

LAB 3 - Ansible by Athika Fatima (101502209)

```

athikafatima@Athikas-MBP lab3 % docker compose up -d
[+] Running 3/3
  ! resolve-host-two Warning
  ! ansible Warning
  ! remote-host-one Warning
[+] Building 304.7s (22/22) FINISHED
=> [remote-host-one internal] load .dockerignore
=> => transferring context: 2B
=> [remote-host-one internal] load build definition from Dockerfile
=> => transferring dockerfile: 485B
=> [remote-host-one internal] load metadata for docker.io/library/ubuntu:16.04
=> [ansible internal] load .dockerignore
=> => transferring context: 2B
=> [ansible internal] load build definition from Dockerfile
=> => transferring dockerfile: 159B
=> [ansible internal] load metadata for docker.io/library/ubuntu:latest
=> CACHED [ansible 1/3] FROM docker.io/library/ubuntu
=> [ansible 2/3] RUN apt-get update
=> [remote-host-two internal] load build definition from Dockerfile
=> => transferring dockerfile: 485B
=> [remote-host-two internal] load .dockerignore
=> => transferring context: 2B
=> [remote-host-one auth] pull token for registry-1.docker.io
=> [remote-host-two 1/7] FROM docker.io/library/ubuntu:16.04@sha256:1f1a2d56de1d604801d9671f301190704c25d604a416f59e03c04f5c6ffee0d6
=> => => transferring context: 2B
=> sha256:b6f50765242581c887ff1acc2511fa02d885c52d8fb3a:8c4bb0131fd85567f2e 3.36kB / 3.36kB
=> sha256:58690f9b18fcfa469a14da4e212c96849469f9b1b16661d2342ad4bf01774aa58 46.50MB / 46.50MB
=> sha256:b51569e7c50720acf6860327847fe342a1afbe148d24c529fb81df105e3eed01 857B / 857B
=> sha256:da8ef40b9ecabc2679fe2419957220c0272a965c5cf7e0269fa1aeeb8c56f2e1 528B / 528B
=> sha256:1f1a2d56de1d604801d9671f301190704c25d604a416f59e03c04f5c6ffee0d6 1.42kB / 1.42kB
=> sha256:a2785f78ab8547ae2710c39e627783cf07ee7824d3468cae6835-9f4eo233ff7 1.15kB / 1.15kB
=> sha256:fb15d4638dd1ea0b1990006c3366ec010c79d374f341687eb2cb23a2c8672e 170B / 170B
=> => extracting sha256:58690f9b18fcfa469a14da4e212c96849469f9b1b16661d2342ad4bf01774aa58
=> => extracting sha256:b51569e7c50720acf6860327847fe342a1afbe148d24c529fb81df105e3eed01
=> => extracting sha256:da8ef40b9ecabc2679fe2419957220c0272a965c5cf7e0269fa1aeeb8c56f2e1
=> => extracting sha256:fb15d46c38dcde1ea0b1990006c3366ec010c79d374f341687eb2cb23a2c8672e
=> [ansible 3/3] RUN apt install ansible -y && apt install vim -y
=> [remote-host-one 2/7] RUN apt-get update && apt-get install -y openssh-server
=> [remote-host-two 3/7] RUN mkdir /var/run/sshd
=> [remote-host-two 4/7] RUN echo 'root:password' | chpasswd
=> [remote-host-two 5/7] RUN sed -i 's/PermitRootLogin prohibit-password/PermitRootLogin yes/' /etc/ssh/sshd_config
=> [remote-host-two 6/7] RUN sed -i '$session *$required$!pam_loginuid.so$session optional pam_loginuid.so@g' -i /etc/pam.d/sshd
=> [remote-host-two 7/7] RUN echo "export VISIBLE=now" >> /etc/profile
=> [remote-host-one] exporting to image
=> => exporting layers
=> => writing image sha256:423d8700f2f890a529f2b7d1ef842844f94d5f41278d92330713ec5e7de301e
=> => naming to docker.io/library/node1
=> [ansible] exporting to image
=> => exporting layers
=> => writing image sha256:dbcee21900ea24bb12decd57c0e6c19df6a49630d1613b7cbcc338a73d07acf0
=> => naming to docker.io/library/ansible
[+] Running 4/4
✓ Network lab3_default Created
✓ Container node1 Started
✓ Container node2 Started
✓ Container ansible Started
athikafatima@Athikas-MBP lab3 %

```

```

athikafatima@Athikas-MBP lab3 % docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED            STATUS              PORTS               NAMES
5fb252963f0        ansible            "/bin/bash"         6 minutes ago      Up 6 minutes          0.0s                ansible
c3f1ed8e07dc       node1              "/usr/sbin/sshd -D"   6 minutes ago      Up 6 minutes          22/tcp              node1
832b722beda0       node2              "/usr/sbin/sshd -D"   6 minutes ago      Up 6 minutes          22/tcp              node2

```

```

@thikafatima@Athikas-MBP lab3 % docker exec -it 5fbe252963f0 bash
root@5fbe252963f0:/# ansible --version
ansible 2.10.8
  config file = None
  configured module search path = ['/root/.ansible/plugins/modules', '/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python3/dist-packages/ansible
  executable location = /usr/bin/ansible
  python version = 3.10.12 (main, Nov 20 2023, 15:14:05) [GCC 11.4.0]
root@5fbe252963f0:/# ssh root@node1
The authenticity of host 'node1 (172.21.0.4)' can't be established.
ED25519 key fingerprint is SHA256:1QXAj9gf8561vBkPn0+iWL0NqcelNZEcYbBmkXvp/Sw.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'node1' (ED25519) to the list of known hosts.
root@node1's password:
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.4.16-linuxkit x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

root@e3f1ea8e07dc:~# exit
logout
Connection to node1 closed.
root@5fbe252963f0:/# ssh root@node2
The authenticity of host 'node2 (172.21.0.3)' can't be established.
ED25519 key fingerprint is SHA256:1QXAj9gf8561vBkPn0+iWL0NqcelNZEcYbBmkXvp/Sw.
This host key is known by the following other names/addresses:
  ~/.ssh/known_hosts:: [hashed name]
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'node2' (ED25519) to the list of known hosts.
root@node2's password:
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 6.4.16-linuxkit x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

