

Ansible Assignment 1

The screenshot shows the AWS EC2 Dashboard for the US East (N. Virginia) Region. The left sidebar includes sections for Instances, Images, and Elastic Block Store. The main area displays a summary of resources: 0 Instances (running), 0 Auto Scaling Groups, 0 Dedicated Hosts, 1 Elastic IP, 8 Instances, 2 Key pairs, 0 Load balancers, 0 Placement groups, 24 Security groups, 0 Snapshots, and 8 Volumes. A 'Launch instance' button is present, along with a note about launching in the US East (N. Virginia) Region. The right sidebar shows account attributes like the Default VPC (vpc-03417eda5fa38b7d) and various settings. A 'Explore AWS' section provides tips for reducing costs and optimizing EC2 usage.

The screenshot shows the 'Launch an instance' configuration page. It starts with a 'Name and tags' section where 'Ansible-' is entered. Below it is an 'Application and OS Images (Amazon Machine Image)' section, which includes a search bar for AMIs and a 'Quick Start' button. On the right, a 'Summary' panel shows the configuration details: 3 instances, Canonical Ubuntu 22.04 LTS AMI, t2.micro instance type, New security group, and 1 volume(s) - 8 GiB storage. A large orange 'Launch instance' button is prominently displayed at the bottom right of the summary panel.

The screenshot shows the AWS EC2 Launch Instance wizard. The configuration includes:

- Configure storage:** 1x 8 GiB gp2 Root volume (Not encrypted). A note indicates Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage.
- Virtual server type (instance type):** t2.micro
- Firewall (security group):** New security group
- Storage (volumes):** 1 volume(s) - 8 GiB

The "Launch instance" button is highlighted in orange at the bottom right.

The screenshot shows the AWS EC2 Instances page. Three instances are listed:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
Ansible-Master	i-0df8bc4a5782fea4c	Running	t2.micro	Initializing	No alarms	us-east-1c	ec2-3-94-64-46.0
Ansible-slave1	i-01dbae4ca583e367f	Running	t2.micro	Initializing	No alarms	us-east-1c	ec2-52-90-250-9
Ansible-Slave2	i-09afa4f92d1e25005	Running	t2.micro	Initializing	No alarms	us-east-1c	ec2-3-80-115-14

The "Launch instances" button is highlighted in orange at the top right of theInstances table.

Inbox (17) - harsh | Start Course | Instances | EC2 | Intellipaat Online | EC2 Instance Connect | EC2 Instance Connect | Feed | LinkedIn | +

us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0df8bc4a5782fea4c&osUser=ubuntu®ion=us-east-1&sshPort=22#

aws Services Search [Alt+S]

CloudWatch RDS EC2 S3 Amazon Redshift IAM

Memory usage: 21% IPv4 address for eth0: 172.31.19.150
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See <https://ubuntu.com/esm> or run: sudo pro status

The list of available updates is more than a week old.
to check for new updates run: sudo apt update

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-172-31-19-150:~\$

```
i-0df8bc4a5782fea4c (Ansible-Master)
PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150
```

CloudShell Feedback

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

ENGLISH IN 9:32 PM 11/3/2023

Inbox (17) - harsh | Start Course | Instances | EC2 | Intellipaat Online | EC2 Instance Connect | EC2 Instance Connect | Feed | LinkedIn | +

us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-1&connType=standard&instanceId=i-01dbae4ca583e367f&osUser=ubuntu&sshPort=22#

aws Services Search [Alt+S]

CloudWatch RDS EC2 S3 Amazon Redshift IAM

Memory usage: 21% IPv4 address for eth0: 172.31.31.183
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See <https://ubuntu.com/esm> or run: sudo pro status

The list of available updates is more than a week old.
to check for new updates run: sudo apt update

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-172-31-31-183:~\$

```
i-01dbae4ca583e367f (Ansible-slave1)
PublicIPs: 52.90.250.91 PrivateIPs: 172.31.31.183
```

