



Ubuntu Installation for Virtual Machine Manual

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Preface

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v1.0	2012-7-18	Found

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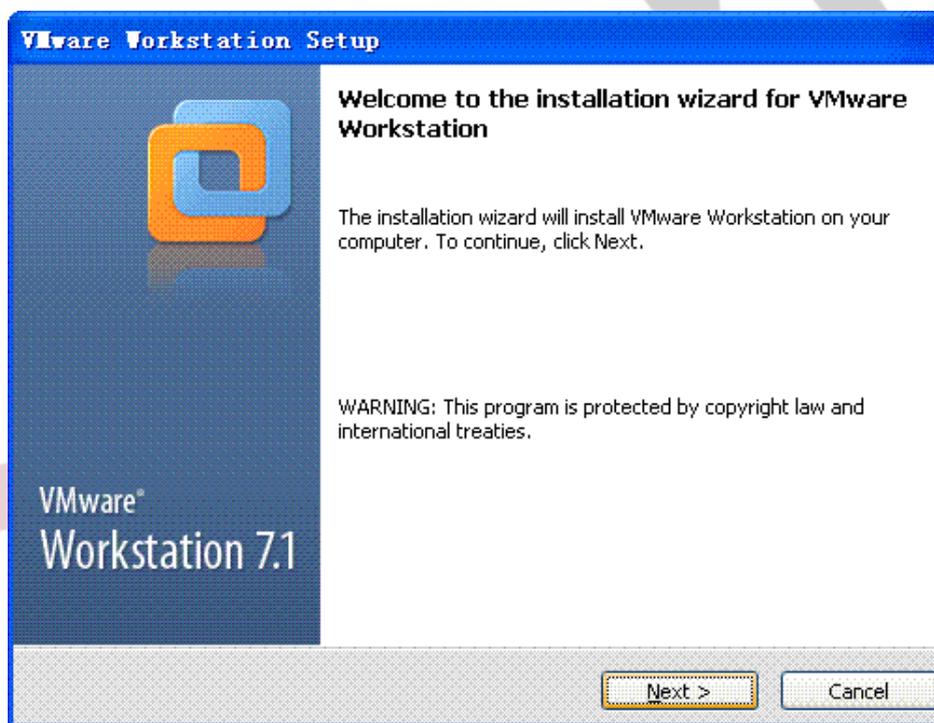
1. Preparation

Windows xp-sp3

VMware-workstation-full-7.1.4 installation program, a sequence number
ubuntu-10.10-i386.iso CD

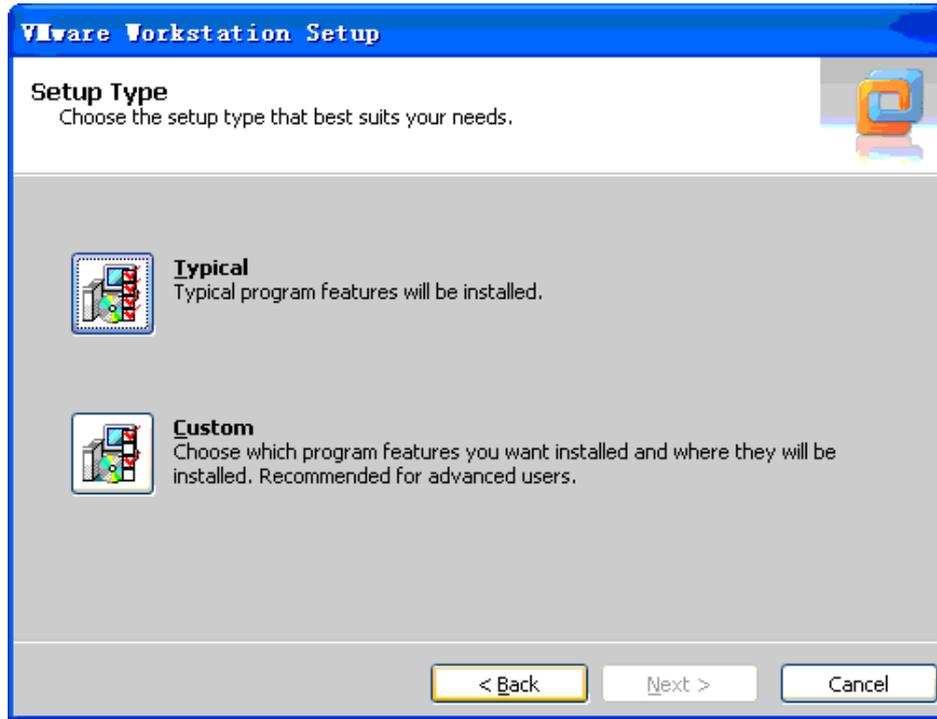
2. vmware-work-station-7.1.4 Installation

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



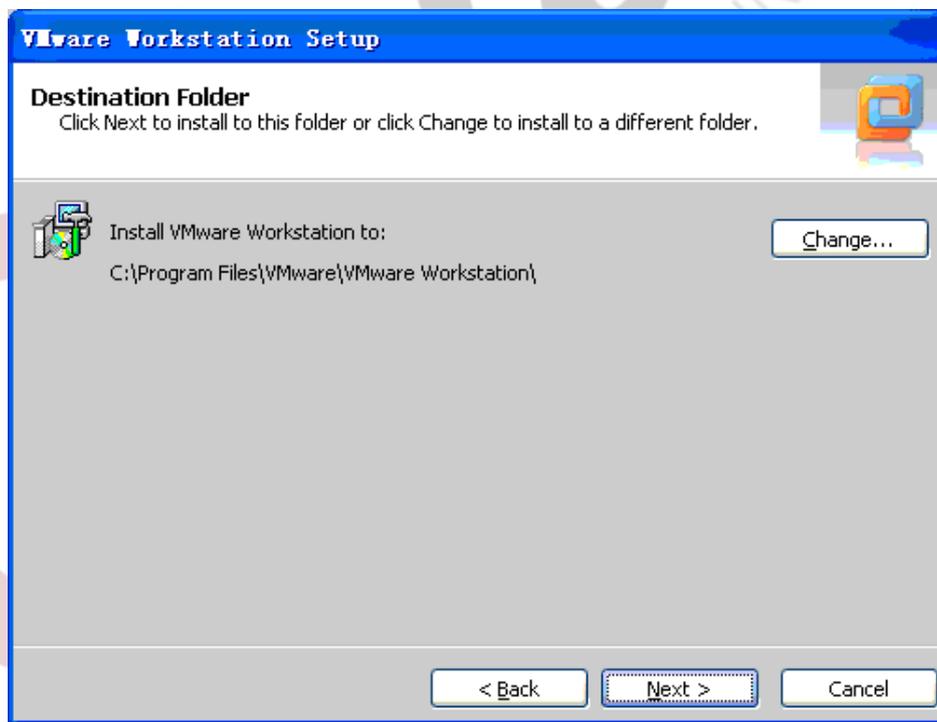
Picture 1

Step 2: Select the "Typical".



Picture 2

Step 3: Select the installation path, the default on disk C.



Picture 3

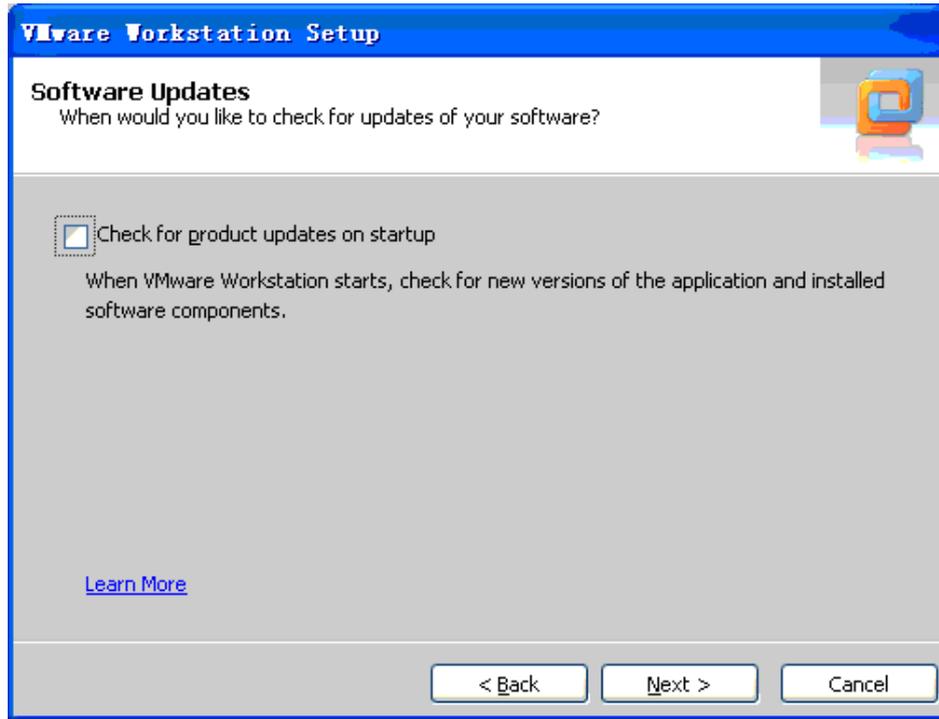
Step 4: In order to save time, do not check updates.

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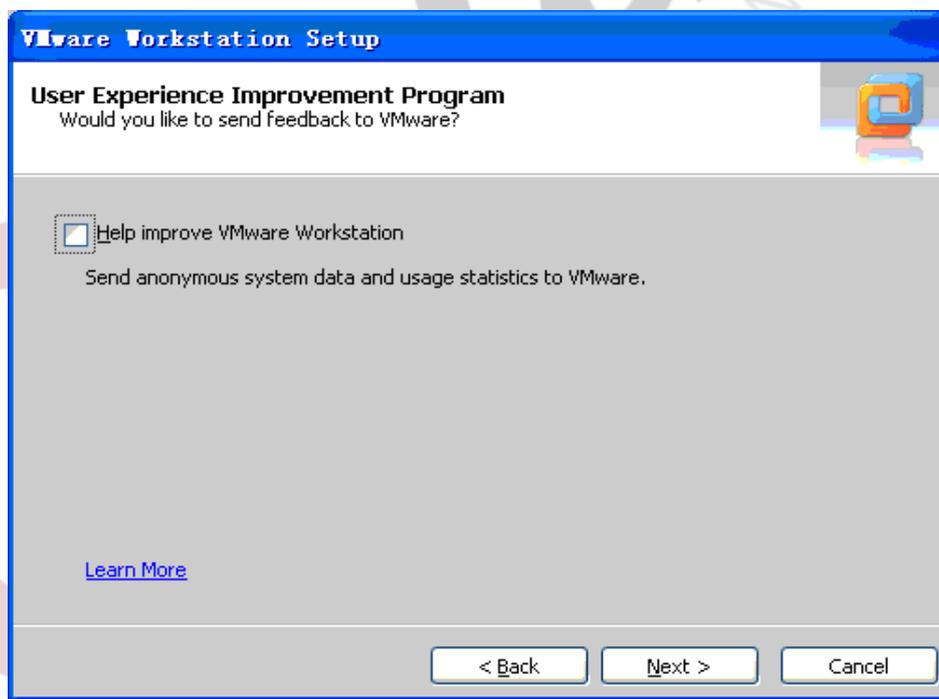
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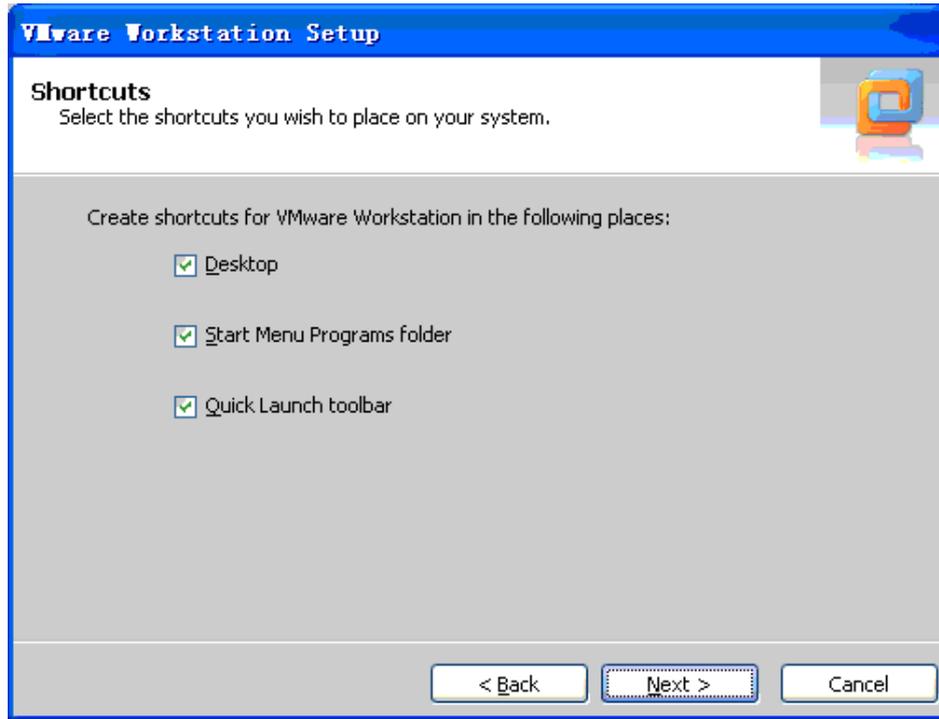
Picture 4

Step 5: Ignore the improvement.



