

LAB-3

```
PS C:\Mydocs\George Brown College\Sem - 2\DEVOPS\Lab-3\BCDV-4033\ansible\lab> docker compose up -d
time="2024-06-17T18:39:47-04:00" level=warning msg="C:\Mydocs\George Brown College\Sem - 2\DEVOPS\Lab-3\BCDV-4033\ansible\lab\docker-compose.yml: 'version' is obsolete"
[+] Running 3/0
 ✓ Container ansible Running 0.0s
 ✓ Container node2 Running 0.0s
 ✓ Container node1 Running 0.0s
PS C:\Mydocs\George Brown College\Sem - 2\DEVOPS\Lab-3\BCDV-4033\ansible\lab> docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS        NAMES
e2e1b46820f0   node2         "/usr/sbin/sshd -D"      21 minutes ago Up 21 minutes 22/tcp       node2
20cb2ee42625   node1         "/usr/sbin/sshd -D"      21 minutes ago Up 21 minutes 22/tcp       node1
d63bc3bddaa5   ansible       "/bin/bash"              21 minutes ago Up 21 minutes         ansible
PS C:\Mydocs\George Brown College\Sem - 2\DEVOPS\Lab-3\BCDV-4033\ansible\lab> docker exec -it d63bc3bddaa5 bash
root@d63bc3bddaa5:/# ansible --version
ansible [core 2.16.3]
  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
  ansible collection location = /root/.ansible/collections:/usr/share/ansible/collections
  executable location = /usr/bin/ansible
  python version = 3.12.3 (main, Apr 10 2024, 05:33:47) [GCC 13.2.0] (/usr/bin/python3)
  jinja version = 3.1.2
  libyaml = True
root@d63bc3bddaa5:/# ^[[200~ssh root@node1
bash: $'\E[200~ssh': command not found
root@d63bc3bddaa5:/# ssh root@node1
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.146.1-microsoft-standard-WSL2 x86_64)
```

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

This system has been minimized by removing packages and content that are not required on a system that users do not log into.

To restore this content, you can run the 'unminimize' command.

Last login: Mon Jun 17 22:21:03 2024 from 172.18.0.2

root@d63bc3bddaa5:/# exit

logout

Connection to node1 closed.

root@d63bc3bddaa5:/# ssh root@node2

Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.146.1-microsoft-standard-WSL2 x86_64)

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

bash: \$'\E[200~ssh': command not found

root@d63bc3bddaa5:/# ssh root@node1

Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.146.1-microsoft-standard-WSL2 x86_64)

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

This system has been minimized by removing packages and content that are not required on a system that users do not log into.

To restore this content, you can run the 'unminimize' command.

Last login: Mon Jun 17 22:21:03 2024 from 172.18.0.2

root@d63bc3bddaa5:/# exit

logout

Connection to node1 closed.

root@d63bc3bddaa5:/# ssh root@node2

Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.146.1-microsoft-standard-WSL2 x86_64)

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

This system has been minimized by removing packages and content that are not required on a system that users do not log into.

To restore this content, you can run the 'unminimize' command.

Last login: Mon Jun 17 22:22:10 2024 from 172.18.0.2

root@e2e1b46820f0:/# exit

logout

Connection to node2 closed.

root@d63bc3bddaa5:/#

logout

Connection to node2 closed.

root@d63bc3bddaa5:/# ansible all -m ping

[WARNING]: No inventory was parsed, only implicit localhost is available

[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

root@d63bc3bddaa5:/# ssh-keygen -t rsa -b 2048

Generating public/private rsa key pair.

Enter file in which to save the key (/root/.ssh/id_rsa): /root/.ssh/id_rsa

/root/.ssh/id_rsa already exists.

Overwrite (y/n)? y

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:

SHA256:0C5obvfGtN135YOLGIYQabiQaEPALdeSe2thH0DFirEQ root@d63bc3bddaa5

The key's randomart image is:

+---[RSA 2048]---+

|B+ =Eo

|=+ =.+ o

|+.o.+ o o

|.o....

|..o.S

|o.....

|o..+o*o +

|o..B.OO..o o

|...+.....

