

采购物理机

建议为1块ssd系统盘, 1块ssd数据盘, 1块hdd数据盘

塔式服务器

小型团队时选择

例如: https://item.m.jd.com/product/10068034355466.html?utm_user=plusmember&gx=RnAoG-fE_vLx_EjSz49UzFw&gxd=RnAokm4IajzenspGrdZ3VFMbDwK4MN8&ad_od=share&utm_source=androidapp&utm_medium=appshare&utm_campaign=t_335139774&utm_term=CopyURL

联想的比较便宜, 但性能会稍微弱一点

采购一个大于8G的U盘作为linux系统启动盘

机架式服务器

中大型团队时选择

规格建议为64c256g

ups、交换机、路由器

网络环境

小型团队时没有交换机, 物理机需要通过网线连接路由器, 人员连接路由器上的wifi

物理机通过路由器连接到外网

物理机可以通过natapp被外网连接

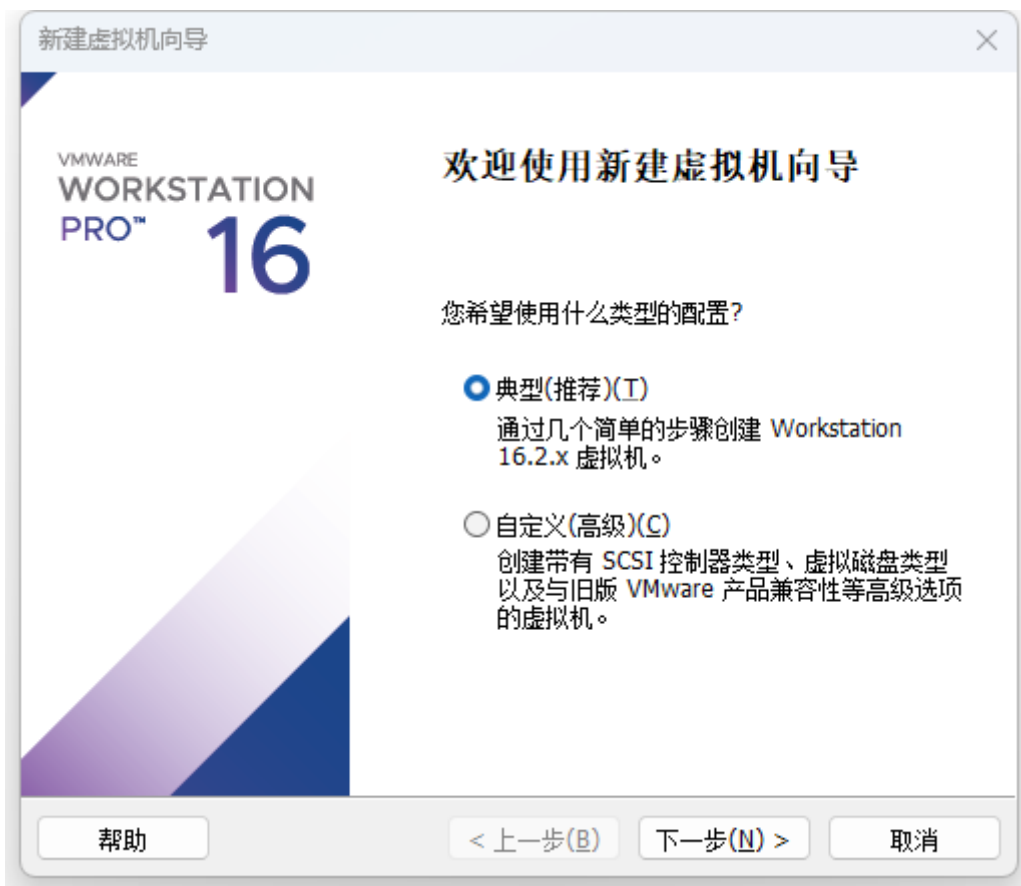
安装操作系统

经典的选择centos7

新的稳定的选debian, 例如debian12

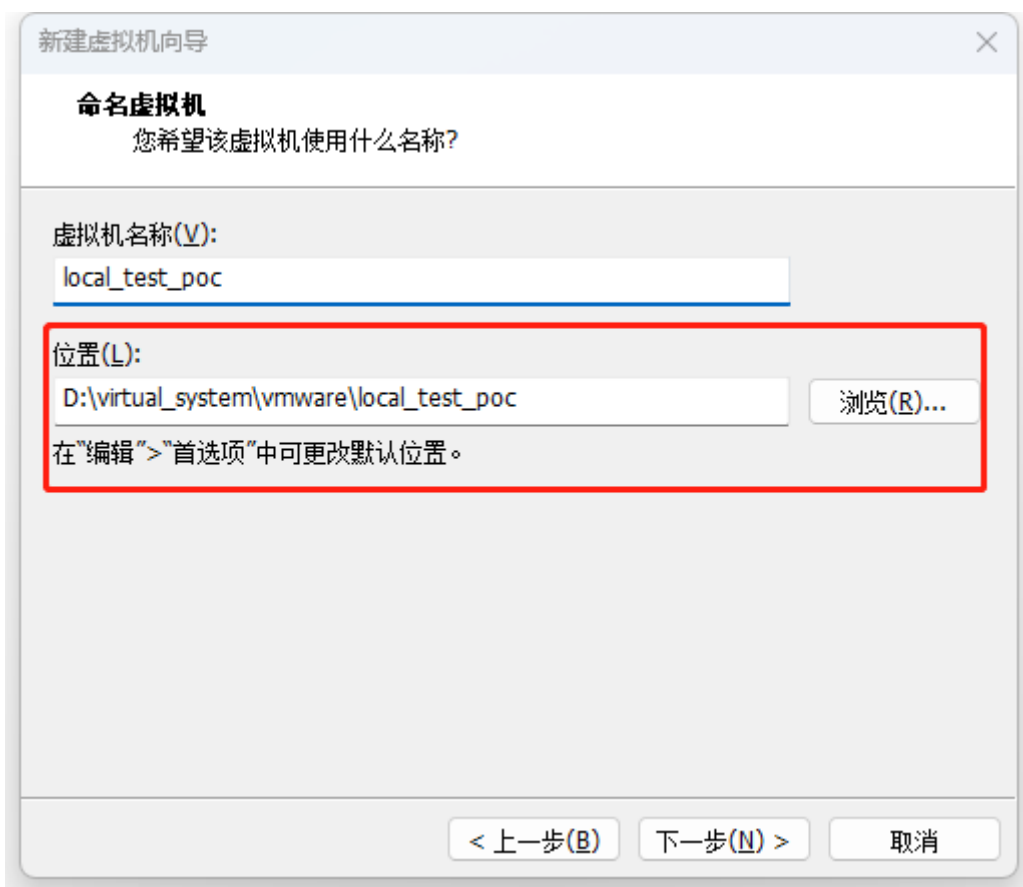
虚拟机模拟

右键 > 新建虚拟机(N)

