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## 1. Introduction

Windows Server includes a built-in software which is known as Server Manager that makes it simple for users to monitor and setup servers. Users are able to create and handle manager server tasks, maintain health of server and establish settings for different servers using a single screen.

It first came out in Windows Server and to make operations simple, like implementing tasks that is Active Directory and DNS, maintaining performance and solving issues. Since it provides remote control without having separate login server. Server Manager is very helpful when operating many servers in a network. One important resource for IT managers, Server managers provides a multiple option for server management effectively. With aim to achieve rise production, and reduce the operation of current IT systems, Server manager helps to control operations like building a new server, and identifying errors.

Furthermore, it is the most common device for powerful server management and important part of for every Windows Server setting. On the web everything depends on server. Specifically, in the world of e-commerce, the ability of customers to find electronic commerce and business suppliers, the experience they have once they get there, the security of transactions, and the integrity of data all depend on the servers. Servers are the computing engines of the Internet.

## 2. Activities Users can Perform with Server Manager

### 2.1 Changing the Server name

- From the dashboard of server manager, select to local server.

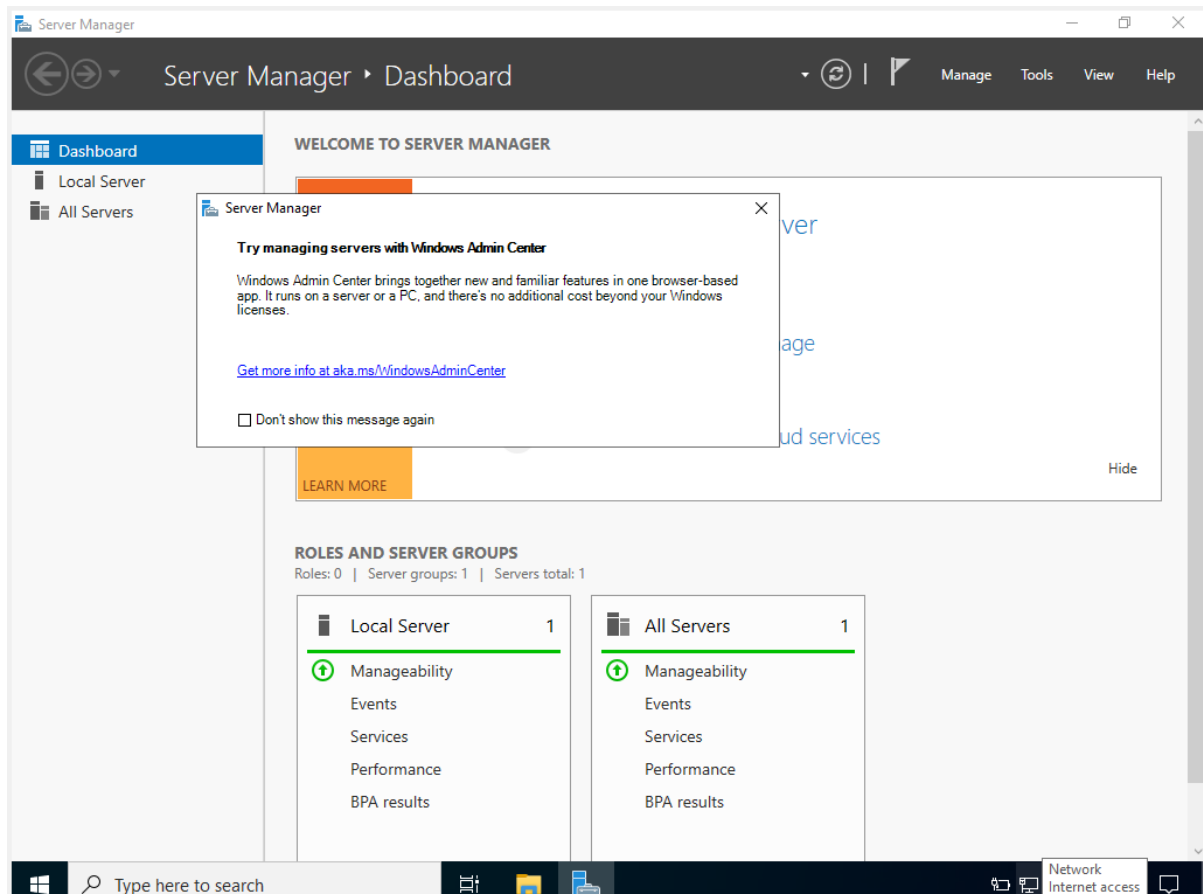


Figure 1: Select to local server

- A configuration box will open when you select computer name

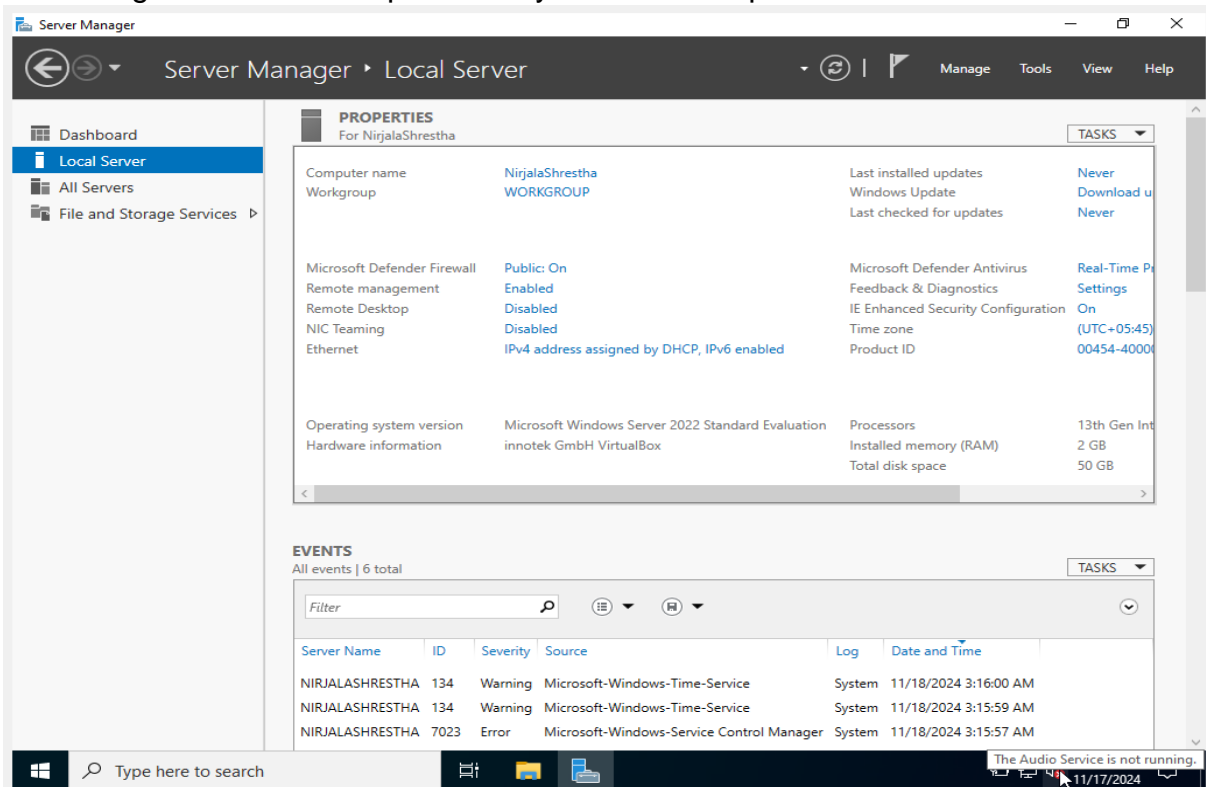


Figure 2: Selecting computer name

- Change the server name and save your changes.

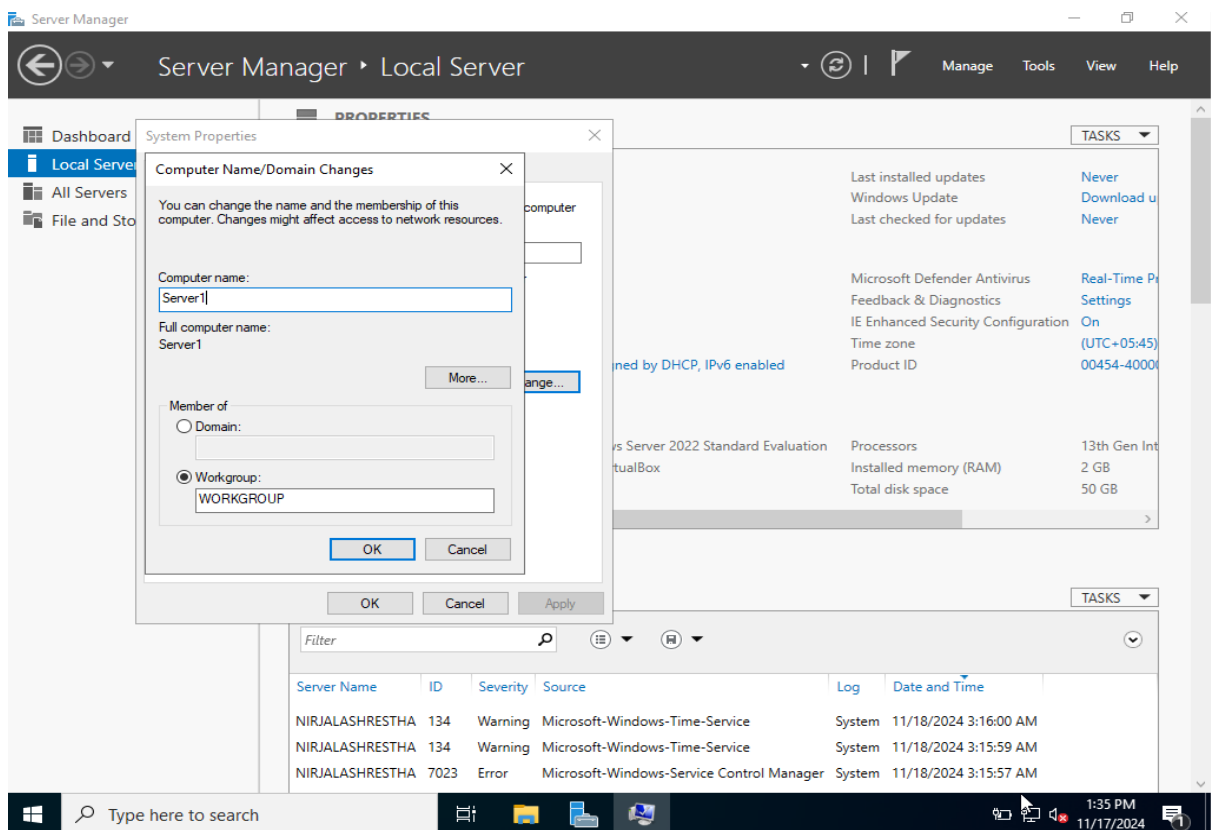


Figure 3: Changing server name

## 2.2 Turning on Remote Desktop

- Remote Desktop provides remote control to the operations and GUI server.
- Select the button for Remote Desktop