```

```

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

root@832b722bed0:~# exit
logout
Connection to node2 closed.
root@5fbe252963f0:/# ssh-keygen -t rsa -b 2048
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /root/.ssh/id_rsa
Your public key has been saved in /root/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:MzBvCAY4+ygqwSkfrnijlqrqich7XDBBTFF6j7tZ5dY root@5fbe252963f0
The key's randomart image is:
+---[RSA 2048]---+
| +o. |
| ..o |
| +oo.o |
| . +o.o |
| . o ..S. |
| o.. o ..oo. |
| !+.. o . o E |
| !B**.. + . |
| !B++ o |
+---[SHA256]---+
root@5fbe252963f0:/#
root@5fbe252963f0:/# ssh-copy-id root@node1
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/root/.ssh/id_rsa.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
root@node1's password:

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'root@node1'"
and check to make sure that only the key(s) you wanted were added.

root@5fbe252963f0:/# ssh-copy-id root@node2
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/root/.ssh/id_rsa.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
root@node2's password:

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'root@node2'"
and check to make sure that only the key(s) you wanted were added.

```

```

Now try logging into the machine, with: "ssh 'root@node2'" and check to make sure that only the key(s) you wanted were added.

|root@5fbe252963f0:/# vi inventory.txt
|root@5fbe252963f0:/# cat inventory.txt
|[group1]
host1 ansible_host=node1 ansible_user=root
host2 ansible_host=node2 ansible_user=root
|root@5fbe252963f0:/# ansible-inventory -i inventory.txt --list
{
  "_meta": {
    "hostvars": {
      "host1": {
        "ansible_host": "node1",
        "ansible_user": "root"
      },
      "host2": {
        "ansible_host": "node2",
        "ansible_user": "root"
      }
    },
    "all": {
      "children": [
        "group1",
        "ungrouped"
      ]
    }
  },
  "group1": {
    "hosts": [
      "host1",
      "host2"
    ]
  }
}
|root@5fbe252963f0:/# ansible all -i inventory.txt -m ping
host1 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
host2 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
|root@5fbe252963f0:/# ansible all -m file -a "path=/path/to/directory state=directory"

|root@5fbe252963f0:/# ansible -i inventory.txt host1 -m shell -a "free -m"
host1 | CHANGED >-
              total     used      free      shared  buff/cache   available
Mem:       3930       525     1103       257      2300       2818
Swap:      1023         0      1023
|root@5fbe252963f0:/# ls -a
. . . dockerenv bin boot dev etc home inventory.txt lib lib32 lib64 libx32 media mnt opt proc root run sbin srv sys tmp usr var
|root@5fbe252963f0:/# cd etc
|root@5fbe252963f0:/etc# ls -a
. . .
  ca-certificates      deluser.conf  group-      inputrc      libaudit.conf  mtab      passwd      rc2.d      rpc      ssl      update-motd.d
  ca-certificates.conf  dpkg        gshadow     issue       localtime    netconfig   profile    rc3.d      security  subgid  vim
  .pwd.lock            cloud       e2scrub.conf  gshadow-    issue.net    login.defs  networks   profile.d  rc4.d      selinux  subuid  wgetrc
  adduser.conf          cron.d     environment  gss       kernel     logrotate.d  nsswitch.conf  protocols  rc5.d      services  sysctl.conf  xattr.conf
  alternatives          cron.daily  ethertypes   host.conf  ld.so.cache  lsb-release  opt       python3   rc6.d      shadow   systemctl
  apt                  debconf.conf  fstab      hosts      ld.so.conf   machine-id  os-release  python3.10  rcS.d      shells   systemd
  bash.bashrc          debian_version  gai.conf   ld.so.conf.d  mime.types  pam.conf   rc0.d      resolv.conf  skel    terminfo
  bindesport.blacklist  default     group      init.d     legal      mke2fs.conf  pam.d     rc1.d      rmt     ssh    timezone
|root@5fbe252963f0:/etc# mkdir ansible
|root@5fbe252963f0:/etc# touch hosts
|root@5fbe252963f0:/etc# vi hosts
|root@5fbe252963f0:/etc# cd ansible/
|root@5fbe252963f0:/etc/ansible# vi hosts
|root@5fbe252963f0:/etc/ansible# cat hosts
node1
node2

|root@5fbe252963f0:/etc/ansible# ansible all -m ping
node1 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
node2 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
|root@5fbe252963f0:/etc/ansible# cd ..
|root@5fbe252963f0:/etc# cd ..
|root@5fbe252963f0:/# ansible all -m ping
node1 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
node2 | SUCCESS => {

