LONDON METROPOLITAN UNIVERSITY

Islington college
(इस्लिङ्टन कलेज)

Module Code & Module Title

Level 5 – Operating Systems

Assessment Type

Logbook 3

Semester

2025/26 Spring/Autumn

Student Name: Prabin Pradhan

London Met ID: 24046428

College ID: np01nt4a240115

Assignment Due Date: Monday, November 10, 2025

Assignment Submission Date: Tuesday, November 11, 2025

Submitted To: Sarika Dahal

Word Count (Where Required): 1533

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.

Table of Contents

List of Figures:

1 Introduction:

Oracle VirtualBox, the world's most popular open source, cross-platform, virtualization software, enables developers to deliver code faster by running multiple operating systems on a single device (Oracle.com, 2025). IT teams and solution providers use VirtualBox to reduce operational costs and shorten the time needed to securely deploy applications on-premises and to the cloud (Oracle.com, 2025).

1.1 Server Manager:

Server Manager is a centralized management console in Windows Server that enables IT professionals to provision and manage both local and remote Windows-based servers from their desktops. With Server Manager, you can efficiently administer multiple servers without needing physical access or enabling Remote Desktop Protocol (RDP) connections (microsoft.com, 2025). Server Manager supports remote, multi-server management, and help increase the number of servers an administrator can manage (microsoft.com, 2025).

1.2 Workshop Task:

In this workshop we are going to change server name, Enable remote desktop, setting up static IP address, changing time zone, turning off IE enhanced security and checking for updates, adding user using GUI, adding user using GUI and in last removing a user in our windows server. This workshop mainly focuses into students are able to complete their task with out facing any difficulties. The following task also helps students to better understand and make comfortable in windows server 2022.

1.3 Aims and Objective:

The Aim of this workshop task are:

- Learn to configure a new windows server for basic administration and secure using power sell.
- Build complete performing common server tasks such as naming access, networking updates and local user management.

The main Object of this workshop is to understand process of perfectly building and configuring a new windows server and more are listed below:

- Identify and use server manager to access key system on a windows server.
- Enable Remote Desktop safely.
- Change the computer name and understand why a restart is required to apply it.
- Configure a static Ipv4 address, subnet mask.

2 Customization:

The customization is a process of modifying somethings according to our need. This workshop is customizing our windows server 2022 such modification changing name, turning off IE enhanced security and checking for updates, adding user using GUI, enable of remote desktop, adding new user using Shell etc.

Step: 1 Changing the server's name:

After opening windows server, go to server manager, click on dashboard. From the dashboard of Server Manager, navigate to Local Server.

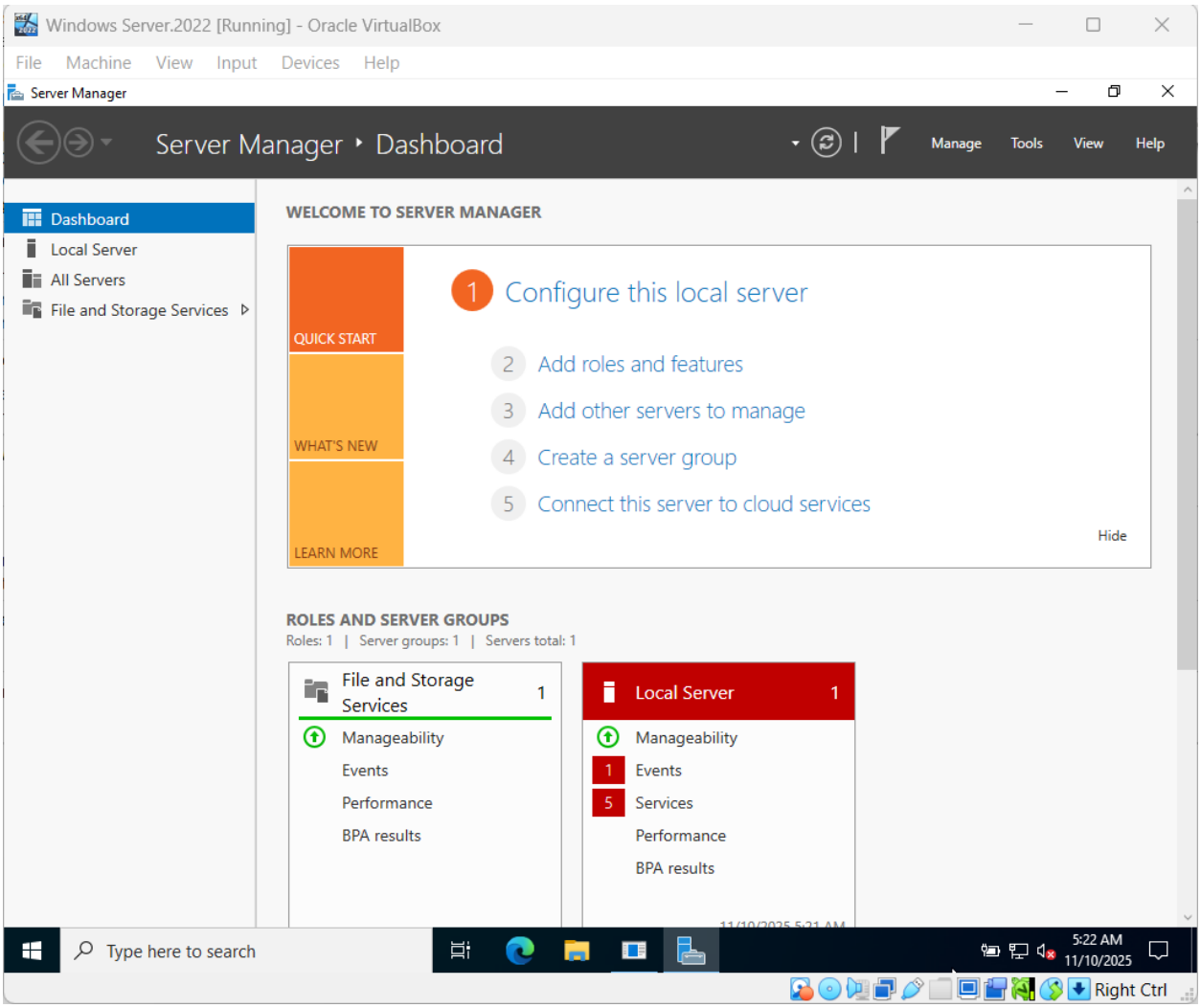

Figure 1: Local Server

After that, you can see properties for win in upper side and computer name in your first left side then click on the computer name, this will open a new window to configure the Server name in your windows server.

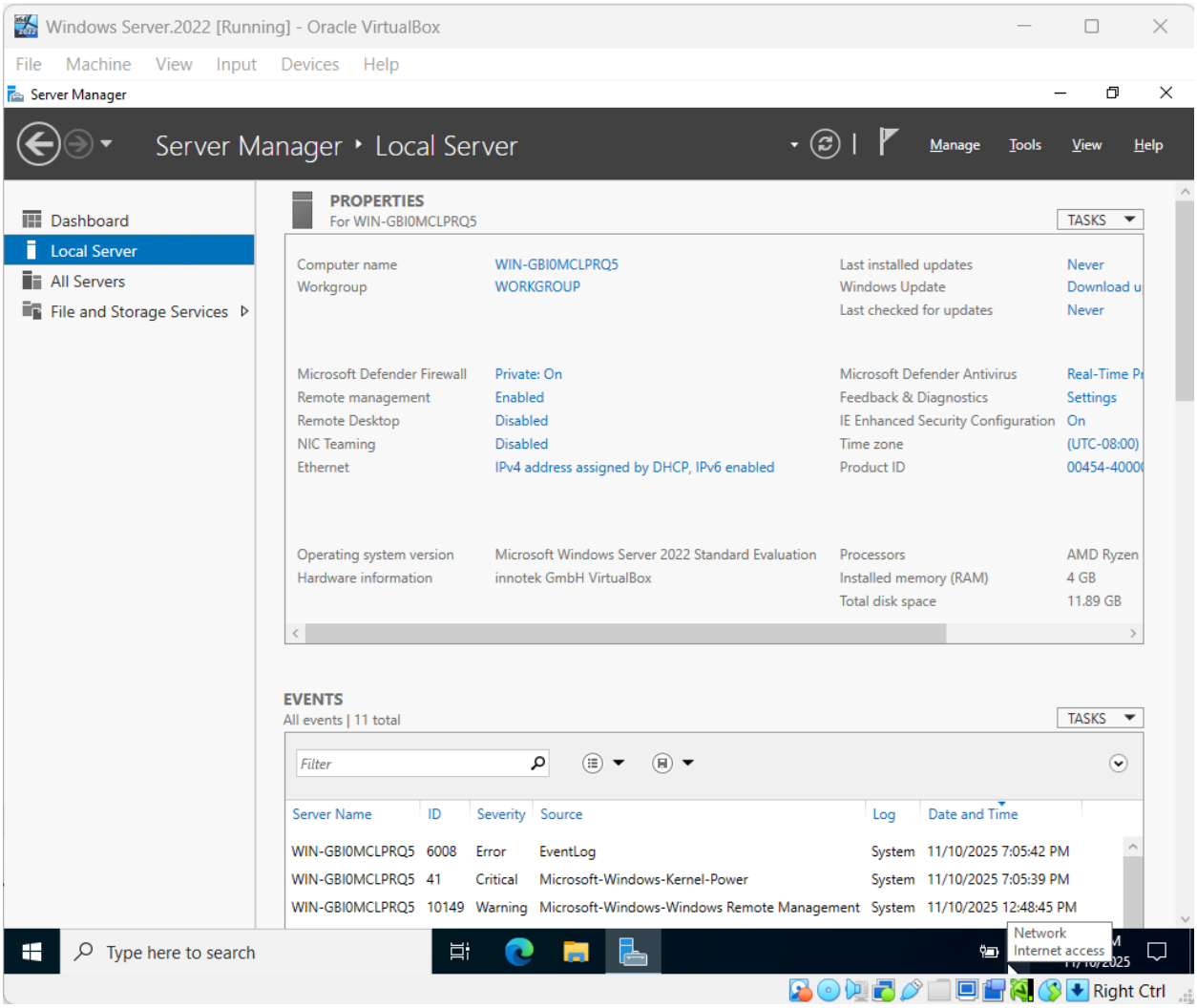

Figure 2: Computer Name

In the new window, press the “Change button” to rename this computer or change its domains or workgroup in your windows server.

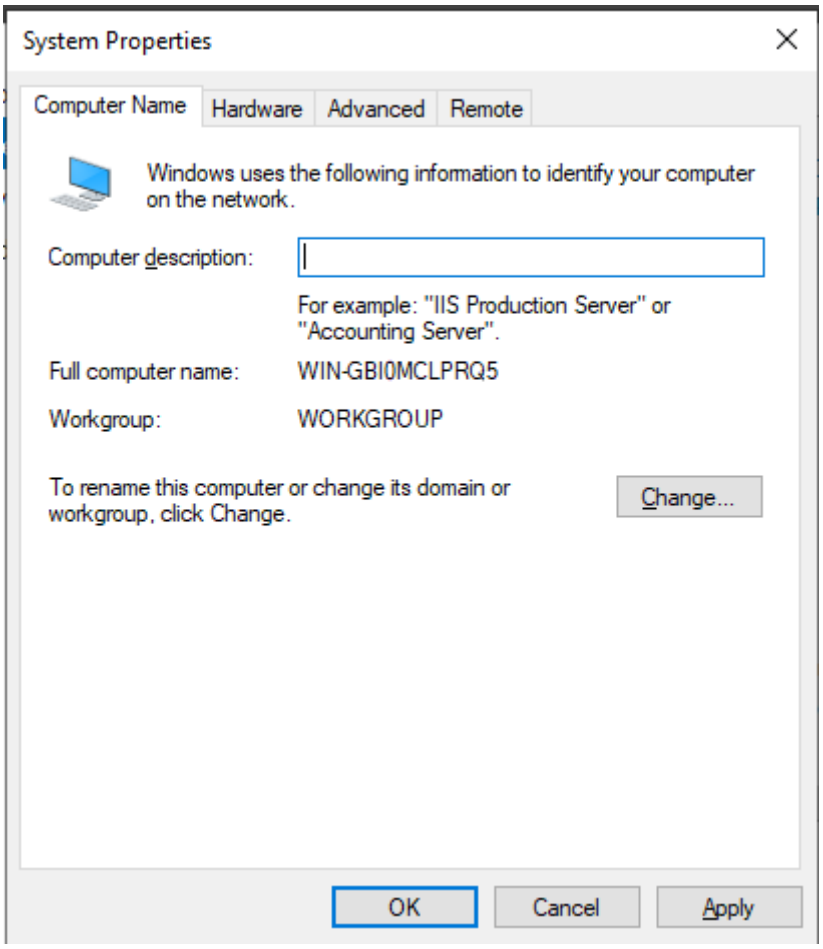

Figure 3: Change Button

After clicking on change option, interface pop up with computer name / Domain name. Enter the new name of the server and press “OK” button.

