Exp No: 3 **Date:**

VIRTUALIZATION
INSTALLATION OF VIRTUAL MACHINE IN VIRTUAL BOX

AIM:

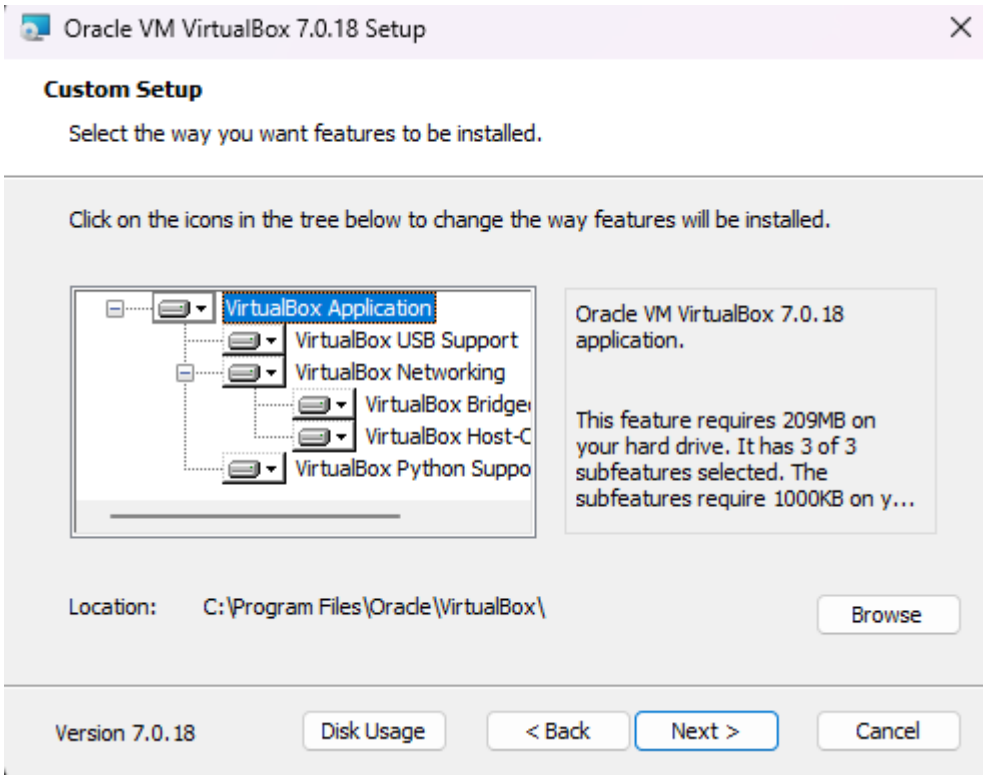
To configure a Virtual Machine using Virtual Box and Launch to execute a simple program using C.

PROCEDURE:

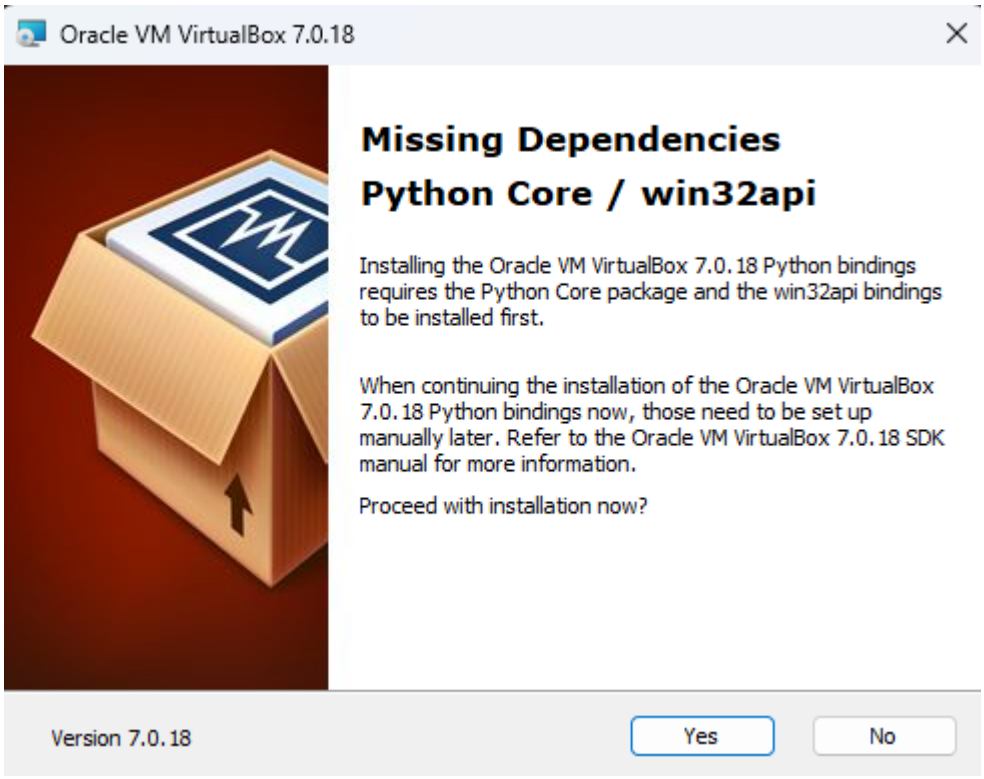
1. Launch a Virtual Box
2. Create new virtual machine
3. Customize the set-up
4. Set username and password
5. Browse for .iso file of an operating system
6. Configure the hardware capacity
7. Finish and power on the VM
8. Install C or PYTHON OR JAVA Compiler and execute a simple program

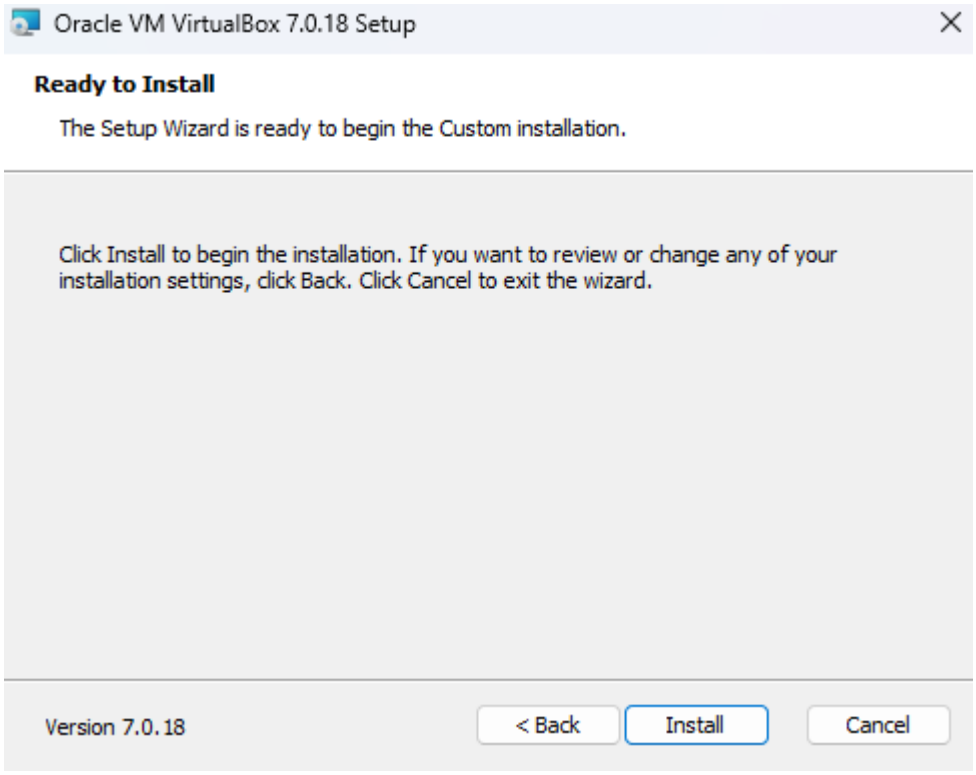
OUTPUT:

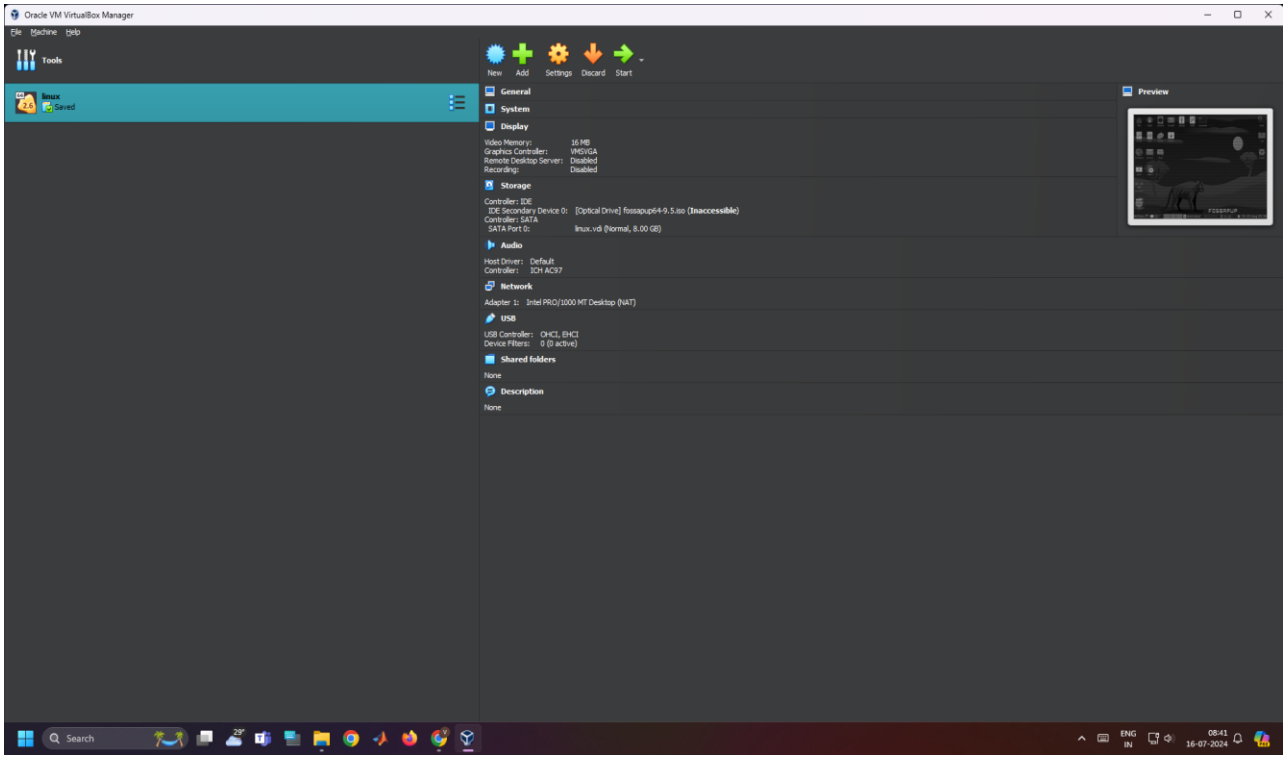
The virtual machine of Ubuntu OS was created using a virtual box. Ubuntu virtual machine running in Virtual Box.

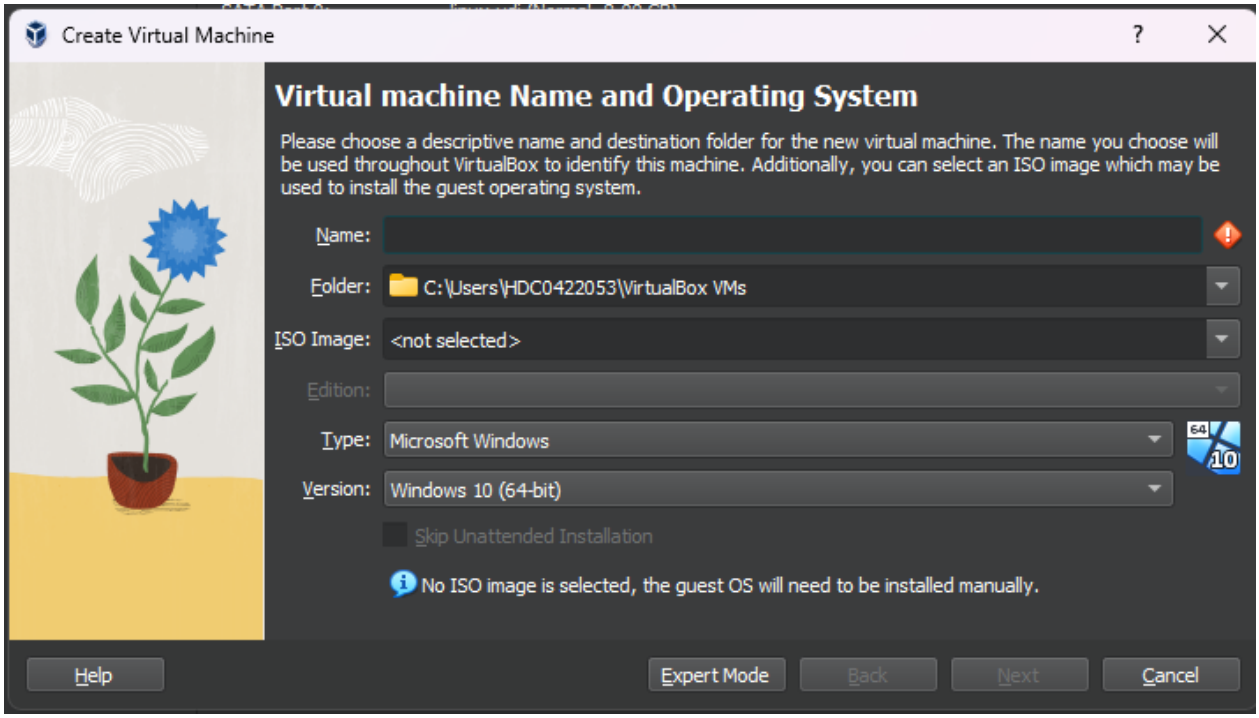

Oracle VM VirtualBox 7.0.18 Setup
Custom Setup
Select the way you want features to be installed.
Click on the icons in the tree below to change the way features will be installed.
VirtualBox Application
VirtualBox USB Support
VirtualBox Networking
VirtualBox Bridge
VirtualBox Host-C
VirtualBox Python Suppo
Oracle VM VirtualBox 7.0.18 application.
This feature requires 209MB on your hard drive. It has 3 of 3 subfeatures selected. The subfeatures require 1000KB on y...
Location:
C:\Program Files\Oracle\VirtualBox\
Browse
Version 7.0.18
Disk Usage
< Back
Next >
Cancel

