

Scenario:

You are part of a team which is responsible for deploying applications to our public cloud production environment.

In the past the deployment process of the company consisted of a lot of manual steps which continuously led to human failures. Being fed up with the situation the CTO of the company entrusted you with the mission to automate this process and reduce the room for failure.

You received the following task:

- Enable the company to deploy their applications easily to a fully load balanced public cloud (e.g. AWS) from scratch.
- Use infrastructure as code to deploy (e.g. Ansible, Terraform)

On top of that he provided you with the following installation requirements for your environment:

- A docker container running the provided webservice
 - Only use official images from docker hub
 - Based on alpine-linux
 - Oracle Java 8.x (not OpenJDK)
 - To run the webservice execute: `java -jar helloworld.war`
(Service will be available on port 8080)
- A webserver (e.g. apache, nginx) which proxies http/s to the application container.

While creating all this, please keep all your scripts and configs under version control (e.g. Git) to keep a decent history of your work.

Our CTO is very keen to understand and follow how you got your job done.

Expected deliverables:

- All your dockerfiles, scripts, configs, playbooks, formulas etc. in a VCS (e.g. GitHub, Bitbucket).
- A short documentation to restore your files to be able to do the deployment based on your recipes.
- Do not provide pre-built docker images.