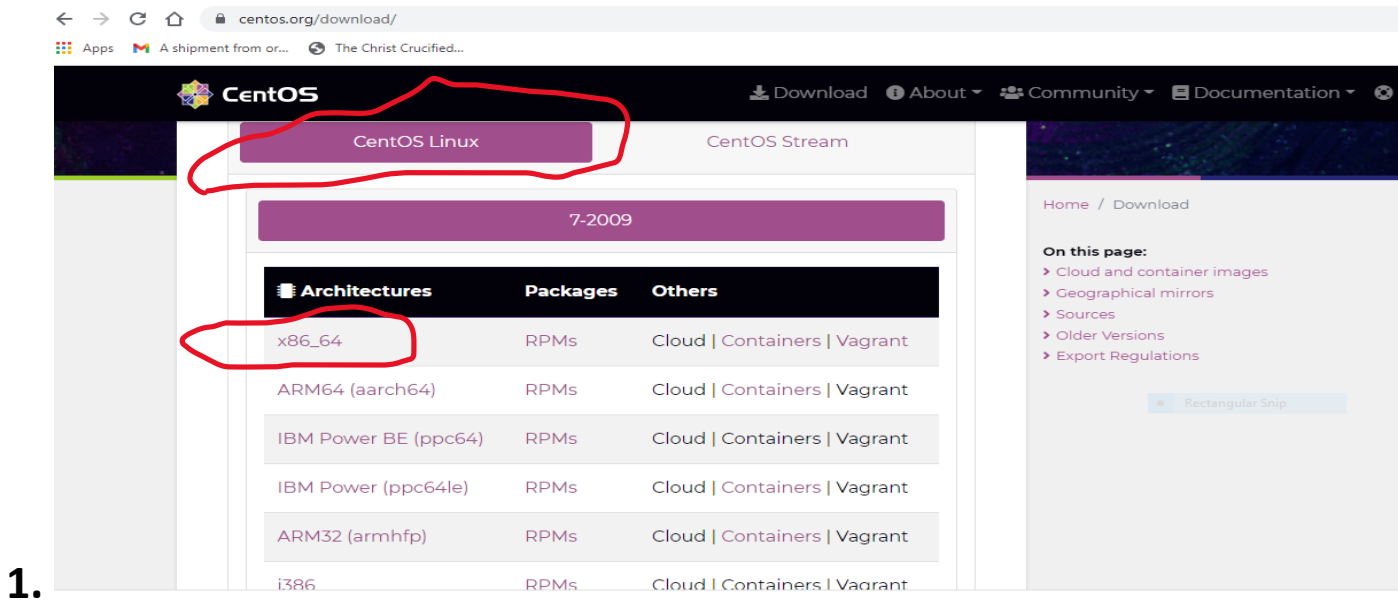


# CentOS installation



The first step I went to google and type CentOS. org and headed over to CentOS root over the home page and click on it, then I was being given two choices on which to pick.

2. In the second part I was given some links to choose from. CentOS are distributed as an ISO image, and those links are called mirrors. I download packages and install OS updates. So, I chose the mirrors compared to what's close to me (as a state I live in). And the second picture shows an index Iso which directs you on what to choose. It provides Names, Last modified or updated, and the size of the Iso file.

2.

**CentOS** Download About Community Documentation Help

In order to conserve the limited bandwidth available, ISO images are not downloadable from mirror.centos.org

The following mirrors in your region should have the ISO images available:

[http://mirrors.tripadvisor.com/centos/7.9.2009/isos/x86\\_64/](http://mirrors.tripadvisor.com/centos/7.9.2009/isos/x86_64/)  
[http://mirrors.mit.edu/centos/7.9.2009/isos/x86\\_64/](http://mirrors.mit.edu/centos/7.9.2009/isos/x86_64/)

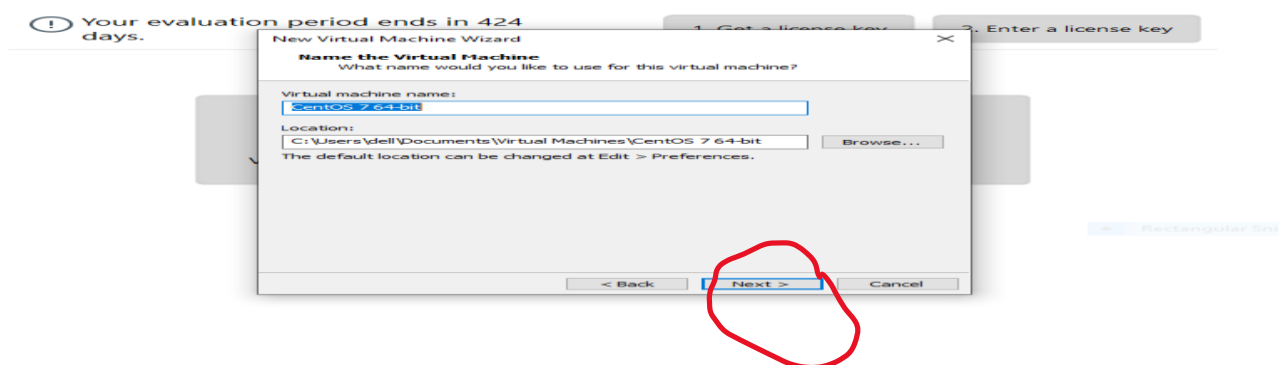
Other mirrors further away:

[http://mirror.nodesdirect.com/centos/7.9.2009/isos/x86\\_64/](http://mirror.nodesdirect.com/centos/7.9.2009/isos/x86_64/)  
[http://mirror.dal.nexril.net/centos/7.9.2009/isos/x86\\_64/](http://mirror.dal.nexril.net/centos/7.9.2009/isos/x86_64/)  
[http://mirror.datto.com/CentOS/7.9.2009/isos/x86\\_64/](http://mirror.datto.com/CentOS/7.9.2009/isos/x86_64/)  
[http://mirror.sfo12.us.leaseweb.net/centos/7.9.2009/isos/x86\\_64/](http://mirror.sfo12.us.leaseweb.net/centos/7.9.2009/isos/x86_64/)  
[http://mirror.teklinks.com/centos/7.9.2009/isos/x86\\_64/](http://mirror.teklinks.com/centos/7.9.2009/isos/x86_64/)  
[http://mirror.net.cen.ct.gov/centos/7.9.2009/isos/x86\\_64/](http://mirror.net.cen.ct.gov/centos/7.9.2009/isos/x86_64/)  
[http://mirrors.rit.edu/centos/7.9.2009/isos/x86\\_64/](http://mirrors.rit.edu/centos/7.9.2009/isos/x86_64/)  
[http://mirrors.xtom.com/centos/7.9.2009/isos/x86\\_64/](http://mirrors.xtom.com/centos/7.9.2009/isos/x86_64/)  
[http://mirror.us-midwest-1.nexcess.net/CentOS/7.9.2009/isos/x86\\_64/](http://mirror.us-midwest-1.nexcess.net/CentOS/7.9.2009/isos/x86_64/)  
[http://mirrors.advancedhosters.com/centos/7.9.2009/isos/x86\\_64/](http://mirrors.advancedhosters.com/centos/7.9.2009/isos/x86_64/)

**Index of /centos/7.9.2009/isos/x86\_64/**

../	06-Nov-2020 14:32	2495
<a href="#">0_README.txt</a>	04-Nov-2020 11:37	4712300544
<a href="#">CentOS-7-x86_64-DVD-2009.iso</a>	06-Nov-2020 14:44	180308
<a href="#">CentOS-7-x86_64-DVD-2009.torrent</a>	02-Nov-2020 15:18	10200547328
<a href="#">CentOS-7-x86_64-Everything-2009.iso</a>	06-Nov-2020 14:44	389690
<a href="#">CentOS-7-x86_64-Everything-2009.torrent</a>	03-Nov-2020 14:55	1020264448
<a href="#">CentOS-7-x86_64-Minimal-2009.iso</a>	06-Nov-2020 14:44	39479
<a href="#">CentOS-7-x86_64-Minimal-2009.torrent</a>	26-Oct-2020 16:26	602931200
<a href="#">CentOS-7-x86_64-NetInstall-2009.iso</a>	06-Nov-2020 14:44	23567
<a href="#">CentOS-7-x86_64-NetInstall-2009.torrent</a>	04-Nov-2020 11:38	398
<a href="#">sha256sum.txt</a>	06-Nov-2020 14:37	1258
<a href="#">sha256sum.txt.asc</a>		

