

由于没有设置图床，暂时需要在本目录下查看pdf版本

资源准备

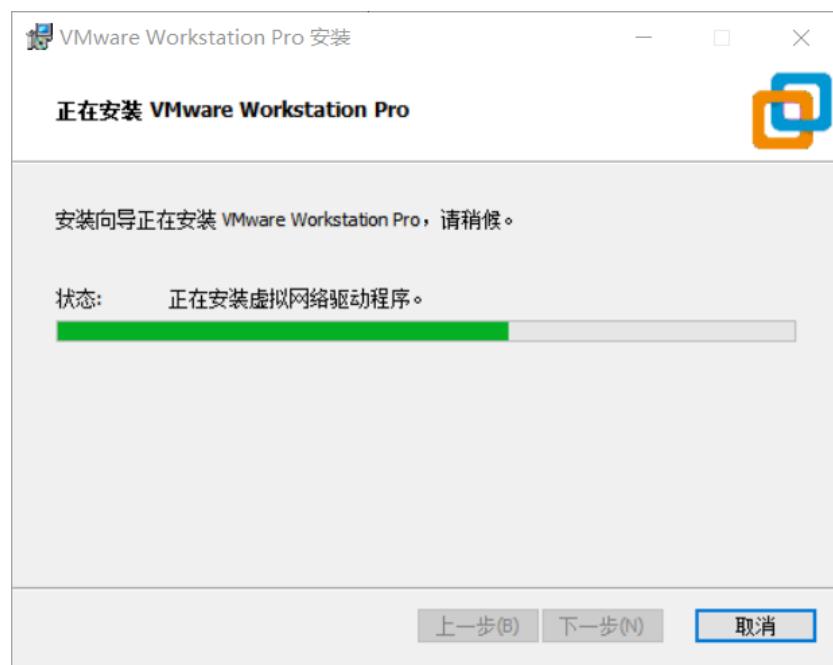
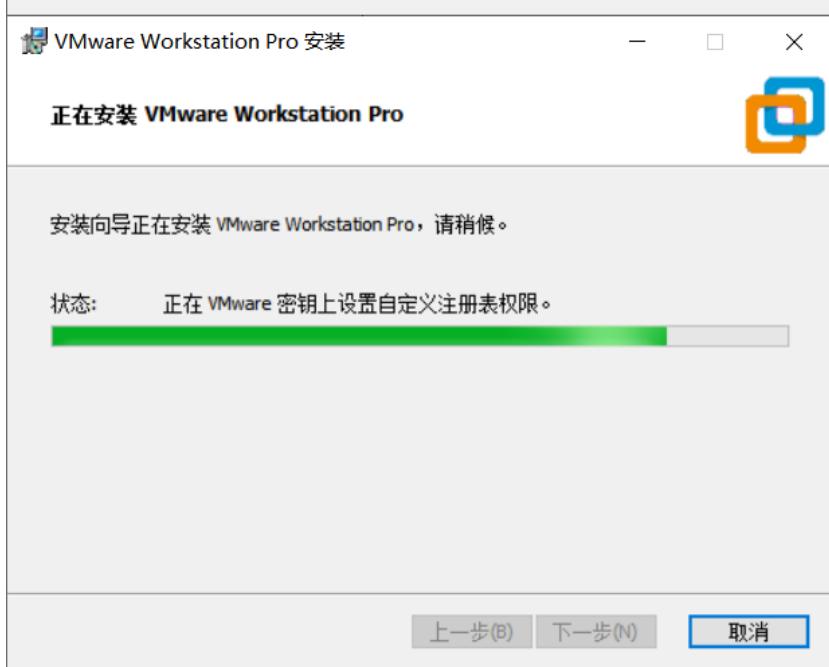
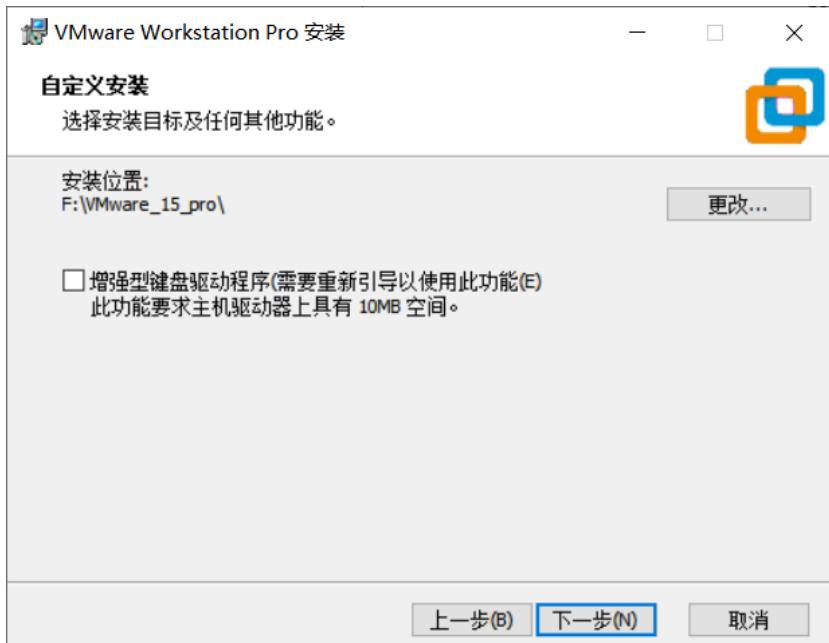
1. CentOS-7-x86_64: 通过国内镜像下载可以更快 http://mirrors.163.com/centos/7/isos/x86_64/CentOS-7-x86_64-Minimal-2009.iso
2. VMware-workstation-full-15.0.0: <https://download3.vmware.com/software/wkst/file/VMware-workstation-full-15.0.0-10134415.exe>

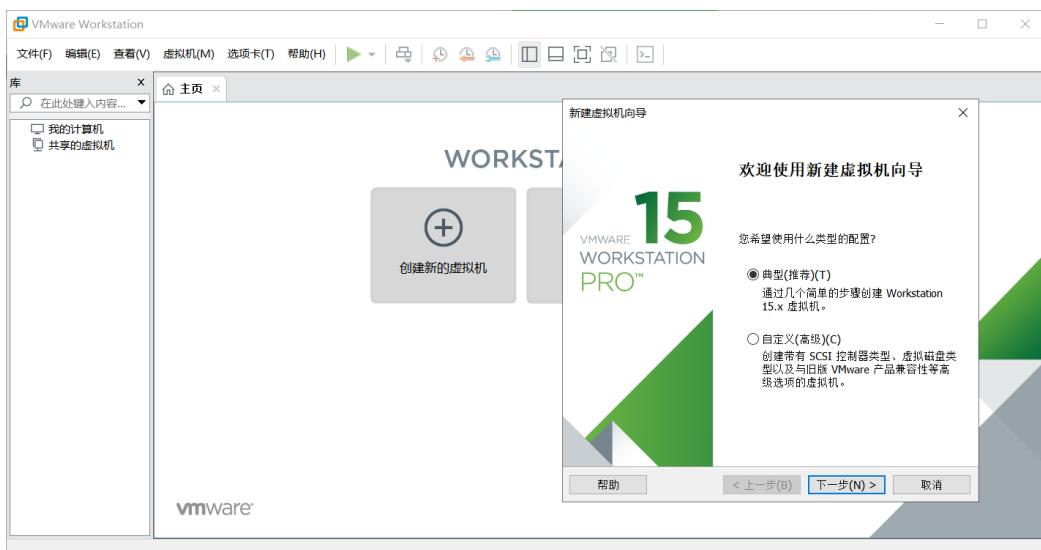
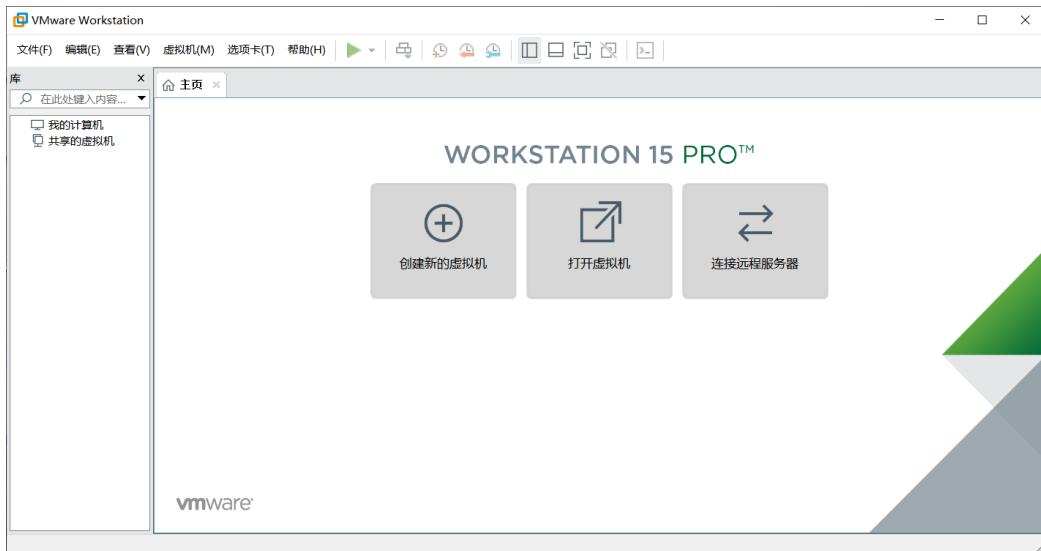
密钥为：

UY758-0RSEQ-M81WP-8ZM7Z-Y3HDA
VF750-4MX5Q-488DQ-9WZE9-ZY2D6
UU54R-FVD91-488PP-7NNGC-ZFAX6
YC74H-FGF92-081VZ-R5QNG-P6RY4
YC34H-6WWDK-085MQ-JYPNX-NZRA2

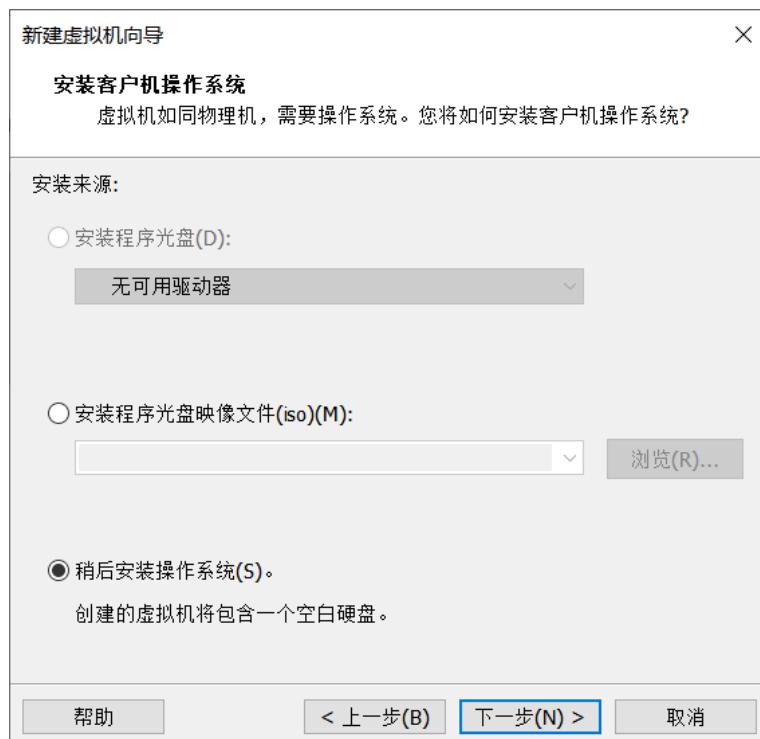
安装虚拟机







安装centOS 7



新建虚拟机向导

×

选择客户机操作系统

此虚拟机中将安装哪种操作系统？

客户机操作系统

- Microsoft Windows(W)
- Linux(L)
- VMware ESX(X)
- 其他(O)

版本(V)

CentOS 7 64 位

帮助

< 上一步(B)

下一步(N) >

取消

新建虚拟机向导

×

命名虚拟机

您希望该虚拟机使用什么名称？

虚拟机名称(V):

Judy

位置(L):

F:\VOS\M1

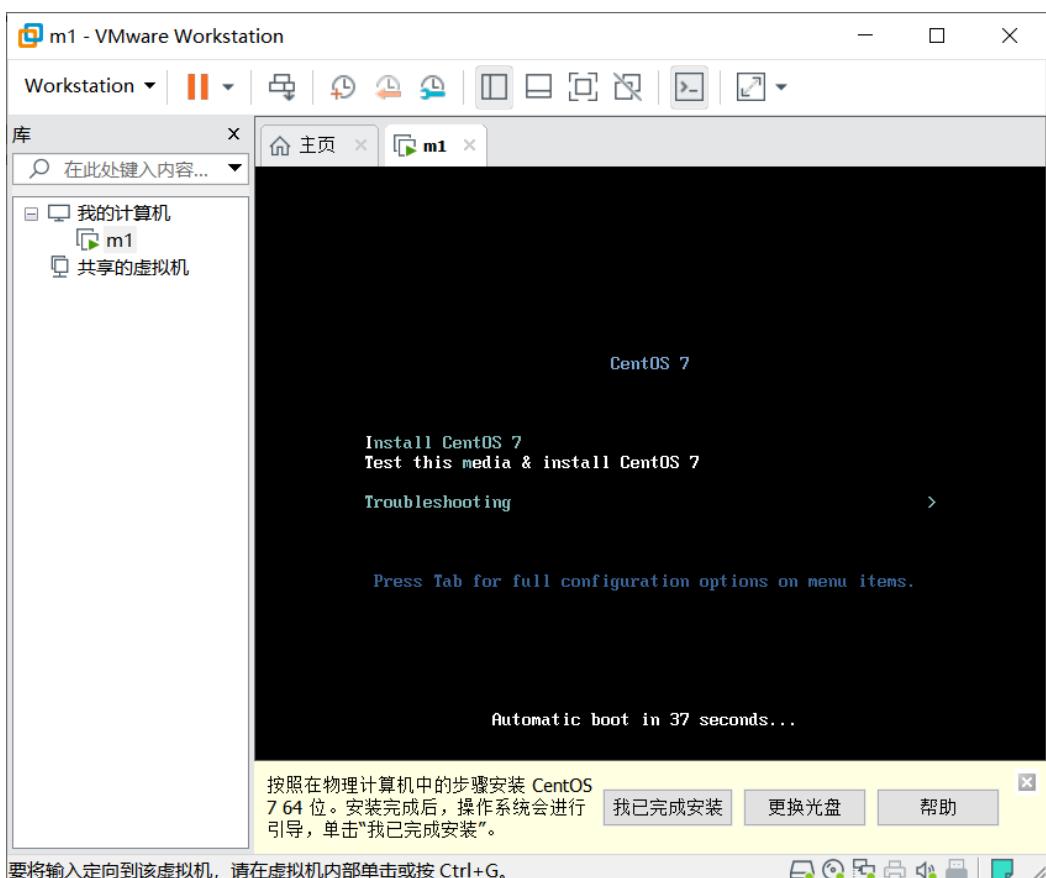
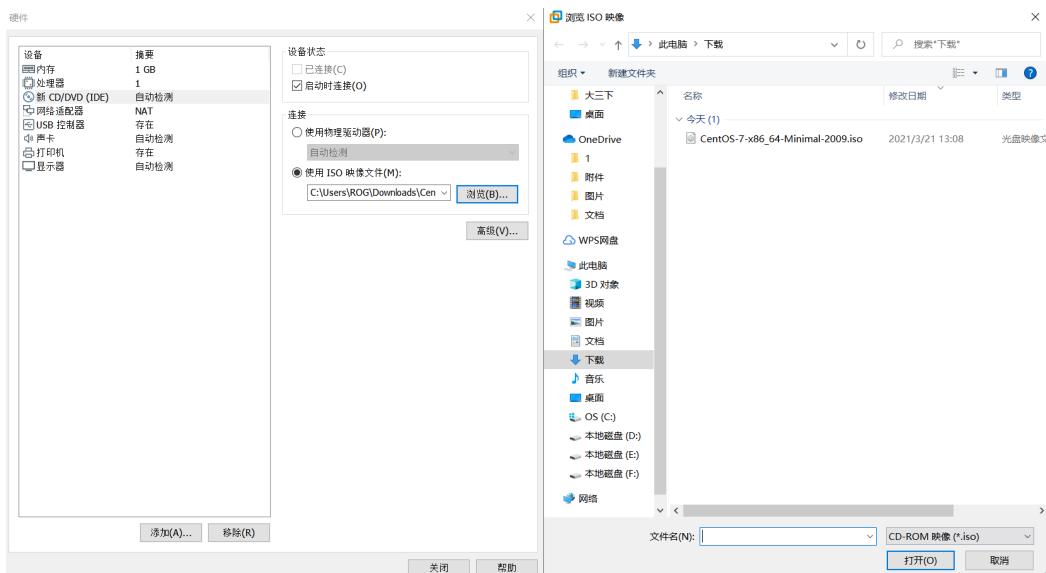
浏览(R)...

