LONDON METROPOLITAN UNIVERSITY

Islington college
(इस्लिङ्टन कलेज)

Module Code & Module Title

Level 5 – Operating Systems

Assessment Type

Logbook 5

Semester

2025/26 Spring/Autumn

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Assignment Due Date: Monday, November 24, 2025

Assignment Submission Date: Tuesday, November 25, 2025

Submitted To: Sarika Dahal

Word Count (Where Required): 1501

I confirm that I understand my coursework needs to be submitted online via Google Classroom under the relevant module page before the deadline in order 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.

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1 Introduction:

A remote desktop is a program or an operating system feature that allows a user to connect to a computer in another location, see that computer's desktop and interact with it as if it were local (Rahul Awati, 2025).

Tech support professionals often use remote desktop connectivity to troubleshoot live fixes on a client's computer (Rahul Awati, 2025). This capability can be particularly useful when users and tech support teams are not in the same geographic location (Rahul Awati, 2025). By remotely connecting to a user's computer, the support person can diagnose and analyse issues on that device and also implement appropriate fixes (Rahul Awati, 2025). In addition to troubleshooting, IT teams also use remote desktop software to perform administrative tasks like software updates, security patching device maintenance and server management (Rahul Awati, 2025).

1.1 Workshop:

In the ongoing workshop, we are using Windows Server 2022 as the guest operating system to host static websites that can be accessed from both the host operating system and other computers connected to the same local area network.

Enabling Windows Server 2022's remote desktop capabilities and accessing it from the host operating system is another goal of this workshop. This workshop's primary goal is to help participants grasp the idea of remote desktop connections and how to use Oracle Virtual Box with Windows Server 2022.

2 Aim and Objectives:

- The aim of workshop is using Windows Server 2022 to host a static website and enable remote desktop access for easy management.

The main objective of workshop is listed below:

- A website can be hosted and viewed from various LAN-connected devices.
- To control the server from a different computer, set up a remote desktop.
- Discover how to solve common Windows Server and VirtualBox issues, such as permission, access, or compatibility issues, through practical experience.
- For true multi-user management, use Remote Desktop Connection to connect from client PCs on your LAN, not just your host OS.

3 Customization:

Customization is the process of making alterations to a product or service to meet the specific needs or desires of an individual or a group (Storyly.com, 2025). It is a way to personalize an experience or item to align with the unique preferences, tastes, or requirements of a customer (Storyly.com, 2025).

Let's first host our static website in Windows Server 2022.

Step 1: Start VirtualBox on your computer and identify, from the list of virtual machines, your Windows Server 2022 virtual environment. You select your virtual machine by clicking on it. Click the "Settings" button at the top to access configuration options for network changes

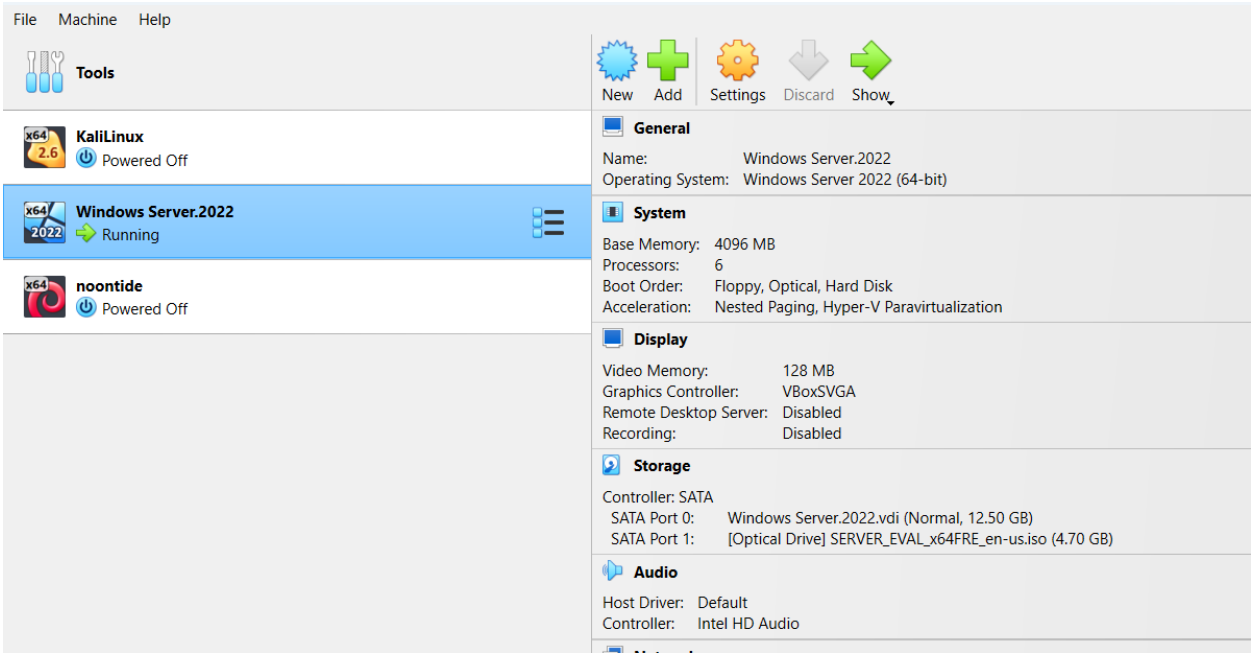

Figure 1: Setting button

Step 2: In the "Network" section, locate the setting on the right that says "Attached to:", and click the dropdown menu to select "Bridged Adapter" so that your VM connects directly to your physical network. Click "Ok" to save changes and start your Windows Server 2022 virtual machine.

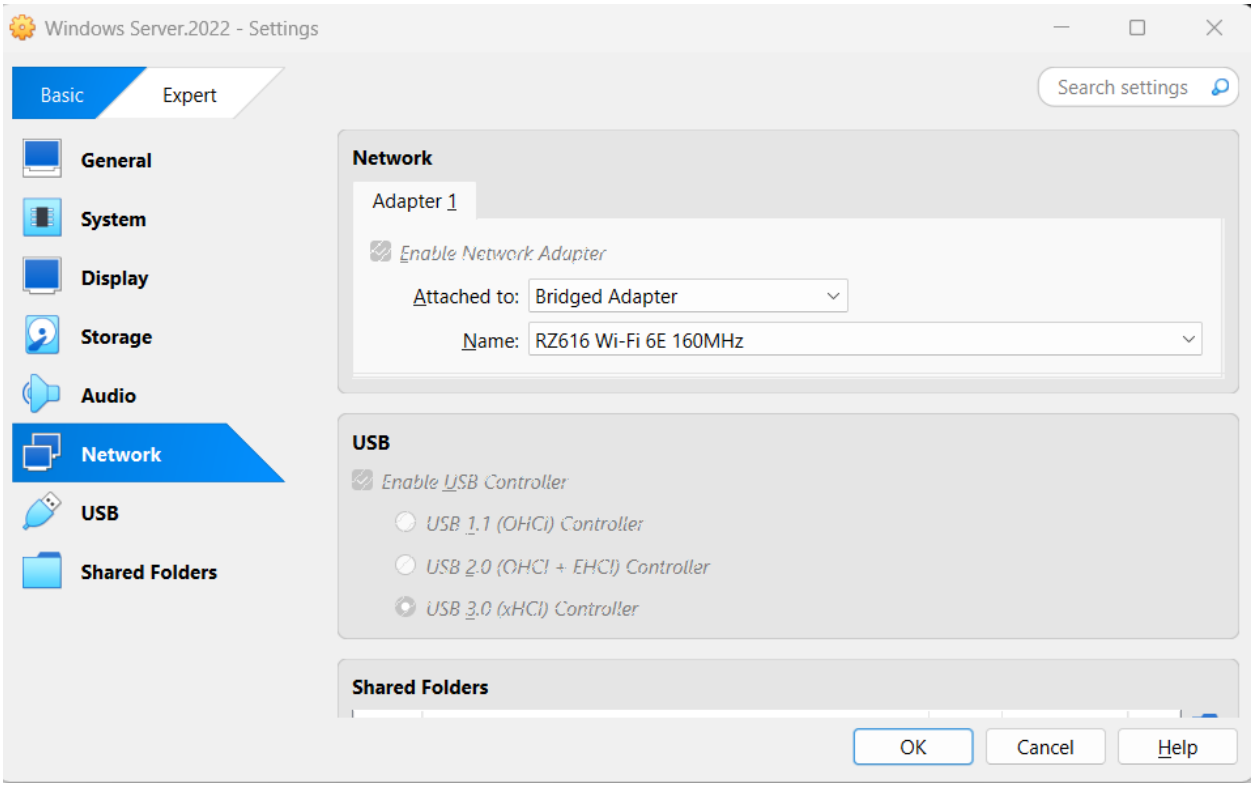

Figure 2: Selection of Bridged Adapter

Step 3: As like from last workshop place your website files in Local Disk C drive in Windows Server 2022 as on following picture. Download the templatemo and Put your templatemo in the Local Disk C drive.

