Lesson 02 Demo 01
Configuring Firewall in Windows

Objective: To install and configure IIS on Windows Server, create a custom website on a specified port, and implement Windows Firewall rules to control and secure network access

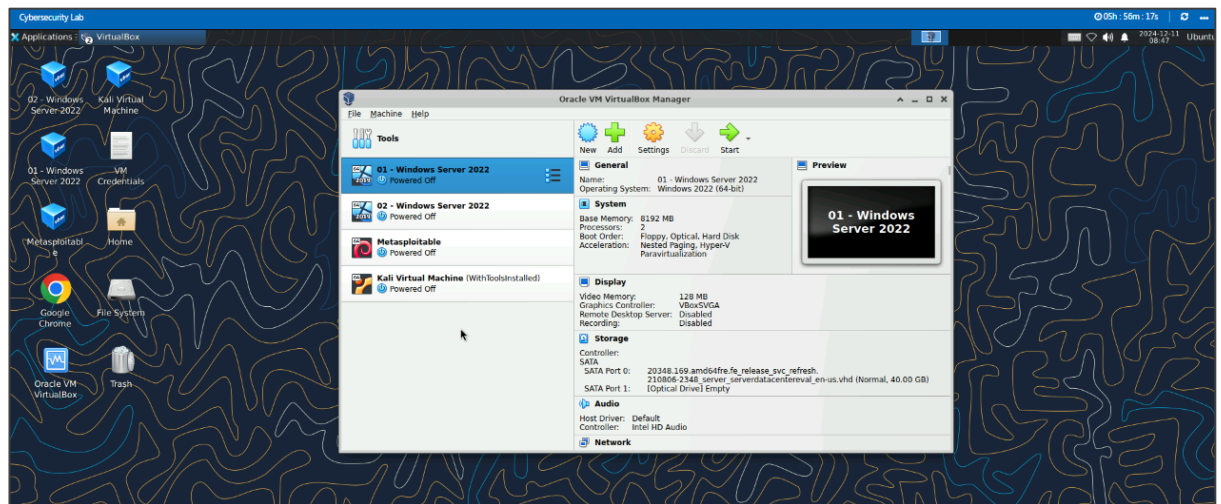**Tools required:** Windows VM, Kali Linux
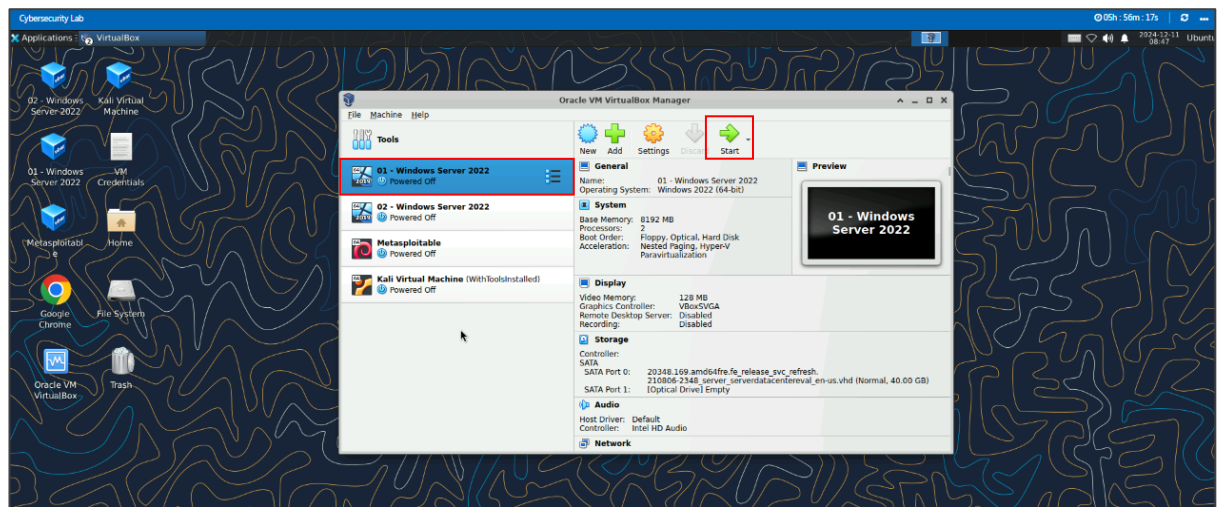
Prerequisites: None

Steps to be followed:
1. Install the IIS (Internet Information Services)
2. Create the website and change the port
3. Configure the firewall to access the web server on a custom port

Step 1: Install the IIS (Internet Information Services)
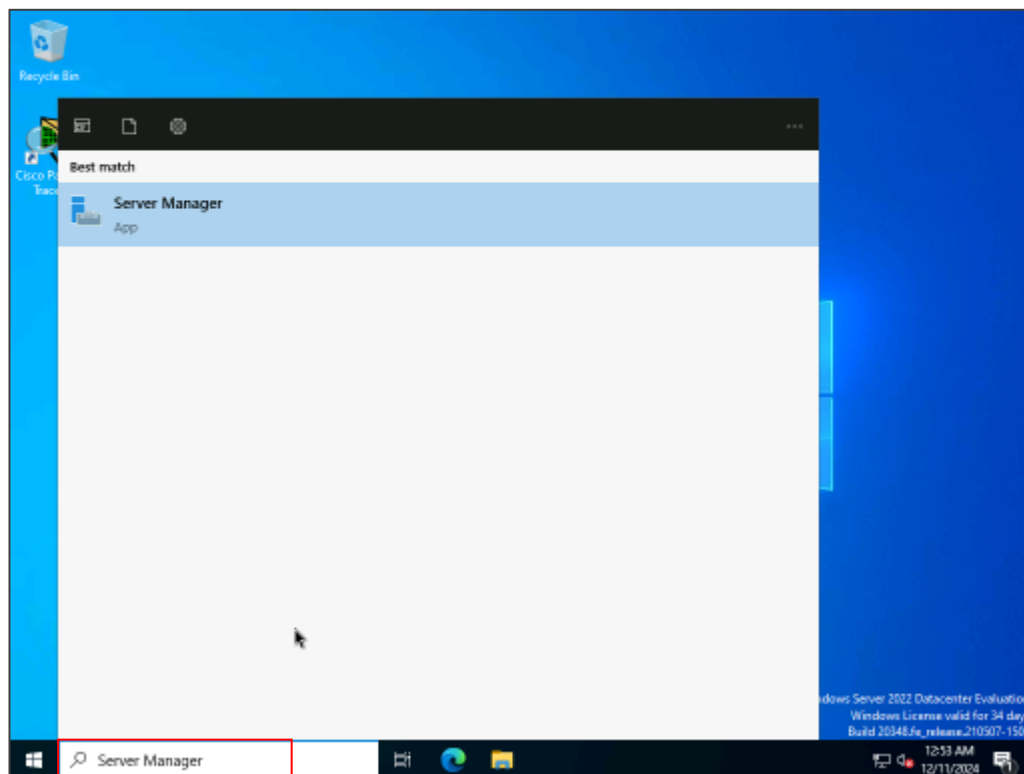
1.1 Navigate to **Oracle VM VirtualBox Manager**

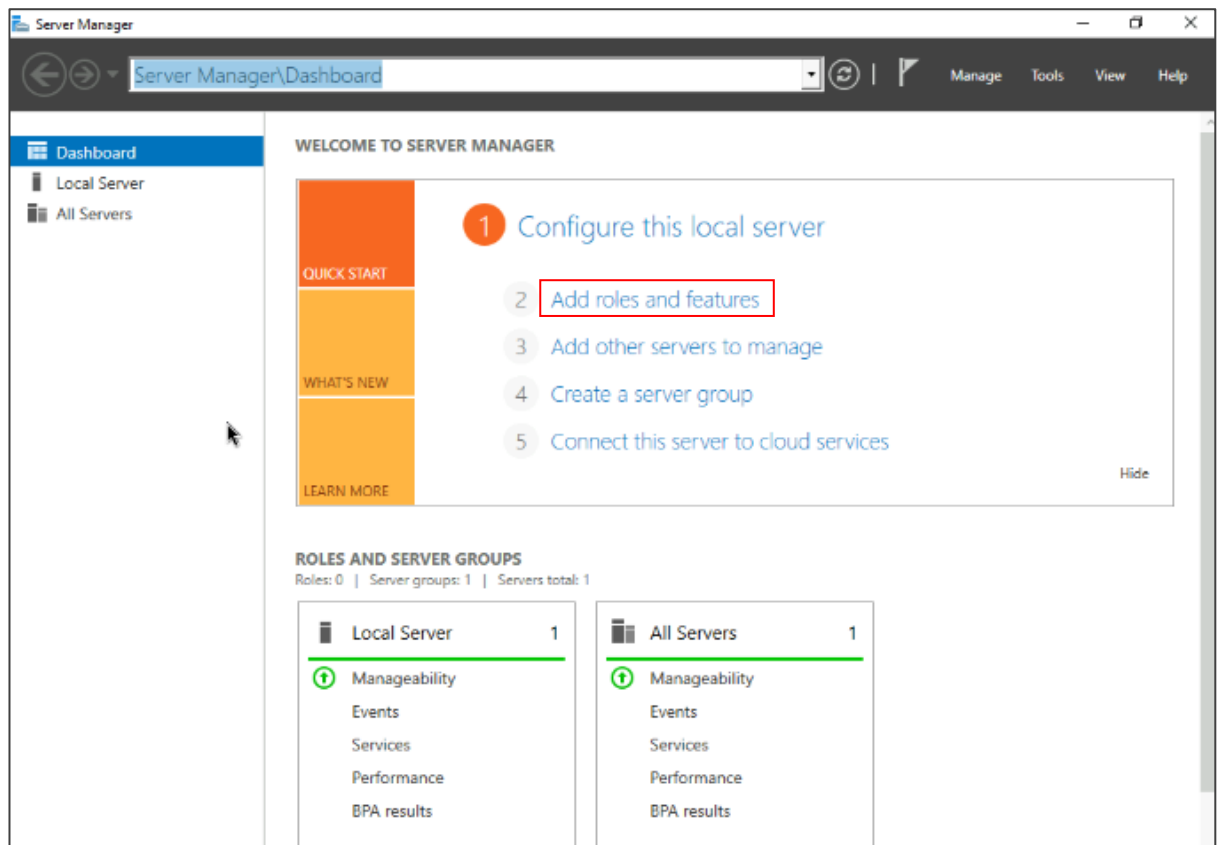1.2 Select **01 – Windows Server 2022** and click on **Start**
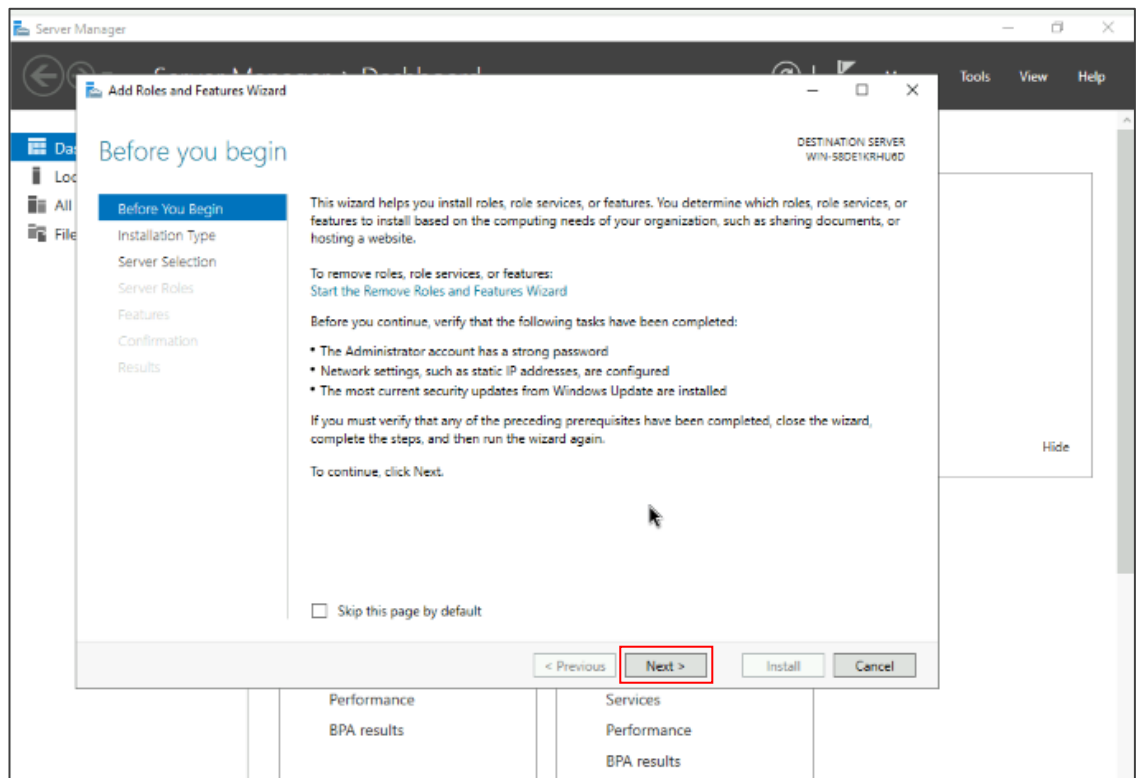

Now, you will be redirected to the Windows VM.

