

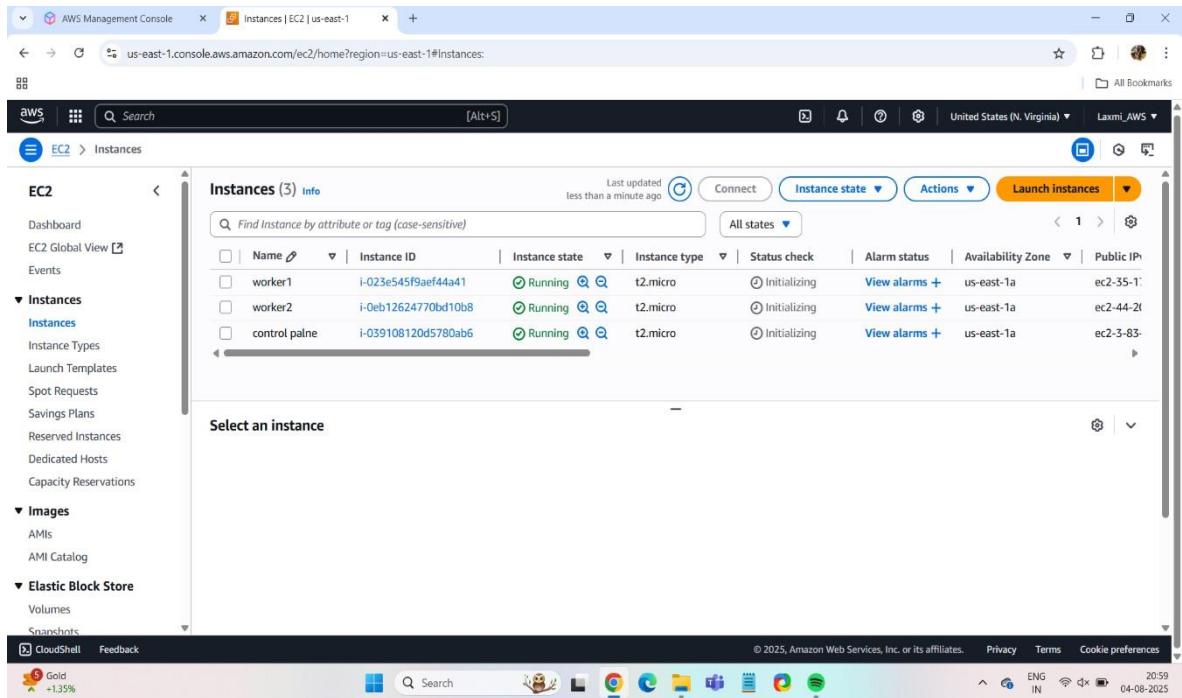
Name :- Laxmi Swami

Topic :- Ansible Set Up & Modules

TASK 1 :

STEP 1 :- Create 3 instances in one instance install ansible so it will be you're Master node and other 2 instances will be worker nodes.

- Master Node IP :- 172-31-93-115
 - Worker Node IP 1 :- 172-31-90-42
 - Worker Node IP 2 :- 172-31-94-141
-
- Master node Connect to git bash
 - update system using command **apt get-update -y**
 - Now generate a key pair by firing command **ssh-keygen**
 - Now go to public key and hit command **cat id_rsa.pub**



```
ubuntu@ip-172-31-93-115: ~
ls419@LAXMI MINGW64 ~
$ cd Downloads/
ls419@LAXMI MINGW64 ~/Downloads
$ ssh -i "my-key.pem" ubuntu@ec2-3-83-65-143.compute-1.amazonaws.com
The authenticity of host 'ec2-3-83-65-143.compute-1.amazonaws.com (3.83.65.143)' can't be established.
ED25519 key fingerprint is SHA256:p2Yod4219Kv4drvt78yQByDbdxS61h1ft6/2o2yZfRM.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-3-83-65-143.compute-1.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

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

System information as of Mon Aug 4 15:31:29 UTC 2025

System load: 0.02      Processes:          103
Usage of /: 22.1% of 7.57GB  Users logged in: 0
Memory usage: 20%          IPv4 address for eth0: 172.31.93.115
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
```

```
ubuntu@ip-172-31-93-115: ~
ubuntu@ip-172-31-93-115: ~$ sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [2802 kB]
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [443 kB]
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [4157 kB]
Get:14 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [2557 kB]
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [753 kB]
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1226 kB]
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [304 kB]
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [28.7 kB]
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [59.5 kB]
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [14.2 kB]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [592 B]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [68.8 kB]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [11.4 kB]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [392 B]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [30.0 kB]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.5 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [672 B]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:30 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [379 kB]
Get:31 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [4013 kB]
Get:32 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [729 kB]
Get:33 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [993 kB]
```

```

ubuntu@ip-172-31-93-115: ~$ 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:NPBr4PG/A+6o167Qjoi8AAxAUqa8lxFsg6m/LE5b0 ubuntu@ip-172-31-93-115
The key's randomart image is:
+---[RSA 3072]---+
|+oo..oo
|oo .. o
|=... o +
|B.+ .. = o
|oX o .. S
|* o . o...
|.+ o + ..
|o o o E.o ..
| o ..+oB= ..
+---[SHA256]---+
ubuntu@ip-172-31-93-115: ~$ ls
ubuntu@ip-172-31-93-115: ~$ cd .ssh
ubuntu@ip-172-31-93-115: ~/ssh$
```

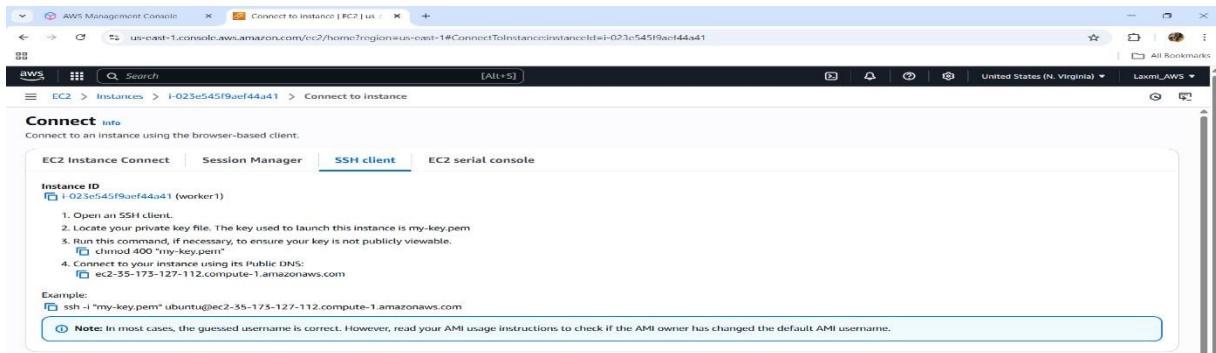


```

ubuntu@ip-172-31-93-115: ~$ 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:NPBr4PG/A+6o167Qjoi8AAxAUqa8lxFsg6m/LE5b0 ubuntu@ip-172-31-93-115
The key's randomart image is:
+---[RSA 3072]---+
|+oo..oo
|oo .. o
|=... o +
|B.+ .. = o
|oX o .. S
|* o . o...
|.+ o + ..
|o o o E.o ..
| o ..+oB= ..
+---[SHA256]---+
ubuntu@ip-172-31-93-115: ~$ ls
ubuntu@ip-172-31-93-115: ~$ cd .ssh
ubuntu@ip-172-31-93-115: ~/ssh$ ls
authorized_keys id_rsa id_rsa.pub
ubuntu@ip-172-31-93-115: ~/ssh$ cat id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAQABAAABgQDWCG6JUC/qFAZ0utCYIZ5eQWN/C5d8GOF50E9xH9Op0/xFhYNRmjyp3T1osg1LtwATps9cffEze9/06FBBLAUGKK
ZI2Ajwt4EFV3EvM7AulbtirHVi/FRbl1PYtluOrofocfvyZnjCvjYCMelHHVYSyx0h35SQLC2p5gaAbuN0tUw2i5jwf2wFqgVLy+s1pHUVDxKSM8BCni9w782a0p
lgMedb96hDkTJcgUErEpY/1/3IVjQ3NAB4JcgfvdCsYYjyDR5U9UfiFL4aSVGIDpualojq8i2ndhAnszkPFRHFCOCqr/MEZTRUx3xIVjDtV8CpyiqvlrKKjMu0oL
7Do57MuK2YLMcnYA8dvgeHUCKOAUXGWT9aPxqgnb6cjCva0pAj3knizaEloJv0z2Fifsoel0x9VAwwooudisC1x88pjqiue9vIh4gobjd1R18TGVPS/Wc15Bg0g
+0rDiruaQRD/gaTqxbUd3+hoIY7Jqn4818vrW4B6bjy/Zj0= ubuntu@ip-172-31-93-115
ubuntu@ip-172-31-93-115: ~/ssh$ ls
ubuntu@ip-172-31-93-115: ~/ssh$ cat id_rsa |

