LONDON METROPOLITAN UNIVERSITY

informatics
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Module Code & Module Title

Level 5 – CT5052NP

Assessment Type

Logbook Four

Semester

2023/24 Spring/Autumn

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Assignment Due Date: November 30, 2024

Assignment Submission Date: November 30, 2024

Submitted To: Prasant Adhikari

Word Count (Where Required): 900

Contents

Table of Figures

INTRODUCTION

This log is about hosting a Static Website, where we will be using IIS, Server Website, and Static Website. Internet Information Services (IIS) provides a request processing architecture to enable sites to use protocols other than HTTP and HTTPS, using Windows Process Activation Service (WAS). It is a flexible, secure and manageable web server developed by Microsoft for hosting websites, services, and applications. It a webserver engine that can be customized by adding or removing modules. (Microsoft, 2024) (Microsoft, 2024)

Server Website is a web platform that is hosted on a server. Where the server processes requests from users, delivers files, and provides services, enabling access to webpages and applications via internet or intranet. Website server mainly handles static page processing and acts as a servlet container, interpreting and executing servlet/JSP, while application server runs business logic mainly Apache, nginx, IIS. (Alibaba Cloud, 2022)

Static Website is made up of web pages created using HTML, CSS and JavaScript. It is a web platform consisting of prewritten, fixed content displayed the same wat to every user. They don't interact with databases or require server-side processing. It is simple to develop and host, has fast loading times, is Cost-effective for small-scale uses. And it lacks interactivity or personalized content and challenging to update frequently. Examples portfolio sites, simple company landing pages, or information blogs. (Wix, 2024)

Dynamic website is a platform that generates and serves content dynamically based on user interactions or database queries. All the data and content are organized in a database or backend content management system (CMS), which connects to your website pages. It helps to personalized user experiences, updates on content can be seen on real time, and scalability for large-scale applications is made easy. On the other hand, it is more complex to develop and maintain and has higher server resource requirements. Examples social media platforms, e-commerce websites, or news portals. (Wix, 2024)

OBJECTIVE

The objective of this Log is to install and configure roles and features in Windows Server 2022 to host a static website using the IIS (Internet Information Services) roles.

Requirements

Download a static website template from www.free-css.com

Extract the template files and copy them to a folder in the C: drive.

Access to a Windows Server 2022 system.

TOOLS AND RESOURCES

Windows Server 2022: The server OS where the website will be hosted.

Internet Information Services (IIS): A web server feature for hosting websites.

Notepad: For editing the host's file.

Downloaded Website Template: Source files for the static website.

STEPS

Installing the Web Server (IIS) Role

a. Open Server Manager on Windows Server.
b. Click on Add Roles and Features.
c. Select Role-based or feature-based installation and click Next.
d. On the "Server Selection" screen, Keep the default server and click Next.
e. Tick the Web Server (IIS) role and confirm by clicking Add features when prompted.
f. Click Next through the subsequent screens, leaving the default values unchanged.
g. Enable the option to restart the server automatically if required, then click Install.
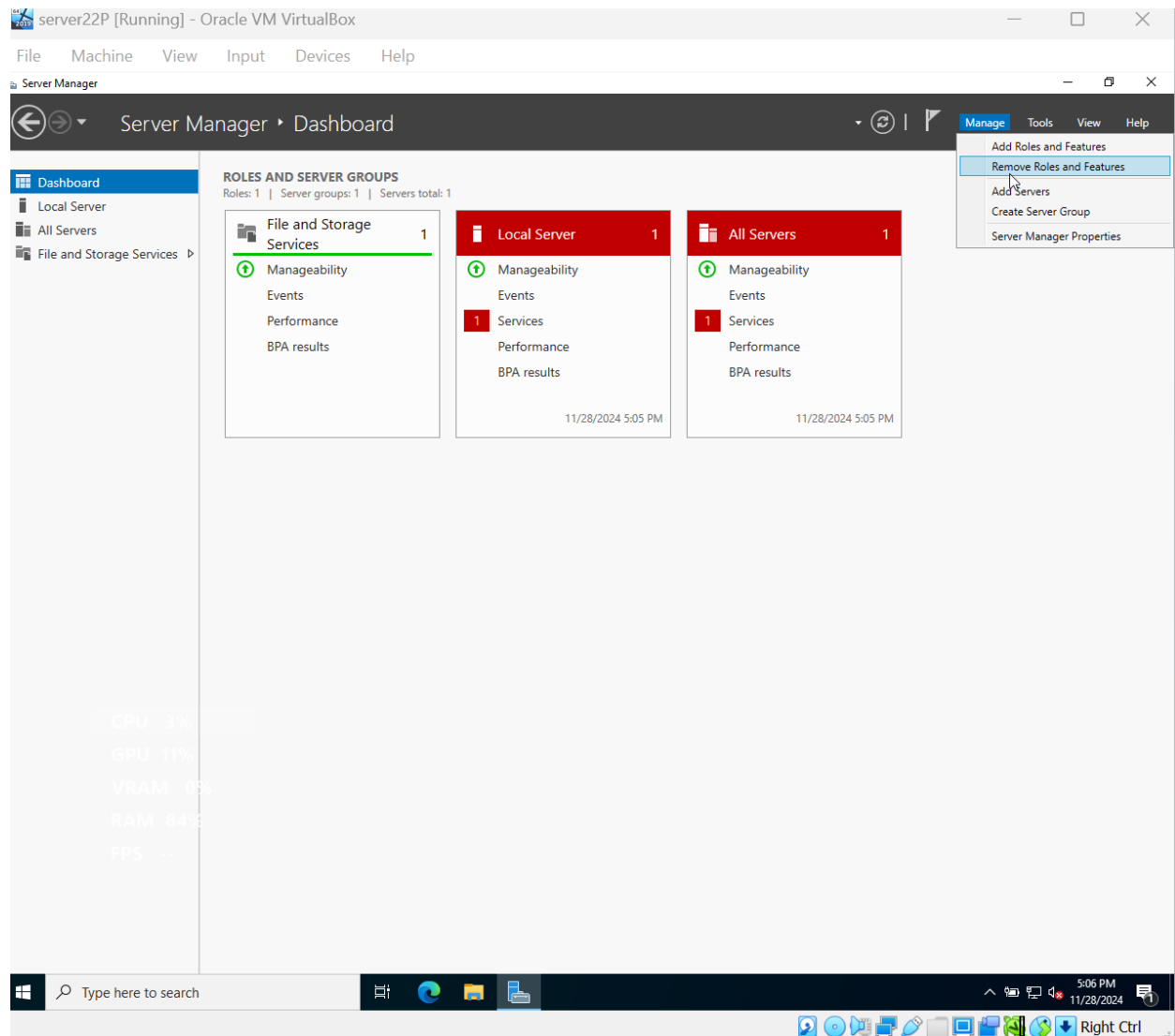h. Wait for the installation to complete. This may take a few minutes.
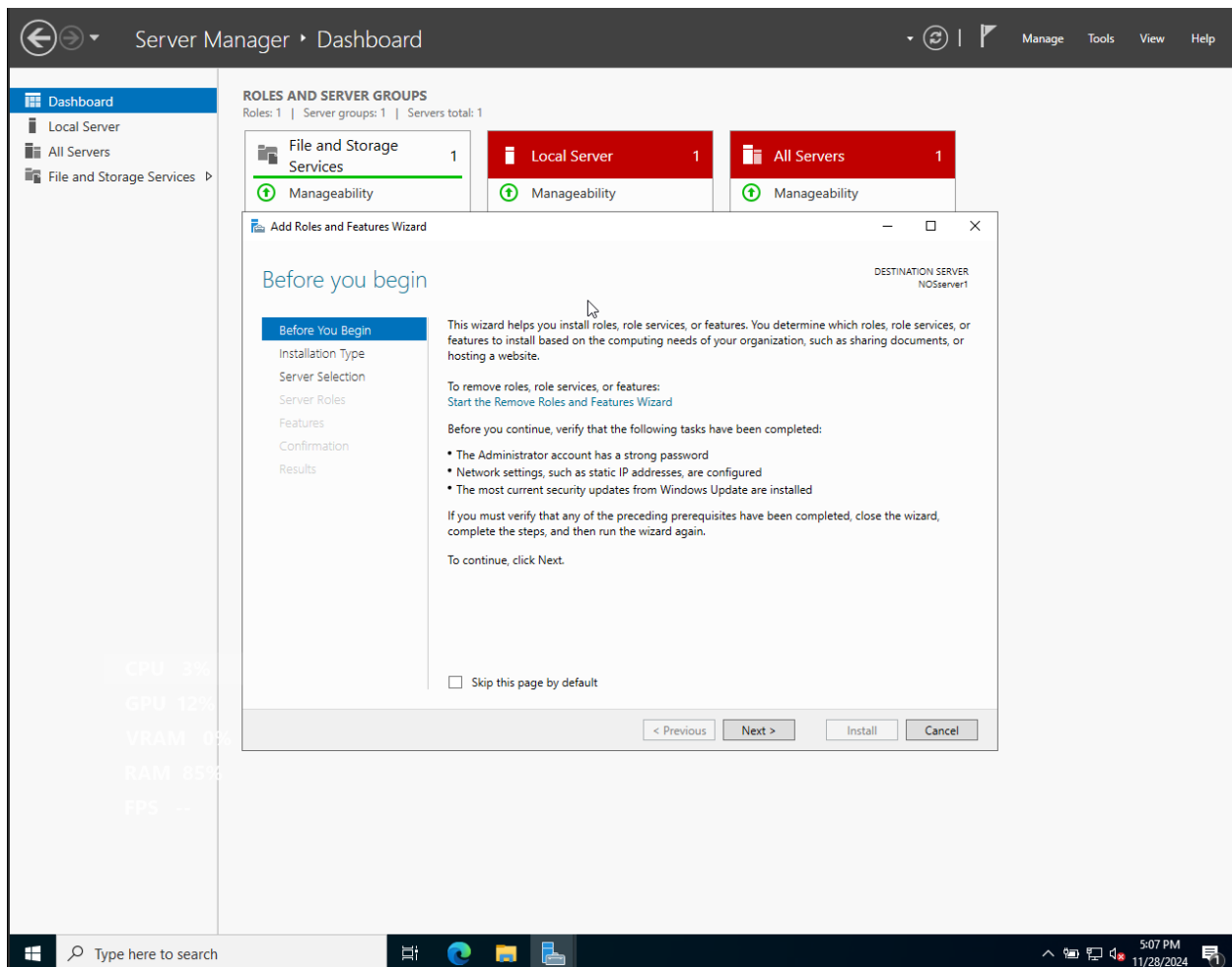
Figure 1: Server Manager Dashboard
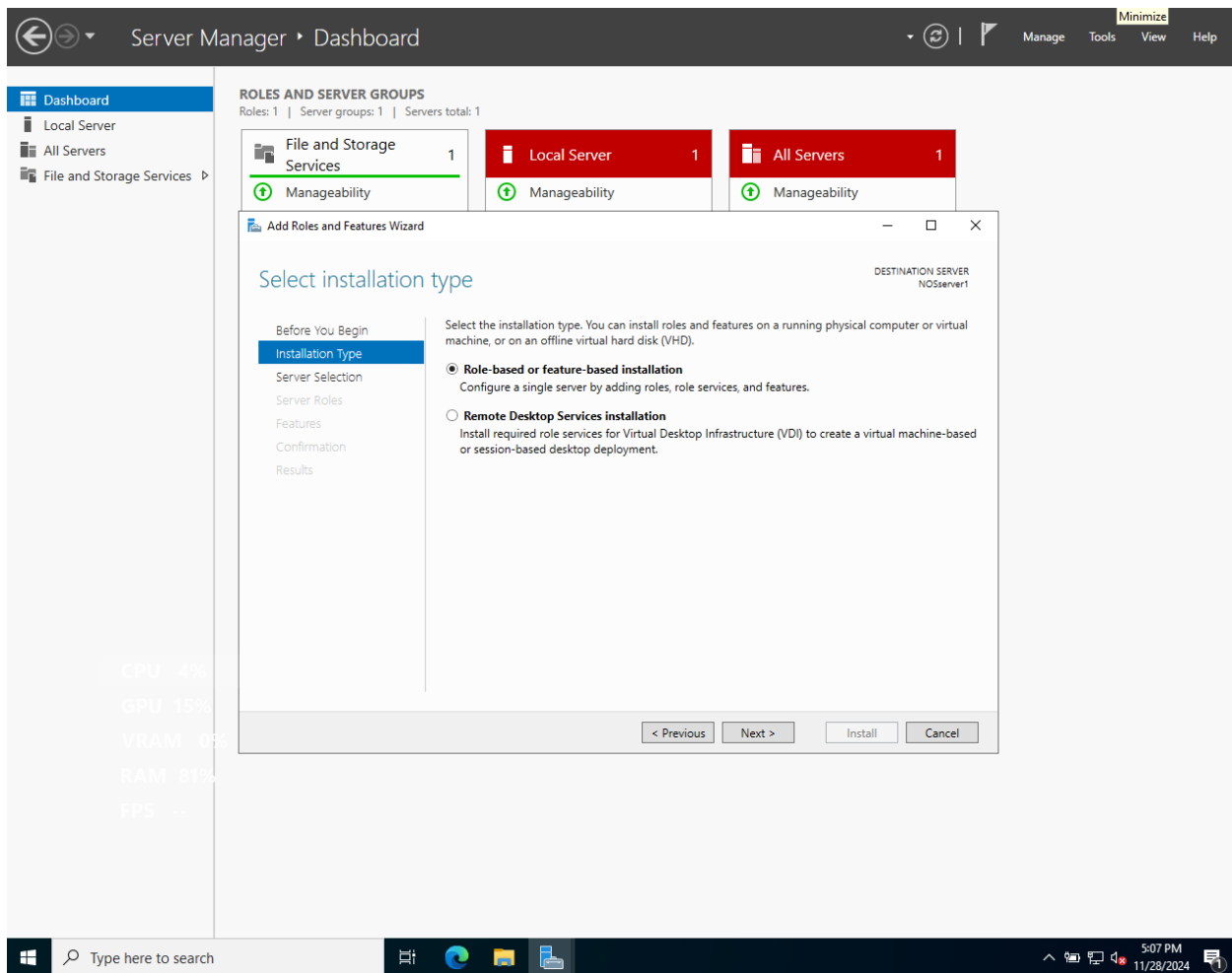
Figure 2: Adding Roles and Features to the Server

