



國立陽明交通大學資訊工程學系資訊中心

IT Center of Department of Computer Science, National Yang Ming Chiao Tung University

# Install Debian

# Debian

- Debian is an operating system based on Linux kernel and a distribution of Free Software.
- NYCU CSIT uses Debian to build services, including workstations, websites, etc.



# ISO

- ISO is a file format that contains a complete image of an operating system installation disc.
- It can be used to create bootable media like USB drives or DVDs.

# Install Debian

# Download Debian ISO

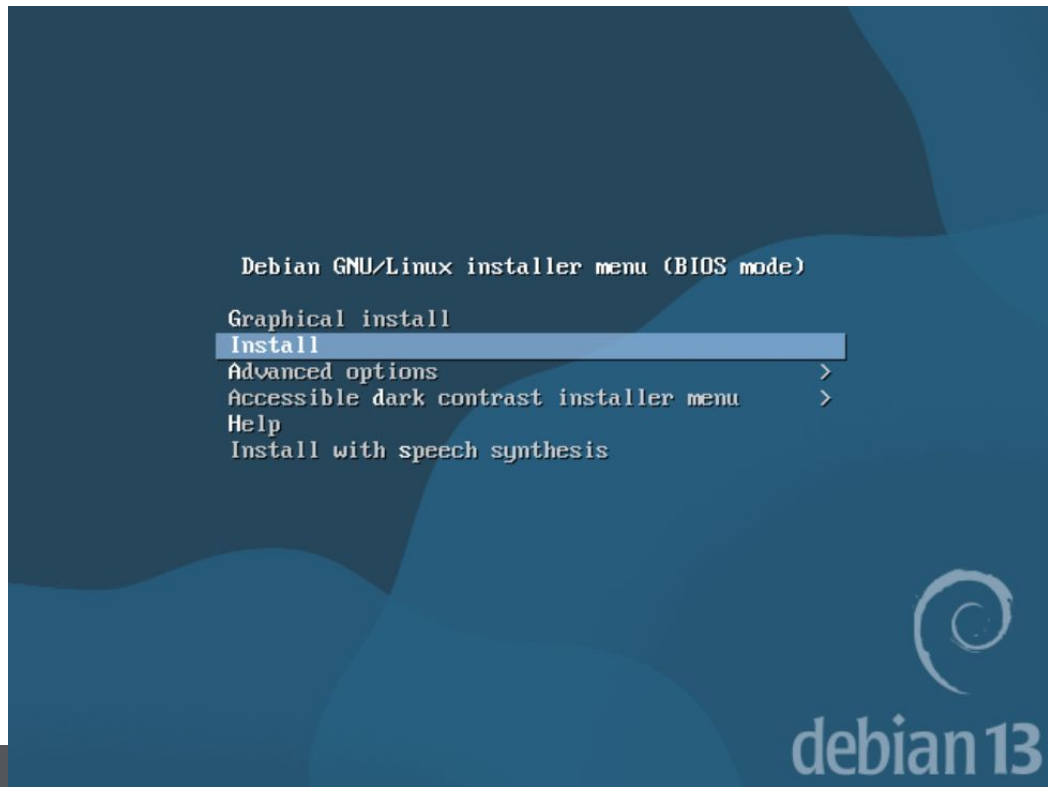
- The newest version of Debian is 13.0, which is release on August, 2025.
- The ISO file can be found in the [official download page](#) or the following two mirror sites in Taiwan:
  - <https://debian.cs.nycu.edu.tw/debian-cd/>
  - <https://free.nchc.org.tw/debian-cd/>
  -

# Debian Installation - TL;DR

- A few things to notice
  - The country should be TW.
  - The keymap and locale should be en\_US.
  - For disk partitioning, you can use the guided one and leave everything default.
  - NYCU CSIT hosts a Debian mirror site on [debian.cs.nycu.edu.tw](http://debian.cs.nycu.edu.tw), and you can choose it when selecting mirror site.
  - For package selection, it's recommended to select openssh-server. Desktop environment is up to you.
- And you can leave others default.

