

Module-11: Provisioning Infrastructure using Terraform Part-I

Demo Document - 2

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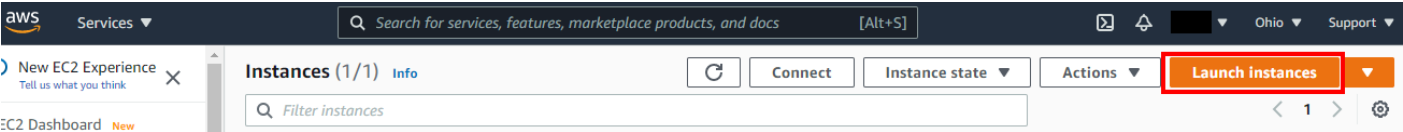
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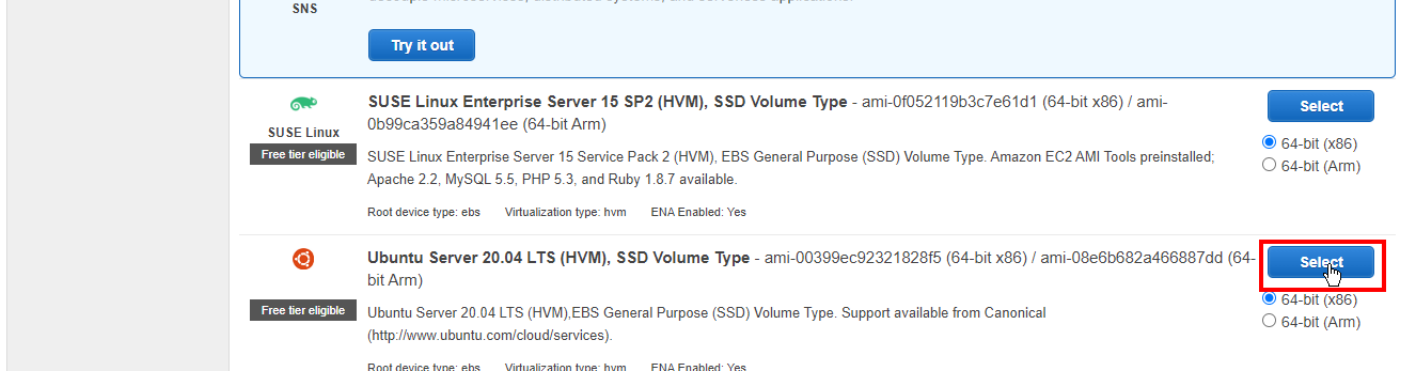
DEMO-2: Installing Terraform