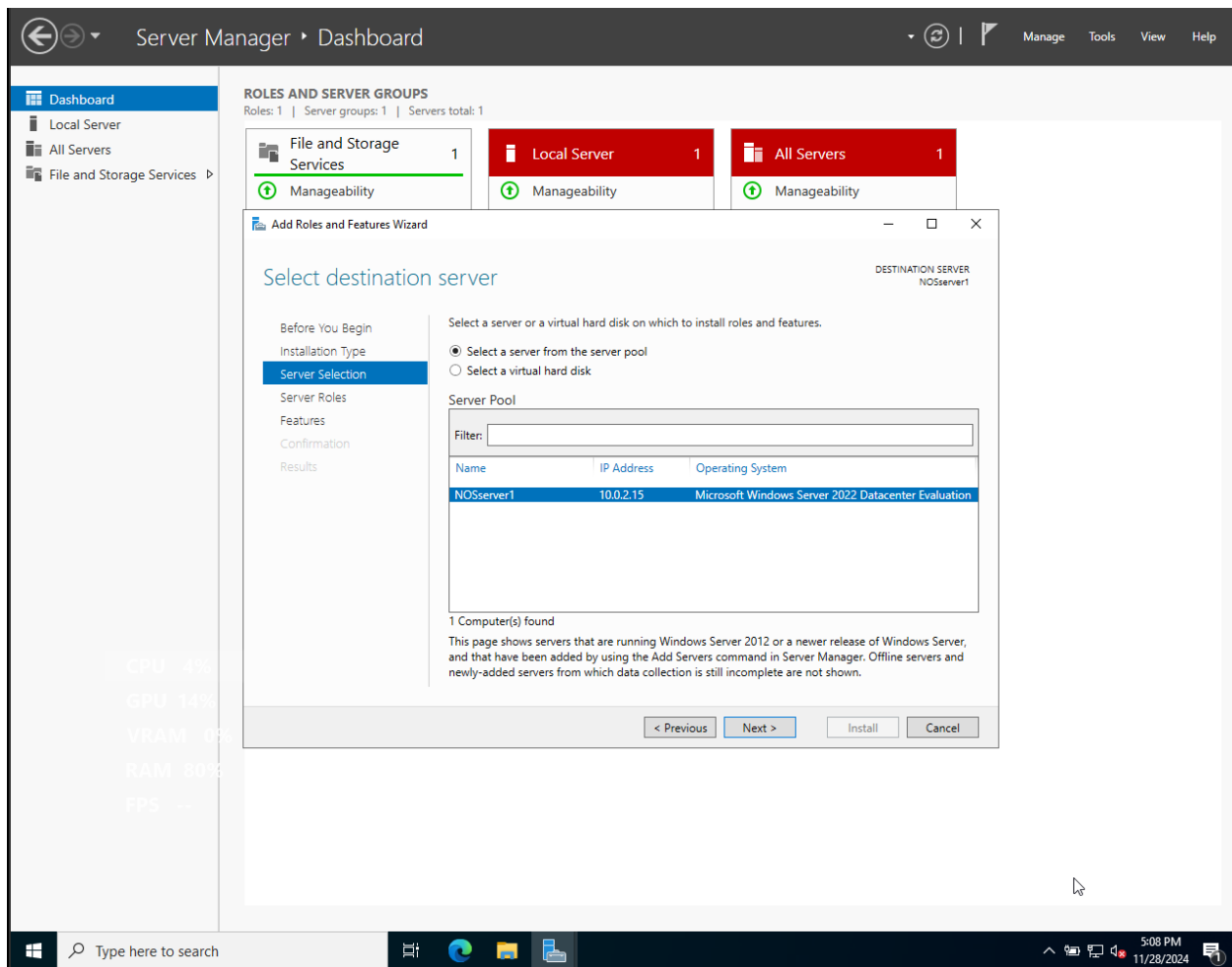*Figure 3: Selecting Role-based or feature-based installation option*

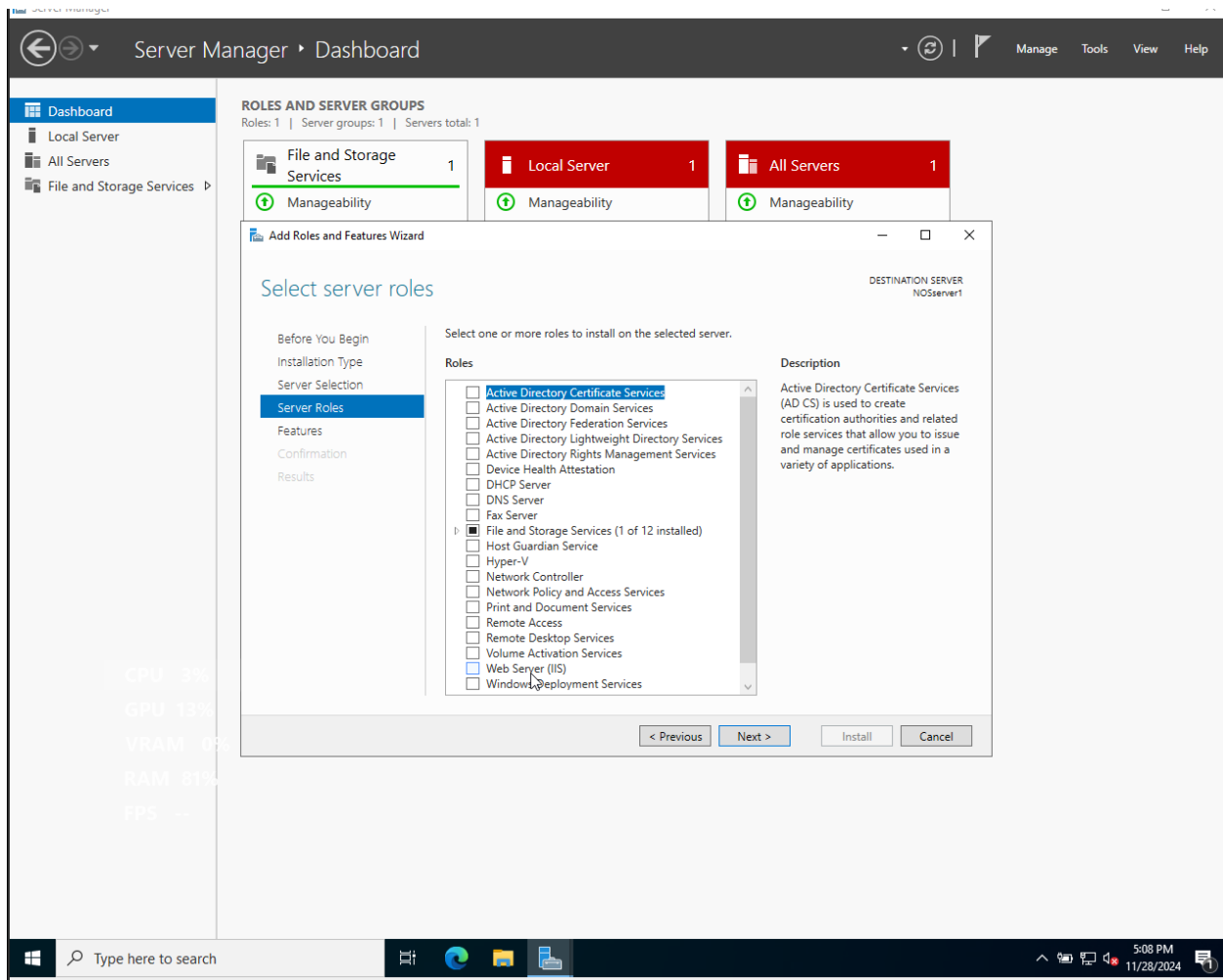*Figure 4: Selecting the Server to apply the roles from the server pool*

