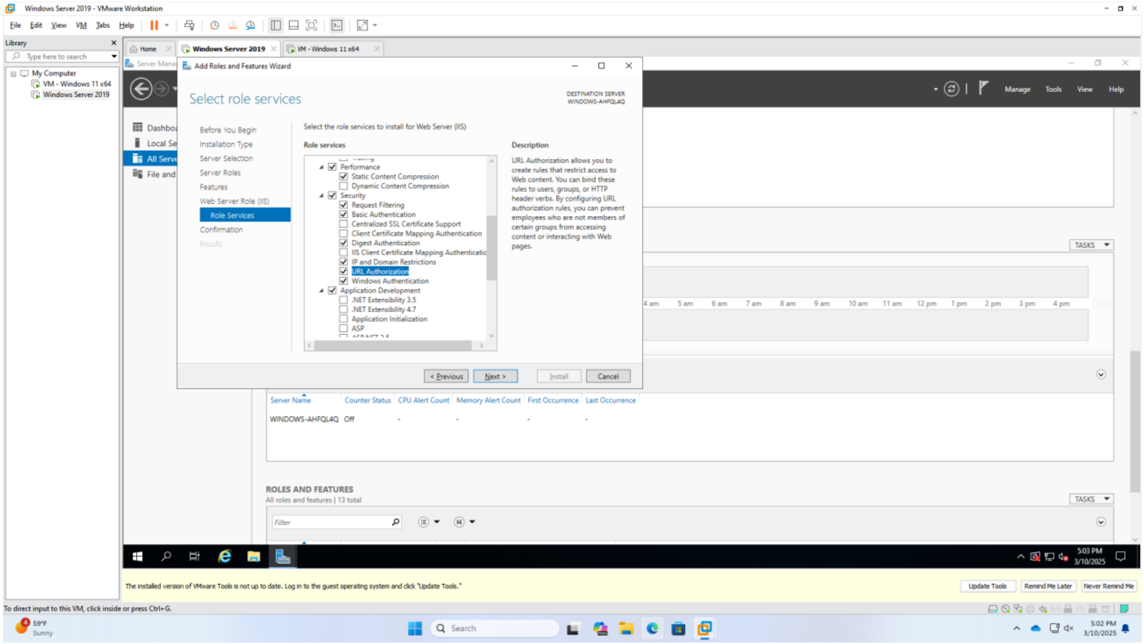
Lab 6-1

Jhonatan Parada T

ET725

PART 1

Selecting the required role services on Windows Server for this project.


Windows Server 2019 - VMware Workstation

Add Roles and Features Wizard

Select role services

DESTINATION SERVER
WINDOWS-AHFQL4Q

Before You Begin
Installation Type
Server Selection
Server Roles
Features
Web Server Role (IIS)
Role Services
Confirmation
Results

Select the role services to install for Web Server (IIS)

Role services

- ☑ Performance
  - ☑ Static Content Compression
  - □ Dynamic Content Compression
- ☑ Security
  - ☑ Request Filtering
  - ☑ Basic Authentication
  - □ Centralized SSL Certificate Support
  - □ Client Certificate Mapping Authentication
  - ☑ Digest Authentication
  - □ IIS Client Certificate Mapping Authenticatic
  - ☑ IP and Domain Restrictions
  - ☑ URL Authorization
  - ☑ Windows Authentication
- ☑ Application Development
  - □ .NET Extensibility 3.5
  - □ .NET Extensibility 4.7
  - □ Application Initialization
  - □ ASP

Description

URL Authorization allows you to create rules that restrict access to Web content. You can bind these rules to users, groups, or HTTP header verbs. By configuring URL authorization rules, you can prevent employees who are not members of certain groups from accessing content or interacting with Web pages.

< Previous | Next > | Install | Cancel

Server Name	Counter Status	CPU Alert Count	Memory Alert Count	First Occurrence	Last Occurrence
WINDOWS-AHFQL4Q	Off	-	-	-	-

ROLES AND FEATURES
All roles and features | 13 total

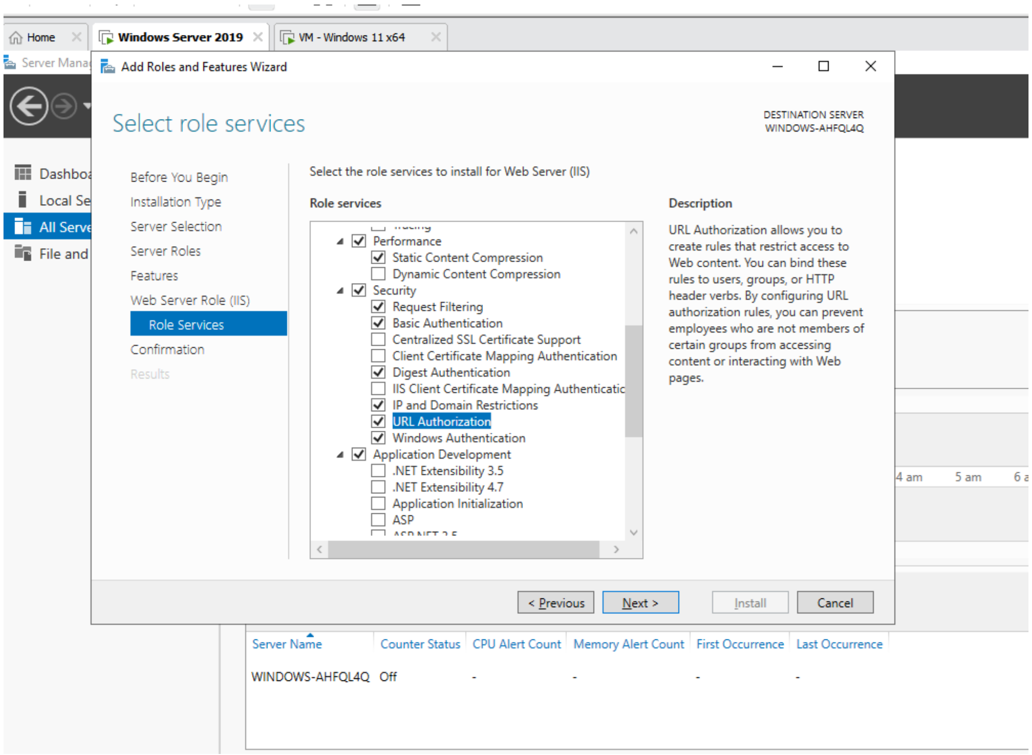
5:03 PM 3/10/2025

The installed version of VMware Tools is not up to date. Log in to the guest operating system and click "Update Tools."

To direct input to this VM, click inside or press Ctrl+G.

59°F Sunny

5:02 PM 3/10/2025



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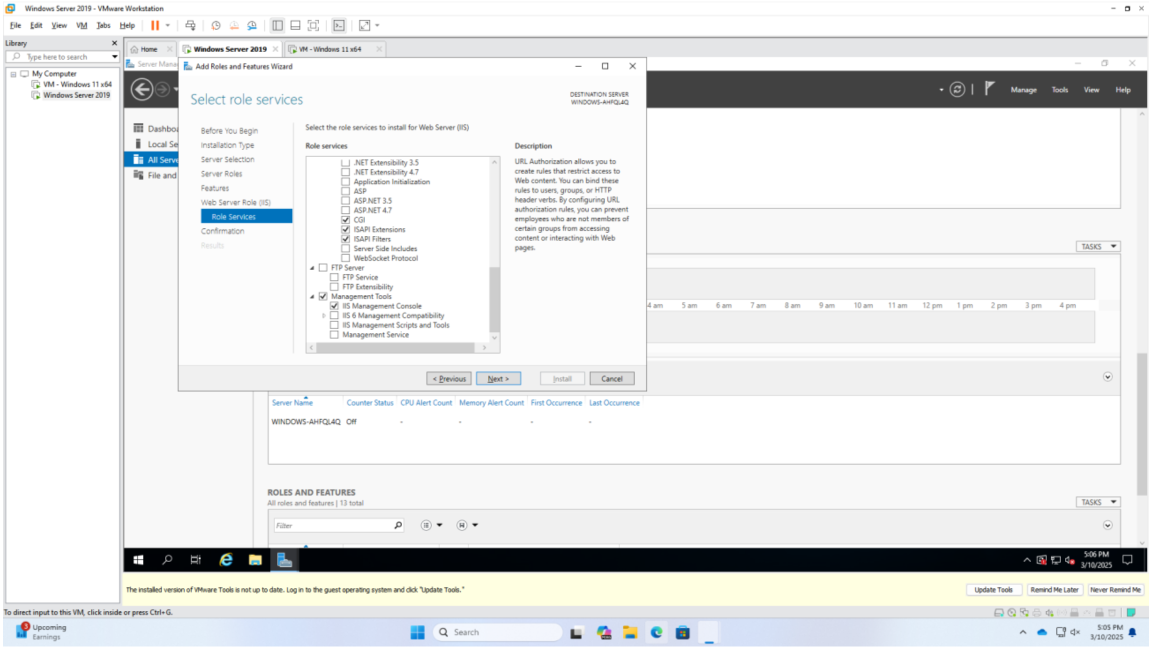