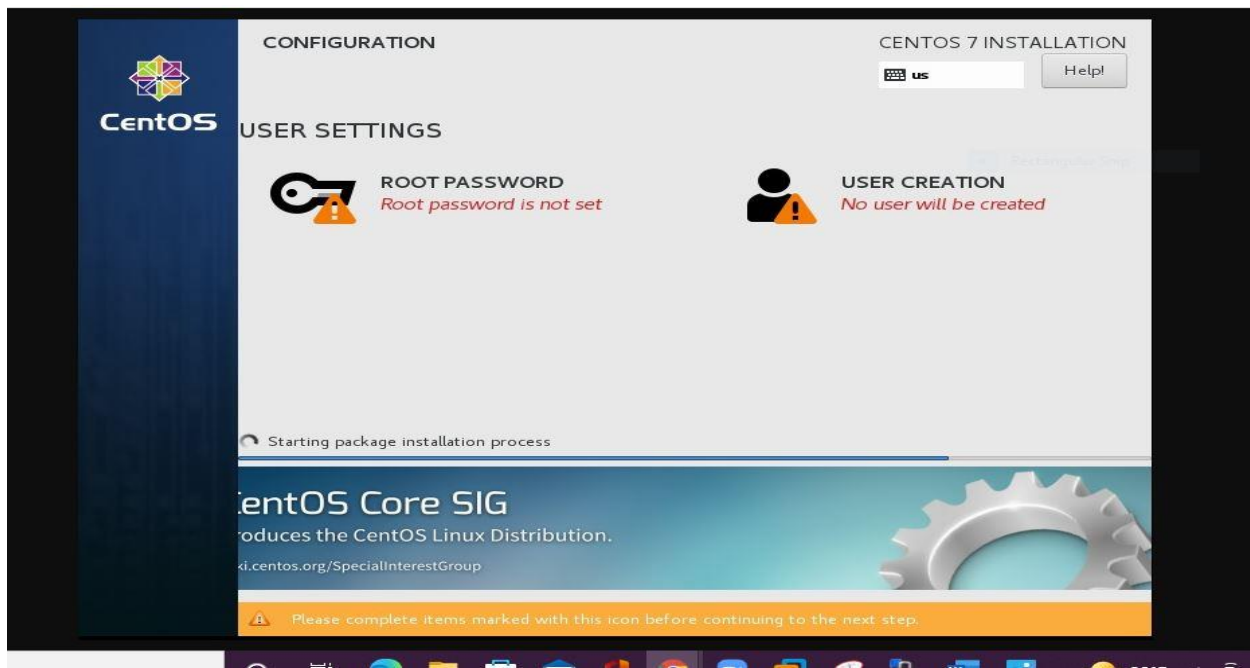
4. after it was downloaded, I opened my virtual machine and install centos Linux. Named it and browse for the Iso file I have downloaded, place it in. and click Next.



5. I set up the language in (English)and the country and select the map location near my time zone. And I select the installation destination, as default it selected the local standard disk, and click done. create your root Username and your server's name and your password and you will wait for the installation to finish and click on reboot and login.



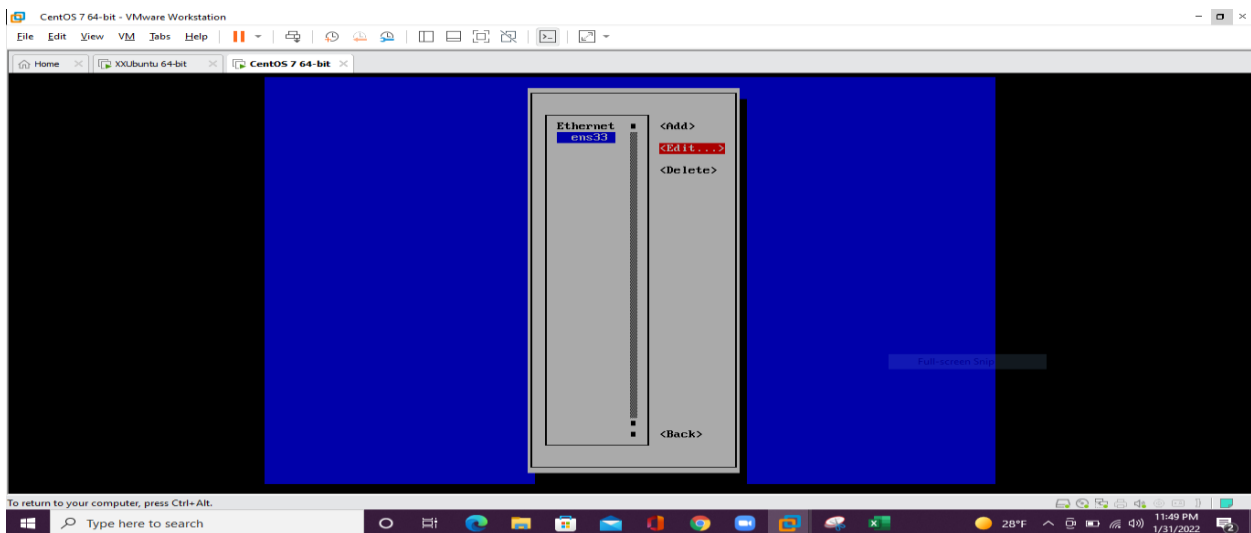
5b.



