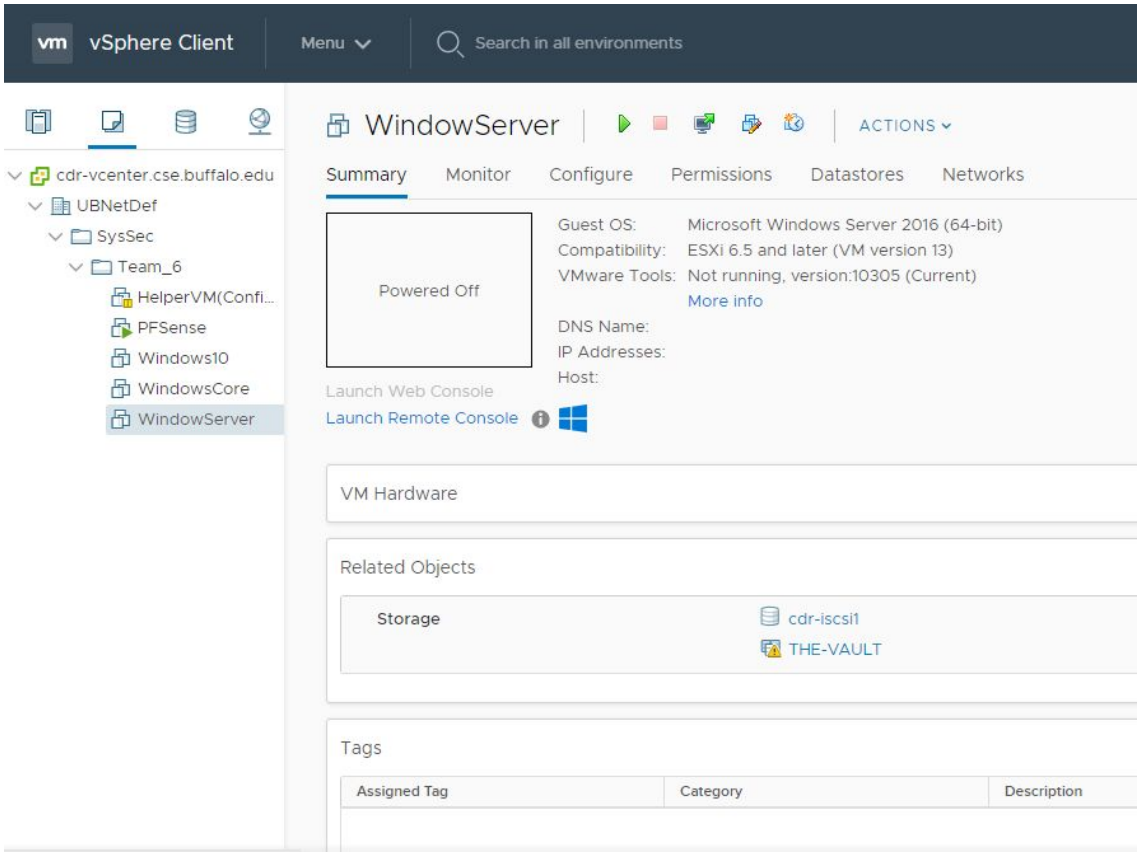
WINDOWS Homework

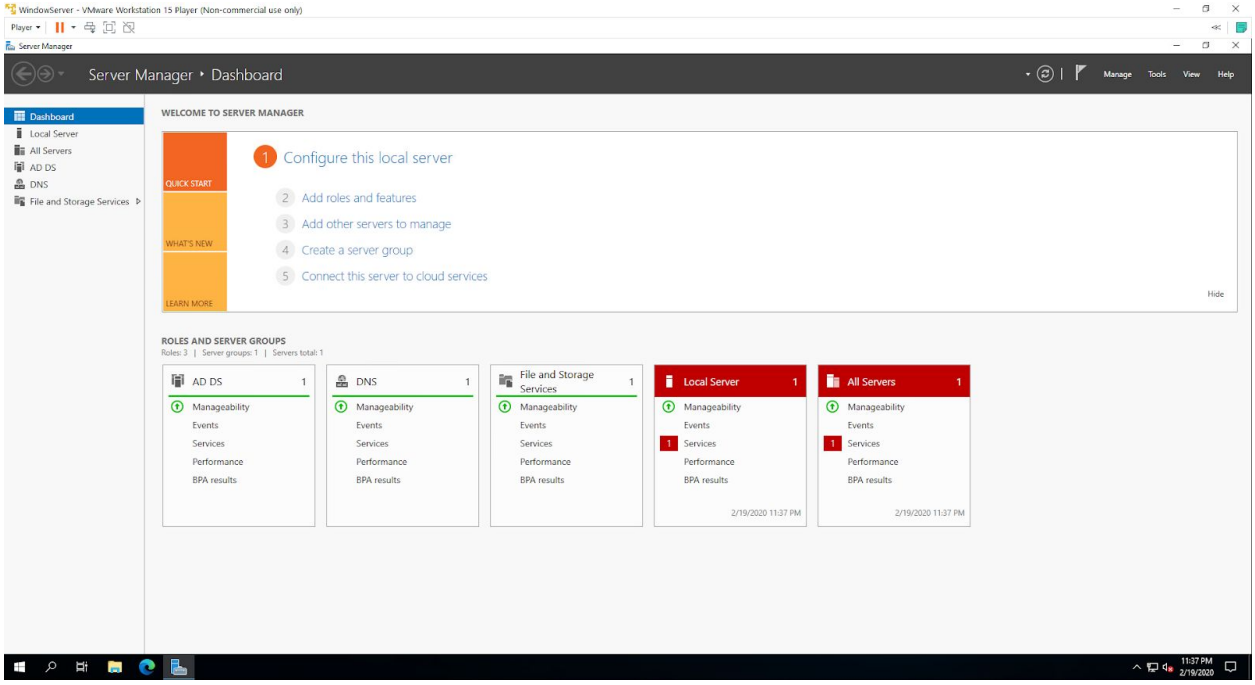
Server 2019 Setup and Operations

1. First login to your vCenter account and power on the Windows Server 2019 VM by going to the Windows Server 2019 Option on the left pane and clicking the play button in green.

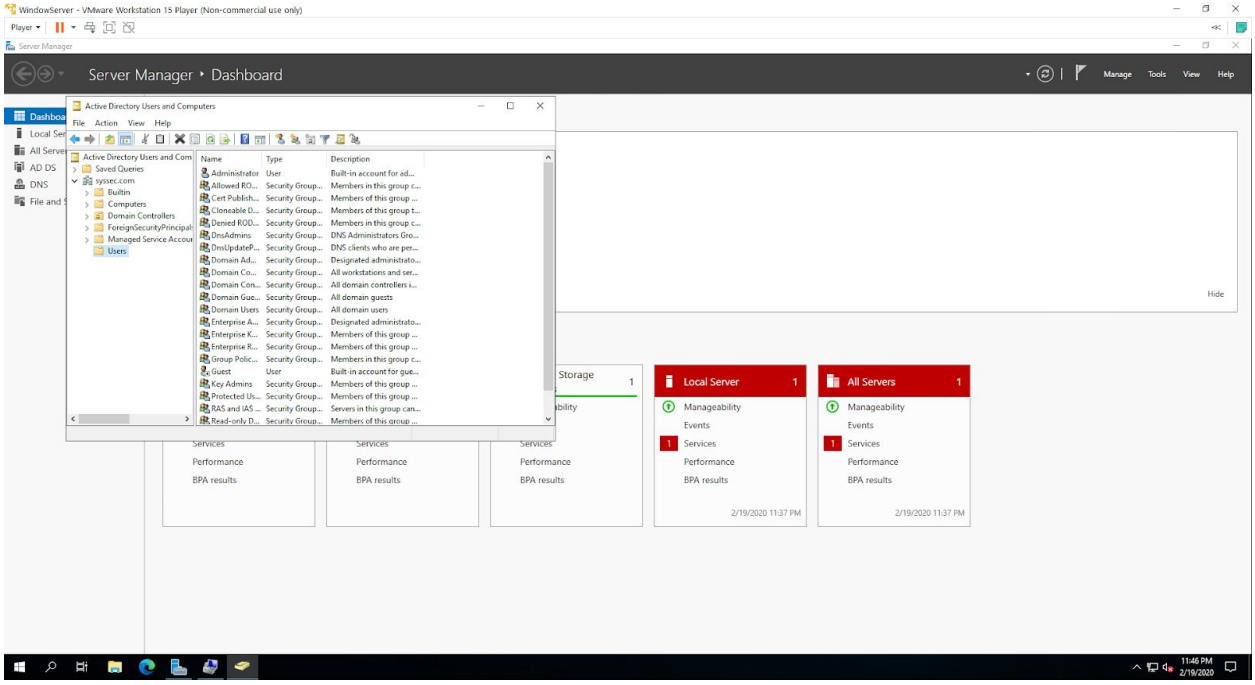


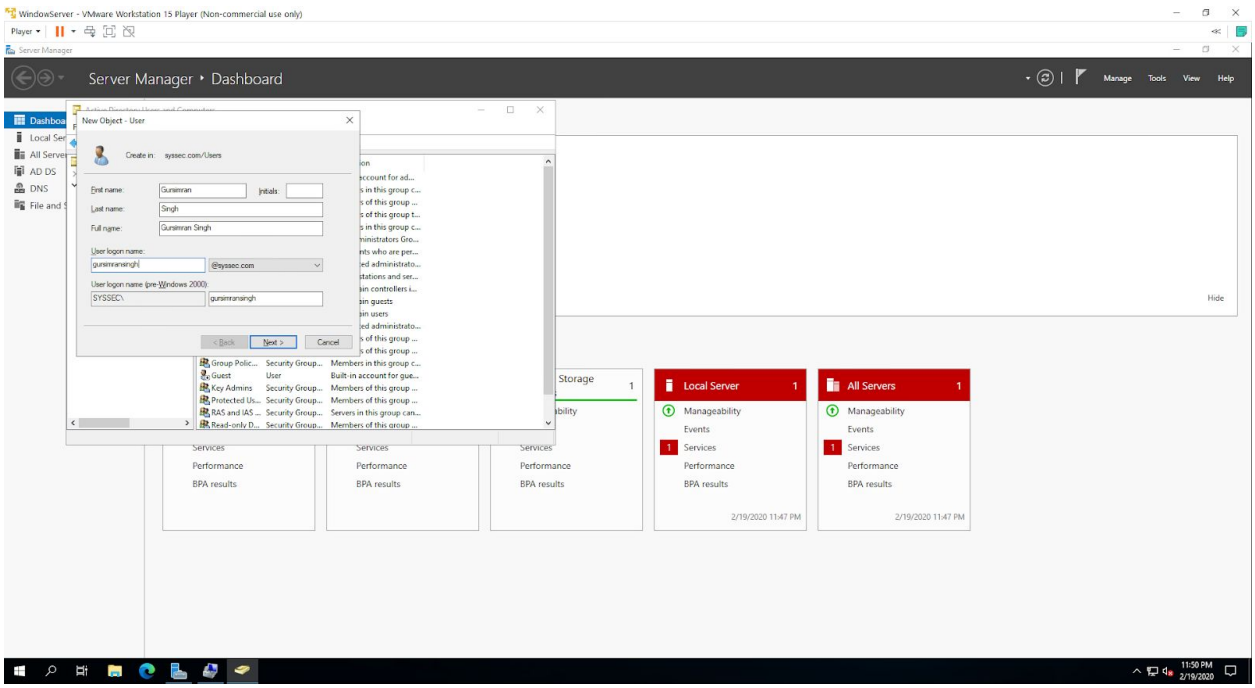
2. After the windows loads, wait for the server manager to open up, it will be as shown below. Note - At this point Active Directory is Setup with domain name as shown in the class, so it is not

covered in this document, but google is always there.