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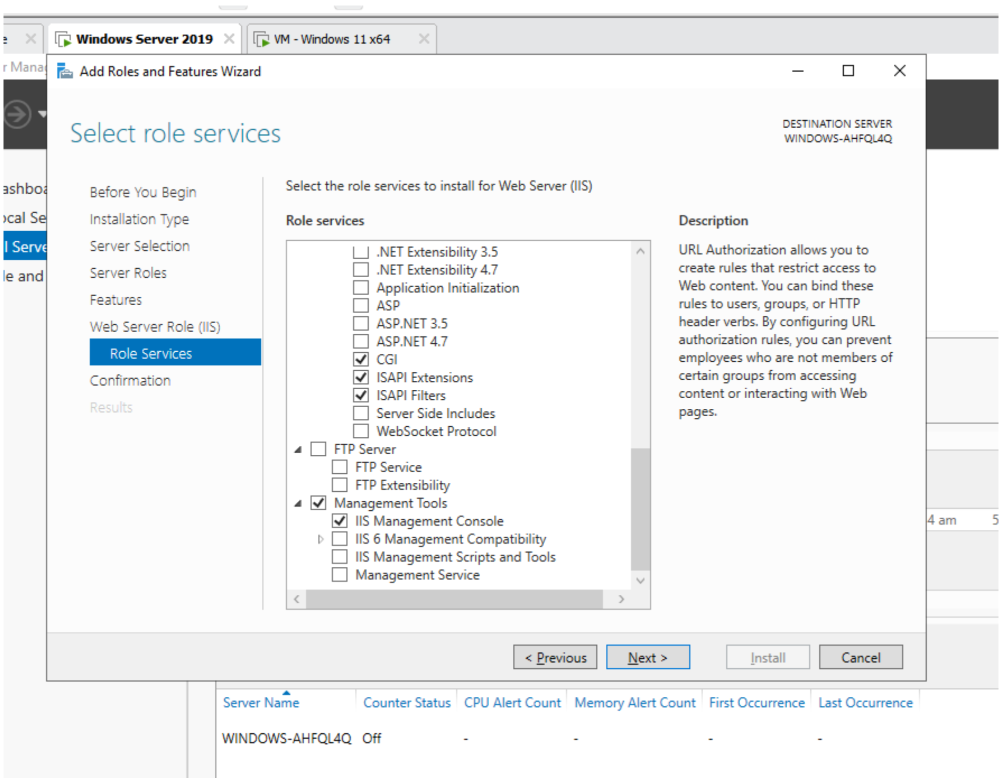

Add Roles and Features Wizard

Select role services

DESTINATION SERVER
WINDOWS-AHFQL4Q

Select the role services to install for Web Server (IIS)

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- □ ASP
- □ ASP.NET 3.5
- □ ASP.NET 4.7
- ☑ CGI
- ☑ ISAPI Extensions
- ☑ ISAPI Filters
- □ Server Side Includes
- □ WebSocket Protocol
- □ FTP Server
  - □ FTP Service
  - □ FTP Extensibility
- ☑ Management Tools
  - ☑ IIS Management Console
  - □ IIS 6 Management Compatibility
  - □ IIS Management Scripts and Tools
  - □ Management Service

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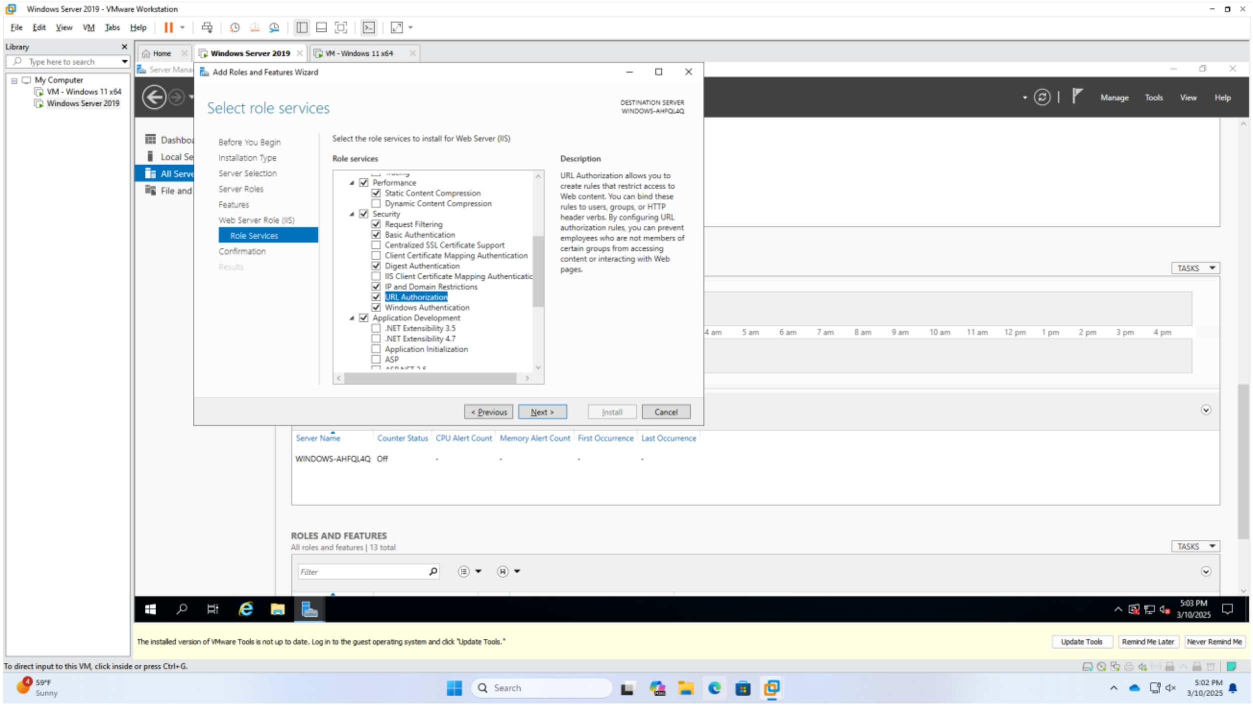

Windows Server 2019 - VMware Workstation

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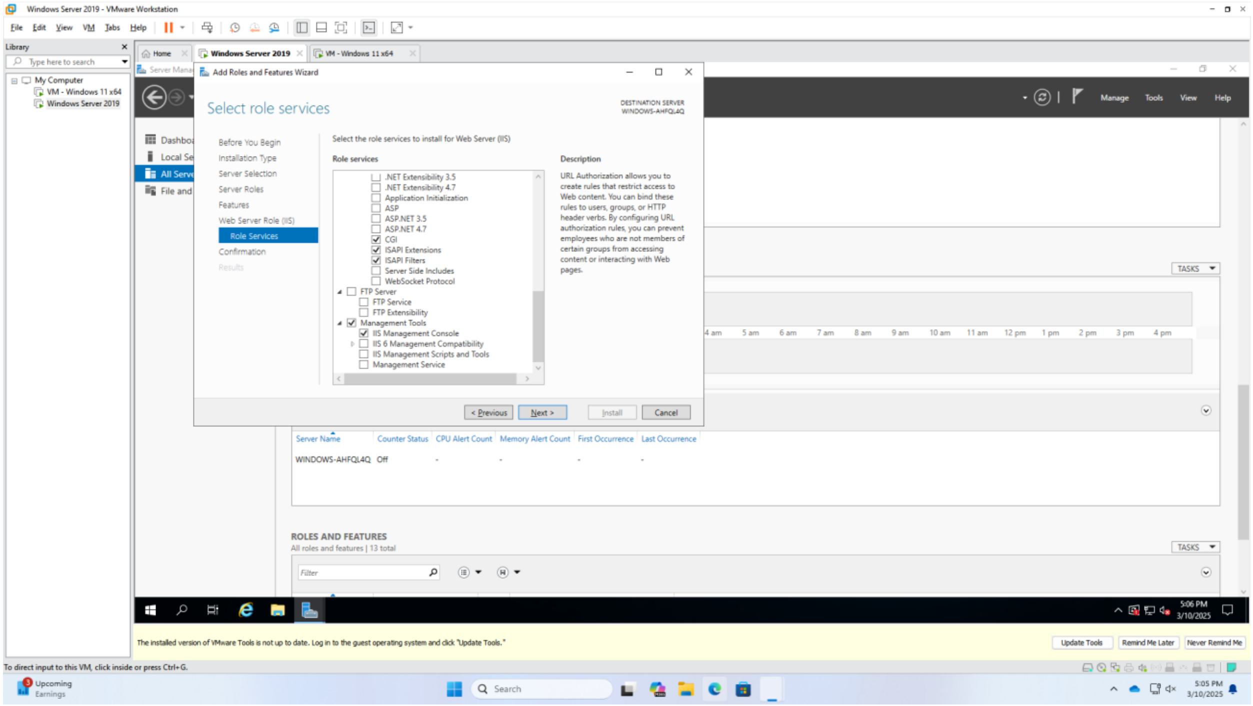