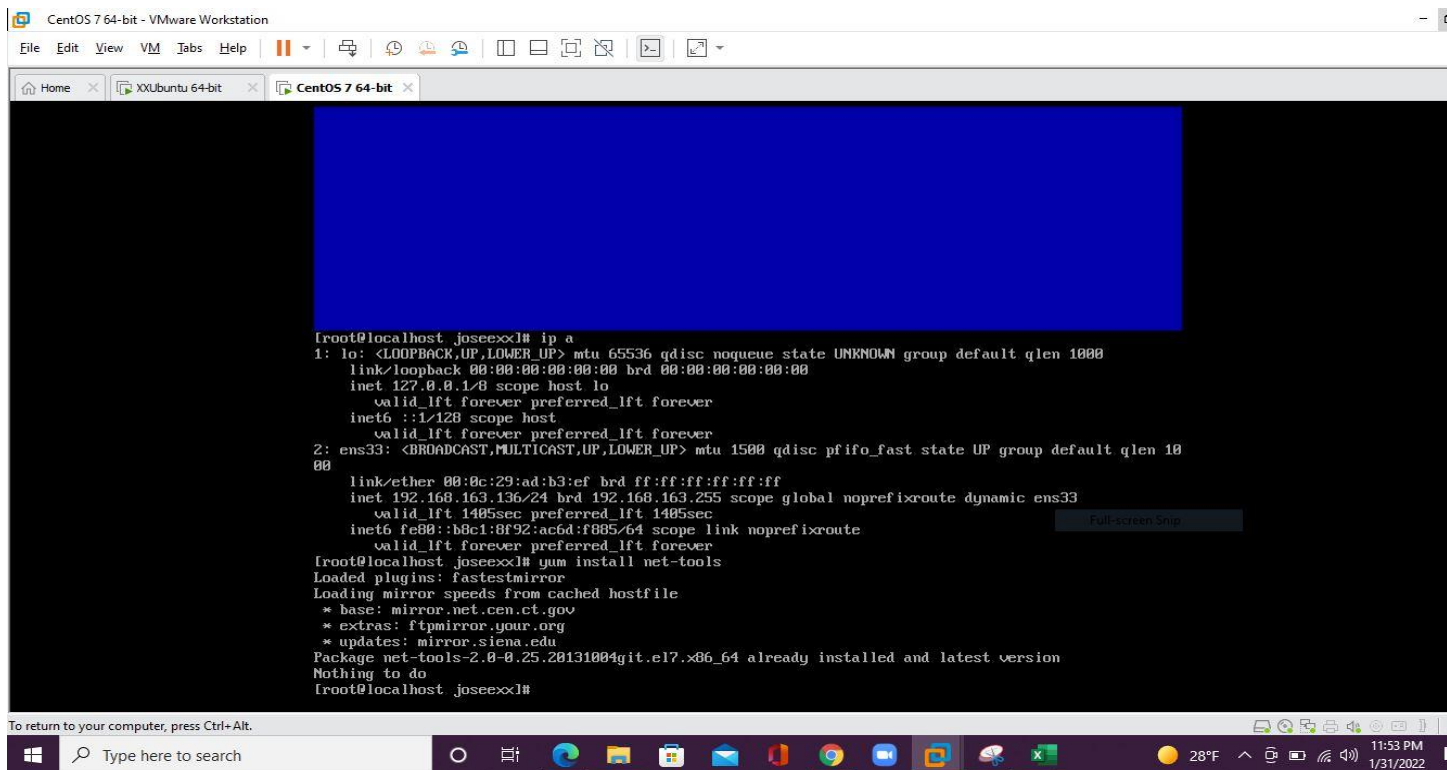
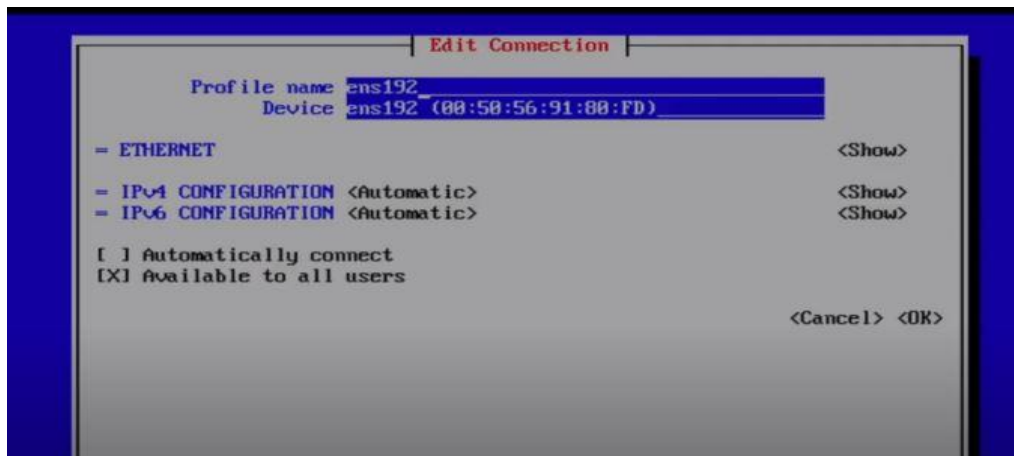
7. I entered a command-line **nmtui** into the command line and it appeared as a graphical interface this comes as pre-installed on all builds of centos7 and I was provided with the menu that has three options but I picked added connection



7b. here I see a menu with the name of my ethernet adapter there are two options to add or edit but I chose edit so I can set my network information.



8. Here I set the network information, so I set an ipv4 configuration and I arrowed down where it says automatic and a small window popped up and selected manual and from there, I selected to show on the left-hand side, which showed all the details to fill in the Ip address for the machine and my default gateway and set DNS server I want to use and select quit to exit.

