

Pantheon Report

Generated at 2019-03-27 08:41:56 (UTC).

Data path: China on `eno1` (*remote*) → AWS Korea on `ens5` (*local*).

Repeated the test of 21 congestion control schemes 5 times.

Each test lasted for 30 seconds running 1 flow.

NTP offsets were measured against `ntp.nict.jp` and have been applied to correct the timestamps in logs.

System info:

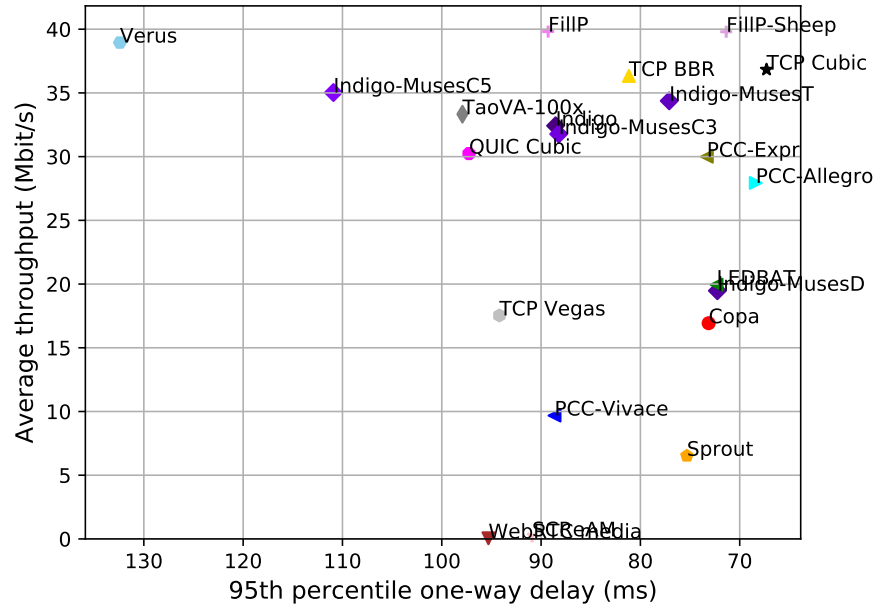
```
Linux 4.15.0-1034-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
```

Git summary:

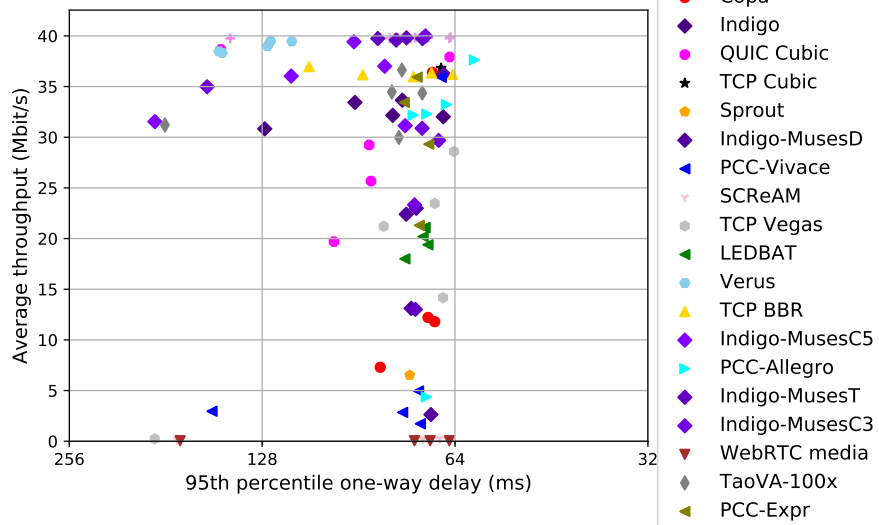
```
branch: muses @ 7a686f7c2ed0a333082c0bab1fa5c921ab47e6ee
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
```

third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851

test from China to AWS Korea, 5 runs of 30s each per scheme
(mean of all runs by scheme)



test from China to AWS Korea, 5 runs of 30s each per scheme



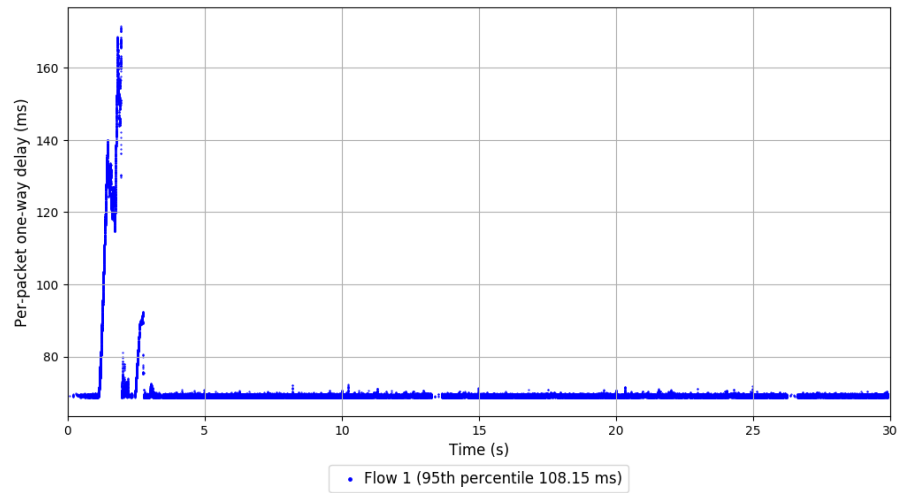
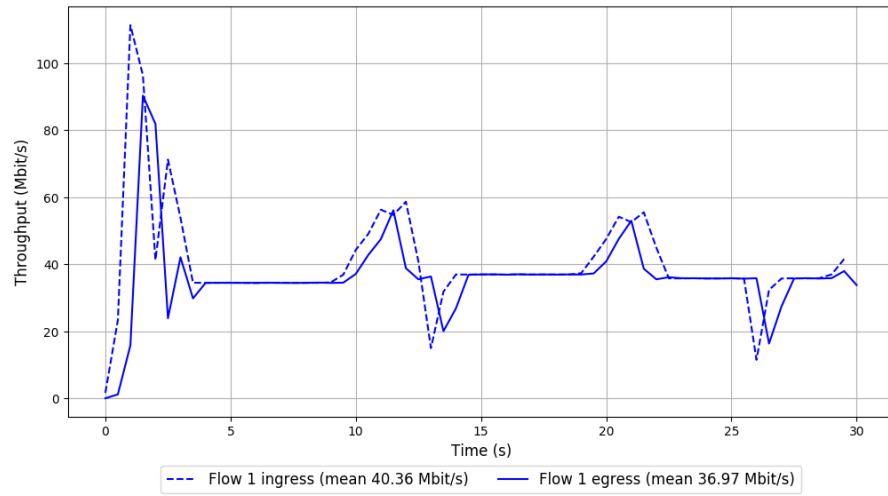
scheme	# runs	mean avg tput (Mbit/s) flow 1	mean 95th-%ile delay (ms) flow 1	mean loss rate (%) flow 1
TCP BBR	5	36.33	81.16	11.96
Copa	4	16.93	73.13	4.33
TCP Cubic	1	36.83	67.30	1.54
FillP	5	39.82	89.29	16.48
FillP-Sheep	5	39.80	71.36	10.04
Indigo	5	32.42	88.54	31.99
Indigo-MusesC3	5	31.78	88.23	5.78
Indigo-MusesC5	5	35.03	110.91	14.43
Indigo-MusesD	5	19.47	72.25	3.30
Indigo-MusesT	5	34.38	77.10	8.31
LEDBAT	5	19.95	72.33	0.89
PCC-Allegro	5	27.94	68.38	2.19
PCC-Expr	4	29.99	73.31	7.04
QUIC Cubic	5	30.24	97.26	2.42
SCReAM	5	0.21	90.91	0.46
Sprout	1	6.53	75.32	0.51
TaoVA-100x	5	33.33	97.92	13.39
TCP Vegas	5	17.53	94.20	2.23
Verus	5	38.95	132.41	23.23
PCC-Vivace	5	9.68	88.65	1.35
WebRTC media	4	0.05	95.30	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-03-27 06:35:43
End at: 2019-03-27 06:36:13
Local clock offset: -0.555 ms
Remote clock offset: -13.261 ms

Below is generated by plot.py at 2019-03-27 08:37:21
Datalink statistics
-- Total of 1 flow:
Average throughput: 36.97 Mbit/s
95th percentile per-packet one-way delay: 108.150 ms
Loss rate: 8.80%
-- Flow 1:
Average throughput: 36.97 Mbit/s
95th percentile per-packet one-way delay: 108.150 ms
Loss rate: 8.80%

Run 1: Report of TCP BBR — Data Link

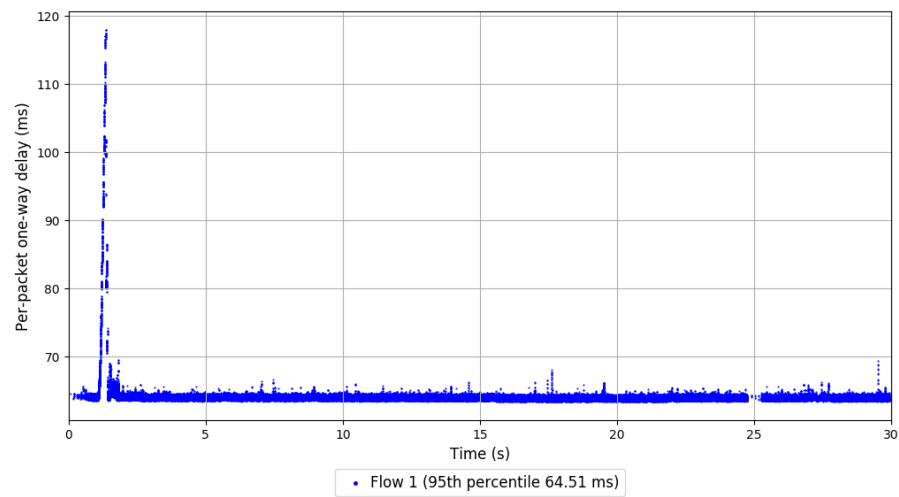
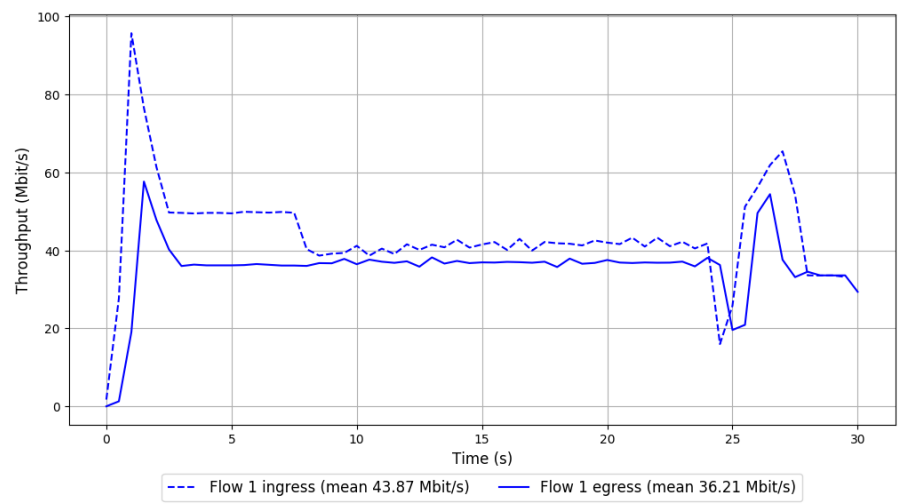


Run 2: Statistics of TCP BBR

Start at: 2019-03-27 07:00:31
End at: 2019-03-27 07:01:01
Local clock offset: -1.322 ms
Remote clock offset: -11.088 ms

Below is generated by plot.py at 2019-03-27 08:37:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 36.21 Mbit/s
95th percentile per-packet one-way delay: 64.506 ms
Loss rate: 17.80%
-- Flow 1:
Average throughput: 36.21 Mbit/s
95th percentile per-packet one-way delay: 64.506 ms
Loss rate: 17.80%

Run 2: Report of TCP BBR — Data Link

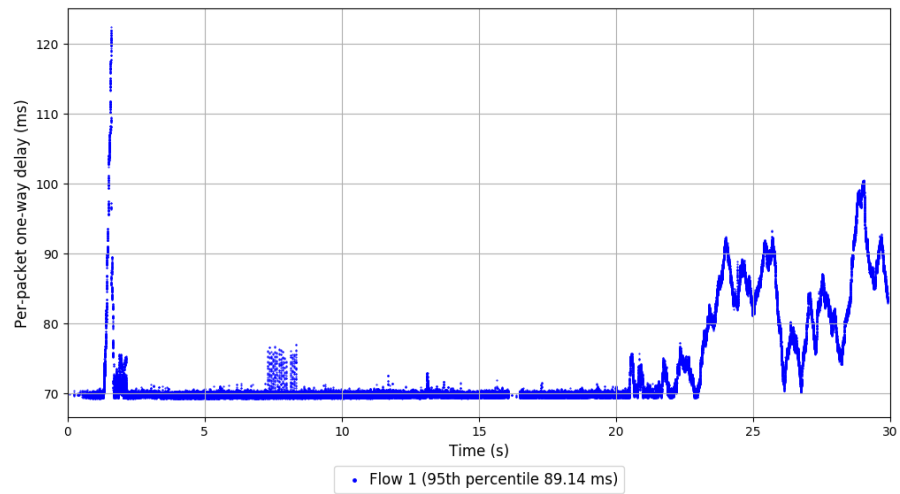
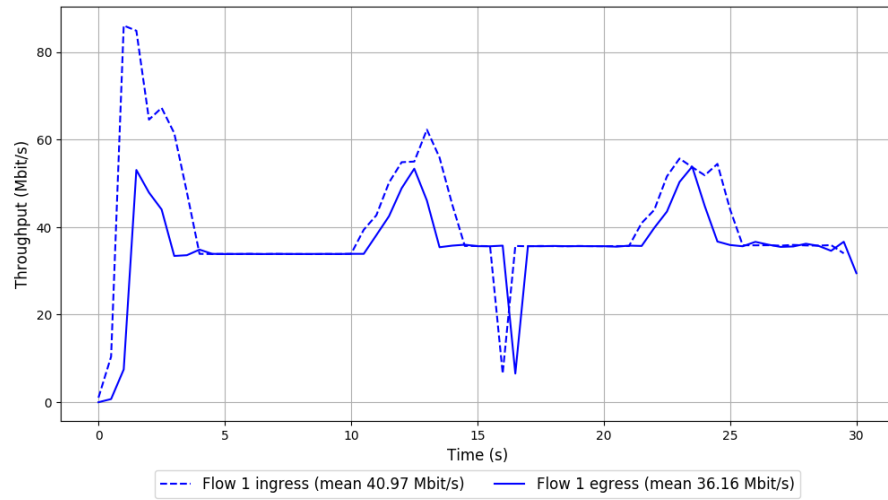


Run 3: Statistics of TCP BBR

Start at: 2019-03-27 07:26:26
End at: 2019-03-27 07:26:56
Local clock offset: -4.236 ms
Remote clock offset: -18.43 ms

Below is generated by plot.py at 2019-03-27 08:37:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 36.16 Mbit/s
95th percentile per-packet one-way delay: 89.145 ms
Loss rate: 12.13%
-- Flow 1:
Average throughput: 36.16 Mbit/s
95th percentile per-packet one-way delay: 89.145 ms
Loss rate: 12.13%

Run 3: Report of TCP BBR — Data Link

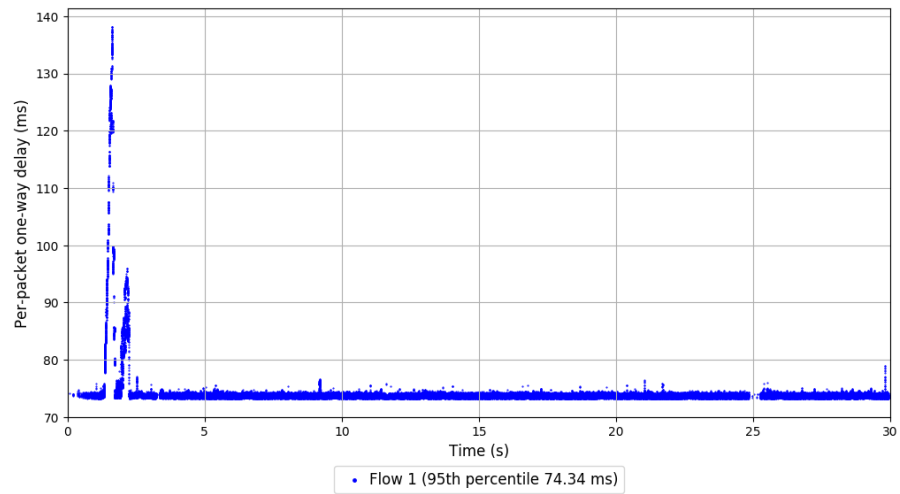
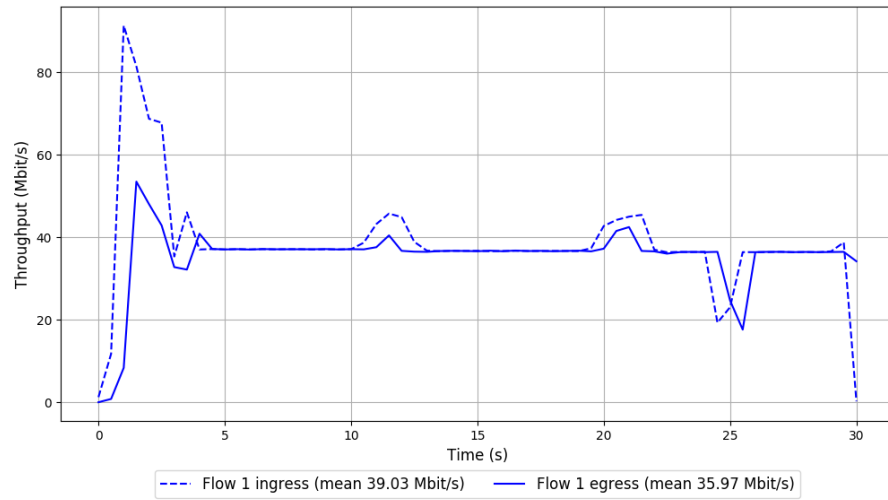


Run 4: Statistics of TCP BBR

Start at: 2019-03-27 07:51:37
End at: 2019-03-27 07:52:07
Local clock offset: -5.675 ms
Remote clock offset: -21.826 ms

Below is generated by plot.py at 2019-03-27 08:37:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 35.97 Mbit/s
95th percentile per-packet one-way delay: 74.338 ms
Loss rate: 8.27%
-- Flow 1:
Average throughput: 35.97 Mbit/s
95th percentile per-packet one-way delay: 74.338 ms
Loss rate: 8.27%

Run 4: Report of TCP BBR — Data Link

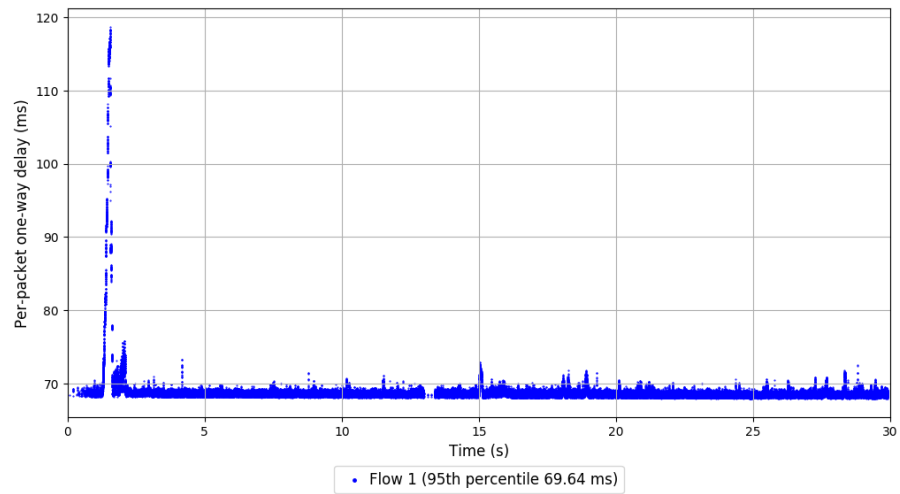
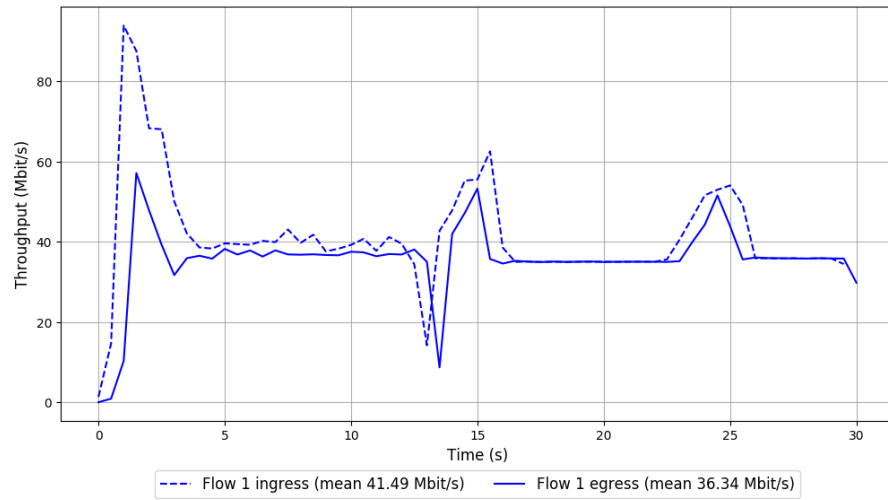


Run 5: Statistics of TCP BBR

Start at: 2019-03-27 08:16:29
End at: 2019-03-27 08:16:59
Local clock offset: -5.415 ms
Remote clock offset: -16.529 ms

Below is generated by plot.py at 2019-03-27 08:37:22
Datalink statistics
-- Total of 1 flow:
Average throughput: 36.34 Mbit/s
95th percentile per-packet one-way delay: 69.645 ms
Loss rate: 12.79%
-- Flow 1:
Average throughput: 36.34 Mbit/s
95th percentile per-packet one-way delay: 69.645 ms
Loss rate: 12.79%

Run 5: Report of TCP BBR — Data Link



Run 1: Statistics of Copa

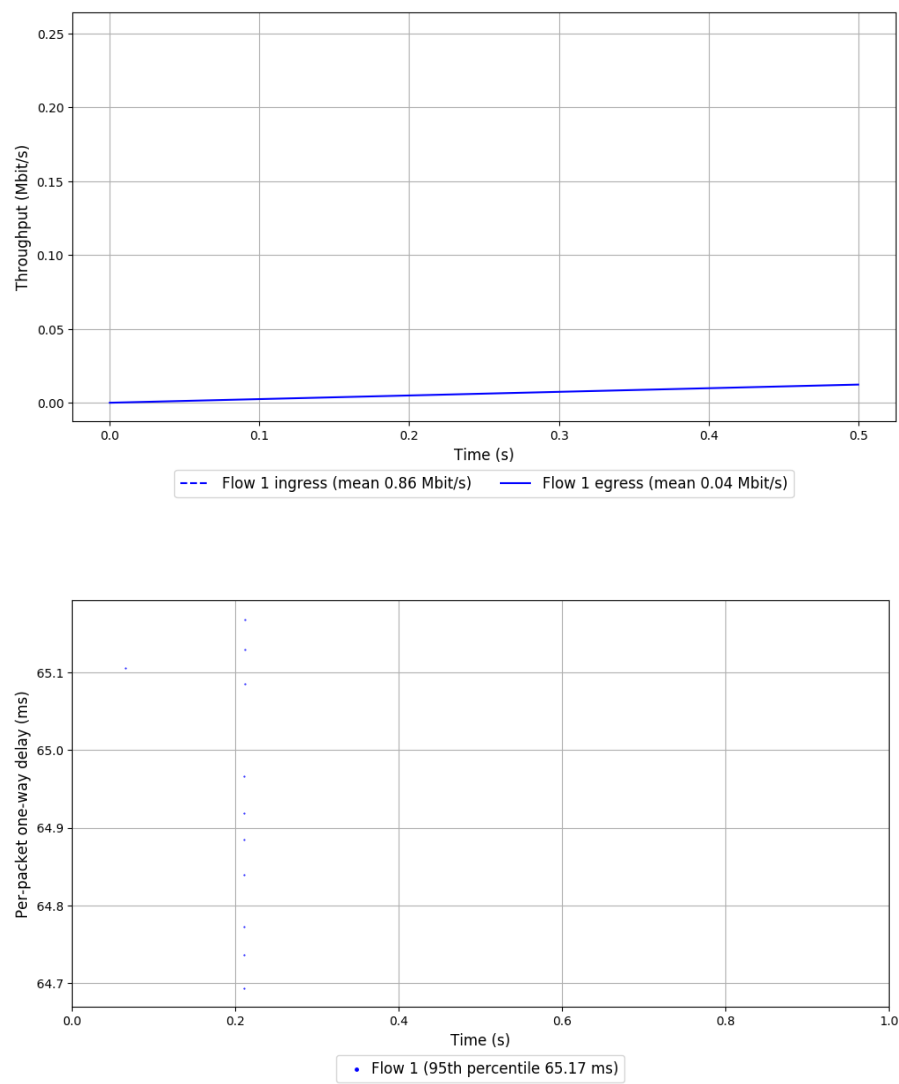
Start at: 2019-03-27 06:32:14

End at: 2019-03-27 06:32:44

Local clock offset: -0.774 ms

Remote clock offset: -8.713 ms

Run 1: Report of Copa — Data Link



Run 2: Statistics of Copa

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

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

Local clock offset: -1.127 ms

Remote clock offset: -8.91 ms

Below is generated by plot.py at 2019-03-27 08:37:53

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.40 Mbit/s

95th percentile per-packet one-way delay: 69.409 ms

Loss rate: 16.07%

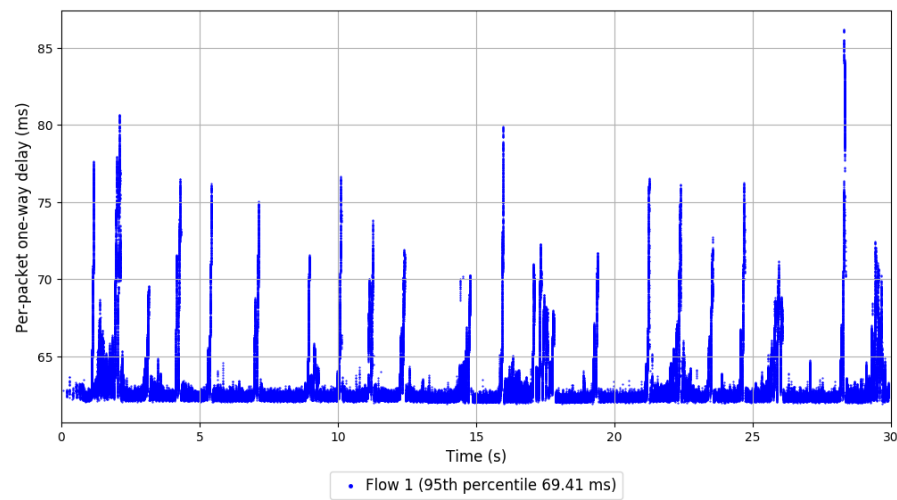
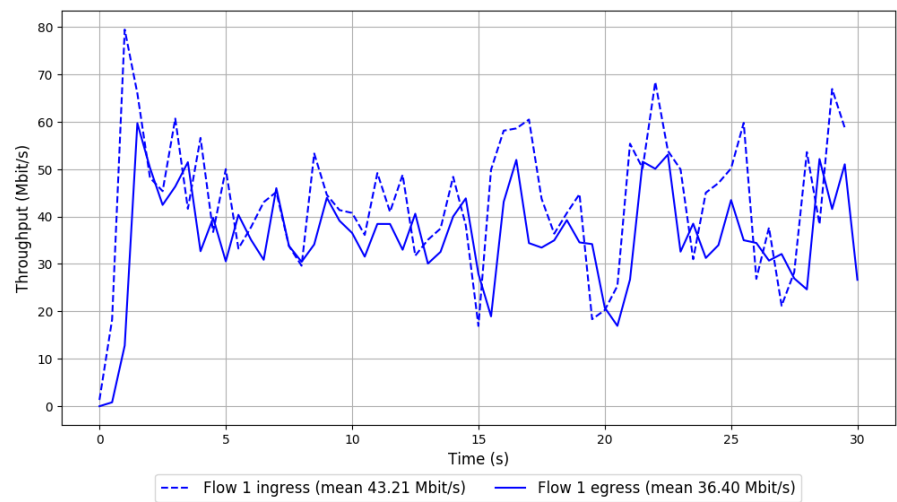
-- Flow 1:

Average throughput: 36.40 Mbit/s

95th percentile per-packet one-way delay: 69.409 ms

Loss rate: 16.07%

Run 2: Report of Copa — Data Link

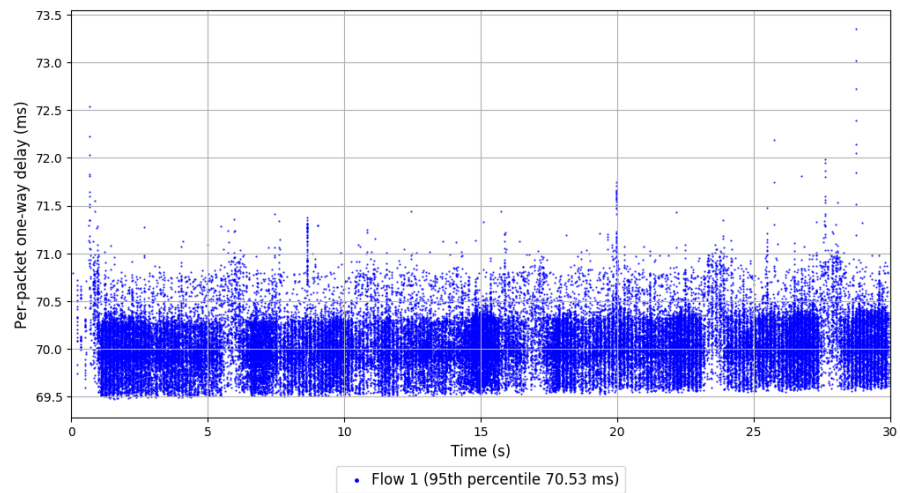
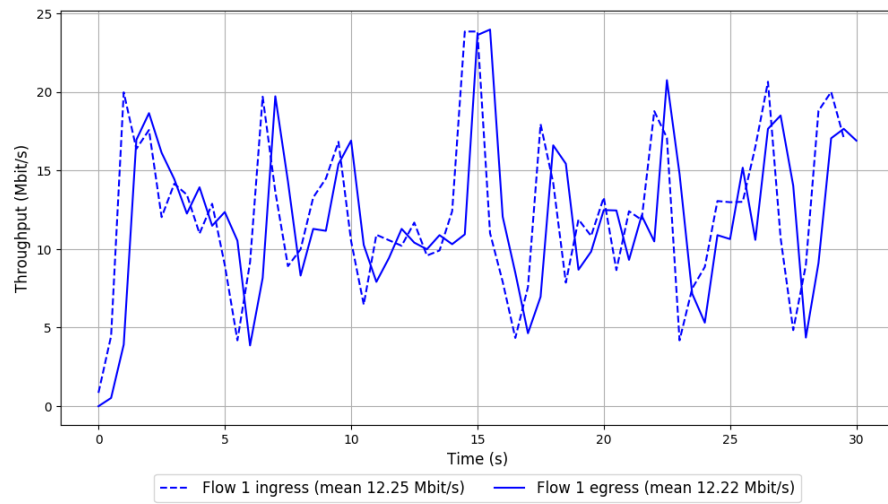


Run 3: Statistics of Copa

Start at: 2019-03-27 07:22:42
End at: 2019-03-27 07:23:12
Local clock offset: -3.463 ms
Remote clock offset: -18.958 ms

Below is generated by plot.py at 2019-03-27 08:37:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 12.22 Mbit/s
95th percentile per-packet one-way delay: 70.527 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 12.22 Mbit/s
95th percentile per-packet one-way delay: 70.527 ms
Loss rate: 0.71%

Run 3: Report of Copa — Data Link

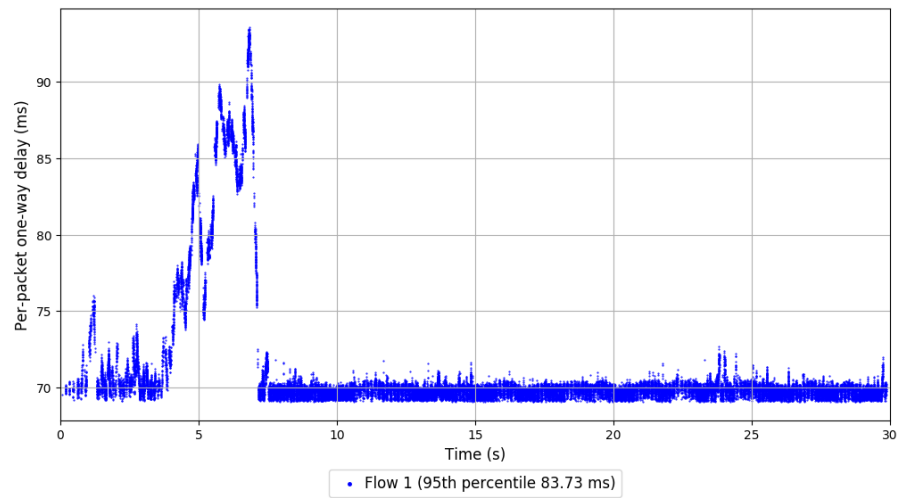
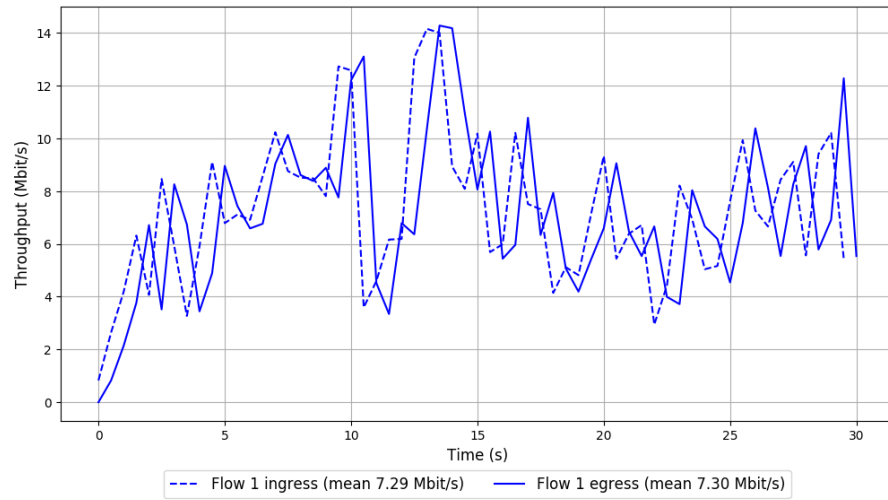


Run 4: Statistics of Copa

Start at: 2019-03-27 07:47:55
End at: 2019-03-27 07:48:25
Local clock offset: -5.664 ms
Remote clock offset: -17.835 ms

Below is generated by plot.py at 2019-03-27 08:37:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 7.30 Mbit/s
95th percentile per-packet one-way delay: 83.729 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 7.30 Mbit/s
95th percentile per-packet one-way delay: 83.729 ms
Loss rate: 0.25%

Run 4: Report of Copa — Data Link

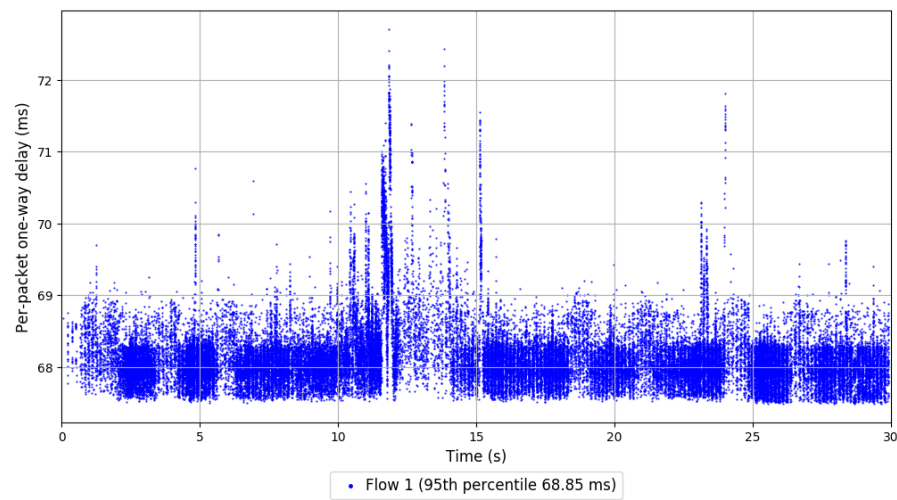
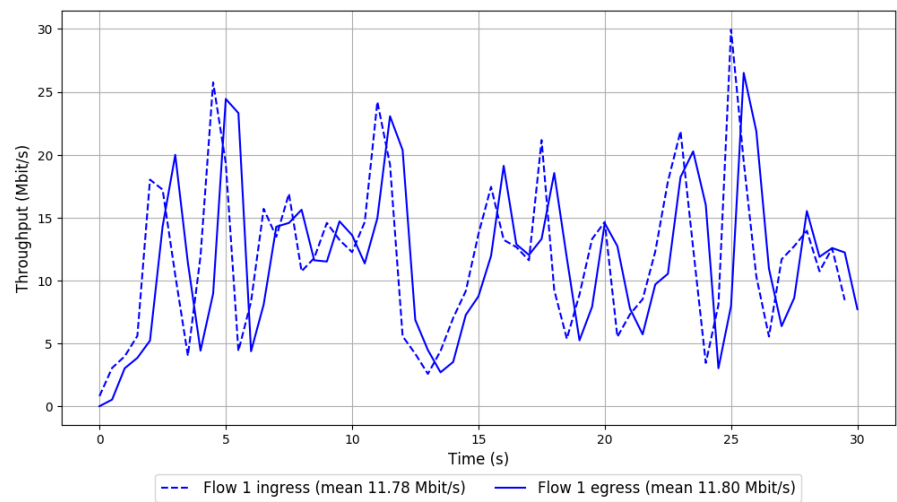


Run 5: Statistics of Copa

Start at: 2019-03-27 08:12:52
End at: 2019-03-27 08:13:22
Local clock offset: -5.386 ms
Remote clock offset: -15.449 ms

Below is generated by plot.py at 2019-03-27 08:37:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 68.847 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 11.80 Mbit/s
95th percentile per-packet one-way delay: 68.847 ms
Loss rate: 0.27%

Run 5: Report of Copa — Data Link

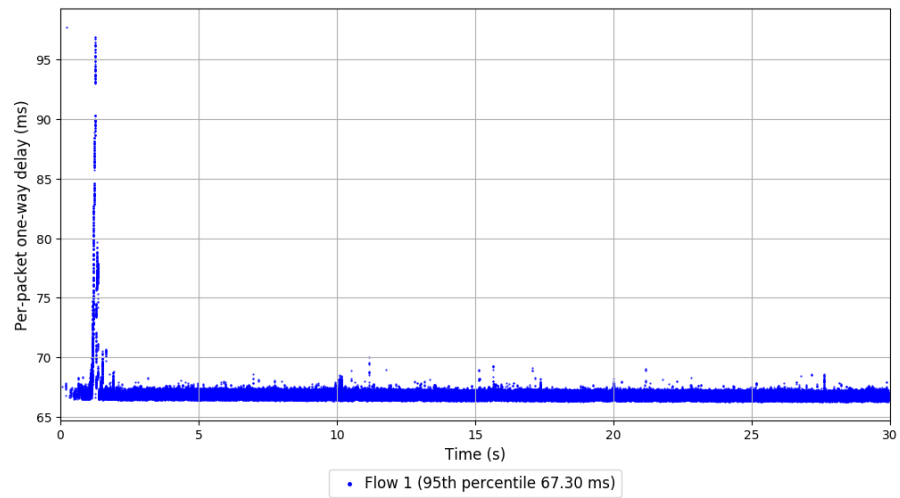
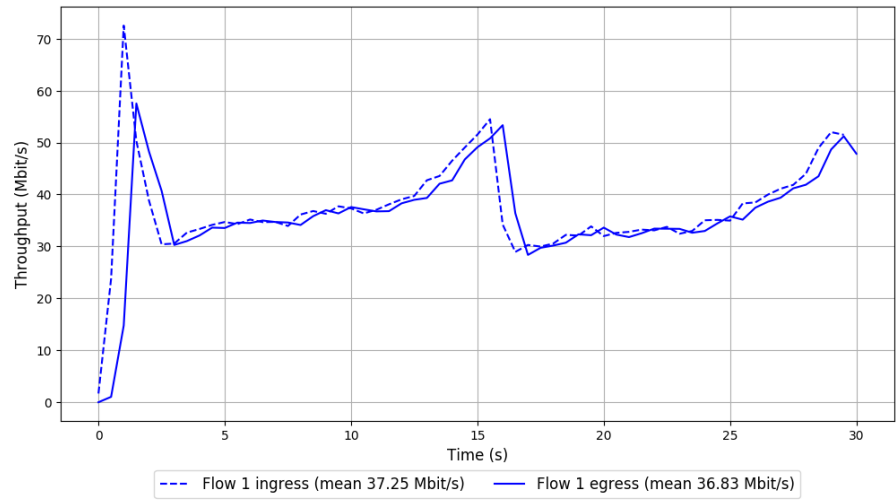


Run 1: Statistics of TCP Cubic

Start at: 2019-03-27 06:53:27
End at: 2019-03-27 06:53:57
Local clock offset: -0.923 ms
Remote clock offset: -12.04 ms

Below is generated by plot.py at 2019-03-27 08:37:53
Datalink statistics
-- Total of 1 flow:
Average throughput: 36.83 Mbit/s
95th percentile per-packet one-way delay: 67.297 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 36.83 Mbit/s
95th percentile per-packet one-way delay: 67.297 ms
Loss rate: 1.54%

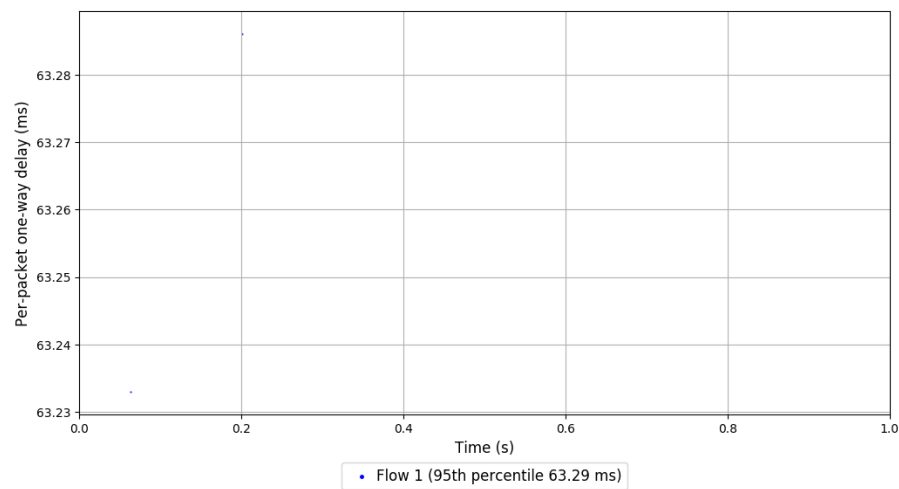
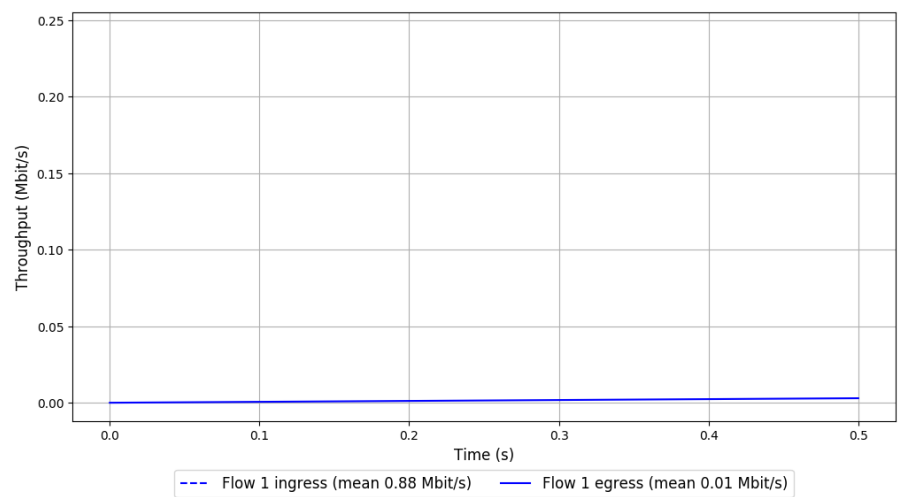
Run 1: Report of TCP Cubic — Data Link