Windows Server 2019 - VMware Workstation

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WINDOWS-AHFQL4Q

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ROLES AND FEATURES
All roles and features | 13 total

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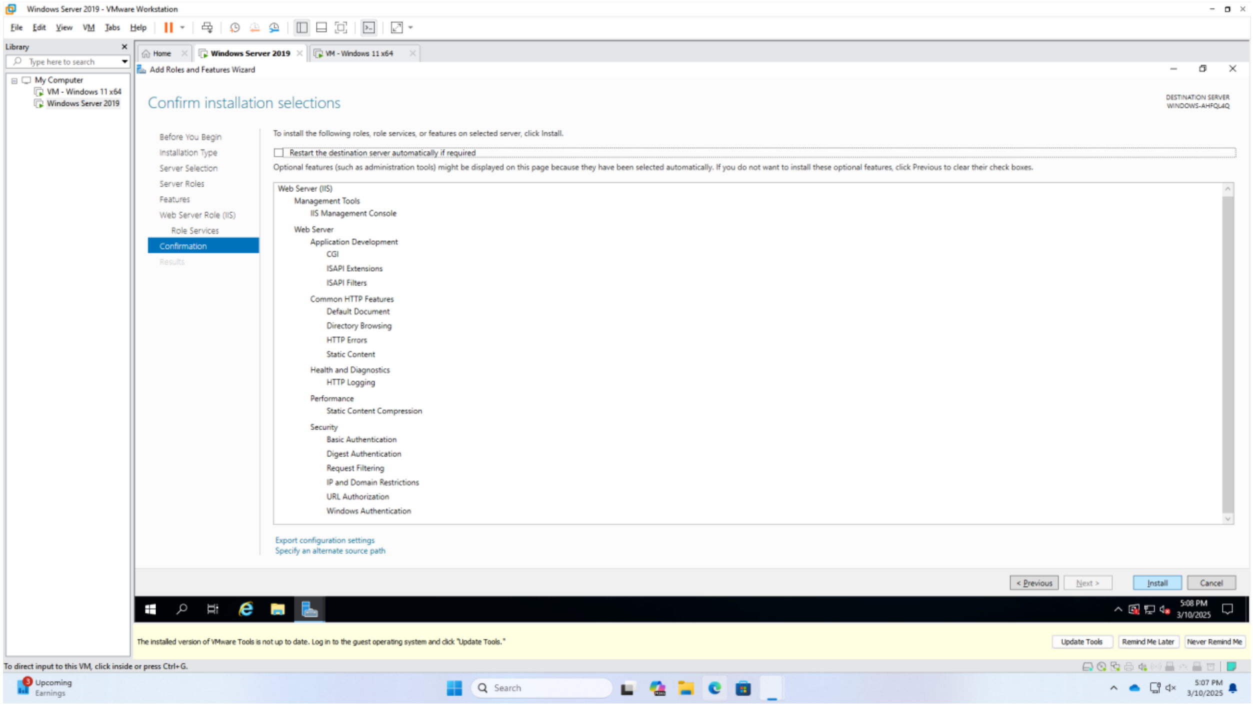
Confirming Roles and features to be installed.



Confirm installation selections

To install the following roles, role services, or features on selected server, click Install.

□ Restart the destination server automatically if required

Optional features (such as administration tools) might be displayed on this page because they have been selected automatically. If you do not want to install these optional features, click Previous to clear their check boxes.

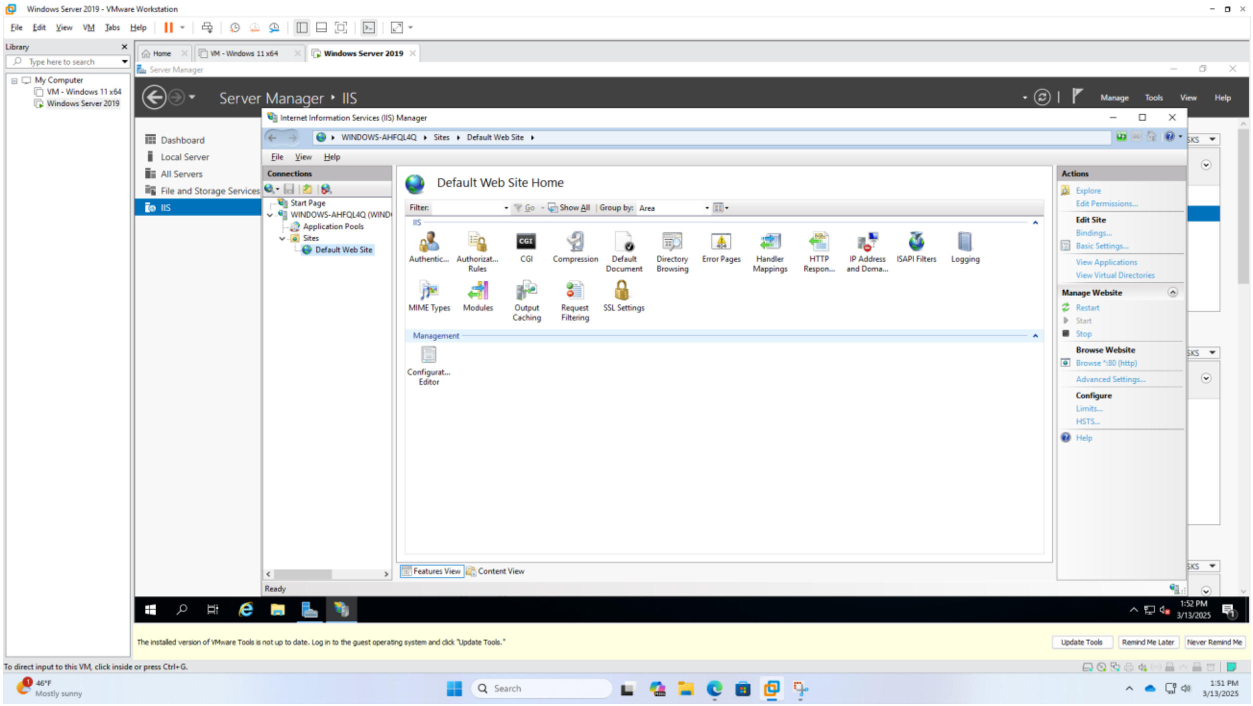
```
Web Server (IIS)
    Management Tools
        IIS Management Console
    Web Server
        Application Development
            CGI
            ISAPI Extensions
            ISAPI Filters
        Common HTTP Features
            Default Document
            Directory Browsing
            HTTP Errors
            Static Content
        Health and Diagnostics
            HTTP Logging
        Performance
            Static Content Compression
        Security
            Basic Authentication
            Digest Authentication
            Request Filtering
            IP and Domain Restrictions
            URL Authorization
            Windows Authentication
```

Export configuration settings
Specify an alternate source path

The installed version of VMware Tools is not up to date. Log in to the guest operating system and click "Update Tools."

To direct input to this VM, click inside or press Ctrl+G.

Navigating the Internet Information Services Manager interface.



