

What you need to know in terraform. Do not worry if you cannot understand some of the information I have provided. We are going to do everything practically.

1. Terraform concept - Important
2. Terraform on-premises/your house/your own laptop - provisioning terraforms project on-premises and storing state in your local/premise server.
3. Terraform cloud/enterprise - highly recommended- provisioning projects using terraform cloud/enterprise and storing the state in the cloud to allow collaboration among team members and state security.
4. Terraform hybrid - a combination of cloud and premise. Provisioning terraforms projects using local CLI (Command-line interface) and backend and storing the state in the cloud to enhance collaboration and security of the state.
5. Creating an organization and workspaces in terraform cloud and inviting your team members to work together on different projects allowing collaboration, increased productivity, and shared knowledge when provisioning dynamic projects.
6. State locking – Important in securing your workspace - If supported by your backend, terraform will lock your state for all operations that could write state. This prevents others from acquiring the lock and potentially corrupting your state.
7. Setting both organizational and workspace environmental variable sets - essential to allow recycling of the variable sets and save time when provisioning terraform projects.
8. Terraform project - automating the provisioning of Jenkins control using terraform on-premises or your laptop, terraform cloud and terraform hybrid.

9. Terraform configuration .tf files, declarative language in terraform .tf files and how to prepare the .tf files.
10. Terraform life cycle - init, plan, apply and destroy.
11. Terraform structure - the core (state and configuration .tf files) and providers such as AWS and GCP.
12. Terraform show - retrieve your state in JSON format.
13. Terraform validate - ensure your configuration .tf files are valid and have no errors
14. Terraform fmt - Displays formatted configuration .tf files in your project.