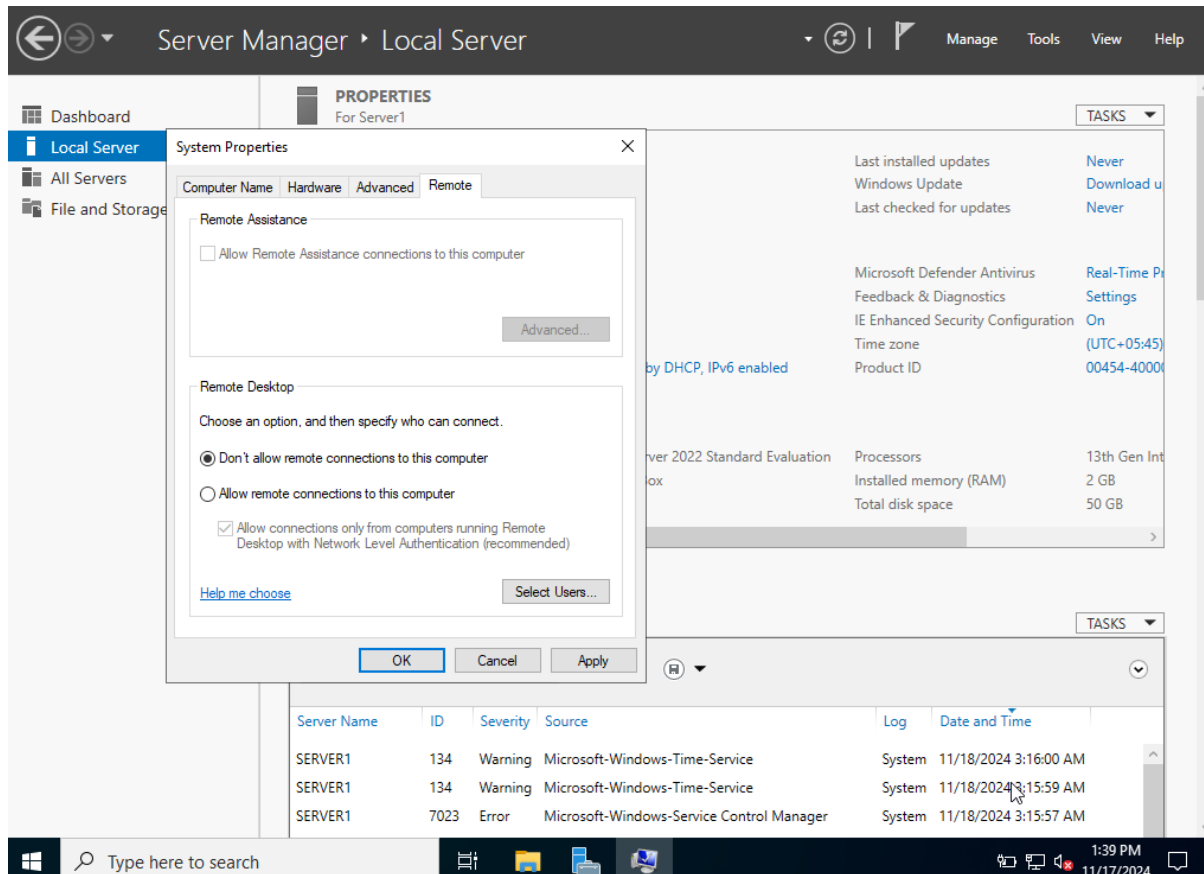


Figure 4: Select the button for Remote Desktop

- Select and tap the allow button and then a firewall alert notification will show up.

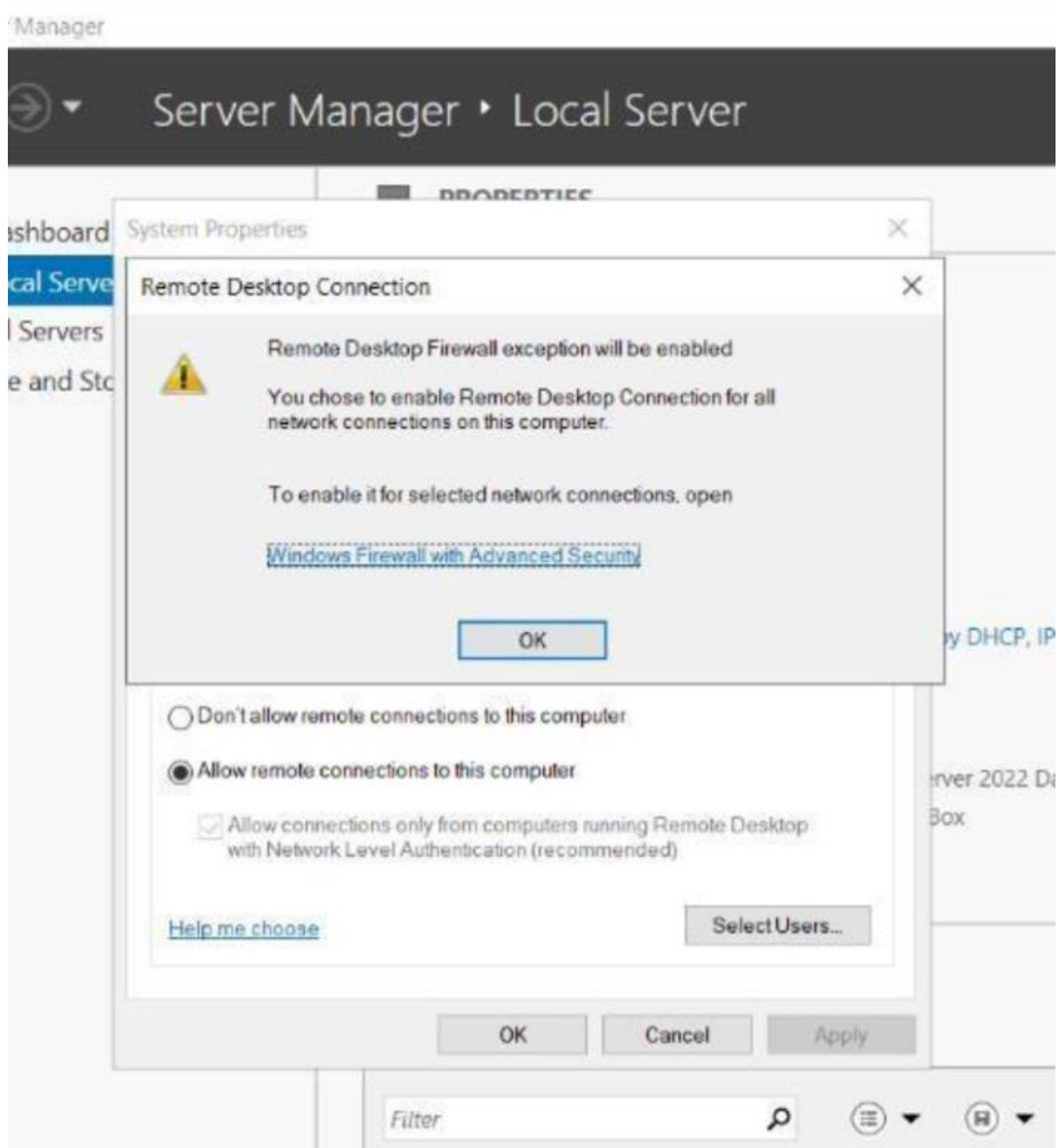


Figure 5: Remote Desktop firewall



- Click Ok button to verify all of the changes that were made.

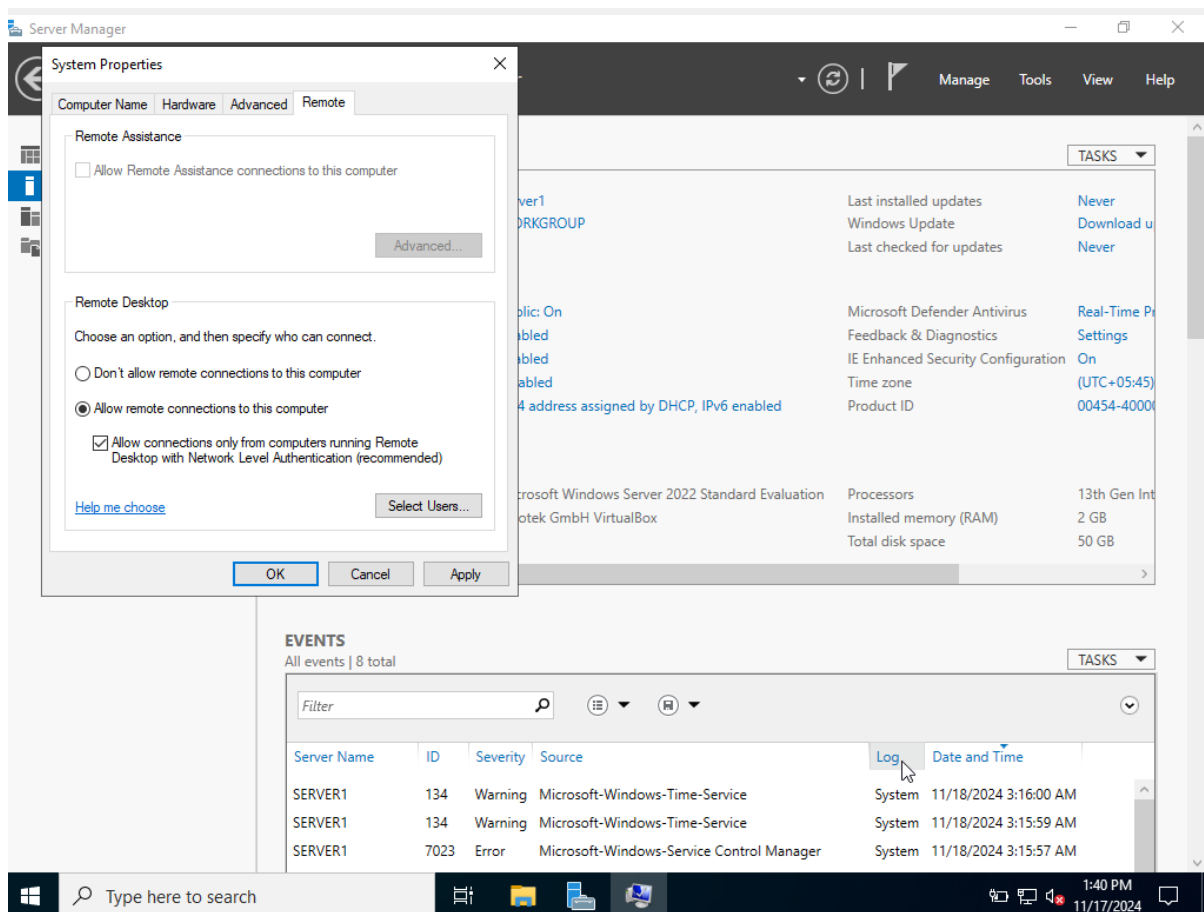


Figure 6: Verifying the changes

## 2.3 Setting Up a Static IP Address

- In order to see network adapters, select the Ethernet icon.

