



As displayed in the chart, the local DNS server used in Experiment 2 has the best performance. The next one is Google's public server, and my DNS resolver has the worst performance in comparison. My program is the slowest because I did not implement a cache. This means that every time I want to resolve a domain, I need to start from the root and send the query down to the DNS hierarchy even if I've resolved that domain before. It's faster to resolve a domain using a local or public DNS server because they have cache. Additionally, the reason why it's faster using the local DNS server than using Google's public server could be that the locations of my device and the authoritative name servers are closer to the local DNS server than to Google's public server. For websites 4 and 7, the inconsistency in Experiment 3 is probably due to the authoritative name servers being outside of the U.S.