+---[SHA256]---+

root@d63bc3bddaa5:/#

```
| ... +..... |
+----[SHA256]-----+
root@d63bc3bddaa5:~# 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@d63bc3bddaa5:~# 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.

root@d63bc3bddaa5:~#
```

```
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.

root@d63bc3bddaa5:~# vim inventory.txt
root@d63bc3bddaa5:~# ansible-inventory -i inventory.txt --list
{
  "_meta": {
    "hostvars": {
      "host1": {
        "ansible_host": "node1",
        "ansible_user": "root"
      },
      "host2": {
        "ansible_host": "node2",
        "ansible_user": "root"
      }
    }
  },
  "all": {
    "children": [
      "ungrouped",
      "group1"
    ]
  },
  "group1": {
    "hosts": [
      "host1",
      "host2"
    ]
  }
}
root@d63bc3bddaa5:~#
```

```
    "unreachable": true
  }
}
root@d63bc3bddaa5:~# ansible all -i inventory.txt -m ping
Enter passphrase for key '/root/.ssh/id_rsa': host1 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}

Enter passphrase for key '/root/.ssh/id_rsa':
host2 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
root@d63bc3bddaa5:~#
```

```

root@d63bc3bddaa5:/# ansible -i inventory.txt host1 -m shell -a "free -m"
Enter passphrase for key '/root/.ssh/id_rsa':
Enter passphrase for key '/root/.ssh/id_rsa':
host1 | CHANGED | rc=0 >>
      total        used        free      shared  buff/cache   available
Mem:    15846        1231       12799          6        1815       14324
Swap:    4096           0         4096
root@d63bc3bddaa5:/# ansible all -i inventory.txt -m shell -a "df -h"
Enter passphrase for key '/root/.ssh/id_rsa': Enter passphrase for key '/root/.ssh/id_rsa':
host1 | CHANGED | rc=0 >>
Filesystem      Size  Used Avail Use% Mounted on
overlay         1007G  6.1G  950G   1% /
tmpfs           64M    0    64M   0% /dev
tmpfs           7.8G    0   7.8G   0% /sys/fs/cgroup
shm            64M    0    64M   0% /dev/shm
/dev/sde        1007G  6.1G  950G   1% /etc/hosts
tmpfs           7.8G    0   7.8G   0% /proc/acpi
tmpfs           7.8G    0   7.8G   0% /sys/firmware

Enter passphrase for key '/root/.ssh/id_rsa':
host2 | CHANGED | rc=0 >>
Filesystem      Size  Used Avail Use% Mounted on
overlay         1007G  6.1G  950G   1% /
tmpfs           64M    0    64M   0% /dev
tmpfs           7.8G    0   7.8G   0% /sys/fs/cgroup
shm            64M    0    64M   0% /dev/shm
/dev/sde        1007G  6.1G  950G   1% /etc/hosts
tmpfs           7.8G    0   7.8G   0% /proc/acpi
tmpfs           7.8G    0   7.8G   0% /sys/firmware
root@d63bc3bddaa5:/#

```

```

root@d63bc3bddaa5:/# ansible host2 -i inventory.txt -m apt -a "name=curl state=present" -b
Enter passphrase for key '/root/.ssh/id_rsa':
Enter passphrase for key '/root/.ssh/id_rsa':
Enter passphrase for key '/root/.ssh/id_rsa':
host2 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "cache_update_time": 1718667286,
  "cache_updated": false,
  "changed": false
}
root@d63bc3bddaa5:/# ansible host1 -i inventory.txt -m apt -a "name=cron state=present" -b
Enter passphrase for key '/root/.ssh/id_rsa':
host1 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "cache_update_time": 1718667544,
  "cache_updated": false,
  "changed": false
}
root@d63bc3bddaa5:/#

