

=> Ansible :- configuration management tool

Part 2

=> Setup => setting up to work with Ansible

① create 3 Linux vms in AWS

2 -> Managed Nodes

1 -> Control Node



② Setup User & configure user in sudoers file & update sshd config file. ↳ in all 3 vms created

a) create users (All vms)

\$ sudo useradd ansible

\$ sudo passwd ansible



b) configure user in sudoers file

\$ sudo visudo

ansible ALL=(ALL) NOPASSWD: ALL



c) update sshd config file

sudo vi /etc/ssh/sshd_config
PermitEmptyPasswords -> yes

↳ Password authentication ↳

d) Restart the servers

sudo service sshd restart

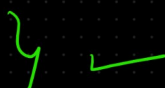


③ Install Ansible in Control Node

a) switch to Ansible users

\$ sudo su ansible

cd ~



b) install python

\$ sudo yum install python3 -y

③ To check python version

```
$ python3 --version
```

④ Install PIP (python Package manager)

```
$ sudo yum -y install python3-pip
```

⑤ Install Ansible using python PIP

```
$ pip3 install ansible --user
```

⑥ verify ansible version

```
$ ansible --version
```

⑦ create ansible folder under /etc

```
$ sudo mkdir /etc/ansible
```

④ Generate SSH key in Control Node & copy SSH key into Managed Nodes

a) Switch to ansible user

```
$ sudo su ansible
```

b) Generate ssh key

```
$ ssh-keygen (after this just press enter-enter-enter)
```

c) Copy it to Managed Nodes as ansible user.

```
$ ssh-copy-id ansible@<ManagedNode-Private-IP>
```

172.31.3.0

172.31.0.88

⑤ Update Host Inventory in Ansible server to add managed node servers details - _____

`sudo vi /etc/ansible/hosts`

[webservers]

private & managed node

[dbservers]

private & managed node

⑥ Test Connectivity

`ansible all -m ping`

Ansible Ad-Hoc commands

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`ansible [all/group-name/host-name/ip] -m <module> -a <args>`

`ansible all -m ping`

We have many modules in ansible to perform configuration management

ping, shell, yum, copy, service

ping module --> `$ ansible all -m ping`, `ansible webservers -m ping`

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shell module --> `$ ansible all -m shell -a date`, `$ ansible all -m shell -a uptime`

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Yum module --> `ansible webservers -b -m yum -a "name=git"`

=====

Ansible Playbooks

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Playbook is a YAML file which contains one or more tasks

Using Playbook we define what tasks to be performed and where to be performed

Telusko:
| Aliem
-

id: 4
name: Harsh
gender: male
hobbies:
- cricket
- chess
- Pubg

student:
id: 4
name: sushil
gender: male
address:
city: mumbai
country: India
hobbies:
- cricket
- basketball

Note & indent spaces most important in yaml file

employee:

id:1

name: Rohan

address:

city: bengaluru

country: india

skills:

- java

- python

- devOps

...

---> start of yml file

... > end of yml file

Writing Playbooks

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1) Host Section : Represents target machines to execute tasks. This configuration depends on Ansible Inventory file

2) Variable Section : used to declare variables for playbook execution

3) Task Section: defines what operations/tasks we want to perform using Ansible

\$ ansible-playbook <playbook-yml-filename>