Ansible Roles

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What is Ansible Roles?

- Roles provide a framework for fully independent, or interdependent collections of variables, tasks, files, templates, and modules.

- In Ansible, the role is the primary mechanism for breaking a playbook into multiple files. This simplifies writing **complex playbooks**, and it makes them easier to reuse.

- Roles are not playbooks. Roles are small functionality which can be independently used but have to be used within playbooks.

- There is no way to directly execute a role.

Roles: Directory Structure

```
└── roles
    └── common-server
        ├── defaults
        │   └── main.yml
        ├── files
        ├── handlers
        │   └── main.yml
        ├── meta
        │   └── main.yml
        ├── README.md
        ├── tasks
        │   └── main.yml
        ├── templates
        ├── tests
        │   ├── inventory
        │   └── test.yml
        └── vars
            └── main.yml
```

```
[root@rhel-8 roles]#
[root@rhel-8 roles]# tree apache
apache
├── 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
```

➢tasks – contains the main list of tasks to be executed by the role.

➢handlers – contains handlers, which may be used by this role or even anywhere outside this role.

➢defaults – default variables for the role.

➢vars – other variables for the role. Vars has the higher priority than defaults.

➢files – contains files required to transfer or deployed to the target machines via this role.

➢templates – contains templates which can be deployed via this role.

➢meta – defines some data / information about this role (author, dependency, versions, examples, etc,.)
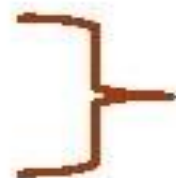
Playbook Structure

```
[ansible@localhost ansible-examples]$ cat site.yml
---



        - hosts: <GroupName>                    Play
          become: yes
          become_user: root
      tasks:
        - name: Task Name
          include_role:                         Role
            name: Role Name




[ansible@localhost ansible-examples]$ []
```

Thank You

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