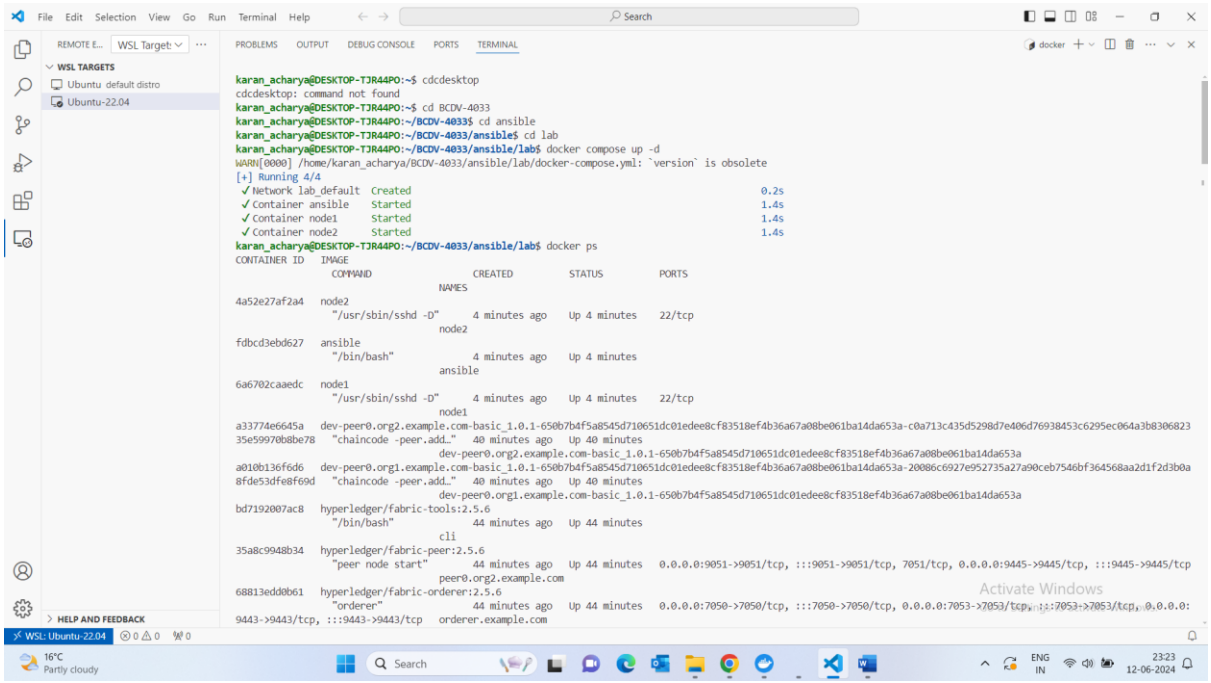
Lab-3:

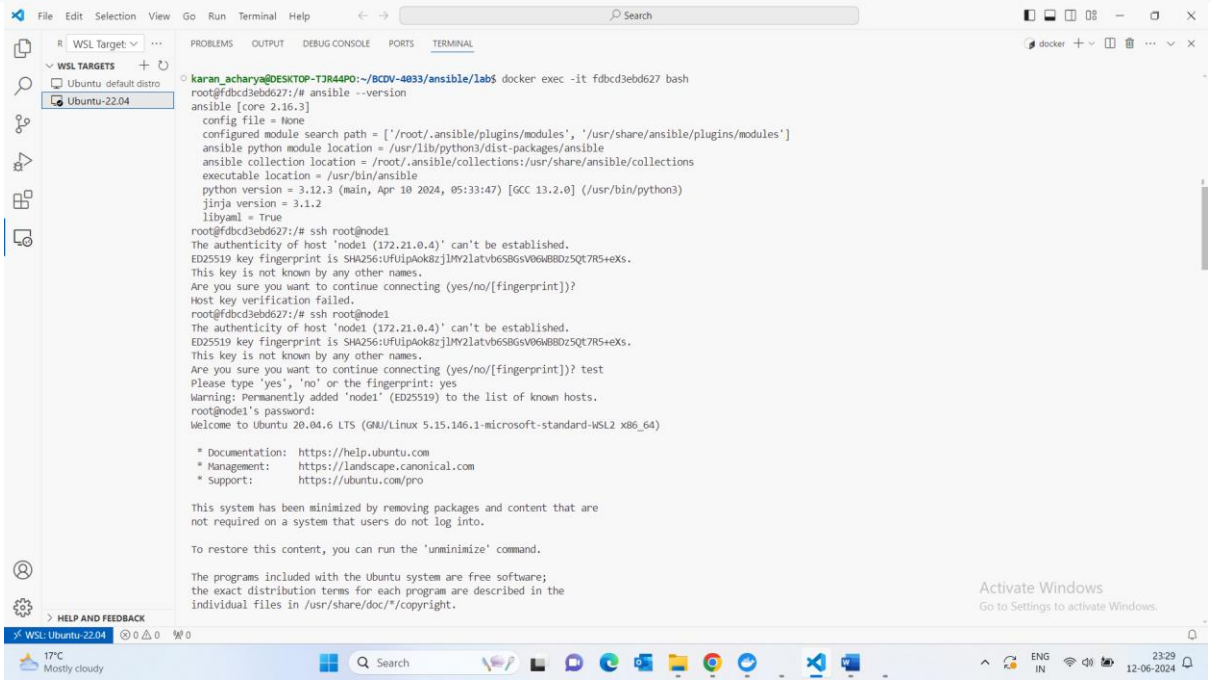
Steps: clone repository

Docker ps

```
cd /ansible/lab
docker compose up -d
```

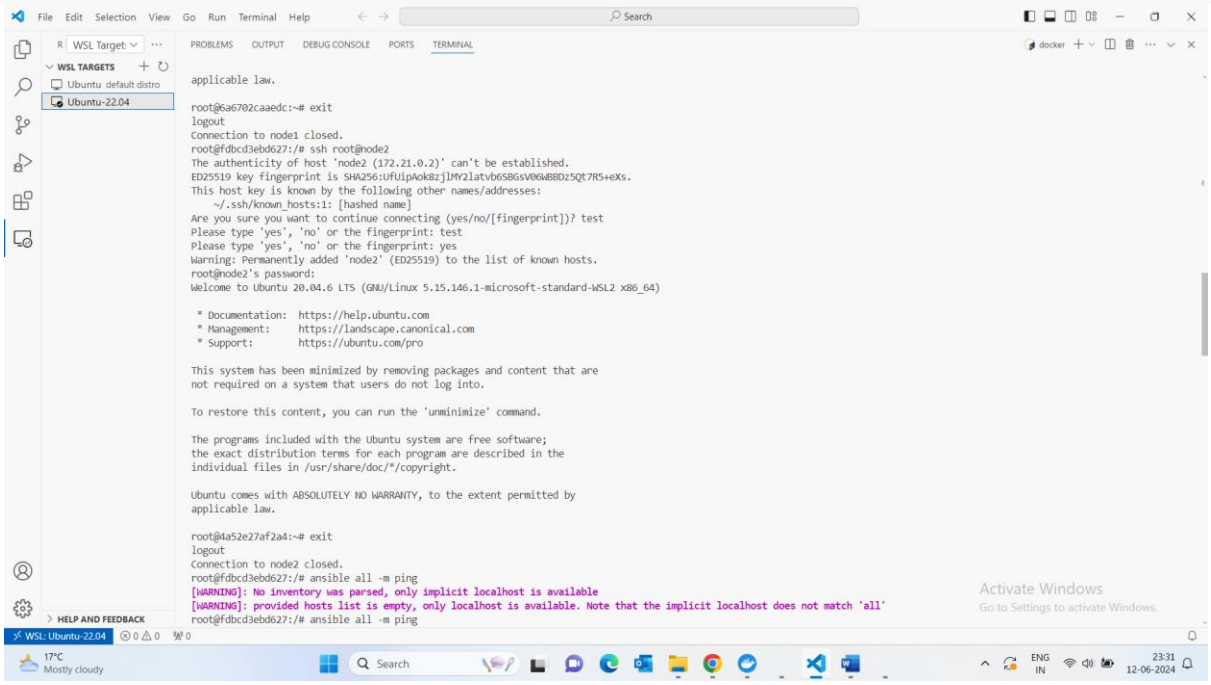



```
Command:  docker exec -it <containerid_ansible> bash
```

