# **OSGeo-Live Quickstart for Running in a Virtual Machine**

This Quick Start describes one way to run OSGeo-Live within a VirtualBox virtual machine. For other methods, follow links from the "See Also" section below.

## **Downloads**

First we need to install the software to play virtual machines on your computer. We'll use the open source software VirtualBox.

- ➢ Go to the VirtualBox website: <u>http://www.virtualbox.org</u>
- Click on the button "Download VirtualBox 5.1"
- Download the right version for your platform

States manufacture	<b>VirtualBox</b>
	Download VirtualBox
About Screenshots Downloads Documentation End-user docs Technical docs Contribute	Here, you will find links to VirtualBox binaries and its source code. VirtualBox binaries By downloading, you agree to the terms and conditions of the respective license. • VirtualBox platform packages. The binaries are released under the terms of the GPL version 2. • VirtualBox 5.1.4 for Vindows hosts ⇔x86/amd64 • VirtualBox 5.1.4 for CS X hosts ⇔amd64 • VirtualBox 5.1.4 for Solaris hosts ⇔amd64
Community	<ul> <li>VirtualBox 5.1.4 Oracle VM VirtualBox Extension Pack ⇒ All supported platforms         Support for USB 2.0 and USB 3.0 devices, VirtualBox RDP and PXE boot for Intel cards. See this chapter from the User Manual for an introduction to th         Extension Pack. The Extension Pack binaries are released under the VirtualBox Personal Use and Evaluation License (PUEL).         Please install the extension pack with the same version as your installed version of VirtualBox:         If you are using VirtualBox 5.0.26, please download the extension pack ⇔here.         If you are using VirtualBox 4.3.38, please download the extension pack ⇔here.     </li> </ul>

- Download the VirtualBox 5.1.4 Oracle VM VirtualBox Extension Pack from the same web page
- Install VirtualBox
- Copy the OSGeo Virtual disk file (vmdk) from the USB stick to your harddrive and unzip the file (using <u>7zip</u>).

#### **Installing VirtualBox**

- Install VirtualBox
- ➢ Install the Extension Pack:

○ In the menu of VirtualBox choose File  $\rightarrow$  Preferences...



Choose Extensions and browse to the downloaded Extension Pack using the
 button. After opening it will add the extension to the list as shown below.

🤌 Virt	ualBox - Prefe	erences		2	x		
	General	Exten	sions				
	V Input Extension Packages						
G	Update	Active	Name	Version	G		
		<b>a</b>	Oracle VM VirtualBox Extension Pack	5.1.4r110228			
	Language						
	Display						
₽	Network						
	Extensions						
	Proxy						
				OK Cance	:		

### **Create a Virtual Machine**

Start the VirtualBox application and click on the New button to create a new VM.



Enter a name such as OSGeo-Live, and choose Linux as the "Operating system", and Ubuntu (64 bit) as the "Version".

	and the second s	? X
G Create	Virtual Machine	
Name	and operating system	
of opera	hoose a descriptive name for the new virtual machine and sele ting system you intend to install on it. The name you choose v out VirtualBox to identify this machine.	
Name:	🔟 OSGeo-Live	-
Type:	Linux	- 64
Version:	Ubuntu (64-bit)	<b>_</b>
	Expert Mode Next	Cancel

If you don't see the 64 bit option, than contact the lecturer. Some settings need to be changed in the BIOS of your computer.

Click Next

In the next screen set the memory to 1024 MB (or more if your host computer has more than 4GB).

Memory s	ize			
Select the am machine.	ount of memory (	RAM) in <mark>m</mark> egabytes	to be allocated to	the virtual
The recomme	nded memory size	e is <b>1024</b> MB.		
	0			1024 🌻
4 MB			4096 MB	

Continue to the next screen and choose "Use an existing virtual hard disk file". Now click on the  $\square$  button to browse to where you saved the osgeo-live-vm-10.0.vmdk file. Select this file and press Create.



Once the VM is created, click on the Settings button. In the "User Interface" section, select "Show at top of screen" for the Mini toolbar.

🙆 OS	Geo-Live 10 - Set	tings 2 ×
	General	User Interface
<b>F</b>	System	File     Machine     View     Input     Devices     Debug     Help
	Display	Mini ToolBar: 📝 Show in Full-screen/Seamless
	Storage	Show at Top of Screen
	Audio	
₽	Network	
	Serial Ports	
Ø	USB	
	Shared Folders	
	User Interface	
		OK Cancel

Go to the "Display" section and increase video memory to 32 or 64 MB.

OSGeo-Live 10 - Set	tings	? ×
📃 General	Display	
System	Screen Remote Display Video Capture	
📃 Display	Video Memory:	64 MB 🌲
5 Storage	0 MB 128 MB Monitor Count:	1
Audio		1
P Network	Scale Factor:	100% 🚖
Serial Ports	Acceleration: Enable <u>3</u> D Acceleration	
🌽 USB	Enable <u>2</u> D Video Acceleration	
Shared Folders		
User Interface		
	ОК	Cancel

In addition, move to the "Shared Folders" section, and click the "Add folder" (green + icon on the right) to find a directory on your host computer that you wish to share inside the VM. In the SNIEAU training we will store the course data in a folder SNIEAU on you hard disk.

🥝 Add Share	2 ×
Folder Path:	🐌 D:\SNIEAU 🔻
Folder Name:	SNIEAU
	Read-only
	Auto-mount
	OK Cancel

🙆 ose	õeo-Live <mark>10 -</mark> Sett	ings			-	8	x
	General	Shared Folde	ers				
	System	<u>Folders List</u>					
	Display	Name	Path		Auto-mount	Access	
	Storage	<ul> <li>Machine Fo</li> <li>SNIEAU</li> </ul>	lders D:\SNIEAU		Yes	Full	
	Audio						
₽	Network						
	Serial Ports						
	USB						
	Shared Folders						
	User Interface						
				(	OK	Cance	<u>:</u>

You can select to make the shared folder read only, and auto-mounted. Once the "Folder path" and "Folder name" are defined, click OK, and again OK to finish and close the settings window.

Oracle VM VirtualBox Manager	a falsal date /E. out over /E. or Sock and a	
<u>F</u> ile <u>M</u> achine <u>H</u> elp		
New Settings Discard Show		Details 💿 Snapshots
Image: Security Show         OSGeo-Live 10	General         Name:       OSGeo-Live 10         Operating System:       Ubuntu (64-bit)         System       Base Memory:       1024 MB         Boot Order:       Floppy, Optical, Hard Disk         Acceleration:       VT-x/AMD-V, Nested         Paging, KVM       Paravirtualization         Display       Video Memory:       64 MB         Remote Desktop Server:       Disabled	
	Video Capture: Disabled  Storage  Controller: IDE IDE Secondary Master: [Optical Drive] Empty Controller: SATA SATA Port 0: osgeo-live-10.0.vmdk (Normal, 25.00 0  Mutio Host Driver: Windows DirectSound Controller: ICH AC97	3B)

## Running the Virtual Machine and mounting a shared folder

Now bootup the VM by clicking the Start button  $\Rightarrow$ .

Once the OSGeo system comes up, open a terminal window. You find a button with >\_ at the



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In the terminal window, first make a folder SNIEAU by typing:

user@osgeolive:~\$ mkdir GIS

bottom left of your screen

user@osgeolive:~\$ sudo mount -t vboxsf SNIEAU /home/user/SNIEAU

Press <Enter> after each command. It will ask a password. The password is: user. Your screen will look like this:



Now files on your host machine in the chosen folder will also be available in the VM in the "SNIEAU" folder in user's home directory.