



islington college
(इरिलहटन कलेज)

Module Code & Module Title
Level 5 – Network Operating Systems

Assessment Type

Logbook 5

Semester

2025 Autumn

Student Name: Eijkeyal Pakhrin

London Met ID: 240**49**

College ID: NP01***022**

Assignment Due Date: Sunday, November 23, 2025

Assignment Submission Date: Tuesday, November 25, 2025

Submitted To: Nischal Pradhan

Word Count (Where required): 1507

I confirm that I understand my coursework needs to be submitted online via MST Classroom under the relevant module page before the deadline for my assignment to be accepted and marked. I am fully aware that late submissions will be treated as non-submission and a mark of zero will be awarded.

Table of Contents

1	Introduction.....	1
2	Aim.....	1
3	Objectives.....	1
4	Requirement Tools.....	1
5	Tools and concept.....	2
6	Configuration Steps	3
6.1	Open VirtualBox and go to VM environment settings button.	3
6.2	Find Network and attached bridged adapter.	3
6.3	Open website file from local disk.	4
6.4	Open Run and type “intmgr”.....	4
6.5	Click on sites and Add Website.	4
6.6	Add details.	5
6.7	Successfully Added a static website to the site.....	5
6.8	Successfully hosted a website.	6
6.9	Try to open hosted website from your smartphone.	6
6.10	To connect Windows server guest To Host.	6
6.11	Confirm the correct Version of virtual Box.	7
6.12	Click on the link based on the version of VM.	7
6.13	Open VM in administrator.....	7
6.14	Click on the Tools and then click on preferences again.....	8
6.15	Add version on Extension.....	8
6.16	Select the Extension pack.	8
6.17	After adding version Click on Install from dialogue box.	9
6.18	Click ok after successfully installation of VirtualBox Extension Pack.	9
6.19	Open VirtualBox settings and click in display.	9
6.20	Enable the Remote Display and click on the enable server.	10
6.21	See your Guest OS IP by “ipconfig” in CLI.	10
6.22	Open remote desktop connection from your host OS.	10
6.23	Add guest OS IP address to the Host OS and click connect.	11
6.24	Enter your administrator Username and password.	11
6.25	Click on OK and leave at is it.	11
6.26	Congratulations!!.... You can access our Guest OS from Host OS Using Remote desktop connections.	11
7	Conclusion.....	12

Table of Figures

Figure 1 VirtualBox Dashboard.....	3
Figure 2 Open a network setting.....	3
Figure 3 Open a Local disk for website files.....	4
Figure 4 Open a CLI to open intmgr	4
Figure 5 Add a website	4
Figure 6 Add Details to the Host Site	5
Figure 7 Website is Live Now	5
Figure 8 Browse a website.....	6
Figure 9 Also Browse from Smartphones.....	6
Figure 10 Confirm the Version of VirtualBox	6
Figure 11 Virtual Box version 6.1.....	7
Figure 12 Download the Vbox-extpack.....	7
Figure 13 Open and Run as administrator	7
Figure 14 Open Tools and click Preferences	8
Figure 15 Add versions on extension	8
Figure 16 Select the Downloaded Extension Pack	8
Figure 17 Install the extension Pack.....	9
Figure 18 Successfully installed the Extension Pack.....	9
Figure 19 Open VirtualBox Settings	9
Figure 20 Enable a remote Server.....	10
Figure 21 See IP by Ipconfig.....	10
Figure 22 Open Remote Desktop Connection	10
Figure 23 Add Guest IP address	11
Figure 24 Give your Credentials	11
Figure 25 Setting Up Remote Desktop	11
Figure 26 Successfully added remote desktop connection	11

Hosting and Remote Access on Windows Server 2022

1 Introduction

Windows Server is the platform for hosting or building infrastructure of connected applications, web applications, and web services over the internet. In the modern tech industry, Windows Server 2022 manages systems remotely to host services. (Microsoft) This lookbook focuses on two critical aspects of system administration within a virtual environment: web hosting and remote access. Using Internet Information Services (IIS), we host static websites by making them accessible not only from the host machine but also from other devices like mobile phones, host machines, and the same local area network (LAN). (Wikipedia)

2 Aim

This logbook aims to configure and manage the windows serve 2022 virtual machine to host a static website and enable or provide to remote access, allowing the connectivity from both host machine as well as guest or other devices under the same local network.

3 Objectives

- Deploy website on windows server 2022 using Internet Information Services (IIS).
- Configured Network Setting in virtual box to use network adapter as bridged adapter, allowing the VM to be accessible on the local area network (LAN).
- Access the deployed website from host operating system, guest operating system as well as other devices like smartphones on the same network.
- Access and enable to use virtual machines via remote desktop form the host Operating system using virtual machines remote desktop feature.

4 Requirement Tools

- **Virtual Box:** Virtual machine or software to run the windows server 2022.
- **Windows Server 2022:** Guest Operating System used for hosting and remote desktop protocol.
- **VirtualBox Extension Pack:** It provides the additional features to enhance the remote desktop support.
- **Static Website Files:** We need static website including HTML, CSS JavaScript and other web files to be hosted.
- **Remote Desktop Connection:** Built-in windows tools to access the virtual machines remotely.

