OpenGnsys VDI user manual

Soleta Networks <https://opengnsys.soleta.eu>

Table of Contents

Prerequisites

- Install OpenGnSys Enterprise from https://opengnsys.soleta.eu/download
- Enable *Virtualization Technology* in your BIOS.
- Host CPU must support IOMMU (Intel VT-d or AMD-Vi)

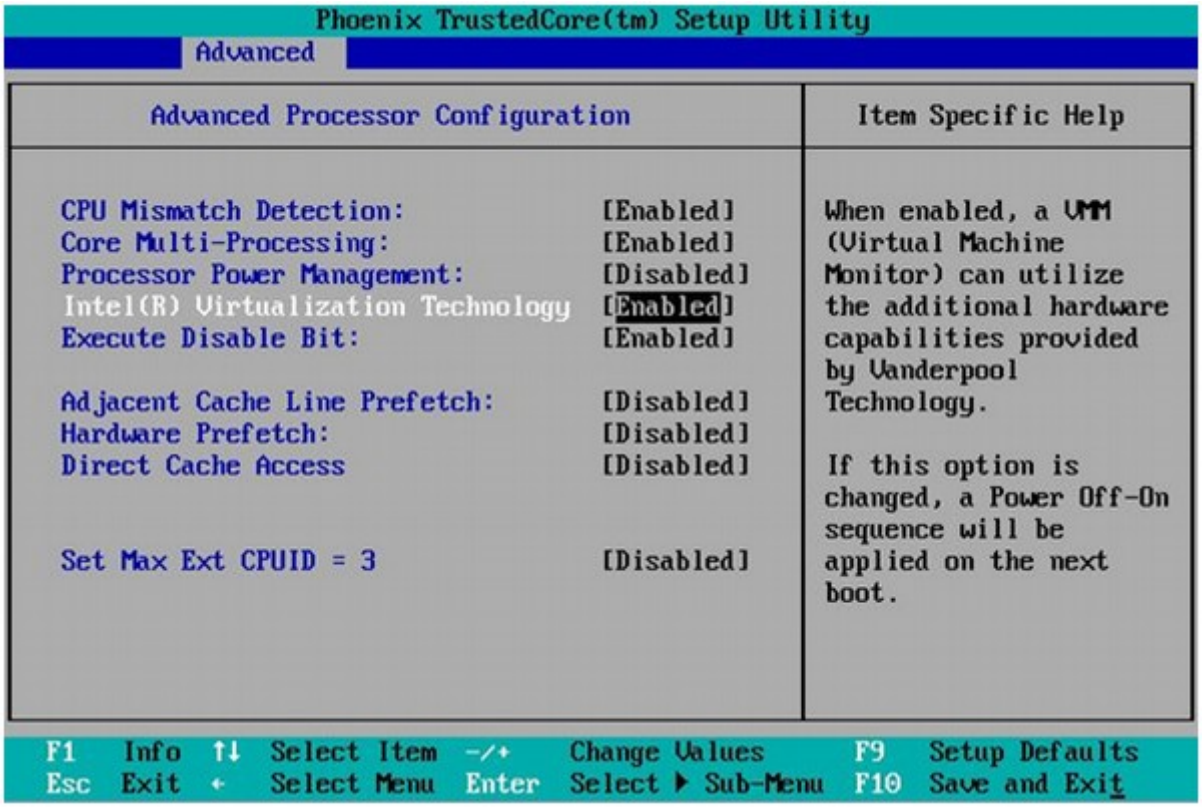

Figure 1: Activate virtualization

Install OpenGnsys VDI

- Download the latest OpenGnSys VDI image.
- Create a bootable USB from the image file.

In Linux, you can use *dd*.

```
# dd bs=4M if=path/to/ogvdi.iso of=/dev/sdx status=progress oflag=sync
```

In Windows, you can use *Rufus* (https://rufus.ie/).

Now, you are ready to boot your computer from your USB stick.

Once you are in the *Boot menu*, please select *Graphical Install* or *Install*.

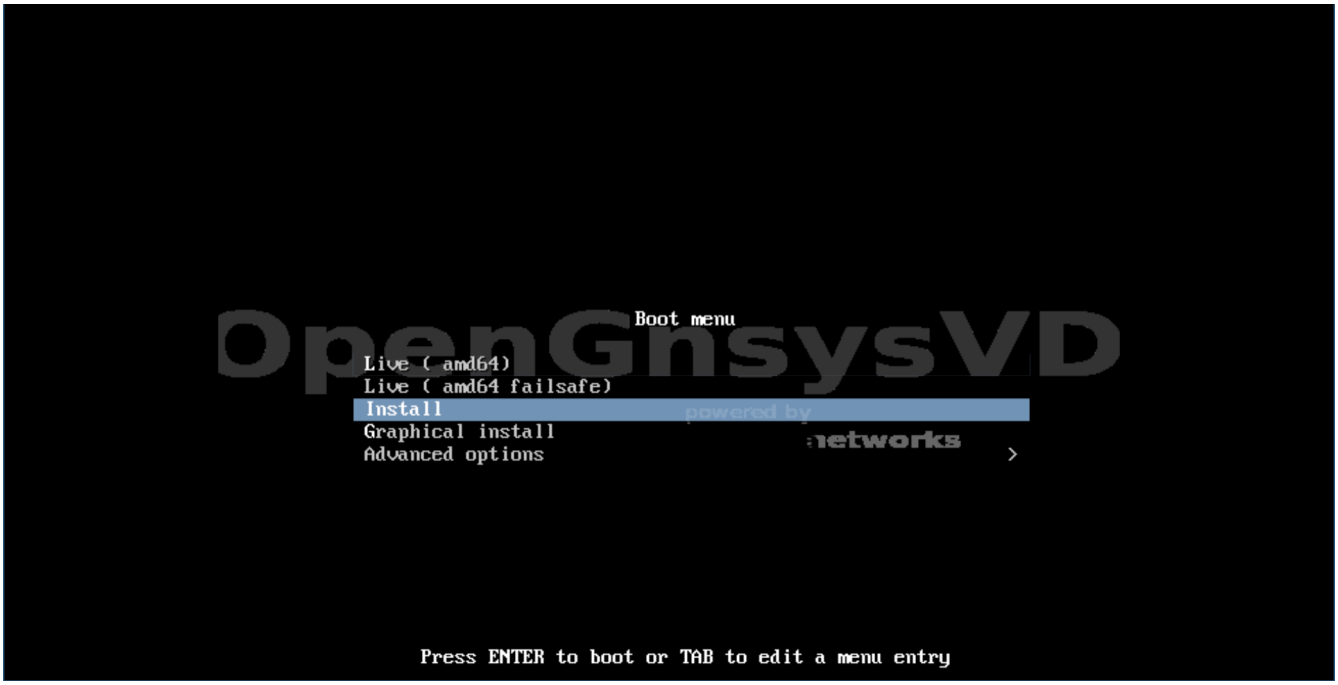

Figure 2: Boot menu

The installation is based on the Debian installer. Please do not skip this user manual if you are familiar with it, there is a few caveats ahead when installing OpenGnsys VDI.