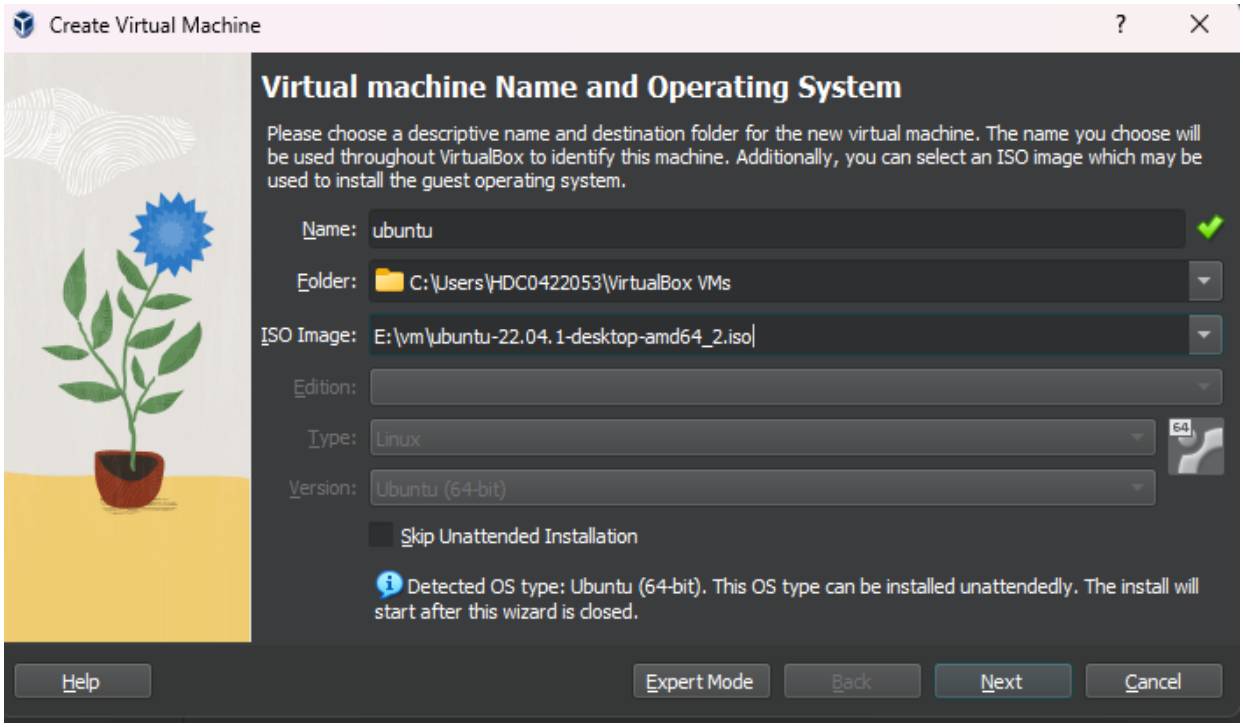

Oracle VM VirtualBox 7.0.18
Warning:
Network Interfaces
Installing the Oracle VM VirtualBox 7.0.18 Networking feature will reset your network connection and temporarily disconnect you from the network.
Proceed with installation now?
Version 7.0.18
Yes
No

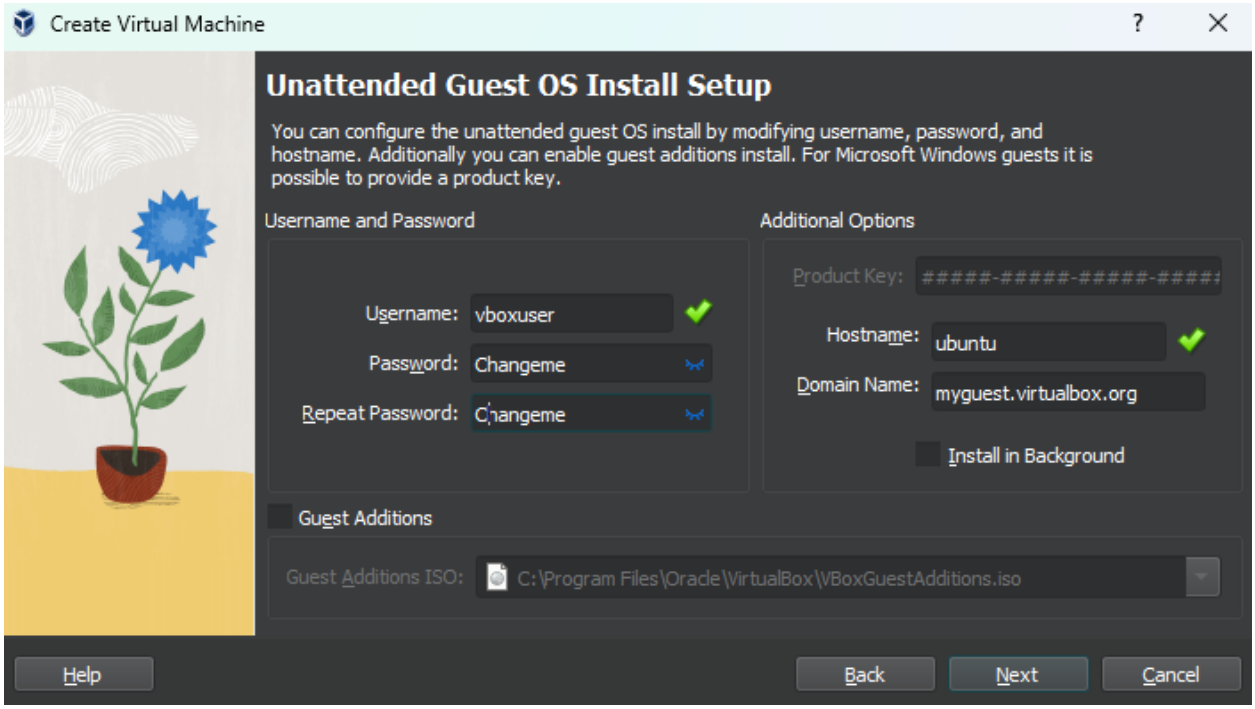

Oracle VM VirtualBox 7.0.18
Missing Dependencies
Python Core / win32api
Installing the Oracle VM VirtualBox 7.0.18 Python bindings requires the Python Core package and the win32api bindings to be installed first.
When continuing the installation of the Oracle VM VirtualBox 7.0.18 Python bindings now, those need to be set up manually later. Refer to the Oracle VM VirtualBox 7.0.18 SDK manual for more information.
Proceed with installation now?
Version 7.0.18
Yes
No

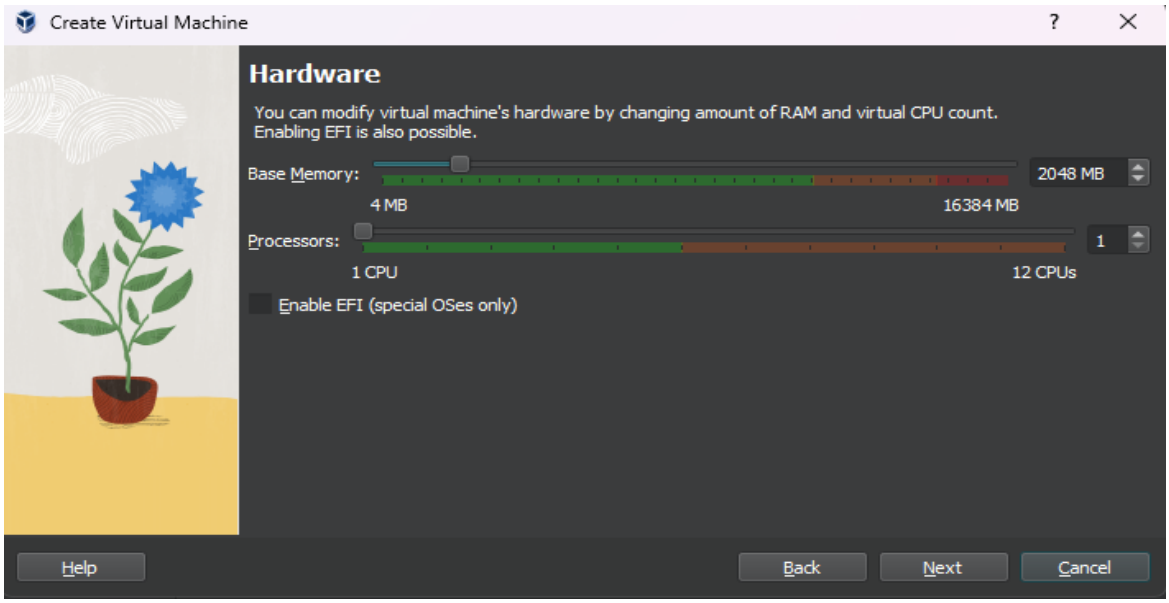

Oracle VM VirtualBox 7.0.18 Setup
Ready to Install
The Setup Wizard is ready to begin the Custom installation.
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
Version 7.0.18
< Back
Install
Cancel

