

TASK - ANSIBLE IN UBUNTU INSTALLATION

Step 1: Launch the Ubuntu instance :

aws

Services

Search for services, features, marketplace products, and docs

[Alt+S]

Jesaws

N. Virginia

Support

1. Choose AMI

2. Choose Instance Type

3. Configure Instance

4. Add Storage

5. Add Tags

6. Configure Security Group

7. Review

Cancel and Exit

Step 1: Choose an Amazon Machine Image (AMI)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

Q ubuntu

Search by Systems Manager parameter

Quick Start (8)

My AMIs (0)

AWS Marketplace (778)

Community AMIs (36375)

Free tier eligible

Ubuntu Server 20.04 LTS (HVM), SSD Volume Type - ami-09e67e426f25ce0d7 (64-bit x86) / ami-00d1ab6b335f217cf (64-bit Arm)

Select

64-bit (x86)

64-bit (Arm)

Ubuntu Server 20.04 LTS (HVM),EBS General Purpose (SSD) Volume Type. Support available from Canonical (http://www.ubuntu.com/cloud/services).

Root device type: ebs

Virtualization type: hvm

ENA Enabled: Yes

aws

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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 combinations of CPU, memory, storage, and 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 computing needs.

Filter by: All instance families Current generation Show/Hide Columns

Currently selected: t2.micro (- ECUs, 1 vCPUs, 2.5 GHz, -, 1 GiB memory, EBS only)

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	t2	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	t2	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.small	1	2	EBS only	-	Low to Moderate	Yes

Cancel

Previous

Review and Launch

Next: Configure Instance Details

Step 2: User data:

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

```
sudo apt-get install software-properties-common
sudo apt-add-repository -y ppa:ansible/ansible
sudo apt-get update
sudo apt-get install -y ansible
```

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Step 3: Configure Instance Details

Additional charges may apply

File systems

Add file system

Create new file system

Advanced Details

Enclave

Metadata accessible

Metadata version

Metadata token response hop limit

User data

☐ Enable

Enabled

V1 and V2 (token optional)

1

☒ As text ☐ As file ☐ Input is already base64 encoded

```
#!/bin/bash

sudo apt-get install software-properties-common
sudo apt-add-repository -y ppa:ansible/ansible
sudo apt-get update
sudo apt-get install -y ansible
```

Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encryption
Root	/dev/sda1	snap-0a52a8f51496c3782	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypte

Add New Volume

Step 5: Add Tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver. A copy of a tag can be applied to volumes, instances or both. Tags will be applied to all instances and volumes. [Learn more](#) about tagging your Amazon EC2 resources.

Key	Value	Instances	Volumes	Network Interfaces
Name	Ansible-master	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Add another tag (Up to 50 tags maximum)

Step 6: Configure Security Group

<input type="checkbox"/>	sg-0f8bba7bfac2f12b8	launch-wizard-13	launch-wizard-13 created 2021-05-04T20:29:17.672+05:30	Copy to new
<input type="checkbox"/>	sg-06eab446241e7d71e	launch-wizard-2	launch-wizard-2 created 2021-04-19T21:07:54.565+05:30	Copy to new
<input type="checkbox"/>	sg-0c71a4a67fc09c1da	launch-wizard-3	launch-wizard-3 created 2021-04-19T21:10:33.006+05:30	Copy to new
<input type="checkbox"/>	sg-08861d303eaa6c7ac	launch-wizard-4	launch-wizard-4 created 2021-04-21T22:37:54.737+05:30	Copy to new
<input type="checkbox"/>	sg-02de4330c5ff56f97	launch-wizard-5	launch-wizard-5 created 2021-04-22T20:19:04.790+05:30	Copy to new
<input type="checkbox"/>	sg-0f90bcbe6c41abe4a	launch-wizard-6	launch-wizard-6 created 2021-04-23T19:59:21.634+05:30	Copy to new
<input type="checkbox"/>	sg-060d80ede618d85cd	launch-wizard-7	launch-wizard-7 created 2021-04-23T20:00:20.016+05:30	Copy to new
<input type="checkbox"/>	sg-01f1cb4a9aa3a12bd	launch-wizard-8	launch-wizard-8 created 2021-04-23T20:09:05.491+05:30	Copy to new
<input checked="" type="checkbox"/>	sg-0164378e8588b18c1	launch-wizard-9	launch-wizard-9 created 2021-04-25T12:38:37.295+05:30	Copy to new

Inbound rules for sg-0164378e8588b18c1 (Selected security groups: sg-0164378e8588b18c1)

Type	Protocol	Port Range	Source	Description
All TCP	TCP	0 - 65535	0.0.0.0/0	

Instance Launch

launch details. You can

instances' security

may be accessible from a

n additional ports in you

ver 20.04 LTS (HVM)

r 20.04 LTS (HVM),EBS

re: ebs Virtualization type:

ECUs

vCP

-

1

Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. [Learn more about removing existing key pairs from a public AMI.](#)

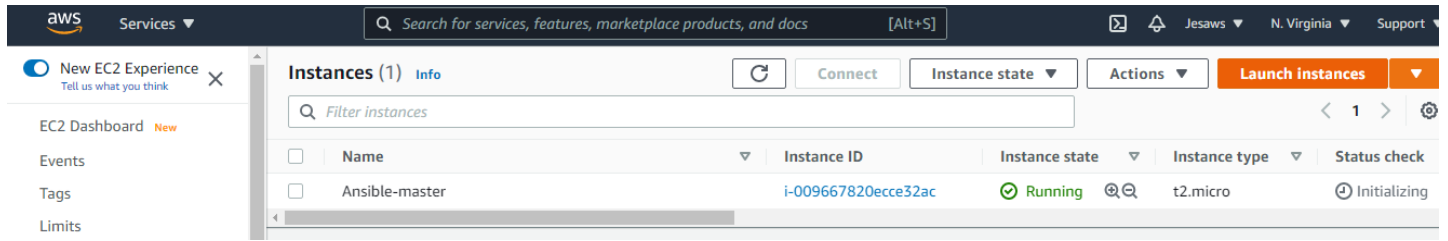
Choose an existing key pair

Select a key pair

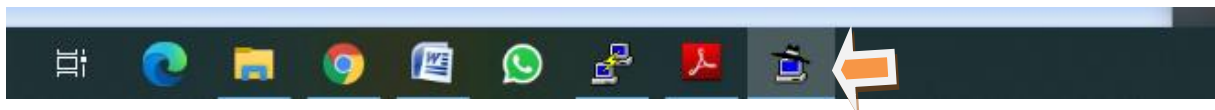
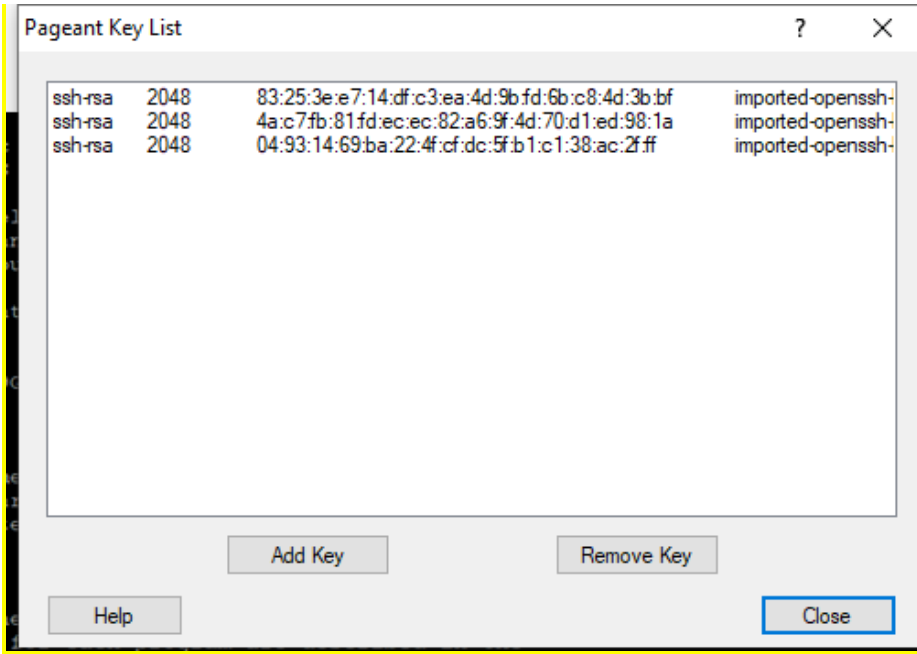
Demo18421

☒ I acknowledge that I have access to the selected private key file (Demo18421.pem), and that without this file, I won't be able to log into my instance.

