Case study :terraform

you work as a DevOps Engineer in a leading software company.

You have been asked to build an infrastructure safely and efficiently. The company's requirements:

1. Use AWS Cloud Provider and the software to be installed is Apache2

2. Use Ubuntu AMI

The company wants the architecture to have the following services:

1. Create a template with a VPC, 2 subnets and 1 instance in each subnet

2. Attach security groups, internet gateway and network interface to the instance

Solution

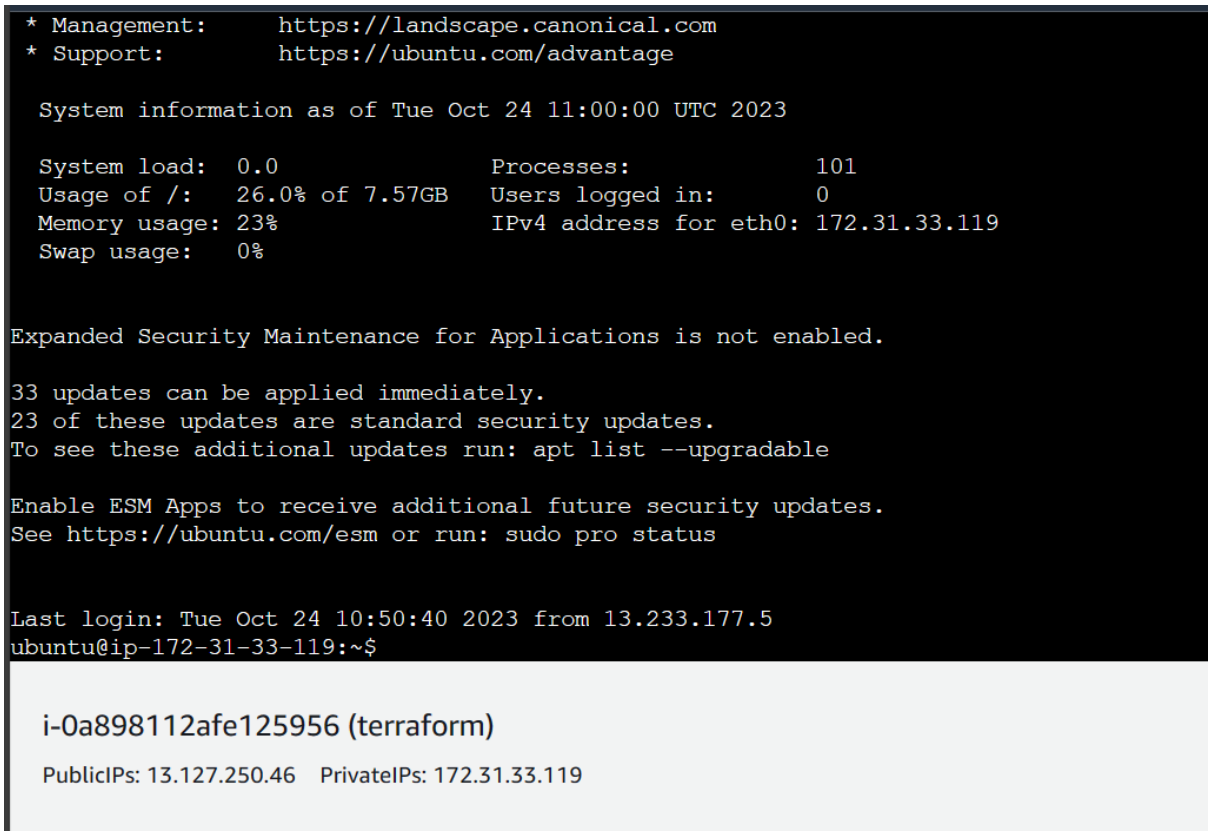
1. *First creat the aws a/c setups*

Aws account with the necessary permission for resource creation and management.

