

## When Control Node and Managed hosts are same machine,  
then 'local' connection is used

ansible\_connection: local

# Ansible Architecture Agentless

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

Inventory

Static [static file with system name/IP  
(yaml/ini)]

Dynamic [Active Directory, LDAP, Satellite  
CMDB, Openstack,AWS] via python script

Push a Task 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:

Idempotent Modules/Behaviour

1. check first the current config
  2. compare current with desired config
  3. is if same, NO changes
  4. if not same, make changes to managed Hosts
- Desired State (OK, Changed, Fatal, ignoring)

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
3. Check & Execute and create commands if changes required
4. Push Commands to Device and Remove Module which was copied from  
localhost (Control Node) (rm -rf Module\_path)

1. Copy(put command) 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
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)

Managed Hosts/Nodes

Python Installed

Linux

become: true  
become\_user: root  
become\_method: sudo/su  
become\_ask\_pass: true/false

PowerShell Installed

Windows

become: true  
become\_user: administrator  
become\_method: runas  
become\_ask\_pass: true/false

Python May/Not

Network Device

become: true  
become\_user: admin  
become\_method: enable  
become\_ask\_pass: true/false

Cloud