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Student Name: Subanta Poudel

London Met ID: 20048736

College ID: NP04CP4S210115

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Introduction

This log is about the step-by-step instructions to manage a Windows Server using Server Manager and PowerShell. It covers tasks like renaming the server, enabling remote desktop, configuring static IP address, adding users, and more.

Windows Server is a robust operating system designed to handle enterprise-level tasks such as hosting applications, managing databases, and serving web pages. Effective server management ensures optional performance, security, and scalability. This guide focuses on essential tasks using Server Manager and PowerShell, empowering administrators to efficiently manage and configure their servers. (Microsoft, n.d.)

Objectives

Understand the basic server management operations using Server Manager and PowerShell.

Learn to configure server settings such as hostname, IP addresses, and time zone.

Enable and manage Remote Desktop Services.

Add, modify, and remove users via GUI and PowerShell.

Improve server security and configuration efficiency.

Tools and Concepts

Tools

Server Manager: A built in GUI tool in Windows Server for server management.

PowerShell: A command-line tool for advance server configuration.

Concepts

Server Configuration: Basic setup like renaming, IP addressing, and time zone configuration.

Remote Desktop: A service for remotely accessing the server's GUI and features.

User Management: Adding, modifying, and removing users form the system.

IE Enhanced Security: Disabling browser security for usability during configuration.

Secure Strings: Storing sensitive data securely in PowerShell.

Steps

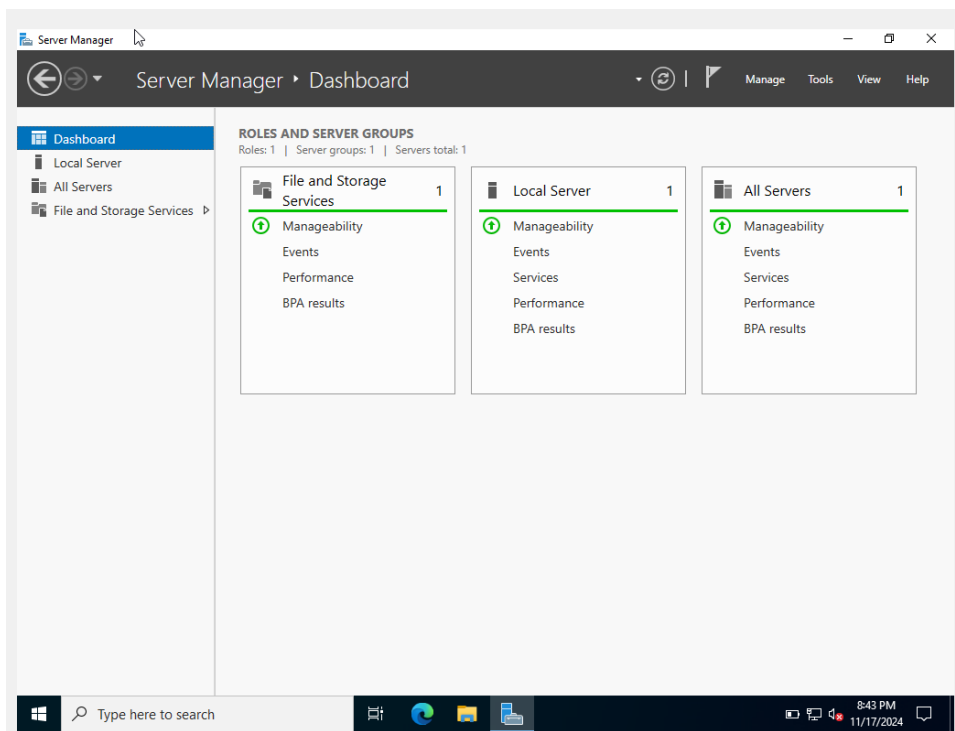## Changing the Server's Name

Open Server Manager

Figure 1 : Server dashboard

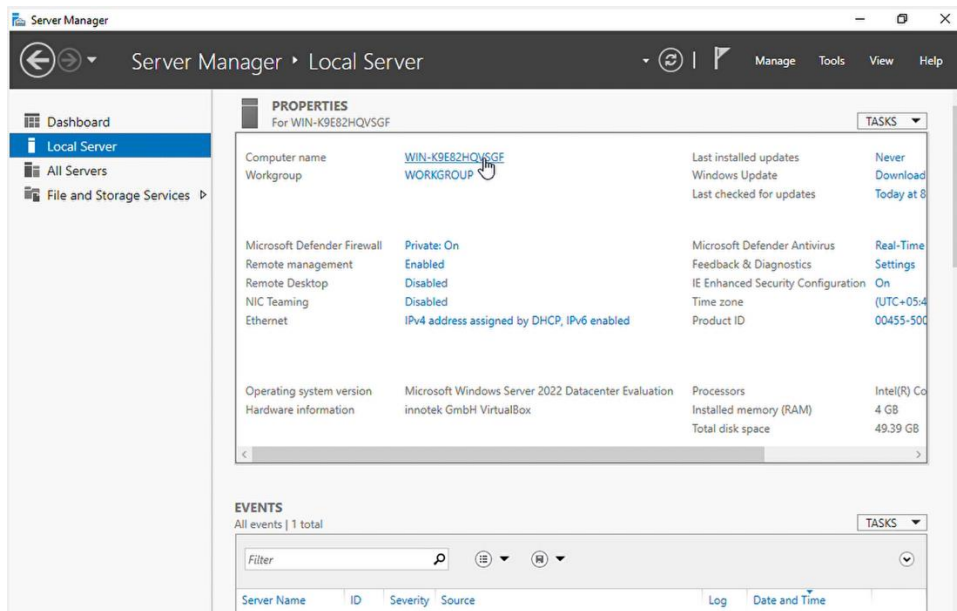Navigate to Local Server and click the Computer Name

