



## Bringing the Eko VM Home (202)

This Howto shows how to install VirtualBox and transfer the Linux Eko VM that is 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 fast PC at home
  - 2+ GB memory recommended
  - 5 GB free disk space minimum
  
- VirtualBox 3.2.6 or later
  - <http://dlc.sun.com/virtualbox/vboxdownload.html>
  
- The hard drive file for Eko
  - available on any of the CIS-Lab-XX stations in the CIS Lab
  - the filename is 90-eko-master.vdi
  - located on the D drive (D:\cis90\VirtualBox\HardDisks)
  
- USB drive (to transport the VM)
  - 4+ GB required

### Overview

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

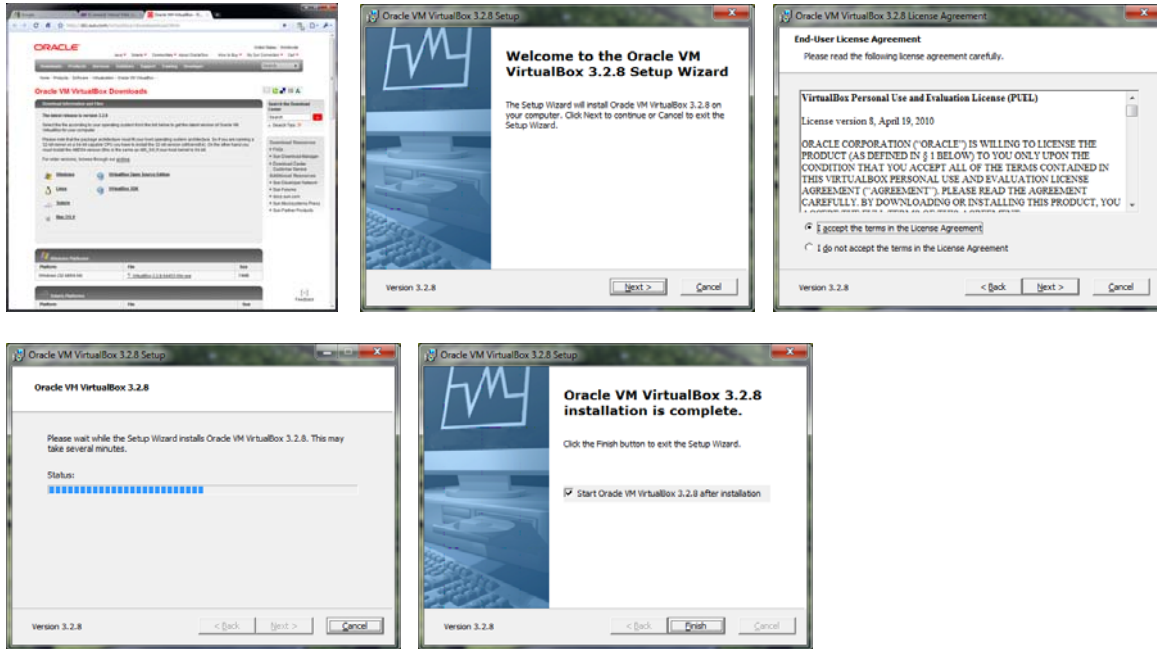
The steps involved to bring the Eko VM home from school are:

1. At home, install VirtualBox
2. At school, obtain the Eko VM hard drive file
3. At home, create a new Eko VM
  - a. Clone a new unique drive
  - b. Add the new hard drive into VirtualBox
  - c. Create a new VM using the new hard drive
  - d. Configure the VM's NIC for Internet access

