



K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

Batch: B-1 Roll No.: 1711074

Experiment / assignment / tutorial No. _____

Grade: AA / AB / BB / BC / CC / CD / DD

Signature of the Staff In-charge with date

Batch: B-1 Roll No.: 1711074

Experiment / Assignment / Tutorial No.: 1

Title: Introduction and installation of Linux Operating System.

Objective: Use of VMware for installation of Ubuntu OS.

C01: Understand the fundamentals of Open Source environment

Expected Outcome of Experiment:

1. Understand the fundamentals of network administration with Open source.

Books/ Journals/ Websites referred:

1. <https://help.ubuntu.com/10.04/serverguide/network-configuration.html>
2. <http://www.yolinux.com/TUTORIALS/LinuxTutorialNetworking.html>

Pre Lab/ Prior Concepts:

Ubuntu is a computer **operating system** based on the Debian Linux distribution and distributed as free and open source software, using its own desktop environment.



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Implementation details:

Installation Steps:

INSTALLING WINDOW 7 ON UBUNTU:-

First step is to check whether CPU has hardware virtualization support or not.

It can be done by executing the following command in the terminal:-

sudo grep -c "svm\|vmx" /proc/cpuinfo

If you the output is any positive then the CPU supports virtualization hardware.

Then another important step is to download the KVM software which is done by this command:-

sudo apt-get install qemu-kvm libvirt-bin bridge-utils virt-manager

Once the download is complete user can create a virtual machine manager by executing this command:-