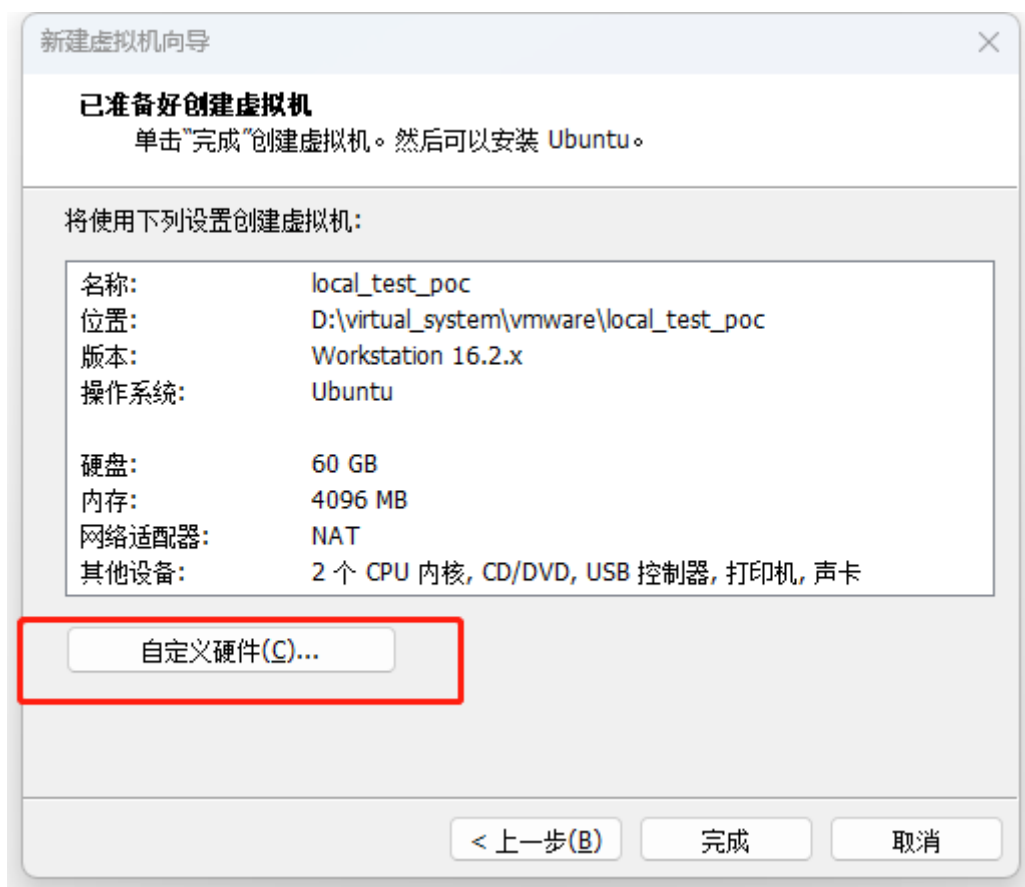


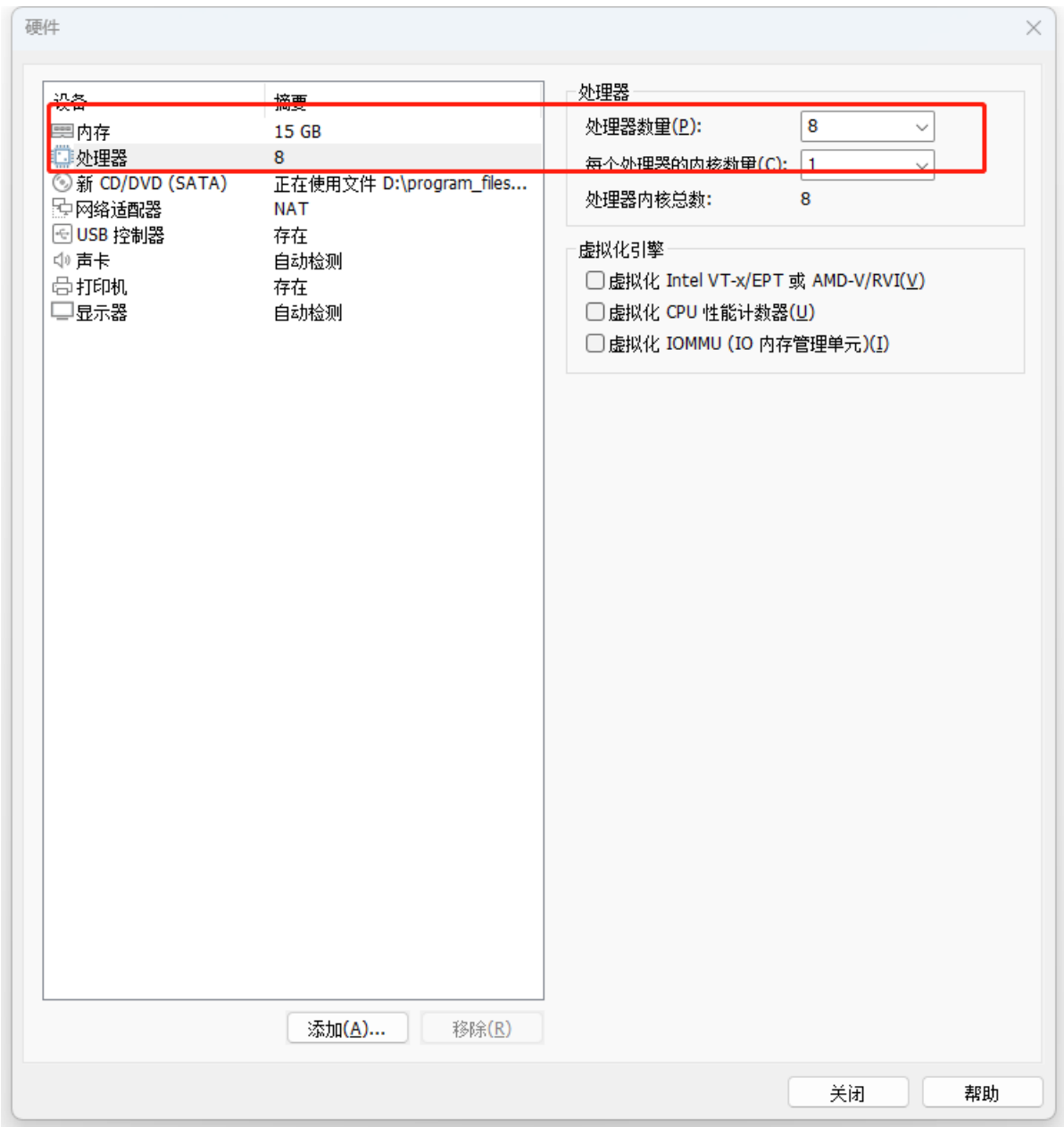


根据实际情况修改本地文件位置



根据实际情况修改磁盘大小





已准备好创建虚拟机

单击“完成”创建虚拟机。然后可以安装 Ubuntu。

将使用下列设置创建虚拟机：

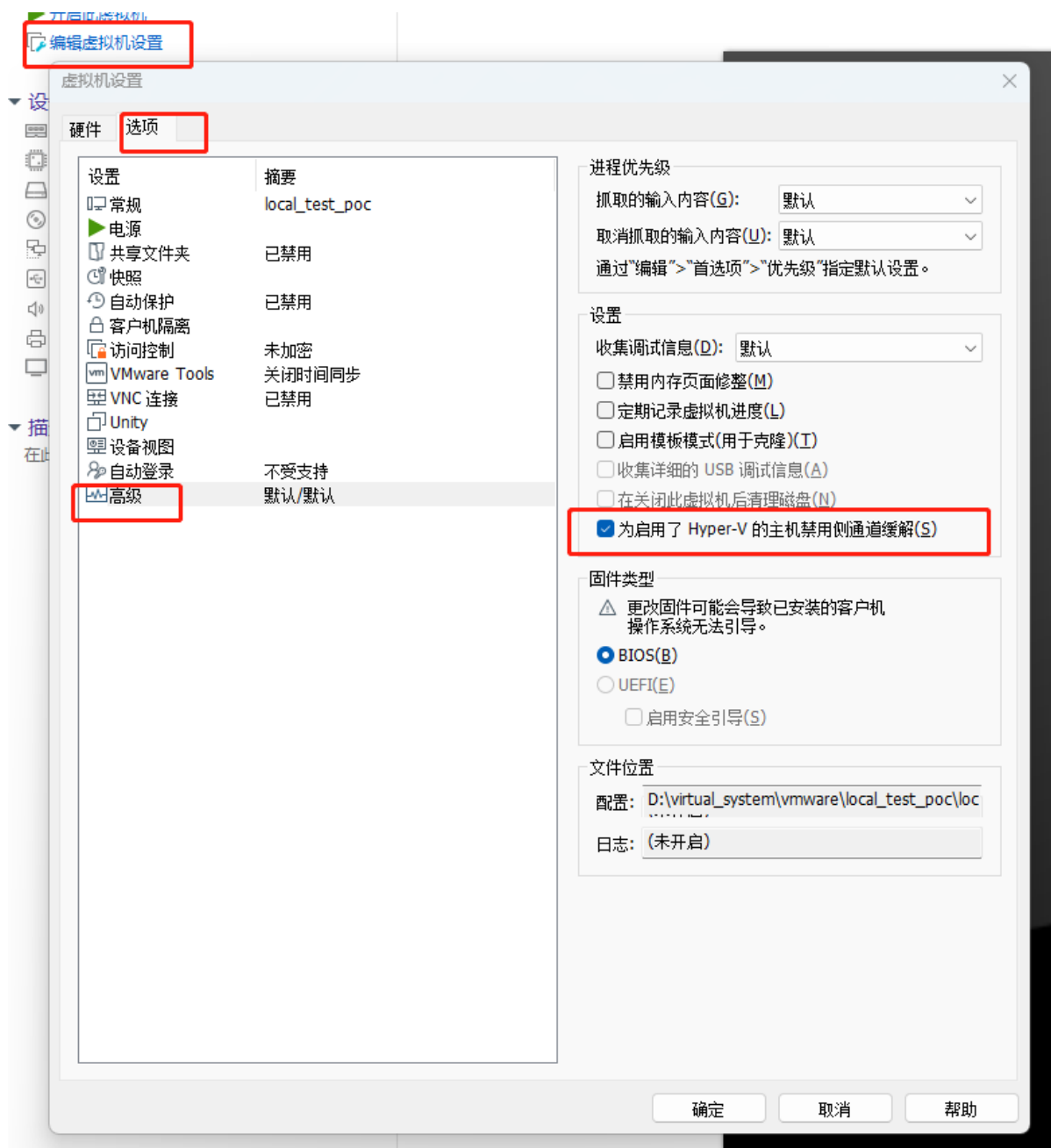
名称：	local_test_poc
位置：	D:\virtual_system\vmware\local_test_poc
版本：	Workstation 16.2.x
操作系统：	Ubuntu
硬盘：	60 GB
内存：	15360 MB
网络适配器：	NAT
其他设备：	8 个 CPU 内核, CD/DVD, USB 控制器, 打印机, 声卡