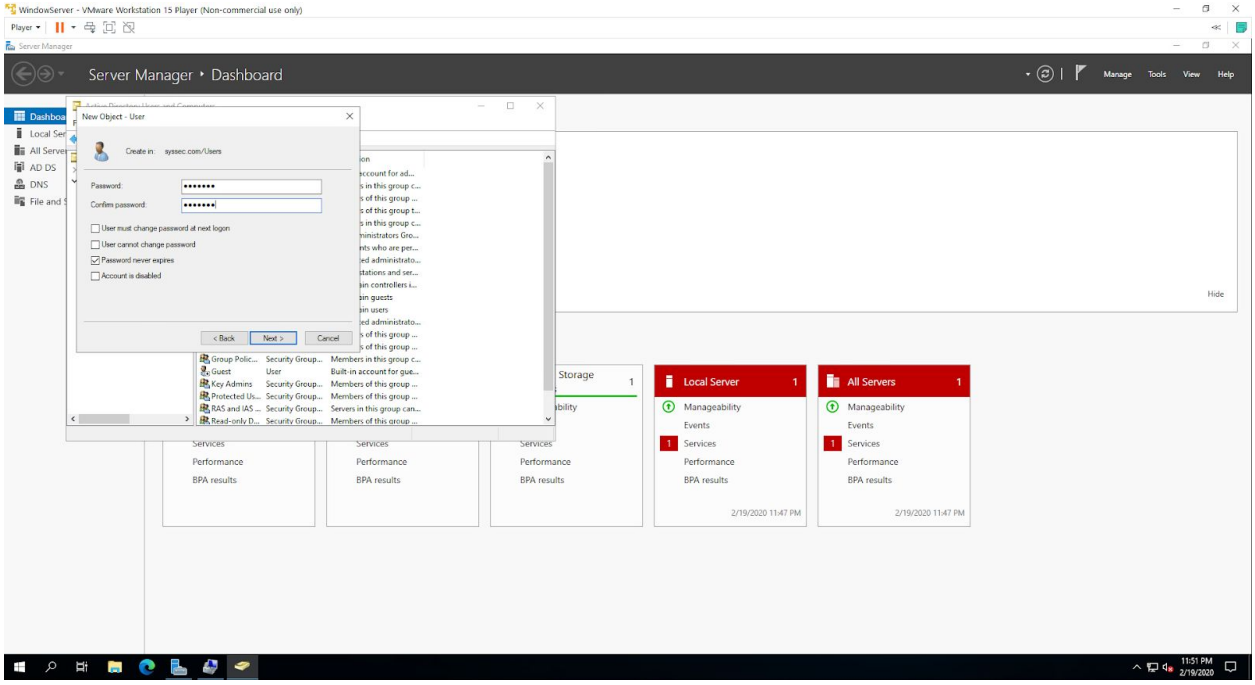


3. From the top right corner, goto Tools > Active Directory Users and Computers > syssec.com > Users , and right click on Users and goto New>Users and fill in user details as shown in figure below.

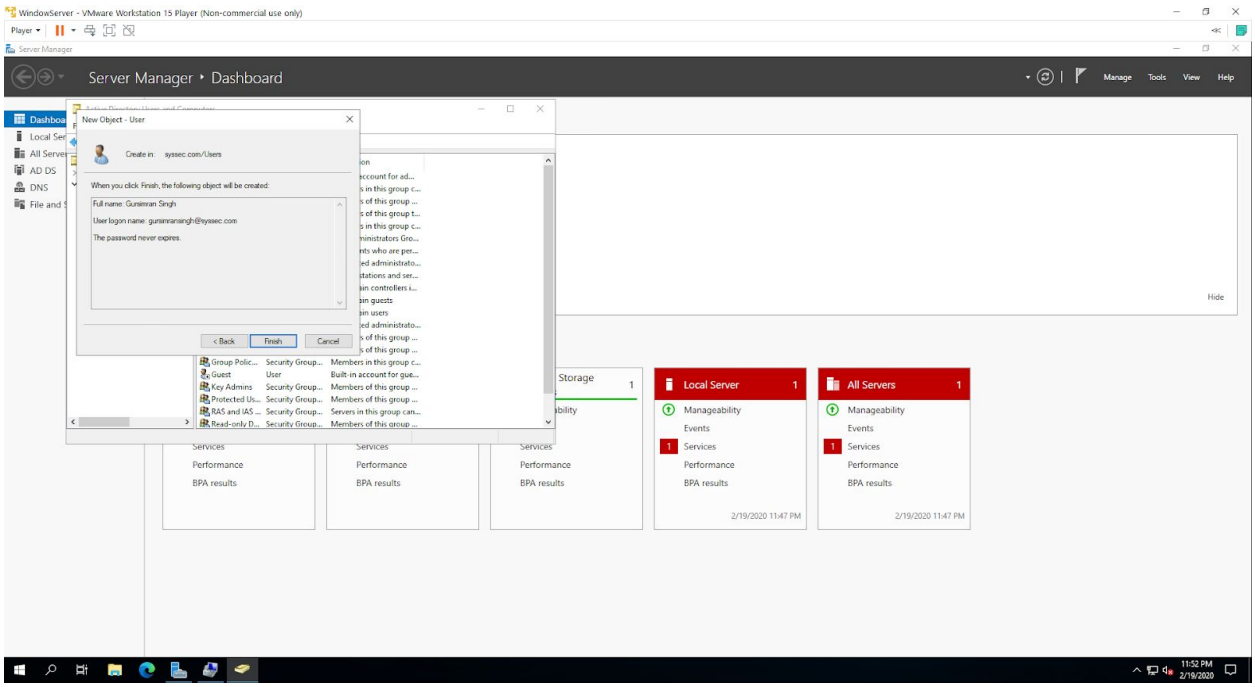

WindowServer - VMware Workstation 15 Player (Non-commercial use only)
Server Manager
Server Manager • Dashboard
Manage
Tools
View
Help
Active Directory Users and Computers
File Action View Help
Active Directory Users and Com
Saved Queries
sysec.com
Builtin
Computers
Domain Controllers
ForeignSecurityPrincipal
Managed Service Accou
Users
Name
Type
Description
Administrator
User
Built-in account for ad...
Hide
Storage
1
Local Server
1
Manageability
Events
Services
Performance
BPA results
2/19/2020 11:37 PM
All Servers
1
Manageability
Events
Services
Performance
BPA results
2/19/2020 11:37 PM
11:46 PM
2/19/2020


WindowServer - VMware Workstation 15 Player (Non-commercial use only)
Server Manager
Server Manager • Dashboard
Manage
Tools
View
Help
New Object - User
Create in: sysec.com/Users
First name:
Gursimran
Initials:
Last name:
Singh
Full name:
Gursimran Singh
User logon name:
gursimransingh
@sysec.com
User logon name (pre-Windows 2000):
SYSSEC\
gursimransingh
< Back
Next >
Cancel
Hide
Storage
1
Local Server
1
Manageability
Events
Services
Performance
BPA results
2/19/2020 11:47 PM
All Servers
1
Manageability
Events
Services
Performance
BPA results
2/19/2020 11:47 PM
11:50 PM
2/19/2020

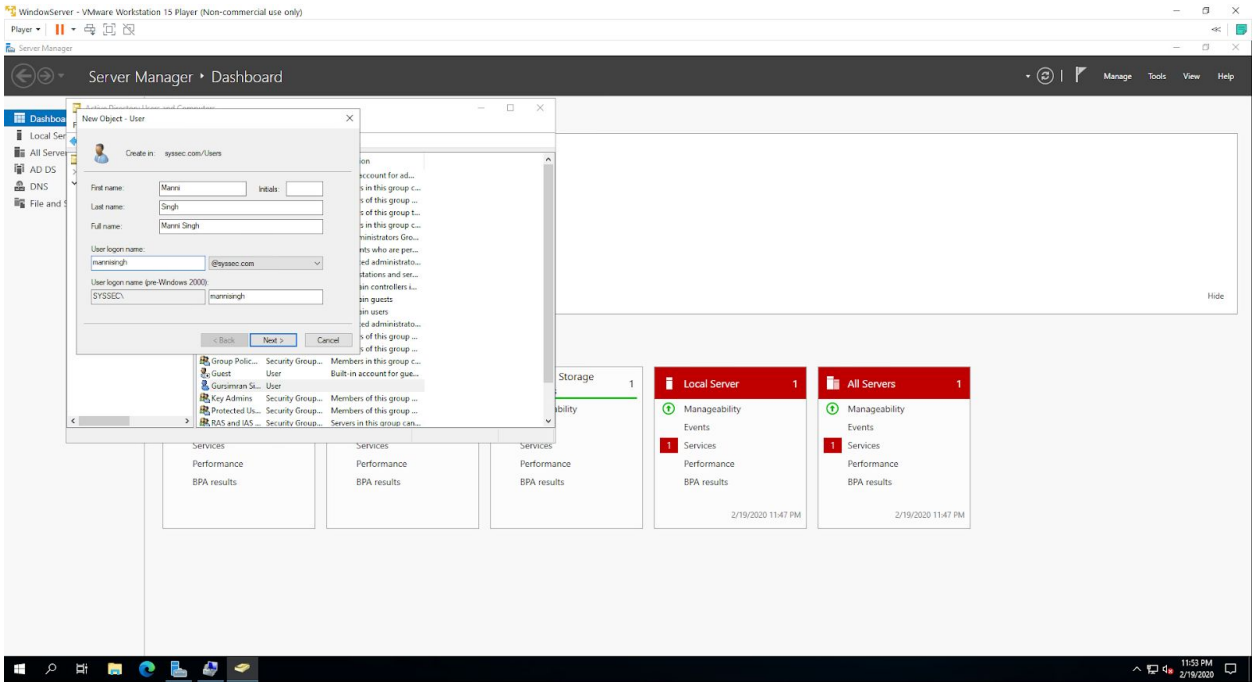
4. Now set the password and confirm the password.