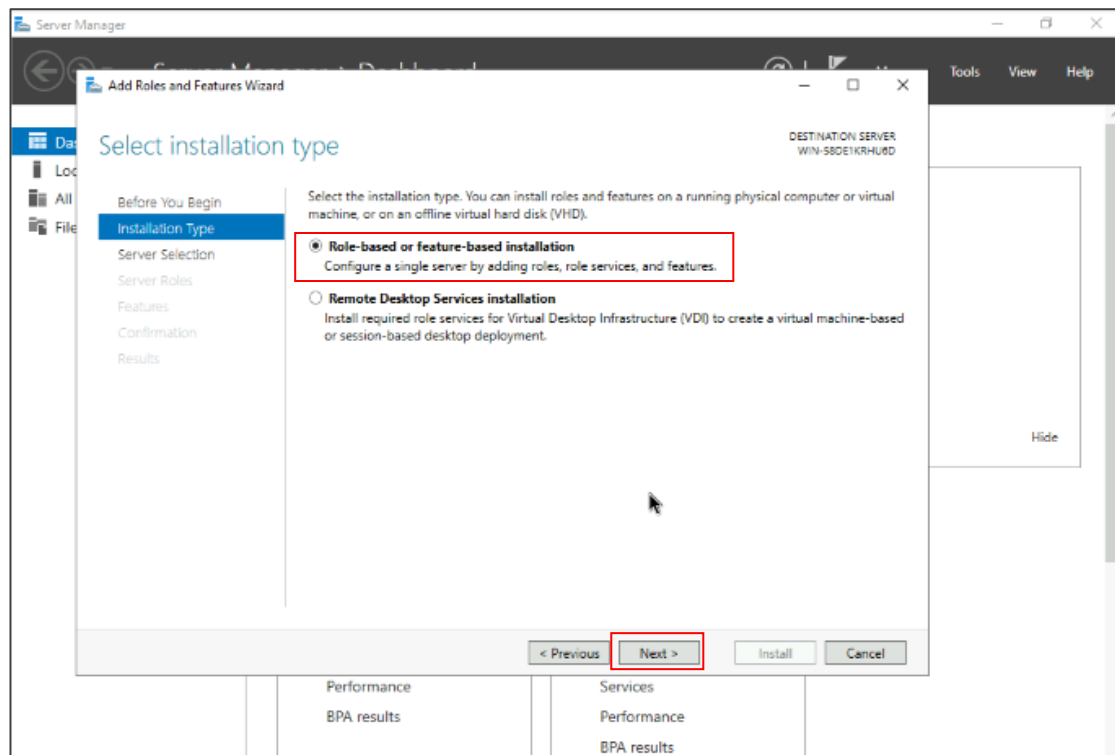1.3 Enter **Server Manager** in the search box and press enter
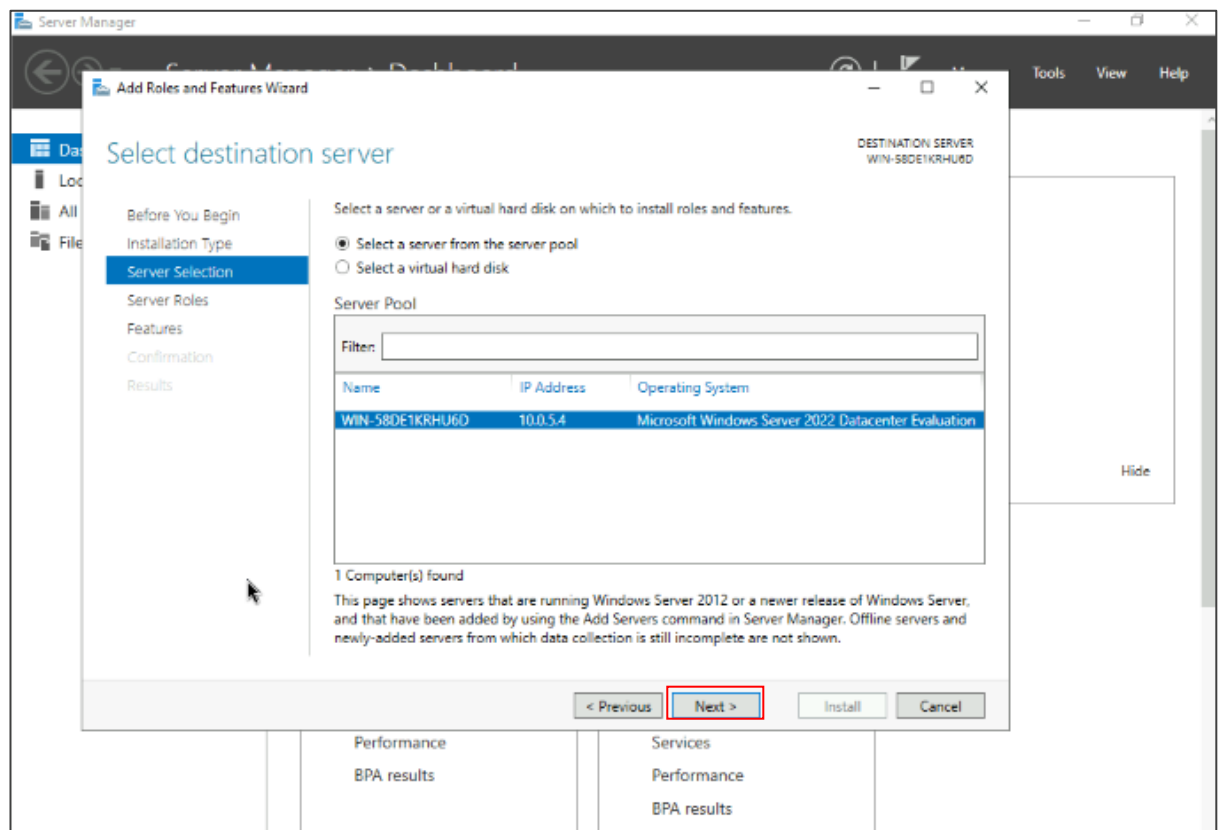
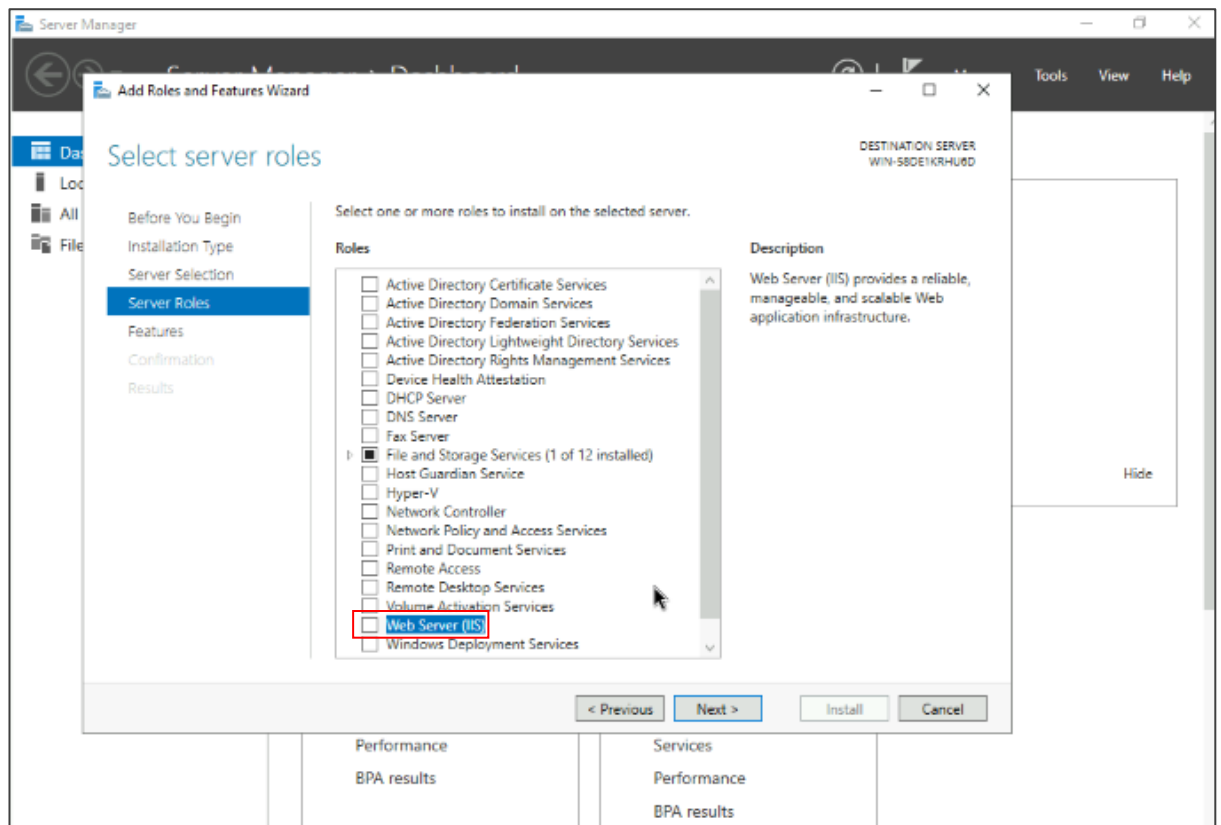## 1.4 Click on **Add roles and features**

1.5 Click on **Next**

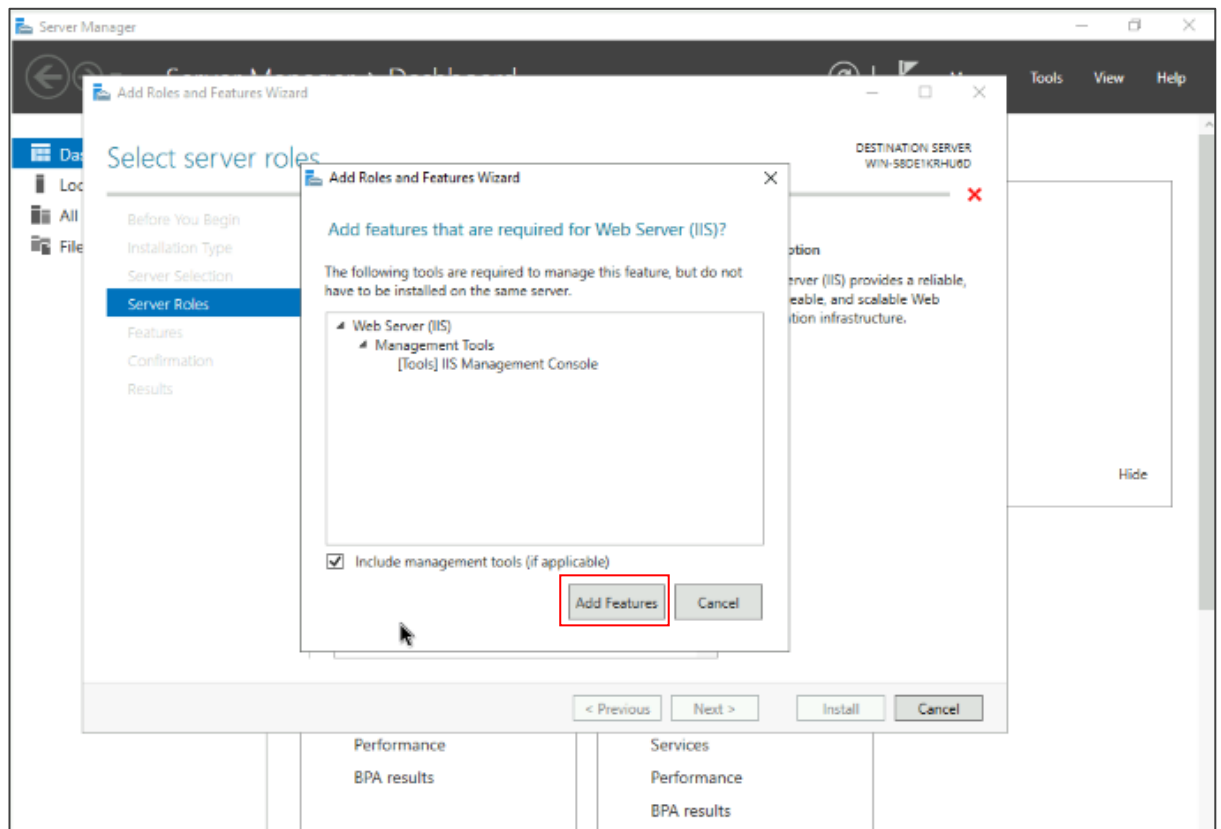1.6 Select **Role-based or feature-based installation** and click on **Next**
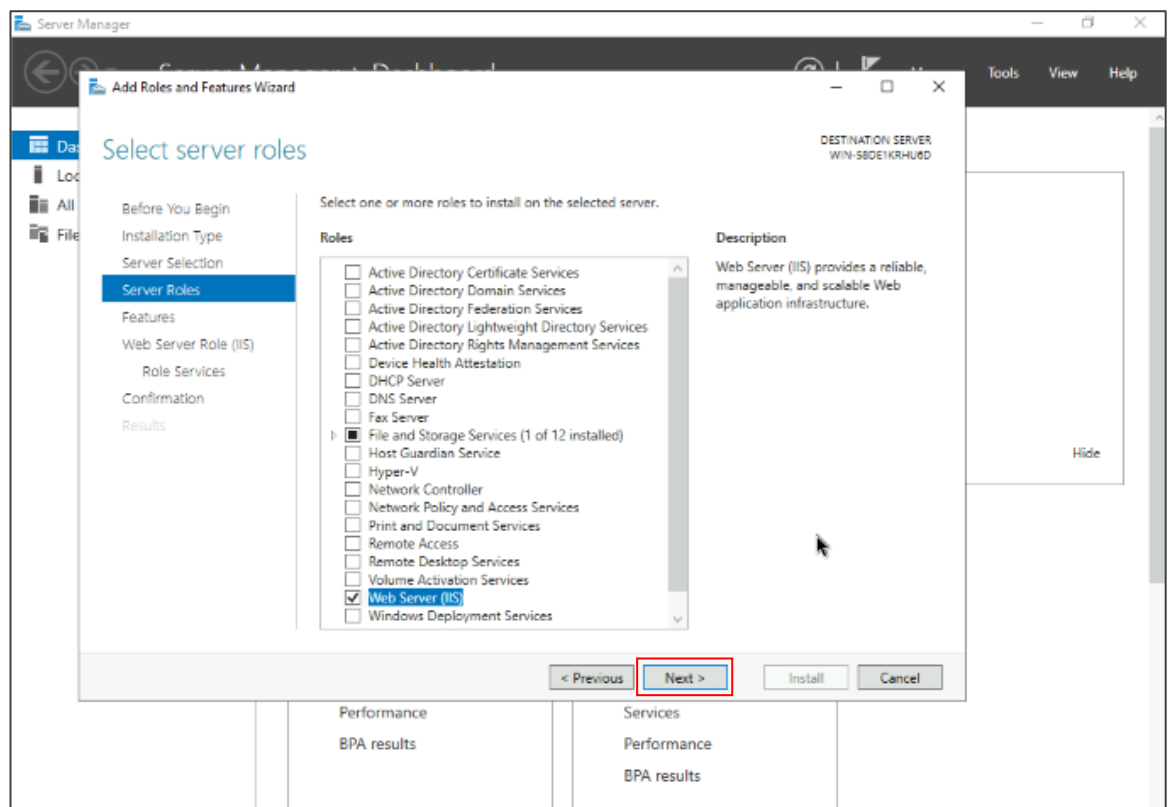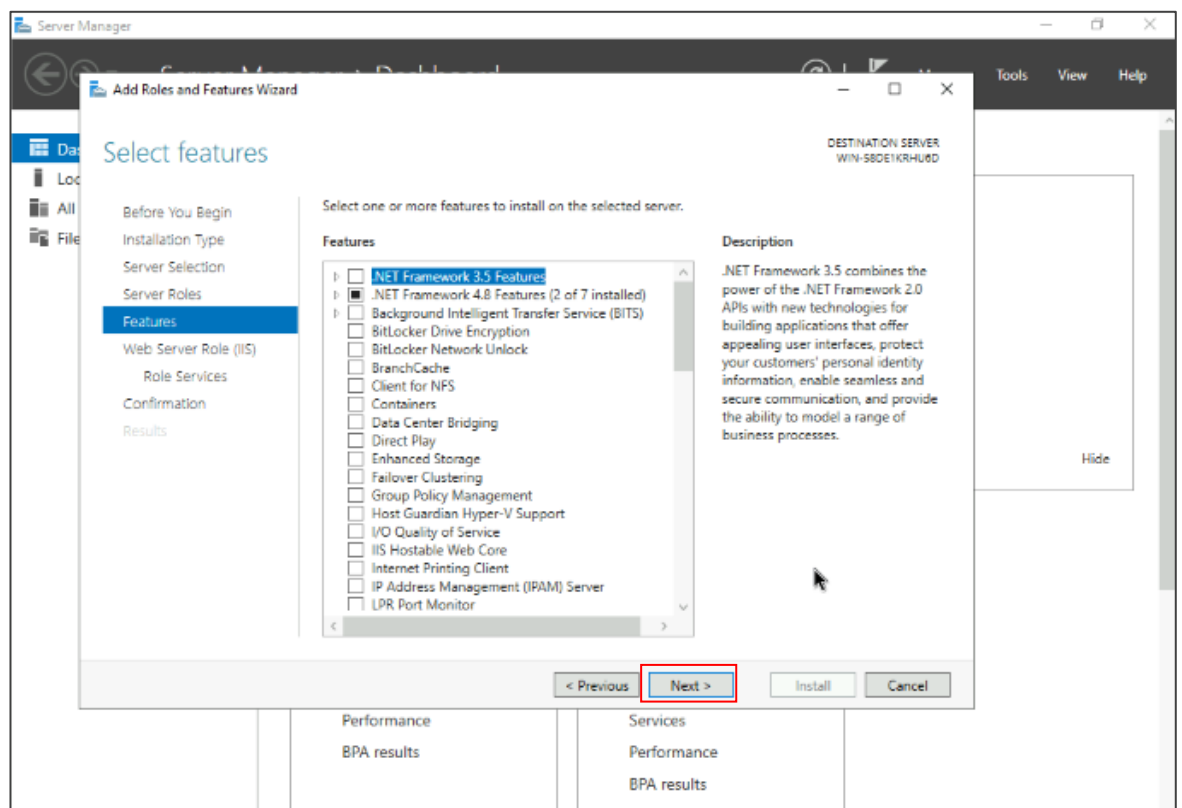

