1:

Average throughput: 558.39 Mbit/s

95th percentile per-packet one-way delay: 151.453 ms

Loss rate: 0.96%

Run 4: Report of Indigo-MusesC3 — Data Link



Run 5: Statistics of Indigo-MusesC3

Start at: 2019-07-17 18:20:29

End at: 2019-07-17 18:20:59

Local clock offset: 4.327 ms

Remote clock offset: 2.006 ms

Below is generated by plot.py at 2019-07-17 19:58:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 576.48 Mbit/s

95th percentile per-packet one-way delay: 157.512 ms

Loss rate: 0.96%

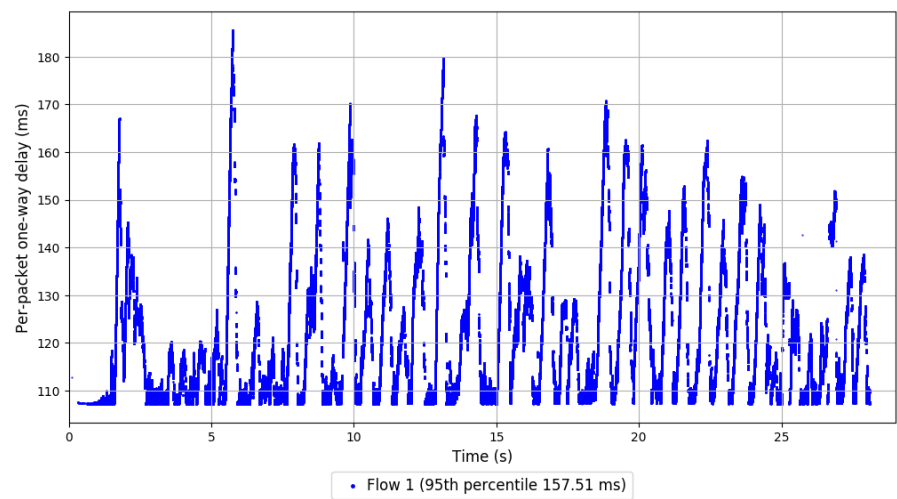
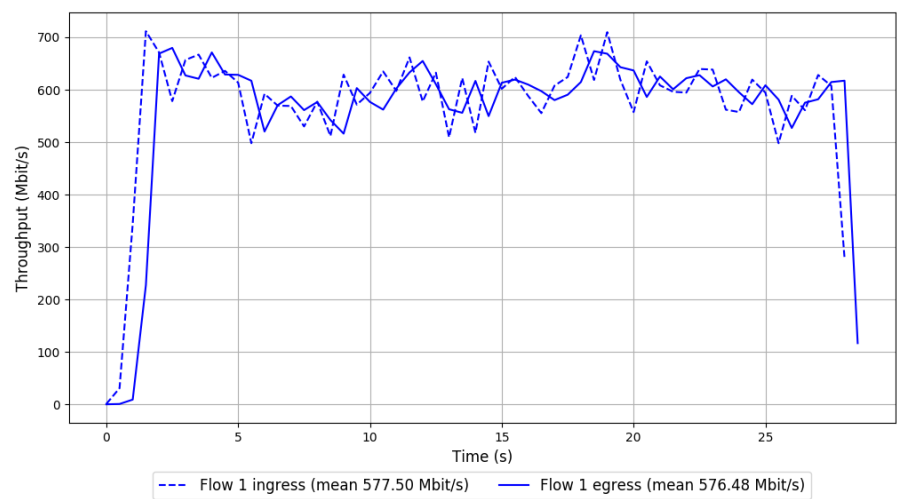
-- Flow 1:

Average throughput: 576.48 Mbit/s

95th percentile per-packet one-way delay: 157.512 ms

Loss rate: 0.96%

Run 5: Report of Indigo-MusesC3 — Data Link

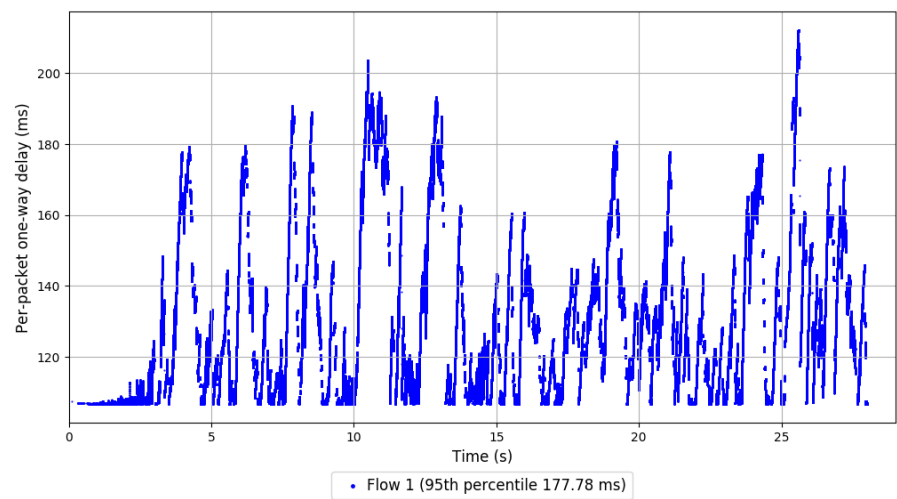
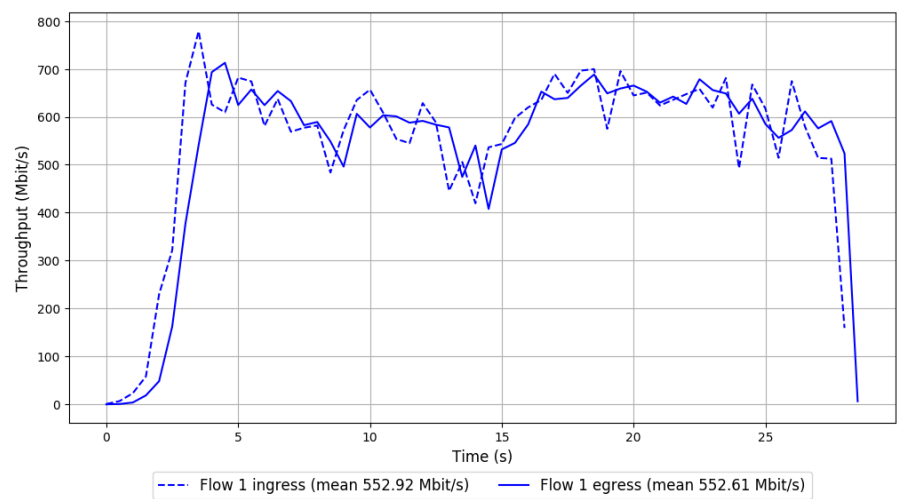


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-07-17 16:30:30
End at: 2019-07-17 16:31:01
Local clock offset: 23.838 ms
Remote clock offset: 23.104 ms

Below is generated by plot.py at 2019-07-17 19:58:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 552.61 Mbit/s
95th percentile per-packet one-way delay: 177.785 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 552.61 Mbit/s
95th percentile per-packet one-way delay: 177.785 ms
Loss rate: 0.85%

Run 1: Report of Indigo-MusesC5 — Data Link



Run 2: Statistics of Indigo-MusesC5

Start at: 2019-07-17 17:06:31

End at: 2019-07-17 17:07:01

Local clock offset: 28.796 ms

Remote clock offset: 26.35 ms

Below is generated by plot.py at 2019-07-17 19:58:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 525.91 Mbit/s

95th percentile per-packet one-way delay: 191.566 ms

Loss rate: 1.05%

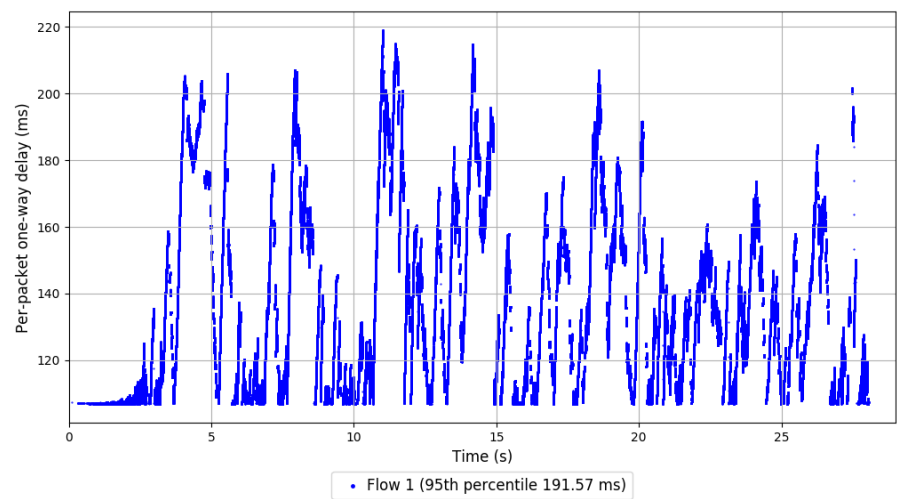
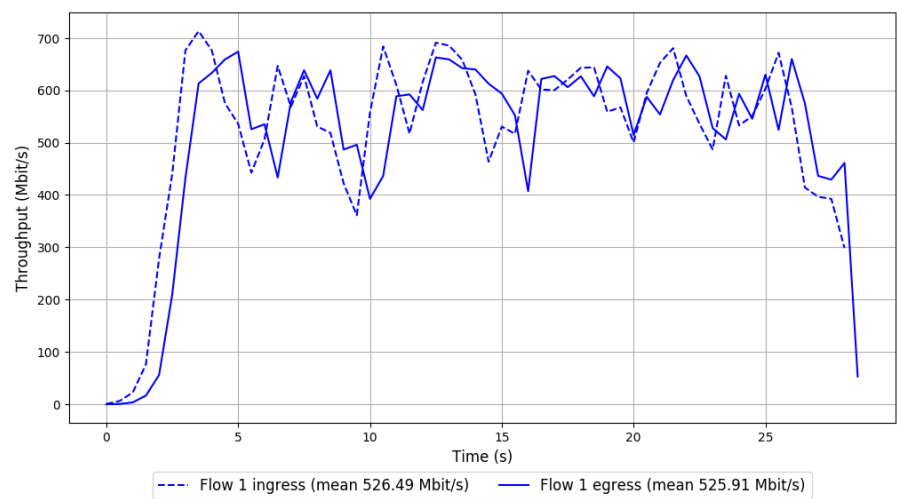
-- Flow 1:

Average throughput: 525.91 Mbit/s

95th percentile per-packet one-way delay: 191.566 ms

Loss rate: 1.05%

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

Start at: 2019-07-17 17:42:34

End at: 2019-07-17 17:43:04

Local clock offset: 12.295 ms

Remote clock offset: 5.784 ms

Below is generated by plot.py at 2019-07-17 20:01:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 554.81 Mbit/s

95th percentile per-packet one-way delay: 169.616 ms

Loss rate: 0.98%

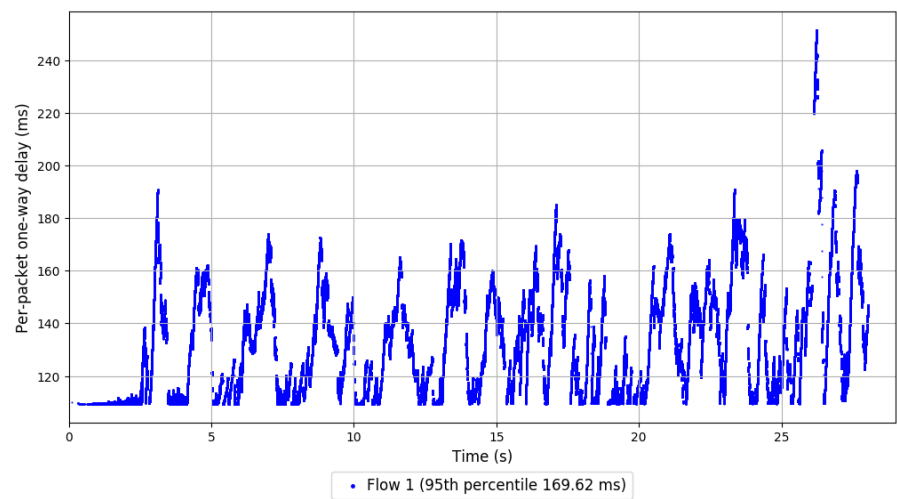
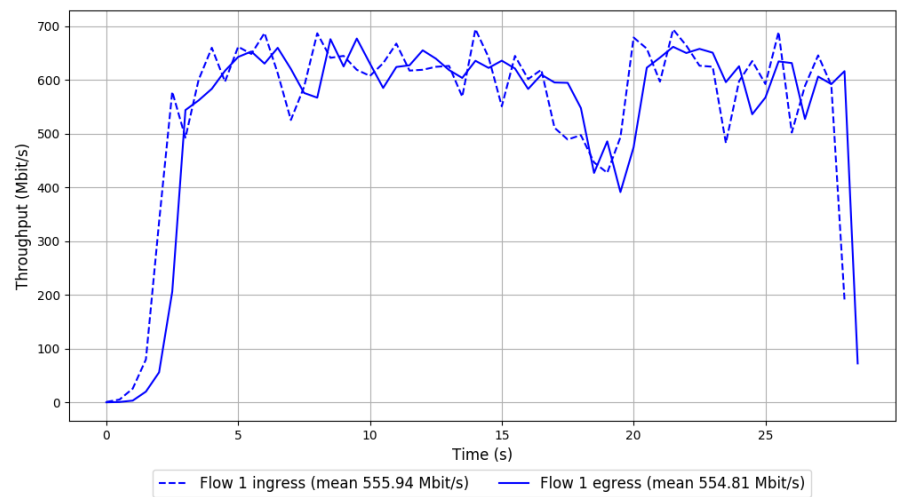
-- Flow 1:

Average throughput: 554.81 Mbit/s

95th percentile per-packet one-way delay: 169.616 ms

Loss rate: 0.98%

Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-07-17 18:18:53

End at: 2019-07-17 18:19:23

Local clock offset: 4.645 ms

Remote clock offset: 2.247 ms

Below is generated by plot.py at 2019-07-17 20:05:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 533.52 Mbit/s

95th percentile per-packet one-way delay: 198.936 ms

Loss rate: 1.18%

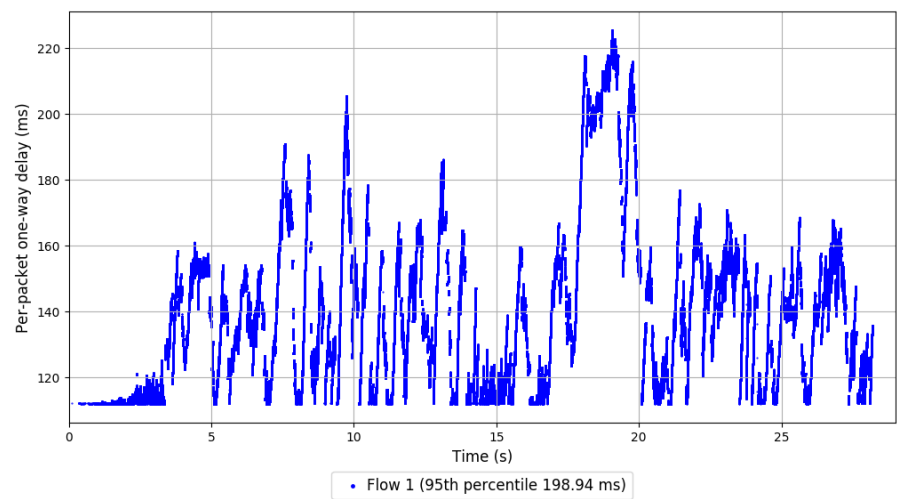
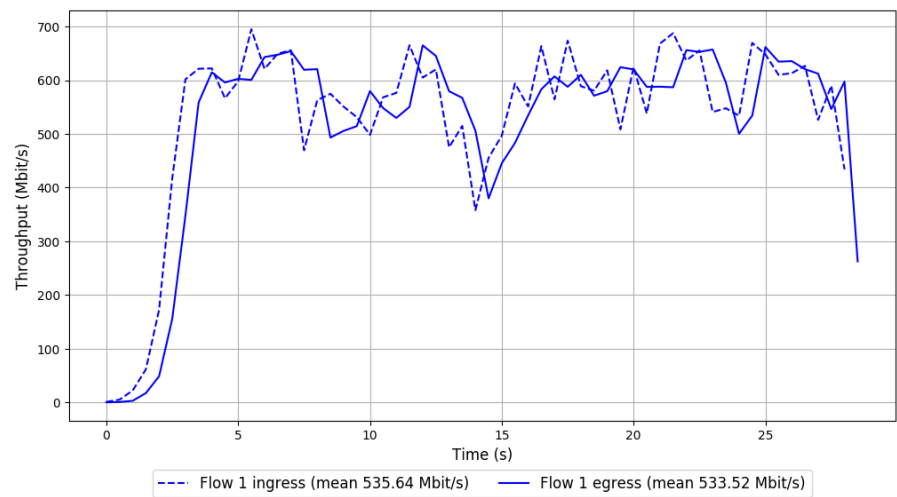
-- Flow 1:

Average throughput: 533.52 Mbit/s

95th percentile per-packet one-way delay: 198.936 ms

Loss rate: 1.18%

Run 4: Report of Indigo-MusesC5 — Data Link



Run 5: Statistics of Indigo-MusesC5

Start at: 2019-07-17 18:55:08

End at: 2019-07-17 18:55:38

Local clock offset: 0.973 ms

Remote clock offset: 0.951 ms

Below is generated by plot.py at 2019-07-17 20:06:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 533.53 Mbit/s

95th percentile per-packet one-way delay: 198.370 ms

Loss rate: 1.52%

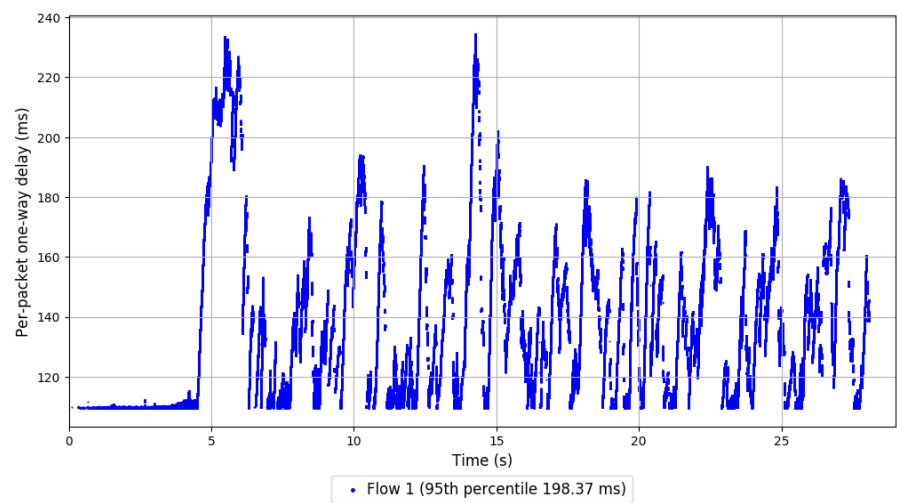
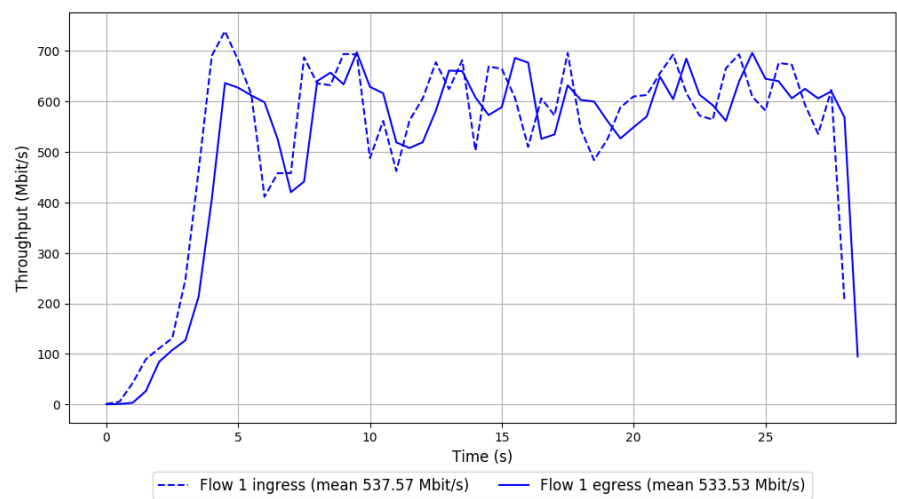
-- Flow 1:

Average throughput: 533.53 Mbit/s

95th percentile per-packet one-way delay: 198.370 ms

Loss rate: 1.52%

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-07-17 15:57:45

End at: 2019-07-17 15:58:15

Local clock offset: 4.486 ms

Remote clock offset: 4.861 ms

Below is generated by plot.py at 2019-07-17 20:06:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 574.41 Mbit/s

95th percentile per-packet one-way delay: 163.731 ms

Loss rate: 0.76%

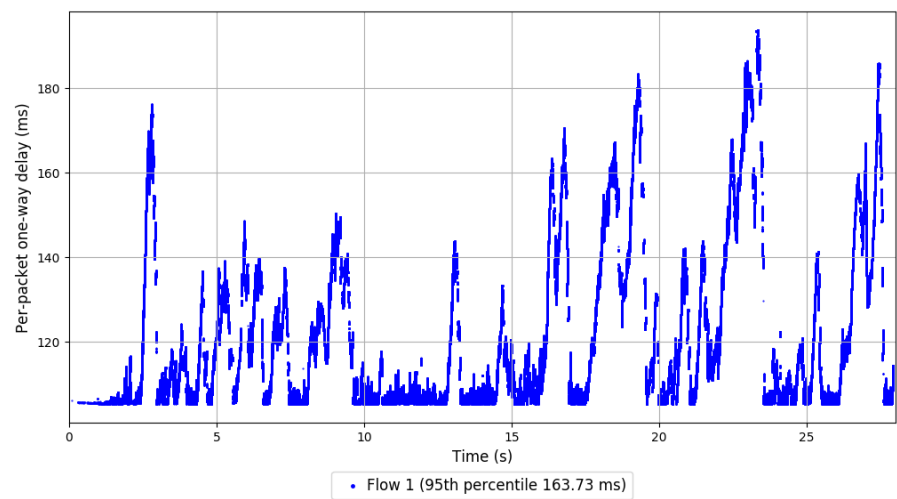
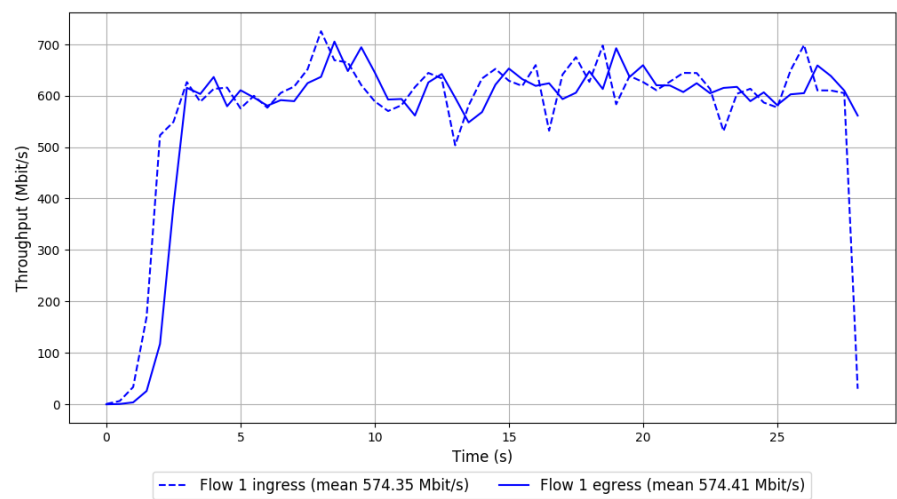
-- Flow 1:

Average throughput: 574.41 Mbit/s

95th percentile per-packet one-way delay: 163.731 ms

Loss rate: 0.76%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-07-17 16:33:47

End at: 2019-07-17 16:34:17

Local clock offset: 20.516 ms

Remote clock offset: 20.342 ms

Below is generated by plot.py at 2019-07-17 20:06:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 534.10 Mbit/s

95th percentile per-packet one-way delay: 157.044 ms

Loss rate: 1.19%

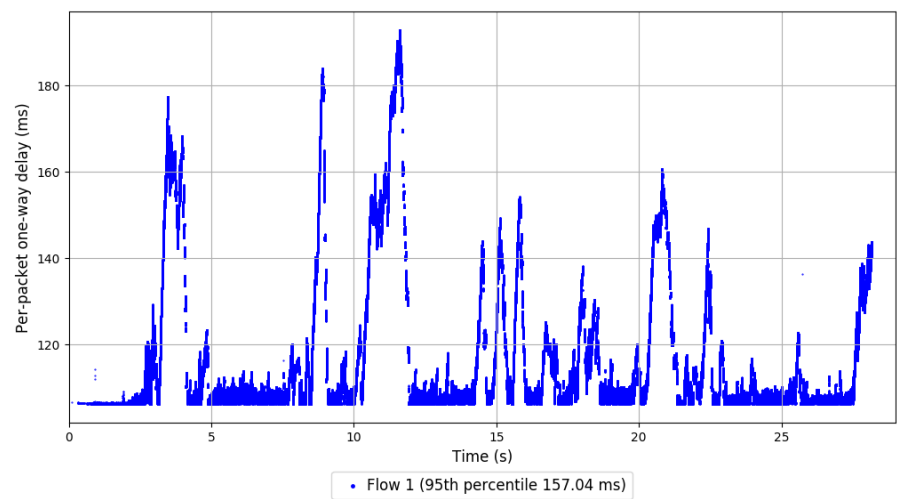
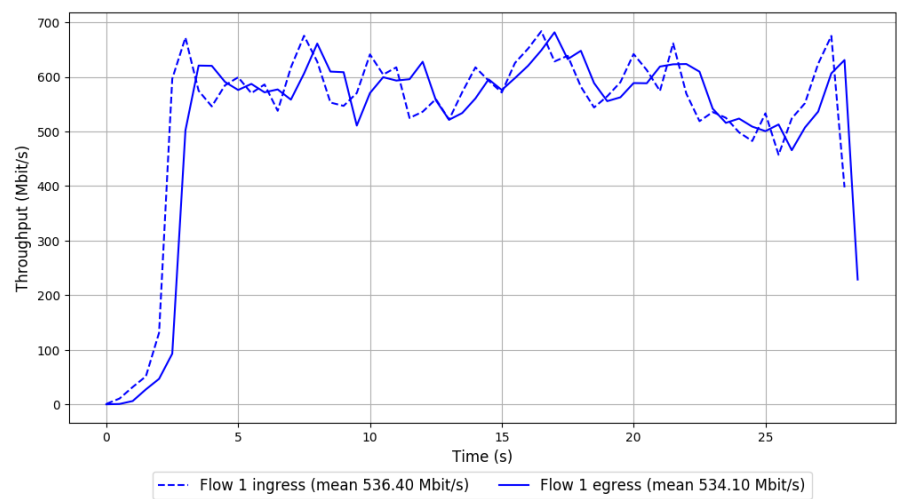
-- Flow 1:

Average throughput: 534.10 Mbit/s

95th percentile per-packet one-way delay: 157.044 ms

Loss rate: 1.19%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-07-17 17:09:45

End at: 2019-07-17 17:10:15

Local clock offset: 22.58 ms

Remote clock offset: 19.047 ms

Below is generated by plot.py at 2019-07-17 20:06:57

Datalink statistics

-- Total of 1 flow:

Average throughput: 534.45 Mbit/s

95th percentile per-packet one-way delay: 203.519 ms

Loss rate: 1.14%

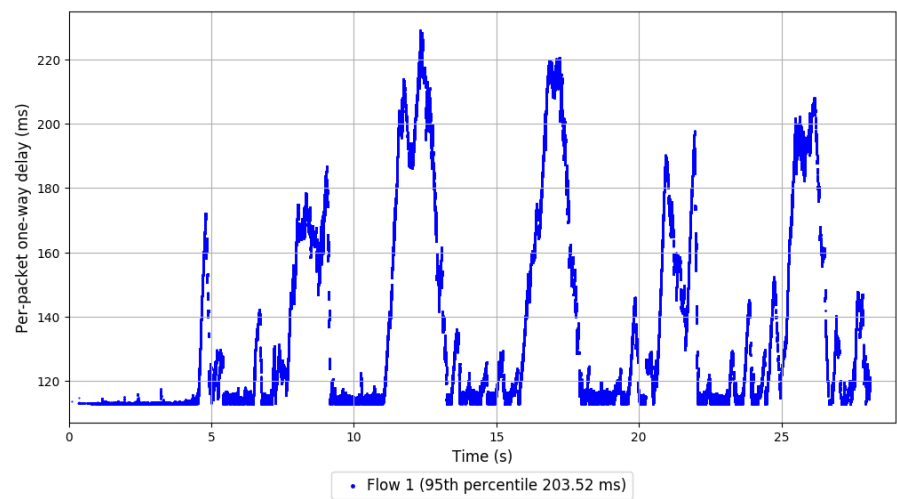
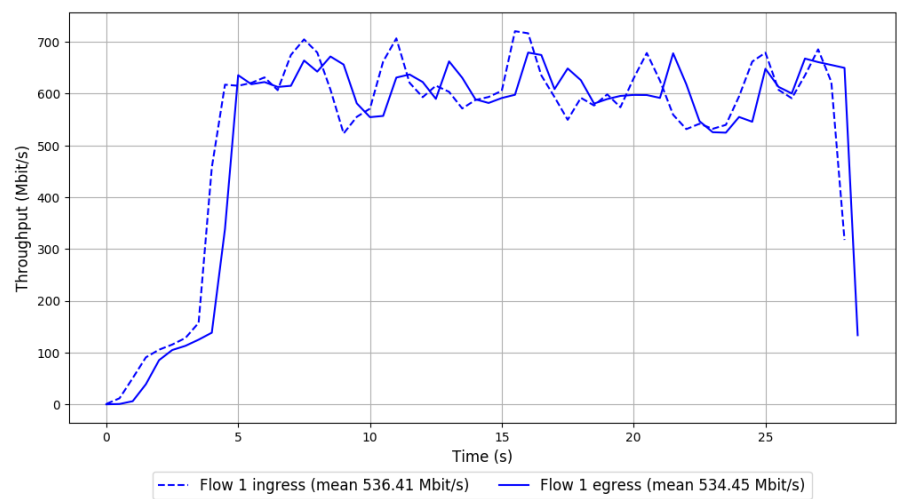
-- Flow 1:

Average throughput: 534.45 Mbit/s

95th percentile per-packet one-way delay: 203.519 ms

Loss rate: 1.14%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-07-17 17:45:49

End at: 2019-07-17 17:46:19

Local clock offset: 9.801 ms

Remote clock offset: 4.607 ms

Below is generated by plot.py at 2019-07-17 20:07:02

Datalink statistics

-- Total of 1 flow:

Average throughput: 533.19 Mbit/s

95th percentile per-packet one-way delay: 175.701 ms

Loss rate: 1.06%

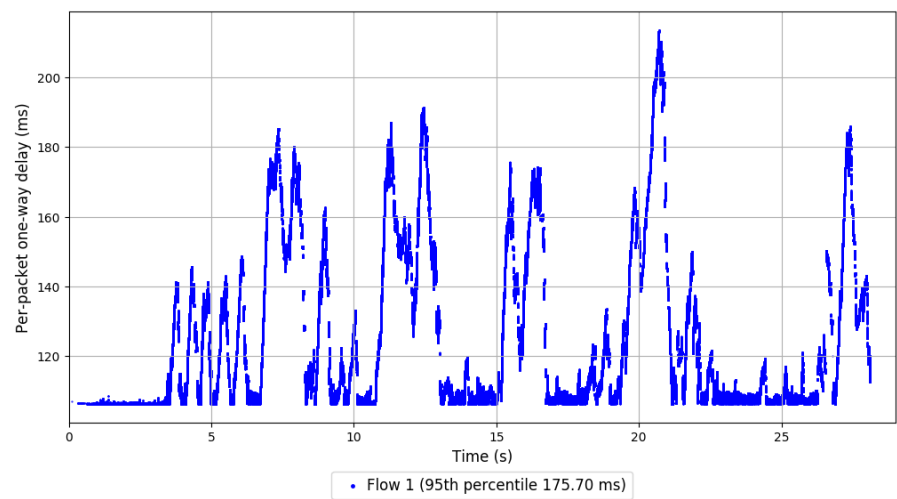
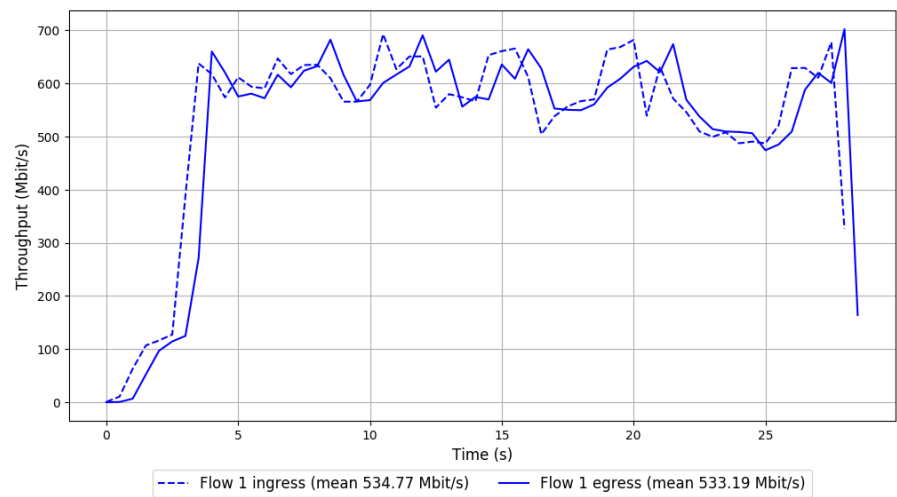
-- Flow 1:

Average throughput: 533.19 Mbit/s

95th percentile per-packet one-way delay: 175.701 ms

Loss rate: 1.06%

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2019-07-17 18:22:08

End at: 2019-07-17 18:22:38

Local clock offset: 3.683 ms

Remote clock offset: 1.884 ms

Below is generated by plot.py at 2019-07-17 20:07:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 510.87 Mbit/s