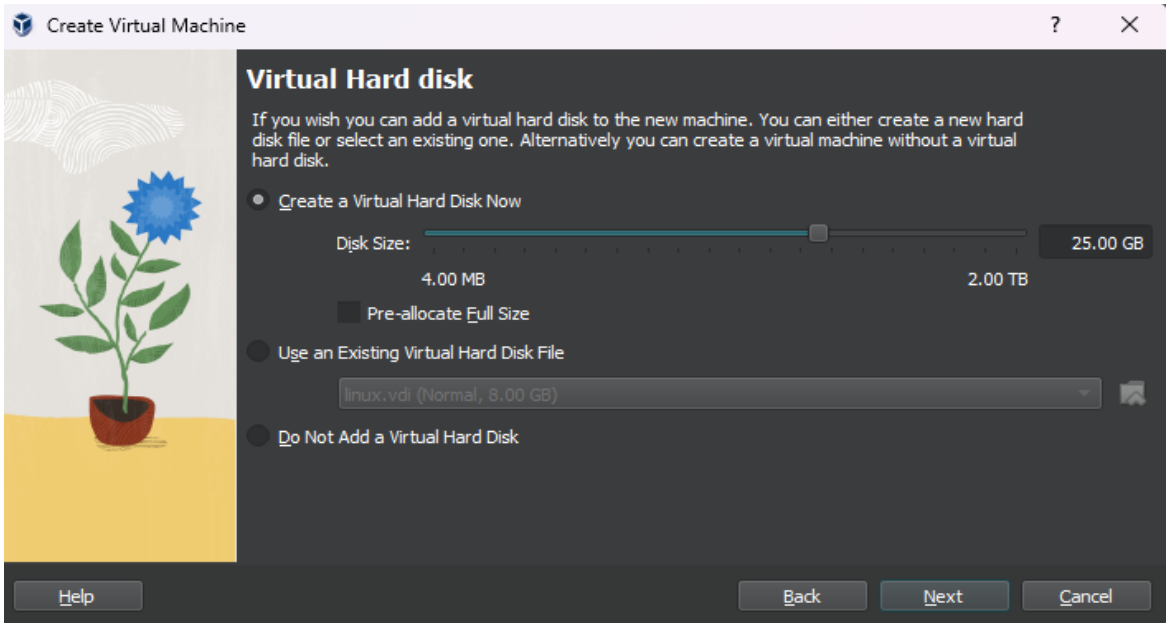

Oracle VM VirtualBox Manager
File Machine Help
Tools
linux
Saved
New Add Settings Discard Start
General
System
Display
Storage
Audio
Network
USB
Shared folders
Description
Preview

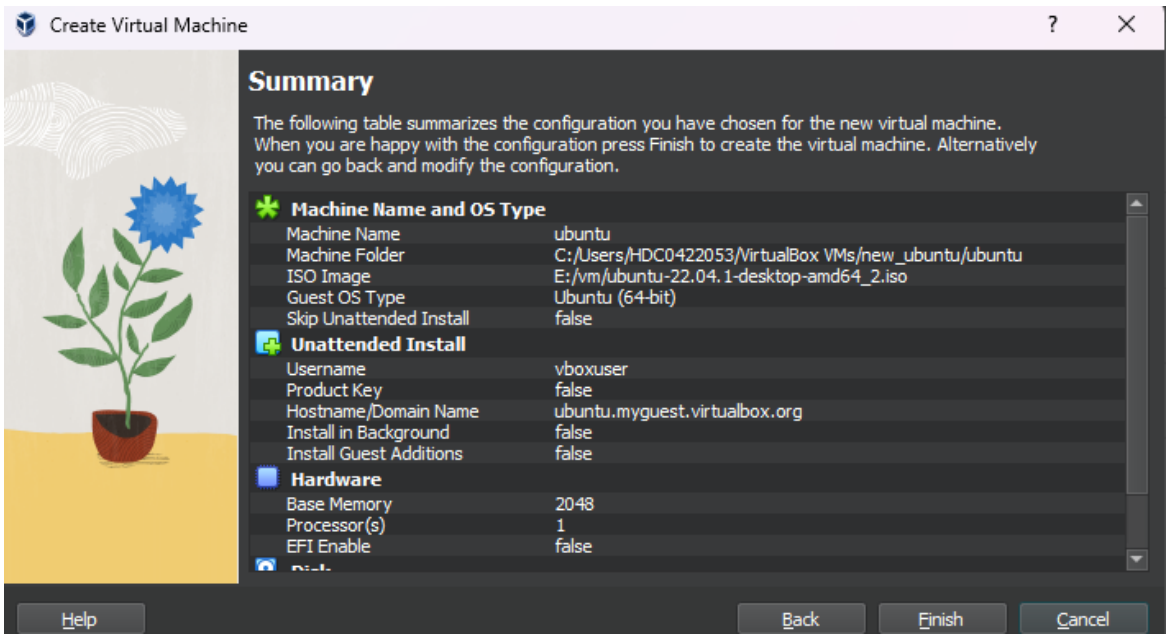

Create Virtual Machine
Virtual machine Name and Operating System
Please choose a descriptive name and destination folder for the new virtual machine. The name you choose will be used throughout VirtualBox to identify this machine. Additionally, you can select an ISO image which may be used to install the guest operating system.
Name:
Folder: C:\Users\HDC0422053\VirtualBox VMs
ISO Image: <not selected>
Edition:
Type: Microsoft Windows
Version: Windows 10 (64-bit)
Skip Unattended Installation
No ISO image is selected, the guest OS will need to be installed manually.
Help
Expert Mode
Back
Next
Cancel

