



Ubuntu 12.04 Installation for
Virtual Machine Manual

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Version Record

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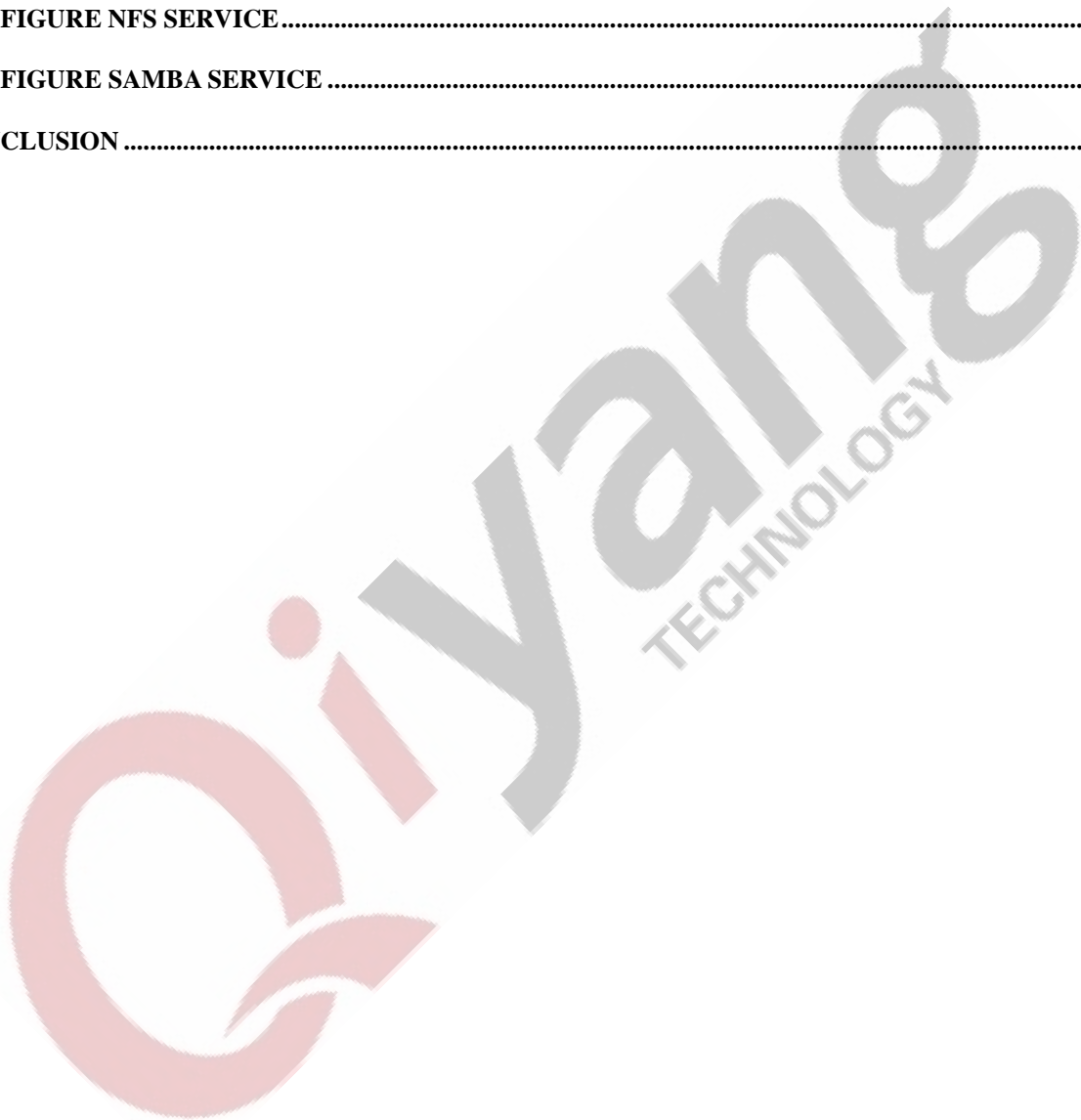
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I .Preparation

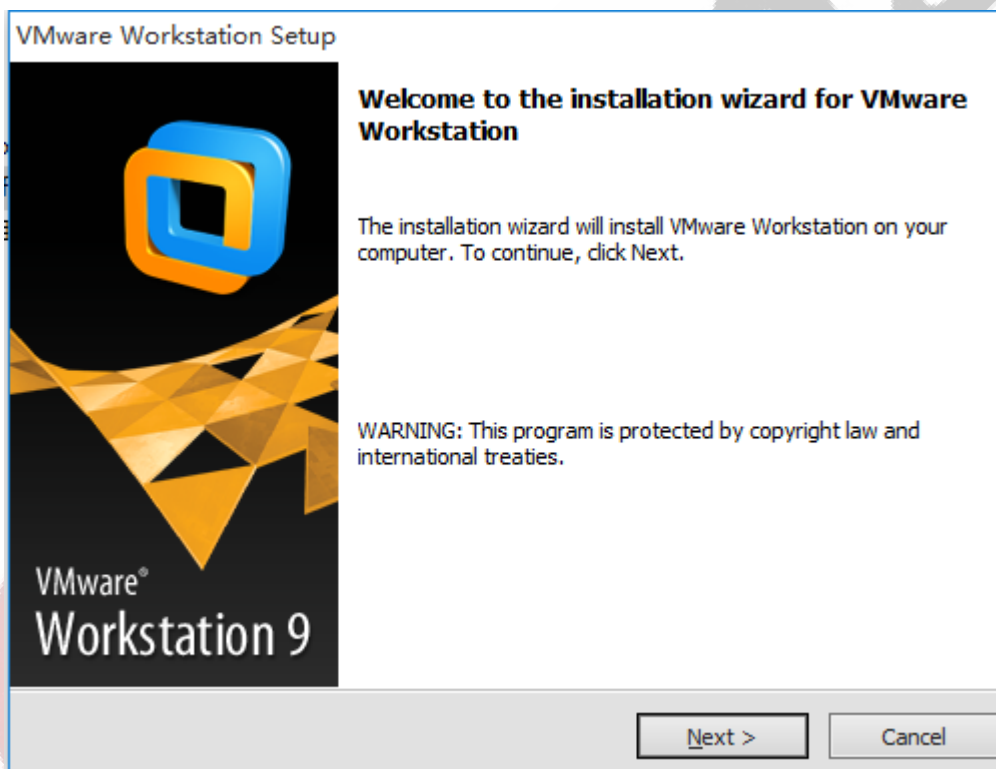
One copy of [VMware-workstation-full-9.0.2-1031769.exe]; A serial number

[ubuntu-12.04.1-desktop-i386.iso] system DVD image

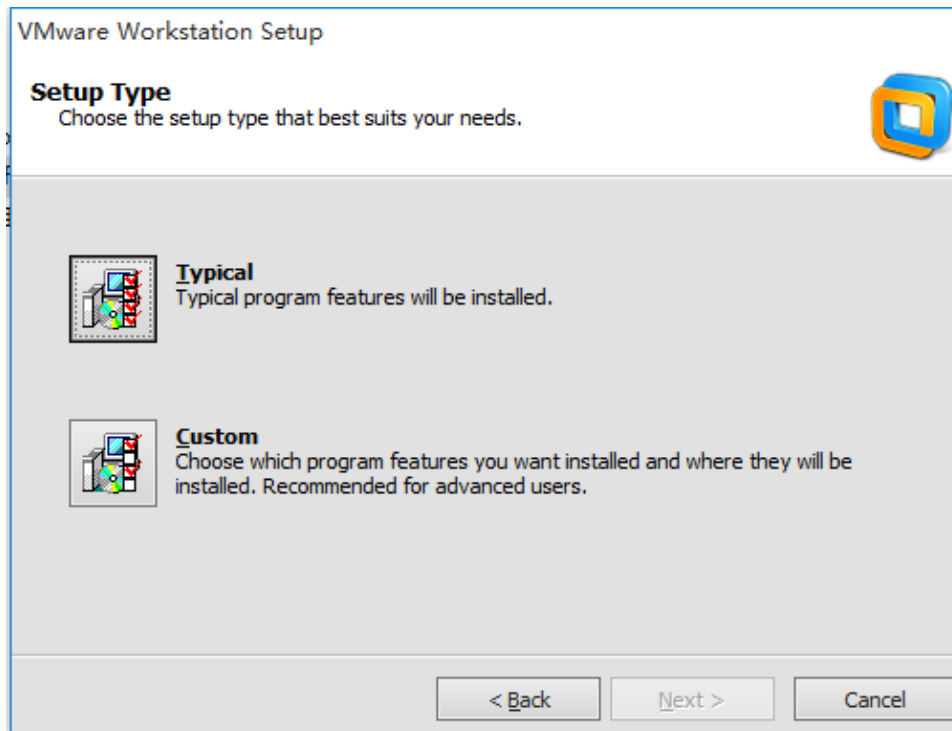
II. Install VMware-workstation-full-9.0.2-1031769

Install [VMware-workstation] ,then press [Next Step].

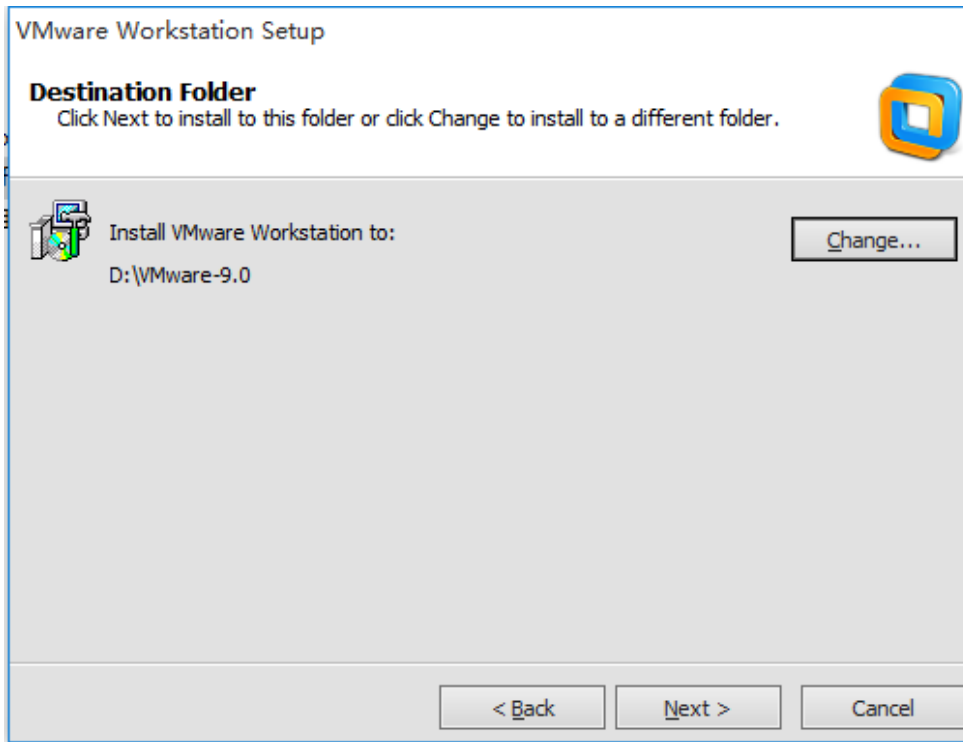
Step 1: Double-click the installation file, the installation program needs a period of time for processing, after processing, pops up the following window, click the "next".



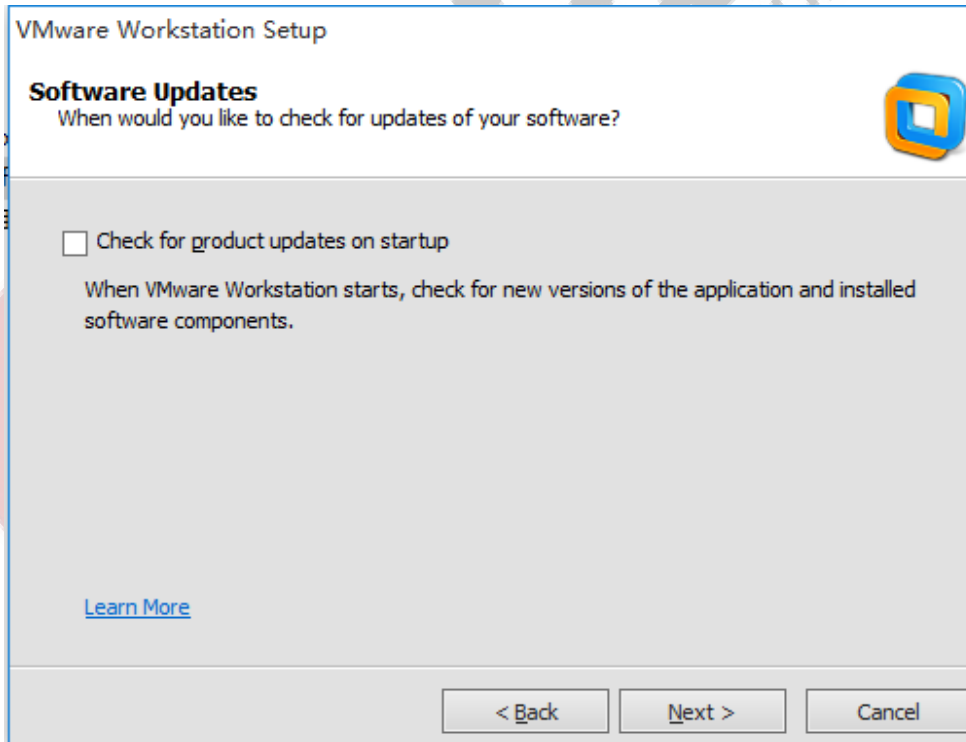
Step 2: Select [Typical]



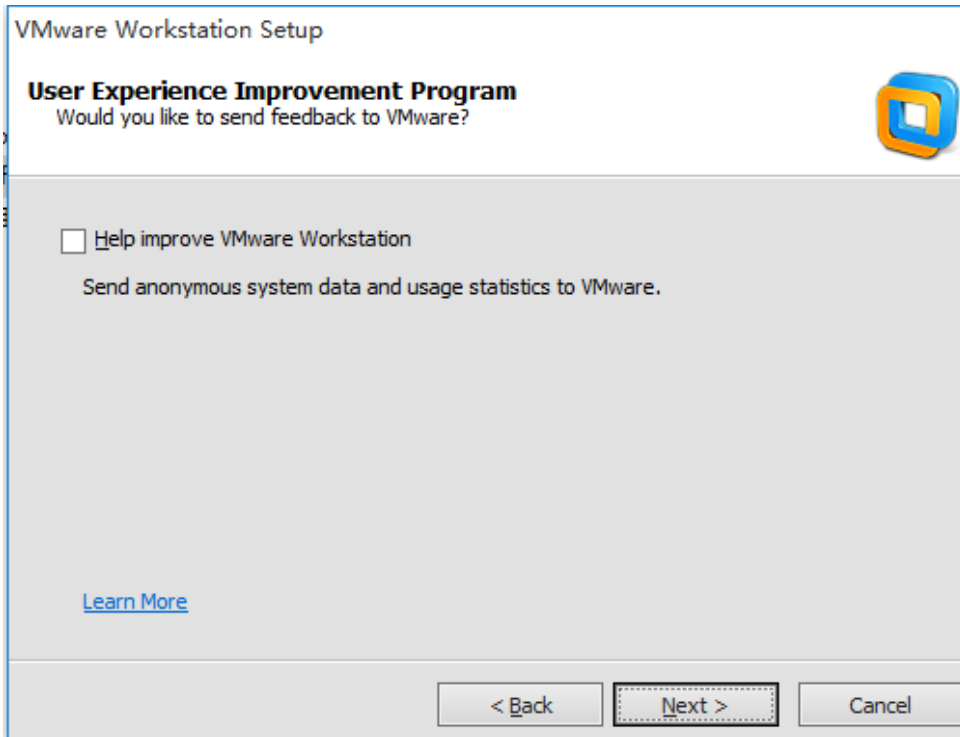
Step 3: Select installation path , the default disk is C. Here , we select Disk D.



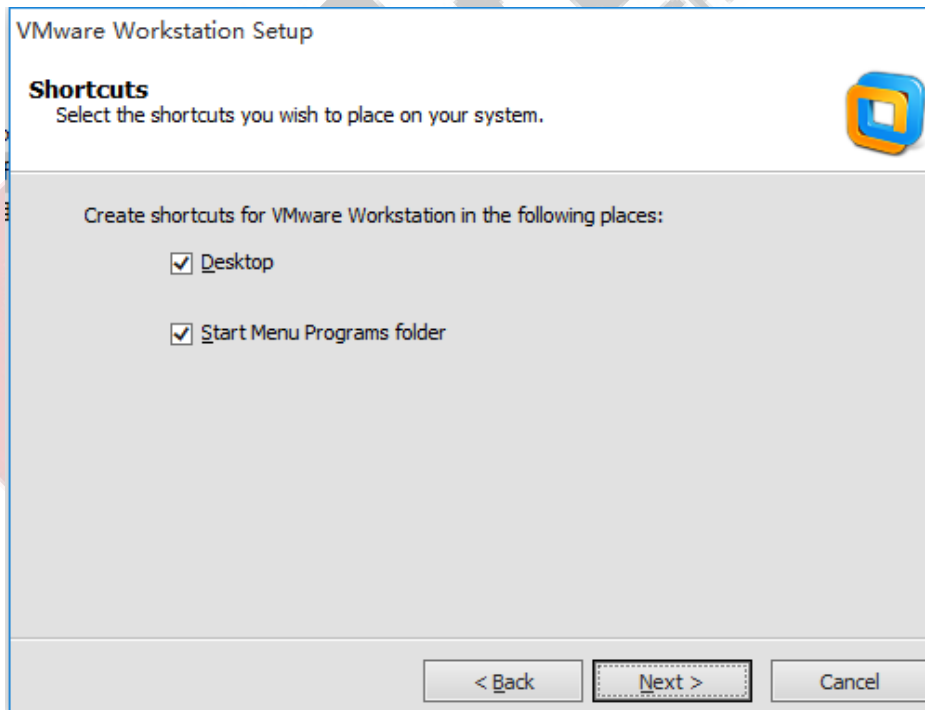
Step 4: To save time, we did not check updating status.



