

LINUX MODULE

SUBMITTED BY – ADESH ARUN ADHAV

SUBMITTED TO- MR. VIKUL SIR

BATCH NO. SA2409031

DATE- 22/11/2024

L1- In EC2 Ubuntu Instance Create a new user and SSH Key pair with an authorized key

STEP 1 -LAUNCH AN EC2 INSTANCE

STEP 2- CONNECT TO THE INSTANCE

STEP3- CREATE NEW USER

- *Sudo adduser user name*
- *Sudo su (change to root user)*
 - *Change to the user*
 - *su adhav*
 - *Crete .ssh directory*
(*mkdir .ssh*)

STEP4- OPEN LOCAL MACHINE

- *Generate public key of laocal machine*
Ssh-keyggen

STEP5 – COPY THE PUBLIC KEY

- *Copy the public key to vi file in new user*

STEP 6- CONNECT THE LOCAL MACHINE

Ssh username@public ip (ssh adhav@ 13.201.190.103

LAUNCH THE INSTANCE

The screenshot displays the AWS Management Console interface for the EC2 service. The left-hand navigation pane shows the 'Instances' section selected. The main content area, titled 'Instances (1/1) Info', shows a table with one instance, 'i-045ff7905a0920abe', which is in the 'Running' state. Below the table, the 'Details' tab for this instance is expanded, showing the 'Instance summary' with fields for Instance ID, Public IPv4 address (13.201.190.103), Private IPv4 addresses (172.31.13.13), and Instance state (Running). The footer of the console shows the copyright notice for Amazon Web Services, Inc. or its affiliates, dated 2024.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
i1	i-045ff7905a0920abe	Running	t2.micro	2/2 checks passed	View alarms	ap-south-1b	ec2-13-201-190-103.ap-south-1.compute.amazonaws.com

i-045ff7905a0920abe (i1)

Instance summary

Instance ID i-045ff7905a0920abe	Public IPv4 address 13.201.190.103 open address	Private IPv4 addresses 172.31.13.13
IPv6 address -	Instance state Running	Public IPv4 DNS ec2-13-201-190-103.ap-south-1.compute.amazonaws.com open address

- **CONNECT TO THE INSTANCE**

```
aws
[Alt+S]
Mumbai ADESH ADHAV
EC2

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

System information as of Fri Nov 22 15:41:40 UTC 2024

System load: 0.16 Processes: 114
Usage of /: 21.6% of 7.57GB Users logged in: 2
Memory usage: 22% IPv4 address for eth0: 172.31.13.13
Swap usage: 0%

Expanded Security Maintenance for Applications is not enabled.

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
New release '24.04.1 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Fri Nov 22 15:24:24 2024 from 13.233.177.3
ubuntu@ip-172-31-13-13:~$

i-045ff7905a0920abe (11)
PublicIPs: 13.201.190.103 PrivateIPs: 172.31.13.13

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```

• ADD THE USER

```
aws
[Alt+S]
Mumbai ADESH ADHAV
EC2

ubuntu@ip-172-31-13-13:~$ ll
total 28
-rwxr-xr-x 4 ubuntu ubuntu 4096 Nov 22 15:24 ./
-rwxr-xr-x 4 root root 4096 Nov 22 15:24 ../
-rw-r--r-- 1 ubuntu ubuntu 220 Jan 6 2022 .bash_logout
-rw-r--r-- 1 ubuntu ubuntu 3771 Jan 6 2022 .bashrc
-rwx----- 2 ubuntu ubuntu 4096 Nov 22 15:24 .cache/
-rw-r--r-- 1 ubuntu ubuntu 807 Jan 6 2022 .profile
-rwx----- 2 ubuntu ubuntu 4096 Nov 22 15:24 .ssh/
-rw-r--r-- 1 ubuntu ubuntu 0 Nov 22 15:24 .sudo_as_admin_successful
ubuntu@ip-172-31-13-13:~$ sudo su
oot@ip-172-31-13-13:/home/ubuntu# sudo adduser adhav
adduser: The user 'adhav' already exists.
oot@ip-172-31-13-13:/home/ubuntu# cd /home
oot@ip-172-31-13-13:/home# ls
adhav ubuntu
oot@ip-172-31-13-13:/home# ll
total 16
-rwxr-xr-x 4 root root 4096 Nov 22 15:24 ./
-rwxr-xr-x 19 root root 4096 Nov 22 15:24 ../
-rwxr-xr-x 4 adhav adhav 4096 Nov 22 15:30 adhav/
-rwxr-xr-x 4 ubuntu ubuntu 4096 Nov 22 15:24 ubuntu/
oot@ip-172-31-13-13:/home# []