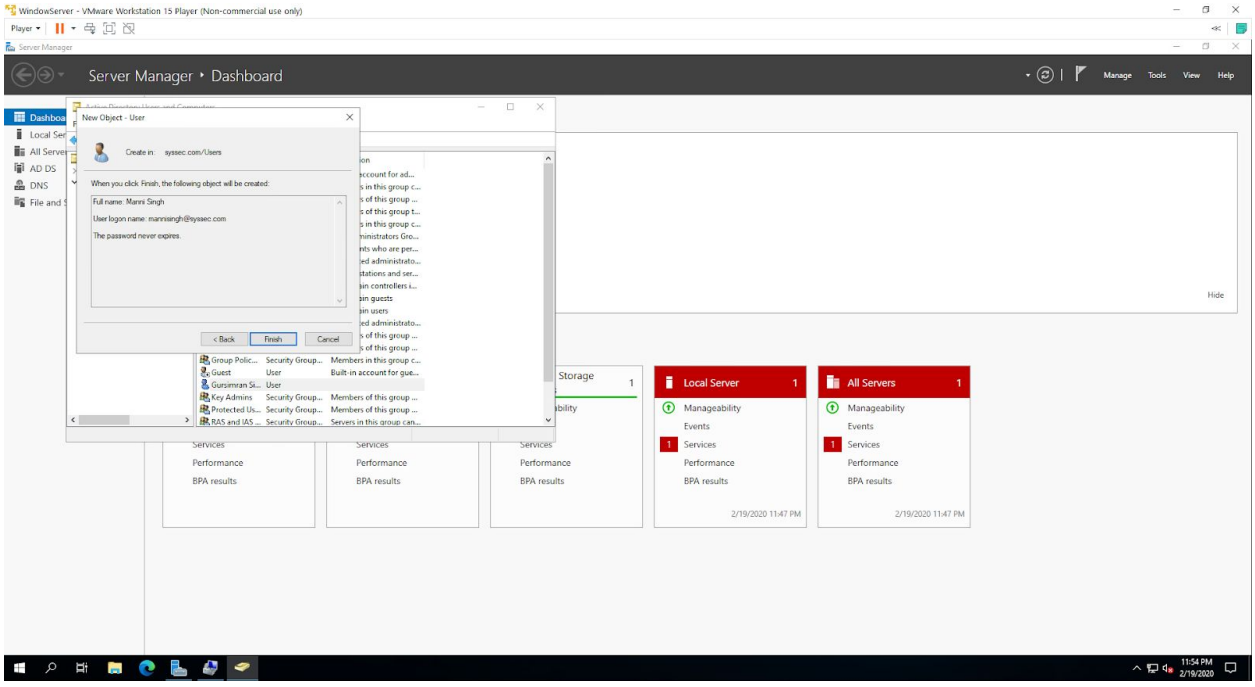


5. Verify the information and click Finish.



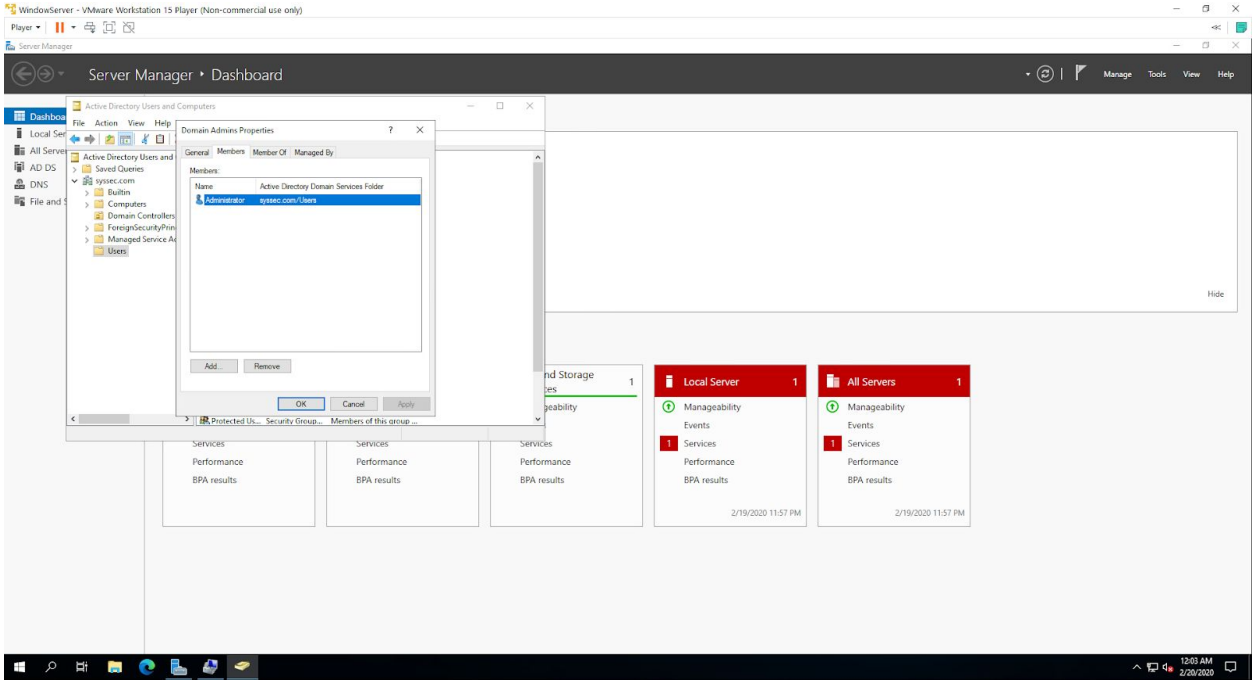
6. Similarly do it for a another user and confirm by clicking Finish.



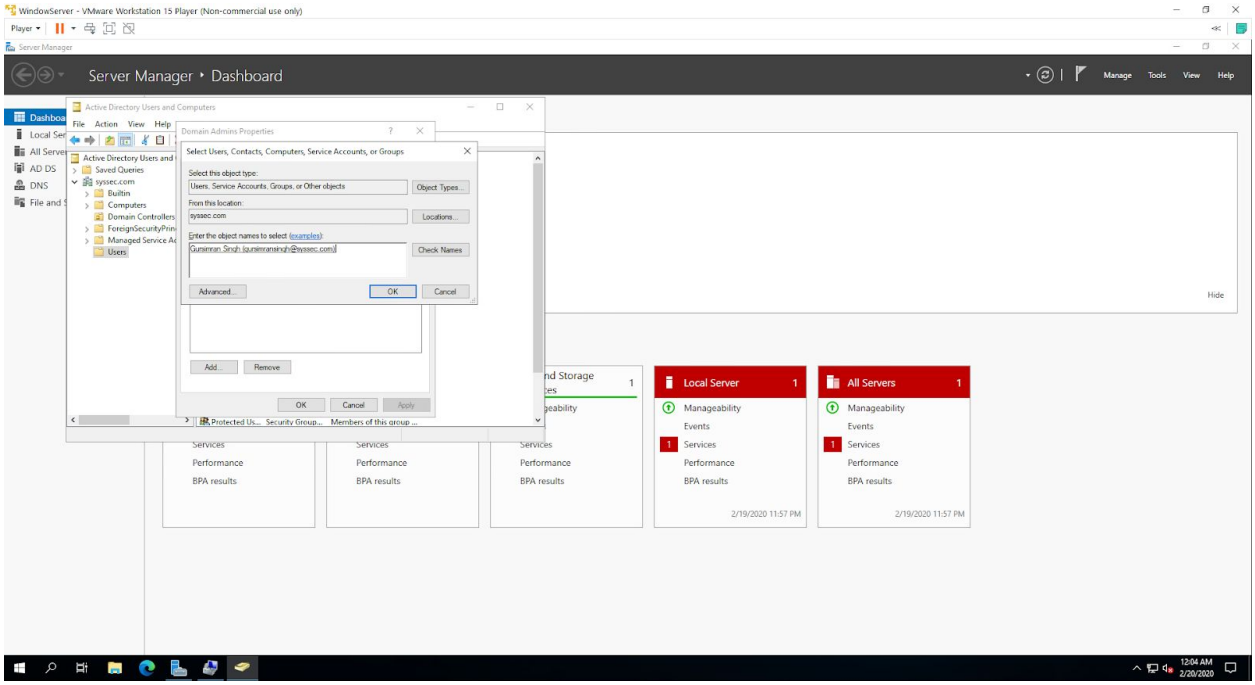


7. Within Users on the Active Directory Users and Computers window, on the right panel, search for Domain Admins group and right click on it and goto properties. From the window, click the

Add option as shown in figure below.