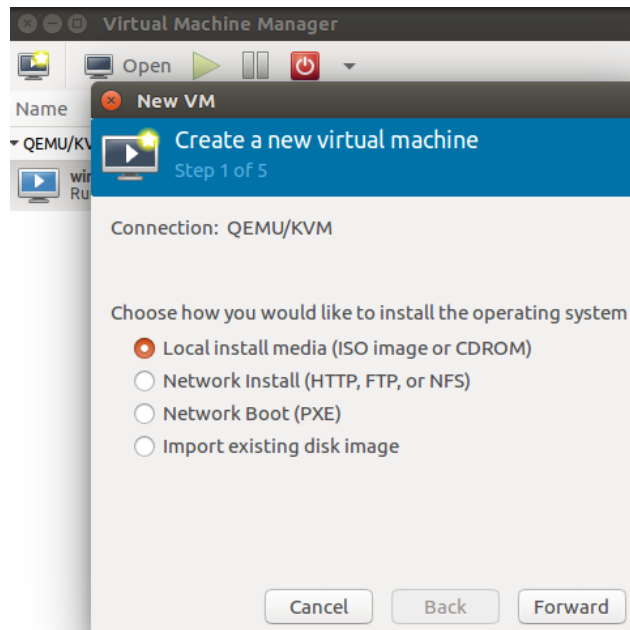
virt-manager

It will open the following GUI:-

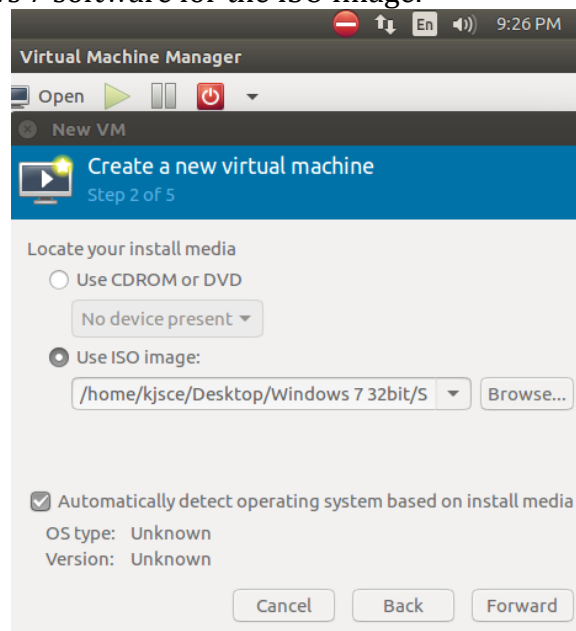
Select Local Install Media

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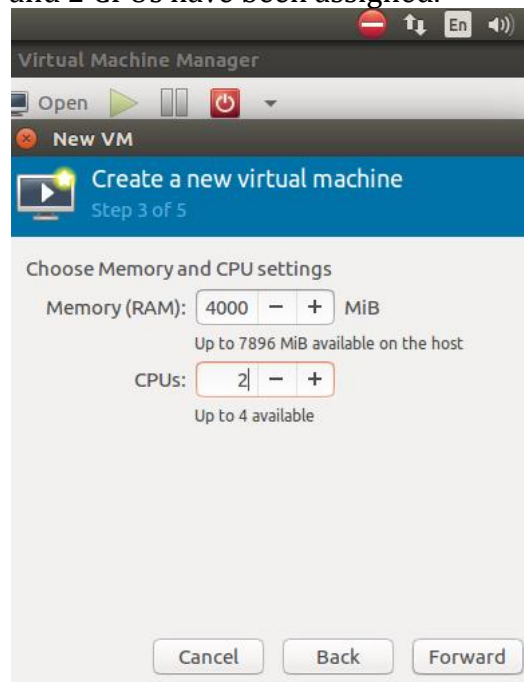
Next upload the windows 7 software for the ISO Image.



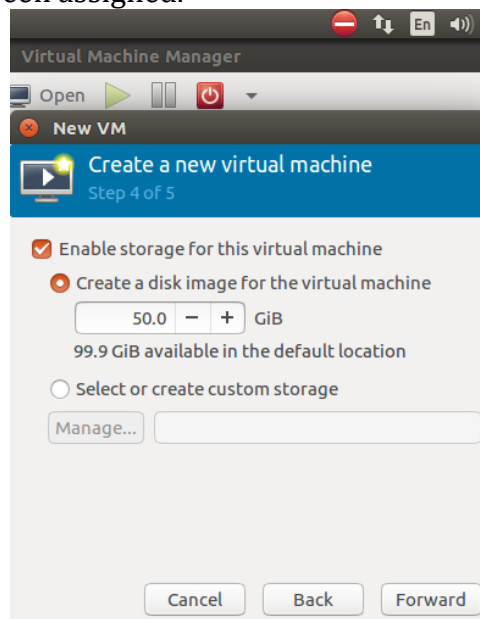
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Assign RAM and memory to the virtual machine.
Here 4000 MB of memory and 2 CPUs have been assigned.



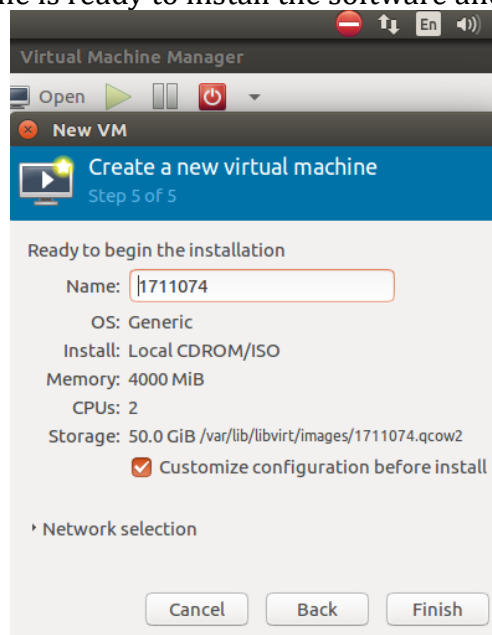
Assign disk storage for the virtual machine.
Here 50 GB of storage has been assigned.