```

STEP 2 :- Now go to worker node 1 and update the system then navigate to **cd .ssh vi authorized_keys** and paste the public key of Worker node-1.



```
ls419@LAXMI MINGW64 ~
$ cd Downloads/
ls419@LAXMI MINGW64 ~/Downloads
$ ssh -i "my-key.pem" ubuntu@ec2-35-173-127-112.compute-1.amazonaws.com
The authenticity of host 'ec2-35-173-127-112.compute-1.amazonaws.com (35.173.127.112)' can't be established.
ED25519 key fingerprint is SHA256:T9npk133Dk3a4cwydcti6wqAoTdu8wAryciMSMgPQ.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-35-173-127-112.compute-1.amazonaws.com' (ED25519) to the list of known hosts.
welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

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

System information as of Mon Aug  4 15:35:08 UTC 2025

System load: 0.0          Processes:      100
Usage of /: 22.0% of 7.57GB  Users logged in:     0
Memory usage: 20%           IPv4 address for eth0: 172.31.90.42
Swap usage:  0%          

Expanded Security Maintenance for Applications is not enabled.

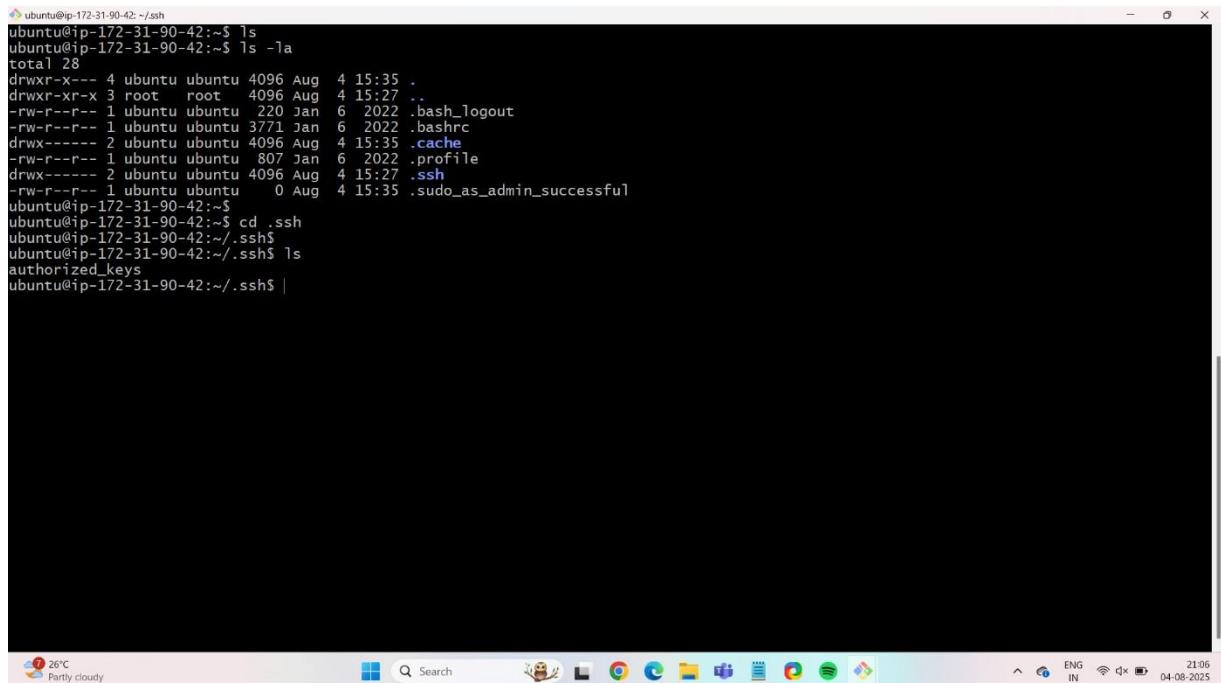
0 updates can be applied immediately.

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

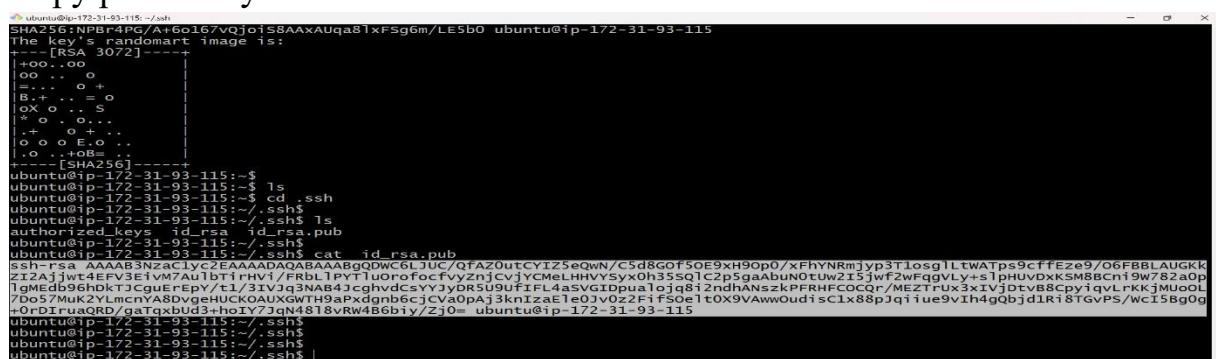
The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.
```

```
ls419@LAXMI MINGW64 ~
$ sudo apt-get update
[...]
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 kB]
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [2802 kB]
Get:12 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [2557 kB]
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [443 kB]
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [4157 kB]
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [753 kB]
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1226 kB]
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [304 kB]
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [28.7 kB]
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [59.5 kB]
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [14.2 kB]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [592 kB]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [68.8 kB]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [11.4 kB]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [392 kB]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 kB]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [30.0 kB]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.5 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [672 kB]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 kB]
76% [ Translation-en store 0 ] [ 12 Packages 898 kB/2557 kB 35%]
```

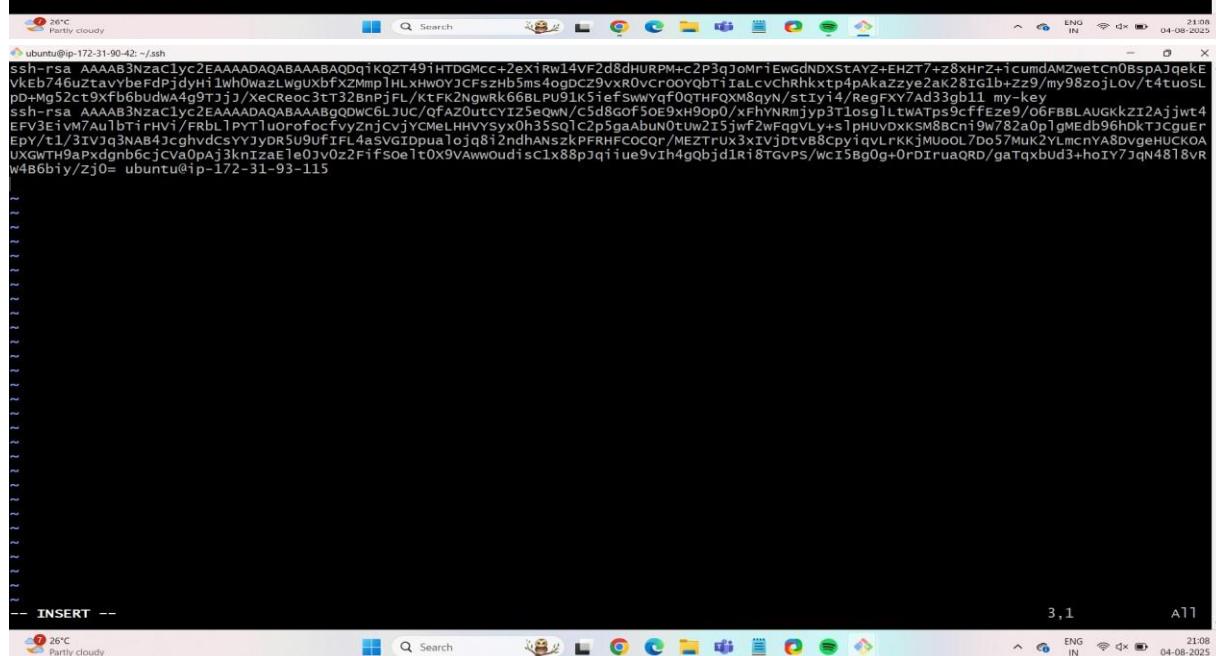


```
ubuntu@ip-172-31-90-42:~/.ssh$ ls -la
total 28
drwxr-x--- 4 ubuntu ubuntu 4096 Aug  4 15:35 .
drwxr-xr-x  3 root  root  4096 Aug  4 15:27 ..
-rw-r--r--  1 ubuntu ubuntu 220 Jan  6 2022 .bash_logout
-rw-r--r--  1 ubuntu ubuntu 371 Jan  6 2022 .bashrc
drwx----- 2 ubuntu ubuntu 4096 Aug  4 15:35 .cache
-rw-r--r--  1 ubuntu ubuntu 807 Jan  6 2022 .profile
drwx----- 2 ubuntu ubuntu 4096 Aug  4 15:27 .ssh
-rw-r--r--  1 ubuntu ubuntu     0 Aug  4 15:35 .sudo_as_admin_successful
ubuntu@ip-172-31-90-42:~$ ls -la
total 28
drwxr-x--- 4 ubuntu ubuntu 4096 Aug  4 15:35 .
drwxr-xr-x  3 root  root  4096 Aug  4 15:27 ..
-rw-r--r--  1 ubuntu ubuntu 220 Jan  6 2022 .bash_logout
-rw-r--r--  1 ubuntu ubuntu 371 Jan  6 2022 .bashrc
drwx----- 2 ubuntu ubuntu 4096 Aug  4 15:35 .cache
-rw-r--r--  1 ubuntu ubuntu 807 Jan  6 2022 .profile
drwx----- 2 ubuntu ubuntu 4096 Aug  4 15:27 .ssh
-rw-r--r--  1 ubuntu ubuntu     0 Aug  4 15:35 .sudo_as_admin_successful
ubuntu@ip-172-31-90-42:~$ cd .ssh
ubuntu@ip-172-31-90-42:~/ssh$ ls
authorized_keys
ubuntu@ip-172-31-90-42:~/ssh$ |
```