5 Tools and concept

- **Virtual Network Configuration:** we need to configure the network and used bridged adapter mode to assign the Virtual Machine IP address to the local network.
- **Web Hosting:** Configuring the IIS manager and add a new static website and binding the website to a specific IP address and deployed it.
- **Remote Desktop Services:** Enable desktop service for using VirtualBox remote display feature for enhanced remote access.
- **VirtualBox Extensions:** Installing the VirtualBox Extensions to enable advanced functionality for remote access.

6 Configuration Steps

6.1 Open VirtualBox and go to VM environment settings button.

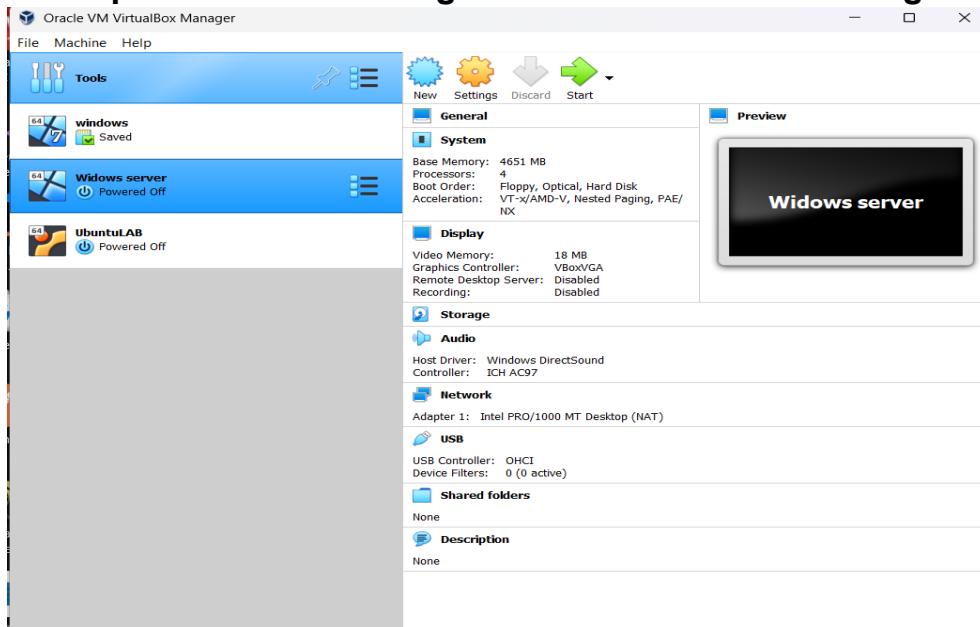


Figure 1 VirtualBox Dashboard

6.2 Find Network and attached bridged adapter.

Click on network and click dropdown list and attached Bridged Adapter.

