

Configuration Management

✓ Can't go manually on every system or every server

So we developed configuration management

✓ ssh from 1 system to all other systems or main server to other servers

which is secure & helps us to automate things

✓ Change in 1 server it will automatically get deployed & or will be done in other servers also & this is called configuration management

✓ we do this by ci/cd

Continuous Integration — Streamlining the development and deployment

After
it is done ↓

written the code push it from remote repository to the production which is continuous delivery.

4 Ansible?

✓ Agentless

other

↓

provide software or agent
to manage the nodes

puppet, chef → we have to provide software or agent to manage the nodes

my laptop — Master node

other — Slave node

Chef

Salt stack

Puppet

✓ Ansible is

based on python &

which is very easy

for everyone to

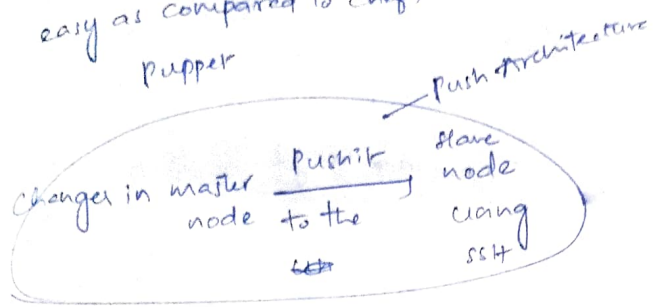
learn & understand

✓ ssh — Password less, secured

✓ puppet, chef — don't use ansible

✓ Push Architecture
 ↓
 code in our system
 which are node
 master node $\xrightarrow{\text{push the code}}$ slave node

✓ setup is also very
 easy as compared to chef,
 puppet



Pull Architecture
 ↓

✓ Based on agent makes a call
 to master like polling kind
 ✓ whether master has done
 anything

✓ Inventory in Ansible
 ↓
 a yaml file (write IP addresses of
 several slave node which are
 available, make the
 things easy to work on)

not available in puppet,
 chef

Modules

Master node will write a set of tasks to the slave node which has to be

Performed — the way which specific tasks are written is called Ansible module

like in script which tasks are written

core modules — set up ansible in order nodes then core module is used
 to any bug then core module is the priority to work on

Extra modules — Extra available in repository where needed we can use that

Types of Inventory

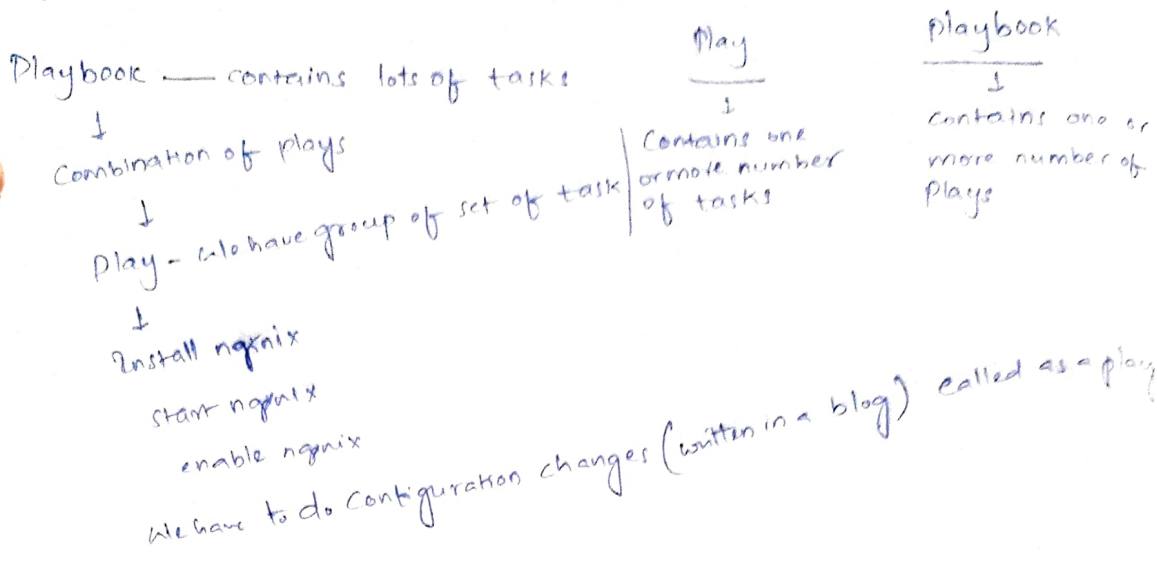
Static — static IP addresses.

Dynamic — script is generated IP addresses. ^{- IPV4.} so IP is not fixed it will change.
 written in python language — script is change, IP is also change.

Working

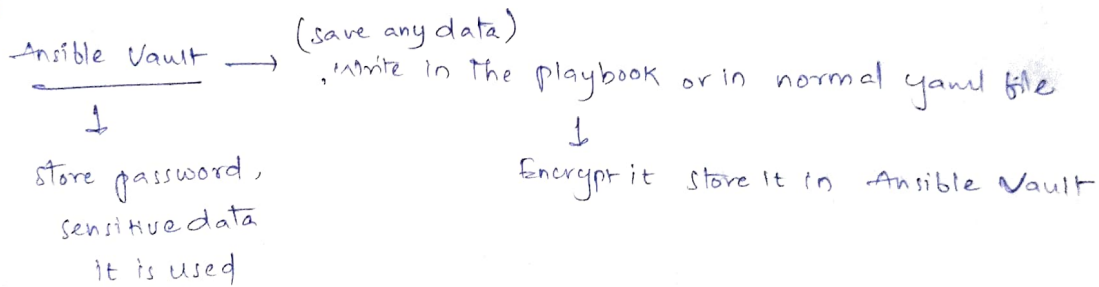
Combination of modules, playbooks, plugins is Ansible.

Modules.



Plugins → Basically used for logging purposes

✓ Runs on main control machine → main node.



Commands

File is already created ✓
ansible-vault encrypt name of your yaml file

For checking ← ansible-vault decrypt file name.
any passwords

How to create already encrypted file ← ansible-vault create name of the file

↓
Prompt create password

↓
Write the password for two times for confirmation

↓
Encrypted file will be created & makes the changes in the data