

# 服务器安装手册

## 目录

服务器安装手册 .....	1
任务目标 .....	3
相关知识点 .....	3
服务启动思路分析 .....	3
编码分析 .....	3
软件安装与操作 .....	3
一、安装虚拟机(VirtualBox) .....	4
二、CentOS 的安装 .....	7
三、CentOS 服务的安装 .....	31
1. Redis 的安装 .....	31
Redis 的使用 .....	32
2. mysql 的安装 .....	33
mysql 的使用 .....	34
3. nginx 的安装 .....	35
nginx 的使用 .....	35
4.jdk 的安装 .....	36
5.tomcat 的安装 .....	43
tomcat 的使用 .....	45
6.kafka 的安装 .....	46
kafka 的使用 .....	49
7.rabbitmq 的安装 .....	51

rabbitmq 的使用 .....	54
四、 导入本课程提供虚拟机.....	56
回马枪总结 .....	60

软件下载链接：<https://pan.baidu.com/s/13BiH8QjSN5xewvOjG4t5jA> 密码：ycuh



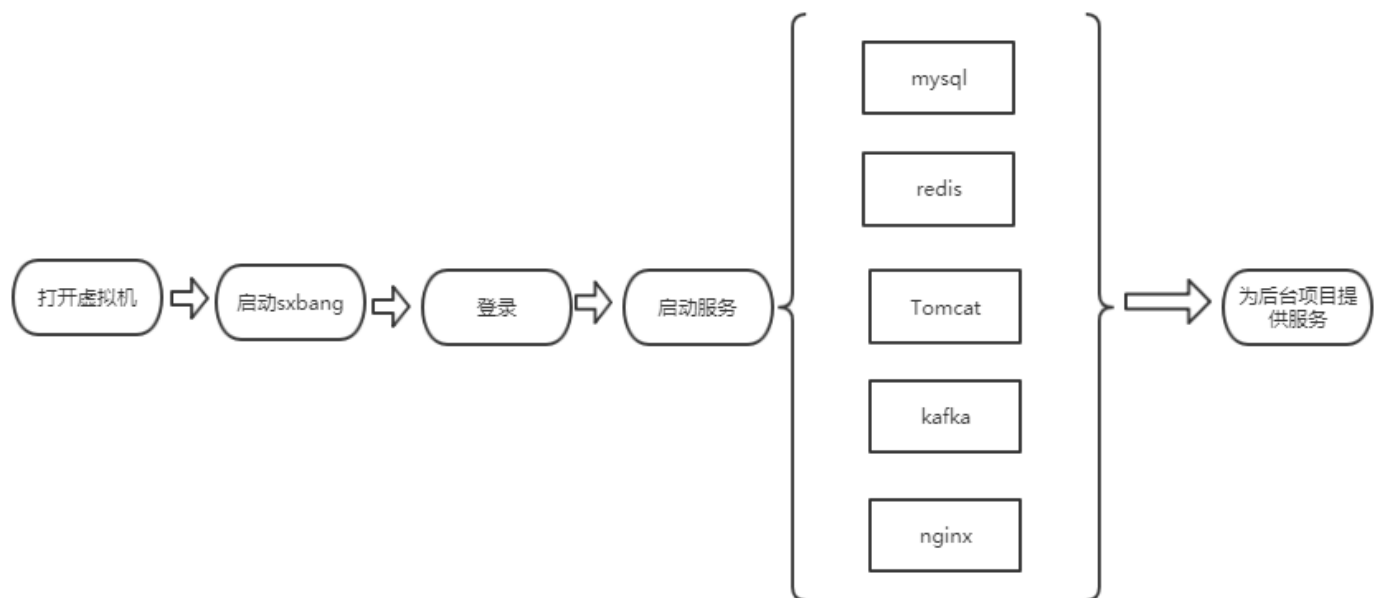
## 任务目标

- 学习 mysql、redis、nginx、tomcat、kafka 等服务的安装于使用；

## 相关知识点

- 1.虚拟机、CentOS7.0 的安装；
- 2.linux 操作系统的基本操作；
- 3.mysql、redis、nginx、tomcat、kafka 等服务的安装。
- 4.mysql、redis、nginx、tomcat、kafka 等服务的使用。

## 服务启动思路分析




## 编码分析

N/A

## 软件安装与操作

## 一、安装虚拟机(VirtualBox)

1.双击 VirtualBox-5.2.6-Win.Exe;

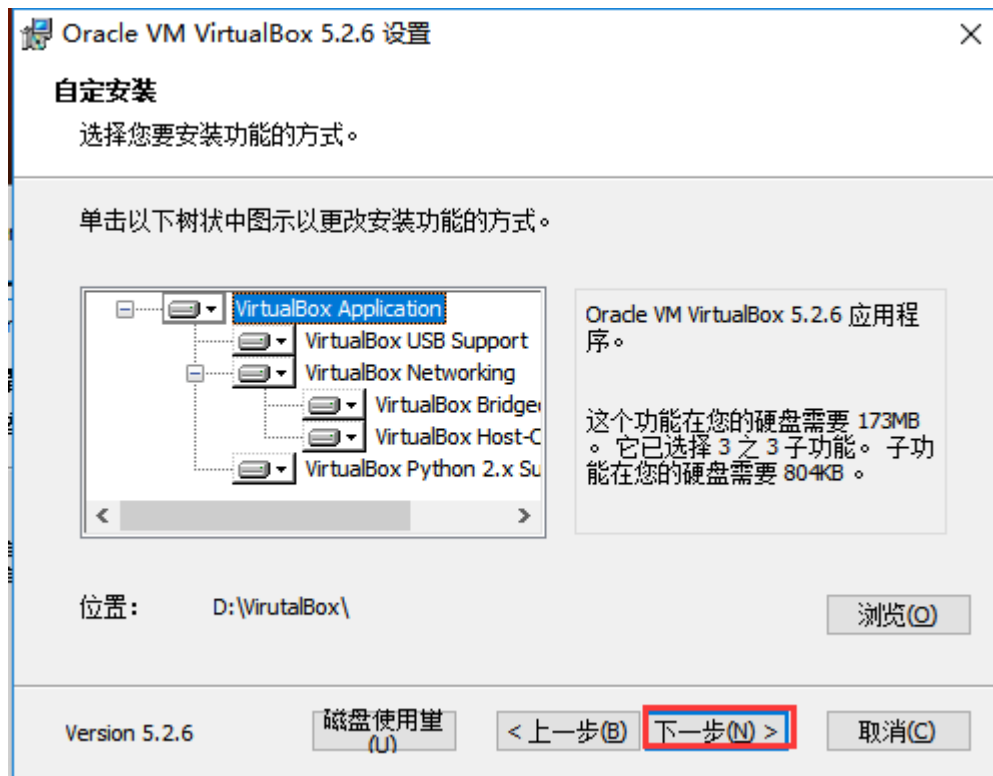
 VirtualBox-5.2.6-120293-Win.exe

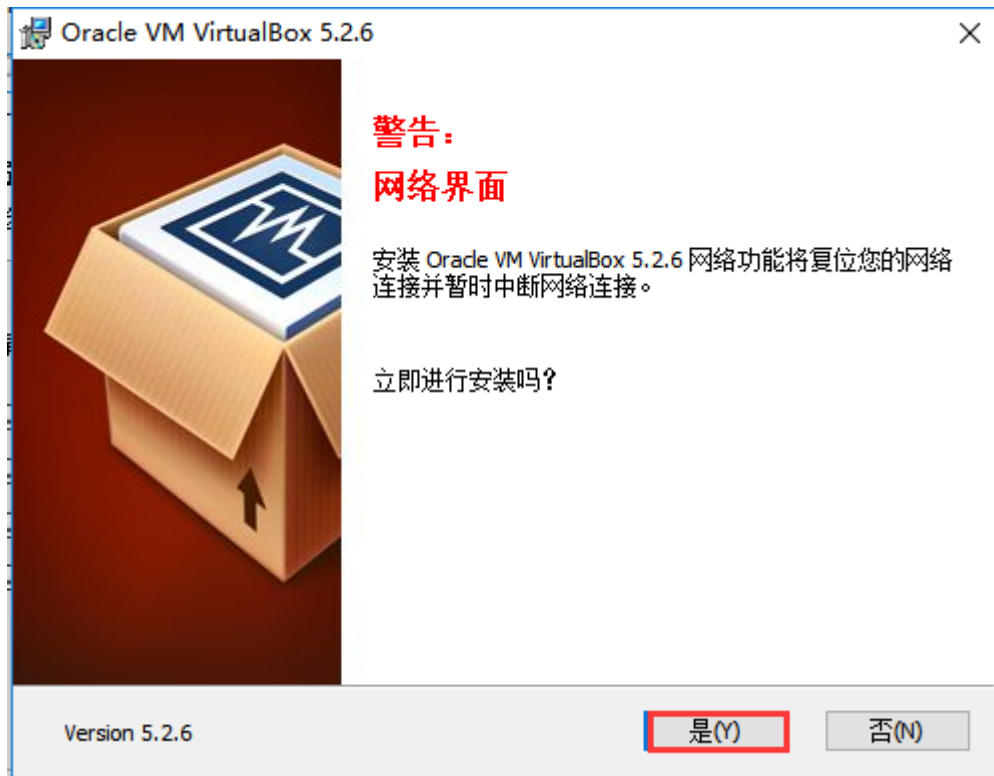
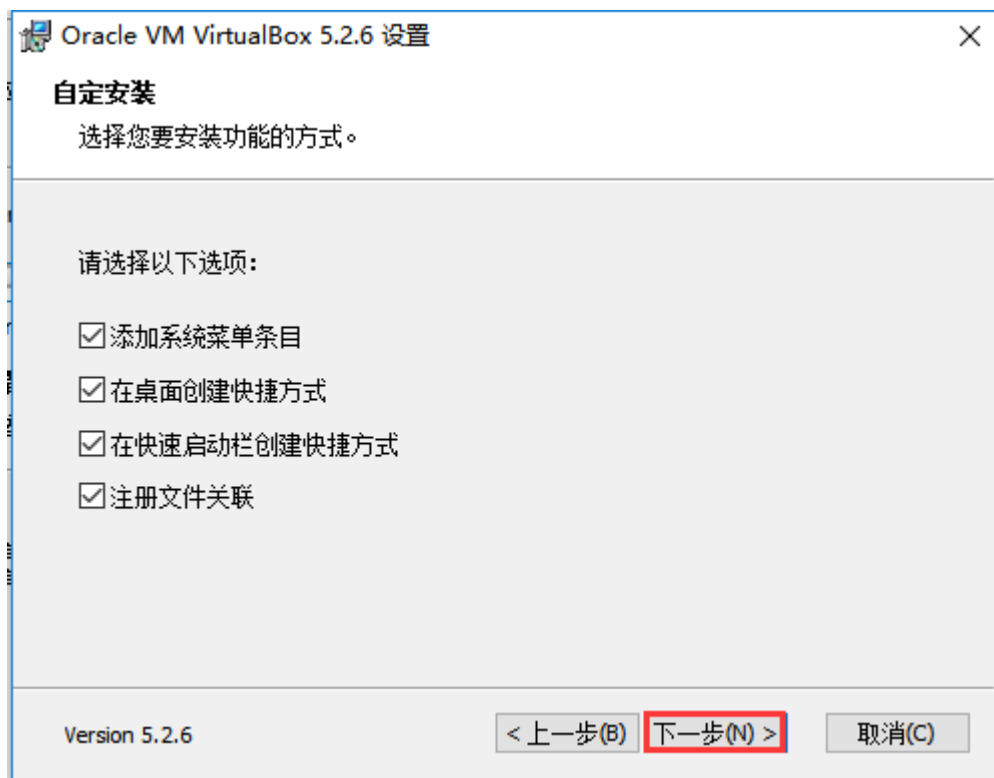
2018/3/8 3:01

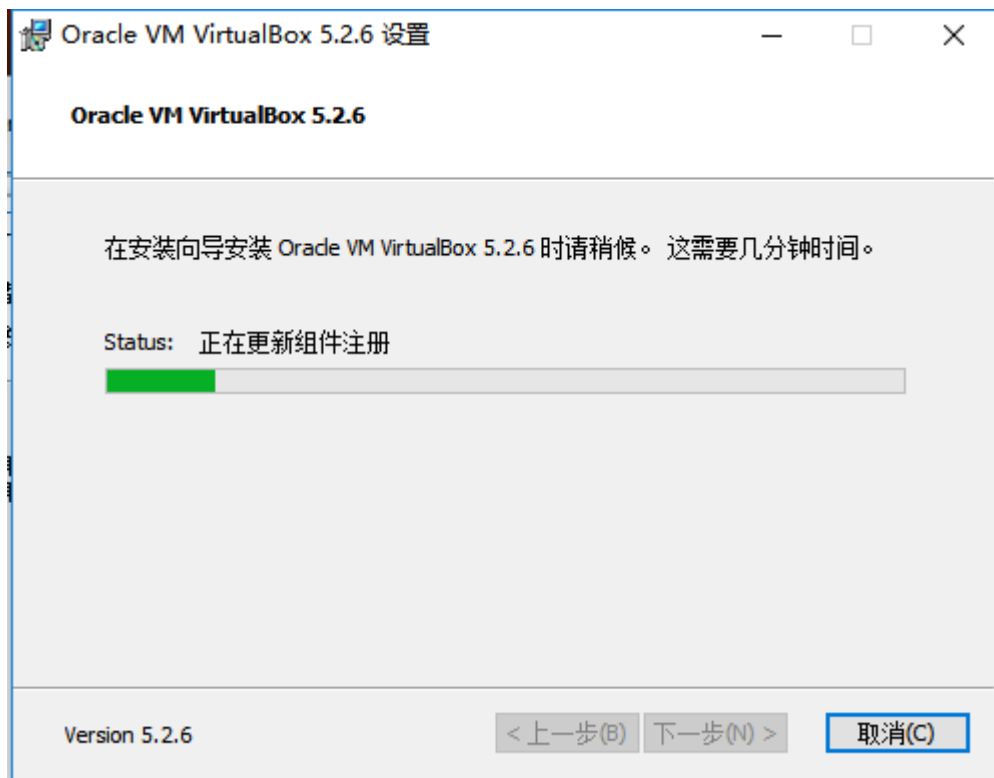
应用程序

111,161 KB

2.一直单击下一步，安装即可；



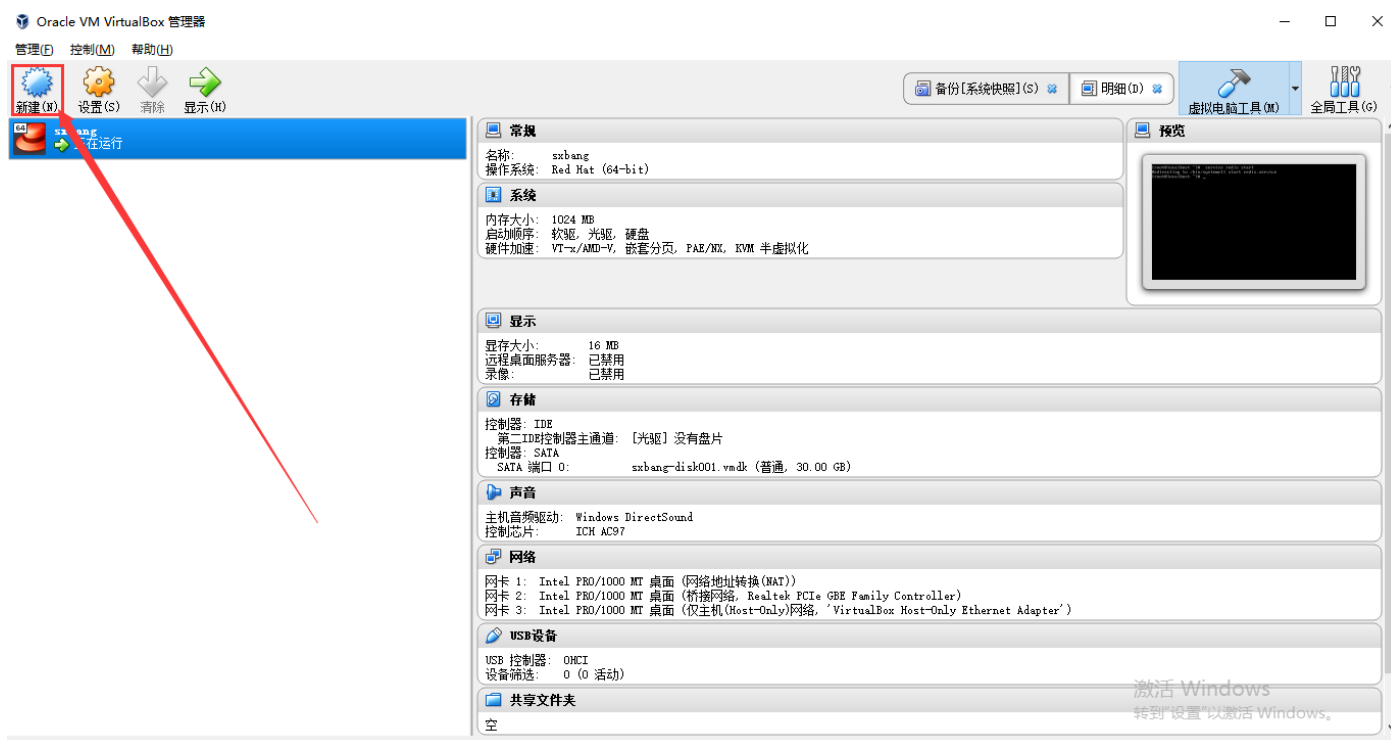






## 二、CentOS 的安装

### 1. 点击新建




## ← 新建虚拟电脑

## 虚拟电脑名称和系统类型

请选择新虚拟电脑的描述名称及要安装的操作系统类型。  
此名称将用于标识此虚拟电脑。

名称(N): CentOs 1

类型(T): Linux 2 

版本(V): Red Hat (64-bit) 3

专家模式(E)

4 下一步(N)

取消

## ← 新建虚拟电脑

## 内存大小

选择分配给虚拟电脑的内存大小(MB)。

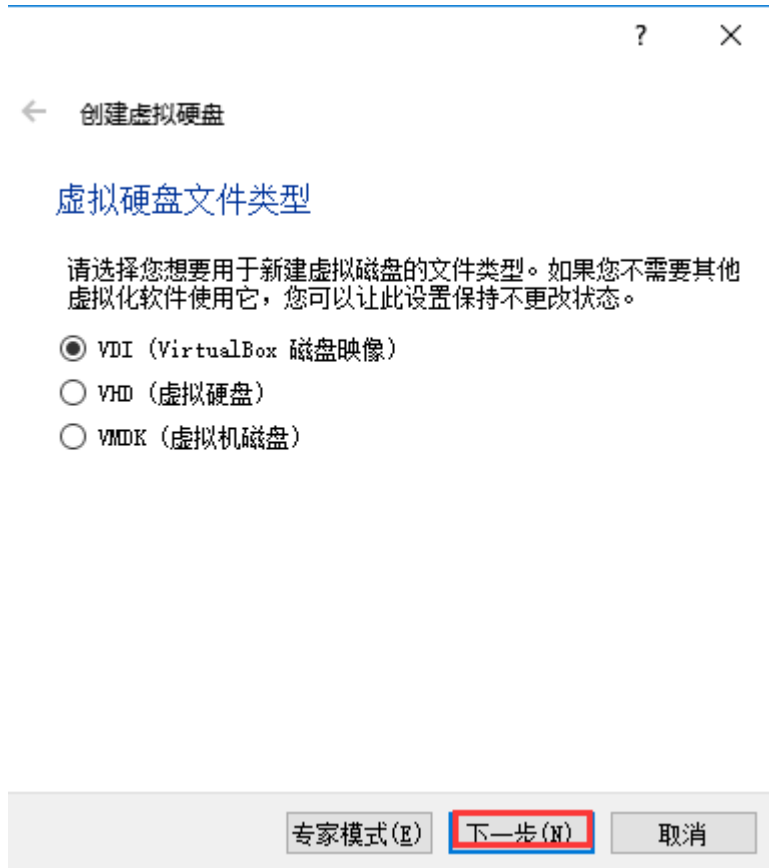
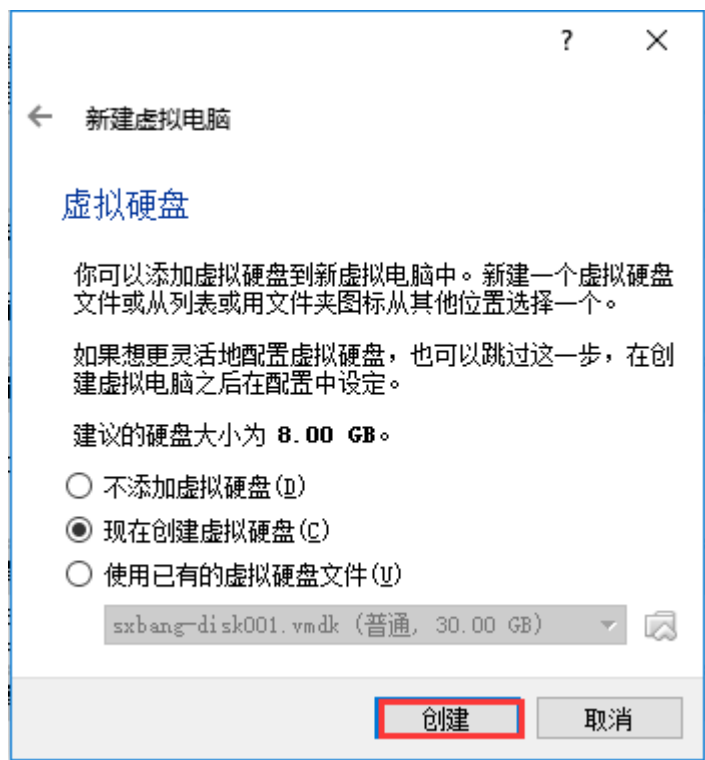
建议的内存大小为 **1024 MB**。

 1024 MB  
4 MB 8192 MB

下一步(N)

取消





## ← 创建虚拟硬盘

## 存储在物理硬盘上

请选择新建虚拟硬盘文件是应该为其使用而分配(动态分配)，还是应该创建完全分配(固定分配)。

**动态分配**的虚拟磁盘只是逐渐占用物理硬盘的空间（直至达到**分配的大小**），不过当其内部空间不用时不会自动缩减占用的物理硬盘空间。

**固定大小**的虚拟磁盘文件可能在某些系统中要花很长时间来创建，但它往往使用起来较快。

- ☒ 动态分配(D)
- ☐ 固定大小(F)

下一步(N)

