

# Technical Specifications for Sailor Ecommerce

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## FRONTEND AND BCKEND

- ❖ HTML
- ❖ CSS
- ❖ BOOTSTRAP 5.0
- ❖ JAVASCRIPT
- ❖ JQUERY
- ❖ AJAX
- ❖ PHP 8
- ❖ LARAVEL 8.0[FRAMEWORK]
- ❖ CDN
- ❖ REST API

## DATABASE:

MYSQL 5.8

## SERVER AND DEPLOYMENT:

For faster serving application we will follow horizontal out-scaling structure where application will be served using multiple nodes. If application needs more resources then extra node will be added for better performance. Request coming from users will be distributed to several nodes using load balancer.

MySQL database will be used for interacting with data. Http request along with MySQL data will be supplied from different MySQL servers. For faster response multiple MySQL nodes will be used also. Here parent MySQL server will play main role and other slaves will assist.

## Content Delivery Network:

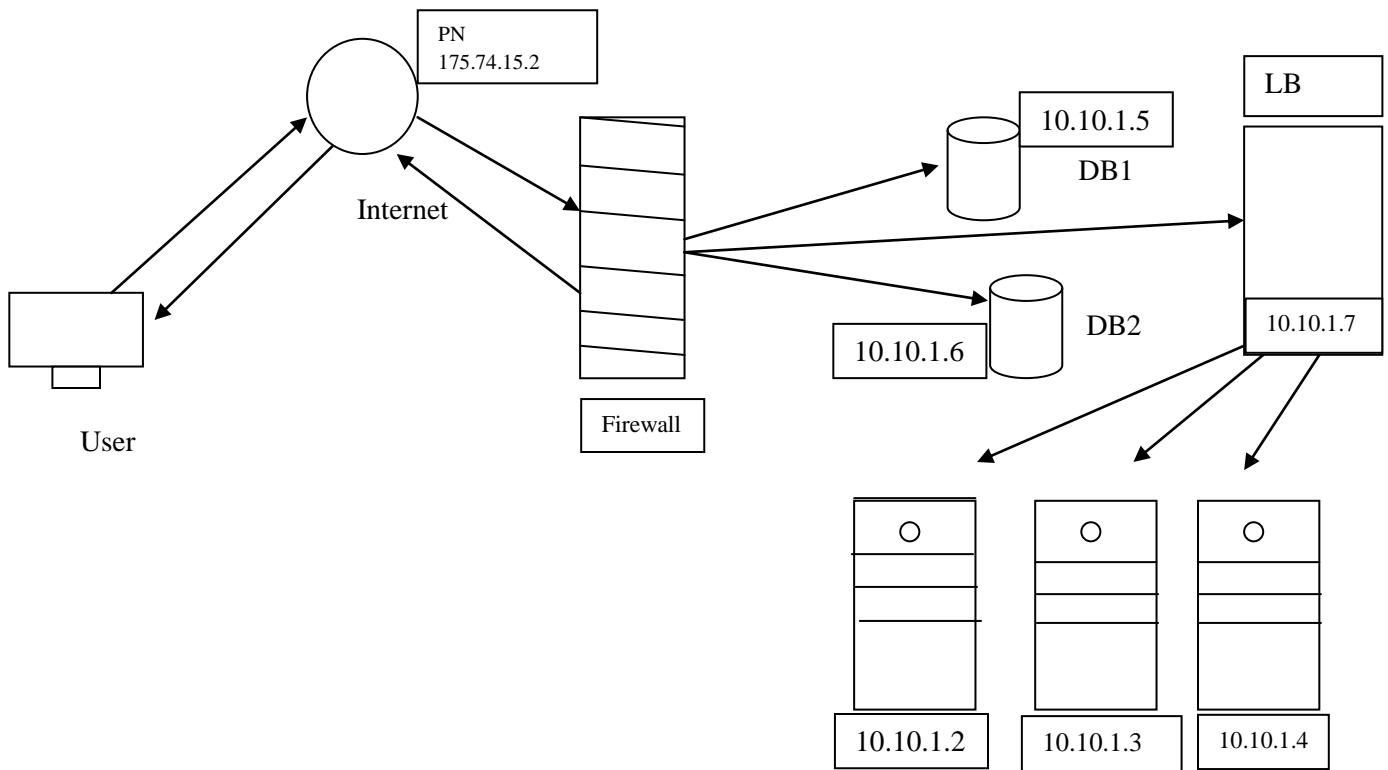
Content delivery network is a way of providing contents such as images, videos, css or JavaScript from nearest location of user request. Several content delivery network such as *aws cloudfront*, *fastly*, *cloudflare* can be integrated with this application for faster loading speed.

# Application Architecture

## Virtual Private Cloud (VPC):

Virtual private cloud is a way of interacting local devices among each other. For faster and securing our internal resources we will use vpc networking structure. In this process private resources will be fully isolated from public network resources for mysql, vps and load balancer. Following this way no public request will be forward to isolated network.

VPC Network Diagram



Deployment Architecture:

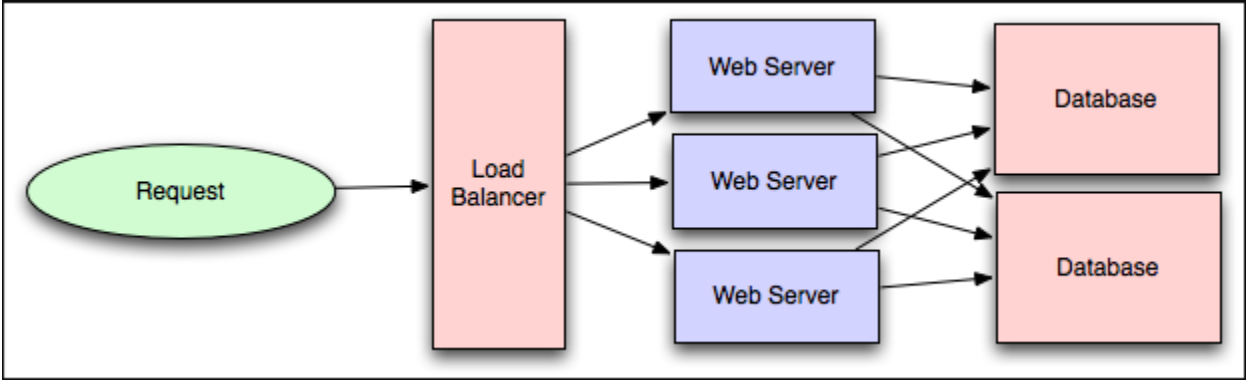


Fig: Project Deployment Architecture