1.7 Click on **Next**

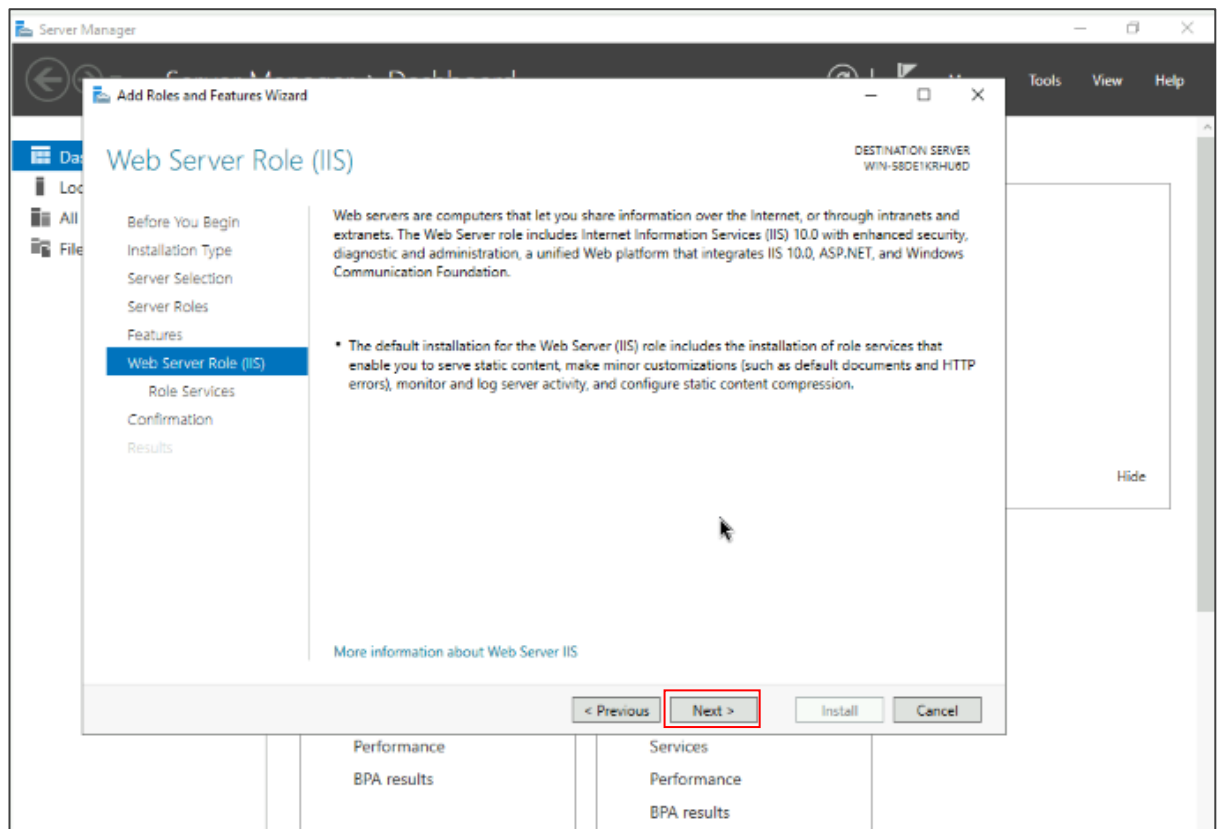1.8 Select **Web Server (IIS)**

1.9 Click on **Add Features**

1.10 Click on **Next**
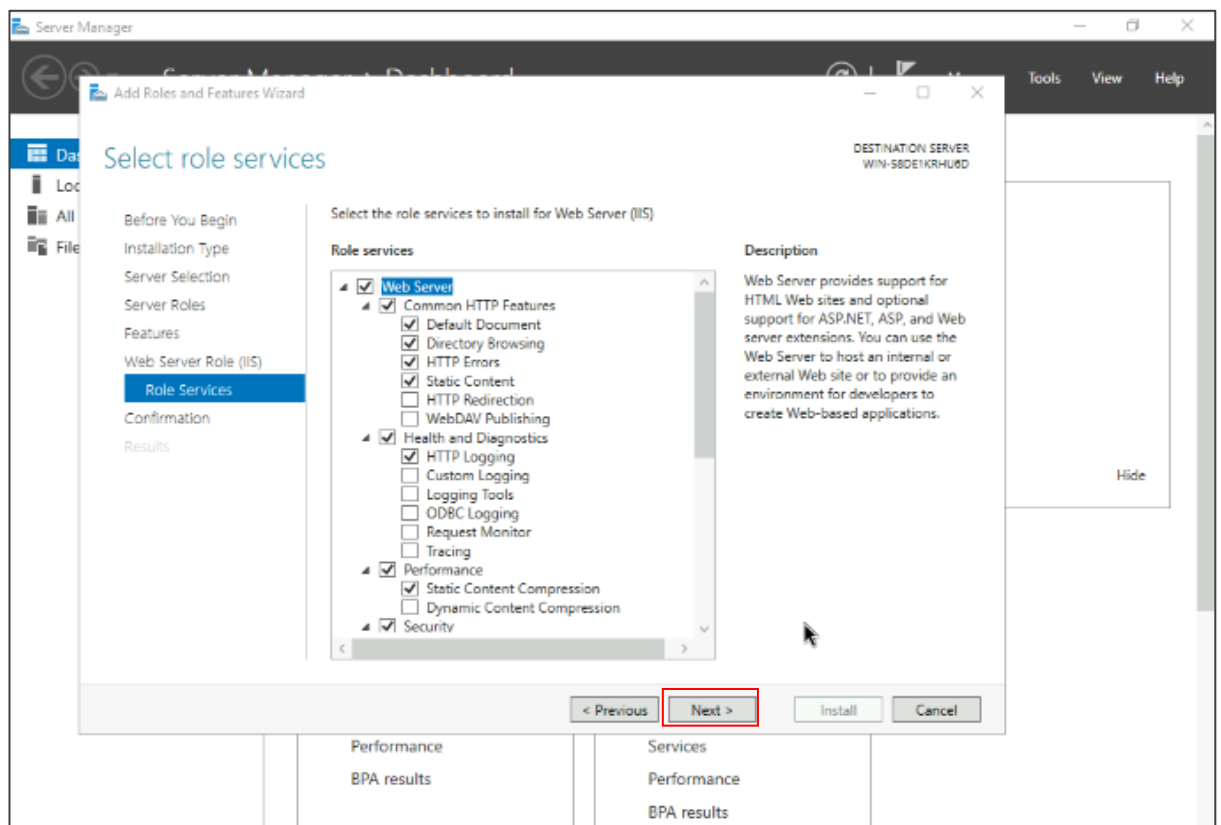

1.11 Click on **Next**
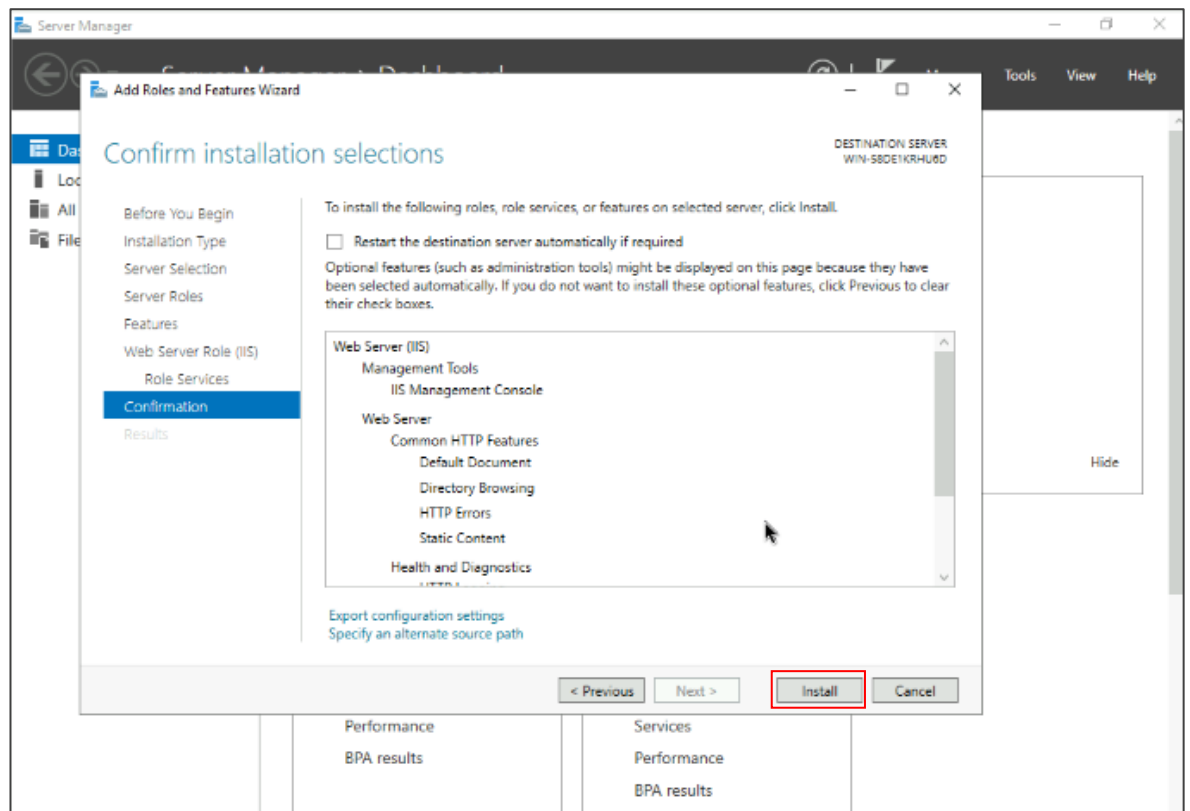
1.12 Again, click on **Next**
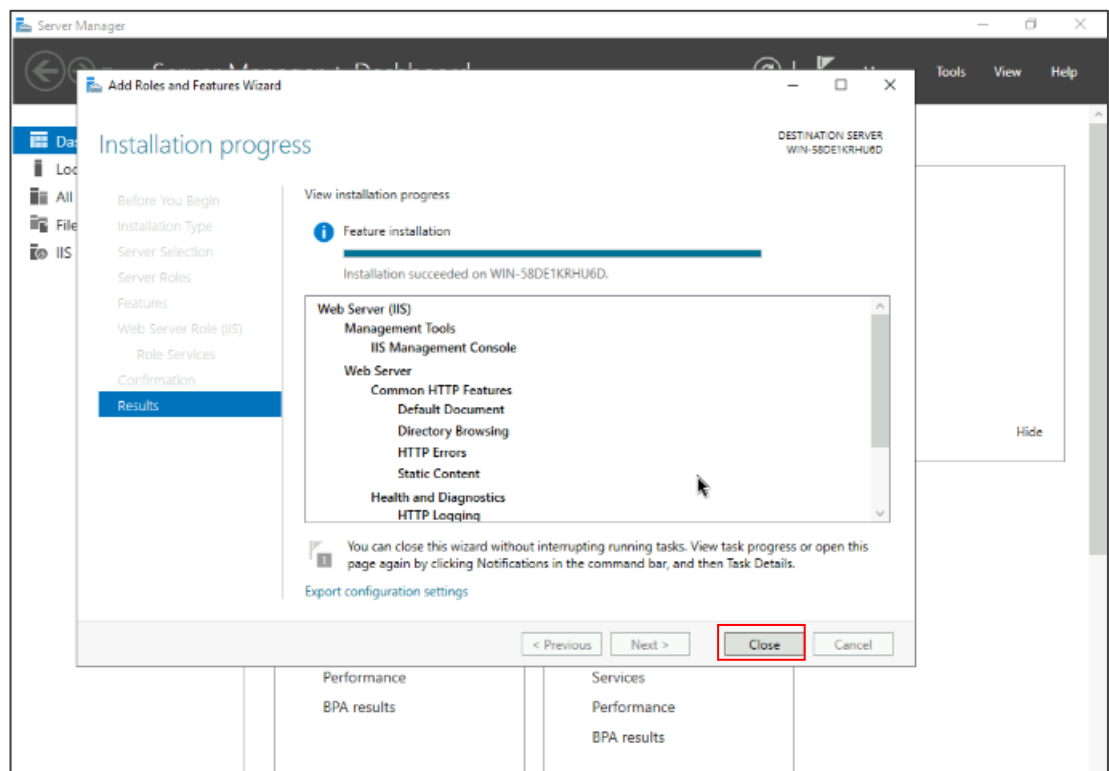

