

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

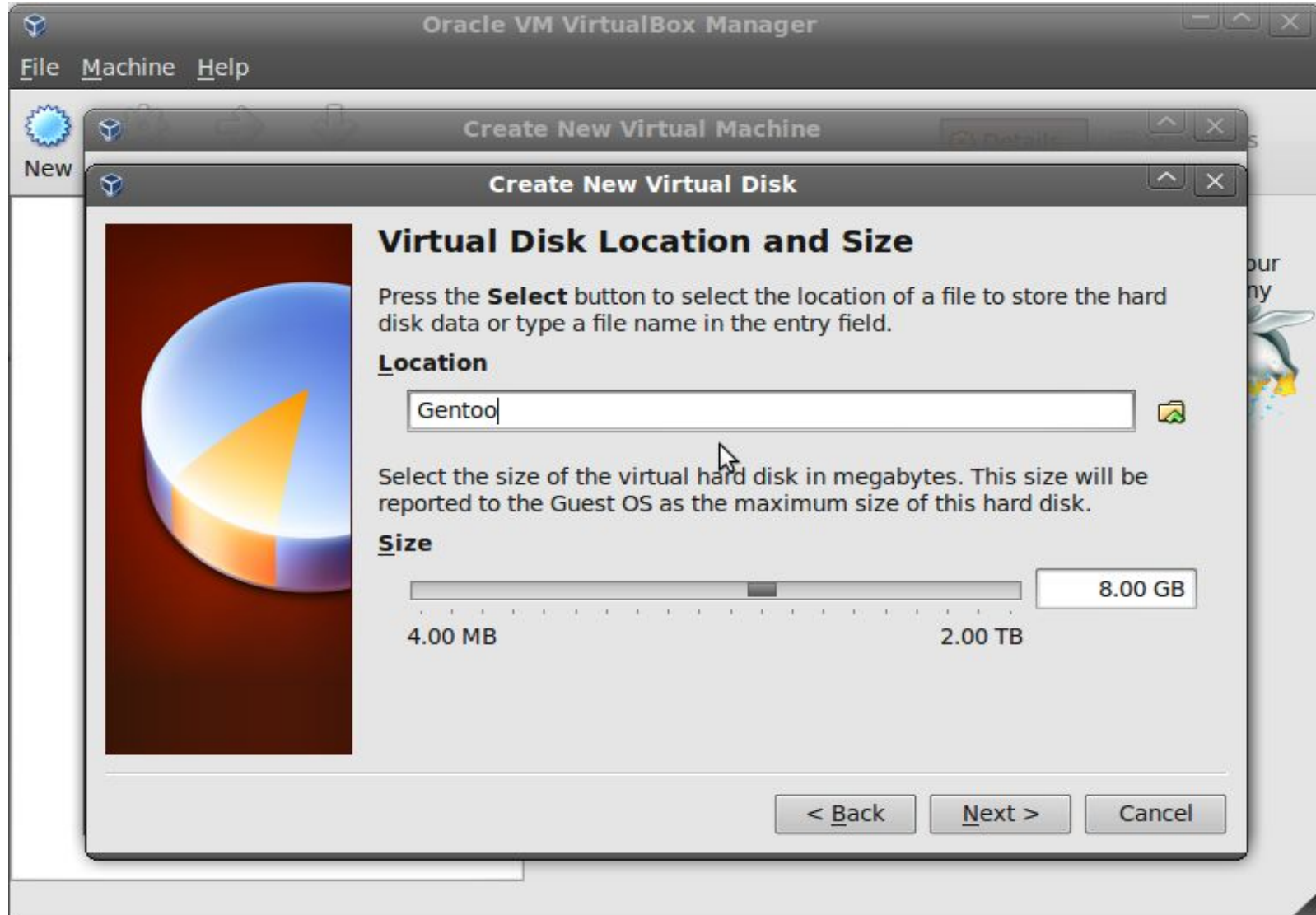
Step 2.3.1: Disk Configuration



Step 2.3.2: Disk Configuration

