Ansible Roles Cheatsheet

Roles provide a way of automatically loading certain var_files, tasks, and handlers based on a known file structure.

Roles also make sharing of configuration templates easier.

Roles require a particular directory structure.

Role definitions must contain at least one of the noted directories:

in /path /to/role:

- **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 (see Variables for more information).
- **vars** - Other variables for the role (see Variables for more information).
- **files** - Contains files which can be deployed via this role.
- **templates** - Contains templates which can be deployed via this role.
- **meta** - Defines some meta data for this role. See below for more details.

Unused directories need not exist.

With the exception of templates and files, each directory must include a main.yml if that directory is being used.

main.yml serves as the entry point for the role.

Files in the tasks, templates, and files directories may be referenced without path within the role.

To invoke a role in a playbook, you may use **import**role, **include**role, or use the role keyword.

Example:

```
---
- hosts: webservers
  tasks:
      - name: Include common role with variables
      - include_role:
          name: common
        vars:
          common_dist: centos
          common_size: medium
      - name: Include webserver role from non-standard path
        include_role:
          name: /opt/roles/webserver
```

Example using two roles in a playbook using various keywords as needed:

```
---
- hosts: webservers
  roles:
      - common
      - role: foo_app_instance
        vars:
          dir: '/opt/a'
          app_port: 5000
      - role: foo_app_instance
        vars:
          dir: '/opt/b'
          app_port: 5001
```

When a role is called in a playbook, Ansible looks for the role definition in ${PWD}/roles/<role_name>

- If ${PWD}/roles does not contain the sought role, then /etc/ansible/roles is checked.
- The "**roles_path**" configuration in ansible.cfg contains a colon delimited list of paths where roles are searched for by ansible.
- The full path to a role may also be specified with the role keyword to use a non-default path.

Example:

```
---
- hosts: webservers
  roles:
      - role: '/path/to/my/roles/common'
```

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