1.13 Click on **Next**

1.14 At the end, click on **Install**
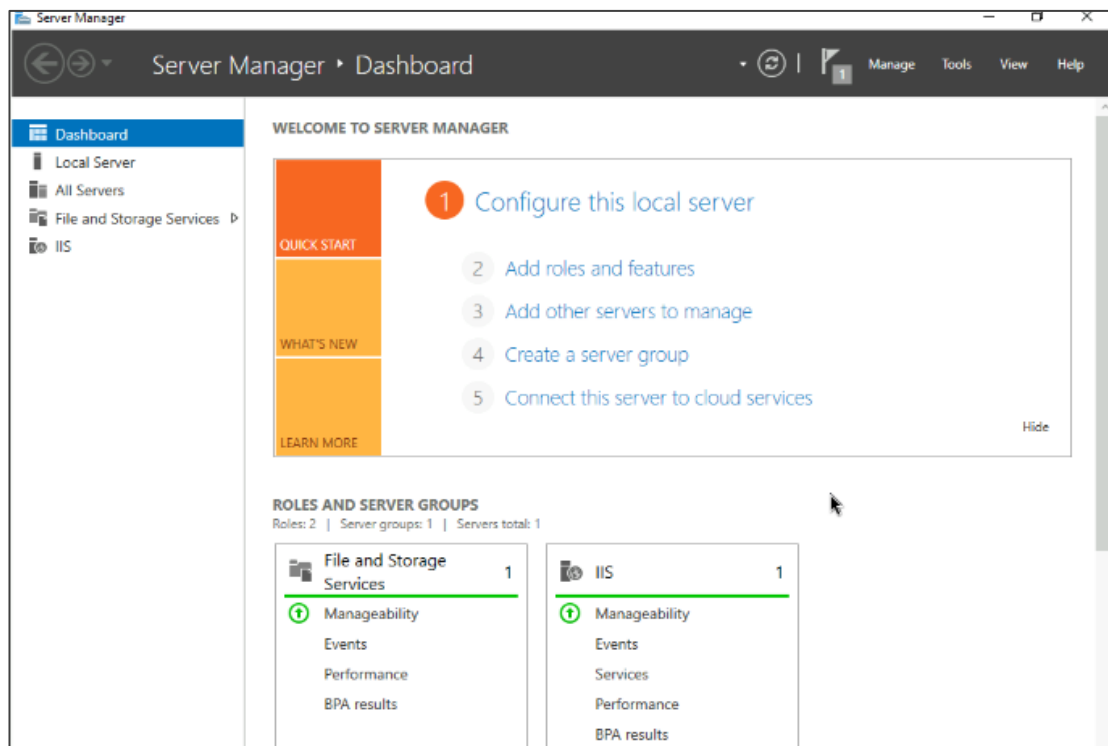

1.15 Then, click on **Close**

Now, the new feature is installed.
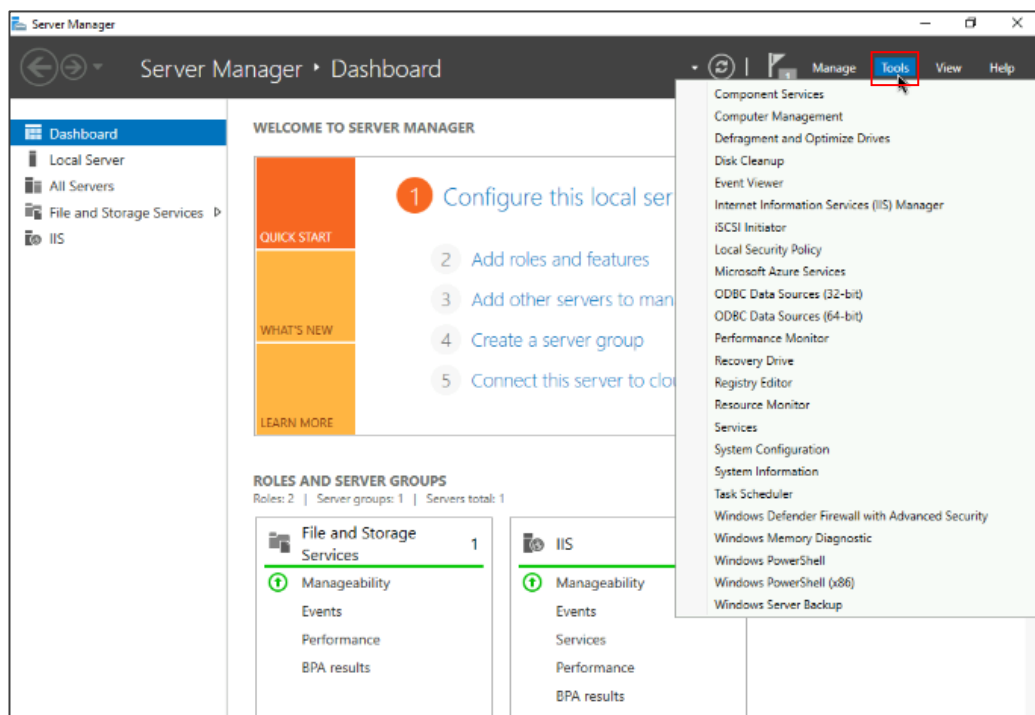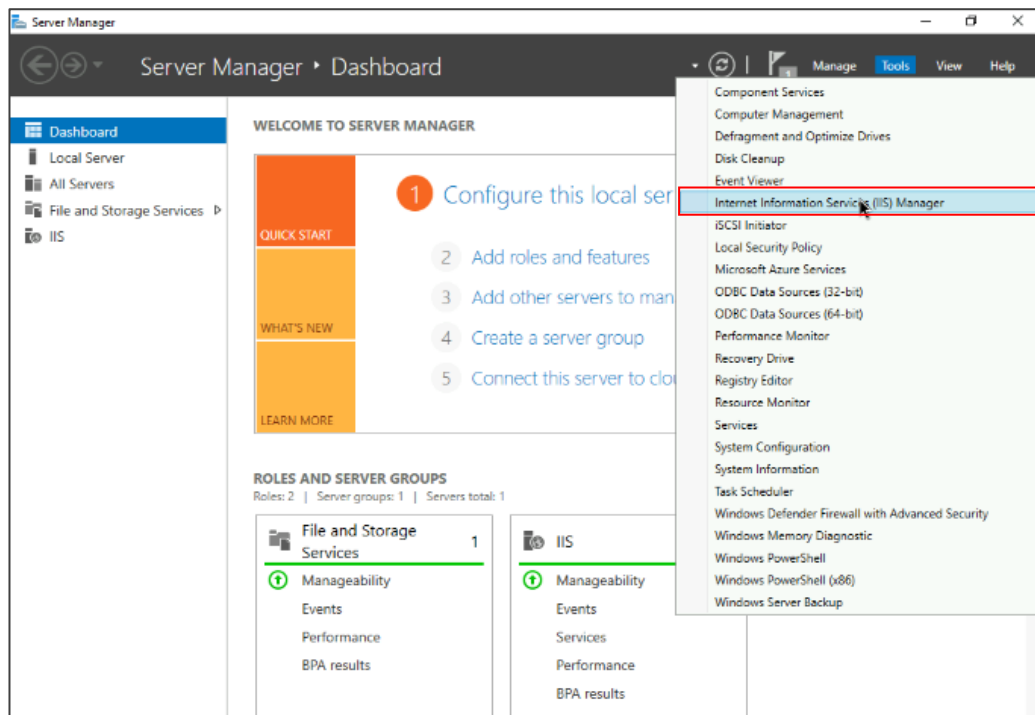
Step 2: Create the website and change the port
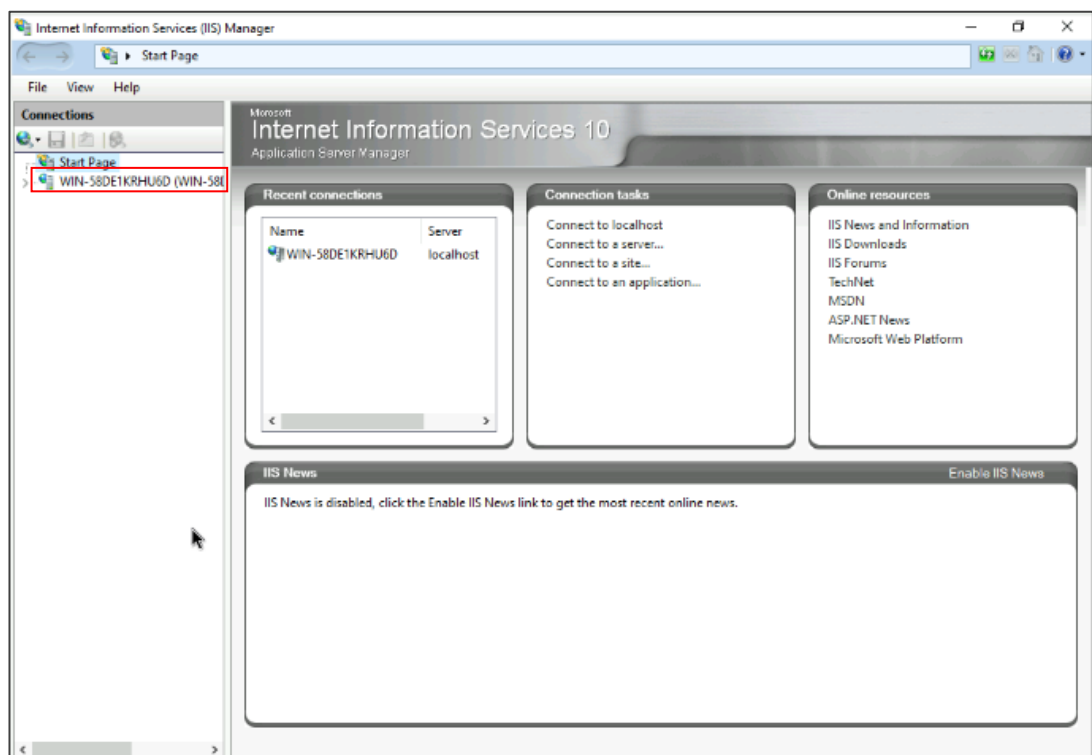
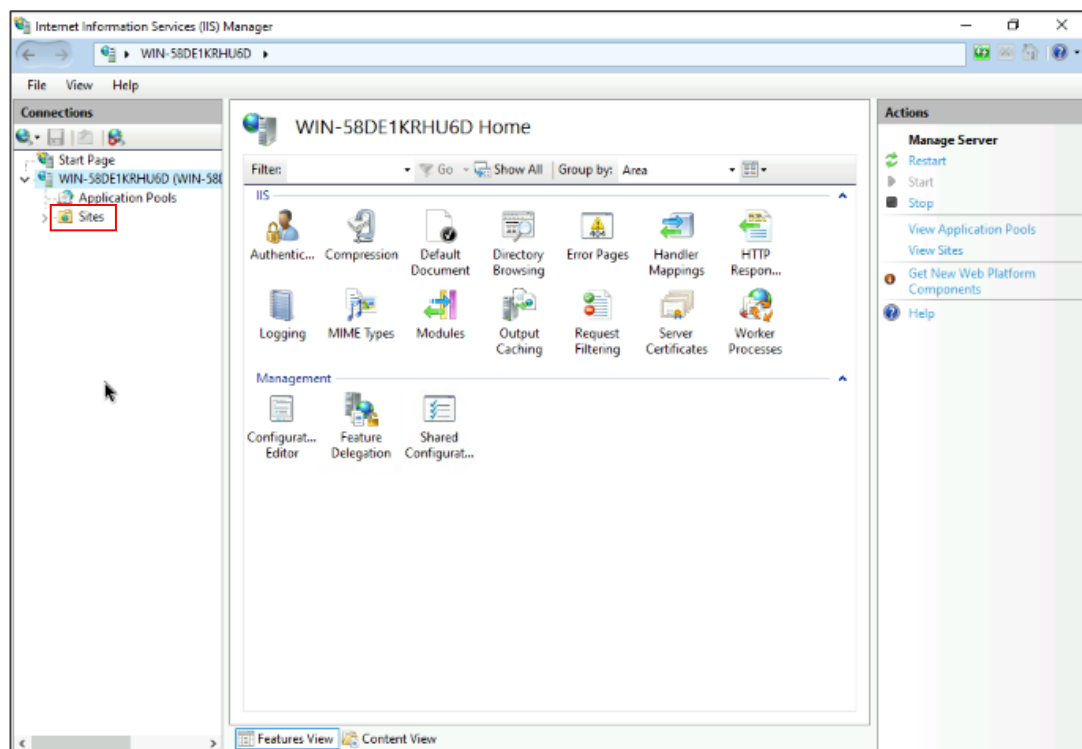### 2.1 Navigate to **Server Manager Dashboard**

2.2 Click on **Tools**

2.3 Click on **Internet Information Service (IIS) Manager**
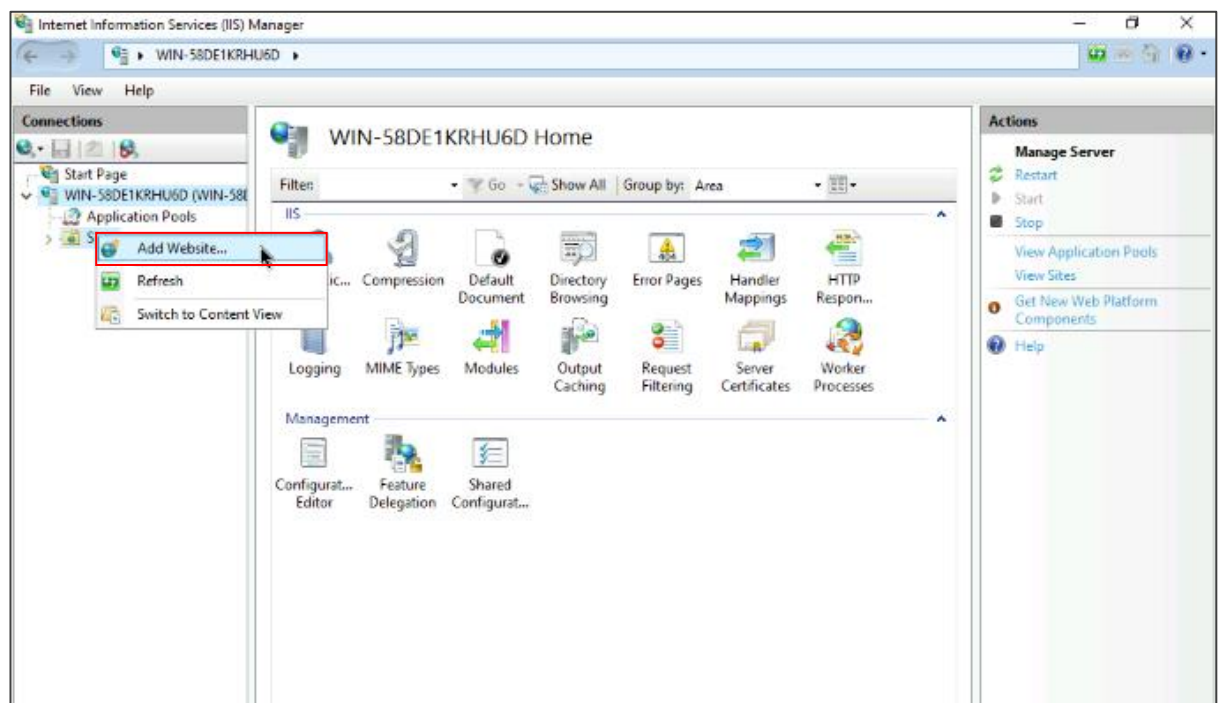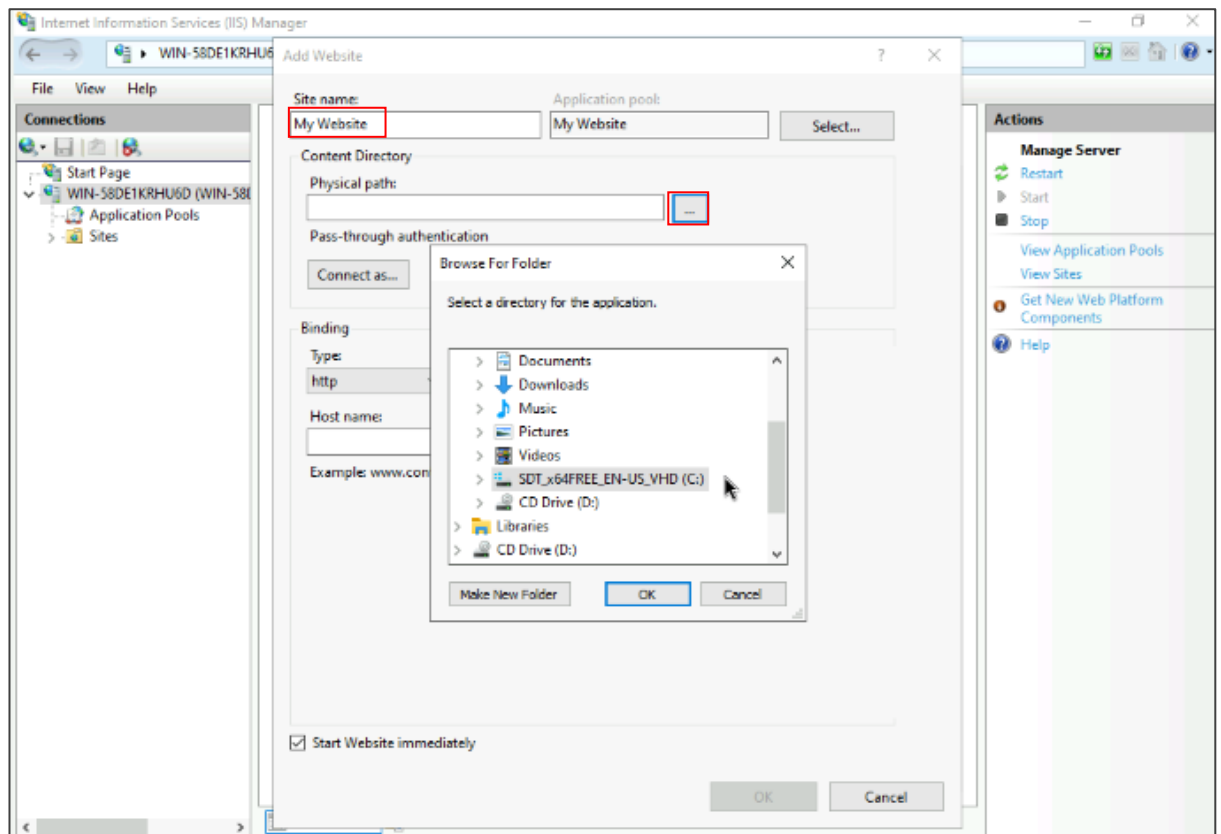