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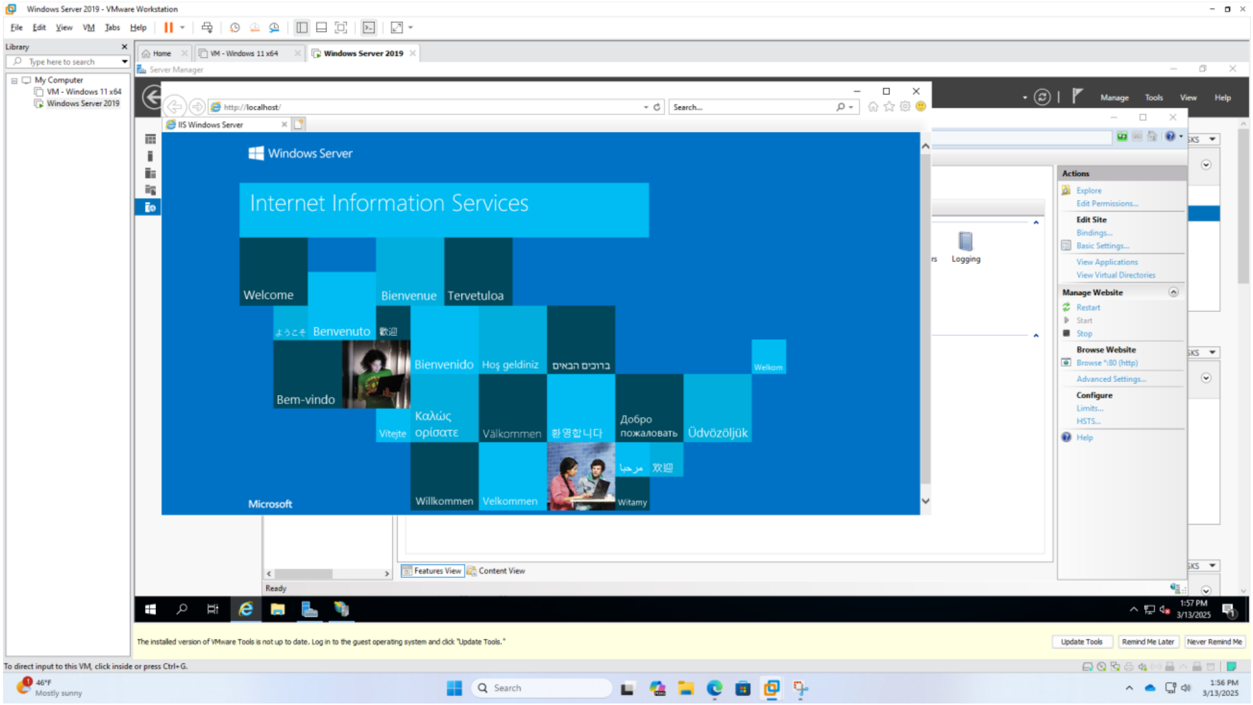
To direct input to this VM, click inside or press Ctrl+G.

Verifying that the default website service is running.



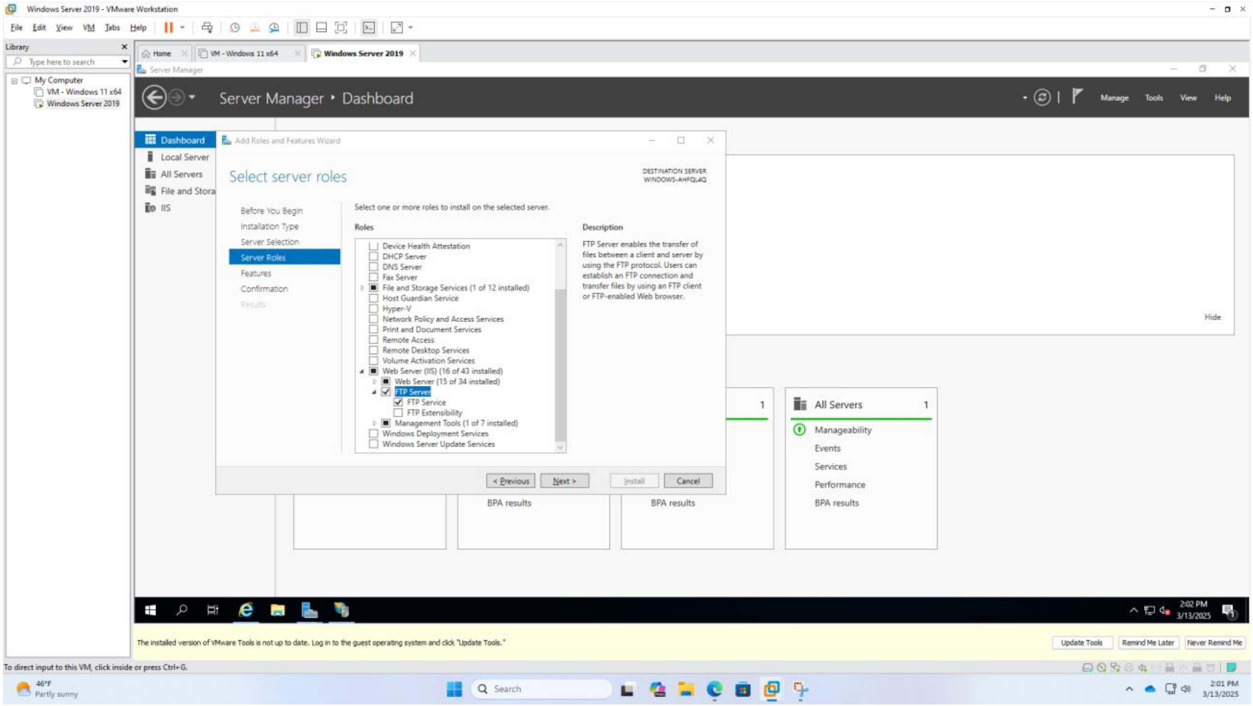
The installed version of VMware Tools is not up to date. Log in to the guest operating system and click "Update Tools."

To direct input to this VM, click inside or press Ctrl+G.

End of PART 1

PART 2

Adding the FTP service to Windows Server.



Select server roles

DESTINATION SERVER
WINDOWS-AHFQL4Q

Select one or more roles to install on the selected server.

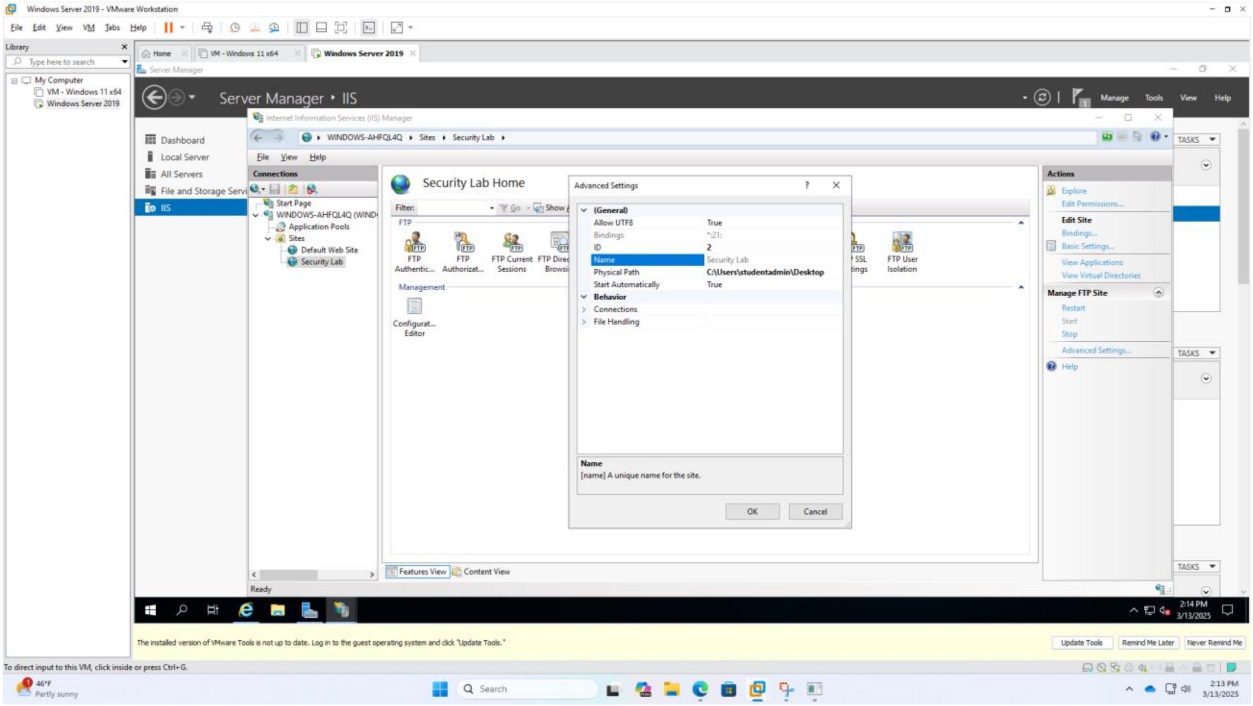
Roles

- □ Device Health Attestation
- □ DHCP Server
- □ DNS Server
- □ Fax Server
- ■ File and Storage Services (1 of 12 installed)
- □ Host Guardian Service
- □ Hyper-V
- □ Network Policy and Access Services
- □ Print and Document Services
- □ Remote Access
- □ Remote Desktop Services
- □ Volume Activation Services
- ■ Web Server (IIS) (16 of 43 installed)
  - ■ Web Server (15 of 34 installed)
  - ☑ FTP Server
    - ☑ FTP Service
    - □ FTP Extensibility
  - ■ Management Tools (1 of 7 installed)
- □ Windows Deployment Services
- □ Windows Server Update Services

