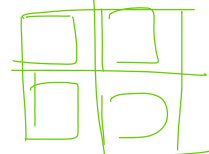


# Ansible Handlers and roles

Wednesday, December 1, 2021 09:40 AM

```

---
- name: learning handler concept
  hosts: all
  become: yes
  tasks:
    - name: Install apache httpd (state=present is optional)
      apt:
        name: apache2
        state: present
  handlers:
    - name: restart apache
      service:
        name: apache2
        state: restarted
  
```



## Ansible Roles

Ansible role is the primary mechanism for breaking a playbook into multiple files.

This simplifies writing complex playbooks, and it makes them easier to reuse components

Advantages of Ansible roles:

- Roles group content, allowing easy sharing of code with others.
- Roles can be written that define the essential elements of a system type: web server, database server, Git repository, or other purpose
- Roles make larger projects more manageable.
- Roles can be developed in parallel by different administrators

```

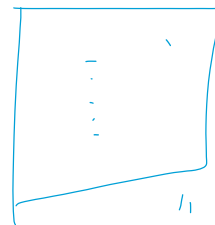
---
- hosts: webservers
  roles:
    - common
    - webservers
  
```

Creating Ansible roles (ansible-galaxy command)

```

[testuser@host2 nbs_roles]$ ansible-galaxy init /home/testuser/nbs_roles/webserver --offline
- Role /home/testuser/nbs_roles/webserver was created successfully
[testuser@host2 nbs_roles]$
[testuser@host2 nbs_roles]$ tree webserver
webserver
├── defaults
│   └── main.yml
├── files
├── handlers
│   └── main.yml
├── meta
│   └── main.yml
├── README.md
├── tasks
│   └── main.yml
├── templates
├── tests
│   ├── inventory
│   └── test.yml
├── vars
│   └── main.yml
8 directories, 8 files
[testuser@host2 nbs_roles]$
  
```

Subdirectory	Function
defaults	The <b>main.yml</b> file in this directory contains the default values of role variables that can be overwritten when the role is used. These variables have low precedence and are intended to be changed and customized in plays.
files	This directory contains static files that are referenced by role tasks.
handlers	The <b>main.yml</b> file in this directory contains the role's handler definitions.
meta	The <b>main.yml</b> file in this directory contains information about the role.



" 5" 228um (no)

<b>meta</b>	The <b>main.yml</b> file in this directory contains information about the role, including author, license, platforms, and optional role dependencies.
<b>tasks</b>	The <b>main.yml</b> file in this directory contains the role's task definitions.
<b>templates</b>	This directory contains Jinja2 templates that are referenced by role tasks.
<b>tests</b>	This directory can contain an inventory and <b>test.yml</b> playbook that can be used to test the role.
<b>vars</b>	The <b>main.yml</b> file in this directory defines the role's variable values. Often these variables are used for internal purposes within the role. These variables have high precedence, and are not intended to be changed when used in a playbook.

[https://docs.ansible.com/ansible/latest/user\\_guide/playbooks\\_reuse\\_roles.html](https://docs.ansible.com/ansible/latest/user_guide/playbooks_reuse_roles.html)

---

- hosts: webserver
- roles:
  - common
  - webserver

Handwritten notes in blue ink:

- 1
- 2
- (10, 15)
- (10, 2)
- Qm (10, 2);