Figure 2: Local Server dashboard

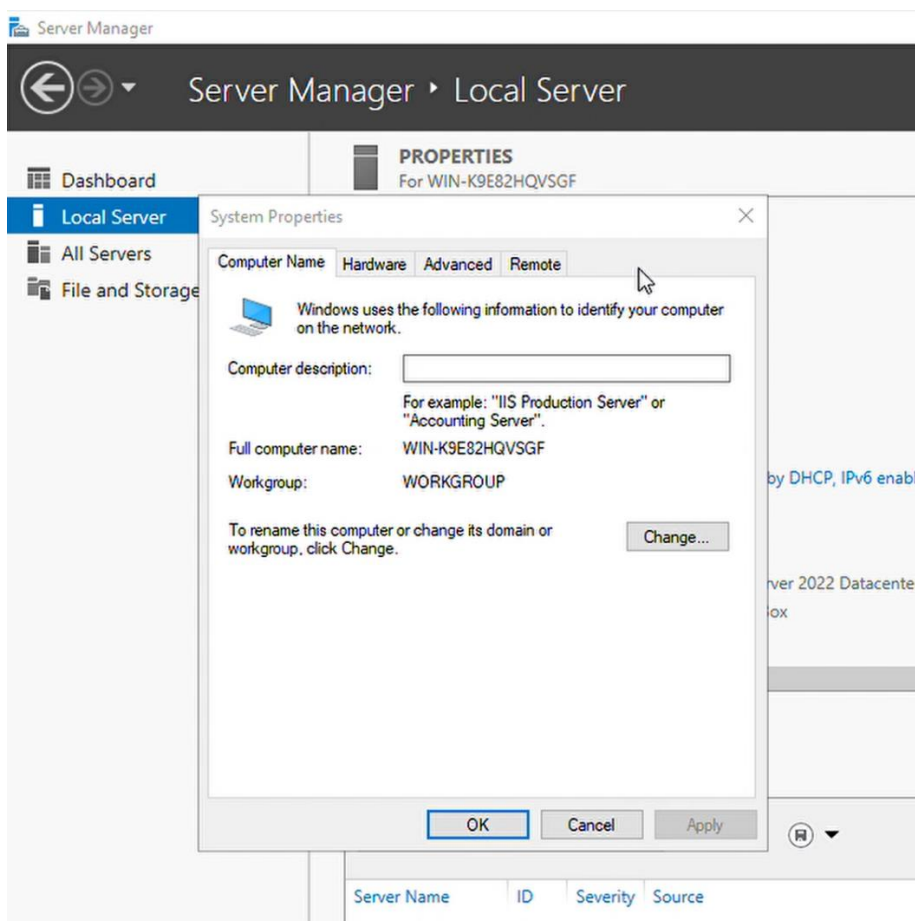In the new window, Click Change Button

Figure 3 : System properties
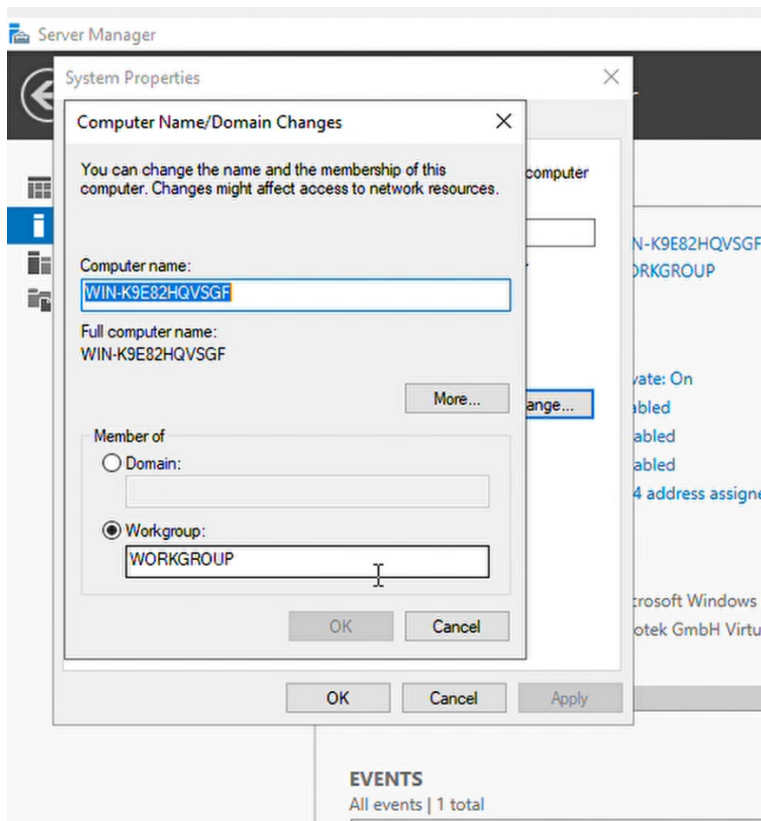
Enter a new name for the server and press OK.

Figure 4 : Change computer name
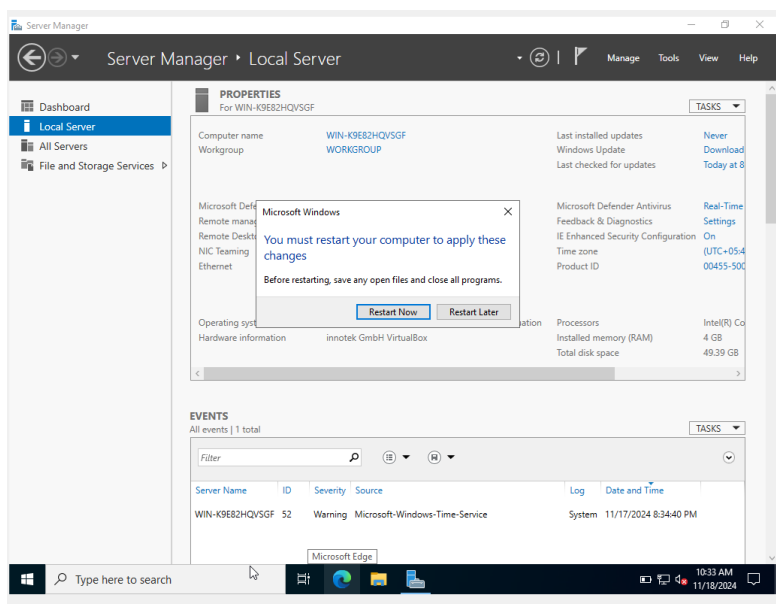
Restart the server when prompted to apply the changes.

Figure 5 : Restart Prompt

Enabling Remote Desktop
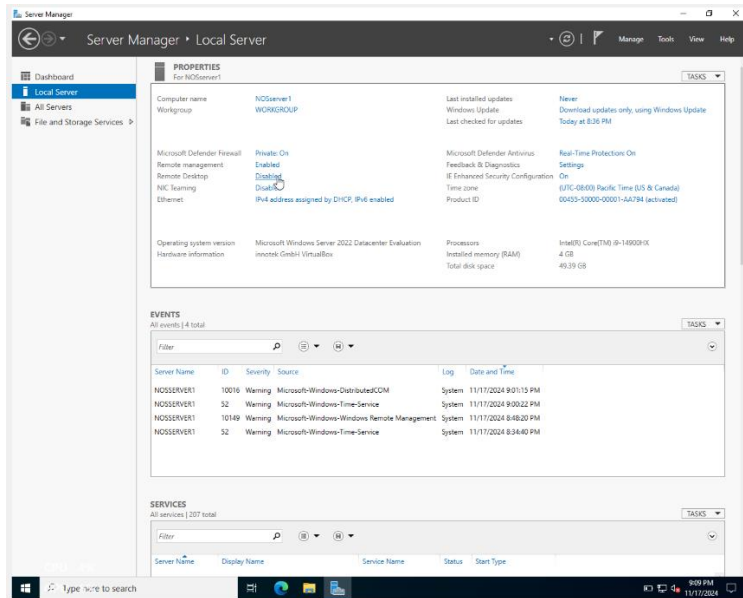
Press the Remote Desktop button