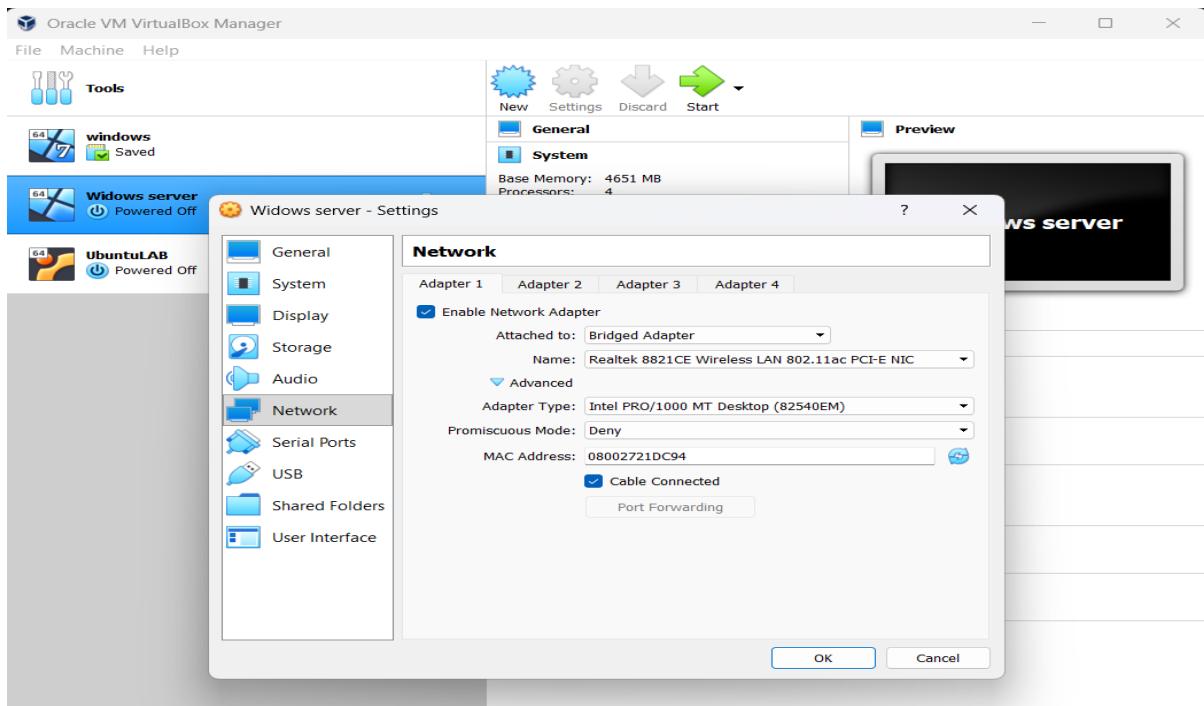


Figure 2 Open a network setting

6.3 Open website file from local disk.

Find your website file from local disk C

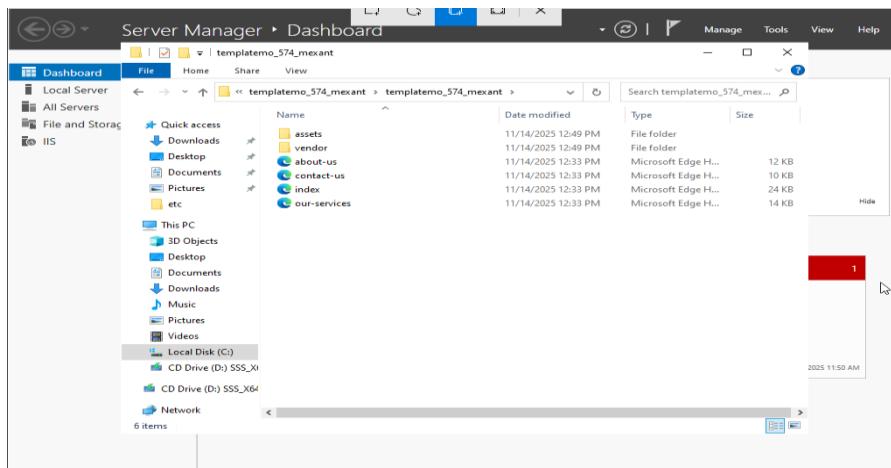


Figure 3 Open a Local disk for website files

6.4 Open Run and type “intmgr”.

It opens the Internet Information Service where we host our website.

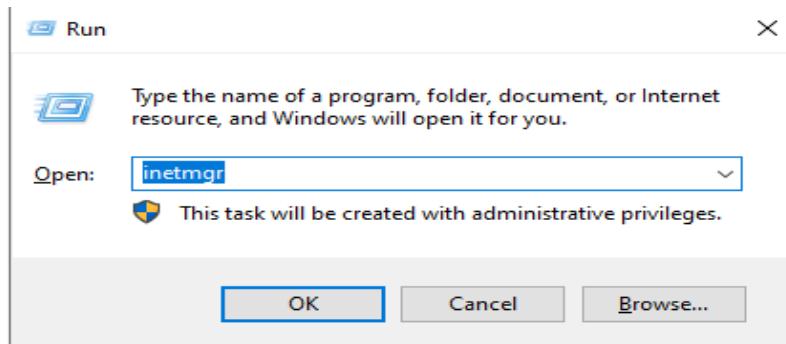


Figure 4 Open a CLI to open intmgr

6.5 Click on sites and Add Website.

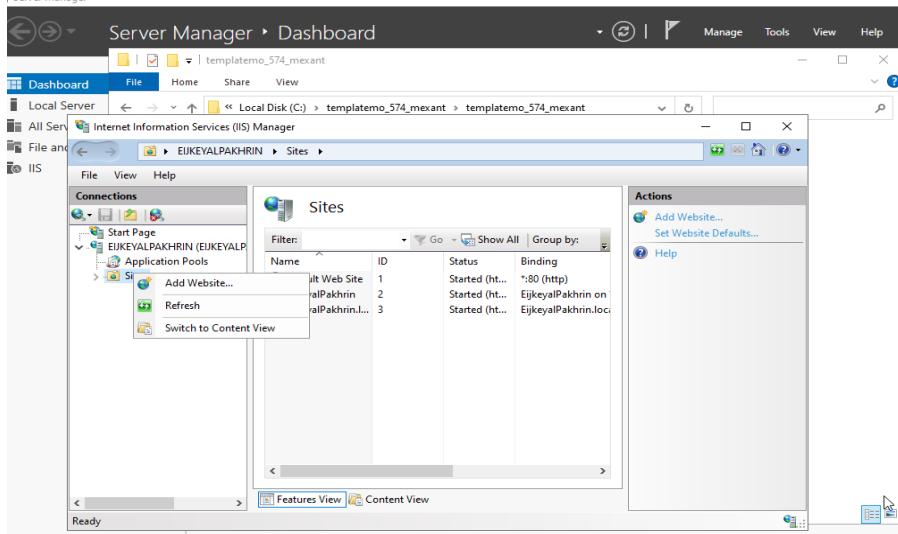


Figure 5 Add a website

6.6 Add details.

Site name: Eijkeyal

Physical Path: C:\templatemo_574_mexant\ templatemo_574_mexant.

IP address: Assigned from dropdown list.

