Configuration Management

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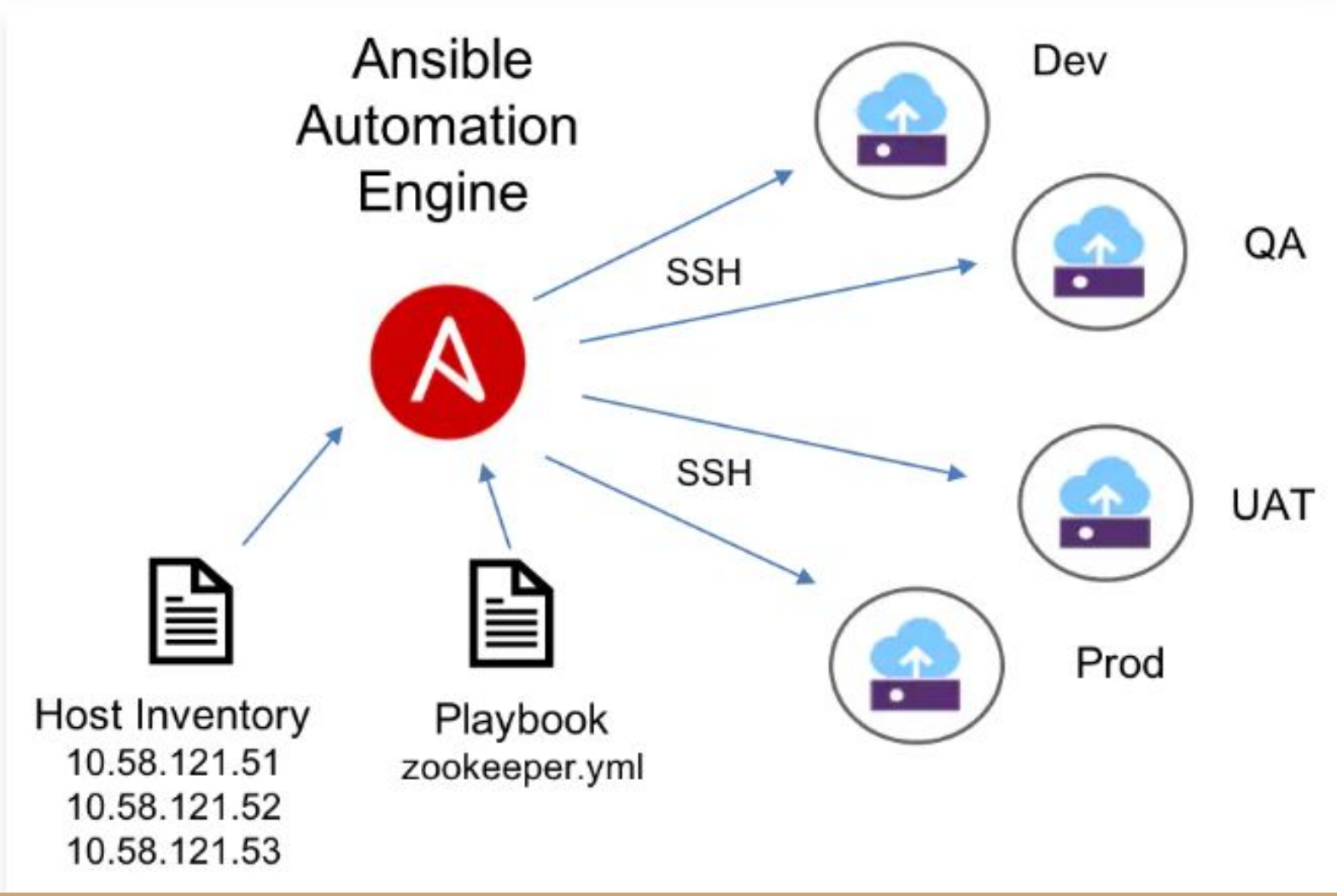
Configuration management (CM) is a systems engineering process for establishing and maintaining consistency of a product's performance, functional, and physical attributes with its requirements, design, and operational information throughout its life.

Ansible

Ansible is an open-source software provisioning, configuration management, and application-deployment tool enabling infrastructure as code. It runs on many Unix-like systems, and can configure both Unix-like systems as well as Microsoft Windows. It includes its own declarative language to describe system configuration.