95th percentile per-packet one-way delay: 185.216 ms

Loss rate: 0.71%

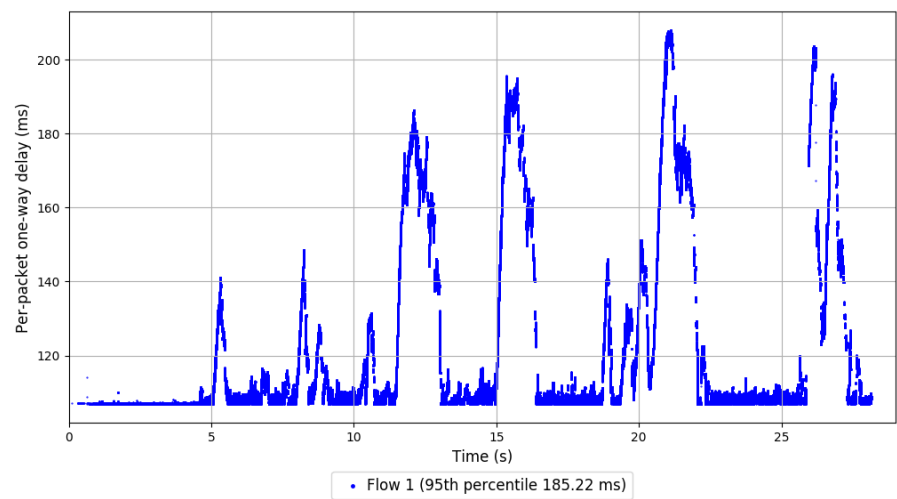
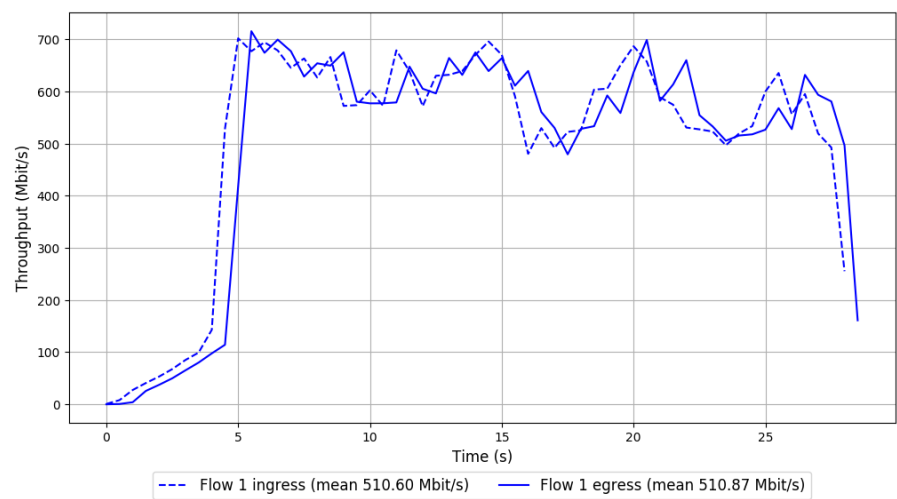
-- Flow 1:

Average throughput: 510.87 Mbit/s

95th percentile per-packet one-way delay: 185.216 ms

Loss rate: 0.71%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-07-17 16:19:32

End at: 2019-07-17 16:20:02

Local clock offset: 15.638 ms

Remote clock offset: 15.1 ms

Below is generated by plot.py at 2019-07-17 20:12:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 606.27 Mbit/s

95th percentile per-packet one-way delay: 208.760 ms

Loss rate: 1.47%

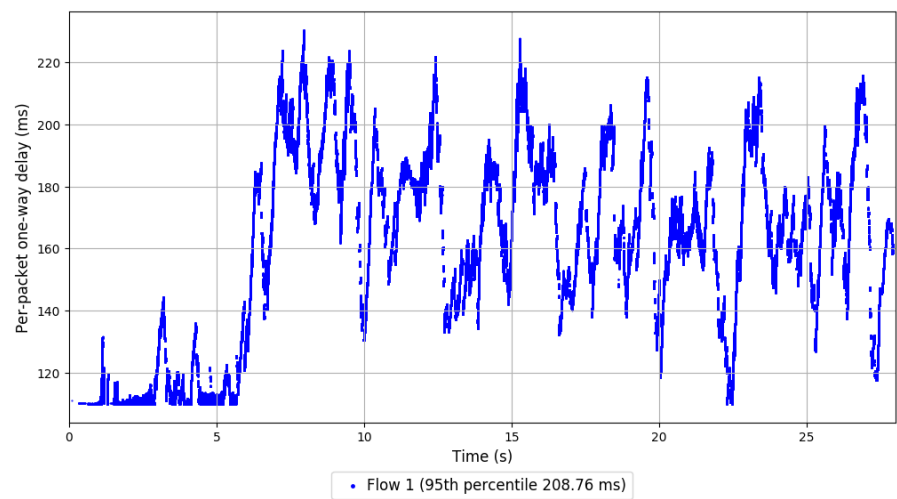
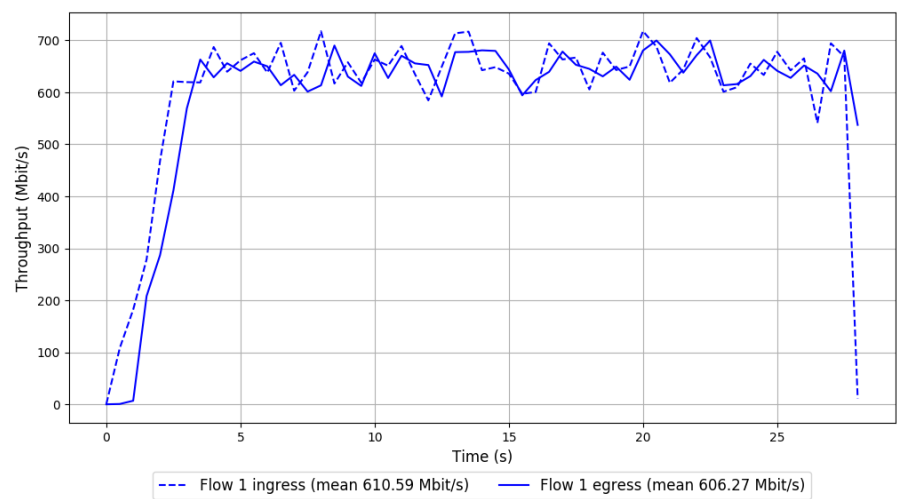
-- Flow 1:

Average throughput: 606.27 Mbit/s

95th percentile per-packet one-way delay: 208.760 ms

Loss rate: 1.47%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-07-17 16:55:25

End at: 2019-07-17 16:55:55

Local clock offset: 32.926 ms

Remote clock offset: 32.05 ms

Below is generated by plot.py at 2019-07-17 20:15:50

Datalink statistics

-- Total of 1 flow:

Average throughput: 607.91 Mbit/s

95th percentile per-packet one-way delay: 206.095 ms

Loss rate: 1.32%

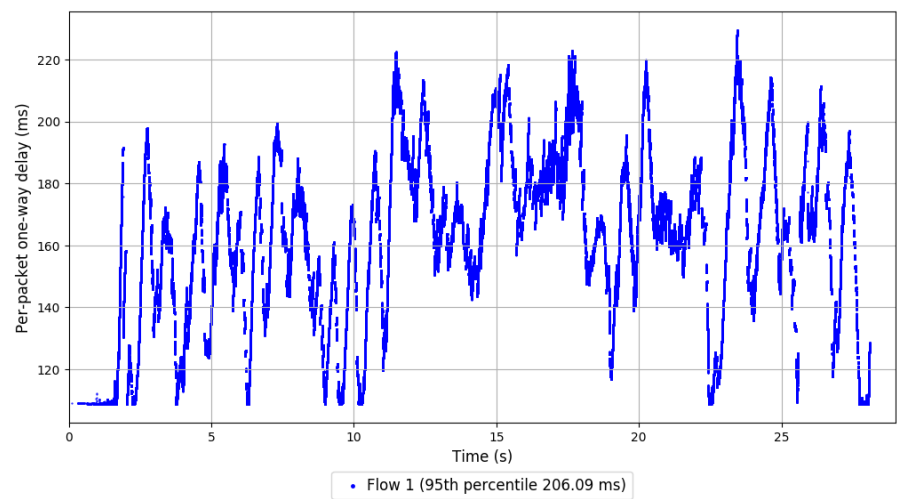
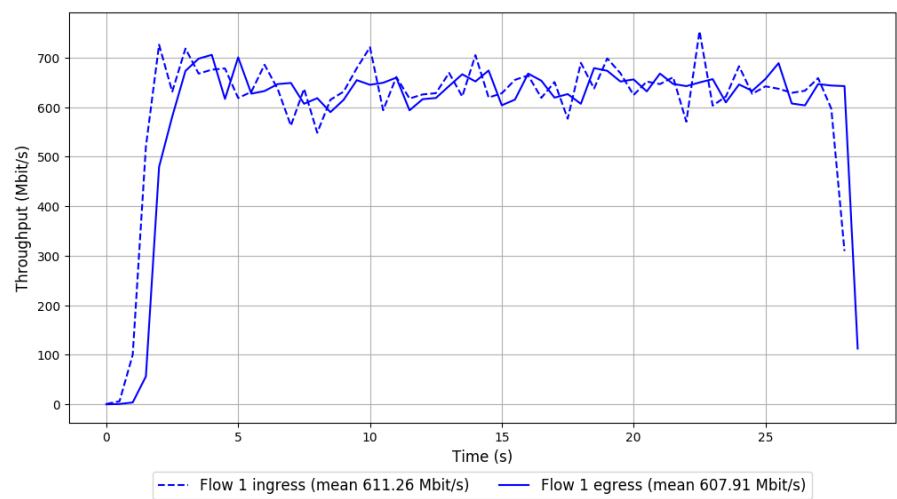
-- Flow 1:

Average throughput: 607.91 Mbit/s

95th percentile per-packet one-way delay: 206.095 ms

Loss rate: 1.32%

Run 2: Report of Indigo-MusesT — Data Link

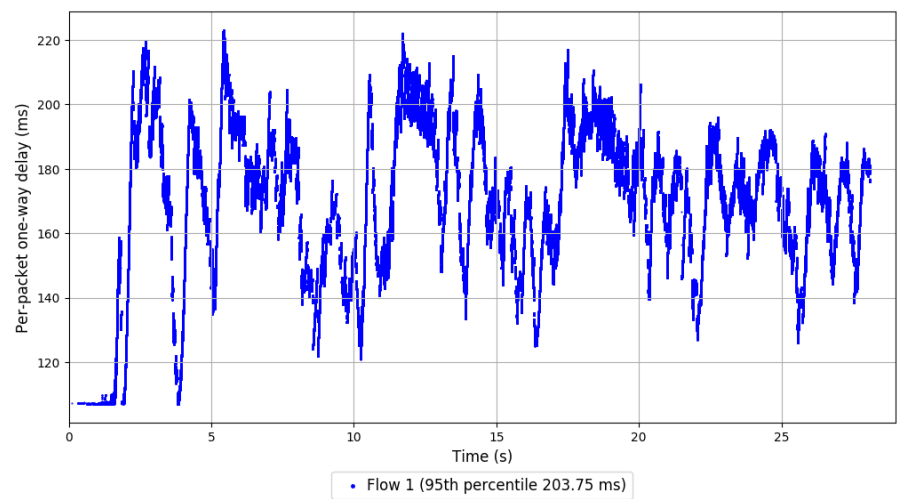
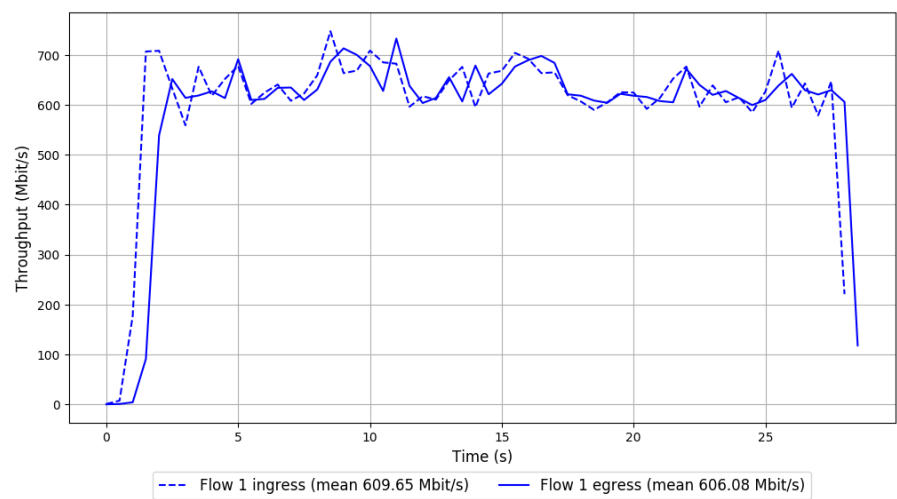


Run 3: Statistics of Indigo-MusesT

Start at: 2019-07-17 17:31:30
End at: 2019-07-17 17:32:00
Local clock offset: 18.215 ms
Remote clock offset: 8.887 ms

Below is generated by plot.py at 2019-07-17 20:16:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 606.08 Mbit/s
95th percentile per-packet one-way delay: 203.749 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 606.08 Mbit/s
95th percentile per-packet one-way delay: 203.749 ms
Loss rate: 1.34%

Run 3: Report of Indigo-MusesT — Data Link



Run 4: Statistics of Indigo-MusesT

Start at: 2019-07-17 18:07:41

End at: 2019-07-17 18:08:11

Local clock offset: 9.133 ms

Remote clock offset: 4.286 ms

Below is generated by plot.py at 2019-07-17 20:16:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 592.61 Mbit/s

95th percentile per-packet one-way delay: 184.373 ms

Loss rate: 1.00%

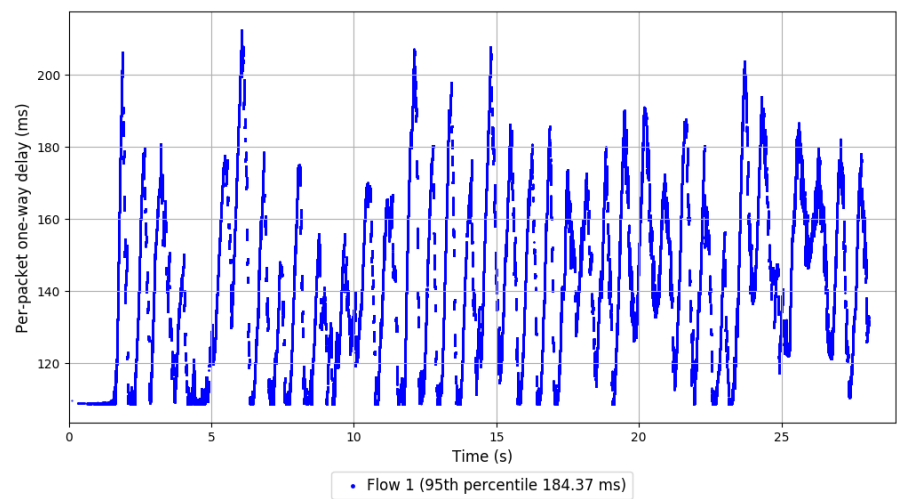
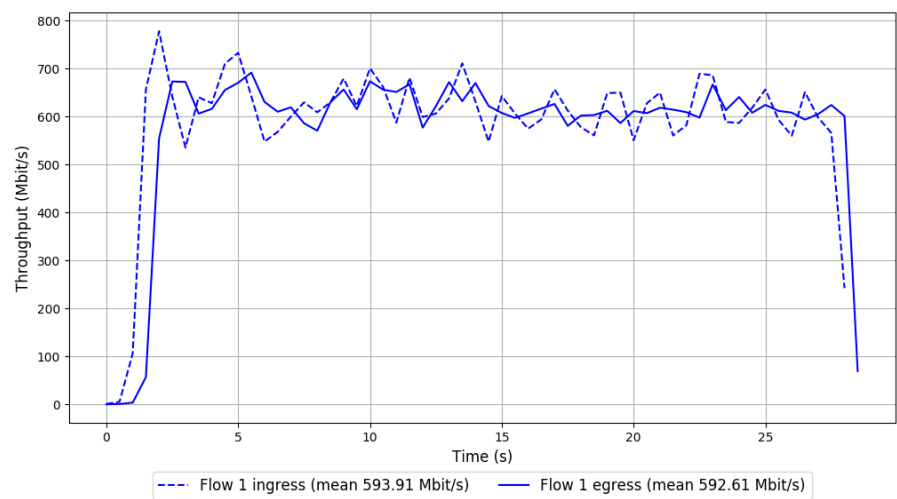
-- Flow 1:

Average throughput: 592.61 Mbit/s

95th percentile per-packet one-way delay: 184.373 ms

Loss rate: 1.00%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-07-17 18:44:02

End at: 2019-07-17 18:44:32

Local clock offset: 2.647 ms

Remote clock offset: 2.068 ms

Below is generated by plot.py at 2019-07-17 20:16:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 594.84 Mbit/s

95th percentile per-packet one-way delay: 203.460 ms

Loss rate: 1.45%

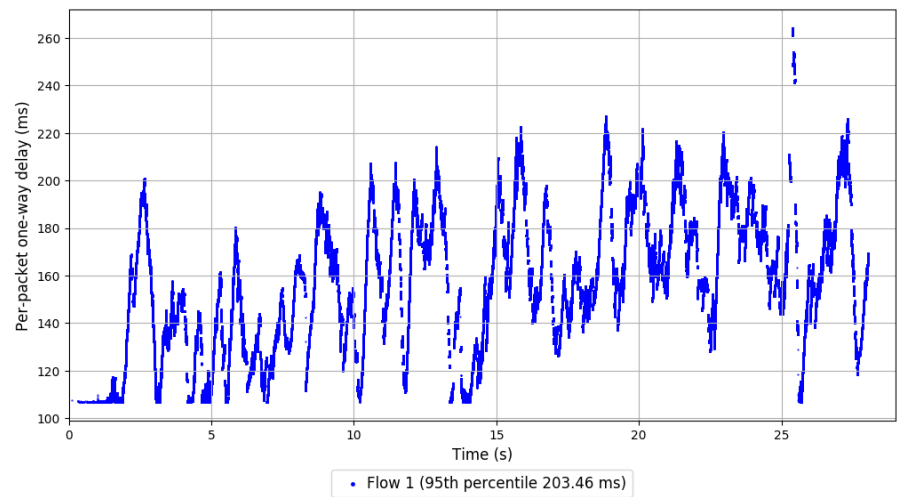
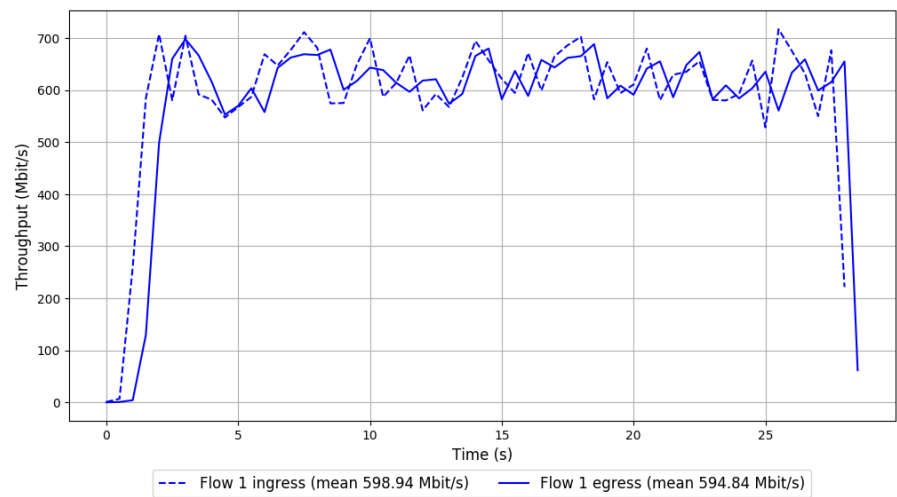
-- Flow 1:

Average throughput: 594.84 Mbit/s

95th percentile per-packet one-way delay: 203.460 ms

Loss rate: 1.45%

Run 5: Report of Indigo-MusesT — Data Link



Run 1: Statistics of LEDBAT

Start at: 2019-07-17 16:00:58

End at: 2019-07-17 16:01:28

Local clock offset: 7.214 ms

Remote clock offset: 7.475 ms

Below is generated by plot.py at 2019-07-17 20:16:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 110.542 ms

Loss rate: 1.47%

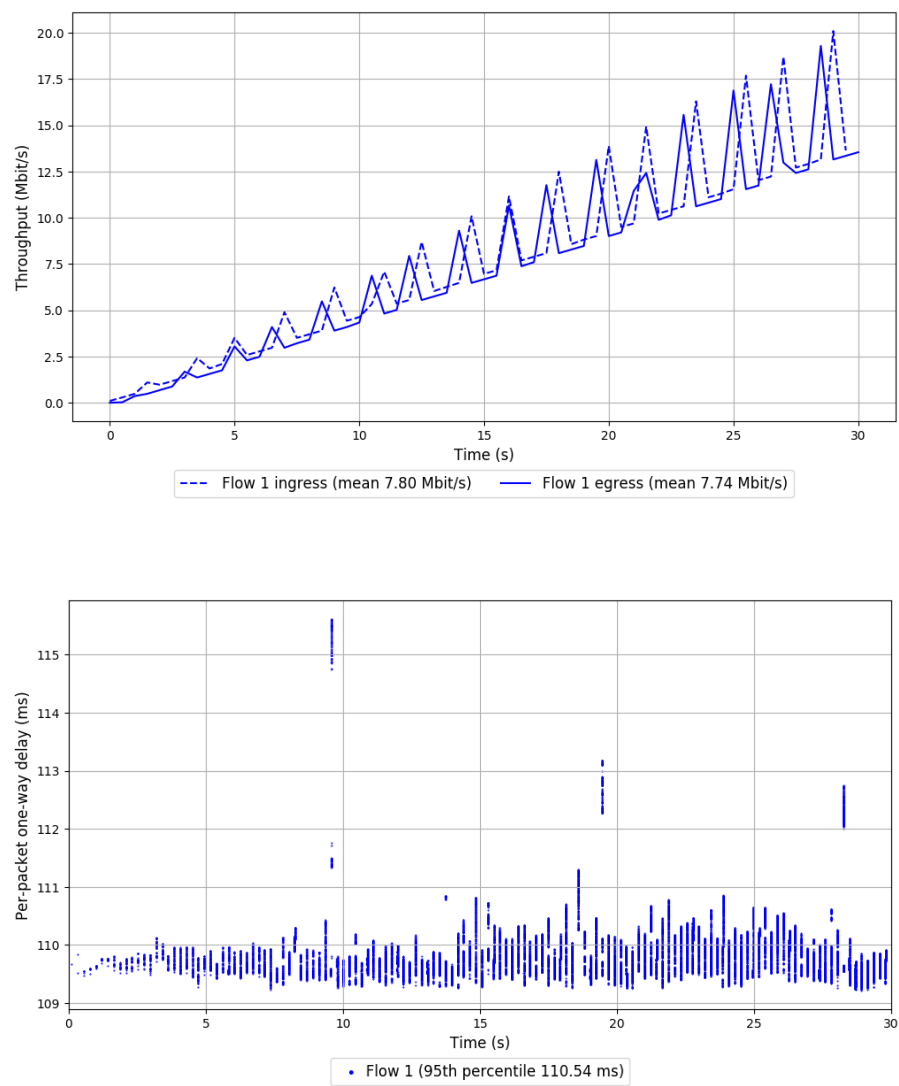
-- Flow 1:

Average throughput: 7.74 Mbit/s

95th percentile per-packet one-way delay: 110.542 ms

Loss rate: 1.47%

Run 1: Report of LEDBAT — Data Link

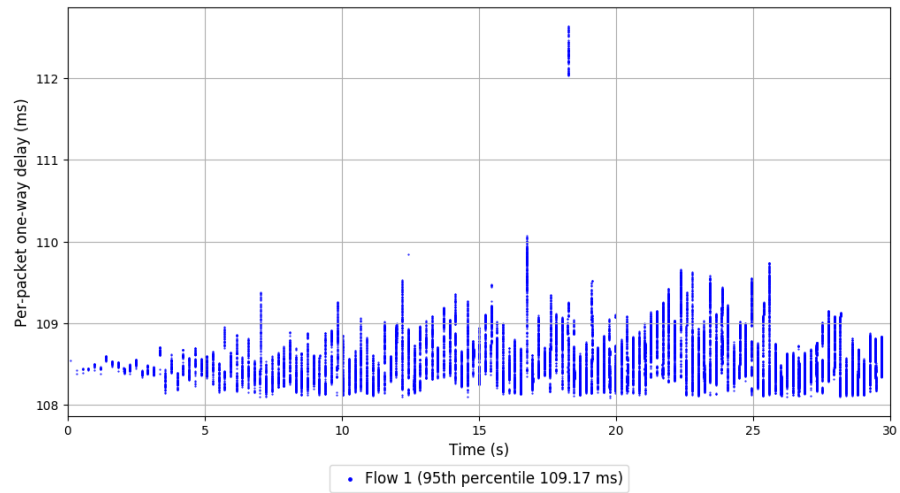
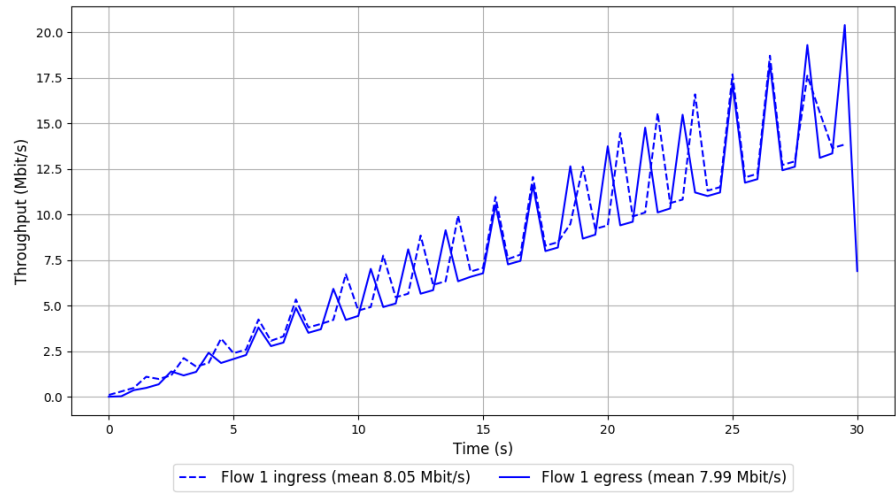


Run 2: Statistics of LEDBAT

Start at: 2019-07-17 16:36:57
End at: 2019-07-17 16:37:27
Local clock offset: 19.611 ms
Remote clock offset: 19.546 ms

Below is generated by plot.py at 2019-07-17 20:16:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 109.171 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 109.171 ms
Loss rate: 1.45%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2019-07-17 17:12:52

End at: 2019-07-17 17:13:22

Local clock offset: 18.713 ms

Remote clock offset: 14.56 ms

Below is generated by plot.py at 2019-07-17 20:16:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 108.103 ms

Loss rate: 1.45%

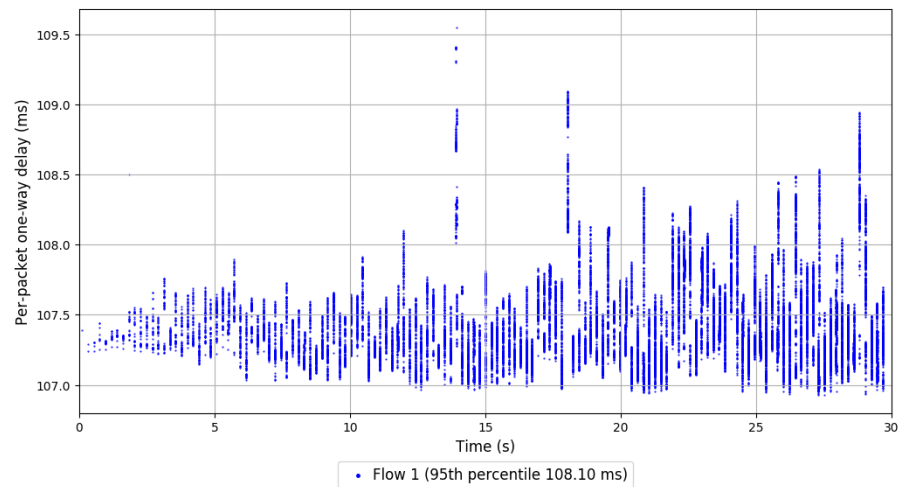
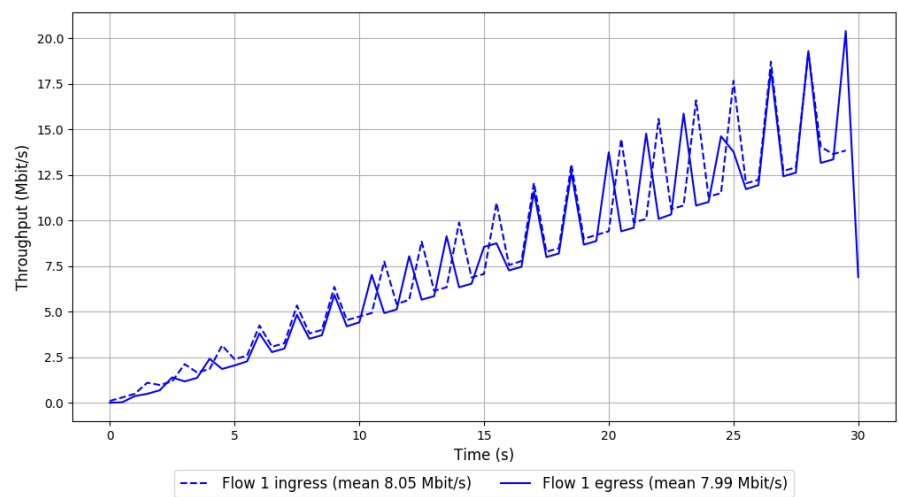
-- Flow 1:

Average throughput: 7.99 Mbit/s

95th percentile per-packet one-way delay: 108.103 ms

Loss rate: 1.45%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2019-07-17 17:49:01

End at: 2019-07-17 17:49:31

Local clock offset: 8.367 ms

Remote clock offset: 3.973 ms

Below is generated by plot.py at 2019-07-17 20:16:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 8.17 Mbit/s

95th percentile per-packet one-way delay: 107.391 ms

Loss rate: 1.43%

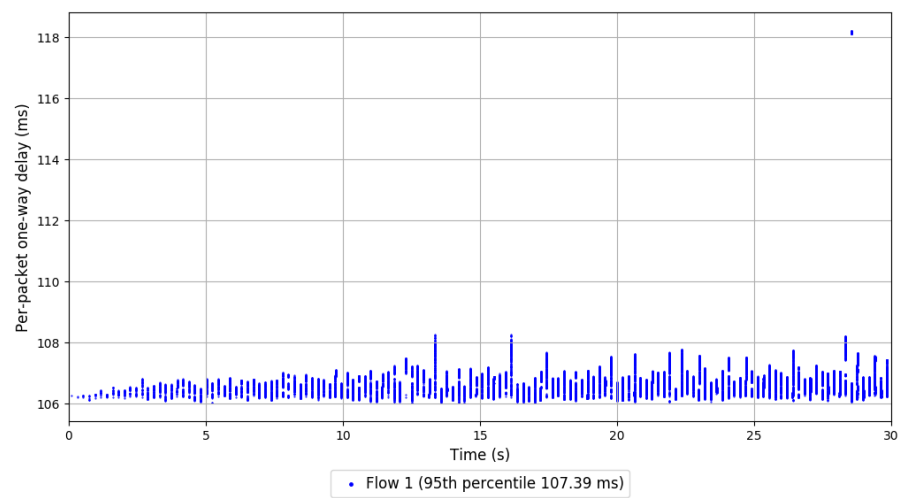
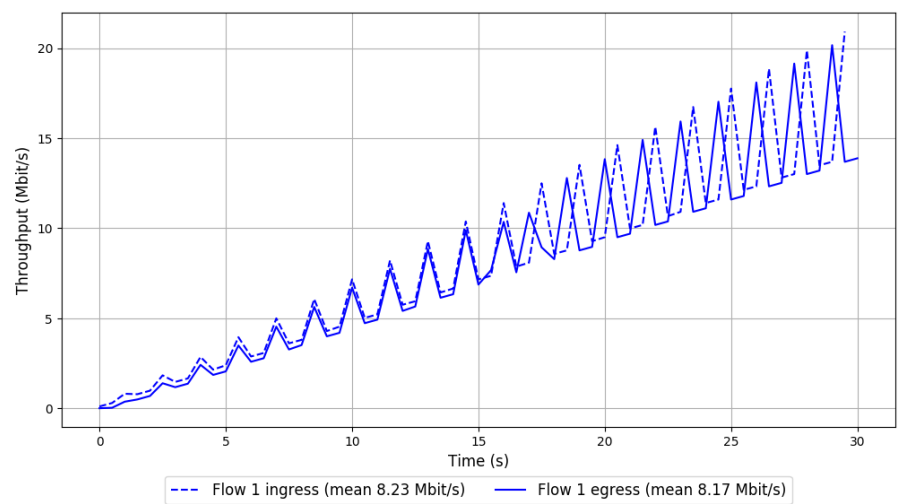
-- Flow 1:

Average throughput: 8.17 Mbit/s

95th percentile per-packet one-way delay: 107.391 ms

Loss rate: 1.43%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2019-07-17 18:25:18

End at: 2019-07-17 18:25:48

Local clock offset: 2.994 ms

Remote clock offset: 1.686 ms

Below is generated by plot.py at 2019-07-17 20:16:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 108.157 ms

Loss rate: 1.47%

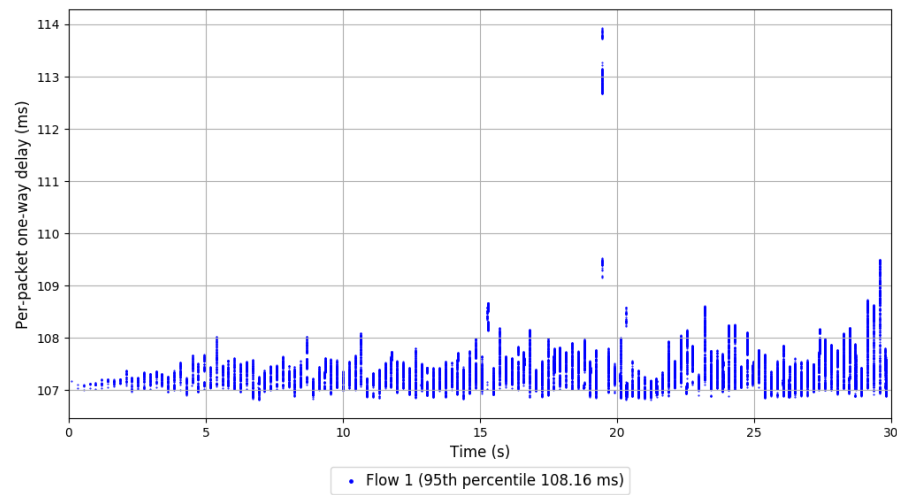
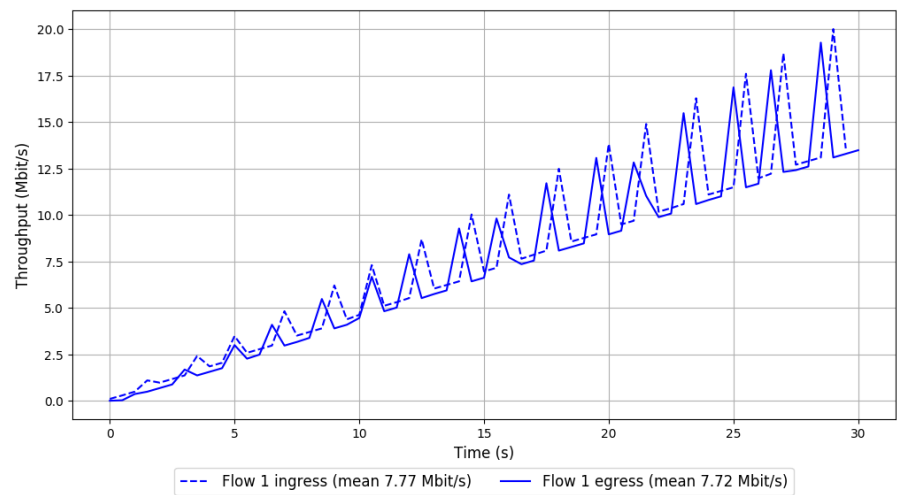
-- Flow 1:

Average throughput: 7.72 Mbit/s

95th percentile per-packet one-way delay: 108.157 ms

Loss rate: 1.47%

Run 5: Report of LEDBAT — Data Link

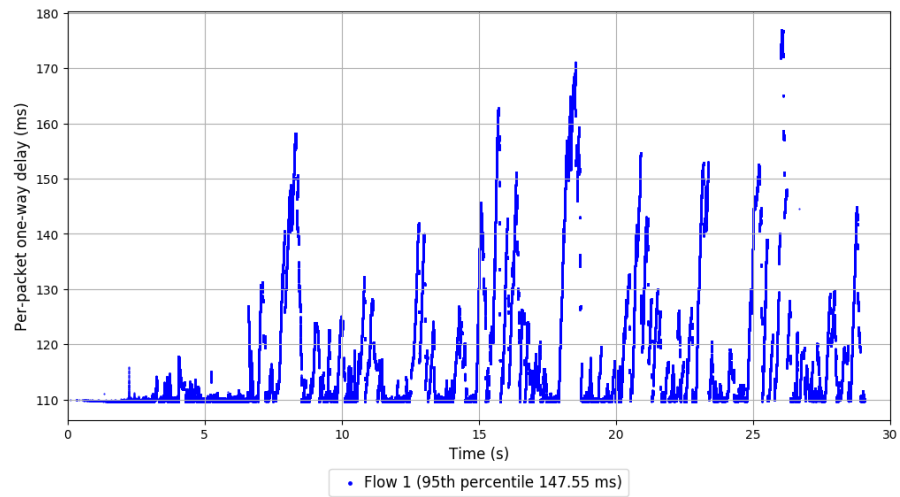
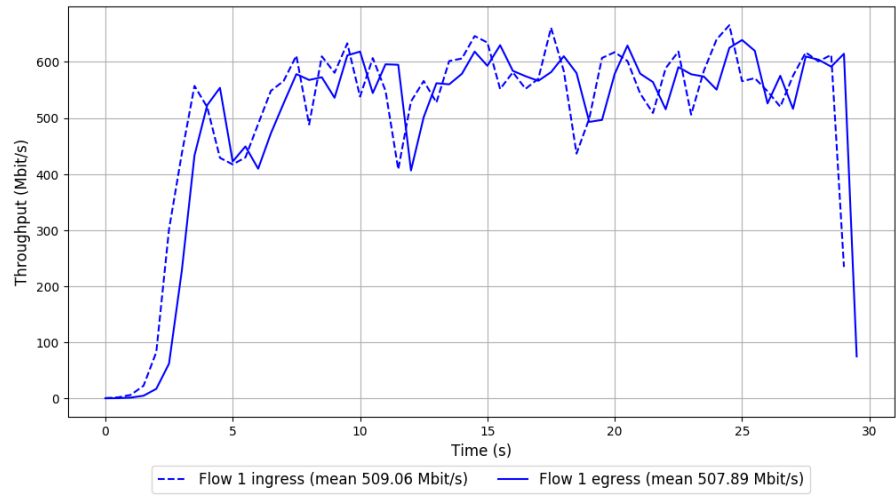


```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-07-17 16:05:24
End at: 2019-07-17 16:05:54
Local clock offset: 9.05 ms
Remote clock offset: 8.757 ms

# Below is generated by plot.py at 2019-07-17 20:16:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 507.89 Mbit/s
95th percentile per-packet one-way delay: 147.553 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 507.89 Mbit/s
95th percentile per-packet one-way delay: 147.553 ms
Loss rate: 0.98%
```

Run 1: Report of Muses_DecisionTree — Data Link

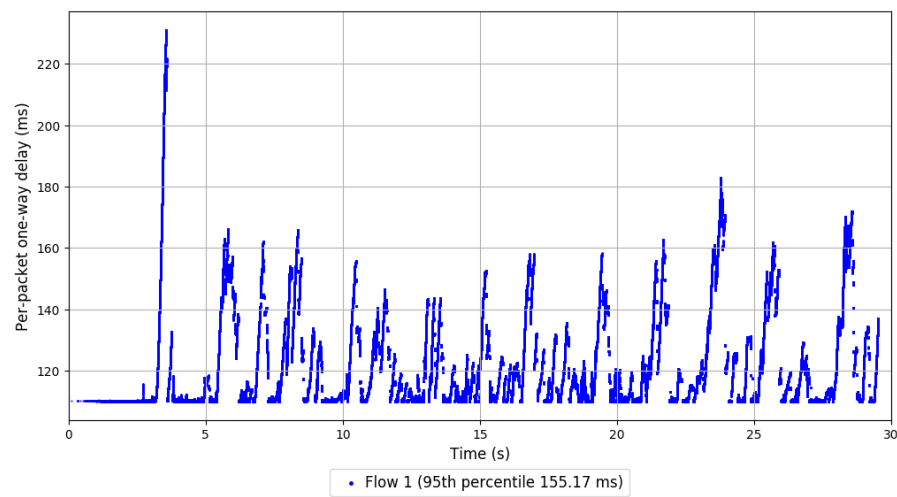
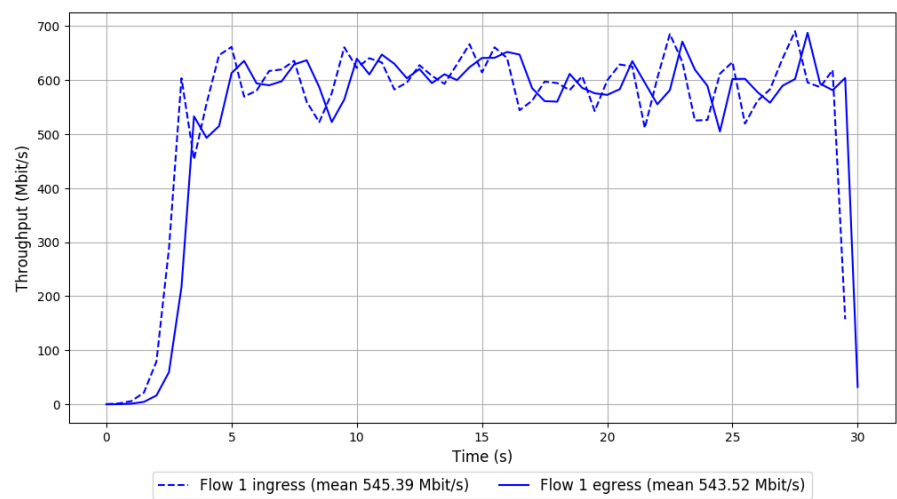


Run 2: Statistics of Muses_DecisionTree

Start at: 2019-07-17 16:41:22
End at: 2019-07-17 16:41:52
Local clock offset: 21.382 ms
Remote clock offset: 20.608 ms

Below is generated by plot.py at 2019-07-17 20:17:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 543.52 Mbit/s
95th percentile per-packet one-way delay: 155.174 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 543.52 Mbit/s
95th percentile per-packet one-way delay: 155.174 ms
Loss rate: 1.08%

Run 2: Report of Muses_DecisionTree — Data Link

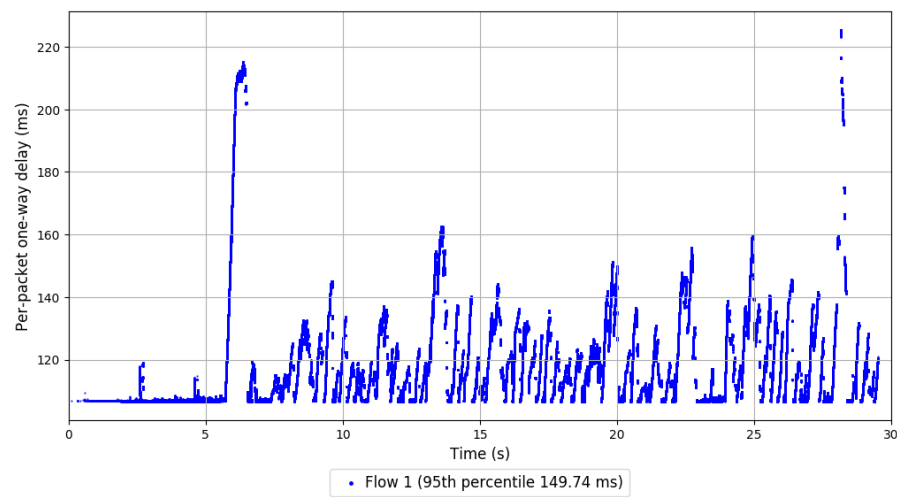
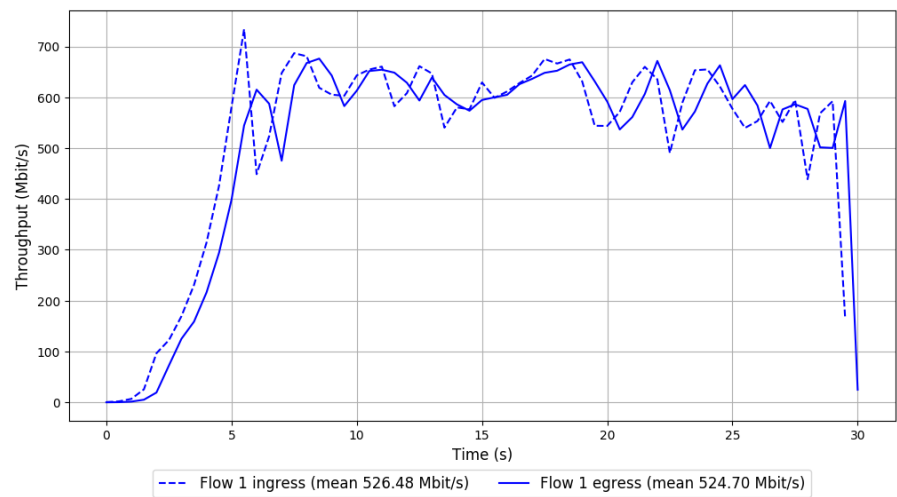


Run 3: Statistics of Muses_DecisionTree

Start at: 2019-07-17 17:17:12
End at: 2019-07-17 17:17:42
Local clock offset: 16.061 ms
Remote clock offset: 11.237 ms

Below is generated by plot.py at 2019-07-17 20:17:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 524.70 Mbit/s
95th percentile per-packet one-way delay: 149.739 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 524.70 Mbit/s
95th percentile per-packet one-way delay: 149.739 ms
Loss rate: 1.07%

Run 3: Report of Muses_DecisionTree — Data Link



Run 4: Statistics of Muses_DecisionTree

Start at: 2019-07-17 17:53:30

End at: 2019-07-17 17:54:00

Local clock offset: 7.776 ms

Remote clock offset: 3.535 ms

Below is generated by plot.py at 2019-07-17 20:22:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 529.25 Mbit/s

95th percentile per-packet one-way delay: 152.797 ms

Loss rate: 0.83%

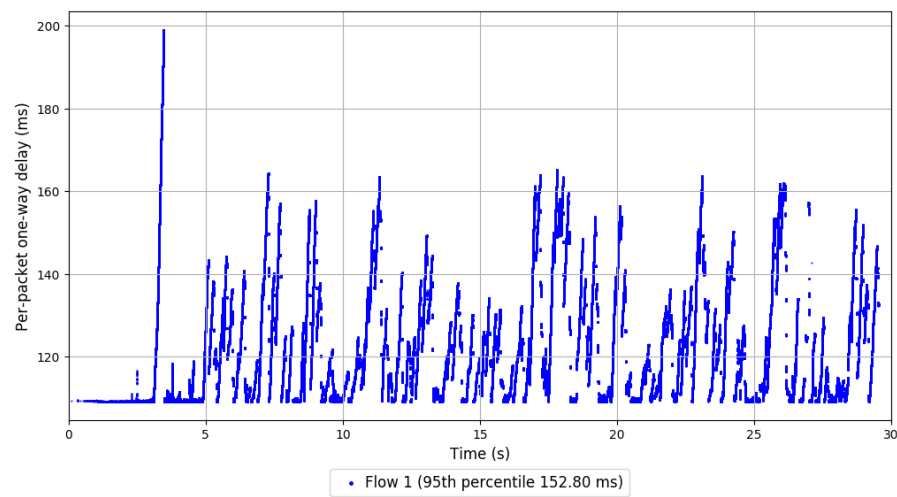
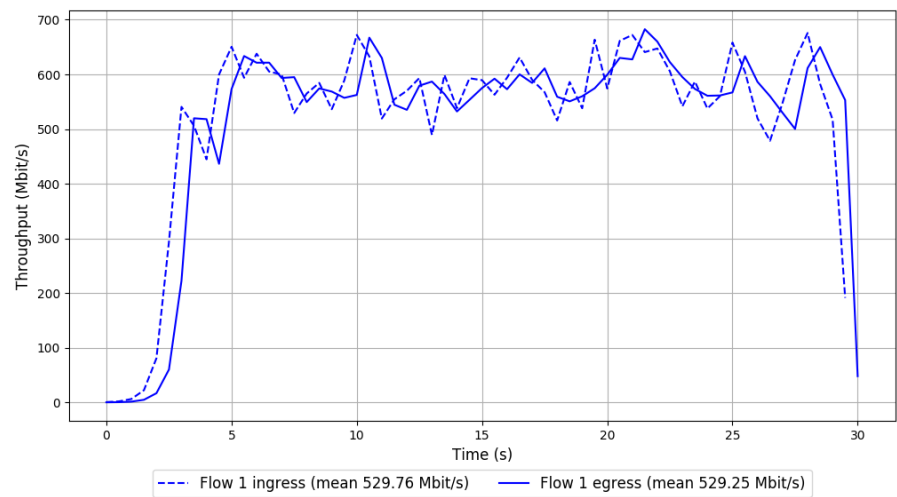
-- Flow 1:

Average throughput: 529.25 Mbit/s

95th percentile per-packet one-way delay: 152.797 ms

Loss rate: 0.83%

Run 4: Report of Muses_DecisionTree — Data Link



Run 5: Statistics of Muses_DecisionTree

Start at: 2019-07-17 18:29:45

End at: 2019-07-17 18:30:15

Local clock offset: 2.513 ms

Remote clock offset: 1.603 ms

Below is generated by plot.py at 2019-07-17 20:25:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 550.54 Mbit/s

95th percentile per-packet one-way delay: 139.586 ms

Loss rate: 0.96%

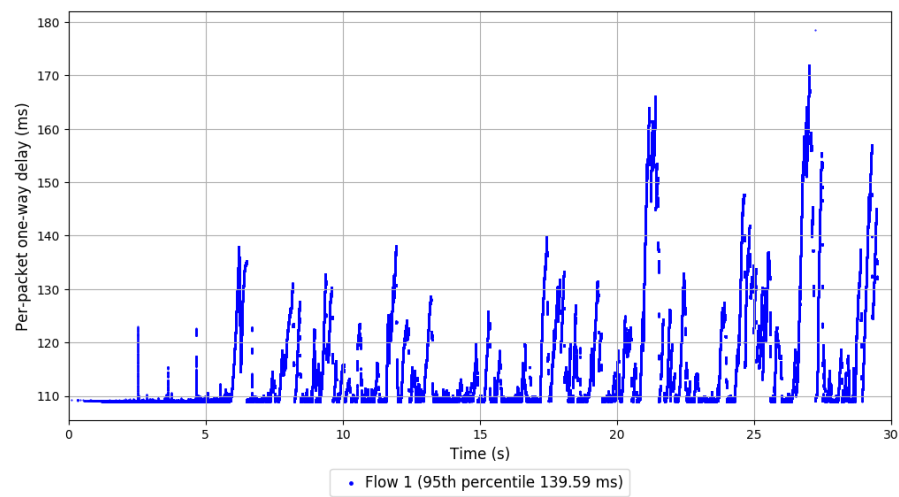
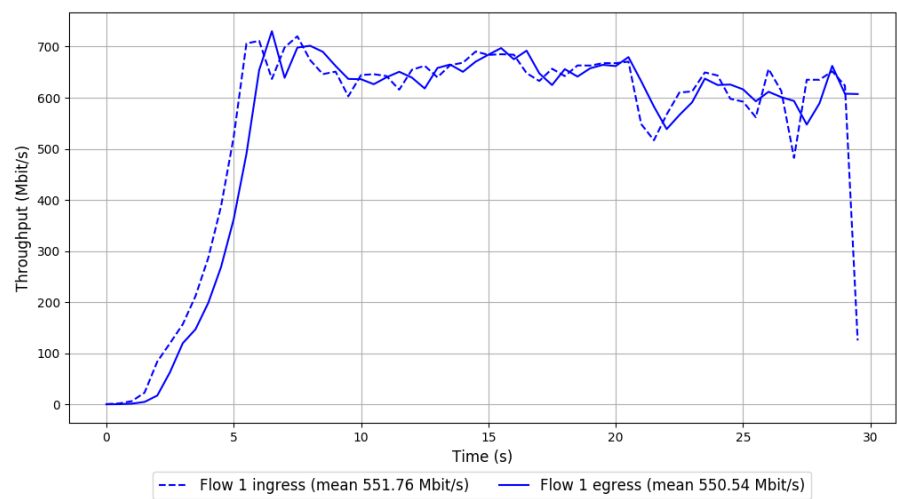
-- Flow 1:

Average throughput: 550.54 Mbit/s

95th percentile per-packet one-way delay: 139.586 ms

Loss rate: 0.96%

Run 5: Report of Muses_DecisionTree — Data Link

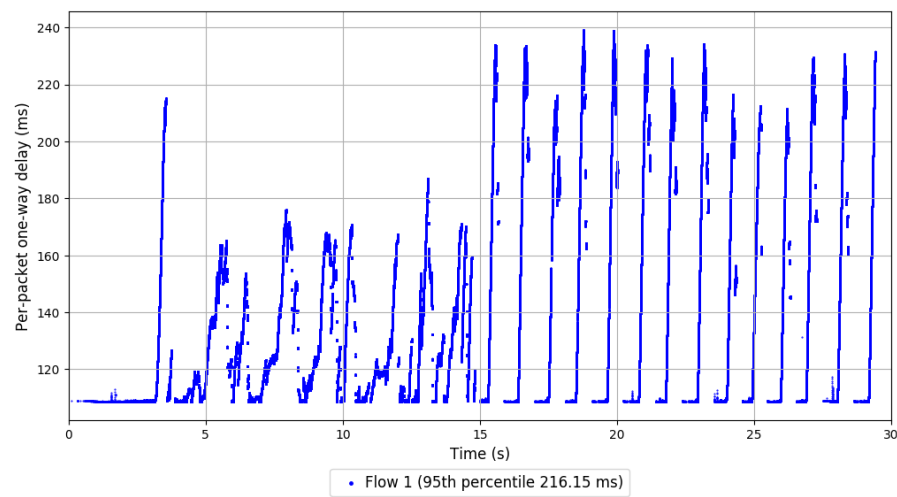
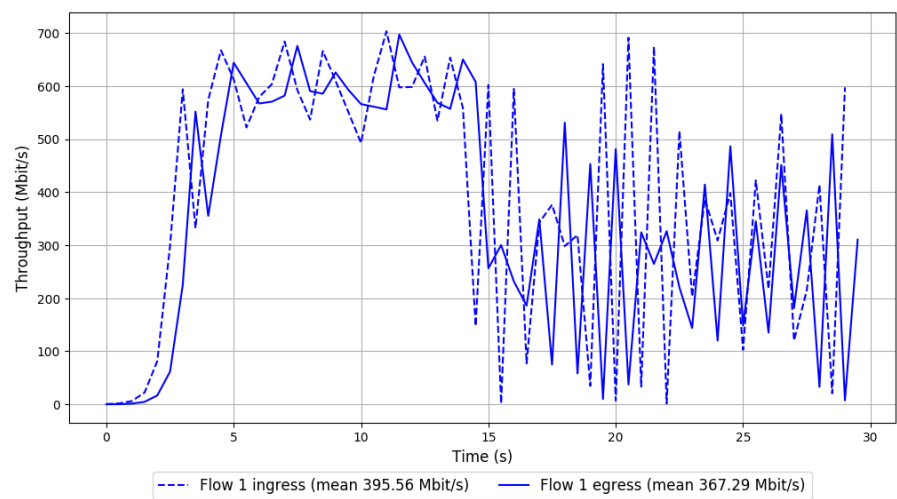



```
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2019-07-17 16:11:18
End at: 2019-07-17 16:11:48
Local clock offset: 17.676 ms
Remote clock offset: 17.38 ms

# Below is generated by plot.py at 2019-07-17 20:25:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 367.29 Mbit/s
95th percentile per-packet one-way delay: 216.149 ms
Loss rate: 7.41%
-- Flow 1:
Average throughput: 367.29 Mbit/s
95th percentile per-packet one-way delay: 216.149 ms
Loss rate: 7.41%
```

Run 1: Report of Muses_DecisionTreeH0 — Data Link

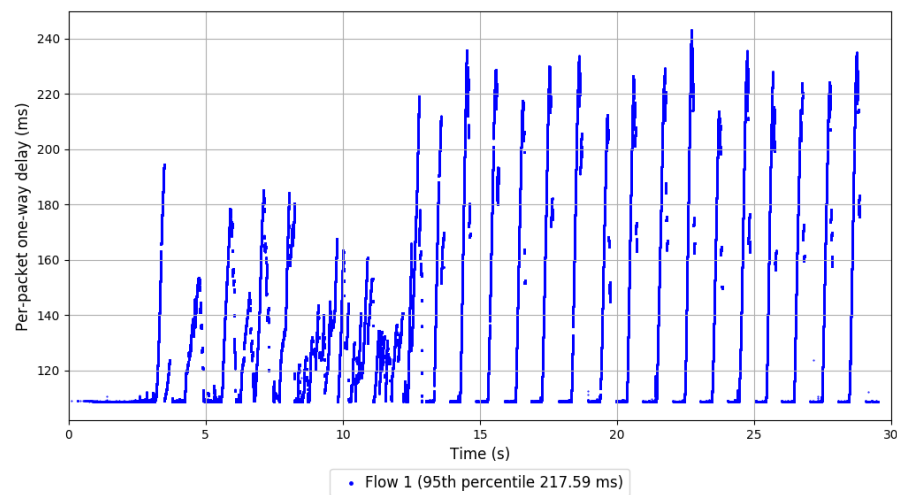
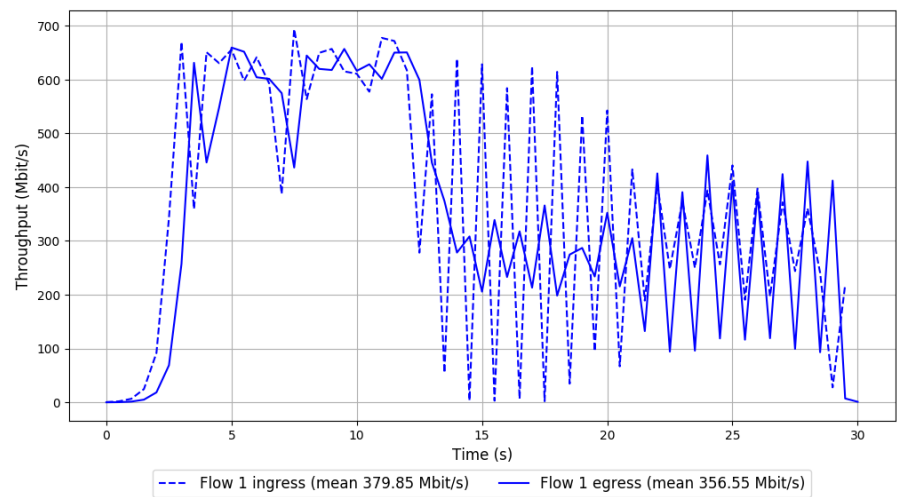


Run 2: Statistics of Muses_DecisionTreeH0

Start at: 2019-07-17 16:47:06
End at: 2019-07-17 16:47:36
Local clock offset: 24.964 ms
Remote clock offset: 24.543 ms

Below is generated by plot.py at 2019-07-17 20:25:03
Datalink statistics
-- Total of 1 flow:
Average throughput: 356.55 Mbit/s
95th percentile per-packet one-way delay: 217.585 ms
Loss rate: 6.83%
-- Flow 1:
Average throughput: 356.55 Mbit/s
95th percentile per-packet one-way delay: 217.585 ms
Loss rate: 6.83%

Run 2: Report of Muses_DecisionTreeH0 — Data Link



Run 3: Statistics of Muses_DecisionTreeH0

Start at: 2019-07-17 17:23:11

End at: 2019-07-17 17:23:41

Local clock offset: 15.71 ms

Remote clock offset: 9.185 ms

Below is generated by plot.py at 2019-07-17 20:25:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 342.57 Mbit/s

95th percentile per-packet one-way delay: 217.871 ms

Loss rate: 8.98%

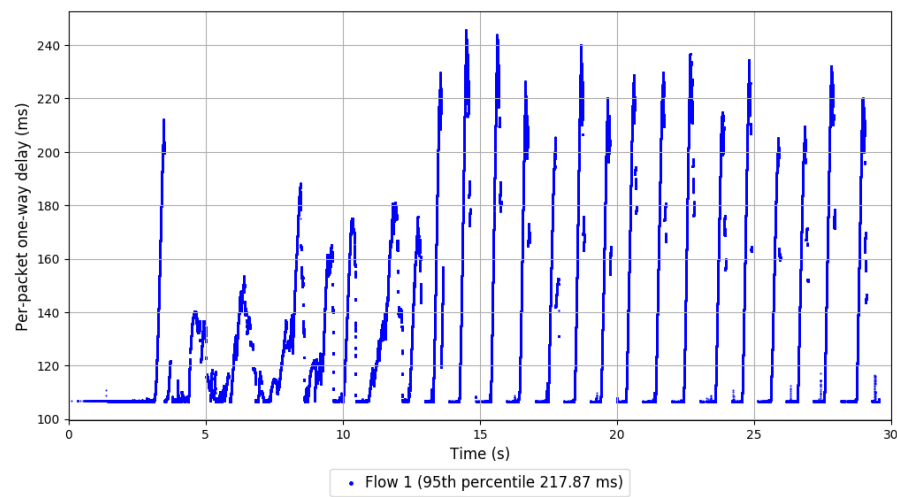
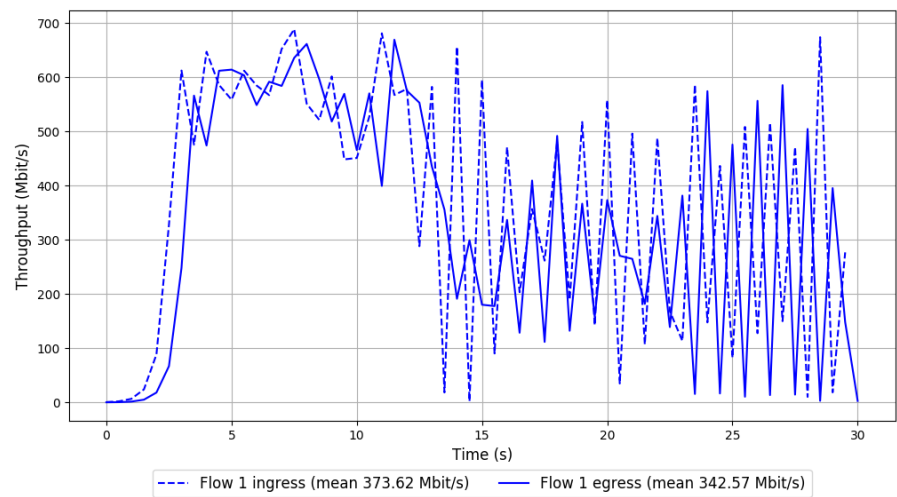
-- Flow 1:

Average throughput: 342.57 Mbit/s

95th percentile per-packet one-way delay: 217.871 ms

Loss rate: 8.98%

Run 3: Report of Muses_DecisionTreeH0 — Data Link



Run 4: Statistics of Muses_DecisionTreeH0

Start at: 2019-07-17 17:59:29

End at: 2019-07-17 18:00:00

Local clock offset: 7.925 ms

Remote clock offset: 3.614 ms

Below is generated by plot.py at 2019-07-17 20:25:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 266.13 Mbit/s

95th percentile per-packet one-way delay: 227.351 ms

Loss rate: 17.92%

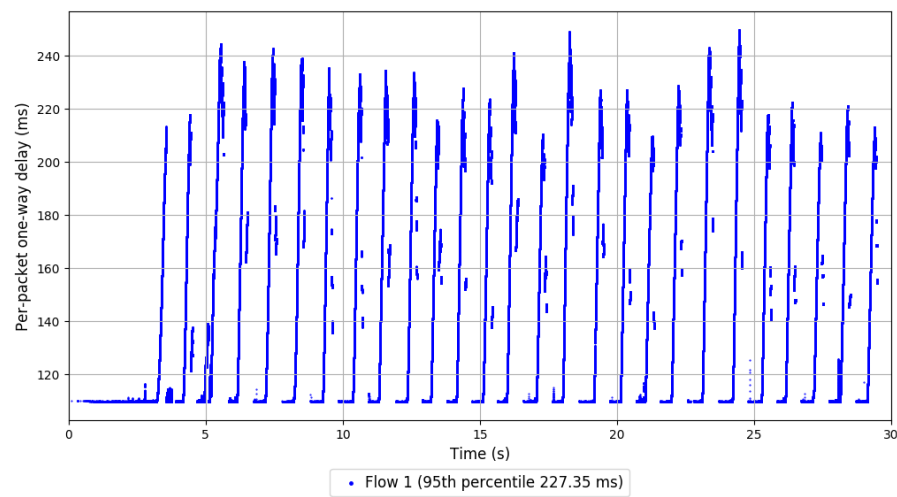
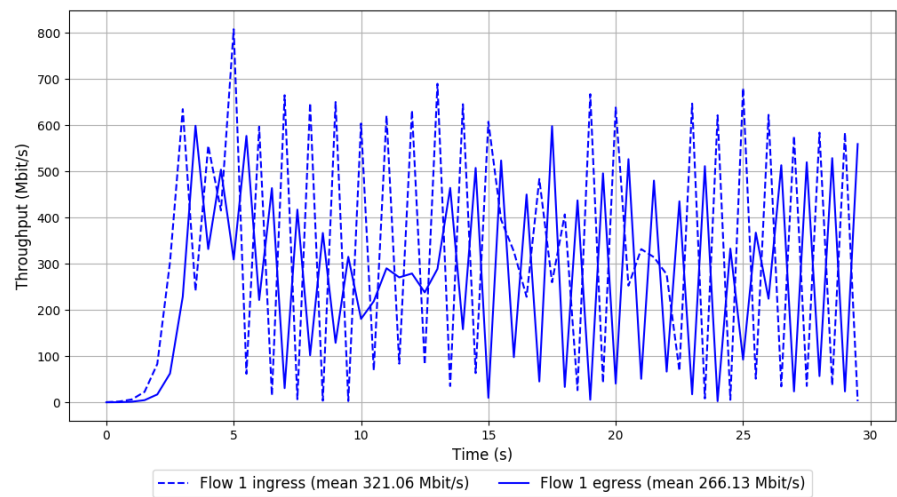
-- Flow 1:

Average throughput: 266.13 Mbit/s

95th percentile per-packet one-way delay: 227.351 ms

Loss rate: 17.92%

Run 4: Report of Muses_DecisionTreeH0 — Data Link



Run 5: Statistics of Muses_DecisionTreeH0

Start at: 2019-07-17 18:35:48

End at: 2019-07-17 18:36:18

Local clock offset: 2.372 ms

Remote clock offset: 1.704 ms

Below is generated by plot.py at 2019-07-17 20:25:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 259.82 Mbit/s

95th percentile per-packet one-way delay: 220.316 ms

Loss rate: 16.01%

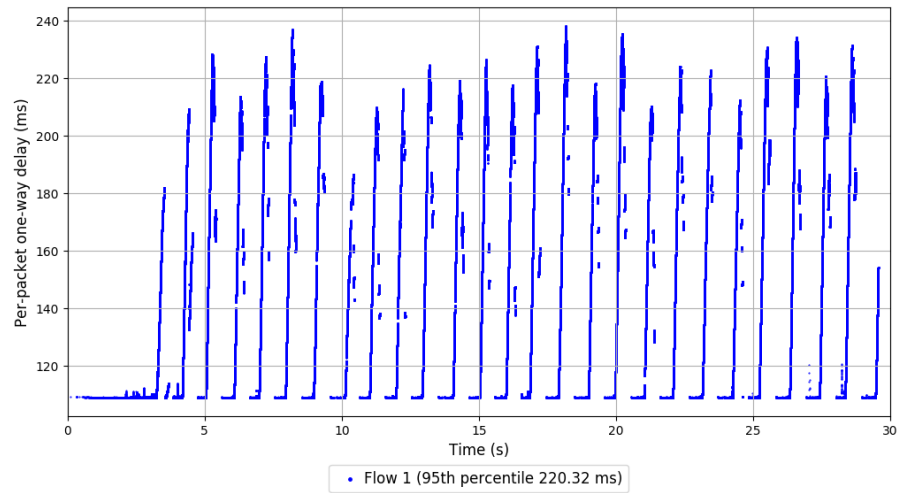
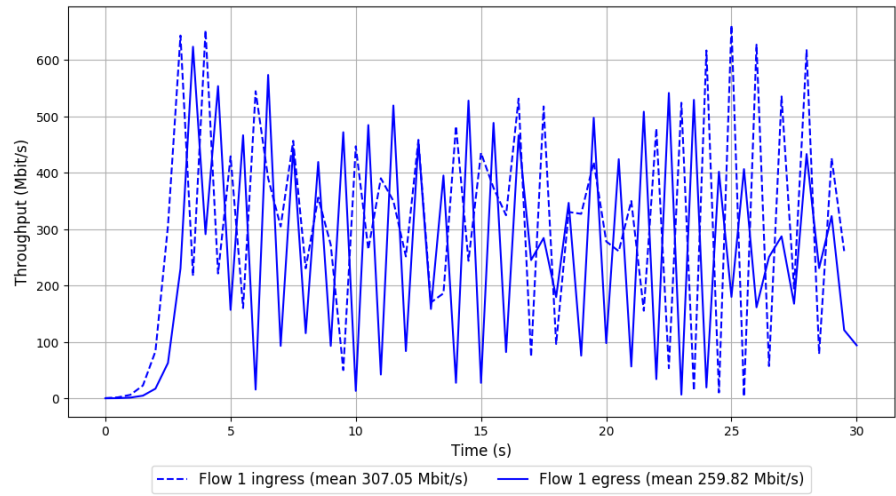
-- Flow 1:

Average throughput: 259.82 Mbit/s

95th percentile per-packet one-way delay: 220.316 ms

Loss rate: 16.01%

Run 5: Report of Muses_DecisionTreeH0 — Data Link

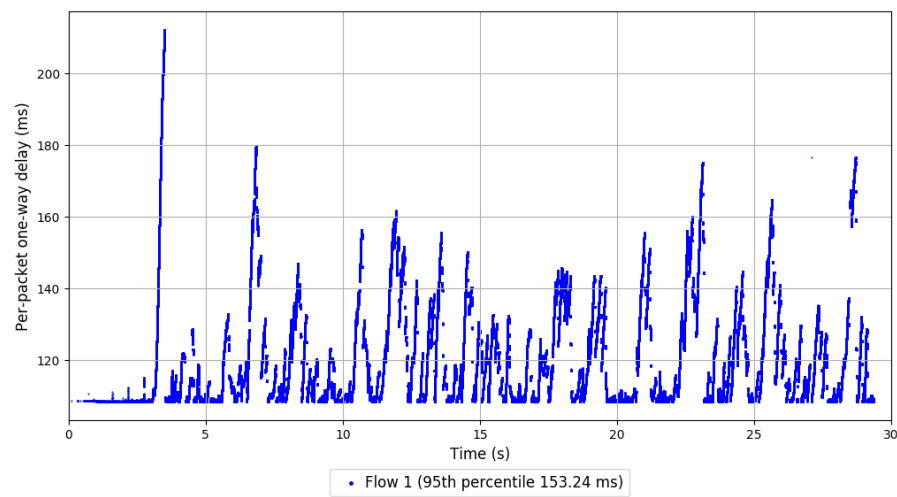
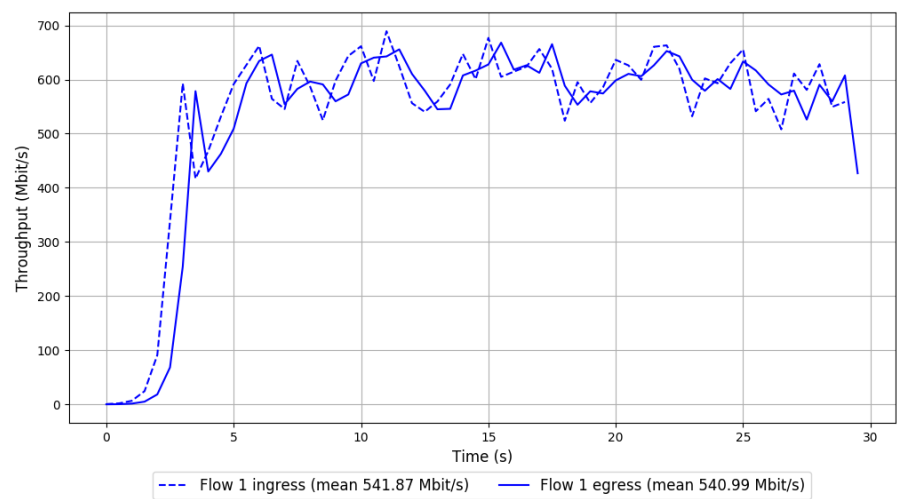


```
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-17 16:07:00
End at: 2019-07-17 16:07:30
Local clock offset: 10.049 ms
Remote clock offset: 10.186 ms

# Below is generated by plot.py at 2019-07-17 20:26:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 540.99 Mbit/s
95th percentile per-packet one-way delay: 153.239 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 540.99 Mbit/s
95th percentile per-packet one-way delay: 153.239 ms
Loss rate: 0.90%
```