Copy public-key

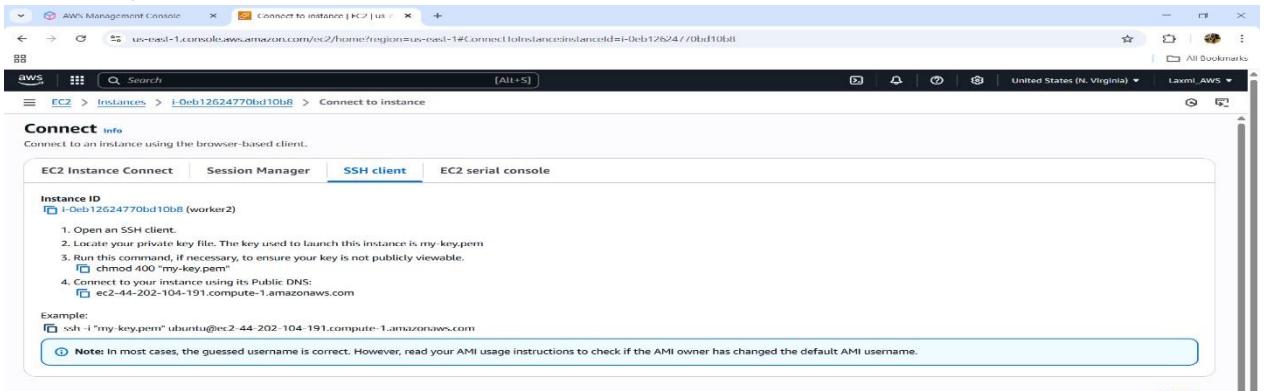


```
ubuntu@ip-172-31-93-115:~$ ls
ubuntu@ip-172-31-93-115:~$ cd .ssh
ubuntu@ip-172-31-93-115:~/ssh$ ls
authorized_keys  id_rsa  id_rsa.pub
ubuntu@ip-172-31-93-115:~/ssh$ cat id_rsa.pub | clip
ubuntu@ip-172-31-93-115:~/ssh$ cat id_rsa.pub > authorized_keys
ubuntu@ip-172-31-93-115:~/ssh$
```



```
ubuntu@ip-172-31-90-42:~/.ssh$ cat id_rsa.pub | clip
ubuntu@ip-172-31-90-42:~/.ssh$ cat id_rsa.pub > authorized_keys
ubuntu@ip-172-31-90-42:~/.ssh$
```

STEP 3 :- Now navigate to worker node 2 follow the same process and paste the public key.



```

ls419@LAXMI MINGW64 ~
$ cd Downloads/
ls419@LAXMI MINGW64 ~/Downloads
$ ssh -i "my-key.pem" ubuntu@ec2-44-202-104-191.compute-1.amazonaws.com
The authenticity of host 'ec2-44-202-104-191.compute-1.amazonaws.com (44.202.104.191)' can't be established.
ED25519 key fingerprint is SHA256:Gjh7R8wZ3ZmxPG+d8lJGFJky5w/C7YAJZYkrFNpkcs.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
warning: Permanently added 'ec2-44-202-104-191.compute-1.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

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

System information as of Mon Aug  4 15:39:45 UTC 2025

System load: 0.0      Processes:          101
Usage of /: 22.0% of 7.57GB   Users logged in:    0
Memory usage: 20%           IPv4 address for eth0: 172.31.94.141
Swap usage:  0%

Expanded Security Maintenance for Applications is not enabled.

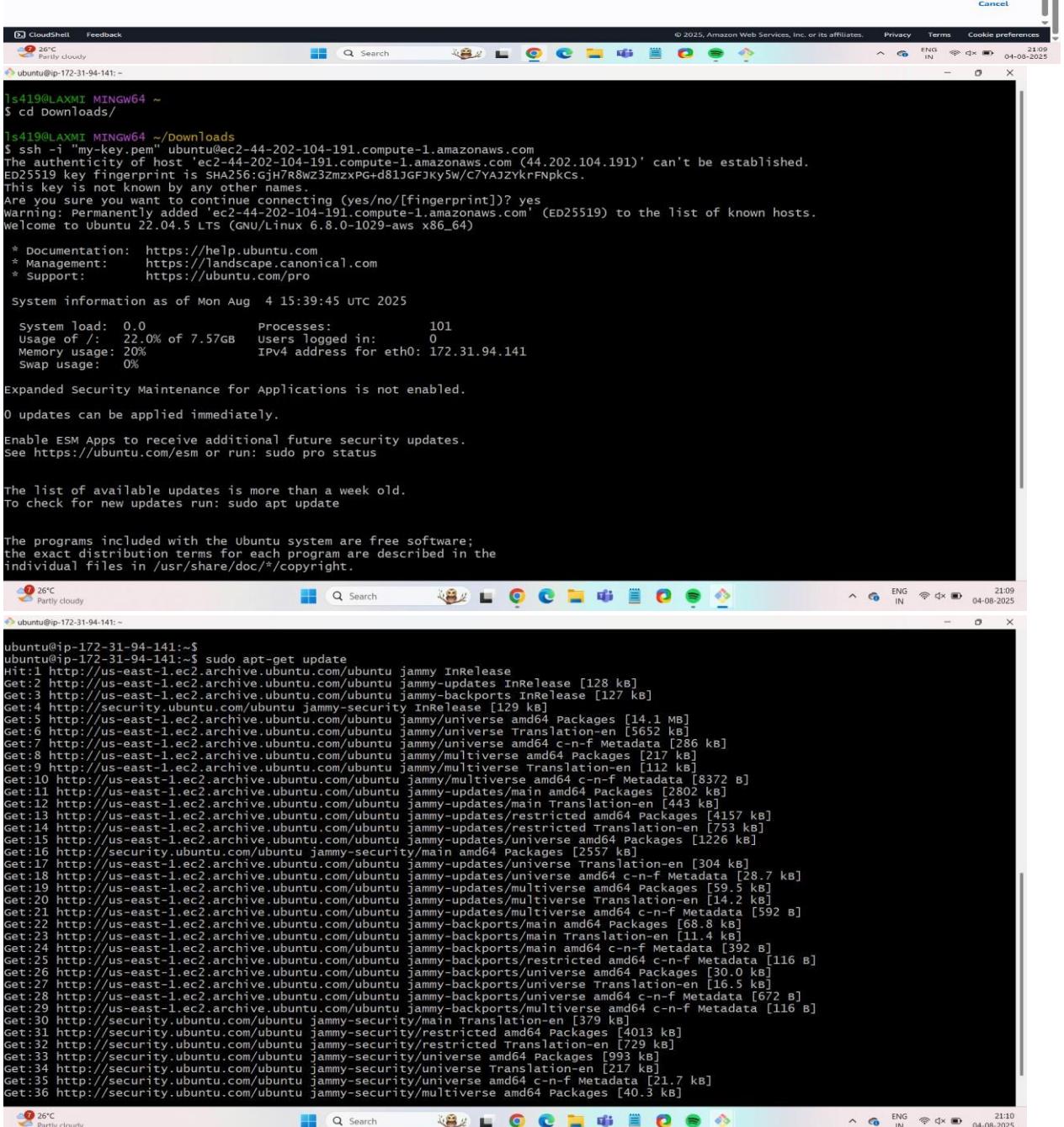
0 updates can be applied immediately.

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@ip-172-31-94-141:~$ sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [28372 kB]
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [2802 kB]
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [443 kB]
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [4157 kB]
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [753 kB]
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1226 kB]
Get:16 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [2557 kB]
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [304 kB]
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [28.7 kB]
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [59.5 kB]
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [14.2 kB]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [592 B]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [68.8 kB]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [11.4 kB]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [392 B]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [30.0 kB]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [16.5 kB]
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [672 B]
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:30 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [379 kB]
Get:31 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [4013 kB]
Get:32 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [729 kB]
Get:33 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [993 kB]
Get:34 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [217 kB]
Get:35 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [21.7 kB]
Get:36 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [40.3 kB]

```

Copy public-key

The screenshots show three terminal sessions on different Ubuntu instances. The top session shows the public key being copied from the master node to the slave node. The middle session shows the key being copied from the slave node back to the master node. The bottom session shows the key being copied from the master node to the slave node again. The terminal output includes the command used (ssh-copy-id), the hostnames, and the progress of the key transfer.

```
ubuntu@ip-172-31-93-115: ~$ ssh-copy-id -i id_rsa.pub root@ip-172-31-93-115
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s)
/usr/bin/ssh-copy-id: INFO: 1 key(s) successfully added to /root/.ssh/authorized_keys

ubuntu@ip-172-31-93-115: ~$ ssh root@ip-172-31-93-115
root@ip-172-31-93-115: ~$ cat .ssh/authorized_keys
id_rsa id_rsa.pub

root@ip-172-31-93-115: ~$ ssh-copy-id -i id_rsa.pub root@ip-172-31-93-115
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s)
/usr/bin/ssh-copy-id: INFO: 1 key(s) successfully added to /root/.ssh/authorized_keys

root@ip-172-31-93-115: ~$ ssh root@ip-172-31-93-115
root@ip-172-31-93-115: ~$ cat .ssh/authorized_keys
id_rsa id_rsa.pub

root@ip-172-31-93-115: ~$
```

STEP 4 :- Now login to both instance for one time. Then logout for one time so that next time when you login it will directly navigate to instance. Now install ansible to master node follow the commands Install ansible

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

```
ubuntu@ip-172-31-93-115:~/.ssh$ sudo apt-get install software-properties-common
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
software-properties-common is already the newest version (0.99.22.9).
0 upgraded, 0 newly installed, 0 to remove and 86 not upgraded.
ubuntu@ip-172-31-93-115:~/.ssh$
```

