

- What is a server?

Servers are physical machines (as hardwares), virtual machines or softwares (computer programs) that serve or provide functionality to other programs or devices called “clients”. The term *server* comes from queuing theory used in Kendall’s notation, where servers serve or process the clients requirements in the same way as a telephone operator, a cooker or a production machine process incoming orders, having in mind its capacity and service process time.

A computer can function as a server, and a server can be a computer, both of them being built up with hardware and software. However, the main difference between these two is the capacity and computer power servers have. In other words, servers are computers on steroids with faster processing capacity. They are usually stored in data centers *racks* (stacks of servers piled one on top of each other).

On the other hand, virtual servers function more like virtual machines, or virtual computers. These are a virtual representation of the physical servers, having their own operating system and applications (Posey, 2021).

- What is the role of the domain name?

The role of the domain name is to replace complex IP addresses numbers into easily understandable names so humans can remember and communicate them in a better way.

- What type of DNS record www in www.foobar.com?

DNS record of www belongs to a subdomain of the www.foobar.com

- What is the role of the web server?

Web servers are what make Web hosting possible, that is, the possibility of renting a space on a server to store the files of our site.

The fundamental role of a Web Server

The main function of a Web server is to store the files of a site and broadcast them over the Internet so that they can be visited by users. Basically, a web server is a large computer that stores and transmits data via the network system called the Internet. When a user enters an Internet page, his browser communicates with the server sending and receiving data that determines what he sees on the screen. Therefore, we say that Web servers are to store and transmit data from a site as requested by a visitor’s browser.

- What is the role of the application server?

The application server is the intermediary between browser-based databases and back-end databases and legacy systems. In many uses, the application server combines or works with a web server (Hypertext Transfer Protocol) and is called a web application server.

- What is the role of the database?

The role of the database is to make the information gathered organized so it can be easily accessed, managed and updated. However, not all database management systems work the same, and the mechanisms they use to organize data can vary, ranging from relational database to object-oriented database, distributed database or cloud database.

- What is the server using to communicate with the computer of the user requesting the website?

The server is using the HTTP (Hypertext Transfer Protocol), which enables the transfer of resource and data, such as HTML documents between the server and the client. In this data exchange the request is initiated by the client, which is done normally by web browser (it can also be done by an operating system or application) are called request and the server answers are called responses. Between the client and server data exchange we can find numerous entities, collectively called proxies, performing different operations such as gateways or caches.