



**Module Code & Module Title**

**Level 5 – CT5052 Network Operating Systems**

**Assessment Type**

**Logbook 2**

**Semester**

**2023/24 Spring/Autumn**

**Student Name: Muna Pun**

**London Met ID: 23048838**

**College ID: NP04CP4A230233**

**Assignment Due Date: November 23rd, 2024**

**Assignment Submission Date: November 23rd, 2024**

**Submitted To: Prasant Adhikari**

**Word Count (Where Required):**

*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

# Table of Figure

## 1. Introduction

Server Manager is an important utility built into Windows Server that simplifies server administration with a user-friendly graphical interface (GUI). It enables administrators to handle different server components, including hardware, software, and network configurations, from a single panel. Server management tools have evolved, with Windows Server Manager and PowerShell providing enhanced control over servers and web sites (Piltzecker, 2008).

Server Manager determines a new functional tool to assist managers of information technology and through the process of installation, configuration and management features and functions that are part of Windows 2012 Server (C. Ortiz, 2015)

## 2. Purposes of Server Manager

The purpose of server manager is providing IT administrators the means to monitor, configure, and maintain the health and performance of servers

- Control Access: We can give different people different levels of access, which helps keep our servers secure.
- Monitoring and Reporting: Delivers a real-time view of server performance, health, and status.
- Work with Other Tools: It connects with other management tools, allowing for more advanced tasks and automation.
- Manage Updates: It helps us to keep our servers up to date with the latest security patches and updates.

## 3. Objectives

The objectives of Server Manager are:

- Efficiency: User-friendly screens and centralized control should minimize the time and effort spent to manage servers.

- Visibility: Clear view of the server environment status regarding roles, features, or just general server health.
- Automation: It will help to do routine tasks with minimal manual input, hence reducing errors and improving efficiency.
- Scalability: Manage physical and virtual servers out of a single console to grow and scale-up the server infrastructure.

## 4. Server manager several task

### 4.1. Server Name Configuration:

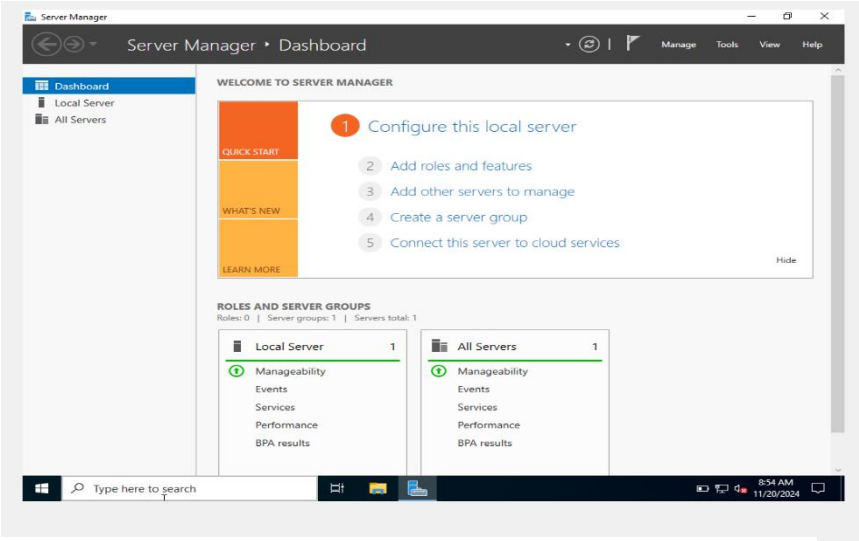
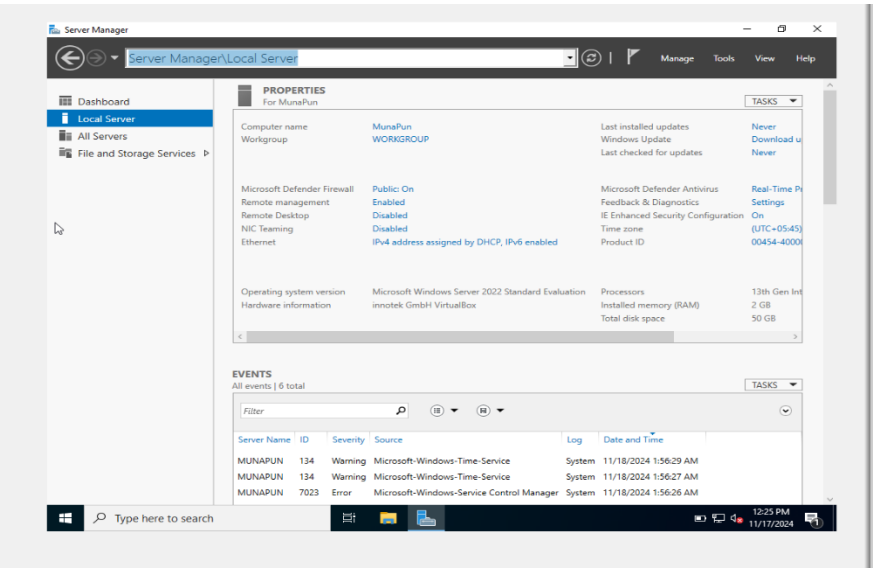



Figure 1 : Server Manager Dashboard

From Server Manager's dashboard, we should select Local Server.

Figure 2 : Local Server Properties




After then, when we click on the computer name, a new window will appear that allows us to change the Server name.

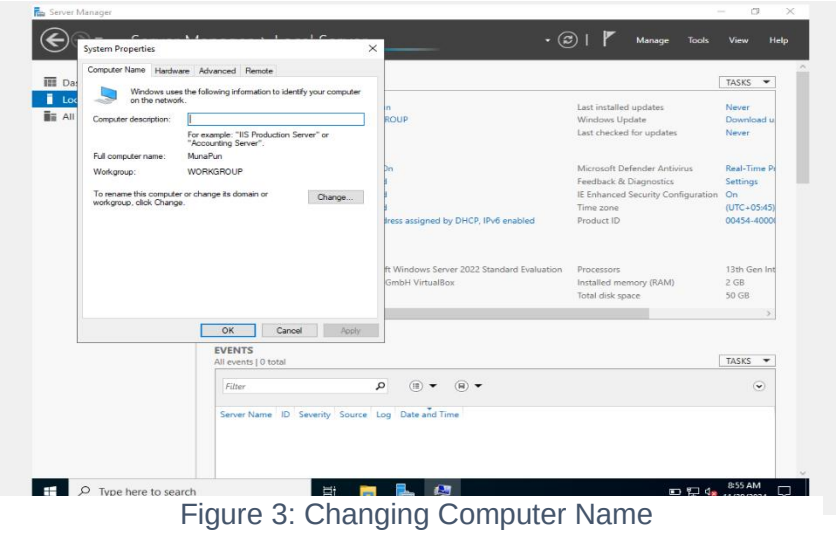



Figure 3: Changing Computer Name

It appears a new windows where we have to press the change button.

Enter the new server’s name and select the "OK" button.

