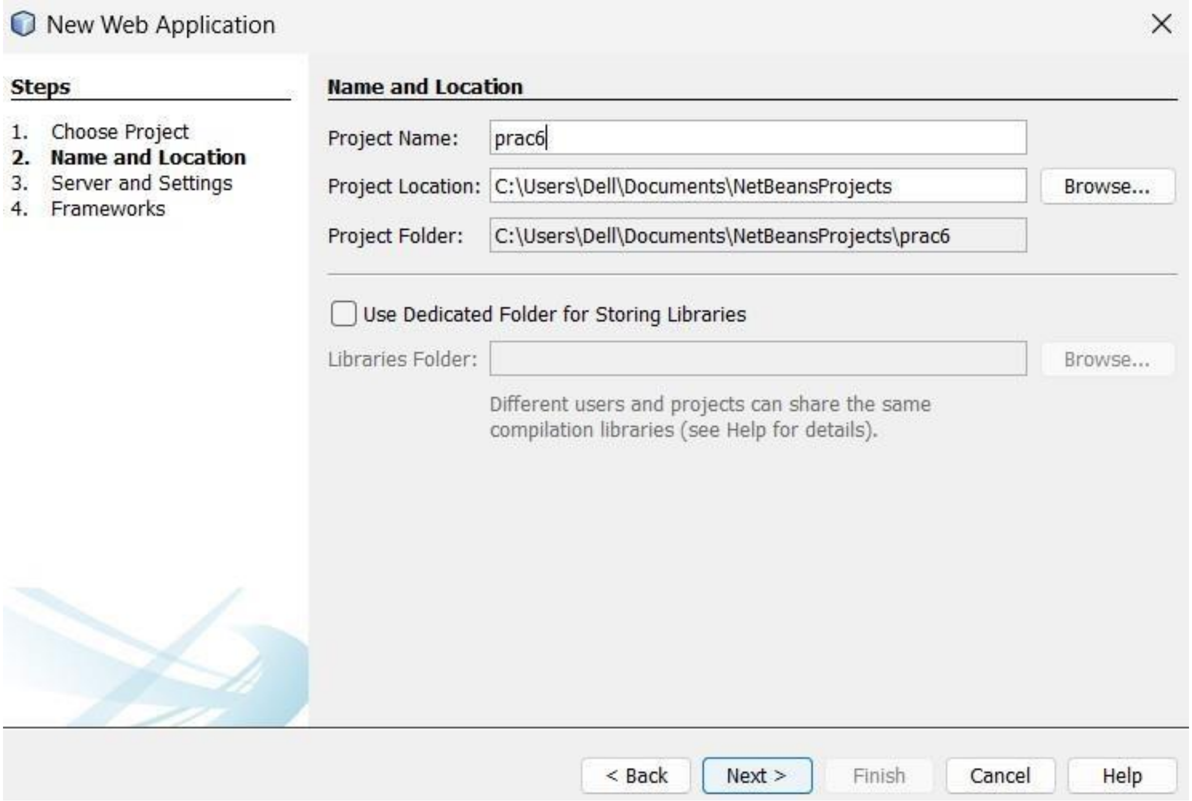
Practical 7

Aim: Develop application to download image/video from server or upload image/video to server using MTOM techniques

Step-1



New Web Application

Steps

1. Choose Project
2. **Name and Location**
3. Server and Settings
4. Frameworks

Name and Location

Project Name: prac6

Project Location: C:\Users\Dell\Documents\NetBeansProjects

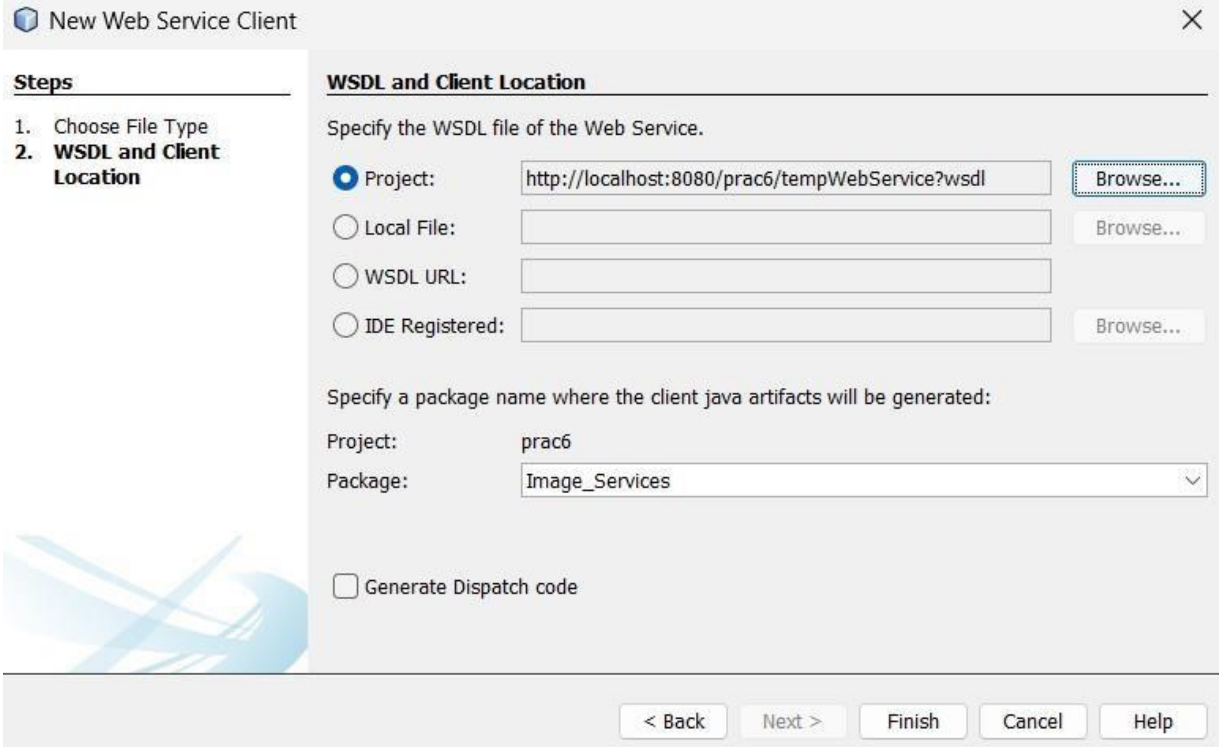
Project Folder: C:\Users\Dell\Documents\NetBeansProjects\prac6

☐ Use Dedicated Folder for Storing Libraries

Libraries Folder:

Different users and projects can share the same compilation libraries (see Help for details).

Step-2



New Web Service Client

Steps

1. Choose File Type
2. **WSDL and Client Location**

WSDL and Client Location

Specify the WSDL file of the Web Service.

● Project: http://localhost:8080/prac6/tempWebService?wsdl

○ Local File:

○ WSDL URL:

○ IDE Registered:

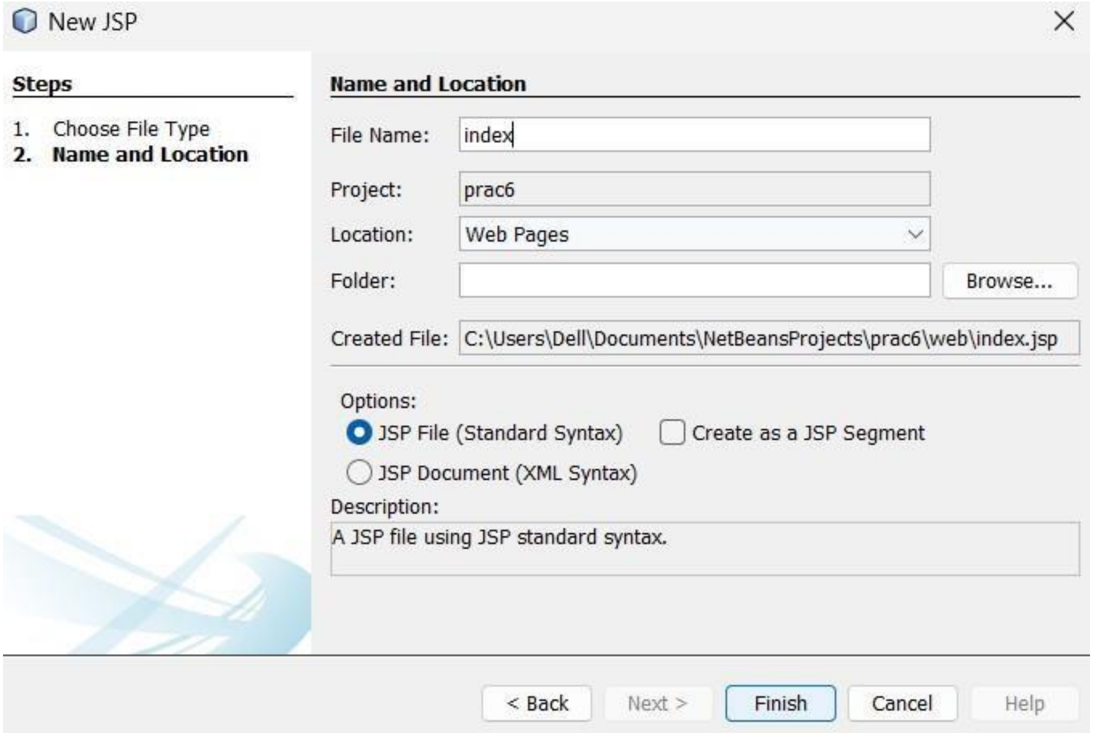
Specify a package name where the client java artifacts will be generated:

Project: prac6

Package: Image_Services

☐ Generate Dispatch code

Step-3



New JSP

Steps

1. Choose File Type
2. **Name and Location**

Name and Location

File Name: index

Project: prac6

Location: Web Pages

Folder:

Created File: C:\Users\Dell\Documents\NetBeansProjects\prac6\web\index.jsp

Options:

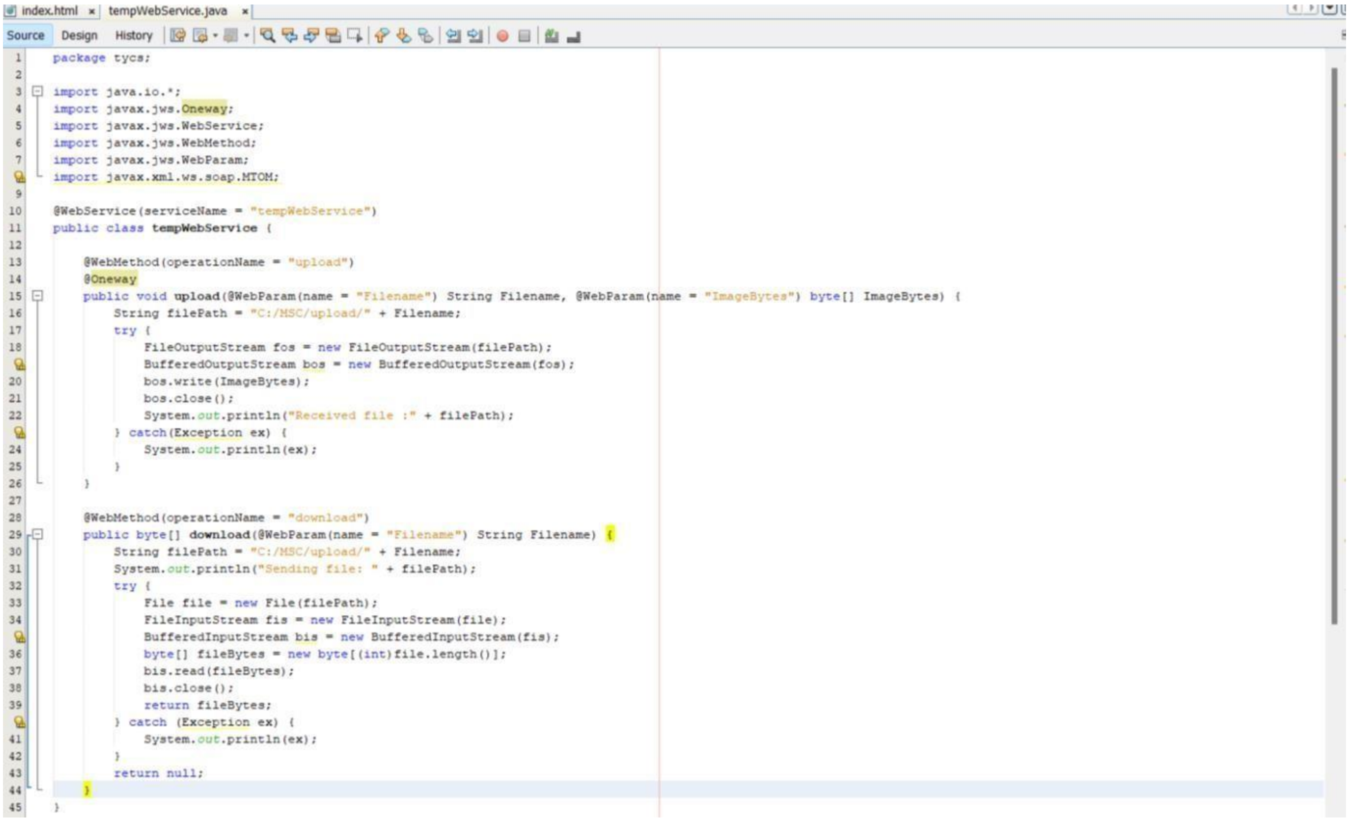
● JSP File (Standard Syntax) □ Create as a JSP Segment

○ JSP Document (XML Syntax)

Description:

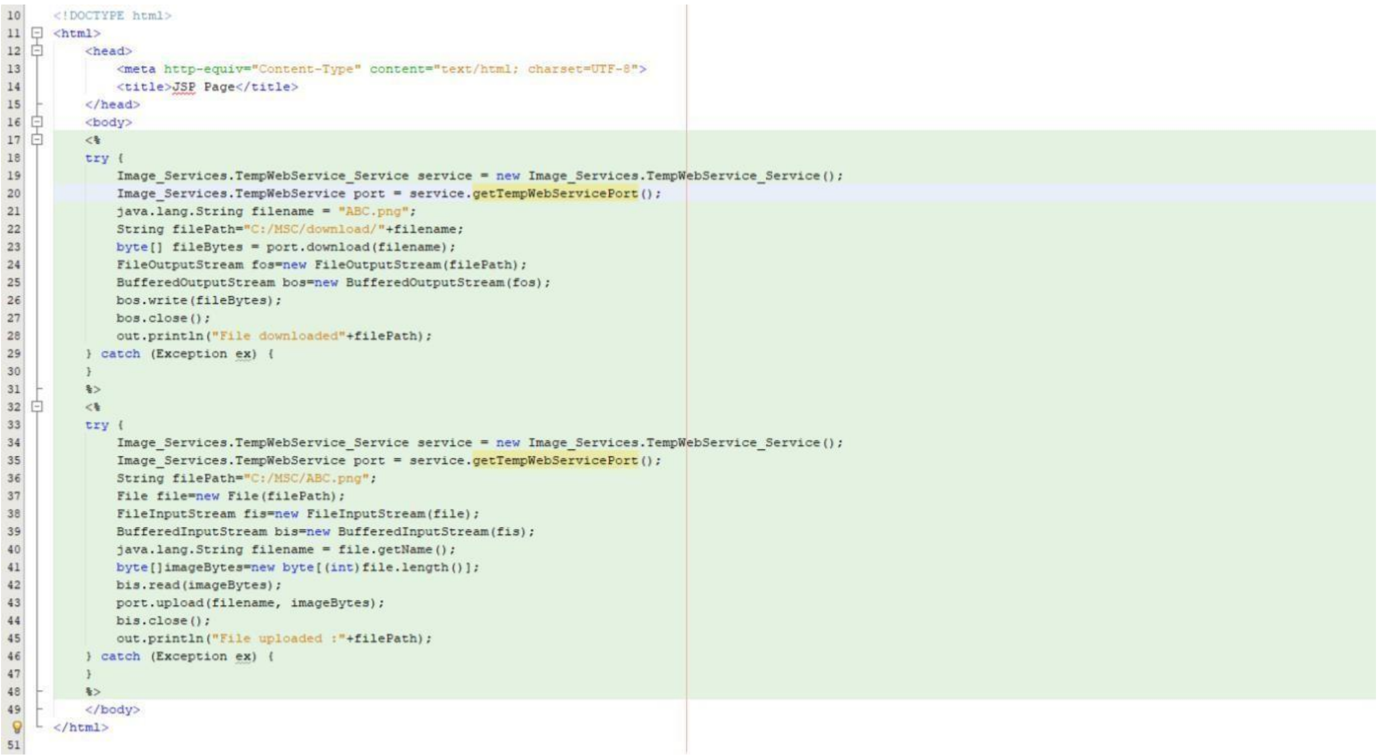
A JSP file using JSP standard syntax.

Step-4



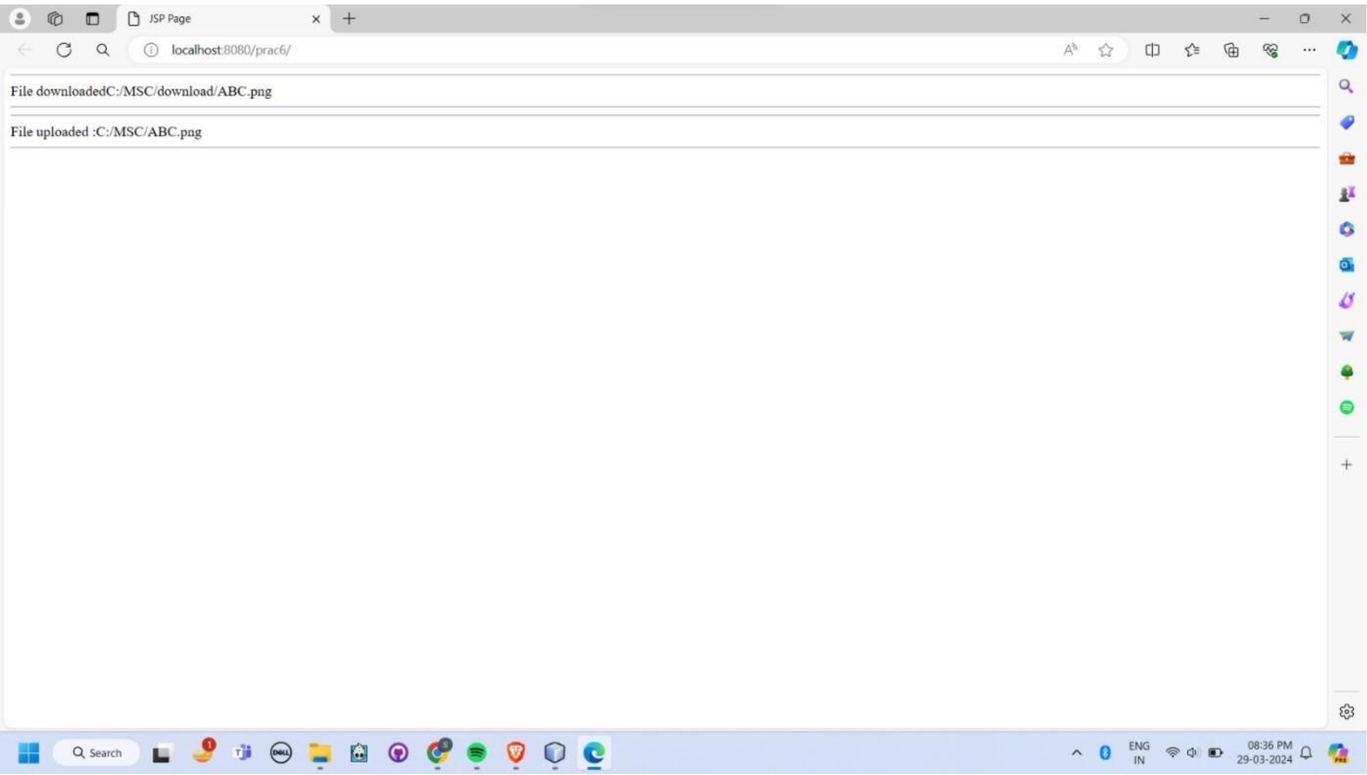
```java
package tycs;

import java.io.*;
import javax.jws.Oneway;
import javax.jws.WebService;
import javax.jws.WebMethod;
import javax.jws.WebParam;
import javax.xml.ws.soap.MTOM;

@WebService(serviceName = "tempWebService")
public class tempWebService {

    @WebMethod(operationName = "upload")
    @Oneway
    public void upload(@WebParam(name = "Filename") String Filename, @WebParam(name = "ImageBytes") byte[] ImageBytes) {
        String filePath = "C:/MSC/upload/" + Filename;
        try {
            FileOutputStream fos = new FileOutputStream(filePath);
            BufferedOutputStream bos = new BufferedOutputStream(fos);
            bos.write(ImageBytes);
            bos.close();
            System.out.println("Received file :" + filePath);
        } catch(Exception ex) {
            System.out.println(ex);
        }
    }

    @WebMethod(operationName = "download")
    public byte[] download(@WebParam(name = "Filename") String Filename) {
        String filePath = "C:/MSC/upload/" + Filename;
        System.out.println("Sending file: " + filePath);
        try {
            File file = new File(filePath);
            FileInputStream fis = new FileInputStream(file);
            BufferedInputStream bis = new BufferedInputStream(fis);
            byte[] fileBytes = new byte[(int)file.length()];
            bis.read(fileBytes);
            bis.close();
            return fileBytes;
        } catch (Exception ex) {
            System.out.println(ex);
        }
        return null;
    }
}
```

Step-5



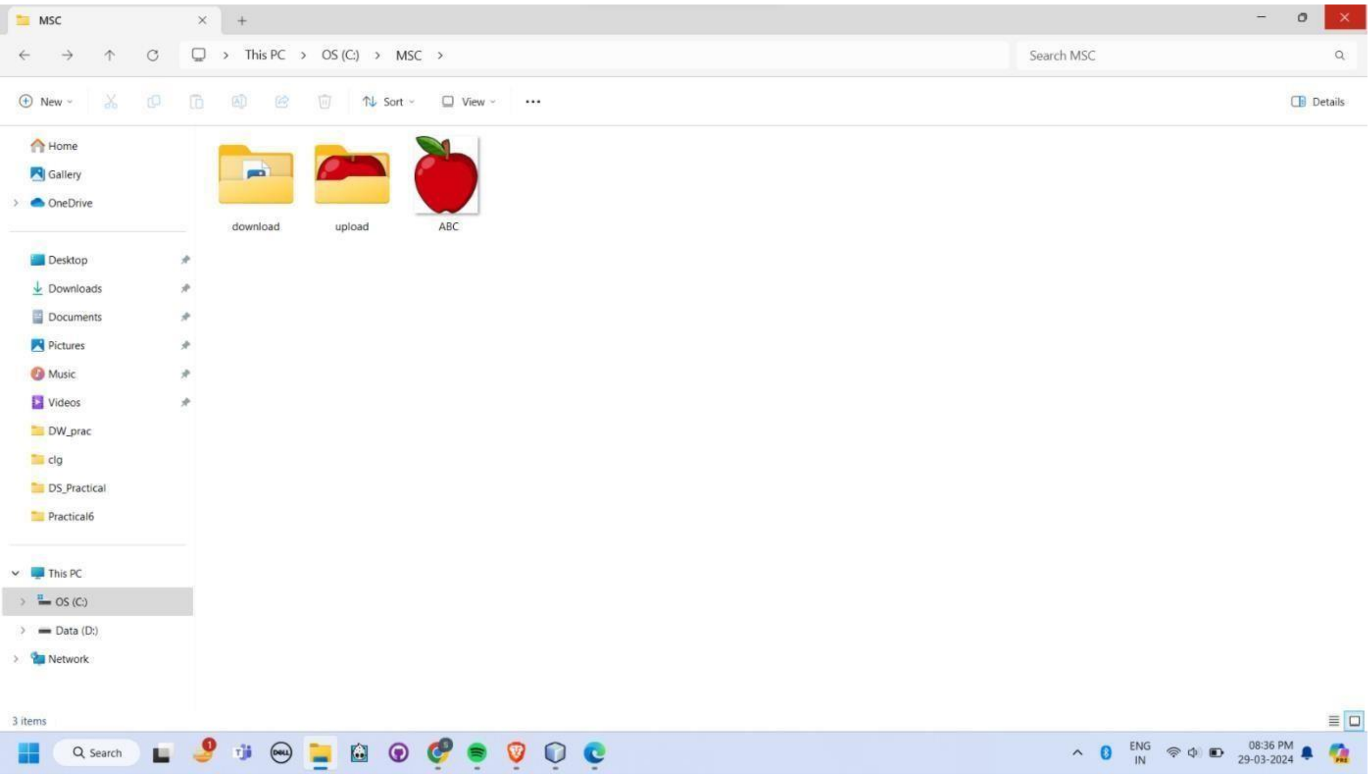
```
<!DOCTYPE html>
<html>
    <head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
        <title>JSP Page</title>
    </head>
    <body>
    <%
    try {
        Image_Services.TempWebService_Service service = new Image_Services.TempWebService_Service();
        Image_Services.TempWebService port = service.getTempWebServicePort();
        java.lang.String filename = "ABC.png";
        String filePath="C:/MSC/download/"+filename;
        byte[] fileBytes = port.download(filename);
        FileOutputStream fos=new FileOutputStream(filePath);
        BufferedOutputStream bos=new BufferedOutputStream(fos);
        bos.write(fileBytes);
        bos.close();
        out.println("File downloaded"+filePath);
    } catch (Exception ex) {
    }
    %>
    <%
    try {
        Image_Services.TempWebService_Service service = new Image_Services.TempWebService_Service();
        Image_Services.TempWebService port = service.getTempWebServicePort();
        String filePath="C:/MSC/ABC.png";
        File file=new File(filePath);
        FileInputStream fis=new FileInputStream(file);
        BufferedInputStream bis=new BufferedInputStream(fis);
        java.lang.String filename = file.getName();
        byte[]imageBytes=new byte[(int)file.length()];
        bis.read(imageBytes);
        port.upload(filename, imageBytes);
        bis.close();
        out.println("File uploaded :"+filePath);
    } catch (Exception ex) {
    }
    %>
    </body>
</html>
```

Step-6



```
File downloadedC:/MSC/download/ABC.png
File uploaded :C:/MSC/ABC.png
```

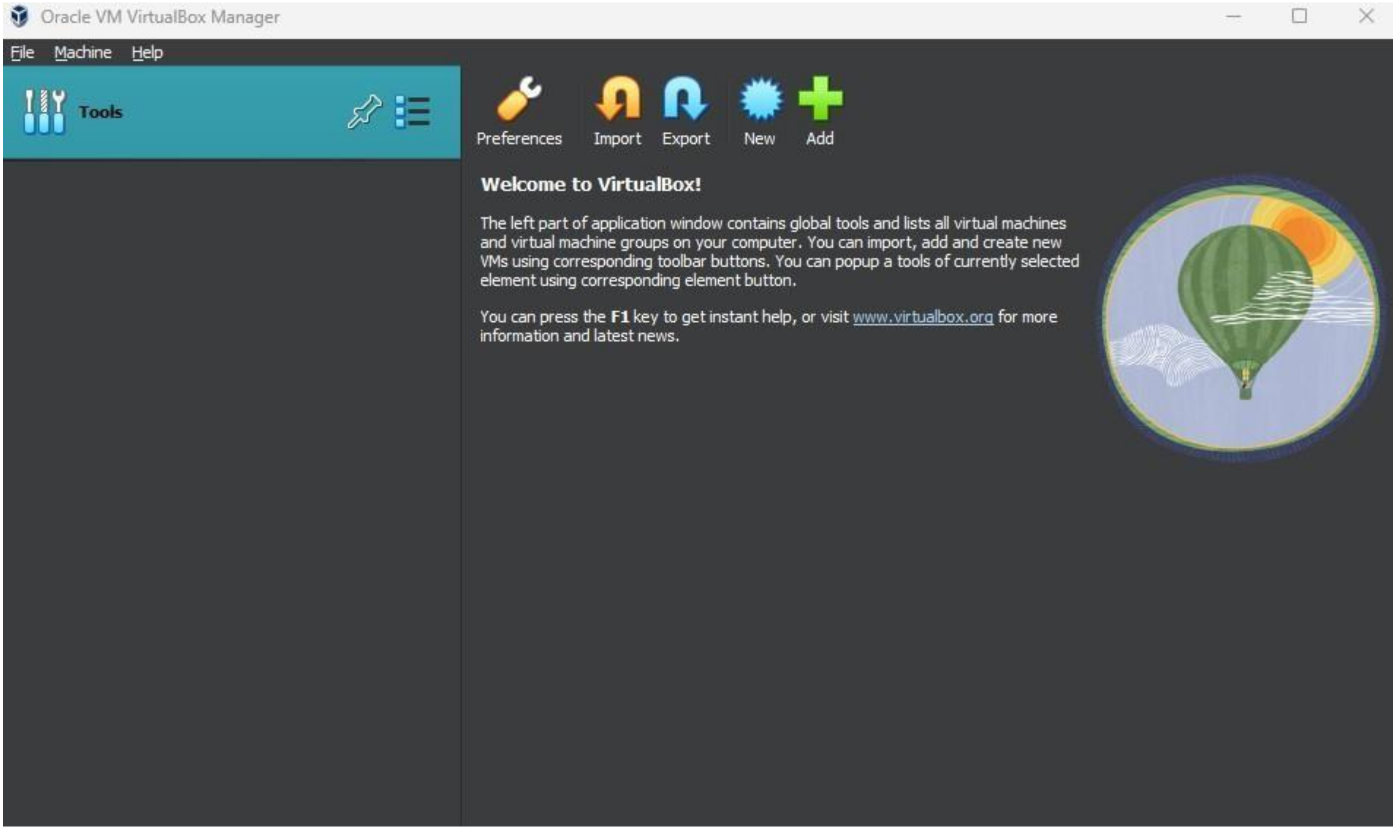
Step-7


MSC
This PC > OS (C:) > MSC >
Search MSC
New
Sort
View
Details
Home
Gallery
OneDrive
Desktop
Downloads
Documents
Pictures
Music
Videos
DW_prac
clg
DS_Practical
Practical6
This PC
OS (C:)
Data (D:)
Network
download
upload
ABC
3 items
Search
ENG
IN
08:36 PM
29-03-2024