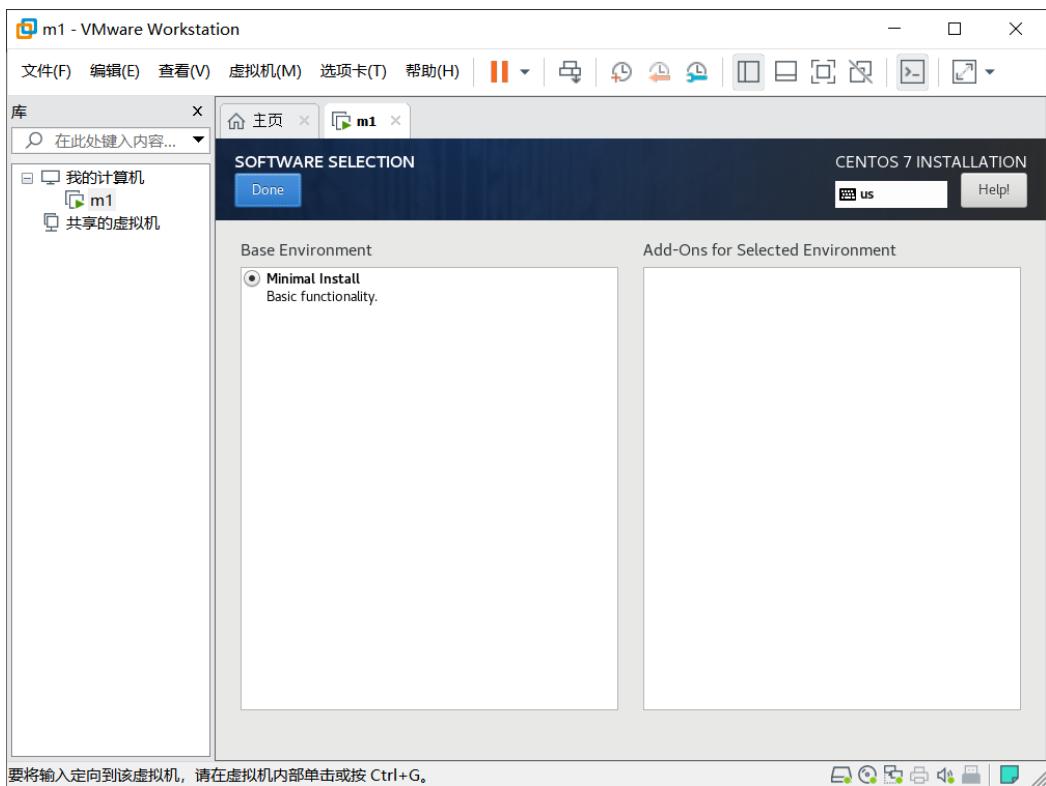
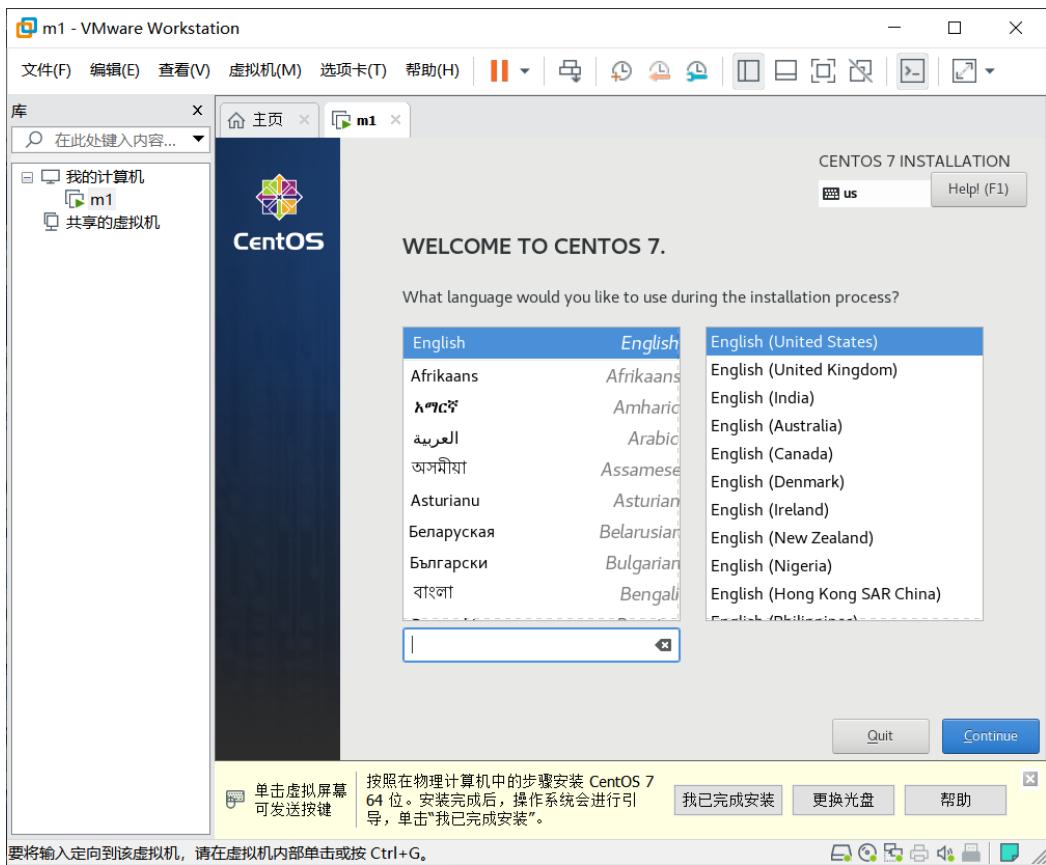
在“编辑”>“首选项”中可更改默认位置。

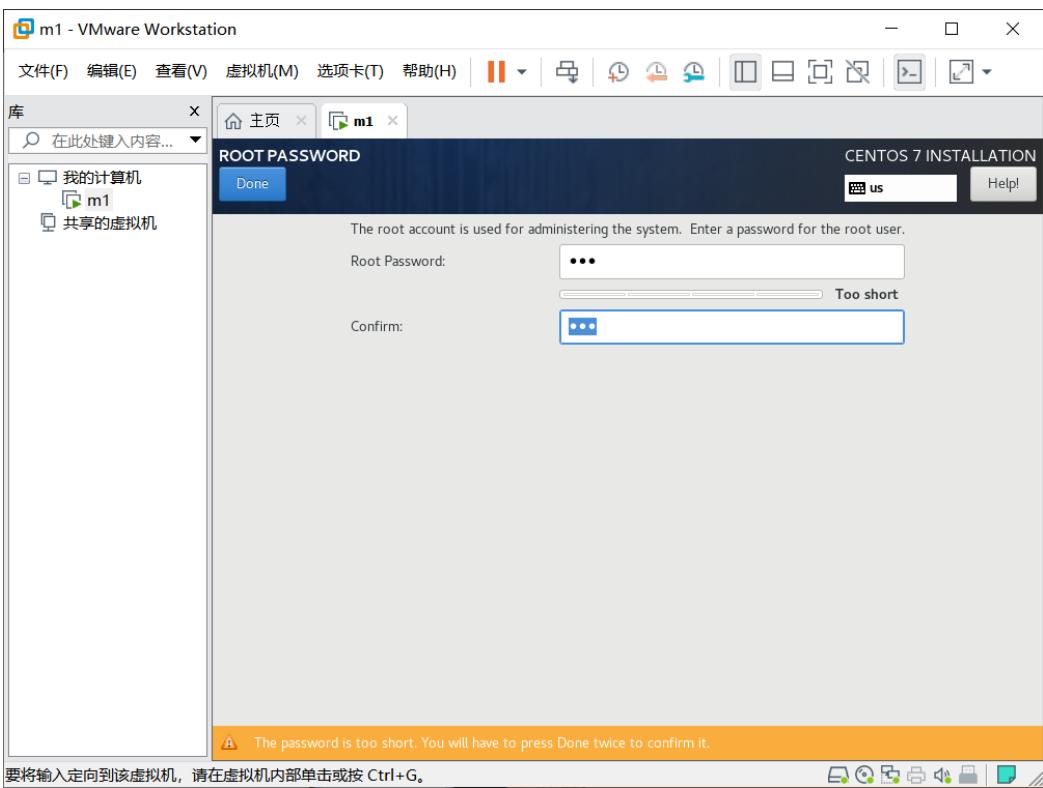
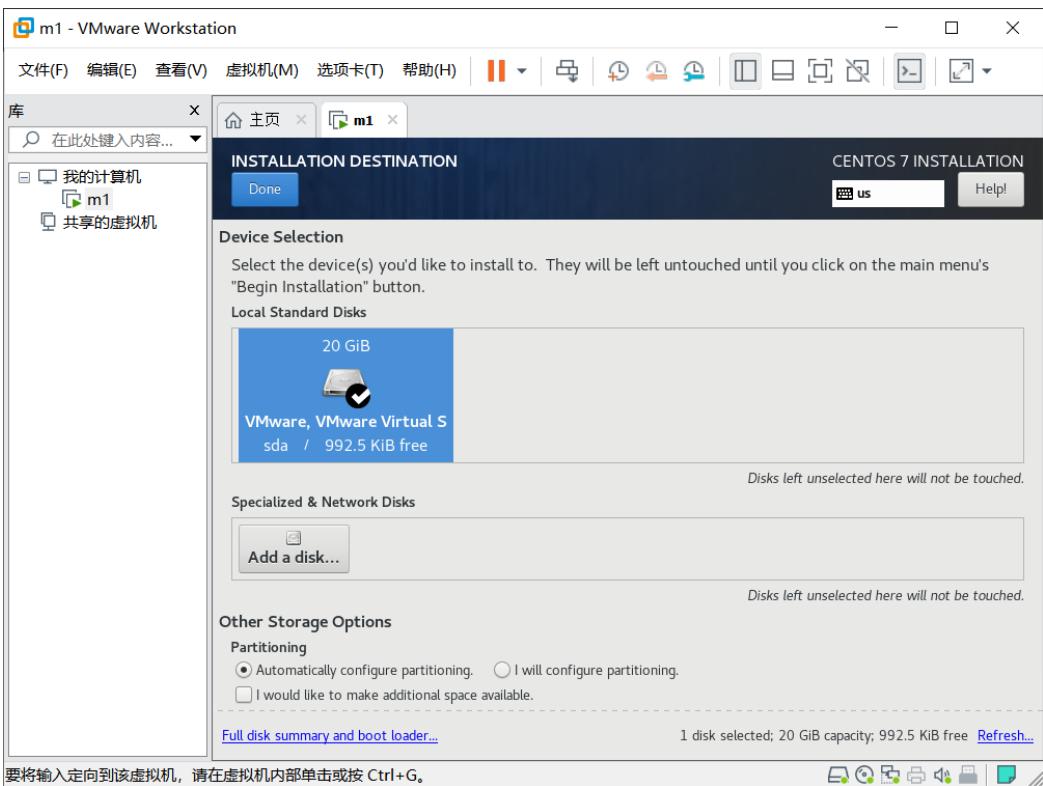
< 上一步(B)

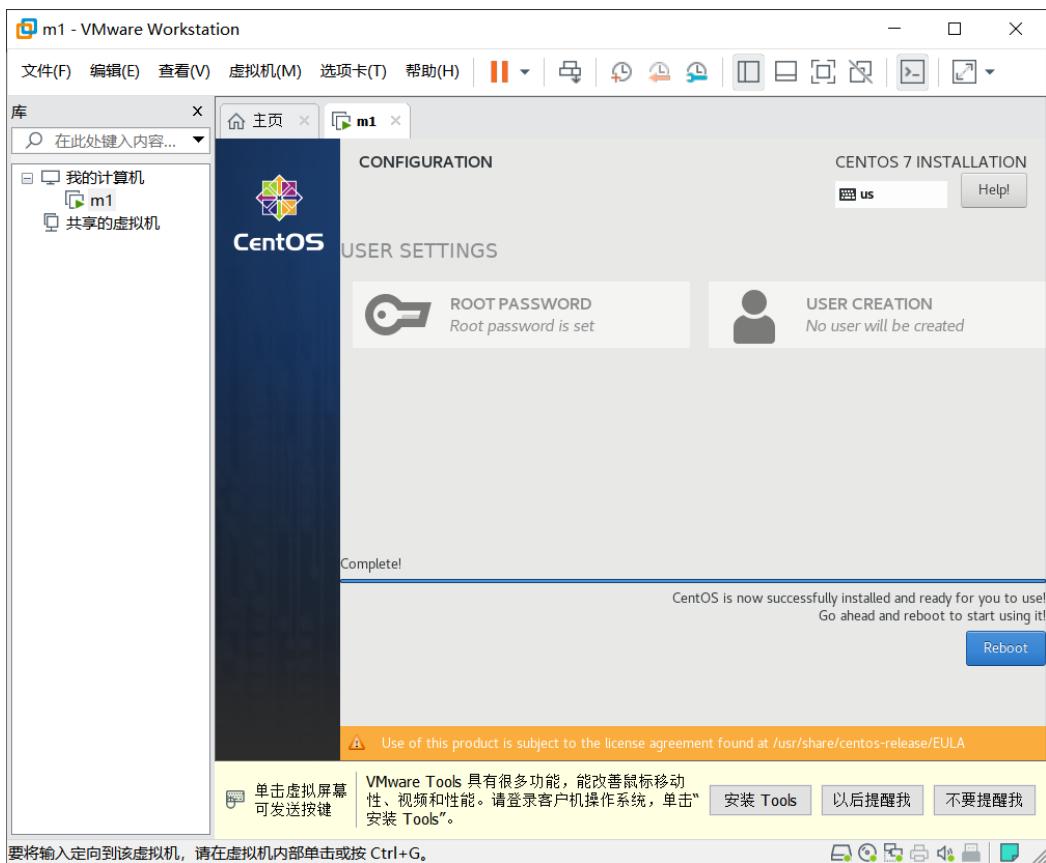
下一步(N) >

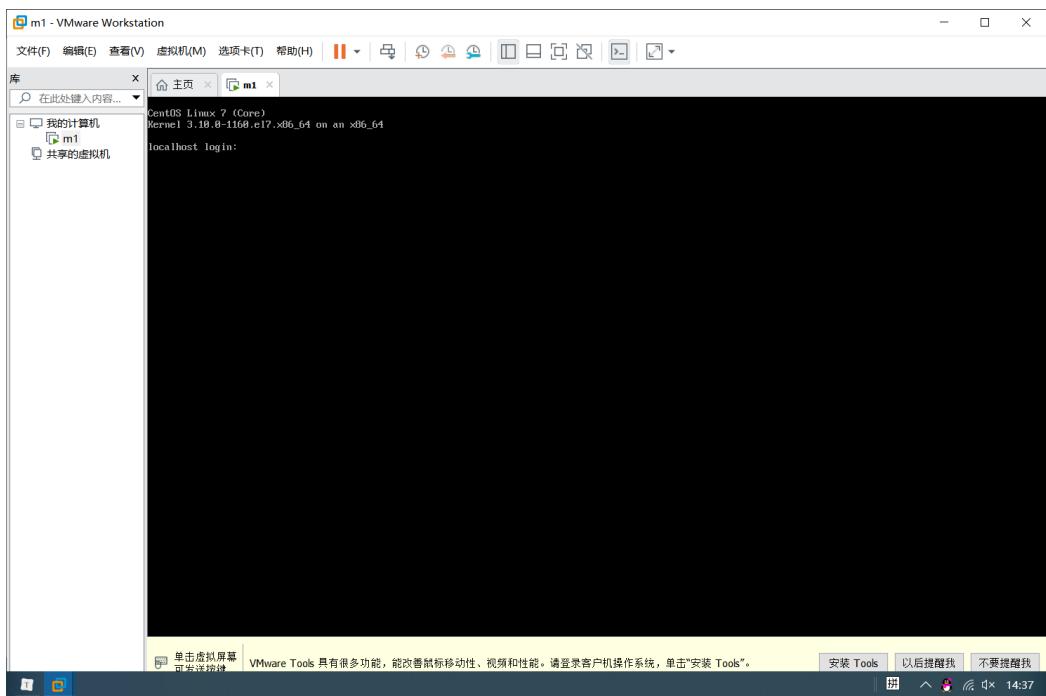
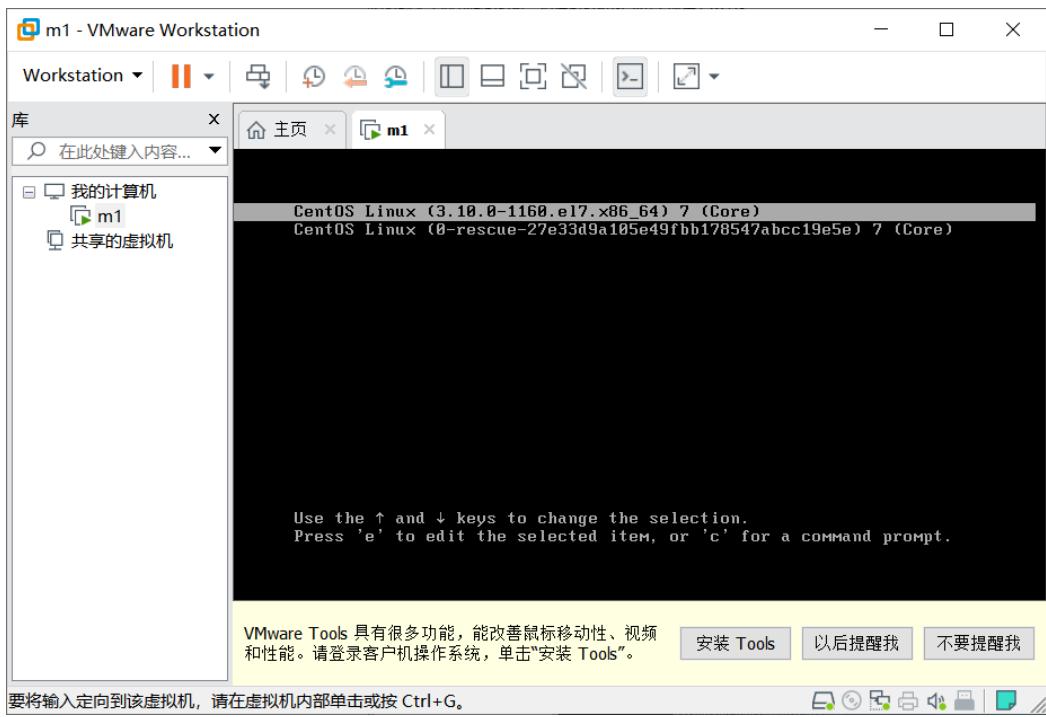
取消