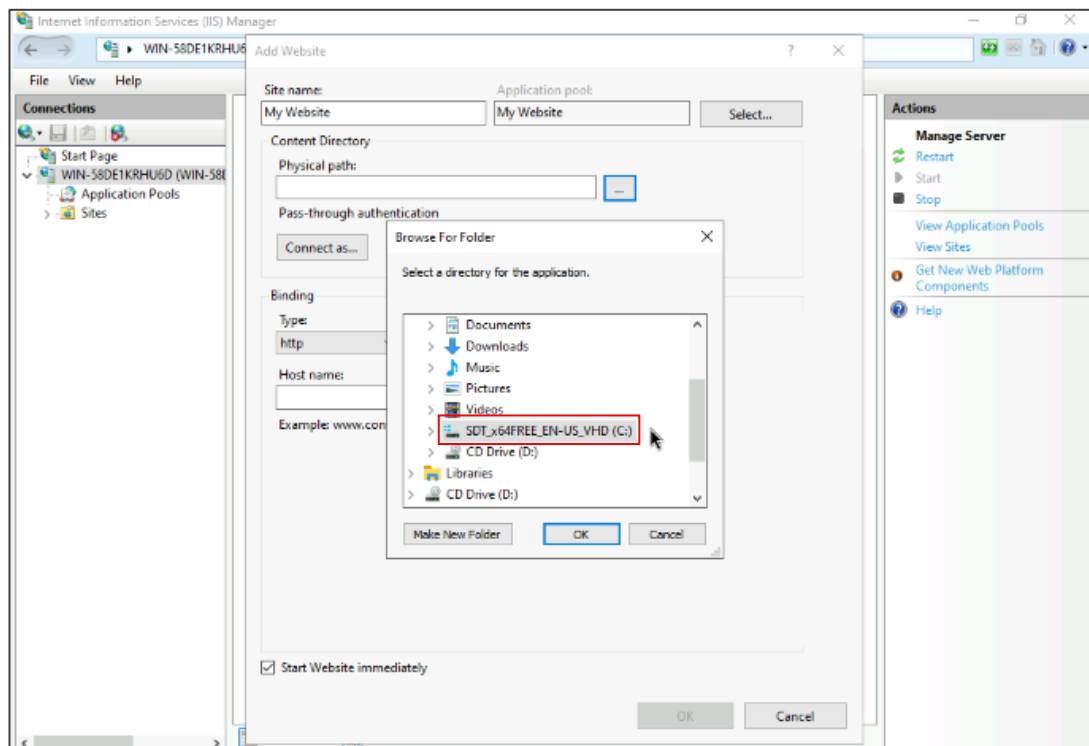2.4 Click on **WIN-58DE1KRHU6D**

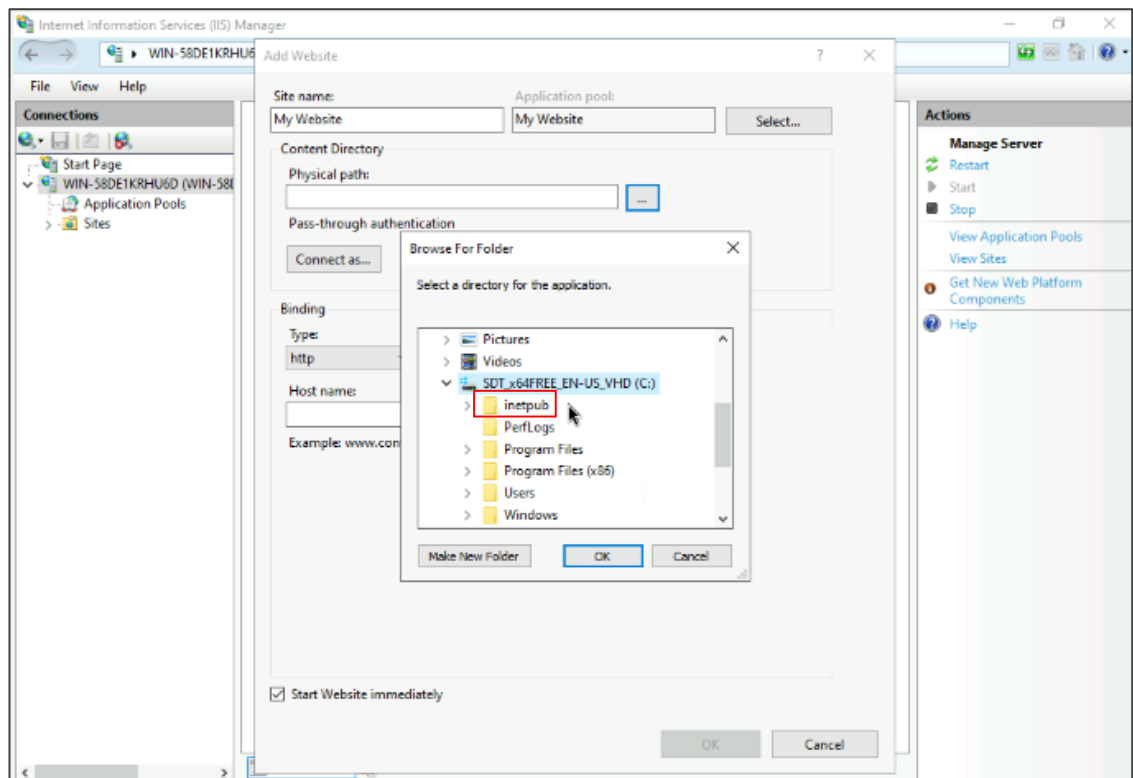2.5 Here, right-click on **Sites**

2.6 Click on **Add Website…**

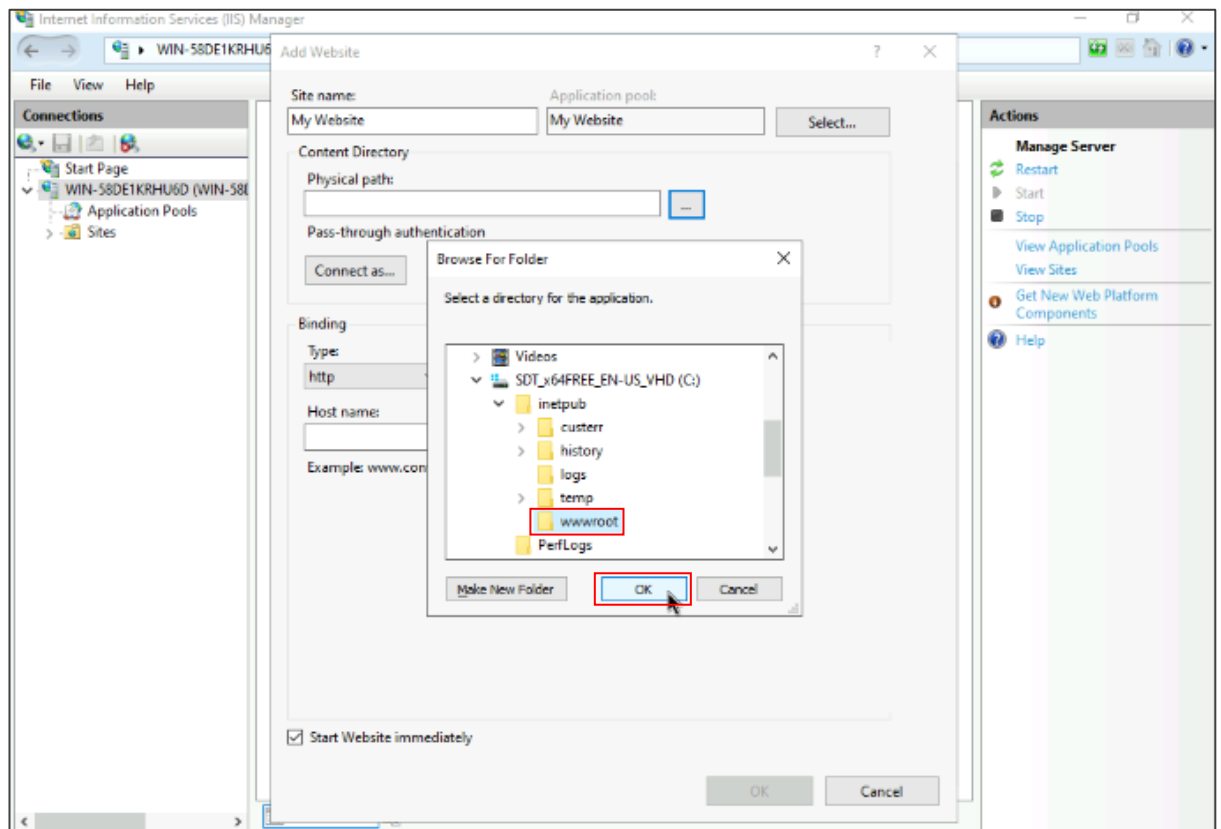2.7 Enter the **Site name** and click on the physical path icon
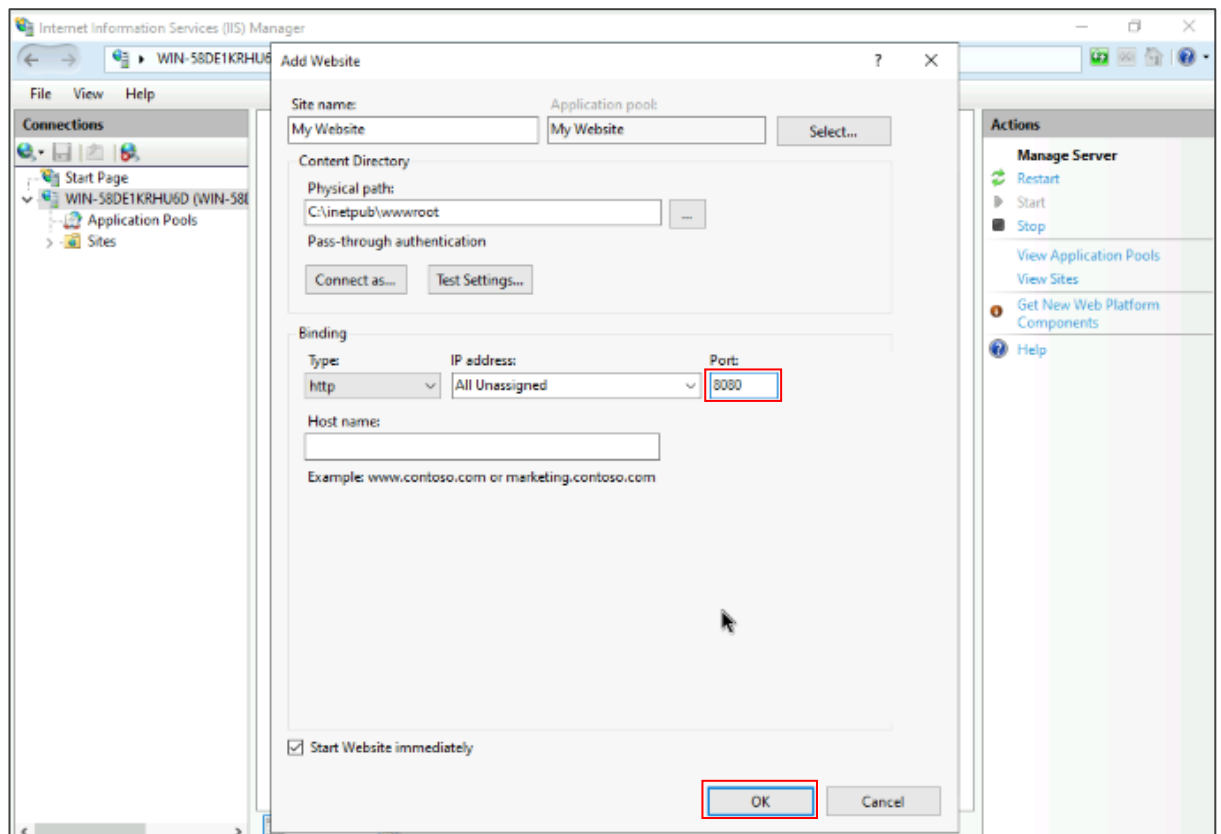