Description

FTP Server enables the transfer of files between a client and server by using the FTP protocol. Users can establish an FTP connection and transfer files by using an FTP client or FTP-enabled Web browser.

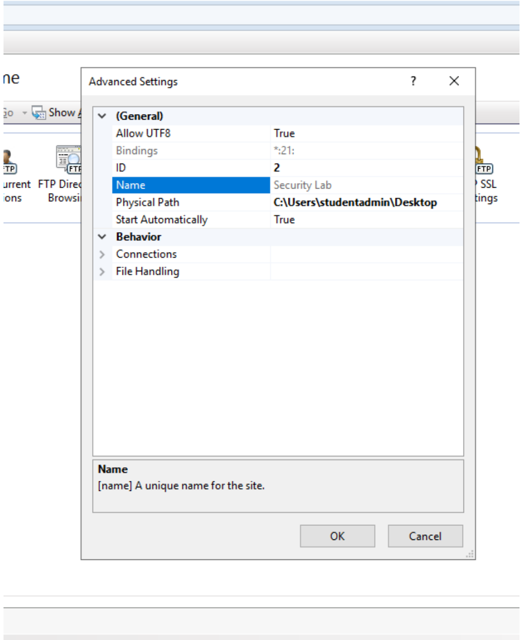
Creating a new FTP Site called 'Security Lab' with a physical path value of C:/Users/studentadmin/Desktop



Advanced Settings

(General)	
Allow UTF8	True
Bindings	*:21:
ID	2
Name	Security Lab
Physical Path	C:\Users\studentadmin\Desktop
Start Automatically	True
Behavior	
Connections	
File Handling	

Name
[name] A unique name for the site.



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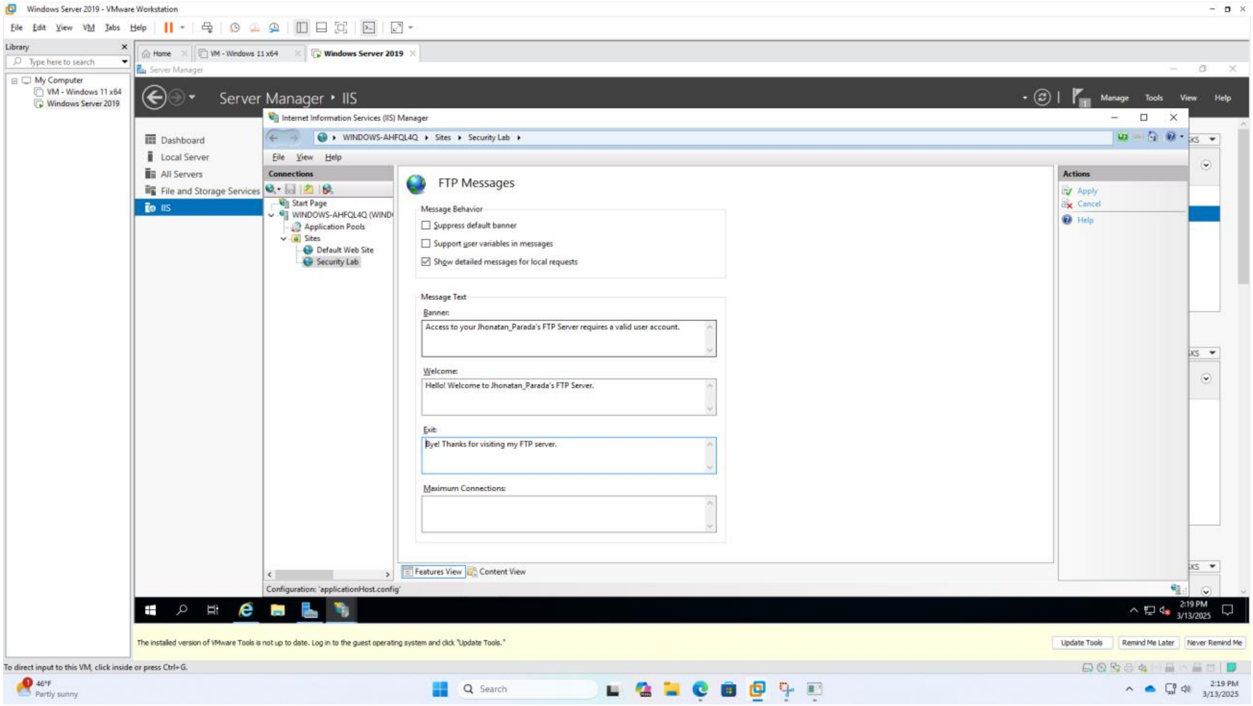
Configuring Banner, Welcome and Exit FTP messages.



Windows Server 2019 - VMware Workstation

Server Manager ▸ IIS

Internet Information Services (IIS) Manager

WINDOWS-AHFQL4Q ▸ Sites ▸ Security Lab ▸

FTP Messages

Message Behavior

- ☐ Suppress default banner
- ☐ Support user variables in messages
- ☑ Show detailed messages for local requests

Message Text

Banner:
Access to your Jhonatan_Parada's FTP Server requires a valid user account.

Welcome:
Hello! Welcome to Jhonatan_Parada's FTP Server.

Exit:
Bye! Thanks for visiting my FTP server.

Maximum Connections:

Configuration: 'applicationHost.config'

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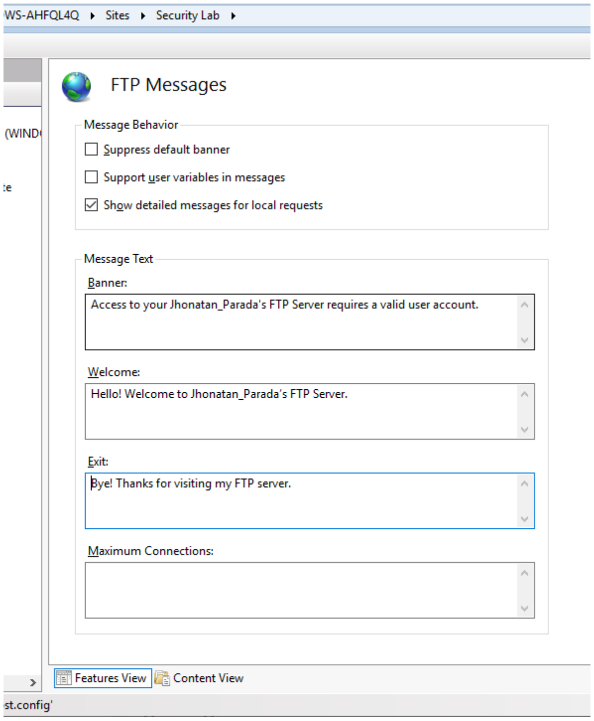

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Banner:

Access to your Jhonatan_Parada's FTP Server requires a valid user account.

