

H3C G7 intel&AMD 平台服务器通过 U 盘引导 安装 Ubuntu Server 24.04 系统的安装方法

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一. 适用范围与注意事项

- 本文档旨在说明 H3C G7 intel&AMD 平台系列服务器通过 U 盘安装系统的方法，并以 R4900 G7 服务器安装 Ubuntu Server 24.04 为例进行安装步骤说明。
安装过程中您可能需要借助其他工具完成部分操作。如需了解详细介绍，请参考本文档<安装前准备>的内容查看。
- 本文所述安装过程如涉及挂载文件/文件夹（高级版），需要购买 HDM License，如想要使用此功能请联系经销商购买并在激活后使用。
HDM License 的注册安装方法请参考：<https://zhiliao.h3c.com/Theme/details/232557>
- 如文中方法不适用或型号不匹配，可以通过下面导航链接查找适用文档：
<https://zhiliao.h3c.com/Theme/details/208474>
- 提示：
本文档中的信息（包括产品，软件版本和设置参数）仅作参考示例，具体操作与目标需求设置请以实际为准。
本文档不定期更新维护，请以发布的最新版本为准。

二. 安装准备

1. 系统兼容性查询
具体确认方法请参考：<https://zhiliao.h3c.com/Theme/details/207728>
2. 系统安装介质获取

具体方法请参考：<https://zhiliao.h3c.com/theme/details/232291>

3. 阵列配置

如果有配置阵列的需求，请在阵列配置完成后再安装系统。

具体阵列配置方法请参考：<https://zhiliao.h3c.com/Theme/details/208527>

4. 连接 HDM 与启用远程控制台

若通过 U 盘引导方式安装操作系统，您可通过外接显示器、键盘与鼠标完成与服务器的交互。

若未配置外设，请通过 HDM 控制台完成后续操作。

具体方法请参考：<https://zhiliao.h3c.com/theme/details/232282>

三. 安装步骤

1. 挂载启动 U 盘

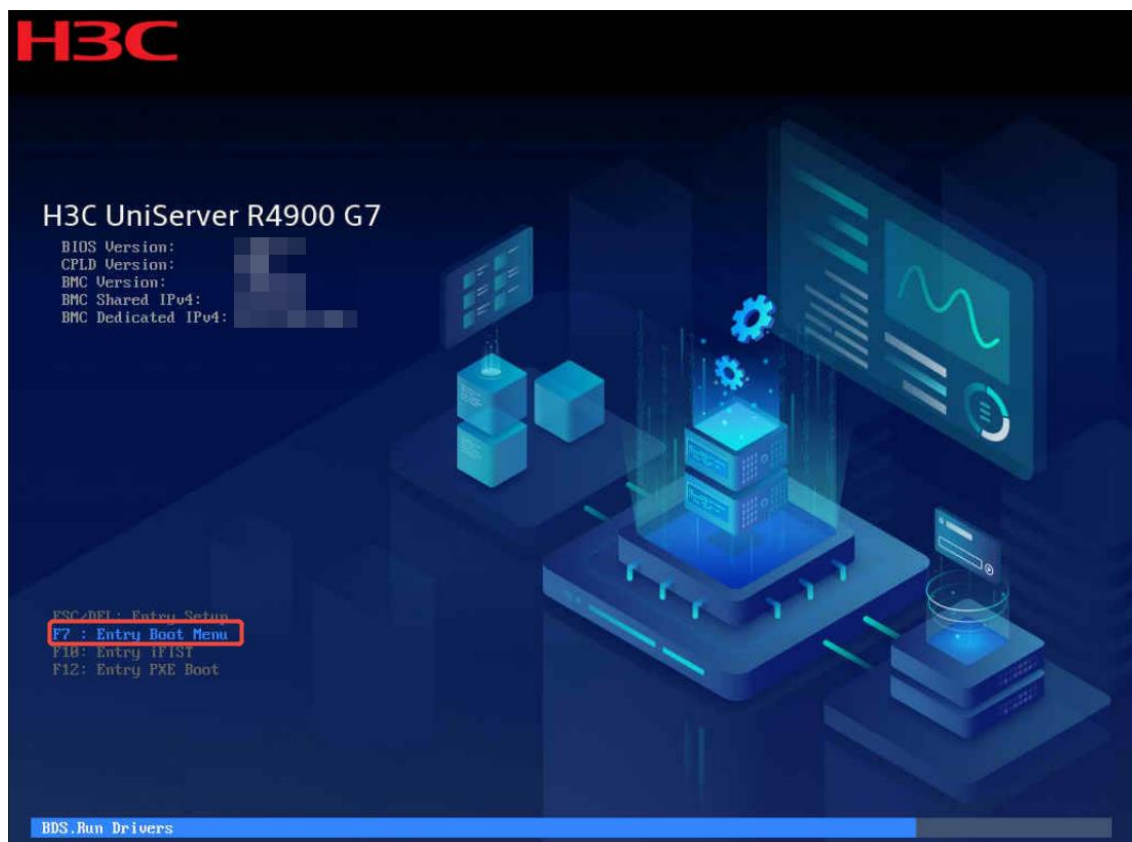
服务器通常默认配置多个 USB 接口，对外接口一般位于前后两侧面板。下图以 2U 服务器为例，可在右侧智能挂而处看到 USB 接口。