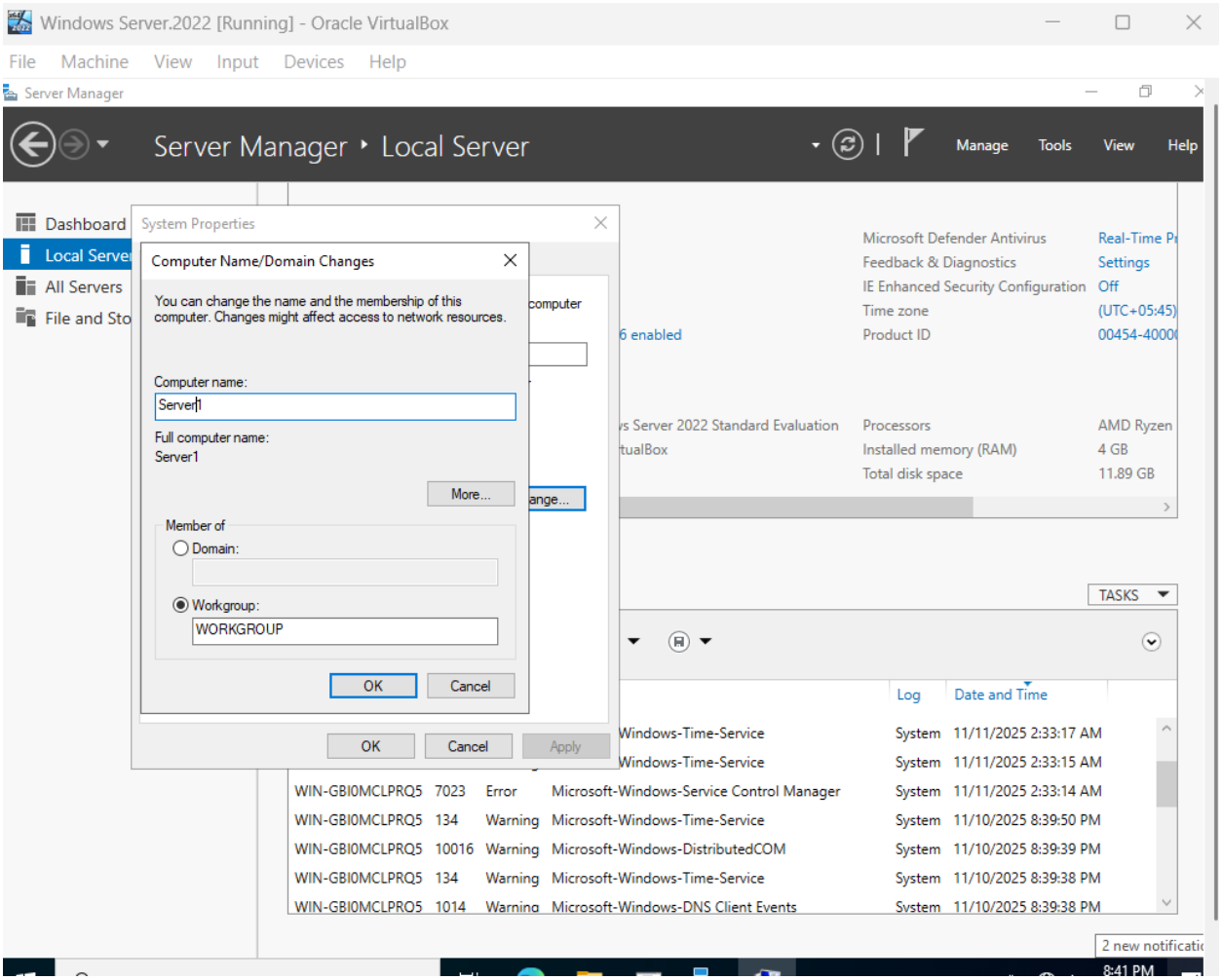

Figure 4: Server 1

After pressing “OK” button, a new window appears requesting a restart in order to change the name. You can restart now or later, click your answer according to you.

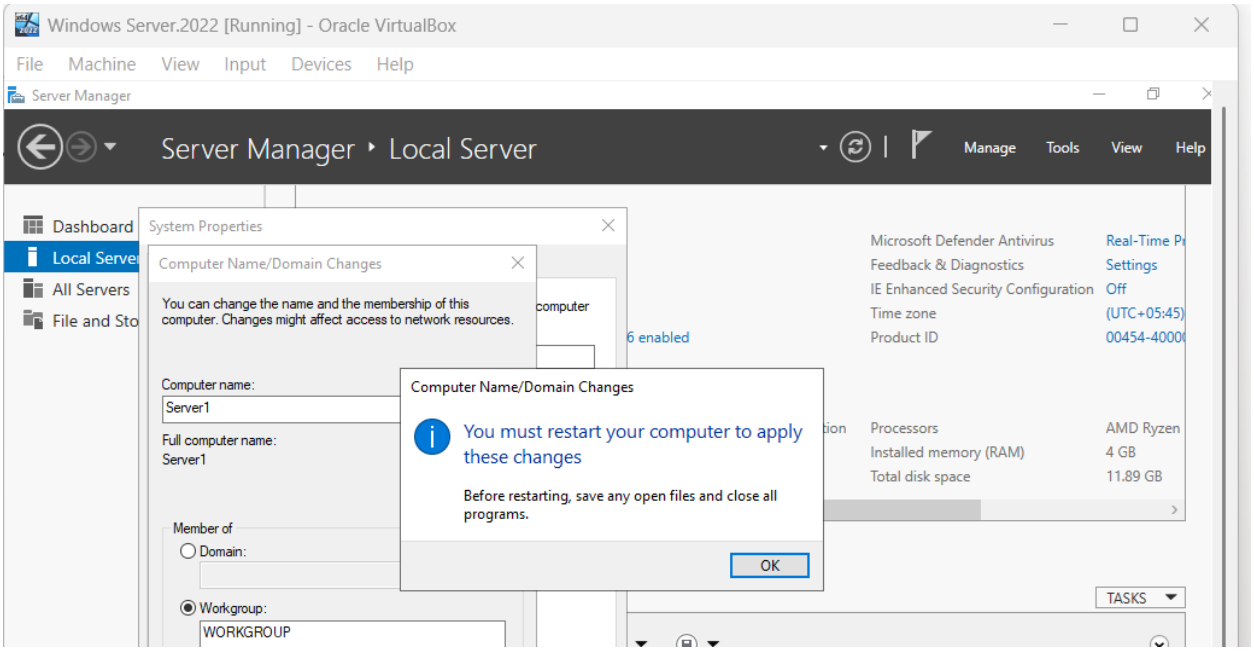

Figure 5: Restart Button

Step: 2 Enabling Remote Desktop:

Remote Desktop Service allows a remote connection to the server to access its GUI and features.

Pressing the Remote Desktop Button opens a window remote desktop system properties.

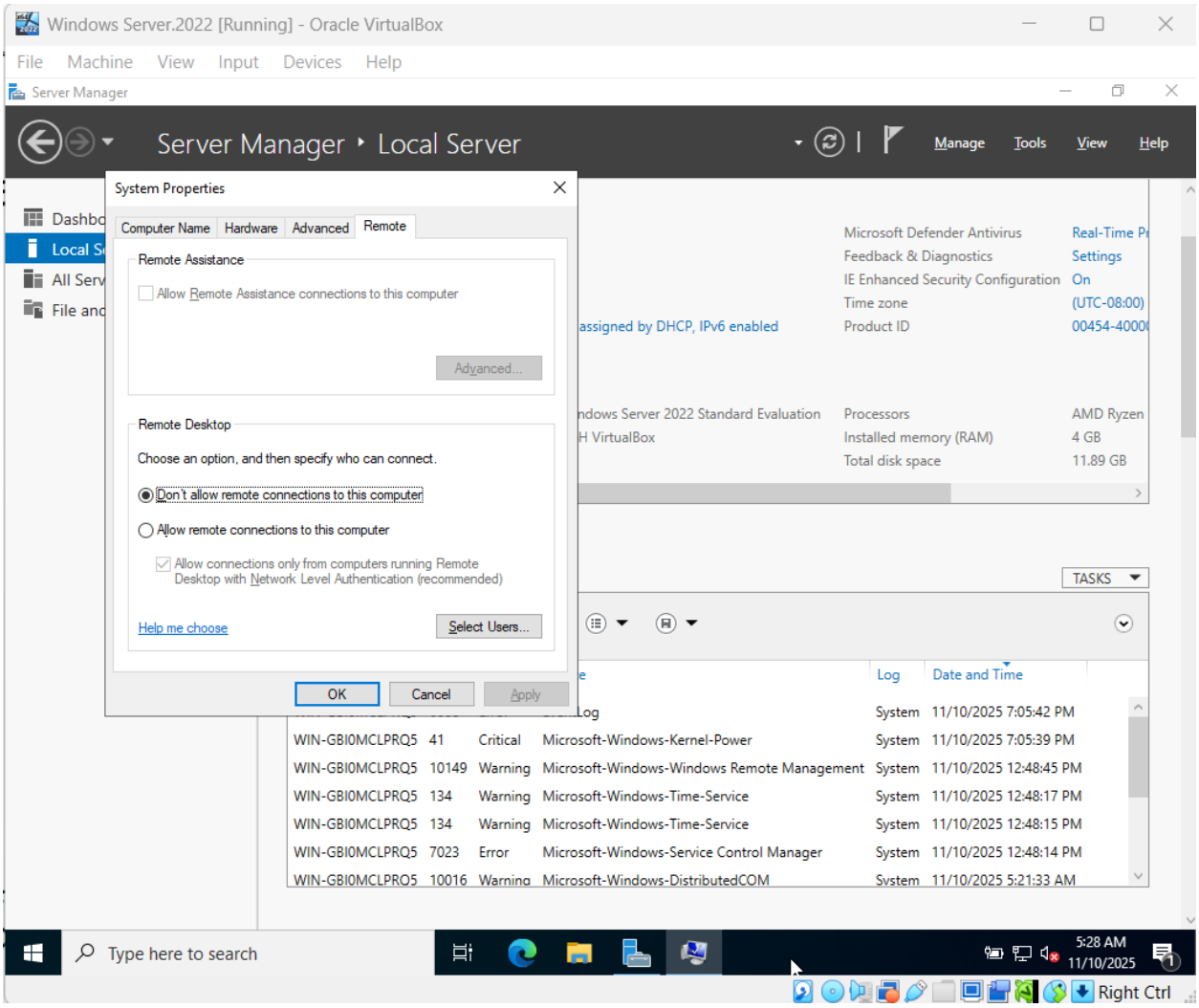

Figure 6: Remote Desktop Service

From there, the Allow button is pressed, this shows a warning about the firewall. On pressing the “OK” button, the remote desktop service gets enabled.