Run 2: Statistics of TCP Cubic

Start at: 2019-03-27 07:19:15
End at: 2019-03-27 07:19:45
Local clock offset: -2.663 ms
Remote clock offset: -12.229 ms

Run 2: Report of TCP Cubic — Data Link



Run 3: Statistics of TCP Cubic

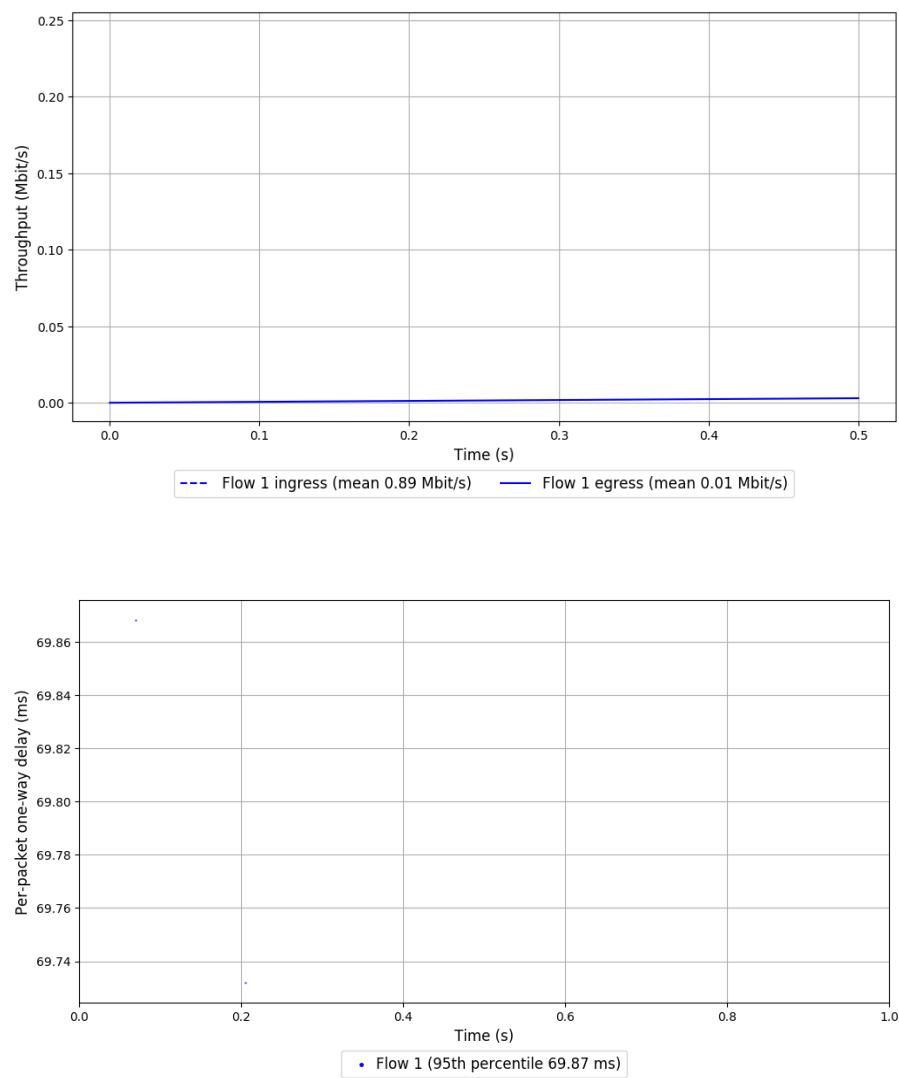
Start at: 2019-03-27 07:44:25

End at: 2019-03-27 07:44:55

Local clock offset: -5.911 ms

Remote clock offset: -17.165 ms

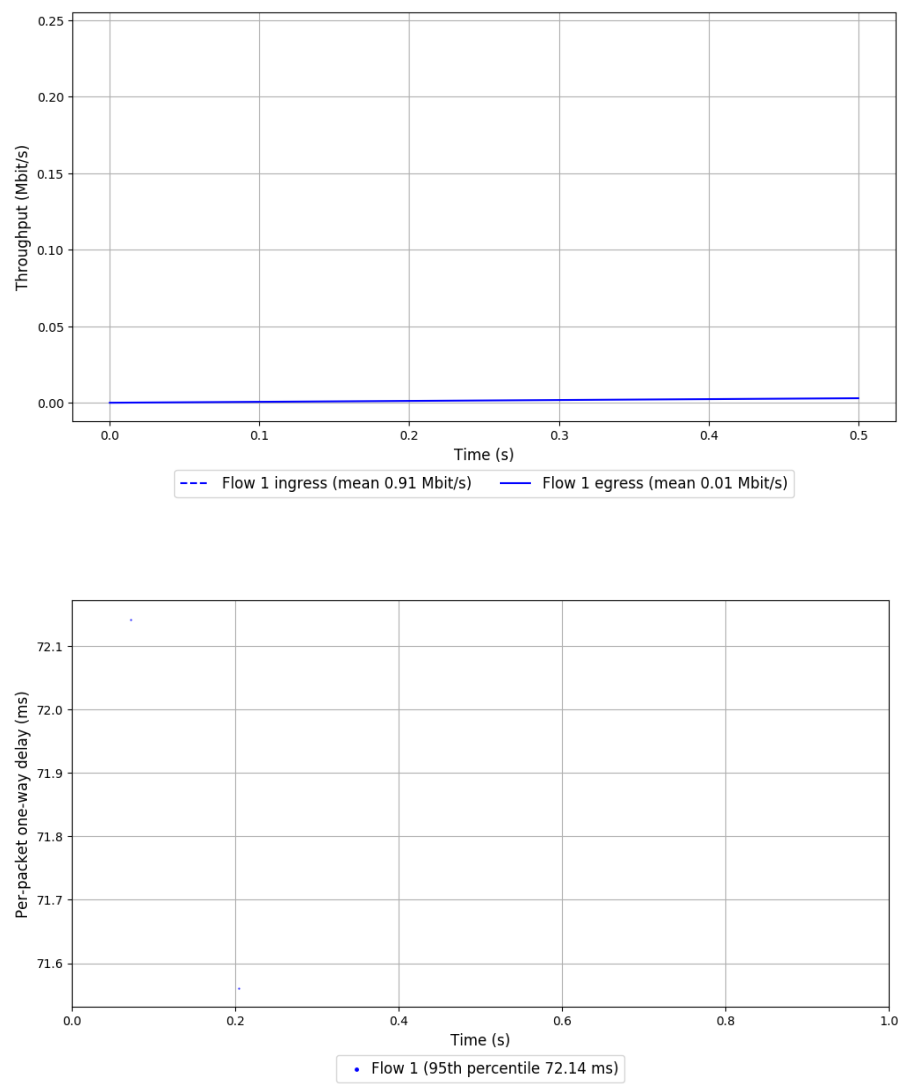
Run 3: Report of TCP Cubic — Data Link



Run 4: Statistics of TCP Cubic

Start at: 2019-03-27 08:09:25
End at: 2019-03-27 08:09:55
Local clock offset: -5.319 ms
Remote clock offset: -19.102 ms

Run 4: Report of TCP Cubic — Data Link



Run 5: Statistics of TCP Cubic

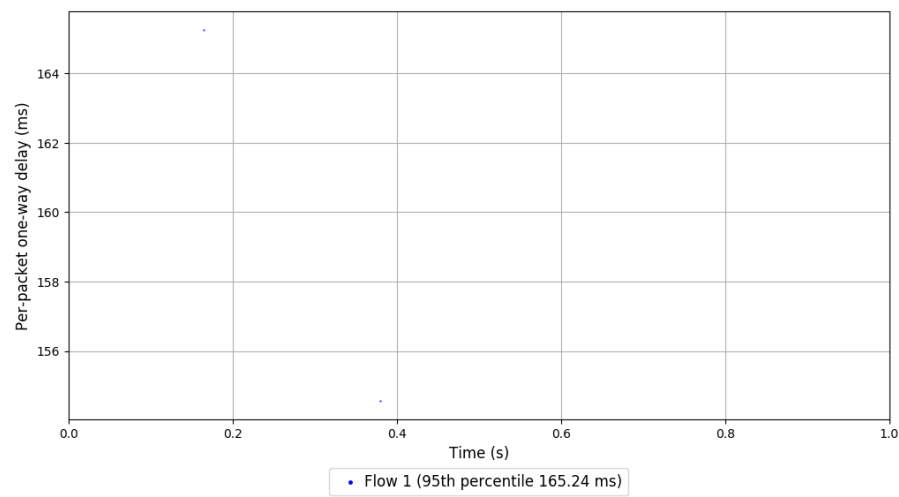
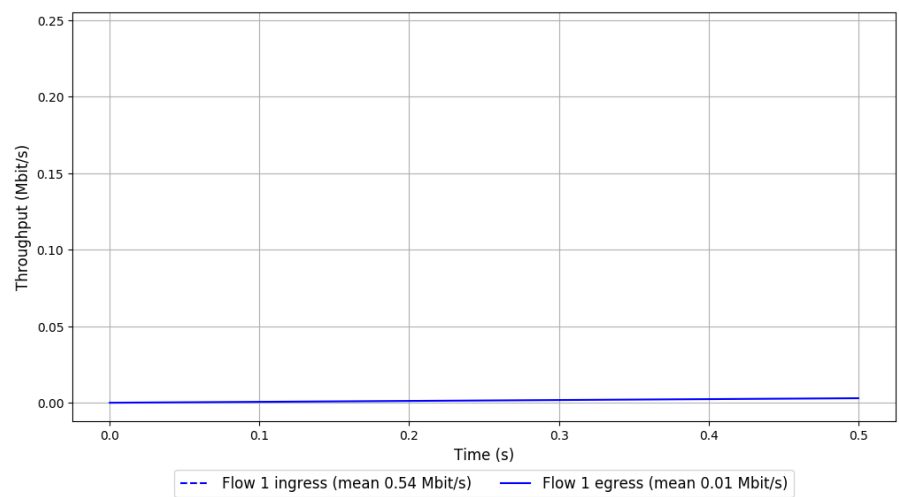
Start at: 2019-03-27 08:34:24

End at: 2019-03-27 08:34:54

Local clock offset: -1.071 ms

Remote clock offset: -7.987 ms

Run 5: Report of TCP Cubic — Data Link

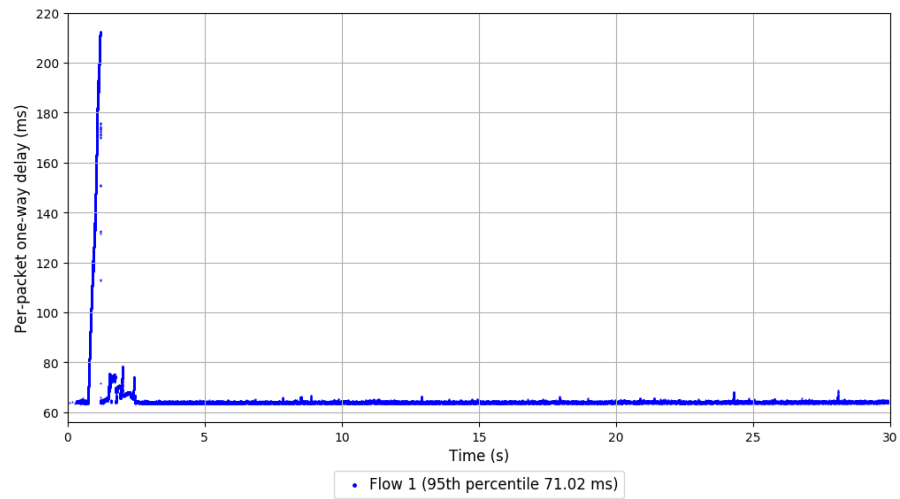
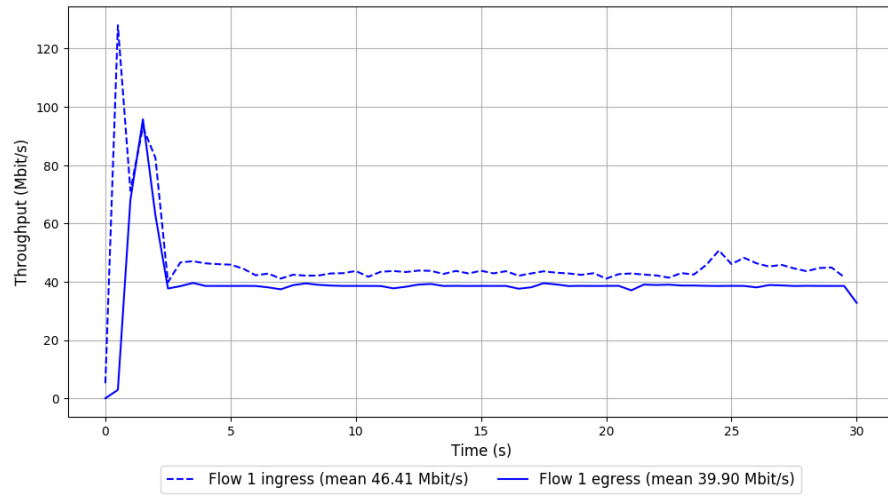


Run 1: Statistics of FillP

Start at: 2019-03-27 06:46:22
End at: 2019-03-27 06:46:52
Local clock offset: -0.012 ms
Remote clock offset: -6.903 ms

Below is generated by plot.py at 2019-03-27 08:37:58
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.90 Mbit/s
95th percentile per-packet one-way delay: 71.015 ms
Loss rate: 14.36%
-- Flow 1:
Average throughput: 39.90 Mbit/s
95th percentile per-packet one-way delay: 71.015 ms
Loss rate: 14.36%

Run 1: Report of FillP — Data Link

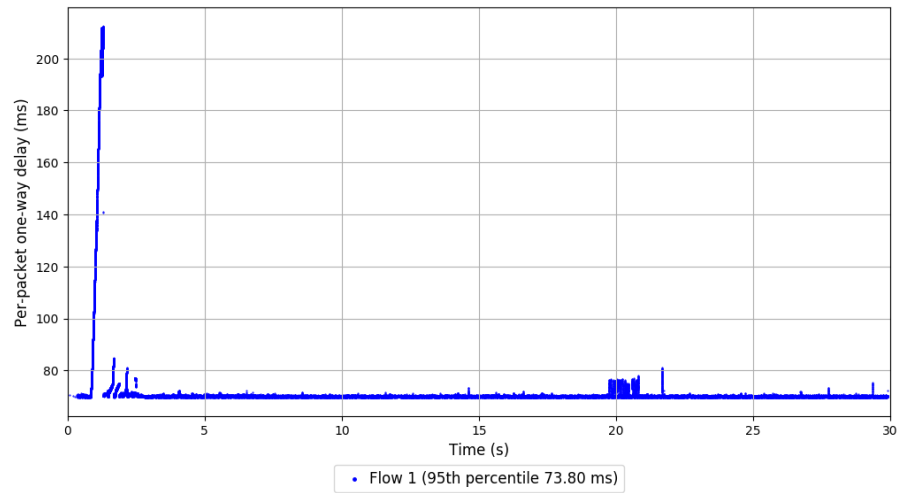
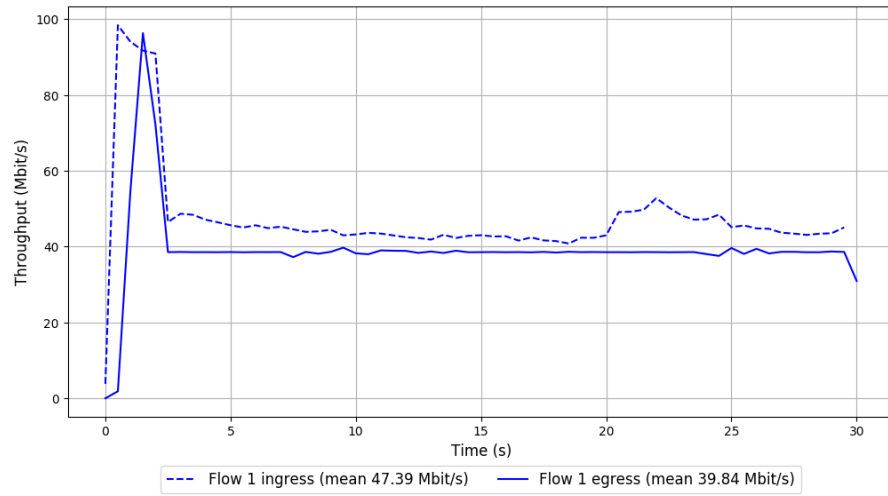


Run 2: Statistics of FillP

Start at: 2019-03-27 07:11:58
End at: 2019-03-27 07:12:28
Local clock offset: -1.652 ms
Remote clock offset: -18.612 ms

Below is generated by plot.py at 2019-03-27 08:37:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.84 Mbit/s
95th percentile per-packet one-way delay: 73.798 ms
Loss rate: 16.31%
-- Flow 1:
Average throughput: 39.84 Mbit/s
95th percentile per-packet one-way delay: 73.798 ms
Loss rate: 16.31%

Run 2: Report of FillP — Data Link

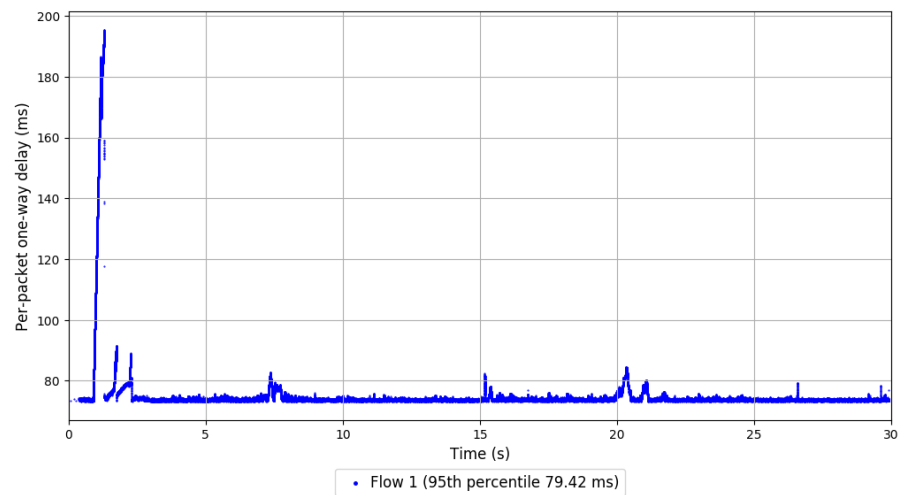
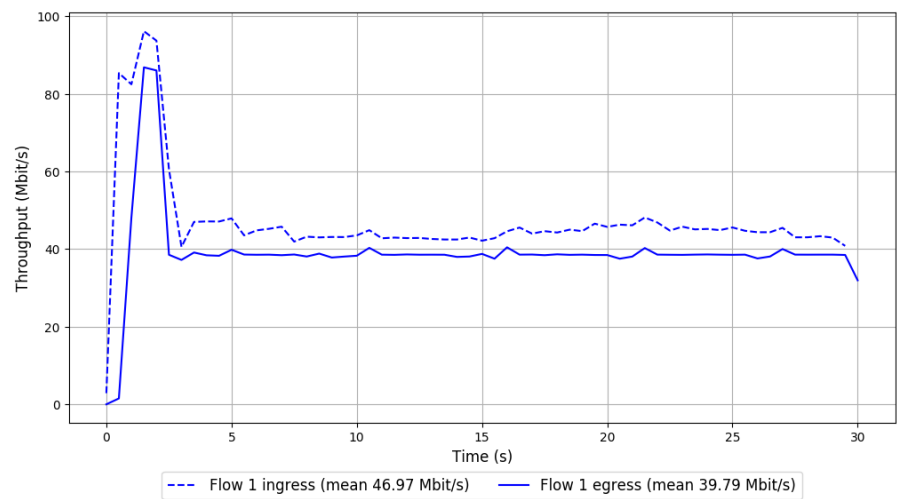


Run 3: Statistics of FillP

Start at: 2019-03-27 07:37:21
End at: 2019-03-27 07:37:51
Local clock offset: -5.442 ms
Remote clock offset: -21.991 ms

Below is generated by plot.py at 2019-03-27 08:37:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.79 Mbit/s
95th percentile per-packet one-way delay: 79.423 ms
Loss rate: 15.64%
-- Flow 1:
Average throughput: 39.79 Mbit/s
95th percentile per-packet one-way delay: 79.423 ms
Loss rate: 15.64%

Run 3: Report of FillP — Data Link

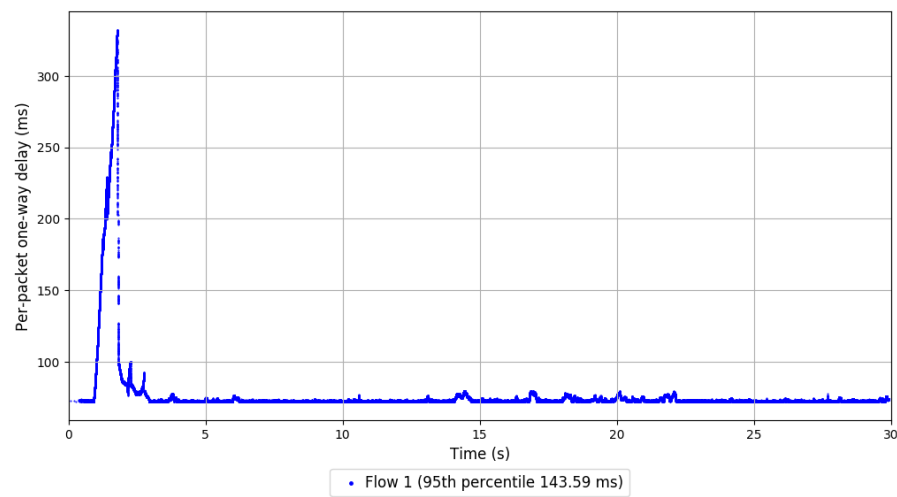
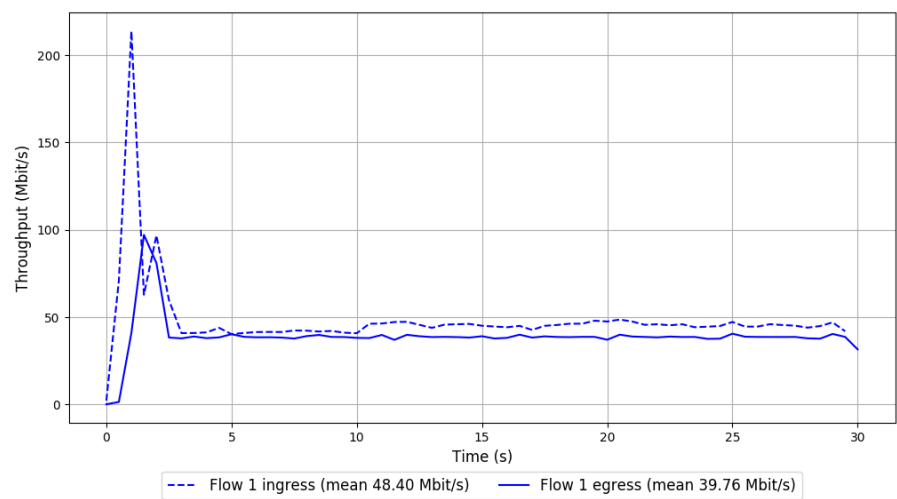


Run 4: Statistics of FillP

Start at: 2019-03-27 08:02:20
End at: 2019-03-27 08:02:50
Local clock offset: -5.474 ms
Remote clock offset: -20.315 ms

Below is generated by plot.py at 2019-03-27 08:38:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.76 Mbit/s
95th percentile per-packet one-way delay: 143.592 ms
Loss rate: 18.25%
-- Flow 1:
Average throughput: 39.76 Mbit/s
95th percentile per-packet one-way delay: 143.592 ms
Loss rate: 18.25%

Run 4: Report of FillP — Data Link

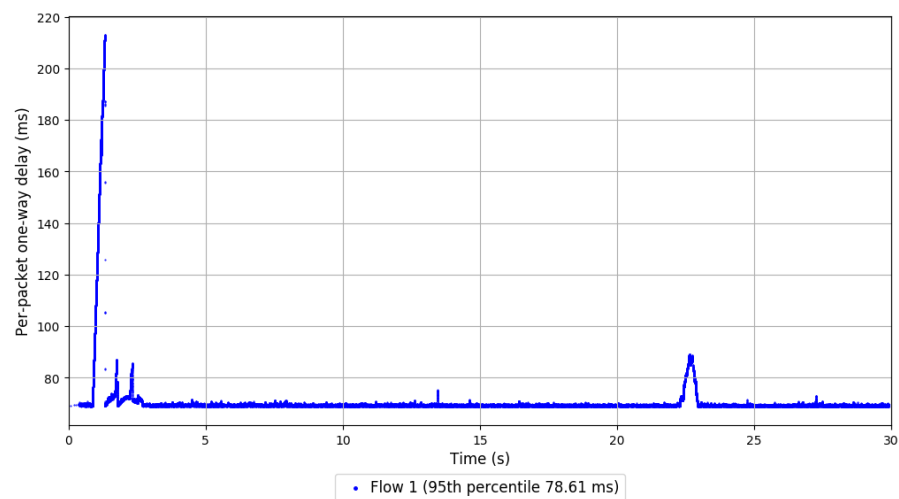
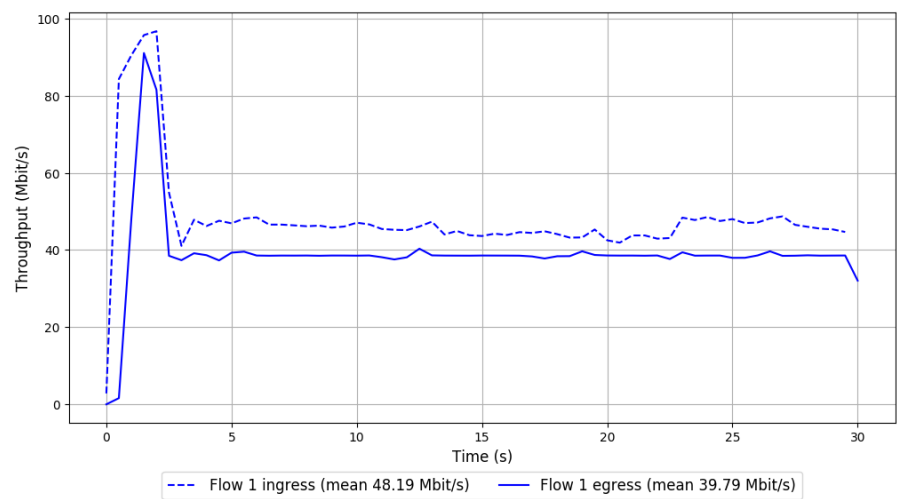


Run 5: Statistics of FillP

Start at: 2019-03-27 08:27:07
End at: 2019-03-27 08:27:37
Local clock offset: -2.105 ms
Remote clock offset: -17.352 ms

Below is generated by plot.py at 2019-03-27 08:38:00
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.79 Mbit/s
95th percentile per-packet one-way delay: 78.605 ms
Loss rate: 17.82%
-- Flow 1:
Average throughput: 39.79 Mbit/s
95th percentile per-packet one-way delay: 78.605 ms
Loss rate: 17.82%

Run 5: Report of FillP — Data Link



Run 1: Statistics of FillP-Sheep

Start at: 2019-03-27 06:34:32

End at: 2019-03-27 06:35:02

Local clock offset: -0.676 ms

Remote clock offset: -12.65 ms

Below is generated by plot.py at 2019-03-27 08:38:00

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.81 Mbit/s

95th percentile per-packet one-way delay: 70.417 ms

Loss rate: 9.94%

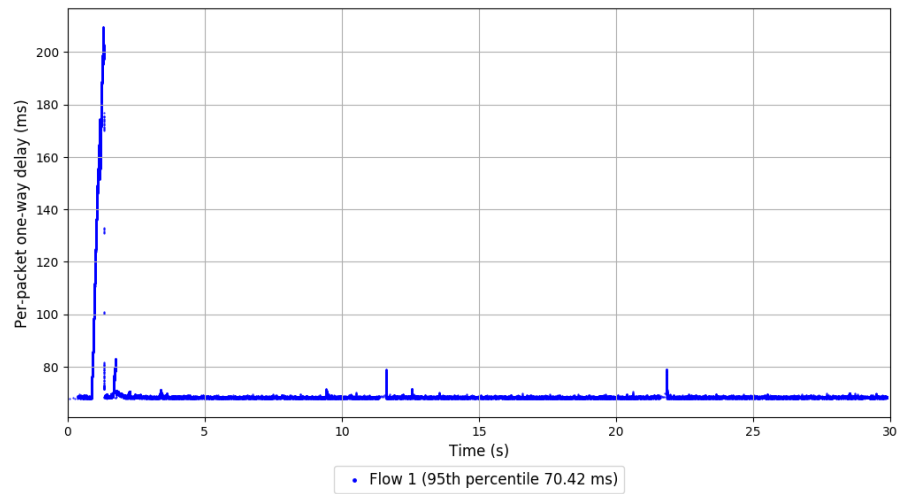
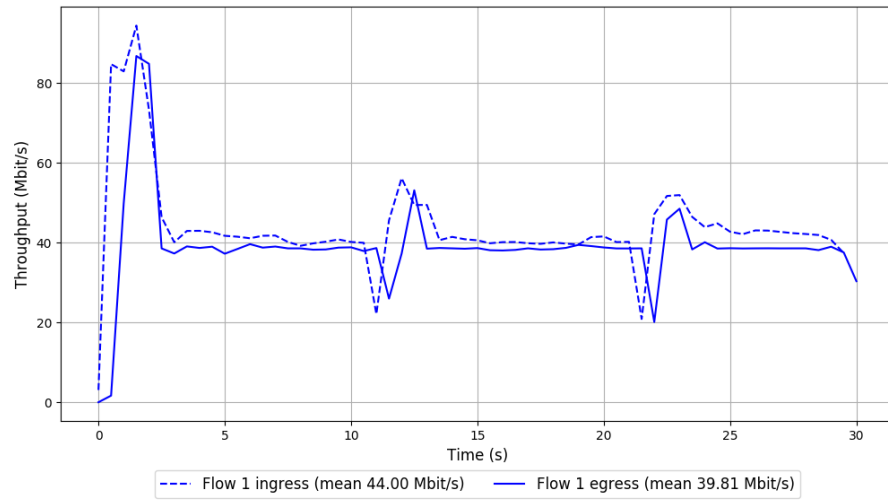
-- Flow 1:

Average throughput: 39.81 Mbit/s

95th percentile per-packet one-way delay: 70.417 ms

Loss rate: 9.94%

Run 1: Report of FillP-Sheep — Data Link

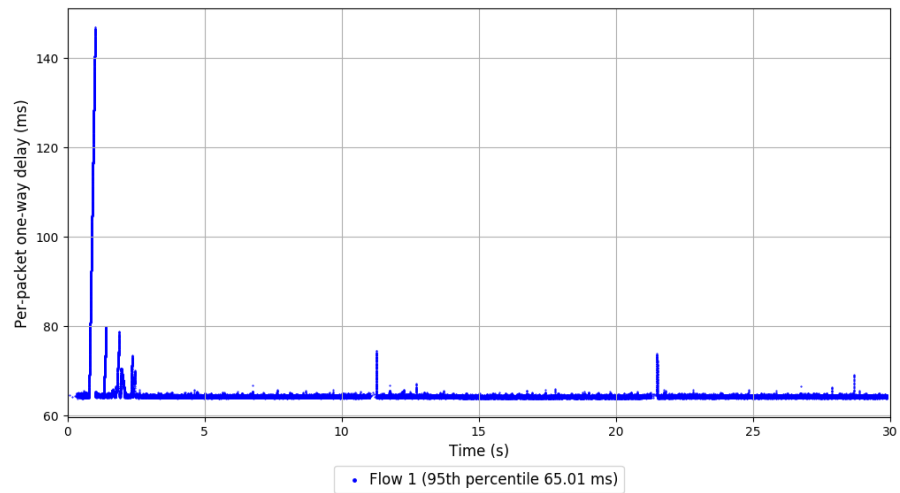
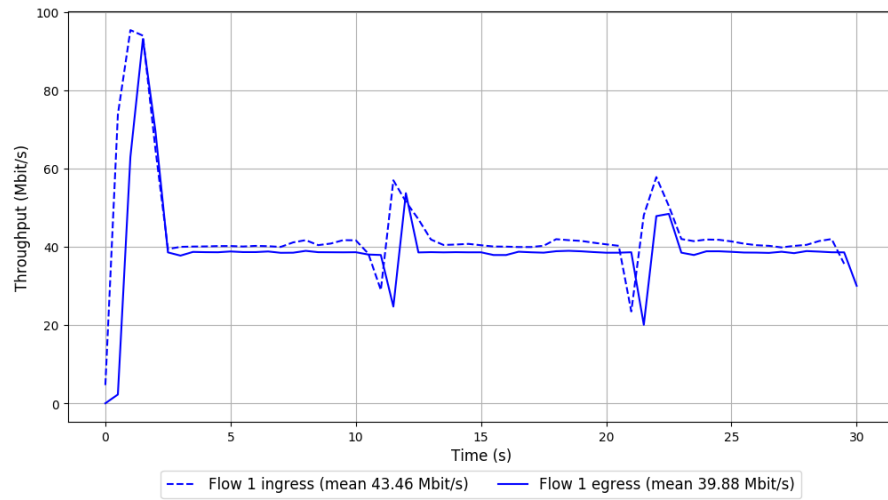


Run 2: Statistics of FillP-Sheep

Start at: 2019-03-27 06:59:20
End at: 2019-03-27 06:59:50
Local clock offset: -1.282 ms
Remote clock offset: -11.307 ms

Below is generated by plot.py at 2019-03-27 08:38:14
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.88 Mbit/s
95th percentile per-packet one-way delay: 65.012 ms
Loss rate: 8.59%
-- Flow 1:
Average throughput: 39.88 Mbit/s
95th percentile per-packet one-way delay: 65.012 ms
Loss rate: 8.59%

Run 2: Report of FillP-Sheep — Data Link

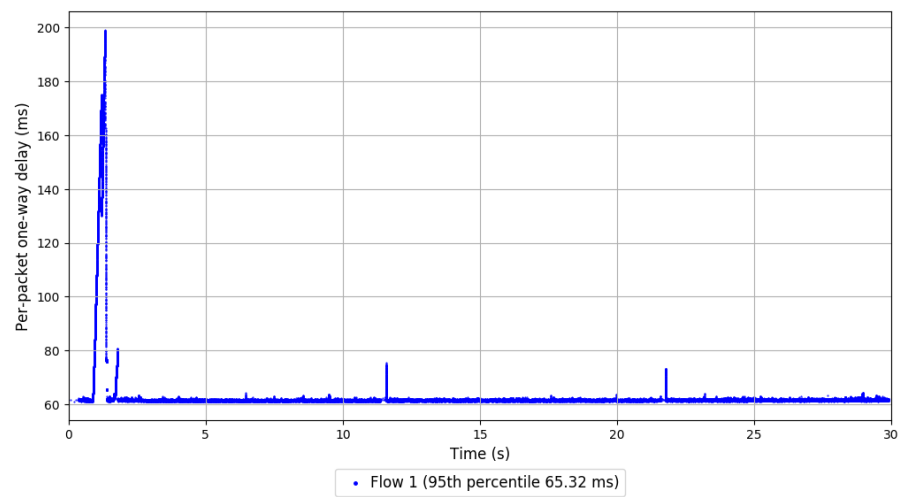
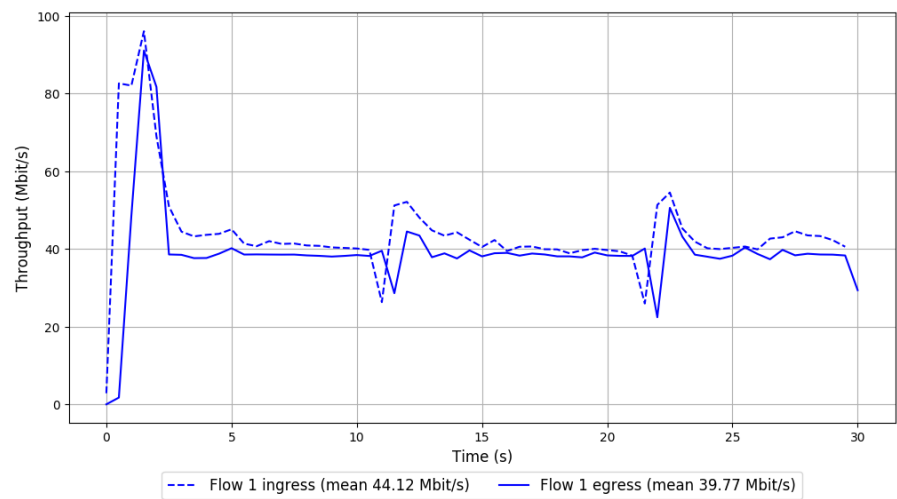


Run 3: Statistics of FillP-Sheep

Start at: 2019-03-27 07:25:05
End at: 2019-03-27 07:25:35
Local clock offset: -3.994 ms
Remote clock offset: -10.512 ms

Below is generated by plot.py at 2019-03-27 08:38:29
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.77 Mbit/s
95th percentile per-packet one-way delay: 65.324 ms
Loss rate: 10.27%
-- Flow 1:
Average throughput: 39.77 Mbit/s
95th percentile per-packet one-way delay: 65.324 ms
Loss rate: 10.27%

Run 3: Report of FillP-Sheep — Data Link

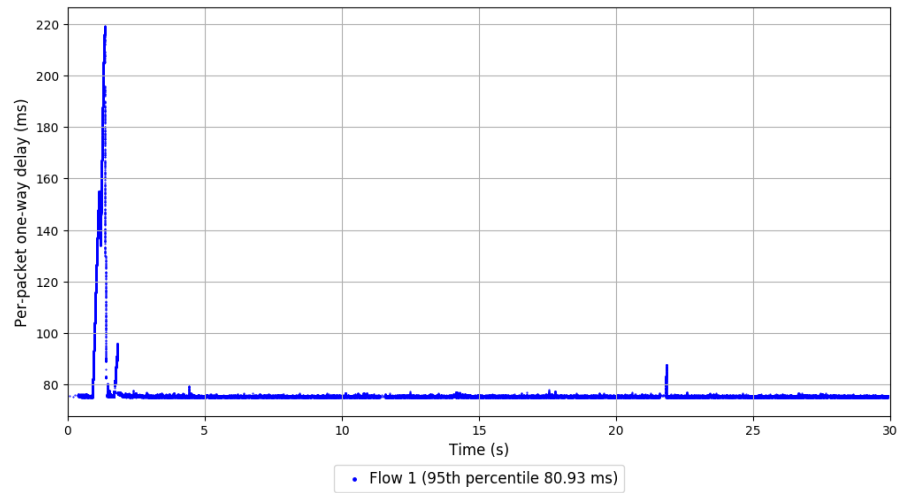
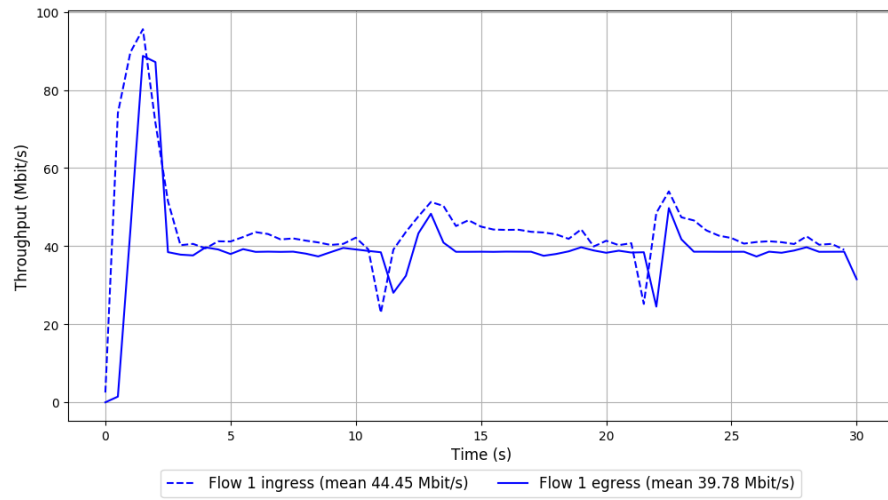


Run 4: Statistics of FillP-Sheep

Start at: 2019-03-27 07:50:15
End at: 2019-03-27 07:50:45
Local clock offset: -5.627 ms
Remote clock offset: -23.139 ms

Below is generated by plot.py at 2019-03-27 08:38:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.78 Mbit/s
95th percentile per-packet one-way delay: 80.927 ms
Loss rate: 10.93%
-- Flow 1:
Average throughput: 39.78 Mbit/s
95th percentile per-packet one-way delay: 80.927 ms
Loss rate: 10.93%

Run 4: Report of FillP-Sheep — Data Link

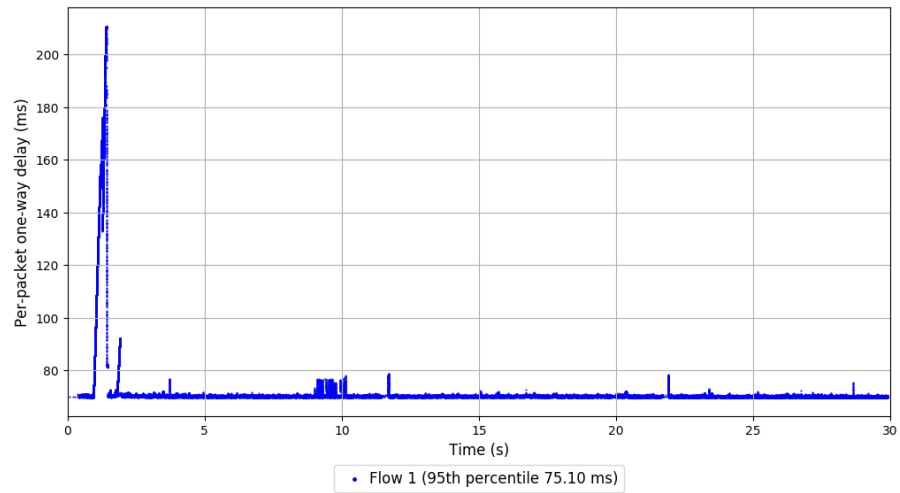
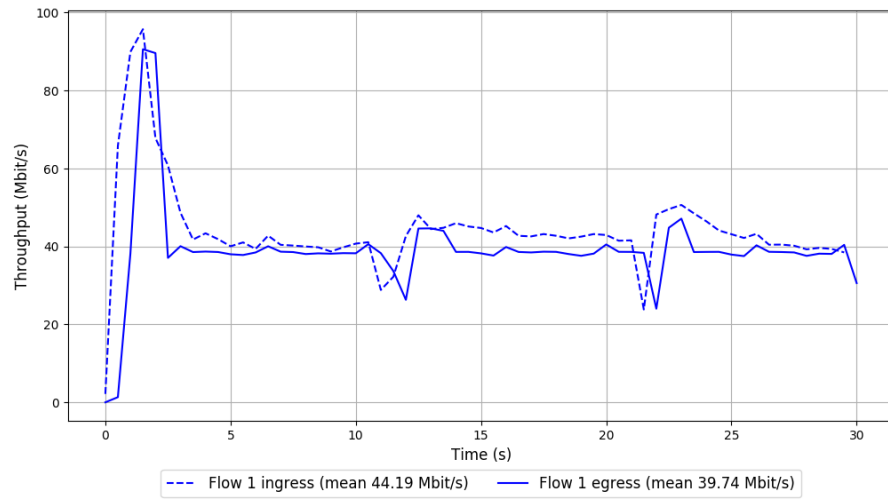


Run 5: Statistics of FillP-Sheep

Start at: 2019-03-27 08:15:18
End at: 2019-03-27 08:15:48
Local clock offset: -5.695 ms
Remote clock offset: -17.739 ms