Practical: 8

Aim: Implement FOSS-Cloud Functionality VSI (Virtual Server Infrastructure) Infrastructure as a Service (IaaS), Storage

Step-1

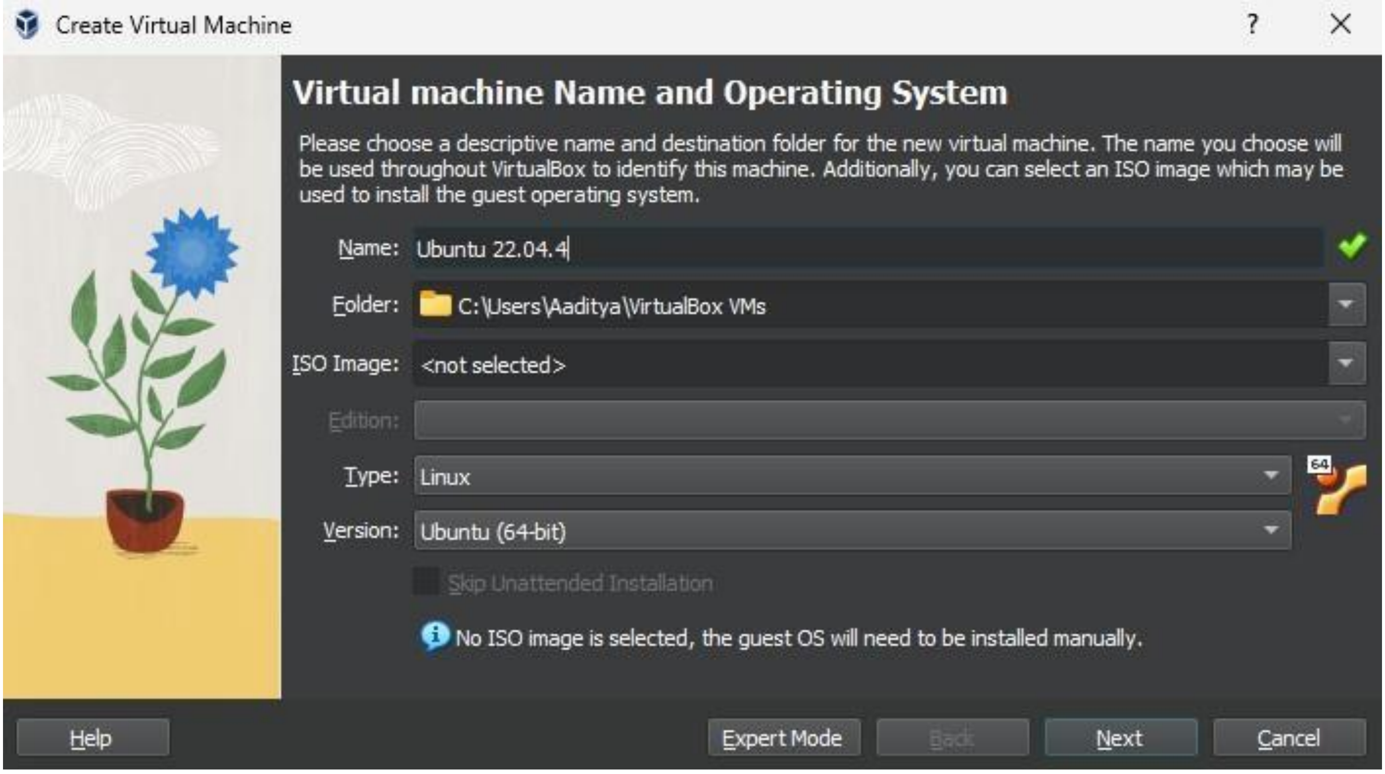


Welcome to VirtualBox!

The left part of application window contains global tools and lists all virtual machines and virtual machine groups on your computer. You can import, add and create new VMs using corresponding toolbar buttons. You can popup a tools of currently selected element using corresponding element button.

You can press the **F1** key to get instant help, or visit www.virtualbox.org for more information and latest news.

Step-2



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 22.04.4

Folder: C:\Users\Aaditya\VirtualBox VMs

ISO Image: <not selected>

Edition:

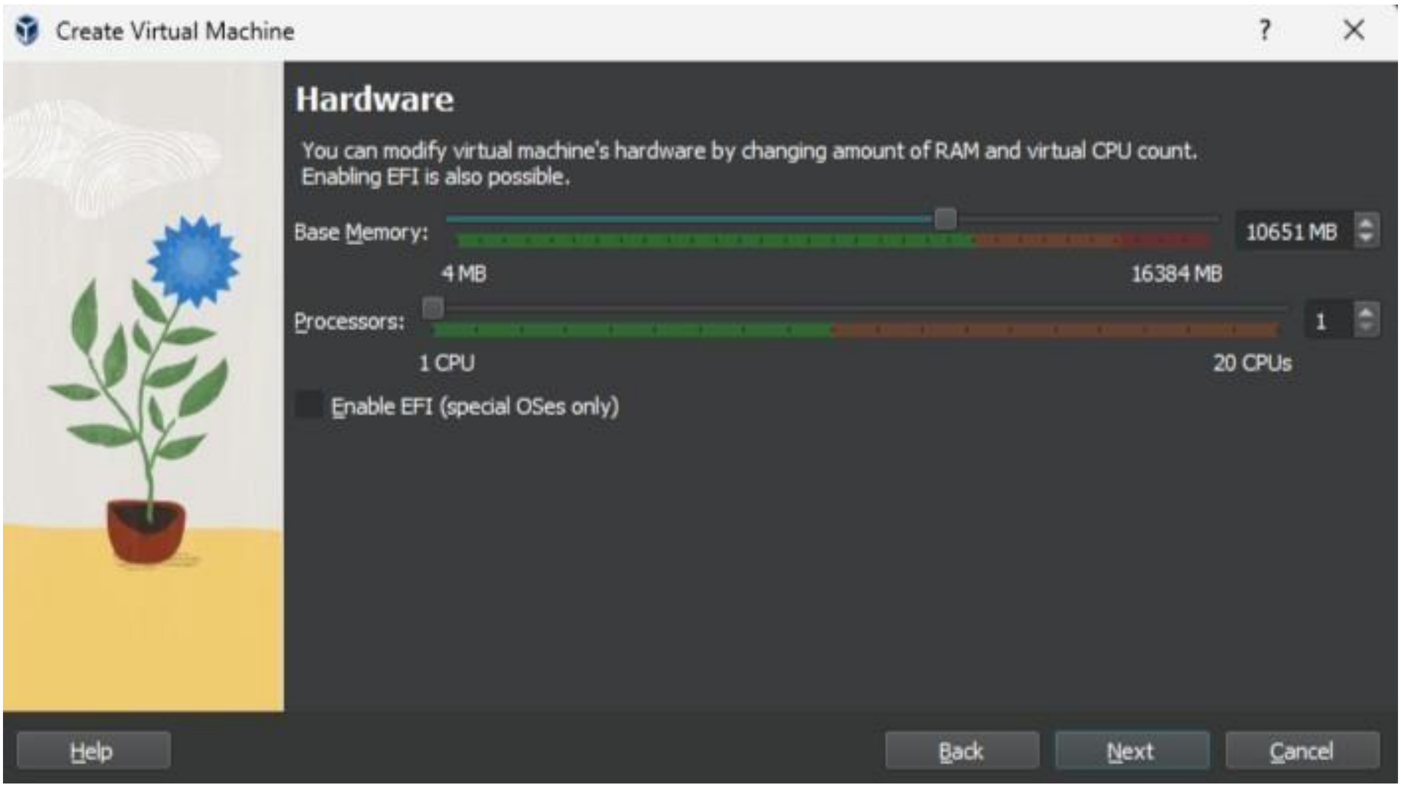
Type: Linux

Version: Ubuntu (64-bit)

□ Skip Unattended Installation

No ISO image is selected, the guest OS will need to be installed manually.

Step-3



Hardware

You can modify virtual machine's hardware by changing amount of RAM and virtual CPU count. Enabling EFI is also possible.

Base Memory: 10651 MB

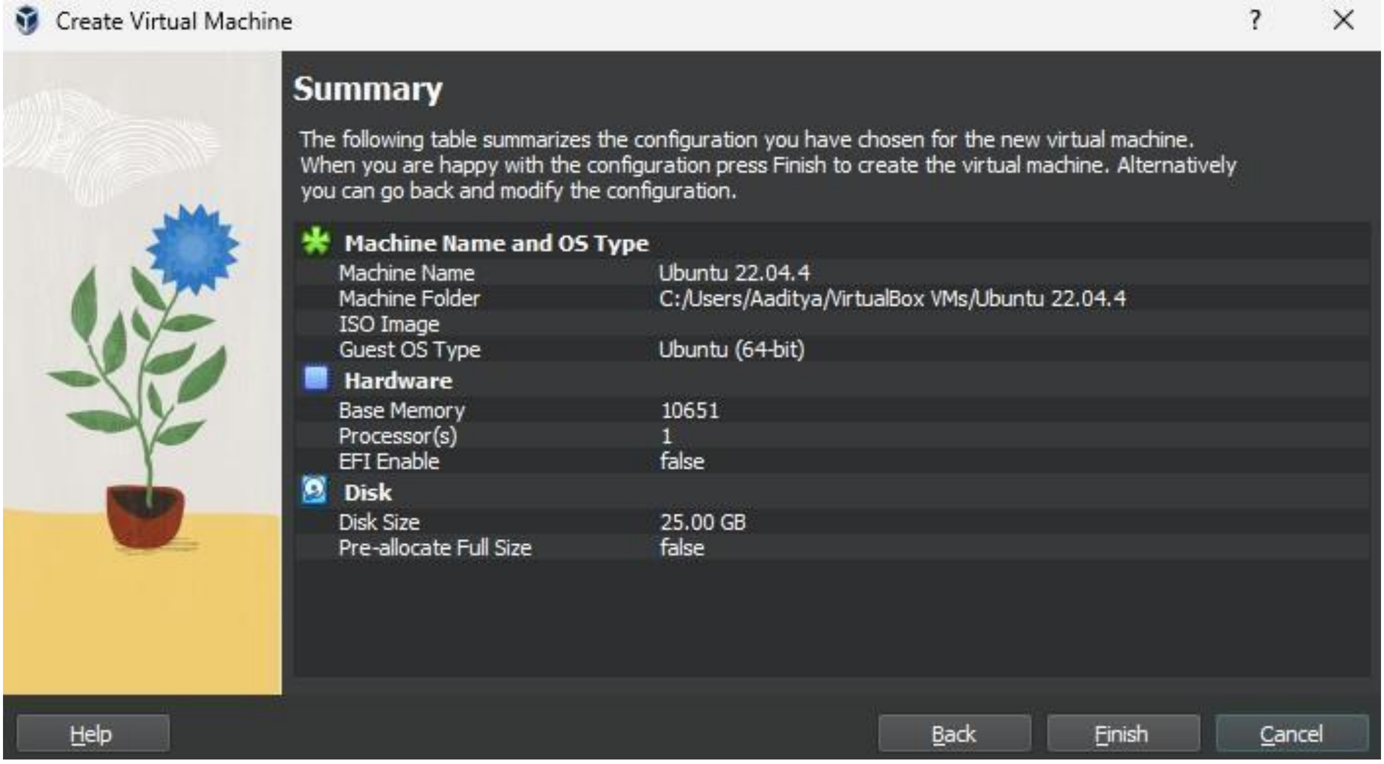
4 MB 16384 MB

Processors: 1

1 CPU 20 CPUs

□ Enable EFI (special OSes only)