请将已制作完成的启动 U 盘插入服务器 USB 接口，然后参考下一步继续。

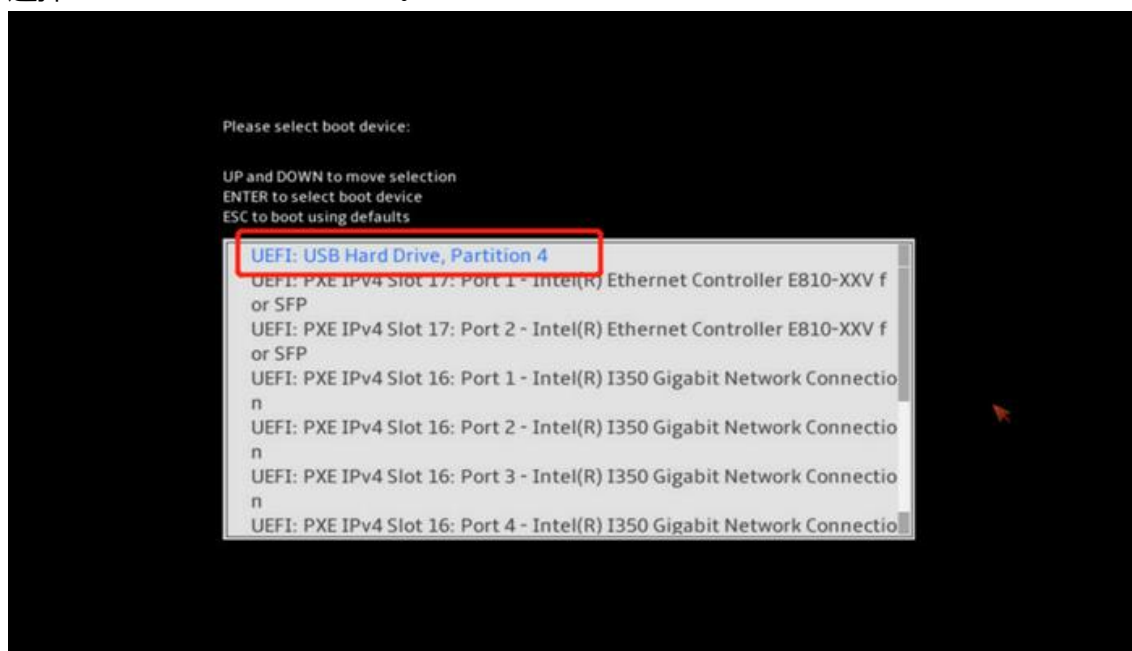


2. 引导系统安装

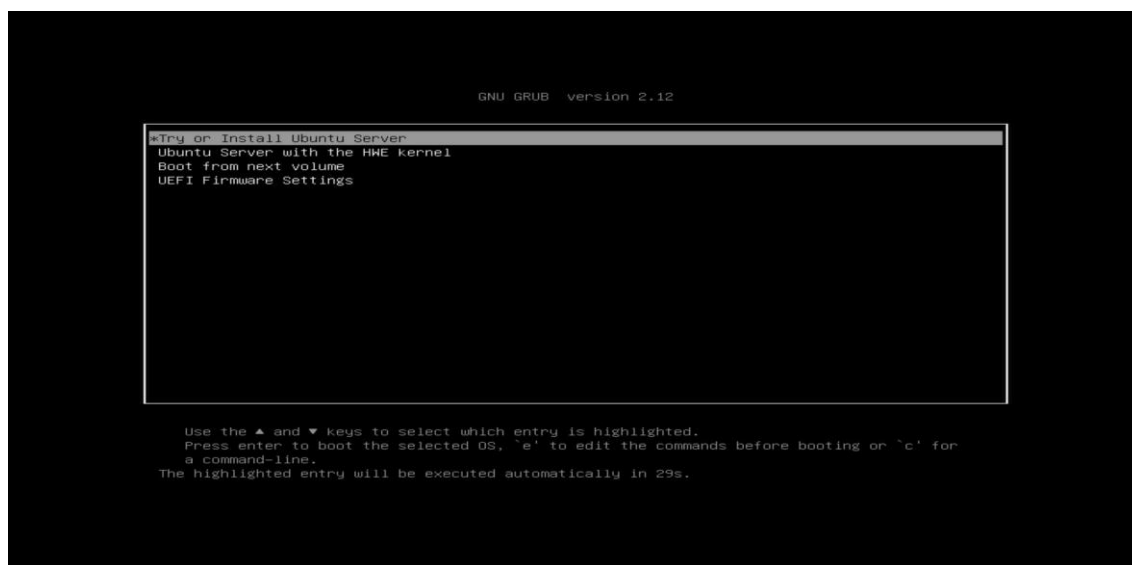
