Web Hosting

- Web hosting is a service that allows organizations and individuals to post a website or web page onto the Internet.

- A web host, or web hosting service provider, is a business that provides the technologies and services needed for the website or webpage to be viewed in the Internet.

- Websites are hosted, or stored, on special computers called servers. When Internet users want to view your website, all they need to do is type your website address or domain into their browser.

- Their computer will then connect to your server and your webpages will be delivered to them through the browser.

- Most hosting companies require that you own your domain in order to host with them. If you do not have a domain, the hosting companies will help you purchase one.

What is Domain Name?

Domain name is the address of your website that people type in the browser URL bar to visit your website.

In simple terms, if your website was a house, then your domain name will be its address.

Domain names are used in URLs to identify particular Web pages. For example, in the URL *http://www.vtabatti.com/index.html,* the domain name is *vtabatti.com.*

Domain names are available in many different extensions. The most popular one is **.com**.

Every domain name has a suffix that indicates which top level domain (TLD) it belongs to. There are only a limited number of such domains. For example:

- **gov** - Government agencies
- **edu** - Educational institutions
- **org** - Organizations (nonprofit)
- **mil** - Military
- **com** - commercial business
- **net** - Network organizations
- **ca** - Canada
- **lk** – Sri Lanka

Top Level Domain – TLD

Top level domain or TLD are **generic domain** extensions that are listed at the highest level in the domain name system.

There are hundreds of TLDs, but the most popular ones are .com, .org, and .net. Other TLDs are lesser known and we don't recommend using them. For example, .biz, .club, .info, .agency, and many more.

Country code top-level domain or ccTLD are **country specific domain** names which end with country code extension like **.uk** for the United Kingdom, **.de** for Germany, **.lk** for Sri Lanka.
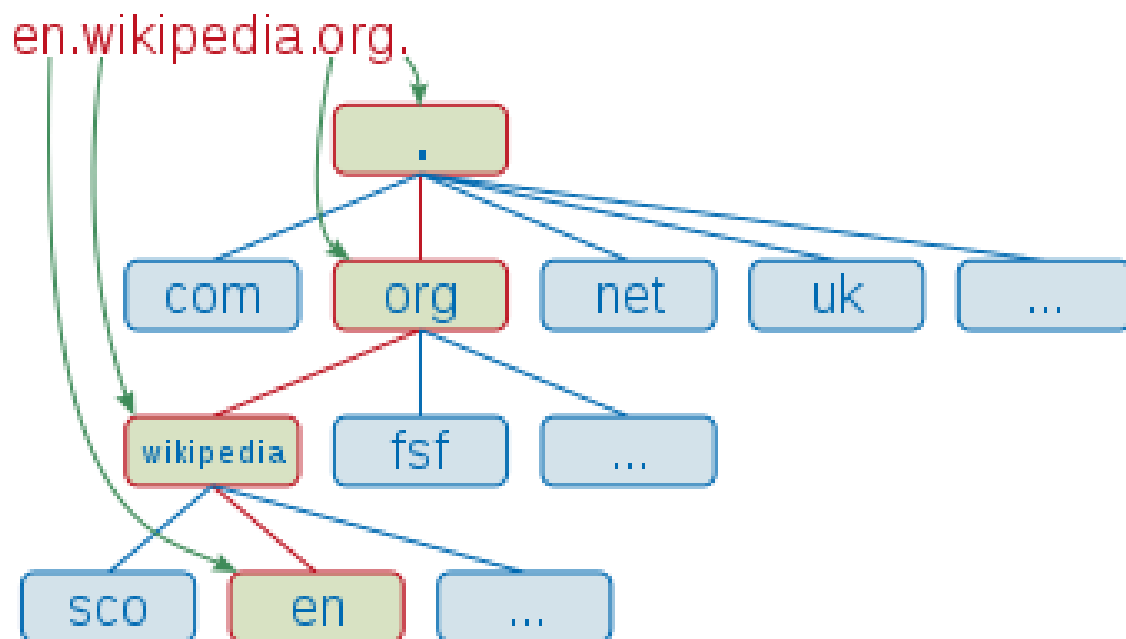
Internet Corporation for Assigned Names and Numbers (ICANN) manages the domain names system. It is a non-profit organization that creates and implements the policies for domain names.

Domain registration requires utilizing the services of a domain name registrar, an ICANN or national ccTLD accredited company that has the authority to register domain names.

Domain Name Servers (DNS) are the Internet's equivalent of a phone book. They maintain a directory of domain names and translate them to Internet Protocol (IP) addresses.

This is necessary because, although domain names are easy for people to remember, computers or machines, access websites based on IP addresses.

