# SOP – Terraform

* Everyday push all terraform work to GitHub repo.
* Establish consistent naming conventions for resources to ensure clarity and prevent naming conflicts.
* Organize Terraform files using a clear directory structure. Follow module’s structure.
* Use remote state storage (AWS S3 / Azure Storage account) to manage Terraform state files.
* Use tfvars files to manage environment-specific values. Use dev.tfvars, stage.tfvars, and prod.tfvars for defining variable configurations for development, staging, and production environment.
* Always run terraform init before executing any other commands to ensure that the necessary provider plugins are downloaded and initialized.
* Use terraform plan to review changes before applying them.
* Check output of terraform apply before applying it. Never us -auto-approve with apply.
* Do not hardcode sensitive information (e.g., passwords, API keys) in Terraform files.
* Define output variables in the outputs.tf file to share important information about the infrastructure.
* Use comments to provide necessary details for resources.
* Run terraform fmt to ensure that Terraform configuration files are consistently formatted.