Run 1: Report of Muses_DecisionTreeR0 — Data Link

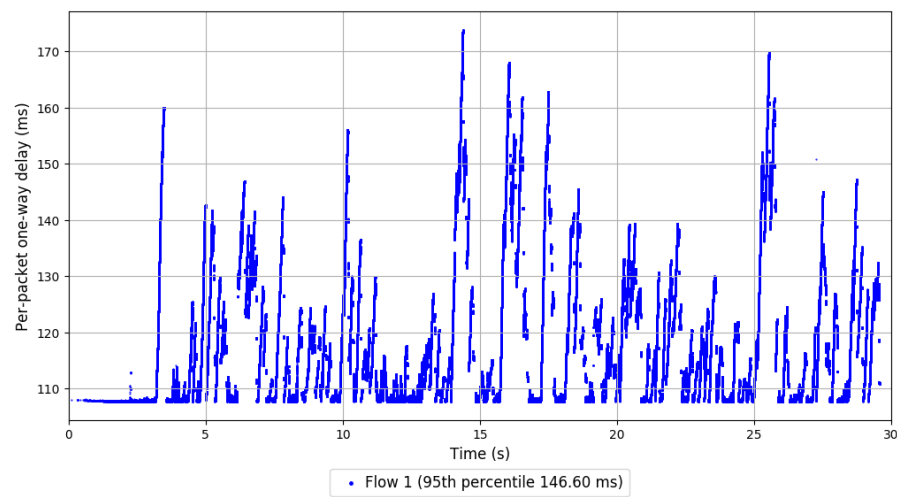
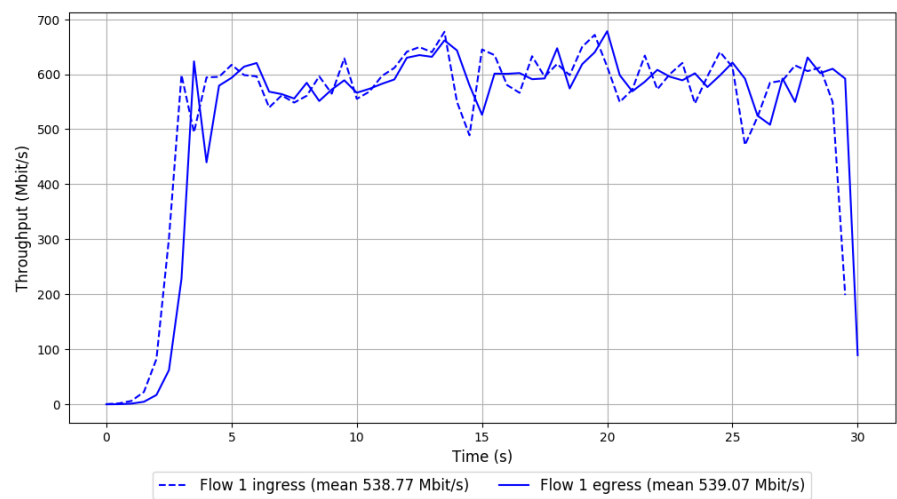


Run 2: Statistics of Muses_DecisionTreeR0

Start at: 2019-07-17 16:43:01
End at: 2019-07-17 16:43:31
Local clock offset: 21.339 ms
Remote clock offset: 21.594 ms

Below is generated by plot.py at 2019-07-17 20:30:30
Datalink statistics
-- Total of 1 flow:
Average throughput: 539.07 Mbit/s
95th percentile per-packet one-way delay: 146.600 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 539.07 Mbit/s
95th percentile per-packet one-way delay: 146.600 ms
Loss rate: 0.69%

Run 2: Report of Muses_DecisionTreeR0 — Data Link



Run 3: Statistics of Muses_DecisionTreeR0

Start at: 2019-07-17 17:18:49

End at: 2019-07-17 17:19:19

Local clock offset: 15.551 ms

Remote clock offset: 9.976 ms

Below is generated by plot.py at 2019-07-17 20:31:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 552.76 Mbit/s

95th percentile per-packet one-way delay: 148.147 ms

Loss rate: 0.83%

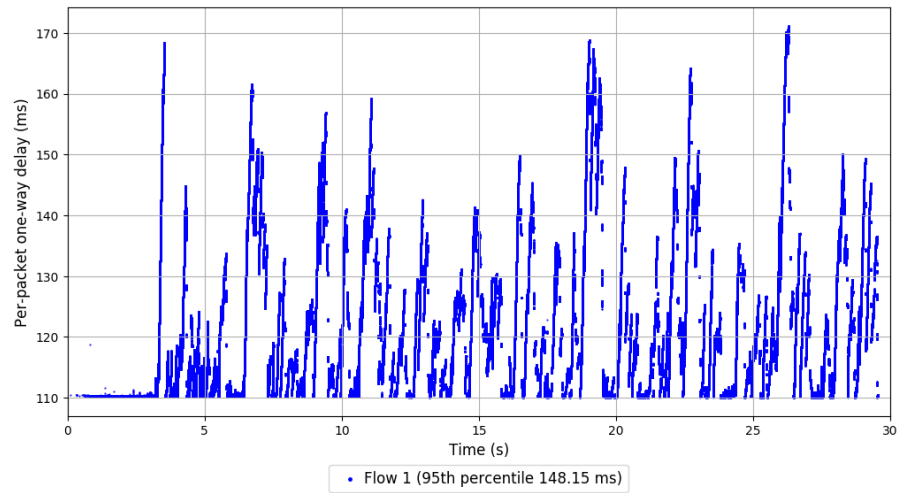
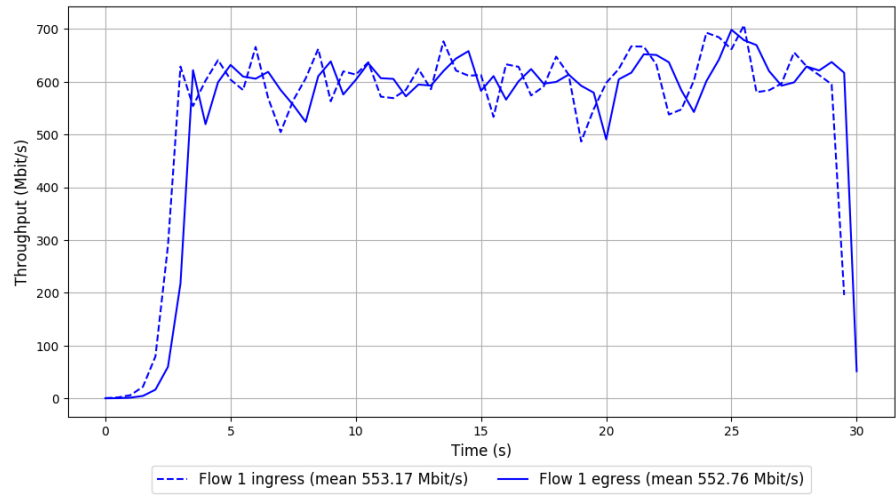
-- Flow 1:

Average throughput: 552.76 Mbit/s

95th percentile per-packet one-way delay: 148.147 ms

Loss rate: 0.83%

Run 3: Report of Muses_DecisionTreeR0 — Data Link



Run 4: Statistics of Muses_DecisionTreeR0

Start at: 2019-07-17 17:55:08

End at: 2019-07-17 17:55:38

Local clock offset: 7.37 ms

Remote clock offset: 3.549 ms

Below is generated by plot.py at 2019-07-17 20:31:28

Datalink statistics

-- Total of 1 flow:

Average throughput: 502.34 Mbit/s

95th percentile per-packet one-way delay: 154.819 ms

Loss rate: 1.03%

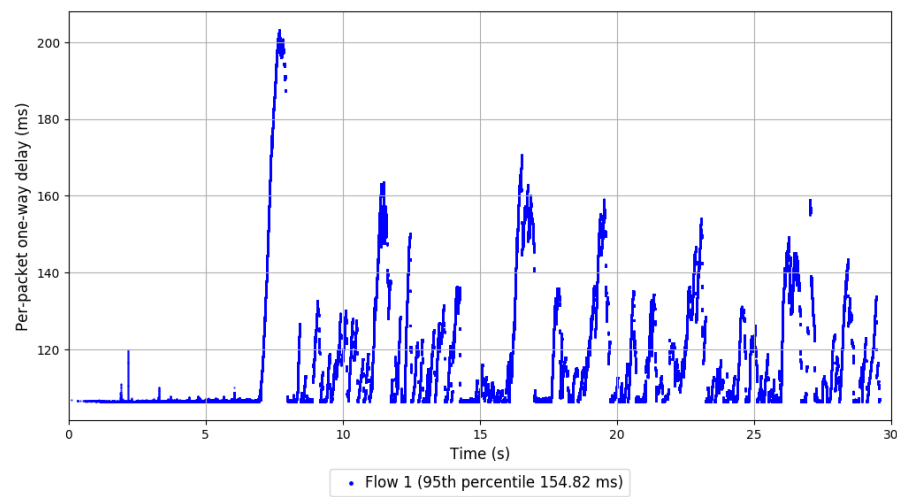
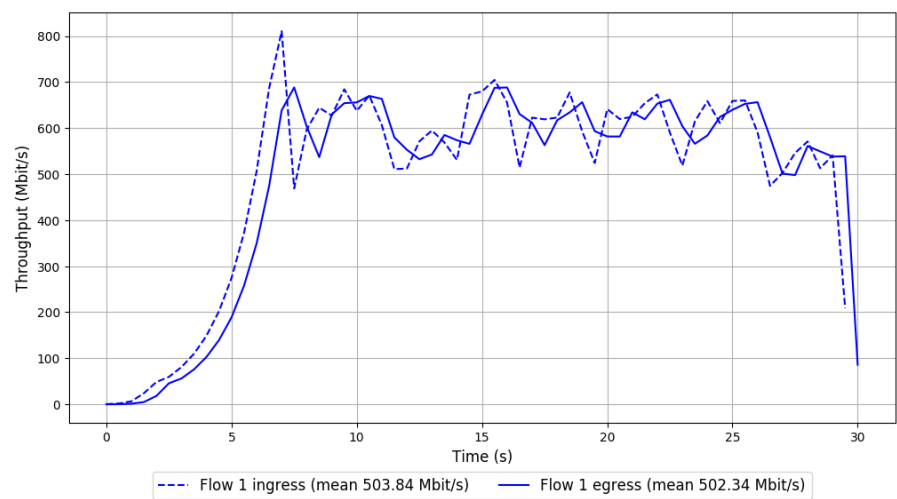
-- Flow 1:

Average throughput: 502.34 Mbit/s

95th percentile per-packet one-way delay: 154.819 ms

Loss rate: 1.03%

Run 4: Report of Muses_DecisionTreeR0 — Data Link



Run 5: Statistics of Muses_DecisionTreeR0

Start at: 2019-07-17 18:31:25

End at: 2019-07-17 18:31:55

Local clock offset: 2.415 ms

Remote clock offset: 1.631 ms

Below is generated by plot.py at 2019-07-17 20:32:30

Datalink statistics

-- Total of 1 flow:

Average throughput: 537.32 Mbit/s

95th percentile per-packet one-way delay: 161.066 ms

Loss rate: 0.90%

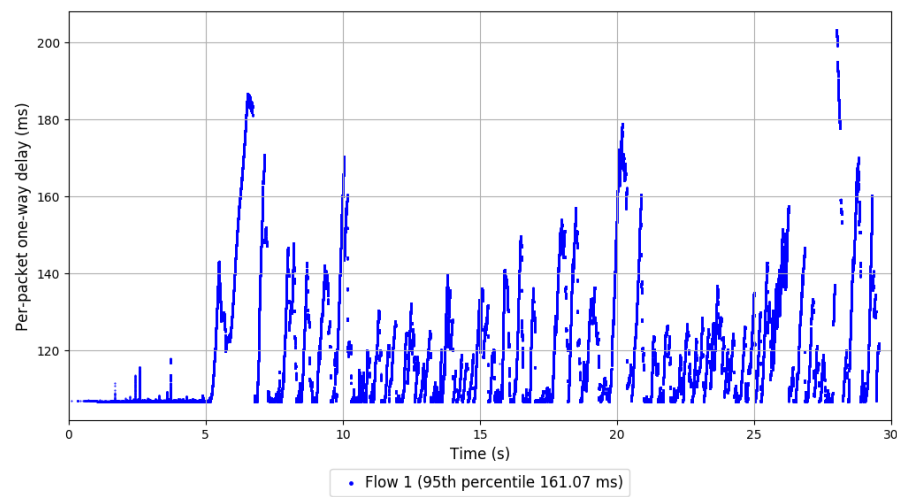
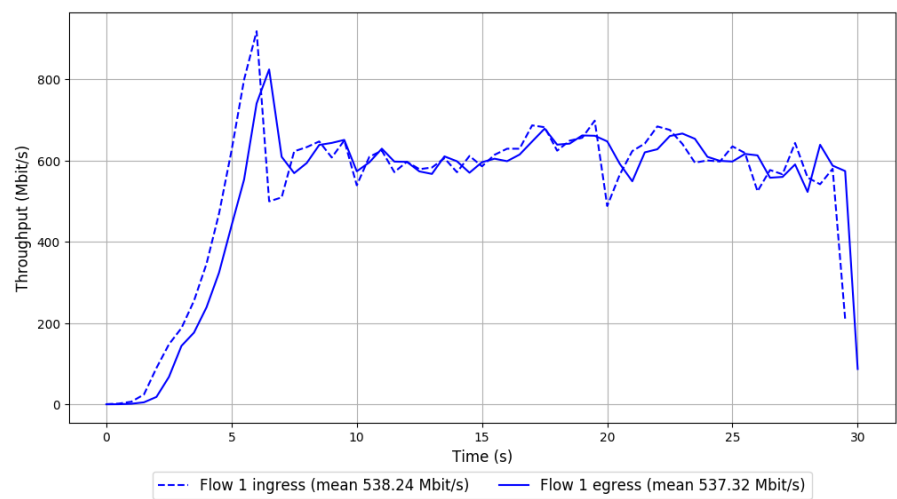
-- Flow 1:

Average throughput: 537.32 Mbit/s

95th percentile per-packet one-way delay: 161.066 ms

Loss rate: 0.90%

Run 5: Report of Muses_DecisionTreeR0 — Data Link



Run 1: Statistics of PCC-Allegro

Start at: 2019-07-17 16:13:58

End at: 2019-07-17 16:14:28

Local clock offset: 14.399 ms

Remote clock offset: 13.626 ms

Below is generated by plot.py at 2019-07-17 20:35:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 391.50 Mbit/s

95th percentile per-packet one-way delay: 227.739 ms

Loss rate: 3.52%

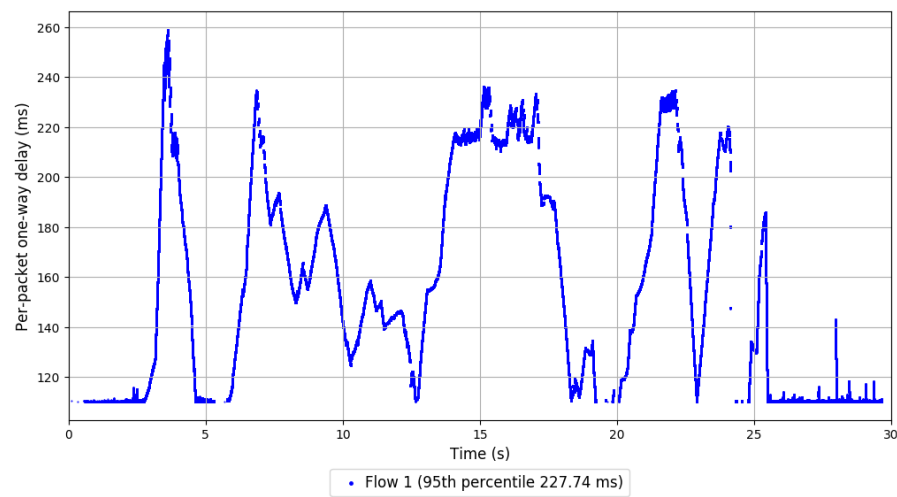
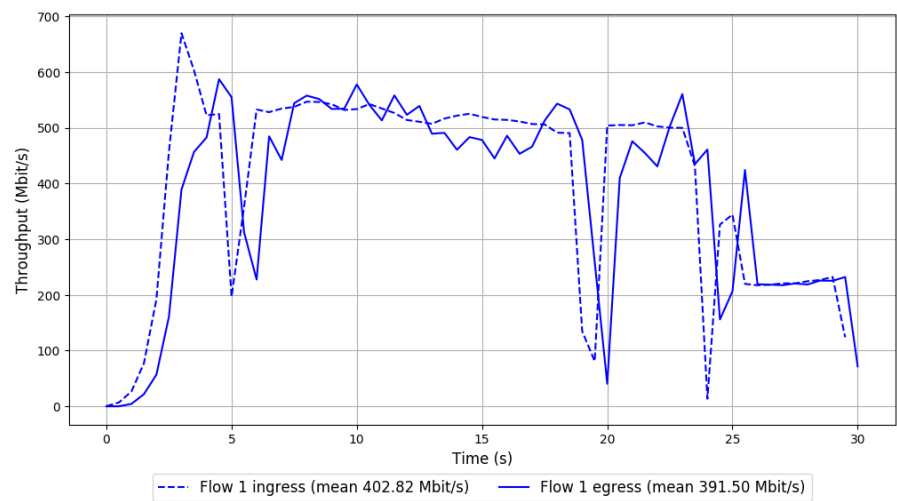
-- Flow 1:

Average throughput: 391.50 Mbit/s

95th percentile per-packet one-way delay: 227.739 ms

Loss rate: 3.52%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-07-17 16:49:44

End at: 2019-07-17 16:50:15

Local clock offset: 27.32 ms

Remote clock offset: 26.58 ms

Below is generated by plot.py at 2019-07-17 20:35:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 356.11 Mbit/s

95th percentile per-packet one-way delay: 199.917 ms

Loss rate: 2.35%

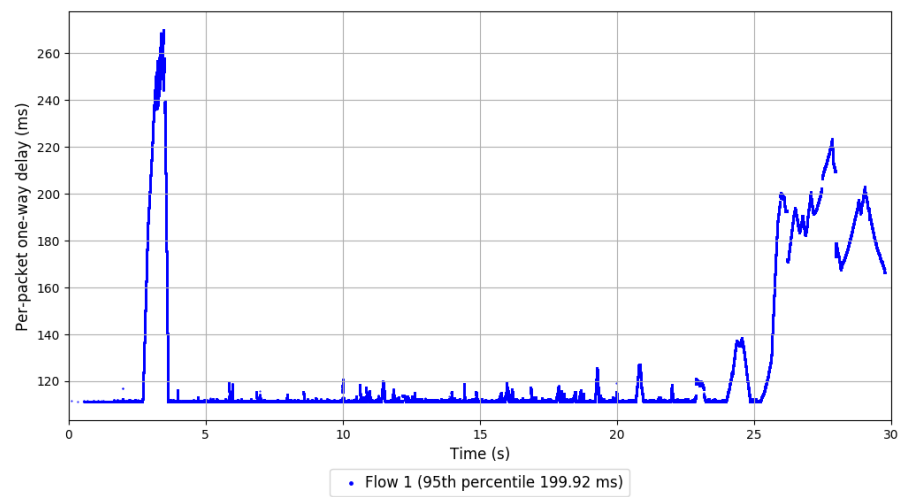
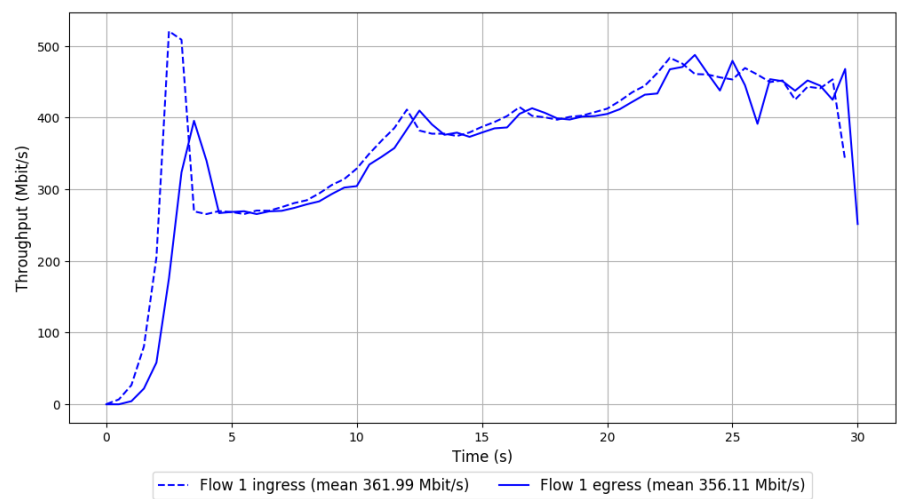
-- Flow 1:

Average throughput: 356.11 Mbit/s

95th percentile per-packet one-way delay: 199.917 ms

Loss rate: 2.35%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-07-17 17:25:50

End at: 2019-07-17 17:26:20

Local clock offset: 16.253 ms

Remote clock offset: 8.965 ms

Below is generated by plot.py at 2019-07-17 20:35:40

Datalink statistics

-- Total of 1 flow:

Average throughput: 319.39 Mbit/s

95th percentile per-packet one-way delay: 165.162 ms

Loss rate: 2.29%

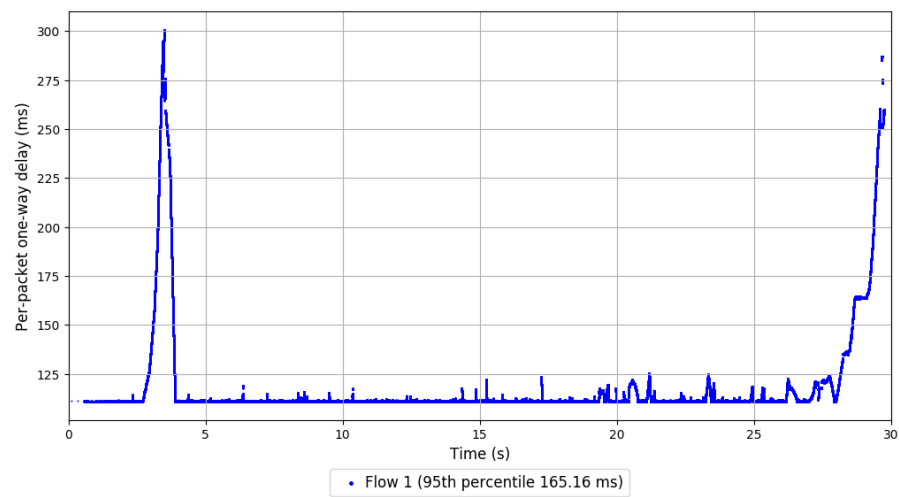
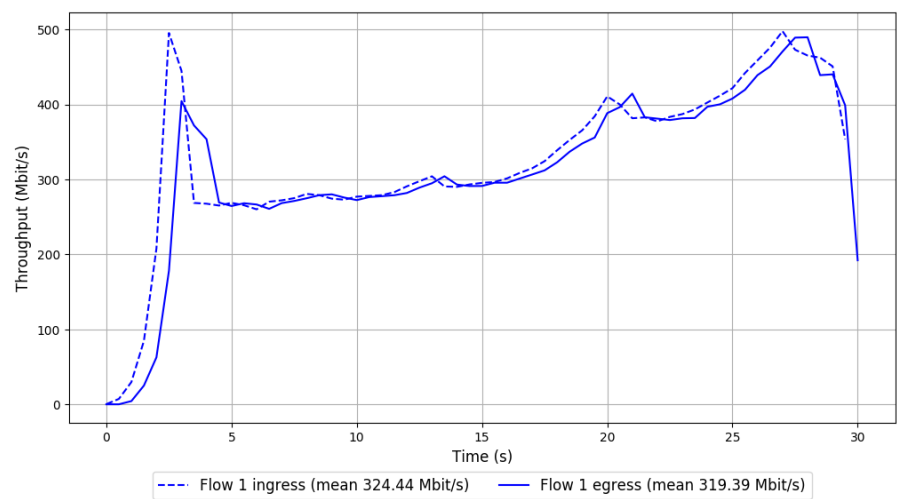
-- Flow 1:

Average throughput: 319.39 Mbit/s

95th percentile per-packet one-way delay: 165.162 ms

Loss rate: 2.29%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-07-17 18:02:05

End at: 2019-07-17 18:02:35

Local clock offset: 8.206 ms

Remote clock offset: 3.806 ms

Below is generated by plot.py at 2019-07-17 20:40:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 389.51 Mbit/s

95th percentile per-packet one-way delay: 229.779 ms

Loss rate: 9.12%

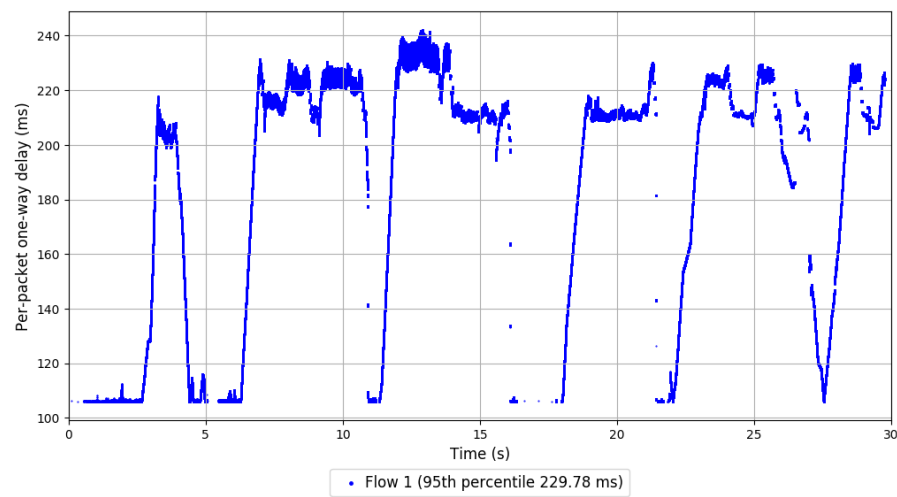
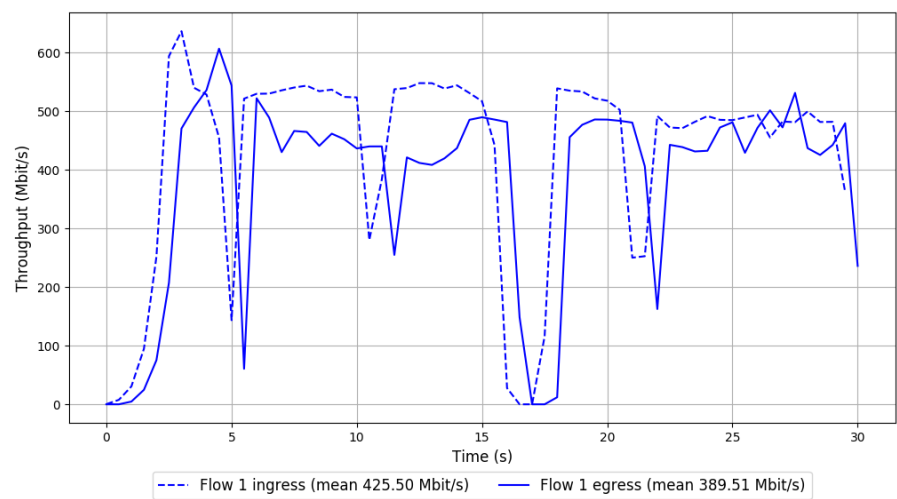
-- Flow 1:

Average throughput: 389.51 Mbit/s

95th percentile per-packet one-way delay: 229.779 ms

Loss rate: 9.12%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-07-17 18:38:23

End at: 2019-07-17 18:38:53

Local clock offset: 2.417 ms

Remote clock offset: 1.824 ms

Below is generated by plot.py at 2019-07-17 20:45:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 390.58 Mbit/s

95th percentile per-packet one-way delay: 232.619 ms

Loss rate: 10.84%

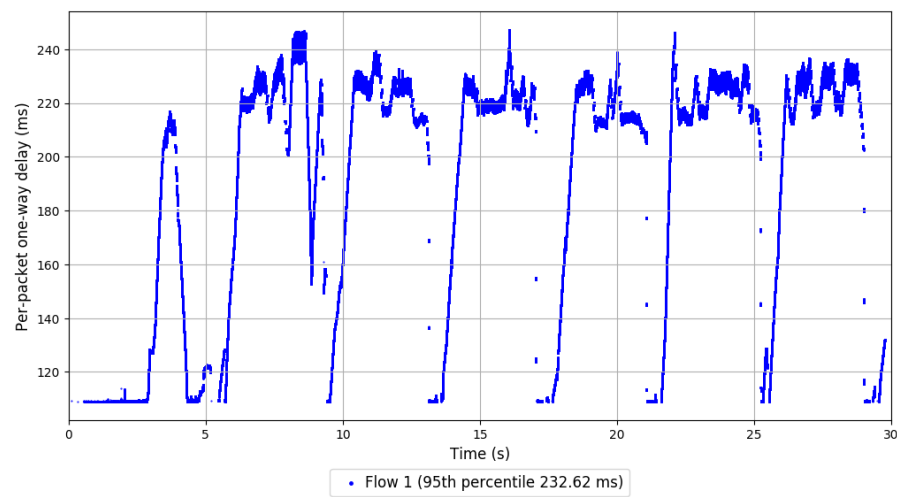
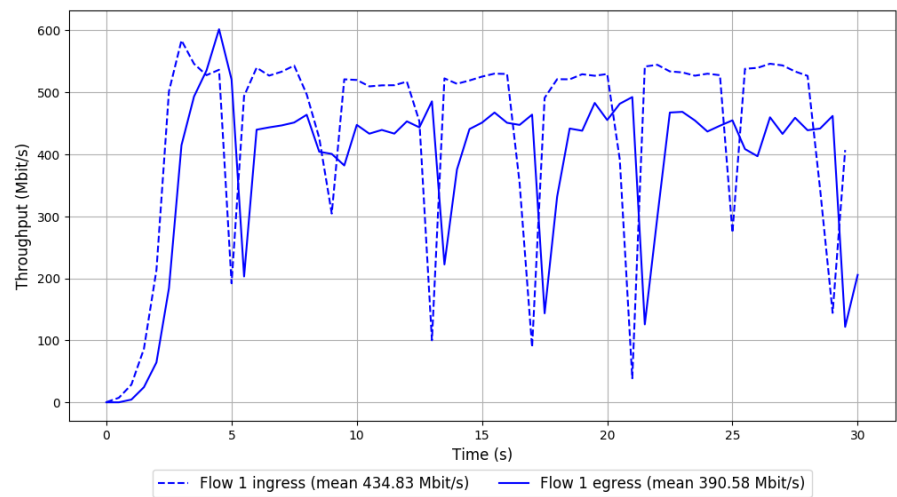
-- Flow 1:

Average throughput: 390.58 Mbit/s

95th percentile per-packet one-way delay: 232.619 ms

Loss rate: 10.84%

Run 5: Report of PCC-Allegro — Data Link

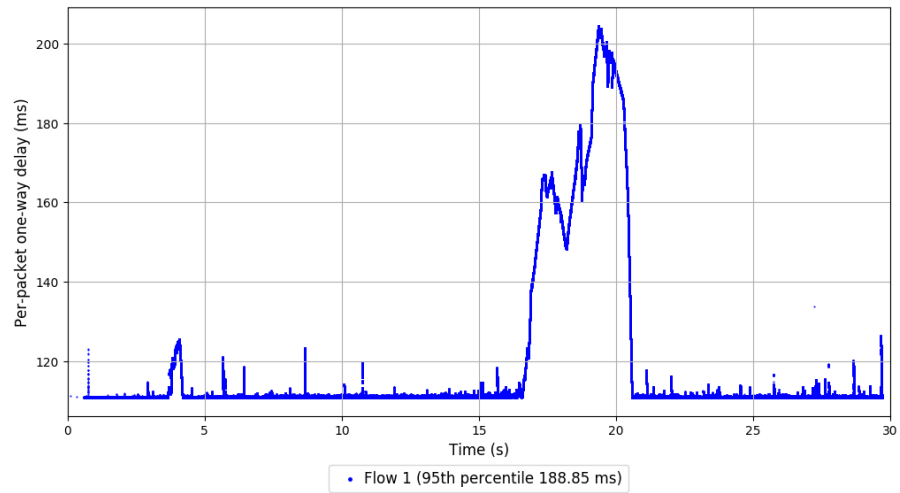
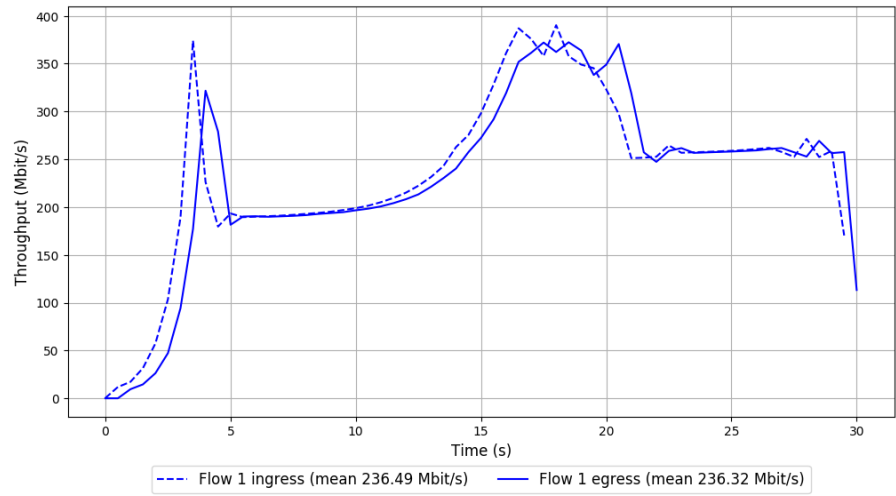


```
Run 1: Statistics of PCC-Expr

Start at: 2019-07-17 16:21:12
End at: 2019-07-17 16:21:42
Local clock offset: 17.186 ms
Remote clock offset: 16.793 ms

# Below is generated by plot.py at 2019-07-17 20:45:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 236.32 Mbit/s
95th percentile per-packet one-way delay: 188.854 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 236.32 Mbit/s
95th percentile per-packet one-way delay: 188.854 ms
Loss rate: 0.81%
```

