

Pantheon Report

Generated at 2019-08-26 20:32:44 (UTC).

Data path: GCE Iowa on *ens4 (remote)* → GCE Sydney 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:

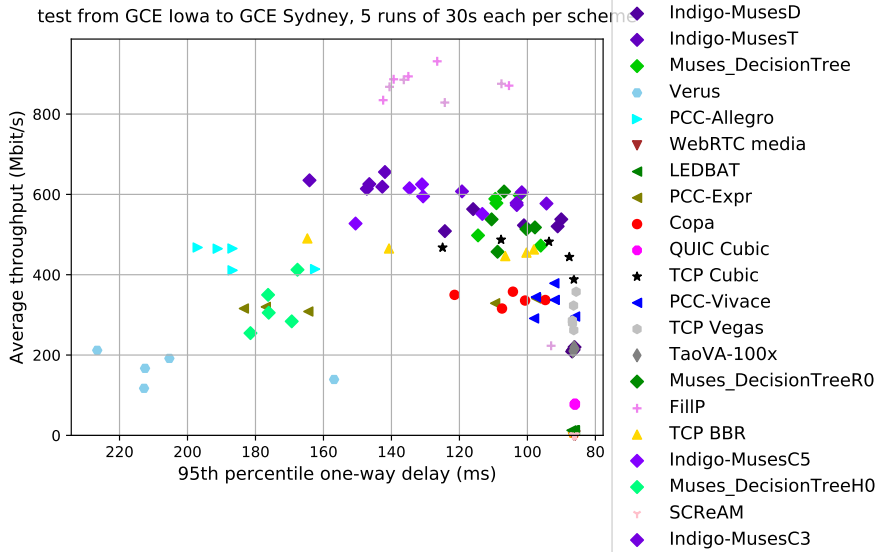
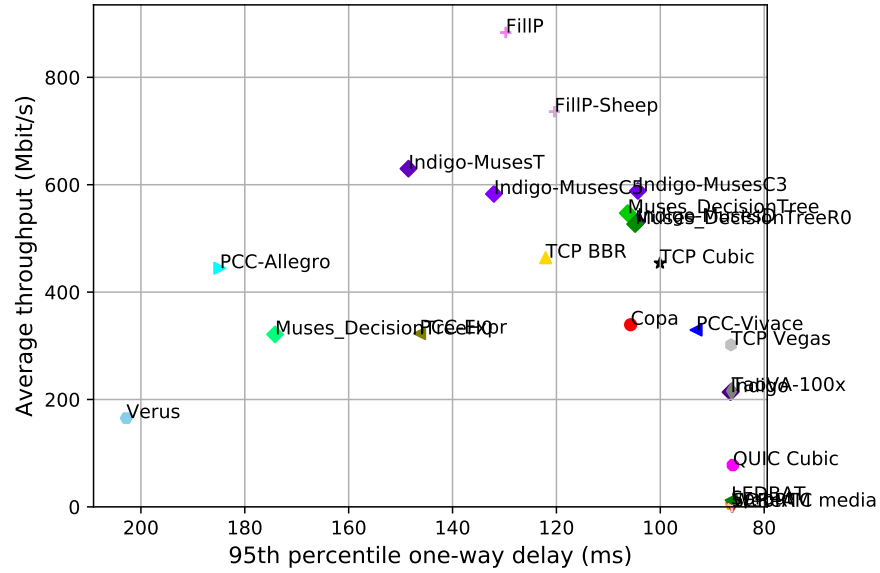
```
Linux 4.15.0-1036-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

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 Iowa to GCE Sydney, 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	464.02	122.07	0.76
Copa	5	339.23	105.72	0.60
TCP Cubic	5	453.85	100.07	0.57
FillP	5	883.44	129.75	1.17
FillP-Sheep	5	736.10	120.38	1.27
Indigo	4	213.65	86.48	0.61
Indigo-MusesC3	5	588.45	104.32	0.66
Indigo-MusesC5	5	582.81	132.04	0.74
Indigo-MusesD	5	530.67	104.48	0.68
Indigo-MusesT	5	629.91	148.49	0.71
LEDBAT	5	12.49	86.36	1.15
Muses_DecisionTree	5	547.11	106.29	0.65
Muses_DecisionTreeH0	5	321.21	174.17	4.55
Muses_DecisionTreeR0	5	526.72	104.85	0.72
PCC-Allegro	5	444.56	184.81	1.47
PCC-Expr	5	322.78	146.35	1.17
QUIC Cubic	4	77.84	86.03	0.45
SCReAM	5	0.22	86.21	0.56
Sprout	5	4.49	86.38	0.65
TaoVA-100x	5	215.89	86.27	0.58
TCP Vegas	5	301.68	86.39	0.51
Verus	5	165.34	202.81	2.65
PCC-Vivace	5	329.43	93.12	0.70
WebRTC media	4	0.53	86.14	0.25

Run 1: Statistics of TCP BBR

Start at: 2019-08-26 16:06:44

End at: 2019-08-26 16:07:14

Local clock offset: 9.355 ms

Remote clock offset: 14.819 ms

Below is generated by plot.py at 2019-08-26 19:05:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 462.90 Mbit/s

95th percentile per-packet one-way delay: 98.110 ms

Loss rate: 0.56%

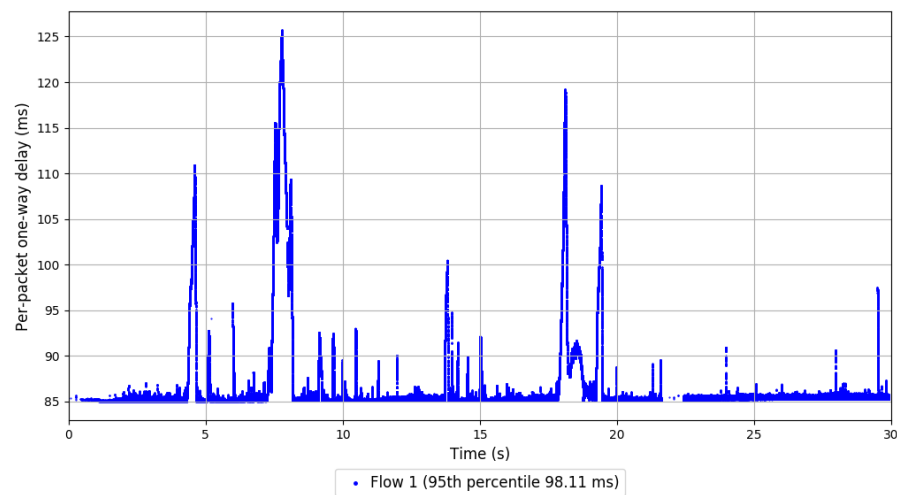
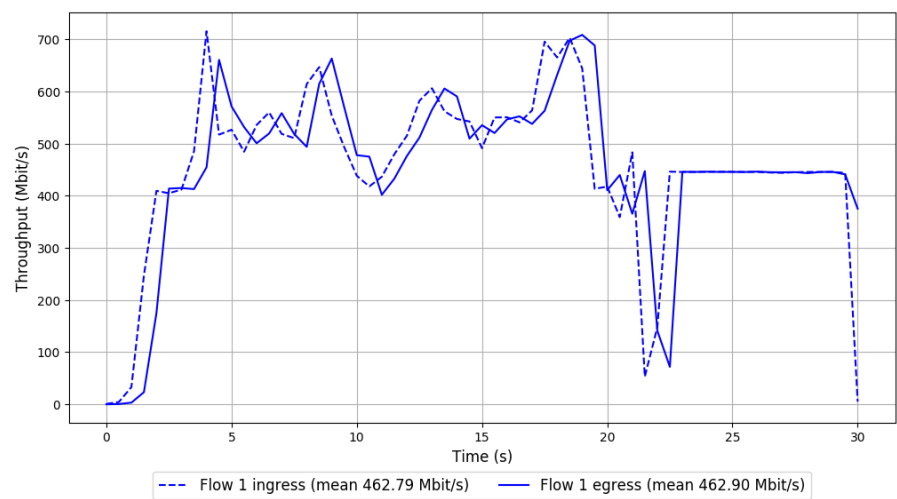
-- Flow 1:

Average throughput: 462.90 Mbit/s

95th percentile per-packet one-way delay: 98.110 ms

Loss rate: 0.56%

Run 1: Report of TCP BBR — Data Link

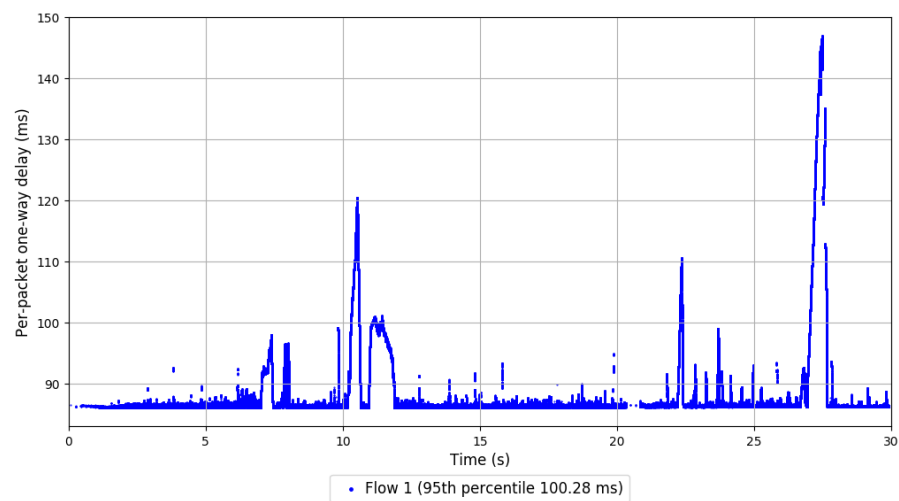
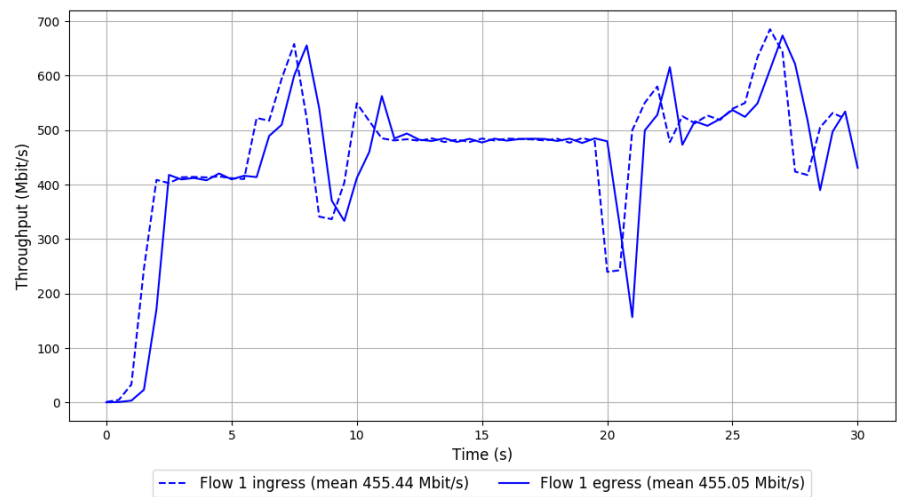


Run 2: Statistics of TCP BBR

Start at: 2019-08-26 16:41:26
End at: 2019-08-26 16:41:56
Local clock offset: 16.822 ms
Remote clock offset: 24.512 ms

Below is generated by plot.py at 2019-08-26 19:05:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 455.05 Mbit/s
95th percentile per-packet one-way delay: 100.279 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 455.05 Mbit/s
95th percentile per-packet one-way delay: 100.279 ms
Loss rate: 0.66%

Run 2: Report of TCP BBR — Data Link



Run 3: Statistics of TCP BBR

Start at: 2019-08-26 17:16:24

End at: 2019-08-26 17:16:55

Local clock offset: 7.969 ms

Remote clock offset: 11.383 ms

Below is generated by plot.py at 2019-08-26 19:05:15

Datalink statistics

-- Total of 1 flow:

Average throughput: 446.42 Mbit/s

95th percentile per-packet one-way delay: 106.514 ms

Loss rate: 0.59%

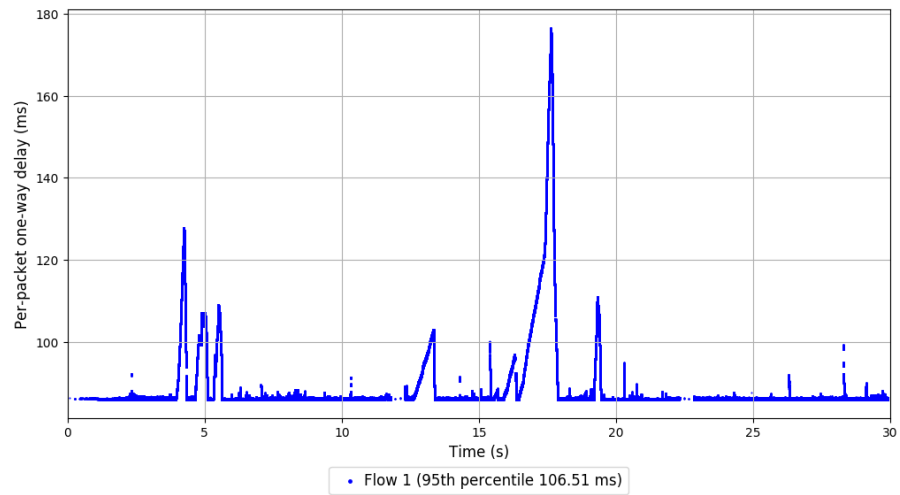
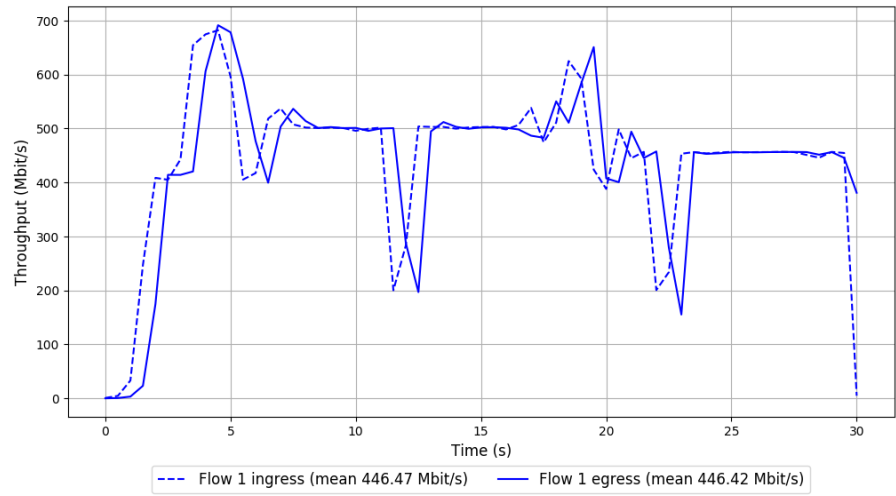
-- Flow 1:

Average throughput: 446.42 Mbit/s

95th percentile per-packet one-way delay: 106.514 ms

Loss rate: 0.59%

Run 3: Report of TCP BBR — Data Link



Run 4: Statistics of TCP BBR

Start at: 2019-08-26 17:50:48

End at: 2019-08-26 17:51:18

Local clock offset: 2.459 ms

Remote clock offset: 3.863 ms

Below is generated by plot.py at 2019-08-26 19:05:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 490.39 Mbit/s

95th percentile per-packet one-way delay: 164.736 ms

Loss rate: 1.30%

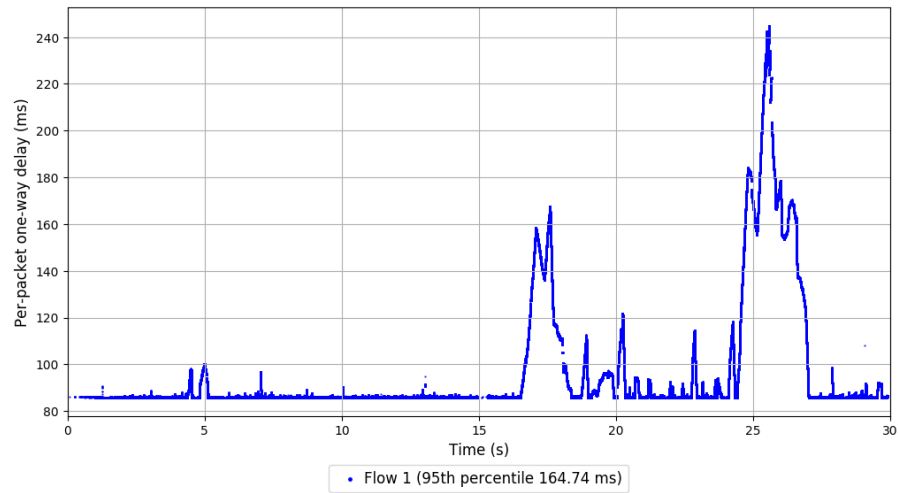
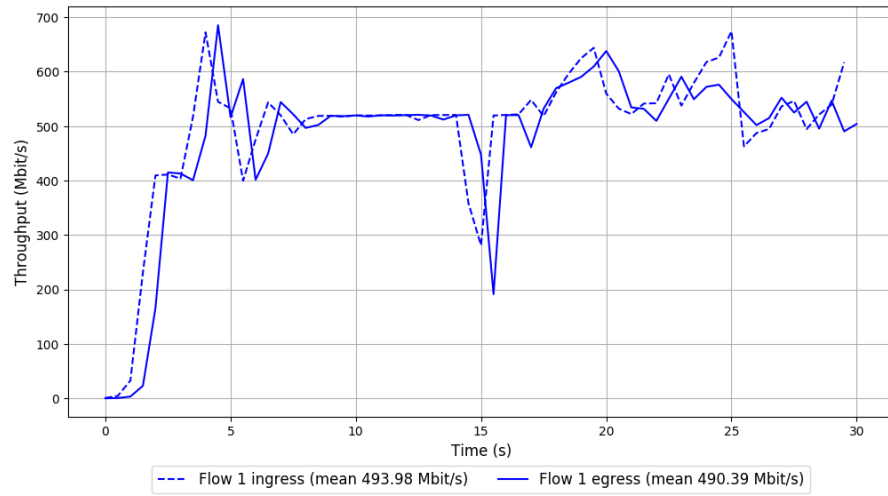
-- Flow 1:

Average throughput: 490.39 Mbit/s

95th percentile per-packet one-way delay: 164.736 ms

Loss rate: 1.30%

Run 4: Report of TCP BBR — Data Link



Run 5: Statistics of TCP BBR

Start at: 2019-08-26 18:25:38

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

Local clock offset: 1.408 ms

Remote clock offset: 1.731 ms

Below is generated by plot.py at 2019-08-26 19:05:59

Datalink statistics

-- Total of 1 flow:

Average throughput: 465.36 Mbit/s

95th percentile per-packet one-way delay: 140.712 ms

Loss rate: 0.71%

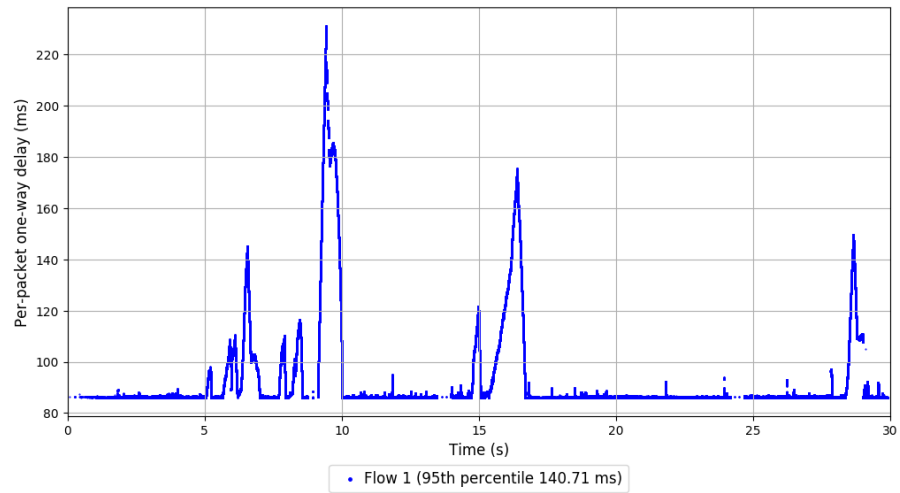
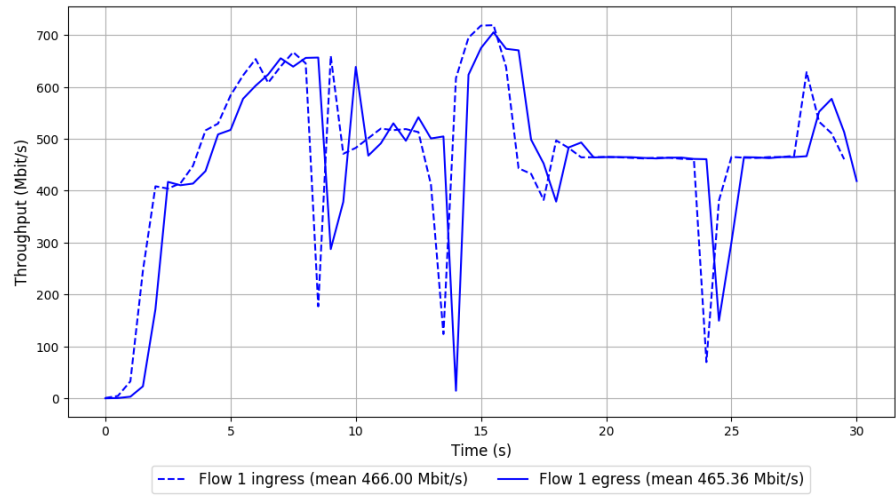
-- Flow 1:

Average throughput: 465.36 Mbit/s

95th percentile per-packet one-way delay: 140.712 ms

Loss rate: 0.71%

Run 5: Report of TCP BBR — Data Link

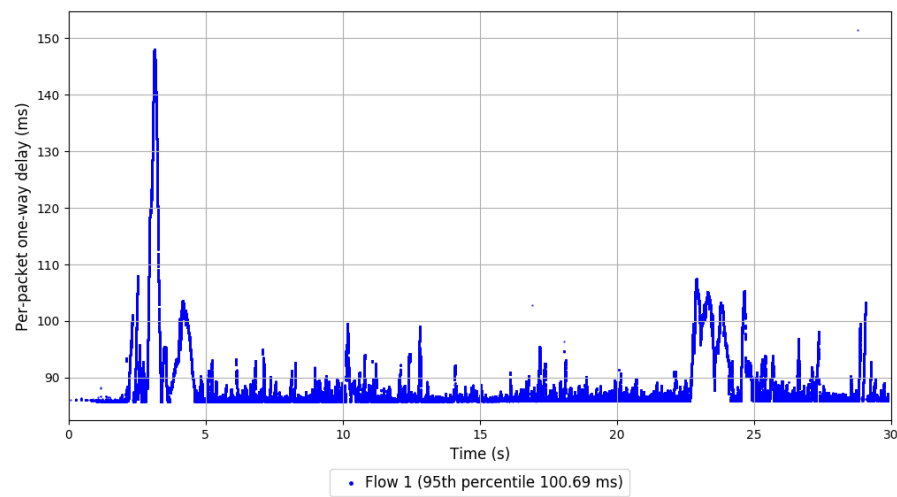
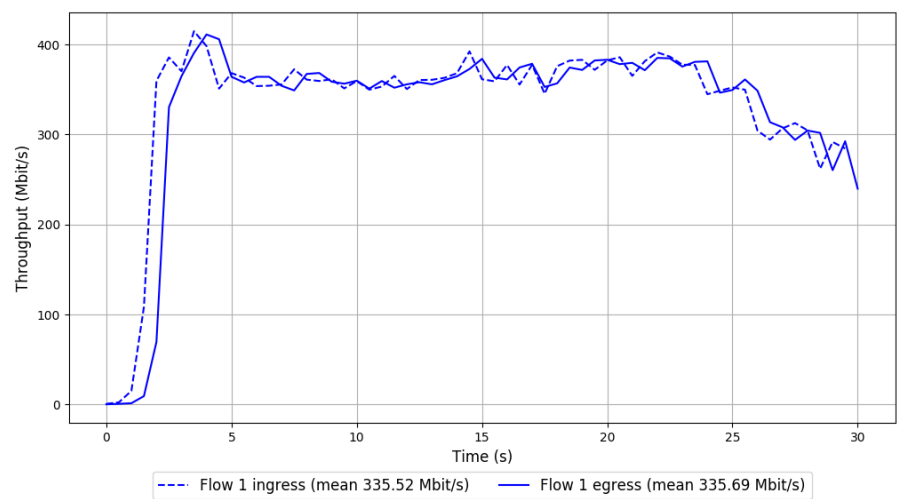


Run 1: Statistics of Copa

Start at: 2019-08-26 16:18:04
End at: 2019-08-26 16:18:34
Local clock offset: 11.813 ms
Remote clock offset: 17.718 ms

Below is generated by plot.py at 2019-08-26 19:07:21
Datalink statistics
-- Total of 1 flow:
Average throughput: 335.69 Mbit/s
95th percentile per-packet one-way delay: 100.687 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 335.69 Mbit/s
95th percentile per-packet one-way delay: 100.687 ms
Loss rate: 0.52%

Run 1: Report of Copa — Data Link

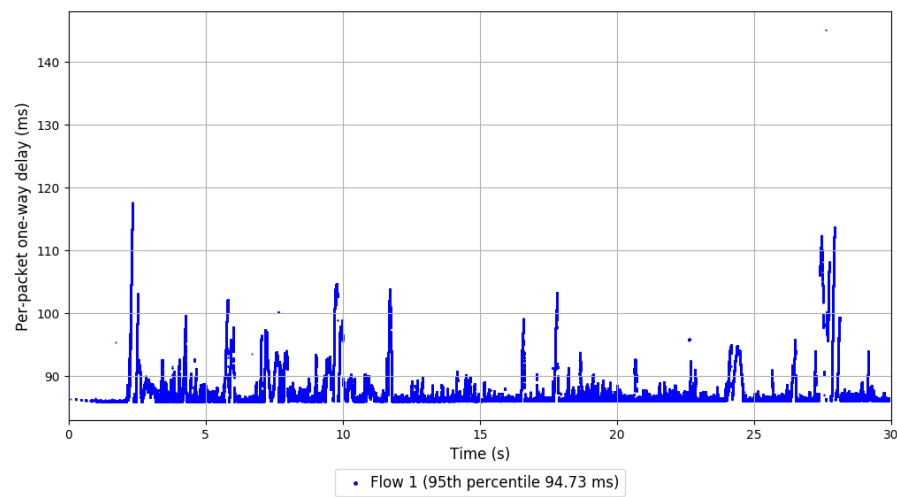
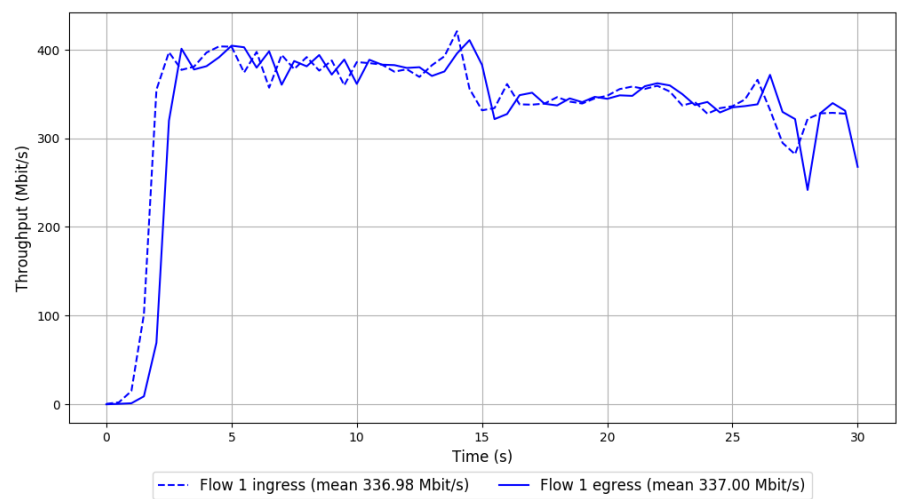


Run 2: Statistics of Copa

Start at: 2019-08-26 16:52:45
End at: 2019-08-26 16:53:15
Local clock offset: 24.004 ms
Remote clock offset: 35.274 ms

Below is generated by plot.py at 2019-08-26 19:07:25
Datalink statistics
-- Total of 1 flow:
Average throughput: 337.00 Mbit/s
95th percentile per-packet one-way delay: 94.734 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 337.00 Mbit/s
95th percentile per-packet one-way delay: 94.734 ms
Loss rate: 0.57%

Run 2: Report of Copa — Data Link

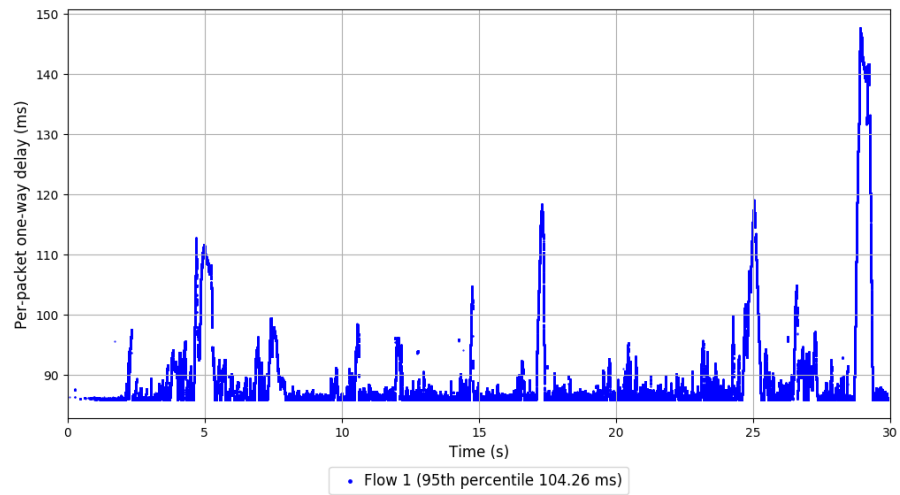
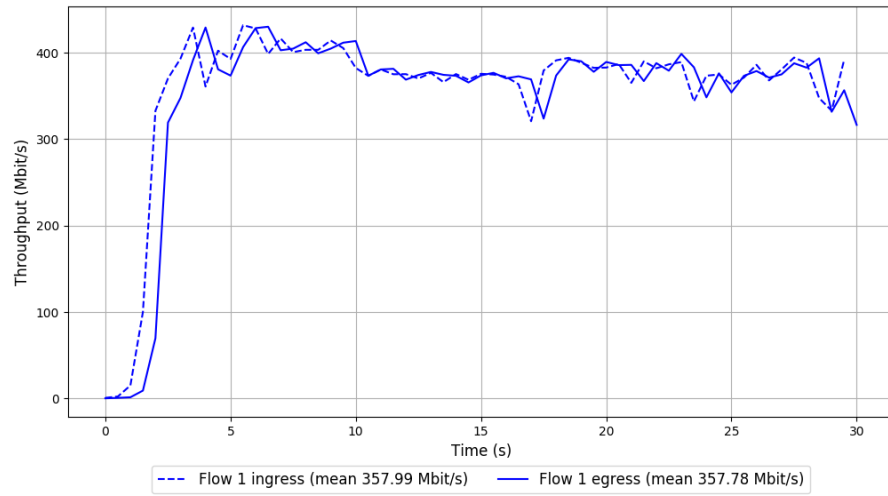


Run 3: Statistics of Copa

Start at: 2019-08-26 17:27:46
End at: 2019-08-26 17:28:16
Local clock offset: 7.036 ms
Remote clock offset: 10.047 ms

Below is generated by plot.py at 2019-08-26 19:07:50
Datalink statistics
-- Total of 1 flow:
Average throughput: 357.78 Mbit/s
95th percentile per-packet one-way delay: 104.260 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 357.78 Mbit/s
95th percentile per-packet one-way delay: 104.260 ms
Loss rate: 0.63%

Run 3: Report of Copa — Data Link



Run 4: Statistics of Copa

Start at: 2019-08-26 18:02:19

End at: 2019-08-26 18:02:49

Local clock offset: 2.829 ms

Remote clock offset: 4.296 ms

Below is generated by plot.py at 2019-08-26 19:13:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 315.82 Mbit/s

95th percentile per-packet one-way delay: 107.474 ms

Loss rate: 0.68%

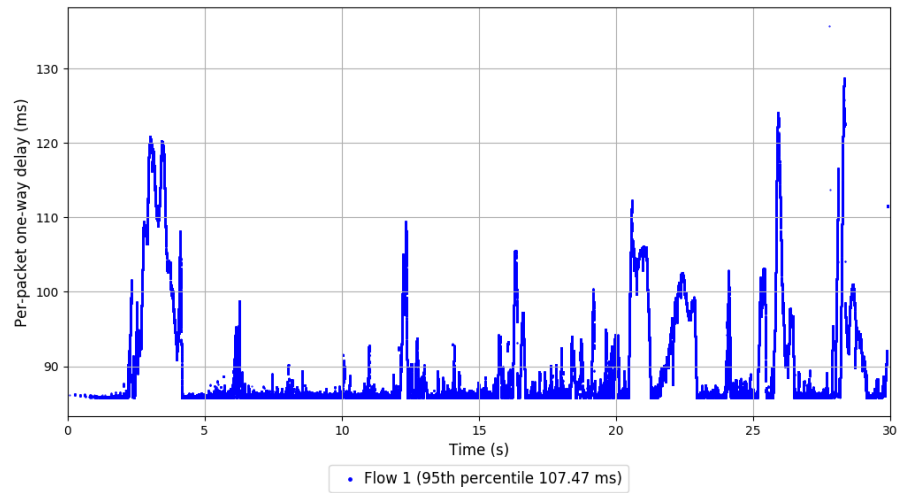
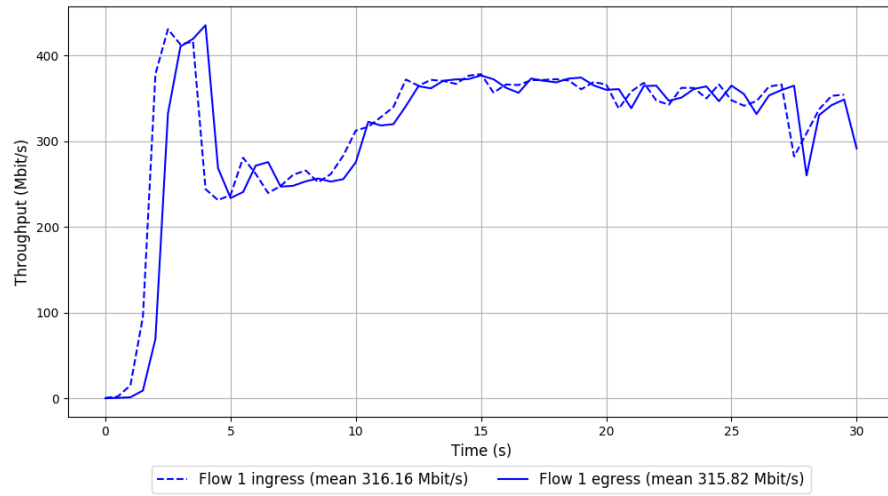
-- Flow 1:

Average throughput: 315.82 Mbit/s

95th percentile per-packet one-way delay: 107.474 ms

Loss rate: 0.68%

Run 4: Report of Copa — Data Link



Run 5: Statistics of Copa

Start at: 2019-08-26 18:37:04

End at: 2019-08-26 18:37:35

Local clock offset: 1.319 ms

Remote clock offset: 1.962 ms

Below is generated by plot.py at 2019-08-26 19:14:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 349.84 Mbit/s

95th percentile per-packet one-way delay: 121.432 ms

Loss rate: 0.60%

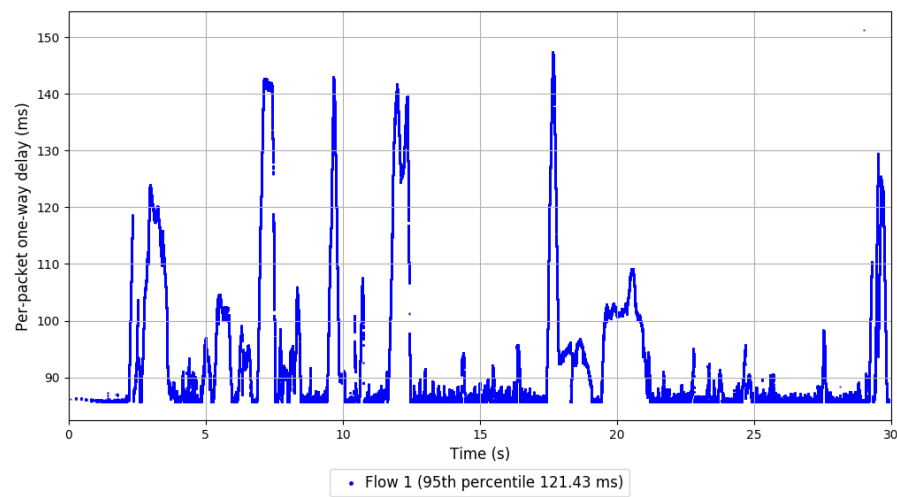
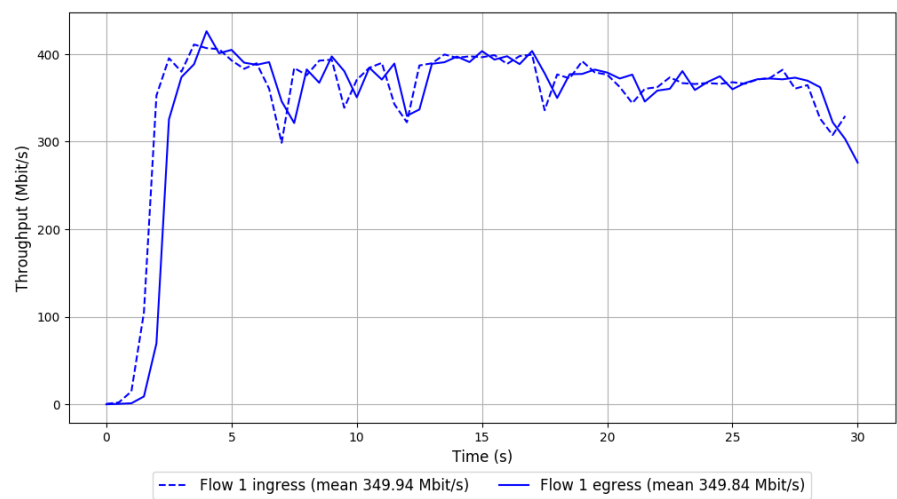
-- Flow 1:

Average throughput: 349.84 Mbit/s

95th percentile per-packet one-way delay: 121.432 ms

Loss rate: 0.60%

Run 5: Report of Copa — Data Link



Run 1: Statistics of TCP Cubic

Start at: 2019-08-26 15:53:56

End at: 2019-08-26 15:54:26

Local clock offset: 2.471 ms

Remote clock offset: 5.198 ms

Below is generated by plot.py at 2019-08-26 19:14:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 467.52 Mbit/s

95th percentile per-packet one-way delay: 124.954 ms

Loss rate: 0.58%

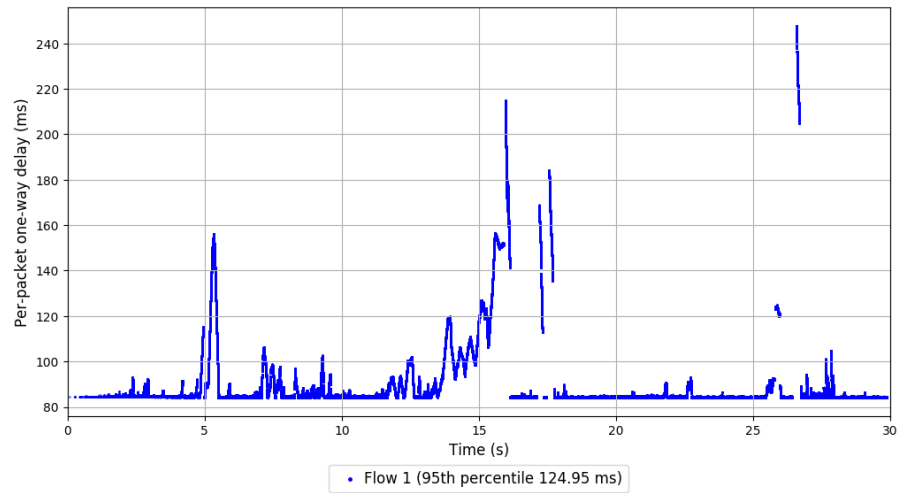
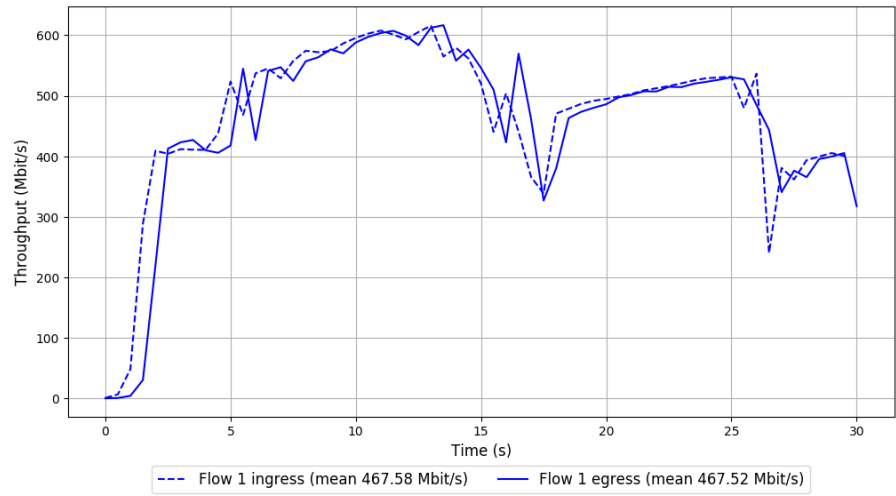
-- Flow 1:

Average throughput: 467.52 Mbit/s

95th percentile per-packet one-way delay: 124.954 ms

Loss rate: 0.58%

Run 1: Report of TCP Cubic — Data Link

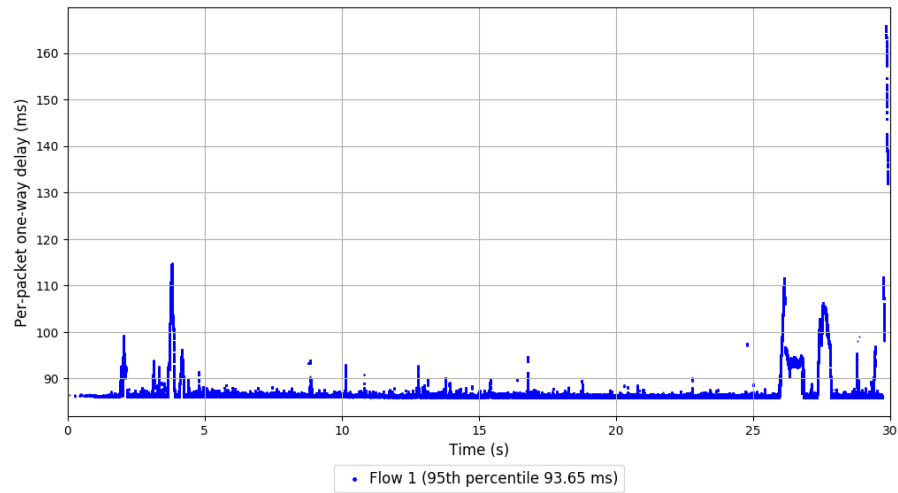
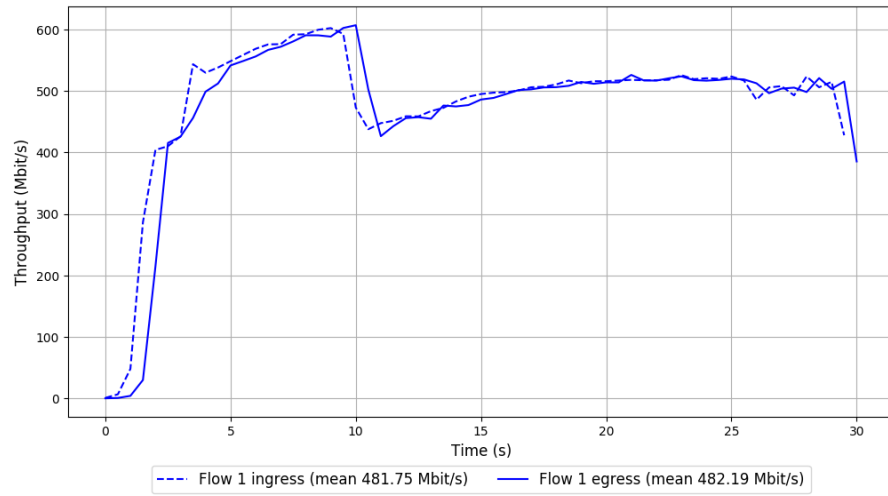


Run 2: Statistics of TCP Cubic

Start at: 2019-08-26 16:28:21
End at: 2019-08-26 16:28:51
Local clock offset: 17.273 ms
Remote clock offset: 25.104 ms

Below is generated by plot.py at 2019-08-26 19:14:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 482.19 Mbit/s
95th percentile per-packet one-way delay: 93.650 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 482.19 Mbit/s
95th percentile per-packet one-way delay: 93.650 ms
Loss rate: 0.48%

Run 2: Report of TCP Cubic — Data Link

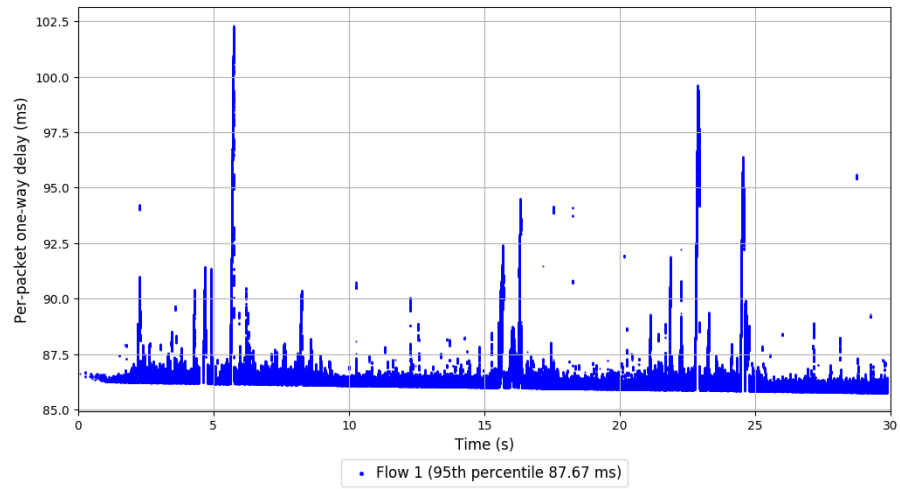
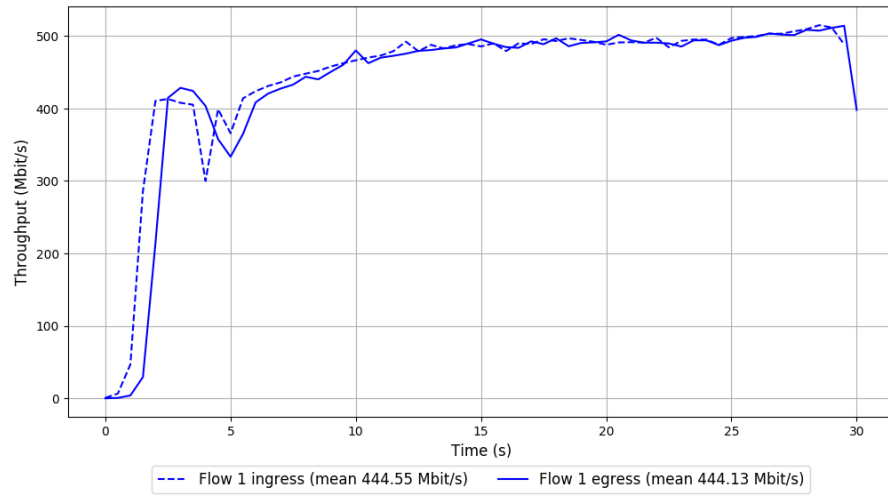


Run 3: Statistics of TCP Cubic

Start at: 2019-08-26 17:03:14
End at: 2019-08-26 17:03:44
Local clock offset: 22.388 ms
Remote clock offset: 32.015 ms

Below is generated by plot.py at 2019-08-26 19:14:12
Datalink statistics
-- Total of 1 flow:
Average throughput: 444.13 Mbit/s
95th percentile per-packet one-way delay: 87.666 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 444.13 Mbit/s
95th percentile per-packet one-way delay: 87.666 ms
Loss rate: 0.67%

Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-08-26 17:37:42

End at: 2019-08-26 17:38:12

Local clock offset: 5.798 ms

Remote clock offset: 7.864 ms

Below is generated by plot.py at 2019-08-26 19:14:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 487.17 Mbit/s

95th percentile per-packet one-way delay: 107.746 ms

Loss rate: 0.50%

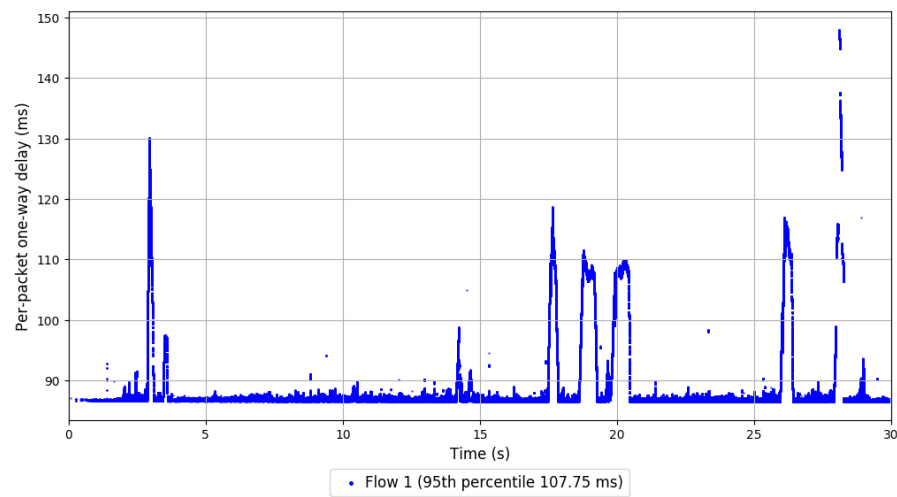
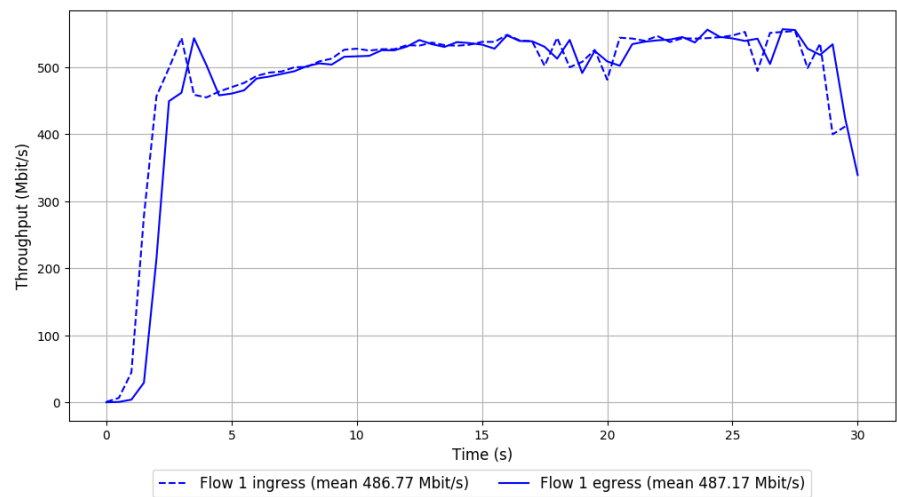
-- Flow 1:

Average throughput: 487.17 Mbit/s

95th percentile per-packet one-way delay: 107.746 ms

Loss rate: 0.50%

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

Start at: 2019-08-26 18:12:37

End at: 2019-08-26 18:13:07

Local clock offset: 1.7 ms

Remote clock offset: 3.218 ms

Below is generated by plot.py at 2019-08-26 19:14:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 388.24 Mbit/s

95th percentile per-packet one-way delay: 86.332 ms

Loss rate: 0.64%

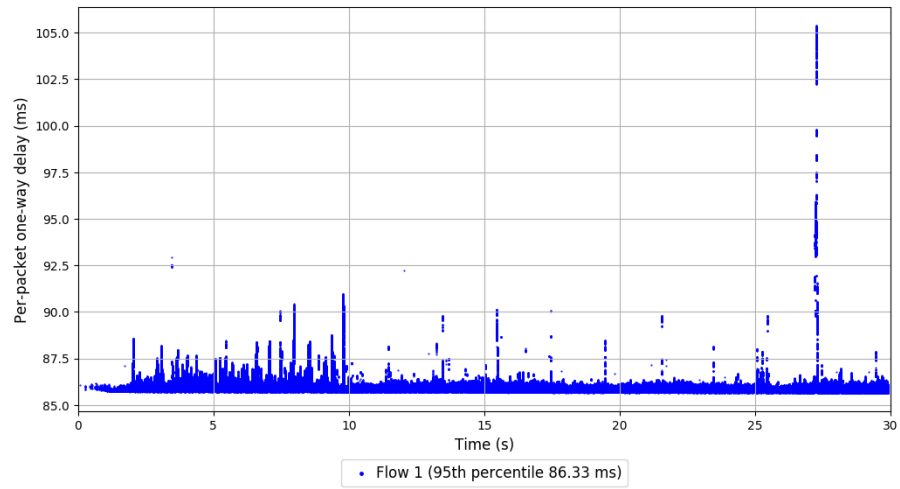
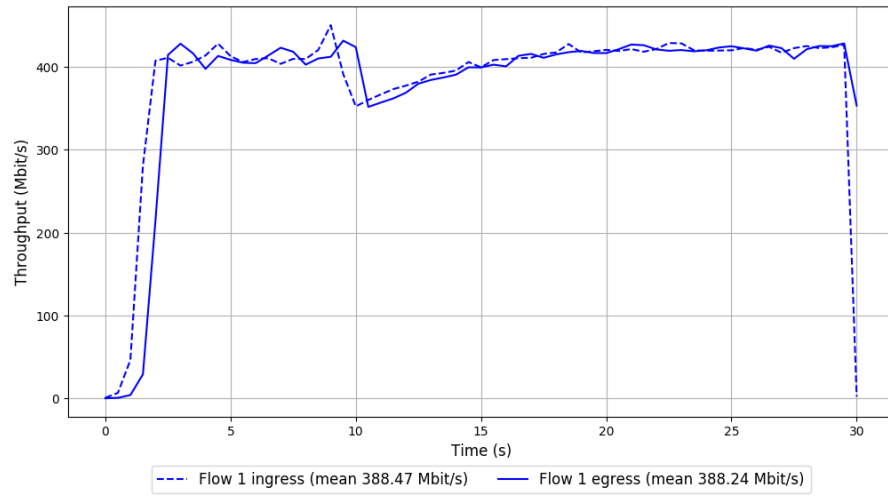
-- Flow 1:

Average throughput: 388.24 Mbit/s

95th percentile per-packet one-way delay: 86.332 ms

Loss rate: 0.64%

Run 5: Report of TCP Cubic — Data Link



Run 1: Statistics of FillP

Start at: 2019-08-26 16:02:07

End at: 2019-08-26 16:02:37

Local clock offset: 6.609 ms

Remote clock offset: 9.089 ms

Below is generated by plot.py at 2019-08-26 19:25:03

Datalink statistics

-- Total of 1 flow:

Average throughput: 931.39 Mbit/s

95th percentile per-packet one-way delay: 126.538 ms

Loss rate: 0.84%

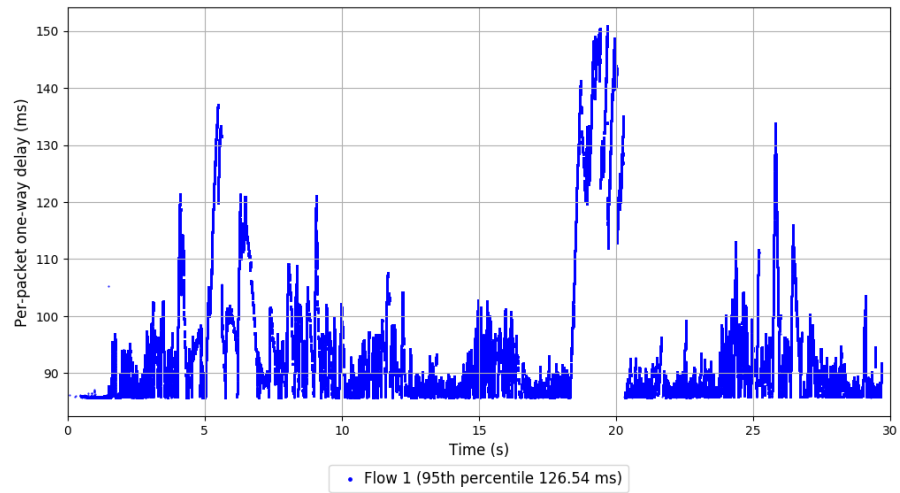
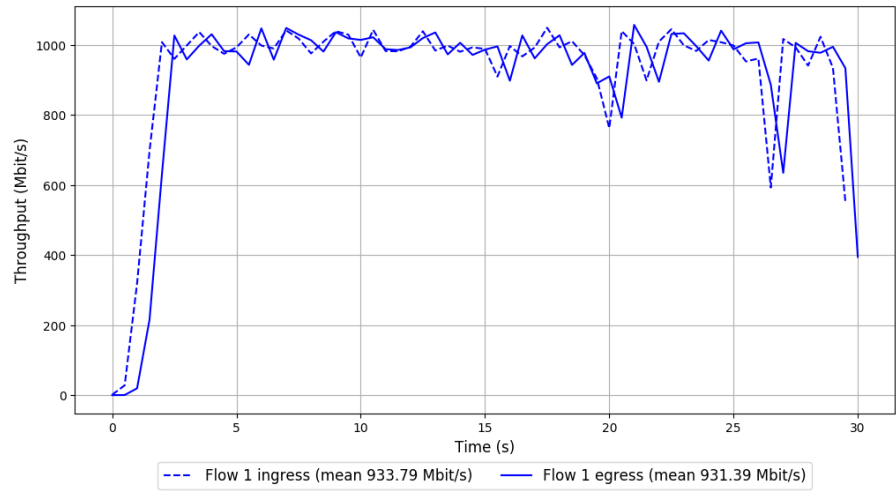
-- Flow 1:

Average throughput: 931.39 Mbit/s

95th percentile per-packet one-way delay: 126.538 ms

Loss rate: 0.84%

Run 1: Report of FillP — Data Link

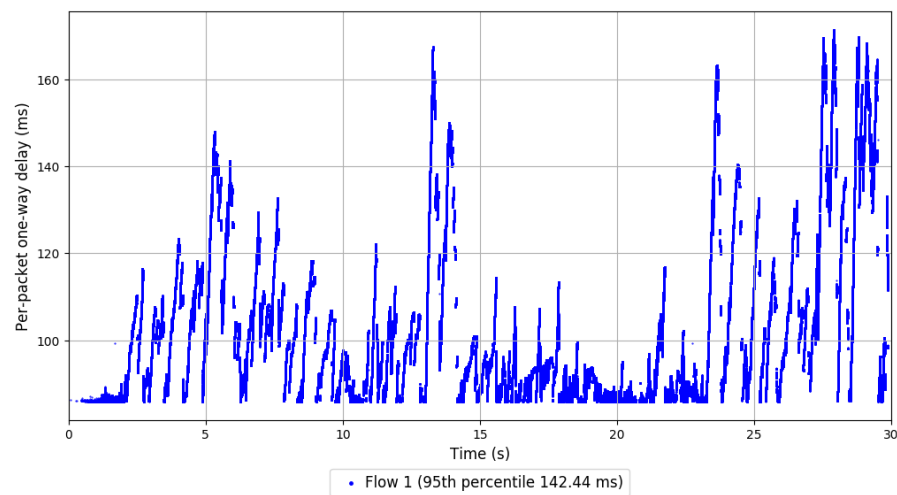
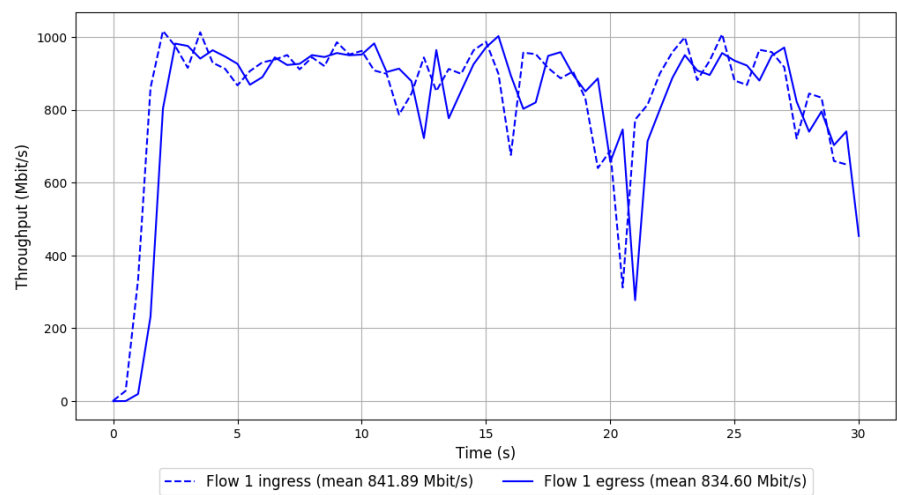


Run 2: Statistics of FillP

Start at: 2019-08-26 16:36:52
End at: 2019-08-26 16:37:22
Local clock offset: 14.997 ms
Remote clock offset: 22.024 ms

Below is generated by plot.py at 2019-08-26 19:26:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 834.60 Mbit/s
95th percentile per-packet one-way delay: 142.439 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 834.60 Mbit/s
95th percentile per-packet one-way delay: 142.439 ms