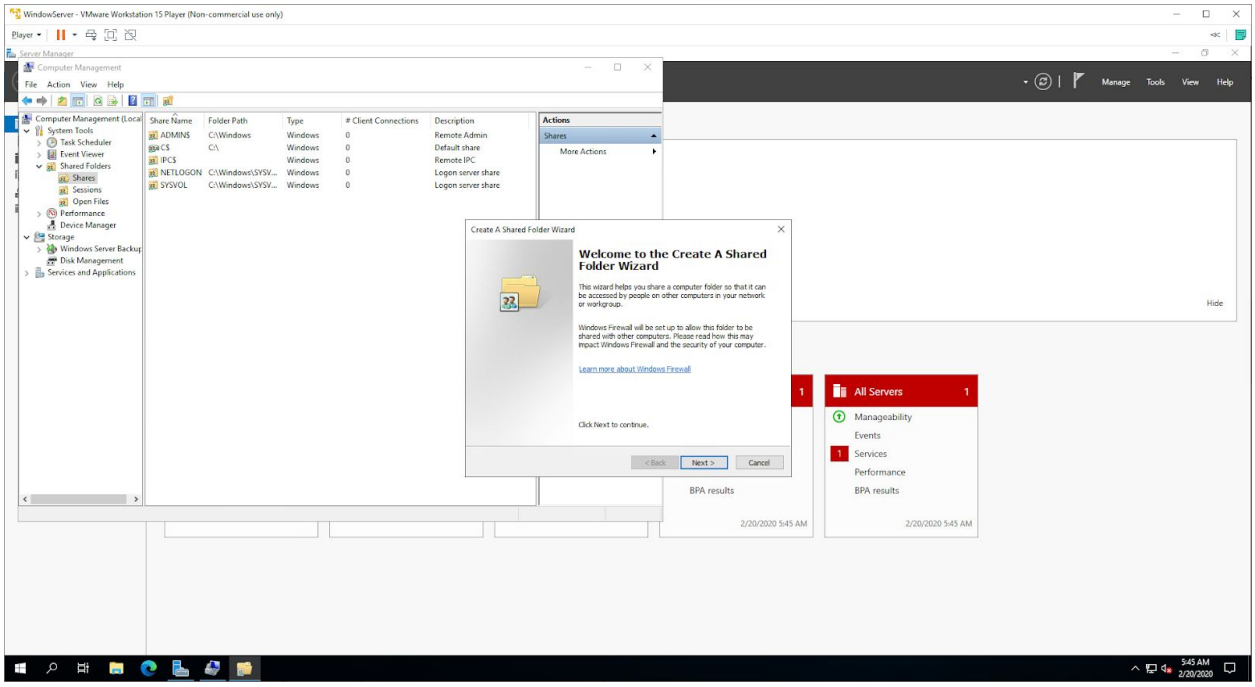


8. Enter the initials of user you want to make admin and click check names and select the desired user, and click OK.

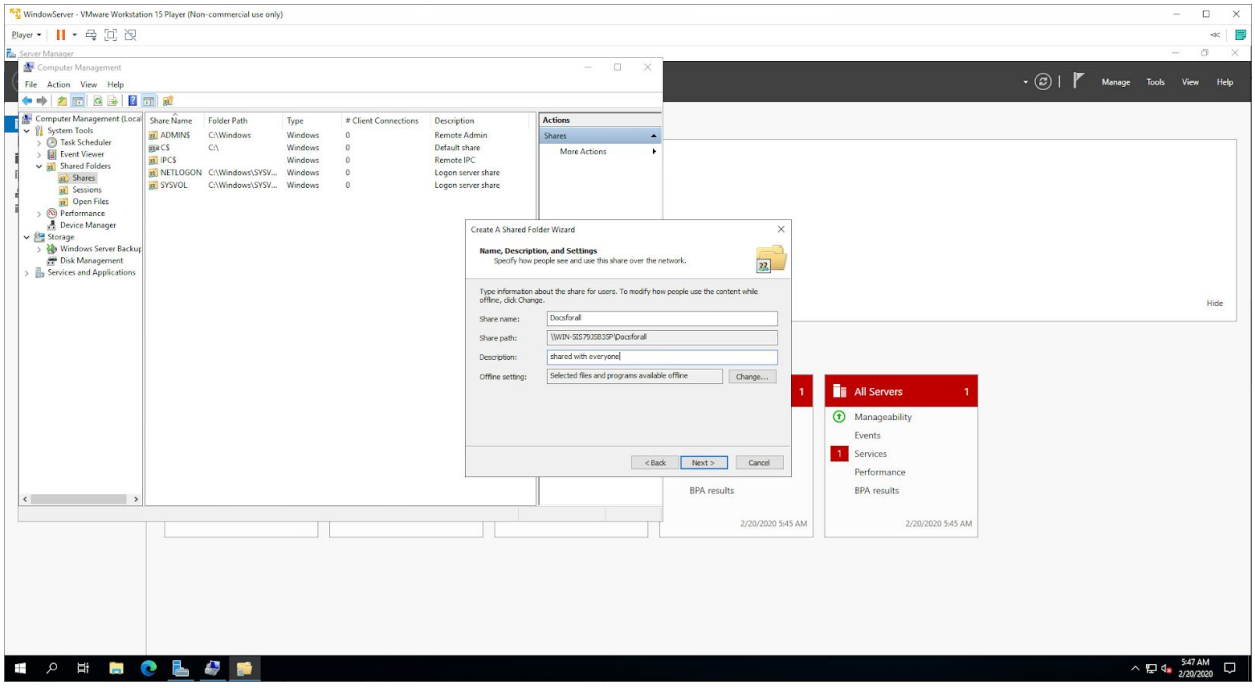


9. Now exit the window and goto Tools > Computer Management > System Tools > Shared Folders, and right click on shared folder and select creating new folder option. The following window will

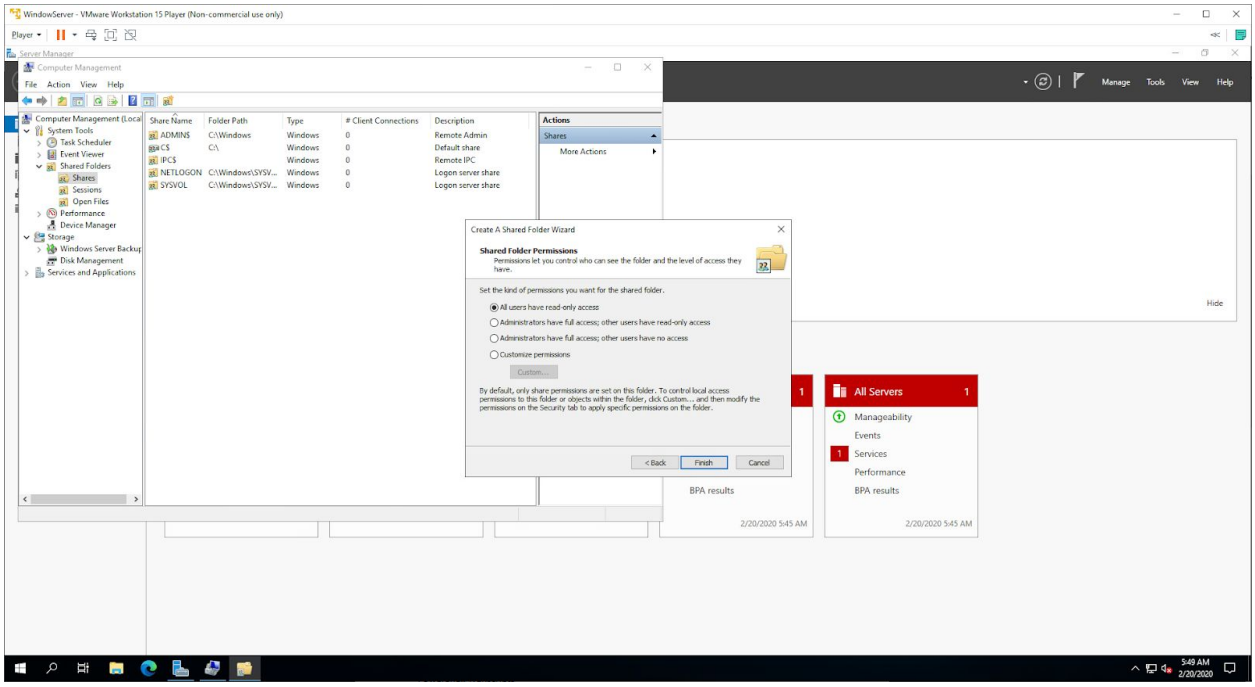
pop up.