Figure 6 : Remote desktop
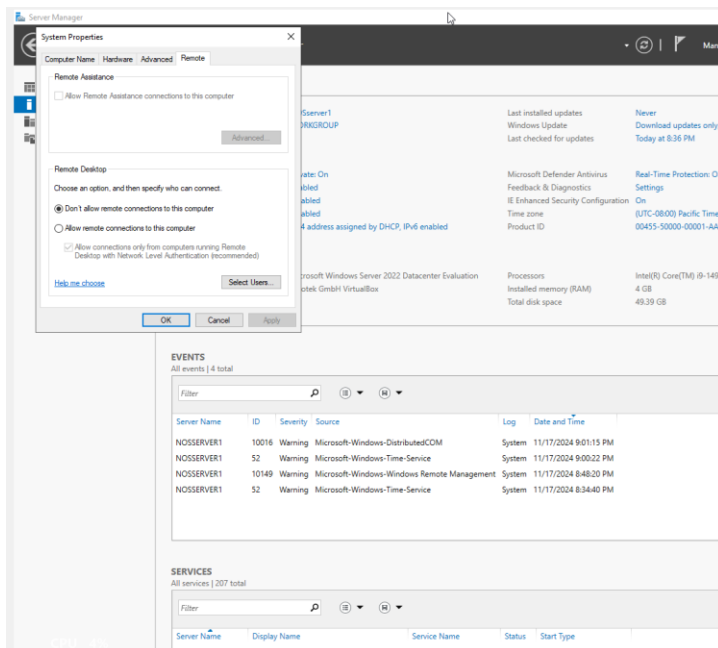
Click Allow button to enable the service

Figure 7 : Remote desktop system properties

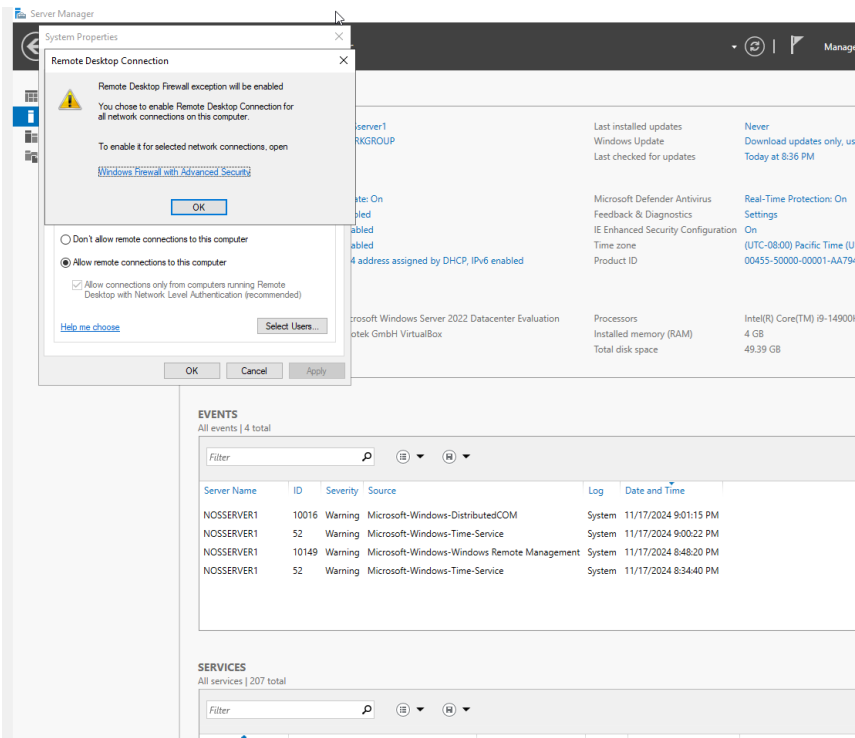A warning message about the firewall will be displayed; press OK to proceed.

Figure 8 : Remote Desktop Connection warning prompt

Setting Up a Static IP Address

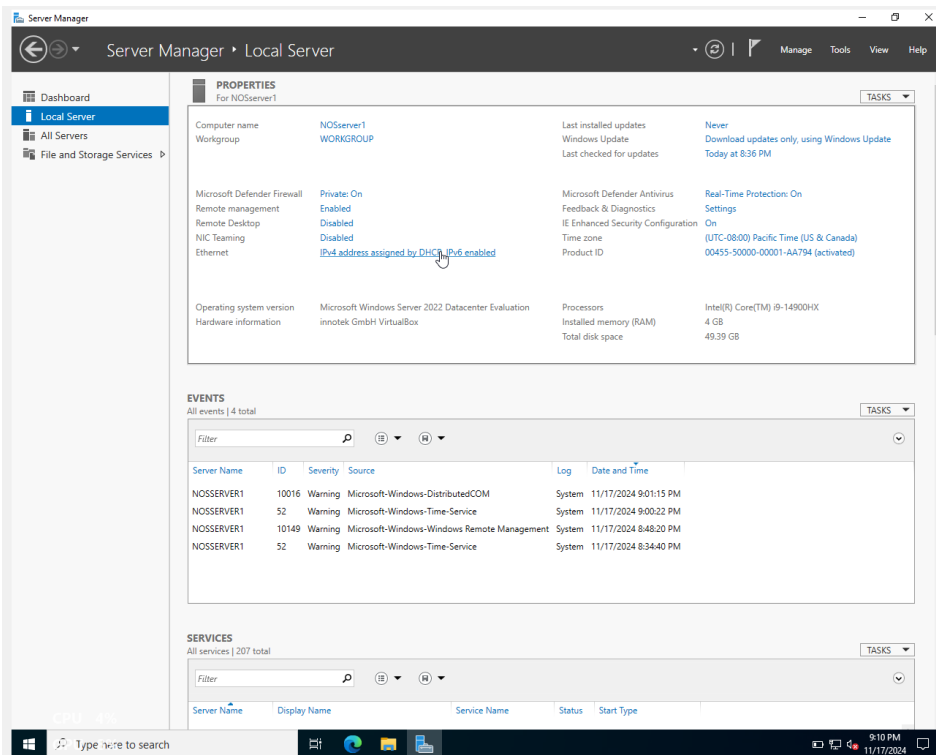In Server Manager, click the Ethernet button to view network adapters.

Figure 9 : Ethernet Setting

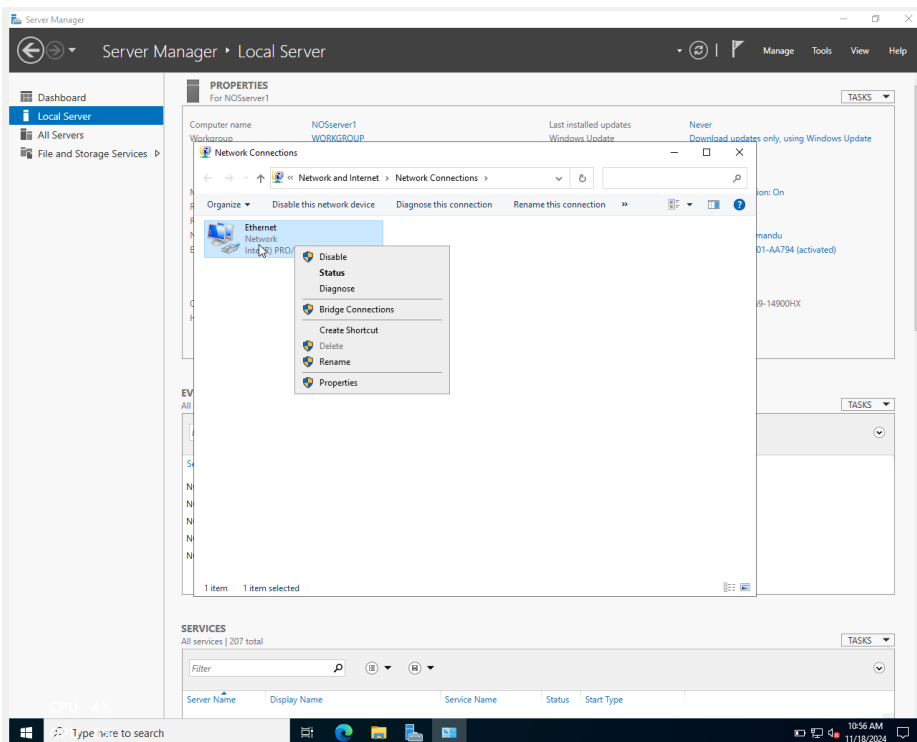Right-click the desired adapter and select Properties.