取消

## ← 创建虚拟硬盘

## 文件位置和大小

请在下面的框中键入新建虚拟硬盘文件的名称，或单击文件夹图标来选择创建文件要保存到的文件夹。

CentOs

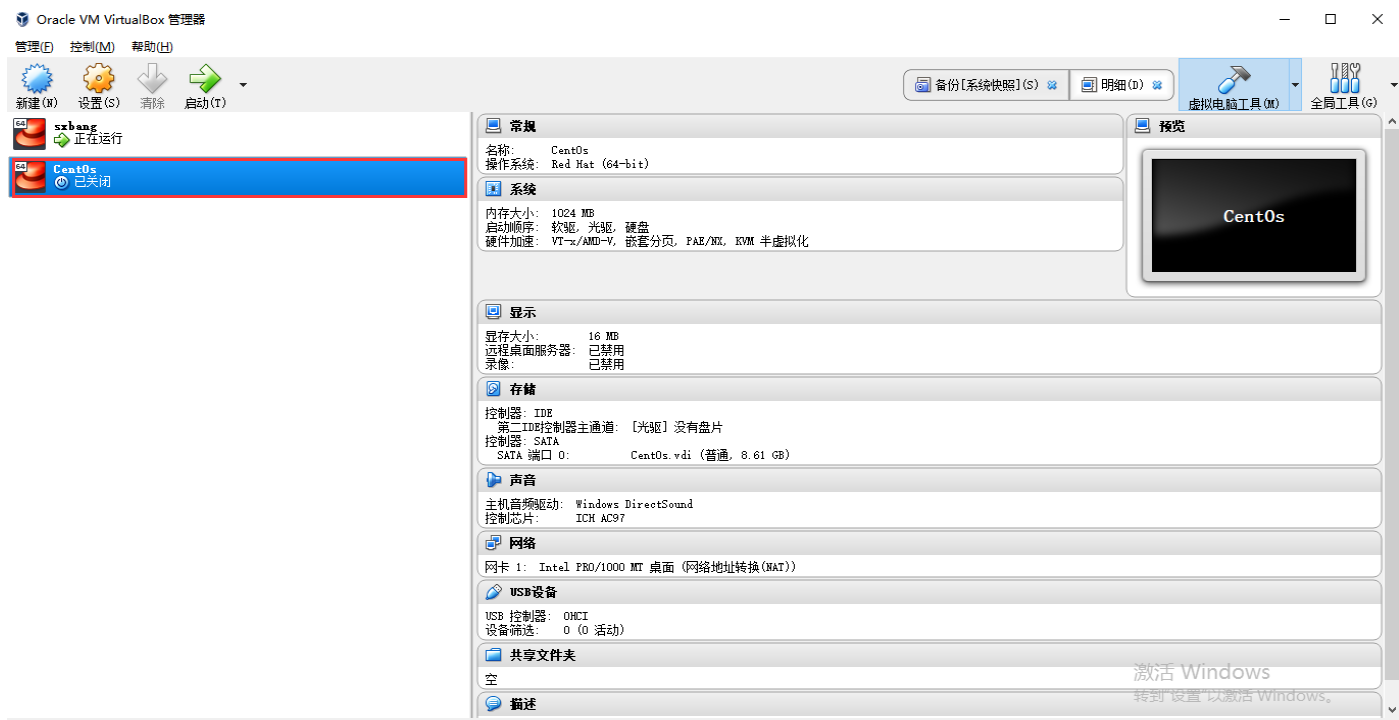


选择虚拟硬盘的大小。此大小为虚拟硬盘文件在实际硬盘中能用的极限大小。



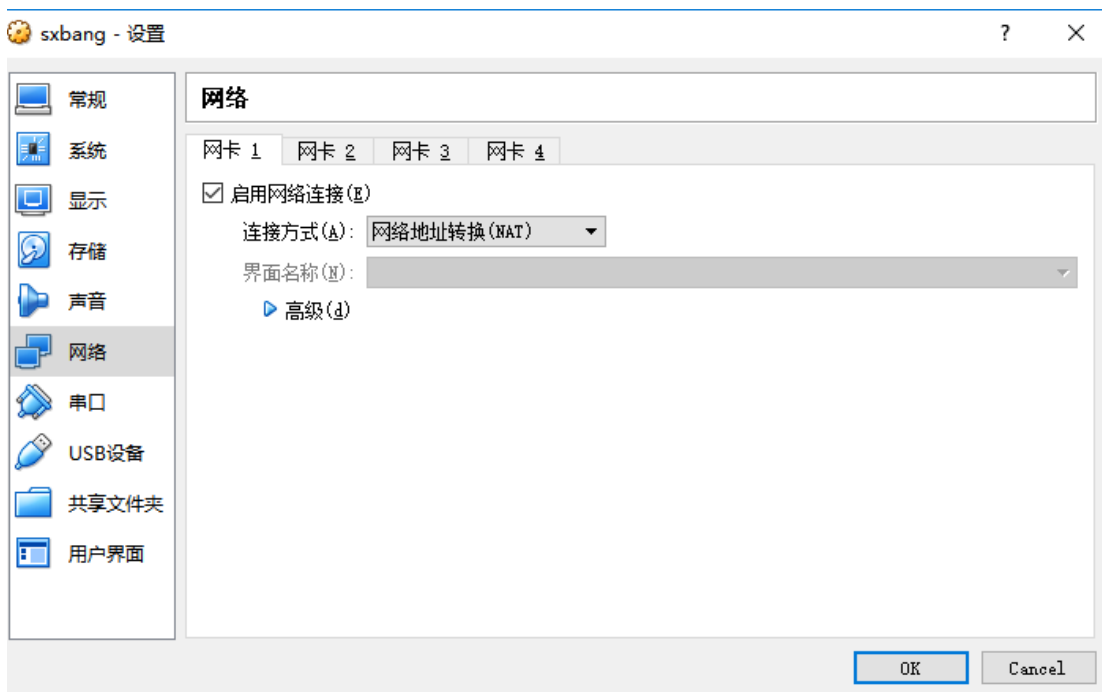
创建

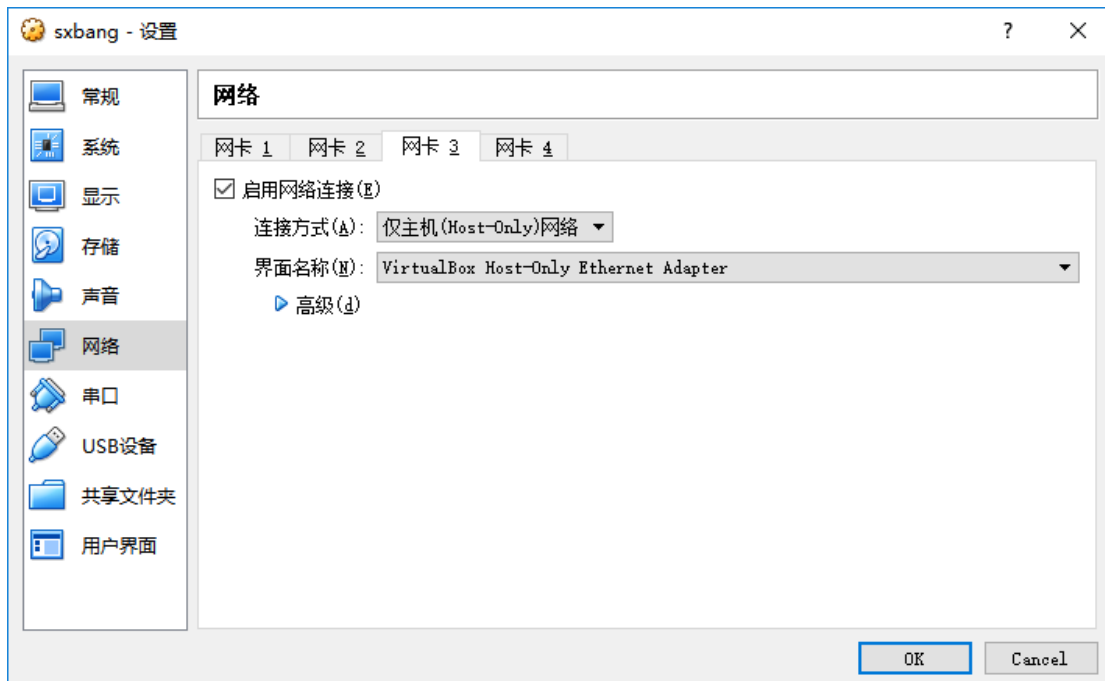
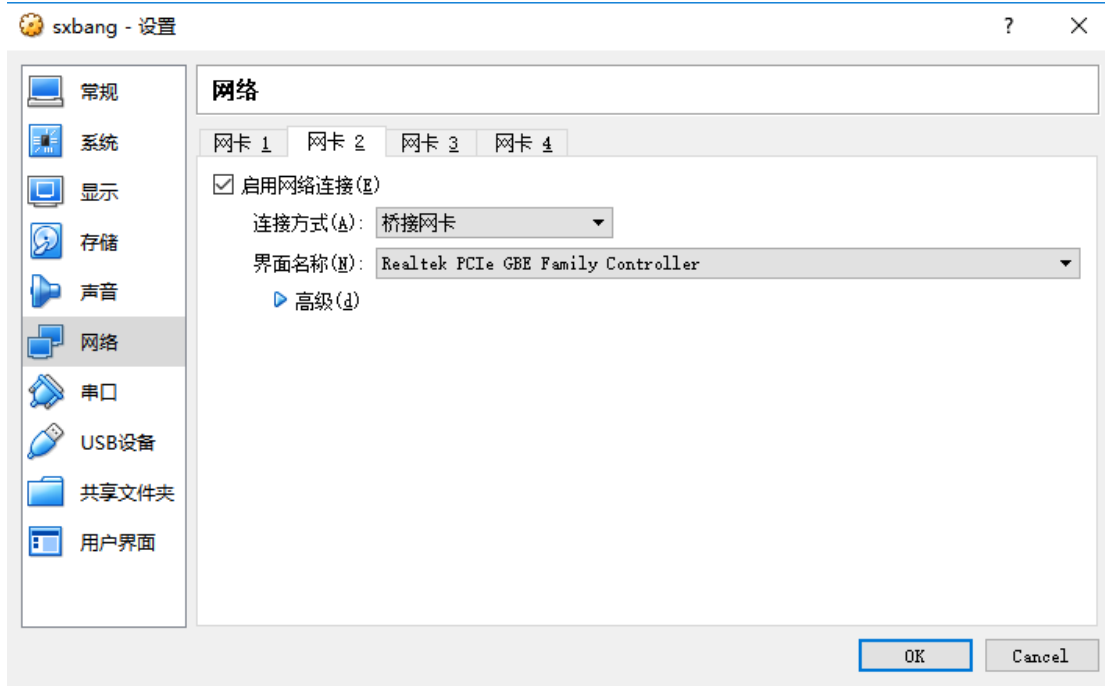
取消



2.设置网卡，选中 sxbang 点击鼠标右键-->设置-->网络，设置三个网卡分别是：

桥接网卡、网络地址转换、仅主机网络。

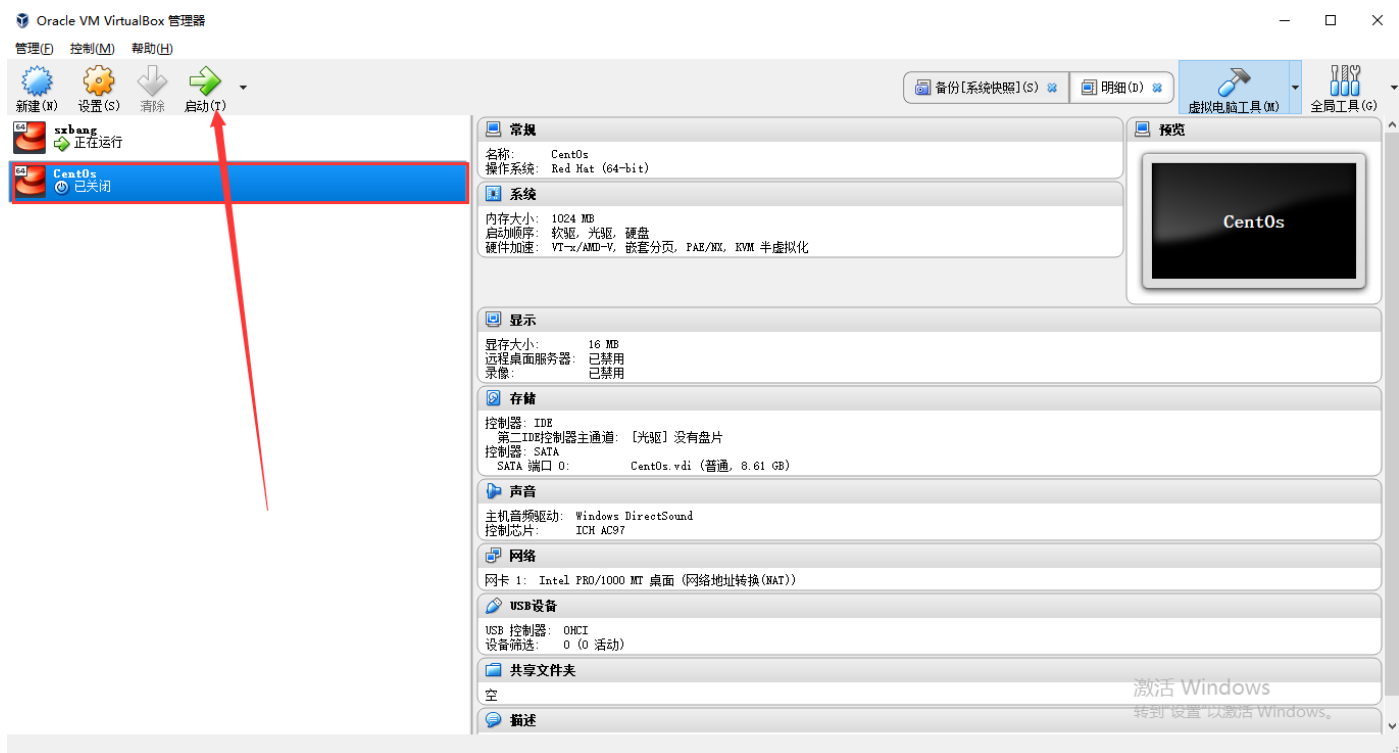




### 3. 下载 centos 镜像文件

链接:<https://pan.baidu.com/s/1HPXERqTCj7G9lWTieOmhdw> 密码:uifl

### 4. 启动虚拟机

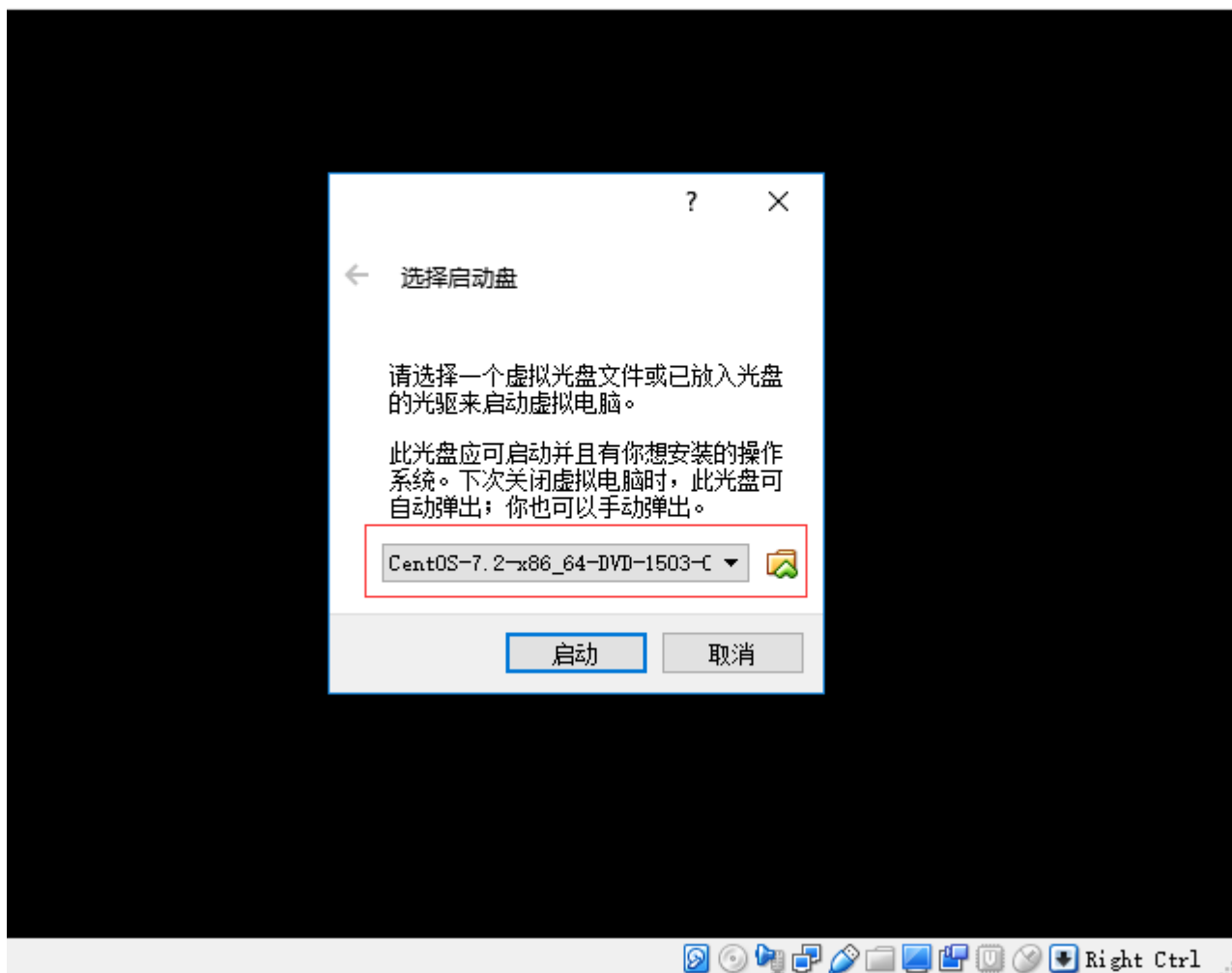


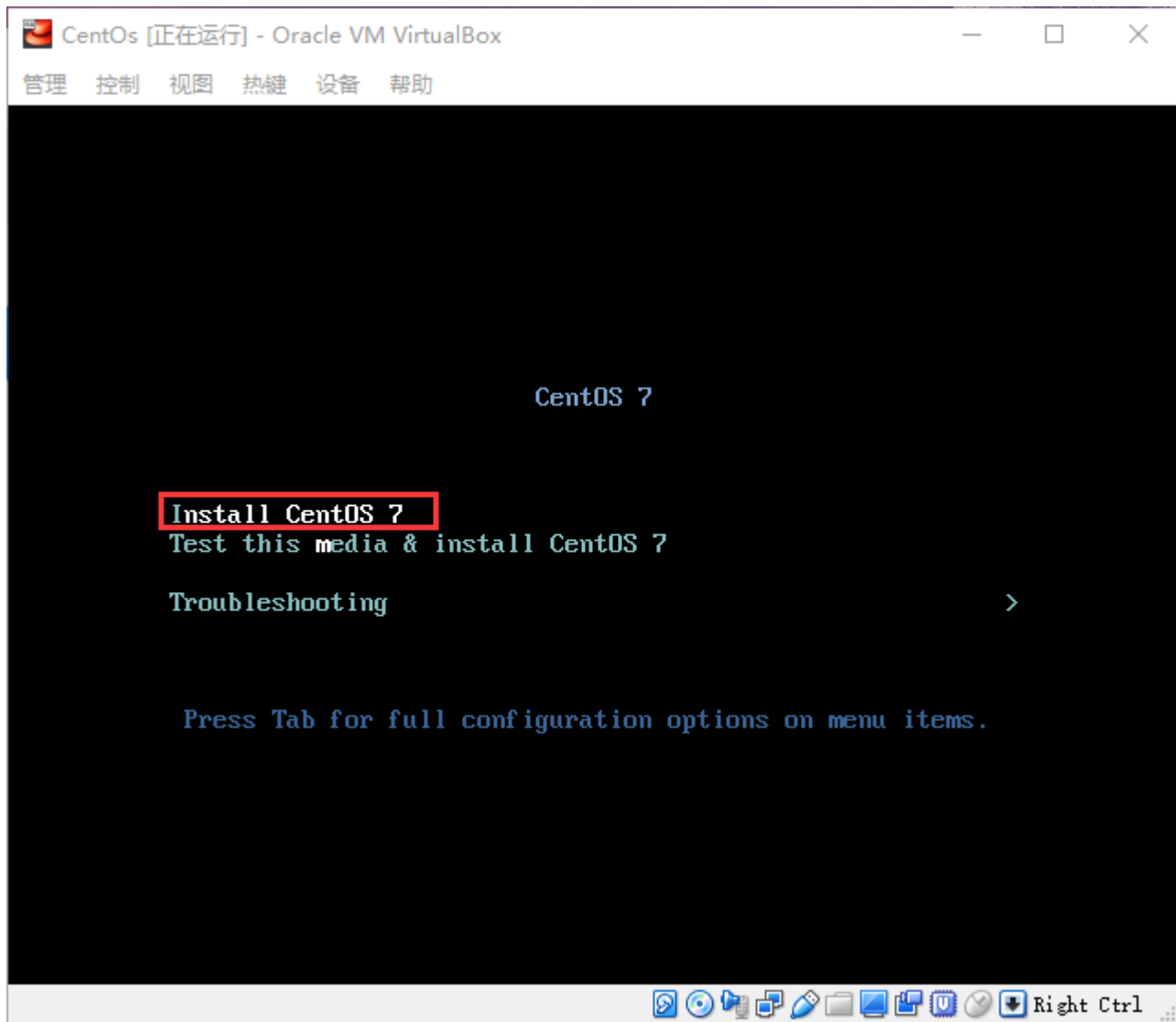
## 5.导入 centos 镜像文件

CentOS-7.2-x86\_64-DVD-1503-01.iso 2018/3/8 3:06 ISO 文件 4,209,664...

test [已关闭] - Oracle VM VirtualBox

管理 控制 视图 热键 设备 帮助





6.点击虚拟机窗口，移动鼠标点击 continue（鼠标要退出虚拟机电脑，按键盘右手边的“Ctrl”键）

What language would you like to use during the installation process?

English	English	English (United States)
Afrikaans	Afrikaans	English (United Kingdom)
አማርኛ	Amharic	English (India)
العربية	Arabic	English (Australia)
অসমীয়া	Assamese	English (Canada)
Asturiano	Asturian	English (Denmark)
Беларуская	Belarusian	English (Ireland)
Български	Bulgarian	English (New Zealand)
বাংলা	Bengali	English (Nigeria)
Bosanski	Bosnian	English (Hong Kong SAR China)
Català	Catalan	English (Philippines)
Čeština	Czech	English (Singapore)
Cymraeg	Welsh	English (South Africa)
Dansk	Danish	English (Zambia)
		English (Zimbabwe)
		English (Botswana)

Type here to search.

Quit

Continue



## LOCALIZATION



### DATE & TIME

Americas/New York timezone



### LANGUAGE SUPPORT

English (United States)



### KEYBOARD

English (US)

## SOFTWARE



### INSTALLATION SOURCE

Local media



### SOFTWARE SELECTION

Minimal Install

## SYSTEM



### INSTALLATION DESTINATION

Automatic partitioning selected



### KDUMP

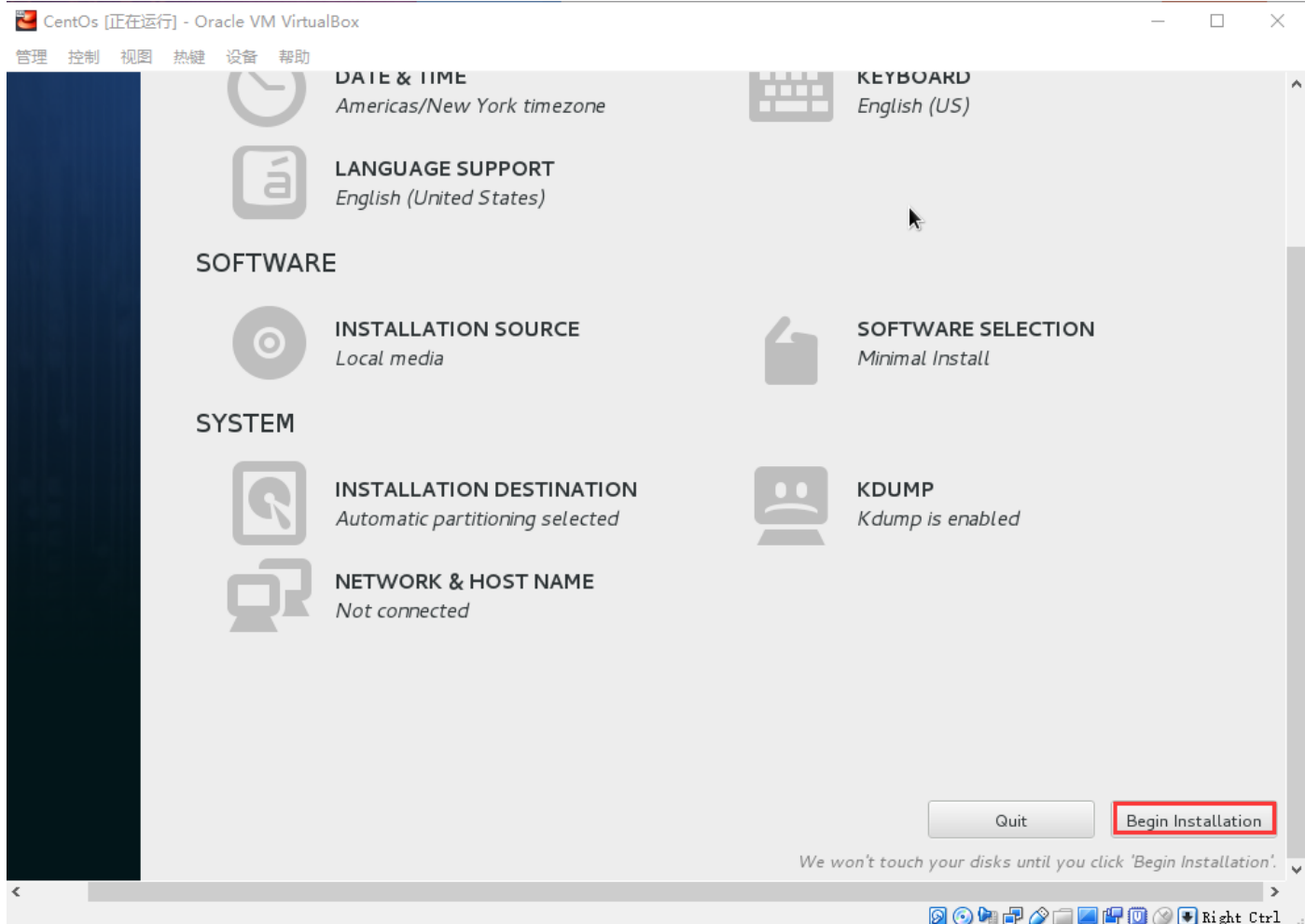
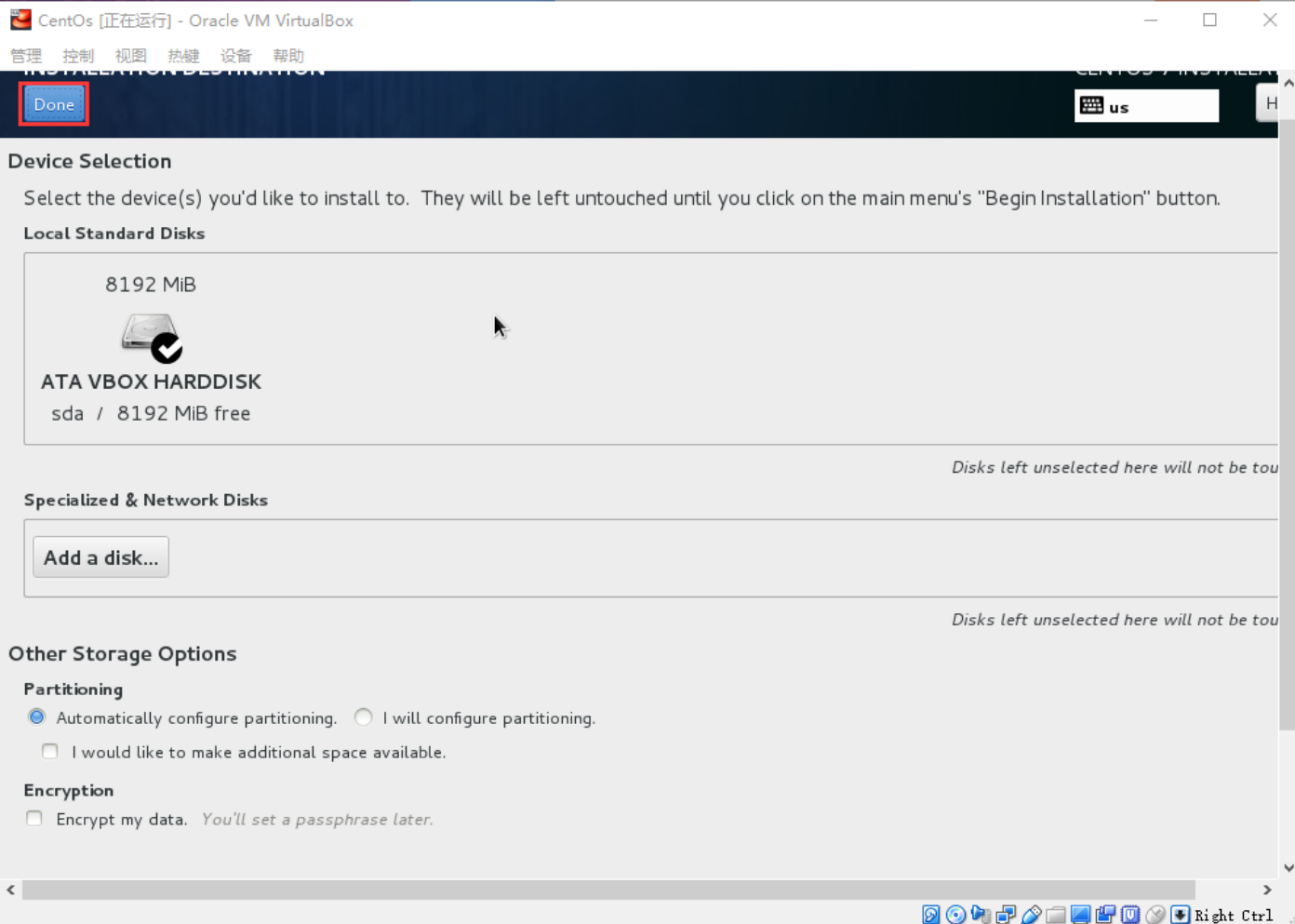
Kdump is enabled

