Lesson 06 Demo 06

Setting Up Terraform

Objective: To demonstrate the process of setting up Terraform on an Ubuntu system

Tools required: Terminal and sudo access

Prerequisites: Understanding of package management in Linux

Steps to be followed:

1. Install Terraform on Ubuntu

Step 1: Install Terraform on Ubuntu

1.1 Update the package list using the following command:
   sudo apt update

```
labsuser@ip-172-31-40-118:~$ sudo apt update
Hit:1 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Hit:3 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Hit:5 https://prod-cdn.packages.k8s.io/repositories/isv:/kubernetes:/core:/stable:/v1.
28/deb  InRelease
Get:6 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages
 [1318 kB]
Get:7 http://us-west-2.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Pack
ages [1033 kB]
Ign:8 https://ppa.launchpadcontent.net/ansible/ansible/ubuntu jammy-date InRelease
Hit:9 https://ppa.launchpadcontent.net/ansible/ansible/ubuntu jammy InRelease
Hit:10 https://ppa.launchpadcontent.net/mozillateam/ppa/ubuntu jammy InRelease
Get:11 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1068 kB]
Err:12 https://ppa.launchpadcontent.net/ansible/ansible/ubuntu jammy-date Release
  404  Not Found [IP: 185.125.190.80 443]
Get:13 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [203 kB]
Get:14 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [833 k
```

1.2 Use the below command to make a directory:
mkdir test

```
labsuser@ip-172-31-40-118:~$ mkdir test
```

1.3 Use the below command to change a directory:
cd test

```
labsuser@ip-172-31-40-118:~$ cd test
```

1.4 Run the following command to download the appropriate package:
wget
https://releases.hashicorp.com/terraform/0.14.9/terraform_0.14.9_linux_amd64.zip

```
labsuser@ip-172-31-40-118:~/test$ wget https://releases.hashicorp.com/terraform/0.14.9
/terraform_0.14.9_linux_amd64.zip
--2024-01-25 14:48:31--  https://releases.hashicorp.com/terraform/0.14.9/terraform_0.1
4.9_linux_amd64.zip
Resolving releases.hashicorp.com (releases.hashicorp.com)... 204.246.191.45, 204.246.1
91.101, 204.246.191.114, ...
Connecting to releases.hashicorp.com (releases.hashicorp.com)|204.246.191.45|:443... c
onnected.
HTTP request sent, awaiting response... 200 OK
Length: 33787465 (32M) [application/zip]
Saving to: 'terraform_0.14.9_linux_amd64.zip'

terraform_0.14.9_linu 100%[=====================>]  32.22M   109MB/s    in 0.3s

2024-01-25 14:48:32 (109 MB/s) - 'terraform_0.14.9_linux_amd64.zip' saved [33787465/33
787465]
```

1.5 Run the below command to download the Terraform binary file:
   sudo apt-get install unzip

```
labsuser@ip-172-31-40-118:~/test$ wget https://releases.hashicorp.com/terraform/0.14.9
/terraform_0.14.9_linux_amd64.zip
--2024-01-25 14:48:31--  https://releases.hashicorp.com/terraform/0.14.9/terraform_0.1
4.9_linux_amd64.zip
Resolving releases.hashicorp.com (releases.hashicorp.com)... 204.246.191.45, 204.246.1
91.101, 204.246.191.114, ...
Connecting to releases.hashicorp.com (releases.hashicorp.com)|204.246.191.45|:443... c
onnected.
HTTP request sent, awaiting response... 200 OK
Length: 33787465 (32M) [application/zip]
Saving to: 'terraform_0.14.9_linux_amd64.zip'

terraform_0.14.9_linu 100%[=======================>]  32.22M   109MB/s    in 0.3s

2024-01-25 14:48:32 (109 MB/s) - 'terraform_0.14.9_linux_amd64.zip' saved [33787465/33
787465]
```

1.6 Unzip the downloaded file using the following command:
   unzip <YourTerraformFileName>.zip

```
labsuser@ip-172-31-40-118:~/test$ unzip terraform_0.14.9_linux_amd64.zip
Archive:  terraform_0.14.9_linux_amd64.zip
  inflating: terraform
```

1.7 Run the below command to move the Terraform binary file to the **bin** directory:
   sudo su
   ls
   mv <YourUnzippedTerraformFileName> /usr/local/bin
   cd ..

```
labsuser@ip-172-31-40-118:~/test$ sudo su
root@ip-172-31-40-118:/home/labsuser/test#
```

```
root@ip-172-31-40-118:/home/labsuser/test# ls
terraform   terraform_0.14.9_linux_amd64.zip
root@ip-172-31-40-118:/home/labsuser/test#
```

```
root@ip-172-31-40-118:/home/labsuser/test# mv terraform /usr/local/bin
root@ip-172-31-40-118:/home/labsuser/test#
```

```
root@ip-172-31-40-118:/home/labsuser/test# cd ..
root@ip-172-31-40-118:/home/labsuser#
```

1.8 Verify Terraform installation using the following command:
terraform -version

```
root@ip-172-31-40-118:/home/labsuser# terraform -version
Terraform v0.14.9

Your version of Terraform is out of date! The latest version
is 1.7.1. You can update by downloading from https://www.terraform.io/downloads.html
root@ip-172-31-40-118:/home/labsuser#
```

By following these steps, you have successfully installed Terraform on your system. You can now start utilizing Terraform for infrastructure as code (IaC) deployments.