

HPE Gen12 服务器

通过 U 盘引导安装 Ubuntu 24.04 系统的方法

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一. 适用范围与注意事项

- 本文档旨在说明 HPE Gen12 系列服务器通过 U 盘引导安装系统的方法，并以 DL360 Gen12 服务器安装 Ubuntu 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<[安装准备](#)>的内容查看。
- 本文所述安装过程基于 iLO Advanced License，若您的 iLO 尚未购买高级授权，请联系经销商购买并在激活后使用。若您曾添加试用版授权且已超过 60 天试用期，则该主机将无法再次添加试用版授权，本文的安装方法也将不适用。
- 实际情况是否适用本文档，请通过下面导航链接进行确认：
<https://zhiliao.h3c.com/Theme/details/218270>
- 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/216161>

2. 系统安装介质获取

具体方法请参考：<https://zhiliao.h3c.com/Theme/details/216393>

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/218271>

4. 连接 iLO 与启用远程控制台

具体方法请参考：<https://zhiliao.h3c.com/theme/details/233627>

三. 安装步骤

1. 挂安装启动 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，可在右侧挂耳附近看到 USB 接口。

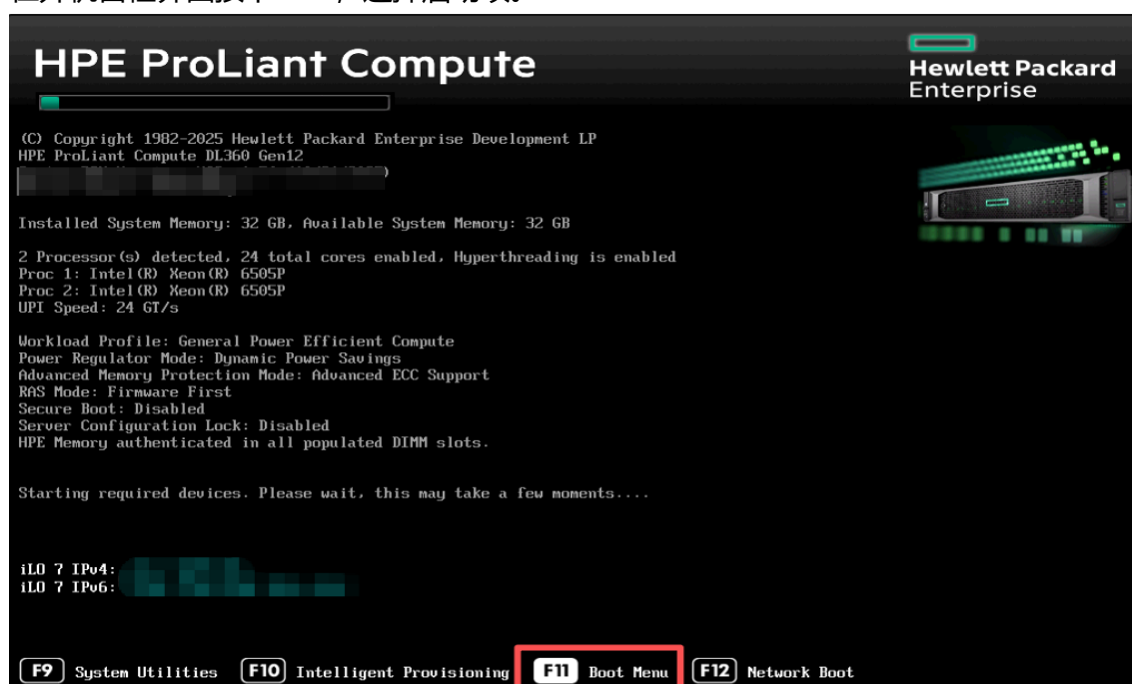
请将已制作完成的启动 U 盘插入服务器 USB 接口，然后参考下一步继续。



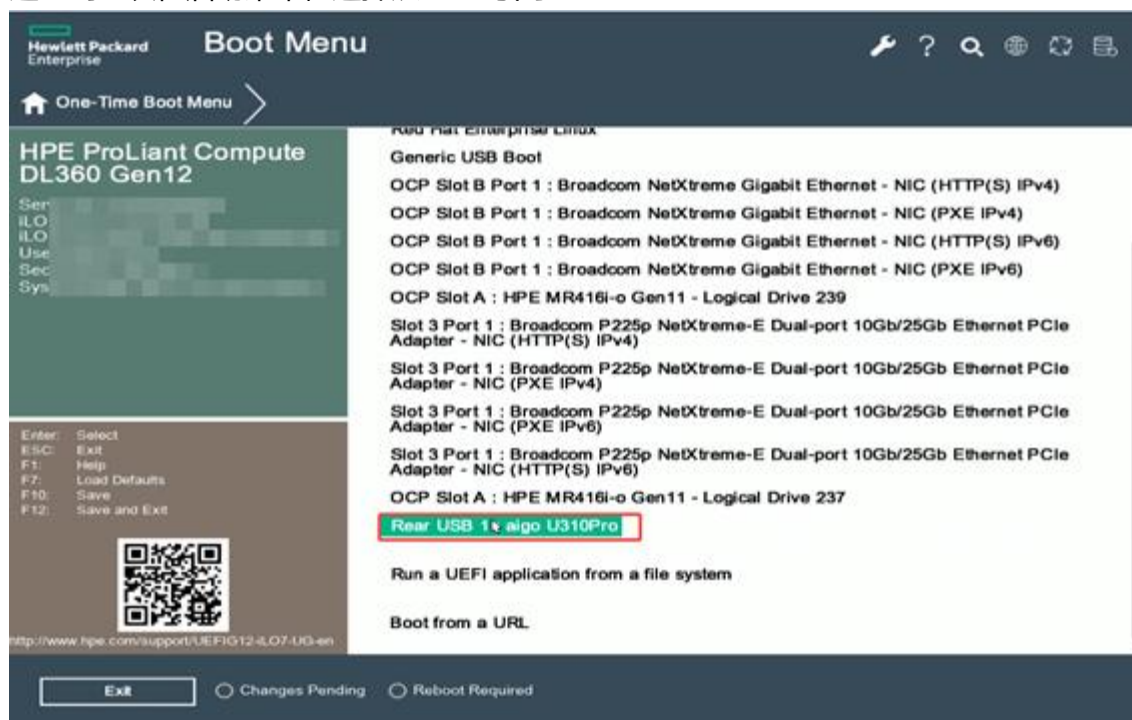
注：引导 U 盘的可用接口标识为  和 .