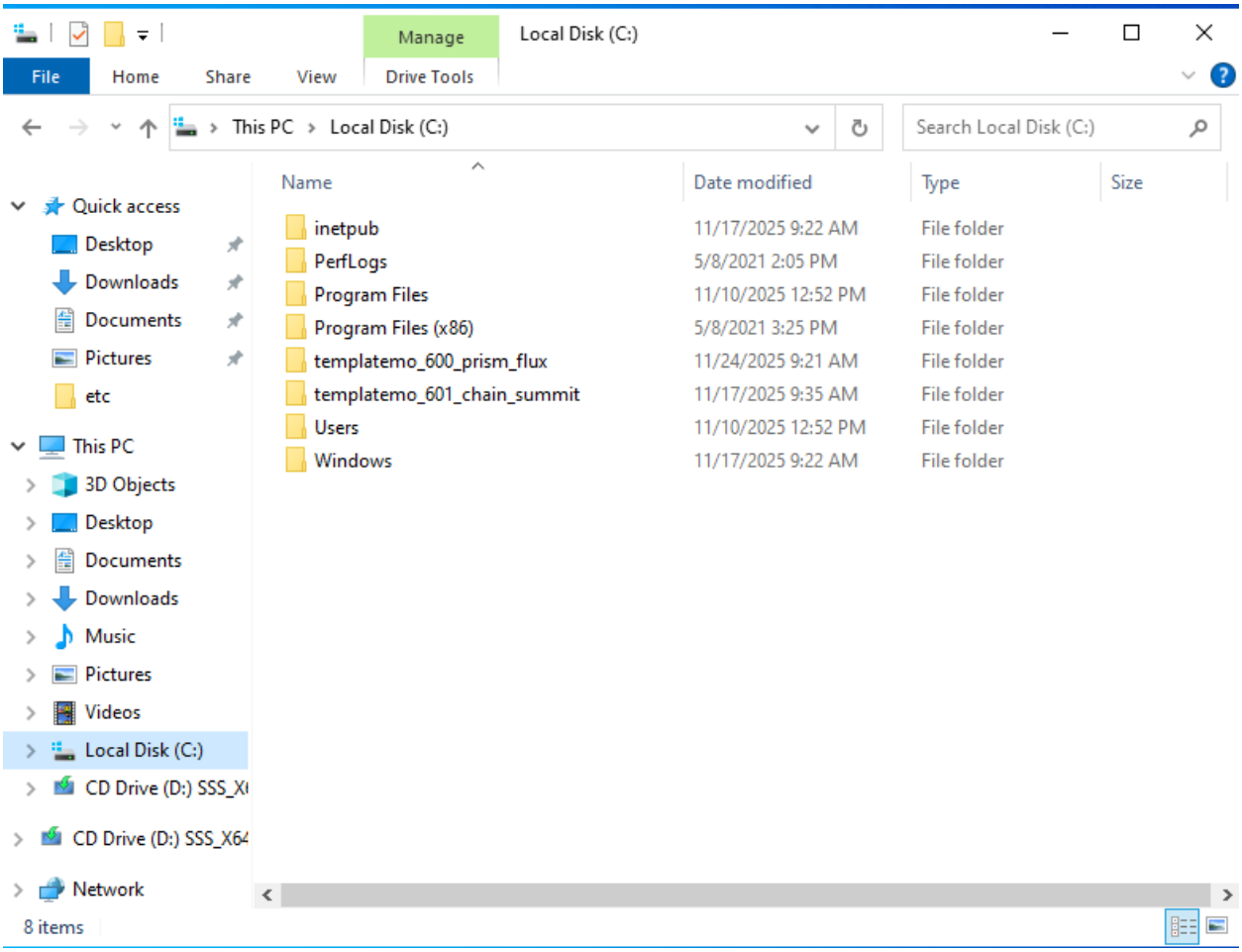

Figure 3: Local Disk C

Step 4: Press the Windows key + R to bring up the Run dialog box. Enter "inetmgr" and click Enter to start the Internet Information Services Manager. The IIS Manager interface opens, and on the left side, you will see a tree view of your server components.

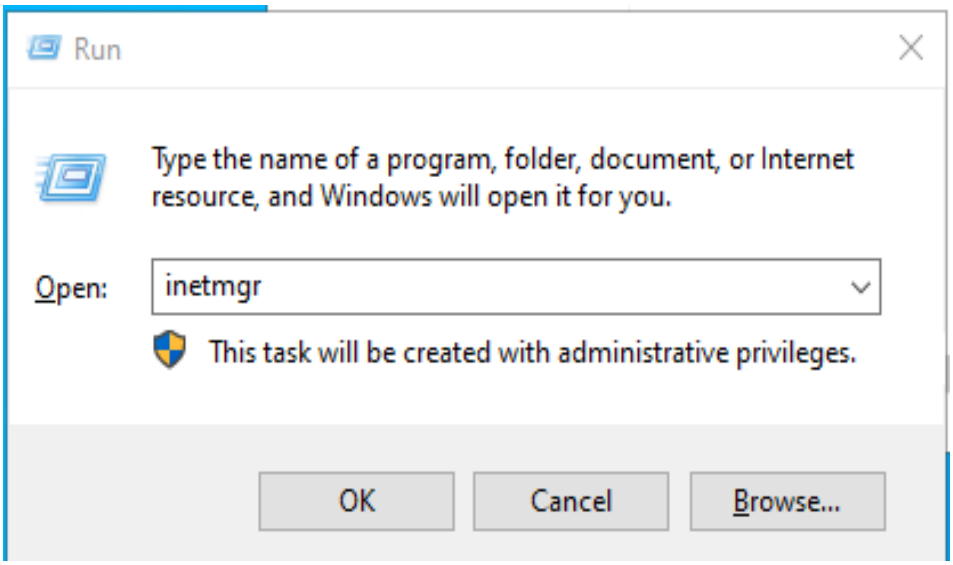

Figure 4: Internet Information Service

Step 5: Open IIS Manager and expand your server name in the left panel to display the folder structure. Right-click on the "Sites" folder within this structure, which opens the context menu. Select "Add Website." to open the configuration dialog for your new website.

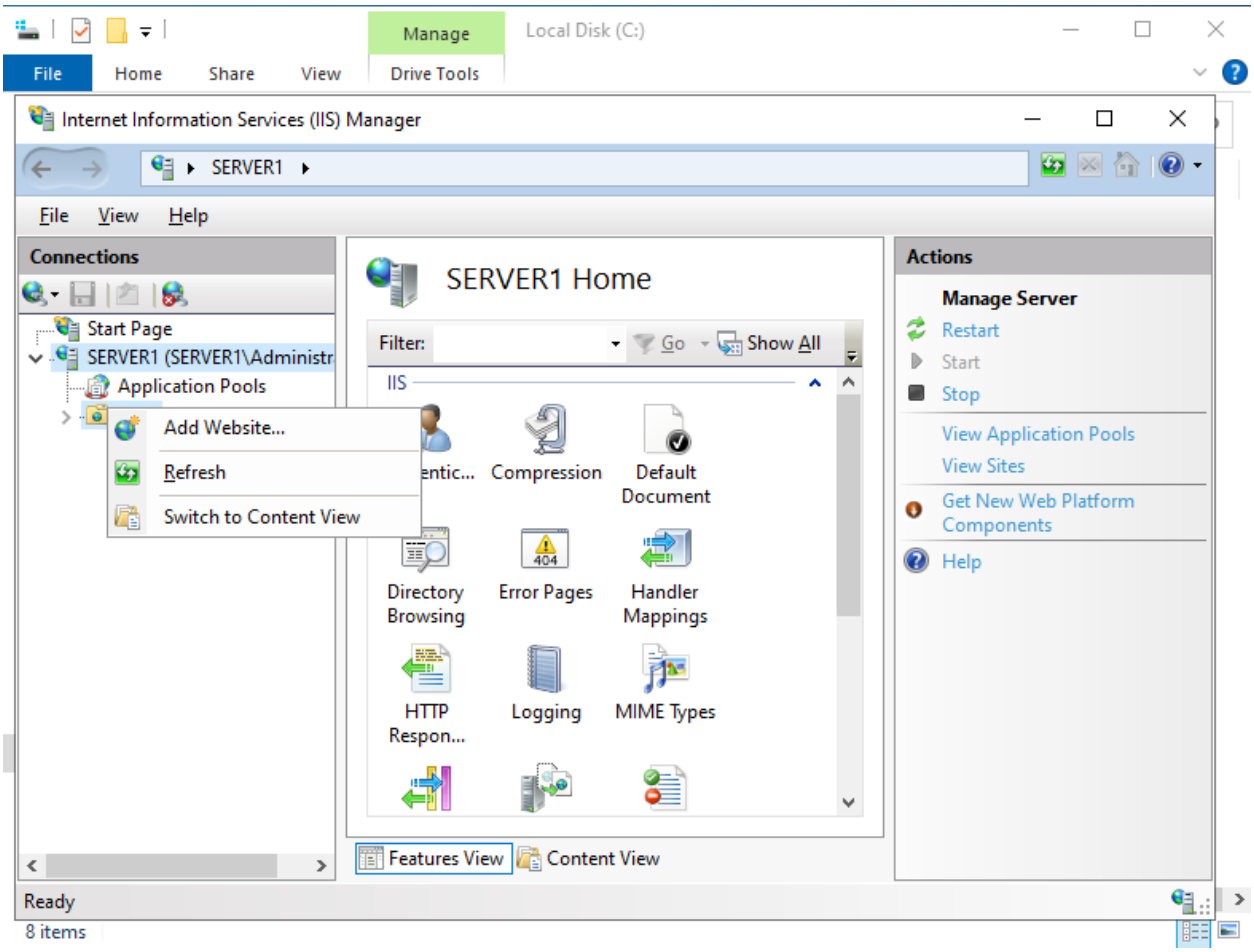

Figure 5: Add Website

Step 6: Fill in the "Site name" with a descriptive name and browse to choose your website folder path under "Physical path." Then, select the IP address of your server from the drop-down menu under "IP address." Click "Ok" to create your website with the settings above.