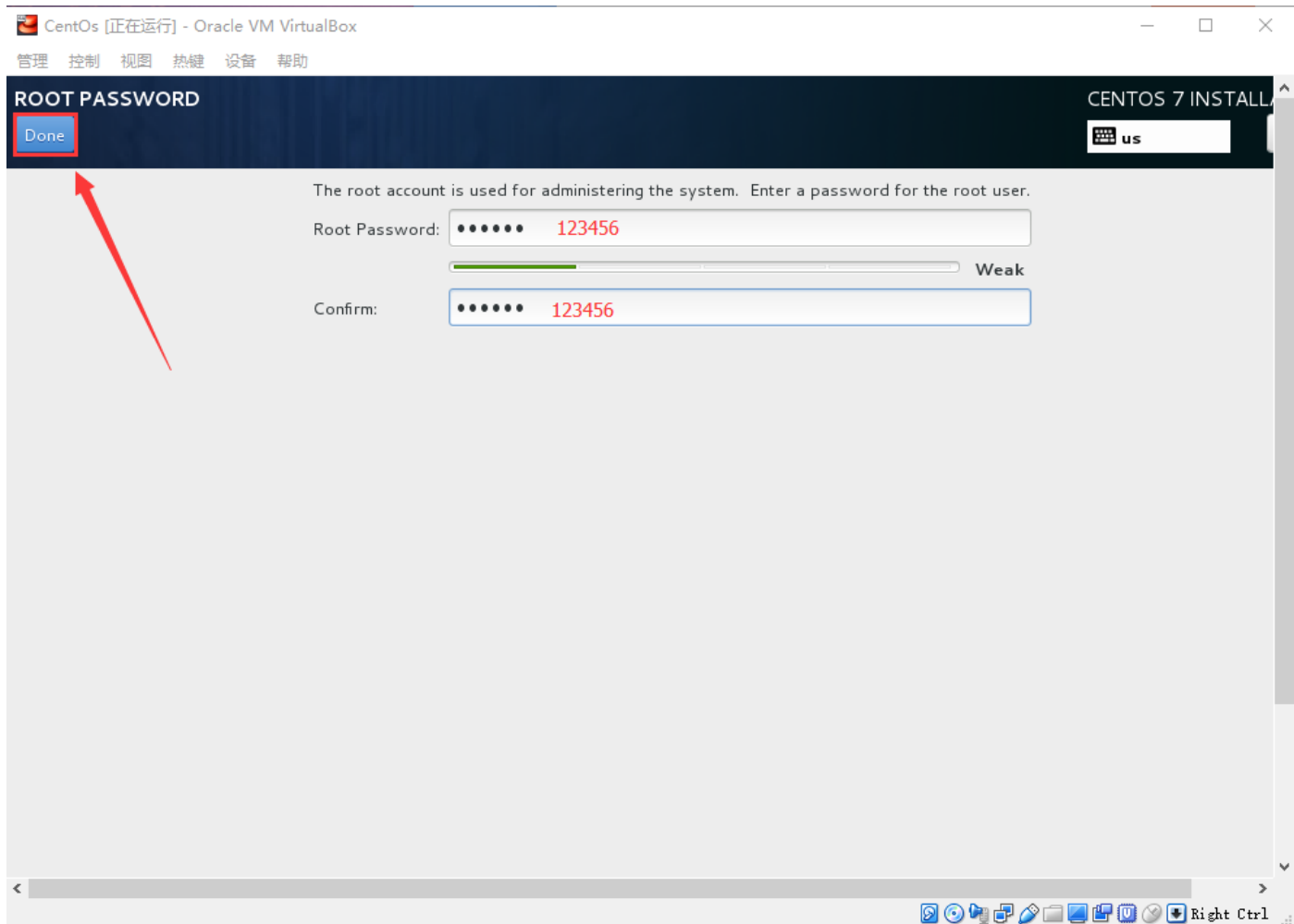
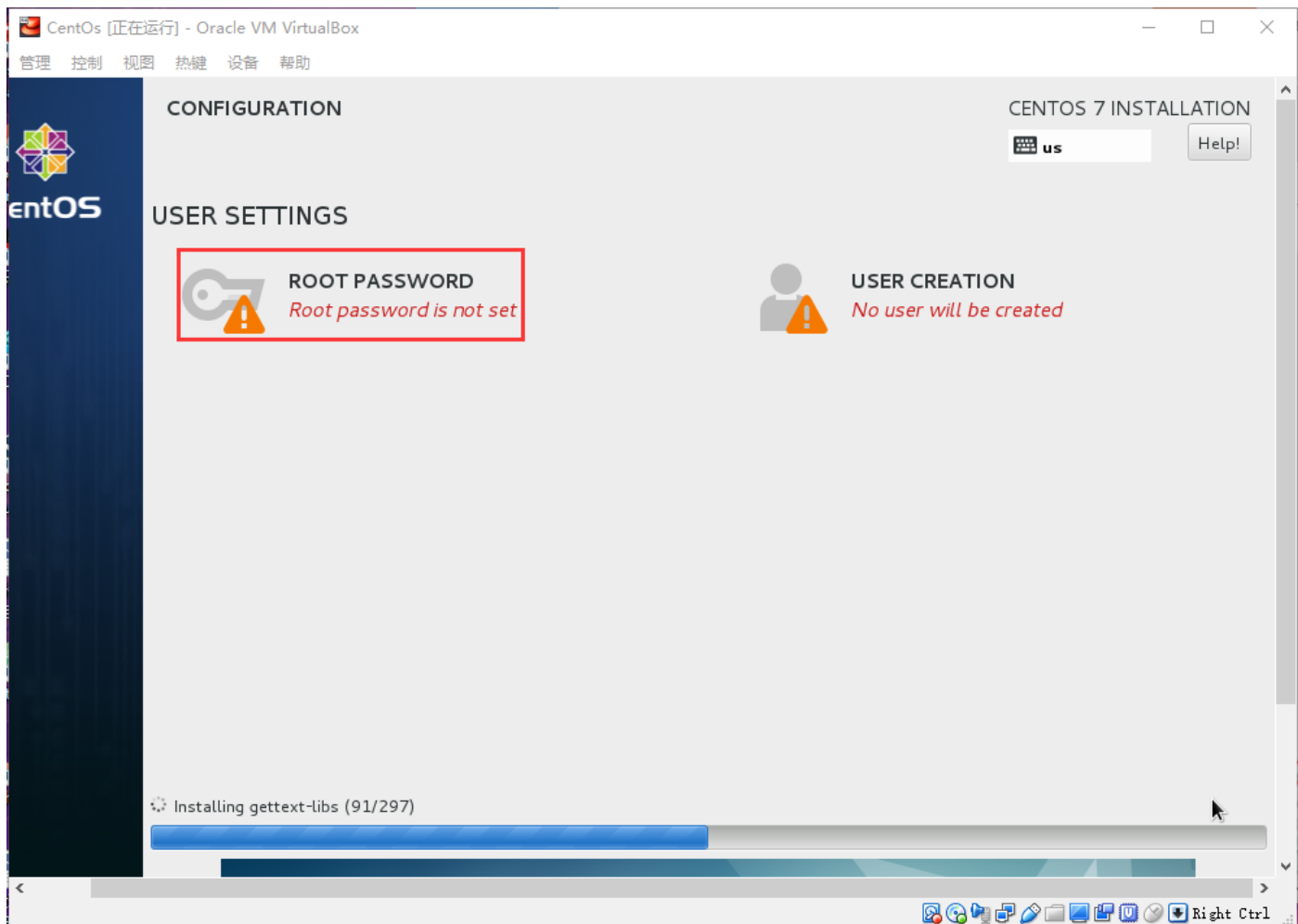


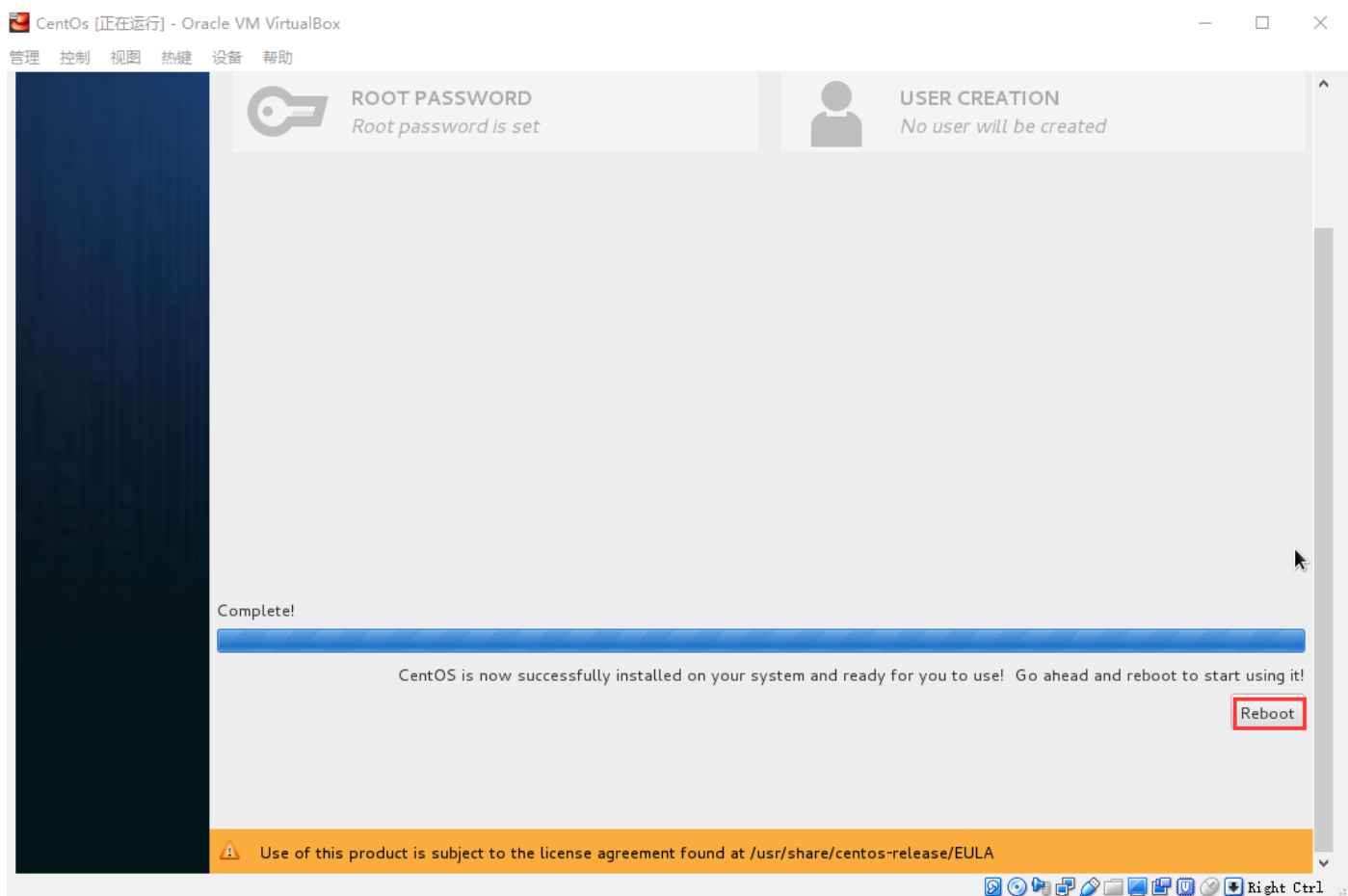
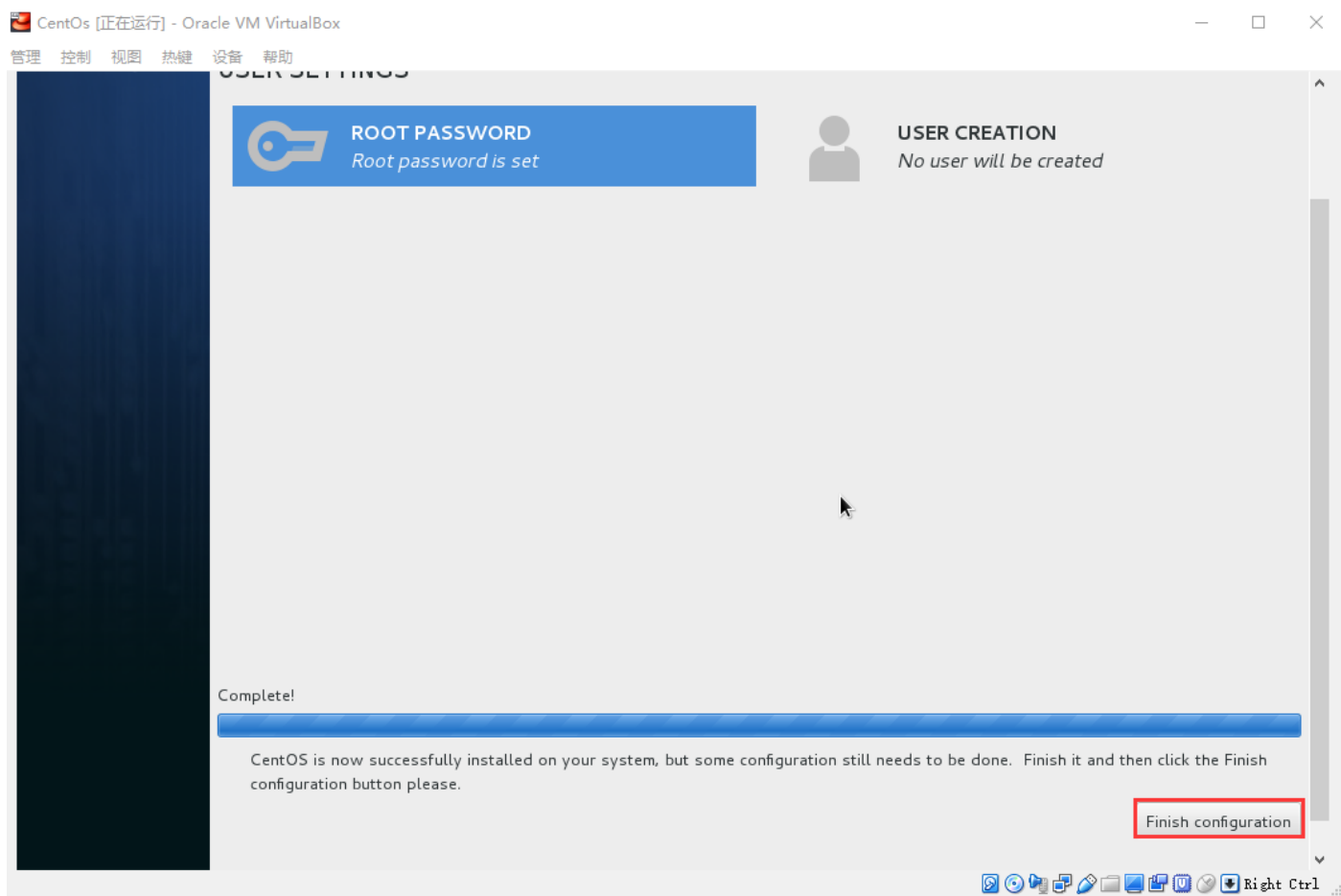
### NETWORK & HOST NAME

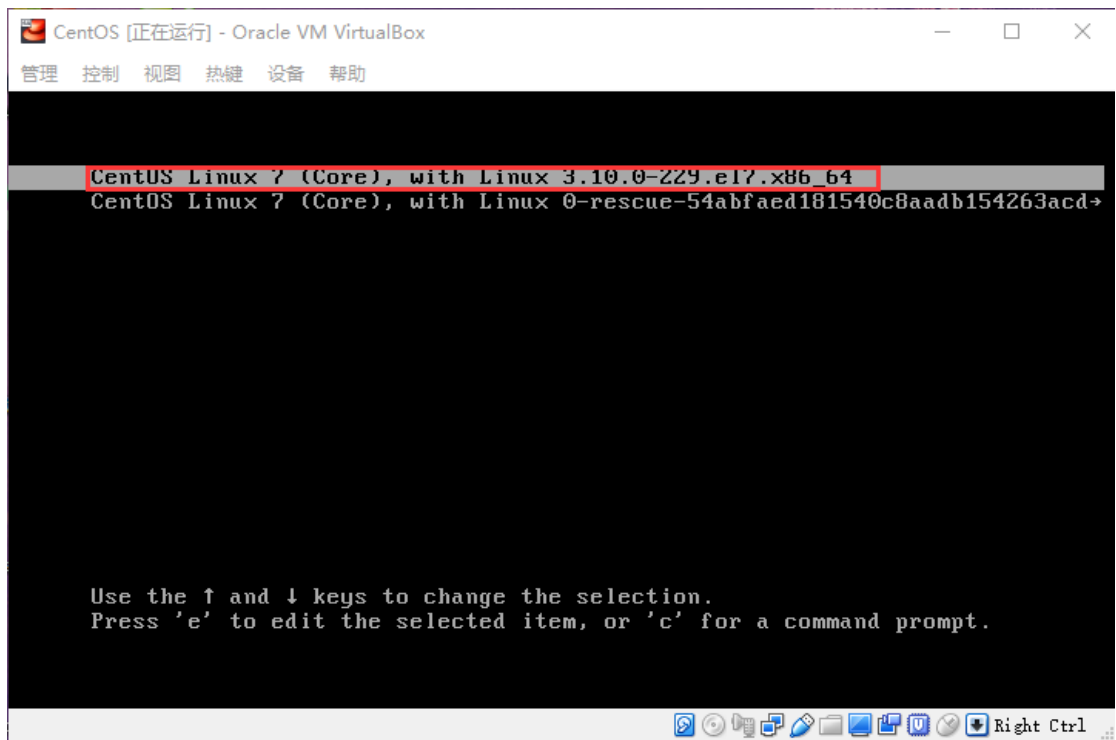
Not connected



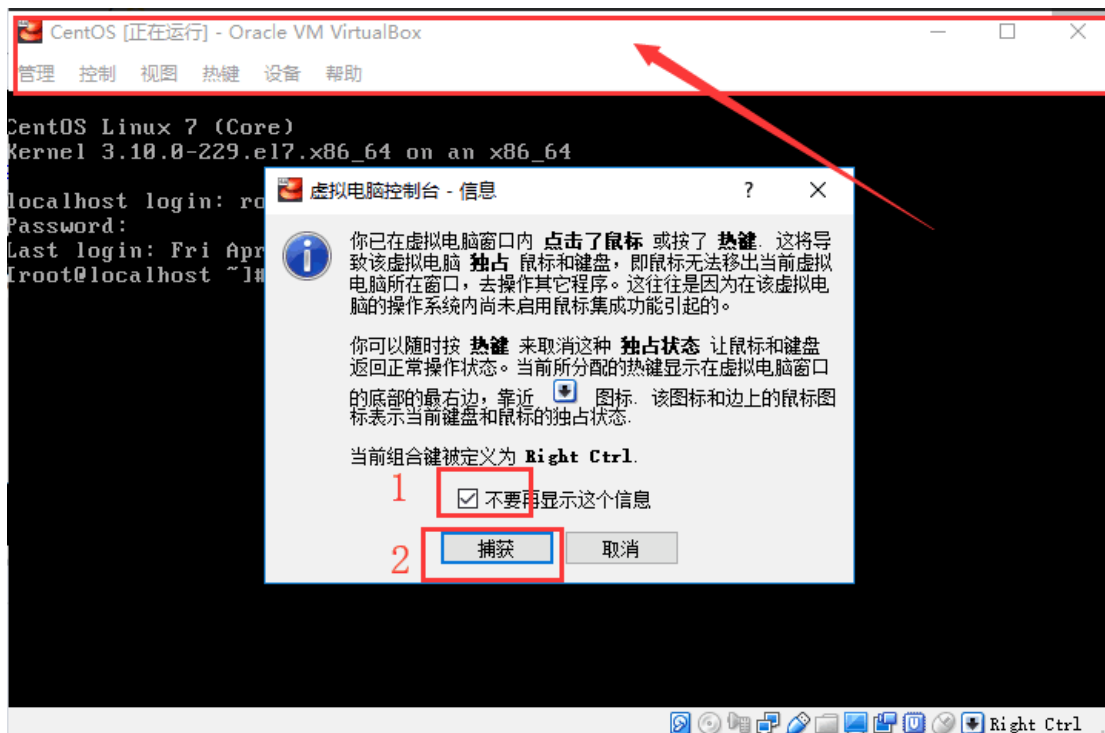






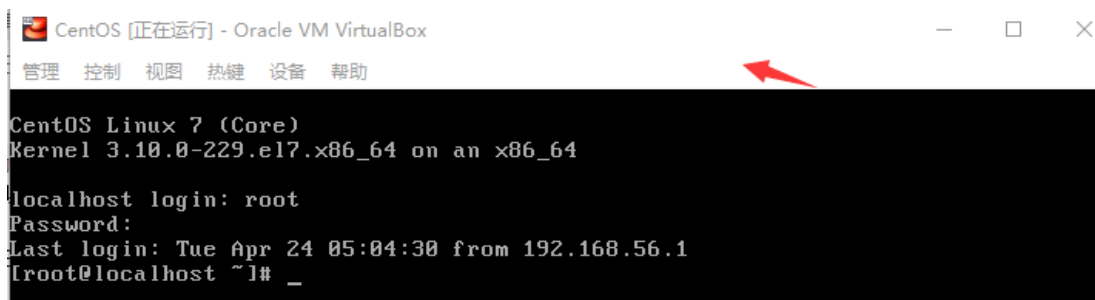


1.点击窗口的上方白色区域可以输入命令(如果点击黑色区域鼠标会隐藏起来,若要显示鼠标,按键盘右手边的 Ctrl 键) ;



2.输入用户名：**root**;

3.按回车输入密码 **123456**（密码输入时界面不会显示出来），出现[**root@localhost ~**]# 即登陆成功；



4.设置允许连接网络：**vi /etc/sysconfig/network-scripts/ifcfg-enp0s3**;

5.ONBOOT 设置为：**ONBOOT=yes**(按 “i” 键进入编辑模式，按 “Esc” 键退出编辑模式，按 “: wq” 保存并退出；



## 8.查看 Ip: ifconfig

## 9.查看信息(按 shift+PageUp 向上翻, shift+PageDown 向下翻)

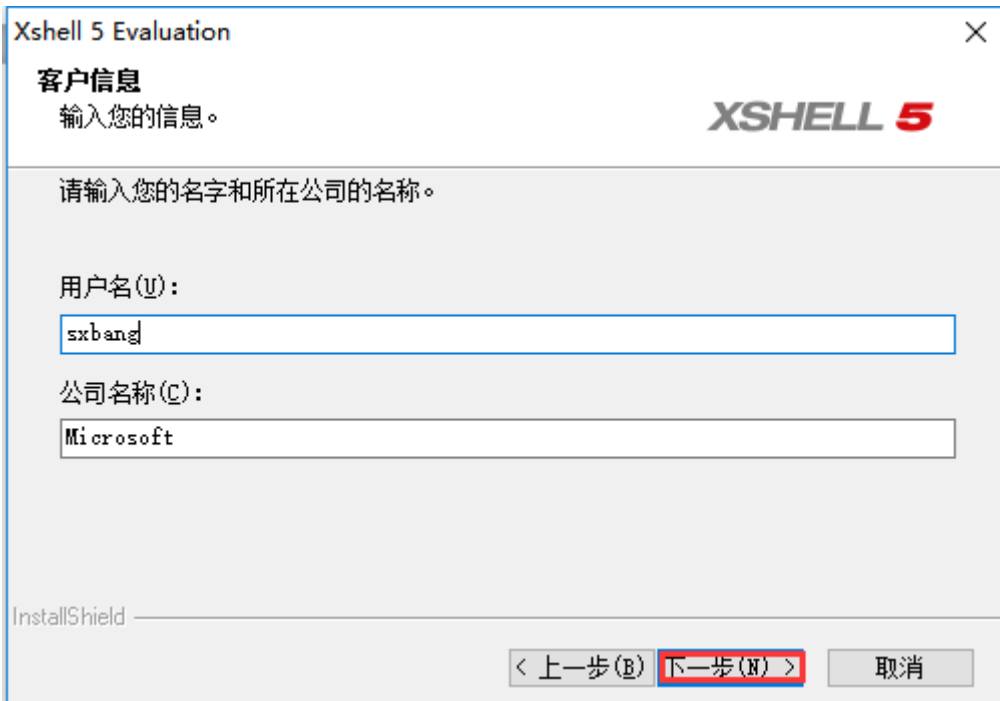
```
[root@localhost ~]# ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet6 fe80::a00:27ff:fea6:d657 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:a6:d6:57 txqueuelen 1000 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 49 bytes 8310 (8.1 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

enp0s8: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.3.15 netmask 255.255.255.0 broadcast 10.0.3.255
    inet6 fe80::a00:27ff:fe7e:768c prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:7e:76:8c txqueuelen 1000 (Ethernet)
    RX packets 12 bytes 1912 (1.8 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 20 bytes 2040 (1.9 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

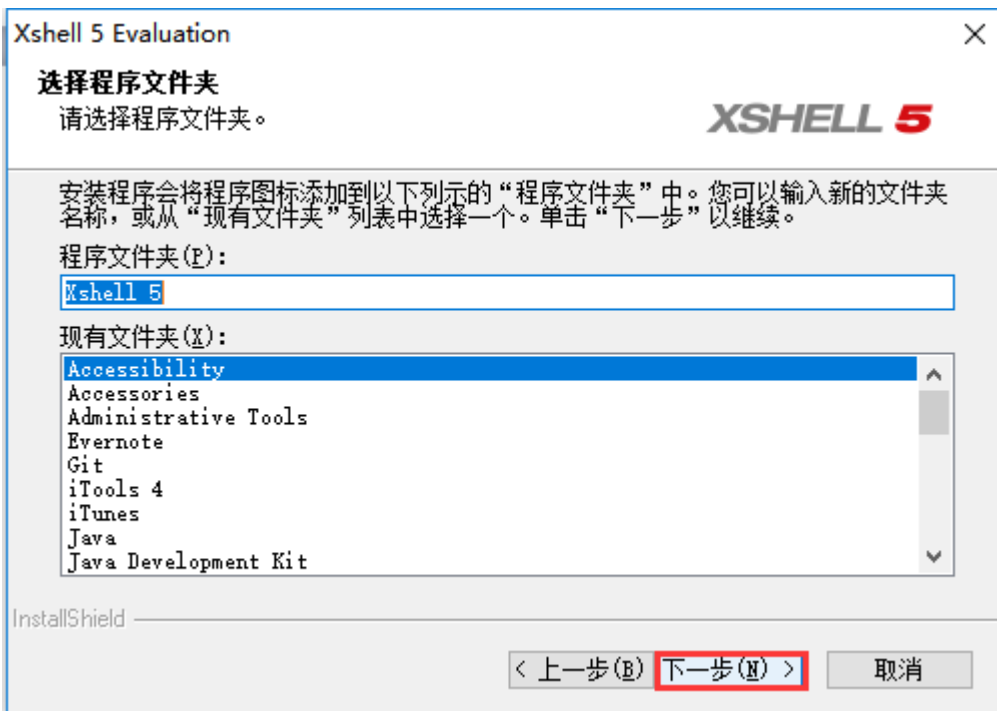
enp0s9: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.56.102 netmask 255.255.255.0 broadcast 192.168.56.255
    inet6 fe80::a00:27ff:fe69:6344 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:69:63:44 txqueuelen 1000 (Ethernet)
    RX packets 3 bytes 1423 (1.3 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 10 bytes 1308 (1.2 KiB)
```