```

```

"changed": false,
"ping": "pong"
}
node2 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
root@5fbc252963f0:/# ansible all -m setup
node1 | SUCCESS => {
  "ansible_facts": {
    "ansible_ajaran": {
      "status": "disabled"
    },
    "ansible_architecture": "x86_64",
    "ansible_bios_date": "NA",
    "ansible_bios_vendor": "NA",
    "ansible_bios_version": "NA",
    "ansible_board_asset_tag": "NA",
    "ansible_board_name": "NA",
    "ansible_board_serial": "NA",
    "ansible_board_vendor": "NA",
    "ansible_board_version": "NA",
    "ansible_chassis_asset_tag": "NA",
    "ansible_chassis_serial": "NA",
    "ansible_chassis_vendor": "NA",
    "ansible_chassis_version": "NA",
    "ansible_cmline": {
      "com.docker.VMID": "fec4fee2-9d1a-485a-9180-590f17d847f9",
      "console": "hvc0",
      "eth0.IPNNet": "192.168.65.3/24",
      "eth0.route": "192.168.65.1",
      "eth1.IPNNet": true,
      "irqaffinity": "0",
      "linuxkit.unified_cgroup_hierarchy": "1",
      "mitigations": "off",
      "no_stf_barrier": true,
      "noibpb": true,
      "nospec_store_bypass_disable": true,
      "panic": "1",
      "tsc": "reliable",
      "virtio.net.disable_csum": "1",
      "vpnkit.connect": "connect://2/1999",
      "vpnkit.disable": "osxfs-data",
      "syscall": "emulate"
    },
    "ansible_date_time": {
      "date": "2024-03-10",
      "day": "10",
      "epoch": "1710040487",
      "hour": "03",
      "iso8601": "2024-03-10T03:14:47Z",
      "iso8601_basic": "20240310T031447Z",
      "iso8601_basic_short": "20240310T031447",
      "iso8601_micro": "2024-03-10T03:14:47.225306Z",
      "minute": "14",
      "month": "03",
      "second": "47",
      "time": "03:14:47",
      "tz": "UTC",
      "tz_offset": "+0000",
      "weekday": "Sunday",
      "weekday_number": "0",
      "weeknumber": "10",
      "year": "2024"
    },
    "ansible_device_links": {
      "ids": {},
      "labels": {},
      "masters": {},
      "uids": {}
    },
    "ansible_devices": {
      "loop0": {
        "holders": [],
        "host": "",
        "links": {
          "ids": [],
          "labels": [],
          "masters": [],
          "uids": []
        },
        "model": null,
        "partitions": {},
        "removable": "0",
        "rotational": "1",
        "sas_address": null,
        "sas_device_handle": null,
        "scheduler_mode": "none",
        "sectors": "1437884",
        "sectorsize": "512",
        "size": "702.09 MB",
        "support_discard": "4096",
        "vendor": null,
        "virtual": 1
      },
      "loop1": {
        "holders": [],
        "host": "",
        "links": {}
      }
    }
  }
}

```

```

},
"model": null,
"partitions": {},
"removable": "0",
"rotational": "1",
"sas_address": null,
"sas_device_handle": null,
"scheduler_mode": "none",
"sectors": "0",
"sectorsize": "512",
"size": "0.00 Bytes",
"support_discard": "0",
"vendor": null,
"virtual": 1
},
"loop2": {
"holders": [],
"host": "",
"links": {
"ids": [],
"labels": [],
"masters": [],
"uuids": []
},
"model": null,
"partitions": {},
"removable": "0",
"rotational": "1",
"sas_address": null,
"sas_device_handle": null,
"scheduler_mode": "none",
"sectors": "0",
"sectorsize": "512",
"size": "0.00 Bytes",
"support_discard": "0",
"vendor": null,
"virtual": 1
},
"loop3": {
"holders": [],
"host": "",
"links": {
"ids": [],
"labels": [],
"masters": [],
"uuids": []
},
"model": null,
"partitions": {},
"removable": "0",
"rotational": "1",
"sas_address": null,
"sectorSize": "512",
"size": "0.00 Bytes",
"support_discard": "0",
"vendor": null,
"virtual": 1
},
"loop4": {
"holders": [],
"host": "",
"links": {
"ids": [],
"labels": [],
"masters": [],
"uuids": []
},
"model": null,
"partitions": {},
"removable": "0",
"rotational": "1",
"sas_address": null,
"sas_device_handle": null,
"scheduler_mode": "none",
"sectors": "0",
"sectorsize": "512",
"size": "0.00 Bytes",
"support_discard": "0",
"vendor": null,
"virtual": 1
},
"loop5": {
"holders": [],
"host": "",
"links": {
"ids": [],
"labels": [],
"masters": [],
"uuids": []
},
"model": null,
"partitions": {},
"removable": "0",
"rotational": "1",
"sas_address": null,
"sas_device_handle": null,
"scheduler_mode": "none",
"sectors": "0",
"sectorsize": "512",
"size": "0.00 Bytes",
"support_discard": "0",
"vendor": null,
"virtual": 1
}
]

```

```

        ],
        "options": {
            "ndots": "0"
        }
    },
    "ansible_domain": "",
    "ansible_effective_group_id": 0,
    "ansible_effective_user_id": 0,
    "ansible_env": {
        "HOME": "/root",
        "LC_CTYPE": "C.UTF-8",
        "LOGNAME": "root",
        "MAIL": "/var/mail/root",
        "PATH": "/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/usr/games:/usr/local/games:/snap/bin",
        "PWD": "/root",
        "SHELL": "/bin/bash",
        "SHLVL": "1",
        "SSH_CLIENT": "172.21.0.2 43360 22",
        "SSH_CONNECTION": "172.21.0.2 43360 172.21.0.4 22",
        "SSH_TTY": "/dev/pts/0",
        "TERM": "xterm",
        "USER": "root",
        "_": "/bin/sh"
    },
    "ansible_fibre_channel_wwn": null,
    "ansible_fips": false,
    "ansible_form_factor": "NA",
    "ansible_fqdn": "c3f1ea8e07dc",
    "ansible_hostname": "c3f1ea8e07dc",
    "ansible_hostqn": "",
    "ansible_is_chroot": false,
    "ansible_iscsi_iqn": "",
    "ansible_kernel": "6.4.16-linuxkit",
    "ansible_kernel_version": "#1 SMP PREEMPT_DYNAMIC Sat Sep 23 13:39:52 UTC 2023",
    "ansible_local": [],
    "ansible_lsb": {
        "codename": "xenial",
        "description": "Ubuntu 16.04.7 LTS",
        "id": "Ubuntu",
        "major_release": "16",
        "release": "16.04"
    },
    "ansible_machine": "x86_64",
    "ansible_memfree_mb": 1069,
    "ansible_memory_mb": {
        "nocache": {
            "free": 3069,
            "used": 861
        },
        "real": {
            "free": 1069,
            "total": 3930,
            "used": 2861
        },
        "swap": {
            "cached": 0,
            "free": 1023,
            "total": 1023,
            "used": 0
        }
    },
    "ansible_memtotal_mb": 3930,
    "ansible_mounts": [
        {
            "block_available": 11338441,
            "block_size": 4096,
            "block_total": 15300561,
            "block_used": 3962120,
            "device": "/dev/vda1",
            "fstype": "ext4",
            "inode_available": 3488620,
            "inode_total": 3907584,
            "inode_used": 418964,
            "mount": "/etc/resolv.conf",
            "options": "rw,relatime,discard,bind",
            "size_available": 46442254336,
            "size_total": 62671097856,
            "uuid": "N/A"
        },
        {
            "block_available": 11338441,
            "block_size": 4096,
            "block_total": 15300561,
            "block_used": 3962120,
            "device": "/dev/vda1",
            "fstype": "ext4",
            "inode_available": 3488620,
            "inode_total": 3907584,
            "inode_used": 418964,
            "mount": "/etc/hostname",
            "options": "rw,relatime,discard,bind",
            "size_available": 46442254336,
            "size_total": 62671097856,
            "uuid": "N/A"
        },
        {
            "block_available": 11338441,
            "block_size": 4096,
            "block_total": 15300561,
            "block_used": 3962120,
            "device": "/dev/vda1",
            "fstype": "ext4"
        }
    ]
}

