

## ANSIBLE 1

1. Setup one master and two worker nodes in ansible.

- Create master server
- Add two 2 worker server
- Create ssh-keygen in master

```
~~  \_#####
~~  \|##|
~~    \#/ __ https://aws.amazon.com/linux/amazon-linux-2023
~~      V~' '-'>
~~~   /
~~. _/ /
~/m/'[ec2-user@ip-172-31-24-191 ~]$ sudo su
[root@ip-172-31-24-191 ec2-user]# yum install ansible -y
Amazon Linux 2023 Kernel Livepatch repository
Dependencies resolved.
=====
           Package          Architecture
=====
Installing:
ansible                         noarch
Installing dependencies:
ansible-core                     x86_64
git-core                         x86_64
sshpass                         x86_64
=====
Transaction Summary
=====
Install 4 Packages

Total download size: 40 M
Installed size: 552 M
```

- And add pub key to worker 1 and worker 2

```
ED25519 key fingerprint is SHA256:dzHjy71f9mcXo9gRnAeSNTDwSAg6cVid7BvRE.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '54.241.84.38' (ED25519) to the list of known hosts
#
~~\_ ##_          Amazon Linux 2023
~~ \_##_##\
~~  \|##|
~~    \#/ __ https://aws.amazon.com/linux/amazon-linux-2023
~~      V~' '-'>
~~~   /
~~. _/ /
~/m/'Last login: Mon Dec 15 05:58:37 2025 from 13.52.6.115
[ec2-user@ip-172-31-16-20 ~]$
```

- **i-0e803279e598d1914 (ansible master)**

- Make them connect

- Install ansible in master

```
[root@ip-172-31-24-191 ec2-user]# ansible --version
ansible [core 2.15.3]
  config file = None
  configured module search path = ['/root/.ansible/plugins/modules', '/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python3.9/site-packages/ansible
  ansible collection location = /root/.ansible/collections:/usr/share/ansible/collections
  executable location = /usr/bin/ansible
  python version = 3.9.25 (main, Nov 12 2025, 00:00:00) [GCC 11.5.0 20240719 (Red Hat 11.5.0-5)] (/usr/bin/python3.9)
  jinja version = 3.1.4
  libyaml = True
[root@ip-172-31-24-191 ec2-user]#
```

- Now write a play book in /etc/hosts/

- All
- Worker 1 ip
- Worker 2 ip
- Now, run
- Ansible all -m ping

```
[ec2-user@ip-172-31-24-191 ~]$ ansible all -m ping
[WARNING]: Platform linux on host worker1 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-core/2.15/reference\_appendices/interpreter\_discovery.html for more information.
worker1 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.9"
    },
    "changed": false,
    "ping": "pong"
}
[WARNING]: Platform linux on host worker2 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-core/2.15/reference\_appendices/interpreter\_discovery.html for more information.
worker2 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3.9"
    },
    "changed": false,
    "ping": "pong"
}
```

- [ec2-user@ip-172-31-24-191 ~]\$ cd /etc/hosts/
- ansible all -m setup

```
        },
        "swap": {
            "cached": 0,
            "free": 0,
            "total": 0,
            "used": 0
        }
    },
    "ansible_memtotal_mb": 916,
    "ansible_mounts": [
        {
            "block_available": 1675429,
            "block_size": 4096,
            "block_total": 2077691,
            "block_used": 402262,
            "device": "/dev/nvme0n1p1",
            "fstype": "xfs",
            "inode_available": 4139754,
            "inode_total": 4188096,
            "inode_used": 48342,
            "mount": "/",
            "options": "rw,seclabel,noatime,attr2,inode64,logbufs=8,logbsize=32k,sunit=1",
            "size_available": 6862557184,
            "size_total": 8510222336,
            "uuid": "170fd7a4-f127-46eb-a3be-8b380dc8d94a"
        },
        {
            "block_available": 4444,
```

- **i-0e803279e598d1914 (ansible master)**

- ansible all -a uptime

```
[ec2-user@ip-172-31-24-191 ~]$ 
[ec2-user@ip-172-31-24-191 ~]$ ansible all -a uptime
[WARNING]: Platform linux on host worker1 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
worker1 | CHANGED | rc=0 >>
 07:08:29 up 1:11,  2 users,  load average: 0.00, 0.01, 0.00
[WARNING]: Platform linux on host worker2 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
worker2 | CHANGED | rc=0 >>
 07:08:29 up 1:10,  2 users,  load average: 0.00, 0.00, 0.00
[ec2-user@ip-172-31-24-191 ~]$ 
```

- **i-0e803279e598d1914 (ansible master)**

```

07:08:29 up 1:10, 2 users, load average: 0.00, 0.00, 0.00
[ec2-user@ip-172-31-24-191 ~]$ ansible all -a "free -m"
[WARNING]: Platform linux on host worker2 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
worker2 | CHANGED | rc=0 >>
      total        used        free      shared  buff/cache   available
Mem:       916         176        510          0        230       609
Swap:          0          0          0
[WARNING]: Platform linux on host worker1 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
worker1 | CHANGED | rc=0 >>
      total        used        free      shared  buff/cache   available
Mem:       916         180        503          0        232       604
Swap:          0          0          0

```

- [ec2-user@ip-172-31-24-191 ~]\$ █
- To run httpd in wrker
- Write a yml file
- In master
- And run platybook

```

}
[ec2-user@ip-172-31-24-191 ~]$ vi install_httpd.yml
[ec2-user@ip-172-31-24-191 ~]$ ansible-playbook install_httpd.yml

PLAY [Install Apache (httpd) on all servers] *****

TASK [Gathering Facts] *****
[WARNING]: Platform linux on host worker1 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
ok: [worker1]
[WARNING]: Platform linux on host worker2 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
ok: [worker2]

TASK [Install httpd package] *****
changed: [worker1]
changed: [worker2]

PLAY RECAP *****
worker1 : ok=2    changed=1    unreachable=0    failed=0    sk
inned=0   rescued=0   ignored=0

```

```
[ec2-user@ip-172-31-24-191 ~]$ ansible all -b -a "systemctl status httpd"
[WARNING]: Platform linux on host worker1 is using the discovered Python
interpreter at /usr/bin/python3.9, but future installation of another Python
interpreter could change the meaning of that path. See
https://docs.ansible.com/ansible-
core/2.15/reference_appendices/interpreter_discovery.html for more information.
worker1 | CHANGED | rc=0 >>
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
     Active: active (running) since Mon 2025-12-15 07:15:32 UTC; 8s ago
       Docs: man:httpd.service(8)
   Main PID: 30921 (httpd)
      Status: "Started, listening on: port 80"
        Tasks: 177 (limit: 1067)
      Memory: 13.3M
         CPU: 65ms
      CGroup: /system.slice/httpd.service
              ├─30921 /usr/sbin/httpd -DFOREGROUND
              ├─30922 /usr/sbin/httpd -DFOREGROUND
              ├─30923 /usr/sbin/httpd -DFOREGROUND
              ├─30925 /usr/sbin/httpd -DFOREGROUND
              ├─30926 /usr/sbin/httpd -DFOREGROUND
```