Ansible with M Prashant

C:\Users\user121\Downloads>icacls "C:\Users\user121\Downloads\ansible-ec2.pem" /inheritance:r /grant:r "%USERNAME%:R"

processed file: C:\Users\user121\Downloads\ansible-ec2.pem

Successfully processed 1 files; Failed processing 0 files

C:\Users\user121\Downloads>icacls "C:\Users\user121\Downloads\ansible-ec2.pem"

C:\Users\user121\Downloads\ansible-ec2.pem NT AUTHORITY\SYSTEM:(F)

BUILTIN\Administrators:(F)

DESKTOP-JFJ21I5\user121:(R)

Successfully processed 1 files; Failed processing 0 files

C:\Users\user121\Downloads>ec2-65-2-6-186.ap-south-1.compute.amazonaws.com

'ec2-65-2-6-186.ap-south-1.compute.amazonaws.com' is not recognized as an internal or external command,

operable program or batch file.

C:\Users\user121\Downloads>ssh -i "C:\Users\user121\Downloads\ansible-ec2.pem" ec2-user@ec2-65-2-6-186.ap-south-1.compute.amazonaws.com

The authenticity of host 'ec2-65-2-6-186.ap-south-1.compute.amazonaws.com (65.2.6.186)' can't be established.

ED25519 key fingerprint is SHA256:mZ7lla9zVxGMaDFl57wG2anFQ761cXMmblZe/IDILwg.

This key is not known by any other names.

Are you sure you want to continue connecting (yes/no/[fingerprint])? yes

Warning: Permanently added 'ec2-65-2-6-186.ap-south-1.compute.amazonaws.com' (ED25519) to the list of known hosts.

ec2-user@ec2-65-2-6-186.ap-south-1.compute.amazonaws.com: Permission denied (publickey).

C:\Users\user121\Downloads>ssh -i "C:\Users\user121\Downloads\ansible-ec2.pem" ubuntu@ec2-65-2-6-186.ap-south-1.compute.amazonaws.com

Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.8.0-1024-aws x86\_64)

\* Documentation: https://help.ubuntu.com

\* Management: https://landscape.canonical.com

\* Support: https://ubuntu.com/pro

System information as of Thu Mar 27 14:16:56 UTC 2025

System load: 0.0 Processes: 103

Usage of /: 24.9% of 6.71GB Users logged in: 0

Memory usage: 20% IPv4 address for enX0: 172.31.15.82

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-172-31-15-82:~$ ls

ubuntu@ip-172-31-15-82:~$ pwd

/home/ubuntu

ubuntu@ip-172-31-15-82:~$ ssh-keygen

Generating public/private ed25519 key pair.

Enter file in which to save the key (/home/ubuntu/.ssh/id\_ed25519):

Enter passphrase (empty for no passphrase):

Enter same passphrase again:

Your identification has been saved in /home/ubuntu/.ssh/id\_ed25519

Your public key has been saved in /home/ubuntu/.ssh/id\_ed25519.pub

The key fingerprint is:

SHA256:r56IVky3dryO1KkBEbftddb9+WHluEZ9gjTPuFV1Zhw ubuntu@ip-172-31-15-82

The key's randomart image is:

+--[ED25519 256]--+

| . . E\*|

| o o +=|

| . . . + o =|

| .... o O =+|

| o..So. o B+=|

| o.ooo. +.o+|

| . .o.+.. o .|

| .. o \*. . |

| .. ..\*.. |

+----[SHA256]-----+

ubuntu@ip-172-31-15-82:~$

$ ssh-copy-id 172-31-15-82

/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/ubuntu/.ssh/id\_ed25519.pub"

/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed

/usr/bin/ssh-copy-id: ERROR: ssh: Could not resolve hostname 172-31-15-82: Temporary failure in name resolution

#ansible only availbale on linux

To install **Ansible** on an Ubuntu instance, follow these steps:

**Step 1: Update Package List**

Run the following command to update your system’s package list:

bash

CopyEdit

sudo apt update -y

**Step 2: Install Ansible**

Install Ansible using:

bash

CopyEdit

sudo apt install ansible -y

**Step 3: Verify Installation**

Check if Ansible is installed correctly by running:

bash

CopyEdit

ansible --version

ubuntu@ip-172-31-15-82:~$ ansible localhost -m ping

[WARNING]: No inventory was parsed, only implicit localhost is available

localhost | SUCCESS => {

"changed": false,

"ping": "pong"

}

ubuntu@ip-172-31-15-82:~$

ubuntu@ip-172-31-15-82:~$ ansible localhost -m ping

[WARNING]: No inventory was parsed, only implicit localhost is available

localhost | SUCCESS => {

"changed": false,

"ping": "pong"

}

ubuntu@ip-172-31-15-82:~$ cd /etc/ansible/

-bash: cd: /etc/ansible/: No such file or directory

ubuntu@ip-172-31-15-82:~$ cd /etc/ansible/

-bash: cd: /etc/ansible/: No such file or directory

ubuntu@ip-172-31-15-82:~$ sudo mkdir -p /etc/ansible

sudo mkdir -p /etc/ansible/inventory

echo "localhost ansible\_connection=local" | sudo tee /etc/ansible/sudo touch /etc/ansible/ansible.cfg

sudo mkdir -p /etc/ansible/inventory

echo "localhost ansible\_connection=local" | sudo tee /etc/ansible/ubuntu@ip-172-31-15-82:~$ inventory/hosts

-bash: inventory/hosts: No such file or directory

ubuntu@ip-172-31-15-82:~$ sudo mkdir -p /etc/ansible

ubuntu@ip-172-31-15-82:~$ sudo touch /etc/ansible/ansible.cfg

ubuntu@ip-172-31-15-82:~$ sudo mkdir -p /etc/ansible/inventory

ubuntu@ip-172-31-15-82:~$ echo "localhost ansible\_connection=local" | sudo tee /etc/ansible/inventory/hosts

localhost ansible\_connection=local

ubuntu@ip-172-31-15-82:~$ cd /etc/config

-bash: cd: /etc/config: No such file or directory

ubuntu@ip-172-31-15-82:~$ cd /etc/ansible/

ubuntu@ip-172-31-15-82:/etc/ansible$ ls -ltr'

> ^C

ubuntu@ip-172-31-15-82:/etc/ansible$ ls -ltr

total 4

-rw-r--r-- 1 root root 0 Mar 27 14:35 ansible.cfg

drwxr-xr-x 2 root root 4096 Mar 27 14:35 inventory

ubuntu@ip-172-31-15-82:/etc/ansible$

ubuntu@ip-172-31-15-82:~$ sudo mkdir -p /etc/ansible

ubuntu@ip-172-31-15-82:~$ sudo touch /etc/ansible/ansible.cfg

ubuntu@ip-172-31-15-82:~$ sudo mkdir -p /etc/ansible/inventory

ubuntu@ip-172-31-15-82:~$ echo "localhost ansible\_connection=local" | sudo tee /etc/ansible/inventory/hosts

localhost ansible\_connection=local

ubuntu@ip-172-31-15-82:~$ cd /etc/config

-bash: cd: /etc/config: No such file or directory

ubuntu@ip-172-31-15-82:~$ cd /etc/ansible/

ubuntu@ip-172-31-15-82:/etc/ansible$ ls -ltr'

> ^C

ubuntu@ip-172-31-15-82:/etc/ansible$ ls -ltr

total 4

-rw-r--r-- 1 root root 0 Mar 27 14:35 ansible.cfg

drwxr-xr-x 2 root root 4096 Mar 27 14:35 inventory

ubuntu@ip-172-31-15-82:/etc/ansible$ less ansible.cfg

ubuntu@ip-172-31-15-82:/etc/ansible$

ubuntu@ip-172-31-15-82:/etc/ansible$ less ansible.cfg

ubuntu@ip-172-31-15-82:/etc/ansible$ ansible-config init --disabled -t all > ansible.cfg