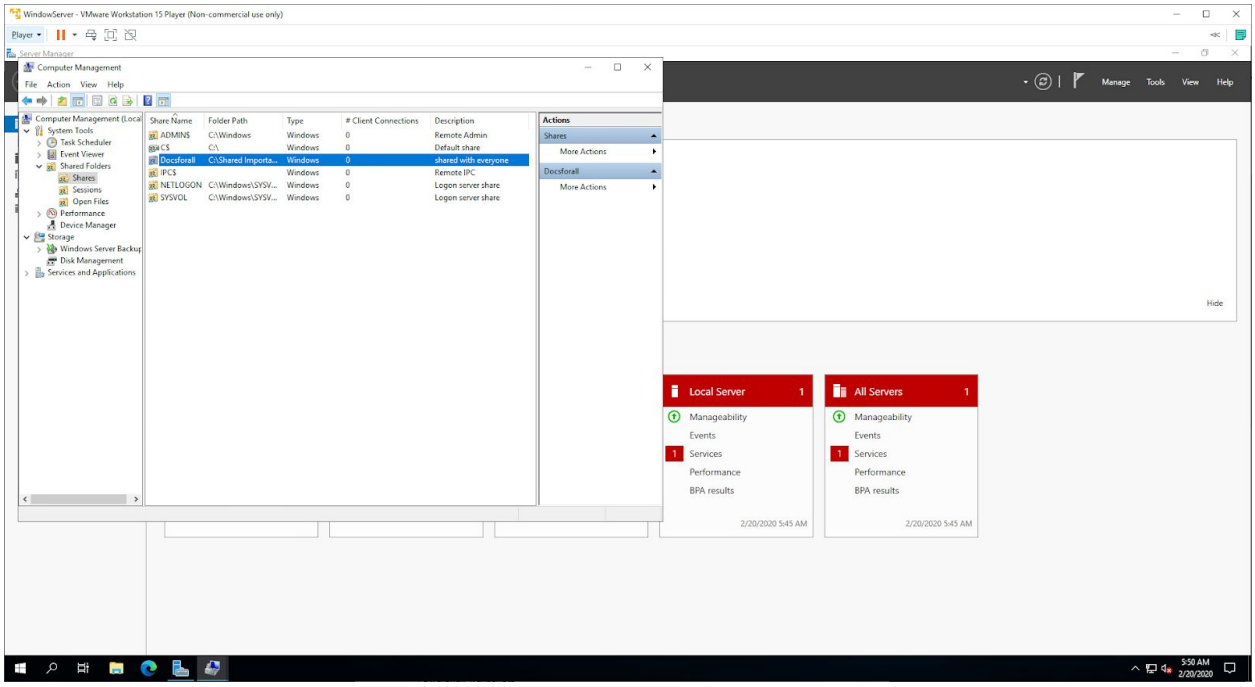


10. Now select the desired location for the folder and after that set a folder name and description.

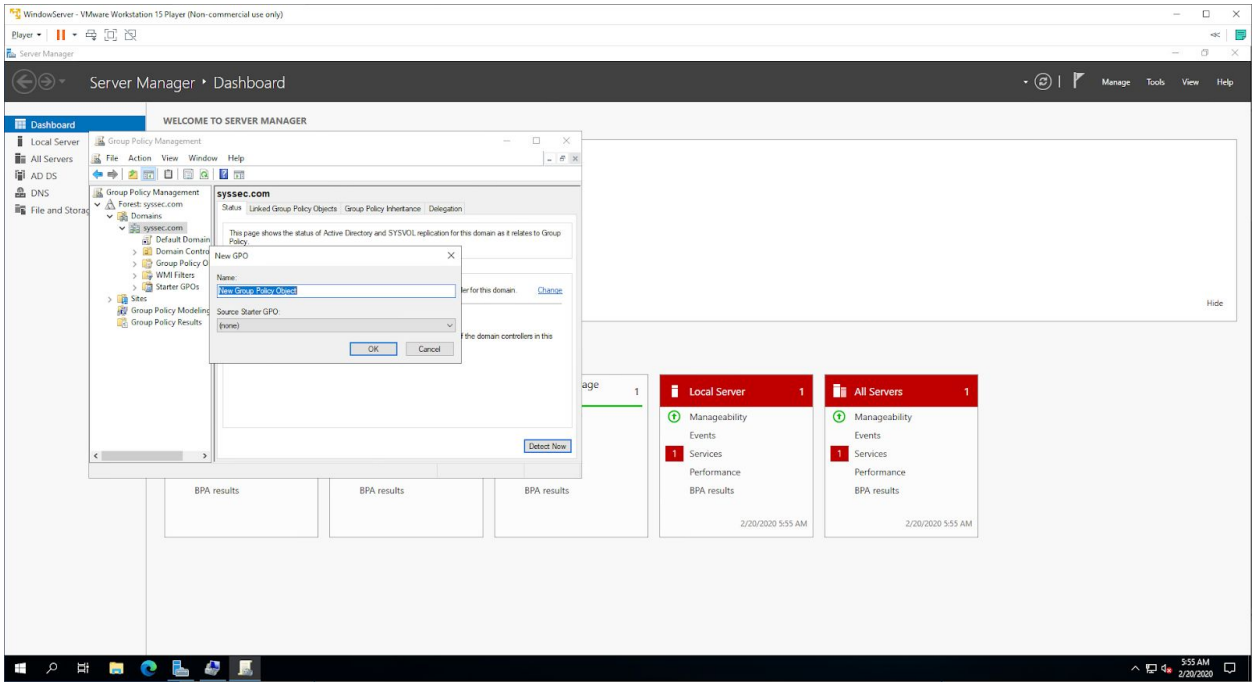


11. Now select all users have read access only option and click finish. You will see a folder created with the desired name as shown below.

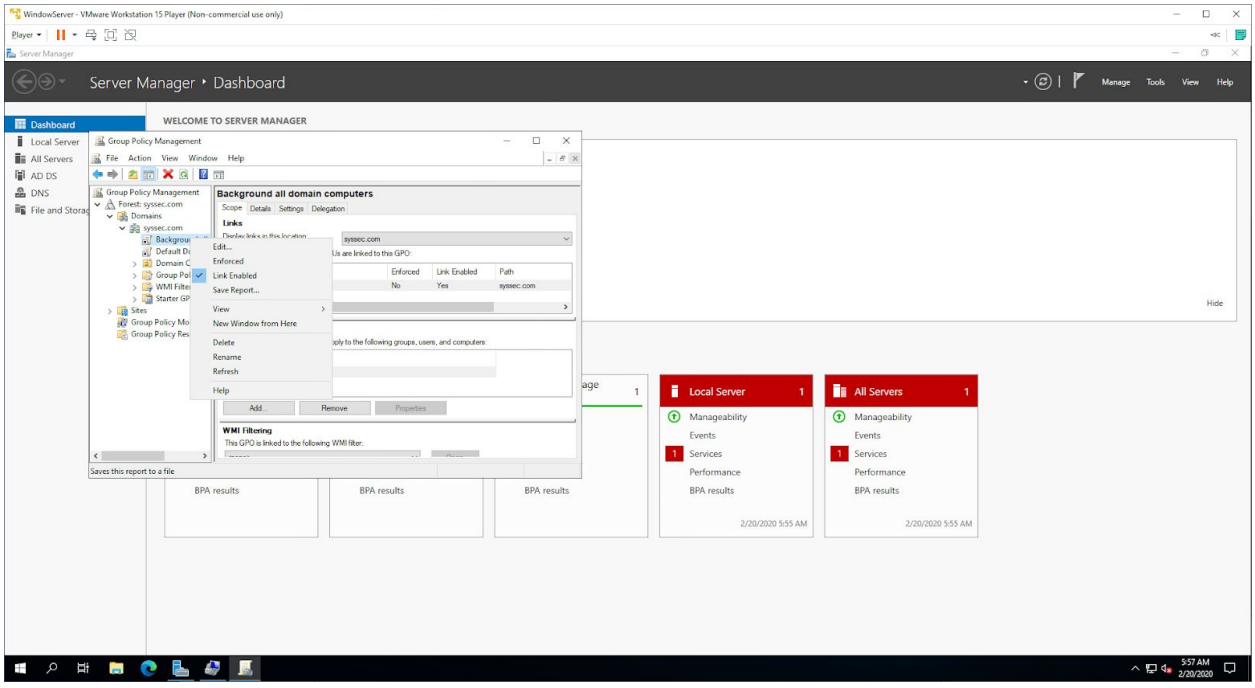

WindowServer - VMware Workstation 15 Player (Non-commercial use only)
Player
Server Manager
Computer Management
File Action View Help
Computer Management (Local
System Tools
Task Scheduler
Event Viewer
Shared Folders
Shares
Sessions
Open Files
Performance
Device Manager
Storage
Windows Server Backup
Disk Management
Services and Applications
Share Name
Folder Path
Type
Client Connections
Description
ADMIN$ C:\Windows Windows 0 Remote Admin
C$ C:\ Windows 0 Default share
IPC$ Windows 0 Remote IPC
NETLOGON C:\Windows\SYSV... Windows 0 Logon server share
SYSVOL C:\Windows\SYSV... Windows 0 Logon server share
Actions
Shares
More Actions
Create A Shared Folder Wizard
Shared Folder Permissions
Permissions let you control who can see the folder and the level of access they have.
Set the kind of permissions you want for the shared folder.
All users have read-only access
Administrators have full access; other users have read-only access
Administrators have full access; other users have no access
Customize permissions
Custom...
By default, only share permissions are set on this folder. To control local access permissions to this folder or objects within the folder, click Custom... and then modify the permissions on the Security tab to apply specific permissions on the folder.
< Back
Finish
Cancel
Manage Tools View Help
Hide
All Servers 1
Manageability
Events
Services
Performance
BPA results
2/20/2020 5:45 AM
5:49 AM
2/20/2020


WindowServer - VMware Workstation 15 Player (Non-commercial use only)
Player
Server Manager
Computer Management
File Action View Help
Computer Management (Local
System Tools
Task Scheduler
Event Viewer
Shared Folders
Shares
Sessions
Open Files
Performance
Device Manager
Storage
Windows Server Backup
Disk Management
Services and Applications
Share Name
Folder Path
Type
Client Connections
Description
ADMIN$ C:\Windows Windows 0 Remote Admin
C$ C:\ Windows 0 Default share
Docsforall C:\Shared Importa... Windows 0 shared with everyone
IPC$ Windows 0 Remote IPC
NETLOGON C:\Windows\SYSV... Windows 0 Logon server share
SYSVOL C:\Windows\SYSV... Windows 0 Logon server share
Actions
Shares
More Actions
Docsforall
More Actions
Manage Tools View Help
Hide
Local Server 1
Manageability
Events
Services
Performance
BPA results
2/20/2020 5:45 AM
All Servers 1
Manageability
Events
Services
Performance
BPA results
2/20/2020 5:45 AM
5:50 AM
2/20/2020

12. Now goto Tools > Group Policy Management > Domains > Right click on syssec and select create new group policy object. Enter the policy Name as shown below.