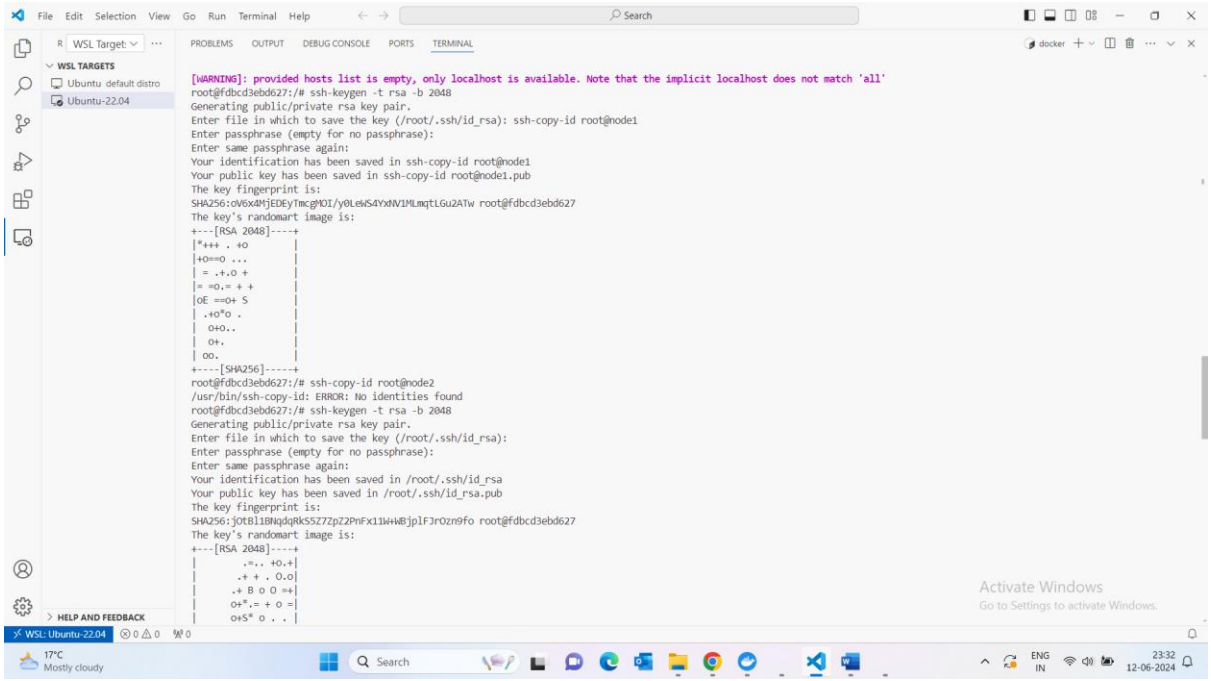


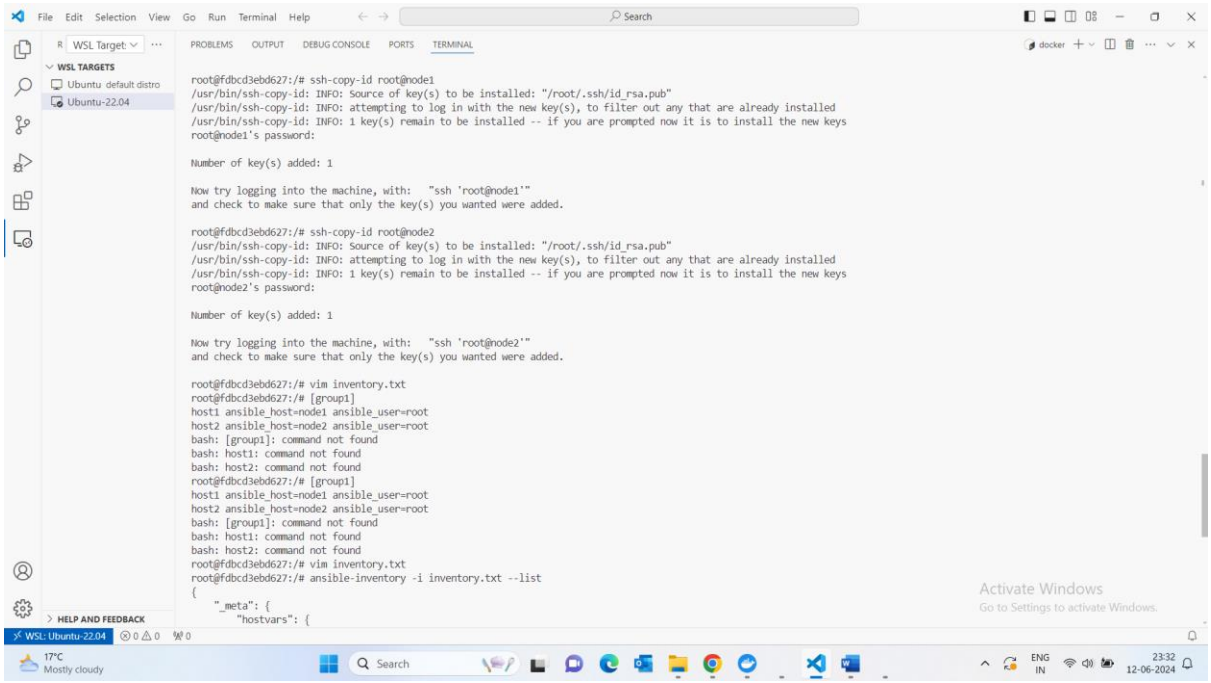

```
Command:  // Check if ansible is installed
```

```
ansible --version

// Check if SSH is enabled and you are able to remote into the two nodes.
ssh root@node1

exit

ssh root@node2

exit
ansible all -m ping
```

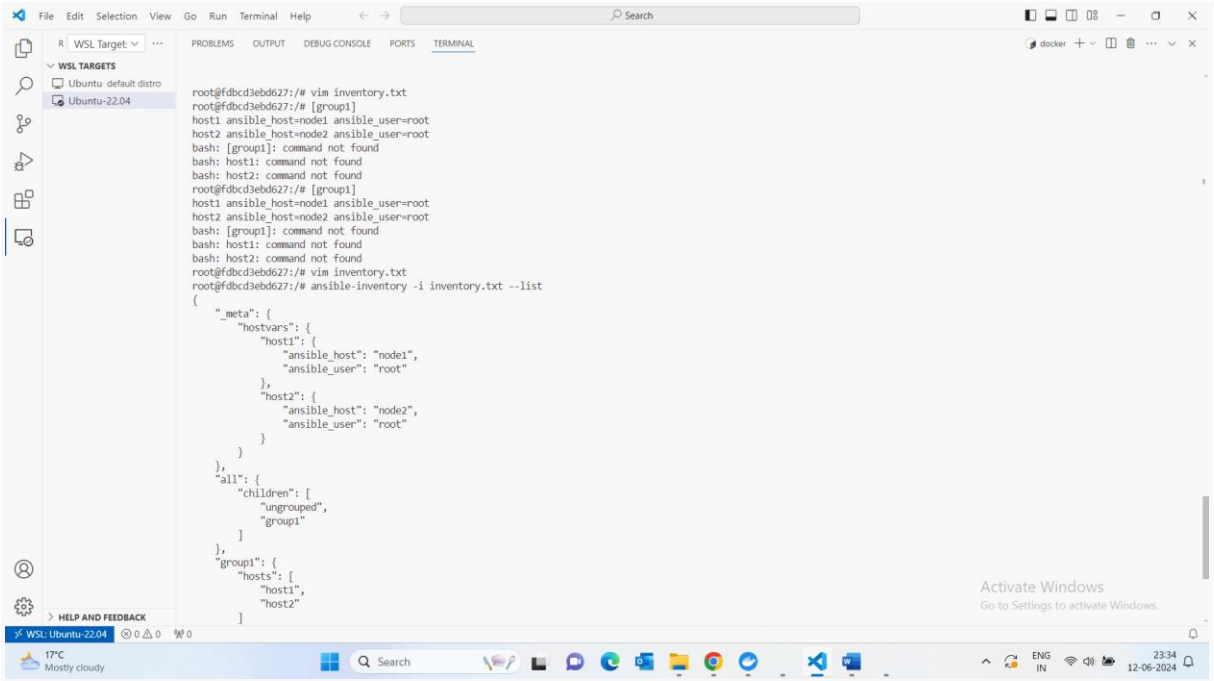



```
Command: ssh-keygen -t rsa -b 2048

ssh-copy-id root@node1
ssh-copy-id root@node2
```