2. 引导系统安装

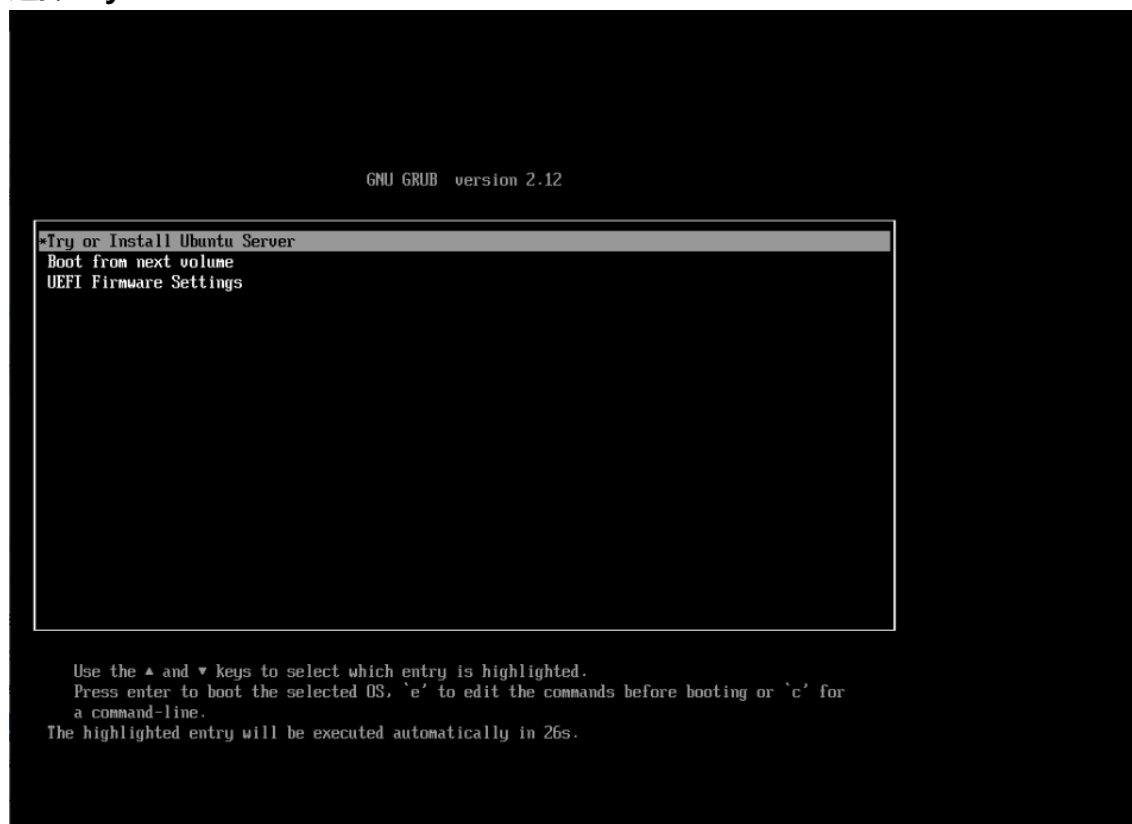
2.1 在开机自检界面按下 F11，选择启动项。



2.2 进入到一次性启动菜单，选择从 USB 引导。



2.3 选择 Try or Install Ubuntu.



