

Ansible Roles



What is role?

2

- An Ansible role is a collection of tasks used to configure a host for a specific purpose, such as configuring a service.
- YAML files with a predefined directory structure are used to define roles.
- The following directories are found in a role directory structure: defaults, vars, tasks, files, templates, meta, and handlers.

Advantage of roles

3

- Roles provide a framework for completely self-contained or interdependent collections of variables, tasks, files, templates, and modules.
- The role is the primary mechanism in Ansible for dividing a playbook into multiple files.
- This simplifies the creation of complex playbooks and makes them more reusable.

What is the difference between roles and playbook in Ansible?

4

- A role is a set of tasks and additional files that are used to configure a host to serve a specific role.
- A playbook is a mapping of hosts and roles.

How to write an Ansible role?

5

- To create an Ansible role, use the `ansible-galaxy` command, which includes templates.
- This will create it in the default directory `/etc/ansible/roles` and make the necessary changes; otherwise, we must manually create each directory and file. where `ansible-galaxy` is the command used to create roles from templates.

Ansible roles Directory Structure

6

- Tasks
- Handlers
- Defaults
- Vars
- Files
- Templates
- Meta

- Contains the main list of tasks that the role must complete.

- A collection of handlers that can be used by this role or anywhere else.

- The role's default variables.

- Additional variables for the role.
- Vars takes precedence over defaults.

Files



- Files that must be transferred or deployed to the target machines via this role.

Templates

12

- A collection of templates that can be deployed using this role.

- Specifies some data/information about this role (author, dependency, versions, examples, and so on).