Figure 10 : Network Connections settings
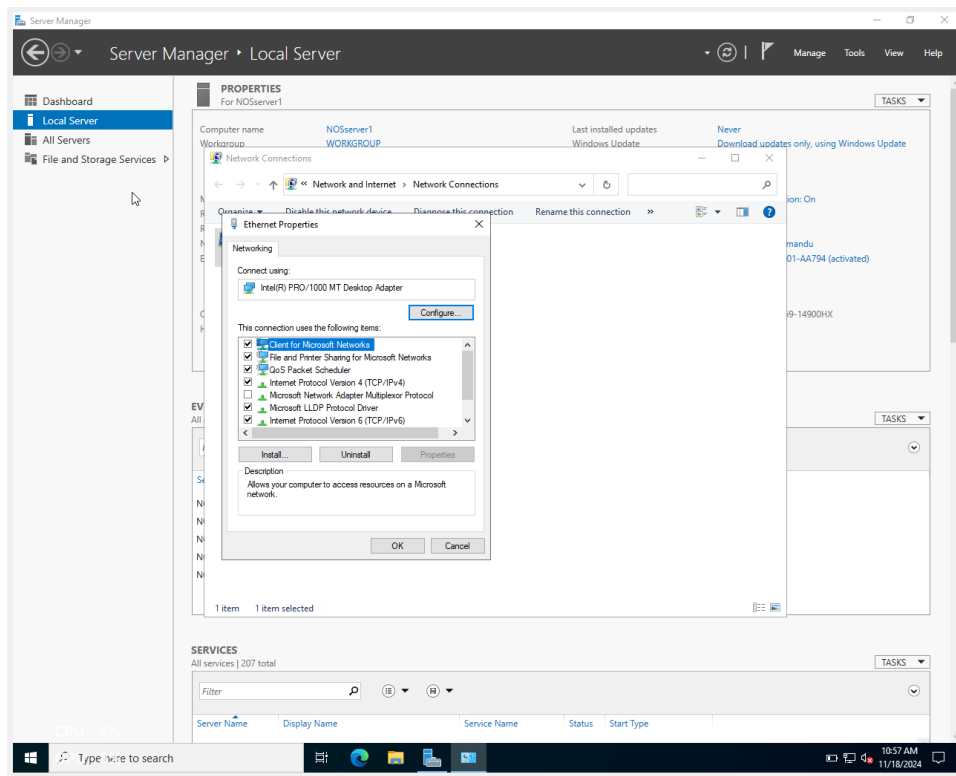
Double-click IPv4 and enter the following details:

Figure 11 : Ethernet Properties

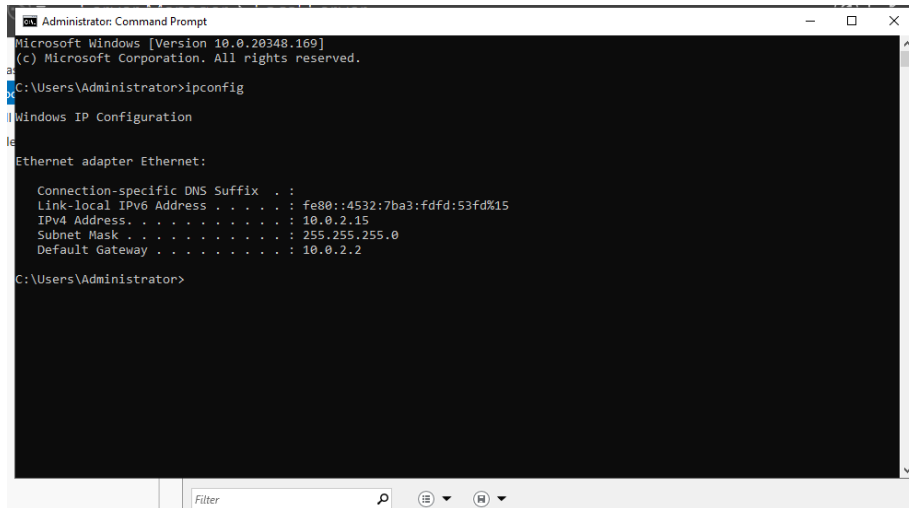*Figure 12 : Command Prompt ipconfig*
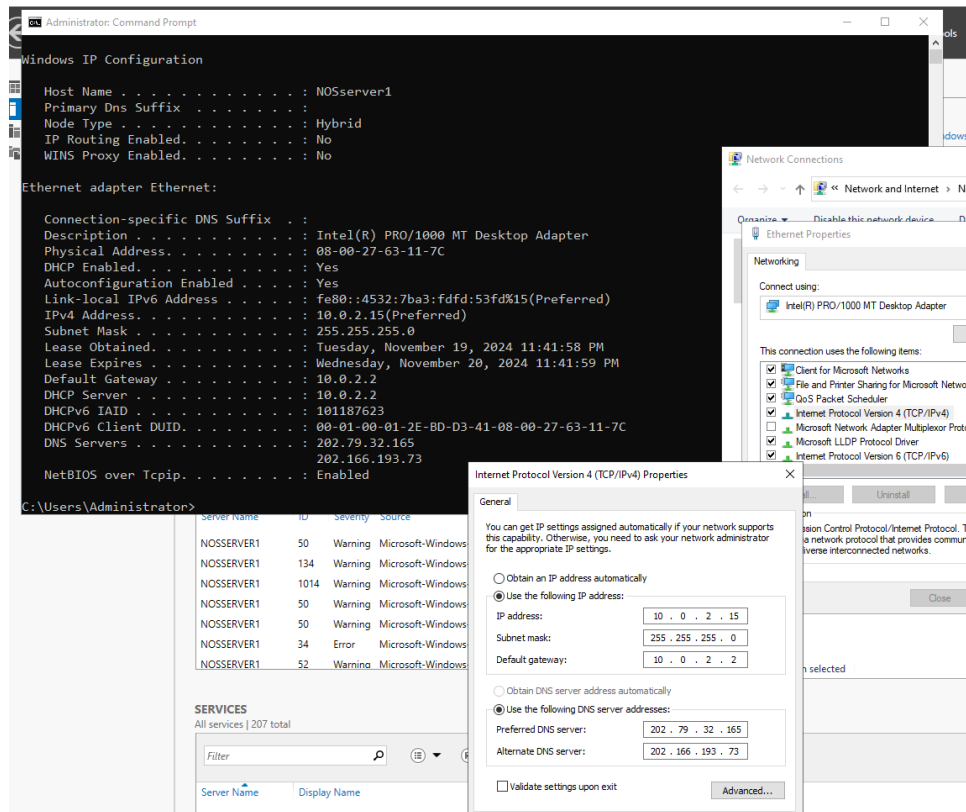
Figure 13 : Command Prompt Ethernet adapter

