

Career Simulation 2 - Runbook



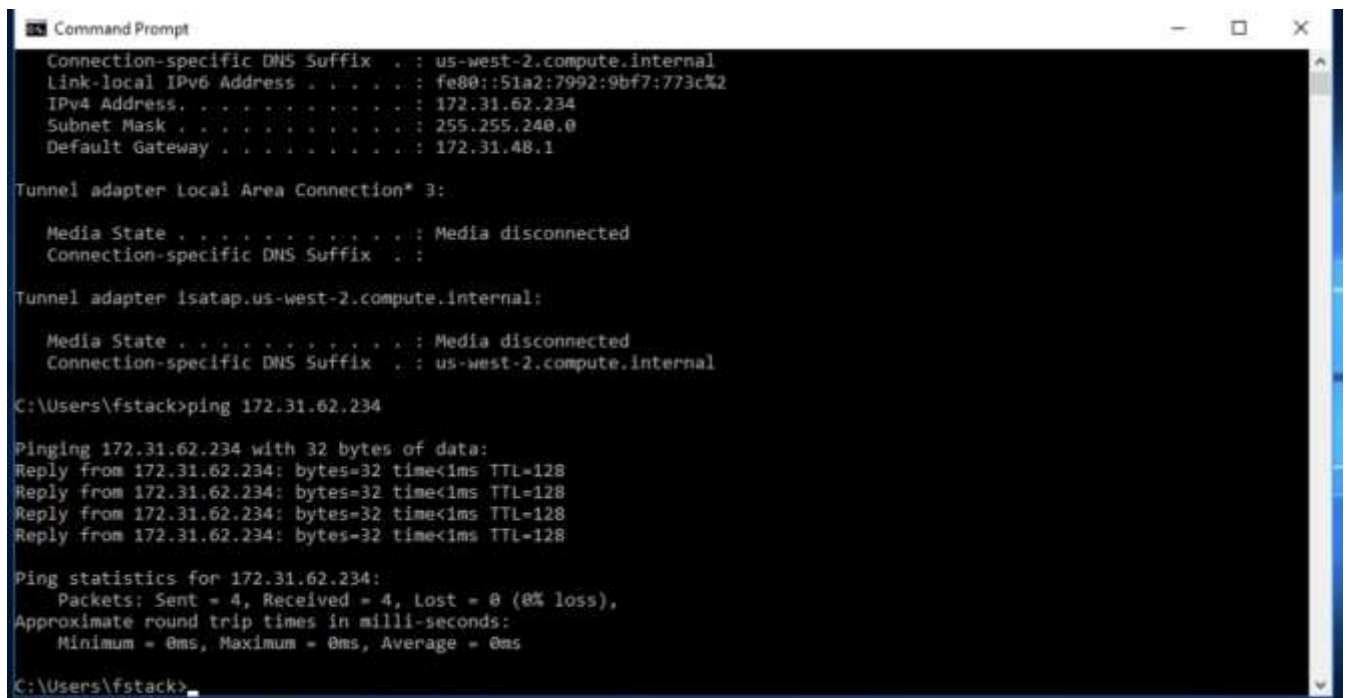
by

Chase Daniel Johnson

Objective: A new hire by the name of Charles Winston has recently been employed for the talent acquisition role within the Human Resources Department. Before onboarding begins, the IT team needs to set up the technology to ensure the new hire is prepared for his first day. The Career Simulation 2 Runbook will serve as a detailed guideline for completing the onboarding process.

Procedure:

Joining a Desktop to the Domain:



```
Command Prompt
Connection-specific DNS Suffix . : us-west-2.compute.internal
Link-local IPv6 Address . . . . . : fe80::51a2:7992:9bf7:773c%2
IPv4 Address. . . . . : 172.31.62.234
Subnet Mask . . . . . : 255.255.240.0
Default Gateway . . . . . : 172.31.48.1

Tunnel adapter Local Area Connection* 3:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  : 

Tunnel adapter {atapi.us-west-2.compute.internal}:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  : us-west-2.compute.internal

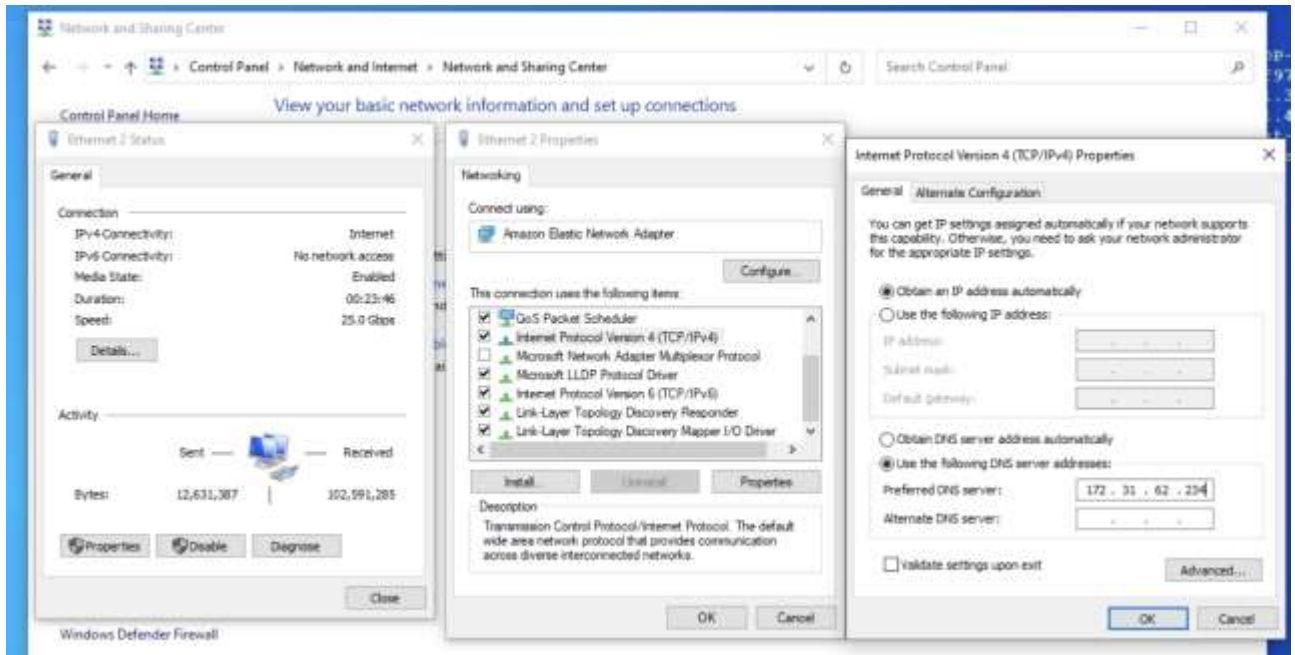
C:\Users\fstack>ping 172.31.62.234

Pinging 172.31.62.234 with 32 bytes of data:
Reply from 172.31.62.234: bytes=32 time<1ms TTL=128
Reply from 172.31.62.234: bytes=32 time<1ms TTL=128
Reply from 172.31.62.234: bytes=32 time<1ms TTL=128
Reply from 172.31.62.234: bytes=32 time<1ms TTL=128

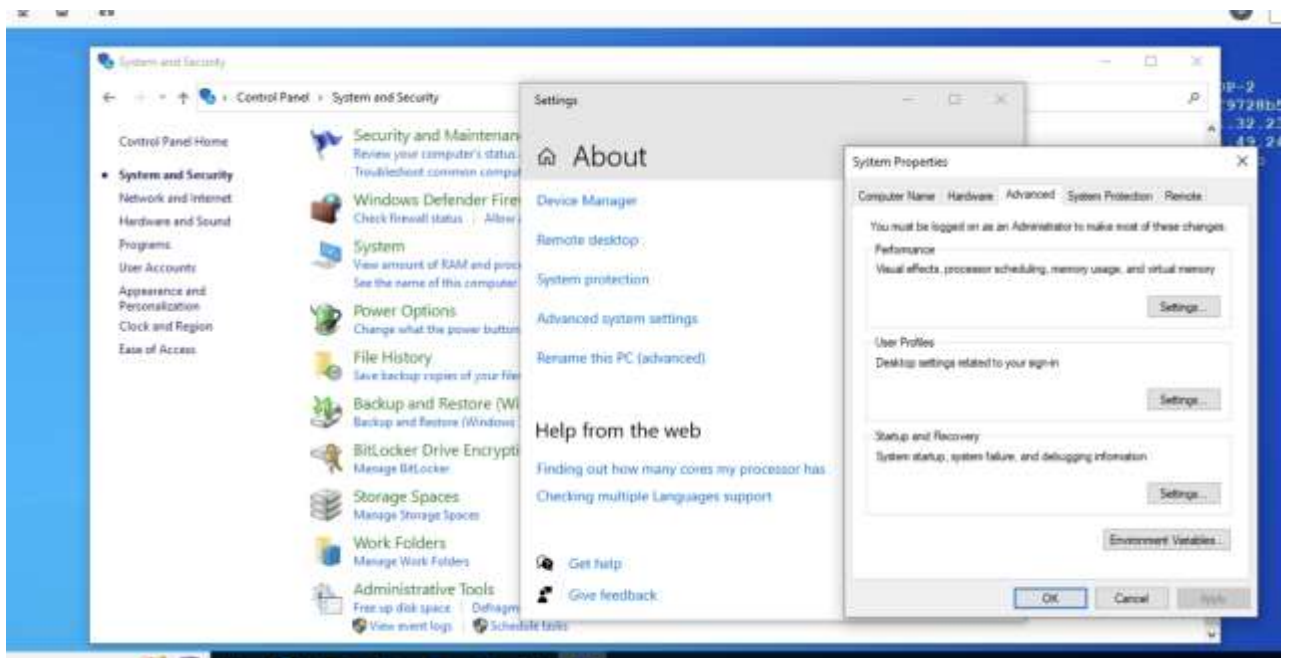
Ping statistics for 172.31.62.234:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\fstack>
```

