Wireshark Lab: Domain Name System (DNS)

1. The domain name system (DNS) is a naming database in which internet [domain](https://www.techtarget.com/whatis/definition/domain) names are located and translated into [Internet Protocol (IP) addresses](https://www.techtarget.com/whatis/definition/IP-address-Internet-Protocol-Address). The domain name system maps the name people use to locate a website to the IP address that a computer uses to locate that website.
2. Nslookup (stands for “Name Server Lookup”) is a useful command for getting information from the DNS server. It is a network administration tool for querying the Domain Name System (DNS) to obtain domain name or IP address mapping or any other specific DNS record.
3. The authoritative DNS server is the final holder of the IP of the domain you are looking for. When you write a domain name in your browser, a DNS query is sent to your internet service provider (ISP). The ISP has a recursive server, which might have the needed information cached in its memory. But if the data is outdated, this recursive server need to find the IP elsewhere. It will try to find it in other recursive servers, but if it can’t, it needs to get the IP address from an authoritative DNS server.