Welcome:

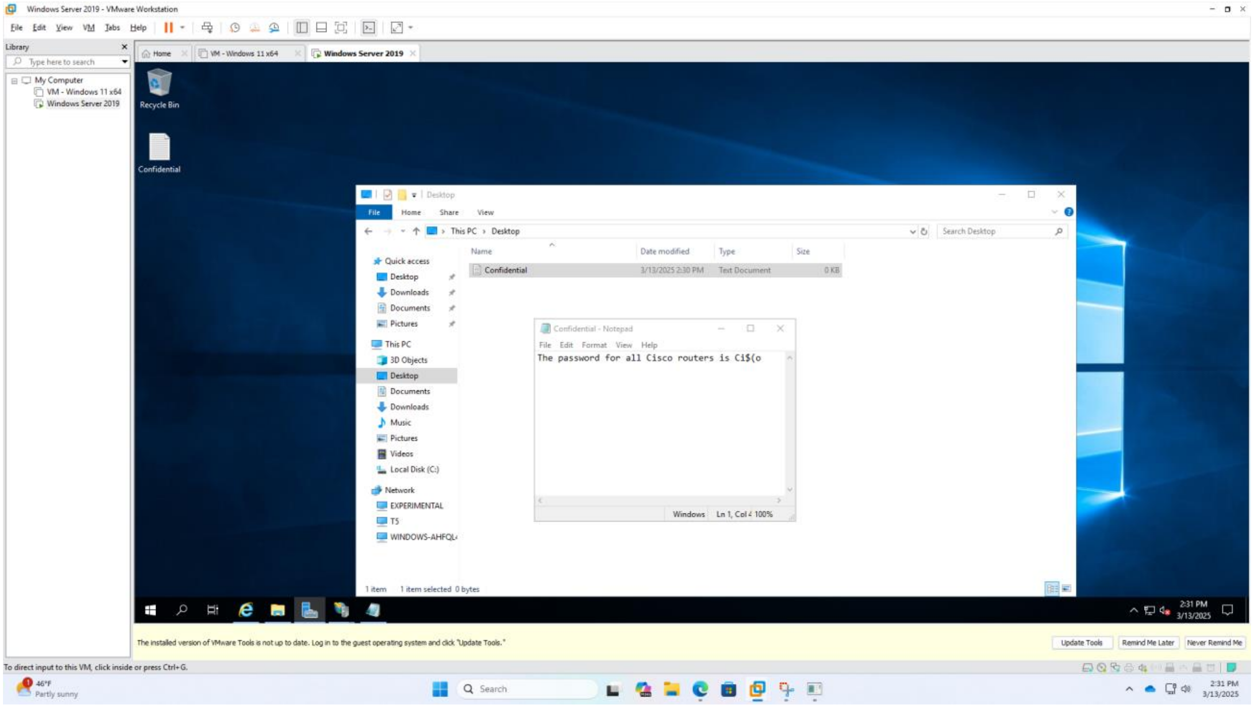
Hello! Welcome to Jhonatan_Parada's FTP Server.

Exit:

Bye! Thanks for visiting my FTP server.

Maximum Connections:

Creating a TXT file called 'Confidential' and saving it in the FTP directory, which is in This PC/Desktop.



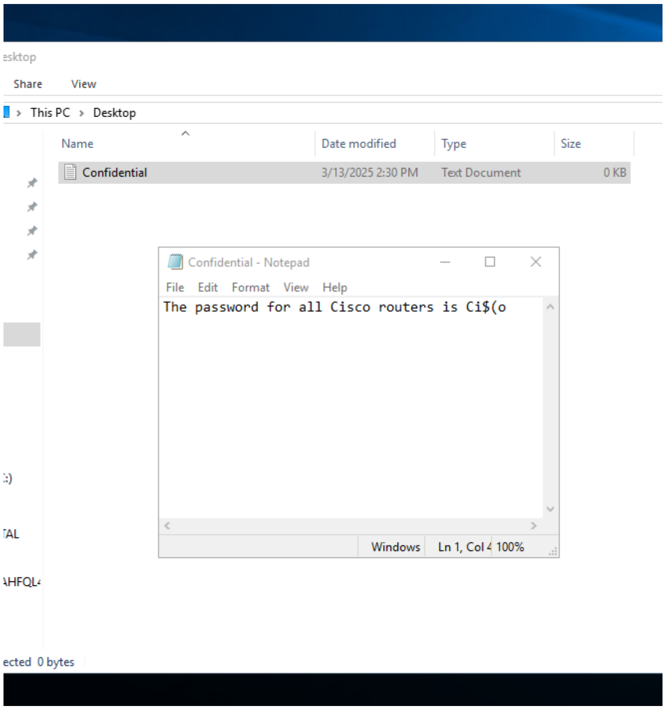
Name	Date modified	Type	Size
Confidential	3/13/2025 2:30 PM	Text Document	0 KB

Confidential - Notepad

```
The password for all Cisco routers is Ci$(o
```

Windows Ln 1, Col 4 100%

The installed version of VMware Tools is not up to date. Log in to the guest operating system and click "Update Tools."



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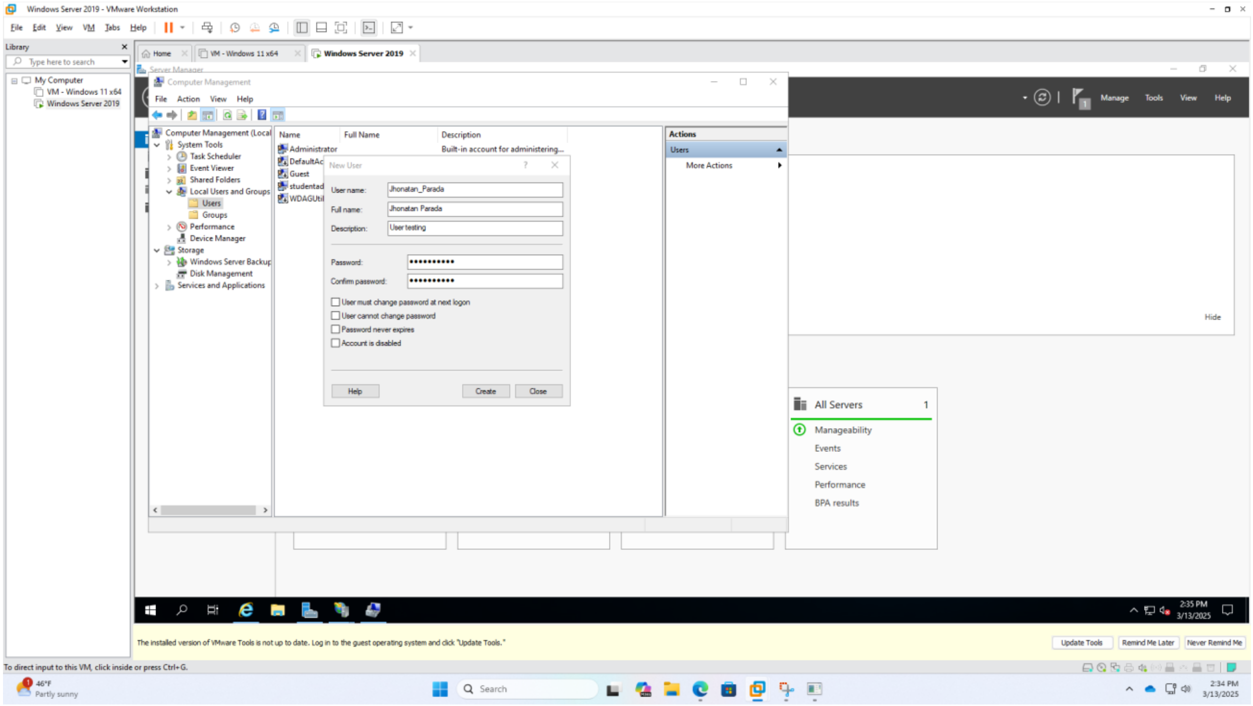
Creating a new user using the Computer Management Windows Utility.