Instance Setup

1. Start a new Ubuntu EC2 Instance in AWS console

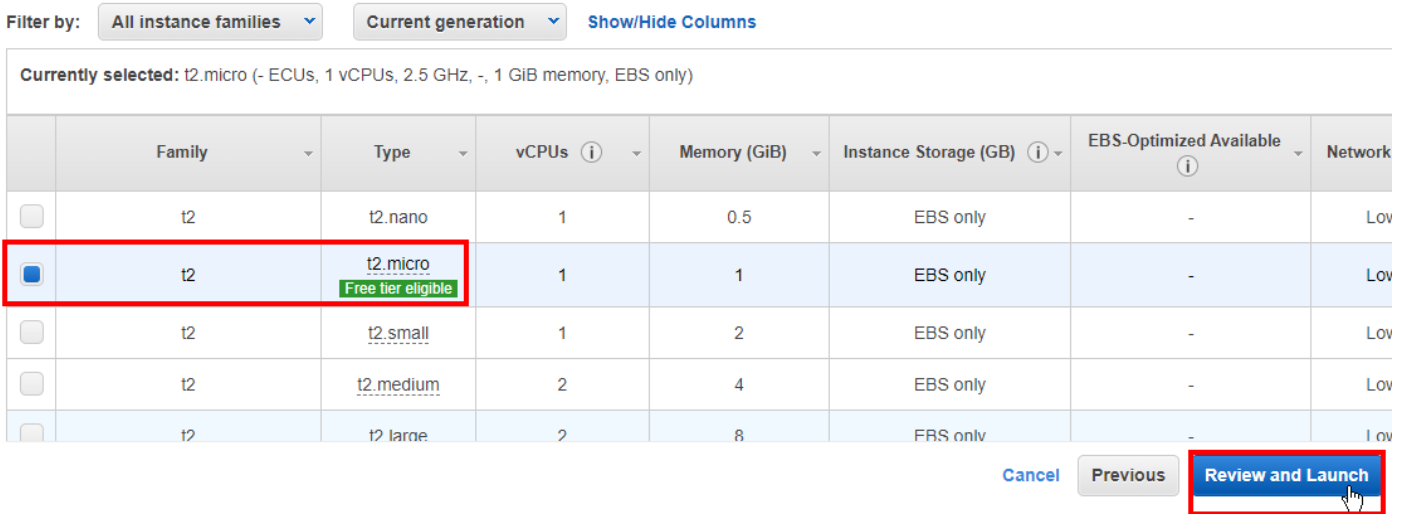


Step 1: Choose an Amazon Machine Image (AMI)



Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combination of vCPUs, memory, networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your co



Edit Security Groups for the Instance and add a rule to allow all traffic

Step 7: Review Instance Launch

eligible

Root Device Type: ebs

Virtualization type: hvm

▼ Instance Type

Edit instance type

| Instance Type | ECUs | vCPUs | Memory (GiB) | Instance Storage (GB) | EBS-Optimized Available | Network Performance |
|---------------|------|-------|--------------|-----------------------|-------------------------|---------------------|
| t2.micro | - | 1 | 1 | EBS only | - | Low to Moderate |

▼ Security Groups

Edit security groups

Security group name

launch-wizard-4

Description

launch-wizard-4 created 2021-05-10T02:41:20.510+05:30

| Type | Protocol | Port Range | Source | Description |
|------|----------|------------|-----------|-------------|
| SSH | TCP | 22 | 0.0.0.0/0 | |

Click on Review and Launch

Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group: ☒ Create a new security group
☐ Select an existing security group

Security group name:

Description:

| Type | Protocol | Port Range | Source | Description |
|-------------|----------|------------|--------------------------|----------------------------|
| SSH | TCP | 22 | Custom 0.0.0.0/0 | e.g. SSH for Admin Desktop |
| All traffic | All | 0 - 65535 | Anywhere 0.0.0.0/0, ::/0 | e.g. SSH for Admin Desktop |

Add Rule

Warning

Cancel

Previous

Review and Launch

Start the instance using Putty

Copy and paste the Public IPv4 DNS of the instance in putty

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

▼ Instance summary

Info

Instance ID

i-06ca0b77d5fa60a47 (Terraform1)

Instance state

Running

Public IPv4 address

3.15.156.29 | open address

Public IPv4 DNS

ec2-3-15-156-29.us-east-2.compute.amazonaws.com | open address

PuTTY Configuration

Category:

Session

Logging

Terminal

Keyboard

Bell

Features

Window

Basic options for your PuTTY session

Specify the destination you want to connect to

Host Name (or IP address)

6-29.us-east-2.compute.amazonaws.com

Port

22

Connection type:

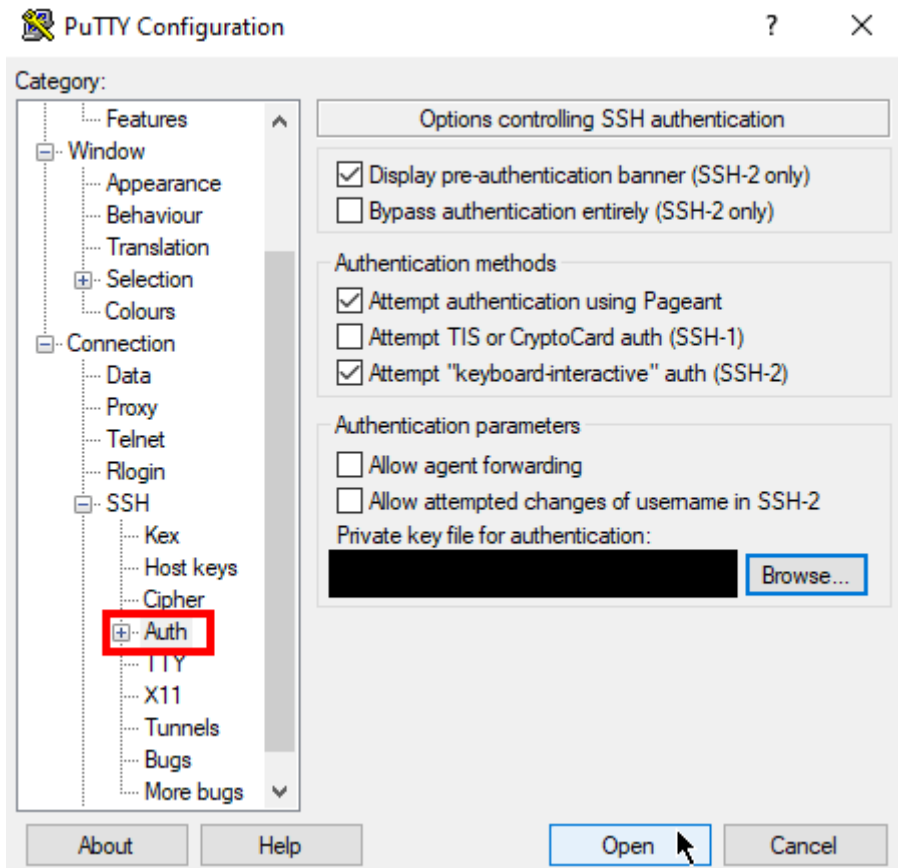
☐ Raw

☐ Telnet

☐ Rlogin

☒ SSH

☐ Serial



Installing Terraform

2. Ensure that gnupg and software-properties-common packages are installed

Syntax: `sudo apt-get update && sudo apt-get install -y gnupg software-properties-common curl`

3. Add the Hashicorp GPG key:

Syntax: `curl -fsSL https://apt.releases.hashicorp.com/gpg | sudo apt-key add -`

```
ubuntu@ip-172-31-19-127:~$ curl -fsSL https://apt.releases.hashicorp.com/gpg | sudo apt-key add -
OK
```

4. Add the hashicorp Linux repository

Syntax: `sudo apt-add-repository "deb [arch=amd64] https://apt.releases.hashicorp.com $(lsb_release -cs) main"`

```
ubuntu@ip-172-31-19-127:~$ sudo apt-add-repository "deb [arch=amd64] https://apt.releases.hashicorp.com $(lsb_release -cs) main"
Hit:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease
Get:4 https://apt.releases.hashicorp.com focal InRelease [4419 B]
Hit:5 http://security.ubuntu.com/ubuntu focal-security InRelease
Get:6 https://apt.releases.hashicorp.com focal/main amd64 Packages [23.1 kB]
Fetched 27.5 kB in 0s (58.8 kB/s)
Reading package lists... Done
```

5. Update the repository and install the Terraform CLI

Syntax: `sudo apt-get update && sudo apt-get install terraform`

```
ubuntu@ip-172-31-19-127:~$ sudo apt-get update && sudo apt-get install terraform
Hit:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease
Hit:4 https://apt.releases.hashicorp.com focal InRelease
Hit:5 http://security.ubuntu.com/ubuntu focal-security InRelease
Reading package lists... Done
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
  terraform
```

6. Verify the Installation

Syntax: `terraform -v`

```
ubuntu@ip-172-31-19-127:~$ terraform --version
Terraform v0.15.3
on linux_amd64
```

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