



Bringing the Eko VM Home (302)

This Howto shows how to install VirtualBox and create the Linux Eko VM used in the CIS 90 course. VirtualBox is a free download and can be installed on Windows, Linux or Mac OS X. This Howto will demonstrate installation on a Windows 7 computer.

Supplies

- A reasonably fast computer at home
 - 2+ GB memory recommended
 - 5 GB free disk space minimum
- VirtualBox 4.0.2 or later
 - <http://www.virtualbox.org/wiki/Downloads>
- The .vdi hard drive file for Eko
 - available on any of the CIS-Lab-XX stations in the CIS Lab
 - downloadable from <ftp://simms-teach.com>

Overview

VMs or virtual machines can be moved or copied to another computer. A VM is stored in one or more files. To move a VM you must first move these files from one physical computer to another.

The steps involved to bring the Eko VM home from school are:

1. Obtain the Eko VM hard drive file
 - a. Download it
 - b. Or get a copy at school using your USB thumb drive
2. Install VirtualBox
3. Create a new Eko VM
 - a. Clone a new unique drive (optional step)
 - b. Create a new VM using the Eko hard drive file
 - c. Configure the VM's NIC for Internet access

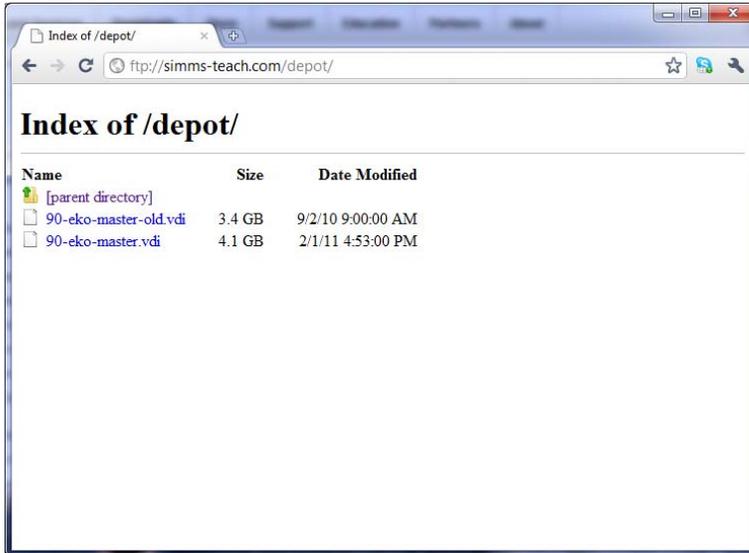
Step 1 – Obtain the Eko VM hard drive file

The hard drive file is quite large. You can either download this file or get a copy from school using a USB thumb drive. Regardless of how you obtain it you should note where you place it and what you name it on your home computer. Later, when creating a VM, you will need

to navigate to this file on your home computer.

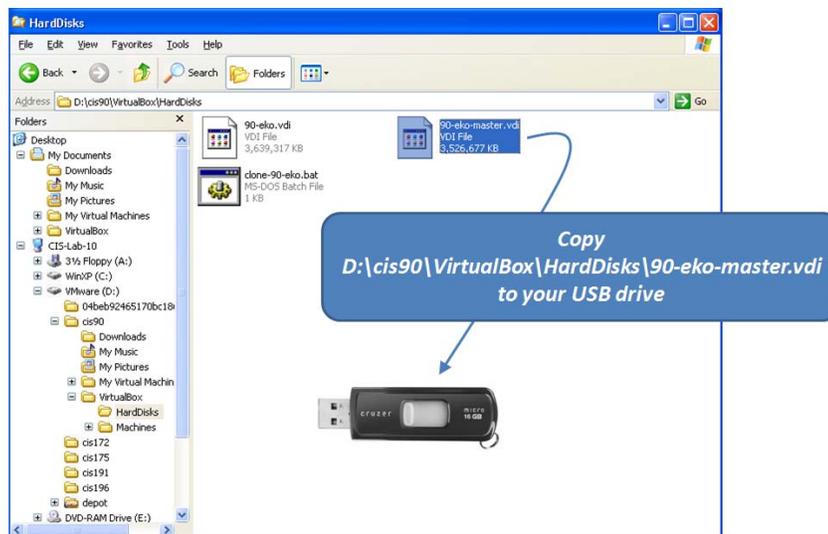
Download option:

To download the hard drive file you can use your FTP utility of choice or just browse to <ftp://simms-teach.com> and look in the depot directory. The older file is smaller and doesn't have all the latest patches installed.



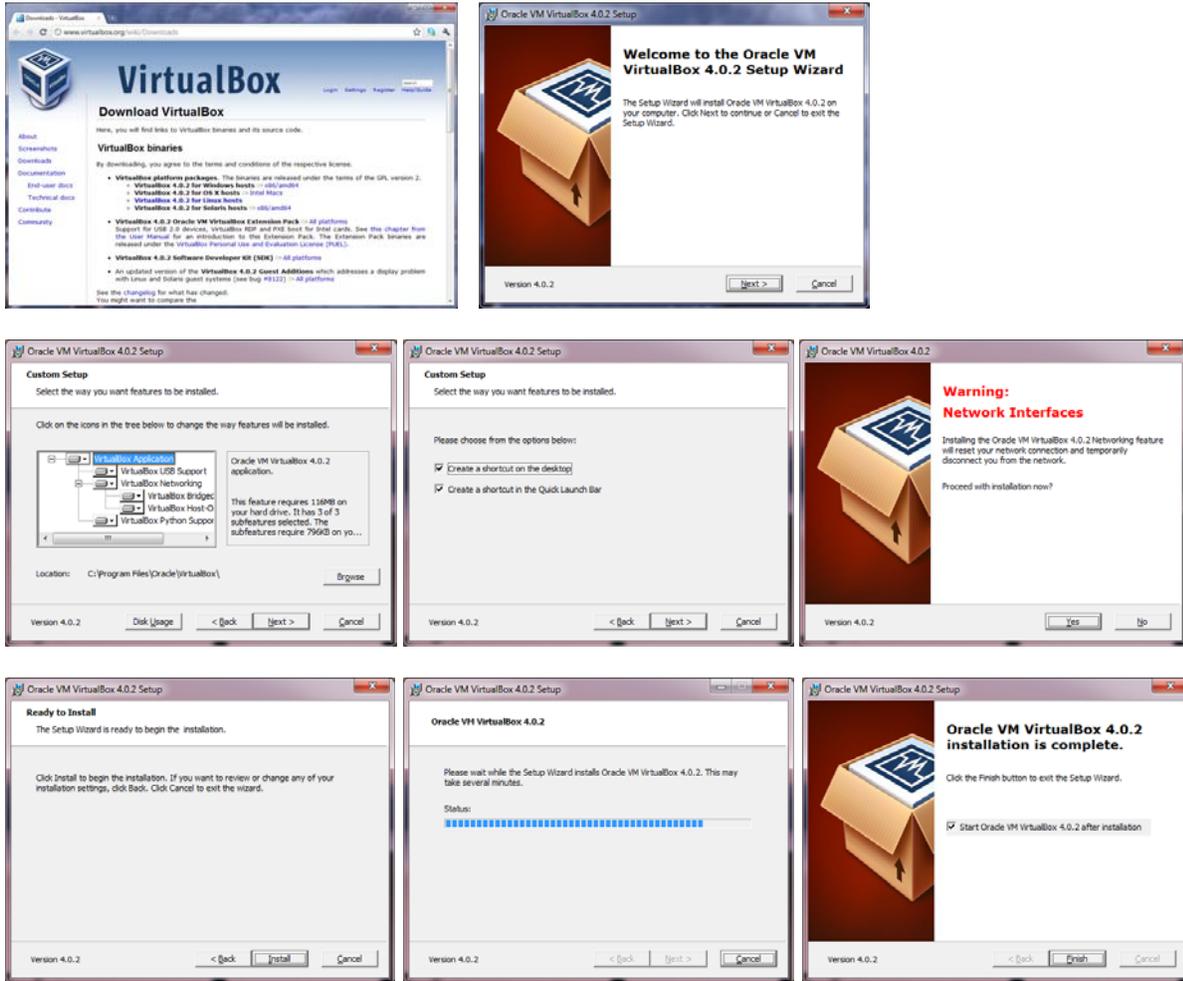
USB thumb drive option:

The 10 CIS-Lab-XX stations in the CIS lab all have the Eko VM installed. Locate the file *90-eko-master.vdi* on the *D:* drive in the folder *D:\cis90\VirtualBox\HardDisks* and copy this file to your USB drive.



Step 2 - Install VirtualBox

Download and install version 4.0.2 or higher using the link above. You can take all the defaults for the installation.



Step 3 - Create a new Eko VM

a) Clone a new unique hard drive (optional)

If you plan to make more than one VM from the Eko hard drive file you will need to do this step for each additional VM you create. This step makes a new hard drive with unique UUID's.

Bring up a DOS command box (*Start > Run > cmd*) then use the **vboxmanage clonevdi** command to make a new unique hard drive file from the hard drive file you obtained earlier.

The example below shows cloning a hard drive file named 90-eko-master.vdi that has been placed in the V:\VirtualBox\HardDisks\ folder. The new hard drive file will be named eko.vdi and go into the same folder.

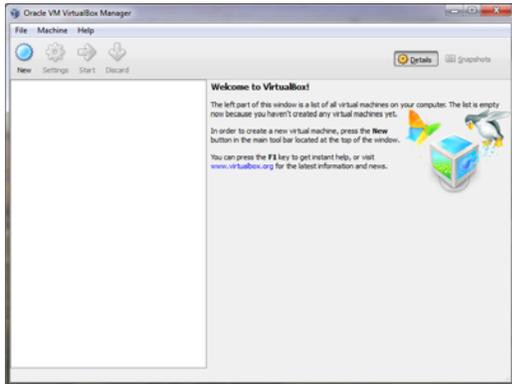
```
cd "c:\Program Files\Oracle\VirtualBox"  
vboxmanage clonevdi v:\VirtualBox\HardDisks\90-eko-master.vdi v:\VirtualBox\HardDisks\eko.vdi
```

0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Clone hard disk created in format 'VDI'. UUID: e20ceb11-b81e-4c6a-9a01-b68763e92bd4

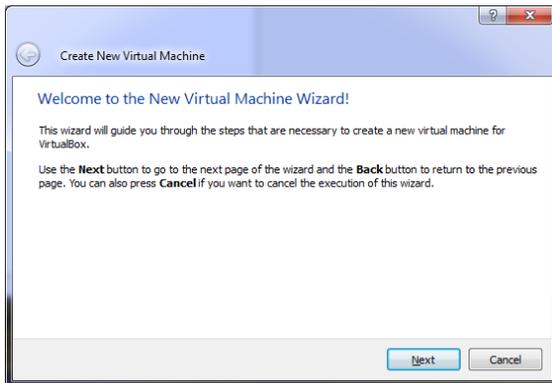
Note, the names and locations of your hard drive files may differ from this example.

