

# Run a Virtual Machine

# Virtualization

Have you ever *imitated* someone else?

That's because your mind is thinking/*imagining* as that person

Same to a Computer:

We can run another system inside a system

*i.e.* Run Windows in Ubuntu/ Run a Ubuntu in Windows

Computer can *virtualize* hardware and have a new system installed on it. We call this new system *Virtual Machine*

- *portable*
- *no hassle*

# Need a virtualization software

Only a virtualization software can "imitate" the hardware. It manages the Virtual Machines, so we normally call it virtual machine manager.

## Open-Source virtualization software



VirtualBox

## Commercial virtualization software



VMware workstation

**\$189**+tax

# Why not use a free one?

- Download at <http://www.virtualbox.org/wiki/Downloads>

Windows(.exe)

Click "VirtualBox 4.0.2 for Windows hosts [x86/amd64](#)"

Ubuntu(.deb)

Click "VirtualBox 4.0.2 for Linux hosts"

Click "Ubuntu 10.04 LTS("Lucid Lynx") [i386](#)"

- Remember where you have saved the software package
- Double click the package and Click "Install package"

or

Go to

System->Administration->Synaptic Package Manager->virtualbox-ose

# Prepare for a VM

- An OS Installation CD or DISC image(.iso)  
Download Linux ISO from <http://mirror.clarkson.edu/distributions.html>
- Enough free disk space on your computer  
At least 8Gigabytes free
- Enough memory on your computer  
Recommend at least 2G for the system, 1G for a VM
- VirtualBox Installed in your system

# Step 1: Create a VM

Go to Applications->System Tools-> Oracle VM VirtualBox

"New"