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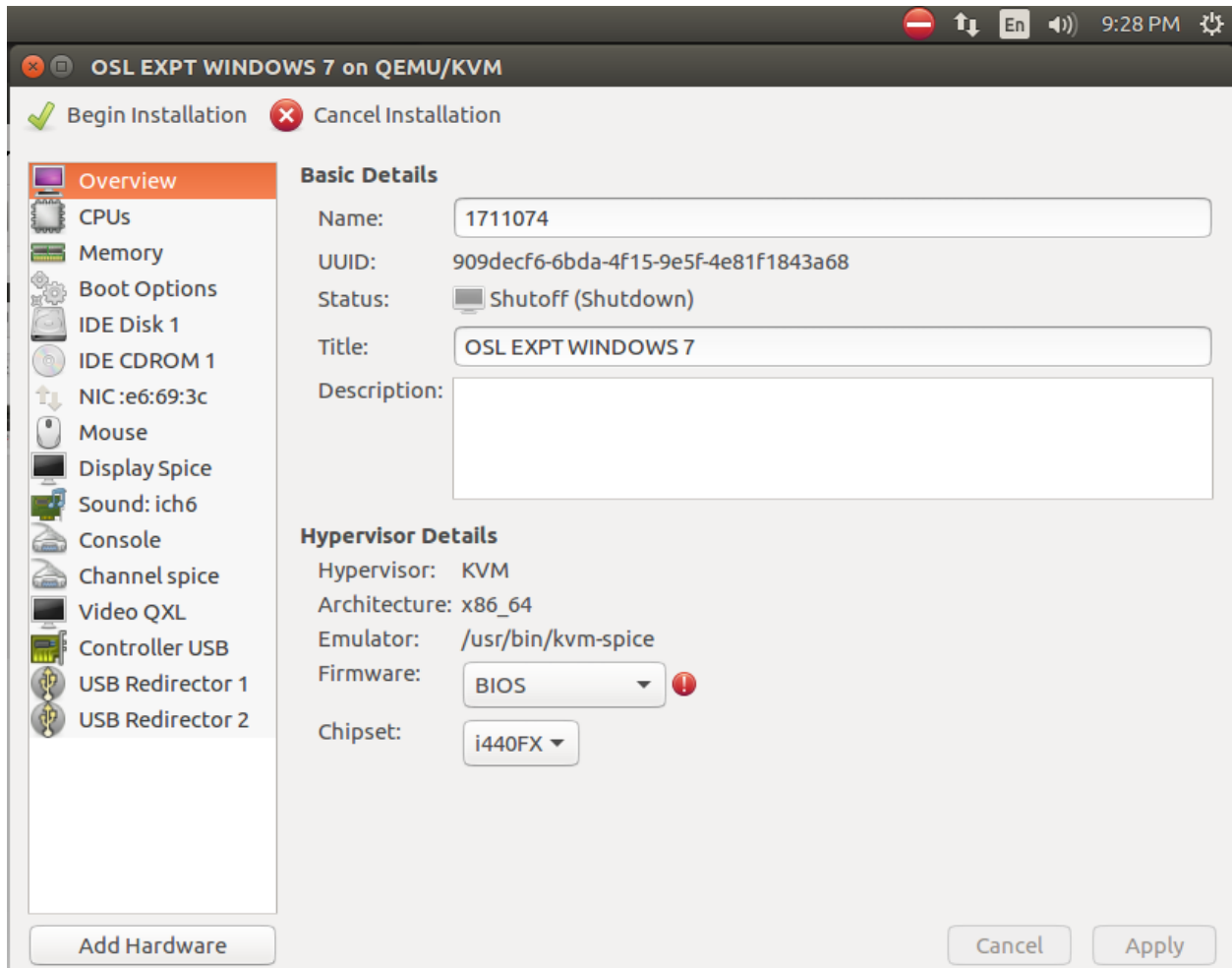
A name has to be assigned to the virtual machine.
And then the virtual machine is ready to install the software and run.



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Here the user can customize the installation and start installation by clicking on the Begin Installation.



OSL EXPT WINDOWS 7 on QEMU/KVM

✓ Begin Installation ✗ Cancel Installation

Overview

- CPUs
- Memory
- Boot Options
- IDE Disk 1
- IDE CDROM 1
- NIC :e6:69:3c
- Mouse
- Display Spice
- Sound: ich6
- Console
- Channel spice
- Video QXL
- Controller USB
- USB Redirector 1
- USB Redirector 2

Basic Details

Name: 1711074

UUID: 909decf6-6bda-4f15-9e5f-4e81f1843a68

Status: Shutoff (Shutdown)

Title: OSL EXPT WINDOWS 7

Description:

Hypervisor Details

Hypervisor: KVM

Architecture: x86_64

Emulator: /usr/bin/kvm-spice

Firmware: BIOS

Chipset: i440FX

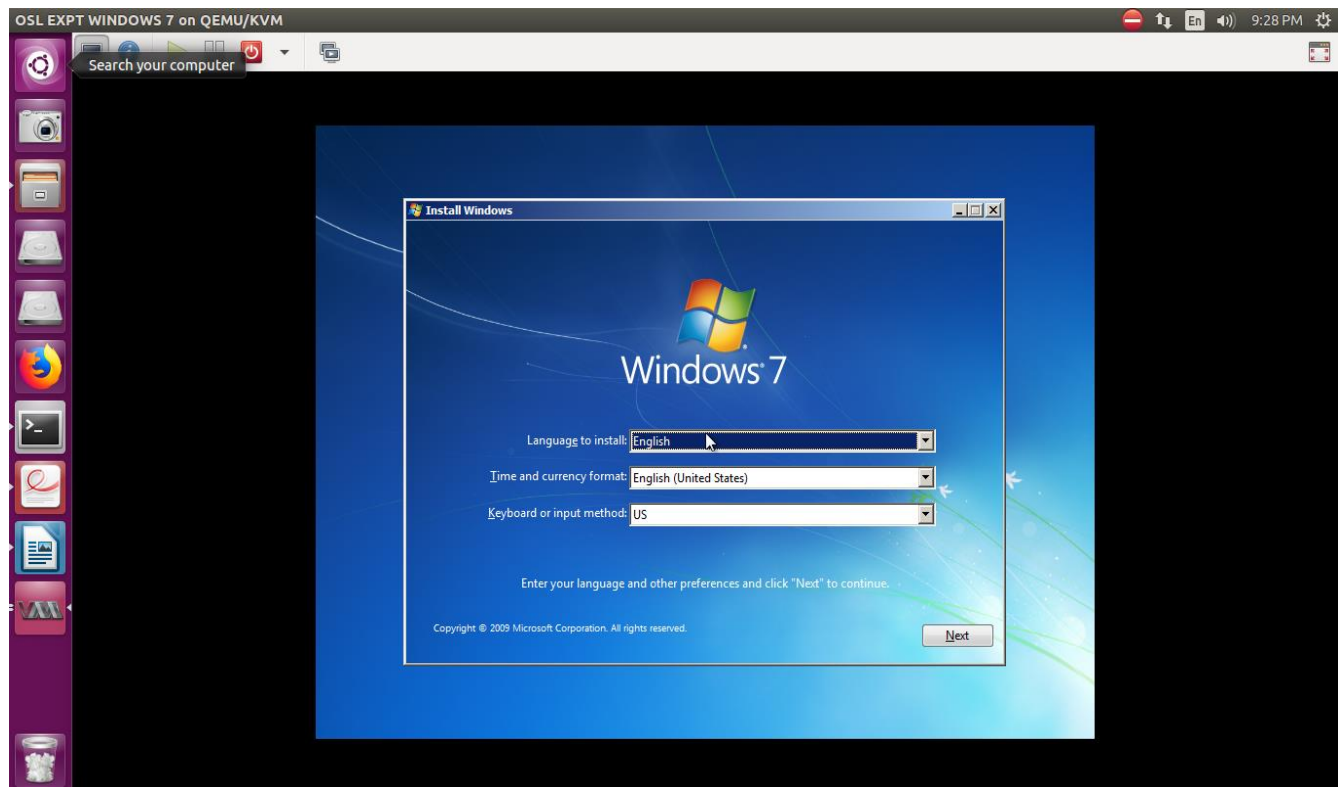
Add Hardware

Cancel Apply

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This page appears after clicking on the above mentioned button.
Enter the Language, Time and Keyboard details and press next.

