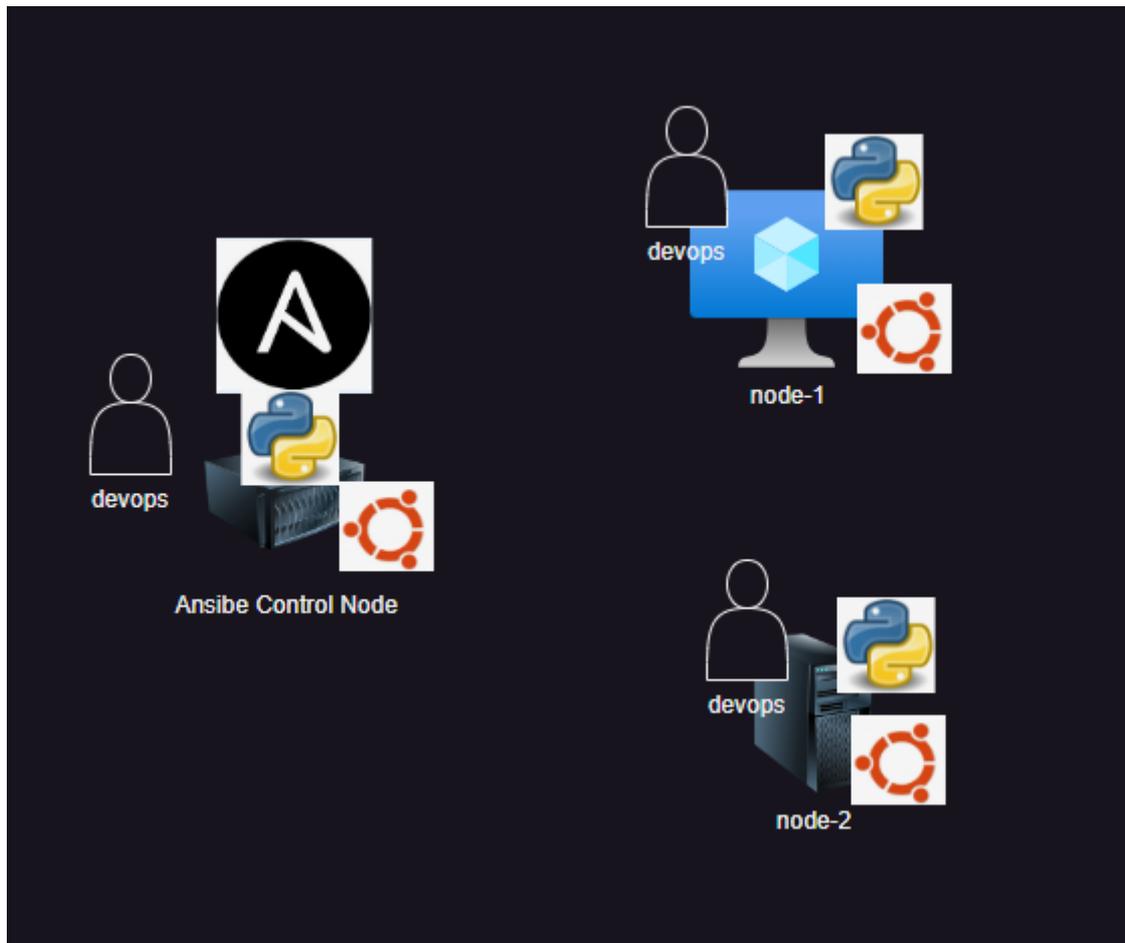


# Ansible Setup

## Combination - 1



- Overview
- We will use 3 ubuntu 22.04 virtual machines
- Lets use Azure in this case for vm creations
- Azure lets you set username and password while creation of virtual machines
- While creating vms we will set a user called as **devops**
- For detailed creation of vms watch classroom video
- We use ansible to install softwares etc which require administrative permissions (sudo)
- In this case **devops** user has sudo permissions
- ssh into node-1 (ansible control node) and install ansible [Refer Here](#)

```
sudo apt update
sudo apt install software-properties-common
sudo add-apt-repository --yes --update ppa:ansible/ansible
sudo apt install ansible -y
```

- Check if the ansible is installed correctly

```
ansible --version
```

```

ansible control node x node-3 x node-2 x + v
devops@node-1:~$ ansible --version
ansible [core 2.16.8]
  config file = /etc/ansible/ansible.cfg
  configured module search path = ['/home/devops/.ansible/plugins/modules', '/usr/share/ansible/
plugins/modules']
  ansible python module location = /usr/lib/python3/dist-packages/ansible
  ansible collection location = /home/devops/.ansible/collections:/usr/share/ansible/collections
  executable location = /usr/bin/ansible
  python version = 3.10.12 (main, Nov 20 2023, 15:14:05) [GCC 11.4.0] (/usr/bin/python3)
  jinja version = 3.0.3
  libyaml = True
devops@node-1:~$

```

- Lets check if the ansible can communicate with node-2 and node-3
- Lets create a inventory.
  - Create a file called as `hosts` with the following entries

```

node-2
node-3

```

- ansible has a command to check connectivity `ansible -m ping --ask-pass -i hosts all`

```

devops@node-1:~$ ansible -m ping --ask-pass -i hosts all
SSH password:
node-2 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
node-3 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
devops@node-1:~$

```

## Terms

- Desired State: State which we have asked for
- Configuration Drift: difference between the desired state and current state.
- Idempotent: The property of a system to give same result irrespective of number of executions.