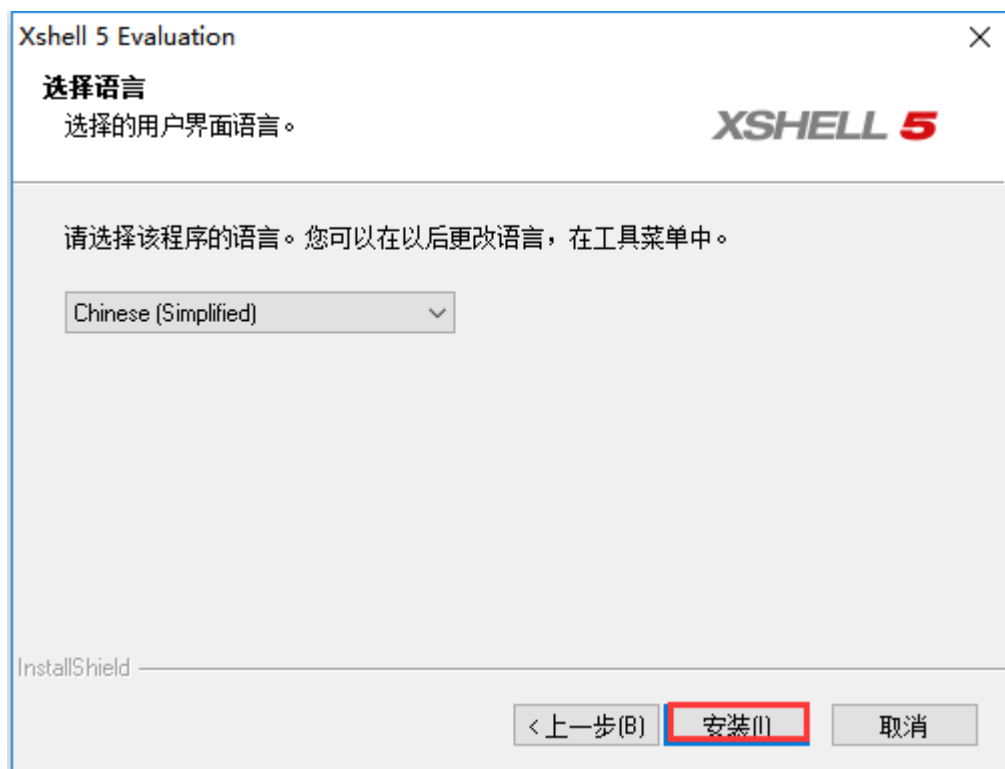
## 10.安装 xshell, 点击图标进行安装



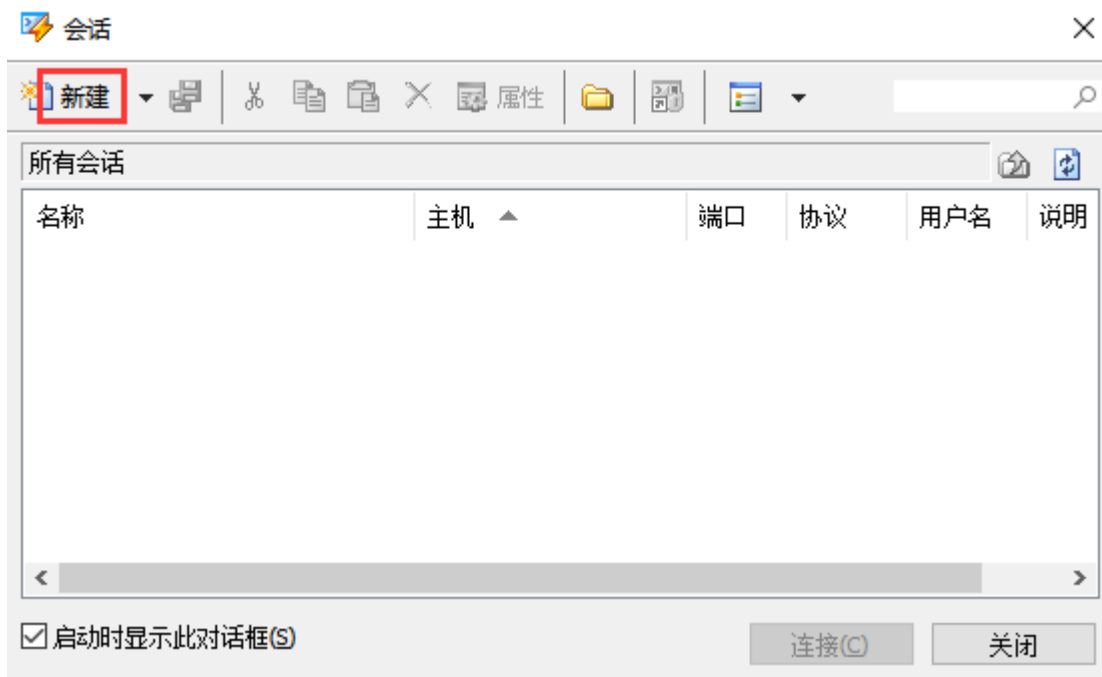
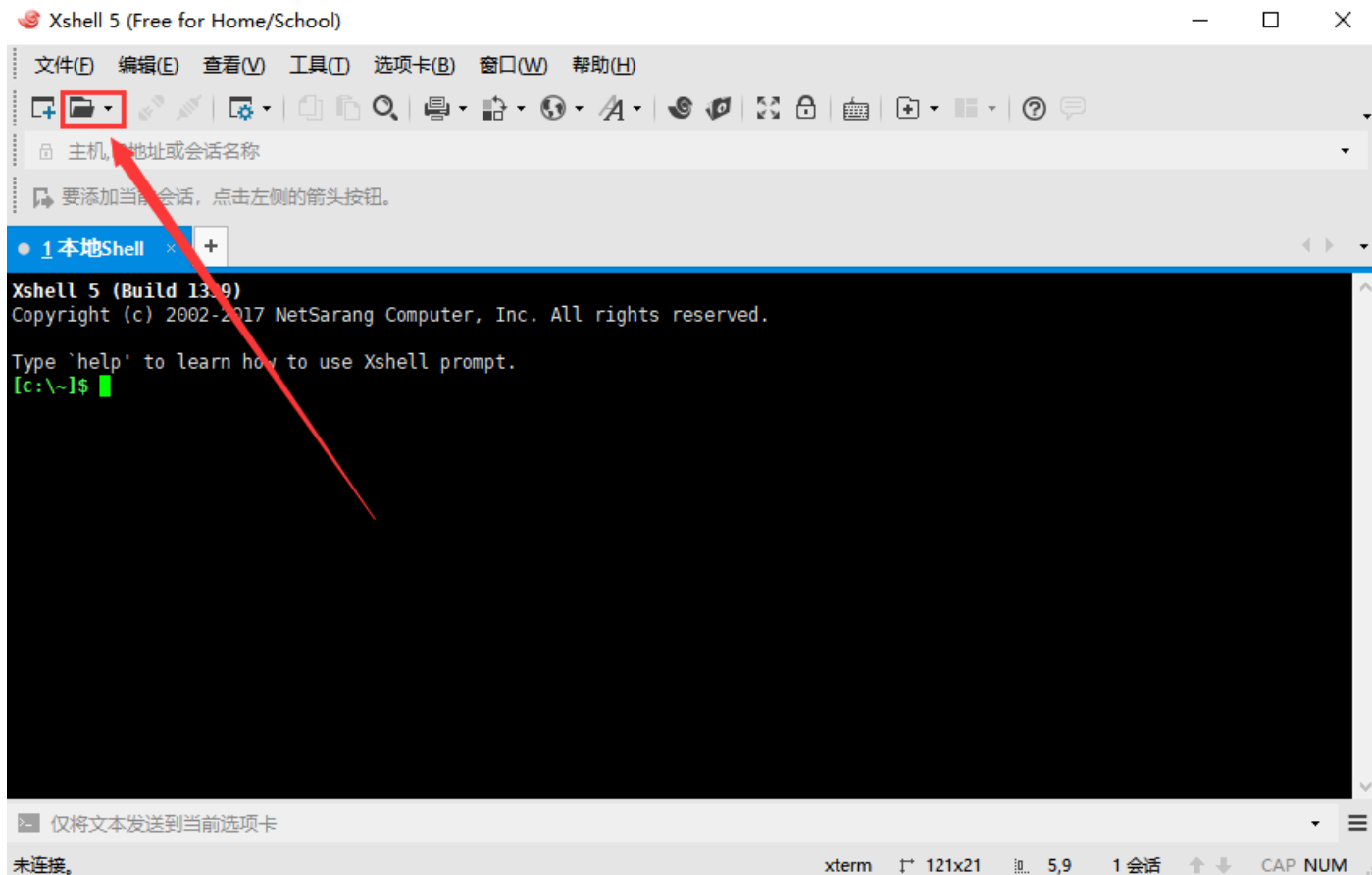




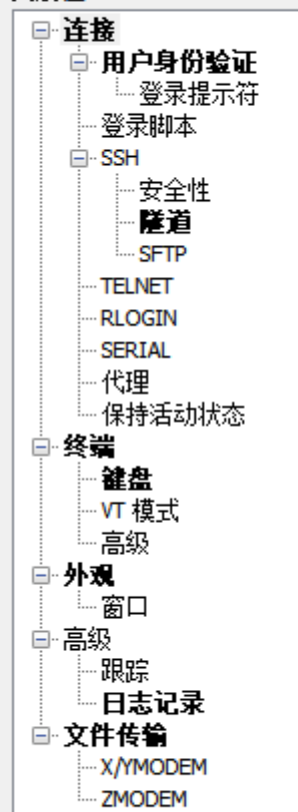




11. 点击左上角的图标，选择打开



类别(C):



连接

常规

名称(N):

新建会话

协议(P):

SSH

主机(H):

192.168.56.103

填虚拟机的Ip

端口号(O):

22

说明(D):

重新连接

☐ 连接异常关闭时自动重新连接(A)

间隔(V):

0

秒

限制(L):

0

分钟

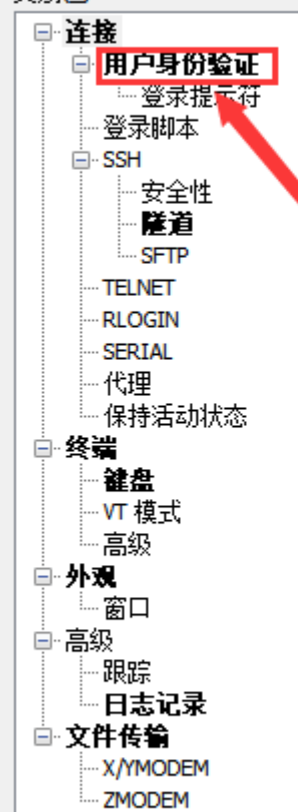
TCP选项

☐ 使用Nagle算法(U)

确定

取消

类别(C):



连接

常规

名称(N):

新建会话

协议(P):

SSH

主机(H):

192.168.56.103

端口号(O):

22

说明(D):

重新连接

☐ 连接异常关闭时自动重新连接(A)

间隔(V):

0

秒

限制(L):

0

分钟

TCP选项

☐ 使用Nagle算法(U)

确定

取消

类别(C):


- 连接
  - 用户身份验证**
    - 登录提示符
    - 登录脚本
  - SSH
    - 安全性
    - 隧道
    - SFTP
  - TELNET
  - RLOGIN
  - SERIAL
  - 代理
  - 保持活动状态
- 终端
  - 键盘
    - VT 模式
    - 高级
- 外观
  - 窗口
- 高级
  - 跟踪
  - 日志记录
- 文件传输
  - X/YMODEM
  - ZMODEM

连接 > 用户身份验证

请选择身份验证方法和其它参数。  
会话属性中此部分是为了登录过程更便捷而提供的。如果需要安全性很高的状态的话建议您空出此字段。

方法(M): Password

用户名(U): root

密码(P): ..... 123456 

用户密钥(K): <无>

密码(A):

注释: 公钥和Keyboard Interactive仅在SSH/SFTP协议中可用。

会话 X

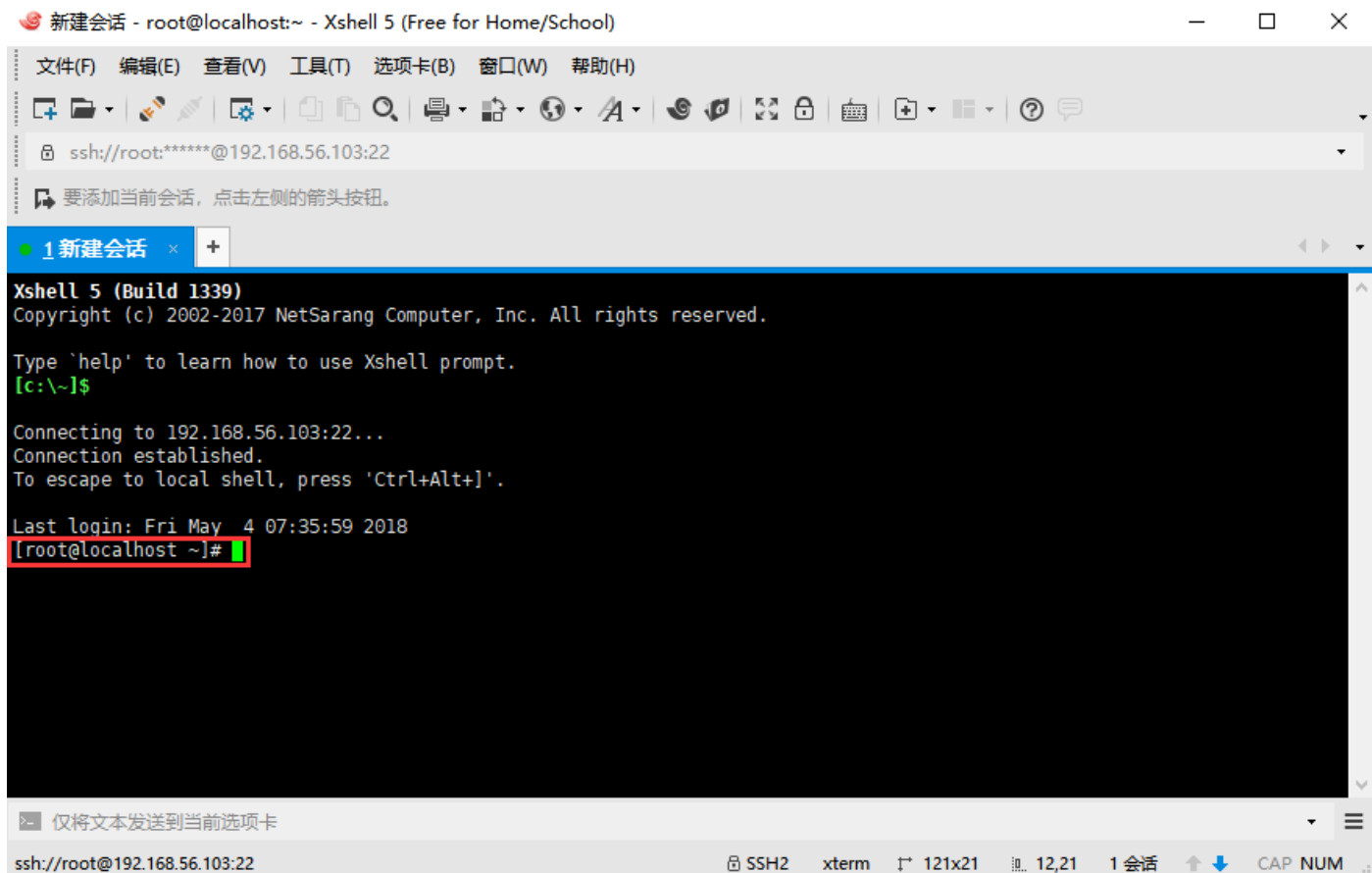
新建 属性 文件夹 图标 列表 搜索

所有会话

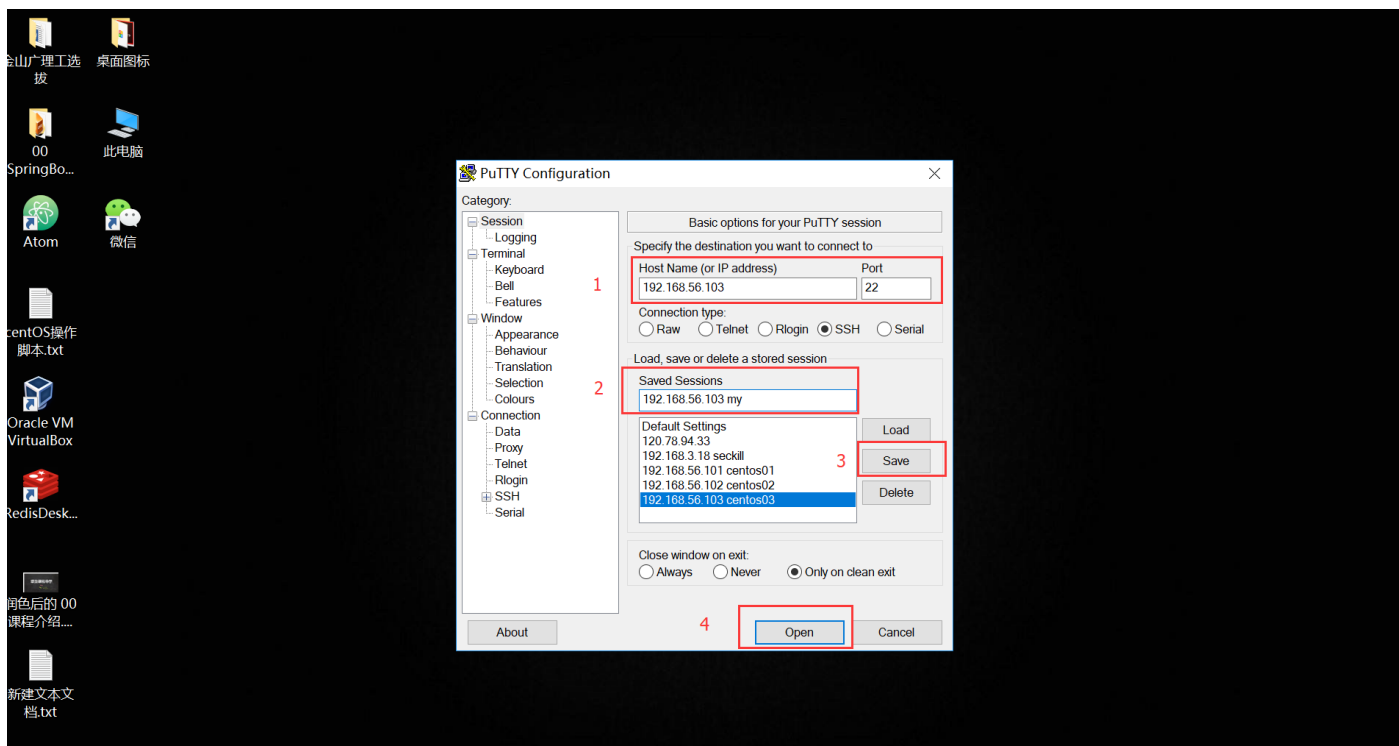
名称	主机	端口	协议	用户名	说明
新建会话	192.168.56.103	22	SSH	root	

☒ 启动时显示此对话框(S)

12.出现[root@localhost~]#则连接成功，（使用 xshell 输入命令可以使用复制粘贴，开启多个窗口，操作更加高效）



另：推荐另一种免费的 SSH/Telnet 工具 Putty，直接双击打开，在 Host Name 输入你的虚拟机地址，同时在 Saved Sessions 中保存你的名字，下一次登陆的时候直接双击你保存的名字就可以连接啦。



13.安装 wget: `yum install wget`

14.安装编辑工具 vim: `yum install vim`

15.备份默认源: `mv /etc/yum.repos.d/CentOS-Base.repo /etc/yum.repos.d/CentOS-Base.repo.backup`

16.进入到/etc/yum.repos.d/目录: `cd /etc/yum.repos.d/`

17.添加源: `wget http://mirrors.163.com/.help/CentOS7-Base-163.repo`

18.运行以下命令生成缓存: `yum clean all`

`yum makecache`

### 三、CentOS 服务的安装

#### 1. Redis 的安装

安装的前提条件:

1.需要安装 gcc: `yum install gcc`

2.安装第三方库: `yum install epel-release`

3.再安装 redis 即可: `yum install redis`

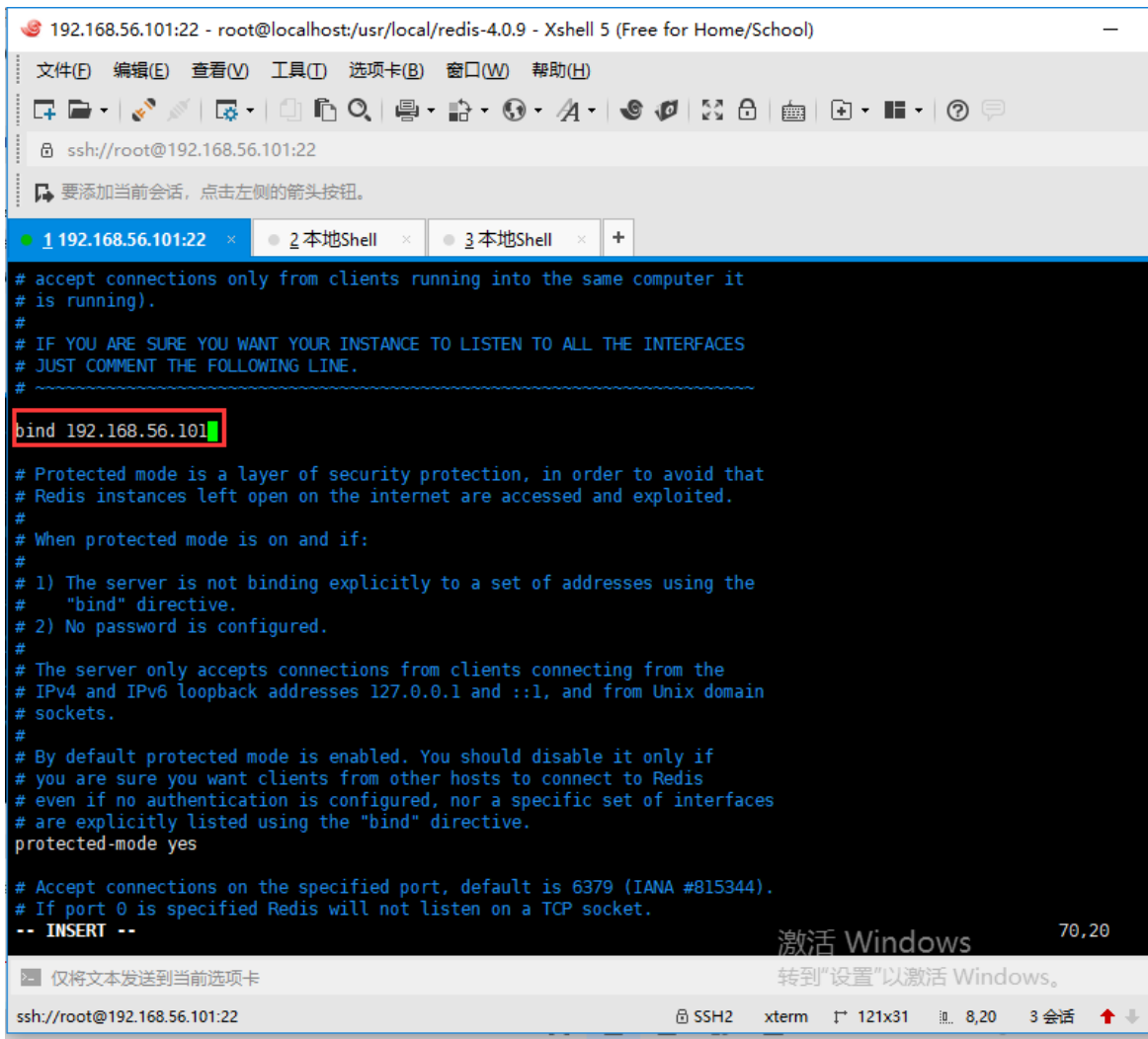
4.使用 `service redis start` 命令启动 redis 服务端

5.配置对外开放端口: `iptables -I INPUT 1 -p tcp --dport 6379 -j ACCEPT`

6.使用 `ps -ef | grep redis` 查看 redis 进程

```
Verifying : jemalloc-3.6.0-1.el7.x86_64 2/2
Installed:
  redis.x86_64 0:3.2.3-1.el7
Dependency Installed:
  jemalloc.x86_64 0:3.6.0-1.el7
Complete!
[root@localhost ~]# service redis start
Redirecting to /bin/systemctl start redis.service
[root@localhost ~]# ps -ef | grep redis
redis 3451 1 0 13:04 ? 00:00:00 /usr/bin/redis-server 127.0.0.1:6379
root 3455 2434 0 13:04 pts/0 00:00:00 grep --color=auto redis
[root@localhost ~]#
```

7. vi /etc/redis.conf 直接/bind 回车, 然后修改为你虚拟机的 ip 地址, 不然无法访问。(不同虚拟机 Ip 不同, 用 ifconfig 命令查看 IP)



```
192.168.56.101:22 - root@localhost:usr/local/redis-4.0.9 - Xshell 5 (Free for Home/School)
文件(F) 编辑(E) 查看(V) 工具(T) 选项卡(B) 窗口(W) 帮助(H)
ssh://root@192.168.56.101:22
要添加当前会话，点击左侧的箭头按钮。
1 192.168.56.101:22 x 2 本地Shell x 3 本地Shell x +
# accept connections only from clients running into the same computer it
# is running).
#
# IF YOU ARE SURE YOU WANT YOUR INSTANCE TO LISTEN TO ALL THE INTERFACES
# JUST COMMENT THE FOLLOWING LINE.
# ~~~~~
bind 192.168.56.101
# Protected mode is a layer of security protection, in order to avoid that
# Redis instances left open on the internet are accessed and exploited.
#
# When protected mode is on and if:
#
# 1) The server is not binding explicitly to a set of addresses using the
#    "bind" directive.
# 2) No password is configured.
#
# The server only accepts connections from clients connecting from the
# IPv4 and IPv6 loopback addresses 127.0.0.1 and ::1, and from Unix domain
# sockets.
#
# By default protected mode is enabled. You should disable it only if
# you are sure you want clients from other hosts to connect to Redis
# even if no authentication is configured, nor a specific set of interfaces
# are explicitly listed using the "bind" directive.
protected-mode yes
# Accept connections on the specified port, default is 6379 (IANA #815344).
# If port 0 is specified Redis will not listen on a TCP socket.
-- INSERT --
激活 Windows 70,20
转到“设置”以激活 Windows。
ssh://root@192.168.56.101:22 SSH2 xterm 121x31 8,20 3 会话
```