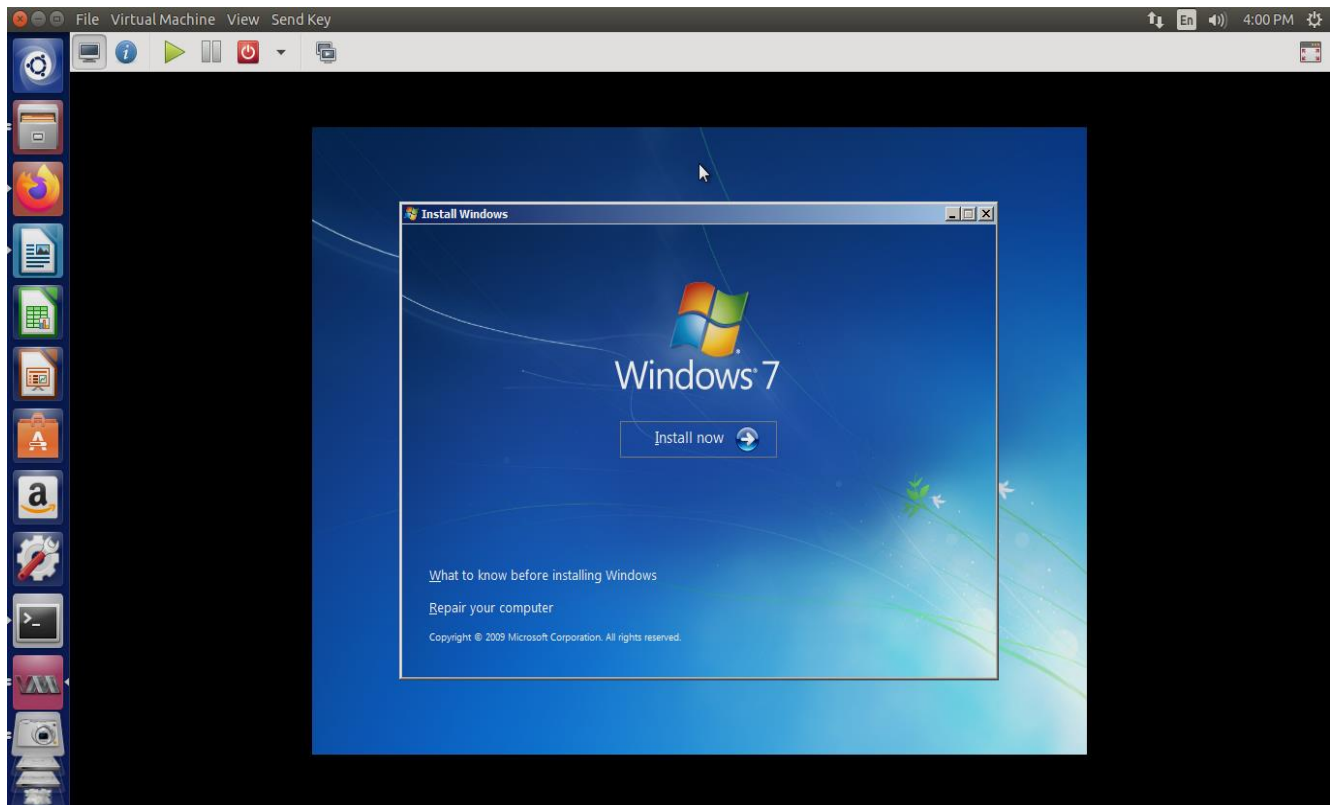


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Now the software is ready to be installed and press Install Now.

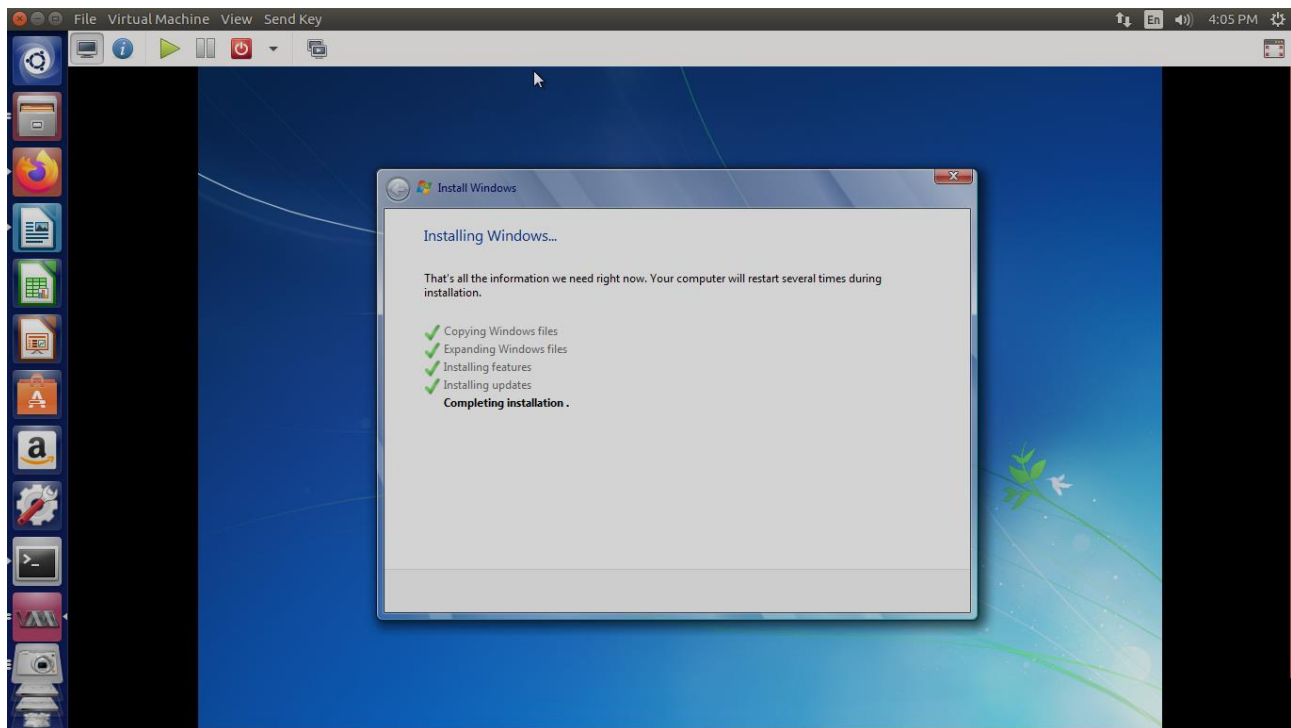
This will start the installation process.



