Ansible Roles and Galaxy

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Roles

Roles Directory Structure

```
└───── roles
    ├──── builders
    ├──── server-common
    │      ├───── defaults
    │      ├───── files
    │      ├───── handlers
    │      ├───── meta
    │      ├───── tasks
    │      ├───── templates
    │      └───── vars
    └───── webservers
```
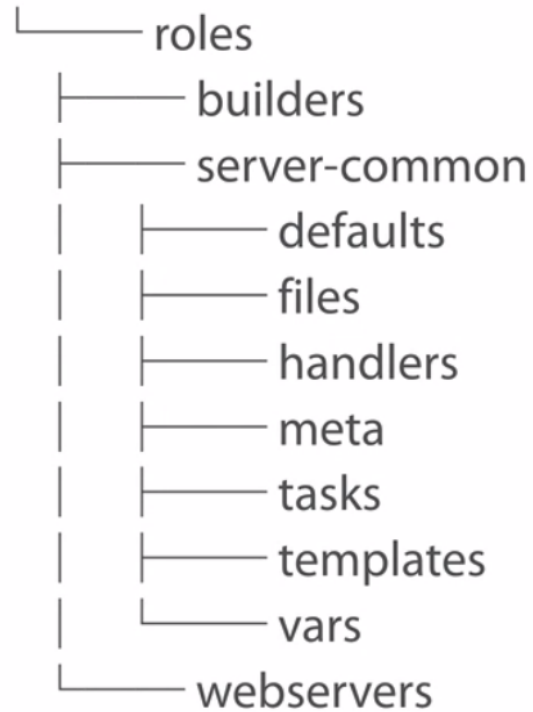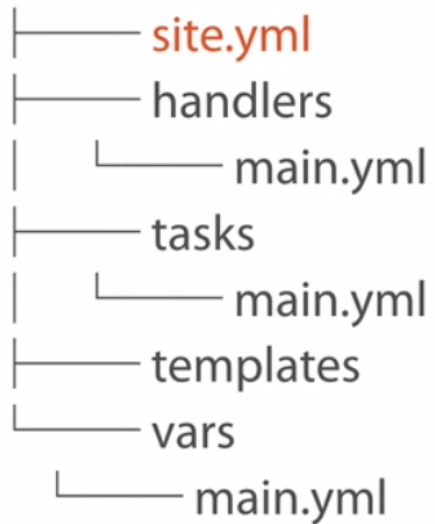
Primary file main.yaml

Primary file main.yaml

```
tasks/main.yml
---
- include: webservers.yml
- include: dbservers.yml
```

Can add includes to break-up long files

Primary file site.yaml

Primary file site.yaml

```
site.yml
---
- include: webservers.yml
- include: dbservers.yml
```

Can add includes to break-up long files

Adding Roles to Playbooks

```yaml
---
- hosts: code-dev
  roles:
    - server-common
    - builders
  gather_facts: no

  tasks:
    # Build your extra tasks here like
    # creating users, or deploying a specific config
```

Pre-tasks and Post-tasks

pre_tasks:

- Executes plays BEFORE roles
  - Use-Cases
    - Setup of maintenance windows
    - Removing servers from Load-balancers
    - Silencing alarms

post_tasks:

- Executes plays AFTER roles
  - Use-Cases
    - Clearing of maintenance windows
    - Adding servers to Load-balancers
    - Enabling Alarms

Adding Pre-tasks and Post-tasks

```yaml
---
- hosts: webservers
  pre_tasks:
    - # Remove from load-balancer
  roles:
    - server-common
    - jboss
  post_tasks:
    - # Add to load-balancer
  gather_facts: no
```

Demonstration: Creating Roles

Define "webserver" role

Define "dbserver" role

Define "common-server" role

Apply roles

Ansible Galaxy (Getting Roles)

Download   Share   Review

Installing Galaxy Roles

Use username.role

```
$ ansible-galaxy install username.role
```

Demonstration: Ansible Galaxy

Browse/Search Ansible Galaxy

Find a Role and install

Demonstration: Creating Roles

Define "webserver" role

Define "dbserver" role

Define "common-server" role

Apply roles

Demonstration: Creating Roles

Define "webserver" role

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Apply roles