### Step 1 - At home, install VirtualBox

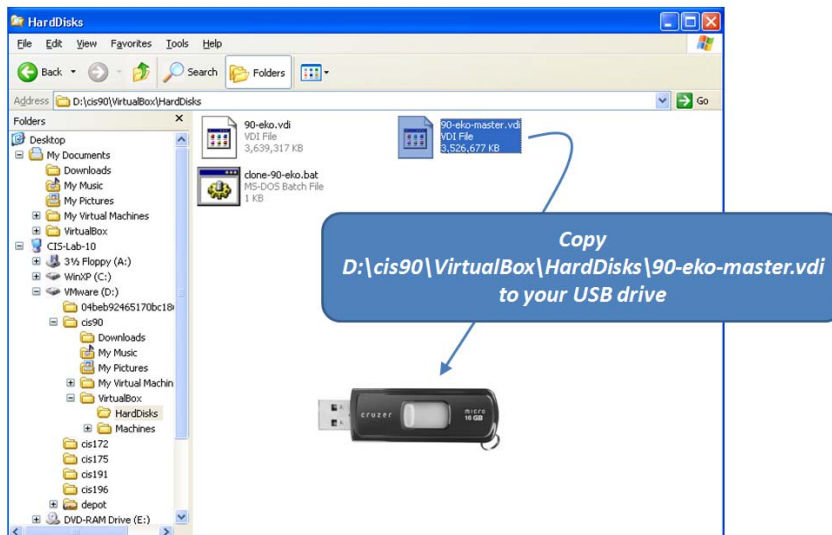
Download and install version 3.2.6 or higher using the link above. You can take all the

defaults for the installation.



## Step 2 - At school, obtain the Eko VM hard drive

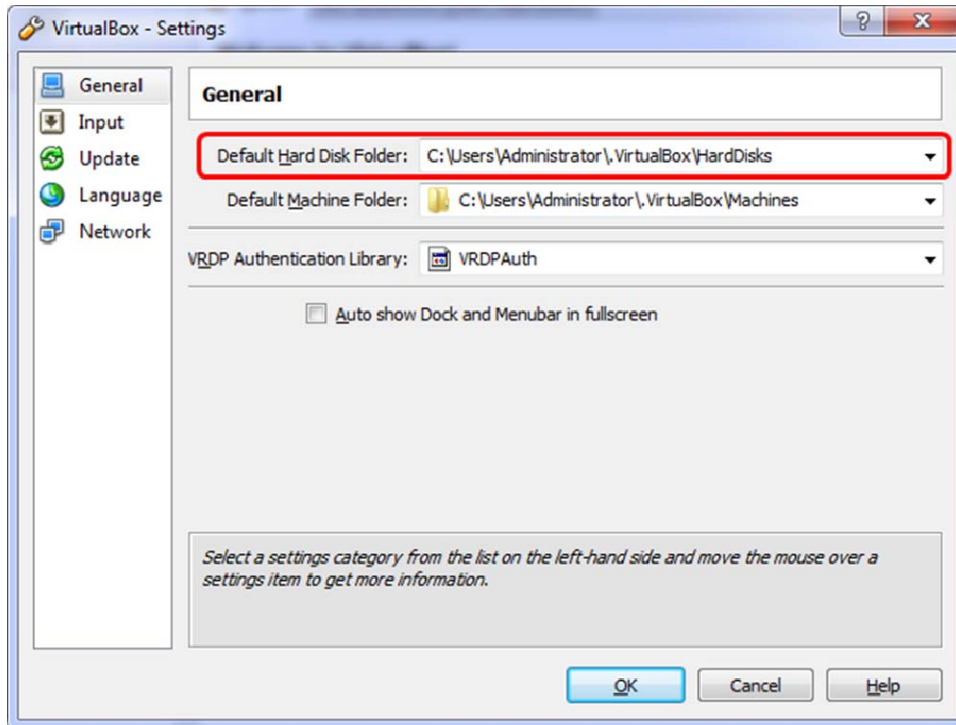
The 24 stations in the classroom (Room 2501) and the 10 CIS-Lab-XX stations in the CIS lab (Building 1400) all have the Eko VM installed. Locate the file *90-eko-master.vdi* on the *D:* drive in the folder *D:\cis90\VirtualBox\HardDisks* and copy this file to your USB drive.