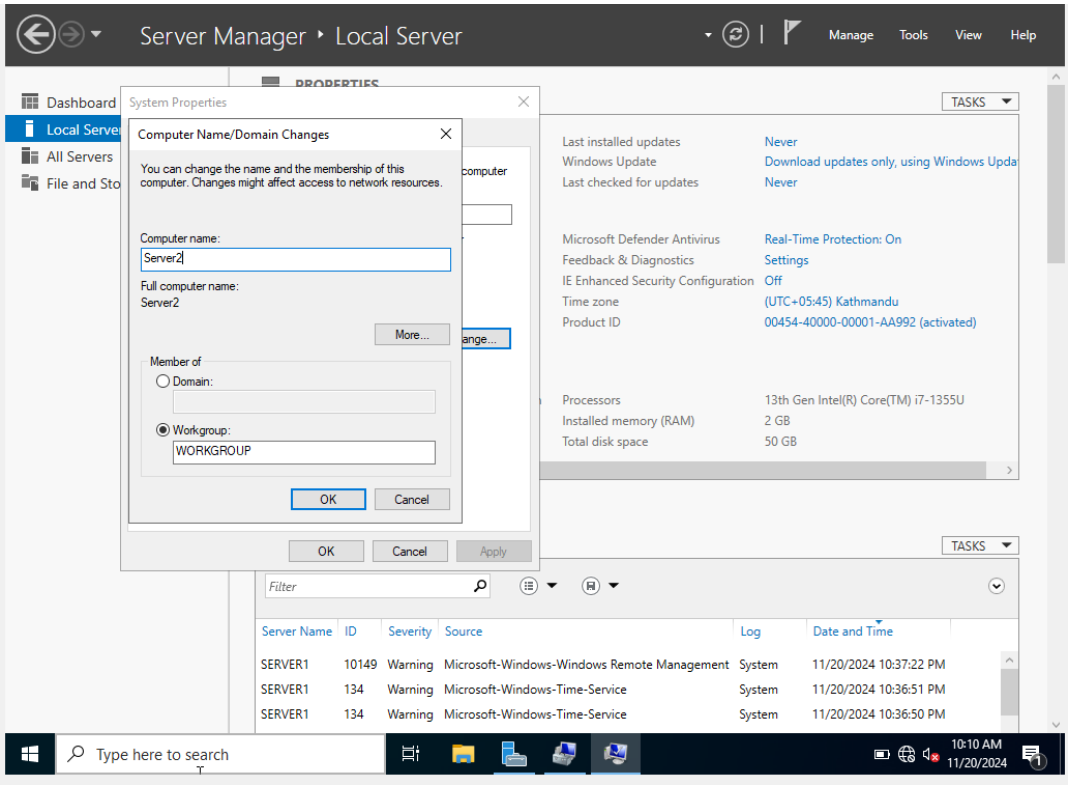



Figure 4: Changing the server's name

After clicking the "OK" button, a new window displays requiring a restart to change the name.

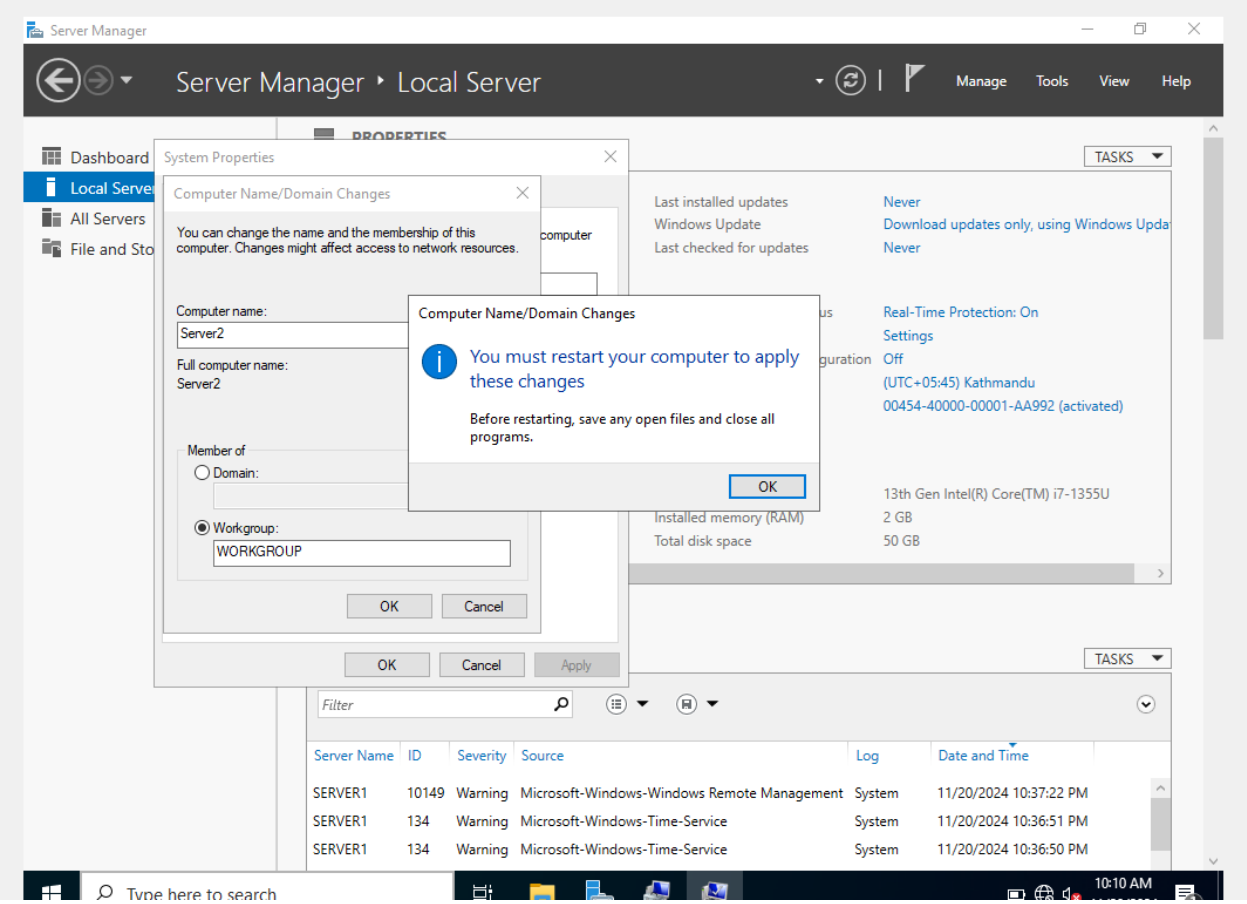



Figure 5: Rebooting the System

## 4.2. Setting up Remote Desktop

Remote Desktop Service enables a remote connection to the server, giving access to its GUI and features.

A new window appears when we press the Remote Desktop Button.

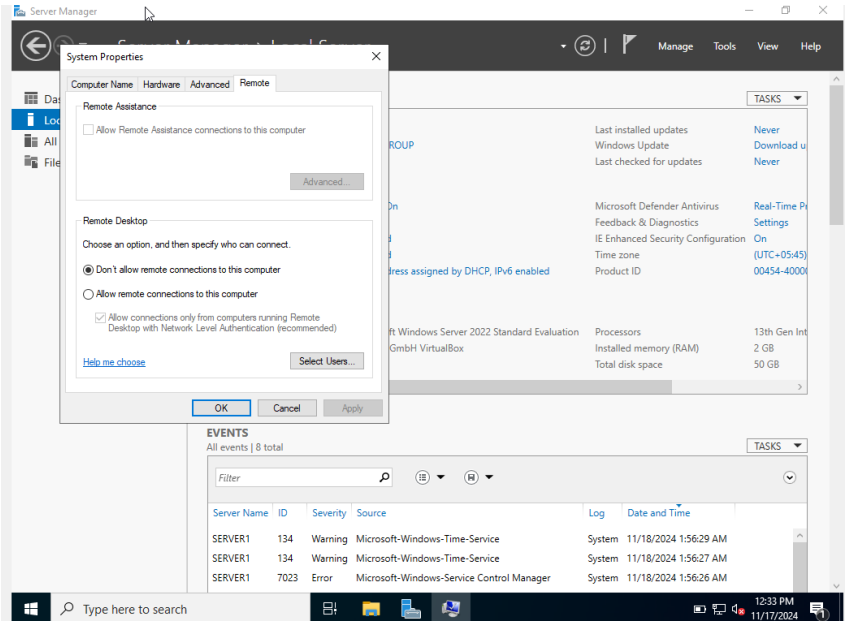



Figure 6:Enabling Remote Desktop

Next, the Allow button is pressed, which displays a firewall warning. When we click the "OK" button, the remote desktop service is enabled.

