

Module 5: Ansible Assignment - 3

1. Create 2 Ansible roles
2. Install Apache2 on slave1 using one role and NGINX on slave2 using the other role
2. Above should be implemented using different Ansible roles

Solution:-

```
$ cd /etc/ansible/roles
roles$ sudo ansible-galaxy init apache2
```

```
Server@Ansible-Server:/home/Server/ansible/roles$ sudo ansible-galaxy init Server.apache2
- Role Server.apache2 was created successfully
Server@Ansible-Server:/home/Server/ansible/roles$ sudo ansible-galaxy init Server.nginx
- Role Server.nginx was created successfully
Server@Ansible-Server:/home/Server/ansible/roles$ ls
Server.apache2  Server.nginx
Server@Ansible-Server:/home/Server/ansible/roles$ cd Server.apache2/
Server@Ansible-Server:/home/Server/ansible/roles/Server.apache2$ ls -al
total 44
drwxr-xr-x 10 root  root  4096 Aug 15 12:48 .
drwxrwxr-x  4 Server Server 4096 Aug 15 12:49 ..
-rw-r--r--  1 root  root  1328 Aug 15 12:48 README.md
drwxr-xr-x  2 root  root  4096 Aug 15 12:48 defaults
drwxr-xr-x  2 root  root  4096 Aug 15 12:48 files
drwxr-xr-x  2 root  root  4096 Aug 15 12:48 handlers
drwxr-xr-x  2 root  root  4096 Aug 15 12:48 meta
drwxr-xr-x  2 root  root  4096 Aug 15 12:48 tasks
drwxr-xr-x  2 root  root  4096 Aug 15 12:48 templates
drwxr-xr-x  2 root  root  4096 Aug 15 12:48 tests
drwxr-xr-x  2 root  root  4096 Aug 15 12:48 vars
Server@Ansible-Server:/home/Server/ansible/roles/Server.apache2$ cd tasks/
Server@Ansible-Server:/home/Server/ansible/roles/Server.apache2/tasks$ sudo vi install.yml
```

```
tasks$ sudo vi install.yml
Press I
----
- name: installing apache2
  apt: name=apache2 state=latest
:wq!
```

```
---
- name: installing apache2
  apt: name=apache2 state=latest
~
```

```
$ sudo vi main.yml
```

```
Server@Ansible-Server:/home/Server/ansible/roles/Server.apache2/tasks$ sudo vi main.yml
```

Press I

```
- include_tasks: install.yml
```

```
--
- include_tasks: install.yml
~
```

```
$ cd
```

```
$ sudo vi play3.yml
```

```
Server@Ansible-Server:/home/Server/ansible/roles/Server.apache2/tasks$ cd
Server@Ansible-Server:/home/Server$ sudo vi play3.yml
```

Press I

```
- name: installing apache2 on Slave1
  hosts: Slave1
  become: true
  roles:
  - apache2
```

```
- name: installing nginx on Slave2
  hosts: Slave2
  become: true
  roles:
  - nginx
```

```

---
- name: installing apache2 on Slave1
  hosts: Slave1
  become: true
  roles:
    - Server.apache2

- name: installing nginx on Slave2
  hosts: Slave2
  become: true
  roles:
    - Server.nginx

```

tasks\$ sudo vi install.yml

```

Server@Ansible-Server:/home/Server$ cd ansible/roles/Server.nginx/tasks/
Server@Ansible-Server:/home/Server/ansible/roles/Server.nginx/tasks$ sudo vi install.yml

```

Press I

```

---
- name: installing nginx
  apt: name=nginx state=latest
:wq!

```

```

---
- name: installing nginx
  apt: name=nginx state=latest

```

\$ sudo vi main.yml

```

Server@Ansible-Server:/home/Server/ansible/roles/Server.nginx/tasks$ sudo vi main.yml

```

Press I

```

---
- include_tasks: install.yml
:wq!

```

```

[ ]--
- include_tasks: install.yml
~

```

```
$ cd
```

```
$ ansible-playbook play3.yml --syntax-check
```

```
Server@Ansible-Server:/home/Server/ansible$ ansible-playbook play3.yml --syntax-check
playbook: play3.yml
```

```
$ ansible-playbook play3.yml --check
```

```
Server@Ansible-Server:/home/Server/ansible$ ansible-playbook play3.yml --check

PLAY [installing apache2 on Slave1] *****
*****
**

TASK [Gathering Facts] *****
*****
**
ok: [172.31.41.112]

TASK [Server.apache2 : include_tasks] *****
*****
**
included: /home/Server/ansible/roles/Server.apache2/tasks/install.yml for 172.31.41.112

TASK [Server.apache2 : installing apache2] *****
*****
**
changed: [172.31.41.112]

PLAY [installing nginx on Slave2] *****
*****
**

TASK [Gathering Facts] *****
*****
**
```

```

PLAY [installing nginx on Slave2] *****
*****
**

TASK [Gathering Facts] *****
*****
**
ok: [172.31.35.248]

TASK [Server.nginx : include_tasks] *****
*****
**
included: /home/Server/ansible/roles/Server.nginx/tasks/install.yml for 172.31.35.248

TASK [Server.nginx : installing nginx] *****
*****
**
changed: [172.31.35.248]

PLAY RECAP *****
*****
172.31.35.248      : ok=3    changed=1    unreachable=0    failed=0    skippe
d=0    rescued=0    ignored=0
172.31.41.112     : ok=3    changed=1    unreachable=0    failed=0    skippe
d=0    rescued=0    ignored=0

```

\$ ansible-playbook play3.yml

```

Server@Ansible-Server:/home/Server/ansible$ ansible-playbook play3.yml

PLAY [installing apache2 on Slave1] *****
*****
**

TASK [Gathering Facts] *****
*****
**
ok: [172.31.41.112]

TASK [Server.apache2 : include_tasks] *****
*****
**
included: /home/Server/ansible/roles/Server.apache2/tasks/install.yml for 172.31.41.112

TASK [Server.apache2 : installing apache2] *****
*****
**
changed: [172.31.41.112]

PLAY [installing nginx on Slave2] *****
*****
**

TASK [Gathering Facts] *****
*****
**

```



```

PLAY [installing nginx on Slave2] *****
*****
**

TASK [Gathering Facts] *****
*****
**
ok: [172.31.35.248]

TASK [Server.nginx : include_tasks] *****
*****
**
included: /home/Server/ansible/roles/Server.nginx/tasks/install.yml for 172.31.35.248

TASK [Server.nginx : installing nginx] *****
*****
**
changed: [172.31.35.248]


PLAY RECAP *****
*****
**
172.31.35.248      : ok=3    changed=1    unreachable=0    failed=0    skippe
d=0    rescued=0    ignored=0
172.31.41.112     : ok=3    changed=1    unreachable=0    failed=0    skippe
d=0    rescued=0    ignored=0

```

* Apache2 install in node1:-

Not secure | 3.81.208.218

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Apache2 Default Page

Ubuntu

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in `/usr/share/doc/apache2/README.Debian.gz`**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```

/etc/apache2/
|-- apache2.conf
|   |-- ports.conf
|-- mods-enabled
|   |-- *.load
|   |-- *.conf
|-- conf-enabled
|   |-- *.conf
|-- sites-enabled

```

* NGINX install in Node2:-