2.4 正在加载引导进安装界面。

```
[ OK ] Reached target paths.target - Path Units.
[ OK ] Reached target timers.target - Timer Units.
[ OK ] Listening on cloud-init-hotplugd.socket - cloud-init hotplug hook socket.
[ OK ] Listening on dbus.socket - D-Bus System Message Bus Socket.
[ OK ] Listening on iscsid.socket - Open-iscsi iscsid Socket.
Starting lxd-installer.socket - Helper to install lxd snap on demand...
Starting snapd.socket - Socket activation for snappy daemon...
[ OK ] Listening on ssh.socket - OpenBSD Secure Shell server socket.
[ OK ] Listening on uidd.socket - UUID daemon activation socket.
[ OK ] Reached target remote-fs-pre.target - Preparation for Remote File Systems.
[ OK ] Reached target remote-fs.target - Remote File Systems.
[ OK ] Finished blk-availability.service - Availability of block devices.
[ OK ] Listening on lxd-installer.socket - Helper to install lxd snap on demand.
[ OK ] Listening on snapd.socket - Socket activation for snappy daemon.
[ OK ] Reached target sockets.target - Socket Units.
[ OK ] Reached target basic.target - Basic System.
Starting systemd-logind.service - User Login Management...
Starting apport.service - automatic crash report generation...
Starting cloud-config.service - Apply the settings specified in cloud-config...
[ OK ] Started cron.service - Regular background program processing daemon.
Starting dbus.service - D-Bus System Message Bus...
[ OK ] Started dmesg.service - Save initial kernel messages after boot.
Starting e2scrub_reap.service - Remove Stale Online ext4 Metadata Check Snapshots...
[ OK ] Reached target getty.target - Login Prompts.
Starting polkit.service - Authorization Manager...
Starting pollinate.service - Pollinate to seed the pseudo random number generator...
Starting rsyslog.service - System Logging Service...
Starting secureboot-db.service - Secure Boot updates for DB and DBX...
[ OK ] Reached target getty-pre.target - Preparation for Logins.
Starting snapd.seeded.service - Wait until snapd is fully seeded...
Starting snapd.service - Snap Daemon...
Starting sysstat.service - Resets System Activity Logs...
Starting thermald.service - Thermal Daemon Service...
Starting udisks2.service - Disk Manager...
[ OK ] Started systemd-logind.service - User Login Management.
[ OK ] Started unattended-upgrades.service - Unattended Upgrades Shutdown.
[ OK ] Finished sysstat.service - Resets System Activity Logs.
[ OK ] Finished secureboot-db.service - Secure Boot updates for DB and DBX.
[ OK ] Finished e2scrub_reap.service - Remove Stale Online ext4 Metadata Check Snapshots.
[ OK ] Started thermald.service - Thermal Daemon Service.
[ OK ] Started rsyslog.service - System Logging Service.
[ OK ] Finished cloud-config.service - Apply the settings specified in cloud-config.
Starting systemd-user-sessions.service - Permit User Sessions...
[ OK ] Finished systemd-user-sessions.service - Permit User Sessions.
Starting plymouth-quit-wait.service - Hold until boot process finishes up...
Starting plymouth-quit.service - Terminate Plymouth Boot Screen...
[ OK ] Finished plymouth-quit-wait.service - Hold until boot process finishes up.
```