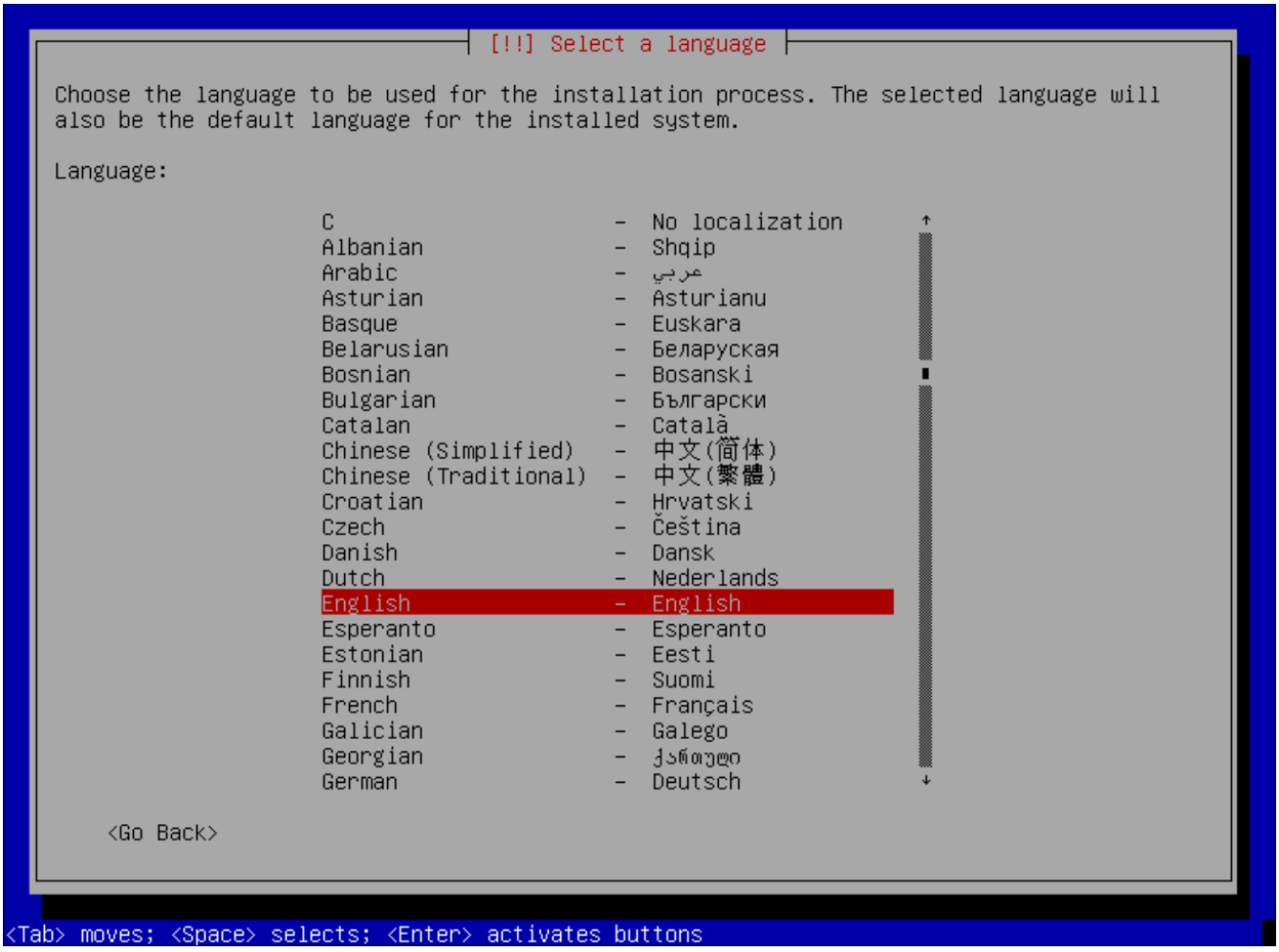

Figure 3: Set language

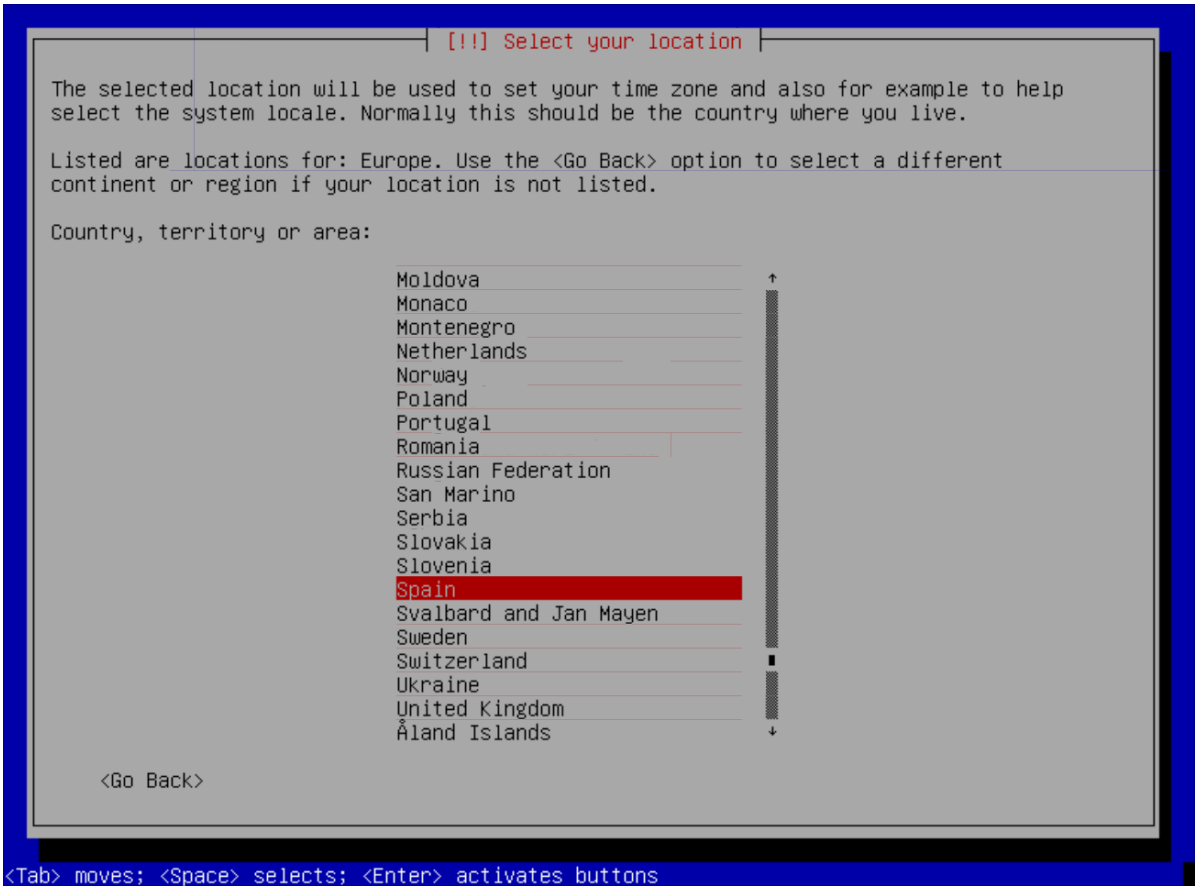

Figure 4: Set location

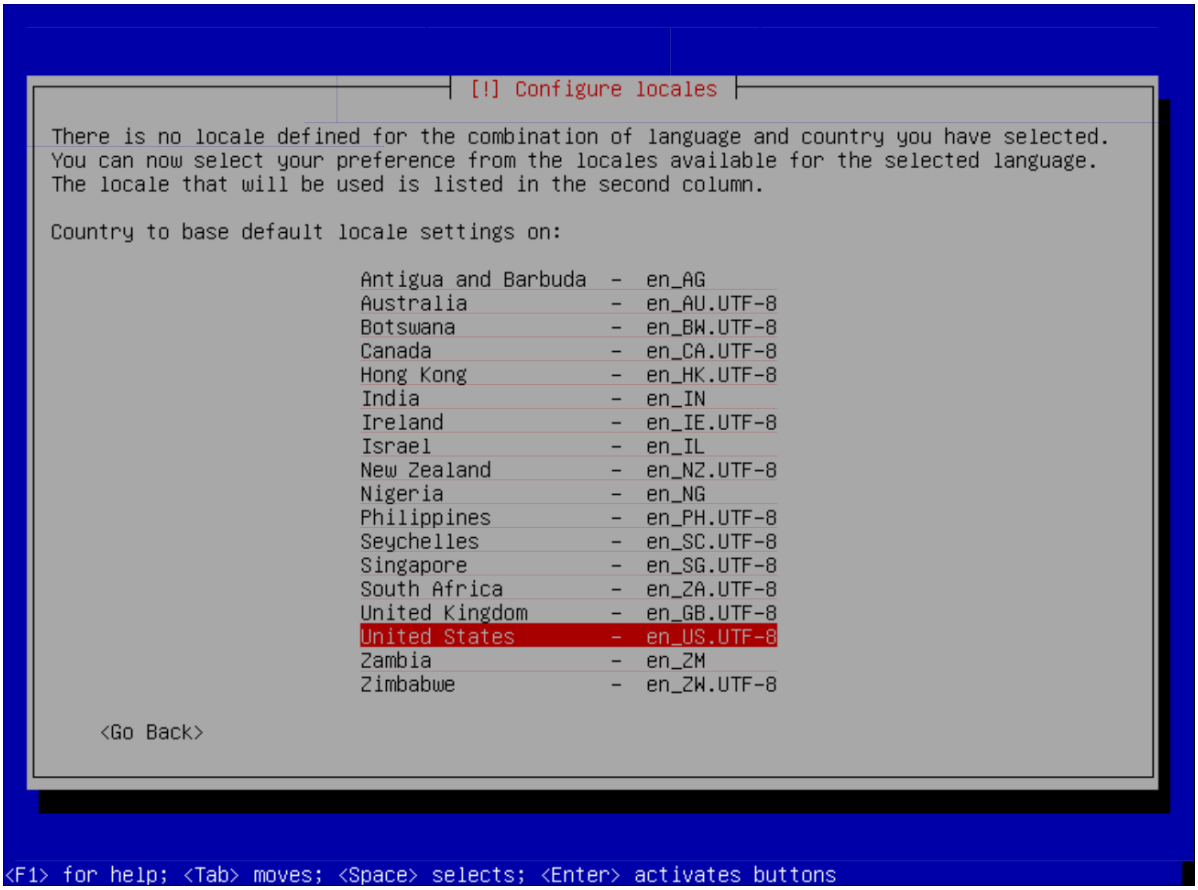

Figure 5: Set locale

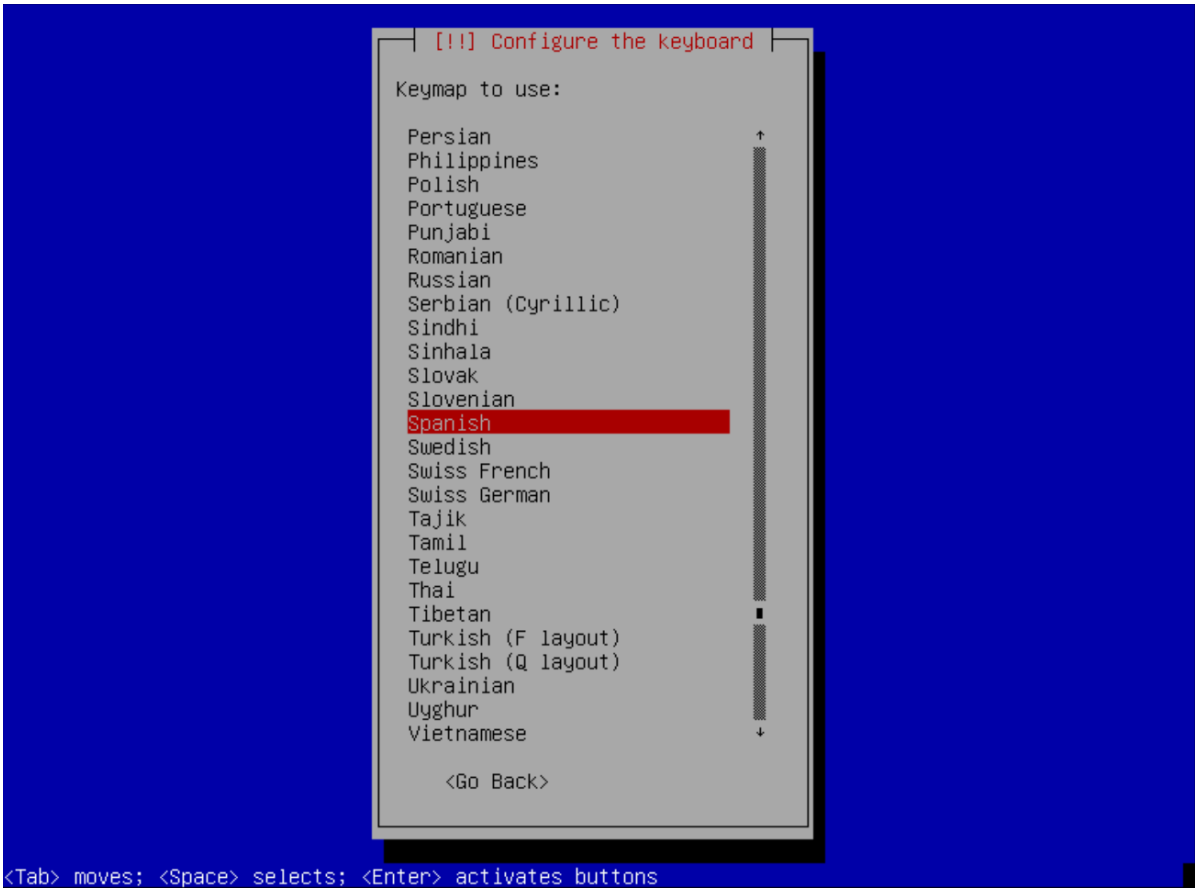

Figure 6: Set keyboard

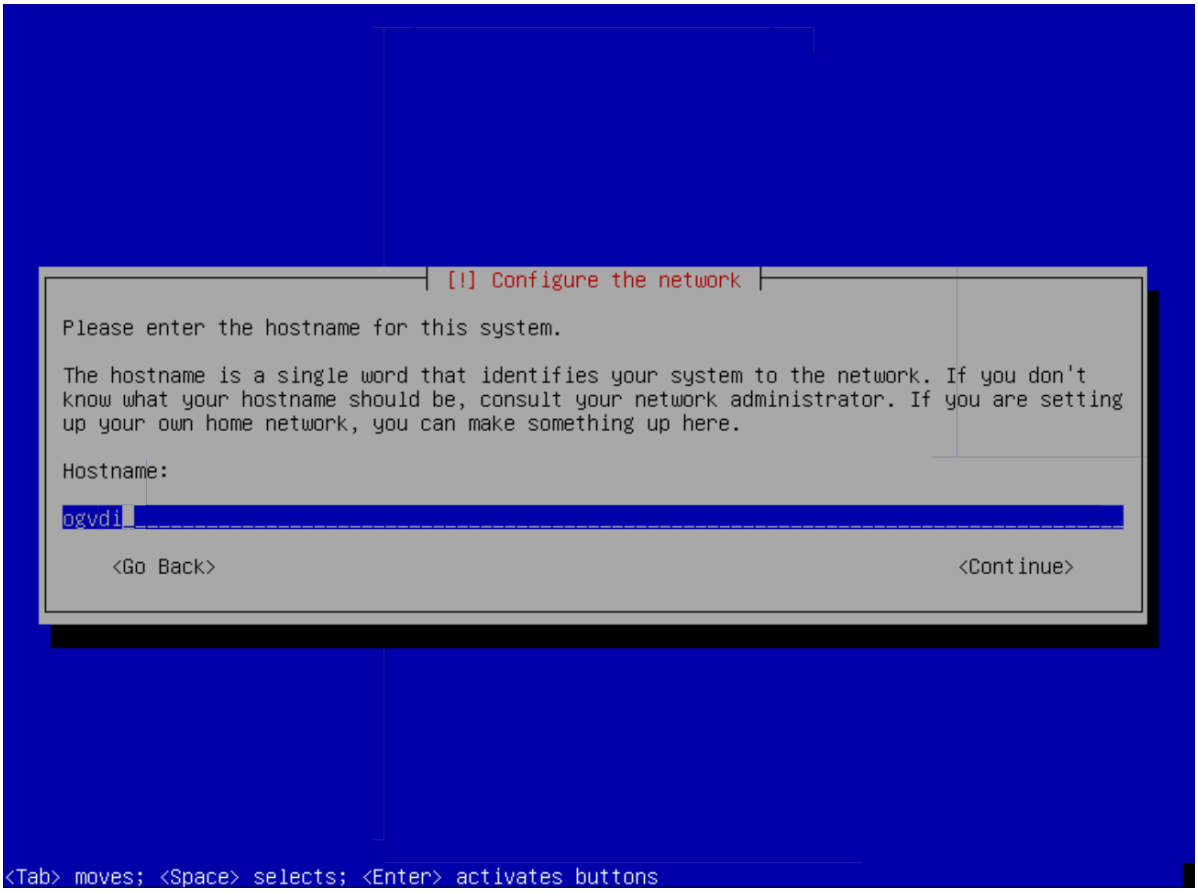

Figure 7: Set hostname

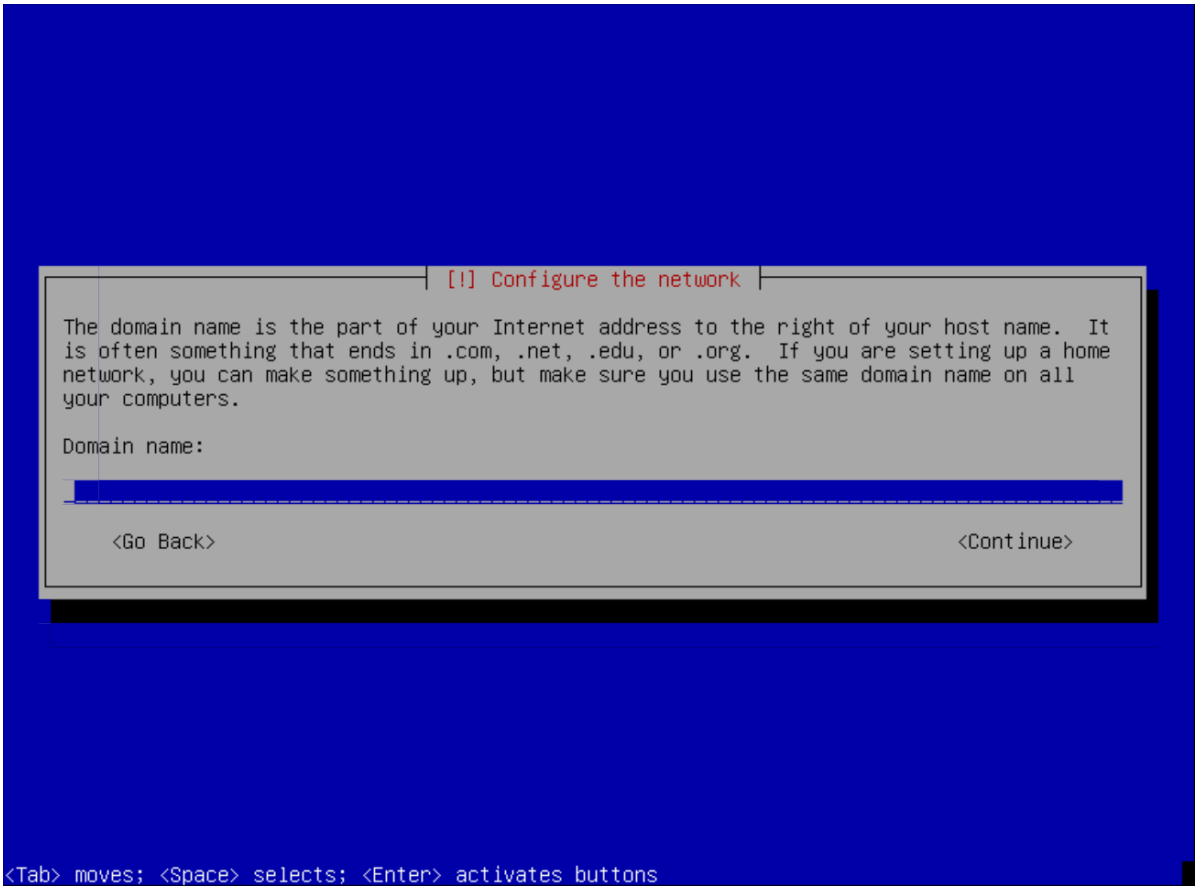

Figure 8: Set domain

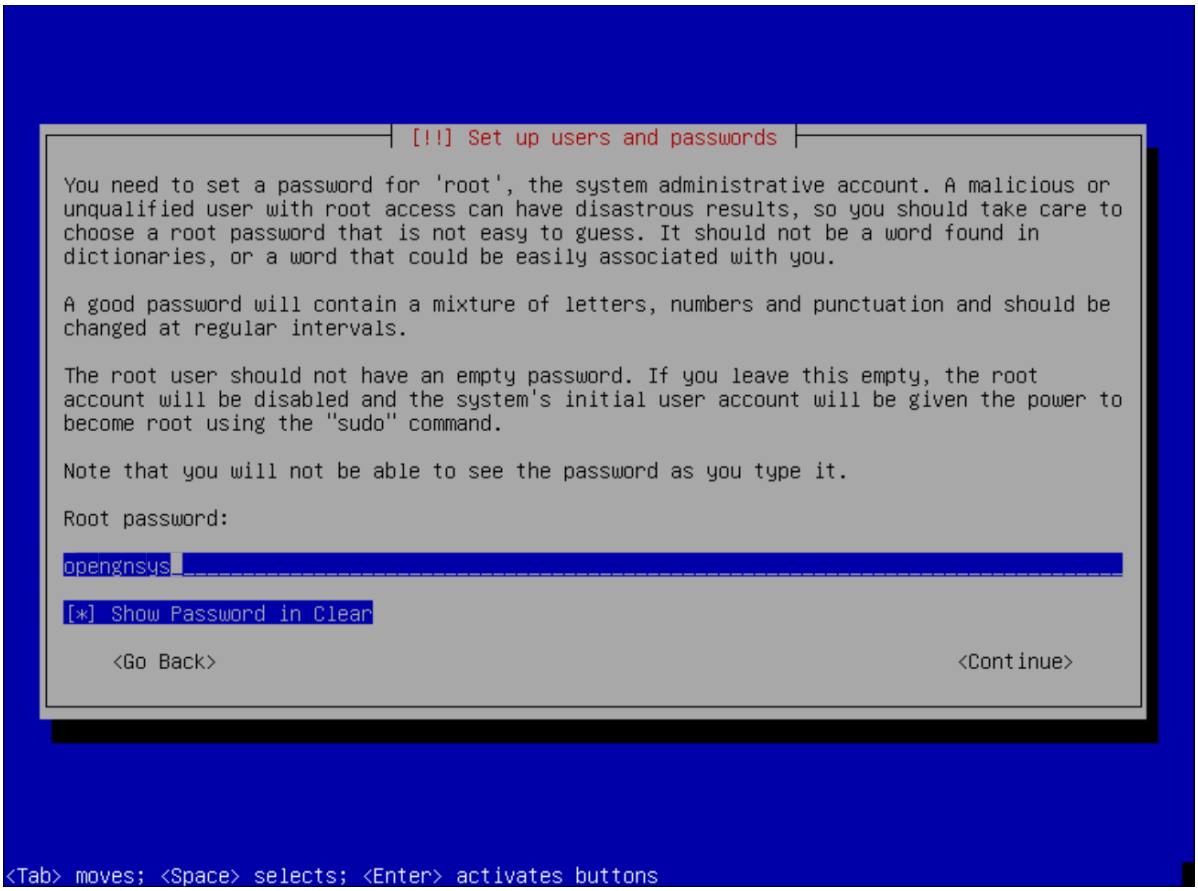

Figure 9: Set root pass

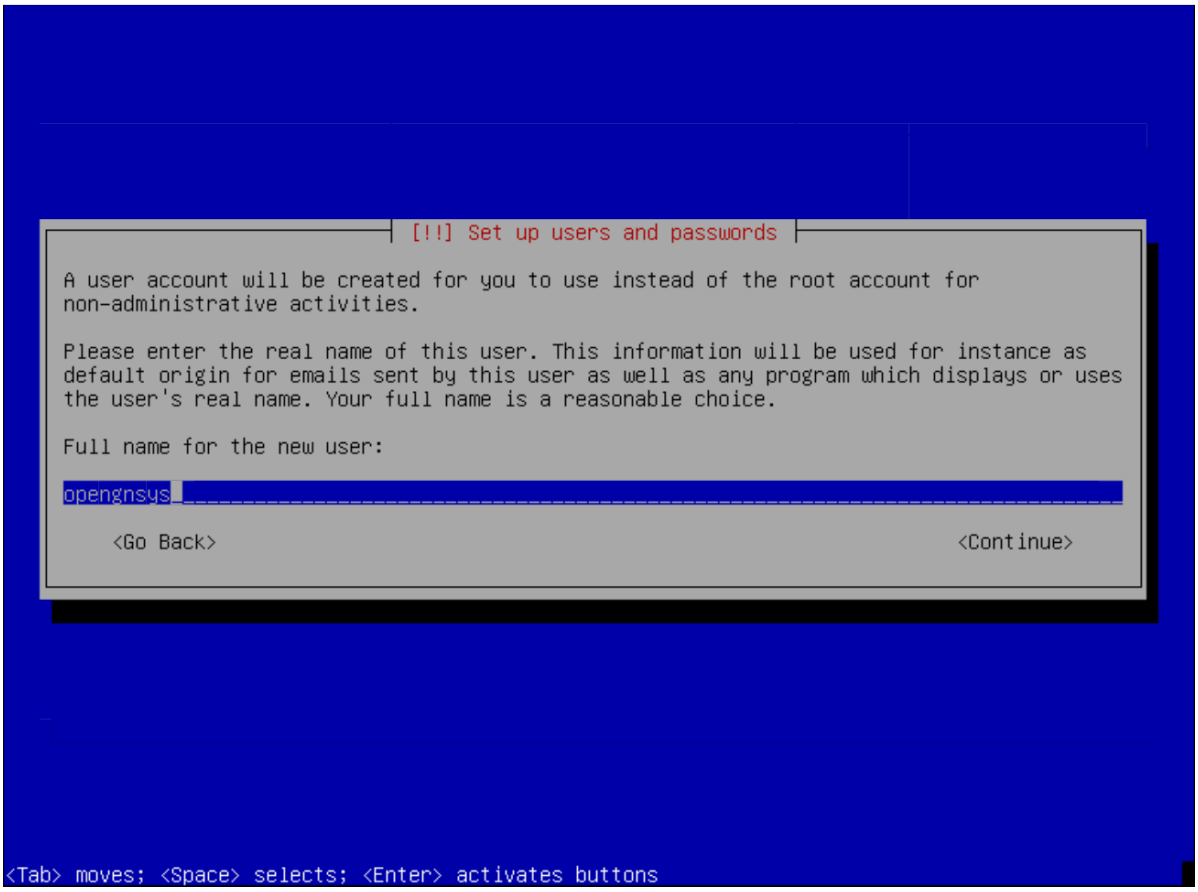

Figure 10: Set full name