CloudShell Feedback

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

ENGLISH IN 9:32 PM 11/3/2023

Inbox (17) - harsh | Start Course | Instances | EC2 | Intellipaat Online | EC2 Instance Connect | EC2 Instance Connect | Feed | LinkedIn | + | - | _ | ×

us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-1&connType=standard&instanceId=i-09afa4f92d1e25005&osUser=ubuntu&sshPort=22#

CloudWatch RDS EC2 S3 Amazon Redshift IAM

Memory usage: 21% IPv4 address for eth0: 172.31.17.26
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See <https://ubuntu.com/esm> or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

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-172-31-17-26:~\$

i-09afa4f92d1e25005 (Ansible-Slave2)

PublicIPs: 3.80.115.141 PrivateIPs: 172.31.17.26

CloudShell Feedback © 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences ENG IN 9:32 PM 11/3/2023

Inbox (17) - harsh | Start Course | Instances | EC2 | Intellipaat Online | EC2 Instance Connect | EC2 Instance Connect | Feed | LinkedIn | + | - | _ | ×

us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0df8bc4a5782fea4c&osUser=ubuntu®ion=us-east-1&sshPort=22#

CloudWatch RDS EC2 S3 Amazon Redshift IAM

```
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [22.1 kB]
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [41.6 kB]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [9768 B]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [472 B]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [64.2 kB]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [10.5 kB]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [388 B]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [27.8 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.4 kB]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [644 B]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:31 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [940 kB]
Get:32 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [186 kB]
Get:33 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [11.4 kB]
Get:34 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [1085 kB]
Get:35 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [176 kB]
Get:36 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [520 B]
Get:37 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [797 kB]
Get:38 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [146 kB]
Get:39 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [16.8 kB]
Get:40 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [36.5 kB]
Get:41 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [7060 B]
Get:42 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [260 B]
Fetched 28.2 MB in 5s (5556 kB/s)
```

i-0df8bc4a5782fea4c (Ansible-Master)

PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150

CloudShell Feedback © 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences ENG IN 9:38 PM 11/3/2023

```
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [64.2 kB]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [10.5 kB]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [388 B]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [27.8 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.4 kB]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [644 B]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:31 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [940 kB]
Get:32 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [186 kB]
Get:33 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [11.4 kB]
Get:34 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [1085 kB]
Get:35 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [176 kB]
Get:36 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [520 B]
Get:37 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [797 kB]
Get:38 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [146 kB]
Get:39 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [16.8 kB]
Get:40 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [36.5 kB]
Get:41 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [7060 B]
Get:42 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [260 B]
Fetched 28.2 MB in 5s (5556 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
42 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-19-150:~$ 
```

i-0df8bc4a5782fea4c (Ansible-Master)

PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150


```
CloudShell Feedback
```

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences ENG IN 9:39 PM 11/3/2023

```
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [64.2 kB]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [10.5 kB]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [388 B]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [27.8 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.4 kB]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [644 B]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:31 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [940 kB]
Get:32 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [186 kB]
Get:33 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [11.4 kB]
Get:34 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [1085 kB]
Get:35 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [176 kB]
Get:36 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [520 B]
Get:37 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [797 kB]
Get:38 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [146 kB]
Get:39 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [16.8 kB]
Get:40 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [36.5 kB]
Get:41 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [7060 B]
Get:42 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [260 B]
Fetched 28.2 MB in 5s (5556 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
42 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-19-150:~$ sudo apt install software-properties-common 
```

i-0df8bc4a5782fea4c (Ansible-Master)

PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150


```
CloudShell Feedback
```