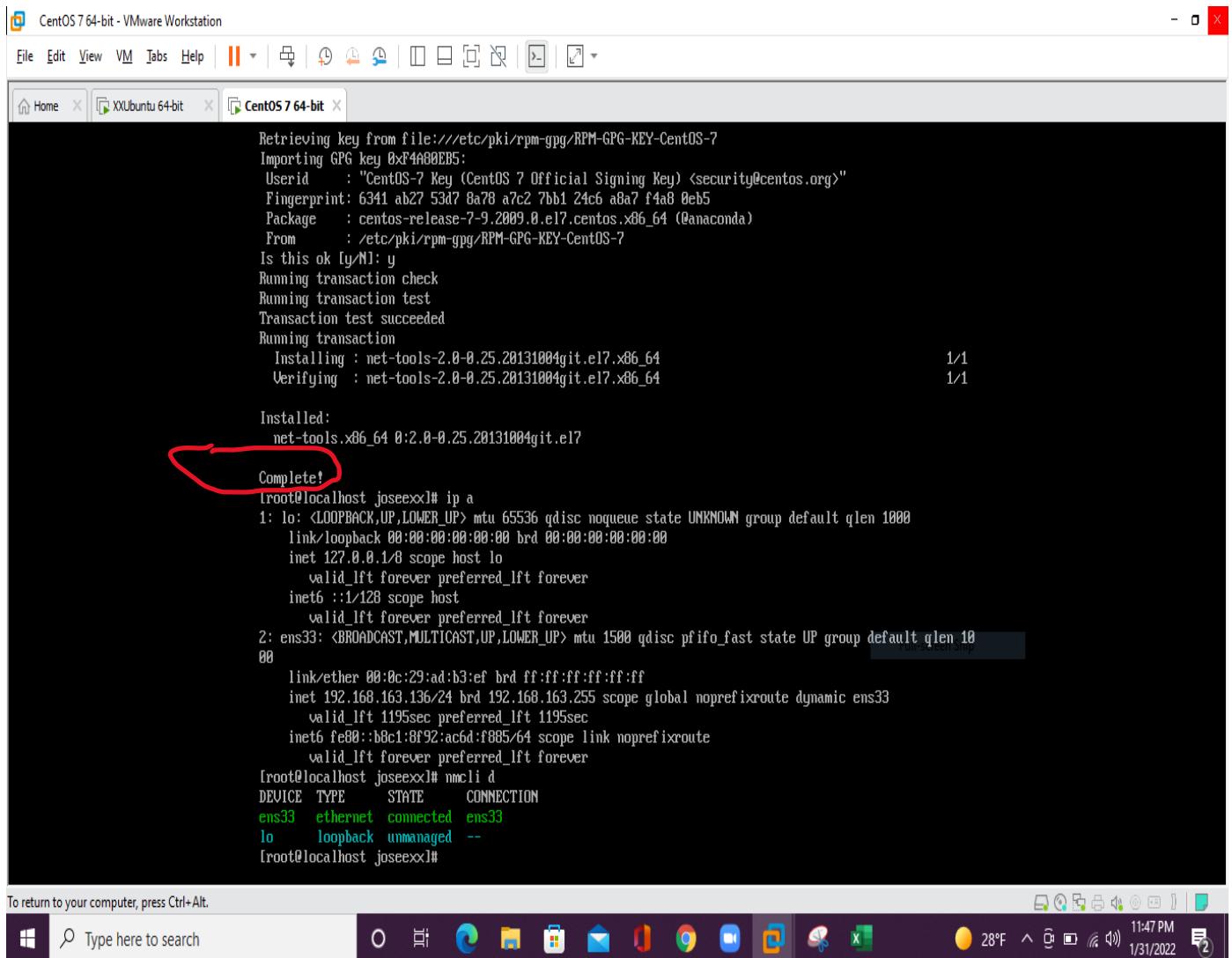


Here I checked to see if I have a network by using Ip a and it displayed my eth0 and gateway interface.

I installed the net-tools package because CentOS doesn't have it by default anymore but before I install, I update the repositories and after using the command "**Sudo yum install net-tools**". And it showed me Complete!

And I can now ifconfig because it's been installed. I displayed my network information and saw see the outputs essential information for the active networks interface at the bottom it says connected in green letters.

9.