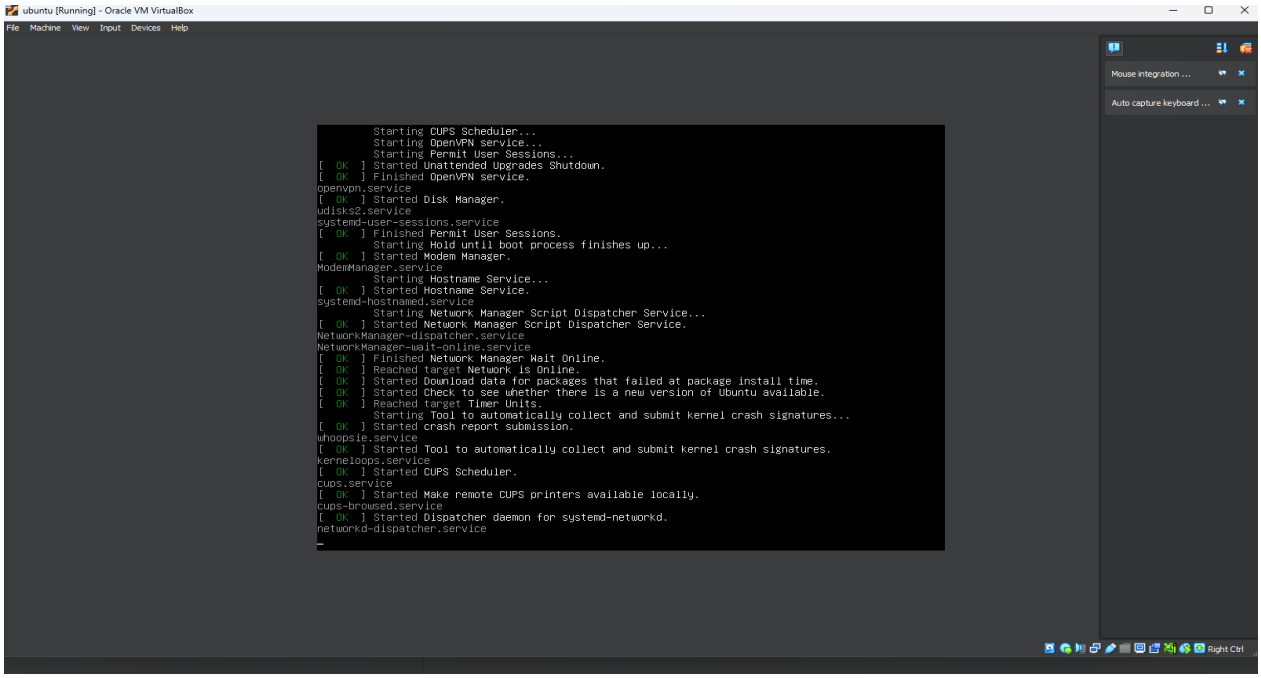

Create Virtual Machine
Virtual machine Name and Operating System
Please choose a descriptive name and destination folder for the new virtual machine. The name you choose will be used throughout VirtualBox to identify this machine. Additionally, you can select an ISO image which may be used to install the guest operating system.
Name: ubuntu
Folder: C:\Users\HDC0422053\VirtualBox VMs
ISO Image: E:\vm\ubuntu-22.04.1-desktop-amd64_2.iso
Edition:
Type: Linux
Version: Ubuntu (64-bit)
Skip Unattended Installation
Detected OS type: Ubuntu (64-bit). This OS type can be installed unattendedly. The install will start after this wizard is closed.
Help
Expert Mode
Back
Next
Cancel

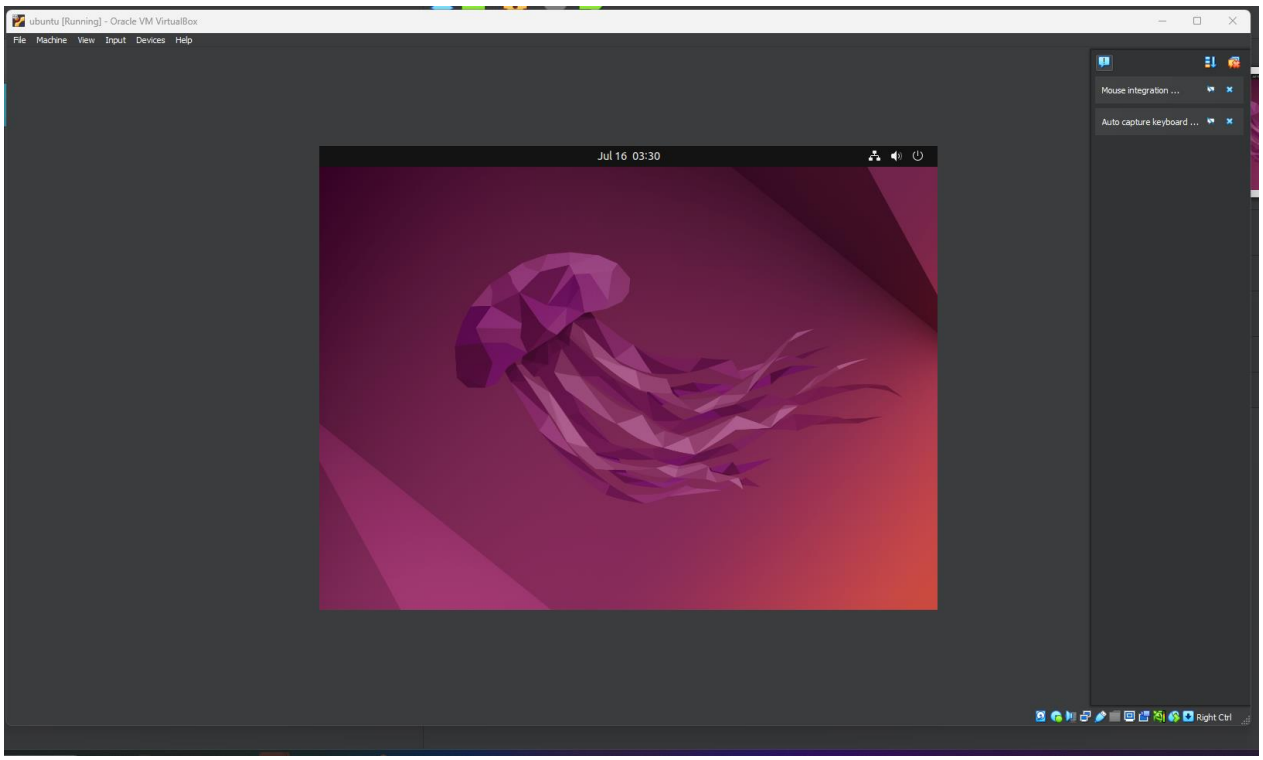

Create Virtual Machine
Unattended Guest OS Install Setup
You can configure the unattended guest OS install by modifying username, password, and hostname. Additionally you can enable guest additions install. For Microsoft Windows guests it is possible to provide a product key.
Username and Password
Additional Options
Username: vboxuser
Password: Changeme
Repeat Password: Changeme
Product Key: #####-#####-#####-#####
Hostname: ubuntu
Domain Name: myguest.virtualbox.org
Install in Background
Guest Additions
Guest Additions ISO: C:\Program Files\Oracle\VirtualBox\VBoxGuestAdditions.iso
Help
Back
Next
Cancel