Loss rate: 1.44%

Run 2: Report of FillP — Data Link

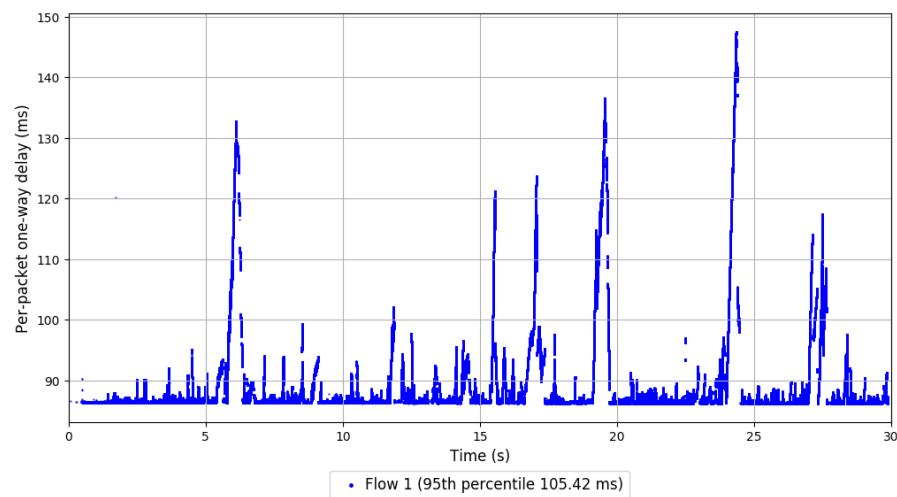
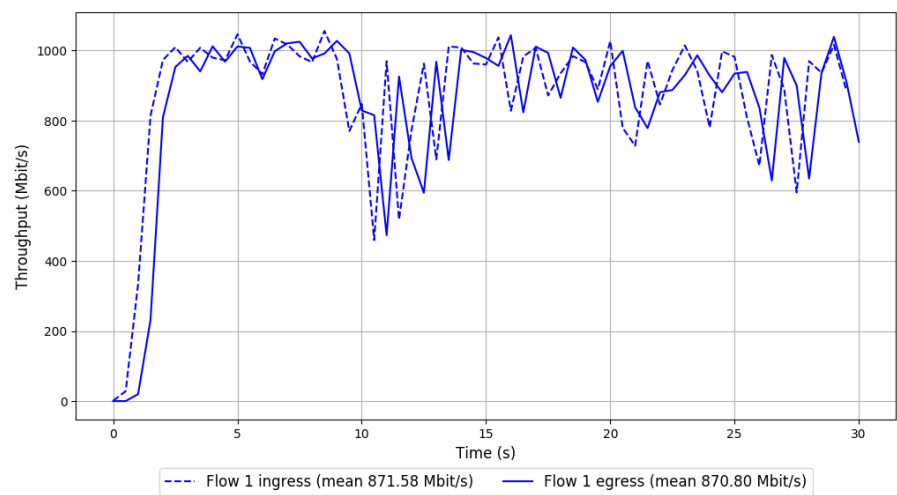


Run 3: Statistics of FillP

Start at: 2019-08-26 17:11:40
End at: 2019-08-26 17:12:10
Local clock offset: 10.54 ms
Remote clock offset: 14.748 ms

Below is generated by plot.py at 2019-08-26 19:27:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 870.80 Mbit/s
95th percentile per-packet one-way delay: 105.423 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 870.80 Mbit/s
95th percentile per-packet one-way delay: 105.423 ms
Loss rate: 0.67%

Run 3: Report of FillP — Data Link



Run 4: Statistics of FillP

Start at: 2019-08-26 17:46:08

End at: 2019-08-26 17:46:39

Local clock offset: 2.514 ms

Remote clock offset: 4.382 ms

Below is generated by plot.py at 2019-08-26 19:27:35

Datalink statistics

-- Total of 1 flow:

Average throughput: 893.79 Mbit/s

95th percentile per-packet one-way delay: 135.024 ms

Loss rate: 1.27%

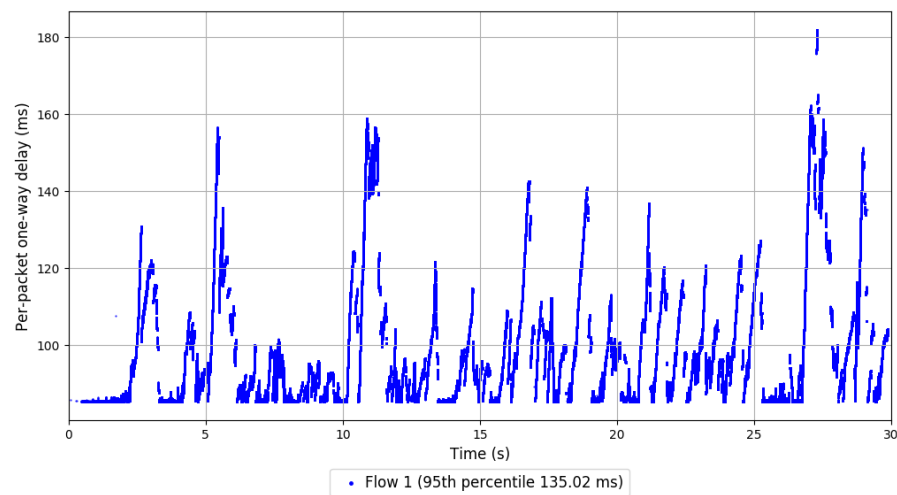
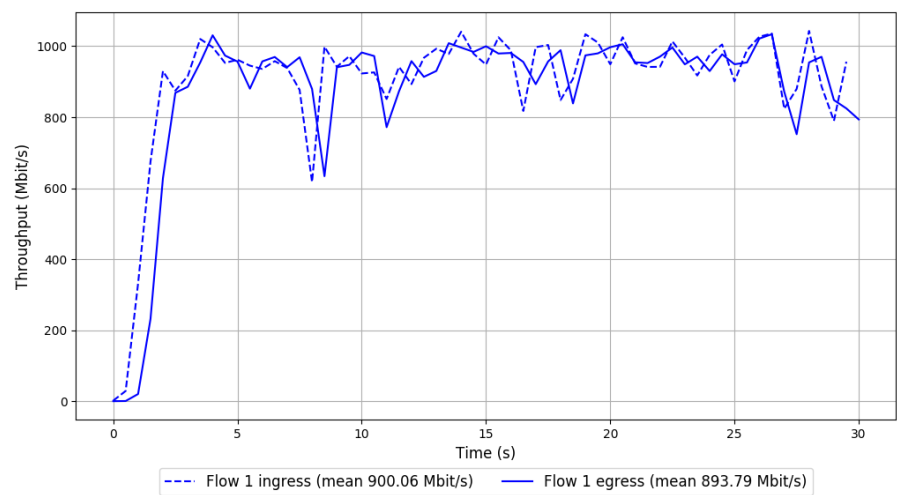
-- Flow 1:

Average throughput: 893.79 Mbit/s

95th percentile per-packet one-way delay: 135.024 ms

Loss rate: 1.27%

Run 4: Report of FillP — Data Link



Run 5: Statistics of FillP

Start at: 2019-08-26 18:21:02

End at: 2019-08-26 18:21:32

Local clock offset: 1.591 ms

Remote clock offset: 1.883 ms

Below is generated by plot.py at 2019-08-26 19:28:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 886.62 Mbit/s

95th percentile per-packet one-way delay: 139.350 ms

Loss rate: 1.63%

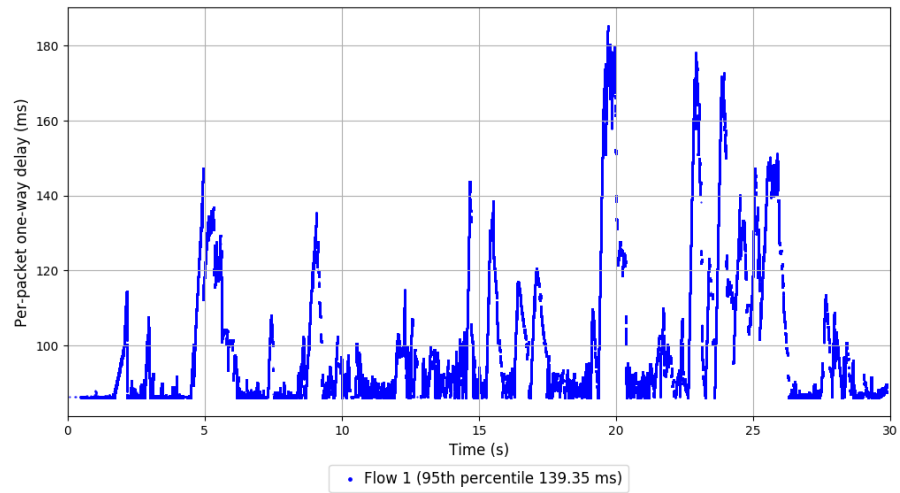
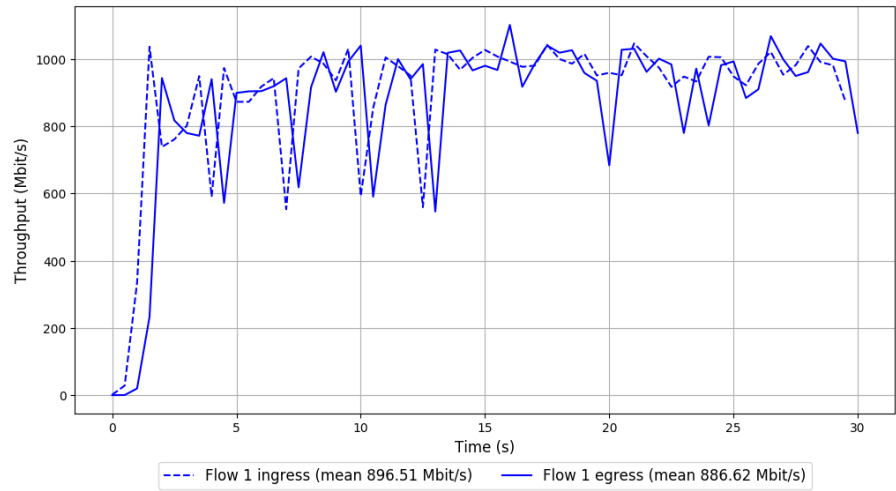
-- Flow 1:

Average throughput: 886.62 Mbit/s

95th percentile per-packet one-way delay: 139.350 ms

Loss rate: 1.63%

Run 5: Report of FillP — Data Link

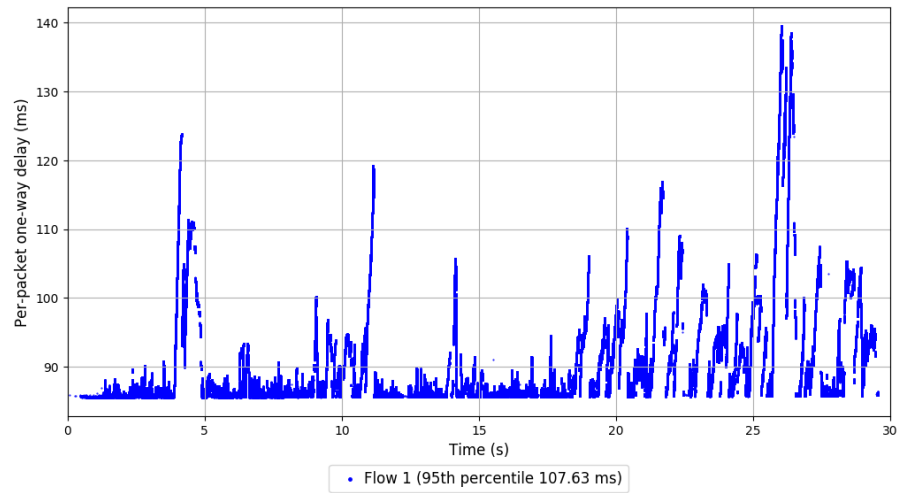
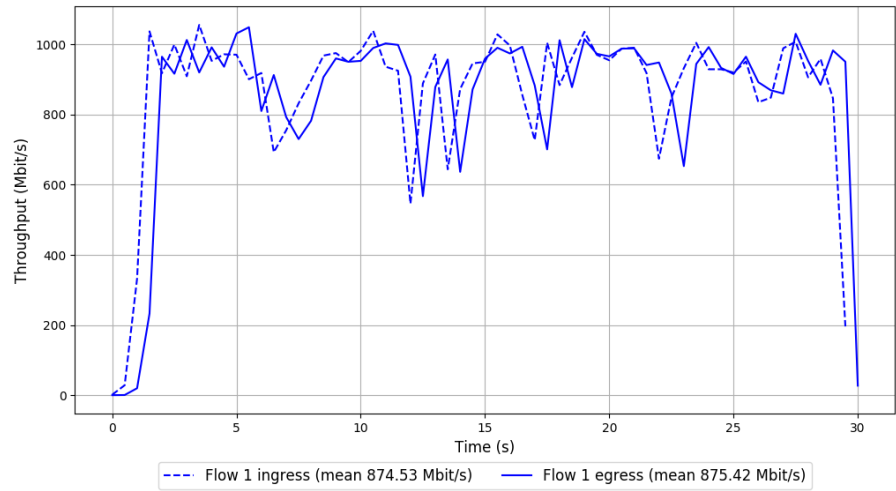


Run 1: Statistics of FillP-Sheep

Start at: 2019-08-26 16:20:49
End at: 2019-08-26 16:21:19
Local clock offset: 14.373 ms
Remote clock offset: 21.554 ms

Below is generated by plot.py at 2019-08-26 19:28:26
Datalink statistics
-- Total of 1 flow:
Average throughput: 875.42 Mbit/s
95th percentile per-packet one-way delay: 107.632 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 875.42 Mbit/s
95th percentile per-packet one-way delay: 107.632 ms
Loss rate: 0.48%

Run 1: Report of FillP-Sheep — Data Link

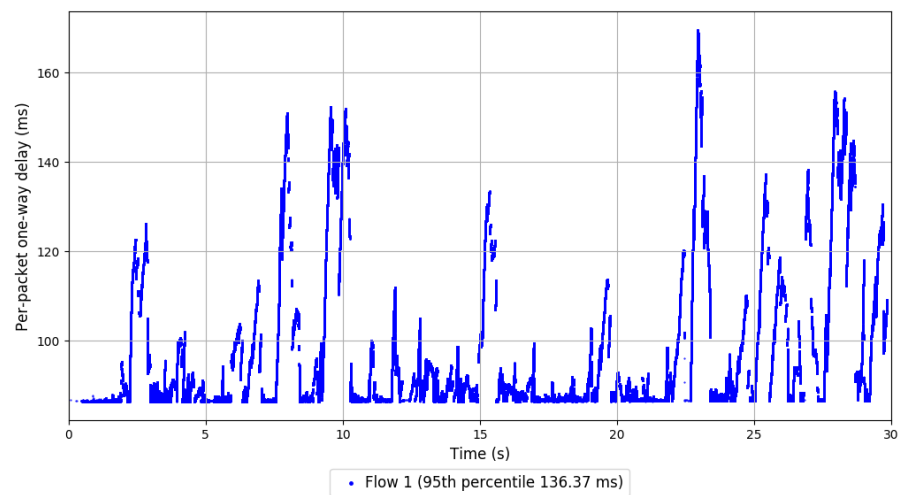
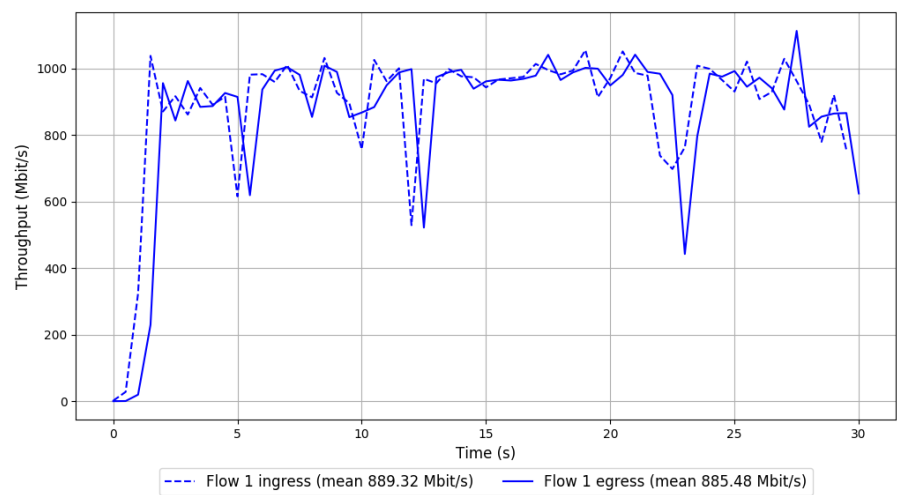


Run 2: Statistics of FillP-Sheep

Start at: 2019-08-26 16:55:36
End at: 2019-08-26 16:56:06
Local clock offset: 26.212 ms
Remote clock offset: 38.551 ms

Below is generated by plot.py at 2019-08-26 19:29:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 885.48 Mbit/s
95th percentile per-packet one-way delay: 136.372 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 885.48 Mbit/s
95th percentile per-packet one-way delay: 136.372 ms
Loss rate: 1.01%

Run 2: Report of FillP-Sheep — Data Link

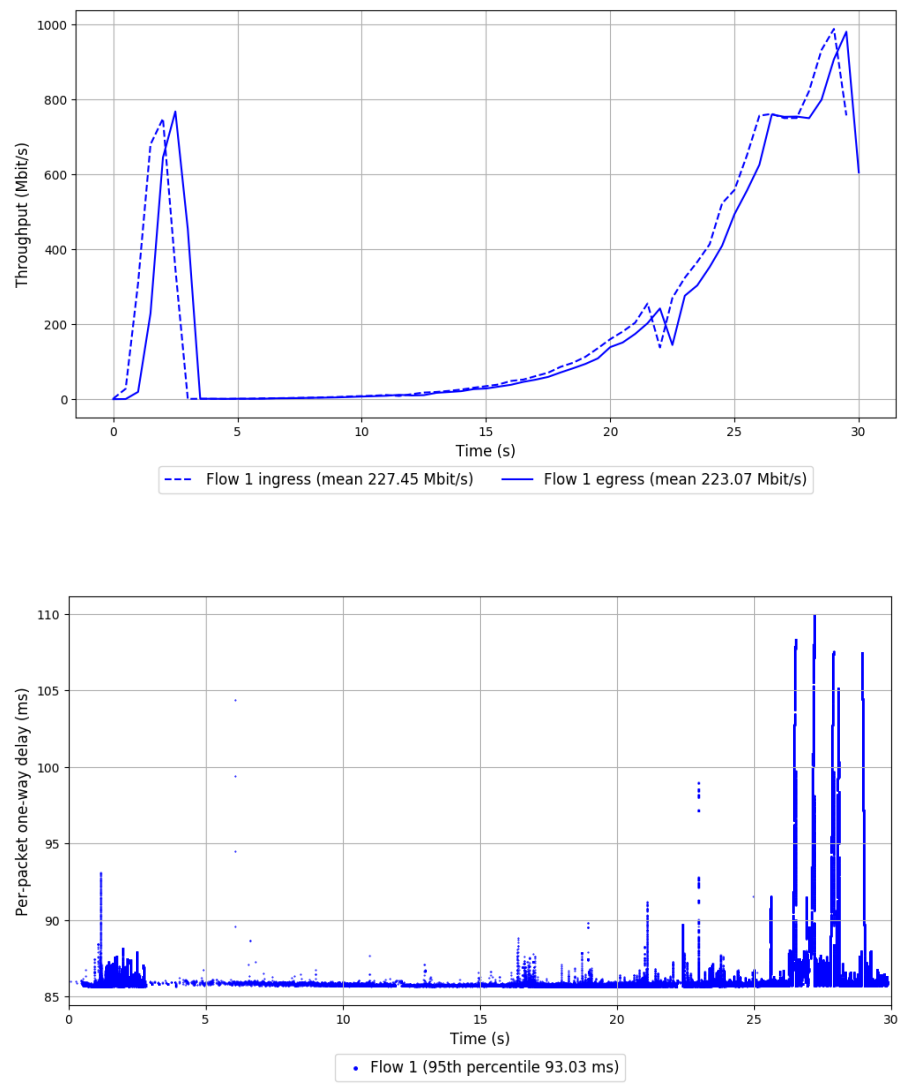


Run 3: Statistics of FillP-Sheep

Start at: 2019-08-26 17:30:38
End at: 2019-08-26 17:31:08
Local clock offset: 6.969 ms
Remote clock offset: 10.414 ms

Below is generated by plot.py at 2019-08-26 19:29:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 223.07 Mbit/s
95th percentile per-packet one-way delay: 93.025 ms
Loss rate: 2.49%
-- Flow 1:
Average throughput: 223.07 Mbit/s
95th percentile per-packet one-way delay: 93.025 ms
Loss rate: 2.49%

Run 3: Report of FillP-Sheep — Data Link



Run 4: Statistics of FillP-Sheep

Start at: 2019-08-26 18:05:07

End at: 2019-08-26 18:05:37

Local clock offset: 2.628 ms

Remote clock offset: 4.556 ms

Below is generated by plot.py at 2019-08-26 19:33:32

Datalink statistics

-- Total of 1 flow:

Average throughput: 867.81 Mbit/s

95th percentile per-packet one-way delay: 140.566 ms

Loss rate: 1.31%

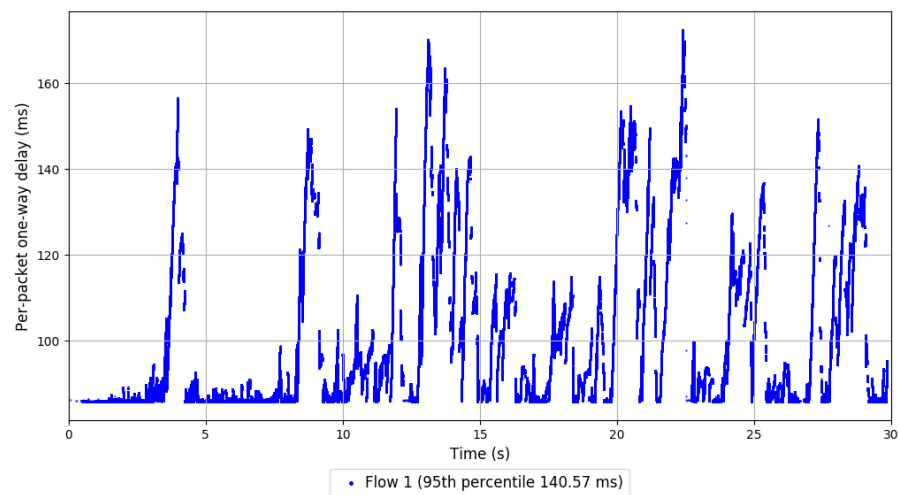
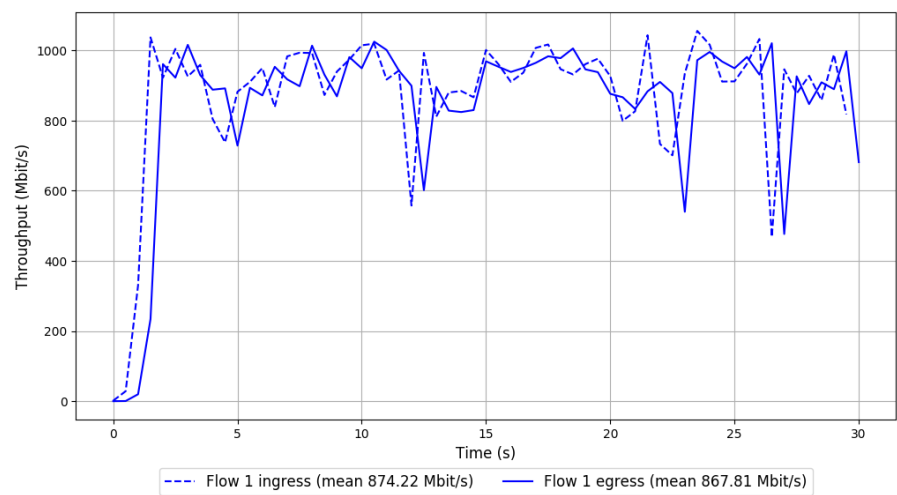
-- Flow 1:

Average throughput: 867.81 Mbit/s

95th percentile per-packet one-way delay: 140.566 ms

Loss rate: 1.31%

Run 4: Report of FillP-Sheep — Data Link



Run 5: Statistics of FillP-Sheep

Start at: 2019-08-26 18:39:56

End at: 2019-08-26 18:40:26

Local clock offset: 1.364 ms

Remote clock offset: 2.152 ms

Below is generated by plot.py at 2019-08-26 19:39:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 828.71 Mbit/s

95th percentile per-packet one-way delay: 124.304 ms

Loss rate: 1.08%

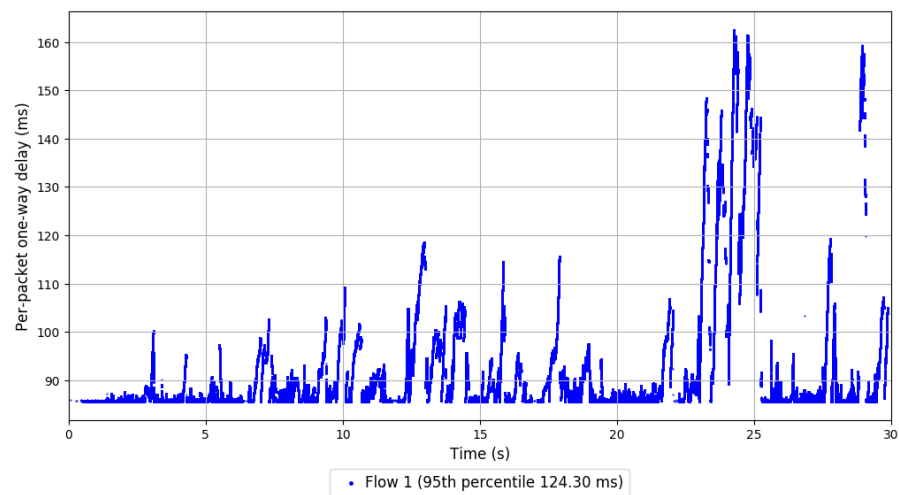
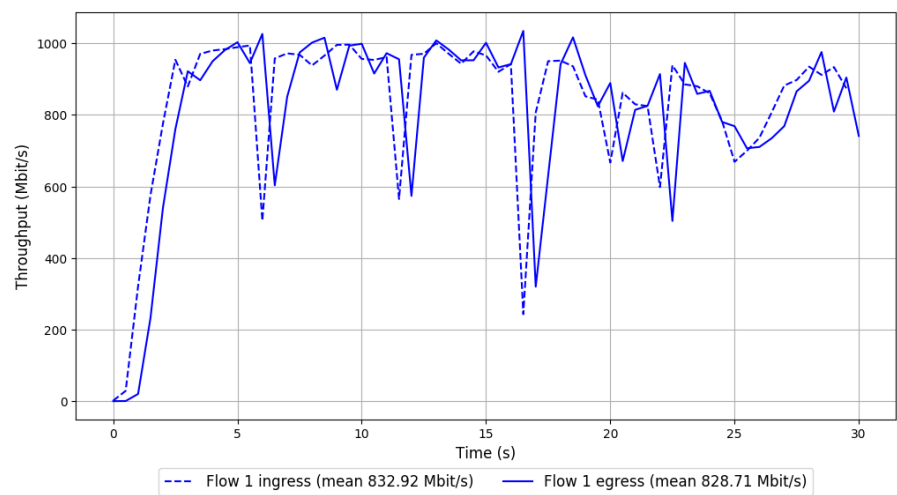
-- Flow 1:

Average throughput: 828.71 Mbit/s

95th percentile per-packet one-way delay: 124.304 ms

Loss rate: 1.08%

Run 5: Report of FillP-Sheep — Data Link



Run 1: Statistics of Indigo

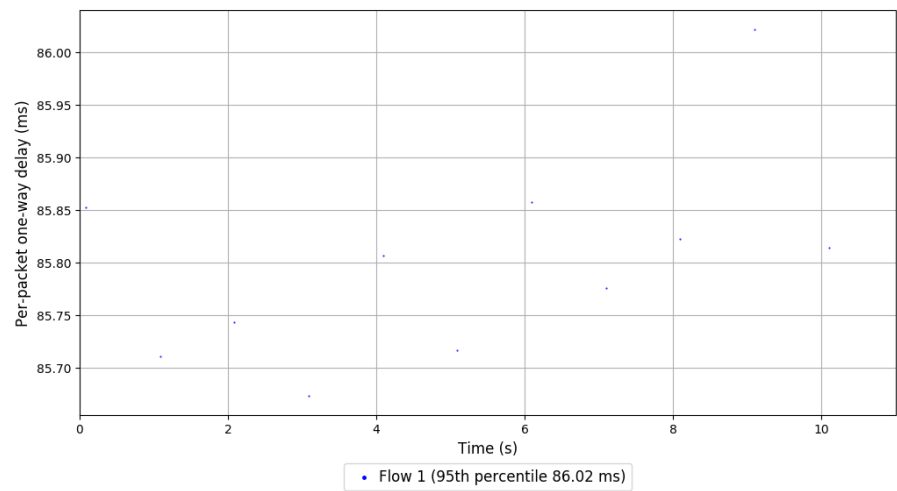
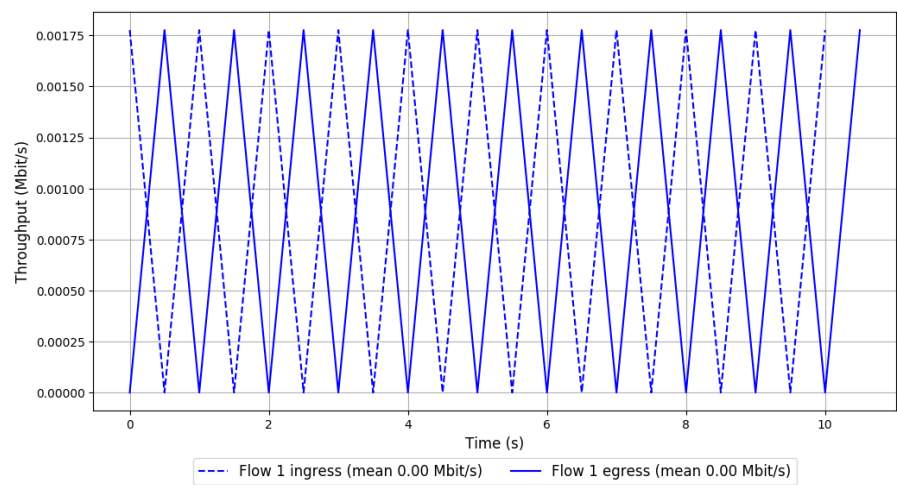
Start at: 2019-08-26 15:58:02

End at: 2019-08-26 15:58:32

Local clock offset: 4.575 ms

Remote clock offset: 6.582 ms

Run 1: Report of Indigo — Data Link

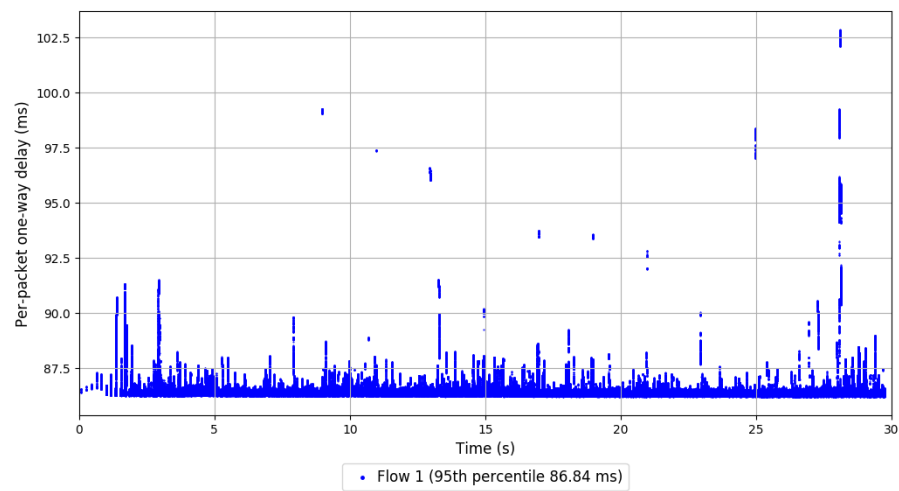
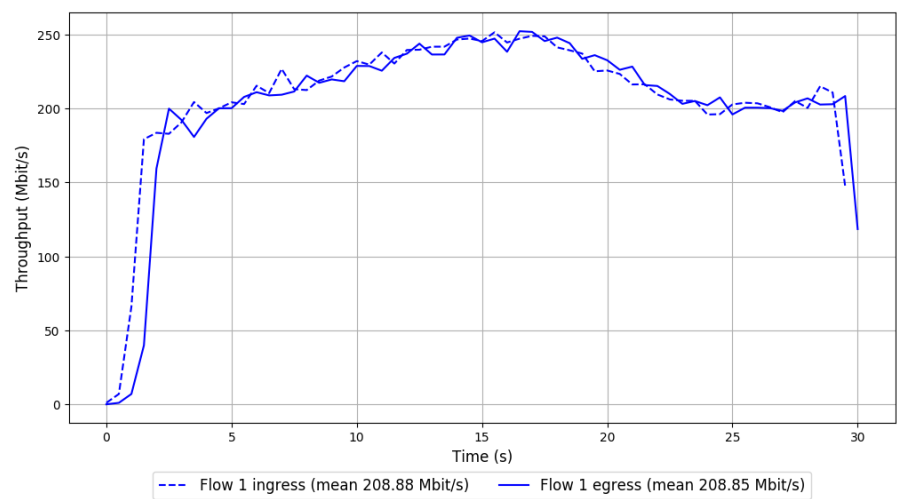


Run 2: Statistics of Indigo

Start at: 2019-08-26 16:32:25
End at: 2019-08-26 16:32:55
Local clock offset: 15.023 ms
Remote clock offset: 21.985 ms

Below is generated by plot.py at 2019-08-26 19:39:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 208.85 Mbit/s
95th percentile per-packet one-way delay: 86.838 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 208.85 Mbit/s
95th percentile per-packet one-way delay: 86.838 ms
Loss rate: 0.59%

Run 2: Report of Indigo — Data Link

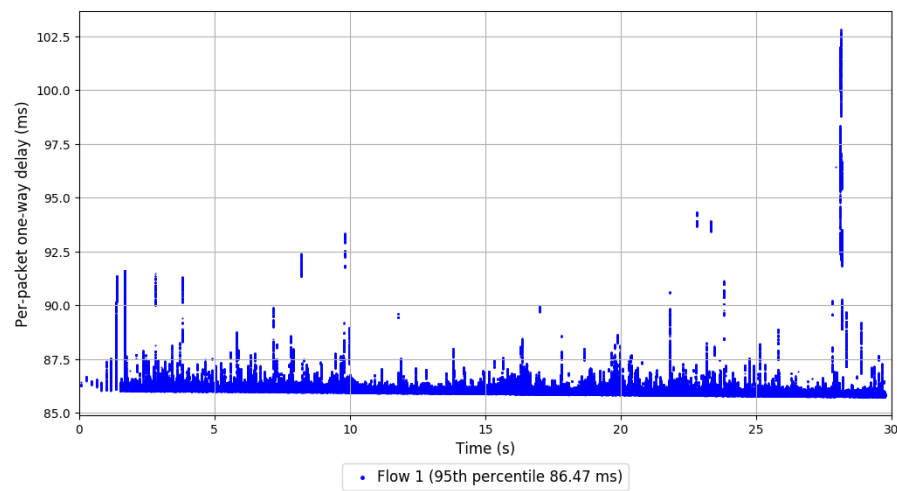
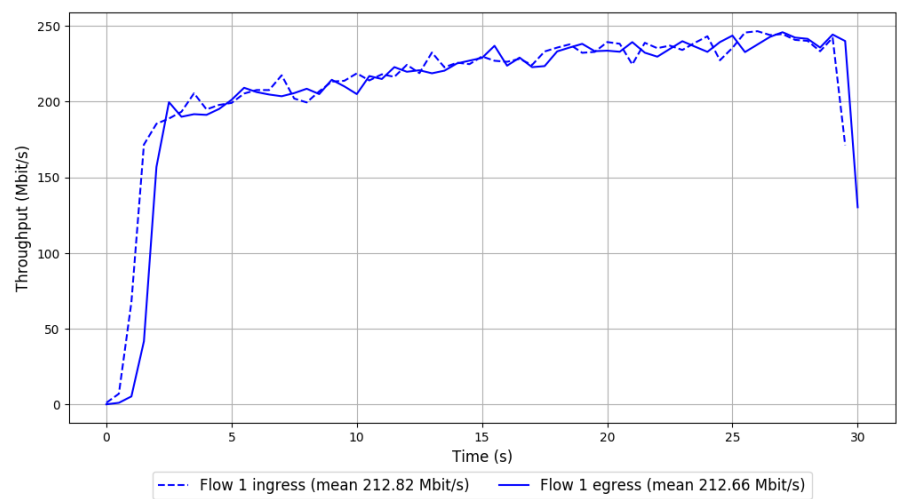


Run 3: Statistics of Indigo

Start at: 2019-08-26 17:07:13
End at: 2019-08-26 17:07:43
Local clock offset: 14.809 ms
Remote clock offset: 21.388 ms

Below is generated by plot.py at 2019-08-26 19:39:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 212.66 Mbit/s
95th percentile per-packet one-way delay: 86.470 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 212.66 Mbit/s
95th percentile per-packet one-way delay: 86.470 ms
Loss rate: 0.66%

Run 3: Report of Indigo — Data Link



Run 4: Statistics of Indigo

Start at: 2019-08-26 17:41:45

End at: 2019-08-26 17:42:15

Local clock offset: 3.821 ms

Remote clock offset: 5.728 ms

Below is generated by plot.py at 2019-08-26 19:39:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 219.76 Mbit/s

95th percentile per-packet one-way delay: 86.132 ms

Loss rate: 0.62%

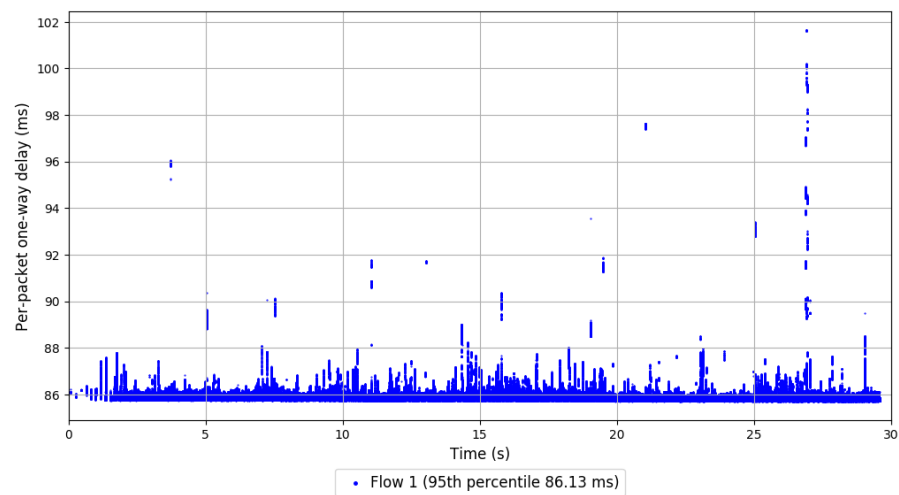
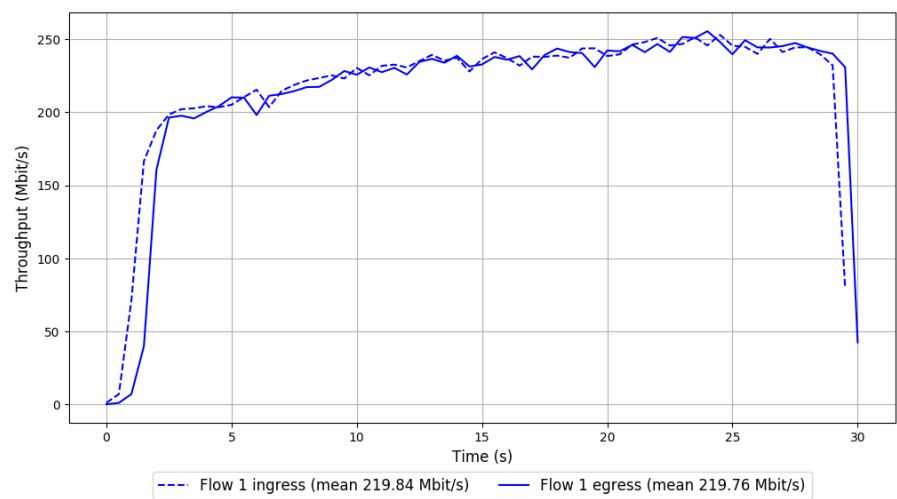
-- Flow 1:

Average throughput: 219.76 Mbit/s

95th percentile per-packet one-way delay: 86.132 ms

Loss rate: 0.62%

Run 4: Report of Indigo — Data Link



Run 5: Statistics of Indigo

Start at: 2019-08-26 18:16:34

End at: 2019-08-26 18:17:04

Local clock offset: 1.283 ms

Remote clock offset: 2.363 ms

Below is generated by plot.py at 2019-08-26 19:39:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 213.32 Mbit/s

95th percentile per-packet one-way delay: 86.467 ms

Loss rate: 0.56%

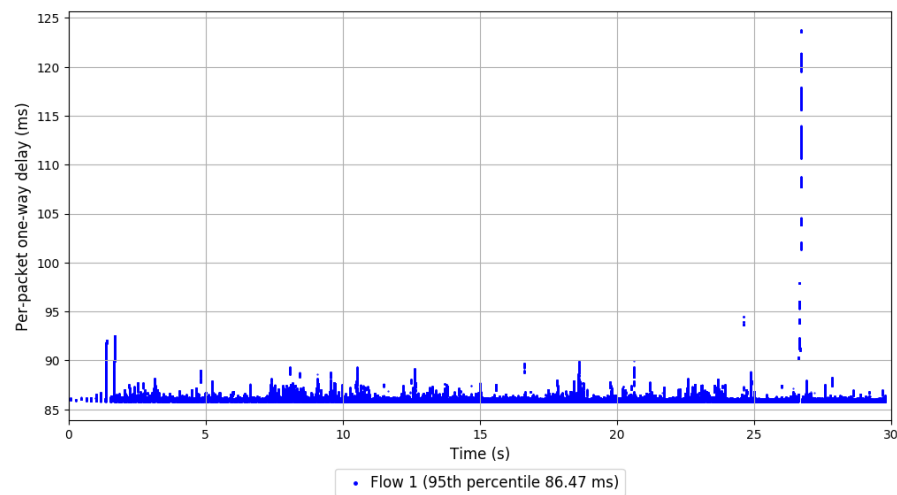
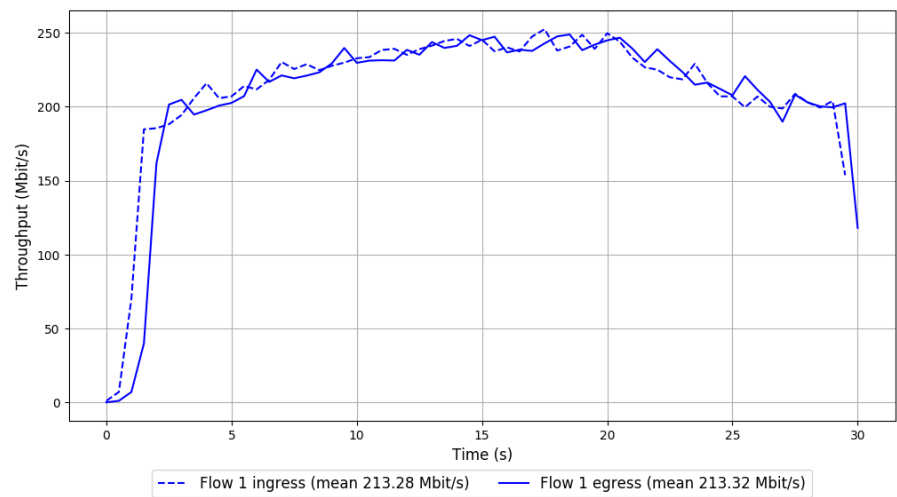
-- Flow 1:

Average throughput: 213.32 Mbit/s

95th percentile per-packet one-way delay: 86.467 ms

Loss rate: 0.56%

Run 5: Report of Indigo — Data Link

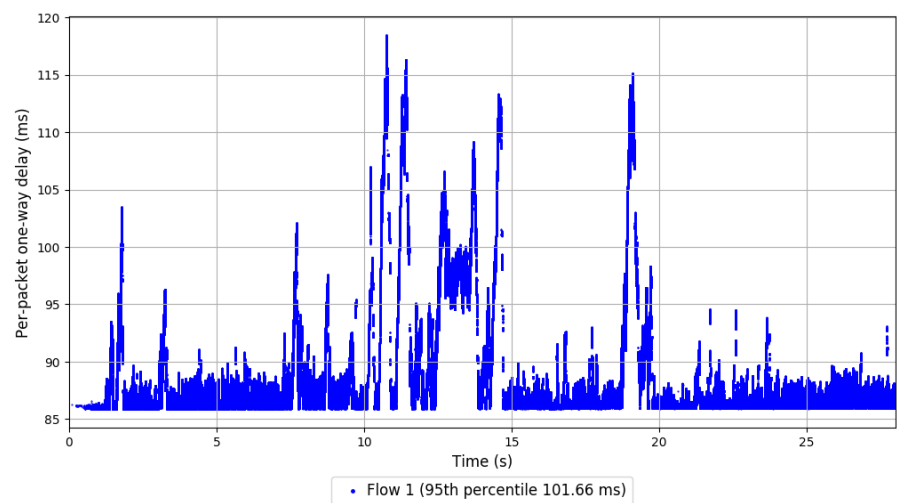
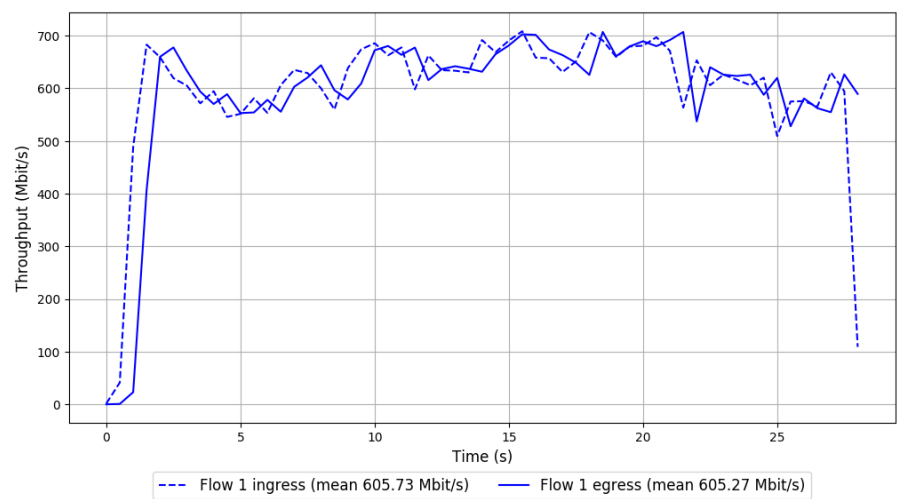


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-08-26 16:13:50
End at: 2019-08-26 16:14:20
Local clock offset: 9.856 ms
Remote clock offset: 14.432 ms

Below is generated by plot.py at 2019-08-26 19:39:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 605.27 Mbit/s
95th percentile per-packet one-way delay: 101.658 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 605.27 Mbit/s
95th percentile per-packet one-way delay: 101.658 ms
Loss rate: 0.69%

Run 1: Report of Indigo-MusesC3 — Data Link

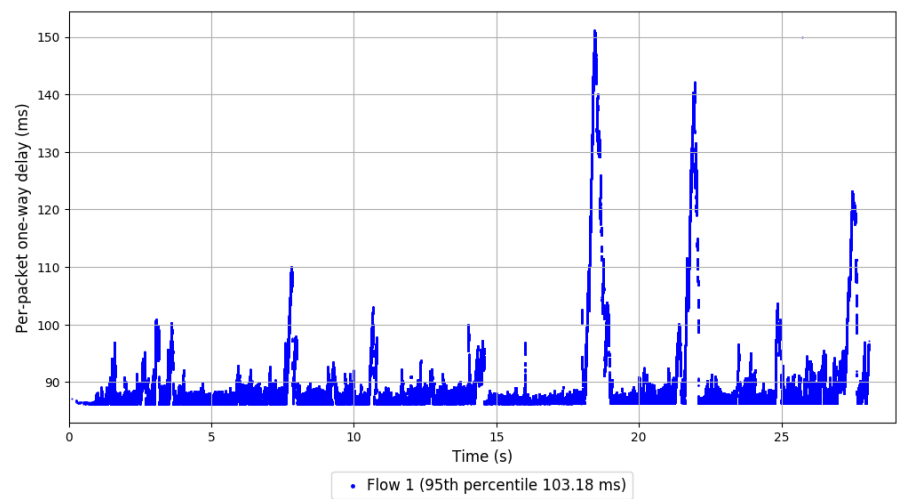
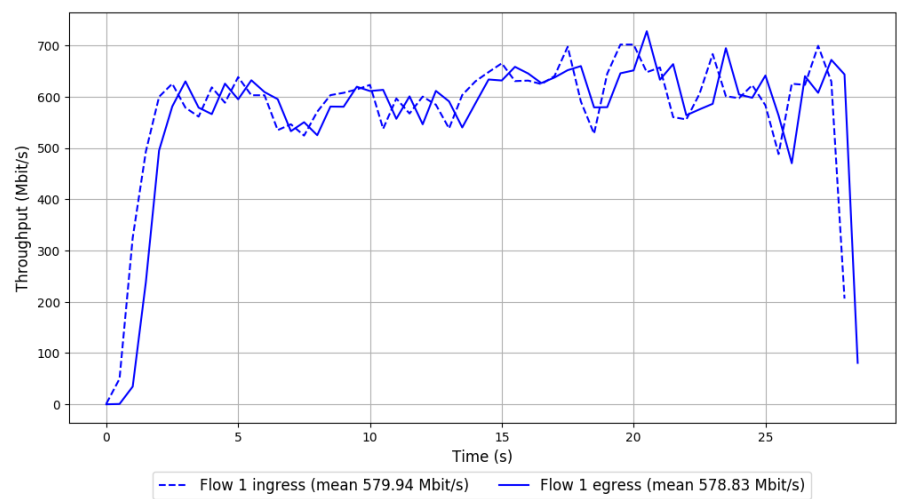


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-08-26 16:48:34
End at: 2019-08-26 16:49:04
Local clock offset: 20.979 ms
Remote clock offset: 30.652 ms

Below is generated by plot.py at 2019-08-26 19:39:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 578.83 Mbit/s
95th percentile per-packet one-way delay: 103.181 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 578.83 Mbit/s
95th percentile per-packet one-way delay: 103.181 ms
Loss rate: 0.80%

Run 2: Report of Indigo-MusesC3 — Data Link



Run 3: Statistics of Indigo-MusesC3

Start at: 2019-08-26 17:23:34

End at: 2019-08-26 17:24:04

Local clock offset: 6.449 ms

Remote clock offset: 9.873 ms

Below is generated by plot.py at 2019-08-26 19:40:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 577.21 Mbit/s

95th percentile per-packet one-way delay: 94.391 ms

Loss rate: 0.58%

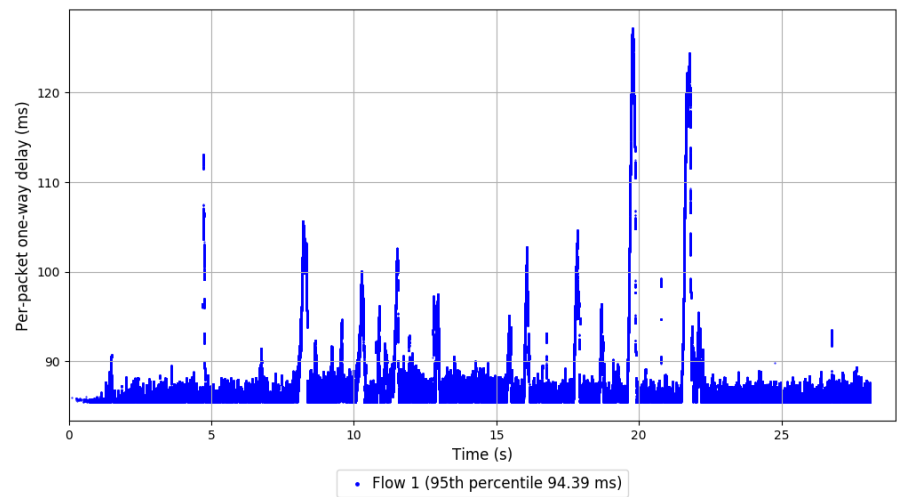
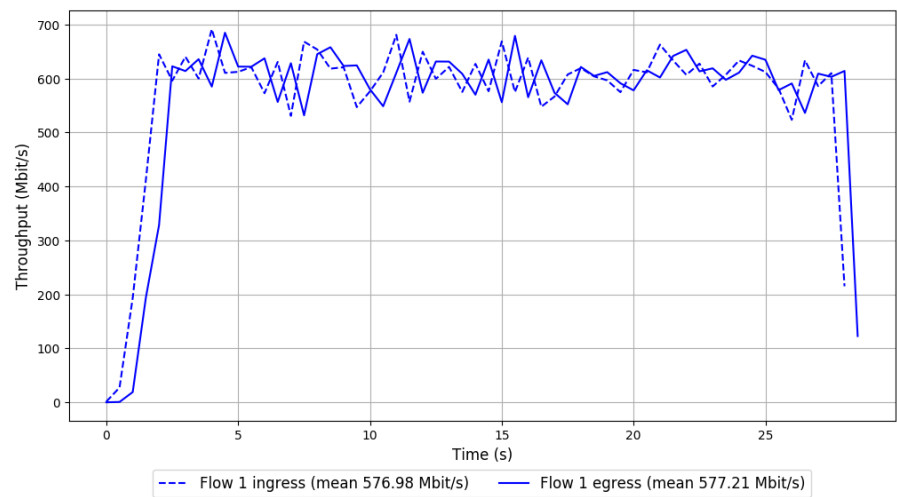
-- Flow 1:

Average throughput: 577.21 Mbit/s

95th percentile per-packet one-way delay: 94.391 ms

Loss rate: 0.58%

Run 3: Report of Indigo-MusesC3 — Data Link



Run 4: Statistics of Indigo-MusesC3

Start at: 2019-08-26 17:58:04

End at: 2019-08-26 17:58:34

Local clock offset: 2.117 ms

Remote clock offset: 3.975 ms

Below is generated by plot.py at 2019-08-26 19:41:13

Datalink statistics

-- Total of 1 flow:

Average throughput: 607.49 Mbit/s

95th percentile per-packet one-way delay: 119.247 ms

Loss rate: 0.63%

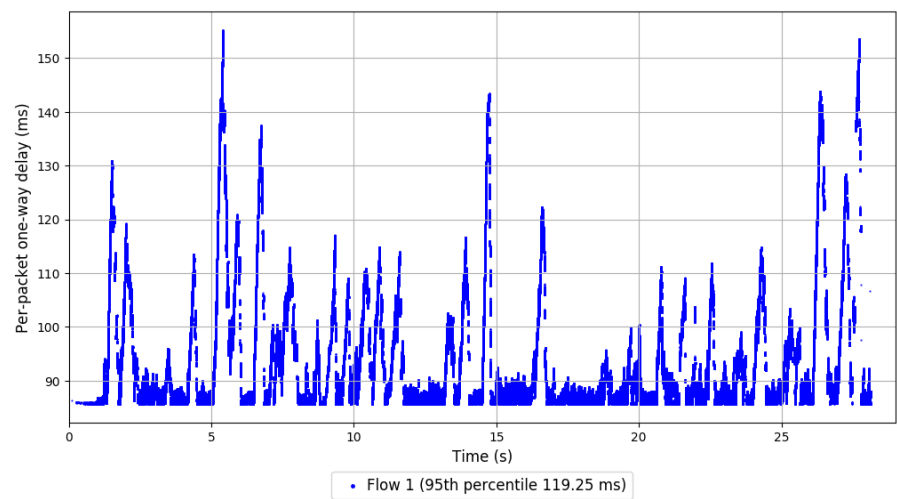
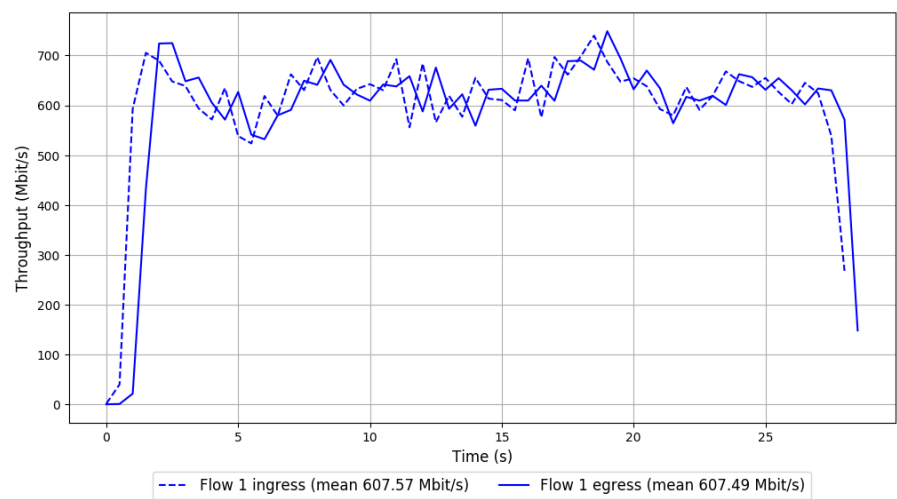
-- Flow 1:

Average throughput: 607.49 Mbit/s

95th percentile per-packet one-way delay: 119.247 ms

Loss rate: 0.63%

Run 4: Report of Indigo-MusesC3 — Data Link



Run 5: Statistics of Indigo-MusesC3

Start at: 2019-08-26 18:32:49

End at: 2019-08-26 18:33:19

Local clock offset: 1.67 ms

Remote clock offset: 1.813 ms

Below is generated by plot.py at 2019-08-26 19:41:29

Datalink statistics

-- Total of 1 flow:

Average throughput: 573.47 Mbit/s

95th percentile per-packet one-way delay: 103.127 ms

Loss rate: 0.62%

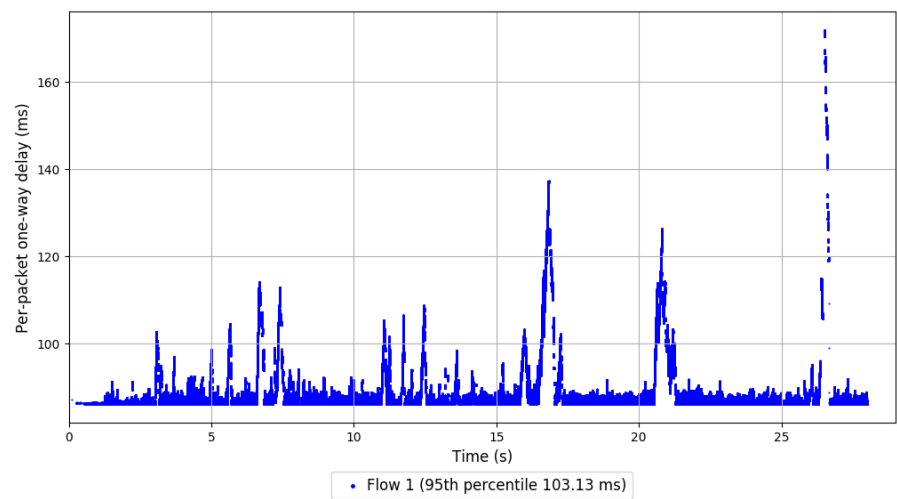
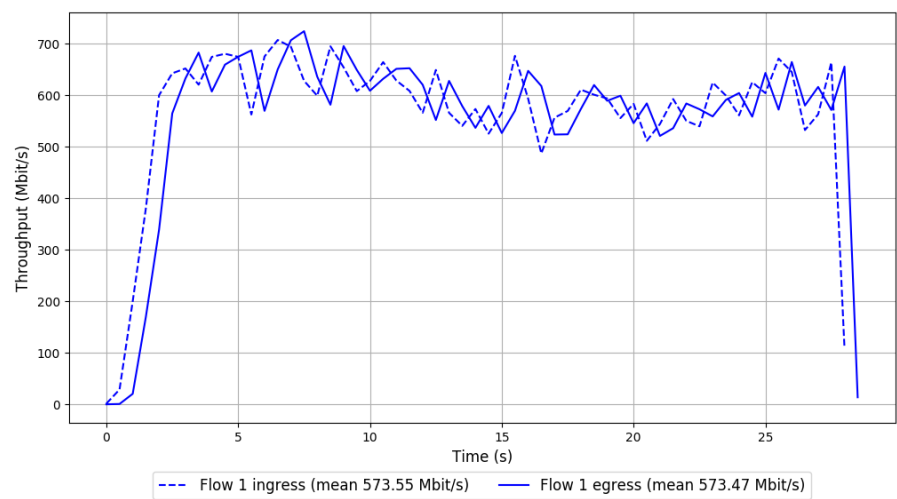
-- Flow 1:

Average throughput: 573.47 Mbit/s

95th percentile per-packet one-way delay: 103.127 ms

Loss rate: 0.62%

Run 5: Report of Indigo-MusesC3 — Data Link

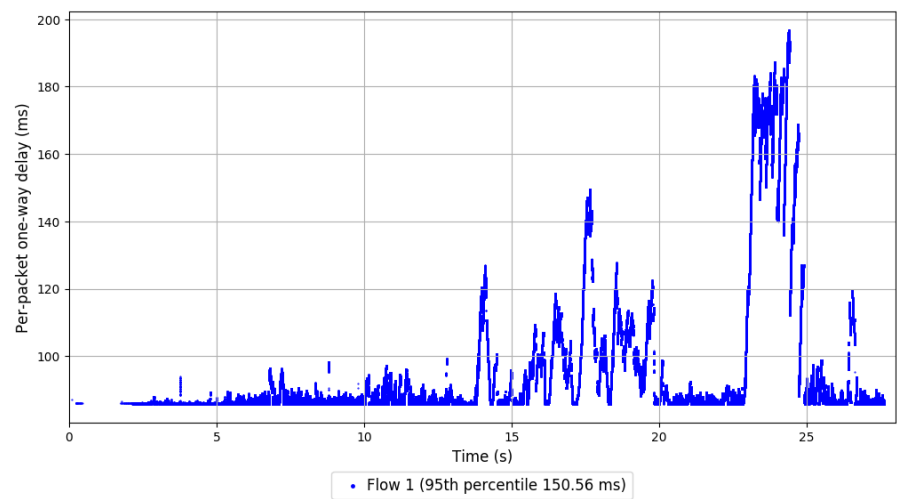
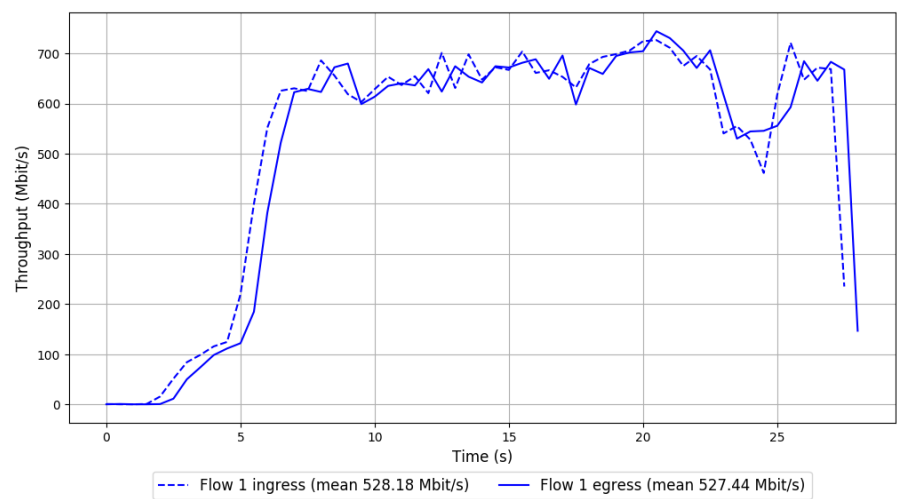


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-08-26 16:12:20
End at: 2019-08-26 16:12:50
Local clock offset: 9.907 ms
Remote clock offset: 14.494 ms

Below is generated by plot.py at 2019-08-26 19:41:29
Datalink statistics
-- Total of 1 flow:
Average throughput: 527.44 Mbit/s
95th percentile per-packet one-way delay: 150.559 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 527.44 Mbit/s
95th percentile per-packet one-way delay: 150.559 ms
Loss rate: 0.77%

Run 1: Report of Indigo-MusesC5 — Data Link

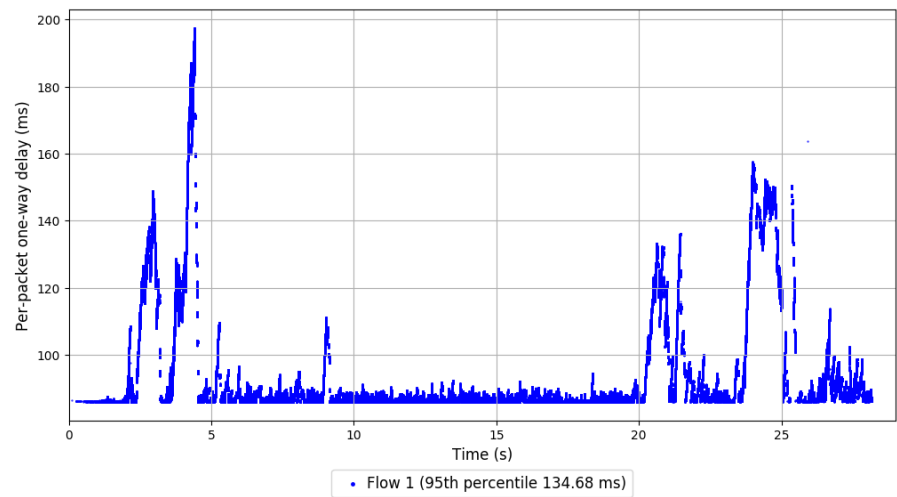
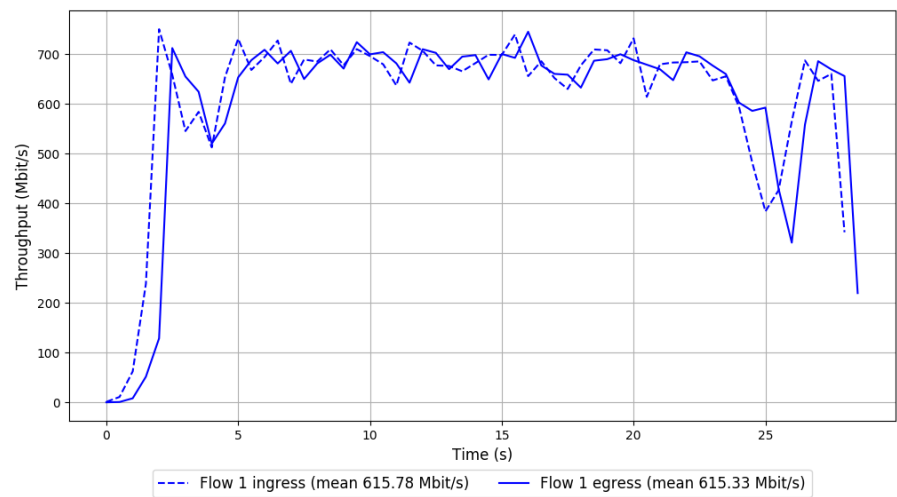