-bash: ansible.cfg: Permission denied

ubuntu@ip-172-31-15-82:/etc/ansible$ sudo ansible-config init --disabled -t all > /etc/ansible/ansible.cfg

-bash: /etc/ansible/ansible.cfg: Permission denied

ubuntu@ip-172-31-15-82:/etc/ansible$ sudo ansible-config init --disabled -t all > /etc/ansible/ansible.cfg

-bash: /etc/ansible/ansible.cfg: Permission denied

ubuntu@ip-172-31-15-82:/etc/ansible$ ls -l /etc/ansible/ansible.cfg

-rw-r--r-- 1 root root 0 Mar 27 14:35 /etc/ansible/ansible.cfg

ubuntu@ip-172-31-15-82:/etc/ansible$ sudo ansible-config init --disabled -t all | sudo tee /etc/ansible/ansible.cfg > /dev/null

ubuntu@ip-172-31-15-82:/etc/ansible$ less ansible.cfg

ubuntu@ip-172-31-15-82:/etc/ansible$ pwd

/etc/ansible

ubuntu@ip-172-31-15-82:/etc/ansible$ ls

ansible.cfg inventory

ubuntu@ip-172-31-15-82:/etc/ansible$ mkdir playbooks

mkdir: cannot create directory ‘playbooks’: Permission denied

ubuntu@ip-172-31-15-82:/etc/ansible$ sudo mkdir playbooks

ubuntu@ip-172-31-15-82:/etc/ansible$ ls

ansible.cfg inventory playbooks

ubuntu@ip-172-31-15-82:/etc/ansible$

ubuntu@ip-172-31-15-82:/etc/ansible$ ls

ansible.cfg inventory playbooks

ubuntu@ip-172-31-15-82:/etc/ansible$ cd playbooks/

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ pwd

/etc/ansible/playbooks

#first plauybook

Playbook name

Hosts – refer to wehre you will perfrom tasks initially you perform tasks on localhost

Then we have tasks

In tasks first we have name -infor about taks

Name – just give infor about takss – just description about the tasks

Then we need to provide modules – which module we want to use

Ping module here we are using

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ vi first\_pb.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ sudo vi first\_pb.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ ls

first\_pb.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ ls -ltr

total 4

-rw-r--r-- 1 root root 92 Mar 27 15:02 first\_pb.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ chmod +x first\_pb.yml

chmod: changing permissions of 'first\_pb.yml': Operation not permitted

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ sudo chmod +x first\_pb.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ ls -ltr

total 4

-rwxr-xr-x 1 root root 92 Mar 27 15:02 first\_pb.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ ansible-playbook first\_pb.yml

[WARNING]: No inventory was parsed, only implicit localhost is available

[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

PLAY [first pb book] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [localhost]

TASK [Test-connectvity] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [localhost]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

localhost : ok=2 changed=0 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$

---

- name: FIRST BASIC PB

hosts: localhost

tasks:

- name: Test Connectivity

ping:

~

First-pb.yml

Second change –minor changes we have done inside playbook

---

- name: first pb book

hosts: localhost

tasks:

-name: Test-connectvity

ping:

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ sudo vi first\_pb.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ sudo vi first\_pb.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ ansible-playbook first\_pb.yml

[WARNING]: No inventory was parsed, only implicit localhost is available

[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

ERROR! We were unable to read either as JSON nor YAML, these are the errors we got from each:

JSON: Expecting value: line 1 column 1 (char 0)

Syntax Error while loading YAML.

mapping values are not allowed in this context

The error appears to be in '/etc/ansible/playbooks/first\_pb.yml': line 7, column 9, but may

be elsewhere in the file depending on the exact syntax problem.

The offending line appears to be:

-name: Test-connectvity

ping:

^ here

To check syntax of playbooks

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ ansible-playbook --syntax-check first\_pb.yml

[WARNING]: No inventory was parsed, only implicit localhost is available

[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

ERROR! We were unable to read either as JSON nor YAML, these are the errors we got from each:

JSON: Expecting value: line 1 column 1 (char 0)

Syntax Error while loading YAML.

mapping values are not allowed in this context

The error appears to be in '/etc/ansible/playbooks/first\_pb.yml': line 7, column 9, but may

be elsewhere in the file depending on the exact syntax problem.

