



ANSIBLE

Ansible Terminology

- **Controller Machine:** the machine where Ansible is installed, responsible for running the provisioning on the servers you are managing
- **Inventory:** a file that contains information about the servers you are managing
- **Module:** a module typically abstracts a system task, like dealing with packages or creating and changing files.
- **Task:** a block that defines a single procedure to be executed, e.g.: install a package.

Ansible Module

- Modules (also referred to as “task plugins” or “library plugins”) are the ones that do the actual work in ansible, they are what gets executed in each playbook task. But you can also run a single one using the ‘ansible’ command.

```
# ansible all -list-hosts  
# ansible all -m ping  
# ansible all -m setup  
# ansible appserv -m ping
```

```
# ansible all --list-hosts  
  
# ansible all -m setup  
  
# ansible all -m setup -a "filter=ansible_distribution"  
# ansible all -m setup -a "filter=ansible_pkg_mgr"  
# ansible all -m command -a "date"  
# ansible all -m shell -a "uptime; ls /"  
# ansible all -m raw -a "mkdir /opt/MYDIR"  
# ansible all -m raw -a "touch /opt/DEVOPS.TXT"  
# ansible all -l web -m raw -a "apt-get install tree"  
# ansible all -l 172.31.2.132 -m raw -a "yum install tree"  
# ansible all -l web -m ansible.builtin.apt -a  
"name=apache2 state=present"
```

```
# ansible all -l app -m ansible.builtin.yum -a  
"name=httpd state=latest"  
  
# ansible all -l app -m ansible.builtin.yum -a  
"name=httpd state=latest"  
  
# ansible all -l web -m ansible.builtin.service -a  
"name=apache2 state=started"  
  
# ansible all -l web -m ansible.builtin.service -a  
"name=apache2 state=stopped"  
  
# ansible all -l app -m ansible.builtin.systemd -a  
"name=httpd state=restarted"  
  
# ansible all -m ansible.builtin.group -a "name=devops  
state=present"
```

```
# ansible all -m ansible.builtin.user -a "name=sathya  
group=devops state=present"  
  
# ansible all -m ansible.builtin.file -a  
"name=/opt/SAMPLE.TXT state=touch"  
  
# ansible all -m ansible.builtin.file -a "name=/opt/AWS  
state=directory"  
  
# ansible all -m ansible.builtin.file -a "name=/opt/AWS  
state=absent"  
  
# ansible all -m ansible.builtin.file -a  
"name=/opt/SAMPLE.TXT owner=sathya  
group=devops mode=0777"
```

```
# ansible all -m ansible.builtin.copy -a "src=/root/demo.txt  
dest=/tmp/demo.txt"
```

```
# ansible all -m ansible.builtin.cron -a "name=myjob job='ls -  
l /etc/ > /opt/files.log' minute=30 hour=5"
```

1 = Execute

2 = Write

3 = 2+1 (Write and Execute)

4 = Read

5 = 4+1 (Read and Execute)

6 = 4+2 (Read and Write)

7 = 4+2+1 (Read, Write and Execute)

0 = no permission

Override Keys:

```
# ansible all --private-key=root/.ssh/id_rsa  
-m ping  
# ansible all -m setup --tree /tmp/myfacts  
# ansible all -m setup -a 'filter=ansible_distribution'  
# ansible all -m setup -a  
'filter=ansible_distribution_version'  
# ansible all -m ping -u admin --private-key=key  
# ansible all -m shell -a "touch /tmp/file1"
```