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The following window shows all the software and drivers that are being installed.

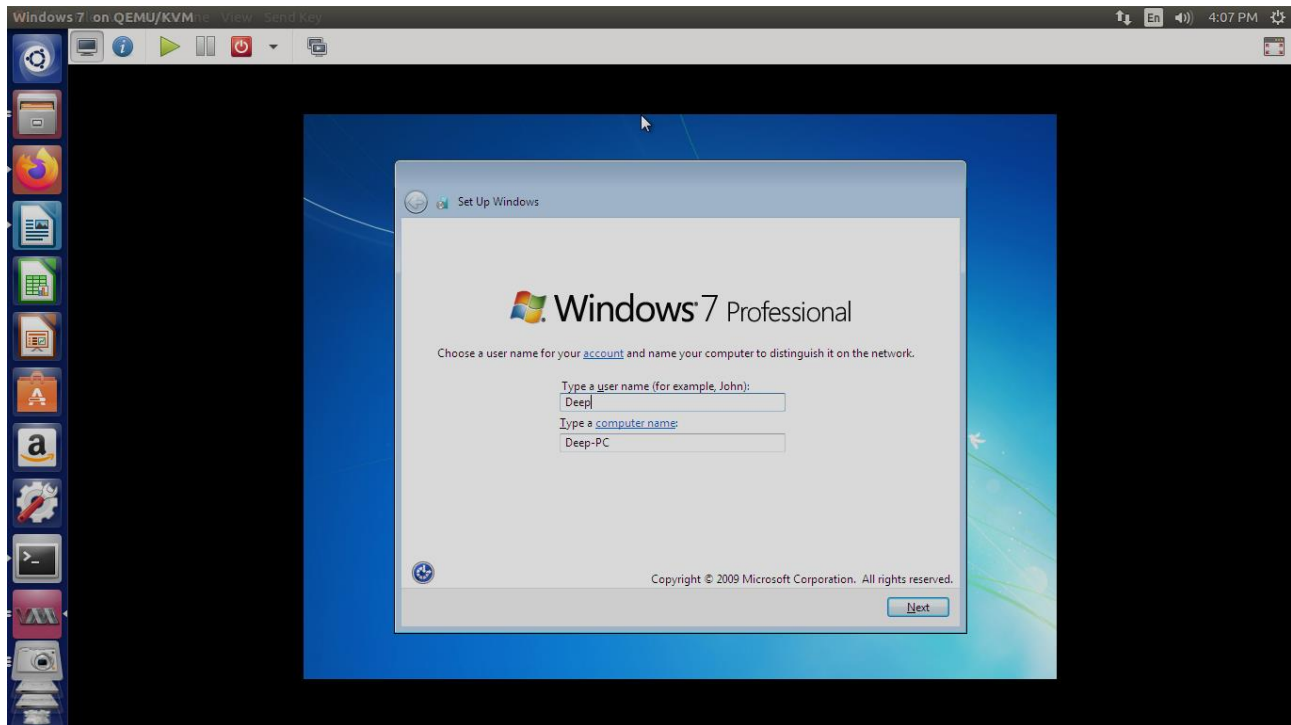




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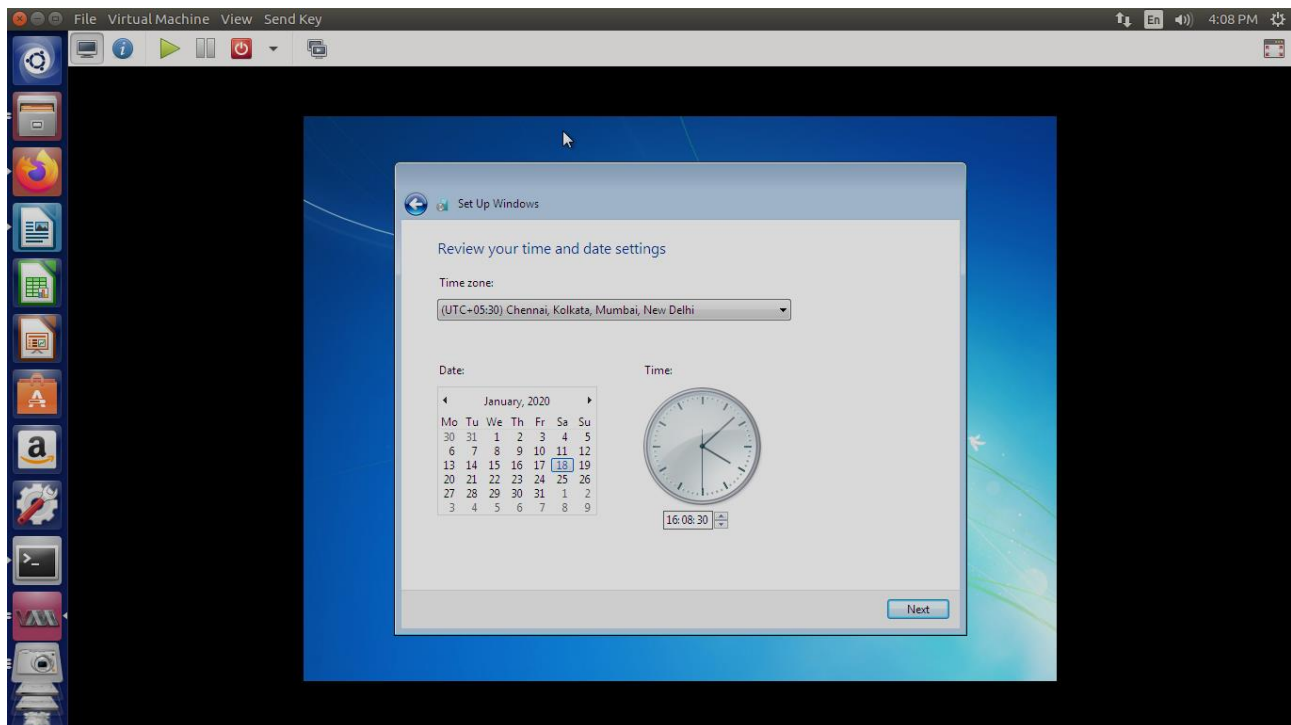