Step 5: We don't improve here.



Step 6: Select the saved location, select all .



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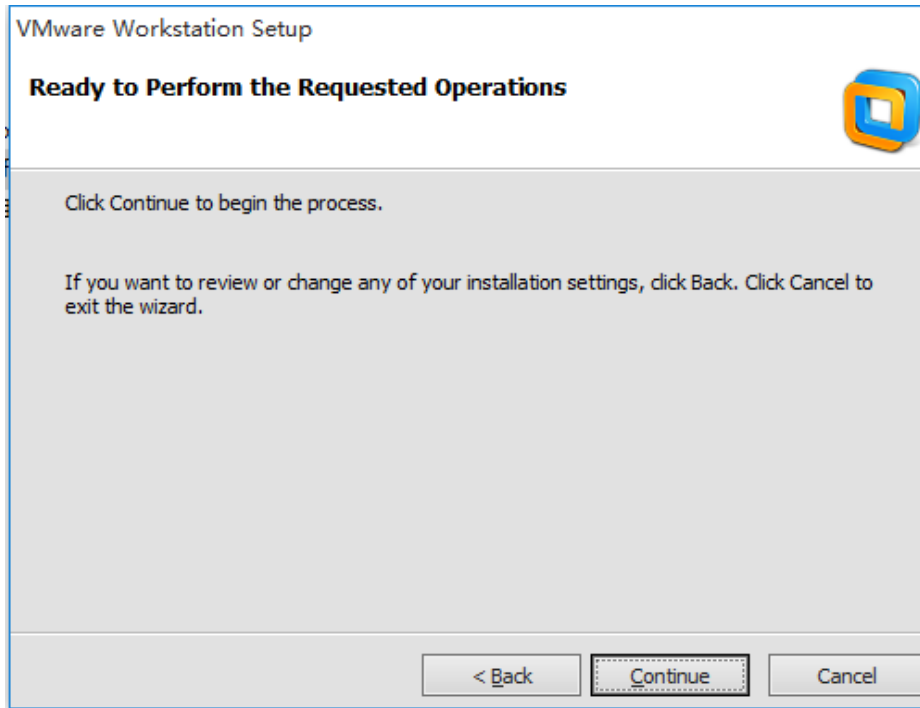
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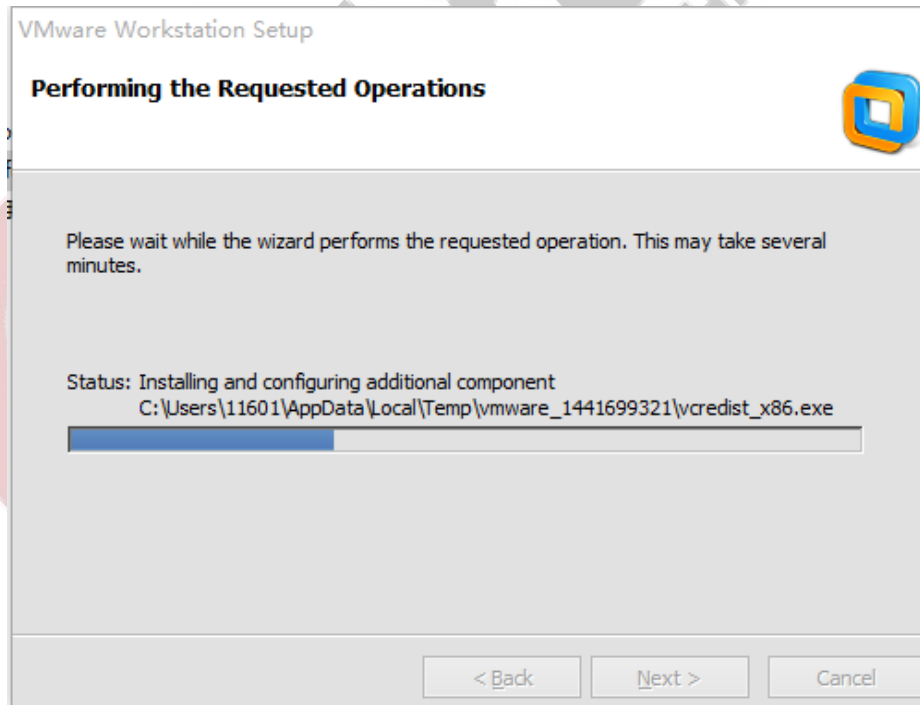
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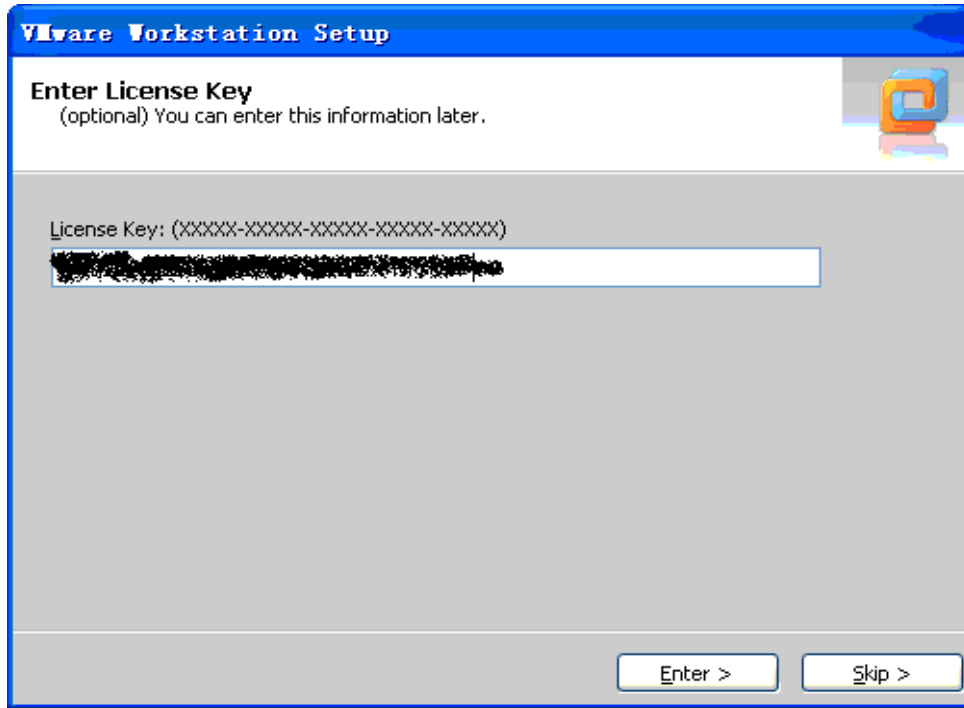
Step 7: All of the option configurations be selected, select [Continue].



Step 8: The installation process needs time, please wait.

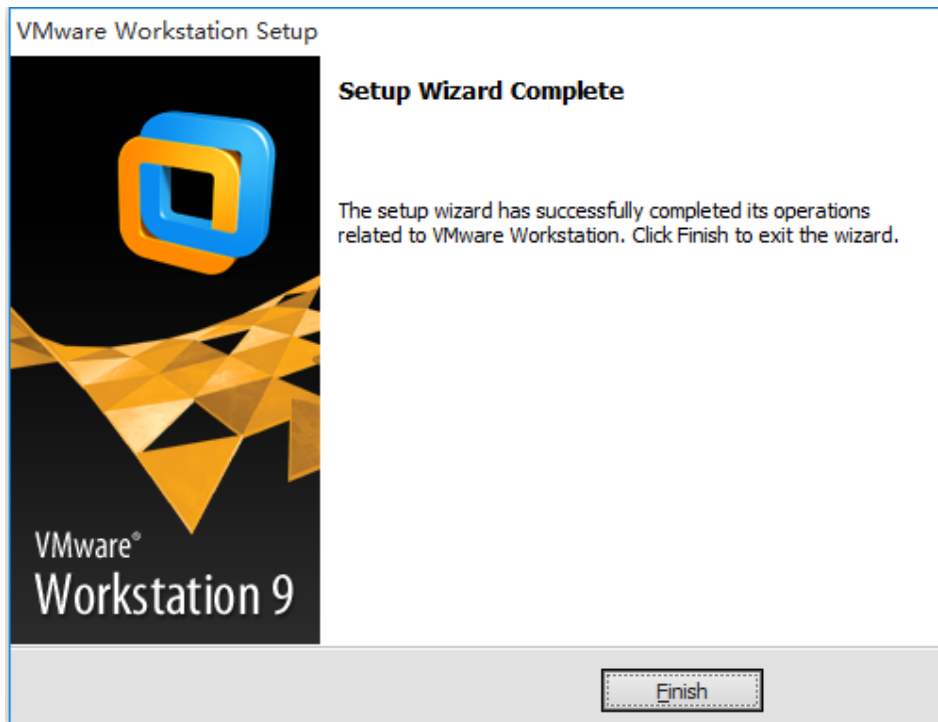


Step 9: Input serial number, here is the SN:[NY0K2-2ULDJ-LZUP1-MV154-8363F]

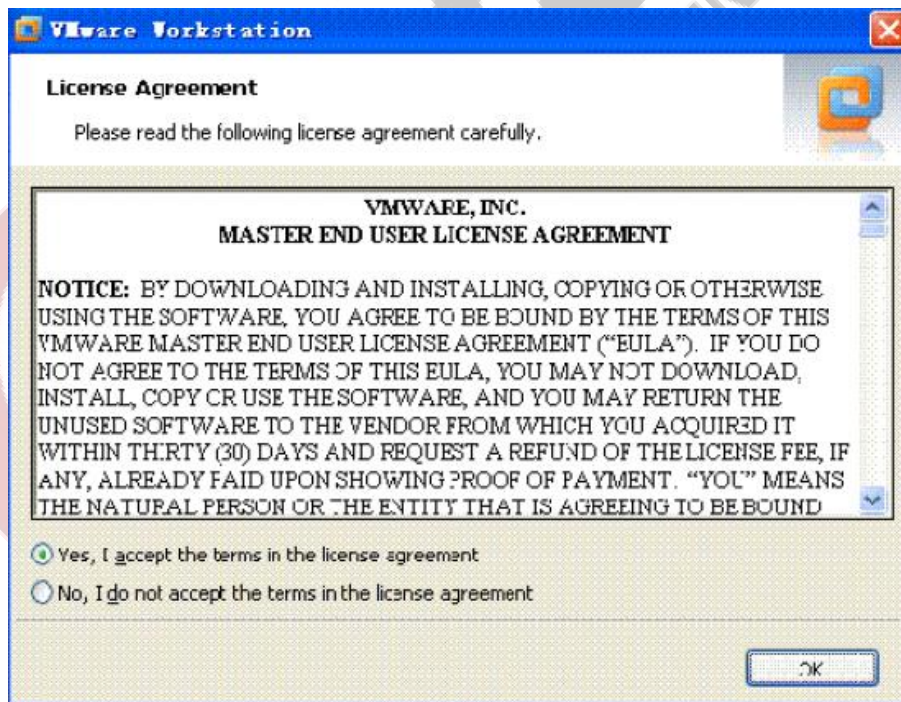


Step 10: 所有安装步骤完成，选择 Finish 完成安装

Finish all the installation steps, select [Finish] to close installation.



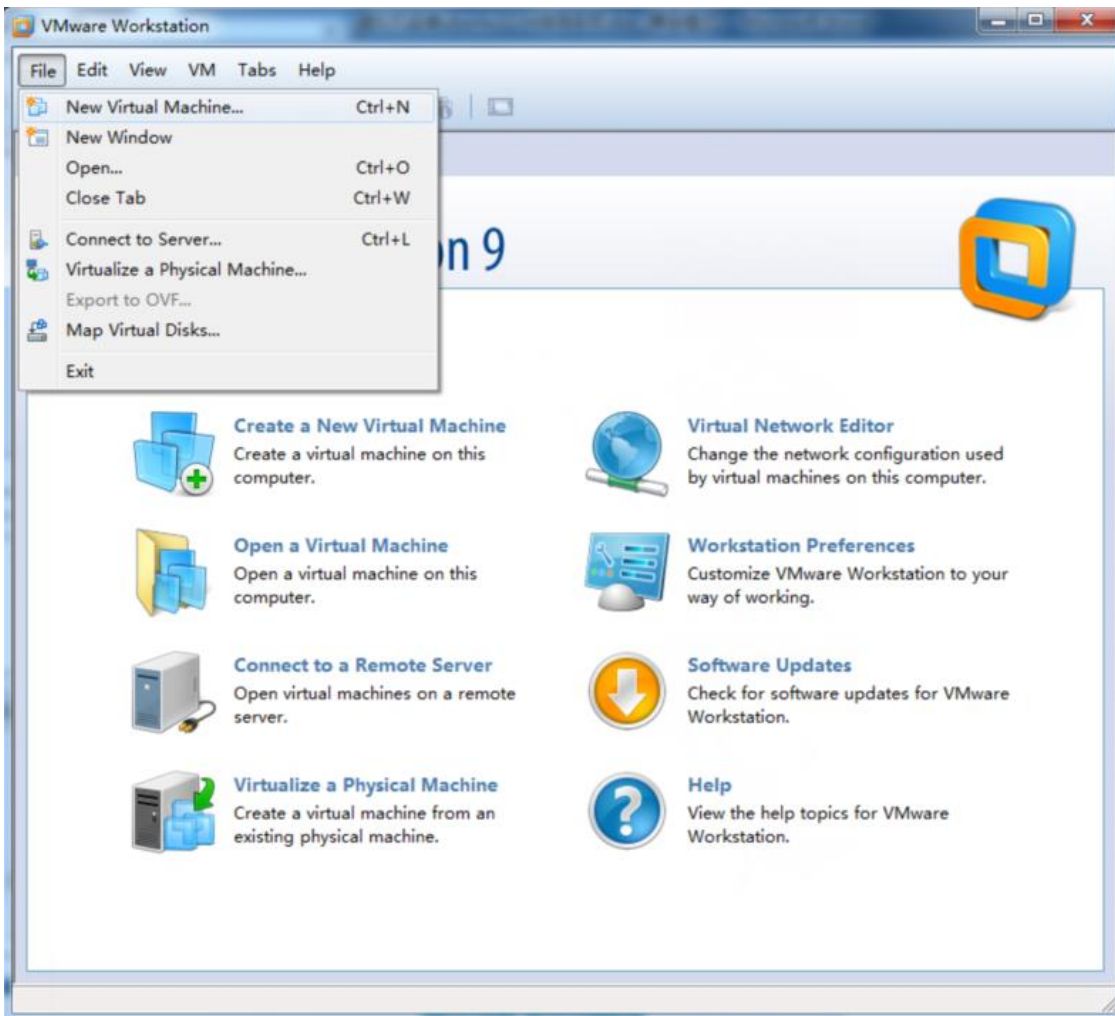
Step 11: Finish installation , double-click the program icon on desktop. Open the program , the first dialog box is the user protocol.



III. New virtual machine

After [vmware] installed , you can create a new virtual machine.

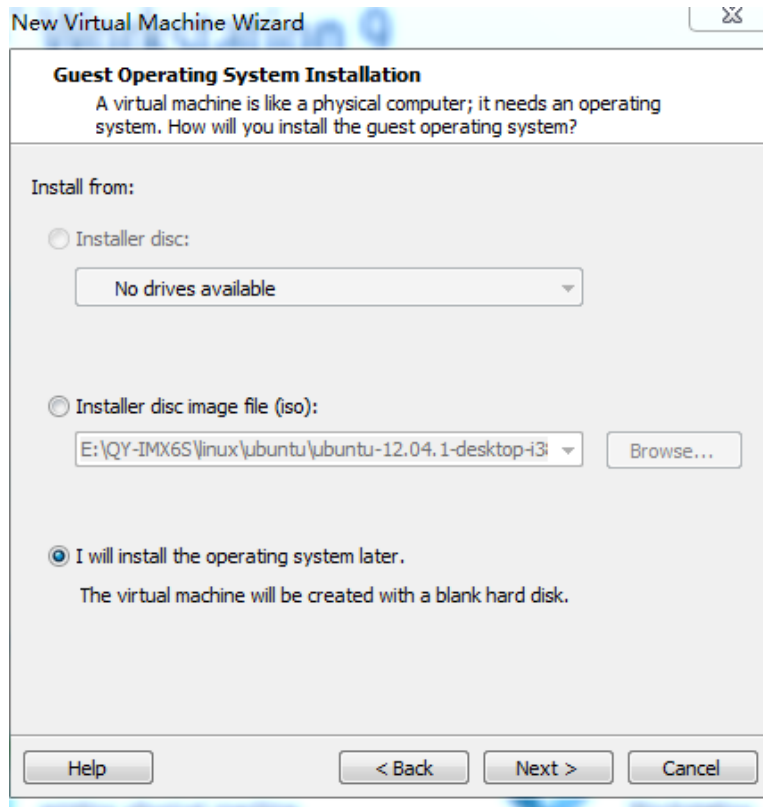
Step 1: Click the content in below red box: Click File->New Virtual Machine...