Make sure username is *opengnsys*, otherwise *OpenGnSys VDI* will not work! (do not mistake username with full name)

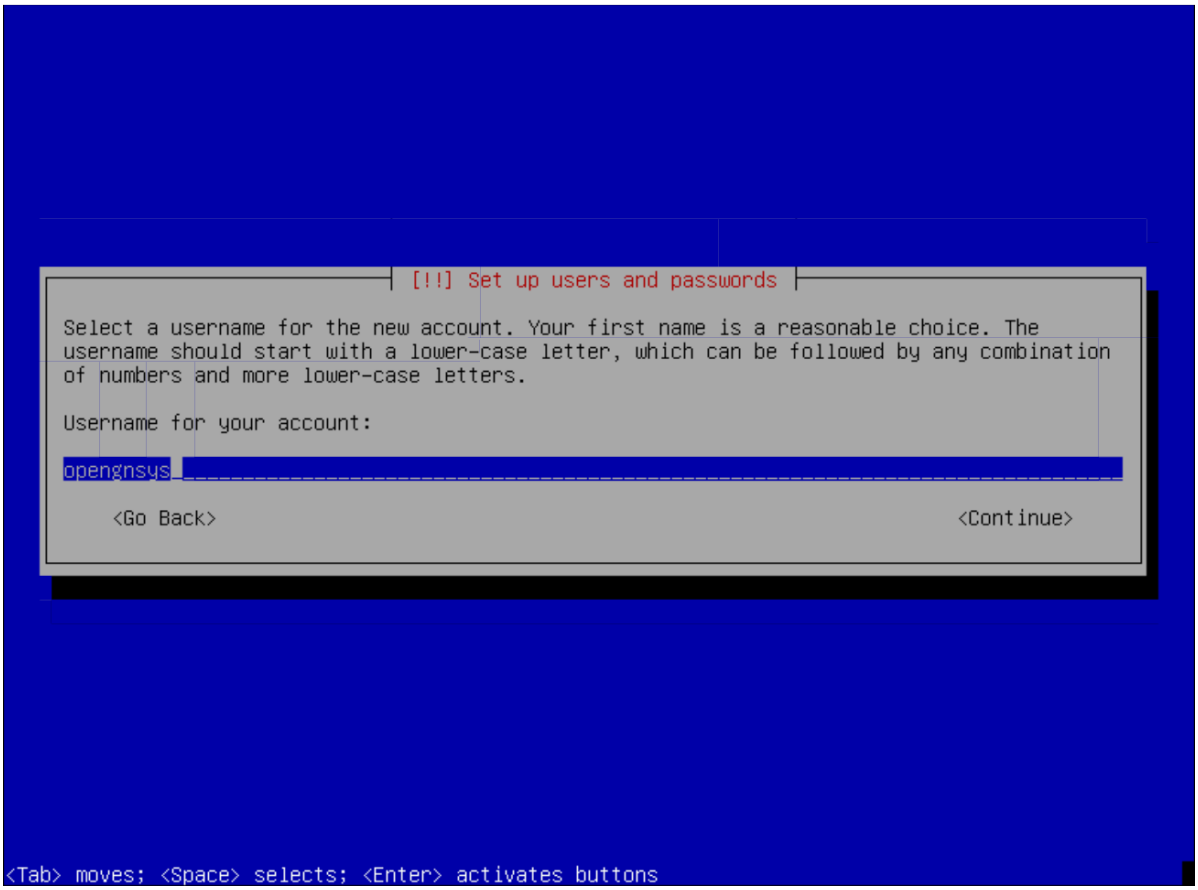

Figure 11: Create the opengnsys user

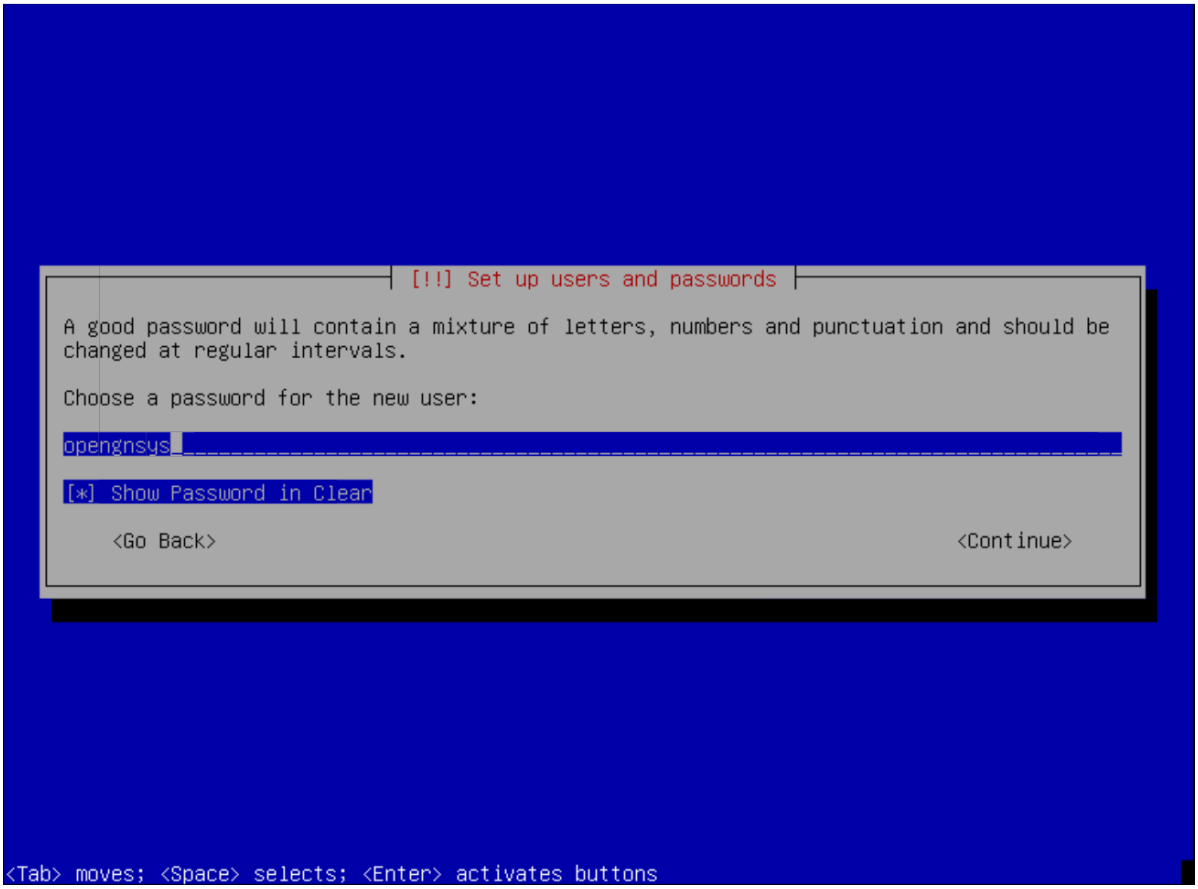

Figure 12: Set the password for your opengnsys user

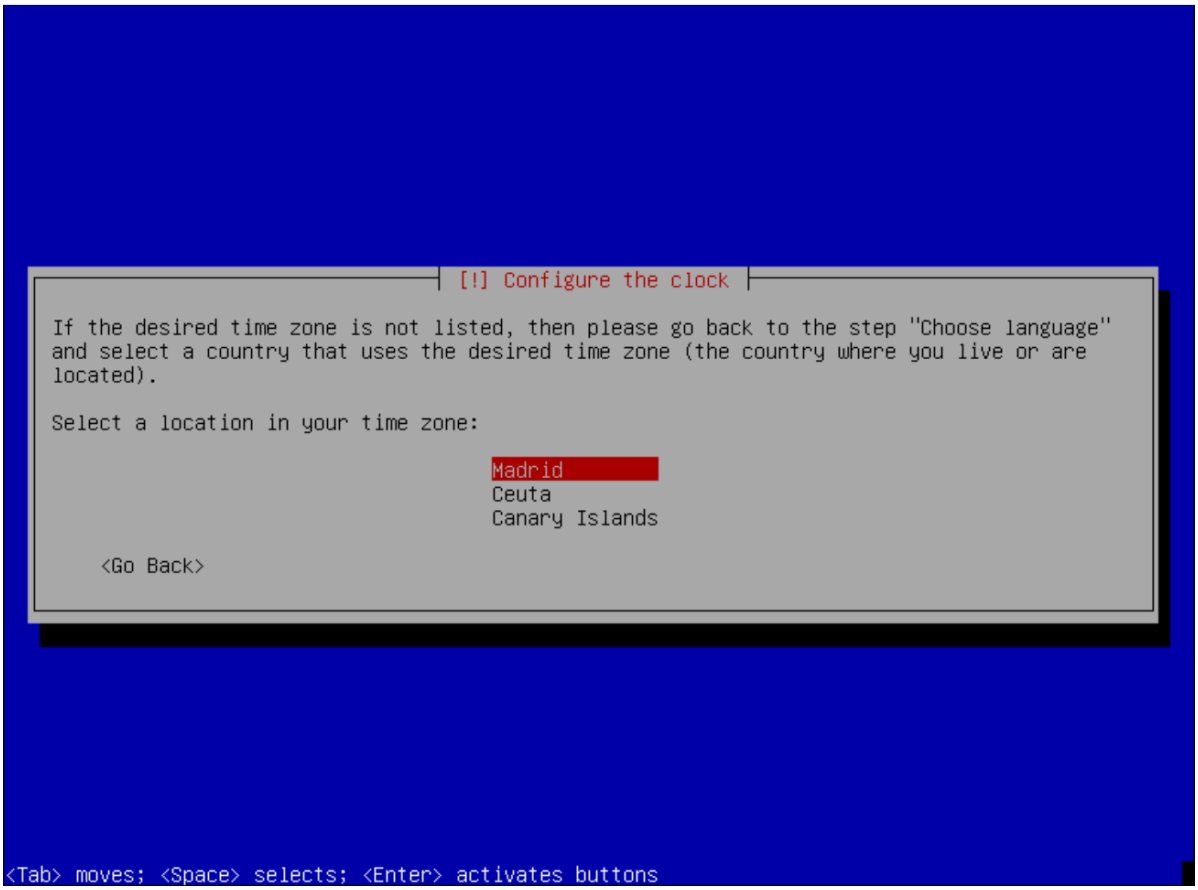

Figure 13: Set your time zone

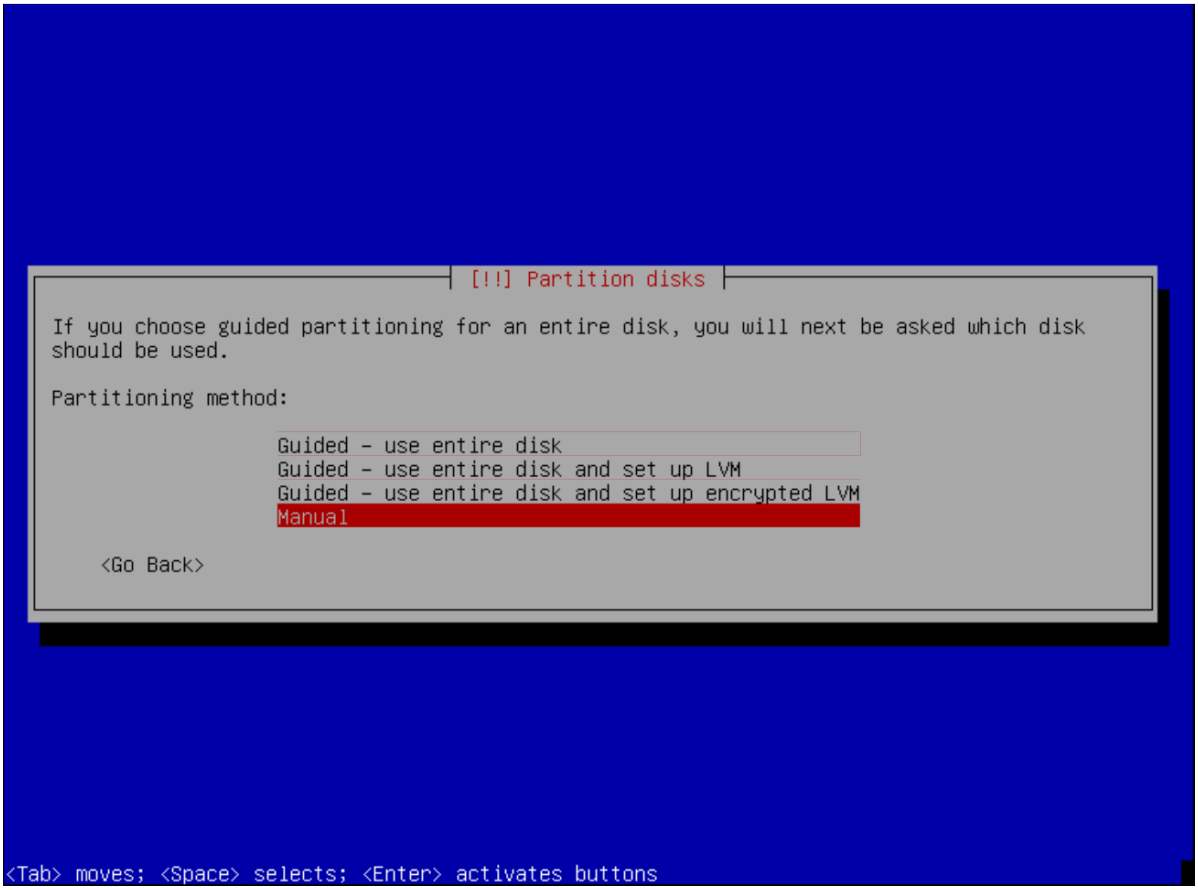

Figure 14: Select manual partitioning method

OpenGnsys VDI must be installed in one single partition for your root (/) filesystem.