IP Address   192.168.56.1

Subnet Mask   255.255.255.0

Default Gateway   192.168.1.254

DNS Server address (Primary and Secondary)

        192.168.235.1 and 8.8.8.8

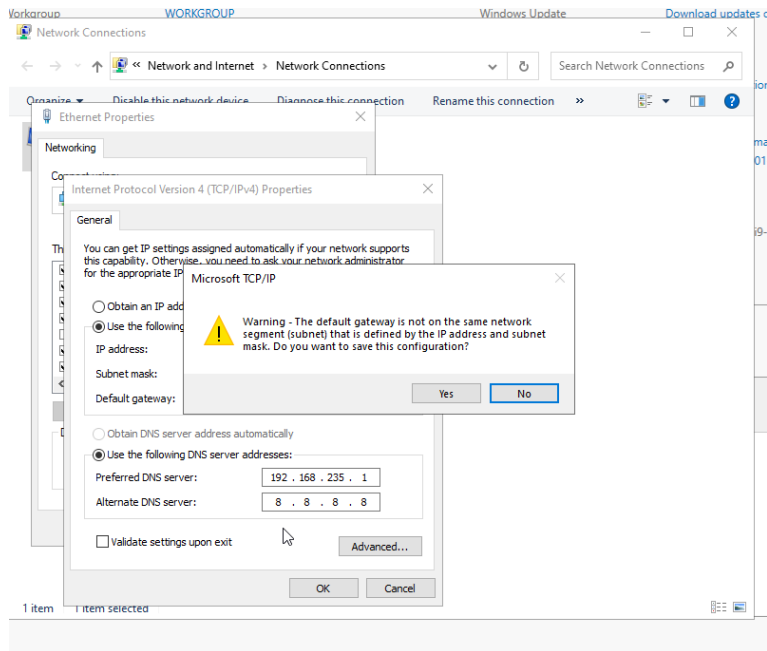Press OK to save and apply the settings.

Figure 14 : Internet Protocol changed warning

Changing the Time zone

In Server Manager, select the Time Zone option
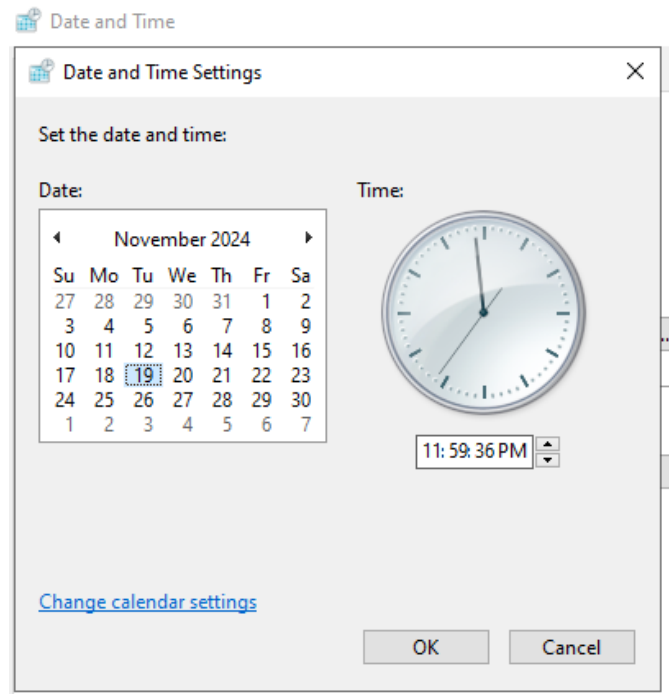
Press the Change Time Zone button in the window.

Figure 15 : Date and Time Settings

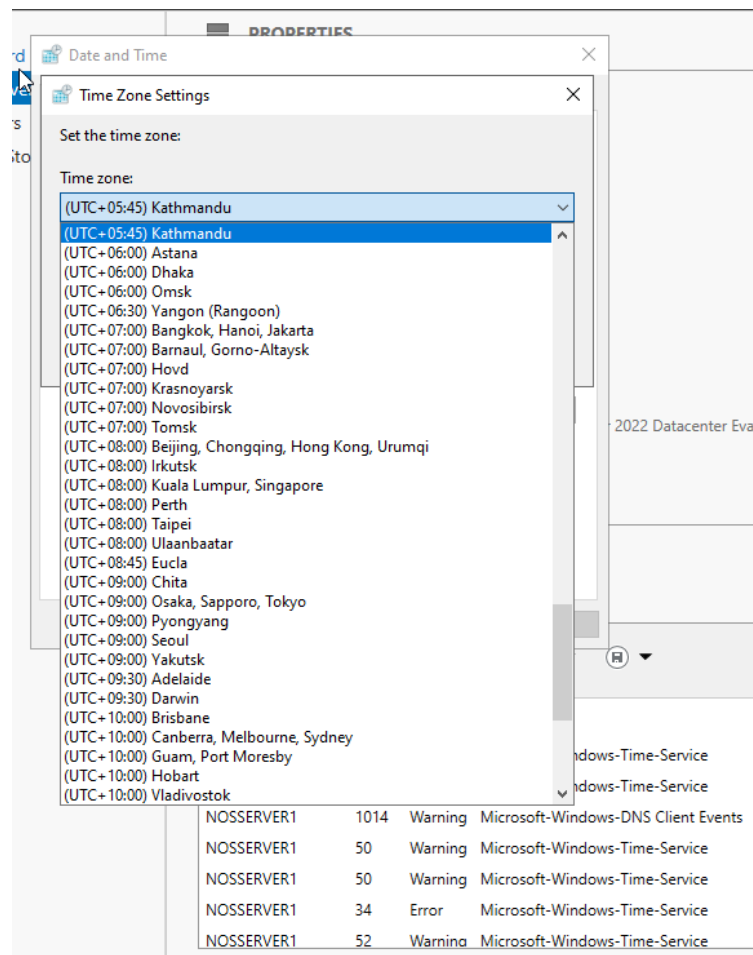Select the appropriate time zone from the drop down menu

Figure 16 : Time Zone Setting dropdown menu

Turing off IE Enhanced Security and Checking for Updates

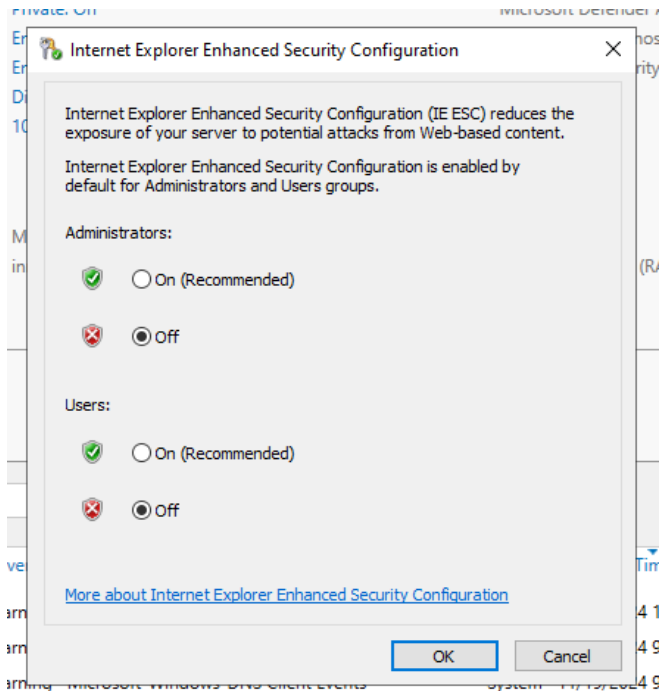In Server Manager, press the IE Enhanced Security button