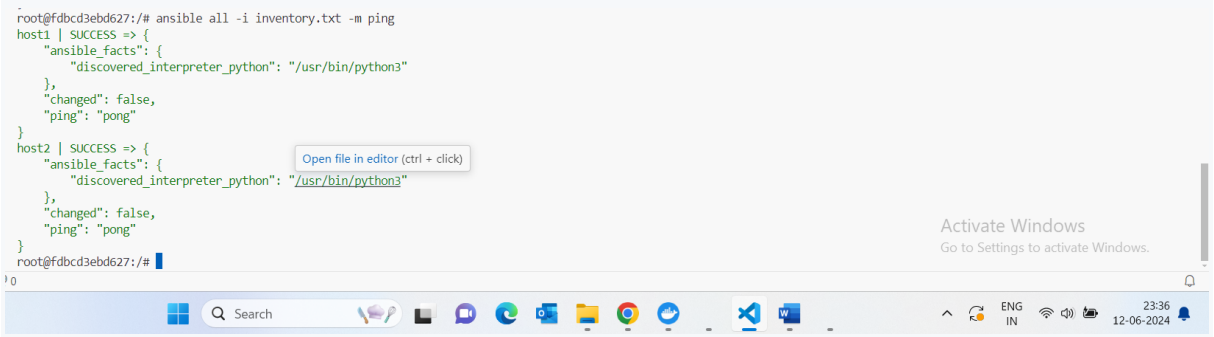





```
Command:// Create a inventory list in a txt file "inventory.txt"
// Install VIM if you would like to use it.

[group1]
host1 ansible_host=node1 ansible_user=root
host2 ansible_host=node2 ansible_user=root
```



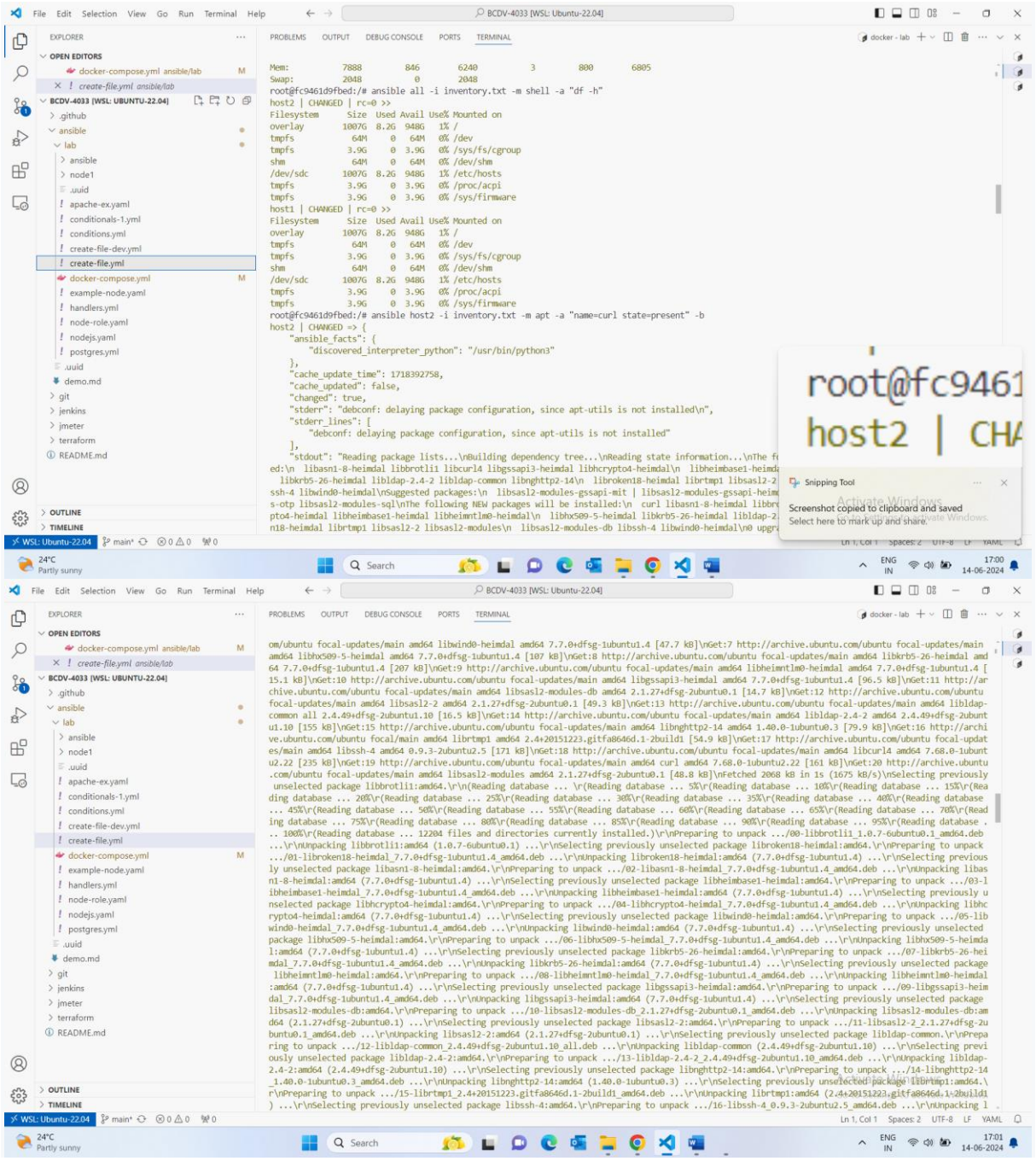

```
// Check if the inventory list is getting picked up

ansible-inventory -i inventory.txt --list

// Check if you are able to connect to the other nodes

ansible all -i inventory.txt -m ping
```




```
Ansible AD-HOC commands:
```

- Check memory usage on node1

```
ansible -i inventory.txt host1 -m shell -a "free -m"

// Disk usage

ansible all -i inventory.txt -m shell -a "df -h"

ansible host2 -i inventory.txt -m apt -a "name=curl state=present" -b

ansible host1 -i inventory.txt -m service -a "name=cron state=restarted" -b
```


File Edit Selection View Go Run Terminal Help
BCDV-4033 [WSL: Ubuntu-22.04]
EXPLORER
OPEN EDITORS
docker-compose.yml ansible/lab
create-file.yml ansible/lab
BCDV-4033 [WSL: UBUNTU-22.04]
.github
ansible
lab
ansible
node1
.uuid
apache-ex.yaml
conditionals-1.yml
conditions.yml
create-file-dev.yml
create-file.yml
docker-compose.yml
example-node.yaml
handlers.yml
node-role.yaml
nodejs.yaml
postgres.yml
.uuid
demo.md
git
jenkins
jmeter
terraform
README.md
OUTLINE
TIMELINE
PROBLEMS OUTPUT DEBUG CONSOLE PORTS TERMINAL
docker - lab
Mem: 7888 846 6240 3 800 6805
Swap: 2048 0 2048
root@fc9461d9fbed:/# ansible all -i inventory.txt -m shell -a "df -h"
host2 | CHANGED | rc=0 >>
Filesystem Size Used Avail Use% Mounted on
overlay 1007G 8.2G 948G 1% /
tmpfs 64M 0 64M 0% /dev
tmpfs 3.9G 0 3.9G 0% /sys/fs/cgroup
shm 64M 0 64M 0% /dev/shm
/dev/sdc 1007G 8.2G 948G 1% /etc/hosts
tmpfs 3.9G 0 3.9G 0% /proc/acpi
tmpfs 3.9G 0 3.9G 0% /sys/firmware
host1 | CHANGED | rc=0 >>
Filesystem Size Used Avail Use% Mounted on
overlay 1007G 8.2G 948G 1% /
tmpfs 64M 0 64M 0% /dev
tmpfs 3.9G 0 3.9G 0% /sys/fs/cgroup
shm 64M 0 64M 0% /dev/shm
/dev/sdc 1007G 8.2G 948G 1% /etc/hosts
tmpfs 3.9G 0 3.9G 0% /proc/acpi
tmpfs 3.9G 0 3.9G 0% /sys/firmware
root@fc9461d9fbed:/# 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": 1718392758,
"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 f
ed:\n libasn1-8-heimdal libbrotli1 libcurl4 libgssapi3-heimdal libhcrypto4-heimdal\n libheimbase1-heimd
libkrb5-26-heimdal libldap-2.4-2 libldap-common libnghttp2-14\n libroken18-heimdal librtmp1 libsasl2-2
ssh-4 libwind0-heimdal\nSuggested packages:\n libsasl2-modules-gssapi-mit | libsasl2-modules-gssapi-heim
s-otp libsasl2-modules-sql\nThe following NEW packages will be installed:\n curl libasn1-8-heimdal libbr
pto4-heimdal libheimbase1-heimdal libheimntlm0-heimdal\n libhx509-5-heimdal libkrb5-26-heimdal libldap-2
n18-heimdal librtmp1 libsasl2-2 libsasl2-modules\n libsasl2-modules-db libssh-4 libwind0-heimdal\n0 upgr
root@fc9461
host2 | CHA
Snipping Tool
Screenshot copied to clipboard and saved
Select here to mark up and share.
Activate Windows
Go to Settings to activate Windows.
WSL: Ubuntu-22.04 main* 0 0 0
Ln 1, Col 1 Spaces: 2 UTF-8 LF YAML
24°C Partly sunny
Search
ENG IN
17:00 14-06-2024