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences ENG IN 9:39 PM 11/3/2023

```

M Inbox (17) - harsh | Start Course | In | Instances | EC2 | Intellipaat Online | EC2 Instance Con | EC2 Instance Con | EC2 Instance Con | Feed | LinkedIn | + | - | _ | X
← → ↗ us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0df8bc4a5782fea4c&osUser=ubuntu&region=us-east-1&sshPort=22#/ 
aws Services Search [Alt+S]
CloudWatch RDS EC2 S3 Amazon Redshift IAM
Get:36 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [520 B]
Get:37 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [797 kB]
Get:38 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [146 kB]
Get:39 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [16.8 kB]
Get:40 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [36.5 kB]
Get:41 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [7060 B]
Get:42 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [260 B]
Fetched 28.2 MB in 5s (5556 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
42 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-19-150:~$ sudo apt install software-properties-common
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
software-properties-common is already the newest version (0.99.22.7).
software-properties-common set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 42 not upgraded.
ubuntu@ip-172-31-19-150:~$ sudo apt install software-properties-common -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
software-properties-common is already the newest version (0.99.22.7).
0 upgraded, 0 newly installed, 0 to remove and 42 not upgraded.
ubuntu@ip-172-31-19-150:~$ sudo add-apt-repository --yes --update ppa:ansible/ansible

i-0df8bc4a5782fea4c (Ansible-Master)
PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150

CloudShell Feedback
© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences
ENG IN 9:40 PM 11/3/2023
CloudWatch RDS EC2 S3 Amazon Redshift IAM
0 upgraded, 0 newly installed, 0 to remove and 42 not upgraded.
ubuntu@ip-172-31-19-150:~$ sudo add-apt-repository --yes --update ppa:ansible/ansible
Repository: 'deb https://ppa.launchpadcontent.net/ansible/ansible/ubuntu/ jammy main'
Description:
Ansible is a radically simple IT automation platform that makes your applications and systems easier to deploy. Avoid writing scripts or custom code to deploy and update your applications—automate in a language that approaches plain English, using SSH, with no agents to install on remote systems.

http://ansible.com/
If you face any issues while installing Ansible PPA, file an issue here:
https://github.com/ansible-community/ppa/issues
More info: https://launchpad.net/~ansible/+archive/ubuntu/ansible
Adding repository.
Adding deb entry to /etc/apt/sources.list.d/ansible-ubuntu-ansible-jammy.list
Adding disabled deb-src entry to /etc/apt/sources.list.d/ansible-ubuntu-ansible-jammy.list
Adding key to /etc/apt/trusted.gpg.d/ansible-ubuntu-ansible.gpg with fingerprint 6125E2A8C77F2818FB7BD15B93C4A3FD7BB9C367
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu jammy-security InRelease
Get:5 https://ppa.launchpadcontent.net/ansible/ansible/ubuntu jammy InRelease [18.0 kB]
Get:6 https://ppa.launchpadcontent.net/ansible/ansible/ubuntu jammy/main amd64 Packages [1140 B]
Get:7 https://ppa.launchpadcontent.net/ansible/ansible/ubuntu jammy/main Translation-en [752 B]
Fetched 19.9 kB in 1s (13.5 kB/s)
Reading package lists... Done
ubuntu@ip-172-31-19-150:~$ sudo apt install ansible

i-0df8bc4a5782fea4c (Ansible-Master)
PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150

CloudShell Feedback
© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences
ENG IN 9:41 PM 11/3/2023

```

Inbox (17) - harsh | Start Course | Instances | EC2 | Intellipaat Online | EC2 Instance Connect | EC2 Instance Connect | Feed | LinkedIn | + | - | _ | X

us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0df8bc4a5782fea4c&osUser=ubuntu®ion=us-east-1&sshPort=22#

aws Services Search [Alt+S]