自定义硬件(C)...

< 上一步(B)

完成

取消



为vmware的虚拟机提升性能: 编辑虚拟机设置 > 选项 > 高级 > 为启用了Hyper-V的主机禁用侧通道缓解(S)

准备好系统

提前下载好 debian 12 dvd iso

<https://cdimage.debian.org/debian-cd/current/amd64/iso-cd/>

制作Linux u盘启动器

需要一个大于8G的U盘

使用软件 rufus

BIOS设置

开机自启

设置散热模式为性能模式

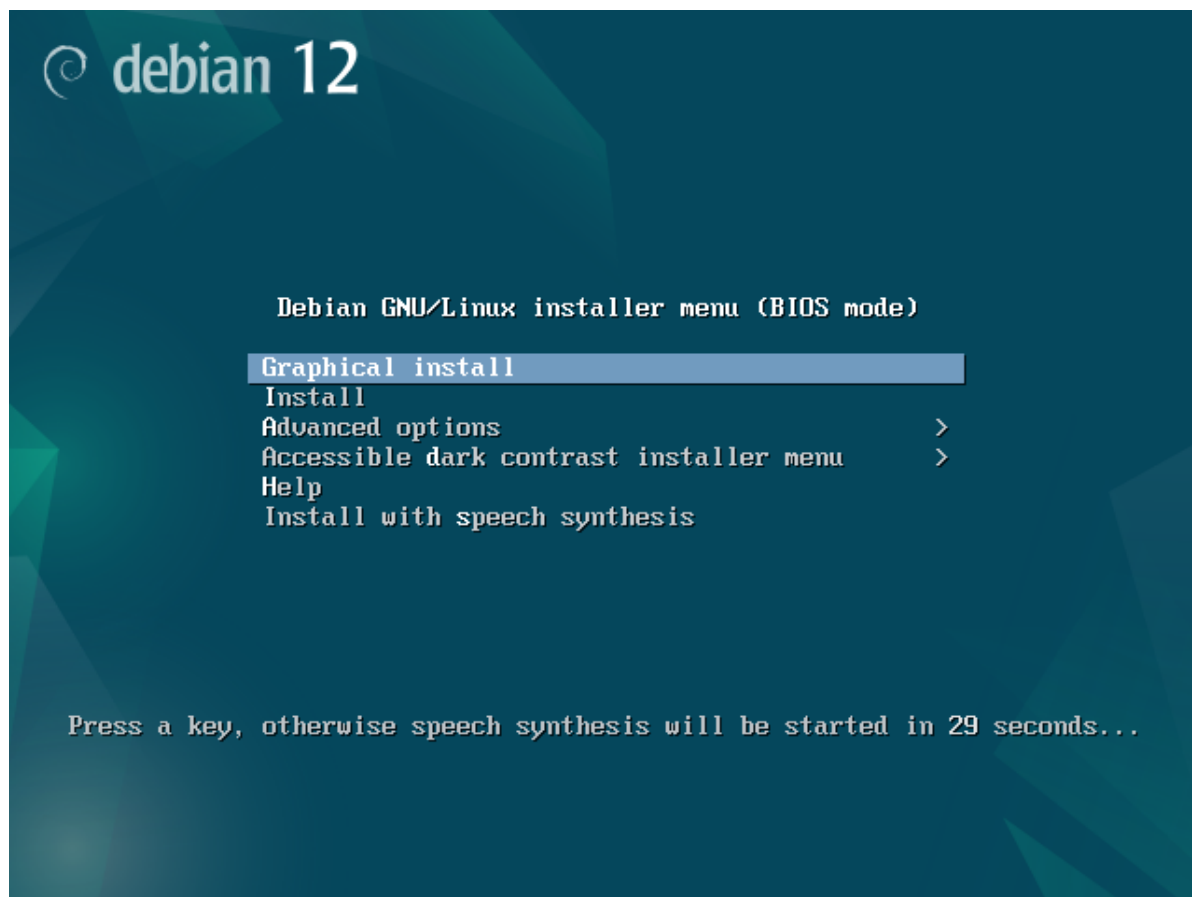
如果系统盘不是raid的话，设置系统盘类型为arch

系统盘尽可能使用raid1, 数据库裸磁盘即可

安装操作系统

安装debian12操作系统

其中的eufi选项选择yes



回车

Select a language

Choose the language to be used for the installation process. The selected language will also be the default language for the installed system.