2.1 启动服务器，在开机自检界面按下 **F7**，选择启动项。



2.2 选择 UEFI: USB Hard Drive.



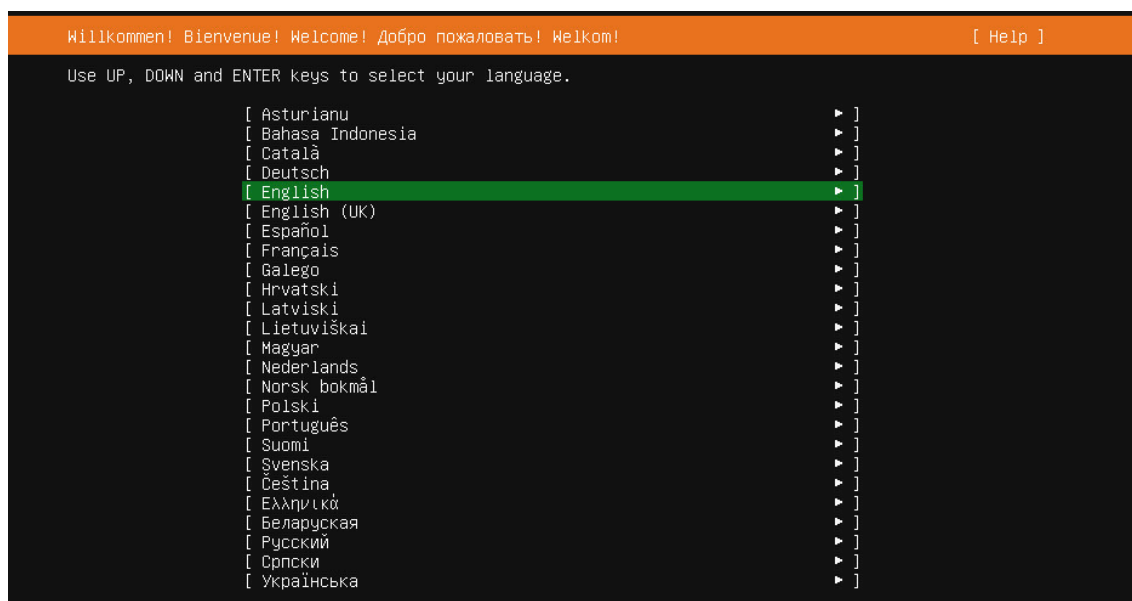
2.3 选择安装 Install Ubuntu Server.