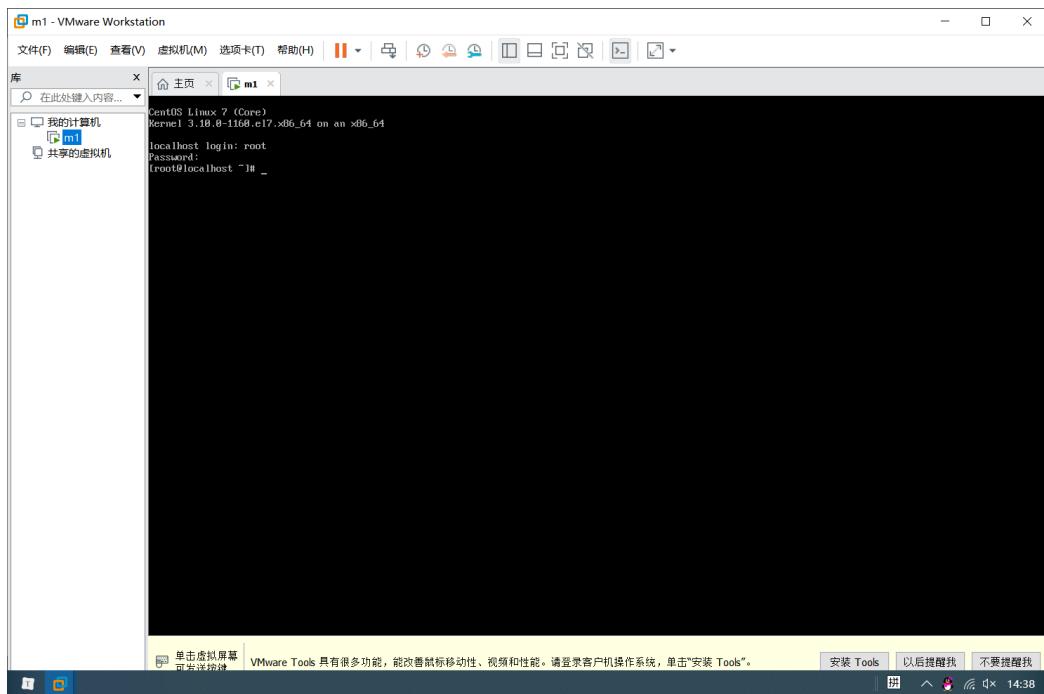




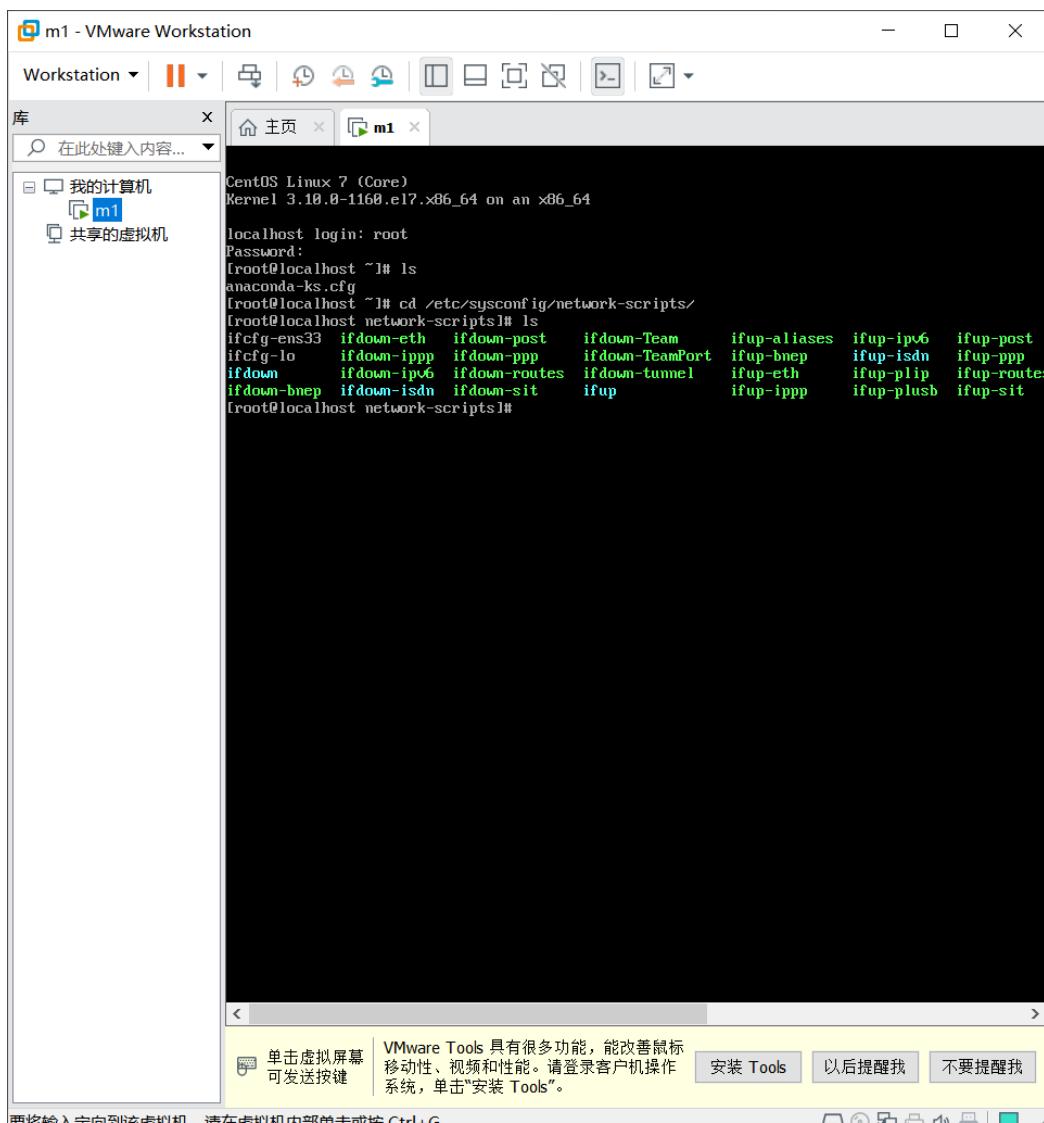




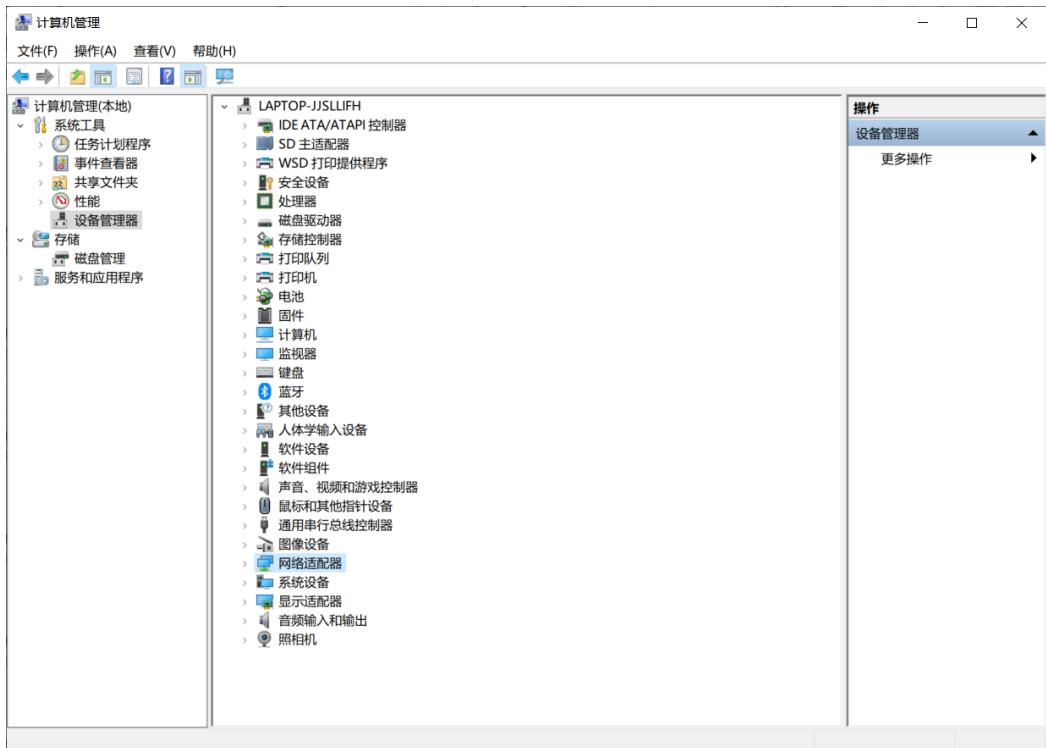




配置网络



要将输入定向到该虚拟机，请在虚拟机内部单击或按 Ctrl+G。



添加硬件

这个向导可以帮助你安装其他硬件

这个向导可以搜索其他硬件并为你自动安装。或者，如果你知道要安装哪个型号的硬件，你可以从列表选择。

你想向导做什么？

- 搜索并自动安装硬件(推荐)(S)
- 安装我手动从列表选择的硬件(高级)(M)

< 上一步(B) 下一步(N) >

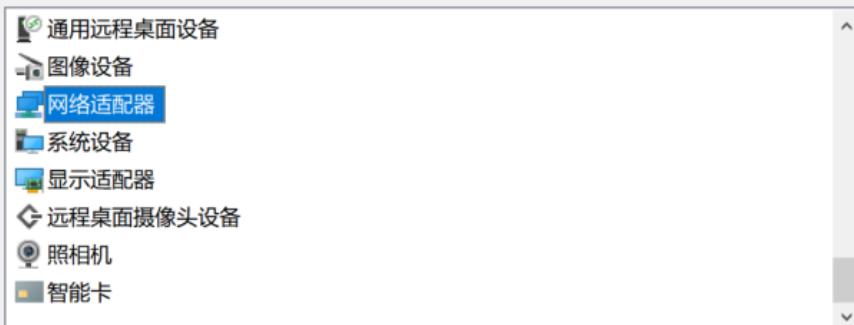
取消

添加硬件

从以下列表，选择要安装的硬件类型

如果看不到想要的硬件类型，请单击“显示所有设备”。

常见硬件类型(H):



< 上一步(B) 下一步(N) >

取消

添加硬件

选择要为此硬件安装的设备驱动程序



请选定硬件设备的厂商和型号，然后单击“下一步”。如果手头有包含要安装的驱动程序的磁盘，请单击“从磁盘安装”。

厂商

Intel
Intel Corporation
Mellanox Technologies Ltd.
Microsoft

型号

Microsoft KM-TEST 环回适配器
UsbNcm Host Device
唤醒 Lan 模式安装部分
通用虚拟网络通道设备



这个驱动程序已经过数字签名。

[告诉我为什么驱动程序签名很重要](#)

从磁盘安装(H)...

< 上一步(B)

下一步(N) >

取消

添加硬件

向导准备安装你的硬件

要安装的硬件:



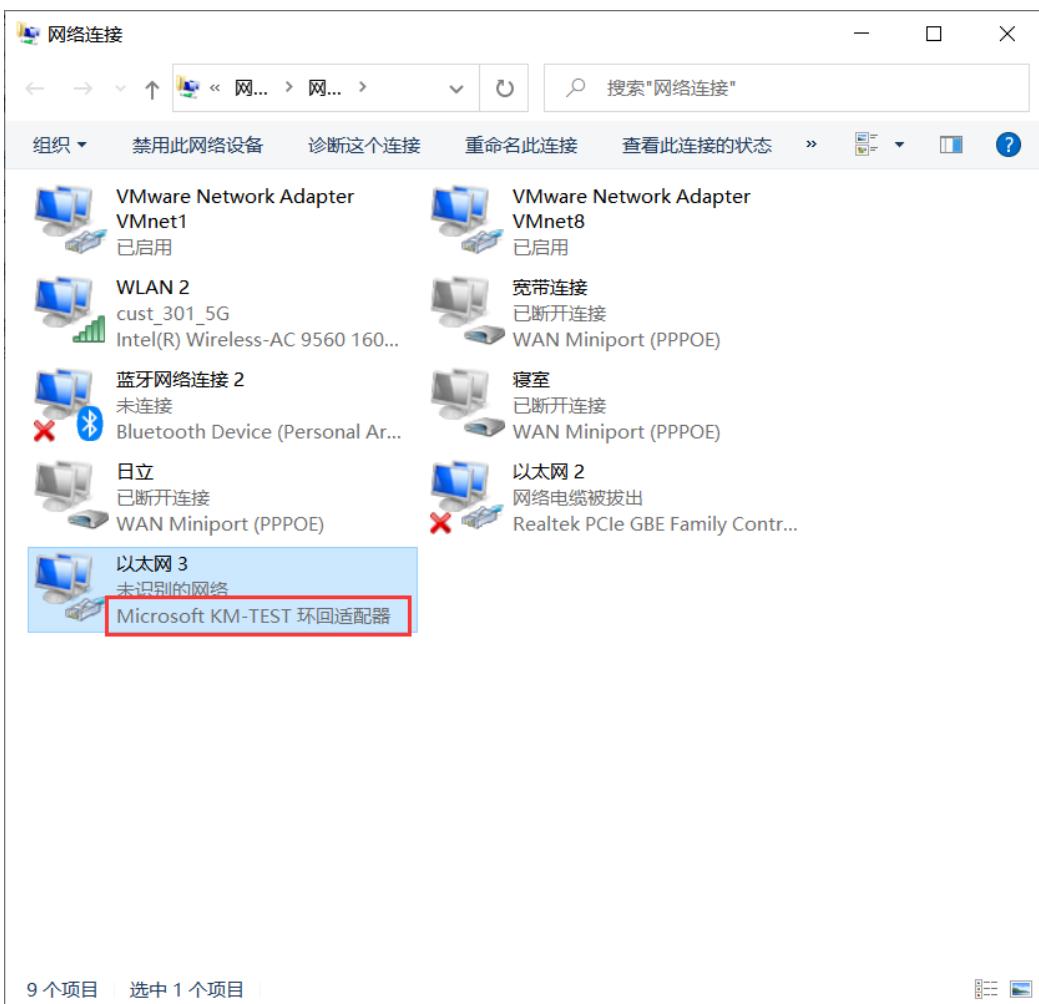
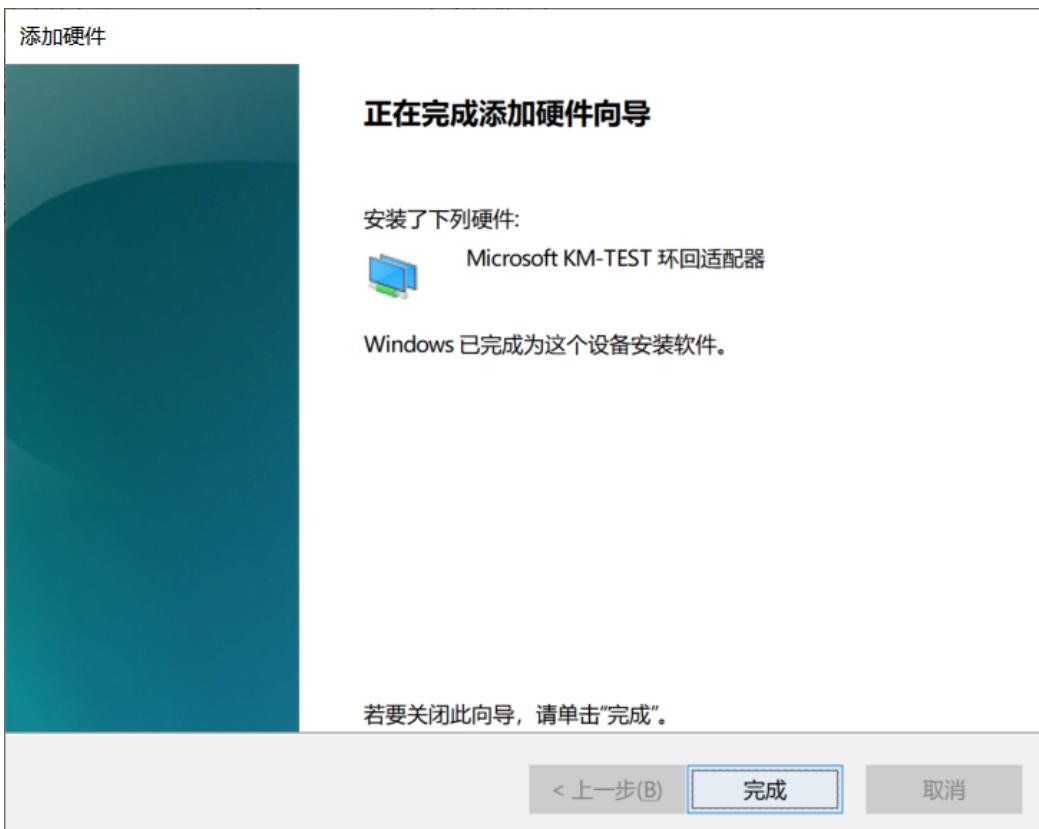
Microsoft KM-TEST 环回适配器