# Installation Menu

- Selecting "Install" is recommended.
- "Graphical Install" sometimes breaks.



# Language Selection





# Location Selection

Choose "other >> Asia >> Taiwan".

[1] 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:

- Antigua and Barbuda
- Australia
- Botswana
- Canada
- Hong Kong
- India
- Ireland
- Israel
- New Zealand
- Nigeria
- Philippines
- Seychelles
- Singapore
- South Africa
- United Kingdom
- United States
- Zambia
- Zimbabwe
- other**

<Go Back>

[1] 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.

Select the continent or region to which your location belongs.

Continent or region:

- Africa
- Antarctica
- Asia**
- Atlantic Ocean
- Caribbean
- Central America
- Europe
- Indian Ocean
- North America
- Oceania
- South America

<Go Back>

[1] 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.

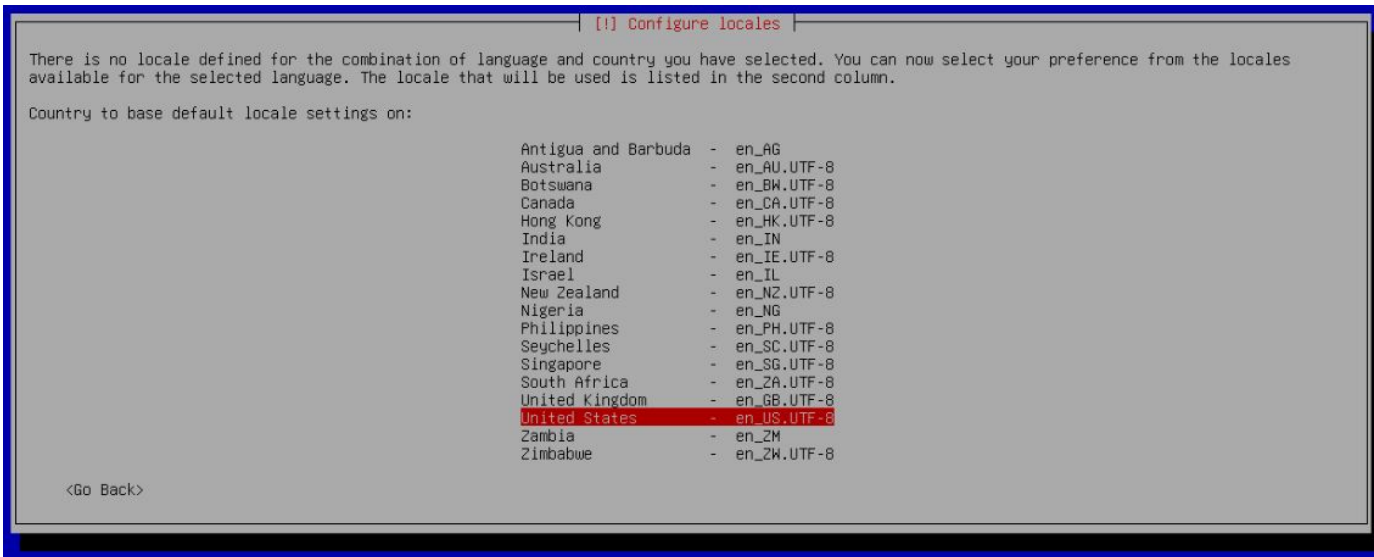
Listed are locations for: Asia. Use the <Go Back> option to select a different continent or region if your location is not listed.

Country, territory or area:

- Israel
- Japan
- Jordan
- Kazakhstan
- Kuwait
- Kyrgyzstan
- Laos
- Lebanon
- Macao
- Malaysia
- Mongolia
- Myanmar
- Nepal
- North Korea
- Oman
- Pakistan
- Palestine, State of
- Philippines
- Qatar
- Saudi Arabia
- Singapore
- South Korea
- Sri Lanka
- Syria
- Taiwan**
- Tajikistan
- Thailand
- Timor-Leste
- Turkmenistan
- Turkiye
- United Arab Emirates
- Uzbekistan
- Vietnam
- Yemen

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# Locale & Keymap Selection



# Hostname & Domain name

You can configure your own hostname and domain name based on the homework requirements.