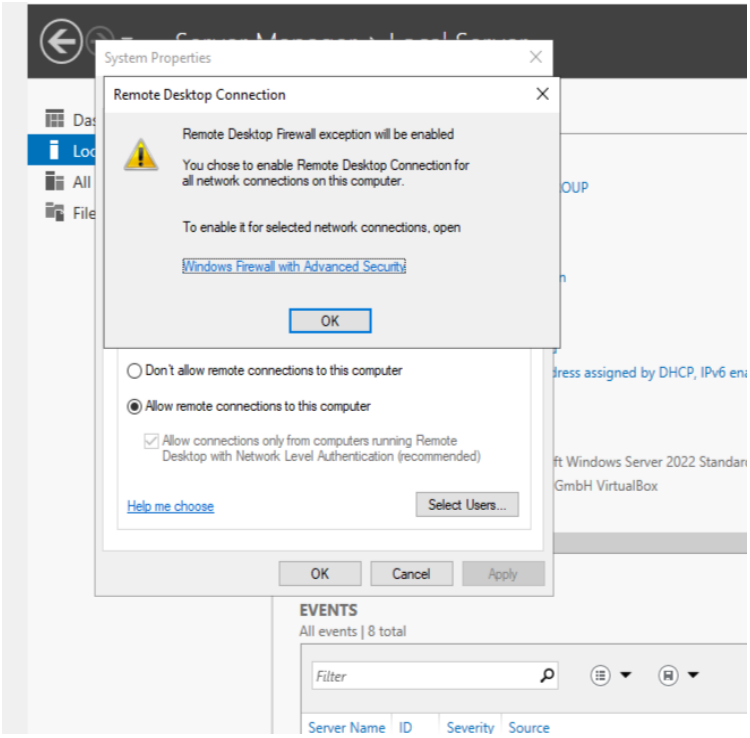



Figure 7: Allow Remote Desktop through Firewall

The "OK" button is then pushed again to close the remote desktop settings window.

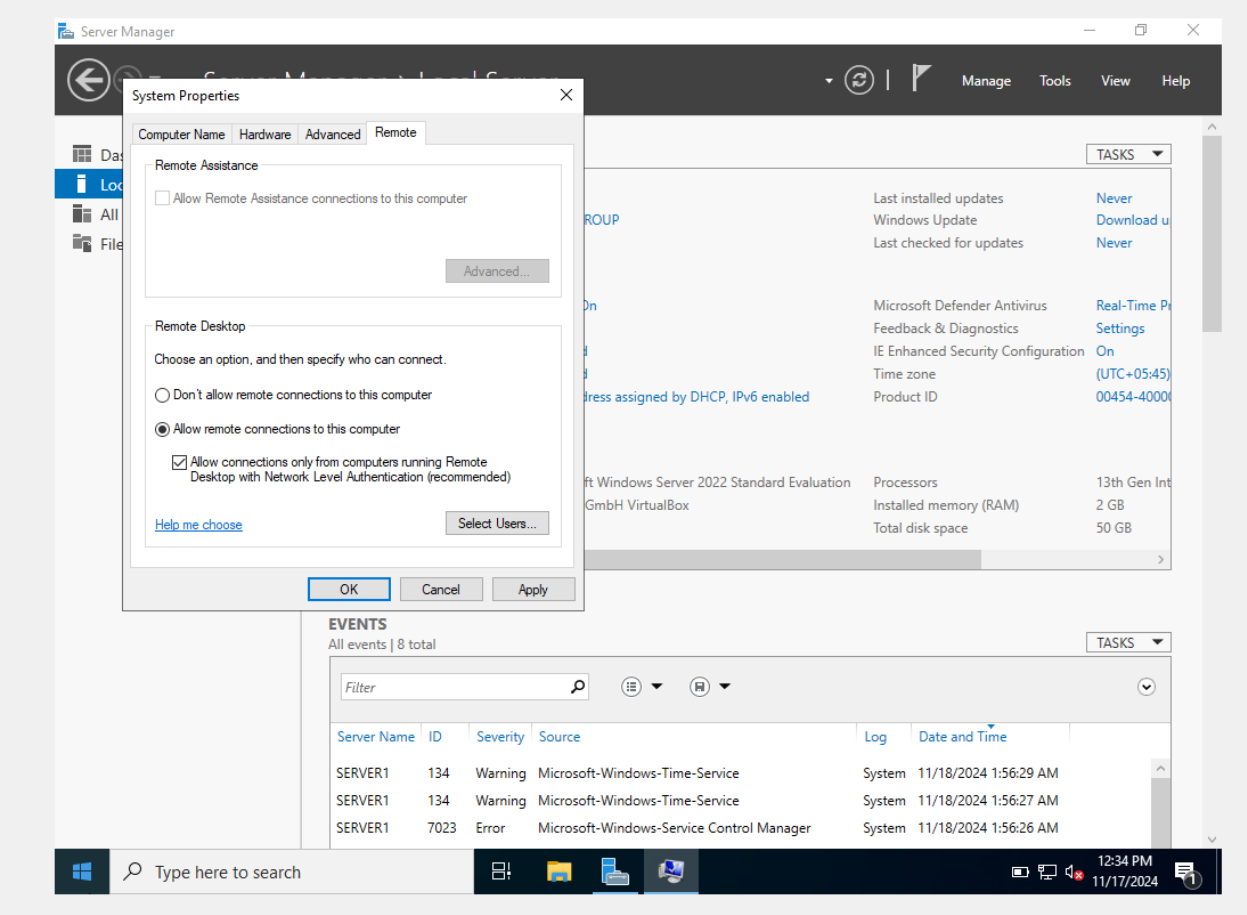



Figure 8: Confirming Change

## 4.3. Setting up a Static IP Address

Press the Ethernet button to set an IP address. This shows a list of network adapters that are connected to the server.

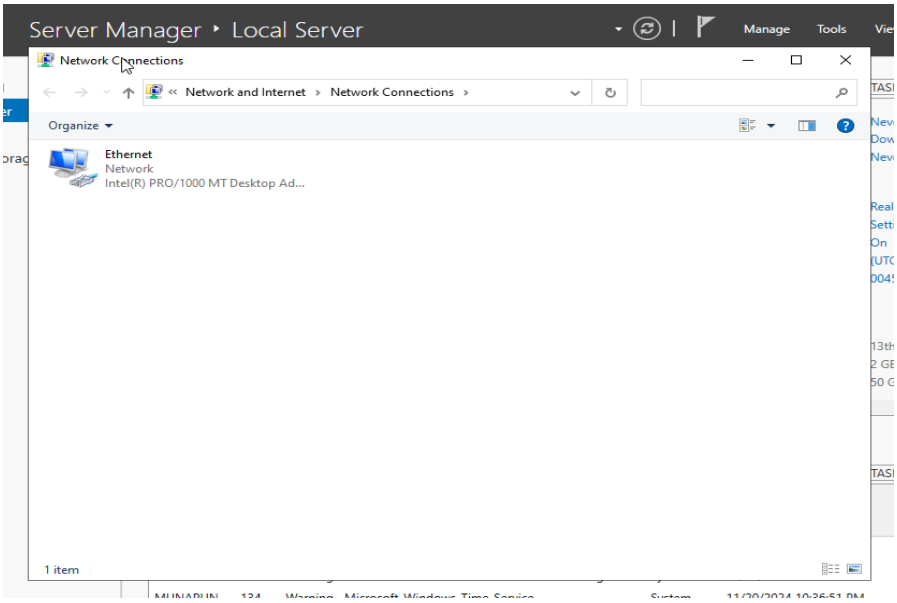



Figure 9: Choosing the ethernet icon

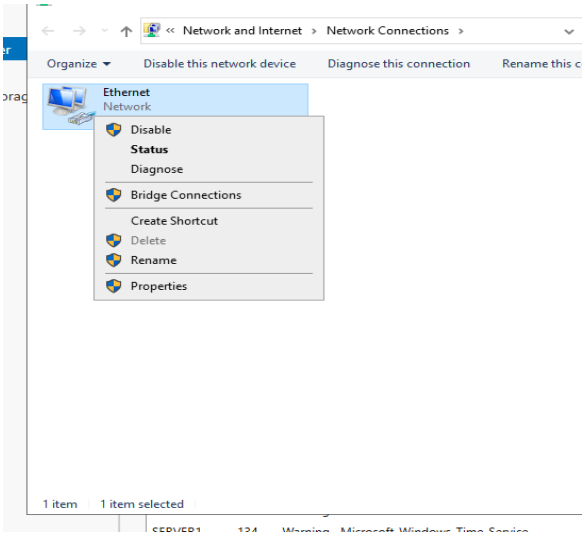



Figure 10:Opening System Properties

The adapter's properties are opened by clicking on it.