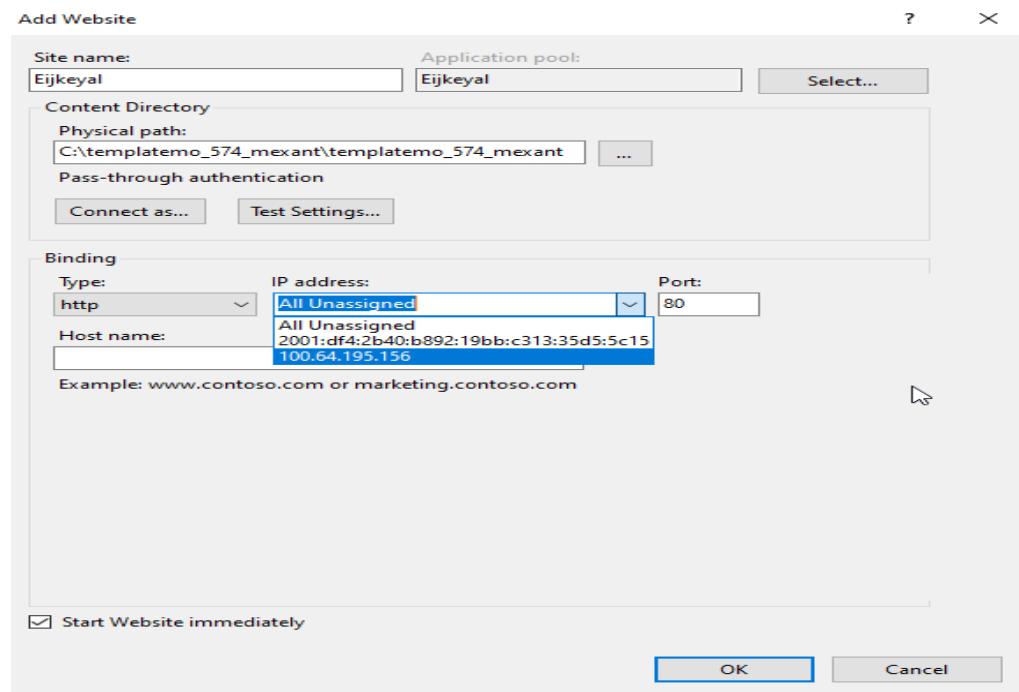


Figure 6 Add Details to the Host Site

6.7 Successfully Added a static website to the site.

Figure 7 Website is Live Now

6.8 Successfully hosted a website.

Now you can check browsing your website by your site name.

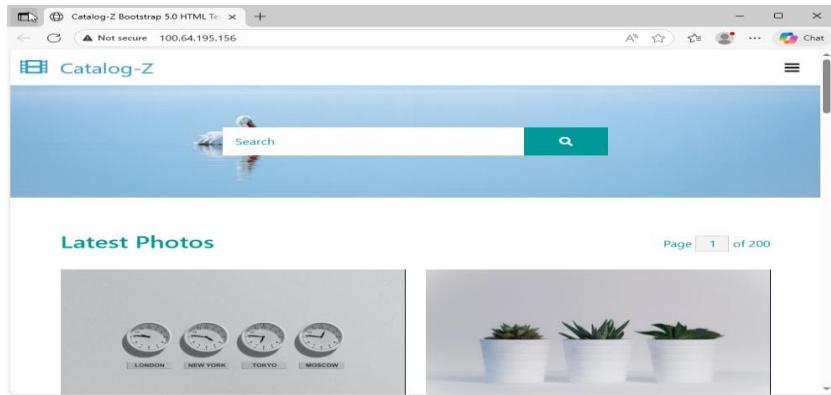


Figure 8 Browse a website

6.9 Try to open hosted website from your smartphone.

Type assigned IP address in the google and search the website it should be accessible from the host OS as well as other devices.

NOTE: All devices and Server must be on the Same network

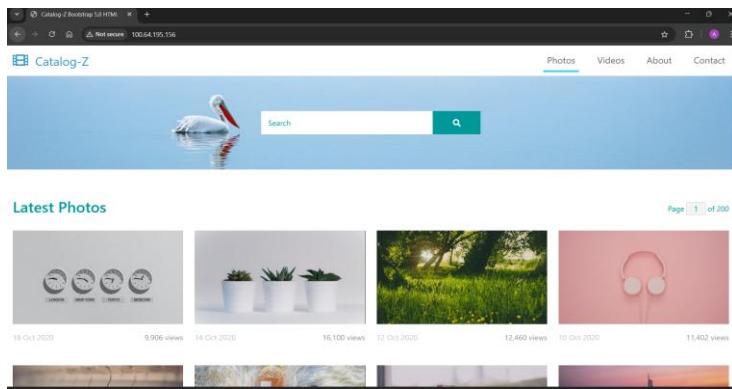


Figure 9 Also Browse from Smartphones

6.10 To connect Windows server guest To Host.

At first, we need to download extension pack for virtual box. Before that first confirm the version of our virtual Box version and select the right version of following link the list.

link: <https://download.virtualbox.org/virtualbox/>

Index of /virtualbox

Name	Last modified	Size
4.0.0/	22-Dec-2010 19:03	-
4.0.2/	20-Jan-2011 11:42	-
4.0.4/	13-Apr-2011 12:05	-
4.0.6/	26-Apr-2011 15:49	-
4.0.8/	17-May-2011 16:07	-
4.0.10/	27-Jun-2011 19:37	-
4.0.12/	19-Jul-2011 12:08	-
4.0.14/	18-Oct-2011 22:43	-
4.0.16/	16-Jan-2012 15:10	-
4.0.18/	19-Dec-2012 16:05	-
4.0.20/	12-Oct-2013 7:45	-
4.0.22/	10-Jan-2014 21:04	-
4.0.24/	14-Mar-2014 15:28	-
4.0.26/	16-Jul-2014 14:58	-
4.0.28/	17-Jan-2015 14:02	-
4.0.30/	20-May-2015 9:19	-
4.0.32/	14-Oct-2015 22:21	-

Figure 10 Confirm the Version of VirtualBox

6.11 Confirm the correct Version of virtual Box.



Figure 11 Virtual Box version 6.1

6.12 Click on the link based on the version of VM.

Click on the 6.1.50. vbox-extpack and download it.