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:

nasa-hu

<Go Back> <Continue>

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:

2025.sa

<Go Back> <Continue>

# Set Root Password

- Choose your own password.
- The installer will ask your confirmation for password.

!!! Set up users and passwords

Some accounts need to be available with administrative super-user privileges. The password for that account should be something that cannot be guessed.

To allow direct password-based access via the 'root' account, you can set the password for that account here.

Alternatively, you can lock the root account's password by leaving this setting empty, and instead use the system's initial user account (which will be set up in the next step) to gain administrative privileges. This will be enabled for you by adding that initial user to the 'sudo' group.

Note: what you type here will be hidden (unless you select to show it).

Root password:

•••••

☐ Show Password in Clear

<Go Back>

<Continue>

# Setup User Account

- Enter your desired username and password.
  - Full name and username can be the same.
- You will also be prompted for password confirmation.

The image displays three overlapping terminal windows from a Linux installation process, specifically the 'Set up users and passwords' step. The top window shows instructions for creating a user account and a prompt for the full name, with 'phkoan' entered. The middle window prompts for a username, also with 'phkoan' entered. The bottom window prompts for a password, showing masked characters '\*\*\*\*\*' and a checkbox for 'Show Password in Clear'.

[!!] 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:

phkoan

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[!!] 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:

phkoan

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[!!] Set up users and passwords

Make sure to select a strong password that cannot be guessed.

Choose a password for the new user:

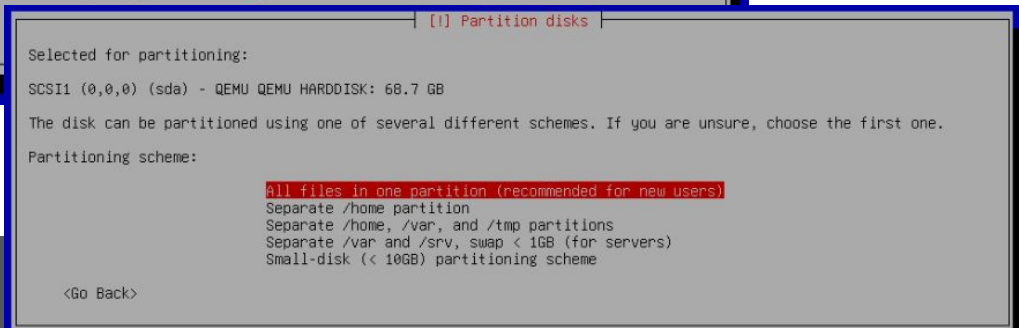
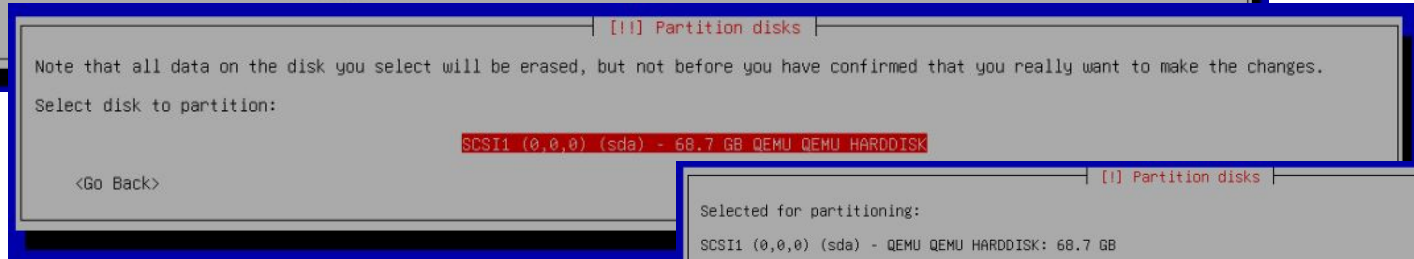
\*\*\*\*\*

[ ] Show Password in Clear

<Go Back> <Continue>

# Disk Partitioning

Choose "Guide - use entire disk" if you are new to Linux.