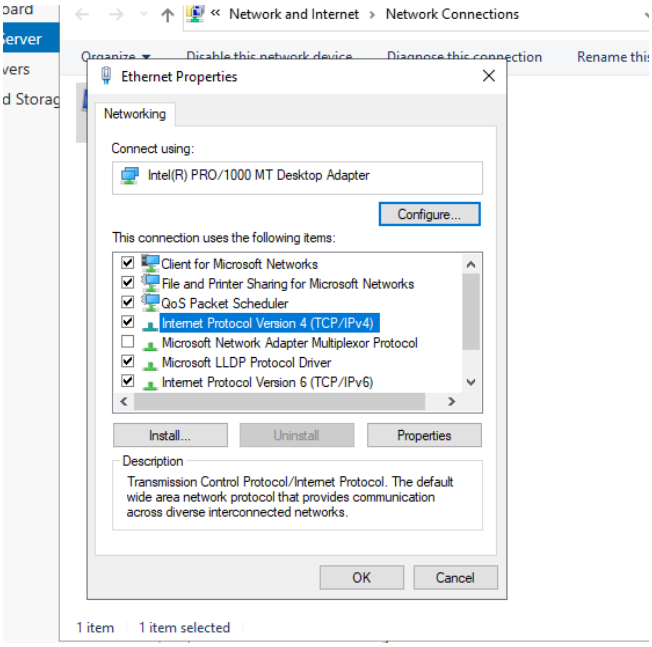



Figure 11:Selecting the IPV 4

From the properties, select IPv4 from the list. This will create a new window in which you may enter the IP address.

In the new box, input the device's IP address, as well as the subnet mask, gateway, and primary and secondary DNS server addresses. Static IP is successfully configured.

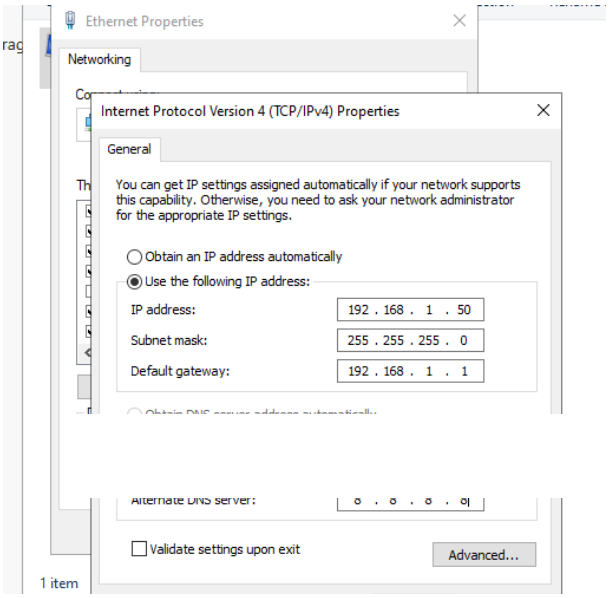



Figure 12:Entering IP Configuration

## 4.4. Adjusting the time zone

To change the time zone, select it from the Server Manager menu. The server requires the correct time zone.

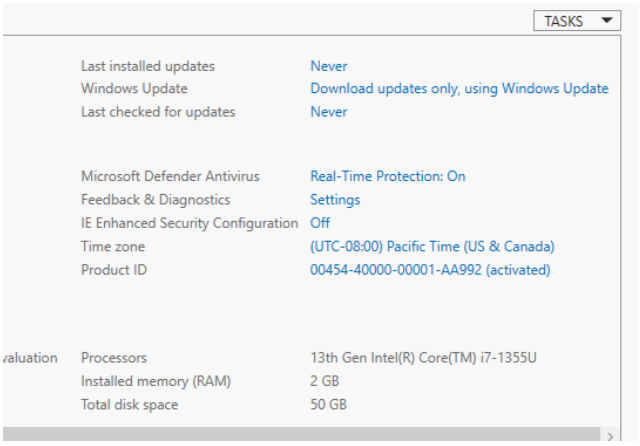



Figure 13:Selecting the time zone

On the new window, click the Change Time Zone button.

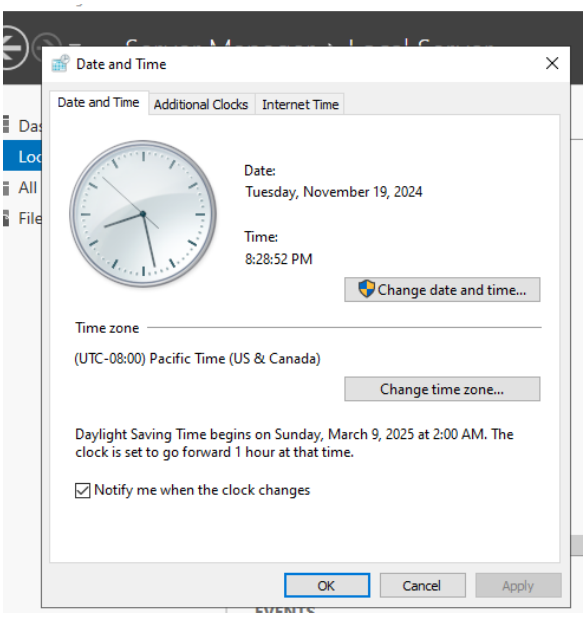



Figure 14:Changing the time zone

Select the correct time zone for the server from the drop-down list, which in this case is Kathmandu.

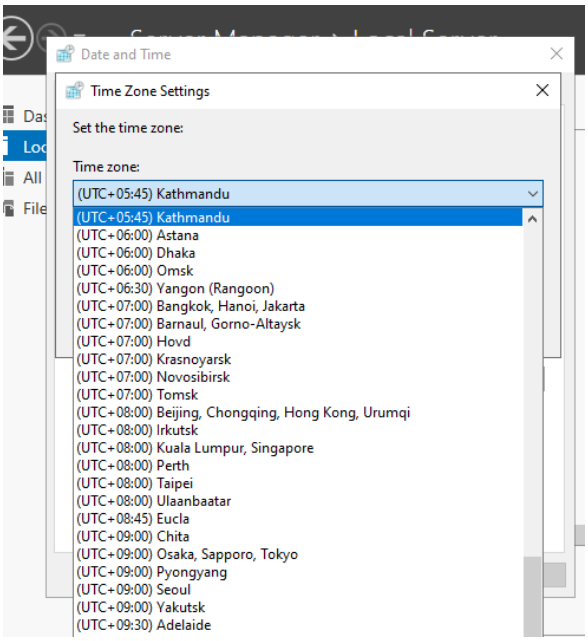



Figure 15 : Setting Time Zone

Finally, select the "OK" button.

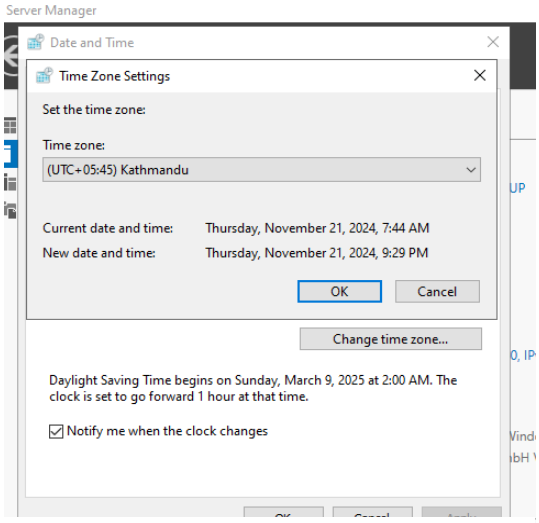



*Figure 16: Entering the ok button*

## 4.5. Off IE enhanced security and check for updates.

To turn off IE enhanced security, click the IE Enhanced Security object in the menu. A new window opens.