i-045ff7905a0920abe (11)
PublicIPs: 13.201.190.103 PrivateIPs: 172.31.13.13

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```

• CRAETE SSH DDIRECTORY

```
aws | Search [Alt+S] | Mumbai | ADESH ADHAV | EC2

root@ip-172-31-13-13:~# ll
total 20
-rwxr-x--- 2 adhav adhav 4096 Nov 22 15:24 ./
-rwxr-xr-x 4 root root 4096 Nov 22 15:24 ../
-rw-r--r-- 1 adhav adhav 220 Nov 22 15:24 .bash_logout
-rw-r--r-- 1 adhav adhav 3771 Nov 22 15:24 .bashrc
-rw-r--r-- 1 adhav adhav 807 Nov 22 15:24 .profile
root@ip-172-31-13-13:/home/adhav# su adhav
adhav@ip-172-31-13-13:~$ ll
total 20
-rwxr-x--- 2 adhav adhav 4096 Nov 22 15:24 ./
-rwxr-xr-x 4 root root 4096 Nov 22 15:24 ../
-rw-r--r-- 1 adhav adhav 220 Nov 22 15:24 .bash_logout
-rw-r--r-- 1 adhav adhav 3771 Nov 22 15:24 .bashrc
-rw-r--r-- 1 adhav adhav 807 Nov 22 15:24 .profile
adhav@ip-172-31-13-13:~$ mkdir .ssh
adhav@ip-172-31-13-13:~$ ll
total 24
-rwxr-x--- 3 adhav adhav 4096 Nov 22 15:26 ./
-rwxr-xr-x 4 root root 4096 Nov 22 15:24 ../
-rw-r--r-- 1 adhav adhav 220 Nov 22 15:24 .bash_logout
-rw-r--r-- 1 adhav adhav 3771 Nov 22 15:24 .bashrc
-rw-r--r-- 1 adhav adhav 807 Nov 22 15:24 .profile
-rwxrwxr-x 2 adhav adhav 4096 Nov 22 15:26 .ssh/
adhav@ip-172-31-13-13:~$ cd .ssh/
adhav@ip-172-31-13-13:~/.ssh$ ls
adhav@ip-172-31-13-13:~/.ssh$ vi authorized_keys
adhav@ip-172-31-13-13:~/.ssh$ cat authorized_keys
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIGrXGbdd5KqHV1z4dBXMcY3Izyg2nG/zdfijBy7PDSWT yashodal7@LAPTOP-5S0JAQVO
adhav@ip-172-31-13-13:~/.ssh$
```

i-045ff7905a0920abe (I1)

PublicIPs: 13.201.190.103 PrivateIPs: 172.31.13.13

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• COPY THE PUBLIC KEY

```
aws | Search [Alt+S] | Mumbai | ADESH ADHAV | EC2

dhav@ip-172-31-13-13:~/.ssh$ history
1 ll
2 mkdir .ssh
3 ll
4 cd .ssh/
5 ls
6 vi authorized_keys
7 cat authorized_keys
8 clear
9 history
dhav@ip-172-31-13-13:~/.ssh$ ll
total 12
-rwxrwxr-x 2 adhav adhav 4096 Nov 22 15:29 ./
-rwxr-x--- 4 adhav adhav 4096 Nov 22 15:30 ../
-rw-rw-r-- 1 adhav adhav 108 Nov 22 15:29 authorized_keys
dhav@ip-172-31-13-13:~/.ssh$ cat authorized_keys
cat: authorized: No such file or directory
dhav@ip-172-31-13-13:~/.ssh$ cat authorized_keys
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIGrXGbdd5KqHV1z4dBXMcY3Izyg2nG/zdfijBy7PDSWT yashodal7@LAPTOP-5S0JAQVO
dhav@ip-172-31-13-13:~/.ssh$
```

i-045ff7905a0920abe (I1)

PublicIPs: 13.201.190.103 PrivateIPs: 172.31.13.13

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- **CONNECT THE LOCAL MACHINE THROUGH PUBLIC IP**

```
System load: 0.0          Processes:           113
Usage of /:  21.7% of 7.57GB Users logged in:       1
Memory usage: 22%        IPv4 address for eth0: 172.31.13.13
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`

New release '24.04.1 LTS' available.

Run 'do-release-upgrade' to upgrade to it.

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.

adhav@ip-172-31-13-13:~\$ █