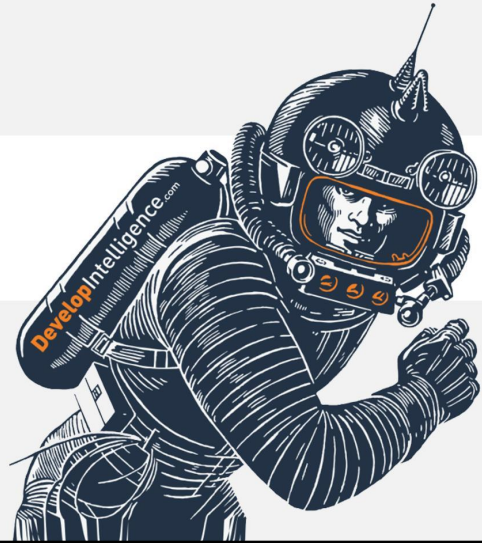# Ansible Roles

**Develop
Intelligence**

- **Role Structure**

- Ansible Galaxy

Roles

Roles are self-contained packages of closely related ansible content.

Roles allow for:
- Sharing
- Single responsibility organization
- Re-use

What would otherwise become a very long and complex playbook can be a set of roles included in a simple playbook.

Roles are packages of closely related ansible content that can be shared more easily, reused, and just break up what would become very complex plays. They are fully functional and self-contained. They help us organize, reuse, and share our ansible code.

Role Structure

```
webserver/
  README.md
  defaults/main.yml
  handlers/main.yml
  meta/main.yml
  tasks/main.yml
  tests/main.yml
  vars/main.yml
```

```
---
- hosts: webservers
  remote_user: root
  roles:
  - webserver
```

https://docs.ansible.com/ansible/latest/user_guide/playbooks_reuse_roles.html

Project with embedded roles

```
playbook.yml
 roles/
  common/
   README.md
   defaults/
   handlers/
   meta/
   tasks/
   tests/
   vars/
  webserver/
   README.md
   defaults/
   handlers/
   meta/
   tasks/
   tests/
   vars/
...
```

Basic inclusion of roles

```
---
- hosts: fullstack
  remote_user: root
  roles:
  - common
  - webserver
  - mysql_db
```

Newer syntax for more detailed ordering
and passing vars

```
---
- hosts: fullstack
  remote_user: root
  tasks:
  - include_role:
      name: common
    vars:
      foo: bar
```

Ansible Galaxy

ansible-galaxy
 - CLI tool for managing roles in shared repositories.

galaxy.ansible.com
 - a public shared repository where you can find roles other have uploaded.

https://galaxy.ansible.com/

ansible-galaxy install downloads a role from the ansible galaxy repository and places it in ~/.ansible/roles/
ansible-galaxy list displays a list of installed roles, with version numbers
ansible-galaxy remove [role] removes an installed role
ansible-galaxy init can be used to create a role template suitable for submission to Ansible Galaxy