1. Access the server, open the Windows Command Prompt (CMD), and search for the server IP address.
2. Ping the server IP address to check for connectivity.

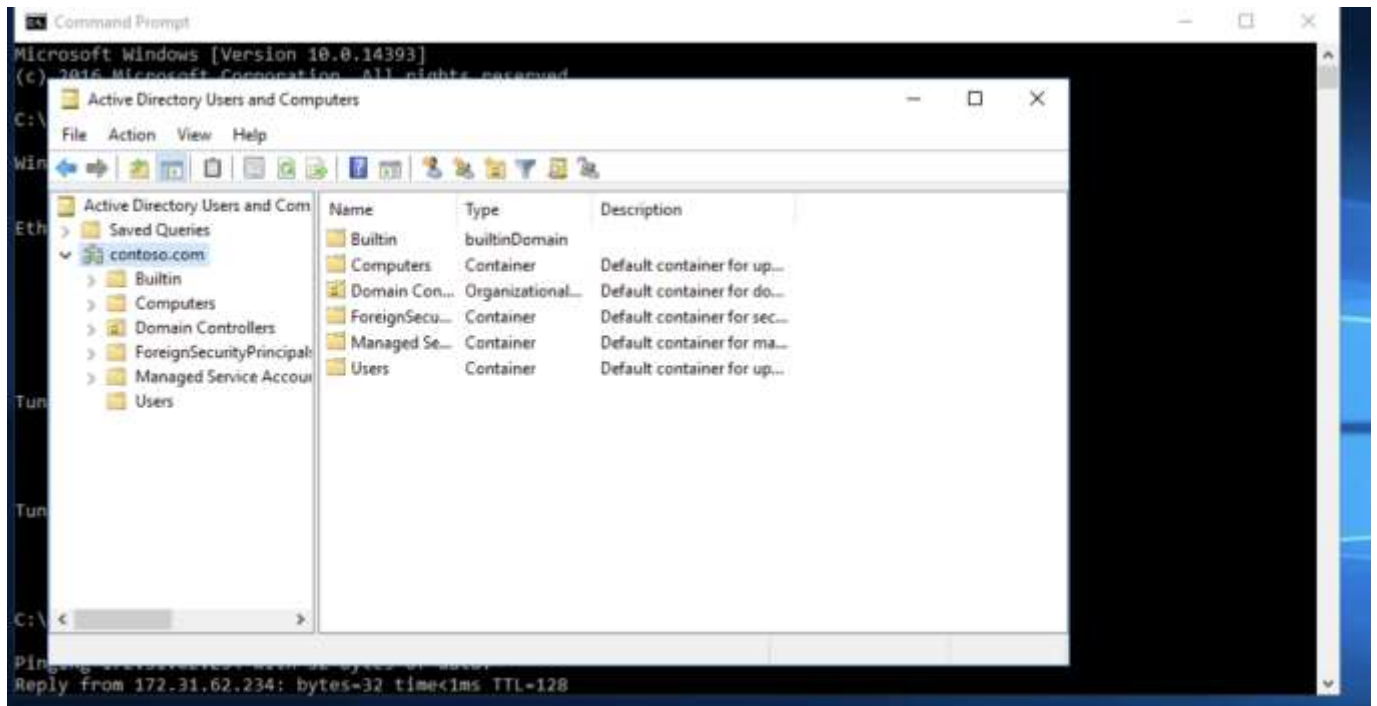


3. Switch to the Windows Desktop-2 computer and access the control panel.
4. Click Network and Internet
5. Followed by Network and Sharing
6. Next Ethernet 2 > Properties > Internet Protocol V4
7. Enter server IP address for preferred DNS server
8. Now switch back to the server and search for Active Directory Users and Computers, observe contoso.com

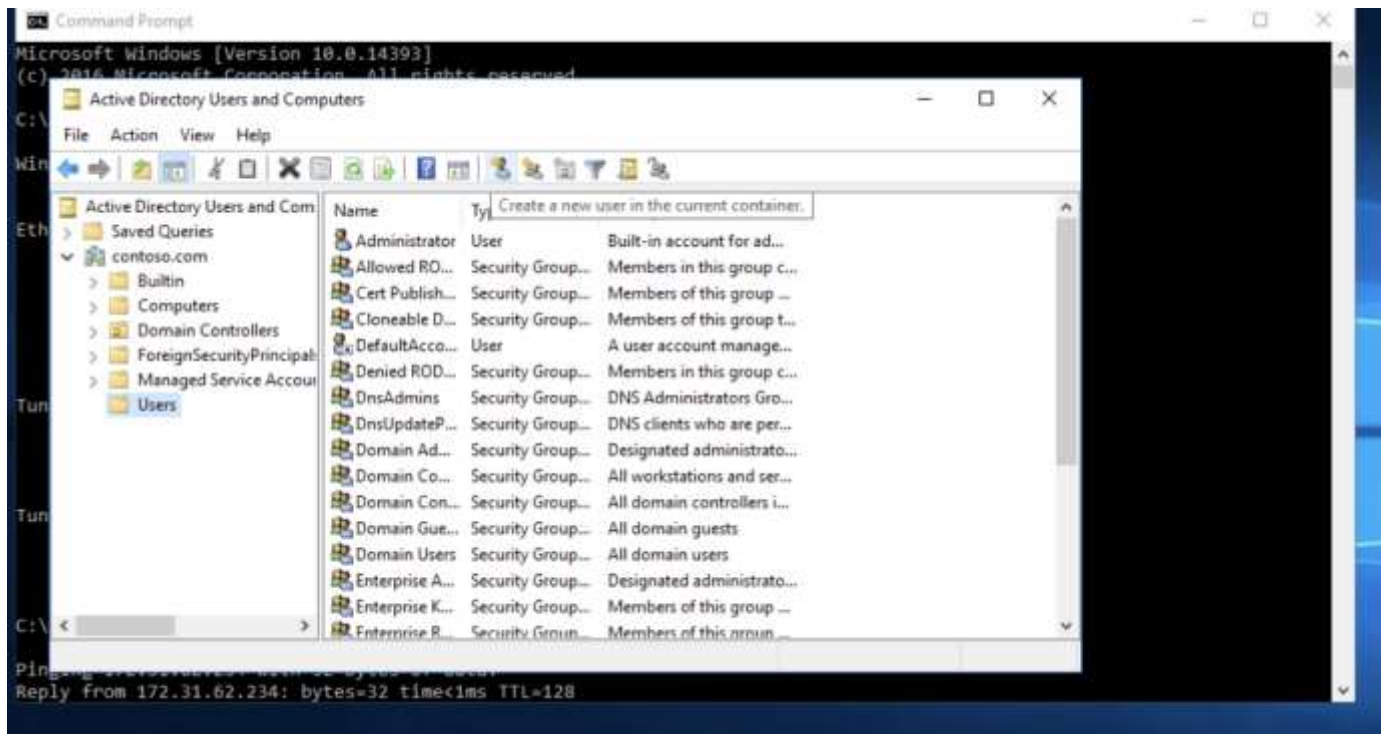


9. Return to Desktop 2, then click the Control Panel.
10. Go to System and Security > System > Advanced System Settings
11. Then Computer Name > Change > Domain.
12. Enter contoso.com into the domain box.
13. Enter the username: administrator and password: Pa\$\$w0rd
14. This joins the Desktop-2 computer to the domain and now the server IP can actively communicate with the active directory.