The security configuration is enabled by default.

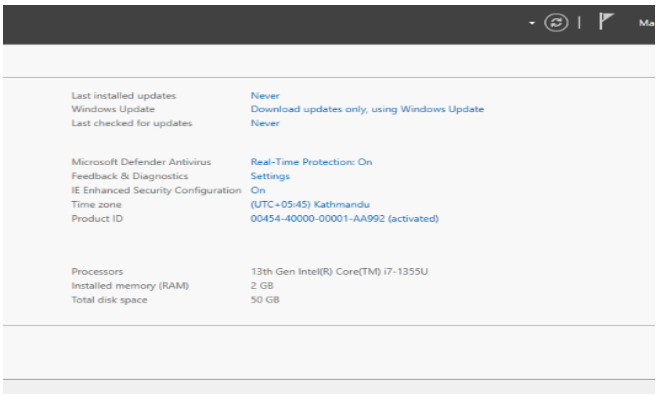



Figure 17:Selecting IE Enhanced Security button

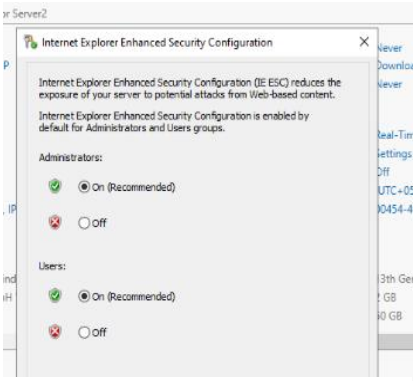



Figure 18 : Security setting is turned on by default

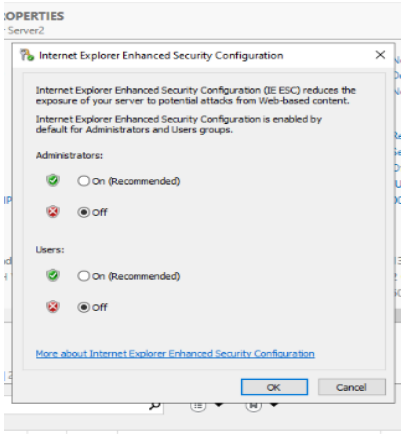



Figure 19:Confirming Selection

The IE security is disabled for both Admin and Users, and the "OK" button is pushed.

To install Windows Update, click the Update button and then Check for Updates; new updates will be downloaded and installed automatically.

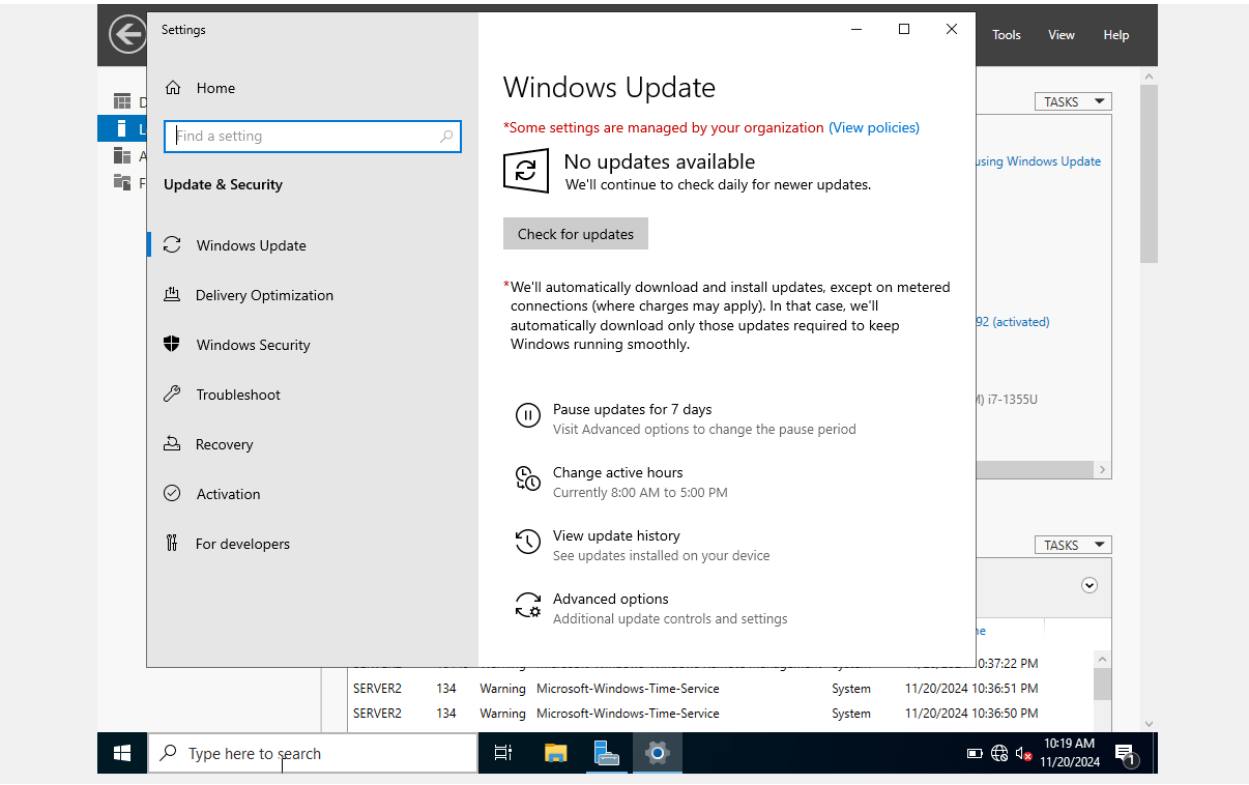



Figure 20: Checking for New Versions

### 4.6. Adding users through the GUI.

Press Tools in the toolbar at the upper right corner of Server Manager, then choose

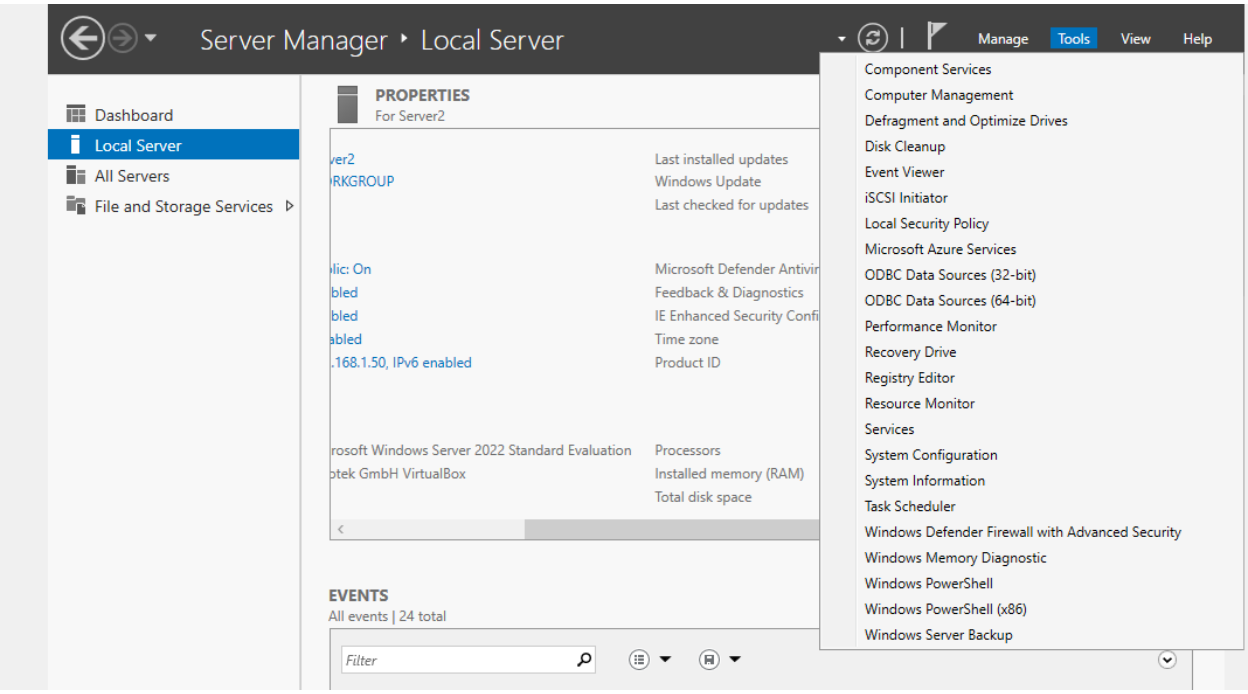



Figure 21: Choosing Computer Management from the tools

Computer Management from the list.