```

```

        ],
        "ansible_system_capabilities_enforced": "True",
        "ansible_system_vendor": "NA",
        "ansible_uptime_seconds": 1971,
        "ansible_user_dir": "/root",
        "ansible_user_gecos": "root",
        "ansible_user_gid": 0,
        "ansible_user_id": "root",
        "ansible_user_shell": "/bin/bash",
        "ansible_user_uid": 0,
        "ansible_userspace_architecture": "x86_64",
        "ansible_userspace_bits": "64",
        "ansible_virtualization_role": "guest",
        "ansible_virtualization_type": "docker",
        "discovered_interpreter_python": "/usr/bin/python3",
        "gather_subset": [
            "all"
        ],
        "module_setup": true
    },
    "changed": false
}
root@5fbe252963f0:/# ansible all -a uptime
node1 | CHANGED | rc=0 >>
03:14:54 up 32 min, 1 user, load average: 0.07, 0.02, 0.12
node2 | CHANGED | rc=0 >>
03:14:54 up 32 min, 1 user, load average: 0.07, 0.02, 0.12
root@5fbe252963f0:/# ansible all -m file -a "path=/tmp/file state=touch"
node2 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": true,
    "dest": "/root/tmp-file",
    "gid": 0,
    "group": "root",
    "mode": "0644",
    "owner": "root",
    "size": 0,
    "state": "file",
    "uid": 0
}
node1 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": true,
    "dest": "/root/tmp-file",
    "gid": 0,
    "group": "root",
    "mode": "0644",
    "owner": "root",
    "size": 0,
    "state": "file",
    "uid": 0
}
root@5fbe252963f0:/# ansible all -m file -a "path=/tmp/file state=absent"
node1 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": true,
    "path": "/root/tmp-file",
    "state": "absent"
}
node2 | CHANGED => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": true,
    "path": "/root/tmp-file",
    "state": "absent"
}
root@5fbe252963f0:/# ansible-doc -l

[DEPRECATION WARNING]: amazon.aws.aws_az_facts has been deprecated. aws_az_facts was renamed in Ansible 2.9 to aws_az_info. Please update your tasks. This feature will be removed from amazon.aws in a release after 2022-06-01. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: amazon.aws.aws_caller_facts has been deprecated. aws_caller_facts was renamed in Ansible 2.9 to aws_caller_info. Please update your tasks. This feature will be removed from amazon.aws in a release after 2021-12-01. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: amazon.aws.cloudformation_facts has been deprecated. cloudformation_facts has been deprecated and will be removed. The cloudformation_info module returns the same information, but not as ansible_facts. See the module documentation for more information. This feature will be removed from amazon.aws in a release after 2021-12-01. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: amazon.aws.ec2_ami_facts has been deprecated. ec2_ami_facts was renamed in Ansible 2.9 to ec2_ami_info. Please update your tasks. This feature will be removed from amazon.aws in a release after 2021-12-01. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: amazon.aws.ec2_eni_facts has been deprecated. ec2_eni_facts was renamed in Ansible 2.9 to ec2_eni_info. Please update your tasks. This feature will be removed from amazon.aws in a release after 2021-12-01. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: amazon.aws.ec2_group_facts has been deprecated. ec2_group_facts was renamed in Ansible 2.9 to ec2_group_info. Please update your tasks. This feature will be removed from amazon.aws in a release after 2021-12-01. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: amazon.aws.ec2_snapshot_facts has been deprecated. ec2_snapshot_facts was renamed in Ansible 2.9 to ec2_snapshot_info. Please update your tasks. This feature will be removed from amazon.aws in a release after 2021-12-01. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: amazon.aws.ec2_vol_facts has been deprecated. ec2_vol_facts was renamed in Ansible 2.9 to ec2_vol_info. Please update your tasks. This feature will be removed from amazon.aws in a release after 2021-12-01. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: amazon.aws.ec2_vpc_dhcp_option_facts has been deprecated. ec2_vpc_dhcp_option_facts was renamed in Ansible 2.9 to ec2_vpc_dhcp_option_info. Please update your tasks. This feature will be removed from amazon.aws in a release after 2021-12-01. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: amazon.aws.ec2_vpc_net_facts has been deprecated. ec2_vpc_net_facts was renamed in Ansible 2.9 to ec2_vpc_net_info. Please update your tasks. This feature will be removed from amazon.aws in a release after 2021-12-01. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.