Adding A New User to the Network:

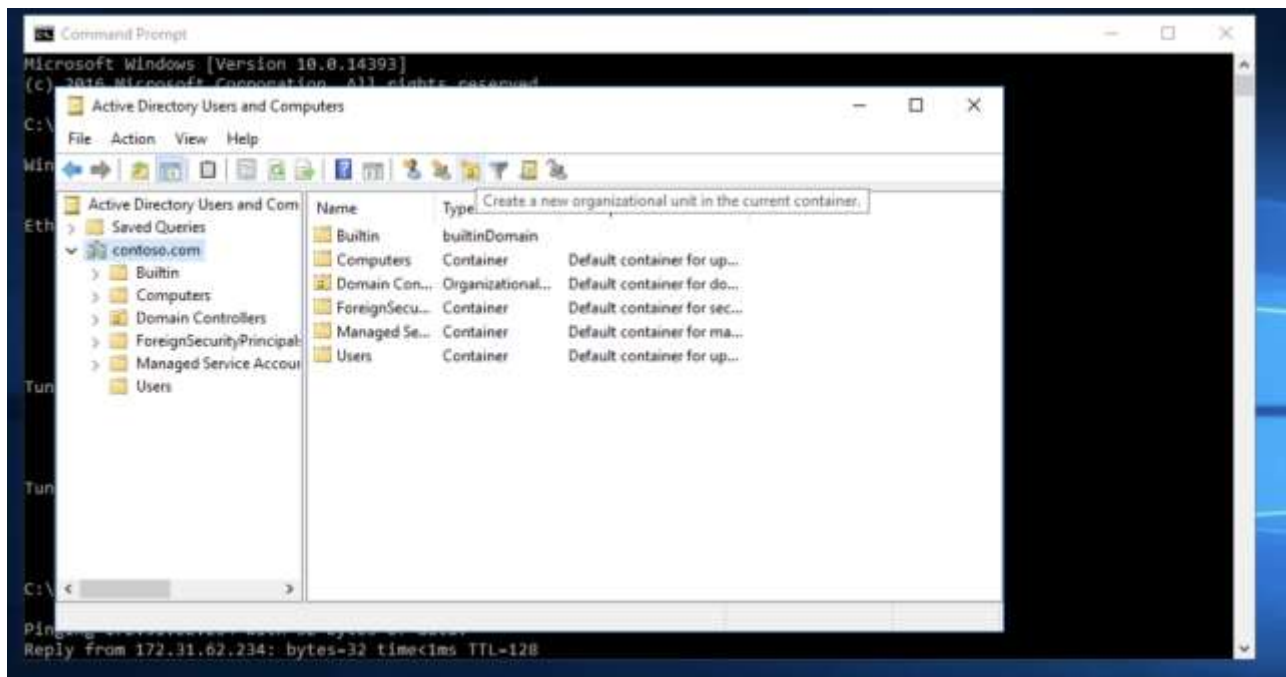


15. Switch back to the Server.
16. Open the active directory > click contoso.com > Users



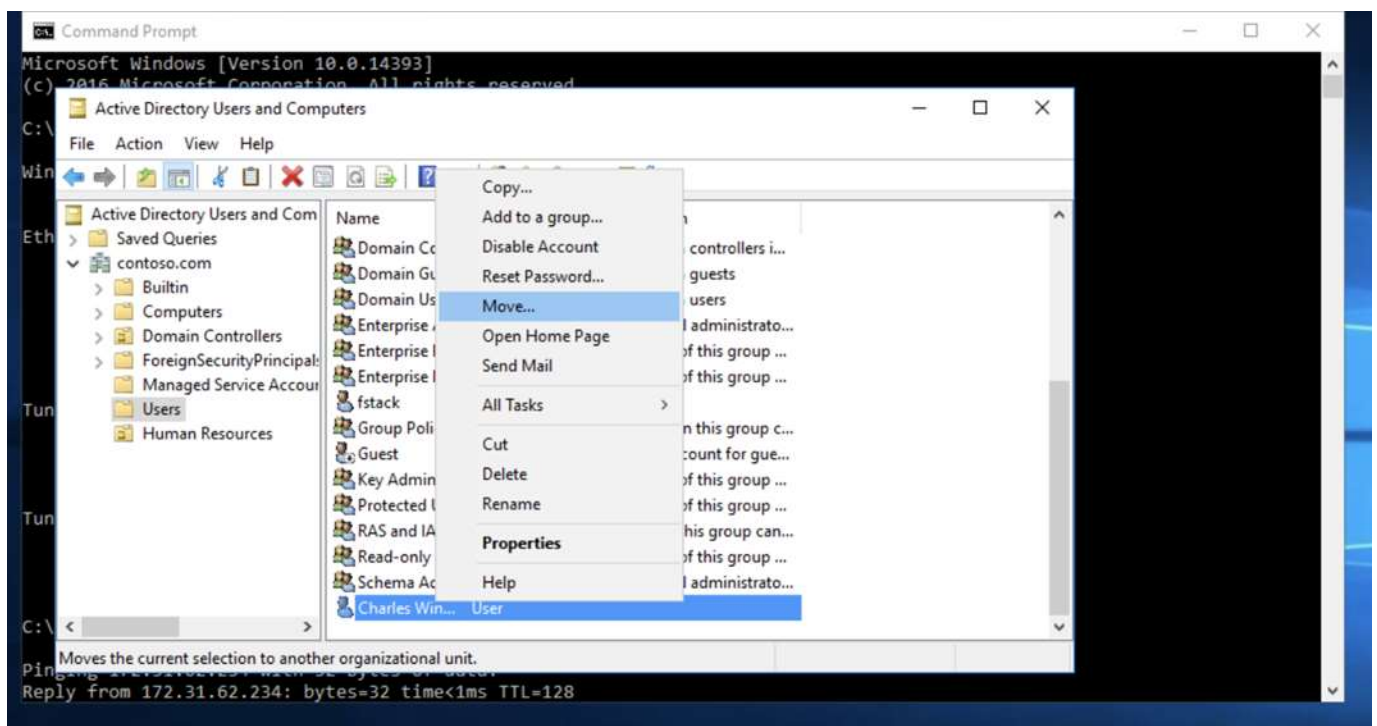
17. Click on create a new user in the current container button.
18. Enter the new hire's information: Charles Winston
19. Create a user logon name: cwinston@contoso.com
20. Create a password for the new hire.
 - a. User: cwinston@contoso.com
 - b. Password: Marvel82!
21. Select a modification based on company policy & procedures.
 - a. User must change password at next login
 - b. User cannot change password
 - c. Password never expires
 - d. Account is disabled
22. Finish the setup and the User Account has been created.

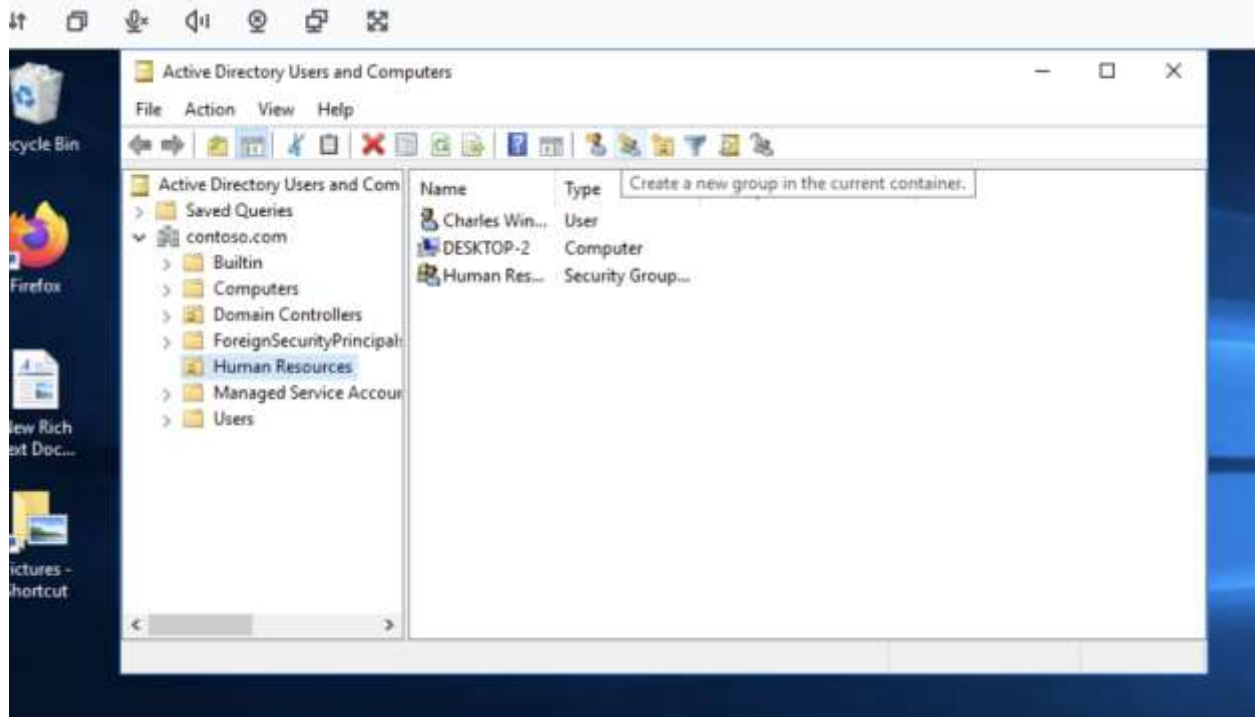
Creating a New Group and Adding New Users:



23. Click, create a new organizational unit in the current container.

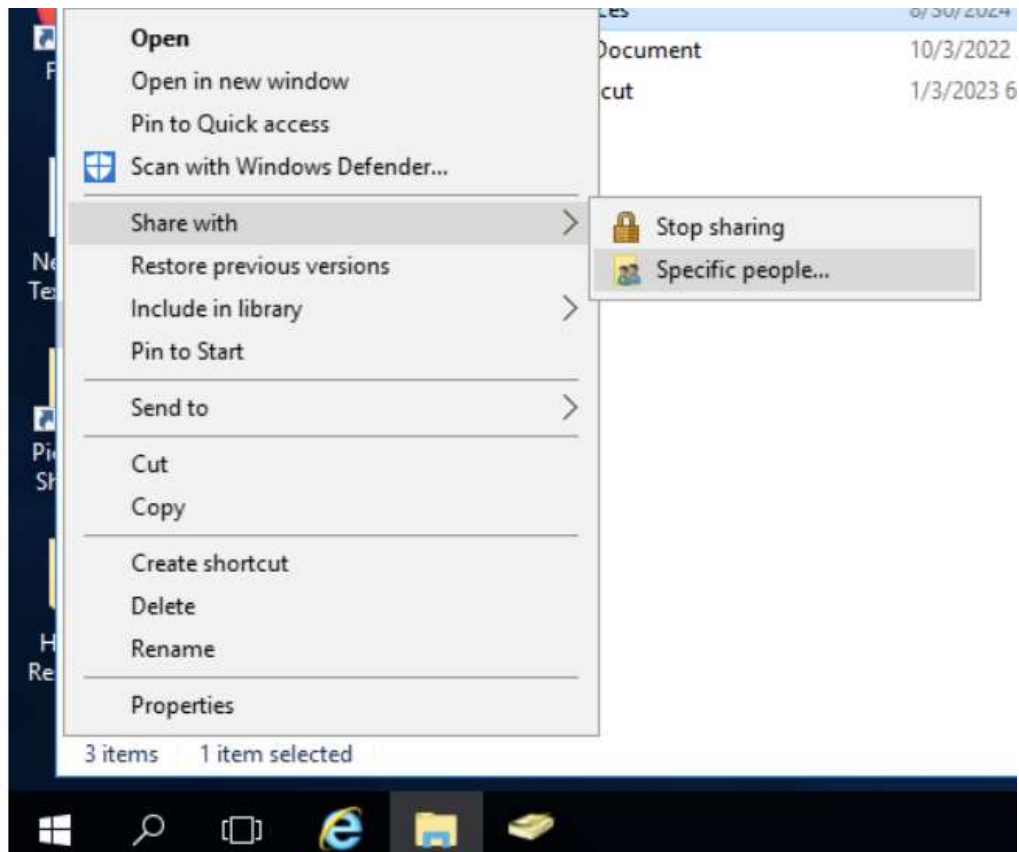
24. Label the organizational unit, "Human Resources".



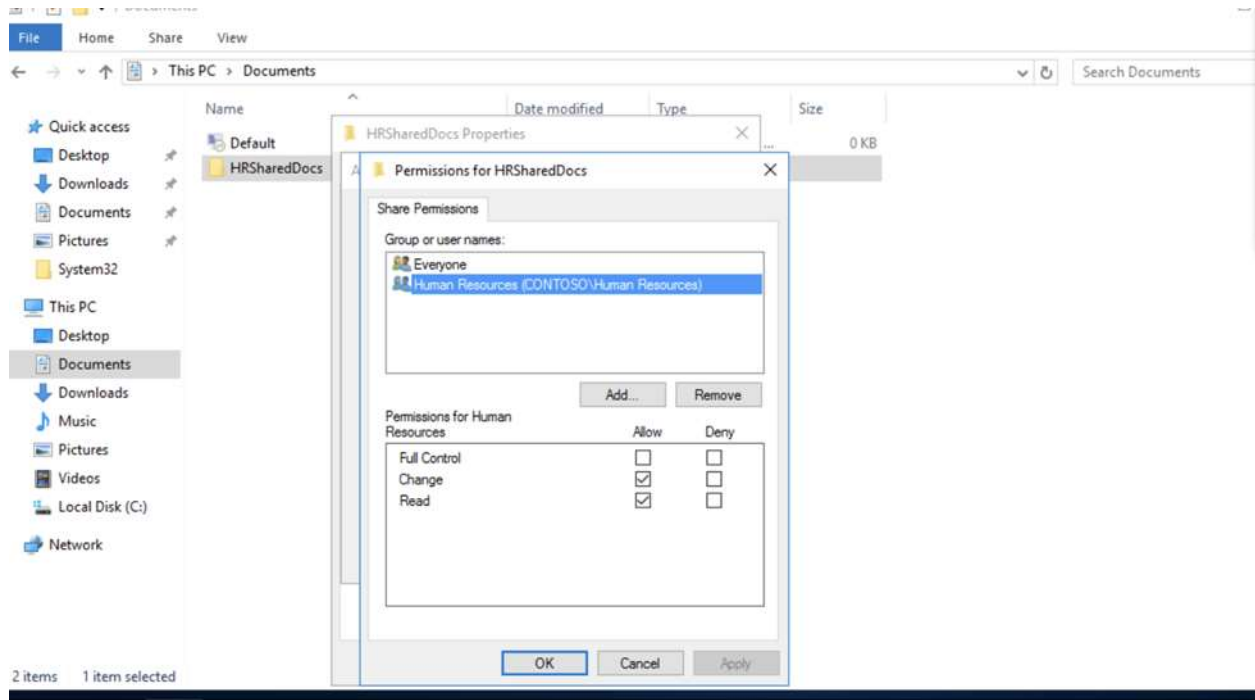


25. Select > create a new group in the current container. Label it Human Resources. This will create a new group on the network
26. Right click the user Charles Winston.
27. Move Charles Winston into the Human Resources organizational unit.
28. Charles Winston has successfully been added to the Human Resources Department.
29. Open the Computers folder and repeat the process by moving Desktop-2 to Human Resources. This places the Desktop-2 computer under the Human Resources Department and adheres to the principles of least privilege.