Select Local Users and Groups from the left-hand list.

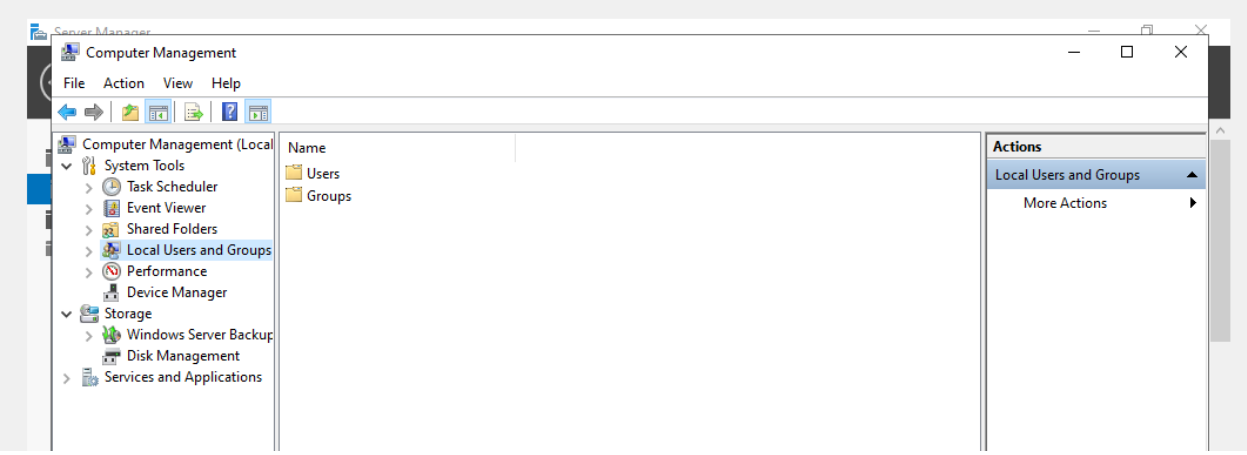



Figure 22: Clicking to local user and group

Right-click Users and choose New User.

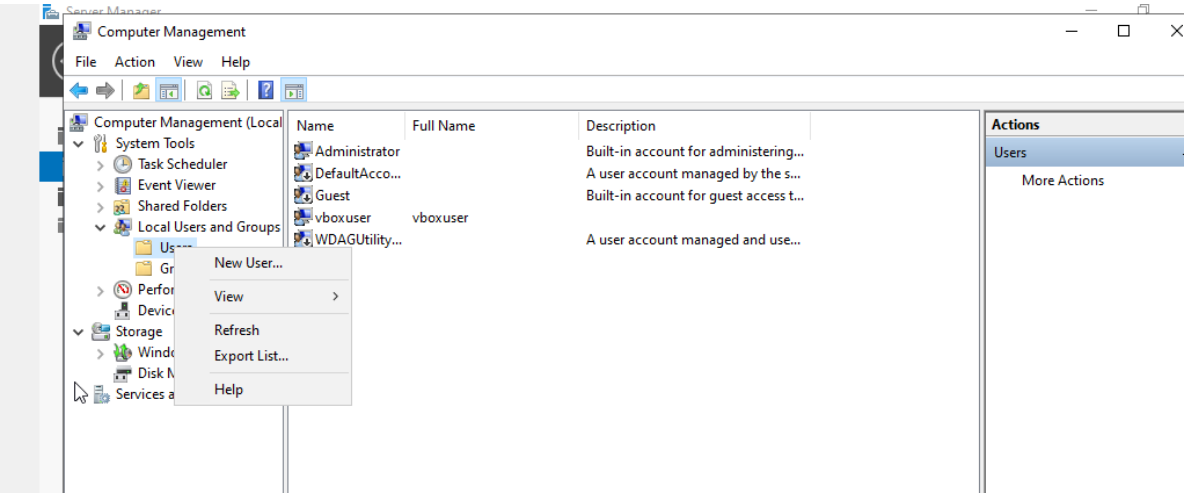



Figure 23: Selecting new user

Enter the new user's information in the new window and select the Create button. The newly created user will be added.

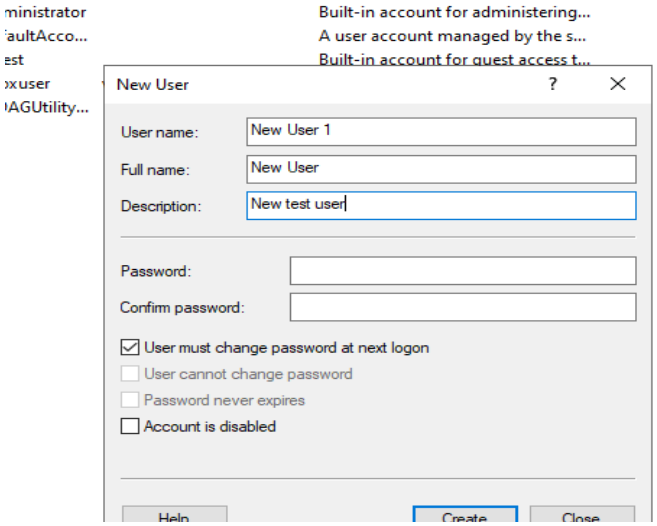



Figure 24: Entering User Information

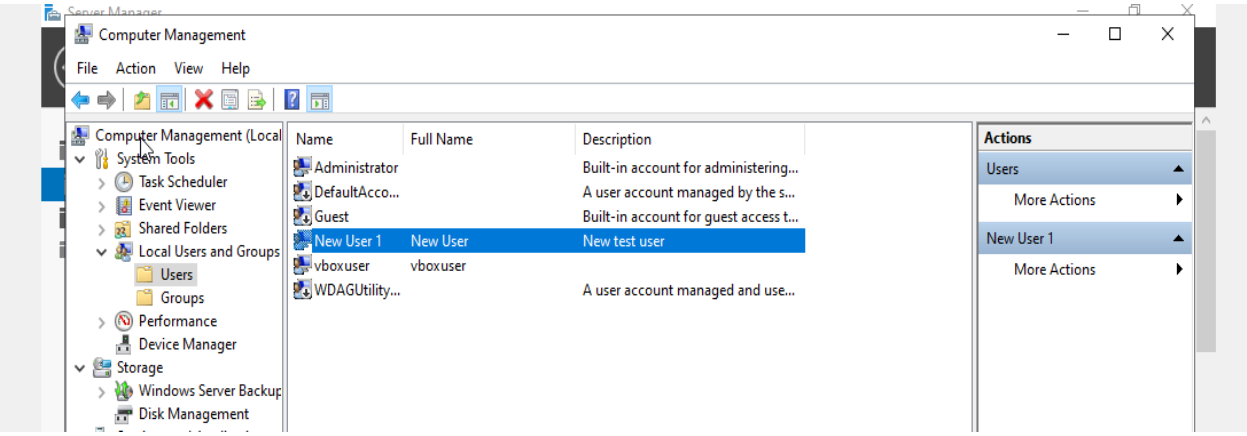



Figure 25:User Created Successfully

## 4.7. Adding a new user with Shell.

Start Windows PowerShell as an administrator.