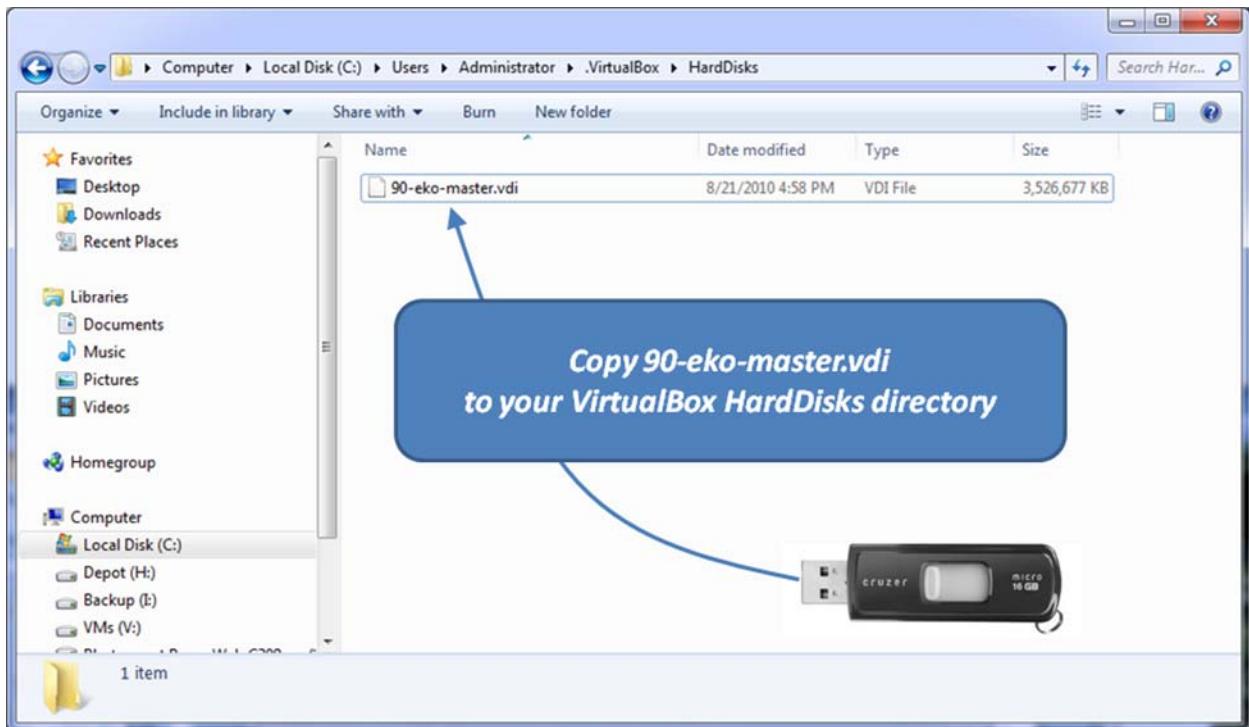
## Step 3 - At home, create a new Eko VM

Copy the *90-eko-master.vdi* file from your USB drive to the location on your home computer containing hard drives for VirtualBox. If you don't know where this is, run VirtualBox and

on the menu select *File > Preferences*. Stretch the VirtualBox – Settings window so you can see the full path to the *HardDisks* folder.



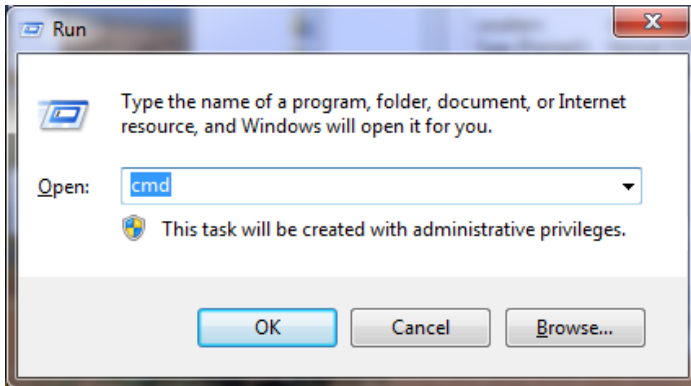
Next copy the *90-eko-master.vdi* file from your USB drive to your *HardDisks* folder. If you have not created any new VMs yet you will need to manually make this folder.