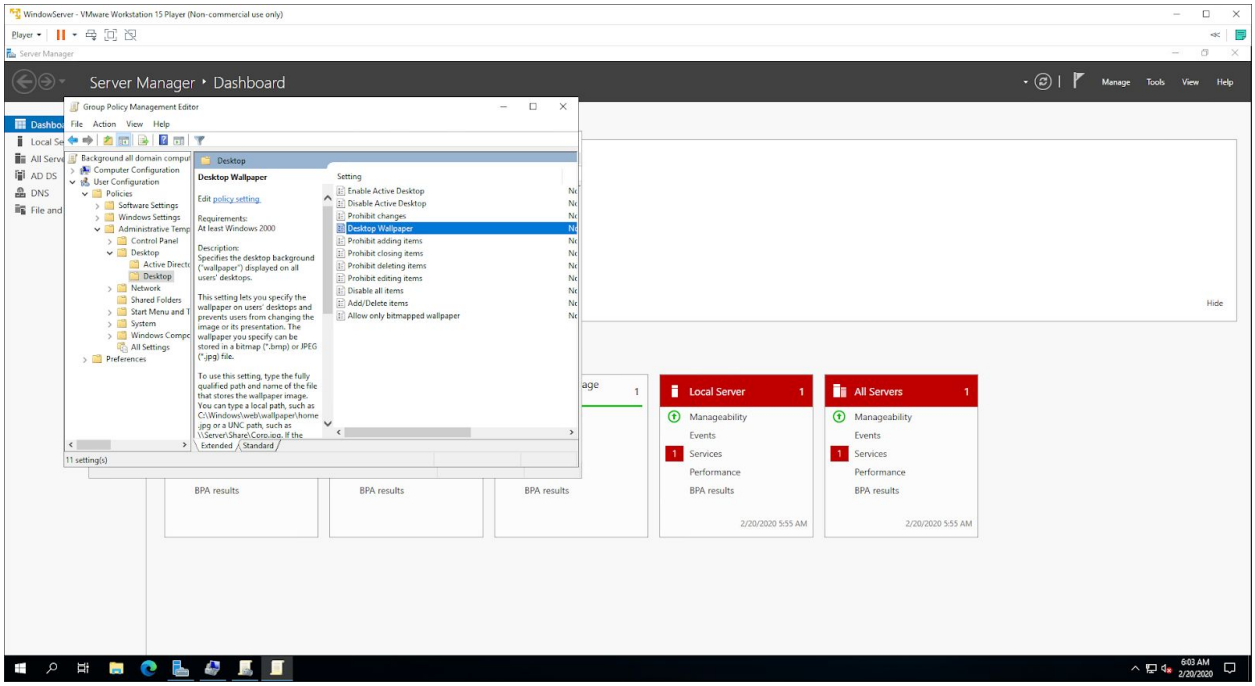


13. Now right click on newly created policy and Select Enforced. Again right click on syssec and click Edit.

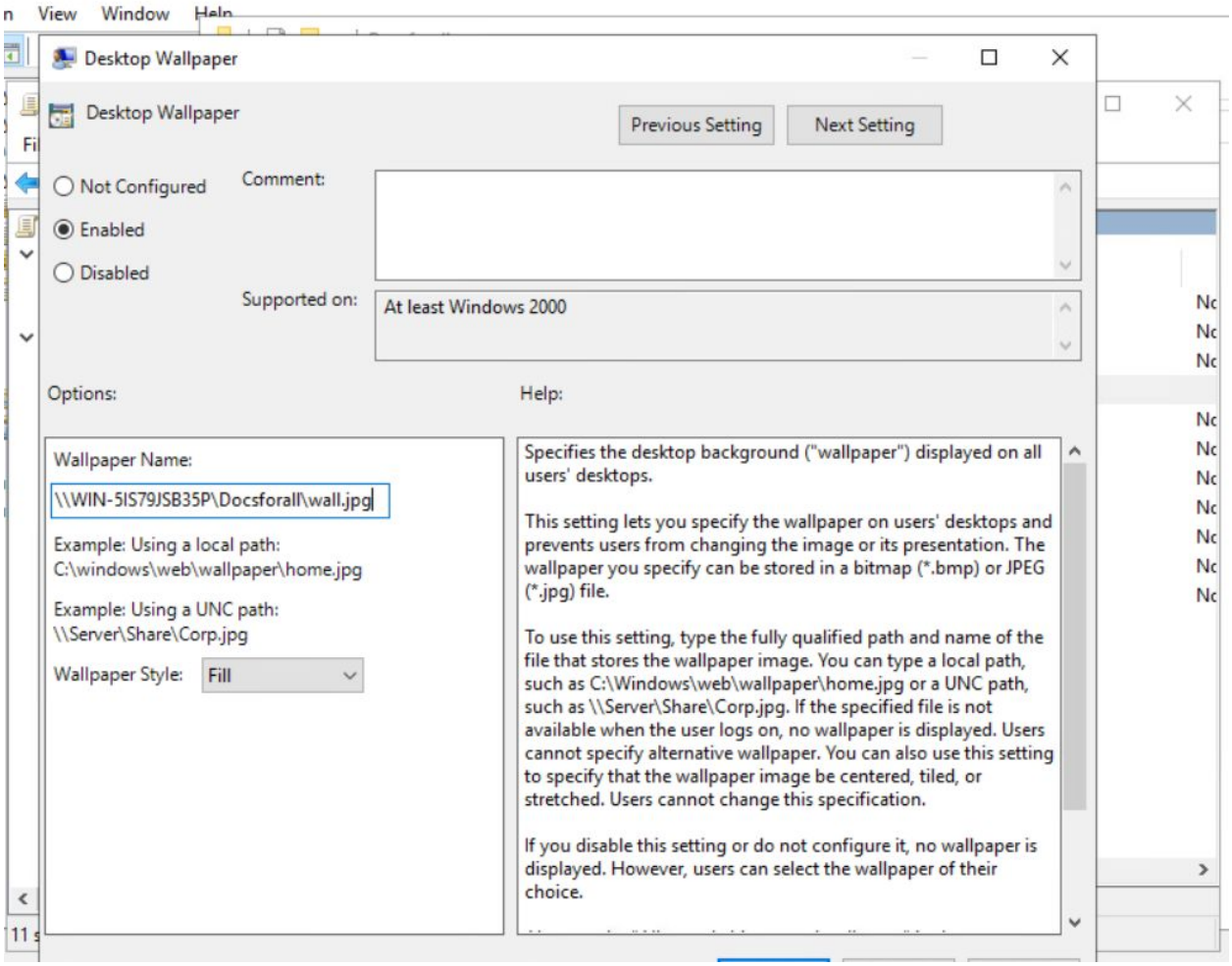


14. In the new window Group Policy Management Editor goto User Configuration > Policies > Administrative Templates > Desktop > Desktop. In the right panel, you can see a Desktop

Wallpaper setting option. Click on it.

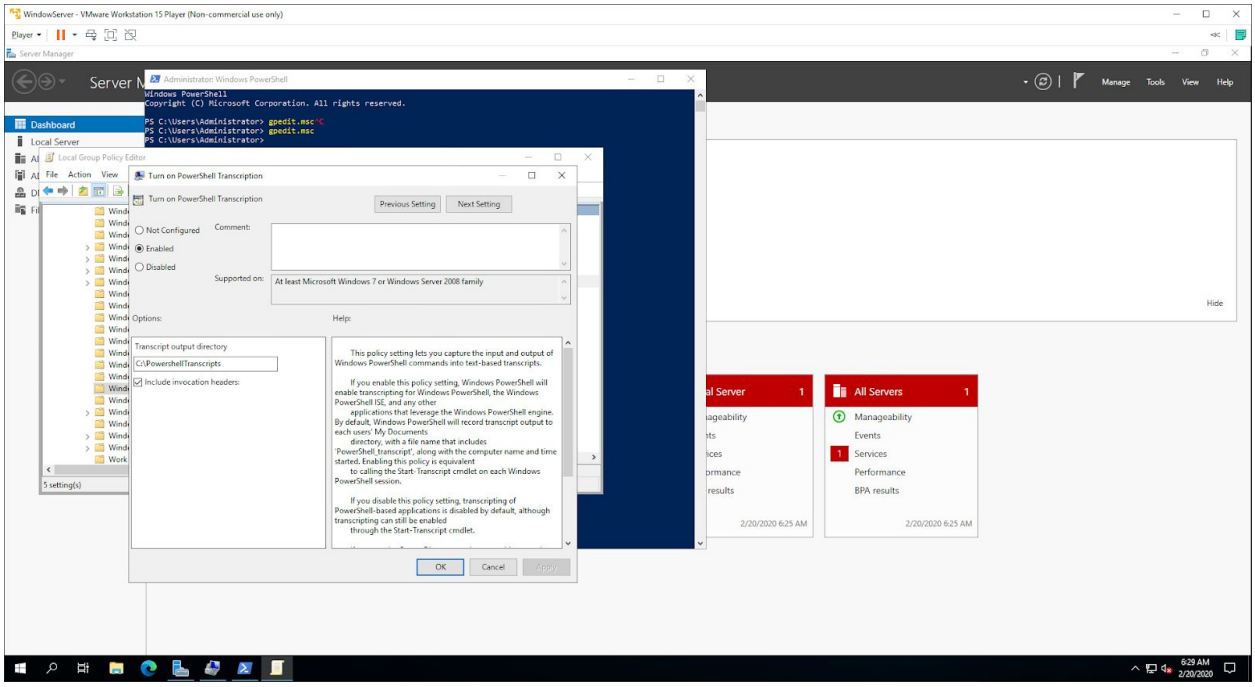


15. Enter the path to the wallpaper image, which should be inside the shared folder you created, and click enabled button, then click apply and OK to save the settings.

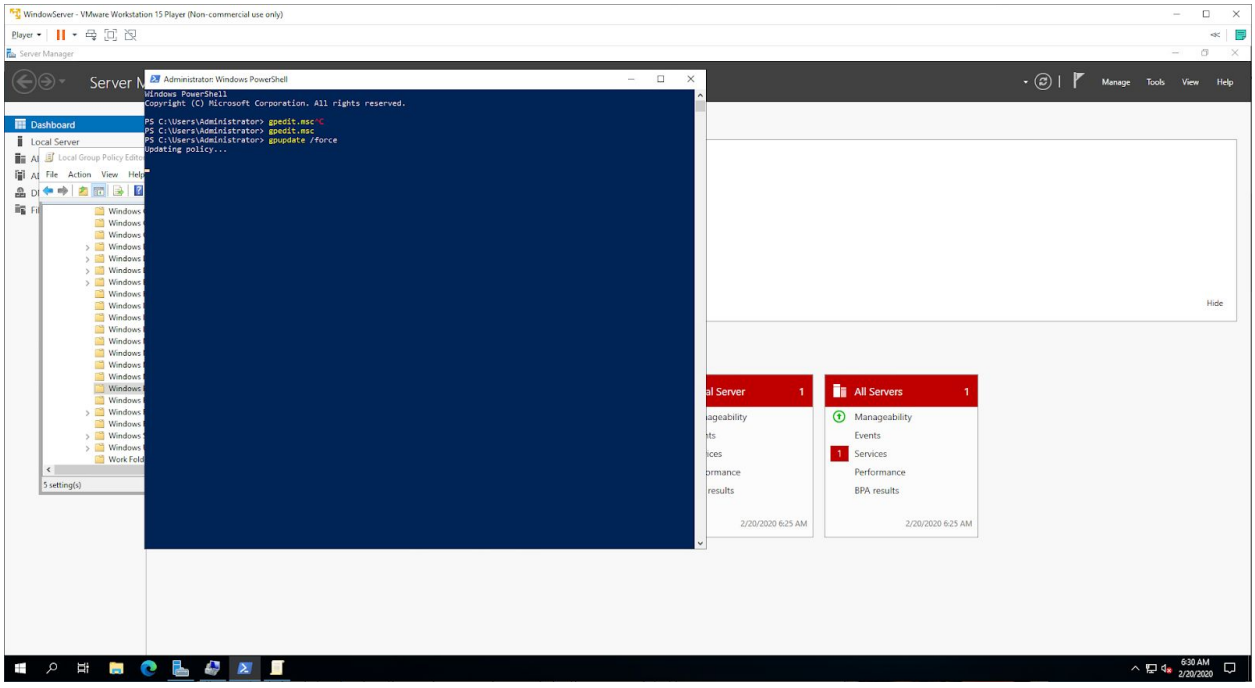


16. In the Group Policy management Window select the Desktop Wallpaper setting policy and on the right panel under security filtering add domain computers group and click ok.
17. Another way of opening the Group Policy Management Editor is by typing the following command in powershell - gpedit.msc .
18. Click on Local Group Policy > Computer Configuration > Administrative Templates > Windows Components > Windows PowerShell and double-click on "Turn on PowerShell Transcription". Click on Enable and enter your prefered Output Directory. You can also activate "Include