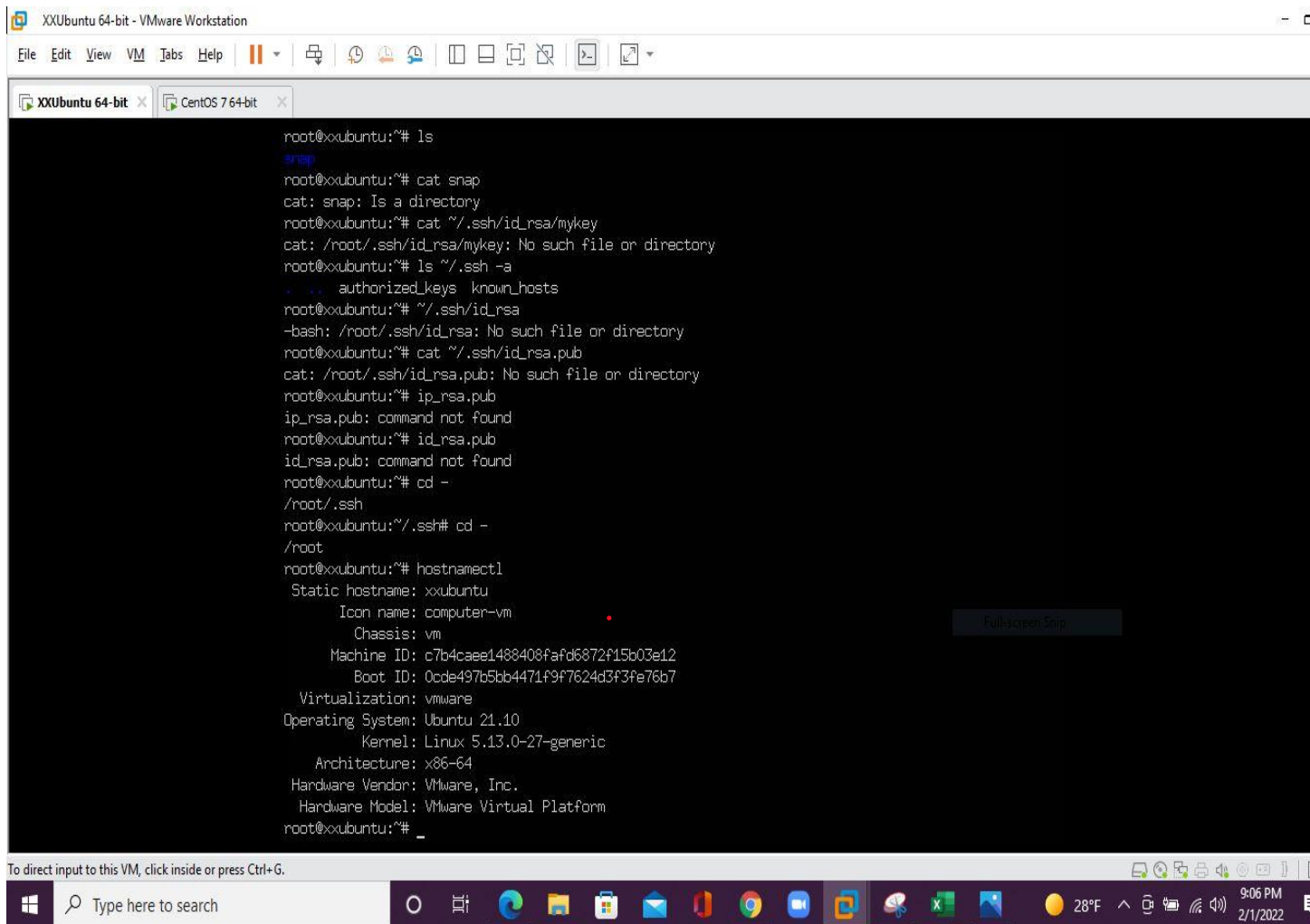
The screenshot shows a terminal window titled "CentOS 7 64-bit - VMware Workstation". The terminal output displays the process of installing the net-tools package. It starts with retrieving a GPG key from a file, importing it, and then running a transaction check and test. The installation of net-tools-2.0-0.25.20131004git.e17.x86\_64 is successful, as indicated by the "Complete!" message, which is circled in red. Following the installation, the user runs the ifconfig command to display network interface information. The output shows the loopback interface 'lo' and the ethernet interface 'ens33'. The 'ens33' interface is shown as 'connected' in green text, which is the information the user was looking for.

```
Retrieving key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Importing GPG key 0xF4A00EB5:
  Userid : "CentOS-7 Key (CentOS 7 Official Signing Key) <security@centos.org>"
  Fingerprint: 6341 ab27 53d7 0a70 a7c2 7bb1 24c6 a8a7 f4a0 0eb5
  Package : centos-release-7-9.2009.0.el7.centos.x86_64 (@anaconda)
  From : /etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Is this ok [y/N]: y
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : net-tools-2.0-0.25.20131004git.e17.x86_64 1/1
  Verifying : net-tools-2.0-0.25.20131004git.e17.x86_64 1/1

Installed:
  net-tools.x86_64 0:2.0-0.25.20131004git.e17

Complete!
[root@localhost jsexx]# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether 00:0c:29:ad:b3:ef brd ff:ff:ff:ff:ff:ff
    inet 192.168.163.136/24 brd 192.168.163.255 scope global noprefixroute dynamic ens33
        valid_lft 1195sec preferred_lft 1195sec
    inet6 fe80::b8c1:8f92:ac6d:f885/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
[root@localhost jsexx]# nmcli d
DEVICE  TYPE      STATE    CONNECTION
ens33   ethernet  connected ens33
lo      loopback  unmanaged --
[root@localhost jsexx]#
```