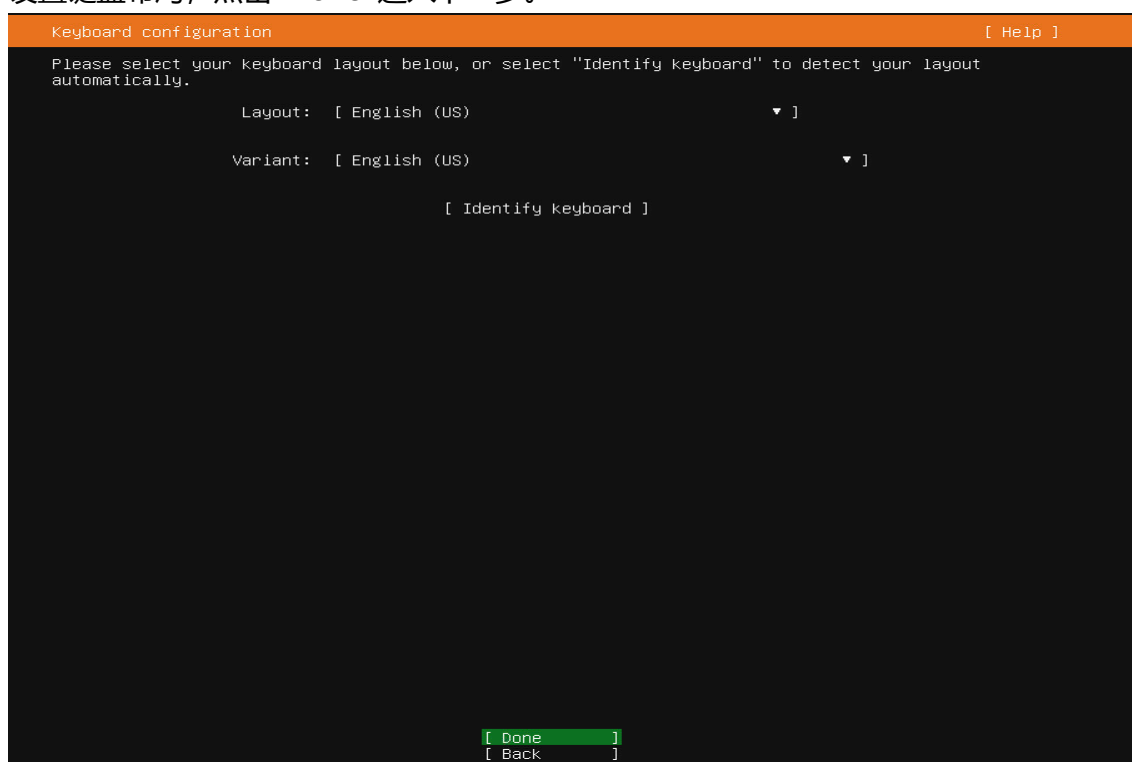
2.4 开始引导安装。

```
[ OK ] Stopped dracut pre-mount hook.
[ OK ] Stopped target Initrd Default Target.
[ OK ] Stopped target Initrd Root Device.
[ OK ] Stopped target Basic System.
[ OK ] Stopped target Paths.
[ OK ] Stopped target Slices.
[ OK ] Stopped target Sockets.
[ OK ] Stopped target System Initialization.
[ OK ] Stopped Create Volatile Files and Directories.
[ OK ] Stopped target Swap.
[ OK ] Stopped Apply Kernel Variables.
[ OK ] Stopped target Local Encrypted Volumes.
[ OK ] Stopped target Local File Systems.
[ OK ] Stopped target Local File Systems (Pre).
[ OK ] Stopped cancel waiting for multipath siblings of sdd.
[ OK ] Stopped target Remote File Systems.
[ OK ] Stopped target Remote File Systems (Pre).
[ OK ] Stopped dracut initqueue hook.
[ OK ] Stopped Open-iSCSI...
[ OK ] Stopped cancel waiting for multipath siblings of sdh.
[ OK ] Started Setup Virtual Console.
[ OK ] Stopped Open-iSCSI.
[ OK ] Started Cleaning Up and Shutting Down Daemons.
[ OK ] Started Plymouth switch root service.
[ OK ] Stopping Device-Mapper Multipath Device Controller...
[ OK ] Stopping iSCSI UserSpace I/O driver...
[ OK ] Closed Open-iSCSI iscsid Socket.
[ OK ] Stopped iSCSI UserSpace I/O driver.
[ OK ] Closed Open-iSCSI iscsiui Socket.
[ OK ] Stopped Device-Mapper Multipath Device Controller.
[ OK ] Stopped udev Wait for Complete Device Initialization.
[ OK ] Stopped udev Coldplug all Devices.
[ OK ] Stopped dracut pre-trigger hook.
[ OK ] Stopping udev Kernel Device Manager...
[ OK ] Stopped udev Kernel Device Manager.
[ OK ] Stopping Hardware RNG Entropy Gatherer Daemon...
[ OK ] Stopped Create Static Device Nodes in /dev.
[ OK ] Stopped Create list of required static device nodes for the current kernel.
[ OK ] Stopped dracut pre-udev hook.
[ OK ] Stopped dracut cmdline hook.
[ OK ] Closed udev Kernel Socket.
[ OK ] Closed udev Control Socket.
[ OK ] Starting Cleanup udev DB...
[ OK ] Stopped Hardware RNG Entropy Gatherer Daemon.
[ OK ] Started Cleanup udev DB.
[ OK ] Reached target Switch Root.
[ OK ] Starting Switch Root...
```

