

0. Simple web stack

Explanations of the specifics about this infrastructure.

1. What is a server

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

2. What is the role of the domain name

A domain name is used to identify resources on the internet, such as computers, networks, services. It is usually denoted in form of text such as www.foobar.com

3. What type of DNS record www is in www.foobar.com

Www is a CNAME record

4. What is the role of the web server

A web server is used to deliver web pages to the clients over the HTTP protocol

5. What is the role of the application server

The application server handles the business logic of the system, this includes handling the backend/databases, serving dynamic content and deploying applications.

6. What is the role of the database

A database provides the mechanism to manage the data effectively through easy storage, access and other data manipulation operations.

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

It communicates through HTTP protocol

Issues about this infrastructure

1. SPOF

No backup database

One server if it fails the whole system is down

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

Downtime will be longer and that means the entire system will be down

3. Cannot scale if too much incoming traffic

The system lacks a way to manage the incoming traffic, lack of a load balancer means that the system will slow down in case of much traffic