Information from all the domain name servers across the Internet are gathered together and housed at the Central Registry. Host companies and Internet Service Providers interact with the Central Registry on a regular schedule to get updated DNS information.
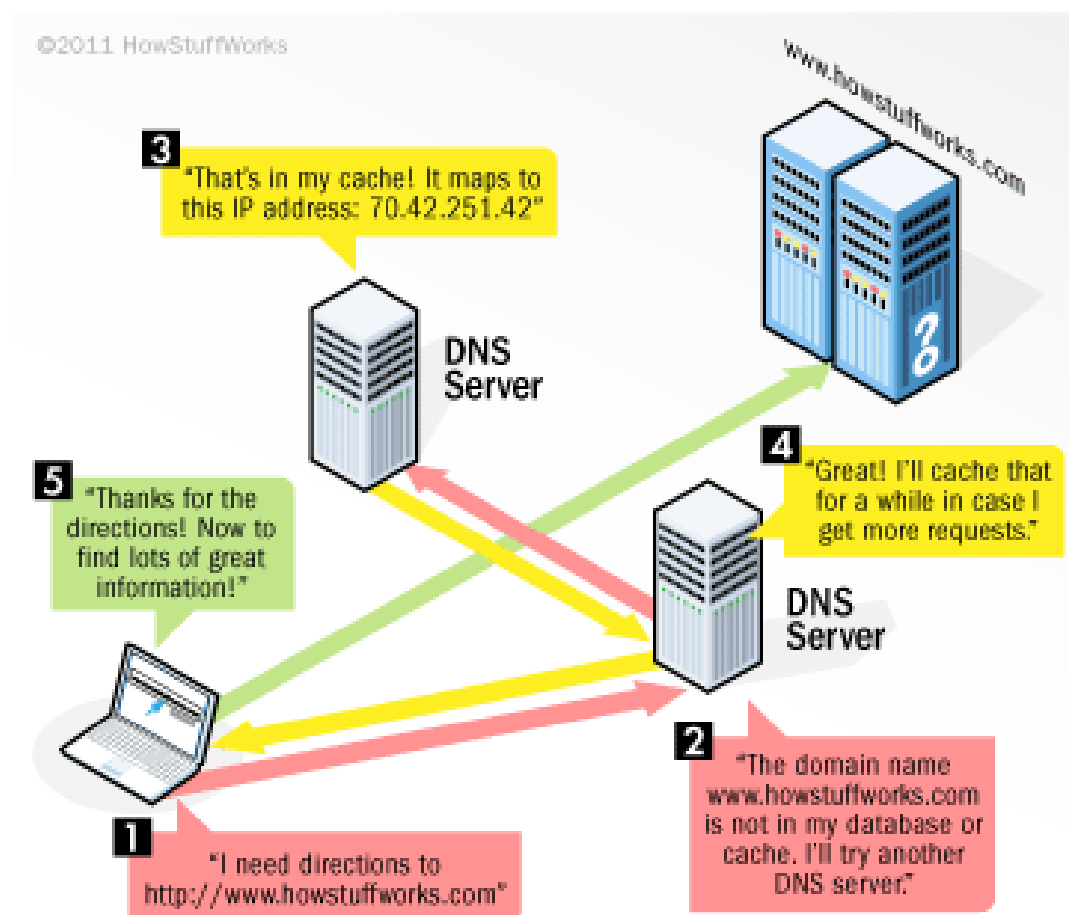
When you type in a web address, e.g., www.vtasl.lk, your Internet Service Provider views the DNS associated with the domain name, translates it into a machine friendly IP address (for example 216.168.224.70 is the IP for vtasl.lk) and directs your Internet connection to the correct website.

What is a subdomain?

A subdomain is basically a child domain under the main domain name. For example, videos.wpbeginner.com is a subdomain of wpbeginner.com.

Once you register a domain, you have the permission to create subdomains for it by yourself.

Example : sample.vtabatti.com

Web Server

A **web server** is a computer system that processes requests via HTTP, the basic network protocol used to distribute information on the World Wide Web. The term can refer to the entire system, or specifically to the software that accepts and supervises the HTTP requests.
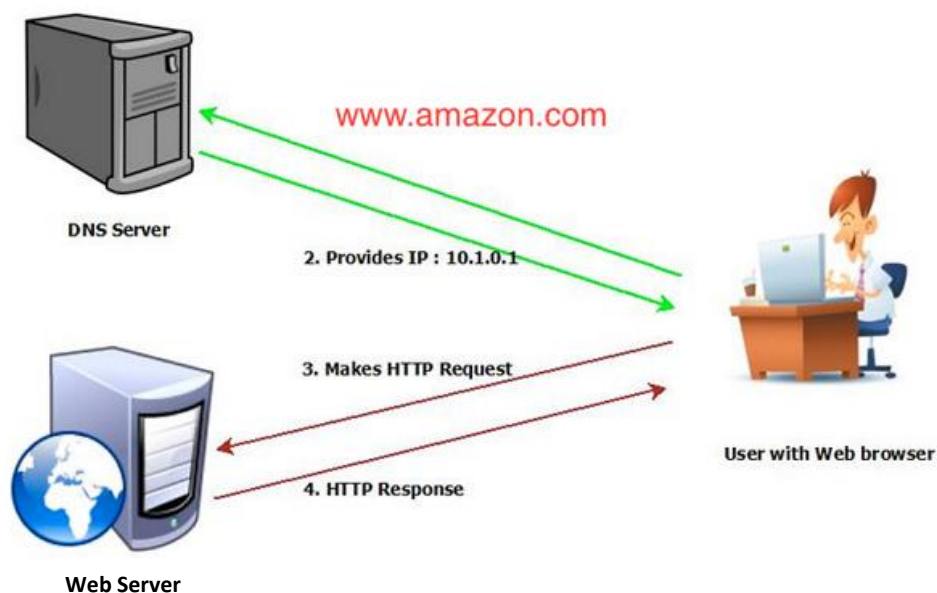
The primary function of a web server is to store, process and deliver web pages to clients. The communication between client and server takes