2.8 Click on the **(C:)** drive

2.9 Click on **inetpub**
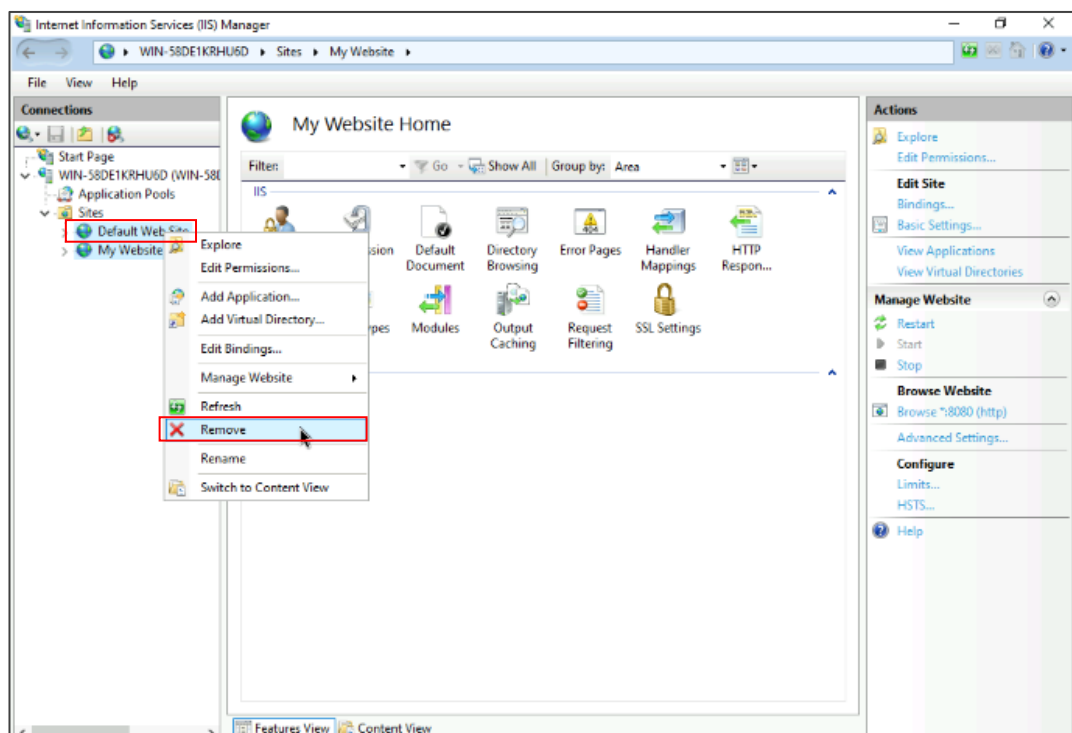

2.10 Here, select **wwwroot** and click on **OK**
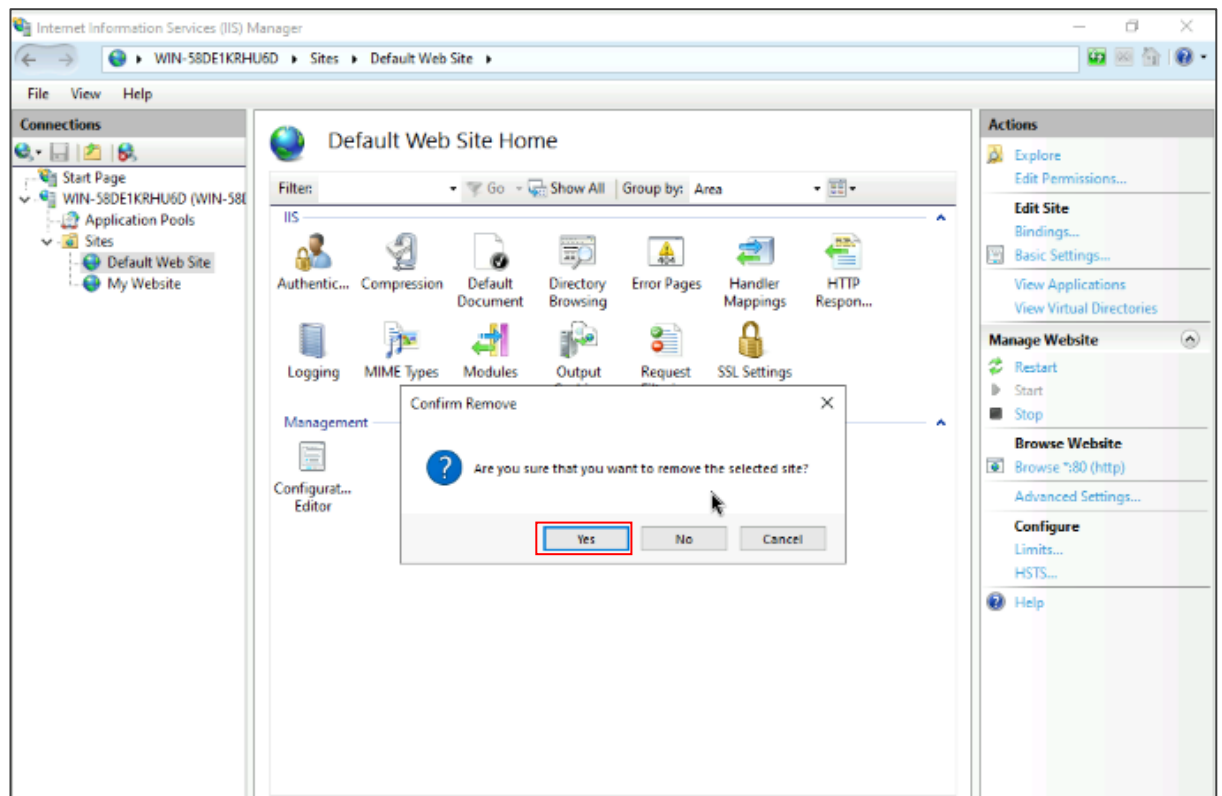
2.11 Enter **8080** in **Port** section and click on **OK**
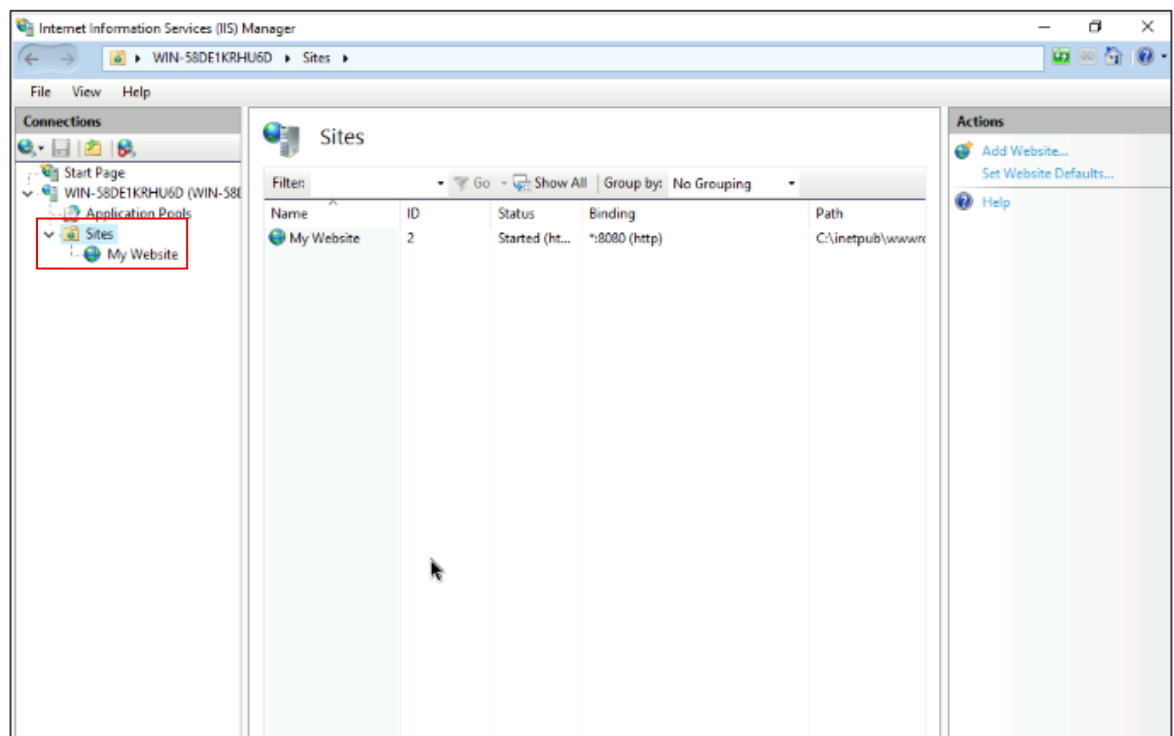

Now, the website is created successfully.

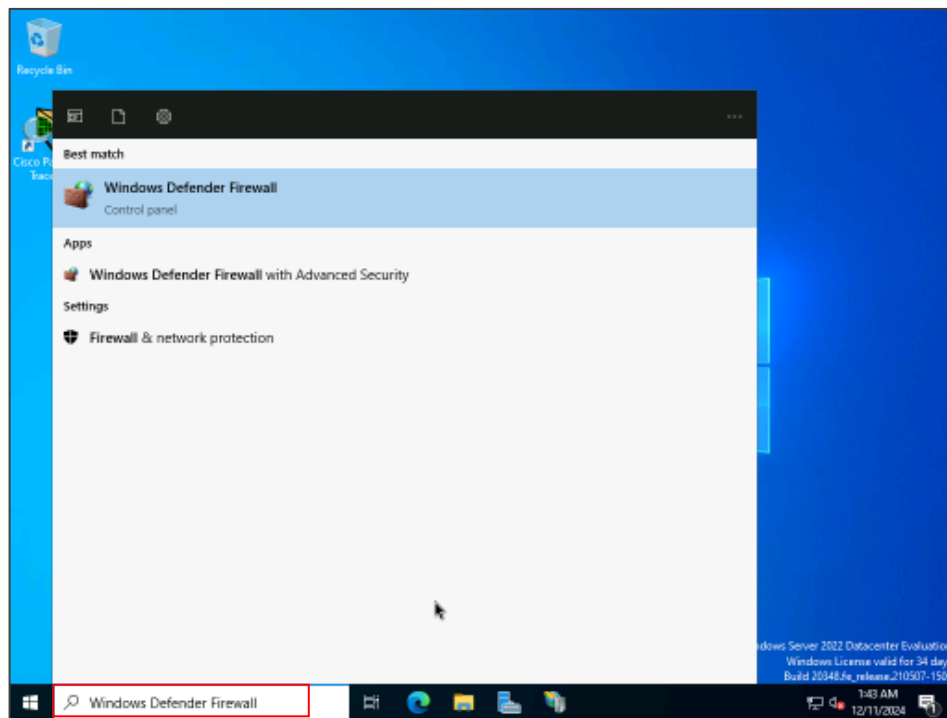2.12 Right-click on **Default Web Site** and click on **Remove**

2.13 Click on **Yes**
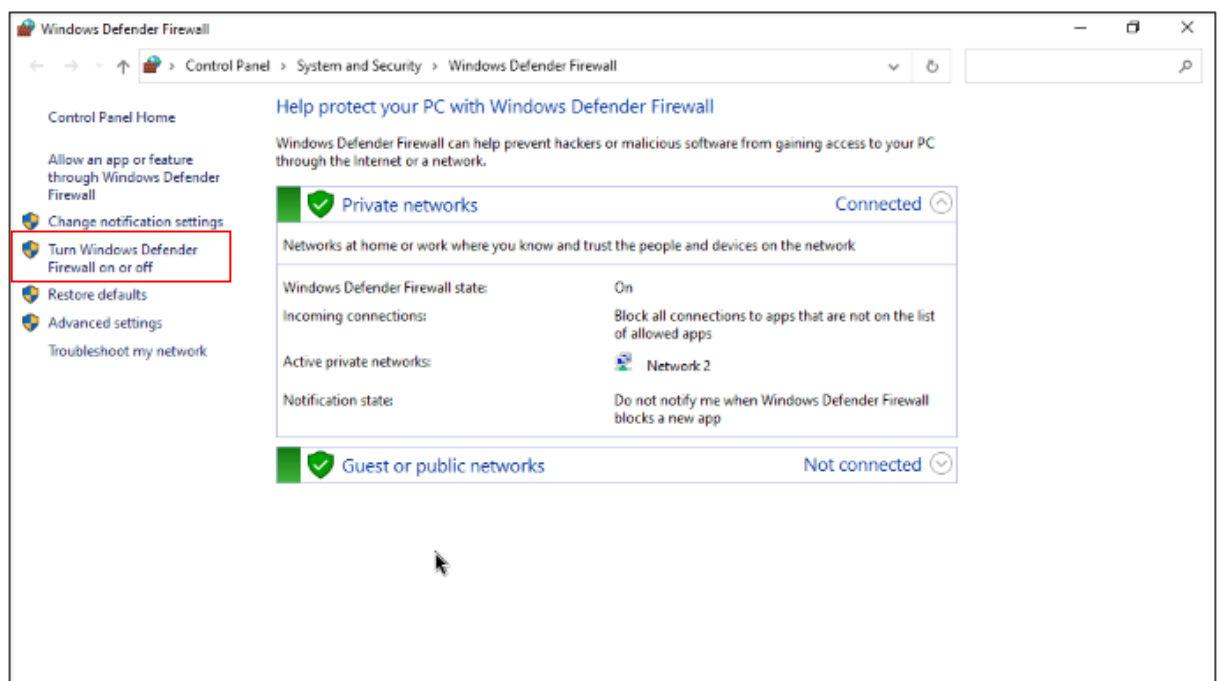

2.14 Verify the **Default Web Site** is removed

Step 3: Configure the firewall to access the web server on a custom port

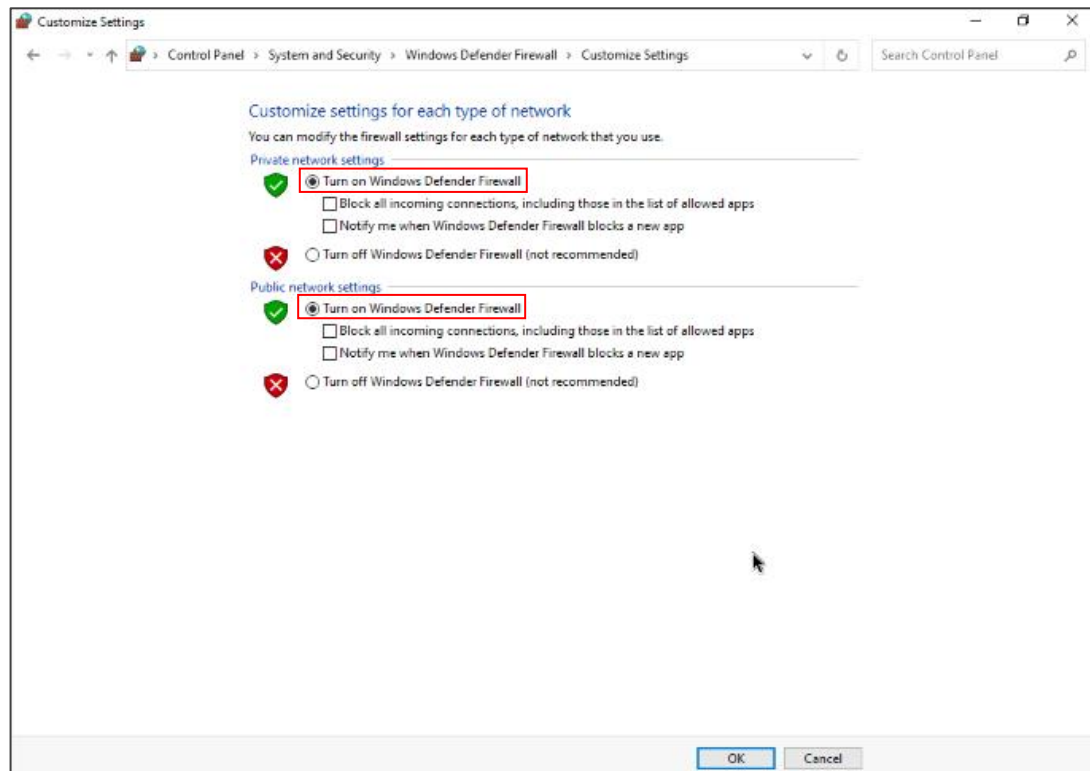3.1 Enter **Windows Defender Firewall** in the search box and press enter
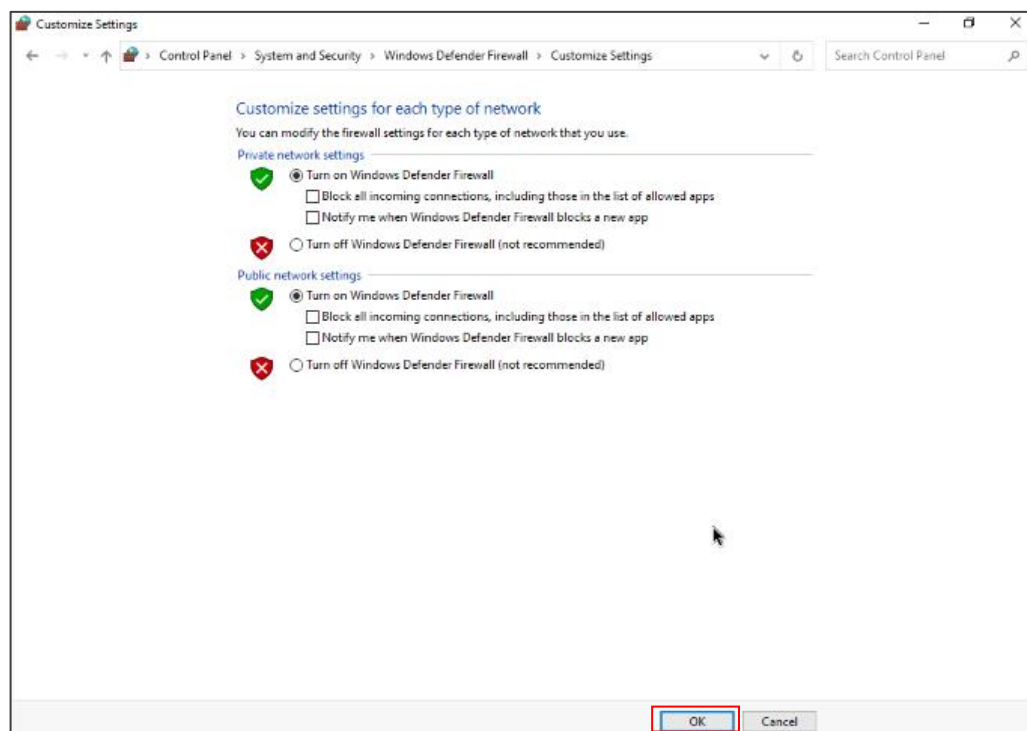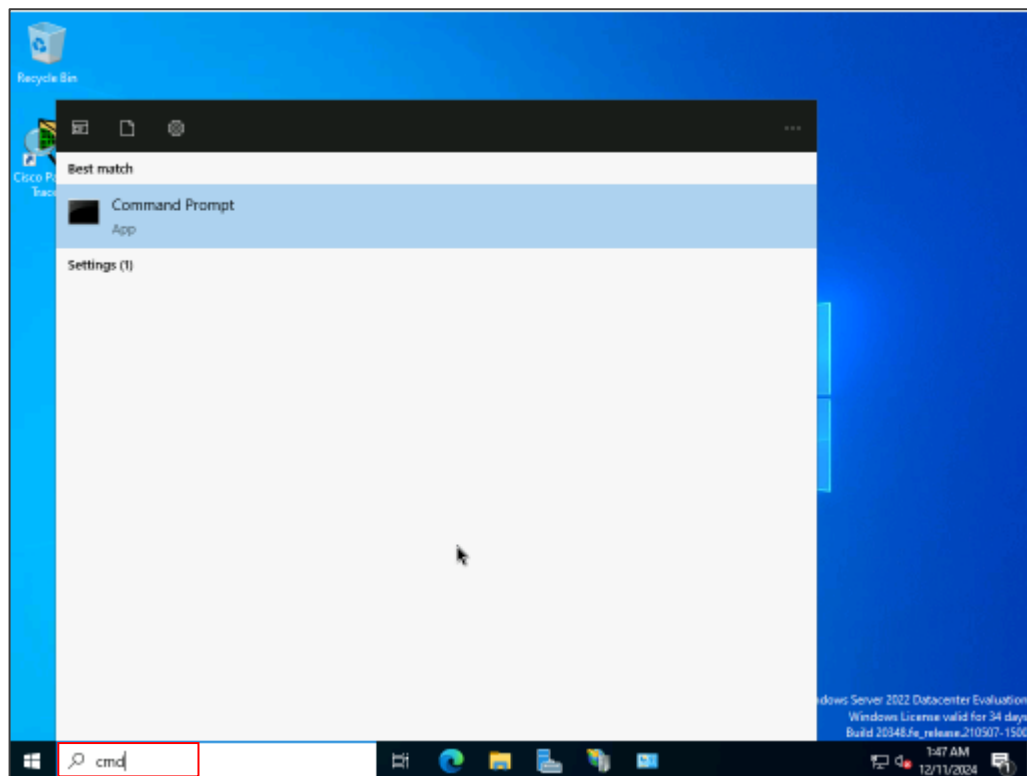