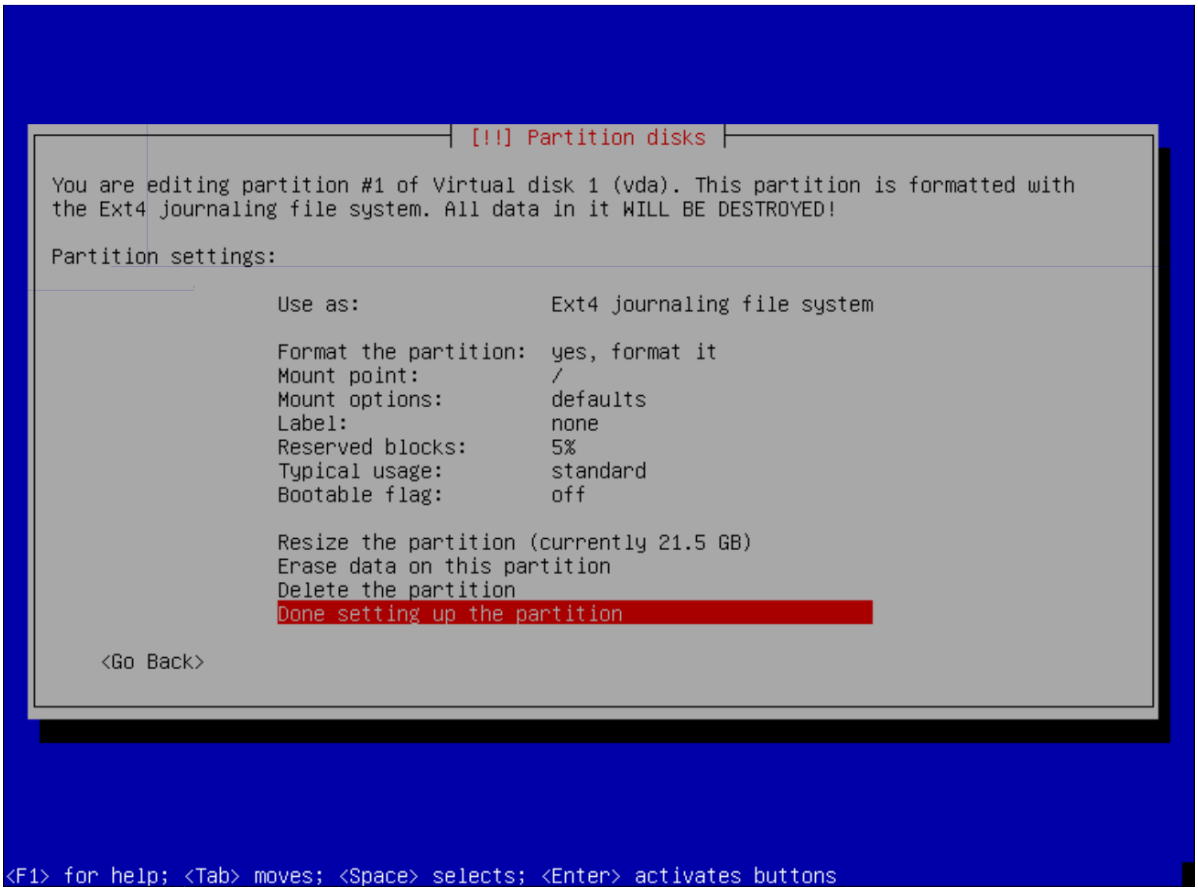

Figure 15: Create one single partition for OpenGnsys VDI

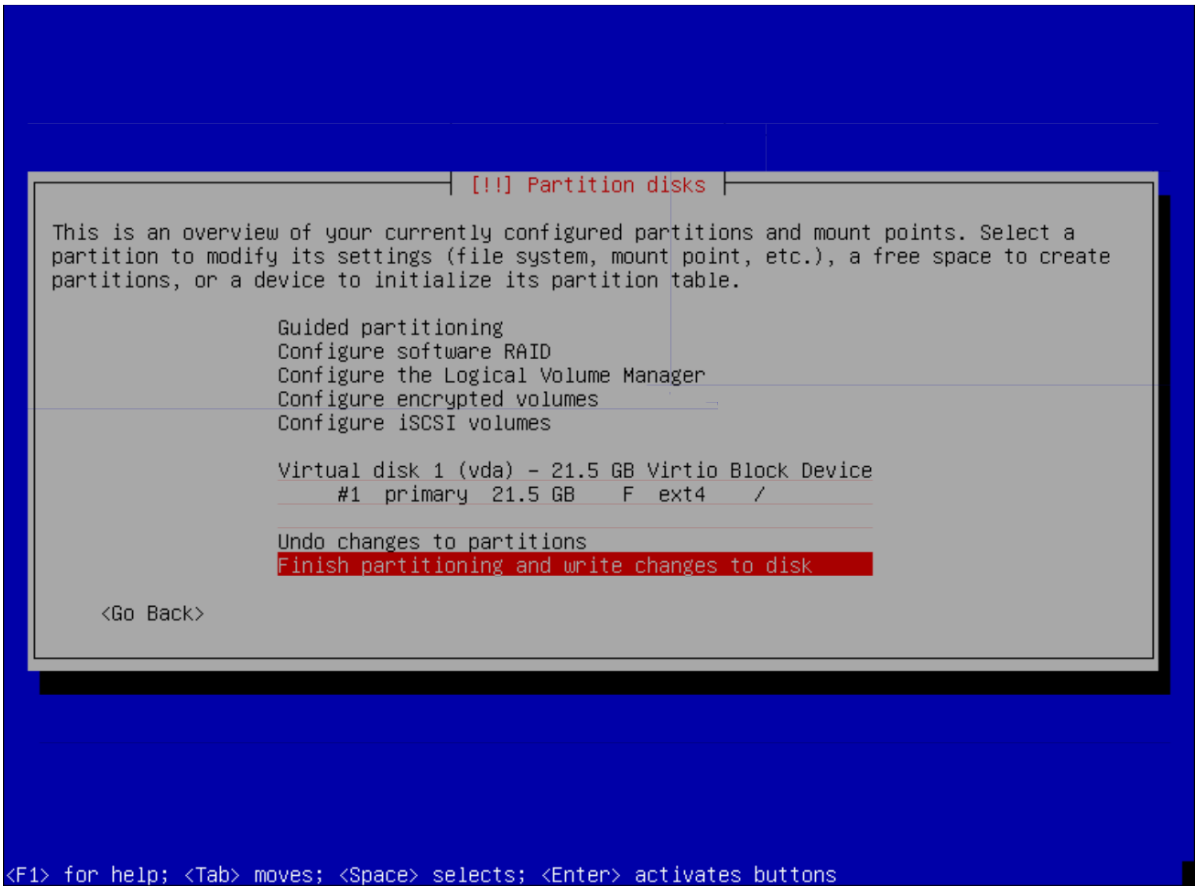

Figure 16: Exit from the partitioning tool

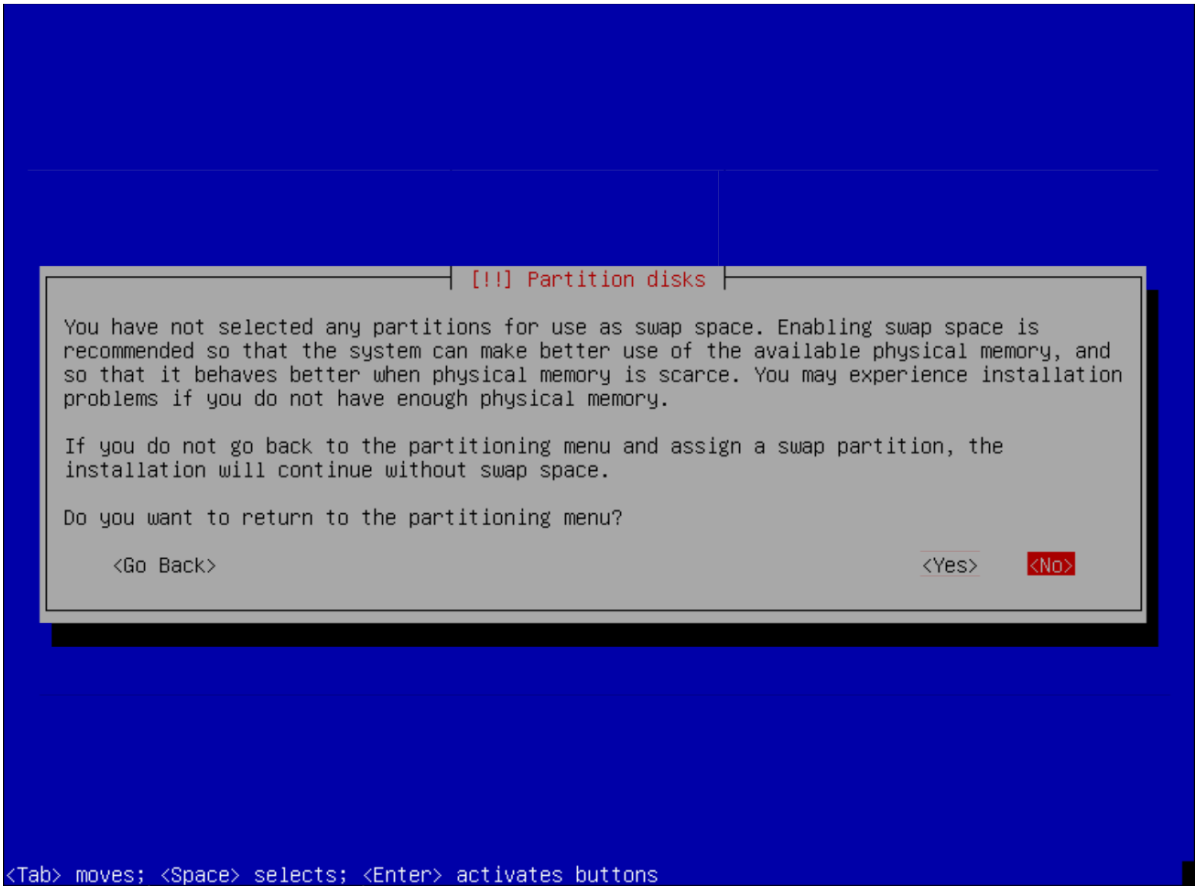

Figure 17: Write partition changes to disk

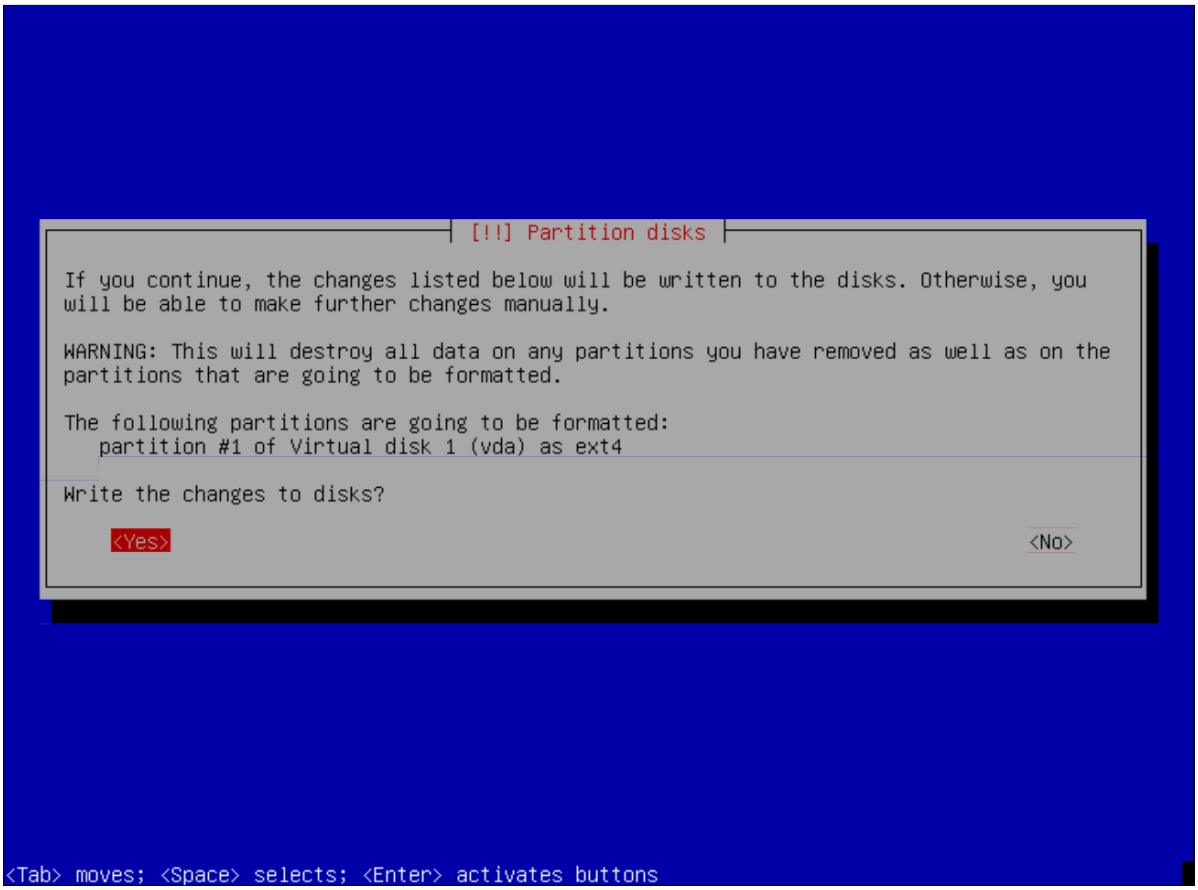

Figure 18: Select your mirror for updates

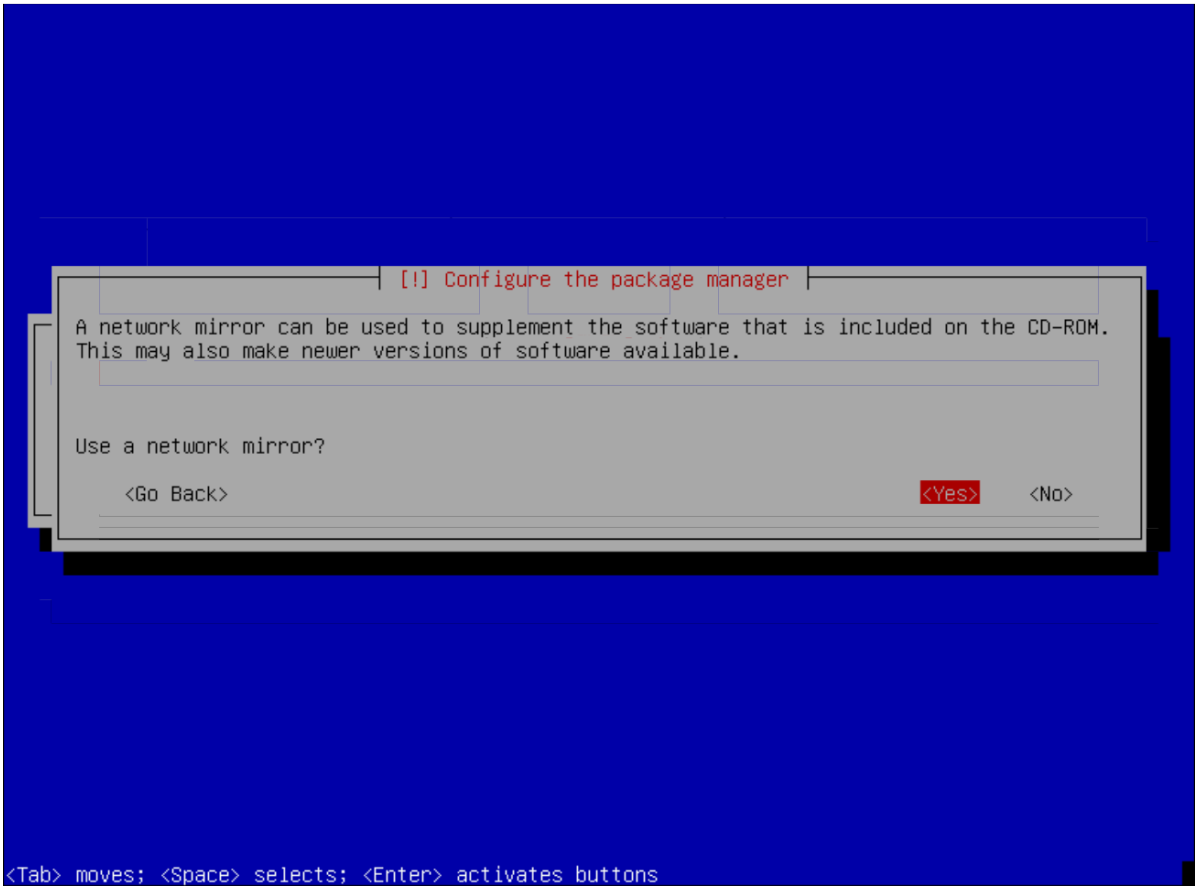

Figure 19: Select your mirror for updates (2)