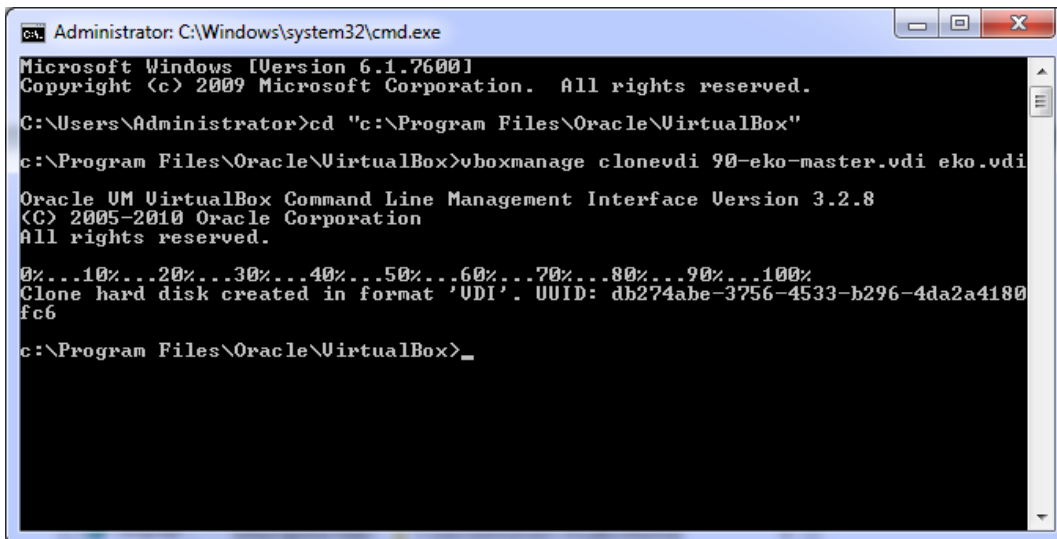
### a) Clone a new unique hard drive

This step makes a new hard drive with unique UUID's using the hard drive you got at school. There may be a easier way to do this but this is still the fastest way I've found. You must bring up a DOS command box (*Start > Run > cmd*) then type the following two commands:

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



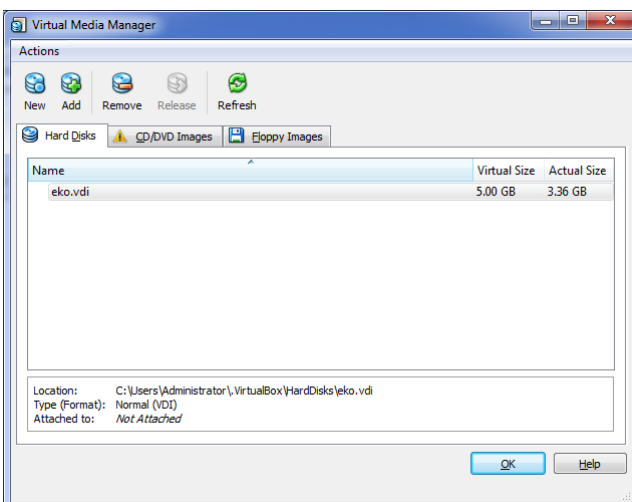
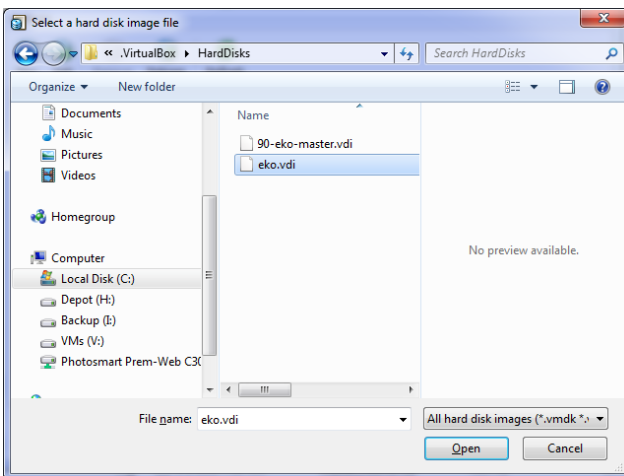
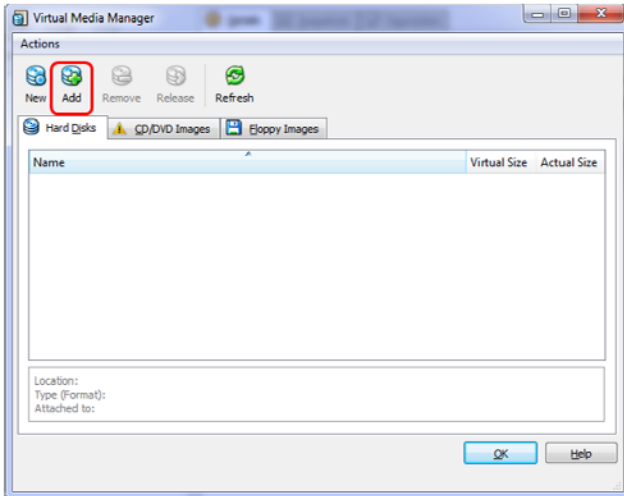
Use Tab completes to simplify typing the first command. For example, type *cd c:\pro* then press the tab key after typing the *o* of *pro*)