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-08-26 16:47:00
End at: 2019-08-26 16:47:30
Local clock offset: 19.451 ms
Remote clock offset: 29.195 ms

Below is generated by plot.py at 2019-08-26 19:42:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 615.33 Mbit/s
95th percentile per-packet one-way delay: 134.683 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 615.33 Mbit/s
95th percentile per-packet one-way delay: 134.683 ms
Loss rate: 0.68%

Run 2: Report of Indigo-MusesC5 — Data Link



Run 3: Statistics of Indigo-MusesC5

Start at: 2019-08-26 17:22:02

End at: 2019-08-26 17:22:32

Local clock offset: 6.391 ms

Remote clock offset: 9.981 ms

Below is generated by plot.py at 2019-08-26 19:44:33

Datalink statistics

-- Total of 1 flow:

Average throughput: 551.32 Mbit/s

95th percentile per-packet one-way delay: 113.267 ms

Loss rate: 0.71%

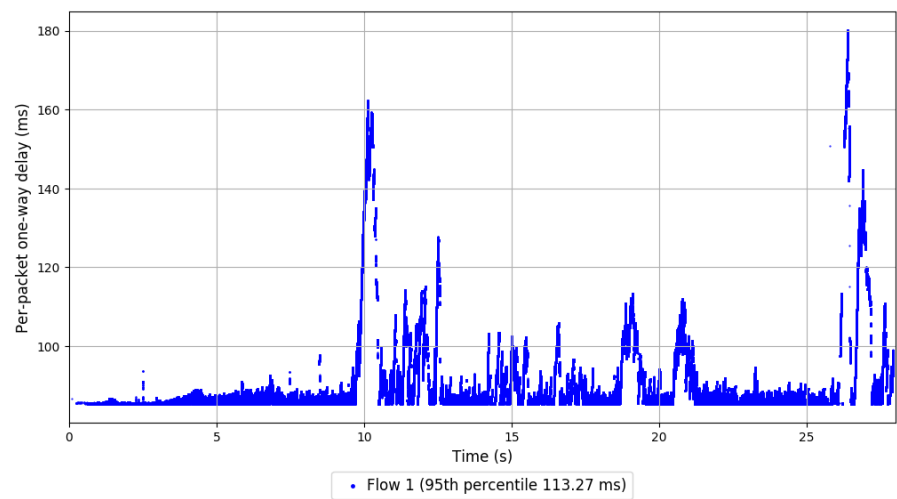
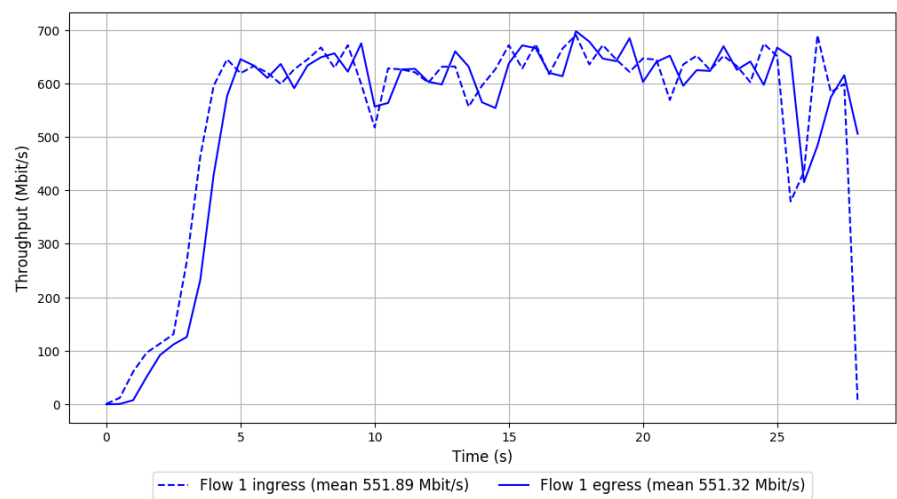
-- Flow 1:

Average throughput: 551.32 Mbit/s

95th percentile per-packet one-way delay: 113.267 ms

Loss rate: 0.71%

Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-08-26 17:56:29

End at: 2019-08-26 17:56:59

Local clock offset: 2.453 ms

Remote clock offset: 3.891 ms

Below is generated by plot.py at 2019-08-26 19:47:14

Datalink statistics

-- Total of 1 flow:

Average throughput: 624.97 Mbit/s

95th percentile per-packet one-way delay: 131.004 ms

Loss rate: 0.72%

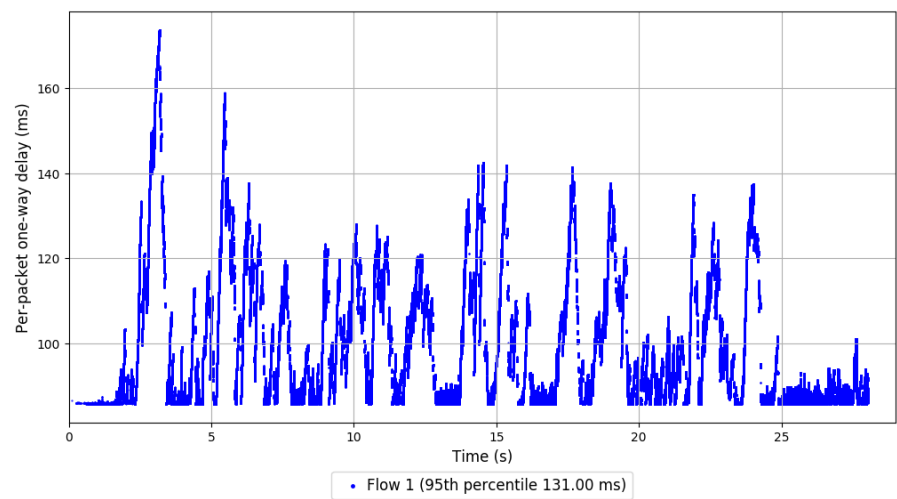
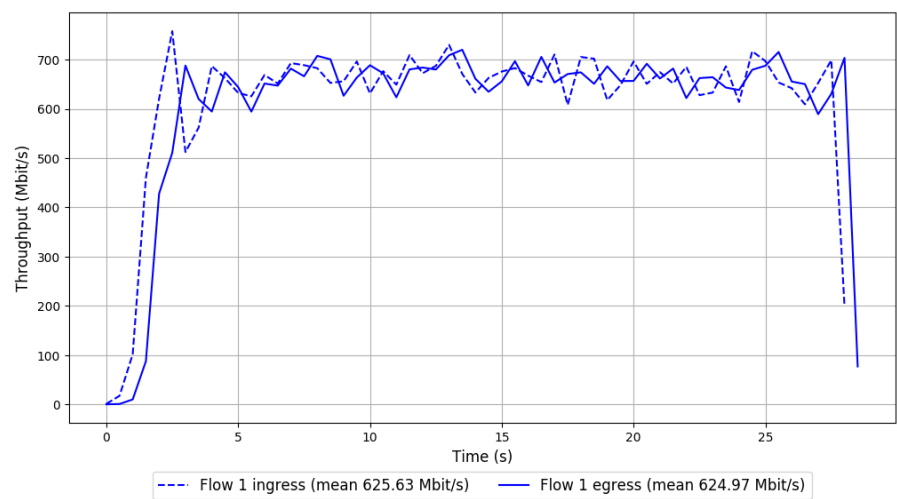
-- Flow 1:

Average throughput: 624.97 Mbit/s

95th percentile per-packet one-way delay: 131.004 ms

Loss rate: 0.72%

Run 4: Report of Indigo-MusesC5 — Data Link



Run 5: Statistics of Indigo-MusesC5

Start at: 2019-08-26 18:31:13

End at: 2019-08-26 18:31:44

Local clock offset: 1.374 ms

Remote clock offset: 1.787 ms

Below is generated by plot.py at 2019-08-26 19:47:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 595.01 Mbit/s

95th percentile per-packet one-way delay: 130.684 ms

Loss rate: 0.84%

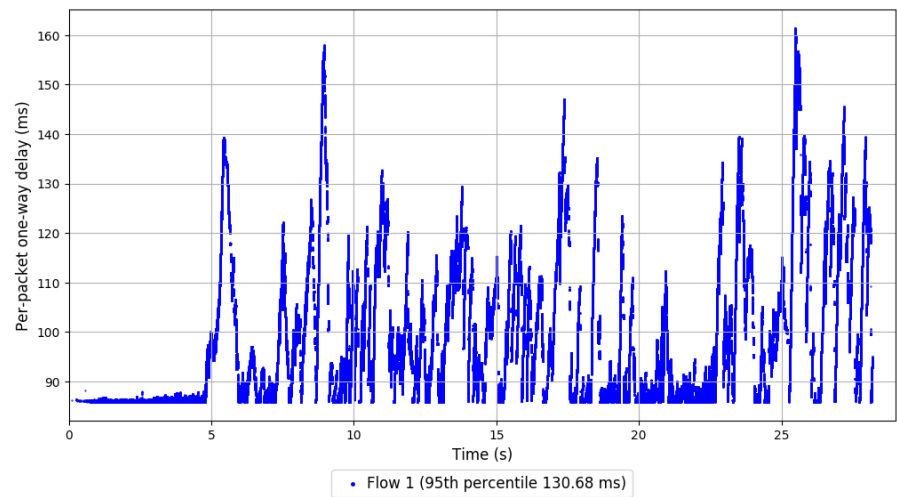
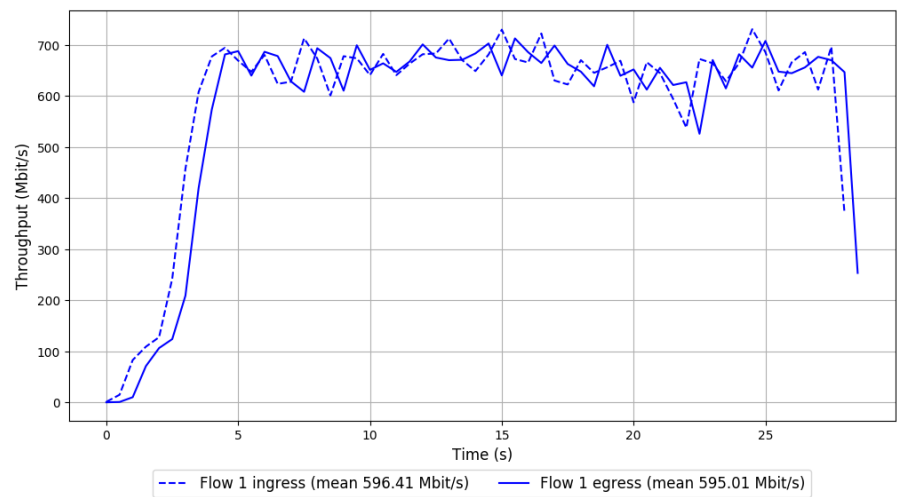
-- Flow 1:

Average throughput: 595.01 Mbit/s

95th percentile per-packet one-way delay: 130.684 ms

Loss rate: 0.84%

Run 5: Report of Indigo-MusesC5 — Data Link



Run 1: Statistics of Indigo-MusesD

Start at: 2019-08-26 16:16:33

End at: 2019-08-26 16:17:03

Local clock offset: 10.878 ms

Remote clock offset: 16.312 ms

Below is generated by plot.py at 2019-08-26 19:47:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 523.05 Mbit/s

95th percentile per-packet one-way delay: 101.023 ms

Loss rate: 0.60%

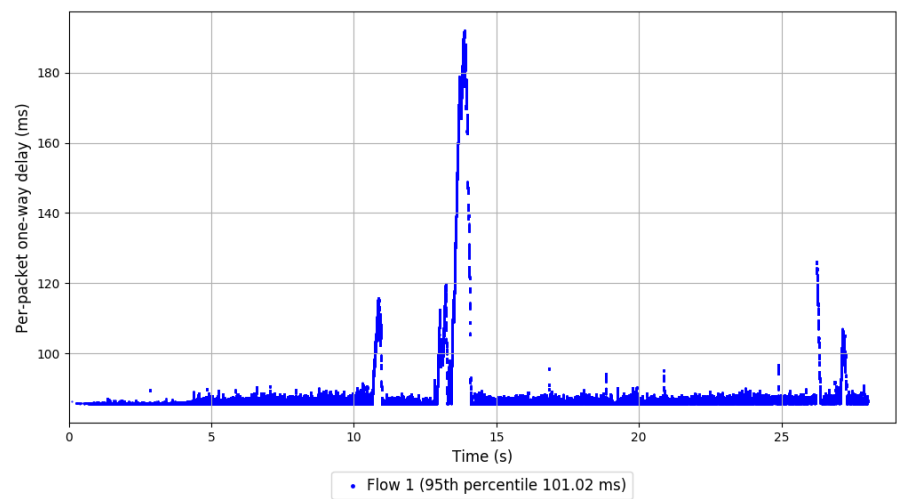
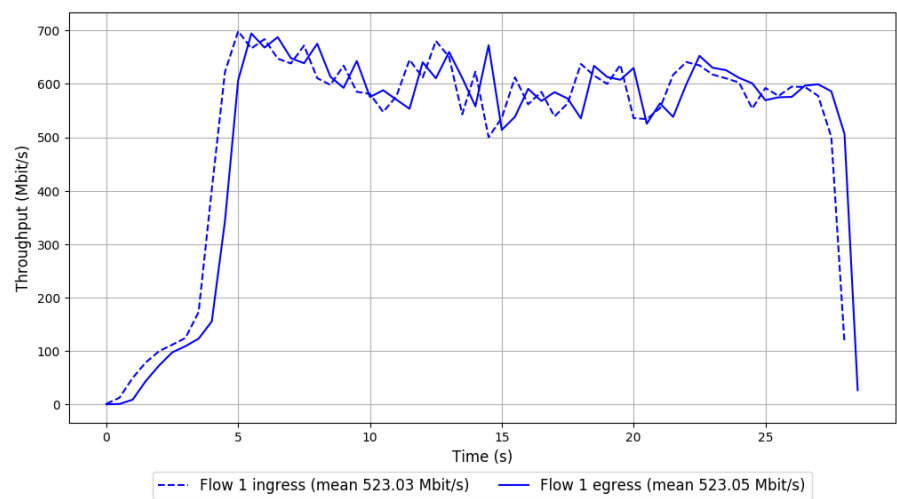
-- Flow 1:

Average throughput: 523.05 Mbit/s

95th percentile per-packet one-way delay: 101.023 ms

Loss rate: 0.60%

Run 1: Report of Indigo-MusesD — Data Link

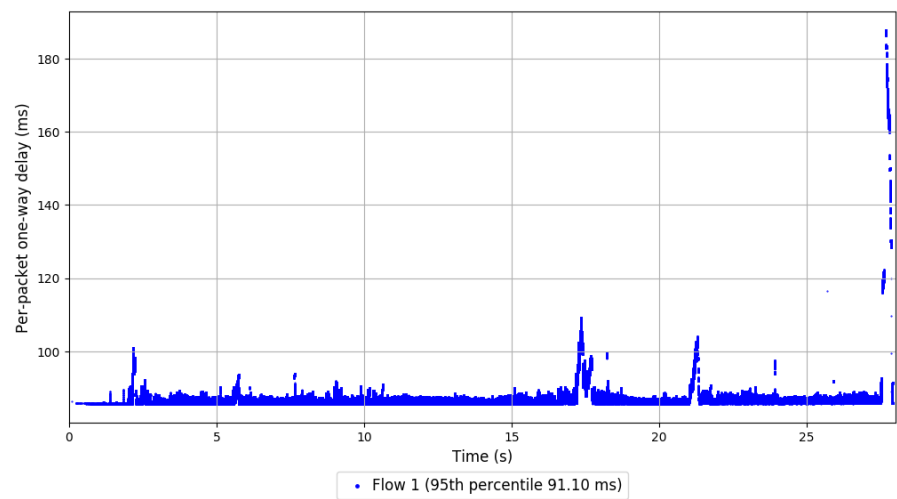
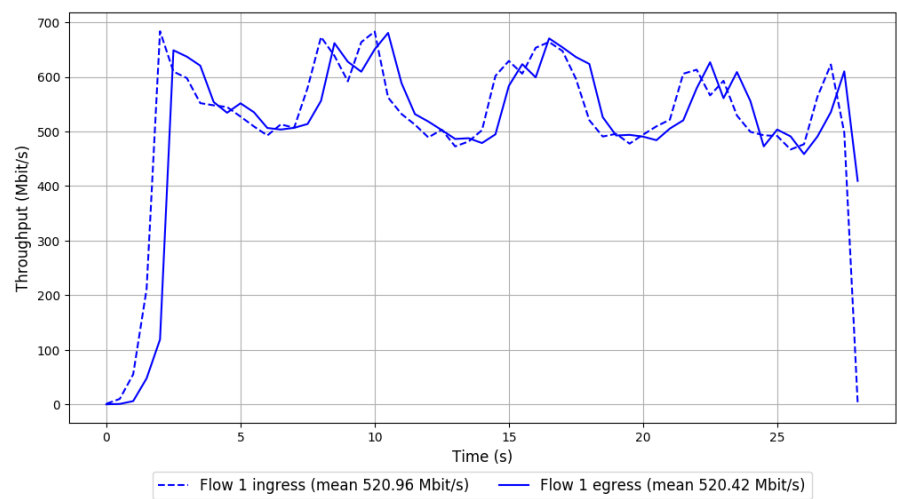


Run 2: Statistics of Indigo-MusesD

Start at: 2019-08-26 16:51:15
End at: 2019-08-26 16:51:45
Local clock offset: 22.211 ms
Remote clock offset: 33.776 ms

Below is generated by plot.py at 2019-08-26 19:48:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 520.42 Mbit/s
95th percentile per-packet one-way delay: 91.100 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 520.42 Mbit/s
95th percentile per-packet one-way delay: 91.100 ms
Loss rate: 0.72%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-08-26 17:26:15

End at: 2019-08-26 17:26:45

Local clock offset: 6.772 ms

Remote clock offset: 9.907 ms

Below is generated by plot.py at 2019-08-26 19:48:11

Datalink statistics

-- Total of 1 flow:

Average throughput: 508.55 Mbit/s

95th percentile per-packet one-way delay: 124.277 ms

Loss rate: 0.65%

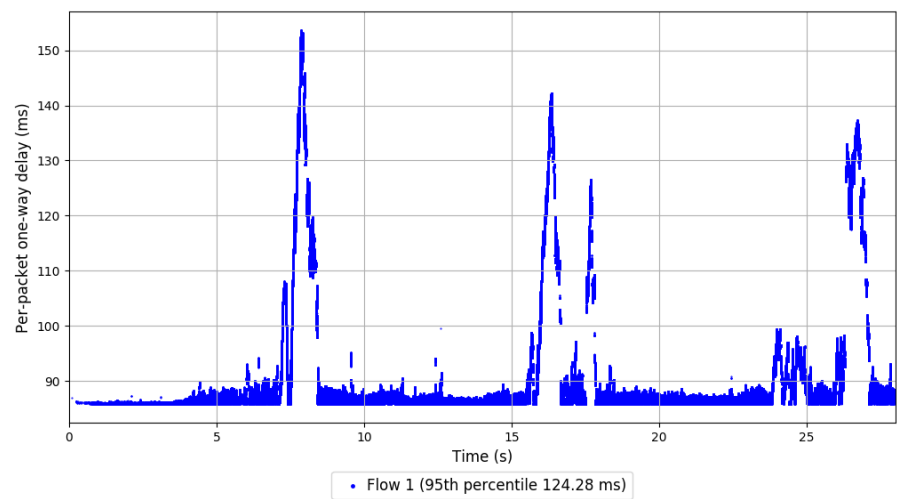
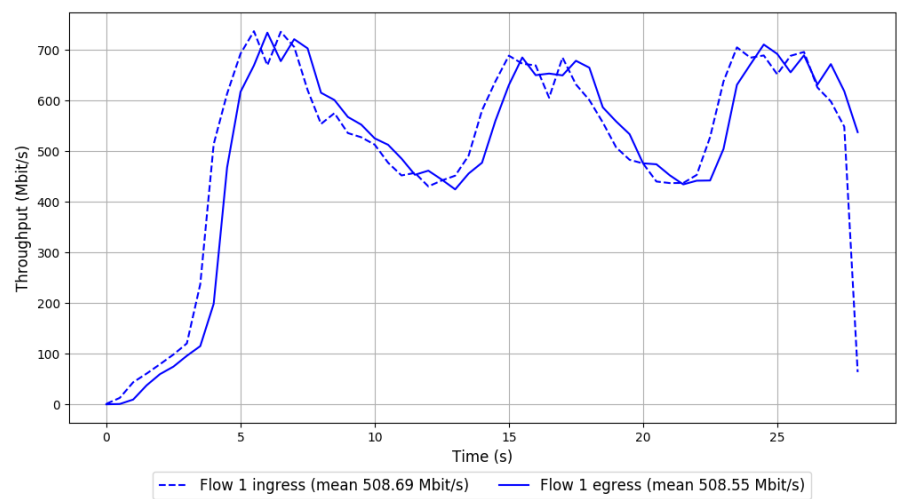
-- Flow 1:

Average throughput: 508.55 Mbit/s

95th percentile per-packet one-way delay: 124.277 ms

Loss rate: 0.65%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-08-26 18:00:47

End at: 2019-08-26 18:01:17

Local clock offset: 2.279 ms

Remote clock offset: 4.171 ms

Below is generated by plot.py at 2019-08-26 19:49:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 537.95 Mbit/s

95th percentile per-packet one-way delay: 90.035 ms

Loss rate: 0.87%

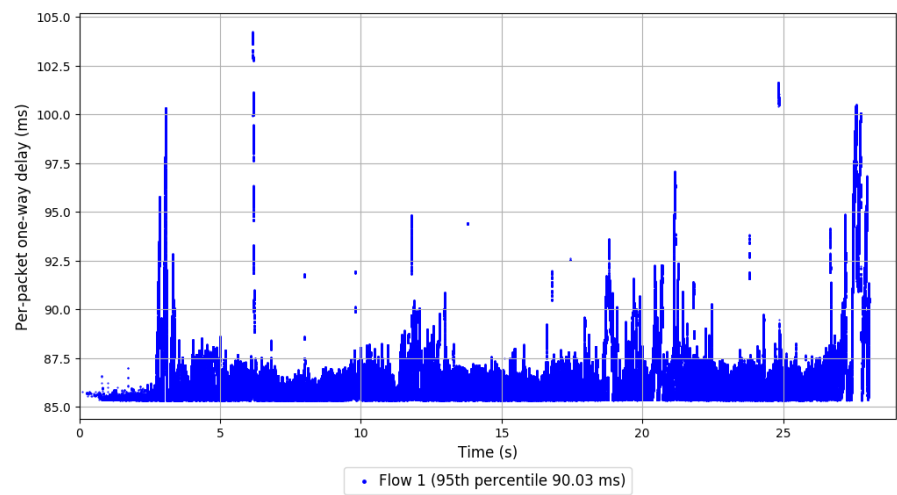
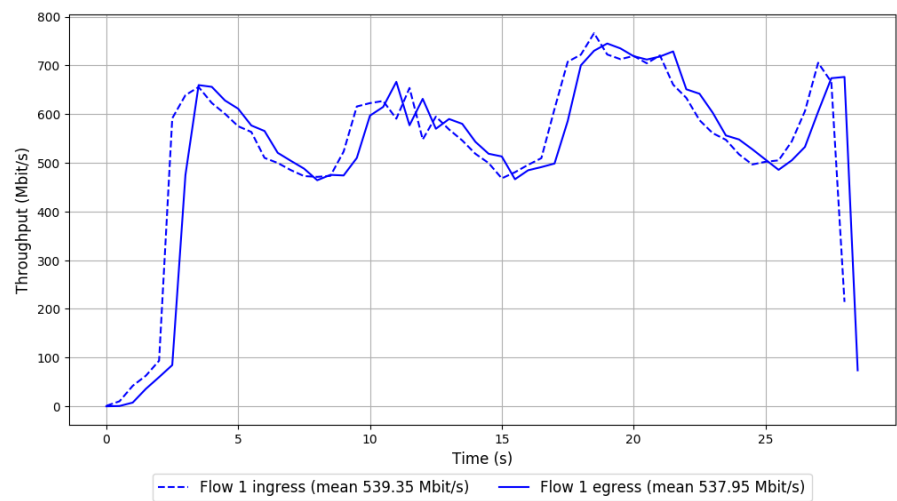
-- Flow 1:

Average throughput: 537.95 Mbit/s

95th percentile per-packet one-way delay: 90.035 ms

Loss rate: 0.87%

Run 4: Report of Indigo-MusesD — Data Link



Run 5: Statistics of Indigo-MusesD

Start at: 2019-08-26 18:35:31

End at: 2019-08-26 18:36:01

Local clock offset: 1.567 ms

Remote clock offset: 1.912 ms

Below is generated by plot.py at 2019-08-26 19:50:26

Datalink statistics

-- Total of 1 flow:

Average throughput: 563.37 Mbit/s

95th percentile per-packet one-way delay: 115.965 ms

Loss rate: 0.58%

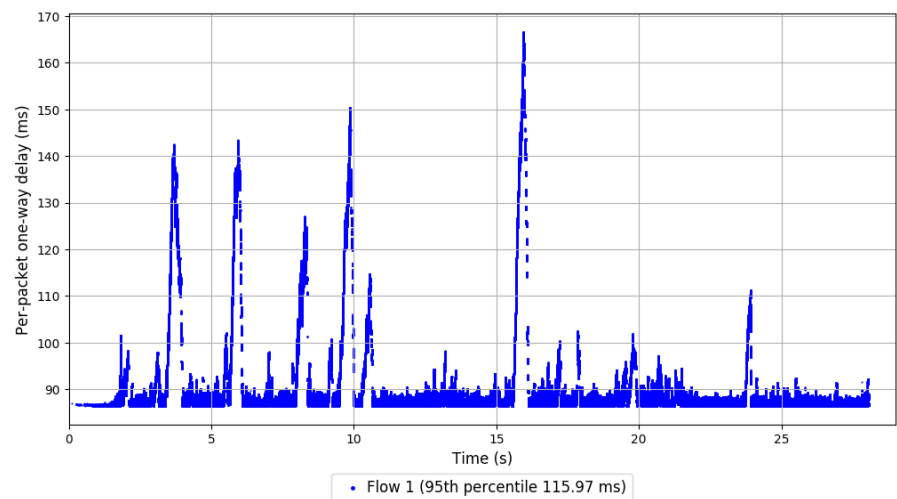
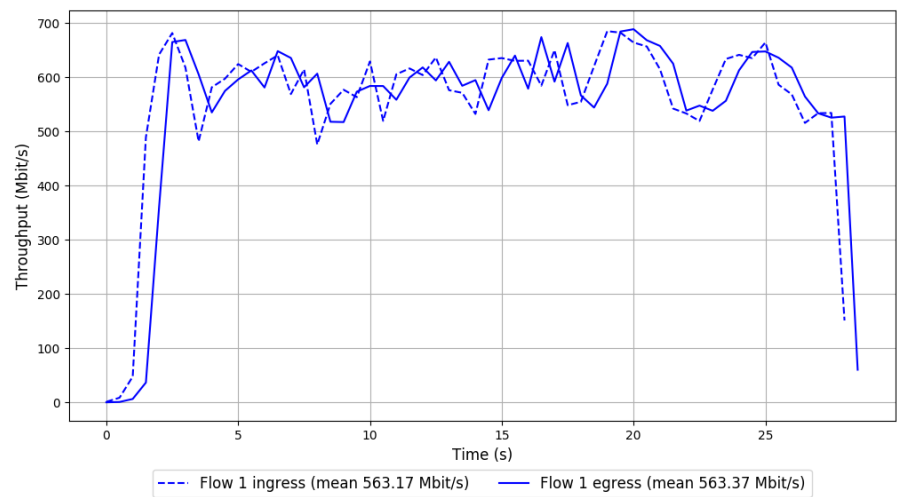
-- Flow 1:

Average throughput: 563.37 Mbit/s

95th percentile per-packet one-way delay: 115.965 ms

Loss rate: 0.58%

Run 5: Report of Indigo-MusesD — Data Link



Run 1: Statistics of Indigo-MusesT

Start at: 2019-08-26 16:25:36

End at: 2019-08-26 16:26:06

Local clock offset: 18.782 ms

Remote clock offset: 28.624 ms

Below is generated by plot.py at 2019-08-26 19:53:36

Datalink statistics

-- Total of 1 flow:

Average throughput: 625.66 Mbit/s

95th percentile per-packet one-way delay: 146.515 ms

Loss rate: 0.78%

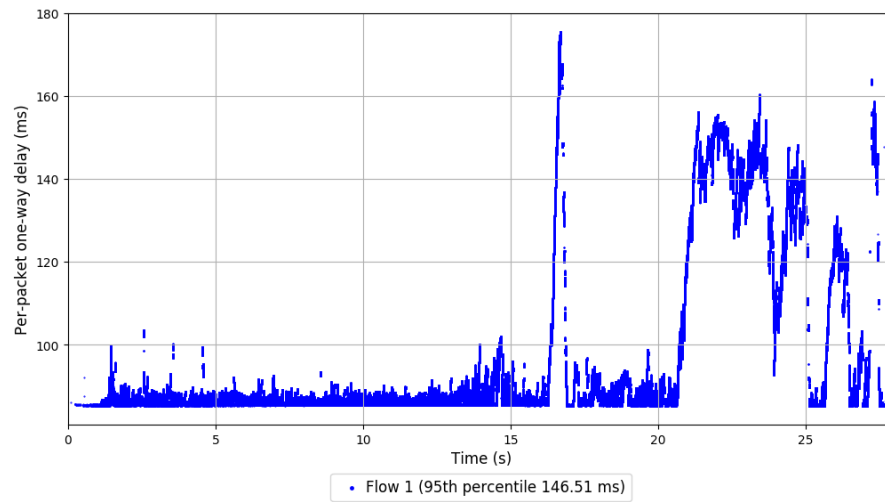
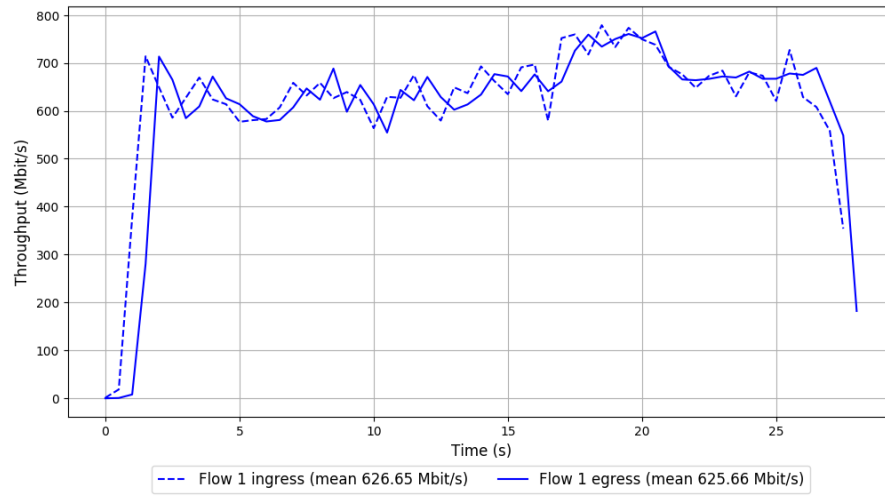
-- Flow 1:

Average throughput: 625.66 Mbit/s

95th percentile per-packet one-way delay: 146.515 ms

Loss rate: 0.78%

Run 1: Report of Indigo-MusesT — Data Link

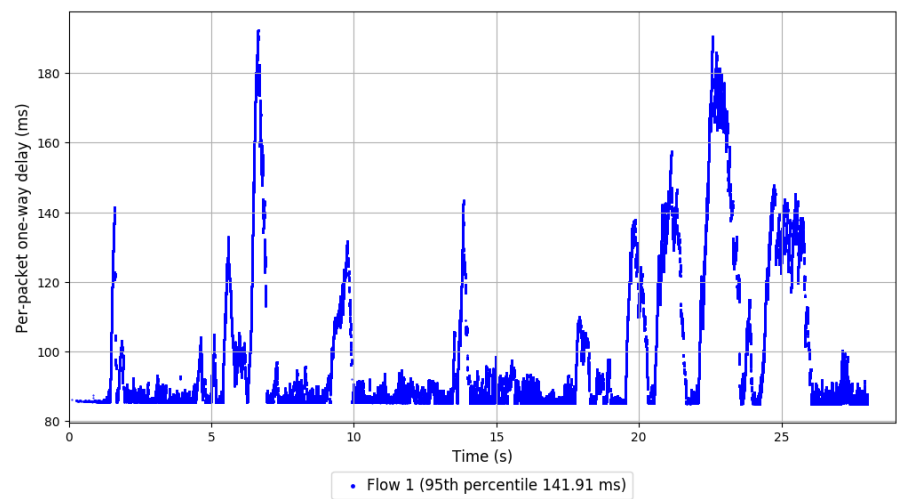
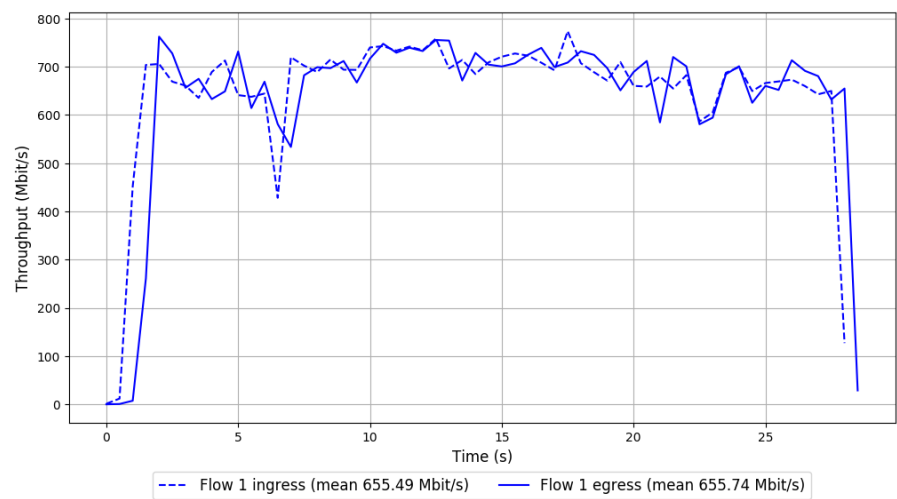


Run 2: Statistics of Indigo-MusesT

Start at: 2019-08-26 17:00:27
End at: 2019-08-26 17:00:57
Local clock offset: 29.109 ms
Remote clock offset: 43.137 ms

Below is generated by plot.py at 2019-08-26 19:56:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 655.74 Mbit/s
95th percentile per-packet one-way delay: 141.906 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 655.74 Mbit/s
95th percentile per-packet one-way delay: 141.906 ms
Loss rate: 0.56%

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

Start at: 2019-08-26 17:34:58

End at: 2019-08-26 17:35:28

Local clock offset: 7.355 ms

Remote clock offset: 10.51 ms

Below is generated by plot.py at 2019-08-26 19:56:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 614.09 Mbit/s

95th percentile per-packet one-way delay: 147.242 ms

Loss rate: 0.59%

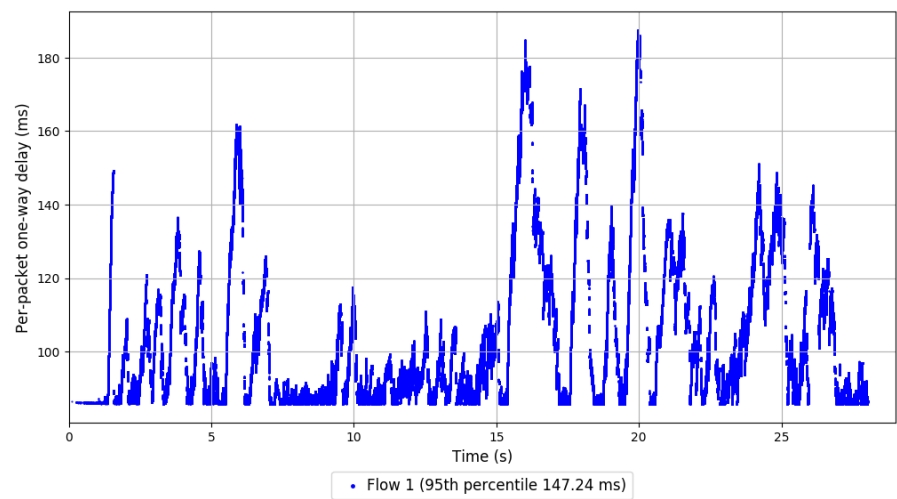
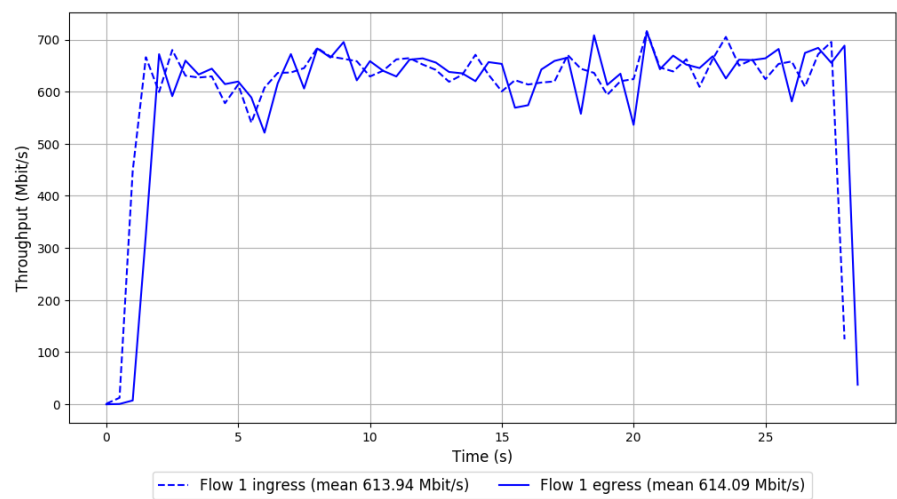
-- Flow 1:

Average throughput: 614.09 Mbit/s

95th percentile per-packet one-way delay: 147.242 ms

Loss rate: 0.59%

Run 3: Report of Indigo-MusesT — Data Link



Run 4: Statistics of Indigo-MusesT

Start at: 2019-08-26 18:09:51

End at: 2019-08-26 18:10:21

Local clock offset: 3.2 ms

Remote clock offset: 4.195 ms

Below is generated by plot.py at 2019-08-26 19:56:19

Datalink statistics

-- Total of 1 flow:

Average throughput: 635.07 Mbit/s

95th percentile per-packet one-way delay: 164.111 ms

Loss rate: 0.77%

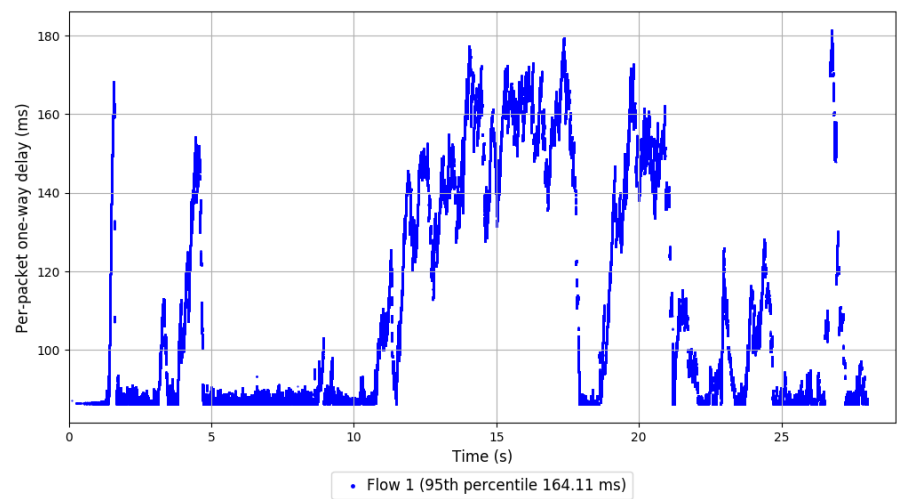
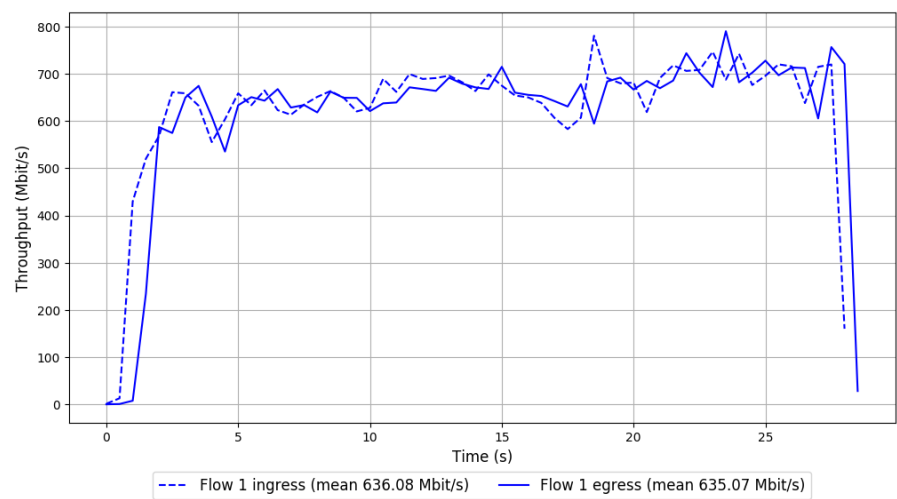
-- Flow 1:

Average throughput: 635.07 Mbit/s

95th percentile per-packet one-way delay: 164.111 ms

Loss rate: 0.77%

Run 4: Report of Indigo-MusesT — Data Link



Run 5: Statistics of Indigo-MusesT

Start at: 2019-08-26 18:44:47

End at: 2019-08-26 18:45:17

Local clock offset: 1.458 ms

Remote clock offset: 1.732 ms

Below is generated by plot.py at 2019-08-26 19:56:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 618.97 Mbit/s

95th percentile per-packet one-way delay: 142.687 ms

Loss rate: 0.87%

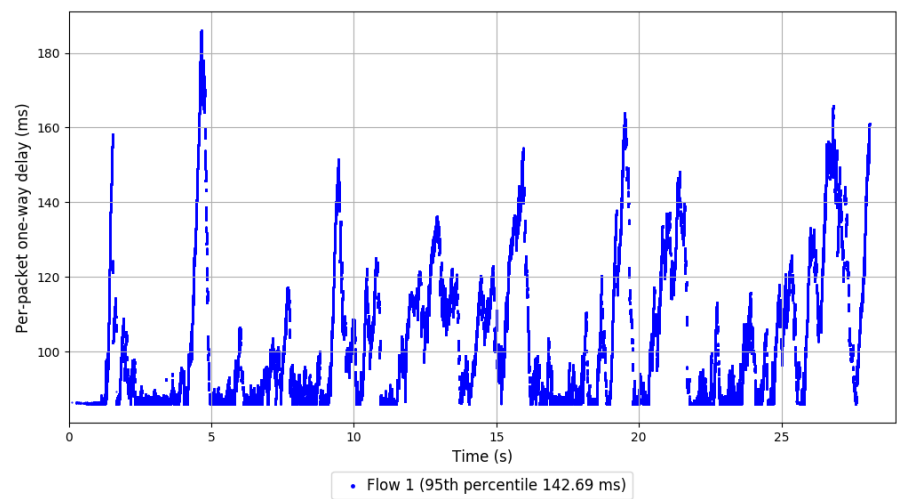
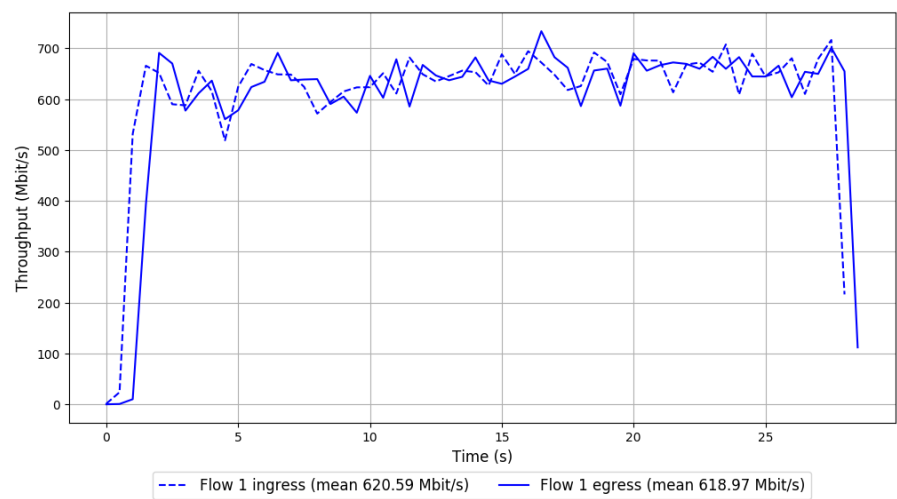
-- Flow 1:

Average throughput: 618.97 Mbit/s

95th percentile per-packet one-way delay: 142.687 ms

Loss rate: 0.87%

Run 5: Report of Indigo-MusesT — Data Link

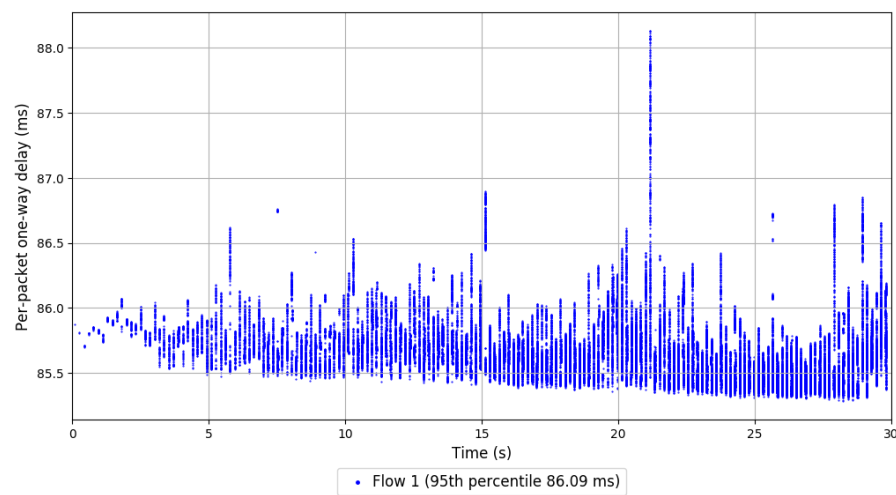
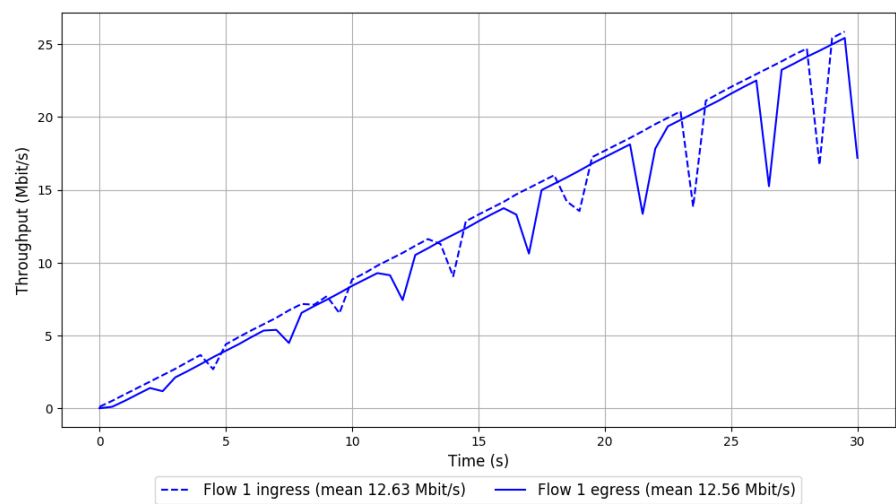


Run 1: Statistics of LEDBAT

Start at: 2019-08-26 16:27:11
End at: 2019-08-26 16:27:41
Local clock offset: 18.057 ms
Remote clock offset: 26.951 ms

Below is generated by plot.py at 2019-08-26 19:56:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.56 Mbit/s
95th percentile per-packet one-way delay: 86.092 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 12.56 Mbit/s
95th percentile per-packet one-way delay: 86.092 ms
Loss rate: 1.15%

Run 1: Report of LEDBAT — Data Link

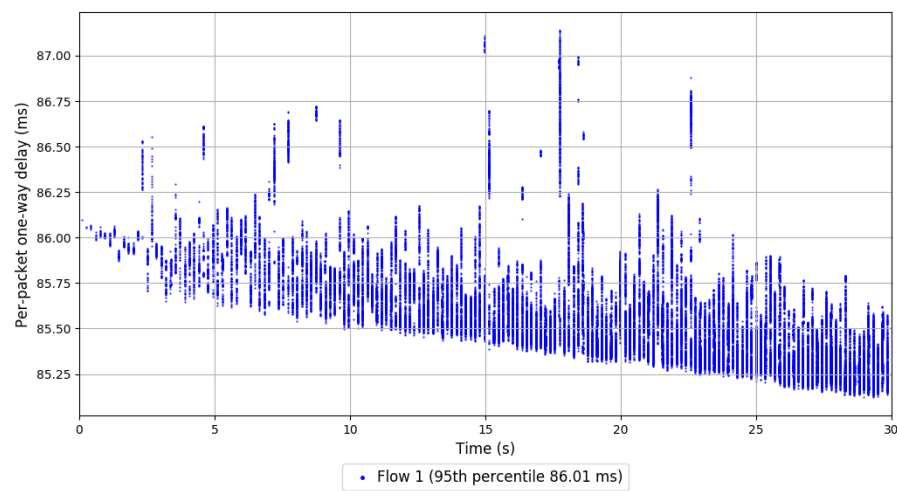
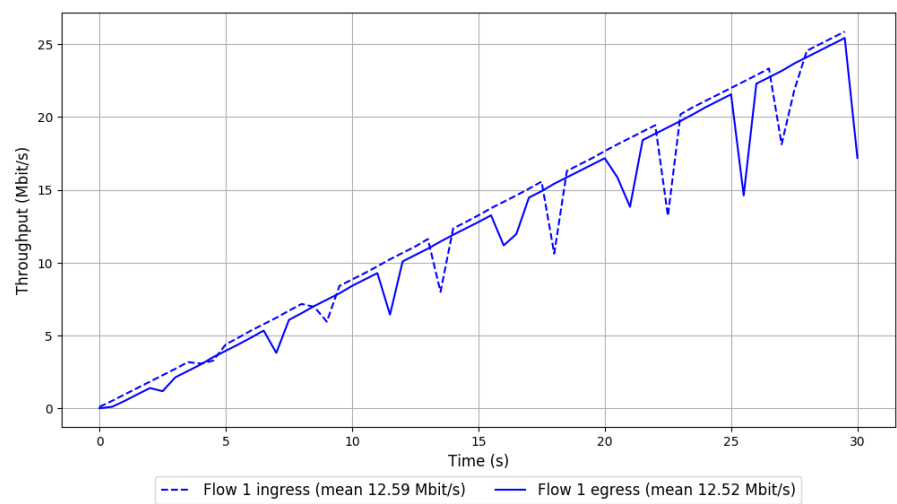


Run 2: Statistics of LEDBAT

Start at: 2019-08-26 17:02:03
End at: 2019-08-26 17:02:33
Local clock offset: 24.461 ms
Remote clock offset: 35.921 ms

Below is generated by plot.py at 2019-08-26 19:56:38
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 86.013 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 12.52 Mbit/s
95th percentile per-packet one-way delay: 86.013 ms
Loss rate: 1.15%

Run 2: Report of LEDBAT — Data Link



Run 3: Statistics of LEDBAT

Start at: 2019-08-26 17:36:32

End at: 2019-08-26 17:37:02

Local clock offset: 5.792 ms

Remote clock offset: 8.954 ms

Below is generated by plot.py at 2019-08-26 19:56:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.37 Mbit/s

95th percentile per-packet one-way delay: 86.330 ms

Loss rate: 1.15%

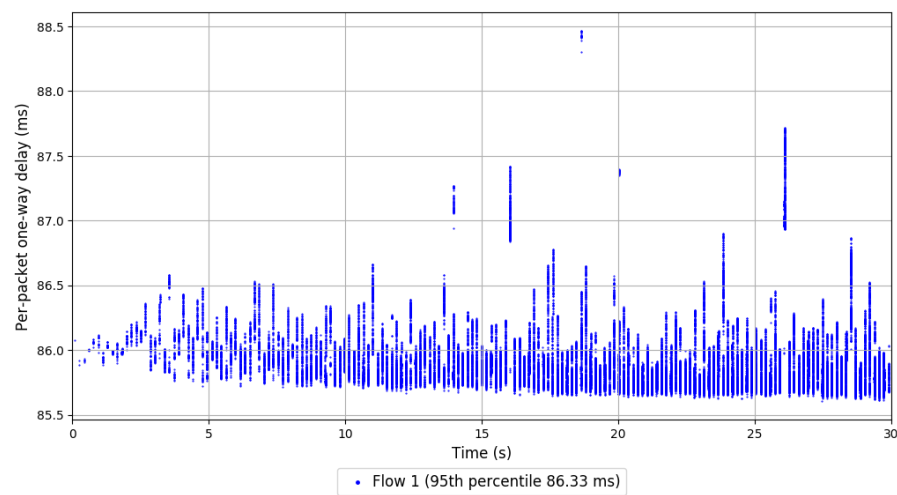
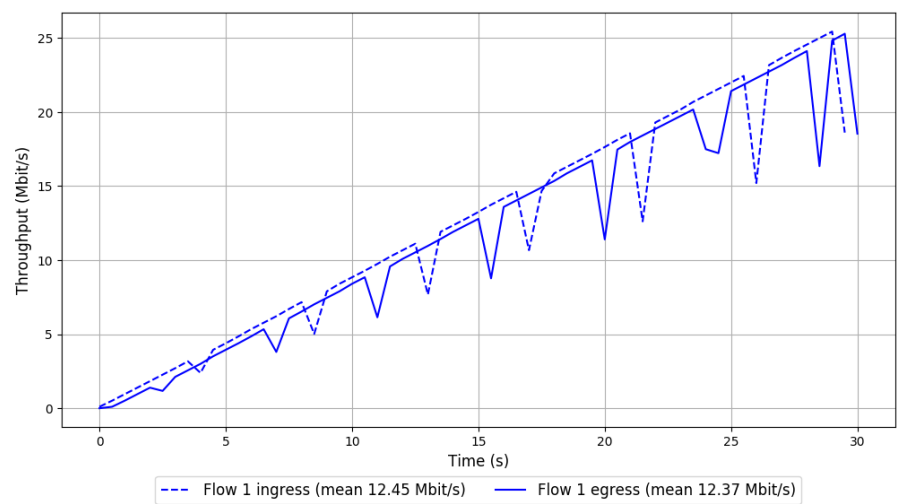
-- Flow 1:

Average throughput: 12.37 Mbit/s

95th percentile per-packet one-way delay: 86.330 ms

Loss rate: 1.15%

Run 3: Report of LEDBAT — Data Link



Run 4: Statistics of LEDBAT

Start at: 2019-08-26 18:11:27

End at: 2019-08-26 18:11:57

Local clock offset: 2.39 ms

Remote clock offset: 3.63 ms

Below is generated by plot.py at 2019-08-26 19:56:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.53 Mbit/s

95th percentile per-packet one-way delay: 86.303 ms

Loss rate: 1.15%

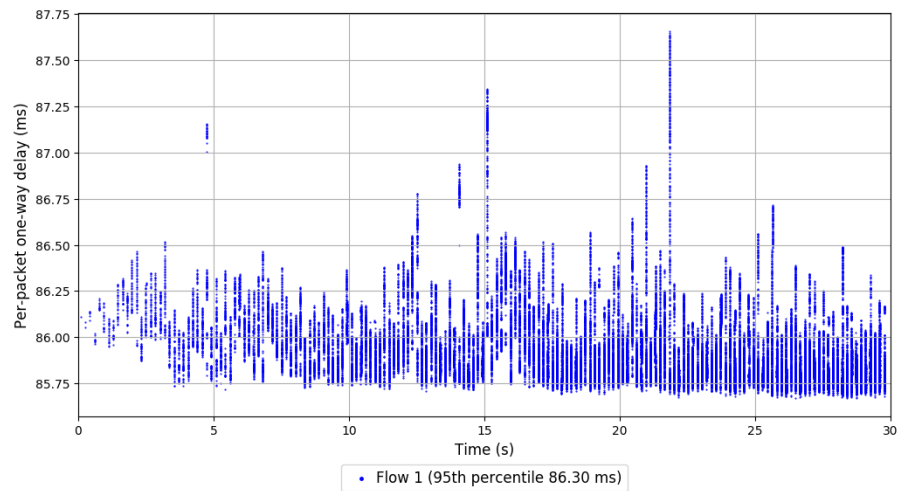
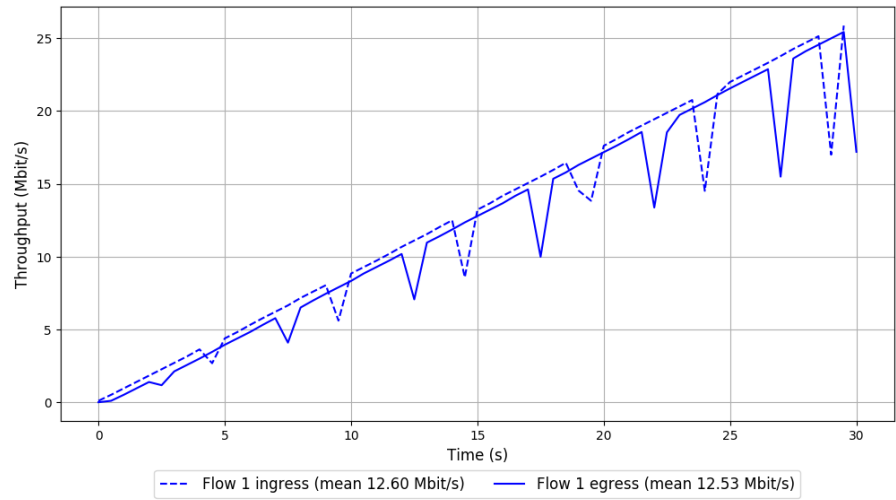
-- Flow 1:

Average throughput: 12.53 Mbit/s

95th percentile per-packet one-way delay: 86.303 ms

Loss rate: 1.15%

Run 4: Report of LEDBAT — Data Link



Run 5: Statistics of LEDBAT

Start at: 2019-08-26 18:46:23

End at: 2019-08-26 18:46:53

Local clock offset: 1.286 ms

Remote clock offset: 1.42 ms

Below is generated by plot.py at 2019-08-26 19:56:38

Datalink statistics

-- Total of 1 flow:

Average throughput: 12.48 Mbit/s

95th percentile per-packet one-way delay: 87.045 ms

Loss rate: 1.15%

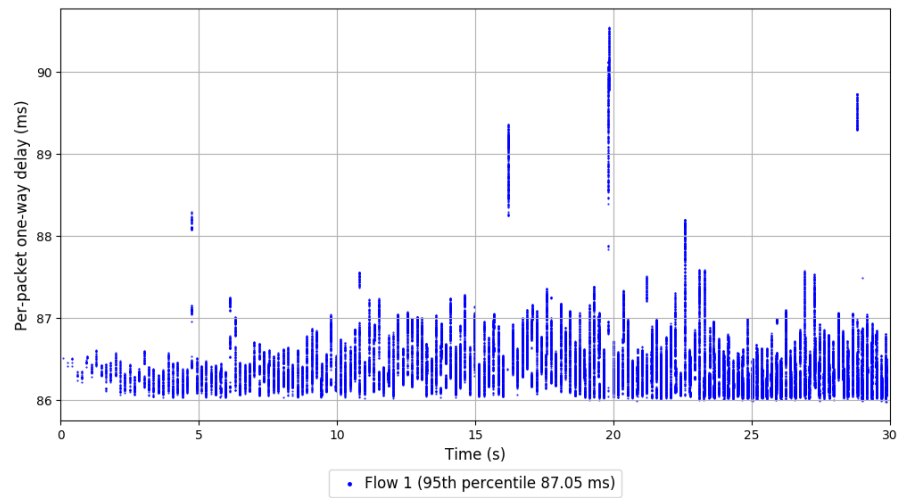
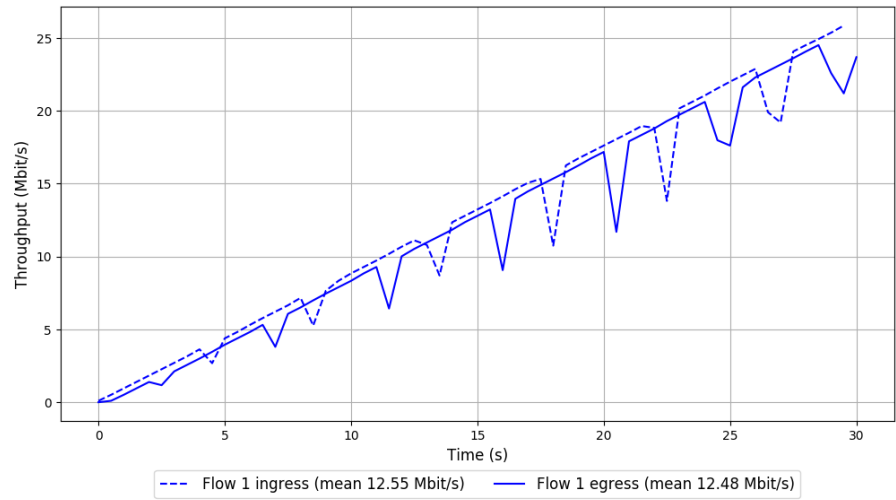
-- Flow 1:

Average throughput: 12.48 Mbit/s

95th percentile per-packet one-way delay: 87.045 ms

Loss rate: 1.15%

Run 5: Report of LEDBAT — Data Link

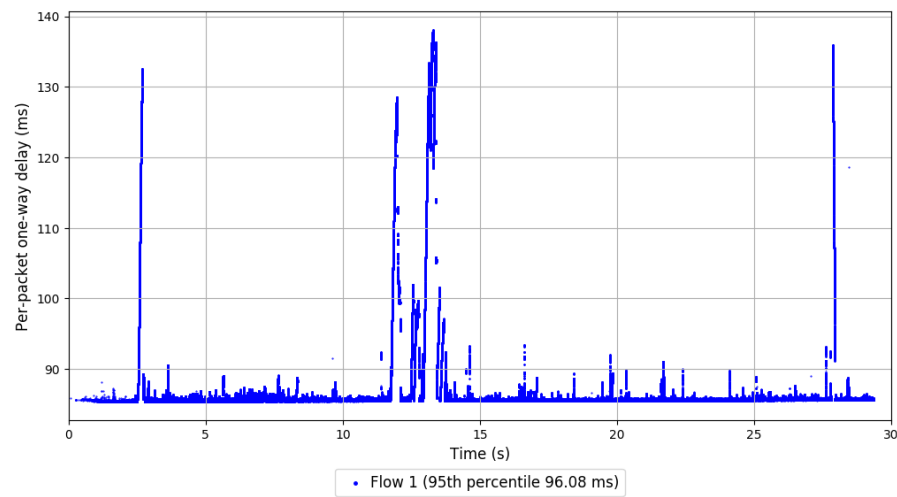
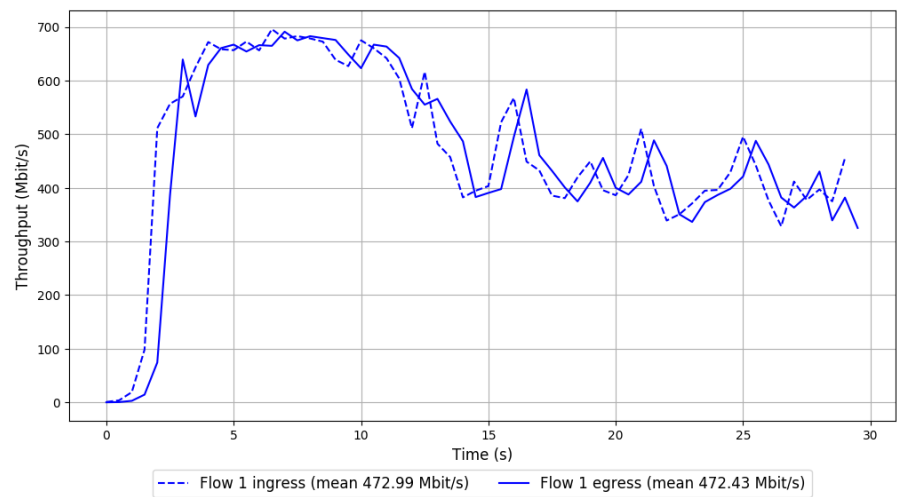