Figure 5: Selecting Web Server (IIS) from the dropdown menu in the server roles section
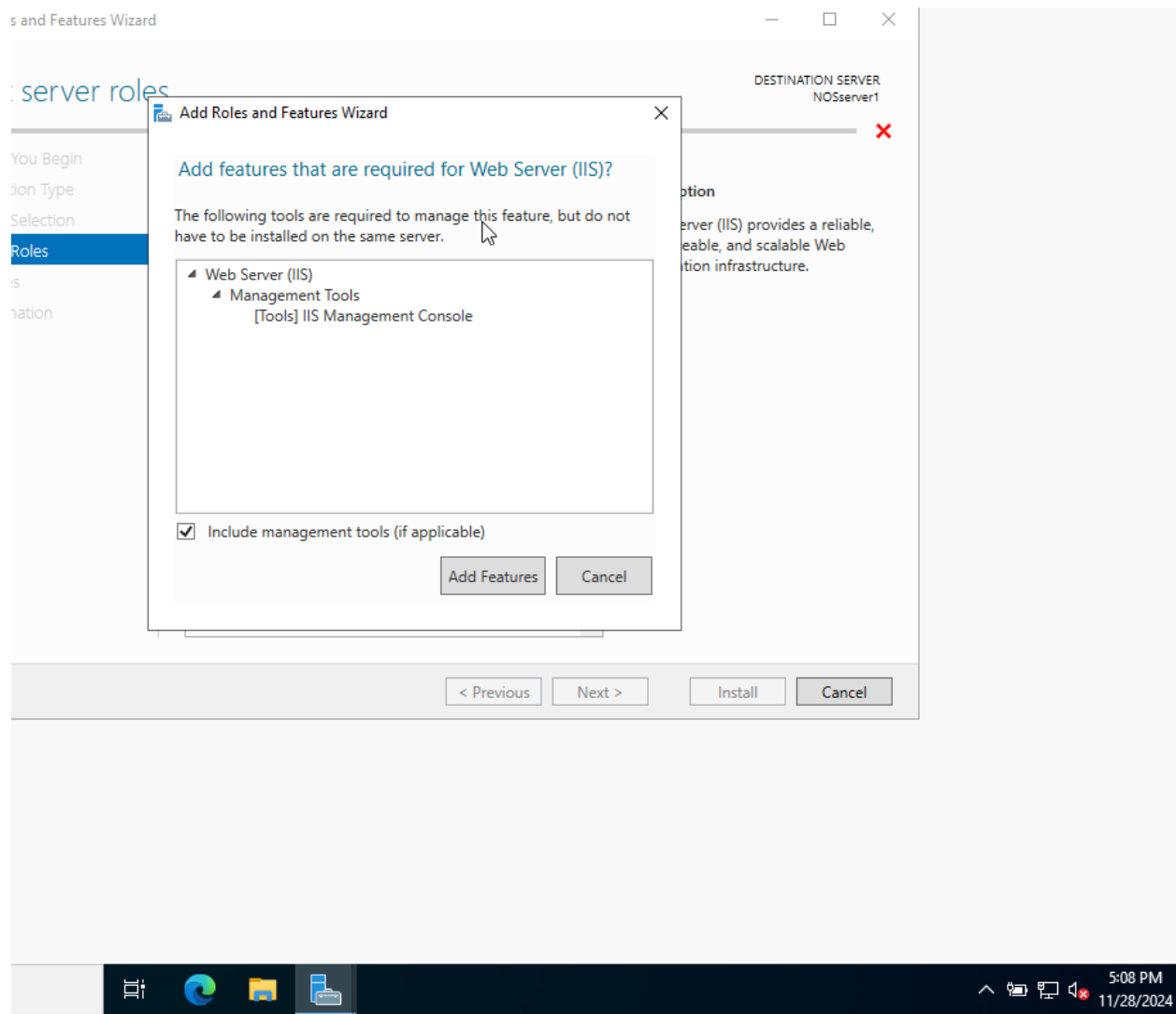
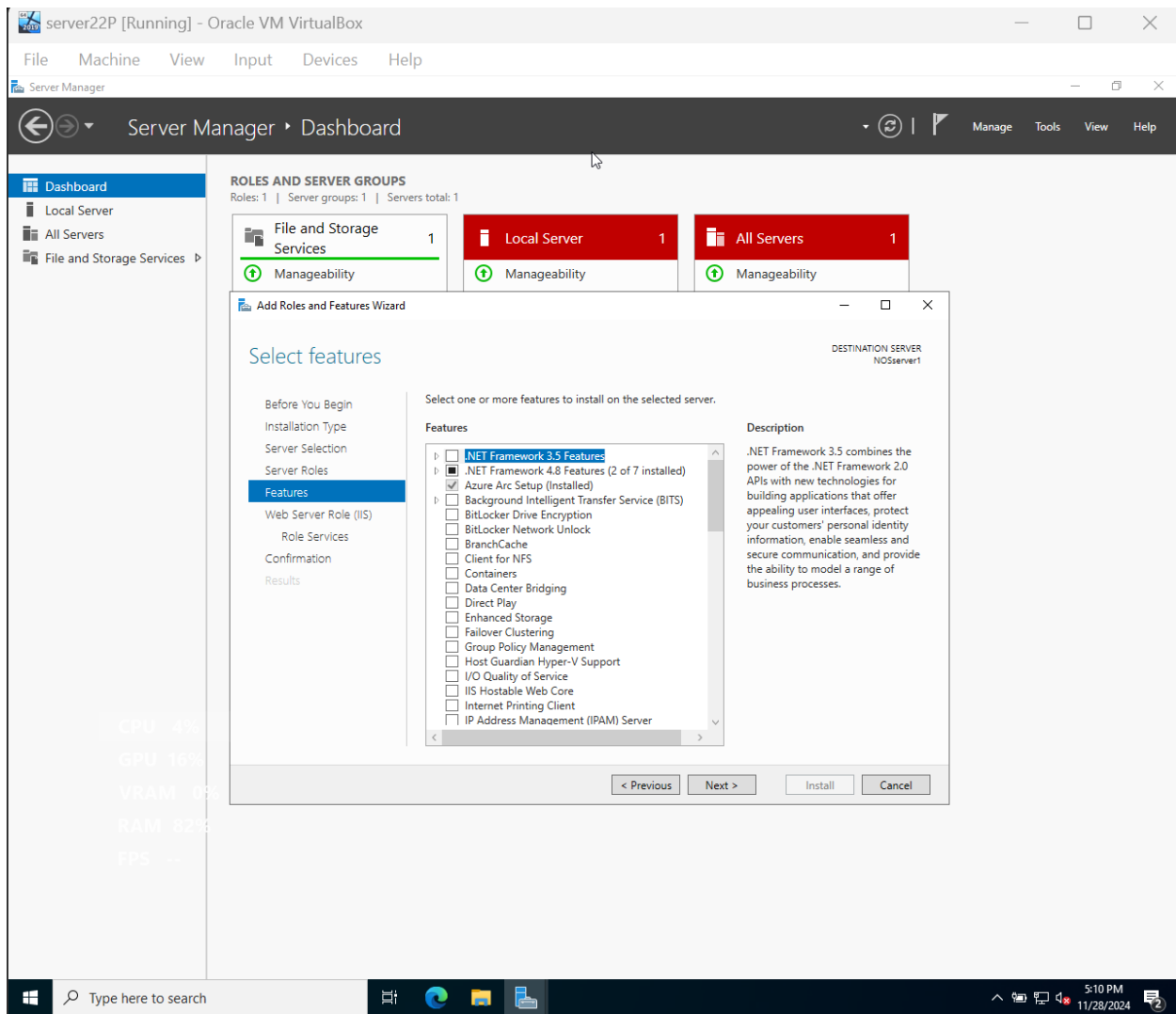*Figure 6: Confirming to add the features that are required for Web Server (IIS)*

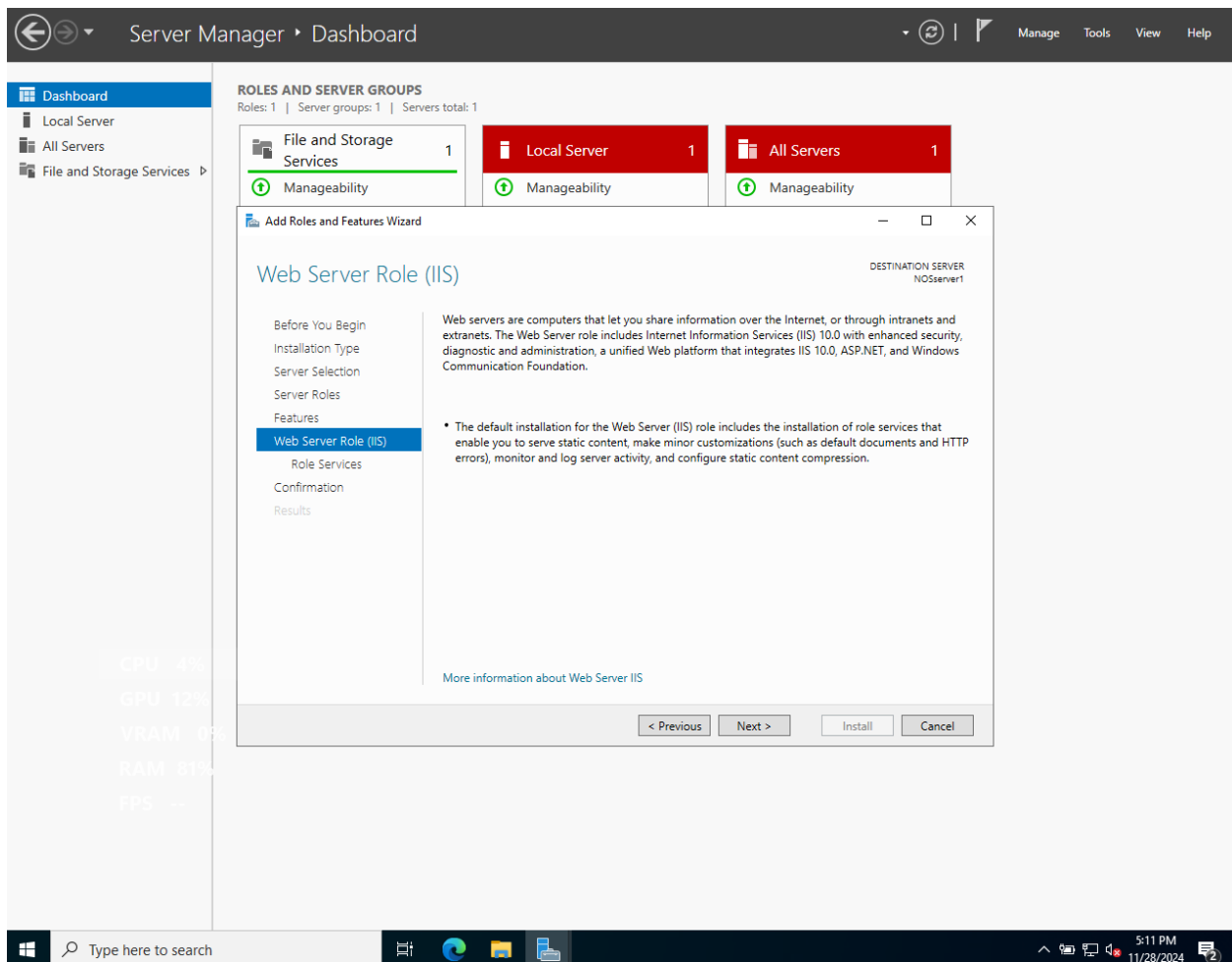*Figure 7: Selecting Features for the Server*

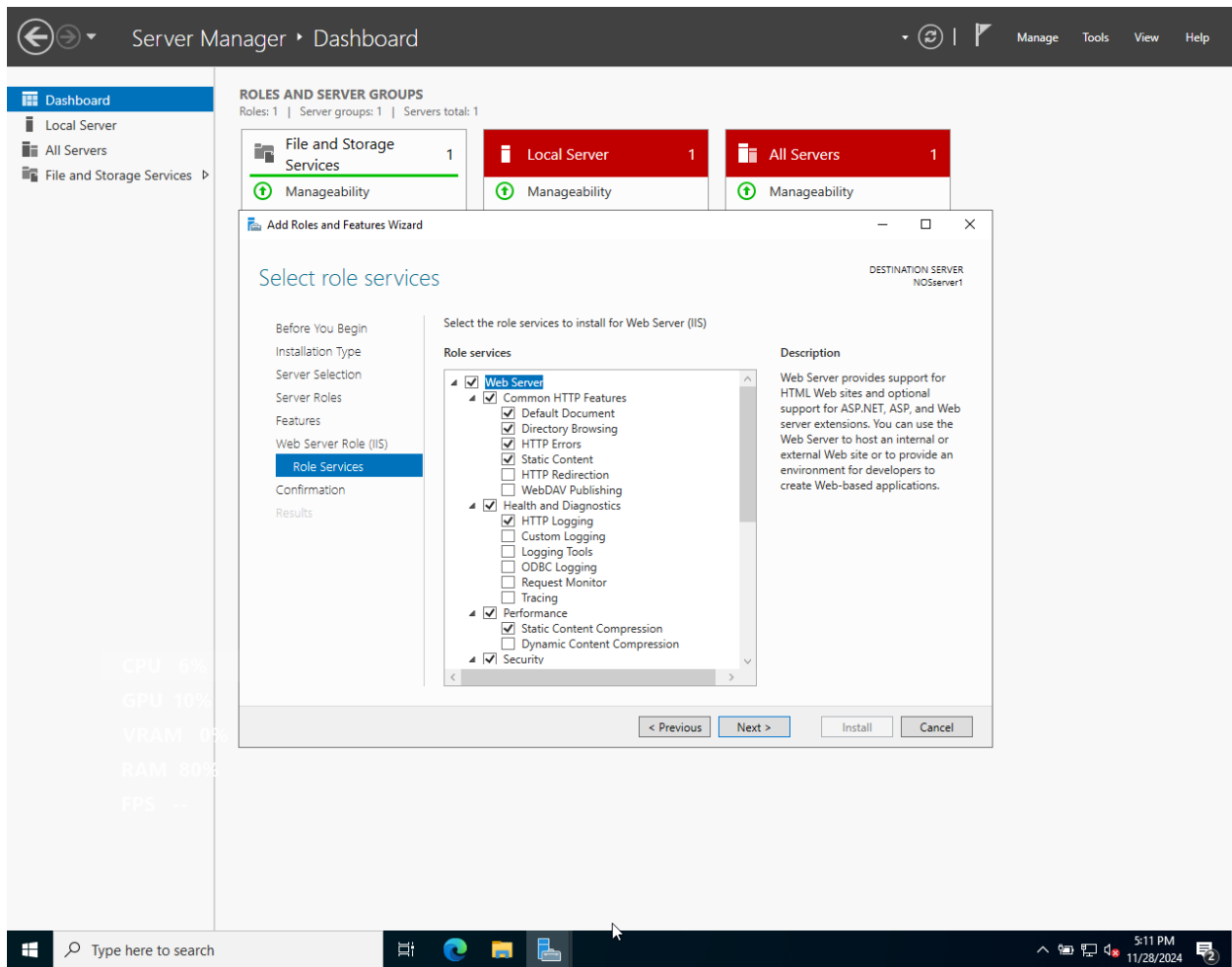*Figure 8: Confirming the IIS for the server*