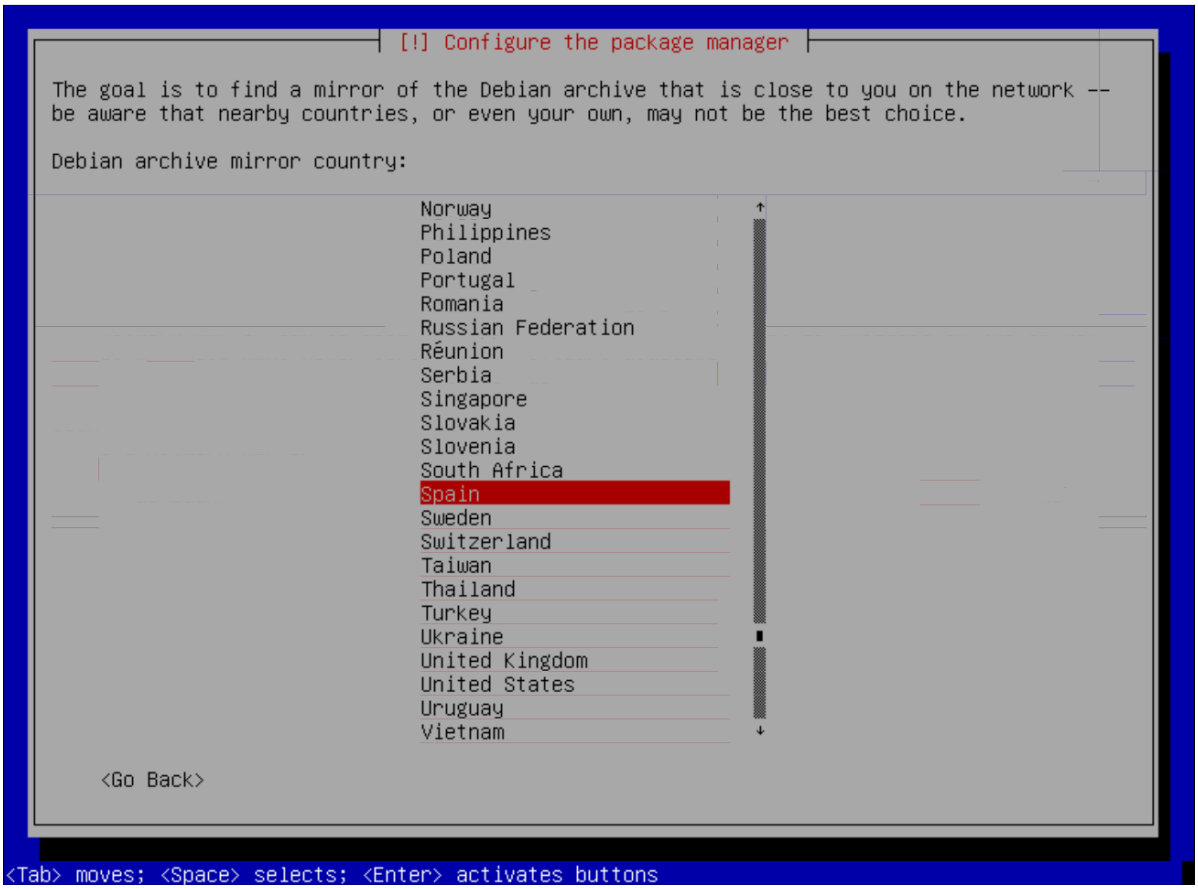

Figure 20: Select your mirror location

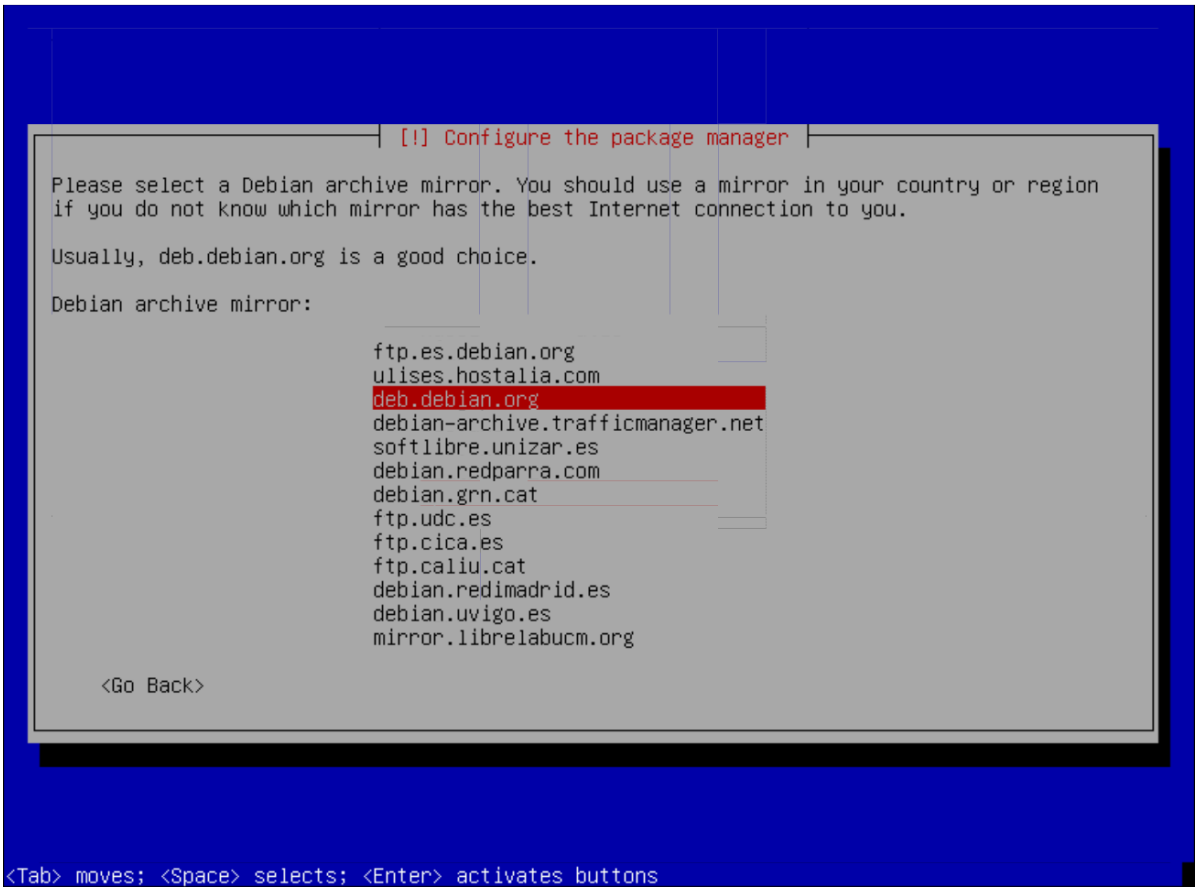

Figure 21: Select your mirror

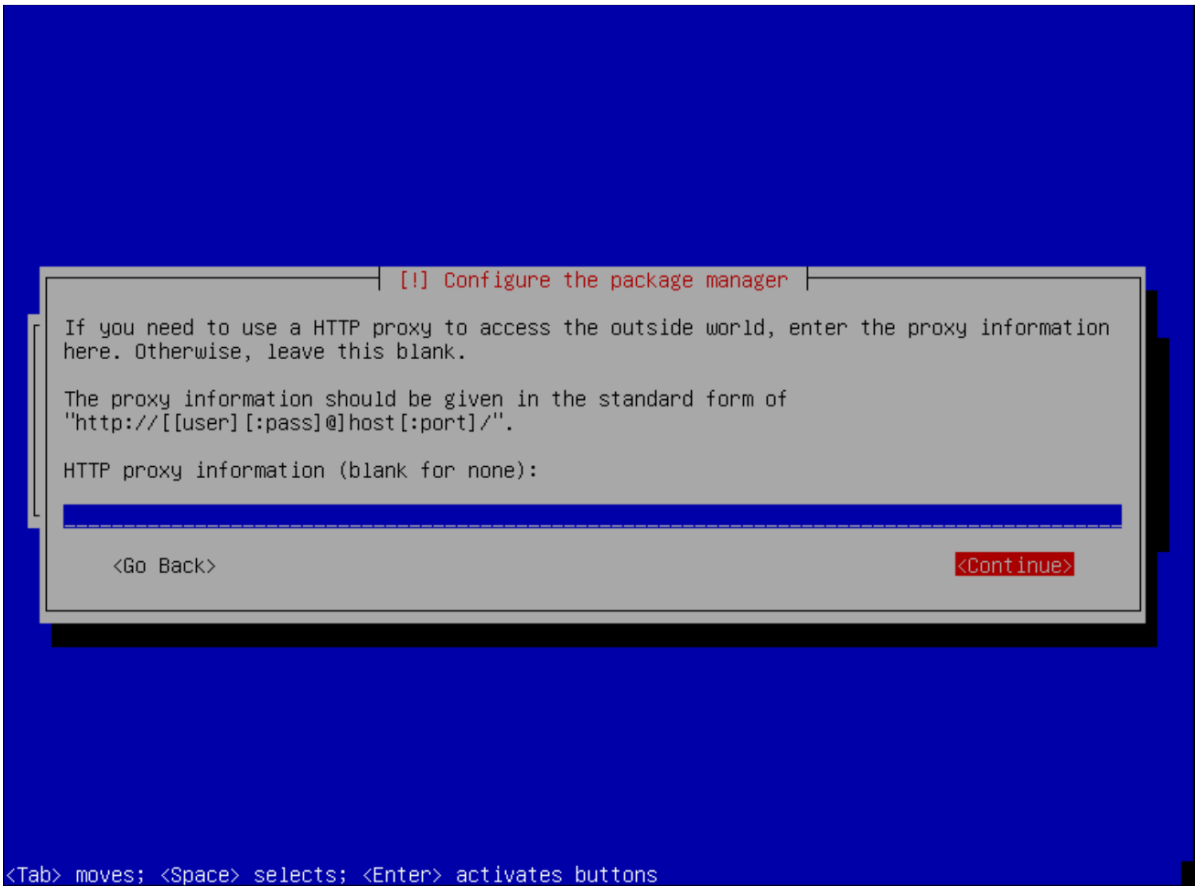

Figure 22: Set your HTTP proxy (leave it blank if your desktop does not require a proxy)