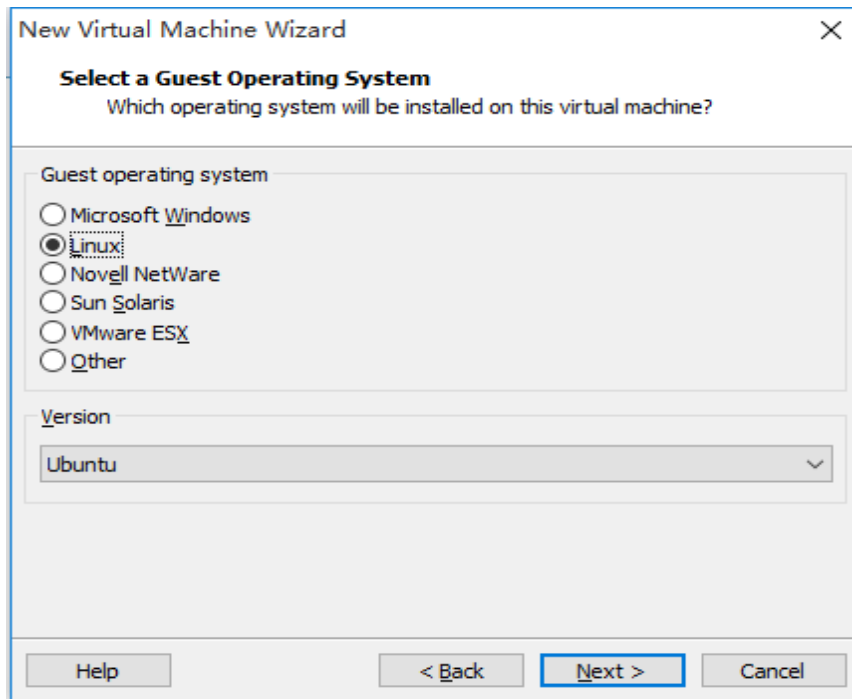
Step 2: Select [Typical] in dialog box.



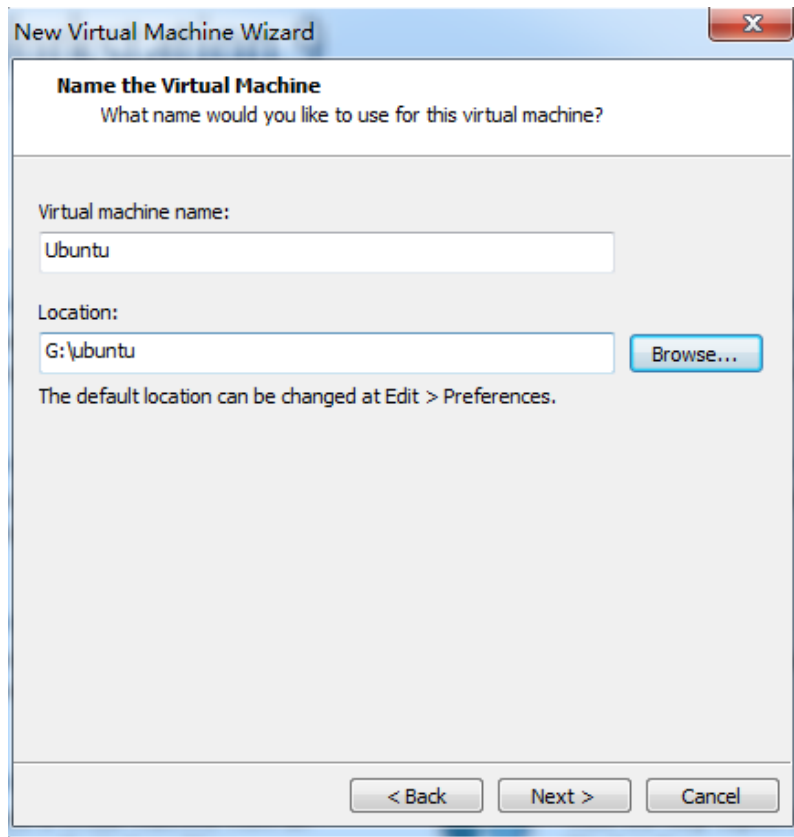
Step 3: Select the third option: I will install the operating system later.



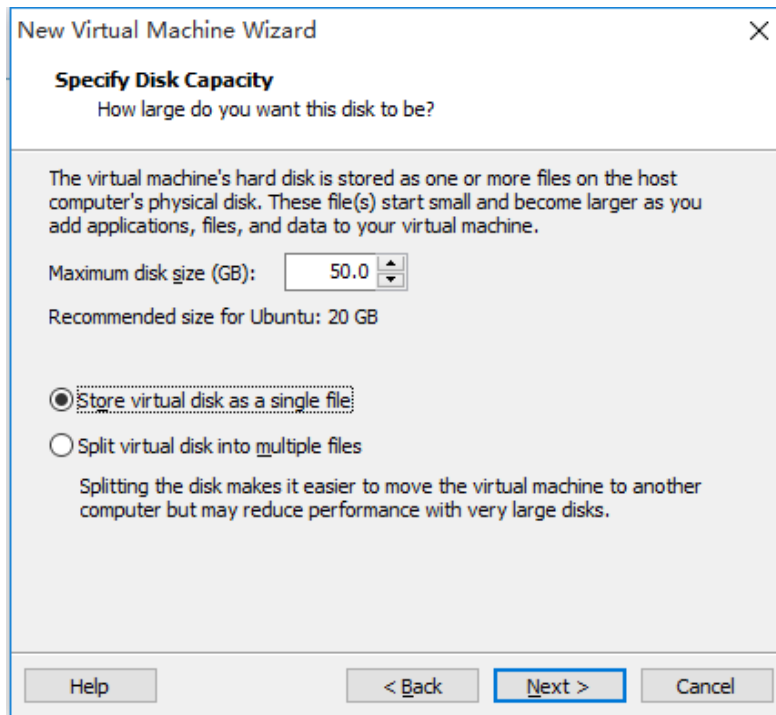
Step 4: Select operation system type ,select [ubuntu]. Later, [vmware] will install corresponding [vmware-tools].



Step 5: Select the virtual machine name and installation directory:

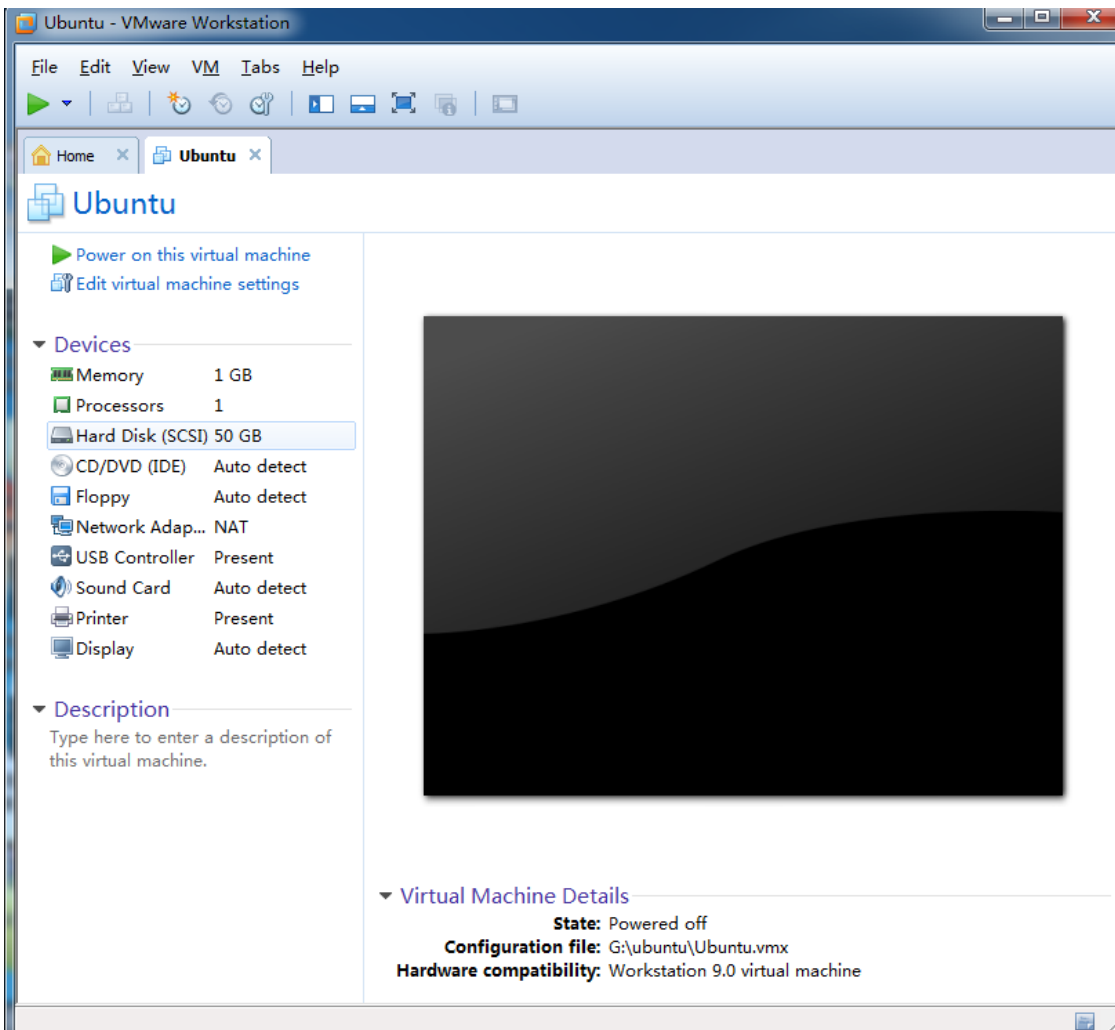


Step 6: This step will tell you the space for the virtual machine use. Default is 20GB ,here ,we use 50G.



Step 7: It shows some summarizing information, click [Finish] to configure the virtual machine's hardware.

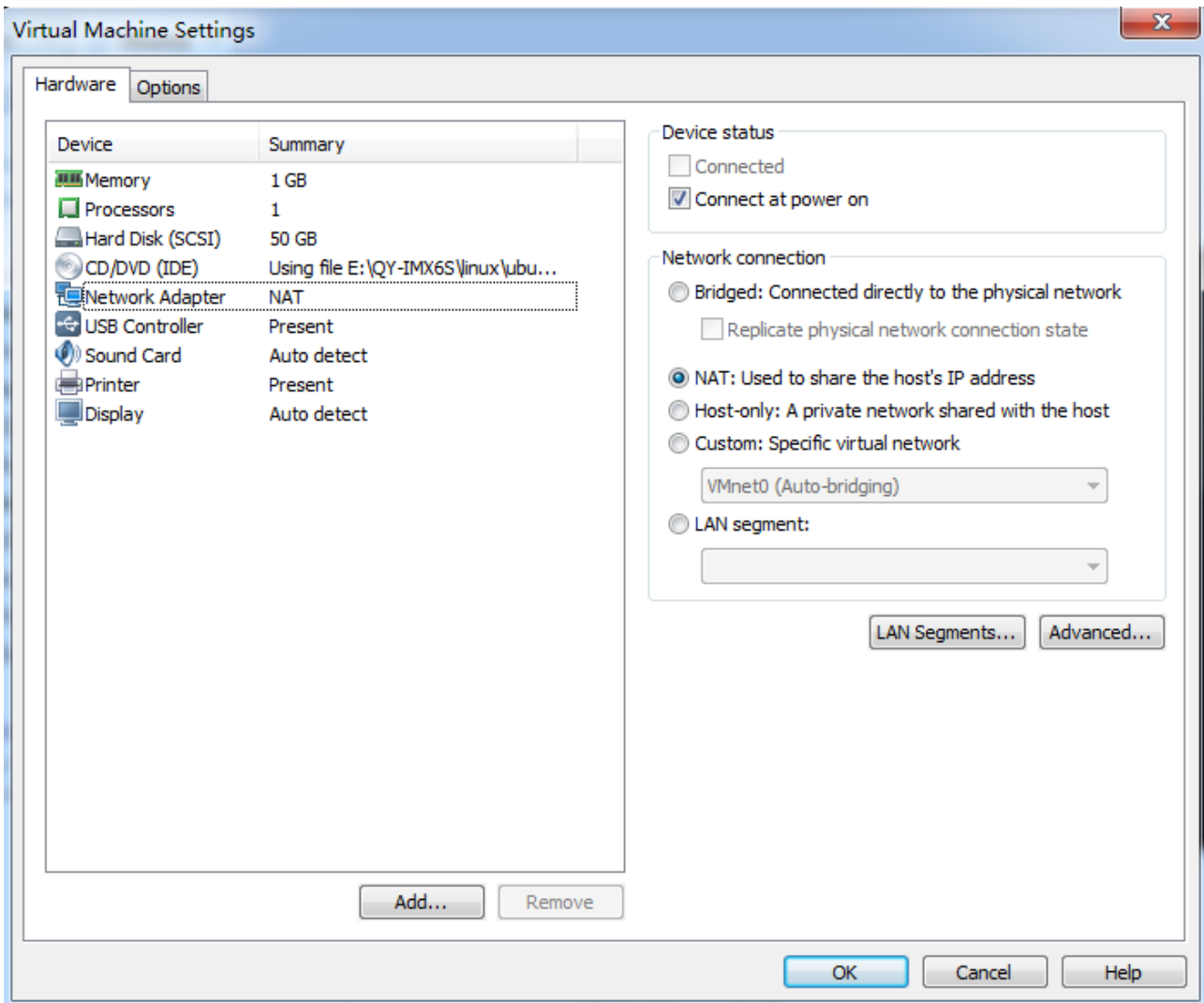
Step8: To finish the new virtual machine, come back to the main interface, click the second option [Edit virtual machine settings], then modify the virtual machine setting.



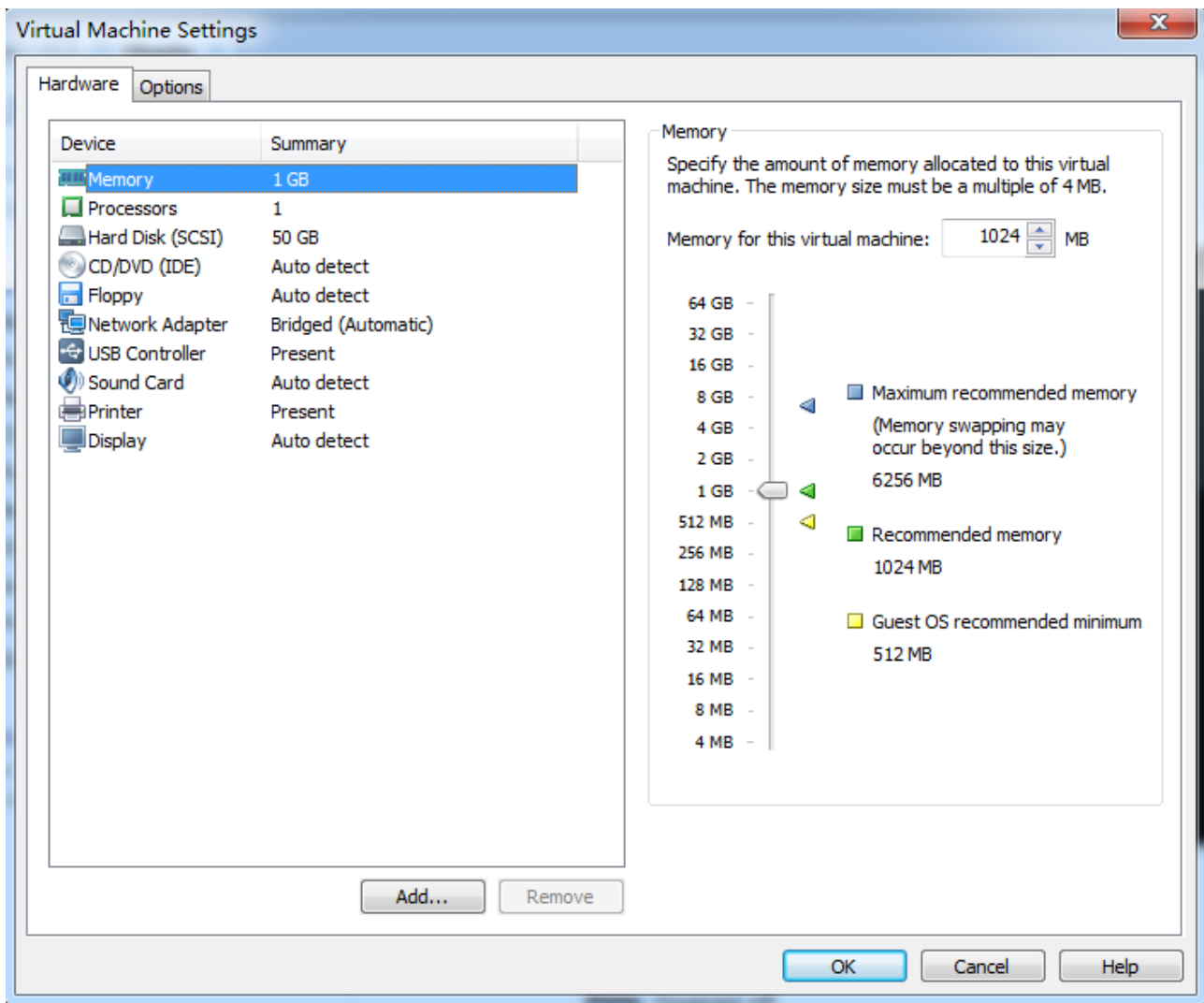
Step 9: Set the network as [Bridged] mode. So the virtual machine and Windows computer could be regarded as two computer in network structure. In order to visit the network successfully, you should adopt different settings base on different network environment.