Creating Shared Files & Granting Permissions:



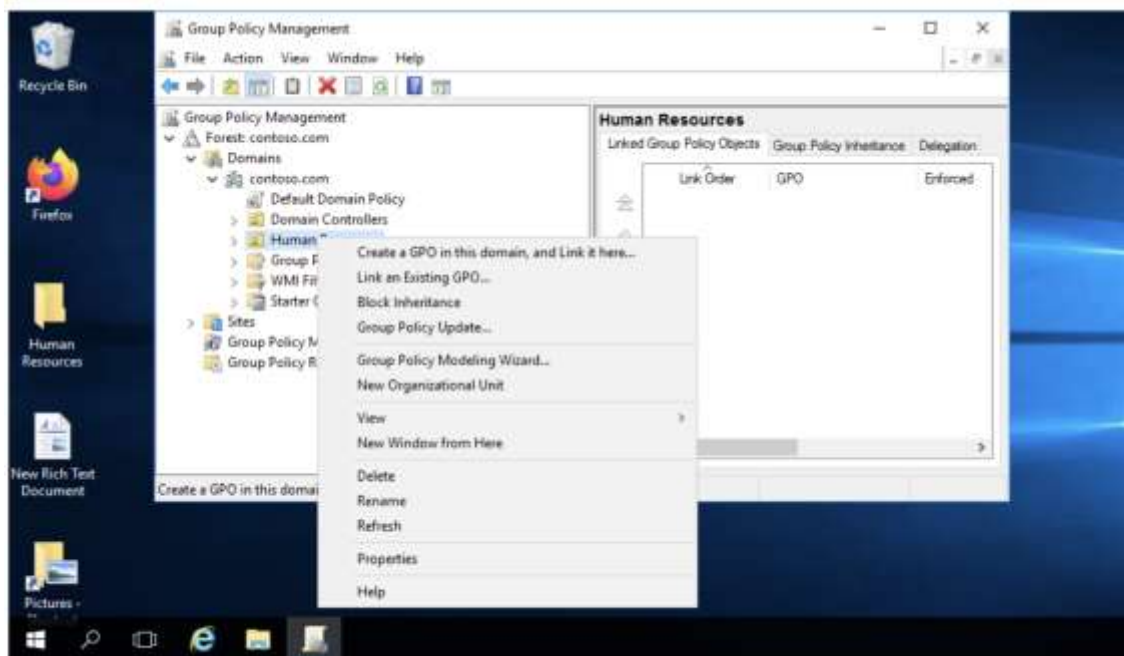
30. Create a folder called HRSharedDocs on the server.
31. Add test.txt within the folder
32. Right click on the folder and click share with > specific people

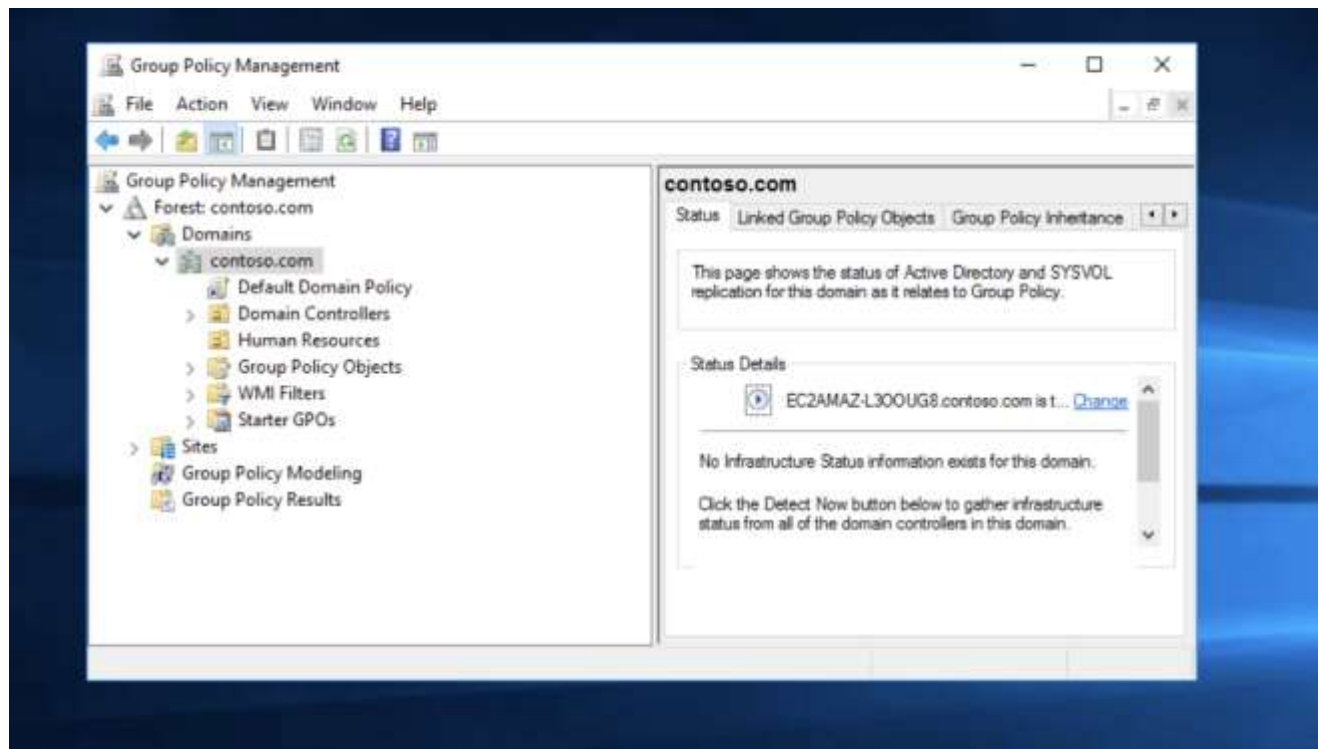


33. Search for Charles Winston, the field will populate when the username has been identified.

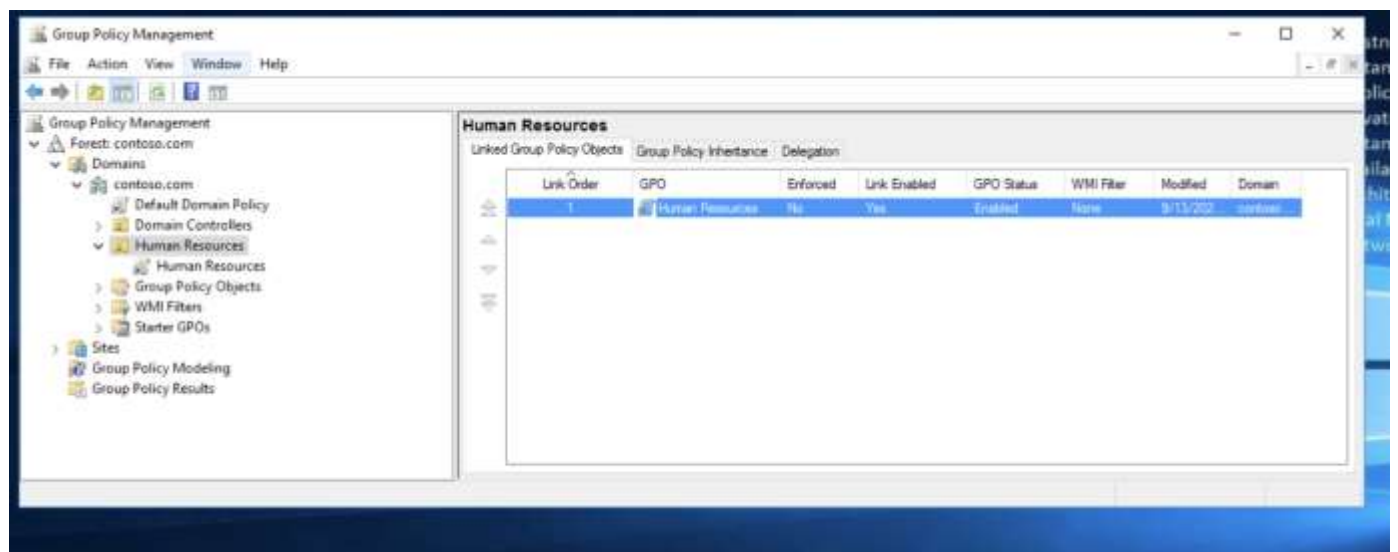
34. Change Permissions to read and write to allow Charles Winston read and writing privileges.

