

Some specifics about the Simple Web Stack infrastructure.

What is a server: A server is a software or hardware device that accepts and responds to requests made over a network. The device that makes the request, and receives a response from the server, is called a client.

What is the role of the domain name?: Domain names serve to identify Internet resources, such as computers, networks, and services, with a text-based label that is easier to memorize than the numerical addresses used in Internet protocols.

What type of DNS record www is in www.foobar.com: The DNS record in the address is known as a CNAME record

What is the role of the web server: It is responsible for hosting websites and providing access to web content. Web servers are computers that store webpages and serve them to users when they request them

What is the role of the application server: the application server is responsible for the following tasks;

- user authentication and security
- processing and serving HTML files
- processing and compiling JSP files with help from its servlet/JSP engine, then serving the entire response generated back to the browser

What is the server using to communicate with the computer of the user requesting the website: the server is known as the HTTP server

The issues with this infrastructure.

SPOF: One of the issues of having a simple web stack infrastructure, has to do with the SPOF (Single Point of Failure) where if a component of the system fails the whole system will collapse by being unable to operate.

Downtime when maintenance is needed: whenever some structure in the system needs to be repaired, the whole system has to be shut down, while the maintenance is done. Then, client requests cannot be attended to during this period of time.

Cannot scale if too much incoming traffic: there is no possibility to scale the service with additional servers as backup. Leading to a possible breakdown of the web page as traffic surpasses servers capacity