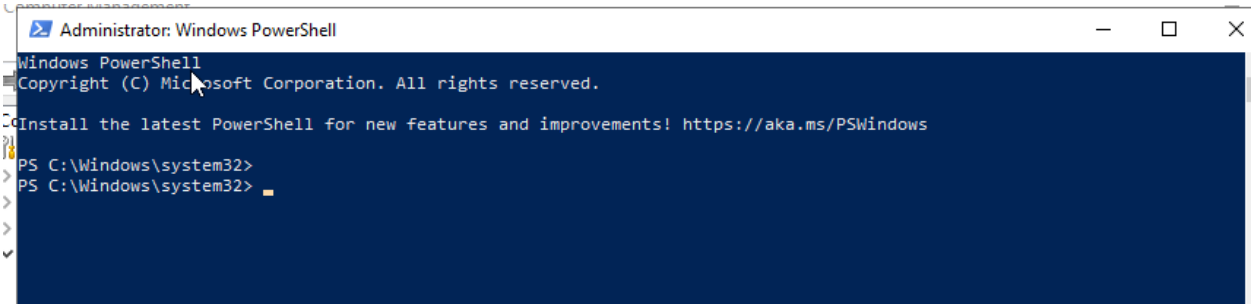



Figure 26: Running Power shell as administration

To view all users, enter the command "get-localuser".

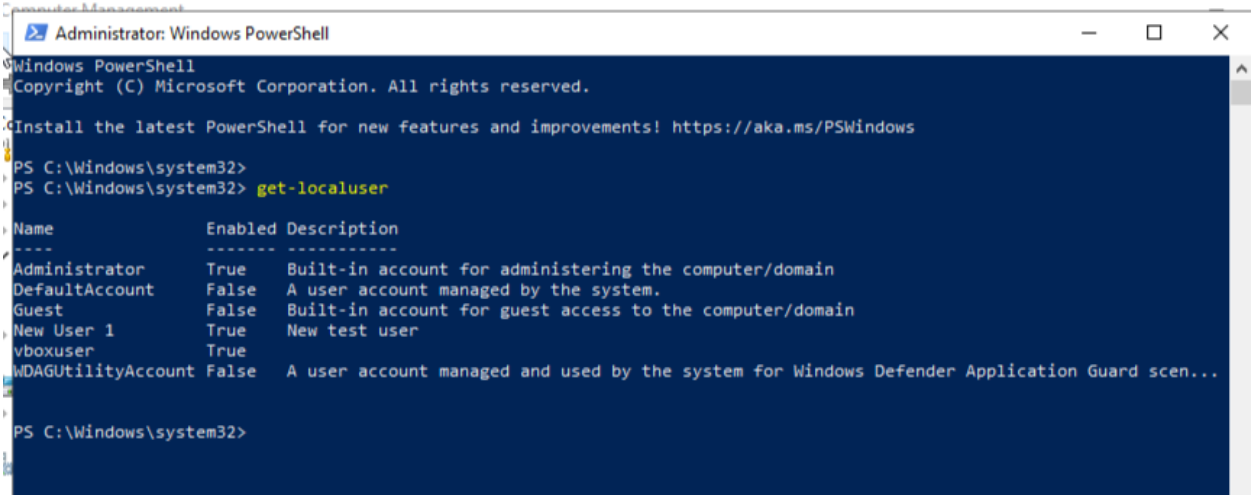



Figure 27: Running Command to Show Users

Run the command "new-localuser -name 'username'". -description 'Description' To create a new user, enter "-password 'password'". In this case, nopassword is used to skip the password.

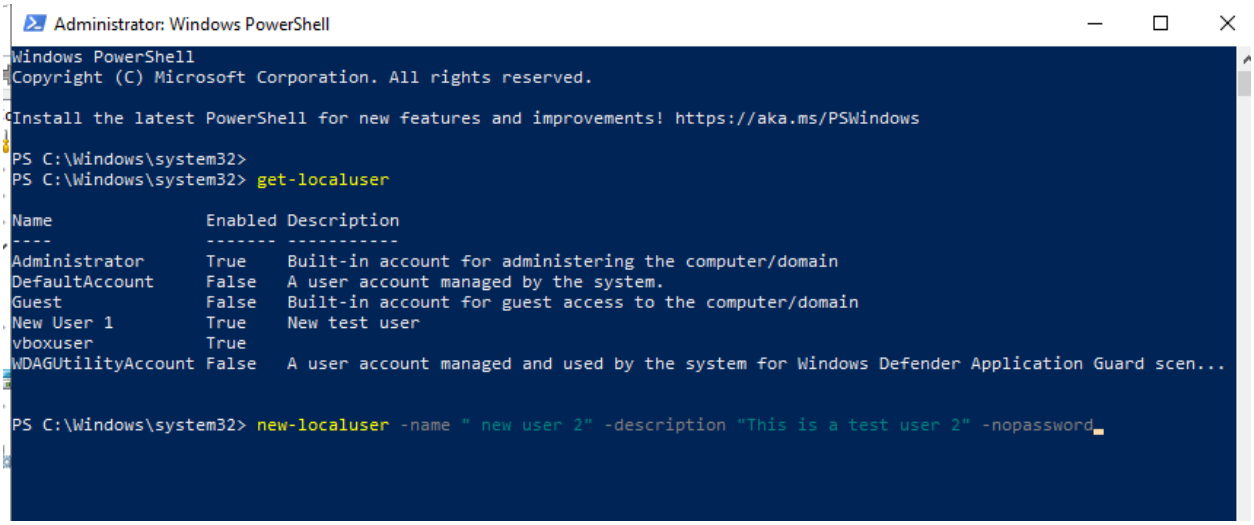



Figure 28: Running Command to Add New User

The new user has been added successfully.

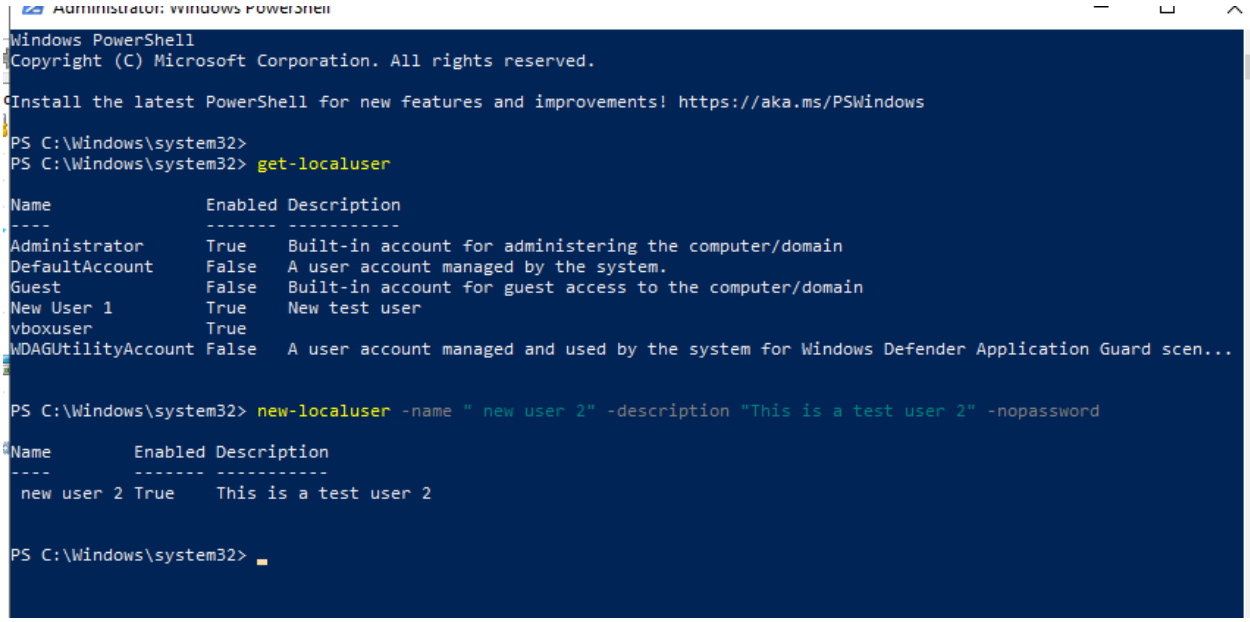



Figure 29: Successfully Added New User

Users, unlike in the GUI, are not automatically added to the group and must be added manually from the Shell. The command is something like "add-localgroupmember -group 'groupname' -member 'username'"

