



Some specifics about this infrastructure:

1. What is a server

A server is a piece of computer hardware or software (computer program) that provides functionality for other programs or devices, called clients

2. What is the role of the domain name

A domain name serves to identify Internet resources, such as computers, networks, and services with a text-based label that is easier to memorize than numerical addresses (IP addresses)

3. What type of DNS record www is in www.foobar.com
It's a CNAME

4. What is the role of the Web Server

The role of a Web Server is to store, process and display website contents (codebase); it delivers web pages to users (HTML and CSS) over HTTP protocol.

5. What is the role of the application server

The role of the application server is to generate dynamic contents by executing server-side code such as JSP, Ajax, PHP, etc.

6. What is the role of the database

The role of a database is to manage data systematically and efficiently in a well-organized manner which allows data to be easily added, accessed, updated, managed, and deleted.

7. What is the server using to communicate with the computer of the user requesting the website

The server communicates through HTTP protocol.

Issues with the infrastructure:

1. SPOF (Single Point Of Failure)

A single point of failure is a part of a system that, if it fails, will stop the entire system from working. We have a single point of failure because we only have one server that contains one web server, application server, and database.

2. Downtime when maintenance is needed (like deploying a new code web server needs to be restarted)

The downtime period would be long because we don't have a backup server. Which will make the needed contents unavailable for this period.

3. Cannot scale if too much incoming traffic

There's no load balancer to manage traffic thus handling increased load would be difficult.