Now continue to installing ansible in Master node

```
ubuntu@ip-172-31-93-115:~/.ssh$ sudo apt-get install software-properties-common
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
software-properties-common is already the newest version (0.99.22.9).
0 upgraded, 0 newly installed, 0 to remove and 86 not upgraded.
ubuntu@ip-172-31-93-115:~/.ssh$ sudo apt-add-repository ppa:ansible/ansible
Repository: 'deb https://ppa.launchpadcontent.net/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...
Press [ENTER] to continue or Ctrl-c to cancel...
Adding deb entry to /etc/apt/sources.list.d/ansible-ubuntu-ansible-jammy.list
Adding 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:1 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/ubuntu jammy InRelease [18.0 kB]
Get:6 https://ppa.launchpadcontent.net/ansible/ubuntu jammy/main amd64 Packages [1120 B]
Get:7 https://ppa.launchpadcontent.net/ansible/ubuntu jammy/main Translation-en [752 B]
Fetched 19.9 kB in 0s (20.0 kB/s)
Reading package lists... Done
ubuntu@ip-172-31-93-115:~/.ssh$
```

```
ubuntu@ip-172-31-93-115:~/.ssh$ sudo apt-get update
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
Hit:5 https://ppa.launchpadcontent.net/ansible/ubuntu jammy InRelease
Reading package lists... Done
```

```
ubuntu@ip-172-31-93-115:~/.ssh$
```

```

ubuntu@ip-172-31-93-115:~/etc/ansible$ ansible --version
ansible [core 2.17.13]
  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 = /home/ubuntu/.ansible/collections:/usr/share/ansible/collections
  python version = 3.10.12 (main, Feb 4 2025, 14:57:36) [GCC 11.4.0] (/usr/bin/python3)
  jinjyaml version = 3.0.3
  libyaml = True
ubuntu@ip-172-31-93-115:~/etc/ansible$ ls
authorized_keys  id_rsa  id_rsa.pub  known_hosts  known_hosts.old
ubuntu@ip-172-31-93-115:~/etc/ansible$ cd /etc/ansible
ubuntu@ip-172-31-93-115:~/etc/ansible$ ls
ansible.cfg  hosts  roles
ubuntu@ip-172-31-93-115:~/etc/ansible$
```

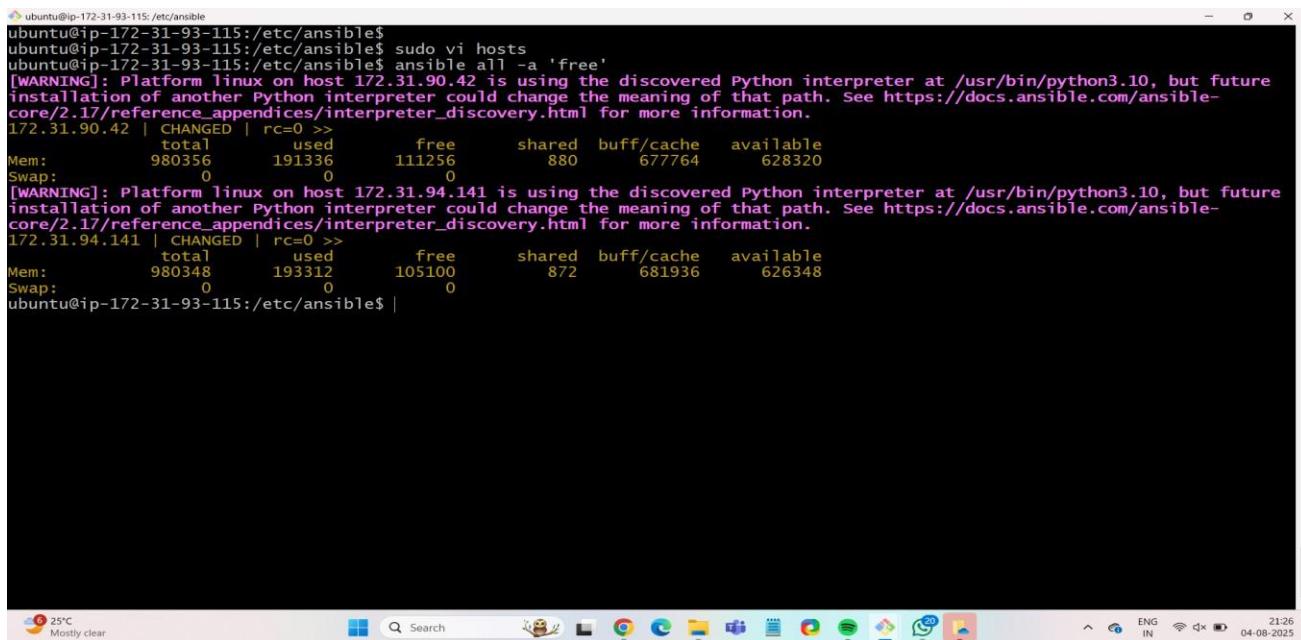
Sudo vi hosts in the /etc/ansible folder and paste here worker1 and worker2 private ip

```

# This is the default ansible 'hosts' file.
#
# It should live in /etc/ansible/hosts
#
#   - Comments begin with the '#' character
#   - Blank lines are ignored
#   - Groups of hosts are delimited by [header] elements
#   - You can enter hostnames or ip addresses
#   - A hostname/ip can be a member of multiple groups
#
# Ex 1: Ungrouped hosts, specify before any group headers:
## green.example.com
## blue.example.com
## 192.168.100.1
## 192.168.100.10
#
# Ex 2: A collection of hosts belonging to the 'webservers' group:
## [webservers]
## alpha.example.org
## beta.example.org
## 192.168.1.100
## 192.168.1.110
#
# If you have multiple hosts following a pattern, you can specify
# them like this:
## www[001:006].example.com
#
# You can also use ranges for multiple hosts:
:wq!
```

TASK 2 :- Now try to login using instance public IP the instance will be connected or not = Yes instance will be connected but one drop back that is when we stop the instance that time public ip will be change if you want to use elastic ip for static ip it will be costly.

STEP 4 :- Check ansible working or not by firing **ansible all -a ‘free’**



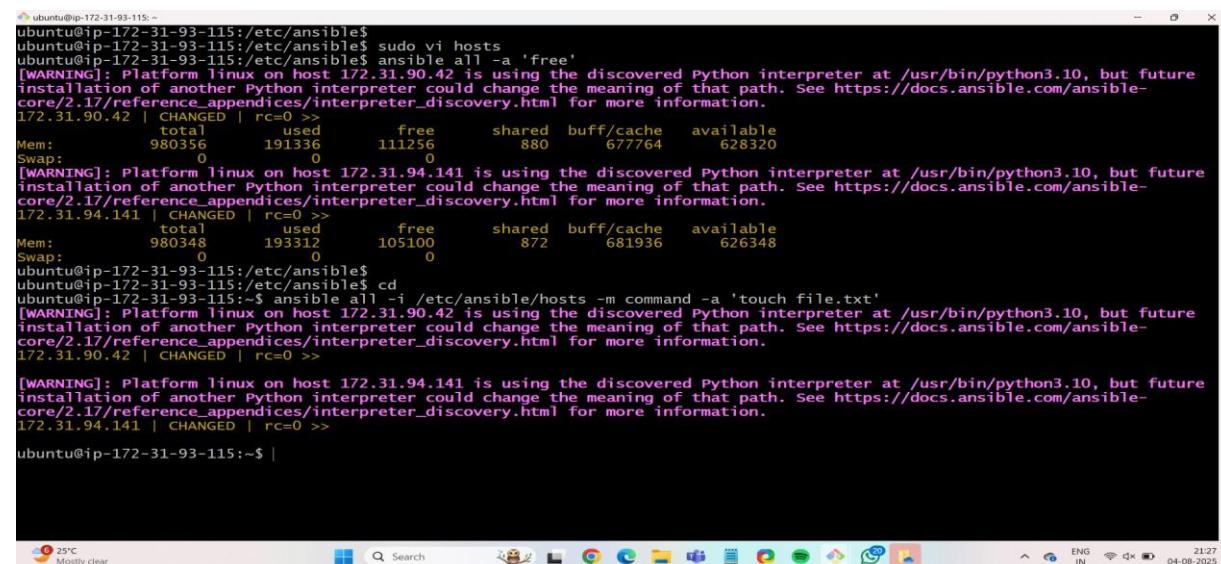
```
ubuntu@ip-172-31-93-115:/etc/ansible$ sudo vi hosts
ubuntu@ip-172-31-93-115:/etc/ansible$ ansible all -a 'free'
[WARNING]: Platform linux on host 172.31.90.42 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.90.42 | CHANGED | rc=0 >>
      total   used   free   shared  buff/cache   available
Mem:      980356     191336    111256       880    677764      628320
Swap:          0        0        0
[WARNING]: Platform linux on host 172.31.94.141 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.94.141 | CHANGED | rc=0 >>
      total   used   free   shared  buff/cache   available
Mem:      980348     193312    105100       872    681936      626348
ubuntu@ip-172-31-93-115:/etc/ansible$ |
```

STEP 5 :- Now create vi myinventory in master node(172-31-93-115) so that you can fire some commands which you want for that worker node only and not to the other worker node.