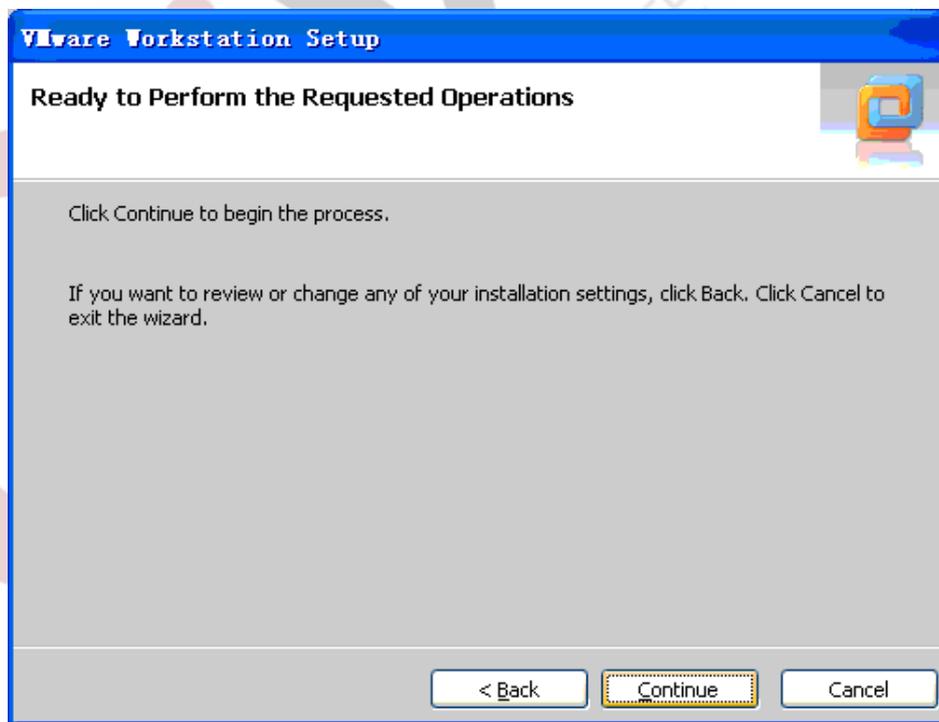
Picture 5

Step 6: Select all the box.

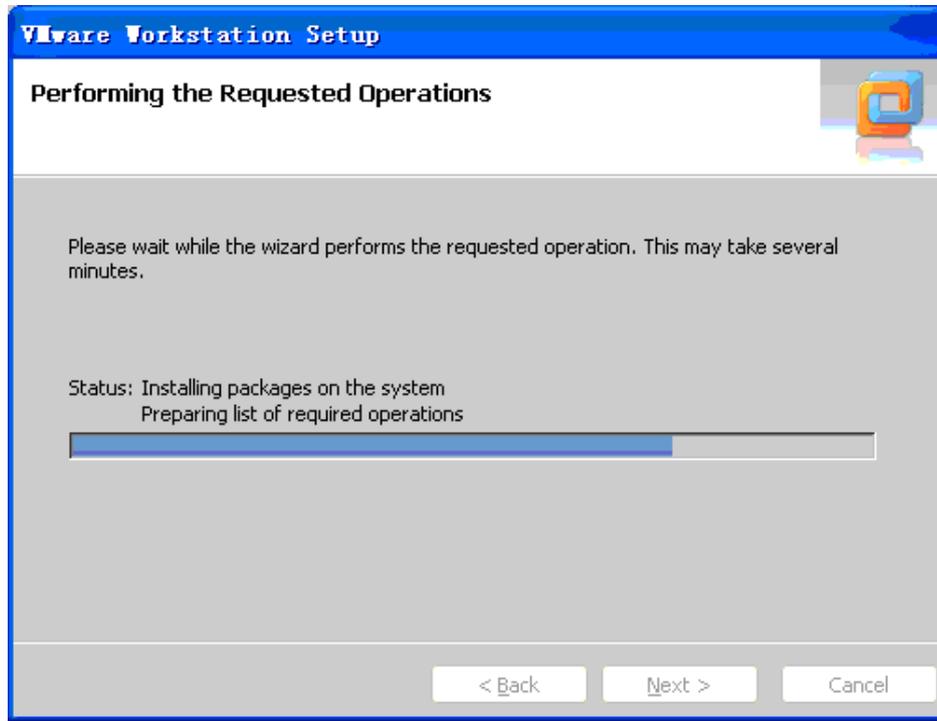


Picture 6

Step 7: All the options configured, select the "continue", the following is a long wait...

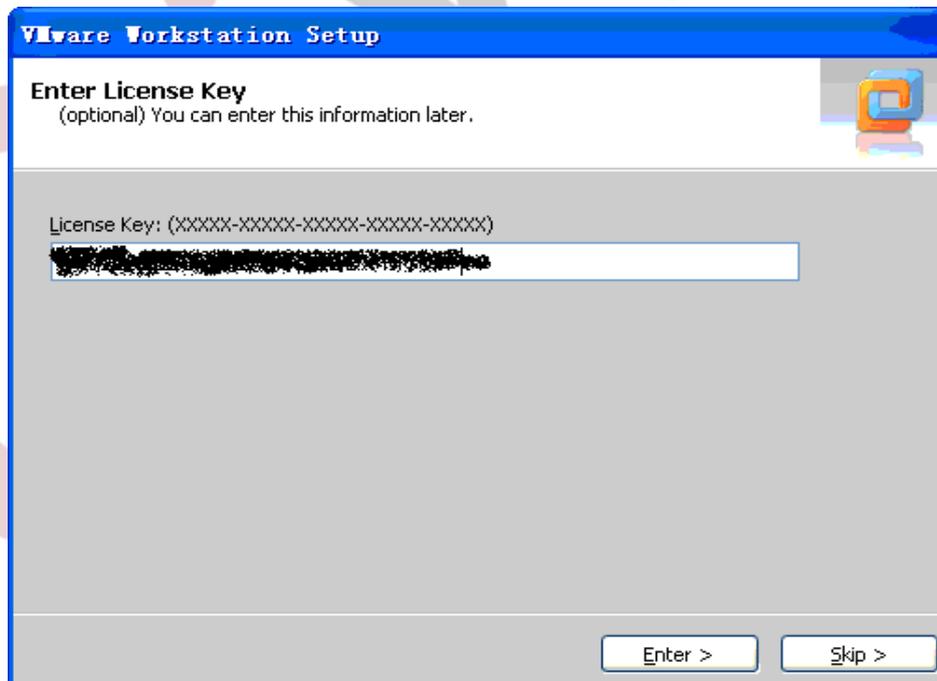


Step 8: Please be patient.

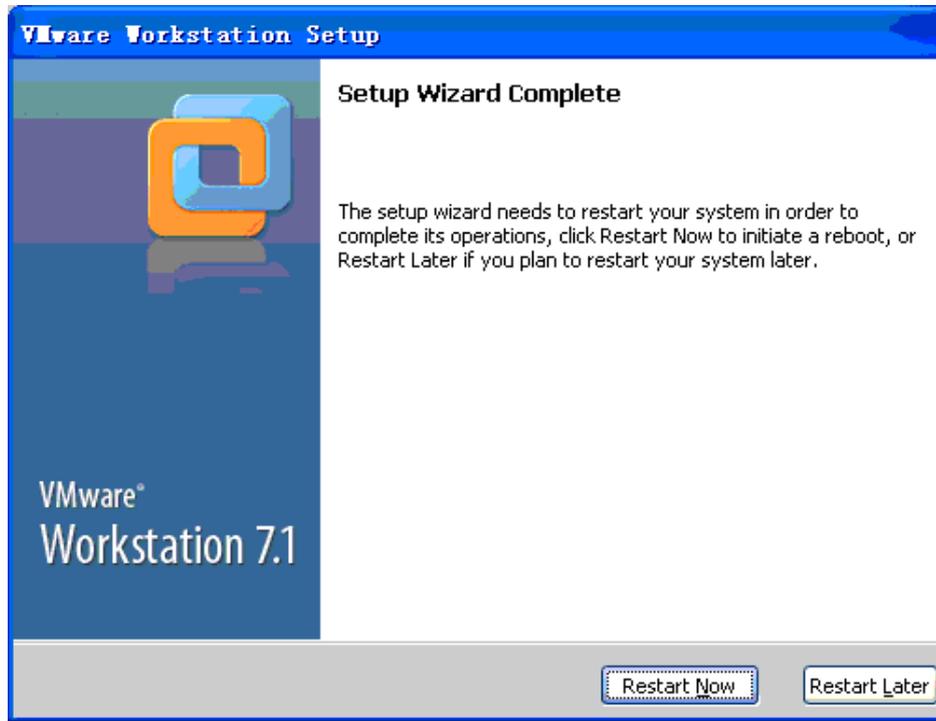


Picture 8

Step 9: Enter the SN:ZZ310-45D8L-M84RZ-Q5NXZ-WV8Z6.

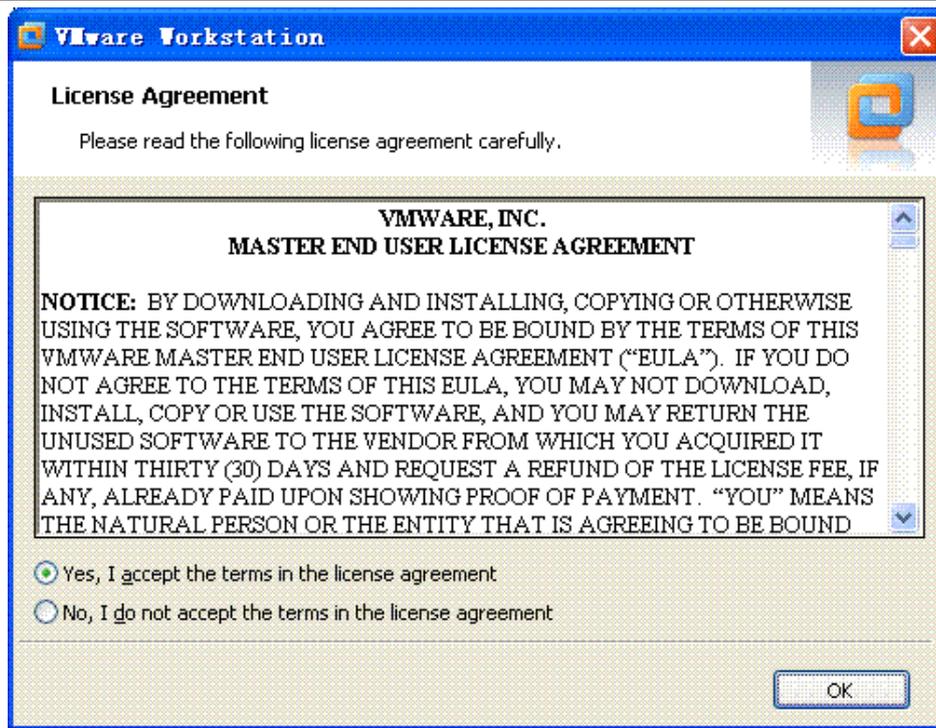


Step 10: Select “Restart Now”.



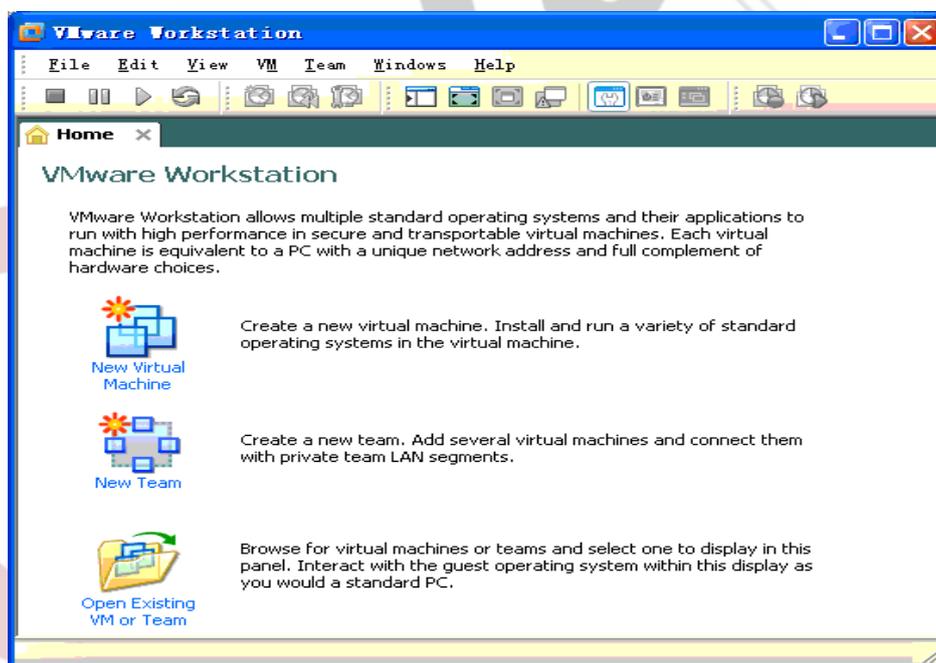
Picture 10

Step 11: Complete restart, double click the program icon on the desktop, open the program, first dialog is user agreement.



Picture 11

Step 12: Accept the user agreement, then appear the program interface.