CloudWatch RDS EC2 S3 Amazon Redshift IAM

```
Setting up python3-packaging (21.3-1) ...
Setting up python3-jmespath (0.10.0-1) ...
Setting up python3-requests-kerberos (0.12.0-2) ...
Setting up python3-nacl (1.5.0-2) ...
Setting up python3-requests-ntlm (1.1.0-1.1) ...
Setting up ansible-core (2.15.5-1ppa-jammy) ...
Setting up python3-winxmm (0.3.0-2) ...
Setting up ansible (8.5.0-1ppa-jammy) ...
Setting up python3-paramiko (2.9.3-0ubuntu1) ...
Processing triggers for man-db (2.10.2-1) ...
scanning processes...
scanning linux images...

Running kernel seems to be up-to-date.
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-19-150:~$ cd .ssh/
ubuntu@ip-172-31-19-150:~/ssh$ ls
authorized_keys
ubuntu@ip-172-31-19-150:~/ssh$ 
```

i-0df8bc4a5782fea4c (Ansible-Master)

PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150

CloudShell Feedback

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

CloudWatch RDS EC2 S3 Amazon Redshift IAM

```
ubuntu@ip-172-31-19-150:~/.ssh$ ls
authorized_keys
ubuntu@ip-172-31-19-150:~/.ssh$ ssh -keygen
Bad escape character 'ygen'.
ubuntu@ip-172-31-19-150:~/.ssh$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/ubuntu/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/ubuntu/.ssh/id_rsa
Your public key has been saved in /home/ubuntu/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:ml+SmJTsSIjHd69A9+j300gllDy4RGY8Eeu3Pck6RA ubuntu@ip-172-31-19-150
The key's randomart image is:
-----[RSA 3072]-----
... ooo...
... +o+ ...
... .EO ...
... +o... .
o o,+oS .
+ +o+* ...
+= B+ + ...
o + ==o...
... ==o...
-----[SHA256]-----+
ubuntu@ip-172-31-19-150:~/.ssh$ 
```

i-0df8bc4a5782fea4c (Ansible-Master)

PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150

CloudShell Feedback

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

CloudWatch RDS EC2 S3 Amazon Redshift IAM

Inbox (17) - harsh | Start Course | Instances | EC2 | Intellipaat Online | EC2 Instance Connect | EC2 Instance Connect | EC2 Instance Connect | Feed | LinkedIn | +

aws Services Search [Alt+S]

CloudWatch RDS EC2 S3 Amazon Redshift IAM

```
ubuntu@ip-172-31-19-150:~/.ssh$ ssh-keygen
Bad escape character 'ogen'.
ubuntu@ip-172-31-19-150:~/.ssh$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/ubuntu/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/ubuntu/.ssh/id_rsa
Your public key has been saved in /home/ubuntu/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:ml+SmJxssijHd69A9+j300gllDy4RGY8Eeu3Pck6RA ubuntu@ip-172-31-19-150
The key's randomart image is:
+---[RSA 3072]---+
|...ooo...
| ..+o+ ...
| .+EO ...
| .+o... .
| o o.+oS .
| + O+o* ...
| + = B+... .
| . o + ==o+ ...
| . ==o...
+---[SHA256]---+
ubuntu@ip-172-31-19-150:~/.ssh$ ls
authorized_keys id_rsa id_rsa.pub
ubuntu@ip-172-31-19-150:~/.ssh$
```

i-0df8bc4a5782fea4c (Ansible-Master)

PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150

CloudShell Feedback

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

ENG IN 9:49 AM 11/3/2023

Inbox (17) - harsh | Start Course | Instances | EC2 | Intellipaat Online | EC2 Instance Connect | EC2 Instance Connect | EC2 Instance Connect | Feed | LinkedIn | +

aws Services Search [Alt+S]

CloudWatch RDS EC2 S3 Amazon Redshift IAM

```
GNU nano 6.2 authorized_keys *
ssh-rsa AAAAB3NzaC1yc2EAAAQABAAQCl10DMMLA51zrLWc2srShJ/PRNU1A3lJaRlnjysDKIYWG5MsWaVnpfzsb9A872NBY3zXoM5AK5natDFrZ2uOkYMBbHDbbBUlw9Q1BWcVrKJiOWMqUZDCMuRloMjx514oe5
ubuntu@ip-172-31-19-150:~/.ssh$ cat id_rsa.pub
tagvhrUKeuBfw8t0Xlb2AyLHSgmjD7Scw/Ikr8=8bLzwaznRidd6QgJ6FXI6G+SW+eskhc/MBB0sgbvincOcASnp/CeEzxj+Cis8SanBIQ2lijklmPaCqZBrQnEzrDEYQF/zdXxg5XyKc4saFhvzif5qE6FHAYGP/yDM8Hx
```

