

Task 3: Scale Up

Description

This advanced task focuses on scaling up the web infrastructure by splitting components (web server, application server, database) onto their own servers and configuring a load balancer (HAproxy) cluster for high availability.

Requirements

- 1 server
- 1 load-balancer (HAproxy) configured as a cluster with the other one
- Split components (web server, application server, database) with their own server

Specifics of the Infrastructure

- **Server:** The additional server is added to distribute the workload across different components.
- **Load-Balancer Cluster:** HAproxy is configured as a cluster to ensure high availability and distribute incoming traffic.
- **Split Components:** Each component (web server, application server, database) now resides on its own server, allowing for better resource management and scalability.

Explanations

- **Server Addition:** Adding another server allows for better scalability and resource management. It ensures that each component has dedicated resources.
- **Load-Balancer Cluster:** Clustering HAproxy provides redundancy and fault tolerance. If one load balancer fails, the other can take over seamlessly.
- **Split Components:** Splitting components onto separate servers improves performance and allows for easier scaling. For example, if the database server needs more resources, it can be scaled independently without affecting other components.