Run 1: Report of PCC-Expr — Data Link

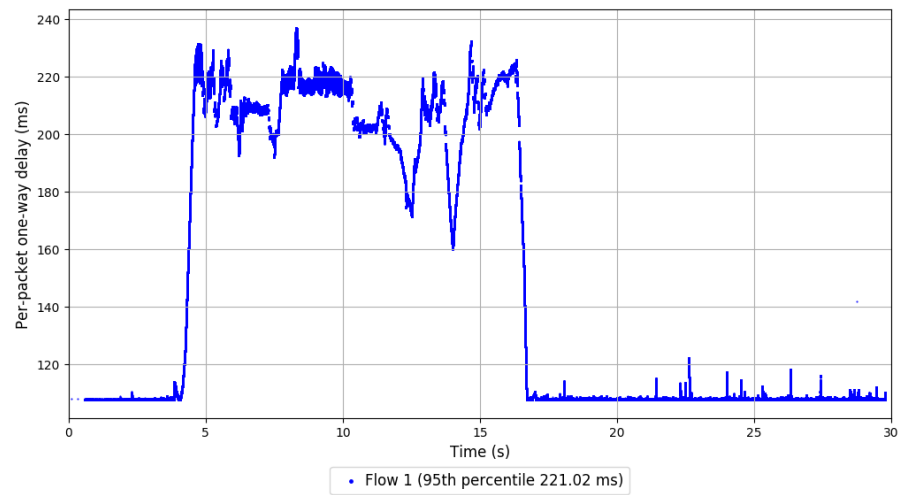
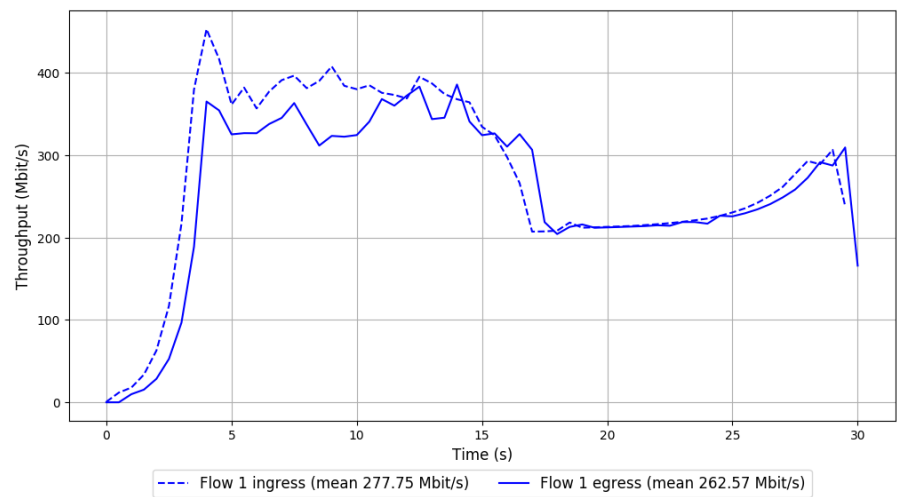


Run 2: Statistics of PCC-Expr

Start at: 2019-07-17 16:57:05
End at: 2019-07-17 16:57:35
Local clock offset: 34.039 ms
Remote clock offset: 34.029 ms

Below is generated by plot.py at 2019-07-17 20:45:13
Datalink statistics
-- Total of 1 flow:
Average throughput: 262.57 Mbit/s
95th percentile per-packet one-way delay: 221.022 ms
Loss rate: 6.16%
-- Flow 1:
Average throughput: 262.57 Mbit/s
95th percentile per-packet one-way delay: 221.022 ms
Loss rate: 6.16%

Run 2: Report of PCC-Expr — Data Link



Run 3: Statistics of PCC-Expr

Start at: 2019-07-17 17:33:10

End at: 2019-07-17 17:33:40

Local clock offset: 18.912 ms

Remote clock offset: 9.481 ms

Below is generated by plot.py at 2019-07-17 20:45:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 310.39 Mbit/s

95th percentile per-packet one-way delay: 217.799 ms

Loss rate: 5.29%

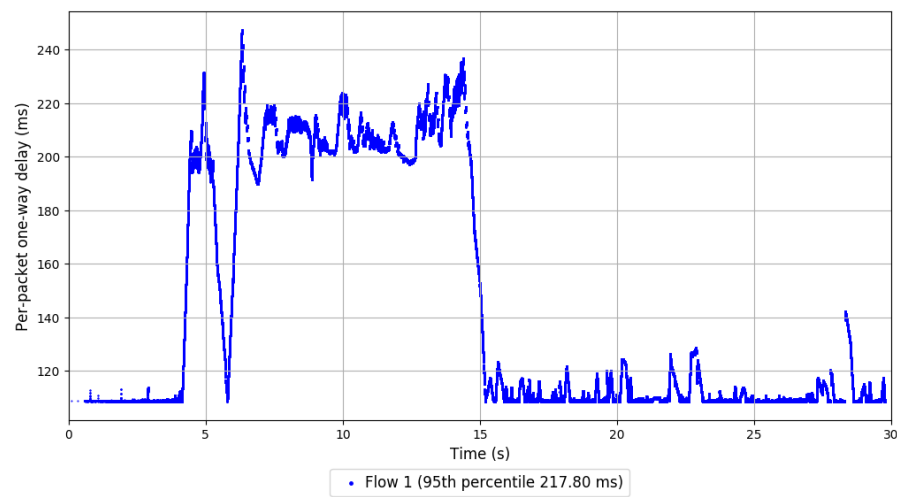
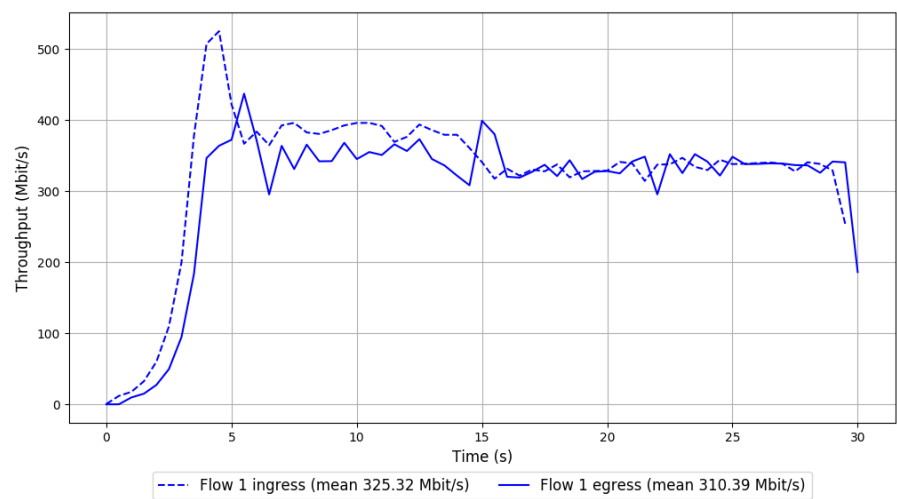
-- Flow 1:

Average throughput: 310.39 Mbit/s

95th percentile per-packet one-way delay: 217.799 ms

Loss rate: 5.29%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2019-07-17 18:09:21

End at: 2019-07-17 18:09:51

Local clock offset: 9.706 ms

Remote clock offset: 4.4 ms

Below is generated by plot.py at 2019-07-17 20:46:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 319.54 Mbit/s

95th percentile per-packet one-way delay: 218.767 ms

Loss rate: 5.02%

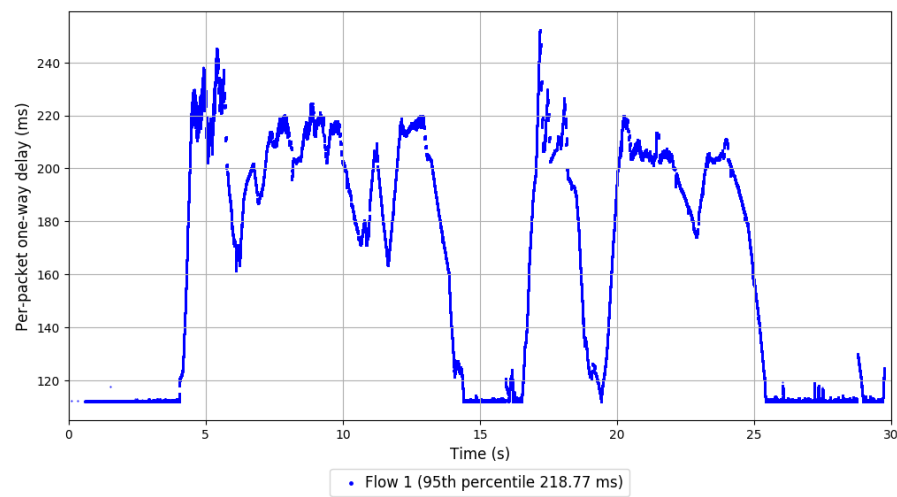
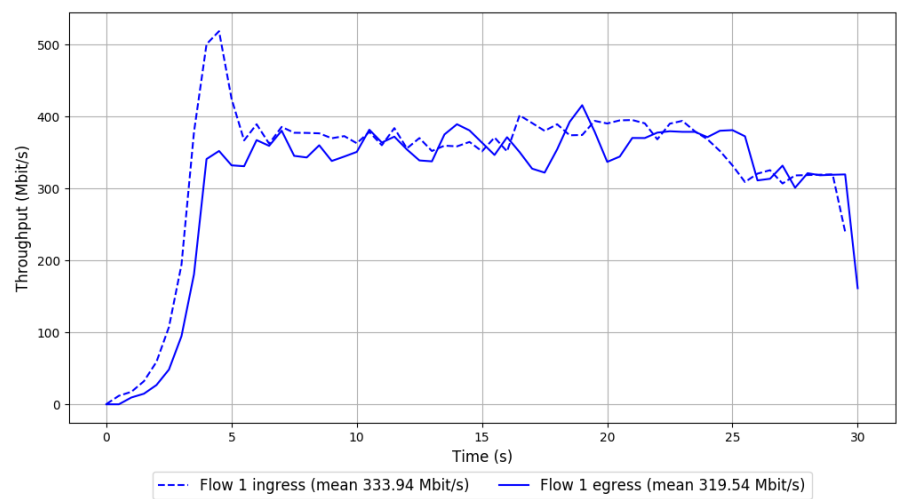
-- Flow 1:

Average throughput: 319.54 Mbit/s

95th percentile per-packet one-way delay: 218.767 ms

Loss rate: 5.02%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2019-07-17 18:45:43

End at: 2019-07-17 18:46:13

Local clock offset: 3.187 ms

Remote clock offset: 1.962 ms

Below is generated by plot.py at 2019-07-17 20:47:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 298.57 Mbit/s

95th percentile per-packet one-way delay: 206.262 ms

Loss rate: 2.19%

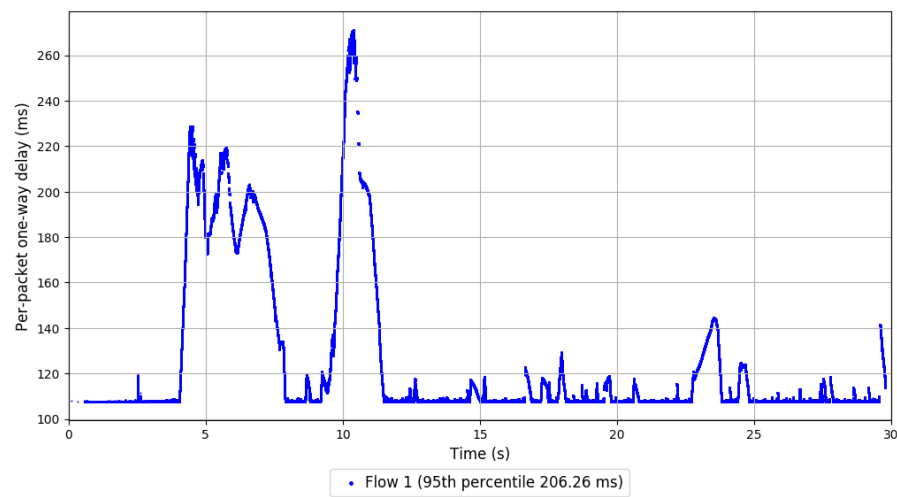
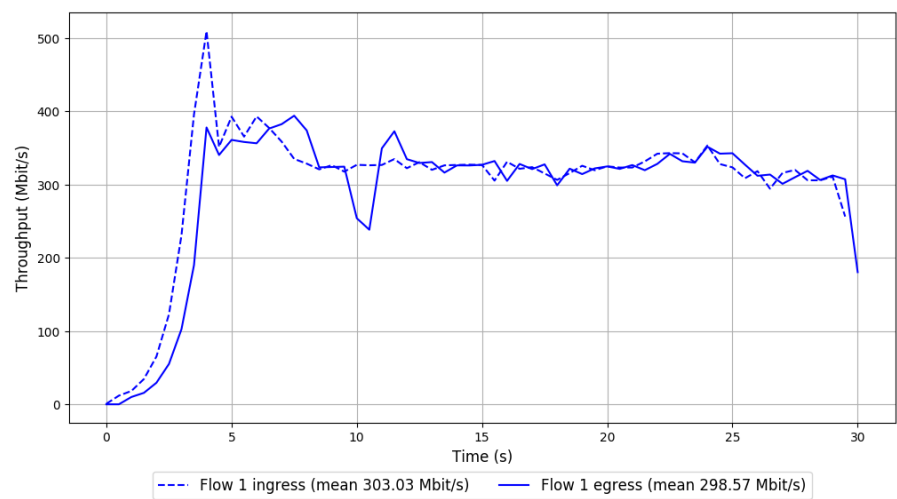
-- Flow 1:

Average throughput: 298.57 Mbit/s

95th percentile per-packet one-way delay: 206.262 ms

Loss rate: 2.19%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

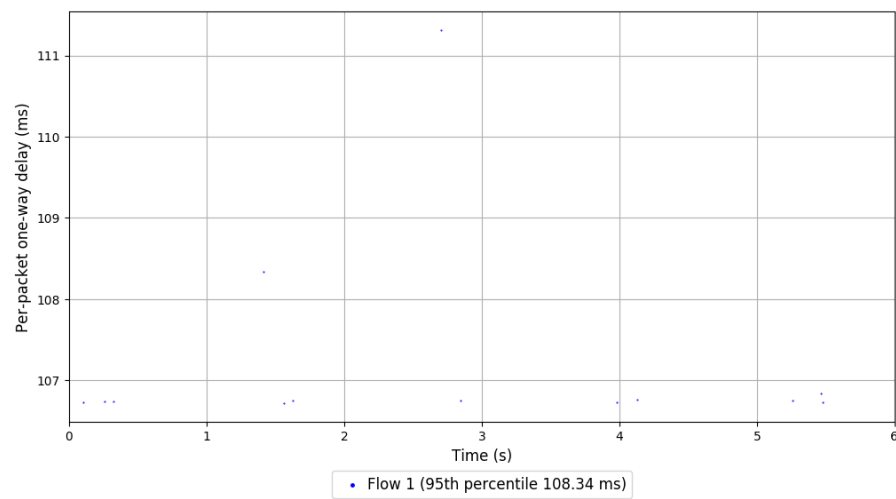
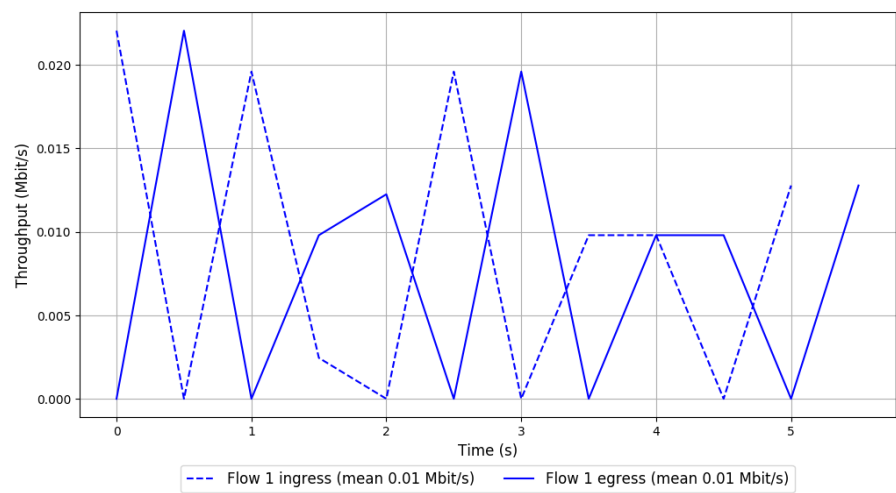
Start at: 2019-07-17 16:08:39

End at: 2019-07-17 16:09:09

Local clock offset: 12.908 ms

Remote clock offset: 12.483 ms

Run 1: Report of QUIC Cubic — Data Link

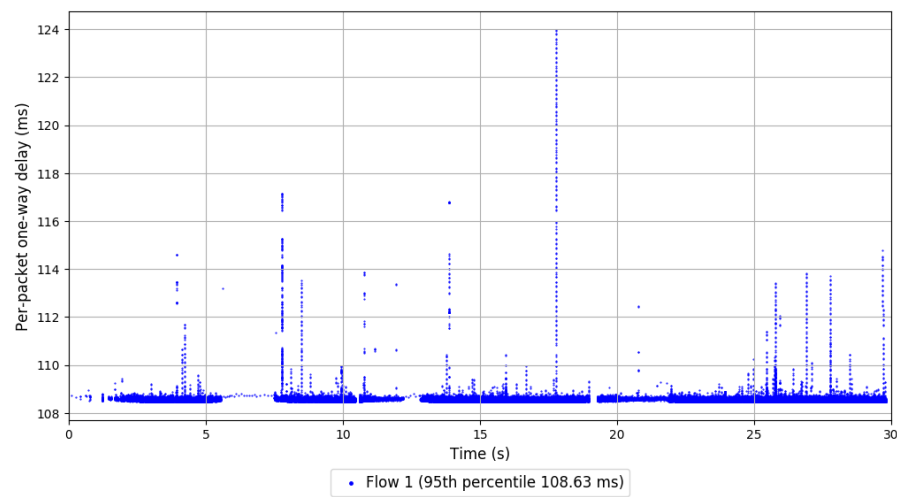
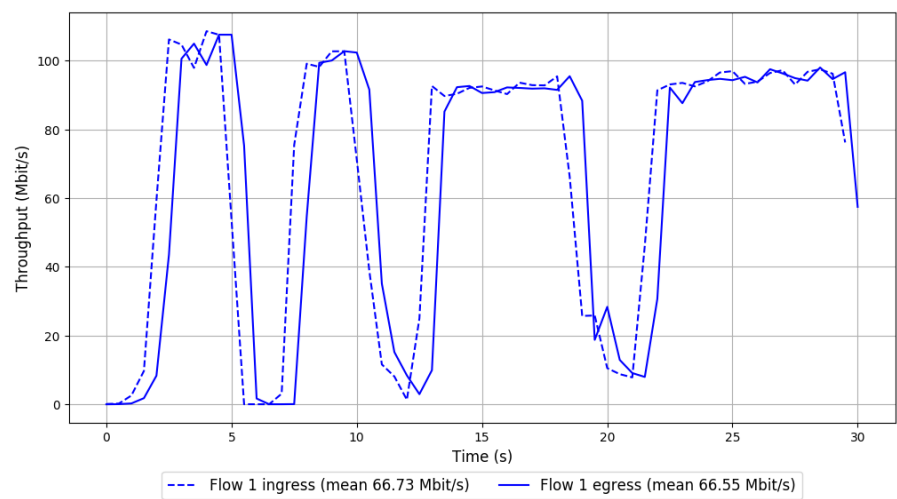


Run 2: Statistics of QUIC Cubic

Start at: 2019-07-17 16:44:40
End at: 2019-07-17 16:45:10
Local clock offset: 23.205 ms
Remote clock offset: 22.696 ms

Below is generated by plot.py at 2019-07-17 20:47:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 66.55 Mbit/s
95th percentile per-packet one-way delay: 108.631 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 66.55 Mbit/s
95th percentile per-packet one-way delay: 108.631 ms
Loss rate: 1.00%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-07-17 17:20:28

End at: 2019-07-17 17:20:58

Local clock offset: 15.524 ms

Remote clock offset: 9.709 ms

Below is generated by plot.py at 2019-07-17 20:47:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 67.16 Mbit/s

95th percentile per-packet one-way delay: 106.663 ms

Loss rate: 1.05%

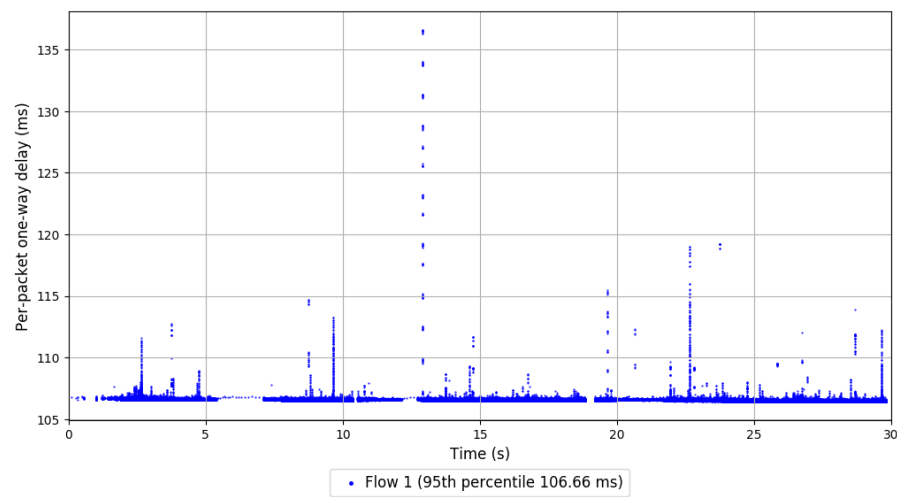
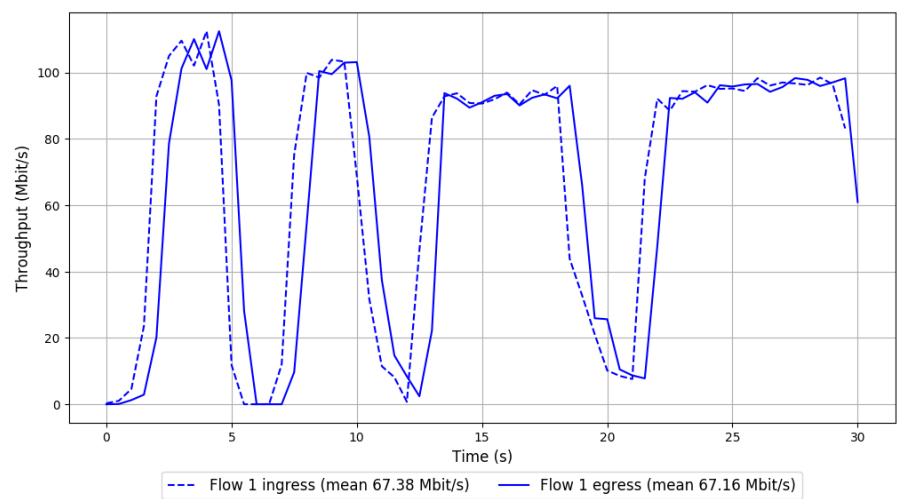
-- Flow 1:

Average throughput: 67.16 Mbit/s

95th percentile per-packet one-way delay: 106.663 ms

Loss rate: 1.05%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2019-07-17 17:56:45

End at: 2019-07-17 17:57:15

Local clock offset: 7.745 ms

Remote clock offset: 3.494 ms

Below is generated by plot.py at 2019-07-17 20:47:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 63.42 Mbit/s

95th percentile per-packet one-way delay: 106.854 ms

Loss rate: 1.12%

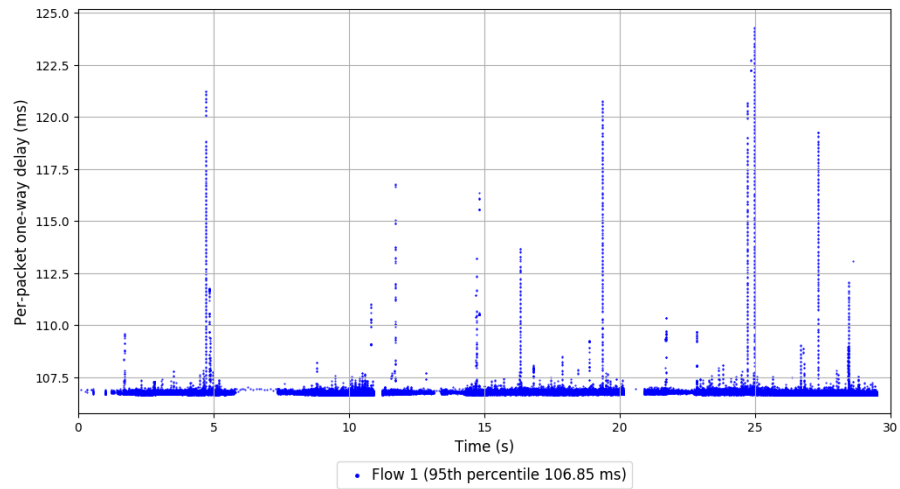
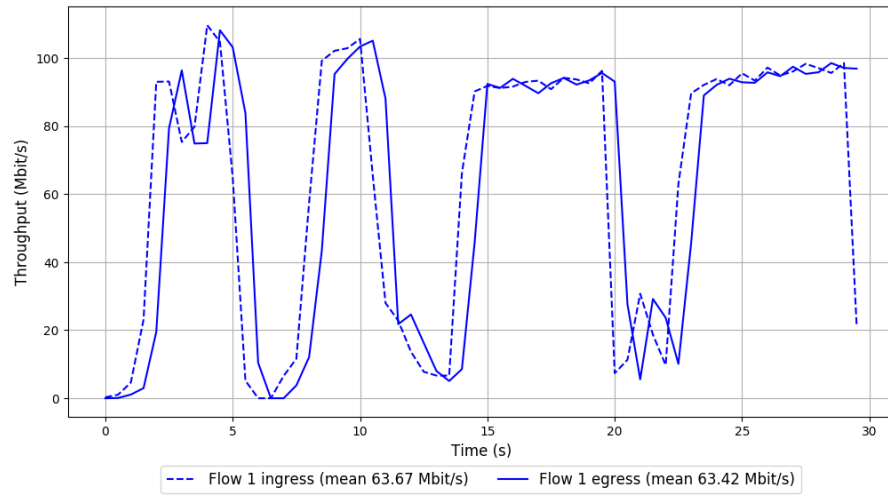
-- Flow 1:

Average throughput: 63.42 Mbit/s

95th percentile per-packet one-way delay: 106.854 ms

Loss rate: 1.12%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2019-07-17 18:33:04

End at: 2019-07-17 18:33:34

Local clock offset: 2.414 ms

Remote clock offset: 1.645 ms

Below is generated by plot.py at 2019-07-17 20:47:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 64.41 Mbit/s

95th percentile per-packet one-way delay: 106.865 ms

Loss rate: 1.08%

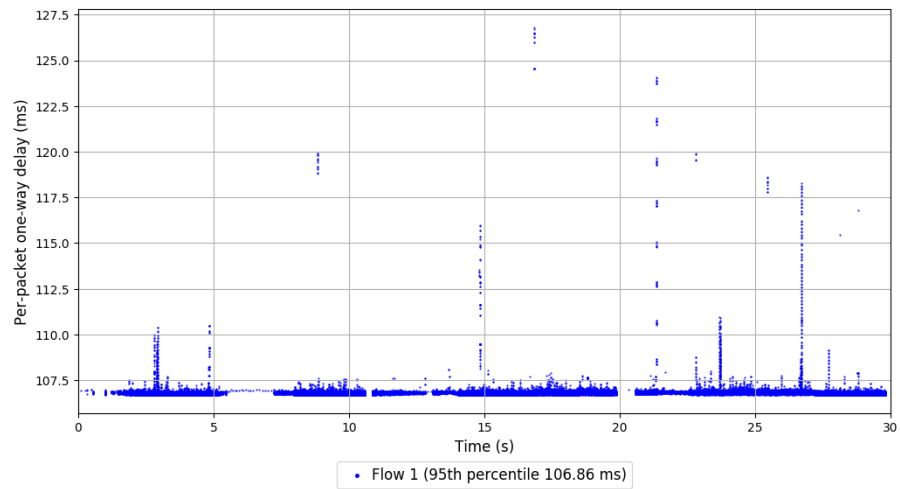
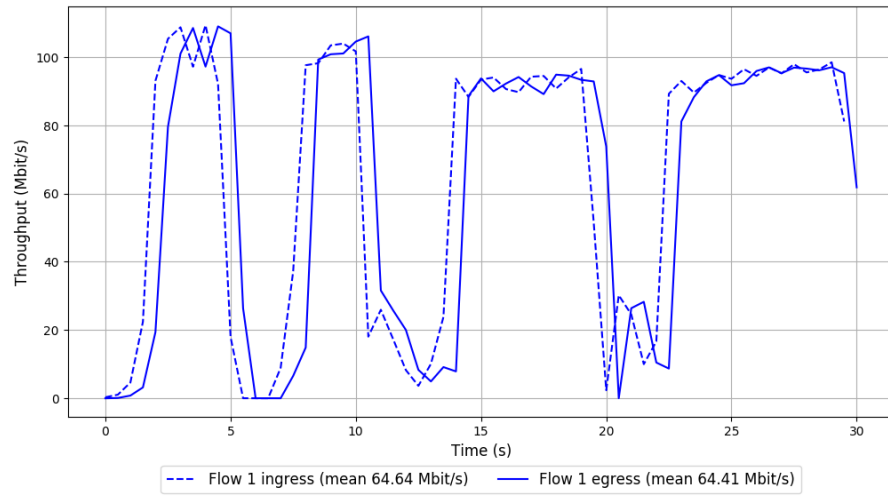
-- Flow 1:

Average throughput: 64.41 Mbit/s

95th percentile per-packet one-way delay: 106.865 ms

Loss rate: 1.08%

Run 5: Report of QUIC Cubic — Data Link

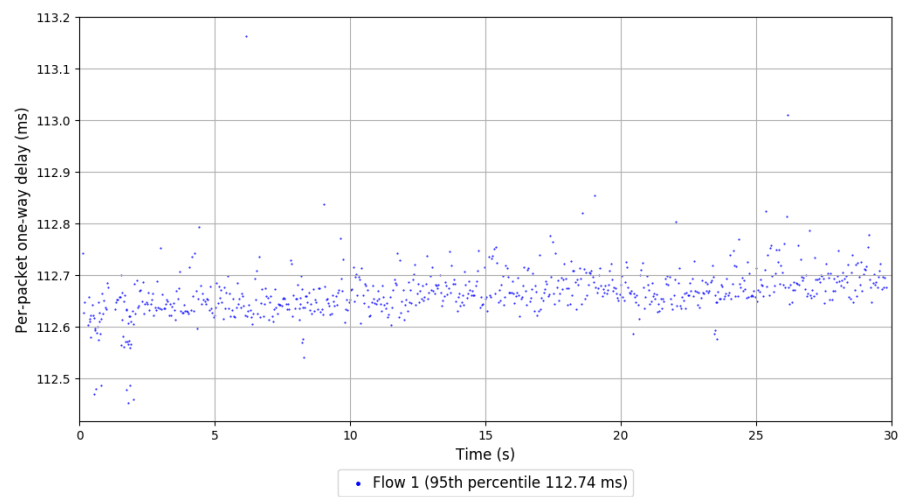
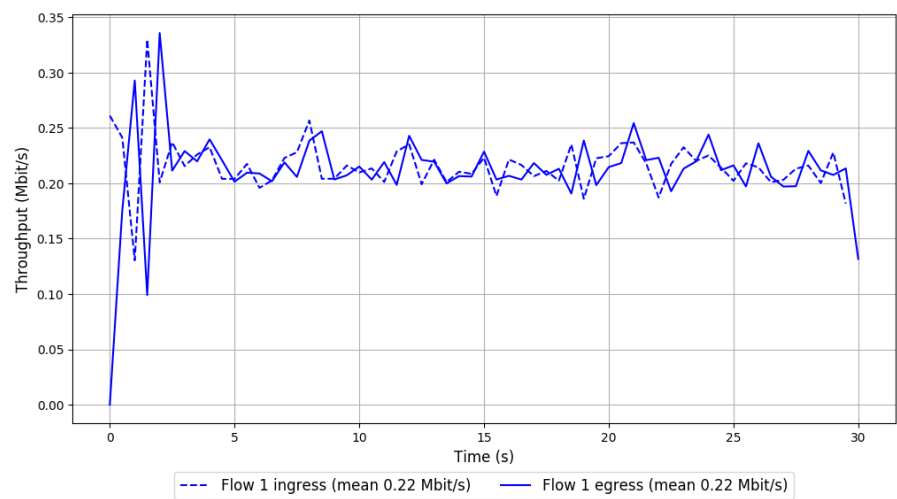


Run 1: Statistics of SCReAM

Start at: 2019-07-17 16:12:48
End at: 2019-07-17 16:13:18
Local clock offset: 16.429 ms
Remote clock offset: 14.744 ms

Below is generated by plot.py at 2019-07-17 20:47:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.737 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.737 ms
Loss rate: 0.76%

Run 1: Report of SReAM — Data Link

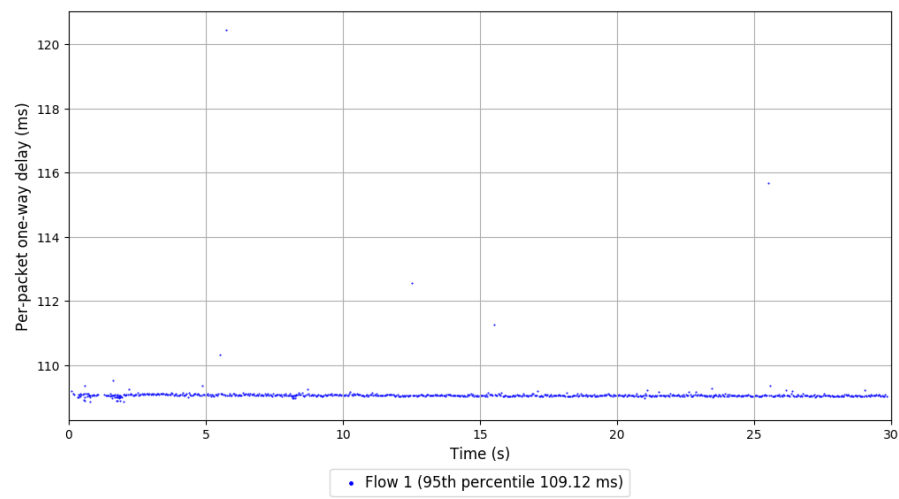
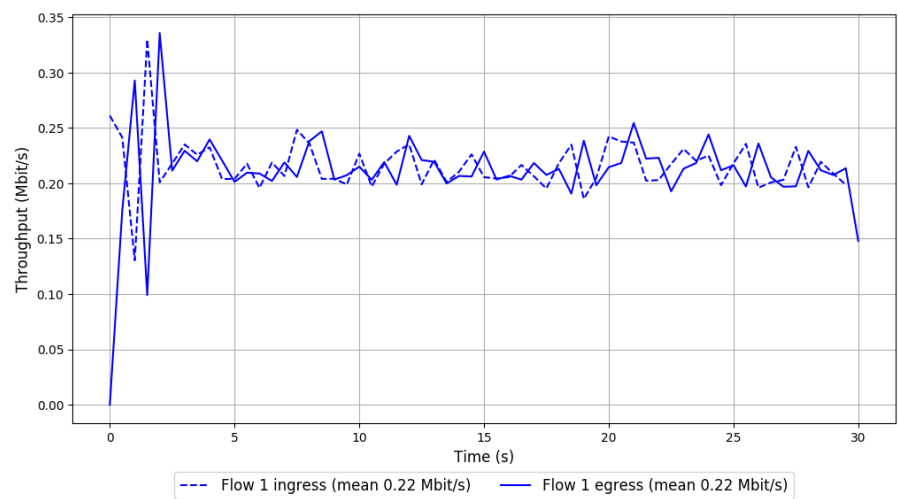


