Ansible 4:

Ansible roles: --> Webservers, Apache Tomcat

If you want to divide tasks from one playbook into smaller chunks or if you want to organize playbook better then we need Ansible roles. Tasks, Handlers all separate

Multiple yaml files

Tasks

Install httpd

Copy file

Handler

Start service

Multiple yaml files

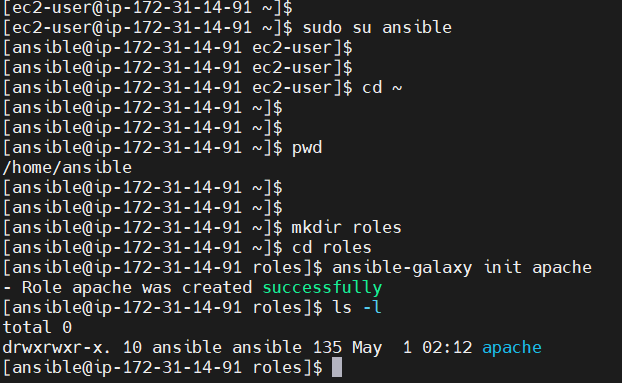
File

Multiple yaml files

Handler

When I breakdown one playbook into multiple chunks, then there is less ambiguity and issues. This is all possible with the concept of Ansible Roles

Whenever there are more tasks or more functionalities in our playbook, it becomes difficult to manage and maintain. Here Ansible Roles, come into picture, allow us to breakdown complex playbook into smaller chuncks that could be co-ordinated by a central entry point. To create Roles in Ansible, we have a concept called as “Ansible Galaxy”.



Practicals with Ansible roles:

sudo su ansible

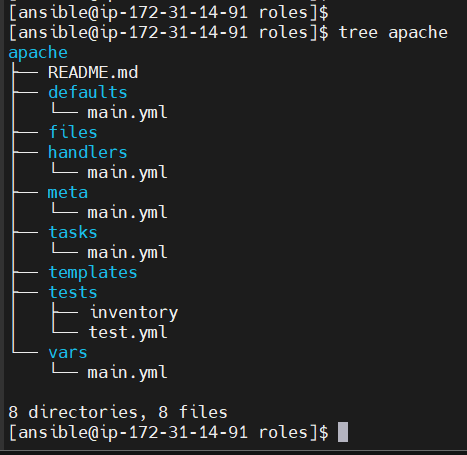
cd ~

pwd ---> /home/ansible

mkdir roles

cd roles

ansible-galaxy init apache ---> apache role is created



One playbook is divided into three parts

[ansible@ip-172-31-14-91 roles]$ cd apache/

[ansible@ip-172-31-14-91 apache]$ vi tasks/main.yml

[ansible@ip-172-31-14-91 apache]$

[ansible@ip-172-31-14-91 apache]$

[ansible@ip-172-31-14-91 apache]$ cat tasks/main.yml

---

# tasks file for apache

- name: Install httpd in only Managed node1

yum:

name: httpd

state: present

- name: Copy index.html file

copy:

src: index.html

dest: /var/www/html/index.html

notify:

- restart apache

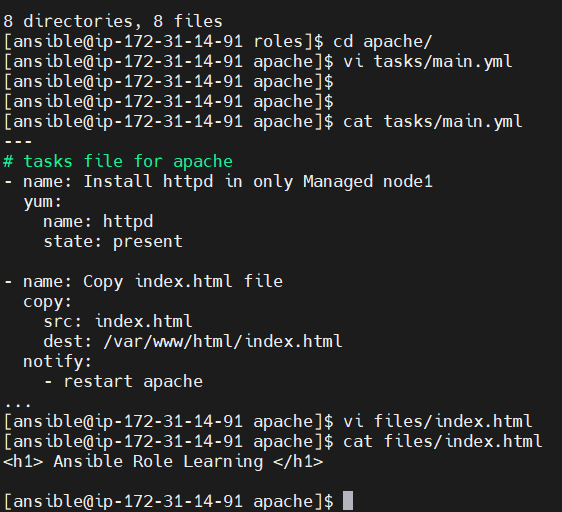
…

Step 2:

[ansible@ip-172-31-14-91 apache]$ vi files/index.html

[ansible@ip-172-31-14-91 apache]$ cat files/index.html

<h1> Ansible Role Learning </h1>



[ansible@ip-172-31-14-91 apache]$ cat handlers/main.yml

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# handlers file for apache

- name: restart apache

service:

name: httpd

state: restarted

...

[ansible@ip-172-31-14-91 apache]$ cd ..

[ansible@ip-172-31-14-91 roles]$ tree apache

apache

├── README.md

├── defaults

│   └── main.yml

├── files

│   └── index.html

├── handlers

│   └── main.yml

├── meta

│   └── main.yml

├── tasks

│   └── main.yml

├── templates

├── tests

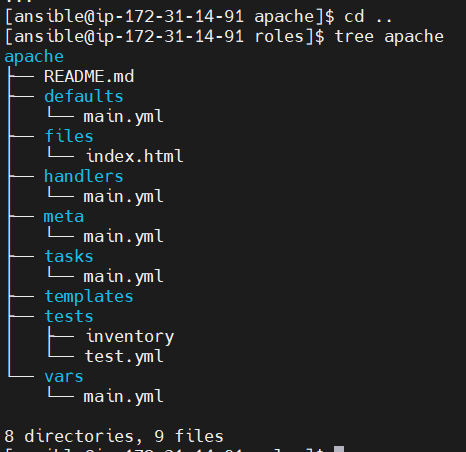
│   ├── inventory

│   └── test.yml

└── vars

└── main.yml

8 directories, 9 files



[ansible@ip-172-31-14-91 ~]$ vi runsetup

[ansible@ip-172-31-14-91 ~]$ cat runsetup

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- hosts: webservers

become: true

roles:

- apache

...