Figure 17 : Internet Explorer Enhanced Security Configuration

In the new window, disable security for both Administrators and Users

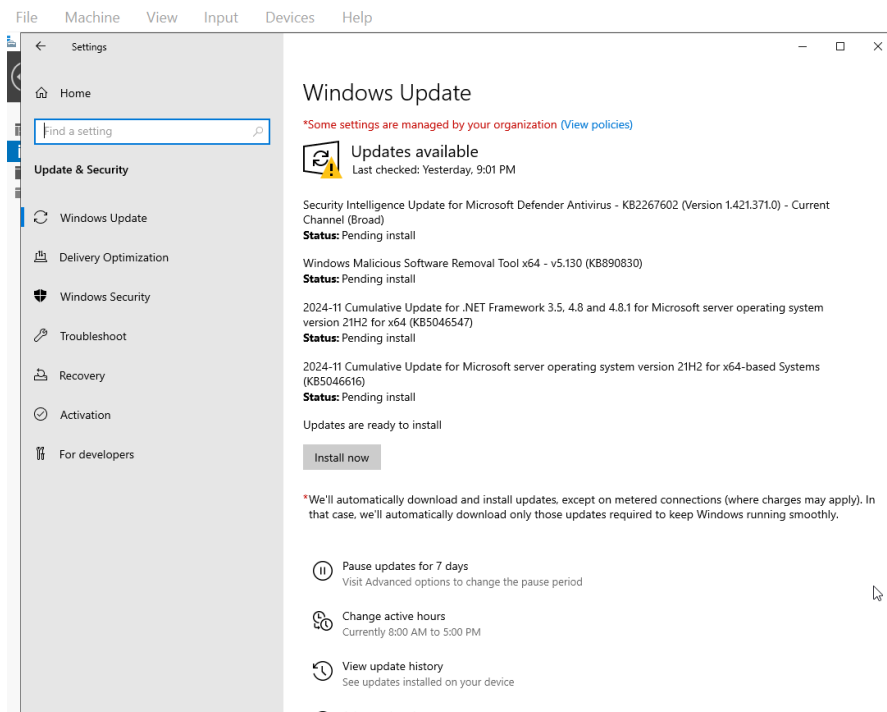For updates, press the Update button and select check for updates

Figure 18 : Windows Update

Adding a User Using GUI

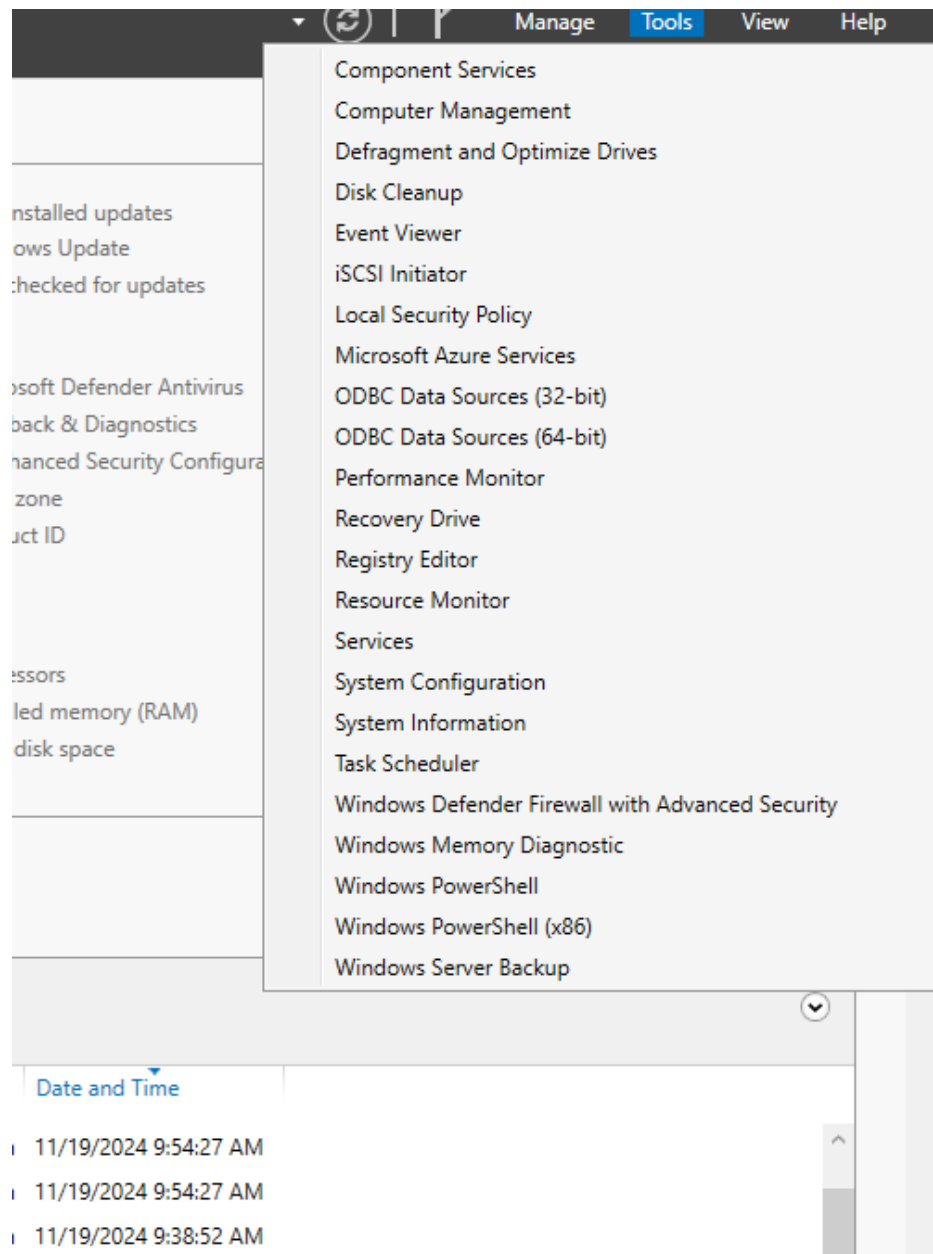In Server Manager, select Tools > Computer Management