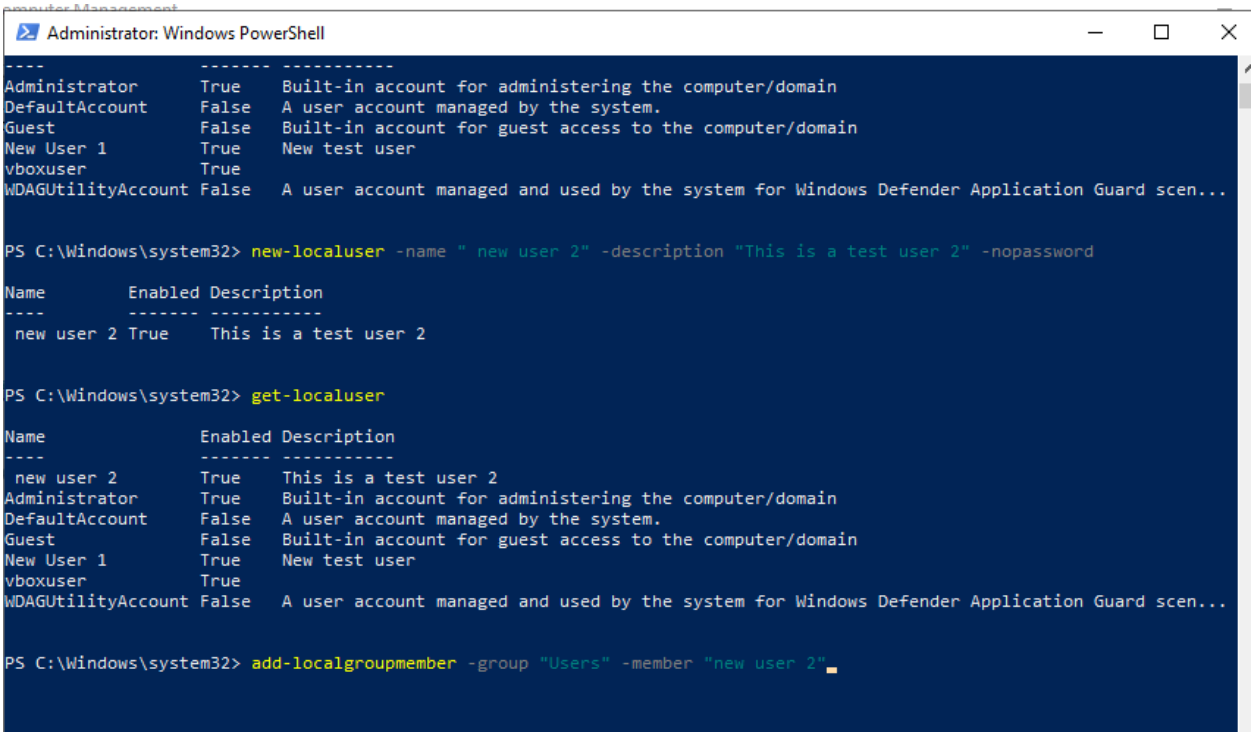



Figure 30: Running Command for Local Group

### 4.8. Removing user

It is quite easy to remove users. To remove a user using Shell, run the command "remove-localuser -name 'username'".

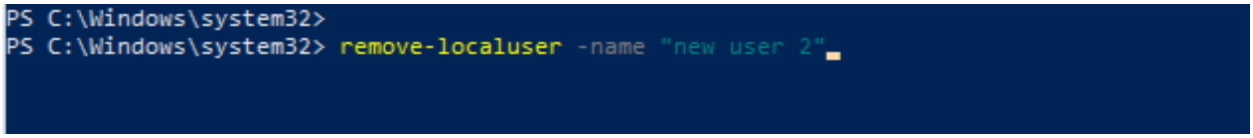



Figure 31: Entering the command for remove user

Confirming that the user has been removed.

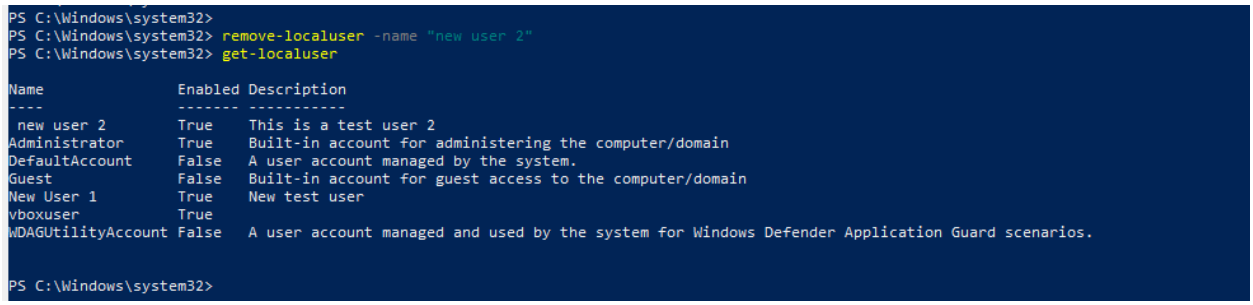



Figure 32: confirming the user is removed

### 4.9. Using safe string variables to store passwords.

The command $variable -read-host -assecurestring creates a new variable for storing strings as secure strings.

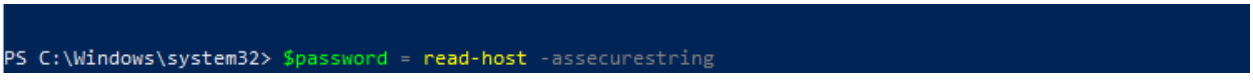



Figure 33: Entering Password Save Command

The variable stores the password string that is given. Passwords must be alpha-numeric and symbolic.

```
PS C:\Windows\system32> $password = read-host -assecurestring
*********
PS C:\Windows\system32>
```

Figure 34: Assuring the password

The variable is used as the password to establish a new user.

```
PS C:\Windows\system32> $password = read-host -assecurestring
*********
PS C:\Windows\system32> new-localuser -name "new user 3" -password $password -description "This is new user 3"

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


PS C:\Windows\system32>
```

Figure 35: Adding a New User

New user created with variable. e as password.

```
**********
PS C:\Windows\system32> new-localuser -name "new user 3" -password $password -description "This is new user 3"

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


PS C:\Windows\system32> 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 1         True    New Test User
new user 3         True    This is new user 3
vboxuser           True
WDAGUtilityAccount False   A user account managed and used by the system for Windows Defender Application Guard scenarios.


PS C:\Windows\system32>
```

Figure 36: Create New User Using Password Variable

## 5. Conclusion

In conclusion, this log has given a thorough introduction of the Server Manager tool in Windows Server 2012. Basic features such as server name configuration, remote desktop configuration, static IP address assignment, and time zone setting are discussed, along with security settings, user options, and password management explained how to manage users using a GUI and PowerShell. Server Manager is an efficient tool for managing Windows Server installations.

Additionally, the logbook explained how to manage users using a GUI and PowerShell. Server Manager is an efficient tool for managing Windows Server installations. Server Manager is a valuable tool for managing Windows Server environments. A description of its features and techniques makes one very efficient and dependable in server administration

## 6.References

C. Ortiz, D. F. (2015). *Generación y desarrollo de un documento guía para prácticas de laboratorio de la materia de sistemas operativos II de la escuela de tecnologías en la Universidad de las Américas.*

Piltzecker, A. (2008). *The Best Damn Windows Server 2008 Book Period.*