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.uuid
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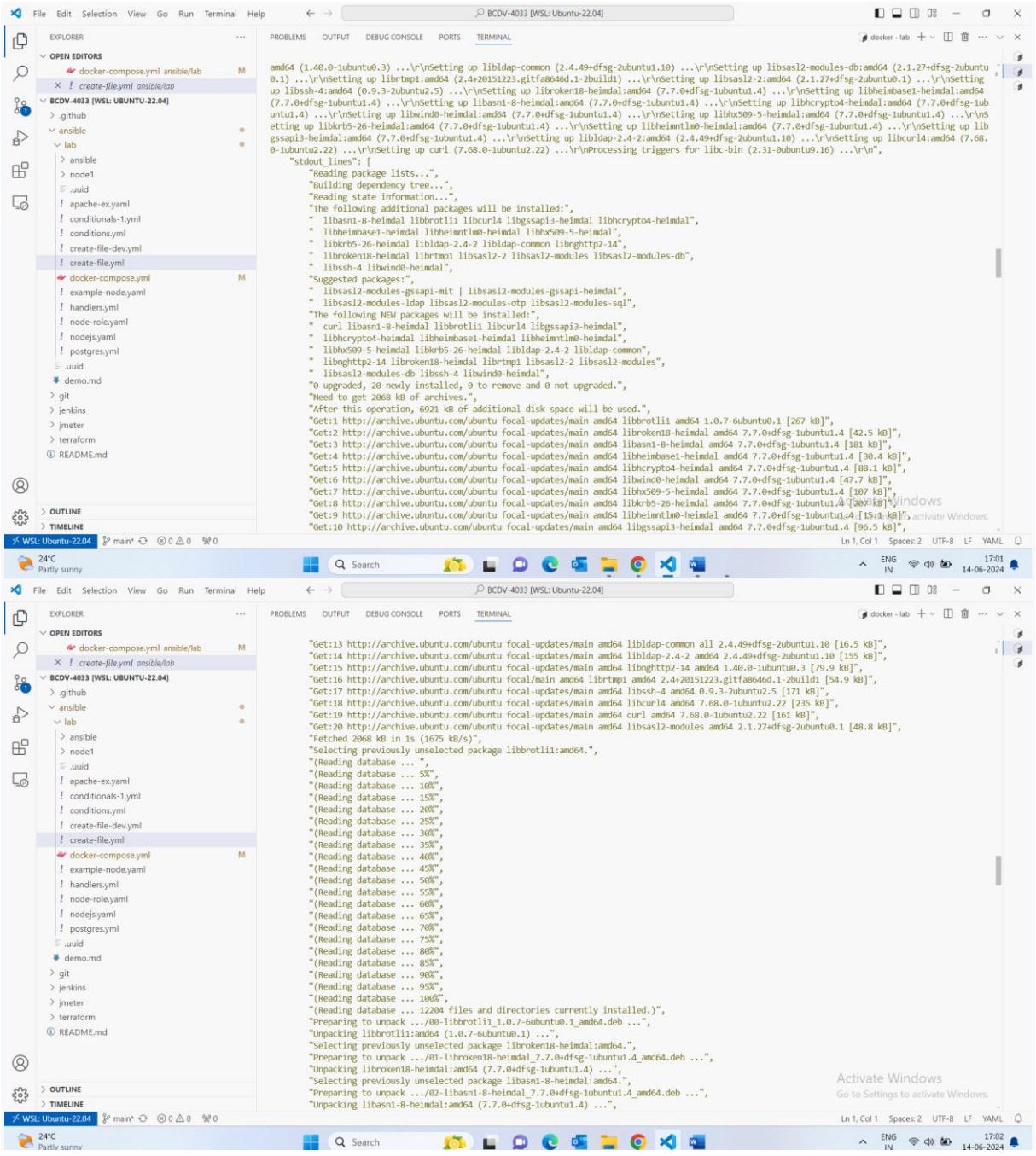
conditionals-1.yml
conditions.yml
create-file-dev.yml
create-file.yml
docker-compose.yml
example-node.yaml
handlers.yml
node-role.yaml
nodejs.yaml
postgres.yml
.uuid
demo.md
git
jenkins
jmeter
terraform
README.md
OUTLINE
TIMELINE
PROBLEMS OUTPUT DEBUG CONSOLE PORTS TERMINAL
docker - lab
om/ubuntu focal-updates/main amd64 libwind0-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [47.7 kB]\nGet:7 http://archive.ubuntu.com/ubuntu focal-updates/main
amd64 libhx509-5-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [107 kB]\nGet:8 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libkrb5-26-heimdal amd
64 7.7.0+dfsg-1ubuntu1.4 [207 kB]\nGet:9 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libheimntlm0-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [
15.1 kB]\nGet:10 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libgssapi3-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [96.5 kB]\nGet:11 http://ar
chive.ubuntu.com/ubuntu focal-updates/main amd64 libsasl2-modules-db amd64 2.1.27+dfsg-2ubuntu0.1 [14.7 kB]\nGet:12 http://archive.ubuntu.com/ubuntu
focal-updates/main amd64 libsasl2-2 amd64 2.1.27+dfsg-2ubuntu0.1 [49.3 kB]\nGet:13 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libldap-
common all 2.4.49+dfsg-2ubuntu1.10 [16.5 kB]\nGet:14 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libldap-2.4-2 amd64 2.4.49+dfsg-2ubunt
u1.10 [155 kB]\nGet:15 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libnghttp2-14 amd64 1.40.0-1ubuntu0.3 [79.9 kB]\nGet:16 http://archi
ve.ubuntu.com/ubuntu focal/main amd64 librtmp1 amd64 2.4+20151223.gitfa8646d.1-2build1 [54.9 kB]\nGet:17 http://archive.ubuntu.com/ubuntu focal-updat
es/main amd64 libssh-4 amd64 0.9.3-2ubuntu2.5 [171 kB]\nGet:18 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libcurl4 amd64 7.68.0-1ubunt
u2.22 [235 kB]\nGet:19 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 curl amd64 7.68.0-1ubuntu2.22 [161 kB]\nGet:20 http://archive.ubuntu
.com/ubuntu focal-updates/main amd64 libsasl2-modules amd64 2.1.27+dfsg-2ubuntu0.1 [48.8 kB]\nFetched 2068 kB in 1s (1675 kB/s)\nSelecting previously
unselected package libbrotli1:amd64.\r\n(Reading database ... \r(Reading database ... 5%\r(Reading database ... 10%\r(Reading database ... 15%\r(Rea
ding 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(Read
ing 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.)\r\nPreparing to unpack .../00-libbrotli1_1.0.7-6ubuntu0.1_amd64.deb
...\r\nUnpacking libbrotli1:amd64 (1.0.7-6ubuntu0.1) ...\r\nSelecting previously unselected package libroken18-heimdal:amd64.\r\nPreparing to unpack
.../01-libroken18-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...\r\nUnpacking libroken18-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSelecting previous
ly unselected package libasn1-8-heimdal:amd64.\r\nPreparing to unpack .../02-libasn1-8-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...\r\nUnpacking libas
n1-8-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSelecting previously unselected package libheimbase1-heimdal:amd64.\r\nPreparing to unpack .../03-l
ibheimbase1-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...\r\nUnpacking libheimbase1-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSelecting previously u
nselected package libhcrypto4-heimdal:amd64.\r\nPreparing to unpack .../04-libhcrypto4-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...\r\nUnpacking libhc
rypto4-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSelecting previously unselected package libwind0-heimdal:amd64.\r\nPreparing to unpack .../05-lib
wind0-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...\r\nUnpacking libwind0-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSelecting previously unselected
package libhx509-5-heimdal:amd64.\r\nPreparing to unpack .../06-libhx509-5-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...\r\nUnpacking libhx509-5-heimda
l:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSelecting previously unselected package libkrb5-26-heimdal:amd64.\r\nPreparing to unpack .../07-libkrb5-26-hei
mdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...\r\nUnpacking libkrb5-26-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSelecting previously unselected package
libheimntlm0-heimdal:amd64.\r\nPreparing to unpack .../08-libheimntlm0-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...\r\nUnpacking libheimntlm0-heimdal
:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSelecting previously unselected package libgssapi3-heimdal:amd64.\r\nPreparing to unpack .../09-libgssapi3-heim
dal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...\r\nUnpacking libgssapi3-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSelecting previously unselected package
libsasl2-modules-db:amd64.\r\nPreparing to unpack .../10-libsasl2-modules-db_2.1.27+dfsg-2ubuntu0.1_amd64.deb ...\r\nUnpacking libsasl2-modules-db:am
d64 (2.1.27+dfsg-2ubuntu0.1) ...\r\nSelecting previously unselected package libsasl2-2:amd64.\r\nPreparing to unpack .../11-libsasl2-2_2.1.27+dfsg-2u
buntu0.1_amd64.deb ...\r\nUnpacking libsasl2-2:amd64 (2.1.27+dfsg-2ubuntu0.1) ...\r\nSelecting previously unselected package libldap-common.\r\nPrepa
ring to unpack .../12-libldap-common_2.4.49+dfsg-2ubuntu1.10_all.deb ...\r\nUnpacking libldap-common (2.4.49+dfsg-2ubuntu1.10) ...\r\nSelecting previ
ously unselected package libldap-2.4-2:amd64.\r\nPreparing to unpack .../13-libldap-2.4-2_2.4.49+dfsg-2ubuntu1.10_amd64.deb ...\r\nUnpacking libldap-
2.4-2:amd64 (2.4.49+dfsg-2ubuntu1.10) ...\r\nSelecting previously unselected package libnghttp2-14:amd64.\r\nPreparing to unpack .../14-libnghttp2-14
_1.40.0-1ubuntu0.3_amd64.deb ...\r\nUnpacking libnghttp2-14:amd64 (1.40.0-1ubuntu0.3) ...\r\nSelecting previously unselected package librtmp1:amd64.\
r\nPreparing to unpack .../15-librtmp1_2.4+20151223.gitfa8646d.1-2build1_amd64.deb ...\r\nUnpacking librtmp1:amd64 (2.4+20151223.gitfa8646d.1-2build1
) ...\r\nSelecting previously unselected package libssh-4:amd64.\r\nPreparing to unpack .../16-libssh-4_0.9.3-2ubuntu2.5_amd64.deb ...\r\nUnpacking l
WSL: Ubuntu-22.04 main* 0 0 0
Ln 1, Col 1 Spaces: 2 UTF-8 LF YAML
24°C Partly sunny
Search
ENG IN
17:01 14-06-2024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BCDV-4033 [WSL: Ubuntu-22.04]
EXPLORER
OPEN EDITORS
docker-compose.yml ansible/lab M
create-file.yml ansible/lab
BCDV-4033 [WSL: UBUNTU-22.04]
.github
ansible
lab
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node1
.uuid
apache-ex.yaml
conditionals-1.yml
conditions.yml
create-file-dev.yml
create-file.yml
docker-compose.yml M
example-node.yaml
handlers.yml
node-role.yaml
nodejs.yaml
postgres.yml
.uuid
demo.md
git
jenkins
jmeter
terraform
README.md
OUTLINE
TIMELINE
PROBLEMS OUTPUT DEBUG CONSOLE PORTS TERMINAL
docker - lab
amd64 (1.40.0-1ubuntu0.3) ...\r\nSetting up libldap-common (2.4.49+dfsg-2ubuntu1.10) ...\r\nSetting up libsasl2-modules-db:amd64 (2.1.27+dfsg-2ubuntu0.1) ...\r\nSetting up librtmp1:amd64 (2.4+20151223.gitfa8646d.1-2build1) ...\r\nSetting up libsasl2-2:amd64 (2.1.27+dfsg-2ubuntu0.1) ...\r\nSetting up libssh-4:amd64 (0.9.3-2ubuntu2.5) ...\r\nSetting up libroken18-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSetting up libheimbase1-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSetting up libasn1-8-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSetting up libhcrypto4-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSetting up libwind0-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSetting up libhx509-5-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSetting up libkrb5-26-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSetting up libheimntlm0-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSetting up libgssapi3-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...\r\nSetting up libldap-2.4-2:amd64 (2.4.49+dfsg-2ubuntu1.10) ...\r\nSetting up libcurl4:amd64 (7.68.0-1ubuntu2.22) ...\r\nSetting up curl (7.68.0-1ubuntu2.22) ...\r\nProcessing triggers for libc-bin (2.31-0ubuntu9.16) ...\r\n",
"stdout_lines": [
"Reading package lists...",
"Building dependency tree...",
"Reading state information...",
"The following additional packages will be installed:",
" libasn1-8-heimdal libbrotli1 libcurl4 libgssapi3-heimdal libhcrypto4-heimdal",
" libheimbase1-heimdal libheimntlm0-heimdal libhx509-5-heimdal",
" libkrb5-26-heimdal libldap-2.4-2 libldap-common libnghttp2-14",
" libroken18-heimdal librtmp1 libsasl2-2 libsasl2-modules libsasl2-modules-db",
" libssh-4 libwind0-heimdal",
"Suggested packages:",
" libsasl2-modules-gssapi-mit | libsasl2-modules-gssapi-heimdal",
" libsasl2-modules-ldap libsasl2-modules-otp libsasl2-modules-sql",
"The following NEW packages will be installed:",
" curl libasn1-8-heimdal libbrotli1 libcurl4 libgssapi3-heimdal",
" libhcrypto4-heimdal libheimbase1-heimdal libheimntlm0-heimdal",
" libhx509-5-heimdal libkrb5-26-heimdal libldap-2.4-2 libldap-common",
" libnghttp2-14 libroken18-heimdal librtmp1 libsasl2-2 libsasl2-modules",
" libsasl2-modules-db libssh-4 libwind0-heimdal",
"0 upgraded, 20 newly installed, 0 to remove and 0 not upgraded.",
"Need to get 2068 kB of archives.",
"After this operation, 6921 kB of additional disk space will be used.",
"Get:1 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libbrotli1 amd64 1.0.7-6ubuntu0.1 [267 kB]",
"Get:2 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libroken18-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [42.5 kB]",
"Get:3 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libasn1-8-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [181 kB]",
"Get:4 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libheimbase1-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [30.4 kB]",
"Get:5 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libhcrypto4-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [88.1 kB]",
"Get:6 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libwind0-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [47.7 kB]",
"Get:7 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libhx509-5-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [107 kB]",
"Get:8 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libkrb5-26-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [207 kB]",
"Get:9 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libheimntlm0-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [15.1 kB]",
"Get:10 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libgssapi3-heimdal amd64 7.7.0+dfsg-1ubuntu1.4 [96.5 kB]",
Activate Windows
Go to Settings to activate Windows.
WSL: Ubuntu-22.04 main* 0 0 0
Ln 1, Col 1 Spaces: 2 UTF-8 LF YAML
24°C Partly sunny
Search
ENG IN
17:01 14-06-2024

