VirtualBox on iMac

I tried to use VirtualBox on iMac to run a guest Ubuntu 11.04. Thus I can access a ext4 USB hard-disk.

I met some difficulty and here is some note about how I fixed them.

**Does not recognize the USB device.**

Workaround in short: **Set the virtual machine to have 1 CPU.**

Some details (**Ref**):

1. Configure VirtualBox to have only one CPU
2. Add a new usb filter so that Virtualbox grabs external hard disk before Apple OS X
3. Boot the guest Ubuntu. Monitor the syslog file to find out the USB device name: tail -f /var/log/syslog
4. Connect the USB disk to you iMac (In my case the device name was sdb2 from the log above)
5. `sudo mount /dev/sdb2 /mnt`

When I configured the guest to have 4 CPUs, I got such errors in the syslog when I connect the USB disk:

```
May 20 16:18:29 as43-VirtualBox kernel: [ 1600.516186] usb 1-1: new high speed USB device using ehci_hcd and address 6
May 20 16:18:44 as43-VirtualBox kernel: [ 1615.680173] usb 1-1: device descriptor read/64, error -110
May 20 16:18:59 as43-VirtualBox kernel: [ 1630.948179] usb 1-1: device descriptor read/64, error -110
May 20 16:19:00 as43-VirtualBox kernel: [ 1631.200204] usb 1-1: new high speed USB device using ehci_hcd and address 7
May 20 16:19:15 as43-VirtualBox kernel: [ 1646.372240] usb 1-1: device descriptor read/64, error -110
May 20 16:19:30 as43-VirtualBox kernel: [ 1661.636297] usb 1-1: device descriptor read/64, error -110
May 20 16:19:30 as43-VirtualBox kernel: [ 1661.888269] usb 1-1: new high speed USB device using ehci_hcd and address 8
May 20 16:19:35 as43-VirtualBox kernel: [ 1666.940269] usb 1-1: device descriptor read/8, error -110
May 20 16:19:41 as43-VirtualBox kernel: [ 1672.061160] usb 1-1: device descriptor read/8, error -110
May 20 16:19:41 as43-VirtualBox kernel: [ 1672.320260] usb 1-1: new high speed USB device using ehci_hcd and address 9
May 20 16:19:46 as43-VirtualBox kernel: [ 1677.353219] usb 1-1: device descriptor read/8, error -110
May 20 16:19:51 as43-VirtualBox kernel: [ 1682.472212] usb 1-1: device descriptor read/8, error -110
May 20 16:19:51 as43-VirtualBox kernel: [ 1682.576327] hub 1-0:1.0: unable to enumerate USB device on port 1
```

But after I reconfigure the virtual box to only have one CPU, the problem was just gone.

**Desktop resolution (Installing Guest Additions)**

By default the resolution only went to as higher as 1024 x 768, and the Unity desktop environment does not work.

Solution in short: Install Guest additions, Enable 3D of the VirtualBox settings.

**REF**

Some details:

1. `apt-get install dkms`

2. Start the virtual machine. Select "Install Guest Addtions" from the "Devices" menu in the virtual machine's menu bar.
3. In the guest Linux, a CD will mount and autorun. Follow the instructions.
   You can also install the virtualbox-ose-guest-x11 package from the Ubuntu package manager but it's better to install the Guest Addition from the VirtualBox tool itself.

**Use Shared Folders (**ref**)**

1. You can add shared folders and give each of them a name from the settings of the VirtualBox or from a folder icon at right bottom of the virtual machine window.
2. in the guest Linux, use mount command to mount the folder: `sudo mount -t vboxsf sharename /mnt`