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`