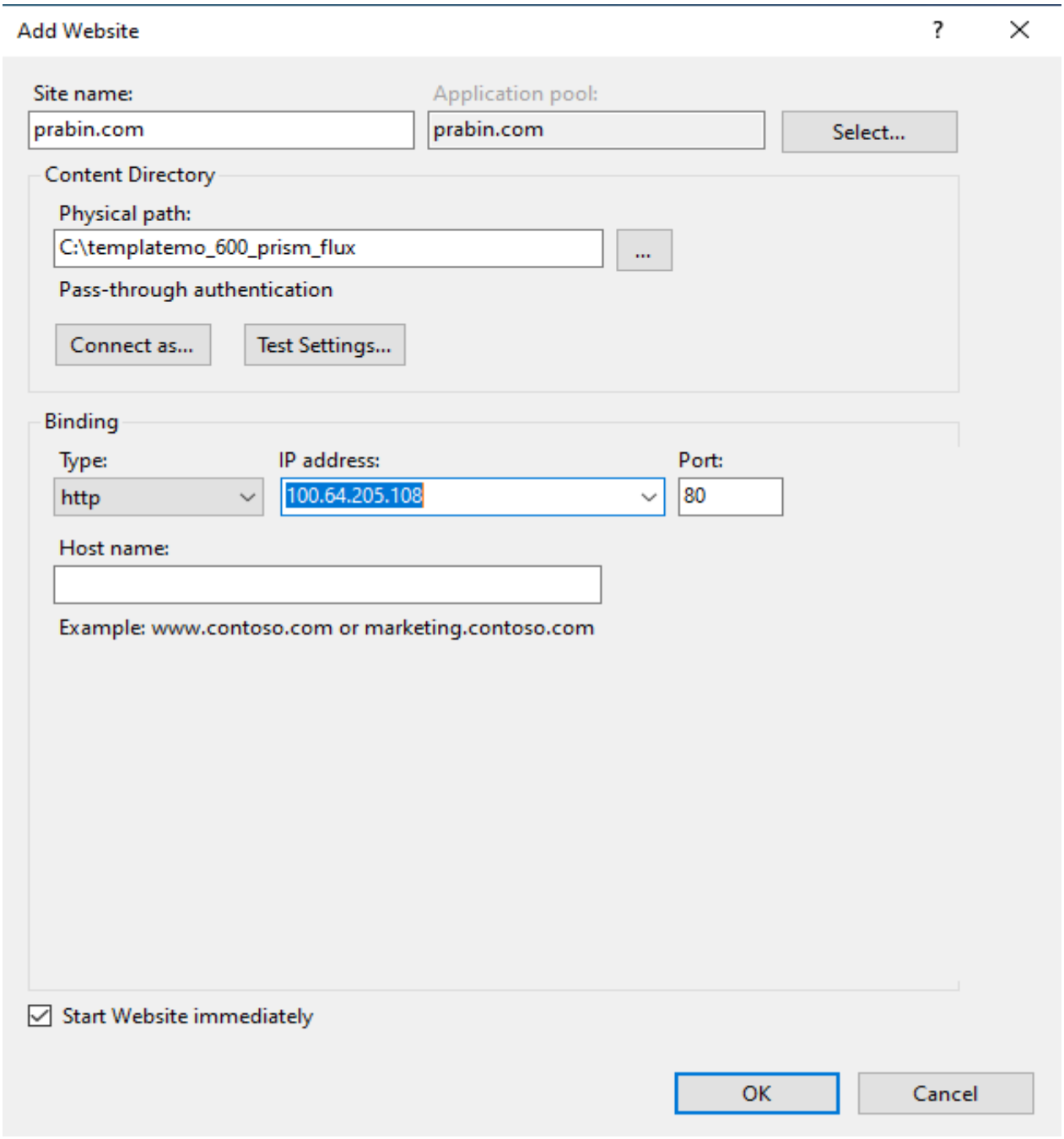

Figure 6: Assigning IP Address

Step 7: After it is created, find your site name in the main panel of IIS Manager. In the "Actions" panel on the right side, click the "Browse" option and then select your IP address. Your website will open in the default browser, showing that it is locally hosted correctly.

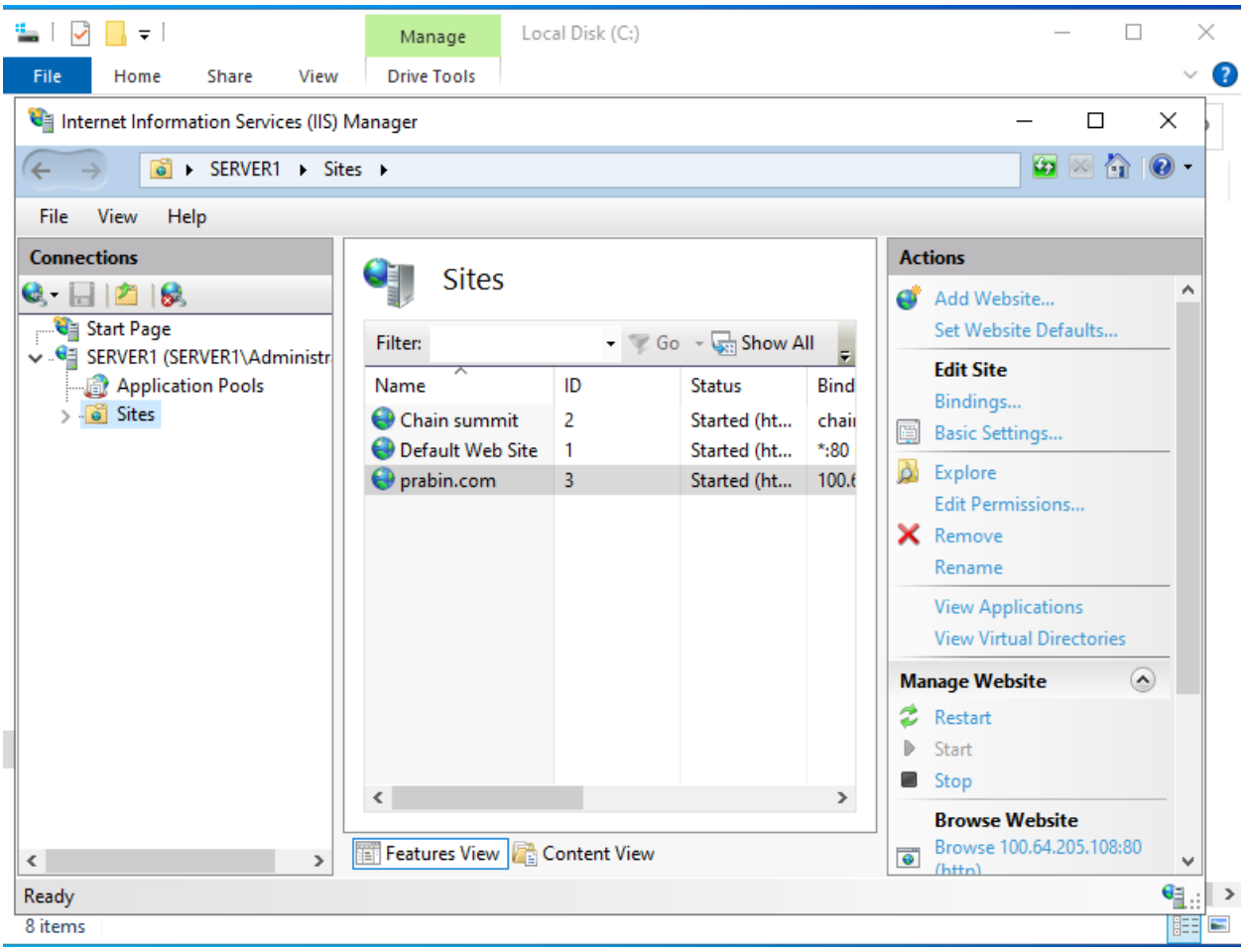

Figure 7: Created Website

Now, as we see our website is live.