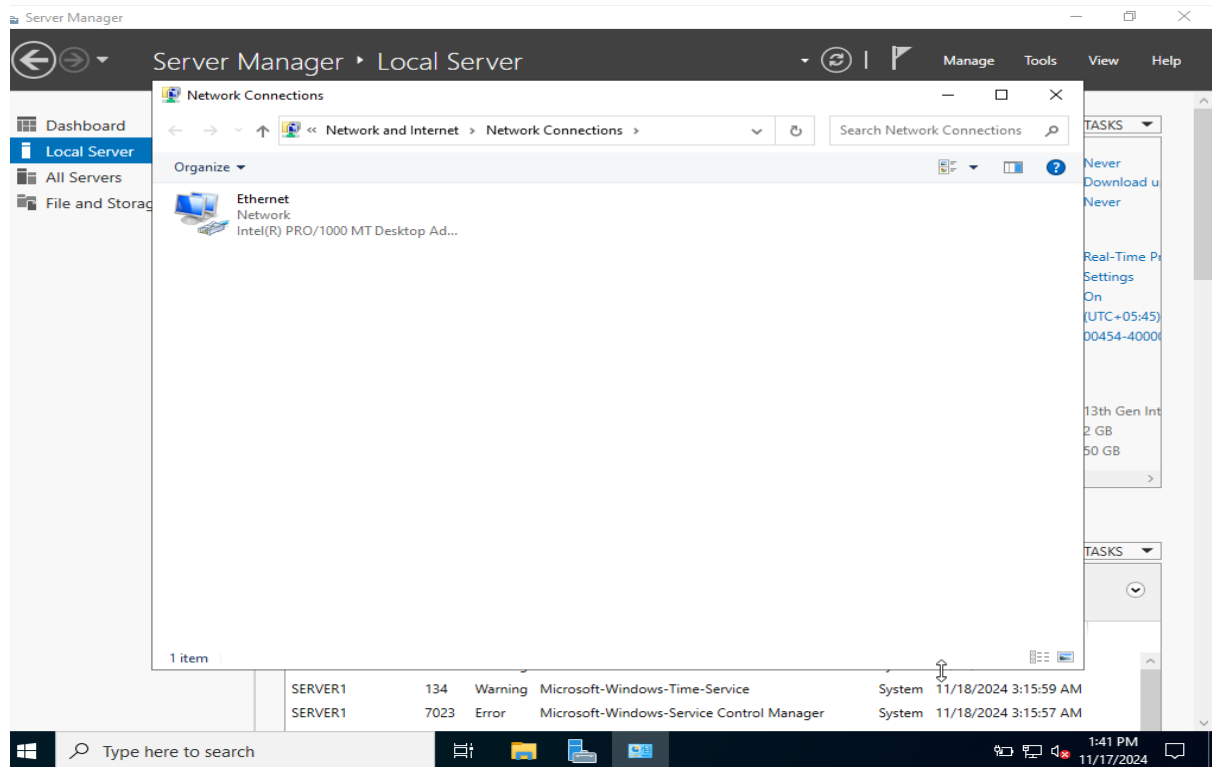


Figure 7: Selecting Ethernet icon

- Use the right-click of adapters and select the properties.

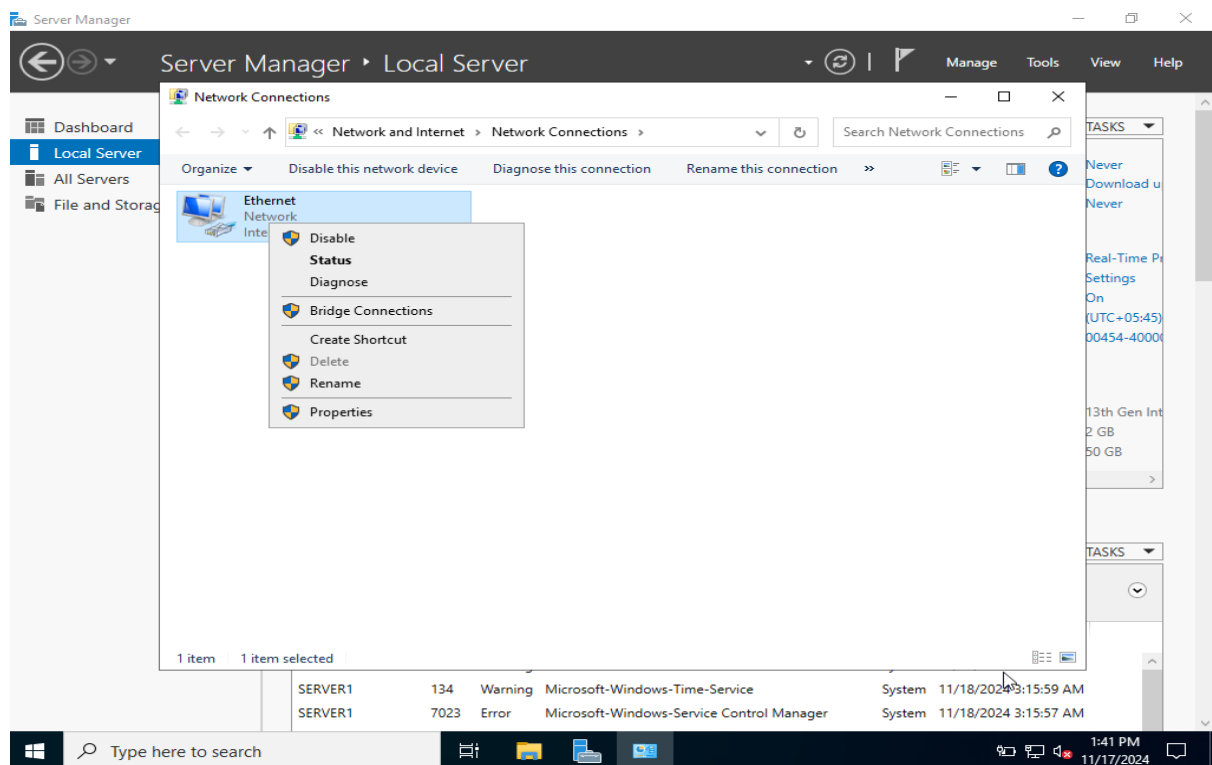


Figure 8: Selecting the properties

- Double click the properties windows IPv4 icon and this will open a new window to enter IP

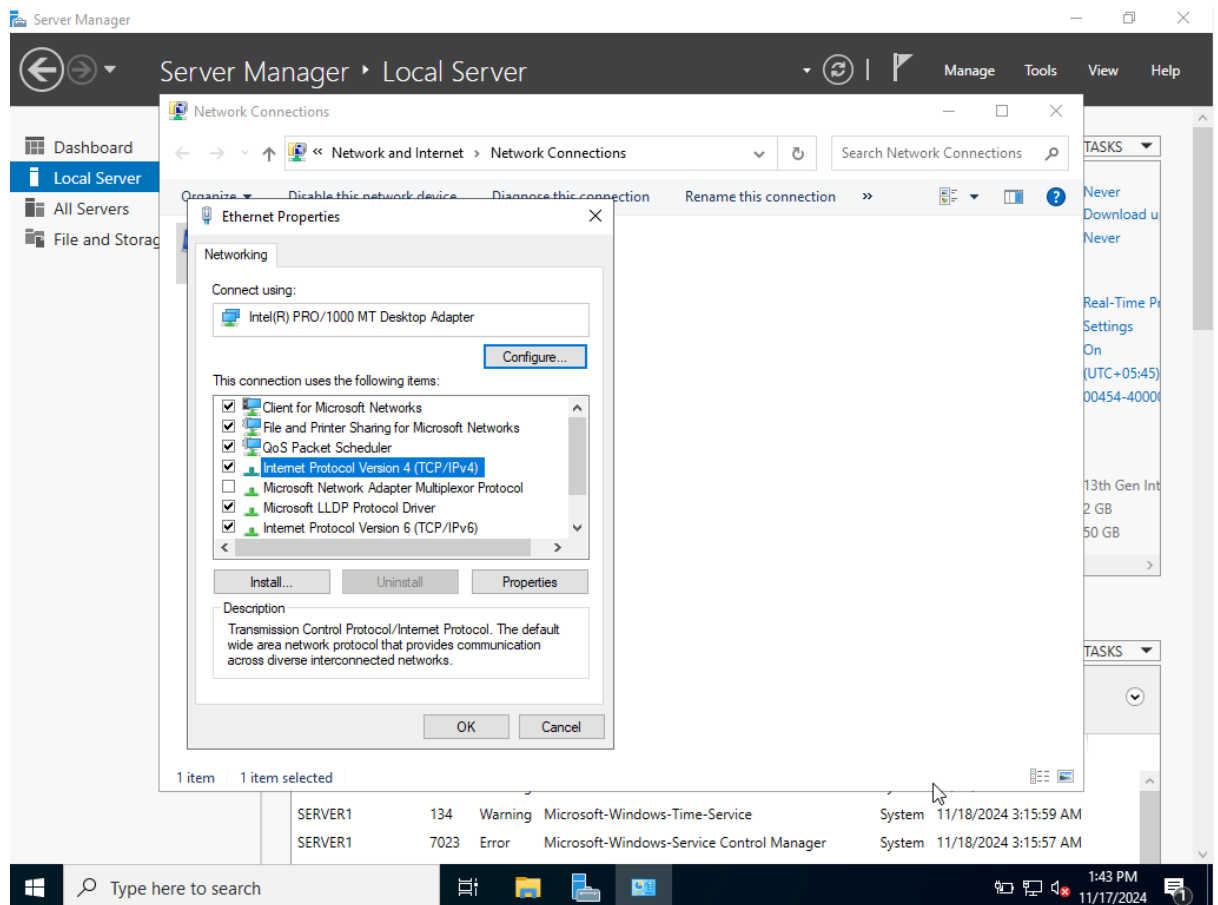


Figure 9: New window to enter IP

- Add the necessary details like gateway, primary and secondary DNS, IP address, and subnet mask.