# Disk Partitioning

Finish partitioning and write changes to disk.

```
[[!]] Partition disks |
This is an overview of your currently configured partitions and mount points. Select a partition to modify its settings (file system, mount point, etc.), a free space to create partitions, or a device to initialize its partition table.

Guided partitioning
Configure software RAID
Configure the Logical Volume Manager
Configure encrypted volumes
Configure iSCSI volumes

SCSI1 (0,0,0) (sda) - 68.7 GB QEMU QEMU HARDDISK
#1 primary 66.6 GB f ext4 /
#5 logical 2.1 GB f swap swap

Undo changes to partitions
Finish partitioning and write changes to disk

<Go Back>
```

```
[[!]] 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.

WARNING: This will destroy all data on any partitions you have removed as well as on the partitions that are going to be formatted.

The partition tables of the following devices are changed:
SCSI1 (0,0,0) (sda)

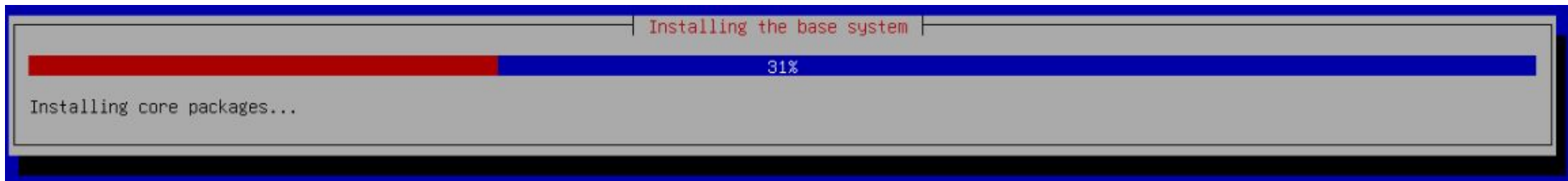
The following partitions are going to be formatted:
partition #1 of SCSI1 (0,0,0) (sda) as ext4
partition #5 of SCSI1 (0,0,0) (sda) as swap

Write the changes to disks?

<Yes> <No>
```

# Base System Installation

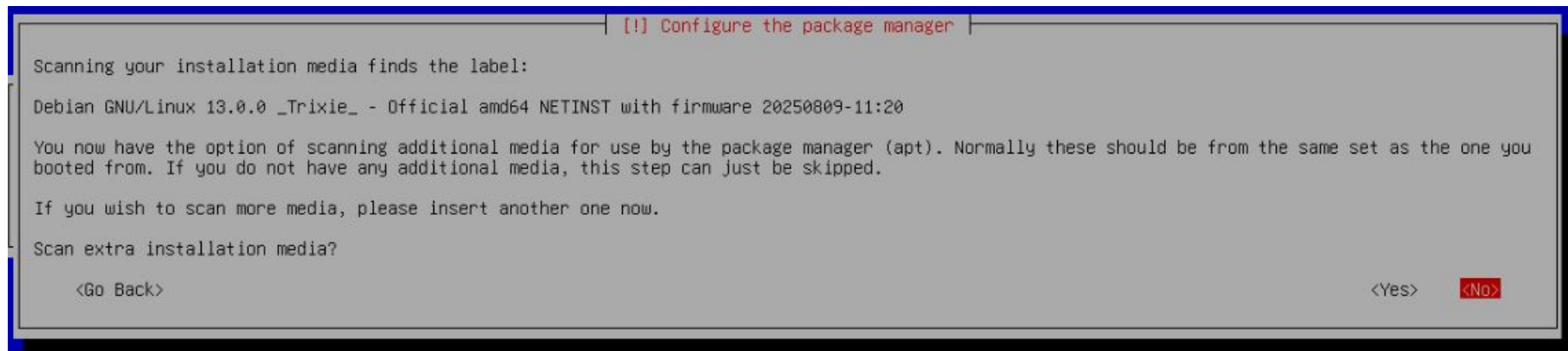
- Just wait a few minutes.