8. 修改完按“Esc”键退出编辑模式，输入“: wq”保存并退出

## ● Redis 的使用

1.启动 redis 服务：**service redis start**

2 启用 redis 客户端：**redis-cli**

3.插入 key 为 test, value 为 hello 的数据：**set test hello**

4.查询 key 为 test 的 value 值：**get test**

5.退出 redis: **quit**

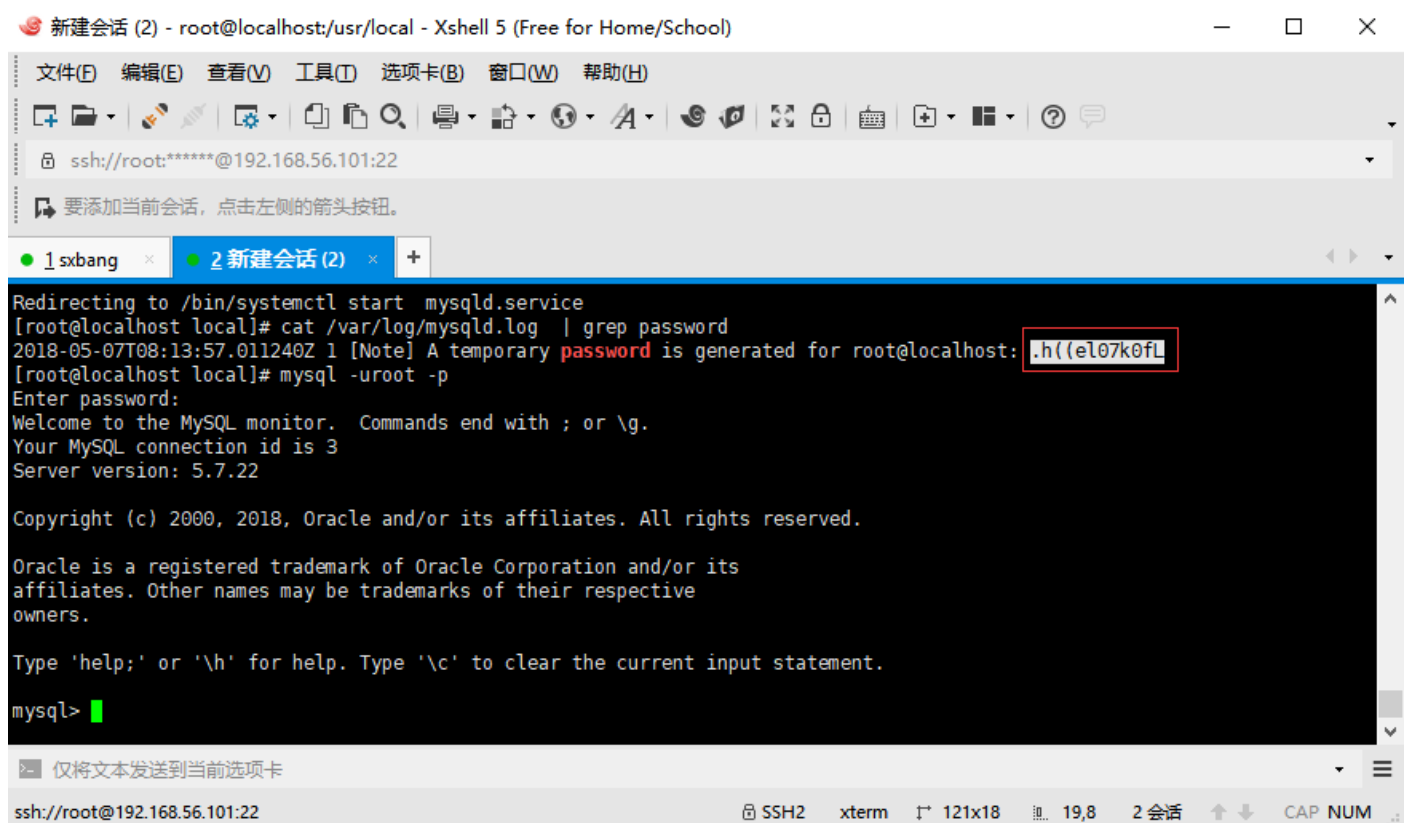


```
CentOS [正在运行] - Oracle VM VirtualBox
管理 控制 视图 热键 设备 帮助
[root@localhost ~]# service redis start
Redirecting to /bin/systemctl start redis.service
[root@localhost ~]# /usr/local/redis-3.2.9/src/redis-cli
127.0.0.1:6379> set test hello
OK
127.0.0.1:6379> get test
"hello"
127.0.0.1:6379> quit
[root@localhost ~]#
```



## 2. mysql 的安装

1. 安装前需移除本地上的 mariadb 数据库: `yum remove mariadb-libs.x86_64`
2. 进入/usr/local/ 目录 : `cd /usr/local/`
3. 下载源: `wget https://dev.mysql.com/get/mysql57-community-release-el7-11.noarch.rpm`
4. 安装源: `yum localinstall mysql57-community-release-el7-11.noarch.rpm`
5. 安装 mysql: `yum install mysql-community-server`
6. 启动 mysql: `service mysqld start`
7. 查看默认密码: `cat /var/log/mysqld.log | grep password`



```
新建会话 (2) - root@localhost:usr/local - Xshell 5 (Free for Home/School)
文件(F) 编辑(E) 查看(V) 工具(T) 选项卡(O) 窗口(W) 帮助(H)
ssh://root:*****@192.168.56.101:22
要添加当前会话, 点击左侧的箭头按钮。
1 sxbang x 2 新建会话 (2) x +
Redirecting to /bin/systemctl start mysqld.service
[root@localhost local]# cat /var/log/mysqld.log | grep password
2018-05-07T08:13:57.011240Z 1 [Note] A temporary password is generated for root@localhost: .h((e107k0fL
[root@localhost local]# mysql -uroot -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 3
Server version: 5.7.22

Copyright (c) 2000, 2018, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

8. 输入用户名: `mysql -uroot -p`
9. 输入密码, root@localhost 后面的字符串就是默认密码, 将密码复制后通过鼠标右键粘贴到命令行:
10. 修改两个全局参数:  
`set global validate_password_policy=0;`  
`set global validate_password_length=1;`
11. 设置密码为 123456: `SET PASSWORD = PASSWORD('123456');`

12. 退出 mysql: **exit**

13. 配置对外开放端口: **iptables -I INPUT 1 -p tcp --dport 3306 -j ACCEPT**

14. 重新登陆: **mysql -uroot -p123456**, 若可以进入 mysql 则说明, 密码设置成功

## ● mysql 的使用

1.启动 mysql: **service mysqld start**

2.进入 mysql: **mysql -uroot -p123456;**

3.显示所有数据库: **show databases;**

4.进入数据库: **use [数据库名]**

5.显示数据库表: **show tables;**

6.退出 mysql: **exit**

```

[root@localhost ~]# service mysqld start
Redirecting to /bin/systemctl start mysqld.service
[root@localhost ~]# mysql -uroot -p123456
mysql: [Warning] Using a password on the command line interface can be insecure
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 2
Server version: 5.7.21 MySQL Community Server (GPL)

Copyright (c) 2000, 2018, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases
      -> ;
+-----+
| Database |
+-----+
| information_schema |
| apj |
| mysql |
| performance_schema |
+-----+

mysql> use seckill
Database changed
mysql> show tables;
+-----+
| Tables_in_seckill |
+-----+
| course |
| course_type |
| hibernate_sequence |
| orders |
| user |
+-----+
5 rows in set (0.00 sec)

mysql>

```

Right Ctrl

### 3. nginx 的安装

#### 1. yum install nginx

#### ● nginx 的使用

1.启动 nginx: **service nginx start**

2.关闭 nginx: **service nginx stop**

3.进入 nginx 相关配置文件: **cd /etc/nginx**

4.显示 nginx 目录下中的所有文件: **ls**


## 4.jdk 的安装

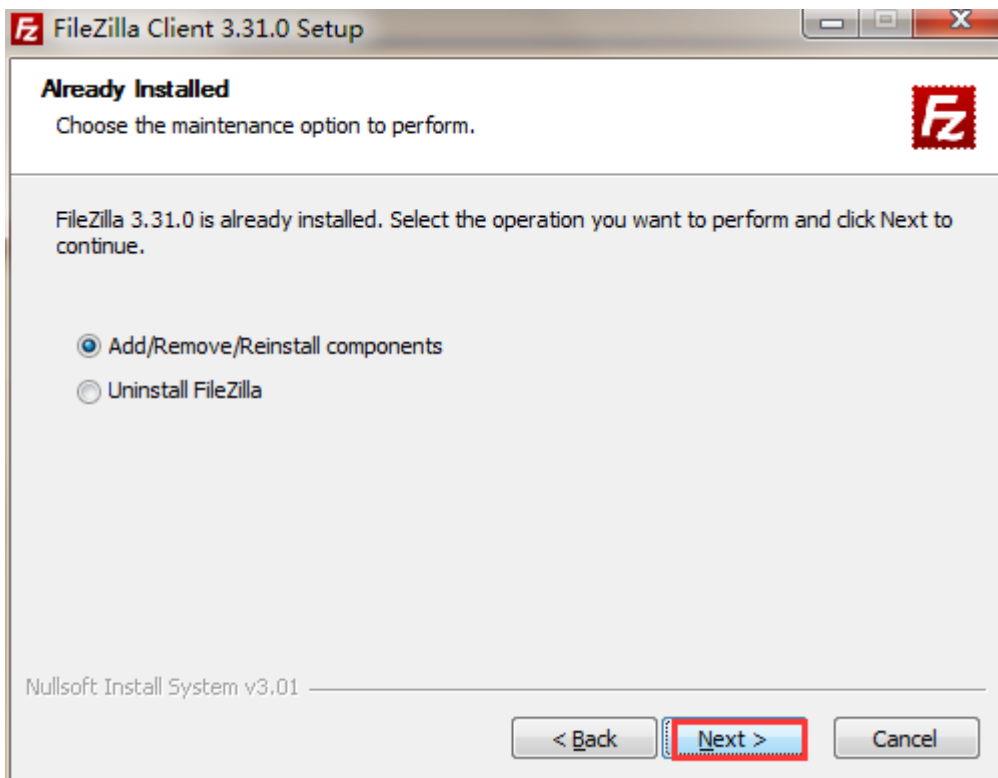
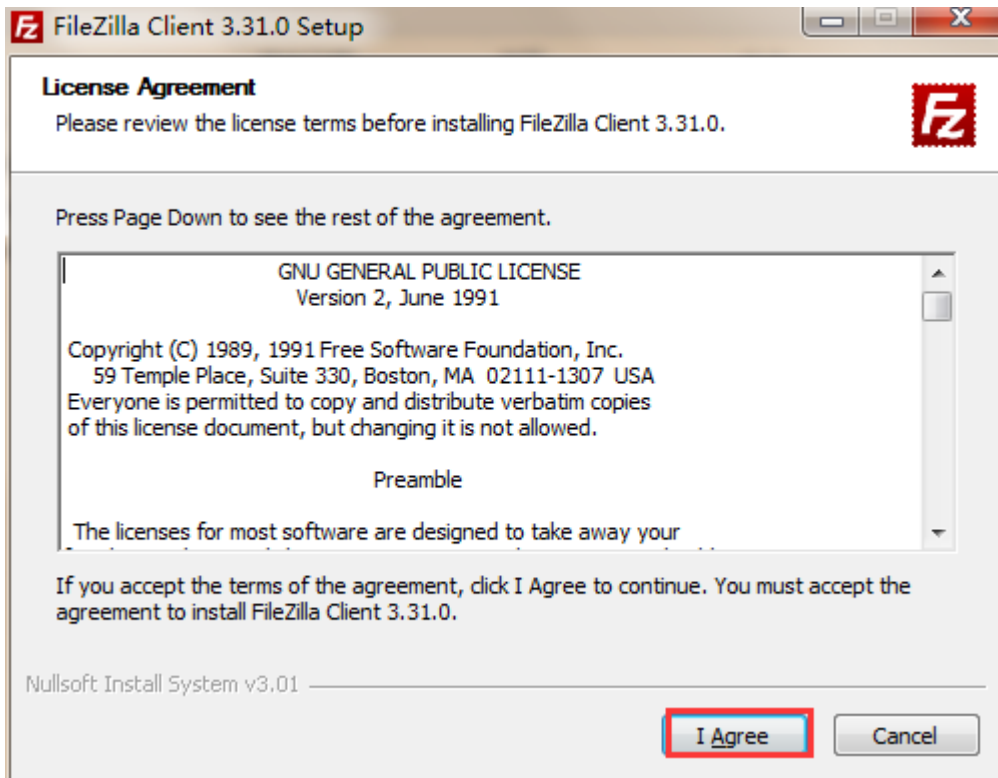
1.到/usr/local 目录: **cd /usr/local**

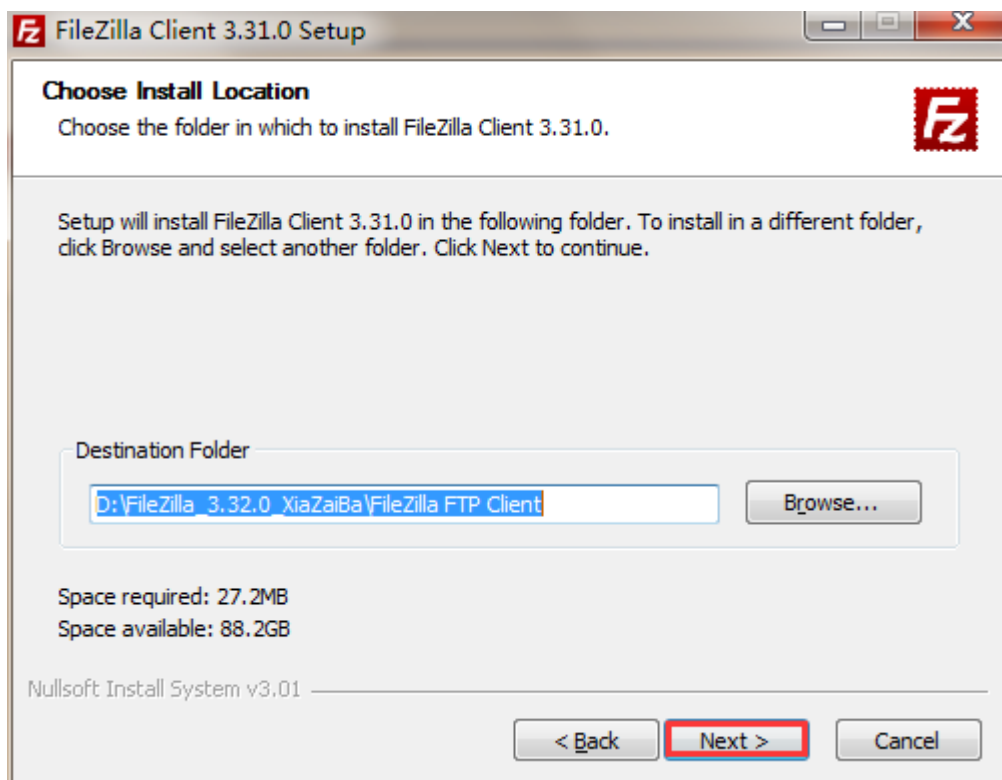
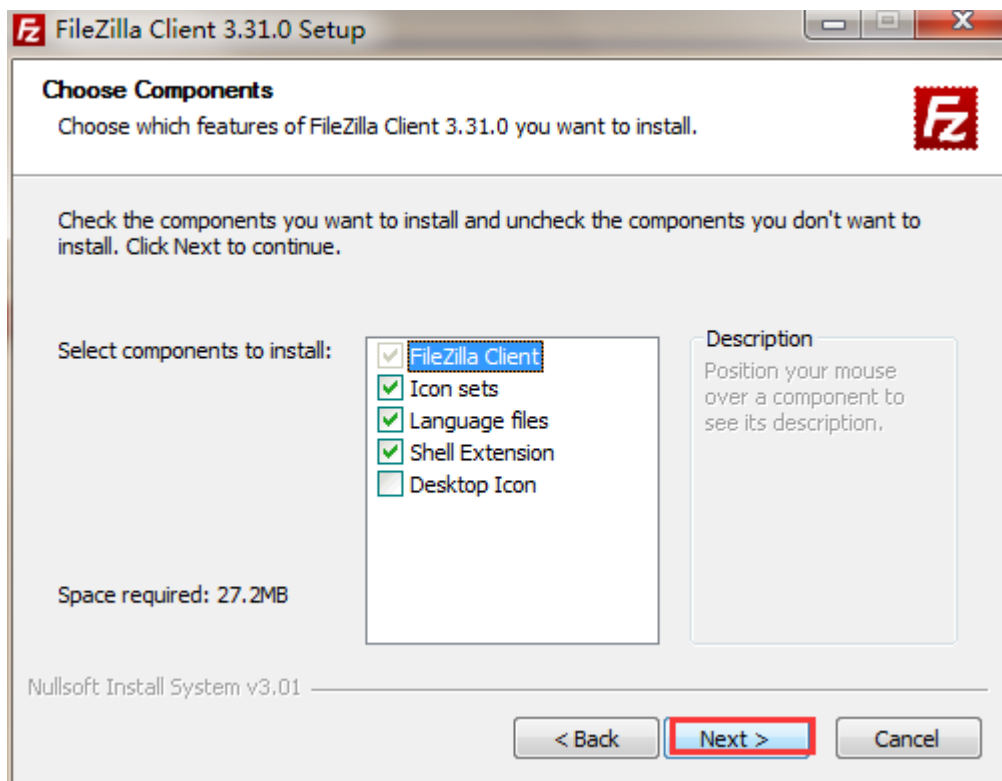
2.创建 java 目录: **mkdir java**

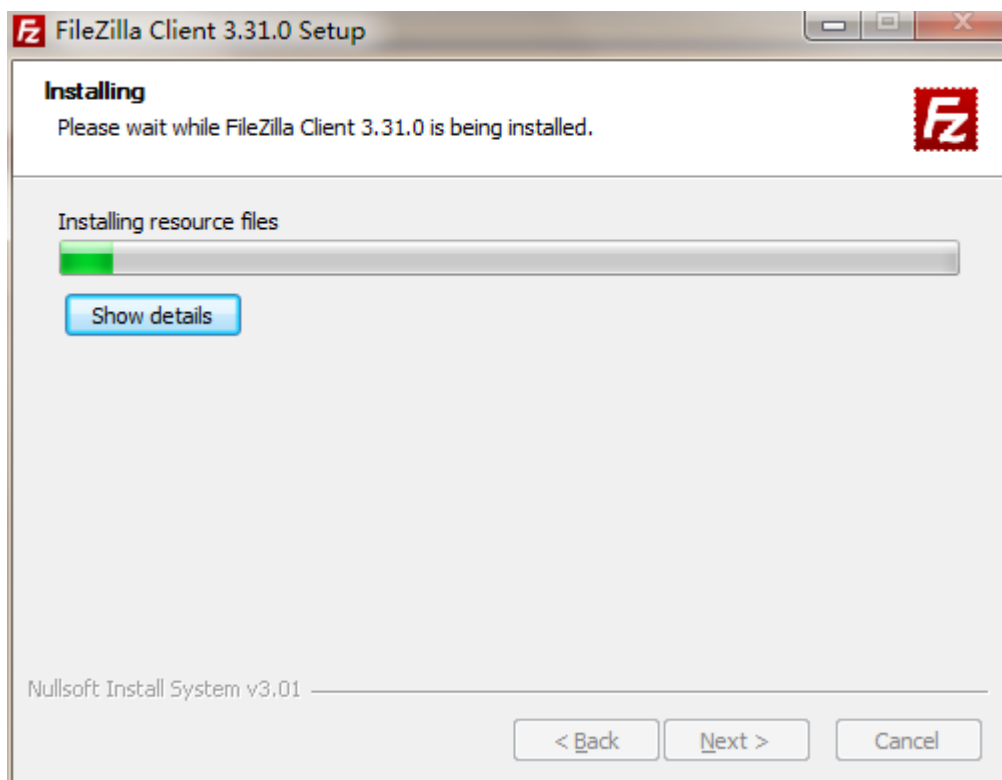
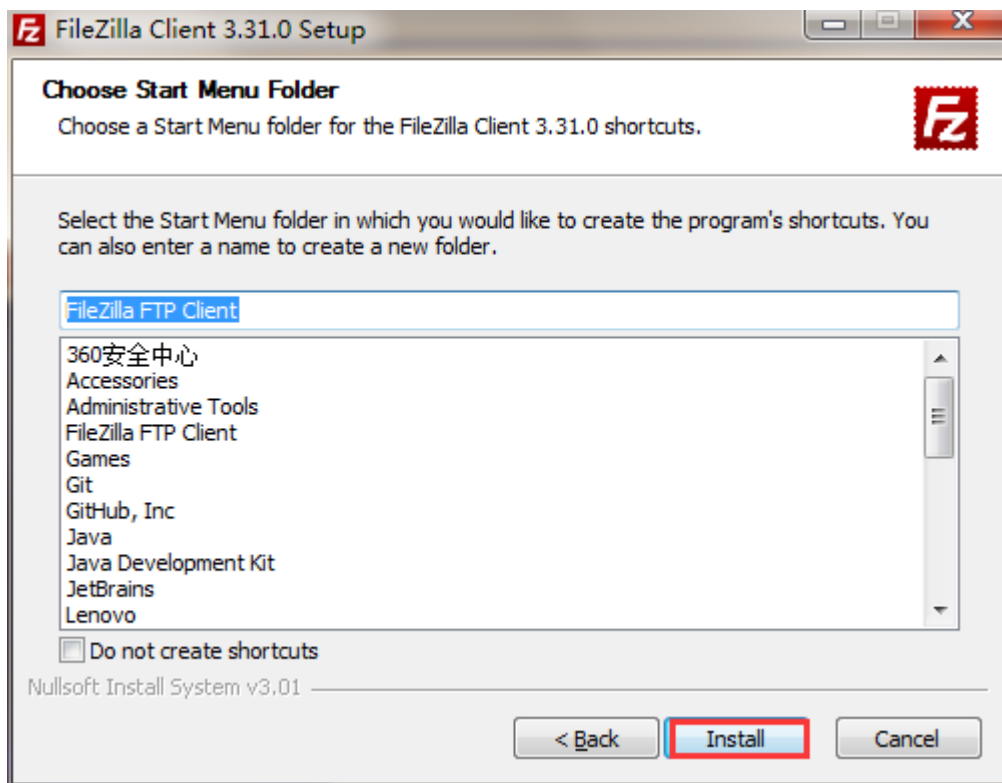
3.安装 FileZilla (此软件可以将电脑本地文件上传到虚拟机)

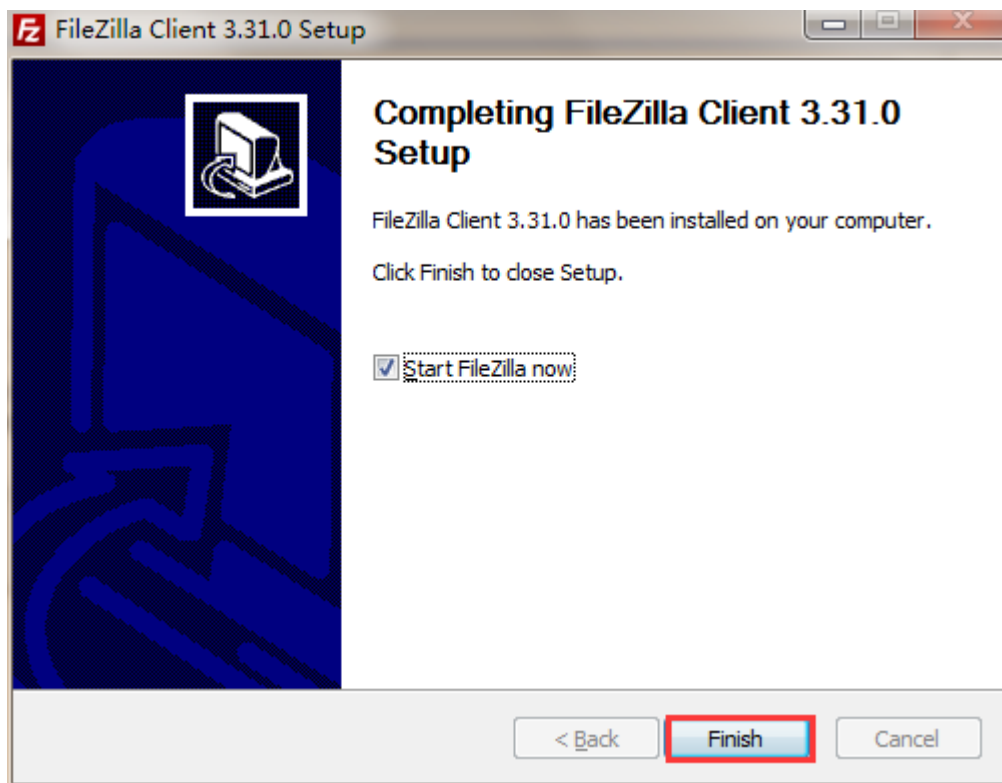
(1).双击图标开始安装

 FileZilla_3.31.0_win64-setup.exe	2018/2/23 15:20	应用程序	7,730 KB
--	-----------------	------	----------

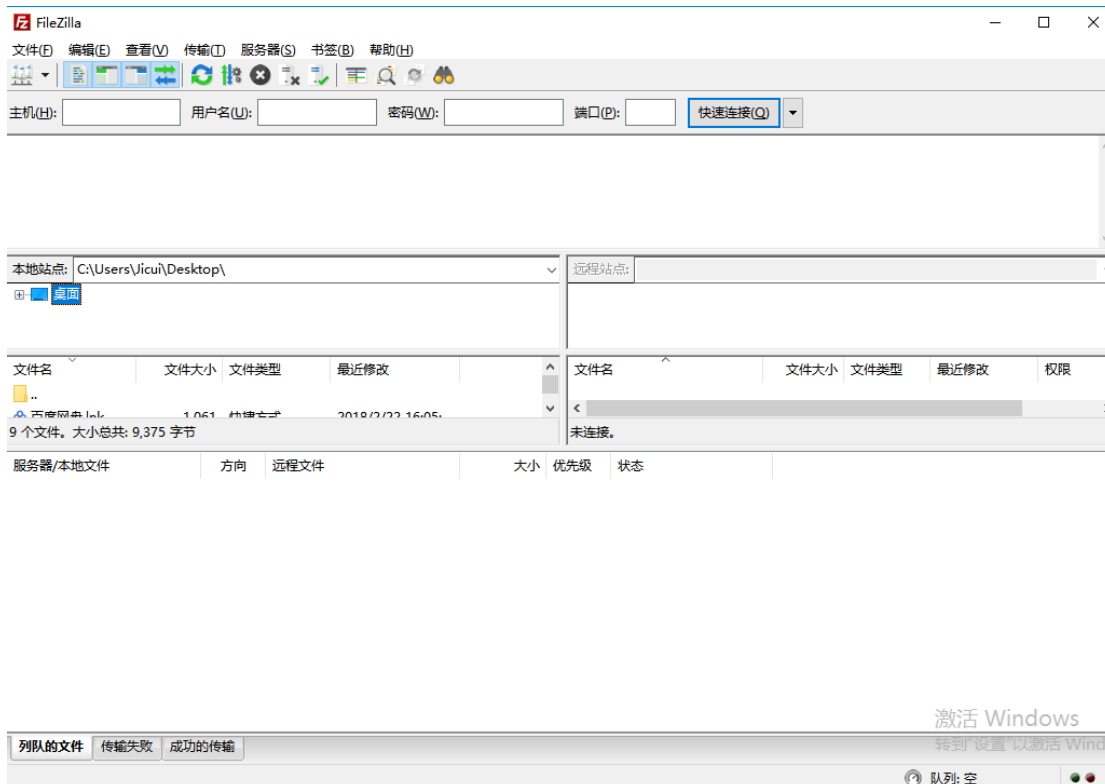






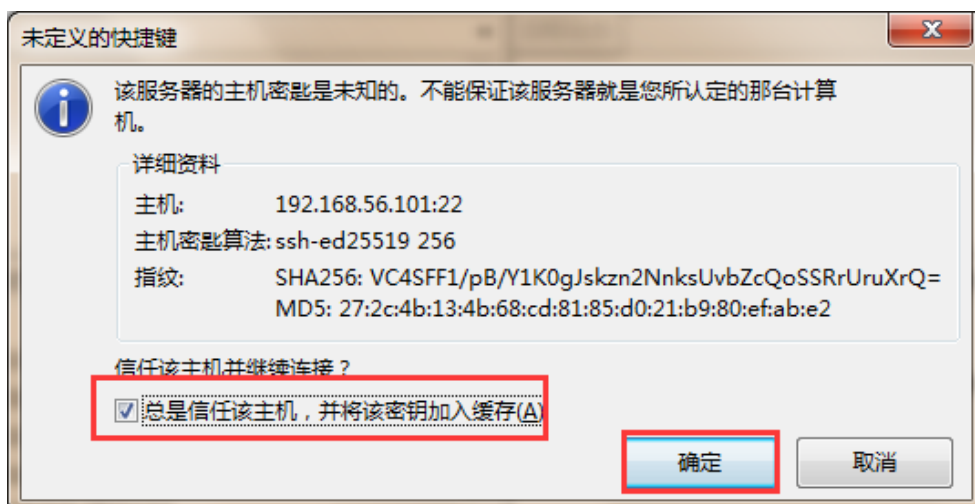
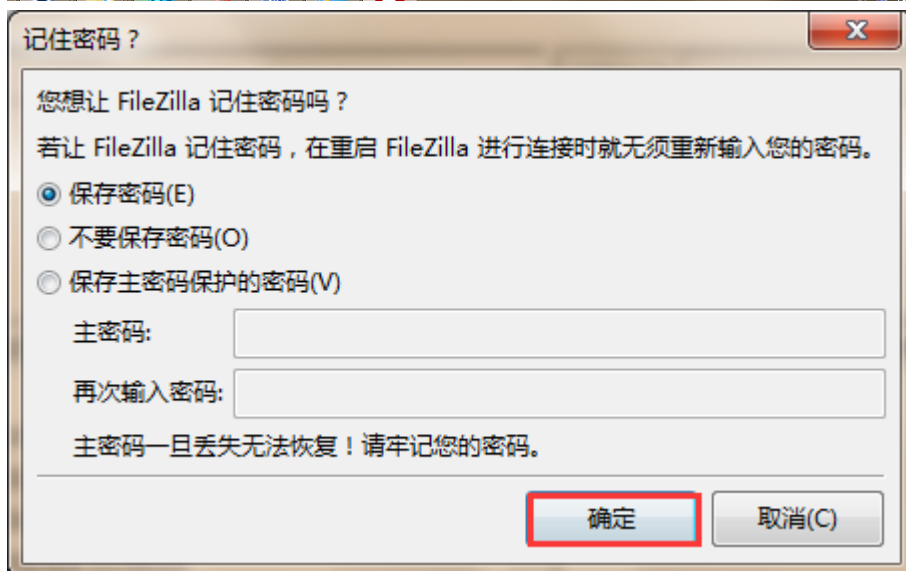
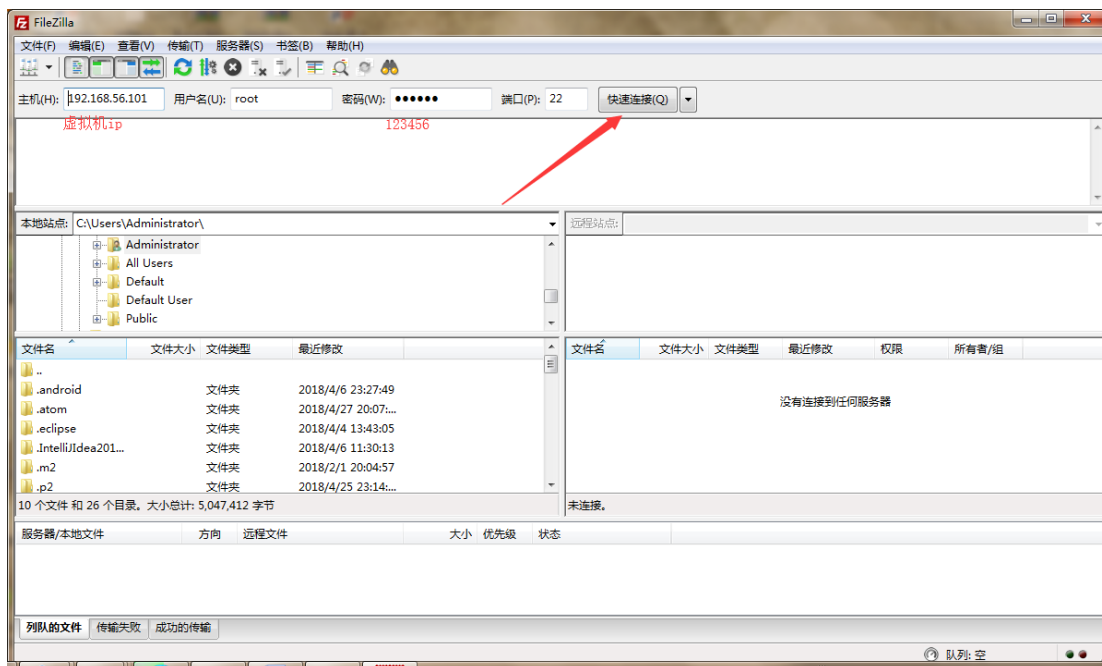


(2)看到此界面则安装成功

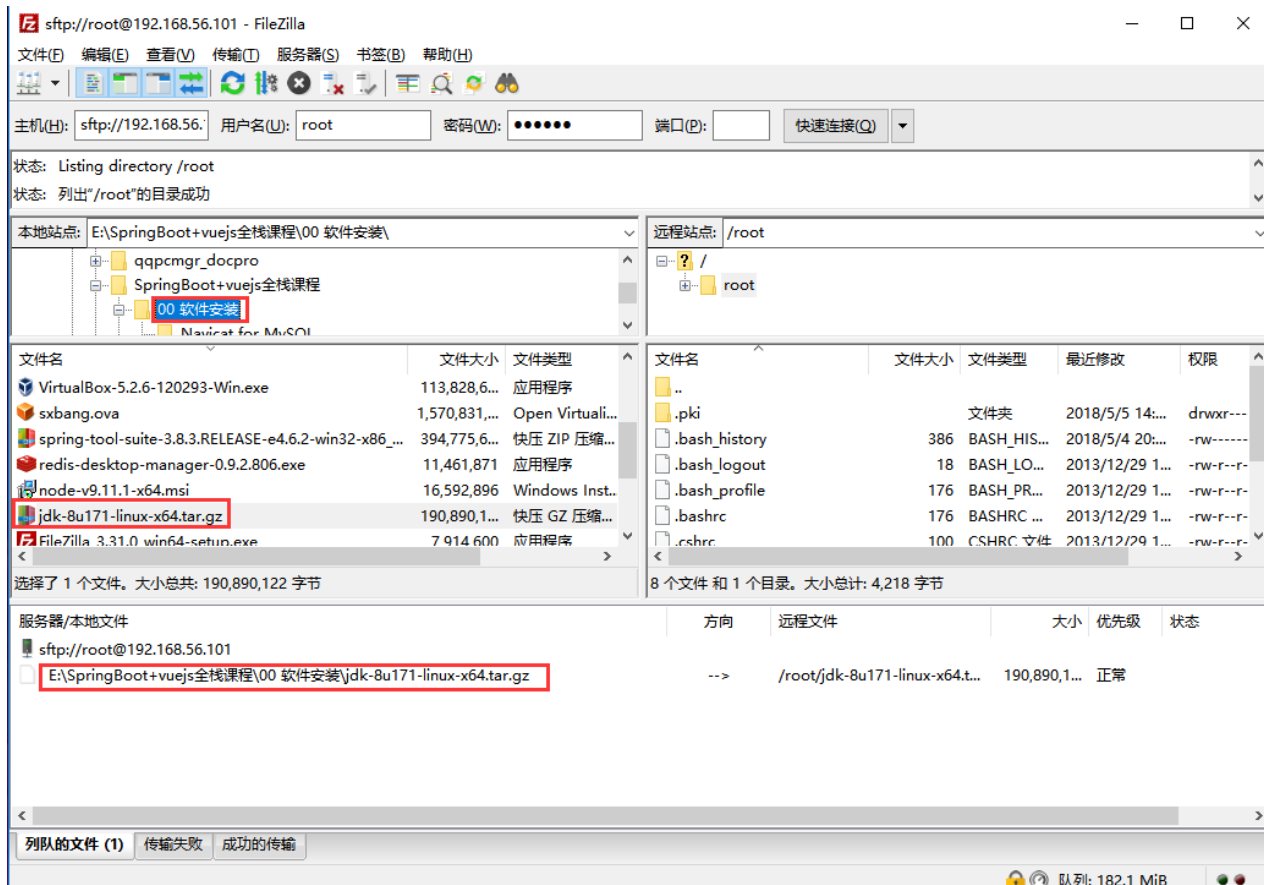


4 使用 FileZilla 上传本地电脑文件到虚拟机中





5.将选中的文件拉到下面的位置，选中文件点鼠标右键，选“处理列队”



传输完成后在虚拟机中 回到根目录 `cd` , 用 `ls` 查看文件, 可以看到 jdk 的压缩包,