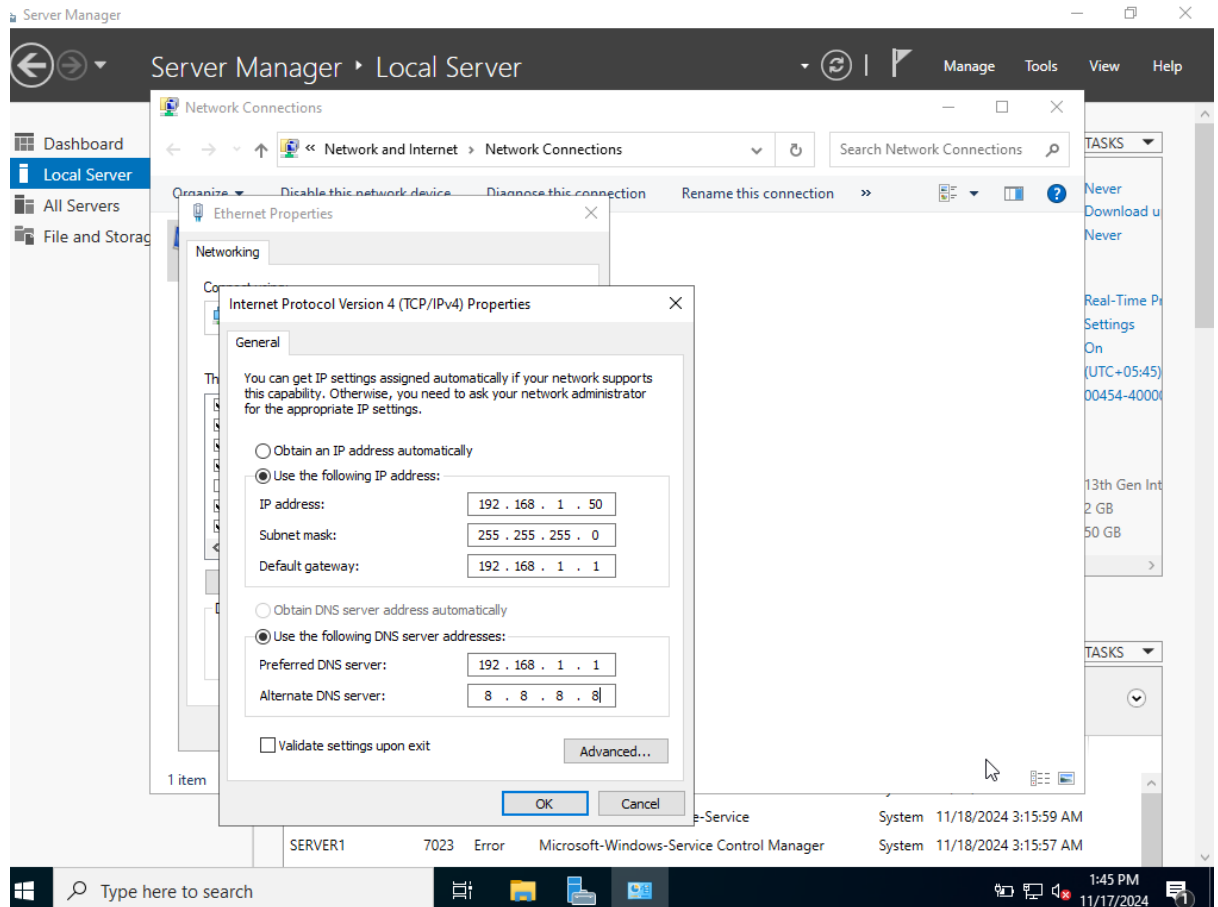


Figure 10: Adding required details including subnet mask

## 2.4 Changing the time zone

- In the server manager, choose the Time zone setting by clicking

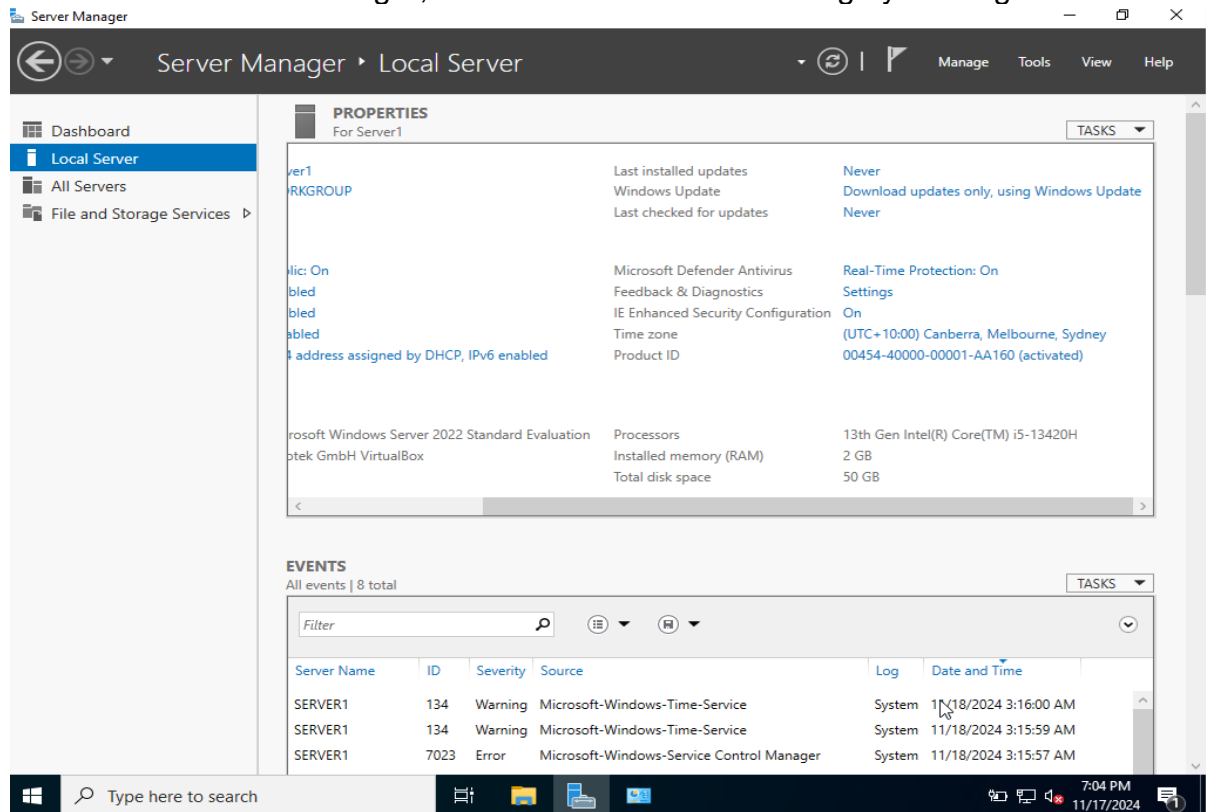


Figure 11: Choosing the time zone

- Select the button called Change Time Zone

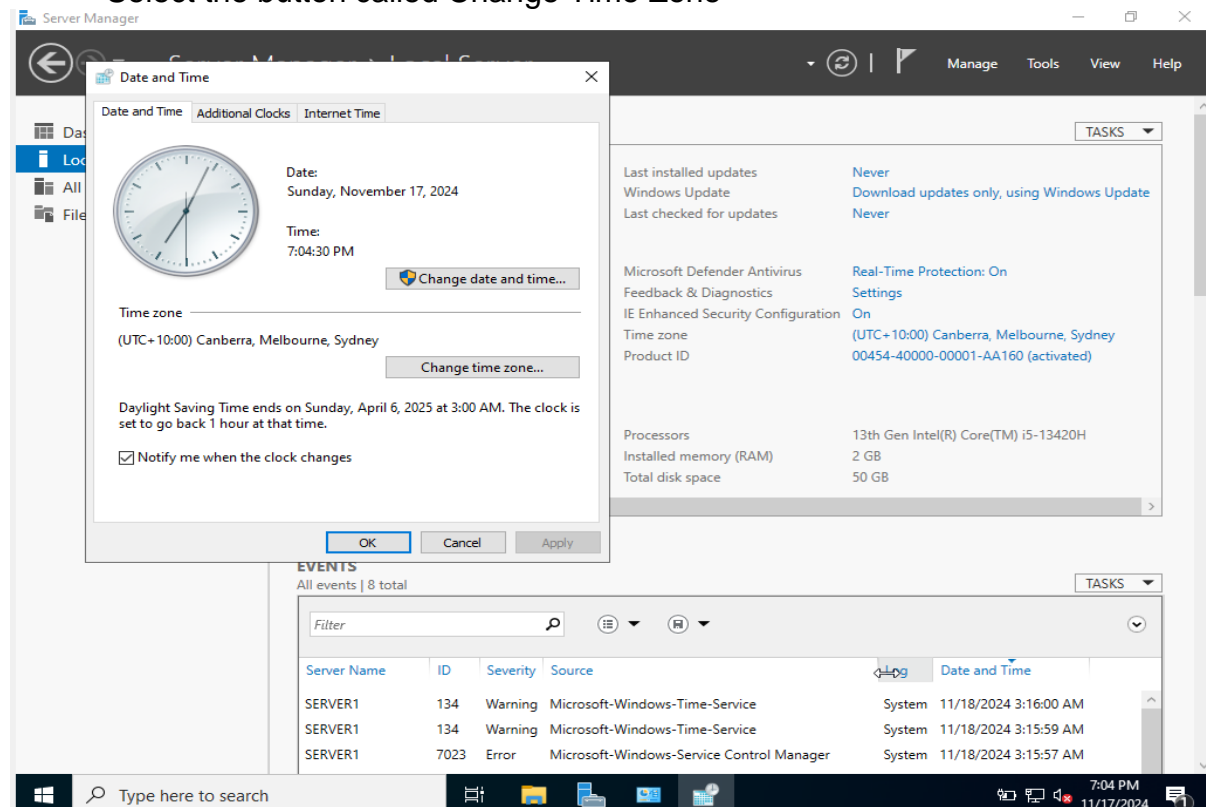


Figure 12: Changing Time zone

- Enter the suitable time zone from the drop-down options such as Kathmandu in Nepal.

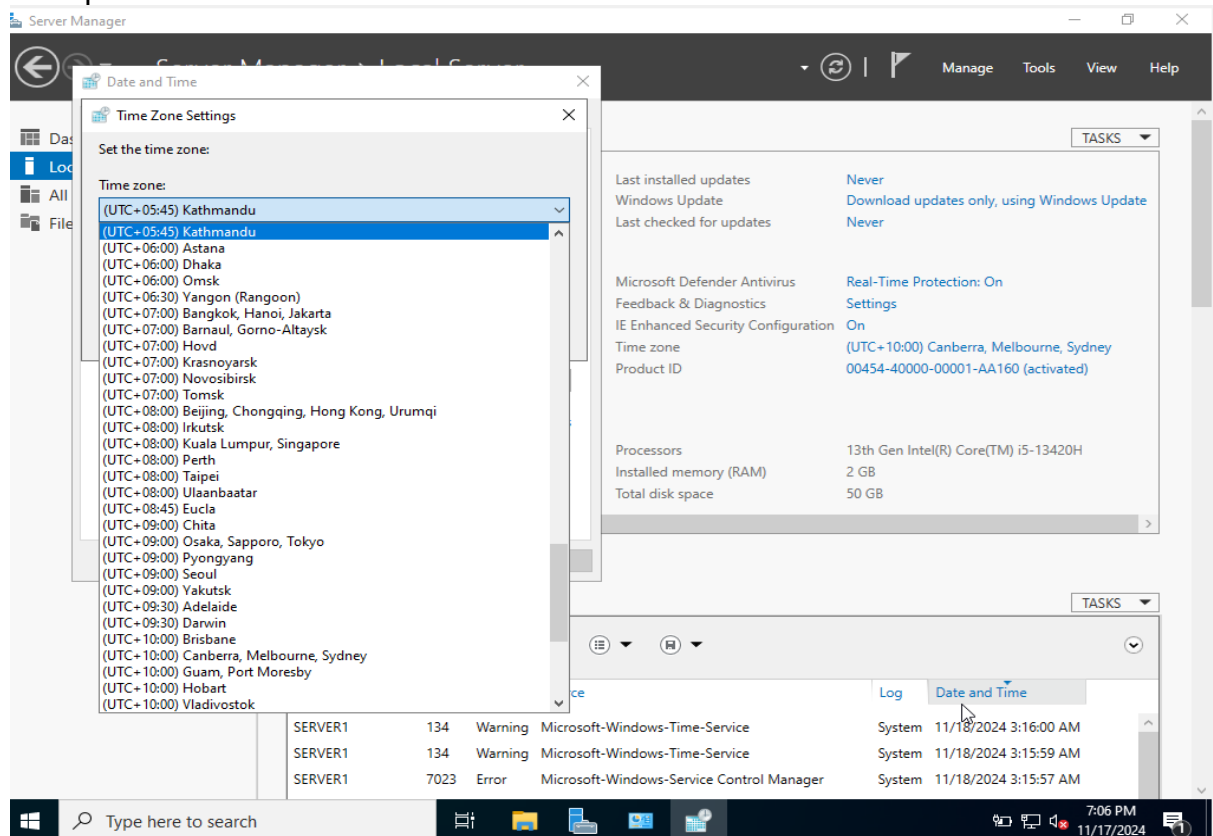


Figure 13: Entering the suitable time zone

- At last, press the 'OK' button.

