



- ❖ What is a server: A server is a computer or a program that provides clients with different services in a network and connects clients to one central computer.
- ❖ Role of the domain name: Domain name allows users to easily access the webpage or website by remembering an easy to memorize domain name.
- ❖ Type of DNS record for www in www.foobar.com (Domain name above with server IP 8.8.8.8): CNAME record
- ❖ Role of web server: Web server is software that can understand URLs, that opens web pages requested by client by loading HTTP/ HTTPS.
- ❖ Role of application server: Application server stores applications and software allowing everyone connected to the network to access them by searching in the database.

- ❖ Role of the database: The database stores the domain names and allow the client to search and access the webpages. Database makes it easy to manipulate the domain names in the server.
- ❖ What the server uses to communicate with computer of the user requesting the website: The server uses the DNS to communicate with the computer of the user sending HTTP requests.

Issues with infrastructure

- ❖ SPOF: There is no backup for any of the components of the server for example: web server, application server and database.
- ❖ Downtime when maintenance is needed: The downtime will be larger during maintenance because there is only one server with no alternatives if certain parts are undergoing maintenance.
- ❖ Cannot scale if too much incoming traffic: There is no load balancer in the network for this purpose.