```
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-08-26 16:03:50
End at: 2019-08-26 16:04:20
Local clock offset: 6.703 ms
Remote clock offset: 10.121 ms

# Below is generated by plot.py at 2019-08-26 19:56:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 472.43 Mbit/s
95th percentile per-packet one-way delay: 96.079 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 472.43 Mbit/s
95th percentile per-packet one-way delay: 96.079 ms
Loss rate: 0.70%
```

Run 1: Report of Muses_DecisionTree — Data Link

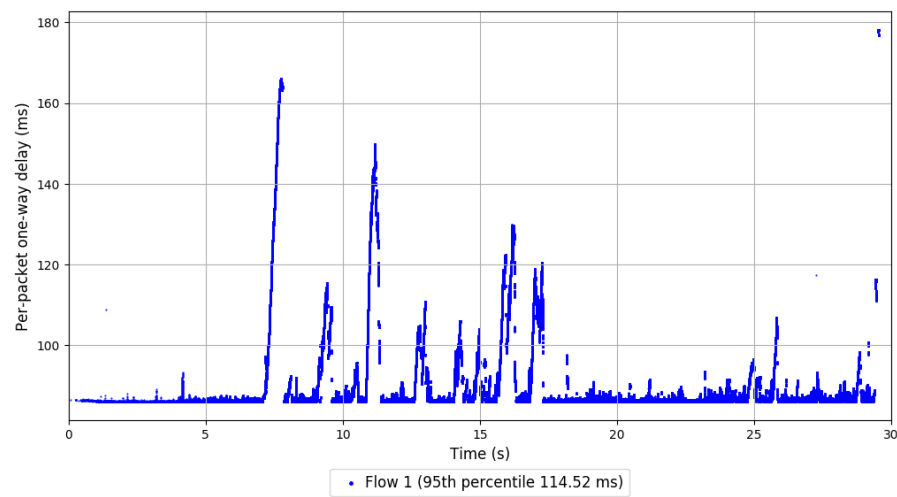
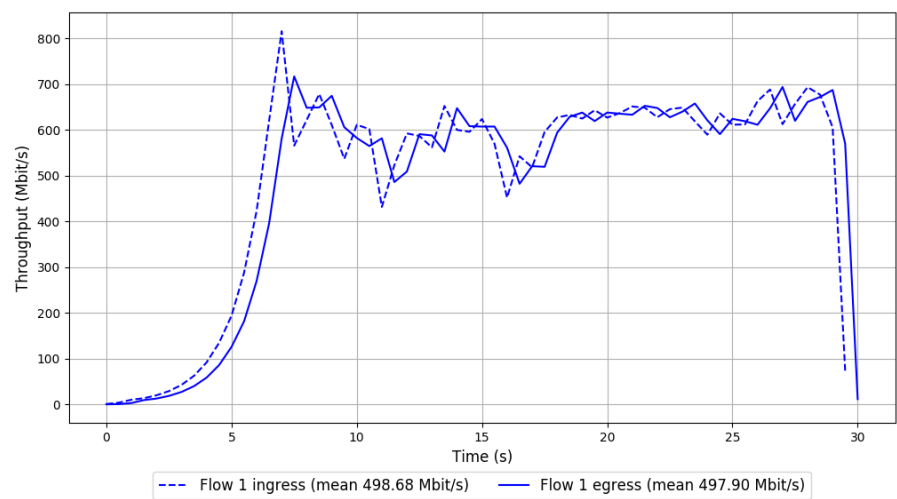


Run 2: Statistics of Muses_DecisionTree

Start at: 2019-08-26 16:38:31
End at: 2019-08-26 16:39:01
Local clock offset: 15.451 ms
Remote clock offset: 22.788 ms

Below is generated by plot.py at 2019-08-26 19:56:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 497.90 Mbit/s
95th percentile per-packet one-way delay: 114.523 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 497.90 Mbit/s
95th percentile per-packet one-way delay: 114.523 ms
Loss rate: 0.74%

Run 2: Report of Muses_DecisionTree — Data Link

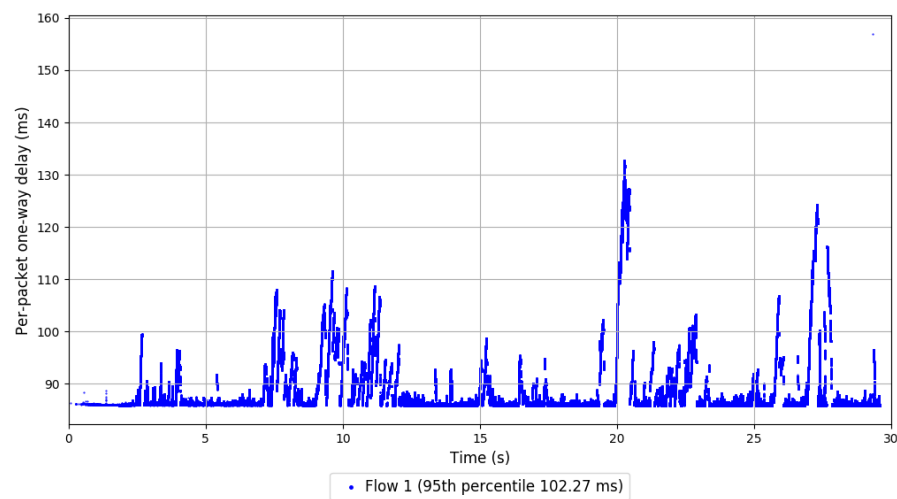
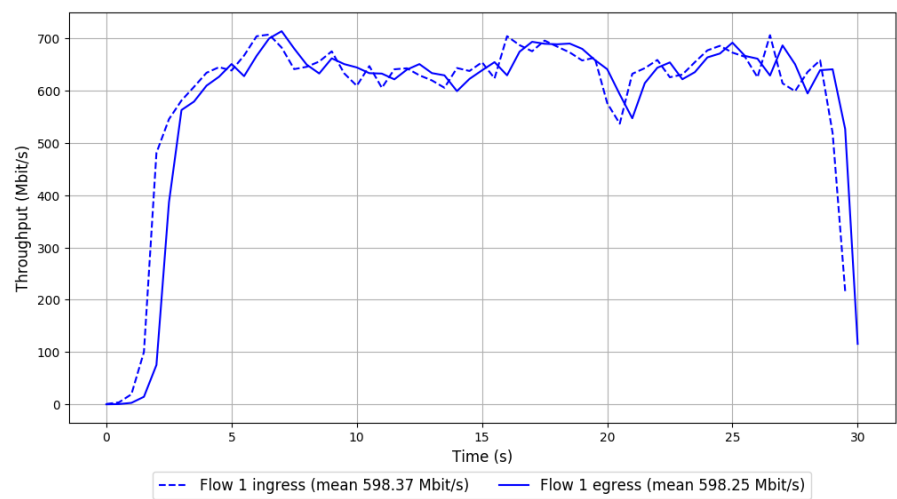


Run 3: Statistics of Muses_DecisionTree

Start at: 2019-08-26 17:13:21
End at: 2019-08-26 17:13:51
Local clock offset: 9.076 ms
Remote clock offset: 13.213 ms

Below is generated by plot.py at 2019-08-26 19:59:35
Datalink statistics
-- Total of 1 flow:
Average throughput: 598.25 Mbit/s
95th percentile per-packet one-way delay: 102.270 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 598.25 Mbit/s
95th percentile per-packet one-way delay: 102.270 ms
Loss rate: 0.60%

Run 3: Report of Muses_DecisionTree — Data Link



Run 4: Statistics of Muses_DecisionTree

Start at: 2019-08-26 17:47:51

End at: 2019-08-26 17:48:21

Local clock offset: 2.763 ms

Remote clock offset: 4.09 ms

Below is generated by plot.py at 2019-08-26 20:02:21

Datalink statistics

-- Total of 1 flow:

Average throughput: 578.10 Mbit/s

95th percentile per-packet one-way delay: 109.118 ms

Loss rate: 0.57%

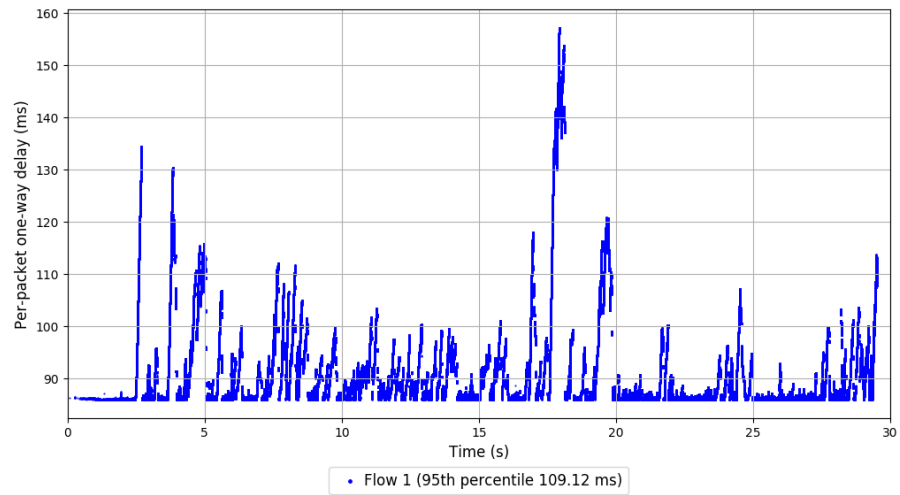
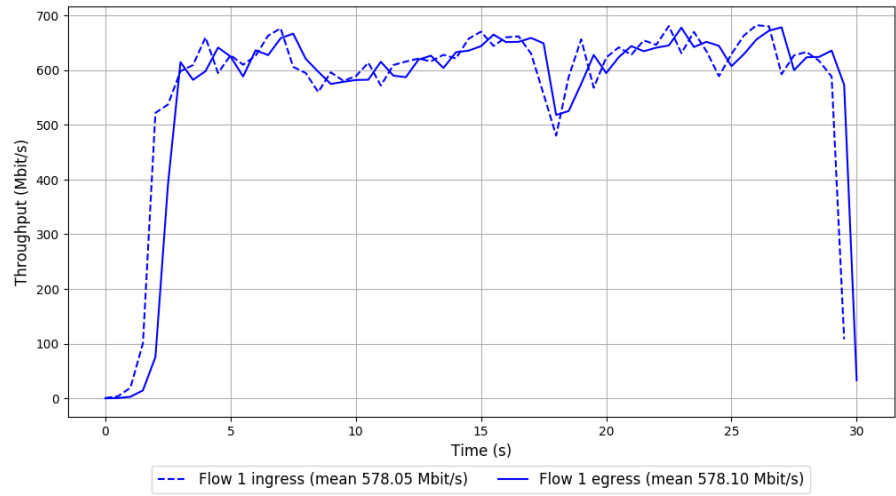
-- Flow 1:

Average throughput: 578.10 Mbit/s

95th percentile per-packet one-way delay: 109.118 ms

Loss rate: 0.57%

Run 4: Report of Muses_DecisionTree — Data Link



Run 5: Statistics of Muses_DecisionTree

Start at: 2019-08-26 18:22:44

End at: 2019-08-26 18:23:14

Local clock offset: 1.547 ms

Remote clock offset: 1.805 ms

Below is generated by plot.py at 2019-08-26 20:03:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 588.88 Mbit/s

95th percentile per-packet one-way delay: 109.444 ms

Loss rate: 0.65%

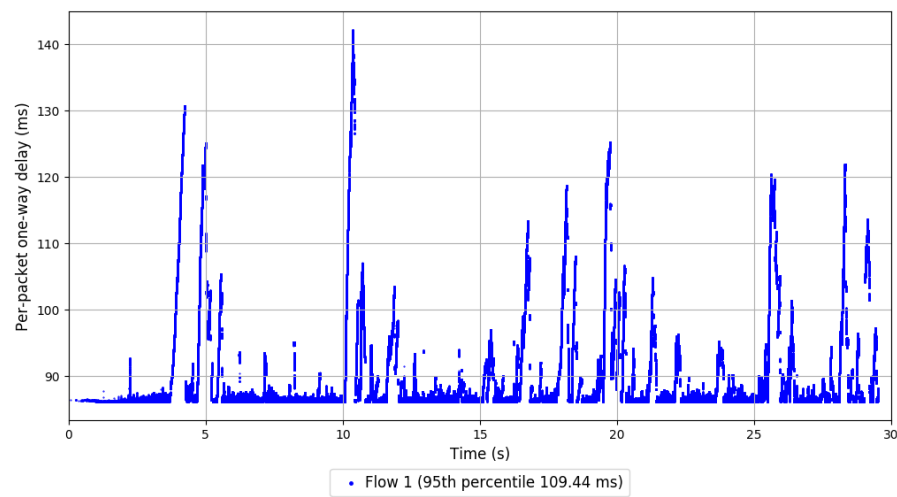
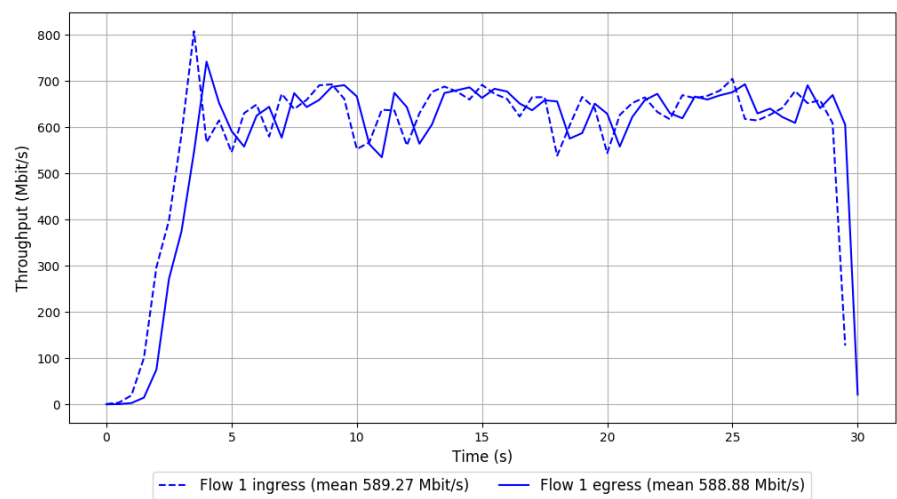
-- Flow 1:

Average throughput: 588.88 Mbit/s

95th percentile per-packet one-way delay: 109.444 ms

Loss rate: 0.65%

Run 5: Report of Muses_DecisionTree — Data Link

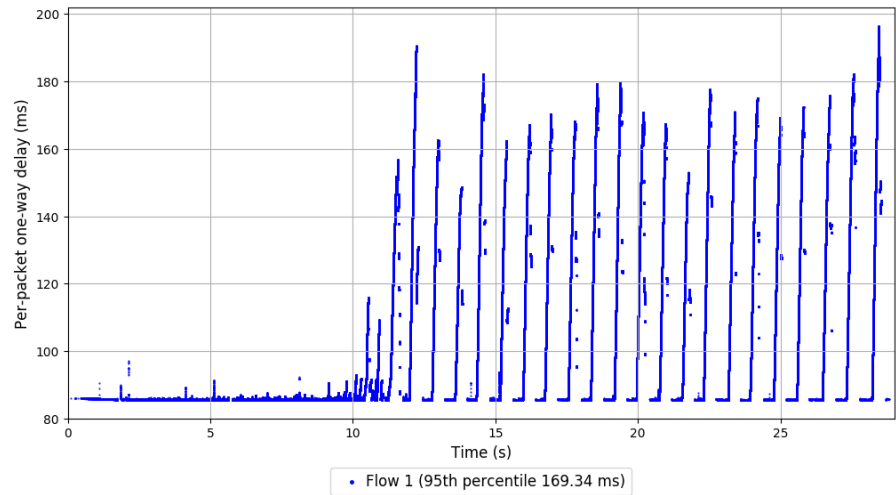
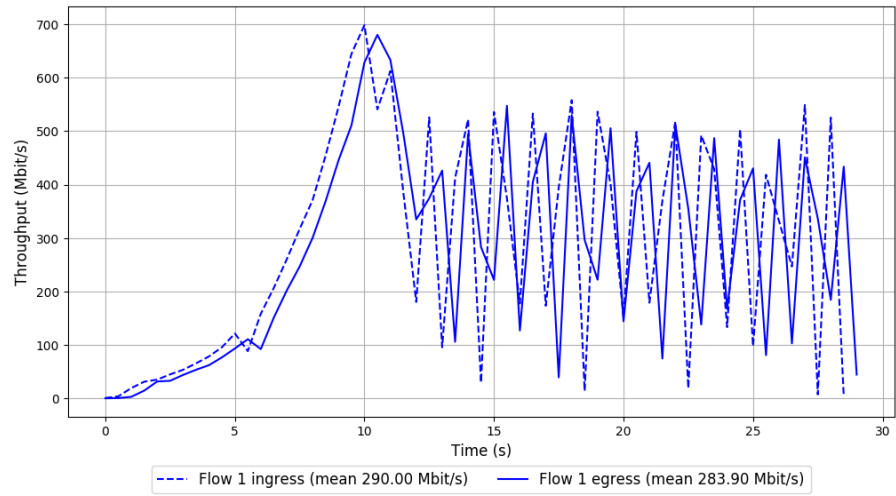