Below is generated by plot.py at 2019-03-27 08:38:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.74 Mbit/s
95th percentile per-packet one-way delay: 75.101 ms
Loss rate: 10.48%
-- Flow 1:
Average throughput: 39.74 Mbit/s
95th percentile per-packet one-way delay: 75.101 ms
Loss rate: 10.48%

Run 5: Report of FillP-Sheep — Data Link

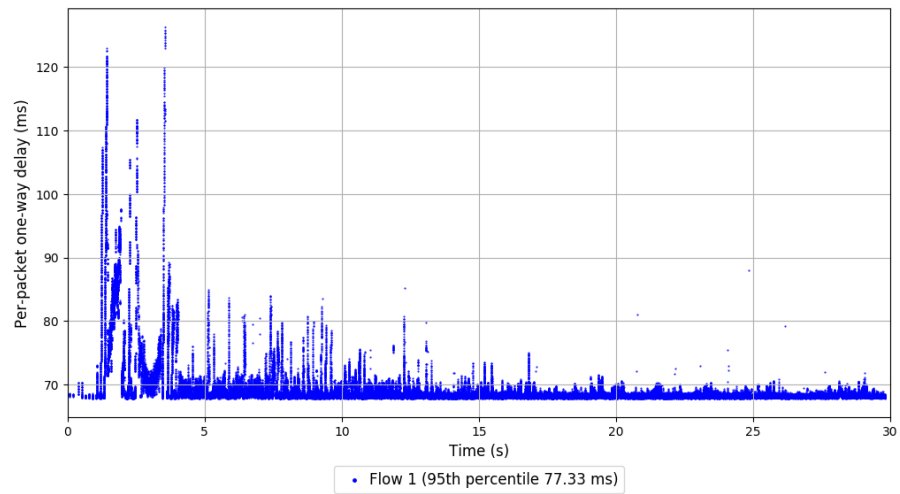
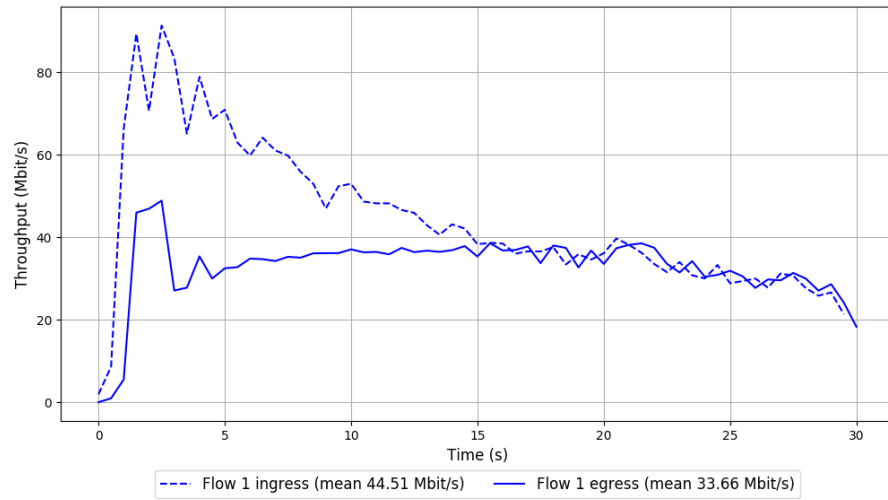


Run 1: Statistics of Indigo

Start at: 2019-03-27 06:38:09
End at: 2019-03-27 06:38:39
Local clock offset: -0.325 ms
Remote clock offset: -12.122 ms

Below is generated by plot.py at 2019-03-27 08:38:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 33.66 Mbit/s
95th percentile per-packet one-way delay: 77.328 ms
Loss rate: 24.72%
-- Flow 1:
Average throughput: 33.66 Mbit/s
95th percentile per-packet one-way delay: 77.328 ms
Loss rate: 24.72%

Run 1: Report of Indigo — Data Link

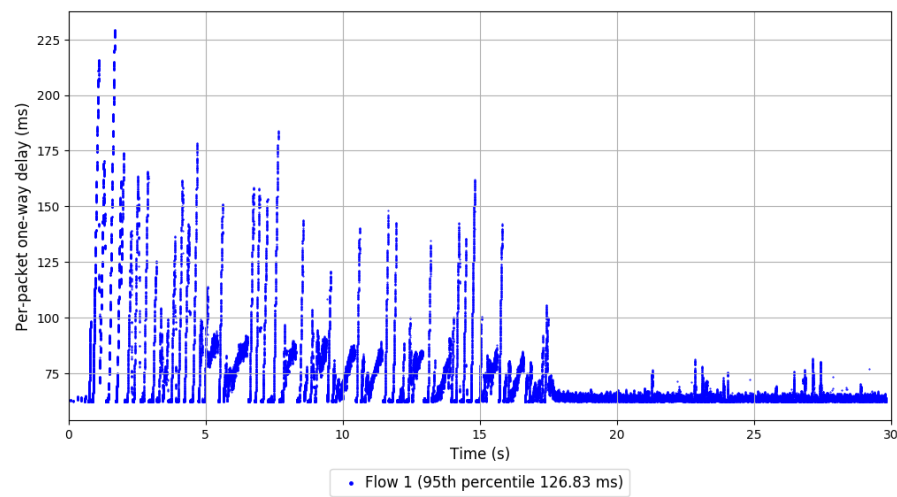
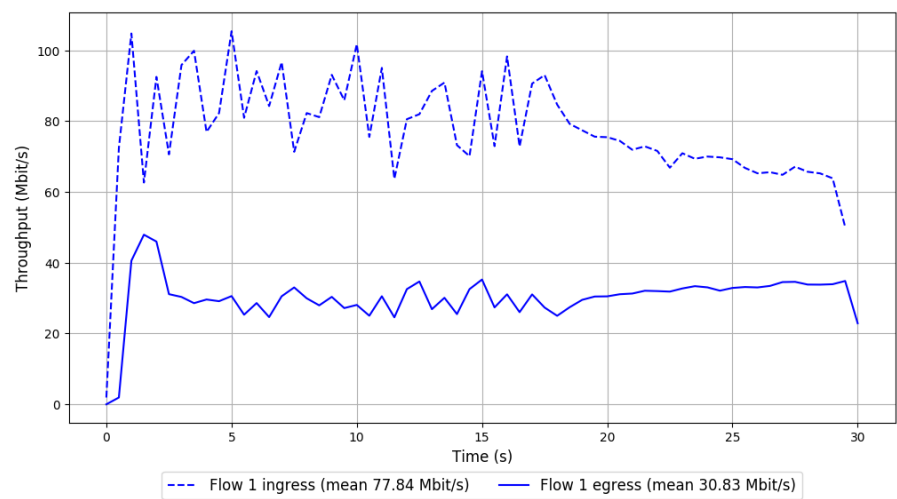


Run 2: Statistics of Indigo

Start at: 2019-03-27 07:03:20
End at: 2019-03-27 07:03:50
Local clock offset: -1.433 ms
Remote clock offset: -10.479 ms

Below is generated by plot.py at 2019-03-27 08:38:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 30.83 Mbit/s
95th percentile per-packet one-way delay: 126.829 ms
Loss rate: 60.55%
-- Flow 1:
Average throughput: 30.83 Mbit/s
95th percentile per-packet one-way delay: 126.829 ms
Loss rate: 60.55%

Run 2: Report of Indigo — Data Link



Run 3: Statistics of Indigo

Start at: 2019-03-27 07:28:55

End at: 2019-03-27 07:29:25

Local clock offset: -4.434 ms

Remote clock offset: -12.4 ms

Below is generated by plot.py at 2019-03-27 08:38:34

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.02 Mbit/s

95th percentile per-packet one-way delay: 66.762 ms

Loss rate: 6.91%

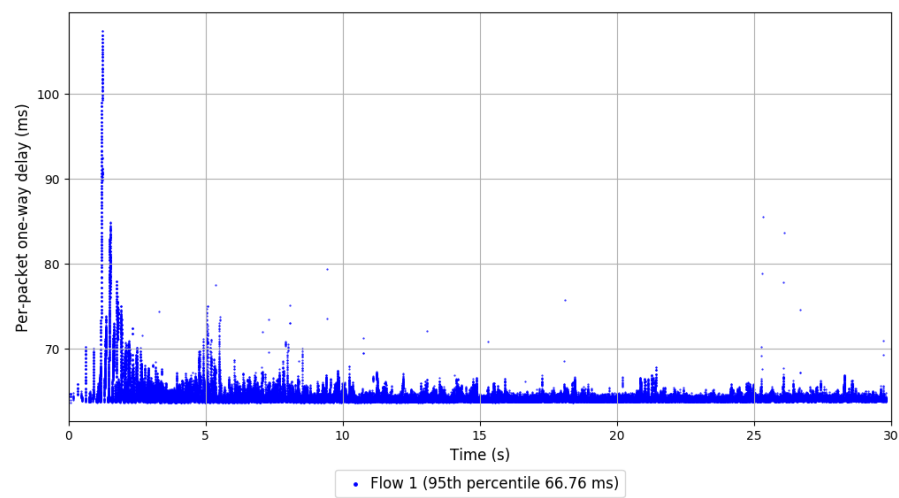
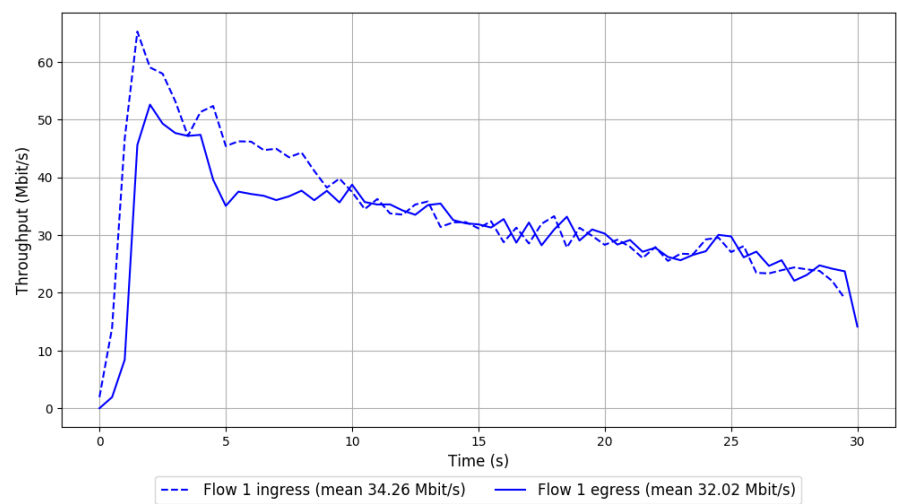
-- Flow 1:

Average throughput: 32.02 Mbit/s

95th percentile per-packet one-way delay: 66.762 ms

Loss rate: 6.91%

Run 3: Report of Indigo — Data Link

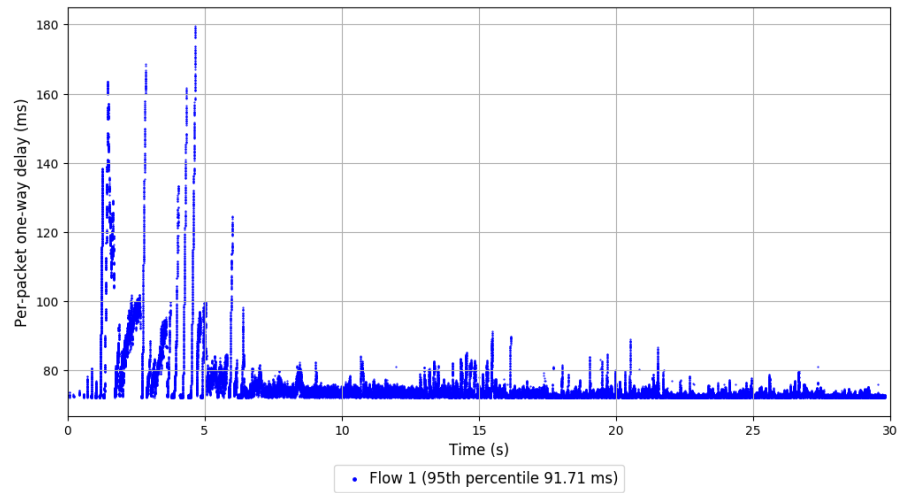
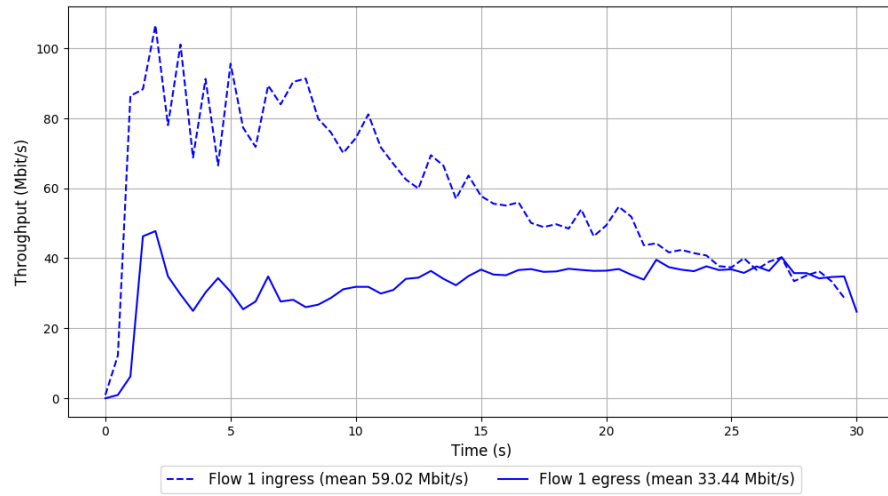


Run 4: Statistics of Indigo

Start at: 2019-03-27 07:54:01
End at: 2019-03-27 07:54:31
Local clock offset: -5.427 ms
Remote clock offset: -20.561 ms

Below is generated by plot.py at 2019-03-27 08:38:34
Datalink statistics
-- Total of 1 flow:
Average throughput: 33.44 Mbit/s
95th percentile per-packet one-way delay: 91.713 ms
Loss rate: 43.61%
-- Flow 1:
Average throughput: 33.44 Mbit/s
95th percentile per-packet one-way delay: 91.713 ms
Loss rate: 43.61%

Run 4: Report of Indigo — Data Link

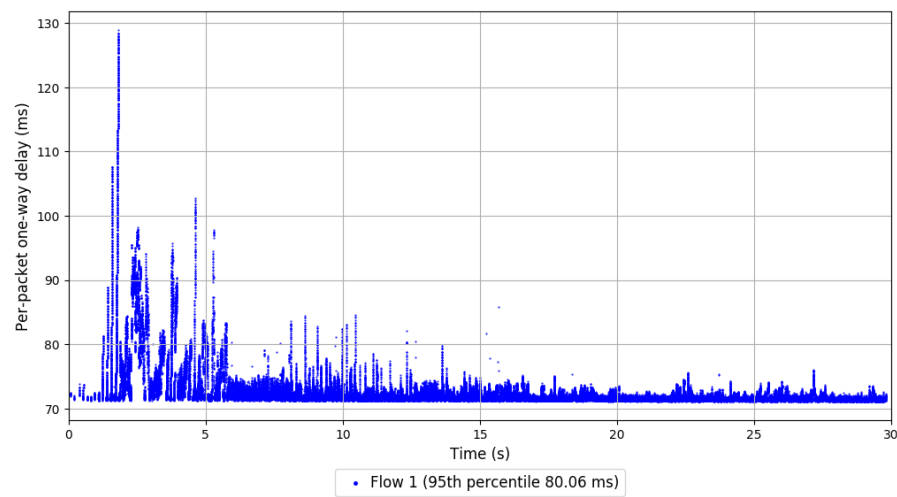
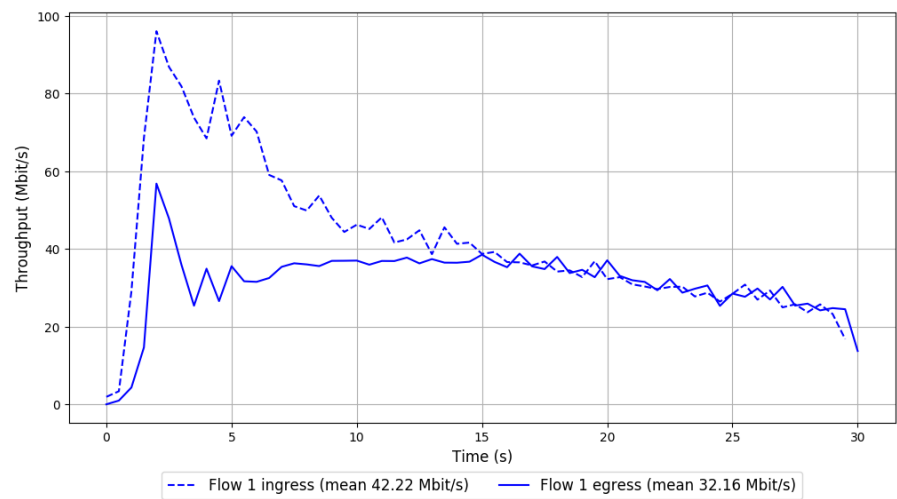


Run 5: Statistics of Indigo

Start at: 2019-03-27 08:18:52
End at: 2019-03-27 08:19:22
Local clock offset: -4.23 ms
Remote clock offset: -19.448 ms

Below is generated by plot.py at 2019-03-27 08:38:42
Datalink statistics
-- Total of 1 flow:
Average throughput: 32.16 Mbit/s
95th percentile per-packet one-way delay: 80.063 ms
Loss rate: 24.14%
-- Flow 1:
Average throughput: 32.16 Mbit/s
95th percentile per-packet one-way delay: 80.063 ms
Loss rate: 24.14%

Run 5: Report of Indigo — Data Link

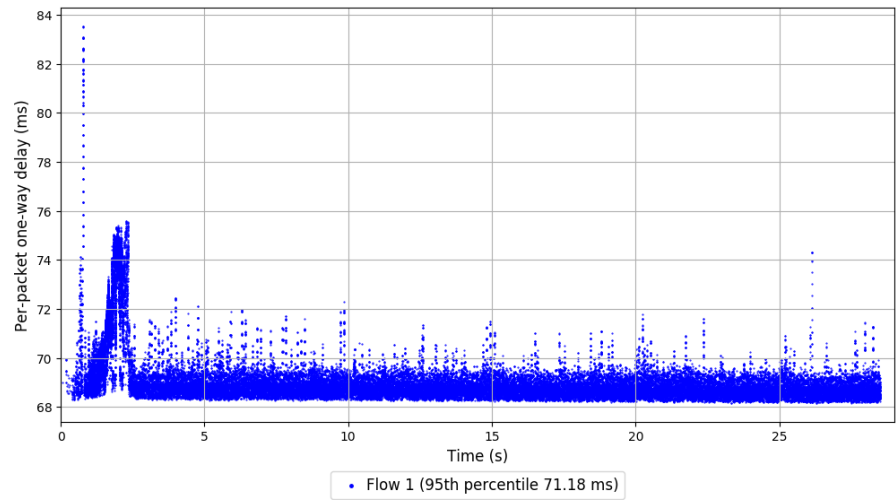
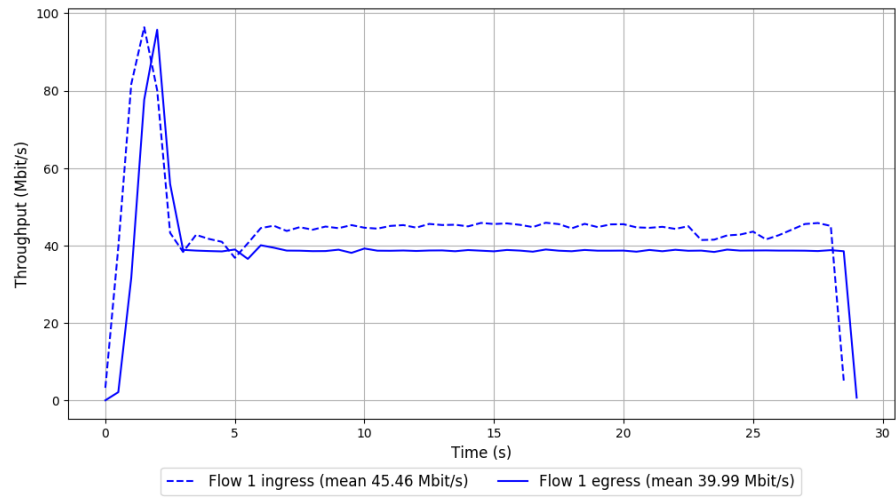


Run 1: Statistics of Indigo-MusesC3

Start at: 2019-03-27 06:52:16
End at: 2019-03-27 06:52:46
Local clock offset: -0.805 ms
Remote clock offset: -13.251 ms

Below is generated by plot.py at 2019-03-27 08:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.99 Mbit/s
95th percentile per-packet one-way delay: 71.177 ms
Loss rate: 12.40%
-- Flow 1:
Average throughput: 39.99 Mbit/s
95th percentile per-packet one-way delay: 71.177 ms
Loss rate: 12.40%

Run 1: Report of Indigo-MusesC3 — Data Link

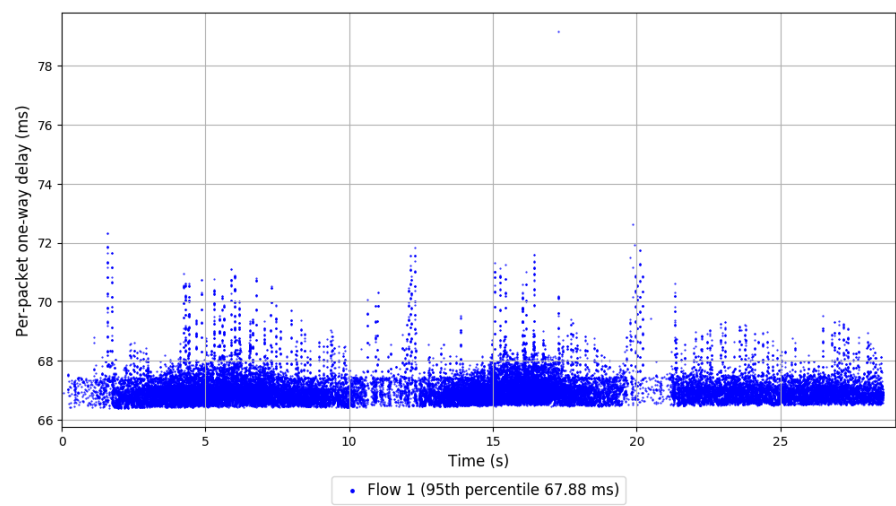
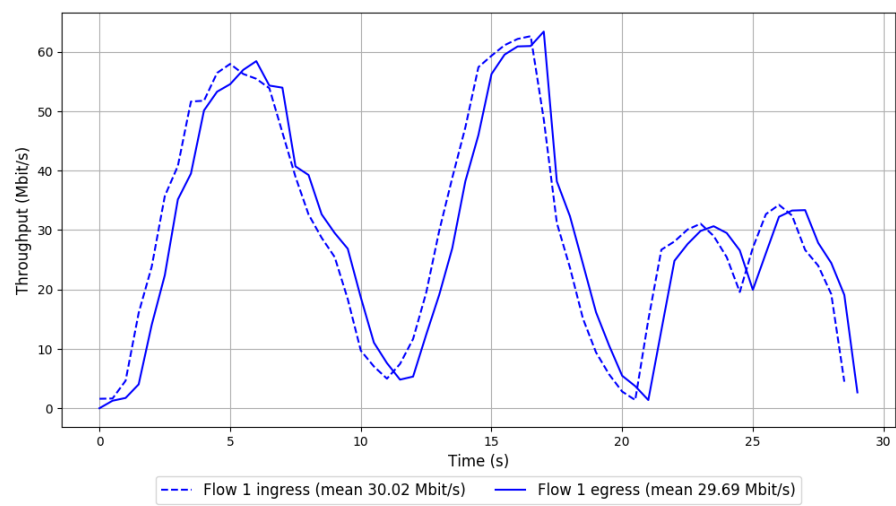


Run 2: Statistics of Indigo-MusesC3

Start at: 2019-03-27 07:18:04
End at: 2019-03-27 07:18:34
Local clock offset: -2.344 ms
Remote clock offset: -15.18 ms

Below is generated by plot.py at 2019-03-27 08:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 29.69 Mbit/s
95th percentile per-packet one-way delay: 67.878 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 29.69 Mbit/s
95th percentile per-packet one-way delay: 67.878 ms
Loss rate: 1.59%

Run 2: Report of Indigo-MusesC3 — Data Link

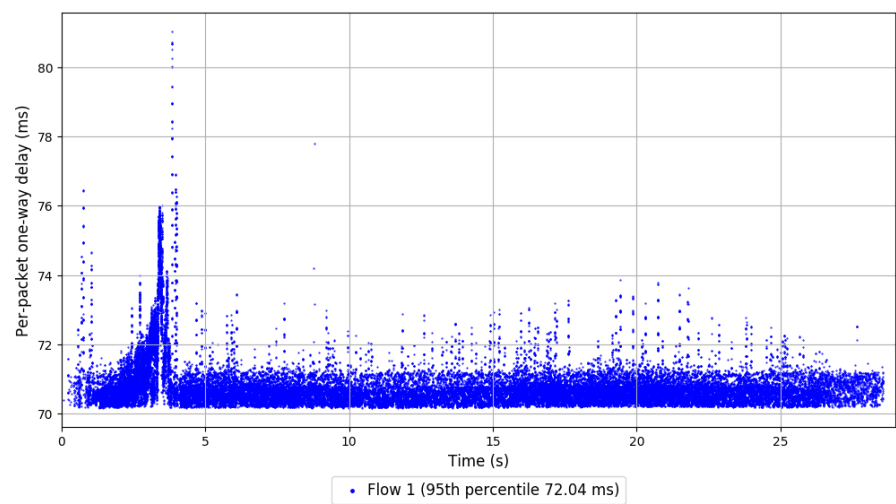
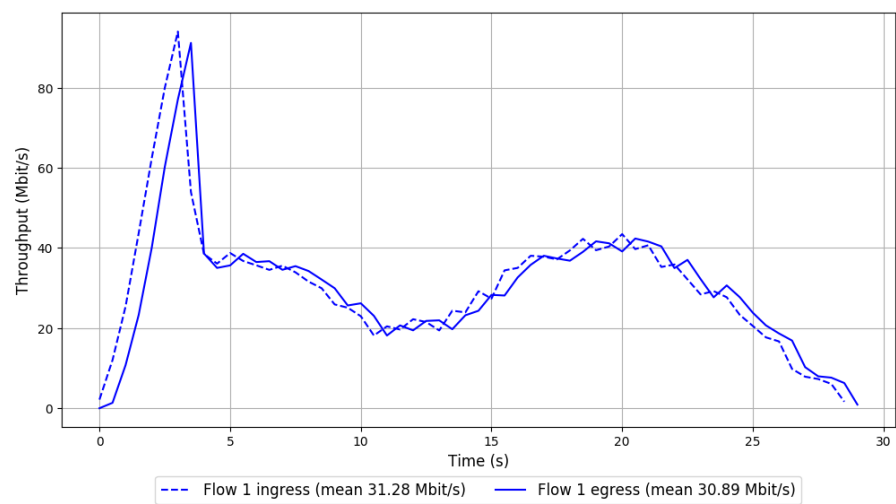


Run 3: Statistics of Indigo-MusesC3

Start at: 2019-03-27 07:43:15
End at: 2019-03-27 07:43:45
Local clock offset: -5.98 ms
Remote clock offset: -18.495 ms

Below is generated by plot.py at 2019-03-27 08:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 30.89 Mbit/s
95th percentile per-packet one-way delay: 72.038 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 30.89 Mbit/s
95th percentile per-packet one-way delay: 72.038 ms
Loss rate: 1.74%

Run 3: Report of Indigo-MusesC3 — Data Link

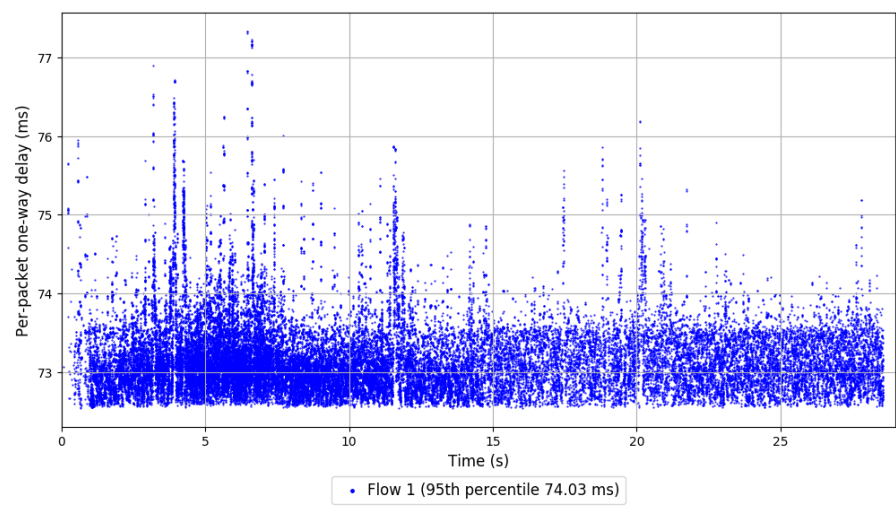
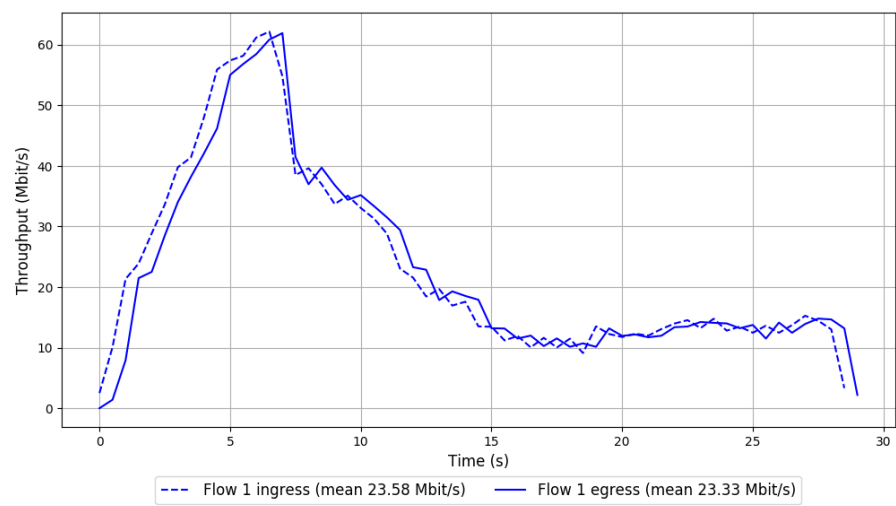


Run 4: Statistics of Indigo-MusesC3

Start at: 2019-03-27 08:08:14
End at: 2019-03-27 08:08:45
Local clock offset: -5.401 ms
Remote clock offset: -20.166 ms

Below is generated by plot.py at 2019-03-27 08:38:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 23.33 Mbit/s
95th percentile per-packet one-way delay: 74.027 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 23.33 Mbit/s
95th percentile per-packet one-way delay: 74.027 ms
Loss rate: 1.57%

Run 4: Report of Indigo-MusesC3 — Data Link

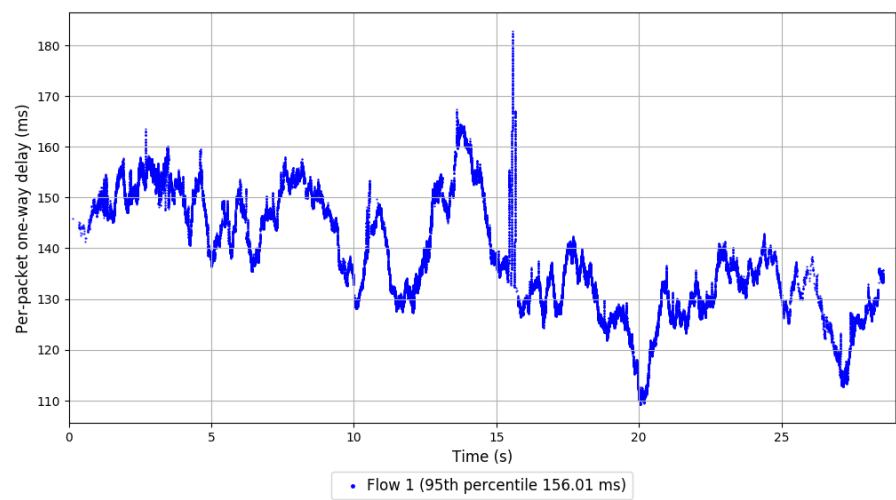
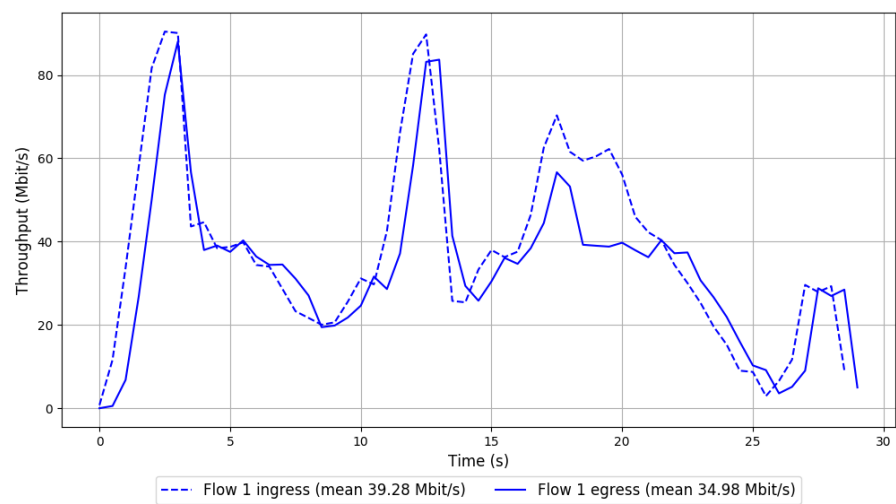


Run 5: Statistics of Indigo-MusesC3

Start at: 2019-03-27 08:33:11
End at: 2019-03-27 08:33:41
Local clock offset: -1.165 ms
Remote clock offset: -12.275 ms

Below is generated by plot.py at 2019-03-27 08:38:59
Datalink statistics
-- Total of 1 flow:
Average throughput: 34.98 Mbit/s
95th percentile per-packet one-way delay: 156.008 ms
Loss rate: 11.60%
-- Flow 1:
Average throughput: 34.98 Mbit/s
95th percentile per-packet one-way delay: 156.008 ms
Loss rate: 11.60%

Run 5: Report of Indigo-MusesC3 — Data Link

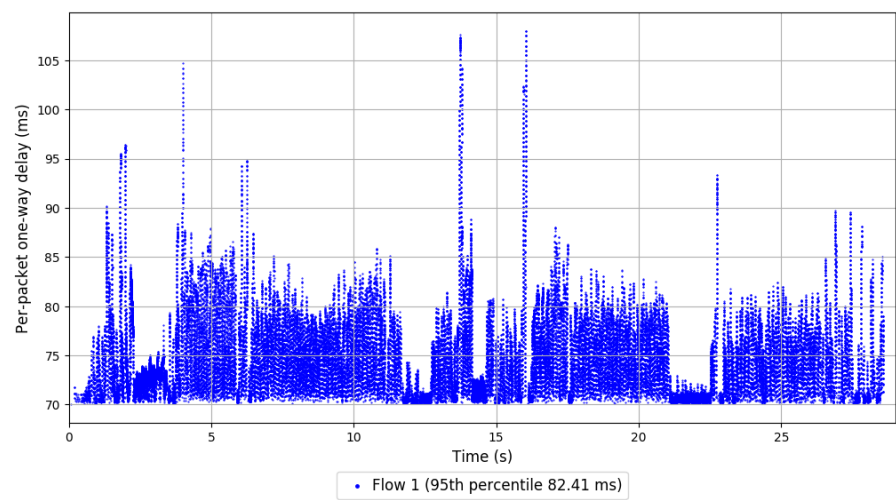
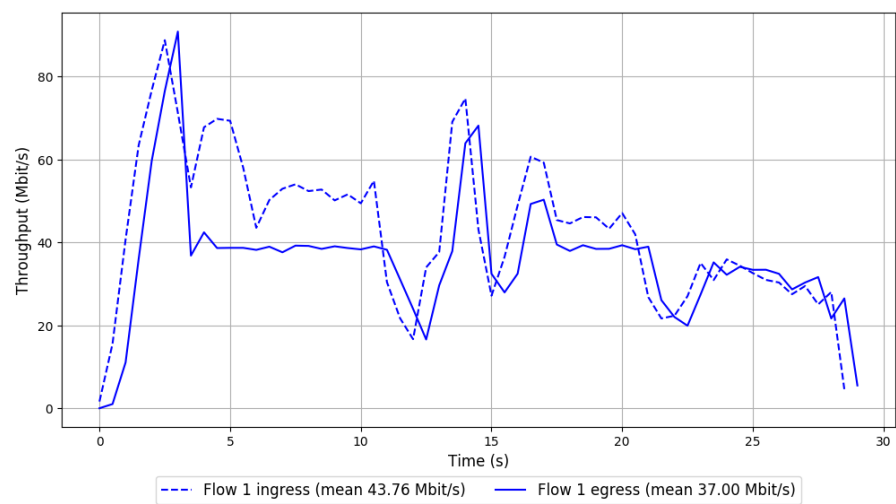


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-03-27 06:36:56
End at: 2019-03-27 06:37:26
Local clock offset: -0.32 ms
Remote clock offset: -14.354 ms

Below is generated by plot.py at 2019-03-27 08:39:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 37.00 Mbit/s
95th percentile per-packet one-way delay: 82.408 ms
Loss rate: 15.78%
-- Flow 1:
Average throughput: 37.00 Mbit/s
95th percentile per-packet one-way delay: 82.408 ms
Loss rate: 15.78%

Run 1: Report of Indigo-MusesC5 — Data Link

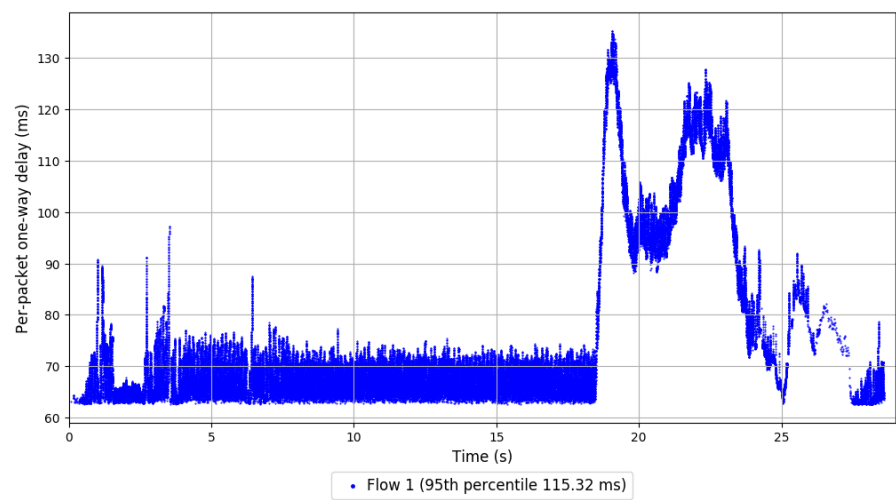
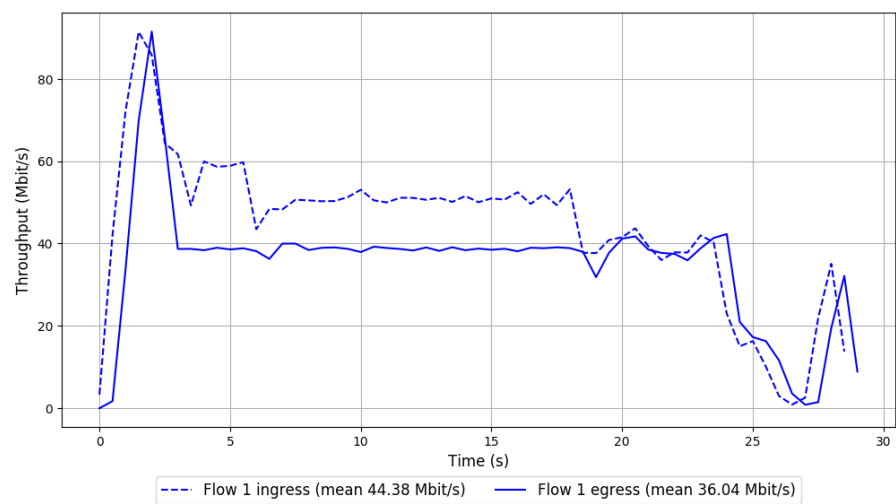


Run 2: Statistics of Indigo-MusesC5

Start at: 2019-03-27 07:01:42
End at: 2019-03-27 07:02:12
Local clock offset: -1.343 ms
Remote clock offset: -10.325 ms

Below is generated by plot.py at 2019-03-27 08:39:05
Datalink statistics
-- Total of 1 flow:
Average throughput: 36.04 Mbit/s
95th percentile per-packet one-way delay: 115.318 ms
Loss rate: 19.14%
-- Flow 1:
Average throughput: 36.04 Mbit/s
95th percentile per-packet one-way delay: 115.318 ms
Loss rate: 19.14%

Run 2: Report of Indigo-MusesC5 — Data Link

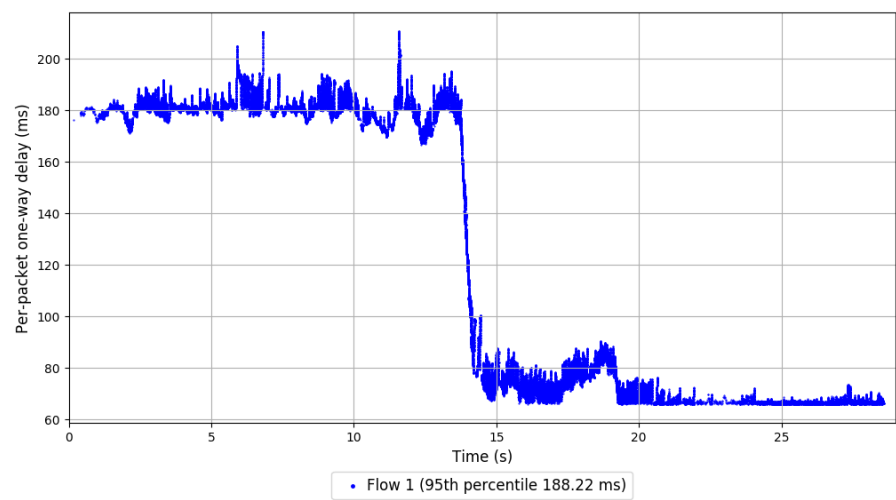
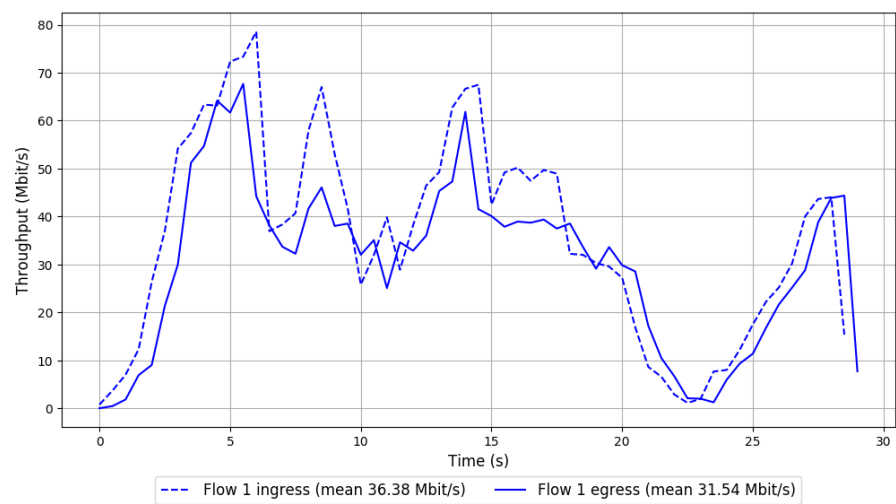


Run 3: Statistics of Indigo-MusesC5

Start at: 2019-03-27 07:27:42
End at: 2019-03-27 07:28:12
Local clock offset: -4.398 ms
Remote clock offset: -14.919 ms