3.2 Click on **Turn Windows Defender Firewall on or off**

3.3 Verify **Turn on Windows Defender Firewall** is selected for both Private and Public network settings

3.4 Click on **OK**

3.5 Search **cmd** in the search box and press enter

3.6 Run the following command:
ipconfig

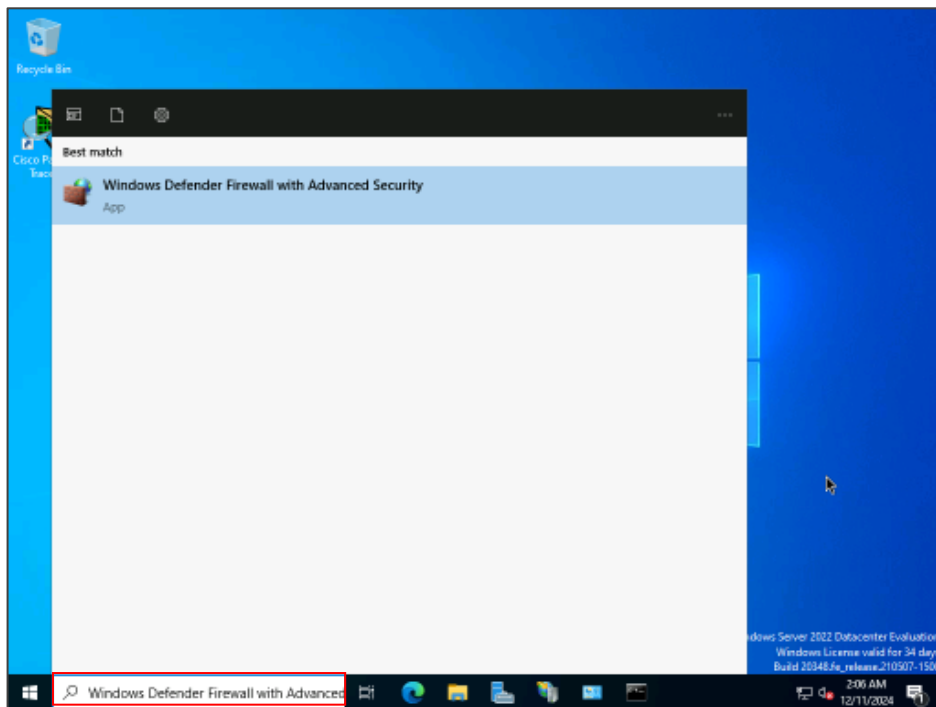3.7 Navigate to **Oracle VM VirtualBox Manager** and select **Kali Virtual Machine**
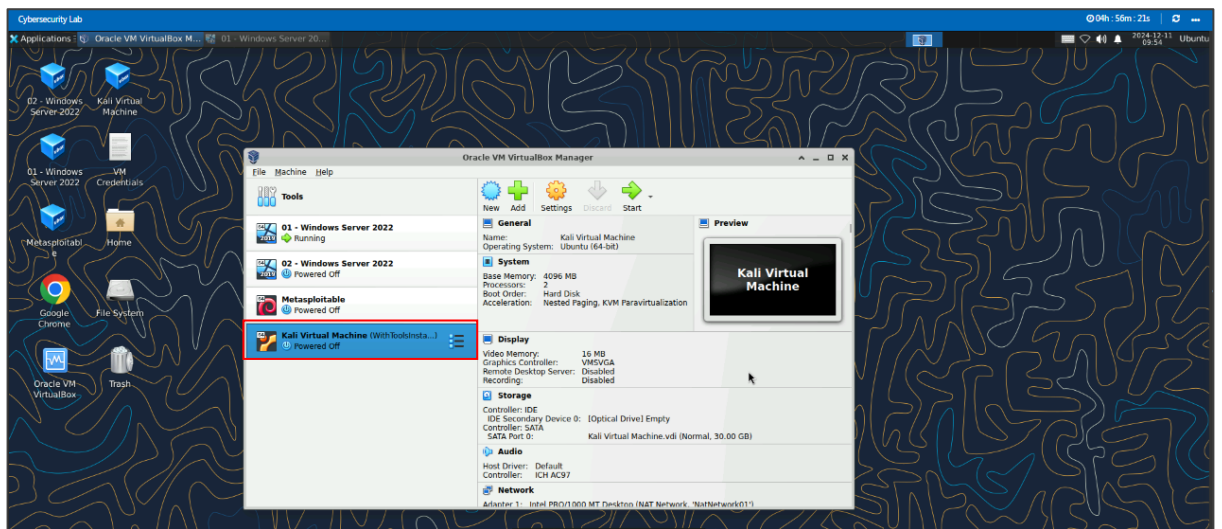
3.8 Navigate to the terminal and run the following command:
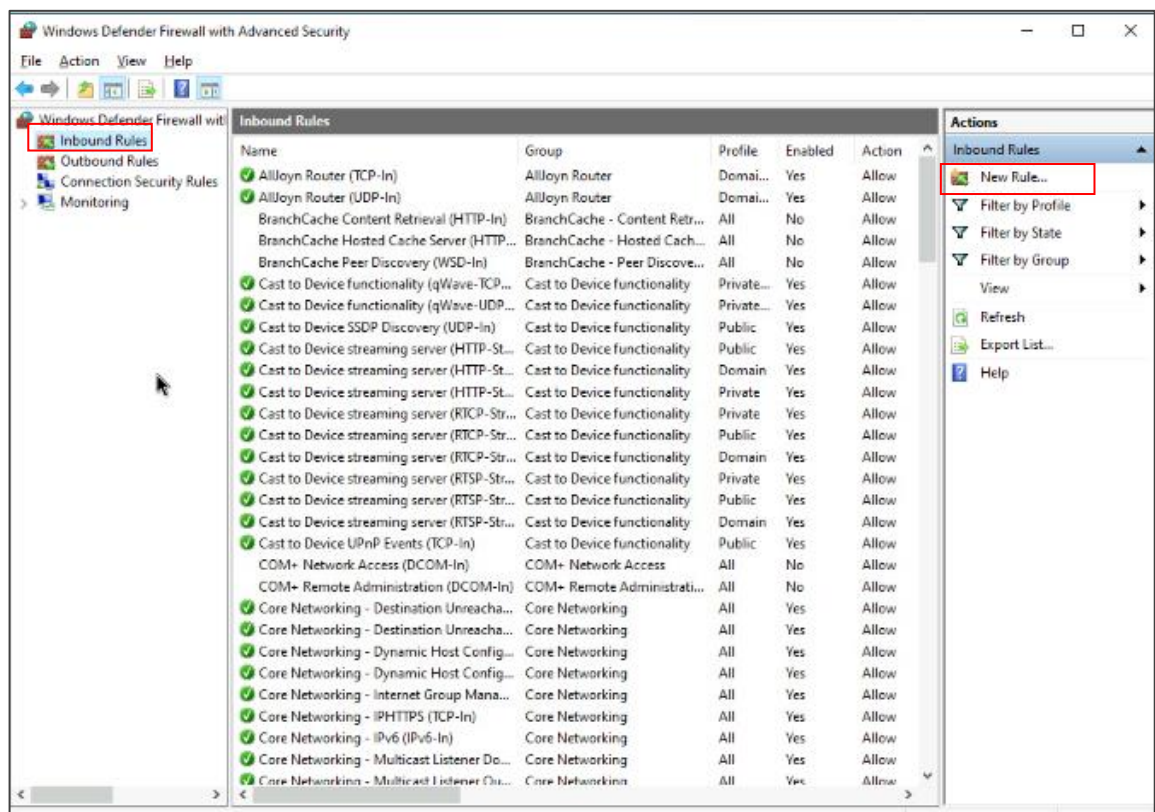**nmap -p 8080 10.0.5.4**
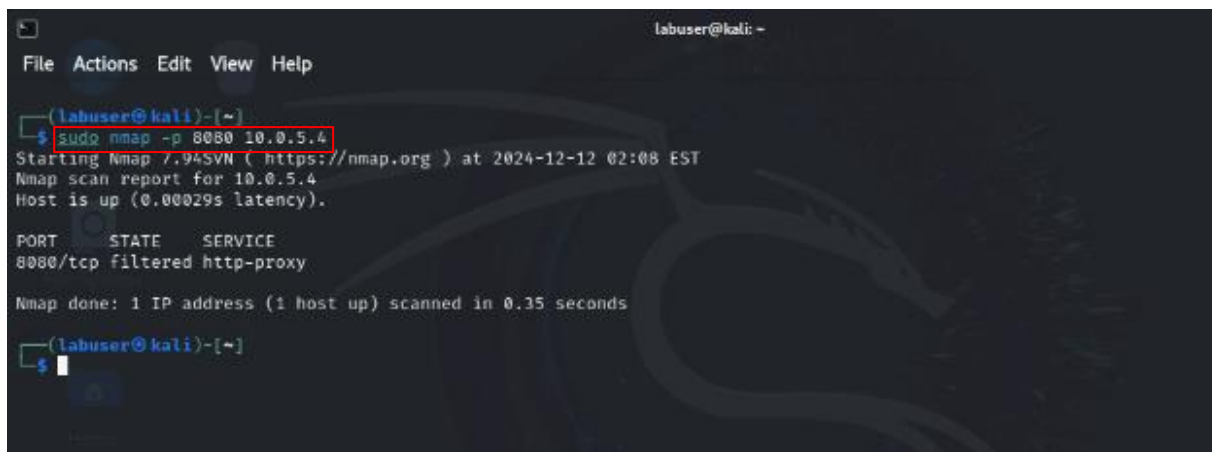
Note: You can see that the state is filtered as the port is protected by the firewall.
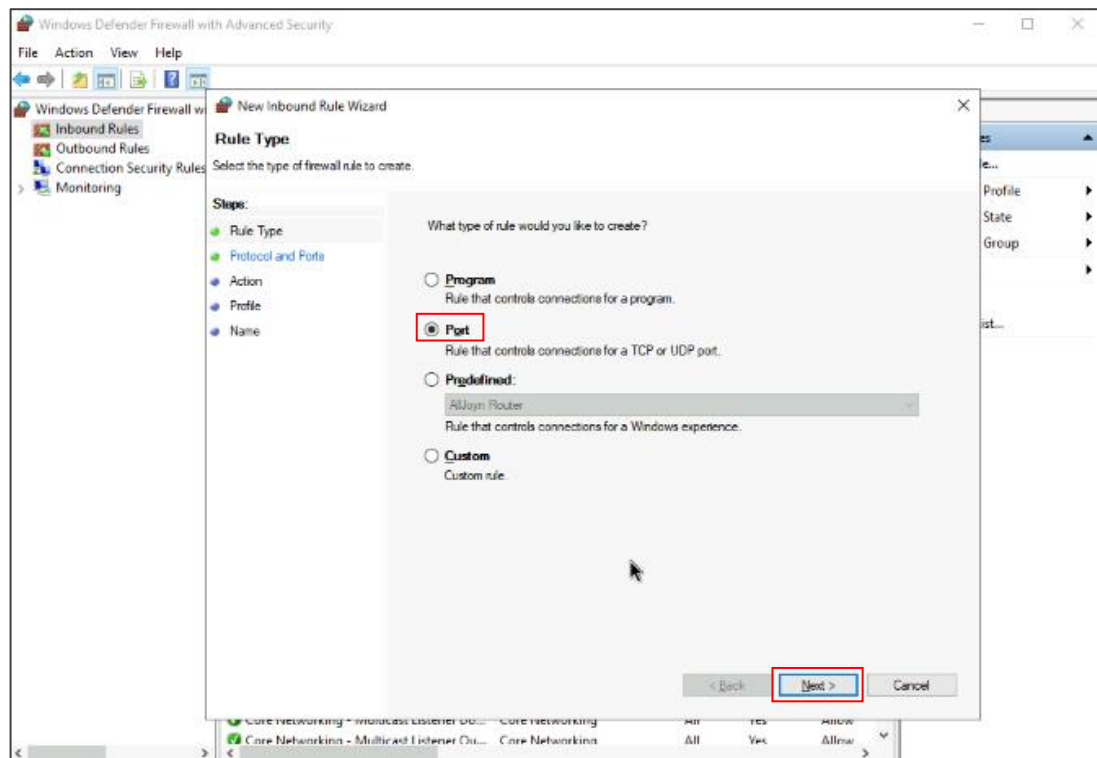
3.9 Enter **Windows Defender Firewall with Advanced Security** in the search box and
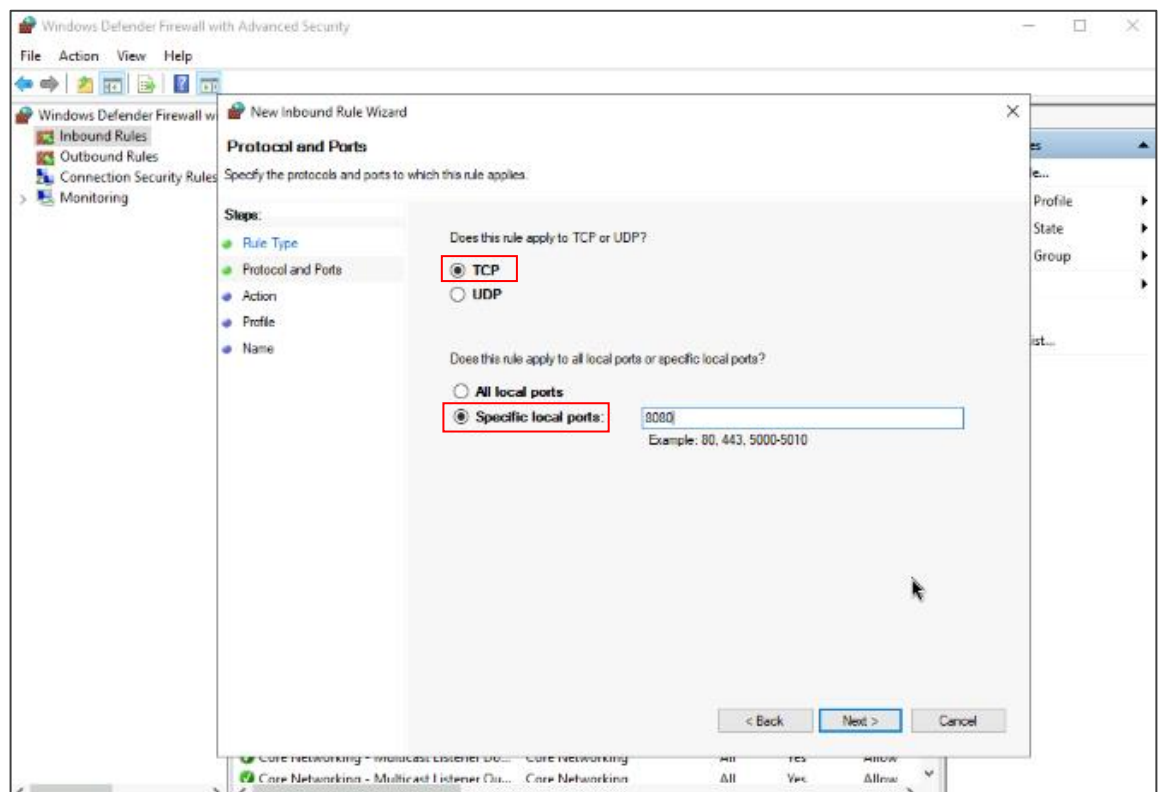   press enter
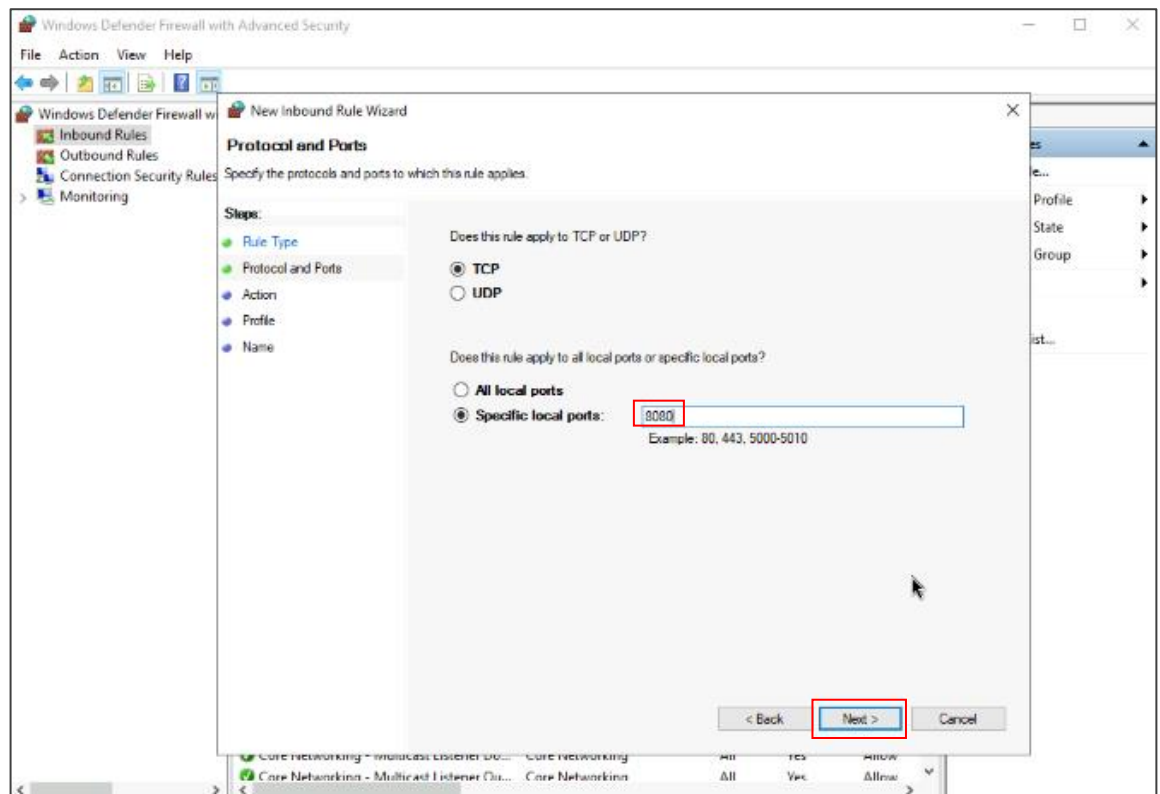