Language:

Chinese (Simplified)	-	中文(简体)
Chinese (Traditional)	-	中文(繁體)
Croatian	-	Hrvatski
Czech	-	Čeština
Danish	-	Dansk
Dutch	-	Nederlands
Dzongkha	-	ཇོངཀ་
English	-	English
Esperanto	-	Esperanto
Estonian	-	Eesti
Finnish	-	Suomi
French	-	Français
Galician	-	Galego
Georgian	-	ქართული
German	-	Deutsch

Screenshot

Go Back

Continue

Select your location

The selected location will be used to set your time zone and also for example to help select the system locale. Normally this should be the country where you live.

This is a shortlist of locations based on the language you selected. Choose "other" if your location is not listed.

Country, territory or area:

India
Ireland
Israel
New Zealand
Nigeria
Philippines
Seychelles
Singapore
South Africa
United Kingdom
United States
Zambia
Zimbabwe
other

Screenshot

Go Back

Continue

Configure the keyboard

Keymap to use:

American English

Albanian

Arabic

Asturian

Bangladesh

Belarusian

Bengali

Belgian

Berber (Latin)

Bosnian

Brazilian

British English

Bulgarian (BDS layout)

Bulgarian (phonetic layout)

Burmese

Canadian French

Canadian Multilingual

Screenshot

Go Back

Continue

Configure the network

Please enter the hostname for this system.

The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are setting up your own home network, you can make something up here.


Hostname:

debian

Screenshot

Go Back

Continue

 **debian 12**

Configure the network


The domain name is the part of your Internet address to the right of your host name. It is often something that ends in .com, .net, .edu, or .org. If you are setting up a home network, you can make something up, but make sure you use the same domain name on all your computers.

Domain name:

Screenshot

Go BackContinue

修改root账号的密码

 **debian 12**

Set up users and passwords

You need to set a password for 'root', the system administrative account. A malicious or unqualified user with root access can have disastrous results, so you should take care to choose a root password that is not easy to guess. It should not be a word found in dictionaries, or a word that could be easily associated with you.

A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.

The root user should not have an empty password. If you leave this empty, the root account will be disabled and the system's initial user account will be given the power to become root using the "sudo" command.

Note that you will not be able to see the password as you type it.

Root password:

●●●●●●●●●●

☐ Show Password in Clear

Please enter the same root password again to verify that you have typed it correctly.

Re-enter password to verify:

●●●●●●●●●●

☐ Show Password in Clear

Screenshot

Go BackContinue

Set up users and passwords

A user account will be created for you to use instead of the root account for non-administrative activities.

Please enter the real name of this user. This information will be used for instance as default origin for emails sent by this user as well as any program which displays or uses the user's real name. Your full name is a reasonable choice.

Full name for the new user:

[Screenshot](#)[Go Back](#)[Continue](#)**Set up users and passwords**

Select a username for the new account. Your first name is a reasonable choice. The username should start with a lower-case letter, which can be followed by any combination of numbers and more lower-case letters.

Username for your account:

[Screenshot](#)[Go Back](#)[Continue](#)

Set up users and passwords

A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals.

Choose a password for the new user:

☐ Show Password in Clear

Please enter the same user password again to verify you have typed it correctly.

Re-enter password to verify:

☐ Show Password in Clear

Screenshot

Go Back

Continue

Configure the clock

If the desired time zone is not listed, then please go back to the step "Choose language" and select a country that uses the desired time zone (the country where you live or are located).

Select your time zone:

Eastern

Central

Mountain

Pacific

Alaska

Hawaii

Arizona

East Indiana

Samoa

Screenshot

Go Back

Continue

Partition disks

The installer can guide you through partitioning a disk (using different standard schemes) or, if you prefer, you can do it manually. With guided partitioning you will still have a chance later to review and customise the results.

If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.

Partitioning method:

Guided - use entire disk

Guided - use entire disk and set up LVM

Guided - use entire disk and set up encrypted LVM

Manual

Screenshot

Go Back

Continue

Partition disks

Note that all data on the disk you select will be erased, but not before you have confirmed that you really want to make the changes.