```

```

after 2022-06-01. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
[DEPRECATION WARNING]: vyos.vyos.vyos_static_route has been deprecated. See the plugin documentation for more details. This feature will be removed from vyos.vyos in a release after 2022-06-01. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.

add_host                                         Add a host (and alternatively a group) to the ansible-playbook in-memory inventory
amazon.aws.aws_az_facts                         Gather information about availability zones in AWS
amazon.aws.aws_az_info                          Gather information about availability zones in AWS
amazon.aws.aws_caller_facts                     Get information about the user and account being used to make AWS calls
amazon.aws.aws_caller_info                      Get information about the user and account being used to make AWS calls
amazon.aws.aws_s3                                manage objects in S3
amazon.aws.cloudformation                       Create or delete an AWS CloudFormation stack
amazon.aws.cloudformation_facts                 Obtain information about an AWS CloudFormation stack
amazon.aws.cloudformation_info                  Obtain information about an AWS CloudFormation stack
amazon.aws.ec2                                  Create, terminate, start or stop an instance in ec2
amazon.aws.ec2_ami                             Create or destroy an image (AMI) in ec2
amazon.aws.ec2_ami_facts                       Get information about ec2 AMIs
amazon.aws.ec2_ami_info                        Gather information about ec2 AMIs
amazon.aws.ec2_elb_lb                           Gather information about ec2 AMIs
amazon.aws.ec2_eni                            Creates, updates or destroys an Amazon ELB
amazon.aws.ec2_eni_facts                      Create and optionally attach an Elastic Network Interface (ENI) to an instance
amazon.aws.ec2_eni_info                        Gather information about ec2 ENI interfaces in AWS
amazon.aws.ec2_group                          Gather information about ec2 ENI interfaces in AWS
amazon.aws.ec2_group_facts                     maintain an ec2 VPC security group
amazon.aws.ec2_group_info                      Gather information about ec2 security groups in AWS
amazon.aws.ec2_key                            Gather information about ec2 security groups in AWS
amazon.aws.ec2_metadata_facts                 create or delete an ec2 key pair
amazon.aws.ec2_snapshot                        Gathers facts (instance metadata) about remote hosts within ec2
amazon.aws.ec2_snapshot_facts                 Creates a snapshot from an existing volume
amazon.aws.ec2_snapshot_info                  Gather information about ec2 volume snapshots in AWS
amazon.aws.ec2_tag                            Gather information about ec2 volume snapshots in AWS
amazon.aws.ec2_tag_info                       create and remove tags on ec2 resources
amazon.aws.ec2_vol                            list tags on ec2 resources
amazon.aws.ec2_vol_facts                      Create and attach a volume, return volume id and device map
amazon.aws.ec2_vol_info                       Gather information about ec2 volumes in AWS
amazon.aws.ec2_vpc_dhcp_option                Gather information about ec2 volumes in AWS
amazon.aws.ec2_vpc_dhcp_option_facts          Manages DHCP Options, and can ensure the DHCP options for the given VPC match what's requested
amazon.aws.ec2_vpc_dhcp_option_info           Gather information about dhcp options sets in AWS
amazon.aws.ec2_vpc_net                         Gather information about dhcp options sets in AWS
amazon.aws.ec2_vpc_net_facts                  Configure AWS virtual private clouds
amazon.aws.ec2_vpc_net_info                   Gather information about ec2 VPCs in AWS
amazon.aws.ec2_vpc_subnet                     Gather information about ec2 VPCs in AWS
amazon.aws.ec2_vpc_subnet_facts               Manage subnets in AWS virtual private clouds
amazon.aws.s3.bucket                          Gather information about ec2 VPC subnets in AWS
amazon.netcommon.cli_command                 Manage S3 buckets in AWS, DigitalOcean, Ceph, Walrus, FakeS3 and StorageGRID
amazon.netcommon.cli_config                  Run a cli command on cli-based network devices
amazon.netcommon.cli_parse                  Push text based configuration to network devices over network_cli
amazon.netcommon.net_banner                 Parse cli output or text using a variety of parsers
amazon.netcommon.net_get                    (deprecated, removed after 2022-06-01) Manage multiline banners on network devices
amazon.netcommon.net_interface              (deprecated, removed after 2022-06-01) Manage Interface on network devices
amazon.netcommon.net_l2_interface            (deprecated, removed after 2022-06-01) Manage Layer-2 interface on network devices
amazon.netcommon.net_l3_interface            (deprecated, removed after 2022-06-01) Manage L3 interfaces on network devices
amazon.netcommon.net_linkagg               (deprecated, removed after 2022-06-01) Manage link aggregation groups on network devices