Figure 19 : Tools Dropdown
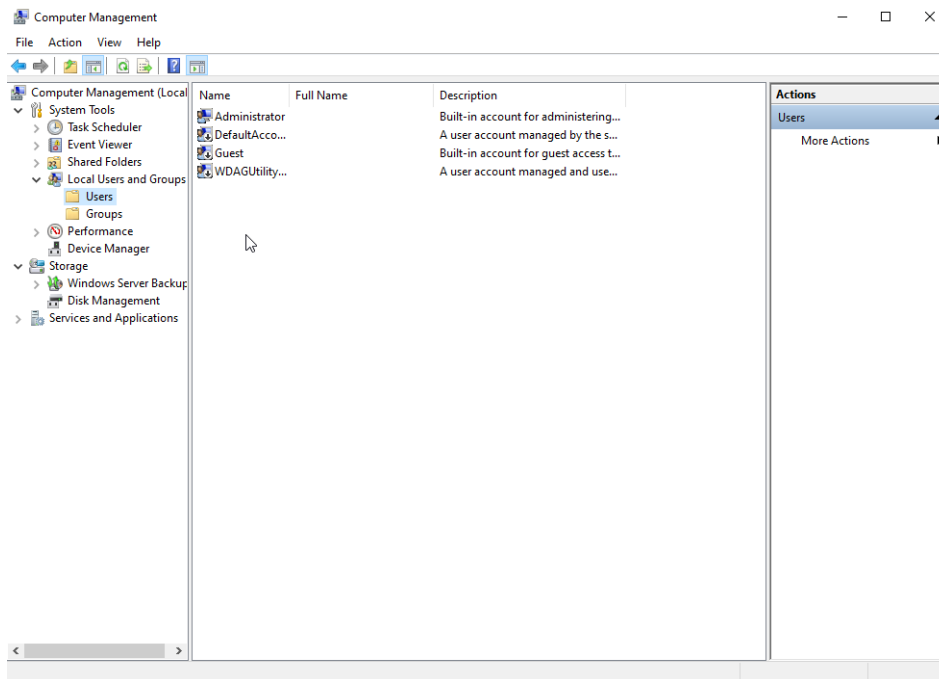
Navigate to Local Users and Groups > Users.

Figure 20 : Computer management > Users
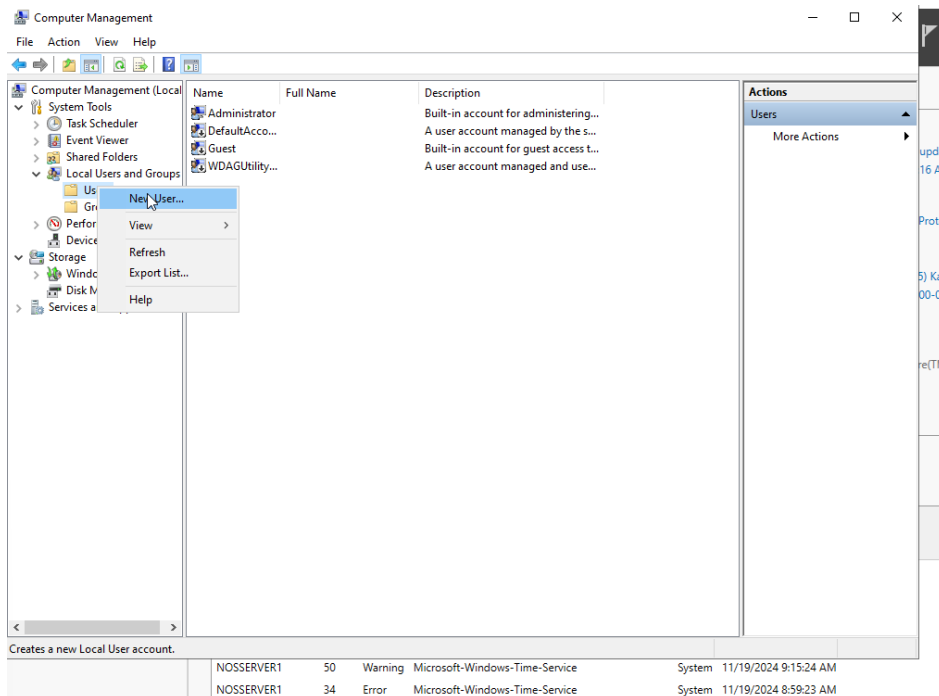
Right click on Users and select New User.

Figure 21 : Adding New User
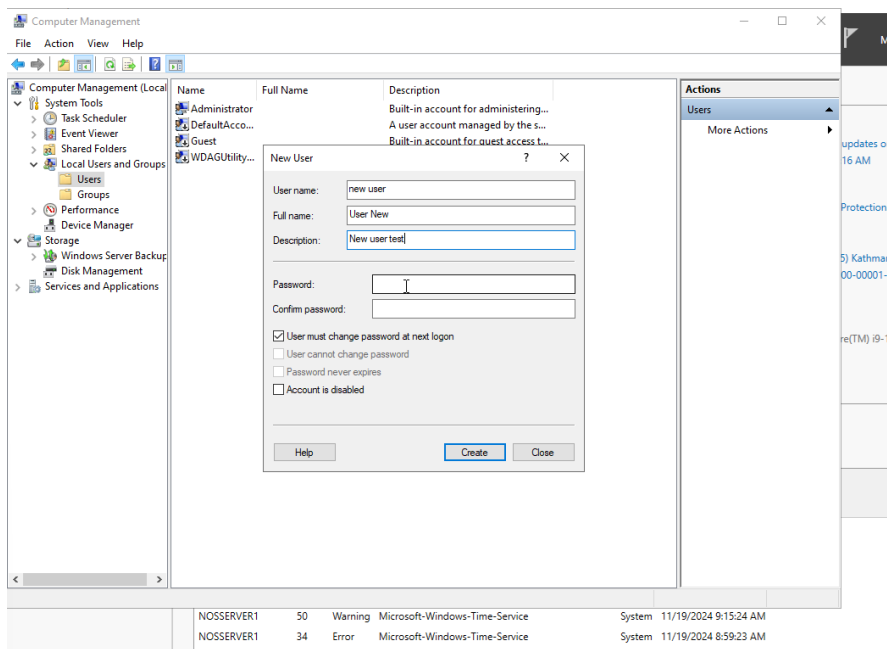
Enter the user details and press Create.
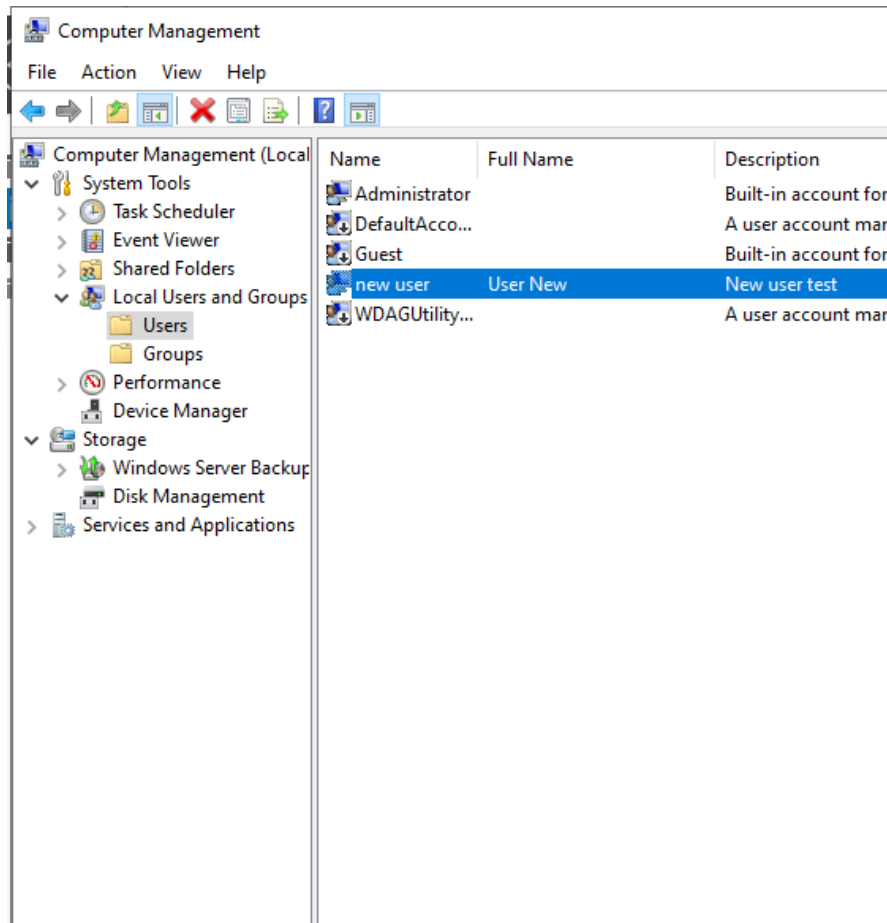
Figure 22 : New User menu