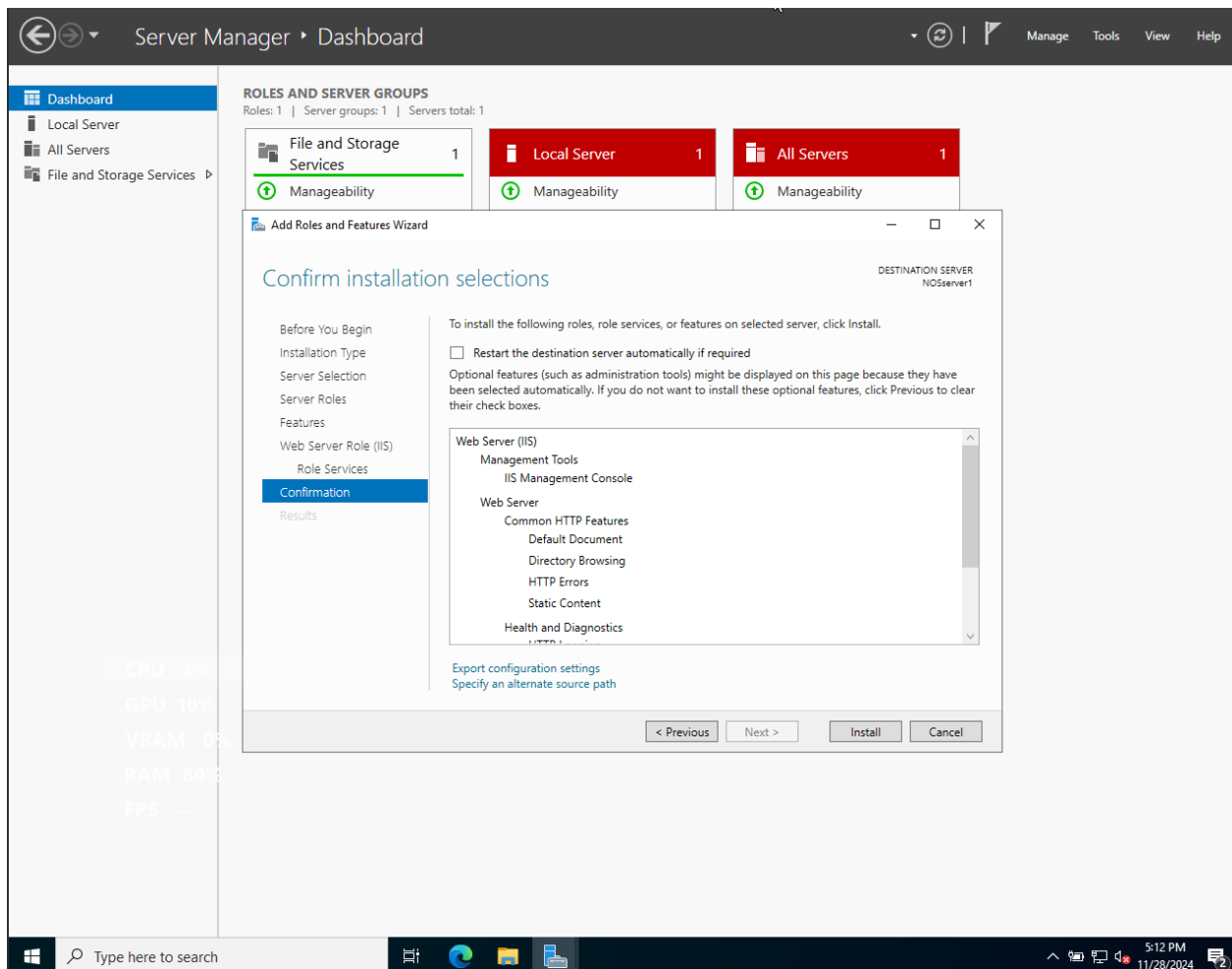*Figure 9: Confirming all the default roles for the Server from Role Services*

Figure 10: Confirming all the selecting we made, before the installation process begins and selecting Restart the destination server if required option
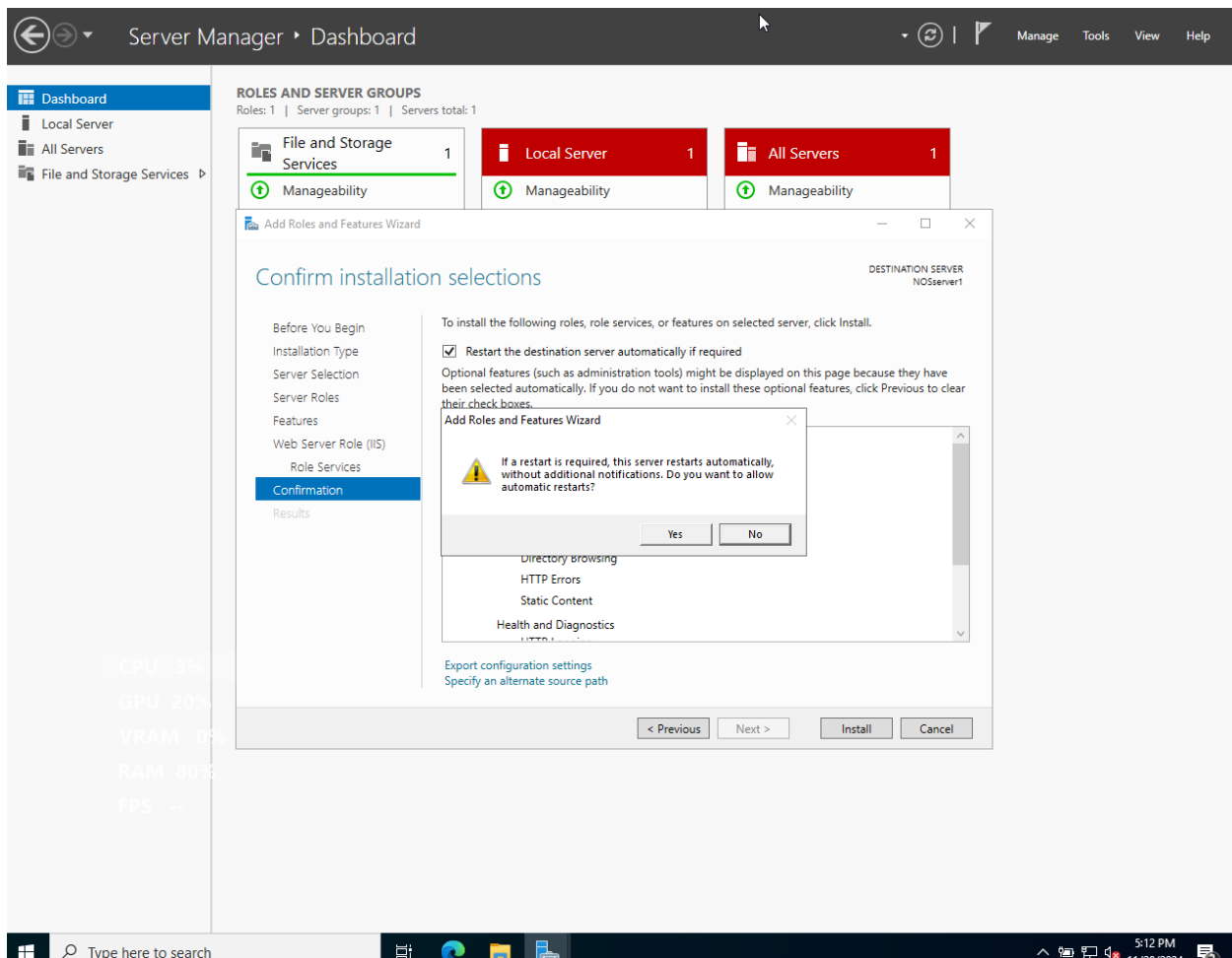
Figure 11: Selecting yes for restarting option when required

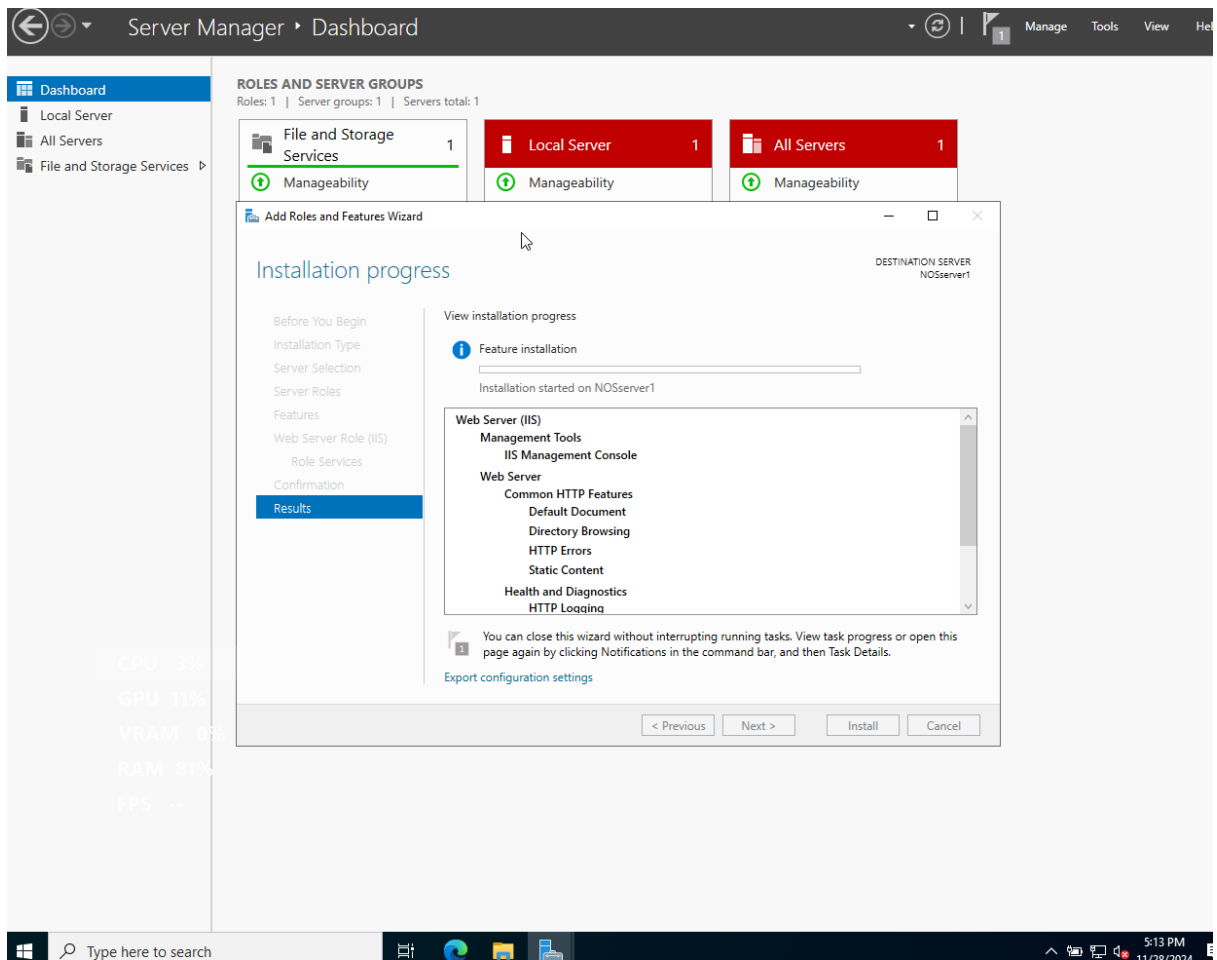*Figure 12: Installation process beginning*