```

<pre> ansible.posix.mount Control active and configured mount points ansible.posix.patch Apply patch files using the GNU patch tool ansible.posix.selinux Toggles SELinux booleans ansible.posix.synchronize Change policy and state of SELinux ansible.posix.sysctl A wrapper around rsync to make common tasks in your playbooks quick and easy ansible.windows.win_acl Manage entries in sysctl.conf ansible.windows.win_acl_inheritance Set file/directory/registry permissions for a system user or group ansible.windows.win_certificate_store Change ACL inheritance ansible.windows.win_certificate_store Manages the certificate store ansible.windows.win_command Executes a command on a remote Windows node ansible.windows.win_copy Copies files to remote locations on windows hosts ansible.windows.win_dns_client Configures DNS lookup on Windows hosts ansible.windows.win_domain Ensures the existence of a Windows domain ansible.windows.win_domain_controller Manage domain controller/member server state for a Windows host ansible.windows.win_domain_membership Manage domain/workgroup membership for a Windows host ansible.windows.win_dsc Invokes a PowerShell DSC configuration ansible.windows.win_environment Modify environment variables on windows hosts ansible.windows.win_feature Installs and uninstalls Windows Features on Windows Server ansible.windows.win_file Creates, touches or removes files or directories ansible.windows.win_find Return a list of files based on specific criteria ansible.windows.win_get_url Downloads file from HTTP, HTTPS, or FTP to node ansible.windows.win_group Add and remove local groups ansible.windows.win_group_membership Manage Windows local group membership ansible.windows.win_hostname Manages local Windows computer name ansible.windows.win_optional_feature Manage optional Windows features ansible.windows.win_owner Set owner ansible.windows.win_package Installs/uninstalls an installable package ansible.windows.win_path Manage Windows path environment variables ansible.windows.win_ping A windows version of the classic ping module ansible.windows.win_reboot Reboot a windows machine ansible.windows.win_reg_stat Get information about Windows registry keys ansible.windows.win_regedit Add, change, or remove registry keys and values ansible.windows.win_service Manage and query Windows services ansible.windows.win_service_info Gather information about Windows services ansible.windows.win_share Manage Windows shares ansible.windows.win_shell Execute shell commands on target hosts ansible.windows.win_stat Get information about Windows files ansible.windows.win_tempfile Creates temporary files and directories ansible.windows.win_template Template a file out to a remote server ansible.windows.win_updates Download and install Windows updates ansible.windows.win_uri Interacts with webservices ansible.windows.win_user Manages local Windows user accounts ansible.windows.win_user_right Manages Windows User Rights ansible.windows.win_wait_for Waits for a condition before continuing ansible.windows.win_whoami Get information about the current user and process apt Manages apt-packages apt_key Add or remove an apt key apt_repository Add and remove APT repositories arista.eos.eos_acl_interfaces ACL interfaces resource module arista.eos.eos_acls ACLs resource module arista.eos.eos_banner Manage multiline banners on Arista EOS devices arista.eos.eos_bgp (deprecated, removed after 2023-01-29) Configure global BGP protocol settings on Arista EOS </pre>	<pre> Toggles SELinux booleans A wrapper around rsync to make common tasks in your playbooks quick and easy Set file/directory/registry permissions for a system user or group Change ACL inheritance Manages the certificate store Copies files to remote locations on windows hosts Configures DNS lookup on Windows hosts Ensures the existence of a Windows domain Manage domain controller/member server state for a Windows host Manage domain/workgroup membership for a Windows host Invokes a PowerShell DSC configuration Modify environment variables on windows hosts Installs and uninstalls Windows Features on Windows Server Creates, touches or removes files or directories Return a list of files based on specific criteria Downloads file from HTTP, HTTPS, or FTP to node Add and remove local groups Manage Windows local group membership Manages local Windows computer name Manage optional Windows features Set owner Installs/uninstalls an installable package Manage Windows path environment variables A windows version of the classic ping module Reboot a windows machine Get information about Windows registry keys Add, change, or remove registry keys and values Manage and query Windows services Gather information about Windows services Manage Windows shares Execute shell commands on target hosts Get information about Windows files Creates temporary files and directories Template a file out to a remote server Download and install Windows updates Interacts with webservices Manages local Windows user accounts Manages Windows User Rights Waits for a condition before continuing Get information about the current user and process Manages apt-packages Add or remove an apt key Add and remove APT repositories ACL interfaces resource module ACLs resource module Manage multiline banners on Arista EOS devices Configure global BGP protocol settings on Arista EOS </pre> 
--	---

```

vyos.vyos.vyos_ospf_interfaces          OSPF Interfaces Resource Module
vyos.vyos.vyos_ospfv2                   OSPFv2 resource module
vyos.vyos.vyos_ospfv3                   OSPFv3 resource module
vyos.vyos.vyos_ping                     Tests reachability using ping from VyOS network devices
vyos.vyos.vyos_static_route             (deprecated, removed after 2022-06-01) Manage static IP routes on Vyatta VyOS network devices
vyos.vyos.vyos_static_routes            Static routes resource module
vyos.vyos.vyos_system                  Run 'set system' commands on VyOS devices
vyos.vyos.vyos_user                    Manage the collection of local users on VyOS device
vyos.vyos.vyos_vlan                   Manage VLANs on VyOS network devices
wait_for                             Waits for a condition before continuing
wait_for_connection                   Waits until remote system is reachable/usable
wti.remote.cpm_alarm_info             Get alarm information from WTI OOB and PDU devices
wti.remote.cpm_config_backup          Get parameters from WTI OOB and PDU devices
wti.remote.cpm_config_restore         Get parameters from WTI OOB and PDU devices
wti.remote.cpm_current_info          Get the Current Information of a WTI device
wti.remote.cpm_firmware_info          Get firmware information from WTI OOB and PDU devices
wti.remote.cpm_interface_config      Set network interface parameters in WTI OOB and PDU devices
wti.remote.cpm_interface_info         Get network interface parameters from WTI OOB and PDU devices
wti.remote.cpm_iptables_config       Set network IPTables parameters in WTI OOB and PDU devices
wti.remote.cpm_iptables_info          Get network IPTABLES parameters from WTI OOB and PDU devices
wti.remote.cpm_plugconfig            Get and Set Plug Parameters on WTI OOB and PDU power devices
wti.remote.cpm_power_info             Get and Set Plug actions on WTI OOB and PDU power devices
wti.remote.cpm_power_info            Get the Power Information of a WTI device
wti.remote.cpm_serial_port_config    Set Serial port parameters in WTI OOB and PDU devices
wti.remote.cpm_serial_port_info      Get Serial port parameters in WTI OOB and PDU devices
wti.remote.cpm_snmp_config           Set network SNMP parameters in WTI OOB and PDU devices
wti.remote.cpm_snmp_info              Get network SNMP parameters from WTI OOB and PDU devices
wti.remote.cpm_status_info           Get general status information from WTI OOB and PDU devices
wti.remote.cpm_temp_info             Get temperature information from WTI OOB and PDU devices
wti.remote.cpm_time_config           Set Time/Date parameters in WTI OOB and PDU devices
wti.remote.cpm_time_info             Get Time/Date parameters in WTI OOB and PDU devices
wti.remote.cpm_time_info             Get various status and parameters from WTI OOB and PDU devices
wti.remote.cpm_user                  Manages packages with the 'yum' package manager
yum.yum_repository                  Add or remove YUM repositories

root@5fbe252963f0:/# ansible all -m file -a "path=/path/to/directory state=directory"
node1 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": true,
  "gid": 0,
  "group": "root",
  "mode": "0755",
  "owner": "root",
  "path": "/path/to/directory",
  "size": 4096,
  "state": "directory",
  "uid": 0
}
node2 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": true,
  "gid": 0,
  "group": "root",
  "mode": "0755",
  "owner": "root",
  "path": "/path/to/directory",
  "size": 4096,
  "state": "directory",
  "uid": 0
}
node2 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": true,
  "gid": 0,
  "group": "root",
  "mode": "0755",
  "owner": "root",
  "path": "/path/to/directory",
  "size": 4096,
  "state": "directory",
  "uid": 0
}
node2 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": true,
  "gid": 0,
  "group": "root",
  "mode": "0755",
  "owner": "root",
  "path": "/path/to/directory",
  "size": 4096,
  "state": "directory",
  "uid": 0
}
root@5fbe252963f0:/# vi file1.yaml

root@5fbe252963f0:/# vi file1.yaml
root@5fbe252963f0:/# ansible-playbook -i inventory.txt file1.yaml

PLAY [all] ****
TASK [Gathering Facts] ****
ok: [host1]
ok: [host2]

TASK [create a file] ****
changed: [host2]
changed: [host1]

PLAY RECAP ****
host1 : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
host2 : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

root@5fbe252963f0:/#

```

```

root@5fbe252963f0:/# vi file1.yaml
root@5fbe252963f0:/# ansible-playbook -i inventory.txt file1.yaml
PLAY [all] ****
TASK [Gathering Facts] ****
ok: [host1]
ok: [host2]

TASK [create a file] ****
fatal: [host1]: FAILED! => {"changed": false, "msg": "value of state must be one of: absent, directory, file, hard, link, touch, got: present"}
fatal: [host2]: FAILED! => {"changed": false, "msg": "value of state must be one of: absent, directory, file, hard, link, touch, got: present"}

PLAY RECAP ****
host1 : ok=1    changed=0   unreachable=0   failed=1    skipped=0   rescued=0   ignored=0
host2 : ok=1    changed=0   unreachable=0   failed=1    skipped=0   rescued=0   ignored=0
root@5fbe252963f0:/# 

root@5fbe252963f0:/# vi file2.yaml
root@5fbe252963f0:/# ansible-playbook -i inventory.txt file2.yaml
PLAY [all] ****
TASK [Gathering Facts] ****
ok: [host2]
ok: [host1]

TASK [create a file] ****
fatal: [host1]: FAILED! => {"changed": false, "msg": "value of state must be one of: absent, directory, file, hard, link, touch, got: present"}
fatal: [host2]: FAILED! => {"changed": false, "msg": "value of state must be one of: absent, directory, file, hard, link, touch, got: present"}

PLAY RECAP ****
host1 : ok=1    changed=0   unreachable=0   failed=1    skipped=0   rescued=0   ignored=0
host2 : ok=1    changed=0   unreachable=0   failed=1    skipped=0   rescued=0   ignored=0
root@5fbe252963f0:/# 

root@5fbe252963f0:/# vi file2.yaml
root@5fbe252963f0:/# ansible-playbook -i inventory.txt file2.yaml
PLAY [all] ****
TASK [Gathering Facts] ****
ok: [host1]
ok: [host2]

TASK [create a file] ****
changed: [host1]
changed: [host2]

PLAY RECAP ****
host1 : ok=2    changed=1   unreachable=0   failed=0    skipped=0   rescued=0   ignored=0
host2 : ok=2    changed=1   unreachable=0   failed=0    skipped=0   rescued=0   ignored=0
root@5fbe252963f0:/# 

[athikafatima@Athikas-MBP lab3 % docker exec -it c3f1ea8e07dc bash
root@c3f1ea8e07dc:/# ls
bin boot dev etc home lib lib64 media mnt opt path proc root run sbin srv sys tmp usr var
root@c3f1ea8e07dc:/# cd tmp
root@c3f1ea8e07dc:/tmp# ls -a
. .. file-playbook1
root@c3f1ea8e07dc:/tmp# ls -a
. .. root@c3f1ea8e07dc:/tmp# 
]

root@5fbe252963f0:/# ansible-playbook -i inventory.txt file2.yaml
PLAY [all] ****
TASK [Gathering Facts] ****
ok: [host1]
ok: [host2]

TASK [create a file] ****
fatal: [host1]: FAILED! => {"changed": false, "msg": "value of state must be one of: absent, directory, file, hard, link, touch, got: present"}
fatal: [host2]: FAILED! => {"changed": false, "msg": "value of state must be one of: absent, directory, file, hard, link, touch, got: present"}

PLAY RECAP ****
host1 : ok=1    changed=0   unreachable=0   failed=1    skipped=0   rescued=0   ignored=0
host2 : ok=1    changed=0   unreachable=0   failed=1    skipped=0   rescued=0   ignored=0
root@5fbe252963f0:/# vi file2.yaml
root@5fbe252963f0:/# ansible-playbook -i inventory.txt file2.yaml
PLAY [all] ****
TASK [Gathering Facts] ****
ok: [host1]
ok: [host2]

TASK [create a file] ****
changed: [host1]
changed: [host2]

PLAY RECAP ****
host1 : ok=2    changed=1   unreachable=0   failed=0    skipped=0   rescued=0   ignored=0
host2 : ok=2    changed=1   unreachable=0   failed=0    skipped=0   rescued=0   ignored=0
root@5fbe252963f0:/# vi inventory.txt
root@5fbe252963f0:/# vi file3.yaml
]