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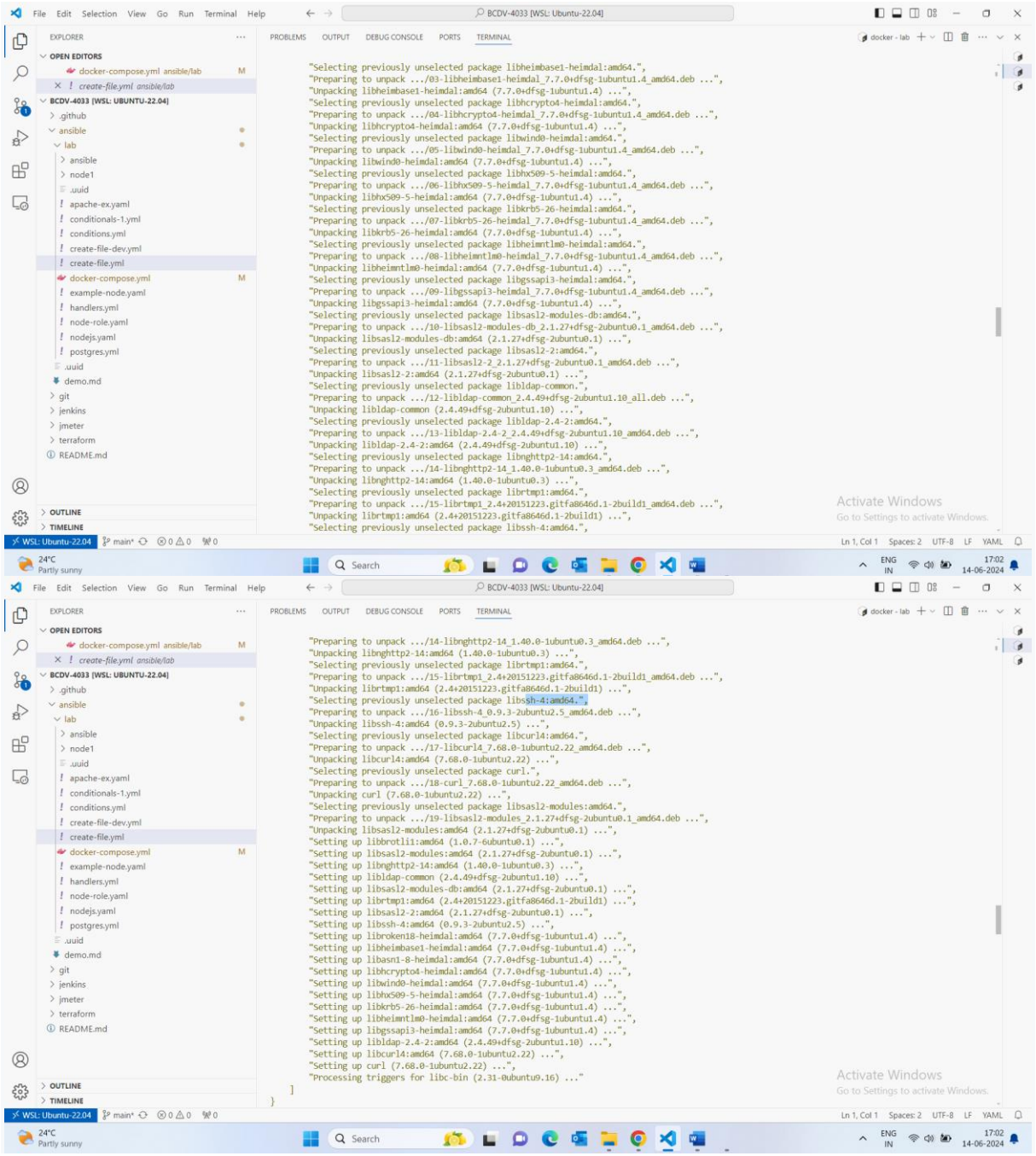
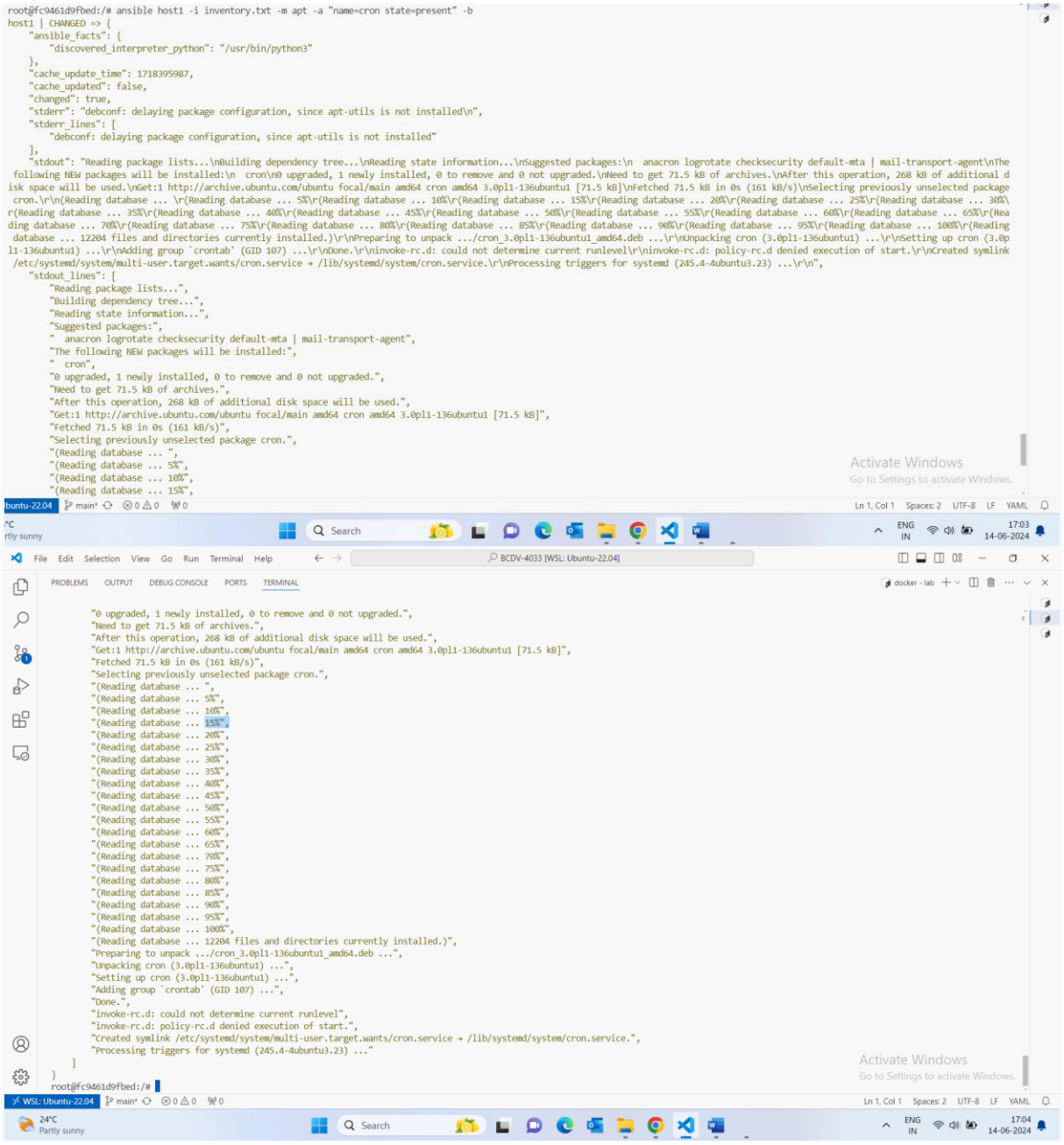
.uuid
apache-ex.yaml
conditionals-1.yml
conditions.yml
create-file-dev.yml
create-file.yml
docker-compose.yml M
example-node.yaml
handlers.yml
node-role.yaml
nodejs.yaml
postgres.yml
.uuid
demo.md
git
jenkins
jmeter
terraform
README.md
OUTLINE
TIMELINE
PROBLEMS OUTPUT DEBUG CONSOLE PORTS TERMINAL
docker - lab
"Get:13 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libldap-common all 2.4.49+dfsg-2ubuntu1.10 [16.5 kB]",
"Get:14 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libldap-2.4-2 amd64 2.4.49+dfsg-2ubuntu1.10 [155 kB]",
"Get:15 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libnghttp2-14 amd64 1.40.0-1ubuntu0.3 [79.9 kB]",
"Get:16 http://archive.ubuntu.com/ubuntu focal/main amd64 librtmp1 amd64 2.4+20151223.gitfa8646d.1-2build1 [54.9 kB]",
"Get:17 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libssh-4 amd64 0.9.3-2ubuntu2.5 [171 kB]",
"Get:18 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libcurl4 amd64 7.68.0-1ubuntu2.22 [235 kB]",
"Get:19 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 curl amd64 7.68.0-1ubuntu2.22 [161 kB]",
"Get:20 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 libsasl2-modules amd64 2.1.27+dfsg-2ubuntu0.1 [48.8 kB]",
"Fetched 2068 kB in 1s (1675 kB/s)",
"Selecting previously unselected package libbrotli1:amd64.",
"(Reading database ... ",
"(Reading database ... 5%",
"(Reading database ... 10%",
"(Reading database ... 15%",
"(Reading database ... 20%",
"(Reading database ... 25%",
"(Reading database ... 30%",
"(Reading database ... 35%",
"(Reading database ... 40%",
"(Reading database ... 45%",
"(Reading database ... 50%",
"(Reading database ... 55%",
"(Reading database ... 60%",
"(Reading database ... 65%",
"(Reading database ... 70%",
"(Reading database ... 75%",
"(Reading database ... 80%",
"(Reading database ... 85%",
"(Reading database ... 90%",
"(Reading database ... 95%",
"(Reading database ... 100%",
"(Reading database ... 12204 files and directories currently installed.)",
"Preparing to unpack .../00-libbrotli1_1.0.7-6ubuntu0.1_amd64.deb ...",
"Unpacking libbrotli1:amd64 (1.0.7-6ubuntu0.1) ...",
"Selecting previously unselected package libroken18-heimdal:amd64.",
"Preparing to unpack .../01-libroken18-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...",
"Unpacking libroken18-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Selecting previously unselected package libasn1-8-heimdal:amd64.",
"Preparing to unpack .../02-libasn1-8-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...",
"Unpacking libasn1-8-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
Activate Windows
Go to Settings to activate Windows.
WSL: Ubuntu-22.04 main* 0 0 0
Ln 1, Col 1 Spaces: 2 UTF-8 LF YAML
24°C Partly sunny
Search
ENG IN
17:02 14-06-2024