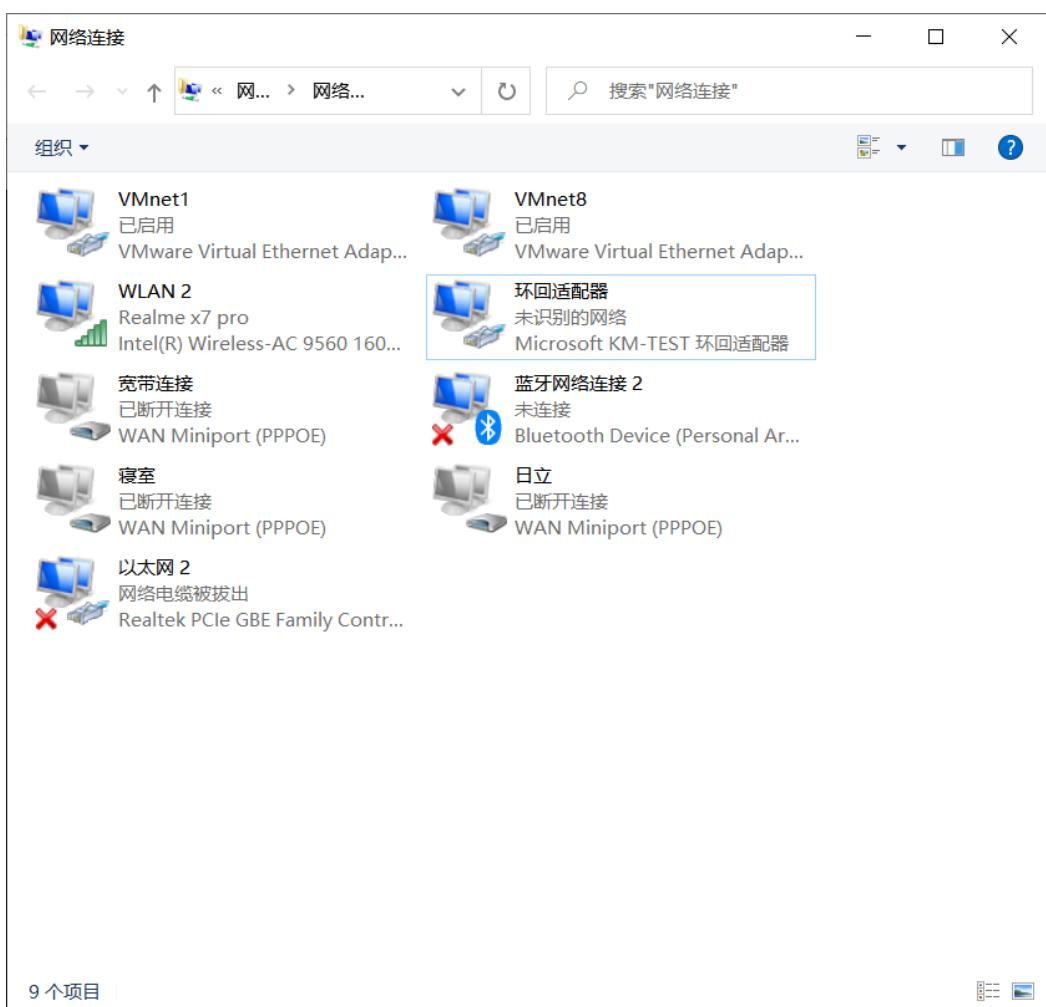
要开始安装你的新硬件，请单击“下一步”。

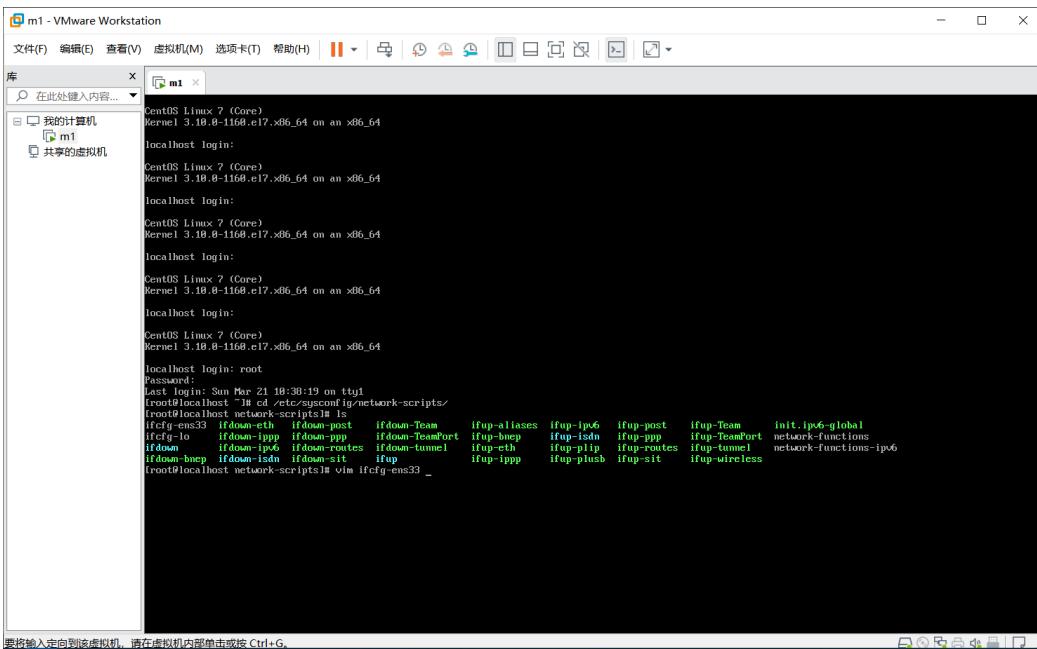
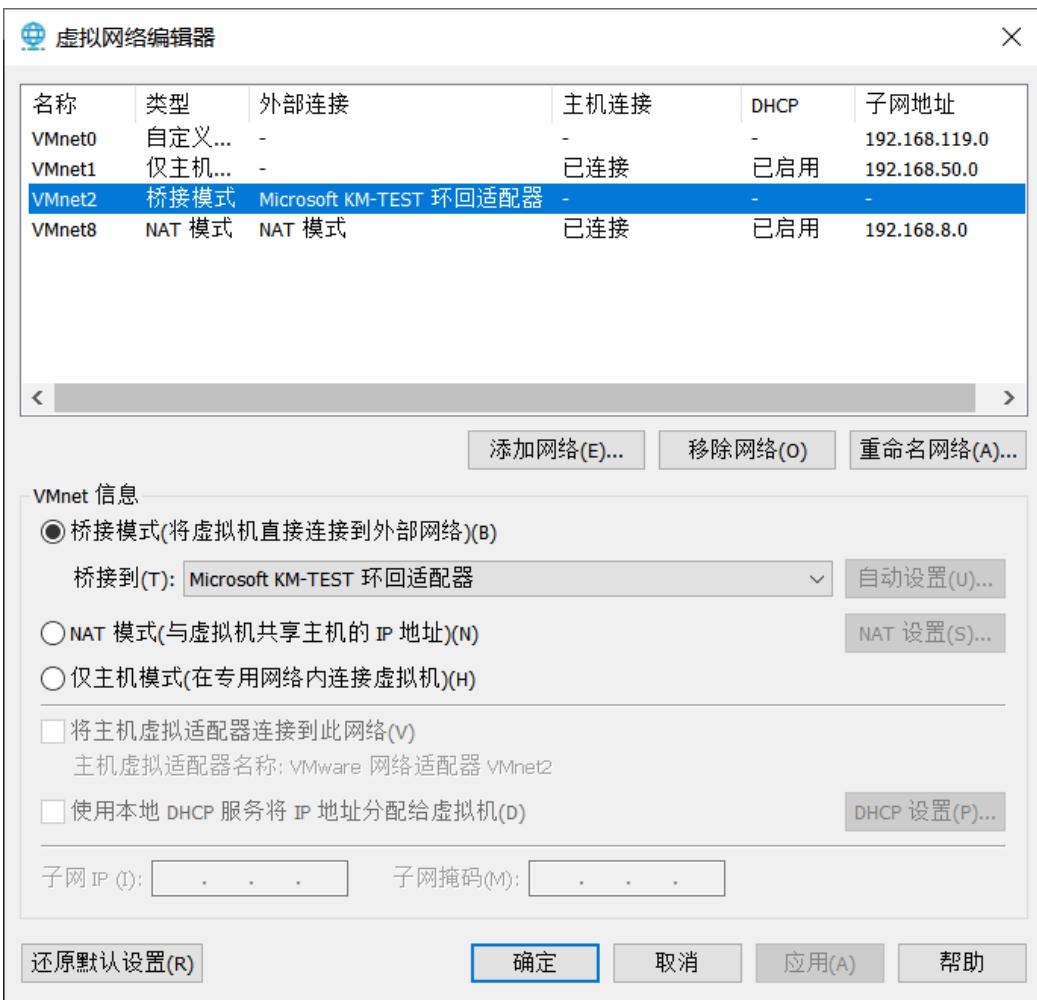
< 上一步(B)