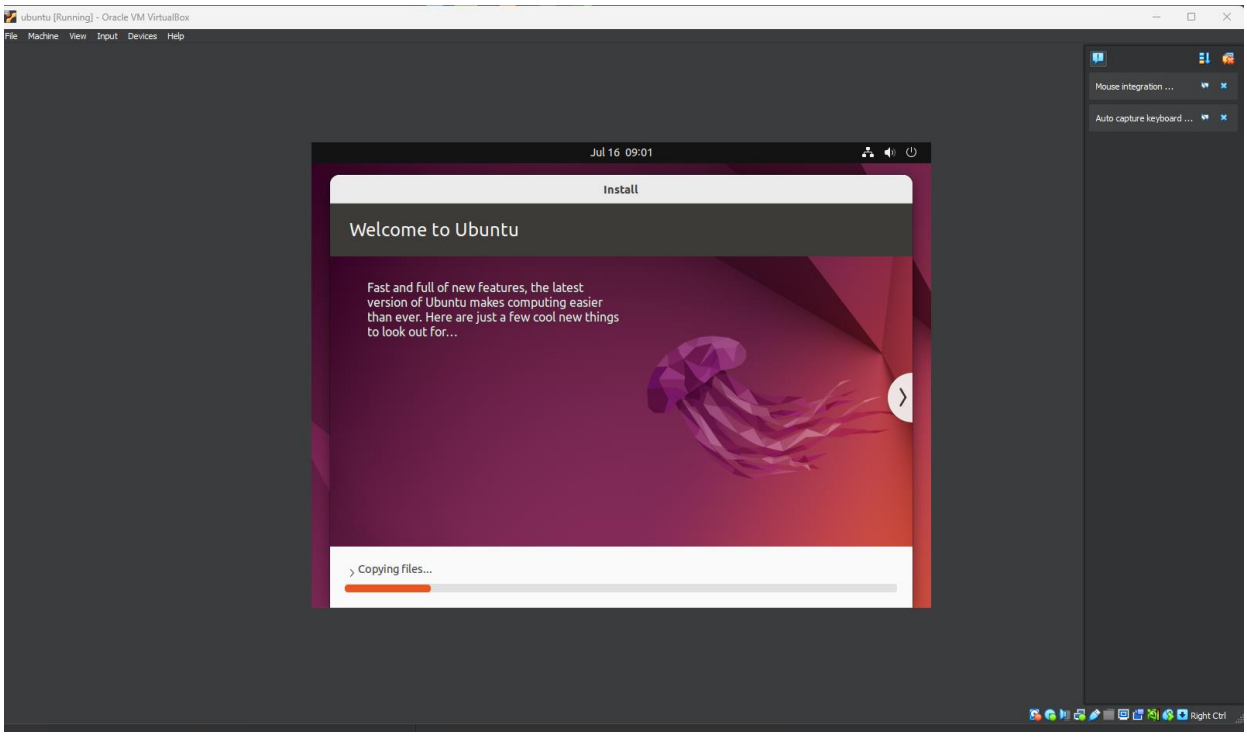

Create Virtual Machine
Hardware
You can modify virtual machine's hardware by changing amount of RAM and virtual CPU count.
Enabling EFI is also possible.
Base Memory:
2048 MB
4 MB
16384 MB
Processors:
1
1 CPU
12 CPUs
Enable EFI (special OSes only)
Help
Back
Next
Cancel

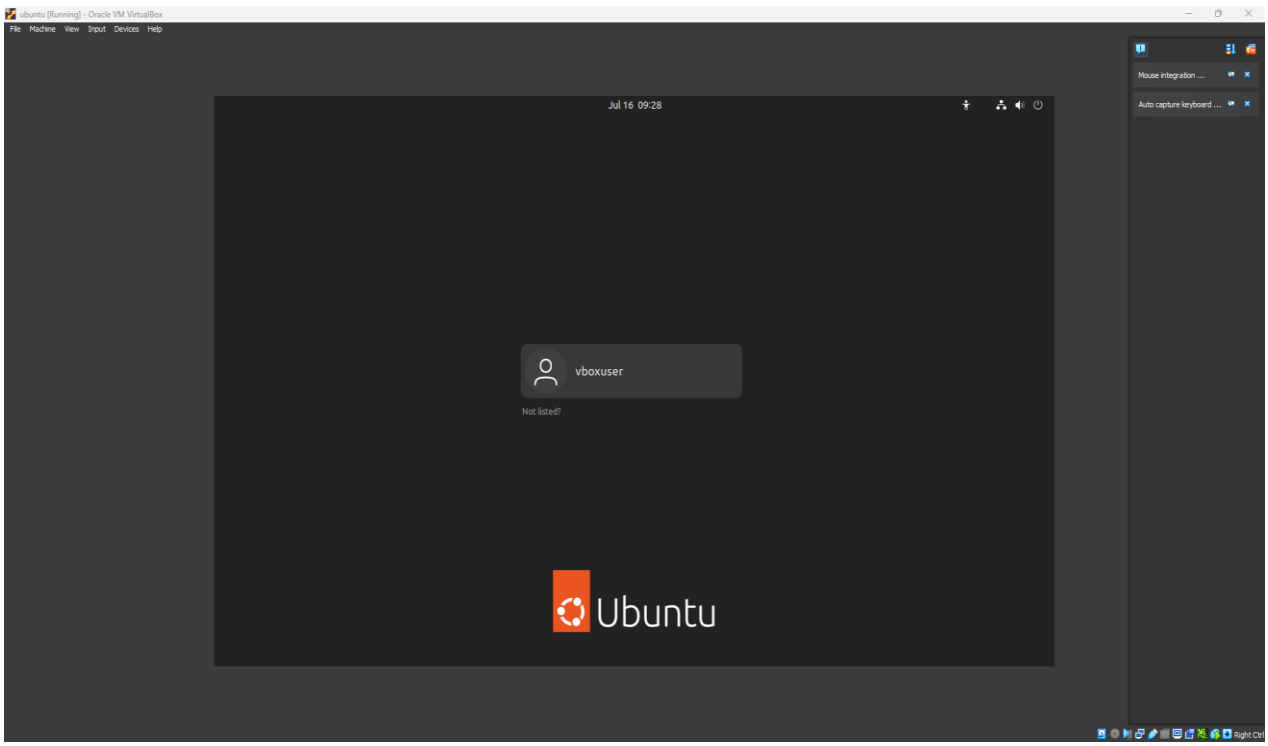

Create Virtual Machine
Virtual Hard disk
If you wish you can add a virtual hard disk to the new machine. You can either create a new hard disk file or select an existing one. Alternatively you can create a virtual machine without a virtual hard disk.
Create a Virtual Hard Disk Now
Disk Size:
25.00 GB
4.00 MB
2.00 TB
Pre-allocate Full Size
Use an Existing Virtual Hard Disk File
linux.vdi (Normal, 8.00 GB)
Do Not Add a Virtual Hard Disk
Help
Back
Next
Cancel

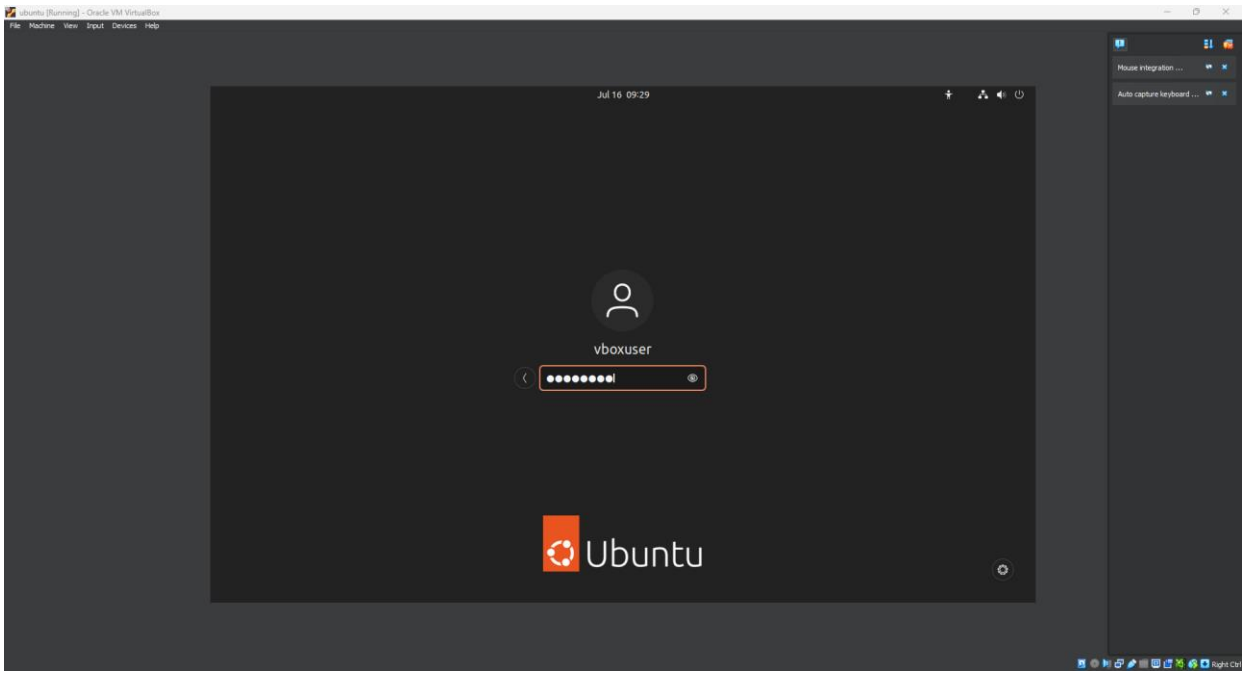

Create Virtual Machine
Summary
The following table summarizes the configuration you have chosen for the new virtual machine.
When you are happy with the configuration press Finish to create the virtual machine. Alternatively you can go back and modify the configuration.
Machine Name and OS Type
Machine Name ubuntu
Machine Folder C:/Users/HDC0422053/VirtualBox VMs/new_ubuntu/ubuntu
ISO Image E:/vm/ubuntu-22.04.1-desktop-amd64_2.iso
Guest OS Type Ubuntu (64-bit)
Skip Unattended Install false
Unattended Install
Username vboxuser
Product Key false
Hostname/Domain Name ubuntu.myguest.virtualbox.org
Install in Background false
Install Guest Additions false
Hardware
Base Memory 2048
Processor(s) 1
EFI Enable false
Help
Back
Finish
Cancel

