

UNDERSTANDING DOMAIN NAMES & DNS

Prepared based on material provided by wix.com

A domain name is the most crucial elements of any website. Without it, browsing the net and visiting your favourite online stores would require lessons in algebra. Your domain name will influence how likely people are to find your website. In many cases, it will also provide the first impression people will have of your business and like all first impressions you only get one chance. Understanding domain names and how they work will help you find and register the perfect domain name for your website.

What is a domain name?

A domain name is the address people type into a browser to reach a site. It can be compared to a fingerprint, that is because each domain name is unique to a specific website and cannot be shared with duplicated by any other. It appears at the very top of a web page,

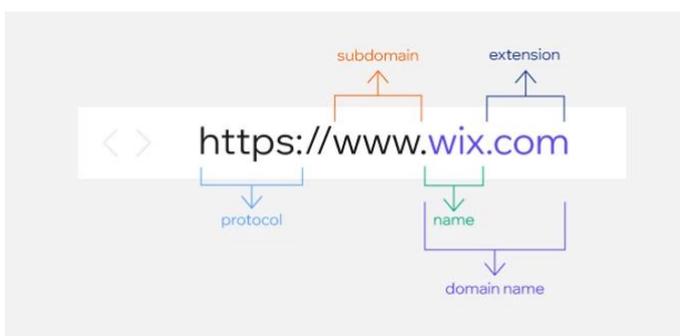
Domains were created as a human-friendly way to access the Internet Protocol (IP) - a website's online locator. An IP address is a string of numbers assigned to every computer and while numbers are great for computers, humans find it easier to remember words So when a domain name appears on a computer as 172.217.3.196, we sit as google.com

All domain name registrations are overseen by the Internet Corporation for Assigned Names and Numbers (ICANN). It allocates and assigns IP addresses, runs accreditation systems for domain registrars and keeps a centralized database of all domain names and their IPs. It also has the authority to approve new domain extensions (also known as TLDs), manage them and shut them down if they do not follow the rules.

Domain names are commonly referred to as URL (Universal Resource Locator) and they are only part of a web address (be it a crucial one). The basic form of a domain name has two parts:

1. Name - for example - wix
2. Extension - for example - .com

if you look at a web address as it appears on a browser address bar, you will notice there is more to it.



In simple terms, the internet is a worldwide network of computers that are connected to each other using a grid of undersea cables. Regardless of whether it is a personal device, a printer, or a server each one is identified by an IP address. This allows them to communicate with each other and to send, find and retrieve web data.

To do this, computers need to convert the human friendly words we use back into computer-readable IP numbers. This is also overseen by ICANN and done according to the domain name system (DNS).

So, when you enter a domain name into a web browser, a request is sent to DNS servers. This initiates a search for the servers connected to that specific domain and your request is forwarded to them. These servers are managed by the web hosting provider. Based on the IP, they send the request to the web server where the website files are stored. The web server uses the IP to find all files associated with it and send all the data back to the browser. All of this occurs in less than 3 seconds.