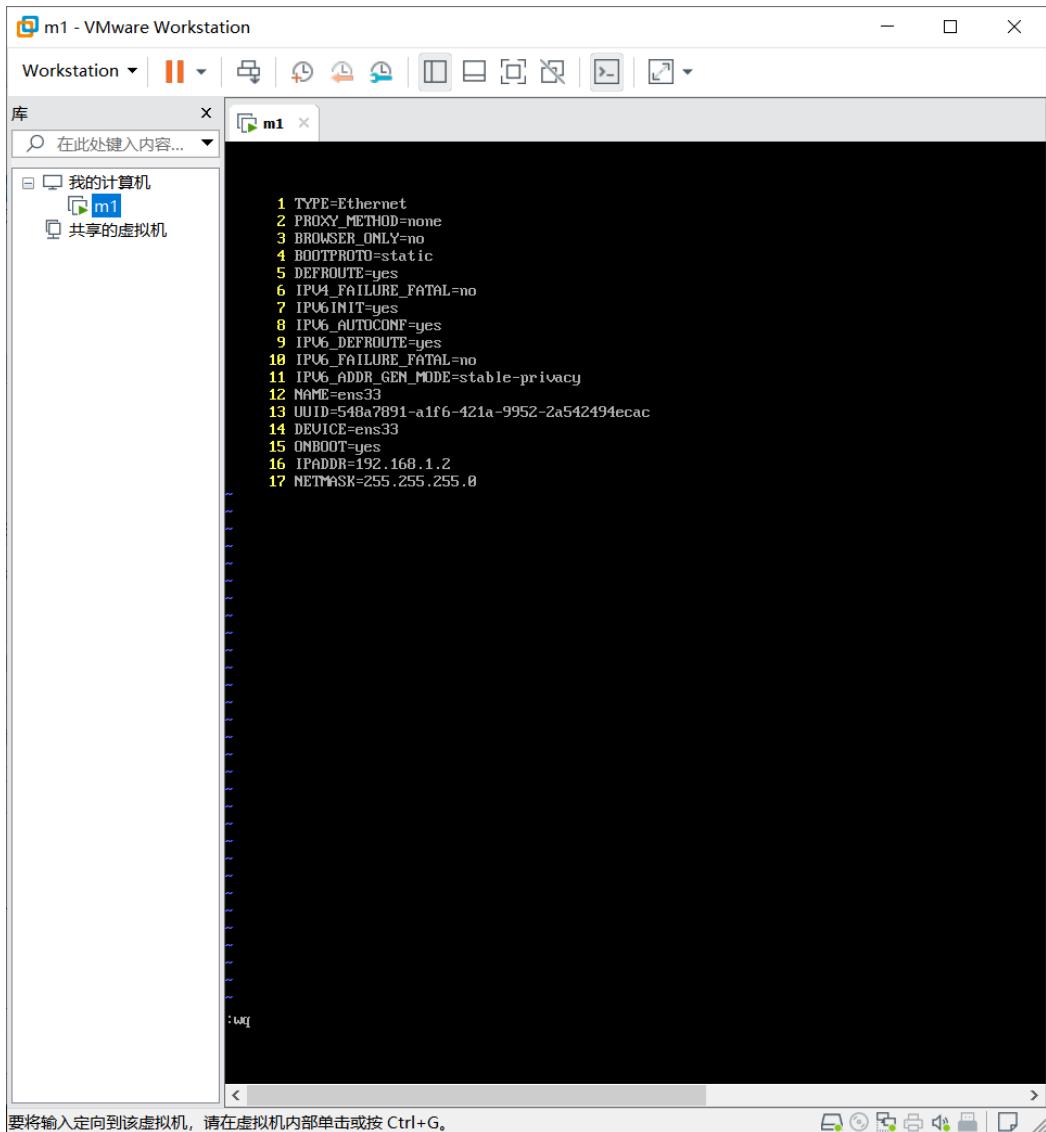
下一步(N) >

取消

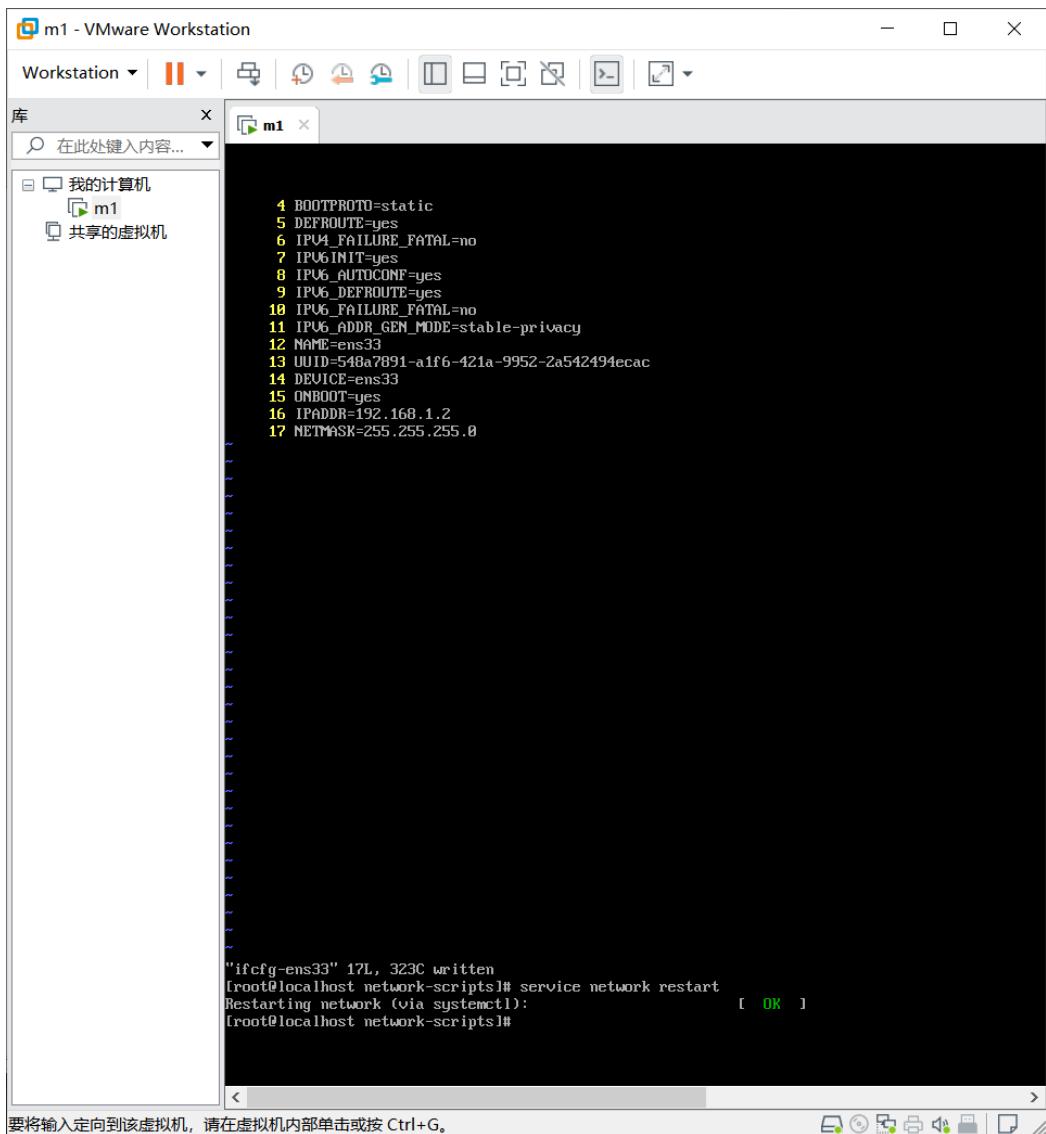


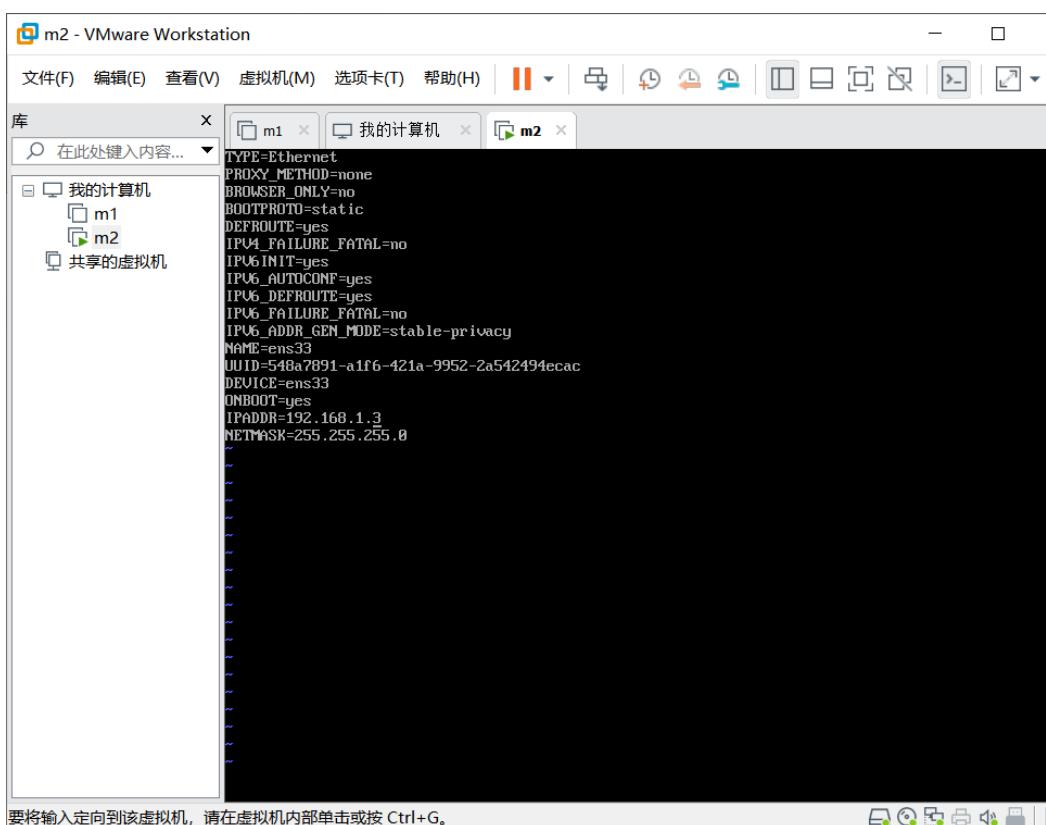
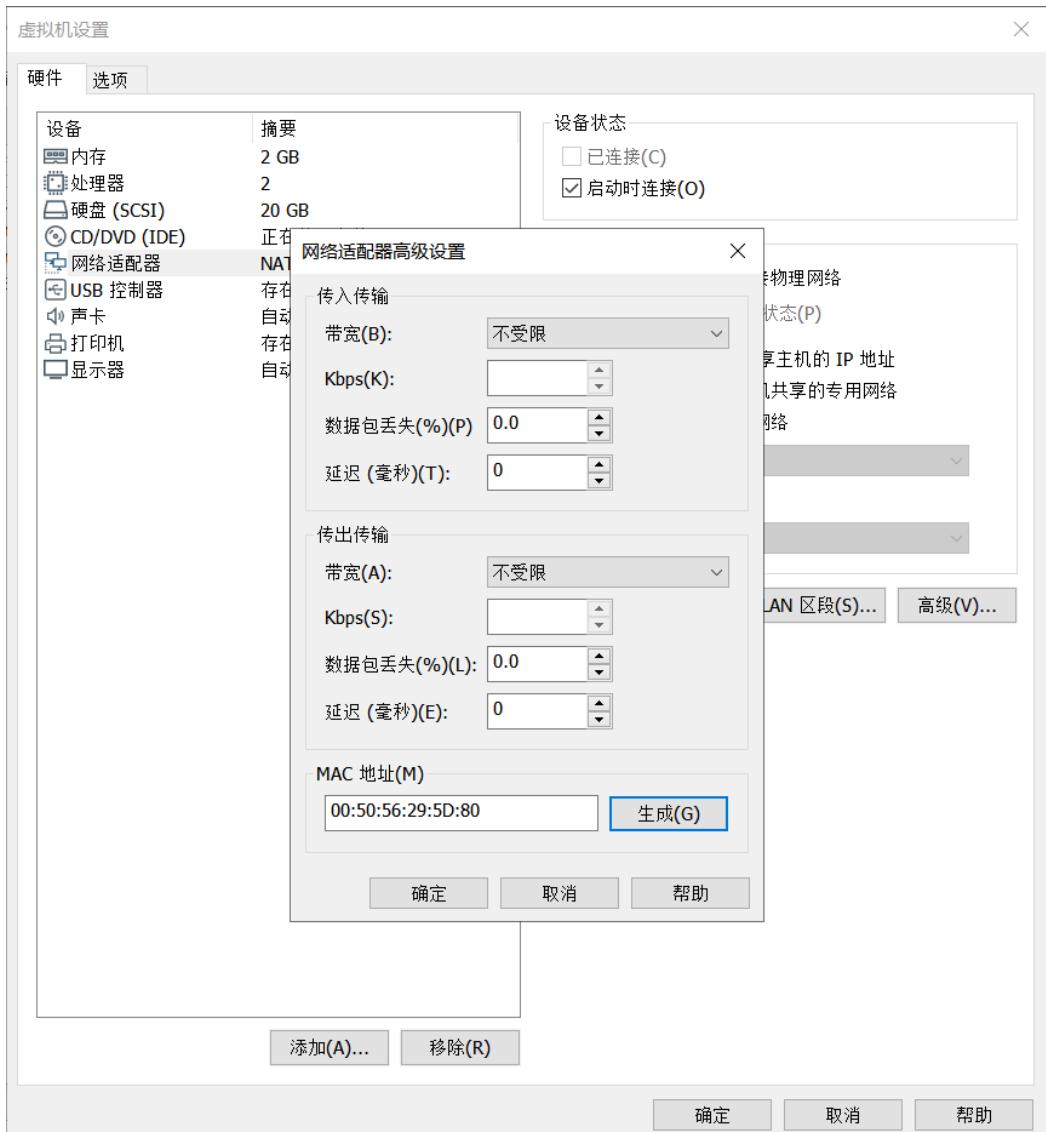


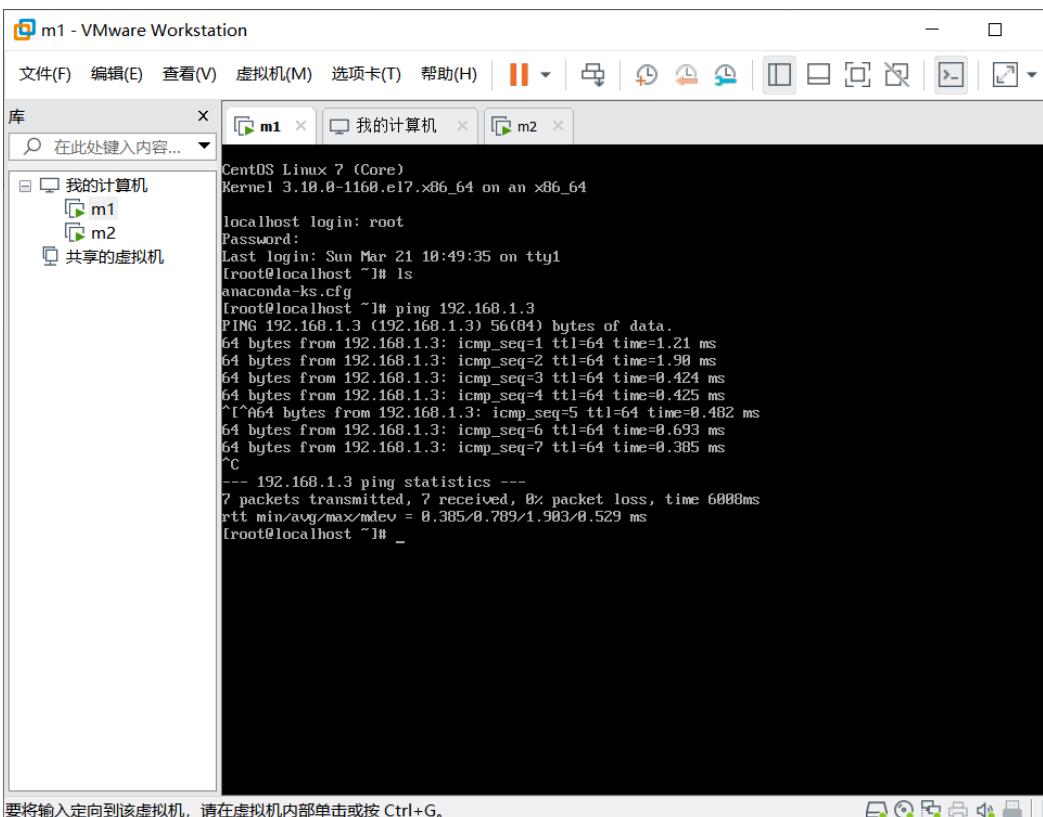
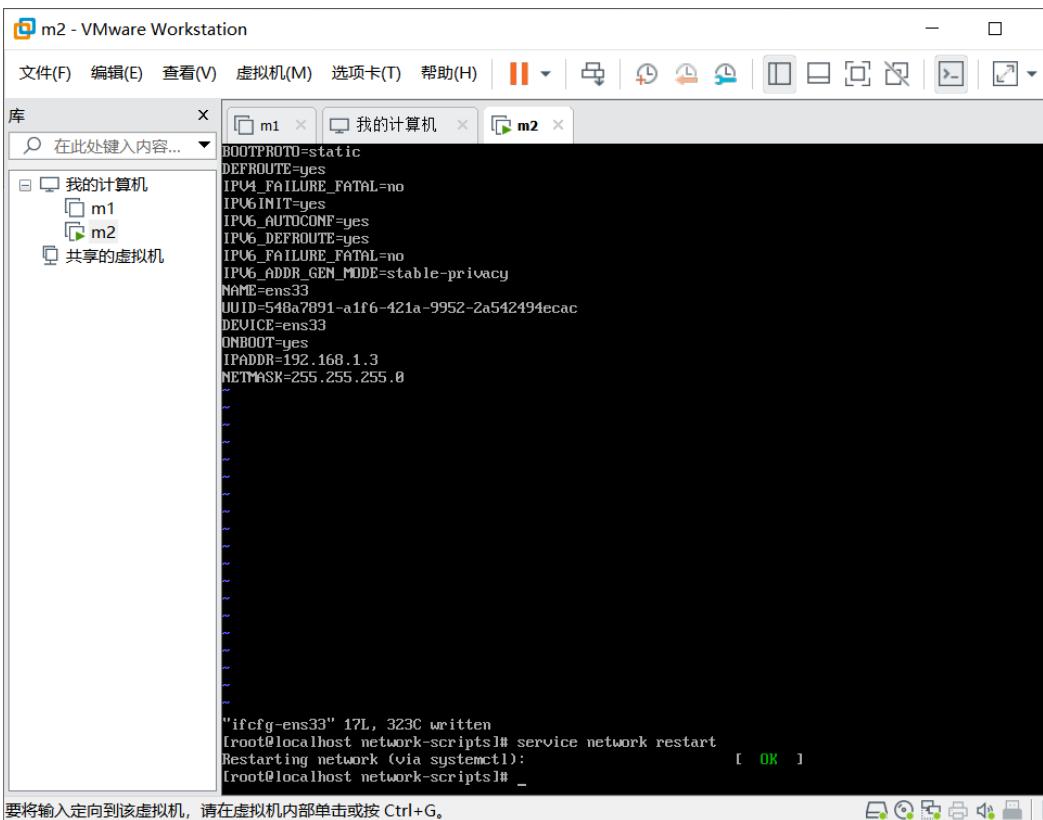