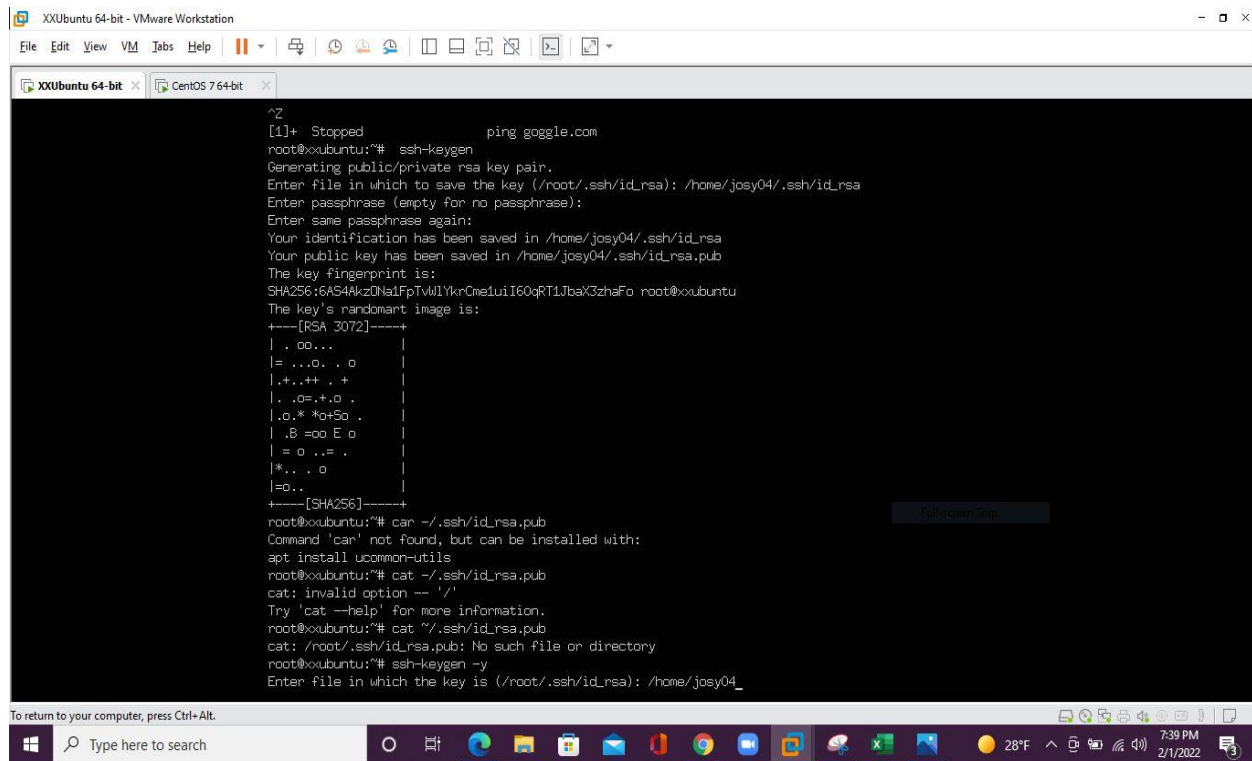
10.



```
root@xxubuntu:~# ls
snap
root@xxubuntu:~# cat snap
cat: snap: Is a directory
root@xxubuntu:~# cat ~/.ssh/id_rsa/mykey
cat: /root/.ssh/id_rsa/mykey: No such file or directory
root@xxubuntu:~# ls ~/.ssh -a
.  ..  authorized_keys  known_hosts
root@xxubuntu:~# ~/.ssh/id_rsa
-bash: /root/.ssh/id_rsa: No such file or directory
root@xxubuntu:~# cat ~/.ssh/id_rsa.pub
cat: /root/.ssh/id_rsa.pub: No such file or directory
root@xxubuntu:~# ip_rsa.pub
ip_rsa.pub: command not found
root@xxubuntu:~# id_rsa.pub
id_rsa.pub: command not found
root@xxubuntu:~# cd -
/root/.ssh
root@xxubuntu:~/.ssh# cd -
/root
root@xxubuntu:~# hostnamectl
Static hostname: xxubuntu
    Icon name: computer-vm
    Chassis: vm
    Machine ID: c7b4caee1488408fafd6872f15b03e12
    Boot ID: 0cde497b5bb4471f9f7624d3f3fe76b7
    Virtualization: vmware
    Operating System: Ubuntu 21.10
    Kernel: Linux 5.13.0-27-generic
    Architecture: x86_64
    Hardware Vendor: VMware, Inc.
    Hardware Model: VMware Virtual Platform
root@xxubuntu:~#
```

Here I can check my hostname using a command **hostnamectl** to check or change your static hostname to an easier name in case I forget. it also displays the operation system, kernel, and the hardware model, the VMware virtual platform.