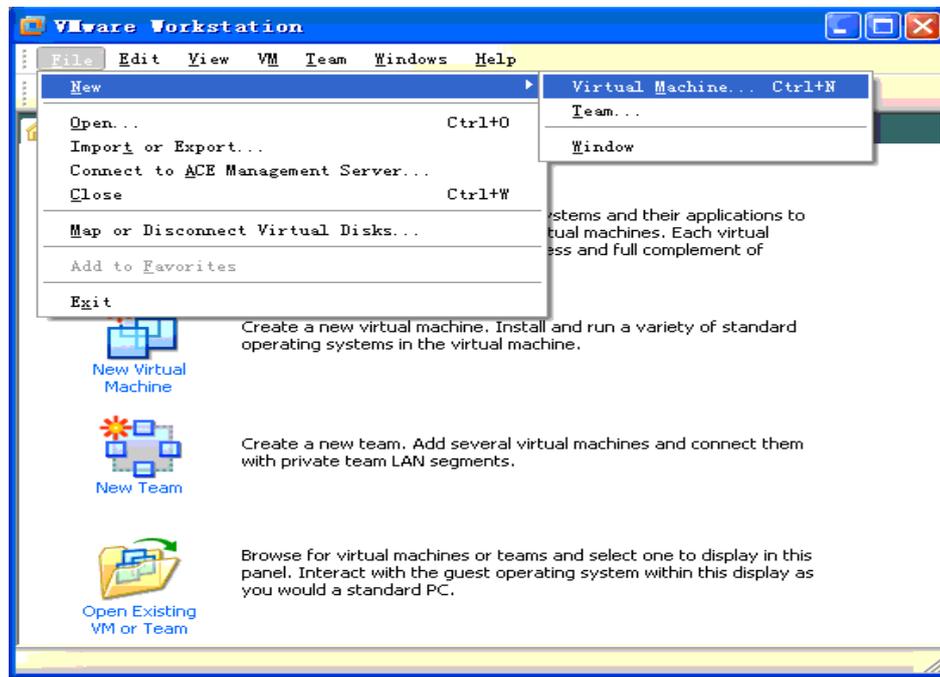


Picture 12

5. Virtual Machine Creation

Vmware installation is completed, you can create a virtual machine.

Step 1: Click “File->New->Virtual Machine...”



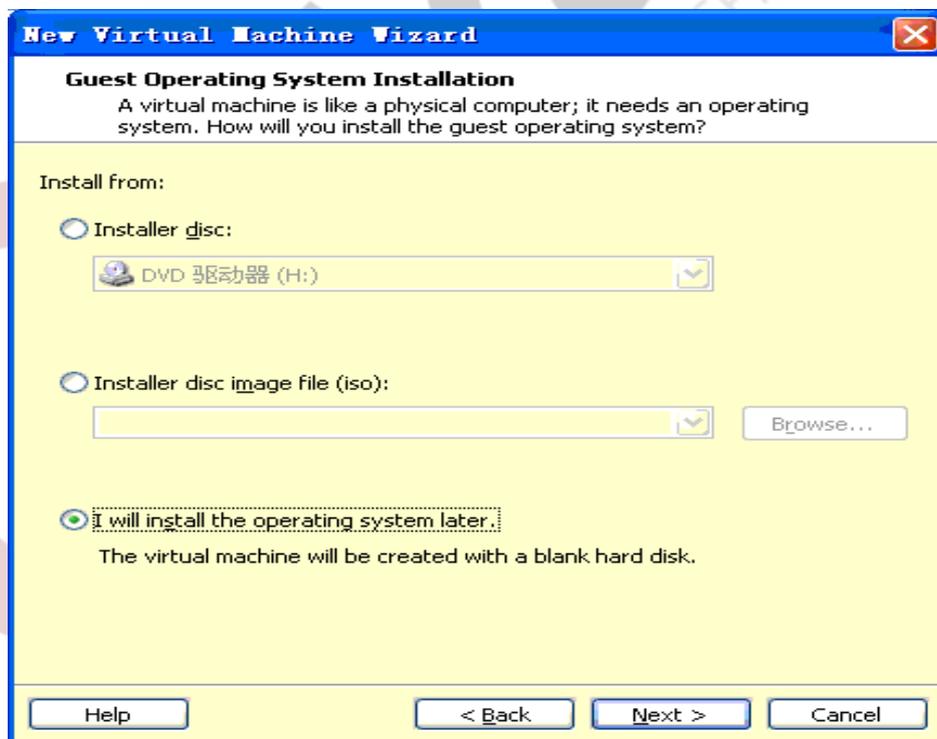
Picture 13

Step 2: Select “Typical”.



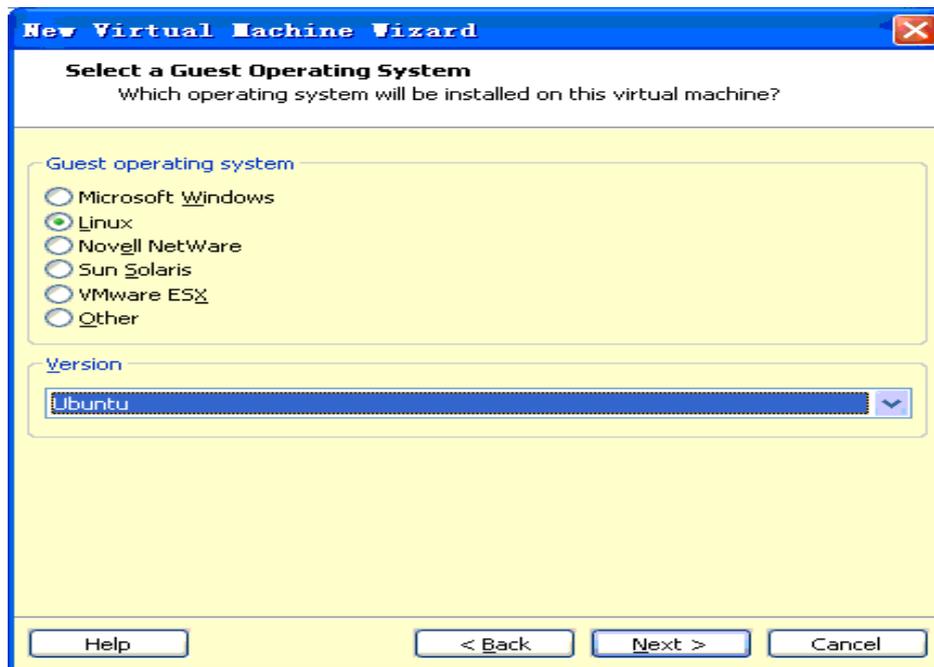
Picture 14

Step 3: For Linux installations, will be some problems, so select the third box ,and select manual installation of OS.



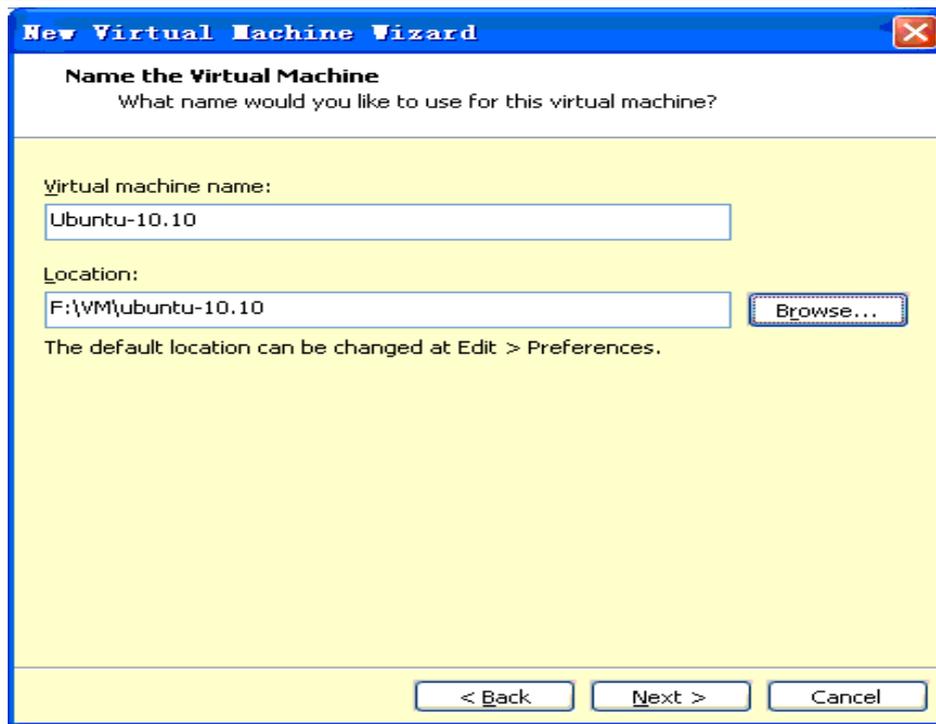
Picture 15

Step 4:Select Ubuntu.



Picture 16

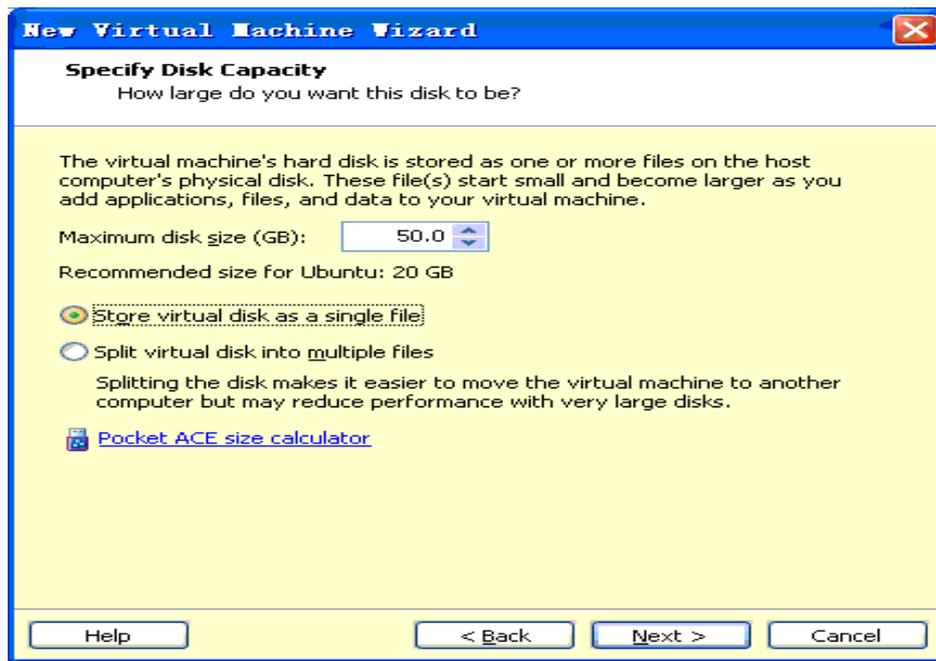
Step 5:Customizable virtual machine name, the second choice you store the virtual machine installation path; It's important to note that the virtual machine files are large, using a period of time may take up more than 20G, so choose a larger disk space, without Spaces in path, Target disk is best in NTFS format.



Picture 17

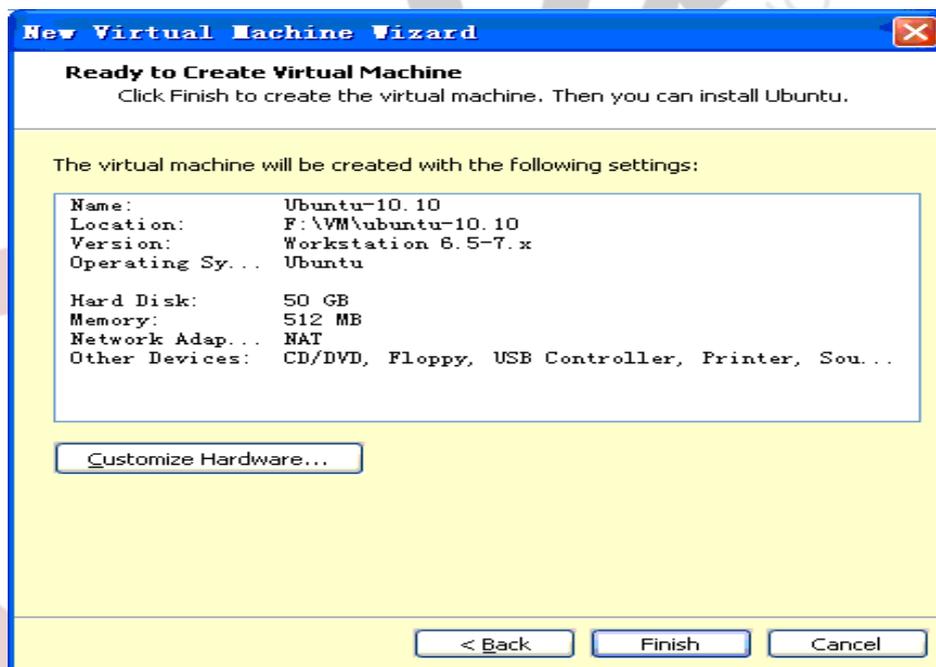
Step 6: This step is to allocate the virtual machine space, appropriately allocate more larger, the default is 20G, 50G be allocated here. If the space is small, will be insufficient in the future, it is easy to lead to problems such as system can't normal start. In this case, the value of space is the maximum allowable virtual machine takes up.

The second option is to select the way of storage, generally select a single file, if the target memory is FAT32, may need to split. Setup be completed, will generate a VMDK files in the target folder, can be simply to understand this file as a virtual HD.



Picture 18

Step 7: Click "Finish" to complete the virtual machine settings.