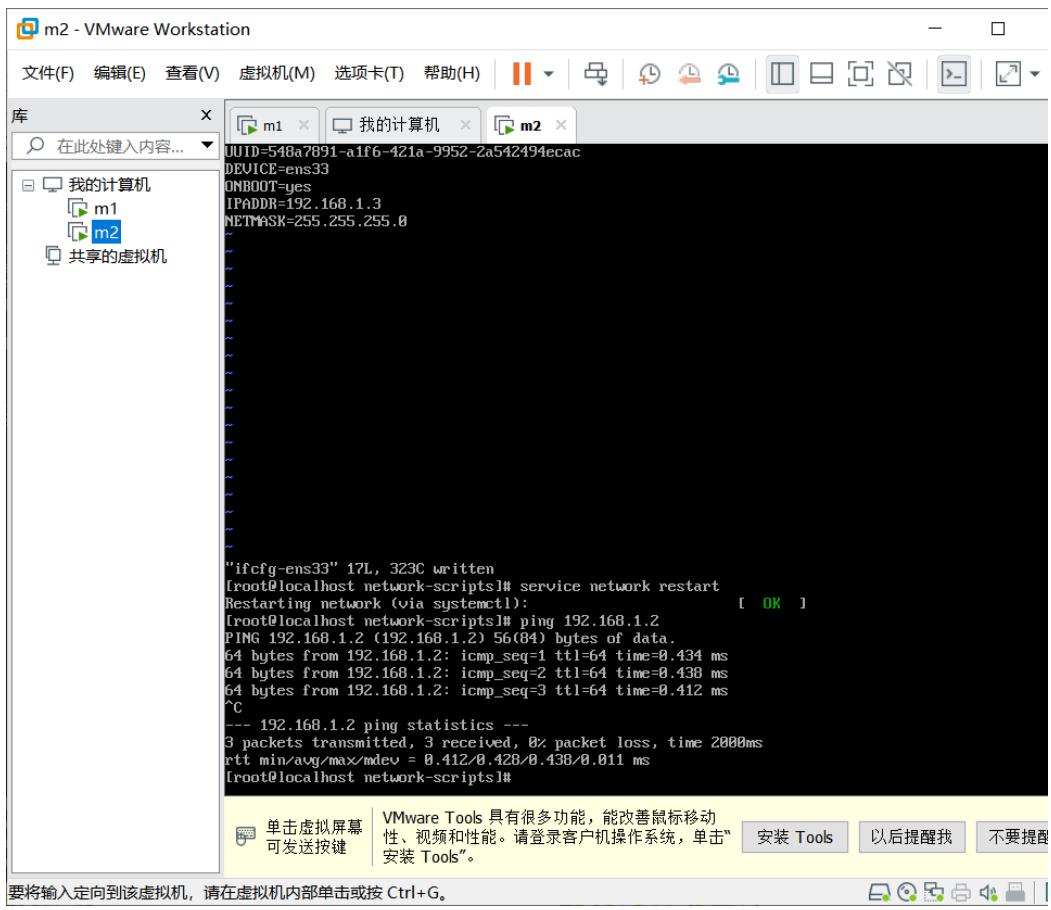


要将输入定向到该虚拟机，请在虚拟机内部单击或按 Ctrl+G。

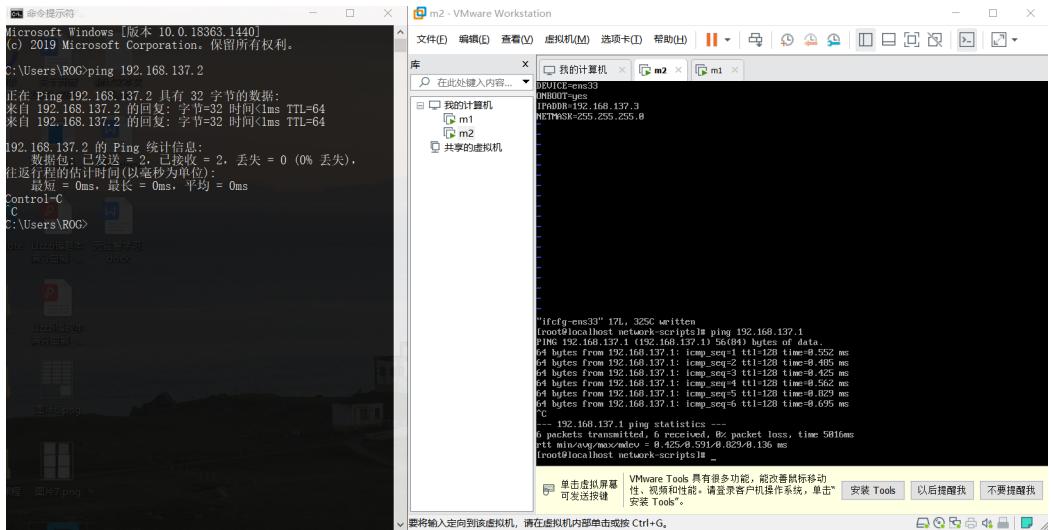








要将输入定向到该虚拟机, 请在虚拟机内部单击或按 Ctrl+G。



ssh连接

The screenshot shows a terminal window with several tabs open. The active tab is titled 'config' and contains the following configuration file content:

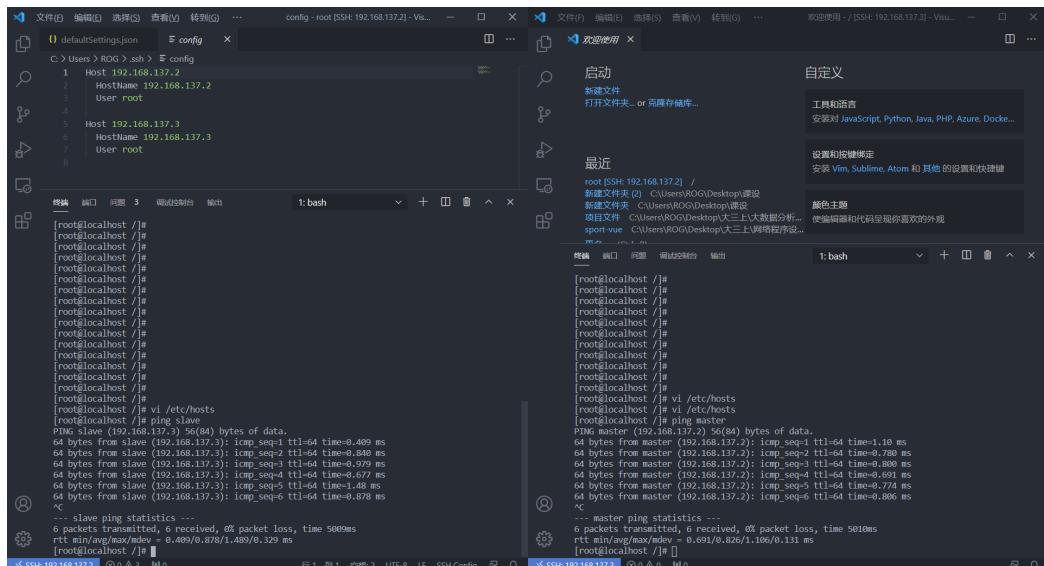
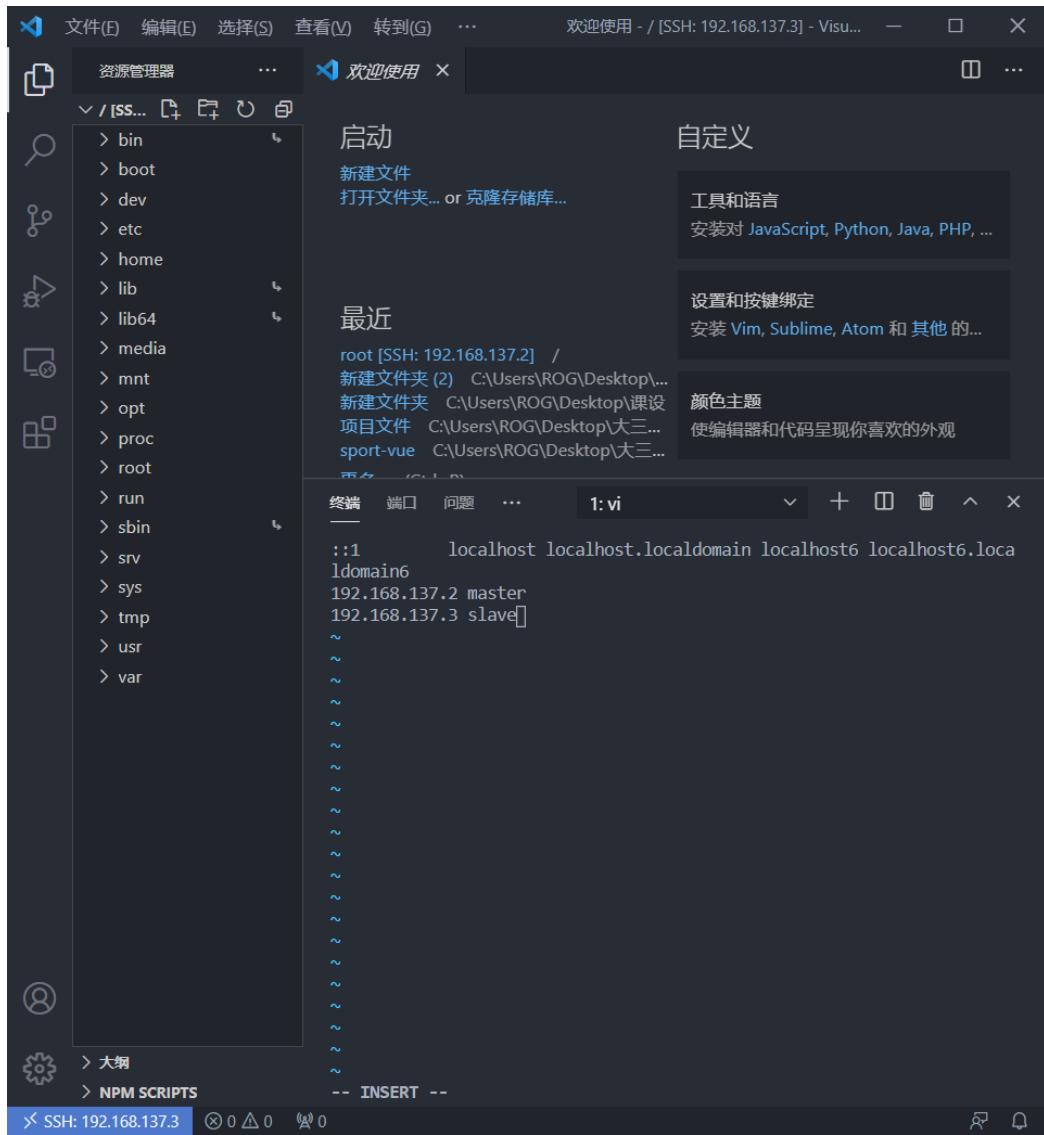
```
C: > Users > ROG > .ssh > config
1 Host 192.168.137.2
2   HostName 192.168.137.2
3   User root
4
5 Host 192.168.137.3
6   HostName 192.168.137.3
7   User root
8
```

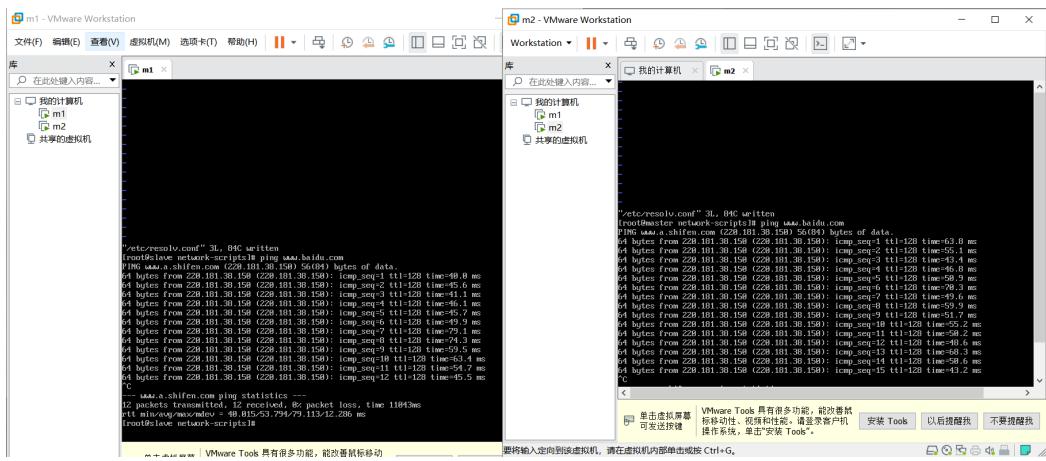
Below the configuration file, the terminal displays system logs from a bash session:

```
终端 端口 问题 3 调试控制台 输出 1: bash
dr-xr-xr-x. 13 root root 0 Mar 21 17:44 sys
drwxrwxrwt. 12 root root 4096 Mar 21 18:01 tmp
drwxr-xr-x. 13 root root 155 Mar 21 10:33 usr
drwxr-xr-x. 19 root root 267 Mar 21 10:37 var
[root@localhost /]# hostnamectl set-hostname slave
[root@localhost /]# hostname
slave
[root@localhost /]#
[root@localhost /]#
[root@localhost /]#
```

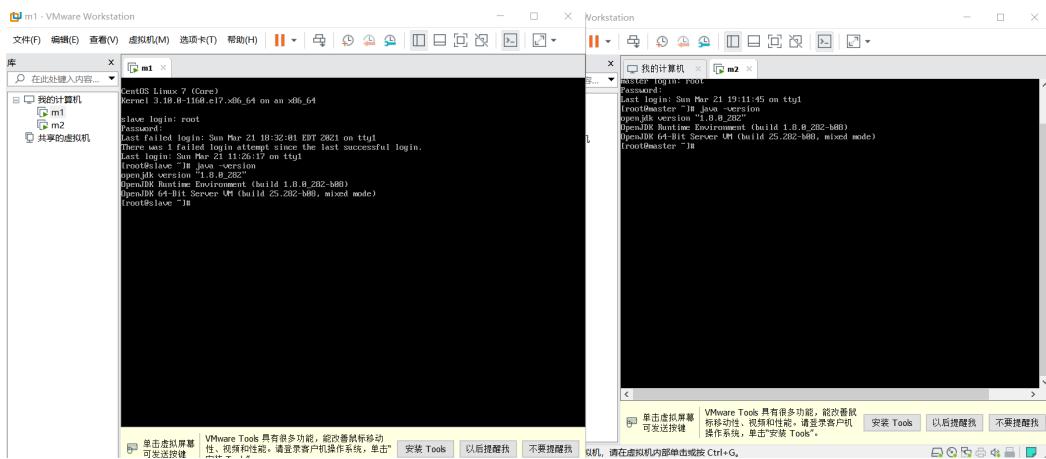
设置别名

The screenshot shows two separate terminal windows side-by-side. Both windows have a title bar '欢迎使用' (Welcome) and a tab bar with '文件(F)' (File), '编辑(E)' (Edit), '选择(S)' (Select), '查看(V)' (View), '转到(G)' (Go To), and '命令(C)' (Command). The left window has a search bar and a toolbar with icons for file operations. It displays a command-line session where a user is navigating through a directory structure and executing commands like 'ls', 'cd', and 'mv'. The right window also has a search bar and a toolbar. It shows a similar command-line session, but with many more entries, indicating a longer or more complex interaction. Both windows have a status bar at the bottom showing the IP address 'SSH: 192.168.137.3' and other system information.