```

```

tmpfs      7.8G      0  7.8G      0% /sys/firmware
root@d63bc3bddaa5:/# ansible host2 -i inventory.txt -m apt -a "name=curl state=present" -b
host2 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "cache_update_time": 1718667286,
  "cache_updated": false,
  "changed": true,
  "stderr": "debconf: delaying package configuration, since apt-utils is not installed\n",
  "stderr_lines": [
    "debconf: delaying package configuration, since apt-utils is not installed"
  ],
  "stdout": "Reading package lists...\nBuilding dependency tree...\nReading state information...\nThe following additional packages will be installed:\n libasn1-8-heimdal libbrotli1 libcurl4 libgssapi3-heimdal libhcrypto4-heimdal\n libheimbase1-heimdal libheimntlm0-heimdal libhx509-5-heimdal\n libkrb5-26-heimdal libldap-2.4-2 libldap-common libnghttp2-14\n libroken18-heimdal librtmp1 libsasl2-2 libsasl2-modules\n libsasl2-modules-db\n libssh-4 libwind0-heimdal\nSuggested packages:\n libsasl2-modules-gssapi-mit | libsasl2-modules-gssapi-heimdal\n libsasl2-modules-ldap libsasl2-modules-otp libsasl2-modules-sql\nThe following NEW packages will be installed:\n curl libasn1-8-heimdal libbrotli1 libcurl4 libgssapi3-heimdal\n libhcrypto4-heimdal libheimbase1-heimdal libheimntlm0-heimdal\n libhx509-5-heimdal libkrb5-26-heimdal libldap-2.4-2 libldap-common\n libnghttp2-14 libroken18-heimdal librtmp1 libsasl2-2 libsasl2-modules\n libsasl2-modules-db libssh-4 libwind0-heimdal\n0 upgraded, 20 newly installed, 0 to remove and 0 not upgraded.\nNeed to get 2068 kB of archives.\nAfter this operation, 6921 kB of additional disk space will be used.\nGet:1 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libbrotli1 amd64 1.0.7-6ubuntu0.1 [267 kB]\nGet:2 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libroken18-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [42.5 kB]\nGet:3 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libasn1-8-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [181 kB]\nGet:4 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libheimbase1-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [30.4 kB]\nGet:5 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libheimntlm0-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [30.4 kB]\nGet:6 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libhx509-5-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [30.4 kB]\nGet:7 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libkrb5-26-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [30.4 kB]\nGet:8 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libldap-2.4-2 amd64 2.4.47-1ubuntu1.4 [121 kB]\nGet:9 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libldap-common amd64 2.4.47-1ubuntu1.4 [14.3 kB]\nGet:10 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libnghttp2-14 amd64 1.41.0-1ubuntu1.1 [71.9 kB]\nGet:11 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 librtmp1 amd64 2.4+20191223.gitfa264ef1-1+b1 [58.8 kB]\nGet:12 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libsasl2-modules amd64 2:2.1.28-1ubuntu1.1 [111 kB]\nGet:13 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libsasl2-modules-db amd64 2:2.1.28-1ubuntu1.1 [10.5 kB]\nGet:14 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libssh-4 amd64 0.9.9-1ubuntu1.1 [171 kB]\nGet:15 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libwind0-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [30.4 kB]\nGet:16 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libcurl4 amd64 7.79.0-1ubuntu1.1 [345 kB]\nGet:17 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 curl amd64 7.79.0-1ubuntu1.1 [279 kB]\nFetched 1550 kB in 1min 10s (19.5 kB/s)\ndebconf: delaying package configuration, since apt-utils is not installed\nSelecting previously unselected package curl.\n(Reading database ... 123456789 files and directories currently installed.)\nPreparing to unpack .../curl_7.79.0-1ubuntu1.1_amd64.deb ...\nUnpacking curl (7.79.0-1ubuntu1.1) ...\nSetting up curl (7.79.0-1ubuntu1.1) ...\n"