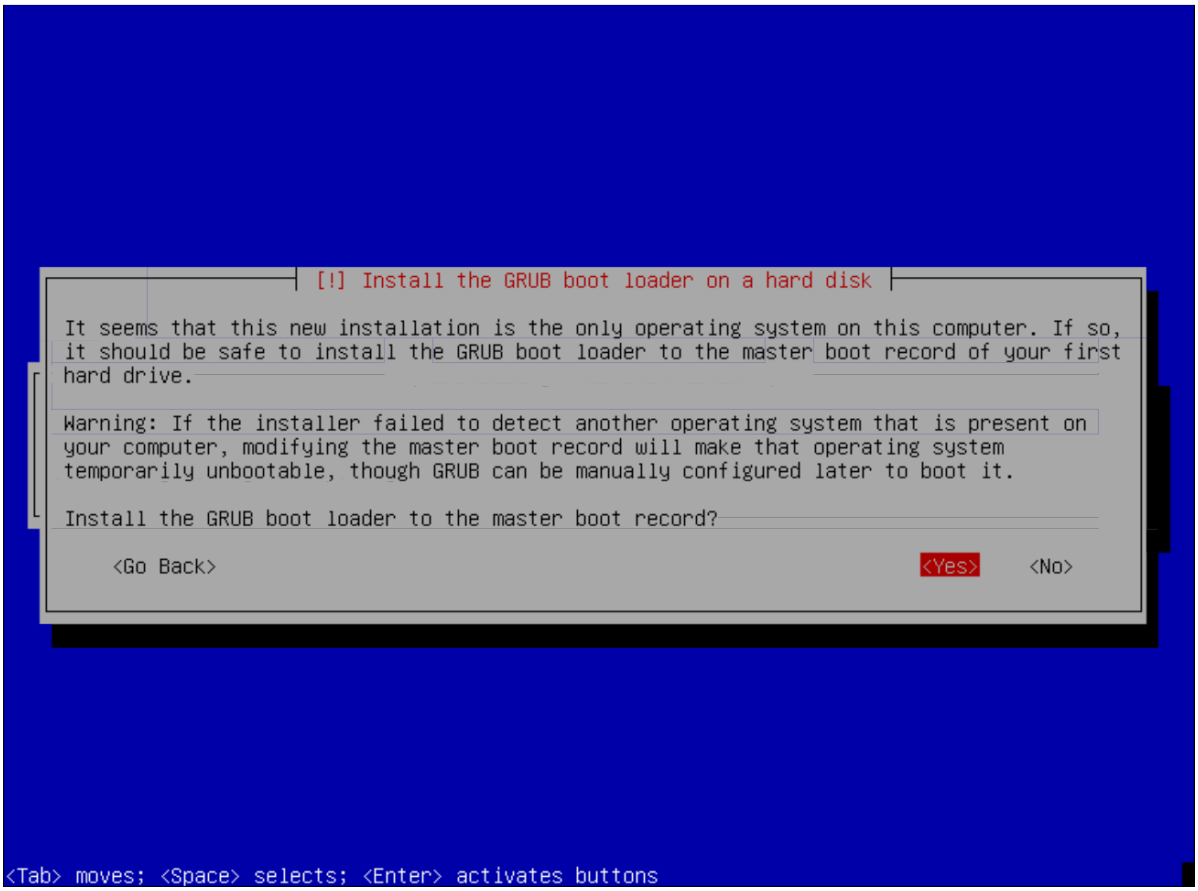

Figure 23: Install the grub bootloader

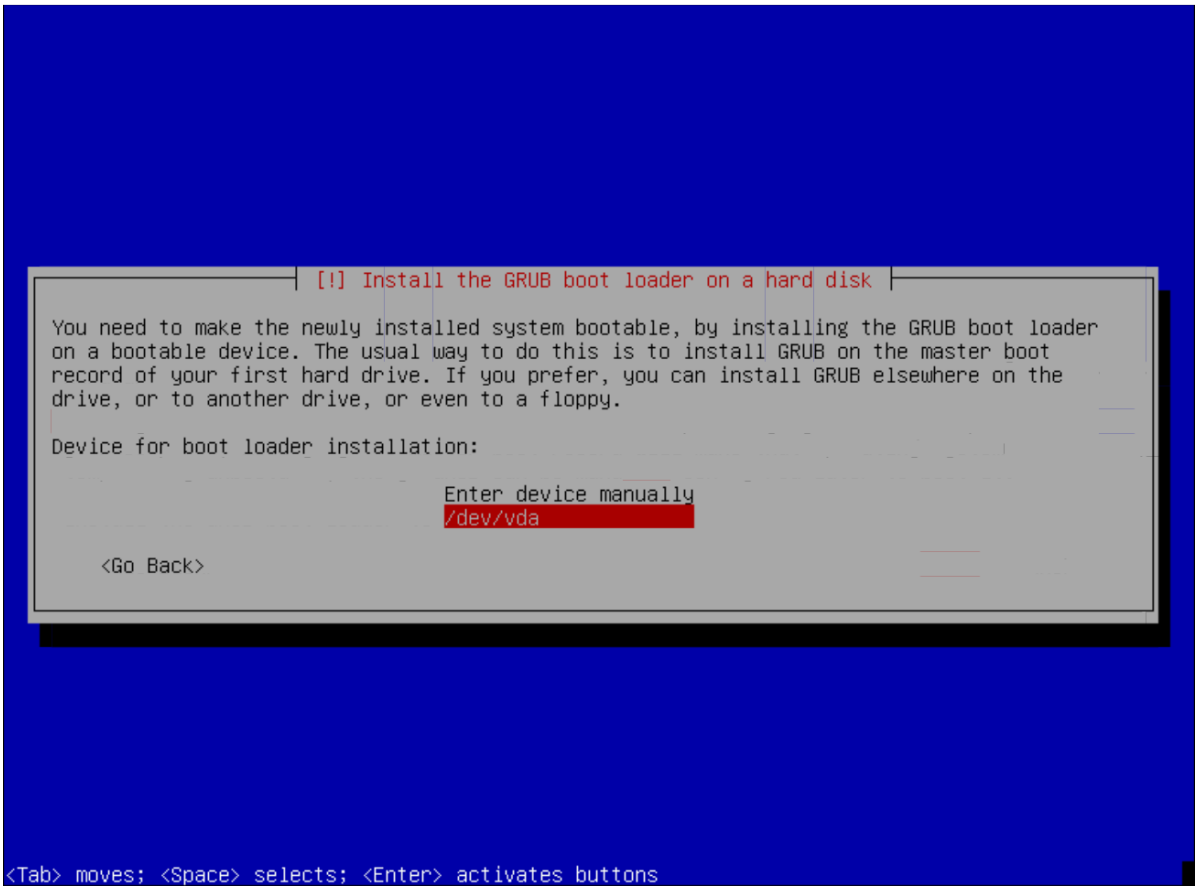

Figure 24: Select the device to install grub

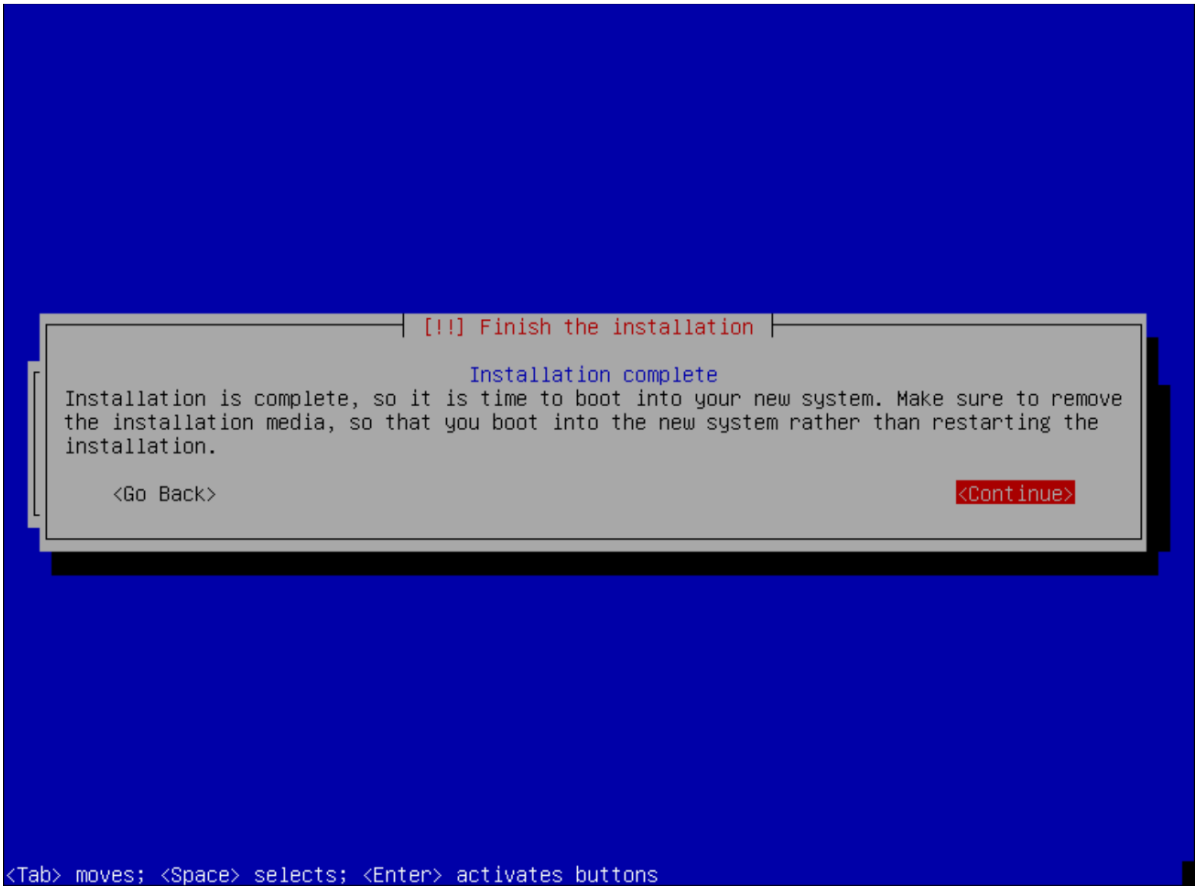

Figure 25: Finish you OpenGnsys VDI installation!

Extract your USB stick! If you boot again into the installer, remove the USB stick and reboot again.

After rebooting, OpenGnSys VDI OS will launch the *boot manager*.

Configuring OpenGnSys VDI

The *boot manager* provides a control panel with four possible actions:

- *Configure* that allows you to specify *ogserver* IP address and VFIO options so you can passthrough wifi or audio devices to the guest machine.
- *Install OS* that allows you to install the guest desktop OS.
- *Power off* to shut down your desktop computer.
- *Reboot* to reboot your desktop computer.

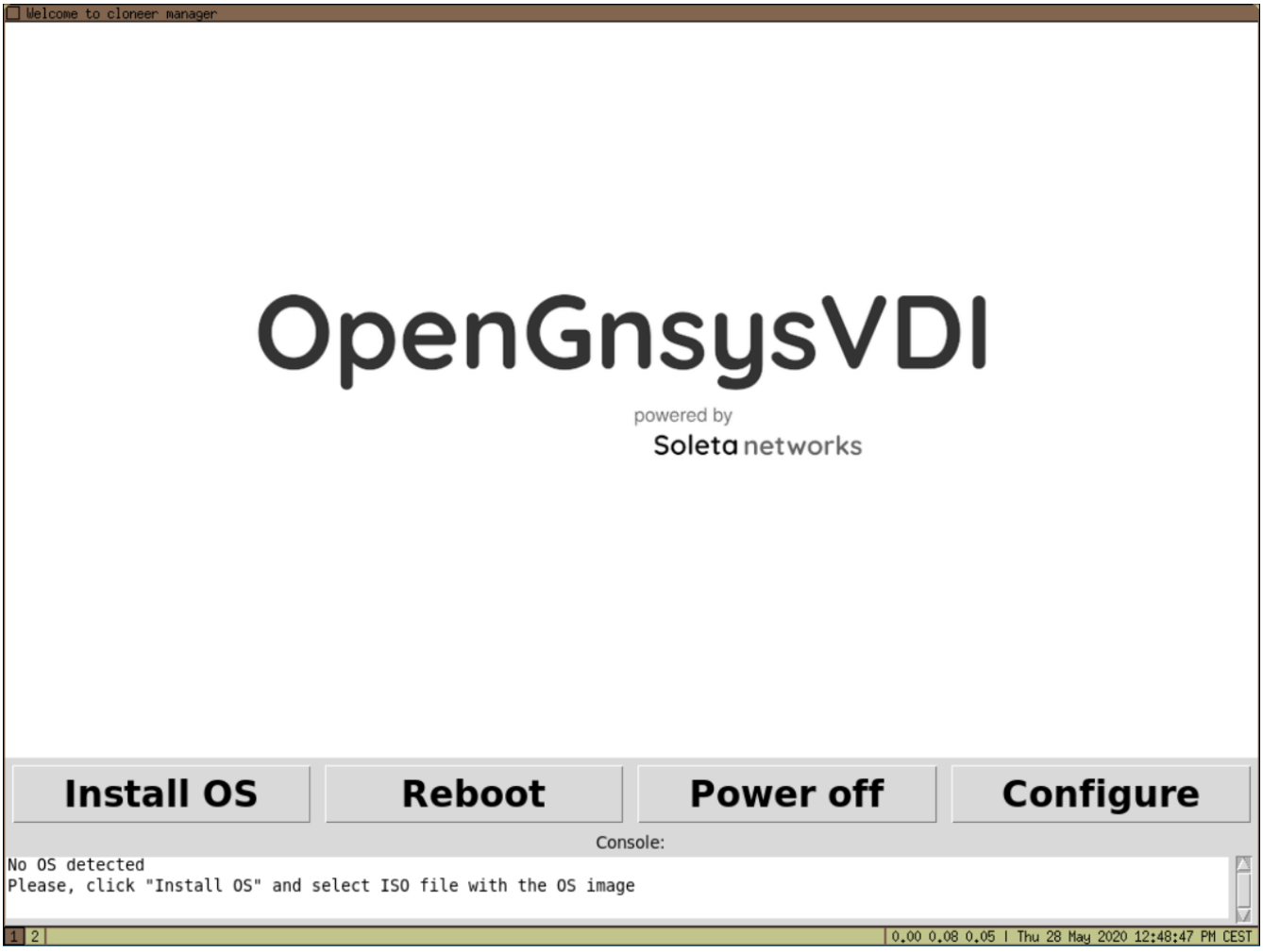

Figure 26: The OpenGnSys VDI boot manager.

Configuring ogServer

Any possible occurence of the term "ogAdmServer" in screenshots refers to the ogServer

Figure 27: Config Set the IP address of your ogAdmServer

Configuring device passthrough

PCI device passthrough is enabled with the Linux vfio module. OpenGnsys VDI requires host cpu to support IOMMU (Intel VT-d / AMD-Vi). Device passthrough is set via checkboxes in the configure pop up window.

This configuration persists in the ogclient.json file:

```
...
    "vfio": [
        "wifi",
        "audio"
        ]
...
```

This section is written automatically via the opengnsys VDI configure window.

Figure 28: Device passthrough checkboxes. Disabled by default. Admin must check only those devices present in the host machine.

Configuring your desktop network

OpenGnsys VDI gets network configuration via **DHCP** by default.

Configuring VNC

VNC remote access to guest desktop is enabled by default, if you want to disable VNC or change the VNC password, you have to edit ogclient.json.

SSH is enabled by default in opengnsysVDI. We recommend perfoming any administration task with an ssh connection.

If not familiar, you can press "WIN + 2" to change the workspace and "WIN + ENTER" to open a terminal in the host machine.

```
/opt/opengnsys/ogclient/cfg/ogclient.json
```

```
...
    "vnc": {
        "activate": true,
        "pass": "ogvnc"
...
```

Installing Ubuntu Linux as your virtualized desktop OS

You will need to transfer an Ubuntu iso file to the opengnsysVDI machine.

If you are using ssh, you can copy it remotely using `scp`

If you want to use a flash drive you will need to follow these steps:

- Copy your iso image to the USB flashdrive. The USB must be formatted with ext4.
- Insert the USB in the computer with OpenGnsys VDI.
- Mount your USB.

Press "WIN + 2" to change the workspace and "WIN + ENTER" to open a terminal.

```
$ lsblk  # List block devices and its mountpoints
# mount /dev/sdb1 /mnt
```

The example above assumes /dev/sdb1 is your USB stick.

Now, press the *Install OS* button to install your virtualized desktop OS.

Figure 29: The Install OS buttom

Go to the /mnt folder that contains the iso images.

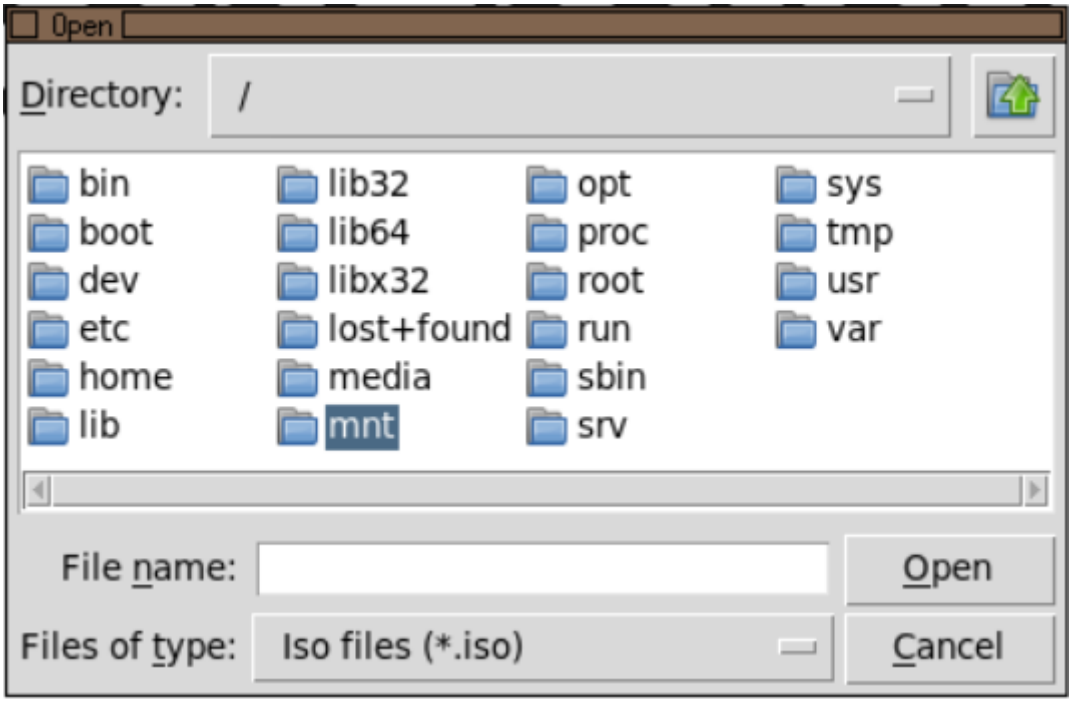

Figure 30: Select the /mnt folder

Go to your virtualized desktop OS installer.

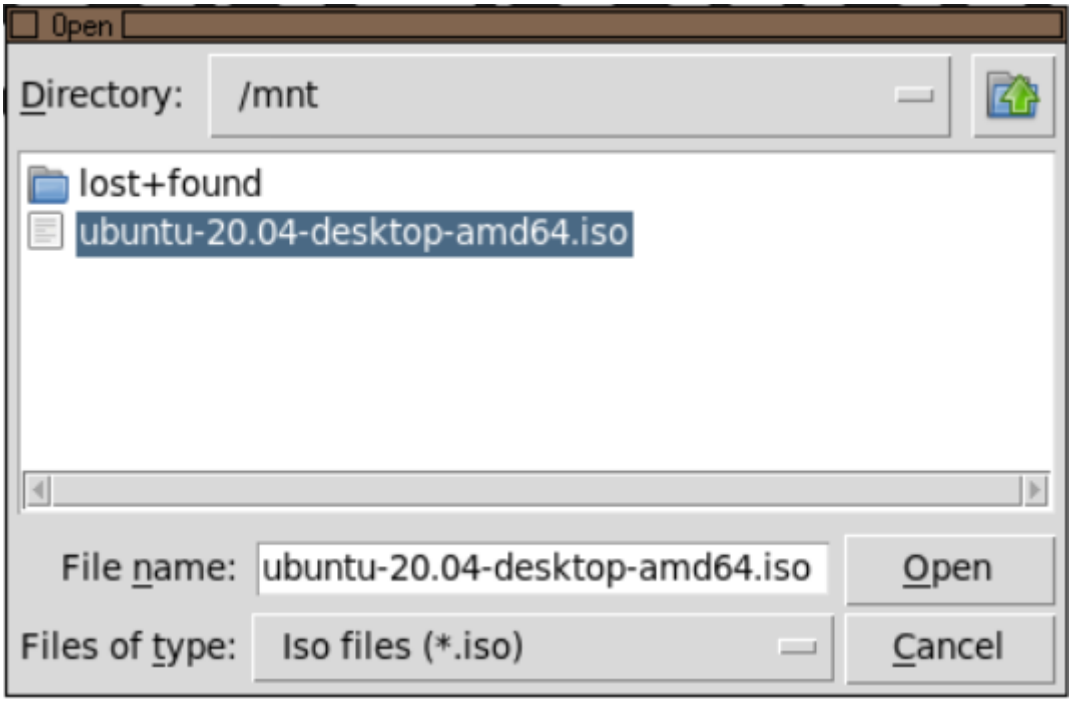

Figure 31: Select your iso file.

OpenGnsys VDI launches a virtual machine using your selected iso file to start the installation of Ubuntu Linux.

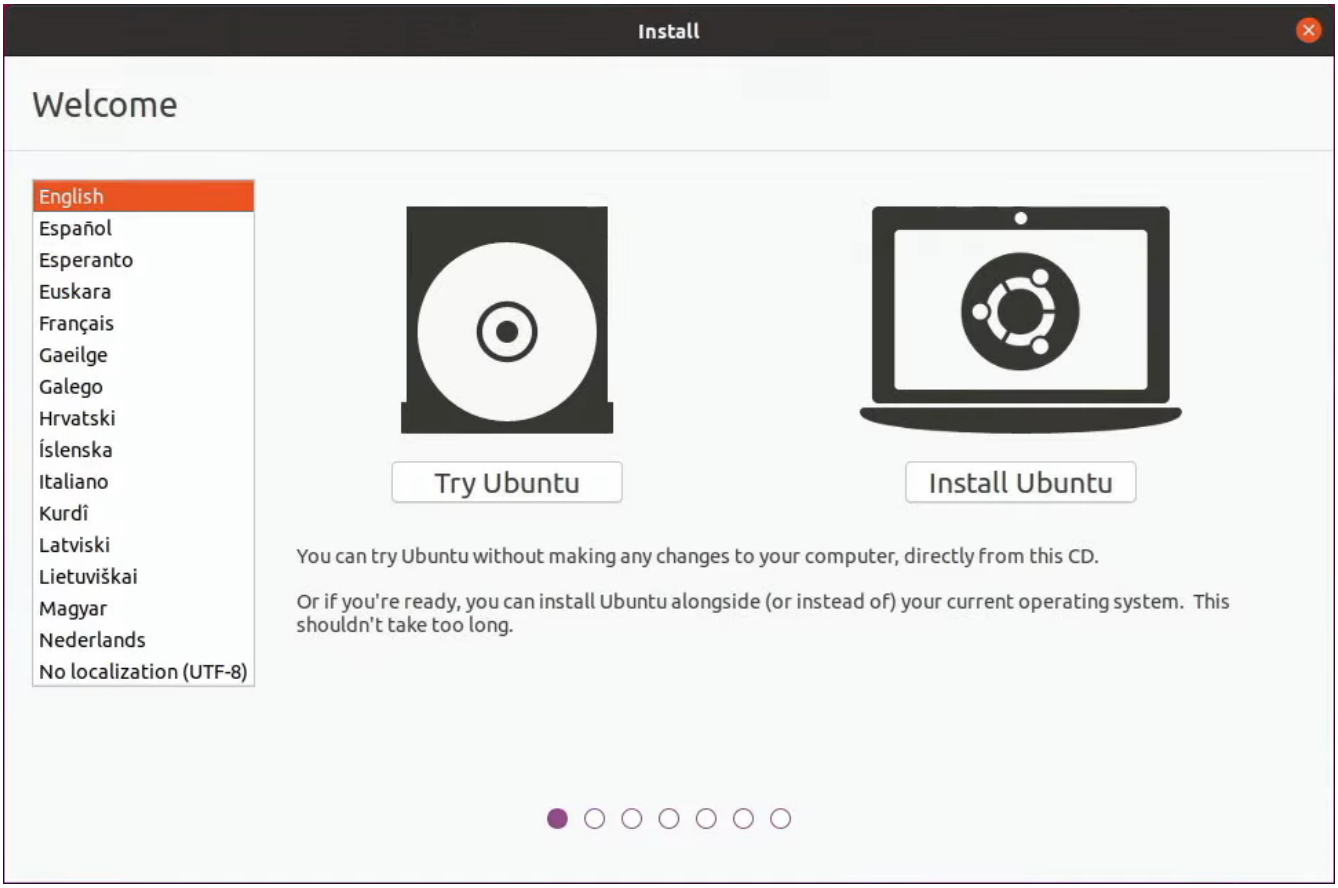

Figure 32: Initial Ubuntu installation menu

You have to install your desktop OS in one single partition.

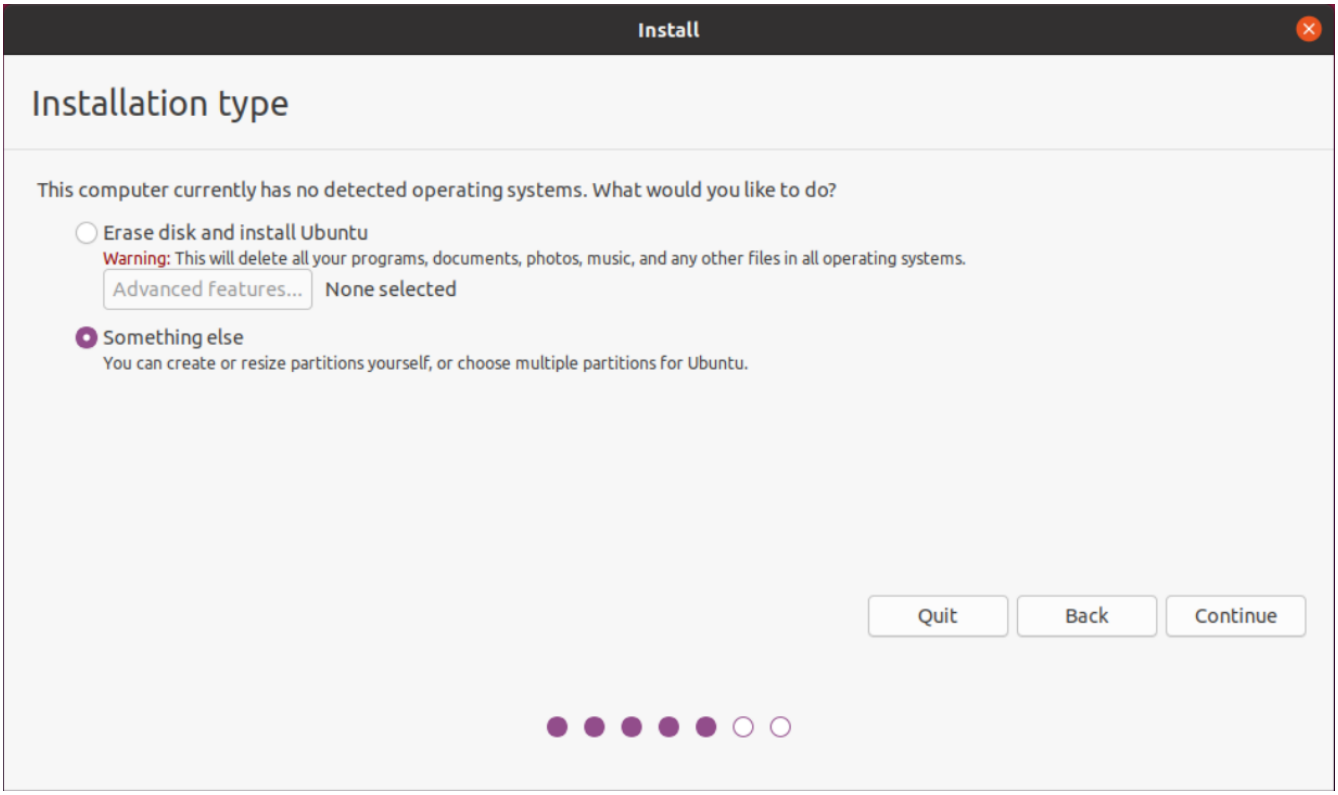

Figure 33: Make sure you install your virtualized desktop OS in one single partition

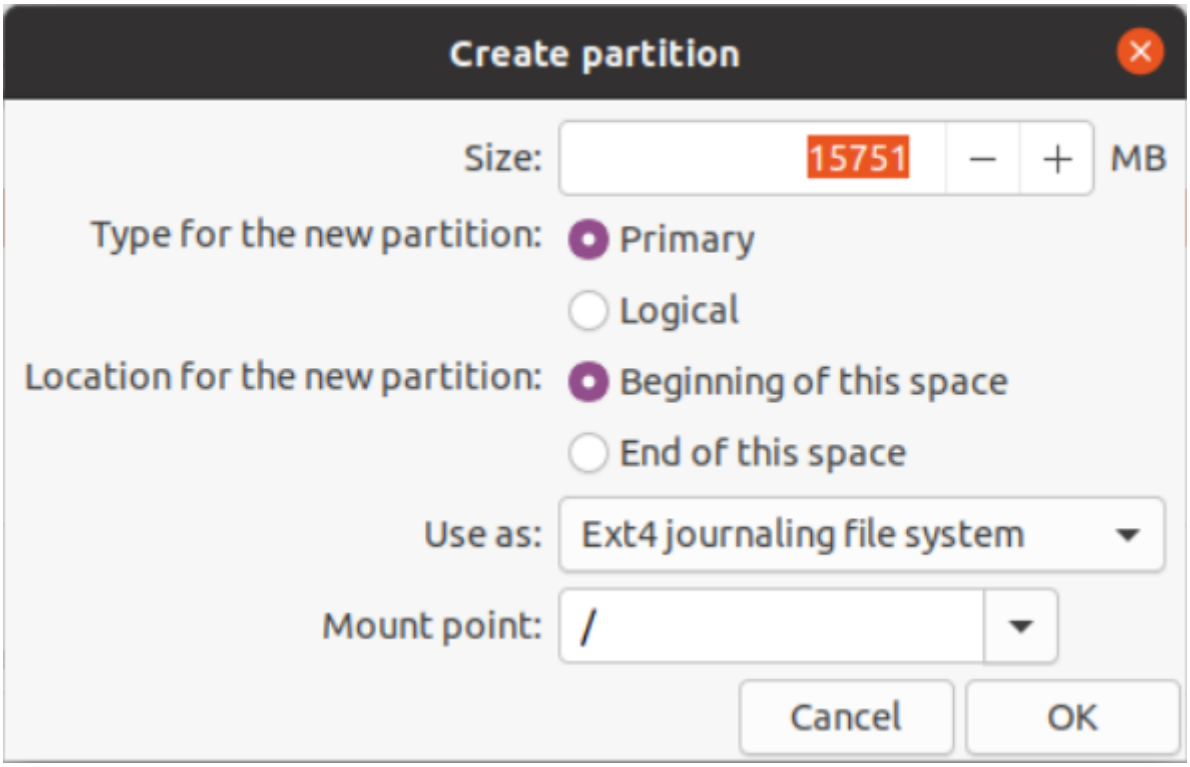

Figure 34: Use the full disk and select ext4 for the root filesystem

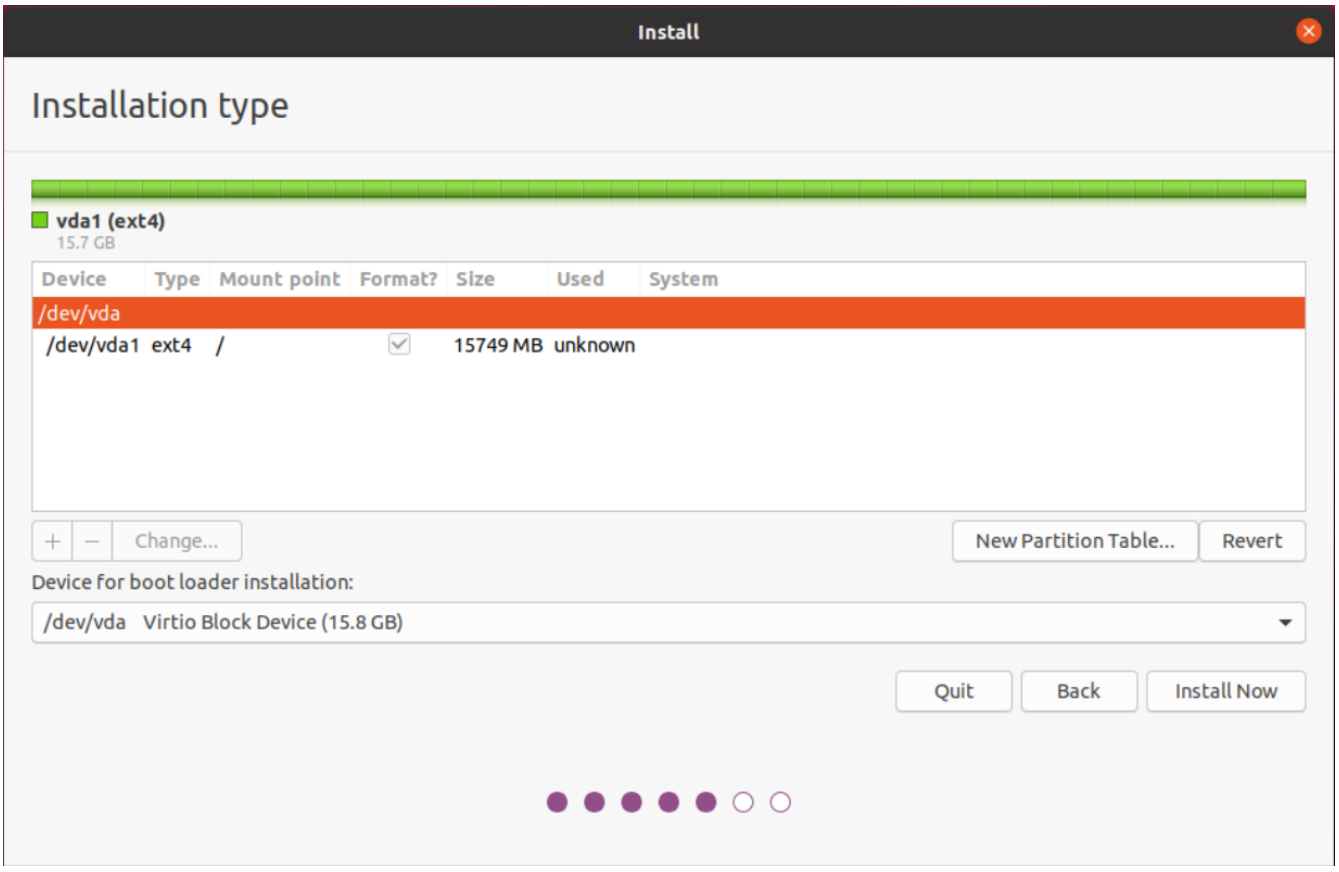

Figure 35: Partition overview

Once you finish installing your virtualized desktop OS, after rebooting, your virtualized desktop OS will be launched.

