# DEVOPS ENGINEER
## Assignment

A client reached out to us for assistance with hosting and maintenance of the platform they run their applications on.

The main concern is that applications are located on provisioned dedicated bare metal servers which are expensive to run and maintain (client still remembers a 6 hour outage caused by a failed RAID card on the server running apache).

The platform currently consists of:
- apache proxy service
- varnish for serving cached static content
- four servers with three different PHP applications on each server
- a shared MySQL database server used by all three applications
- NFS storage mounted on each server for static files

In order to provide technical details about the project and to make things a bit easier for us, the client provided the following information:
- diagram of the current infrastructure
- local development configuration files and docker environment definitions

The decision has been made to migrate applications to AWS so we ask you to create the architecture diagram of the new setup that will be highly available, resilient and quick to recover from failures.

The entire project has been divided into multiple tasks:
- AWS infrastructure setup (Terraform or CloudFormation is a plus)
- application environment setup based on the proposed architecture
- CI/CD setup - build and deploy pipeline for PHP applications (configuration for Jenkins, SemaphoreCI or a similar CI service is a plus; shell scripts are a plus)

Since this is your first major project in the DevOps team, **you can choose one of the tasks to work on** while the remaining tasks will be assigned to other members of the DevOps team.

As a part of this assignment, please provide:

- architecture plan with explanation on why each decision was made and what were the alternatives in the design process
- configuration files, scripts and documentation for **the selected task**



apache
varnis
app1
app2
app3

app1
app2
app3

app1
app2
app3

app1
app2
app3

NFS