

Module 9: Configuration Management with Ansible

Demo Document - 3

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Demo – 3: Ansible Roles (Setting up nginx using Ansible Roles)

Note: The text editor used in this demo is vi. You can use any editor of your choice.

Note: Create a custom index.html file and past it inside the roleName/files directory inside your ansible/roles directory

- Navigate to the roles directory in ansible folder

Syntax: `cd /etc/ansible/roles`

```
edureka@edureka:~$ cd /etc/ansible/roles/  
edureka@edureka:/etc/ansible/roles$
```

- Use the ansible-galaxy command to create a role directory structure

Syntax: `ansible-galaxy init roleName`

```
edureka@edureka:/etc/ansible/roles$ sudo ansible-galaxy init demo-role  
- demo-role was created successfully
```

```
edureka@edureka:/etc/ansible/roles$ ls demo-role  
defaults  files  handlers  meta  README.md  tasks  templates  tests  vars
```

- Open and edit the main.yml file inside the tasks folder

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

```
edureka@edureka:/etc/ansible/roles$ sudo vi demo-role/tasks/main.yml
```

```
---
- name: Install nginx web server
  apt: pkg=nginx state=installed update_cache=true
  notify:
    - start nginx

- name: Upload
  copy: src=index.html dest=/usr/share/nginx/www/ mode=0644
  register: php
  ignore_errors: True

- name: Remove index.html for host
  command: rm /usr/share/nginx/www/index.html
  when: php|success

- name: Upload default index.html for host
  copy: src=index.html dest=/usr/share/nginx/www/ mode=0644
  when: php|failed
```

- Edit the main.yml inside the handlers directory

Syntax: `sudo vi roleName/handlers/main.yml`

```
edureka@edureka:/etc/ansible/roles$ sudo vi demo-role/handlers/main.yml
```

```
---  
- name: start nginx  
  service: name=nginx state=started
```

- Inside the ansible directory create and edit a new playbook to use the role in

Syntax: `sudo vi roleName`

```
edureka@edureka:/etc/ansible$ sudo vi RolesDemo.yml
```

```
---  
- hosts: all  
  become: true  
  vars:  
    ansible_become_pass: edureka  
  roles:  
    - role: demo-role
```

- Now execute the playbook using the `ansible-playbook` command

Syntax: `ansible-playbook playbookName`

```

edureka@edureka:/etc/ansible$ ansible-playbook RolesDemo.yml

PLAY [all] *****

TASK [Gathering Facts] *****
ok: [app1]
ok: [db1]

TASK [demo-role : Install nginx web server] *****
changed: [db1]
changed: [app1]

TASK [demo-role : Upload] *****
ok: [db1]
ok: [app1]

TASK [demo-role : Remove index.html for host] *****
skipping: [app1]
skipping: [db1]

TASK [demo-role : Upload default index.html for host] *****
changed: [app1]
changed: [db1]

RUNNING HANDLER [demo-role : start nginx] *****
ok: [app1]
ok: [db1]

PLAY RECAP *****
app1                : ok=5    changed=2    unreachable=0    failed=0
db1                 : ok=5    changed=2    unreachable=0    failed=0

```

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