

Q2)Ansible

1)create an inventory file

2)create playbook create_user.yml

3)Test connection

```
master@master-vm:~$ ansible --version
ansible [core 2.12.10]
  config file = /etc/ansible/ansible.cfg
  configured module search path = ['/home/master/.ansible/plugins/modules', '/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python3/dist-packages/ansible
  ansible collection location = /home/master/.ansible/collectons:/usr/share/ansible/collectons
  executable location = /usr/bin/ansible
  python version = 3.8.10 (default, Mar 18 2025, 20:04:55) [GCC 9.4.0]
  jinja version = 2.10.1
  libyaml = True
master@master-vm:~$ nano create_user.yml
master@master-vm:~$ mkdir test_1
master@master-vm:~$ cd test_1/
master@master-vm:~/test_1$ nano inventory.ini
master@master-vm:~/test_1$ whoami
master
master@master-vm:~/test_1$ nano create_user.yml
master@master-vm:~/test_1$ ansible -i inventory.ini all -m ping
192.168.147.130 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
192.168.147.129 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
```

4)Run the playbook

```
master@master-vm:~/test_1$ ansible-playbook -i inventory.ini create_user.yml --ask-become-pass
BECOME password:

PLAY [Create a user and add to sudousers group] *****

TASK [Gathering Facts] *****
ok: [192.168.147.130]
ok: [192.168.147.129]

TASK [Ensure the sudousers group exists] *****
changed: [192.168.147.130]
changed: [192.168.147.129]

TASK [Create user with home directory] *****
changed: [192.168.147.130]
changed: [192.168.147.129]

PLAY RECAP *****
192.168.147.129 : ok=3  changed=2  unreachable=0  failed=0  skipped=0  rescued=0  ignored=0
192.168.147.130 : ok=3  changed=2  unreachable=0  failed=0  skipped=0  rescued=0  ignored=0
```

5)Verify the user on remote machines

```
master@master-vm:~/test_1$ ssh worker1@192.168.147.129
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-136-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/proid devuser
ls -ld /home/devuser

Expanded Security Maintenance for Applications is not enabled.

7 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

1 additional security update can be applied with ESM Apps.
Learn more about enabling ESM Apps service at https://ubuntu.com/esm

New release '22.04.5 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Your Hardware Enablement Stack (HWE) is supported until April 2025.
Last login: Thu Apr 10 10:13:14 2025 from 192.168.147.128
worker1@worker1-vm:~$ id devuser
uid=1001(devuser) gid=1002(devuser) groups=1002(devuser),1001(sudousers)
worker1@worker1-vm:~$ ls -ld /home/devuser
drwxr-xr-x 2 devuser devuser 4096 Apr 10 10:13 /home/devuser
worker1@worker1-vm:~$
```