The offending line appears to be:

-name: Test-connectvity

ping:

^ here

# this playbook perform only single task here

**#adding second task inside my playbookls**

---

- name: first pb book

hosts: localhost

tasks:

- name: Test-connectvity

ping:

- name: "Print Output"

debug: msg="Alright we are using playbooks!!"

~ ~

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ sudo vi first\_pb.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ ansible-playbook first\_pb.yml

[WARNING]: No inventory was parsed, only implicit localhost is available

[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

PLAY [first pb book] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [localhost]

TASK [Test-connectvity] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [localhost]

TASK [Print Output] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [localhost] => {

"msg": "Alright we are using playbooks!!"

}

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

localhost : ok=3 changed=0 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ ansible-playbook --syntax-check first\_pb.yml

[WARNING]: No inventory was parsed, only implicit localhost is available

[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

playbook: first\_pb.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ ansible-playbook first\_pb.yml

[WARNING]: No inventory was parsed, only implicit localhost is available

[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

PLAY [first pb book] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [localhost]

TASK [Test-connectvity] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [localhost]

TASK [Print Output] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [localhost] => {

"msg": "Alright we are using playbooks!!"

}

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

localhost : ok=3 changed=0 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

# PLAYBOOK FOR INSTALLING AND UPDATING A PACKAGE and stating a package

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ sudo vi app\_install.yml

---

- name: Install and start the service

hosts: localhost

tasks:

- name: Installing nginx

apt:

name: nginx

* We are installing nginx and using apt module and giving the name of pcakge manager

---

- name: Install and start the service

hosts: localhost

tasks:

- name: Installing nginx

apt:

name: nginx

state: present

#stage presetent means our ngninx is present on our system , ensure nginx is present in our system

# so this is one task we have and after that – after installing nginx – I want to start it as well

---

- name: Install and start the service

hosts: localhost

tasks:

- name: Installing nginx

apt:

name: nginx

state: present

- name: Starting the nginx server

service:

name: nginx

state: present

# we have second task to start nginx server , and using module service to start the nginx server and ensure nginx is present by using state

---

- name: Install and start the service

hosts: localhost

tasks:

- name: Installing nginx

apt:

name: nginx

state: present

- name: Starting the nginx server

service:

name: nginx

state: started

enabled: true

**after start enable this as well so that it again reboot**

---

- name: Install and start the service

hosts: localhost

tasks:

- name: Installing nginx

apt:

name: nginx

state: present

- name: Starting the nginx server

service:

name: nginx

state: started

enabled: true

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ sudo ansible-playbook app\_install.yml

[WARNING]: No inventory was parsed, only implicit localhost is available

[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

PLAY [Install and start the service] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [localhost]

TASK [Installing nginx] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [localhost]

TASK [Starting the nginx server] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [localhost]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

localhost : ok=3 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ nginx

2025/03/27 16:53:04 [warn] 3377#3377: the "user" directive makes sense only if the master process runs with super-user privileges, ignored in /etc/nginx/nginx.conf:1

2025/03/27 16:53:04 [emerg] 3377#3377: open() "/var/log/nginx/error.log" failed (13: Permission denied)

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ sudo nginx

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ sudo systemctl status nginx

● nginx.service - A high performance web server and a reverse proxy server

Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: enabled)

Active: active (running) since Thu 2025-03-27 16:54:00 UTC; 2min 3s ago

Docs: man:nginx(8)

Process: 3387 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master\_process on; (code=exited, status=0/SUCCESS)

Process: 3389 ExecStart=/usr/sbin/nginx -g daemon on; master\_process on; (code=exited, status=0/SUCCESS)

Main PID: 3390 (nginx)

Tasks: 2 (limit: 1129)

Memory: 1.7M (peak: 2.0M)

CPU: 28ms

CGroup: /system.slice/nginx.service

├─3390 "nginx: master process /usr/sbin/nginx -g daemon on; master\_process on;"

└─3391 "nginx: worker process"

Mar 27 16:54:00 ip-172-31-15-82 systemd[1]: Starting nginx.service - A high performance web server and a reverse proxy server...

