

Porteus in portable virtualbox for windows

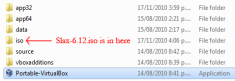
WEDNESDAY, 17 NOVEMBER 2010 17:57 JAY


Slax in portable virtualbox for windows

[Download the screencast \(drag into browser window\)](#)

Now you can carry your Porteus around on a USB device and start Porteus from within any windows computer. This tutorial will show you how to install Porteus as a portable [virtual machine](#) on a USB device which can be started from within windows. The first step is to download the portable virtualbox file. At the time i wrote this tutorial the main website for downloading the file had mysteriously disappeared however typing "*portable virtualbox mirror*" into google produced a list of file servers still holding the latest version. You will also need a copy of the Porteus ISO file which you can download from the website or create from a disk or porteus version you already have.

Unpack the compressed file you downloaded onto the usb device which should now contain 5 folders and an executable portable virtualbox file. Create a folder called *iso* on the USB and copy your porteus.iso into it. I have provided an image of what the directory structure should look like on your USB device.



- 
- Start the portable vbox from the USB now and follow the prompts below to setup your virtual drive.

 - In the name section type: slax
 - In the operating system select Linux and Linux 2.6 for the version
 - Memory: 256Mb (default)
 - Create new hard disk (default)
 - Dynamically expanding storage (default)

I gave 2.6Gb for my maximum storage because i am using a 4Gb USB drive. After pressing finish your drive should be created. It is stored on the USB device in the data/.virtualbox directory but you should have no need to go into there unless you want to delete everything and start again. The last screen just confirms that you have everything in place and the setting you chose were correct. You can change any of these settings from the main virtualbox screen by clicking the setting button.



You can now start your Virtual Porteus machine. The first time you run the virtual machine the *'first run wizard'* will start and you will be asked to choose an image to boot from. Click the search folder button (see image) and navigate to your porteus.iso that is on the USB drive in the folder you created called 'iso'. You will need to boot from this image once so you can prepare a file system on the virtual drive created earlier. The Porteus files will be copied there and you will then remove the porteus.iso file. After selecting the slax.iso click next and follow the prompts and you should boot into a porteus desktop.

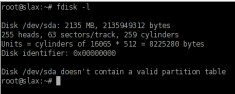


After your first boot

Open up a console and look for the name of your virtual drive (e.g /dev/sda) by typing:

```
# fdisk -l
```

You should see that it is an *unsupported filesystem* because it has not yet been formatted (see image). The virtual drive will be divided into two partitions. The first will be an ext3 partition for the boot and slax folder and it should be around 3/4 the size of the drive. The remaining space will become a swap partition. There are a couple of built in partition management tools included in porteus and you will use the *'cfdisk'* tool for this one.



In the same console you can run:

```
# cfdisk /dev/sda
```

Use the right and left arrow keys to navigate the menu. Make the following selections to set up your partitions:

- new/primary partition/<type size in Mb>/beginning/bootable
- Hit the down arrow now to select the remaining space on the virtual drive and continue:
- new/primary partition/<press enter to fill remaining space>/type/<enter number 82>/write

You will be prompted to type 'yes'.
Once the writing has finished you can select *exit* and you can now format the partition.

```
# mkfs.ext3 /dev/sda1
```

Create the directory in /mnt for the slax files

```
# mkdir /mnt/sda1
```

Mount the empty partition at /mnt/sda1

```
# mount /dev/sda1 /mnt/sda1
```

You need to find out where slax has mounted the slax.iso image so type: *mount*

Look for the line that contains [iso9660](#) and the beginning will be similar to */dev/hdc*

Replace the dev with mnt and copy the boot and slax folder to the virtual drive you just formatted.

```
# cp -R /mnt/hdc/boot /mnt/sda1
```

Copying the slax files should take a couple of minutes

```
# cp -R /mnt/hdc/slax /mnt/sda1
# ls /mnt/sda1
```

Change directory into the boot folder and run the script to make the partition bootable. Since slax is running from an ext3 partition and not FAT32 we will need to run the liloinst.sh script. If you would like the full menu options when starting slax you can create 3 partitions. The first should be a small (32Mb) FAT32 partition for the boot folder. The second should be a larger ext3 partition for the slax folder and the third a swap partition around half the size of your ext3 partition. You would then enter the boot folder and run the bootinst.sh script. This would result in a boot menu that gives you all the options of the regular slax.

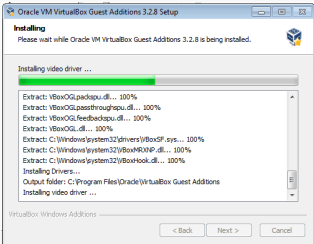
```
# cd /mnt/sda1/boot
# ./liloinst.sh
```

Everything is done now and it is time to shutdown the virtual machine and remove the slax.iso as a mounted drive. Give slax the command to shutdown: *init 0*

Slax is now virtually installed

Once slax has shutdown you can click on the settings button in the virtualbox screen and then select 'storage', you should see the slax.iso mounted as a DVD/CD and you can now remove it since slax will boot to the virtual drive you just created. You should now find that your virtual slax is portable on your USB device. You can plug it into any computer running windows and run the portable virtualbox exe file and start slax. If you ran the liloinst.sh then you will find slax boots into a text mode after which you should login using *root/toor* and then run *startx* to get to the desktop.

After the mounted iso has been removed and you have booted from the virtual drive you prepared it is time to install the guest additions which will allow the virtual slax to match the resolution of the host operating system. Simply choose from the 'devices' menu to install the addons. The guest additions will be automatically mounted and should open up a konqueror dialog asking you to open the image in a new window. Do this and then choose to open a console in the existing folder. This option is in the tools menu of konqueror. When the console opens run the script called *VBoxLinuxAdditions-x86.run*.



if you find things go wrong and you want to remove your virtual slax and start again, simply open portable virtualbox and remove the existing installation and close it down again. Then go into the USB device and remove the files from /data/.virtualbox and it's subfolders. Don't remove the two folders named 'HardDisks' and 'Machines', only remove the files that are inside them. All XML files can also be removed. When you start portable vbox again it will be as if it is running for the first time.

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