Step-4

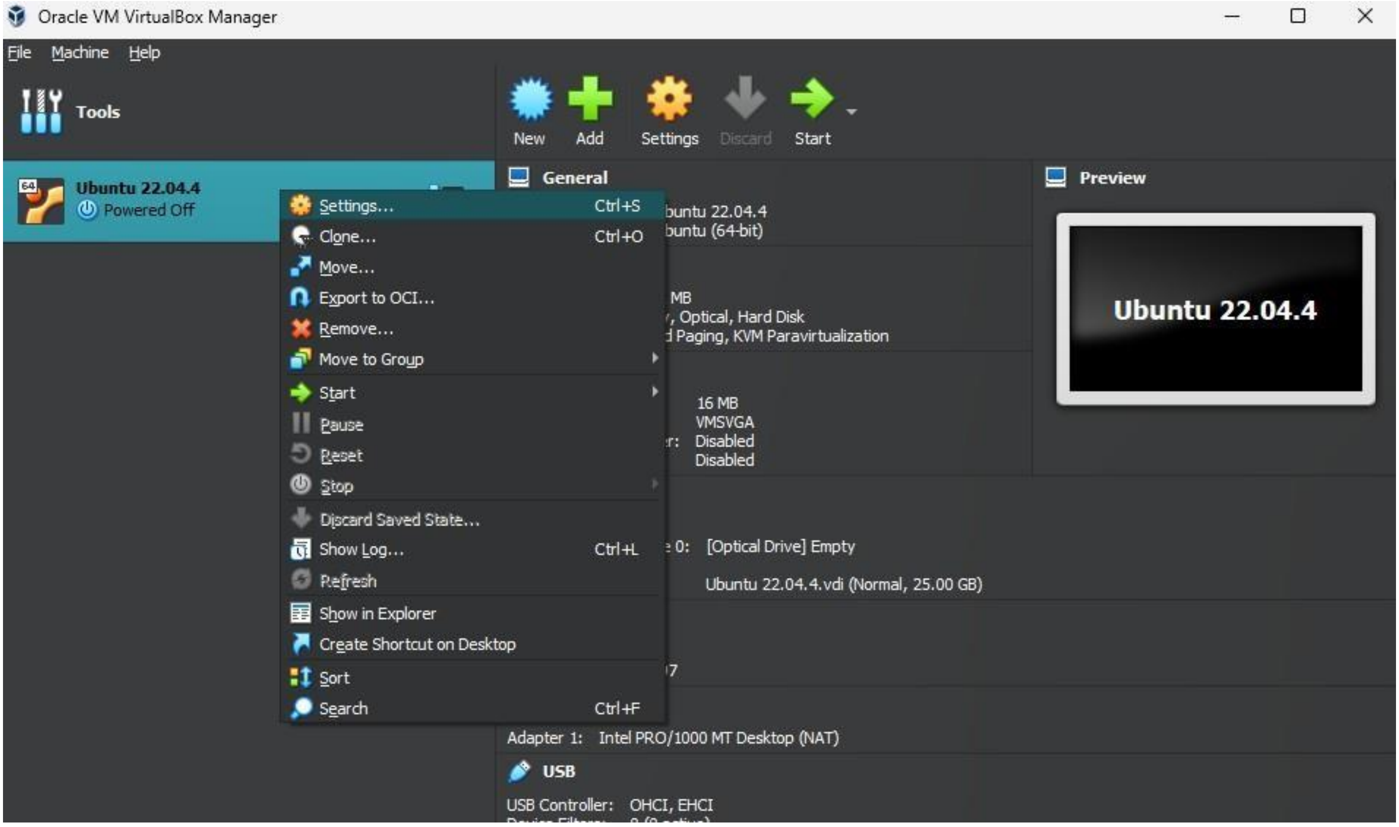


Summary

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.

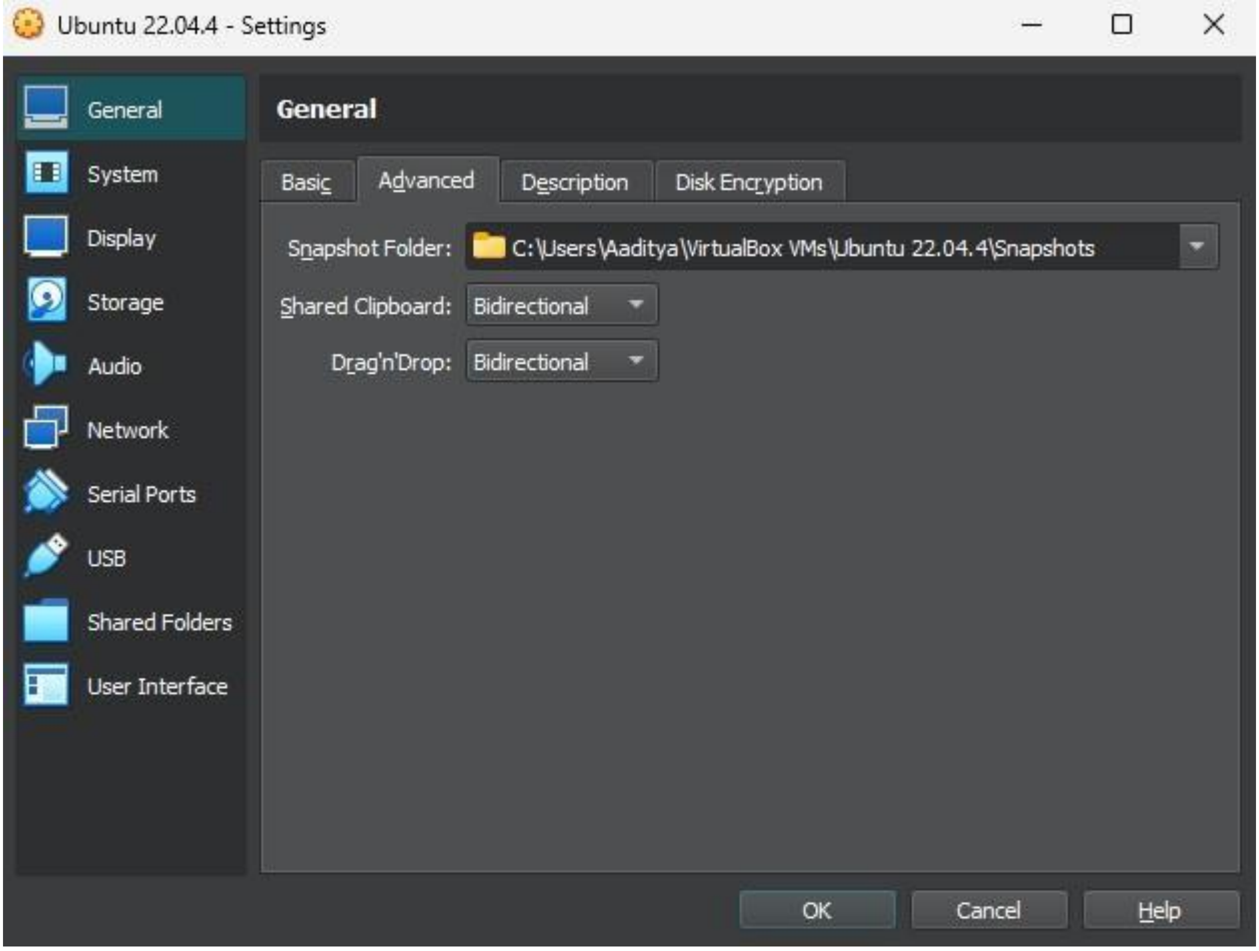
Machine Name and OS Type	
Machine Name	Ubuntu 22.04.4
Machine Folder	C:/Users/Aaditya/VirtualBox VMs/Ubuntu 22.04.4
ISO Image	
Guest OS Type	Ubuntu (64-bit)
Hardware	
Base Memory	10651
Processor(s)	1
EFI Enable	false
Disk	
Disk Size	25.00 GB
Pre-allocate Full Size	false

Step-5



buntu 22.04.4
buntu (64-bit)
MB
, Optical, Hard Disk
Paging, KVM Paravirtualization
16 MB
VMSVGA
r: Disabled
Disabled
0: [Optical Drive] Empty
Ubuntu 22.04.4.vdi (Normal, 25.00 GB)
Adapter 1: Intel PRO/1000 MT Desktop (NAT)
USB Controller: OHCI, EHCI