# Extra Installation Media

It can be skipped for now.



# Package Mirror Selection

- NYCU CSIT hosts a Debian mirror site on [debian.cs.nycu.edu.tw](http://debian.cs.nycu.edu.tw).
- The proxy can be left empty.

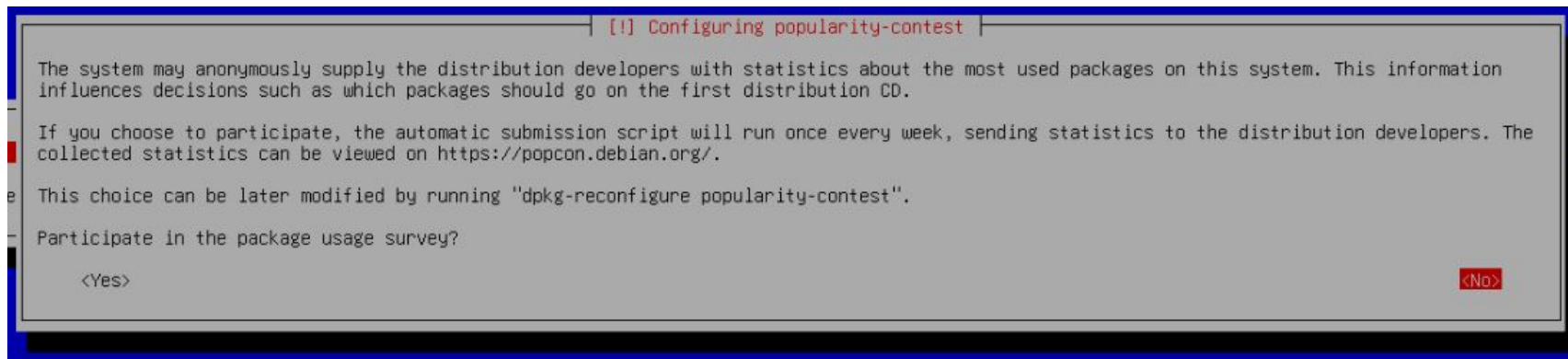
The first screenshot shows the 'Configure the package manager' dialog box. It explains the goal is to find a mirror close to the user and lists various countries. 'Taiwan' is highlighted at the bottom of the list.

The second screenshot shows the same dialog box with the 'Debian archive mirror' field filled with 'deb.debian.org' and 'debian.cs.nycu.edu.tw' highlighted in red. Other mirrors listed include 'ftp.tw.debian.org', 'opensource.nchc.org.tw', 'deb.debian.org', 'deb.debian.ccns.ncku.edu.tw', 'tw1.mirror.blendbyte.net', 'mirror.twds.com.tw', and 'debian-archive.trafficmanager.net'.

The third screenshot shows the 'Configure the package manager' dialog box with the 'HTTP proxy information' field filled with a redacted value. The dialog box also includes a 'Scanning the' field and a 'Cancel' button.

# Popularity Contest Survey

This selection is up to you.

A screenshot of a terminal window titled "[!] Configuring popularity-contest". The window has a grey background and a blue border. It contains the following text: "The system may anonymously supply the distribution developers with statistics about the most used packages on this system. This information influences decisions such as which packages should go on the first distribution CD." followed by "If you choose to participate, the automatic submission script will run once every week, sending statistics to the distribution developers. The collected statistics can be viewed on <https://popcon.debian.org/>." and "This choice can be later modified by running 'dpkg-reconfigure popularity-contest'." The question "Participate in the package usage survey?" is displayed. At the bottom left, there is a "<Yes>" button, and at the bottom right, there is a red "<No>" button.

[!] Configuring popularity-contest

The system may anonymously supply the distribution developers with statistics about the most used packages on this system. This information influences decisions such as which packages should go on the first distribution CD.

If you choose to participate, the automatic submission script will run once every week, sending statistics to the distribution developers. The collected statistics can be viewed on <https://popcon.debian.org/>.