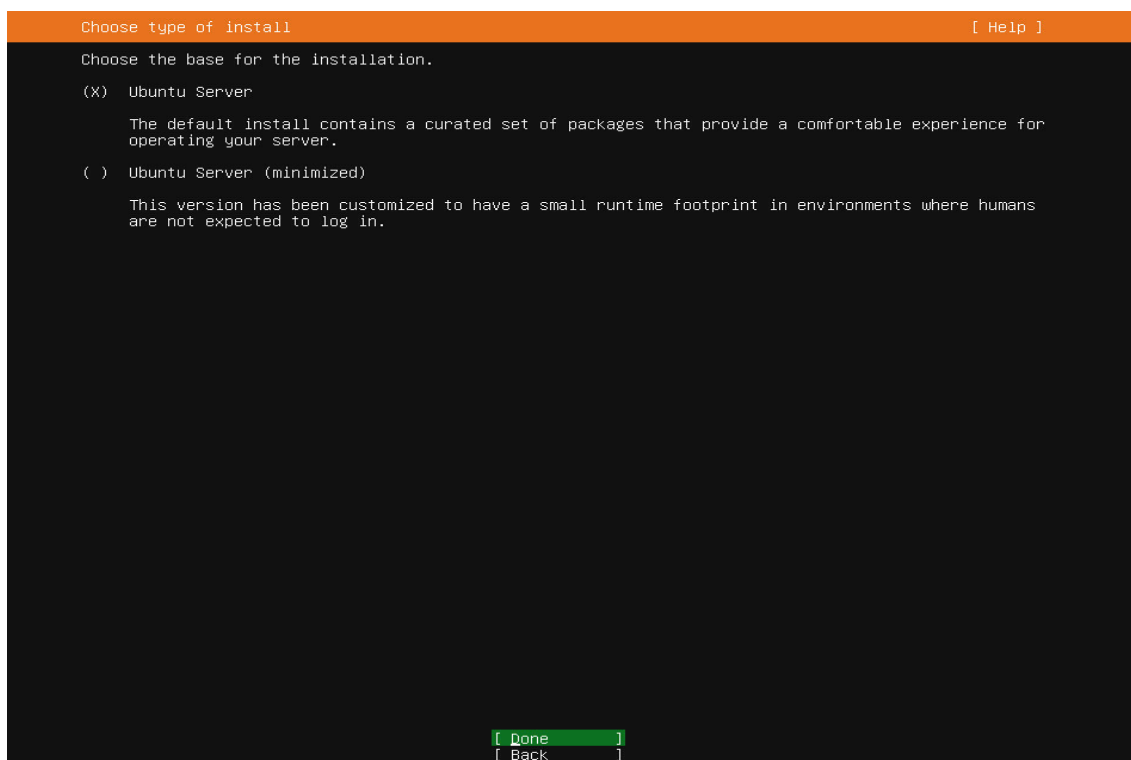
2.5 选择语言。



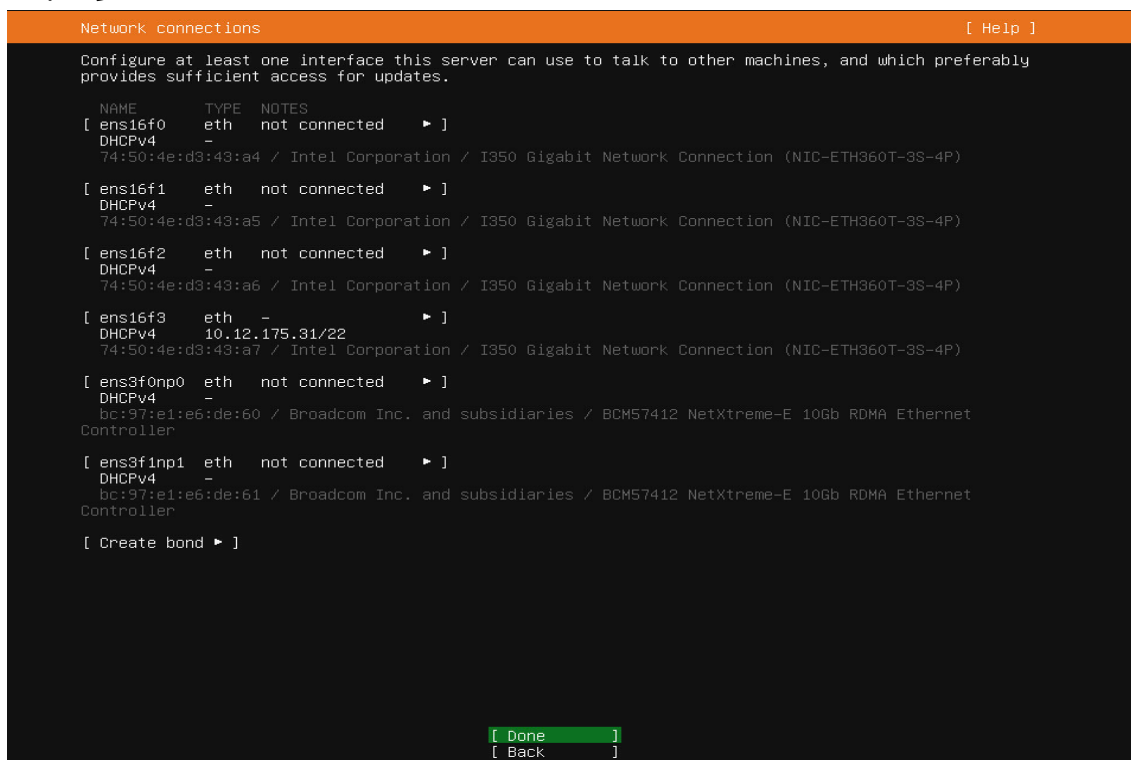
2.6 设置键盘布局，点击 Done 进入下一步。



2.7 选择一个系统类型进行安装，回车 “Done” 进入下一步。



2.8 设置网络链接，可根据需求修改网卡获取 IP 地址模式，默认是 DHCP，配置好后选择 Done。如果不需要在此界面配置，可以选择“Continue without network” 配置好后选择 Done 进入下一步。