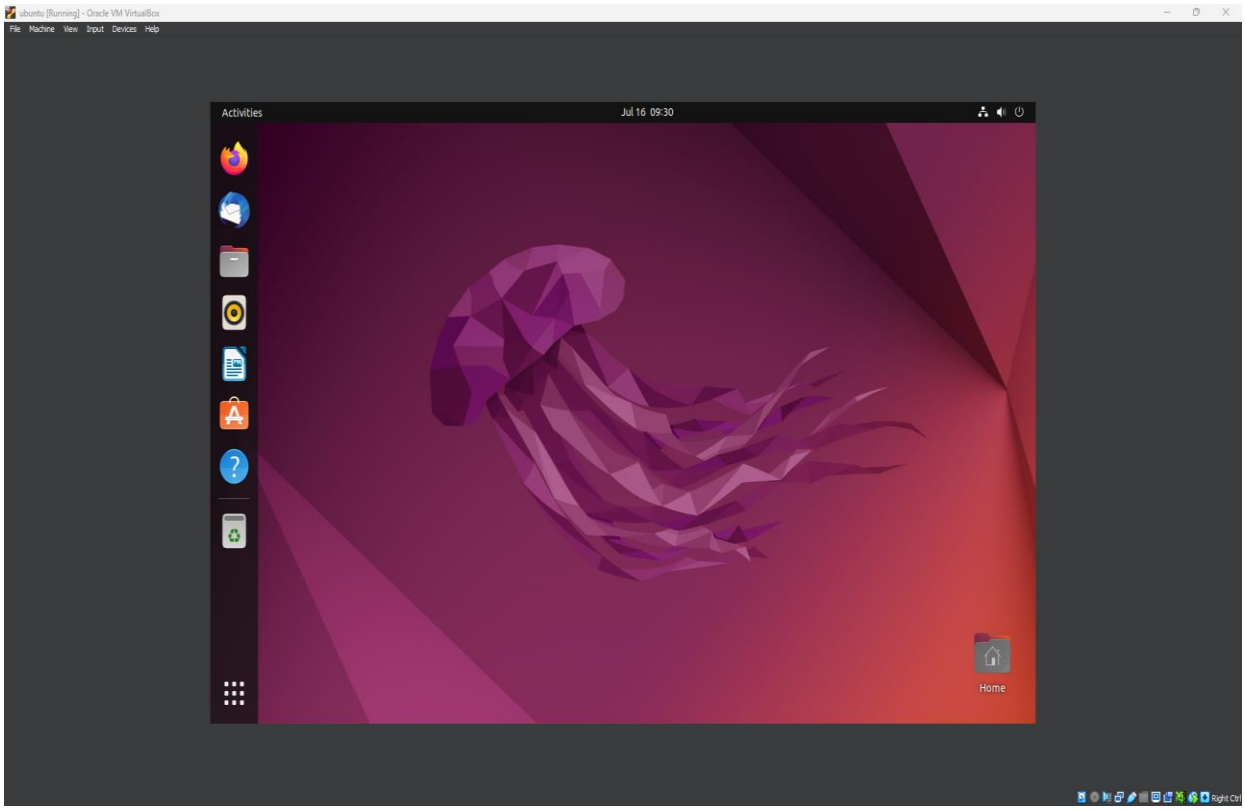

ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Mouse integration ...
Auto capture keyboard ...
Starting CUPS Scheduler...
Starting OpenVPN service...
Starting Permit User Sessions...
[OK] Started Unattended Upgrades Shutdown.
[OK] Finished OpenVPN service.
openvpn.service
[OK] Started Disk Manager.
udisks2.service
systemd-user-sessions.service
[OK] Finished Permit User Sessions.
Starting Hold until boot process finishes up...
[OK] Started Modem Manager.
ModemManager.service
Starting Hostname Service...
[OK] Started Hostname Service.
systemd-hostnamed.service
Starting Network Manager Script Dispatcher Service...
[OK] Started Network Manager Script Dispatcher Service.
NetworkManager-dispatcher.service
NetworkManager-wait-online.service
[OK] Finished Network Manager Wait Online.
[OK] Reached target Network is Online.
[OK] Started Download data for packages that failed at package install time.
[OK] Started Check to see whether there is a new version of Ubuntu available.
[OK] Reached target Timer Units.
Starting Tool to automatically collect and submit kernel crash signatures...
[OK] Started crash report submission.
whoopsie.service
[OK] Started Tool to automatically collect and submit kernel crash signatures.
kerneloops.service
[OK] Started CUPS Scheduler.
cups.service
[OK] Started Make remote CUPS printers available locally.
cups-browsed.service
[OK] Started Dispatcher daemon for systemd-networkd.
networkd-dispatcher.service
Right Ctrl

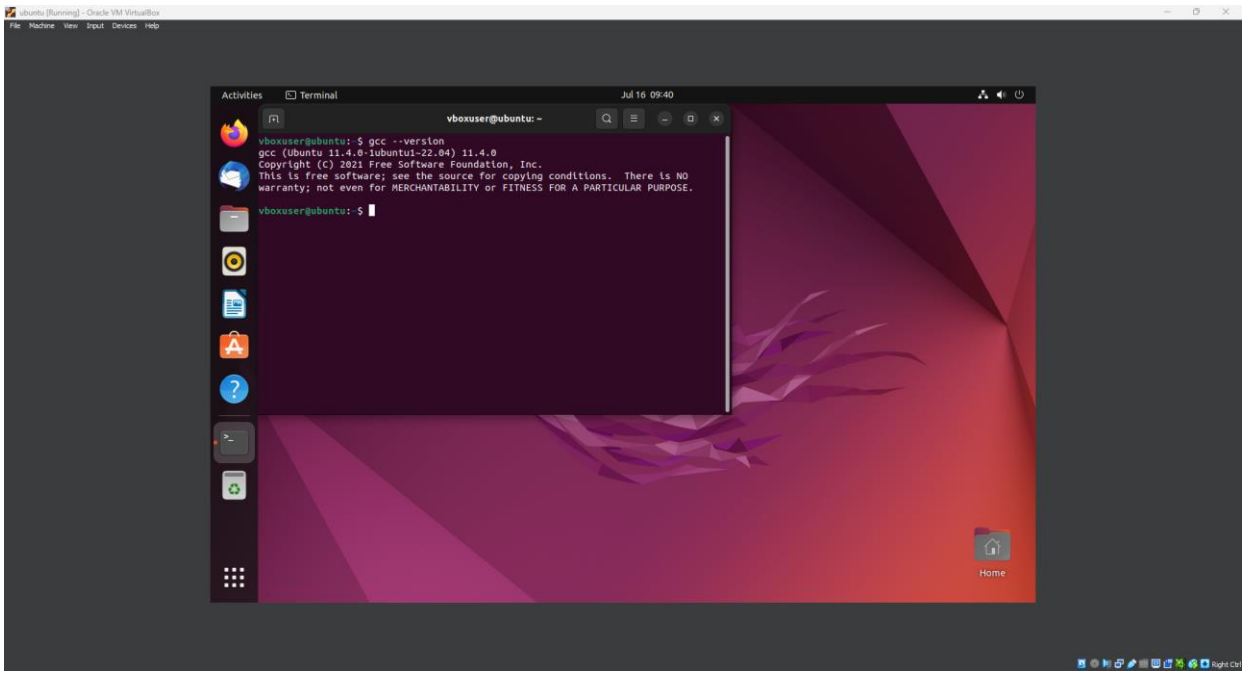

ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Mouse integration ...
Auto capture keyboard ...
Jul 16 03:30
Right Ctrl