Run 2: Statistics of SCReAM

Start at: 2019-07-17 16:48:35
End at: 2019-07-17 16:49:05
Local clock offset: 26.963 ms
Remote clock offset: 26.135 ms

Below is generated by plot.py at 2019-07-17 20:47:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.117 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.117 ms
Loss rate: 0.77%

Run 2: Report of SReAM — Data Link



Run 3: Statistics of SCReAM

Start at: 2019-07-17 17:24:41

End at: 2019-07-17 17:25:11

Local clock offset: 15.922 ms

Remote clock offset: 8.964 ms

Below is generated by plot.py at 2019-07-17 20:47:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 106.885 ms

Loss rate: 0.64%

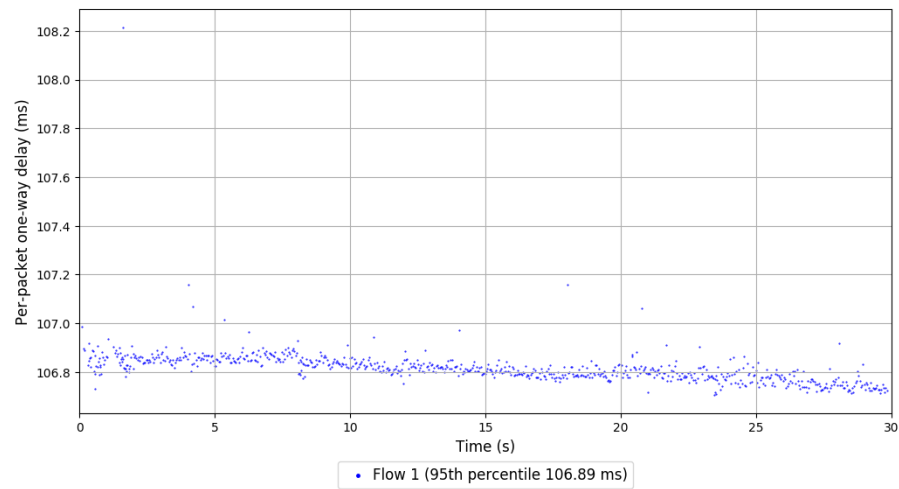
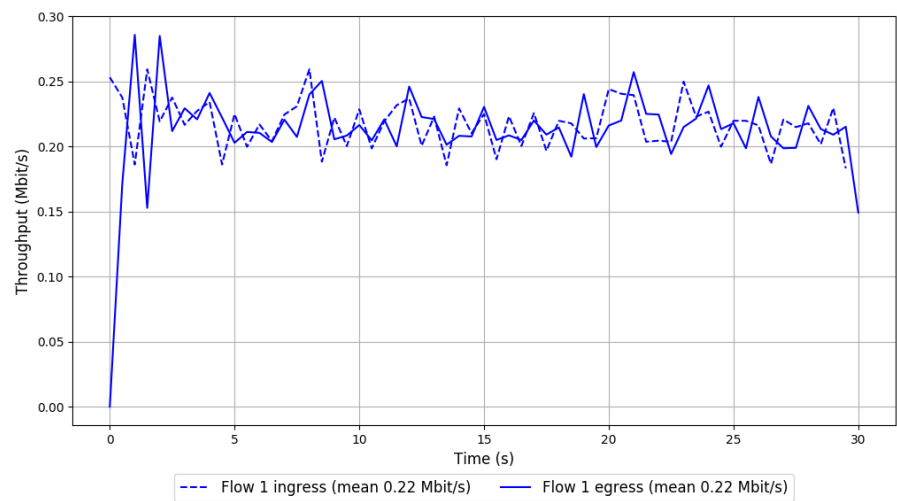
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 106.885 ms

Loss rate: 0.64%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2019-07-17 18:00:56

End at: 2019-07-17 18:01:26

Local clock offset: 8.02 ms

Remote clock offset: 3.666 ms

Below is generated by plot.py at 2019-07-17 20:47:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 106.872 ms

Loss rate: 0.64%

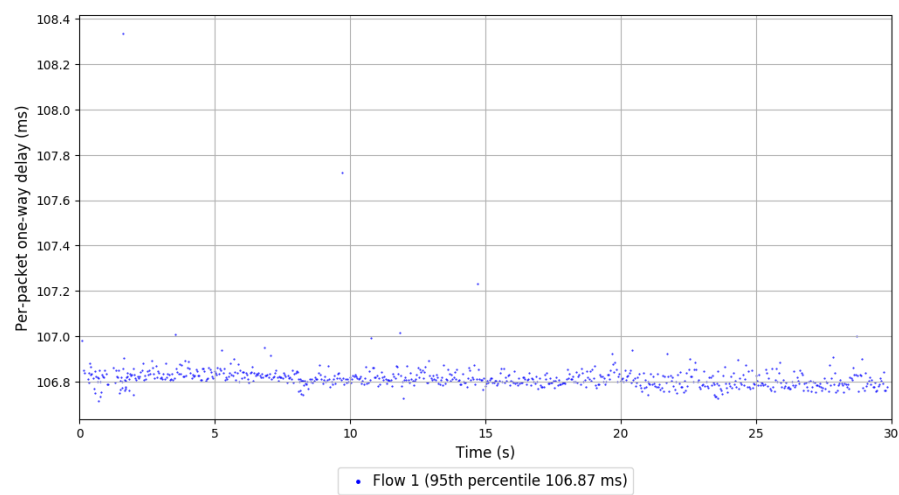
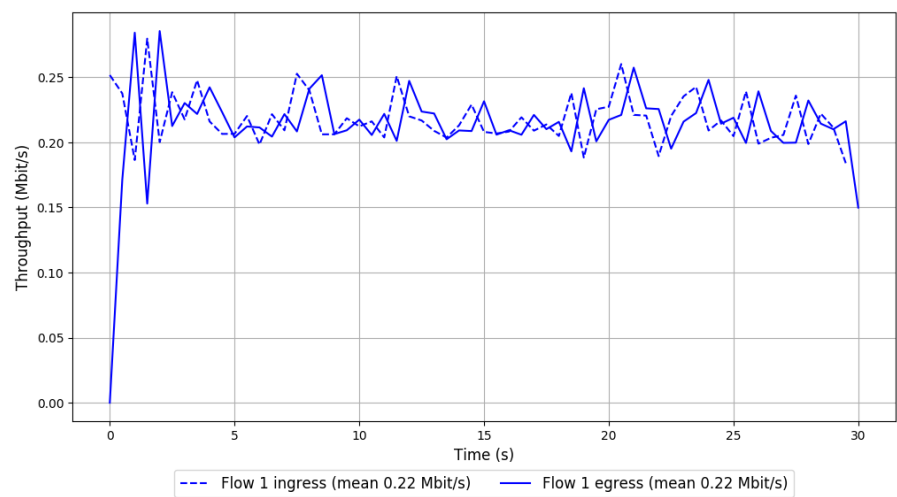
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 106.872 ms

Loss rate: 0.64%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2019-07-17 18:37:13

End at: 2019-07-17 18:37:43

Local clock offset: 2.399 ms

Remote clock offset: 1.772 ms

Below is generated by plot.py at 2019-07-17 20:47:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 109.938 ms

Loss rate: 0.64%

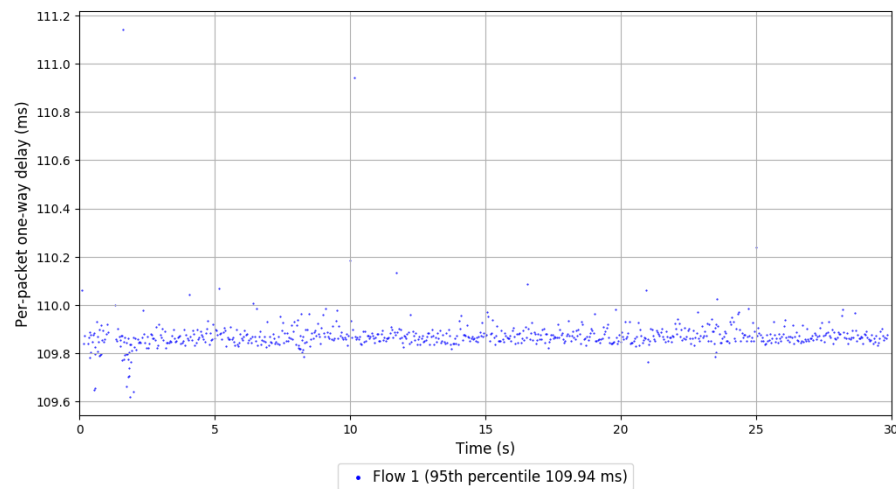
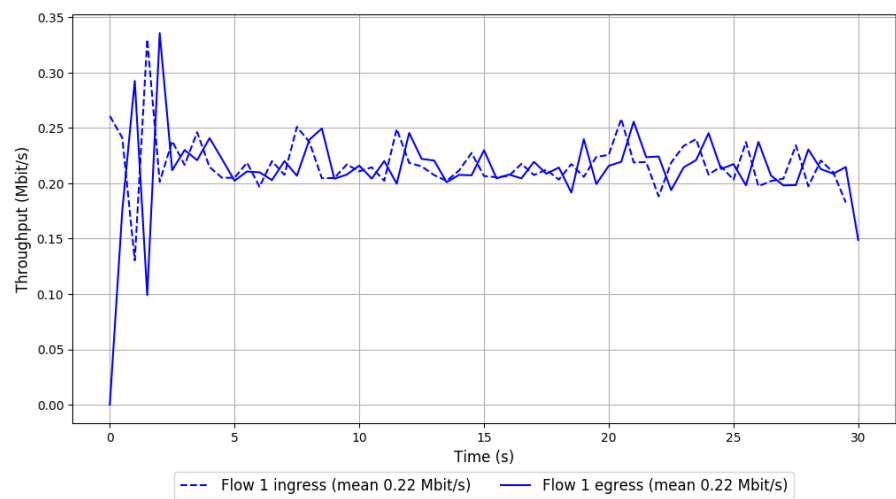
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 109.938 ms

Loss rate: 0.64%

Run 5: Report of SReAM — Data Link

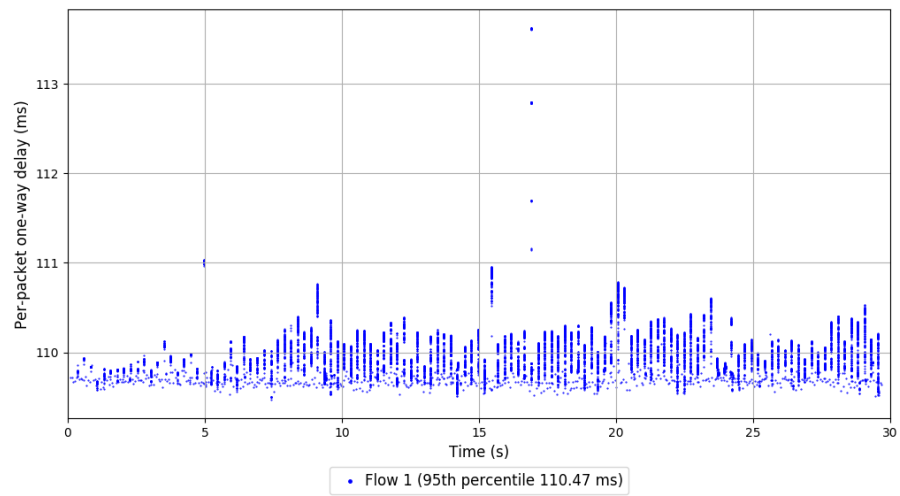
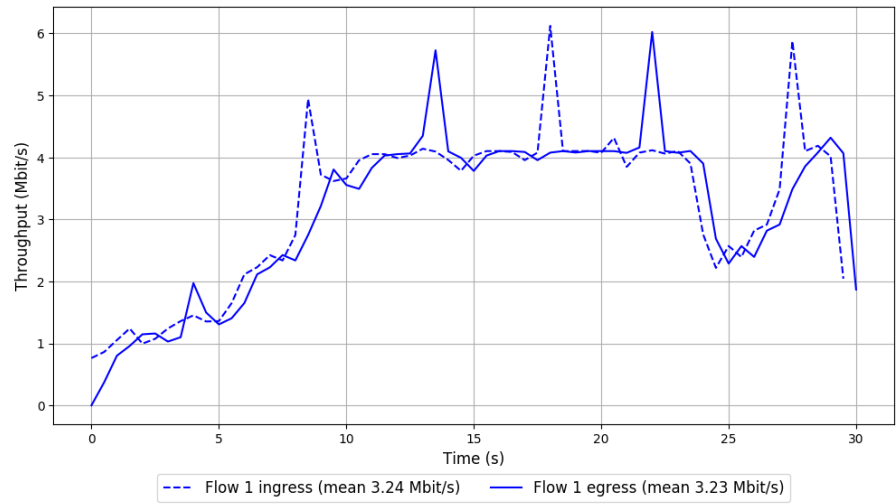


Run 1: Statistics of Sprout

Start at: 2019-07-17 16:17:00
End at: 2019-07-17 16:17:30
Local clock offset: 13.733 ms
Remote clock offset: 13.381 ms

Below is generated by plot.py at 2019-07-17 20:47:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 110.472 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 3.23 Mbit/s
95th percentile per-packet one-way delay: 110.472 ms
Loss rate: 1.06%

Run 1: Report of Sprout — Data Link

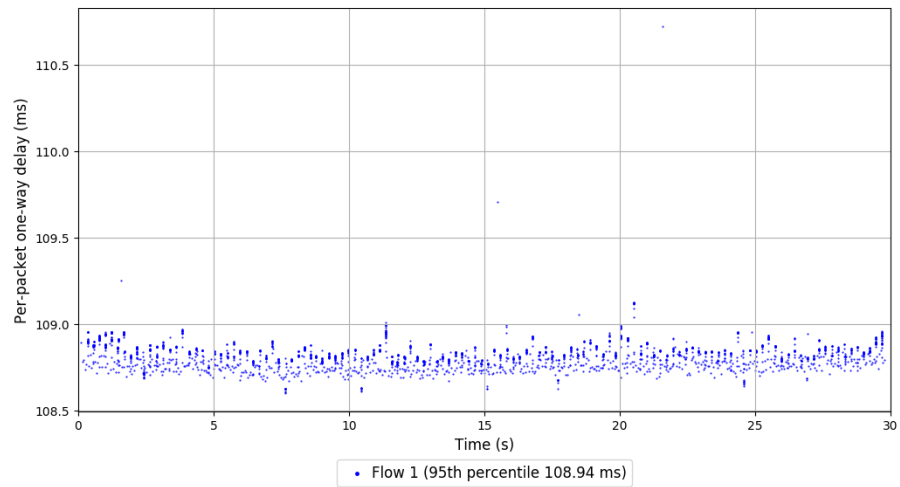
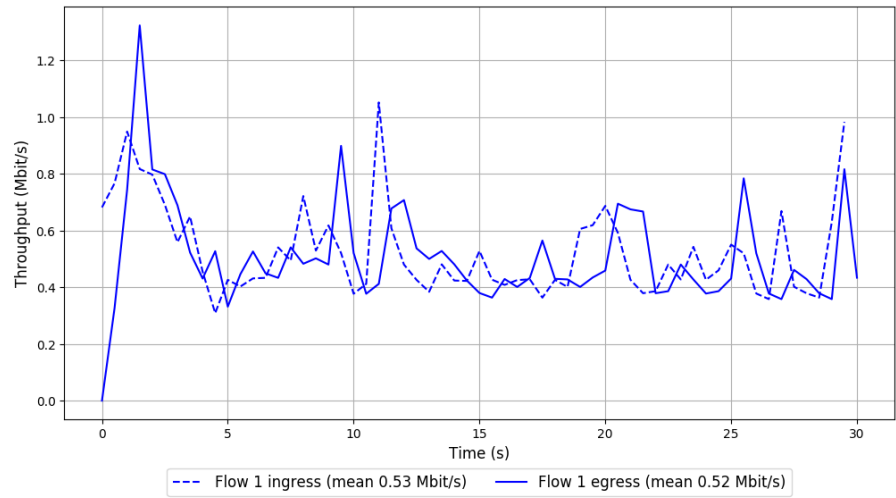


Run 2: Statistics of Sprout

Start at: 2019-07-17 16:52:52
End at: 2019-07-17 16:53:22
Local clock offset: 30.434 ms
Remote clock offset: 29.661 ms

Below is generated by plot.py at 2019-07-17 20:47:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 108.941 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 0.52 Mbit/s
95th percentile per-packet one-way delay: 108.941 ms
Loss rate: 1.75%

Run 2: Report of Sprout — Data Link

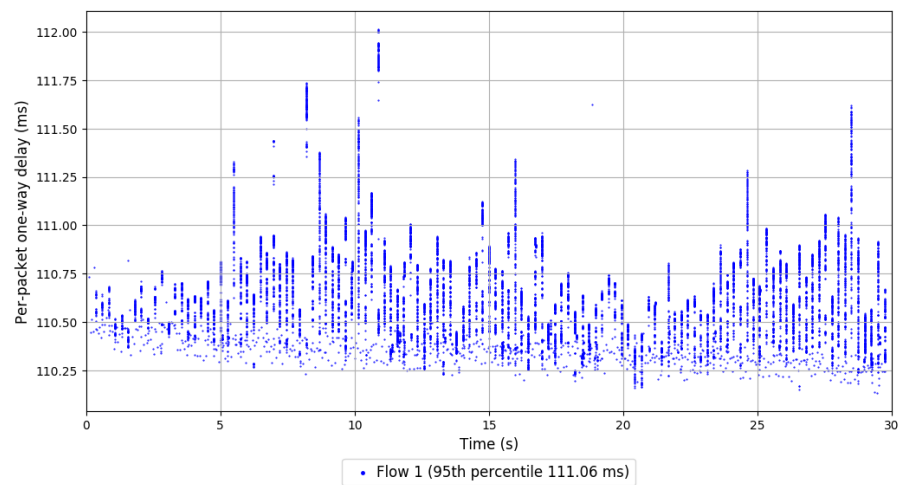
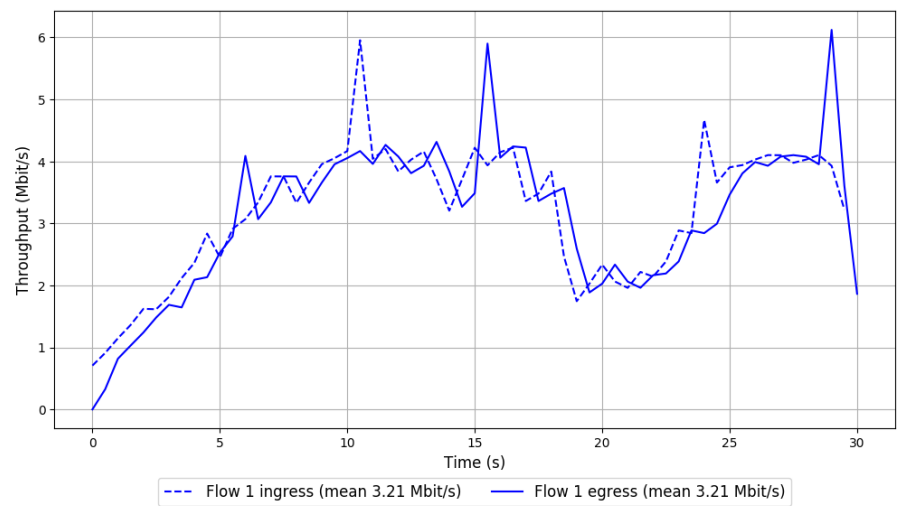


Run 3: Statistics of Sprout

Start at: 2019-07-17 17:28:55
End at: 2019-07-17 17:29:25
Local clock offset: 16.606 ms
Remote clock offset: 9.03 ms

Below is generated by plot.py at 2019-07-17 20:47:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 111.059 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 111.059 ms
Loss rate: 0.88%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2019-07-17 18:05:10

End at: 2019-07-17 18:05:40

Local clock offset: 8.997 ms

Remote clock offset: 3.968 ms

Below is generated by plot.py at 2019-07-17 20:47:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 3.48 Mbit/s

95th percentile per-packet one-way delay: 110.096 ms

Loss rate: 0.68%

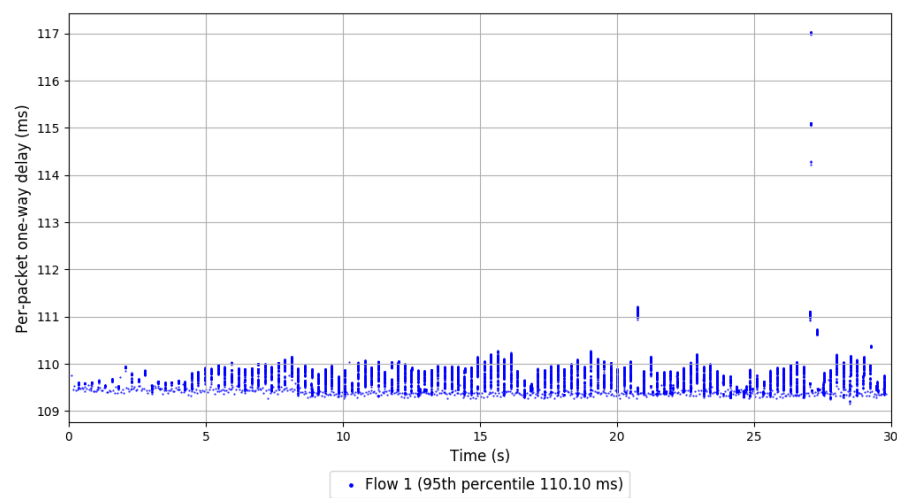
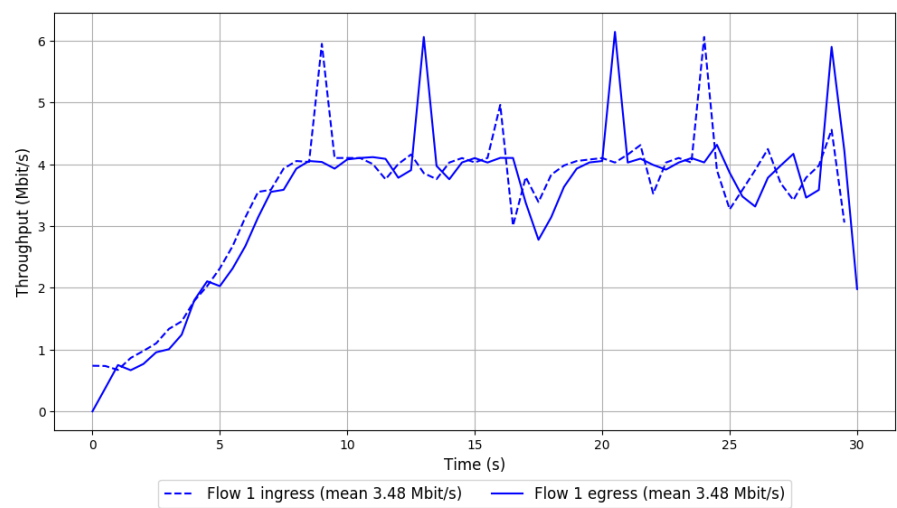
-- Flow 1:

Average throughput: 3.48 Mbit/s

95th percentile per-packet one-way delay: 110.096 ms

Loss rate: 0.68%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2019-07-17 18:41:28

End at: 2019-07-17 18:41:58

Local clock offset: 2.558 ms

Remote clock offset: 1.568 ms

Below is generated by plot.py at 2019-07-17 20:47:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 107.419 ms

Loss rate: 0.15%

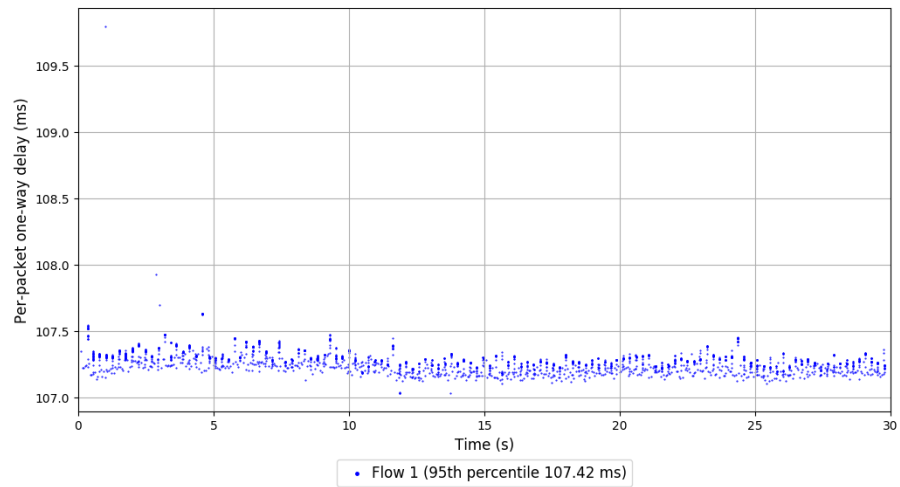
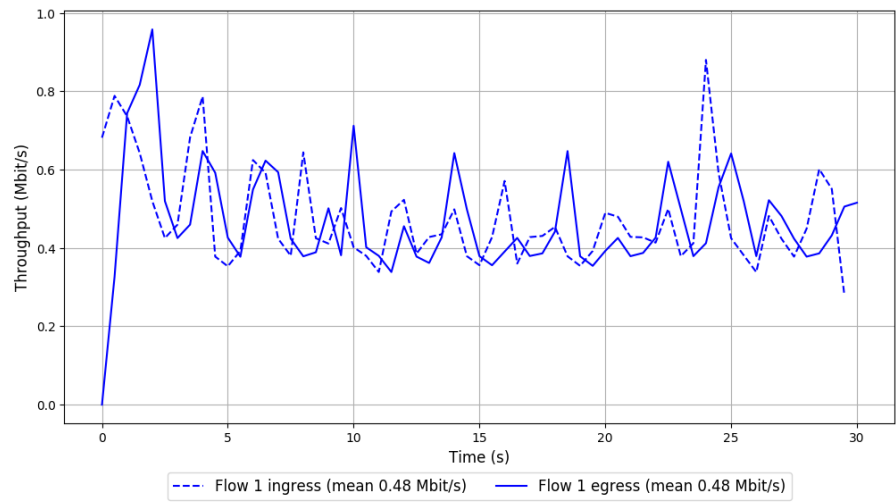
-- Flow 1:

Average throughput: 0.48 Mbit/s

95th percentile per-packet one-way delay: 107.419 ms

Loss rate: 0.15%

Run 5: Report of Sprout — Data Link

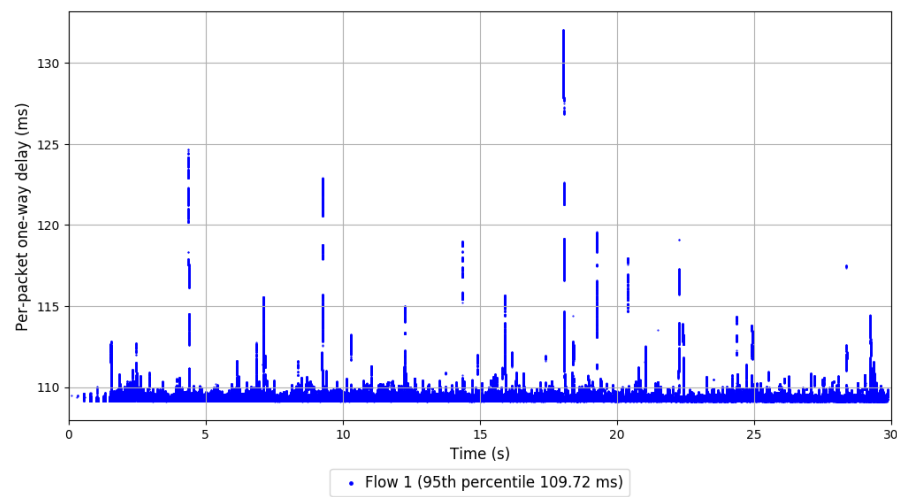
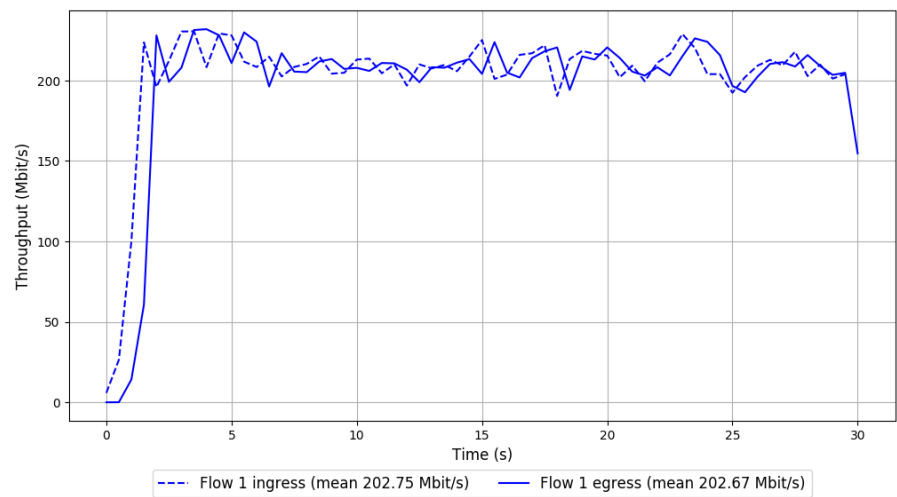


Run 1: Statistics of TaoVA-100x

Start at: 2019-07-17 16:09:48
End at: 2019-07-17 16:10:18
Local clock offset: 15.537 ms
Remote clock offset: 14.826 ms

Below is generated by plot.py at 2019-07-17 20:47:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 202.67 Mbit/s
95th percentile per-packet one-way delay: 109.721 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 202.67 Mbit/s
95th percentile per-packet one-way delay: 109.721 ms
Loss rate: 0.77%

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

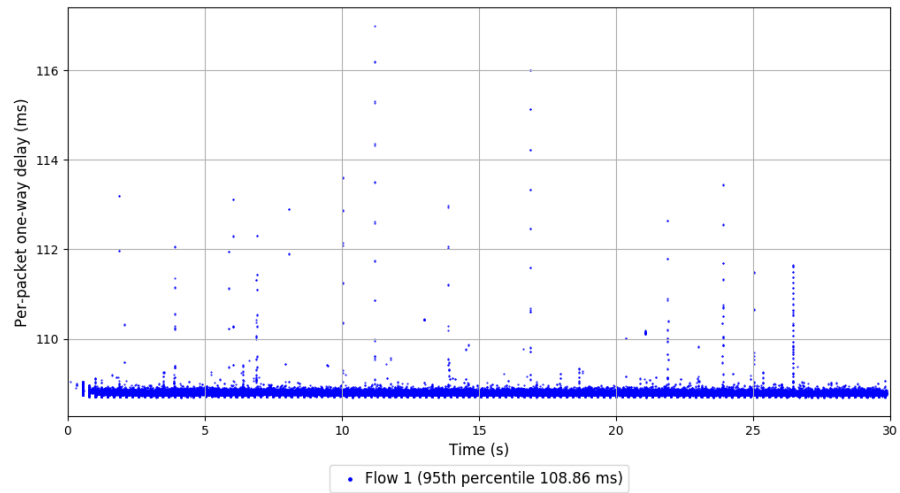
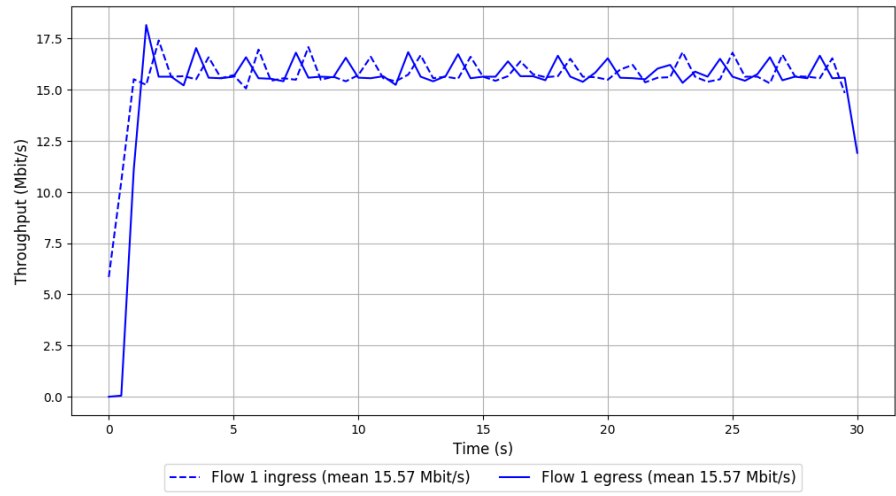


Run 2: Statistics of TaoVA-100x

Start at: 2019-07-17 16:45:54
End at: 2019-07-17 16:46:24
Local clock offset: 24.166 ms
Remote clock offset: 23.6 ms

Below is generated by plot.py at 2019-07-17 20:47:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 15.57 Mbit/s
95th percentile per-packet one-way delay: 108.860 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 15.57 Mbit/s
95th percentile per-packet one-way delay: 108.860 ms
Loss rate: 0.74%

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



Run 3: Statistics of TaoVA-100x

Start at: 2019-07-17 17:21:42

End at: 2019-07-17 17:22:12

Local clock offset: 15.458 ms

Remote clock offset: 9.447 ms

Below is generated by plot.py at 2019-07-17 20:47:58

Datalink statistics

-- Total of 1 flow:

Average throughput: 193.93 Mbit/s

95th percentile per-packet one-way delay: 109.045 ms

Loss rate: 0.38%

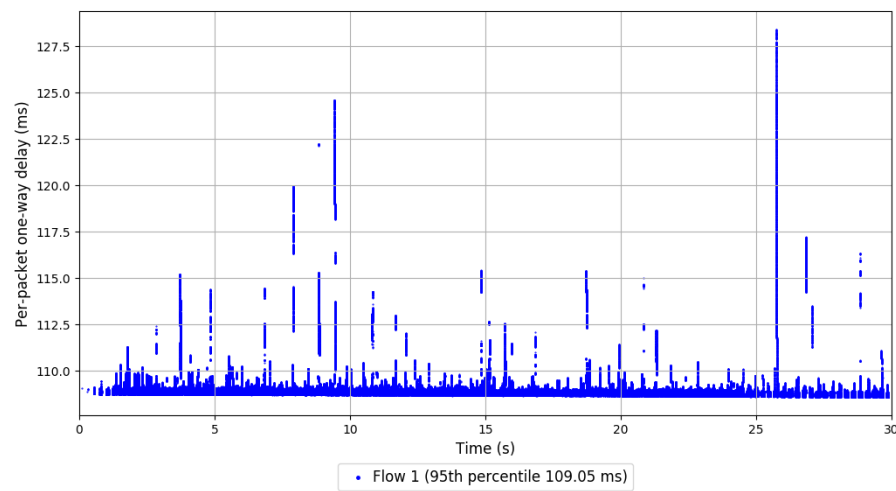
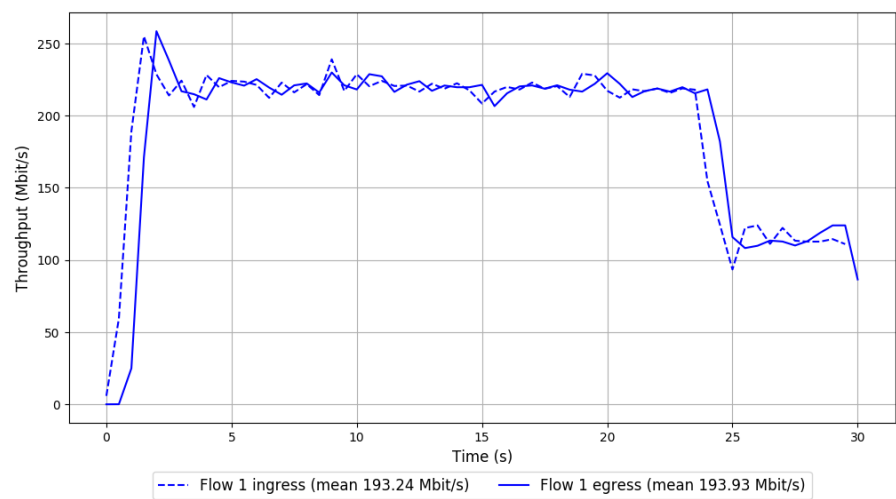
-- Flow 1:

Average throughput: 193.93 Mbit/s

95th percentile per-packet one-way delay: 109.045 ms

Loss rate: 0.38%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-07-17 17:57:59

End at: 2019-07-17 17:58:29

Local clock offset: 6.949 ms

Remote clock offset: 3.557 ms

Below is generated by plot.py at 2019-07-17 20:48:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 202.52 Mbit/s

95th percentile per-packet one-way delay: 106.517 ms

Loss rate: 0.82%

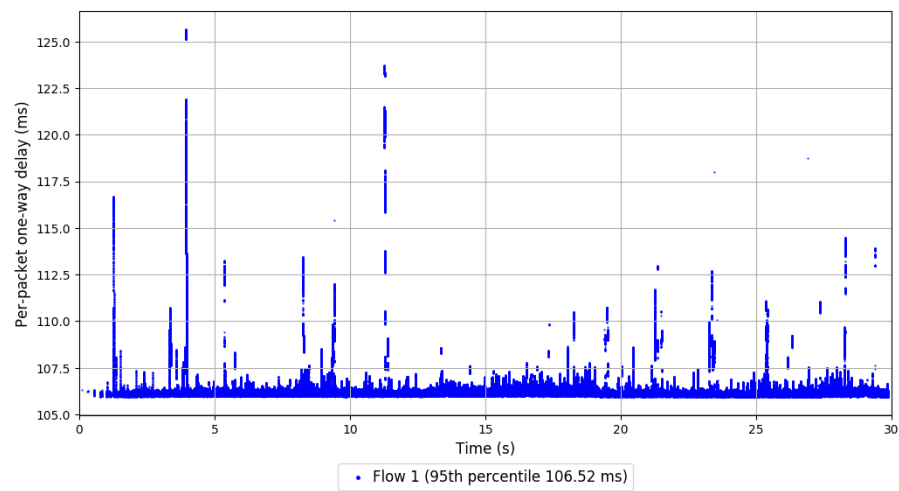
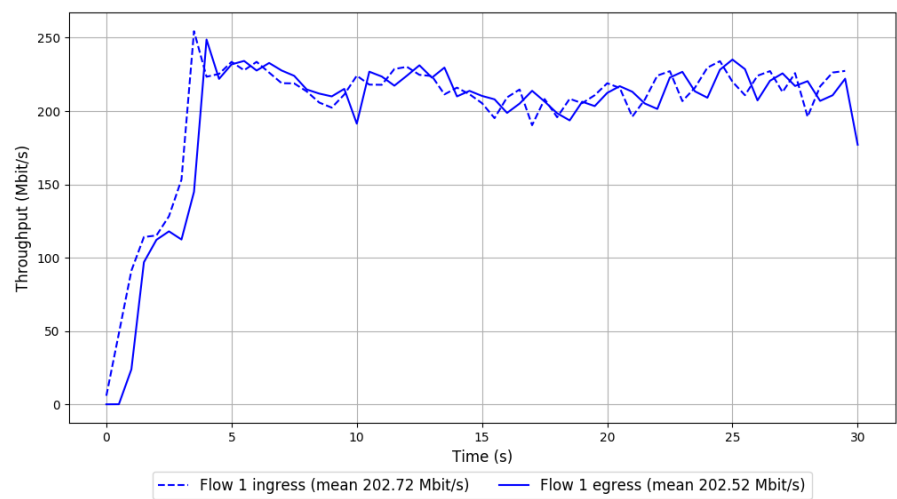
-- Flow 1:

Average throughput: 202.52 Mbit/s

95th percentile per-packet one-way delay: 106.517 ms

Loss rate: 0.82%

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



Run 5: Statistics of TaoVA-100x

Start at: 2019-07-17 18:34:18

End at: 2019-07-17 18:34:48

Local clock offset: 2.355 ms

Remote clock offset: 1.669 ms

Below is generated by plot.py at 2019-07-17 20:48:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 205.85 Mbit/s

95th percentile per-packet one-way delay: 110.067 ms

Loss rate: 0.73%

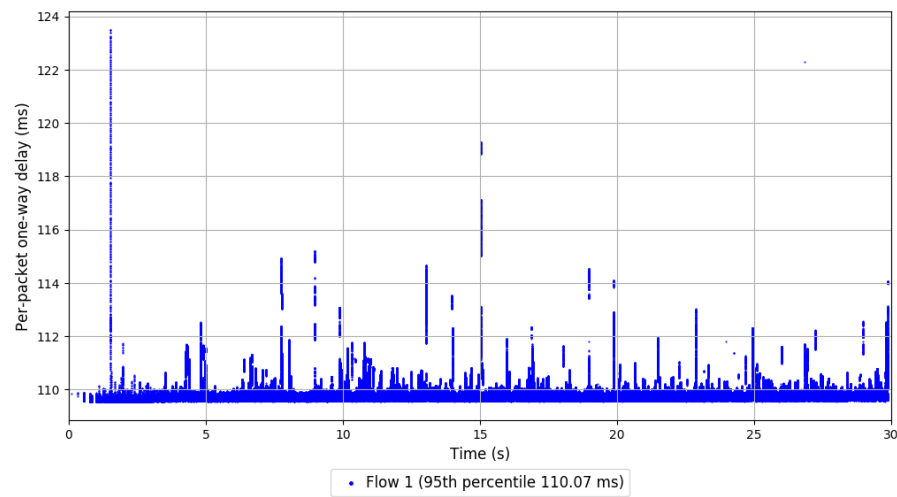
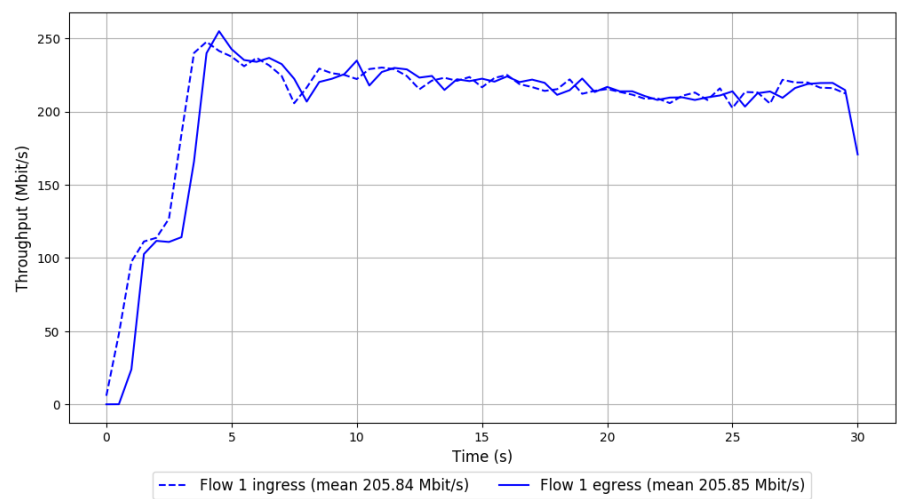
-- Flow 1:

Average throughput: 205.85 Mbit/s

95th percentile per-packet one-way delay: 110.067 ms

Loss rate: 0.73%

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

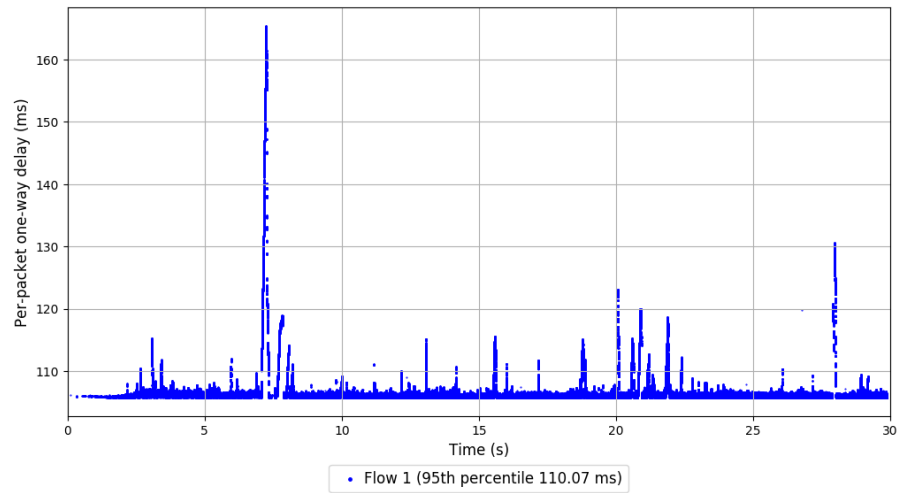
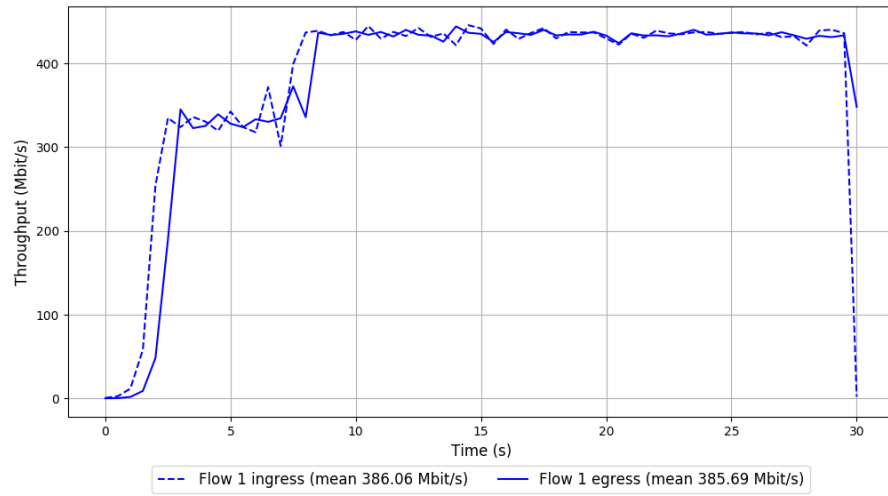


Run 1: Statistics of TCP Vegas

Start at: 2019-07-17 16:22:44
End at: 2019-07-17 16:23:14
Local clock offset: 18.977 ms
Remote clock offset: 18.554 ms

Below is generated by plot.py at 2019-07-17 20:50:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 385.69 Mbit/s
95th percentile per-packet one-way delay: 110.072 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 385.69 Mbit/s
95th percentile per-packet one-way delay: 110.072 ms
Loss rate: 0.81%

Run 1: Report of TCP Vegas — Data Link

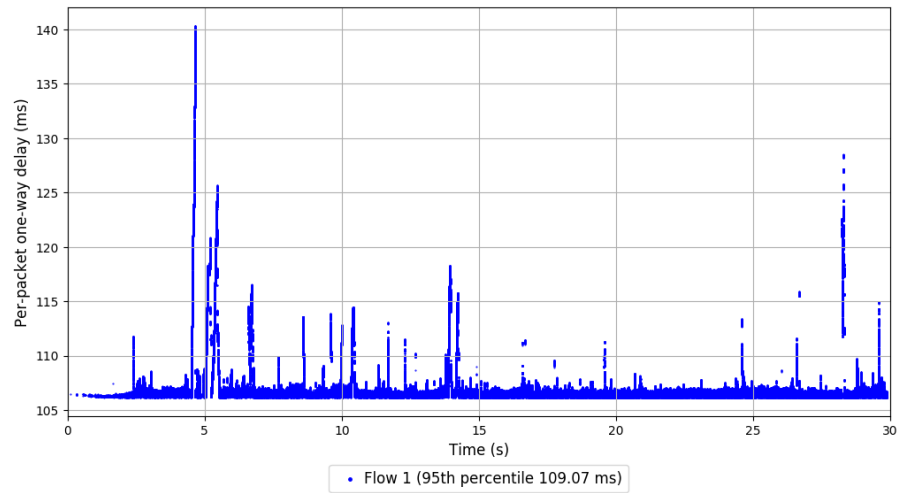
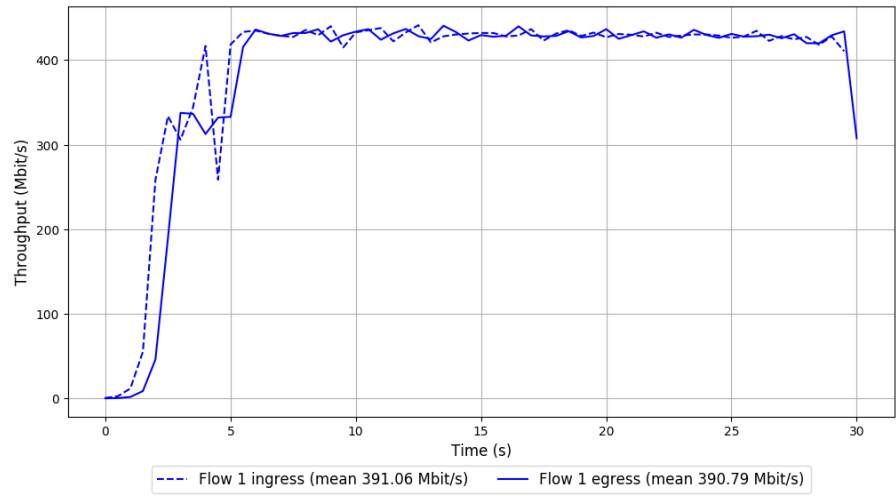


Run 2: Statistics of TCP Vegas

Start at: 2019-07-17 16:58:41
End at: 2019-07-17 16:59:11
Local clock offset: 36.542 ms
Remote clock offset: 35.729 ms

Below is generated by plot.py at 2019-07-17 20:53:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 390.79 Mbit/s
95th percentile per-packet one-way delay: 109.072 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 390.79 Mbit/s
95th percentile per-packet one-way delay: 109.072 ms
Loss rate: 0.79%

Run 2: Report of TCP Vegas — Data Link

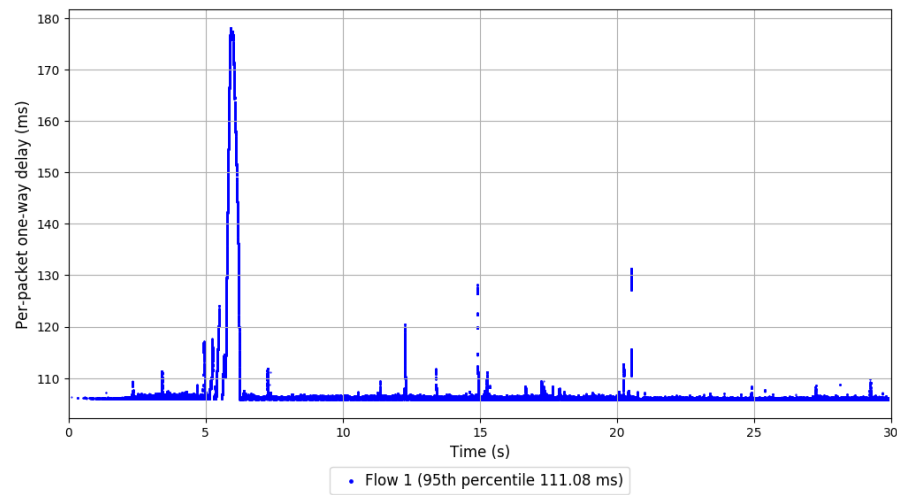
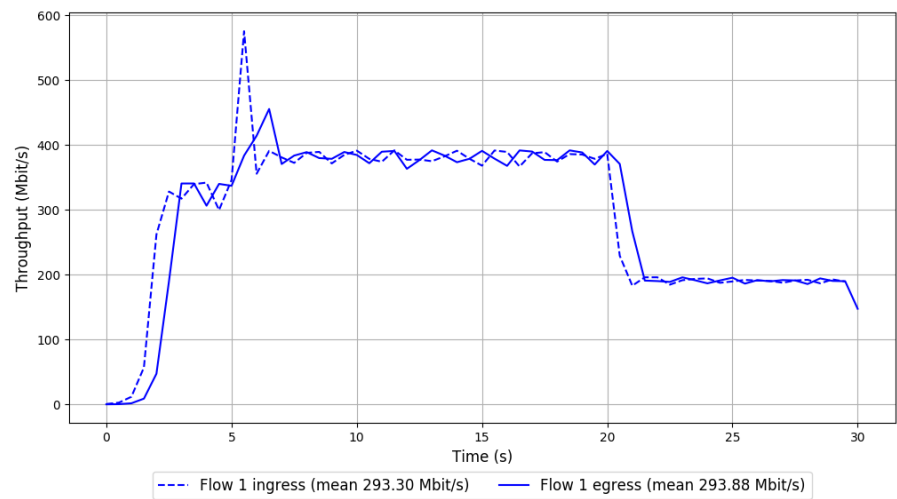


Run 3: Statistics of TCP Vegas

Start at: 2019-07-17 17:34:50
End at: 2019-07-17 17:35:20
Local clock offset: 19.873 ms
Remote clock offset: 9.746 ms

Below is generated by plot.py at 2019-07-17 20:53:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 293.88 Mbit/s
95th percentile per-packet one-way delay: 111.082 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 293.88 Mbit/s
95th percentile per-packet one-way delay: 111.082 ms
Loss rate: 0.53%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-07-17 18:11:03

End at: 2019-07-17 18:11:33

Local clock offset: 9.954 ms

Remote clock offset: 4.567 ms

Below is generated by plot.py at 2019-07-17 20:54:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 397.42 Mbit/s

95th percentile per-packet one-way delay: 112.695 ms

Loss rate: 0.78%

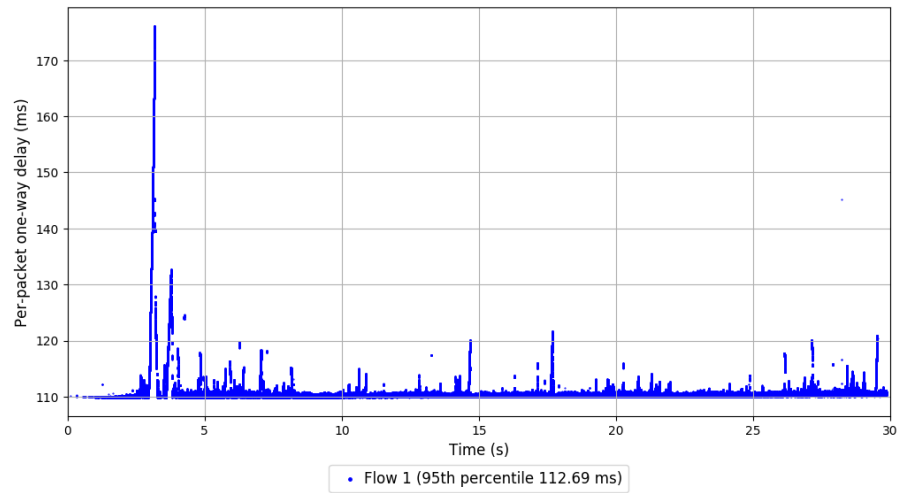
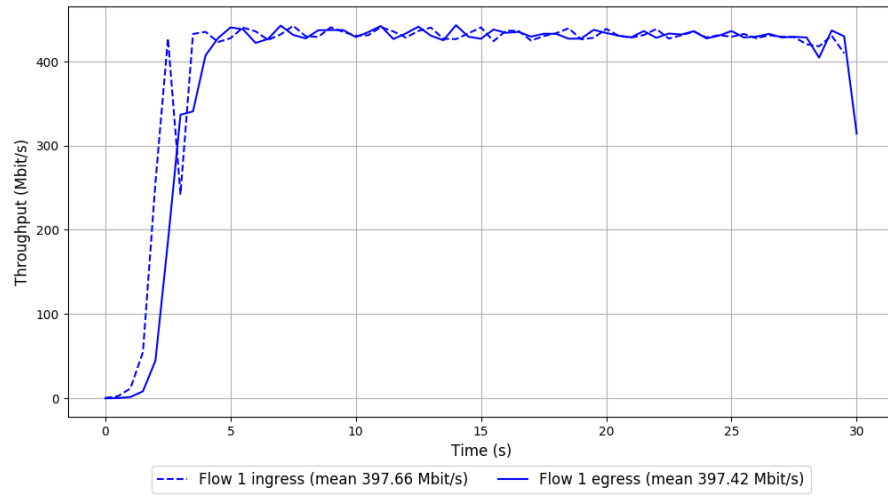
-- Flow 1:

Average throughput: 397.42 Mbit/s

95th percentile per-packet one-way delay: 112.695 ms

Loss rate: 0.78%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2019-07-17 18:47:22

End at: 2019-07-17 18:47:52

Local clock offset: 1.329 ms

Remote clock offset: 1.705 ms

Below is generated by plot.py at 2019-07-17 20:54:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 390.76 Mbit/s

95th percentile per-packet one-way delay: 107.870 ms

Loss rate: 0.80%

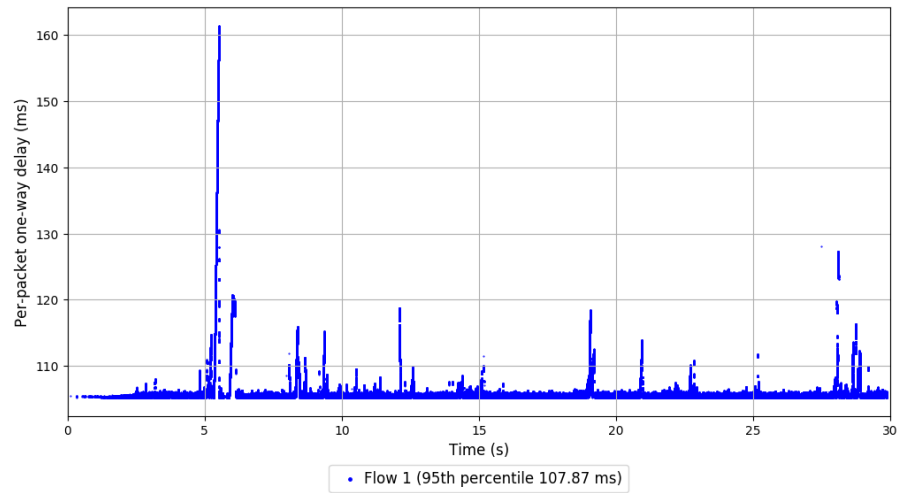
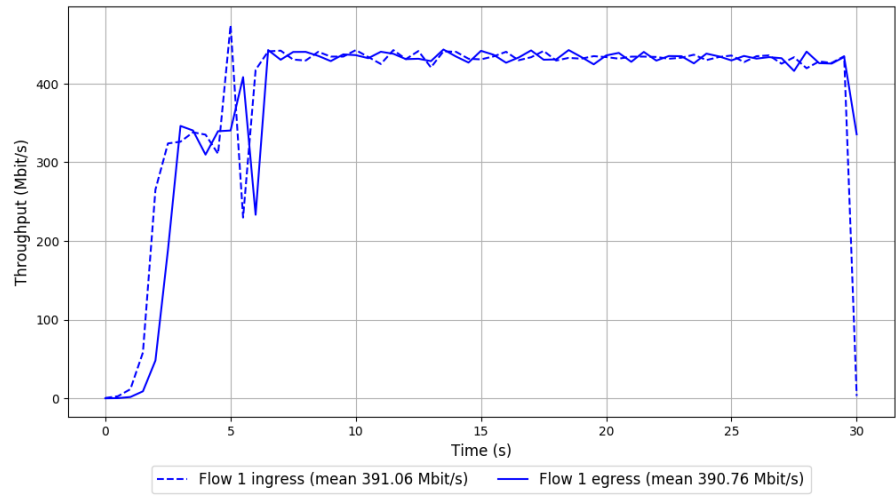
-- Flow 1:

Average throughput: 390.76 Mbit/s

95th percentile per-packet one-way delay: 107.870 ms

Loss rate: 0.80%

Run 5: Report of TCP Vegas — Data Link

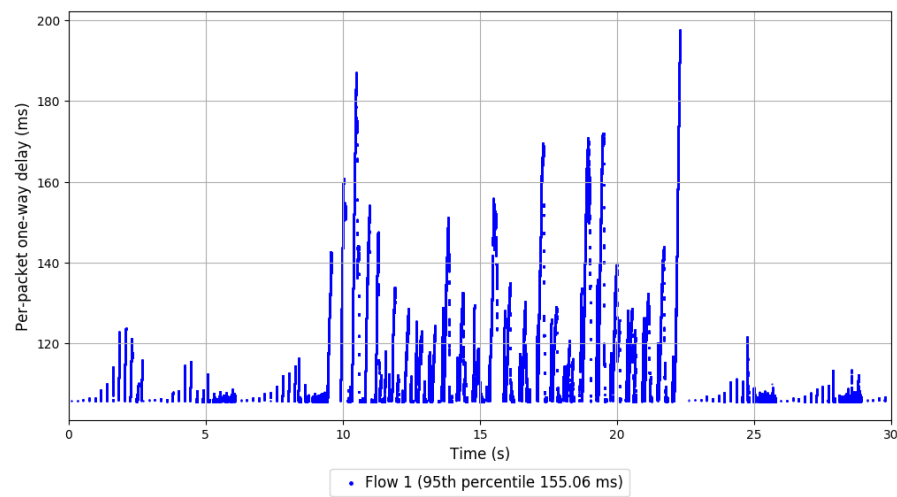
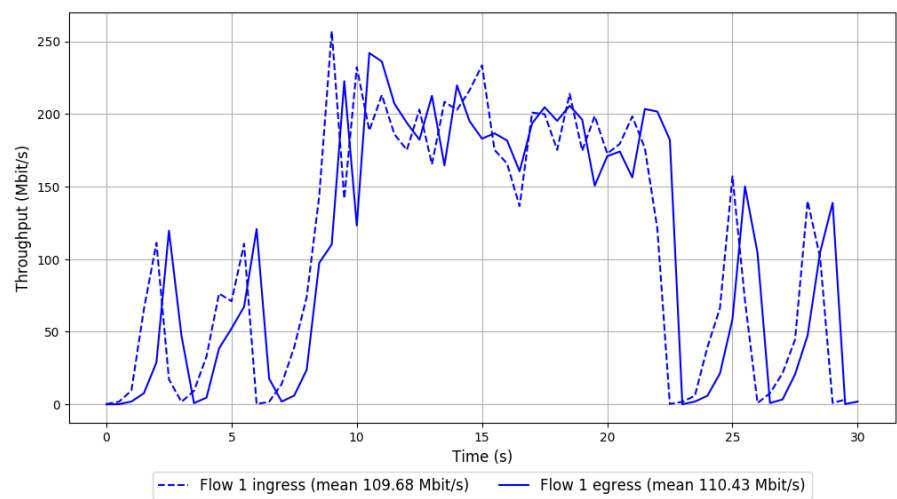


Run 1: Statistics of Verus

Start at: 2019-07-17 16:18:11
End at: 2019-07-17 16:18:41
Local clock offset: 14.261 ms
Remote clock offset: 14.124 ms

Below is generated by plot.py at 2019-07-17 20:54:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 110.43 Mbit/s
95th percentile per-packet one-way delay: 155.061 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 110.43 Mbit/s
95th percentile per-packet one-way delay: 155.061 ms
Loss rate: 0.03%

Run 1: Report of Verus — Data Link

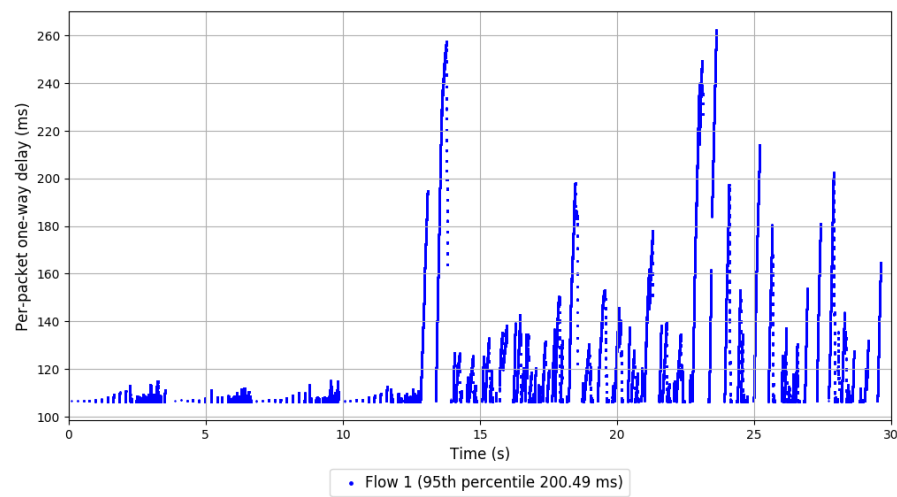
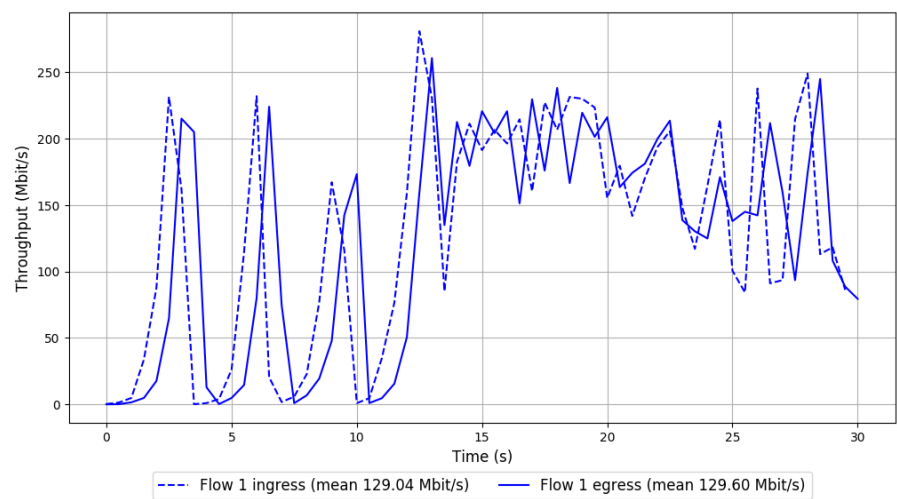


Run 2: Statistics of Verus

Start at: 2019-07-17 16:54:02
End at: 2019-07-17 16:54:32
Local clock offset: 31.631 ms
Remote clock offset: 30.803 ms

Below is generated by plot.py at 2019-07-17 20:54:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 129.60 Mbit/s
95th percentile per-packet one-way delay: 200.494 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 129.60 Mbit/s
95th percentile per-packet one-way delay: 200.494 ms
Loss rate: 1.13%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-07-17 17:30:05

End at: 2019-07-17 17:30:35

Local clock offset: 17.687 ms

Remote clock offset: 9.107 ms

Below is generated by plot.py at 2019-07-17 20:54:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 142.43 Mbit/s

95th percentile per-packet one-way delay: 206.185 ms

Loss rate: 1.23%

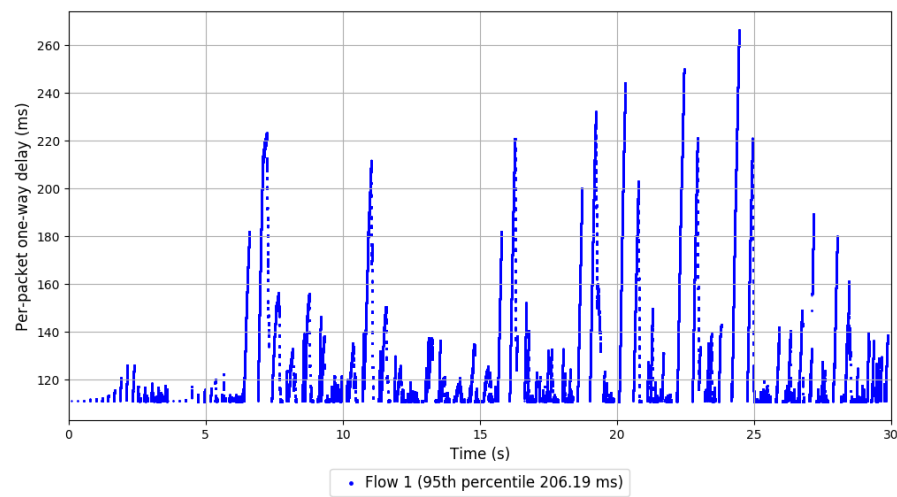
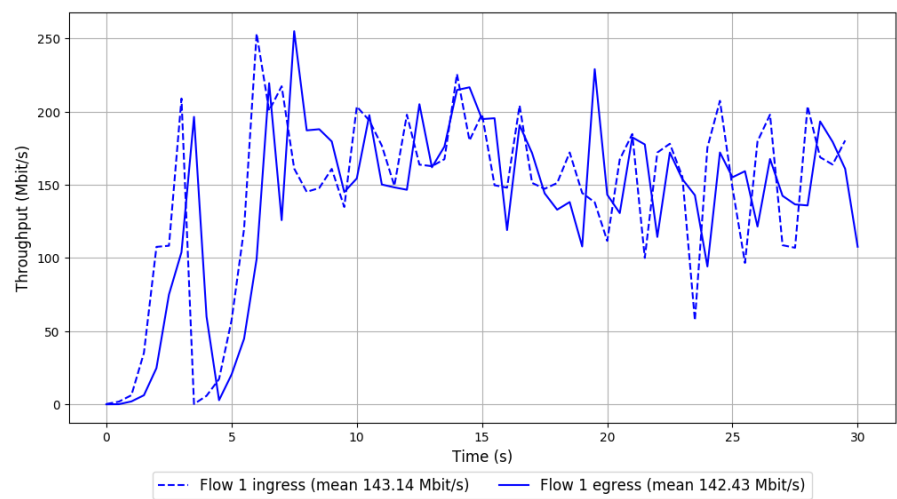
-- Flow 1:

Average throughput: 142.43 Mbit/s

95th percentile per-packet one-way delay: 206.185 ms

Loss rate: 1.23%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2019-07-17 18:06:21

End at: 2019-07-17 18:06:51

Local clock offset: 8.979 ms

Remote clock offset: 4.081 ms

Below is generated by plot.py at 2019-07-17 20:54:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 92.94 Mbit/s