2.9 设置代理服务器，可以根据需要是否配置，不需要进行配置，选择“Done” 按<Enter>键进入

下一步即可。

Configure proxy [Help]

If this system requires a proxy to connect to the internet, enter its details here.

Proxy address:

If you need to use a HTTP proxy to access the outside world, enter the proxy information here. Otherwise, leave this blank.

The proxy information should be given in the standard form of "http://[[user] [:pass]@]host[:port]/".

[Done]
[Back]

2.10 设置镜像源地址，在“Mirror address”输入框中输入镜像源地址，若无特殊要求默认后，选择“Done”按<Enter>键进入下一步。

Configure Ubuntu archive mirror [Help]

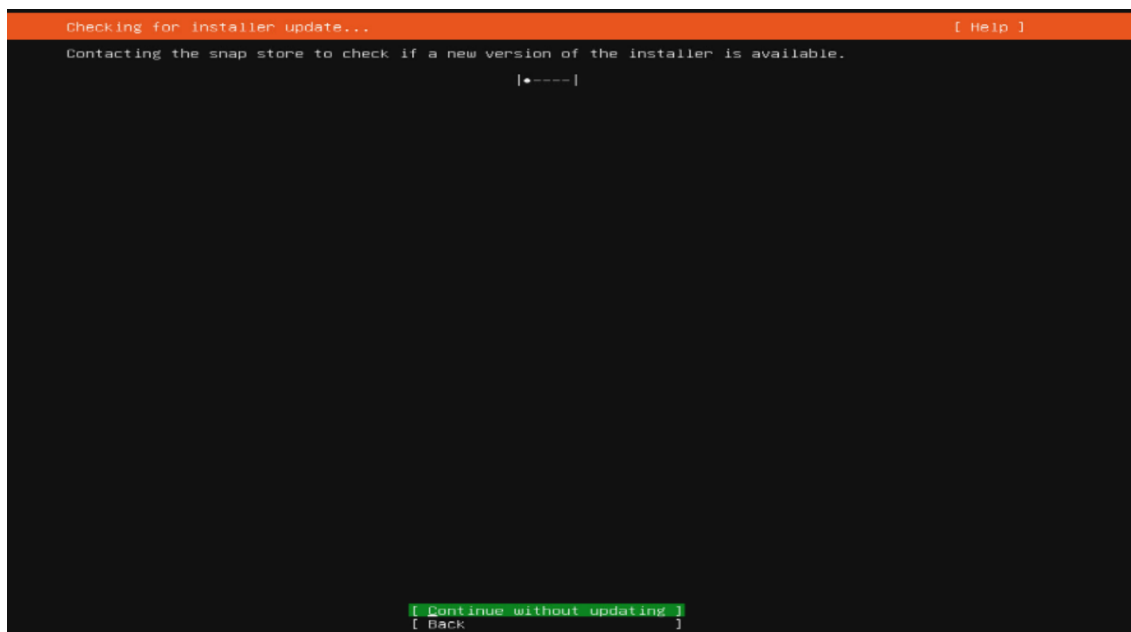
If you use an alternative mirror for Ubuntu, enter its details here.

Mirror address:

You may provide an archive mirror that will be used instead of the default.

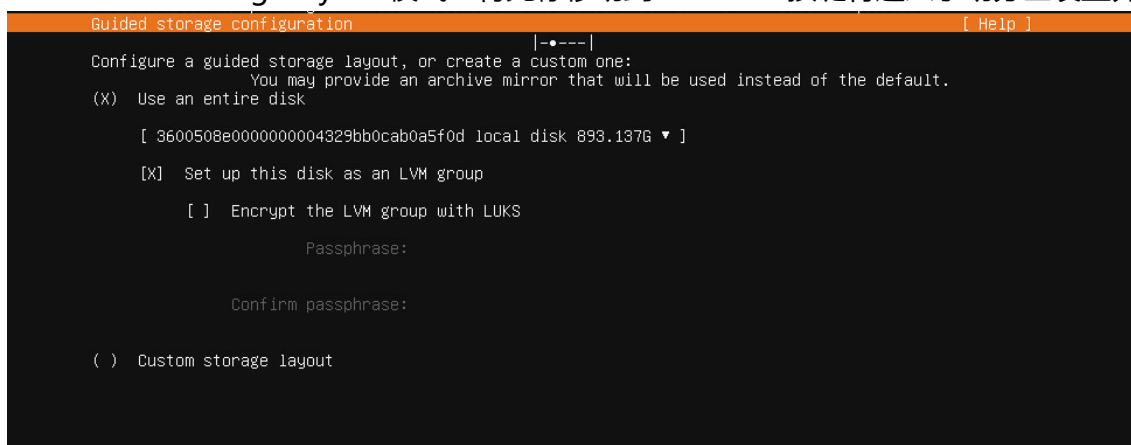
[Done]
[Back]