place using the Hypertext Transfer Protocol (HTTP). Pages delivered are most frequently HTML documents, which may include images, style sheets and scripts in addition to text content.

Product	Vendor
Apache	Apache
IIS	Microsoft
nginx	NGINX, Inc.
GWS	Google
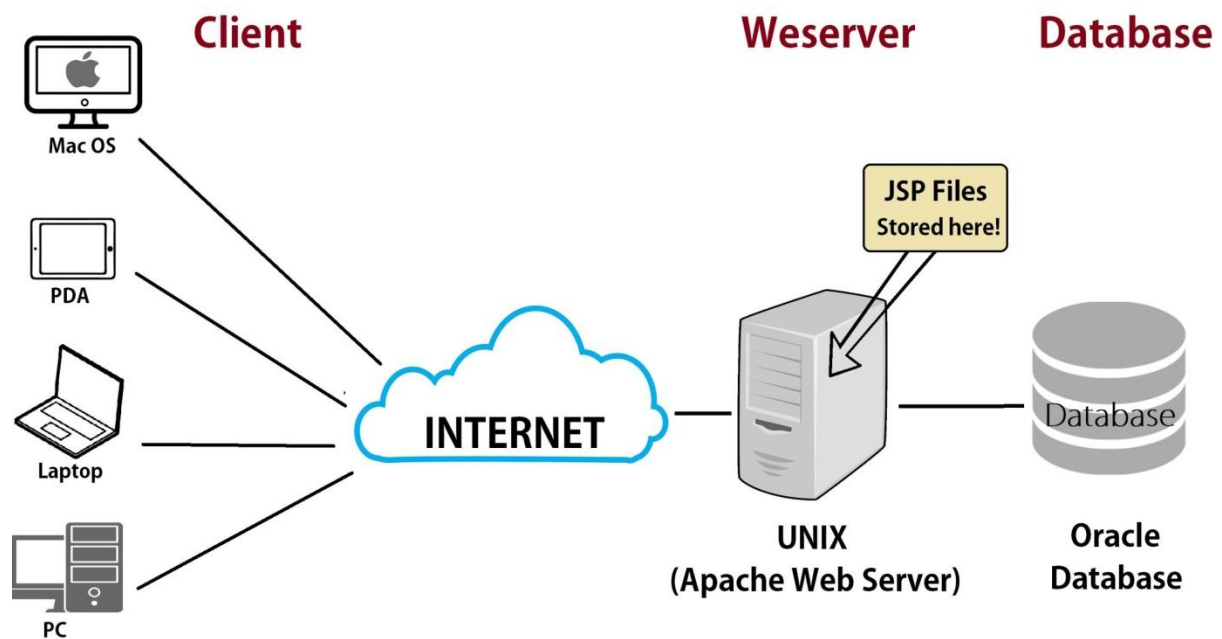
Role of web servers in web hosting

Hosting websites refers to placing websites on web servers to bring them into access by people over internet. Web servers play a significant role in web hosting services as they form the key elements. Following are few functions performed by web servers in hosting:

Stores and secures website data: In web hosting services, a web server stores all website data and secures it from unauthorized users when it is properly configured.

Provides web database access: A web server's responsibility is to provide access to websites that are hosted. Web hosting service providers own some web servers that are used in variable ways to provide different web hosting services, such as backend database servers.

Serve the end user requests: Web servers accept requests from different users connected over the internet and serve them accordingly.

February 2019

Below are the latest statistics of the *market share of all sites* of the top web servers on the Internet by W3Techs Usage of Web Servers for Websites.

Product	Vendor	Percent
Apache	Apache	44.3%
nginx	NGINX, Inc.	41.0%
IIS	Microsoft	8.9%
LiteSpeed Web Server	LiteSpeed Technologies	3.9%
GWS	Google	0.9%

All other web servers are used by less than 1% of the websites.