Below is generated by plot.py at 2019-03-27 08:39:09
Datalink statistics
-- Total of 1 flow:
Average throughput: 31.54 Mbit/s
95th percentile per-packet one-way delay: 188.218 ms
Loss rate: 14.05%
-- Flow 1:
Average throughput: 31.54 Mbit/s
95th percentile per-packet one-way delay: 188.218 ms
Loss rate: 14.05%

Run 3: Report of Indigo-MusesC5 — Data Link



Run 4: Statistics of Indigo-MusesC5

Start at: 2019-03-27 07:52:49

End at: 2019-03-27 07:53:19

Local clock offset: -5.468 ms

Remote clock offset: -16.752 ms

Below is generated by plot.py at 2019-03-27 08:39:12

Datalink statistics

-- Total of 1 flow:

Average throughput: 31.14 Mbit/s

95th percentile per-packet one-way delay: 76.573 ms

Loss rate: 8.93%

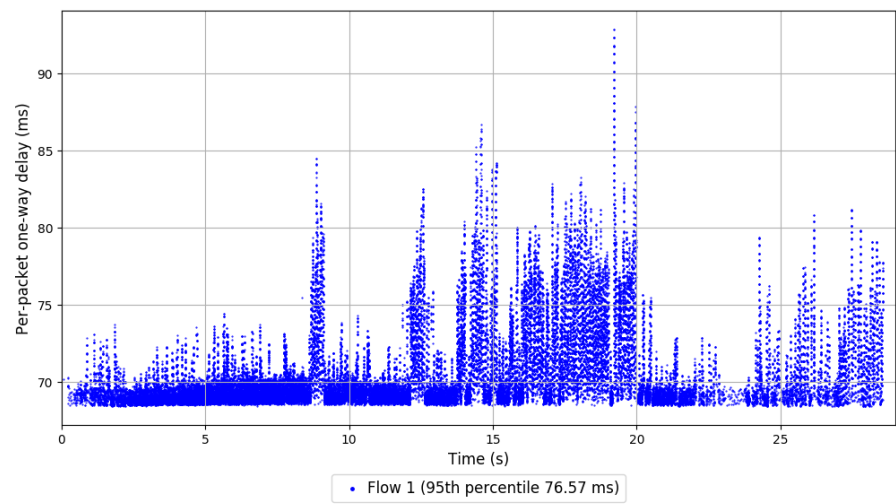
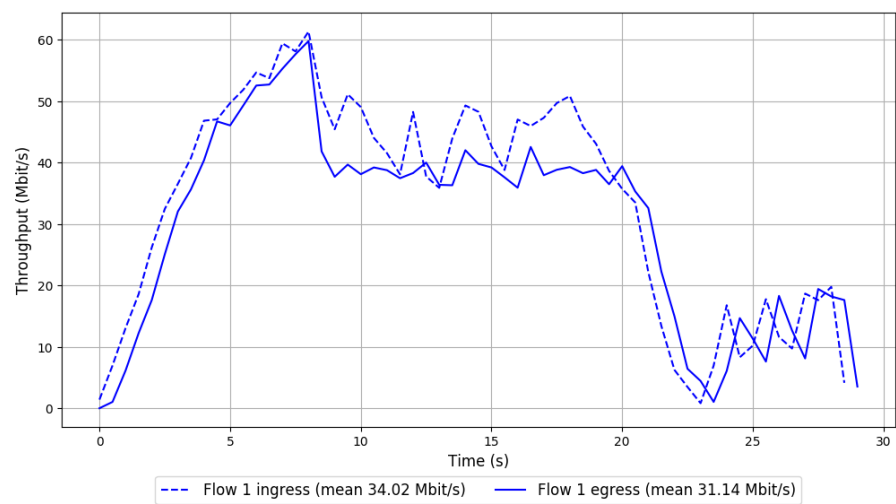
-- Flow 1:

Average throughput: 31.14 Mbit/s

95th percentile per-packet one-way delay: 76.573 ms

Loss rate: 8.93%

Run 4: Report of Indigo-MusesC5 — Data Link

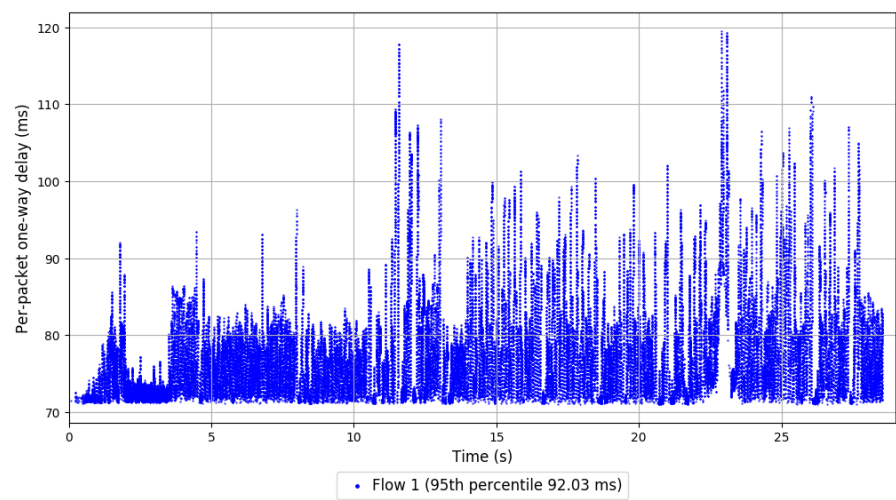
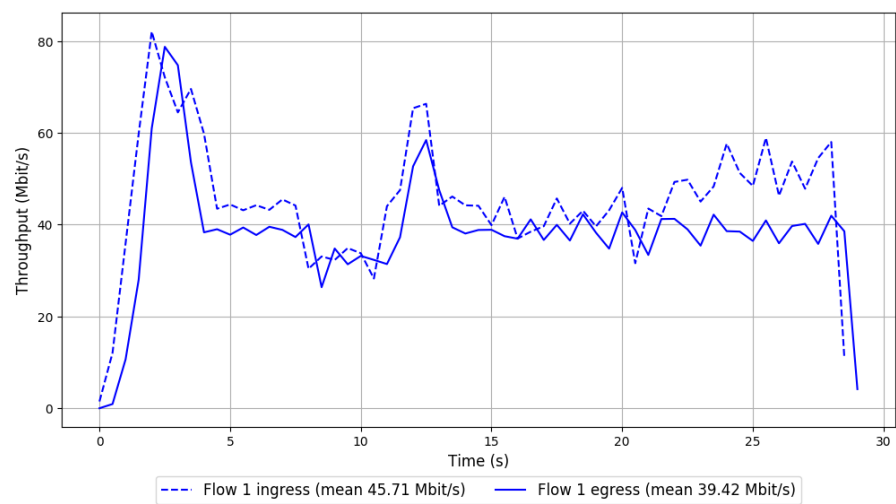


Run 5: Statistics of Indigo-MusesC5

Start at: 2019-03-27 08:17:41
End at: 2019-03-27 08:18:11
Local clock offset: -4.744 ms
Remote clock offset: -18.898 ms

Below is generated by plot.py at 2019-03-27 08:39:20
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.42 Mbit/s
95th percentile per-packet one-way delay: 92.025 ms
Loss rate: 14.24%
-- Flow 1:
Average throughput: 39.42 Mbit/s
95th percentile per-packet one-way delay: 92.025 ms
Loss rate: 14.24%

Run 5: Report of Indigo-MusesC5 — Data Link

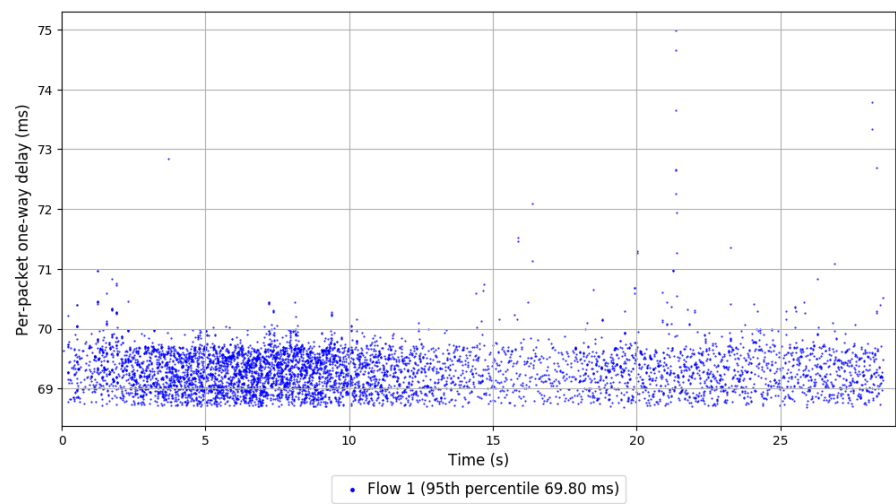
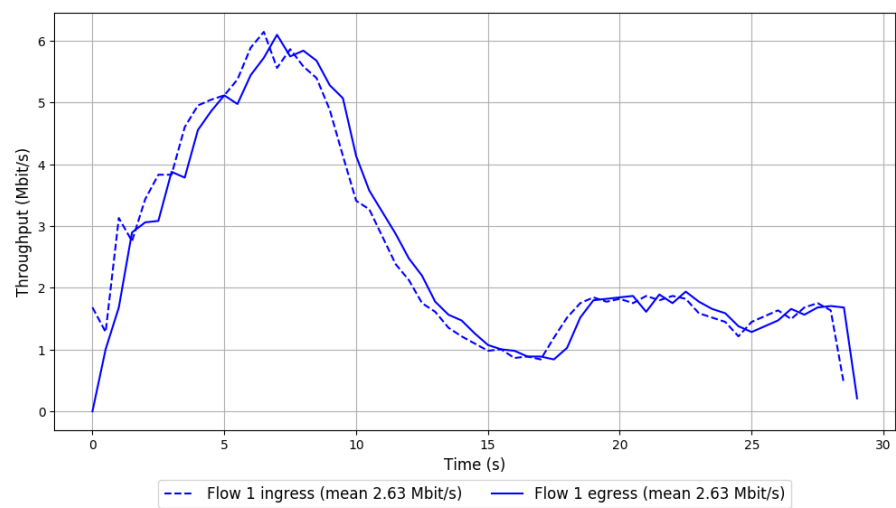


Run 1: Statistics of Indigo-MusesD

Start at: 2019-03-27 06:31:05
End at: 2019-03-27 06:31:35
Local clock offset: -1.207 ms
Remote clock offset: -13.828 ms

Below is generated by plot.py at 2019-03-27 08:39:20
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.63 Mbit/s
95th percentile per-packet one-way delay: 69.797 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 2.63 Mbit/s
95th percentile per-packet one-way delay: 69.797 ms
Loss rate: 0.28%

Run 1: Report of Indigo-MusesD — Data Link



Run 2: Statistics of Indigo-MusesD

Start at: 2019-03-27 06:55:46

End at: 2019-03-27 06:56:16

Local clock offset: -1.214 ms

Remote clock offset: -9.997 ms

Below is generated by plot.py at 2019-03-27 08:39:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 36.23 Mbit/s

95th percentile per-packet one-way delay: 66.686 ms

Loss rate: 14.23%

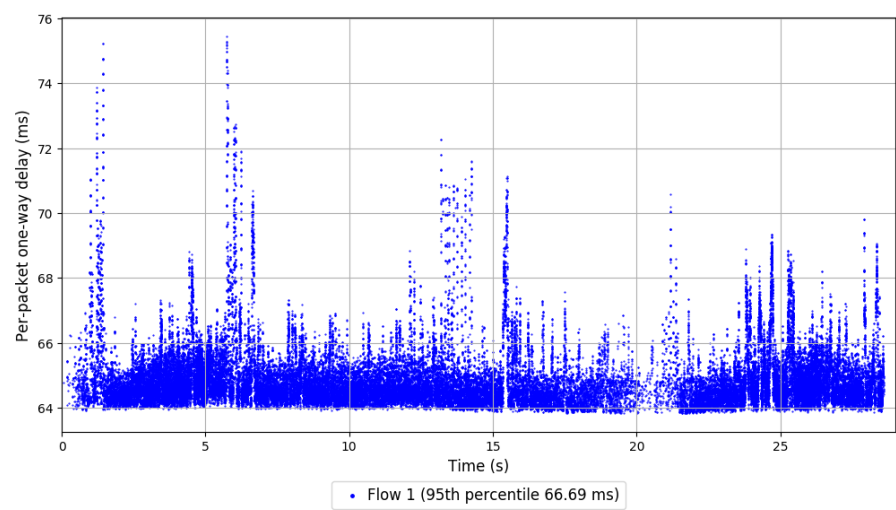
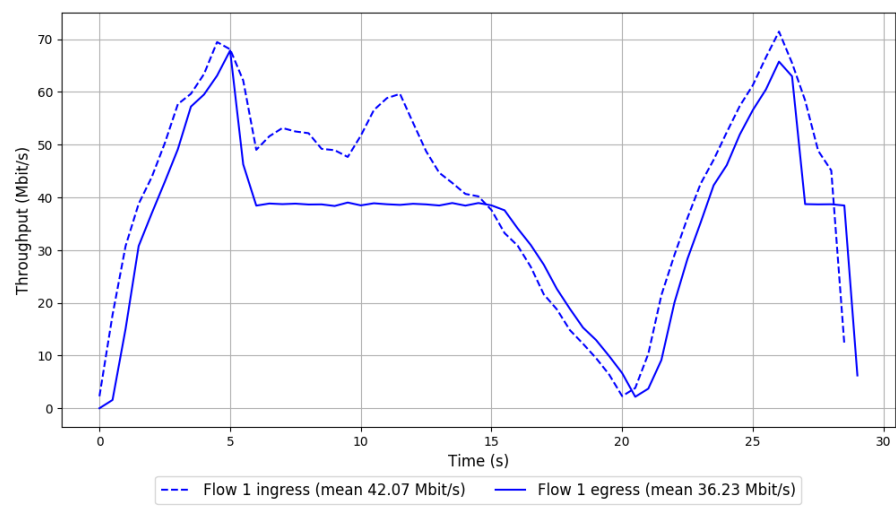
-- Flow 1:

Average throughput: 36.23 Mbit/s

95th percentile per-packet one-way delay: 66.686 ms

Loss rate: 14.23%

Run 2: Report of Indigo-MusesD — Data Link



Run 3: Statistics of Indigo-MusesD

Start at: 2019-03-27 07:21:32

End at: 2019-03-27 07:22:02

Local clock offset: -3.269 ms

Remote clock offset: -21.228 ms

Below is generated by plot.py at 2019-03-27 08:39:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.99 Mbit/s

95th percentile per-packet one-way delay: 73.561 ms

Loss rate: 1.79%

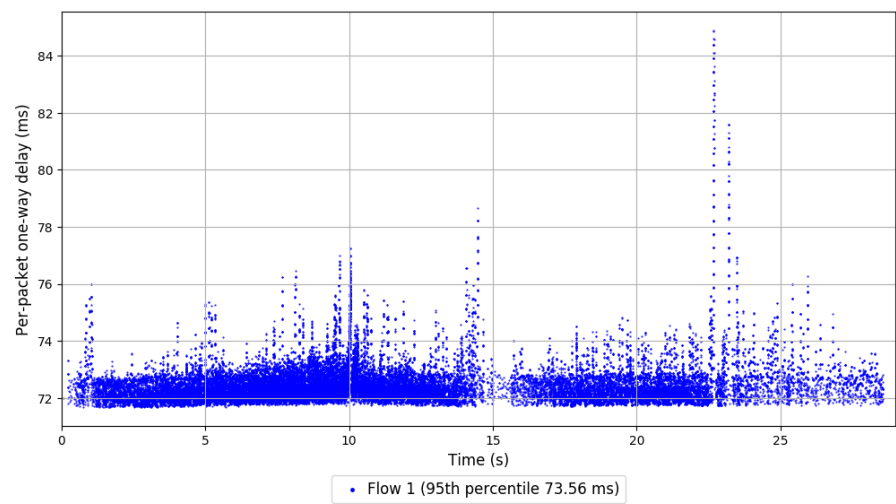
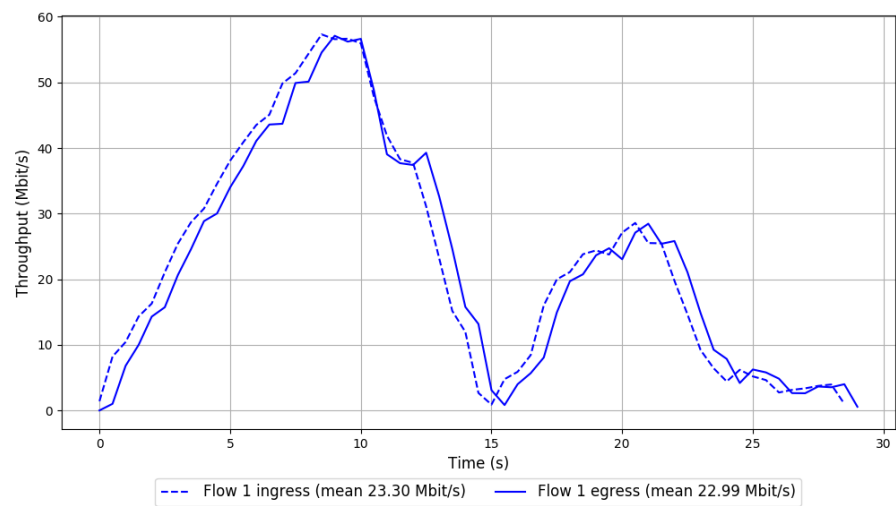
-- Flow 1:

Average throughput: 22.99 Mbit/s

95th percentile per-packet one-way delay: 73.561 ms

Loss rate: 1.79%

Run 3: Report of Indigo-MusesD — Data Link



Run 4: Statistics of Indigo-MusesD

Start at: 2019-03-27 07:46:44

End at: 2019-03-27 07:47:14

Local clock offset: -5.784 ms

Remote clock offset: -22.021 ms

Below is generated by plot.py at 2019-03-27 08:39:23

Datalink statistics

-- Total of 1 flow:

Average throughput: 22.40 Mbit/s

95th percentile per-packet one-way delay: 76.265 ms

Loss rate: 0.19%

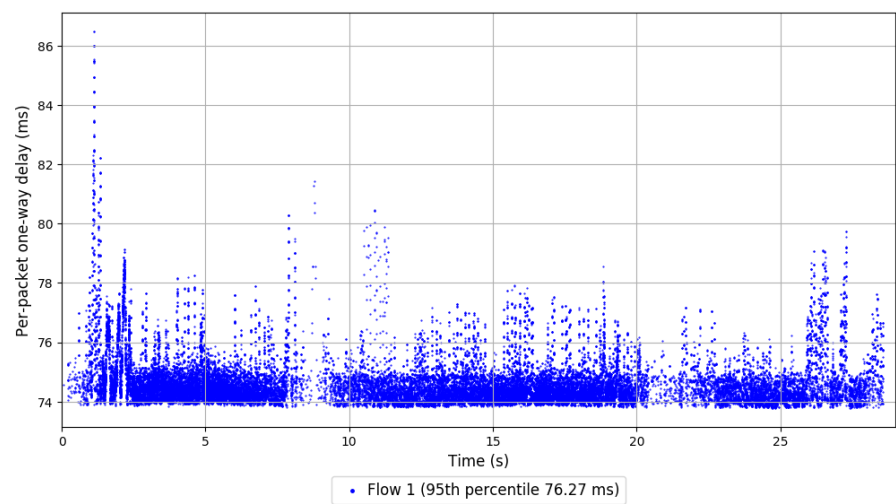
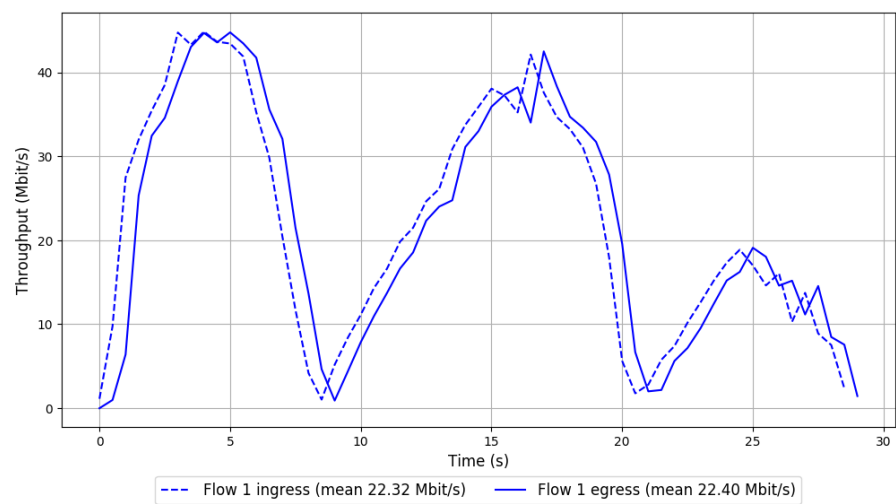
-- Flow 1:

Average throughput: 22.40 Mbit/s

95th percentile per-packet one-way delay: 76.265 ms

Loss rate: 0.19%

Run 4: Report of Indigo-MusesD — Data Link

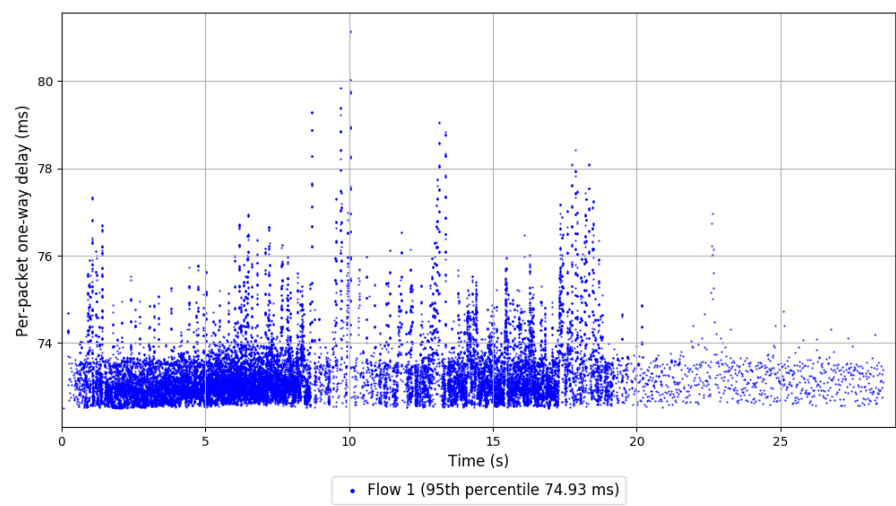
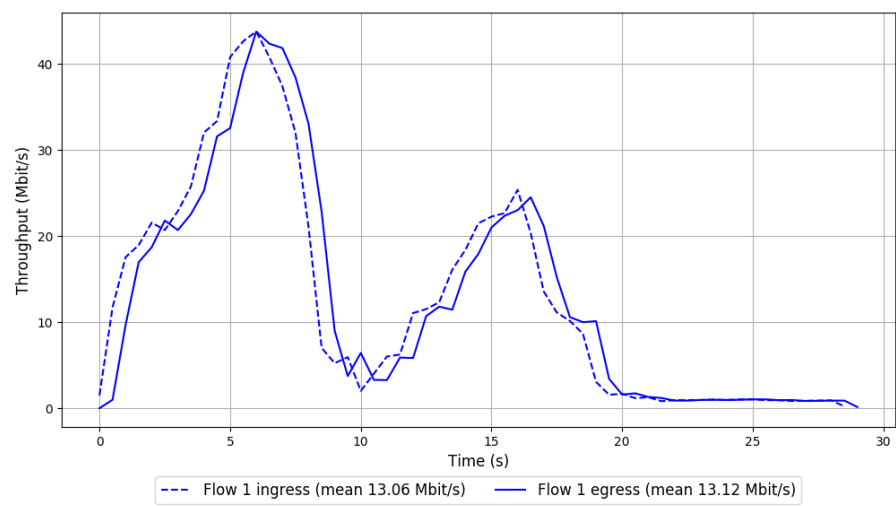


Run 5: Statistics of Indigo-MusesD

Start at: 2019-03-27 08:11:42
End at: 2019-03-27 08:12:12
Local clock offset: -5.343 ms
Remote clock offset: -19.904 ms

Below is generated by plot.py at 2019-03-27 08:39:23
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 74.932 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 13.12 Mbit/s
95th percentile per-packet one-way delay: 74.932 ms
Loss rate: 0.03%

Run 5: Report of Indigo-MusesD — Data Link

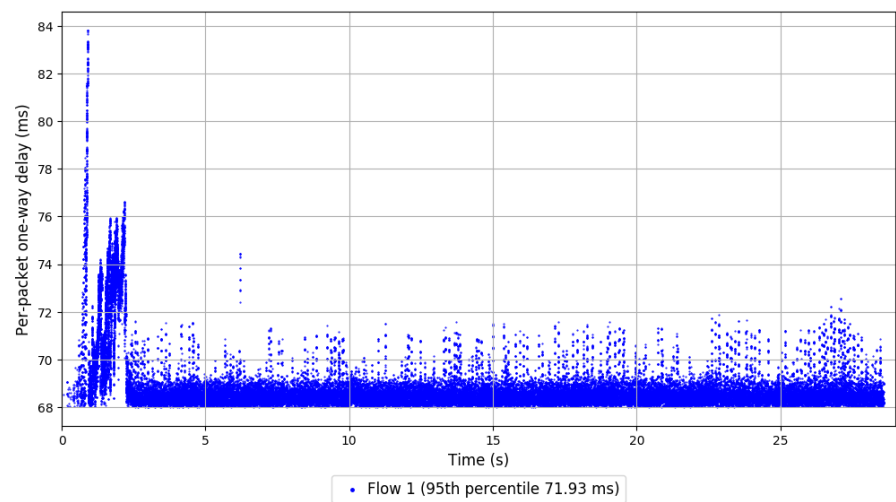
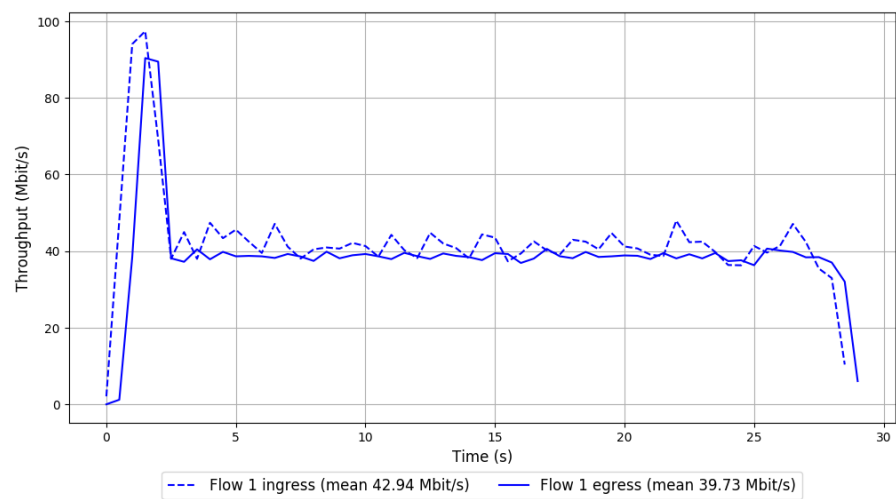


Run 1: Statistics of Indigo-MusesT

Start at: 2019-03-27 06:42:52
End at: 2019-03-27 06:43:22
Local clock offset: 0.047 ms
Remote clock offset: -11.528 ms

Below is generated by plot.py at 2019-03-27 08:39:39
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.73 Mbit/s
95th percentile per-packet one-way delay: 71.926 ms
Loss rate: 7.89%
-- Flow 1:
Average throughput: 39.73 Mbit/s
95th percentile per-packet one-way delay: 71.926 ms
Loss rate: 7.89%

Run 1: Report of Indigo-MusesT — Data Link



Run 2: Statistics of Indigo-MusesT

Start at: 2019-03-27 07:08:24

End at: 2019-03-27 07:08:54

Local clock offset: -1.439 ms

Remote clock offset: -16.171 ms

Below is generated by plot.py at 2019-03-27 08:39:43

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.81 Mbit/s

95th percentile per-packet one-way delay: 76.210 ms

Loss rate: 8.36%

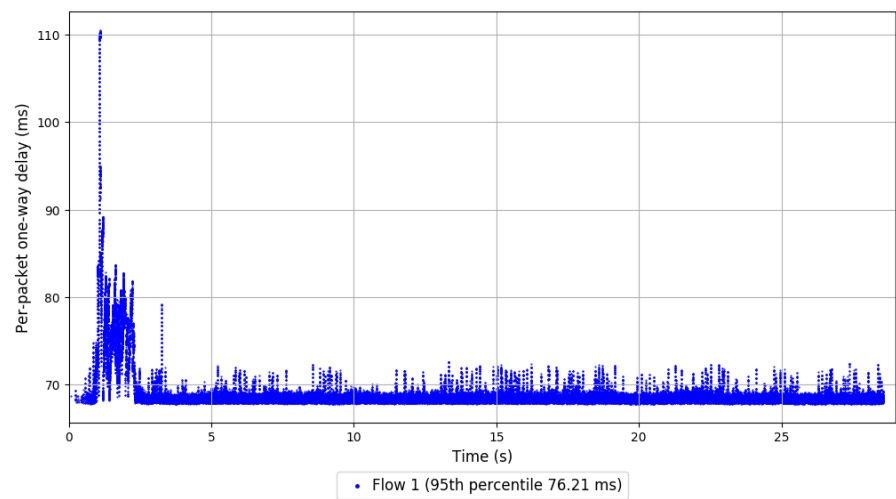
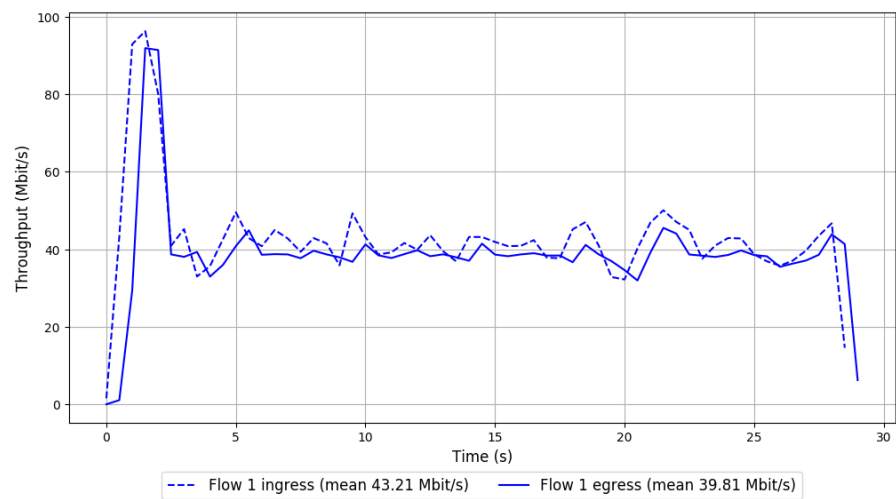
-- Flow 1:

Average throughput: 39.81 Mbit/s

95th percentile per-packet one-way delay: 76.210 ms

Loss rate: 8.36%

Run 2: Report of Indigo-MusesT — Data Link



Run 3: Statistics of Indigo-MusesT

Start at: 2019-03-27 07:33:46

End at: 2019-03-27 07:34:16

Local clock offset: -5.117 ms

Remote clock offset: -17.919 ms

Below is generated by plot.py at 2019-03-27 08:39:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.74 Mbit/s

95th percentile per-packet one-way delay: 84.469 ms

Loss rate: 9.56%

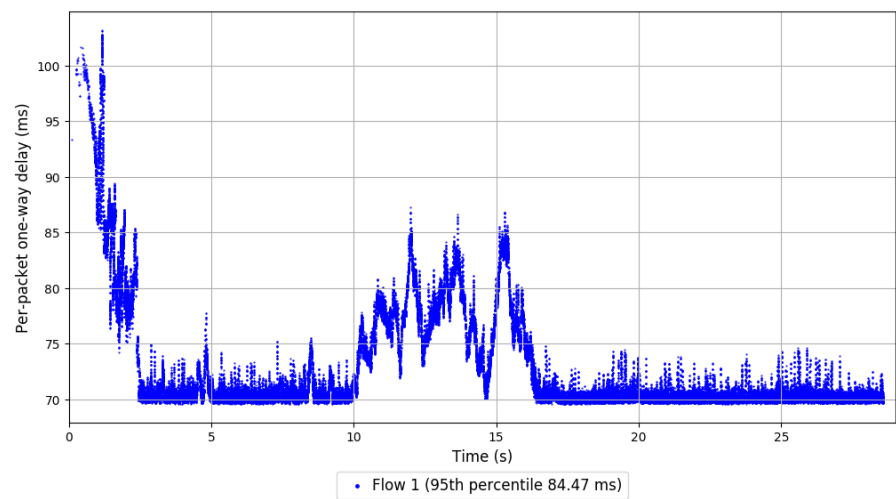
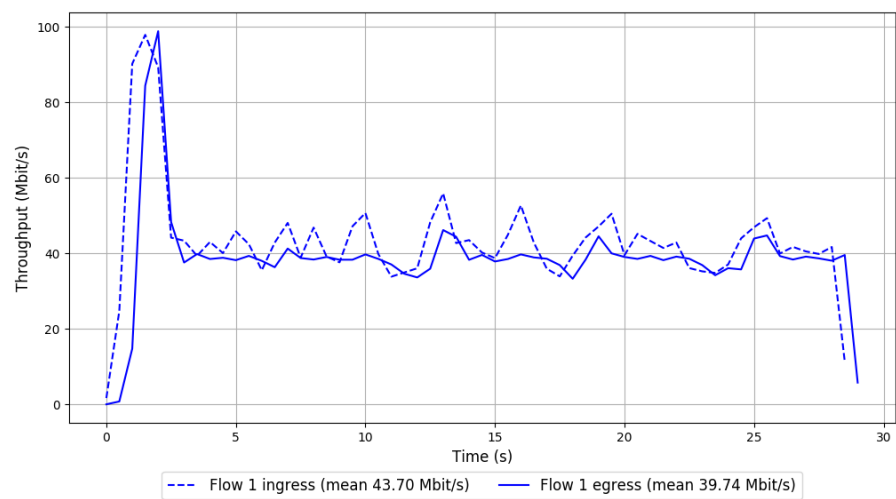
-- Flow 1:

Average throughput: 39.74 Mbit/s

95th percentile per-packet one-way delay: 84.469 ms

Loss rate: 9.56%

Run 3: Report of Indigo-MusesT — Data Link



Run 4: Statistics of Indigo-MusesT

Start at: 2019-03-27 07:58:44

End at: 2019-03-27 07:59:14

Local clock offset: -5.343 ms

Remote clock offset: -21.586 ms

Below is generated by plot.py at 2019-03-27 08:39:46

Datalink statistics

-- Total of 1 flow:

Average throughput: 39.59 Mbit/s

95th percentile per-packet one-way delay: 79.073 ms

Loss rate: 9.09%

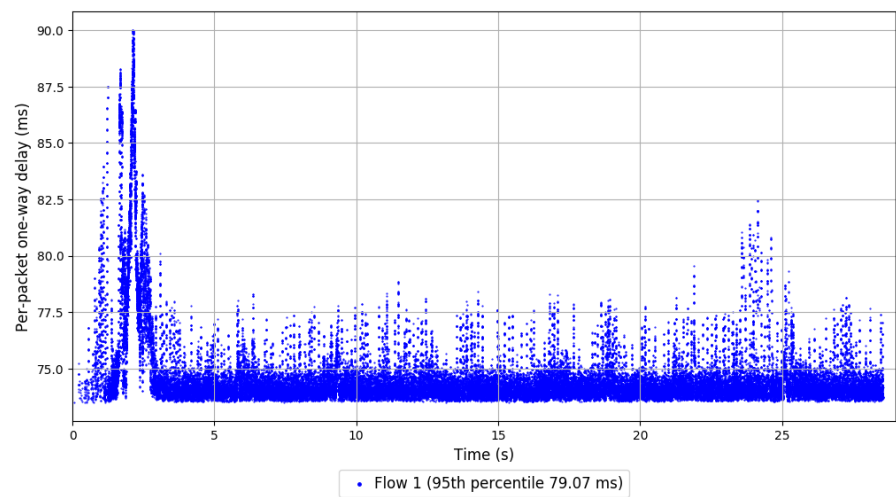
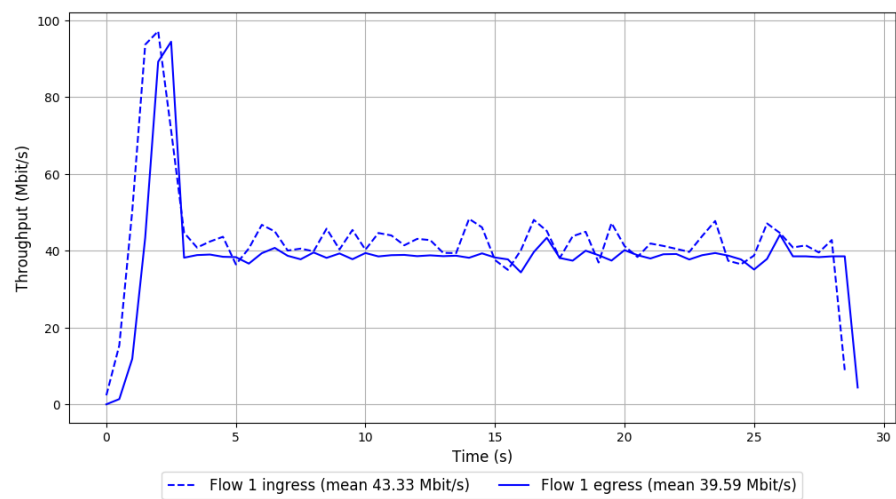
-- Flow 1:

Average throughput: 39.59 Mbit/s

95th percentile per-packet one-way delay: 79.073 ms

Loss rate: 9.09%

Run 4: Report of Indigo-MusesT — Data Link

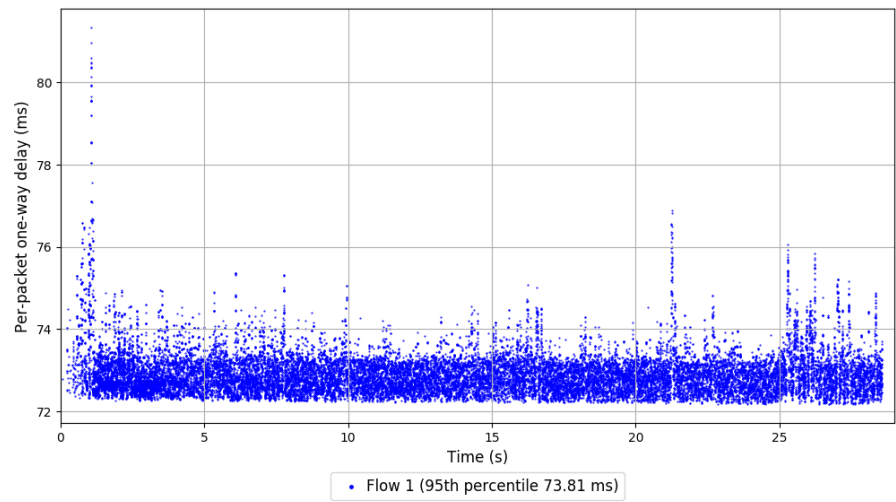
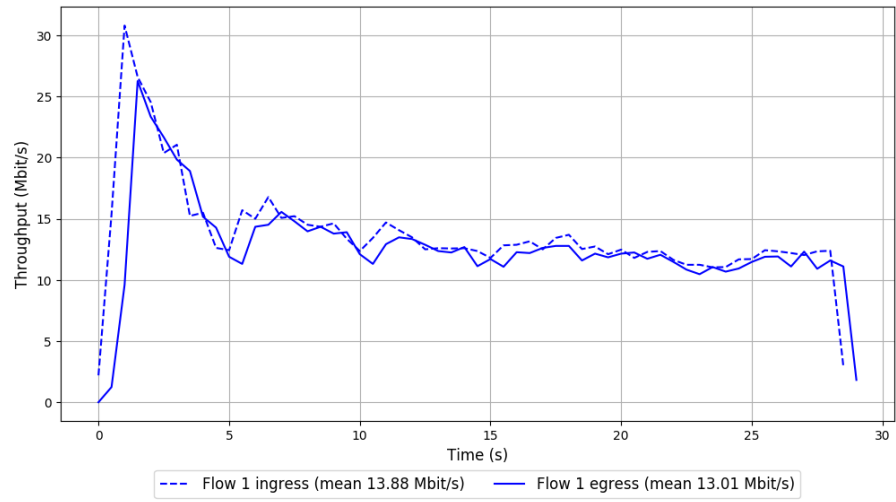


Run 5: Statistics of Indigo-MusesT

Start at: 2019-03-27 08:23:35
End at: 2019-03-27 08:24:05
Local clock offset: -2.765 ms
Remote clock offset: -20.192 ms

Below is generated by plot.py at 2019-03-27 08:39:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 13.01 Mbit/s
95th percentile per-packet one-way delay: 73.807 ms
Loss rate: 6.66%
-- Flow 1:
Average throughput: 13.01 Mbit/s
95th percentile per-packet one-way delay: 73.807 ms
Loss rate: 6.66%

Run 5: Report of Indigo-MusesT — Data Link

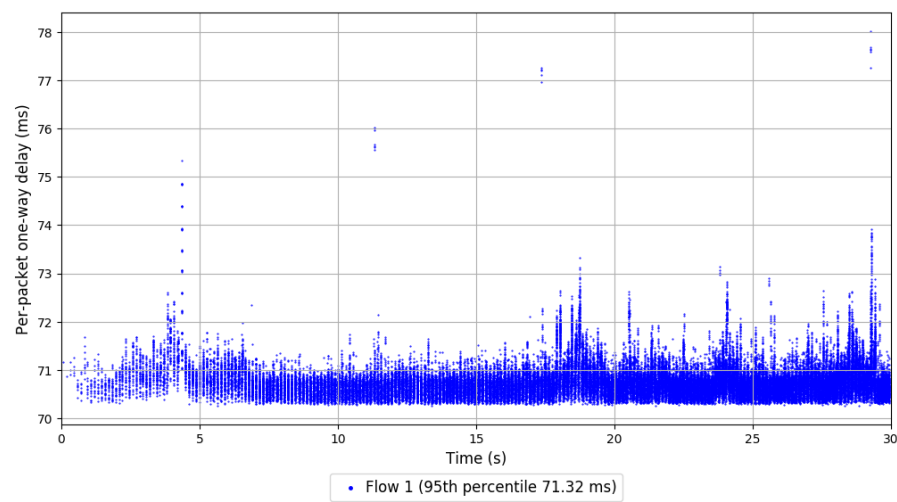
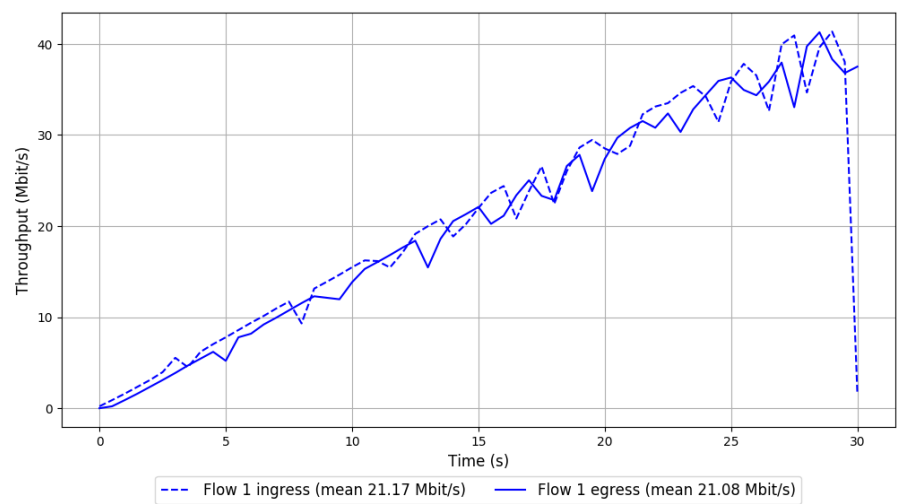


Run 1: Statistics of LEDBAT

Start at: 2019-03-27 06:41:42
End at: 2019-03-27 06:42:12
Local clock offset: -0.001 ms
Remote clock offset: -13.92 ms