NOTE: commands can only be fired from master node

STEP 6:- Now start to execute some commands **ansible all -i**

/etc/ansible/hosts -m command -a ‘touch file.txt’ Now check that file generated in both instance or not.



```
ubuntu@ip-172-31-93-115:/etc/ansible$ sudo vi hosts
ubuntu@ip-172-31-93-115:/etc/ansible$ ansible all -a 'free'
[WARNING]: Platform linux on host 172.31.90.42 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.90.42 | CHANGED | rc=0 >>
      total   used   free   shared  buff/cache   available
Mem:      980356     191336    111256       880    677764      628320
Swap:          0        0        0
[WARNING]: Platform linux on host 172.31.94.141 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.94.141 | CHANGED | rc=0 >>
      total   used   free   shared  buff/cache   available
Mem:      980348     193312    105100       872    681936      626348
ubuntu@ip-172-31-93-115:/etc/ansible$ cd
ubuntu@ip-172-31-93-115:~$ ansible all -i /etc/ansible/hosts -m command -a 'touch file.txt'
[WARNING]: Platform linux on host 172.31.90.42 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.90.42 | CHANGED | rc=0 >>
[WARNING]: Platform linux on host 172.31.94.141 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.94.141 | CHANGED | rc=0 >>
ubuntu@ip-172-31-93-115:~$ |
```

```

ubuntu@ip-172-31-90-42:~$ [WARNING]: Platform linux on host 172.31.94.141 is using the discovered Python interpreter at /usr/bin/python3.10, but future installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.94.141 | CHANGED | rc=0 >>
ubuntu@ip-172-31-93-115:~$ ssh 172.31.90.42
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

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

System information as of Mon Aug 4 15:57:32 UTC 2025

System load: 0.0 Processes: 104
Usage of /: 25.2% of 7.57GB Users logged in: 1
Memory usage: 22% IPv4 address for eth0: 172.31.90.42
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

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

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

New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Aug 4 15:57:07 2025 from 172.31.93.115
ubuntu@ip-172-31-90-42:~$ 25°C Mostly clear 21:27 ENG IN 04-08-2025

ubuntu@ip-172-31-94-141:~$ Last login: Mon Aug 4 15:57:07 2025 from 172.31.93.115
ubuntu@ip-172-31-90-42:~$ ls
file.txt
ubuntu@ip-172-31-90-42:~$ exit
Connection to 172.31.90.42 closed.
ubuntu@ip-172-31-93-115:~$ ssh 172.31.94.141
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

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

System information as of Mon Aug 4 15:58:01 UTC 2025

System load: 0.0 Processes: 105
Usage of /: 25.2% of 7.57GB Users logged in: 1
Memory usage: 22% IPv4 address for eth0: 172.31.94.141
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

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

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

New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Aug 4 15:57:07 2025 from 172.31.93.115
ubuntu@ip-172-31-94-141:~$ 25°C Mostly clear 21:28 ENG IN 04-08-2025

ubuntu@ip-172-31-94-141:~$ file.txt
ubuntu@ip-172-31-90-42:~$ exit
Connection to 172.31.90.42 closed.
ubuntu@ip-172-31-93-115:~$ ssh 172.31.94.141
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

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

System information as of Mon Aug 4 15:58:01 UTC 2025

System load: 0.0 Processes: 105
Usage of /: 25.2% of 7.57GB Users logged in: 1
Memory usage: 22% IPv4 address for eth0: 172.31.94.141
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

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

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

New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Aug 4 15:57:07 2025 from 172.31.93.115
ubuntu@ip-172-31-94-141:~$ ls
file.txt
ubuntu@ip-172-31-94-141:~$ 25°C Mostly clear 21:28 ENG IN 04-08-2025

```

STEP 7 :- Now we will execute the command for the specific worker using command

ansible 172.31.90.42 -i myinventory -m command -a ‘touch abc.txt’ check file reflect in 172.31.90.42 node or not

```
ubuntu@ip-172-31-93-115:~$ ansible 172.31.90.42 -m command -a 'touch abc.txt'
[WARNING]: Platform Linux on host 172.31.90.42 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.1//reference_appendices/interpreter_discovery.html for more information.
172.31.90.42 | CHANGED | rc=0 >>
ubuntu@ip-172-31-93-115:~$
```



```
ubuntu@ip-172-31-90-42:~$ 25C Mostly clear
ubuntu@ip-172-31-90-42:~$ 21:29 04-08-2025
172.31.90.42 | CHANGED | rc=0 >>
ubuntu@ip-172-31-93-115:~$ ssh 172.31.90.42
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

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

System information as of Mon Aug  4 15:59:25 UTC 2025

System load:  0.0          Processes:           104
Usage of /:   25.2% of 7.57GB  Users logged in:     1
Memory usage: 21%          IPv4 address for eth0: 172.31.90.42
Swap usage:   0%         

Expanded Security Maintenance for Applications is not enabled.

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

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

New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Aug  4 15:59:25 2025 from 172.31.93.115
ubuntu@ip-172-31-90-42:~$ ls
> ^C
ubuntu@ip-172-31-90-42:~$ ls
abc.txt  file.txt
ubuntu@ip-172-31-90-42:~$
```

```
ubuntu@ip-172-31-90-42:~$ 25C Mostly clear
ubuntu@ip-172-31-90-42:~$ 21:29 04-08-2025
```

STEP 8 :- Now abc.txt file is already present in worker node 1 create one file using same file name and also write some content in it check what changes you will see.

Answer :- In worker node 1 the data will be added in to existing file and in worker node 2 the file will be created and also data will be present in that file.

```

ubuntu@ip-172-31-94-141:~ 
logout
Connection to 172.31.94.141 closed.
ubuntu@ip-172-31-93-115:~$ ansible all -m shell -a 'echo abc file is present in worker1 but not worker2 then see what happen > abc.txt'
[WARNING]: Platform Linux on host 172.31.94.141 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.94.141 | CHANGED | rc=0 >>

[WARNING]: Platform linux on host 172.31.90.42 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.90.42 | CHANGED | rc=0 >>

ubuntu@ip-172-31-93-115:~$ ssh 172.31.94.141
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

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

System information as of Mon Aug  4 16:06:09 UTC 2025

System load:  0.0          Processes:      107
Usage of /:   25.2% of 7.57GB  Users logged in:   1
Memory usage: 22%           IPv4 address for eth0: 172.31.94.141
Swap usage:   0%           

Expanded Security Maintenance for Applications is not enabled.

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

Enable ESM Apps to receive additional future security updates.

25°C  Mostly clear
  Q Search  ENG IN  21:37
04-08-2025

ubuntu@ip-172-31-94-141:~ 
172.31.90.42 | CHANGED | rc=0 >>
ubuntu@ip-172-31-93-115:~$ ssh 172.31.94.141
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

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

System information as of Mon Aug  4 16:06:09 UTC 2025

System load:  0.0          Processes:      107
Usage of /:   25.2% of 7.57GB  Users logged in:   1
Memory usage: 22%           IPv4 address for eth0: 172.31.94.141
Swap usage:   0%           

Expanded Security Maintenance for Applications is not enabled.

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

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

New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Aug  4 16:05:53 2025 from 172.31.93.115
ubuntu@ip-172-31-94-141:~$ ls
abc.txt  file.txt
ubuntu@ip-172-31-94-141:~$ cat abc.txt
abc file is present in worker1 but not worker2 then see what happen
ubuntu@ip-172-31-94-141:~$ |

25°C  Mostly clear
  Q Search  ENG IN  21:37
04-08-2025

ubuntu@ip-172-31-90-42:~ 
logout
Connection to 172.31.94.141 closed.
ubuntu@ip-172-31-93-115:~$ ssh 172.31.90.42
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

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

System information as of Mon Aug  4 16:07:50 UTC 2025

System load:  0.08          Processes:      106
Usage of /:   25.2% of 7.57GB  Users logged in:   1
Memory usage: 22%           IPv4 address for eth0: 172.31.90.42
Swap usage:   0%           

Expanded Security Maintenance for Applications is not enabled.

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

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

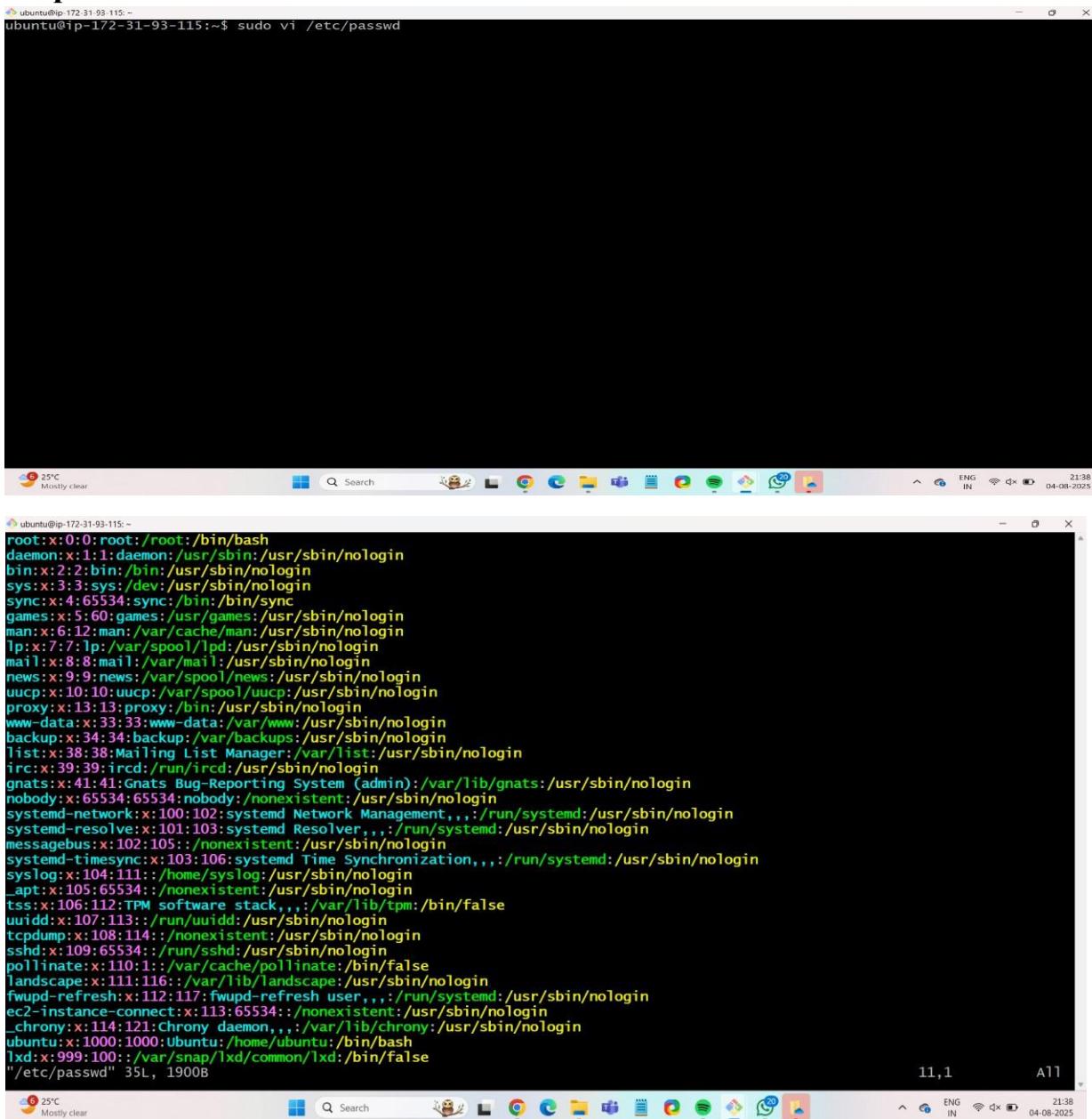
New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Aug  4 16:05:53 2025 from 172.31.93.115
ubuntu@ip-172-31-90-42:~$ ls
abc.txt  file.txt
ubuntu@ip-172-31-90-42:~$ cat abc.txt
abc file is present in worker1 but not worker2 then see what happen
ubuntu@ip-172-31-90-42:~$ |

25°C  Mostly clear
  Q Search  ENG IN  21:37
04-08-2025