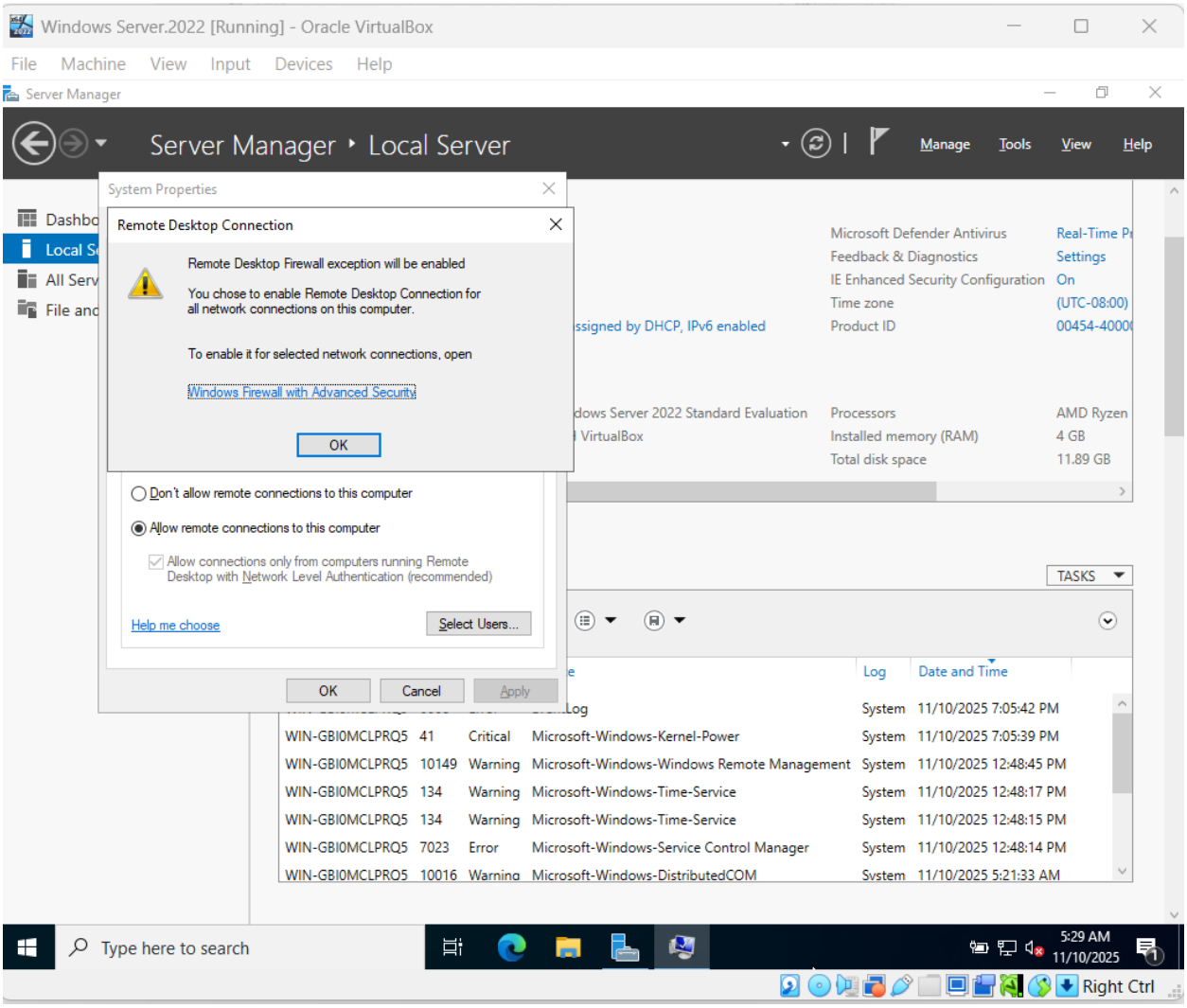

Figure 7: Warning about the firewall

From here, again click “OK” button to close the remote desktop settings window and you are all set to enable remote desktop in your windows server.

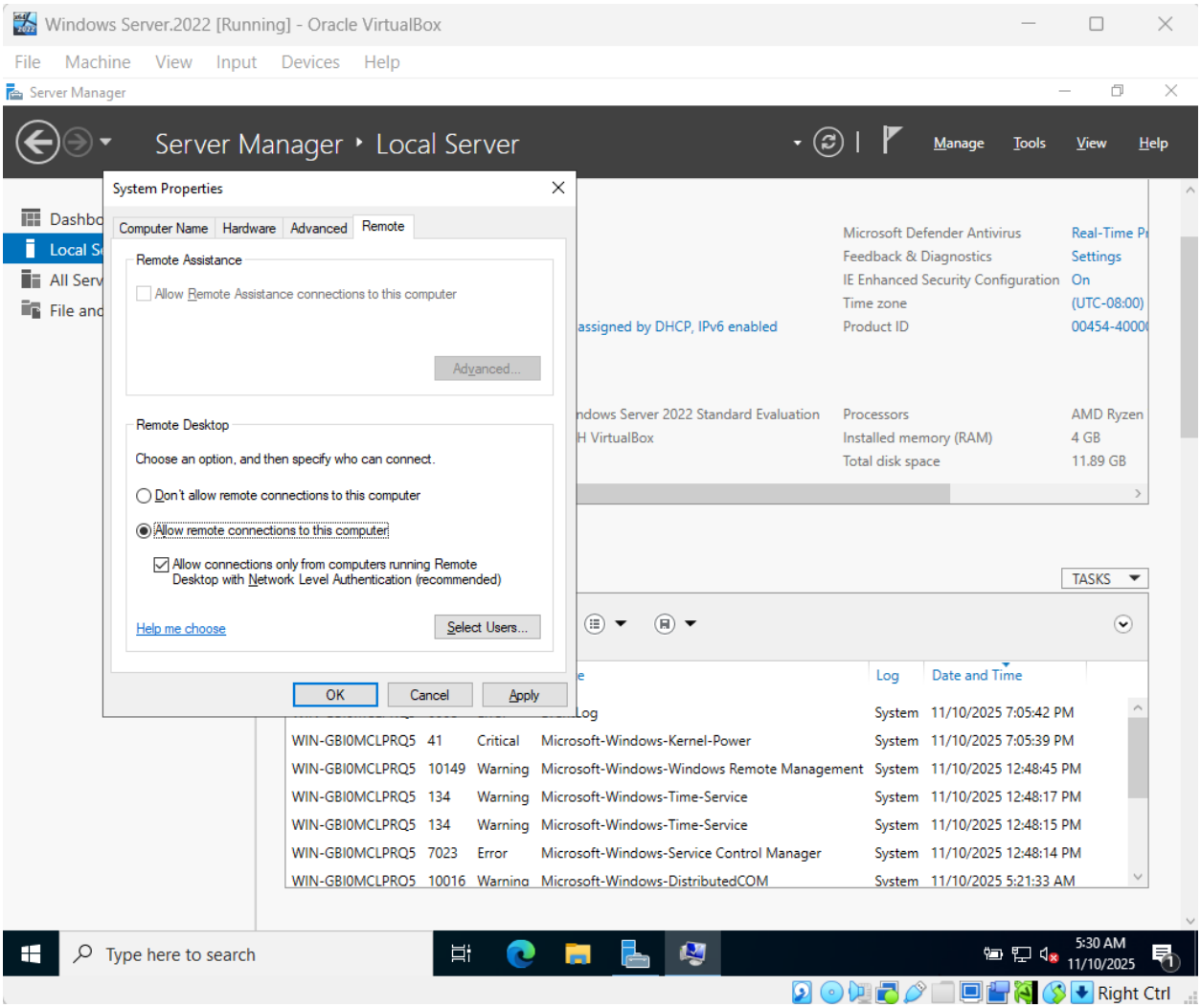

Figure 8: Close the remote desktop settings

Step: 3 Setting up Static IP address:

Servers should not rely on DHCP so services and DNS records remain stable. To set an IP address, again go to local server and press the Ethernet button. This shows a list of network adapters connected to the server.

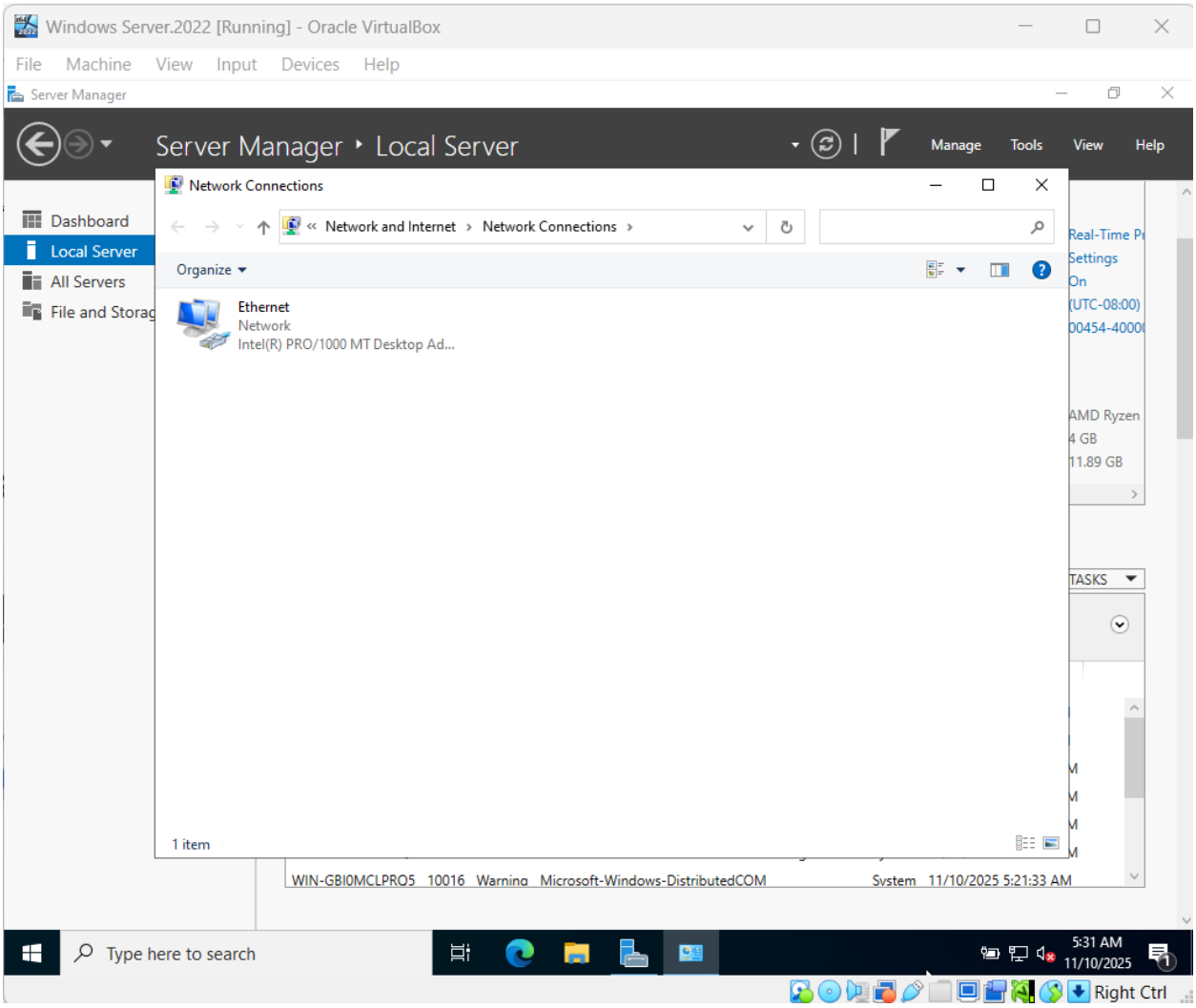

Figure 9: Ethernet button

From there the properties of the adapter is opened by right click on the adapter.

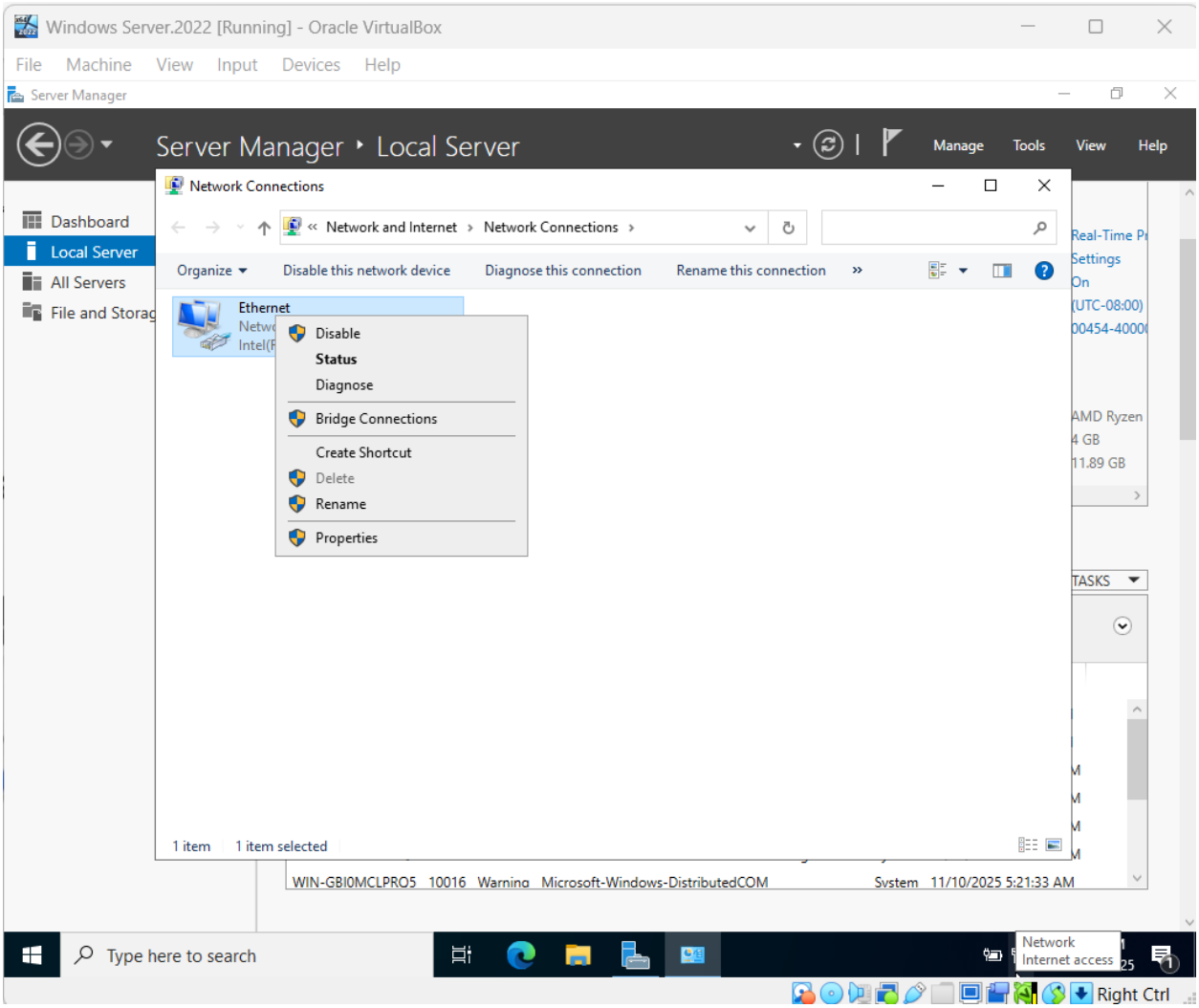

Figure 10: Properties of the adapter

From there again, you can see the properties, Select internet protocol version 4(TCP/IPv6). Now double click on IPv4 from the list. This will open a new window to enter the IP.