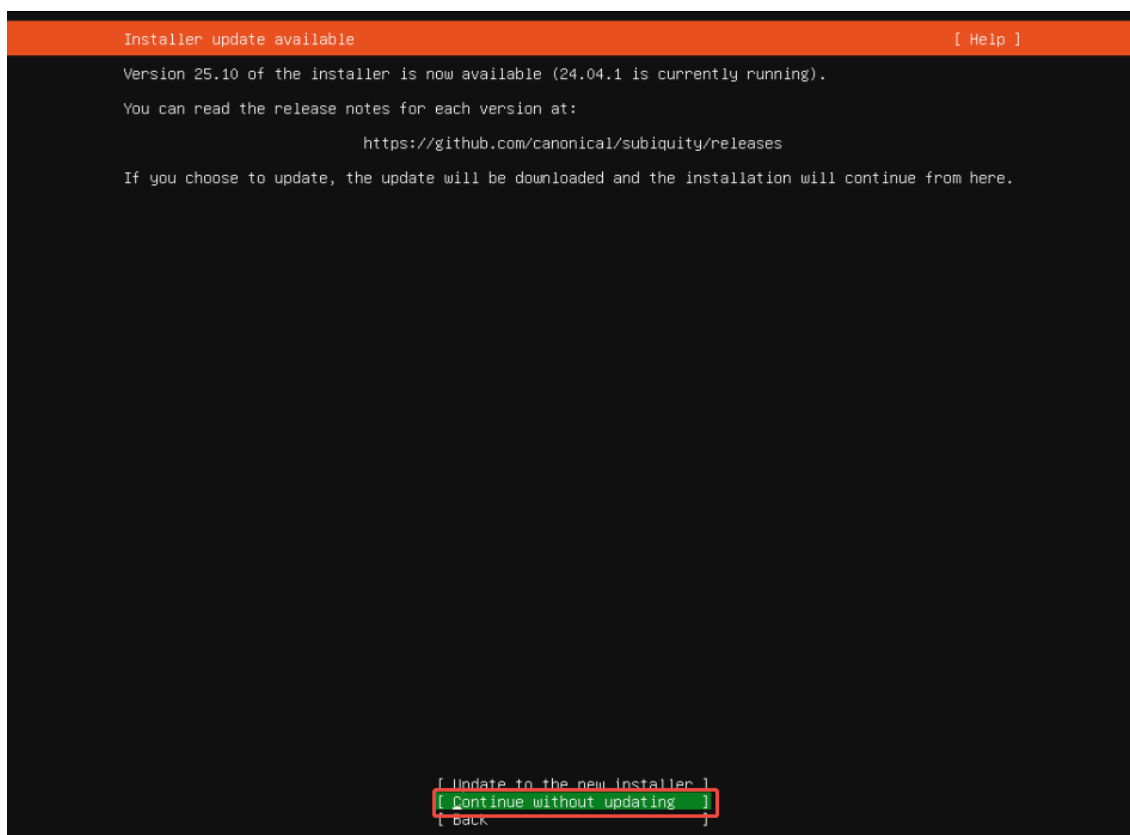
2.5 选择语言。

```
Willkommen! Bienvenue! Welcome! Добро пожаловать! Welkom! [ Help ]

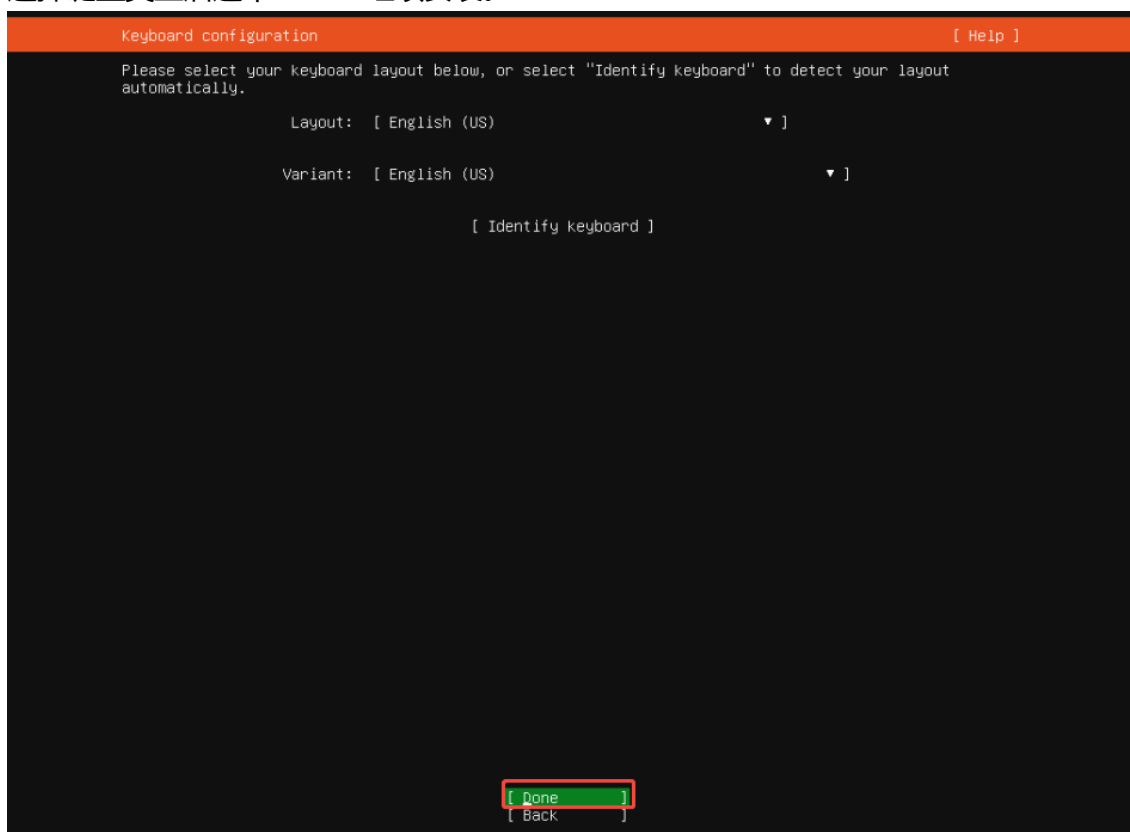
Use UP, DOWN and ENTER keys to select your language.

[ Asturianu ]
[ Bahasa Indonesia ]
[ Català ]
[ Deutsch ]
[ English ]
[ English (UK) ]
[ Español ]
[ Français ]
[ Galego ]
[ Hrvatski ]
[ Latviski ]
[ Lietuviškai ]
[ Magyar ]
[ Nederlands ]
[ Norsk bokmål ]
[ Occitan ]
[ Polski ]
[ Português ]
[ Suomi ]
[ Svenska ]
[ Čeština ]
[ Ελληνικά ]
[ Беларуская ]
[ Русский ]
[ Српски ]
[ Українська ]
```

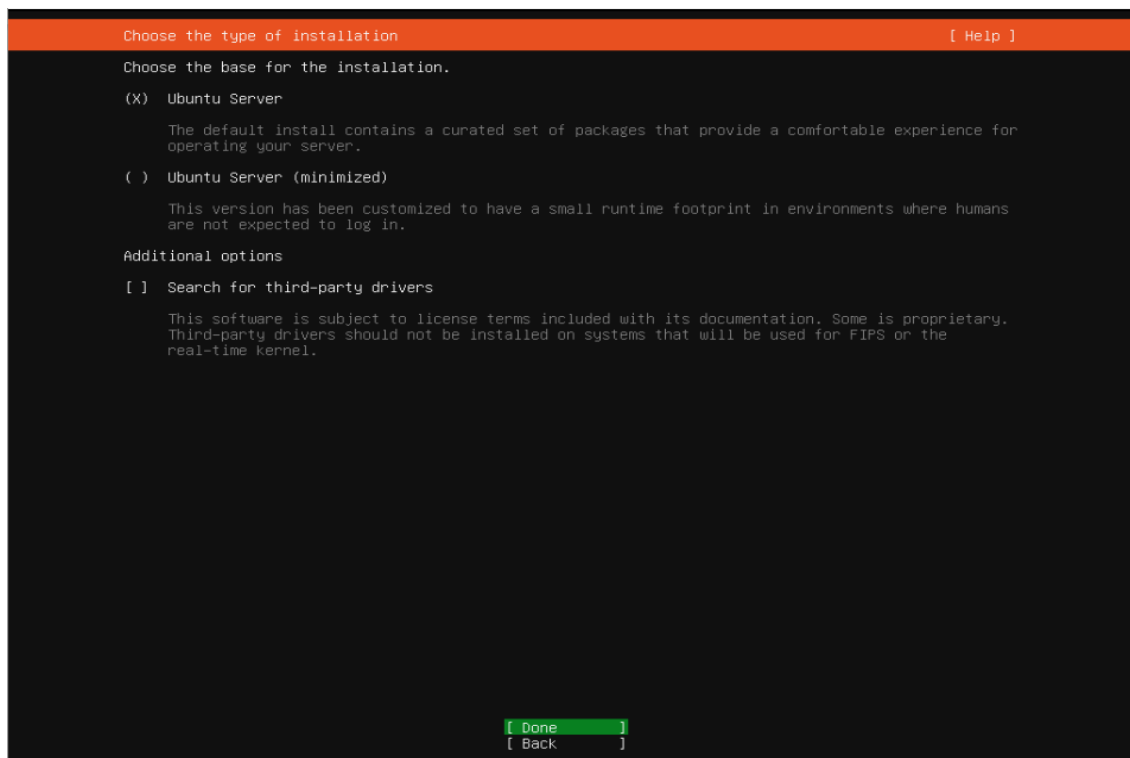
2.6 选择 **Continue without updating**，继续安装。



