CREATING ANSIBLE PLAYBOOKS

Installing software using Ansible Playbook

Pre-requisite

1. 3 AWS Servers
2. Keyless Access configured between master and slaves
3. Configuration of slaves in Ansible Master's /etc/ansible/hosts
4. Slaves are called slave1 and slave2 respectively

Creating Ansible Playbook

Step 1: Edit an ansible playbook in a new folder called 'ansible', by using the following commands:

```
$ mkdir ansible
$ cd ansible
$ sudo nano play.yaml
```

Step 2: Edit the play.yaml with the following syntax:

```
---
 -  hosts: slave1
    become: yes
    name: Installing apache2 on slave1
    tasks:
     - name: Install apache2
       apt: name=apache2 state=latest
 -  hosts: slave2
    become: yes
    name: Installing nginx on slave2
    tasks:
     - name: installing nginx
       apt: name=nginx state=latest
```

```
  GNU nano 2.9.3                                          play.yaml

---

- hosts: slave1
  become: yes
  name: Installing nginx on slave1
  tasks:
   - name: Installing
     apt: name=nginx state=latest

- hosts: slave2
  become: yes
  name: Installing apache2 on slave2
  tasks:
   - name: Installing
     apt: name=apache2 state=latest
```

Step3: Run the Ansible playbook using the following command:

```
$ ansible-playbook play.yaml
```

```
ubuntu@ip-172-31-24-91:~/ansible$ ansible-playbook play.yaml

PLAY [Installing nginx on slave1] **********************************************************************************

TASK [Gathering Facts] *********************************************************************************************
ok: [slave1]

TASK [Installing] **************************************************************************************************
changed: [slave1]

PLAY [Installing apache2 on slave2] ********************************************************************************

TASK [Gathering Facts] *********************************************************************************************
ok: [slave2]

TASK [Installing] **************************************************************************************************
changed: [slave2]

PLAY RECAP *********************************************************************************************************
slave1                     : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
slave2                     : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

You have successfully installed nginx and apache2 on slave machines, based on their name.

Executing scripts using Ansible Playbook

Step 1: Create a sample script in the ansible folder; here we are creating a script to enter some text in a file

```
$ sudo nano script.sh
```

Write the following syntax in the script:

```
#!/bin/sh
echo “hello world” > /var/www/html/1.html
```

Step 2: Let’s create the playbook now, which is going to execute this script. Let’s add a task to our previous written playbook for slave2.

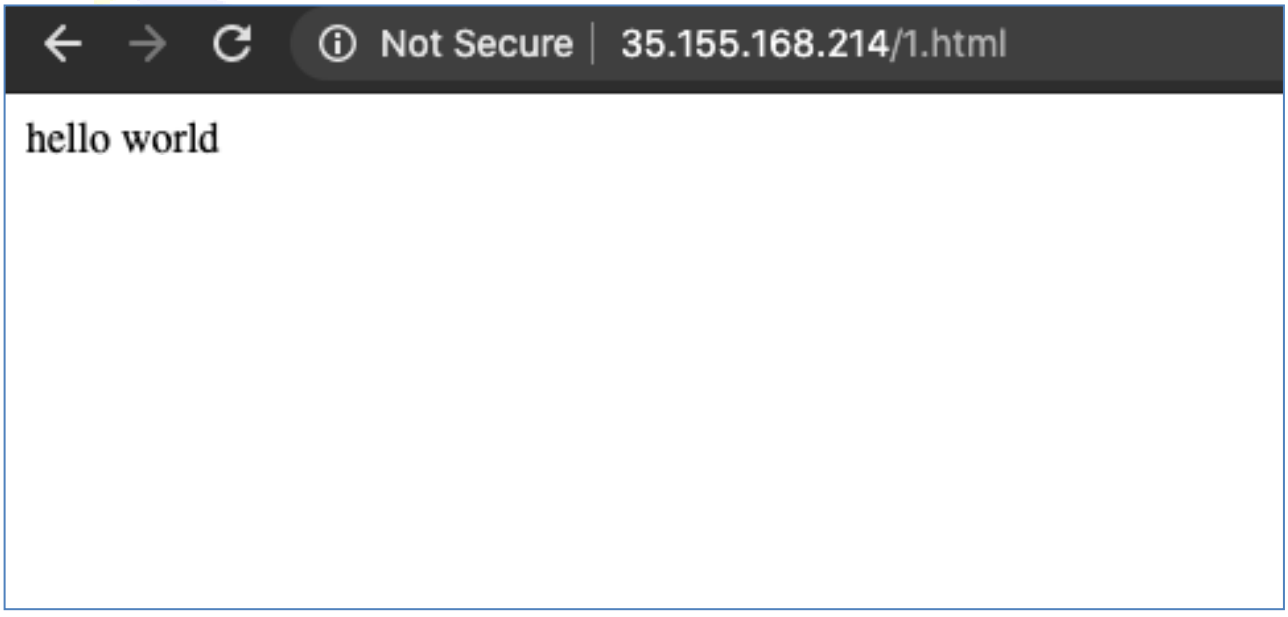
```
---
 -  hosts: slave1
    become: yes
    name: Installing apache2 on slave1
    tasks:
     - name: Install apache2
       apt: name=apache2 state=latest
 -  hosts: slave2
    become: yes
    name: Installing nginx on slave2
    tasks:
     - name: installing nginx
       apt: name=nginx state=latest
     - name: Running a script
       script: script.sh
```

Step 3: Let's run the script now, using the following syntax:

```
$ ansible-playbook play.yaml
```

```
ubuntu@ip-172-31-24-91:~/ansible$ ansible-playbook play.yaml

PLAY [Installing nginx on slave1] **********************************************

TASK [Gathering Facts] *********************************************************
ok: [slave1]

TASK [Installing] **************************************************************
ok: [slave1]

PLAY [Installing apache2 on slave2] ********************************************

TASK [Gathering Facts] *********************************************************
ok: [slave2]

TASK [Installing] **************************************************************
ok: [slave2]

TASK [run script] **************************************************************
changed: [slave2]

PLAY RECAP *********************************************************************
slave1                     : ok=2    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
slave2                     : ok=3    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

Let's verify the output by going to our browser, and navigating to <slave-2-ip>/1.html



With this, we have successfully completed our Ansible Playbook hands-on.