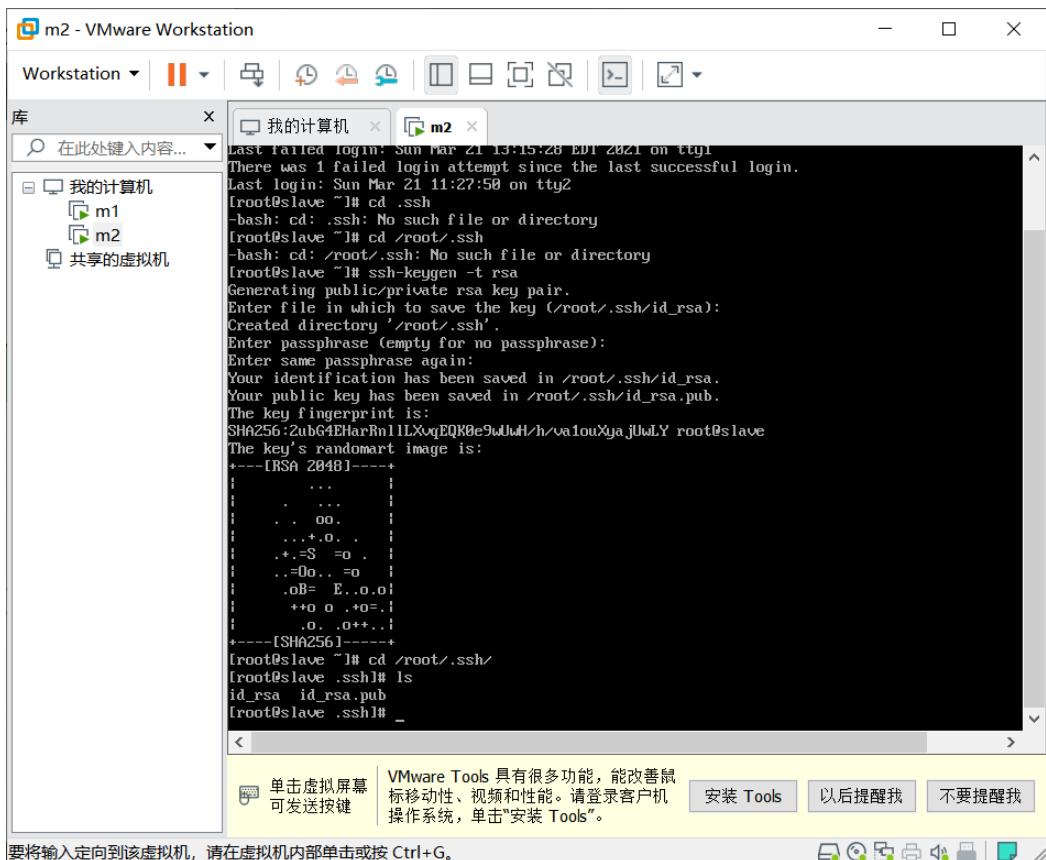




安装JDK

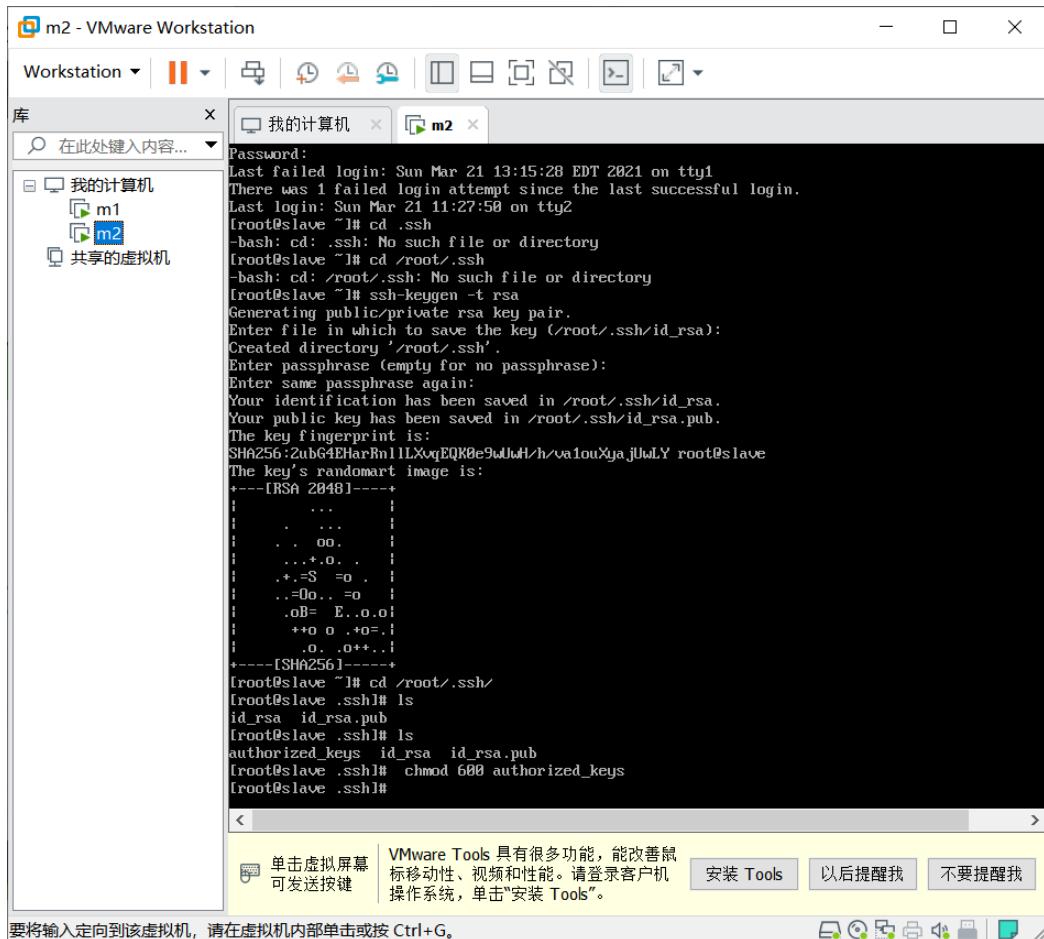


免密登录

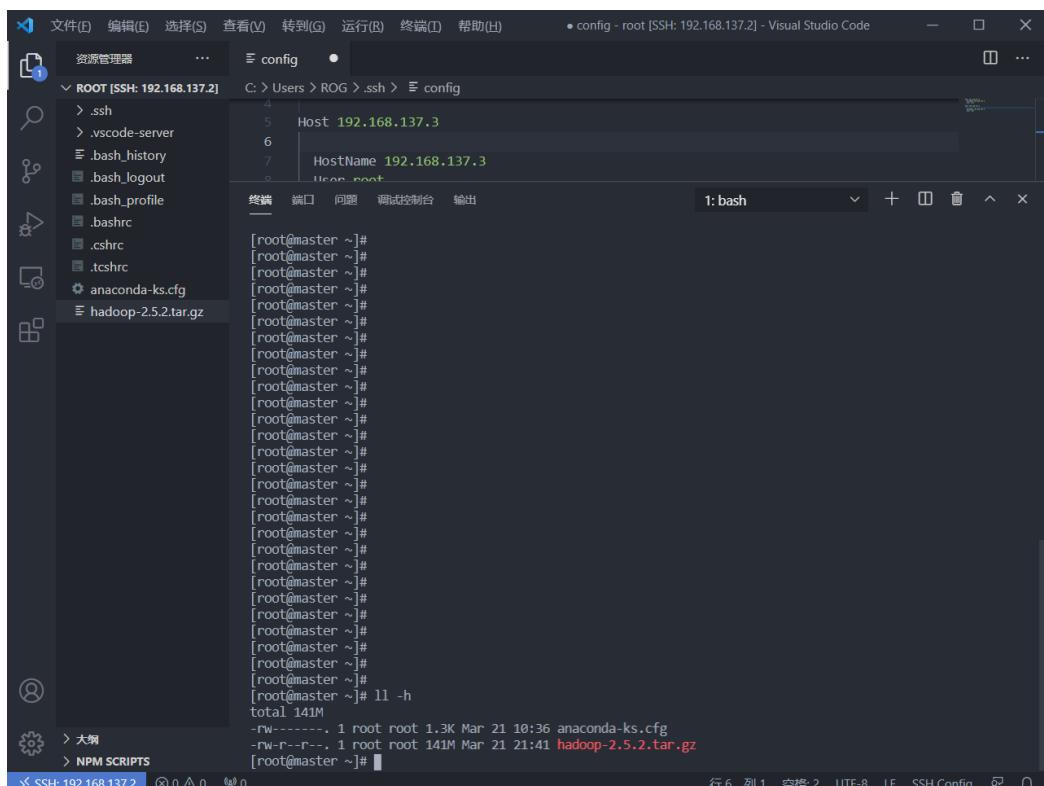


要将输入定向到该虚拟机，请在虚拟机内部单击或按 Ctrl+G。

slave login: root
Password:
Last failed login: Sun Mar 21 13:15:28 EDT 2021 on ttys1
There was 1 failed login attempt since the last successful login.
Last login: Sun Mar 21 11:27:58 on ttys2
[root@slave ~]# cd .ssh
-bash: cd: .ssh: No such file or directory
[root@slave ~]# cd /root/.ssh
-bash: cd: /root/.ssh: No such file or directory
[root@slave ~]# ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa):
Created directory '/root/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /root/.ssh/id_rsa.
Your public key has been saved in /root/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:2ubG4bHarRn1LLXqEQK0e9wJwH/h/vaiouXyaJuWLY root@slave
The key's randomart image is:
+---[RSA 2048]---+
| .. . |
| . . . |
| . . oo. |
| ...+o.. . |
| .+=S =O . |
| ..=O... =O |
| .OB= E..o.o|
| +*o o ,+o=|
| .o .o+...|
+---[SHA256]---+
[root@slave ~]# cd /root/.ssh/
[root@slave .ssh]# ls
id_rsa id_rsa.pub
[root@slave .ssh]# ls
authorized_keys id_rsa id_rsa.pub
[root@slave .ssh]# s_



hadoop安装



文件(E) 编辑(E) 选择(S) 查看(V) 转到(G) ... config - root [SSH: 192.168.137.2] - Vis...

资源管理器 ... config ●

ROOT [SSH: 192.168.137.2]

- > .ssh
- > .vscode-server
- > hadoop-2.5.2
- .bash_history
- .bash_logout
- .bash_profile
- .bashrc
- .cshrc
- .tcshrc
- anaconda-ks.cfg
- hadoop-2.5.2.tar.gz

C: > Users > ROG > .ssh > config

```
4
5 Host 192.168.137.3
6
7 | HostName 192.168.137.3
8 | User root
9
```

终端 端口 问题 ... 1: bash + □ ^ X

```
hadoop-2.5.2/include/StringUtil.hh
hadoop-2.5.2/include/Pipes.hh
hadoop-2.5.2/include/hdfs.h
hadoop-2.5.2/libexec/
hadoop-2.5.2/libexec/yarn-config.cmd
hadoop-2.5.2/libexec/hadoop-config.cmd
hadoop-2.5.2/libexec/mapred-config.sh
hadoop-2.5.2/libexec/httpfs-config.sh
hadoop-2.5.2/libexec/hadoop-config.sh
hadoop-2.5.2/libexec/mapred-config.cmd
hadoop-2.5.2/libexec/hdfs-config.cmd
hadoop-2.5.2/libexec/yarn-config.sh
hadoop-2.5.2/libexec/hdfs-config.sh
hadoop-2.5.2/README.txt
hadoop-2.5.2/NOTICE.txt
hadoop-2.5.2/lib/
hadoop-2.5.2/lib/native/
hadoop-2.5.2/lib/native/libhadoop.a
hadoop-2.5.2/lib/native/libhadoop.so
hadoop-2.5.2/lib/native/libhadooppipes.a
hadoop-2.5.2/lib/native/libhdfs.so.0.0.0
hadoop-2.5.2/lib/native/libhadooputils.a
hadoop-2.5.2/lib/native/libhdfs.a
hadoop-2.5.2/lib/native/libhdfs.so
hadoop-2.5.2/lib/native/libhadoop.so.1.0.0
hadoop-2.5.2/LICENSE.txt
[root@master ~]# ls
anaconda-ks.cfg hadoop-2.5.2 hadoop-2.5.2.tar.gz
[root@master ~]# cd hadoop-2.5.2
[root@master hadoop-2.5.2]# ls
bin include libexec NOTICE.txt sbin
etc lib LICENSE.txt README.txt share
[root@master hadoop-2.5.2]#
```

SSH: 192.168.137.2 ⌂ 0 △ 0 ⌂ 0 行 6, 列 1 空格: 2 UTF-8 LF SSH Config ⌂ ⌂

The screenshot shows a terminal window with the following details:

- File Bar:** 文件(E) 编辑(E) 选择(S) 查看(V) 转到(G) ...
- Title Bar:** config - root [SSH: 192.168.137.2] - Vis...
- Left Sidebar:** Includes icons for file operations (copy, move, delete), search, and navigation.
- Current Path:** C: > Users > ROG > .ssh > config
- Code Area:** Displays the contents of the config file:

```
4
5 Host 192.168.137.3
6
7 HostName 192.168.137.3
8 User root
9
```
- Bottom Navigation:** 终端 端口 问题 调试控制台 输出
- Terminal Session:** 1: bash
- Terminal History:**

```
[root@master java-1.8.0-openjdk-1.8.0.282.b08-1.el7_9.x86_64]# pwd
/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.282.b08-1.el7_9.x86_64
[root@master java-1.8.0-openjdk-1.8.0.282.b08-1.el7_9.x86_64]# cd ~
[root@master ~]# ;s
bash: syntax error near unexpected token `;'
[root@master ~]# cd hadoop-2.5.2
[root@master hadoop-2.5.2]# ls
bin include libexec NOTICE.txt sbin
etc lib LICENSE.txt README.txt share
[root@master hadoop-2.5.2]# cd etc/hadoop/
[root@master hadoop]# ls
capacity-scheduler.xml httpfs-site.xml
configuration.xsl log4j.properties
container-executor.cfg mapred-env.cmd
core-site.xml mapred-env.sh
hadoop-env.cmd mapred-queues.xml.template
hadoop-env.sh mapred-site.xml.template
hadoop-metrics2.properties slaves
hadoop-metrics.properties ssl-client.xml.example
hadoop-policy.xml ssl-server.xml.example
hdfs-site.xml yarn-env.cmd
httpfs-env.sh yarn-env.sh
httpfs-log4j.properties yarn-site.xml
httpfs-signature.secret
[root@master hadoop]# vi yarn-env.sh
[root@master hadoop]# vi yarn-env.sh
[root@master hadoop]# pwd
/root/hadoop-2.5.2/etc/hadoop
[root@master hadoop]# vi hadoop-env.sh
[root@master hadoop]# vi hadoop-env.sh
[root@master hadoop]# vi hadoop-env.sh
[root@master hadoop]# vi hadoop-env.sh
[root@master hadoop]#
```
- Bottom Status Bar:** 行 4, 列 1 空格: 2 LF SSH Config

```
4 # regarding copyright ownership. The ASF licenses this file
5 # to you under the Apache License, Version 2.0 (the
6 # "License"); you may not use this file except in compliance
7 # with the License. You may obtain a copy of the License at
8 #
9 #     http://www.apache.org/licenses/LICENSE-2.0
10 #
11 # Unless required by applicable law or agreed to in writing, software
12 # distributed under the License is distributed on an "AS IS" BASIS,
13 # WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
14 # See the License for the specific language governing permissions and
15 # limitations under the License.
16
17 # Set Hadoop-specific environment variables here.
18
19 # The only required environment variable is JAVA_HOME. All others are
20 # optional. When running a distributed configuration it is best to
21 # set JAVA_HOME in this file, so that it is correctly defined on
22 # remote nodes.
23
24 # The java implementation to use.
25 export JAVA_HOME=/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.282.b08-1.el7_9.x86_64
26
27 # The jsvc implementation to use. Jsvc is required to run secure datanodes.
28 #export JSVC_HOME=${JSVC_HOME}
29
30 export HADOOP_CONF_DIR=${HADOOP_CONF_DIR:-"/etc/hadoop"}
31
32 # Extra Java CLASSPATH elements. Automatically insert capacity-scheduler.
33 for f in $HADOOP_HOME/contrib/capacity-scheduler/*.jar; do
34   if [ "$HADOOP_CLASSPATH" ]; then
35     export HADOOP_CLASSPATH=$HADOOP_CLASSPATH:$f
```

SSH: 192.168.137.2 行 4, 列 1 空格: 2 UTF-8 LF SSH Config

The screenshot shows a terminal window titled 'config' with the command 'C: > Users > ROG > .ssh > config'. The file contains the following configuration:

```
Host 192.168.137.3
HostName 192.168.137.3
User root
```

Below the configuration file, the terminal shows the directory structure and files for the Hadoop installation:

```
hadoop-2.5.2/lib/native/libhadoop.so
hadoop-2.5.2/lib/native/libhadooppipes.a
hadoop-2.5.2/lib/native/libhdfs.so.0.0.0
hadoop-2.5.2/lib/native/libhadooputils.a
hadoop-2.5.2/lib/native/libhdfs.a
hadoop-2.5.2/lib/native/libhdfs.so
hadoop-2.5.2/lib/native/libhadoop.so.1.0.0
hadoop-2.5.2/LICENSE.txt
[root@master ~]# ls
anaconda-ks.cfg  hadoop-2.5.2  hadoop-2.5.2.tar.gz
[root@master ~]# cd hadoop-2.5.2
[root@master hadoop-2.5.2]# ls
bin  include  libexec  NOTICE.txt  sbin
etc  lib      LICENSE.txt  README.txt  share
[root@master hadoop-2.5.2]# cd etc/
[root@master etc]# ls
hadoop
[root@master etc]# cd hadoop/
[root@master hadoop]# ls
capacity-scheduler.xml  httpfs-site.xml
configuration.xsl        log4j.properties
container-executor.cfg   mapred-env.cmd
core-site.xml            mapred-env.sh
hadoop-env.cmd          mapred-queues.xml.template
hadoop-env.sh            mapred-site.xml.template
hadoop-metrics2.properties  slaves
hadoop-metrics.properties  ssl-client.xml.example
hadoop-policy.xml        ssl-server.xml.example
hdfs-site.xml           yarn-env.cmd
httpfs-env.sh           yarn-env.sh
httpfs-log4j.properties  yarn-site.xml
httpfs-signature.secret
```

The terminal prompt at the bottom right indicates the user is editing the 'yarn-env.sh' file.