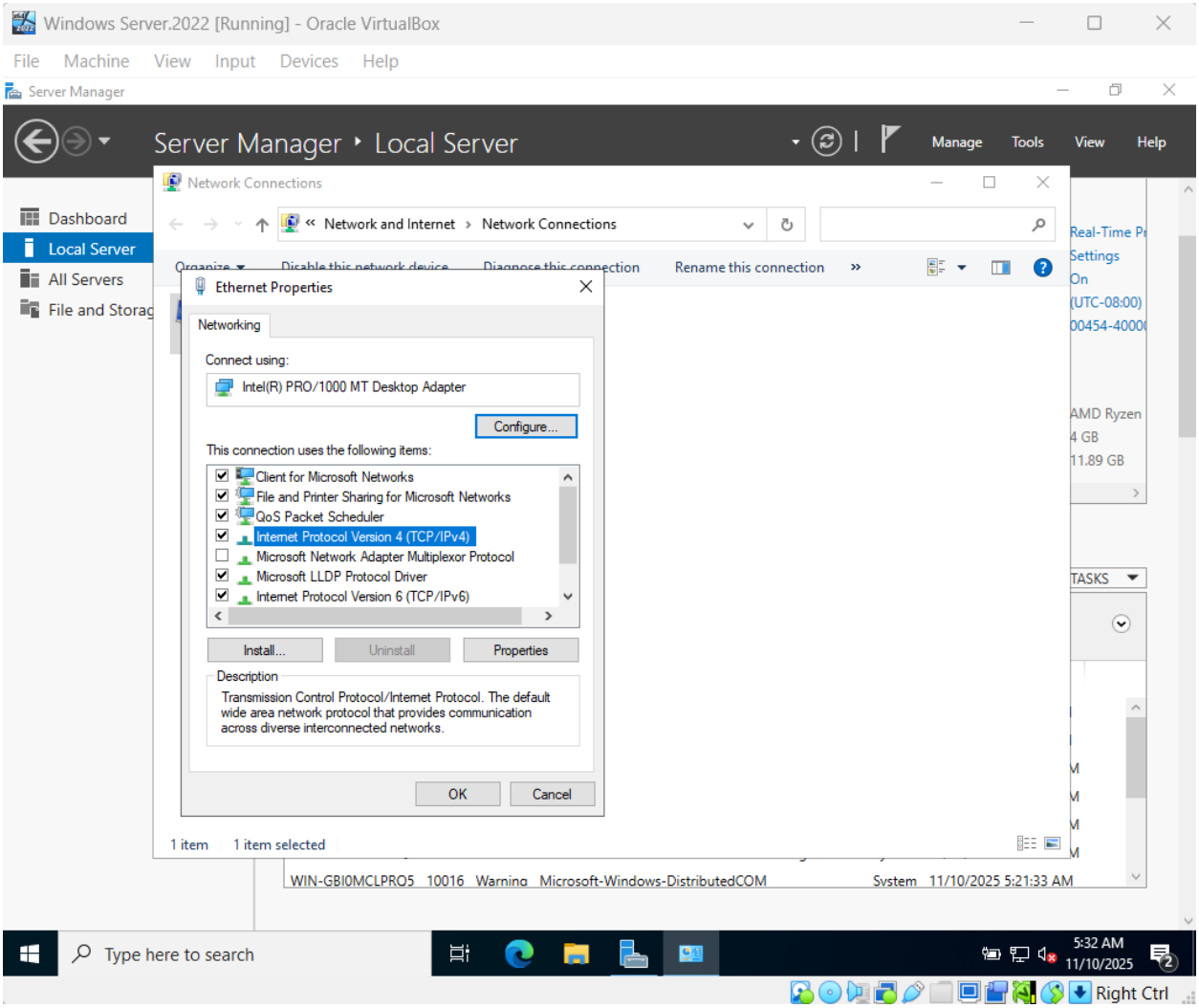

Figure 11: Enter the IP

In the new window, enter the IP for the device 192.168.0.252 and also Subnet mask 255.255.255.0, Gateway 192.168.0.1 and Primary 192.168.0.1 and Secondary DNS server address 8.8.8.8 Static IP is configured successfully.

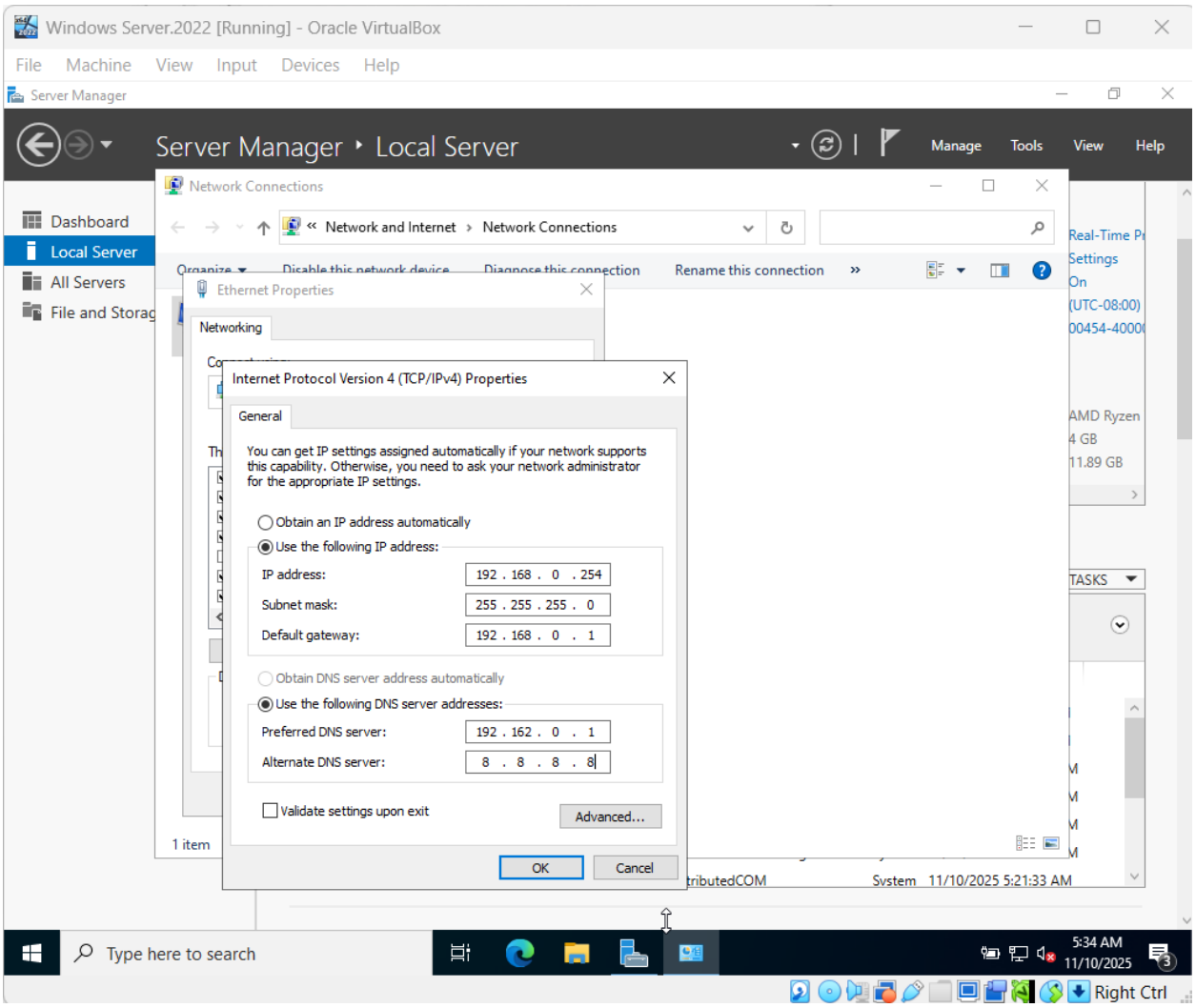

Figure 12: Configured successfully.

Step: 4 Changing the time zone:

Correct time zone and time are essential for Kerberos authentication, logging, scheduled tasks, and certificates. To change the time zone, press on the time zone from the menu on Server Manager. Selecting the correct time zone is important for the server.

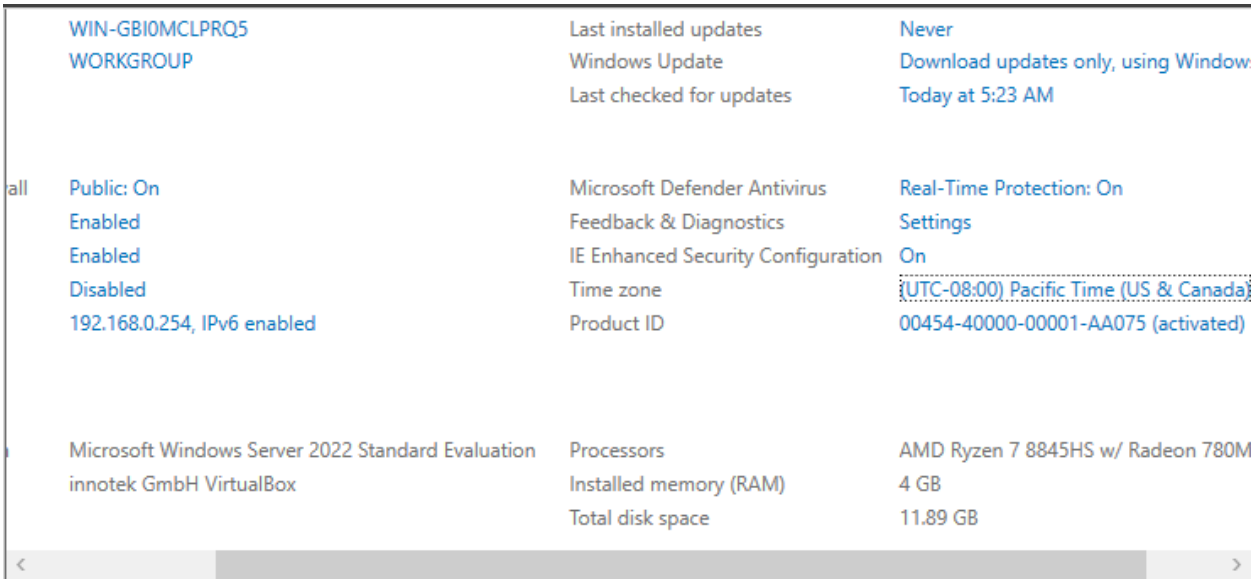

Figure 13: Changing time zone

From there, On the new window, press the Change time zone to current time of todays.

