



# **Experiment No. 1.3**

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Subject Name: CI/CD Pipelines Subject Code: 22CAP-781

## 1. Aim/Overview of the practical:

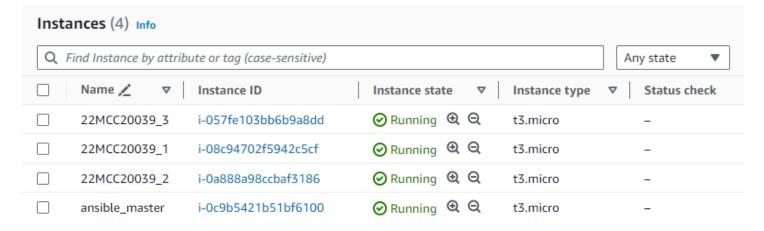
a) Install and Configure Ansible Server in AWS/Microsoft Azure/Docker and two nodes (YOUR UID\_1, YOUR UID\_2).

b) Create a connection between Ansible Server and Nodes.

## 2. Code for practical:

A)

- Open AWS account and click to EC2 instance.
- Create an instance with name ansible\_master and create a security key RSA, pem.
- Select Ubuntu and click on create Instance.
- When instance start, select and click on Instance State, Click on Actions > Create Similar instances.
- Select same security key for ssh and create 3 new instances.



Select master node and click on connect by ssh.

B)

• Use following command to install ansible





#### sudo apt update

#### sudo apt install ansible -y

• Go to .ssh and create an ansible\_key with vim and paste contents of security key.pem file.

cd.ssh

vim ansible key

• Initlize ssh key using your Private server address:

sudo ssh -i ~/.ssh/ansible key ubuntu@13.53.124.96

• Make a directory named ansible and inside it make a file using vim hosts.

mkdir ansible

cd ansible

vim hosts

• Inside hosts add server IP addresses and If you want to install any dependencies you can do it in here.

```
[servers]
server1 ansible_host=13.53.124.96
server2 ansible_host=13.60.14.159
server3 ansible_host=51.20.190.151

[all:vars]
ansible_python_interpreter=/usr/bin/python3
```

• Provide ansible hosts list like following

ansible-inventory --list -y /home/ubuntu/ansible/hosts

Provide permissions to .ssh and ansible\_key

chmod 700 ~/.ssh

chmod 600 ~/.ssh/ansible\_key

• To ping all servers use command:

ansible all -m ping -i /home/ubuntu/ansible/hosts --private-key=~/.ssh/ansible key





```
This key is not known by any other names
The authenticity of host '51.20.190.151 (51.20.190.151)' can't be established.
ED25519 key fingerprint is SHA256:E/lMdAeIOyssTqa/XV1JnMQOTmyXkWcoheJ8ObTACNw.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? server1 | CHANGED | rc=0 >>
                                                          shared buff/cache available
                  total
                                 used
                                                                           385Mi
                  924Mi
                                                                                          596Mi
                                               366Mi
Mem:
Swap:
yes
server2 | CHANGED | rc=0 >>
                                                           shared buff/cache
                                used
Mem:
                  924Mi
                                                                           329Mi
                                                                                          589Mi
 Swap:
yes
server3 | CHANGED | rc=0 >>
                                 used
                                                free
                                                            shared buff/cache
                                                                                     available
                  total
                  924Mi
                                                                                          589Mi
ubuntu@ip-172-31-18-171:~$ ansible all -m ping -i /home/ubuntu/ansible/hosts --private-key=~/.ssh/ansible_key
ubuntu@ip-172-31-18-171:~$
```

• To view free space in servers, use command:

ansible all -a ''free -h'' -i /home/ubuntu/ansible/hosts --private-key=~/.ssh/ansible\_key