# Step 2: Specify a VM

Configure a VM's hardware specification

1. Machine name

2. Memory size

At most, half of the physical machine's RAM size

3. Disk size

Less than the free space on the physical machine disk

# Step 2.3.1: Disk Configuration



# Step 2.3.2: Disk Configuration

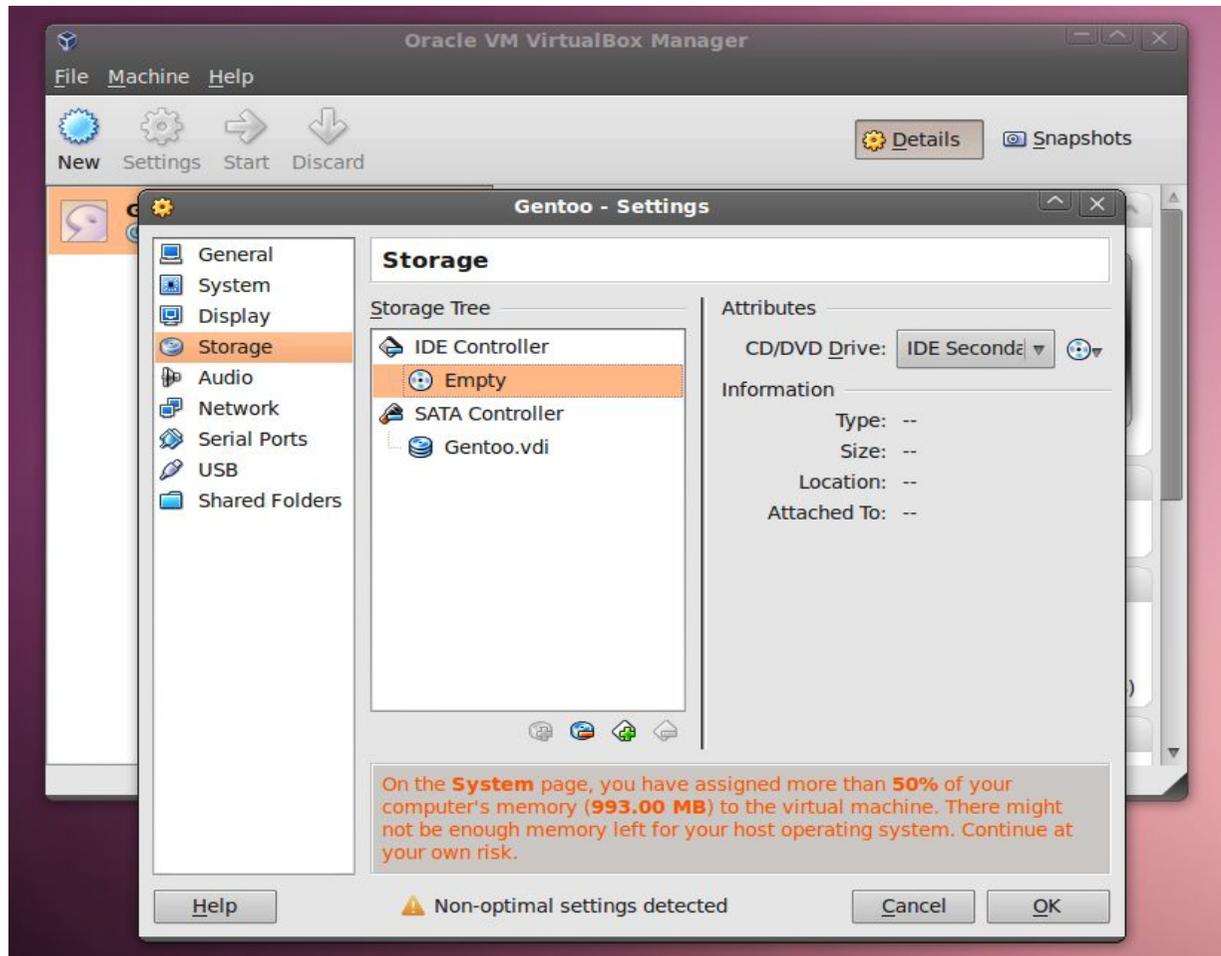


# Step 2.3.3: Disk Configuration



# Step 3: Insert an Installation CD

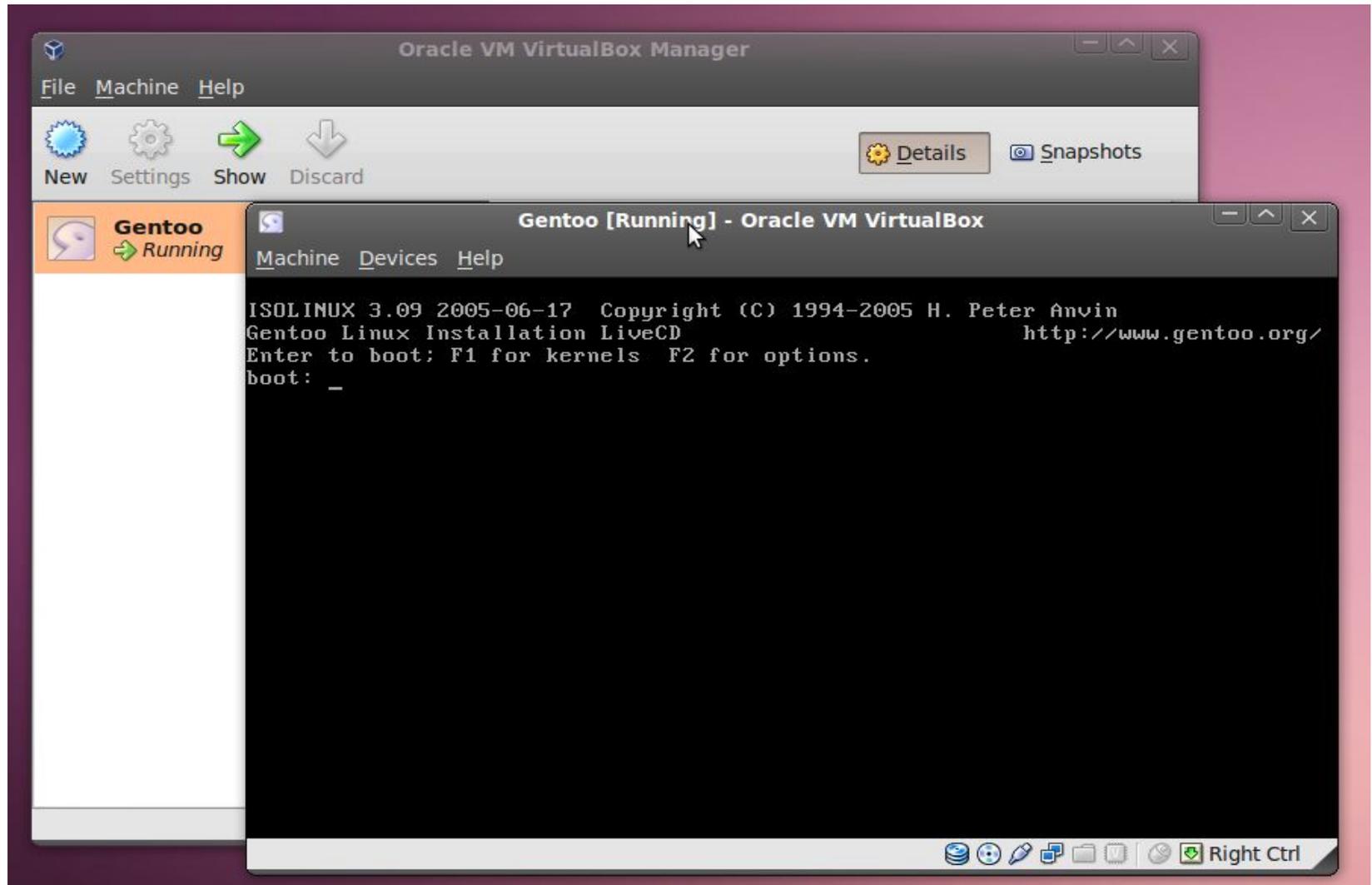
Install a installation disc image (.iso)  
choose a virtual cd/dvd disc file...



OR Insert an installation CD in DVD-ROM

# Step 3: Run a VM

"Start"



Friendly Reminder: *Next time, when you run this VM  
Remember to remove the installation CD/ CD image from the VM*

# Q&A: Manipulate a VM

How to get into a VM?

Click your mouse on the VM screen

How to get out of a VM?

press the key "Ctrl" on the right of the keyboard

How to stop a VM?

Close the window of the VM

# Hooray!

Put this "machine" in your packet!

All the machine files are in

`Places->Home Folder->VirtualBox VMs`