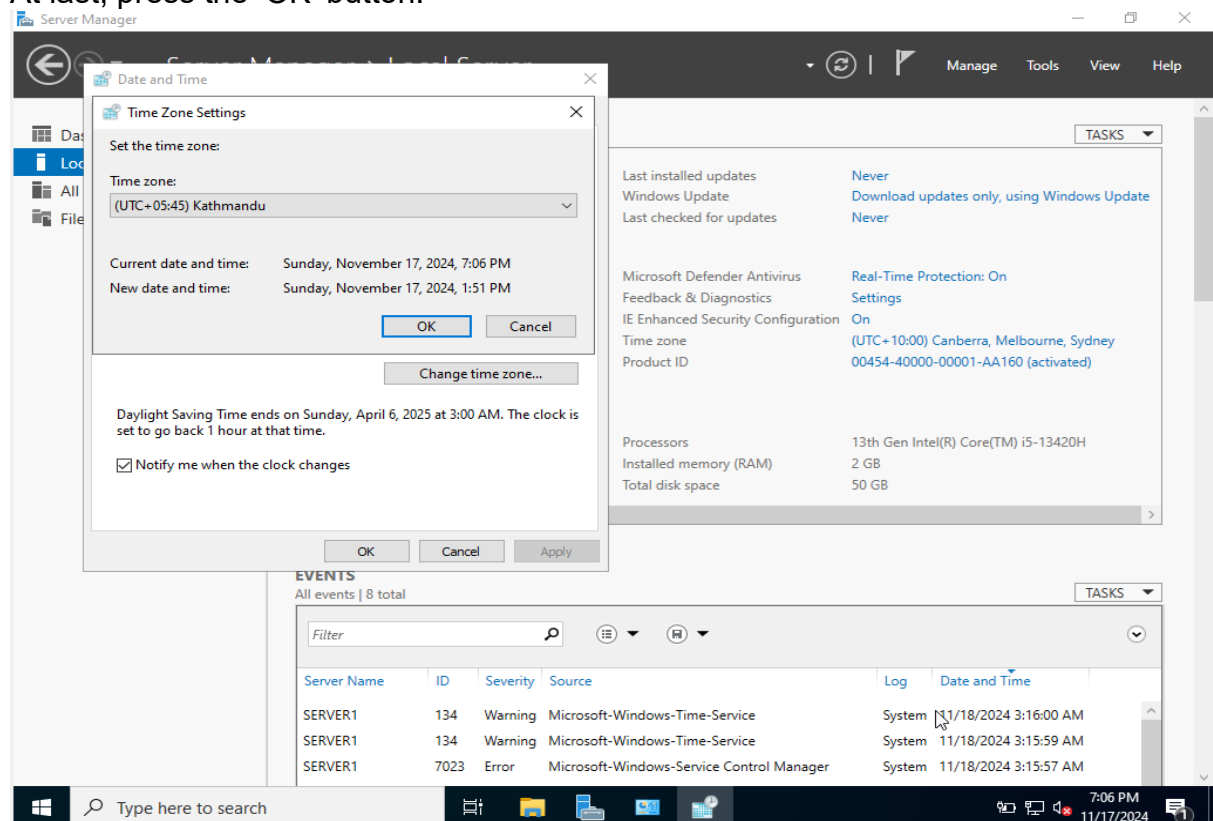


Figure 14: Pressing the OK button

## 2.5 Turning Off IE Enhanced Security and searching for updates

- From the menu that appears, click the IE Enhanced Security button.
- The security setting is turned on by default.

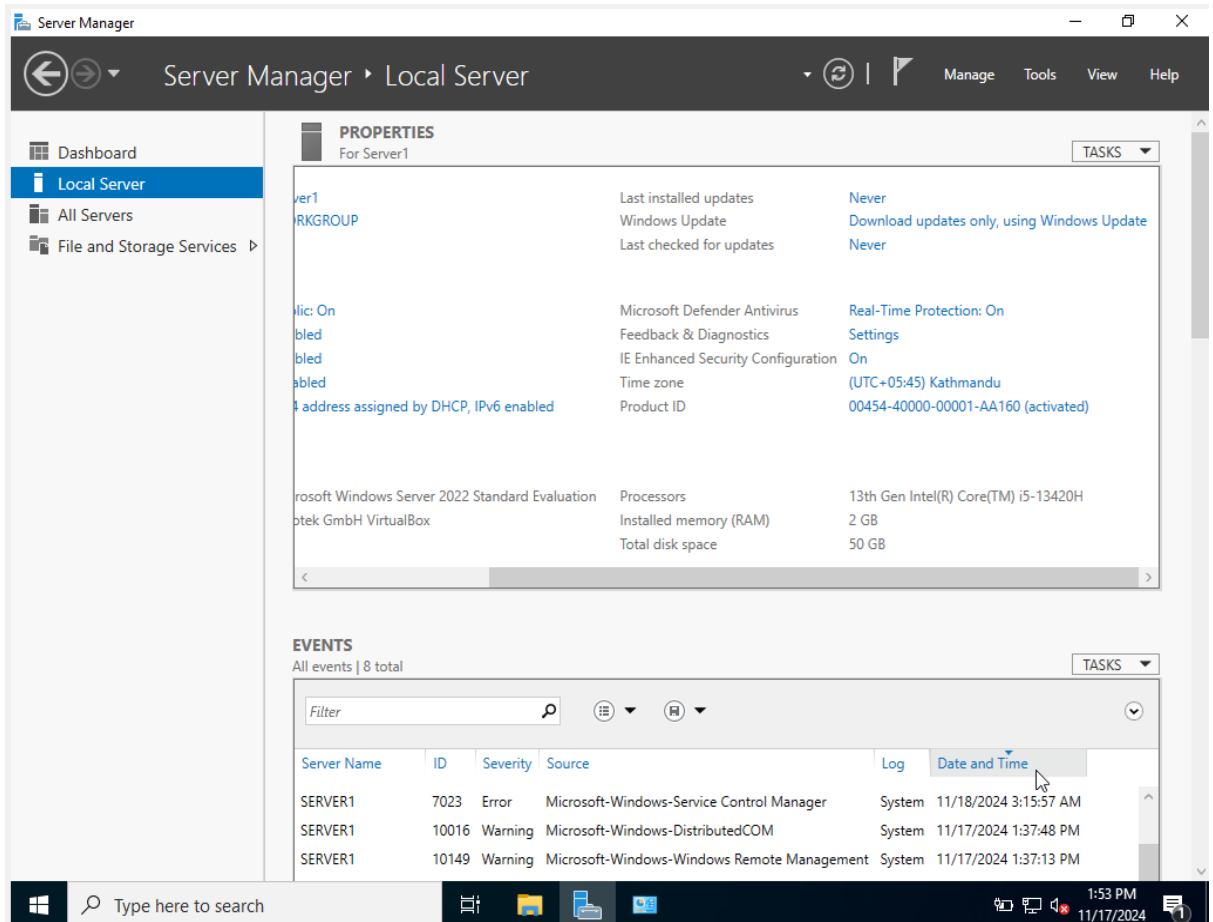


Figure 15: Selecting IE Enhanced Security button

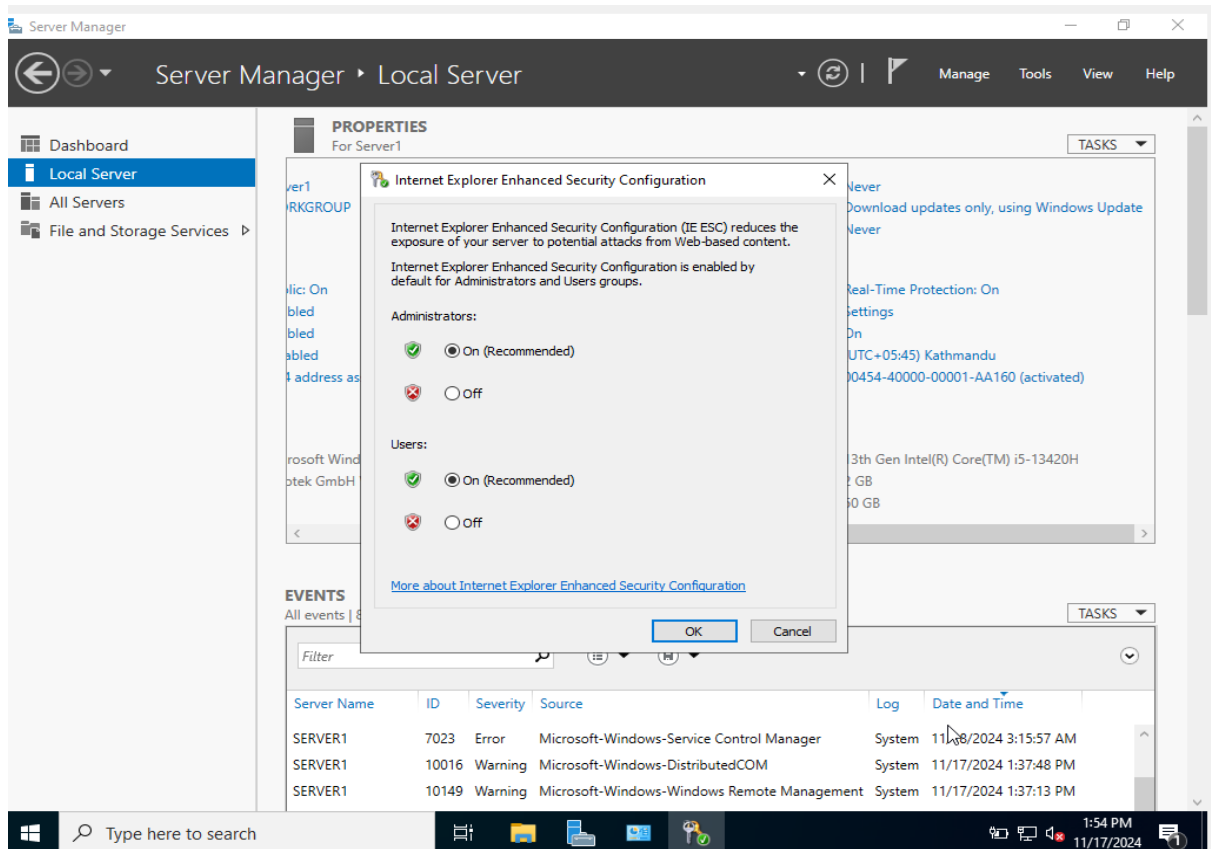


Figure 16: Security setting is turned on by default

- Select OK to verify the action.

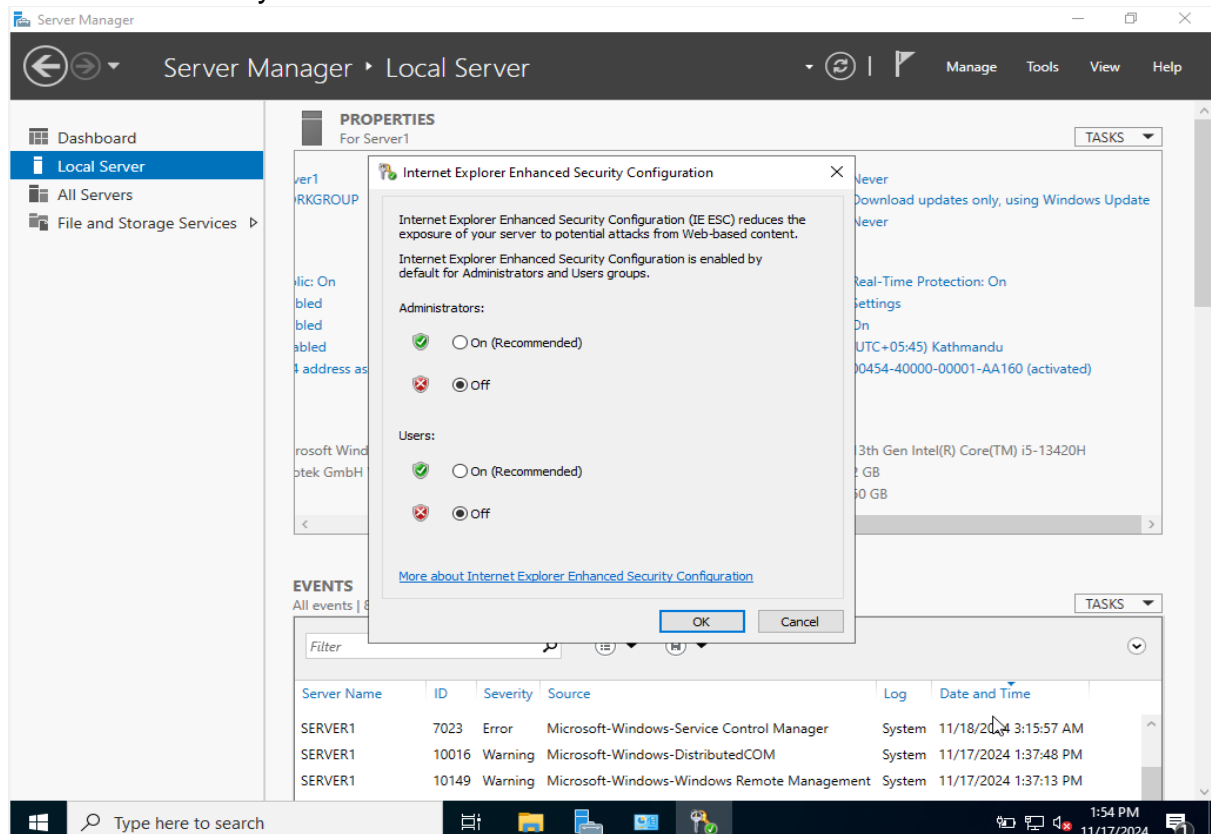


Figure 17: Selecting OK to confirm



- For new Windows Update to be downloaded and set up by itself, click updates and pick Check for updates.