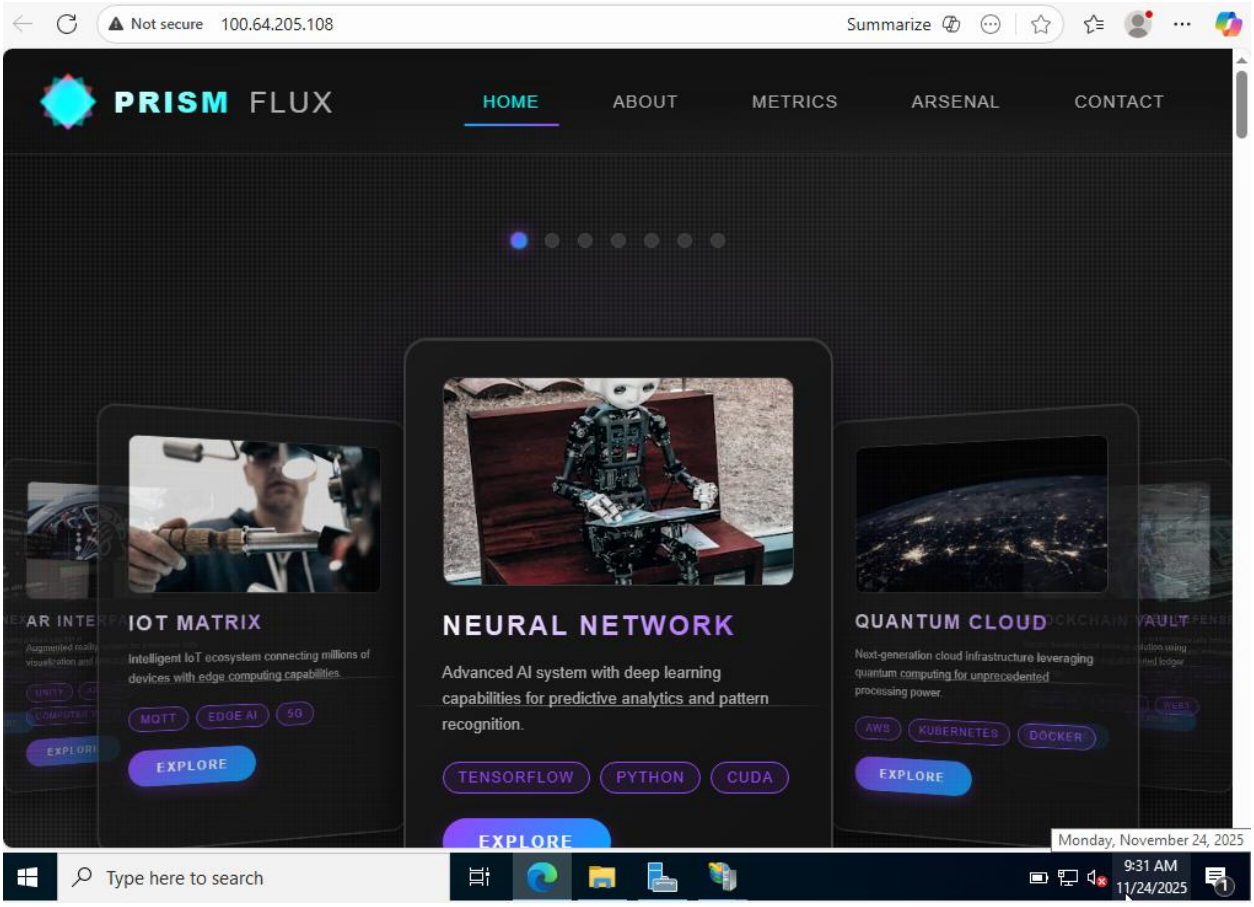

Figure 8: Website Live

Step 8: Testing Access from Host Operating System. From here, go to your host operating system and open any web browser. In the address bar of the browser, type your Guest OS' IP address and hit Enter. Your website should load, meaning it's accessible across your local network.

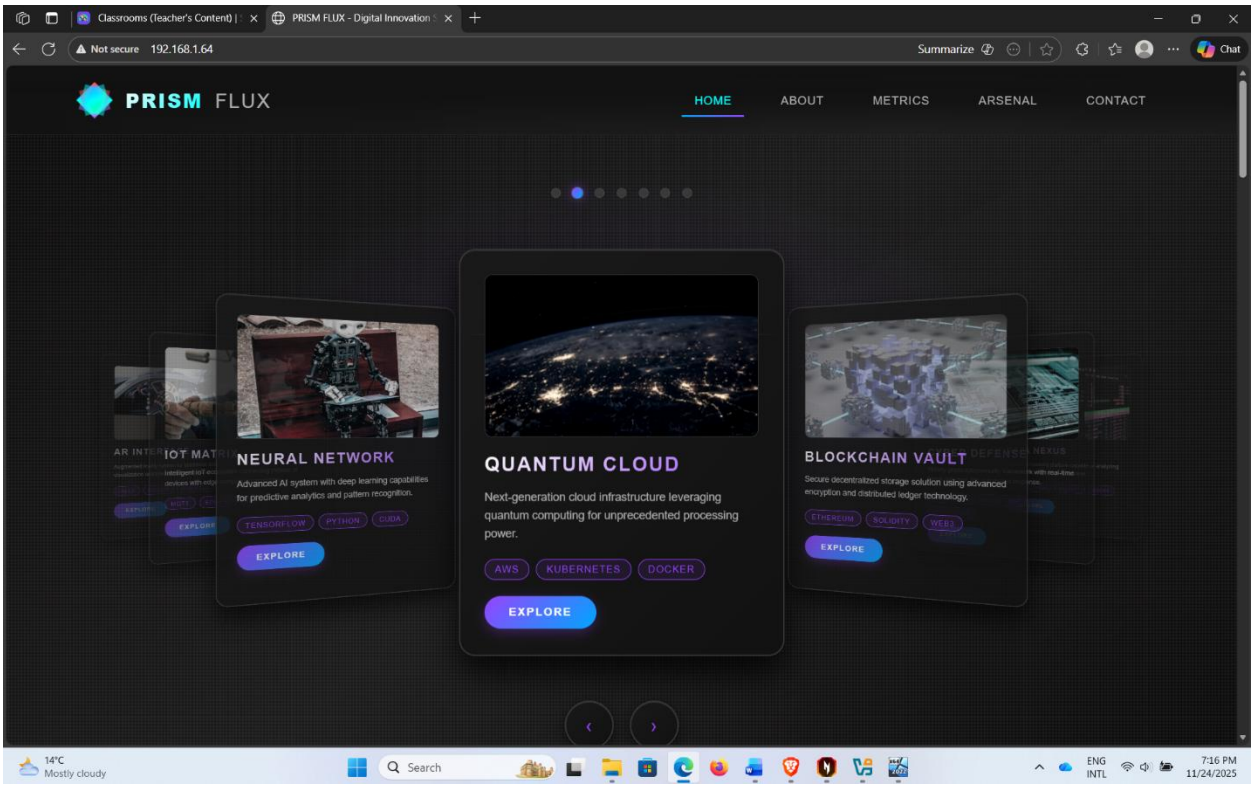

Figure 9: Access from Host OS

Step 9: Testing Access from Your Smartphone. Connect your smartphone to the same WiFi network as your computer. Launch a web browser on your phone and type the Guest OS IP address. Your website should load on your phone, confirming successful LAN-wide accessibility.

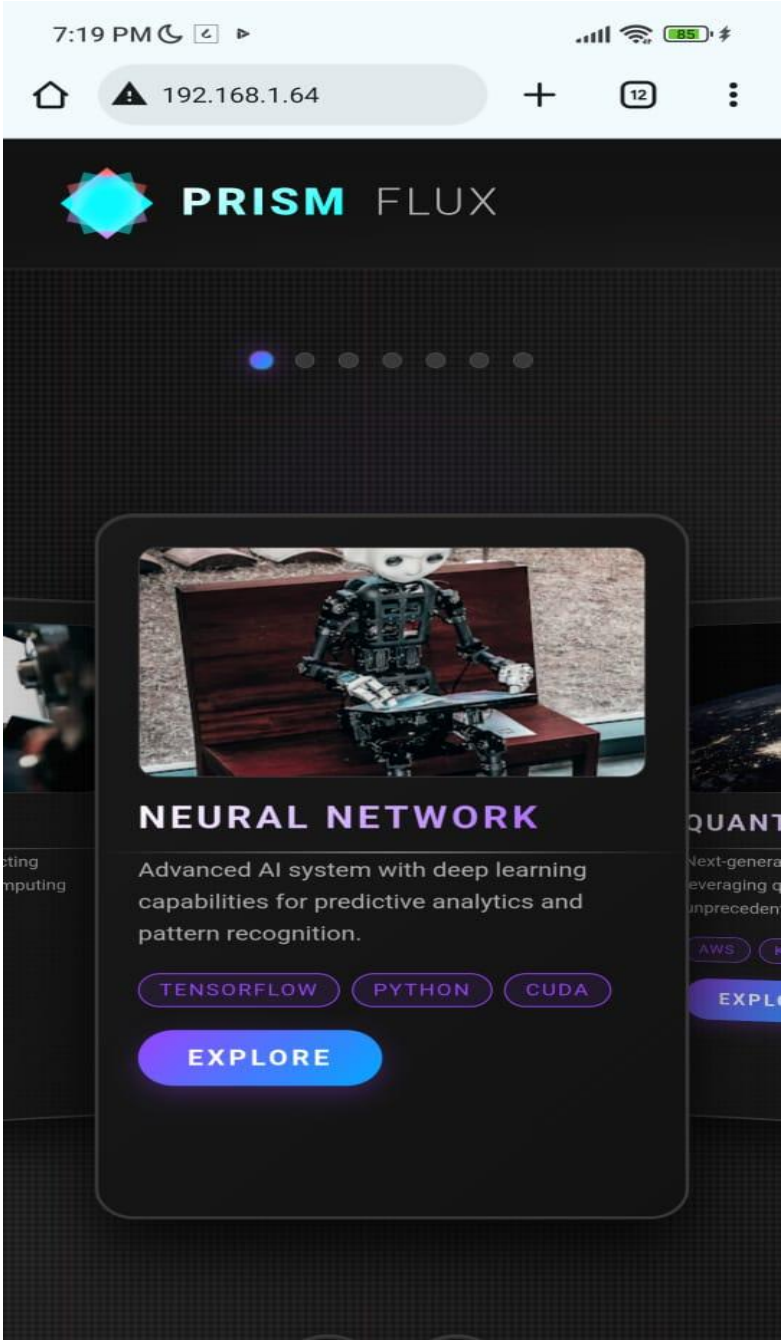

Figure 10: Access from Smartphone

Process of Remote connection to Guest OS from Host OS.

Step 1: Close VirtualBox and all running virtual machines completely. Right-click the VirtualBox application icon and choose "Run as Administrator." In the User Account Control prompt, click "Yes" to open VirtualBox with administrative privileges.