```
[root@localhost ~]# ls
anaconda-ks.cfg  jdk-8u171-linux-x64.tar.gz
[root@localhost ~]#
```

4. 将 jdk 移动到 `/usr/local/java` 目录:

```
mv jdk-8u171-linux-x64.tar.gz /usr/local/java/jdk-8u171-linux-x64.tar.gz
```

5. 进入 `/usr/local/java` 目录 `cd /usr/local/java`

6. 安装解压命令解压: `yum install tar`

7. 解压文件 `tar -zxvf jdk-8u171-linux-x64.tar.gz`

8. 重命名 `mv jdk1.8.0_171 jdk`

9. : 配置环境变量: 使用 `vim /etc/profile` 编辑 `profile` 文件

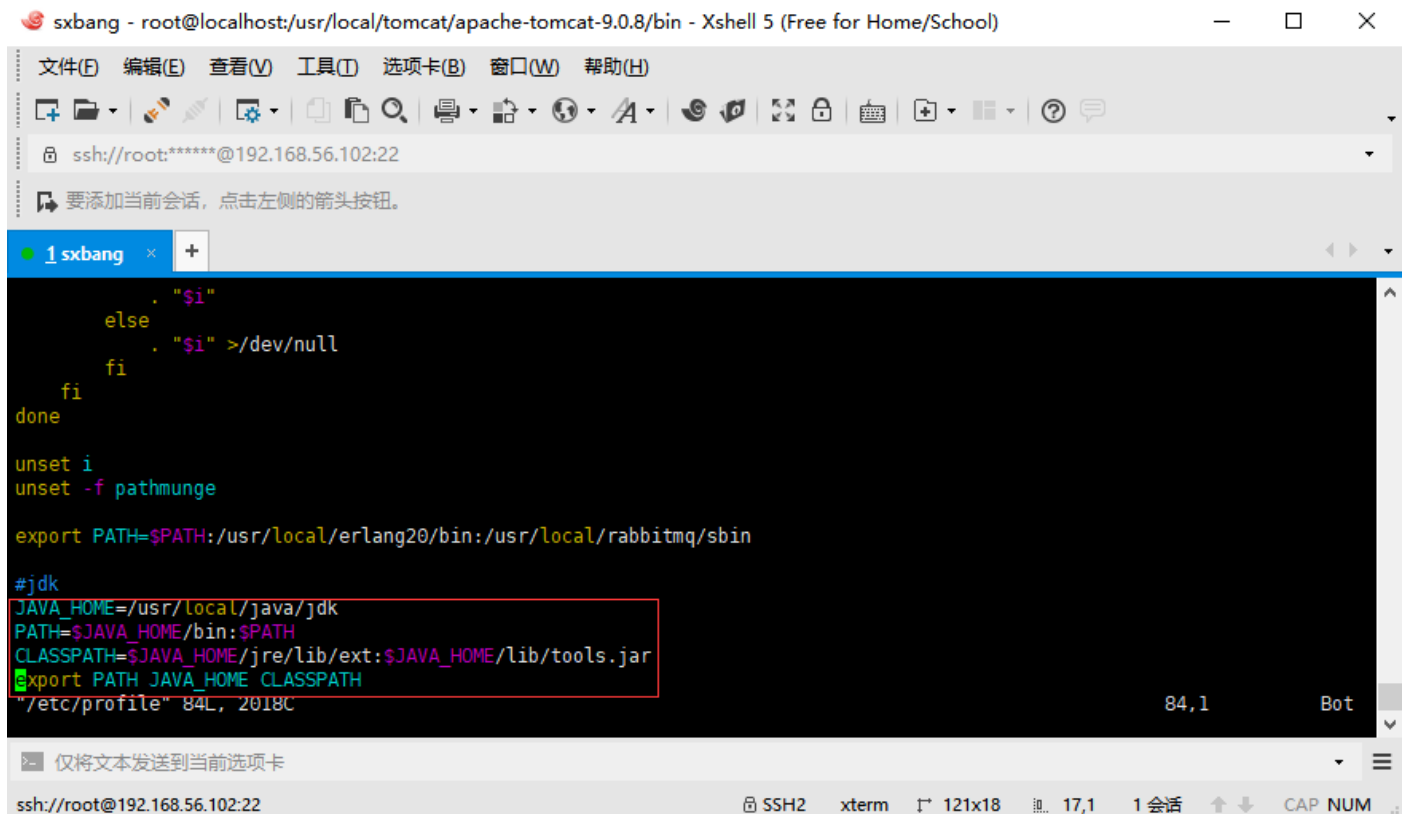
10.在 `/etc/profile` 底部加入如下内容:

```
JAVA_HOME=/usr/local/java/jdk
```

```
PATH=$JAVA_HOME/bin:$PATH
```

```
CLASSPATH=$JAVA_HOME/jre/lib/ext:$JAVA_HOME/lib/tools.jar
```

export PATH JAVA\_HOME CLASSPATH



The screenshot shows an Xshell 5 terminal window titled 'sxbang - root@localhost:/usr/local/tomcat/apache-tomcat-9.0.8/bin - Xshell 5 (Free for Home/School)'. The terminal displays a series of shell configuration commands. A red rectangle highlights the following lines:

```
else  
    . "$i"  
fi  
done  
unset i  
unset -f pathmunge  
export PATH=$PATH:/usr/local/erlang20/bin:/usr/local/rabbitmq/sbin  
#jdk  
JAVA_HOME=/usr/local/java/jdk  
PATH=$JAVA_HOME/bin:$PATH  
CLASSPATH=$JAVA_HOME/jre/lib/ext:$JAVA_HOME/lib/tools.jar  
export PATH JAVA_HOME CLASSPATH
```

Below the highlighted code, the terminal shows the command prompt and the file path `/etc/profile`. The status bar at the bottom indicates the session is 'SSH2' on 'xterm' with a size of '121x18' and a zoom level of '17,1'.

11.使用 **source /etc/profile** 让 profile 文件立即生效。

## 5.tomcat 的安装

1.进入/usr/local/ 目录 **cd /usr/local/**

2.下载 tmocat:

**wget http://mirrors.shu.edu.cn/apache/tomcat/tomcat-9/v9.0.8/bin/apache-tomcat-9.0.8.tar.gz**

3.解压: **tar -zxvf apache-tomcat-9.0.8.tar.gz**

4.重命名: **mv apache-tomcat-9.0.8 tomcat**

5.进入到 /etc/init.d 目录中: **cd /etc/init.d**

6.创建 tomcat 服务配置文件: **vi tomcat**

7.将如下代码加入写入到 tomcat 配置文件中:

```
#idea - tomcat config start - 2016-05-01
```

```
#!/bin/bash
```

```
# description: Tomcat Start Stop Restart
```

```
# processname: tomcat

# chkconfig: 2345 20 80

JAVA_HOME=/usr/local/java/jdk

export JAVA_HOME

PATH=$JAVA_HOME/bin:$PATH

#idea - tomcat config start - 2016-05-01

#!/bin/bash

# description: Tomcat Start Stop Restart

# processname: tomcat

# chkconfig: 2345 20 80

JAVA_HOME=/usr/local/java/jdk

export JAVA_HOME

PATH=$JAVA_HOME/bin:$PATH

export PATH

CATALINA_HOME=/usr/local/tomcat/

case $1 in

start)

    sh $CATALINA_HOME/bin/startup.sh

;;

stop)

    sh $CATALINA_HOME/bin/shutdown.sh

;;

restart)

    sh $CATALINA_HOME/bin/shutdown.sh
```

```
sh $CATALINA_HOME/bin/startup.sh
```

```
::
```

```
esac
```

```
exit 0
```

```
#chmod 755 tomcat
```

```
#chkconfig --add tomcat
```

```
#chkconfig --level 2345 tomcat on
```

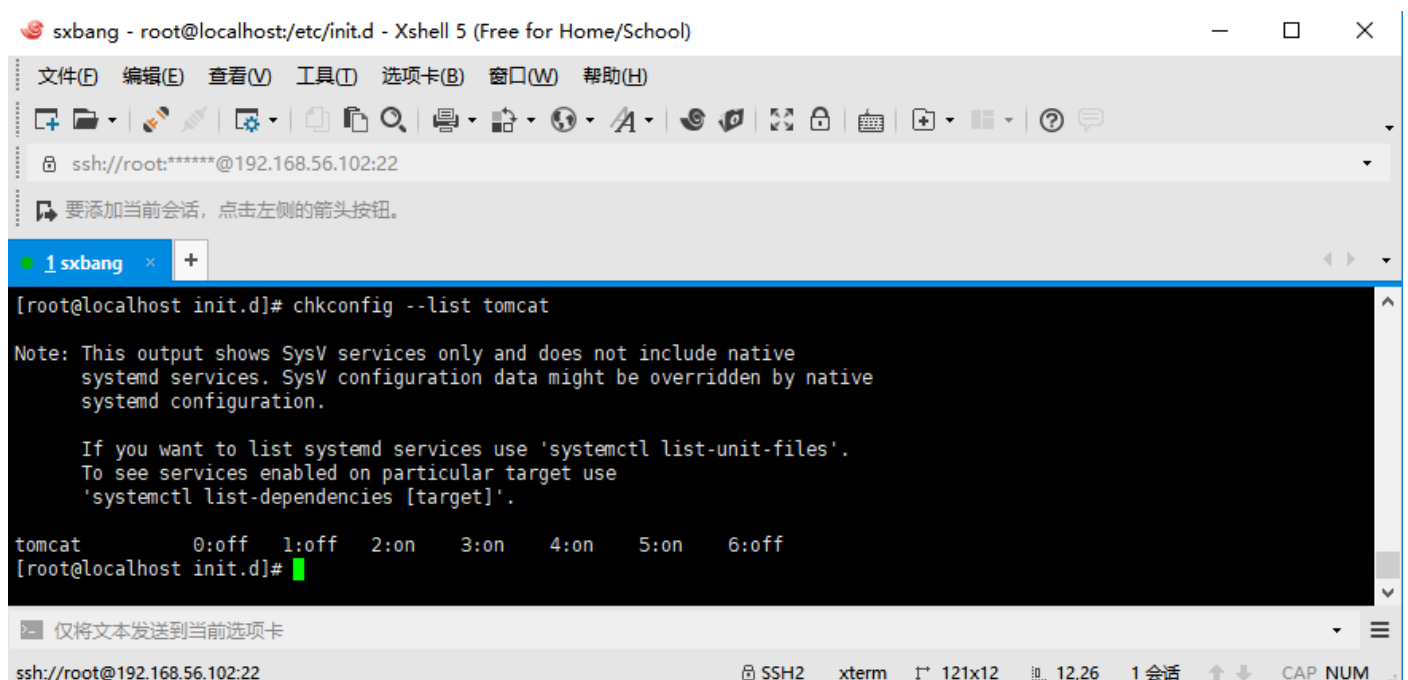
8. 为 tomcat 分配可执行权限: **chmod +x tomcat**

9.添加 tomcat 为系统服务: **chkconfig --add tomcat**

10.**chkconfig --list tomcat**

打印如下信息:

则表明已将 tomcat 设置为系统服务, 2、3、4、5 都为 on 表示可随系统自动启动;



```
sxbang - root@localhost:/etc/init.d - Xshell 5 (Free for Home/School)
文件(F) 编辑(E) 查看(V) 工具(T) 选项卡(B) 窗口(W) 帮助(H)
ssh://root:*****@192.168.56.102:22
要添加当前会话, 点击左侧的箭头按钮。
1 sxbang x +
[root@localhost init.d]# chkconfig --list tomcat

Note: This output shows SysV services only and does not include native
systemd services. SysV configuration data might be overridden by native
systemd configuration.

If you want to list systemd services use 'systemctl list-unit-files'.
To see services enabled on particular target use
'systemctl list-dependencies [target]'.