Next step is to select a username for the account you will be creating.
The same name will be applied for the computer name with a -PC appended to it.



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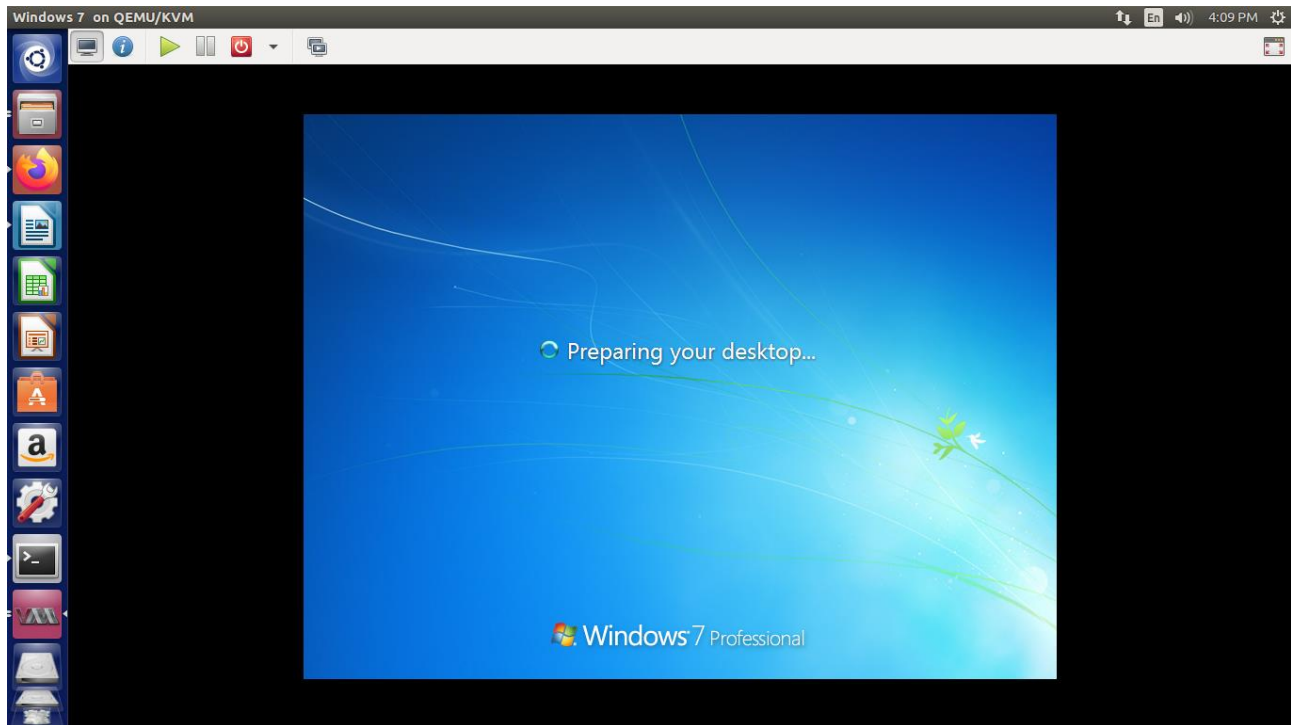
Adjust the time and date settings.
Select an appropriate time zone settings.



