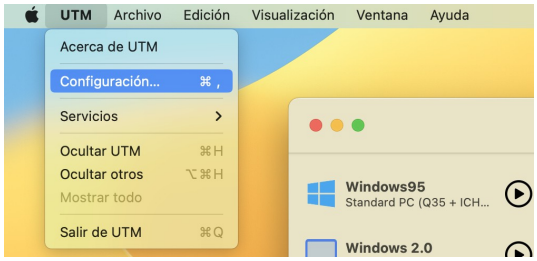
Managing the UTM Virtual Machine

UTM Application Settings:

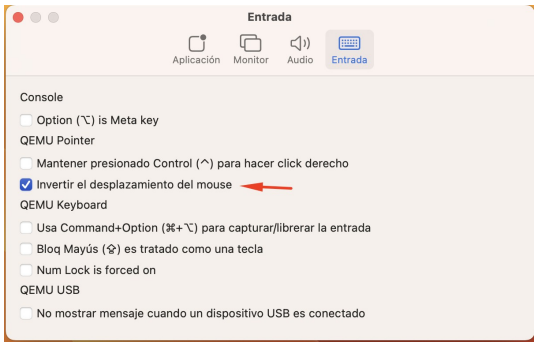
At the top, when we place the mouse pointer (if we have it configured so that the application menu appears when the pointer is at the top), the UTM application menu will be displayed.

I won't go over every menu item because it's very simple — I will only show the **Settings** option.

In the UTM application menu, we select **Settings**.



In **Input**, we check that the checkbox for **Invert mouse scrolling** is selected, because otherwise, when you access a virtual machine, the Y-axis will move in the opposite direction from how it normally works.

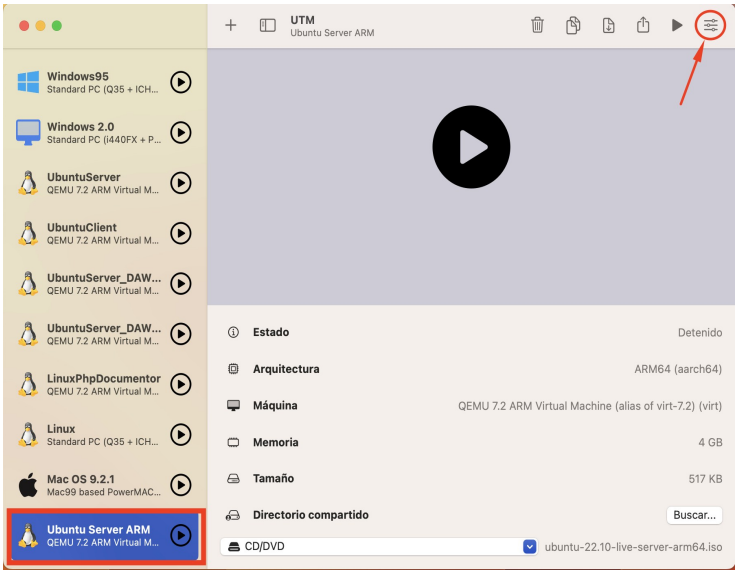


Now let's take a look at the configuration or settings options for a virtual machine:

For each virtual machine we've created, we can adjust its configuration.

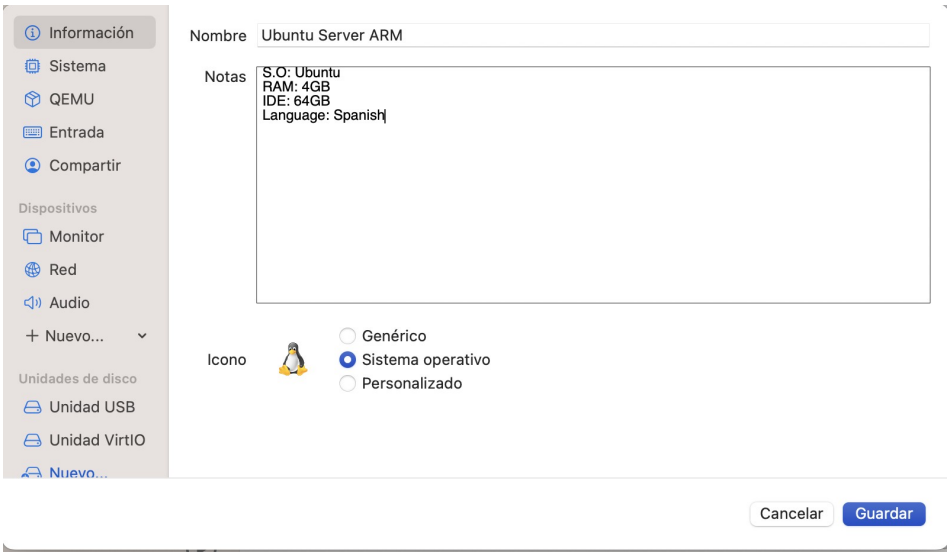
We can make configuration changes either before installing the operating system on the virtual machine or afterwards, whenever we want — but the virtual machine must always be turned off.

Now that the virtual machine appears in UTM, let's take a look at its configuration.

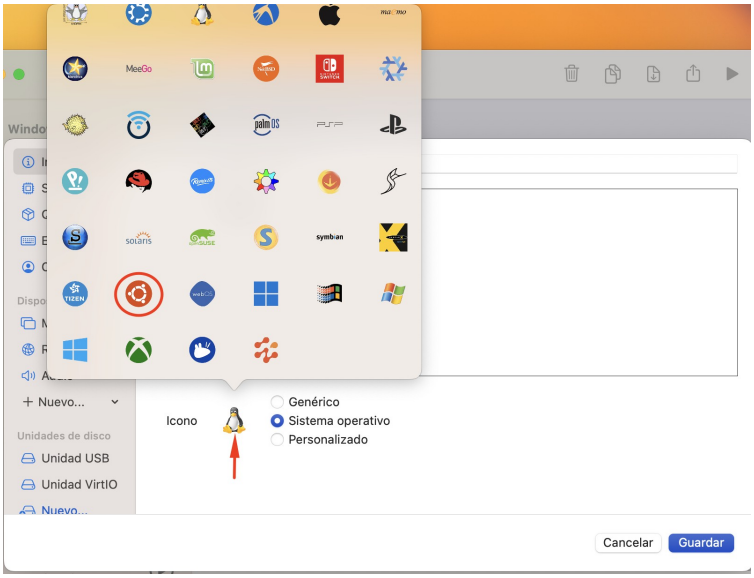


In the first item of the menu on the left, the information appears.

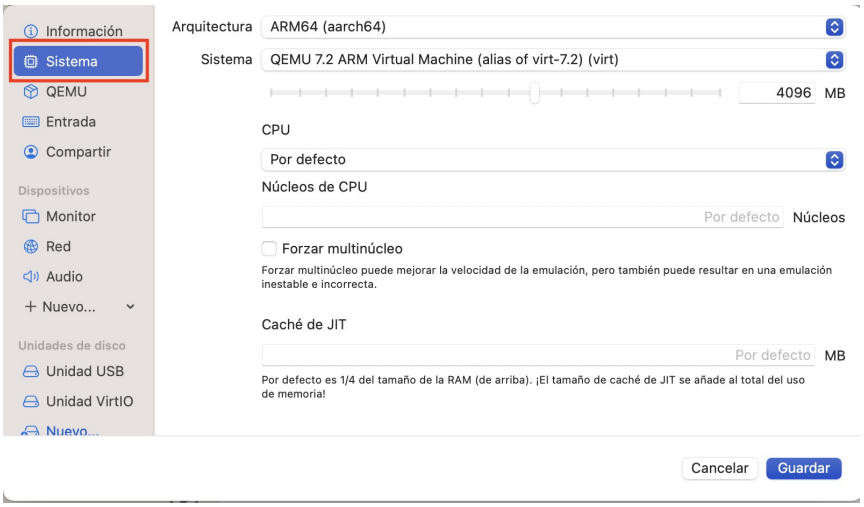
Here we have the **name** (which we had already changed earlier), and the **notes** section, where we can write down anything we need or add explanations.



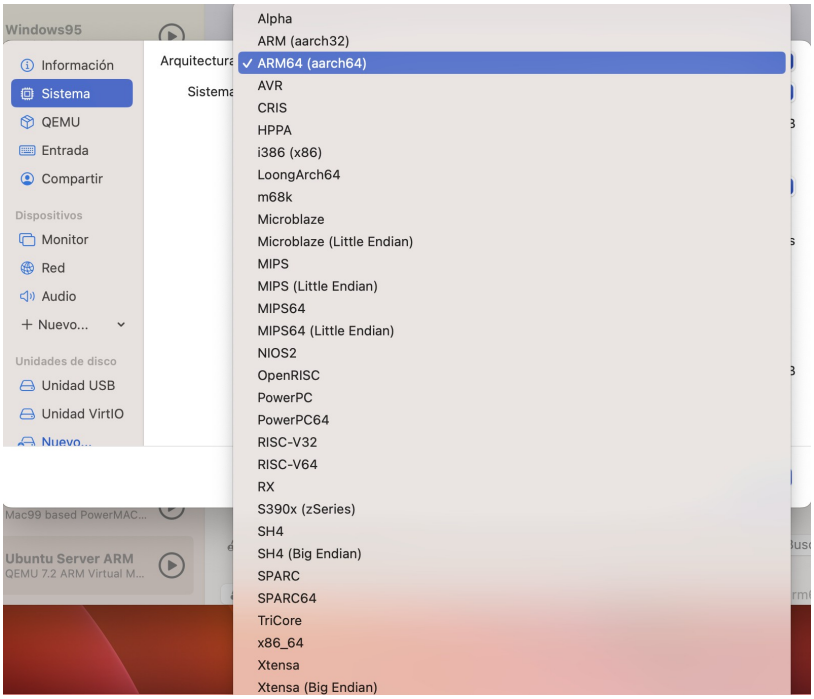
And further down, we have the **icon**, which we can change by clicking on it. A menu will pop up with lots of operating system icons — we choose the **Ubuntu** one.



The next item in the menu on the left is **System**, which lets us modify all the settings of the virtual machine.

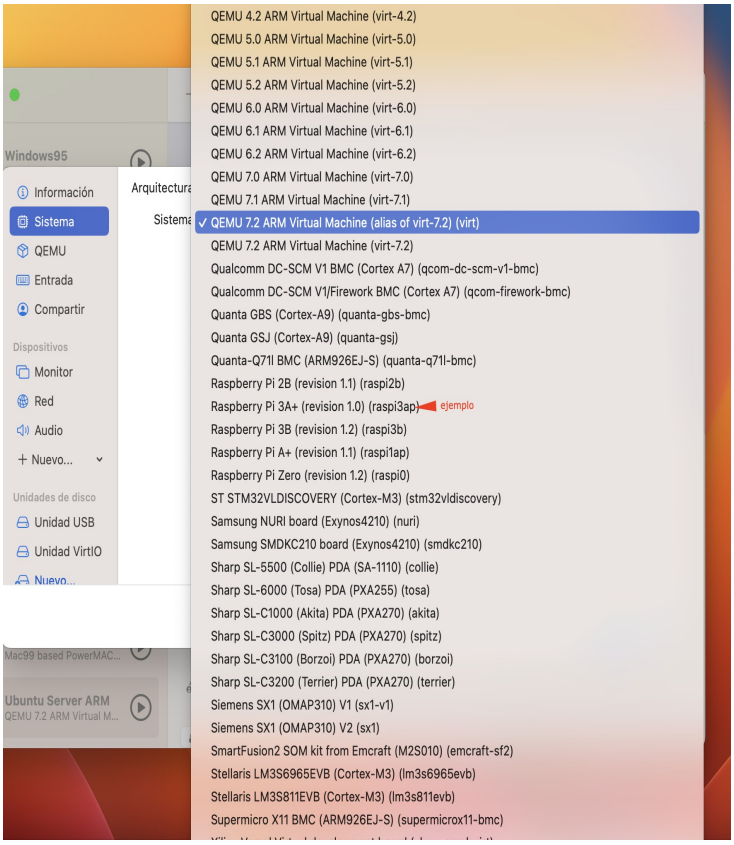


Architecture: we can see the different options available for configuration — and there are many, such as **ARM 32**, **ARM 64**, **i386**, **x86_64**, and so on.

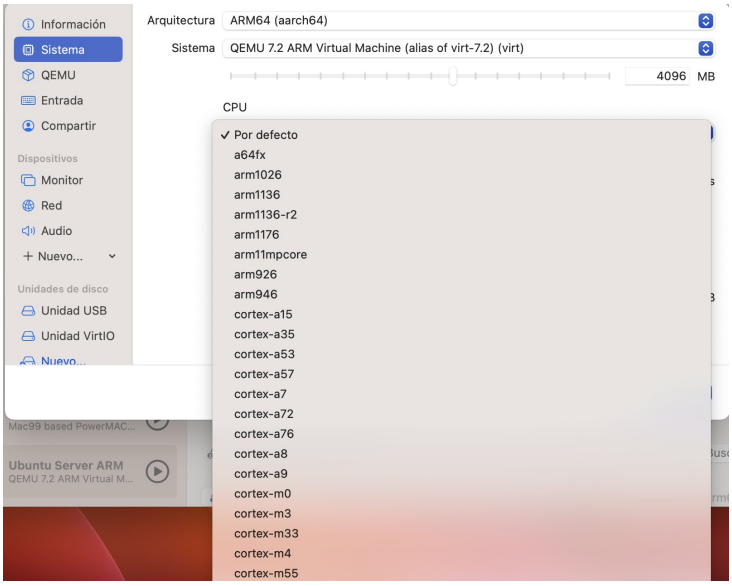


System: If we select this, we will see a very extensive dropdown menu. Here, we leave it as it is by default.

Let’s imagine we want to virtualize a Raspberry Pi 3A+; we select that option, and if the architecture is **ARM 32**, we choose **ARM (aarch32)**. This is just an example to illustrate the many options available.



***CPU**: Here, we can choose from a selection of different CPU types in the dropdown menu. For now, we leave it as the default.*



***CPU Cores**: We can set as many as we want. If left by default, the number of CPUs will match the ones on the host machine. In my case, the MacBook Pro M1 has 8 cores.*

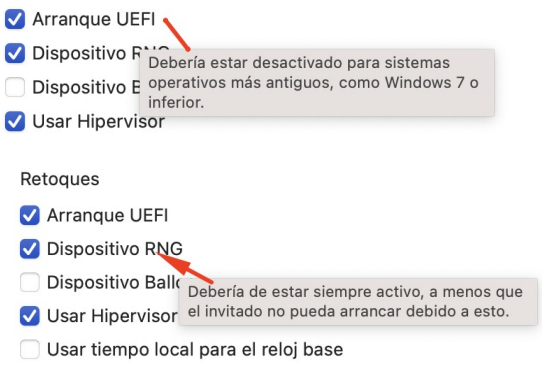
***Force Multicore** and **JIT Cache** don't affect anything for me; these are options for advanced users.*

*The next item in the list is **QEMU**:*

We can save a debugging log if we select it.

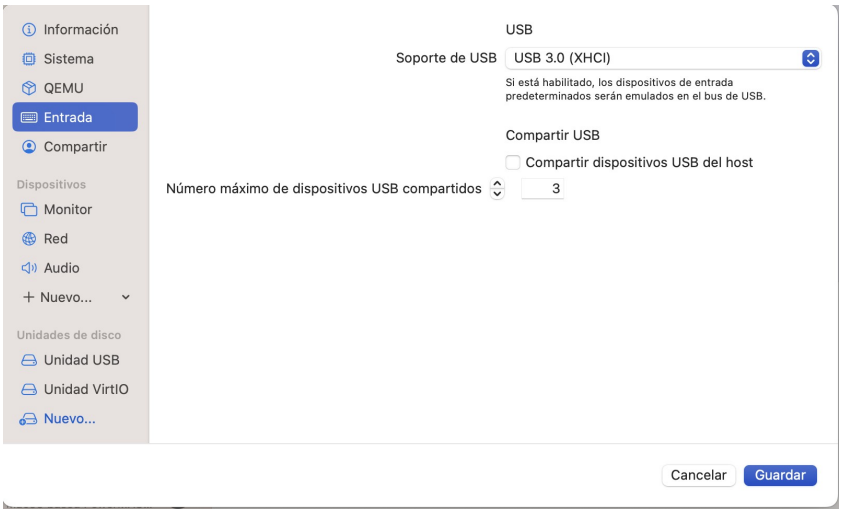
UEFI Boot is for older operating systems; if it doesn't boot, we will need to disable this boot mode.

To know what each option means, simply hover the mouse over one of these tweaks, and a description will appear.

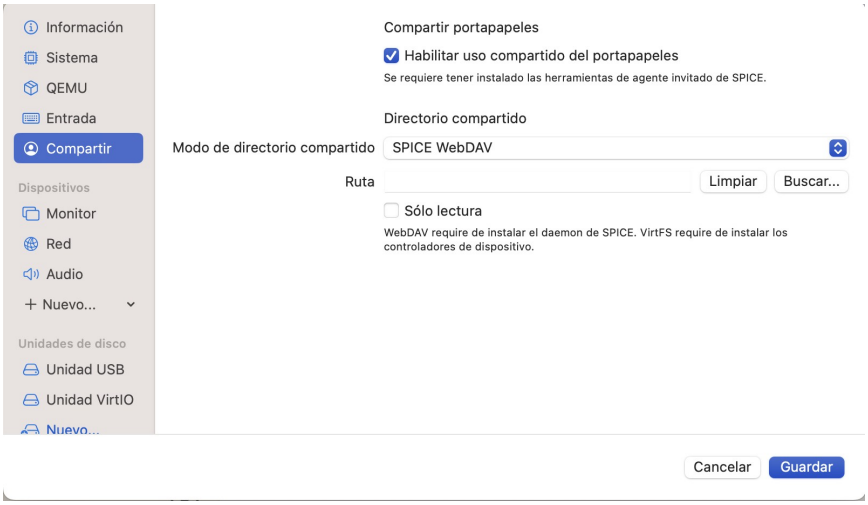


For now, we'll leave everything as is.

The next item in the menu is **Input**. Here, we can select the type of USB support: **USB 2.0**, **USB 3.0**, or **disabled**, as well as the maximum number of shared USB devices.



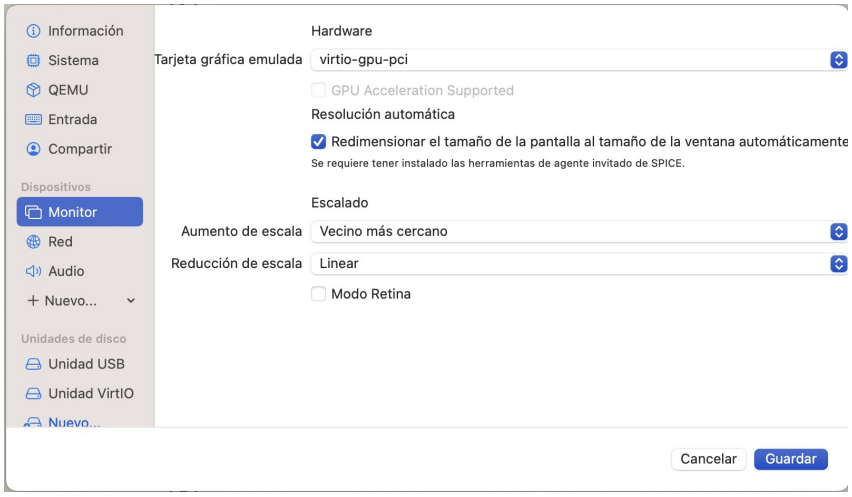
The next item in the menu is **Sharing**. Here, we can choose different options for sharing files between the host machine and the guest machine.



For Windows, we use **SIPCE WebDAV**. For Linux, we can use either **SIPCE WebDAV** or **VirtFS**.

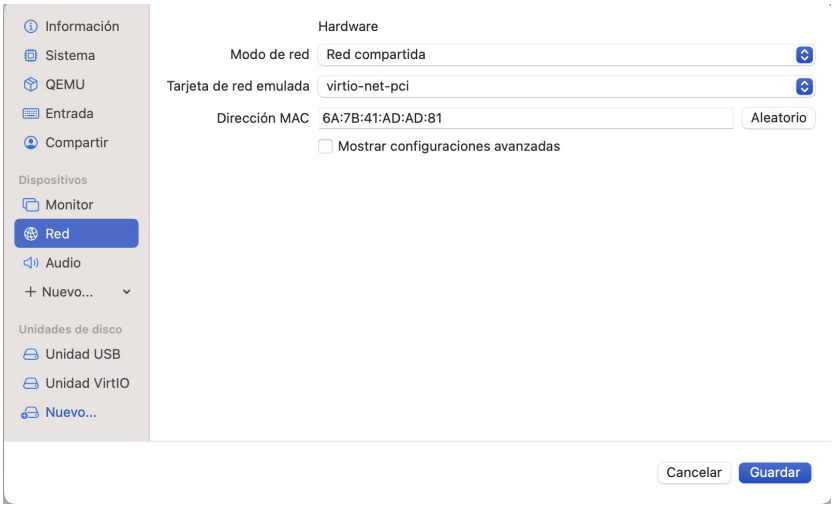
More information here: https://docs.getutm.app/guest-support/linux/#virtfs

The next item in the menu is **Monitor**. Here, we can choose different options for the virtual machine's monitor.

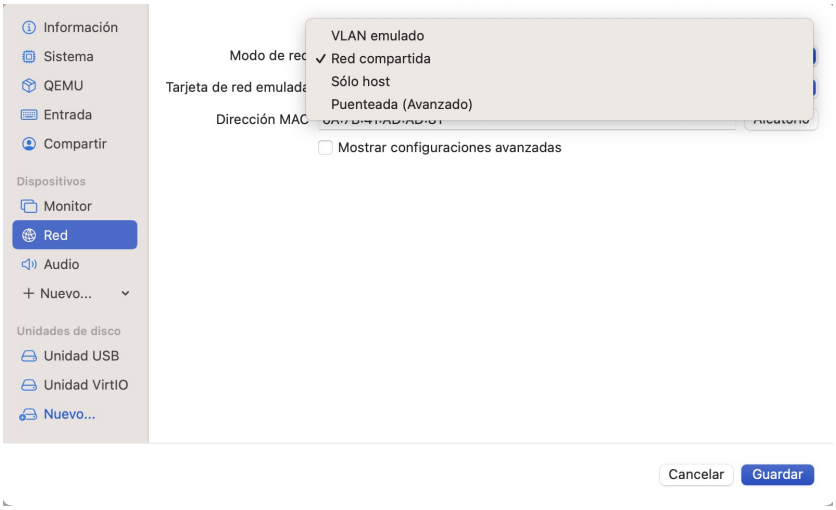


The next item in the menu is **Network**. Here, we can make various network configurations.

We can create different network adapters and configure them with the various options available.



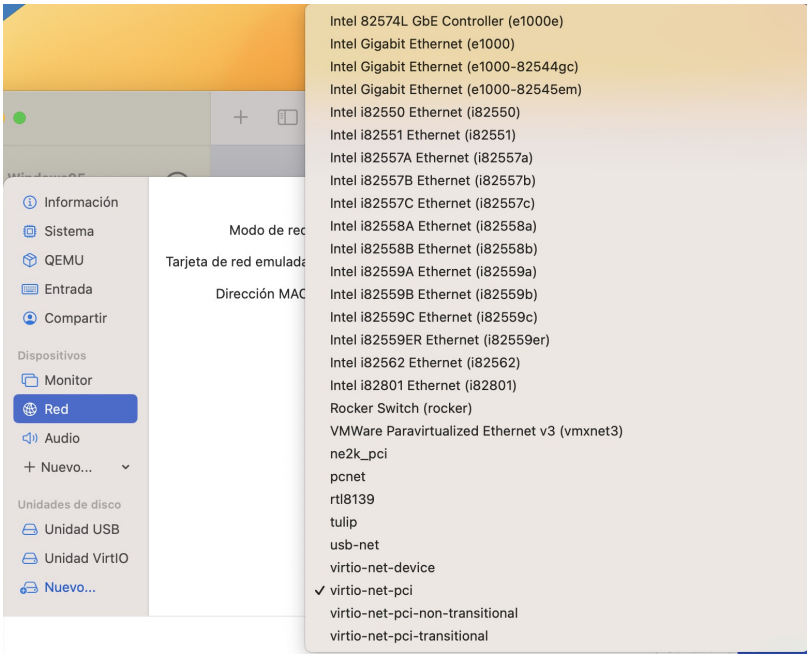
Network Mode:



We have different options: **Emulated VLAN**, **Shared Network**, and **Bridged Host (Advanced)**.

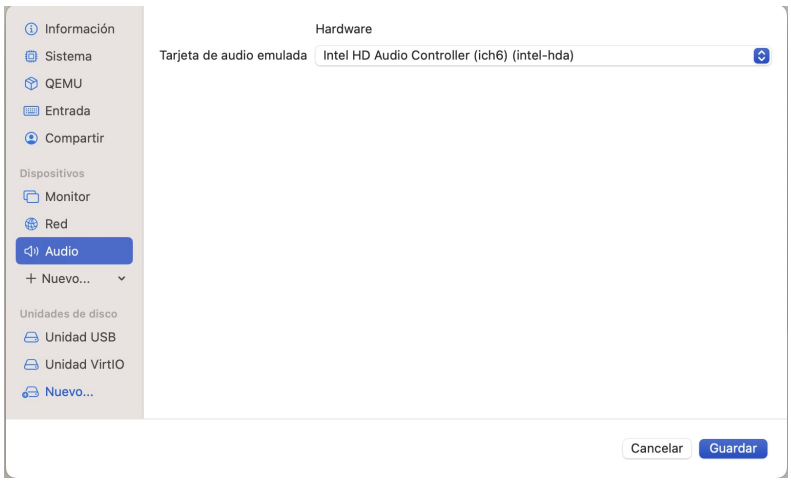
If you want to learn more: https://docs.getutm.app/settings-qemu/devices/network/network/

Emulated Network Adapter:

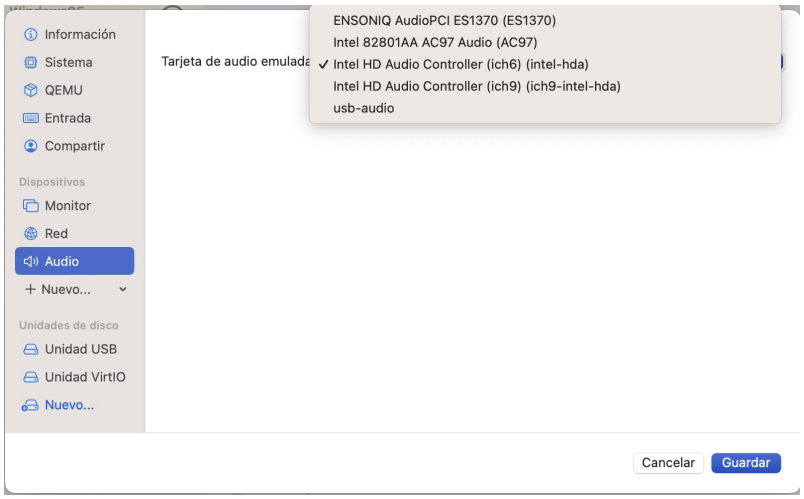


MAC Address: We can set whatever we want, or click the **Random** button to generate a random MAC address.

The next item in the menu is **Audio**:



Here, we can select from the different audio devices:



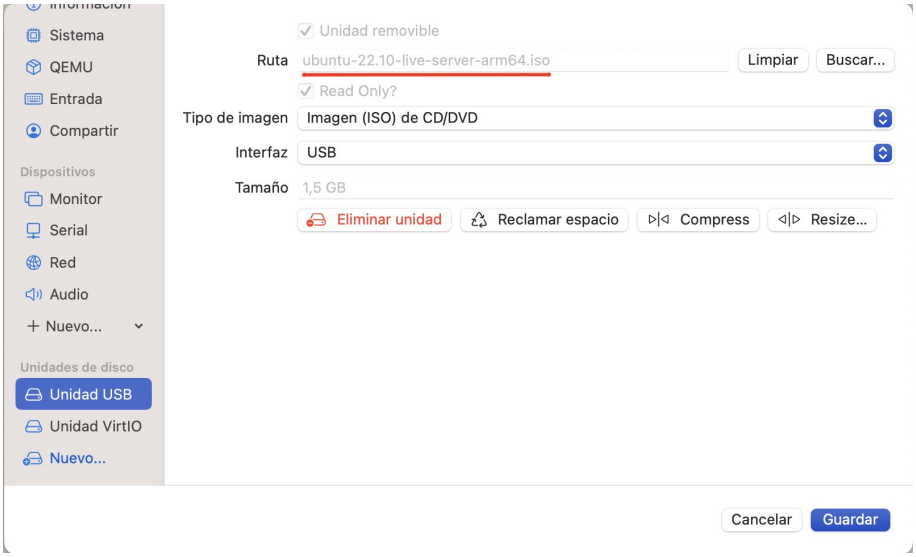
*The next item in the menu is **+New**. Here, we can create or add a monitor, network, audio, and serial device.*

With **Serial**, we can emulate serial devices through network sockets or pseudo-TTY devices.

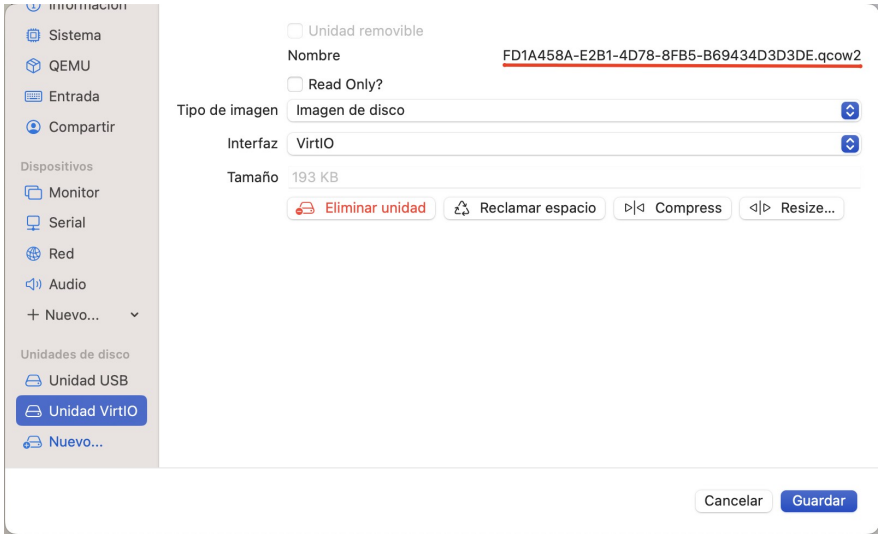
More information: https://docs.getutm.app/advanced/serial/

The next item in the menu is **Disk Drives**. Here, we will always see that two drives have been created.

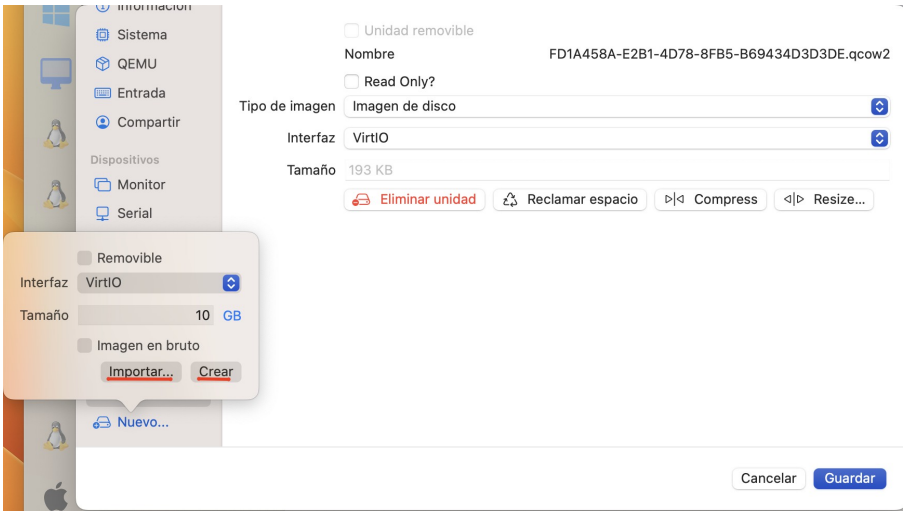
USB Drive is where the disk installation image (.iso) has been placed.



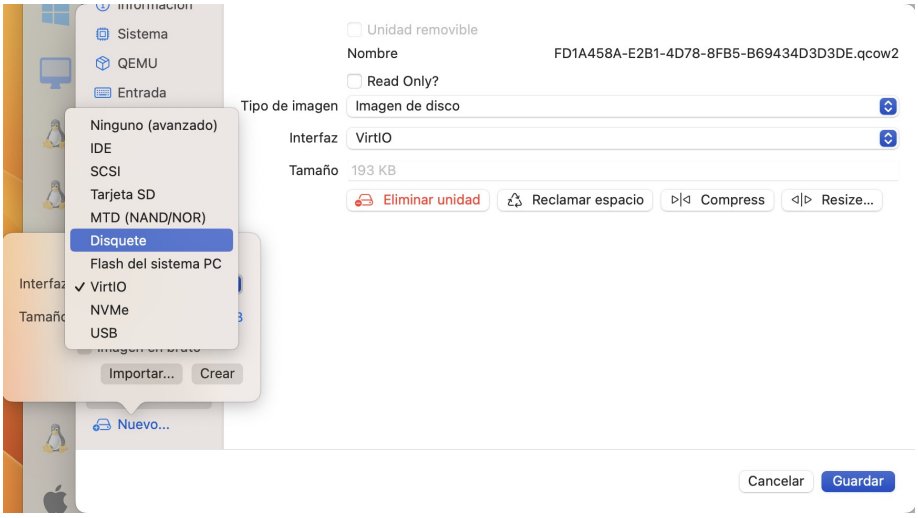
VirtIO Drive: From the .iso image, the file is created in .qcow2 format to be used in UTM.



In **New**, we can create additional disk drives. We can import or create a new one and assign a size to it.



Or we can assign an interface, such as a **Floppy Disk:**

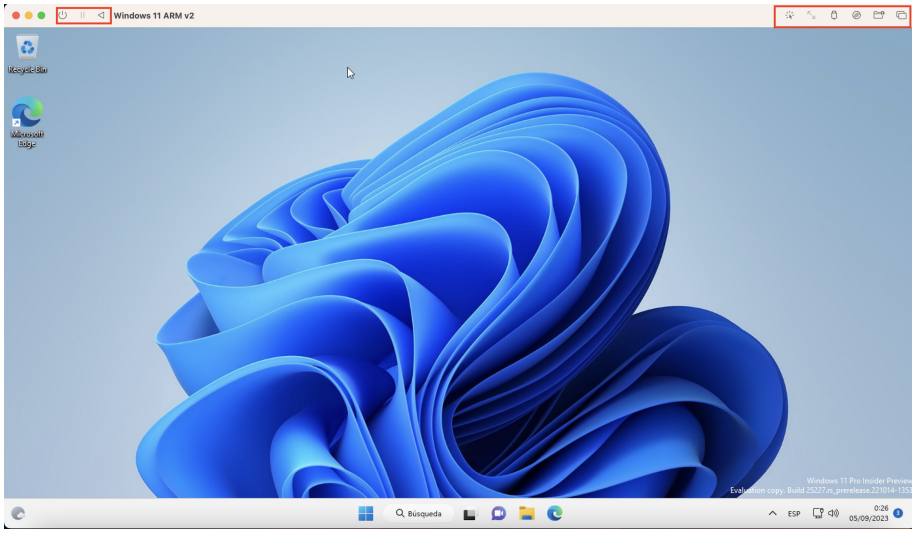


If we've made the adjustments we want, we click **Save**.

Icons in the Virtual Machine Window:

When we start a virtual machine, at the top of the window, there are several icons.

A menu on the left and another on the right.



In the upper right menu [from left to right]:

- **Shutdown** (Forces the virtual machine to shut down).
- **Pause** (Pauses the virtual machine).
- **Restart** (Forces the virtual machine to restart).

In the left menu [from left to right or from the center outward]:

- ***Lock Mouse to Window*** *(Locks the mouse within the window, preventing it from leaving. To unlock it, press* ***Control + Option****).*
- **Send Resize Console Command** (This is for when a serial device is created).
- **USB Device** (Used to connect a USB device, explained in **How to Share Files**).
- **Disk Drive Options** (We can manage the disk drives).

- **Shared Folder** (Directory used for sharing, explained in **How to Share Files**). 

- **Windows** (These are the monitors. If we have more than one, they will appear here, and we can select them).