```
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2019-08-26 16:00:46
End at: 2019-08-26 16:01:16
Local clock offset: 8.521 ms
Remote clock offset: 11.22 ms

# Below is generated by plot.py at 2019-08-26 20:03:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 283.90 Mbit/s
95th percentile per-packet one-way delay: 169.338 ms
Loss rate: 2.72%
-- Flow 1:
Average throughput: 283.90 Mbit/s
95th percentile per-packet one-way delay: 169.338 ms
Loss rate: 2.72%
```

Run 1: Report of Muses_DecisionTreeH0 — Data Link

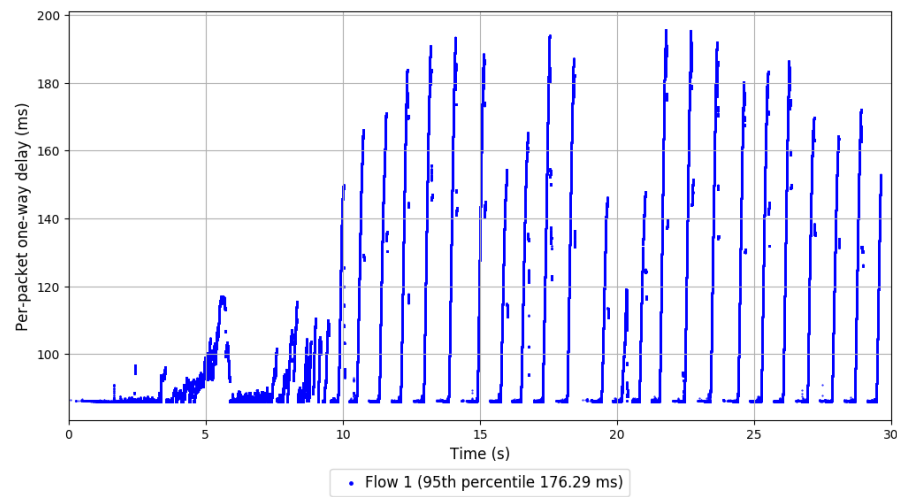
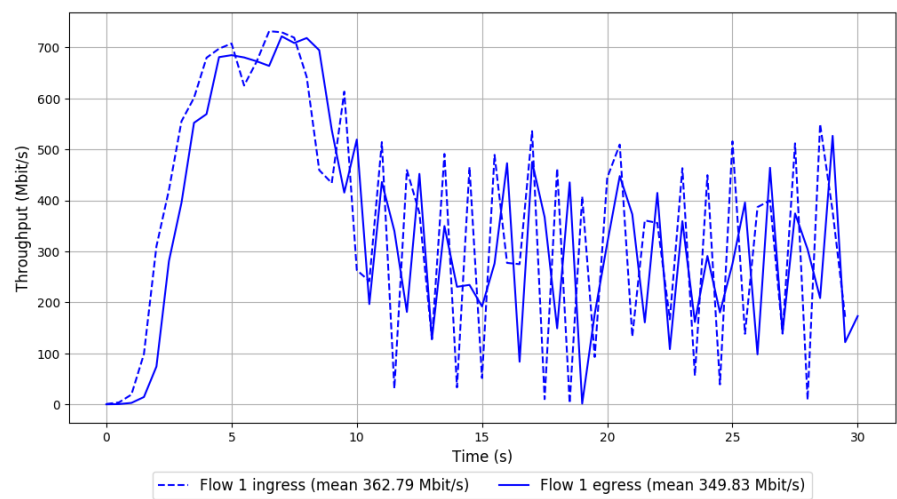


Run 2: Statistics of Muses_DecisionTreeH0

Start at: 2019-08-26 16:35:27
End at: 2019-08-26 16:35:57
Local clock offset: 14.607 ms
Remote clock offset: 21.773 ms

Below is generated by plot.py at 2019-08-26 20:03:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 349.83 Mbit/s
95th percentile per-packet one-way delay: 176.292 ms
Loss rate: 3.92%
-- Flow 1:
Average throughput: 349.83 Mbit/s
95th percentile per-packet one-way delay: 176.292 ms
Loss rate: 3.92%

Run 2: Report of Muses_DecisionTreeH0 — Data Link

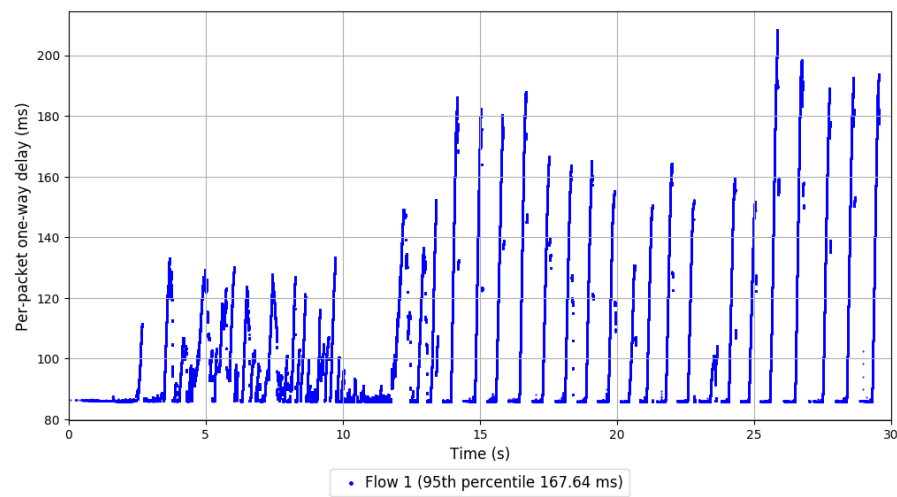
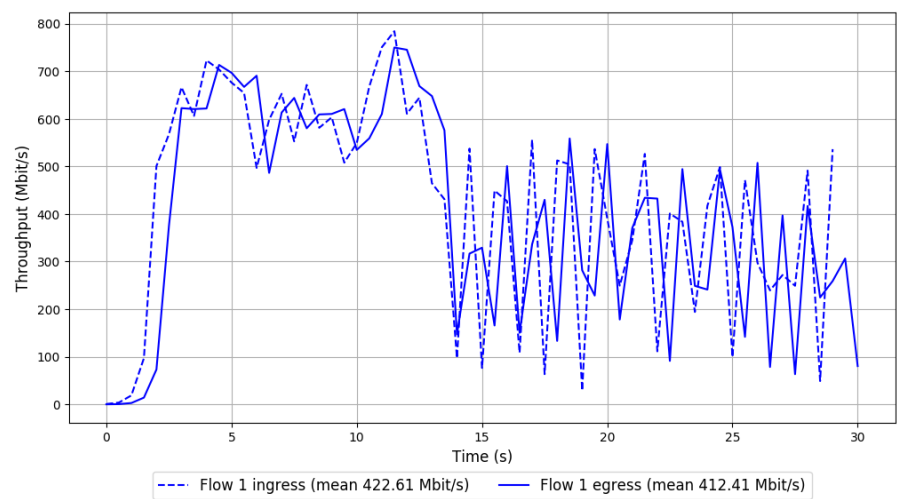


Run 3: Statistics of Muses_DecisionTreeH0

Start at: 2019-08-26 17:10:13
End at: 2019-08-26 17:10:43
Local clock offset: 11.101 ms
Remote clock offset: 16.574 ms

Below is generated by plot.py at 2019-08-26 20:03:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 412.41 Mbit/s
95th percentile per-packet one-way delay: 167.642 ms
Loss rate: 2.38%
-- Flow 1:
Average throughput: 412.41 Mbit/s
95th percentile per-packet one-way delay: 167.642 ms
Loss rate: 2.38%

Run 3: Report of Muses_DecisionTreeH0 — Data Link



Run 4: Statistics of Muses_DecisionTreeH0

Start at: 2019-08-26 17:44:48

End at: 2019-08-26 17:45:18

Local clock offset: 3.119 ms

Remote clock offset: 4.697 ms

Below is generated by plot.py at 2019-08-26 20:03:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 254.55 Mbit/s

95th percentile per-packet one-way delay: 181.476 ms

Loss rate: 5.92%

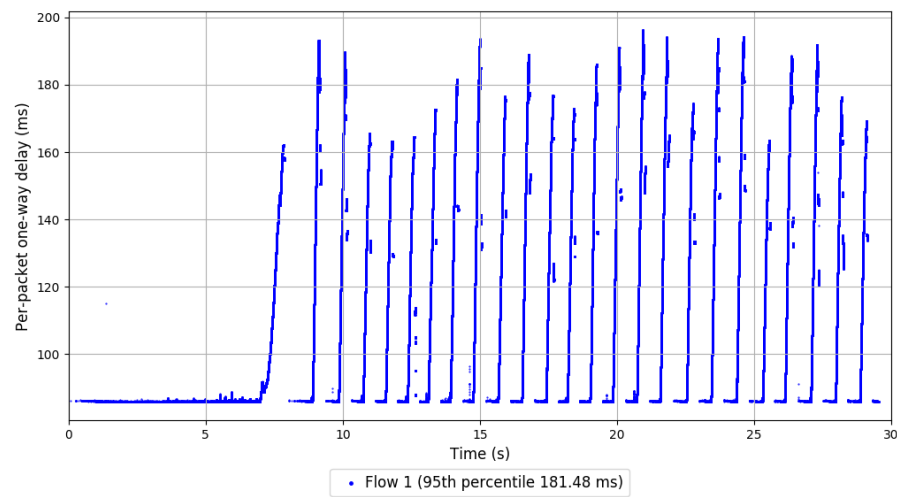
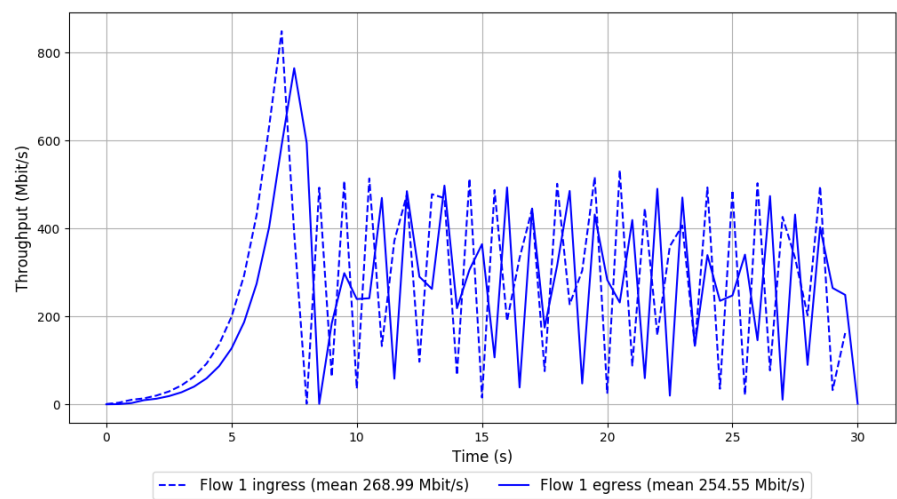
-- Flow 1:

Average throughput: 254.55 Mbit/s

95th percentile per-packet one-way delay: 181.476 ms

Loss rate: 5.92%

Run 4: Report of Muses_DecisionTreeH0 — Data Link

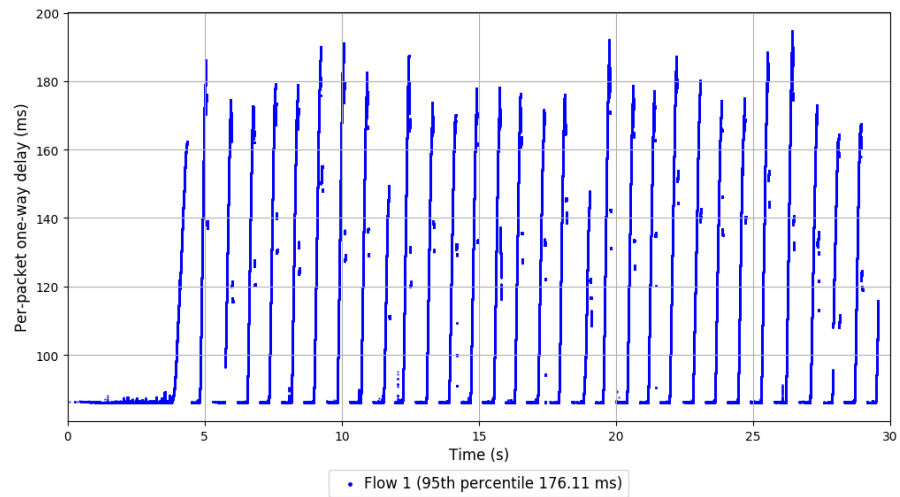
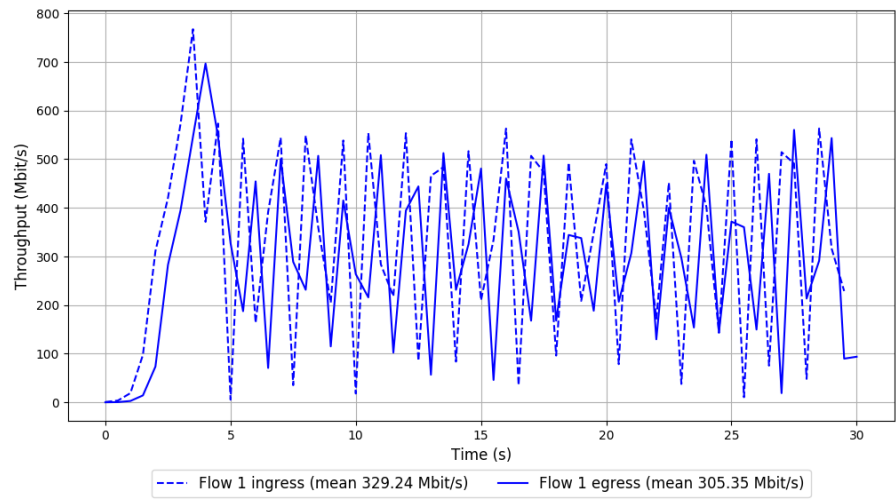



```
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2019-08-26 18:19:38
End at: 2019-08-26 18:20:08
Local clock offset: 1.276 ms
Remote clock offset: 2.034 ms

# Below is generated by plot.py at 2019-08-26 20:03:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 305.35 Mbit/s
95th percentile per-packet one-way delay: 176.109 ms
Loss rate: 7.80%
-- Flow 1:
Average throughput: 305.35 Mbit/s
95th percentile per-packet one-way delay: 176.109 ms
Loss rate: 7.80%
```

Run 5: Report of Muses_DecisionTreeH0 — Data Link

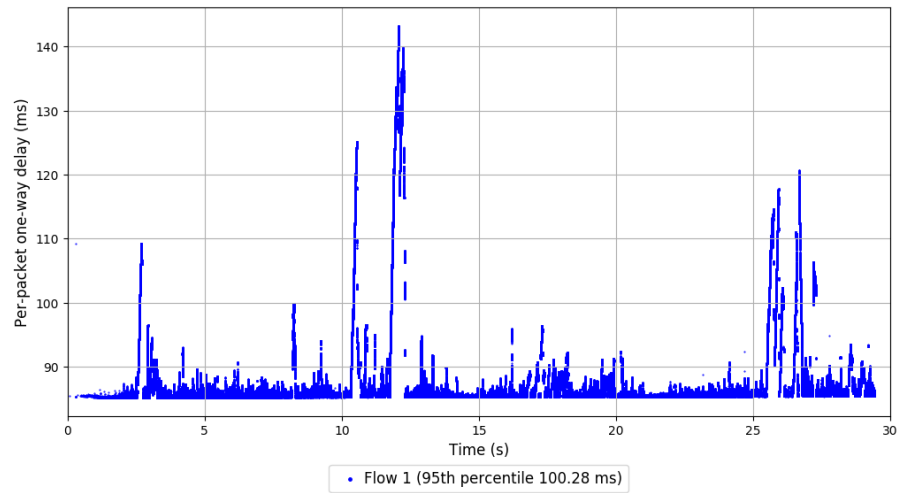
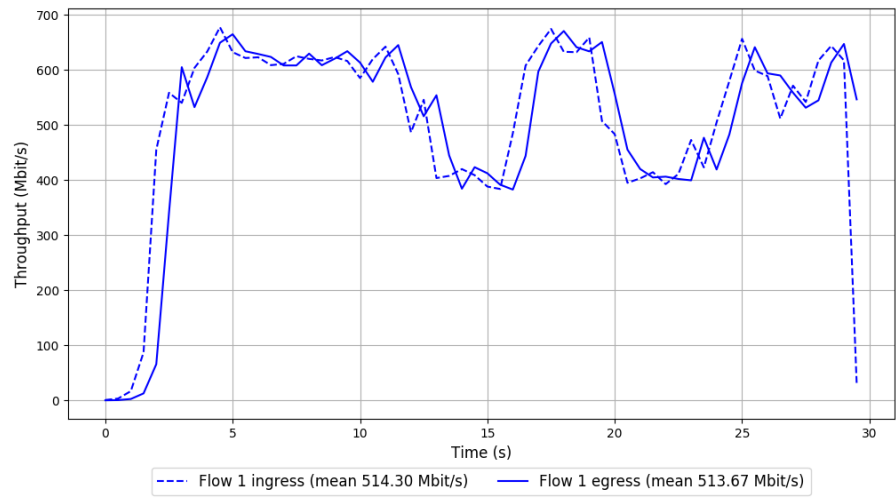


```
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2019-08-26 16:24:05
End at: 2019-08-26 16:24:35
Local clock offset: 17.243 ms
Remote clock offset: 26.404 ms

# Below is generated by plot.py at 2019-08-26 20:07:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 513.67 Mbit/s
95th percentile per-packet one-way delay: 100.280 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 513.67 Mbit/s
95th percentile per-packet one-way delay: 100.280 ms
Loss rate: 0.71%
```

Run 1: Report of Muses_DecisionTreeR0 — Data Link

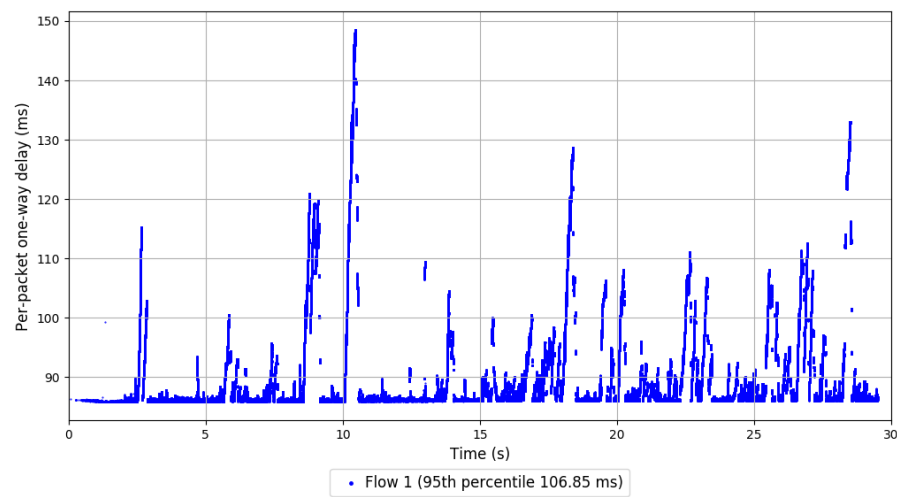
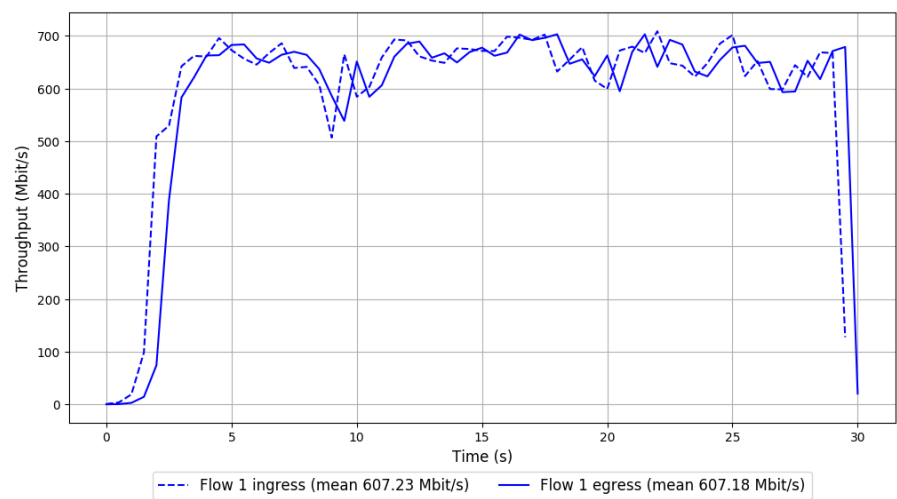


Run 2: Statistics of Muses_DecisionTreeR0

Start at: 2019-08-26 16:58:52
End at: 2019-08-26 16:59:22
Local clock offset: 28.363 ms
Remote clock offset: 42.432 ms

Below is generated by plot.py at 2019-08-26 20:08:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 607.18 Mbit/s
95th percentile per-packet one-way delay: 106.854 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 607.18 Mbit/s
95th percentile per-packet one-way delay: 106.854 ms
Loss rate: 0.59%

Run 2: Report of Muses_DecisionTreeR0 — Data Link

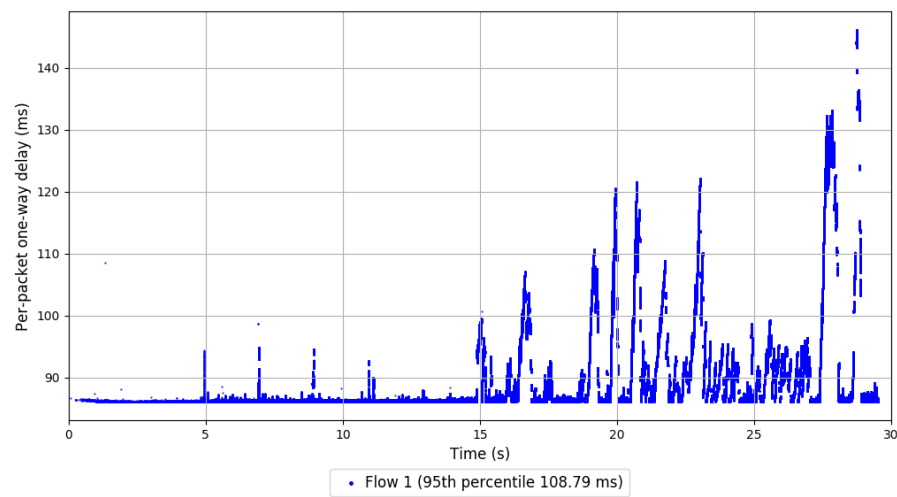
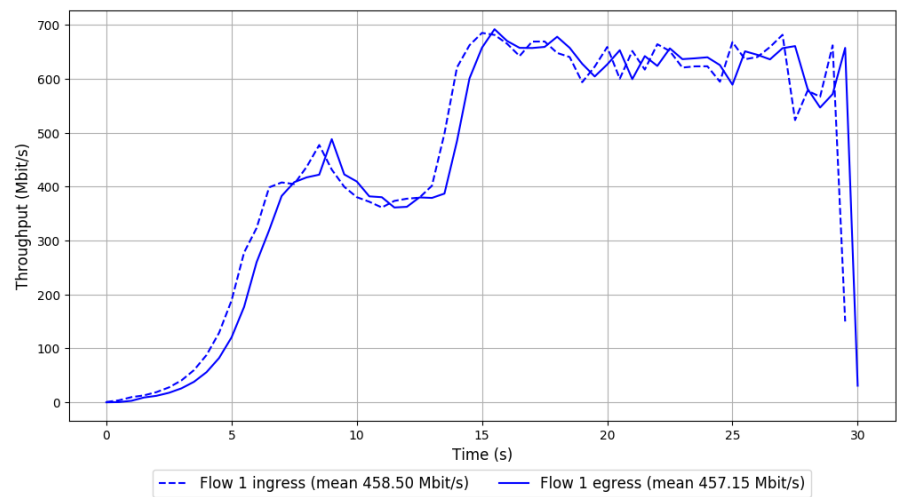


Run 3: Statistics of Muses_DecisionTreeR0

Start at: 2019-08-26 17:33:29
End at: 2019-08-26 17:33:59
Local clock offset: 7.789 ms
Remote clock offset: 10.953 ms

Below is generated by plot.py at 2019-08-26 20:08:15
Datalink statistics
-- Total of 1 flow:
Average throughput: 457.15 Mbit/s
95th percentile per-packet one-way delay: 108.786 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 457.15 Mbit/s
95th percentile per-packet one-way delay: 108.786 ms
Loss rate: 0.87%

Run 3: Report of Muses_DecisionTreeR0 — Data Link



Run 4: Statistics of Muses_DecisionTreeR0

Start at: 2019-08-26 18:08:20

End at: 2019-08-26 18:08:50

Local clock offset: 3.525 ms

Remote clock offset: 4.955 ms

Below is generated by plot.py at 2019-08-26 20:08:18

Datalink statistics

-- Total of 1 flow:

Average throughput: 517.78 Mbit/s

95th percentile per-packet one-way delay: 97.785 ms

Loss rate: 0.69%

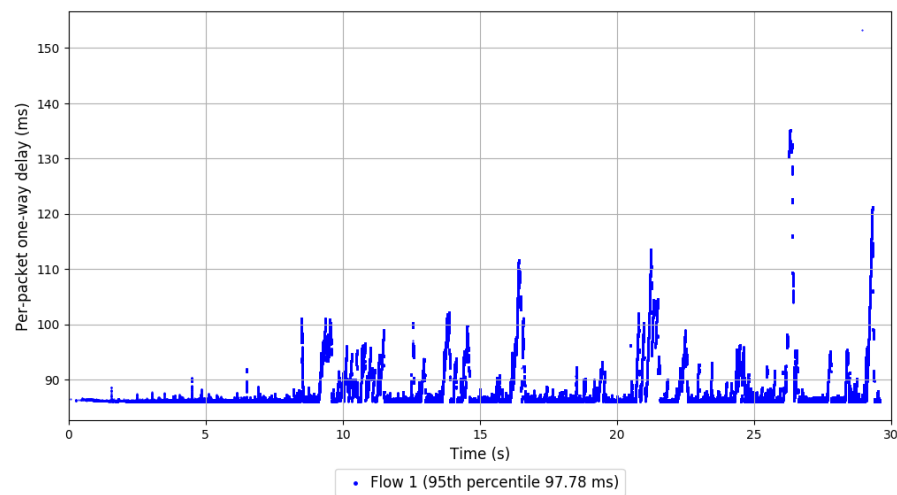
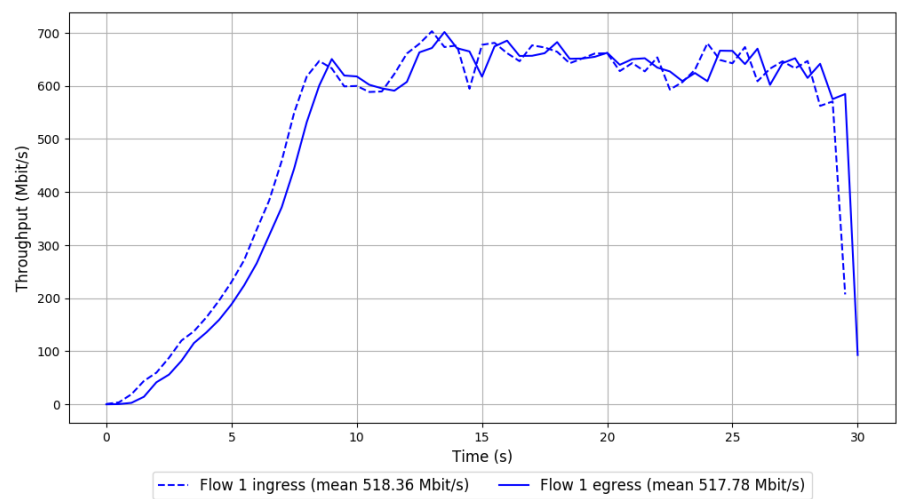
-- Flow 1:

Average throughput: 517.78 Mbit/s

95th percentile per-packet one-way delay: 97.785 ms

Loss rate: 0.69%

Run 4: Report of Muses_DecisionTreeR0 — Data Link



Run 5: Statistics of Muses_DecisionTreeR0

Start at: 2019-08-26 18:43:13

End at: 2019-08-26 18:43:43

Local clock offset: 1.212 ms

Remote clock offset: 2.075 ms

Below is generated by plot.py at 2019-08-26 20:08:39

Datalink statistics

-- Total of 1 flow:

Average throughput: 537.84 Mbit/s

95th percentile per-packet one-way delay: 110.537 ms

Loss rate: 0.75%

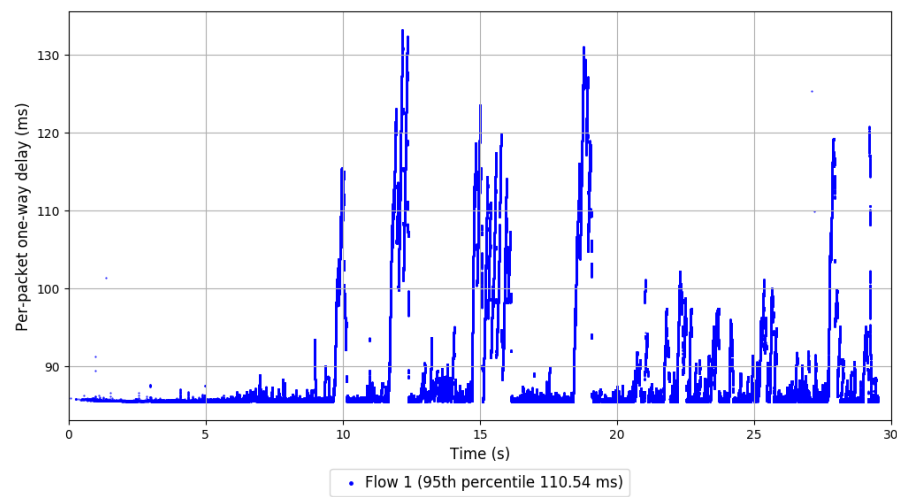
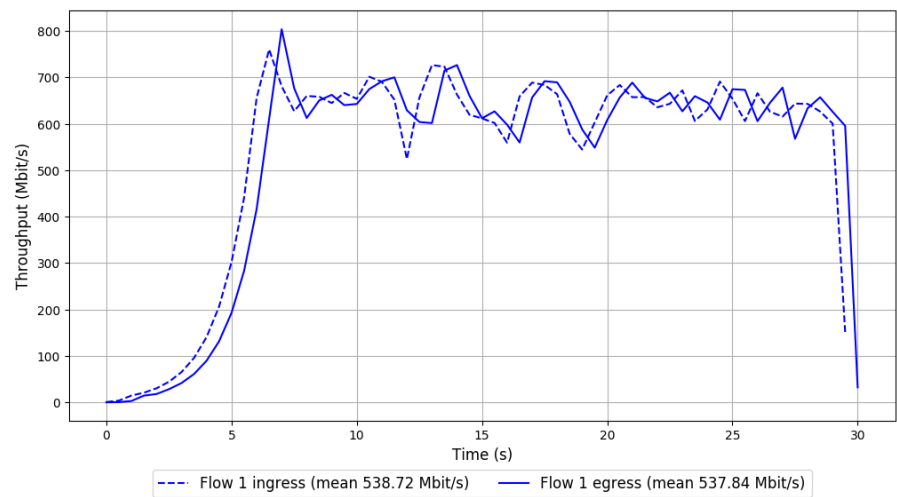
-- Flow 1:

Average throughput: 537.84 Mbit/s

95th percentile per-packet one-way delay: 110.537 ms

Loss rate: 0.75%

Run 5: Report of Muses_DecisionTreeR0 — Data Link

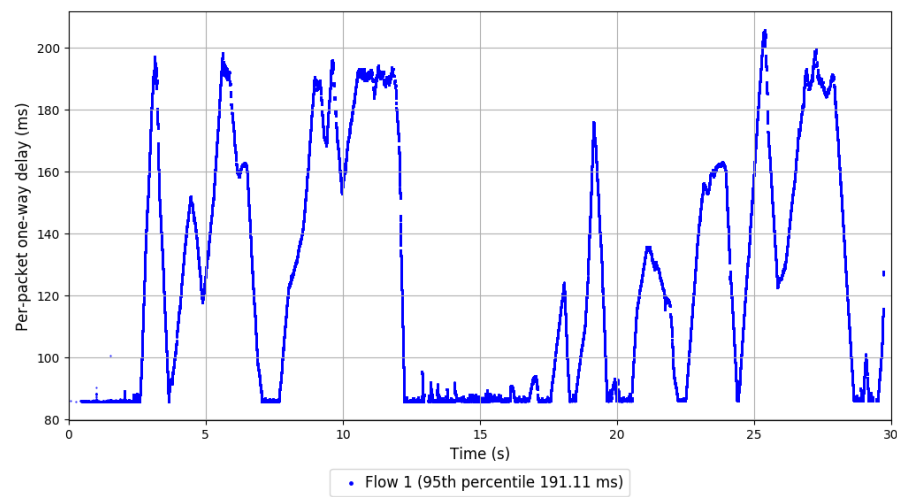
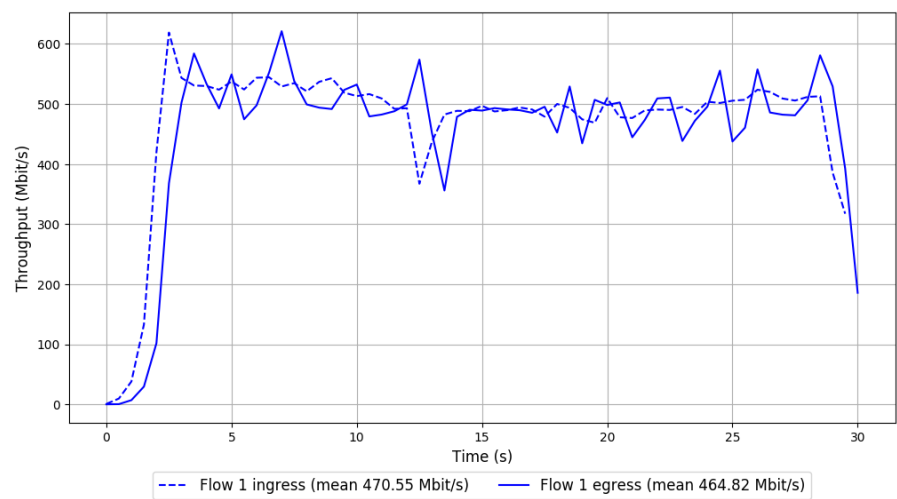


Run 1: Statistics of PCC-Allegro

Start at: 2019-08-26 16:22:29
End at: 2019-08-26 16:22:59
Local clock offset: 15.864 ms
Remote clock offset: 23.624 ms

Below is generated by plot.py at 2019-08-26 20:15:11
Datalink statistics
-- Total of 1 flow:
Average throughput: 464.82 Mbit/s
95th percentile per-packet one-way delay: 191.108 ms
Loss rate: 1.79%
-- Flow 1:
Average throughput: 464.82 Mbit/s
95th percentile per-packet one-way delay: 191.108 ms
Loss rate: 1.79%

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-08-26 16:57:16

End at: 2019-08-26 16:57:46

Local clock offset: 27.73 ms

Remote clock offset: 40.453 ms

Below is generated by plot.py at 2019-08-26 20:15:16

Datalink statistics

-- Total of 1 flow:

Average throughput: 465.23 Mbit/s

95th percentile per-packet one-way delay: 186.760 ms

Loss rate: 1.18%

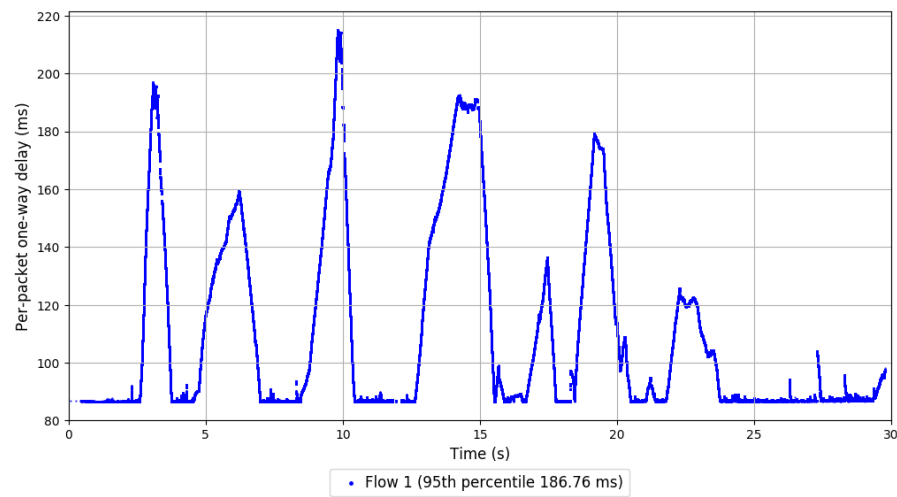
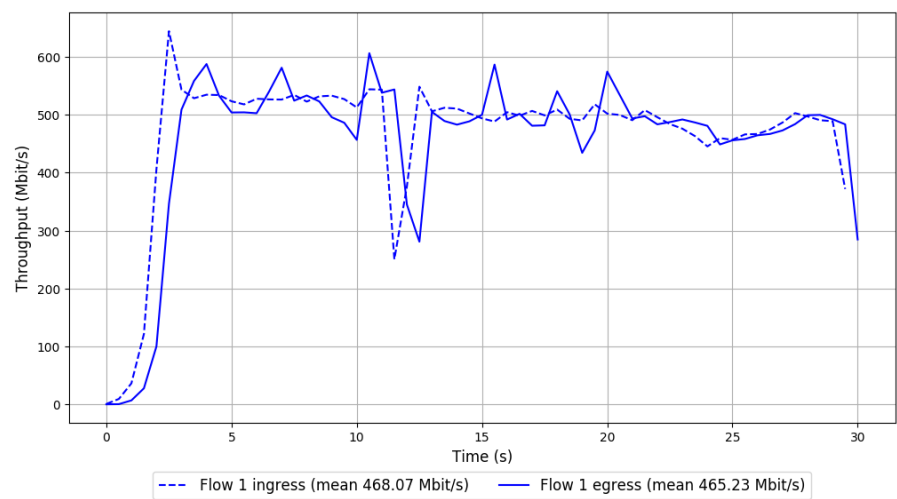
-- Flow 1:

Average throughput: 465.23 Mbit/s

95th percentile per-packet one-way delay: 186.760 ms

Loss rate: 1.18%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-08-26 17:31:55

End at: 2019-08-26 17:32:25

Local clock offset: 7.2 ms

Remote clock offset: 10.649 ms

Below is generated by plot.py at 2019-08-26 20:16:04

Datalink statistics

-- Total of 1 flow:

Average throughput: 410.96 Mbit/s

95th percentile per-packet one-way delay: 186.729 ms

Loss rate: 0.88%

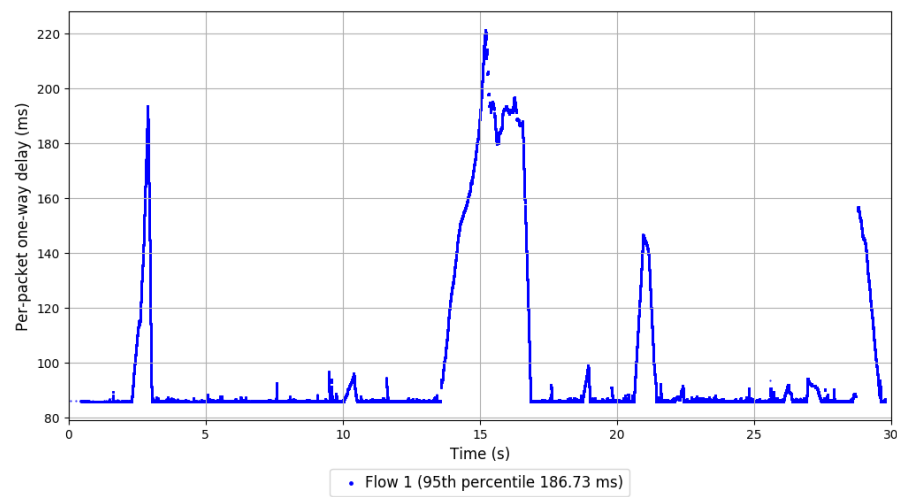
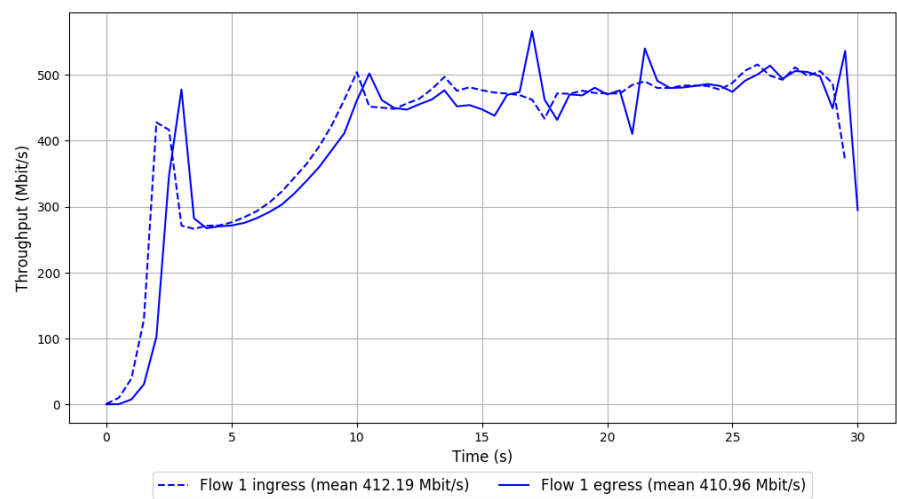
-- Flow 1:

Average throughput: 410.96 Mbit/s

95th percentile per-packet one-way delay: 186.729 ms

Loss rate: 0.88%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-08-26 18:06:47

End at: 2019-08-26 18:07:17

Local clock offset: 2.955 ms

Remote clock offset: 4.722 ms

Below is generated by plot.py at 2019-08-26 20:18:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 413.97 Mbit/s

95th percentile per-packet one-way delay: 162.456 ms

Loss rate: 1.07%

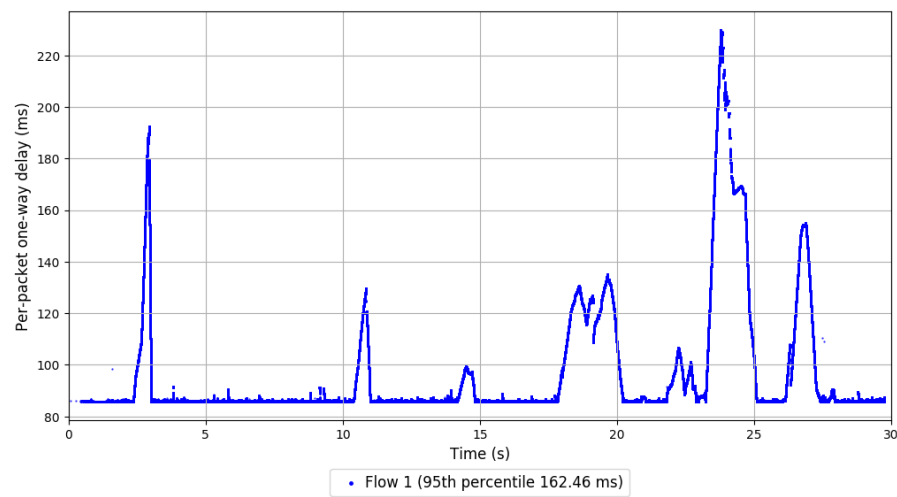
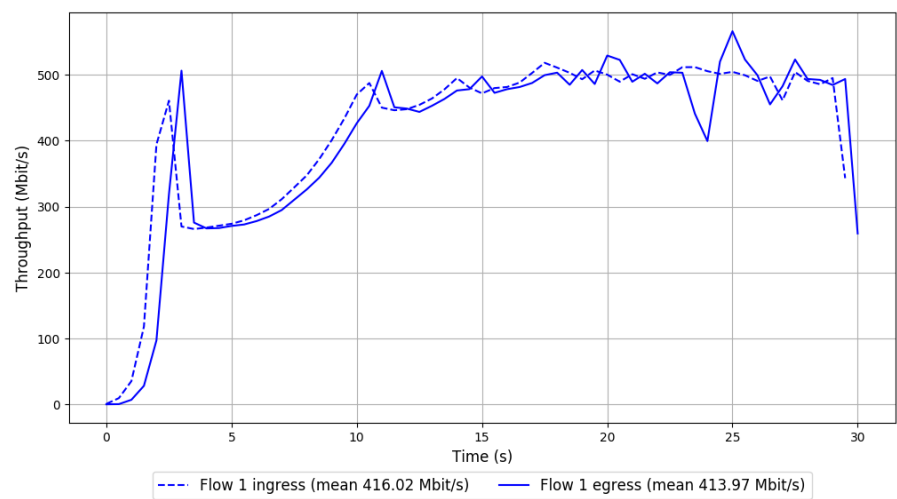
-- Flow 1:

Average throughput: 413.97 Mbit/s

95th percentile per-packet one-way delay: 162.456 ms

Loss rate: 1.07%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-08-26 18:41:37

End at: 2019-08-26 18:42:07

Local clock offset: 1.969 ms

Remote clock offset: 2.202 ms

Below is generated by plot.py at 2019-08-26 20:20:05

Datalink statistics

-- Total of 1 flow:

Average throughput: 467.81 Mbit/s

95th percentile per-packet one-way delay: 197.002 ms

Loss rate: 2.44%

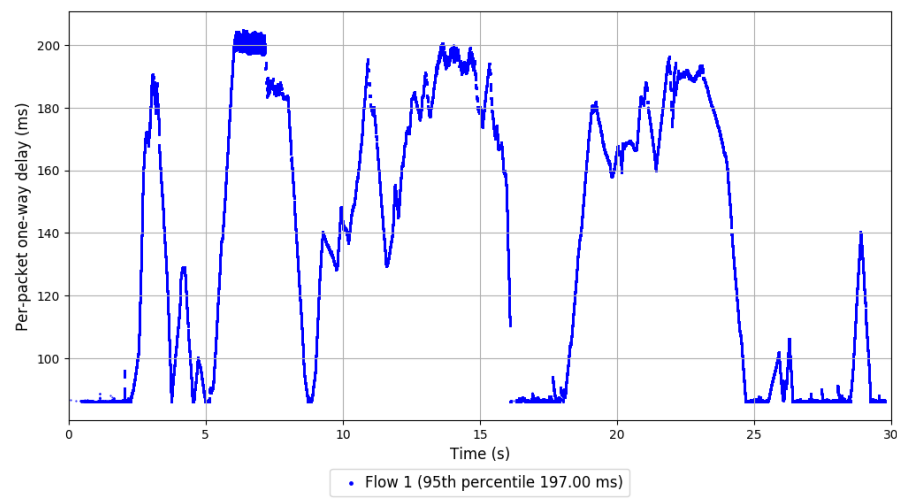
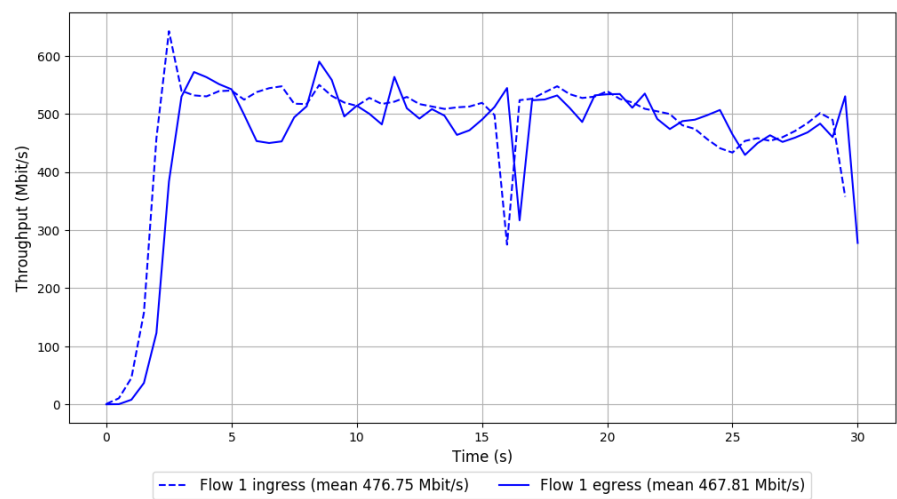
-- Flow 1:

Average throughput: 467.81 Mbit/s

95th percentile per-packet one-way delay: 197.002 ms

Loss rate: 2.44%

Run 5: Report of PCC-Allegro — Data Link

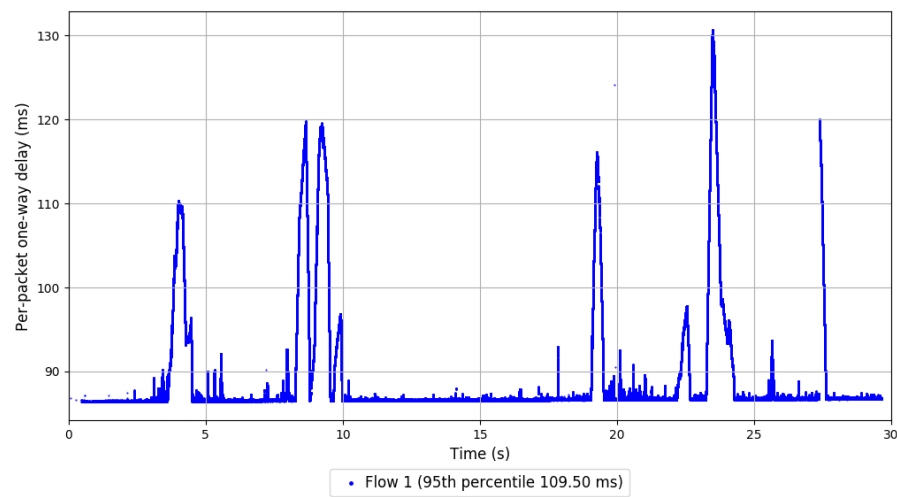
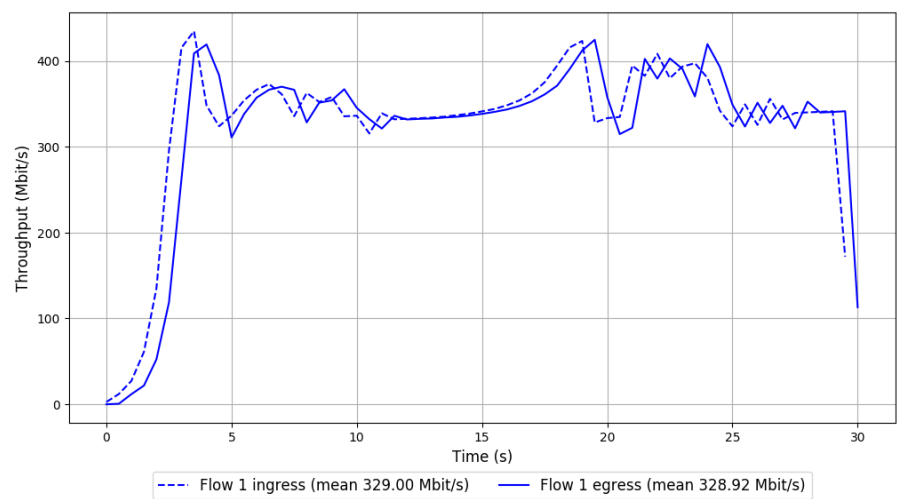