This creates a new hard drive file, *eko.vdi*, in your *HardDisks* folder.

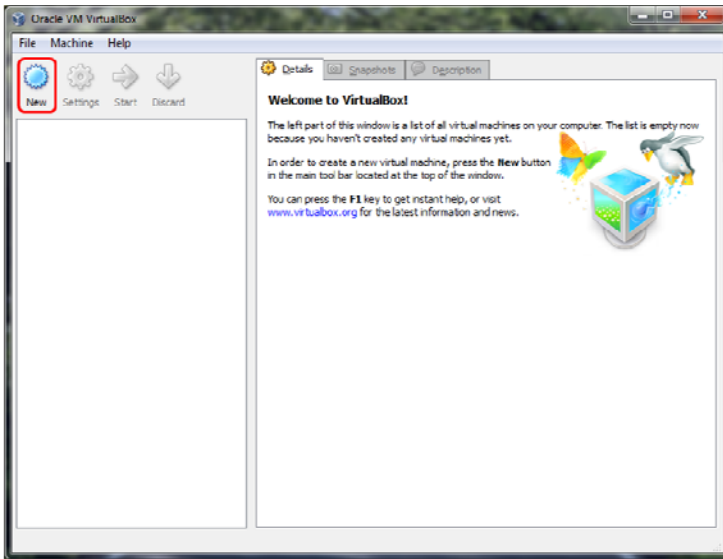
### b) Add the new drive into VirtualBox

VirtualBox has a Virtual Media Manager to keep all your virtual drives, CDs and DVDs in a single repository. From the menu bar, select *File > Virtual Media Manager...*