Index of /virtualbox/6.1.50

Name	Last modified
Parent Directory	
MD5SUMS	16-Jan-2024 16
Oracle_VM_VirtualBox_Extension_Pack-6.1.50-161033.vbox-extpack	12-Jan-2024 10
Oracle_VM_VirtualBox_Extension_Pack-6.1.50.vbox-extpack	12-Jan-2024 10
SDKRef.pdf	12-Jan-2024 10
SHA256SUMS	16-Jan-2024 16
UserManual.pdf	12-Jan-2024 10
VBoxGuestAdditions_6.1.50.iso	12-Jan-2024 10
VirtualBox-6.1-6.1.50_161033_el6-1.x86_64.rpm	12-Jan-2024 10
VirtualBox-6.1-6.1.50_161033_el7-1.x86_64.rpm	12-Jan-2024 10
VirtualBox-6.1-6.1.50_161033_el8-1.x86_64.rpm	12-Jan-2024 10
VirtualBox-6.1-6.1.50_161033_el9-1.x86_64.rpm	12-Jan-2024 10
VirtualBox-6.1-6.1.50_161033_x64-1.x86_64.rpm	12-Jan-2024 10

Figure 12 Download the Vbox-extpack

6.13 Open VM in administrator.

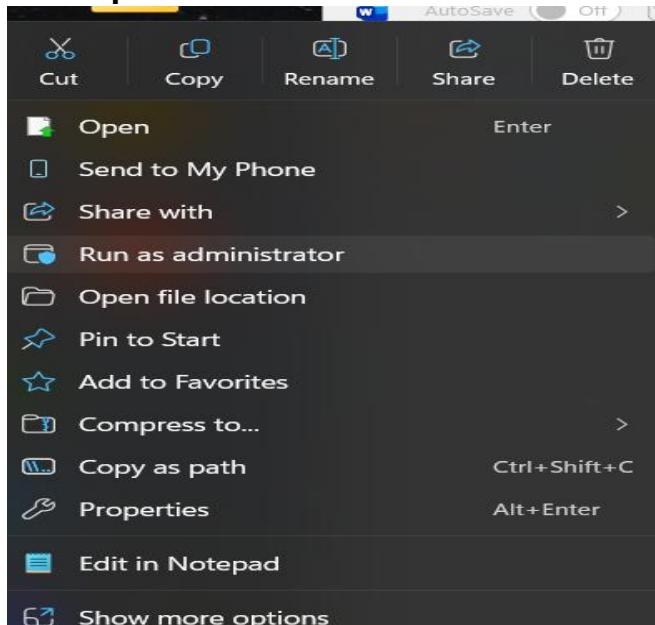


Figure 13 Open and Run as administrator

6.14 Click on the Tools and then click on preferences again.



Figure 14 Open Tools and click Preferences

6.15 Add version on Extension.

After clicking on preferences there is extension in left and open it then there is add(+) sign on the right side click and add the version which is we downloaded before.