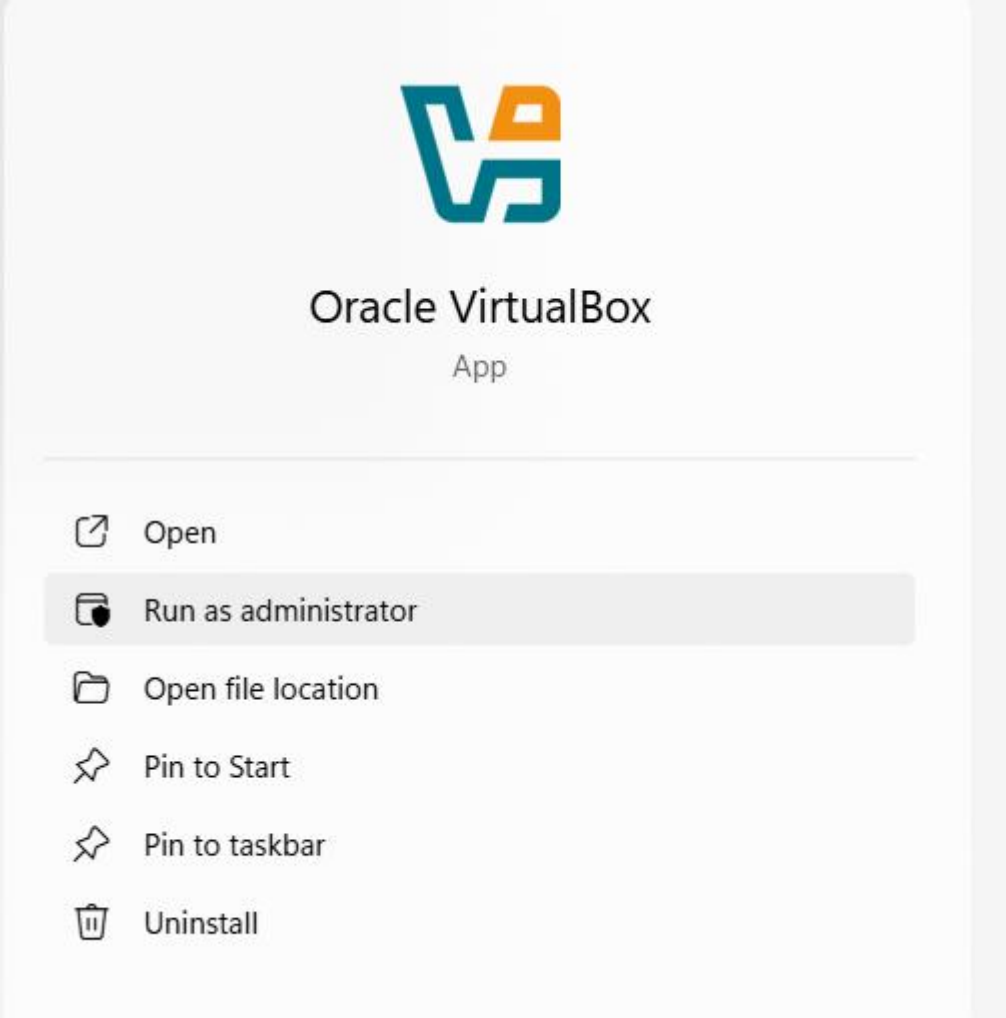

Figure 11: Run as Administrator

Step 2: Click "Tools" in the top toolbar of the VirtualBox Manager application. In the drop-down menu that opens, select "Preferences" to open the Preferences window. It will show you global configuration categories for VirtualBox.

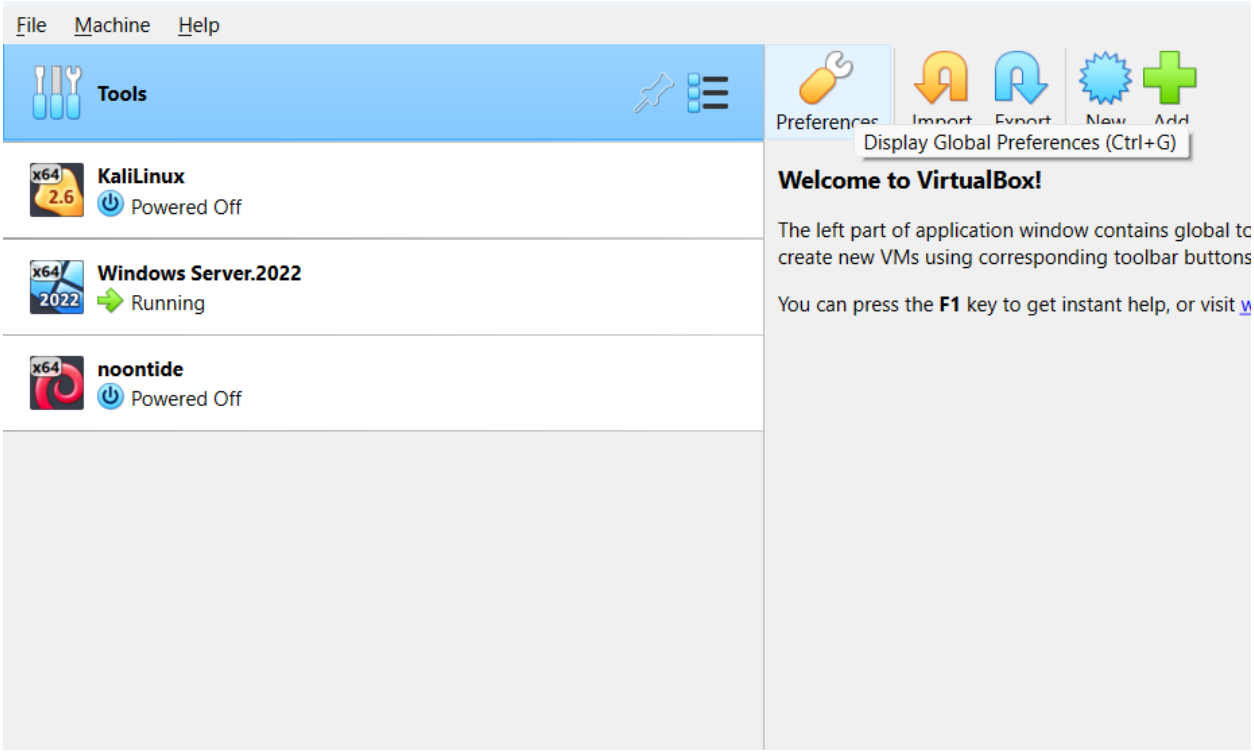

Figure 12: Selection of Preferences

Step 3: Click "Extensions" in the left-side categories in the Preferences window. You will see a panel showing currently installed extension packs. On the right side, click the green plus icon button to add a new extension pack.

Figure 13: New Extension Pack

Step 4: In the file browser dialog, navigate to and select the downloaded ".extpack" file. Click "Open" and scroll through the license agreement, then click "Install." Click "Yes" on any permission prompts, and the extension pack will install successfully.