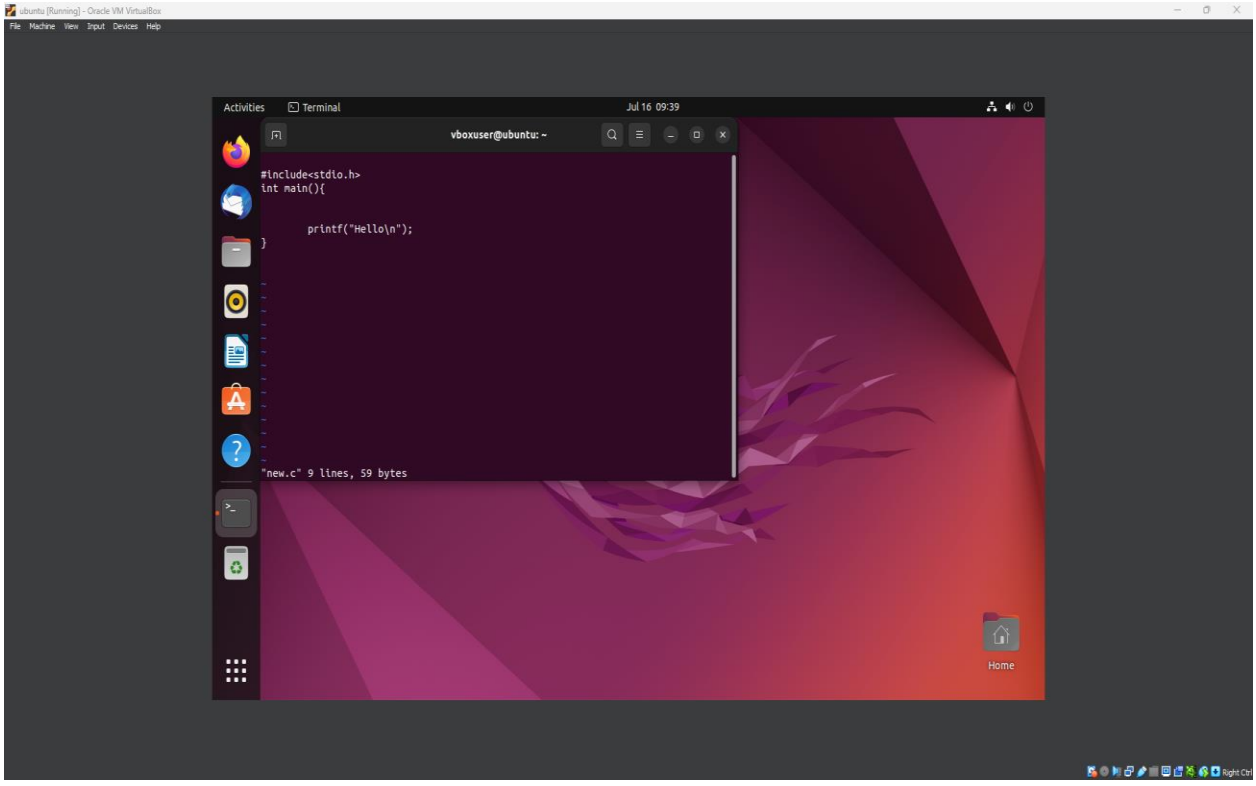

ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Mouse integration ...
Auto capture keyboard ...
Jul 16 09:01
Install
Welcome to Ubuntu
Fast and full of new features, the latest version of Ubuntu makes computing easier than ever. Here are just a few cool new things to look out for...
Copying files...
Right Ctrl

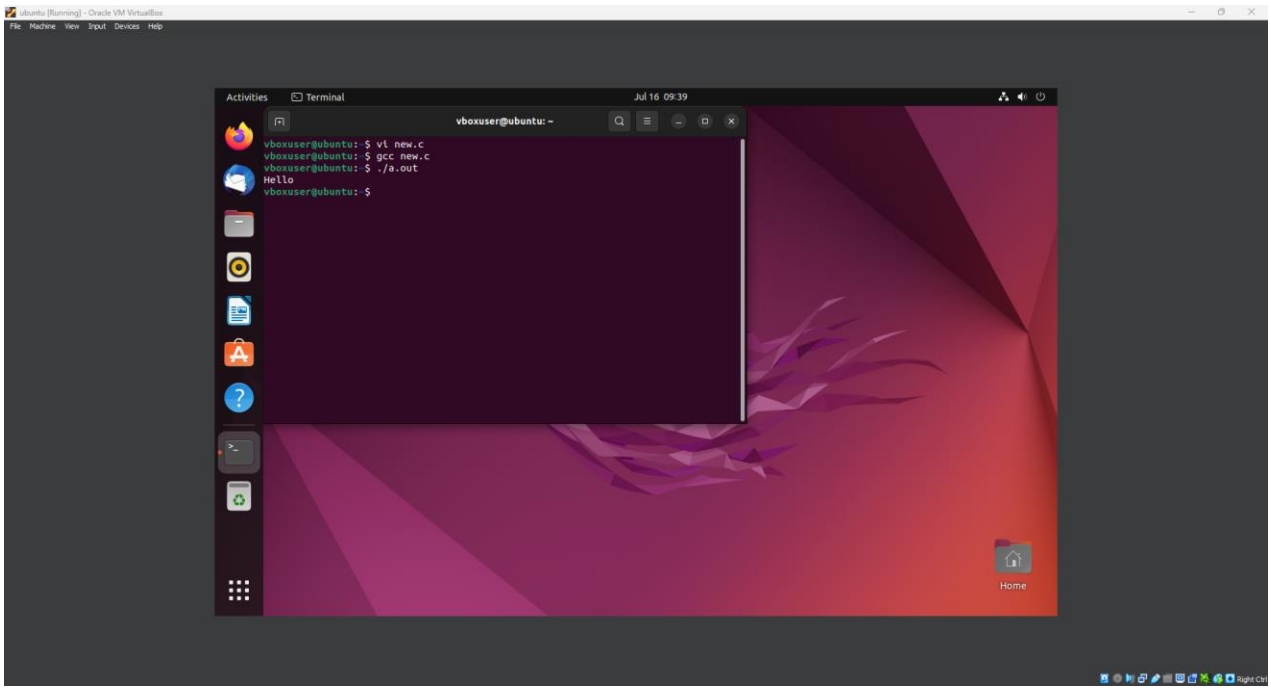

ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Mouse integration ...
Auto capture keyboard ...
Jul 16 09:28
vboxuser
Not listed?
Ubuntu
Right Ctrl


ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Jul 16 09:29
Mouse integration ...
Auto capture keyboard ...
vboxuser
Ubuntu
Right Ctrl


ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Jul 16 09:30
Home
Right Ctrl


ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
Jul 16 09:40
vboxuser@ubuntu: ~
vboxuser@ubuntu: $ gcc --version
gcc (Ubuntu 11.4.0-1ubuntu1~22.04) 11.4.0
Copyright (C) 2021 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
vboxuser@ubuntu: $
Home
Right Ctrl


ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
Jul 16 09:39
vboxuser@ubuntu: ~
#include<stdio.h>
int main(){
printf("Hello\n");
}
"new.c" 9 lines, 59 bytes
Home
Right Ctrl



RESULT:

Thus a Virtual Machine using Virtual Box has been configured and launched to execute a simple program using C.