

Basics of Ansible

Module-1

We are using two OS, both redhat version-8

Control Node: Where we write code

Target Node: Where we configure. Also known as the Managed Node

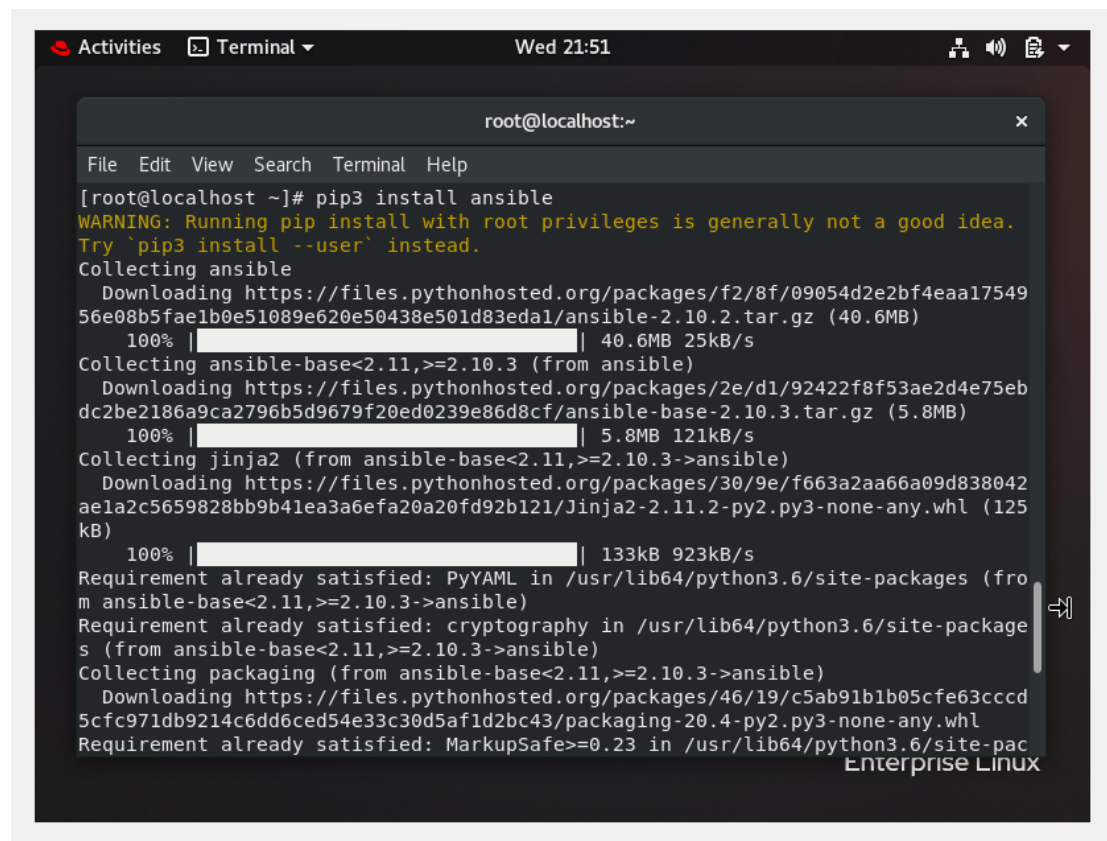
Ansible is agentless, i.e, we install it on 1 OS and it is capable to work on other OS.

Commands to set up ansible:

On your Control Node:

1.pip3 install ansible

2. ansible all --list-hosts

A terminal window titled 'root@localhost:~' showing the command 'pip3 install ansible' being executed. The output shows the installation progress for 'ansible', 'ansible-base', 'jinja2', and 'packaging'. The terminal window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The status bar at the top shows 'Activities', 'Terminal', and the time 'Wed 21:51'. The bottom of the terminal shows 'Enterprise Linux'.

```
root@localhost:~  
File Edit View Search Terminal Help  
[root@localhost ~]# pip3 install ansible  
WARNING: Running pip install with root privileges is generally not a good idea.  
Try `pip3 install --user` instead.  
Collecting ansible  
  Downloading https://files.pythonhosted.org/packages/f2/8f/09054d2e2bf4eaa17549  
56e08b5fae1b0e51089e620e50438e501d83eda1/ansible-2.10.2.tar.gz (40.6MB)  
    100% |#####| 40.6MB 25kB/s  
Collecting ansible-base<2.11,>=2.10.3 (from ansible)  
  Downloading https://files.pythonhosted.org/packages/2e/d1/92422f8f53ae2d4e75eb  
dc2be2186a9ca2796b5d9679f20ed0239e86d8cf/ansible-base-2.10.3.tar.gz (5.8MB)  
    100% |#####| 5.8MB 121kB/s  
Collecting jinja2 (from ansible-base<2.11,>=2.10.3->ansible)  
  Downloading https://files.pythonhosted.org/packages/30/9e/f663a2aa66a09d838042  
a61a2c5659828bb9b41ea3a6efa20a20fd92b121/Jinja2-2.11.2-py2.py3-none-any.whl (125  
kB)  
    100% |#####| 133kB 923kB/s  
Requirement already satisfied: PyYAML in /usr/lib64/python3.6/site-packages (fro  
m ansible-base<2.11,>=2.10.3->ansible)  
Requirement already satisfied: cryptography in /usr/lib64/python3.6/site-packag  
e s (from ansible-base<2.11,>=2.10.3->ansible)  
Collecting packaging (from ansible-base<2.11,>=2.10.3->ansible)  
  Downloading https://files.pythonhosted.org/packages/46/19/c5ab91b1b05cfe63cccd  
5cfc971db9214c6dd6ced54e33c30d5af1d2bc43/packaging-20.4-py2.py3-none-any.whl  
Requirement already satisfied: MarkupSafe>=0.23 in /usr/lib64/python3.6/site-pac  
Enterprise Linux
```