Step-6

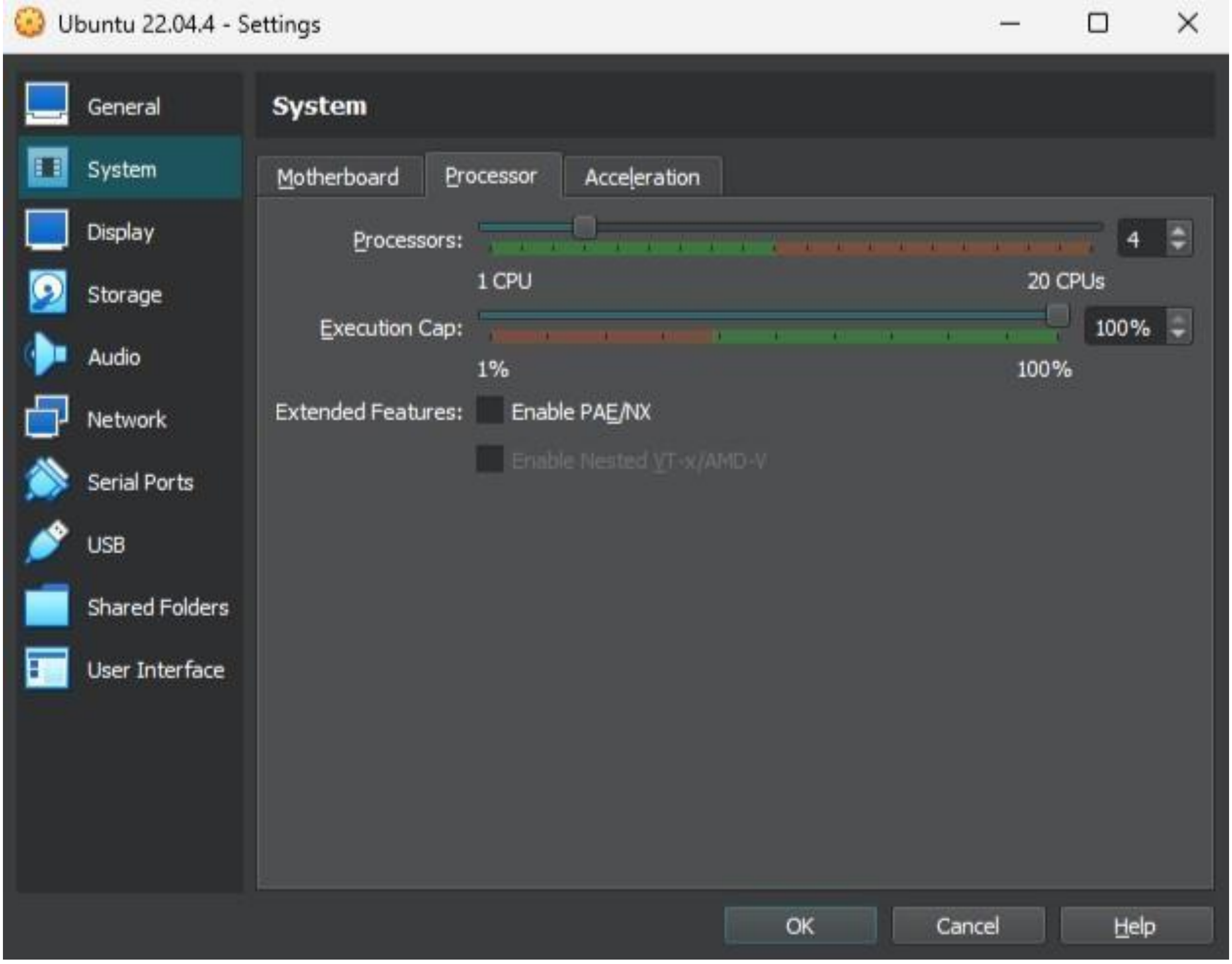


Snapshot Folder: C:\Users\Aaditya\VirtualBox VMs\Ubuntu 22.04.4\Snapshots

Shared Clipboard: Bidirectional

Drag'n'Drop: Bidirectional

Step-7



Ubuntu 22.04.4 - Settings

System

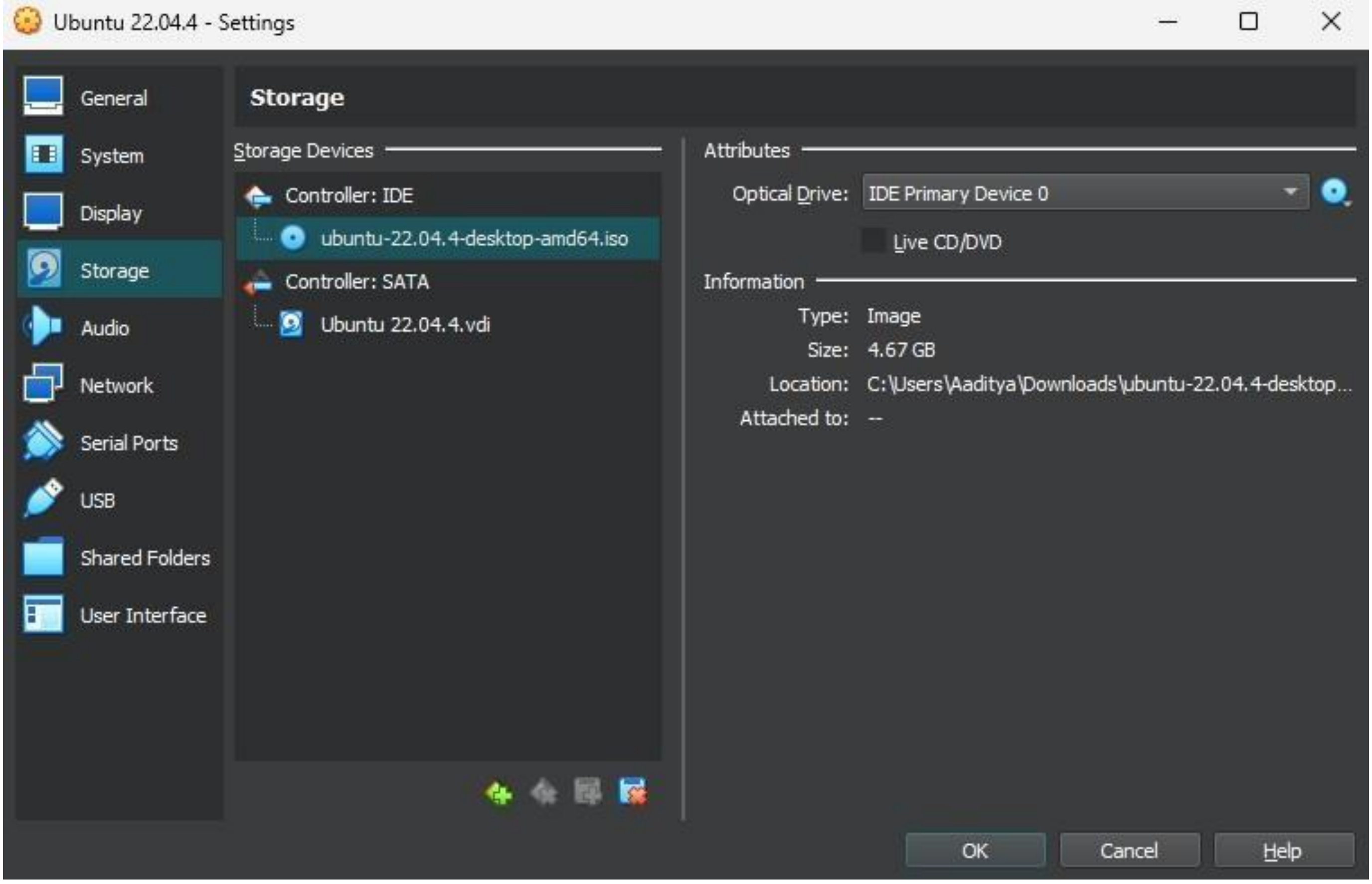
Processors: 4

Execution Cap: 100%

Extended Features: □ Enable PAE/NX

□ Enable Nested VT-x/AMD-V

Step-8



Ubuntu 22.04.4 - Settings

Storage

Storage Devices

Controller: IDE
- ubuntu-22.04.4-desktop-amd64.iso

Controller: SATA
- Ubuntu 22.04.4.vdi

Attributes

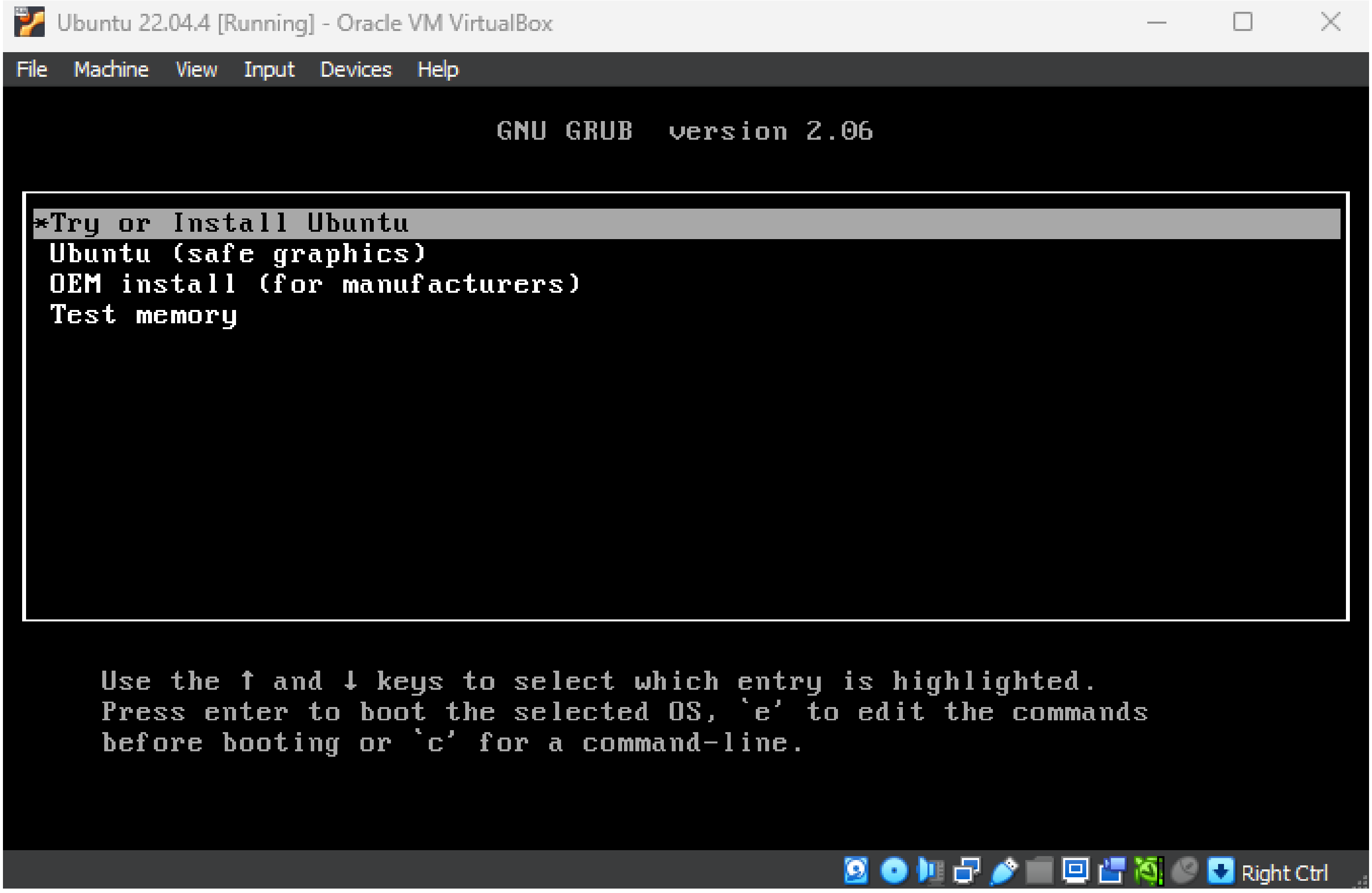
Optical Drive: IDE Primary Device 0

□ Live CD/DVD

Information

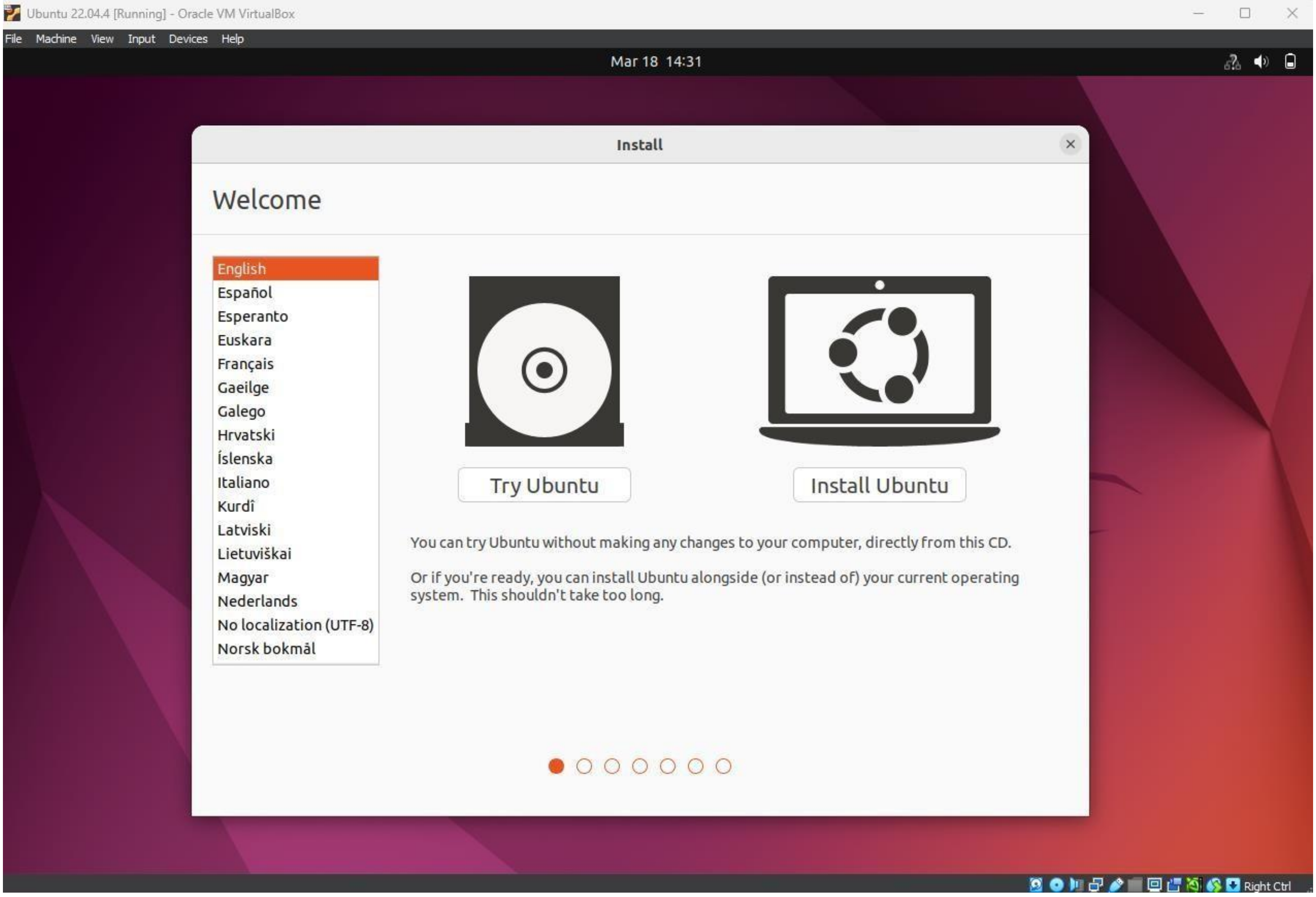
Type: Image
Size: 4.67 GB
Location: C:\Users\Aaditya\Downloads\ubuntu-22.04.4-desktop...
Attached to: --

Step-9



```
                    GNU GRUB  version 2.06

 *Try or Install Ubuntu
  Ubuntu (safe graphics)
  OEM install (for manufacturers)
  Test memory

     Use the ↑ and ↓ keys to select which entry is highlighted.
     Press enter to boot the selected OS, `e' to edit the commands
     before booting or `c' for a command-line.
```

Step-10

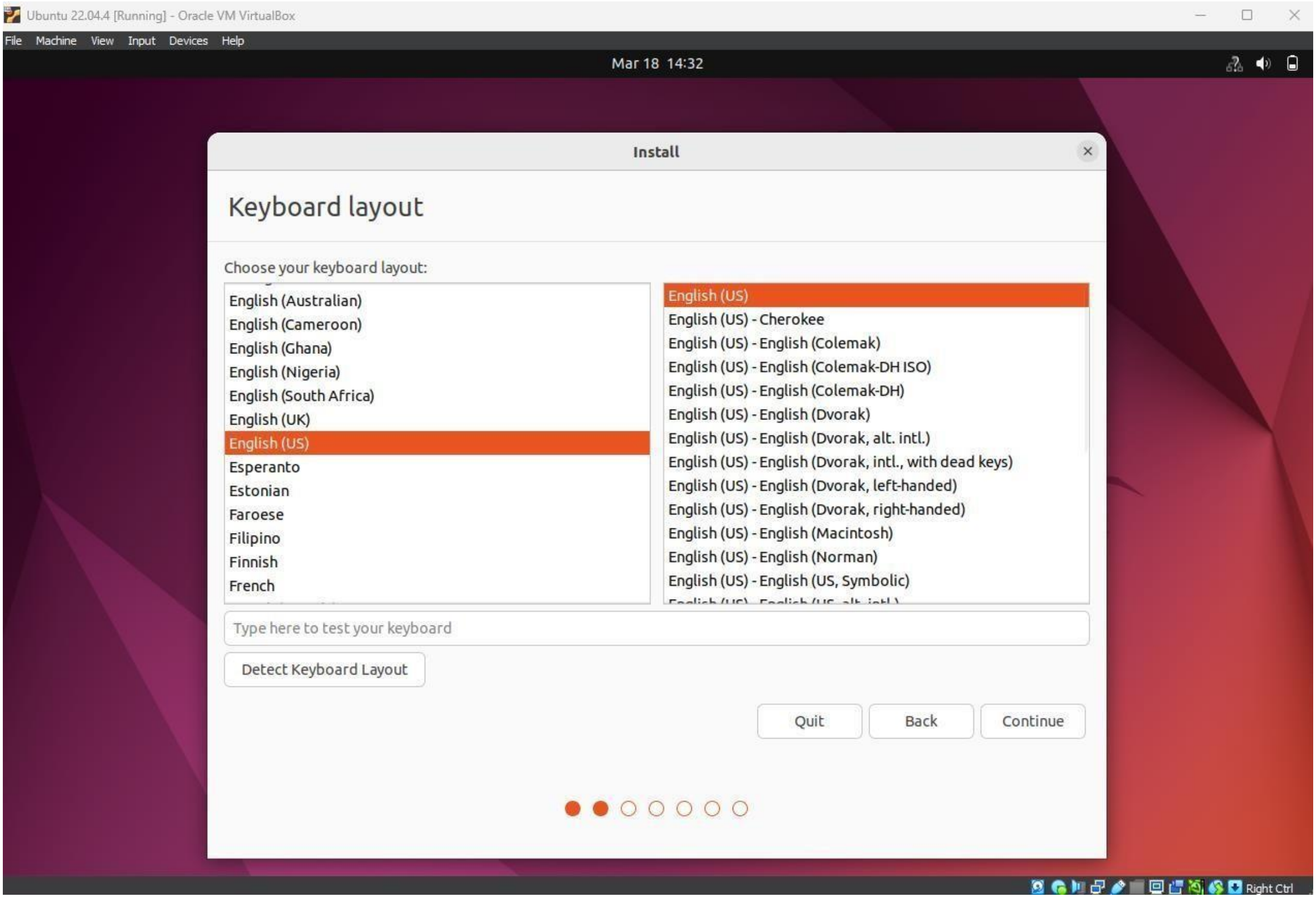


Welcome

You can try Ubuntu without making any changes to your computer, directly from this CD.

Or if you're ready, you can install Ubuntu alongside (or instead of) your current operating system. This shouldn't take too long.