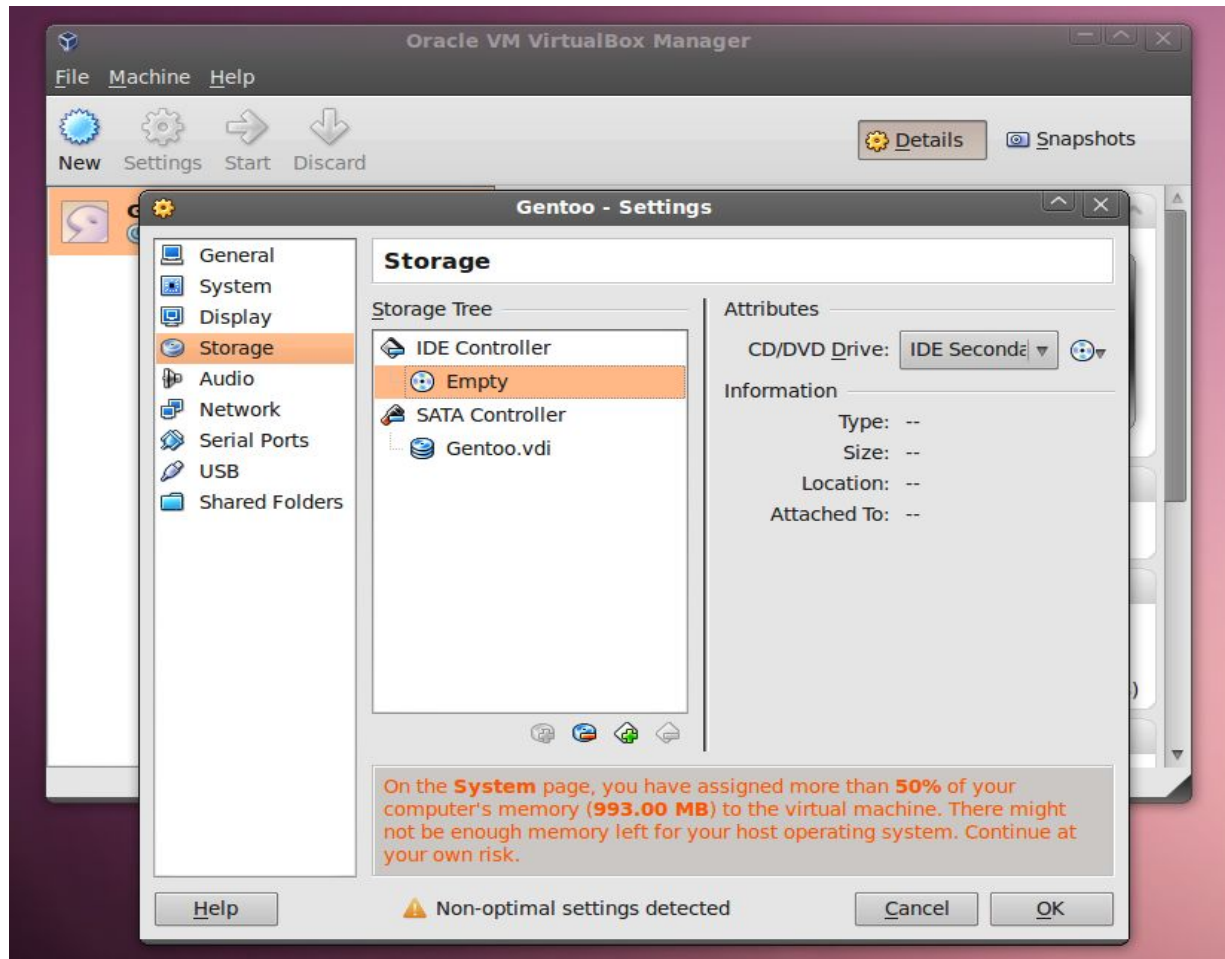


Step 2.3.3: Disk Configuration



Step 3: Insert an Installation CD

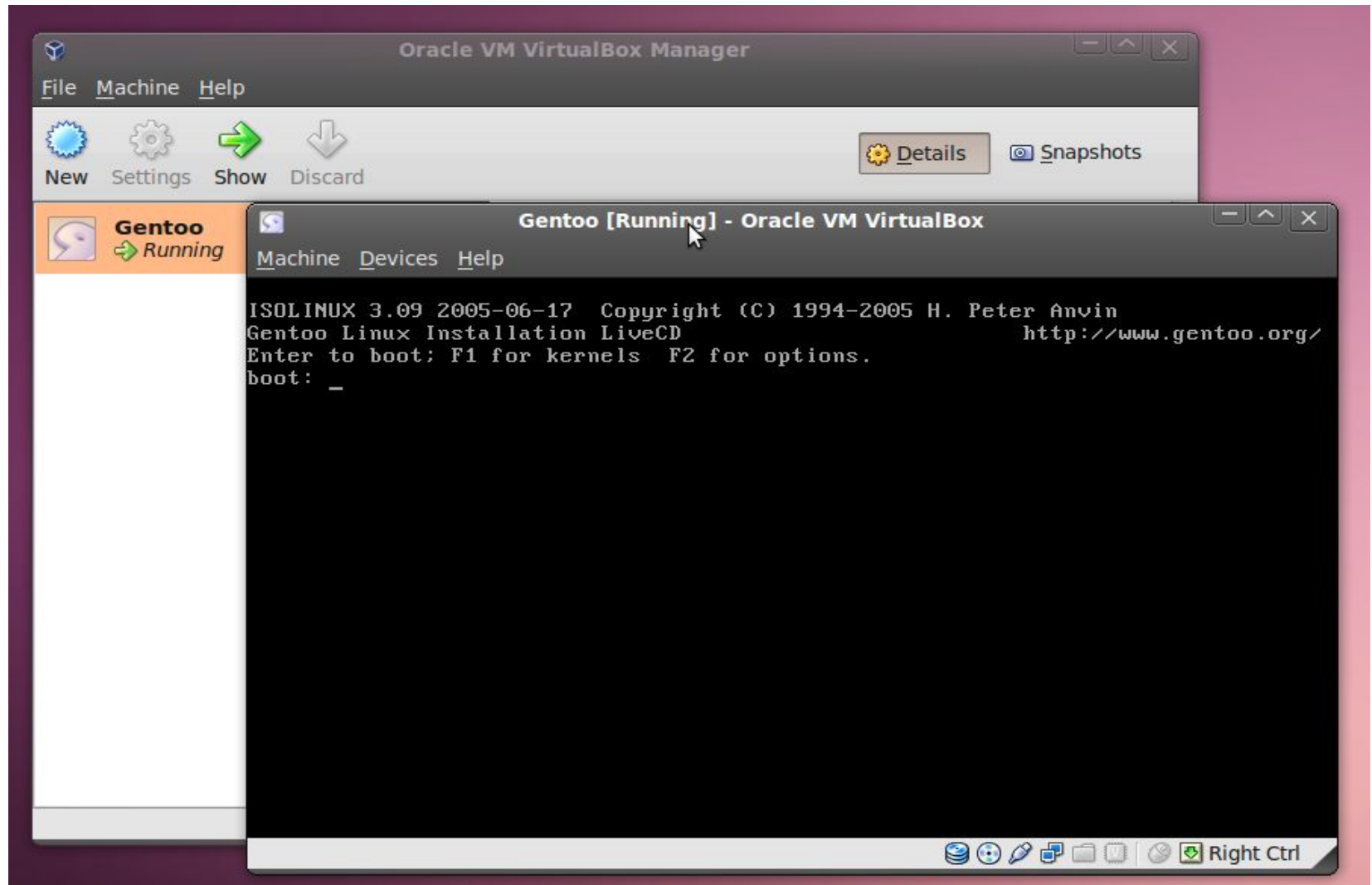
Install a installation disc image (.iso)
choose a virtual cd/dvd disc file...



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`