2. *Next stept to creat the aws vpc and cidr block 10.0.0./16*

Two sebnet in vpc with different availability zone

3. *So next seep to create the security groups in the https,ports 22 number*
4. *Let launch the internet gateway in the vpc attact in public subnets*
5. *Lauch the ec2 instances in ubuntu ami with 3 seps to create*



```
  1  sudo yum update
  2  sudo apt-get update
  3  sudo apt-get install docker
  4  wget <a href="https://releases.hashicorp.com/terra
orm_1.3.5_linux_amd64.zip">https://releases.hashicorp.c
5/terraform_1.3.5_linux_amd64.zip</a>
  5  echo $PATH
  6  sudo unzip terraform_1.3.5_linux_amd64.zip -d /usr
  7  ls -l /usr/local/bin
  8  terraform -version
  9  sudo snap install terraform
 10  sudo apt-get install terraform
 11  sudo yum install -y yum-utils
 12  clear
```

```
 16  unzip terraform_1.0.7_linux_amd64.zip
 17  sudo mv terraform /usr/local/bin/
 18  terraform --version
 19  clear
 20  kubectl get job -o json
 21  sudo apt-get install kubectl
 22  kubectl get job -o json
 23  sudo -i
 24  sudo mv terraform /usr/local/bin
 25  history
untu@ip-172-31-33-119:~$
```

i-0a898112afe125956 (terraform)

PublicIPs: 13.127.250.46 PrivateIPs: 172.31.33.119

So we launch the terraform successful

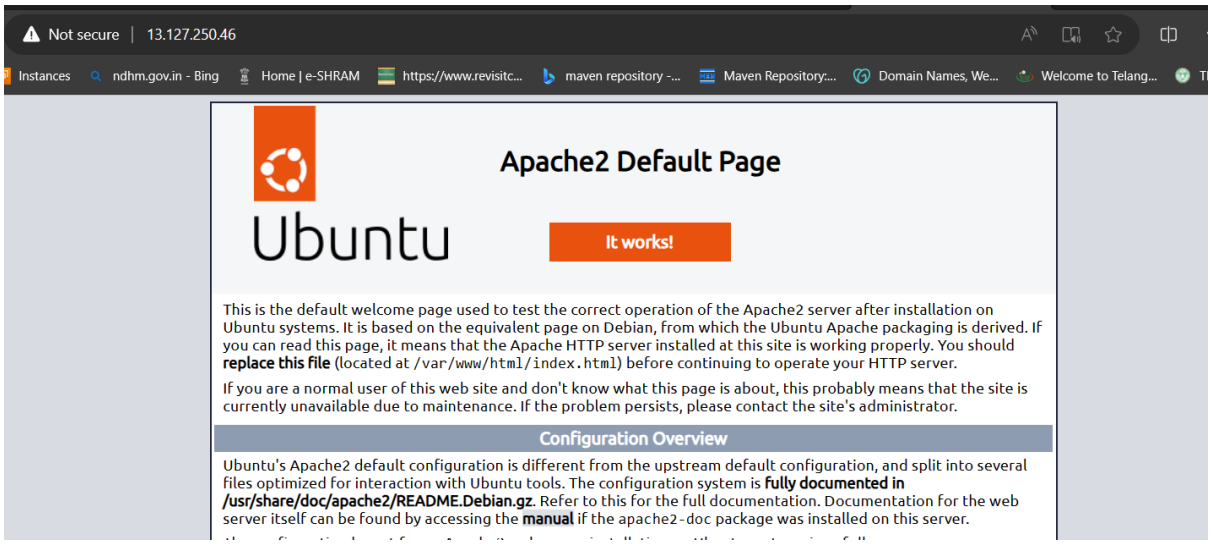
```
ubuntu@ip-172-31-33-119:~$ terraform --version
Terraform v1.0.7
on linux_amd64

Your version of Terraform is out of date! The latest version
is 1.6.2. You can update by downloading from https://www.terraform.io/do
wnloads.html
```

Now last step to create the apache install and terform in the ubuntu in the aws so Commands;

1. *"sudo apt-get update"*
2. *"sudo apt-get install apache2"*
3. *"sudo apt-get start apache2"*

Then test the public ip addres in the https hosts and dns server running correctly
So additional configuration in the apache2 and instances in second setup pages

Let check it work or not



So out put is correct and successfully to launch apache2