Establishing Group Policy Objects:

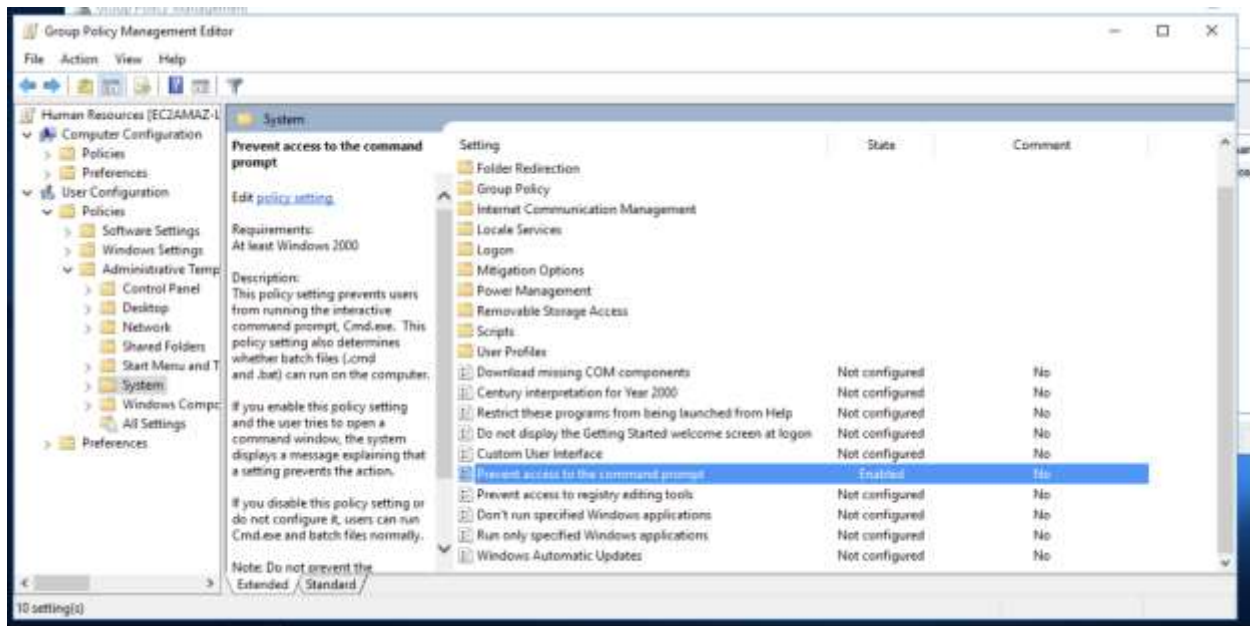




35. In the search bar, find Group Policy Management, and open it.
36. Find Human Resources, right click then add "Create a GPO in this domain and link it here".
37. Label the GPO – Human Resources and click okay.



38. Right click on the GPO and click Edit.



39. Open User Configuration

40. Go to System

41. Edit the GPO and apply the following rules:

- A message should appear whenever the computer starts (do not install unauthorized programs).
- Prevent the user's access to CMD.
- Add Script to the user's login to map the share you created.
- Disable the run command from the start menu.

42. The purpose of setting GPO's is to provide centralized rules within an organization's system to ensure employees are adhering to company security standards.

43. Refer to the figures below to enable the configurations of specific GPO's.

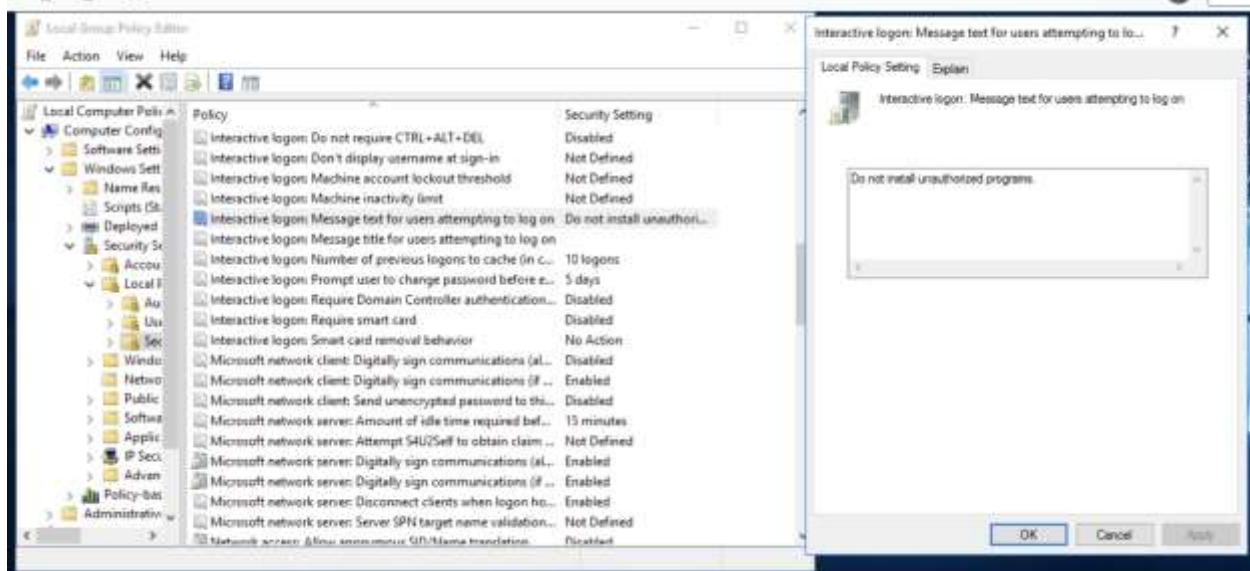


Figure 46a. – Navigate to Local Group Policy Editor > Computer Configurations > Windows Settings > Security Settings > Local Group Policy Editor > Security Options > Interactive Logon: Message text for users attempting to log on > Type “Do not install unauthorized programs.” > Apply > Okay.

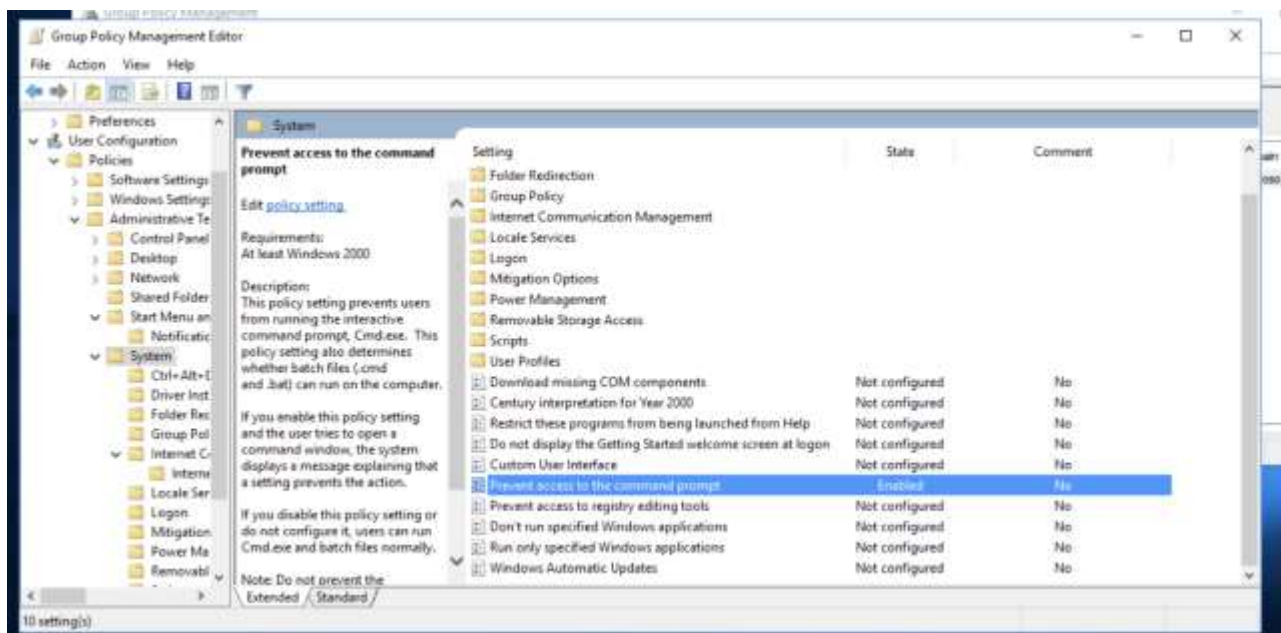


Figure 46b. – Navigate to User Configuration > Policies > Administrative Templates > System > Double click Prevent access to the command prompt in the right pane and enable the policy.