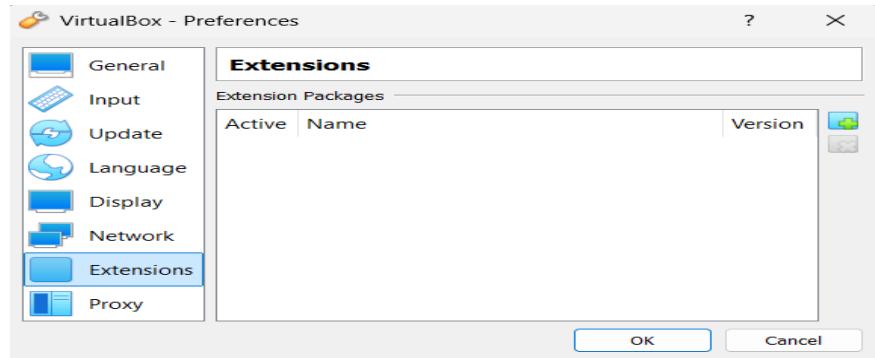


Figure 15 Add versions on extension

6.16 Select the Extension pack.

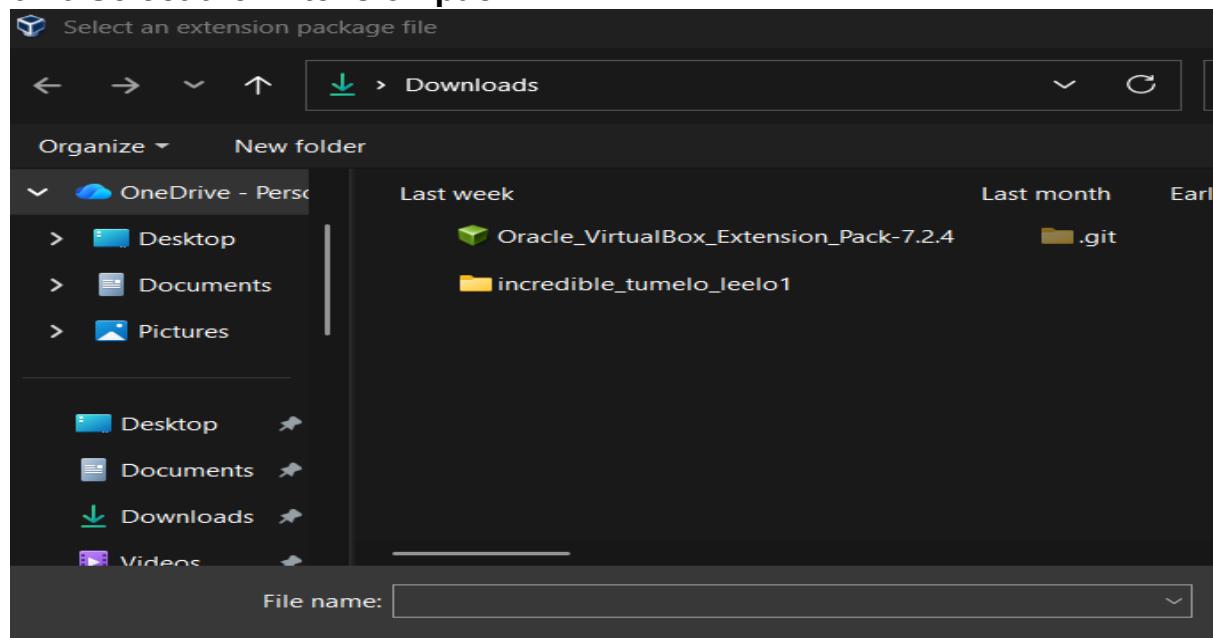


Figure 16 Select the Downloaded Extension Pack

6.17 After adding version Click on Install from dialogue box.

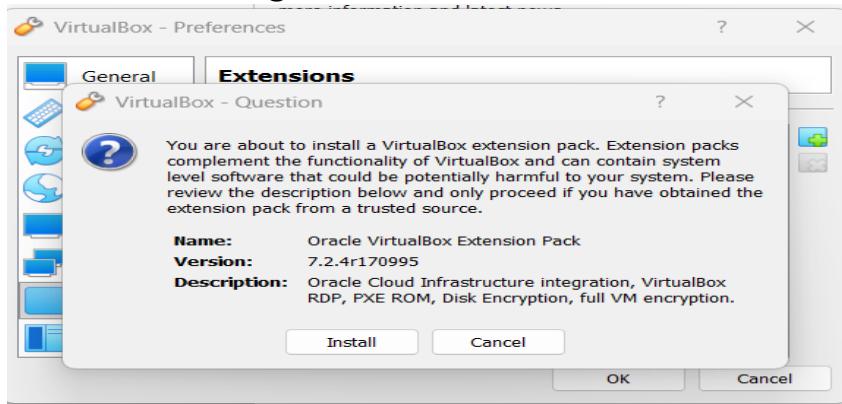


Figure 17 Install the extension Pack

6.18 Click ok after successfully installation of VirtualBox Extension Pack.

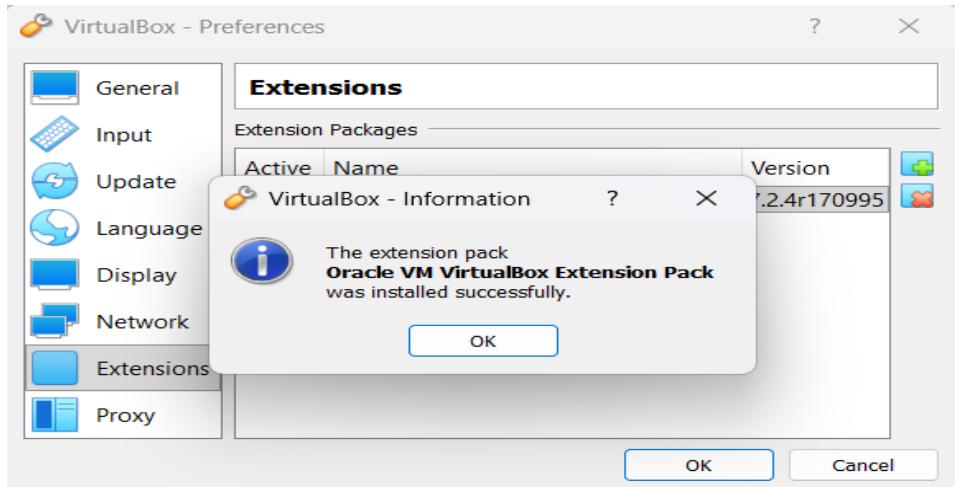


Figure 18 Successfully installed the Extension Pack

6.19 Open VirtualBox settings and click in display.

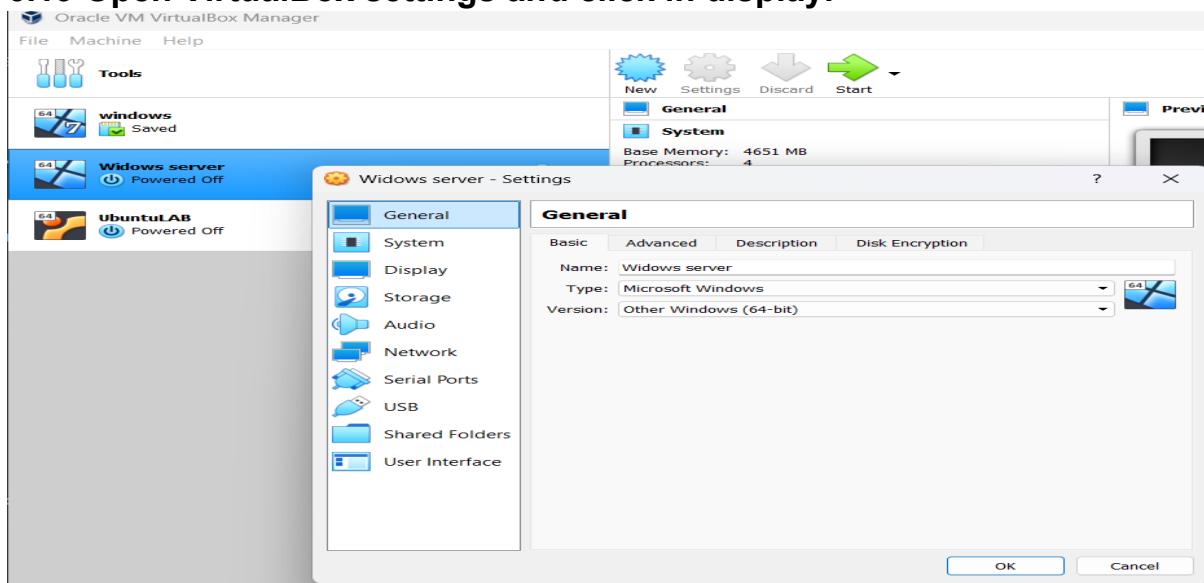


Figure 19 Open VirtualBox Settings

6.20 Enable the Remote Display and click on the enable server.