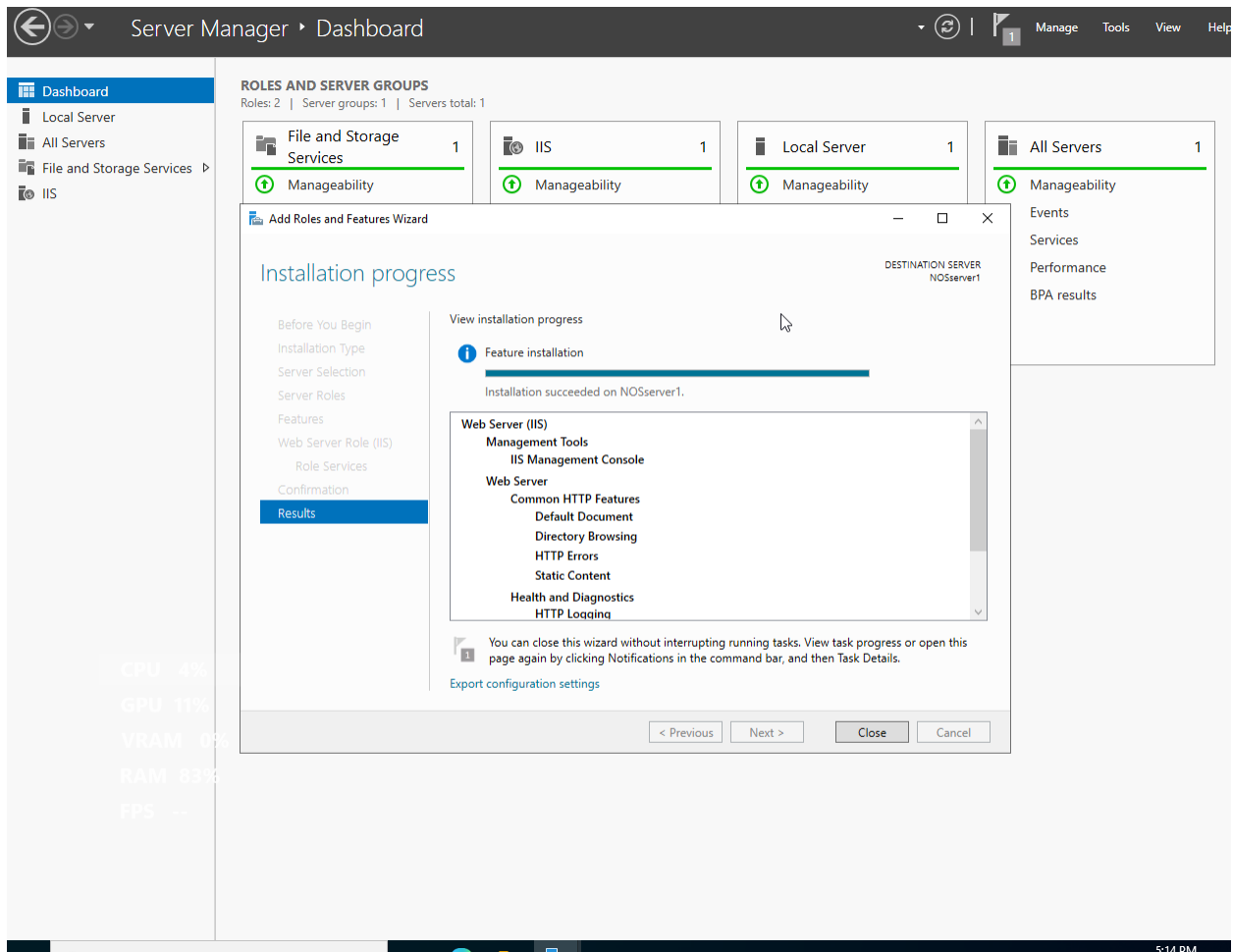*Figure 13: Installation process almost completed*

Configuring IIS

    a. Once the Web Server role is installed, open IIS Manger form the Tools menu in Server Manger.

    b. In IIS Manager, expand the server's name in the left-hand panel.

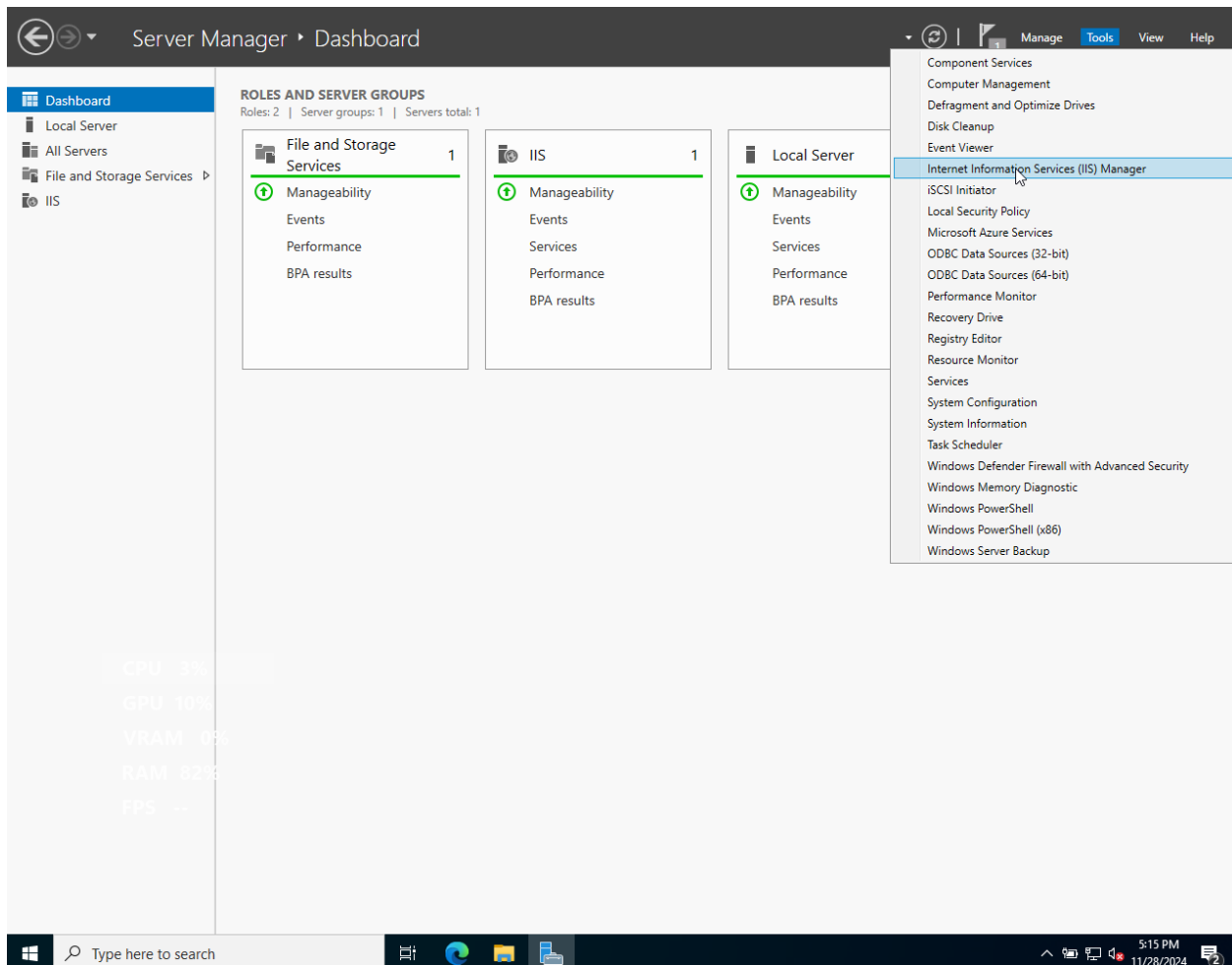   c. Expand Sites and locate the default website.

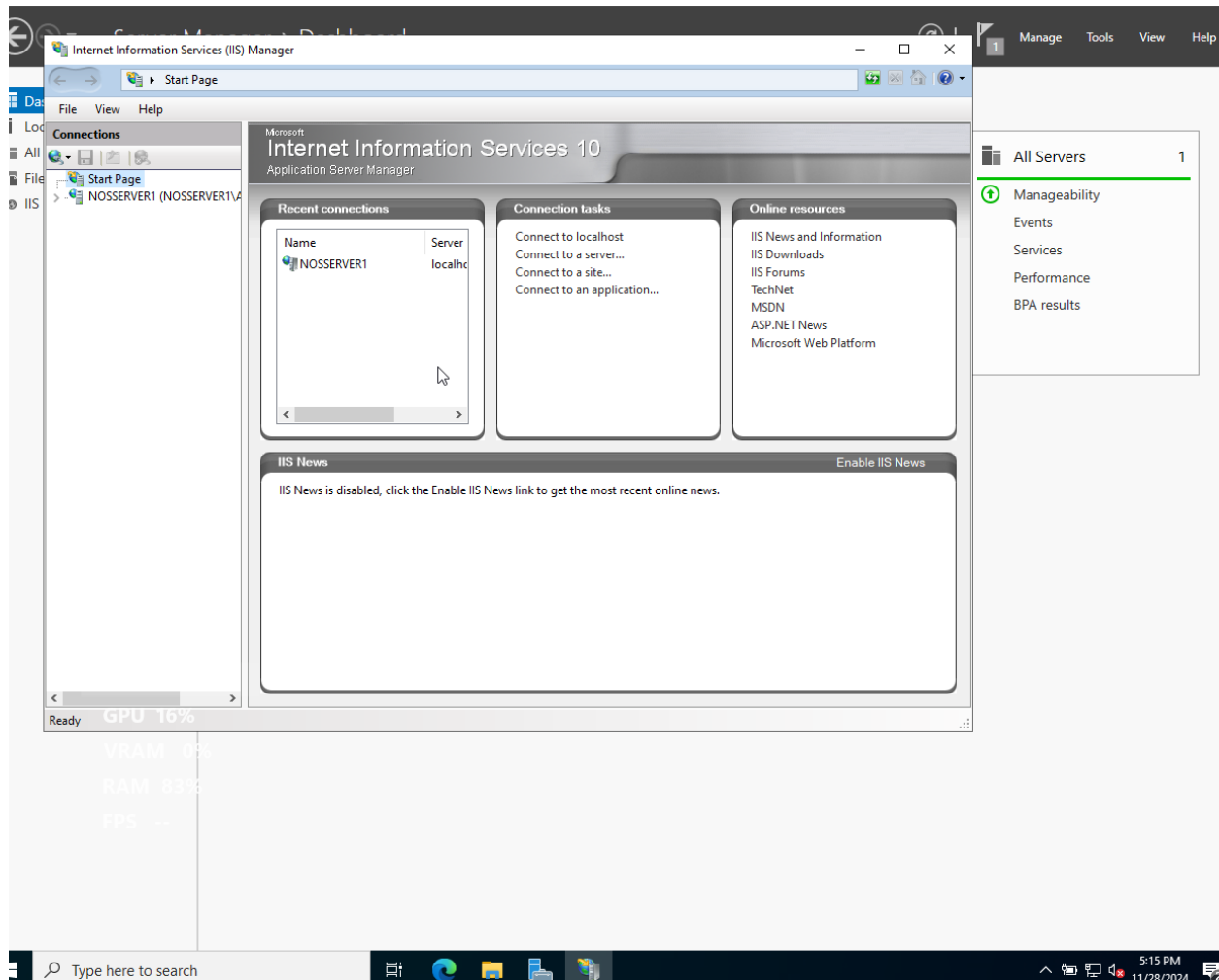*Figure 14: Selecting Internet Information Service (IIS) Manager*