File Edit Selection View Go Run Terminal Help
BCDV-4033 [WSL: Ubuntu-22.04]
EXPLORER
OPEN EDITORS
docker-compose.yml ansible/lab M
create-file.yml ansible/lab
BCDV-4033 [WSL: UBUNTU-22.04]
.github
ansible
lab
ansible
node1
.uuid
apache-ex.yaml
conditionals-1.yml
conditions.yml
create-file-dev.yml
create-file.yml
docker-compose.yml M
example-node.yaml
handlers.yml
node-role.yaml
nodejs.yaml
postgres.yml
.uuid
demo.md
git
jenkins
jmeter
terraform
README.md
OUTLINE
TIMELINE
PROBLEMS OUTPUT DEBUG CONSOLE PORTS TERMINAL
docker - lab
"Selecting previously unselected package libheimbase1-heimdal:amd64.",
"Preparing to unpack .../03-libheimbase1-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...",
"Unpacking libheimbase1-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Selecting previously unselected package libhcrypto4-heimdal:amd64.",
"Preparing to unpack .../04-libhcrypto4-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...",
"Unpacking libhcrypto4-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Selecting previously unselected package libwind0-heimdal:amd64.",
"Preparing to unpack .../05-libwind0-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...",
"Unpacking libwind0-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Selecting previously unselected package libhx509-5-heimdal:amd64.",
"Preparing to unpack .../06-libhx509-5-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...",
"Unpacking libhx509-5-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Selecting previously unselected package libkrb5-26-heimdal:amd64.",
"Preparing to unpack .../07-libkrb5-26-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...",
"Unpacking libkrb5-26-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Selecting previously unselected package libheimntlm0-heimdal:amd64.",
"Preparing to unpack .../08-libheimntlm0-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...",
"Unpacking libheimntlm0-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Selecting previously unselected package libgssapi3-heimdal:amd64.",
"Preparing to unpack .../09-libgssapi3-heimdal_7.7.0+dfsg-1ubuntu1.4_amd64.deb ...",
"Unpacking libgssapi3-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Selecting previously unselected package libsasl2-modules-db:amd64.",
"Preparing to unpack .../10-libsasl2-modules-db_2.1.27+dfsg-2ubuntu0.1_amd64.deb ...",
"Unpacking libsasl2-modules-db:amd64 (2.1.27+dfsg-2ubuntu0.1) ...",
"Selecting previously unselected package libsasl2-2:amd64.",
"Preparing to unpack .../11-libsasl2-2_2.1.27+dfsg-2ubuntu0.1_amd64.deb ...",
"Unpacking libsasl2-2:amd64 (2.1.27+dfsg-2ubuntu0.1) ...",
"Selecting previously unselected package libldap-common.",
"Preparing to unpack .../12-libldap-common_2.4.49+dfsg-2ubuntu1.10_all.deb ...",
"Unpacking libldap-common (2.4.49+dfsg-2ubuntu1.10) ...",
"Selecting previously unselected package libldap-2.4-2:amd64.",
"Preparing to unpack .../13-libldap-2.4-2_2.4.49+dfsg-2ubuntu1.10_amd64.deb ...",
"Unpacking libldap-2.4-2:amd64 (2.4.49+dfsg-2ubuntu1.10) ...",
"Selecting previously unselected package libnghttp2-14:amd64.",
"Preparing to unpack .../14-libnghttp2-14_1.40.0-1ubuntu0.3_amd64.deb ...",
"Unpacking libnghttp2-14:amd64 (1.40.0-1ubuntu0.3) ...",
"Selecting previously unselected package librtmp1:amd64.",
"Preparing to unpack .../15-librtmp1_2.4+20151223.gitfa8646d.1-2build1_amd64.deb ...",
"Unpacking librtmp1:amd64 (2.4+20151223.gitfa8646d.1-2build1) ...",
"Selecting previously unselected package libssh-4:amd64.",
Activate Windows
Go to Settings to activate Windows.
WSL: Ubuntu-22.04 main* 0 0 0
Ln 1, Col 1 Spaces: 2 UTF-8 LF YAML
24°C Partly sunny
Search
ENG IN
17:02 14-06-2024