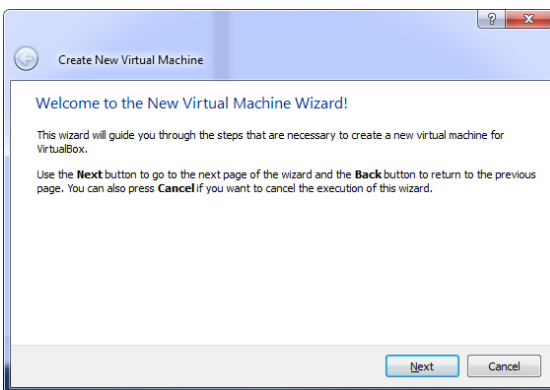


**c) Create a new VM using the hard drive**

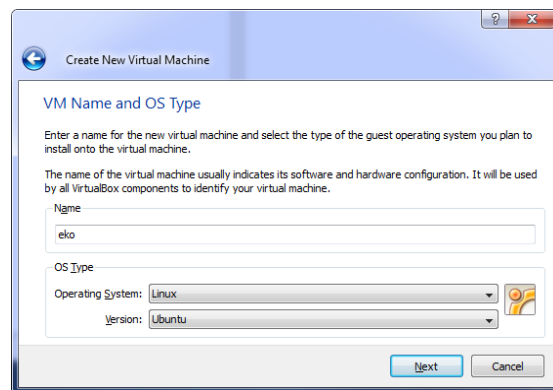
Click the New button to create a new VM



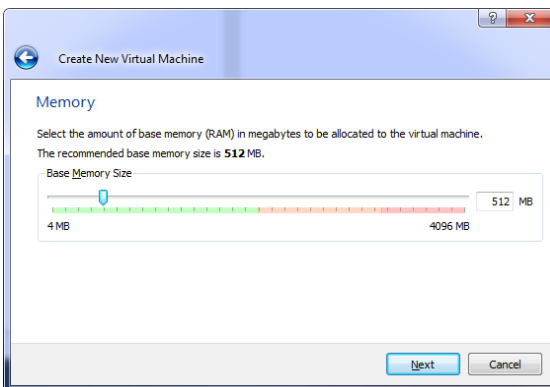
Use the wizard to create a new VM named eko, for Ubuntu Linux, with 512MB RAM and use the new drive we just made (*eko.vdi*)