^G Help ^C Write Out ^W Where Is ^K Cut ^X Execute ^M Location M-U Undo ^N Set Mark M-I To Bracket M-Q Previous
^X Exit ^R Read File ^A Replace ^U Paste ^J Justify ^F Go To Line M-E Redo ^C Copy M-G Where Was M-W Next

i-01dbae4ca583e367f (Ansible-slave1)

PublicIPs: 52.90.250.91 PrivateIPs: 172.31.31.183

CloudShell Feedback

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

ENG IN 9:55 PM 11/3/2023

```
authorized_keys *  
ssh-rsa AAAAB3NzaC1yc2EAAAQABAAQCl10IMMIA51zrIWCzsShJ/PNU1A3LJaRlnjyxDKlyWbGMSwVnplfzsb9a87zNBY32XnMSAK5naLDSFzZ2u0kYMDBbHDbbBUIw9Q1BWcViKJ1oWMgJ2DCMUrioMjx514oeS  
ubuntu@ip-172-31-19-150:~/.ssh$ cat id_rsa.pub  
yDm8ItxK5bnkjv+32mo36whm]3qxp/0eGAbxeDefWeelS4txjFET3OBN2NTFQb/90= ubuntu@ip-172-31-19-150:  
  
^G Help      ^O Write Out    ^W Where Is     ^K Cut          ^X Execute      ^C Location     M-U Undo       M-R Set Mark   M-] To Bracket  M-Q Previous  
^X Exit      ^P Read File    ^R Replace      ^U Paste         ^J Justify     ^V Go To Line   M-E Redo       M-C Copy      M-` Where Was   M-W Next  
  
i-09afa4f92d1e25005 (Ansible-Slave2)  
PublicIPs: 3.80.115.141 PrivateIPs: 172.31.17.26  
  
CloudShell Feedback
```

```
* Documentation: https://help.ubuntu.com  
* Management: https://landscape.canonical.com  
* Support: https://ubuntu.com/advantage  
  
System information as of Fri Nov  3 16:30:32 UTC 2023  
System load: 0.0 Processes: 97  
Usage of /: 20.7% of 7.57GB Users logged in: 1  
Memory usage: 22% IPv4 address for eth0: 172.31.31.183  
Swap usage: 0%  
  
Expanded Security Maintenance for Applications is not enabled.  
0 updates can be applied immediately.  
Enable ESM Apps to receive additional future security updates.  
See https://ubuntu.com/esm or run: sudo pro status  
  
The list of available updates is more than a week old.  
To check for new updates run: sudo apt update  
  
Last login: Fri Nov  3 16:01:48 2023 from 18.206.107.29  
ubuntu@ip-172-31-31-183:~$  
  
i-0df8bc4a5782fea4c (Ansible-Master)  
PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150  
  
CloudShell Feedback
```

```
i-0df8bc4a5782fea4c (Ansible-Master)  
PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150  
  
CloudShell Feedback
```

The screenshot shows a terminal session on an AWS CloudShell. The user is executing Ansible commands to manage hosts and run a playbook.

```
ubuntu@ip-172-31-19-150:/etc/ansible$ sudo nano hosts
ubuntu@ip-172-31-19-150:/etc/ansible$ ansible -m ping all
The authenticity of host '172.31.31.183 (172.31.31.183)' can't be established.
ED25519 key fingerprint is SHA256:6ewxQbccGN637oFk6R5Fa6HcSSyWmIgDZm3bNr3/vXoI.
This host key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
172.31.31.183 | SUCCESS => [
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
]
yes
172.31.17.26 | SUCCESS => [
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
]
ubuntu@ip-172-31-19-150:/etc/ansible$ i-0df8bc4a5782fea4c (Ansible-Master)
PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150
```