Mar 27 16:54:00 ip-172-31-15-82 systemd[1]: Started nginx.service - A high performance web server and a reverse proxy server.

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ sudo systemctl status nginx

● nginx.service - A high performance web server and a reverse proxy server

Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: enabled)

Active: active (running) since Thu 2025-03-27 16:54:00 UTC; 2min 3s ago

Docs: man:nginx(8)

Process: 3387 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master\_process on; (code=exited, status=0/SUCCESS)

Process: 3389 ExecStart=/usr/sbin/nginx -g daemon on; master\_process on; (code=exited, status=0/SUCCESS)

Main PID: 3390 (nginx)

Tasks: 2 (limit: 1129)

Memory: 1.7M (peak: 2.0M)

CPU: 28ms

CGroup: /system.slice/nginx.service

├─3390 "nginx: master process /usr/sbin/nginx -g daemon on; master\_process on;"

└─3391 "nginx: worker process"

Mar 27 16:54:00 ip-172-31-15-82 systemd[1]: Starting nginx.service - A high performance web server and a reverse proxy server...

Mar 27 16:54:00 ip-172-31-15-82 systemd[1]: Started nginx.service - A high performance web server and a reverse proxy server.

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ curl -I http://localhost

HTTP/1.1 200 OK

Server: nginx/1.24.0 (Ubuntu)

Date: Thu, 27 Mar 2025 16:56:52 GMT

Content-Type: text/html

Content-Length: 615

Last-Modified: Thu, 27 Mar 2025 16:44:59 GMT

Connection: keep-alive

ETag: "67e5808b-267"

Accept-Ranges: bytes

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ curl -I http://localhost

HTTP/1.1 200 OK

Server: nginx/1.24.0 (Ubuntu)

Date: Thu, 27 Mar 2025 16:57:15 GMT

Content-Type: text/html

Content-Length: 615

Last-Modified: Thu, 27 Mar 2025 16:44:59 GMT

Connection: keep-alive

ETag: "67e5808b-267"

Accept-Ranges: bytes

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ systemctl status nginx.service

● nginx.service - A high performance web server and a reverse proxy server

Loaded: loaded (/usr/lib/systemd/system/nginx.service; enabled; preset: enabled)

Active: active (running) since Thu 2025-03-27 16:54:00 UTC; 4min 34s ago

Docs: man:nginx(8)

Process: 3387 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master\_process on; (code=exited, status=0/SUCCESS)

Process: 3389 ExecStart=/usr/sbin/nginx -g daemon on; master\_process on; (code=exited, status=0/SUCCESS)

Main PID: 3390 (nginx)

Tasks: 2 (limit: 1129)

Memory: 1.7M (peak: 2.0M)

CPU: 48ms

CGroup: /system.slice/nginx.service

├─3390 "nginx: master process /usr/sbin/nginx -g daemon on; master\_process on;"

└─3391 "nginx: worker process"

Mar 27 16:54:00 ip-172-31-15-82 systemd[1]: Starting nginx.service - A high performance web server and a reverse proxy server...

Mar 27 16:54:00 ip-172-31-15-82 systemd[1]: Started nginx.service - A high performance web server and a reverse proxy server.

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$

**ansible modules google serach**

we have different modules here

Yes! In **Ansible**, the **hosts file** is the same as the **inventory file**.

### ****What is the Inventory File?****

* It is a file that defines the list of servers (hosts) where Ansible will execute tasks.