Below is generated by plot.py at 2019-03-27 08:39:46
Datalink statistics
-- Total of 1 flow:
Average throughput: 21.08 Mbit/s
95th percentile per-packet one-way delay: 71.323 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 21.08 Mbit/s
95th percentile per-packet one-way delay: 71.323 ms
Loss rate: 0.87%

Run 1: Report of LEDBAT — Data Link

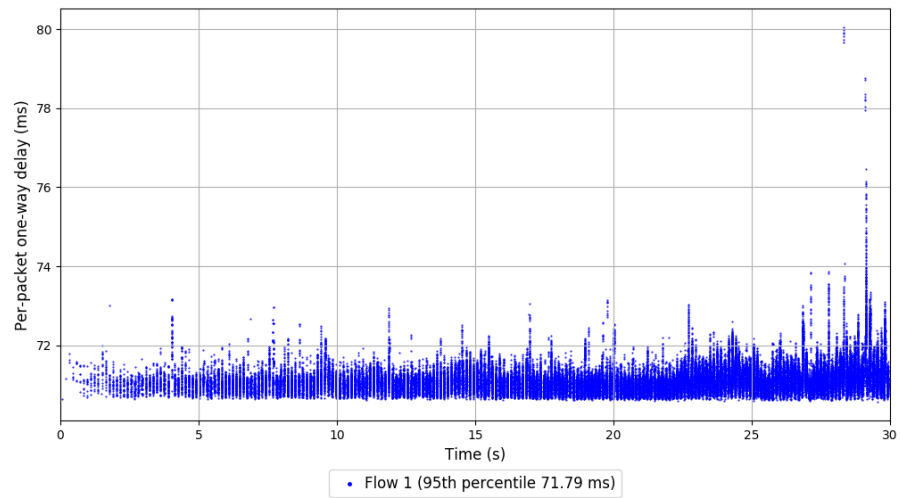
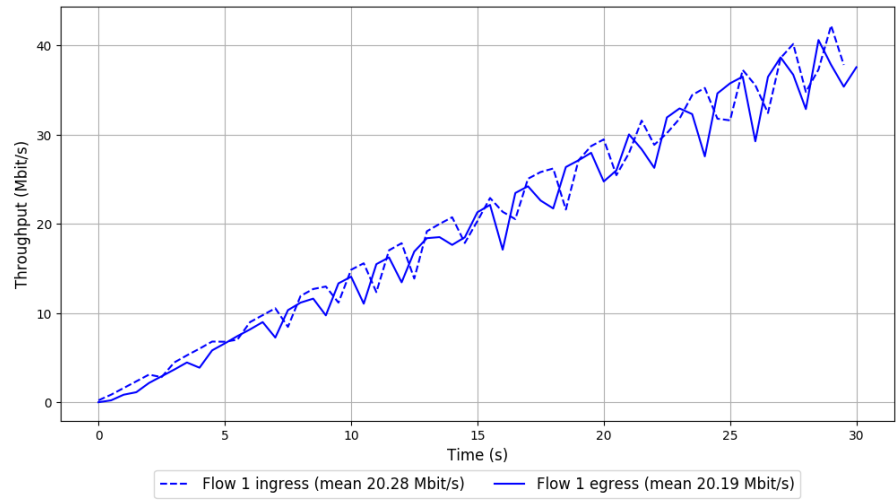


Run 2: Statistics of LEDBAT

Start at: 2019-03-27 07:07:13
End at: 2019-03-27 07:07:43
Local clock offset: -1.53 ms
Remote clock offset: -18.954 ms

Below is generated by plot.py at 2019-03-27 08:39:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 20.19 Mbit/s
95th percentile per-packet one-way delay: 71.788 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 20.19 Mbit/s
95th percentile per-packet one-way delay: 71.788 ms
Loss rate: 0.88%

Run 2: Report of LEDBAT — Data Link

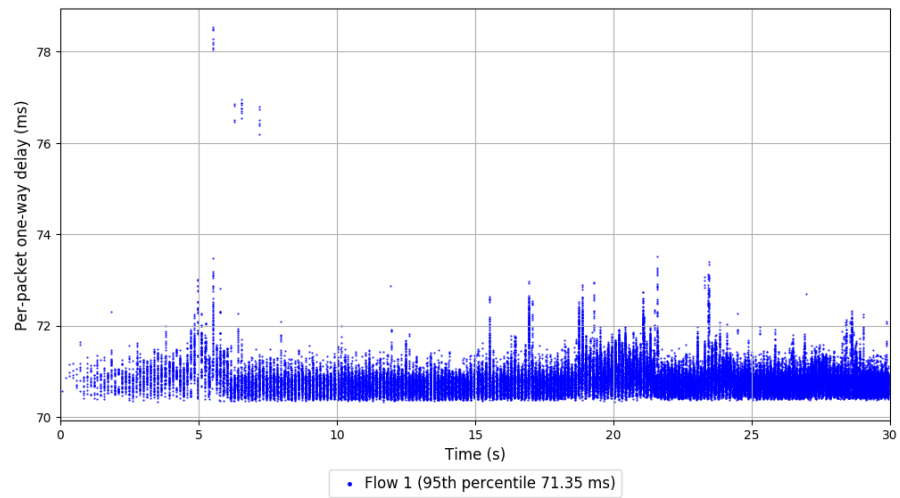
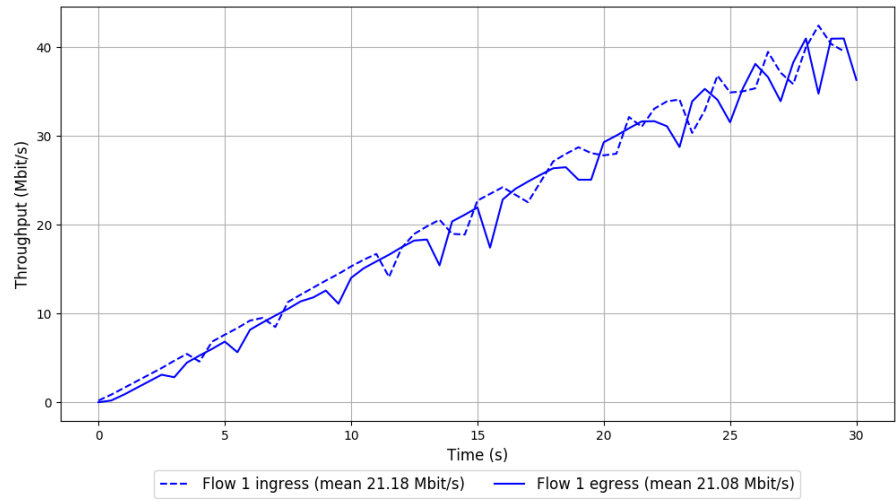


Run 3: Statistics of LEDBAT

Start at: 2019-03-27 07:32:34
End at: 2019-03-27 07:33:04
Local clock offset: -5.14 ms
Remote clock offset: -18.821 ms

Below is generated by plot.py at 2019-03-27 08:39:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 21.08 Mbit/s
95th percentile per-packet one-way delay: 71.350 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 21.08 Mbit/s
95th percentile per-packet one-way delay: 71.350 ms
Loss rate: 0.87%

Run 3: Report of LEDBAT — Data Link

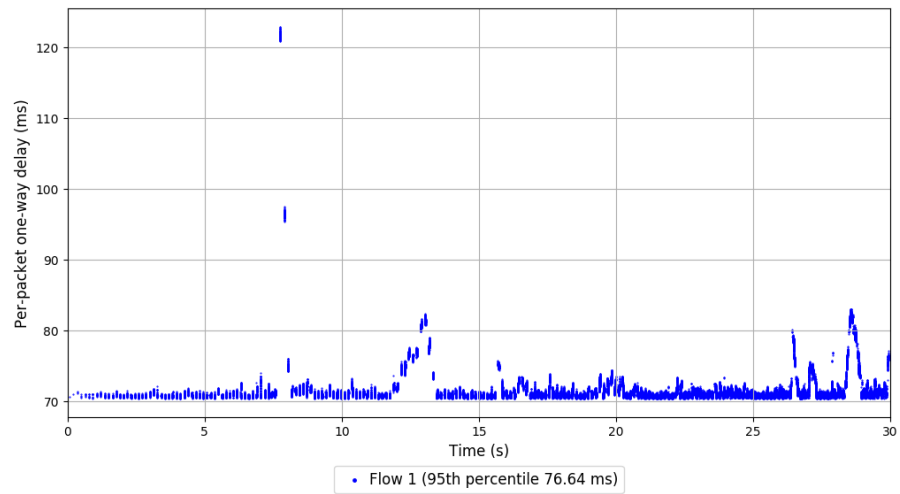
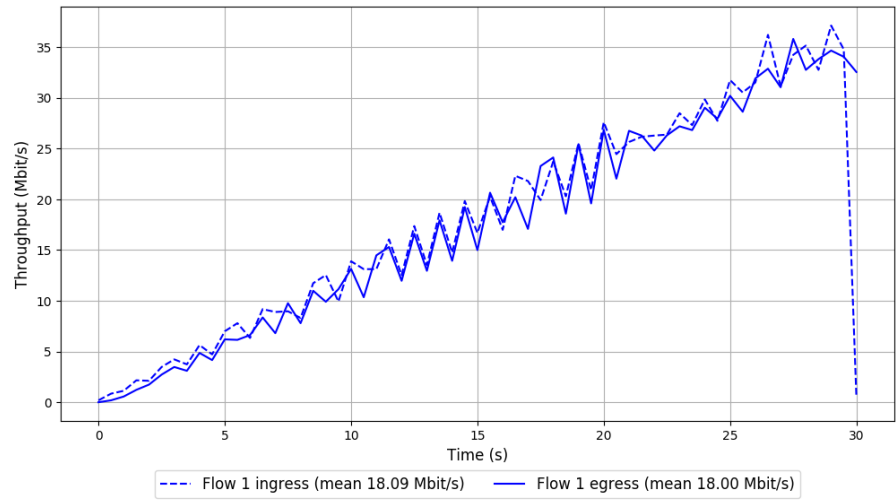


Run 4: Statistics of LEDBAT

Start at: 2019-03-27 07:57:33
End at: 2019-03-27 07:58:03
Local clock offset: -5.36 ms
Remote clock offset: -18.175 ms

Below is generated by plot.py at 2019-03-27 08:39:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 18.00 Mbit/s
95th percentile per-packet one-way delay: 76.643 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 18.00 Mbit/s
95th percentile per-packet one-way delay: 76.643 ms
Loss rate: 0.93%

Run 4: Report of LEDBAT — Data Link

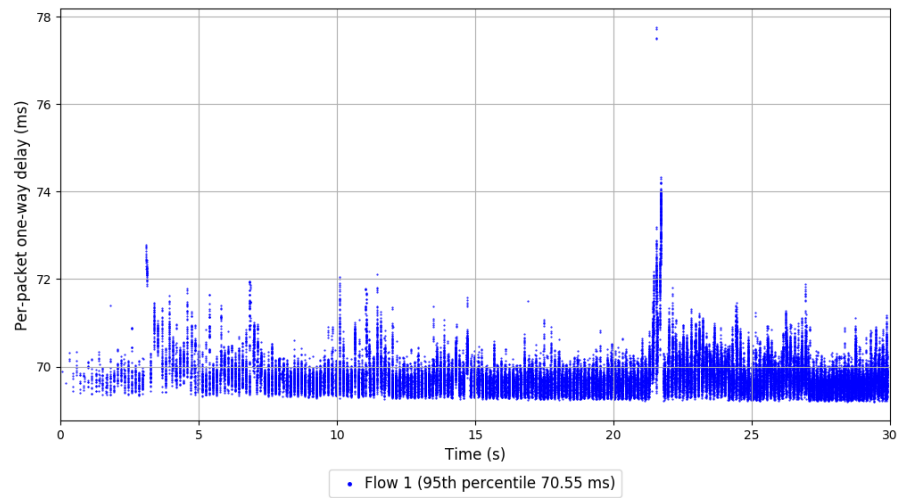
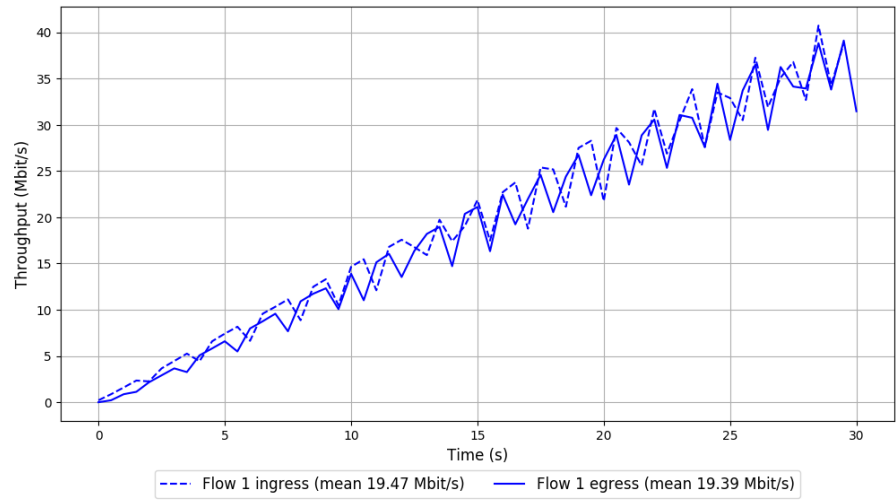


Run 5: Statistics of LEDBAT

Start at: 2019-03-27 08:22:24
End at: 2019-03-27 08:22:54
Local clock offset: -3.008 ms
Remote clock offset: -17.103 ms

Below is generated by plot.py at 2019-03-27 08:39:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 19.39 Mbit/s
95th percentile per-packet one-way delay: 70.553 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 19.39 Mbit/s
95th percentile per-packet one-way delay: 70.553 ms
Loss rate: 0.91%

Run 5: Report of LEDBAT — Data Link

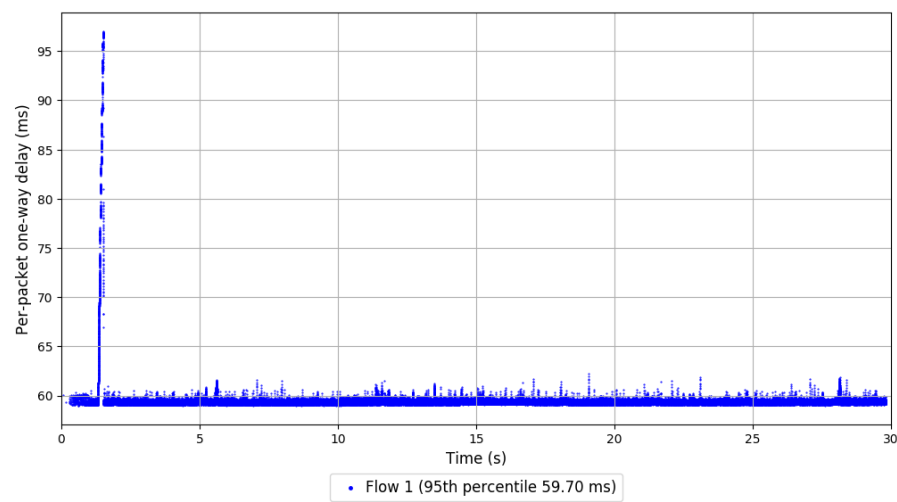
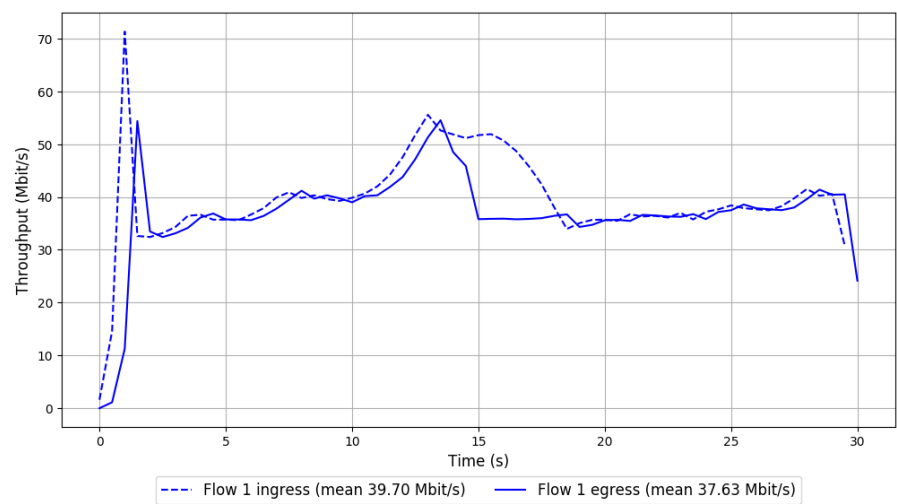


```
Run 1: Statistics of PCC-Allegro

Start at: 2019-03-27 06:45:11
End at: 2019-03-27 06:45:41
Local clock offset: 0.024 ms
Remote clock offset: -2.72 ms

# Below is generated by plot.py at 2019-03-27 08:40:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.63 Mbit/s
95th percentile per-packet one-way delay: 59.695 ms
Loss rate: 5.59%
-- Flow 1:
Average throughput: 37.63 Mbit/s
95th percentile per-packet one-way delay: 59.695 ms
Loss rate: 5.59%
```

Run 1: Report of PCC-Allegro — Data Link



Run 2: Statistics of PCC-Allegro

Start at: 2019-03-27 07:10:49

End at: 2019-03-27 07:11:19

Local clock offset: -1.618 ms

Remote clock offset: -18.996 ms

Below is generated by plot.py at 2019-03-27 08:40:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 70.965 ms

Loss rate: 0.48%

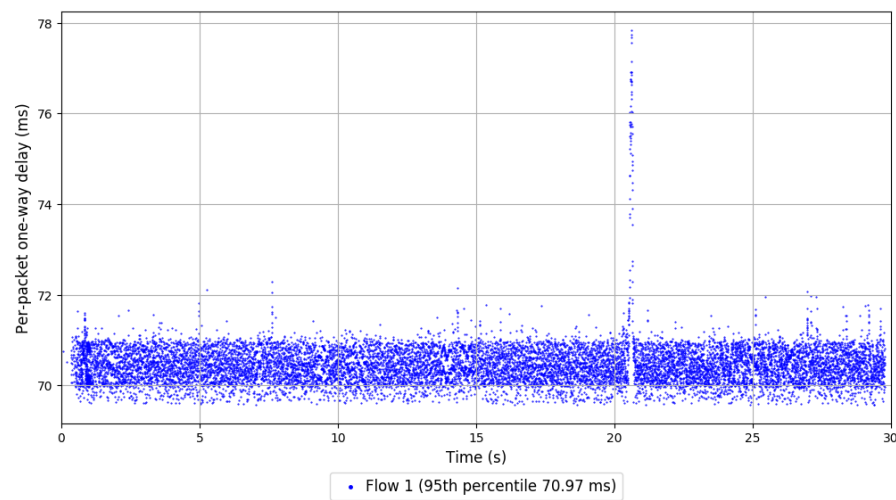
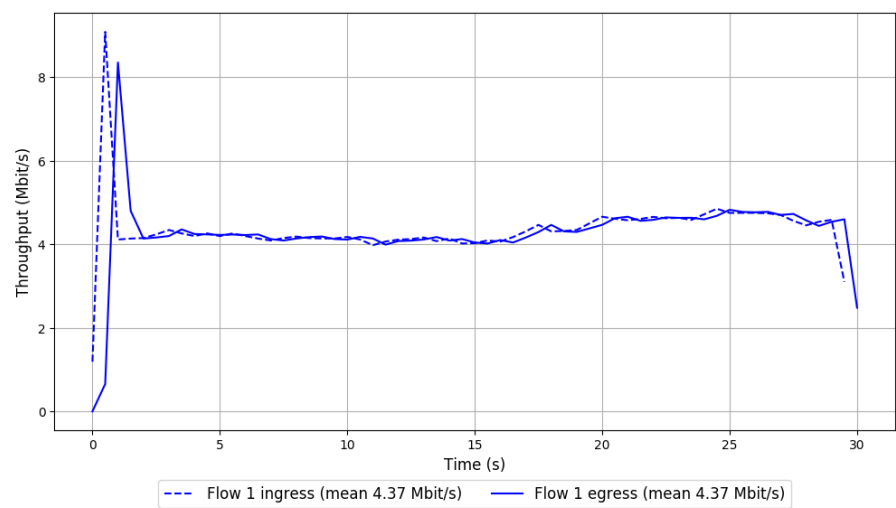
-- Flow 1:

Average throughput: 4.37 Mbit/s

95th percentile per-packet one-way delay: 70.965 ms

Loss rate: 0.48%

Run 2: Report of PCC-Allegro — Data Link



Run 3: Statistics of PCC-Allegro

Start at: 2019-03-27 07:36:10

End at: 2019-03-27 07:36:40

Local clock offset: -5.319 ms

Remote clock offset: -18.488 ms

Below is generated by plot.py at 2019-03-27 08:40:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.28 Mbit/s

95th percentile per-packet one-way delay: 70.832 ms

Loss rate: 1.65%

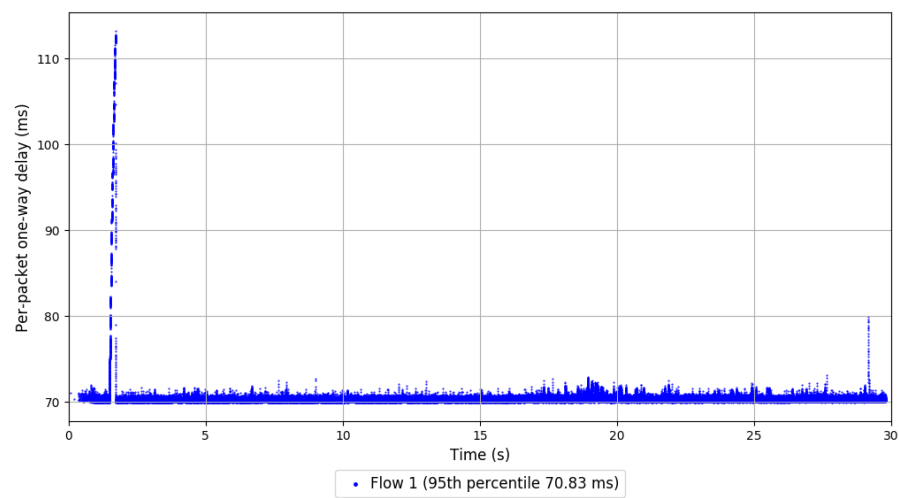
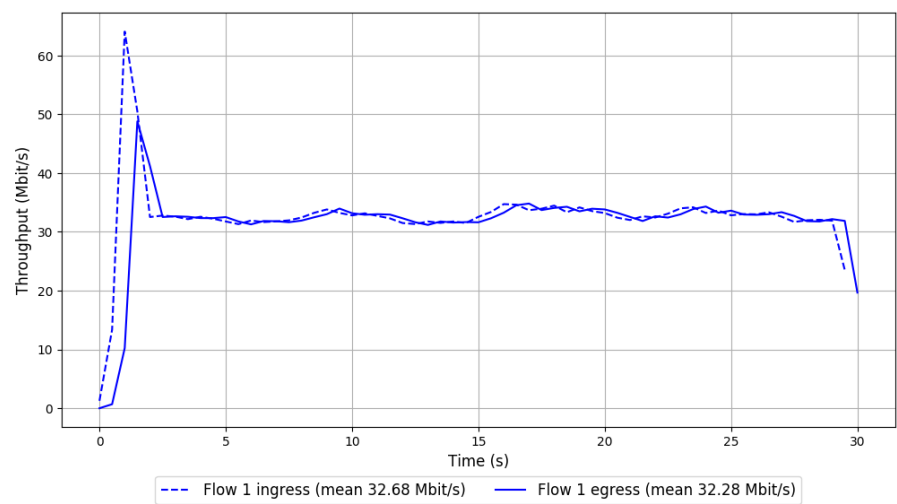
-- Flow 1:

Average throughput: 32.28 Mbit/s

95th percentile per-packet one-way delay: 70.832 ms

Loss rate: 1.65%

Run 3: Report of PCC-Allegro — Data Link



Run 4: Statistics of PCC-Allegro

Start at: 2019-03-27 08:01:09

End at: 2019-03-27 08:01:39

Local clock offset: -5.304 ms

Remote clock offset: -21.616 ms

Below is generated by plot.py at 2019-03-27 08:40:06

Datalink statistics

-- Total of 1 flow:

Average throughput: 32.18 Mbit/s

95th percentile per-packet one-way delay: 74.408 ms

Loss rate: 1.62%

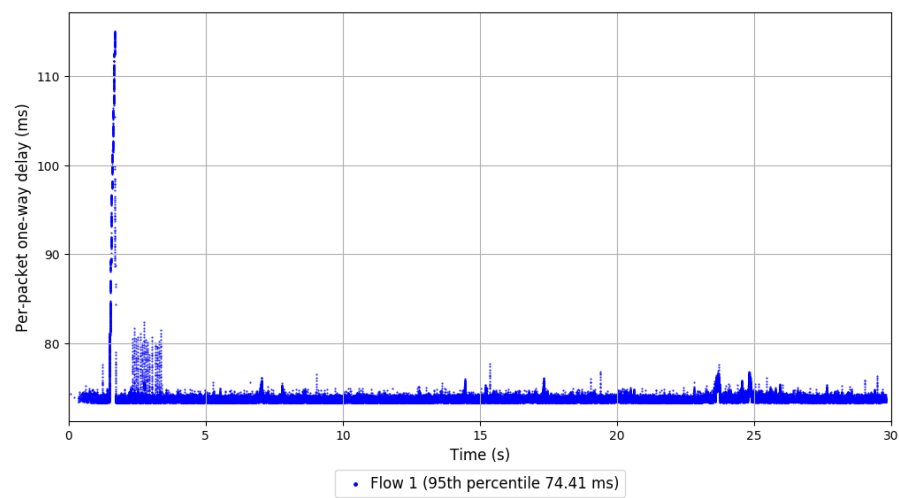
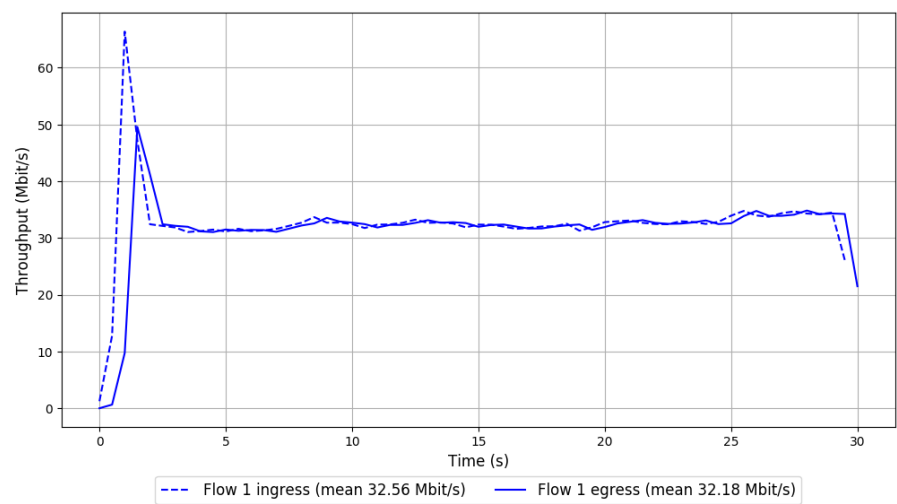
-- Flow 1:

Average throughput: 32.18 Mbit/s

95th percentile per-packet one-way delay: 74.408 ms

Loss rate: 1.62%

Run 4: Report of PCC-Allegro — Data Link



Run 5: Statistics of PCC-Allegro

Start at: 2019-03-27 08:25:56

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

Local clock offset: -2.347 ms

Remote clock offset: -13.58 ms

Below is generated by plot.py at 2019-03-27 08:40:07

Datalink statistics

-- Total of 1 flow:

Average throughput: 33.22 Mbit/s

95th percentile per-packet one-way delay: 66.013 ms

Loss rate: 1.63%

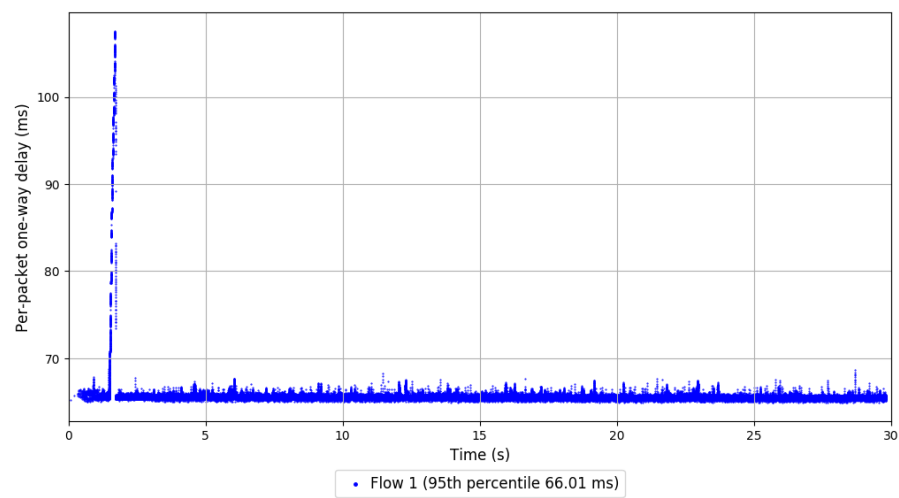
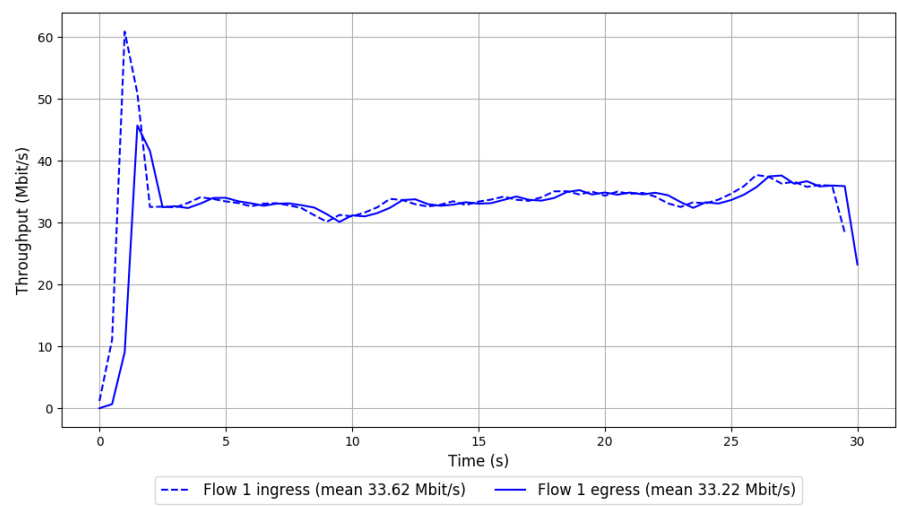
-- Flow 1:

Average throughput: 33.22 Mbit/s

95th percentile per-packet one-way delay: 66.013 ms

Loss rate: 1.63%

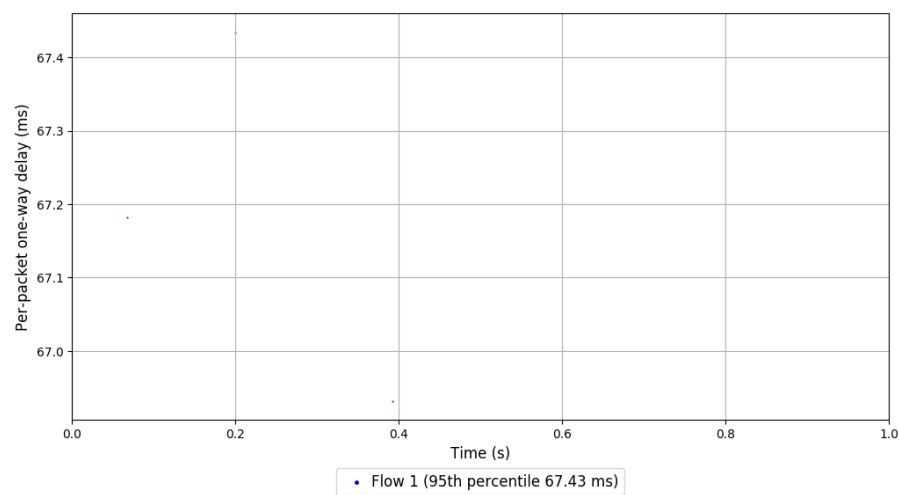
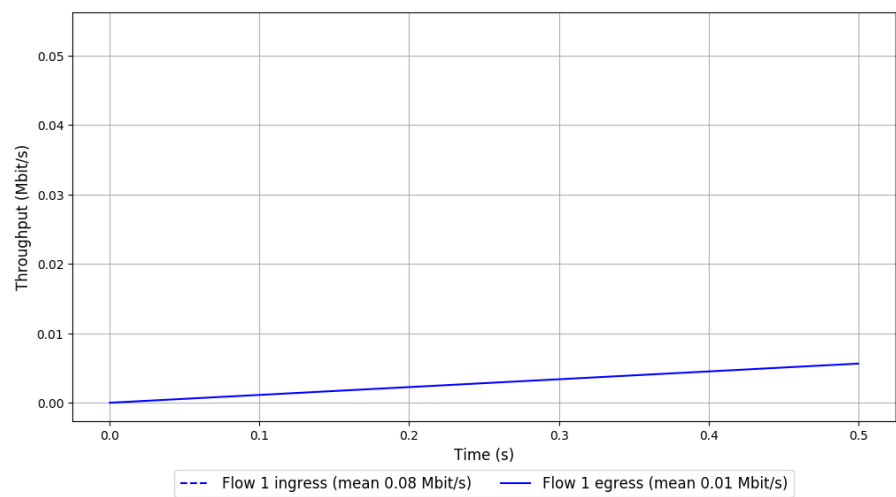
Run 5: Report of PCC-Allegro — Data Link



Run 1: Statistics of PCC-Expr

Start at: 2019-03-27 06:44:03
End at: 2019-03-27 06:44:33
Local clock offset: -0.168 ms
Remote clock offset: -10.821 ms

Run 1: Report of PCC-Expr — Data Link

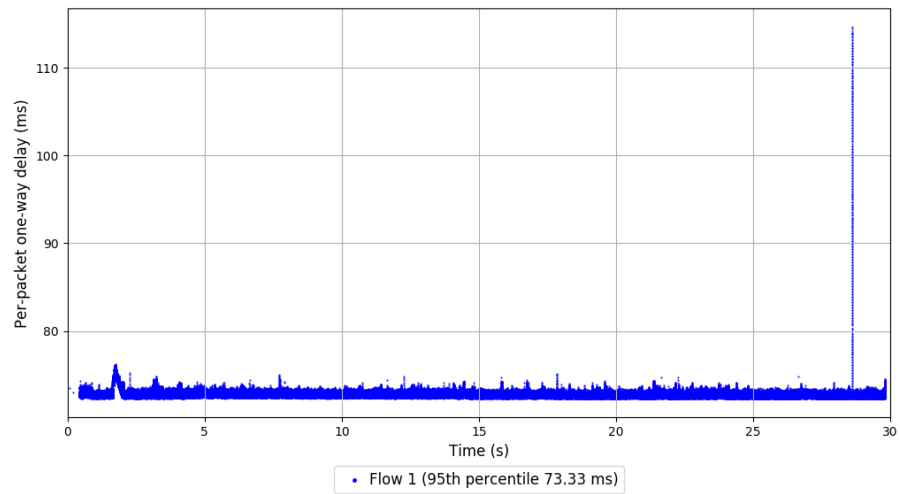
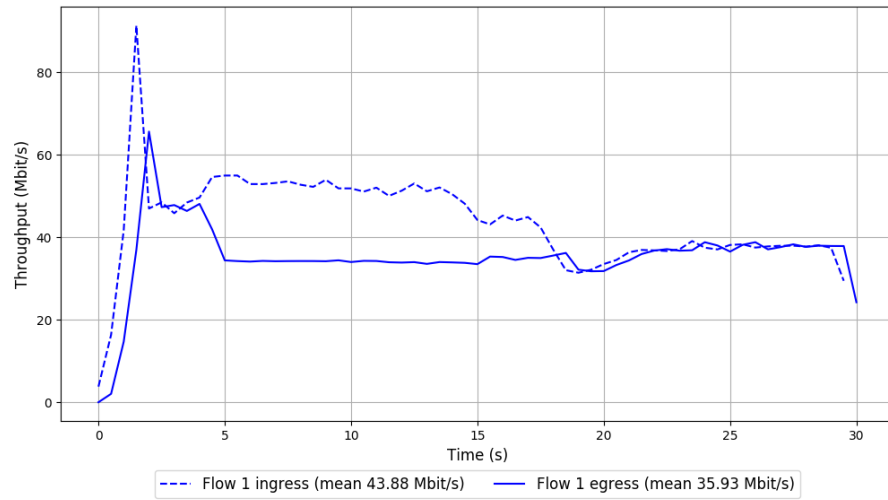


Run 2: Statistics of PCC-Expr

Start at: 2019-03-27 07:09:36
End at: 2019-03-27 07:10:06
Local clock offset: -1.705 ms
Remote clock offset: -21.36 ms

Below is generated by plot.py at 2019-03-27 08:40:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 35.93 Mbit/s
95th percentile per-packet one-way delay: 73.334 ms
Loss rate: 18.48%
-- Flow 1:
Average throughput: 35.93 Mbit/s
95th percentile per-packet one-way delay: 73.334 ms
Loss rate: 18.48%

Run 2: Report of PCC-Expr — Data Link

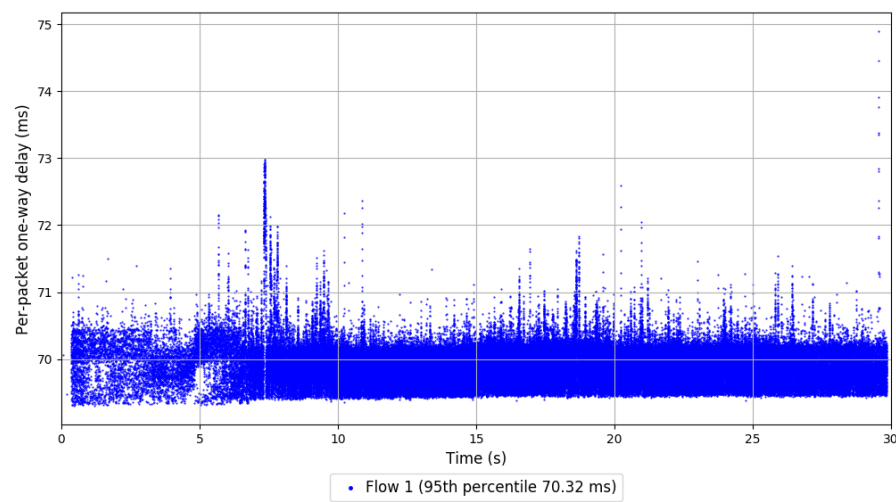
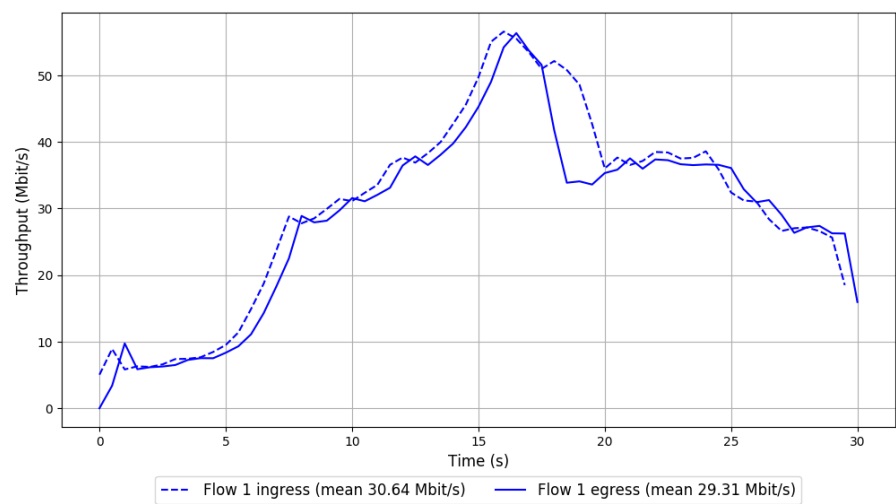


Run 3: Statistics of PCC-Expr

Start at: 2019-03-27 07:34:58
End at: 2019-03-27 07:35:28
Local clock offset: -5.215 ms
Remote clock offset: -18.294 ms

Below is generated by plot.py at 2019-03-27 08:40:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 29.31 Mbit/s
95th percentile per-packet one-way delay: 70.324 ms
Loss rate: 4.75%
-- Flow 1:
Average throughput: 29.31 Mbit/s
95th percentile per-packet one-way delay: 70.324 ms
Loss rate: 4.75%

Run 3: Report of PCC-Expr — Data Link

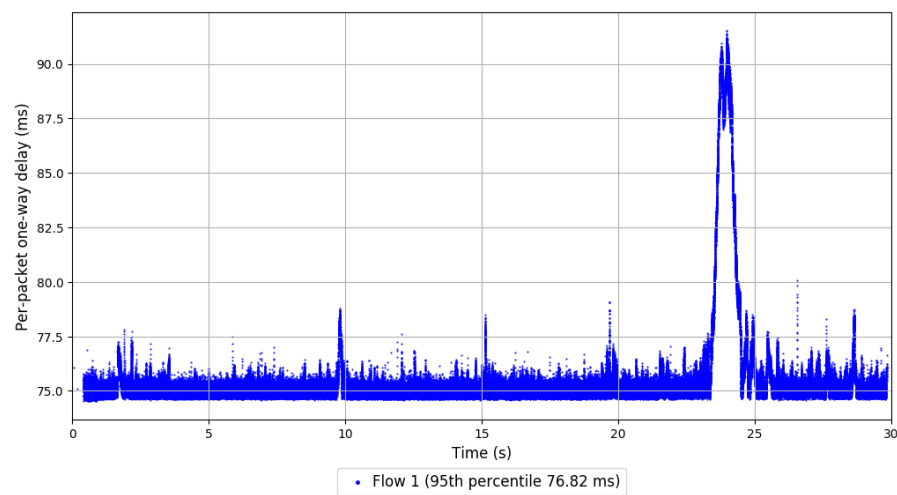
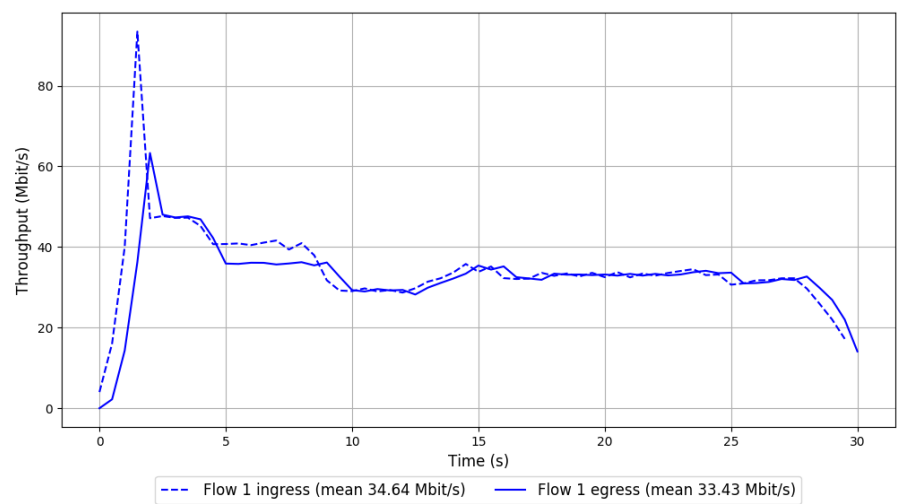


Run 4: Statistics of PCC-Expr

Start at: 2019-03-27 07:59:56
End at: 2019-03-27 08:00:26
Local clock offset: -5.307 ms
Remote clock offset: -23.222 ms

Below is generated by plot.py at 2019-03-27 08:40:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 33.43 Mbit/s
95th percentile per-packet one-way delay: 76.821 ms
Loss rate: 3.95%
-- Flow 1:
Average throughput: 33.43 Mbit/s
95th percentile per-packet one-way delay: 76.821 ms
Loss rate: 3.95%