2.11 检查安装包更新，选择“continue without updating”选项按<Enter>键进入下一步。



2.12 设置磁盘分区，可以选择自动或者手动分区。

- Use an entire disk 模式：选择一个磁盘后将光标移动到 “Done” 按键系统 将按照默认设置对磁盘进行分区。
- Custom storage layout 模式：将光标移动到 “Done” 按键将进入手动分区设置界面。



2.13 以 Use an entire disk 为例，根据需要进行分区配置。

```
Storage configuration [ Help ]
|--|

FILE SYSTEM SUMMARY
You may provide an archive mirror that will be used instead of the default.
MOUNT POINT  SIZE  TYPE  DEVICE TYPE
[ /           100.000G new ext4 new LVM logical volume ▶ ]
[ /boot       2.000G new ext4 new partition of local disk ▶ ]
[ /boot/efi   1.049G new fat32 new partition of local disk ▶ ]

AVAILABLE DEVICES

DEVICE                                TYPE                                SIZE
[ ubuntu-vg (new)                     LVM volume group                   890.082G ▶ ]
free space                             790.082G ▶ ]

[ 35002538e013675c6                   local disk                         894.253G ▶ ]
free space                             894.250G ▶ ]

[ Create software RAID (md) ▶ ]
[ Create volume group (LVM) ▶ ]

USED DEVICES

DEVICE                                TYPE                                SIZE
[ ubuntu-vg (new)                     LVM volume group                   890.082G ▶ ]
ubuntu-lv new, to be formatted as ext4, mounted at / 100.000G ▶ ]

[ 3600508e000000004329bb0cab0a5f0d   local disk                         893.137G ▶ ]
partition 1 new, primary ESP, to be formatted as fat32, mounted at /boot/efi 1.049G ▶ ]
partition 2 new, to be formatted as ext4, mounted at /boot 2.000G ▶ ]
partition 3 new, PV of LVM volume group ubuntu-vg 890.085G ▶ ]
```

2.14 弹窗提示确认清除磁盘数据，选择 “continue” 按 Enter 键进入下一步。

```
Storage configuration [ Help ]
|--|

FILE SYSTEM SUMMARY
MOUNT POINT  SIZE  TYPE  DEVICE TYPE
[ /           100.000G new ext4 new LVM logical volume ▶ ]
[ /boot       2.000G new ext4 new partition of local disk ▶ ]
[ /boot/efi   1.049G new fat32 new partition of local disk ▶ ]

AVAILABLE DEVICES

DEVICE                                TYPE                                SIZE
[ ubuntu-vg (new)                     LVM volume group                   890.082G ▶ ]
free space                             790.082G ▶ ]

[ 35002538e013675c6                   local disk                         894.253G ▶ ]
free space                             894.250G ▶ ]

[ Create software RAID (md) ▶ ]
[ Create volume group (LVM) ▶ ]

USED DEVICES

DEVICE                                TYPE                                SIZE
[ ubuntu-vg (new)                     LVM volume group                   890.082G ▶ ]
ubuntu-lv new, to be formatted as ext4, mounted at / 100.000G ▶ ]

[ 3600508e000000004329bb0cab0a5f0d   local disk                         893.137G ▶ ]
partition 1 new, primary ESP, to be formatted as fat32, mounted at /boot/efi 1.049G ▶ ]
partition 2 new, to be formatted as ext4, mounted at /boot 2.000G ▶ ]
partition 3 new, PV of LVM volume group ubuntu-vg 890.085G ▶ ]

Confirm destructive action

Selecting Continue below will begin the installation process and
result in the loss of data on the disks selected to be formatted.

You will not be able to return to this or a previous screen once the
installation has started.

Are you sure you want to continue?

[ No ]
[ Continue ]
```