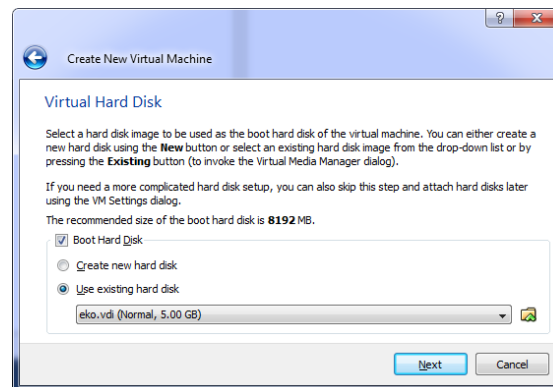
Starts here



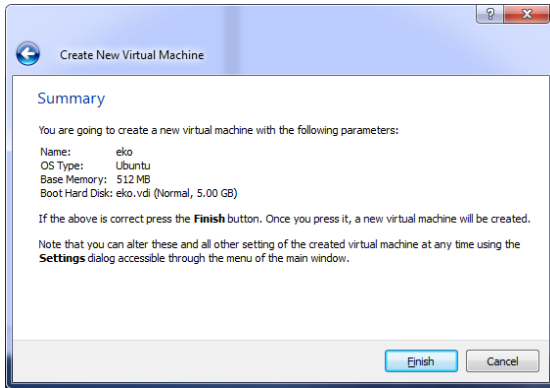
Linux Ubuntu



Take the default

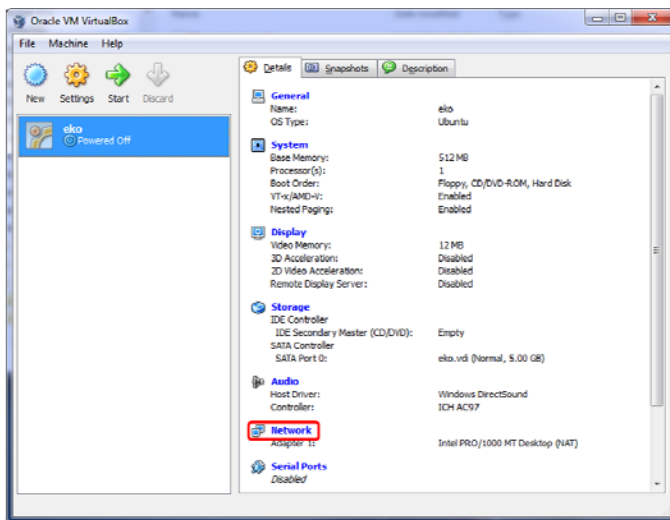


Use existing eko.vdi drive

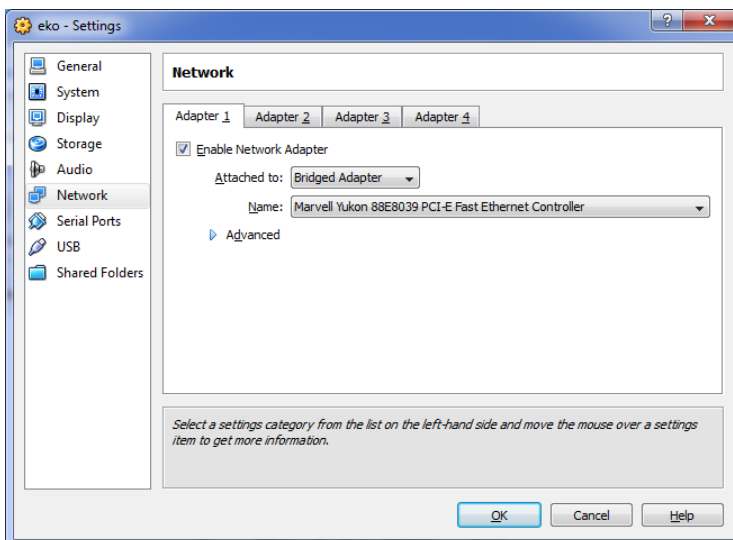


#### d) Configure the VM's NIC for Internet access

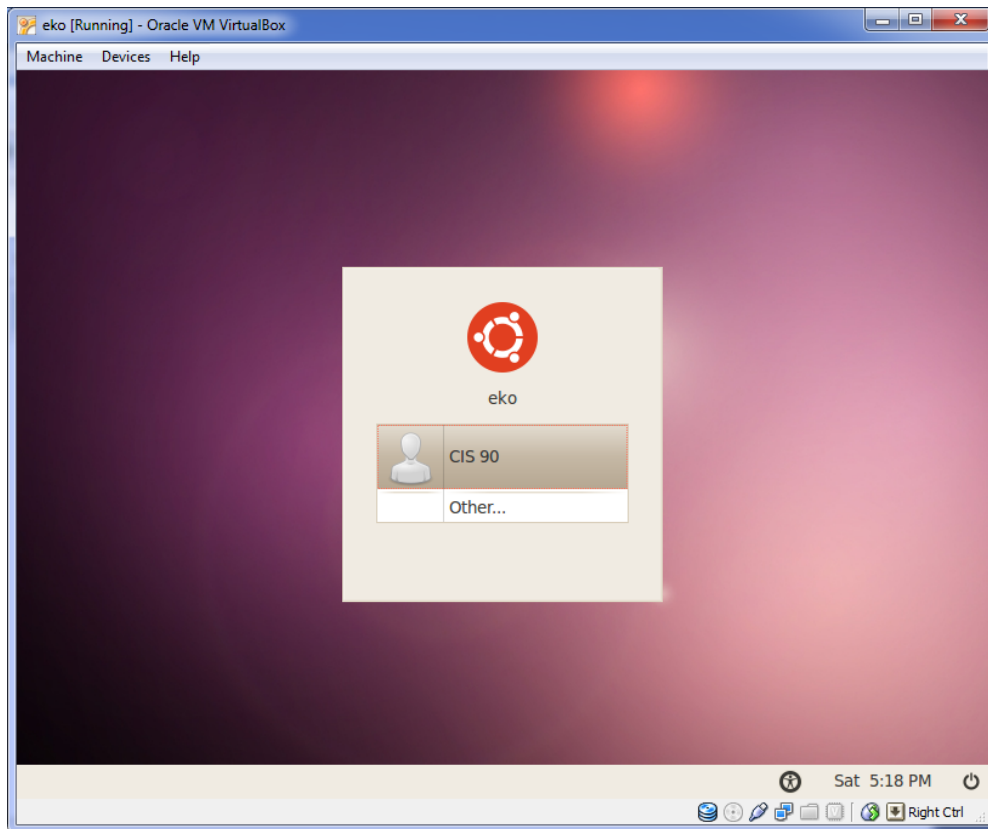
On the Details tab, click on Network



The select *Bridged Adapter* to allow the VM to share the network interface used by your physical computer then click OK.



You now have your own Linux computer on your Windows 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.