3.10 Select **Inbound Rules** and click on **New Rule…**
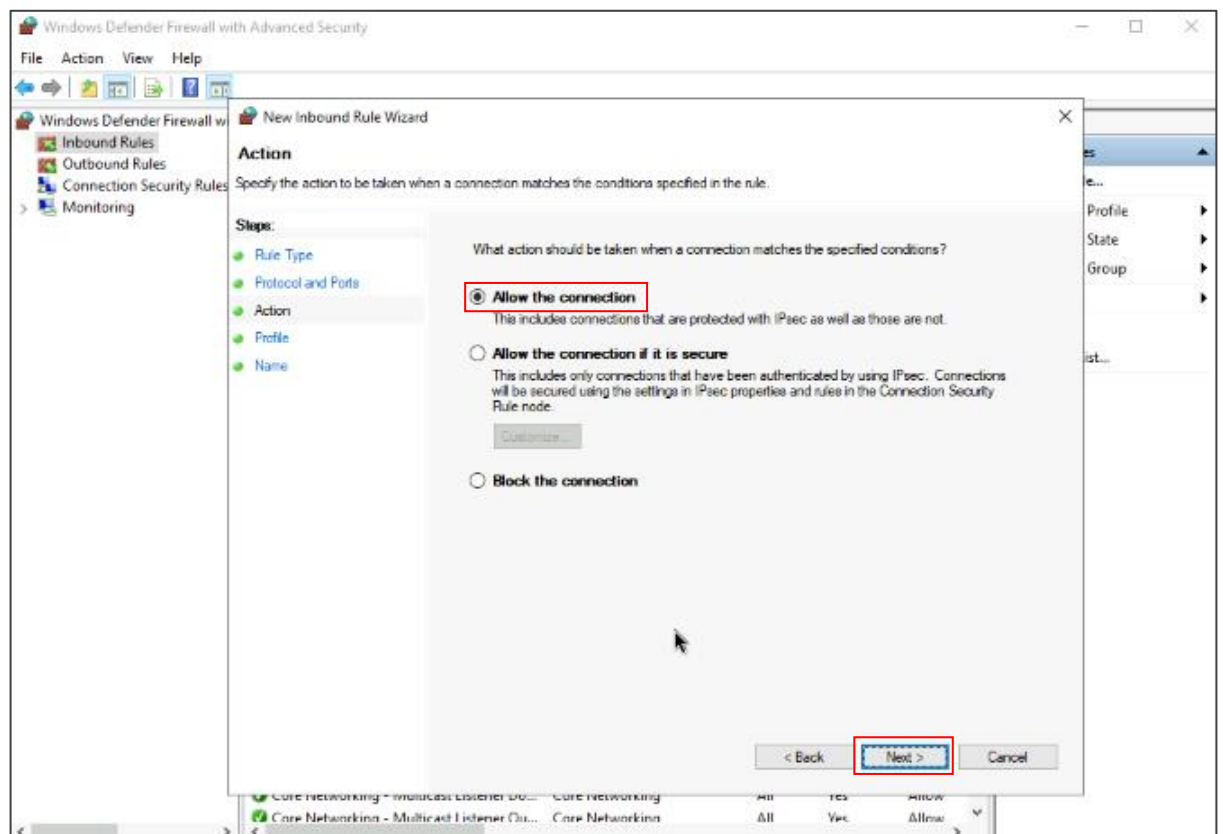
3.11 Select **Port** and click on **Next**
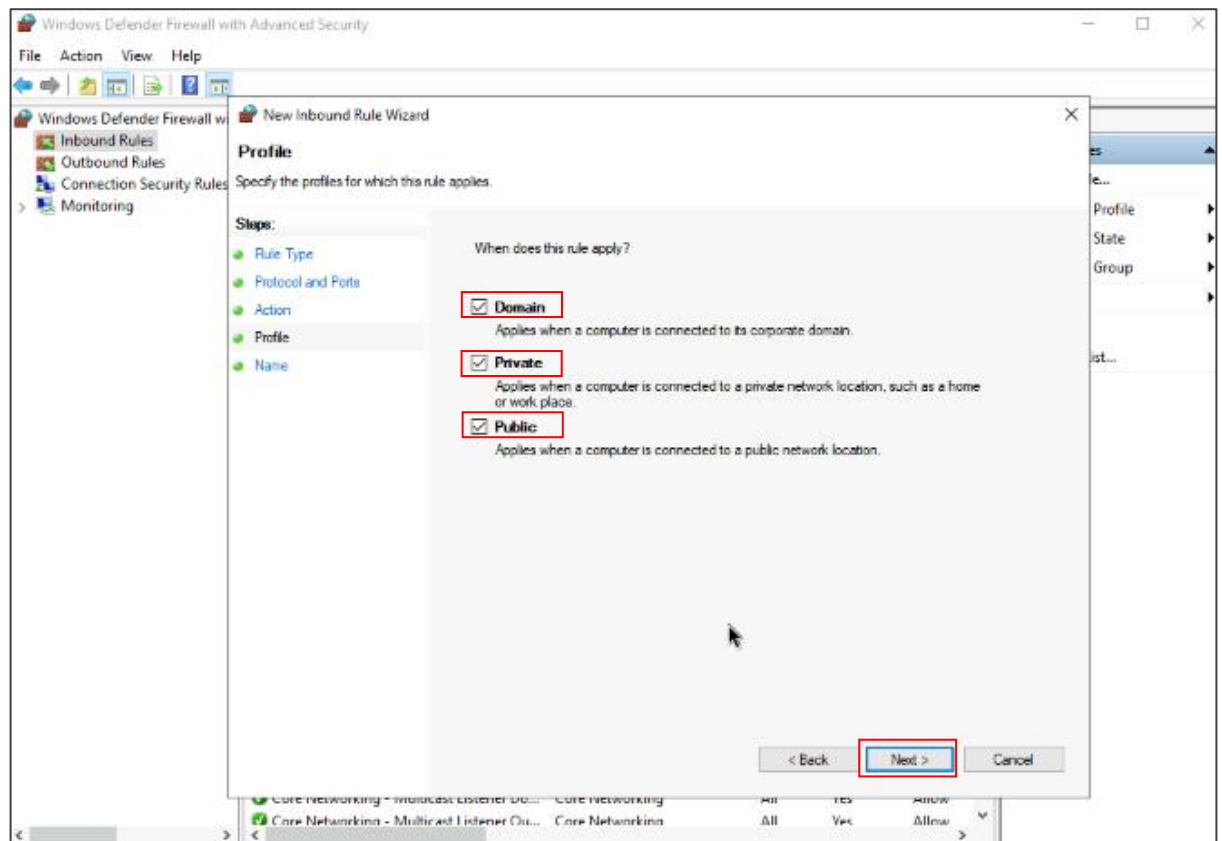

3.12 Select **TCP** and **Specific local ports**

3.13 Enter **8080** in **Specific local ports** and click on **Next**

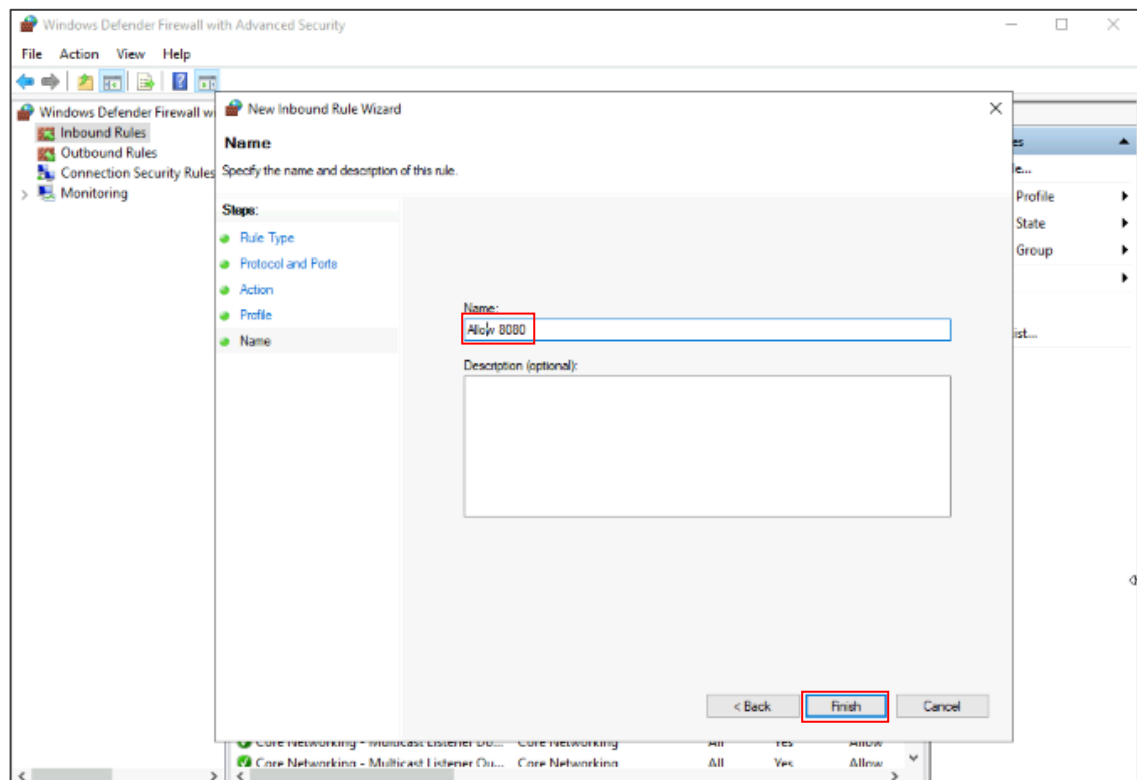3.14 Select **Allow the connection** and click on **Next**

3.15 Select all the checkboxes and click on **Next**
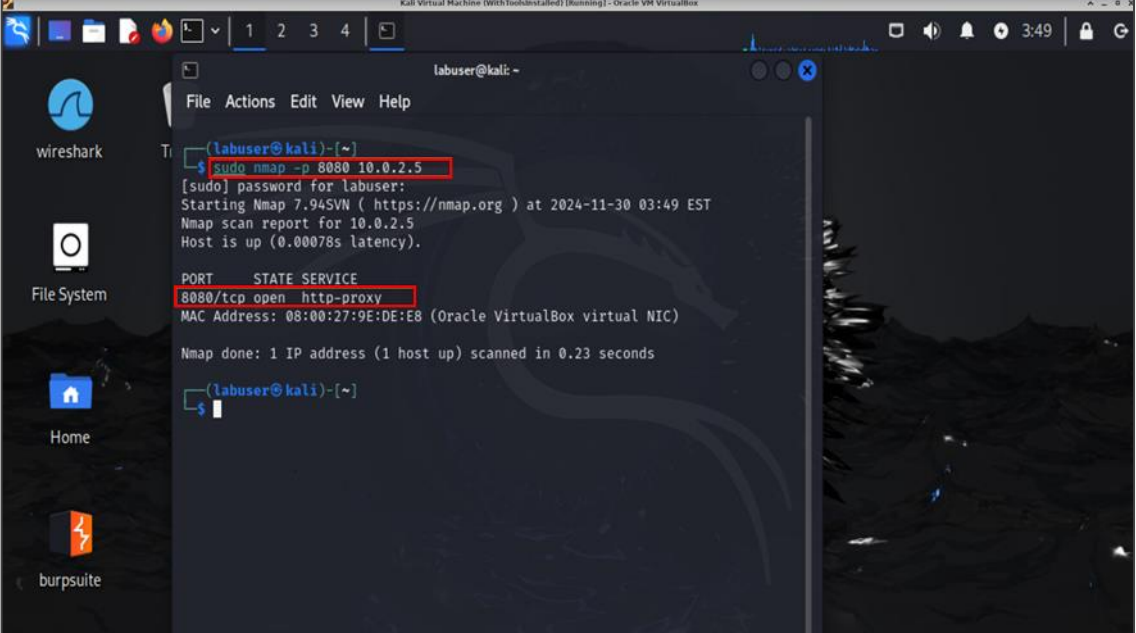

3.16 Enter the preferred rule **Name** and click on **Finish**

3.17 Navigate to the Kali Linux terminal and run the following command
nmap -p 8080 10.0.2.5

By following the above steps, you have successfully installed and configured Internet Information Services (IIS) on Windows Server 2022, created a custom website on port 8080, and set up the necessary firewall rules to allow external access to the web server.