```
Run 1: Statistics of PCC-Expr

Start at: 2019-08-26 15:59:10
End at: 2019-08-26 15:59:40
Local clock offset: 6.576 ms
Remote clock offset: 8.608 ms

# Below is generated by plot.py at 2019-08-26 20:20:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 328.92 Mbit/s
95th percentile per-packet one-way delay: 109.503 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 328.92 Mbit/s
95th percentile per-packet one-way delay: 109.503 ms
Loss rate: 0.60%
```

Run 1: Report of PCC-Expr — Data Link

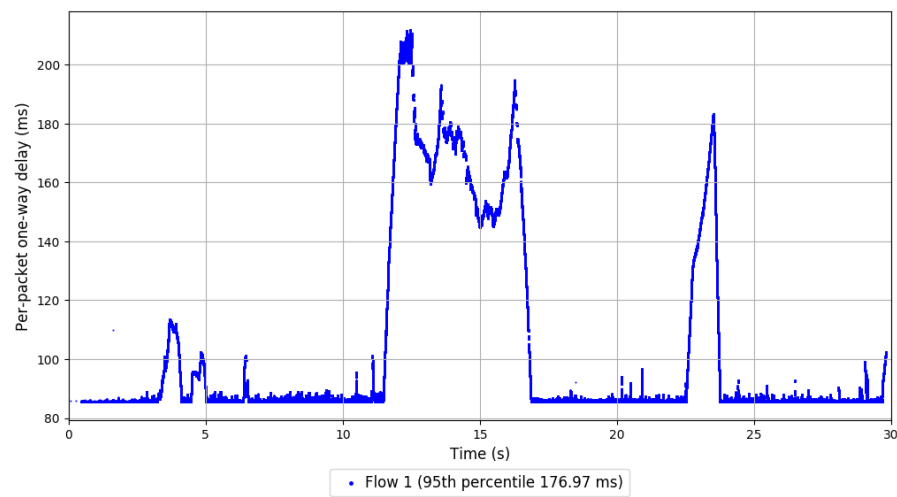
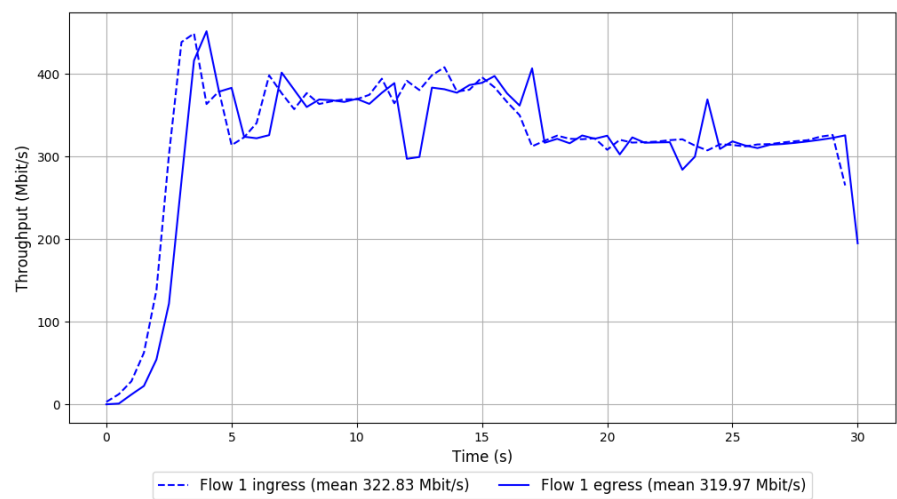


Run 2: Statistics of PCC-Expr

Start at: 2019-08-26 16:33:51
End at: 2019-08-26 16:34:21
Local clock offset: 14.437 ms
Remote clock offset: 21.687 ms

Below is generated by plot.py at 2019-08-26 20:20:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 319.97 Mbit/s
95th percentile per-packet one-way delay: 176.967 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 319.97 Mbit/s
95th percentile per-packet one-way delay: 176.967 ms
Loss rate: 1.46%

Run 2: Report of PCC-Expr — Data Link

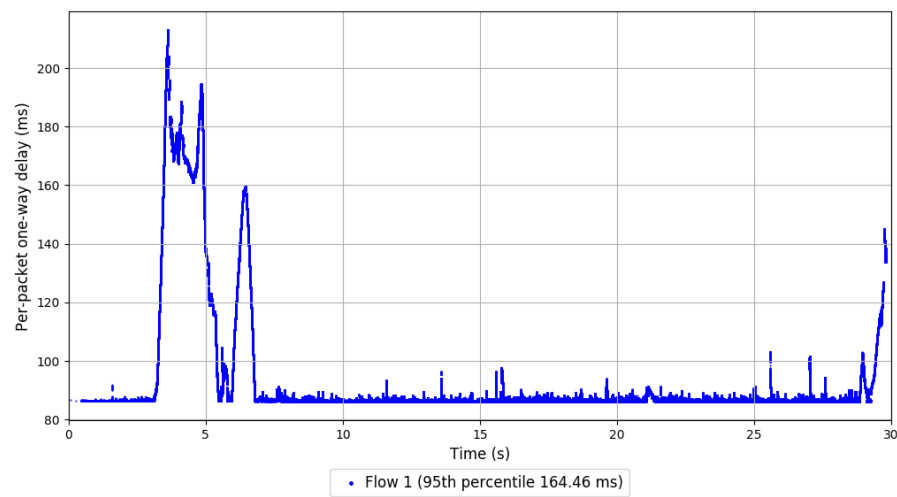
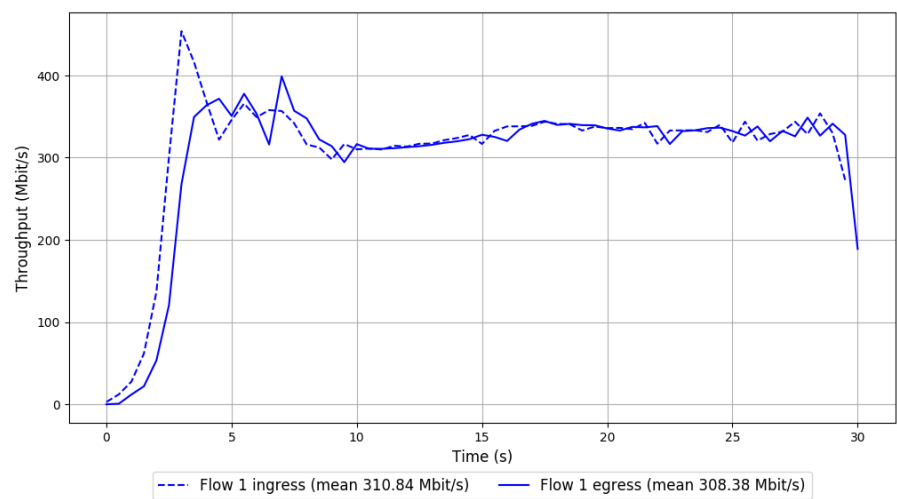


Run 3: Statistics of PCC-Expr

Start at: 2019-08-26 17:08:39
End at: 2019-08-26 17:09:09
Local clock offset: 12.981 ms
Remote clock offset: 18.596 ms

Below is generated by plot.py at 2019-08-26 20:20:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 308.38 Mbit/s
95th percentile per-packet one-way delay: 164.458 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 308.38 Mbit/s
95th percentile per-packet one-way delay: 164.458 ms
Loss rate: 1.36%

Run 3: Report of PCC-Expr — Data Link



Run 4: Statistics of PCC-Expr

Start at: 2019-08-26 17:43:13

End at: 2019-08-26 17:43:43

Local clock offset: 3.377 ms

Remote clock offset: 5.092 ms

Below is generated by plot.py at 2019-08-26 20:24:09

Datalink statistics

-- Total of 1 flow:

Average throughput: 315.85 Mbit/s

95th percentile per-packet one-way delay: 183.423 ms

Loss rate: 1.78%

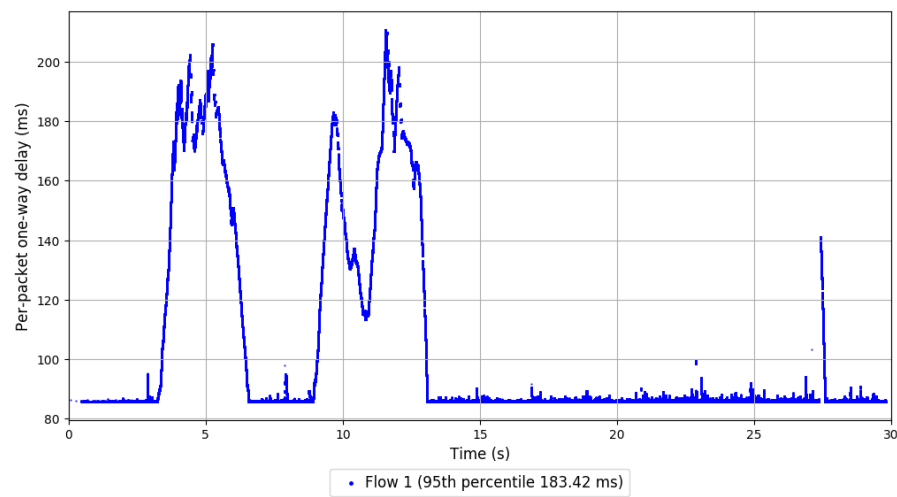
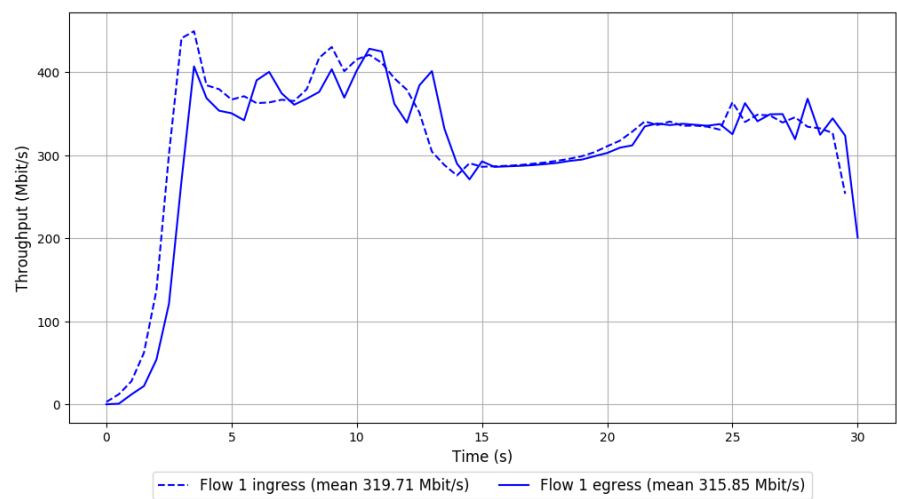
-- Flow 1:

Average throughput: 315.85 Mbit/s

95th percentile per-packet one-way delay: 183.423 ms

Loss rate: 1.78%

Run 4: Report of PCC-Expr — Data Link



Run 5: Statistics of PCC-Expr

Start at: 2019-08-26 18:18:01

End at: 2019-08-26 18:18:31

Local clock offset: 1.127 ms

Remote clock offset: 2.199 ms

Below is generated by plot.py at 2019-08-26 20:24:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 340.79 Mbit/s

95th percentile per-packet one-way delay: 97.405 ms

Loss rate: 0.63%

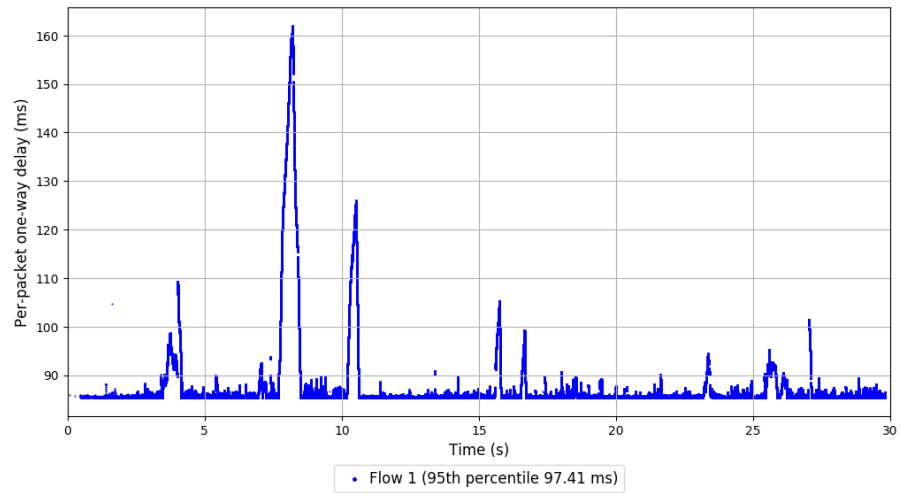
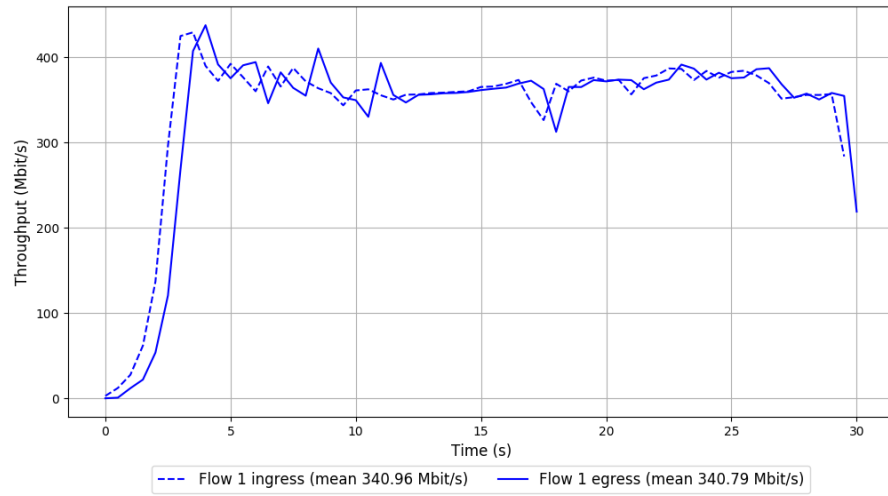
-- Flow 1:

Average throughput: 340.79 Mbit/s

95th percentile per-packet one-way delay: 97.405 ms

Loss rate: 0.63%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

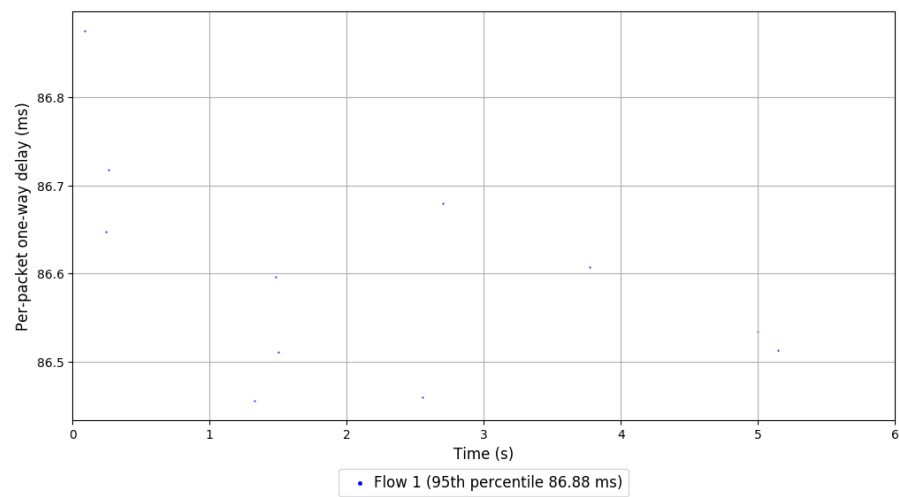
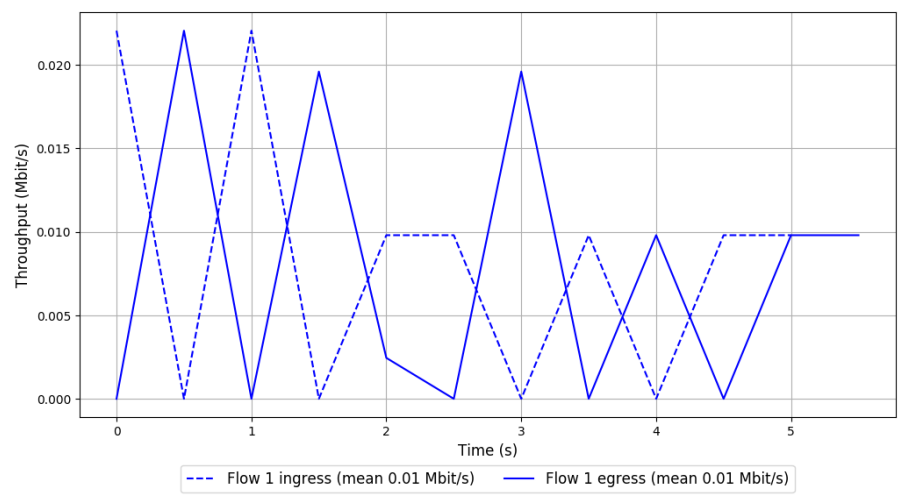
Start at: 2019-08-26 16:19:41

End at: 2019-08-26 16:20:11

Local clock offset: 13.642 ms

Remote clock offset: 19.626 ms

Run 1: Report of QUIC Cubic — Data Link



Run 2: Statistics of QUIC Cubic

Start at: 2019-08-26 16:54:23

End at: 2019-08-26 16:54:53

Local clock offset: 25.057 ms

Remote clock offset: 37.2 ms

Below is generated by plot.py at 2019-08-26 20:24:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 78.85 Mbit/s

95th percentile per-packet one-way delay: 85.928 ms

Loss rate: 0.24%

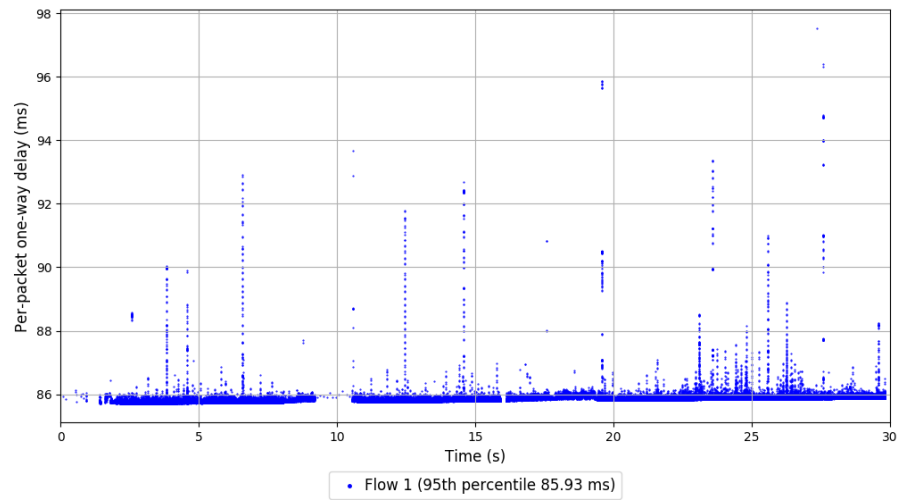
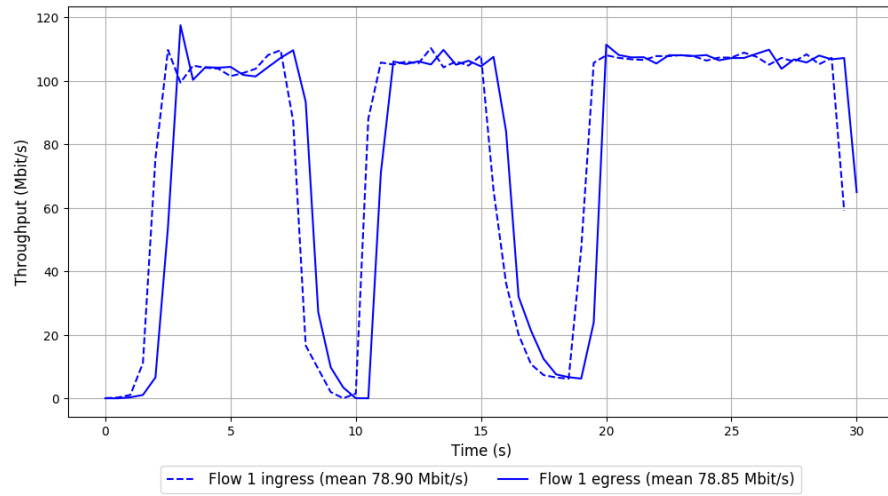
-- Flow 1:

Average throughput: 78.85 Mbit/s

95th percentile per-packet one-way delay: 85.928 ms

Loss rate: 0.24%

Run 2: Report of QUIC Cubic — Data Link



Run 3: Statistics of QUIC Cubic

Start at: 2019-08-26 17:29:24

End at: 2019-08-26 17:29:54

Local clock offset: 7.095 ms

Remote clock offset: 10.202 ms

Below is generated by plot.py at 2019-08-26 20:24:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 79.52 Mbit/s

95th percentile per-packet one-way delay: 86.033 ms

Loss rate: 0.00%

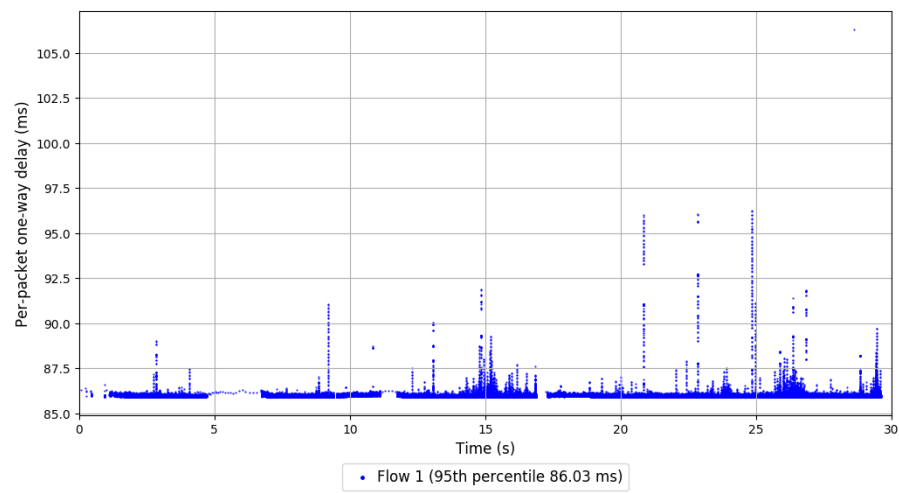
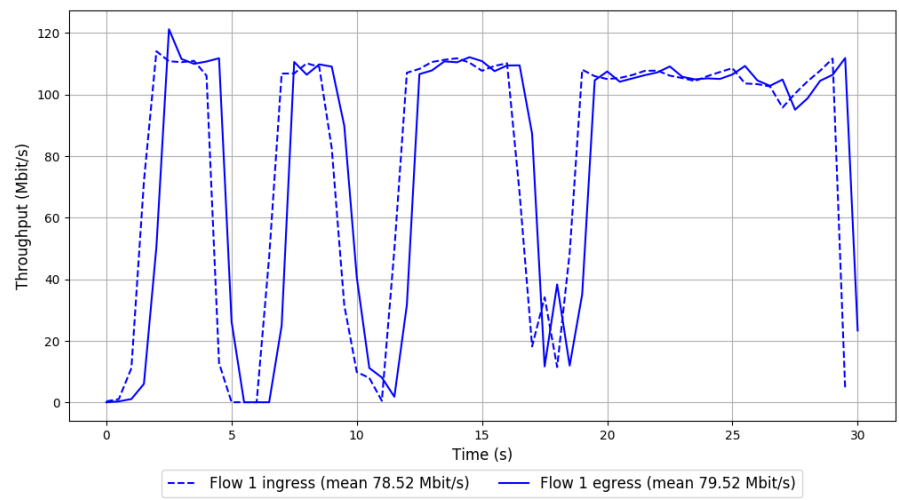
-- Flow 1:

Average throughput: 79.52 Mbit/s

95th percentile per-packet one-way delay: 86.033 ms

Loss rate: 0.00%

Run 3: Report of QUIC Cubic — Data Link



Run 4: Statistics of QUIC Cubic

Start at: 2019-08-26 18:03:54

End at: 2019-08-26 18:04:24

Local clock offset: 3.004 ms

Remote clock offset: 4.455 ms

Below is generated by plot.py at 2019-08-26 20:24:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 75.79 Mbit/s

95th percentile per-packet one-way delay: 85.980 ms

Loss rate: 0.74%

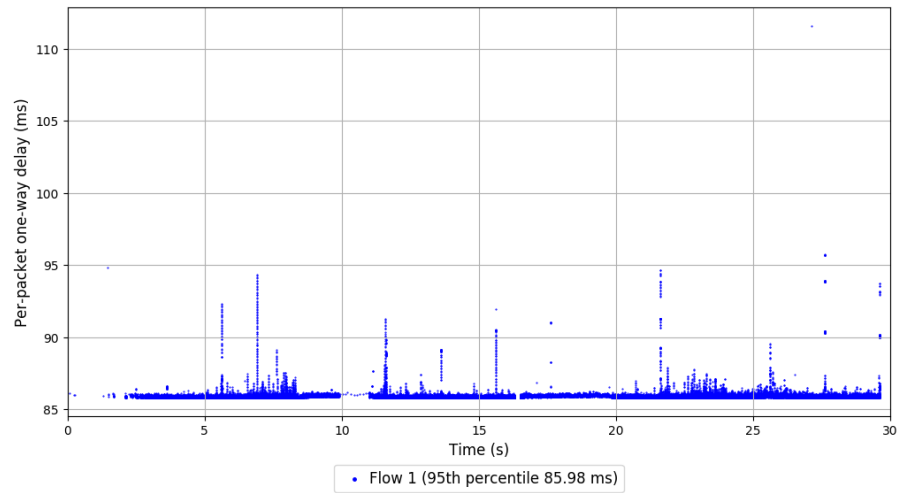
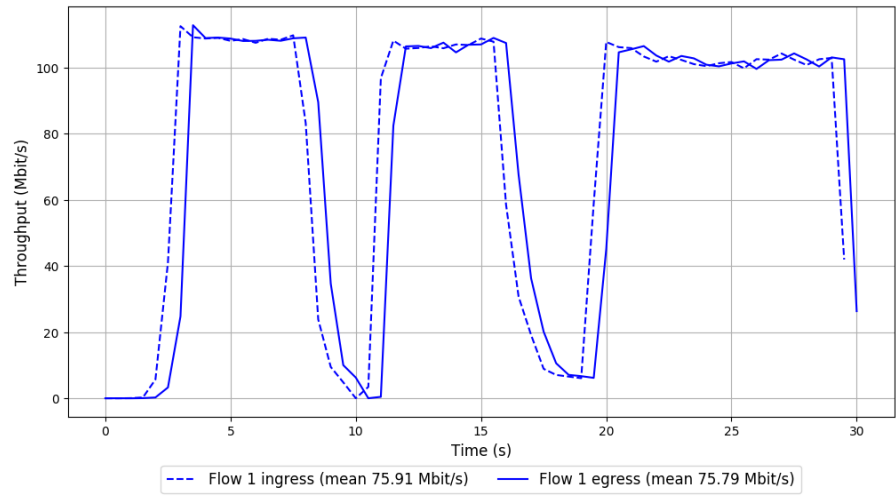
-- Flow 1:

Average throughput: 75.79 Mbit/s

95th percentile per-packet one-way delay: 85.980 ms

Loss rate: 0.74%

Run 4: Report of QUIC Cubic — Data Link



Run 5: Statistics of QUIC Cubic

Start at: 2019-08-26 18:38:43

End at: 2019-08-26 18:39:13

Local clock offset: 1.395 ms

Remote clock offset: 2.071 ms

Below is generated by plot.py at 2019-08-26 20:24:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 77.20 Mbit/s

95th percentile per-packet one-way delay: 86.191 ms

Loss rate: 0.80%

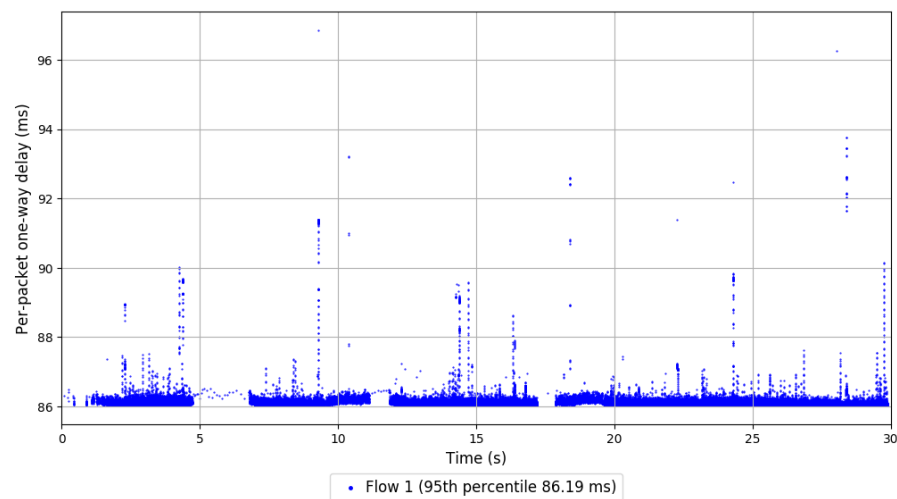
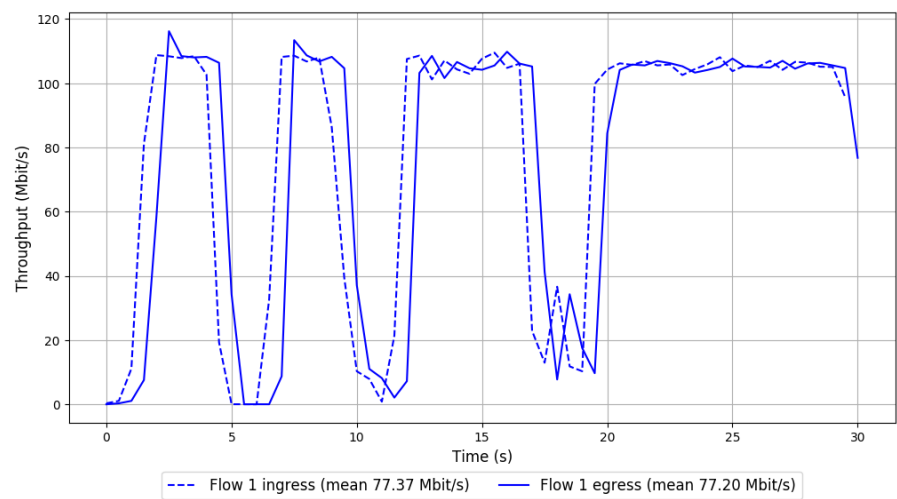
-- Flow 1:

Average throughput: 77.20 Mbit/s

95th percentile per-packet one-way delay: 86.191 ms

Loss rate: 0.80%

Run 5: Report of QUIC Cubic — Data Link

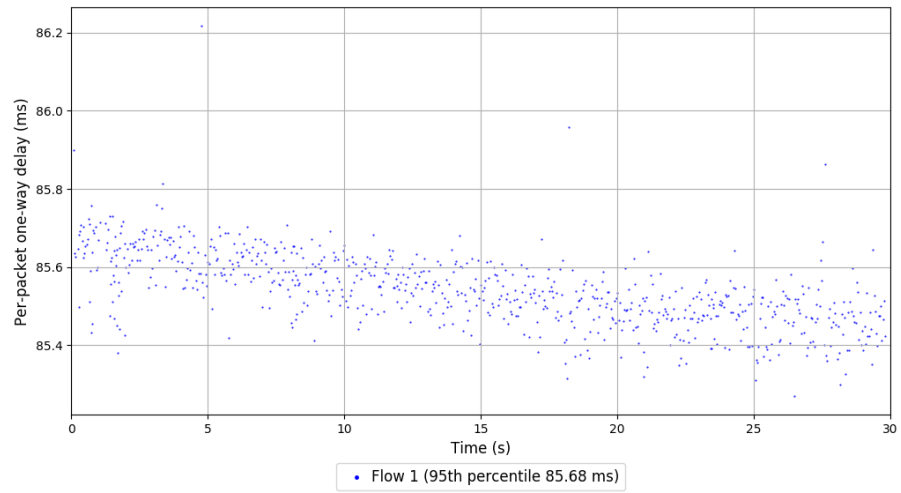
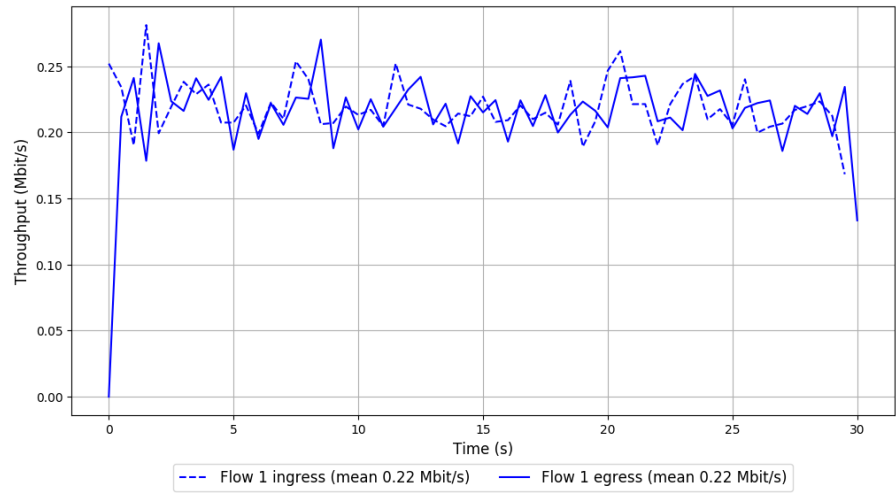


Run 1: Statistics of SCReAM

Start at: 2019-08-26 16:09:45
End at: 2019-08-26 16:10:15
Local clock offset: 11.726 ms
Remote clock offset: 17.587 ms

Below is generated by plot.py at 2019-08-26 20:24:48
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.684 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.684 ms
Loss rate: 0.52%

Run 1: Report of SCReAM — Data Link



Run 2: Statistics of SCReAM

Start at: 2019-08-26 16:44:24

End at: 2019-08-26 16:44:54

Local clock offset: 18.275 ms

Remote clock offset: 26.86 ms

Below is generated by plot.py at 2019-08-26 20:24:48

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.513 ms

Loss rate: 0.64%

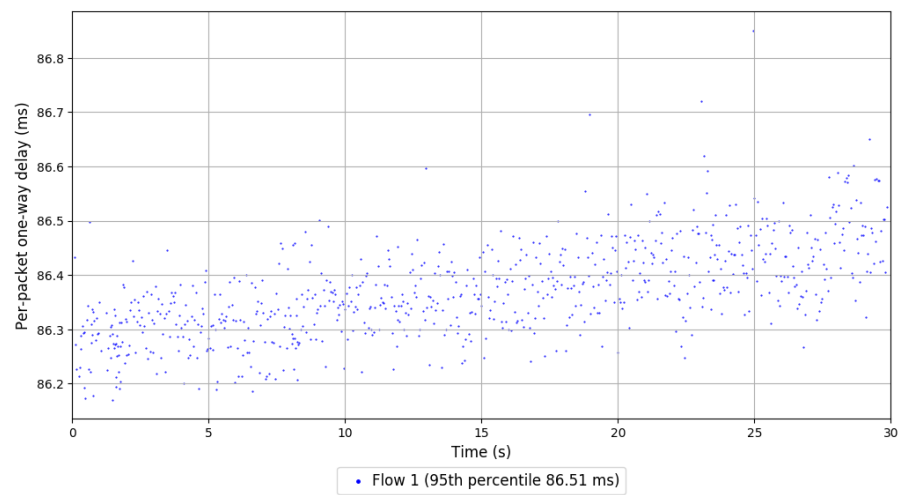
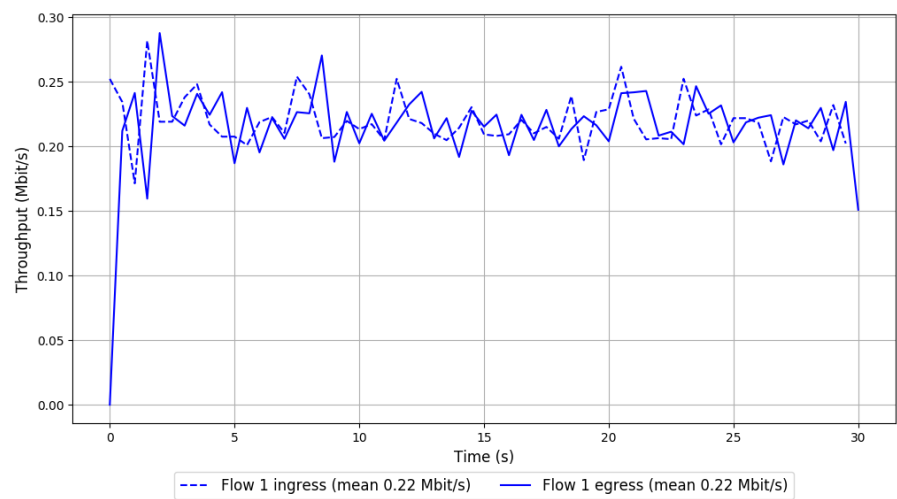
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.513 ms

Loss rate: 0.64%

Run 2: Report of SReAM — Data Link

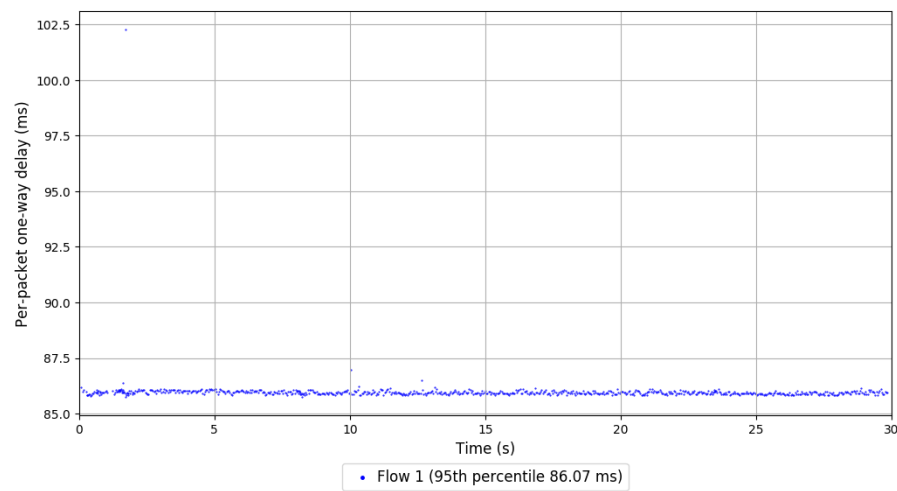
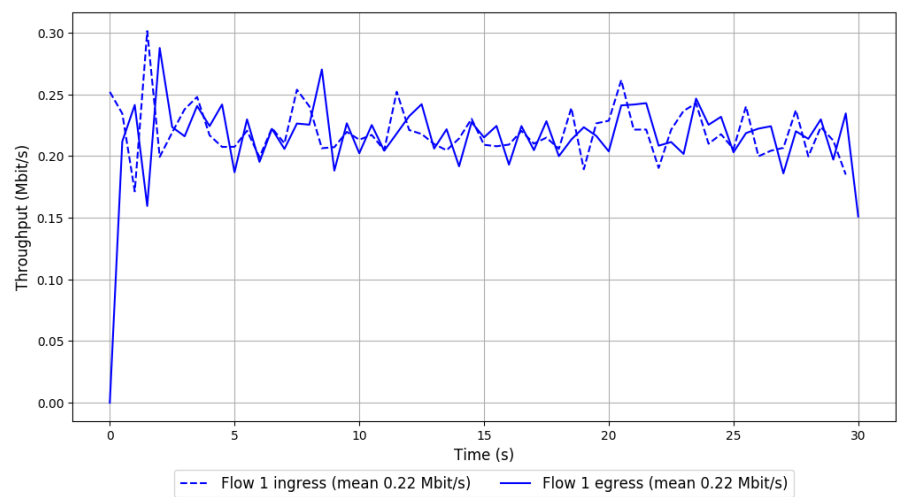


Run 3: Statistics of SCReAM

Start at: 2019-08-26 17:19:27
End at: 2019-08-26 17:19:57
Local clock offset: 7.052 ms
Remote clock offset: 10.415 ms

Below is generated by plot.py at 2019-08-26 20:24:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.074 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.074 ms
Loss rate: 0.51%

Run 3: Report of SReAM — Data Link



Run 4: Statistics of SCReAM

Start at: 2019-08-26 17:53:53

End at: 2019-08-26 17:54:23

Local clock offset: 2.213 ms

Remote clock offset: 3.838 ms

Below is generated by plot.py at 2019-08-26 20:24:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.193 ms

Loss rate: 0.64%

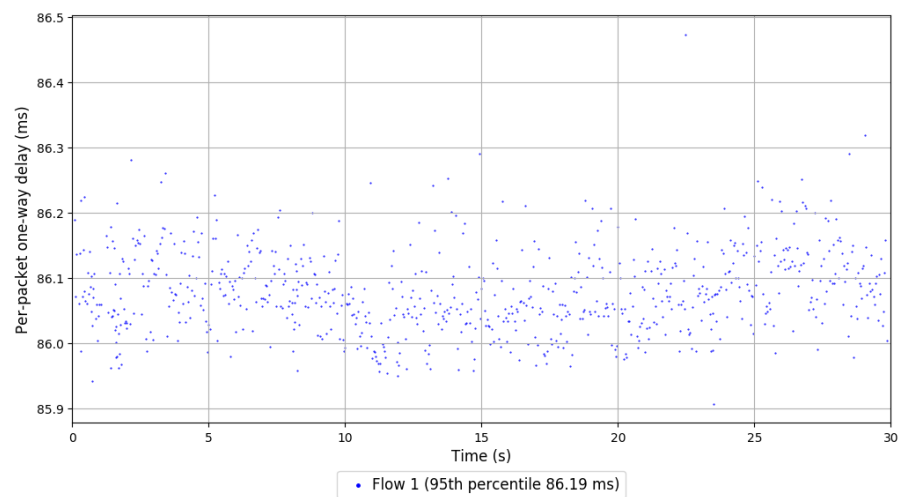
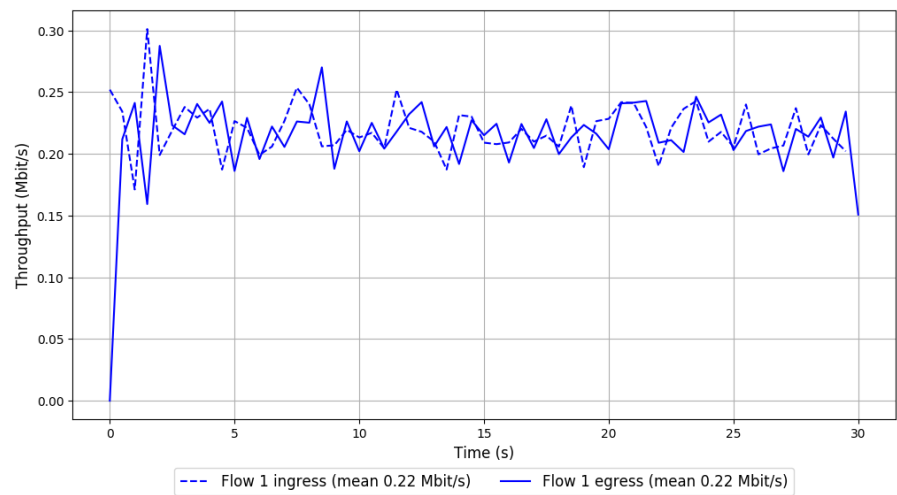
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.193 ms

Loss rate: 0.64%

Run 4: Report of SReAM — Data Link



Run 5: Statistics of SCReAM

Start at: 2019-08-26 18:28:37

End at: 2019-08-26 18:29:07

Local clock offset: 1.591 ms

Remote clock offset: 1.71 ms

Below is generated by plot.py at 2019-08-26 20:24:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.593 ms

Loss rate: 0.51%

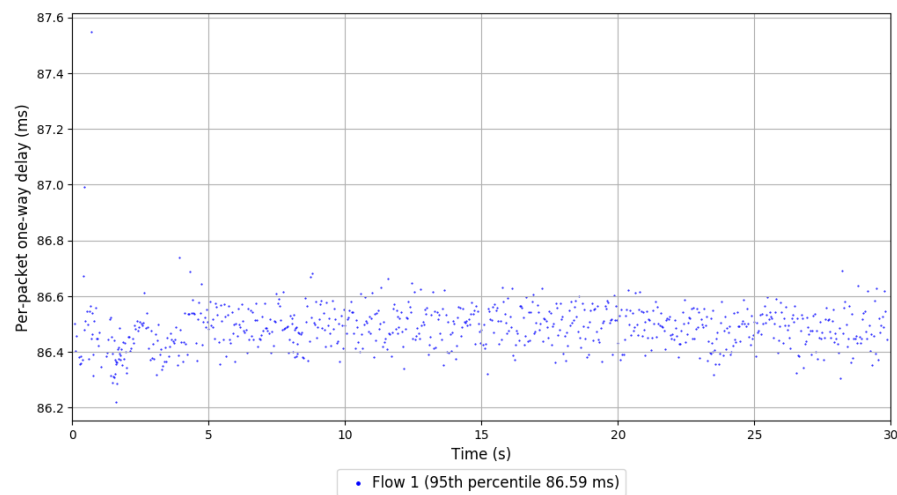
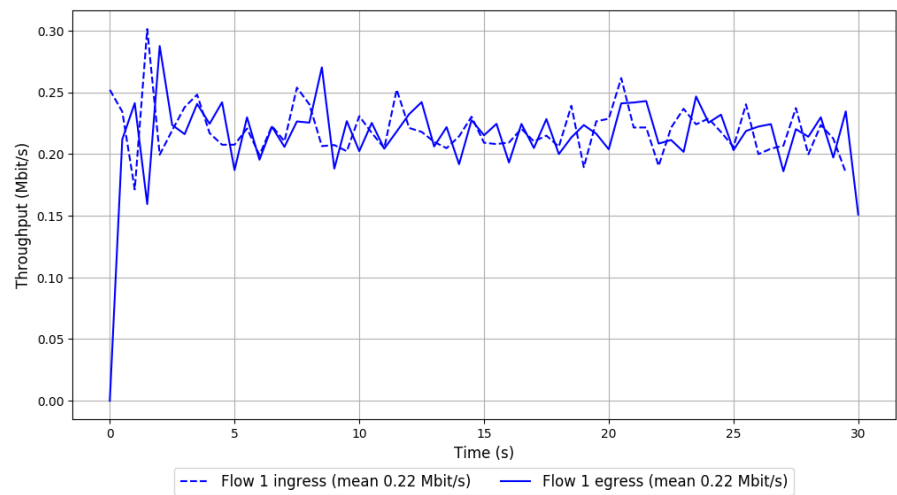
-- Flow 1:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 86.593 ms

Loss rate: 0.51%

Run 5: Report of SReAM — Data Link



Run 1: Statistics of Sprout

Start at: 2019-08-26 15:56:52

End at: 2019-08-26 15:57:22

Local clock offset: 4.12 ms

Remote clock offset: 6.197 ms

Below is generated by plot.py at 2019-08-26 20:24:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 86.068 ms