Run 4: Report of PCC-Expr — Data Link

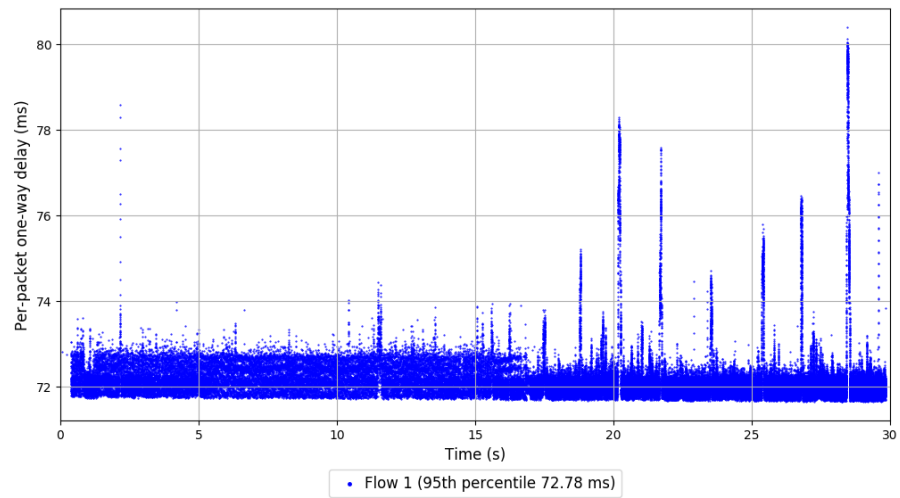
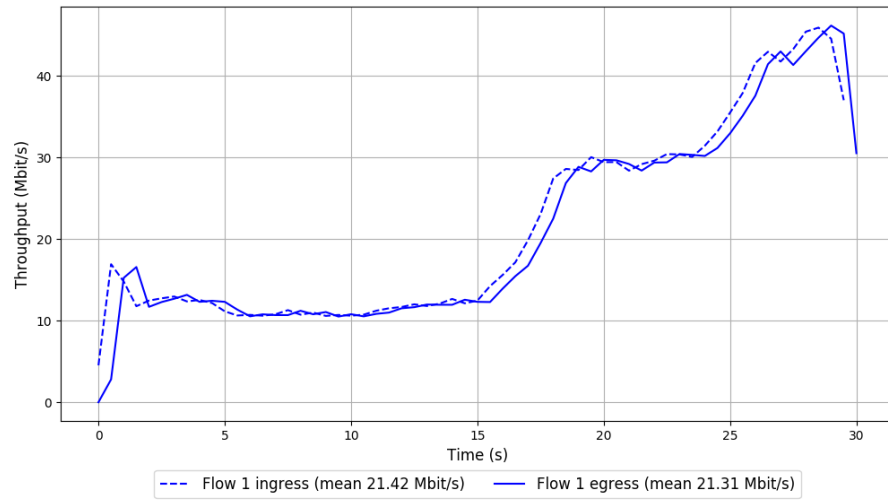


Run 5: Statistics of PCC-Expr

Start at: 2019-03-27 08:24:45
End at: 2019-03-27 08:25:15
Local clock offset: -2.486 ms
Remote clock offset: -19.932 ms

Below is generated by plot.py at 2019-03-27 08:40:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 21.31 Mbit/s
95th percentile per-packet one-way delay: 72.779 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 21.31 Mbit/s
95th percentile per-packet one-way delay: 72.779 ms
Loss rate: 0.99%

Run 5: Report of PCC-Expr — Data Link



Run 1: Statistics of QUIC Cubic

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

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

Local clock offset: -0.176 ms

Remote clock offset: -6.306 ms

Below is generated by plot.py at 2019-03-27 08:40:45

Datalink statistics

-- Total of 1 flow:

Average throughput: 37.92 Mbit/s

95th percentile per-packet one-way delay: 65.231 ms

Loss rate: 1.59%

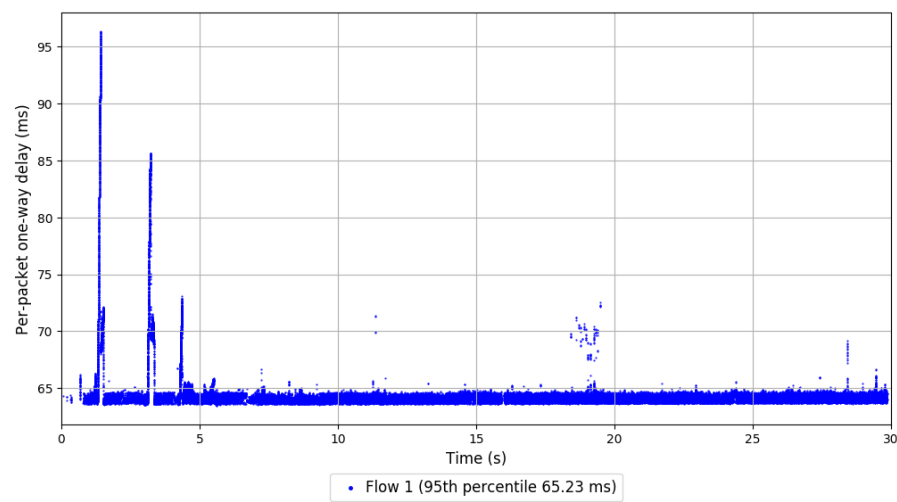
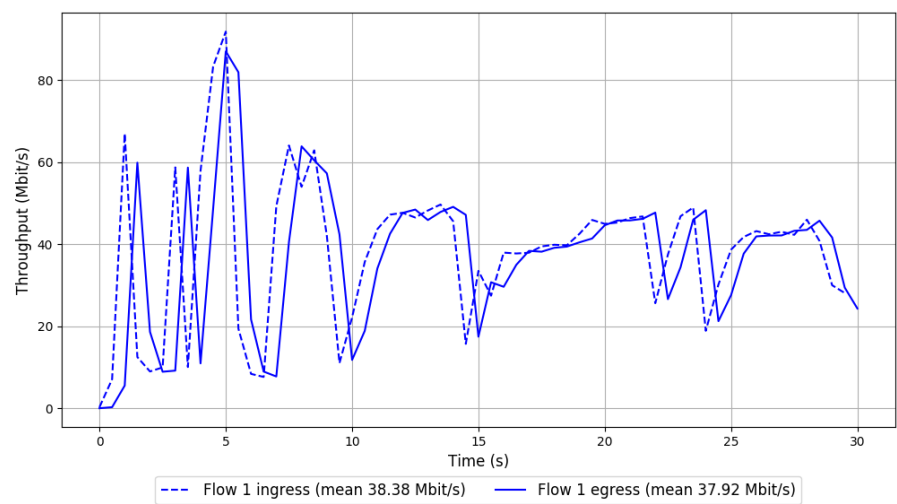
-- Flow 1:

Average throughput: 37.92 Mbit/s

95th percentile per-packet one-way delay: 65.231 ms

Loss rate: 1.59%

Run 1: Report of QUIC Cubic — Data Link

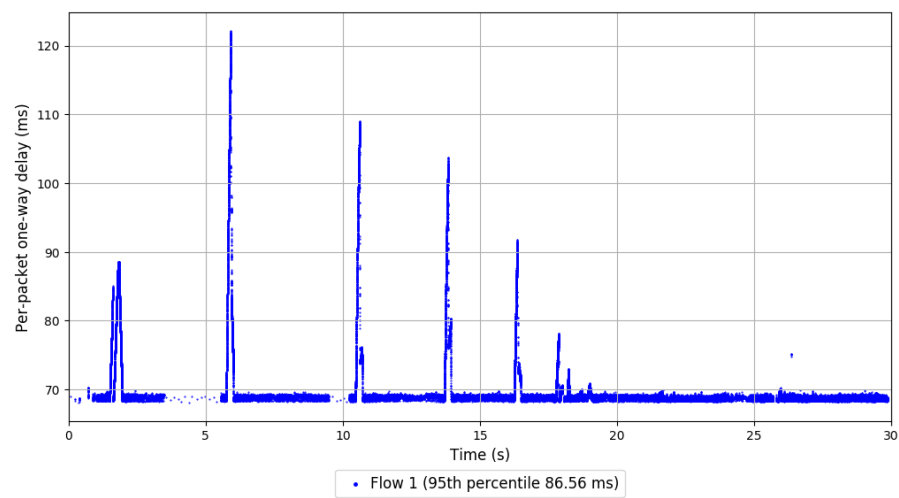
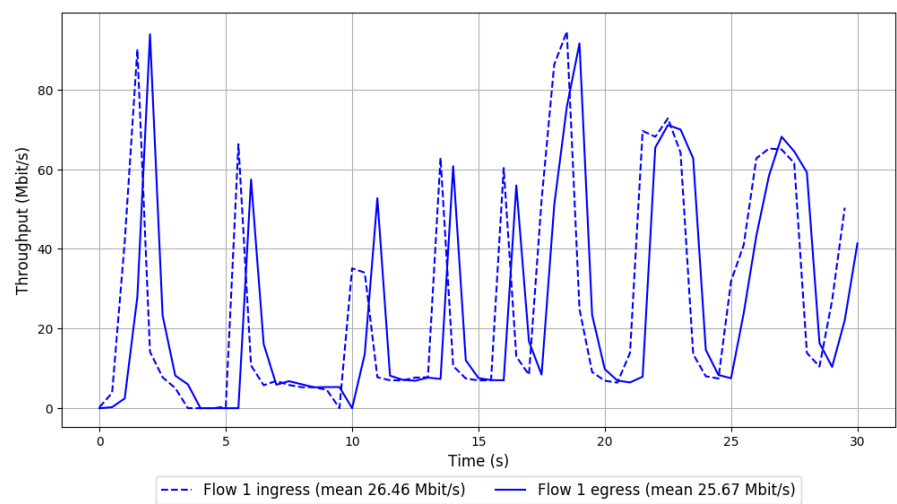


Run 2: Statistics of QUIC Cubic

Start at: 2019-03-27 07:13:21
End at: 2019-03-27 07:13:51
Local clock offset: -1.656 ms
Remote clock offset: -17.557 ms

Below is generated by plot.py at 2019-03-27 08:40:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 25.67 Mbit/s
95th percentile per-packet one-way delay: 86.563 ms
Loss rate: 3.46%
-- Flow 1:
Average throughput: 25.67 Mbit/s
95th percentile per-packet one-way delay: 86.563 ms
Loss rate: 3.46%

Run 2: Report of QUIC Cubic — Data Link

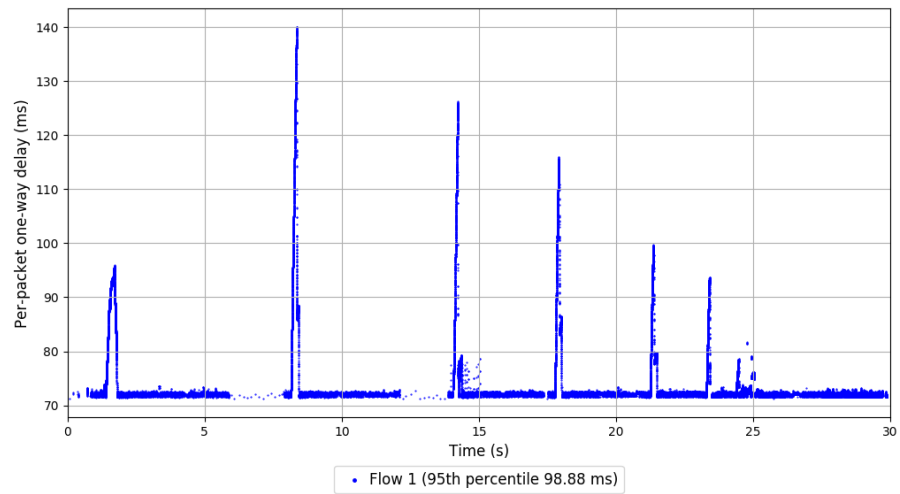
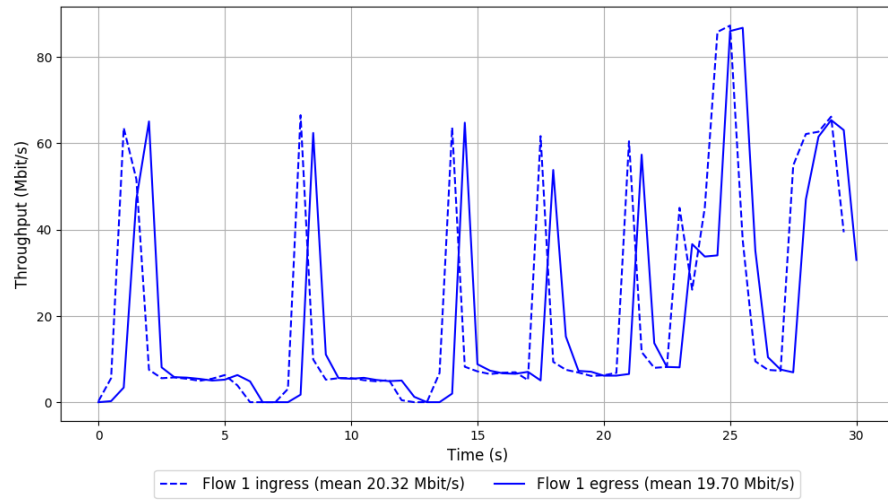


Run 3: Statistics of QUIC Cubic

Start at: 2019-03-27 07:38:33
End at: 2019-03-27 07:39:03
Local clock offset: -5.527 ms
Remote clock offset: -19.807 ms

Below is generated by plot.py at 2019-03-27 08:40:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 19.70 Mbit/s
95th percentile per-packet one-way delay: 98.878 ms
Loss rate: 3.49%
-- Flow 1:
Average throughput: 19.70 Mbit/s
95th percentile per-packet one-way delay: 98.878 ms
Loss rate: 3.49%

Run 3: Report of QUIC Cubic — Data Link

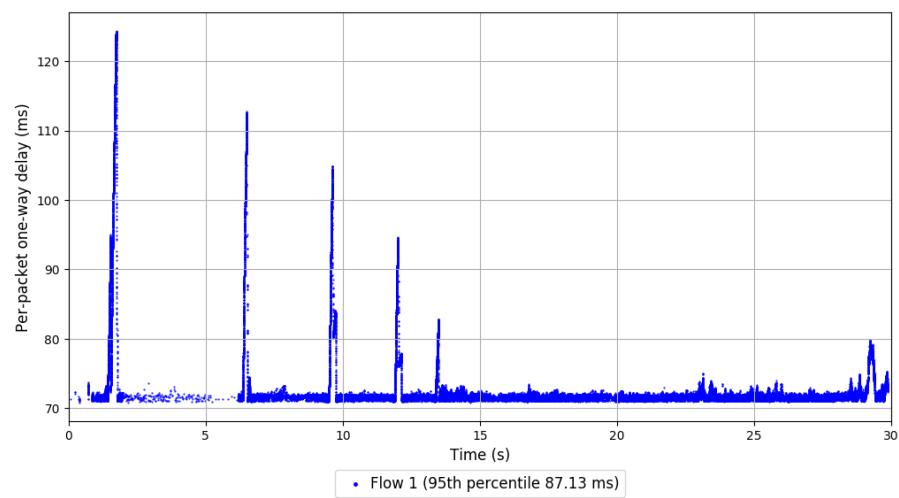
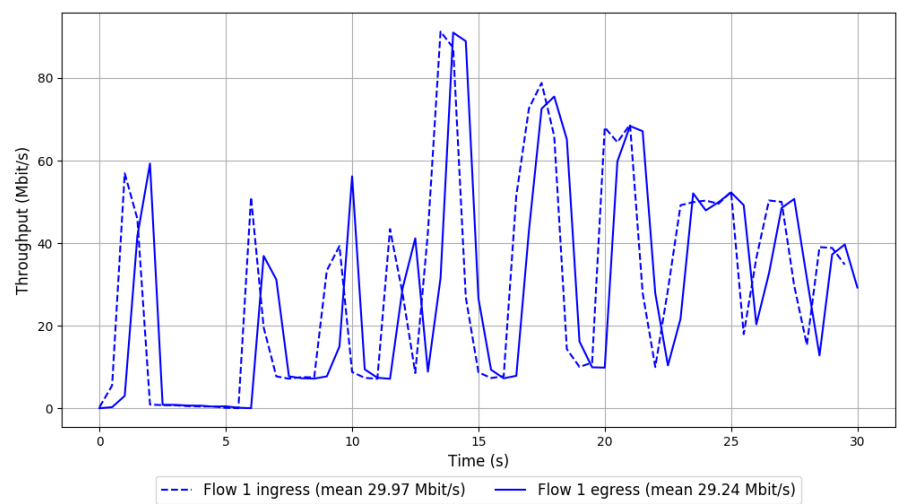


Run 4: Statistics of QUIC Cubic

Start at: 2019-03-27 08:03:32
End at: 2019-03-27 08:04:02
Local clock offset: -5.196 ms
Remote clock offset: -18.512 ms

Below is generated by plot.py at 2019-03-27 08:40:45
Datalink statistics
-- Total of 1 flow:
Average throughput: 29.24 Mbit/s
95th percentile per-packet one-way delay: 87.132 ms
Loss rate: 2.90%
-- Flow 1:
Average throughput: 29.24 Mbit/s
95th percentile per-packet one-way delay: 87.132 ms
Loss rate: 2.90%

Run 4: Report of QUIC Cubic — Data Link

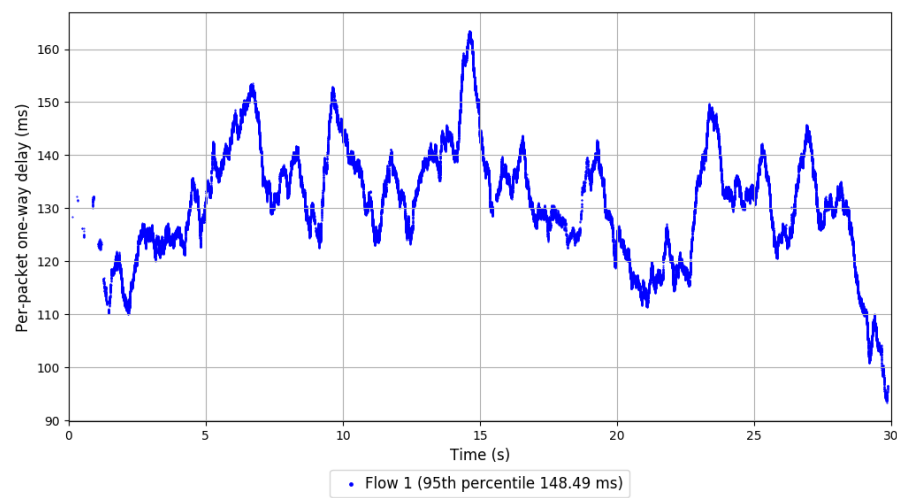
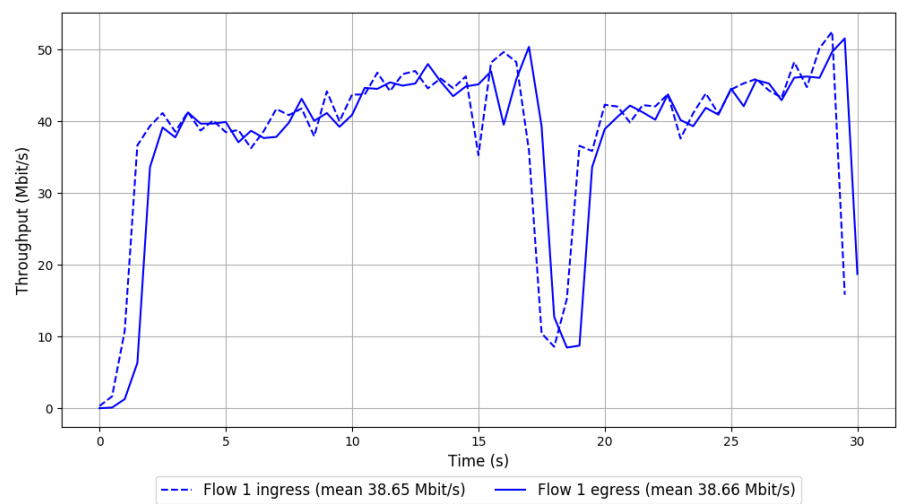


Run 5: Statistics of QUIC Cubic

Start at: 2019-03-27 08:28:19
End at: 2019-03-27 08:28:49
Local clock offset: -1.808 ms
Remote clock offset: -6.642 ms

Below is generated by plot.py at 2019-03-27 08:40:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 38.66 Mbit/s
95th percentile per-packet one-way delay: 148.492 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 38.66 Mbit/s
95th percentile per-packet one-way delay: 148.492 ms
Loss rate: 0.67%

Run 5: Report of QUIC Cubic — Data Link

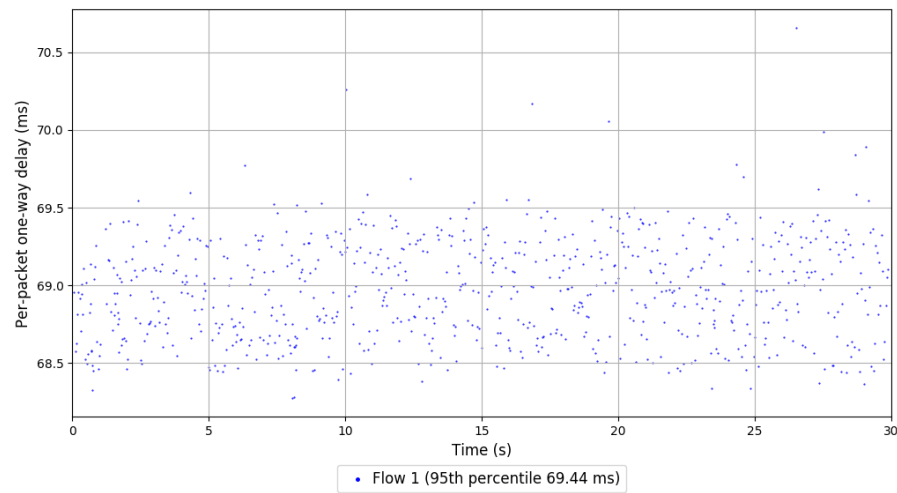
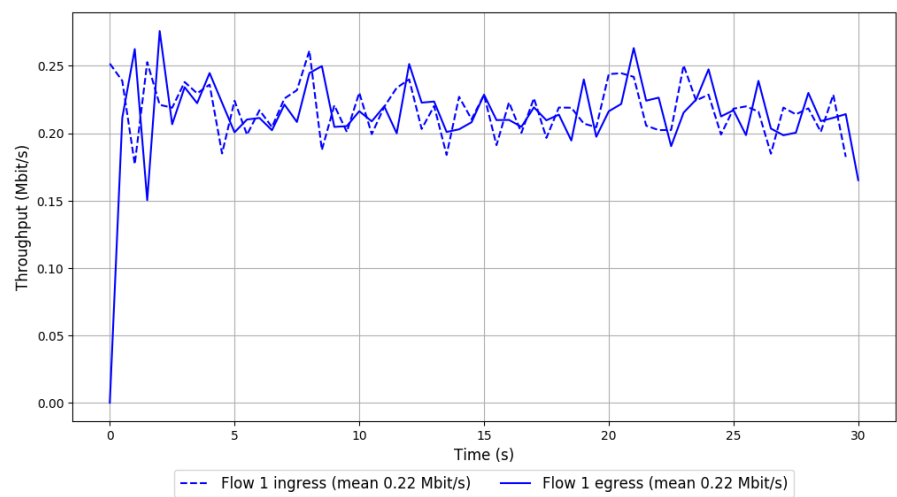


Run 1: Statistics of SCReAM

Start at: 2019-03-27 06:48:44
End at: 2019-03-27 06:49:14
Local clock offset: -0.372 ms
Remote clock offset: -11.01 ms

Below is generated by plot.py at 2019-03-27 08:40:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.440 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.440 ms
Loss rate: 0.38%

Run 1: Report of SReAM — Data Link

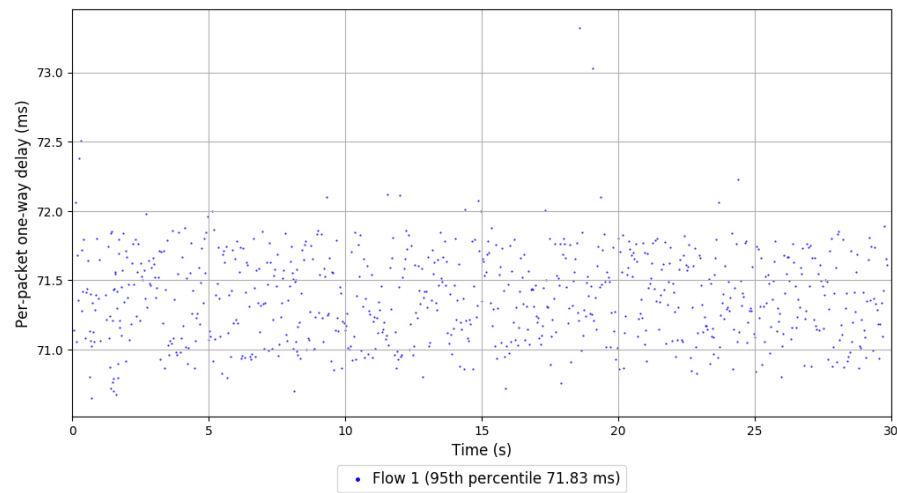
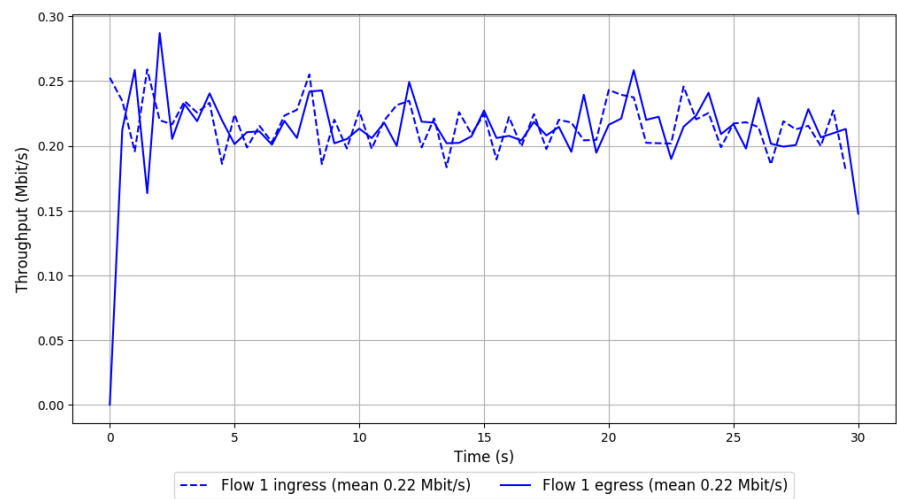


Run 2: Statistics of SCReAM

Start at: 2019-03-27 07:14:32
End at: 2019-03-27 07:15:02
Local clock offset: -1.642 ms
Remote clock offset: -20.058 ms

Below is generated by plot.py at 2019-03-27 08:40:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 71.832 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 71.832 ms
Loss rate: 0.50%

Run 2: Report of SReAM — Data Link

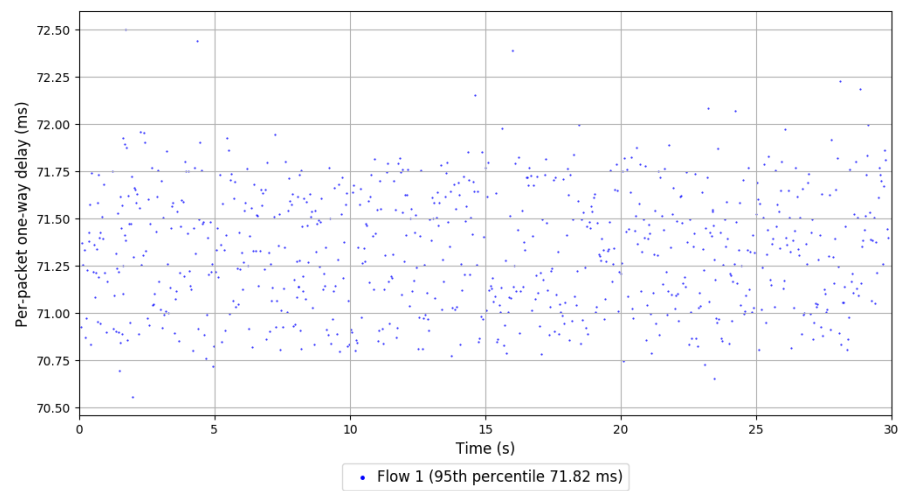
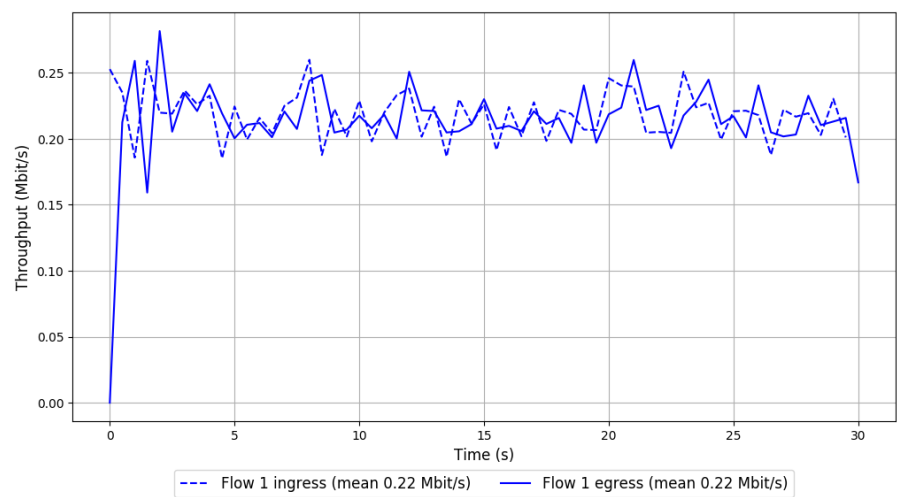


Run 3: Statistics of SCReAM

Start at: 2019-03-27 07:39:43
End at: 2019-03-27 07:40:13
Local clock offset: -5.592 ms
Remote clock offset: -18.852 ms

Below is generated by plot.py at 2019-03-27 08:40:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 71.818 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 71.818 ms
Loss rate: 0.51%

Run 3: Report of SReAM — Data Link

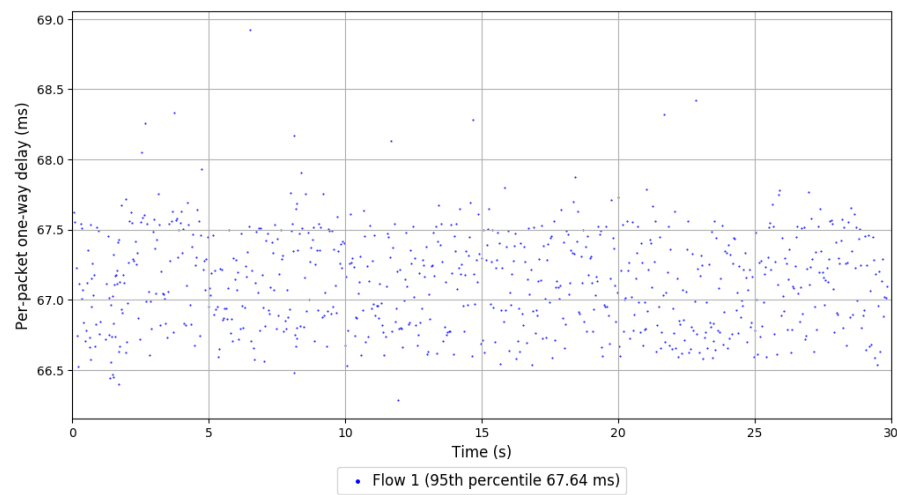
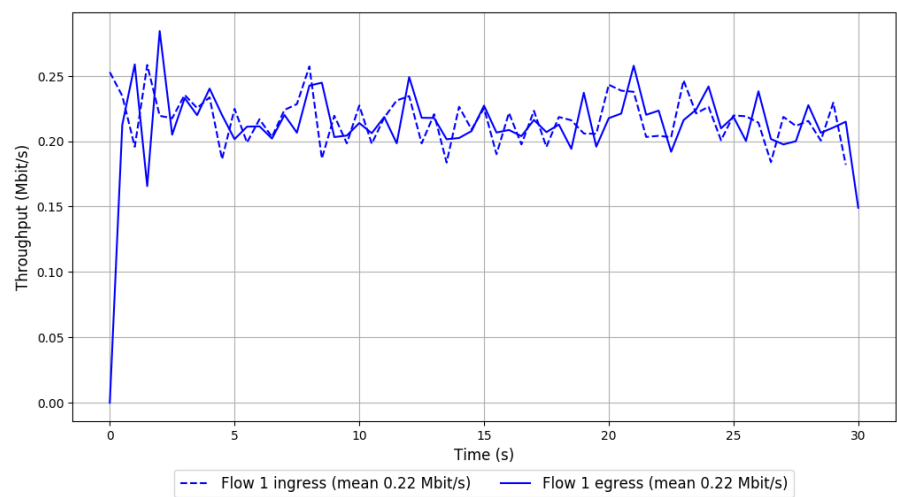


Run 4: Statistics of SCReAM

Start at: 2019-03-27 08:04:43
End at: 2019-03-27 08:05:13
Local clock offset: -5.357 ms
Remote clock offset: -14.751 ms

Below is generated by plot.py at 2019-03-27 08:40:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.640 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.640 ms
Loss rate: 0.50%

Run 4: Report of SReAM — Data Link

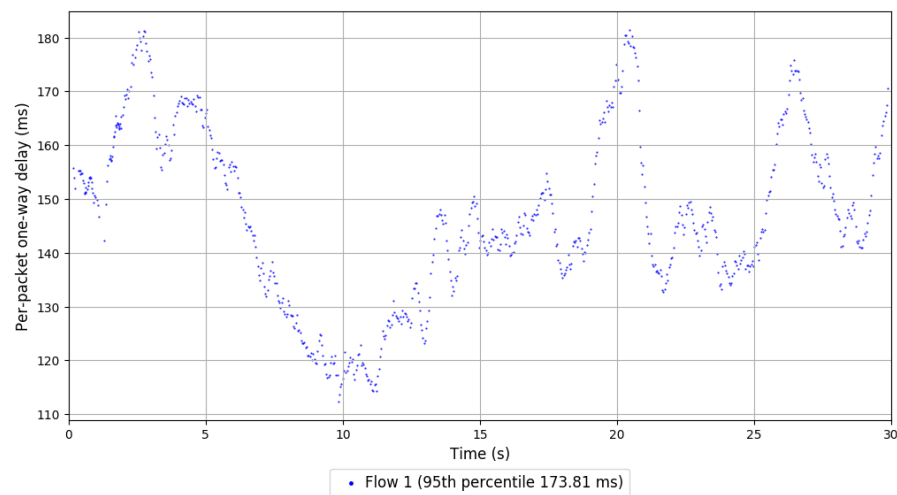
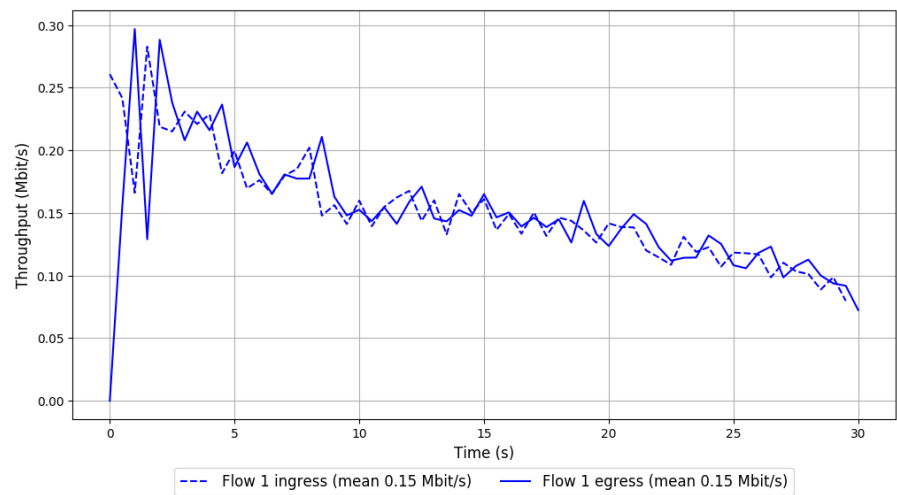


Run 5: Statistics of SCReAM

Start at: 2019-03-27 08:29:32
End at: 2019-03-27 08:30:03
Local clock offset: -1.636 ms
Remote clock offset: -14.584 ms

Below is generated by plot.py at 2019-03-27 08:40:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 173.810 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 173.810 ms
Loss rate: 0.40%

Run 5: Report of SReAM — Data Link

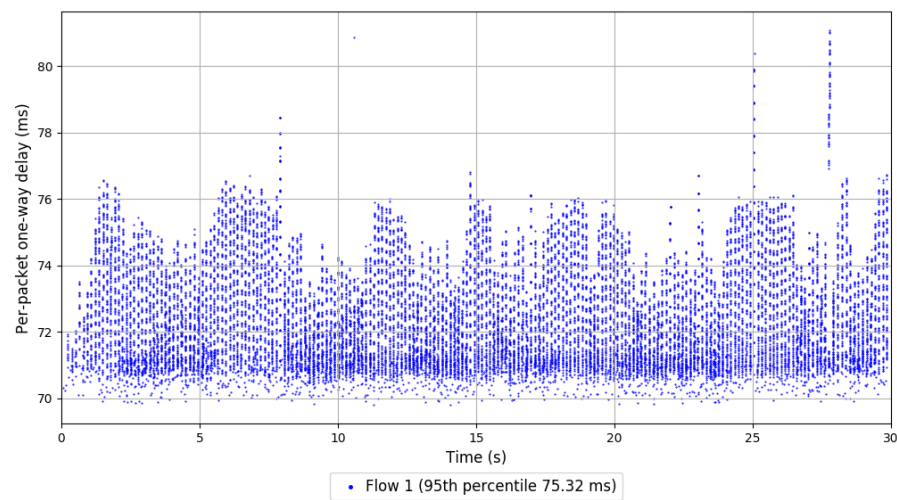
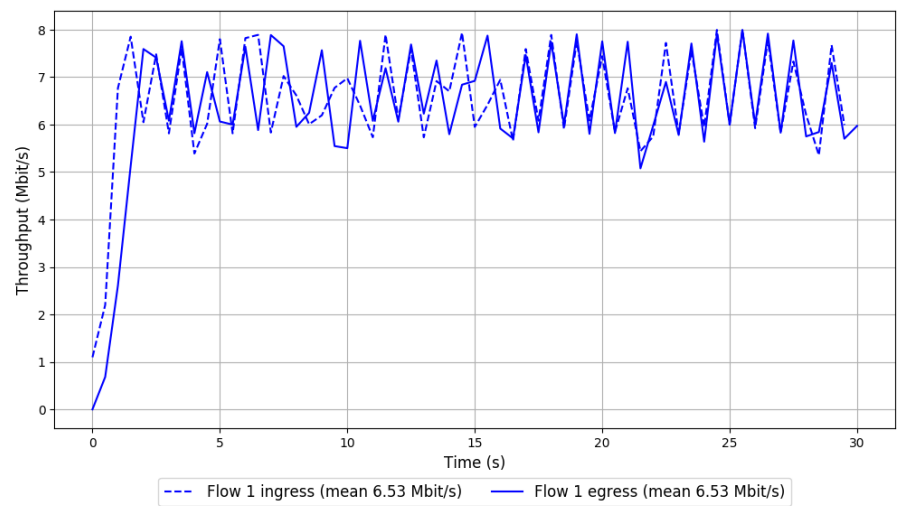


Run 1: Statistics of Sprout

Start at: 2019-03-27 06:40:32
End at: 2019-03-27 06:41:02
Local clock offset: -0.213 ms
Remote clock offset: -13.801 ms

Below is generated by plot.py at 2019-03-27 08:40:56
Datalink statistics
-- Total of 1 flow:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 75.319 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 75.319 ms
Loss rate: 0.51%

Run 1: Report of Sprout — Data Link



Run 2: Statistics of Sprout

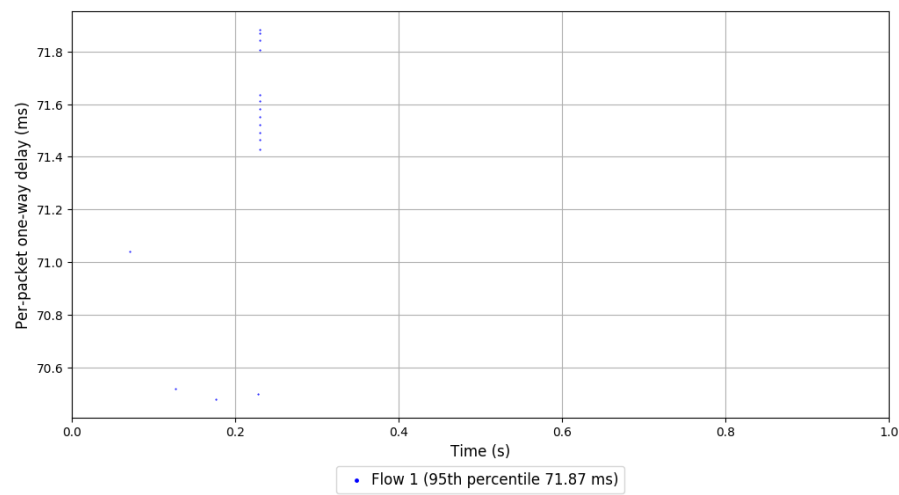
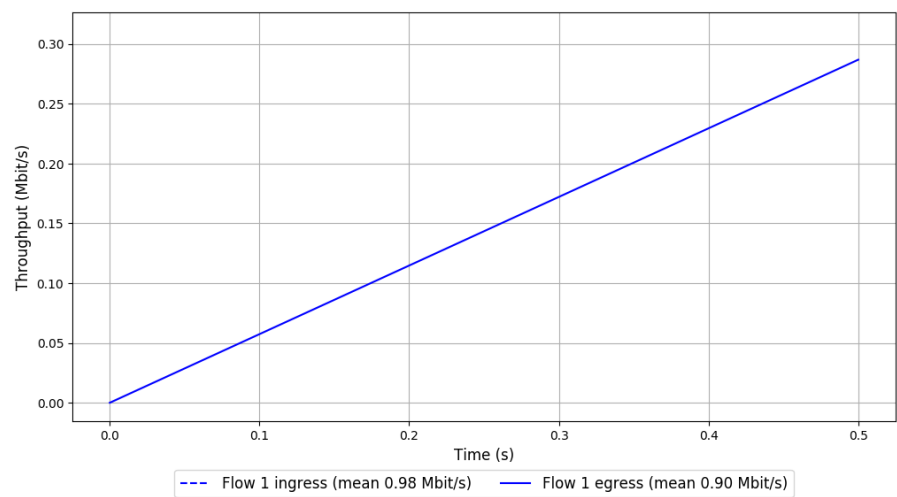
Start at: 2019-03-27 07:06:04

End at: 2019-03-27 07:06:34

Local clock offset: -1.524 ms

Remote clock offset: -18.882 ms

Run 2: Report of Sprout — Data Link



Run 3: Statistics of Sprout

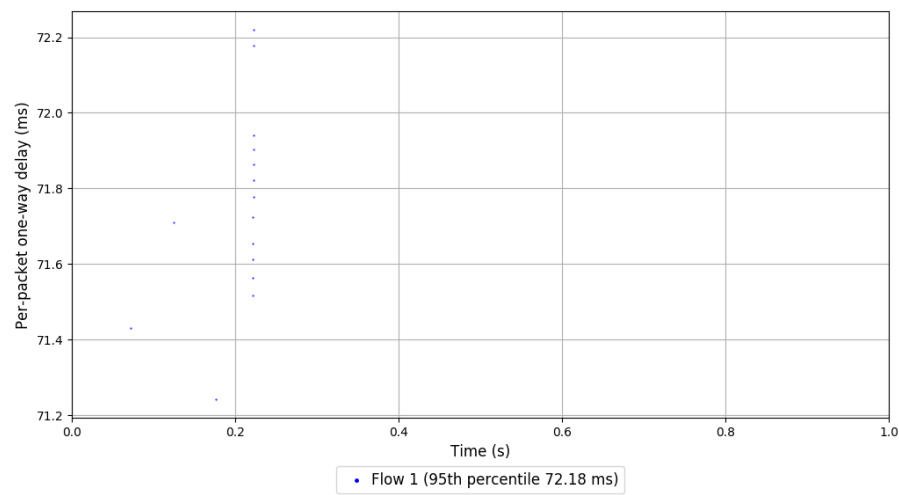
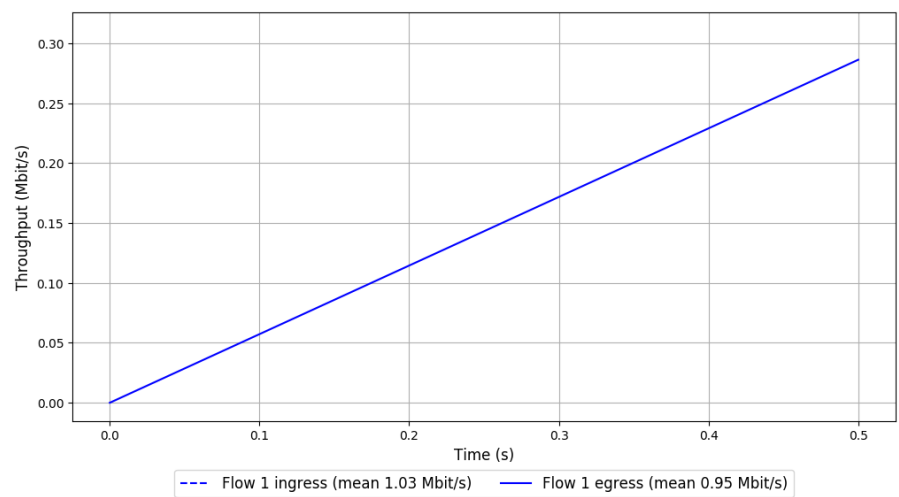
Start at: 2019-03-27 07:31:26