```

STEP 9 :- Now user add module first check the number of user using **sudo vi /etc/passwd**



```
ubuntu@ip-172-31-93-115:~$ sudo vi /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:102:105:/nonexistent:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
syslog:x:104:111:/home/syslog:/usr/sbin/nologin
_apt:x:105:65534:/nonexistent:/usr/sbin/nologin
tss:x:106:112:TPM software stack,,,:/var/lib/tpm:/bin/false
uuid:x:107:113:/run/uuid:/usr/sbin/nologin
tcpdump:x:108:114:/nonexistent:/usr/sbin/nologin
sshd:x:109:65534:/run/sshd:/usr/sbin/nologin
pollinate:x:110:1:/:/var/cache/pollinate:/bin/false
landscape:x:111:116:/var/lib/landscape:/usr/sbin/nologin
fwupd-refresh:x:112:117:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
ec2-instance-connect:x:113:65534:/nonexistent:/usr/sbin/nologin
_chrony:x:114:121:chrony daemon,,,:/var/lib/chrony:/usr/sbin/nologin
ubuntu:x:1000:1000:Ubuntu:/home/ubuntu:/bin/bash
lxd:x:999:100:/:/var/snap/lxd/common/lxd:/bin/false
"/etc/passwd" 35L, 1900B
```

STEP 10:- Now if I write command as below

ansible all -i /etc/ansible/hosts -m user -a ‘name=abc

password=abc@123’ there will be error as it does not have permission to add new user so modify command as

ansible all -i /etc/ansible/hosts -m user -a ‘name=abc password=abc@123’ b

```

ubuntu@ip-172-31-93-115:~$ sudo vi /etc/passwd
ubuntu@ip-172-31-93-115:~$ ansible all -i /etc/ansible/hosts -m user -a 'name=abc password=@abc1' -b
[WARNING]: The input password appears not to have been hashed. The 'password' argument must be encrypted for this module to work properly.
[WARNING]: Platform linux on host 172.31.90.42 is using the discovered Python interpreter at /usr/bin/python3.10, but future installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.90.42 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.10"
    },
    "changed": true,
    "comment": "",
    "create_home": true,
    "group": 1001,
    "home": "/home/abc",
    "name": "abc",
    "password": "NOT_LOGGING_PASSWORD",
    "shell": "/bin/sh",
    "state": "present",
    "system": false,
    "uid": 1001
}
[WARNING]: Platform linux on host 172.31.94.141 is using the discovered Python interpreter at /usr/bin/python3.10, but future installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.94.141 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.10"
    },
    "changed": true,
    "comment": "",
    "create_home": true,
    "group": 1001,
    "home": "/home/abc",
}

```

STEP 11 :- Now check user will not be created in master node but created inside worker node 1 and 2.

```

ubuntu@ip-172-31-90-42:~$ ssh 172.31.90.42
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

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

System information as of Mon Aug  4 16:10:09 UTC 2025

 System load:  0.01      Processes:          105
 Usage of /:   25.2% of 7.57GB  Users logged in:     1
 Memory usage: 21%           IPv4 address for eth0: 172.31.90.42
 Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

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

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

New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Aug  4 16:10:10 2025 from 172.31.93.115
ubuntu@ip-172-31-90-42:~$ sudo vi /etc/passwd |

```

```
ubuntu@ip-172-31-90-42:~  
daemon:x:1:1:daemon:/usr/sbin/nologin  
bin:x:2:2:bin:/usr/sbin/nologin  
sys:x:3:3:sys:/dev:/usr/sbin/nologin  
sync:x:4:65534:sync:/bin:/bin/sync  
games:x:5:60:games:/usr/games:/usr/sbin/nologin  
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin  
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin  
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin  
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin  
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin  
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin  
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin  
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin  
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin  
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin  
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin  
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin  
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin  
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin  
messagebus:x:102:105:/nonexistent:/usr/sbin/nologin  
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin  
syslog:x:104:111:/home/syslog:/usr/sbin/nologin  
_apt:x:105:65534:/nonexistent:/usr/sbin/nologin  
tss:x:106:112:TPM software stack,,,:/var/lib/tpm:/bin/false  
uuidd:x:107:113:/run/uuidd:/usr/sbin/nologin  
tcpdump:x:108:114:/nonexistent:/usr/sbin/nologin  
sshd:x:109:65534:/run/sshd:/usr/sbin/nologin  
pollinate:x:110:116:/var/lib/landscape:/usr/sbin/nologin  
fwupd-refresh:x:112:117:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin  
ec2-instance-connect:x:113:65534:/nonexistent:/usr/sbin/nologin  
_chrony:x:114:121:Chrony daemon,,,:/var/lib/chrony:/usr/sbin/nologin  
ubuntu:x:1000:1000:Ubuntu:/home/ubuntu:/bin/bash  
lxd:x:999:100:/:/var/snap/lxd/common/lxd:/bin/false  
abc:x:1001:1001:/:/home/abc:/bin/sh  
-- INSERT --
```

36,1 Bot

25°C Mostly clear 21:41 ENG IN 04-08-2025

```
ubuntu@ip-172-31-94-141:~  
ubuntu@ip-172-31-90-42:~$ sudo vi /etc/passwd  
ubuntu@ip-172-31-90-42:~$ exit  
logout  
Connection to 172.31.90.42 closed.  

```

25°C Mostly clear 21:42 ENG IN 04-08-2025

```
ubuntu@ip-172-31-94-141:~  
daemon:x:1:1:daemon:/usr/sbin/nologin  
bin:x:2:2:bin:/usr/sbin/nologin  
sys:x:3:3:sys:/dev:/usr/sbin/nologin  
sync:x:4:65534:sync:/bin:/bin/sync  
games:x:5:60:games:/usr/games:/usr/sbin/nologin  
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin  
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin  
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin  
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin  
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin  
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin  
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin  
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin  
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin  
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin  
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin  
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin  
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin  
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin  
messagebus:x:102:105:/nonexistent:/usr/sbin/nologin  
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin  
syslog:x:104:111:/home/syslog:/usr/sbin/nologin  
_apt:x:105:65534:/nonexistent:/usr/sbin/nologin  
tss:x:106:112:TPM software stack,,,:/var/lib/tpm:/bin/false  
uuidd:x:107:113:/run/uuidd:/usr/sbin/nologin  
tcpdump:x:108:114:/nonexistent:/usr/sbin/nologin  
sshd:x:109:65534:/run/sshd:/usr/sbin/nologin  
pollinate:x:110:116:/var/cache/pollinate:/bin/false  
landscape:x:111:116:/var/lib/landscape:/usr/sbin/nologin  
fwupd-refresh:x:112:117:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin  
ec2-instance-connect:x:113:65534:/nonexistent:/usr/sbin/nologin  
_chrony:x:114:121:Chrony daemon,,,:/var/lib/chrony:/usr/sbin/nologin  
ubuntu:x:1000:1000:Ubuntu:/home/ubuntu:/bin/bash  
lxd:x:999:100:/:/var/snap/lxd/common/lxd:/bin/false  
abc:x:1001:1001:/:/home/abc:/bin/sh  
-- INSERT --
```

25°C Mostly clear 21:42 ENG IN 04-08-2025

```
ubuntu@ip-172-31-93-115:~$ ansible all -i /etc/ansible/hosts -m user -a 'name=abc password=@abc1 uid=3319 home=/home/ubuntu/abc shell=/bin/bash' -b
[WARNING]: The input password appears not to have been hashed. The 'password' argument must be encrypted for this module to work properly.
[WARNING]: Platform linux on host 172.31.90.42 is using the discovered Python interpreter at /usr/bin/python3.10, but future installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.90.42 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.10"
    },
    "append": false,
    "changed": true,
    "comment": "",
    "group": 1001,
    "home": "/home/ubuntu/abc",
    "move_home": false,
    "name": "abc",
    "password": "NOT_LOGGING_PASSWORD",
    "shell": "/bin/bash",
    "state": "present",
    "uid": 3319
}
[WARNING]: Platform linux on host 172.31.94.141 is using the discovered Python interpreter at /usr/bin/python3.10, but future installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.94.141 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.10"
    },
    "append": false,
    "changed": true,
    "comment": "",
    "group": 1001,
    "home": "/home/ubuntu/abc",
}

6 25°C
Mostly clear
Search ENG IN 21:45 04-08-2025
```