File Edit Selection View Go Run Terminal Help
BCDV-4033 [WSL: Ubuntu-22.04]
EXPLORER
OPEN EDITORS
docker-compose.yml ansible/lab M
create-file.yml ansible/lab
BCDV-4033 [WSL: UBUNTU-22.04]
.github
ansible
lab
ansible
node1
.uuid
apache-ex.yaml
conditionals-1.yml
conditions.yml
create-file-dev.yml
create-file.yml
docker-compose.yml M
example-node.yaml
handlers.yml
node-role.yaml
nodejs.yaml
postgres.yml
.uuid
demo.md
git
jenkins
jmeter
terraform
README.md
OUTLINE
TIMELINE
PROBLEMS OUTPUT DEBUG CONSOLE PORTS TERMINAL
docker - lab
"Preparing to unpack .../14-libnghttp2-14_1.40.0-1ubuntu0.3_amd64.deb ...",
"Unpacking libnghttp2-14:amd64 (1.40.0-1ubuntu0.3) ...",
"Selecting previously unselected package librtmp1:amd64.",
"Preparing to unpack .../15-librtmp1_2.4+20151223.gitfa8646d.1-2build1_amd64.deb ...",
"Unpacking librtmp1:amd64 (2.4+20151223.gitfa8646d.1-2build1) ...",
"Selecting previously unselected package libssh-4:amd64.",
"Preparing to unpack .../16-libssh-4_0.9.3-2ubuntu2.5_amd64.deb ...",
"Unpacking libssh-4:amd64 (0.9.3-2ubuntu2.5) ...",
"Selecting previously unselected package libcurl4:amd64.",
"Preparing to unpack .../17-libcurl4_7.68.0-1ubuntu2.22_amd64.deb ...",
"Unpacking libcurl4:amd64 (7.68.0-1ubuntu2.22) ...",
"Selecting previously unselected package curl.",
"Preparing to unpack .../18-curl_7.68.0-1ubuntu2.22_amd64.deb ...",
"Unpacking curl (7.68.0-1ubuntu2.22) ...",
"Selecting previously unselected package libsasl2-modules:amd64.",
"Preparing to unpack .../19-libsasl2-modules_2.1.27+dfsg-2ubuntu0.1_amd64.deb ...",
"Unpacking libsasl2-modules:amd64 (2.1.27+dfsg-2ubuntu0.1) ...",
"Setting up libbrotli1:amd64 (1.0.7-6ubuntu0.1) ...",
"Setting up libsasl2-modules:amd64 (2.1.27+dfsg-2ubuntu0.1) ...",
"Setting up libnghttp2-14:amd64 (1.40.0-1ubuntu0.3) ...",
"Setting up libldap-common (2.4.49+dfsg-2ubuntu1.10) ...",
"Setting up libsasl2-modules-db:amd64 (2.1.27+dfsg-2ubuntu0.1) ...",
"Setting up librtmp1:amd64 (2.4+20151223.gitfa8646d.1-2build1) ...",
"Setting up libsasl2-2:amd64 (2.1.27+dfsg-2ubuntu0.1) ...",
"Setting up libssh-4:amd64 (0.9.3-2ubuntu2.5) ...",
"Setting up libroken18-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Setting up libheimbase1-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Setting up libasn1-8-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Setting up libhcrypto4-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Setting up libwind0-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Setting up libhx509-5-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Setting up libkrb5-26-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Setting up libheimntlm0-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Setting up libgssapi3-heimdal:amd64 (7.7.0+dfsg-1ubuntu1.4) ...",
"Setting up libldap-2.4-2:amd64 (2.4.49+dfsg-2ubuntu1.10) ...",
"Setting up libcurl4:amd64 (7.68.0-1ubuntu2.22) ...",
"Setting up curl (7.68.0-1ubuntu2.22) ...",
"Processing triggers for libc-bin (2.31-0ubuntu9.16) ..."
]
}
Activate Windows
Go to Settings to activate Windows.
WSL: Ubuntu-22.04 main* 0 0 0
Ln 1, Col 1 Spaces: 2 UTF-8 LF YAML
24°C Partly sunny
Search
ENG IN
17:02 14-06-2024