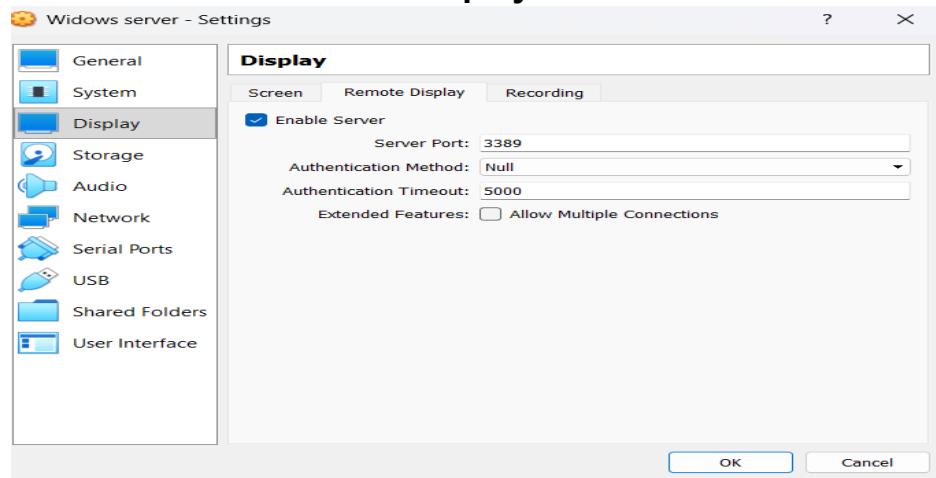


Figure 20 Enable a remote Server

6.21 See your Guest OS IP by “ipconfig” in CLI.

```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 10.0.20348.169]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Administrator>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

  Connection-specific DNS Suffix  . : 2001:df4:2b40:b8c4:19bb:c113:35d5:5c15
  IPv6 Address. . . . . : 2001:df4:2b40:b8c4:19bb:c113:35d5:5c15%8
  Link-local IPv6 Address . . . . . : fe80::19bb:c113:35d5:5c15%8
  IPv4 Address. . . . . : 100.64.195.156
  Subnet Mask . . . . . : 255.255.192.0
  Default Gateway . . . . . : fe80::200:5eff:fe00:127%8
                           100.64.192.1

C:\Users\Administrator>
```