Currently, there is no inventory, we shall create one.

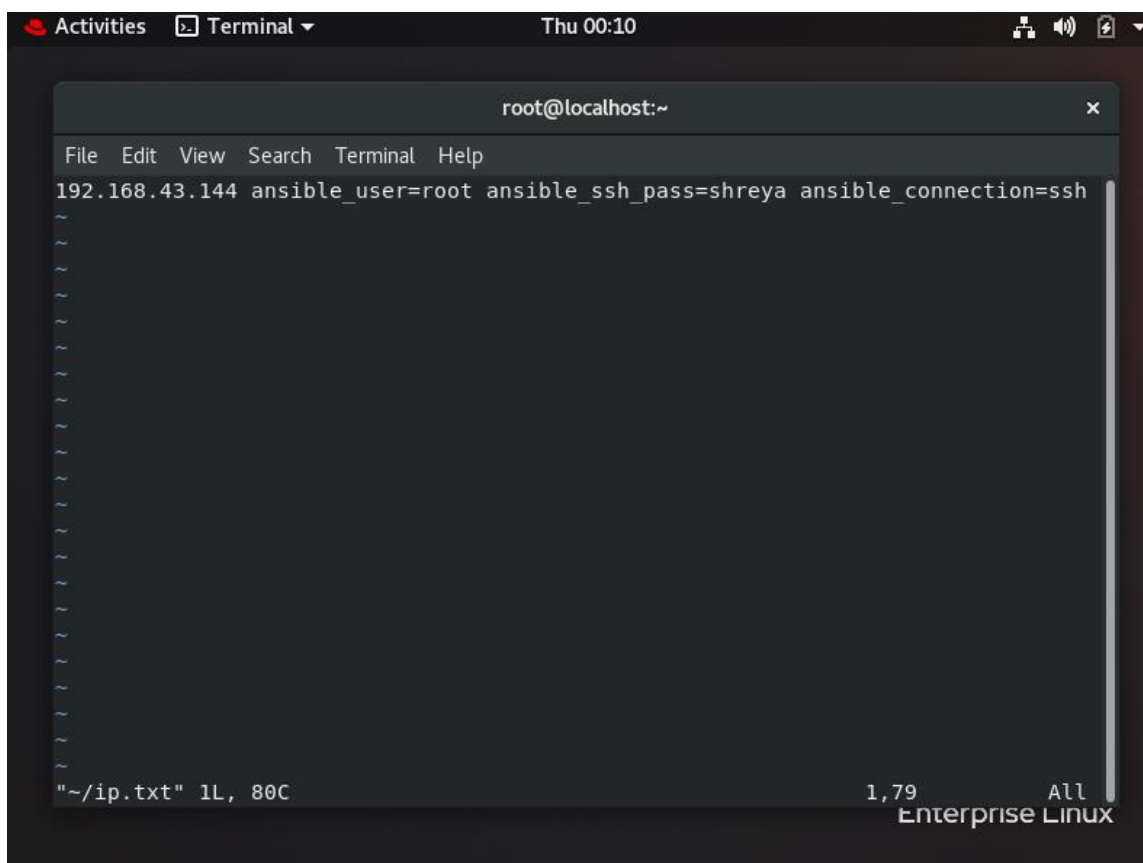
```
[root@localhost ~]# ansible all --list-hosts
[WARNING]: No inventory was parsed, only implicit localhost is available
[WARNING]: provided hosts list is empty, only localhost is available. Note that
the implicit localhost does not match 'all'
hosts (0):
[root@localhost ~]#
```

Enterprise Linux

3.vim ip.txt

192.168.43.144 ansible_user=root ansible_ssh_pass=shreya ansible_connection=ssh

(Write ip of your Target Node)



