

Ansible Basics

Default config /etc/ansible/ansible.cfg

[defaults] - default paths + values, can be overridden
(inventory)

[privilege-escalation]

[parameters - connection]

[ssh - connection]

[persistent - connection]

[colors]

Config Priority

1) `ANSIBLE_CONFIG` directory variable definition

2) `ansible.cfg` file in directory run

3) `.ansible.cfg` file in user home directory

4) default /etc/ansible/ansible.cfg

`ansible - config list` - list all config

`ansible - config view` - shows current config file

`ansible - config dump` - shows current settings & why/where

Ansible Inventory - `.ini` or `.yaml` file

Ansible variables

In Playbook look like `'{{ http-port }}'` or `{{ http-port }}`

Variable file `web.yaml`

`http-port: 8081`

List Variables hold one or more values

`{{ values[0] }}`

Dictionary Variables - Key Variable Pairs

`{{ user.name }}` `{{ user.password }}`

Precedence Extra Vars → Playbook Vars → Host Vars → Group Vars

register: allows you to output data variable

variable scopes - host, global

group-names

magic variable `vars` var from different host hostvars

Ansible facts contain system info.

Ansible Playbook

Playbook = A single YAML file

Play - A set of activities to be run on a host

Task - An action to be performed on a host

- Execute a Command
- Run a Script
- Install a package
- Shut down / Restart

Module - Command, Script, yum, service, etc.

- Check option - dry run w/o changes
- diff option - show before and after comparison
- Syntax-check - check Syntax
- ansible-lint - check formatting

Ansible Conditionals

Conditional when! on a task runs if true

loop! allows a list of things to be run

i.e. install "{{ item.name }}"

when: environment == 'production'

loop is new with-items is older

with-files, with-mongo-db, etc.

lookup plugins

Ansible Modules

System, Commands, Files, DBs, Cloud, Windows, etc.

Ansible Handlers

Tasks triggered by events / notifications

Defined in playbook

Manage actions based on system state / configuration changes

Ansible
Galaxy

Ansible Roles

mysql, nginx

trigger tasks to install common pre reqs / Config

Ansible Collections

Package and distribute modules, roles, plugins, etc...