Name	Full Name	Description
Administrator		Built-in account for administering...
DefaultAc		
Guest		
studentad		
WDAGUtil		

New User

User name: Jhonatan_Parada

Full name: Jhonatan Parada

Description: User testing

Password: ●●●●●●●●●●●

Confirm password: ●●●●●●●●●●●

□ User must change password at next logon

□ User cannot change password

□ Password never expires

□ Account is disabled

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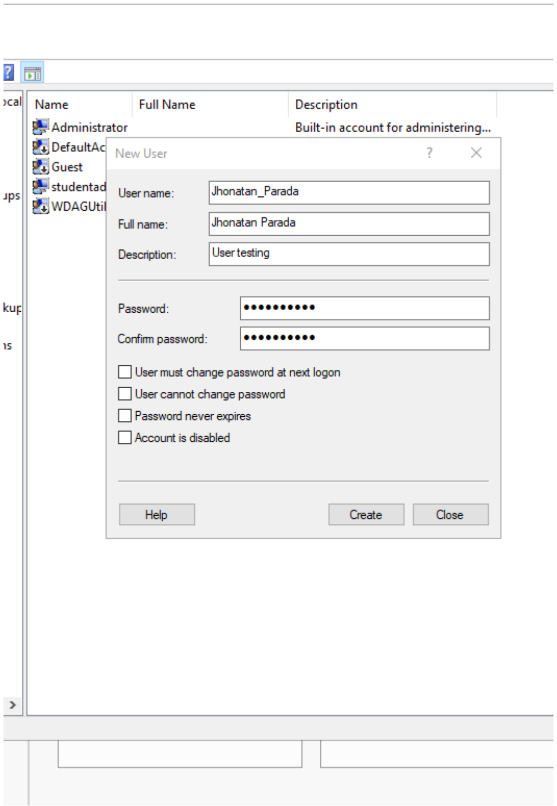

Name	Full Name	Description
Administrator		Built-in account for administering...
DefaultAc		
Guest		
studentad		
WDAGUtil		

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User name: Jhonatan_Parada

Full name: Jhonatan Parada

Description: User testing

Password: ••••••••••

Confirm password: ••••••••••

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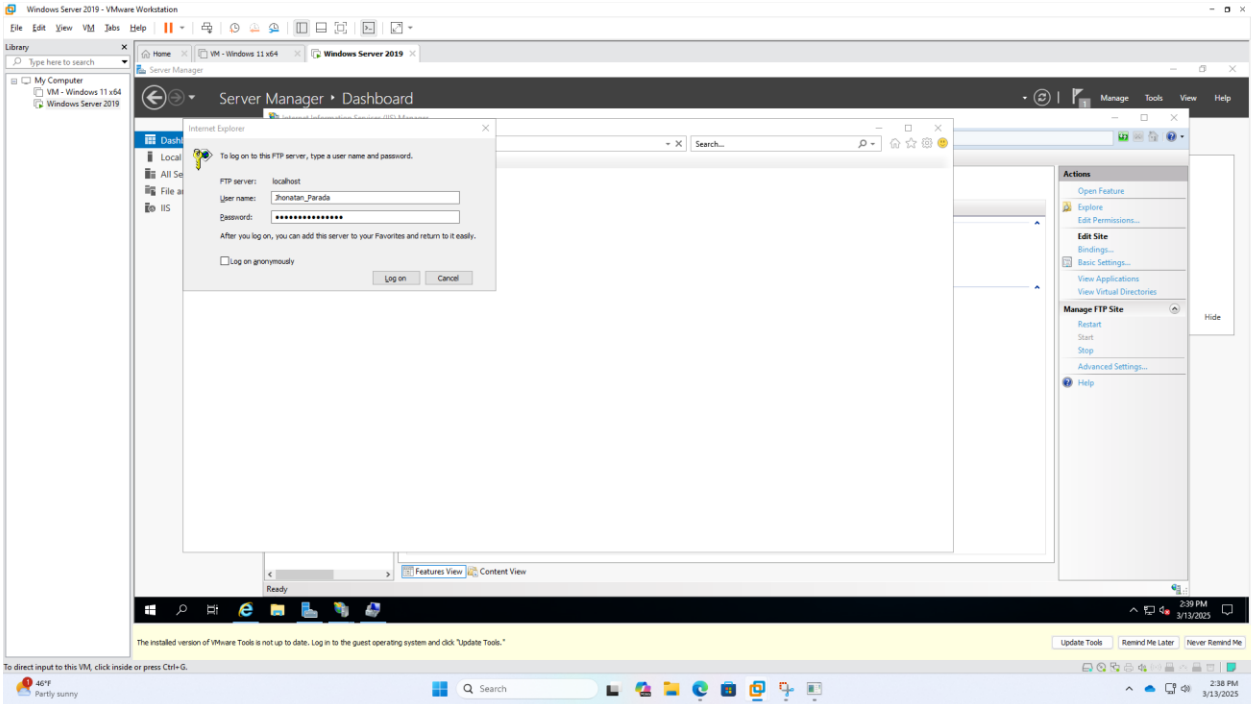
Attempting to access the FTP server in Internet Explorer by authentication



Internet Explorer

To log on to this FTP server, type a user name and password.

FTP server: localhost

User name: Jhonatan_Parada

Password: •••••••••••••••

After you log on, you can add this server to your Favorites and return to it easily.

□ Log on anonymously

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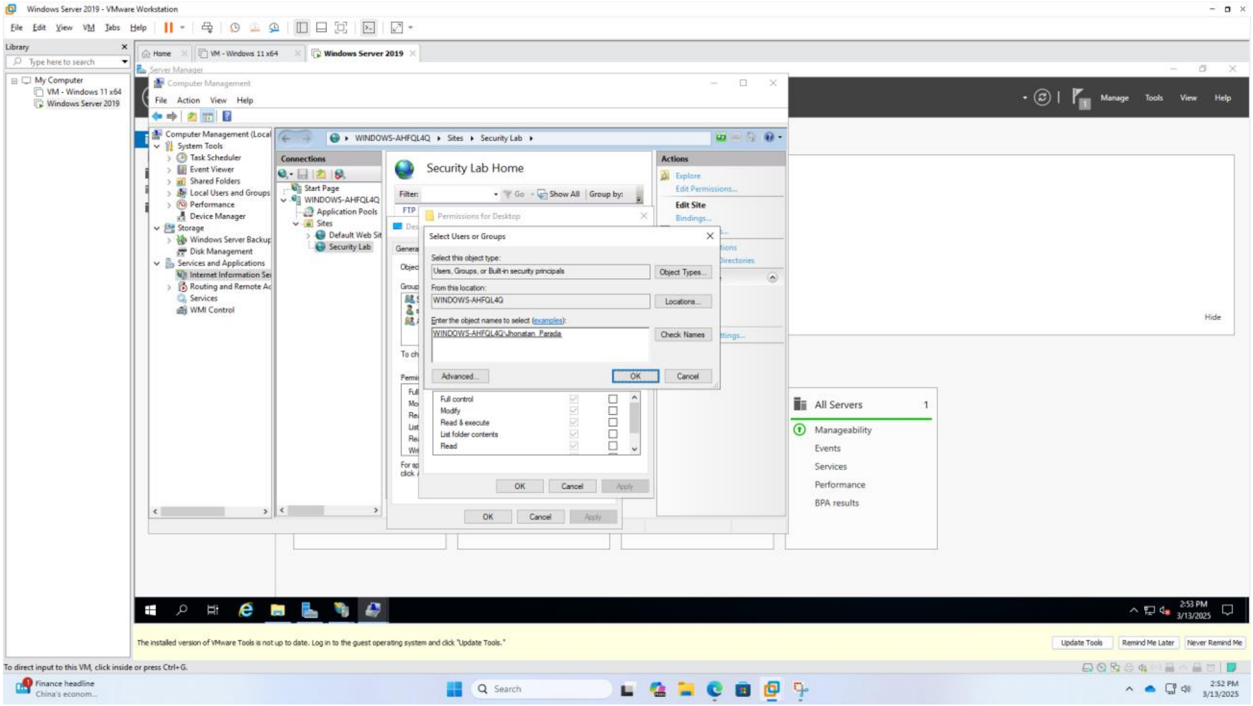
To direct input to this VM, click inside or press Ctrl+G.

Authentication failed. It was because I forgot to add the Jhonatan_Parada user to the list of users that have permission to access the FTP directory. Another work around would have been adding the user to the Administrator group.



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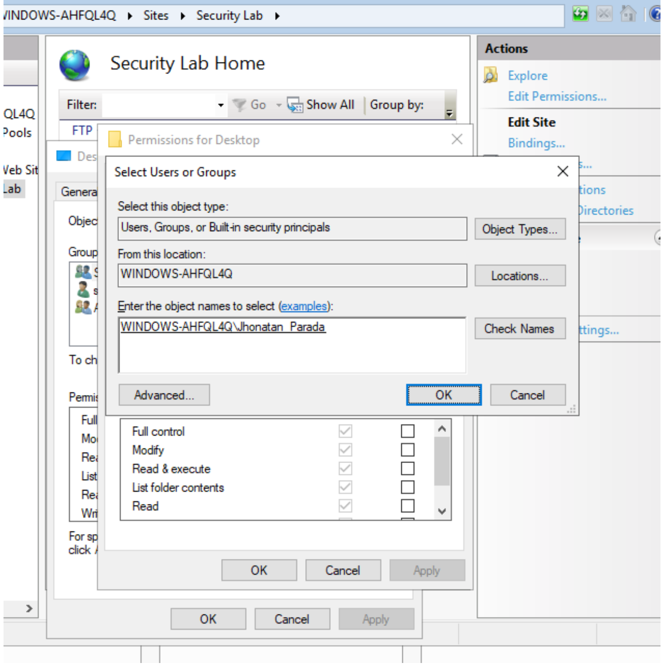


Select Users or Groups

Select this object type:
Users, Groups, or Built-in security principals [Object Types...]