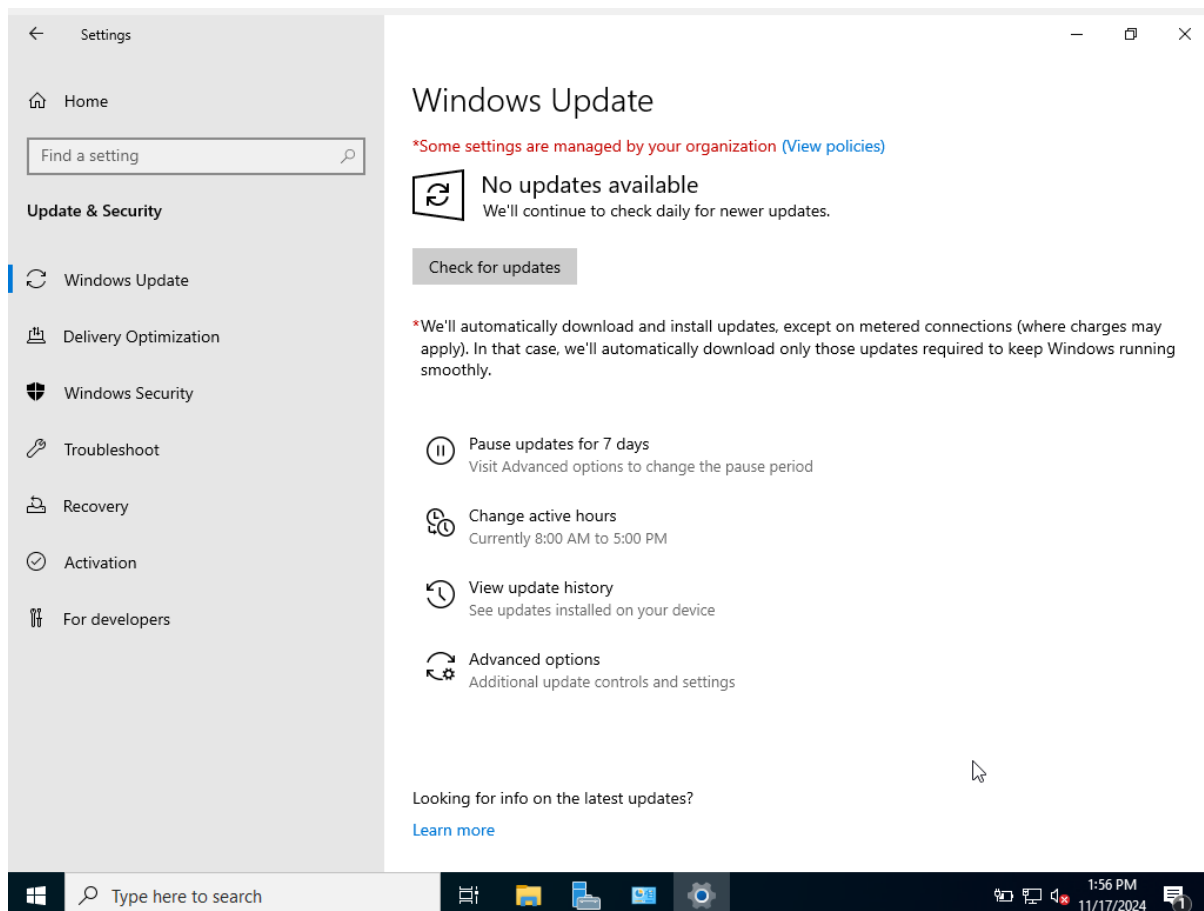


Figure 18: Checking for Updates

## 2.6 Adding a New User using GUI method

- Select Computer Management from the list and then click tools from the toolbar at the top right of server manager.

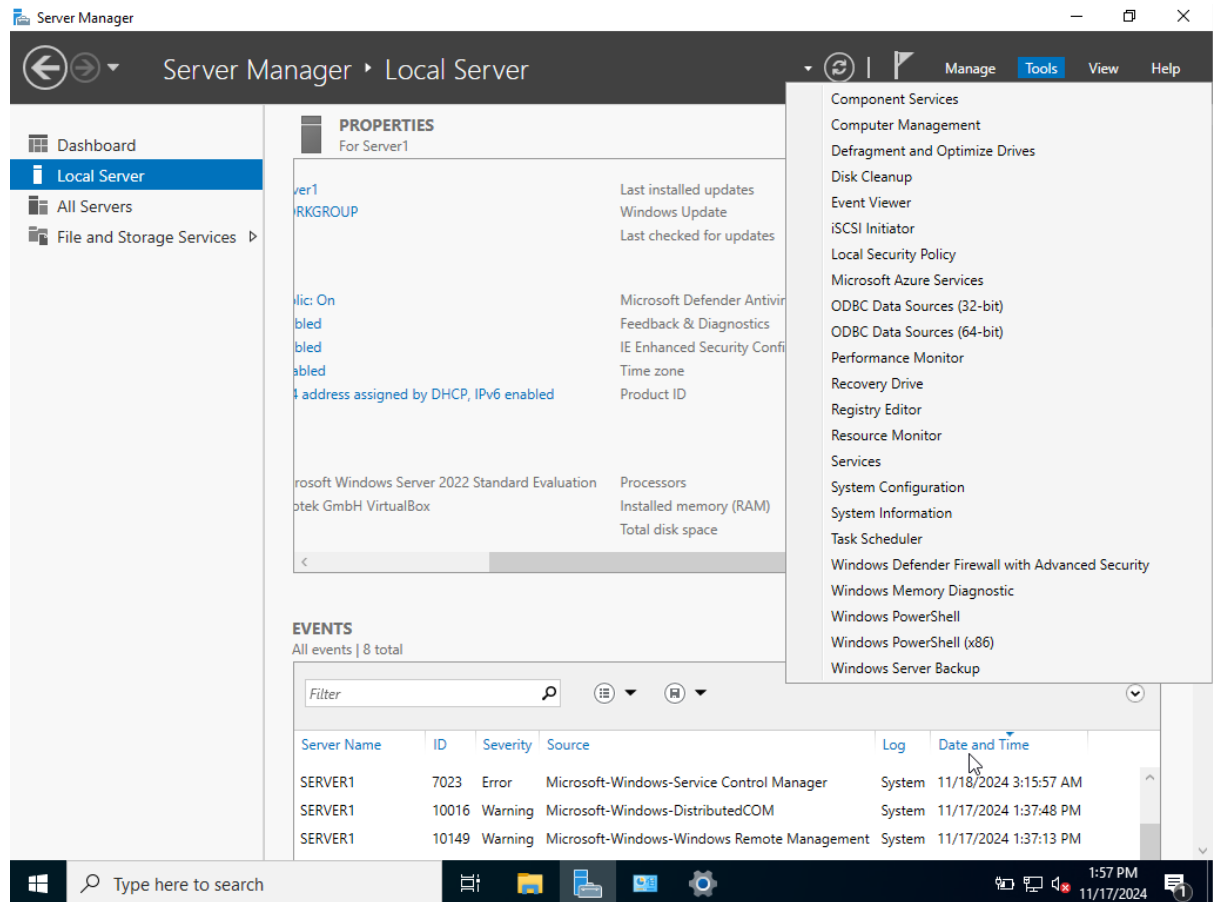


Figure 19: Selecting Computer Management from the list

- Go to the local users and group from the panel on the left.

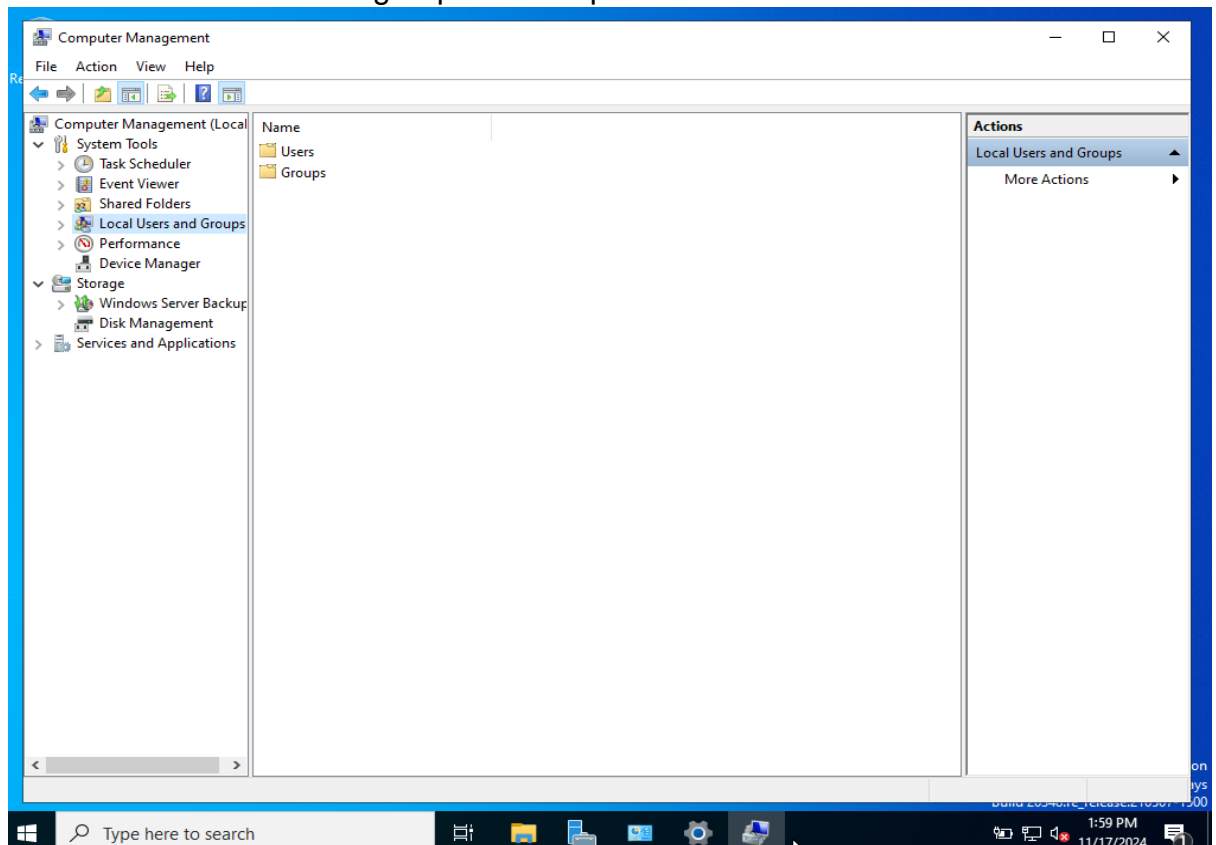


Figure 20: Clicking to local users and group

- Select New User by right-clicking Users.