STEP 12 :- Now create one more user using ID and also path as a bash

**ansible all -m user -a ‘name=abc password=abc@123 uid=3319
home=/home/ubuntu/abc shell=/bin/bash’ -b**

```
ubuntu@ip-172-31-93-115:~$ ansible all -i /etc/ansible/hosts -m user -a 'name=abc password=@abc1 uid=3319 home=/home/ubuntu/abc shell=/bin/bash' -b
[WARNING]: The input password appears not to have been hashed. The 'password' argument must be encrypted for this module to work properly.
[WARNING]: Platform linux on host 172.31.90.42 is using the discovered Python interpreter at /usr/bin/python3.10, but future installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.90.42 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.10"
    },
    "append": false,
    "changed": true,
    "comment": "",
    "group": 1001,
    "home": "/home/ubuntu/abc",
    "move_home": false,
    "name": "abc",
    "password": "NOT_LOGGING_PASSWORD",
    "shell": "/bin/bash",
    "state": "present",
    "uid": 3319
}
[WARNING]: Platform linux on host 172.31.94.141 is using the discovered Python interpreter at /usr/bin/python3.10, but future installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.94.141 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.10"
    },
    "append": false,
    "changed": true,
    "comment": "",
    "group": 1001,
    "home": "/home/ubuntu/abc",
}

6 25°C
Mostly clear
Search ENG IN 21:45 04-08-2025
```

```

ubuntu@ip-172-31-90-42: ~
daemon:x:1:1:daemon:/usr/sbin/nologin
bin:x:2:2:bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/sync
games:x:5:60:games:/var/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:102:105:/nonexistent:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
syslog:x:104:111:/home/syslog:/usr/sbin/nologin
_apt:x:105:65534:/nonexistent:/usr/sbin/nologin
tss:x:106:112:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:113:/run/uuidd:/usr/sbin/nologin
tcpdump:x:108:114:/nonexistent:/usr/sbin/nologin
sshd:x:109:65534:/run/sshd:/usr/sbin/nologin
pollinate:x:110:1:/var/cache/pollinate:/bin/false
landscape:x:111:116:/var/lib/landscape:/usr/sbin/nologin
fwupd-refresh:x:112:117:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
ec2-instance-connect:x:113:65534:/nonexistent:/usr/sbin/nologin
_chrony:x:114:121:Chrony daemon,,,:/var/lib/chrony:/usr/sbin/nologin
ubuntu:x:1000:1000:Ubuntu:/home/ubuntu:/bin/bash
lxd:x:999:100:/var/snap/lxd/common/lxd:/bin/false
abc:x:3319:1001:/home/ubuntu/abc:bin: bash
-- INSERT --

```

36,1 Bot

25°C Mostly clear Search ENG IN 21:45 04-08-2025

STEP 13:- ansible all -m apt -a ‘name=git state=present’ -b

As we hit above command the package is already present in both the worker node so GREEN color will show that.

```

ubuntu@ip-172-31-93-115: ~
New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Aug  4 16:14:57 2025 from 172.31.93.115
ubuntu@ip-172-31-90-42:~$ vi /etc/passwd
ubuntu@ip-172-31-90-42:~$ ubuntu@ip-172-31-90-42:~$ exit
logout
Connection to 172.31.90.42 closed.
ubuntu@ip-172-31-93-115:~$ ansible all -i /etc/ansible/hosts -m apt -a 'name=git state=present' -b
[WARNING]: Platform linux on host 172.31.90.42 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.90.42 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.10"
    },
    "cache_update_time": 1754321757,
    "cache_updated": false,
    "changed": false
}
[WARNING]: Platform linux on host 172.31.94.141 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.94.141 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.10"
    },
    "cache_update_time": 1754322022,
    "cache_updated": false,
    "changed": false
}
ubuntu@ip-172-31-93-115:~|
```

CAD/INR +0.58% 21:48 04-08-2025

```

ubuntu@ip-172-31-93-115:~ 
"cache_update_time": 1754322022,
"cache_updated": false,
"changed": false
}
ubuntu@ip-172-31-93-115:~$ ssh 172.31.90.42
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)

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

System information as of Mon Aug 4 16:18:29 UTC 2025

System load: 0.0 Processes: 105
Usage of /: 25.2% of 7.57GB Users logged in: 1
Memory usage: 21% IPv4 address for eth0: 172.31.90.42
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

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

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

New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Aug 4 16:18:30 2025 from 172.31.93.115
ubuntu@ip-172-31-90-42:~$ git --version
git version 2.34.1
ubuntu@ip-172-31-90-42:~$ |

```

21:48
ENG IN 04-08-2025

STEP 14 :- Now delete the git from worker node 1 hit below command for that and again hit installation command and see the changes **ansible all -m apt -a ‘name=git state=absent’ -b**

```

ubuntu@ip-172-31-93-115:~ 
New release '24.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Aug 4 16:29:30 2025 from 172.31.93.115
ubuntu@ip-172-31-94-141:~$ nginx -v
nginx version: nginx/1.18.0 (Ubuntu)
ubuntu@ip-172-31-94-141:~$ exit
logout
Connection to 172.31.94.141 closed.
ubuntu@ip-172-31-93-115:~$ ansible all -i /etc/ansible/hosts -m apt -a 'name=git state=absent' -b
[WARNING]: Platform Linux on host 172.31.94.141 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.94.141 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.10"
    },
    "changed": false
}
[WARNING]: Platform Linux on host 172.31.90.42 is using the discovered Python interpreter at /usr/bin/python3.10, but future
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-
core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.90.42 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.10"
    },
    "changed": false
}
ubuntu@ip-172-31-93-115:~$ ssh 44.202.104.191
The authenticity of host '44.202.104.191 (44.202.104.191)' can't be established.
ED25519 key fingerprint is SHA256:GjH/R8wZ3znzxPg+d81GFJky5W/C7YAJZYkrFnPkcs.
This host key is known by the following other names/addresses:
    ~/.ssh/known_hosts:4: [hashed name]
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes

```

22:01
ENG IN 04-08-2025

Again ansible all -m apt -a ‘name=git state=present’ -b

```
ubuntu@ip-172-31-84-192:~$ ansible all -m apt -a 'name=git state=present' -b
[WARNING]: Platform Linux on host 172.31.83.96 is using the discovered Python interpreter at /usr/bin/python3.10, but future installation of another Python interpreter could change the meaning of that path.
See https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.83.96: SUCCESS! 0:00:00.000000
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3.10"
  },
  "cache_update_time": 1754301944,
  "cache_updated": false,
  "changed": false
}
[WARNING]: Platform Linux on host 172.31.88.231 is using the discovered Python interpreter at /usr/bin/python3.10, but future installation of another Python interpreter could change the meaning of that path.
See https://docs.ansible.com/ansible-core/2.17/reference_appendices/interpreter_discovery.html for more information.
172.31.88.231: CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3.10"
  },
  "cache_update_time": 1754301642,
  "cache_updated": false,
  "changed": true,
  "stderr": "",
  "stdout_lines": []
}
[WARNING]: Running package tests... \nBuilding dependency tree... \nReading state information... \nSuggested packages:
  git-daemon-run git-doc git-email git-gui gitk gitweb
git-mediawiki git-svn
The following NEW packages will be installed:
  git 1:2.34.1-1ubuntu1.15
0 newly installed, 0 to remove and 85 not upgraded.
Need to get 3166 kB of archives.
After this operation, 18.9 MB of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 git amd64 1:2.34.1-1ubuntu1.15 [3166 kB]
Fetched 3166 kB in 0s (41.4 MB/s)
Selecting previously unselected package git.
(Reading database ... 10%)
(Reading database ... 15%)
(Reading database ... 20%)
(Reading database ... 25%)
(Reading database ... 30%)
(Reading database ... 35%)
(Reading database ... 40%)
(Reading database ... 45%)
(Reading database ... 50%)
(Reading database ... 55%)
(Reading database ... 60%)
(Reading database ... 65%)
(Reading database ... 70%)
(Reading database ... 75%)
(Reading database ... 80%)
(Reading database ... 85%)
(Reading database ... 90%)
(Reading database ... 95%)
(Reading database ... 100%)
Unpacking git (1:2.34.1-1ubuntu1.15) ...
Installing up git (1:2.34.1-1ubuntu1.15) ...
Preparing to unpack .../git_1:2.34.1-1ubuntu1.15 ...
Unpacking git (1:2.34.1-1ubuntu1.15) ...
Setting up git (1:2.34.1-1ubuntu1.15) ...
3.5)NEEDRESTART-KOR: 6.8.0-1029-aws\nNEEDRESTART-KEXP: 6.8.0-1029-aws\nNEEDRESTART-KSTA: 1\n"
  "stdout_lines": [
    "Reading package lists...",
    "Building dependency tree...",
    "Reading state information...",
    "Suggested packages:",
    "  git-daemon-run git-daemon-sysvinit git-doc git-email git-gui gitk gitweb",
    "  git-cvs git-mediawiki git-svn"
  ]
}
```