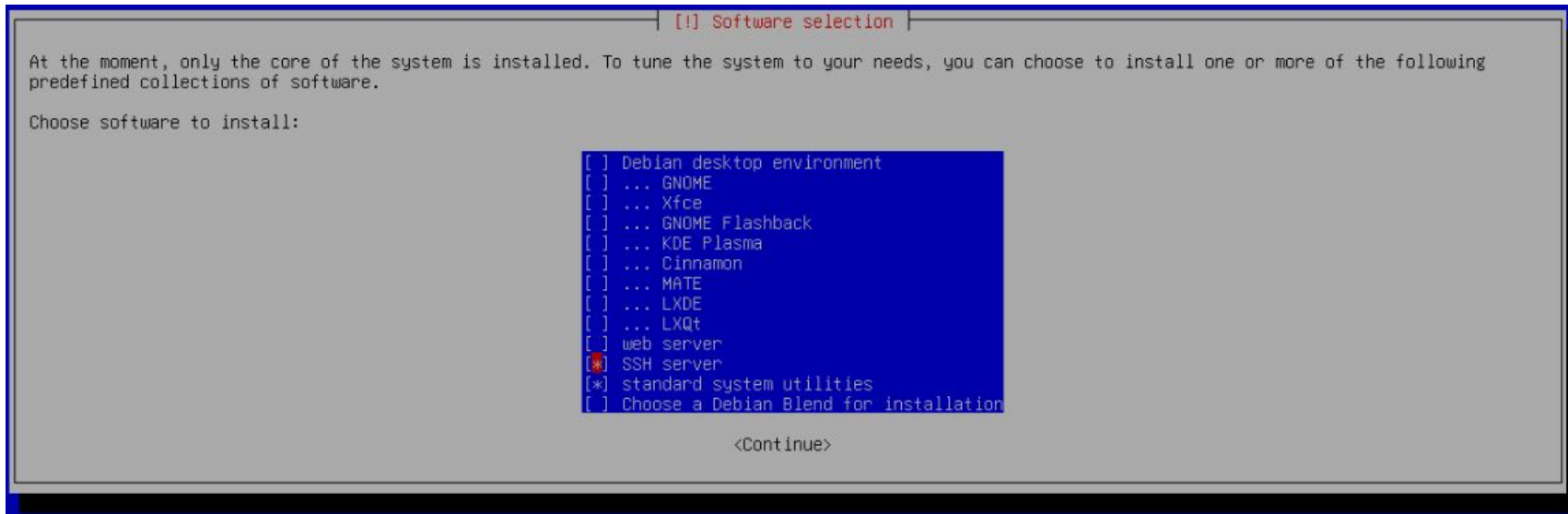
This choice can be later modified by running "dpkg-reconfigure popularity-contest".

Participate in the package usage survey?