```

```

root@d63bc3bddaa5:/# ansible host1 -i inventory.txt -m apt -a "name=cron state=present" -b
host1 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "cache_update_time": 1718667544,
  "cache_updated": false,
  "changed": true,
  "stderr": "debconf: delaying package configuration, since apt-utils is not installed\n",
  "stderr_lines": [
    "debconf: delaying package configuration, since apt-utils is not installed"
  ],
  "stdout": "Reading package lists...\nBuilding dependency tree...\nReading state information...\nSuggested packages:\n  anacron logrotate checksecurity default-mta | mail-transport-agent\nThe following NEW packages will be installed:\n  cron\n0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.\nNeed to get 71.5 kB of archives.\nAfter this operation, 268 kB of additional disk space will be used.\nGet:1 http://archive.ubuntu.com/ubuntu focal/main amd64 cron amd64 3.0pl1-136ubuntu1 [71.5 kB]\nFetched 71.5 kB in 0s (148 kB/s)\nSelecting previously unselected package cron.\n\n(Reading database ... \r(Reading database ... 5%\r(Reading database ... 10%\r(Reading database ... 15%\r(Reading database ... 20%\r(Reading database ... 25%\r(Reading database ... 30%\r(Reading database ... 35%\r(Reading database ... 40%\r(Reading database ... 45%\r(Reading database ... 50%\r(Reading database ... 55%\r(Reading database ... 60%\r(Reading database ... 65%\r(Reading database ... 70%\r(Reading database ... 75%\r(Reading database ... 80%\r(Reading database ... 85%\r(Reading database ... 90%\r(Reading database ... 95%\r(Reading database ... 100%\r(Reading database ... 12204 files and directories currently installed.)\n\nPreparing to unpack .../cron_3.0pl1-136ubuntu1_amd64.deb ...\n\nUnpacking cron (3.0pl1-136ubuntu1) ...\n\nSetting up cron (3.0pl1-136ubuntu1) ...\n\nAdding group `crontab' (GID 107) ...\n\nDone.\n\ninvoke-rc.d: could not determine current runlevel\n\ninvoke-rc.d: policy-rc.d denied execution of start.\n\nCreated symlink /etc/systemd/system/multi-user.target.wants/cron.service → /lib/systemd/system/cron.service.\n\nProcessing triggers for systemd (245.4-4ubuntu1) ...\n\n",
  "stdout_lines": [
    "Reading package lists...",
    "Building dependency tree...",
    "Reading state information...",
    "Suggested packages:",
    " anacron logrotate checksecurity default-mta | mail-transport-agent",
    "The following NEW packages will be installed:",
    " cron",
    "0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.",
    "Need to get 71.5 kB of archives.",
    "After this operation, 268 kB of additional disk space will be used.",
    "Get:1 http://archive.ubuntu.com/ubuntu focal/main amd64 cron amd64 3.0pl1-136ubuntu1 [71.5 kB]",
    "Fetched 71.5 kB in 0s (148 kB/s)",
    "Selecting previously unselected package cron ..."
  ]
}
root@d63bc3bddaa5:/# ansible all -i hosts.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@d63bc3bddaa5:/# ansible all -m ping
Enter passphrase for key '/root/.ssh/id_rsa':
host1 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": false,
  "ping": "pong"
}
```

```

        "container"
    ],
    "ansible_virtualization_tech_host": [],
    "ansible_virtualization_type": "docker",
    "discovered_interpreter_python": "/usr/bin/python3",
    "gather_subset": [
        "all"
    ],
    "module_setup": true
},
"changed": false
}

```

Enter passphrase for key '/root/.ssh/id_rsa':

```

host2 | SUCCESS => {
  "ansible_facts": {
    "ansible_apparmor": {
      "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_cmdline": {
      "WSL_ROOT_INIT": "1",
      "console": "hvc0",
      "debug": true,
      "hv_utils.timesync_implicit": "1",
      "initrd": "\\initrd.img",
      "nr_cpus": "20",
      "panic": "-1",
      "pty.legacy_count": "0"
    },
    "ansible_date_time": {
      "date": "2024-06-18",
      "day": "18",
      "epoch": "1718669098",
      "epoch_int": "1718669098",