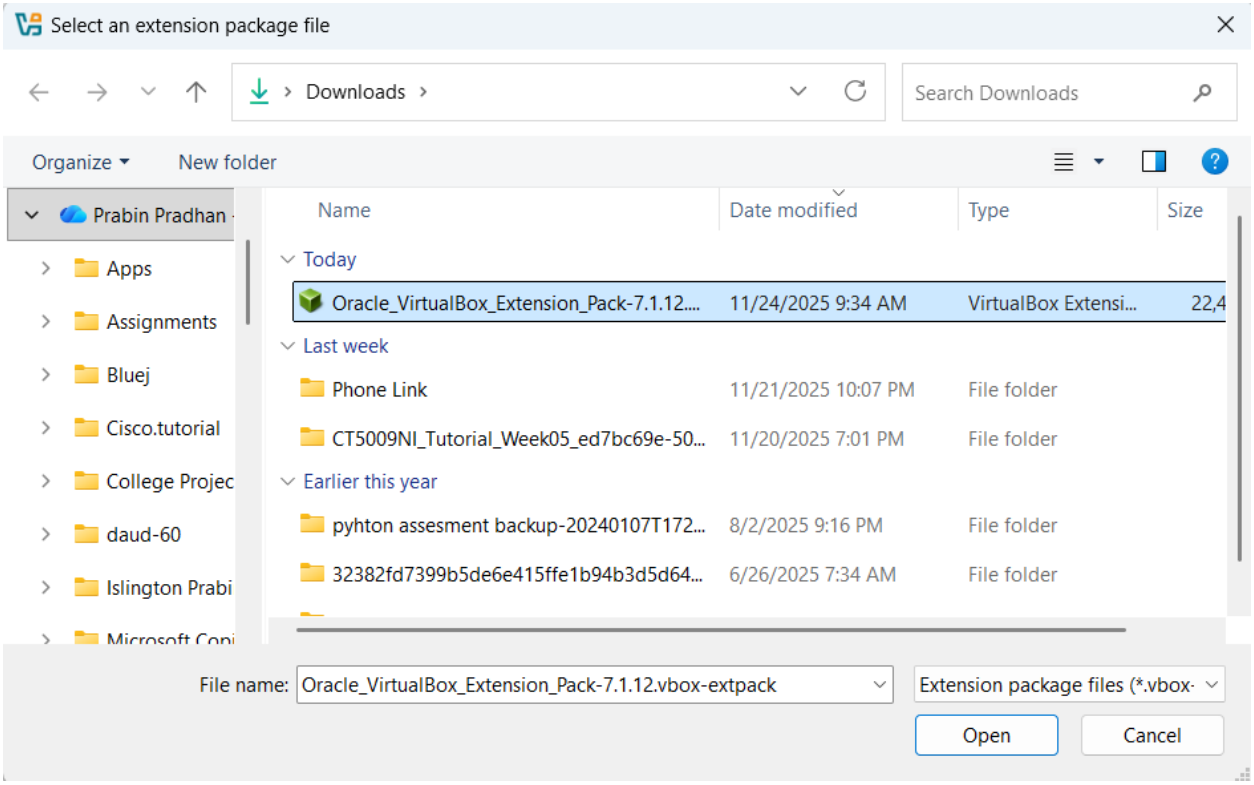

Figure 14: Selection of New Extension

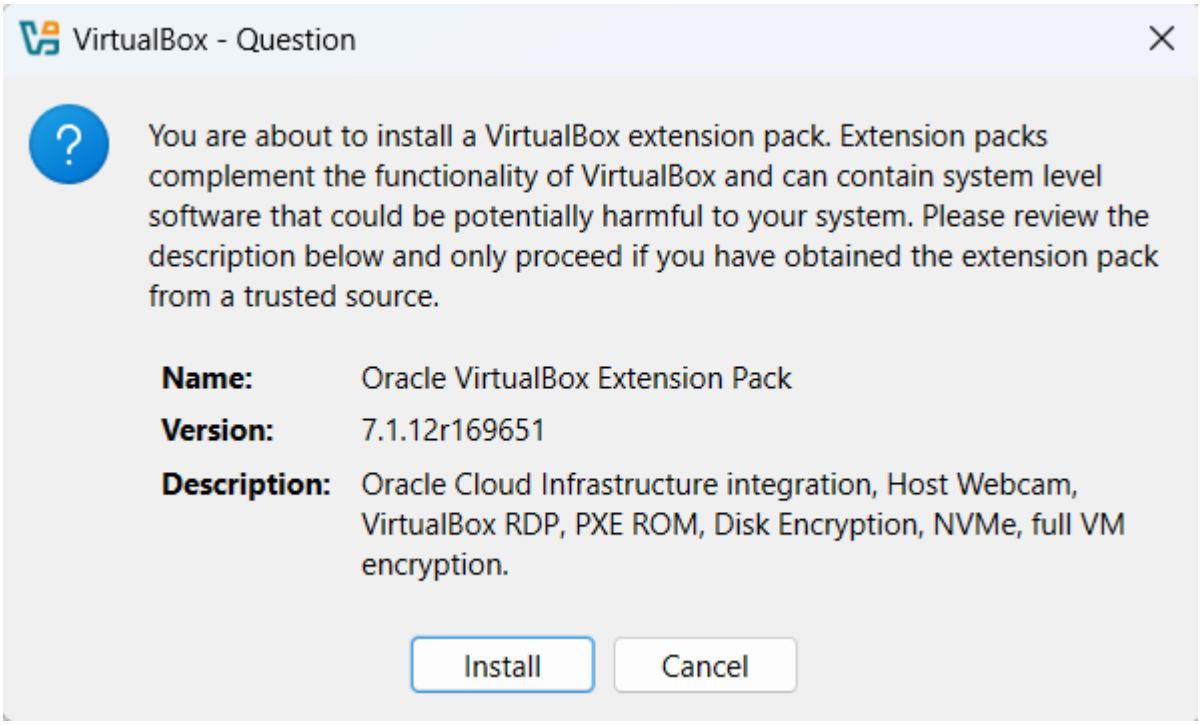

Figure 15: Click on Install Button

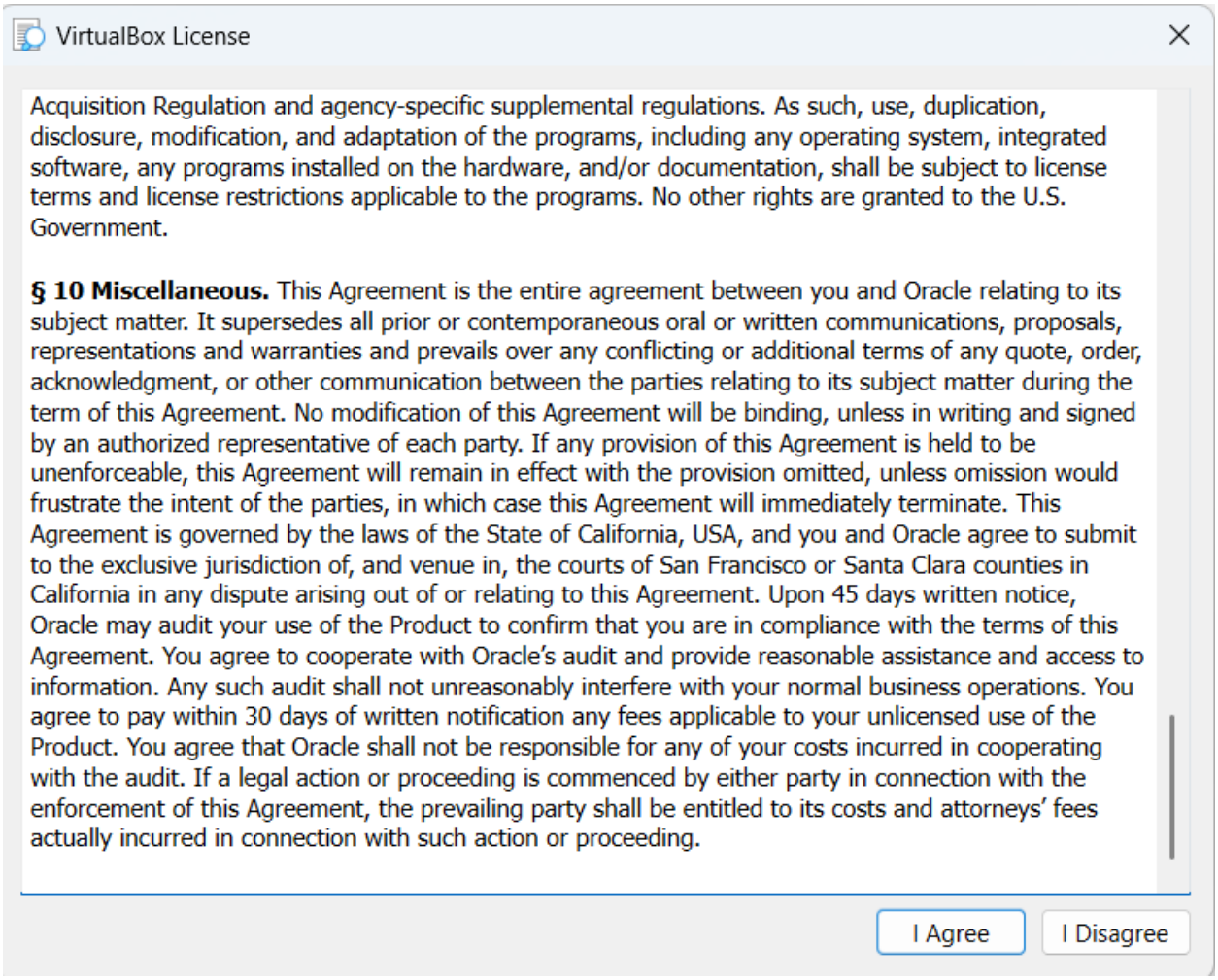

Figure 16: VirtualBox License

Step 5: Close the Preferences window and return to the main VirtualBox Manager. Choose your "Windows Server 2022" virtual machine in the list on the left-hand side of the window, ensuring it is powered off. Click the "Settings" button at the top to open VM-specific configuration options.

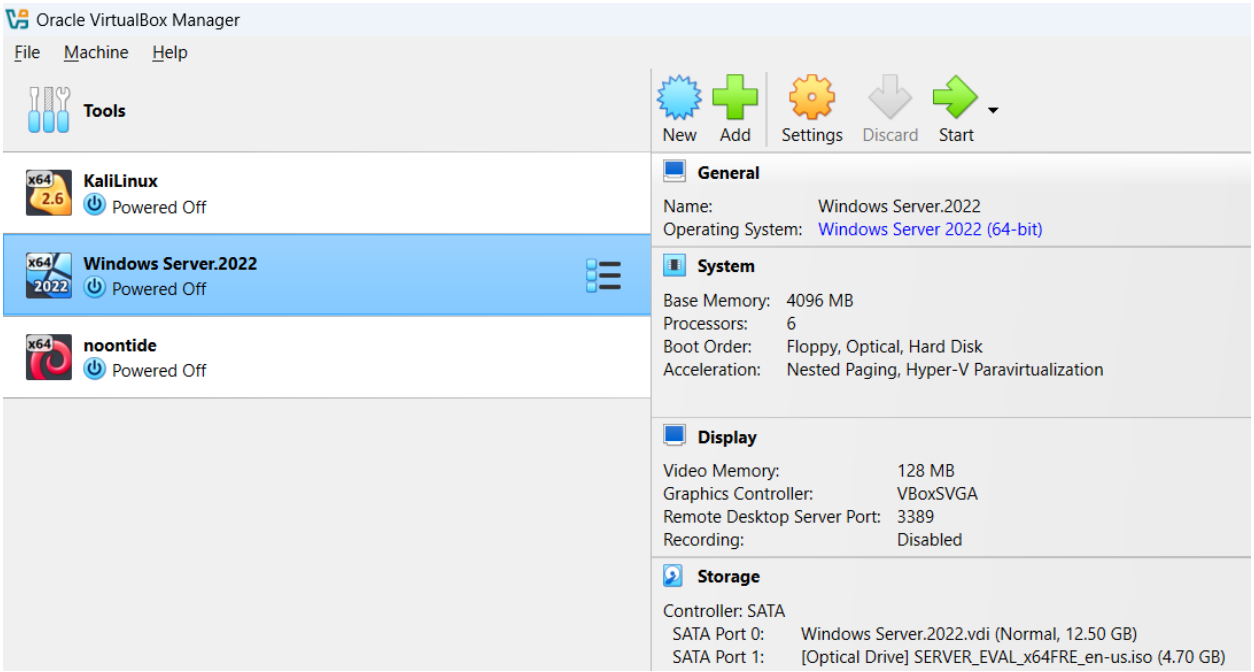

Figure 17: Click Setting Button

Step 6: Open the VM Settings window and select the "Display" category. Click the "Remote Display" tab located at the top. Select the checkbox labeled "Enable Server". Click "Ok" to apply your changes.