If your PC is same as me which mounted on the Router. Don't need to dial up, you can access the network directly. And you also can obtain IP address from DHCP, set it as Bridged mode.

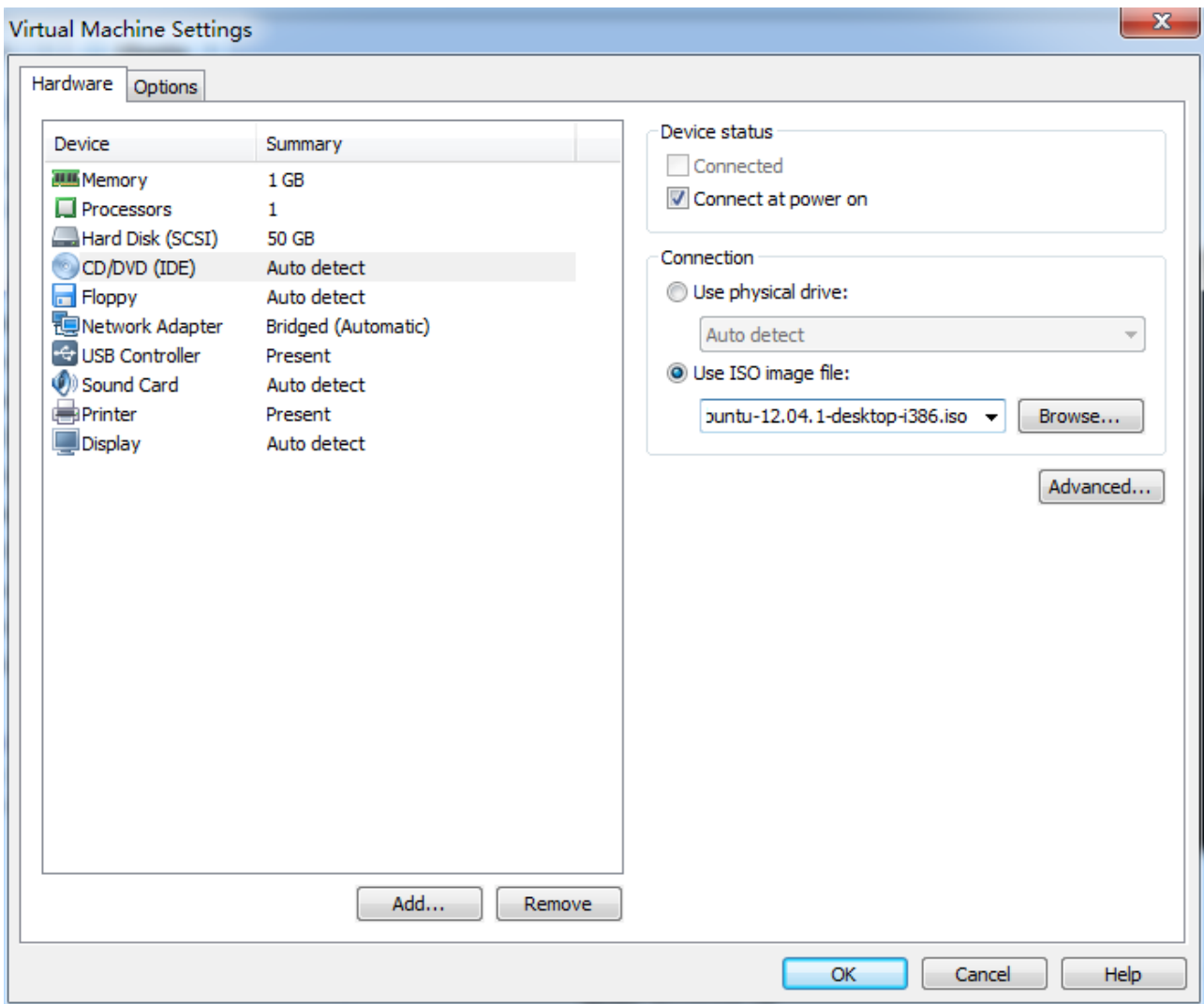
If you need dialing at native computer to access Internet, then you need to set it as NAT mode, to let it visit net through host machine. You can set it as Bridged mode when you need to mount the network file system in future.



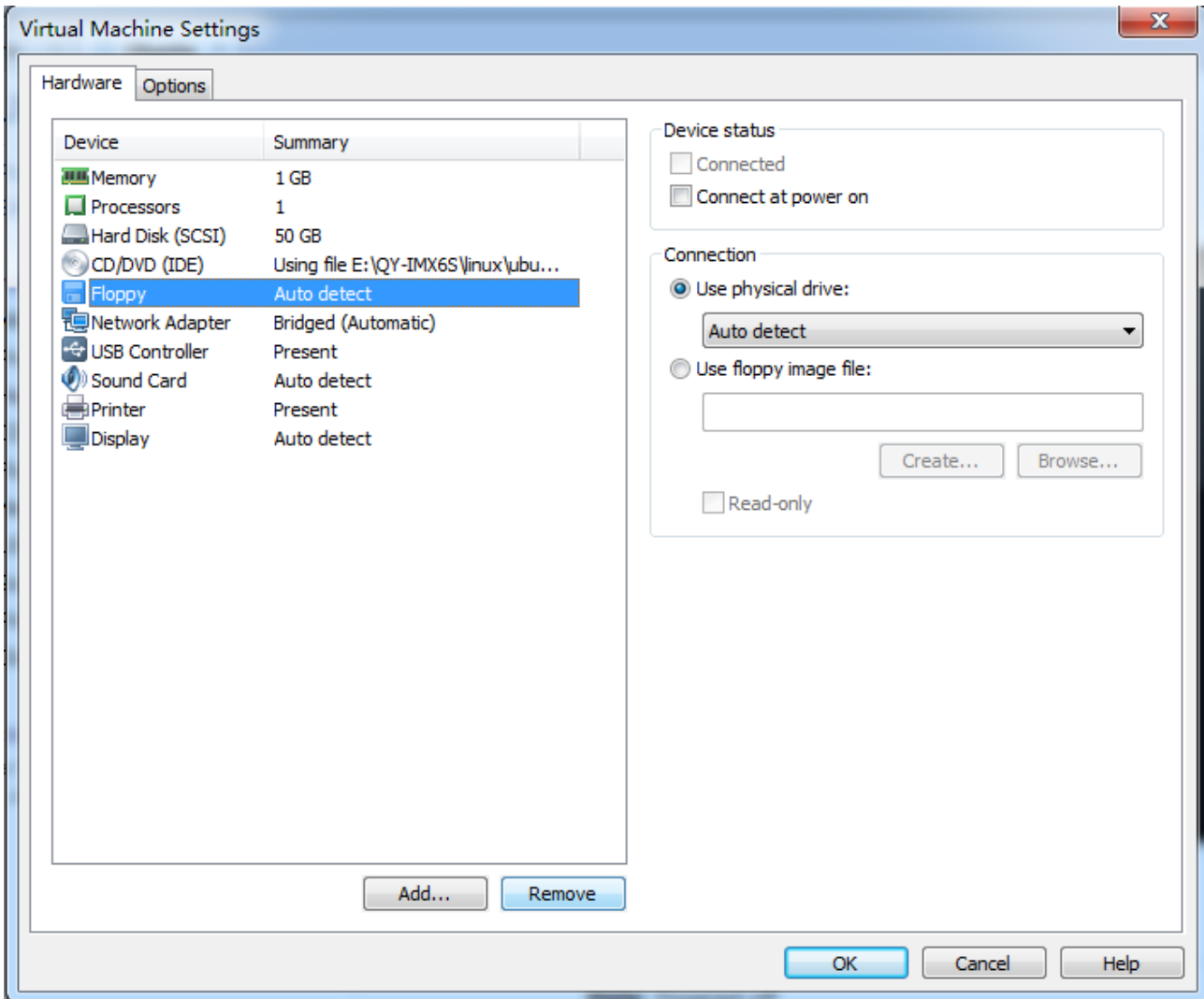
Step 10: First is memory, suggest to set it above [1G],no less than 512M. Here I used [1G]



Step 11: Disk, if you use ISO file installation system. You need to set it as picture. And need to appoint it to ISO path. If you use the physical dis, you should use the above option.



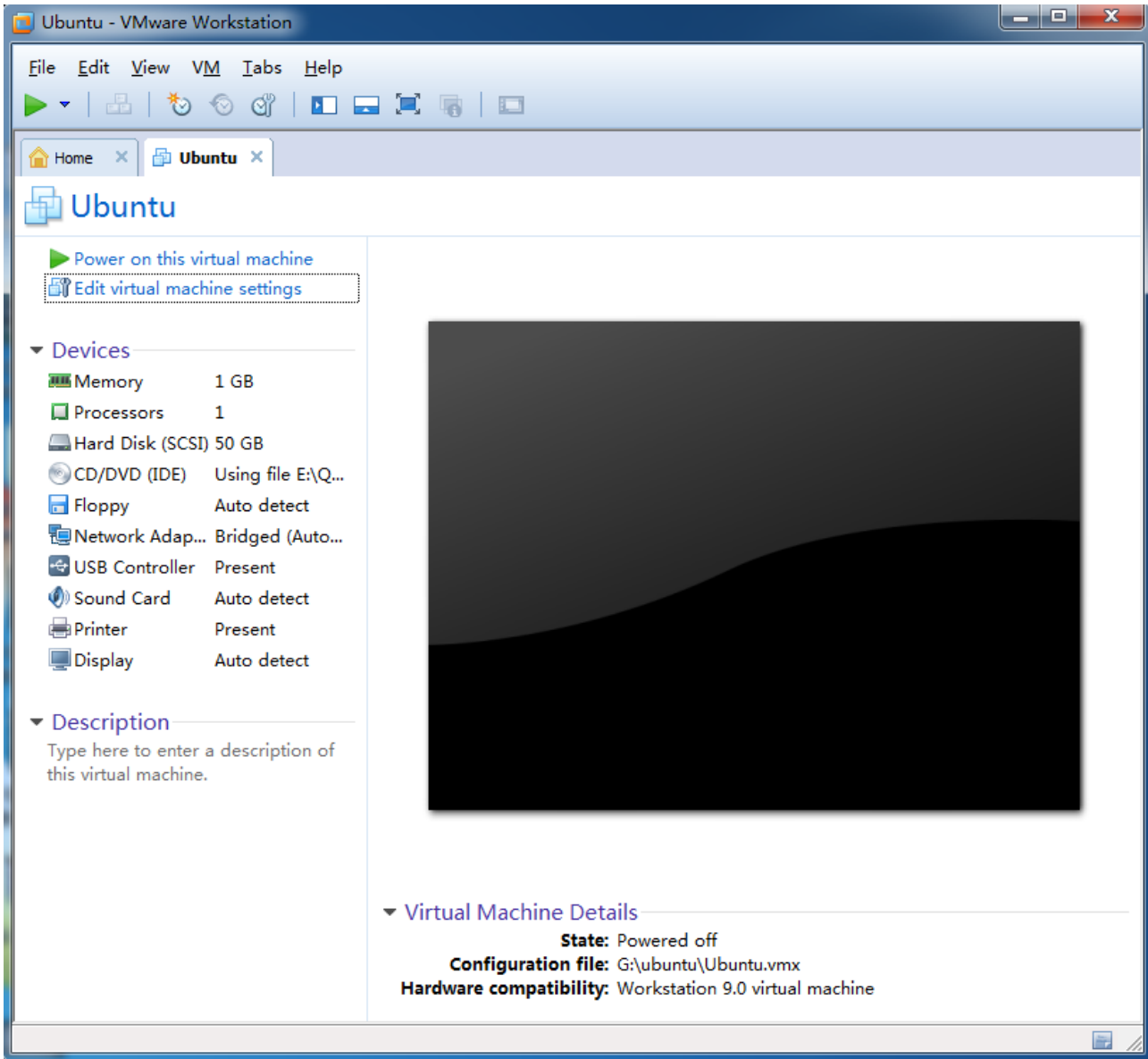
Step12: Soft Disk, normally, don't need it. Click [Remove].



After configuration, click [OK], back to main interface.

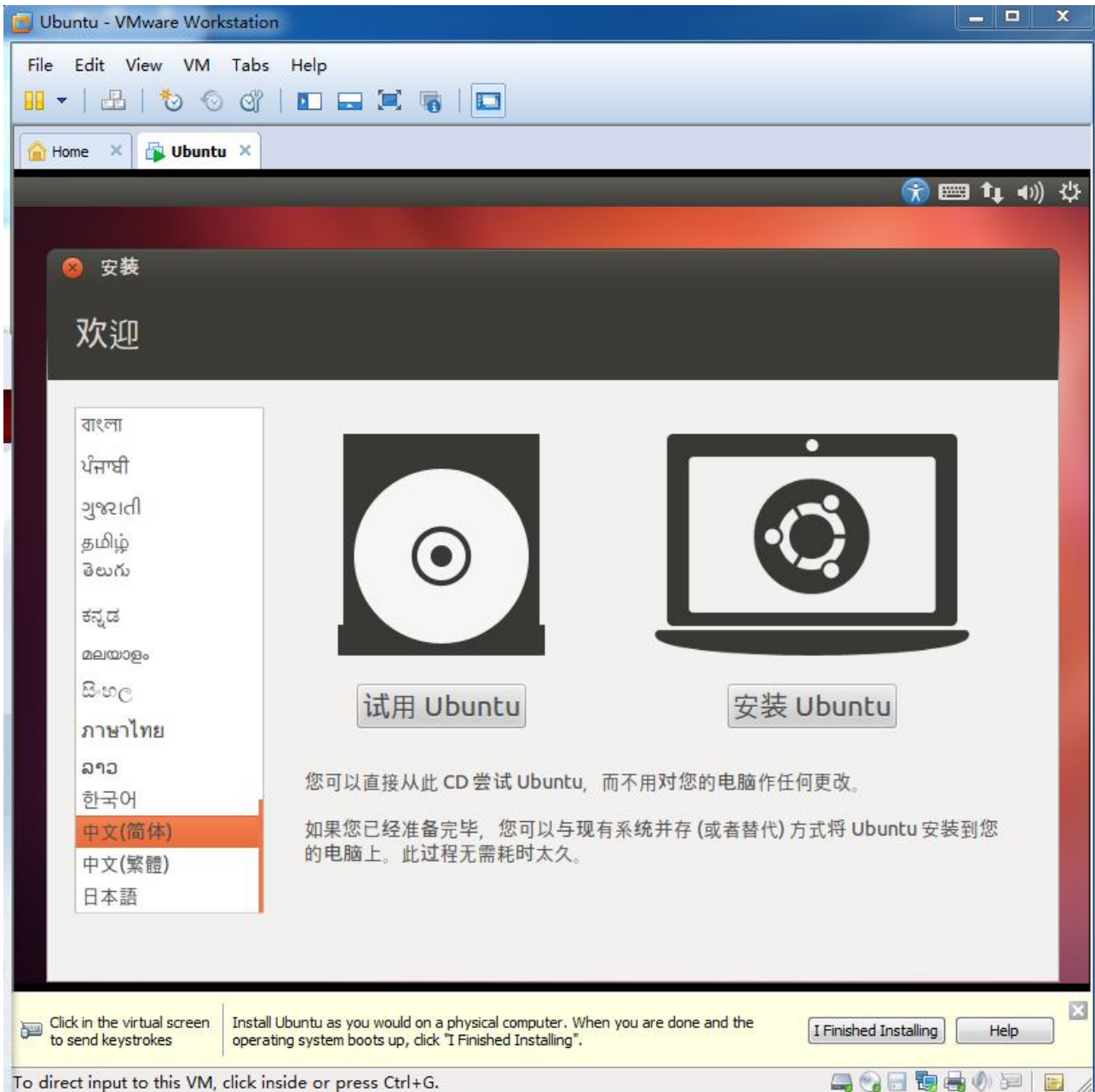
IV. Install ubuntu-12.04 Operation System in Virtual Machine

Step 1: Click the first option [Power on this virtual machine] on main interface, boot virtual machine. It regards as pressing on power.



