

MyDig vs Google Public DNS

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The DNS Resolver implemented (Mydig), starts querying from root-servers until the appropriate authoritative Name server is found (a name server down the hierarchy), where the (A, NS, MX) records for the target DomainName are stored. Mydig doesn't make use of caching. On the other hand Google Public DNS Server caches the most frequent and recent DomainName.

Top 25 websites most frequently visited, as listed by Alexa, are queried for DNS resolution both through MyDig and Google Public DNS. Each website in the top 25 websites is queried 10 times and average query time is considered for this study.

Based on where the authoritative servers are, Mydig query times ranged from 170 ms to 1300 ms (authoritative servers present in far away regions like China). Thus, a high variance in query resolution times.

On the other hand, Google Public DNS has a query times ranging from 8ms to 200ms. For the most frequently visited sites like Facebook, Google, Youtube, the records are cached at local dns resolver and thus are resolved in the first hop. For sites like Sohu.com which aren't cached, initial queries took longer query times and subsequent queries for the Domain took 8-9 ms as they were immediately cached, thus the average present in the order of 100-200ms as opposed to 1000ms.