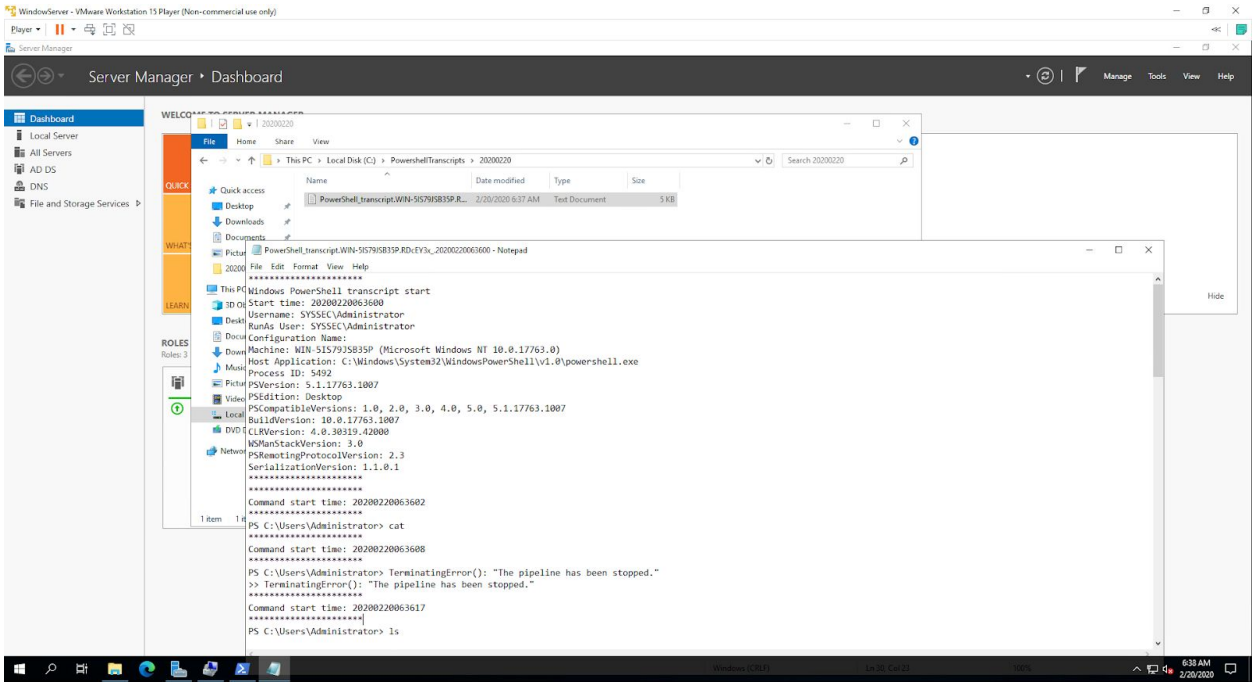
invocation headers". Click OK.