Figure 15: The start page of IIS manager
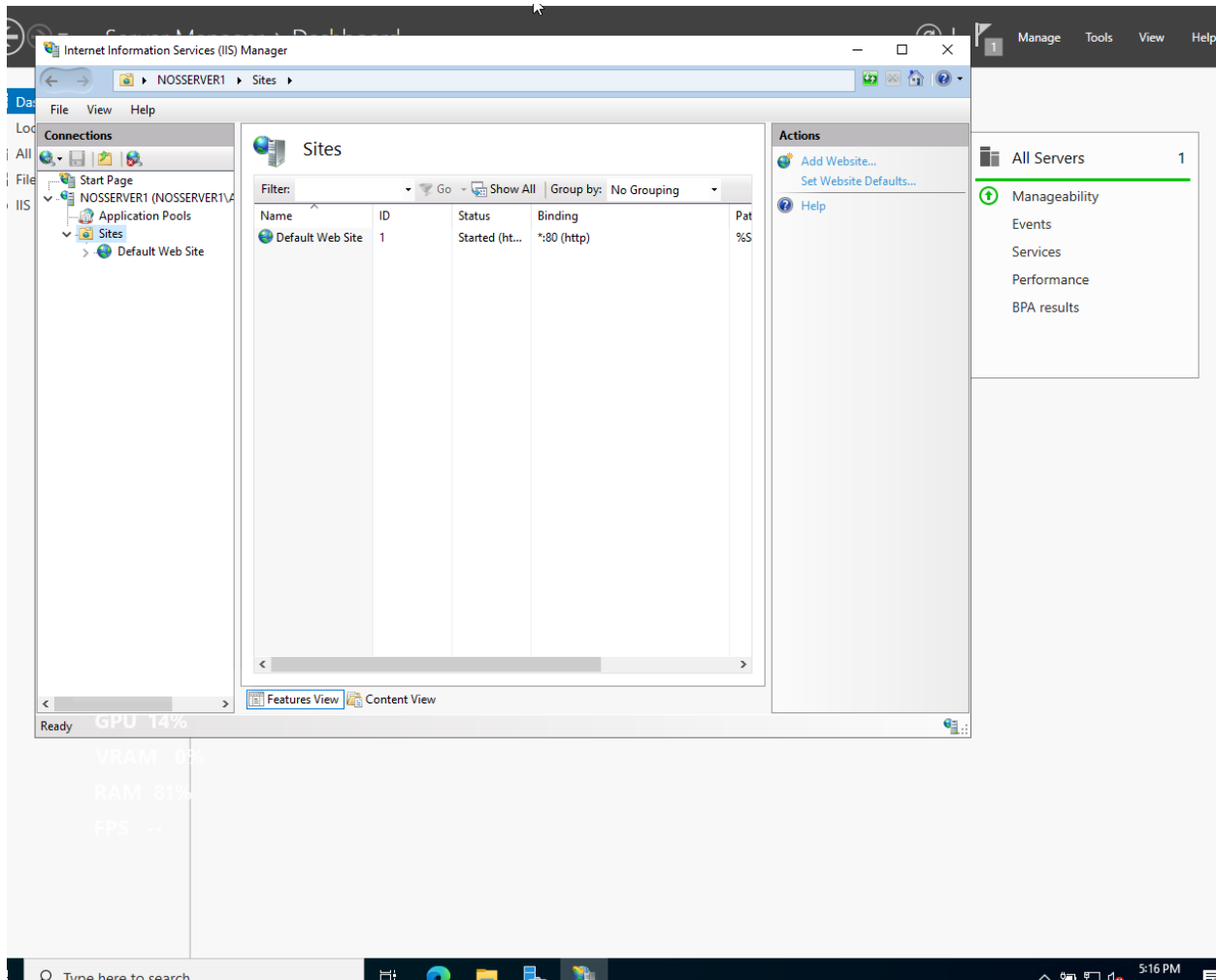
Figure 16: Sites section in the Server

Adding and configuring a New Website

a. Right click on **Sites** in IIS Manager and select Add Website.
b. In the **Add Website** dialog, provide the following details:
    Site Name: <mark>*mysite.local*</mark>
    Physical Path: Browse and select the folder where the static website files are located.
    Host Name: <mark>*mysite.local*</mark>
c. Click OK to add the website.
d. The new site will appear in the list under **Sites** in IIS Manager.
e. The new site will appear in the list under **Sites** in IIS Manager