# to preform actions on remote server you need to provide ip in hosts

# you just need to provide ip or address of remote server

[local]

localhost ansible\_connection=local

[remote]

15.207.19.16 ansible\_user=ubuntu ansible\_ssh\_private\_key\_file=~/.ssh/ansible-2.pem

~ ~

~

Hosts

~

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ pwd

/etc/ansible/playbooks

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ cd ..

ubuntu@ip-172-31-15-82:/etc/ansible$ ls

ansible.cfg inventory playbooks

ubuntu@ip-172-31-15-82:/etc/ansible$ pwd

/etc/ansible

ubuntu@ip-172-31-15-82:/etc/ansible$ ls

ansible.cfg inventory playbooks

ubuntu@ip-172-31-15-82:/etc/ansible$ less inventoryy

inventoryy: No such file or directory

ubuntu@ip-172-31-15-82:/etc/ansible$ less inventory

inventory is a directory

ubuntu@ip-172-31-15-82:/etc/ansible$ cd inventory

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ ls

hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ less hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ less hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ less hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ less hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ vi hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ vi hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ sudo vi hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ sudo vi hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ sudo vi hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ ansible-inventory --list

[WARNING]: No inventory was parsed, only implicit localhost is available

{

"\_meta": {

"hostvars": {}

},

"all": {

"children": [

"ungrouped"

]

}

}

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ sudo vi hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ ansibel-inventory --list

Command 'ansibel-inventory' not found, did you mean:

command 'ansible-inventory' from deb ansible-core (2.14.13-1)

Try: sudo apt install <deb name>

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ ansible-inventory --list

[WARNING]: No inventory was parsed, only implicit localhost is available

{

"\_meta": {

"hostvars": {}

},

"all": {

"children": [

"ungrouped"

]

}

}

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ sudo vi hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ ansible-inventory -i /etc/ansible/inventory/hosts --list

{

"\_meta": {

"hostvars": {

"15.207.19.16": {

"ansible\_ssh\_private\_key\_file": "~/.ssh/id\_rsa",

"ansible\_user": "ubuntu"

},

"localhost": {

"ansible\_connection": "local"

}

}

},

"all": {

"children": [

"ungrouped",

"local",

"remote"

]

},

"local": {

"hosts": [

"localhost"

]

},

"remote": {

"hosts": [

"15.207.19.16"

]

}

}

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ sudo

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ ansible-inventory --list

[WARNING]: No inventory was parsed, only implicit localhost is available

{

"\_meta": {

"hostvars": {}

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}

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ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ sudo vi hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ ansible-inventory -i /etc/ansible/inventory/hosts --list

{

"\_meta": {

"hostvars": {

"15.207.19.16": {

"ansible\_ssh\_private\_key\_file": "~/.ssh/id\_rsa",

"ansible\_user": "ubuntu"

},

"localhost": {

"ansible\_connection": "local"

}

}

},

"all": {

"children": [

"ungrouped",

"local",

"remote"

]

},

"local": {

"hosts": [

"localhost"

]

},

"remote": {

"hosts": [

"15.207.19.16"

]

}

}

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ sudo vi hosts

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ ansible all -m ping

[WARNING]: No inventory was parsed, only implicit localhost is available

[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

ubuntu@ip-172-31-15-82:/etc/ansible/inventory$ cd ..

ubuntu@ip-172-31-15-82:/etc/ansible$ ansible all -m ping

[WARNING]: No inventory was parsed, only implicit localhost is available

[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

ubuntu@ip-172-31-15-82:/etc/ansible$ ansible -i /etc/ansible/inventory/hosts remote -m ping

---

- name: first pb book

hosts: all

tasks:

- name: Test-connectvity

ping:

- name: "Print Output"

debug: msg="Alright we are using playbooks!!"

~

ubuntu@ip-172-31-15-82:/etc/ansible$ ls

ansible.cfg inventory playbooks

ubuntu@ip-172-31-15-82:/etc/ansible$ cd playbooks

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ ls

app\_install.yml first\_pb.yml play\_books.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ sudo vi first\_pb.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ ansible-playbook first\_pb.yml

[WARNING]: No inventory was parsed, only implicit localhost is available

[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

PLAY [first pb book] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

skipping: no hosts matched

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$ sudo vi first\_pb.yml

ubuntu@ip-172-31-15-82:/etc/ansible/playbooks$