Step-11


Ubuntu 22.04.4 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Mar 18 14:32
Install
Right Ctrl

Keyboard layout

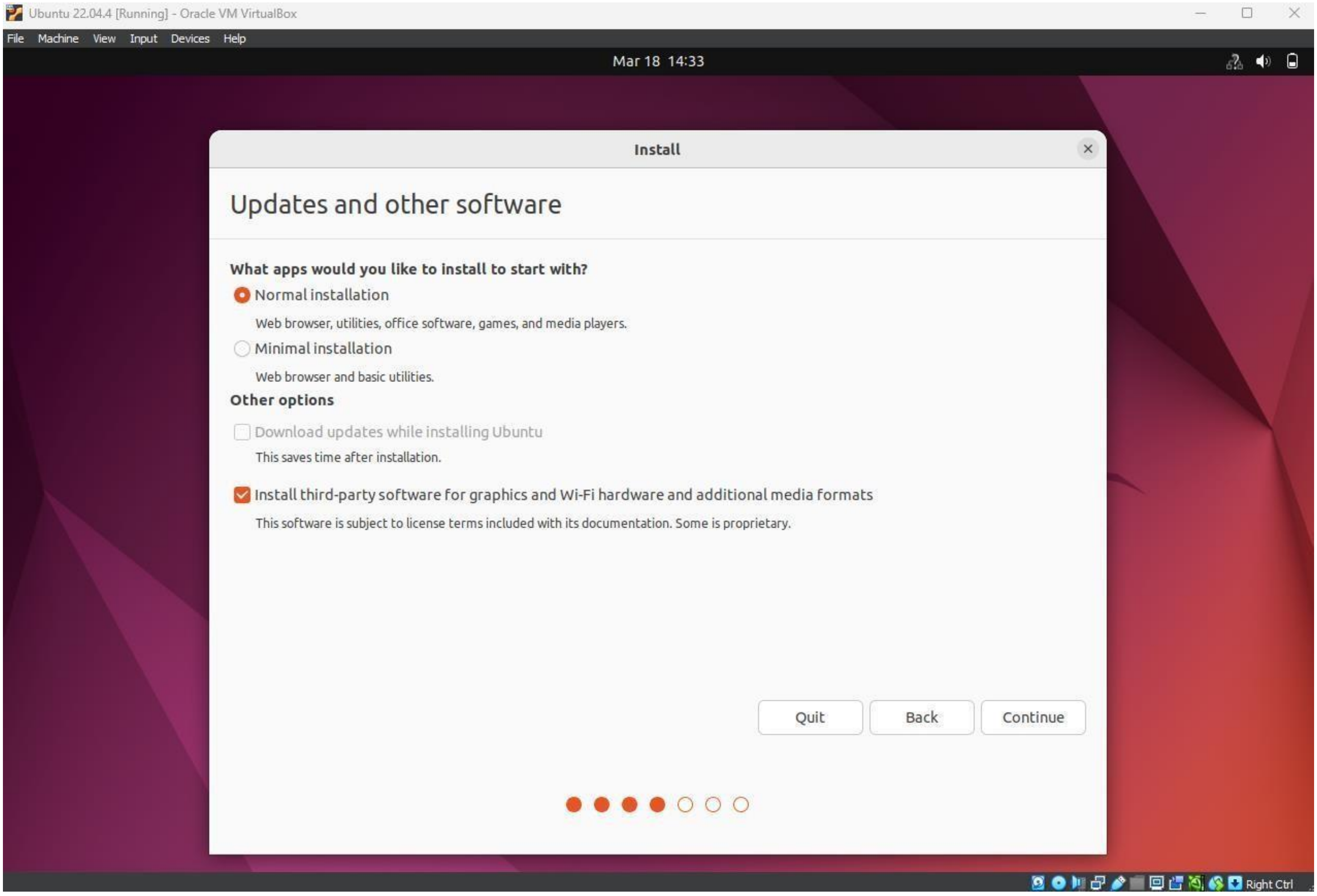
Choose your keyboard layout:

English (Australian)
English (Cameroon)
English (Ghana)
English (Nigeria)
English (South Africa)
English (UK)
English (US)
Esperanto
Estonian
Faroese
Filipino
Finnish
French

English (US)
English (US) - Cherokee
English (US) - English (Colemak)
English (US) - English (Colemak-DH ISO)
English (US) - English (Colemak-DH)
English (US) - English (Dvorak)
English (US) - English (Dvorak, alt. intl.)
English (US) - English (Dvorak, intl., with dead keys)
English (US) - English (Dvorak, left-handed)
English (US) - English (Dvorak, right-handed)
English (US) - English (Macintosh)
English (US) - English (Norman)
English (US) - English (US, Symbolic)
English (US) - English (US, alt. intl.)

Type here to test your keyboard

Step-12


Ubuntu 22.04.4 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Mar 18 14:33
Install
Right Ctrl

Updates and other software

What apps would you like to install to start with?

● Normal installation

Web browser, utilities, office software, games, and media players.

○ Minimal installation

Web browser and basic utilities.

Other options

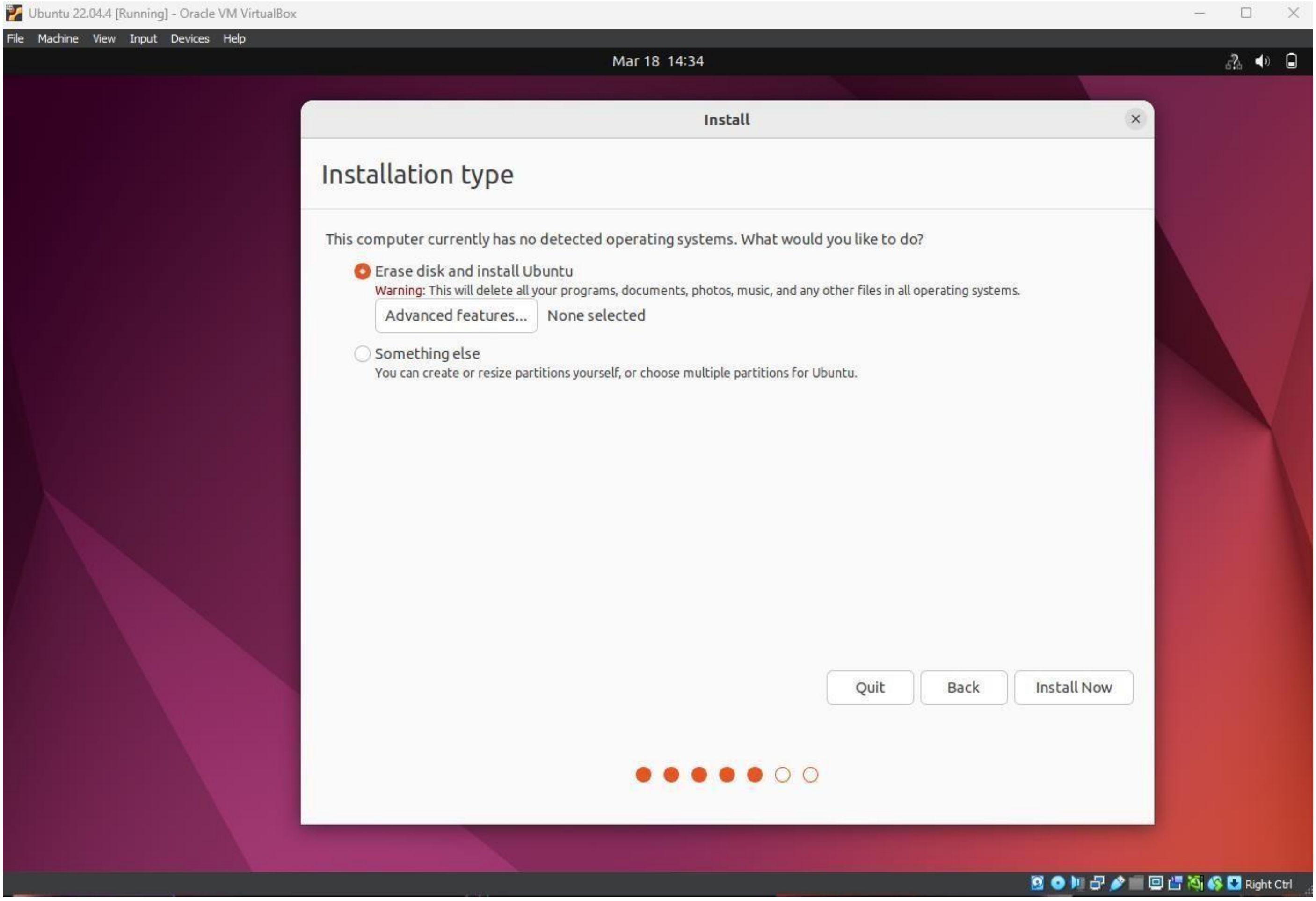
□ Download updates while installing Ubuntu

This saves time after installation.

☑ Install third-party software for graphics and Wi-Fi hardware and additional media formats

This software is subject to license terms included with its documentation. Some is proprietary.

Step-13



Ubuntu 22.04.4 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Mar 18 14:34
Install

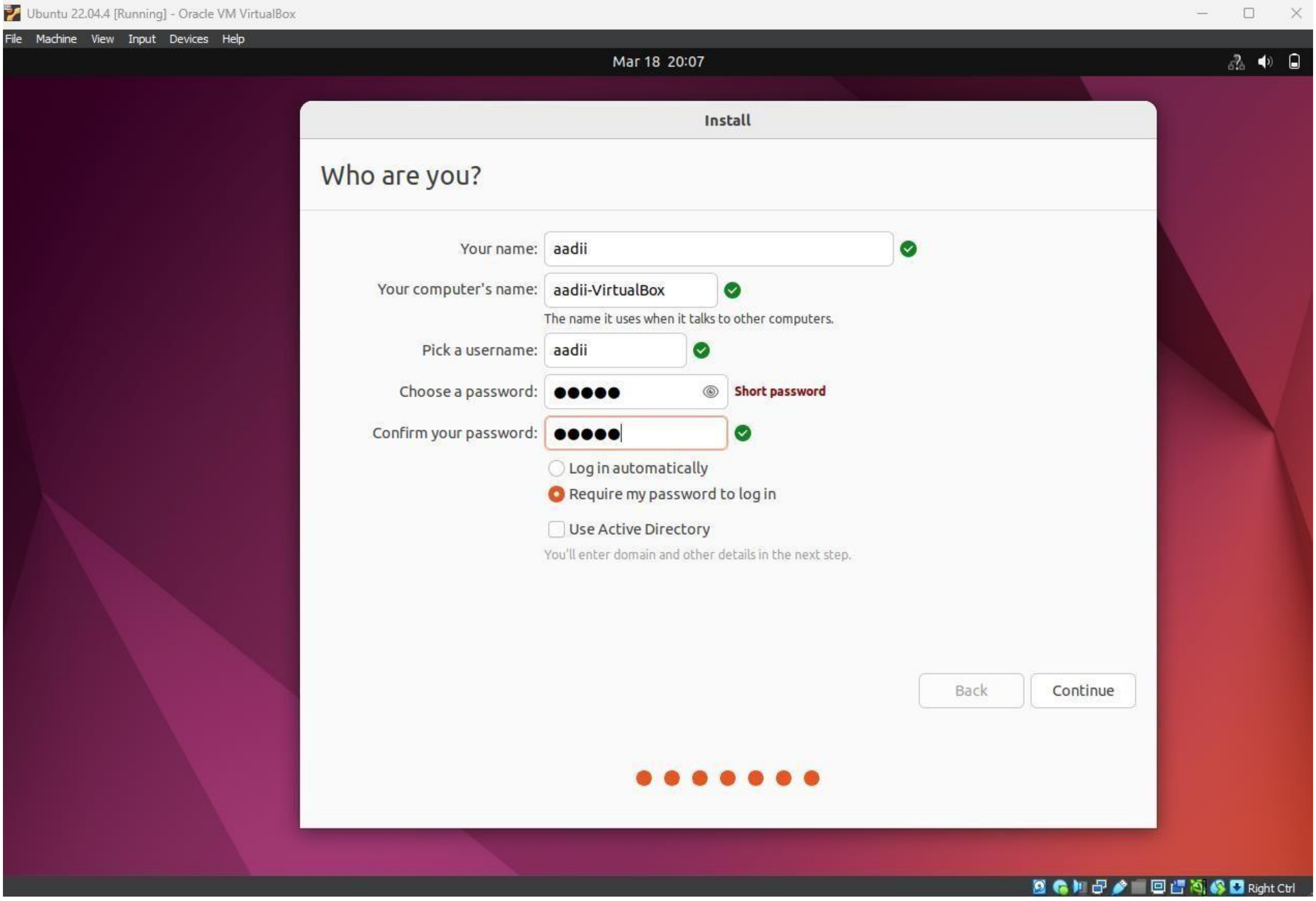
Installation type

This computer currently has no detected operating systems. What would you like to do?

● Erase disk and install Ubuntu
Warning: This will delete all your programs, documents, photos, music, and any other files in all operating systems.
Advanced features... None selected

○ Something else
You can create or resize partitions yourself, or choose multiple partitions for Ubuntu.

Step-14

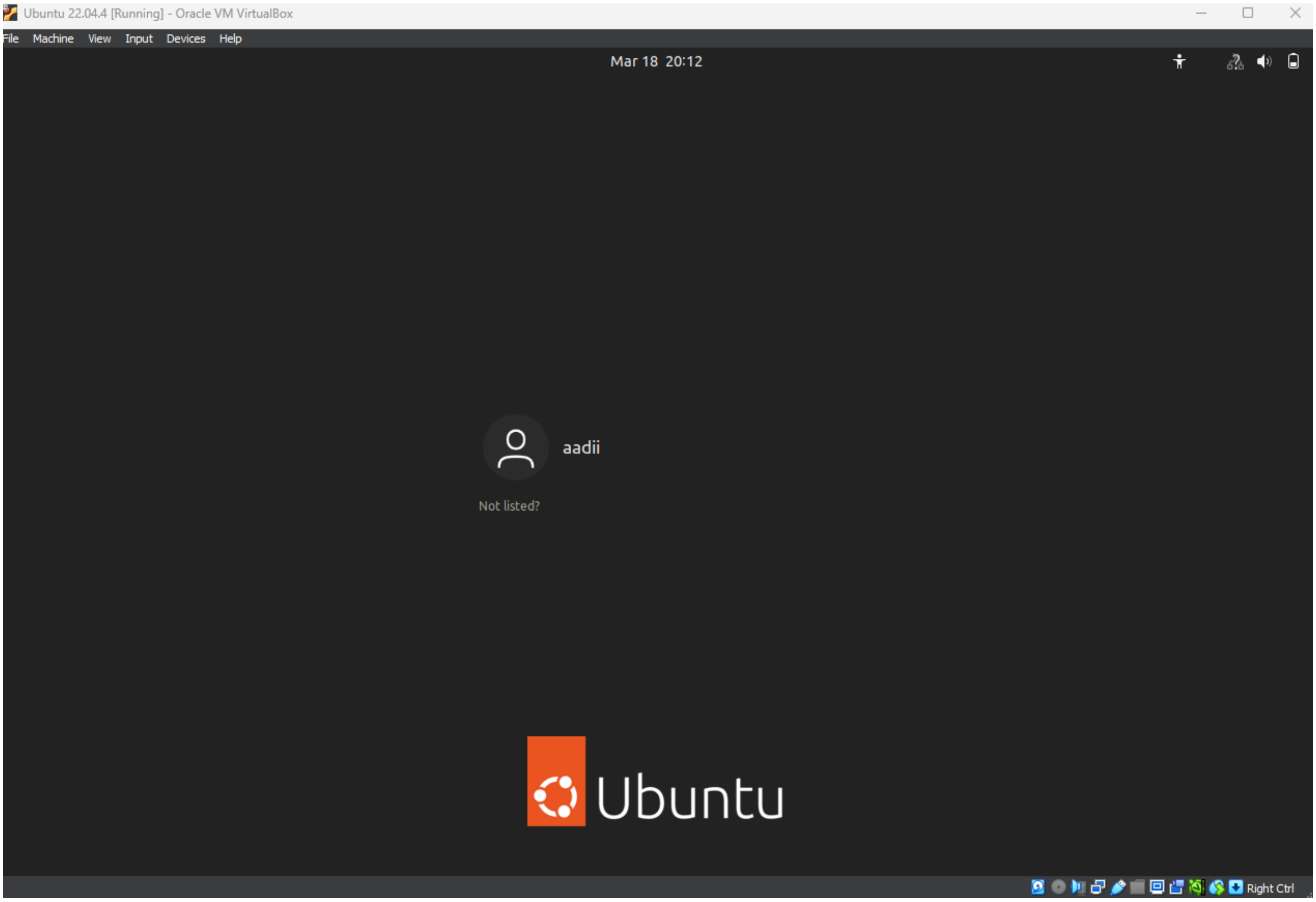


Ubuntu 22.04.4 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Mar 18 20:07
Install

