

Here are some specifics about this infrastructure:

- We are adding two additional servers to the infrastructure to improve performance and reliability. The additional servers will allow us to distribute the load across multiple machines and provide redundancy in case of hardware failure.
- The load balancer (HAproxy) is configured with a round-robin distribution algorithm. This algorithm works by distributing incoming requests evenly across all available servers.
- The load balancer is enabling an Active-Passive setup. In this setup, one server is active and handling incoming requests while the other server is passive and ready to take over if the active server fails.
- The database Primary-Replica (Master-Slave) cluster works by having one primary node that handles all write requests and multiple replica nodes that handle read requests. The primary node replicates all changes to the replica nodes in real-time.
- The primary node is responsible for handling all write requests while the replica nodes are responsible for handling read requests. The application should be configured to send write requests to the primary node and read requests to any of the replica nodes.

Here are some issues with this infrastructure:

- There is still a single point of failure (SPOF) in the infrastructure, which is the load balancer. If the load balancer fails, the entire system will be unavailable.
- There are security issues with this infrastructure since there is no firewall or HTTPS encryption.
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- There is no monitoring in place to detect and respond to issues in real-time.