Figure 17: Selecting Add Website option in the Sites section
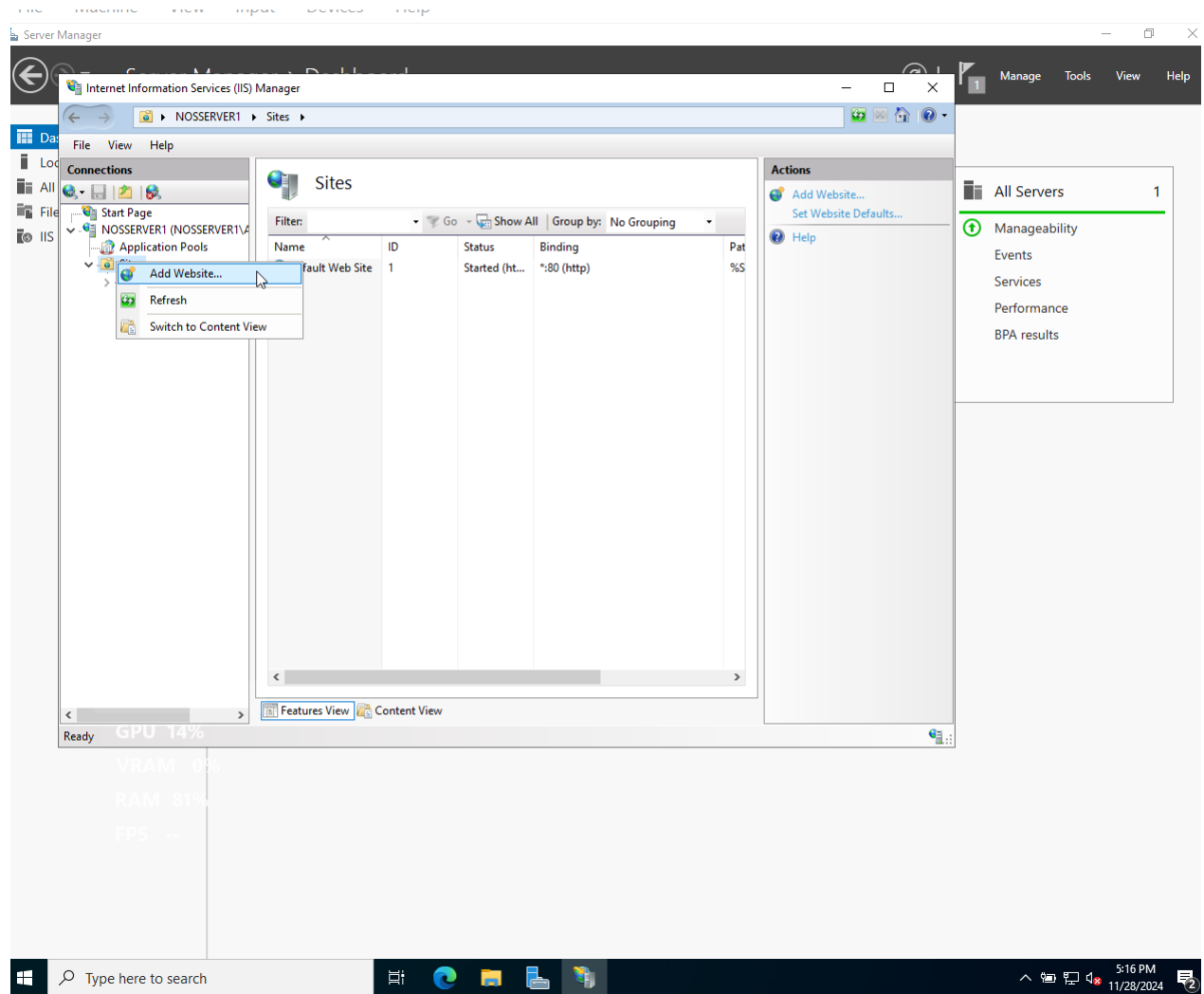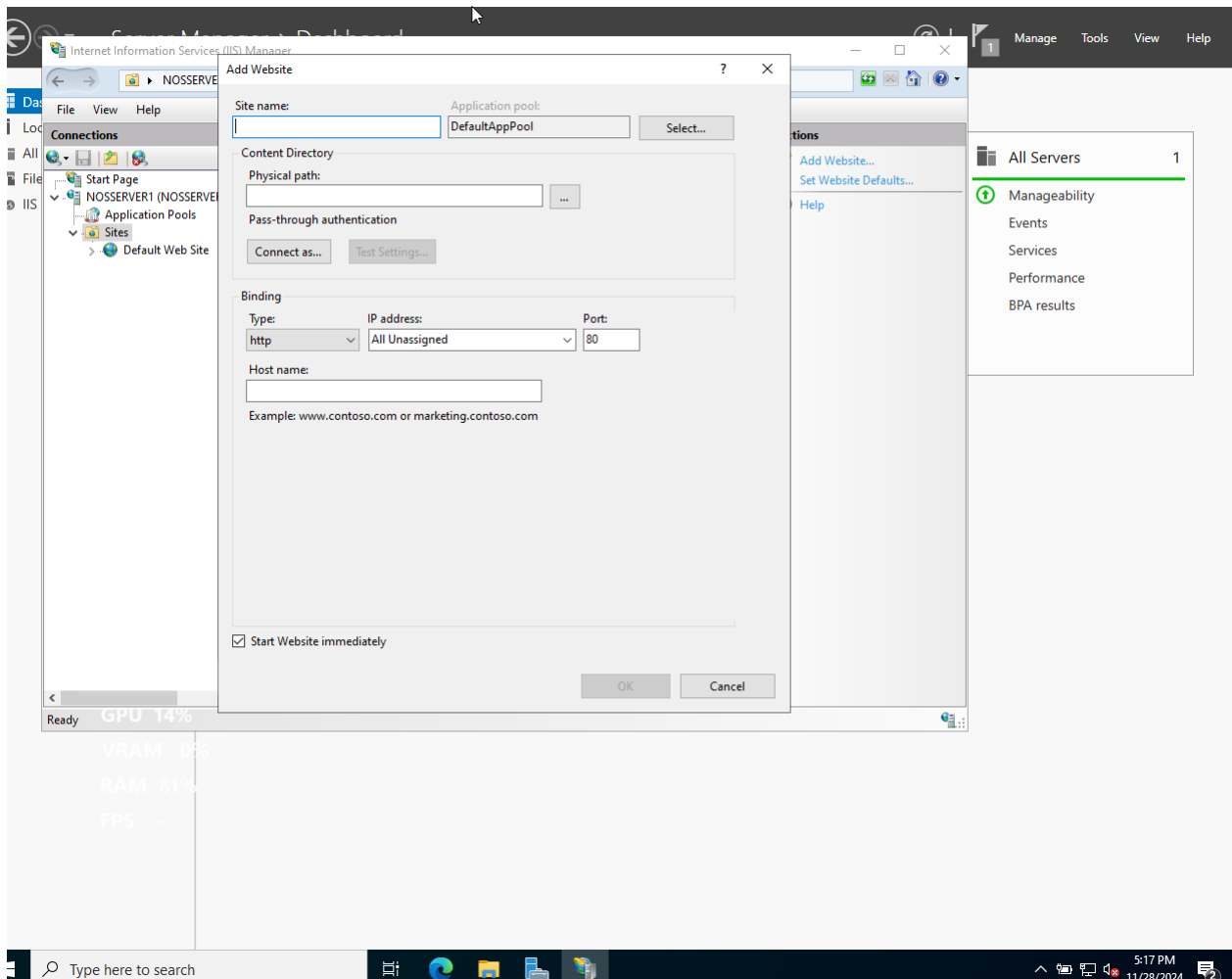
Figure 18: Add Website section of the ISS manager
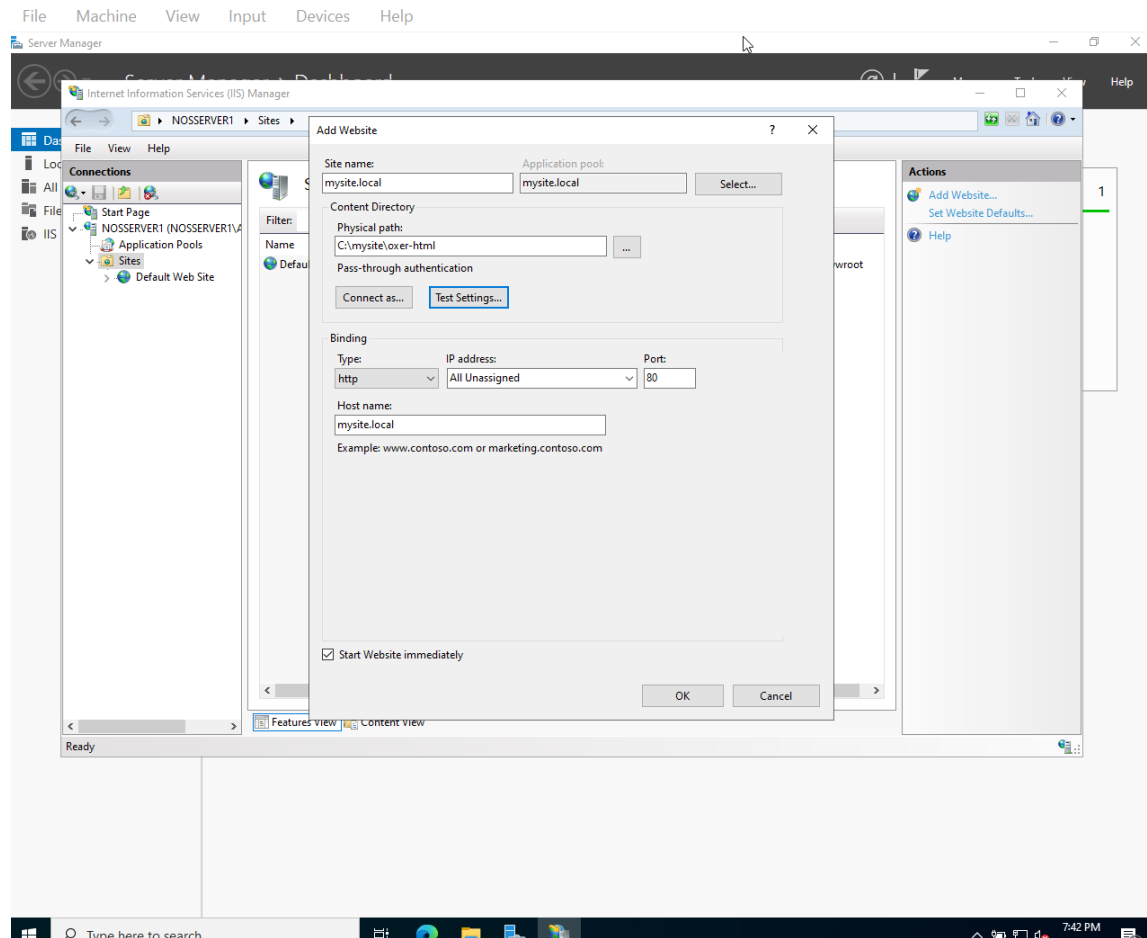
Figure 19: Typing the required options in the Add Website section
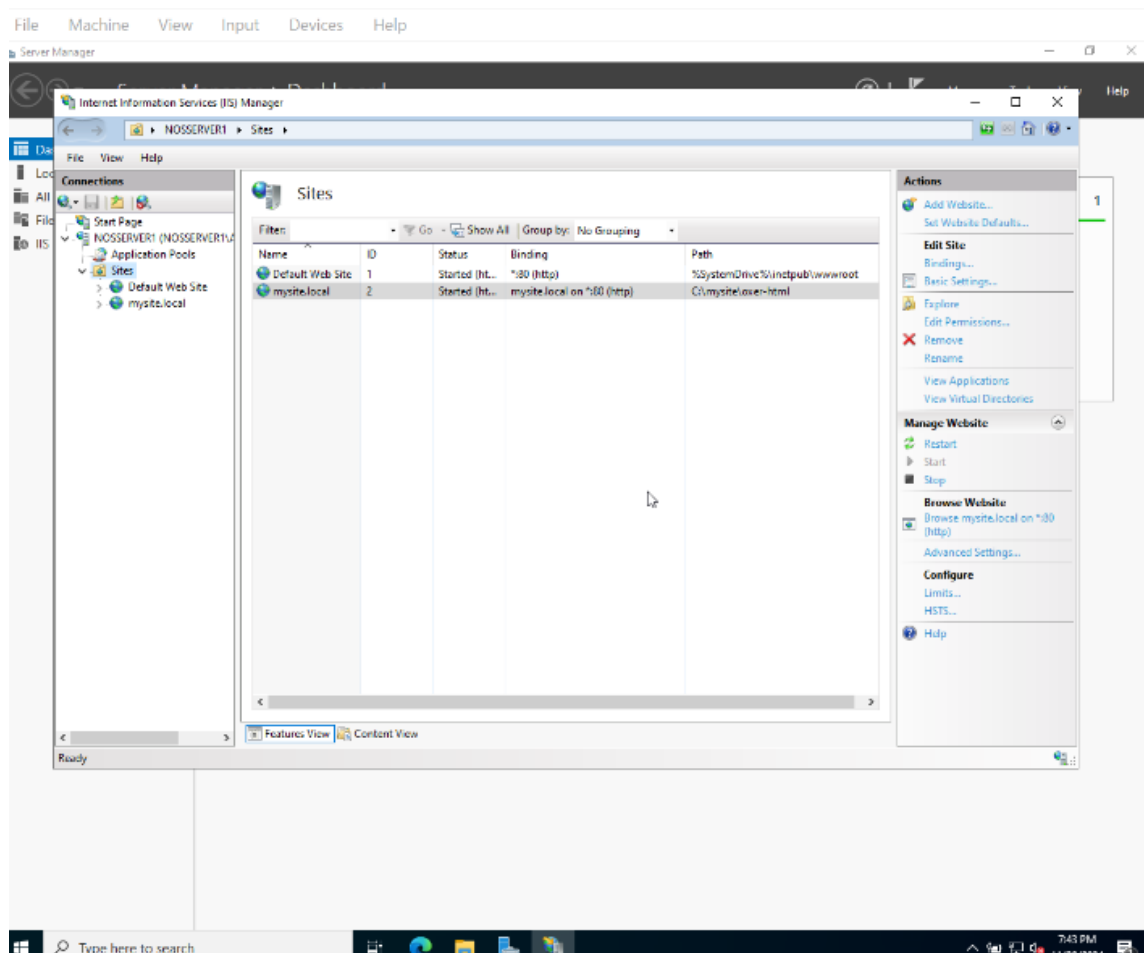
Figure 20: mysite in the Sites Section

Figure 21: mysite.local not able to reach

Registering the Website in the Hosts File

    a. Open Notepad as an administrator

    b. Navigate to the hosts file located at:

     c.   Add the following entry at the end of the file:
        127.0.0.1 mysite.local

     d.   Save and close the file.
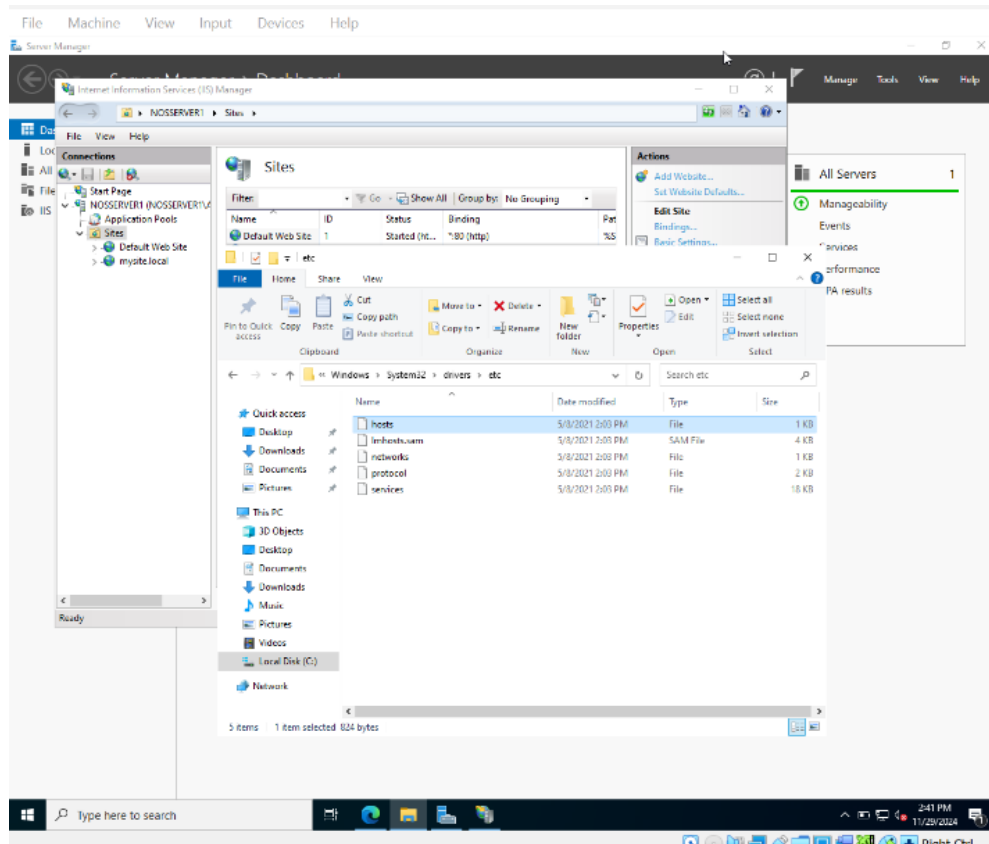
Figure 22: Opening Hosts.txt file in File Explorer

