



Definition of Terms:

Server: Acts as the hosting environment for the entire web infrastructure.

Domain Name: Translates human-readable domain names (like `www.foobar.com`) into IP addresses that computers can understand.

www DNS Record: `www` in `www.foobar.com` is a subdomain and typically represents the web server for the domain.

Web Server: Handles incoming HTTP requests and serves static files and routes dynamic requests to the application server.

Application Server: Executes application logic, processes dynamic content, and interacts with the database to generate web pages.

Database: Stores and manages the website's data, providing a structured storage solution for the application.

Issues with the Infrastructure:

SPOF (Single Point of Failure): Since all components are hosted on a single server, any failure in hardware or software could result in downtime for the entire website.

Downtime during Maintenance: Deploying new code or performing maintenance tasks may require restarting the web server, resulting in temporary downtime for users.

Limited Scalability: The infrastructure may struggle to handle a significant increase in incoming traffic since it's hosted on a single server, limiting scalability and potentially leading to performance issues.