Curriculum

SE Foundations ^
Average: **158.95%** ⌄

We're moving to Discord!

In a few days, we will be leaving Slack in favor of Discord 🎉

👆 **Click here for more information (/concepts/100033)**

DNS

Basics

DNS is, in simple words, the technology that translates human-adapted, text-based domain names to machine-adapted, numerical-based IP:

- Learn everything about DNS in cartoon (/rltoken/pNRbUoGy3V1TEtUR39Hayw)
- Be sure to know the main DNS record types:

    - A (/rltoken/sG6Mf3-vKj7fdMNCfwNMlg)
    - CNAME (/rltoken/mdIerH3qh8EjbCxLkzapxA)
    - MX (/rltoken/D6OKuWe4ONpfzBVnQ_b-VQ)
    - TXT (/rltoken/Y2iguvsbBglrkX4fIIPEsQ)

Advanced

- Use DNS to scale with round-robin DNS (/rltoken/6qX_vNIdBK2OQ2kD0l_3Kg)
- What's an NS Record? (/rltoken/iH9cMxl0jrJbMSlpL9T86g)
- What's an SOA Record? (/rltoken/0glAnunJuMY0-QGK3mZ5SQ)

The root domain and sub domain - differences

A root domain is the parent domain to a sub domain, and its name is not, and can not be divided by a dot.

While creating any domain at a website of domain provider, the provider system will always ask you to choose a domain name without a dot in the name. In other words, the address of the root domain may be **mydomain.com** but it can never be **my.domain.com**. Domain providers block the ability to create such a root domain until you type a name without the dot. Why?

The dot in the domain name delimits the sub domain name (the part of the name before the dot, eg. **www.my.**) and the root domain name (the part after the dot, ie **.domain.com**). This means that the address **my.domain.com** is a sub domain of the root domain, whose name is **domain.com**

In an administrator panel at domain provider account, you can create any number of sub domains. This means that for the root domain called **domain.com** it is possible to create different sub domains eg. **my.domain.com**, **your.domain.com**, **school.domain.com**… Creating multiple sub domains is always free and does not require you to set up new accounts on a domain provider website.

As you can see, all of the domain addresses used as an example (above) do not start with the **www** prefix. **www** is also a sub domain. The www prefix always leads to the main domain. See: What's the point in having www in a url? (/rltoken/KyVdBxvCWwsWUXNarIBByQ)