<Yes> <No>

# Software Selection

- Select SSH server and standard system utilities.
- You can select desktop environment, but this can slow down your system.



```
[!] 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.

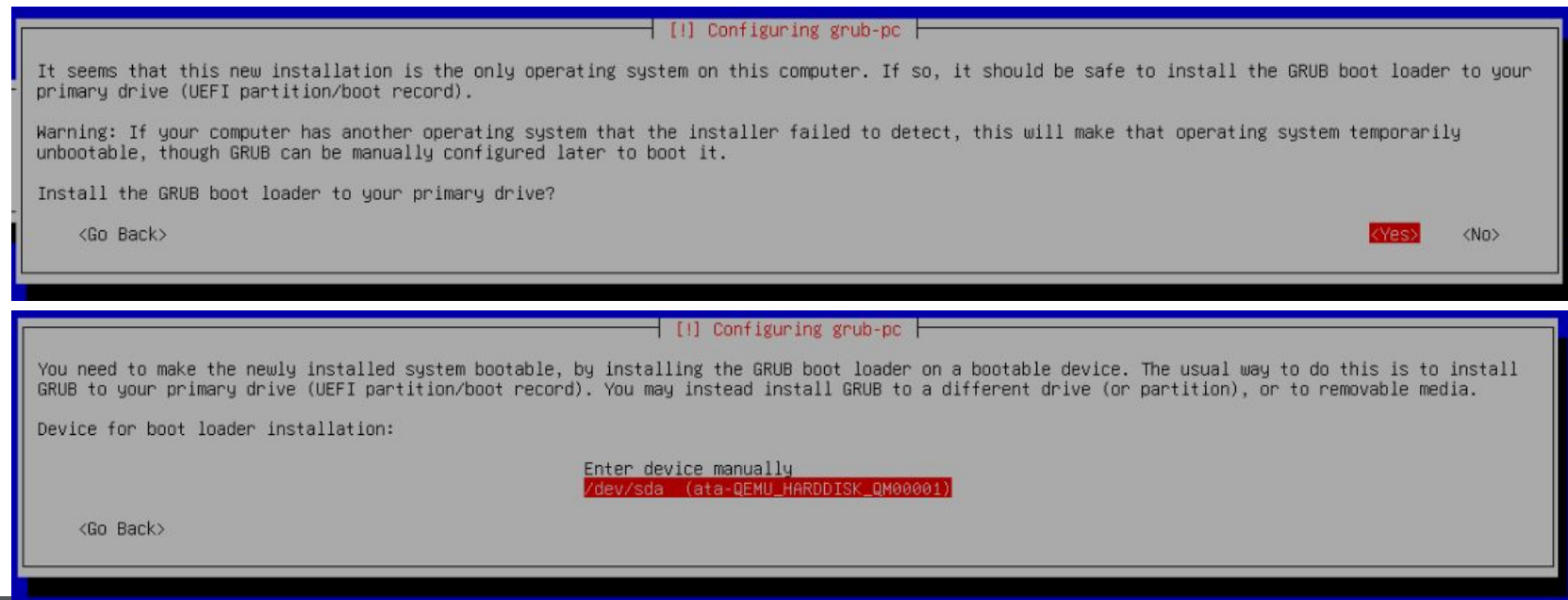
Choose software to install:

[ ] Debian desktop environment
[ ] ... GNOME
[ ] ... Xfce
[ ] ... GNOME Flashback
[ ] ... KDE Plasma
[ ] ... Cinnamon
[ ] ... MATE
[ ] ... LXDE
[ ] ... LXQt
[ ] web server
[*] SSH server
[*] standard system utilities
[ ] Choose a Debian Blend for installation

<Continue>
```

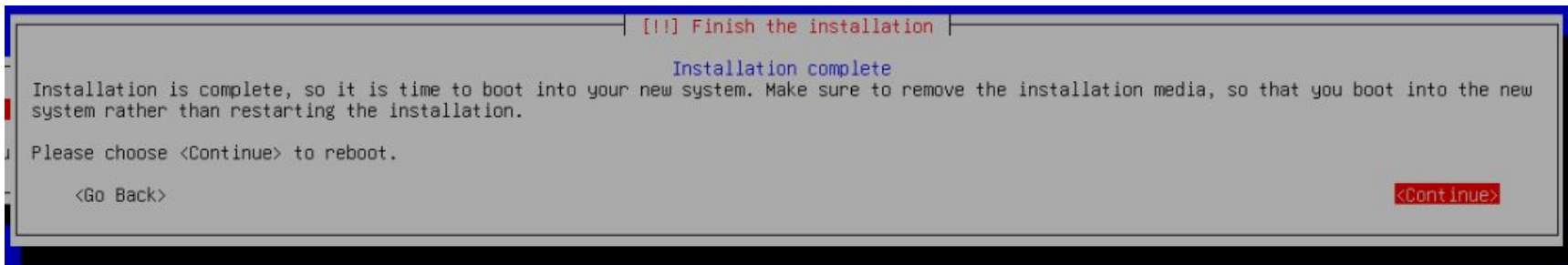
# Grub installation

Install grub on the drive.



# Finishing Installation

Choose "Continue" to reboot and enjoy your system.



```
Debian GNU/Linux 13 nasa tty1
nasa login: phkoan
Password:
Linux nasa 6.12.41+deb13-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.12.41-1 (2025-08-12) x86_64

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

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
phkoan@nasa:~$
```