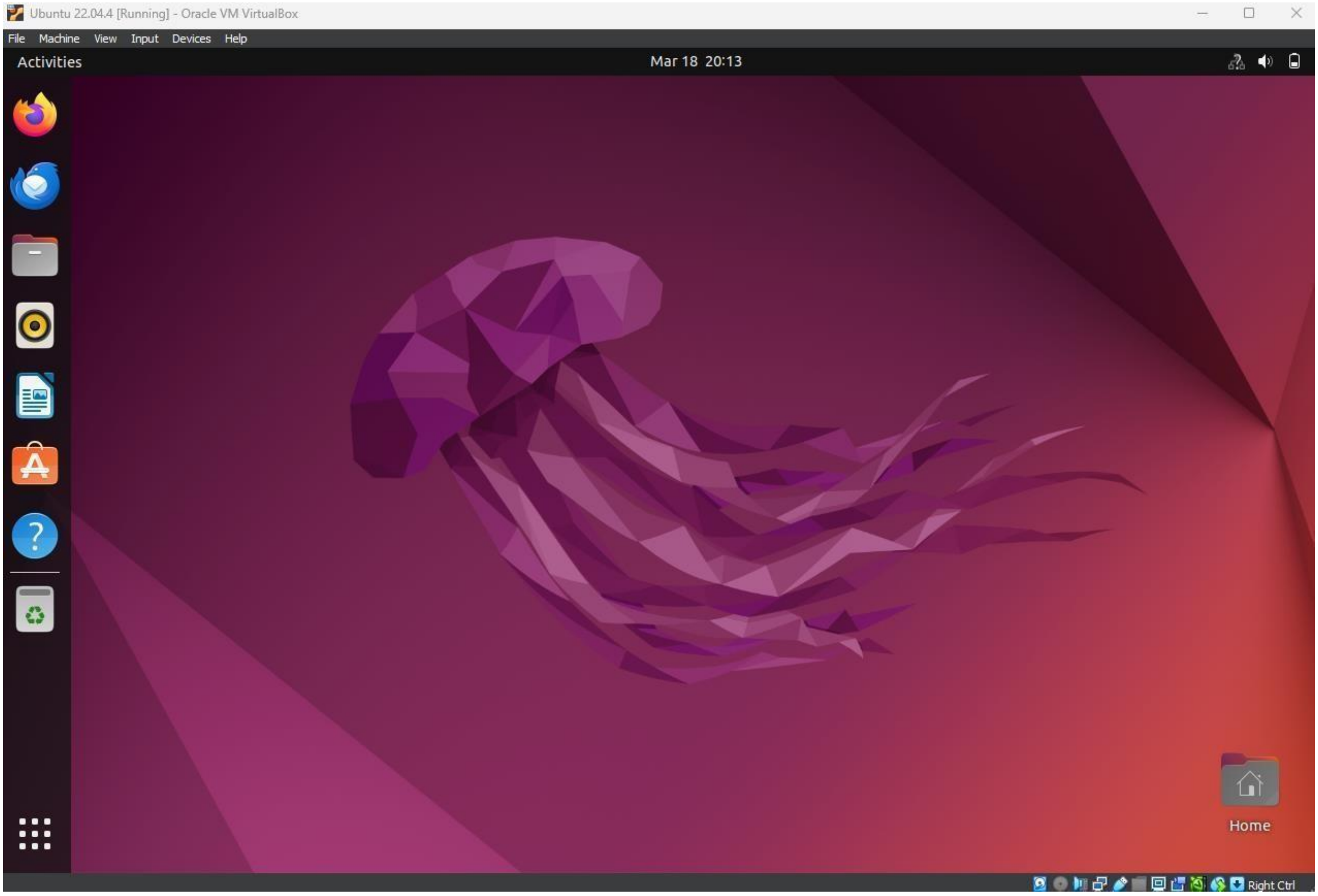
Who are you?

Your name: aadii
Your computer's name: aadii-VirtualBox
The name it uses when it talks to other computers.
Pick a username: aadii
Choose a password: ●●●●● Short password
Confirm your password: ●●●●●
○ Log in automatically
● Require my password to log in
□ Use Active Directory
You'll enter domain and other details in the next step.

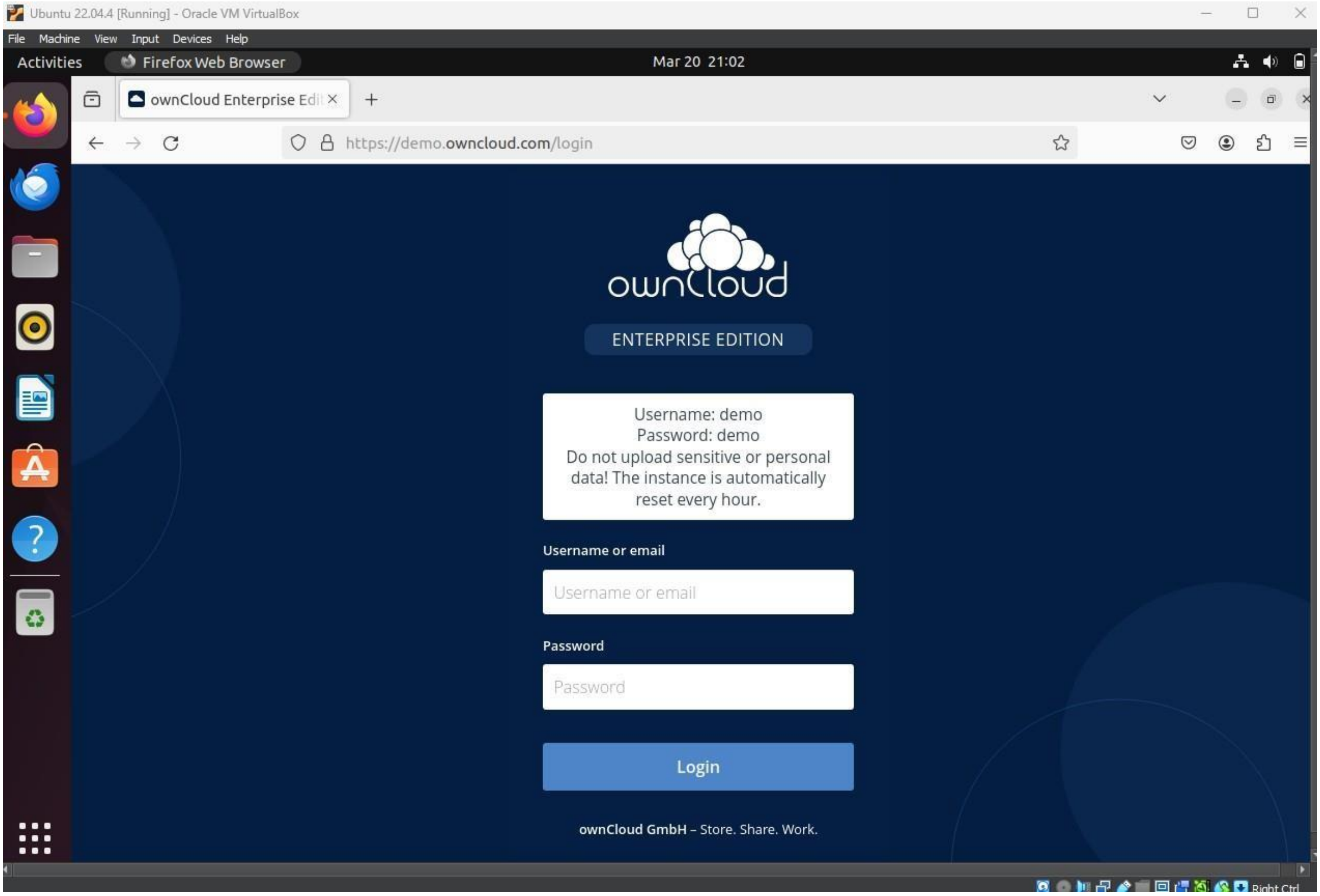
Step-15


Ubuntu 22.04.4 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Mar 18 20:12
aadii
Not listed?
Ubuntu
Right Ctrl

Step-16


Ubuntu 22.04.4 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Mar 18 20:13
Home
Right Ctrl

Step-17


Ubuntu 22.04.4 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Firefox Web Browser
Mar 20 21:02
ownCloud Enterprise Edi
https://demo.owncloud.com/login
ownCloud
ENTERPRISE EDITION

Username: demo
Password: demo
Do not upload sensitive or personal data! The instance is automatically reset every hour.

Username or email

Username or email

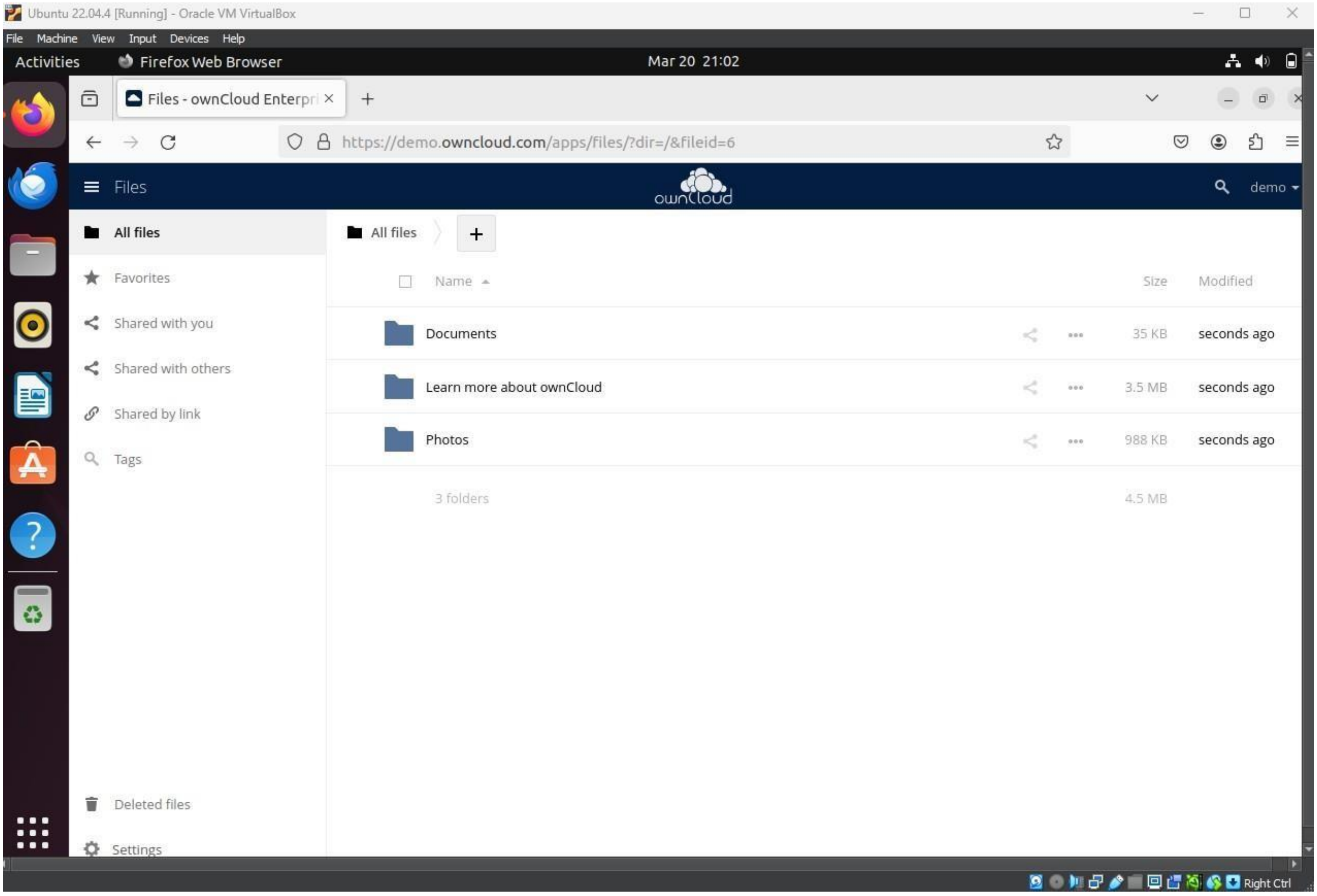
Password

Password

Login

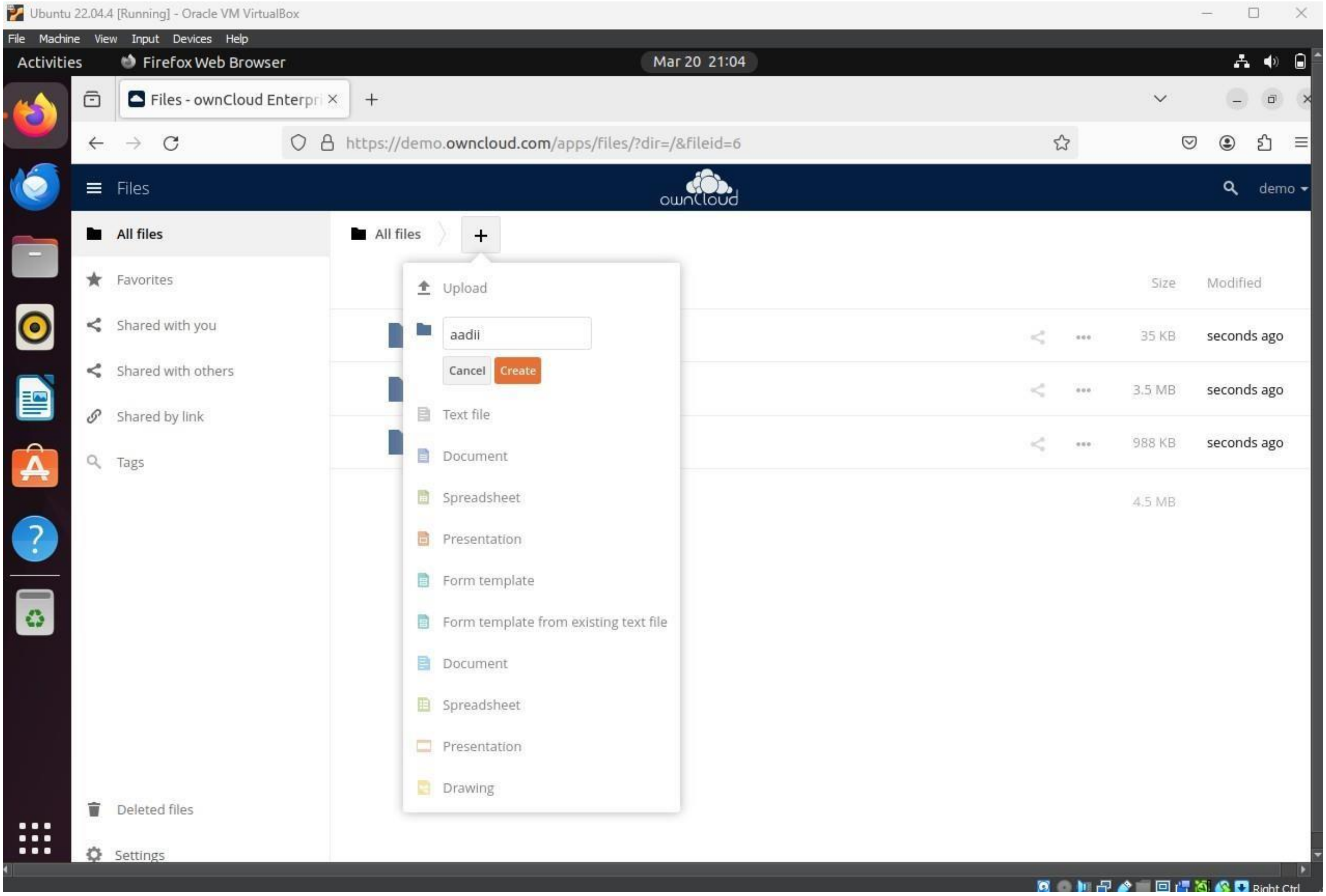
ownCloud GmbH – Store. Share. Work.