Picture 19

Step 8: Completed the creation of a virtual machine, back to the main interface,

click the left side of the second option "Edit virtual machine Settings", and then

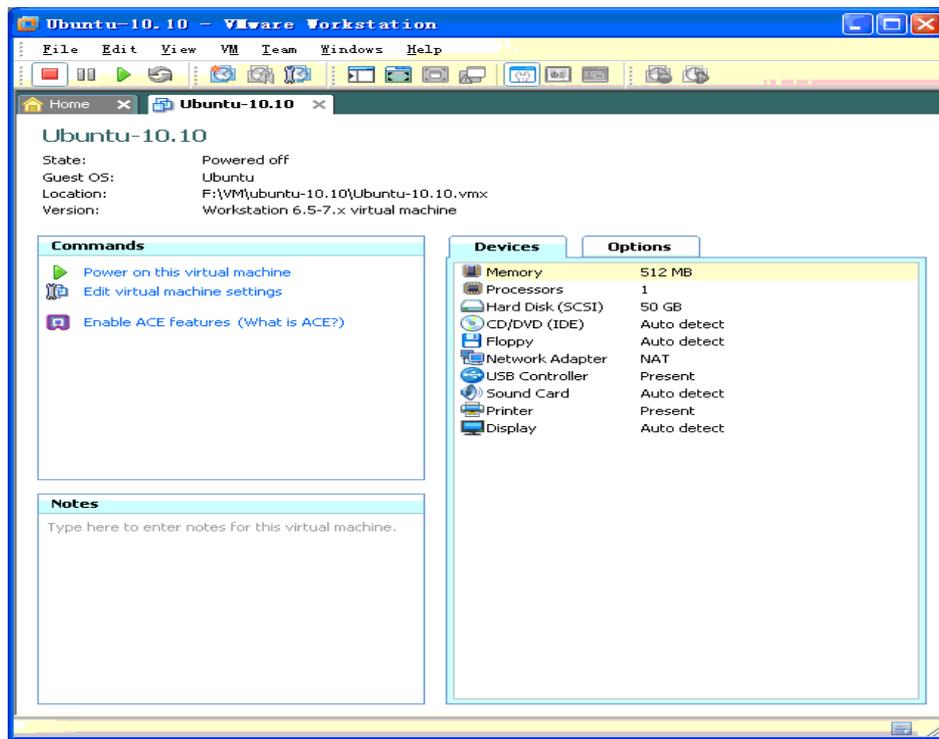
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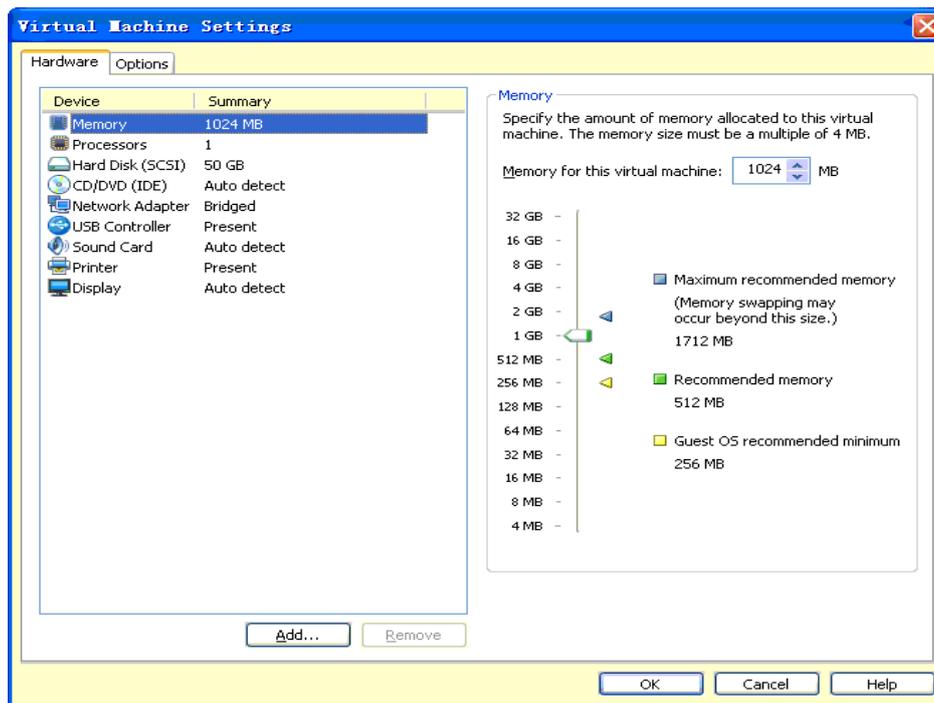
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configure the virtual machine.



Picture 20

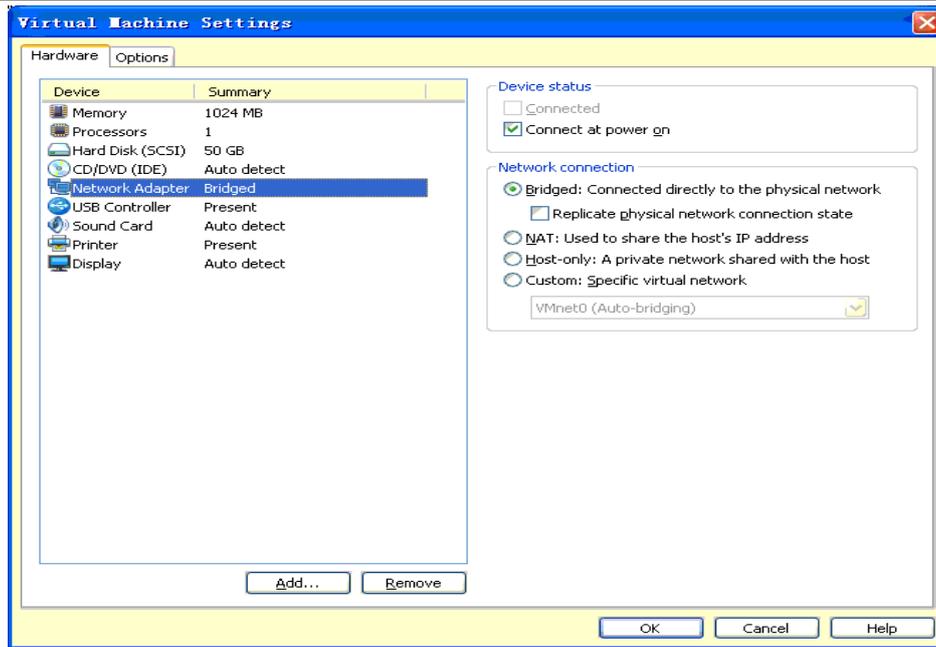
Step 9: About memory, suggest to use above 1G memory setting, generally not less than 512 M, less than half the total capacity of the memory.



Picture 21

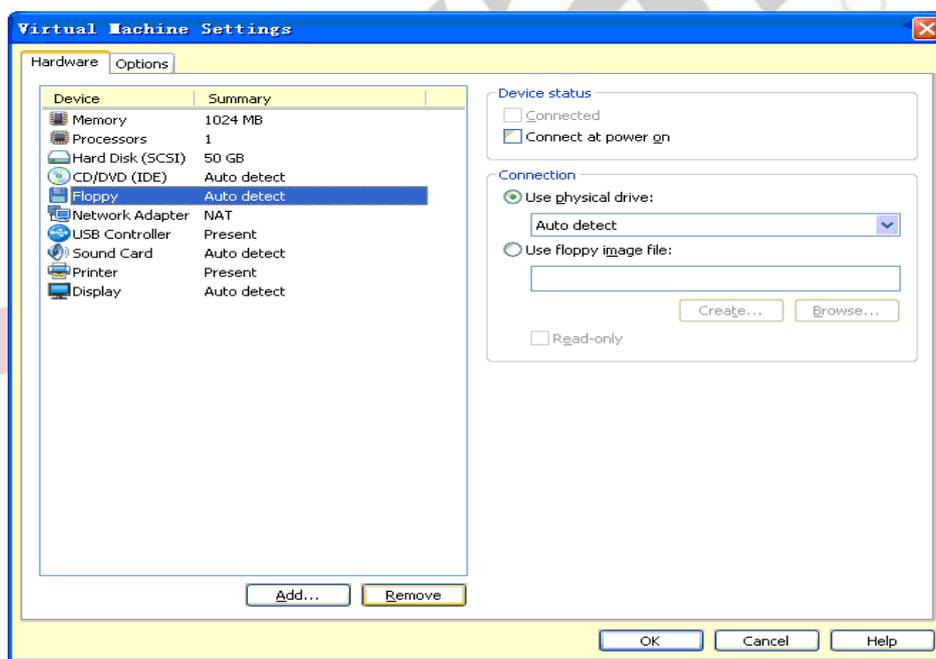
Step 10:Network Settings as "Bridged mode, then the virtual machine on the network structure and Windows equivalent of two equal computer. It is important to notice the different network environment should adopt different Settings.

If your PC connect to router directly, do not need to dial ,can directly access the network, and can get IP address through DHCP automatically, please set Bridged mode; If you need to dial to access the network, set to NAT model first, let the virtual machine through host machine access the network, when we need mount the network file system in the future, set Bridged mode.



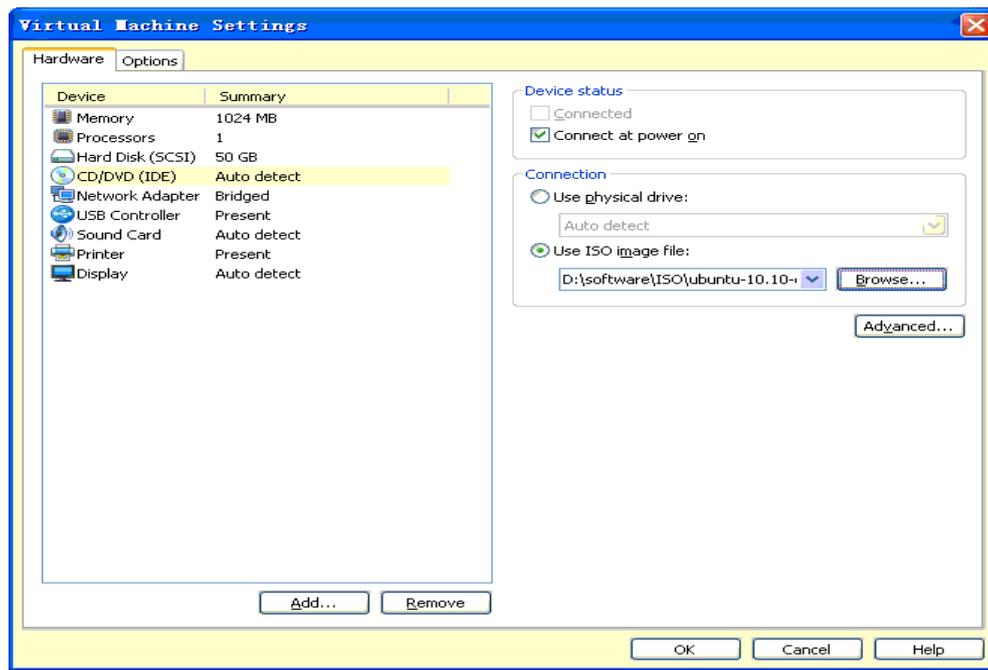
Picture 22

Step 11: Floppy disk generally do not need, click "Remove ".



Picture 23

Step 12: CD, if you install system with ISO file, setting as shown, then set the paths to ISO; If you use a physical disks, select "CD/DVD".

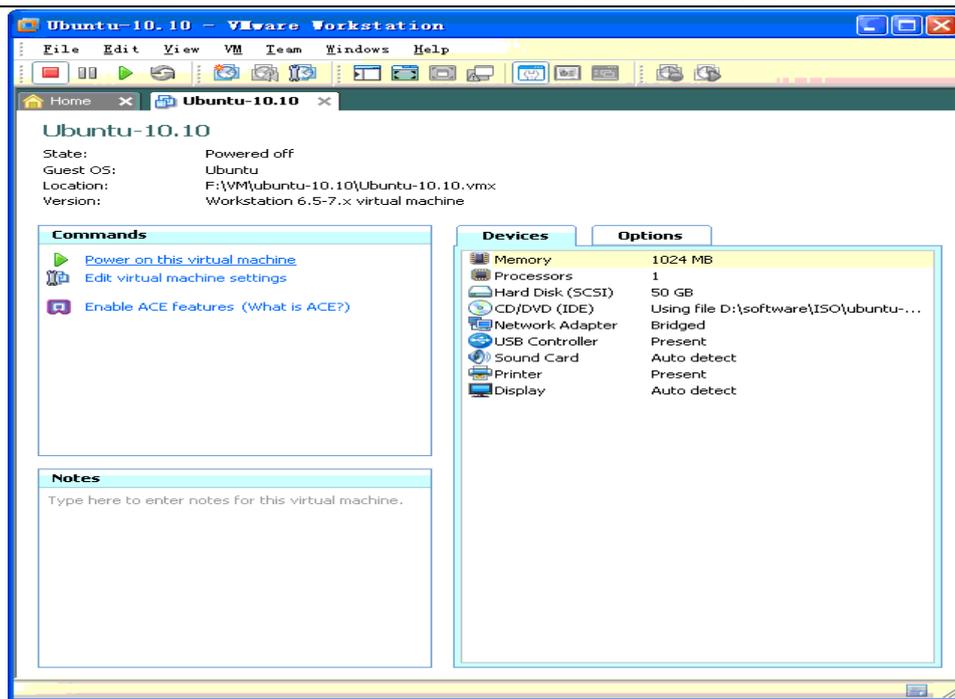


Picture 24

After configuration is completed, click "OK " to return to main interface.