Create ansible host file :

```
                8,
                10,
                "final",
                0
            ]
        },
        "ansible_python_version": "3.8.10",
        "ansible_real_group_id": 0,
        "ansible_real_user_id": 0,
        "ansible_selinux": {
            "status": "disabled"
        },
        "ansible_selinux_python_present": true,
        "ansible_service_mgr": "sshd",
        "ansible_ssh_host_key_ecdsa_public": "AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBGd8A5RAFgUAop9fguziBFfXJtHGCgmNlBe17Q4p0pAtwgnots8sw4u20ofOFDKhqSA4CpCwe
OL77bNzJRPUkgs=",
        "ansible_ssh_host_key_ecdsa_public_keytype": "ecdsa-sha2-nistp256",
        "ansible_ssh_host_key_ed25519_public": "AAAAC3NzaC1lZDI1NTE5AAAAICqz40VE2ejj1DI1A6KvQnJmT7E4jiM8WCik/I6lpw9w",
        "ansible_ssh_host_key_ed25519_public_keytype": "ssh-ed25519",
        "ansible_ssh_host_key_rsa_public": "AAAAB3NzaC1yc2EAAAADAQABAAABgQC8LxUNnlHegdmL+PKhfu8KmeMD8tw7LGA+GaC7LHi3Y9bGgC3Or1iMlPsl3W4pSdXXKyuo96g5sF2ILQD2+lk39stSEPy01nC
serRiZ/i1whbRGzw7umoUHrBZSxtqEHu9g7MhlZX7VudsusPPweHy7P2TLLbILlb7lb6cISOWyEXsgmDr7nMkxQTpUEpERuwfldF4TlVb+hg3qTfjYXXiFqLFmDU+p9abeoAjeTKDIahvMtAVudwvJkqAA6Can01hAN1X4YKLFb
0Ujw7PkmqFH7Xmu+68UBc09JgL03Hj2trDR5JI7JOHn8FB5t4d7hpAA3Hrd5P0s2b8+/ijBZNuOvIqnzvPtBb893IK01VnuRUHJimc9GJZwtTqy/rv0Dm0bp4irsjIEtwdgdPbsT96etlxwdofdXS4Q3uopKgAxWhfbWGGri6kk
WPjbx543Otl9UK30MjrlrqQPxHLq46a/Q9lxvI4Q4hKN25bzIoSc1MXMmL3LLBDnsRtZVvJDEc=",
        "ansible_ssh_host_key_rsa_public_keytype": "ssh-rsa",
        "ansible_swapfree_mb": 2048,
        "ansible_swaptotal_mb": 2048,
        "ansible_system": "Linux",
        "ansible_system_capabilities": "N/A",
        "ansible_system_capabilities_enforced": "N/A",
        "ansible_system_vendor": "NA",
        "ansible_uptime_seconds": 7106,
        "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",
```



```
// Check if you can connect without passing inventory

ansible all -m ping

// To view the configurations of the other nodes
ansible all -m setup

// To check uptime
ansible all -a uptime

// To create a file
ansible all -m file -a "path=~/tmp-file state=touch"

// To delete the file
ansible all -m file -a "path=~/tmp-file state=absent"

// To list all the modules
ansible-doc -l
```

```
root@7d73237dcc07:/# ansible all -a uptime
node1 | CHANGED | rc=0 >>
 00:00:17 up  1:58,  1 user,  load average: 0.30, 0.32, 0.57
node2 | CHANGED | rc=0 >>
 00:00:17 up  1:58,  1 user,  load average: 0.30, 0.32, 0.57
root@7d73237dcc07:/# ansible all -m file -a "path=~/tmp-file state=touch"
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
}
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
}
root@7d73237dcc07:/# ansible all -m file -a "path=~/tmp-file state=absent"
node1 | CHANGED => {
    "ansible facts": {
```



```
root@7d73237dcc07:/# ansible-doc -l
amazon.aws.autoscaling_group                  Create or delete AWS AutoScaling Groups (ASGs)
amazon.aws.autoscaling_group_info             Gather information about EC2 Auto Scaling Groups (ASGs) in...
amazon.aws.aws_az_info                        Gather information about availability zones in AWS
amazon.aws.aws_caller_info                    Get information about the user and account being used to m...
amazon.aws.aws_region_info                    Gather information about AWS regions
amazon.aws.backup_plan                        Manage AWS Backup Plans
amazon.aws.backup_plan_info                   Describe AWS Backup Plans
amazon.aws.backup_restore_job_info            List information about backup restore jobs
amazon.aws.backup_selection                   Create, delete and modify AWS Backup selection
amazon.aws.backup_selection_info              Describe AWS Backup Selections
amazon.aws.backup_tag                         Manage tags on backup plan, backup vault, recovery point
amazon.aws.backup_tag_info                    List tags on AWS Backup resources
amazon.aws.backup_vault                       Manage AWS Backup Vaults
```

Create first playbook

```
// Copy Create-file.yml into the control node

// Run the playbook
ansible-playbook create-file.yml
```

```
karan_acharya@DESKTOP-TJR44PO:~/BCDV-4033/ansible/lab$ docker exec -it 7d73237dcc07 bash
root@7d73237dcc07:/# touch Create-file.yml
root@7d73237dcc07:/# vi Create-file.yml
root@7d73237dcc07:/# ansible-playbook Create-file.yml

PLAY [all] *********************************************************************************************************************************************************************

TASK [Gathering Facts] *********************************************************************************************************************************************************
ok: [node2]
ok: [node1]

TASK [create a file] ***********************************************************************************************************************************************************
changed: [node2]
changed: [node1]

PLAY RECAP *********************************************************************************************************************************************************************
node1                      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
node2                      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```


Delete-file.yml

```
root@7d73237dcc07:/# touch delete-file.yml
root@7d73237dcc07:/# vi delete-file.yml
root@7d73237dcc07:/# ansible-playbook delete-file.yml

PLAY [all] ********************************************************************************************************************************************************************

TASK [Gathering Facts] ********************************************************************************************************************************************************
ok: [node1]
ok: [node2]

TASK [delete a file] **********************************************************************************************************************************************************
changed: [node1]
changed: [node2]

PLAY RECAP ********************************************************************************************************************************************************************
node1                      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
node2                      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```


Create-dev-file.yml

```
root@7d73237dcc07:/etc/ansible# vi hosts
root@7d73237dcc07:/etc/ansible# cd
root@7d73237dcc07:~# touch create-file-dev.yml
root@7d73237dcc07:~# vi create-file-dev.yml
root@7d73237dcc07:~# ansible-playbook create-file-dev.yml

PLAY [dev] ********************************************************************************************************************************************************************

TASK [Gathering Facts] ********************************************************************************************************************************************************
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
```


- Use the example node.yaml and clone the Lab 1 repo to both the nodes. Build the node modules

Play book node-modules

```
root@7d73237dcc07:~# vi node-modules.yml
root@7d73237dcc07:~# ansible-playbook node-modules.yml

PLAY [Clone repository] *******************************************************************************************************************************************************

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

TASK [Update the apt package index] *******************************************************************************************************************************************
changed: [host1]
changed: [host2]

TASK [Install Git] ************************************************************************************************************************************************************
changed: [host1]
changed: [host2]

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

PLAY RECAP ********************************************************************************************************************************************************************
host1                      : ok=4    changed=3    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
host2                      : ok=4    changed=3    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```