Loss rate: 0.80%

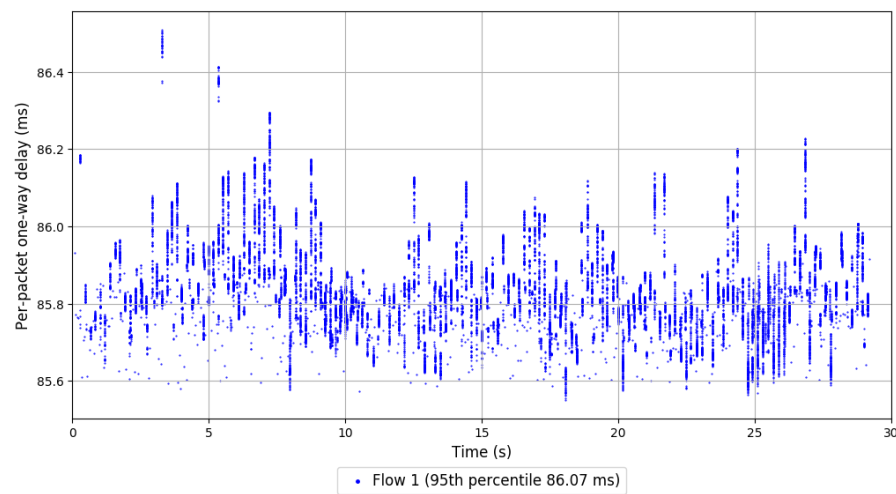
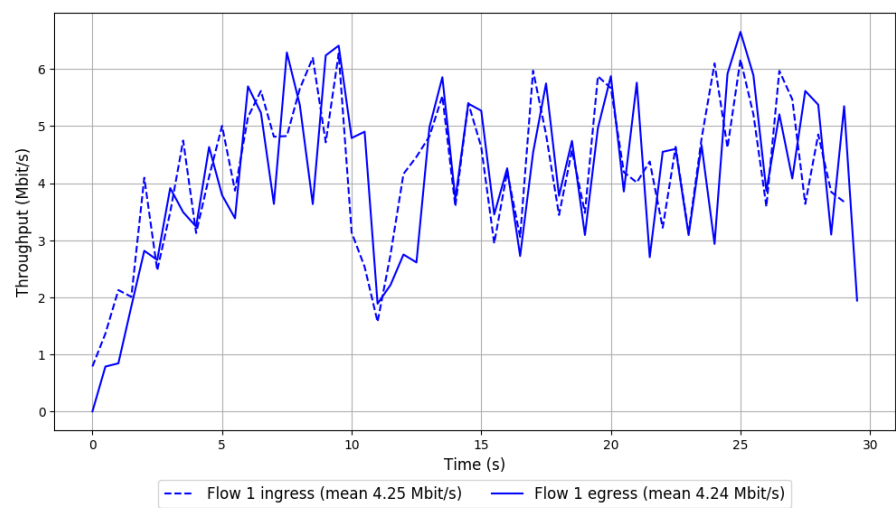
-- Flow 1:

Average throughput: 4.24 Mbit/s

95th percentile per-packet one-way delay: 86.068 ms

Loss rate: 0.80%

Run 1: Report of Sprout — Data Link

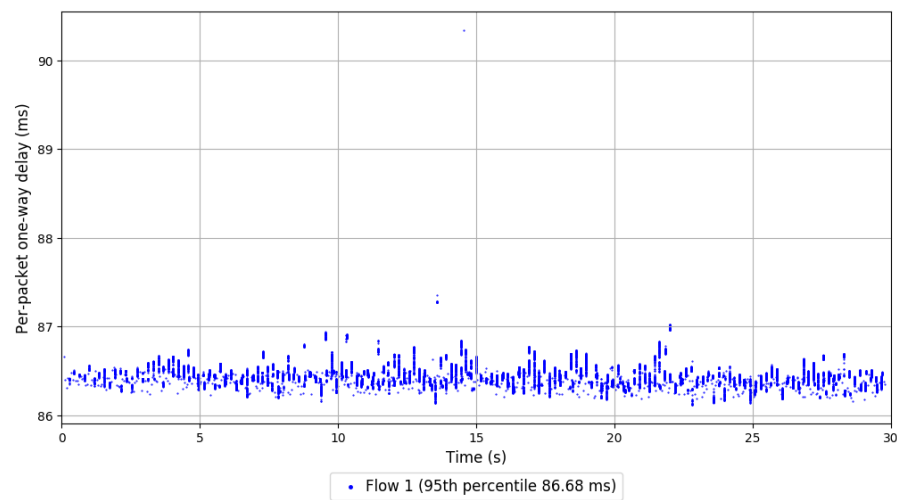
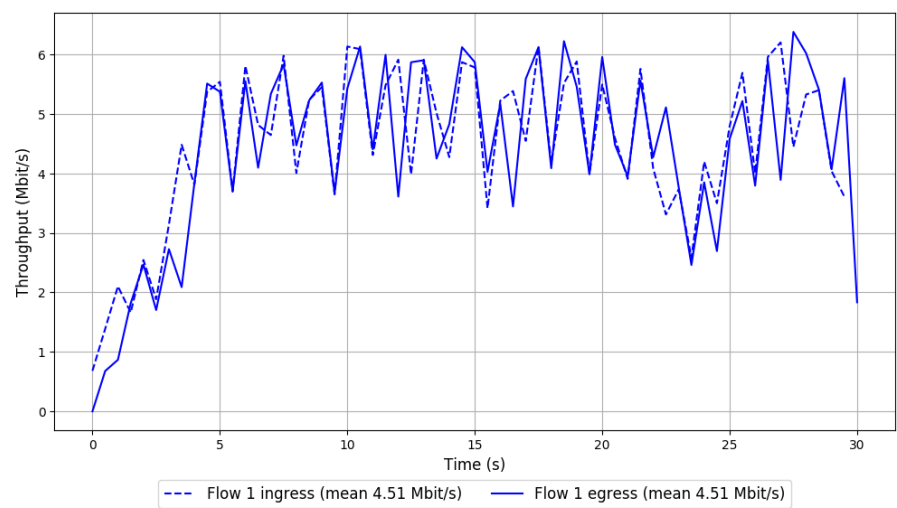


Run 2: Statistics of Sprout

Start at: 2019-08-26 16:31:15
End at: 2019-08-26 16:31:45
Local clock offset: 15.699 ms
Remote clock offset: 22.625 ms

Below is generated by plot.py at 2019-08-26 20:24:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 86.684 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 86.684 ms
Loss rate: 0.66%

Run 2: Report of Sprout — Data Link

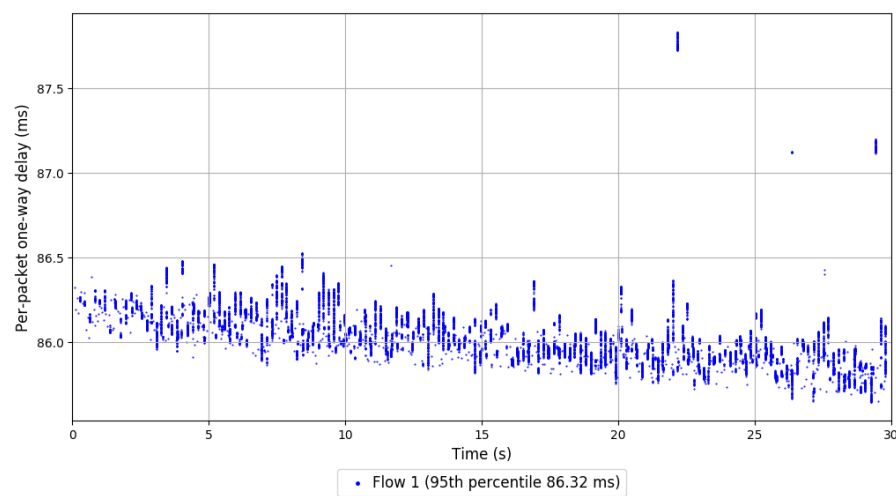
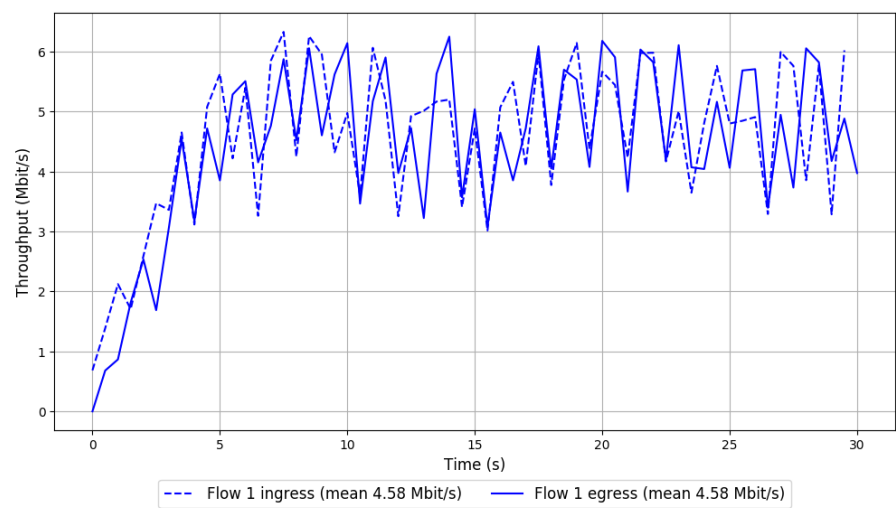


Run 3: Statistics of Sprout

Start at: 2019-08-26 17:06:03
End at: 2019-08-26 17:06:33
Local clock offset: 16.073 ms
Remote clock offset: 23.5 ms

Below is generated by plot.py at 2019-08-26 20:24:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 86.316 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 4.58 Mbit/s
95th percentile per-packet one-way delay: 86.316 ms
Loss rate: 0.75%

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

Start at: 2019-08-26 17:40:36

End at: 2019-08-26 17:41:06

Local clock offset: 4.427 ms

Remote clock offset: 6.23 ms

Below is generated by plot.py at 2019-08-26 20:24:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 86.526 ms

Loss rate: 0.46%

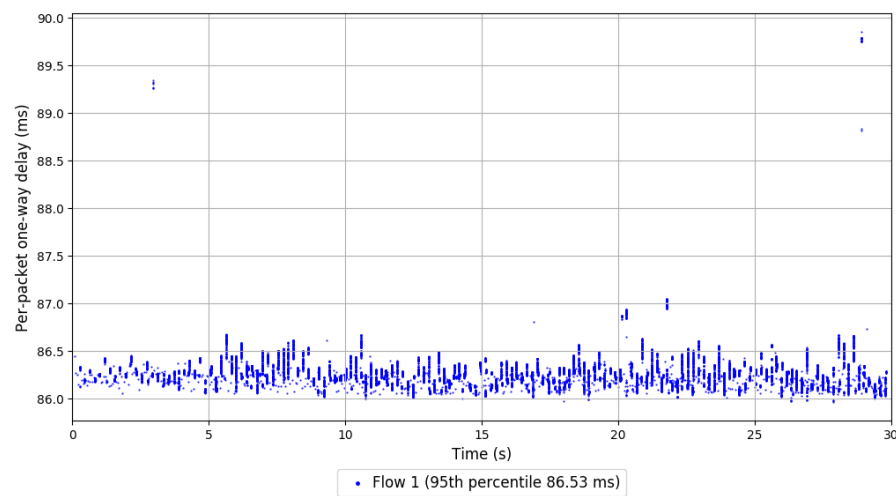
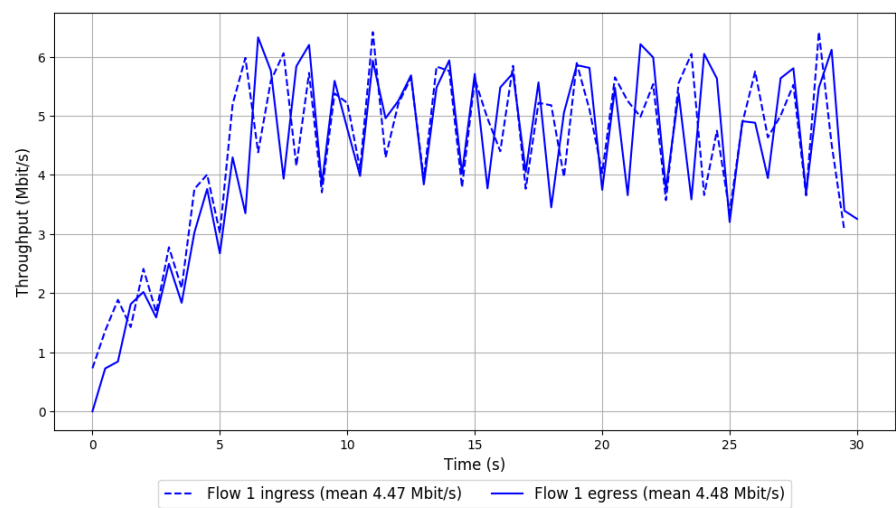
-- Flow 1:

Average throughput: 4.48 Mbit/s

95th percentile per-packet one-way delay: 86.526 ms

Loss rate: 0.46%

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

Start at: 2019-08-26 18:15:25

End at: 2019-08-26 18:15:55

Local clock offset: 1.668 ms

Remote clock offset: 2.618 ms

Below is generated by plot.py at 2019-08-26 20:24:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 86.327 ms

Loss rate: 0.60%

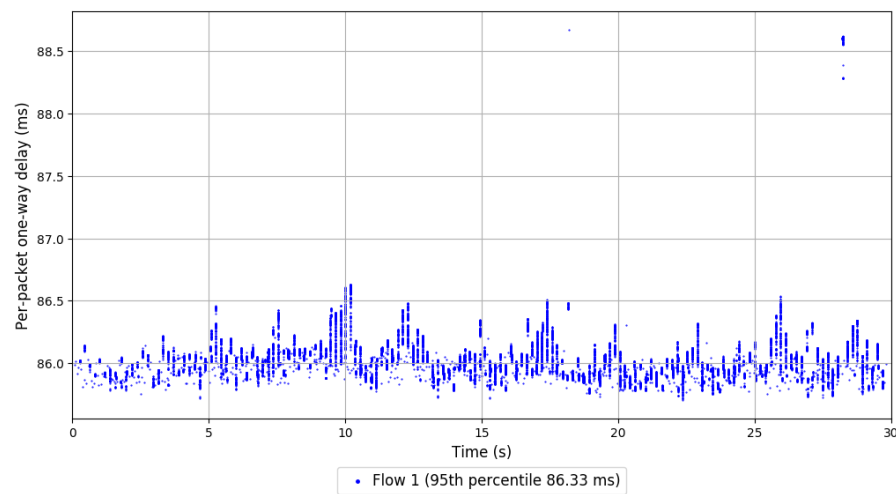
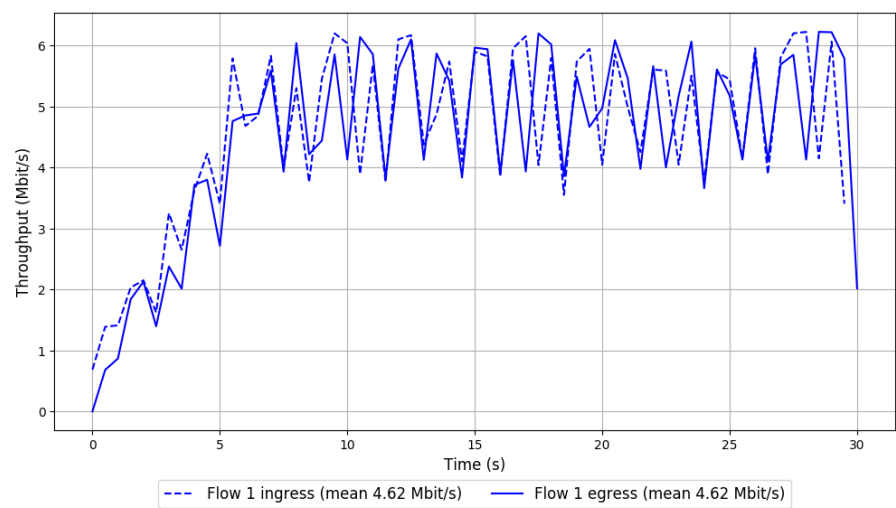
-- Flow 1:

Average throughput: 4.62 Mbit/s

95th percentile per-packet one-way delay: 86.327 ms

Loss rate: 0.60%

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-08-26 16:10:54

End at: 2019-08-26 16:11:24

Local clock offset: 10.841 ms

Remote clock offset: 15.491 ms

Below is generated by plot.py at 2019-08-26 20:24:49

Datalink statistics

-- Total of 1 flow:

Average throughput: 209.93 Mbit/s

95th percentile per-packet one-way delay: 86.602 ms

Loss rate: 0.59%

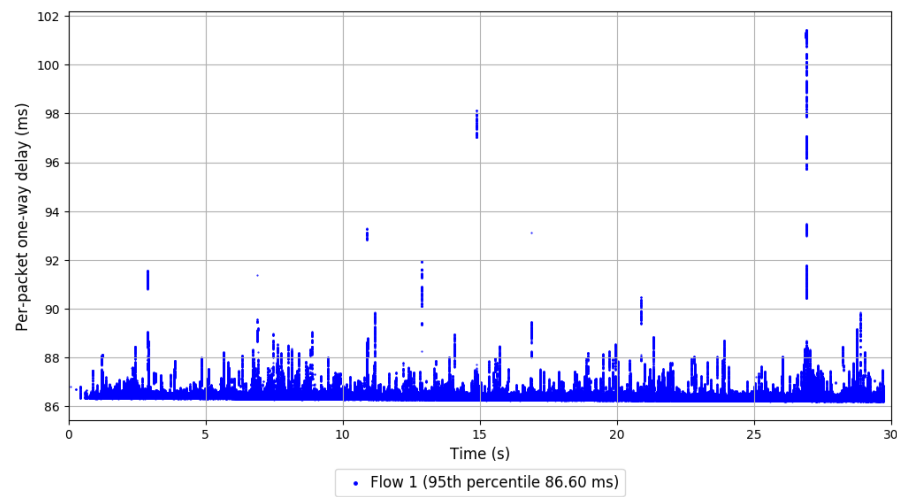
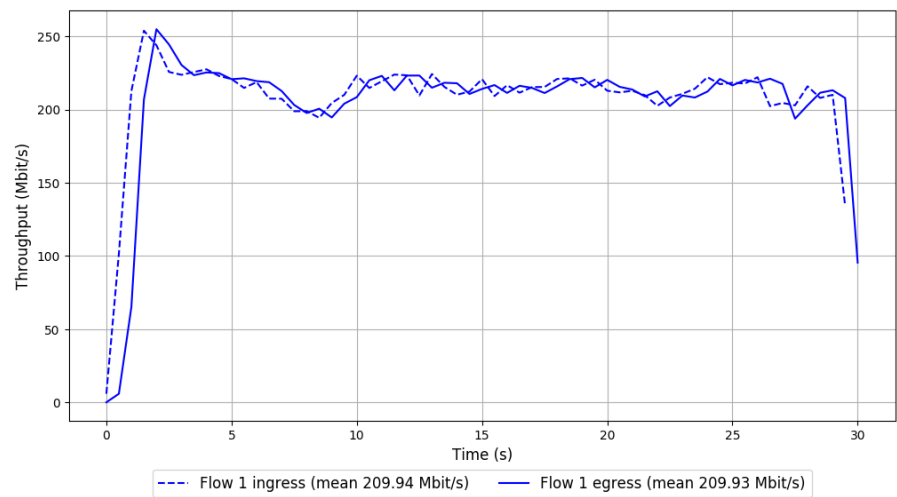
-- Flow 1:

Average throughput: 209.93 Mbit/s

95th percentile per-packet one-way delay: 86.602 ms

Loss rate: 0.59%

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

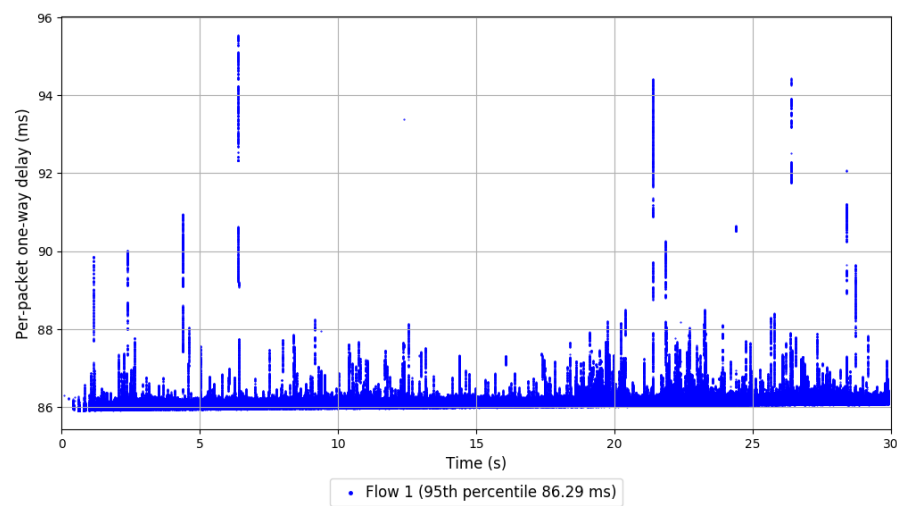
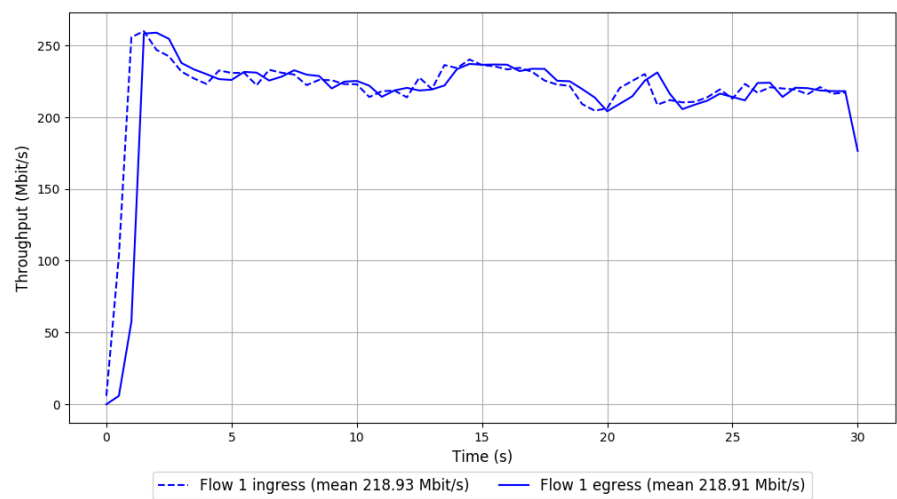


Run 2: Statistics of TaoVA-100x

Start at: 2019-08-26 16:45:32
End at: 2019-08-26 16:46:02
Local clock offset: 19.048 ms
Remote clock offset: 27.983 ms

Below is generated by plot.py at 2019-08-26 20:24:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 218.91 Mbit/s
95th percentile per-packet one-way delay: 86.286 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 218.91 Mbit/s
95th percentile per-packet one-way delay: 86.286 ms
Loss rate: 0.58%

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

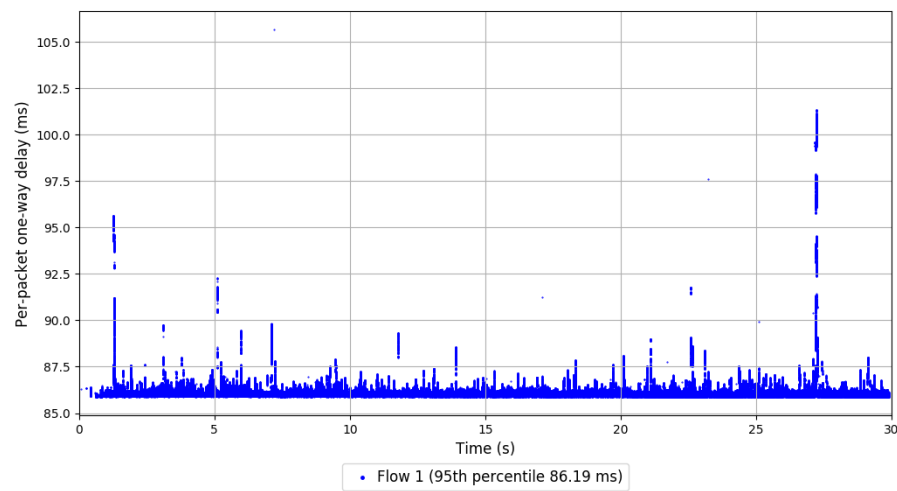
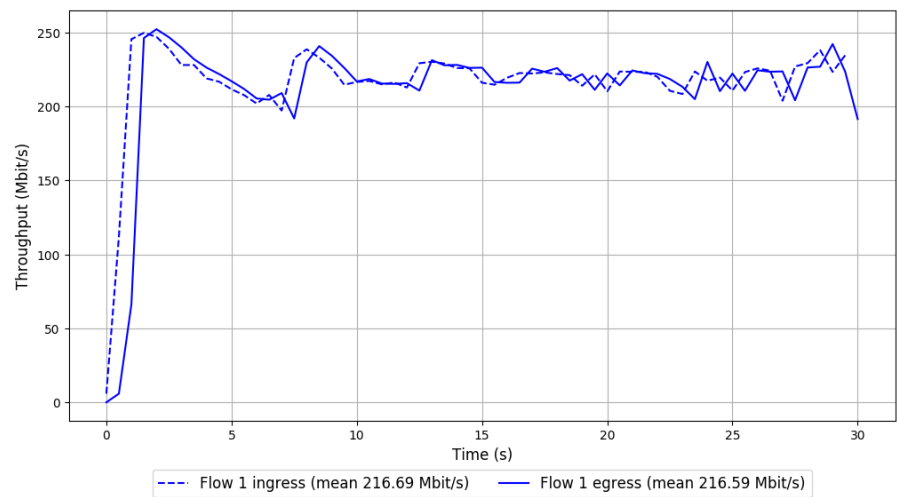


Run 3: Statistics of TaoVA-100x

Start at: 2019-08-26 17:20:36
End at: 2019-08-26 17:21:06
Local clock offset: 6.753 ms
Remote clock offset: 10.218 ms

Below is generated by plot.py at 2019-08-26 20:24:49
Datalink statistics
-- Total of 1 flow:
Average throughput: 216.59 Mbit/s
95th percentile per-packet one-way delay: 86.189 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 216.59 Mbit/s
95th percentile per-packet one-way delay: 86.189 ms
Loss rate: 0.62%

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



Run 4: Statistics of TaoVA-100x

Start at: 2019-08-26 17:55:02

End at: 2019-08-26 17:55:32

Local clock offset: 2.443 ms

Remote clock offset: 3.829 ms

Below is generated by plot.py at 2019-08-26 20:24:52

Datalink statistics

-- Total of 1 flow:

Average throughput: 215.50 Mbit/s

95th percentile per-packet one-way delay: 85.963 ms

Loss rate: 0.57%

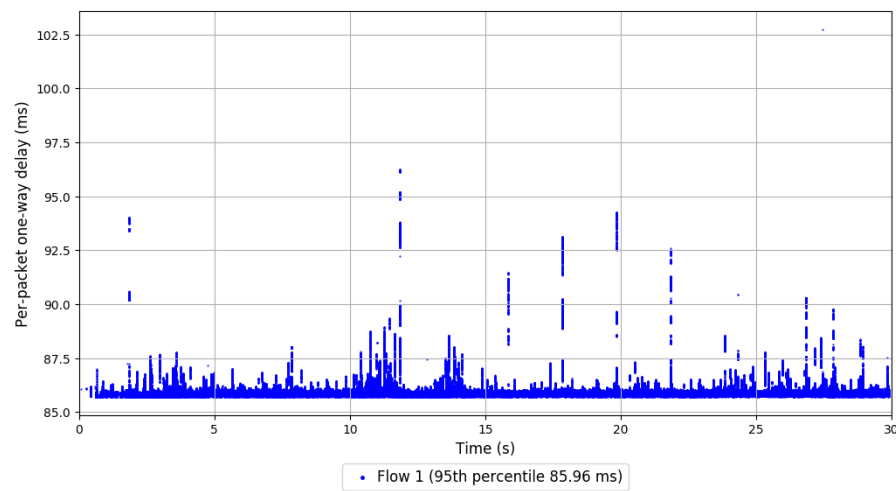
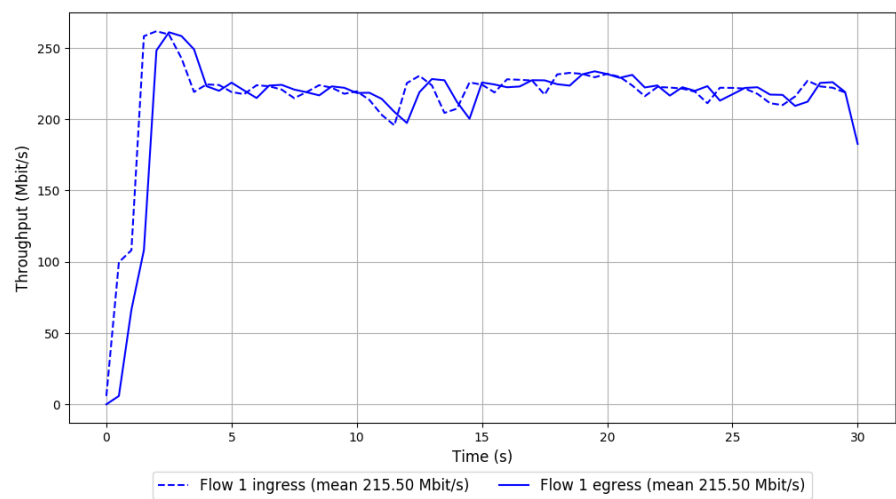
-- Flow 1:

Average throughput: 215.50 Mbit/s

95th percentile per-packet one-way delay: 85.963 ms

Loss rate: 0.57%

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



Run 5: Statistics of TaoVA-100x

Start at: 2019-08-26 18:29:46

End at: 2019-08-26 18:30:16

Local clock offset: 1.425 ms

Remote clock offset: 1.742 ms

Below is generated by plot.py at 2019-08-26 20:25:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 218.54 Mbit/s

95th percentile per-packet one-way delay: 86.288 ms

Loss rate: 0.56%

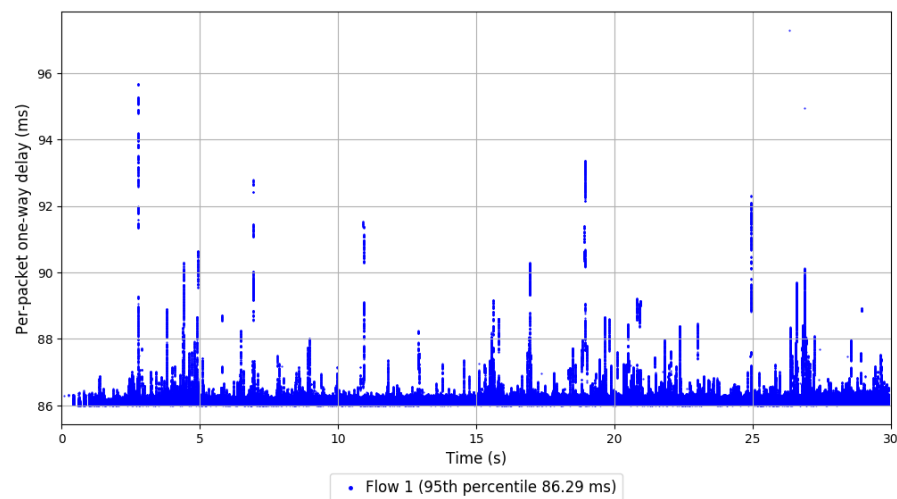
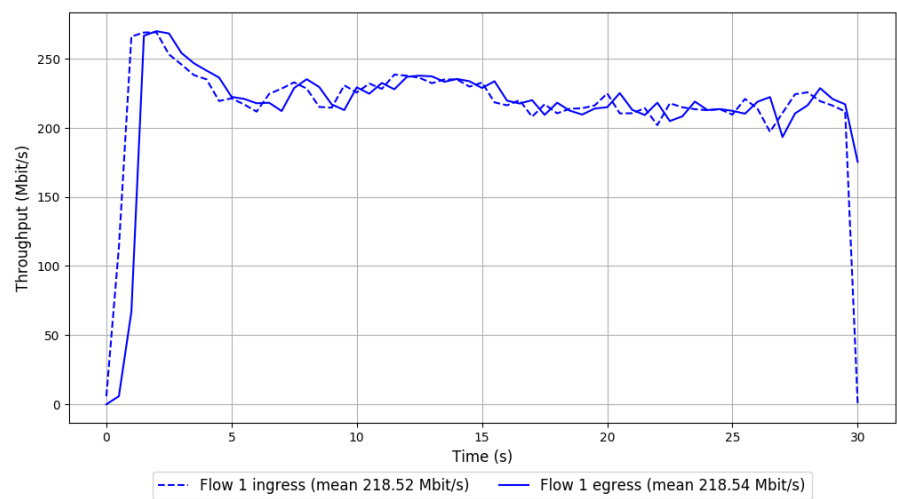
-- Flow 1:

Average throughput: 218.54 Mbit/s

95th percentile per-packet one-way delay: 86.288 ms

Loss rate: 0.56%

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



Run 1: Statistics of TCP Vegas

Start at: 2019-08-26 15:55:27

End at: 2019-08-26 15:55:58

Local clock offset: 3.588 ms

Remote clock offset: 6.164 ms

Below is generated by plot.py at 2019-08-26 20:25:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 357.62 Mbit/s

95th percentile per-packet one-way delay: 85.661 ms

Loss rate: 0.59%

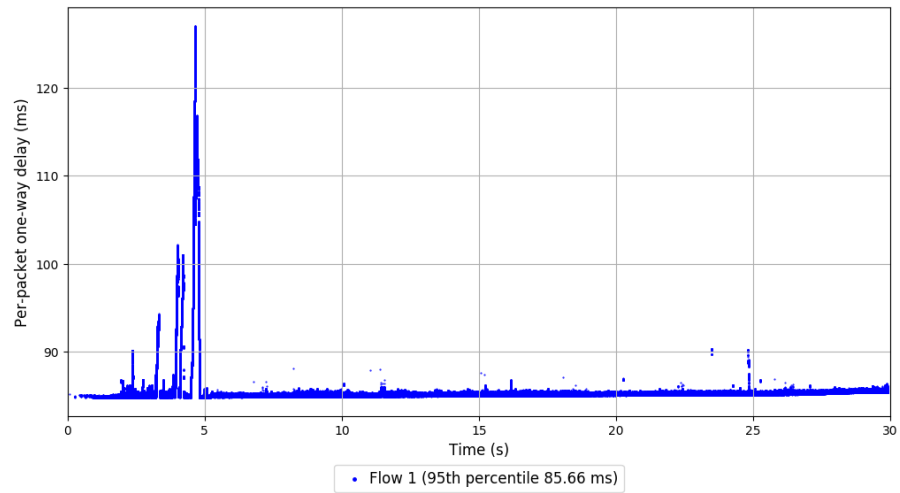
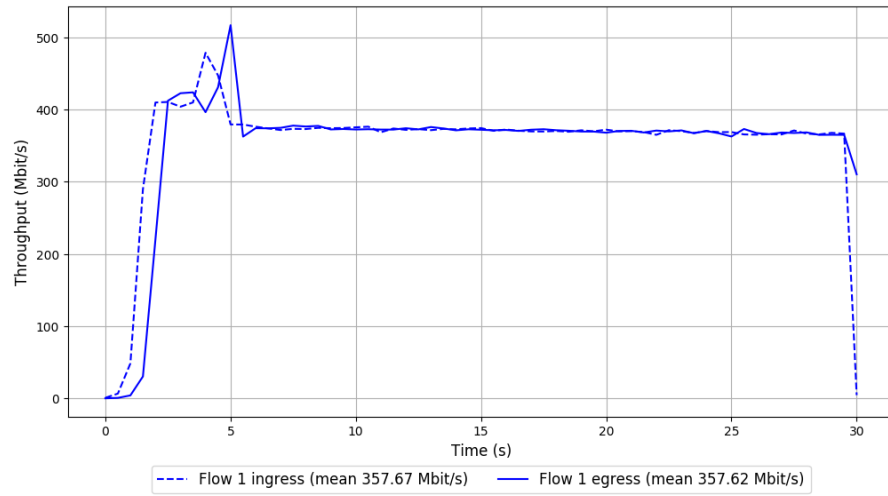
-- Flow 1:

Average throughput: 357.62 Mbit/s

95th percentile per-packet one-way delay: 85.661 ms

Loss rate: 0.59%

Run 1: Report of TCP Vegas — Data Link

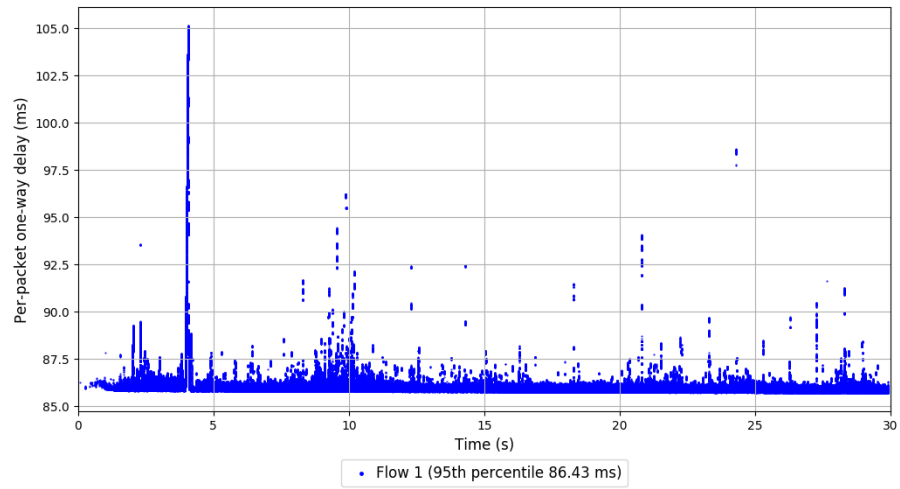
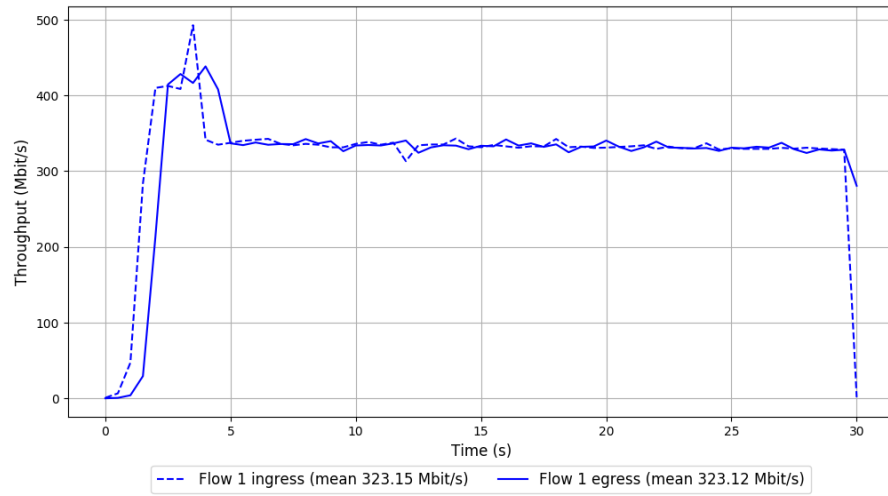


Run 2: Statistics of TCP Vegas

Start at: 2019-08-26 16:29:51
End at: 2019-08-26 16:30:22
Local clock offset: 16.033 ms
Remote clock offset: 23.535 ms

Below is generated by plot.py at 2019-08-26 20:28:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 323.12 Mbit/s
95th percentile per-packet one-way delay: 86.429 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 323.12 Mbit/s
95th percentile per-packet one-way delay: 86.429 ms
Loss rate: 0.59%

Run 2: Report of TCP Vegas — Data Link

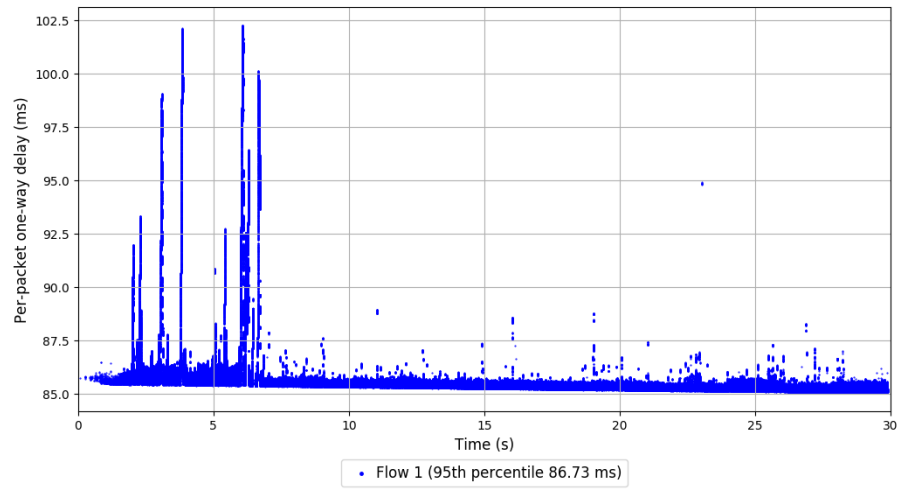
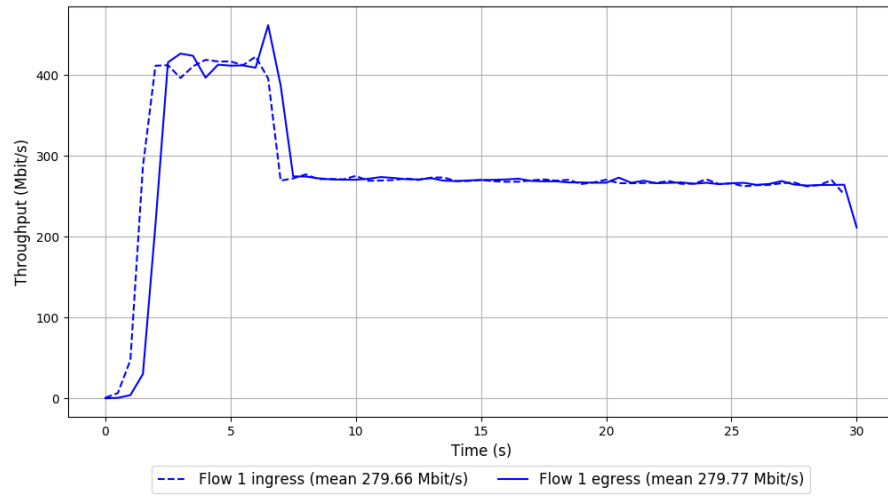


Run 3: Statistics of TCP Vegas

Start at: 2019-08-26 17:04:42
End at: 2019-08-26 17:05:12
Local clock offset: 18.568 ms
Remote clock offset: 27.538 ms

Below is generated by plot.py at 2019-08-26 20:28:43
Datalink statistics
-- Total of 1 flow:
Average throughput: 279.77 Mbit/s
95th percentile per-packet one-way delay: 86.733 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 279.77 Mbit/s
95th percentile per-packet one-way delay: 86.733 ms
Loss rate: 0.54%

Run 3: Report of TCP Vegas — Data Link



Run 4: Statistics of TCP Vegas

Start at: 2019-08-26 17:39:13

End at: 2019-08-26 17:39:43

Local clock offset: 4.859 ms

Remote clock offset: 6.893 ms

Below is generated by plot.py at 2019-08-26 20:28:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 285.94 Mbit/s

95th percentile per-packet one-way delay: 86.771 ms

Loss rate: 0.53%

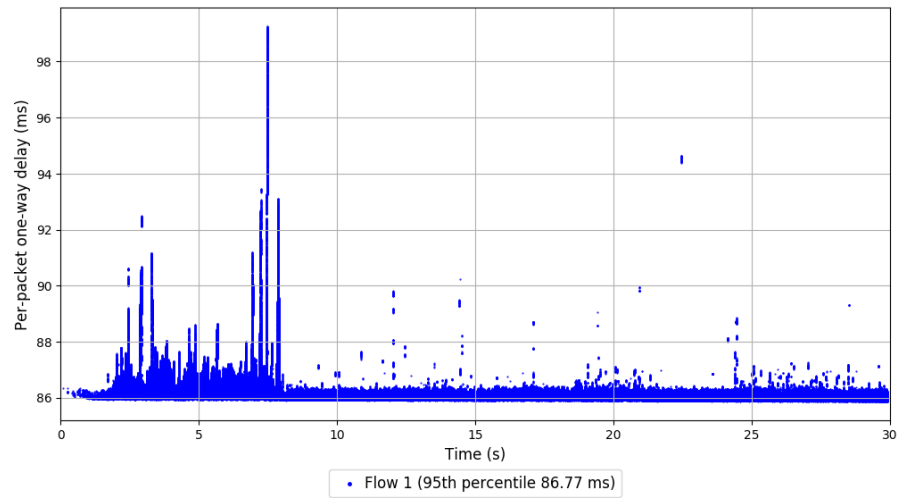
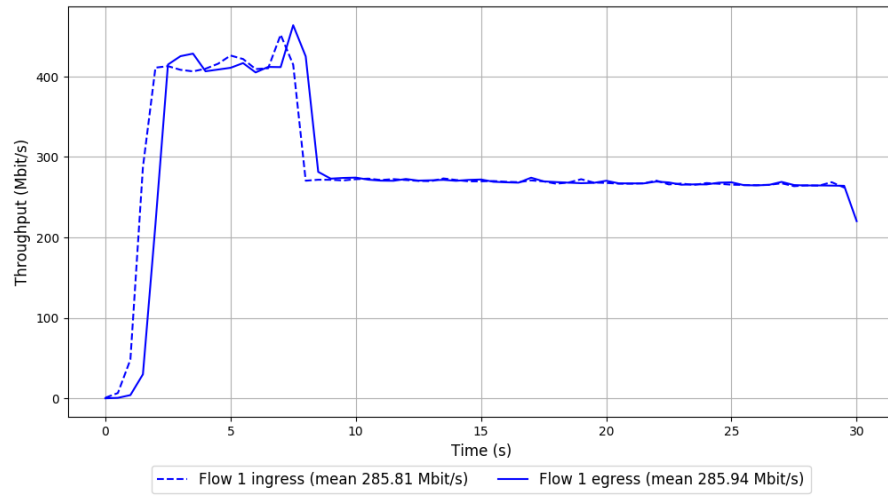
-- Flow 1:

Average throughput: 285.94 Mbit/s

95th percentile per-packet one-way delay: 86.771 ms

Loss rate: 0.53%

Run 4: Report of TCP Vegas — Data Link



Run 5: Statistics of TCP Vegas

Start at: 2019-08-26 18:14:04

End at: 2019-08-26 18:14:34

Local clock offset: 2.135 ms

Remote clock offset: 2.919 ms

Below is generated by plot.py at 2019-08-26 20:28:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 261.97 Mbit/s

95th percentile per-packet one-way delay: 86.360 ms

Loss rate: 0.29%

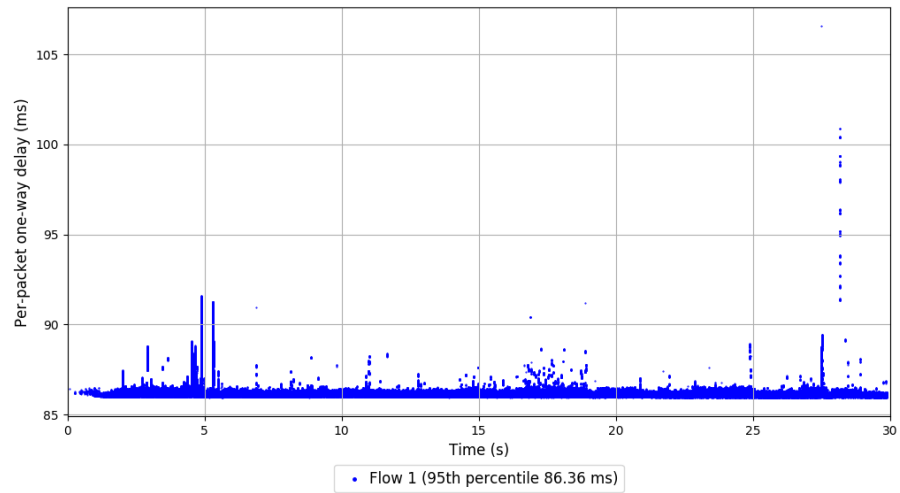
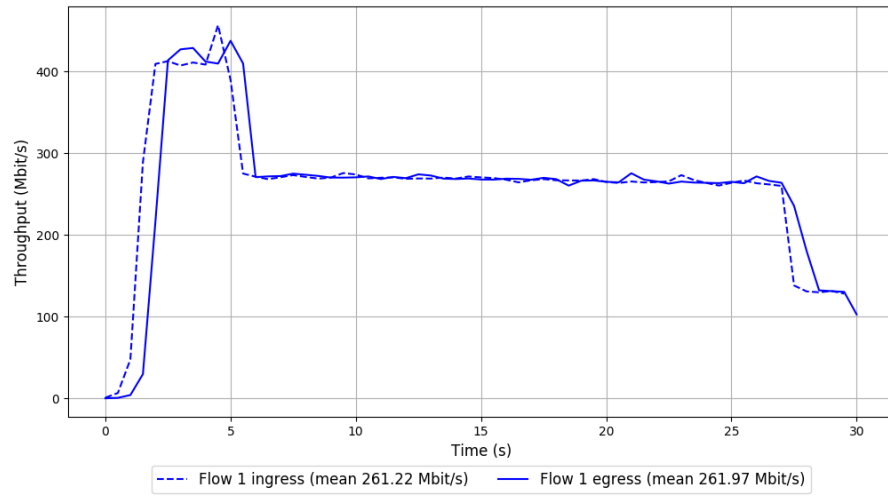
-- Flow 1:

Average throughput: 261.97 Mbit/s