Step 2: As there is no installation system in virtual machine hard disk, so it boots from disk after BIOS.

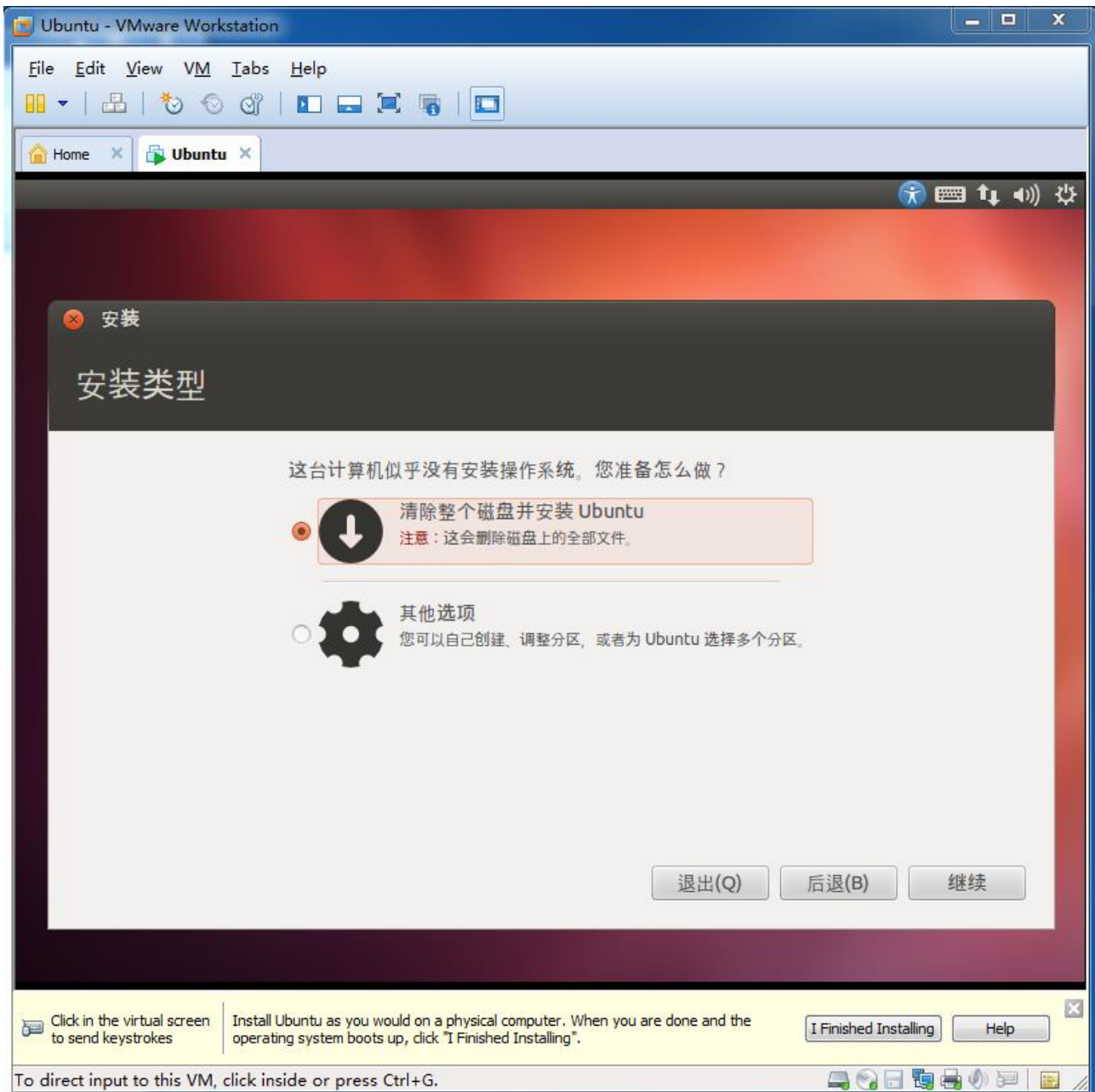
After showing [ubuntu], it starts system installation. Select language in first interface, here ,I select Chinese simplified, then click[install ubuntu].



Step 3: Don't tick these two options, click [continue].



Step 4: Use whole disk ,don't worry. This disk ,it means the VMDK file which the virtual machine created. It will not affect your physical disk.



Step 5: Click to install.



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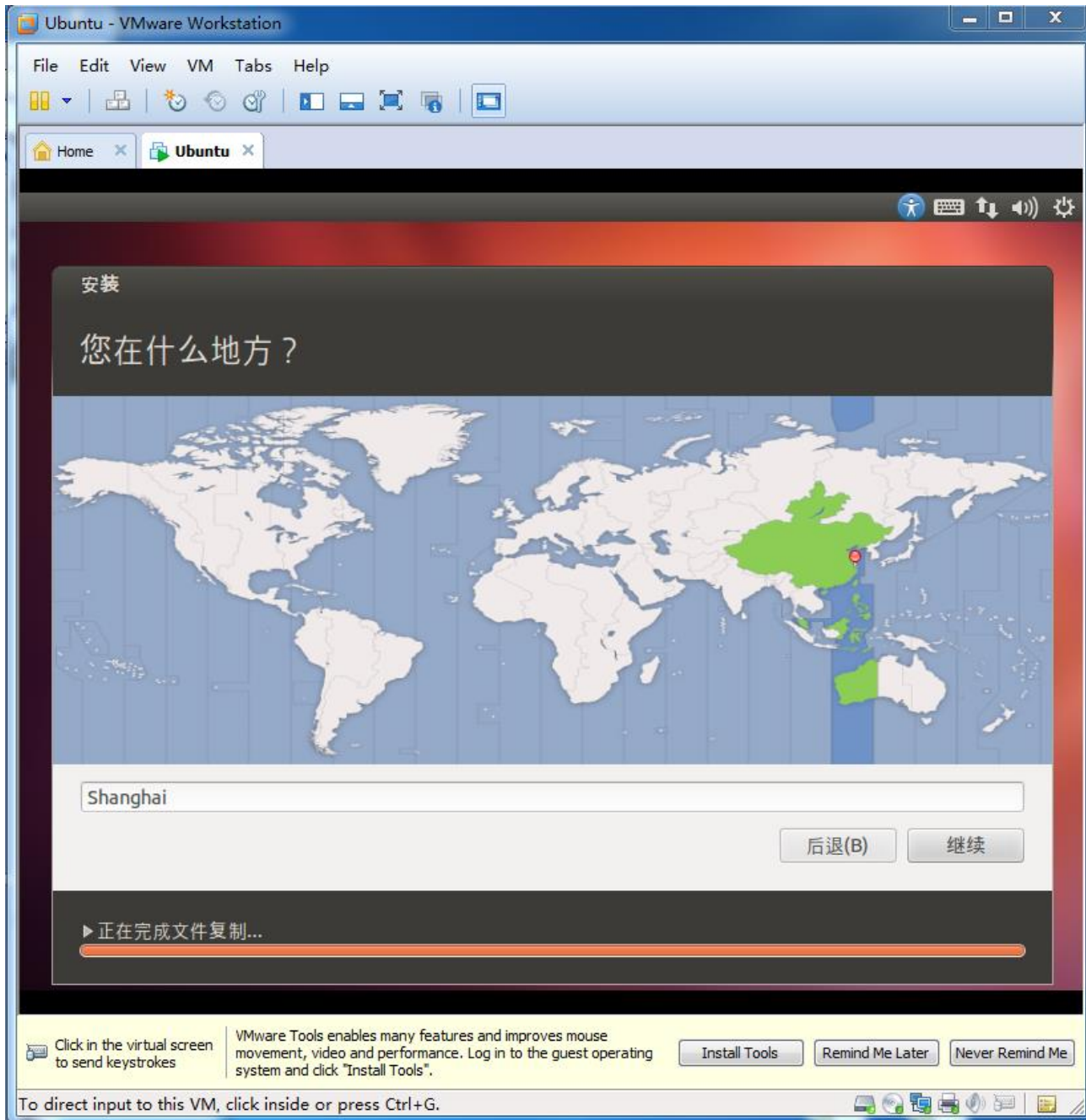
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Step 6: Select time zone.



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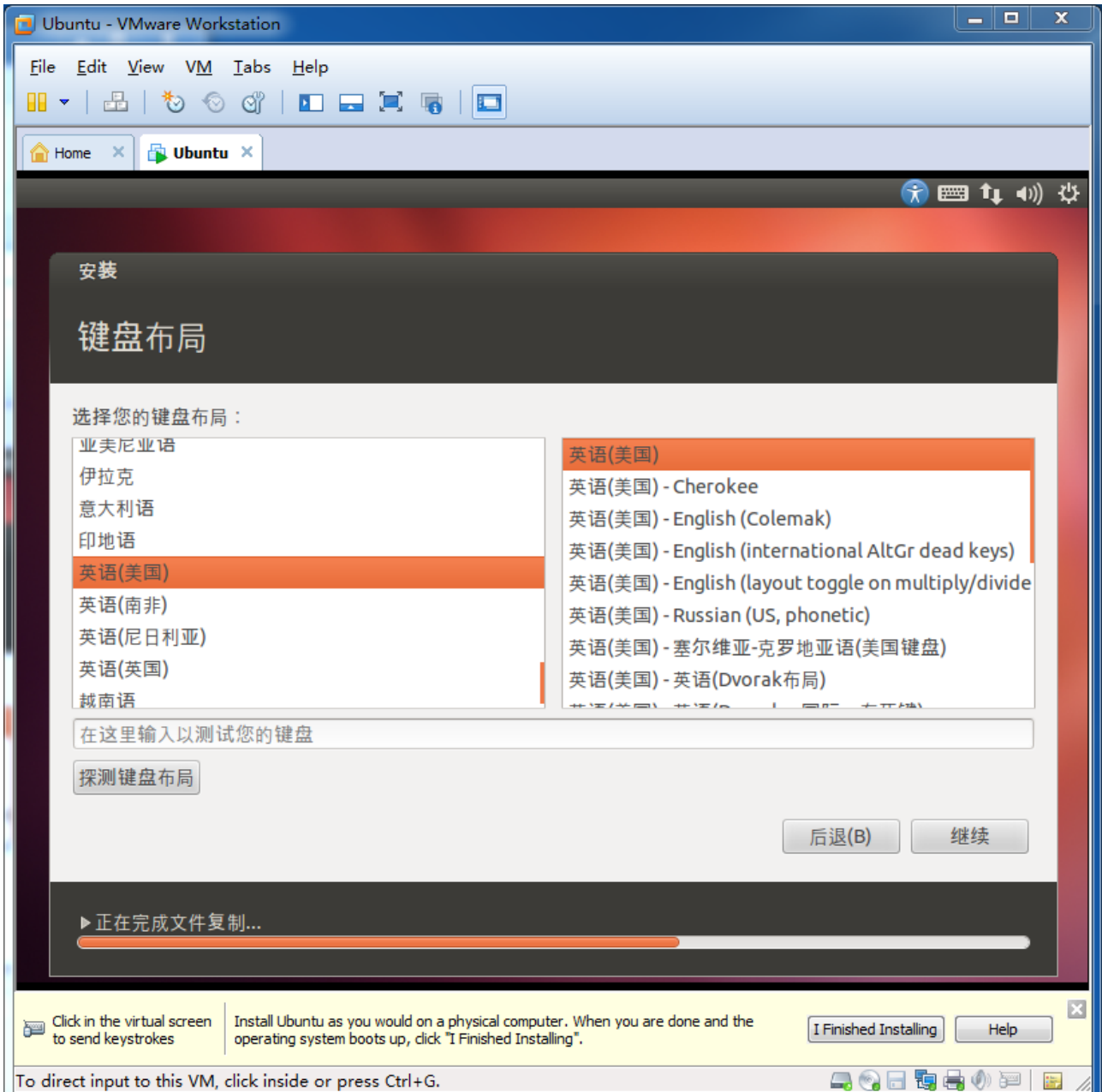
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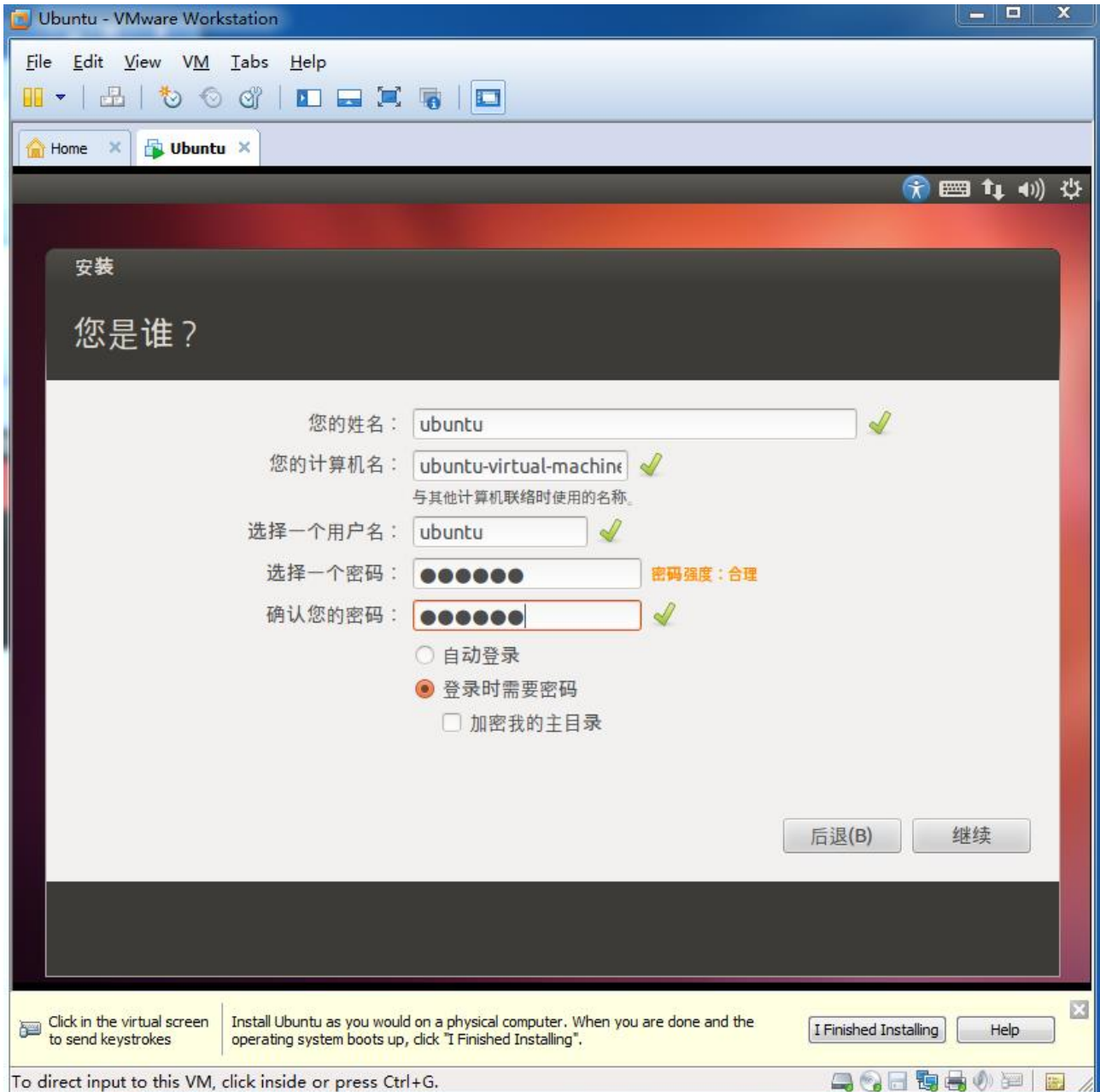
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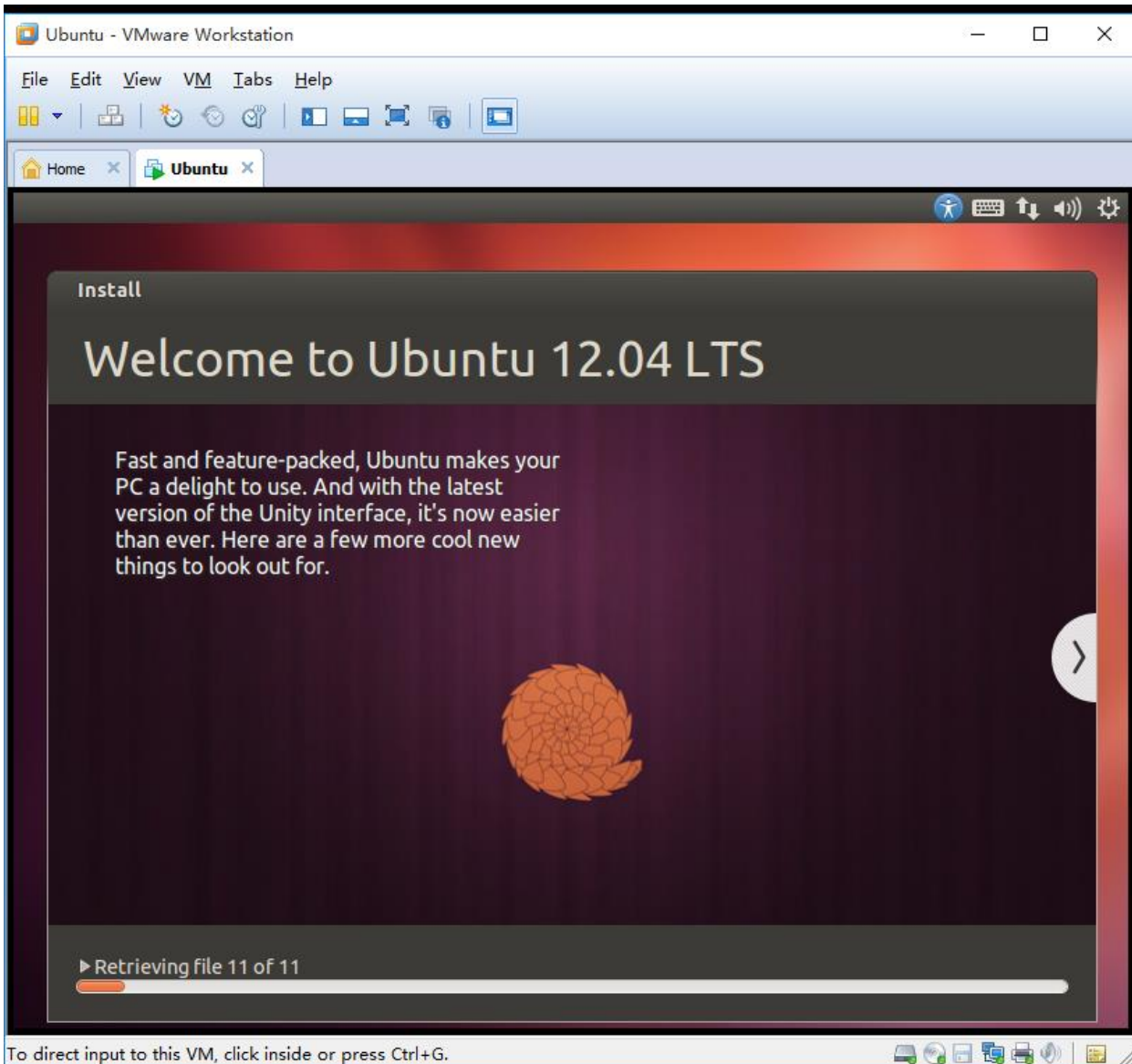
Step 7: Keyboard