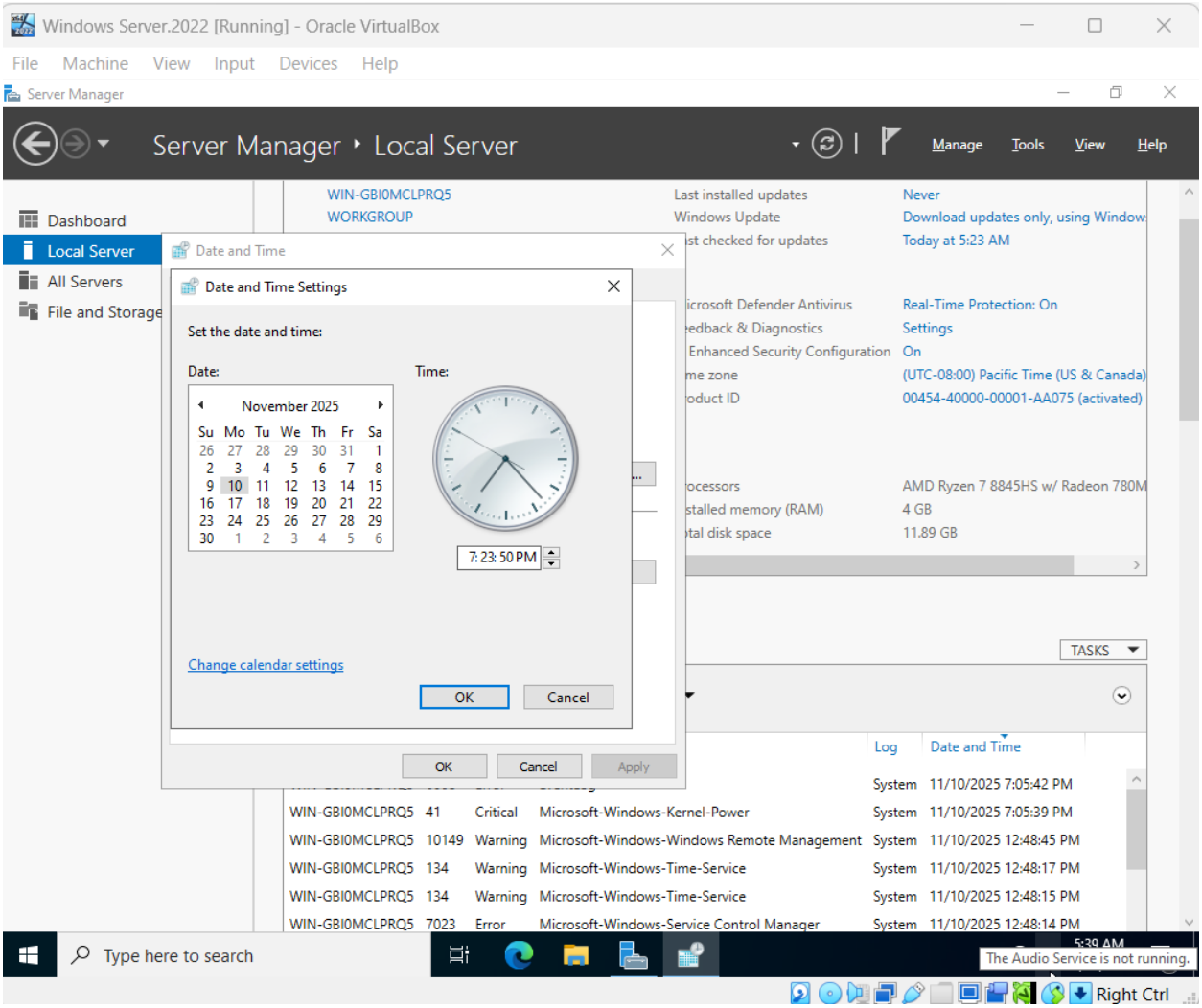

Figure 14: Current time

From the drop-down list, select the correct time zone for the Server, here Kathmandu is selected. After that click on “OK” button and time is set.

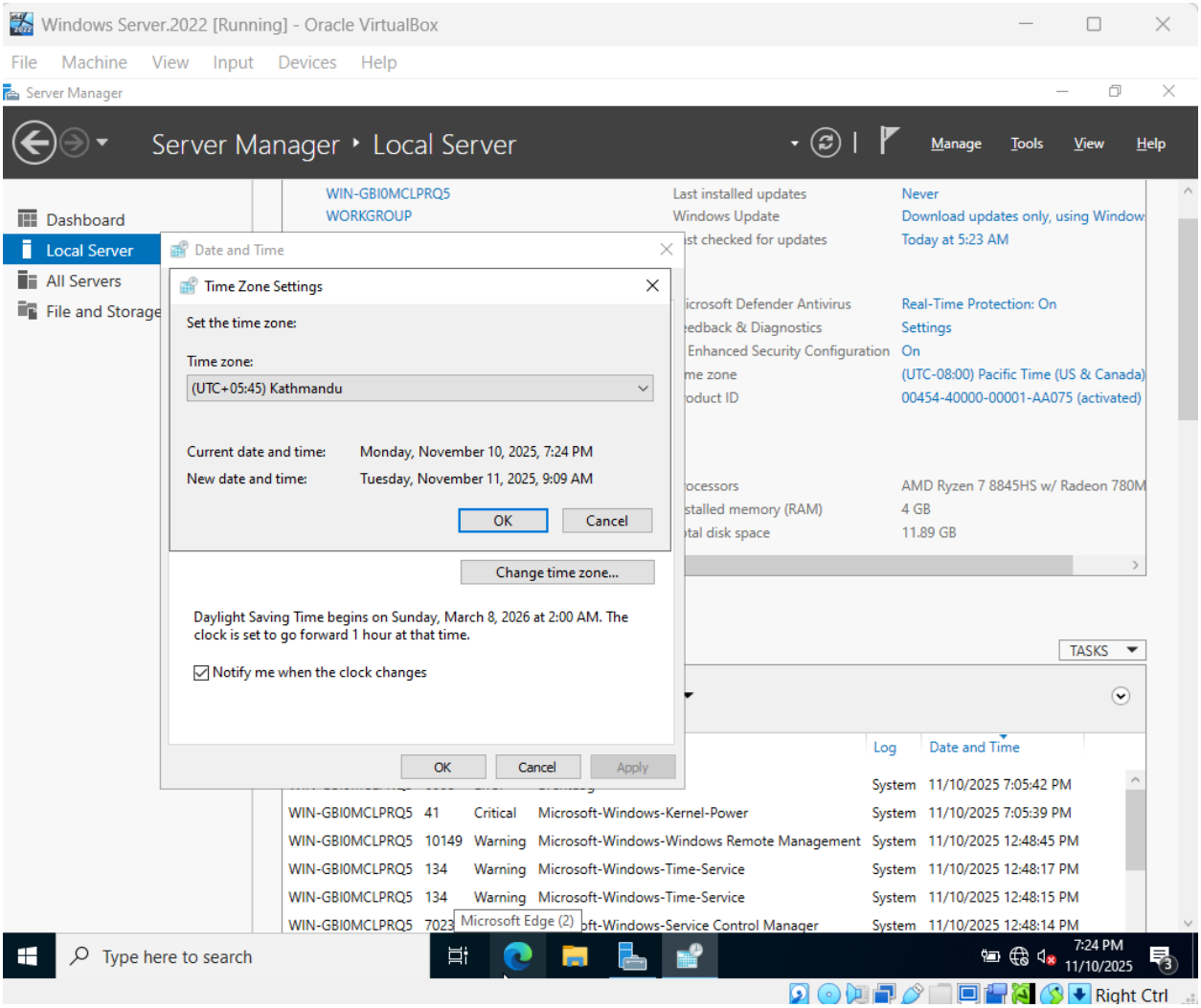

Figure 15: Set time

Step: 5 Turning off IE enhanced security and checking for updates:

IE ESC restricts browsing; commonly disabled on lab/demo servers to simplify intra-net admin pages. Keep enabled on production unless you have a safe need. To turn off IE enhanced security, from the local server, the IE Enhanced Security button is pressed. A new window opens.

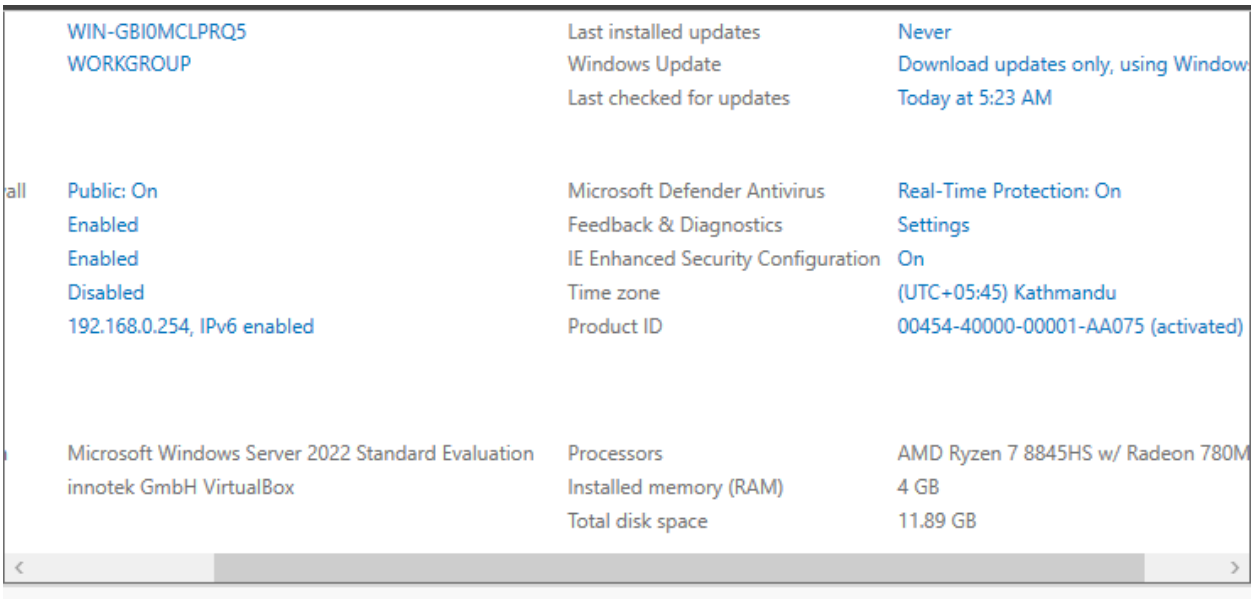

Figure 16: IE Enhanced Security button

From there By default, the Security Configuration is turned on in the IE Enhanced Security Administrator.

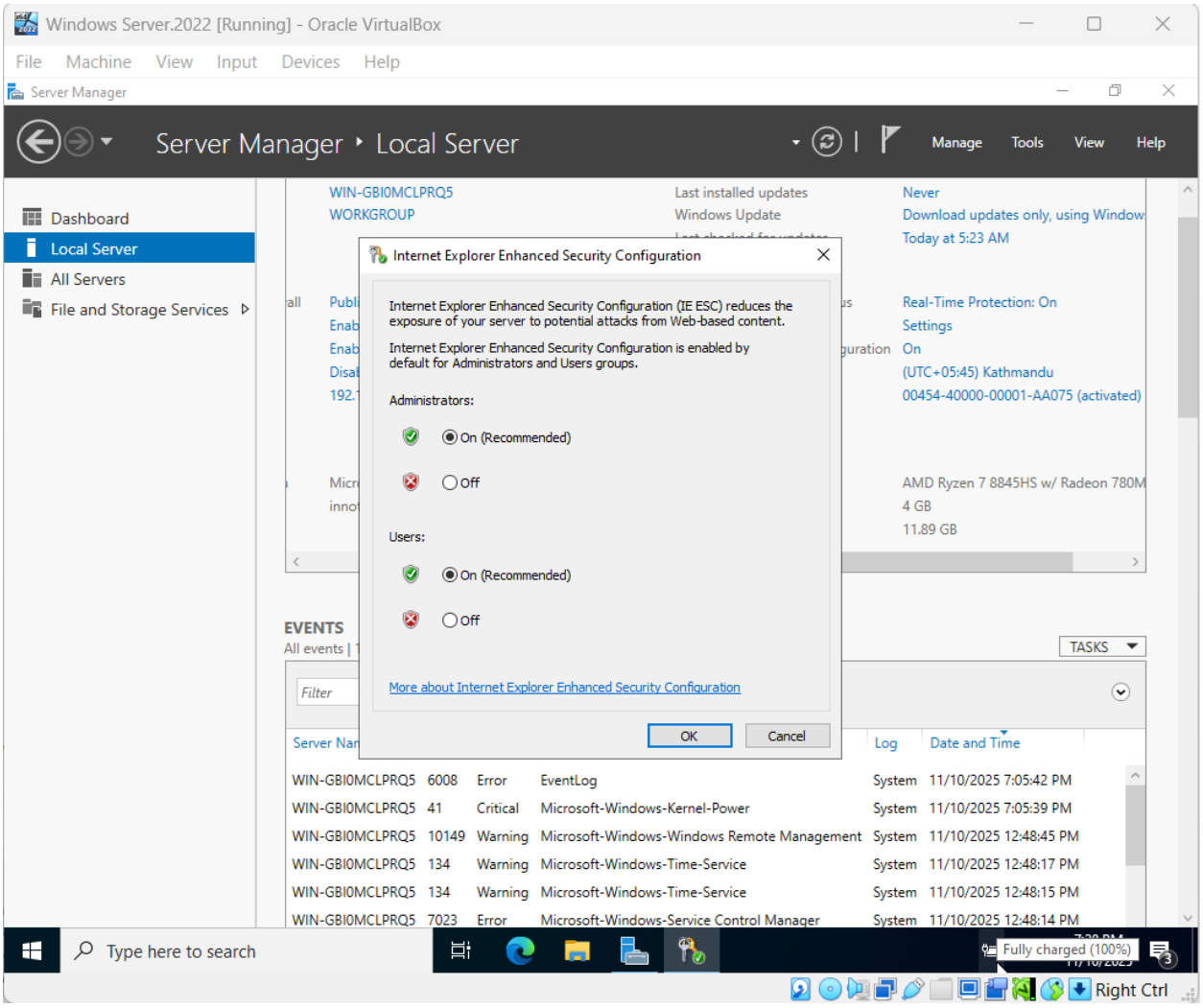

Figure 17: By default

From there again, The IE security is turned off for both Admin and click on “OK” button.