Step-18

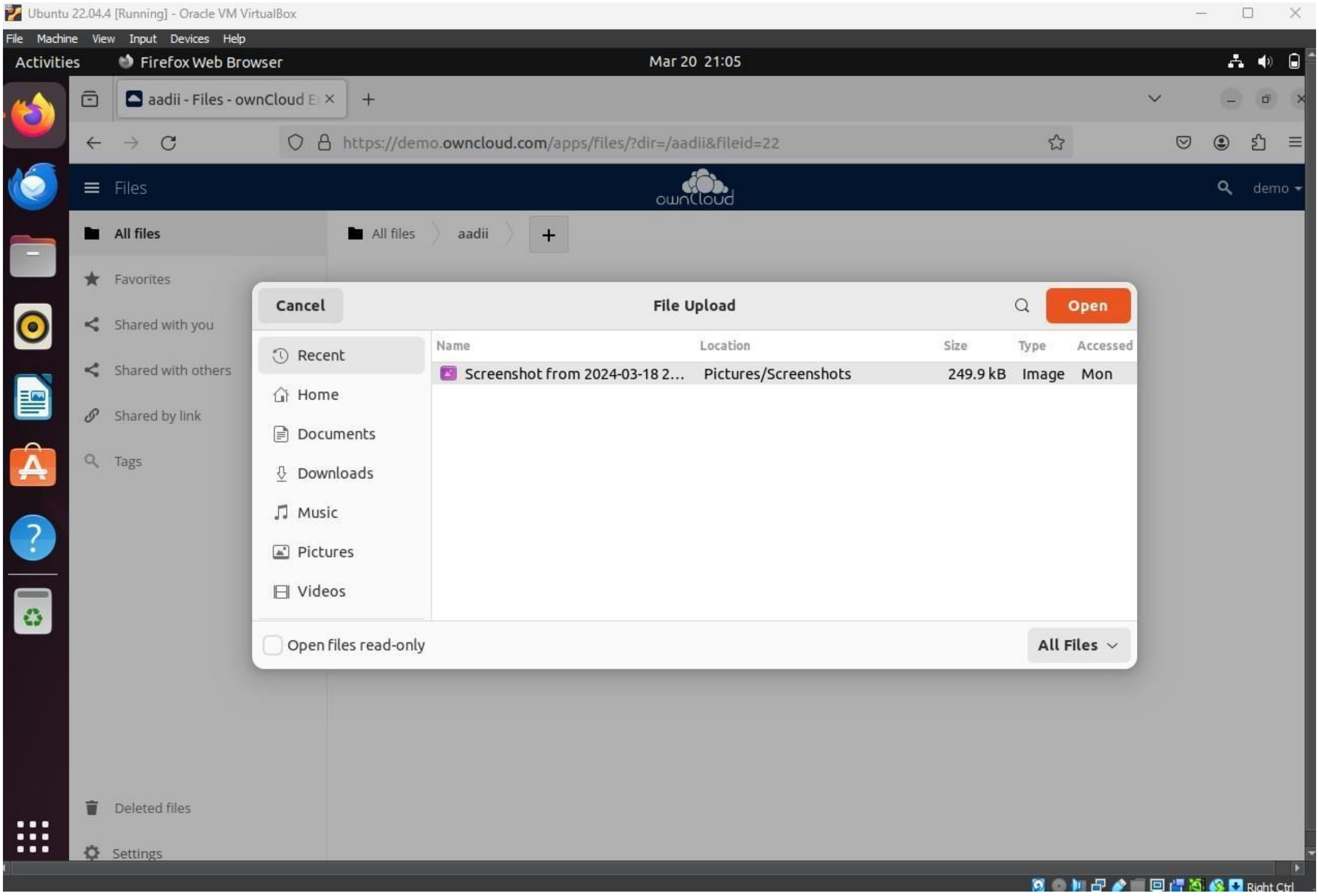

Ubuntu 22.04.4 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Firefox Web Browser
Mar 20 21:02
Files - ownCloud Enterpri
https://demo.owncloud.com/apps/files/?dir=/&fileid=6
Files
ownCloud
demo
All files
Favorites
Shared with you
Shared with others
Shared by link
Tags
Deleted files
Settings
All files
+

	Name	Size	Modified
	Documents	35 KB	seconds ago
	Learn more about ownCloud	3.5 MB	seconds ago
	Photos	988 KB	seconds ago
	3 folders	4.5 MB	

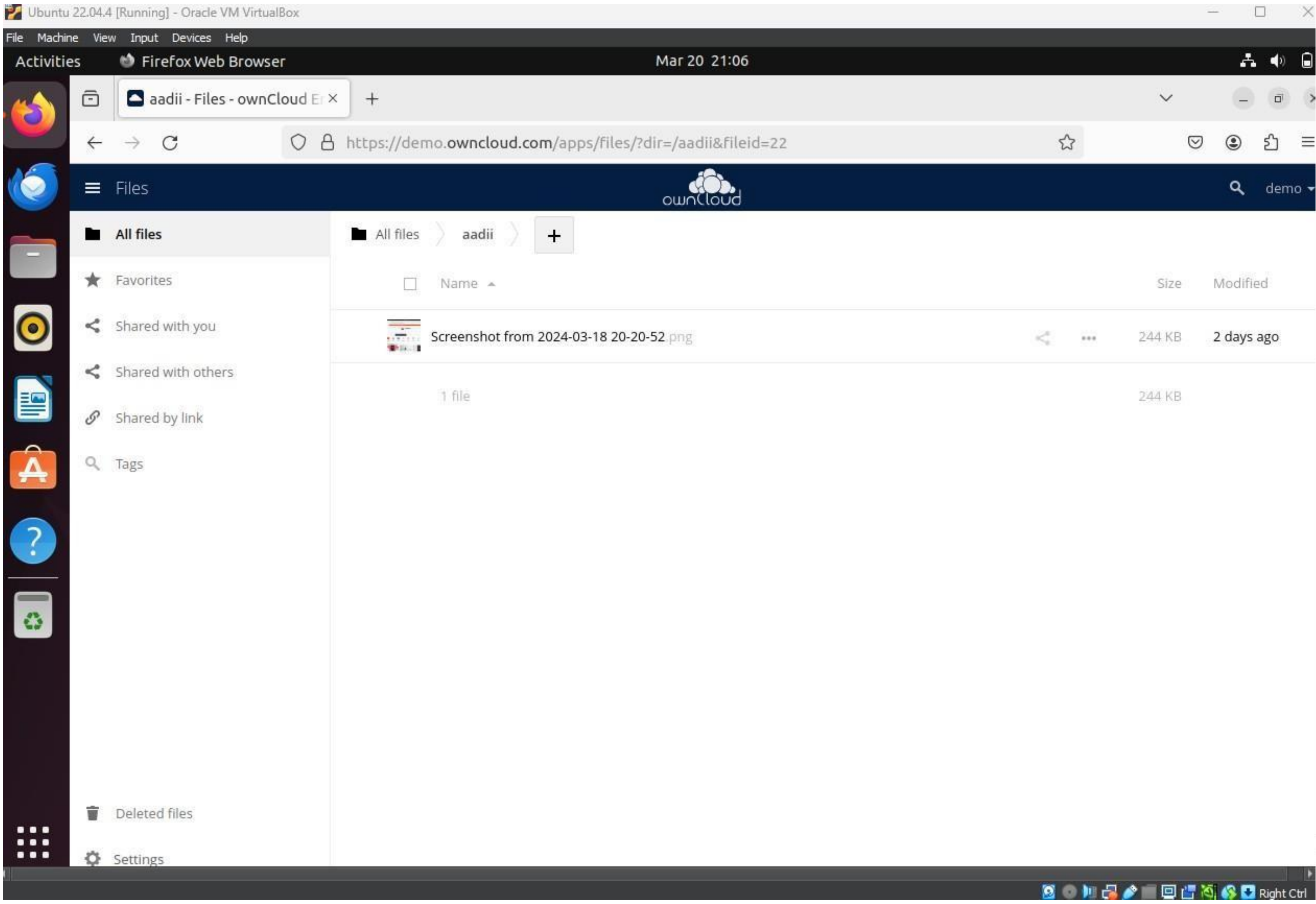
Step-19



Step-20

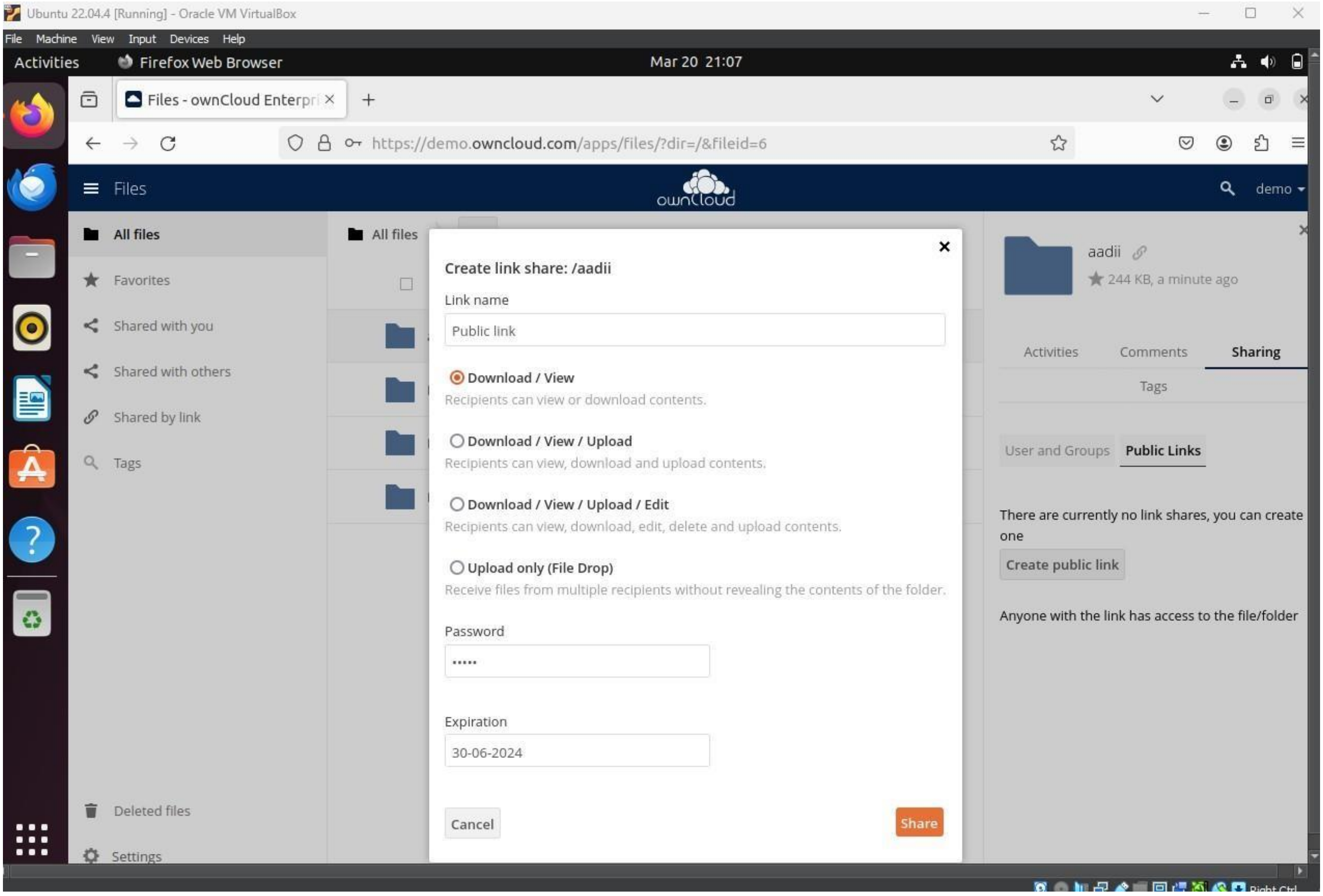


Step-19



Step-22

Step-19



Create link share: /aadii

Link name: Public link

● Download / View
Recipients can view or download contents.

○ Download / View / Upload
Recipients can view, download and upload contents.

○ Download / View / Upload / Edit
Recipients can view, download, edit, delete and upload contents.

○ Upload only (File Drop)
Receive files from multiple recipients without revealing the contents of the folder.

Password: •••••

Expiration: 30-06-2024

Cancel | Share

There are currently no link shares, you can create one

Anyone with the link has access to the file/folder