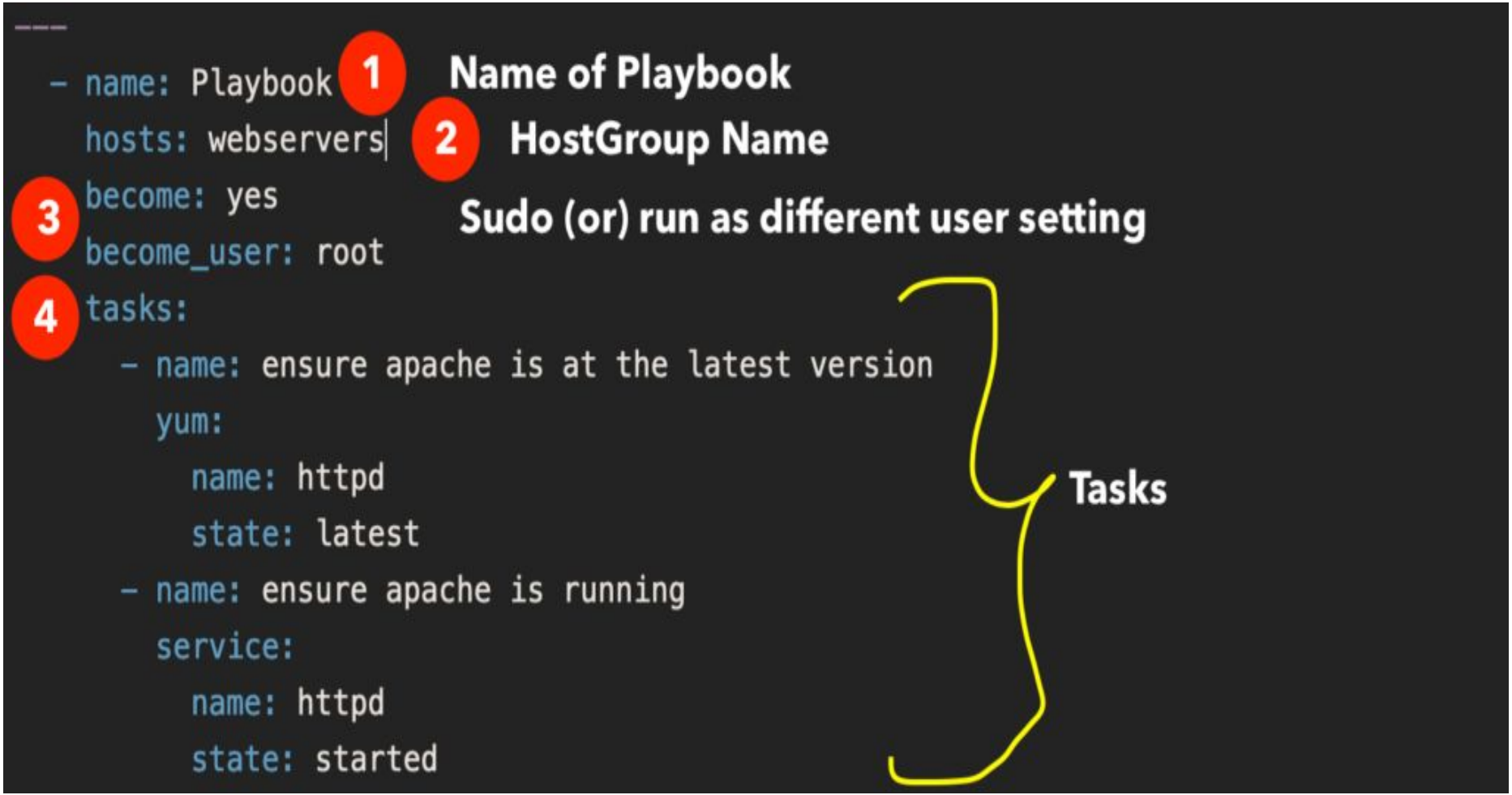
https://www.ansible.com


Ansible
Automation
Engine
Dev
QA
SSH
SSH
UAT
Prod
Host Inventory
10.58.121.51
10.58.121.52
10.58.121.53
Playbook
zookeeper.yml

```
[root@vm0-net ~]# cat inventory1
[production]
10.8.232.61
10.8.232.62

[root@vm0-net ~]# cat inventory2
[production]
10.8.232.63
10.8.232.64

[root@vm0-net ~]# ansible -i inventory1 -i inventory2
--list-hosts production
 hosts (4):
 10.8.232.61
 10.8.232.62
 10.8.232.63
 10.8.232.64
[root@vm0-net ~]#
```



- name: Playbook
hosts: webservers
become: yes
become_user: root
tasks:
- name: ensure apache is at the latest version
yum:
name: httpd
state: latest
- name: ensure apache is running
service:
name: httpd
state: started
1
Name of Playbook
2
HostGroup Name
3
Sudo (or) run as different user setting
4
Tasks

Ansible modules

https://docs.ansible.com/ansible/2.9/modules/list_of_all_modules.html

Ansible Galaxy

https://galaxy.ansible.com/search?deprecated=false&keywords=&order_by=-relevance&tags=networking%20docker&page=1


SALTSTACK


CHEF


puppet

Let’s watch a video on config management...

https://www.youtube.com/watch?v=i2E1VDjmrXo

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Homework

- Create an Ansible playbook

1) Create a VM using virtualbox
2) Install ansible on your local machine and control the VM (perform installations of tools / libraries)
3) Create ansible inventory file
4) Create ansible playbook
5) Create public /private key pair and setup SSH authentication