STEP 15 :- Now install nginx using the same command **ansible all -m apt -a ‘name=nginx state=present’ -b**

```
ubuntu@ip-172-31-93-115:~  
git version 2.34.1  
ubuntu@ip-172-31-90-42:~$ exit  
logout  
Connection to 172.31.90.42 closed.  
ubuntu@ip-172-31-93-115:~$ ansible all -i /etc/ansible/hosts -m apt -a 'name=nginx state=present' -b  
[WARNING]: Platform linux on host 172.31.90.42 is using the discovered Python interpreter at /usr/bin/python3.10, but future  
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-  
core/2.17/reference_appendices/interpreter_discovery.html for more information.  
172.31.90.42 | CHANGED => {  
    "ansible_facts": {  
        "discovered_interpreter_python": "/usr/bin/python3.10"  
    },  
    "cache_update_time": 1754321757,  
    "cache_updated": false,  
    "changed": true,  
    "stderr": "",  
    "stderr_lines": [],  
    "stdout": "Reading package lists...\nBuilding dependency tree...\nReading state information...\nThe following additional p  
ackages will be installed:\n  fontconfig-config fonts-dejavu-core libdeflate0 libfontconfig1 libgd3\n  libjbig0 libjpeg-turbo8  
  libjpeg8 libnginx-mod-http-geoip2\n  libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter\n  libnginx-mod-mail libngi  
nx-mod-stream libnginx-mod-stream-geoip2 libtiff5\n  libwebp7 libxpm4 nginx-common nginx-core\nSuggested packages:\n  libgd-to  
ols fcgiwrap nginx-doc ssl-cert\nThe following NEW packages will be installed:\n  fontconfig-config fonts-dejavu-core libdefla  
te0 libfontconfig1 libgd3\n  libjbig0 libjpeg-turbo8 libjpeg8 libnginx-mod-http-geoip2\n  libnginx-mod-http-image-filter libng  
inx-mod-http-xslt-filter\n  libnginx-mod-mail libnginx-mod-stream libnginx-mod-stream-geoip2 libtiff5\n  libwebp7 libxpm4 ngin  
x nginx-common nginx-core\n0 upgraded, 20 newly installed, 0 to remove and 86 not upgraded.\nNeed to get 2693 kB of archives.\nA  
fter this operation, 8346 kB of additional disk space will be used.\nGet:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy/main amd64 fonts-dejavu-core all 2.37-2build1 [1041 kB]\nGet:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy/main amd64 libfontconfig1 amd64 2.1.2-1.10-2 [70.9 kB]\nGet:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy/main amd64 libdeflate0 amd64 1.10-2 [70.9 kB]\nGet:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy/main amd64 libxpm4 amd64 2.1-3.1ubuntu0.22.04.1 [29.2 kB]\nGet:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy/main amd64 libjpeg8 amd64 8c-2ubuntu10 [2264 kB]\nGet:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libjbig0 amd64 2.1-3.1ubuntu0.22.04.1 [29.2 kB]\nGet:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libwebp7 amd64 1.2.2-2ubuntu0.22.04.2 [206 kB]\nGet:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libtiff5 amd64 4.3.0-6ubuntu0.10 [185 kB]\nGet:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libxpm4 amd64 1:3.5.12-1ubuntu0.22.04.2 [36.7 kB]\nGet:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libgd3 amd64 2.3.0-2ubuntu2.3 [129 kB]\nGet:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libnginx-mod-http-geoip2 amd64 1.18.0-6ubuntu14.6 [40.1 kB]\nGet:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libnginx-mod-http-geoip2 amd64 1.18.0-6ubuntu14.6 [12  
ubuntu@ip-172-31-93-115:~  
[NEEDRESTART-KSTA: 1"]  
}  
[WARNING]: Platform linux on host 172.31.94.141 is using the discovered Python interpreter at /usr/bin/python3.10, but future  
installation of another Python interpreter could change the meaning of that path. See https://docs.ansible.com/ansible-  
core/2.17/reference_appendices/interpreter_discovery.html for more information.  
172.31.94.141 | CHANGED => {  
    "ansible_facts": {  
        "discovered_interpreter_python": "/usr/bin/python3.10"  
    },  
    "cache_update_time": 1754322022,  
    "cache_updated": false,  
    "changed": true,  
    "stderr": "",  
    "stderr_lines": [],  
    "stdout": "Reading package lists...\nBuilding dependency tree...\nReading state information...\nThe following additional p  
ackages will be installed:\n  fontconfig-config fonts-dejavu-core libdeflate0 libfontconfig1 libgd3\n  libjbig0 libjpeg-turbo8  
  libjpeg8 libnginx-mod-http-geoip2\n  libnginx-mod-http-image-filter libnginx-mod-http-xslt-filter\n  libnginx-mod-mail libngi  
nx-mod-stream libnginx-mod-stream-geoip2 libtiff5\n  libwebp7 libxpm4 nginx-common nginx-core\nSuggested packages:\n  libgd-to  
ols fcgiwrap nginx-doc ssl-cert\nThe following NEW packages will be installed:\n  fontconfig-config fonts-dejavu-core libdefla  
te0 libfontconfig1 libgd3\n  libjbig0 libjpeg-turbo8 libjpeg8 libnginx-mod-http-geoip2\n  libnginx-mod-http-image-filter libng  
inx-mod-http-xslt-filter\n  libnginx-mod-mail libnginx-mod-stream libnginx-mod-stream-geoip2 libtiff5\n  libwebp7 libxpm4 ngin  
x nginx-common nginx-core\n0 upgraded, 20 newly installed, 0 to remove and 86 not upgraded.\nNeed to get 2693 kB of archives.\nA  
fter this operation, 8346 kB of additional disk space will be used.\nGet:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy/main amd64 fonts-dejavu-core all 2.37-2build1 [1041 kB]\nGet:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy/main amd64 libfontconfig1 amd64 2.1.2-1.10-2 [70.9 kB]\nGet:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy/main amd64 libdeflate0 amd64 1.10-2 [70.9 kB]\nGet:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy/main amd64 libxpm4 amd64 2.1-3.1ubuntu0.22.04.1 [29.2 kB]\nGet:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libjbig0 amd64 2.1-3.1ubuntu0.22.04.1 [29.2 kB]\nGet:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libwebp7 amd64 1.2.2-2ubuntu0.22.04.2 [206 kB]\nGet:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libtiff5 amd64 4.3.0-6ubuntu0.10 [185 kB]\nGet:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libxpm4 amd64 1:3.5.12-1ubuntu0.22.04.2 [36.7 kB]\nGet:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libgd3 amd64 2.3.0-2ubuntu2.3 [129 kB]\nGet:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libnginx-mod-http-geoip2 amd64 1.18.0-6ubuntu14.6 [40.1 kB]\nGet:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu ja  
mmy-updates/main amd64 libnginx-mod-http-geoip2 amd64 1.18.0-6ubuntu14.6 [12
```

```
ubuntu@ip-172-31-94-141:~  
  "NEEDRESTART-KEXP: 6.8.0-1029-aws",  
  "NEEDRESTART-KSTA: 1"  
]  
}  
ubuntu@ip-172-31-93-115:~$ ssh 172.31.94.141  
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)  
  
* Documentation: https://help.ubuntu.com  
* Management: https://landscape.canonical.com  
* Support: https://ubuntu.com/pro  
  
System information as of Mon Aug 4 16:20:24 UTC 2025  
  
System load: 0.19 Processes: 109  
Usage of /: 25.4% of 7.57GB Users logged in: 1  
Memory usage: 23% IPv4 address for eth0: 172.31.94.141  
Swap usage: 0%  
  
Expanded Security Maintenance for Applications is not enabled.  
  
92 updates can be applied immediately.  
80 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
Enable ESM Apps to receive additional future security updates.  
See https://ubuntu.com/esm or run: sudo pro status  
  
New release '24.04.2 LTS' available.  
Run 'do-release-upgrade' to upgrade to it.  
  
Last login: Mon Aug 4 16:19:24 2025 from 172.31.93.115
```

```
ubuntu@ip-172-31-94-141:~$ nginx -v  
nginx version: nginx/1.18.0 (Ubuntu)  
ubuntu@ip-172-31-94-141:~$ |  
  
Wi - PAK  
Game score  
Windows Search  
Owl icon  
Google Chrome  
File Explorer  
Task View  
File History  
OneDrive  
Microsoft Edge  
WhatsApp  
Teams  
PowerShell  
21:50  
ENG IN  
04-08-2025  
  
ubuntu@ip-172-31-90-42:~$ ssh 172.31.90.42  
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1029-aws x86_64)  
  
* Documentation: https://help.ubuntu.com  
* Management: https://landscape.canonical.com  
* Support: https://ubuntu.com/pro  
  
System information as of Mon Aug 4 16:21:18 UTC 2025  
  
System load: 0.05 Processes: 108  
Usage of /: 25.4% of 7.57GB Users logged in: 1  
Memory usage: 23% IPv4 address for eth0: 172.31.90.42  
Swap usage: 0%  
  
* Ubuntu Pro delivers the most comprehensive open source security and  
  compliance features.  
  
https://ubuntu.com/aws/pro  
  
Expanded Security Maintenance for Applications is not enabled.  
  
92 updates can be applied immediately.  
80 of these updates are standard security updates.  
To see these additional updates run: apt list --upgradable  
  
Enable ESM Apps to receive additional future security updates.  
See https://ubuntu.com/esm or run: sudo pro status  
  
New release '24.04.2 LTS' available.  
Run 'do-release-upgrade' to upgrade to it.  
  
Last login: Mon Aug 4 16:19:24 2025 from 172.31.93.115
```

```
ubuntu@ip-172-31-90-42:~$ nginx -v  
nginx version: nginx/1.18.0 (Ubuntu)  
ubuntu@ip-172-31-90-42:~$ |  
  
Wi - PAK  
Game score  
Windows Search  
Owl icon  
Google Chrome  
File Explorer  
Task View  
File History  
OneDrive  
Microsoft Edge  
WhatsApp  
Teams  
PowerShell  
21:51  
ENG IN  
04-08-2025
```