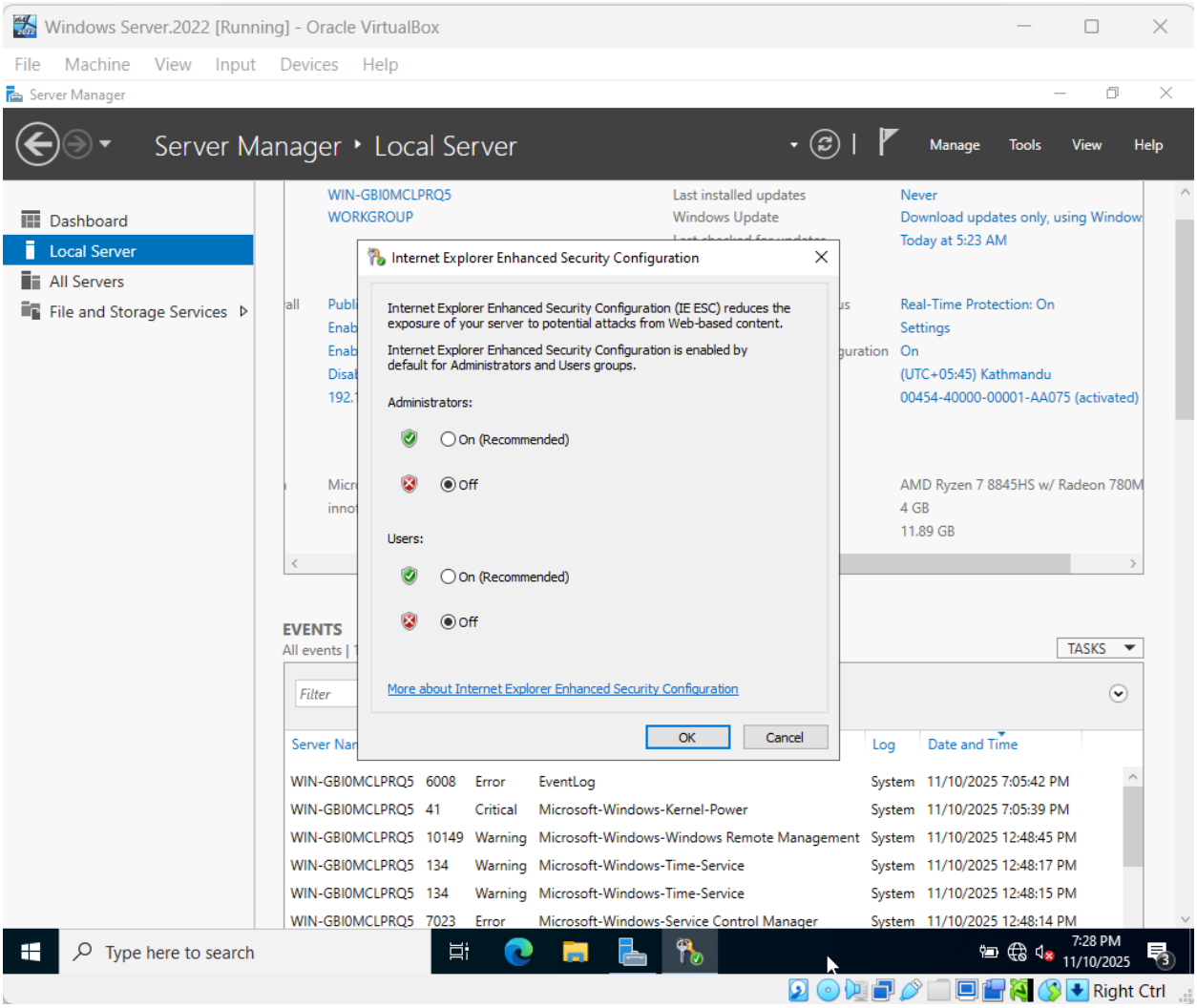

Figure 18: Turned off button

After that click windows button, search Windows Update, press the Update button and press Check for Updates, new updates will be downloaded and installed automatically.

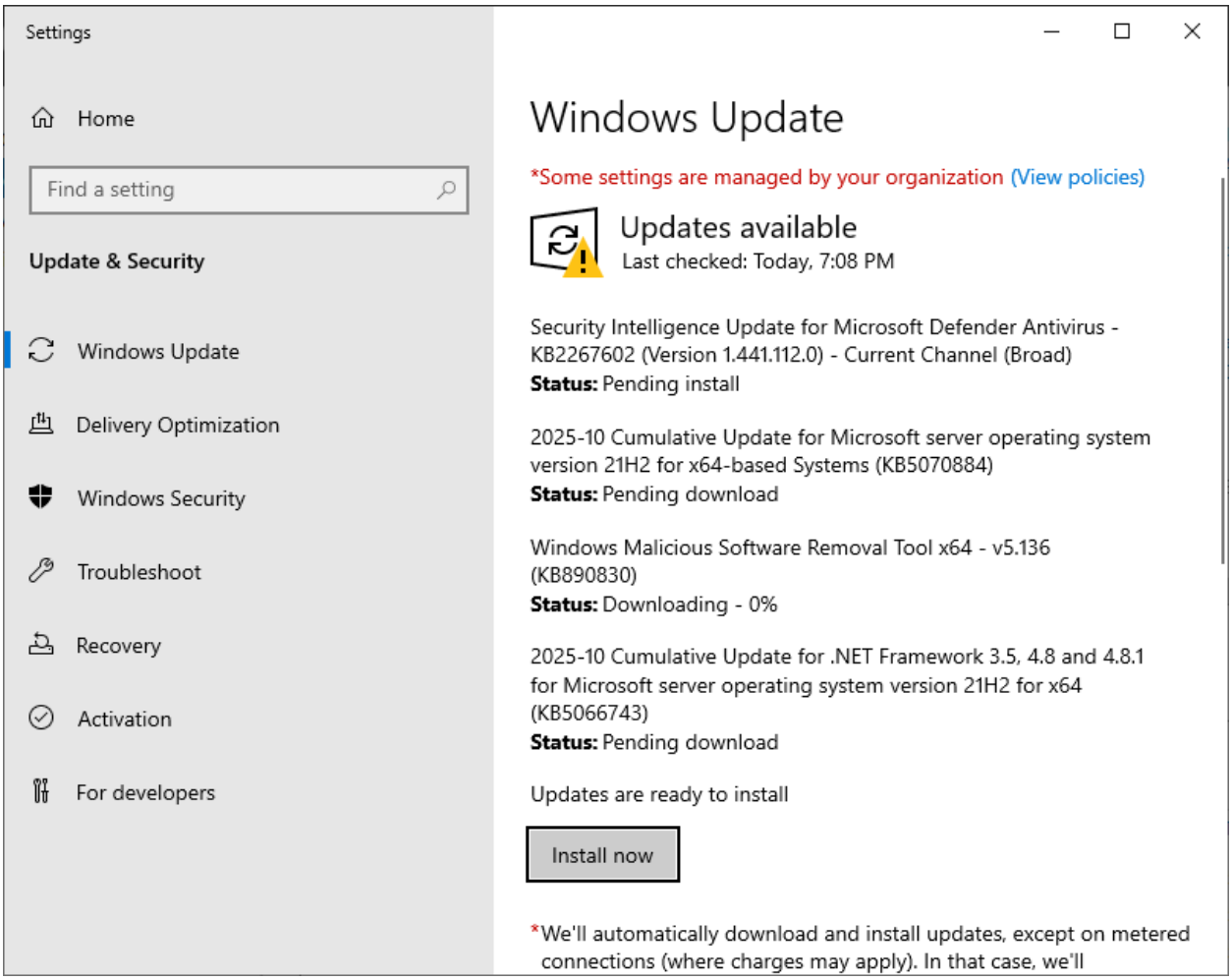

Figure 19: Update check

Step: 6 Adding user using GUI:

Create local accounts for break-glass, service use, or non-domain scenarios. From there local server the toolbar at the top right of Server Manager, press Tools and from the list selects Computer Management.

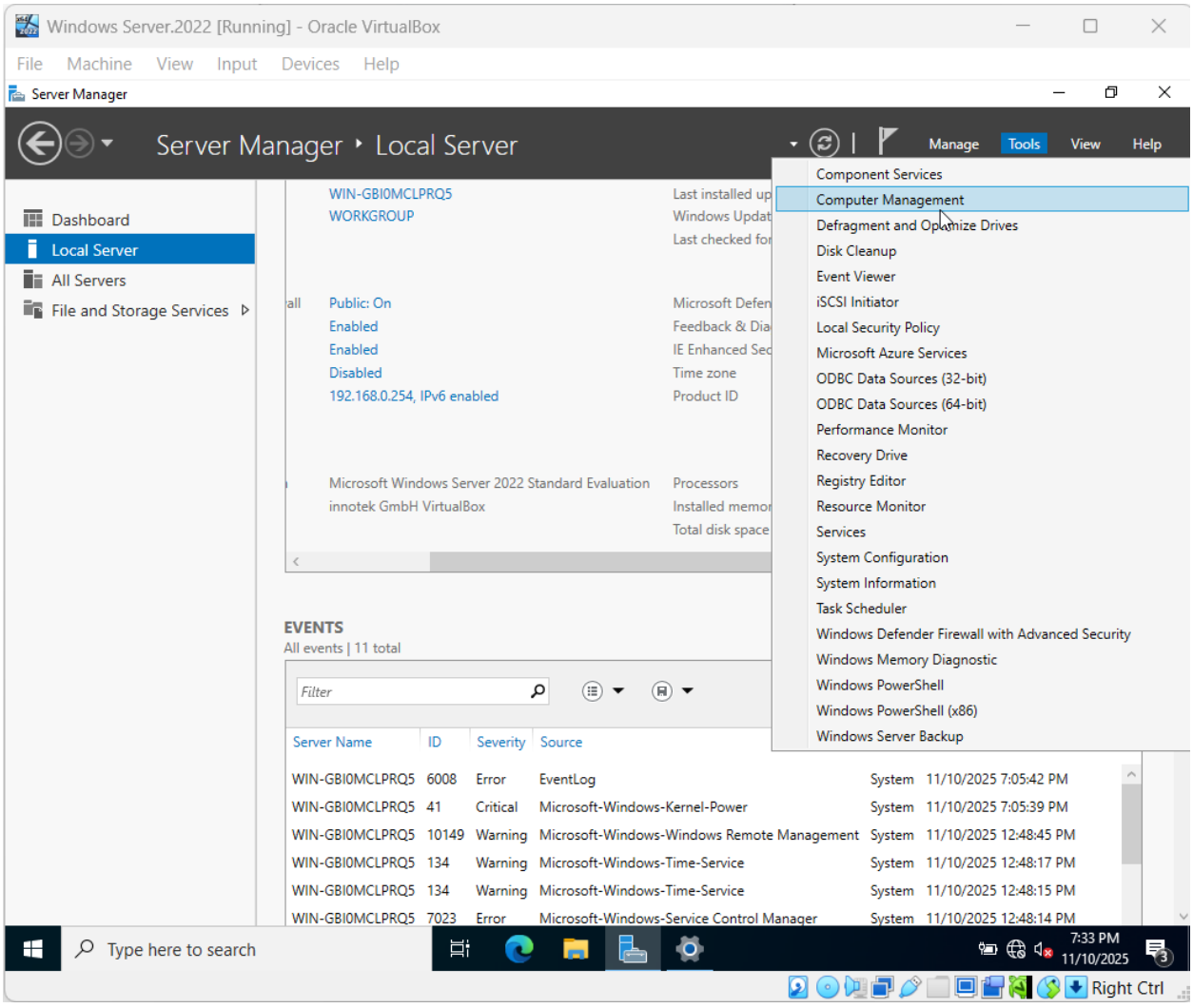

Figure 20: Computer Management

From there, Select Local Users and Groups form the list at the left.