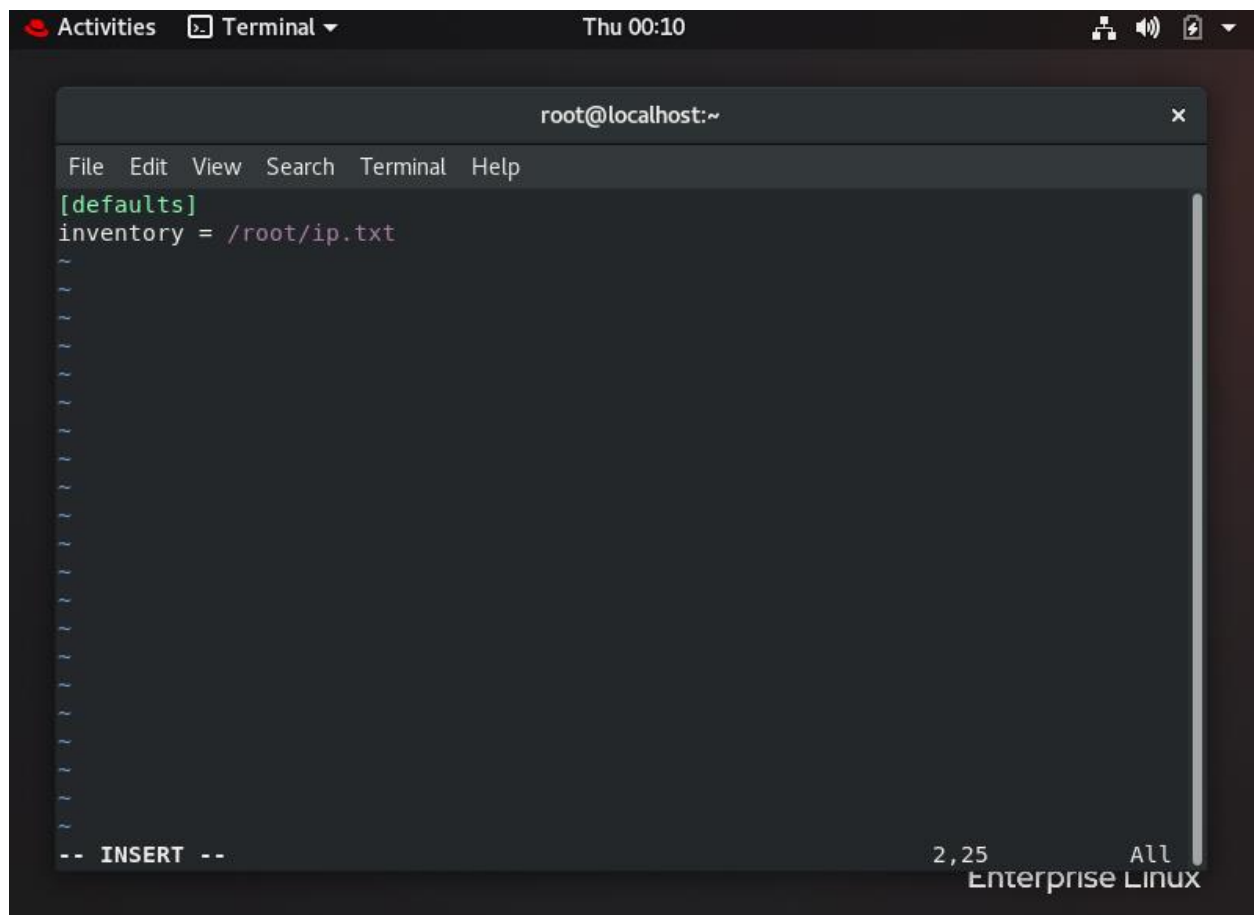
The screenshot shows a terminal window titled "Terminal" with a timestamp of "Thu 00:10". Inside the terminal, a vim editor window is open, editing a file named "ip.txt". The editor's title bar shows "root@localhost:~". The vim status bar at the bottom indicates the file path as "~/ip.txt", the current line as 1L, and the column as 80C. The main content of the file is the Ansible inventory entry: "192.168.43.144 ansible_user=root ansible_ssh_pass=shreya ansible_connection=ssh". The vim status bar also shows "1,79" and "All". The text "Enterprise Linux" is visible in the bottom right corner of the terminal window.

4. `mkdir /etc/ansible`

5. `vim /etc/ansible/ansible.cfg`

[defaults]

inventory= /root/ip.txt



Control Node is ready.

Go to the target node and stop httpd command. Check its status to confirm if it is inactive.

```
dnf install https://dl.fedoraproject.org/pub/epel/epel-release-latest-8.noarch.rpm
```

Go to the Target Node and check status of httpd, it would be active.

The image shows two terminal windows side-by-side, both titled 'redhat8 [Running] - Oracle VM VirtualBox'. The left window shows the command 'systemctl status httpd' being run, which shows the service is 'inactive (dead)'. Then, the command 'systemctl start httpd' is run, and the service becomes 'active (running)'. The right window shows the command 'systemctl status httpd' being run, which shows the service is 'active (running)'. Then, the command 'systemctl stop httpd' is run, and the service becomes 'inactive (dead)'.