Ansible Project: Reboot Servers

Ansible Project:

Rebooting servers using Ansible.

Problem Statement:

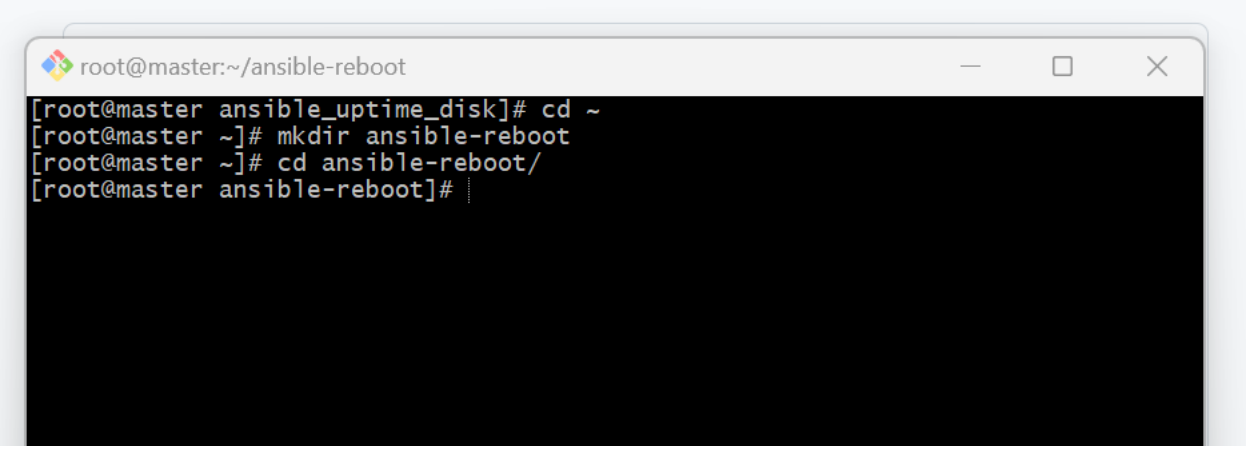
-Some companies reboot all their servers once every week for good maintenance of the server. This process can be tedious doing it manually especially if you are working with a lot of servers. A company submitted a job ticket for automating the task of rebooting multiple servers using Ansible.

Solution Statement:

-For demonstration purposes, I am going to use three servers to solve the problem. The concept is the same if you are working with 3 servers or 100 servers. One of my servers will be used as the master node and the other two as the target nodes. I am going to create an Ansible playbook that will reboot the target servers from the inventory or host file.

Some of the reasons why a company would rebook their servers every week are regular restart of a server makes the environment more stable and better performing. Also, regular reboots protect the business from outages and downtime.

Creating a directory for Ansible files including the playbook



Creating an inventory file to keep track of all the hosts.

```
root@master:~/ansible-reboot
[root@master ansible-reboot]# ls
inventory.txt
[root@master ansible-reboot]# cat inventory.txt


# Target Nodes

[servers]
192.168.43.13
192.168.43.15



[root@master ansible-reboot]#
```

Creating a configuration for ansible

```
root@master:~/ansible-reboot
[root@master ansible-reboot]# vim ansible.cfg
[root@master ansible-reboot]# ls
ansible.cfg  inventory.txt
[root@master ansible-reboot]# cat ansible.cfg

[defaults]
host_key_checking = False
inventory=inventory.txt
interpreter_python=auto_silent
localhost_warning=false
[root@master ansible-reboot]#
```

Validate the inventory

```
root@master:~/ansible-reboot
[root@master ansible-reboot]# ansible-inventory --graph
@all:
  |--@servers:
  |  |--192.168.43.13
  |  |--192.168.43.15
  |--@ungrouped:
[root@master ansible-reboot]#
```

Checking the connectivity of all the target nodes

```
root@master:~/ansible-reboot
[root@master ansible-reboot]# ansible all -m ping
192.168.43.13 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python"
    },
    "changed": false,
    "ping": "pong"
}
192.168.43.15 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python"
    },
    "changed": false,
    "ping": "pong"
}
[root@master ansible-reboot]#
```

Checking the playbook syntax before running it

```
root@master:~/ansible-reboot
[root@master ansible-reboot]# ansible-playbook reboot.yml --syntax-check

playbook: reboot.yml
[root@master ansible-reboot]#
```

Playbook output

```
root@master:~/ansible-reboot

PLAY [servers] ***************************************************************

TASK [Gathering Facts] *******************************************************
ok: [192.168.43.13]
ok: [192.168.43.15]

TASK [restart server] ********************************************************
changed: [192.168.43.13]
changed: [192.168.43.15]

TASK [waiting for the server to come back] ***********************************
ok: [192.168.43.15 -> localhost]
ok: [192.168.43.13 -> localhost]

PLAY RECAP *******************************************************************
192.168.43.13              : ok=3    changed=1    unreachable=0    failed=0    s
192.168.43.15              : ok=3    changed=1    unreachable=0    failed=0    s
```

Now, we can be able to reboot the target server automatically.