

AWS DevOps recruitment process | Challenge – 1NCE

Consider the following setup:

You are a cloud engineer in a company that is providing a web and mobile application to its customers. The infrastructure is running on a single on-premises datacenter with no Disaster recovery nor redundancy. The whole infrastructure is protected by a physical appliance firewall which also acts as a reverse-proxy/load balancer for 2 web servers. The web servers write data to a single mysql database in the same network. Application logs are stored locally on the web servers but there is a nagios server that monitors load, memory, cpu and disk space usage.

The company would like to migrate to AWS cloud as soon as possible since they are not able to meet the demand, the main motivation being Redundancy.

You are required to **design a cloud architecture diagram** to meet company's requirements to migrate to AWS cloud

- Describe AWS services that you would use
- Consider cloud best practises on your design
- Bonus points
 - Propose deployment process (strategy) using IaC and CI/CD for multiple aws accounts (e.g. dev, stage, prod)
 - Security
 - Well structured private and public subnets
 - Encryption to enforce security at-rest and in-transit
 - High availability and redundancy

Current architecture diagram:

