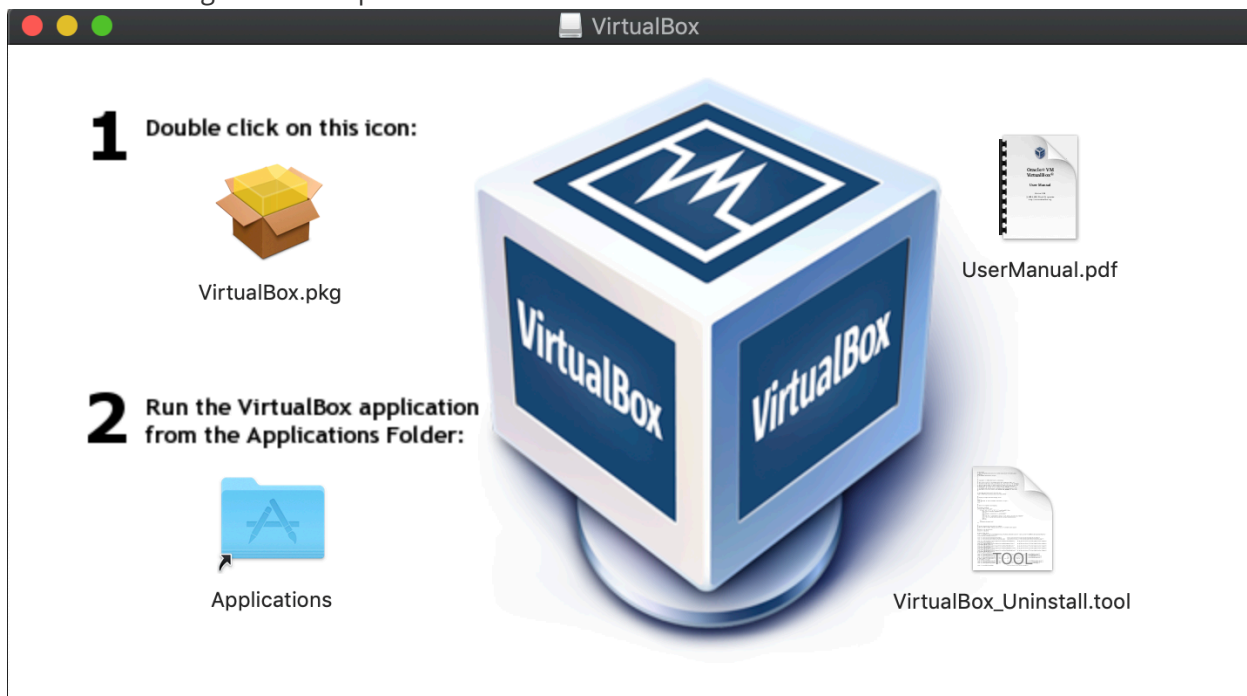


# Download VirtualBox for Windows 10 on Mac :

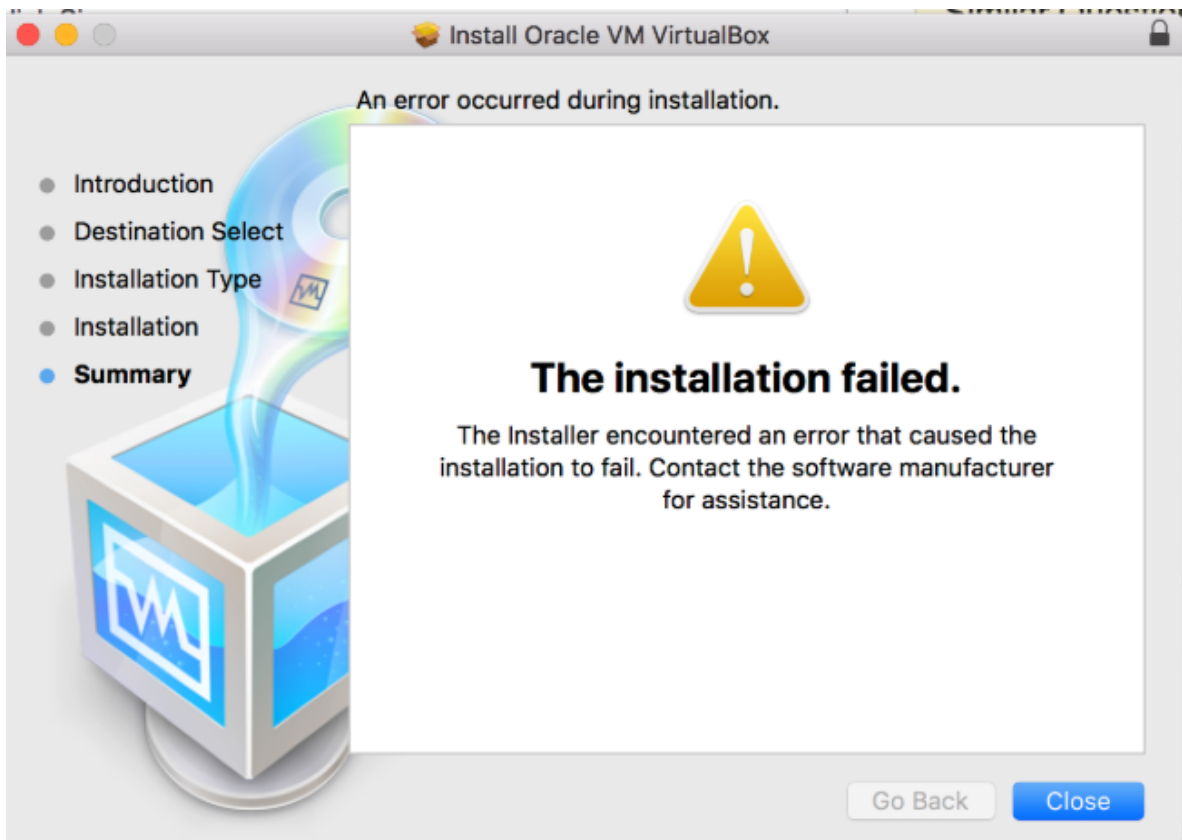
1. Go on <https://www.virtualbox.org/wiki/Downloads>.
2. Click on OS X hosts under the tab *VirtualBox 6.0.8 platform packages*. The downloader will download automatically.
3. Download Windows 10 on your Mac by going on this site : <https://www.microsoft.com/en-ca/software-download/windows10ISO>. Just follow the instructions by selecting the edition and the product language.
4. When Windows 10 is download, go on Finder>Downloads and open the file *VirtualBox-6.0.8-130520-OSX.dmg*. This will open a window.



5. Click on the first brown icon to install VirtualBox. If the latter step doesn't work, follow these next instructions taken from this website on May 24<sup>th</sup> 2019 - <https://medium.com/@DMeechan/fixing-the-installation-failed-virtualbox-error-on-mac-high-sierra-7c421362b5b5> - :

## 1. Introduction

A colleague had some trouble installing VirtualBox on macOS High Sierra v10.13.5. Here's the error he kept encountering:



'The installer encountered an error that caused the installation to fail' — a very helpful error message

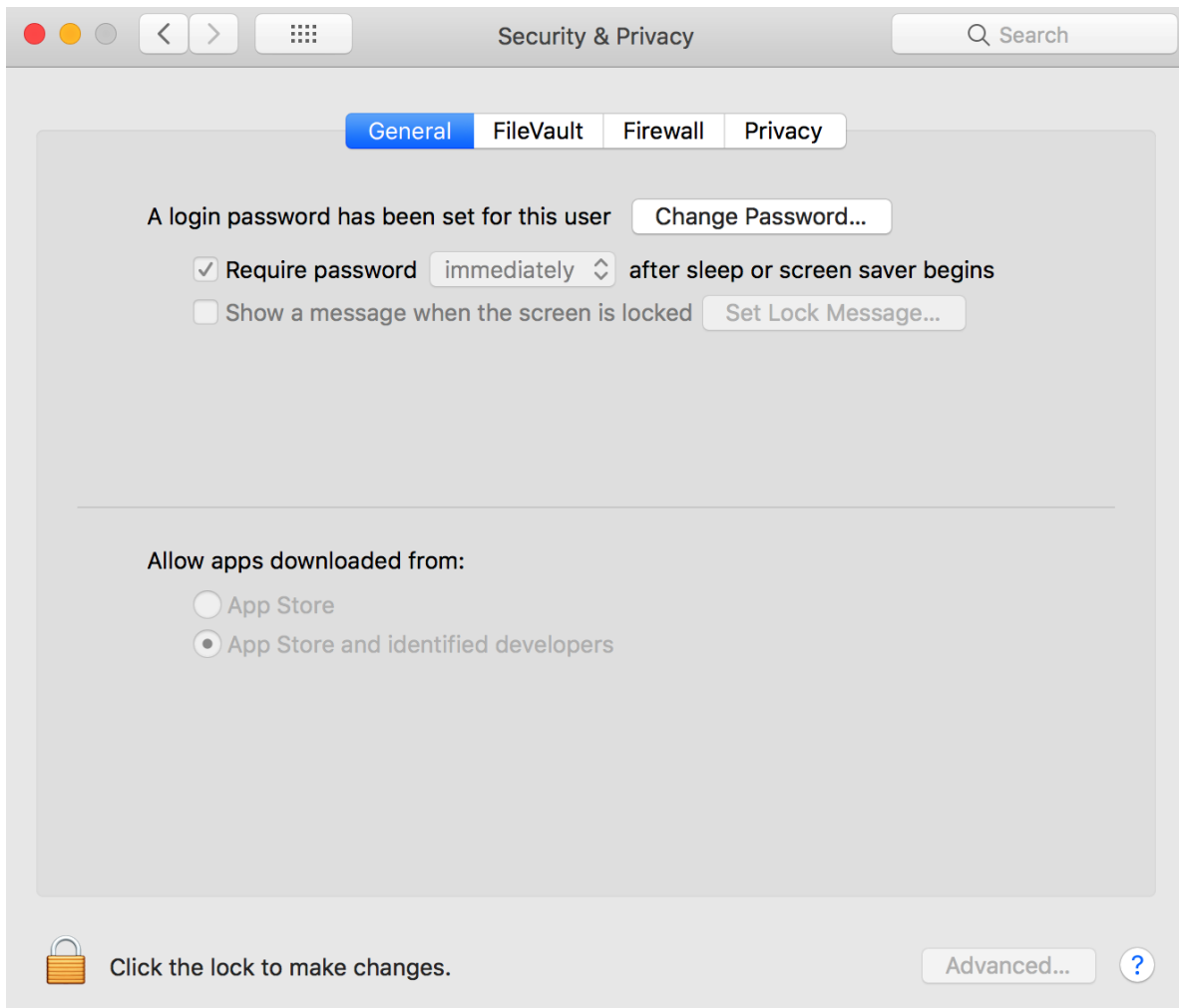
We scoured the web for solutions before finally figuring it out.

Finding a solution wasn't as easy as we'd hoped, so hopefully our findings below will help out anyone who ran into the same stubborn error that we did.

## Check this first

1. Open up `System Preferences`
2. Click on the `Security & Privacy` icon
3. Make sure `Allow apps downloaded from: **App store and identified developers**` is checked.

It should look like this:



Make sure 'App store and identified developers' is checked

If your screen doesn't look like that:

1. Click the lock icon in the bottom left of the window
2. Enter your Mac password
3. Click **App store and identified developers**
4. Try to install VirtualBox again

If you get the same error, try solution 1.

## Solution #1 — Quick and easy

If you're lucky, this solution will work first time.

1. Open up **System Preferences**
2. Click on the **Security & Privacy** icon
3. Hopefully you'll see a message saying **System software from developer "Oracle America, Inc." was blocked from loading.**
4. If you do see the message, click the lock icon in the bottom left of the window
5. Enter your Mac password
6. Then click the **Allow** button

Done! Now open up the VirtualBox installer again and it should work fine.

If only it were always this simple... If the `Allow` button didn't come up for you, try out the next one.

## Solution #2— Back to basics

Sometimes macOS needs a good restart before deciding to show the `Allow` button. So here's what we'll do:

1. Restart your Mac
2. Open up the VirtualBox installer
3. Go through the installer until you get to the screen with the `Change Install Location...` and `Install` buttons. **Do not click install** (yet)
4. Open up `System Preferences`
5. Click on the `Security & Privacy` icon
6. Hopefully you'll see a message saying `System software from developer "Oracle America, Inc." was blocked from loading.`
7. If you do see the message, click the lock icon in the bottom left of the window
8. Enter your Mac password
9. Then click the `Allow` button

Done! If the message and the `Allow` button *still* didn't appear, we'll have to resort to drastic measures with solution #3:

## Solution #3— Force macOS to let us install VirtualBox

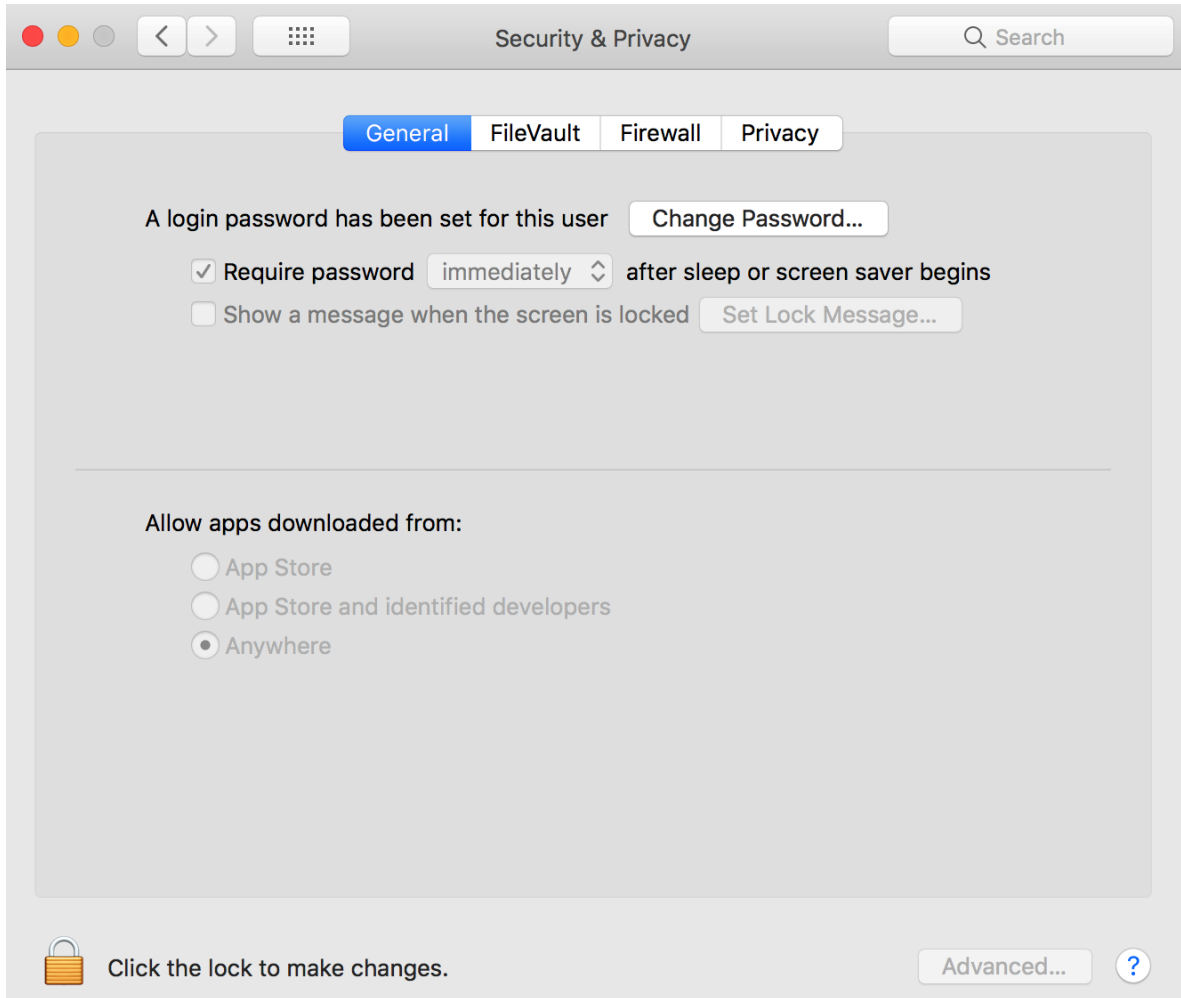
To force macOS to let us install VirtualBox, we'll need to use Terminal to open up our security preferences temporarily:

1. Do `CMD + SPACE` to open up Spotlight
2. Type in `Terminal` and press `ENTER` to open up Terminal
3. Now let's temporarily disable Mac Gatekeeper. Type the following into Terminal: `sudo spctl --master-disable`
4. Press `ENTER`
5. Now type in the password for your Mac account. Don't worry if it looks like your password isn't being typed: Mac hides the input for security
6. Press `ENTER`

Done! Next we need to restart System Preferences:

1. Make sure System Preferences is open
2. Hold down the **Option key** `⌥` and **right-click** System Preferences in the Dock
3. Click `Force Quit`
4. Now open up System Preferences again
5. Click on the `Security & Privacy` icon

Below `Allow apps downloaded from:` you should now see a third option which is already selected: `Anywhere`



A third option has appeared: `Anywhere`

Great! Now one of either two things should happen:

1. The `Allow` button has already appeared: just click Allow and install VirtualBox. Everything should work smoothly
2. The `Allow` button has not appeared yet: don't worry. Try to install VirtualBox. It should just work or you should see the `Allow` button appear.

**Warning:** we have not re-enabled app installation security yet. Make sure to complete the app installation security section below so your Mac isn't left unprotected!

## If you don't see the third option 'Anywhere' appear

You may need to run the `sudo spctl --master-disable` command again and then restart System Preferences. One person online said it took 5 attempts to get the command to work for them. Keep trying.

Worst case scenario: restart your Mac and try again.

## ⚠ **Important: Re-enabling app installation security on your Mac**

If you've attempted Solution #3, **you must follow this section** to ensure your Mac is secure:

1. Open up Terminal again
2. Enter the command below: `sudo spctl --master-enable`
3. Press `ENTER`
4. Now type in the password for your Mac account. Don't worry if it looks like your password isn't being typed: Mac hides the input for security
5. Press `ENTER`

Done! Now you should be able to install VirtualBox fine and your Mac is secure!

If you want to check that it worked, you'll have to restart System Preferences again. Afterwards, you should no longer see the `Anywhere` option in `Security & Privacy`.

I hope this has helped! If you have any trouble with this, please post in the comments below. I'll do my best to help.

## 🌐 **2019 Update: a couple of things to try if you're stuck**

If you've tried all of the above but VirtualBox *still* refuses to install, the kind commenters [Leo Shaw](#) and [Elias Politakis](#) have got your back.

They've posted a couple of extra fixes in the comments below:

- Have a look [here](#) if you can't click the 'Allow' button
- Read through the information [here](#) if you're using a VNC connection

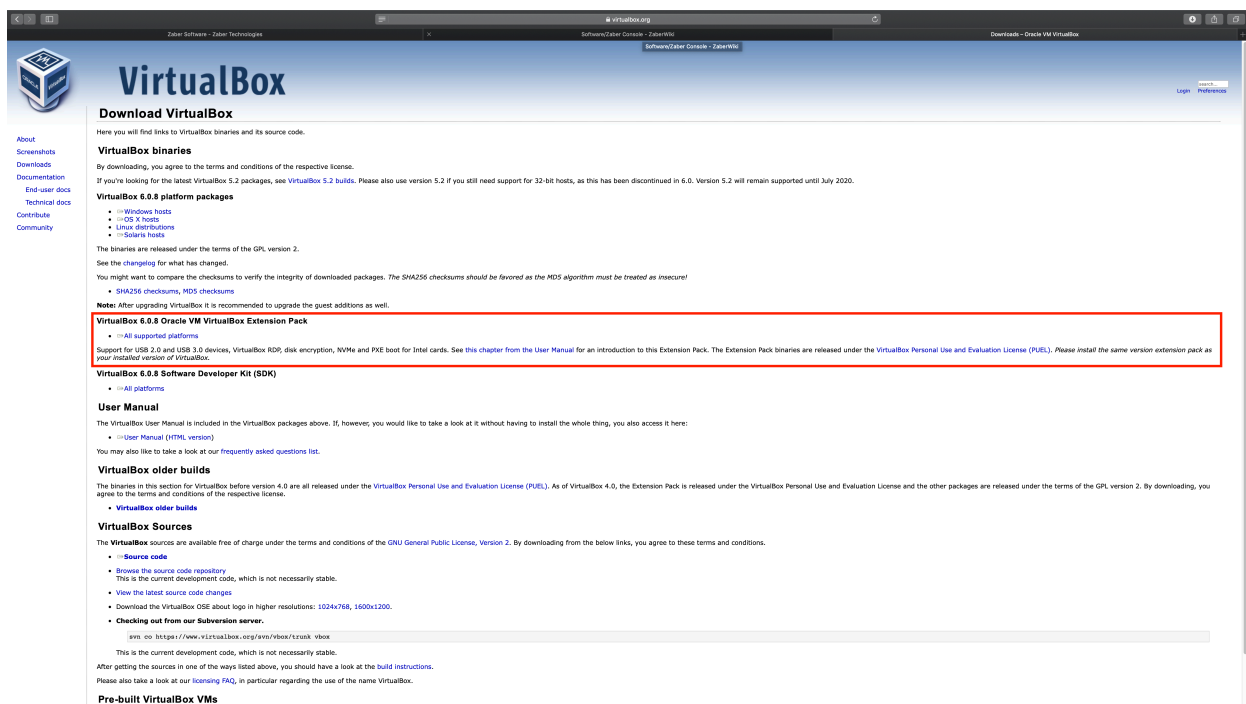
Good luck (and happy virtualbox-ing)! :)

6. Click on the other blue icon to open VirtualBox.
7. To create a new virtual machine, click on *New*. You may name your operating system as you like. Select the type and the version of your operating system. Click on *Continue*.
8. Choose the amount of memory given to your operating system every time the virtual machine is started. Choose this setting carefully! The memory used by the virtual machine will not be available for your host OS while the virtual machine is running. " As a rule of thumb, if you have 1 GB of RAM or more in your host computer, it is usually safe to allocate 512 MB to each VM. In any case, make sure you always have at least 256 to 512 MB of RAM left on your host OS. Otherwise you may cause your host OS to excessively swap out memory to your hard disk, effectively bringing your host system to a standstill. " (Reference : *Chapter 1.8 : Creating your first virtual machine*, <https://www.virtualbox.org/manual/ch01.html#intro-running>) Click on *Continue*.
9. Select *Create a virtual hard disk now*. Click on *Create*.

10. Select the *dynamically allocated file* if you want the size of the virtual hard disk to be modulable (if you want to download applications on this *VirtualMachine*, I recommend to select this one). Otherwise, select the *fixed-size file*. Click on *Next*.
11. Select the file location size. Click on *Create*.
12. To run your virtual machine, select the virtual machine on the *VirtualMachine Manager* window and click on *Start*.

IF YOU PROVIDE TO USE YOUR VIRTUAL MACHINE TO WORK WITH A USB DEVICE, follow the next step after installation :

13. Is there a driver you should install for using your USB device? Look up on the manufacturer's website. If there is a driver you should install, install it. Otherwise, take the next step.
14. Download the *Oracle VM VirtualBox Extension Pack* on this website : <https://www.virtualbox.org/wiki/Downloads>.



15. Open up *VirtualBox* and open *Preferences>Extensions* from the file menu. Add the extensions file you just downloaded.
16. Restart your computer.
17. Plug the USB device you want to use with your virtual machine. Verify that your computer is detecting it by writing this command in the terminal : `ls /dev/*` This shows a list of the devices files your computer' system has in the `/dev` directory. You should find the device file of your USB device.
18. Open up *VirtualBox*. Make sure that *Enable USB Controller* and *Enable USB 2,0 (EHCI) Controller* are both selected in *Settings>USB devices* from the file menu. Click the *Add* button on the right side of the window (USB plug with a green plus sign icon). This filter allows the virtual machine to reconize automatically the USB device at the start-up. If you don't see your USB device in the list of devices recognized by your virtual machine, go to *IF IT STILL DOESN'T WORK*.

19. Run your virtual machine.
20. If there is a driver you should install for your USB device, install it on your virtual machine as well. Otherwise, download the software or your code you want to use on your virtual machine.

IF IT STILL DOESN'T WORK :

18. Verify in The Apple>About this Mac>System Report>USB if there are two USB devices that has the same serial number (if there are, they usually have the same name in the *USB device tree* as well). You can see this information by clicking on the USB device in the *USB device tree*.
19. If there are two or more USB devices that have the same serial number, unplug the USB device and restart the computer.
20. Plug in the USB device in another USB port of your computer.
21. Verify that the USB device is detected by your computer by going in Apple>About this Mac>System Report>USB. Now, you should not have two or more USB devices in your *USB device tree* that have the same serial number.
22. Open up *VirtualBox*. In Settings>USB, create a new filter by clicking on the *Add* button on the right side of the window (USB plug with a green plus sign icon).
23. Select the new filter and click the *Settings* button (USB plug with an orange roulette).
24. Enter the four numbers of the Vendor ID. This information is found in Apple>About this Mac>System Report>USB by selecting your USB device. Rename your filter if necessary. When it's finished, click on the *Ok* button.
25. Click on the *Ok* button of the setting window of your virtual machine.
26. Deplug the USB device and restart the computer.
27. Open up *VirtualBox* and run your virtual machine.
28. Plug your USB device when the virtual machine is completely opened. You should here the sound of Windows when a device is reconized by the system. It is important from now on to ALWAYS plug the USB device AFTER the virtual machine is running.