End at: 2019-03-27 07:31:56

Local clock offset: -4.867 ms

Remote clock offset: -19.293 ms

Run 3: Report of Sprout — Data Link



Run 4: Statistics of Sprout

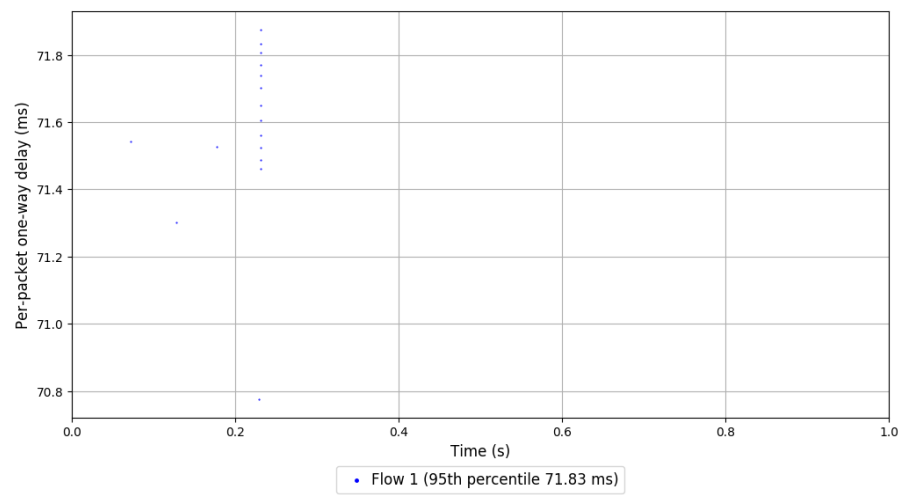
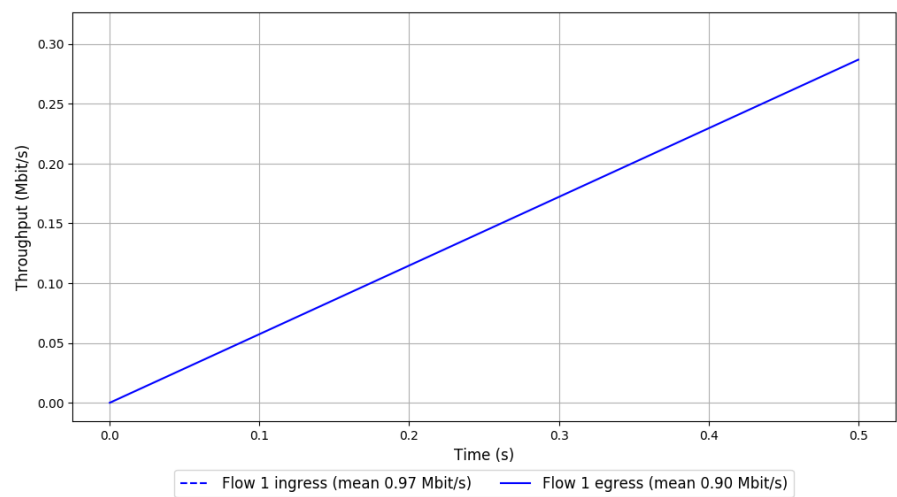
Start at: 2019-03-27 07:56:25

End at: 2019-03-27 07:56:55

Local clock offset: -5.335 ms

Remote clock offset: -19.367 ms

Run 4: Report of Sprout — Data Link



Run 5: Statistics of Sprout

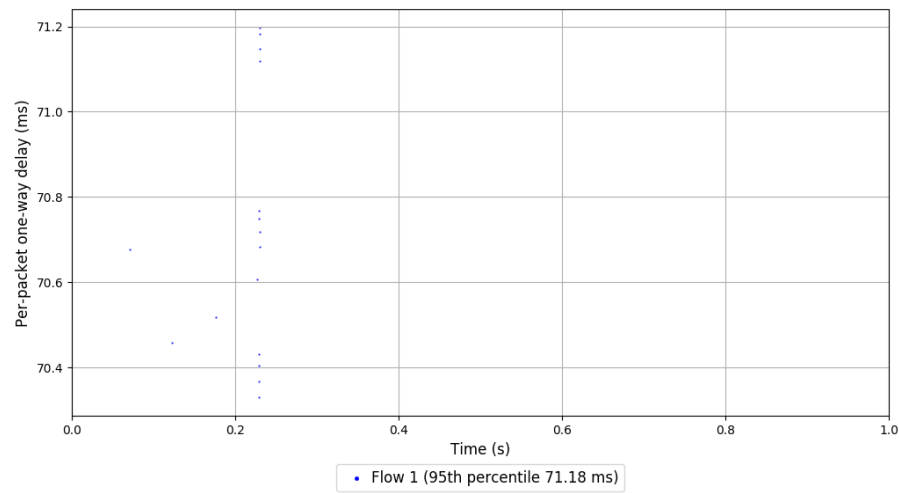
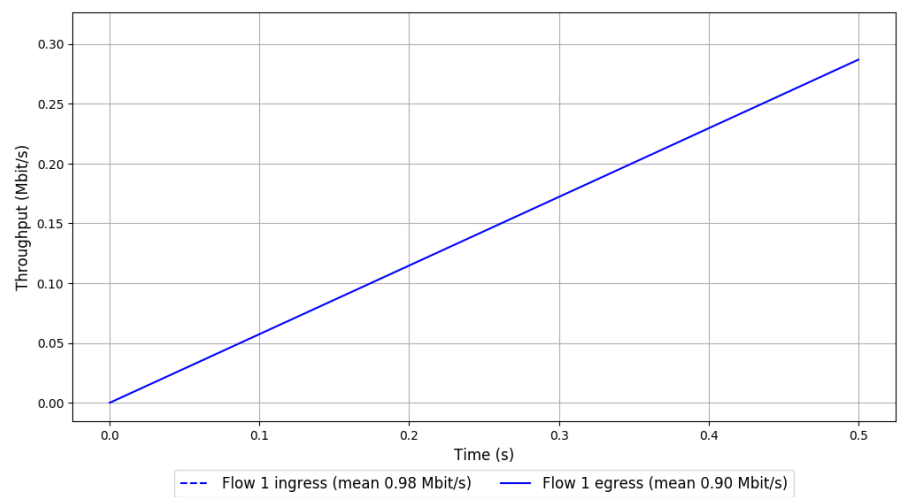
Start at: 2019-03-27 08:21:16

End at: 2019-03-27 08:21:46

Local clock offset: -3.351 ms

Remote clock offset: -17.803 ms

Run 5: Report of Sprout — Data Link



Run 1: Statistics of TaoVA-100x

Start at: 2019-03-27 06:49:53

End at: 2019-03-27 06:50:23

Local clock offset: -0.542 ms

Remote clock offset: -7.074 ms

Below is generated by plot.py at 2019-03-27 08:41:24

Datalink statistics

-- Total of 1 flow:

Average throughput: 29.98 Mbit/s

95th percentile per-packet one-way delay: 78.313 ms

Loss rate: 19.51%

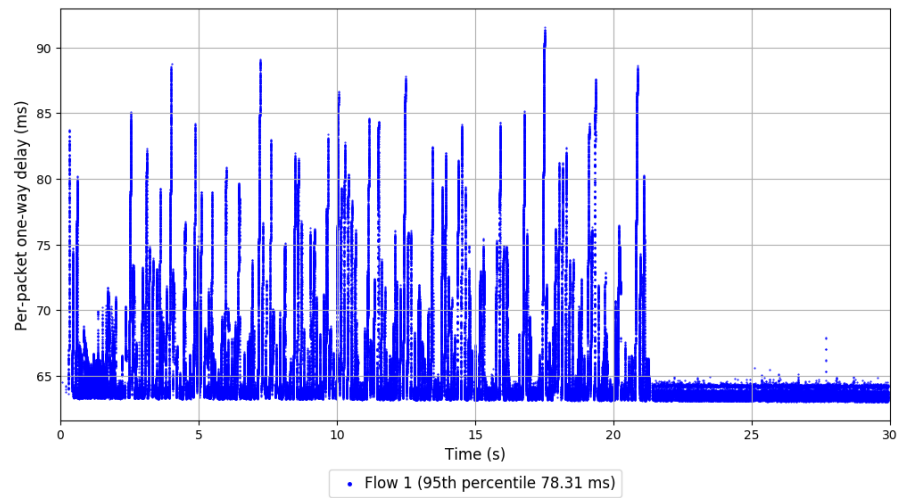
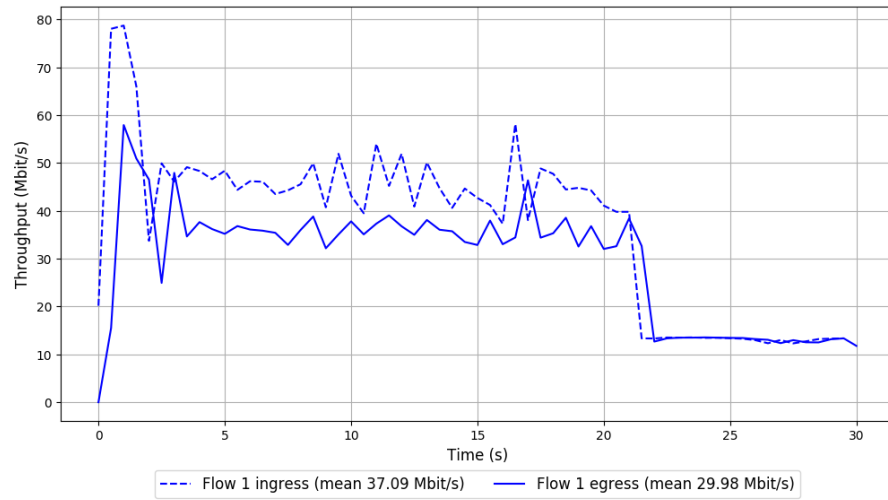
-- Flow 1:

Average throughput: 29.98 Mbit/s

95th percentile per-packet one-way delay: 78.313 ms

Loss rate: 19.51%

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

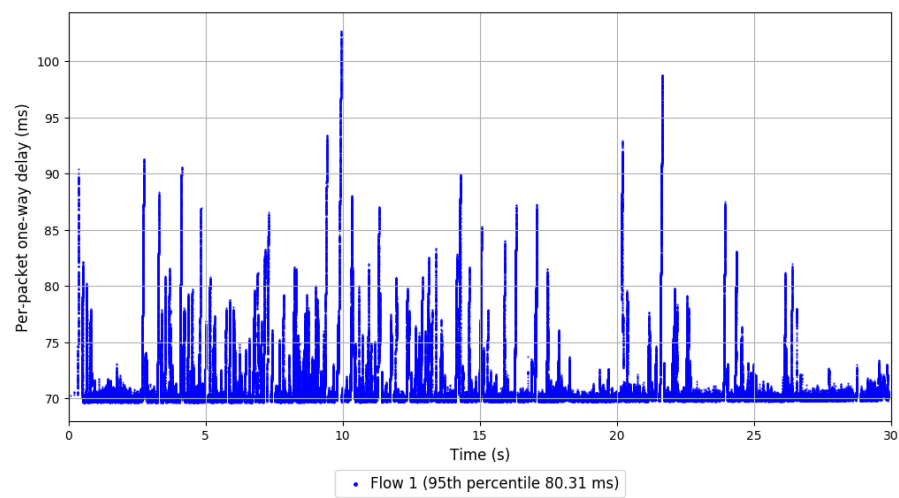
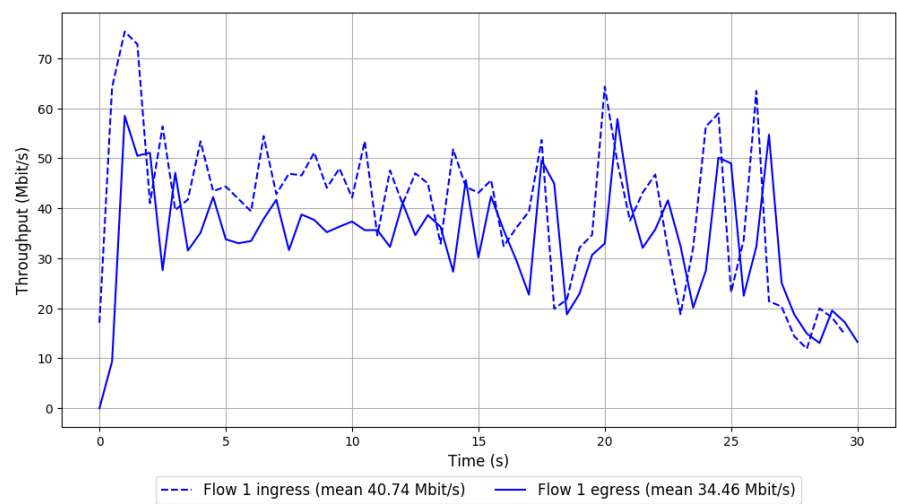


Run 2: Statistics of TaoVA-100x

Start at: 2019-03-27 07:15:41
End at: 2019-03-27 07:16:11
Local clock offset: -1.668 ms
Remote clock offset: -18.939 ms

Below is generated by plot.py at 2019-03-27 08:41:28
Datalink statistics
-- Total of 1 flow:
Average throughput: 34.46 Mbit/s
95th percentile per-packet one-way delay: 80.311 ms
Loss rate: 15.84%
-- Flow 1:
Average throughput: 34.46 Mbit/s
95th percentile per-packet one-way delay: 80.311 ms
Loss rate: 15.84%

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

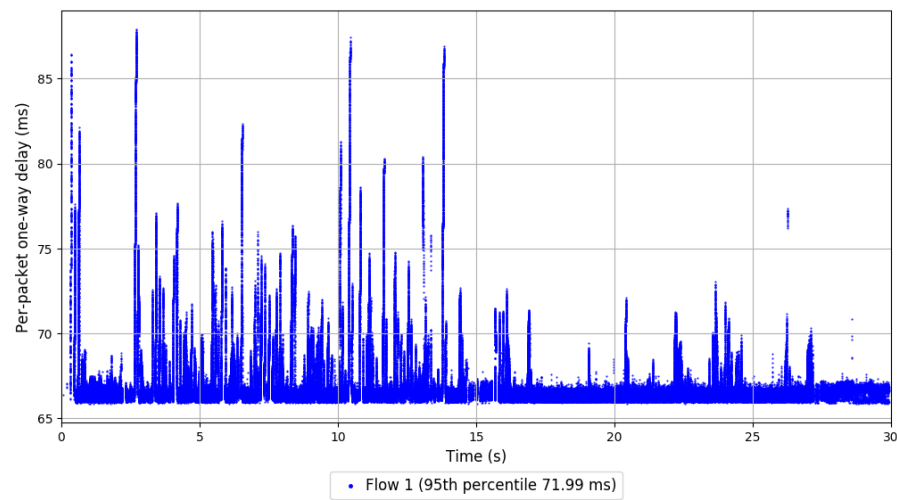
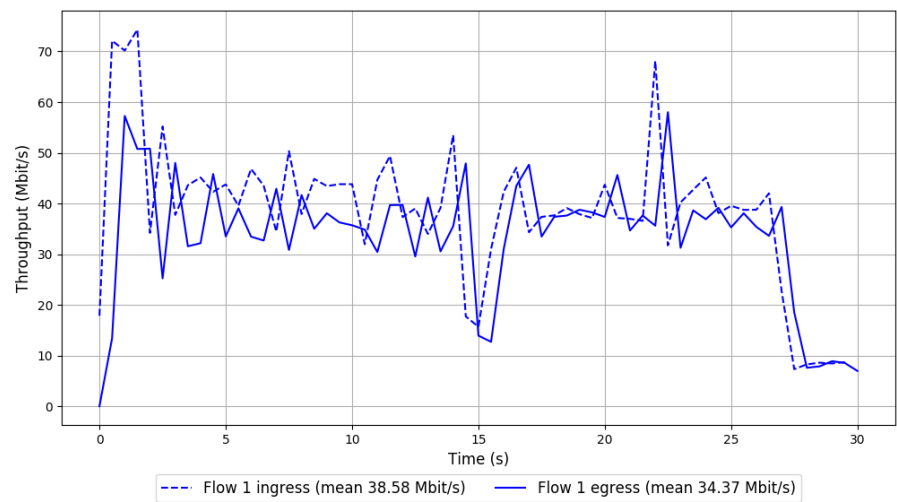


Run 3: Statistics of TaoVA-100x

Start at: 2019-03-27 07:40:52
End at: 2019-03-27 07:41:22
Local clock offset: -5.58 ms
Remote clock offset: -14.542 ms

Below is generated by plot.py at 2019-03-27 08:41:29
Datalink statistics
-- Total of 1 flow:
Average throughput: 34.37 Mbit/s
95th percentile per-packet one-way delay: 71.991 ms
Loss rate: 11.32%
-- Flow 1:
Average throughput: 34.37 Mbit/s
95th percentile per-packet one-way delay: 71.991 ms
Loss rate: 11.32%

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

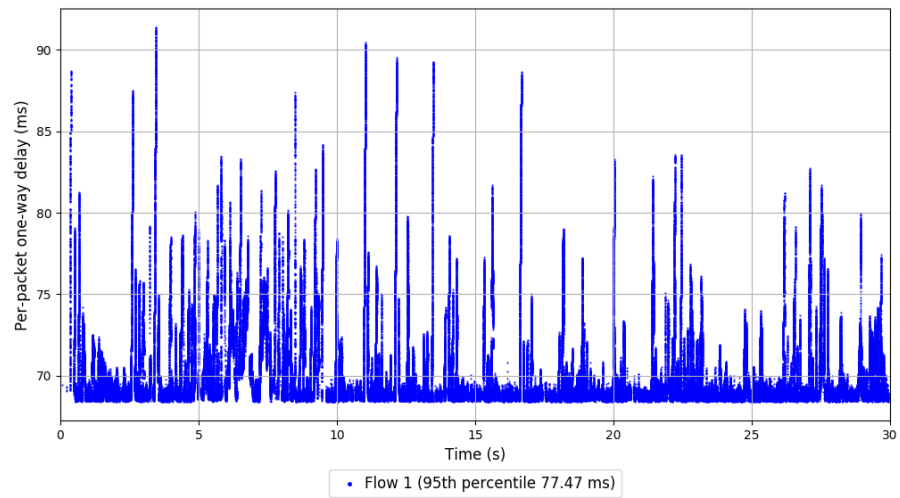
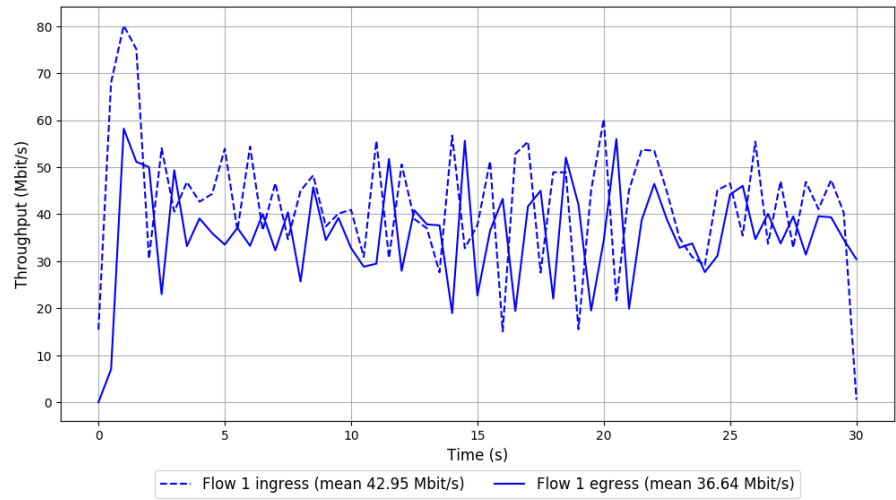


Run 4: Statistics of TaoVA-100x

Start at: 2019-03-27 08:05:52
End at: 2019-03-27 08:06:22
Local clock offset: -5.249 ms
Remote clock offset: -16.438 ms

Below is generated by plot.py at 2019-03-27 08:41:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 36.64 Mbit/s
95th percentile per-packet one-way delay: 77.465 ms
Loss rate: 15.11%
-- Flow 1:
Average throughput: 36.64 Mbit/s
95th percentile per-packet one-way delay: 77.465 ms
Loss rate: 15.11%

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

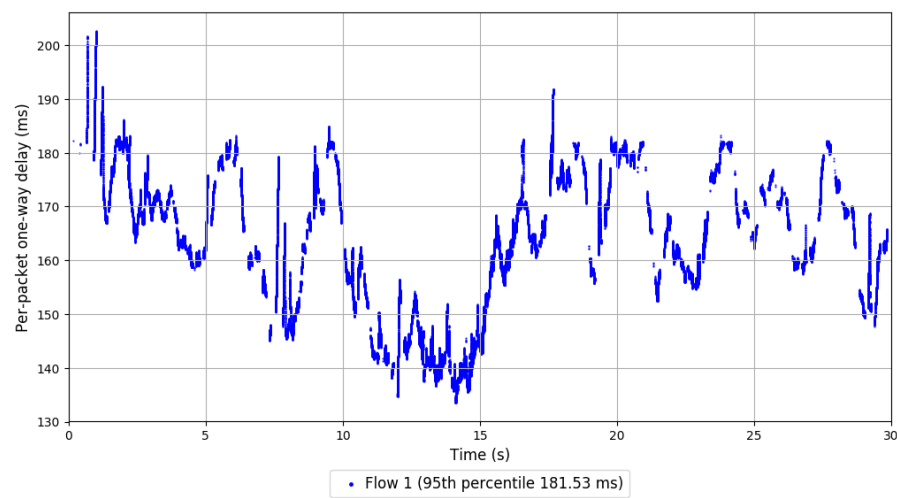
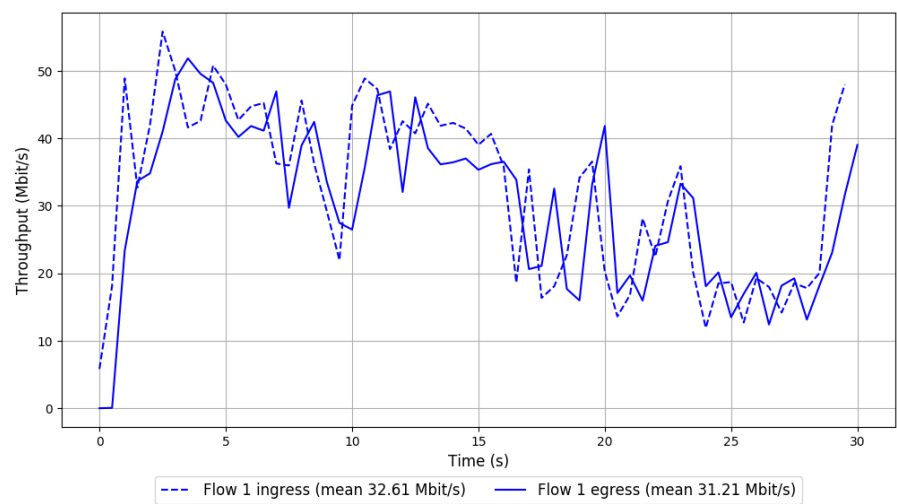


Run 5: Statistics of TaoVA-100x

Start at: 2019-03-27 08:30:44
End at: 2019-03-27 08:31:14
Local clock offset: -1.451 ms
Remote clock offset: -14.923 ms

Below is generated by plot.py at 2019-03-27 08:41:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 31.21 Mbit/s
95th percentile per-packet one-way delay: 181.528 ms
Loss rate: 5.15%
-- Flow 1:
Average throughput: 31.21 Mbit/s
95th percentile per-packet one-way delay: 181.528 ms
Loss rate: 5.15%

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

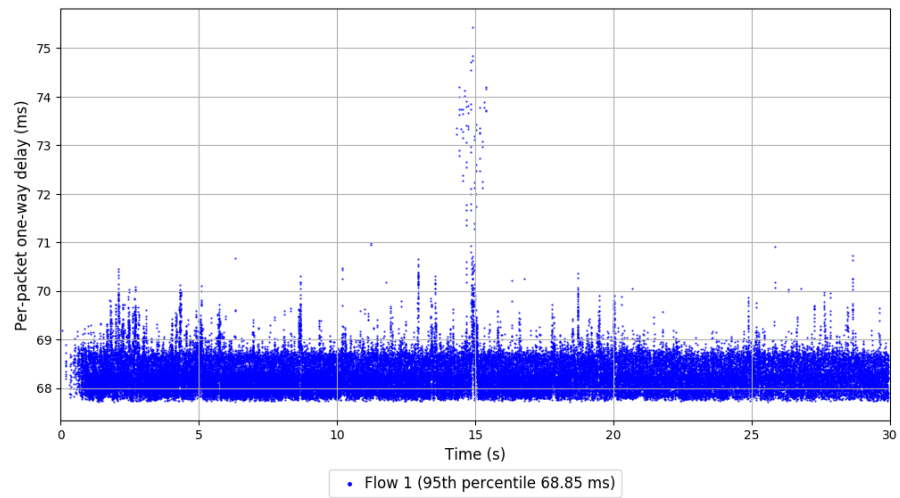
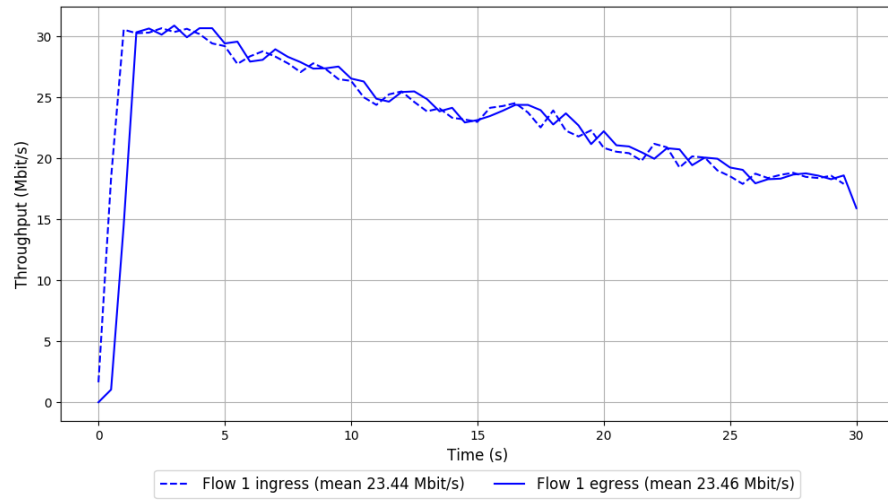


Run 1: Statistics of TCP Vegas

Start at: 2019-03-27 06:33:22
End at: 2019-03-27 06:33:52
Local clock offset: -0.741 ms
Remote clock offset: -12.616 ms

Below is generated by plot.py at 2019-03-27 08:41:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 23.46 Mbit/s
95th percentile per-packet one-way delay: 68.850 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 23.46 Mbit/s
95th percentile per-packet one-way delay: 68.850 ms
Loss rate: 0.32%

Run 1: Report of TCP Vegas — Data Link

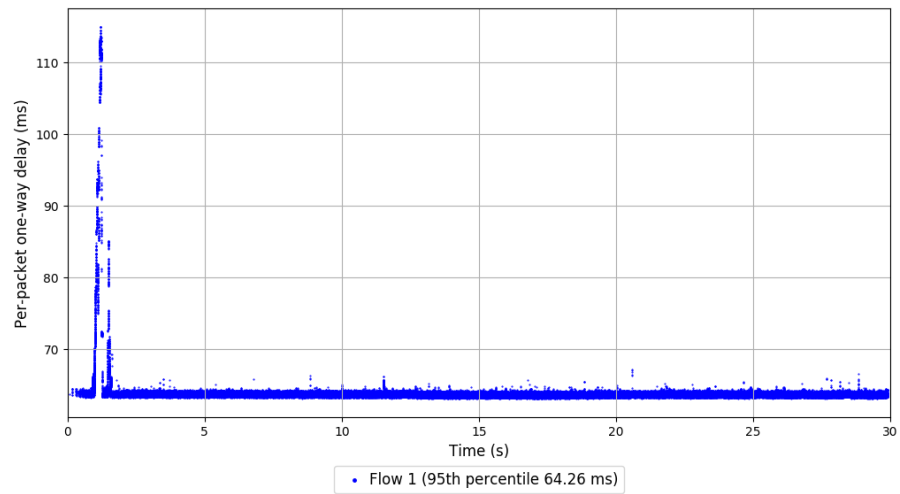
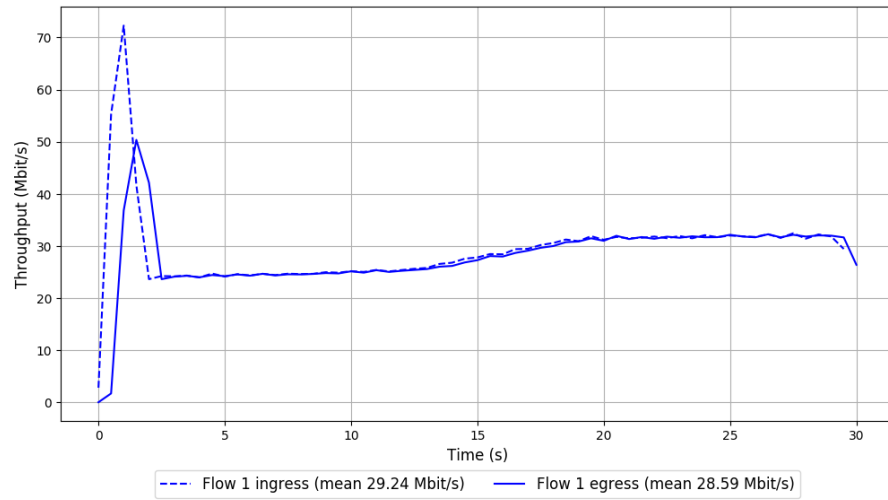


Run 2: Statistics of TCP Vegas

Start at: 2019-03-27 06:58:09
End at: 2019-03-27 06:58:39
Local clock offset: -1.218 ms
Remote clock offset: -10.369 ms

Below is generated by plot.py at 2019-03-27 08:41:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 28.59 Mbit/s
95th percentile per-packet one-way delay: 64.263 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 28.59 Mbit/s
95th percentile per-packet one-way delay: 64.263 ms
Loss rate: 2.58%

Run 2: Report of TCP Vegas — Data Link

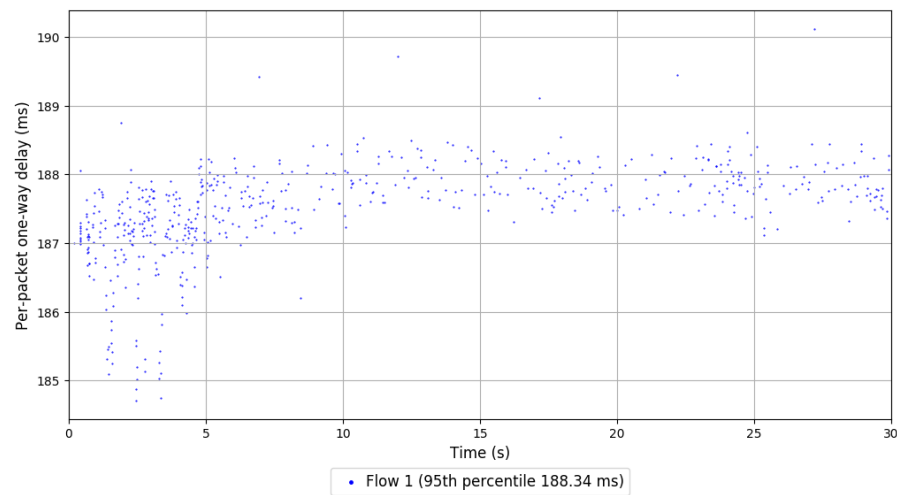
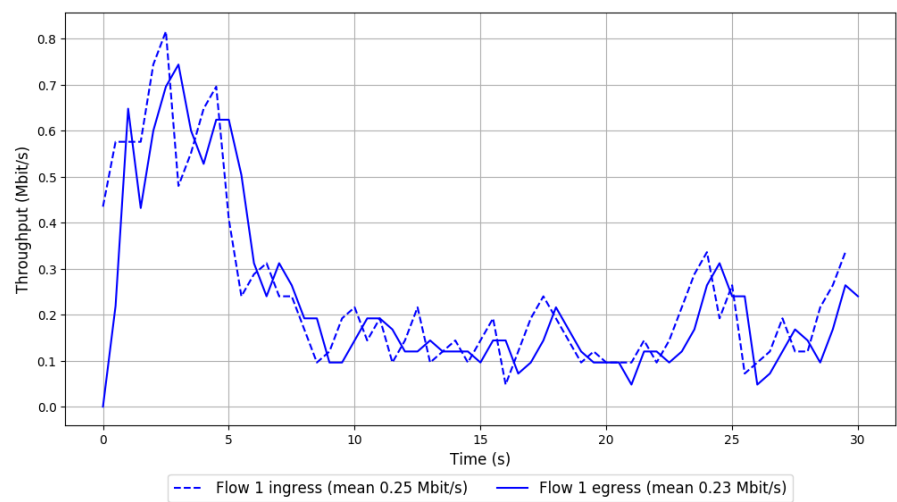


Run 3: Statistics of TCP Vegas

Start at: 2019-03-27 07:23:53
End at: 2019-03-27 07:24:23
Local clock offset: -3.808 ms
Remote clock offset: -21.657 ms

Below is generated by plot.py at 2019-03-27 08:41:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 188.335 ms
Loss rate: 6.46%
-- Flow 1:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 188.335 ms
Loss rate: 6.46%

Run 3: Report of TCP Vegas — Data Link

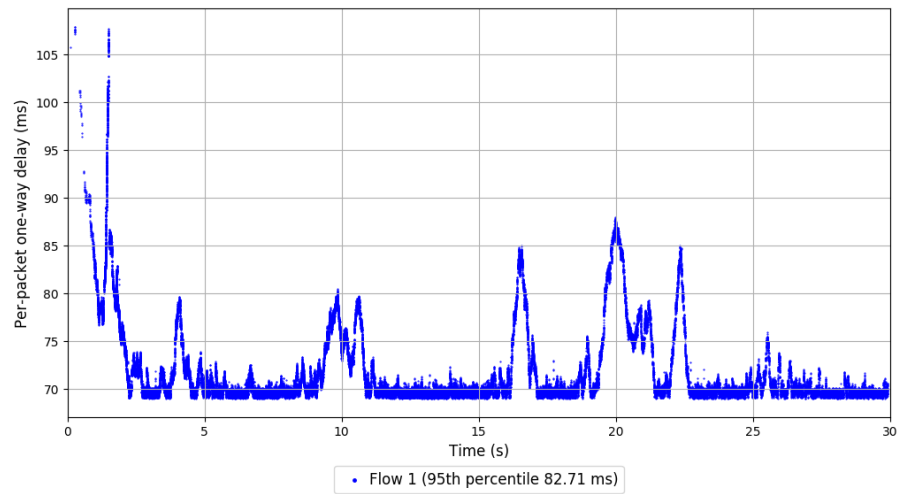
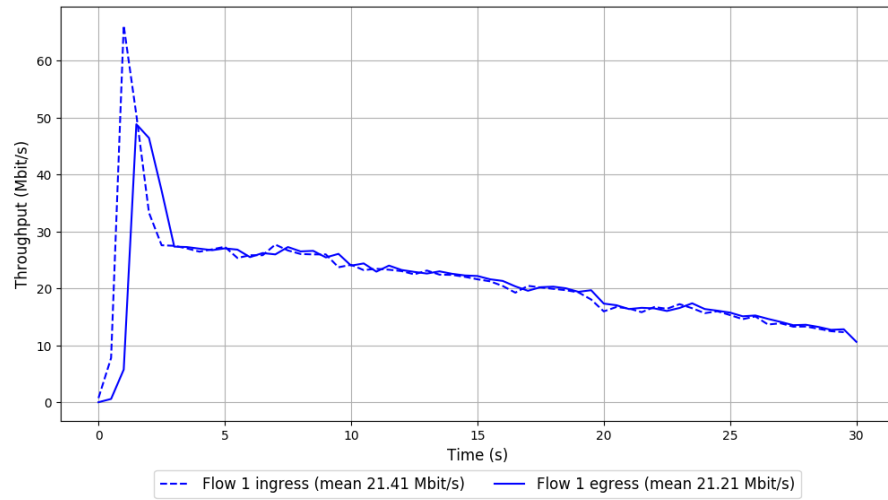


Run 4: Statistics of TCP Vegas

Start at: 2019-03-27 07:49:05
End at: 2019-03-27 07:49:35
Local clock offset: -5.575 ms
Remote clock offset: -17.325 ms

Below is generated by plot.py at 2019-03-27 08:41:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 21.21 Mbit/s
95th percentile per-packet one-way delay: 82.710 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 21.21 Mbit/s
95th percentile per-packet one-way delay: 82.710 ms
Loss rate: 1.52%

Run 4: Report of TCP Vegas — Data Link

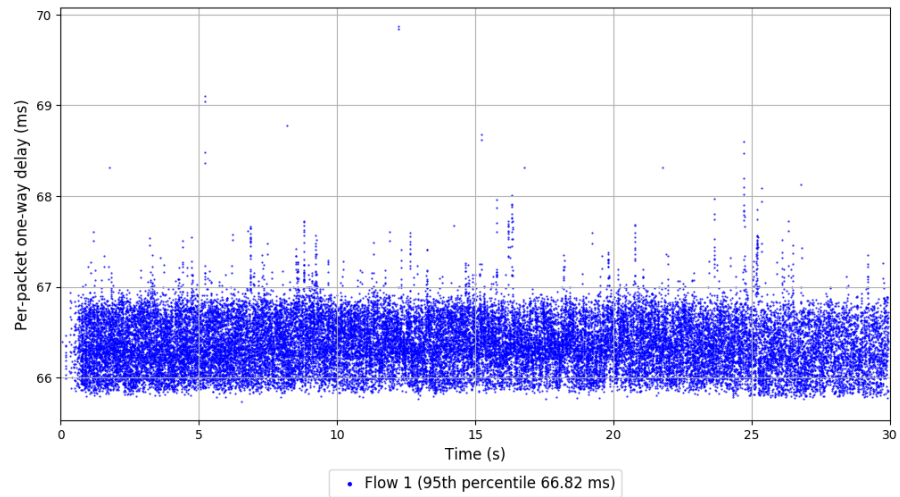
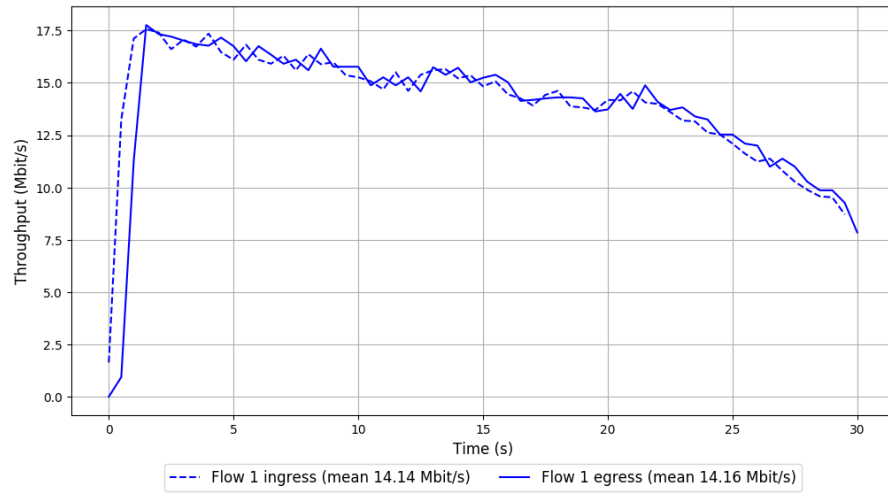


Run 5: Statistics of TCP Vegas

Start at: 2019-03-27 08:14:03
End at: 2019-03-27 08:14:33
Local clock offset: -5.401 ms
Remote clock offset: -13.654 ms

Below is generated by plot.py at 2019-03-27 08:41:37
Datalink statistics
-- Total of 1 flow:
Average throughput: 14.16 Mbit/s
95th percentile per-packet one-way delay: 66.822 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 14.16 Mbit/s
95th percentile per-packet one-way delay: 66.822 ms
Loss rate: 0.26%

Run 5: Report of TCP Vegas — Data Link

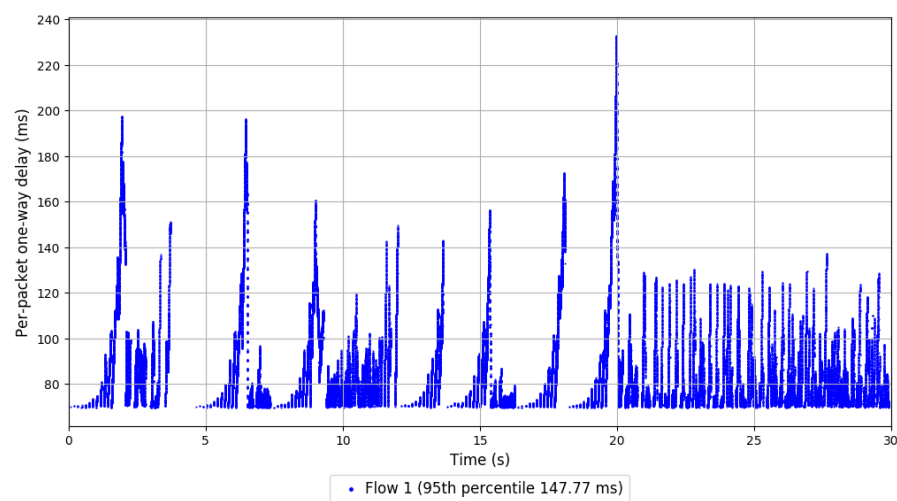
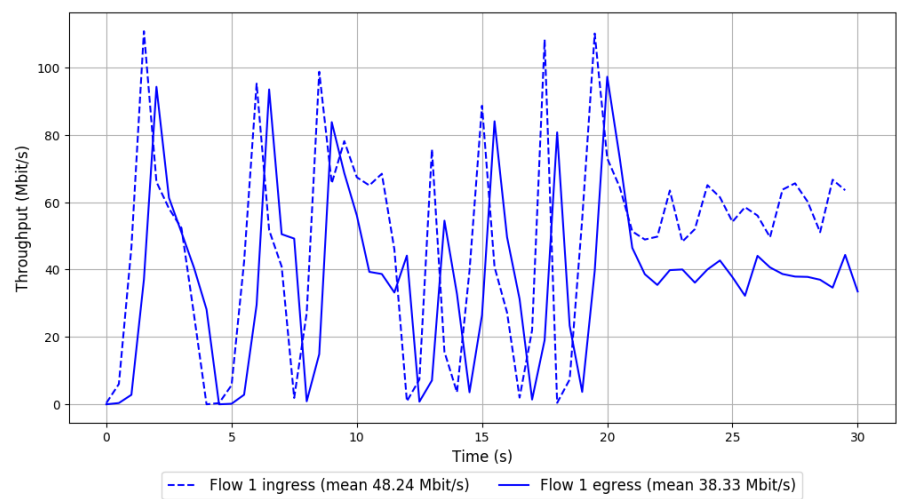


