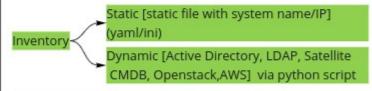
Ansible Architecture

Control Node/Workstation (Linux/Unix Only) yum install ansible python -y



Push a Task(Module with values) to Managed Hosts

- 1. Ad-Hoc Command (Development/Testing) One time NOT reusable ansible hostname -m Module_name -a 'option1=value1 option2=value2'
- 2. Playbook (Production) Reusable as many time ansible-playbook play1.yml

Playbook:

vim play1.yml

name: Playbook Purpose hosts: list_host

tasks:

- name: Install httpd Module_name: Module_options:
- name: Create user

Module name: Module_options:

INVENTORY:

Default File: /etc/ansible/hosts ustom File: YOUR CUSTOM PATH

ANSIBLE Configuration File:

Default File: /etc/ansible/ansible.cfg Level 1 Iser file(Home Dir): ~/.ansible.cfg Level 2 Project specific: ./ansible.cfg Level 3

Define Env Variable: ANSIBLE_CONFIG___#=/tmp/ansible.config_Level 4

1. Copy module.py from Control Node to Managed Host (Temp Folder)

- 2. Change permission of module.py to executable via chmod u+x module.py
- 3. Check & Execute using python and make changes (Desired State) Idempotent
- 4. Remove Module which was copied (rm -rf Module path)

DEFAULT if Nothing explicitly Mentioned ## ansible connection: ssh ansible_port: 22 (depend) ansible_user: devops # remote_user=devops ansible_password: redhat (SSH_KEY)

ansible_connection: winrm

ansible_port: 5986

ansible_user: devops (remote_user) ansible_password: redhat (SSH_KEY)

ansible_connection: network_cli/netconf

ansible_port: 22 (Depend)

ansible_user: admin (remote_user) ansible_password: student (SSH_KEY)

dempotent Modules/Behaviour

Desired State (OK, Changed, Fatal, ignoring)

Check if the Managed Hosts has already those configs?

f Yes, Nothing Happen

f No, Config Changed Done

In Network Device Case which doesn't have python(Normally):

- 1. Copy Module.py from Control Node to Itself(CN) (Temp Folder)
- 2. chmod u+x on the module copied on Control Node
- 3. Check & Execute and create commands if changes required
- 4. Push Commands to Device and (On Control Node) Remove Module which was copied from localhost (Control Node) (rm -rf Module_path)

Ansible is AgentLess

Managed Hosts/Nodes

Linux

devops user as root via sudo/su

ecome: true

ecome user: root

ecome_method: sudo/su ecome_ask_pass: true/false

Windows

become: true

ecome user: administrator ecome method: runas

ecome ask pass: true/false

thon May/May Not Network Device

ecome: true

ecome user: admin ecome method: enable ecome_ask_pass: true/false

Cloud