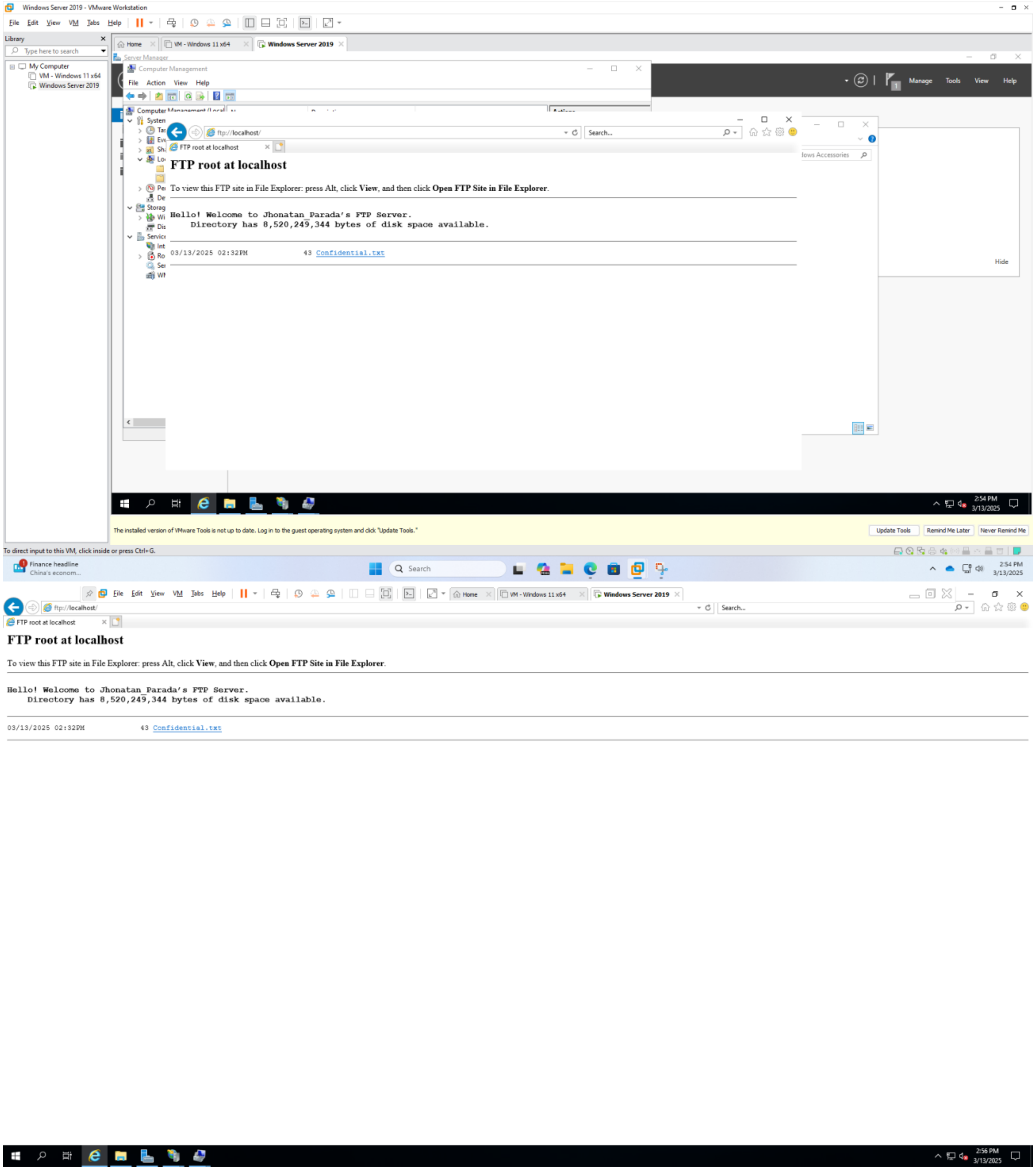
From this location:
WINDOWS-AHFQL4Q [Locations...]

Enter the object names to select (examples):
WINDOWS-AHFQL4Q\Jhonatan_Parada [Check Names]

[Advanced...] [OK] [Cancel]

Full control	☑	□
Modify	☑	□
Read & execute	☑	□
List folder contents	☑	□
Read	☑	□

Now the Jhonatan_Parada user have permission to access and see the FTP directory.



FTP root at localhost

To view this FTP site in File Explorer: press Alt, click **View**, and then click **Open FTP Site in File Explorer**.

```
Hello! Welcome to Jhonatan_Parada's FTP Server.
    Directory has 8,520,249,344 bytes of disk space available.

03/13/2025 02:32PM           43 Confidential.txt
```

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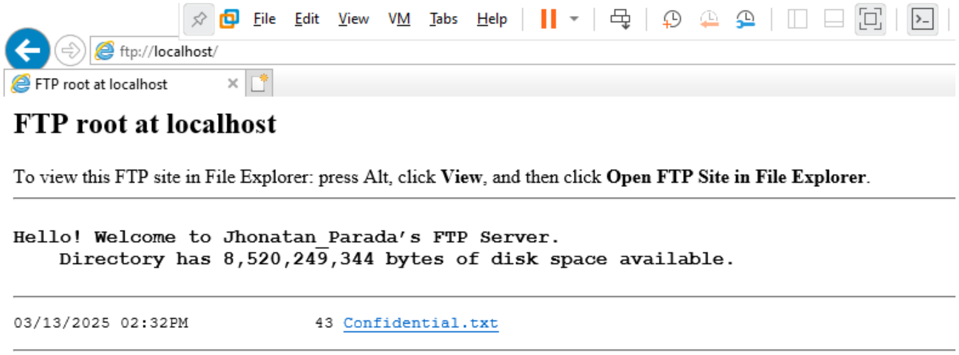

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Review Questions

1. Your Windows Server 2019 is named server02.acme.com. It is running the FTP server service. While reviewing the FTP logs, you notice entries indicating that a user named IUSR_SERVER02 has been logging on and accessing the FTP directory. What is the significance of these log entries?

a. Anonymous access is permitted by your FTP server.

b. Users from the Internet have accessed your FTP server.

c. Log maintenance has been performed by the IUSR service.

d. It is likely that your system has been attacked.

Answer: a. The significance of theses log entries indicates that the FTP server anonymous access is enabled.

2. Which of the following is a capture file format that can be read by Wireshark? (Choose all that apply.)

a. Microsoft Network Monitor captures

b. Cisco Secure Ingress Log output

c. Novell LANalyzer captures

d. tcpdump

Answer: a, c and d

3. Which of the following statements best describes the function of WinPcap?

a. WinPcap provides the logging functions for Wireshark.

b. WinPcap allows applications to capture and transmit network packets bypassing the protocol stack.

c. WinPcap is a device driver that allows applications to communicate with the Windows operating system.

d. WinPcap adds functionality to Wireshark, including skins, fonts, extended color depth, and advanced rendering.

Answer: Since WindPcap is an open-source library for Win32 platforms to capture and analyze 'raw' packets, applications such as Wireshark can potentially use this low-level module for network analysis, so option b.

4. In a Windows Server 2019 FTP server, configuration options in the FTP site's Properties/Directory Security permit administrators to block specific computers from connecting with the FTP server based on the client's IP address or NetBIOS name.

True or False?

Answer: True. The security tab in the FTP site allows administrators to manage and determine who can and cannot access the FTP server based on the client's IP address or NetBIOS name.

5. You have decided to track user activity on your Windows Server 2019 FTP server by storing your FTP log file information on a Microsoft Access database. What would be the most sensible choice of formats in which to save your FTP log files?

a. W3C Extended Log File Format

b. ODBC logging

c. Microsoft IIS Log File Format

d. Comma Separated Value Format

Answer: b. ODBC (Open Database Connectivity) loggin allows to directly connect the FTP server logs to a Microsoft database, enabling automatic insertion of log data into a structured database format, such as Microsoft Access.