# Как работи DNS?

## История на DNS

The U.S. Department of Defense’s ARPANET (Advanced Research Projects Agency Network) originally developed IP. As a result, U.S. research centers shared information among themselves more quickly. To do this, it used a huge directory of websites and their corresponding IP addresses—a digital phone book of sorts.

By the 1970s, the number of computers in this network was growing rapidly. The system to track them was unwieldy and fragmented. Subsequently, numerical IP addresses became increasingly long and impossible to memorize. One united system was needed to simplify networking.

## Query – explained

You direct your computer or smartphone, also called a client device, to visit a website. To do so, your device sends out a DNS query or request. A stub resolver is the part of a client device that facilitates these requests.

There are 2 types of queries:

* **Recursive query**: This occurs between a client device and a local DNS resolver or server. The client demands a name resolution and the server must provide a complete answer. On the other hand, if the server can't provide one, then it starts an iterative query.
* **Non-recursive (or iterative) query**: This occurs between a local and other DNS servers. It often begins with root name servers. The local server does not demand name resolution. Subsequently, the other servers can respond either with an answer or a referral to another server.

Queries, also known as DNS lookups, are happening all the time. Some of these activities take place within your network—these internal DNS queries never make it to the public internet. In business settings, a dedicated internal DNS server resolves all of the internal DNS names inside your network.

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