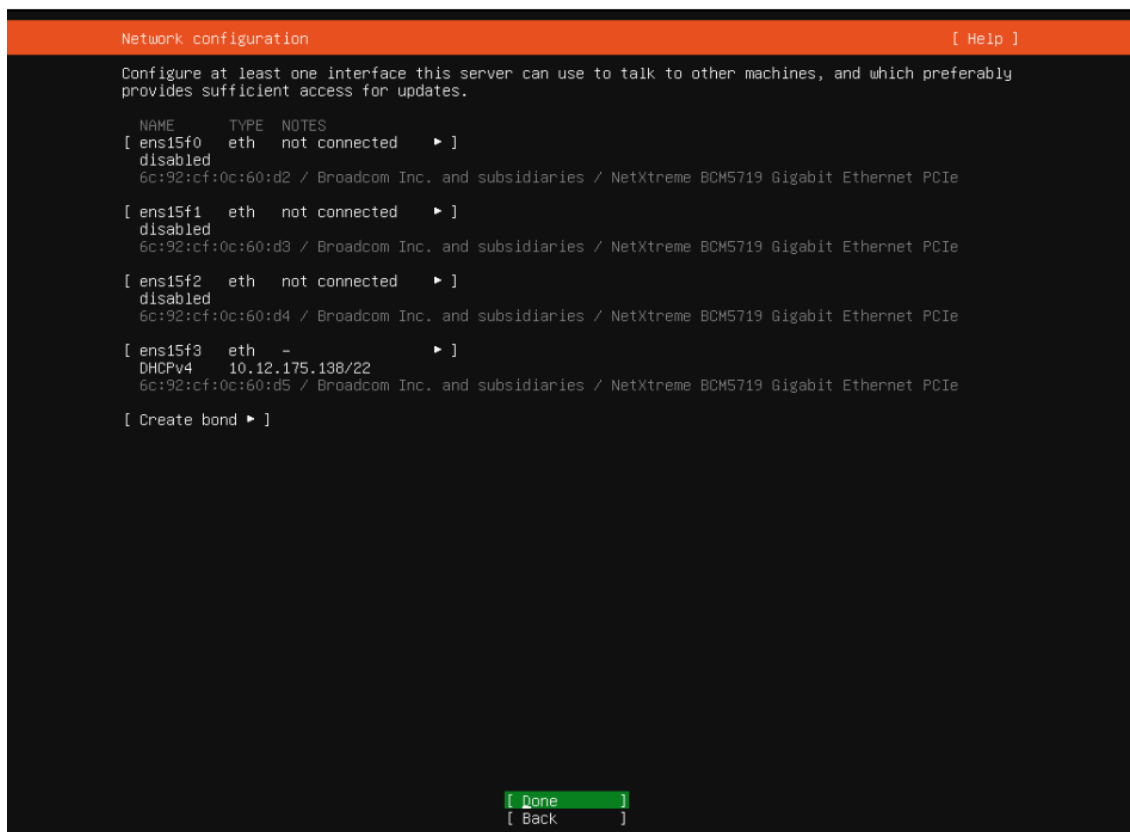
2.7 选择键盘类型后选中 **Done** 继续安装。



2.8 选择安装模式，正常安装或最小化安装，是否安装时下载更新 Ubuntu、安装第三方软件等。
默认选择 **Done** 继续。



2.9 设置网卡的网口选择，根据需求选择。默认选择 **Done** 继续。



2.10 设置代理，默认选择 **Done** 继续。

Proxy configuration

[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]

2.11 等待镜像测试，默认选择 **Done** 继续。

Ubuntu archive mirror configuration

[Help]

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

Mirror address:

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

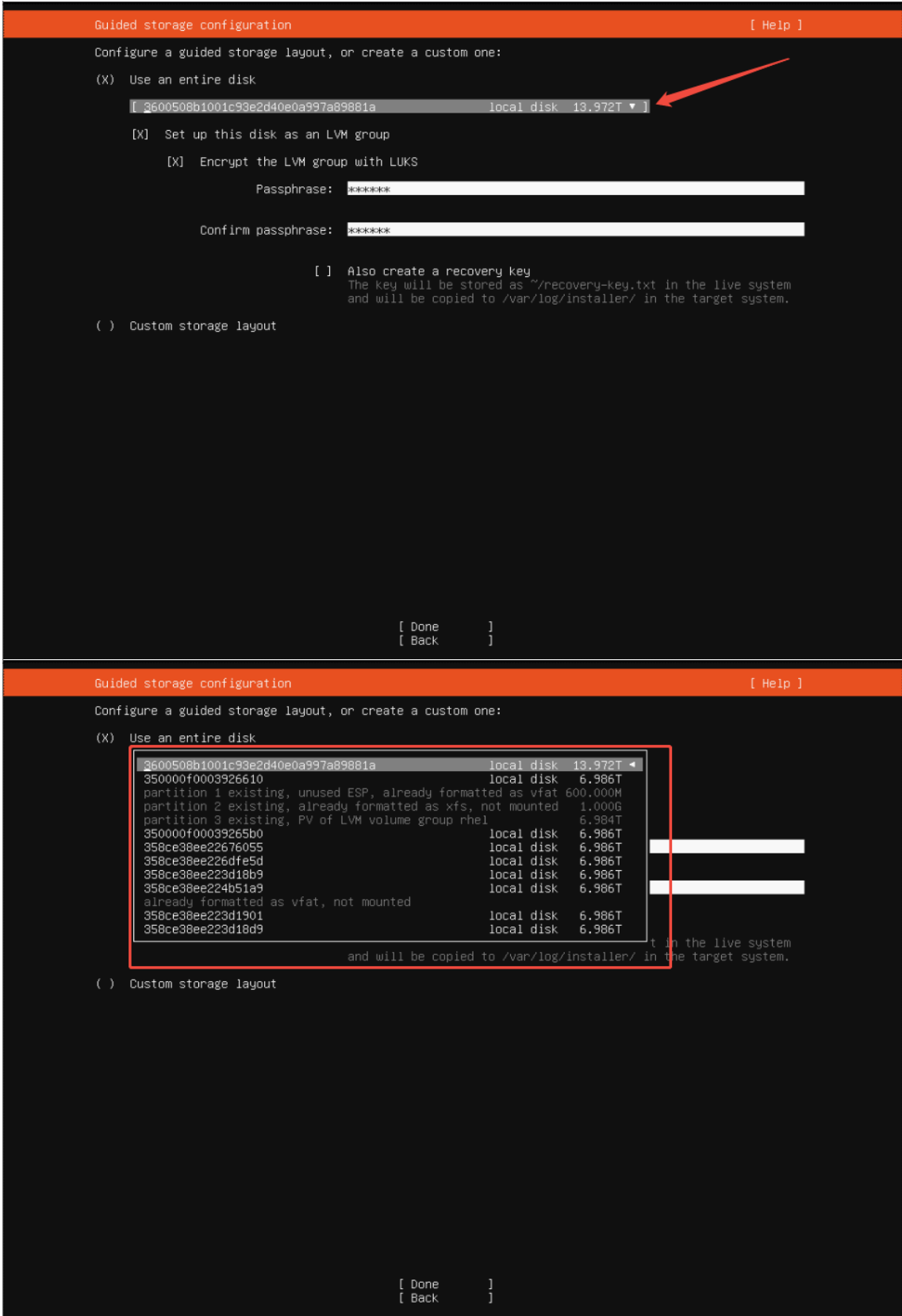
The mirror location is being tested. \

Get:1 http://mirrors.tuna.tsinghua.edu.cn/ubuntu noble InRelease [256 kB]
Get:2 http://mirrors.tuna.tsinghua.edu.cn/ubuntu noble-updates InRelease [126 kB]
Get:3 http://mirrors.tuna.tsinghua.edu.cn/ubuntu noble-backports InRelease [126 kB]

[Done]

[Back]

2.12 设置安装磁盘位置。



2.13 设置 LUKS 加密密码。

Guided storage configuration

[Help]

Configure a guided storage layout, or create a custom one:

(X) Use an entire disk

[358ce38ee223d18b9 local disk 6.986T ▼]

[X] Set up this disk as an LVM group

[X] Encrypt the LVM group with LUKS

Passphrase: *****

Confirm passphrase: *****

[] Also create a recovery key
The key will be stored as ~/recovery-key.txt in the live system
and will be copied to /var/log/installer/ in the target system.

() Custom storage layout

[Done]

[Back]

2.14 选择 Done 继续安装。

Guided storage configuration

[Help]

Configure a guided storage layout, or create a custom one:

(X) Use an entire disk

[358ce38ee223d18b9 local disk 6.986T ▼]

