Performance Comparison between our DNS resolver, local DNS resolver and Google's public DNS server

From the Top 25 websites taken from https://ahrefs.com/blog/most-visited-websites/, each website has been run 10 times on each of the following, and then averaged out:

- Local DNS server
- Google's public DNS server
- myDig

Websites: ['instagram.com', 'google.com', 'youtube.com', 'facebook.com', 'twitter.com']

Average Time for our Local DNS server (130.245.255.4) (Stony Brook's local DNS):

0.003152990341
0.00370285511
0.003478097916
0.003145694733
0.003777074814

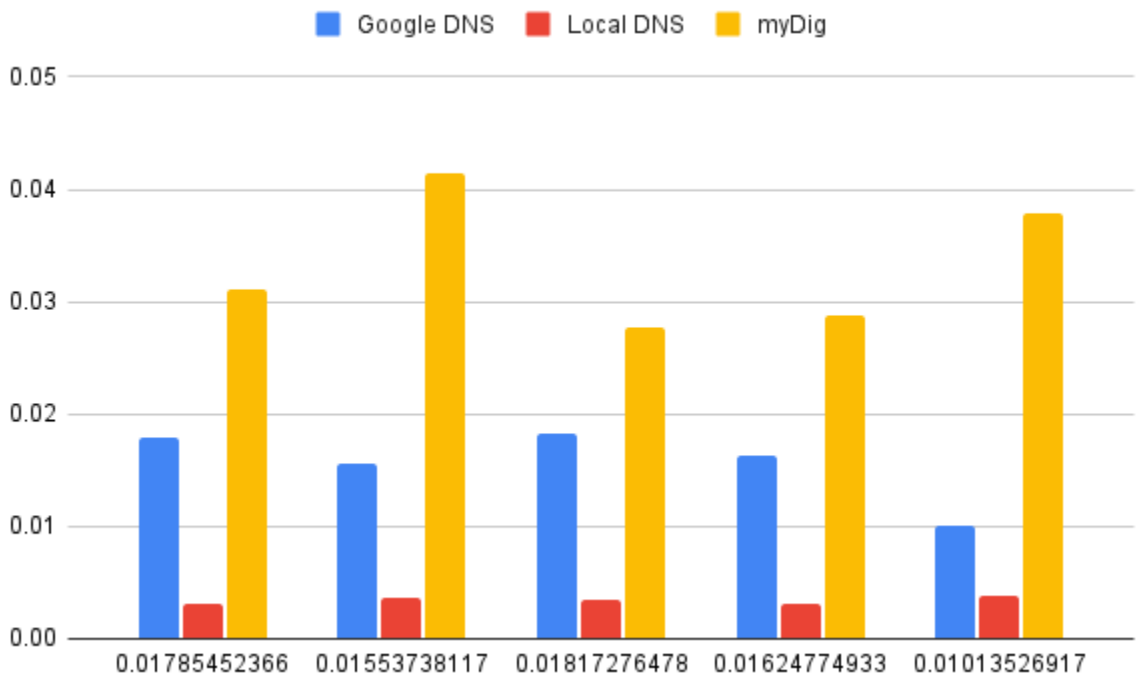
Average Time for Google's public DNS server (8.8.8.8):

0.01785452366
0.01553738117
0.01817276478
0.01624774933
0.01013526917

Average Time for our myDig server:

0.03108848476
0.04147197723
0.02775522137
0.02868873596
0.03781607304

Graph:



Discussion:

The graph helps us deduce that the DNS server's proximity along with its caching capabilities can help us gain faster resolution times. This is evident from the fact that the Local DNS Server has the fastest resolution, followed by Google's DNS Server and lastly myDig. myDig's lower resolution time can also be attributed to factors such as caching ability.