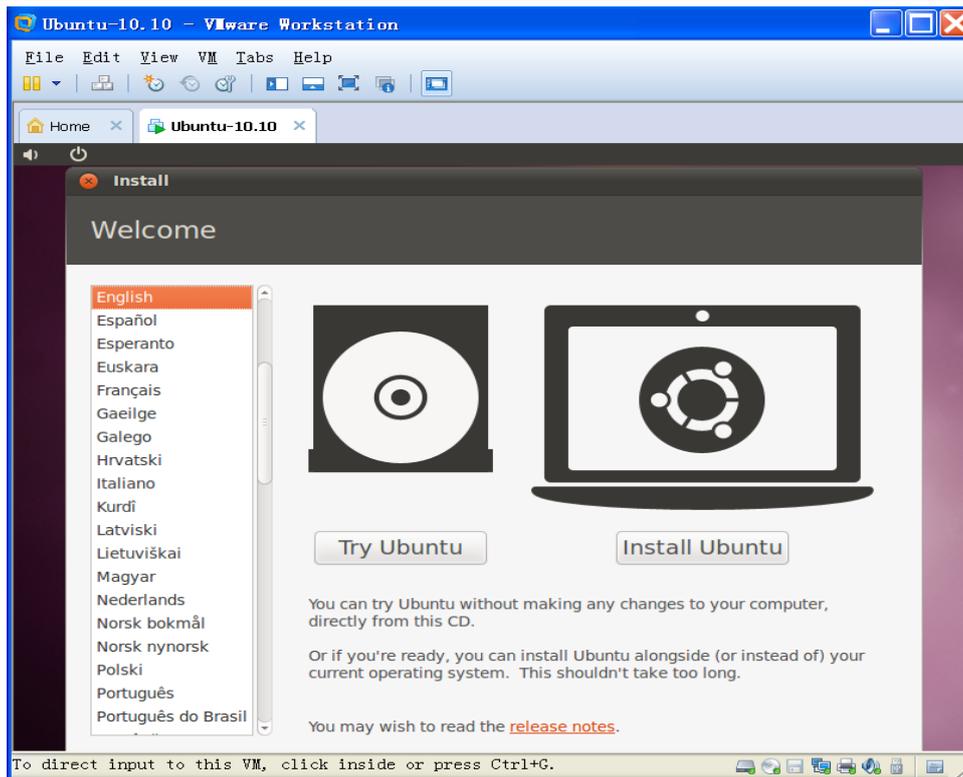
4. Install Ubuntu 10.10 OS in Virtual Machine

Step 1: At the virtual machine main interface, click the first item on the left "Power on this virtual machine", start the virtual machine.



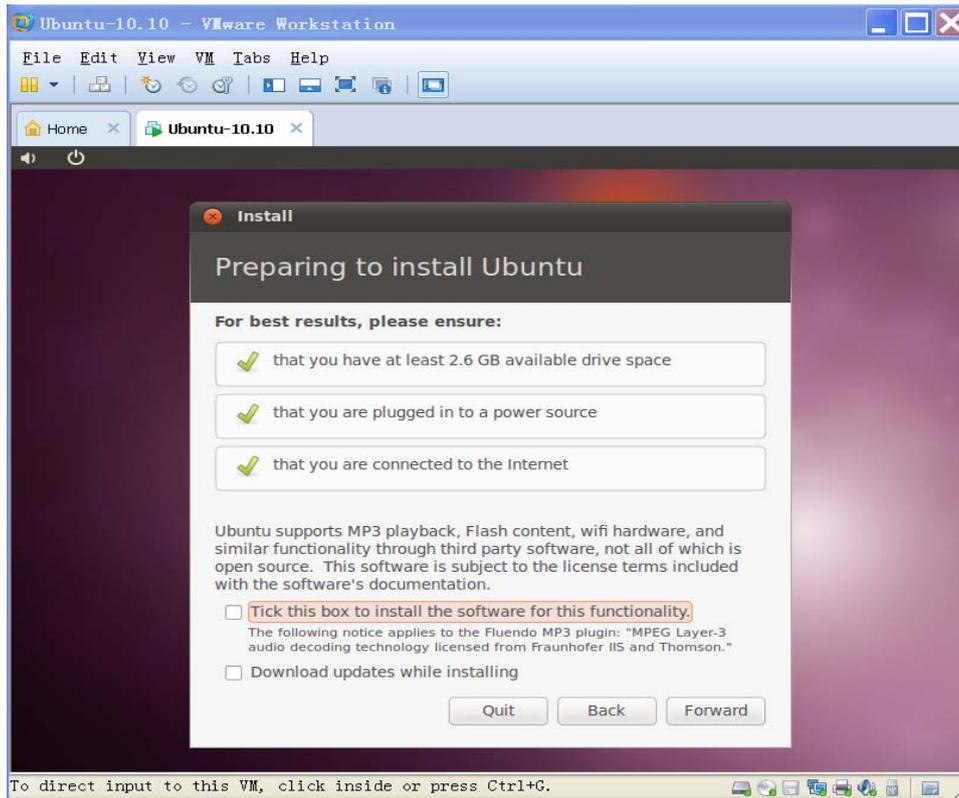
Picture 25

Step 2: Because the virtual machine hard disk system is not yet installed, so after BIOS interface will start from CD, after appearing Ubuntu logo select English then click "install Ubuntu".



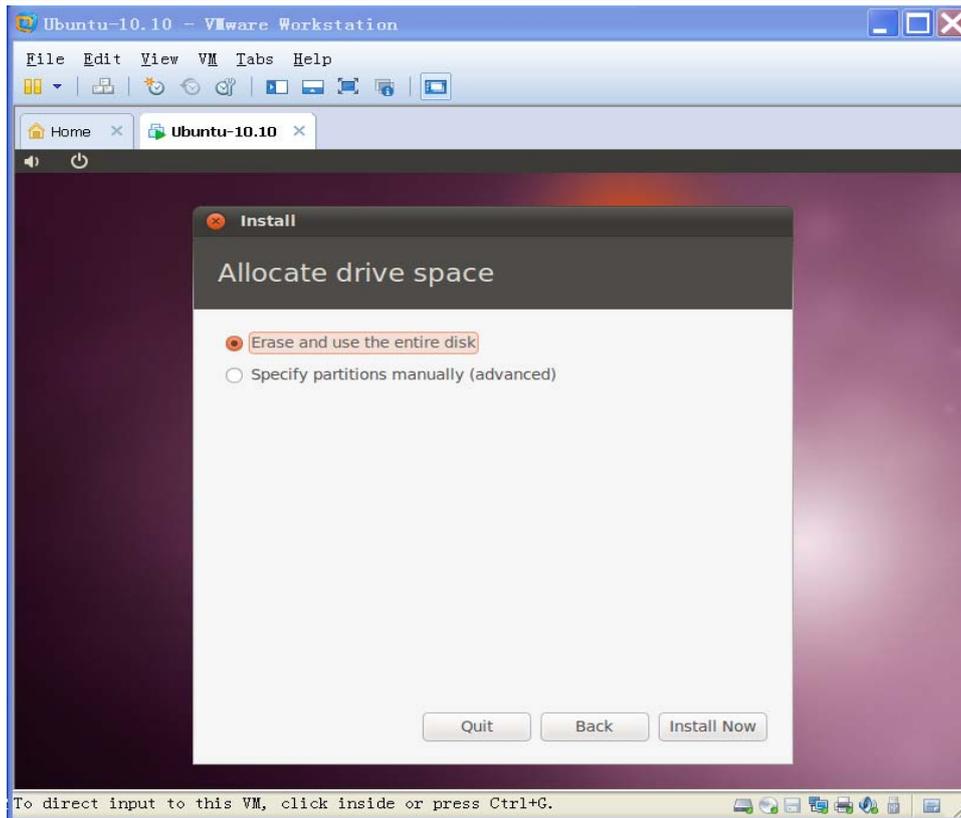
Picture 26

Step 3: Several checks on there, do not select the two options on below, click the "forward".



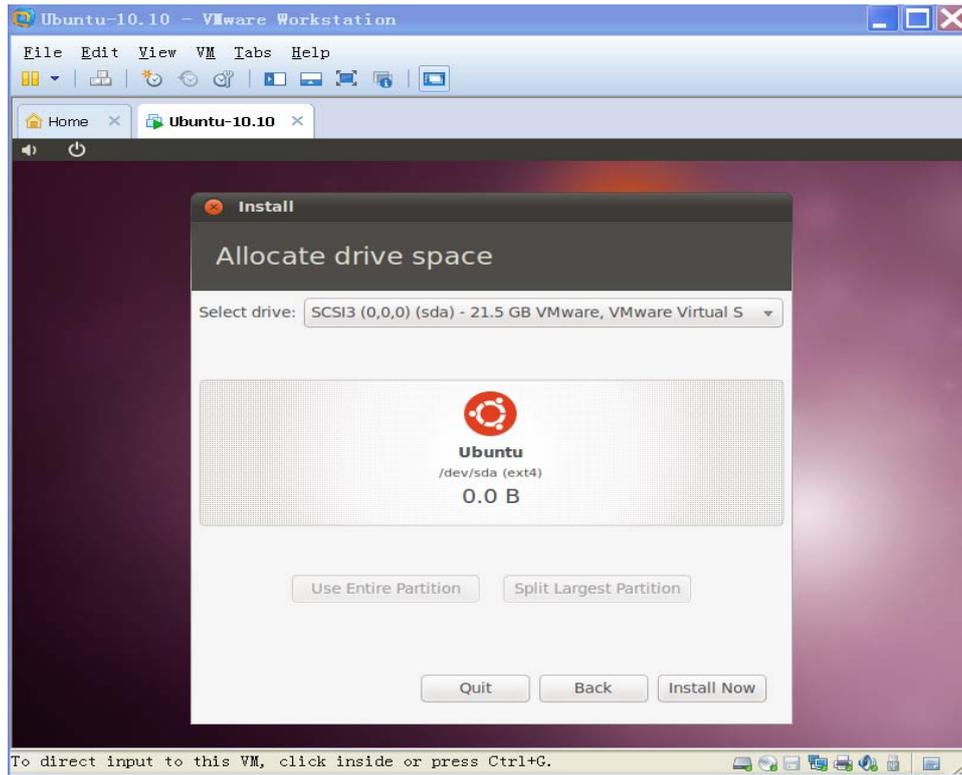
Picture 27

Step 4: Select "empty and use the entire disk".



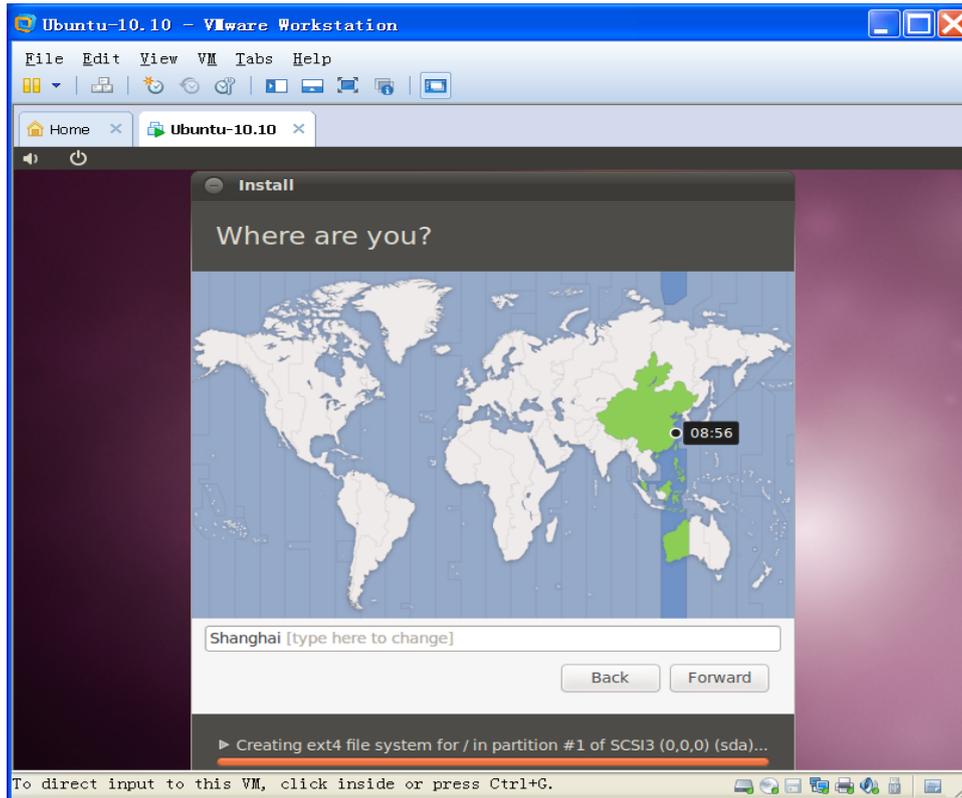
Picture 28

Step 5: Start the installation.