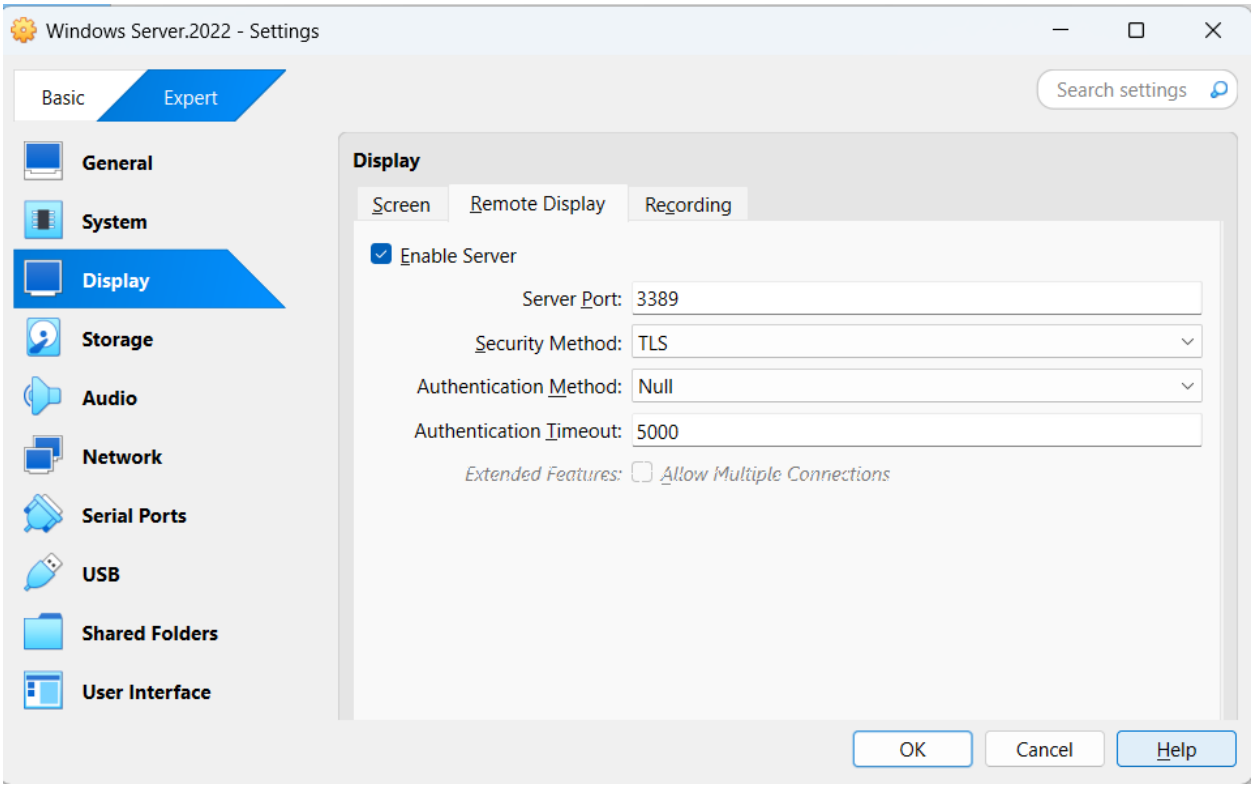

Figure 18: Enable Remote Display

Step 7: With VirtualBox Manager open, click the "Start" button to boot your Windows Server 2022 VM. Then log in, and from Command Prompt, execute "ipconfig," followed by Enter. Take note of the IPv4 Address presented in the output of the command for the next step.

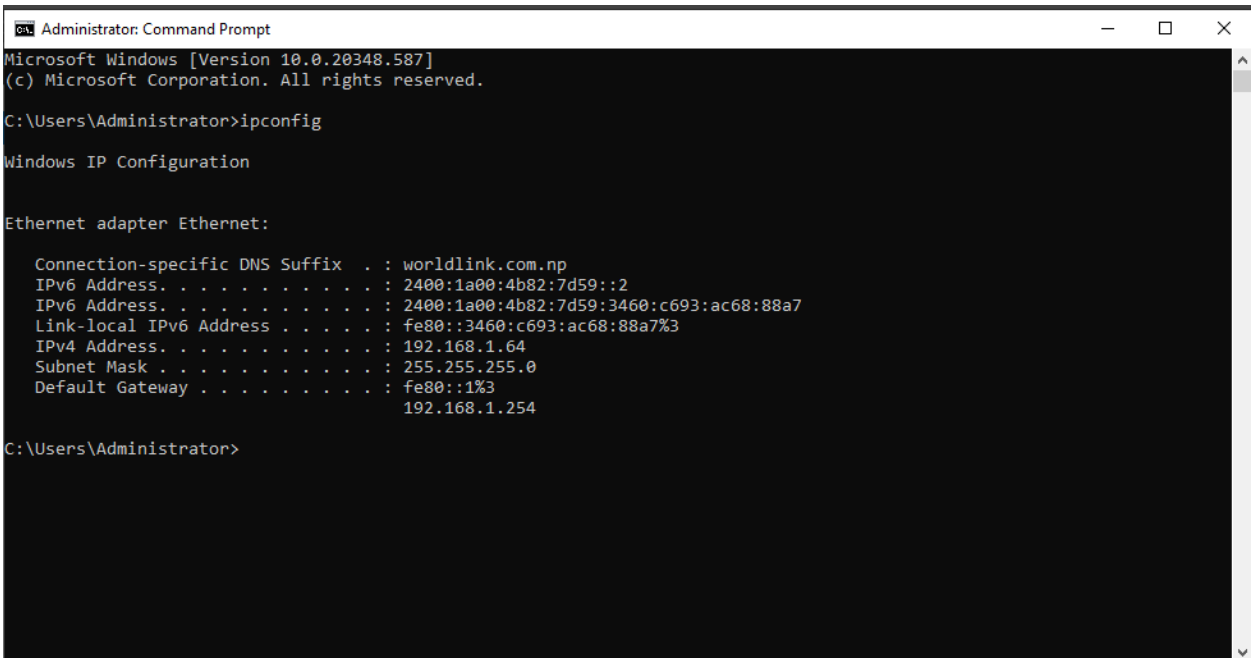

Figure 19: IP Address

Step 8: Go to Remote Desktop Connection from Host OS and open.

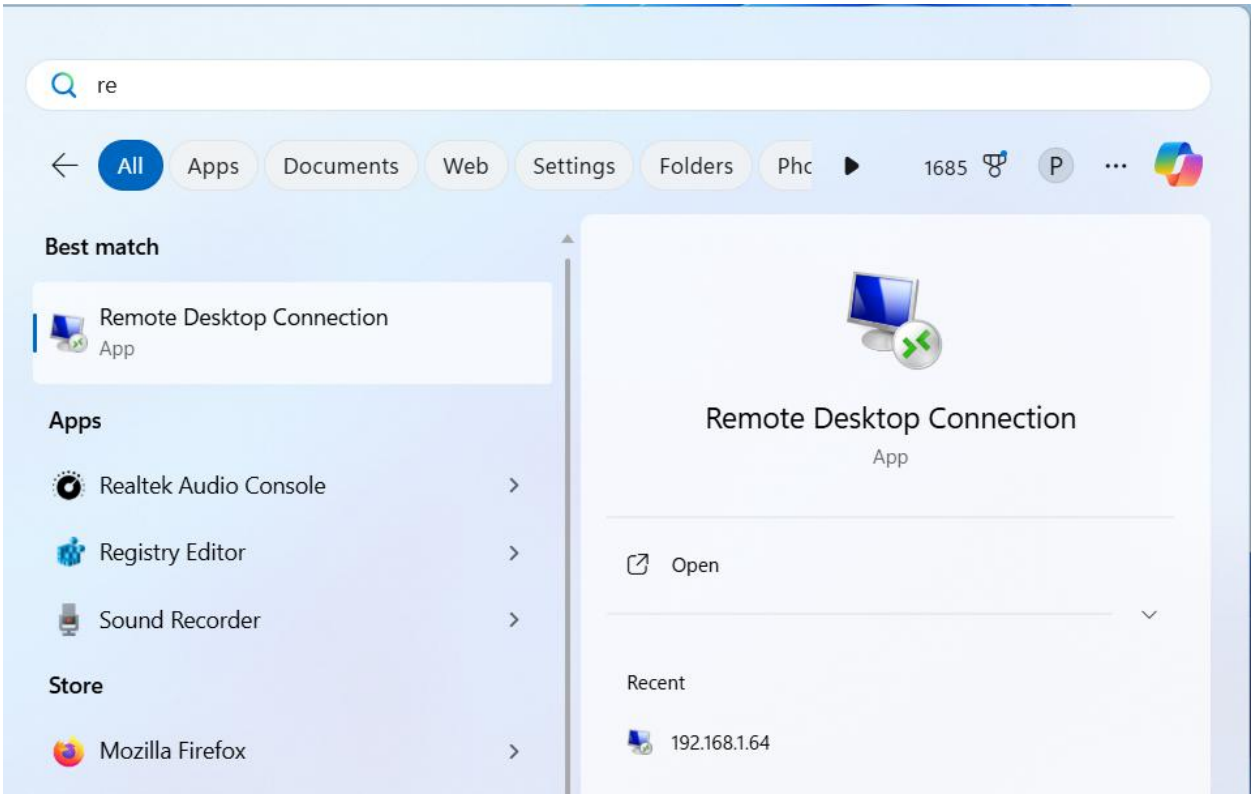

Figure 20: Remote Desktop Connection

Now, enter Ipv4 address of guess operating system to connect “Remote Desktop Connection”.