b) Create a new VM using the hard drive

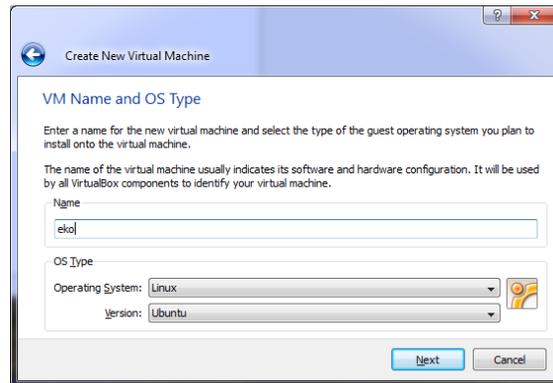
Click the New button to create a new VM



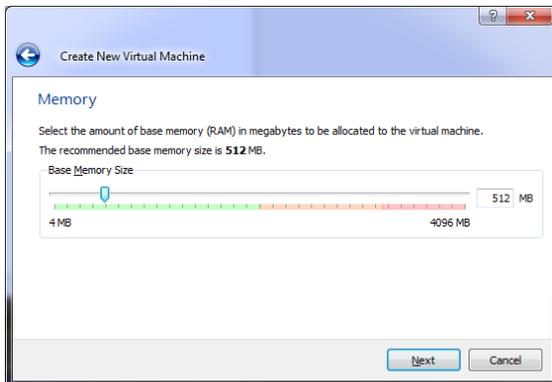
Use the wizard to create a new VM named eko, for Ubuntu Linux, with 512MB RAM and use the new drive we just obtained or cloned.



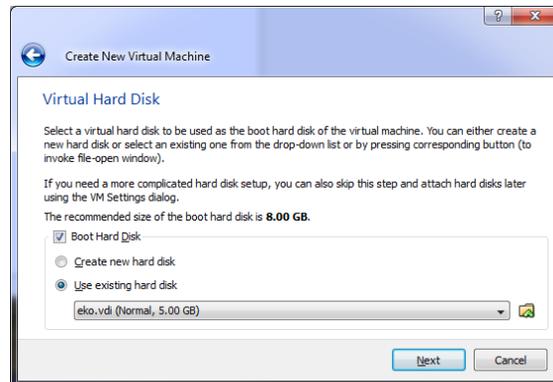
Start here



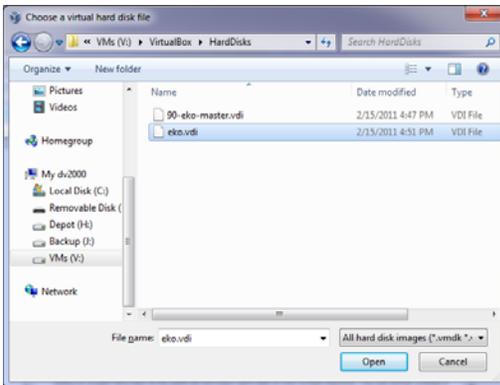
Name=eko, OS=Linux, Version=Ubuntu



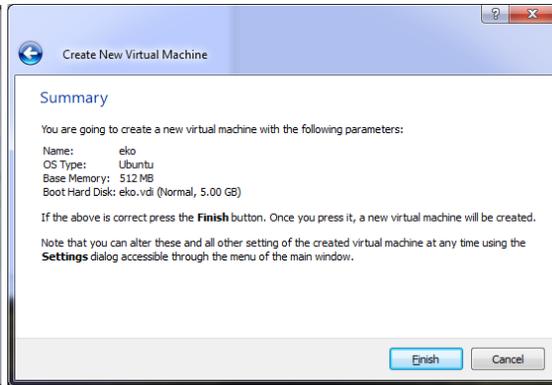
Take the default (512 MB)



Use the hard drive file you obtained earlier (browse to the location of this file)