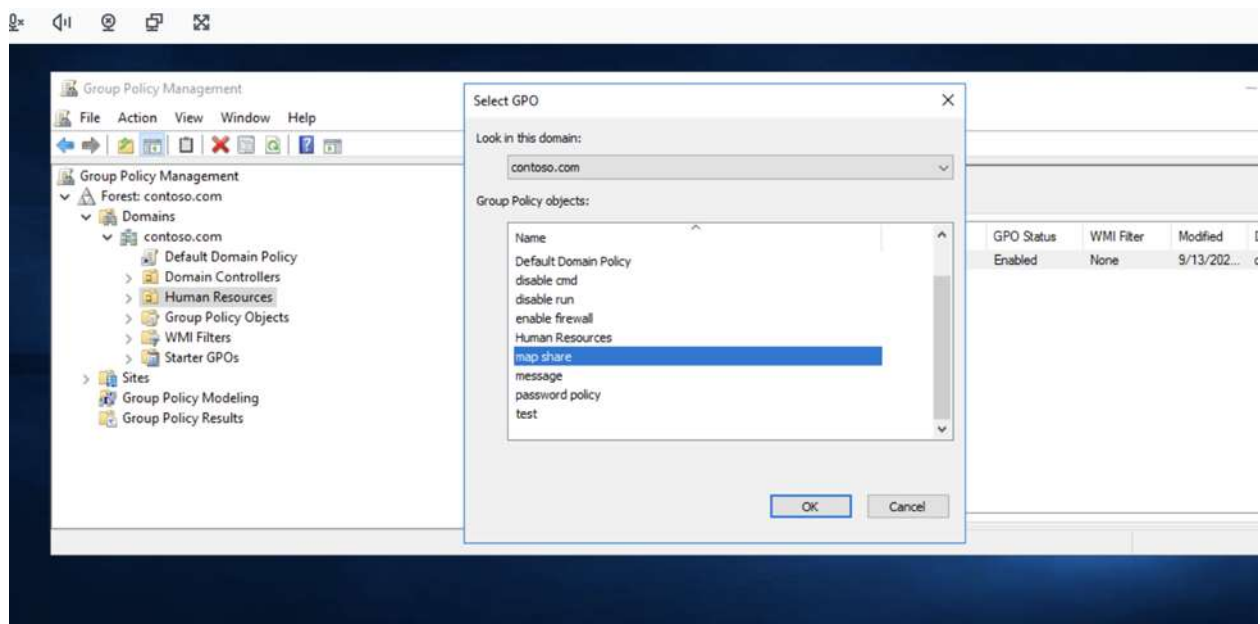


Figure 46c. – Navigate to contoso.com > Human Resources OU > Right click Link an existing GPO > map share > okay.

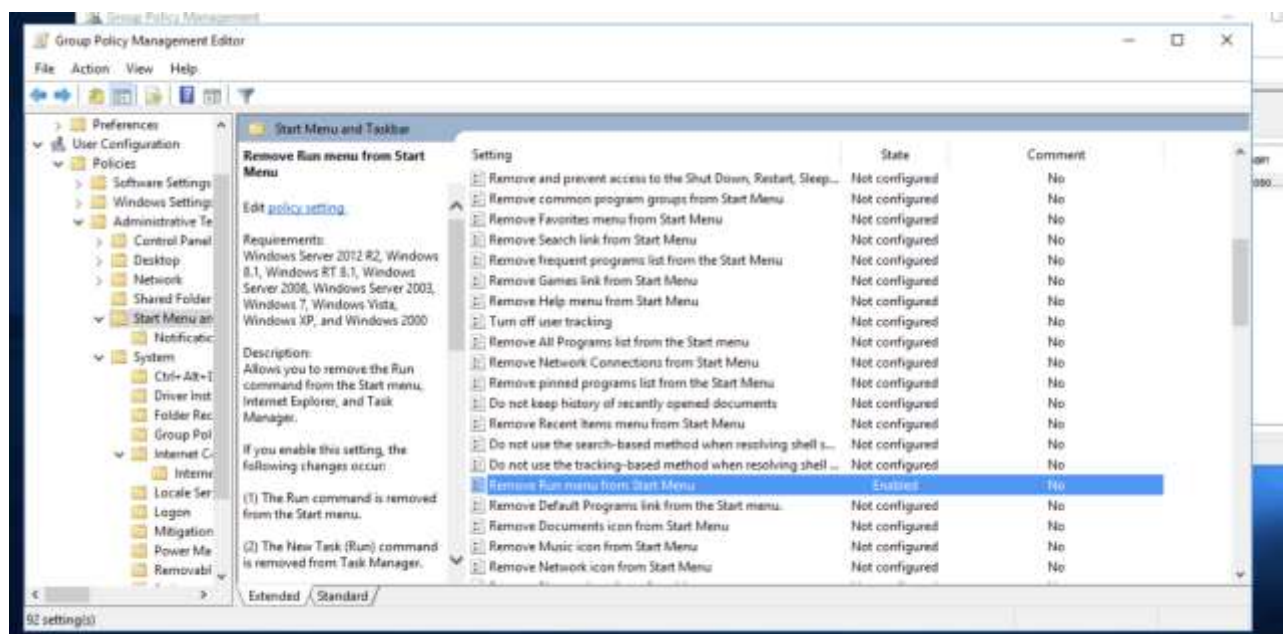
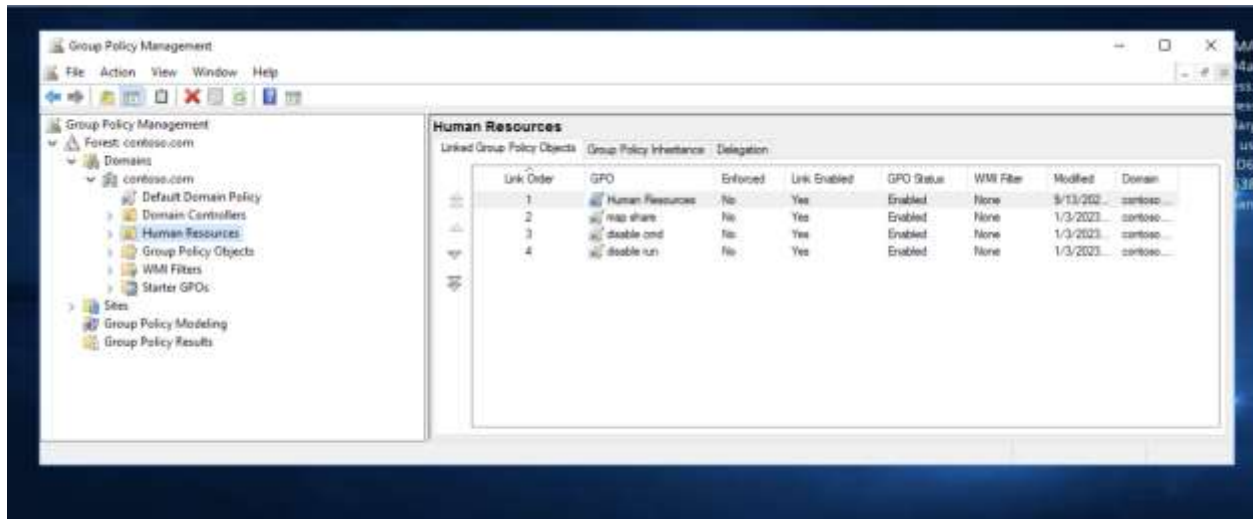
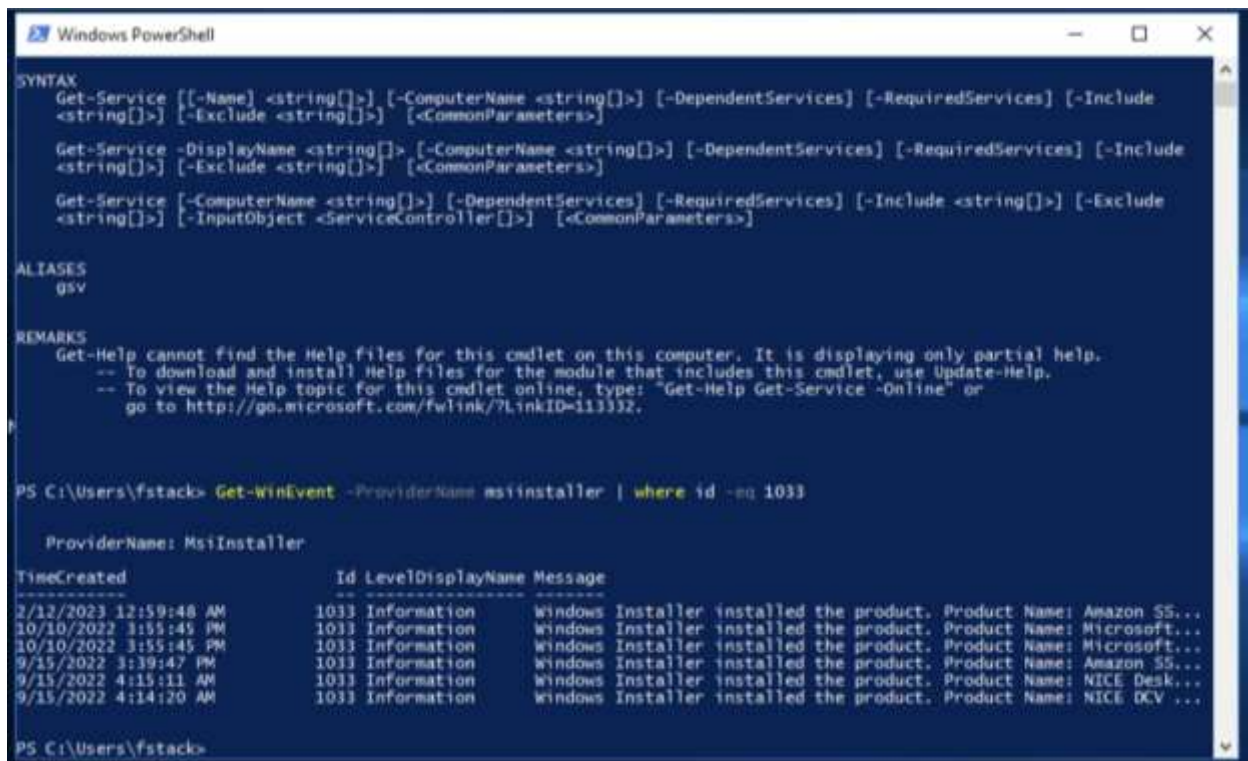