Step 8: Create user, and set password. Different with the old release version, [ubuntu] does not set in root user. The user is not root user, and it is without root's permission.

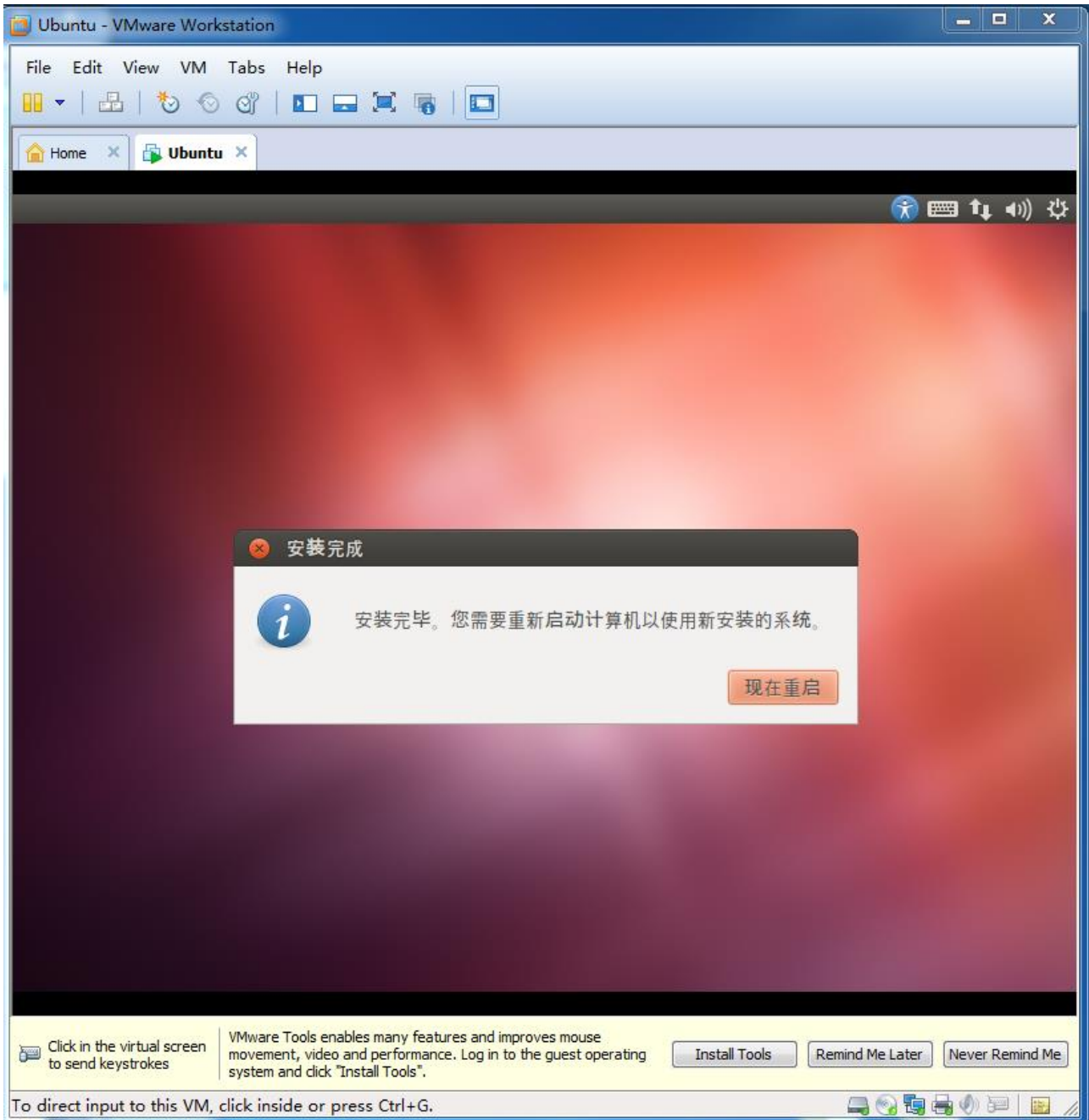


Step 9: The installation process is long, please be patient.

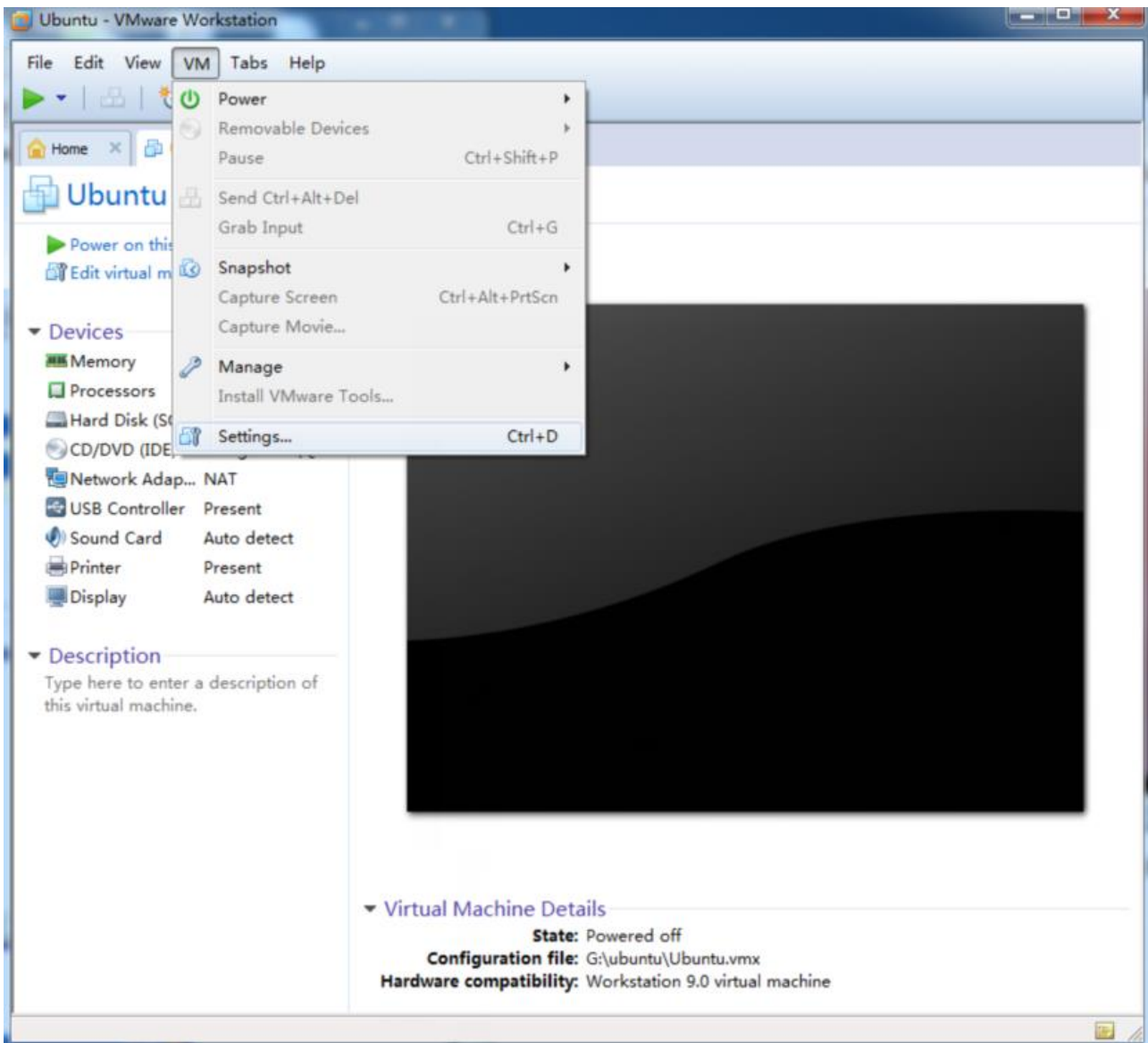


Step 10: You will need to download something from Internet when in installation process. Please make sure the network is normal.

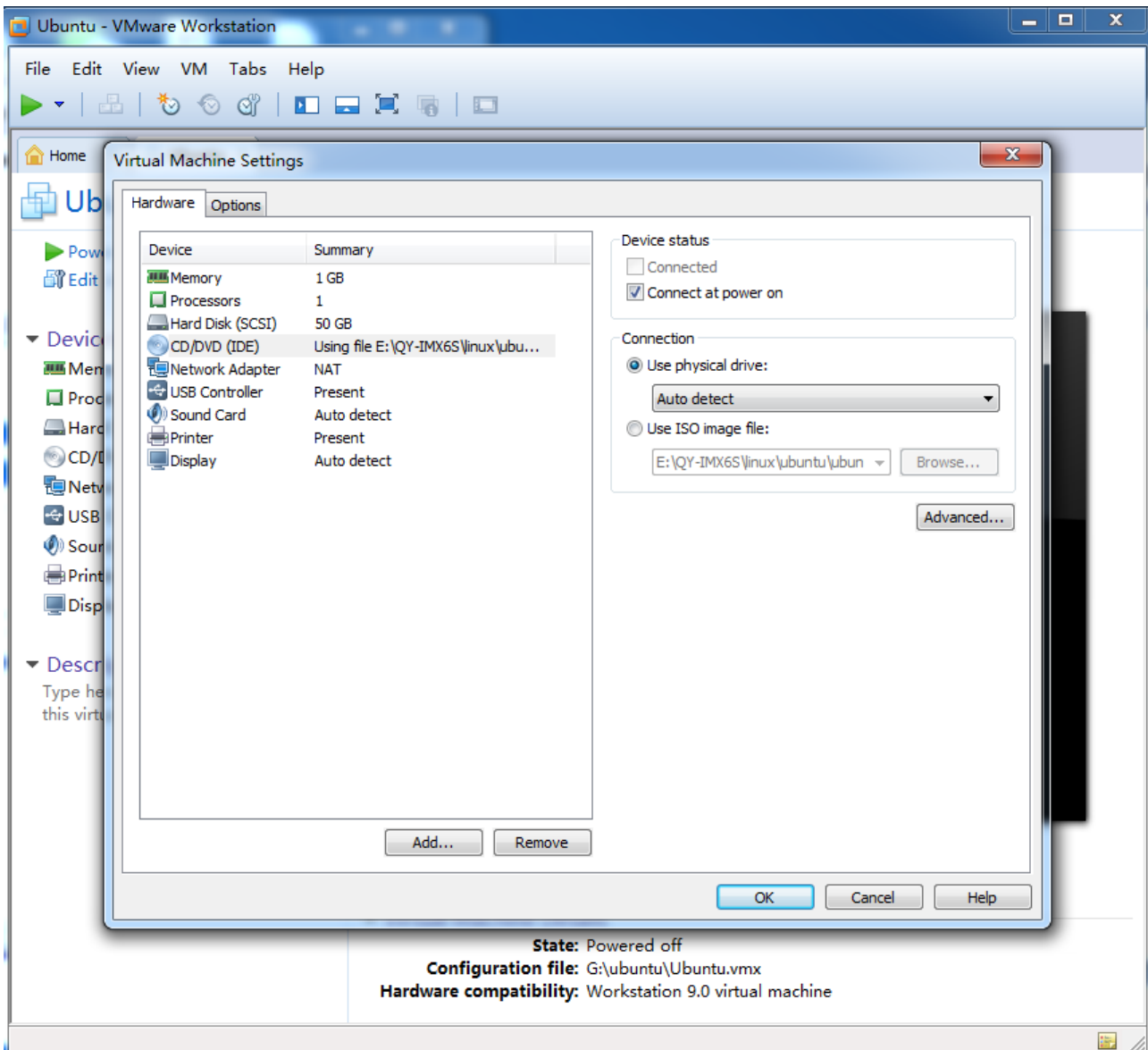
Step 11: Finish installation , re-boot virtual machine system.



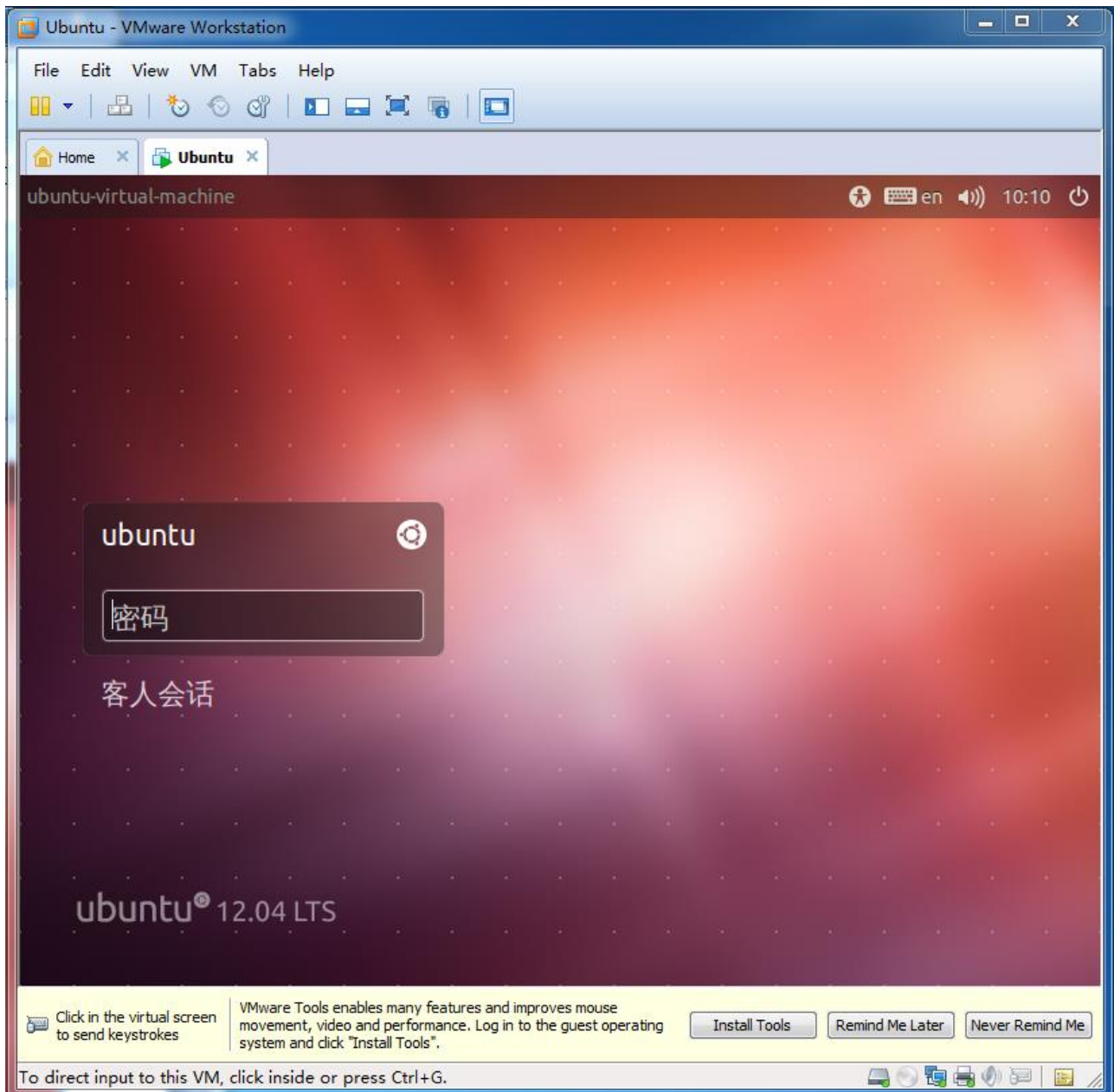
Step 12: Click [VM->Setting], if there are difficulties, you can't find out the mouse. You can use [Ctrl+ALT] to release the mouse from virtual machine.