[X] Set up this disk as an LVM group

[X] Encrypt the LVM group with LUKS

Passphrase: *****

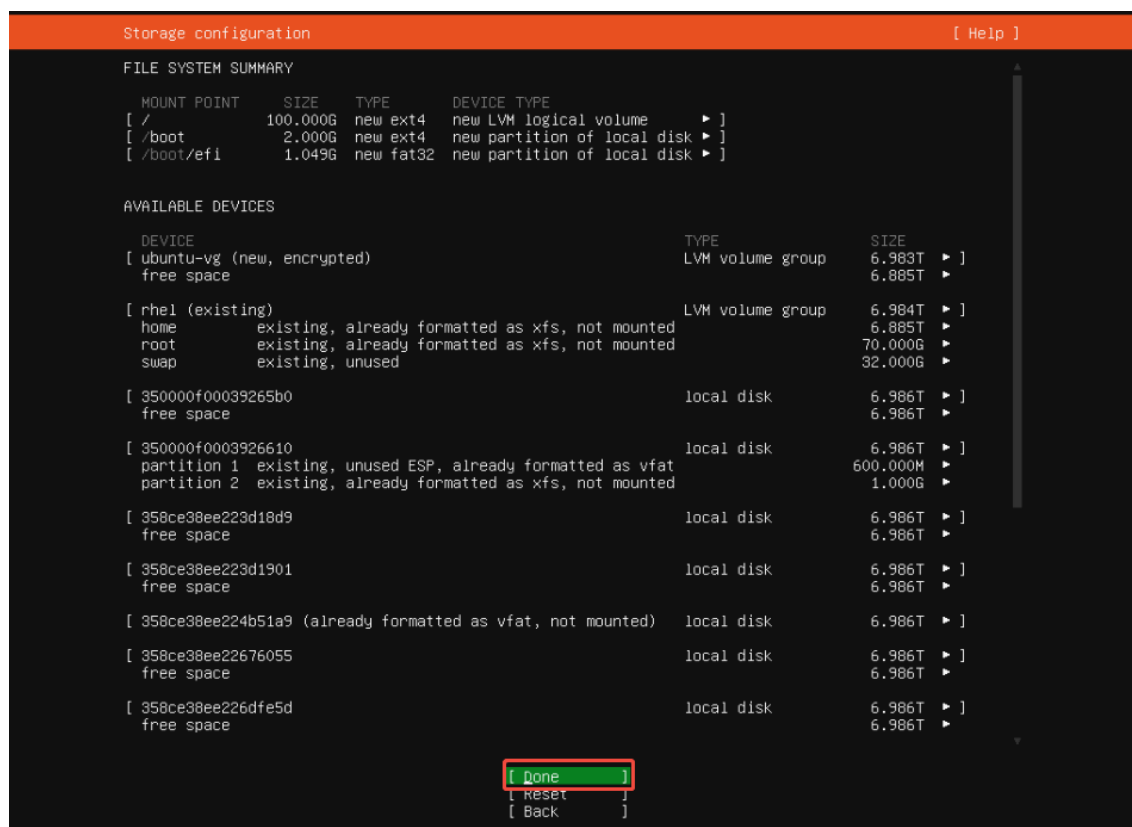
Confirm passphrase: *****

[] Also create a recovery key
The key will be stored as ~/recovery-key.txt in the live system
and will be copied to /var/log/installer/ in the target system.

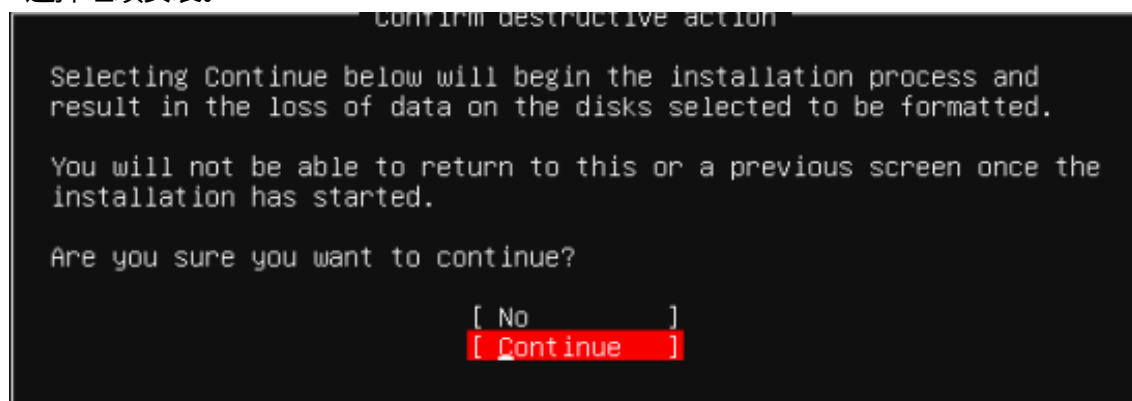
() Custom storage layout

[Done]

[Back]



2.15 选择继续安装。



2.16 设置系统密码。

Profile configuration [Help]

Enter the username and password you will use to log in to the system. You can configure SSH access on a later screen, but a password is still needed for sudo.

Your name:

Your servers name:
The name it uses when it talks to other computers.

Pick a username:

Choose a password:

Confirm your password:

[Done]

2.17 选择跳过

Upgrade to Ubuntu Pro [Help]

Upgrade this machine to Ubuntu Pro for security updates on a much wider range of packages, until 2034. Assists with FedRAMP, FIPS, STIG, HIPAA and other compliance or hardening requirements.

[About Ubuntu Pro ►]

() Enable Ubuntu Pro

(X) Skip for now

You can always enable Ubuntu Pro later using the 'pro attach' command.

2.18 根据业务需求设置是否需要 ssh 功能。

SSH configuration [Help]

You can choose to install the OpenSSH server package to enable secure remote access to your server.