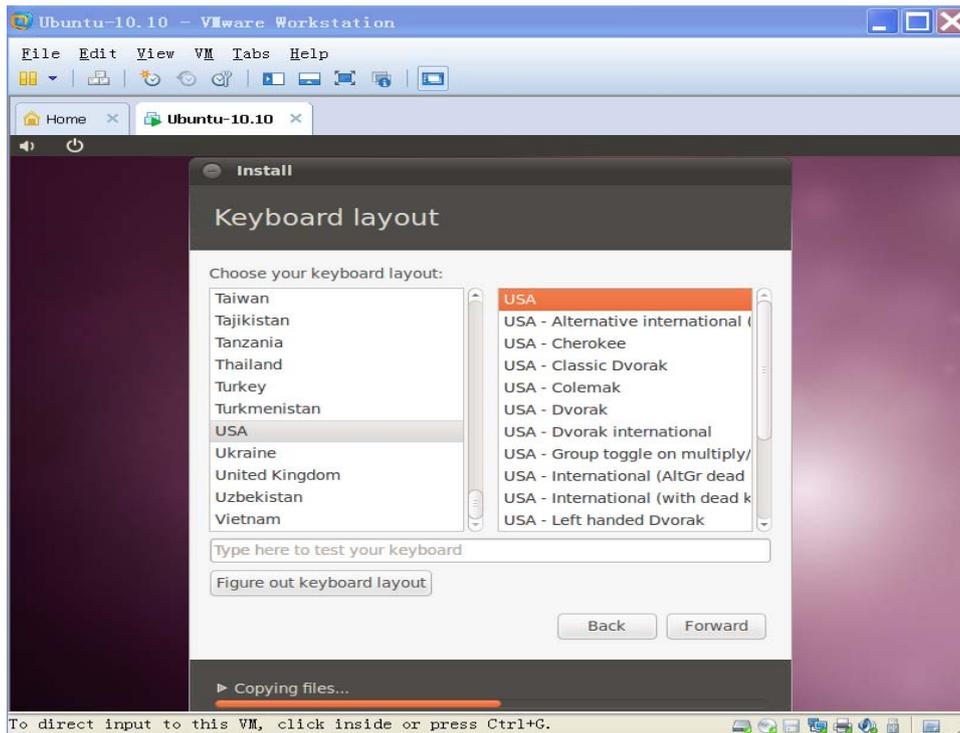
Picture 29

Step 6: Select Time Zone.



Picture 30

Step 7: Keyboard layout.

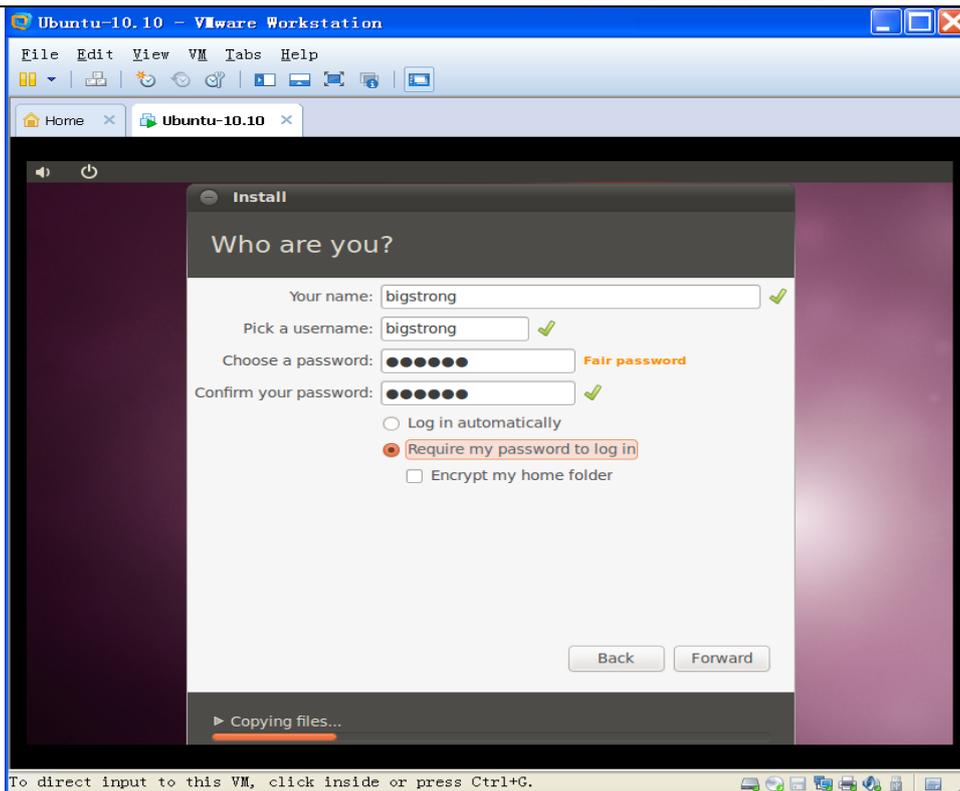


Picture 31

Step 8: Create a user and password. Need to be aware of different release versions between some older versions , ubuntu do not configure the root user, the user created here are not the root user, and no all permissions of root.

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

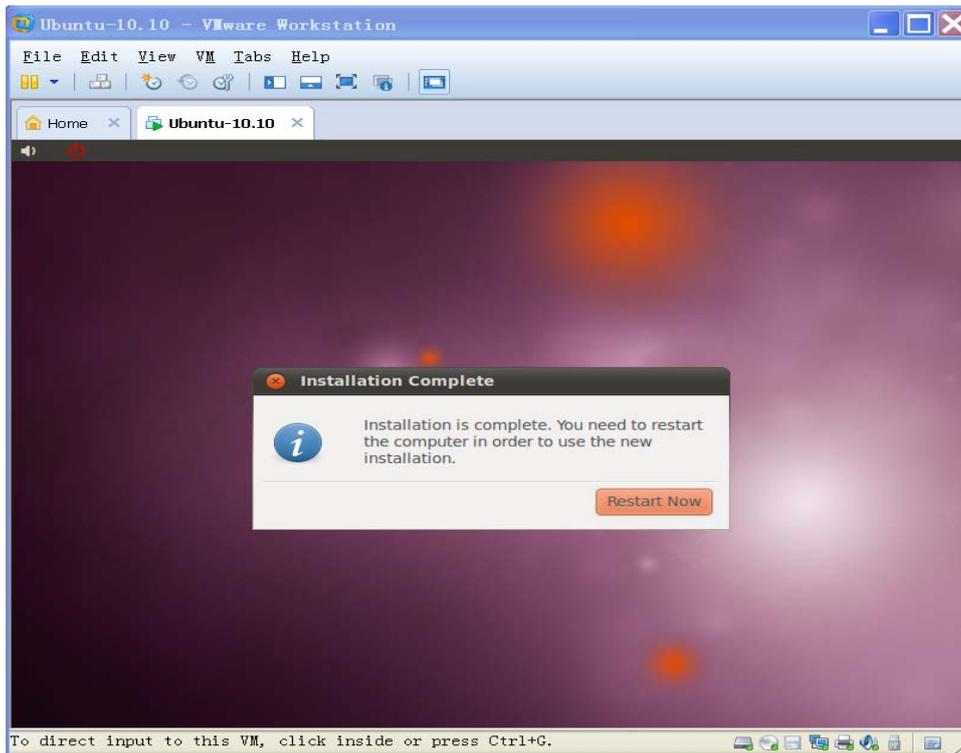
.....



Picture 32

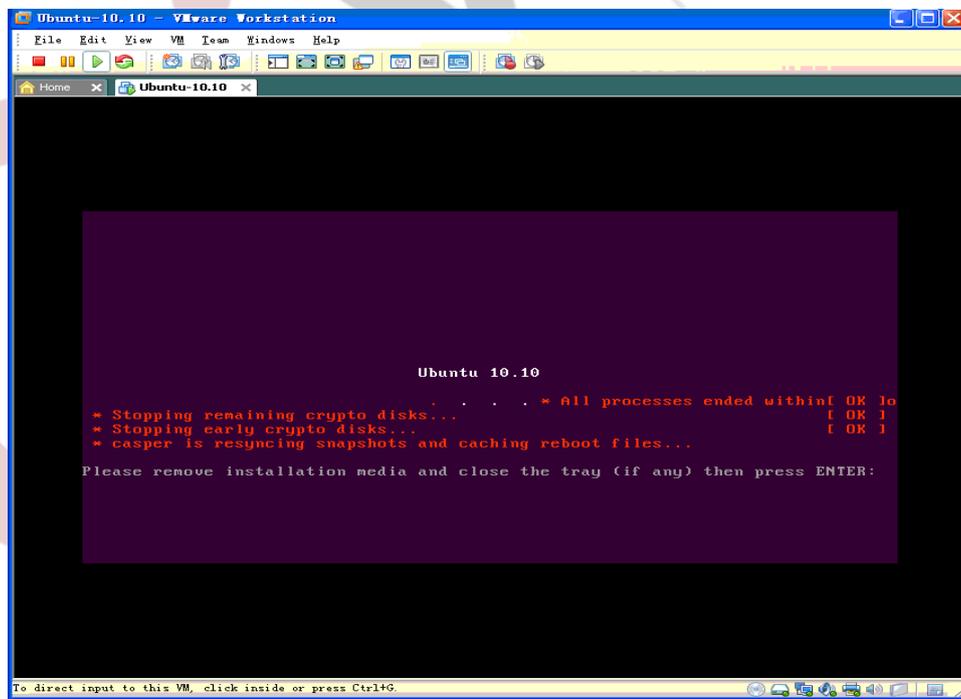
Step 10:In the process of installation, need to download something from the Internet (So before installation should keep network smoothly .

Step 11: After the installation is completed, restart the virtual machine system.



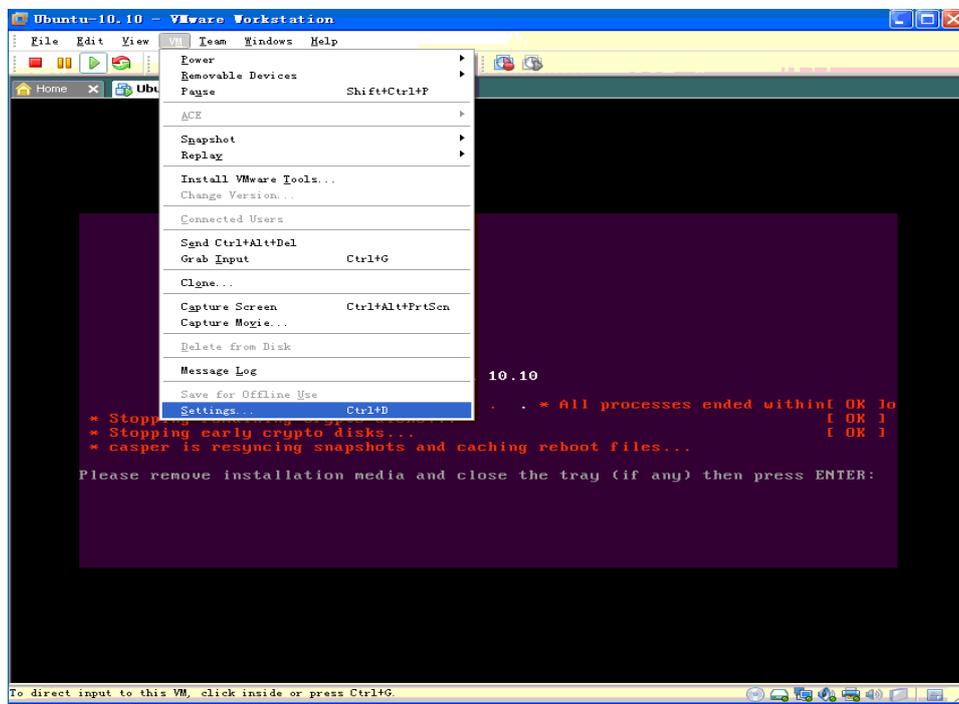
Picture 33

Step 12: Click "restart", prompt to take out the installation disk ,then press the [ENTER] key.



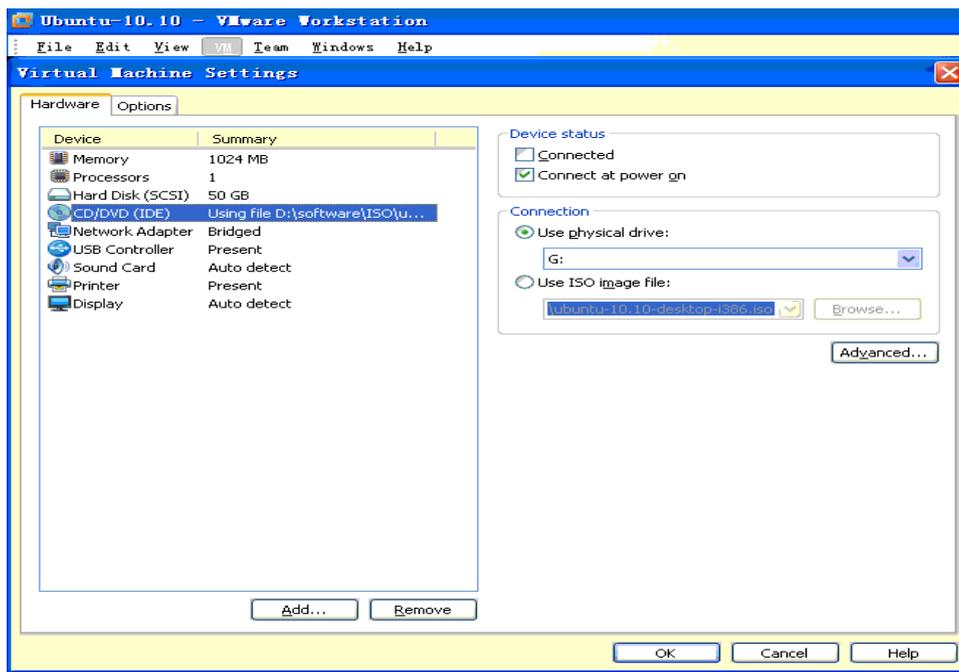
Picture 34

Step 13: Click "VM->Setting", If you can't find the mouse, you can press [CTRL + Alt], the mouse is released from the virtual machine.



