Module 9: Configuration Management with Ansible

Demo Document - 4

edureka!

Demo – 4: Ansible In Class Project

Note: The text editor used in this demo is vi. You can use any editor of your choice. Also, use a different clean ubuntu VM as a slave VM for this DEMO with connection set up on it.

1. Create a new ansible role

   Syntax: sudo ansible-galaxy init <roleName>

   ```
   edureka@master:/etc/ansible/roles$ sudo ansible-galaxy init inClassProj
   [sudo] password for edureka:
   - inClassProj was created successfully
   ```

2. Now, edit the main.yml file in the tasks directory of your role folder

   Syntax: sudo vi roles/roleName/tasks/main.yml

3. Add tasks to your role

```
---
- name: apt-update
  apt:
    update_cache: yes


- name: Install Docker
  apt:
    name: docker.io
    state: present


- name: Create new directory
  file:
    path: /home/edureka/Downloads/dockDeploy
    state: directory


- name: Copy war file
  copy:
    src: /home/edureka/Downloads/addressbook.war
    dest: /home/edureka/Downloads/dockDeploy/


- name: Copy Dockerfile
  copy:
    src: /home/edureka/Downloads/Dockerfile
    dest: /home/edureka/Downloads/dockDeploy/


- name: Build Docker Image
  command: chdir=/home/edureka/Downloads/dockDeploy/ docker build . -t
edureka/inclass


- name: Run Docker Container
  command: chdir=/home/edureka/Downloads/dockDeploy/ docker run -it -d -p
8085:8080 edureka/inclass
```

3. Add tasks to your role

4. Create a playbook and call the role inside of it

Syntax: sudo vi <playbookName>

```
---
- hosts: slave1
  become: true
  roles:
  - role: inClassProj
```
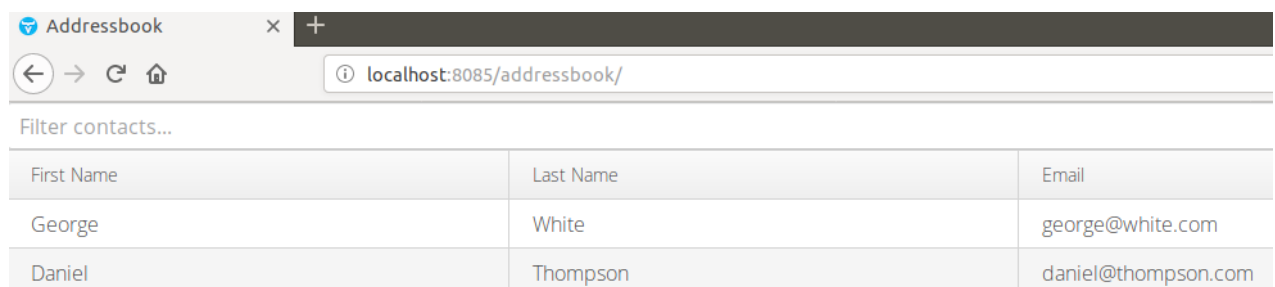
5. Execute the playbook with -K flag to input the sudo password for your slave machine

Syntax: ansible-playbook -K <playbookName.yaml>

```
edureka@master:/etc/ansible$ ansible-playbook -K inClass.yaml
SUDO password:

PLAY [slave1] *************************************************************************************

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

TASK [inClassProj : apt-update] ******************************************************************
changed: [slave1]

TASK [inClassProj : Install Docker] **************************************************************
changed: [slave1]

TASK [inClassProj : Create new directory] *********************************************************
changed: [slave1]

TASK [inClassProj : Copy war file] ****************************************************************
changed: [slave1]

TASK [inClassProj : Copy Dockerfile] **************************************************************
changed: [slave1]

TASK [inClassProj : Build Docker Image] ***********************************************************
changed: [slave1]

TASK [inClassProj : Run Docker Container] *********************************************************
changed: [slave1]

PLAY RECAP ***************************************************************************************
slave1                     : ok=8     changed=7    unreachable=0    failed=0
```

6. Check your slave browser to check if the app has been deployed

Browser link: localhost:8085/addressbook

First Name	Last Name	Email
George	White	george@white.com
Daniel	Thompson	daniel@thompson.com