Step 13: Set the Disk as the below picture shown, or clear ISO path. Click [OK].



Step 14: Rebooting, then click your user name, input password to enter into system.



Step 15: This step is very important, install [vmware-tools]. You can exchange files between virtual machine and host machine, and also can adapt virtual machine resolution.

Click [VM->Install VMware Tools]

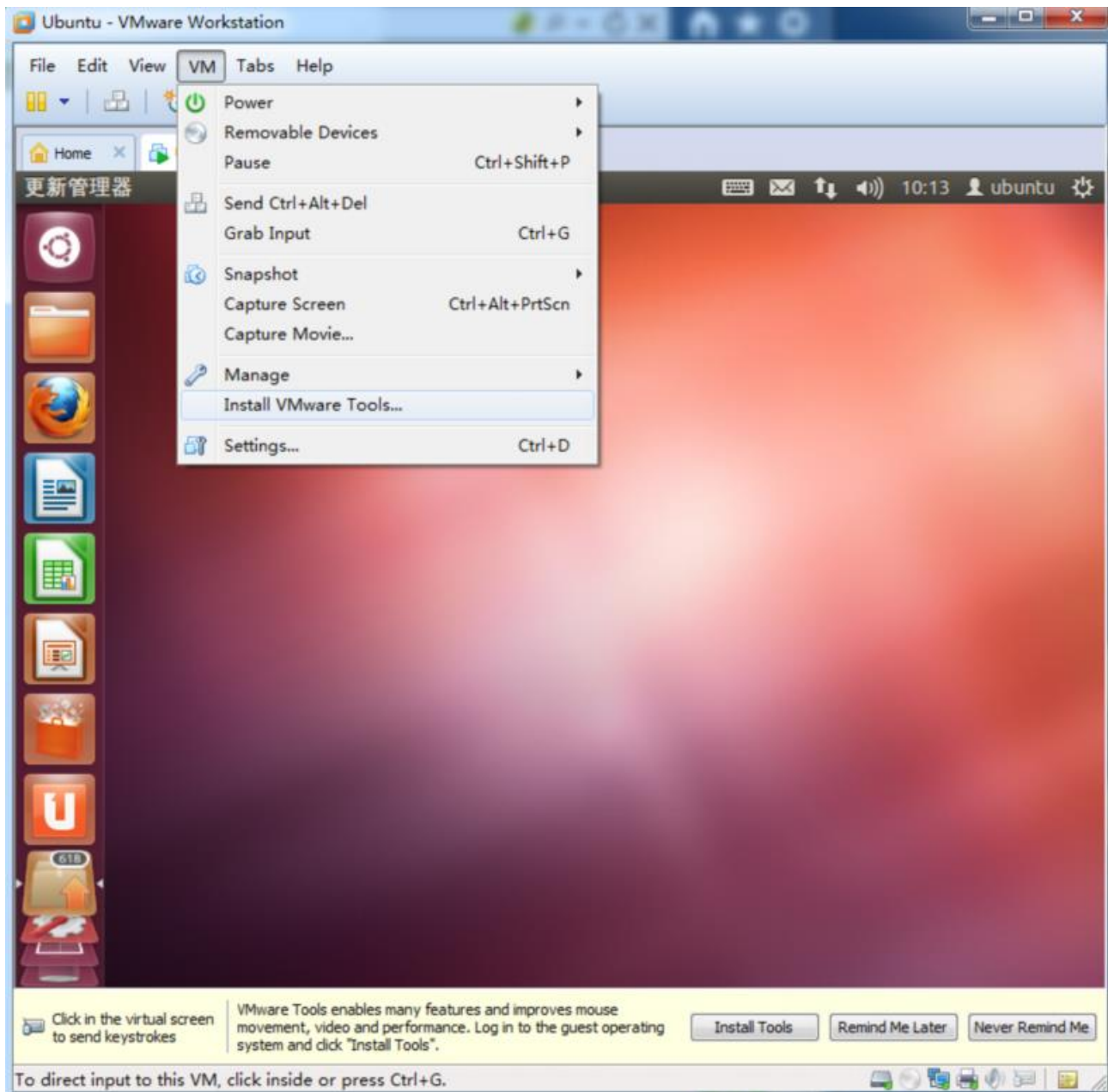
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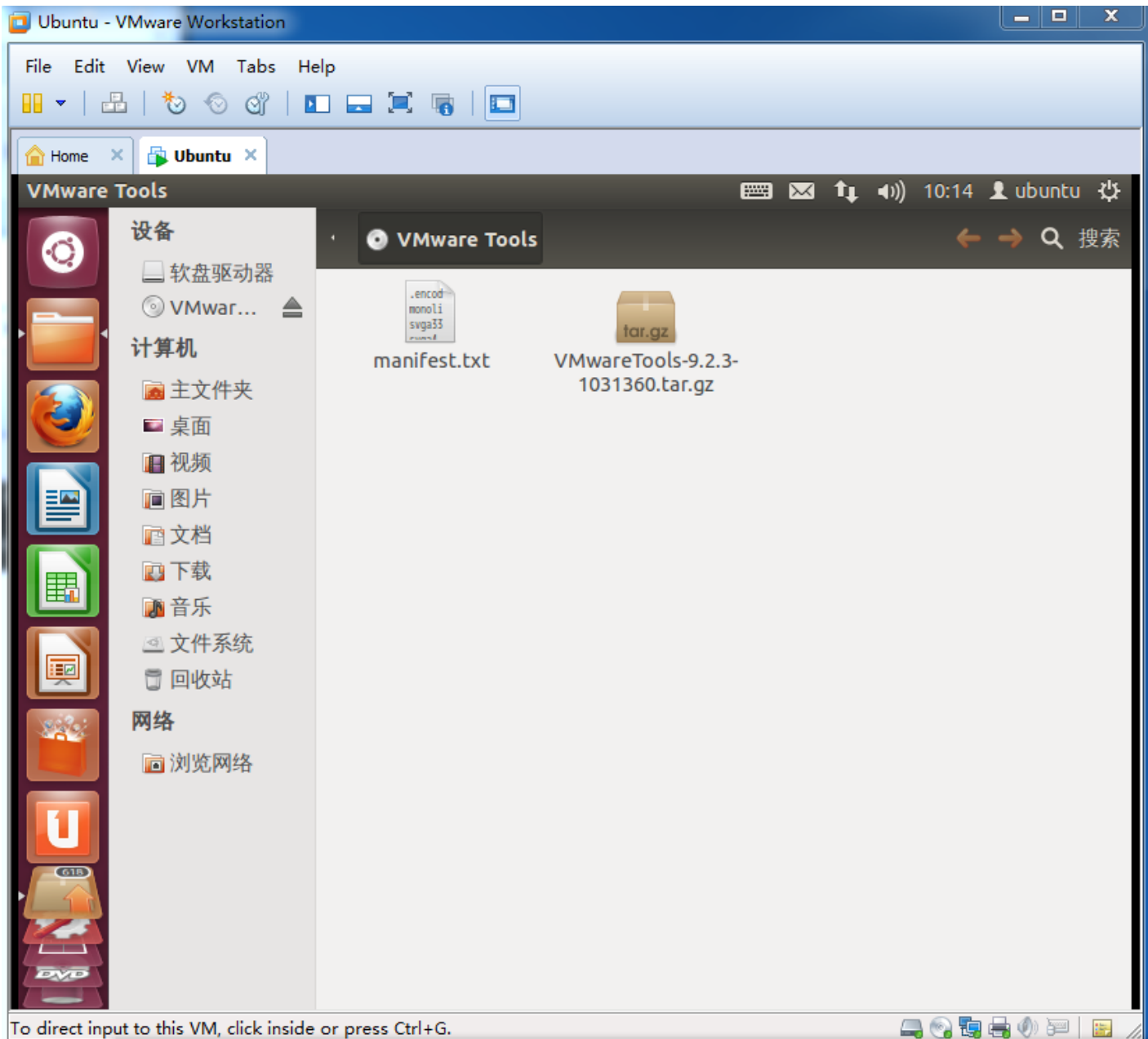
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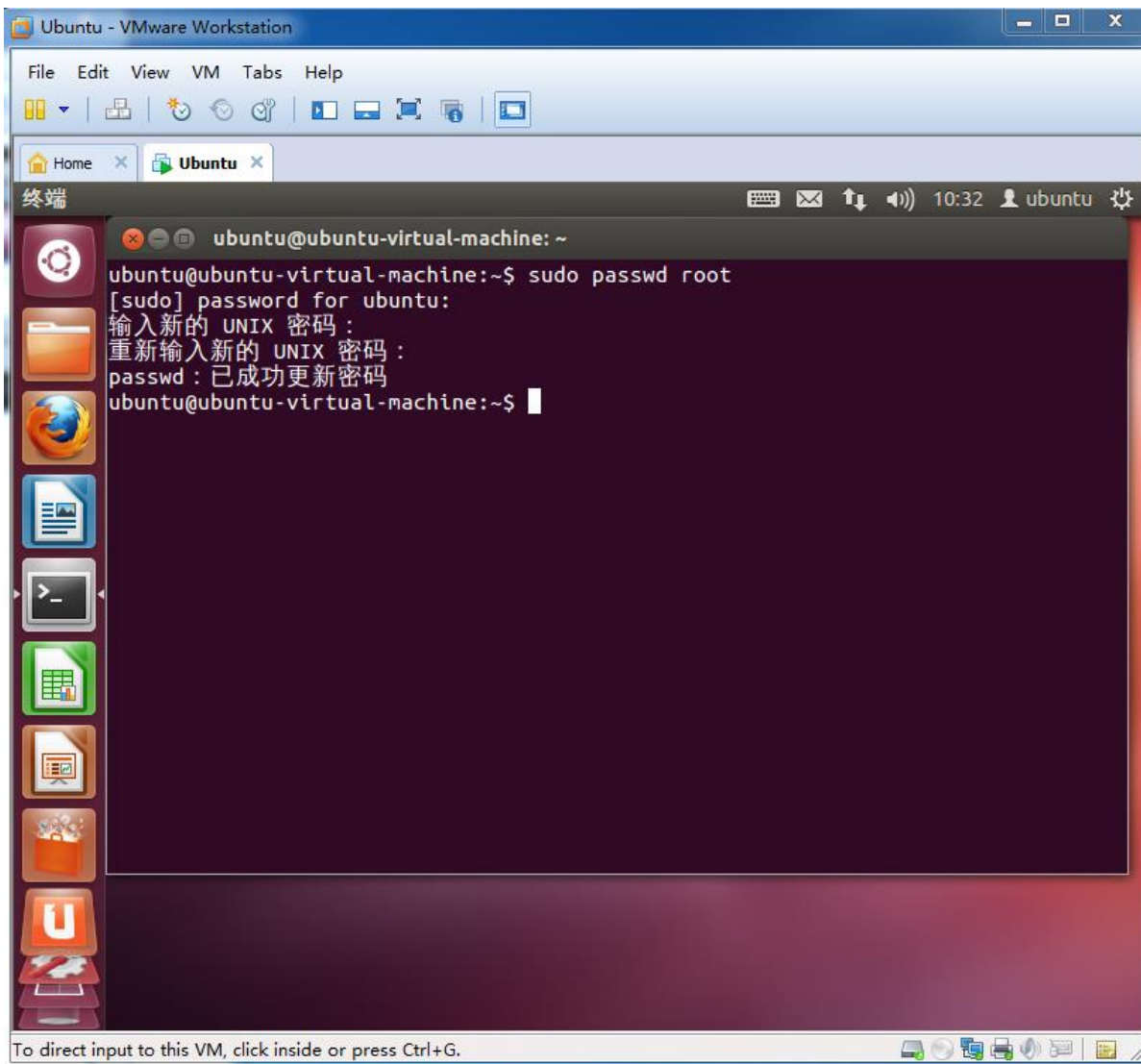
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Step 16: After clicking, there is a windows opened on virtual machine. The installation file is mounted on virtual machine as DVD.



Setp17: Set [root], close the pop-up windows, input [ctrl + alt + t], open terminal windows.



Step 18:

Input the following command in sequence:

```
ubuntu@ubuntu-virtual-machine:~$ cp /media/VMware\ Tools/VMwareTools-9.2.3-1031360.tar.gz .
```

/* Copy to the current directory*/

```
ubuntu@ubuntu-virtual-machine:~$ tar -xzf VMwareTools-9.2.3-1031360.tar.gz
```

/* Extract*/

```
ubuntu@ubuntu-virtual-machine:~$ cd vmware-tools-distrib
```

/*Enter into directory*/

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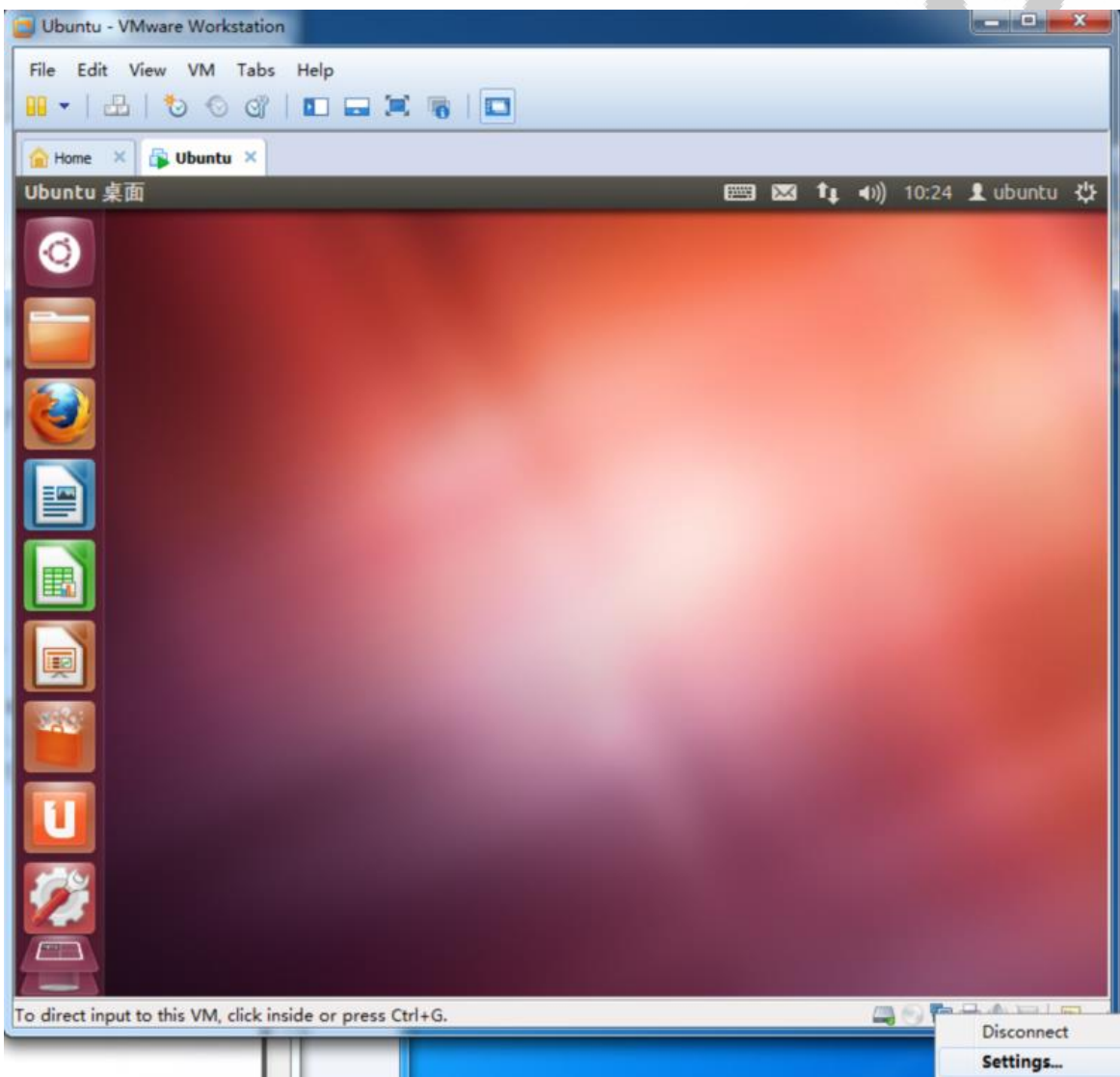
```
ubuntu@ubuntu-virtual-machine:~$ sudo ./vmware-install.pl -d  
/*Use default option to install*/
```

```
ubuntu@ubuntu-virtual-machine:~$ cd ..  
/*Back to upper directory*/
```

```
ubuntu@ubuntu-virtual-machine:~$ rm -rf vmware-tools-distrib  
/*Delete folder*/
```

```
ubuntu@ubuntu-virtual-machine:~$ sudo reboot  
/*Reboot virtual machine*/
```

