

MONOLITHIC PROJECT

- STEP-1: Launch an instance (t2.medium & 20 gb ebs) with key-pair, 8080 port and IAM Admin role
- STEP-2: install terraform and write a terraform code to launch an instance with same key-pair.
- STEP-3: push that code into GitHub.
- STEP-4: setup Jenkins in our server.
- STEP-5: create a job in Jenkins (Automate terraform) to launch an instance.
- STEP-6: install Ansible and its dependencies(python-pip, level, openssl and pip install boto3)
- STEP-7: write a plugin for getting prod server details
- STEP-8: allow all permissions for Ansible configuration on prod servers
- STEP-9: make ssh connection b/w the server through pem file
- STEP-10: write a script to automate the configuration on prod servers.

STEP-2: INSTALL TERRAFORM

```
yum-config-manager --add-repo  
https://rpm.releases.hashicorp.com/AmazonLinux/hashicorp.repo  
  
yum install terraform -y
```

STEP-5:

1. Choice parameters
2. Integrate GitHub repo
3. Shell:

```
#!/bin/bash
```

```
set -xe
```

```
cd /var/lib/jenkins/workspace/j1/Terraform
```

```
terraform init
```

```
terraform plan
```

```
terraform $tf_action -auto-approve
```

```
sleep 20
```

```
if [ $TERRAFORM_ACTION = "destroy" ]; then
```

```
    exit 0
```

```
else
```

```
    cd ../Ansible
```

```
    ansible-playbook -i /opt/ansible/inventory/aws_ec2.yml deployment.yml
```

```
fi
```

STEP-6,7,8,9:

```
amazon-linux-extras install ansible2 -y
```

```
yum install python python-pip python-level openssl -y
```

```
pip install boto3
```

```
vi /etc/ansible/ansible.cfg
```

- inventory = /opt/ansible/inventory/aws_ec2.yml
- host_key_checking = False
- enable_plugins = aws_ec2 (line-330)
- Vim keypair.yml

```
Mkdir -p /opt/ansible/inventory
```

```
Vim aws_ec2.yml
```

```
=====
```

```
---
```

```
plugin: aws_ec2
```

```
regions:
```

```
- ap-south-1
```

```
filters:
```

```
tag:Environment: dev
```

```
=====
```