The user is creating a YAML configuration file named `play1.yaml`.

```
GNU nano 6.2                               play1.yaml
---
- name: task for slave1
hosts: [
```


The user has completed the `play1.yaml` file.

```
! Wrote 3 lines !
^G Help      ^C Write Out   ^W Where Is     ^K Cut          ^X Execute      ^O Location     M-U Undo       M-R Set Mark   M-] To Bracket M-Q Previous
^X Exit      ^R Read File   ^A Replace      ^U Paste         ^S Justify      ^P Go To Line   M-E Redo       M-C Copy      M-Q Where Was  M-W Next
```

i-0df8bc4a5782fea4c (Ansible-Master)
PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150

GN# nano 6.2

```
[Slave1]
172.31.31.183
[Slave2]
172.31.17.26
```

GNU nano 6.2

```
i-0df8bc4a5782fea4c (Ansible-Master)
PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150
```

CloudShell Feedback

CloudWatch RDS EC2 S3 Amazon Redshift IAM

GNU nano 6.2

```
---
```

```
- name: task for slave1
  hosts: Slave1
  become: true
  tasks:
    - name: install java in Slave1
      apt: name=openjdk-11-jdk state=latest

- name: task for slave2
  hosts: Slave2
  become: true
  tasks:
    - name: install mysql in Slave2
      apt: name=mysql-server state=latest
```

GNU nano 6.2

```
[ Unknown sequence ]
```

```
i-0df8bc4a5782fea4c (Ansible-Master)
PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150
```

CloudShell Feedback

CloudWatch RDS EC2 S3 Amazon Redshift IAM

Inbox (17) - harsh | Start Course | Instances | EC2 | Intelliaat Online | EC2 Instance Connect | EC2 Instance Connect | IP AWS 22Now - Go... | Git B-1 2023 - Goo... | devopstrain23/my... | Docker B-1 2023 - ... | KB - B1-2023 - Goo... | Jenkins B1- 2023 - ... | All Bookmarks | N. Virginia | harsh

aws Services Search [Alt+S]

CloudWatch RDS EC2 S3 Amazon Redshift IAM

```
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
172.31.31.150 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
yes
172.31.17.26 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
ubuntu@ip-172-31-19-150:/etc/ansible$ cd
ubuntu@ip-172-31-19-150:~$ ls
ubuntu@ip-172-31-19-150:~$ sudo nano play1.yaml
ubuntu@ip-172-31-19-150:~$ sudo nano /etc/ansible/hosts/
ubuntu@ip-172-31-19-150:~$ sudo nano /etc/ansible/hosts
ubuntu@ip-172-31-19-150:~$ sudo nano play1.yaml
ubuntu@ip-172-31-19-150:~$ ansible-playbook play1.yaml --syntax-check
playbook: play1.yaml
ubuntu@ip-172-31-19-150:~$
```

i-0df8bc4a5782fea4c (Ansible-Master)

PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150

CloudShell Feedback

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

ENG IN 10:34 PM 11/3/2023

Inbox (17) - harsh | Start Course | Instances | EC2 | Intelliaat Online | EC2 Instance Connect | EC2 Instance Connect | IP AWS 22Now - Go... | Git B-1 2023 - Goo... | devopstrain23/my... | Docker B-1 2023 - ... | KB - B1-2023 - Goo... | Jenkins B1- 2023 - ... | All Bookmarks | N. Virginia | harsh

aws Services Search [Alt+S]