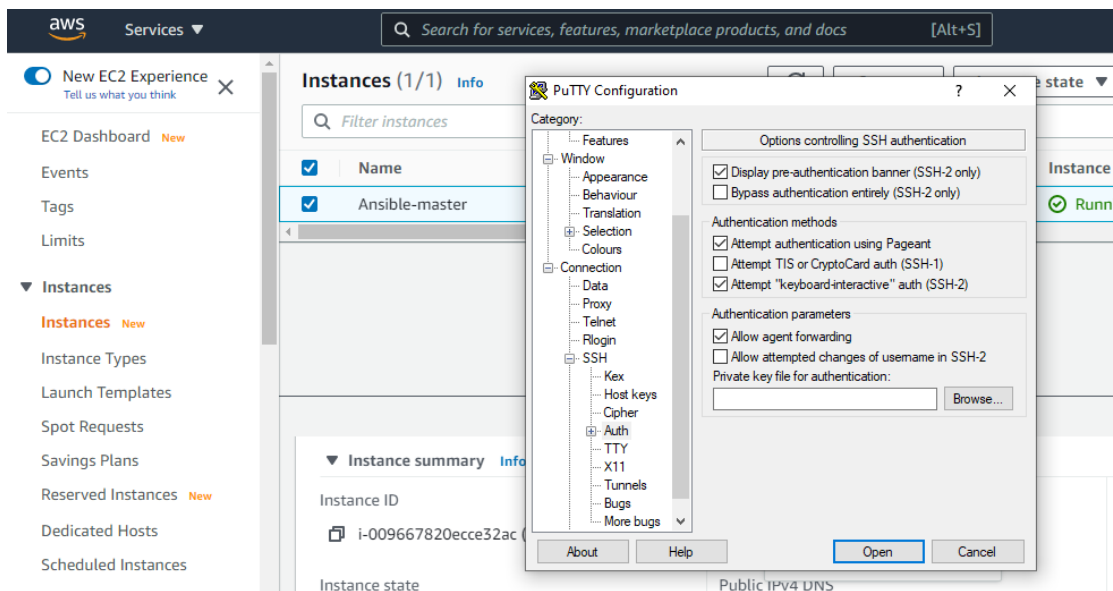
CancelLaunch Instances



Step 3: Download Pageagent and load your ppk file.



Using right click add the ppk file in the Pageagent:



Step 4: In putty ssh session enable allow agent forwarding option- Otherwise while connecting to node instance you will get permission denied error

Logon to ubuntu

```
login as: ubuntu
Authenticating with public key "imported-openssh-key" from agent
Welcome to Ubuntu 20.04.2 LTS (GNU/Linux 5.4.0-1045-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Sat May  8 16:16:08 UTC 2021

System load:  0.0           Processes:      101
Usage of /:   20.7% of 7.69GB Users logged in:  0
Memory usage: 26%          IPv4 address for eth0: 172.31.30.185
Swap usage:   0%

16 updates can be applied immediately.
7 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-30-185:~$
```

Step 5: Ansible adhoc command: Practice the command below with ubuntu user and not with root user

```
ubuntu@ip-172-31-30-185:~$ ansible --version
ansible 2.9.6
  config file = /etc/ansible/ansible.cfg
  configured module search path = ['/home/ubuntu/.ansible/plugins/modules', '/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python3/dist-packages/ansible
  executable location = /usr/bin/ansible
  python version = 3.8.5 (default, Jan 27 2021, 15:41:15) [GCC 9.3.0]
ubuntu@ip-172-31-30-185:~$
```

Step 6: Create one text file for e.g. slaves.txt and add node instance private IP

```
ubuntu@ip-172-31-30-185:~$ vi slaves.txt
ubuntu@ip-172-31-30-185:~$
```

```
ubuntu@ip-172-31-30-185: ~
172.31.53.16
~
```

Step 7: Default creation of ansible.cfg file and u can get it from

```
ubuntu@ip-172-31-30-185:/etc/ansible$ ls -lrta
total 32
-rw-r--r--  1 root root  982 Dec 18  2018 hosts
-rw-r--r--  1 root root 19985 Mar  5  2020 ansible.cfg
drwxr-xr-x 93 root root 4096 May  8 16:09 ..
drwxr-xr-x  2 root root 4096 May  8 16:09 .
ubuntu@ip-172-31-30-185:/etc/ansible$ vi hosts
ubuntu@ip-172-31-30-185:/etc/ansible$ vi ansible.cfg
ubuntu@ip-172-31-30-185:/etc/ansible$
```

Step 8: Vi ansible.cfg

ubuntu@ip-172-31-30-185:~\$ vi ansible.cfg

```
# option lets you increase or decrease that
# timeout to something more suitable for the
# environment.
# gather_timeout = 10

# Ansible facts are available inside the ansible_facts.* dictionary
# namespace. This setting maintains the behaviour which was the default prior
# to 2.5, duplicating these variables into the main namespace, each with a
# prefix of 'ansible_'.
# This variable is set to True by default for backwards compatibility. It
# will be changed to a default of 'False' in a future release.
# ansible_facts.
# inject_facts_as_vars = True

# additional paths to search for roles in, colon separated
#roles_path      = /etc/ansible/roles

# uncomment this to disable SSH key host checking
host_key_checking = False

# change the default callback, you can only have one 'stdout' type  enabled at a time.
#stdout_callback = skippy
```

Step 9: ansible all -i slaves.txt -m ping

```
ubuntu@ip-172-31-30-185:~$ ansible all -i "slaves.txt" -m ping
172.31.53.168 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
ubuntu@ip-172-31-30-185:~$
```