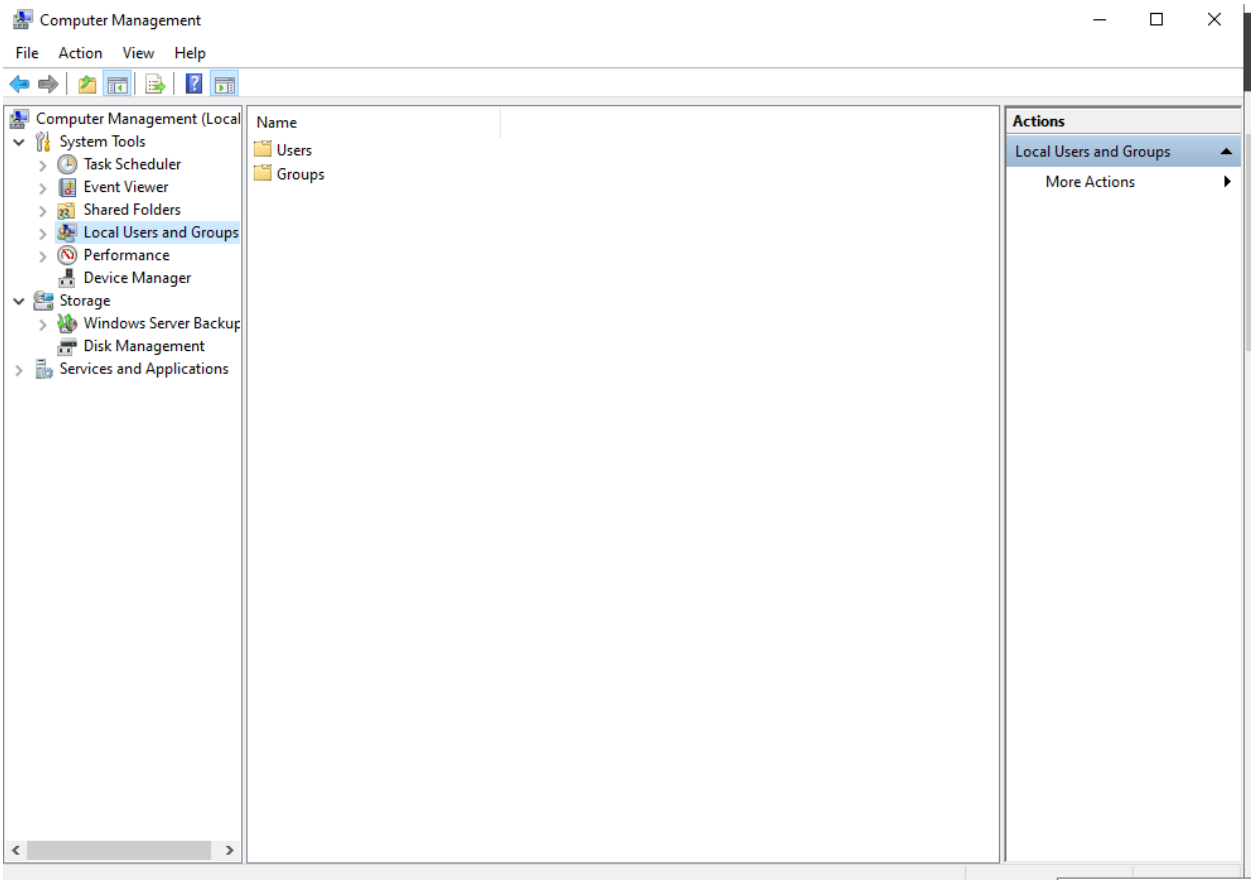

Figure 21: Local User

From there, click right on Users and you can see administrator, guest etc in the right side. After that click New User.

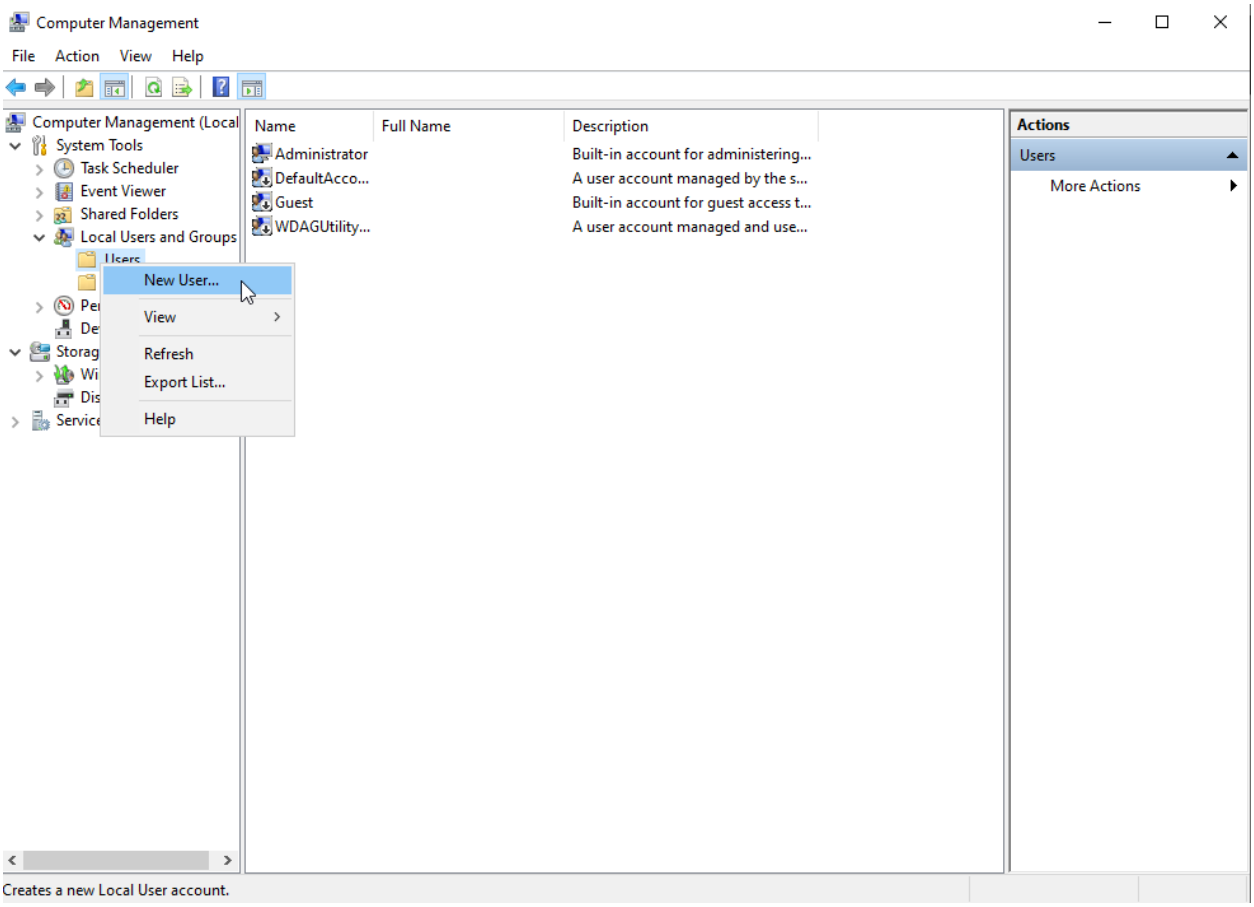

Figure 22: New user

After that on the new window, enter details on the username “New user 1”, Full name “New user” description “New test user” and press Create.

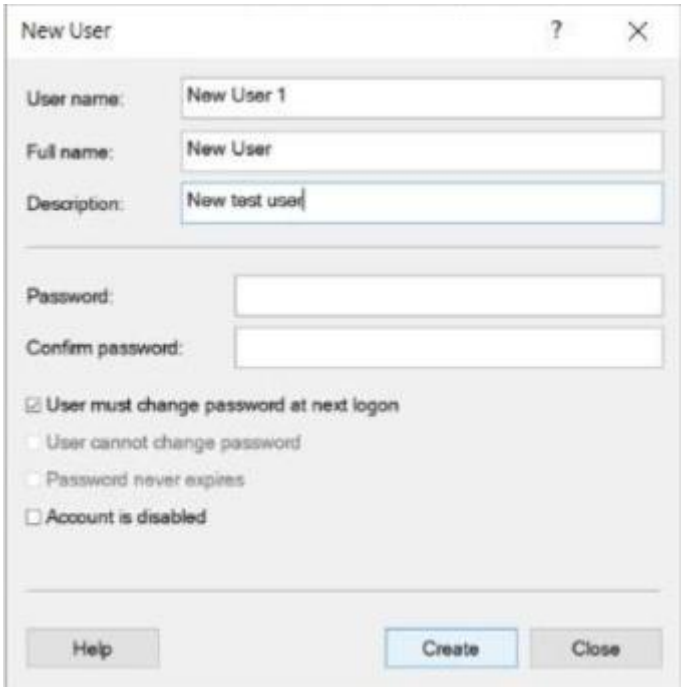

Figure 23: Enter details

From there, the new user will be added in your windows server successfully.

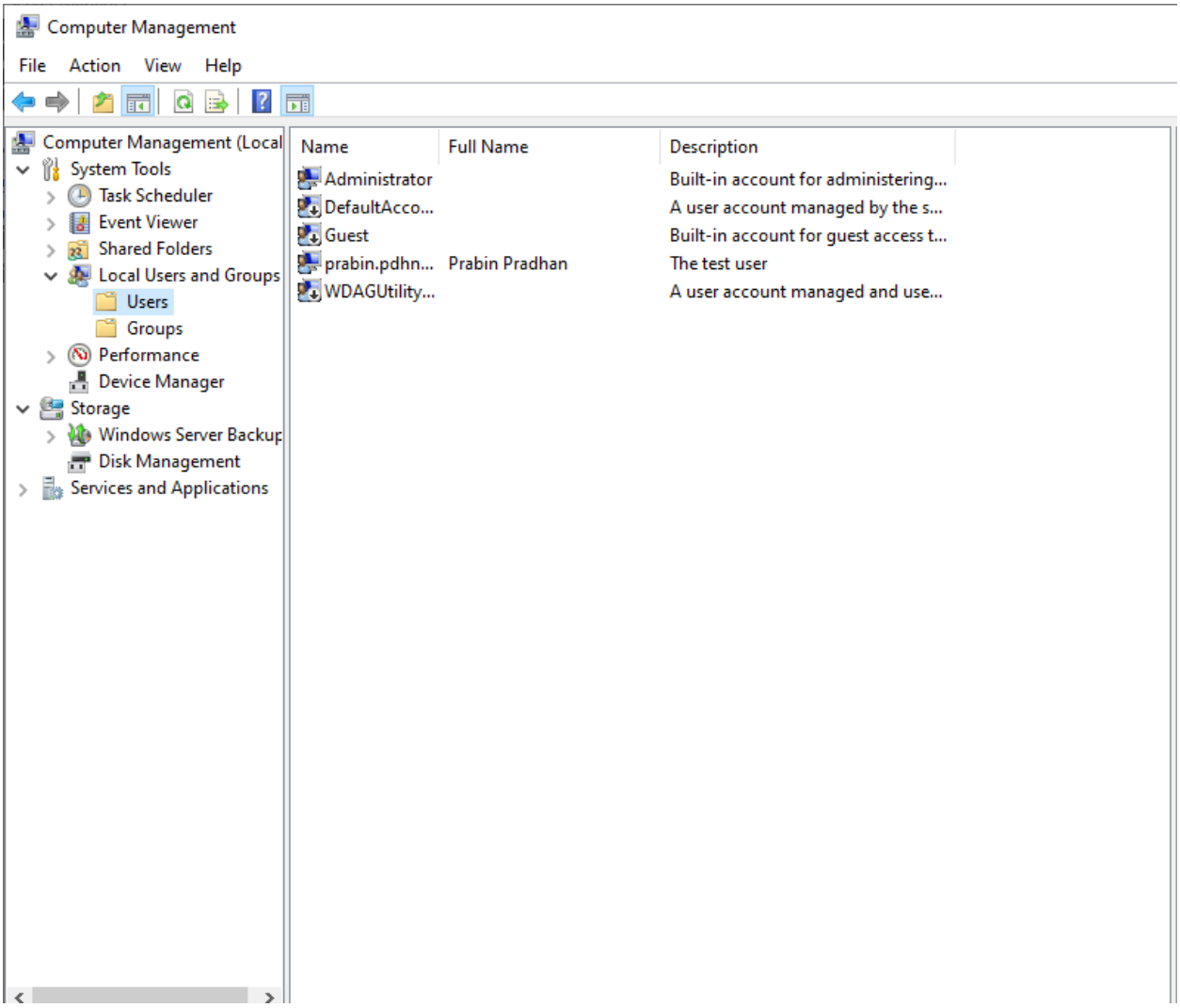

Figure 24: User added

Step: 7 Adding new user using Shell:

Power shell is Faster, scriptable, consistent across many servers. Open Windows, search Power shell and double click on power shell. Power shell as an administrator.