2.15 设置用户名、服务器名及密码，设置完成后将光标移动到 “Done”，按<Enter>键进入下一步。

2.16 按<空格键>选择 “Install OpenSSH server”，将光标移到 “Done” 按<Enter>进行安装。

注：需要安装 OpenSSH 服务，否则系统完成安装后无法使用 SSH。

2.17 进行操作系统安装，操作系统安装需要等待一段时间，无需进行其他操作。

```
Installing system [ Help ]

subiquity/Early/apply_autoinstall_config
subiquity/Reporting/apply_autoinstall_config
subiquity/Error/apply_autoinstall_config
subiquity/Userdata/apply_autoinstall_config
subiquity/Package/apply_autoinstall_config
subiquity/Debconf/apply_autoinstall_config
subiquity/Kernel/apply_autoinstall_config
subiquity/Zdev/apply_autoinstall_config
subiquity/Late/apply_autoinstall_config
configuring apt
  curtin command in-target
installing system
  curtin command install
    preparing for installation
    configuring storage
      running 'curtin block-meta simple'
      curtin command block-meta
        removing previous storage devices
        configuring disk: disk-sda
        configuring partition: partition-0
        configuring format: format-0
        configuring partition: partition-1
        configuring format: format-1
        configuring partition: partition-2
        configuring lvm_voigroup: lvm_voigroup-0
        configuring lvm_partition: lvm_partition-0
        configuring format: format-2
        configuring mount: mount-2
        configuring mount: mount-1
        configuring mount: mount-0
    writing install sources to disk
      running 'curtin extract'
      curtin command extract
        acquiring and extracting image from cp:///tmp/tmpeam7s9zm/mount |

[ View full log ]
```

2.18 操作系统安装完成，将光标移动到“Reboot Now”按<Enter>键重启服务器。

```
Install complete! [ Help ]

curtin command block-meta
configuring partition: partition-2
configuring format: format-2
configuring mount: mount-2
configuring mount: mount-1
configuring mount: mount-0
writing install sources to disk
  running 'curtin extract'
  curtin command extract
    acquiring and extracting image from cp:///tmp/tmpeam7s9zm/mount
configuring installed system
  running 'mount --bind /cdrom /target/cdrom'
  running 'curtin curthooks'
  curtin command curthooks
    configuring apt configuring apt
    installing missing packages
    installing packages on target system: ['efibootmgr', 'grub-efi-amd64',
'grub-efi-amd64-signed', 'shim-signed']
    configuring iscsi service
    configuring raid (mdadm) service
    installing kernel
    setting up swap
    apply networking config
    writing etc/fstab
    configuring multipath
    updating packages on target system
    configuring pollinate user-agent on target
    updating initramfs configuration
    configuring target system bootloader
    installing grub to target devices
  finalizing installation
    running 'curtin hook'
    curtin command hook
  executing late commands
final system configuration
  configuring cloud-init
  calculating extra packages to install
  installing openssh-server
  curtin command system-install
  downloading and installing security updates
  curtin command in-target /

[ View full log ]
[ Cancel update and reboot ]
```

```

Install complete! [ Help ]
  curtin command block-meta
  configuring partition: partition-2
  configuring format: format-2
  configuring mount: mount-2
  configuring mount: mount-1
  configuring mount: mount-0
  writing install sources to disk
  running 'curtin extract'
  curtin command extract
    acquiring and extracting image from cp:///tmp/tmpeam7s9zm/mount
  configuring installed system
  running 'mount --bind /cdrom /target/cdrom'
  running 'curtin curthooks'
  curtin command curthooks
    configuring apt configuring apt
    installing missing packages
    Installing packages on target system: ['efibootmgr', 'grub-efi-amd64',
'grub-efi-amd64-signed', 'shim-signed']
    configuring iscsi service
    configuring raid (mdadm) service
    installing kernel
    setting up swap
    apply networking config
    writing etc/fstab
    configuring multipath
    updating packages on target system
    configuring pollinate user-agent on target
    updating initramfs configuration
    configuring target system bootloader
    installing grub to target devices
  finalizing installation
  running 'curtin hook'
  curtin command hook
  executing late commands
  final system configuration
  configuring cloud-init
  calculating extra packages to install
  installing openssh-server
  curtin command system-install
  downloading and installing security updates
  curtin command in-target /

[ View full log ]
[ Cancel update and reboot ]

```

2.19 在系统登录界面输入设置的账户名和密码，即可登录系统。

```

Ubuntu 24.04.2 LTS administrator tty1
administrator login: administrator
Password:
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.8.0-53-generic x86_64)

* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:       https://ubuntu.com/pro

System information as of Fri Jul 25 04:02:19 PM UTC 2025

  System load:  0.08           Swap usage:   0%           Users logged in: 0
  Usage of /:   10.5% of 97.87GB Temperature:  73.0 C
  Memory usage: 1%           Processes:   1114

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

administrator@administrator:~$ _

```