[] Install OpenSSH server

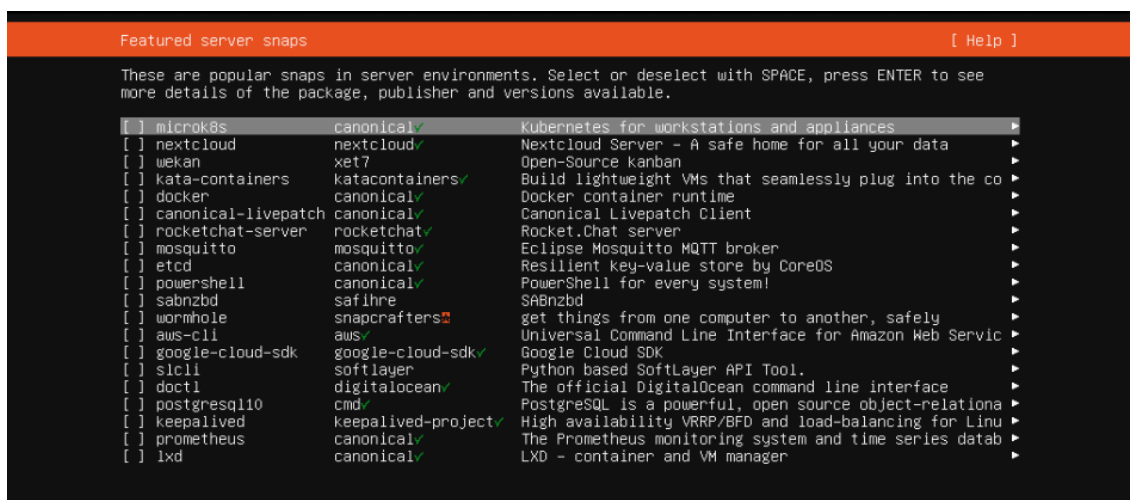
[X] Allow password authentication over SSH

[Import SSH key ►]

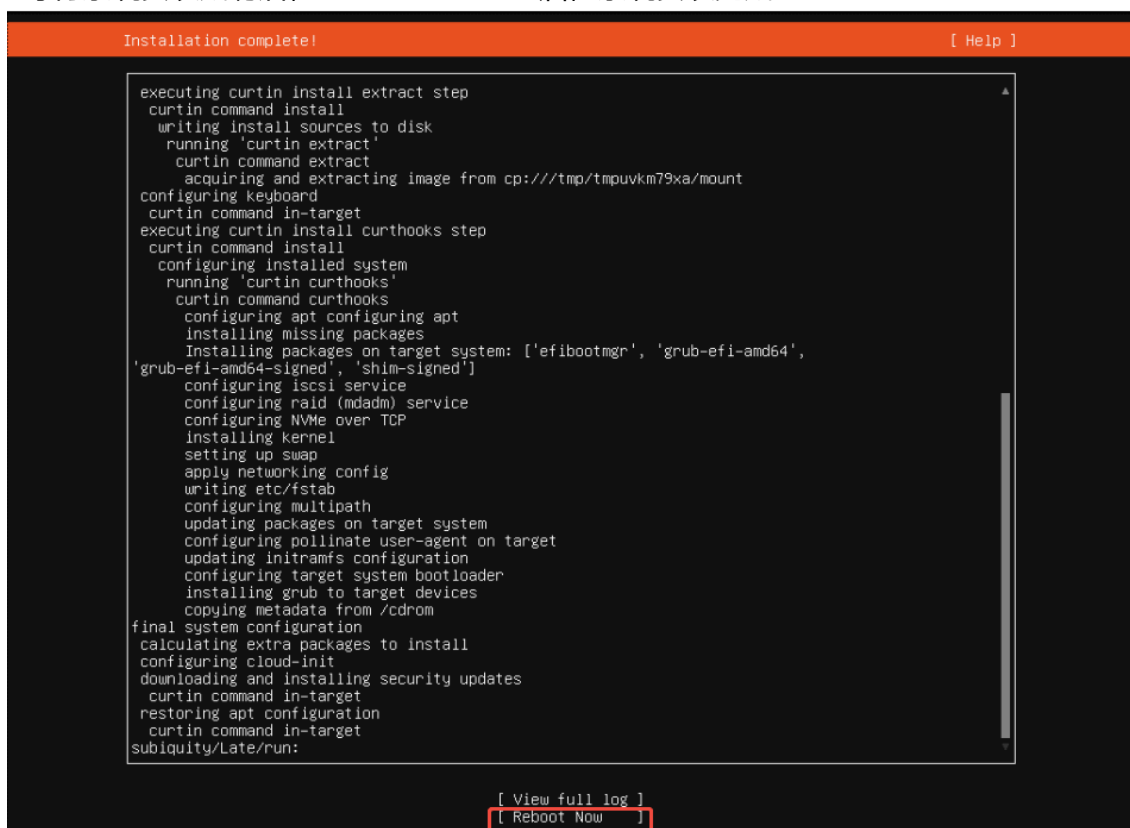
AUTHORIZED KEYS

No authorized key

2.19 根据业务需求选择业务快照。



2.20 等待系统安装成功后，**Reboot Now** 重启，系统安装完成。



```
Ubuntu 24.04 LTS test tty1
test login: test
Password:
Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.8.0-31-generic x86_64)

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

System information as of Fri Oct 31 06:14:24 AM UTC 2025

System load:  0.16           Temperature:   42.0 C
Usage of /:   10.3% of 97.87GB Processes:    618
Memory usage: 0%           Users logged in: 0
Swap usage:  0%           IPv4 address for ens15f3: 10.12.175.95

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.

test@test:~$
```