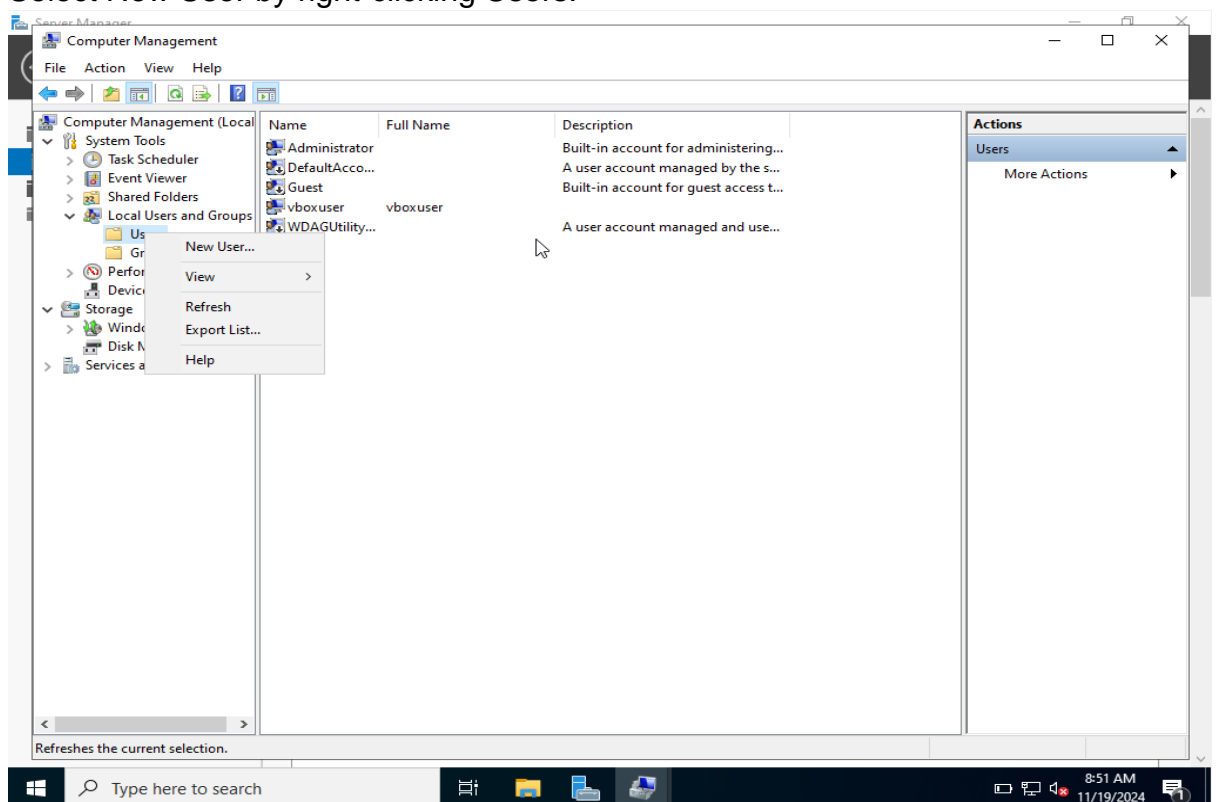


Figure 21: Selecting new user

- Select create button after providing the user information in the new window.

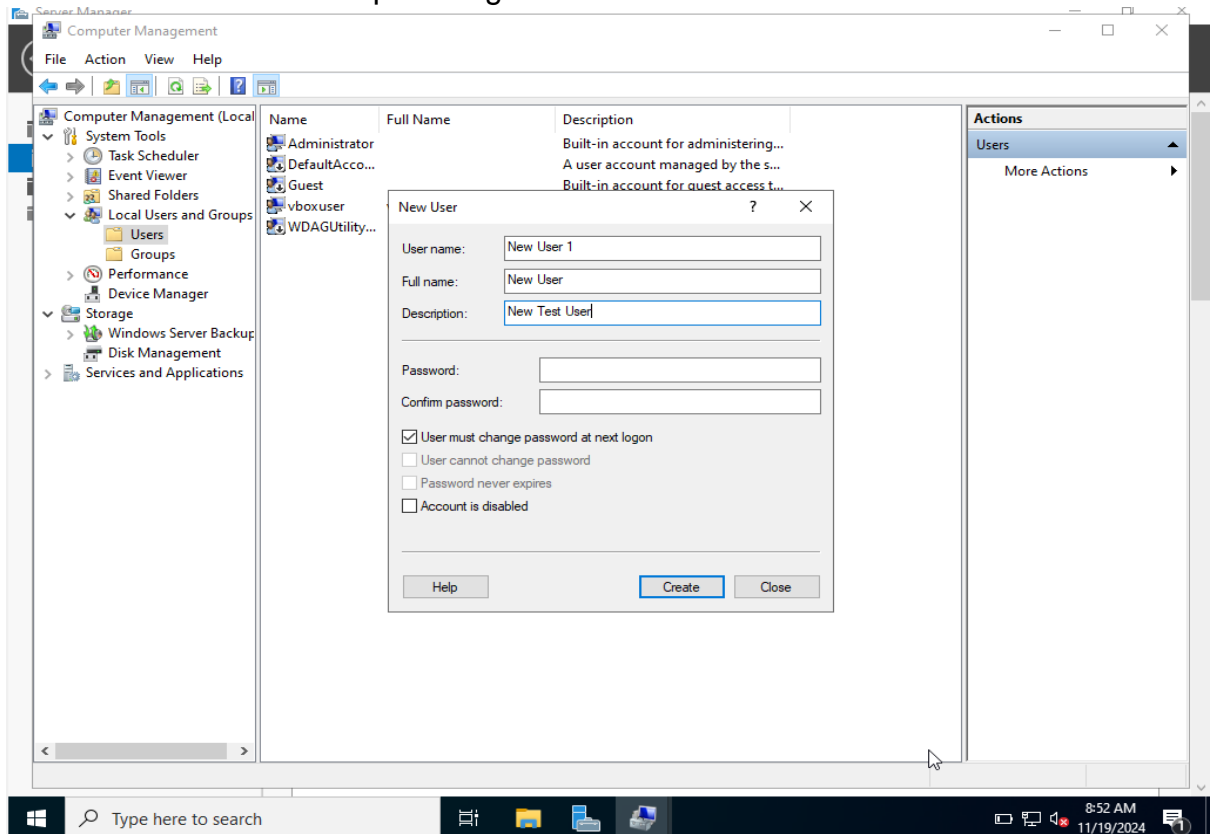


Figure 22: Providing user details

- The new user will be added successfully.

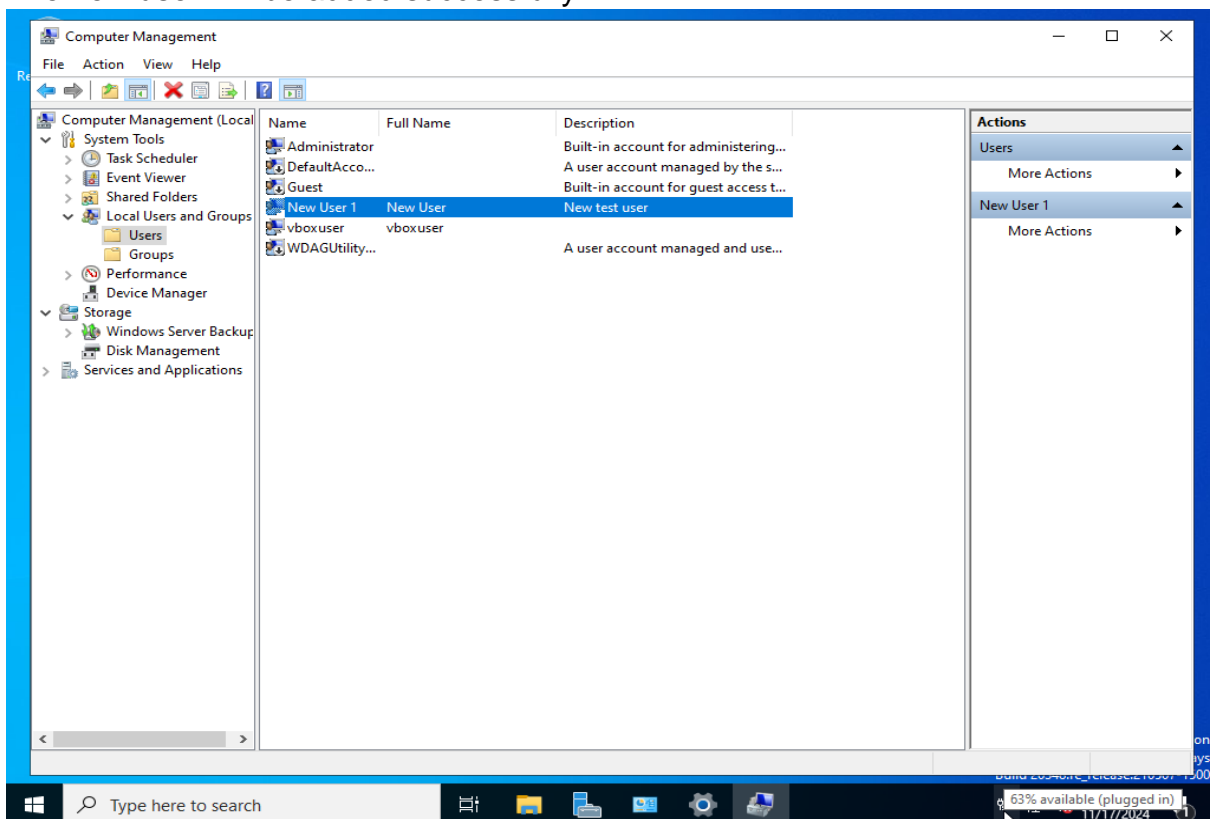


Figure 23: New user added successfully

## 2.7 Using power shell to add a new user.

- Run power shell on Windows as an administrator.

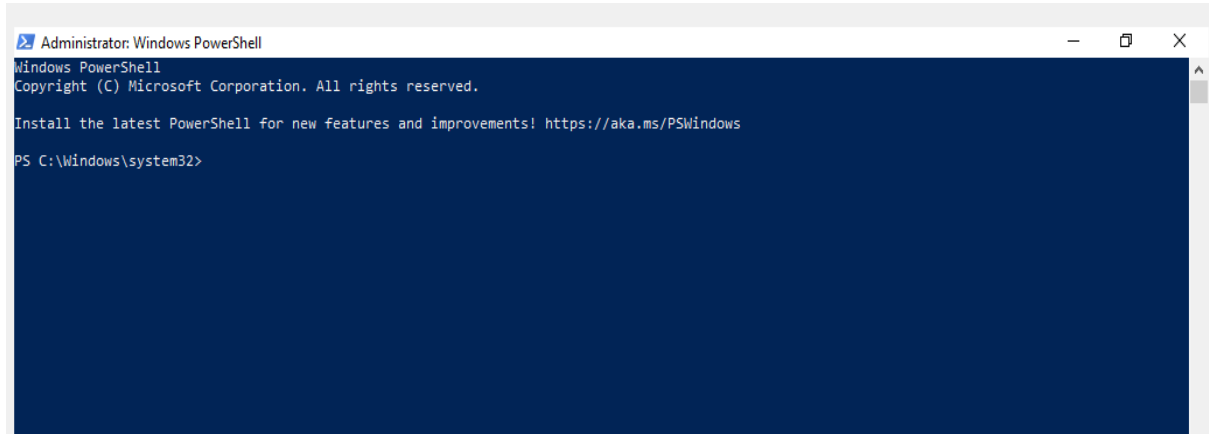


Figure 24: Running power shell as administrator

- In order to see all of the users, enter 'get-localuser' command.