95th percentile per-packet one-way delay: 86.360 ms

Loss rate: 0.29%

Run 5: Report of TCP Vegas — Data Link

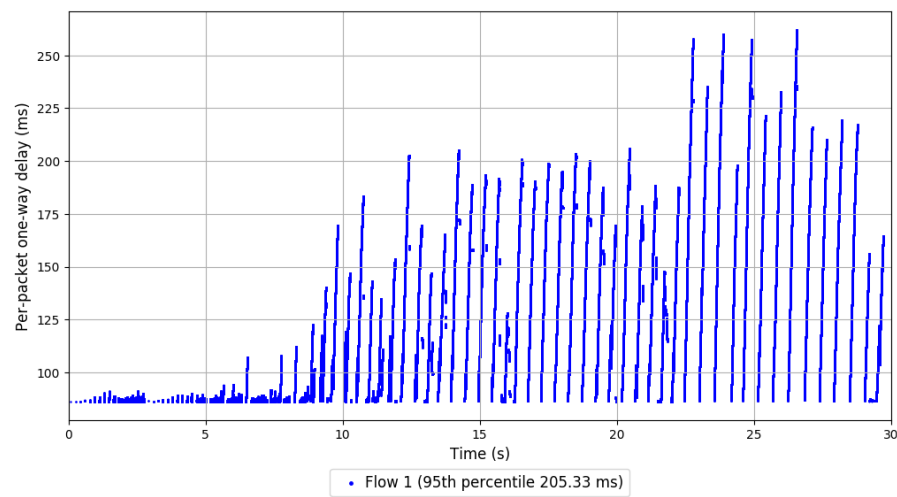
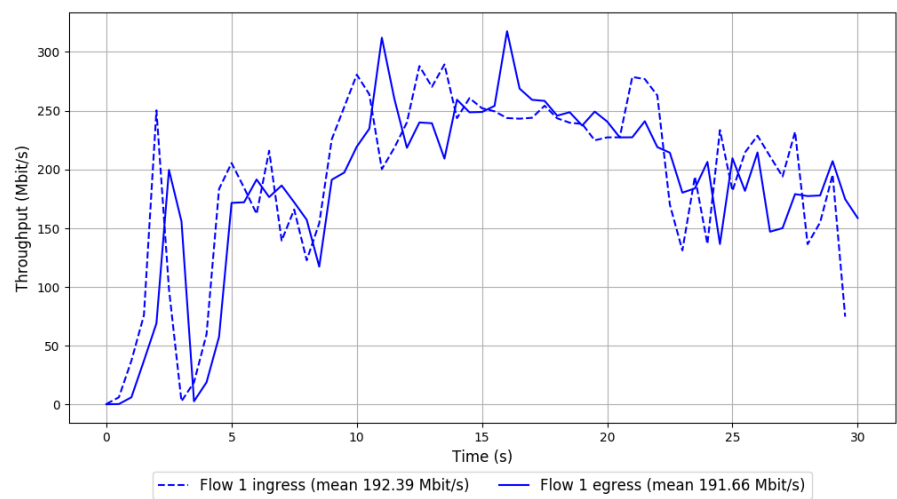


Run 1: Statistics of Verus

Start at: 2019-08-26 16:05:19
End at: 2019-08-26 16:05:49
Local clock offset: 8.659 ms
Remote clock offset: 12.031 ms

Below is generated by plot.py at 2019-08-26 20:29:55
Datalink statistics
-- Total of 1 flow:
Average throughput: 191.66 Mbit/s
95th percentile per-packet one-way delay: 205.331 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 191.66 Mbit/s
95th percentile per-packet one-way delay: 205.331 ms
Loss rate: 1.29%

Run 1: Report of Verus — Data Link



Run 2: Statistics of Verus

Start at: 2019-08-26 16:40:03

End at: 2019-08-26 16:40:33

Local clock offset: 15.93 ms

Remote clock offset: 23.47 ms

Below is generated by plot.py at 2019-08-26 20:29:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 166.91 Mbit/s

95th percentile per-packet one-way delay: 212.497 ms

Loss rate: 3.26%

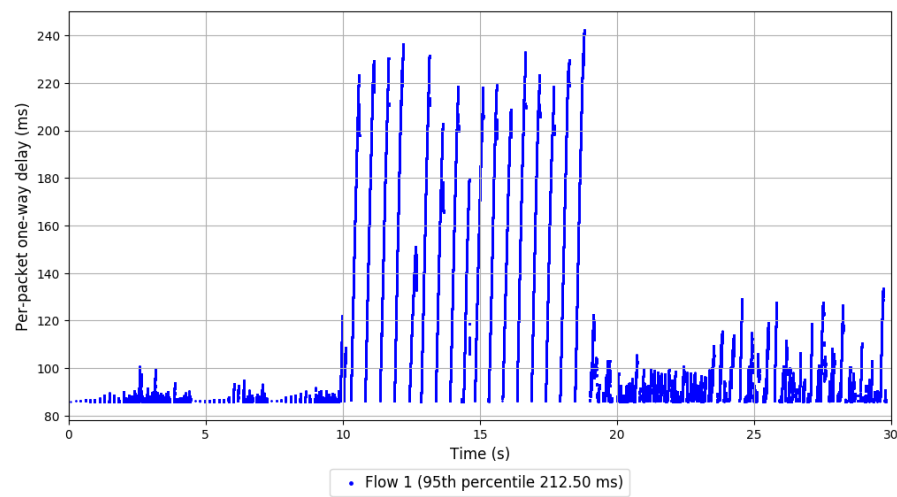
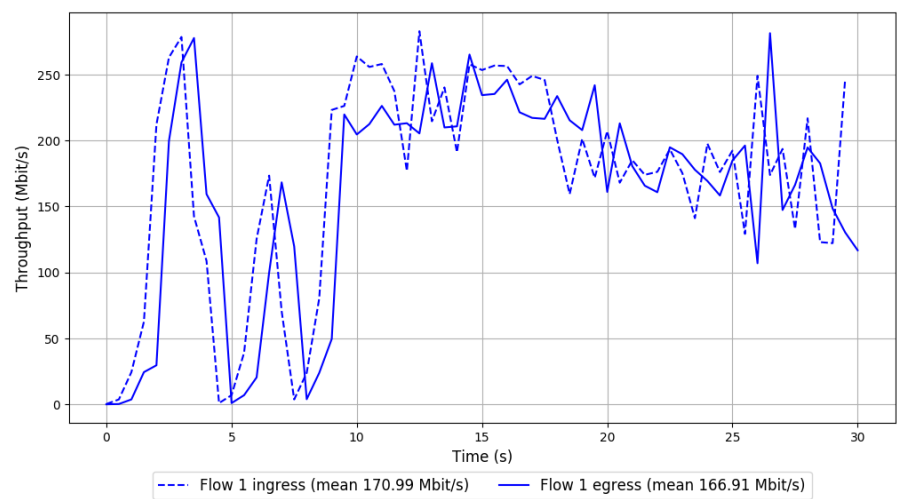
-- Flow 1:

Average throughput: 166.91 Mbit/s

95th percentile per-packet one-way delay: 212.497 ms

Loss rate: 3.26%

Run 2: Report of Verus — Data Link



Run 3: Statistics of Verus

Start at: 2019-08-26 17:14:57

End at: 2019-08-26 17:15:27

Local clock offset: 8.75 ms

Remote clock offset: 12.23 ms

Below is generated by plot.py at 2019-08-26 20:30:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 211.80 Mbit/s

95th percentile per-packet one-way delay: 226.560 ms

Loss rate: 6.09%

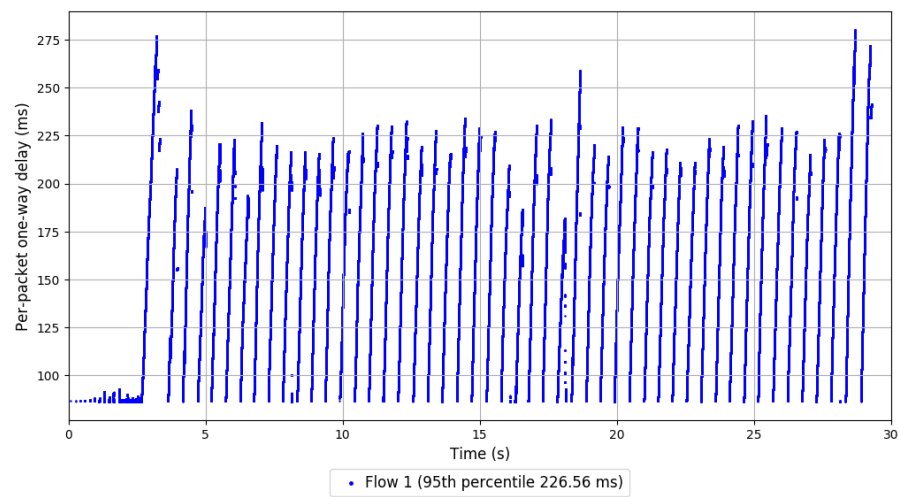
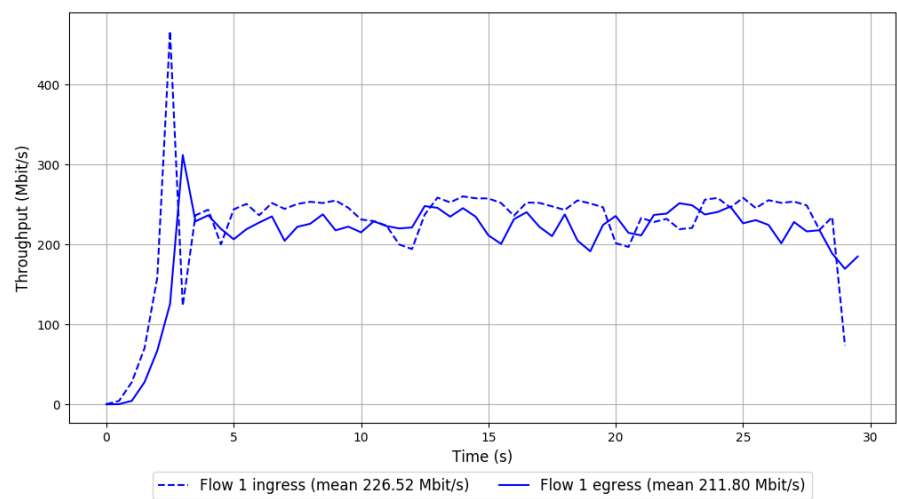
-- Flow 1:

Average throughput: 211.80 Mbit/s

95th percentile per-packet one-way delay: 226.560 ms

Loss rate: 6.09%

Run 3: Report of Verus — Data Link



Run 4: Statistics of Verus

Start at: 2019-08-26 17:49:27

End at: 2019-08-26 17:49:57

Local clock offset: 2.47 ms

Remote clock offset: 3.961 ms

Below is generated by plot.py at 2019-08-26 20:30:37

Datalink statistics

-- Total of 1 flow:

Average throughput: 139.17 Mbit/s

95th percentile per-packet one-way delay: 156.872 ms

Loss rate: 0.08%

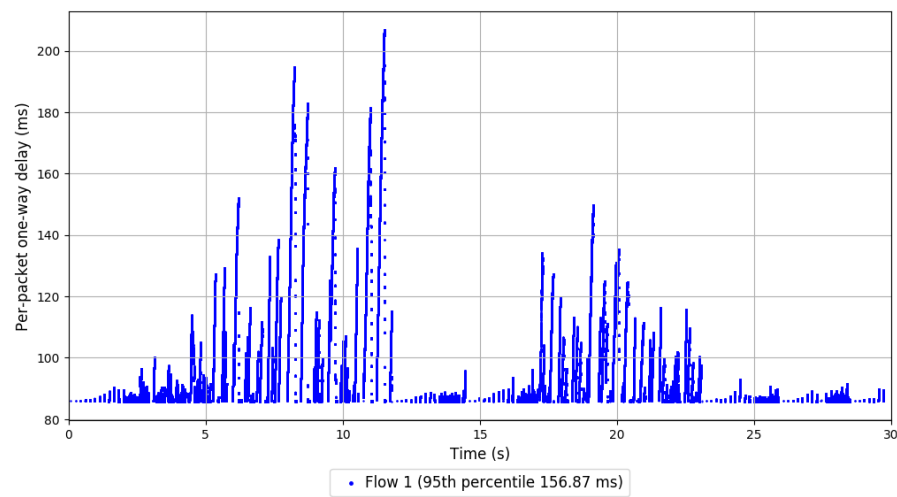
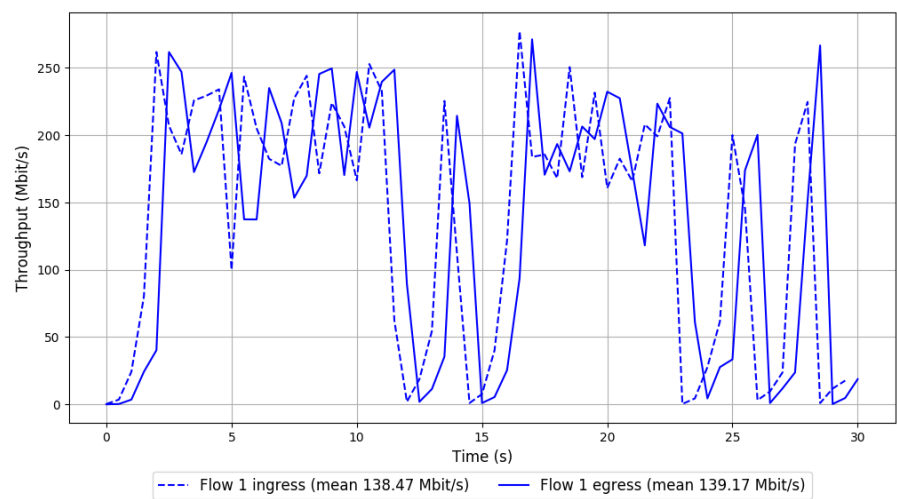
-- Flow 1:

Average throughput: 139.17 Mbit/s

95th percentile per-packet one-way delay: 156.872 ms

Loss rate: 0.08%

Run 4: Report of Verus — Data Link



Run 5: Statistics of Verus

Start at: 2019-08-26 18:24:19

End at: 2019-08-26 18:24:49

Local clock offset: 1.151 ms

Remote clock offset: 1.753 ms

Below is generated by plot.py at 2019-08-26 20:30:55

Datalink statistics

-- Total of 1 flow:

Average throughput: 117.17 Mbit/s

95th percentile per-packet one-way delay: 212.779 ms

Loss rate: 2.51%

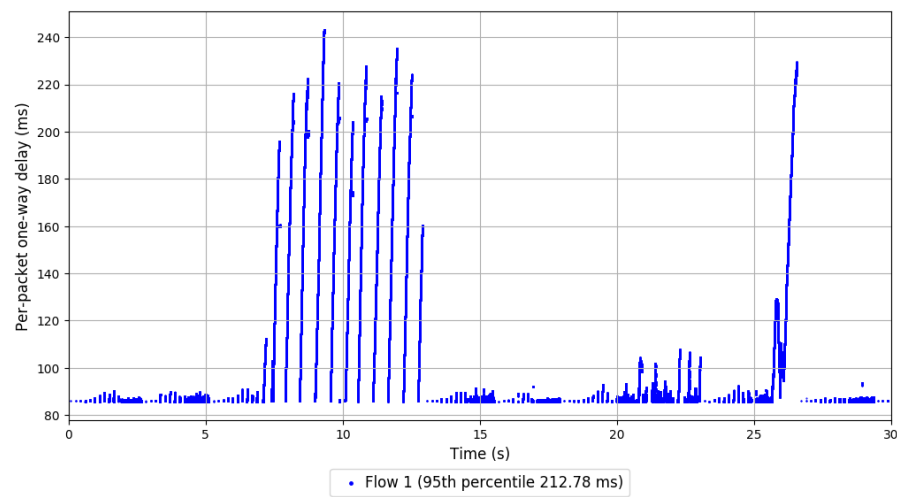
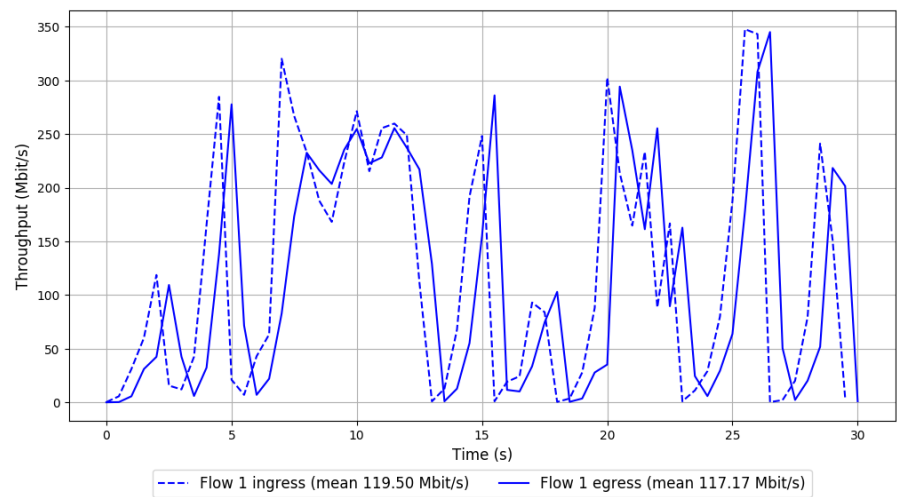
-- Flow 1:

Average throughput: 117.17 Mbit/s

95th percentile per-packet one-way delay: 212.779 ms

Loss rate: 2.51%

Run 5: Report of Verus — Data Link

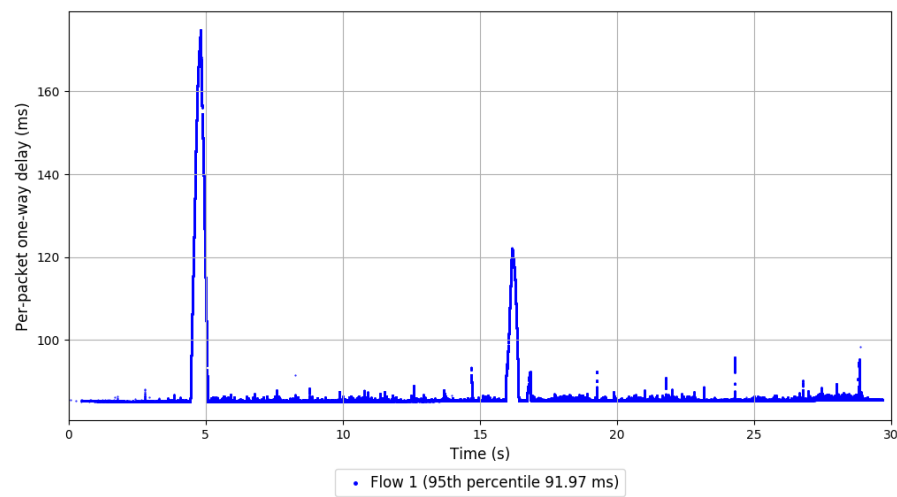
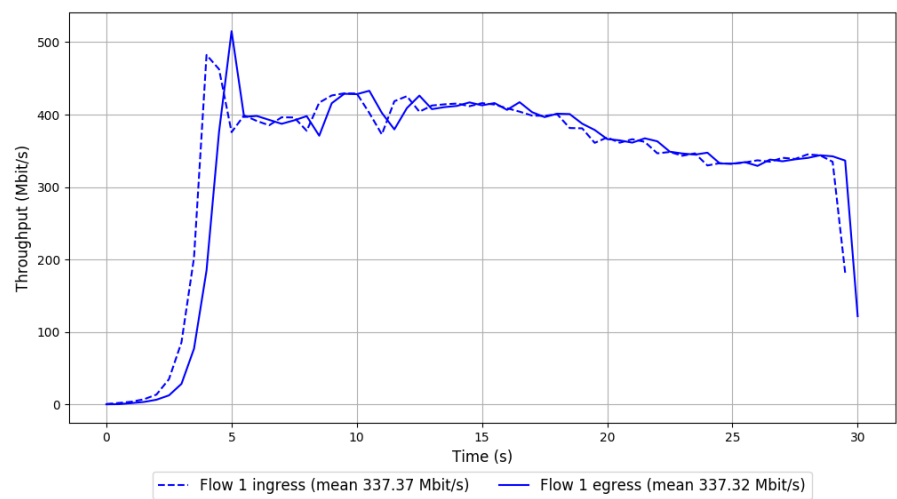


Run 1: Statistics of PCC-Vivace

Start at: 2019-08-26 16:08:16
End at: 2019-08-26 16:08:46
Local clock offset: 11.651 ms
Remote clock offset: 17.964 ms

Below is generated by plot.py at 2019-08-26 20:32:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 337.32 Mbit/s
95th percentile per-packet one-way delay: 91.967 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 337.32 Mbit/s
95th percentile per-packet one-way delay: 91.967 ms
Loss rate: 0.59%

Run 1: Report of PCC-Vivace — Data Link

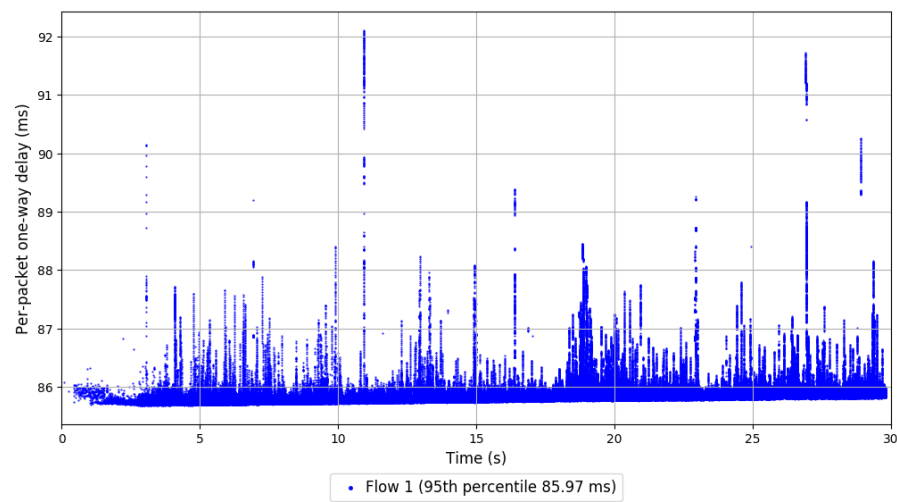
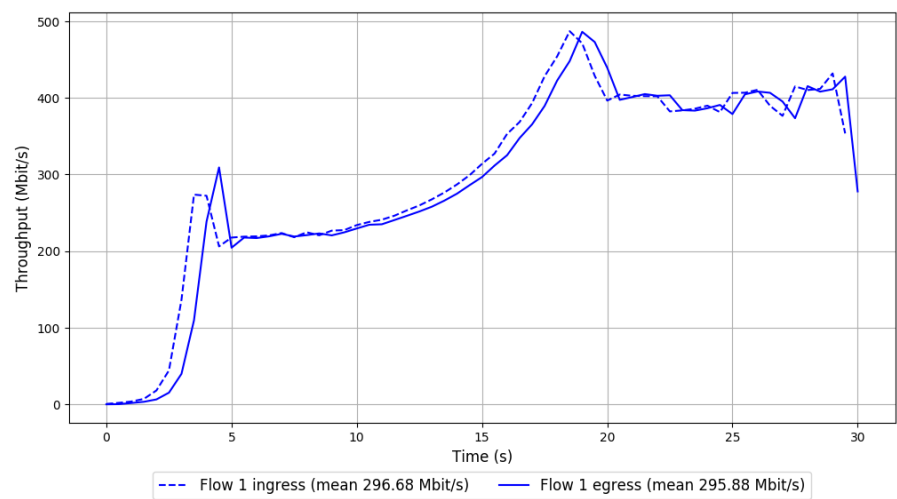


Run 2: Statistics of PCC-Vivace

Start at: 2019-08-26 16:42:57
End at: 2019-08-26 16:43:27
Local clock offset: 17.064 ms
Remote clock offset: 25.505 ms

Below is generated by plot.py at 2019-08-26 20:32:31
Datalink statistics
-- Total of 1 flow:
Average throughput: 295.88 Mbit/s
95th percentile per-packet one-way delay: 85.975 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 295.88 Mbit/s
95th percentile per-packet one-way delay: 85.975 ms
Loss rate: 0.85%

Run 2: Report of PCC-Vivace — Data Link



Run 3: Statistics of PCC-Vivace

Start at: 2019-08-26 17:17:55

End at: 2019-08-26 17:18:25

Local clock offset: 7.338 ms

Remote clock offset: 10.861 ms

Below is generated by plot.py at 2019-08-26 20:32:41

Datalink statistics

-- Total of 1 flow:

Average throughput: 378.57 Mbit/s

95th percentile per-packet one-way delay: 92.081 ms

Loss rate: 0.67%

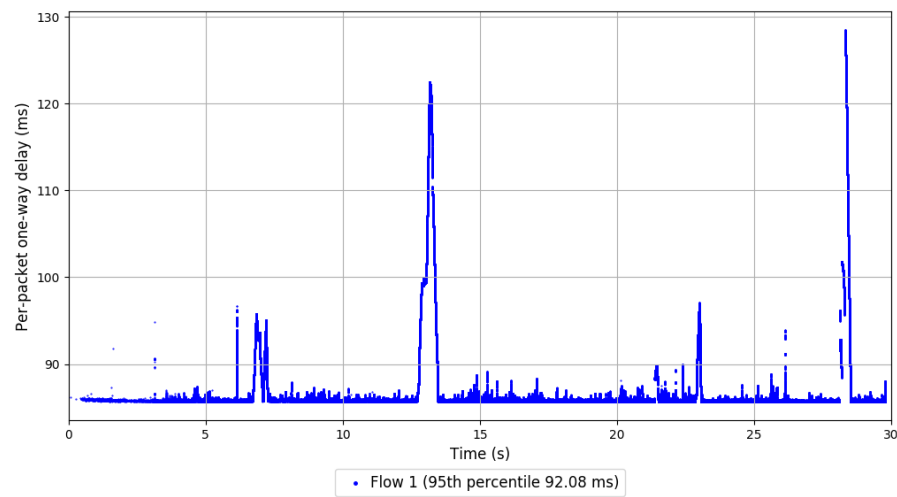
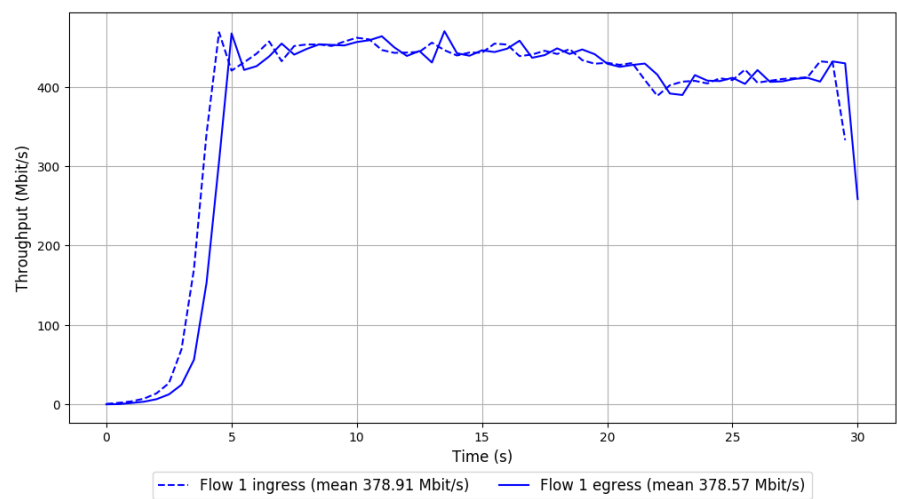
-- Flow 1:

Average throughput: 378.57 Mbit/s

95th percentile per-packet one-way delay: 92.081 ms

Loss rate: 0.67%

Run 3: Report of PCC-Vivace — Data Link



Run 4: Statistics of PCC-Vivace

Start at: 2019-08-26 17:52:22

End at: 2019-08-26 17:52:52

Local clock offset: 2.531 ms

Remote clock offset: 3.792 ms

Below is generated by plot.py at 2019-08-26 20:32:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 344.25 Mbit/s

95th percentile per-packet one-way delay: 97.515 ms

Loss rate: 0.59%

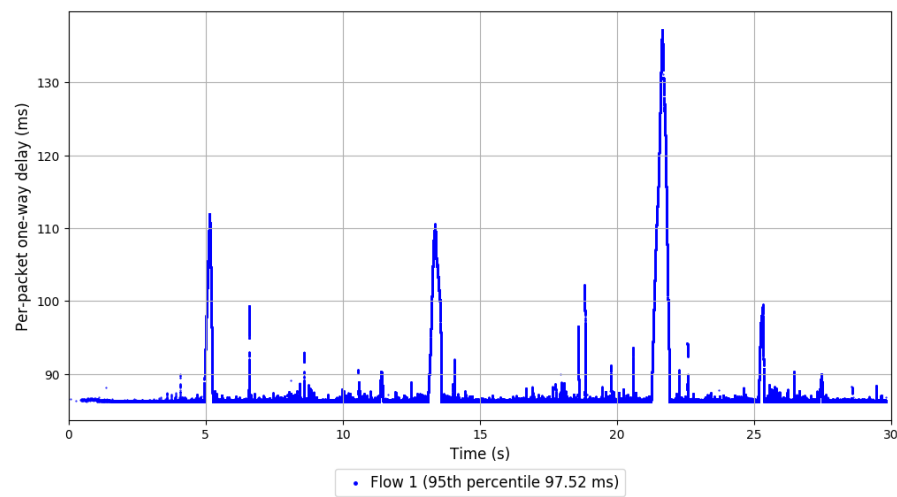
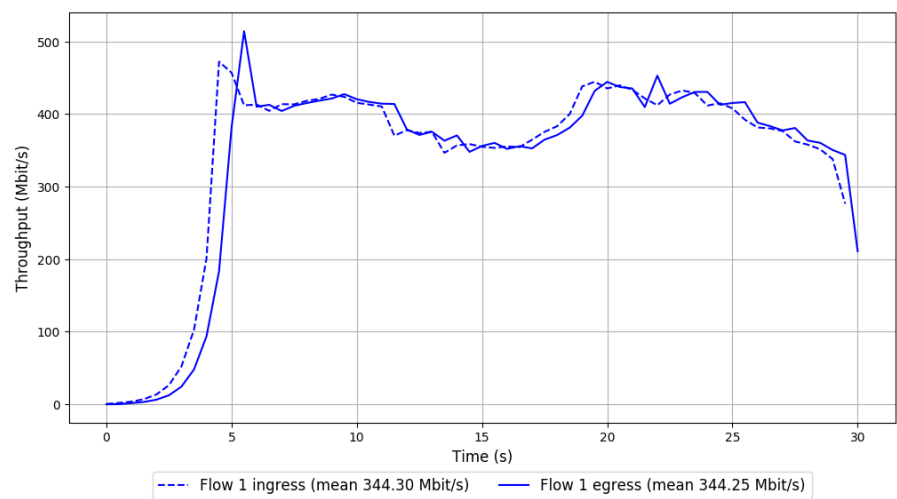
-- Flow 1:

Average throughput: 344.25 Mbit/s

95th percentile per-packet one-way delay: 97.515 ms

Loss rate: 0.59%

Run 4: Report of PCC-Vivace — Data Link



Run 5: Statistics of PCC-Vivace

Start at: 2019-08-26 18:27:10

End at: 2019-08-26 18:27:40

Local clock offset: 1.459 ms

Remote clock offset: 1.713 ms

Below is generated by plot.py at 2019-08-26 20:32:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 291.14 Mbit/s

95th percentile per-packet one-way delay: 98.042 ms

Loss rate: 0.78%

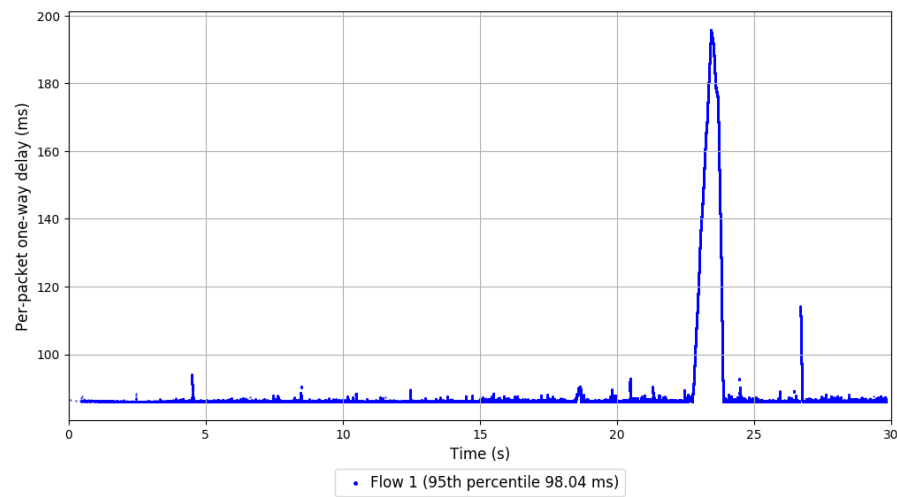
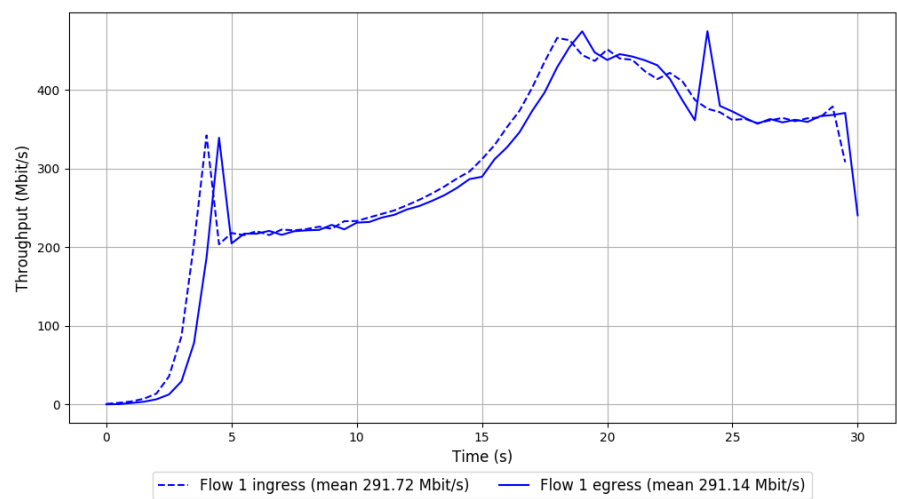
-- Flow 1:

Average throughput: 291.14 Mbit/s

95th percentile per-packet one-way delay: 98.042 ms

Loss rate: 0.78%

Run 5: Report of PCC-Vivace — Data Link

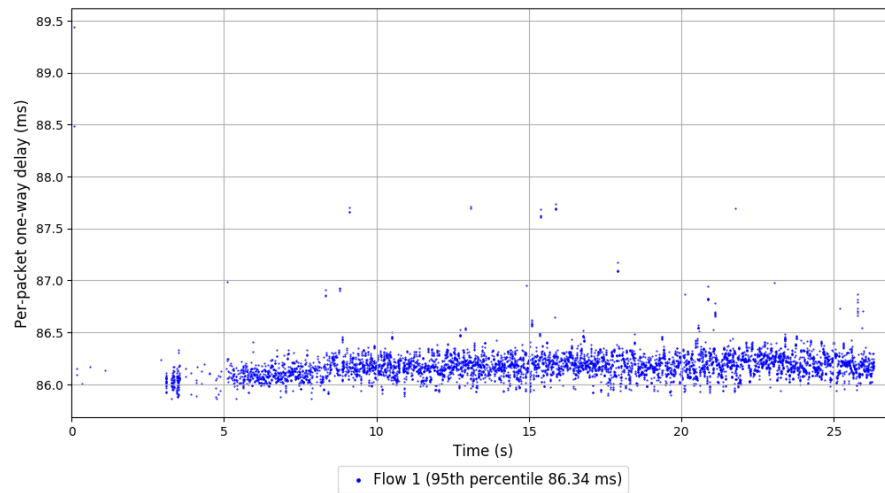
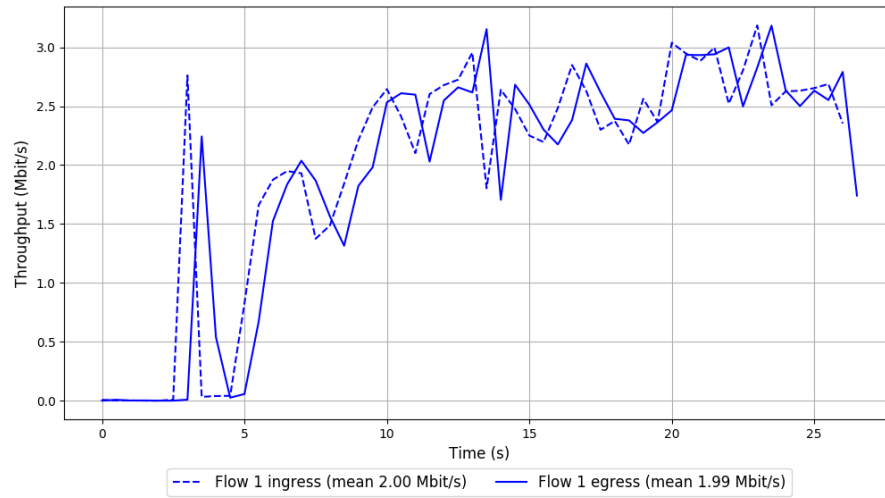


Run 1: Statistics of WebRTC media

Start at: 2019-08-26 16:15:24
End at: 2019-08-26 16:15:54
Local clock offset: 10.196 ms
Remote clock offset: 15.129 ms

Below is generated by plot.py at 2019-08-26 20:32:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 86.344 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 86.344 ms
Loss rate: 1.01%

Run 1: Report of WebRTC media — Data Link

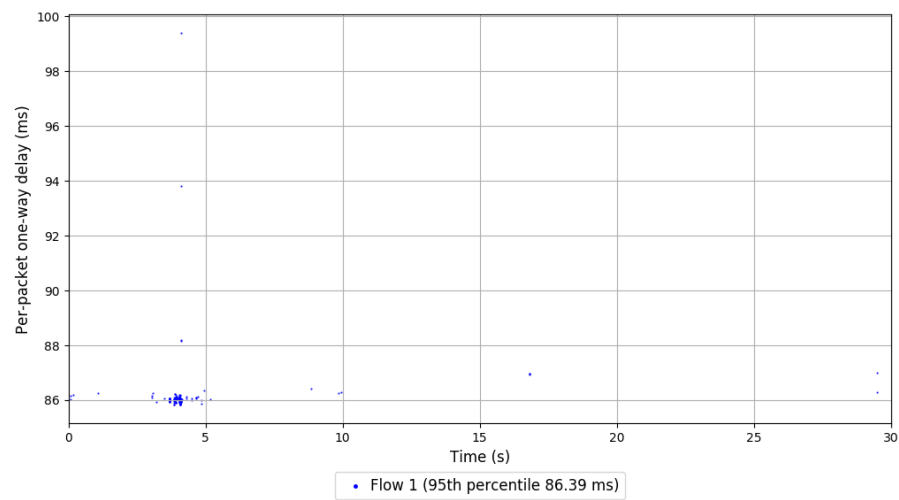
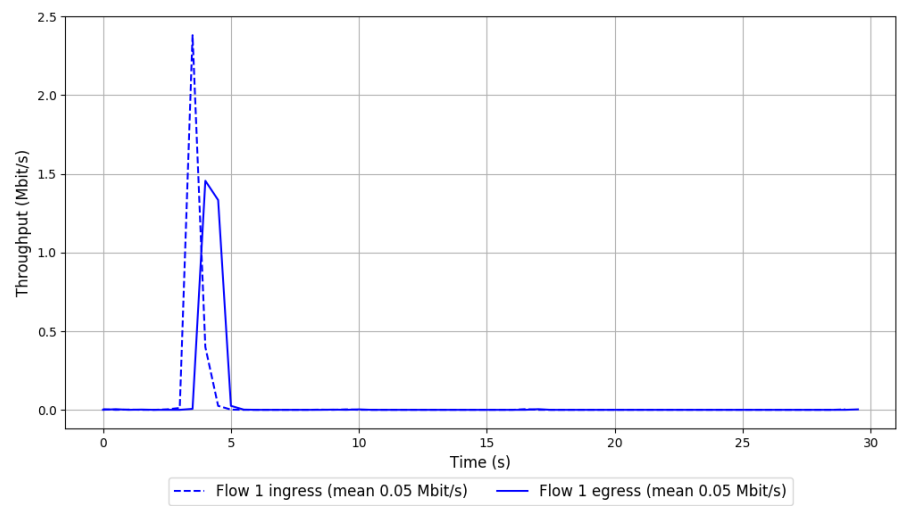


Run 2: Statistics of WebRTC media

Start at: 2019-08-26 16:50:06
End at: 2019-08-26 16:50:36
Local clock offset: 21.968 ms
Remote clock offset: 32.534 ms

Below is generated by plot.py at 2019-08-26 20:32:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.392 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 86.392 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link



Run 3: Statistics of WebRTC media

Start at: 2019-08-26 17:25:07

End at: 2019-08-26 17:25:37

Local clock offset: 6.519 ms

Remote clock offset: 9.894 ms

Below is generated by plot.py at 2019-08-26 20:32:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.897 ms

Loss rate: 0.00%

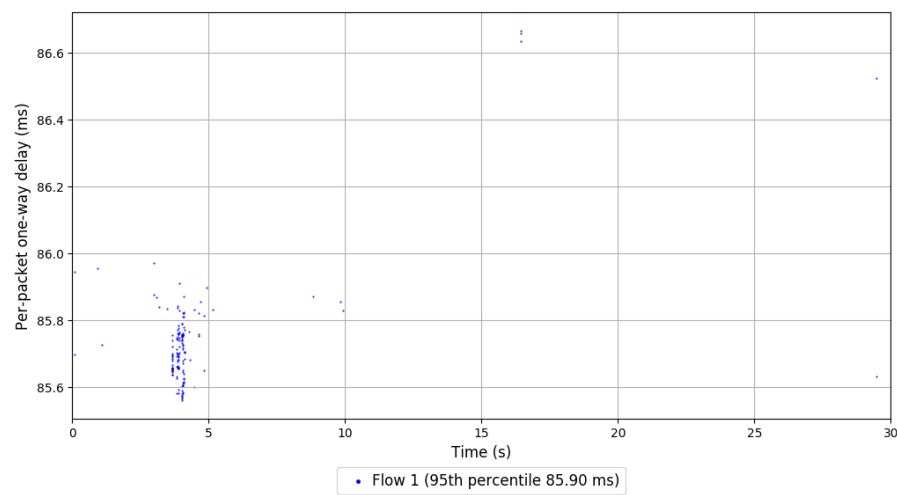
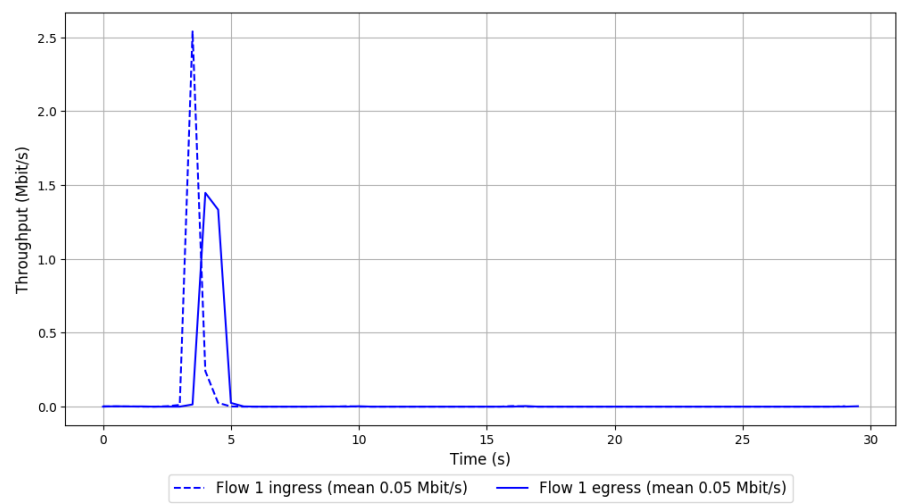
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.897 ms

Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link



Run 4: Statistics of WebRTC media

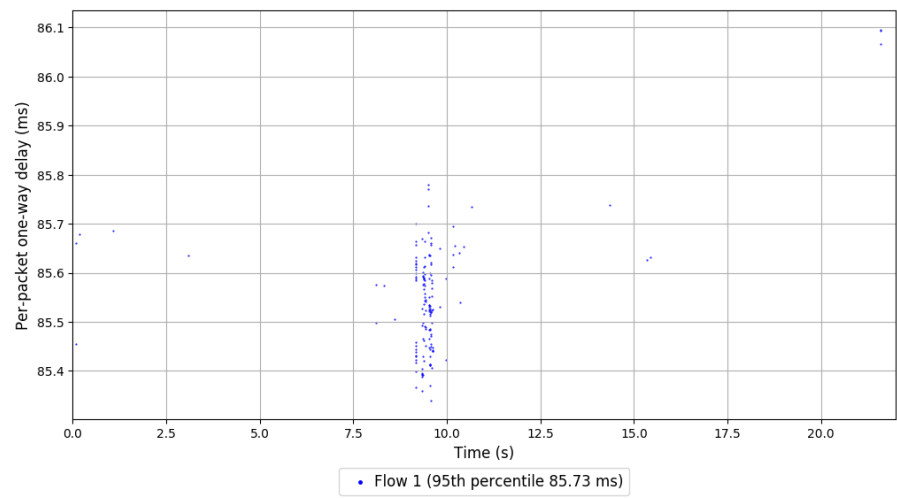
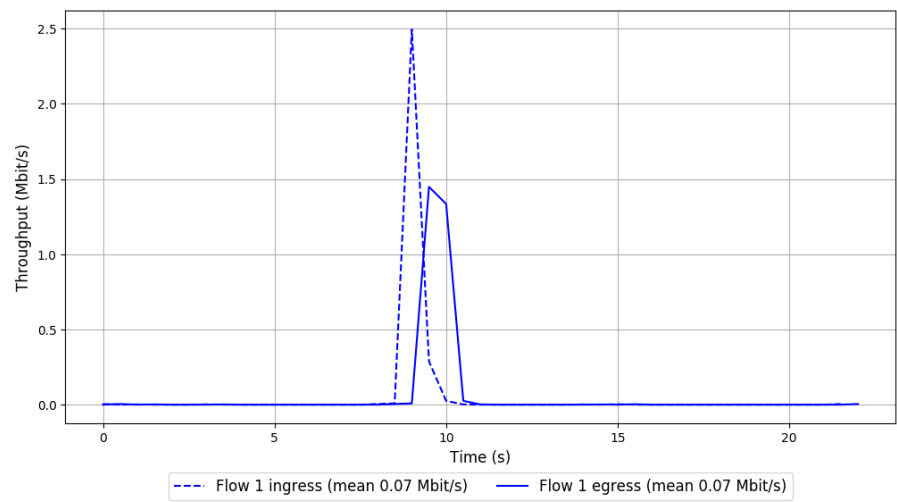
Start at: 2019-08-26 17:59:39

End at: 2019-08-26 18:00:09

Local clock offset: 2.167 ms

Remote clock offset: 4.049 ms

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-08-26 18:34:23

End at: 2019-08-26 18:34:53

Local clock offset: 1.075 ms

Remote clock offset: 1.862 ms

Below is generated by plot.py at 2019-08-26 20:32:42

Datalink statistics

-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.937 ms

Loss rate: 0.00%

-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 85.937 ms

Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