Figure 23: Selecting Notepad to open the txt file

Figure 24: Adding 127.0.0.1 mysite.local at the end of the txt file

Testing the Website
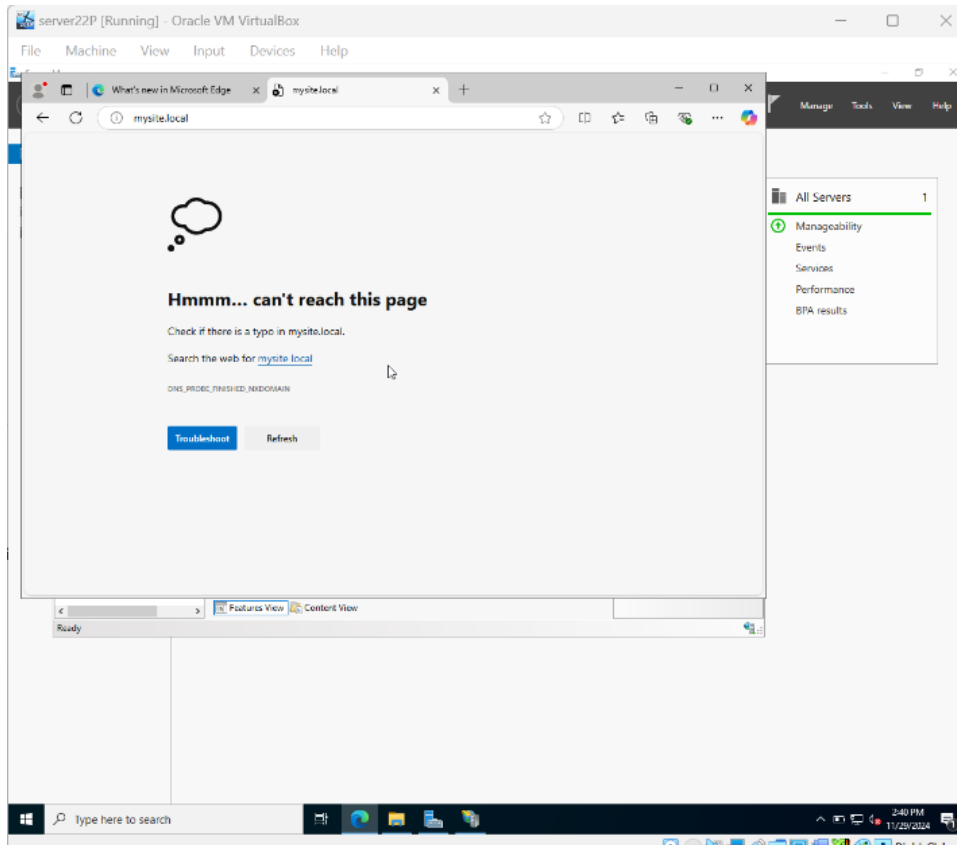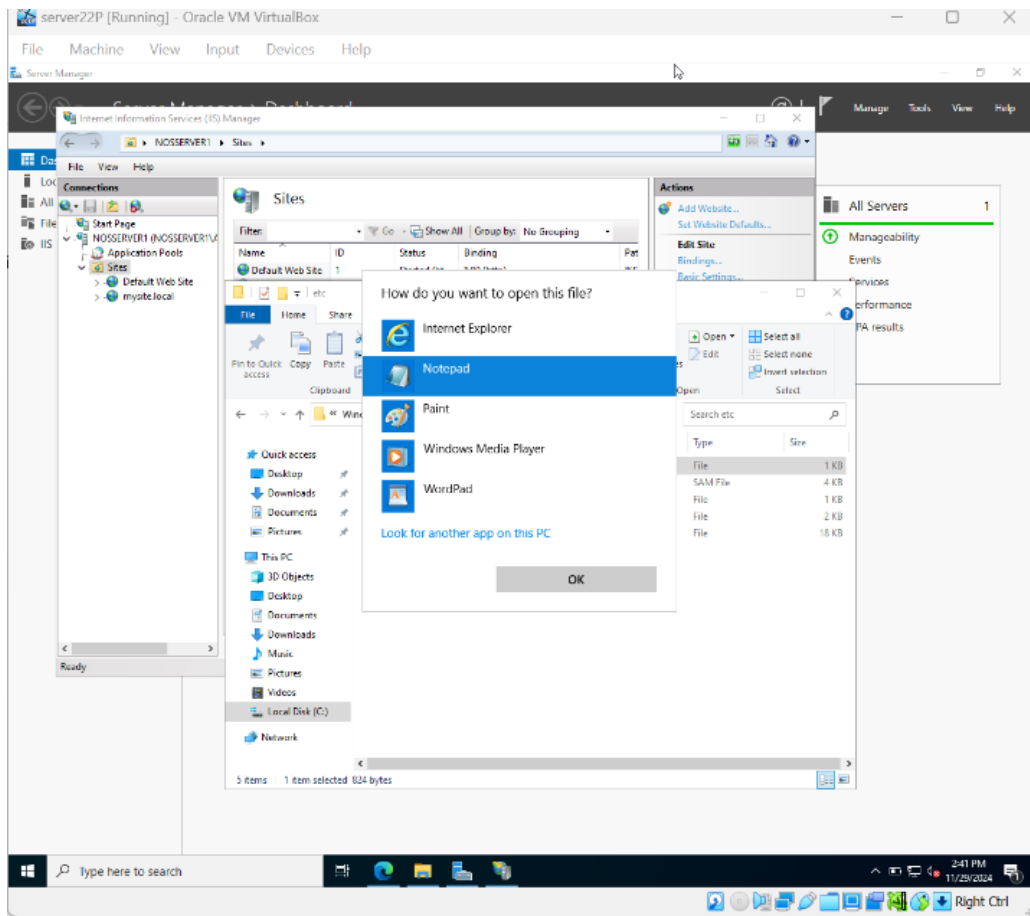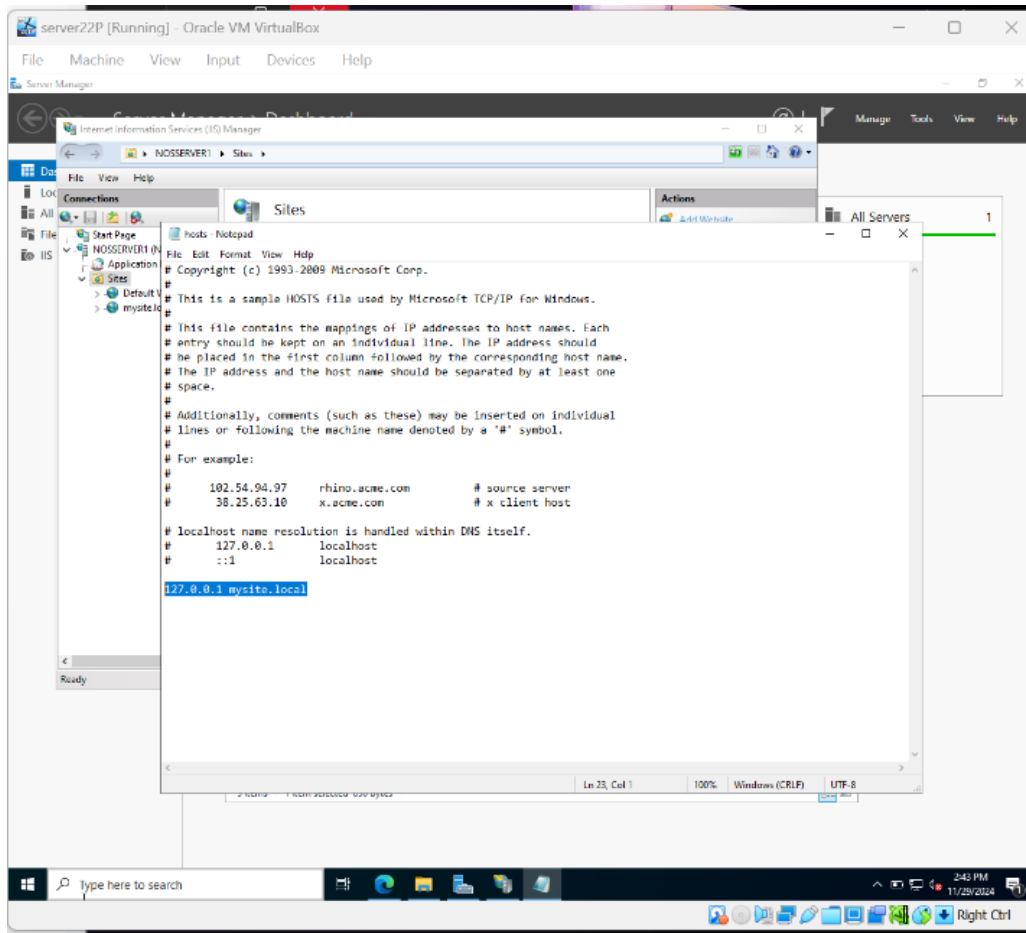
     a. Open a web browser on the server.

     b. Type *mysite.local* into the address bar and press Enter.

     c. The static website should now load.

          If the site doesn't load, ensure the host entry was added correctly, and the IIS service is running.
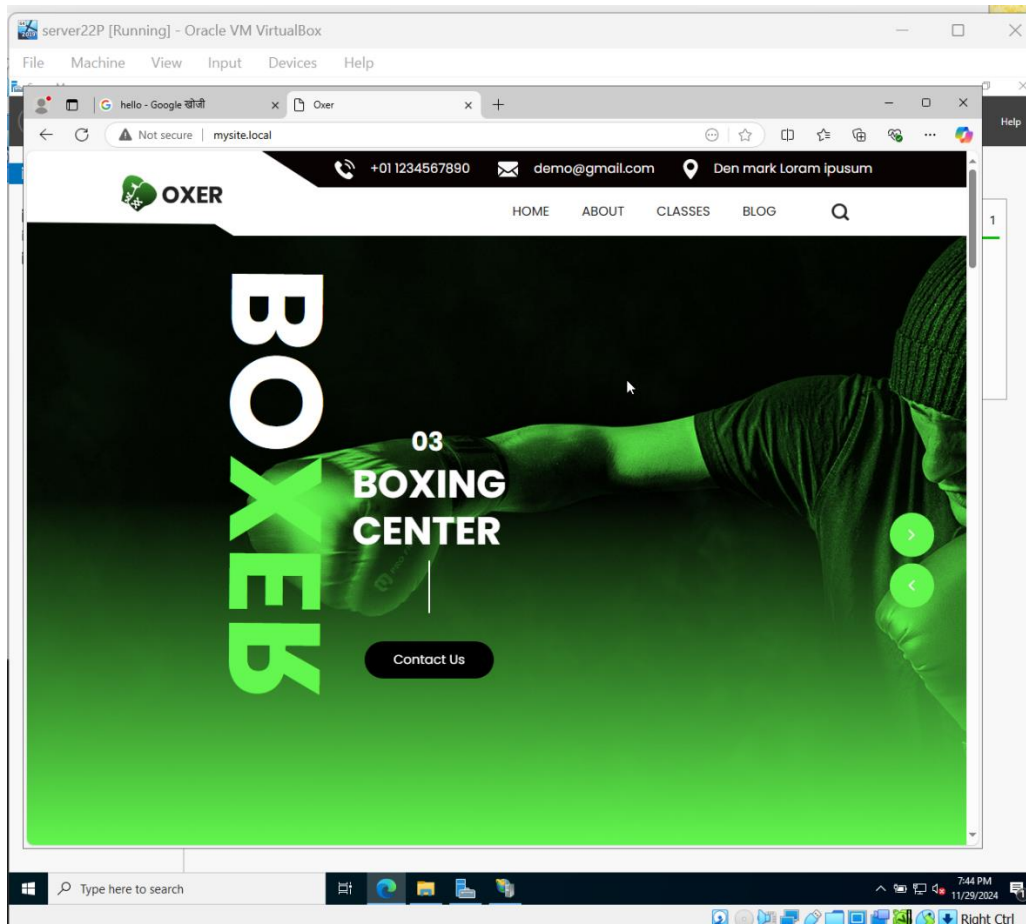
Figure 25: Opening Microsoft Explorer and typing mysite.local to check if the website is working or not

OBSERVATIONS

The web server successfully processed and displayed the static website hosted in IIS.

The use of the hosts file ensured the server recognized the custom domain (*mysite.local*).

The workflow demonstrates the simplicity of hosting static websites on IIS using minimal resources.

SUMMARY

In this workshop, we successfully:

a. Installed the **Web Server (IIS)** role in the Windows Server 2022.
b. Configured IIS to host a static website using a downloaded template.
c. Registered a custom domain (mysite.local) in the *hosts* file for local access.
d. Verified the functionality of the hosted static website.

Conclusion

Using IIS on Windows Server 2022 is an effective way to host static websites. The process is straightforward, leveraging the powerful features of IIS to create a reliable and customizable hosting environment. This setup is particularly suited for small-scale websites, portfolios, or landing pages.

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