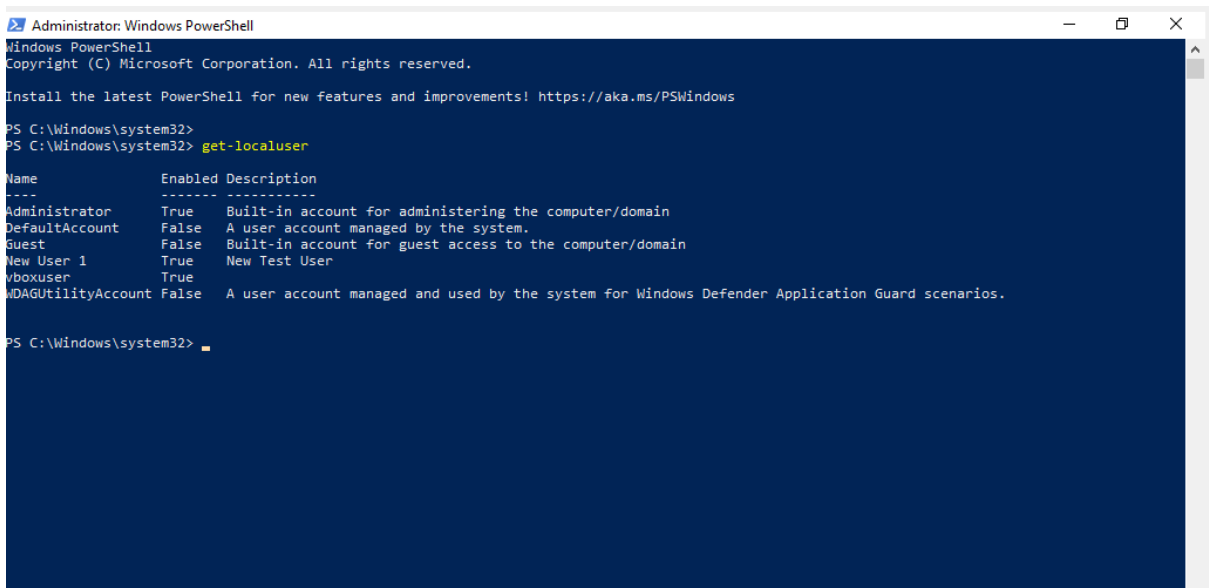
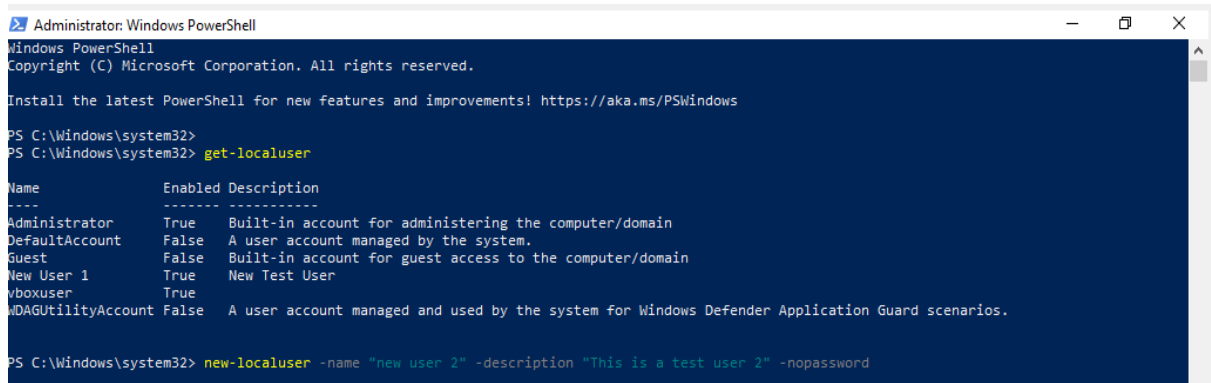


Figure 25: Entering the command to see all user

- Enter “new-localuser -name ‘username’ -description ‘description’ -password ‘password’” command in order to start new user. In this scenario, no password is provided.



```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

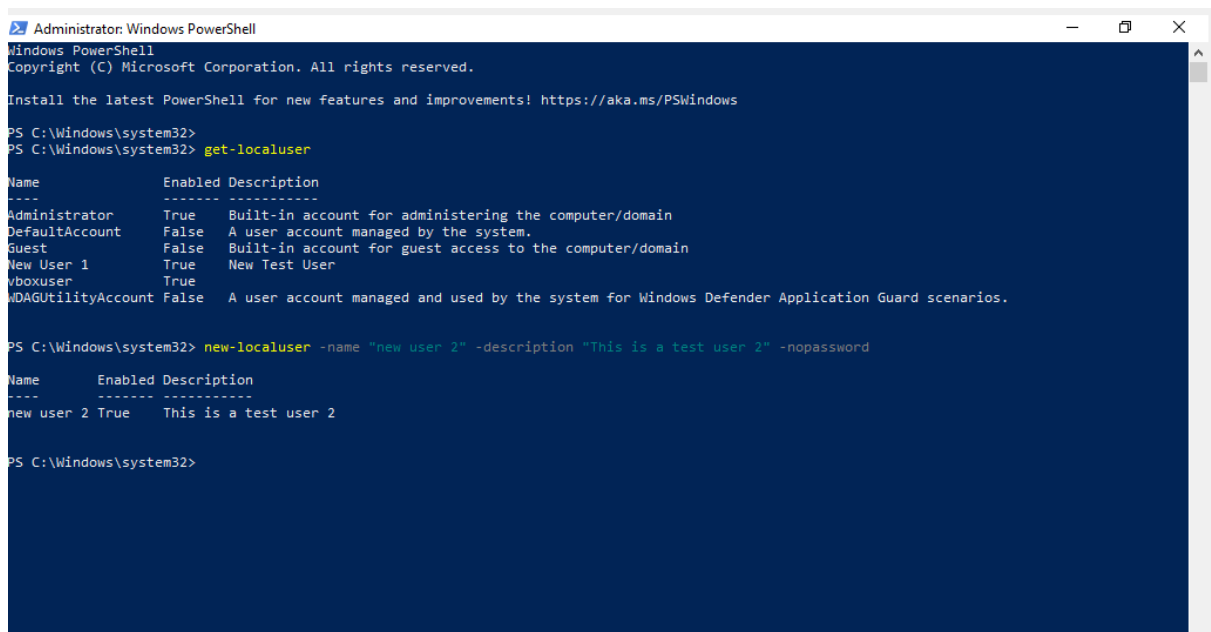
PS C:\Windows\system32>
PS C:\Windows\system32> get-localuser

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
vboxuser            True
WDAGUtilityAccount  False   A user account managed and used by the system for Windows Defender Application Guard scenarios.

PS C:\Windows\system32> new-localuser -name "new user 2" -description "This is a test user 2" -nopassword
```

Figure 26: Entering command to start a new user

- The new user is added successfully.



```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Windows\system32>
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
vboxuser            True
WDAGUtilityAccount  False   A user account managed and used by the system for Windows Defender Application Guard scenarios.

PS C:\Windows\system32> new-localuser -name "new user 2" -description "This is a test user 2" -nopassword

Name                Enabled Description
-----
new user 2          True    This is a test user 2

PS C:\Windows\system32>
```

Figure 27: New user added successfully

- In comparison to GUI, users need to be frequently added to the group from the Shell and they are not added instantly. The command is "add-localgroupmember -group 'groupname' -member 'username'".

```
PS C:\Windows\system32> new-localuser -name "new user 2" -description "This is a test user 2" -nopassword

Name      Enabled Description
-----
new user 2 True    This is a test user 2

PS C:\Windows\system32> get-localuser

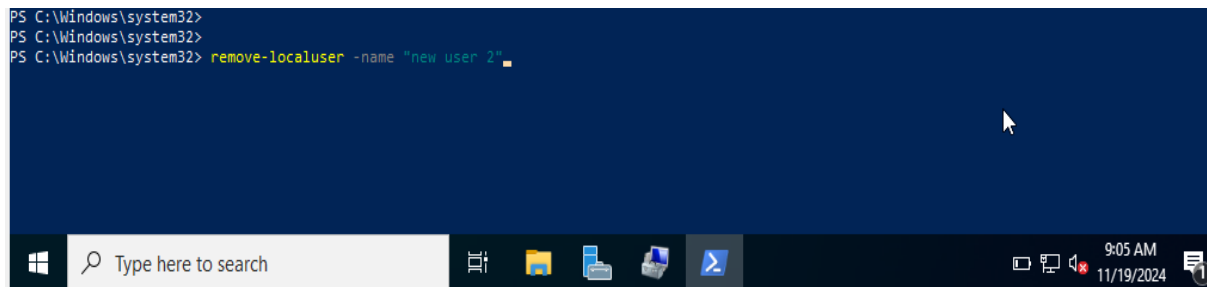
Name      Enabled Description
-----
Administrator True    Built-in account for administering the computer/domain
DefaultAccount False   A user account managed by the system.
Guest      False   Built-in account for guest access to the computer/domain
New User 1 True    New Test User
new user 2 True    This is a test user 2
vboxuser   True
WDAGUtilityAccount False   A user account managed and used by the system for Windows Defender Application Guard scenarios.

PS C:\Windows\system32> add-localgroupmember -group "Users" -member "new user 2"
```

Figure 28: Entering command for local group member

## 2.8 Removing a User

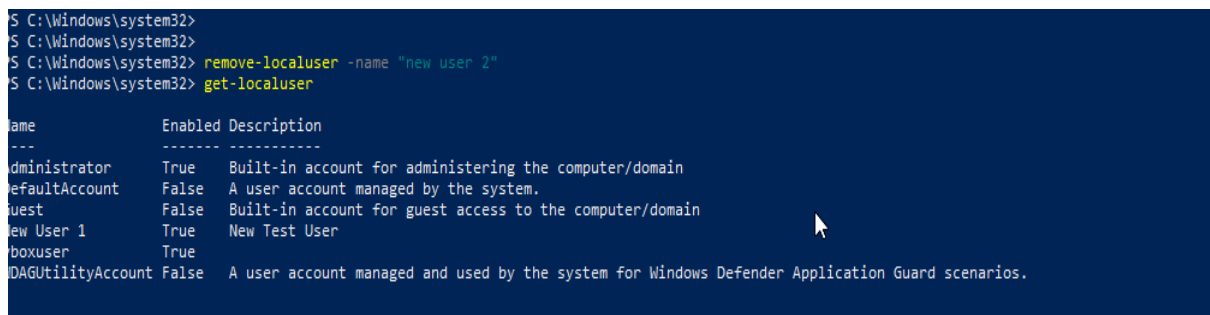
- The command for removing user from the Shell is “remove-localuser -name ‘username’”. Removing user is very easy task to do.



```
PS C:\Windows\system32>
PS C:\Windows\system32>
PS C:\Windows\system32> remove-localuser -name "new user 2"
```

Figure 29: Inserting command for remove user

- Checking and confirming that the user is removed



```
S C:\Windows\system32>
S C:\Windows\system32>
S C:\Windows\system32> remove-localuser -name "new user 2"
S 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
Boxuser	True	
DAGUtilityAccount	False	A user account managed and used by the system for Windows Defender Application Guard scenarios.

Figure 30: Verifying user is removed



## 2.9 Using variables as securestring to store password

- In power shell, a securestring is a specific variable that is created to store a password safely. The command is \$variable -read-host -assecurestring.

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

Figure 31: Entering command to store a password

- Enter a password, when it is necessary. Make sure that password must holds both alpha numeric and symbolic like Tr@vel2024!

```
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"
```

Figure 32: Entering password including alpha numeric and symbolic

- Create a new user by providing variable as password.

```
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 33: Creating a new user

- Create a new user by using variable as password that was already saved.

```
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 34: Create a new user by using variable as password

### 3. References

Held, G. (2000). *Server Management*. London, England: CRC Press.

Held, G. (2000). *Server Management*. London, England.: CRC Press.

### 4. Conclusion

In the case of stable and efficient IT services, server manager is very important feature. Even though server manager has become more simple and faster by suing the modern tools, there still remains problems which includes expensive costs, hard to maintain, and the demand for trained employees. Companies may handle difficulties while making sure that their server work securely without any risk. We can achieve this by being creative and investing in the correct devices and policies.