Figure 23 : Computer Management after user added

Adding a User Using Shell
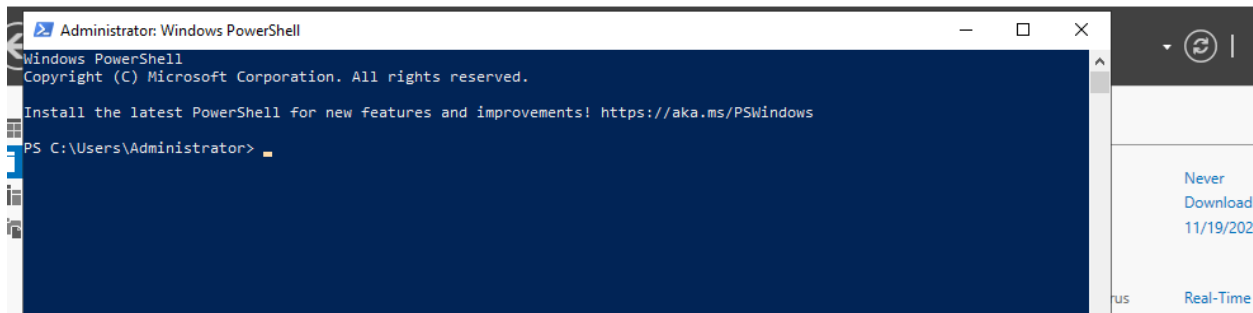
Open PowerShell as Administrator.

Figure 24 : Windows PowerShell

Use the following commands:
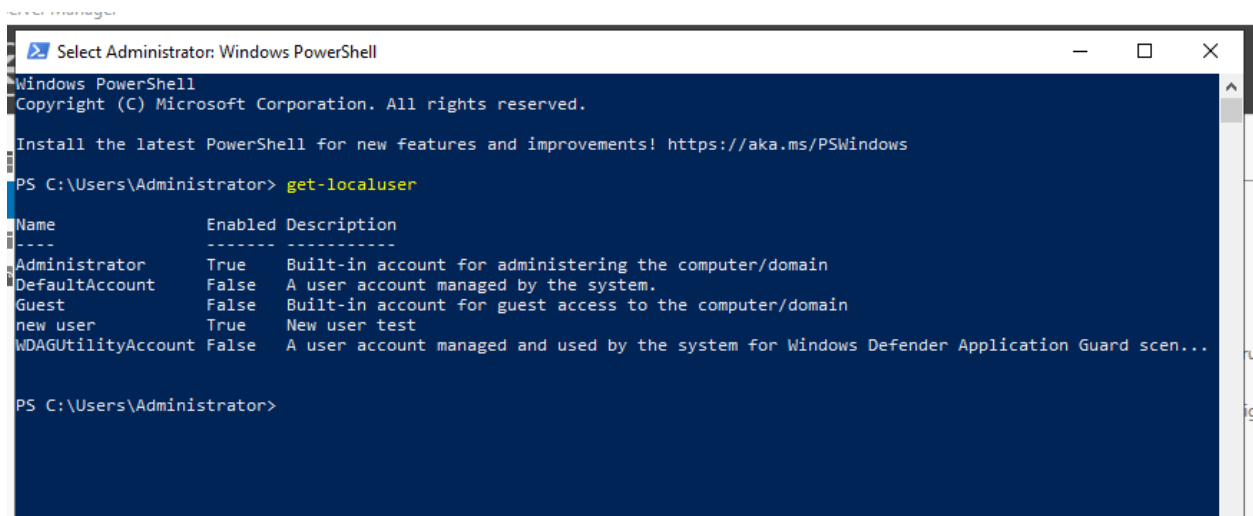
View all users: get-localuser

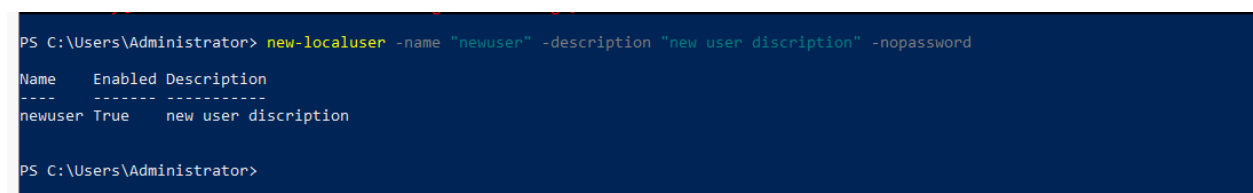*Figure 25 : Windows PowerShell view all users*

Add a user:

Figure 26 : Windows PowerShell add new user

Add user to a group:


```
PS C:\Users\Administrator> add-localgroupmember -group "users" -member "newuser"
PS C:\Users\Administrator> _
```

Figure 27 : Windows PowerShell add user to a group

Removing a User

In PowerShell, remove a user with:


```
PS C:\Users\Administrator> remove-localuser -name "newuser"
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           True    New user test
WDAGUtilityAccount False   A user account managed and used by the system for Windows Defender Application Guard scenarios.


PS C:\Users\Administrator> _
```

Figure 28 : Windows PowerShell remove a user

Storing Passwords as Secure Strings

Create a secure string variable


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

Figure 29 : Windows PowerShell creating secure string variable

Use this variable to create a user


```
PS C:\Users\Administrator> $password = read-host -assecurestring
*********
PS C:\Users\Administrator> new-localuser -name "new user 2" -password $password -description "this is new user 2"

Name        Enabled Description
----        ------- -----------
new user 2  True    this is new user 2


PS C:\Users\Administrator> _
```

Figure 30 : Windows PowerShell create new user with a password

Figure 31 : Windows PowerShell view all user after adding another user

Errors that may occur in PowerShell

Figure 32 : Windows PowerShell error due to password being spelled wrong

Figure 33 : Windows PowerShell error unrecognized cmdlet name

Figure 34 : Windows PowerShell error due to weak password

Summary

This log provides detailed instructions for common server management tasks such as renaming the server, enabling remote desktop, and configuring static IP addresses. By mastering these tasks administrators can ensure that their Windows Server is properly configured, secured, and efficient.

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