Step: Network Setting [settings→network→bridged→ok]



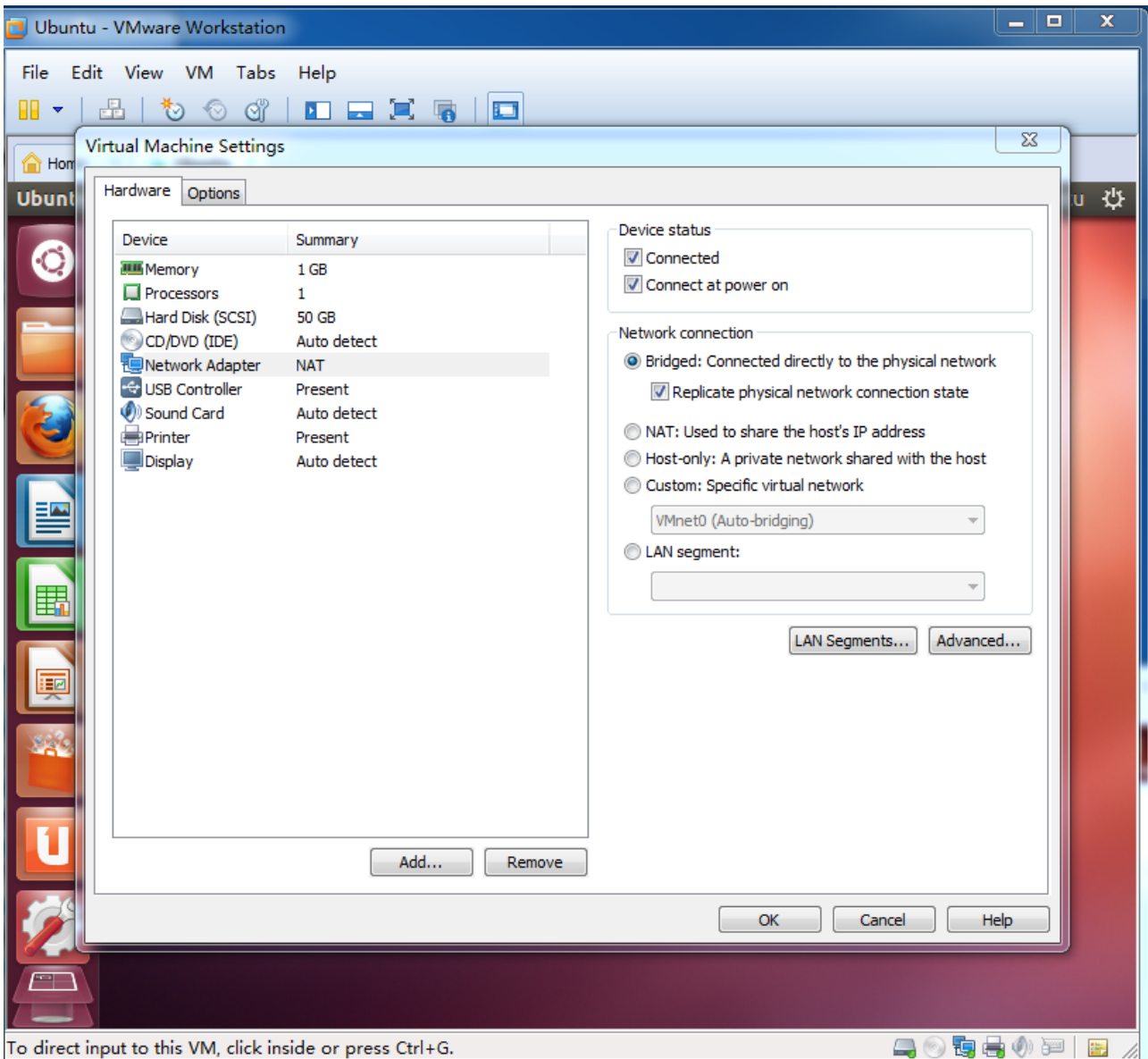
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Step 19: Set fixed ip, click the upper left button, select system setting.



To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

Step 20: Select network, click option.



To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

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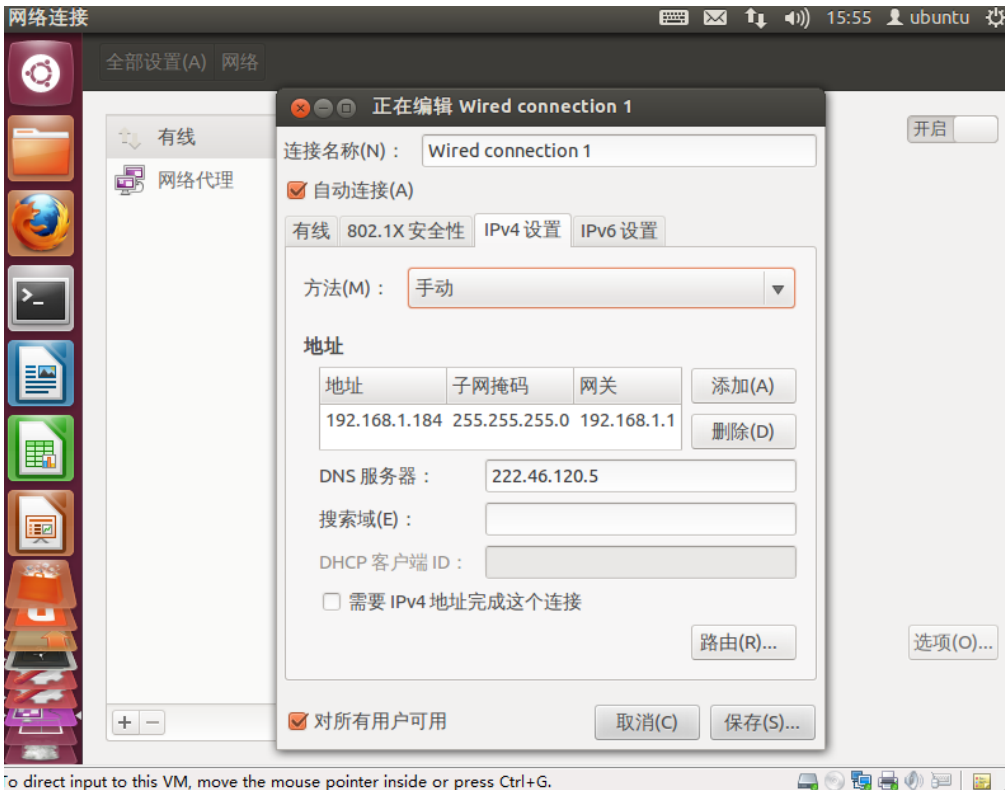
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Step 21: Select [IPv4 Settings] in pop-up interface, modify self-motion to manual operation, click [Add] to add the modified IP. Click [Save] . (DNS could be configured base on PC)



V. Configure ubuntu-10.10 development environment, install the necessary software package

Step1 : Source List Updates

```
[ubuntu@ubuntu-virtual-machine:~$ sudo apt-get install vim]
```

```
[ubuntu@ubuntu-virtual-machine:~$ sudo vi /etc/apt/sources.list]
```

Input the following list in opened file.

```
deb http://mirrors.163.com/ubuntu/ precise main restricted
```

```
deb-src http://mirrors.163.com/ubuntu/ precise main restricted
```

```
deb http://mirrors.163.com/ubuntu/ precise-updates main restricted
```

```
deb-src http://mirrors.163.com/ubuntu/ precise-updates main restricted
```

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```
deb http://mirrors.163.com/ubuntu/ precise universe
deb-src http://mirrors.163.com/ubuntu/ precise universe
deb http://mirrors.163.com/ubuntu/ precise-updates universe
deb-src http://mirrors.163.com/ubuntu/ precise-updates universe
deb http://mirrors.163.com/ubuntu/ precise multiverse
deb-src http://mirrors.163.com/ubuntu/ precise multiverse
deb http://mirrors.163.com/ubuntu/ precise-updates multiverse
deb-src http://mirrors.163.com/ubuntu/ precise-updates multiverse
deb http://mirrors.163.com/ubuntu/ precise-backports main restricted universe multiverse
deb-src http://mirrors.163.com/ubuntu/ precise-backports main restricted universe multiverse
deb http://mirrors.163.com/ubuntu/ precise-security main restricted
deb-src http://mirrors.163.com/ubuntu/ precise-security main restricted
deb http://mirrors.163.com/ubuntu/ precise-security universe
deb-src http://mirrors.163.com/ubuntu/ precise-security universe
deb http://mirrors.163.com/ubuntu/ precise-security multiverse
deb-src http://mirrors.163.com/ubuntu/ precise-security multiverse
deb http://extras.ubuntu.com/ubuntu precise main
deb-src http://extras.ubuntu.com/ubuntu precise main
```

As below picture

```
st@st-virtual-machine: /etc/apt
deb http://mirrors.163.com/ubuntu/ precise main restricted
deb-src http://mirrors.163.com/ubuntu/ precise main restricted
deb http://mirrors.163.com/ubuntu/ precise-updates main restricted
deb-src http://mirrors.163.com/ubuntu/ precise-updates main restricted
deb http://mirrors.163.com/ubuntu/ precise universe
deb-src http://mirrors.163.com/ubuntu/ precise universe
deb http://mirrors.163.com/ubuntu/ precise-updates universe
deb-src http://mirrors.163.com/ubuntu/ precise-updates universe
deb http://mirrors.163.com/ubuntu/ precise multiverse
deb-src http://mirrors.163.com/ubuntu/ precise multiverse
deb http://mirrors.163.com/ubuntu/ precise-updates multiverse
deb-src http://mirrors.163.com/ubuntu/ precise-updates multiverse
deb http://mirrors.163.com/ubuntu/ precise-backports main restricted universe mu
ltiverse
deb-src http://mirrors.163.com/ubuntu/ precise-backports main restricted univers
e multiverse
deb http://mirrors.163.com/ubuntu/ precise-security main restricted
deb-src http://mirrors.163.com/ubuntu/ precise-security main restricted
deb http://mirrors.163.com/ubuntu/ precise-security universe
deb-src http://mirrors.163.com/ubuntu/ precise-security universe
deb http://mirrors.163.com/ubuntu/ precise-security multiverse
deb-src http://mirrors.163.com/ubuntu/ precise-security multiverse
deb http://extras.ubuntu.com/ubuntu precise main
```

Save, then exit

```
[ubuntu@ubuntu-virtual-machine:~$ sudo apt-get update]
```

Step2: After updating , install the necessary software.

```
ubuntu@ubuntu-virtual-machine:~$ sudo apt-get install build-essential
```

```
ubuntu@ubuntu-virtual-machine:~$ sudo apt-get install libncurses5-dev
```

```
ubuntu@ubuntu-virtual-machine:~$ sudo apt-get install bison
```

```
ubuntu@ubuntu-virtual-machine:~$ sudo apt-get install flex
```

```
ubuntu@ubuntu-virtual-machine:~$ sudo apt-get install gettext
```

```
ubuntu@ubuntu-virtual-machine:~$ sudo apt-get install texinfo
```

```
ubuntu@ubuntu-virtual-machine:~$ sudo apt-get install subversion
```

VI. Configure NFS Service

NFS(Network File System), you can share several mainframe (different OS) by network-----use NFS to mount remote mainframe's directory. Visit this directory ,just like to visit local directory!(Root user operate as belows)

1、 Install NFS server-side and client-side.

```
ubuntu@ubuntu-virtual-machine:~$sudo apt-get install nfs-kernel-server nfs-common portmap
```

Hint whether to continue : Y

```
Do you want to continue [Y/n]? Y
```

To do NFS test on local machine by using client-side.

3、 Configure mounted directory and permission

Create [/nfs]directory.

```
[ubuntu@ubuntu-virtual-machine:~$cd /]
```

```
[ubuntu@ubuntu-virtual-machine:~$ sudo mkdir /work]
```

Then modify [nfs] configuration

```
[ubuntu@ubuntu-virtual-machine:~$sudo gedit /etc/exports]
```

Add the following content at end.

```
/home/ubuntu/work *(rw,sync,no_root_squash) //work , the shared directory
```

4、 Reboot NFS service

```
[ubuntu@ubuntu-virtual-machine:~$ sudo /etc/init.d/nfs-kernel-server restart]
```

5、 Test NFS

Try to mount local disk, mount [/nfs] to [/mnt]

```
[ubuntu@ubuntu-virtual-machine:~$ mount -t nfs 192.168.1.184:/home/ubuntuwork mnt/]
```

```
[/*192.168.1.184 Your IP*/]
```

Run[df] to check result:

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```
[ubuntu@ubuntu-virtual-machine:~$df]
```

```
[192.168.1.184:/work 51275648 3691008 45015552 8% /mnt]
```

It has been mounted successfully, test ok. Then uninstall it.

```
[ubuntu@ubuntu-virtual-machine:~$ umount /mnt]
```

Next, you can test ubuntu server on development board, normally, it could be mounted successfully in local machine. If IP is no limitation, the development board's mount could also be successful. If it still has issues, please check ubuntu firewall setting. Use the following command to close firewall, then try to mount again:

```
[ubuntu@ubuntu-virtual-machine:~$ sudo ufw disable] if the development board can't mount ubuntu server.
```

VIII. Configure samba service

1、 Install samba service

```
[ubuntu@ubuntu-virtual-machine:~$ sudo apt-get install samba]
```

```
[ubuntu@ubuntu-virtual-machine:~$ sudo apt-get install smbfs]
```

2、 Edit [/etc/samba/smb.conf] configuration file.

```
[ubuntu@ubuntu-virtual-machine:~$ sudo vi /etc/samba/smb.conf]
```

(1) Remove [#] from the [security=user].

(2) Add at end.

```
[share]
```

```
comment = Home Directories
```

```
path = /home/ubuntu/samba
```

```
available = yes
```

```
browseable = yes
```

```
read only = no
```

```
public = yes
```

Remark: the red words, here, use absolute path.

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3、 Create a user in system setting ,user name [samba].

Set [samba] user setting to [samba] account, and set permission.

```
ubuntu@ubuntu-virtual-machine:~$ sudo smbpasswd -a samba
```

```
ubuntu@ubuntu-virtual-machine:~$ mkdir ~/samba
```

```
ubuntu@ubuntu-virtual-machine:~$ chmod 777 ~/samba
```

4、 Reboot [ubuntu samba] server.

```
ubuntu@ubuntu-virtual-machine:~$ sudo /etc/init.d/smbd restart
```

Or use the following command:

```
ubuntu@ubuntu-virtual-machine:~$ sudo service smb stop
```

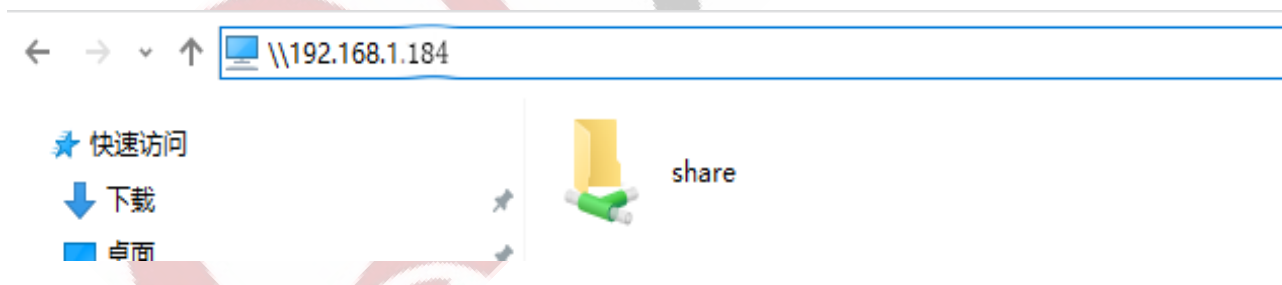
```
ubuntu@ubuntu-virtual-machine:~$ sudo service smb restart
```

5、 Visit [ubuntu samba] server.

Input [\\] + [ubuntu IP] in windows folder, for example: [\\192.168.1.184]

Enter into the folder ,you can see the shared directory [share], in this way, you can share file folder between PC and virtual machine.

As shown:



[share]directory is [samba]'s shared directory.

IX. Conclusion

Till now, the development environment server has been constructed well. The development board's testing,

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please refer to [Linux User Manual]. If there is any issue , please contact us.

Thanks for using Qiyang mainboard.



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