

You must be able to explain some specifics about this infrastructure:

- **For every additional element, why you are adding it**

- load balancer**

- Handle the high volume traffic at the site by distribute it among the servers

- 2 servers**

- 1 server to hosting the load balance

- 1 server for support the site

- **What distribution algorithm your load balancer is configured with and how it works**

Round Robin Scheduling, The Requests are served by the server sequentially one after another. After sending the request to the last server, it starts from the first server again.

- **Is your load-balancer enabling an Active-Active or Active-Passive setup, explain the difference between both**

- Round Robin algorithm for load balancing typically indicates an active-active setup

- Active-Active Setup: Multiple load balancers handle traffic simultaneously, increasing capacity and providing high availability.

- Active-Passive Setup: One load balancer is active, distributing traffic, while another remains idle as a backup. It provides failover protection for high availability.

- **How a database Primary-Replica (Master-Slave) cluster works**

- a query write to the leader , the leader then replicate the updated data to the follower , both leader and follower must commits before the right is considered a successful

- **What is the difference between the Primary node and the Replica node in regard to the application**

- Primary Node: Responsible for handling read and write operations, maintaining the primary copy of data, and enforcing consistency rules.

- Replica Node: Stores duplicate data, provides fault tolerance, serves read requests, and reduces the load on the primary node.