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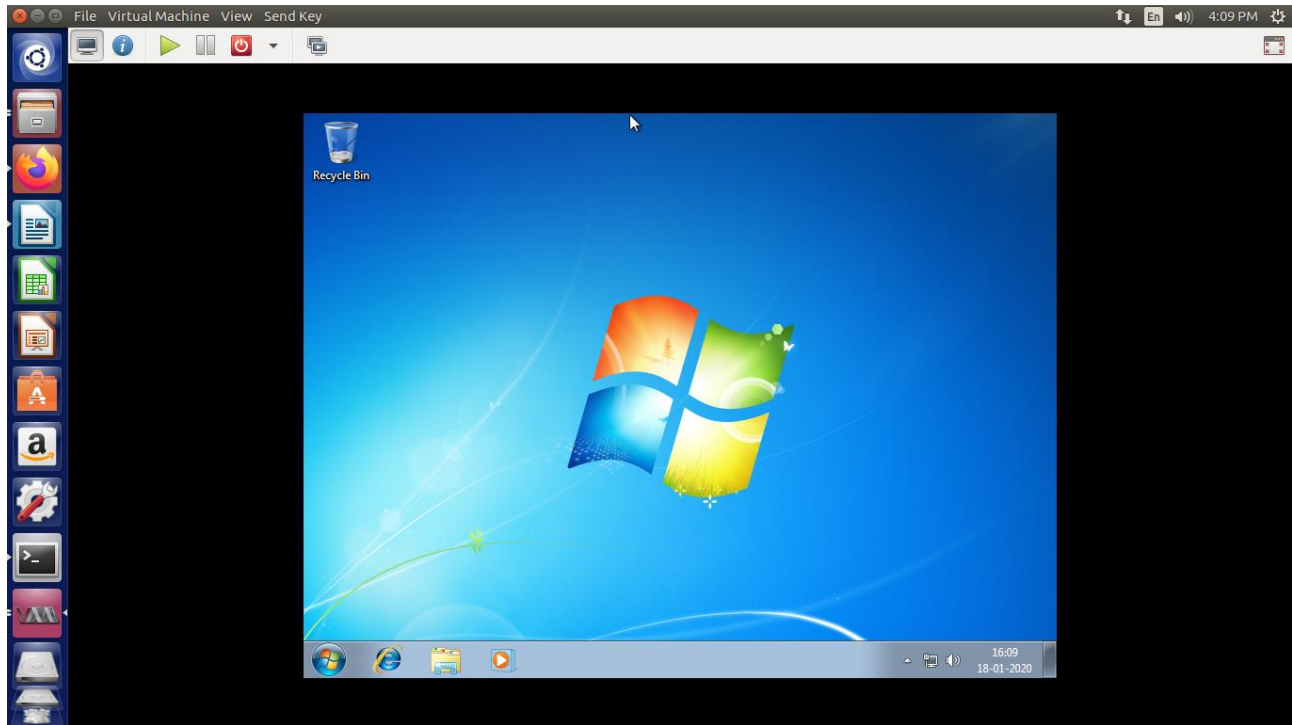
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Now the system is ready to run and the user can use it.



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Conclusion:

Successfully used Oracle VM Box to install Ubuntu OS on a Windows system and KVM to install Windows 7 OS on Ubuntu system.