Figure 21 See IP by Ipconfig

6.22 Open remote desktop connection from your host OS.

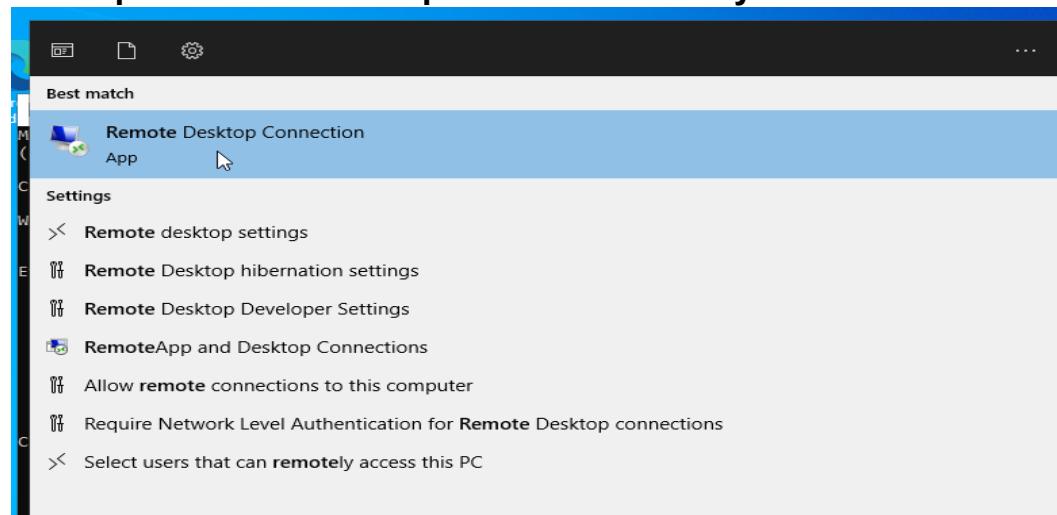


Figure 22 Open Remote Desktop Connection

6.23 Add guest OS IP address to the Host OS and click connect.

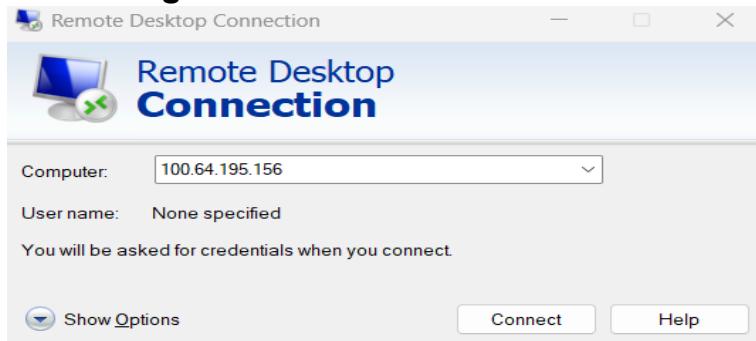


Figure 23 Add Guest IP address

6.24 Enter your administrator Username and password.

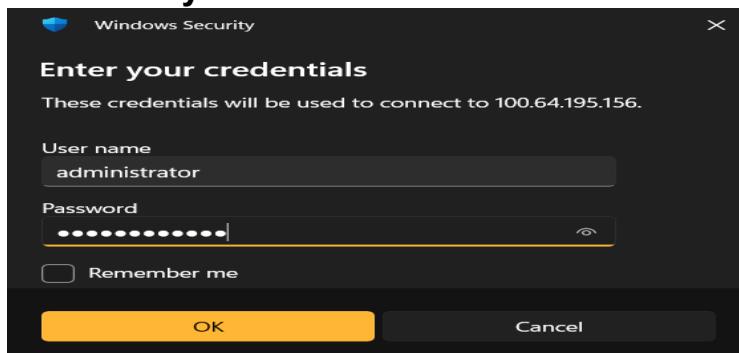


Figure 24 Give your Credentials

6.25 Click on OK and leave at is it.

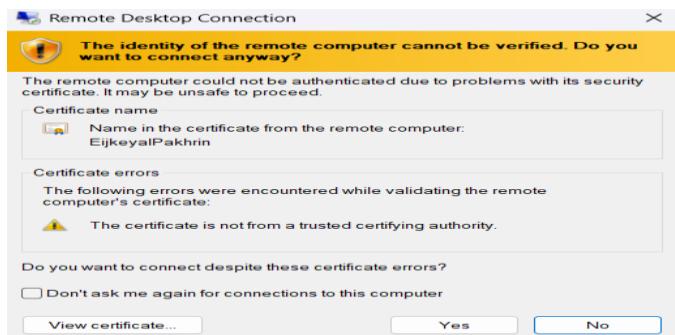


Figure 25 Setting Up Remote Desktop

6.26 Congratulations!!.... You can access our Guest OS from Host OS Using Remote desktop connections.

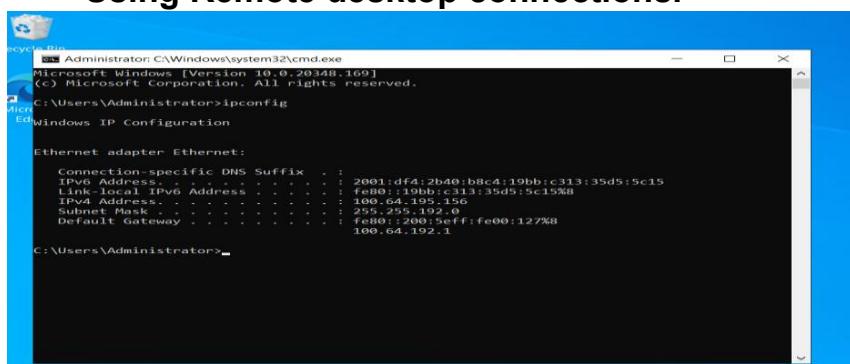


Figure 26 Successfully added remote desktop connection

7 Conclusion

This Logbook Successfully achieved its objectives by implementing and hosting website using IIS and enabling remote desktop connections on windows server 2022. By configuring bridged networking, it allows us to be making accessible website across the local area network and by installing VirtualBox extension pack and enabling remote desktop connections provides secure remote access to the server or guest OS to host OS.