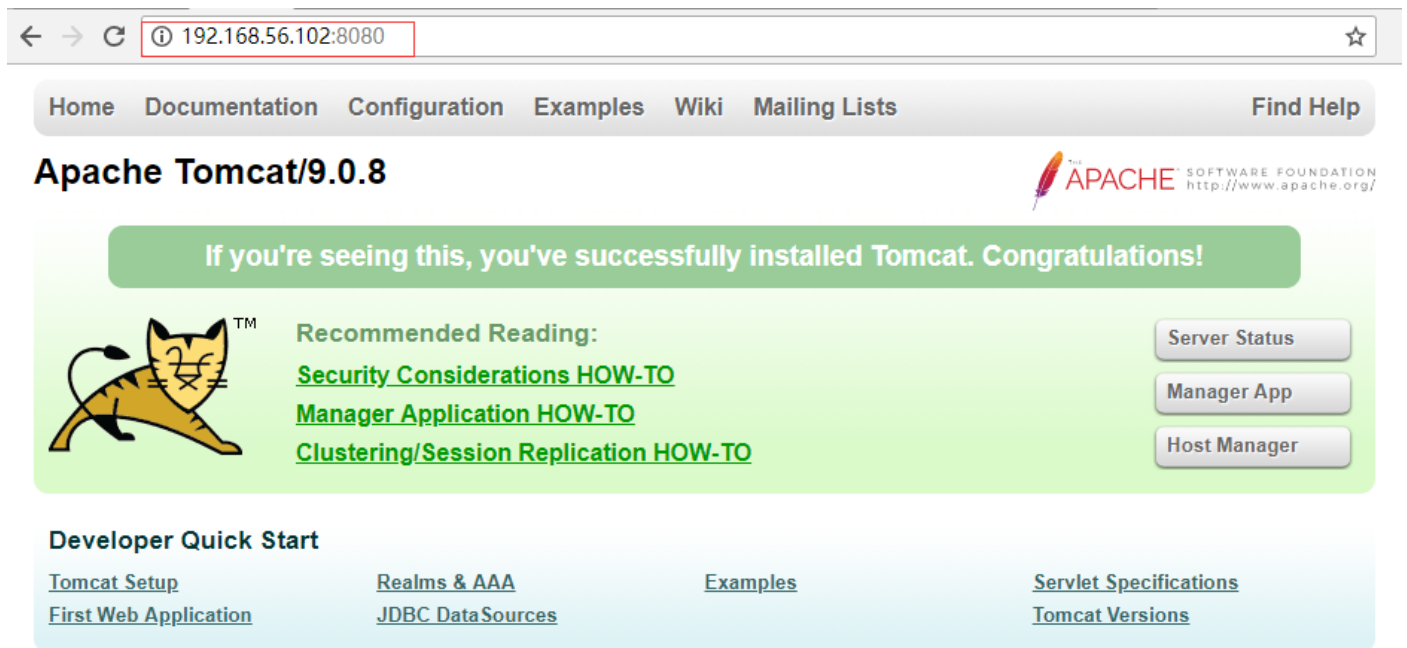
tomcat          0:off  1:off  2:on   3:on   4:on   5:on   6:off
[root@localhost init.d]#
```

11..配置对外开放端口: **iptables -I INPUT 1 -p tcp --dport 8080 -j ACCEPT**

## ● tomcat 的使用

1 .启动 tomcat: **service tomcat start**

2. 打开浏览器输入: [IP 地址]:8080

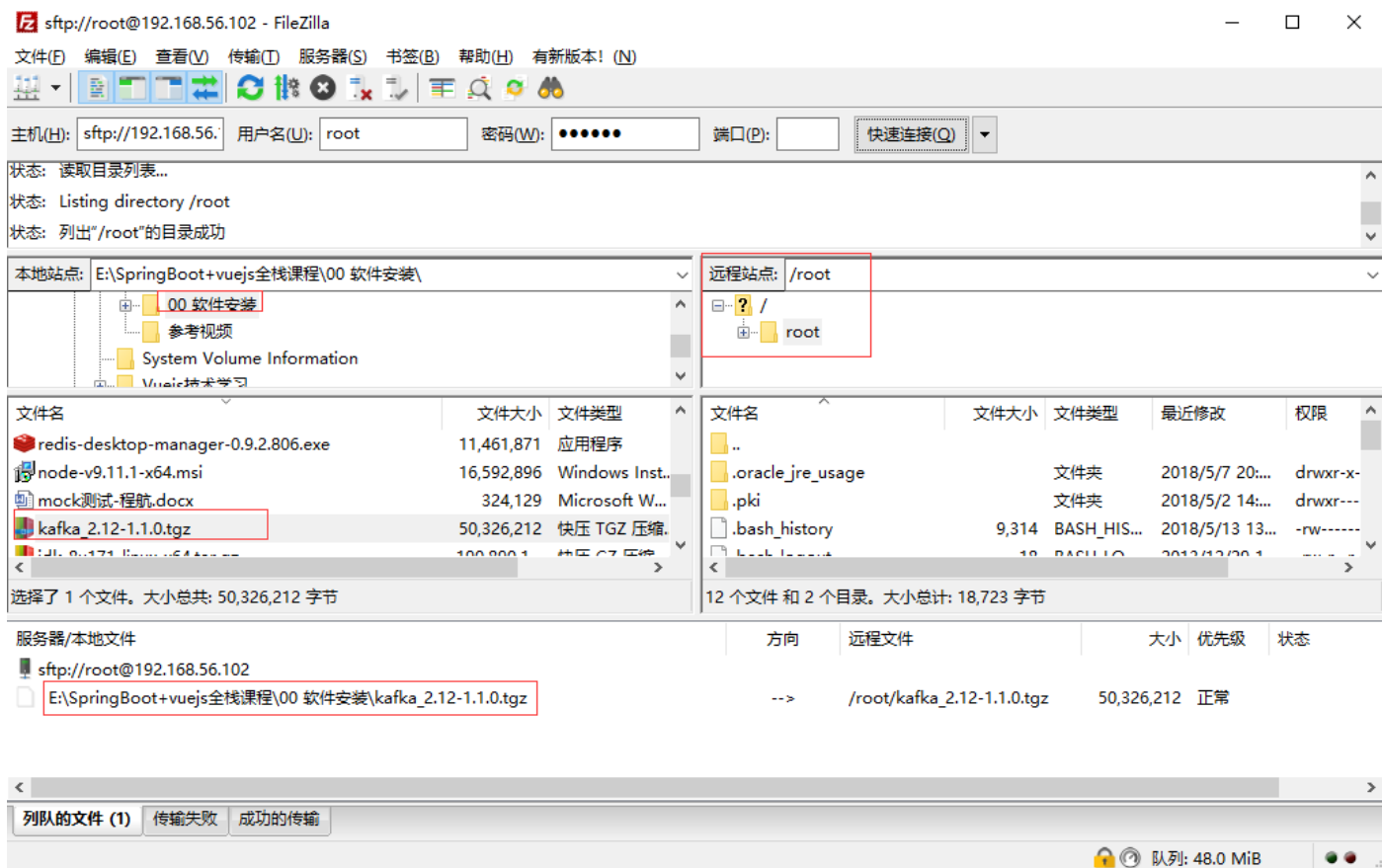


3.关闭 tomcat: service tomcat stop

## 6.kafka 的安装

1) 使用 FileZilla 上传压缩包到虚拟机中

(也可以用 `wget http://apache.fayea.com/kafka/1.1.0/kafka_2.12-1.1.0.tgz` 命令在/usr/local/路径下直接下载压缩包)

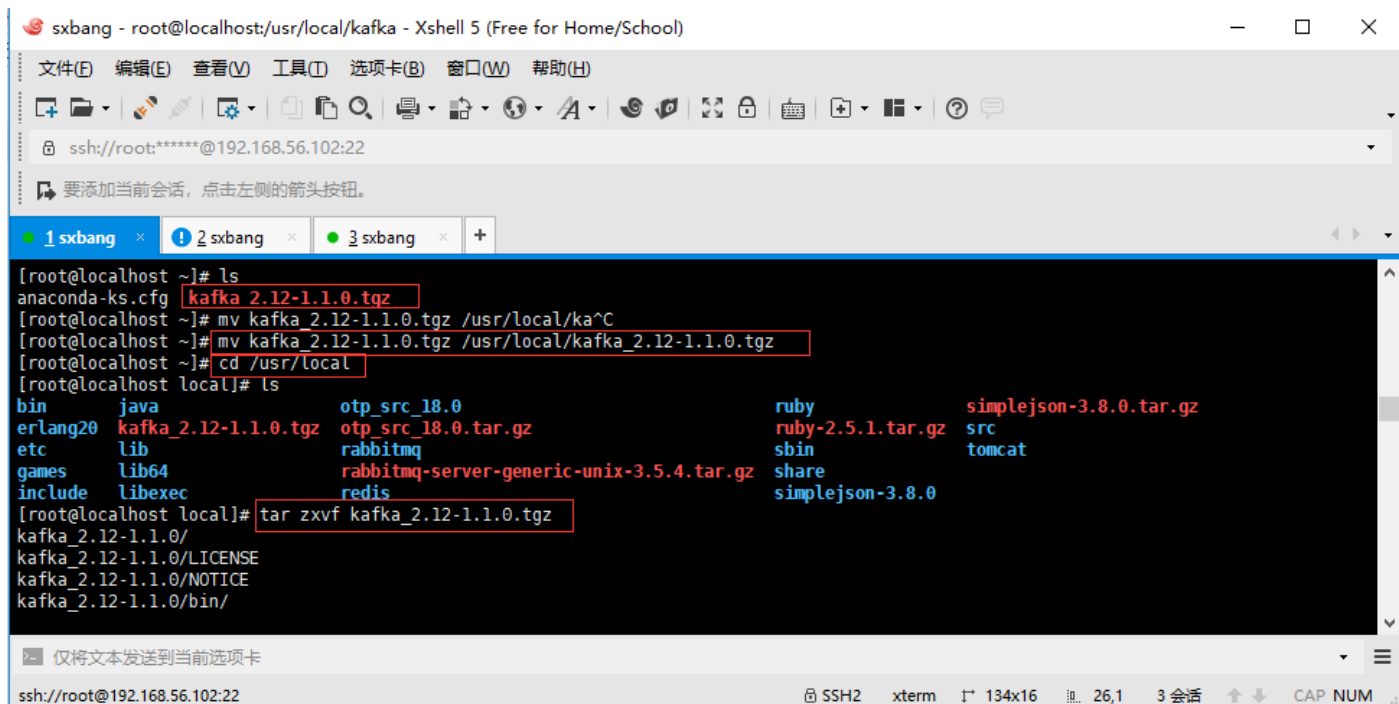


2) 将压缩文件移动到/usr/local/目录: `mv kafka_2.12-1.1.0.tgz /usr/local/kafka_2.12-1.1.0.tgz`

3) 进入 /usr/local/目录: `cd /usr/local`

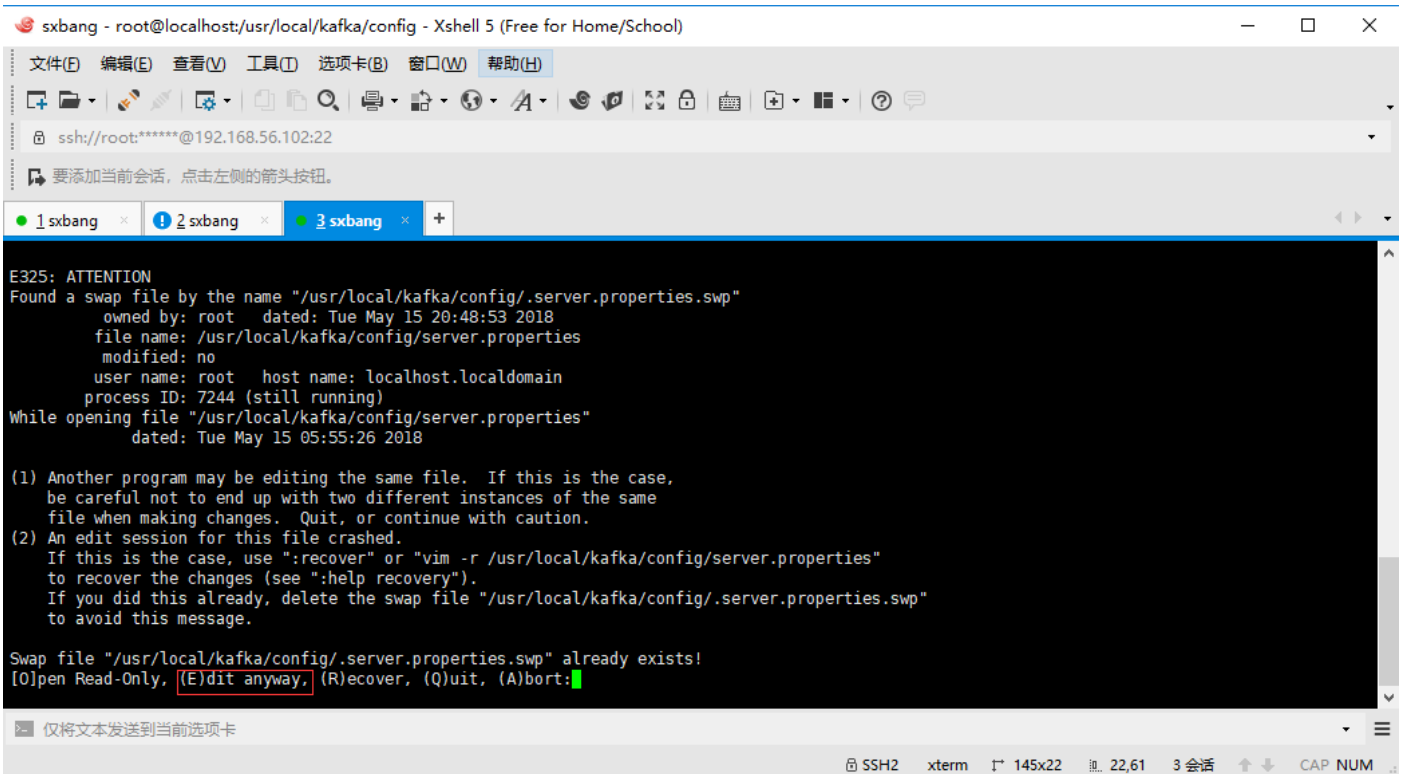
4) 解压: `tar zxvf kafka_2.12-1.1.0.tgz`

5) 重命名: `mv kafka_2.12-1.1.0 kafka`



6) 编辑 server.properties 文件: `vim /usr/local/kafka/config/server.properties`

(如果出现以下页面则按“e”键进入，没有出现此页面则忽略这一步骤)

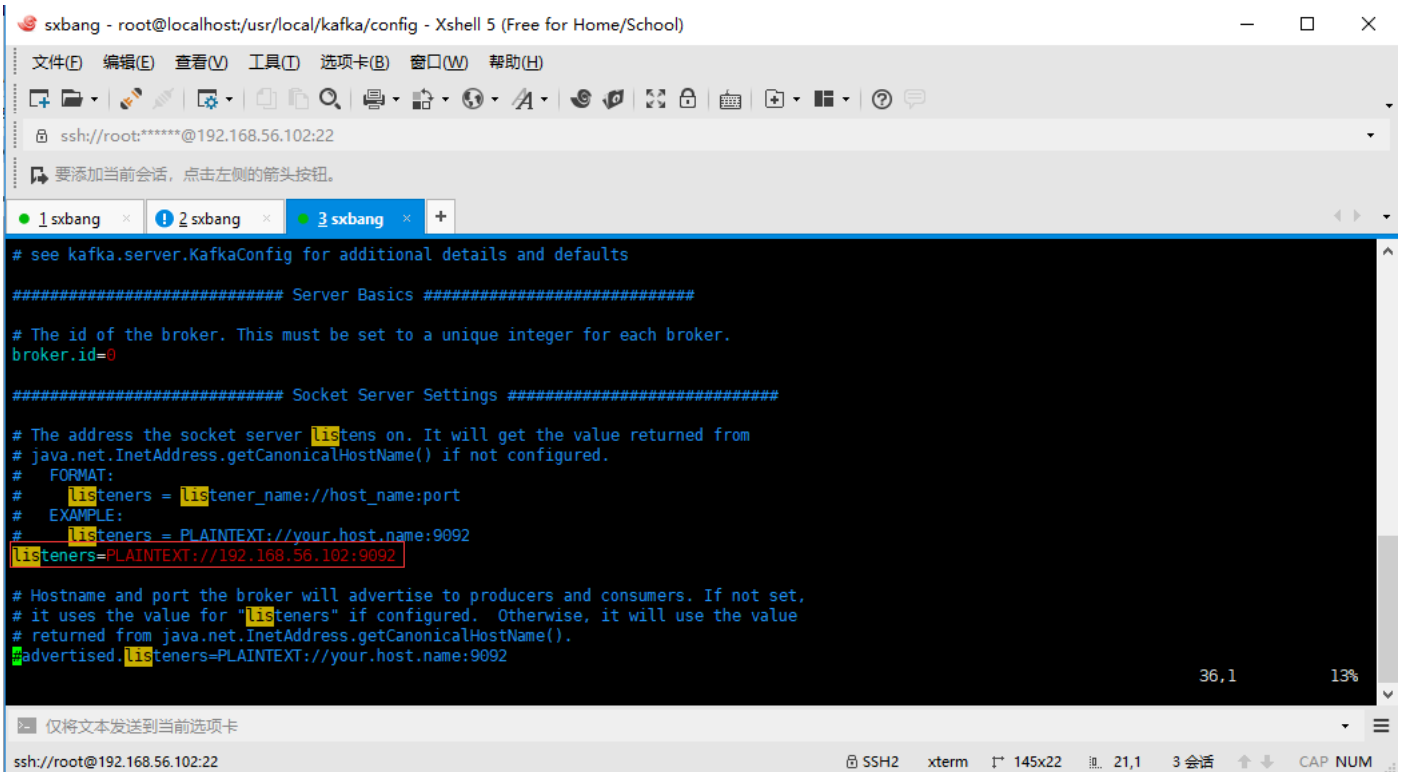


The screenshot shows an Xshell terminal window titled "sxbang - root@localhost:/usr/local/kafka/config - Xshell 5 (Free for Home/School)". The terminal displays a warning message from Vim about a swap file named "/usr/local/kafka/config/.server.properties.swp". The message includes details about the file's ownership (root), creation date (Tue May 15 20:48:53 2018), and location. It also provides instructions on how to handle the swap file, such as using ":recover" or ":help recovery" to recover changes. The prompt at the bottom is "[O]pen Read-Only, [E]dit anyway, [R]ecover, [Q]uit, [A]bort:". The terminal interface includes a menu bar with options like "文件(F)", "编辑(E)", "查看(V)", "工具(T)", "选项卡(B)", "窗口(W)", and "帮助(H)". The status bar at the bottom shows "SSH2", "xterm", "145x22", "22,61", "3 会话", and "CAP NUM".

7)在 server.properties 中加入以下代码:

**listeners=PLAINTEXT://192.168.56.102:9092**

(按 i 进入编辑模式，按 Esc 退出编辑模式再输入 “ : wq ” 保存并退出)



The screenshot shows the same Xshell terminal window, now displaying the contents of the "server.properties" file. The file includes comments and configuration values for Kafka. The line "listeners=PLAINTEXT://192.168.56.102:9092" is highlighted with a red box. The terminal also shows the "broker.id=0" configuration. The status bar at the bottom shows "SSH2", "xterm", "145x22", "21,1", "3 会话", and "CAP NUM".

8) 配置对外开放端口: **iptables -I INPUT 1 -p tcp --dport 9092 -j ACCEPT**



## ● kafka 的使用

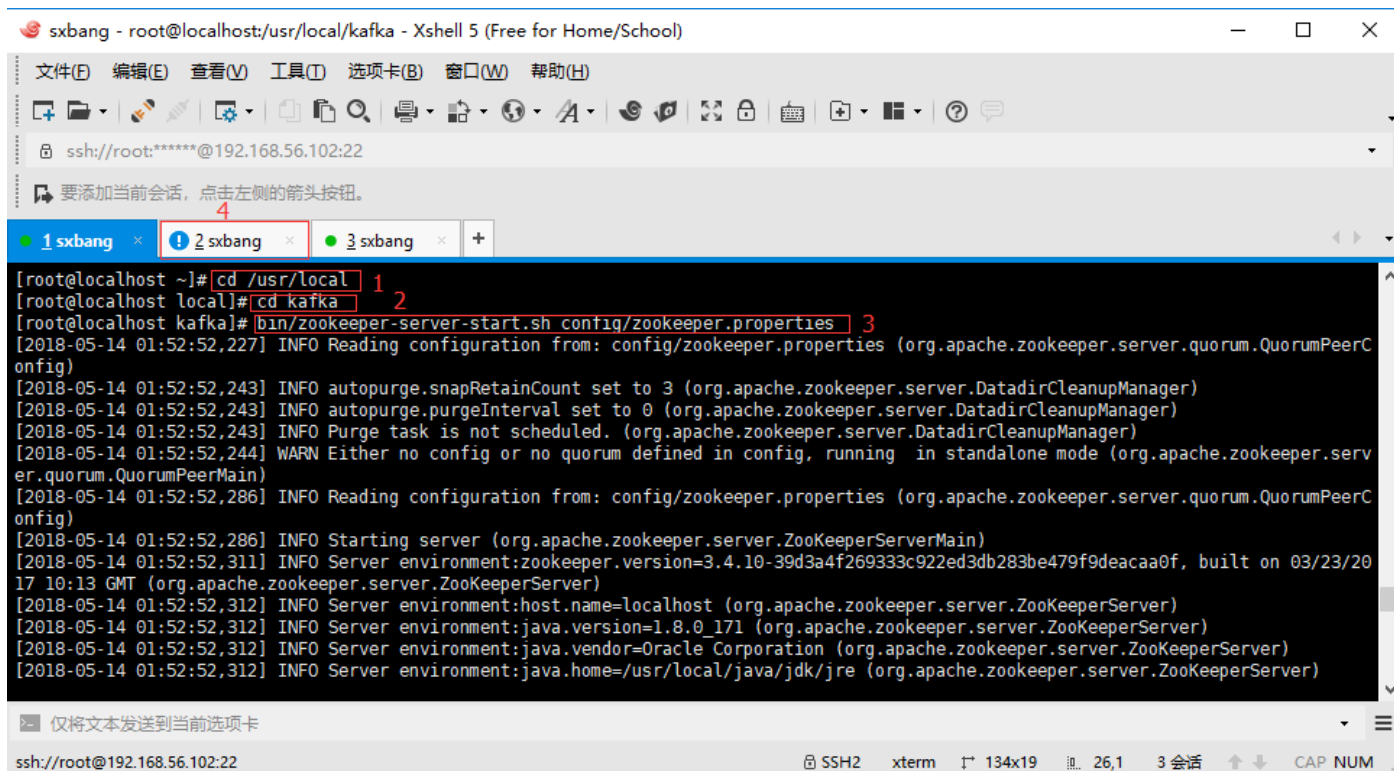
### 1.启动服务

(运行 kafka 需要使用 Zookeeper, 所以需要先启动一个 Zookeeper 服务器, 可以使用 kafka 自带打包和配置好的 Zookeeper)

#### 1.进入 kafka 目录: `cd /usr/local/kafka`

#### 2.启动 Zookeeper 服务器: `bin/zookeeper-server-start.sh config/zookeeper.properties`

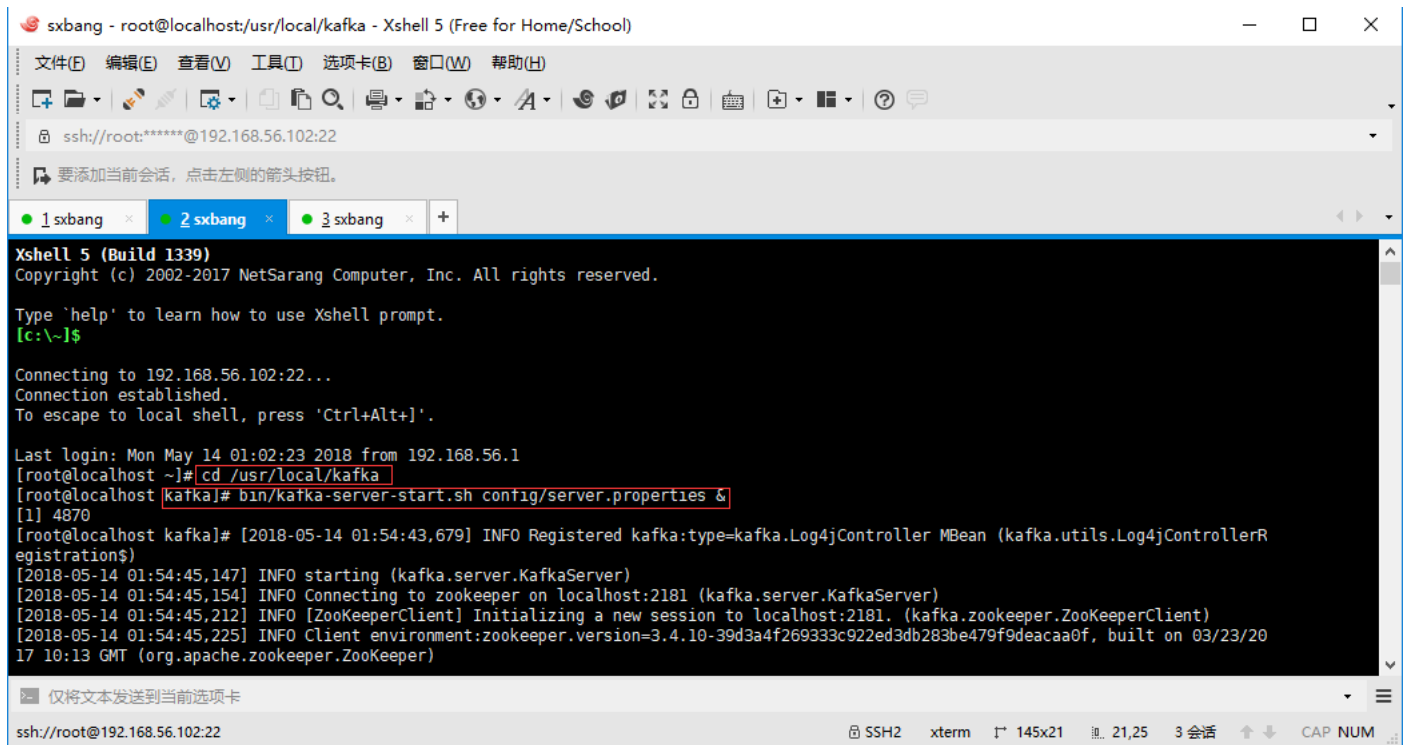
#### 3.打开一个新窗口



```
sxbang - root@localhost:usr/local/kafka - Xshell 5 (Free for Home/School)
文件(F) 编辑(E) 查看(V) 工具(T) 选项卡(O) 窗口(W) 帮助(H)
ssh://root:*****@192.168.56.102:22
要添加当前会话, 点击左侧的箭头按钮。
1 sxbang x 2 sxbang x 3 sxbang x +
[root@localhost ~]# cd /usr/local 1
[root@localhost local]# cd kafka 2
[root@localhost kafka]# bin/zookeeper-server-start.sh config/zookeeper.properties 3
[2018-05-14 01:52:52,227] INFO Reading configuration from: config/zookeeper.properties (org.apache.zookeeper.server.quorum.QuorumPeerC
onfig)
[2018-05-14 01:52:52,243] INFO autopurge.snapRetainCount set to 3 (org.apache.zookeeper.server.DataDirCleanupManager)
[2018-05-14 01:52:52,243] INFO autopurge.purgeInterval set to 0 (org.apache.zookeeper.server.DataDirCleanupManager)
[2018-05-14 01:52:52,243] INFO Purge task is not scheduled. (org.apache.zookeeper.server.DataDirCleanupManager)
[2018-05-14 01:52:52,244] WARN Either no config or no quorum defined in config, running in standalone mode (org.apache.zookeeper.serv
er.quorum.QuorumPeerMain)
[2018-05-14 01:52:52,286] INFO Reading configuration from: config/zookeeper.properties (org.apache.zookeeper.server.quorum.QuorumPeerC
onfig)
[2018-05-14 01:52:52,286] INFO Starting server (org.apache.zookeeper.server.ZooKeeperServerMain)
[2018-05-14 01:52:52,311] INFO Server environment:zookeeper.version=3.4.10-39d3a4f269333c922ed3db283be479f9deacaa0f, built on 03/23/20
17 10:13 GMT (org.apache.zookeeper.server.ZooKeeperServer)
[2018-05-14 01:52:52,312] INFO Server environment:host.name=localhost (org.apache.zookeeper.server.ZooKeeperServer)
[2018-05-14 01:52:52,312] INFO Server environment:java.version=1.8.0_171 (org.apache.zookeeper.server.ZooKeeperServer)
[2018-05-14 01:52:52,312] INFO Server environment:java.vendor=Oracle Corporation (org.apache.zookeeper.server.ZooKeeperServer)
[2018-05-14 01:52:52,312] INFO Server environment:java.home=/usr/local/java/jdk/jre (org.apache.zookeeper.server.ZooKeeperServer)
仅将文本发送到当前选项卡
ssh://root@192.168.56.102:22 SSH2 xterm 134x19 26,1 3 会话 CAP NUM
```

#### 4.进入 /usr/local/kafka/目录 `cd /usr/local/kafka` (启动 kafka、zookeeper 服务都要在此目录)

#### 5.启动 kafka 服务: `bin/kafka-server-start.sh config/server.properties &`



The screenshot shows an Xshell 5 terminal window with the title 'sxbang - root@localhost:/usr/local/kafka - Xshell 5 (Free for Home/School)'. The terminal displays the following content:

```
Xshell 5 (Build 1339)
Copyright (c) 2002-2017 NetSarang Computer, Inc. All rights reserved.

Type 'help' to learn how to use Xshell prompt.
[c:\~]$

Connecting to 192.168.56.102:22...
Connection established.
To escape to local shell, press 'Ctrl+Alt+J'.

Last login: Mon May 14 01:02:23 2018 from 192.168.56.1
[root@localhost ~]# cd /usr/local/kafka
[root@localhost kafka]# bin/kafka-server-start.sh config/server.properties &
[1] 4870
[root@localhost kafka]# [2018-05-14 01:54:43,679] INFO Registered kafka:type=kafka.Log4jController MBean (kafka.utils.Log4jControllerR
egistration$)
[2018-05-14 01:54:45,147] INFO starting (kafka.server.KafkaServer)
[2018-05-14 01:54:45,154] INFO Connecting to zookeeper on localhost:2181 (kafka.server.KafkaServer)
[2018-05-14 01:54:45,212] INFO [ZooKeeperClient] Initializing a new session to localhost:2181. (kafka.zookeeper.ZooKeeperClient)
[2018-05-14 01:54:45,225] INFO Client environment:zookeeper.version=3.4.10-39d3a4f269333c922ed3db283be479f9deacaa0f, built on 03/23/20
17 10:13 GMT (org.apache.zookeeper.ZooKeeper)
```

6.打开一个新窗口，进入/usr/local/kafka 目录: **cd /usr/local/kafka**

7.创建一个名为“test”的 Topic，只有一个分区和一个备份:

**bin/kafka-topics.sh --create --zookeeper localhost:2181 --replication-factor 1 --partitions 1 --topic test**

通过以下命令查看已创建的 topic 信息:

**bin/kafka-topics.sh --list --zookeeper localhost:2181**

8.发送消息:

**bin/kafka-console-producer.sh --broker-list localhost:9092 --topic test**

9.消费消息:

**bin/kafka-console-consumer.sh --zookeeper localhost:2181 --topic test --from-beginning**

```
sxbang - root@localhost:/usr/local/kafka - Xshell 5 (Free for Home/School)
文件(F) 编辑(E) 查看(V) 工具(T) 选项卡(B) 窗口(W) 帮助(H)
ssh://root:*****@192.168.56.102:22
要添加当前会话，点击左侧的箭头按钮。
1 sxbang x 2 sxbang x 3 sxbang x +

Type 'help' to learn how to use Xshell prompt.
[tc:~]-]$

Connecting to 192.168.56.102:22...
Connection established.
To escape to local shell, press 'Ctrl+Alt+J'.