CloudWatch RDS EC2 S3 Amazon Redshift IAM

```
"changed": false,
  "ping": "pong"
}
yes
172.31.17.26 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
ubuntu@ip-172-31-19-150:/etc/ansible$ cd
ubuntu@ip-172-31-19-150:~$ ls
ubuntu@ip-172-31-19-150:~$ sudo nano play1.yaml
ubuntu@ip-172-31-19-150:~$ sudo nano /etc/ansible/hosts/
ubuntu@ip-172-31-19-150:~$ sudo nano /etc/ansible/hosts
ubuntu@ip-172-31-19-150:~$ sudo nano play1.yaml
ubuntu@ip-172-31-19-150:~$ ansible-playbook play1.yaml --syntax-check
playbook: play1.yaml
ubuntu@ip-172-31-19-150:~$ ansible-playbook play1.yaml --check
PLAY [task for slave1] ****
TASK [Gathering Facts] ****
```

i-0df8bc4a5782fea4c (Ansible-Master)

PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150

CloudShell Feedback

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

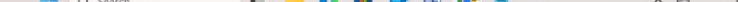
ENG IN 10:34 PM 11/3/2023

```
 172.31.17.26      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
 172.31.31.183     : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

PLAY RECAP ****
172.31.17.26      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
 172.31.31.183     : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

Public IPs: 3.94.64.46 Private IPs: 172.31.19.150

CloudShell Feedback © 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences



Inbox (17) - harsh | Start Course | Instances | EC2 | Intellipaat Online | EC2 Instance Connect | EC2 Instance Connect | EC2 Instance Connect | IP AWS 22Now - Go... | Git B-1 2023 - Go... | devopstrain23/my... | Docker B-1 2023 - Go... | Jenkins B1- 2023 ... | All Bookmarks

N. Virginia harsh

aws Services Search [Alt+S]

CloudWatch RDS EC2 S3 Amazon Redshift IAM

```
PLAY RECAP
172.31.31.183 : ok=1 changed=0 unreachable=0 failed=1 skipped=0 rescued=0 ignored=0
ubuntu@ip-172-31-19-150:~$ ansible-playbook play1.yaml

PLAY [task for slave1] ****
TASK [Gathering Facts] ****
ok: [172.31.31.183]

TASK [install java in Slave1] ****
changed: [172.31.31.183]

PLAY [task for slave2] ****
TASK [Gathering Facts] ****
ok: [172.31.17.26]

TASK [install mysql in Slave2] ****
changed: [172.31.17.26]

PLAY RECAP ****
172.31.17.26 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0
172.31.31.183 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0
ubuntu@ip-172-31-19-150:~$
```

i-0df8bc4a5782fea4c (Ansible-Master)

PublicIPs: 3.94.64.46 PrivateIPs: 172.31.19.150

CloudShell Feedback

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

ENG IN 10:40 PM 11/3/2023

Inbox (17) - harsh | Start Course | Instances | EC2 | Intellipaat Online | EC2 Instance Connect | EC2 Instance Connect | EC2 Instance Connect | IP AWS 22Now - Go... | Git B-1 2023 - Go... | devopstrain23/my... | Docker B-1 2023 - Go... | Jenkins B1- 2023 ... | All Bookmarks

N. Virginia harsh

aws Services Search [Alt+S]

CloudWatch RDS EC2 S3 Amazon Redshift IAM