The screenshot shows a terminal window titled 'config' with the command 'Host 192.168.137.3' entered. The file path is 'C: > Users > ROG > .ssh > config'. The terminal interface includes tabs for '终端', '端口', '问题', '调试控制台', and '输出'. The status bar at the bottom shows '行 4, 列 1 空格: 2 UTF-8 LF SSH Config'.

```
1 # Licensed to the Apache Software Foundation (ASF) under one or more
2 # contributor license agreements. See the NOTICE file distributed with
3 # this work for additional information regarding copyright ownership.
4 # The ASF licenses this file to You under the Apache License, Version 2.0
5 # (the "License"); you may not use this file except in compliance with
6 # the License. You may obtain a copy of the License at
7 #
8 #     http://www.apache.org/licenses/LICENSE-2.0
9 #
10 # Unless required by applicable law or agreed to in writing, software
11 # distributed under the License is distributed on an "AS IS" BASIS,
12 # WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
13 # See the License for the specific language governing permissions and
14 # limitations under the License.
15
16 # User for YARN daemons
17 export HADOOP_YARN_USER=${HADOOP_YARN_USER:-yarn}
18
19 # resolve links - $0 may be a softlink
20 export YARN_CONF_DIR="${YARN_CONF_DIR:-$HADOOP_YARN_HOME/conf}"
21
22 # some Java parameters
23 export JAVA_HOME=/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.282.b08-1.el7_9.x86_64
24 if [ "$JAVA_HOME" != "" ]; then
25   #echo "run java in $JAVA_HOME"
26   JAVA_HOME=$JAVA_HOME
27 fi
28
29 if [ "$JAVA_HOME" = "" ]; then
30   echo "Error: JAVA_HOME is not set."
31   exit 1
32 fi
-- INSERT --
```

The screenshot shows a terminal window with the following details:

- File Bar:** 文件(E) 编辑(E) 选择(S) 查看(V) 转到(G) ...
- Current File:** core-site.xml
- Content:** The terminal displays the XML configuration for Hadoop's core-site. It includes properties for the default file system (fs.defaultFS) pointing to hdfs://master:9000 and the temporary directory (hadoop.tmp.dir) pointing to /root/hadoopdata.
- Bottom Status:** SSH: 192.168.137.2 行 26, 列 30 空格: 2 UTF-8 LF XML

The screenshot shows a terminal window with several tabs at the top: "config", "core-site.xml", "hdfs-site.xml", and "yarn-site.xml". The "yarn-site.xml" tab is active, displaying the XML configuration for YARN. The code in the editor is as follows:

```
15 <configuration>
16
17     <!-- Site specific YARN configuration properties -->
18     <property>
19         <name>yarn.nodemanager.aux-services</name>
20         <value>mapreduce_shuffle</value>
21     </property>
22     <property>
23         <name>yarn.resourcemanager.address</name>
24         <value>master:8040</value>
25     </property>
26     <property>
27         <name>yarn.resourcemanager.scheduler.address</name>
28         <value>master:8030</value>
29     </property>
30     <property>
31         <name>yarn.resourcemanager.resource-tracker.address</name>
32         <value>master:8025</value>
33     </property>
34     <property>
35         <name>yarn.resourcemanager.admin.address</name>
36         <value>master:8141</value>
37     </property>
38     <property>
39         <name>yarn.resourcemanager.webapp.address</name>
40         <value>master:8088</value>
41     </property>
42 </configuration>
```

The terminal below shows the current directory is "/etc/hadoop" and lists several configuration files. The prompt is "[root@master hadoop]#".

```
core-site.xml      httpfs-signature.secret    ssl-server.xml.example
hadoop-env.cmd    httpfs-site.xml           yarn-env.cmd
hadoop-env.sh     log4j.properties          yarn-env.sh
hadoop-metrics2.properties mapred-env.cmd
hadoop-metrics.properties mapred-env.sh
hadoop-policy.xml mapred-queues.xml.template
[root@master hadoop]#
```

文件(E) 编辑(E) 选择(S) 查看(V) 转到(G) ... mapred-site.xml - root [SSH: 192.168.137.2] ...

config ● core-site.xml hdfs-site.xml yarn-site.xml mapred-site.xml

```

1  <?xml version="1.0"?>
2  <?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
3  <!--
4      Licensed under the Apache License, Version 2.0 (the "License");
5      you may not use this file except in compliance with the License.
6      You may obtain a copy of the License at
7
8          http://www.apache.org/Licenses/LICENSE-2.0
9
10     Unless required by applicable law or agreed to in writing, software
11     distributed under the License is distributed on an "AS IS" BASIS,
12     WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
13     See the License for the specific language governing permissions and
14     limitations under the License. See accompanying LICENSE file.
15  -->
16
17  <!-- Put site-specific property overrides in this file. -->
18
19 <configuration>
20   <property>
21     <name>mapreduce.framework.name</name>
22     <value>yarn</value>
23   </property>
24 </configuration>
25

```

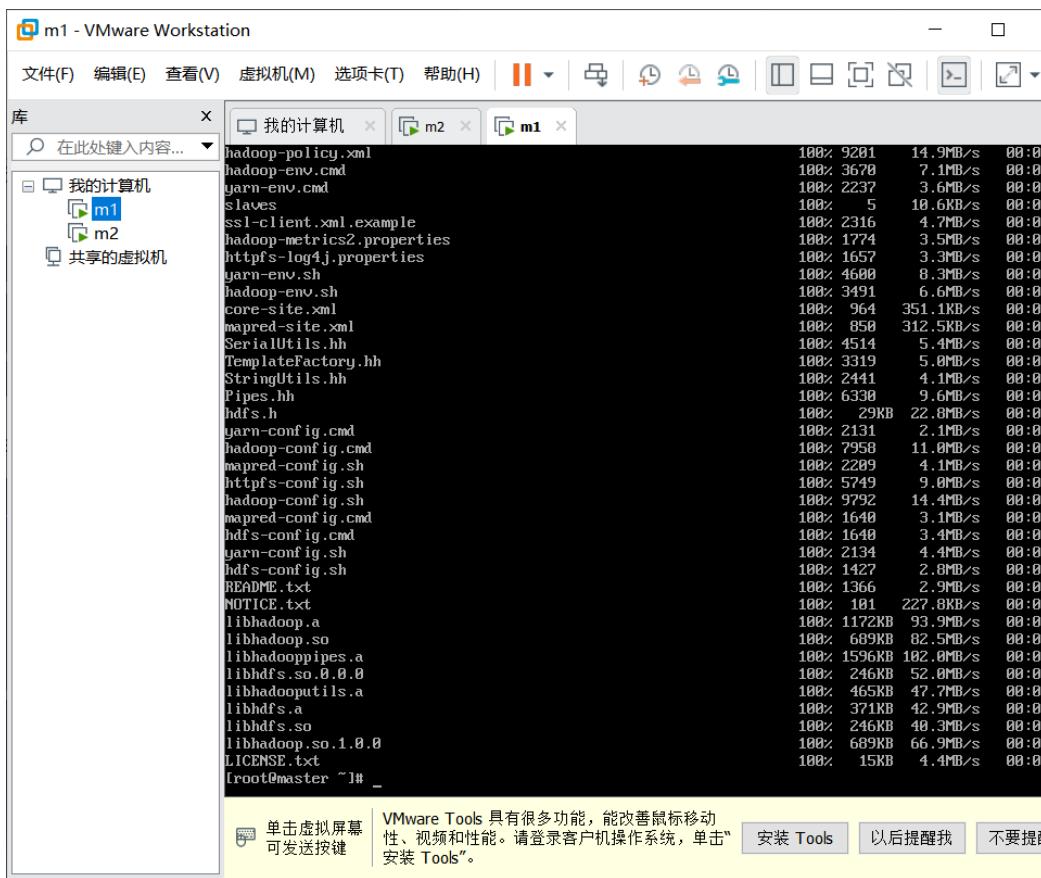
终端 端口 问题 调试控制台 输出 1: bash + - ×

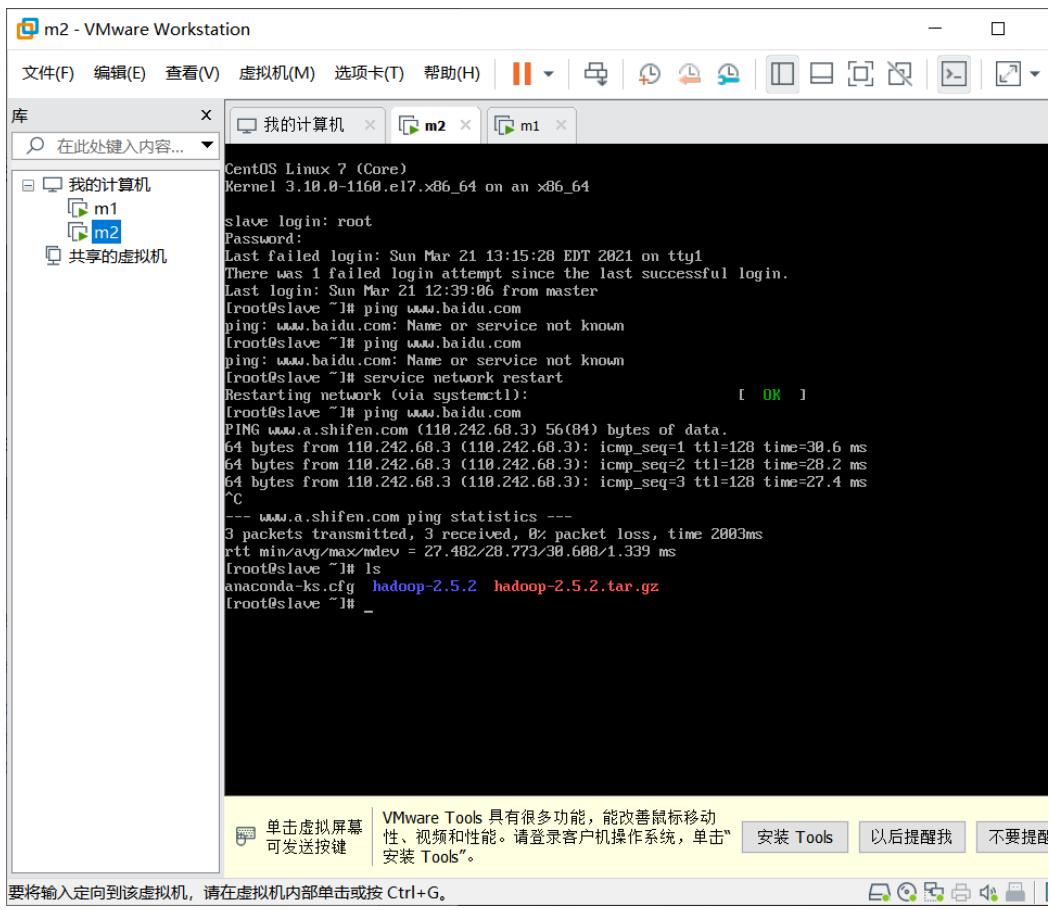
```

hadoop-env.sh log4j.properties yarn-env.sh
hadoop-metrics2.properties mapred-env.cmd yarn-site.xml
hadoop-metrics.properties mapred-env.sh
hadoop-policy.xml mapred-queues.xml.template
[root@master hadoop]# cp mapred-site.xml.template mapred-site.xml
[root@master hadoop]# ^C
[root@master hadoop]# 

```

SSH: 192.168.137.2 行 23, 列 14 空格: 2 LF XML





要将输入定向到该虚拟机，请在虚拟机内部单击或按 Ctrl+G。

文件(E) 编辑(E) 选择(S) 查看(V) 转到(G)bash_profile - root [SSH: 192.168.137.2] -

资源管理器

ROOT [SSH: 192.168.137.2]

- .ssh
- .vscode-server
- hadoop-2.5.2
- hadoopdata
- .bash_history
- .bash_logout
- .bash_profile
- .bashrc
- .cshrc
- .tcshrc
- anaconda-ks.cfg
- hadoop-2.5.2.tar.gz

.bash_profile

```
# .bash_profile
# Get the aliases and functions
if [ -f ~/.bashrc ]; then
    . ~/.bashrc
fi
# User specific environment and startup programs
PATH=$PATH:$HOME/bin
export JAVA_HOME=/usr/lib/jvm/java-1.8.0-openjdk-1.8.0
export HADOOP_HOME=/root/hadoop-2.5.2
export PATH=$HADOOP_HOME/bin:$HADOOP_HOME/sbin:$PATH
export PATH=$JAVA_HOME/bin:$ANT_HOME/bin:$PATH
export PATH
```

终端 2: bash

```
[root@master hadoop]# cp mapred-site.xml.template mapred-site.xml
[root@master hadoop]# ^C
[root@master hadoop]# ls -lrt /etc/alternatives/java
lrwxrwxrwx. 1 root root 73 Mar 21 11:27 /etc/alternatives/java -> /usr/lib/jvm/java-1.8.0-openjdk-1.8.0.282.b08-1.el7_9.x86_64/jre/bin/java
[root@master hadoop]# ls /usr/lib/jvm/java-1.8.0-openjdk-1.8.0.282.b08-1.el7_9.x86_64
ASSEMBLY_EXCEPTION include LICENSE tasset
bin jre sample THIRD_PARTY_README
demo lib src.zip
[root@master hadoop]# pwd
/root/hadoop-2.5.2/etc/hadoop
[root@master hadoop]# $ANT_HOME
[root@master hadoop]# $JAVA_HOME/bin:$ANT_HOME/bin:$PATH
bash: /bin:/bin:/root/.vscode-server/bin/2b9aebebd5354a3629c3aba0a5f5df49f43d6689f8/bin:/root/.vscode-server/bin/2b9aebebd5354a3629c3aba0a5f5df49f43d6689f8/bin:/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/root/bin: No such file or directory
[root@master hadoop]# []
```

The screenshot shows a terminal window with the following command and its output:

```
[root@master hadoop-2.5.2]# hadoop jar share/hadoop/mapreduce/hadoop-mapreduce-examples-2.5.2.jar pi 10 10
Number of Maps = 10
Samples per Map = 10
Wrote input for Map #0
Wrote input for Map #1
Wrote input for Map #2
Wrote input for Map #3
Wrote input for Map #4
Wrote input for Map #5
Wrote input for Map #6
Wrote input for Map #7
Wrote input for Map #8
Wrote input for Map #9
Starting Job
21/03/22 00:21:34 INFO client.RMProxy: Connecting to ResourceManager at master/192.168.137.2:8040
21/03/22 00:21:35 INFO input.FileInputFormat: Total input paths to process : 10
21/03/22 00:21:35 INFO mapreduce.JobSubmitter: number of splits:10
21/03/22 00:21:35 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1616386842129_0001
21/03/22 00:21:36 INFO impl.YarnClientImpl: submitted application application_1616386842129_0001
21/03/22 00:21:36 INFO mapreduce.Job: The url to track the job: http://master:8088/proxy/application_1616386842129_0001/
21/03/22 00:21:36 INFO mapreduce.Job: Running job: job_1616386842129_0001
```



Datanode Information

In operation

| Node | Last contact | Admin State | Capacity | Used | Non DFS Used | Remaining | Blocks | Block pool used | Failed Volumes | Version |
|-----------------------------|--------------|-------------|----------|-----------|--------------|-----------|--------|-----------------|----------------|---------|
| slave (192.168.137.3:50010) | 0 | In Service | 16.99 GB | 446.54 KB | 2.08 GB | 14.91 GB | 15 | 446.54 KB (0%) | 0 | 2.5.2 |

Decommissioning

| Node | Last contact | Under replicated blocks | Blocks with no live replicas | Under Replicated Blocks In files under construction |
|------|--------------|-------------------------|------------------------------|--|
| | | | | |

The screenshot shows a terminal window with the following content:

```
11 PATH=$PATH:$HOME/bin
12 export JAVA_HOME=/usr/lib/jvm/java-1.8.0-openjdk-1.8.0.282.b08-1.el7_9.x86_
13 export HADOOP_HOME=/root/hadoop-2.5.2
14 export ANT_HOME=/root/apache-ant-1.9.4
15 export PATH=$HADOOP_HOME/bin:$HADOOP_HOME/sbin:$PATH
16 export PATH=$JAVA_HOME/bin:$ANT_HOME/bin:$PATH
17 export PATH
18
19
```

Terminal session output:

```
[root@master hadoop-2.5.2]# cd ..
[root@master ~]# unzip apache-ant-1.9.4-bin.zip
bash: unzip: command not found
[root@master ~]# yum install unzip
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
 * base: mirrors.nju.edu.cn
 * extras: mirrors.nju.edu.cn
 * updates: mirrors.ustc.edu.cn
^C^Z
[1]+  Stopped                  yum install unzip
[root@master ~]# ping www.baidu.com

ping: www.baidu.com: Name or service not known
[root@master ~]#
[root@master ~]#
[root@master ~]#
[root@master ~]# source .bash_profile
[root@master ~]# ant
bash: /root/apache-ant-1.9.4/bin/ant: Permission denied
[root@master ~]# chmod 777 apache-ant-1.9.4/bin/ant
[root@master ~]# ant
Buildfile: build.xml does not exist!
Build failed
[root@master ~]# []
```

Bottom status bar:

```
SSH: 192.168.137.2 ⑧ 0 △ 0 ⑧ 0 行 16, 列 41 制表符长度: 4 UTF-8 LF Shell Script
```