95th percentile per-packet one-way delay: 153.736 ms

Loss rate: 0.35%

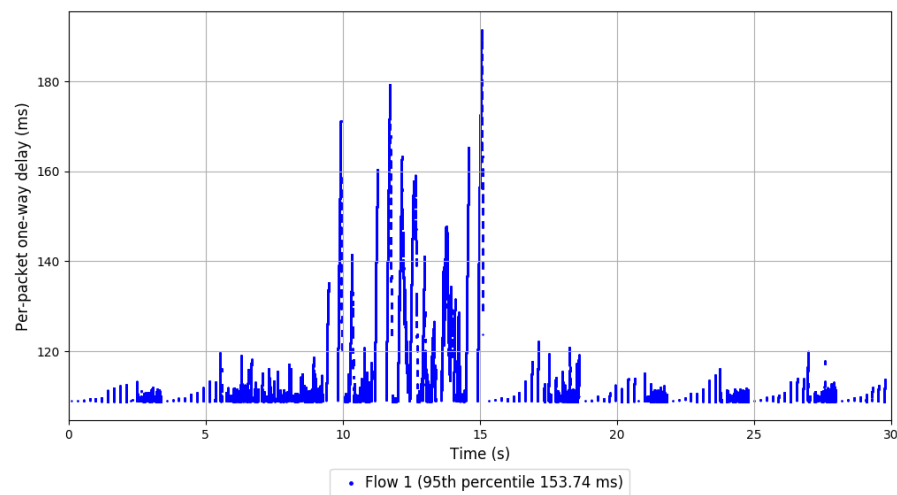
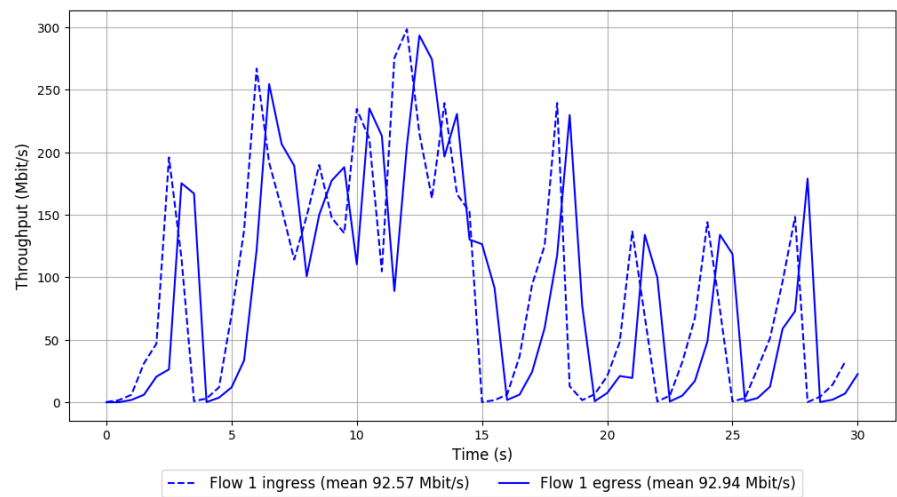
-- Flow 1:

Average throughput: 92.94 Mbit/s

95th percentile per-packet one-way delay: 153.736 ms

Loss rate: 0.35%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2019-07-17 18:42:37

End at: 2019-07-17 18:43:07

Local clock offset: 3.17 ms

Remote clock offset: 2.006 ms

Below is generated by plot.py at 2019-07-17 20:56:25

Datalink statistics

-- Total of 1 flow:

Average throughput: 142.42 Mbit/s

95th percentile per-packet one-way delay: 230.318 ms

Loss rate: 2.16%

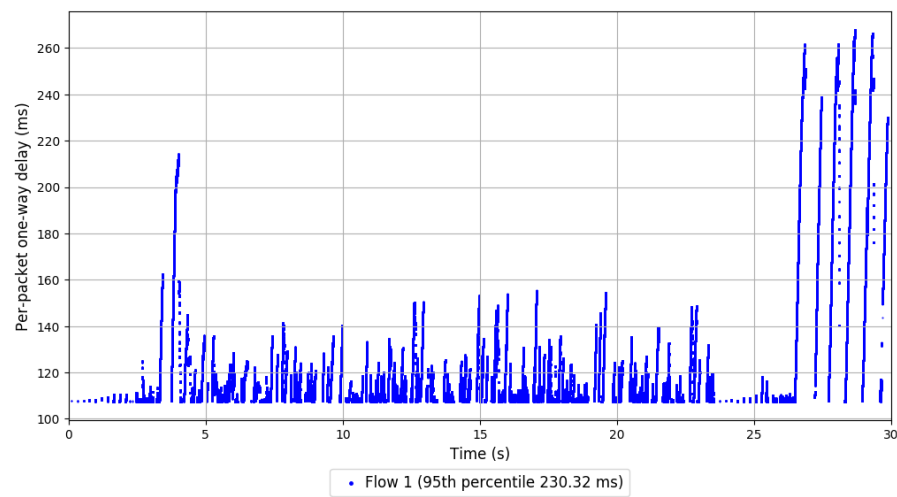
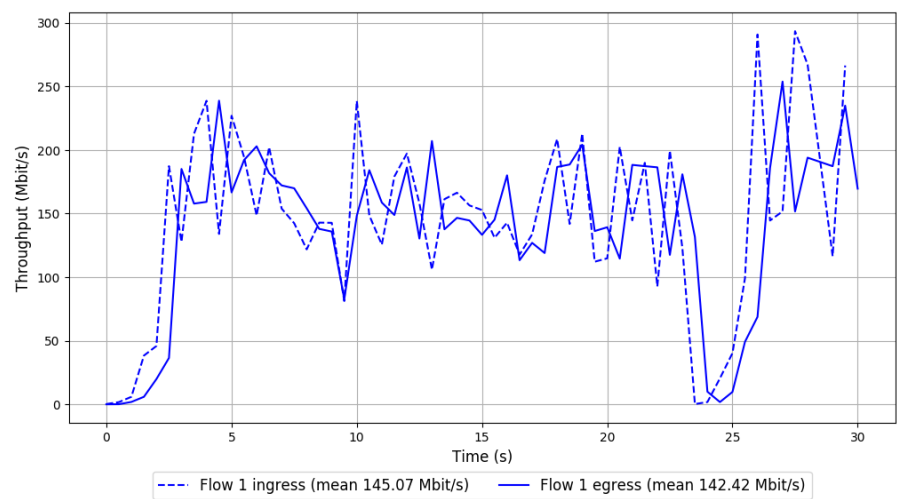
-- Flow 1:

Average throughput: 142.42 Mbit/s

95th percentile per-packet one-way delay: 230.318 ms

Loss rate: 2.16%

Run 5: Report of Verus — Data Link



Run 1: Statistics of PCC-Vivace

Start at: 2019-07-17 15:59:24

End at: 2019-07-17 15:59:54

Local clock offset: 6.766 ms

Remote clock offset: 5.964 ms

Below is generated by plot.py at 2019-07-17 20:57:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 332.36 Mbit/s

95th percentile per-packet one-way delay: 116.735 ms

Loss rate: 0.87%

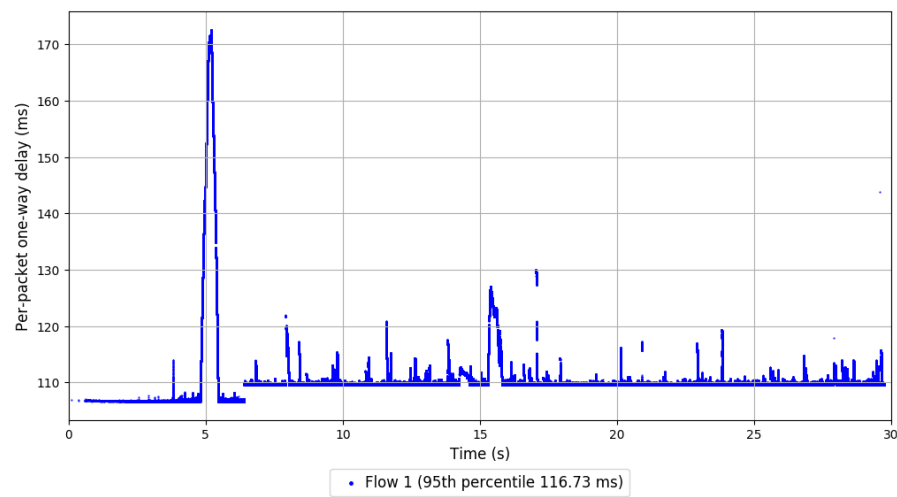
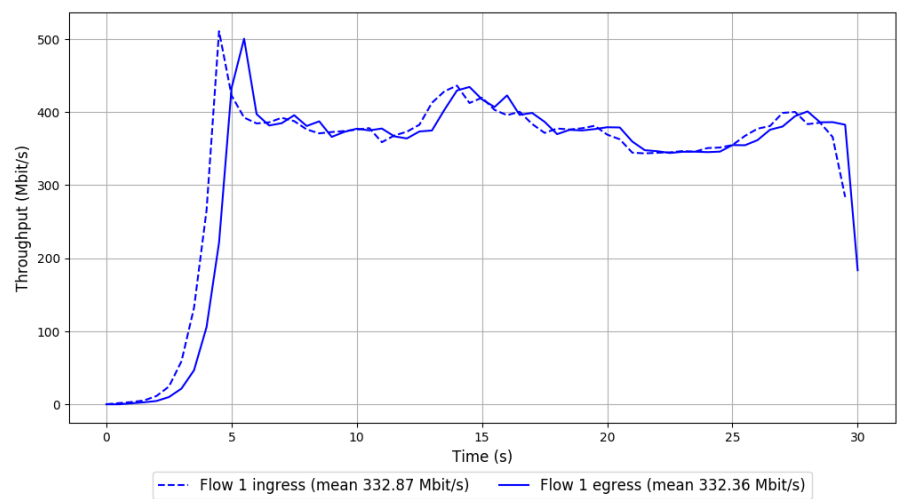
-- Flow 1:

Average throughput: 332.36 Mbit/s

95th percentile per-packet one-way delay: 116.735 ms

Loss rate: 0.87%

Run 1: Report of PCC-Vivace — Data Link

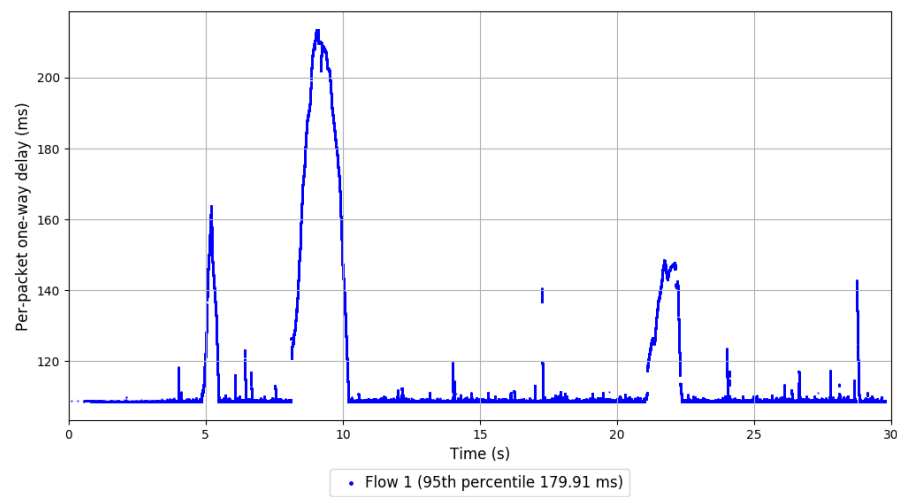
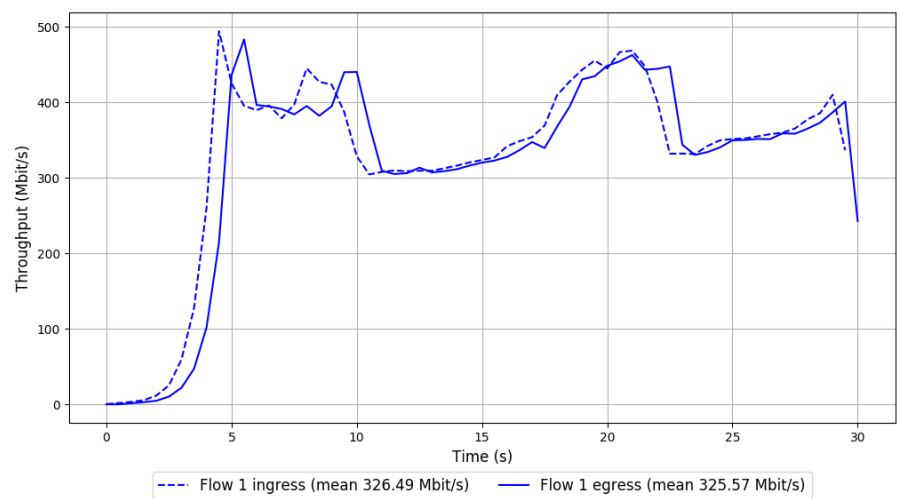


Run 2: Statistics of PCC-Vivace

Start at: 2019-07-17 16:35:23
End at: 2019-07-17 16:35:53
Local clock offset: 20.195 ms
Remote clock offset: 19.826 ms

Below is generated by plot.py at 2019-07-17 20:57:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 325.57 Mbit/s
95th percentile per-packet one-way delay: 179.915 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 325.57 Mbit/s
95th percentile per-packet one-way delay: 179.915 ms
Loss rate: 1.01%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-07-17 17:11:22

End at: 2019-07-17 17:11:52

Local clock offset: 19.816 ms

Remote clock offset: 16.47 ms

Below is generated by plot.py at 2019-07-17 20:57:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 271.16 Mbit/s

95th percentile per-packet one-way delay: 115.823 ms

Loss rate: 1.22%

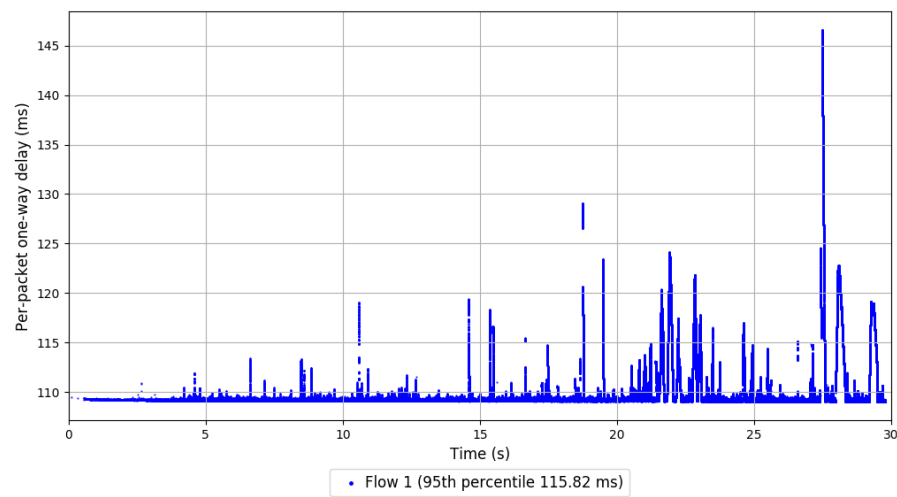
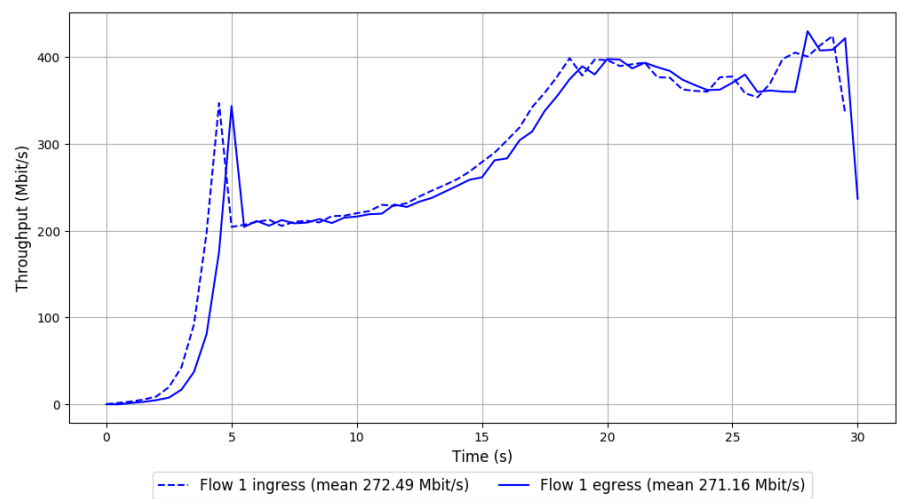
-- Flow 1:

Average throughput: 271.16 Mbit/s

95th percentile per-packet one-way delay: 115.823 ms

Loss rate: 1.22%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-07-17 17:47:26

End at: 2019-07-17 17:47:56

Local clock offset: 9.048 ms

Remote clock offset: 4.216 ms

Below is generated by plot.py at 2019-07-17 20:57:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 342.69 Mbit/s

95th percentile per-packet one-way delay: 111.274 ms

Loss rate: 0.74%

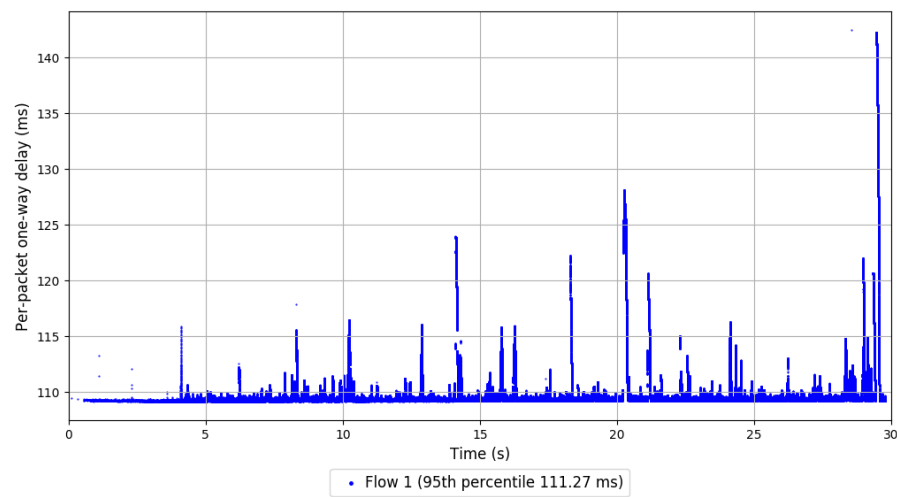
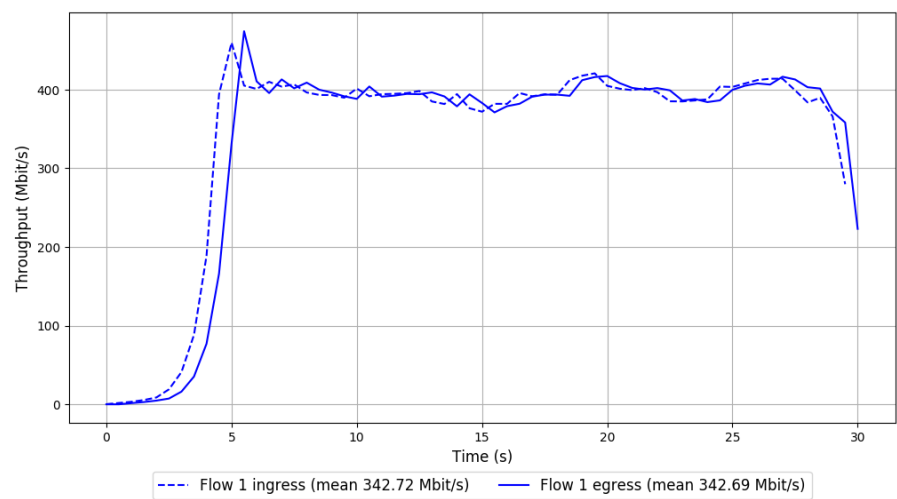
-- Flow 1:

Average throughput: 342.69 Mbit/s

95th percentile per-packet one-way delay: 111.274 ms

Loss rate: 0.74%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-07-17 18:23:44

End at: 2019-07-17 18:24:14

Local clock offset: 3.275 ms

Remote clock offset: 1.742 ms

Below is generated by plot.py at 2019-07-17 20:57:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 331.68 Mbit/s

95th percentile per-packet one-way delay: 117.978 ms

Loss rate: 1.01%

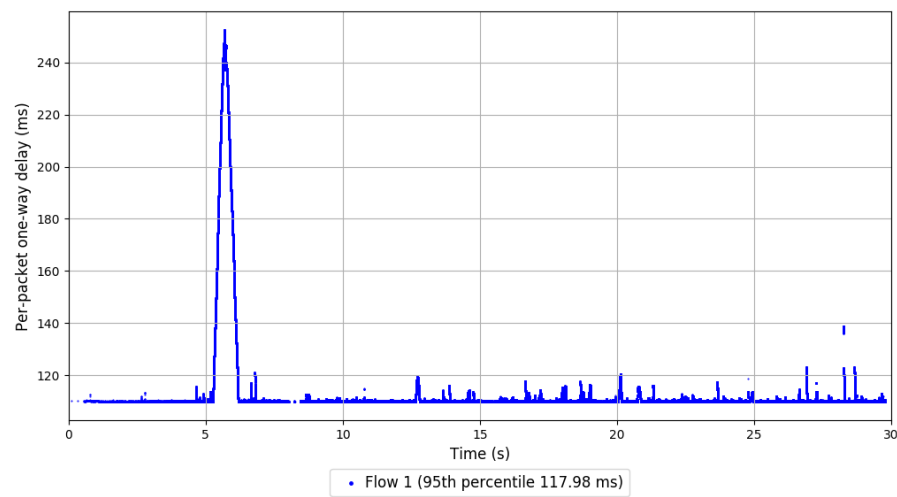
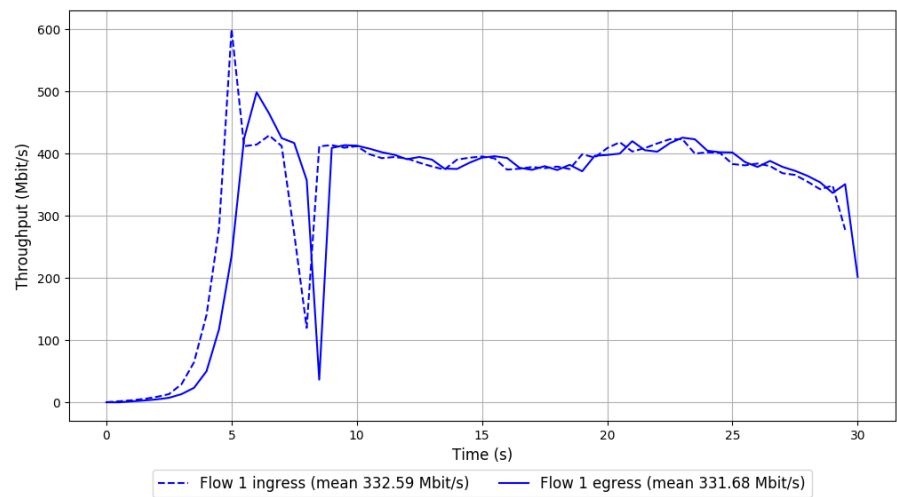
-- Flow 1:

Average throughput: 331.68 Mbit/s

95th percentile per-packet one-way delay: 117.978 ms

Loss rate: 1.01%

Run 5: Report of PCC-Vivace — Data Link

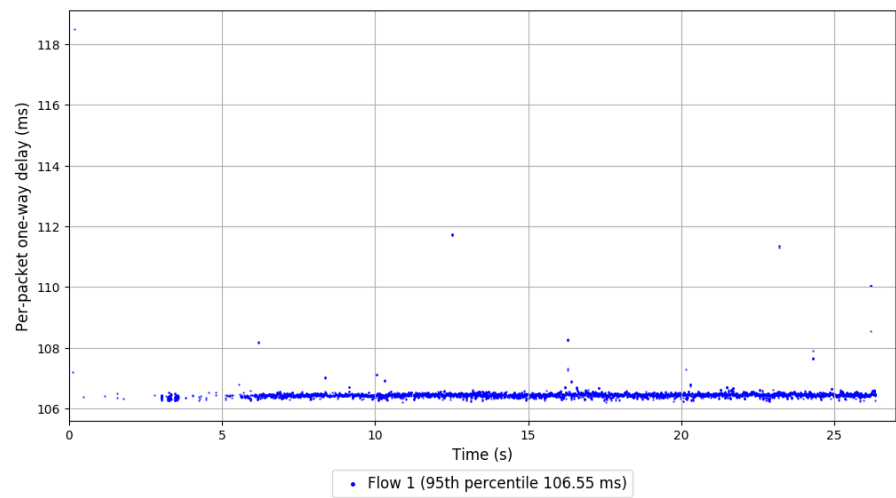
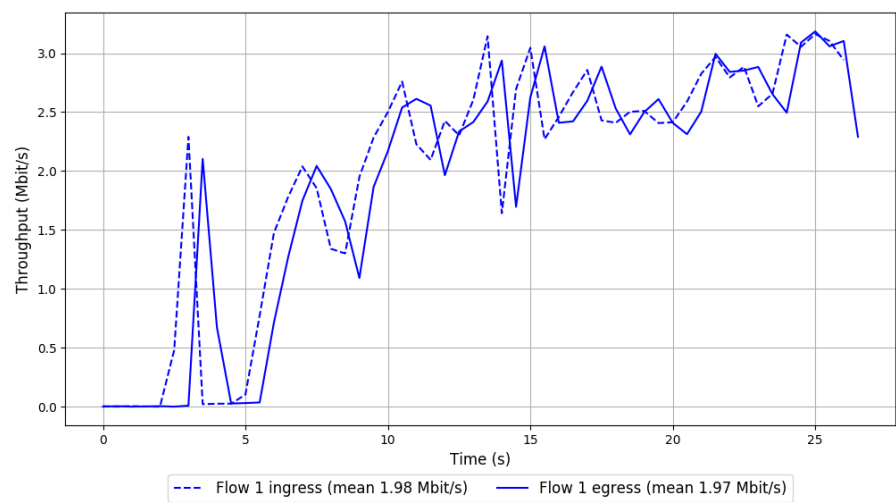


Run 1: Statistics of WebRTC media

Start at: 2019-07-17 16:27:41
End at: 2019-07-17 16:28:11
Local clock offset: 25.911 ms
Remote clock offset: 25.545 ms

Below is generated by plot.py at 2019-07-17 20:57:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 106.547 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 106.547 ms
Loss rate: 1.28%

Run 1: Report of WebRTC media — Data Link

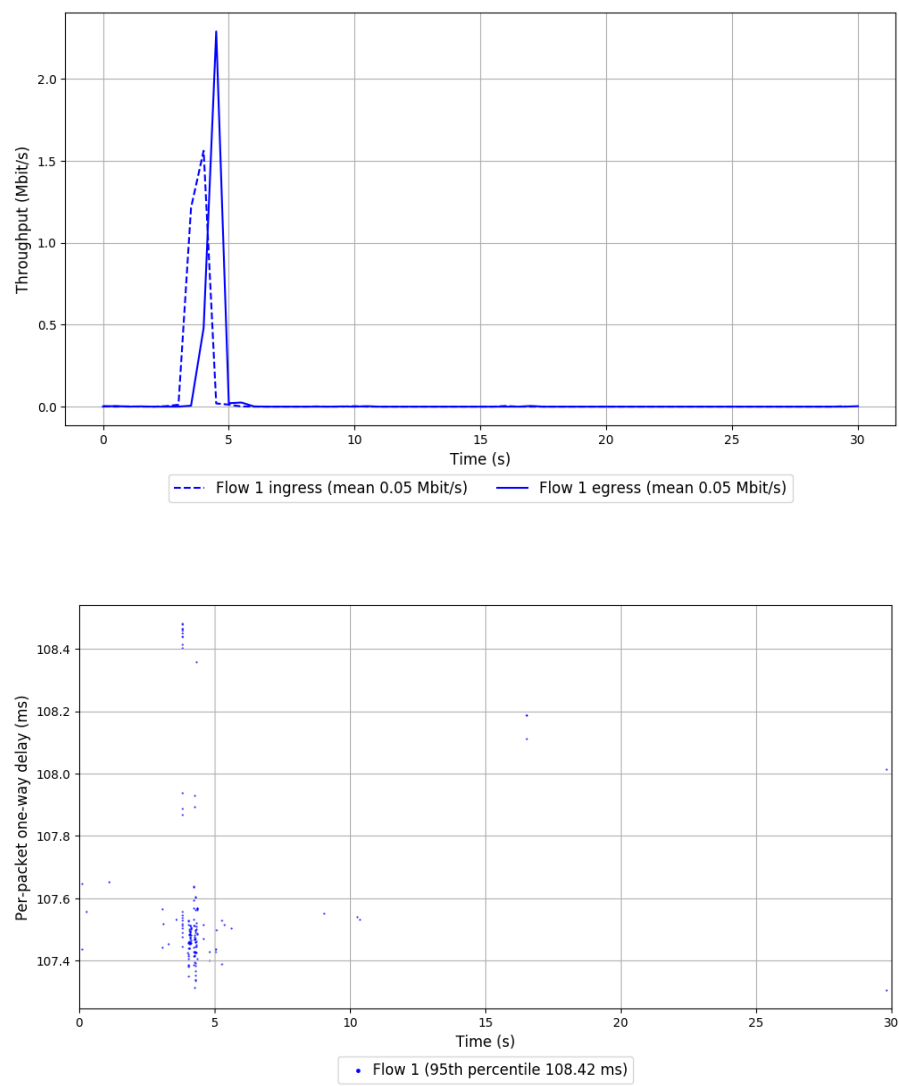


Run 2: Statistics of WebRTC media

Start at: 2019-07-17 17:03:42
End at: 2019-07-17 17:04:12
Local clock offset: 37.616 ms
Remote clock offset: 35.469 ms

Below is generated by plot.py at 2019-07-17 20:57:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 108.415 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 108.415 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-07-17 17:39:45

End at: 2019-07-17 17:40:15

Local clock offset: 15.989 ms

Remote clock offset: 7.399 ms

Below is generated by plot.py at 2019-07-17 20:57:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 107.806 ms

Loss rate: 0.00%

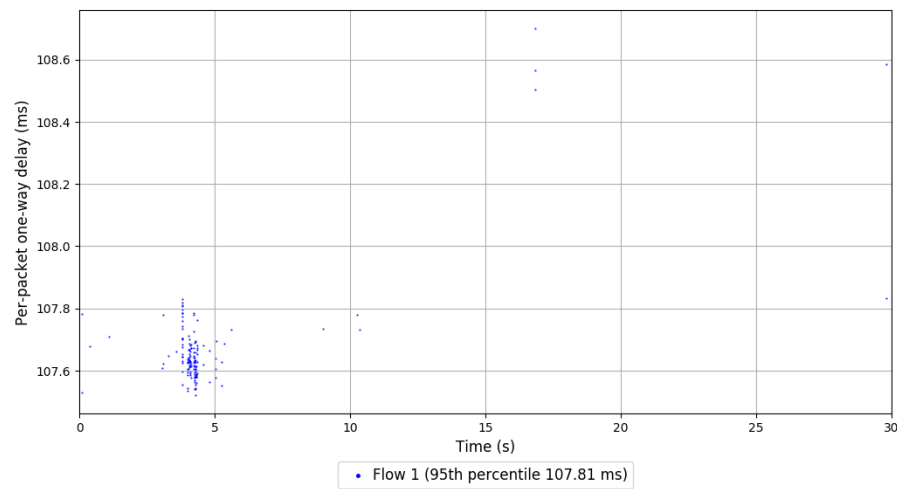
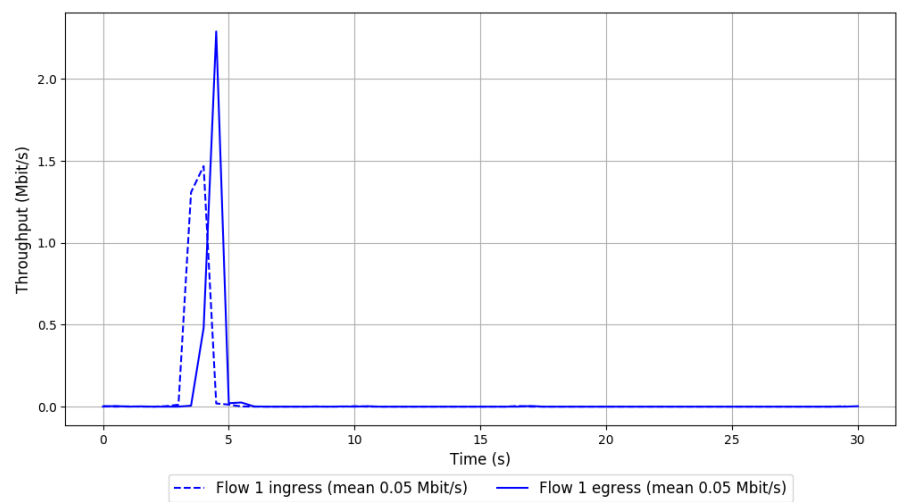
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 107.806 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

Start at: 2019-07-17 18:16:07

End at: 2019-07-17 18:16:37

Local clock offset: 6.146 ms

Remote clock offset: 2.785 ms

Below is generated by plot.py at 2019-07-17 20:57:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 112.687 ms

Loss rate: 0.00%

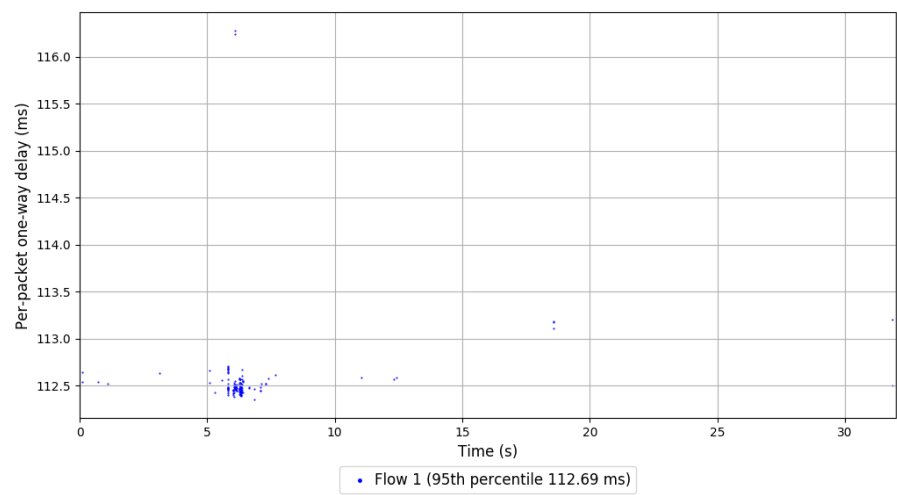
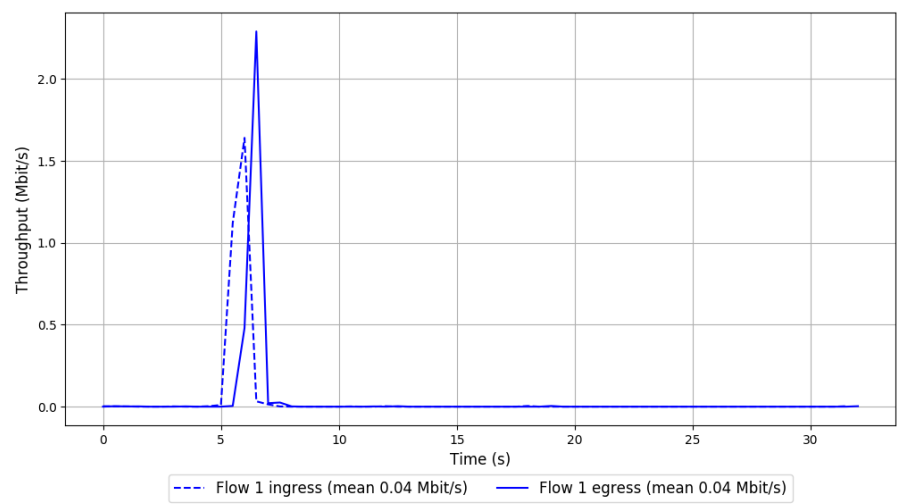
-- Flow 1:

Average throughput: 0.04 Mbit/s

95th percentile per-packet one-way delay: 112.687 ms

Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-07-17 18:52:23

End at: 2019-07-17 18:52:53

Local clock offset: 1.13 ms

Remote clock offset: 1.105 ms

Below is generated by plot.py at 2019-07-17 20:57:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 107.120 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 107.120 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