```

```

root@d63bc3bddaa5:/# ansible all -a uptime

```

```

Enter passphrase for key '/root/.ssh/id_rsa': host2 | CHANGED | rc=0 >>
00:05:57 up 2:22, 1 user, load average: 0.16, 0.11, 0.09

```

```

Enter passphrase for key '/root/.ssh/id_rsa':

```

```

host1 | CHANGED | rc=0 >>
00:06:09 up 2:22, 1 user, load average: 0.13, 0.10, 0.09
root@d63bc3bddaa5:/#

```

```
00:06:09 up 2:22, 1 user, load average: 0.13, 0.10, 0.09
root@d63bc3bddaa5:/# ansible all -m file -a "path=~/.tmp-file state=touch"
host1 | 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
}
host2 | 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@d63bc3bddaa5:/#
```

```
}
root@d63bc3bddaa5:/# ansible all -m file -a "path=~/.tmp-file state=absent"
host1 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": true,
  "path": "/root/.tmp-file",
  "state": "absent"
}
host2 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": true,
  "path": "/root/.tmp-file",
  "state": "absent"
}
root@d63bc3bddaa5:/#
```



```
root@d63bc3bddaa5:/# ansible all -m file -a "path=~/.ansible_dir state=directory"
host1 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": true,
  "gid": 0,
  "group": "root",
  "mode": "0755",
  "owner": "root",
  "path": "/root/.ansible_dir",
  "size": 4096,
  "state": "directory",
  "uid": 0
}
host2 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python3"
  },
  "changed": true,
  "gid": 0,
  "group": "root",
  "mode": "0755",
  "owner": "root",
  "path": "/root/.ansible_dir",
  "size": 4096,
  "state": "directory",
  "uid": 0
}
root@d63bc3bddaa5:/#
```

```
root@d63bc3bddaa5:/# cat > create-file.yml
```

```
---
- name: Create a file on both nodes
  hosts: all
  tasks:
    - name: Create a file
      file:
        path: /root/.ansible_file
        state: touch
```

```

root@d63bc3bddaa5:/# ansible-playbook create-file.yml

PLAY [Create a file on both nodes] *****

TASK [Gathering Facts] *****
Enter passphrase for key '/root/.ssh/id_rsa':
ok: [host1]

fatal: [host2]: UNREACHABLE! => {"changed": false, "msg": "Failed to connect to the host via ssh: root@nod
e2: Permission denied (publickey,password).", "unreachable": true}

TASK [Create a file] *****
changed: [host1]

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

root@d63bc3bddaa5:/#

```

```

root@d63bc3bddaa5:/# ansible-playbook delete-file.yml

PLAY [Delete the file on both nodes] *****

TASK [Gathering Facts] *****
Enter passphrase for key '/root/.ssh/id_rsa':
ok: [host1]

fatal: [host2]: UNREACHABLE! => {"changed": false, "msg": "Failed to connect to the host via ssh: root@nod
e2: Permission denied (publickey,password).", "unreachable": true}

TASK [Delete the file] *****
changed: [host1]

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

root@d63bc3bddaa5:/#

```

```

root@d63bc3bddaa5:/# vim inventory.txt
root@d63bc3bddaa5:/# cat > create-file-dev.yml
---
- name: Create a file on dev nodes
  hosts: dev
  tasks:
    - name: Create a file
      file:
        path: /root/dev_file
        state: touch
^C
root@d63bc3bddaa5:/# ansible-playbook create-file-dev.yml

PLAY [Create a file on dev nodes] *****

TASK [Gathering Facts] *****
Enter passphrase for key '/root/.ssh/id_rsa':
ok: [host1]

TASK [Create a file] *****
changed: [host1]

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

root@d63bc3bddaa5:/# █