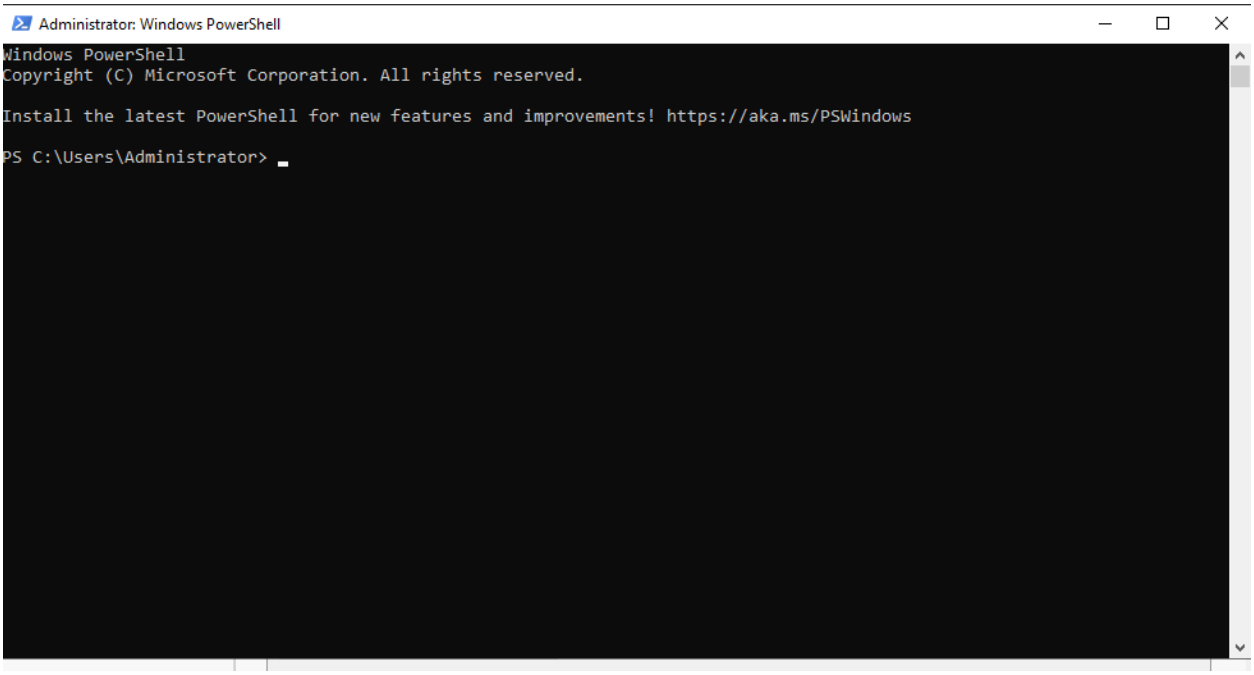

Figure 25: Using shell

After that, Enter the command “get-localuser” to view all the users.

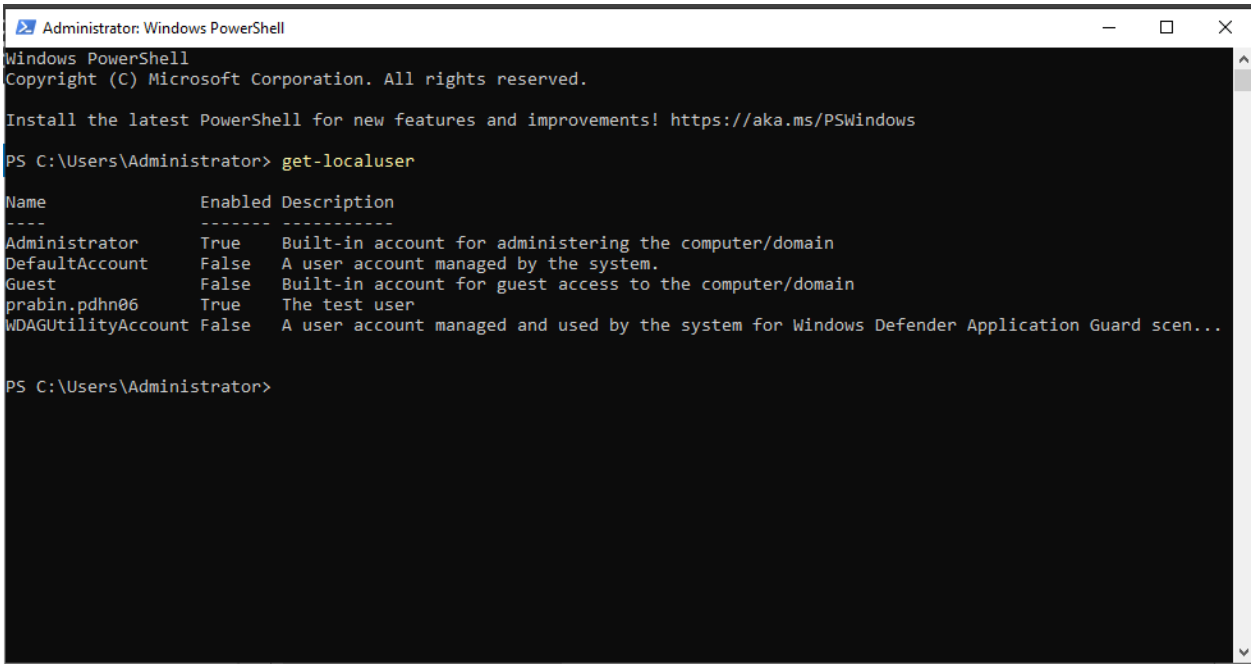

Figure 26: View all users

After that, Enter the command “new-localuser -name ‘username’ -description ‘description’ -password ‘password’ ” to create new user. In this case, nopassword is given to skip the password.

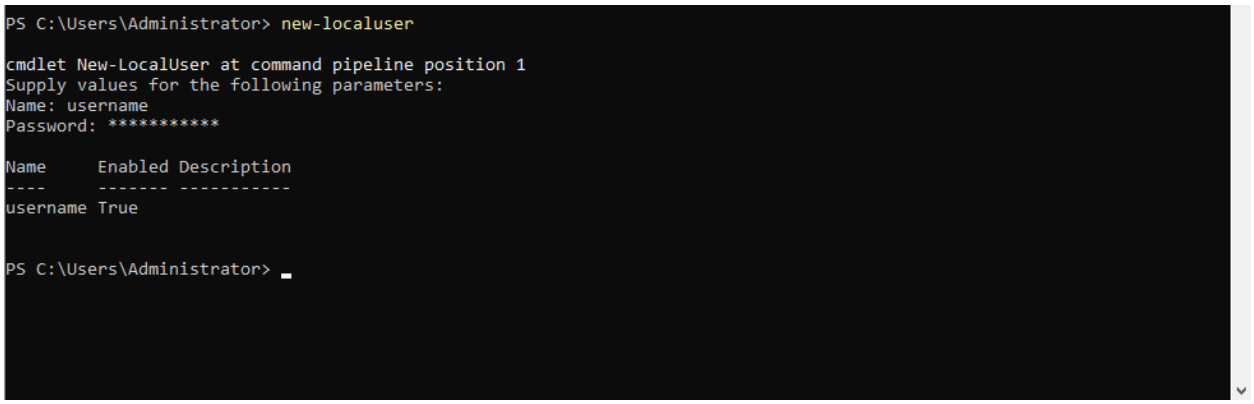

Figure 27: Create new user

After that, the new user is added successfully in the windows server.

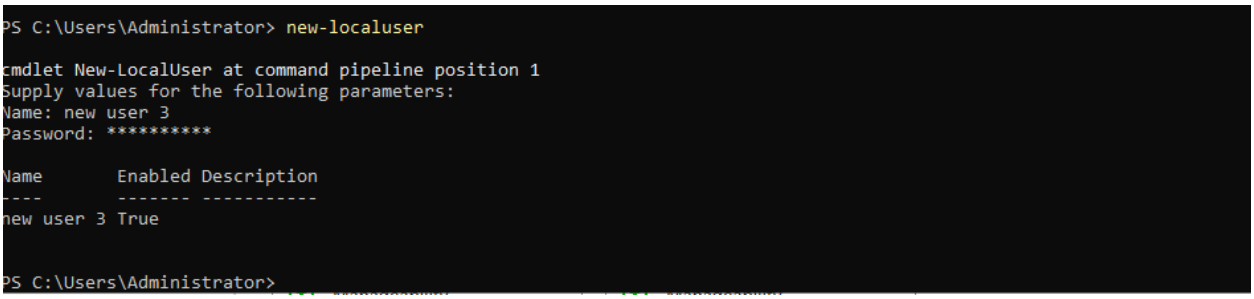

Figure 28: User added successful

Unlike GUI, users are not added automatically to the group and require them to be manually added from the Shell. The command is “add-localgroupmember -group ‘groupname’ -member ‘username’

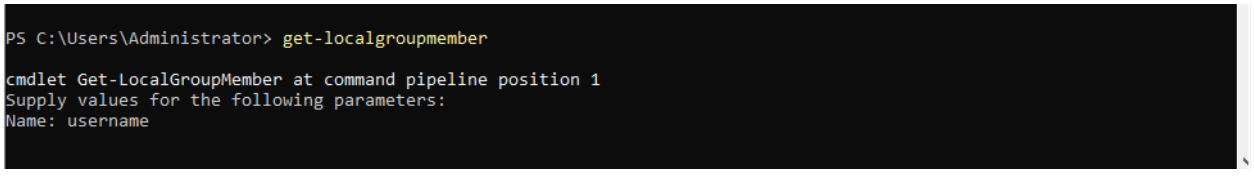

Figure 29: Manually added from command

Step: 8 Removing a user:

Removing or Clean up unused accounts to reduce attack surface. Removing users is very simple. The command to remove a user using Shell is “remove-localuser -name ‘username’ ”

```
PS C:\Users\Administrator> remove-localuser -name "username"
PS C:\Users\Administrator> get-localuser

Name               Enabled Description
```

Figure 30: Remove

After that, confirming that the user is removed from the system.

```
PS C:\Users\Administrator> remove-localuser -name "new user 3"
PS C:\Users\Administrator> get-localuser

Name               Enabled Description
----               ------- -----------
Administrator      True    Built-in account for administering the computer/domain
DefaultAccount     False   A user account managed by the system.
Guest              False   Built-in account for guest access to the computer/domain
new user 4         True    This is new user 3
prabin.pdhn06      True    The test user
WDAGUtilityAccount False   A user account managed and used by the system for Windows Defender Application Guard scen...


PS C:\Users\Administrator>
```

Figure 31: Remove successful

Step: 9 Storing passwords using variables as securestrings:

To store strings as secure string a new variable is created using the command $variable -read-host -assecurestring.

```
PS C:\Users\Administrator> $password = read-host -assecurestring
```

Figure 32: Password using variable

Password string is given and is stored by the variable. Passwords must be alpha numeric and symbolic. A new user is created by giving the variable as password.

```
PS C:\Users\Administrator> new-localuser

cmdlet New-LocalUser at command pipeline position 1
Supply values for the following parameters:
Name: new user 3
Password: **********

Name       Enabled Description
----       ------- -----------
new user 3 True


PS C:\Users\Administrator>
```

Figure 33: Password alpha numeric and symbolic

From there, new user created by using variable as password in the system.

```
PS C:\Users\Administrator> get-localuser

Name               Enabled Description
----               ------- -----------
Administrator      True    Built-in account for administering
DefaultAccount     False   A user account managed by the syste
Guest              False   Built-in account for guest access t
new user 3         True
new user 4         True    This is new user 3
prabin.pdhn06      True    The test user
WDAGUtilityAccount False   A user account managed and used by


PS C:\Users\Administrator>
```

Figure 34: Created password using variable

3 Conclusion:

This workshop focusses how to prepare a Windows Server for productive use by covering the essentials: naming the server, enabling safe remote access, setting a static IP, selecting the proper time zone, applying updates, and managing local users and groups via GUI and PowerShell. These steps make the server easier to manage, more reliable on the network, and safer to administer day to day.

In the process of practicing both Server Manager and PowerShell to perform the same admin tasks, speed and repeatability improve, as does one's troubleshooting capability. The server is prepared for the addition of roles and features later on with less problems since it has remote desktop enabled, correct networking set up, and users handled properly with secure passwords.

References:

Oracle (n.d.) *Oracle VM VirtualBox.*

Available at: https://www.oracle.com/virtualization/virtualbox/ (Accessed: 10 November 2025).

Microsoft (n.d.) *Server Manager in Windows Server.*

Available at: https://learn.microsoft.com/en-us/windows-server/administration/server-manager/server-manager (Accessed: 10 November 2025).