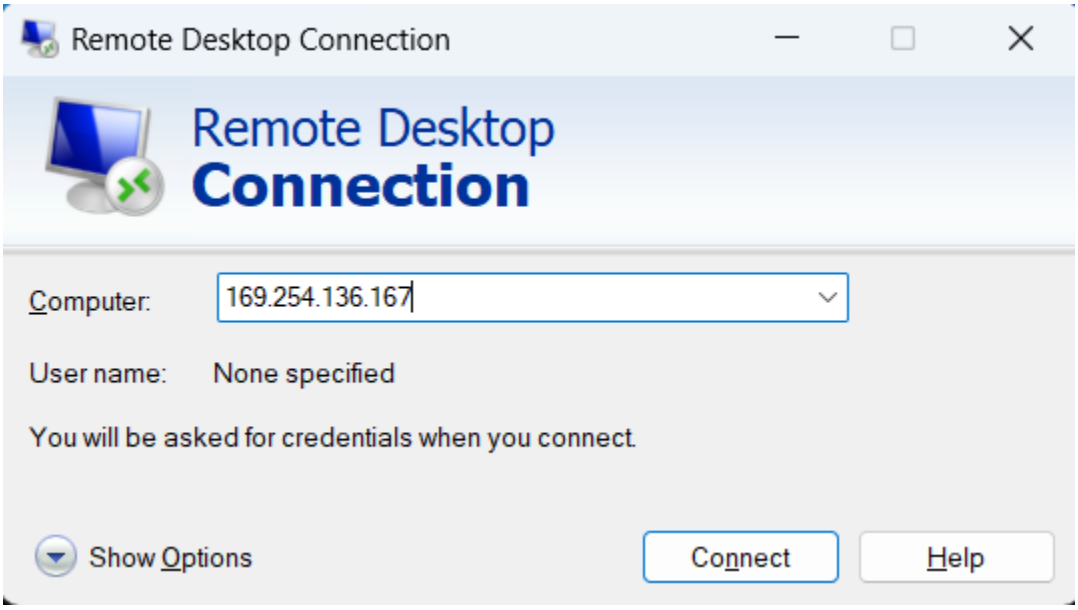

Figure 21: Entered Guess IP Address and Username

Finally, click on “yes” to establish connection.

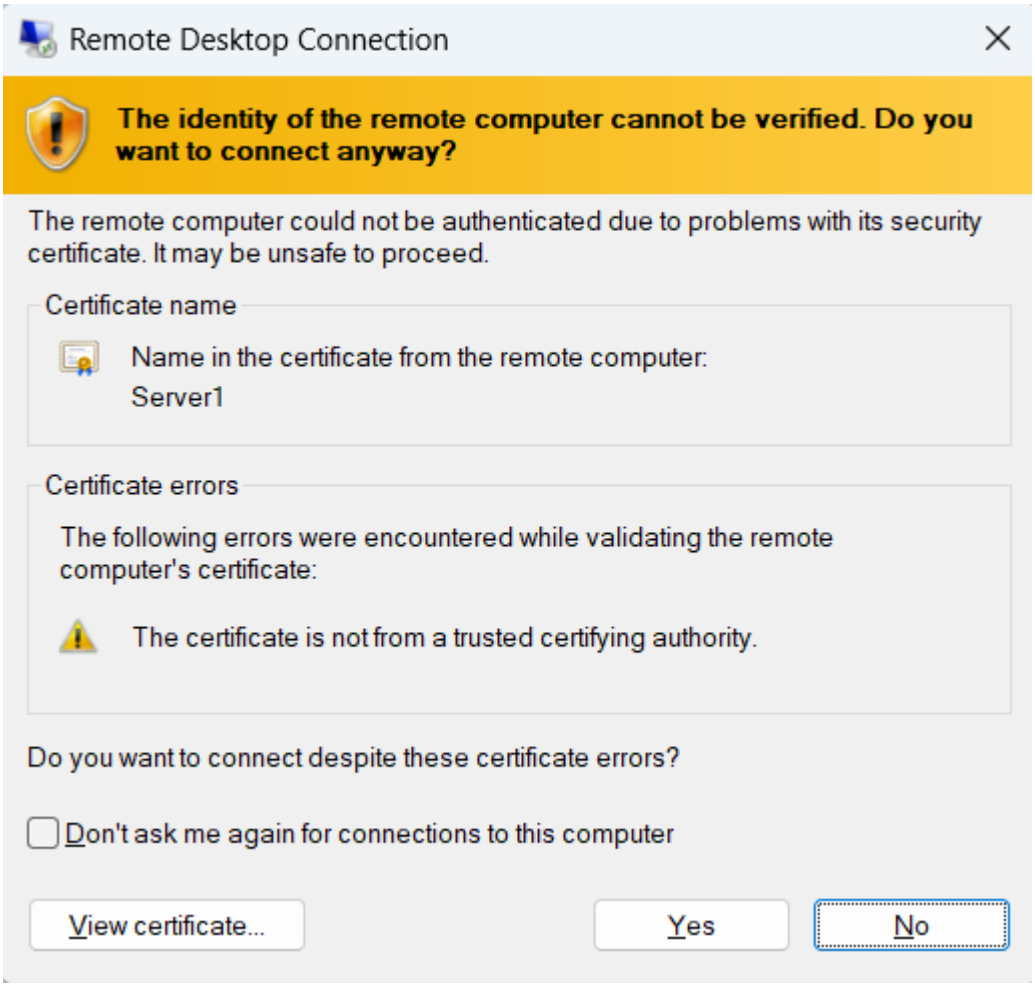

Figure 22: Confirmation for Connection

Step 8: Now, we are successfully able to access our Guest OS from Host OS using Remote Desktop.

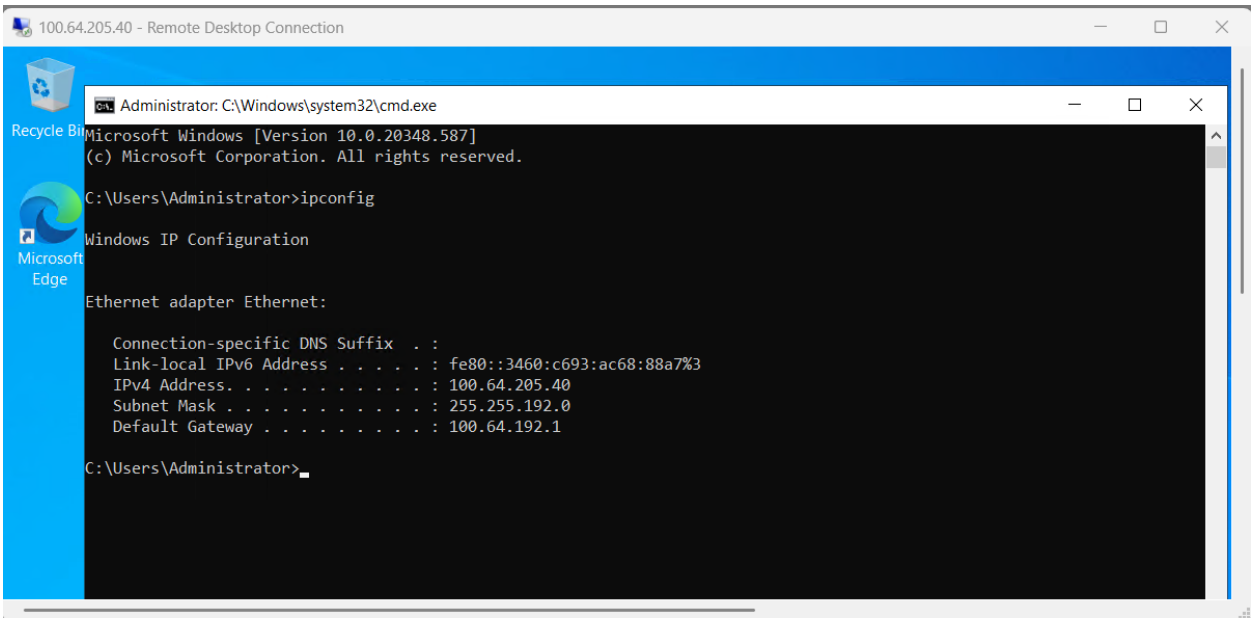

Figure 23:Remote Desktop Connection Successful

4 Conclusion:

This workshop taught me how to create and host a static website in a Windows Server 2022 virtual machine that is accessible from my host computer as well as other devices connected to the same local network, such as my phone. Using bridged networking and walking through the network configuration made it easier for me to comprehend how virtual environments can connect to actual hardware a crucial ability for real world IT setups.

I also practiced managing my Windows Server remotely from a different computer by turning on Remote Desktop. This demonstrates how virtualization and remote access can be combined for effective administration by giving me more flexible server control.

All in all, these practical exercises not only reaffirmed important networking and server management concepts but also provided me with firsthand experience that I can use in future projects. I might try summarizing in my own words what happens when I switch VirtualBox's network type if I want to review. I could also explain the distinction between NAT and bridged networking if I wanted to test myself. I now know that NAT isolates my virtual machine (VM) and conceals it behind the host's IP, whereas bridged mode makes my VM visible as a peer on the network.

References:

Awati, R. & Chouffani, R., 2025. *What is a remote desktop and how does it work?* TechTarget. [online]

Available at: https://www.techtarget.com/searchenterprisedesktop/definition/remote-desktop [Accessed 24 Nov. 2025].

Team Storyly, 2025. *What Is Customization?* Storyly Glossary. [online]Available at: https://www.storyly.io/glossary/customization

[Accessed 24 Nov. 2025].