Run 1: Statistics of Verus

Start at: 2019-03-27 06:39:21
End at: 2019-03-27 06:39:51
Local clock offset: -0.274 ms
Remote clock offset: -13.411 ms

Below is generated by plot.py at 2019-03-27 08:41:41
Datalink statistics
-- Total of 1 flow:
Average throughput: 38.33 Mbit/s
95th percentile per-packet one-way delay: 147.766 ms
Loss rate: 20.94%
-- Flow 1:
Average throughput: 38.33 Mbit/s
95th percentile per-packet one-way delay: 147.766 ms
Loss rate: 20.94%

Run 1: Report of Verus — Data Link

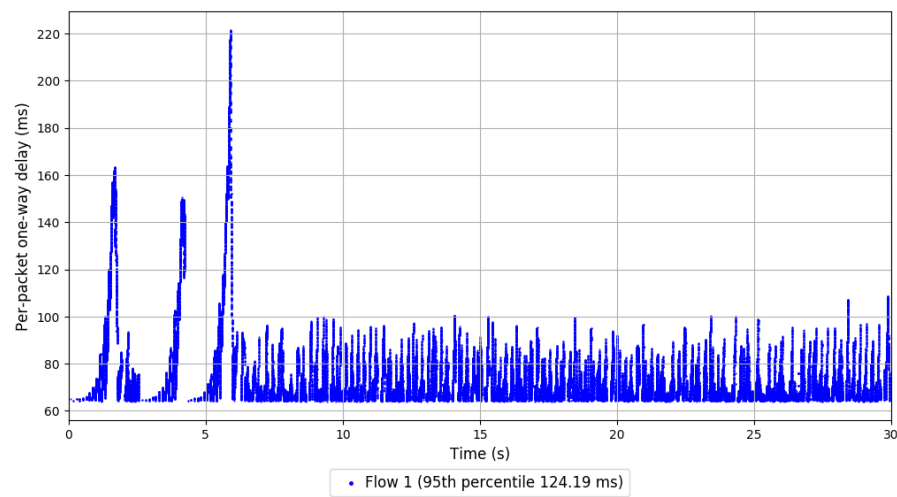
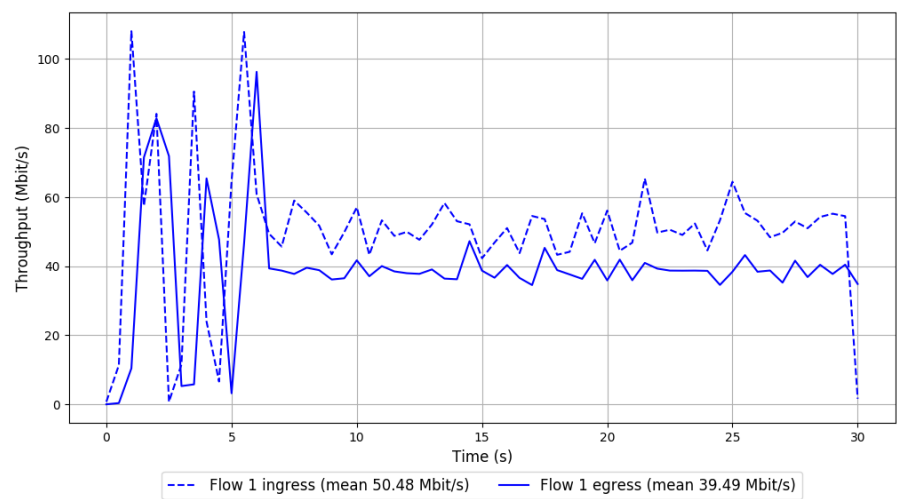


Run 2: Statistics of Verus

Start at: 2019-03-27 07:04:41
End at: 2019-03-27 07:05:11
Local clock offset: -1.465 ms
Remote clock offset: -11.632 ms

Below is generated by plot.py at 2019-03-27 08:41:47
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.49 Mbit/s
95th percentile per-packet one-way delay: 124.192 ms
Loss rate: 22.12%
-- Flow 1:
Average throughput: 39.49 Mbit/s
95th percentile per-packet one-way delay: 124.192 ms
Loss rate: 22.12%

Run 2: Report of Verus — Data Link

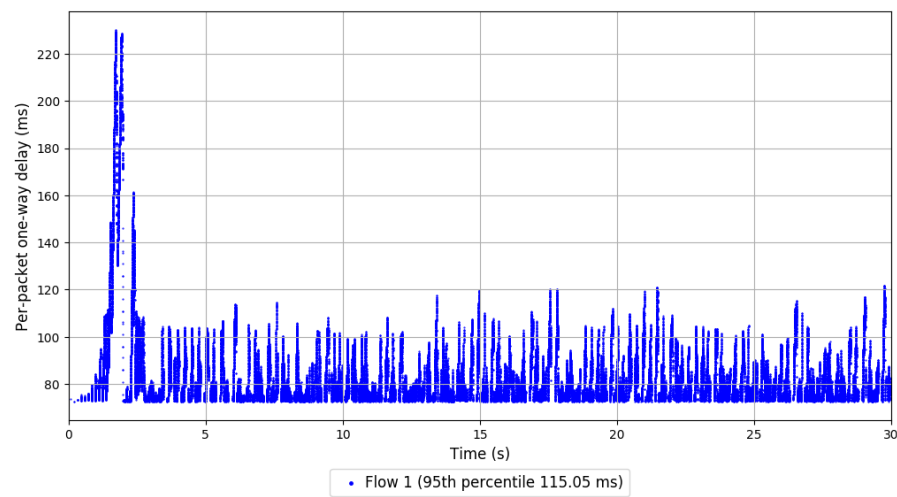
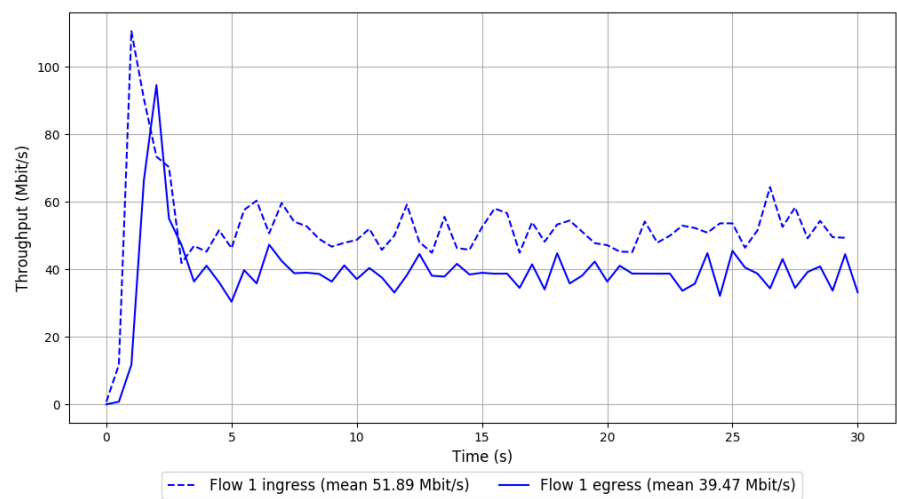


Run 3: Statistics of Verus

Start at: 2019-03-27 07:30:09
End at: 2019-03-27 07:30:39
Local clock offset: -4.741 ms
Remote clock offset: -21.066 ms

Below is generated by plot.py at 2019-03-27 08:41:51
Datalink statistics
-- Total of 1 flow:
Average throughput: 39.47 Mbit/s
95th percentile per-packet one-way delay: 115.050 ms
Loss rate: 24.18%
-- Flow 1:
Average throughput: 39.47 Mbit/s
95th percentile per-packet one-way delay: 115.050 ms
Loss rate: 24.18%

Run 3: Report of Verus — Data Link

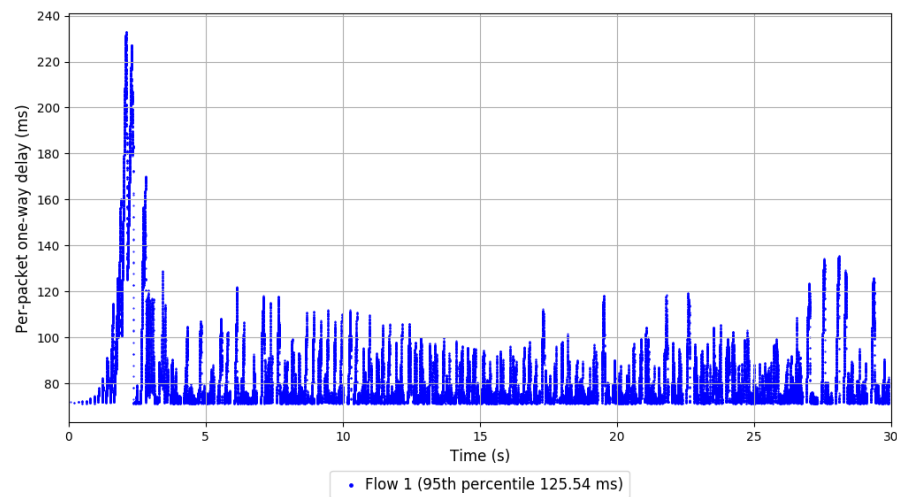
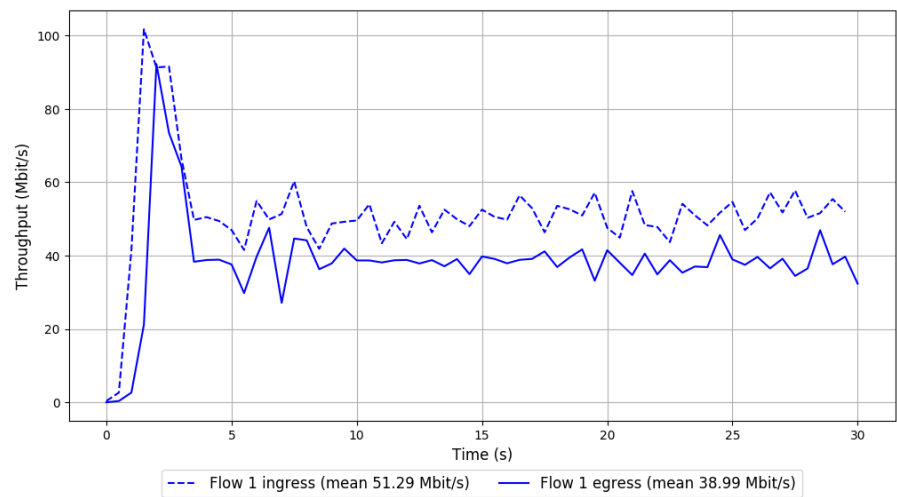


Run 4: Statistics of Verus

Start at: 2019-03-27 07:55:13
End at: 2019-03-27 07:55:43
Local clock offset: -5.412 ms
Remote clock offset: -19.617 ms

Below is generated by plot.py at 2019-03-27 08:41:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 38.99 Mbit/s
95th percentile per-packet one-way delay: 125.536 ms
Loss rate: 24.29%
-- Flow 1:
Average throughput: 38.99 Mbit/s
95th percentile per-packet one-way delay: 125.536 ms
Loss rate: 24.29%

Run 4: Report of Verus — Data Link

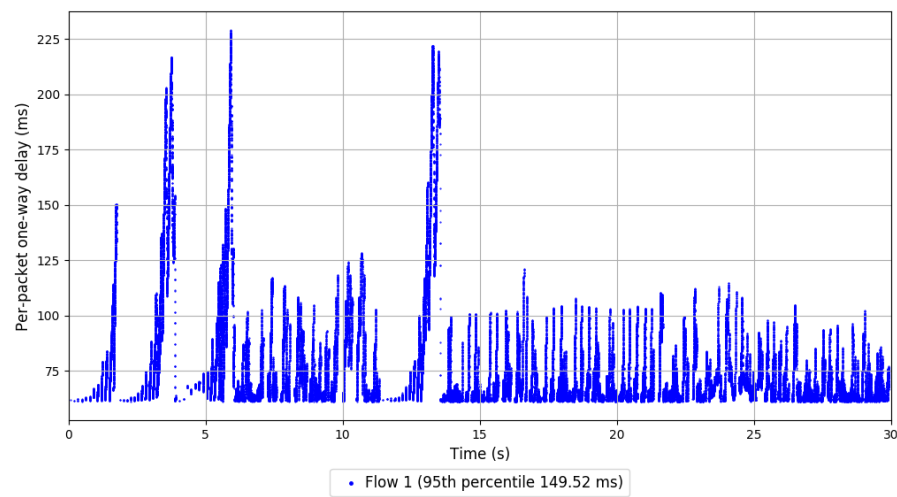
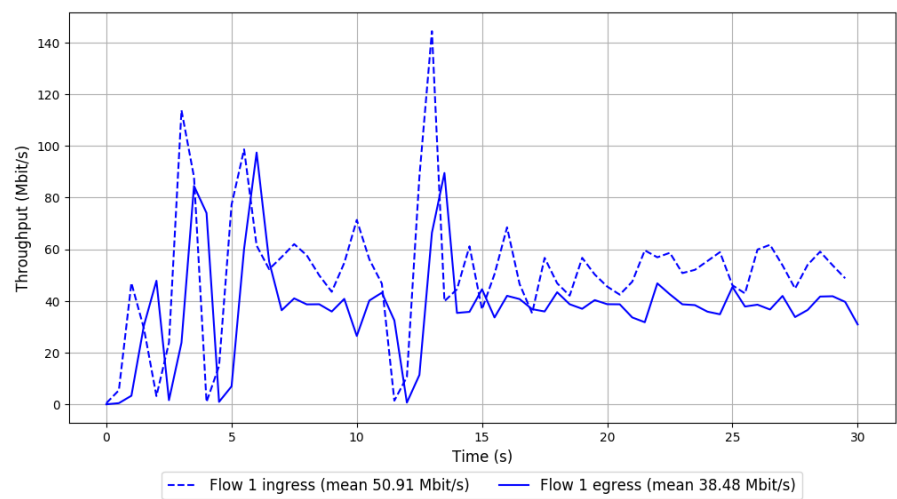


Run 5: Statistics of Verus

Start at: 2019-03-27 08:20:04
End at: 2019-03-27 08:20:34
Local clock offset: -3.805 ms
Remote clock offset: -9.471 ms

Below is generated by plot.py at 2019-03-27 08:41:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 38.48 Mbit/s
95th percentile per-packet one-way delay: 149.524 ms
Loss rate: 24.63%
-- Flow 1:
Average throughput: 38.48 Mbit/s
95th percentile per-packet one-way delay: 149.524 ms
Loss rate: 24.63%

Run 5: Report of Verus — Data Link

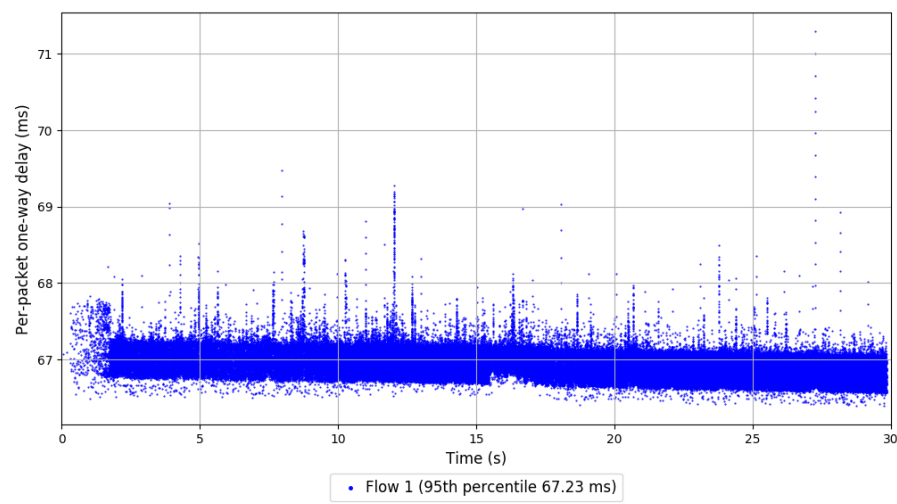
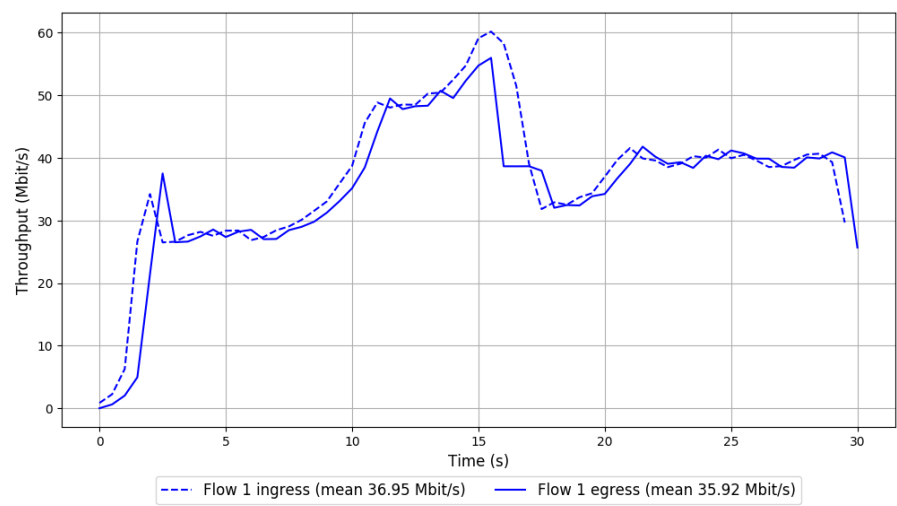


Run 1: Statistics of PCC-Vivace

Start at: 2019-03-27 06:51:05
End at: 2019-03-27 06:51:35
Local clock offset: -0.543 ms
Remote clock offset: -10.954 ms

Below is generated by plot.py at 2019-03-27 08:41:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 35.92 Mbit/s
95th percentile per-packet one-way delay: 67.226 ms
Loss rate: 3.18%
-- Flow 1:
Average throughput: 35.92 Mbit/s
95th percentile per-packet one-way delay: 67.226 ms
Loss rate: 3.18%

Run 1: Report of PCC-Vivace — Data Link

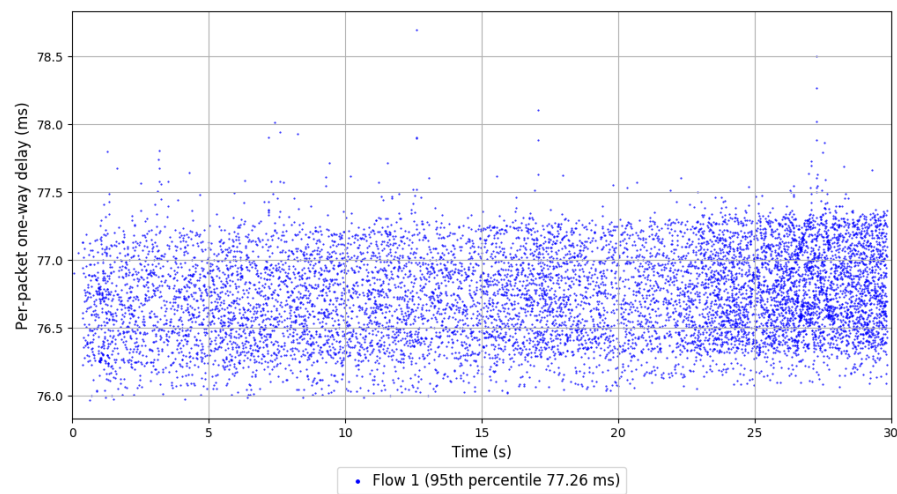
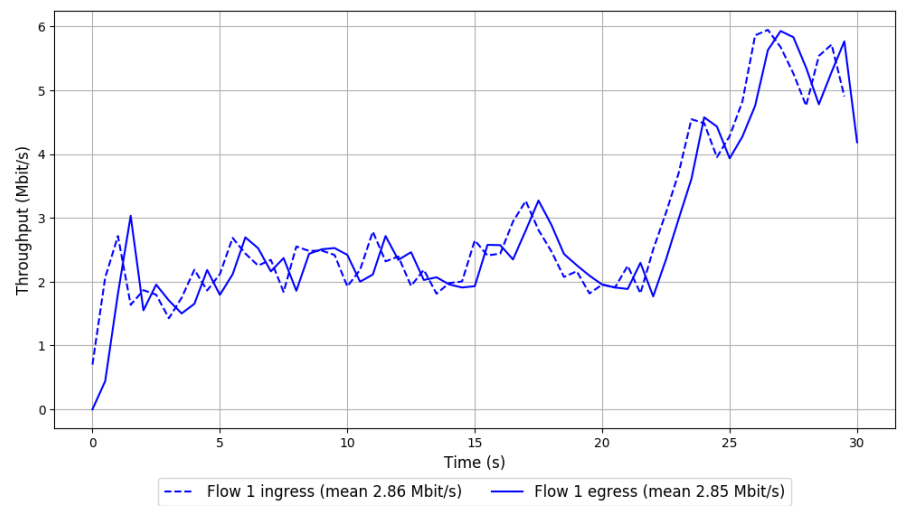


Run 2: Statistics of PCC-Vivace

Start at: 2019-03-27 07:16:55
End at: 2019-03-27 07:17:25
Local clock offset: -1.843 ms
Remote clock offset: -25.068 ms

Below is generated by plot.py at 2019-03-27 08:41:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 77.260 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 77.260 ms
Loss rate: 0.96%

Run 2: Report of PCC-Vivace — Data Link

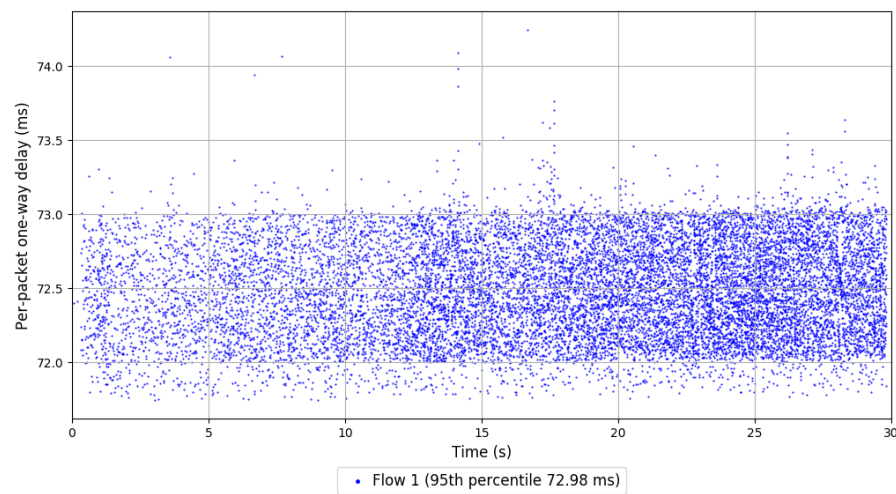
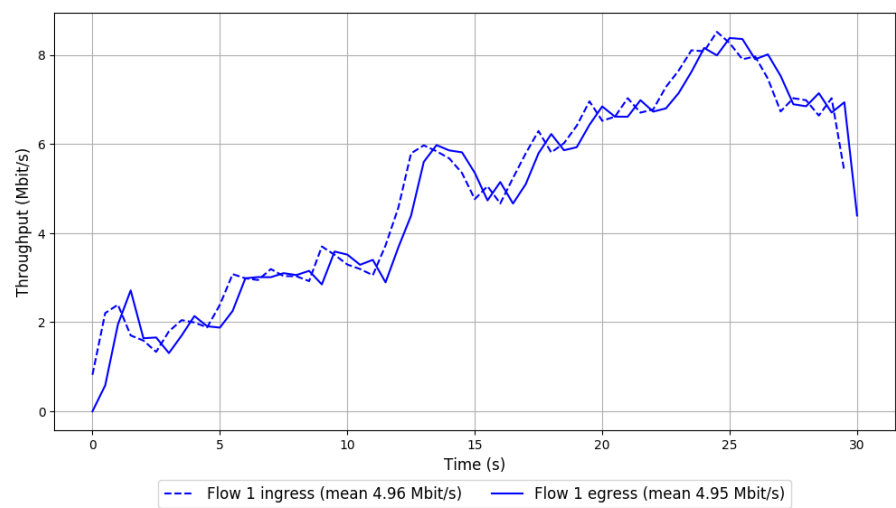


Run 3: Statistics of PCC-Vivace

Start at: 2019-03-27 07:42:05
End at: 2019-03-27 07:42:35
Local clock offset: -5.766 ms
Remote clock offset: -19.94 ms

Below is generated by plot.py at 2019-03-27 08:41:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 72.977 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 72.977 ms
Loss rate: 0.66%

Run 3: Report of PCC-Vivace — Data Link

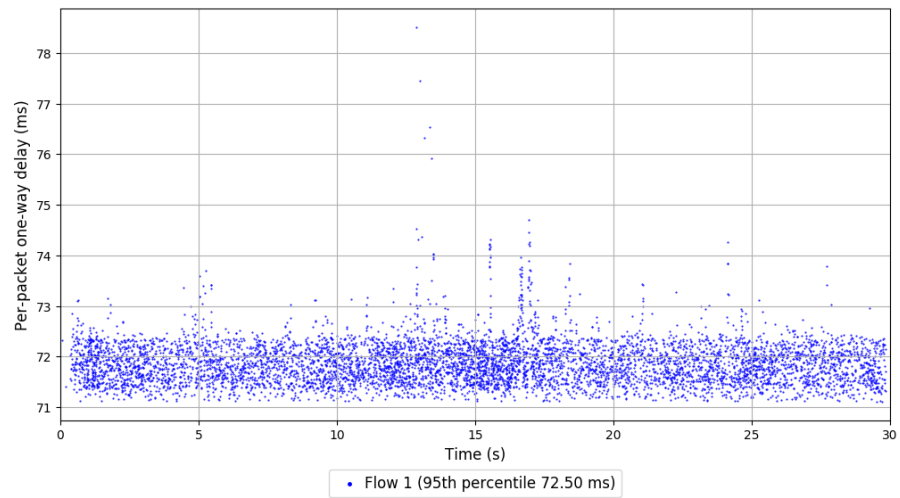
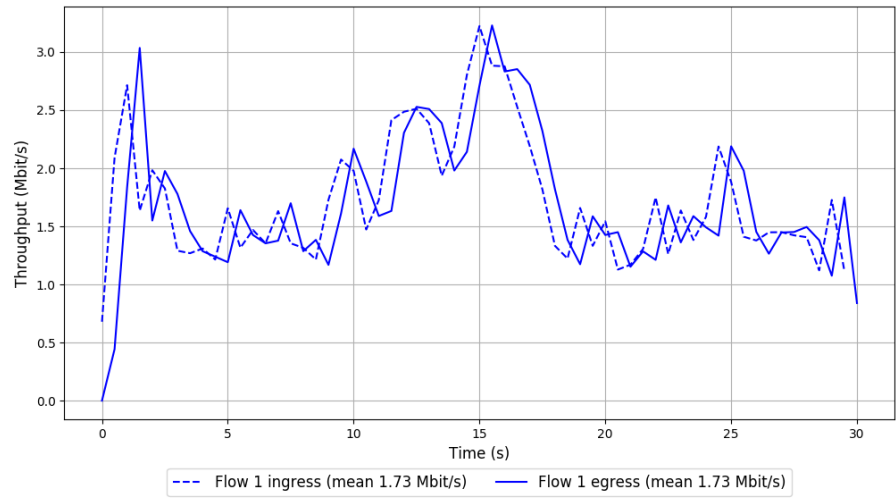


Run 4: Statistics of PCC-Vivace

Start at: 2019-03-27 08:07:05
End at: 2019-03-27 08:07:35
Local clock offset: -5.38 ms
Remote clock offset: -19.641 ms

Below is generated by plot.py at 2019-03-27 08:41:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 72.500 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 72.500 ms
Loss rate: 0.50%

Run 4: Report of PCC-Vivace — Data Link

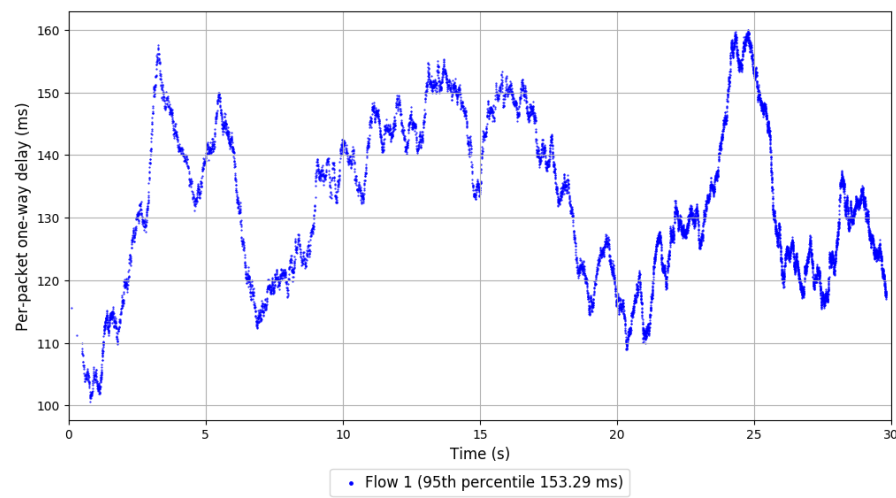
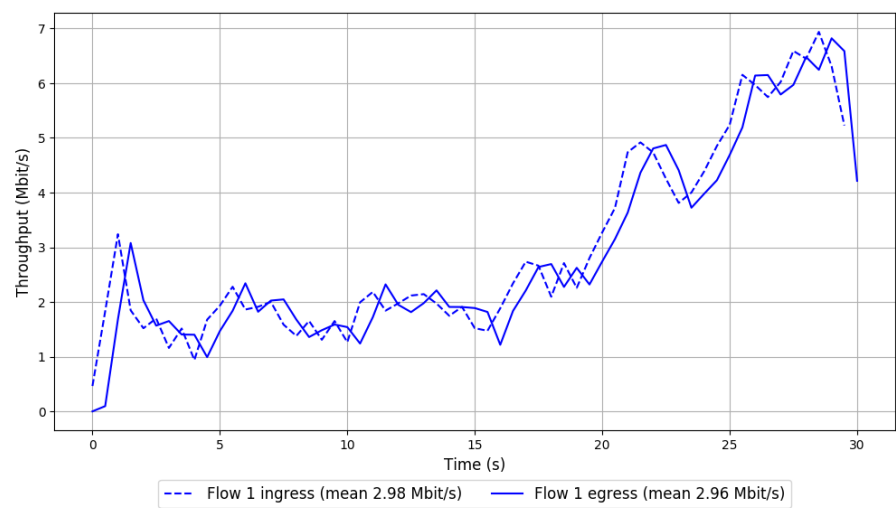


Run 5: Statistics of PCC-Vivace

Start at: 2019-03-27 08:31:59
End at: 2019-03-27 08:32:29
Local clock offset: -1.333 ms
Remote clock offset: -8.466 ms

Below is generated by plot.py at 2019-03-27 08:41:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 153.288 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 153.288 ms
Loss rate: 1.44%

Run 5: Report of PCC-Vivace — Data Link



Run 1: Statistics of WebRTC media

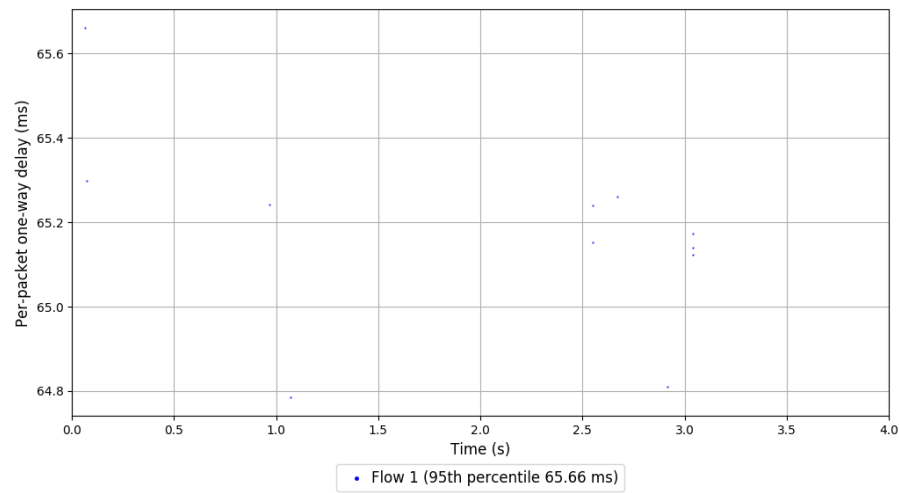
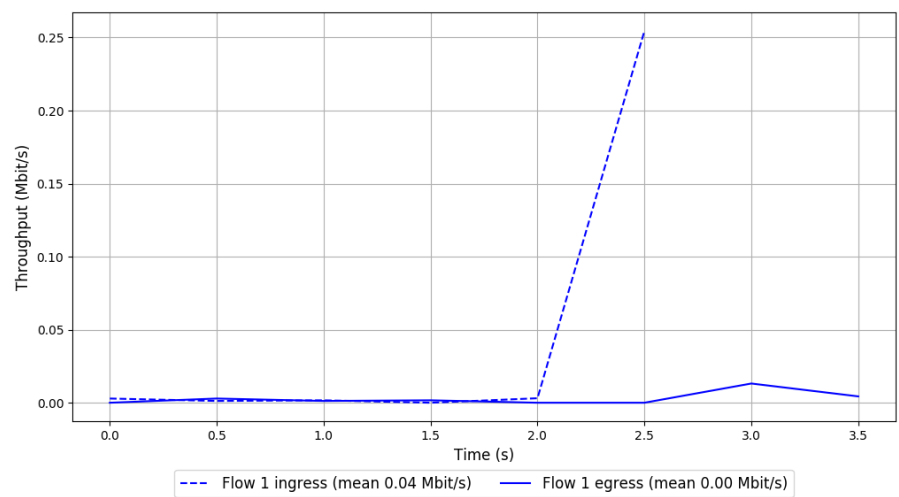
Start at: 2019-03-27 06:54:38

End at: 2019-03-27 06:55:08

Local clock offset: -1.101 ms

Remote clock offset: -10.637 ms

Run 1: Report of WebRTC media — Data Link

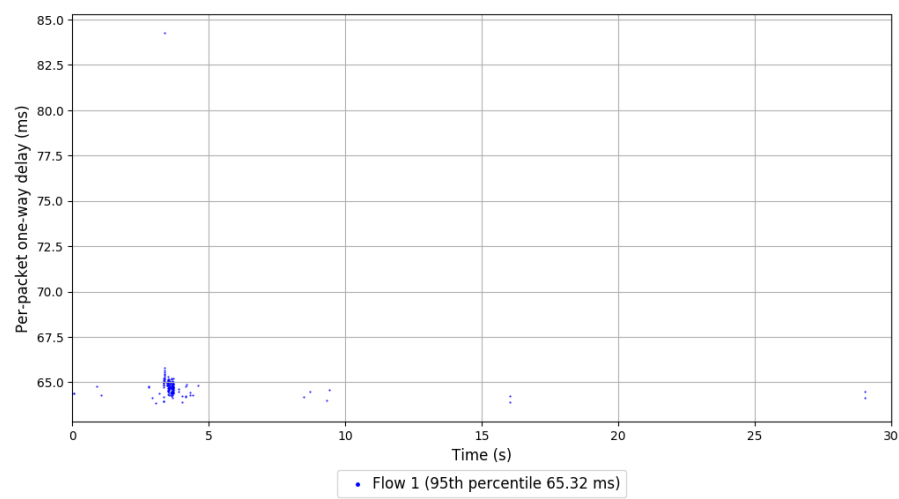
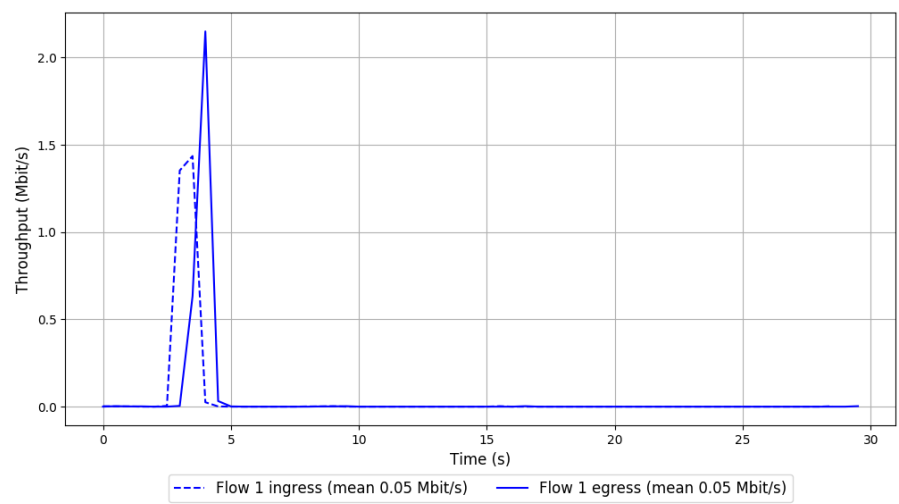


Run 2: Statistics of WebRTC media

Start at: 2019-03-27 07:20:23
End at: 2019-03-27 07:20:53
Local clock offset: -2.887 ms
Remote clock offset: -13.479 ms

Below is generated by plot.py at 2019-03-27 08:41:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.319 ms
Loss rate: 0.00%

Run 2: Report of WebRTC media — Data Link

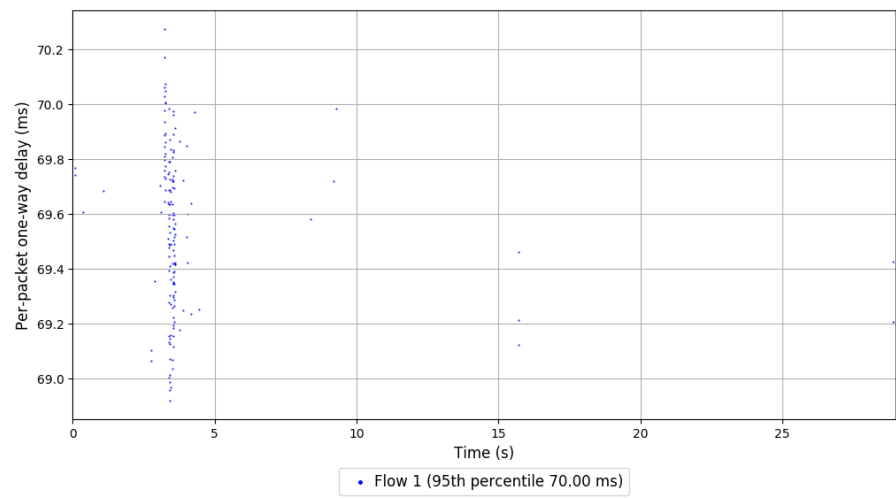
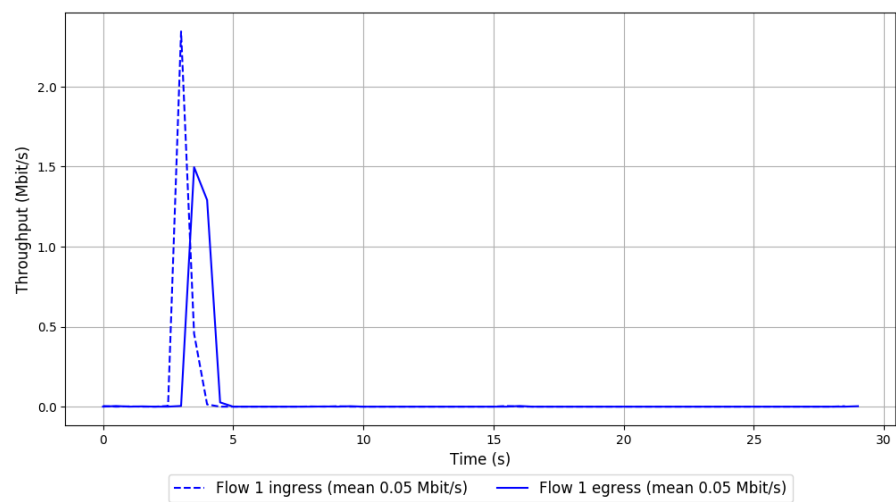


Run 3: Statistics of WebRTC media

Start at: 2019-03-27 07:45:36
End at: 2019-03-27 07:46:06
Local clock offset: -6.023 ms
Remote clock offset: -17.278 ms

Below is generated by plot.py at 2019-03-27 08:41:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 70.004 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 70.004 ms
Loss rate: 0.00%

Run 3: Report of WebRTC media — Data Link

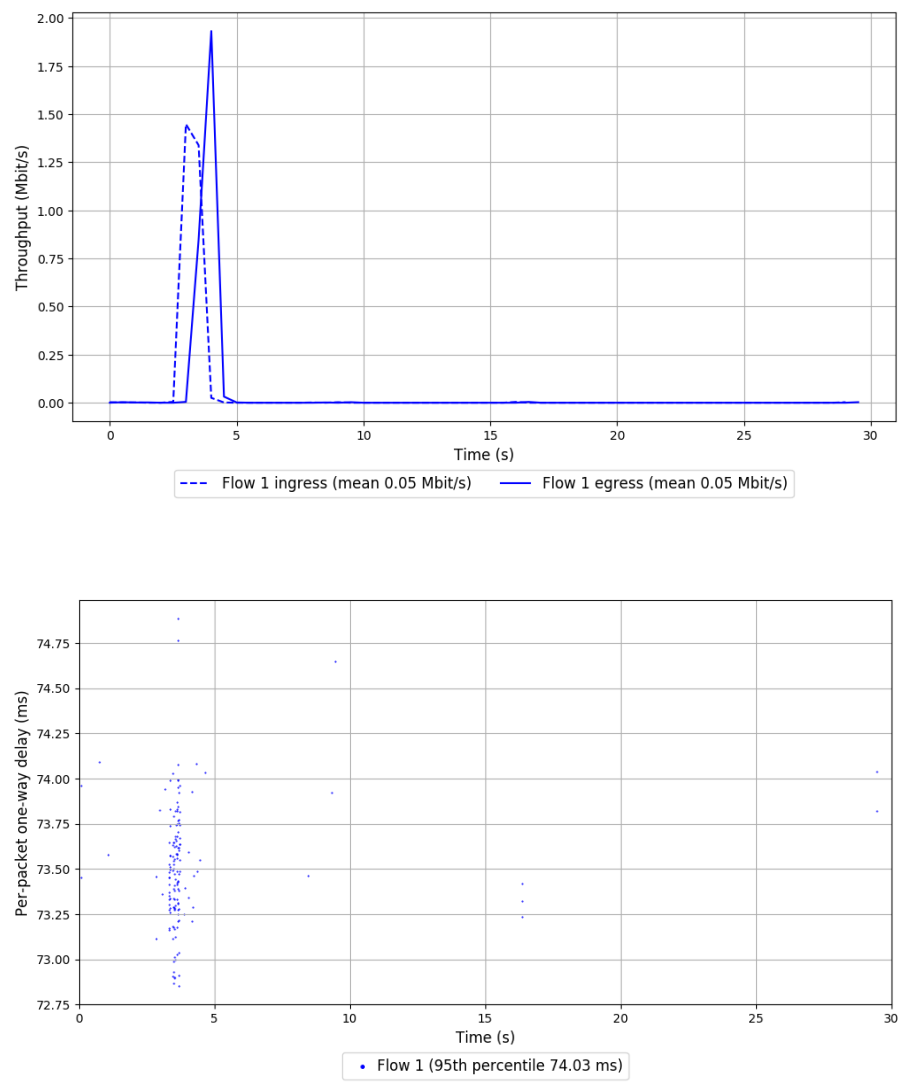


Run 4: Statistics of WebRTC media

Start at: 2019-03-27 08:10:33
End at: 2019-03-27 08:11:03
Local clock offset: -5.464 ms
Remote clock offset: -20.812 ms

Below is generated by plot.py at 2019-03-27 08:41:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 74.033 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 74.033 ms
Loss rate: 0.00%

Run 4: Report of WebRTC media — Data Link



Run 5: Statistics of WebRTC media

Start at: 2019-03-27 08:35:34
End at: 2019-03-27 08:36:05
Local clock offset: -0.938 ms
Remote clock offset: -12.422 ms

Below is generated by plot.py at 2019-03-27 08:41:54
Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 171.860 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 171.860 ms
Loss rate: 0.00%

Run 5: Report of WebRTC media — Data Link