Figure 46d. - Navigate to User Configuration > Policies > Administrative Templates > Start Menu and Taskbar > Double click Remove Run menu from Start Menu in the right pane and enable the policy.



44. The figure above shows the enabled GPO rules.
45. Switch to Desktop-2 and logon using Charles Winston's credentials.
46. Switch back to the Server and open Event Viewer from the search bar.
47. Click on Windows Logs > Security > Observe the security logs columns: Date and Time, Source, Event ID, and Task Category.
 - a. User: cwinston logged on at 9/13/2024 3:59:22 PM
48. This demonstrates how event logs are created and stored to track user logon's for security purposes.

Utilizing Windows PowerShell to Interpret Event Logs and Export Files:



```
Windows PowerShell

SYNTAX
Get-Service [-Name <string[]>] [-ComputerName <string[]>] [-DependentServices] [-RequiredServices] [-Include <string[]>] [-Exclude <string[]>] [<CommonParameters>]
Get-Service -DisplayName <string[]> [-ComputerName <string[]>] [-DependentServices] [-RequiredServices] [-Include <string[]>] [-Exclude <string[]>] [<CommonParameters>]
Get-Service [-ComputerName <string[]>] [-DependentServices] [-RequiredServices] [-Include <string[]>] [-Exclude <string[]>] [-InputObject <ServiceController[]>] [<CommonParameters>]

ALIASES
gsv

REMARKS
Get-Help cannot find the Help files for this cmdlet on this computer. It is displaying only partial help.
-- To download and install Help files for the module that includes this cmdlet, use Update-Help.
-- To view the Help topic for this cmdlet online, type: "Get-Help Get-Service -Online" or go to http://go.microsoft.com/fwlink/?LinkID=113332.

PS C:\Users\fstack> Get-WinEvent -ProviderName msiinstaller | where id -eq 1033

ProviderName: MsiInstaller

TimeCreated          Id Level DisplayName Message
-----
2/12/2023 12:59:48 AM 1033 Information windows Installer installed the product. Product Name: Amazon S5...
10/10/2022 1:55:45 PM 1033 Information windows Installer installed the product. Product Name: Microsoft...
10/10/2022 3:55:45 PM 1033 Information windows Installer installed the product. Product Name: Microsoft...
9/15/2022 3:39:47 PM 1033 Information windows Installer installed the product. Product Name: Amazon S5...
9/15/2022 4:15:11 AM 1033 Information windows Installer installed the product. Product Name: NICE Desk...
9/15/2022 4:14:20 AM 1033 Information windows Installer installed the product. Product Name: NICE DCV ...

PS C:\Users\fstack>
```

49. To Check what the latest program installed on the computer was. Open Windows Powershell and use Get-WinEvent to retrieve Windows Event Logs.
50. Code: `Get-WinEvent -ProviderName msiinstaller | where id -eq 1033`
51. The following code retrieves Window Event Logs from the Microsoft Software Installer and the id = 1033 denotes the locale Id/language. An MSI package uses the language you configure it to.


```

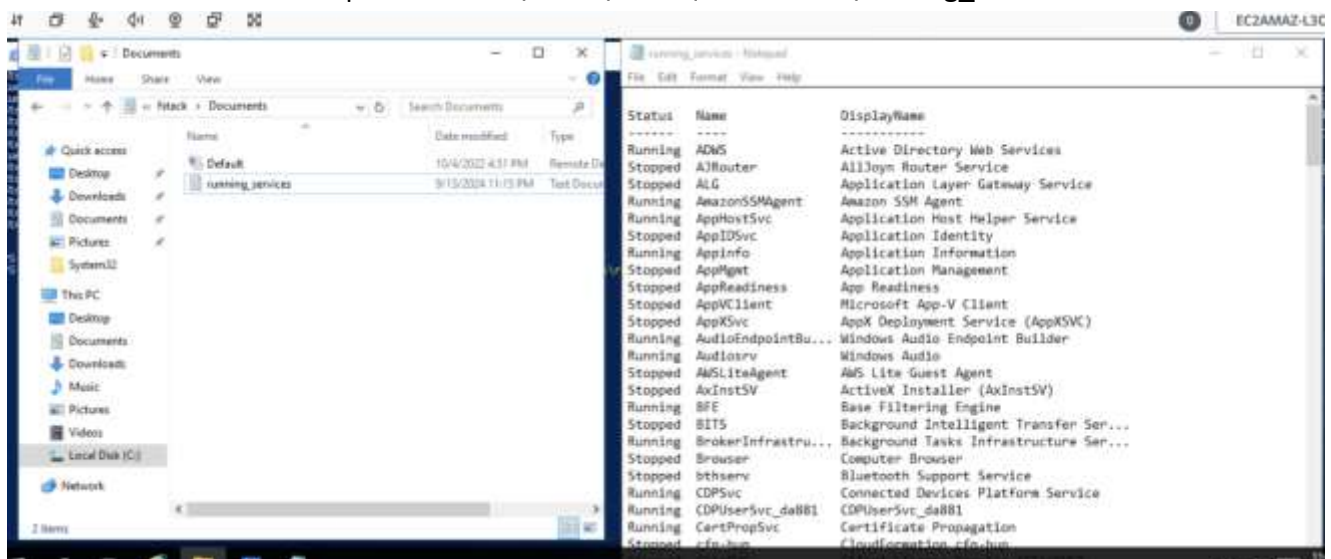
Stopped WinHttpAutoProx... WinHTTP Web Proxy Auto-Discovery Se...
Running Winmgmt Windows Management Instrumentation
Running WinRM Windows Remote Management (WS-Manag...
Stopped wscntcfg Windows Insider Service
Stopped widsvc Microsoft Account Sign-in Assistant
Stopped wmiApSrv WMI Performance Adapter
Stopped WPDBusEnum Portable Device Enumerator Service
Running WpnService Windows Push Notifications System S...
Stopped WpnUserService... Windows Push Notifications User Ser...
Stopped wsearch Windows Search
Stopped wuauclt Windows Update
Stopped wudfsvc Windows Driver Foundation - User-mo...
Stopped XblAuthManager Xbox Live Auth Manager
Stopped XblGameSave Xbox Live Game Save

PS C:\Users\fstack> Get-Service | Out-File "C:\Users\fstack\Documents\running_services.txt"
PS C:\Users\fstack>

```

52. Write a PowerShell script that gives a list of all running services and puts it into a file named running_services.txt.

Code: `Get-Service | Out-File "C:\Users\fstack\Documents\running_services.txt"`



53. Use the GUI to confirm if the text output was correctly stored in the correct file pathway.

Summary:

The steps highlighted in this runbook demonstrate the following concepts: How to join a desktop computer to a domain server, Adding a new user to a network, Creating a new group and adding a user to the group, Creating shared files/folders and granting permissions, Establishing Group Policy Objects (GPO's), and utilizing Windows PowerShell to Interpret Event Logs and Export Files.

References:

Fullstack Cohort Connection Unit 21

Fullstack Cohort Connection Unit 22

Locale Identifiers:

<https://learn.microsoft.com/en-us/windows/win32/intl/locale-identifiers>

Microsoft PowerShell – Get_Event

<https://learn.microsoft.com/en-us/powershell/module/microsoft.powershell.utility/get-event?view=powershell-7.4>

Microsoft PowerShell – Out-File

<https://learn.microsoft.com/en-us/powershell/module/microsoft.powershell.utility/out-file?view=powershell-7.4>