Ad-hoc commands

AD HOC COMMANDS

- ad hoc command uses the **/usr/bin/ansible command-line tool** to automate a single task on one or more managed nodes. These are quick and easy, but they are not reusable.
- ad hoc commands are great for tasks you **repeat rarely.**
  E.g.: To power off all the machines, you could execute a quick one-liner in Ansible without a playbook.
- It is used to **reboot servers, copy files, manage packages** and **users,** and much more.

$ansible [pattern] -m [module] -a "[module options]"

ANSIBLE MODULE:

- A module is a reusable, standalone script that Ansible runs on your behalf, either locally or remotely.
- Modules interact with your local machine, an API, or a remote system to perform specific tasks like changing a database password or spinning up a cloud instance.

$ansible --list-hosts webservers : List webservers group

To list all Modules:

$ansible-doc -l

$ansible-doc yum [Details of yum module]

$ansible -m ping webservers / $ansible -m ping all [Testing Environment]

Reboot servers:

$ansible webservers -a "/sbin/reboot"

$ansible webservers -a "/sbin/reboot" -f 10 [By default Ansible uses only 5 simultaneous processes.To reboot the webservers with 10 parallel forks]

$ansible webservers -a "/sbin/reboot" -f 10 -u username --become --ask-become-pass

(or)

-K [Rebooting probably requires privilege escalation]

Managing Files:

An ad hoc task can harness the power of Ansible and SCP to transfer many files to multiple machines in parallel.

To transfer a file directly to all servers in the [webservers] group:

$ansible webservers -m ansible.builtin.file -a "dest=/tmp/java mode=600 state=touch"

$ansible webservers -m ansible.builtin.copy -a "src=/opt/script.sh dest=/tmp/"

$ ansible webservers -m ansible.builtin.file -a "dest=/tmp/ mode=600 owner=raju group=developers"

$ansible webservers -m ansible.builtin.file -a "dest=/world/asia/india/ap/vskp mode=755 owner=raju group=developers state=directory"

$ansible webservers -m ansible.builtin.file -a "dest=/world/asia/india/ap/vskp state=absent" [Delete a directory]

$ansible webservers -a "free -m"   [To check Ram size]

$ansible webservers -a "df -h"

Shell module:

$ansible webservers -m shell -a "cat /etc/passwd|grep -i raju" -b -K

$ansible webservers -m shell -a "cat /proc/meminfo|head -2"

Managing packages:

$ansible webservers -m ansible.builtin.yum -a "name=httpd state=present"

ansible webservers -m ansible.builtin.yum -a "name=httpd state=present" --limit "*.4" [any node that ends with a .4 IP address.]

$ansible webservers -m ansible.builtin.yum -a "name=httpd-2.4 state=present" --limit "webservers:!172.6.7.80”

$ansible webservers -m ansible.builtin.yum -a "name=httpd state=absent"

Managing services:

$ansible webservers -m ansible.builtin.service -a "name=httpd state=started"

$ansible webservers -m ansible.builtin.service -a "name=httpd state=restarted"

$ansible webservers -m ansible.builtin.service -a "name=httpd state=stopped"

Managing users and groups:

$ ansible all -m ansible.builtin.user -a "name=raju password=<crypted password here>"

$ ansible all -m ansible.builtin.user -a "name=foo state=absent"