11b.



```
^Z
[1]+  Stopped                  ping google.com
root@xxubuntu:~# ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa): /home/josy04/.ssh/id_rsa
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/josy04/.ssh/id_rsa
Your public key has been saved in /home/josy04/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:6AS4KzDNalFpIVMlykrOmeIuiI60qRTlJbaX3zhaFo root@xxubuntu
The key's randomart image is:
+---[RSA 3072]-----+
| . oo... |
| = ...o. . o |
| .+.+.+.+. |
| . .o+.+.o . |
| .o.* *o+So . |
| .B =oo E o |
| = o ..= . |
| *. . o |
| =o.. |
+---[SHA256]-----+
root@xxubuntu:~# cat ~/.ssh/id_rsa.pub
Command 'cat' not found, but can be installed with:
apt install ucommon-utils
root@xxubuntu:~# cat ~/.ssh/id_rsa.pub
cat: invalid option -- '/'
Try 'cat --help' for more information.
root@xxubuntu:~# cat ~/.ssh/id_rsa.pub
cat: /root/.ssh/id_rsa.pub: No such file or directory
root@xxubuntu:~# ssh-keygen -y
Enter file in which the key is (/root/.ssh/id_rsa): /home/josy04_
```

I installed the ssh server application and it showed the active running in the process once the packages are installed you are ready to connect to the server using ssh. And now login into your user to create **ssh-keygen** command which will create an encrypted password, after this, it will give you public and private keys and enter the file location you want to save the key. After that, it will ask you passphrase, just click enter twice. So, identification has been saved under your directory. And I could see id\_rsa.pub as a public key and id\_rsa as a private key. after that, I added my public key under their user home directory, after I can **cat \*pub** to see my key. And it asked me for my username and password. And I was only able to see encrypted words only for security reasons.

11b. Here I created a file using the touch command and named it History which I was able to share using my WinSCP windows machine.



The image shows a VMware Workstation interface with a CentOS 7 64-bit virtual machine running. The terminal window displays the following commands and outputs:  

```
ip net 192.168.105.111/24 and 192.168.105.233 scope global noprefixroute dynamic ens3
valid_lft 1250sec preferred_lft 1250sec
inet6 fe80::45e2:c25f:6678:af7b/64 scope link noprefixroute
valid_lft forever preferred_lft forever

[joseexoo@localhost ~]$ ls
document
[joseexoo@localhost ~]$ touch HISTORY
[joseexoo@localhost ~]$ ls
document HISTORY
[joseexoo@localhost ~]$ rm HOSTORY
rm: cannot remove 'HOSTORY': No such file or directory
[joseexoo@localhost ~]$ ls HISTORY
[joseexoo@localhost ~]$ LS
-bash: LS: command not found
[joseexoo@localhost ~]$ ls
document
[joseexoo@localhost ~]$ la -la
-bash: la: command not found
[joseexoo@localhost ~]$ ls -la
total 16
drwx----- 3 joseexoo joseexoo 111 Feb  4 17:52 .
drwxr-xr-x 3 root root 22 Feb  2 21:05 ..
-rw----- 1 joseexoo joseexoo 54 Feb  3 03:33 .bash_history
-rw-r--r-- 1 joseexoo joseexoo 18 Mar 31 2020 .bash_logout
-rw-r--r-- 1 joseexoo joseexoo 193 Mar 31 2020 .bash_profile
-rw-r--r-- 1 joseexoo joseexoo 231 Mar 31 2020 .bashrc
-rw-rw-r-- 1 joseexoo joseexoo 0 Feb  3 09:52 document
drwx----- 2 joseexoo joseexoo 74 Feb  3 18:50 .ssh
[joseexoo@localhost ~]$ touch HISTORY
[joseexoo@localhost ~]$ ls
document HISTORY
[joseexoo@localhost ~]$ cd ssh
-bash: cd: ssh: No such file or directory
[joseexoo@localhost ~]$ cd .ssh
[joseexoo@localhost .ssh]$ cat *pub
ssh-rsa AAAAAB3IzaC1yc2EAAAADAQABAAQDAAM9pDCixe8UzRFAUk8Cn5/iP5JepZp+E3Iat+D1ba/ojNBbkQWf4US3C9A+kG9svBH+AkK9eRDTY8Ehac67vsyG26x7LagYL7PF5rrU/Q8pJ5+mw4wIyw6Z1
A9Jb/fFv3Tzt0qk781tAKIQ2YC728YpussY2uqfHAvDkYcwJqfyndsQ+PUQpvcT4TE0B1QdHwJeg5KuHR59UTnshL4w18YJZ/sMlfCKOXfPA07EWDHPInCS7f gap1FC6pHyPmcrSTIUHu7k8EFm+FRUrUhwECsya
KeGu0d3RCeZsb1t8mYTKgE/0305JZJdf25BChHx0BITzUGW333A27CYSu4Sd joseexoo@localhost.localdomain
[joseexoo@localhost .ssh]$
```

A blue arrow points to the `ssh` directory in the `cd` command output.

At the bottom of the window, a message reads: "To return to your computer, press Ctrl+Alt."