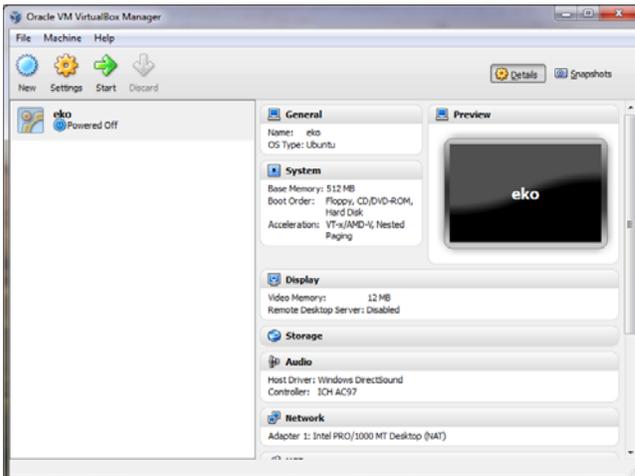
Selecting the hard drive file



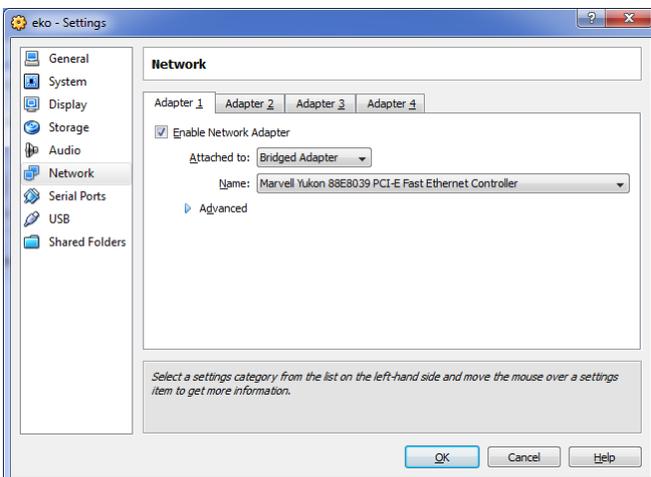
Review then create

c) Configure the VM's NIC for Internet access

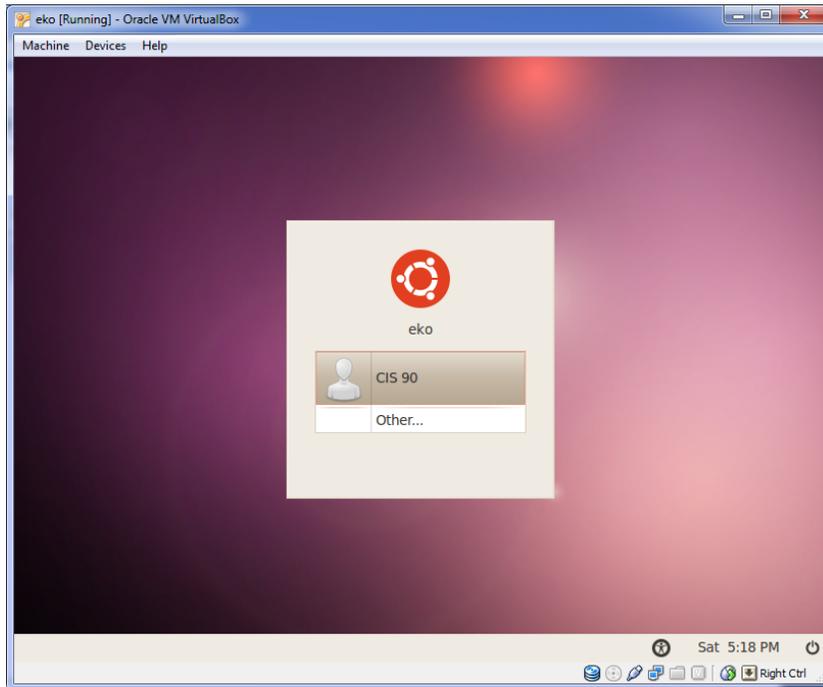
On the Details tab, click on Network



Select *Bridged Adapter* to allow the VM to use your computer's network interface controller then click OK.



You now have your own Eko Linux computer on your home computer. Click the Green Start arrow to fire it up!



If your mouse ever gets "stuck" inside the VM, just press the Right Ctrl key to release it.