```
get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [27.8 kB]
get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.4 kB]
get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [644 B]
get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
get:31 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [940 kB]
get:32 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [186 kB]
get:33 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [11.4 kB]
get:34 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [1095 kB]
get:35 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [176 kB]
get:36 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [520 B]
get:37 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [791 kB]
get:38 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [146 kB]
get:39 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [16.8 kB]
get:40 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [36.5 kB]
get:41 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [7060 B]
get:42 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [260 B]
Fetched 28.2 MB in 5s (5479 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
42 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-31-183:~$ java --version
openjdk 11.0.20.1 2023-08-24
OpenJDK Runtime Environment (build 11.0.20.1+1-post-Ubuntu-0ubuntu122.04)
OpenJDK 64-Bit Server VM (build 11.0.20.1+1-post-Ubuntu-0ubuntu122.04, mixed mode, sharing)
ubuntu@ip-172-31-31-183:~$
```

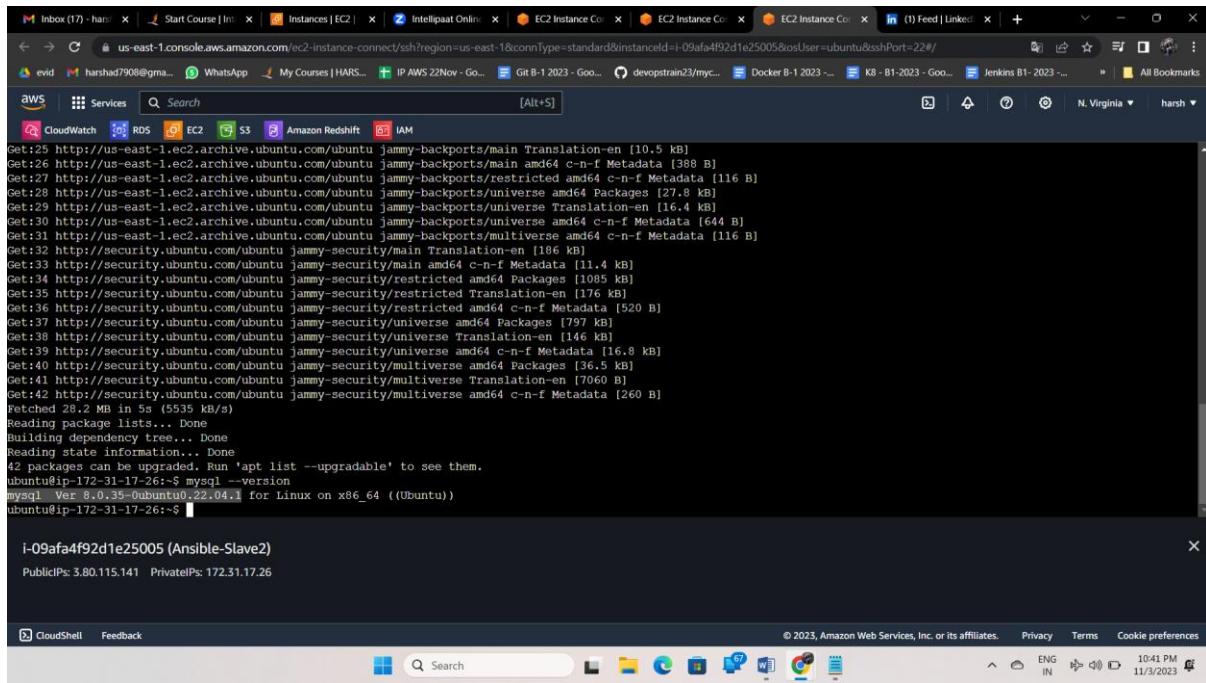
i-01dbae4ca583e367f (Ansible-slave1)

PublicIPs: 52.90.250.91 PrivateIPs: 172.31.31.183

CloudShell Feedback

© 2023, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

ENG IN 10:41 PM 11/3/2023



```
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [10.5 kB]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [388 B]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [27.8 kB]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.4 kB]
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [644 B]
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:32 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [186 kB]
Get:33 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [11.4 kB]
Get:34 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [1085 kB]
Get:35 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [176 kB]
Get:36 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [520 B]
Get:37 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [797 kB]
Get:38 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [146 kB]
Get:39 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [16.8 kB]
Get:40 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [36.5 kB]
Get:41 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [7060 B]
Get:42 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [260 B]
Fetched 28.2 MB in 5s (5535 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
42 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-17-26:~$ mysql --version
mysql Ver 8.0.35-0ubuntu0.22.04.1 for Linux on x86_64 ((Ubuntu))
ubuntu@ip-172-31-17-26:~$
```

i-09afa4f92d1e25005 (Ansible-Slave2)
PublicIPs: 3.80.115.141 PrivateIPs: 172.31.17.26