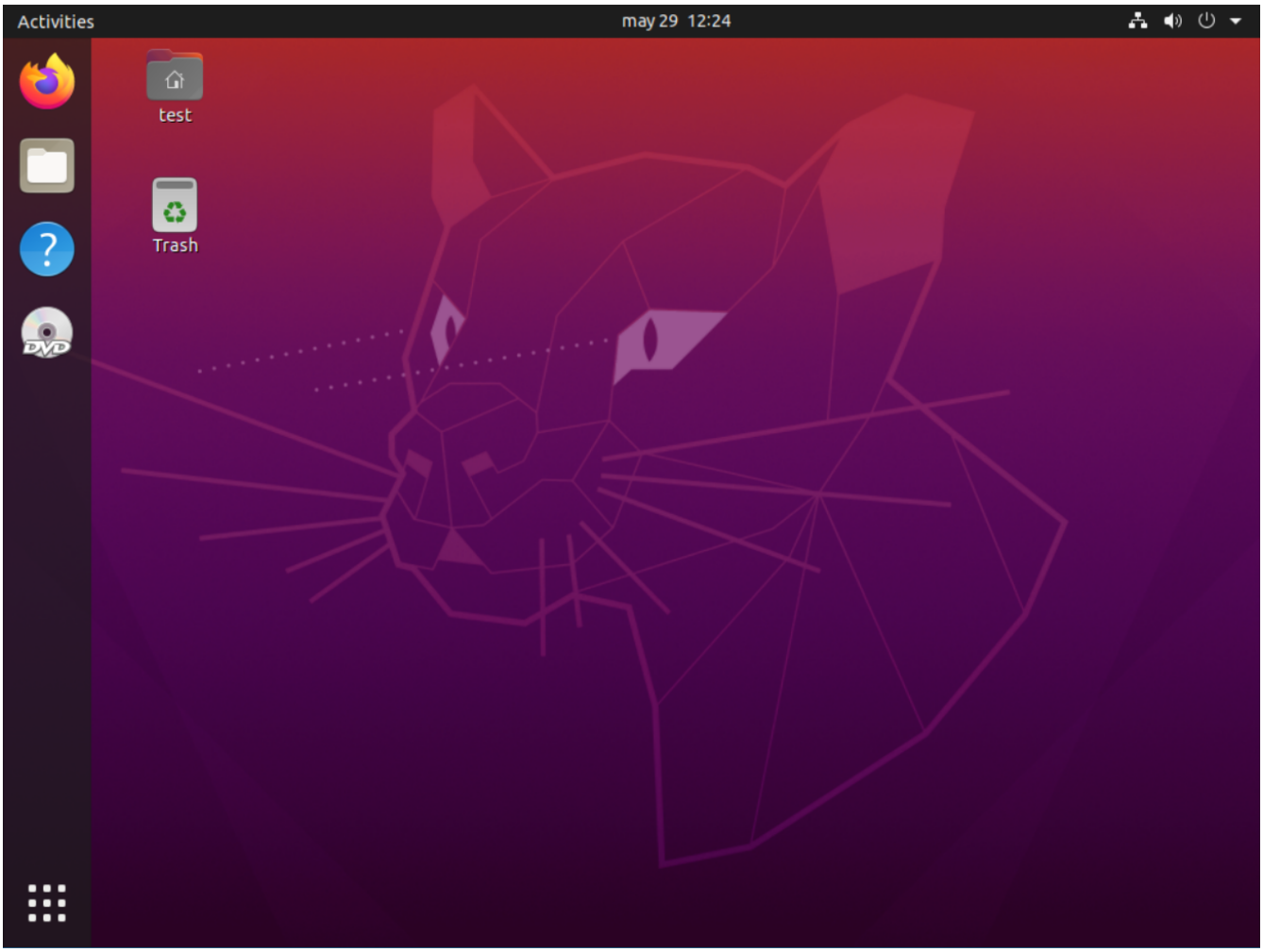

Figure 36: Ubuntu is now ready to use

Installing Windows as your virtualized desktop OS

The *Windows* installation slightly differs from the *Windows* installation on the bare metal desktop computer.

You must install Windows in only one partition.

When you reach the partition setup, you will see no disk. **Don't panic!** You need to install the drivers for VirtIO disks.

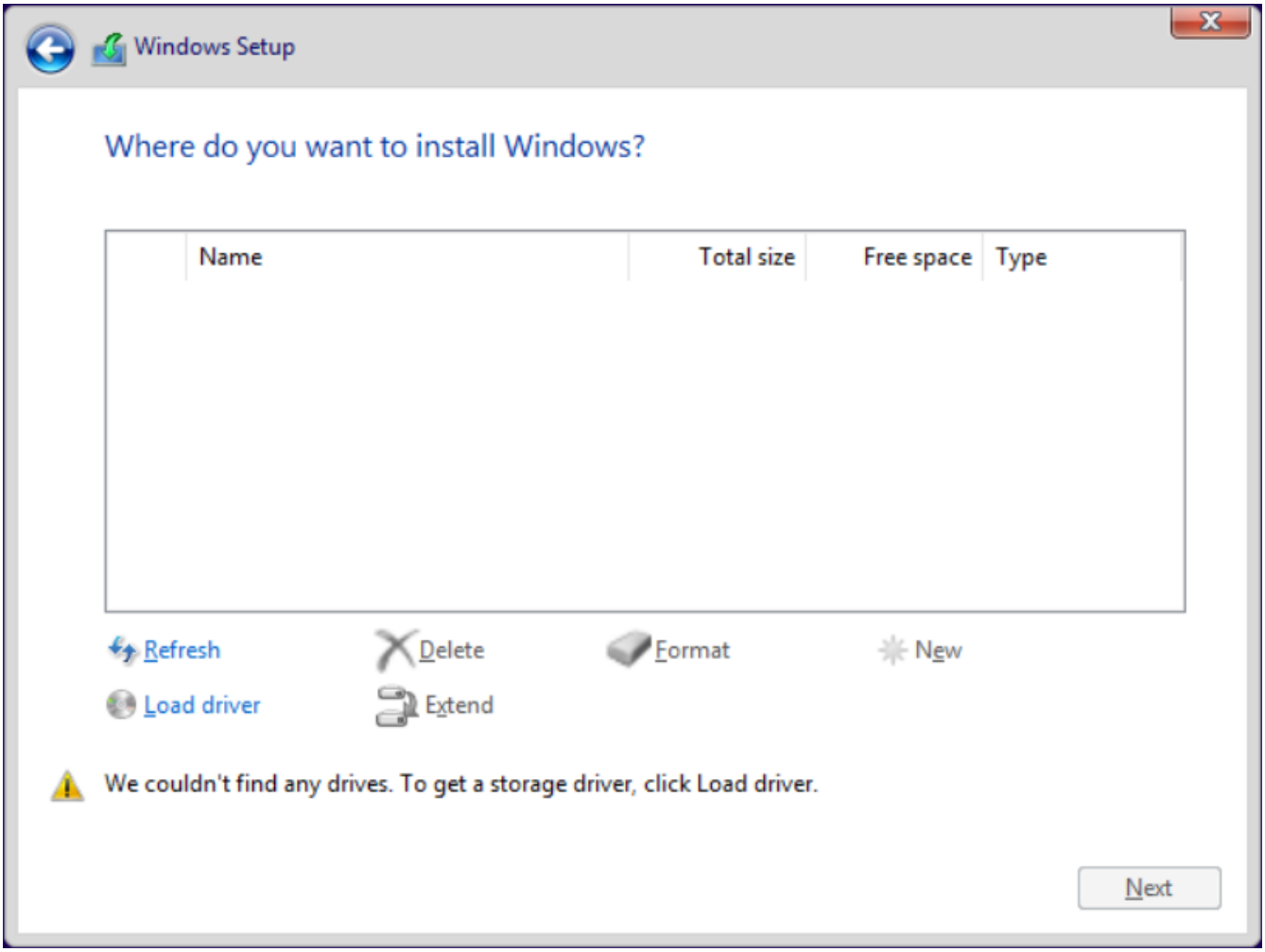

Figure 37: Windows partitioning showing no disks available

OpenGnsys VDI already provides a virtual floppy disk with these drivers. You only have to click on *load drivers* and select them. Now you have to press **OK**.

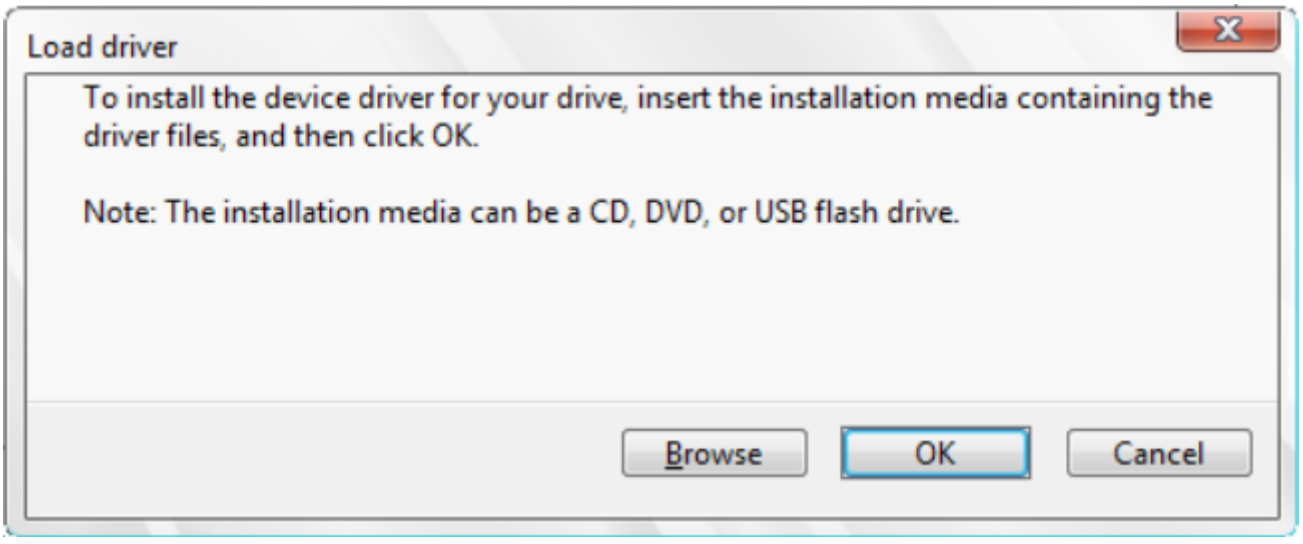

Figure 38: Windows load the virtualization drivers from Windows

Select the correct driver for your Windows version.

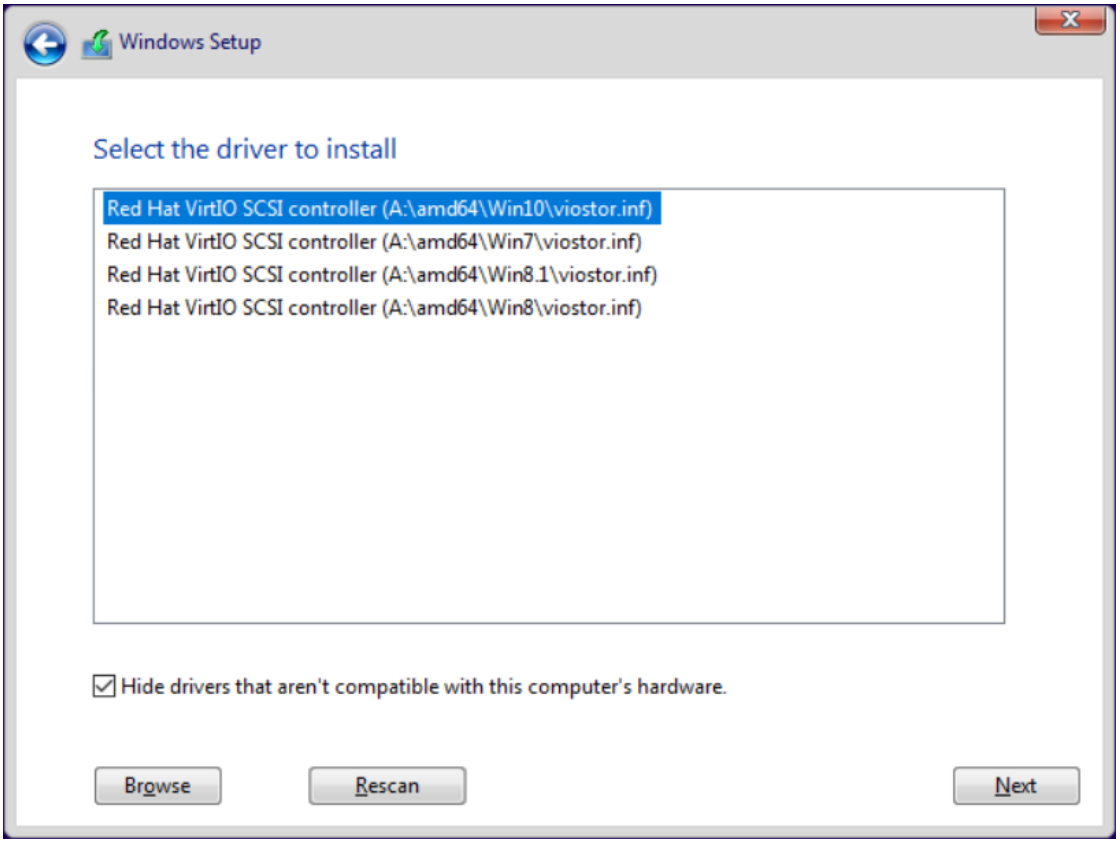

Figure 39: Select the VirtIO SCSI controller to enable your virtual disk

Once the driver is installed, the virtual disk to be used for the installation becomes available.

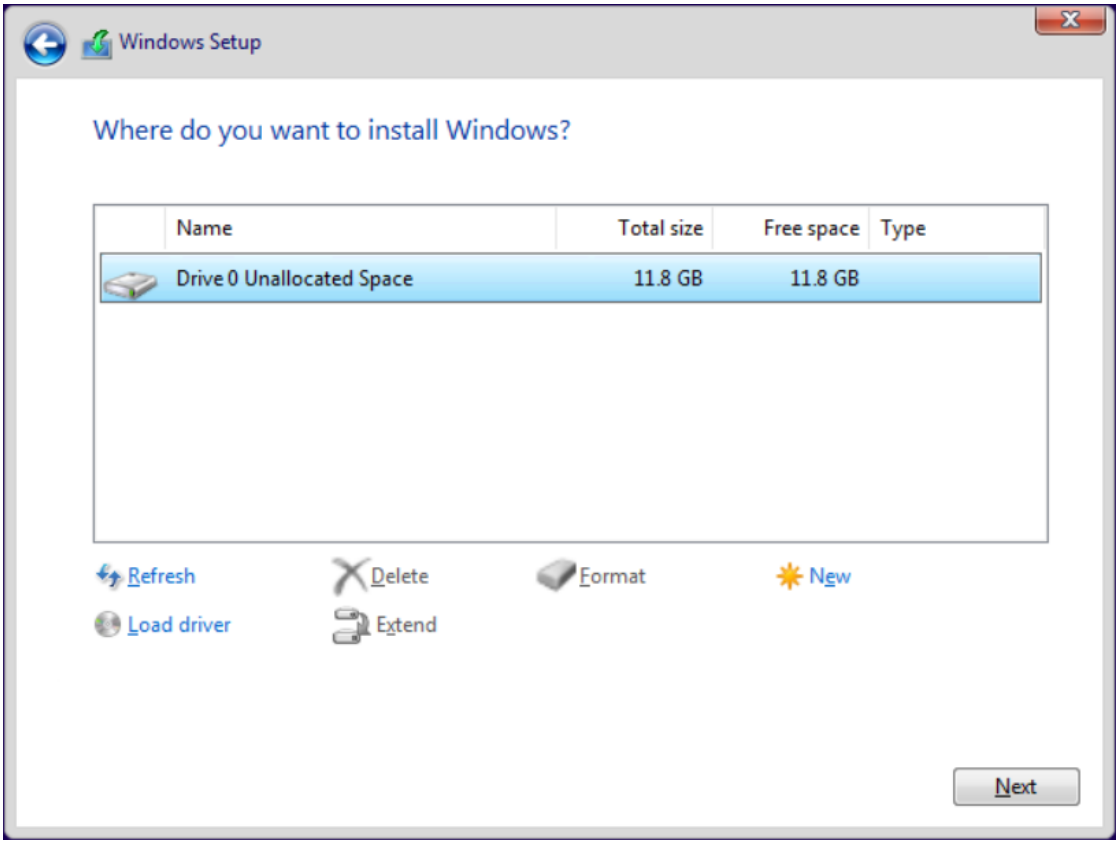

Figure 40: Virtual disk is now available for the Windows installation

Now you can proceed with your usual Windows installation.

Contact us

If you have any question or you would like to report a problem, please contact us at opengnsys@soleta.eu.