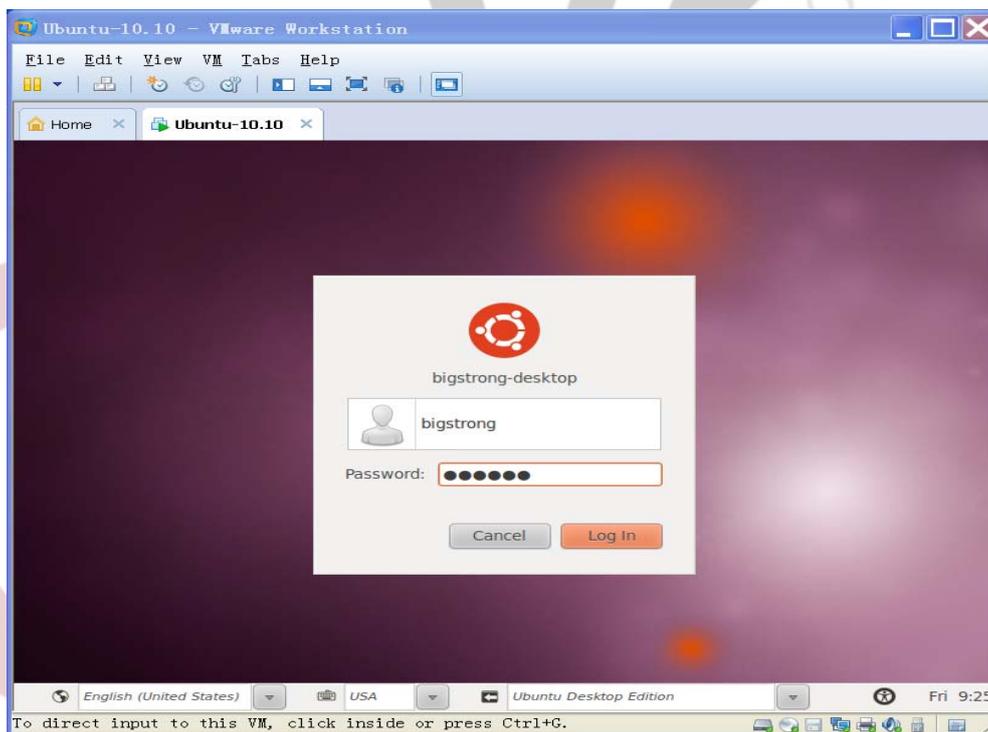
Picture 35

Step 14: In the pop-up Settings interface, set CD/DVD parameters as shown, also can empty ISO path, click "OK", click in the virtual machine, the mouse return to the virtual machine, then press [enter] to restart.



Picture 36

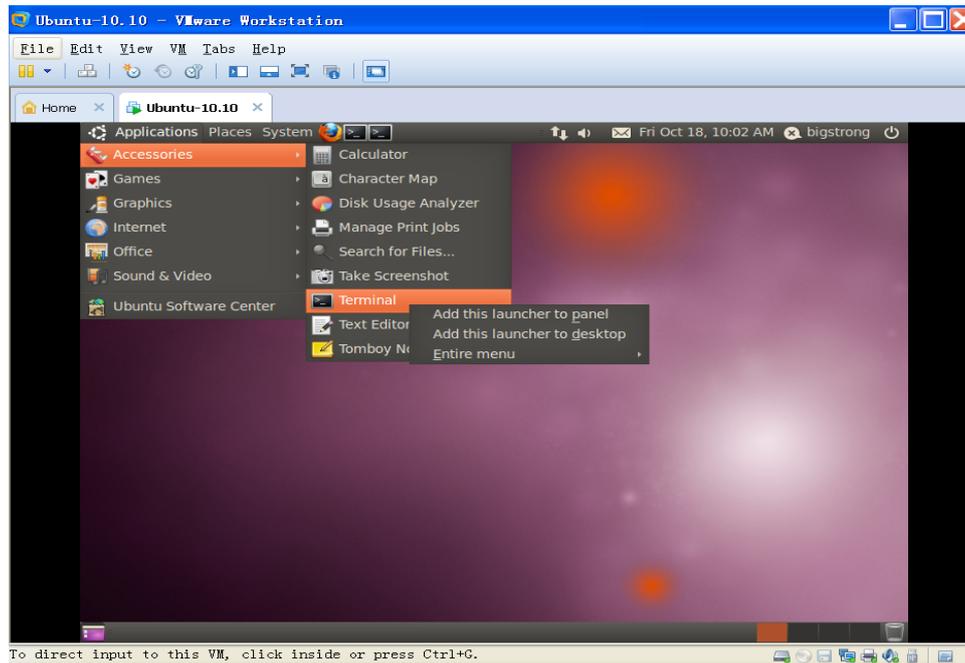
Step 15: After the restart, Enter user name and password, then enter the system.



Picture 37

Step 16: Go into the system first, enable the root account, use the command line

to start the root, open the terminal as shown:



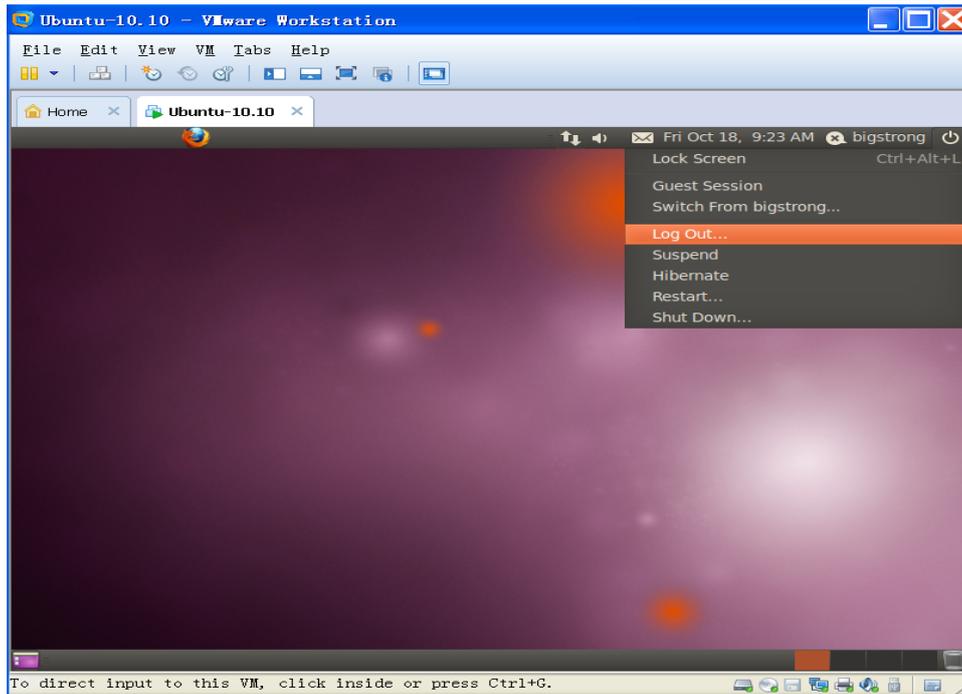
Picture 38

Step 17: Click "Terminal", type the following command:

```
sudo passwd root
```

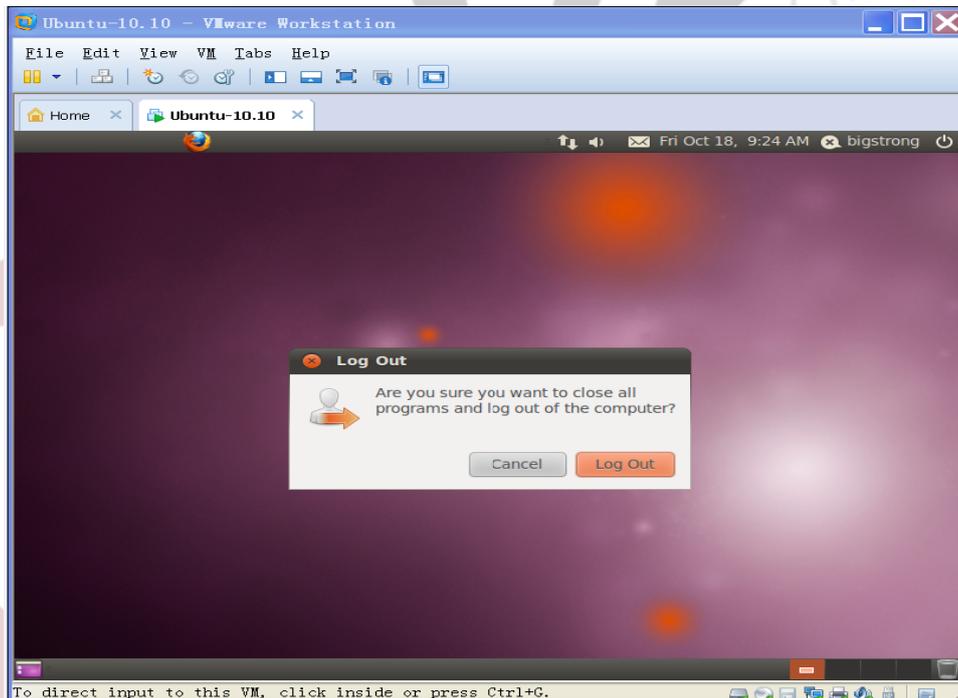
The system will ask for your password, after inputted, require setting a new password for root, enter the root password twice then root account setting is completed.

Step 18: Click the “power icon” in the top right corner, Log out of the current user.



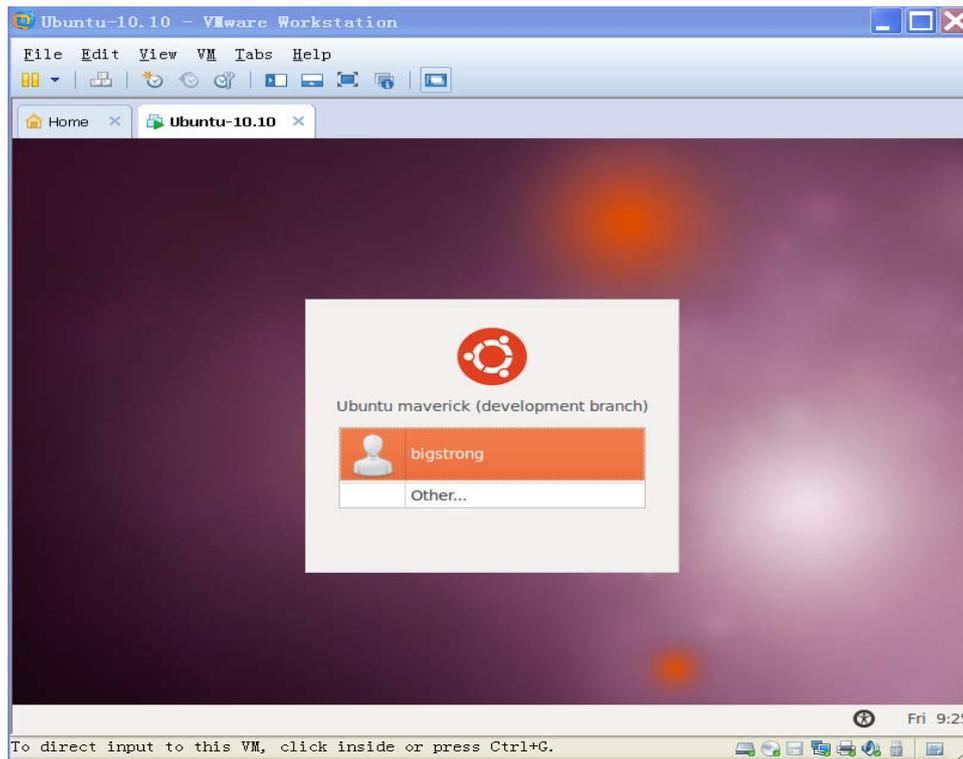
Picture 39

Step 19: Select "logout" in the pop-up dialog.



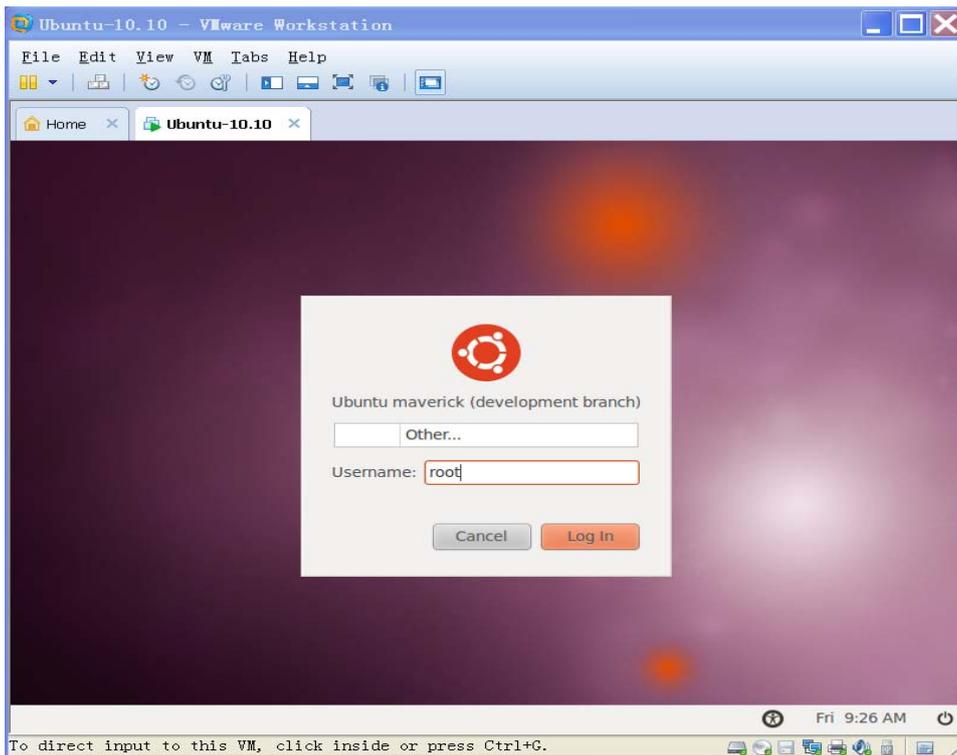
Picture 40

Step 20: Back to the login screen, click "other".