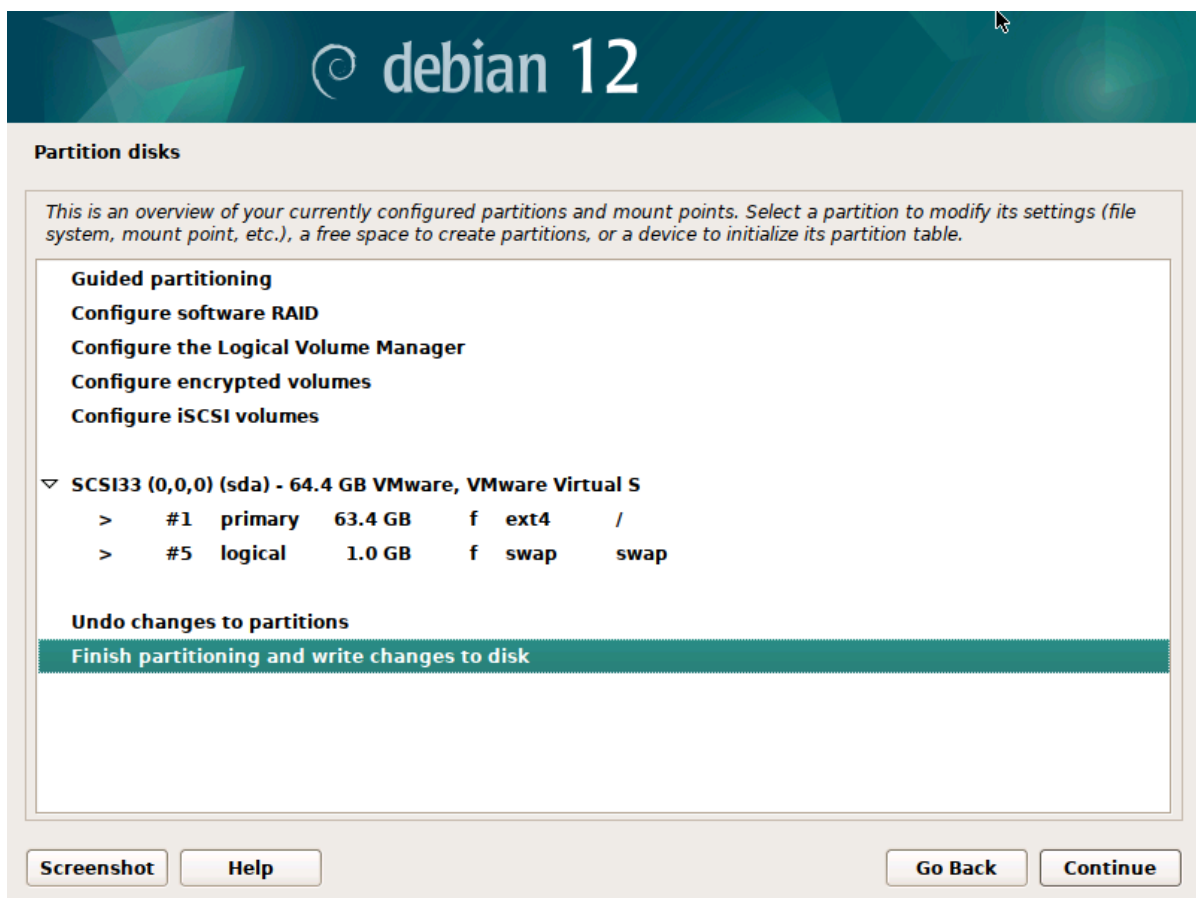
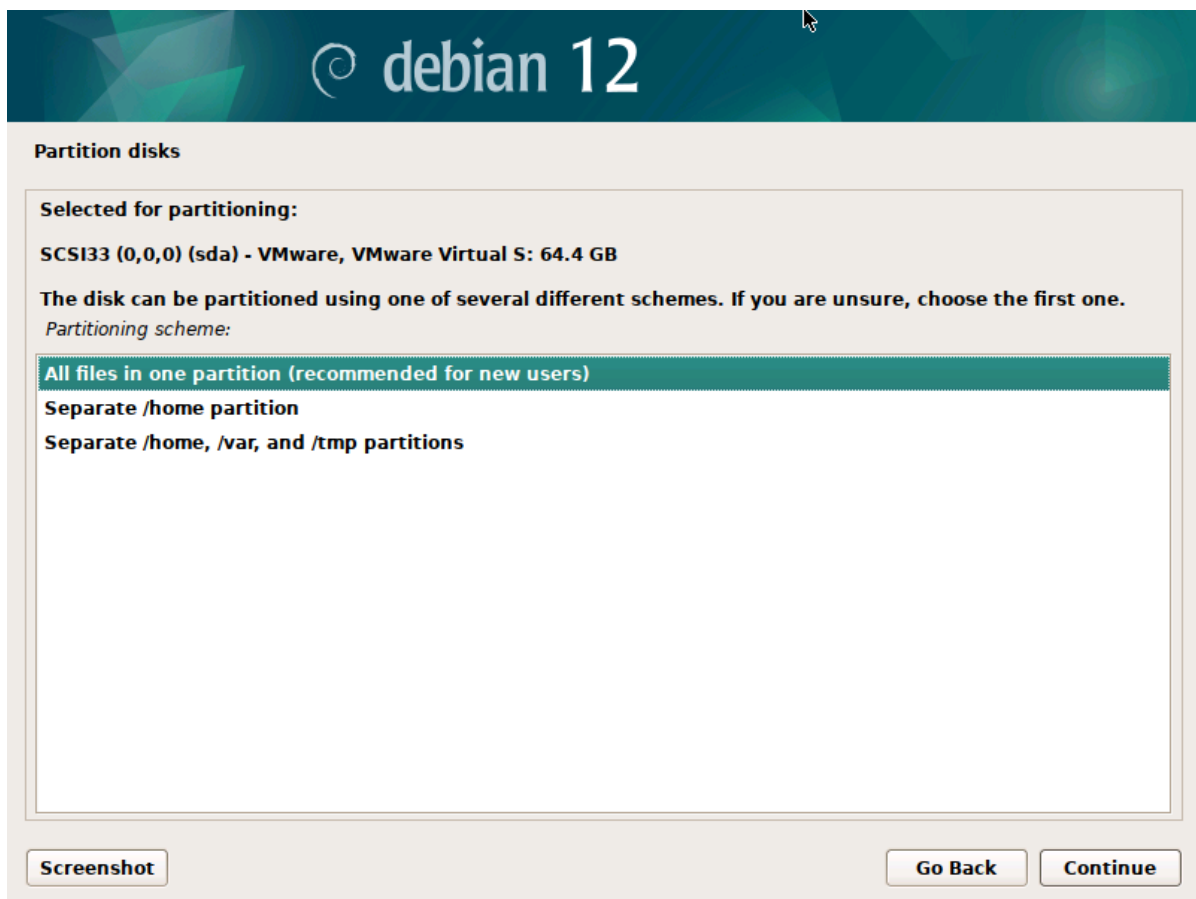
Select disk to partition:

SCSI33 (0,0,0) (sda) - 64.4 GB VMware, VMware Virtual S

Screenshot

Go Back

Continue



确认修改到磁盘

Partition disks

If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.