Last login: Mon May 14 01:53:16 2018 from 192.168.56.1
[root@localhost ~]# cd /usr/local/kafka
[root@localhost kafka]# bin/kafka-topics.sh --create --zookeeper localhost:2181 --replication-factor 1 --partitions 1 --topic test
Created topic "test".
[root@localhost kafka]# bin/kafka-topics.sh --list --zookeeper localhost:2181test
Exception in thread "main" java.lang.NumberFormatException: For input string: "2181test"
    at java.lang.NumberFormatException.forInputString(NumberFormatException.java:65)
    at java.lang.Integer.parseInt(Integer.java:580)
    at java.lang.Integer.parseInt(Integer.java:615)
    at org.apache.zookeeper.client.ConnectStringParser.<init>(ConnectionStringParser.java:72)
    at org.apache.zookeeper.ZooKeeper.<init>(ZooKeeper.java:443)
    at org.apache.zookeeper.ZooKeeper.<init>(ZooKeeper.java:380)
    at kafka.zookeeper.ZooKeeperClient.<init>(ZooKeeperClient.scala:86)
    at kafka.zk.KafkaZkClient$.apply(KafkaZkClient.scala:1539)
    at kafka.admin.TopicCommand$.main(TopicCommand.scala:57)
    at kafka.admin.TopicCommand.main(TopicCommand.scala)
[root@localhost kafka]# bin/kafka-console-producer.sh --broker-list localhost:9092 --topic test
>This is a message
>^C[root@localhost kafka]# bin/kafka-console-consumer.sh --zookeeper localhost:2181 --topic test --from-beginning
Using the ConsoleConsumer with old consumer is deprecated and will be removed in a future major release. Consider using the new consumer by passing [bootstrap-server] instead of [zookeeper].
This is a message
[
```

## 7.rabbitmq 的安装

### 1.安装 Erlang 环境

1)安装 GCC GCC-C++ Openssl 等模块:

```
yum -y install make gcc gcc-c++ kernel-devel m4 ncurses-devel openssl-devel
```

2)安装 ncurses

```
yum -y install ncurses-devel
```

3) 进入/usr/local/目录

4) 安装 erlang 环境 wget [http://erlang.org/download/otp\\_src\\_18.2.1.tar.gz](http://erlang.org/download/otp_src_18.2.1.tar.gz)

5) 解压文件 tar xvfz otp\_src\_18.2.1.tar.gz

6) 重命名 mv otp\_src\_18.2.1 erlang

7)进入 erlang: cd erlang

8)执行 ./configure

9) 执行 make install

## 2.安装 RabbitMQ

1)到/usr/local 目录 cd /usr/local

2)下载 rabbitmq-server-3.6.9.tar.xz

wget <http://www.rabbitmq.com/releases/rabbitmq-server/v3.6.9/rabbitmq-server-generic-unix-3.6.9.tar.xz>

3)对于下载 xz 包进行解压，首先先下载 xz 压缩工具：

yum install xz

4)对 rabbitmq 包进行解压：

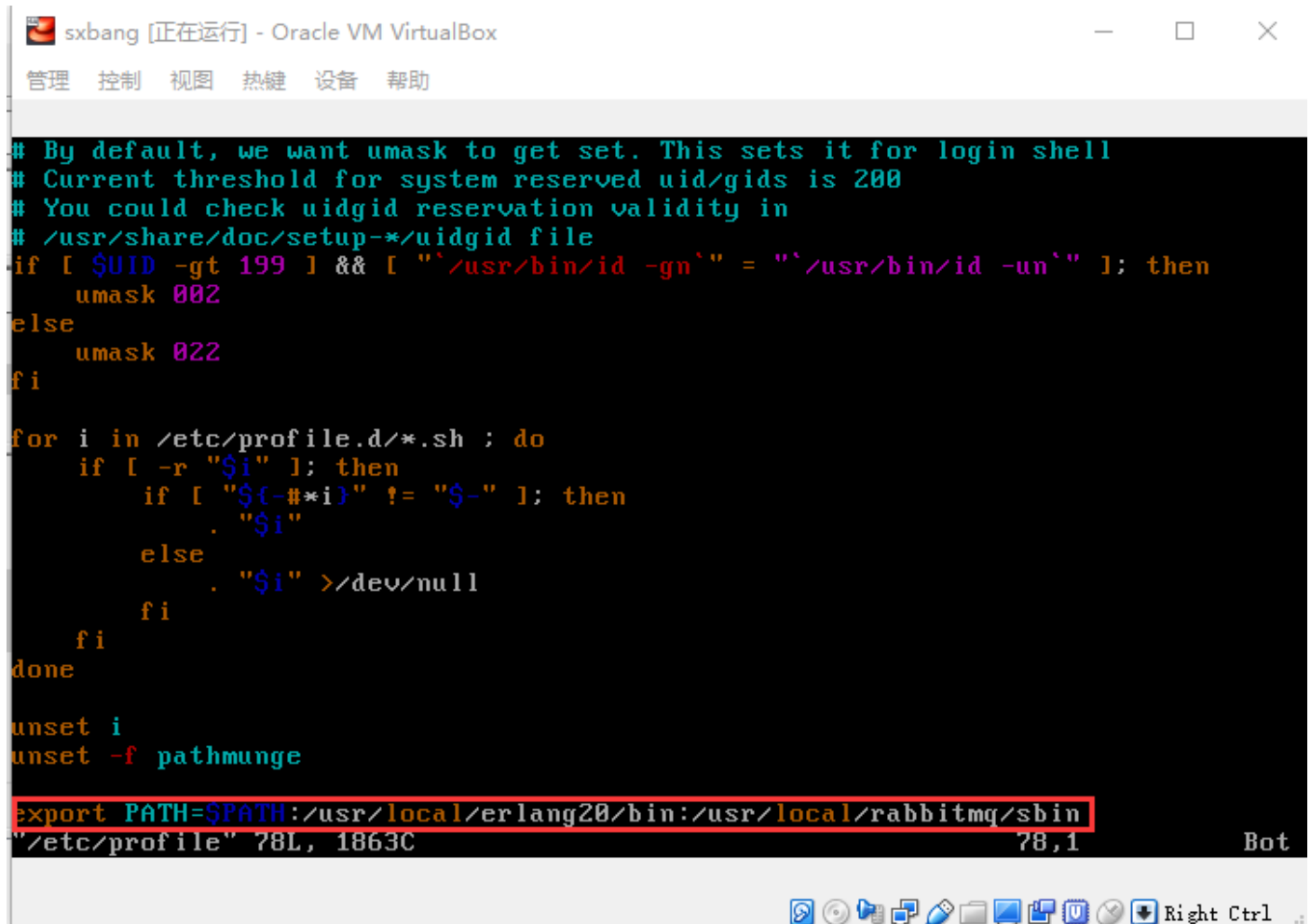
xz -d xz -d rabbitmq-server-generic-unix-3.6.9.tar.xz

tar -xvf rabbitmq-server-generic-unix-3.6.9.tar

5)改名 rabbitmq: mv rabbitmq\_server-3.6.9 /usr/local/rabbitmq

6)将 sbin 文件夹的路径添加到 PATH 中修改/etc/profile: **vim/etc/profile**

```
export PATH=/usr/local/rabbitmq/sbin:$PATH
```



```
# By default, we want umask to get set. This sets it for login shell
# Current threshold for system reserved uid/gids is 200
# You could check uidgid reservation validity in
# /usr/share/doc/setup-*/uidgid file
if [ $UID -gt 199 ] && [ "`/usr/bin/id -gn`" = "`/usr/bin/id -un`" ]; then
    umask 002
else
    umask 022
fi

for i in /etc/profile.d/*.sh ; do
    if [ -r "$i" ]; then
        if [ "${-#*i}" != "$-" ]; then
            . "$i"
        else
            . "$i" >/dev/null
        fi
    fi
done

unset i
unset -f pathmunge

export PATH=$PATH:/usr/local/erlang20/bin:/usr/local/rabbitmq/sbin
"/etc/profile" 78L, 1863C                                     78,1 Bot
```

执行 **source /etc/profile** 使得 PATH 路径更新, rabbitMQ 安装成功。

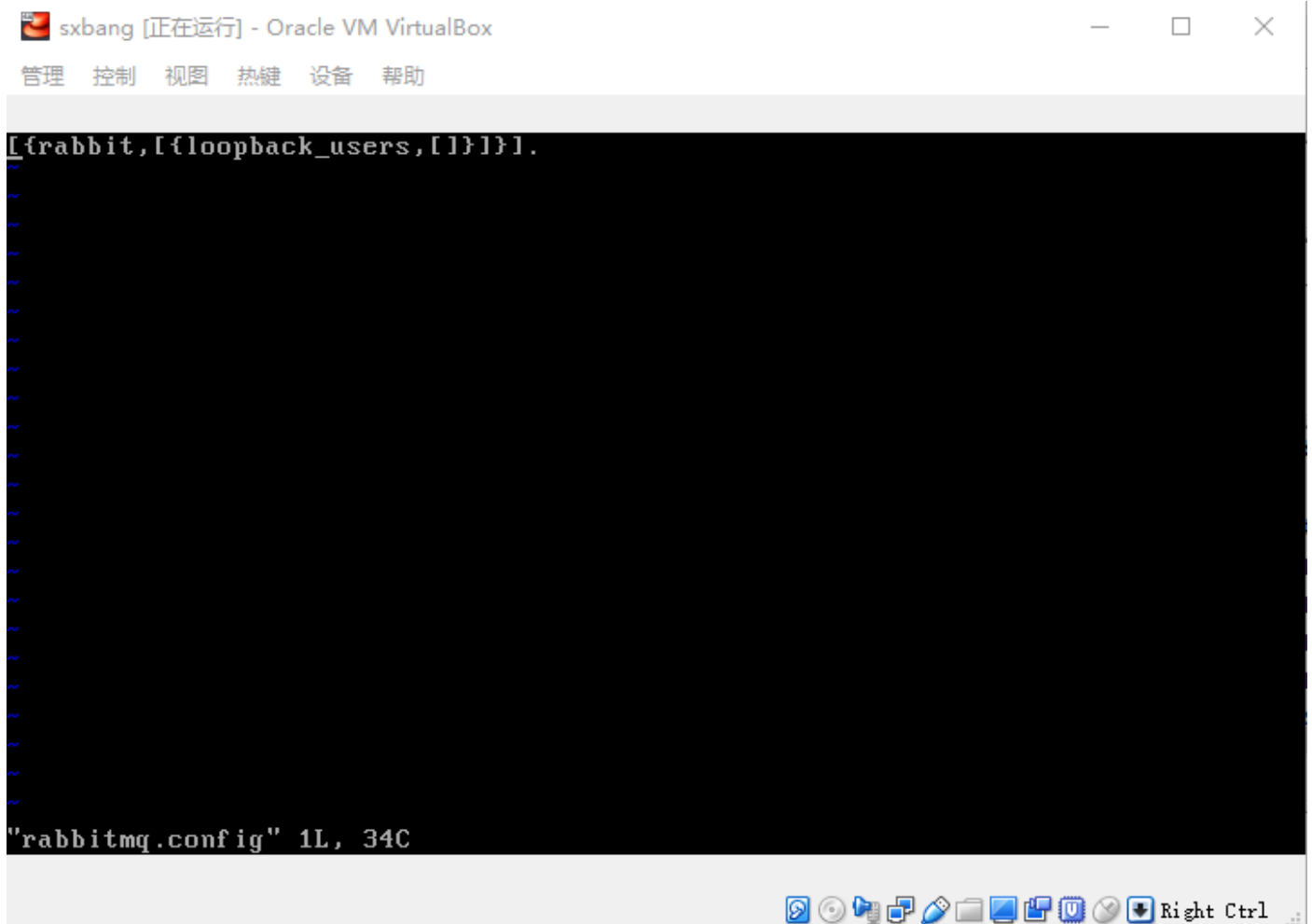
6) 设置端口号, 可供外部访问:

```
iptables -I INPUT -p tcp --dport 15672 -j ACCEPT
```

7) 进入 /usr/local/rabbitmq/etc/rabbitmq: `cd /usr/local/rabbitmq/etc/rabbitmq`

8) 创建 rabbitmq.config 并编辑: `vi rabbitmq.config`

9) 按 i 进入编辑模式输入: `[[rabbit,[[loopback_users,[]]]]]`.



10) 启动 RabbitMQ 后, 没法访问 Web 管理页面

解决

RabbitMQ 安装后默认是不启动管理模块的, 所以需要配置将管理模块启动

启动管理模块命令如下

```
rabbitmqctl start_app
```

```
rabbitmq-plugins enable rabbitmq_management
```

```
rabbitmqctl stop
```

## ● rabbitmq 的使用

1.进入/usr/local/rabbitmq/sbin/: `cd /usr/local/rabbitmq/sbin/`

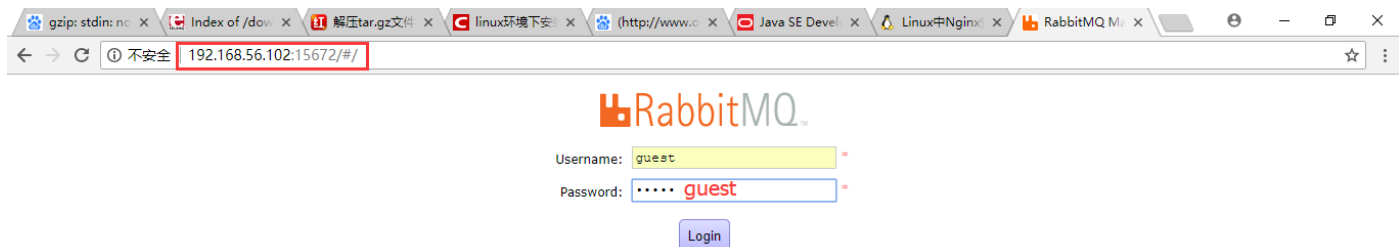
2.启动 rabbitmq: `./rabbitmq-server`

Oracle VM VirtualBox window titled "sxbang [正在运行] - Oracle VM VirtualBox". The terminal shows the following commands and output:

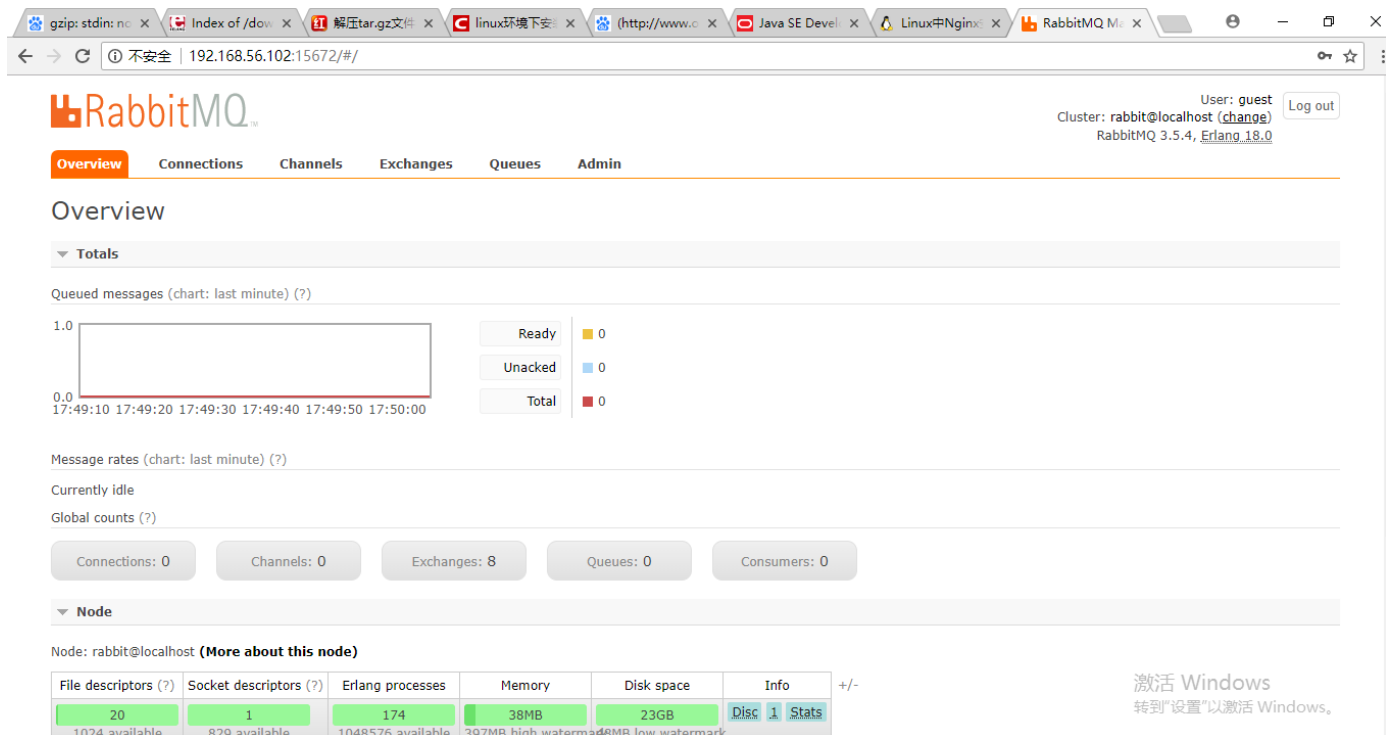
```
[21]+ Stopped vi rabbitmq.config
[root@localhost rabbitmq]# cd
[root@localhost ~]# cd /usr/local/rabbitmq/sbin/rabbitmq-server
-bash: cd: /usr/local/rabbitmq/sbin/rabbitmq-server: Not a directory
[root@localhost ~]# cd /usr/local/rabbitmq/sbin/
[root@localhost sbin]# ls
rabbitmqctl  rabbitmq-defaults  rabbitmq-env  rabbitmq-plugins  rabbitmq-server
[root@localhost sbin]# ./rabbitmq-server

RabbitMQ 3.5.4. Copyright (C) 2007-2015 Pivotal Software, Inc.
##  ## Licensed under the MPL. See http://www.rabbitmq.com/
##  ##
##### Logs: ../../var/log/rabbitmq/rabbit@localhost.log
#####  ##      ../../var/log/rabbitmq/rabbit@localhost-sasl.log
#####
Starting broker... completed with 6 plugins.
```

3.打开浏览器输入: [虚拟机 Ip]:5672/#/

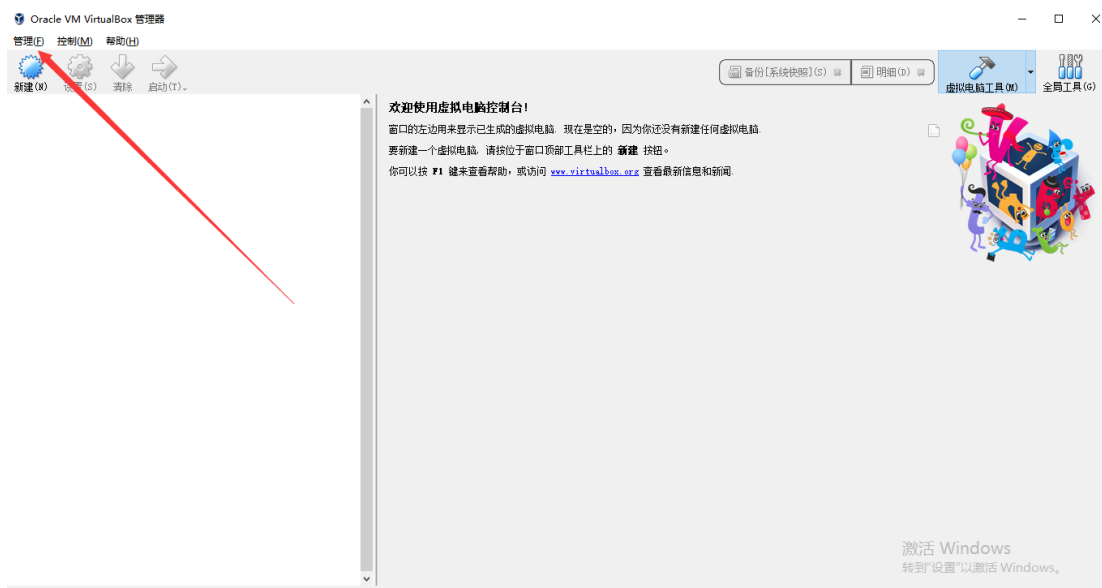


看到此页面则访问成功




## 四、导入本课程提供虚拟机

### 1. 点击虚拟机左上方的管理



### 2. 选择导入虚拟机，单击下图所示图标，选择本课程提供文件 sxbang.ova

 sxbang.ova

2018/5/2 9:06

Open Virtualizati...

1,534,015...



← 导入虚拟电脑

## 要导入的虚拟电脑

VirtualBox目前支持从开放虚拟格式文件(OVF)中导入虚拟电脑。从下面选择文件继续。



专家模式(E)

下一步(N)


取消

要  
你

← 导入虚拟电脑

## 要导入的虚拟电脑

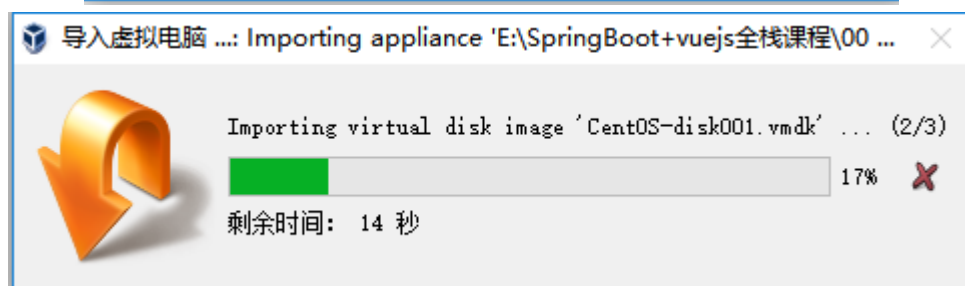
VirtualBox目前支持从开放虚拟格式文件(OVF)中导入虚拟电脑。从下面选择文件继续。

E:\SpringBoot+vuejs全栈课程\00 软件安装\sxbang.ova 

专家模式(E)

下一步(N)

取消

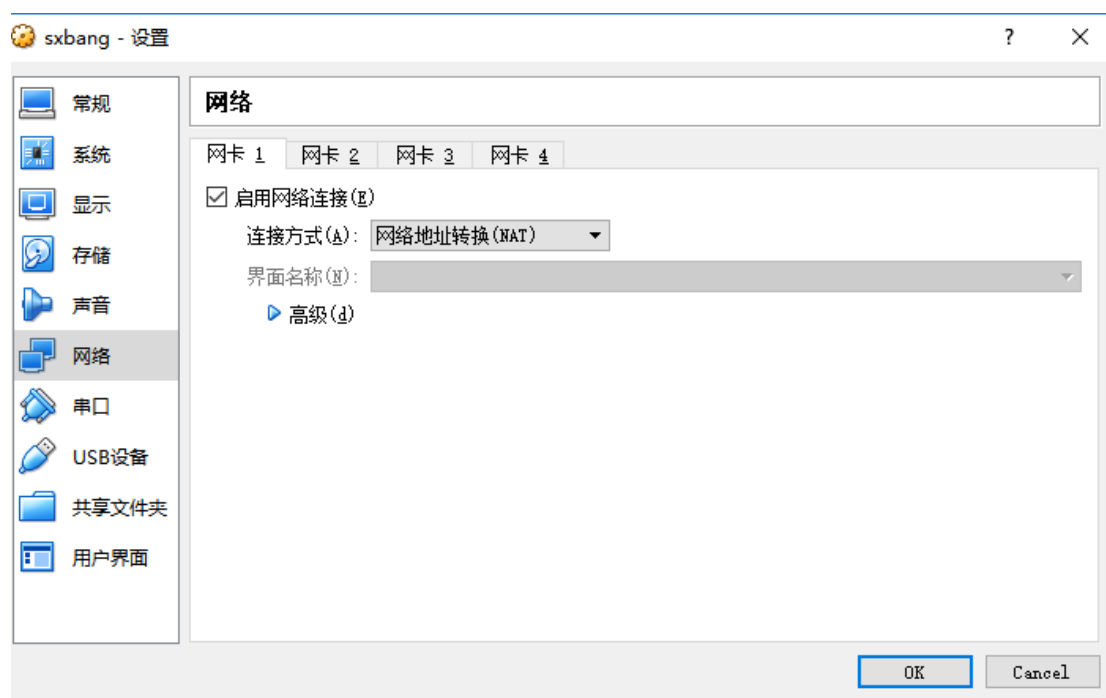


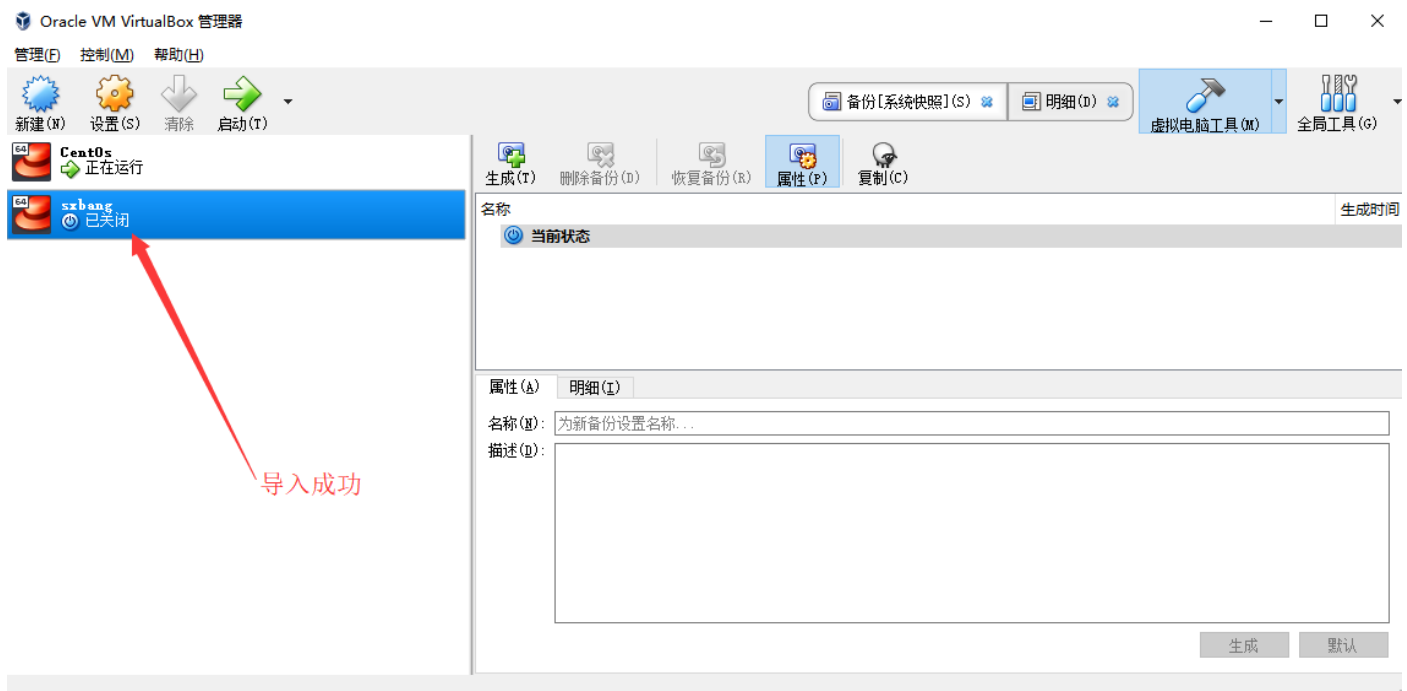
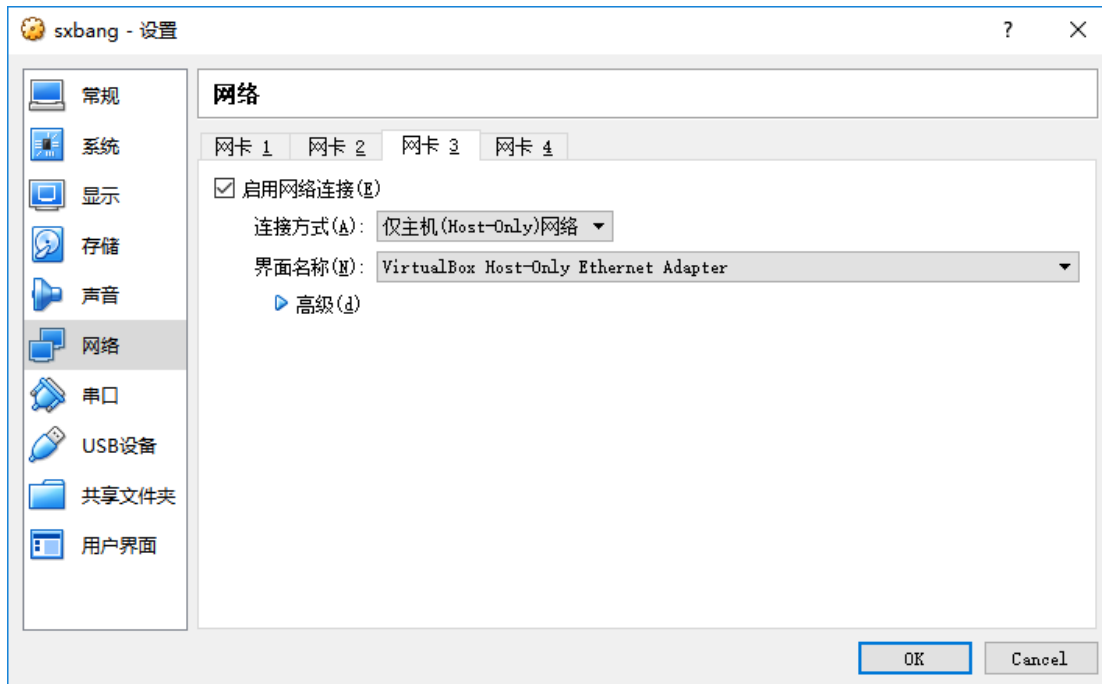
3.导入完成出现 sxbang，如图所示



4.设置网卡，选中 sxbang 点击鼠标右键-->设置-->网络，设置三个网卡分别是：

桥接网卡、网络地址转换、仅主机网络。





## 回马枪总结

- 查看 ip 用: `ifconfig`
- 进入文件夹用 `cd` 命令
- 查看所在目录下的文件 `ls`
- 编辑文件 `vim [文件名]`
- 在文件中按 `i` 进入编辑模式

- 编辑完按 Esc 退出编辑模式，按：wq 保存并退出，如果不想保存，按 :q! 强制退出
- 安装软件 yum install [软件名]
- 卸载软件 yum remove [软件名]
- 启动服务 service [服务名] start
- 关闭服务 service [服务名] stop
- 查看进程 ps -ef |grep [服务名]
- 查看端口占用情况： netstat -anp|grep [端口]
- 从电脑本地上传文件到虚拟机使用 FileZilla。