

A SIMPLE WEB STACK

A DESIGN OF A ONE SERVER WEB INFRASTRUCTURE THAT HOST A WEBSITE REACHABLE VIA www.foobar.com

NOTE: DEFINITION AND EXPLANATION FOR EASY UNDERSTANDING

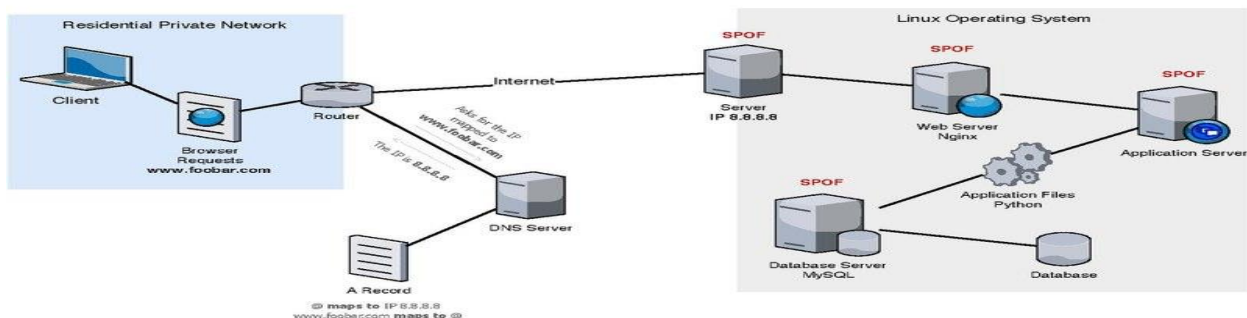
1. **SERVER:** A server is a **computer program or device that provides a service to another computer program and its user, also known as the client.**
2. **DOMAIN NAME:** A domain name is a hostname that the domain name system (DNS) uses to identify and map to website and internet protocol (IP) resources
3. **TYPE OF DNS RECORD IN www.foobar.com:** A CName. It is a special type of DNS record used to create an alias from one hostname to another
4. **ROLE OF A WEB SERVER:** The primary role of a web server is **to store, process, and deliver requested information or webpages to end users.** It uses: Physical Storage: All website data is stored on a physical web server to ensure its safety.
5. **ROLE OF APPLICATION SERVER:** It acts as host (or container) for the user's business logic while facilitating access to and performance of the business application.
6. **ROLE OF THE DATABASE:** A database gives structure to business information. It allows for rapid creation, updating and retrieval of business records. And it provides sophisticated security — granting access only to users possessing the right password
7. **What is the server using to communicate with the computer of the user requesting the website:** HTTP. HTTP is a method for encoding and transporting information between a client (such as a web browser) and a web server. HTTP is the primary protocol for transmission of information across the Internet.

SPOF: Single point of Failure refers to one fault or malfunction that can cause an entire system to stop operating in networking or any web application.

Downtime when maintenance needed (like deploying new code web server needs to be restarted). A downtime is experienced when there is no access to the services disrupted by service maintenance maybe when a corrective measure is carried out or a deployment of a new code or a server restart.

Cannot scale if too much incoming traffic: This is what I termed Overload. Overload happens when conditions cause a server to exhaust its resources so that it fails to handle incoming requests. For example, the server will no longer be responsive to requests from its email and web servers as it fails to process them, and the applications will no longer be responsive

0. Simple Web Stack



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