The partition tables of the following devices are changed:
SCSI33 (0,0,0) (sda)

The following partitions are going to be formatted:

partition #1 of SCSI33 (0,0,0) (sda) as ext4
partition #5 of SCSI33 (0,0,0) (sda) as swap

Write the changes to disks?

- ☐ No
☒ Yes

Screenshot

Continue

Configure the package manager

Scanning your installation media finds the label:

Debian GNU/Linux 12.1.0 _Bookworm_ - Official amd64 DVD Binary-1 with firmware 20230722-10:49

You now have the option of scanning additional media for use by the package manager (apt). Normally these should be from the same set as the one you booted from. If you do not have any additional media, this step can just be skipped.

If you wish to scan more media, please insert another one now.

Scan extra installation media?

- ☒ No
☐ Yes

Screenshot

Go Back

Continue

下面选择 Yes

Configure the package manager

A network mirror can be used to supplement the software that is included on the installation media. This may also make newer versions of software available.

You are installing from a DVD image. Even though it contains a large selection of packages, some may be missing. If you have a reasonably good Internet connection, use of a mirror is suggested if you plan to install a graphical desktop environment.

Use a network mirror?

- ☒ **No**
- ☐ **Yes**

Screenshot

Go Back

Continue

Configure the package manager

The goal is to find a mirror of the Debian archive that is close to you on the network -- be aware that nearby countries, or even your own, may not be the best choice.

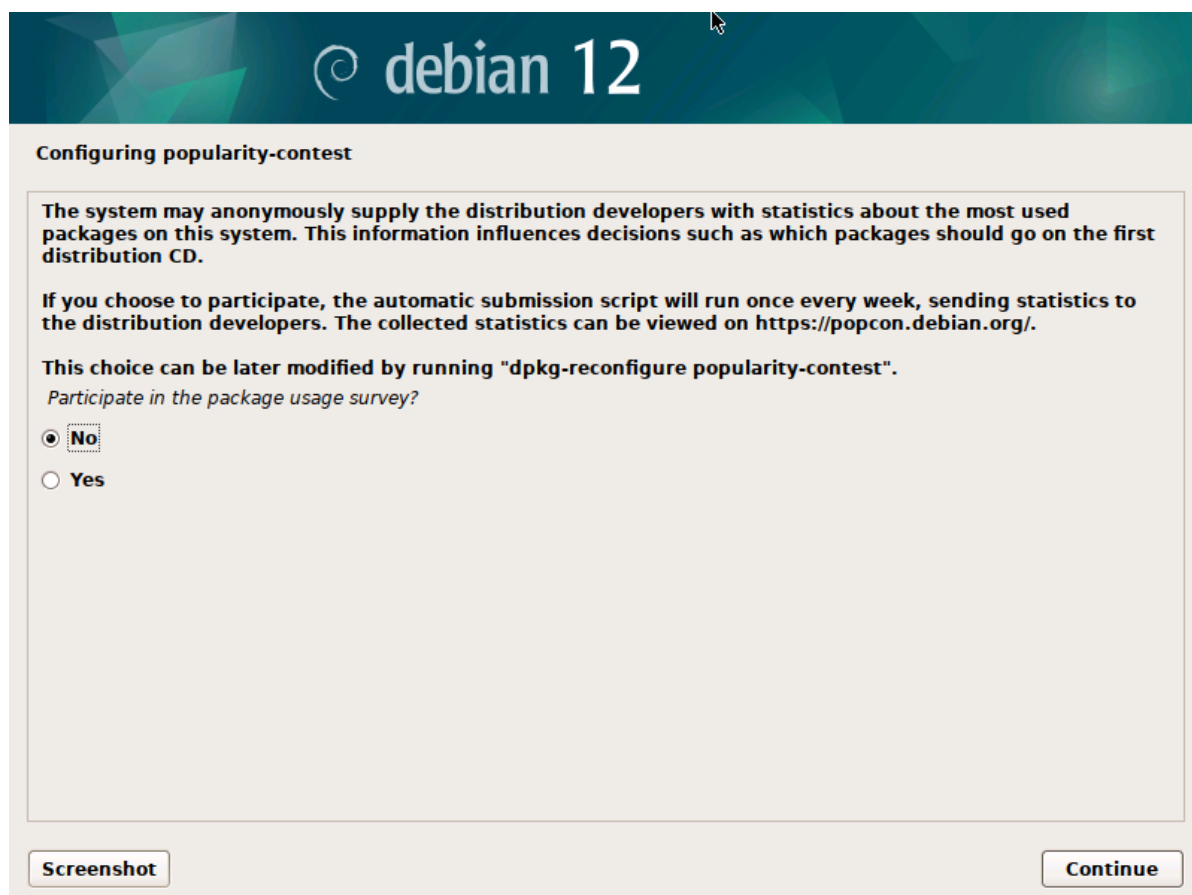
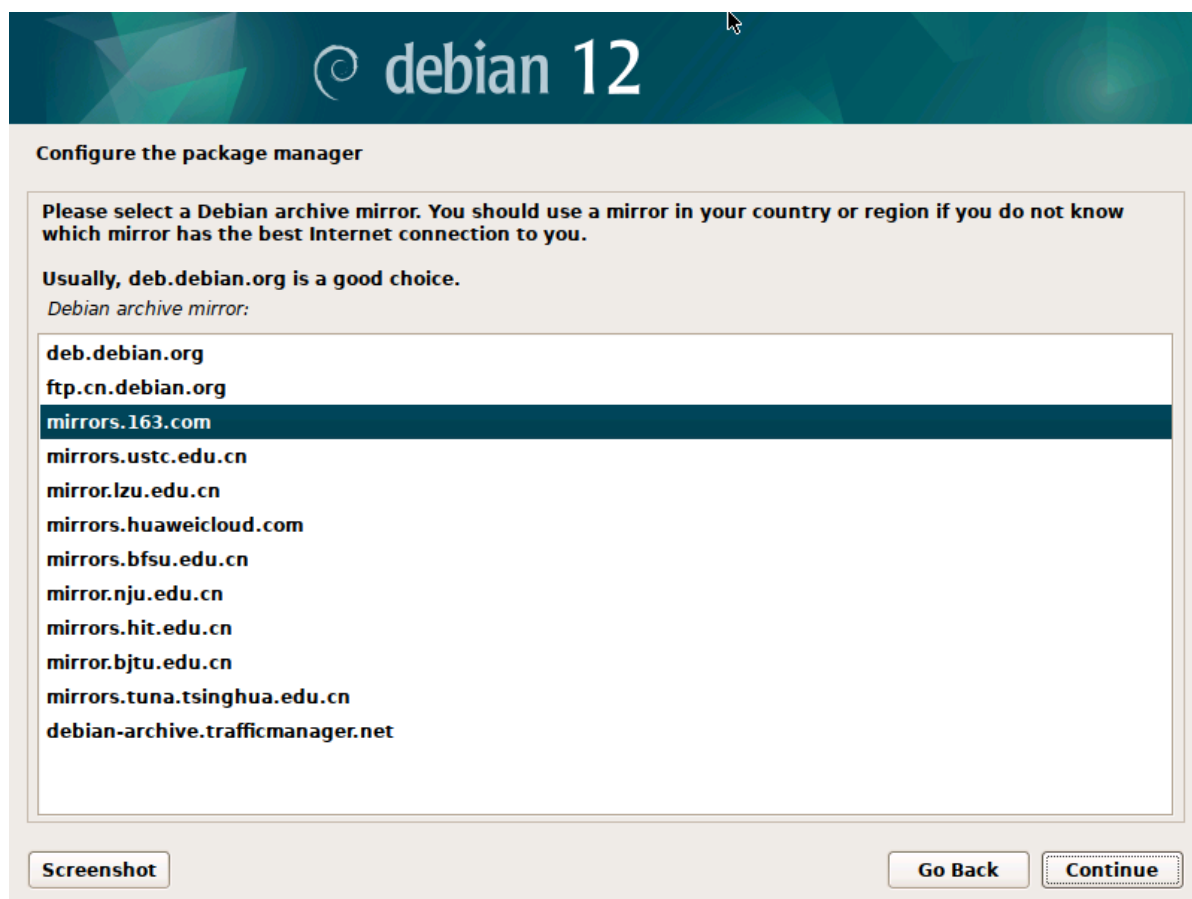
Debian archive mirror country:

Belarus
Belgium
Brazil
Bulgaria
Cambodia
Canada
Chile
China
Costa Rica
Croatia
Czechia
Denmark
Estonia
Finland
France

Screenshot

Go Back

Continue



安装ssh 和 操作系统

Software selection

At the moment, only the core of the system is installed. To tune the system to your needs, you can choose to install one or more of the following predefined collections of software.

Choose software to install:

- ☐ Debian desktop environment
- ☐ ... GNOME
- ☐ ... Xfce
- ☐ ... GNOME Flashback
- ☐ ... KDE Plasma
- ☐ ... Cinnamon
- ☐ ... MATE
- ☐ ... LXDE
- ☐ ... LXQt
- ☐ web server
- ☒ SSH server
- ☒ standard system utilities

Screenshot

Continue

Install the GRUB boot loader

It seems that this new installation is the only operating system on this computer. If so, it should be safe to install the GRUB boot loader to your primary drive (UEFI partition/boot record).

Warning: If your computer has another operating system that the installer failed to detect, this will make that operating system temporarily unbootable, though GRUB can be manually configured later to boot it.

Install the GRUB boot loader to your primary drive?

- ☐ No
- ☒ Yes

Screenshot

Go Back

Continue

Install the GRUB boot loader

You need to make the newly installed system bootable, by installing the GRUB boot loader on a bootable device. The usual way to do this is to install GRUB to your primary drive (UEFI partition/boot record). You may instead install GRUB to a different drive (or partition), or to removable media.

Device for boot loader installation:

Enter device manually

/dev/sda

Screenshot

Go Back

Continue

Finish the installation



Installation complete

Installation is complete, so it is time to boot into your new system. Make sure to remove the installation media, so that you boot into the new system rather than restarting the installation.

Please choose <Continue> to reboot.

Screenshot

Go Back

Continue

配置系统

SSH可登录

```
echo "PermitRootLogin yes" >> /etc/ssh/sshd_config

systemctl restart sshd
systemctl status  sshd

# 查看ip
hostname -I
```

删除本地DVD镜像源

```
sed -i '/dvd/d' /etc/apt/sources.list

apt update -y
```

挂载硬盘

配置共享目录

```
apt-get install open-vm-tools -y

mkdir -p /local_file
vmhgfs-fuse .host:/sealos /local_file
```

监控

硬盘

坏了会发出声音