

Tasks

1. Using Terraform, and on Oracle Cloud Infrastructure (OCI), build a hop and spoke network and all of its necessary components.
2. Provision an application VM with Nuxt.js as a frontend and Laravel as a backend.
3. Provision a database VM with MySQL, Redis and Mongo.
4. Setup an automated CI/CD deployment using Jenkins.
5. Use Ansible to install and configure all systems.

Infrastructure and Assumptions

1. VM-1 for setup of terraform and ansible.
2. Using Ansible, I want to perform task 2, 3 and 4.
3. VM-2 will be used to setup MySQL, Redis and Mongo Databases.
4. VM-3 will be used to setup three applications.
 - A. one frontend app using Nuxt.js
 - B. one backend app using Laravel
 - C. one Node.js app deployed using automated CI/CD with Jenkins and Kubernetes (one node for Kubernetes)
5. Frontend and backend can be exposed using nginx or with ingress in Kubernetes (domains and SSL certs will be required)
- 6.

Install Terraform

Install Ansible