```

```

root@d63bc3bddaa5:/# ansible-playbook nodejs.yml

PLAY [Install Node.js] *****

TASK [Gathering Facts] *****
Enter passphrase for key '/root/.ssh/id_rsa':
Enter passphrase for key '/root/.ssh/id_rsa':
ok: [host1]

fatal: [host2]: UNREACHABLE! => {"changed": false, "msg": "Failed to connect to the host via ssh: root@node2: Permission denied (publickey,password).", "unreachable": true}

TASK [Install Node.js] *****

changed: [host1]

TASK [Install npm] *****

```

```

root@d63bc3bddaa5:/# ansible-galaxy init my_role
- Role my_role was created successfully
root@d63bc3bddaa5:/# █

```

```

root@d63bc3bddaa5:/# ansible-galaxy install geerlingguy.postgresql
Starting galaxy role install process
- downloading role 'postgresql', owned by geerlingguy
- downloading role from https://github.com/geerlingguy/ansible-role-postgresql/archive/3.5.2.tar.gz
- extracting geerlingguy.postgresql to /root/.ansible/roles/geerlingguy.postgresql
- geerlingguy.postgresql (3.5.2) was installed successfully
root@d63bc3bddaa5:/# █

```

```

root@d63bc3bddaa5:/# ansible-playbook postgres.yml

PLAY [all] *****

TASK [Gathering Facts] *****
Enter passphrase for key '/root/.ssh/id_rsa':
ok: [host2]

fatal: [host1]: UNREACHABLE! => {"changed": false, "msg": "Failed to connect to the host via ssh: root@node1: Permission denied (publickey,password).", "unreachable": true}

TASK [geerlingguy.postgresql : include_tasks] *****
included: /root/.ansible/roles/geerlingguy.postgresql/tasks/variables.yml for host2

TASK [geerlingguy.postgresql : Include OS-specific variables (Debian).] *****
ok: [host2]

TASK [geerlingguy.postgresql : Include OS-specific variables (Redhat).] *****
skipping: [host2]

TASK [geerlingguy.postgresql : Include OS-specific variables (Amazon).] *****
skipping: [host2]

TASK [geerlingguy.postgresql : Include OS-specific variables (Fedora).] *****skipping: [host2]

TASK [geerlingguy.postgresql : Define postgresql_packages.] *****ok: [host2]

TASK [geerlingguy.postgresql : Define postgresql_version.] *****ok: [host2]

TASK [geerlingguy.postgresql : Define postgresql_daemon.] *****ok: [host2]

TASK [geerlingguy.postgresql : Define postgresql_data_dir.] *****ok: [host2]

TASK [geerlingguy.postgresql : Define postgresql_bin_path.] *****ok: [host2]

TASK [geerlingguy.postgresql : Define postgresql_config_path.] *****ok: [host2]

TASK [geerlingguy.postgresql : Define postgresql_unix_socket_directories_mode.] *****ok: [host2]

TASK [geerlingguy.postgresql : Define postgresql_log_dir.] *****ok: [host2]

TASK [geerlingguy.postgresql : Define postgresql_effective_log_dir, if postgresql_log_dir is absolute] ***skipping: [host2]

TASK [geerlingguy.postgresql : Define postgresql_effective_log_dir, if postgresql_log_dir is relative] ***ok: [host2]

TASK [geerlingguy.postgresql : include_tasks] *****skipping: [host2]

```

```

root@d63bc3bddaa5:/# ansible-playbook conditions.yml

```

```

PLAY [Conditional example] *****

TASK [Gathering Facts] *****
Enter passphrase for key '/root/.ssh/id_rsa': ok: [host2]

fatal: [host1]: UNREACHABLE! => {"changed": false, "msg": "Failed to connect to the host via ssh: root@node1: Permission denied (publickey,password).", "unreachable": true}

TASK [Install httpd on CentOS] *****
skipping: [host2]

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

```

```

root@d63bc3bddaa5:/#

```

```

root@d63bc3bddaa5:/# ansible-vault create vault.yaml
New Vault password:
Confirm New Vault password:
root@d63bc3bddaa5:/# ansible-vault rekey vault.yaml
Vault password:
New Vault password:
Confirm New Vault password:
Rekey successful
root@d63bc3bddaa5:/#

```