```

```
[root@5fbe252963f0:~/# ansible-playbook -i inventory.txt file3.yaml
PLAY [task] ****
TASK [Gathering Facts] ****
ok: [node1]
TASK [Update task] ****
ok: [node1] => {
    "msg": "test node"
}
PLAY RECAP ****
node1 : ok=2    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

[root@5fbe252963f0:~/vi file4.yaml
[root@5fbe252963f0:~/cat file4.yaml
- hosts: all
  gather_facts: yes
  become: yes
  tasks:
    - name: Update apt cache
      apt:
        update_cache: yes
    - name: Install Node.js dependencies
      apt:
        name: "{{ item }}"
        state: present
      loop:
        - curl
        - software-properties-common
    - name: Add NodeSource repository
      apt_repository:
        repo: "deb https://deb.nodesource.com/node_14.x {{ ansible_distribution_release }} main"
        state: present
        update_cache: yes
    - name: Install Node.js
      apt:
        name: nodejs
        state: present
    - name: Install build-essential
      apt:
        name: build-essential
```

```
[root@5fbe252963f0:~/# sudo apt-get install apt-transport-https
bash: sudo: command not found
root@5fbe252963f0:~/# apt-get install apt-transport-https
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  apt-transport-https
0 upgraded, 1 newly installed, 0 to remove and 15 not upgraded.
Need to get 1510 B of archives.
After this operation, 170 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 apt-transport-https all 2.4.11 [1510 B]
Fetched 1510 B in 0s (4235 B/s)
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package apt-transport-https.
(Reading database... 49959 files and directories currently installed.)
Preparing to unpack .../apt-transport-https_2.4.11_all.deb ...
Unpacking apt-transport-https (2.4.11) ...
Setting up apt-transport-https (2.4.11) ...
root@5fbe252963f0:~/vi file5.yaml
root@5fbe252963f0:~/ansible-playbook -i inventory.txt file4.yaml
PLAY [all] ****
TASK [Gathering Facts] ****
ok: [host1]
ok: [host2]
TASK [Update apt cache] ****
ok: [host2]
ok: [host1]
TASK [Install Node.js dependencies] ****
ok: [host1] => (item(curl))
ok: [host2] => (item(curl))
ok: [host2] => (item=software-properties-common)
ok: [host1] => (item=software-properties-common)
```

```

root@5fbe252963f0:/# apt-get update
Hit:1 http://archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Hit:4 http://archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:5 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1349 kB]
Get:6 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1843 kB]
Fetched 3421 kB in 1s (3417 kB/s)
Reading package lists... Done
root@5fbe252963f0:/# ansible-playbook -i inventory.txt file4.yaml

PLAY [all] ****
TASK [Gathering Facts] ****
ok: [host1]
ok: [host2]

TASK [Update apt cache] ****
changed: [host2]
changed: [host1]

TASK [Install Node.js dependencies] ****
ok: [host1] => (item=curl)
ok: [host2] => (item=curl)
ok: [host2] => (item=software-properties-common)
ok: [host1] => (item=software-properties-common)

root@5fbe252963f0:/# vi file4.yaml
root@5fbe252963f0:/# rm -rf file4.yaml
root@5fbe252963f0:/# vi file4.yaml
root@5fbe252963f0:/# ansible-playbook -i inventory.txt file4.yaml

PLAY [all] ****
TASK [Gathering Facts] ****
ok: [host1]
ok: [host2]

TASK [Update apt cache] ****
changed: [host2]
changed: [host1]

TASK [Install Node.js dependencies] ****
ok: [host1] => (item=curl)
ok: [host2] => (item=curl)
ok: [host1] => (item=software-properties-common)
ok: [host2] => (item=software-properties-common)

TASK [Add NodeSource repository] ****
ok: [host1]
ok: [host2]

TASK [Install Node.js] ****
changed: [host1]
changed: [host2]

TASK [Install build-essential] ****
changed: [host1]
changed: [host2]

PLAY RECAP ****
host1 : ok=6    changed=3   unreachable=0   failed=0    skipped=0   rescued=0   ignored=0
host2 : ok=6    changed=3   unreachable=0   failed=0    skipped=0   rescued=0   ignored=0

root@5fbe252963f0:/# vi file5.yaml
root@5fbe252963f0:/# ansible-playbook -i inventory.txt file5.yaml

PLAY [all] ****
TASK [Update package manager cache] ****
changed: [host1]
changed: [host2]

TASK [Install required packages] ****
changed: [host2] => (item=git)
changed: [host1] => (item=git)
ok: [host1] => (item=curl)
ok: [host2] => (item=curl)
ok: [host2] => (item=wget)
ok: [host1] => (item=wget)
changed: [host2] => (item=nginx)
changed: [host1] => (item=nginx)
ok: [host2] => (item=nodejs)
ok: [host1] => (item=nodejs)

TASK [Clone the repository] ****
changed: [host1]
changed: [host2]

TASK [Install Node.js dependencies] ****
changed: [host1]
changed: [host2]

TASK [Build app] ****
changed: [host2]
changed: [host1]

PLAY RECAP ****
host1 : ok=5    changed=5   unreachable=0   failed=0    skipped=0   rescued=0   ignored=0
host2 : ok=5    changed=5   unreachable=0   failed=0    skipped=0   rescued=0   ignored=0

```

```
[athikafatima@Athikas-MBP lab3 % docker exec -it 832b722beda0 bash
root@832b722beda0:/# apt-get install apt-transport-https
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
  apt-transport-https
0 upgraded, 1 newly installed, 0 to remove and 2 not upgraded.
Need to get 26.6 kB of archives.
After this operation, 217 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu xenial-updates/main amd64 apt-transport-https amd64 1.2.35 [26.6 kB]
Fetched 26.6 kB in 0s (176 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package apt-transport-https.
(Reading database ... 10897 files and directories currently installed.)
Preparing to unpack .../apt-transport-https_1.2.35_amd64.deb ...
Unpacking apt-transport-https (1.2.35) ...
Setting up apt-transport-https (1.2.35) ...
Fetched 4584 B in 0s (758 B/s)
Reading package lists... Done
W: GPG error: https://deb.nodesource.com/node_14.x xenial InRelease: The following signatures couldn't be verified because the public key is not available: NO_PUBKEY 1655A0AB68576280
W: The repository 'https://deb.nodesource.com/node_14.x xenial InRelease' is not signed.
N: Data from such a repository can't be authenticated and is therefore potentially dangerous to use.
N: See apt-secure(8) manpage for repository creation and user configuration details.
root@832b722beda0:/# exit
exit
[athikafatima@Athikas-MBP lab3 % docker exec -it c3f1ea8e07dc bash
root@c3f1ea8e07dc:/# apt-get update
Hit:1 http://archive.ubuntu.com/ubuntu xenial InRelease
Hit:2 http://archive.ubuntu.com/ubuntu xenial-updates InRelease
Hit:3 http://archive.ubuntu.com/ubuntu xenial-backports InRelease
Get:4 https://deb.nodesource.com/node_14.x xenial InRelease [4584 B]
Hit:5 http://security.ubuntu.com/ubuntu xenial-security InRelease
Ign:4 https://deb.nodesource.com/node_14.x xenial InRelease
Hit:3 https://deb.nodesource.com/node_14.x xenial InRelease
Fetched 4584 B in 0s (7657 B/s)
Reading package lists... Done
W: GPG error: https://deb.nodesource.com/node_14.x xenial InRelease: The following signatures couldn't be verified because the public key is not available: NO_PUBKEY 1655A0AB68576280
W: The repository 'https://deb.nodesource.com/node_14.x xenial InRelease' is not signed.
N: Data from such a repository can't be authenticated and is therefore potentially dangerous to use.
N: See apt-secure(8) manpage for repository creation and user configuration details.
root@c3f1ea8e07dc:/# ]
```