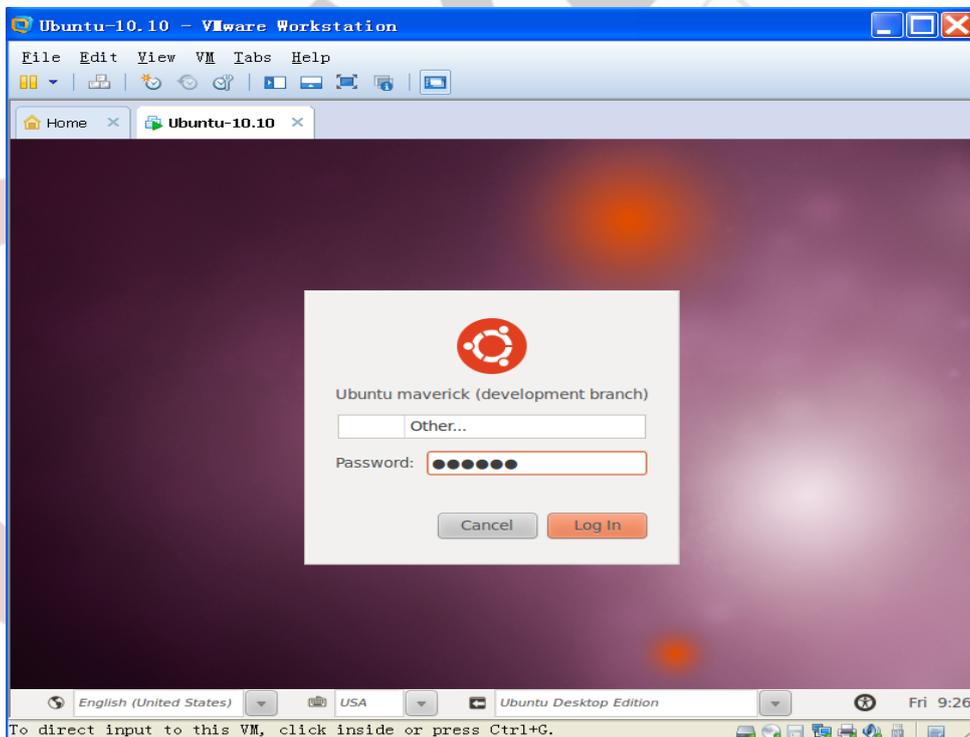
Picture 41

Step 21: Enter the user name: root.



Picture 42

Step 22: Enter the password of the root.

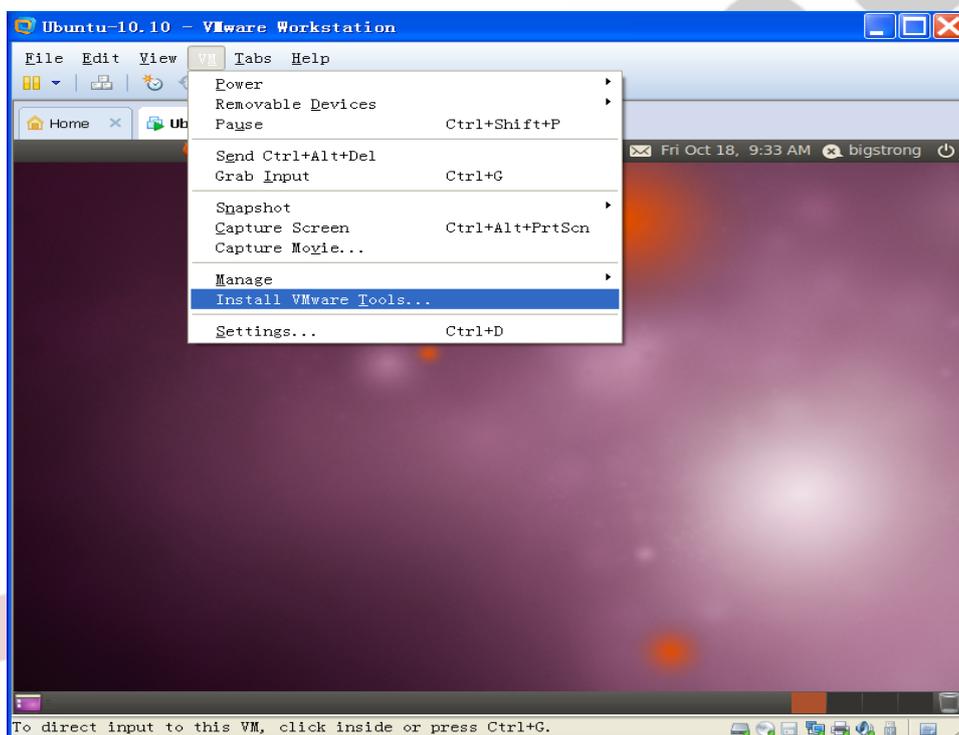


Picture 43

Step 23: In the case of without special instructions, use root login to complete the corresponding operations.

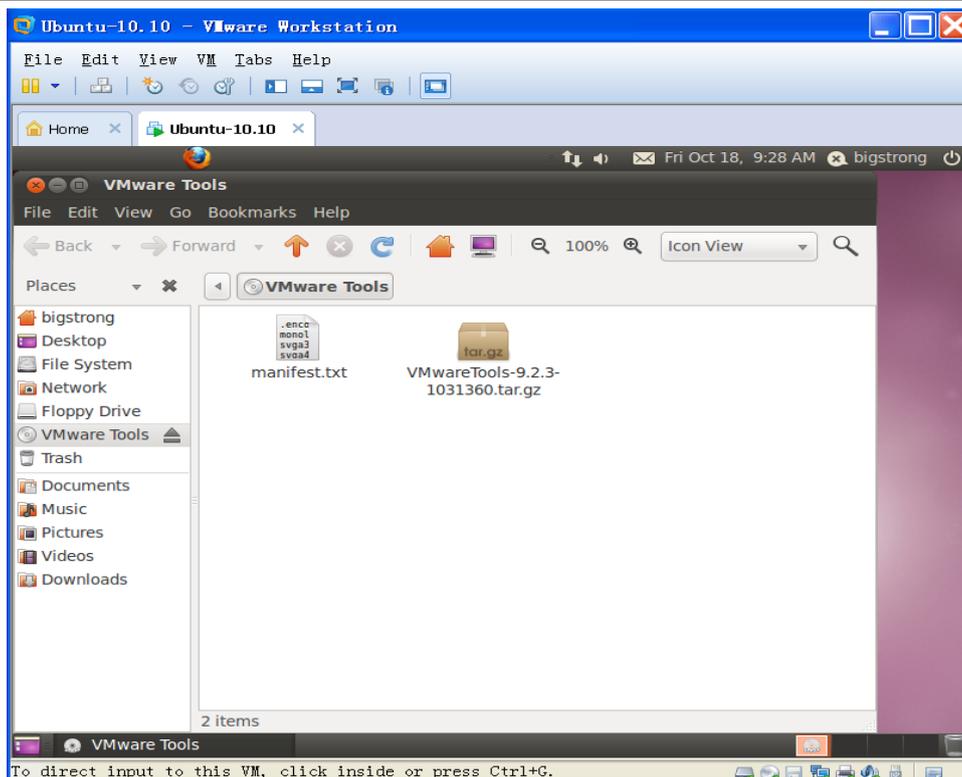
Step 24:After installing vmware-tools ,can easily exchange file between the virtual machine and host machine, also can realize the adaptive of virtual machine resolution.

Click "VM->Install VMware Tools ".



Picture 44

Step 25: In the virtual machine desktop pops up a window, installation files are mounted in CD form in the virtual machine.



Picture 45

Step 26: Close the pop-up window and open a terminal window, type the following command in turn:

```

root@ubuntu:/# cp media/"VMware Tools"/VMwareTools-8.4.4-301548.tar.gz .      /* Copy to
the current directory */
root@ubuntu:/# tar -xvf VMwareTools-8.4.4-301548.tar.gz                    /* extract */
root@ubuntu:/# cd vmware-tools-distrib                                     /* Enter the
directory */
root@ubuntu:/# ./vmware-install.pl                                       /* All the prompt to press enter
*/
root@ubuntu:/# cd ..                                                    /* Return to
the upon directory */
root@ubuntu:/# rm -rf vmware-tools-distrib                                /* Delete
the folder */
root@ubuntu:/# rm VMwareTools-8.4.4-301548.tar.gz                       /* Delete
the package*/

```

Finally, restart the server,vmware-tools is installed.

5. ubuntu 10.10 development environment configuration, the necessary software package

Ubuntu provides apt - get way to install the software from the Internet, can solve the problem of some dependencies automatically. Please input the following command to install the corresponding software. If can't find the software, may be your network access has a problem, or the source set need to be updated.

```
root@ubuntu:/# apt-get install build-essential
root@ubuntu:/# apt-get install libncurses5-dev
root@ubuntu:/# apt-get install bison
root@ubuntu:/# apt-get install flex
root@ubuntu:/# apt-get install gettext
root@ubuntu:/# apt-get install texinfo
root@ubuntu:/# apt-get install subversion
```

6. NFS service configuration

NFS(Network File System), It shares different host(OS) over the network directory, through the NFS ,mount directory to the remote host, access to this directory as access to the local directory!) The root user do the following operation.

1. NFS server and the client installation.

```
root@ubuntu:/# apt-get install nfs-kernel-server nfs-common portmap
```

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

After installing the client ,can have a NFS service test in the native machine.

2. Portmap Configuration

```
root@ubuntu:/# dpkg-reconfigure portmap
```

Select “No”.

3. Mount the directory and the permission configuration.

First, build [/NFS]directory

```
root@ubuntu:/# mkdir /nfs
```

Modify the NFS configuration

```
root@ubuntu:/# vim /etc/exports
```

Configuration is as follows:

```
# /etc/exports: the access control list for filesystems which may be exported # to NFS clients.
See exports(5). # # Example for NFSv2 and NFSv3: # /srv/homes hostname1(rw,sync)
hostname2(ro,sync) # # Example for NFSv4: # /srv/nfs4 gss/krb5i(rw,sync,fsid=0,crossmnt) #
/srv/nfs4/homes gss/krb5i(rw,sync) #
/nfs *(rw,sync,no_root_squash,no_subtree_check)
```

Remark: * there is space in front

The content behind the # is to explain/nfs the NFS Shared directory, * is any IP can share this directory, you can change to limited IP, rw is permissions, sync is the default.

4. NFS service and portmap Restart)

```
root@ubuntu:/# service nfs-kernel-server restart
```

```
root@ubuntu:/# service portmap restart
```

5. NFS test)

Try to mount a local disk, [/nfs] will be mounted to[/mnt].

```
root@ubuntu:/# mount -t nfs 192.168.1.241:/nfs mnt/
```

/*192.168.1.241 is your own

IP */.

Running the df

```
root@ubuntu:/# df
192.168.1.110:/nfs 19737280 2962304 15772352 16% /mnt
```

Mount successfully test successfully, then uninstall.

```
root@ubuntu:/# umount mnt/
```

Then to test the development board mount ubuntu server, generally IP has no limitation, development board mount will succeed. If still have questions, please check the ubuntu firewall Settings, use the following command to close the firewall, and then try to mount again:

```
root@ubuntu:/# sudo ufw disable
```

7. Samba services configuration

1. Install samba services.

```
root@ubuntu:/# sudo apt-get install samba
root@ubuntu:/# sudo apt-get install smbfs
```

2. Edit [/etc/samba/smb.conf],and config files.

```
root@ubuntu:/# sudo vi /etc/samba/smb.conf
```

(1) Delete # before the “security = user”

(2) Add the following content at the end of the file:

```
[samba]
comment = Home Directories
path = /home/wjh/samba
available = yes
browseable = yes
read only = no
public = yes
```

Remark: Please pay attention to the red letter, here want to use absolute paths, may not be able to access with the [~/samba].

3. Create a user in system Settings, the user is called samba

Sets the samba user to the samba account, and set the permissions.

```
root@ubuntu:/# sudo smbpasswd -a samba
root@ubuntu:/# mkdir ~/samba
root@ubuntu:/# chmod 777 ~/samba
```

4. Ubuntu samba server restart

```
root@ubuntu:/# sudo /etc/init.d/smbd restart
```

Or Enter the following command:

```
root@ubuntu:/# sudo service smbd stop
root@ubuntu:/# sudo service smbd restart
```

5. Ubuntu samba server access

In the folder where input "\ \ " + " ubuntu machine IP ", example: [\ \ 192.168.1.241]

After entering, can see shared directory [samba], between the PC and virtual machine ,can immediately share files.

8. Conclusion

This chapter mainly introduces the development environment server setup, specifically for the development of the development board, please refer to

《Linux user manual》

If have any questions of building development environment, please consult our customer's service to solve questions. Thank you very much for using Qiyang development board!

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