19. Now execute gpupdate /force to reflect the group policy changes as shown below.

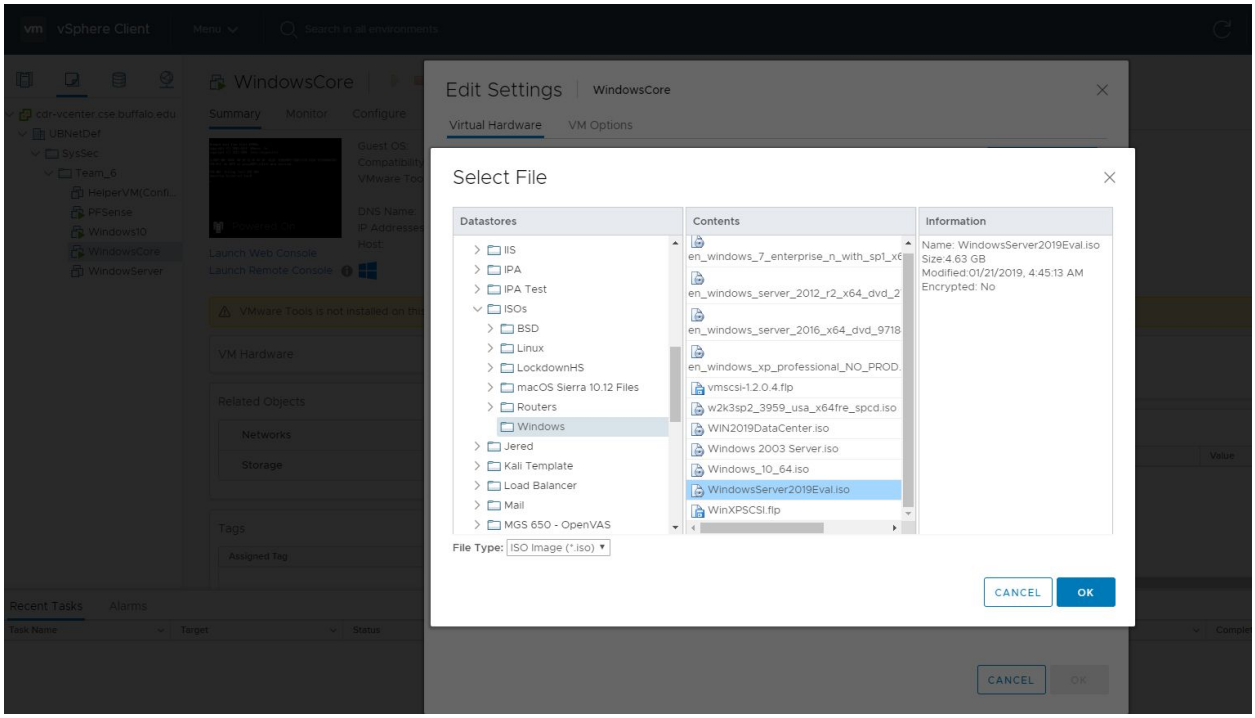


20. You can check the directory you selected for transcripts after typing any commands in powershell as shown below.

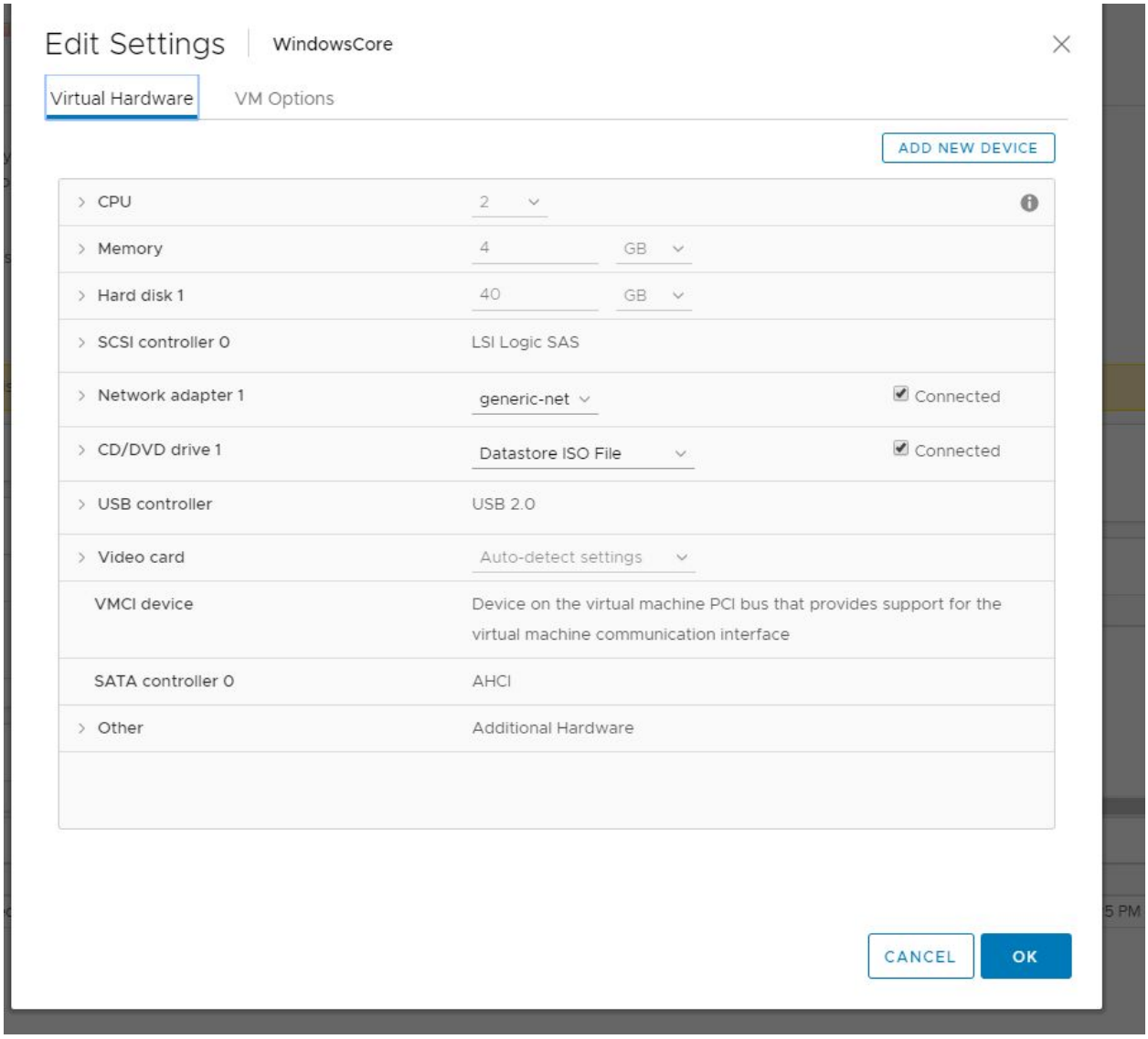


Server Core Setup and Configuration

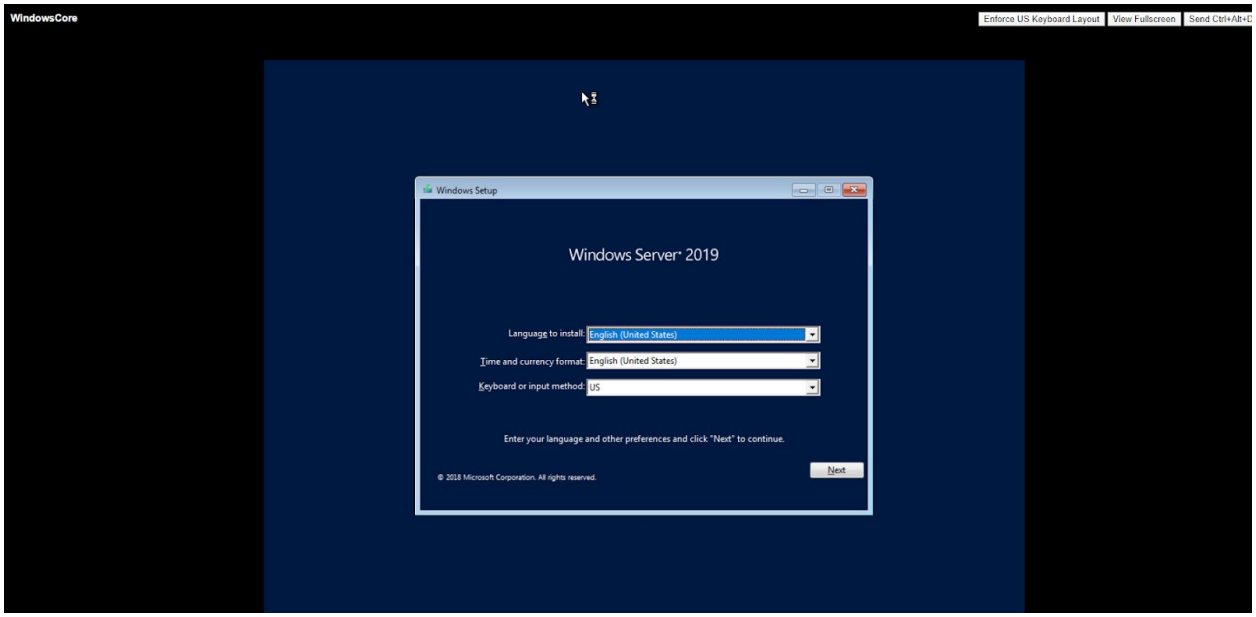
1. Now goto vSphere Client and right click on Windows Core VM option on the left side bar and select Edit. Change the CD/DVD Drive option to Data ISO and goto cdr-iscsi1>ISO>Windows and Select Windows Server 2019 option as shown below.

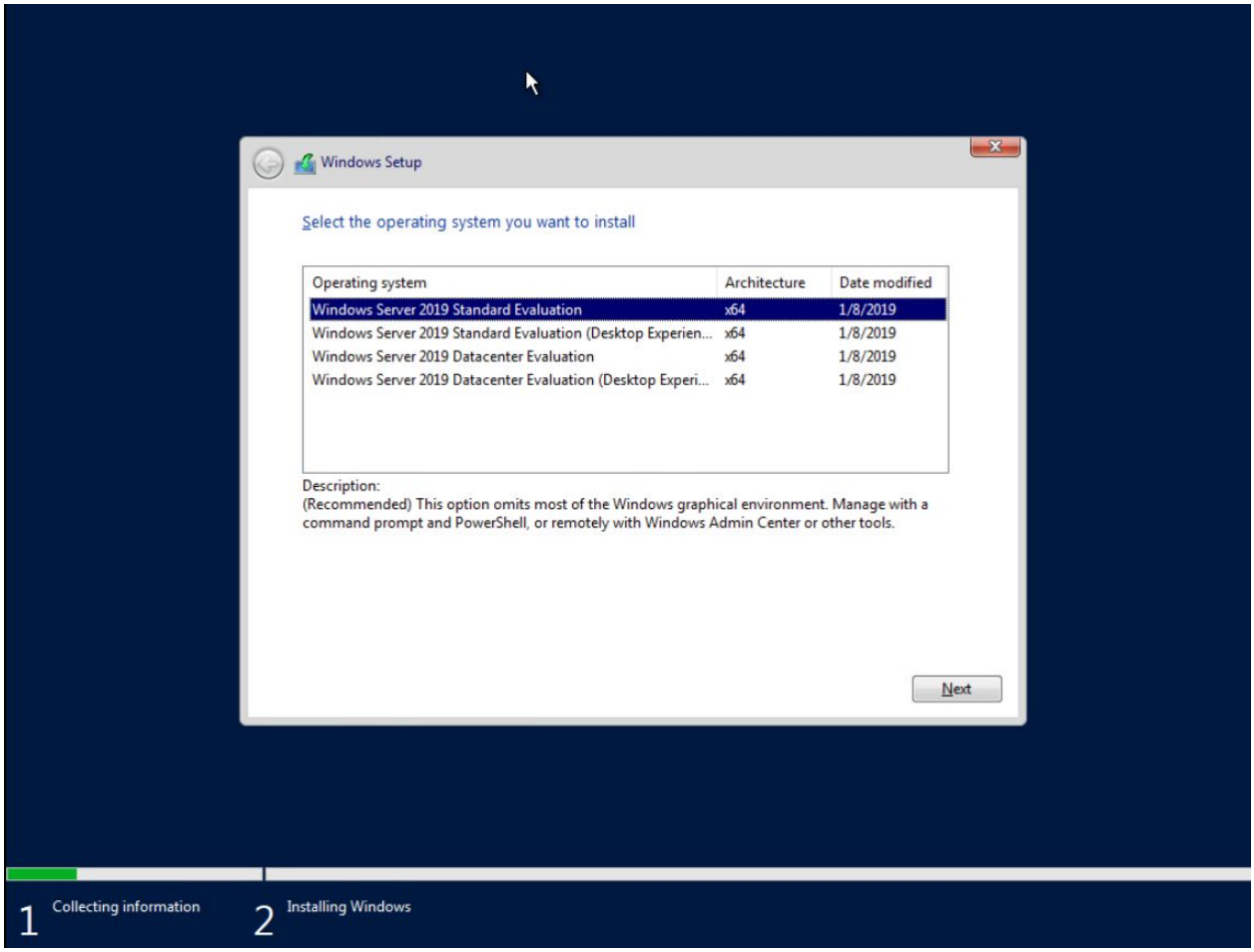


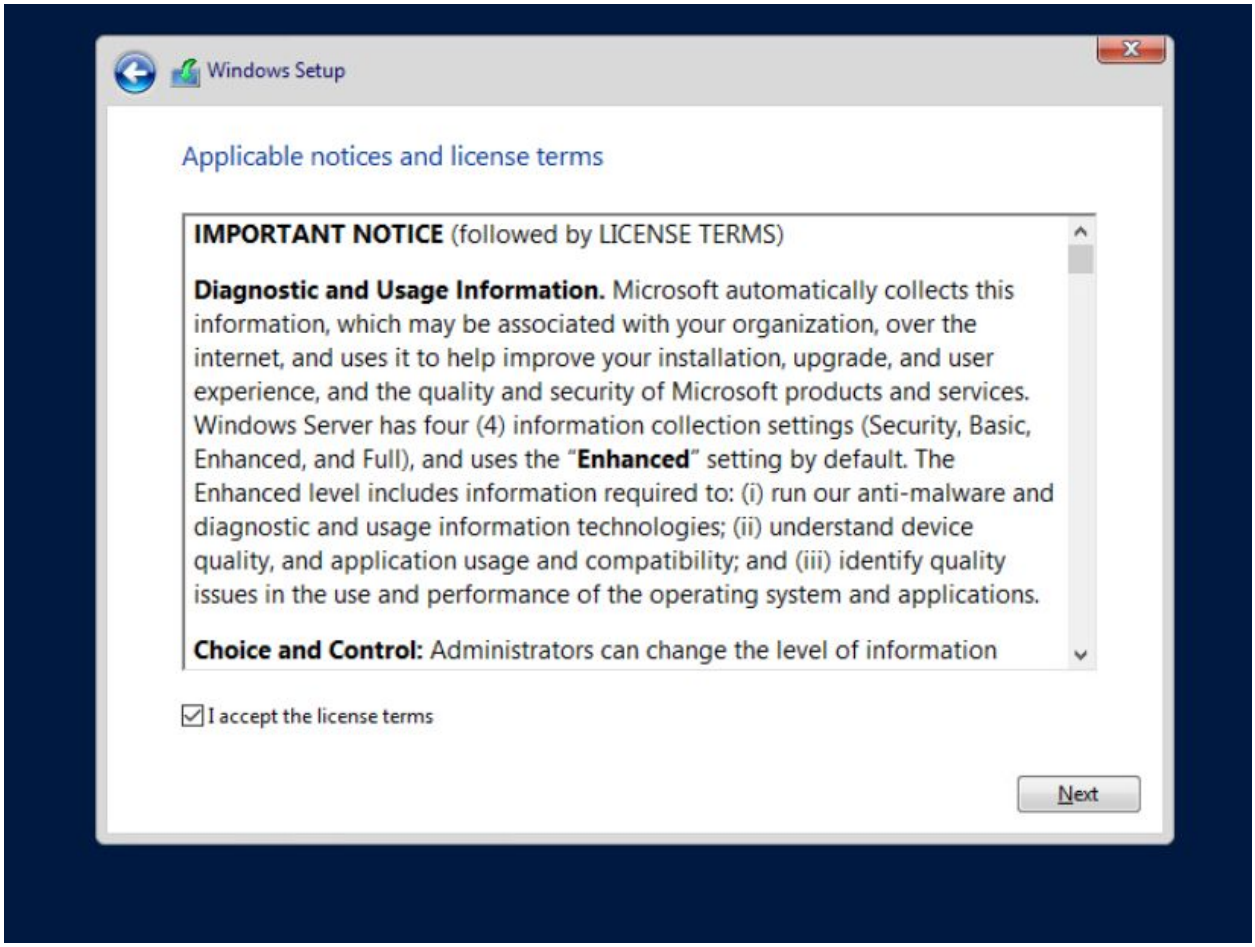
2. Check the Connected checkbox and click OK.

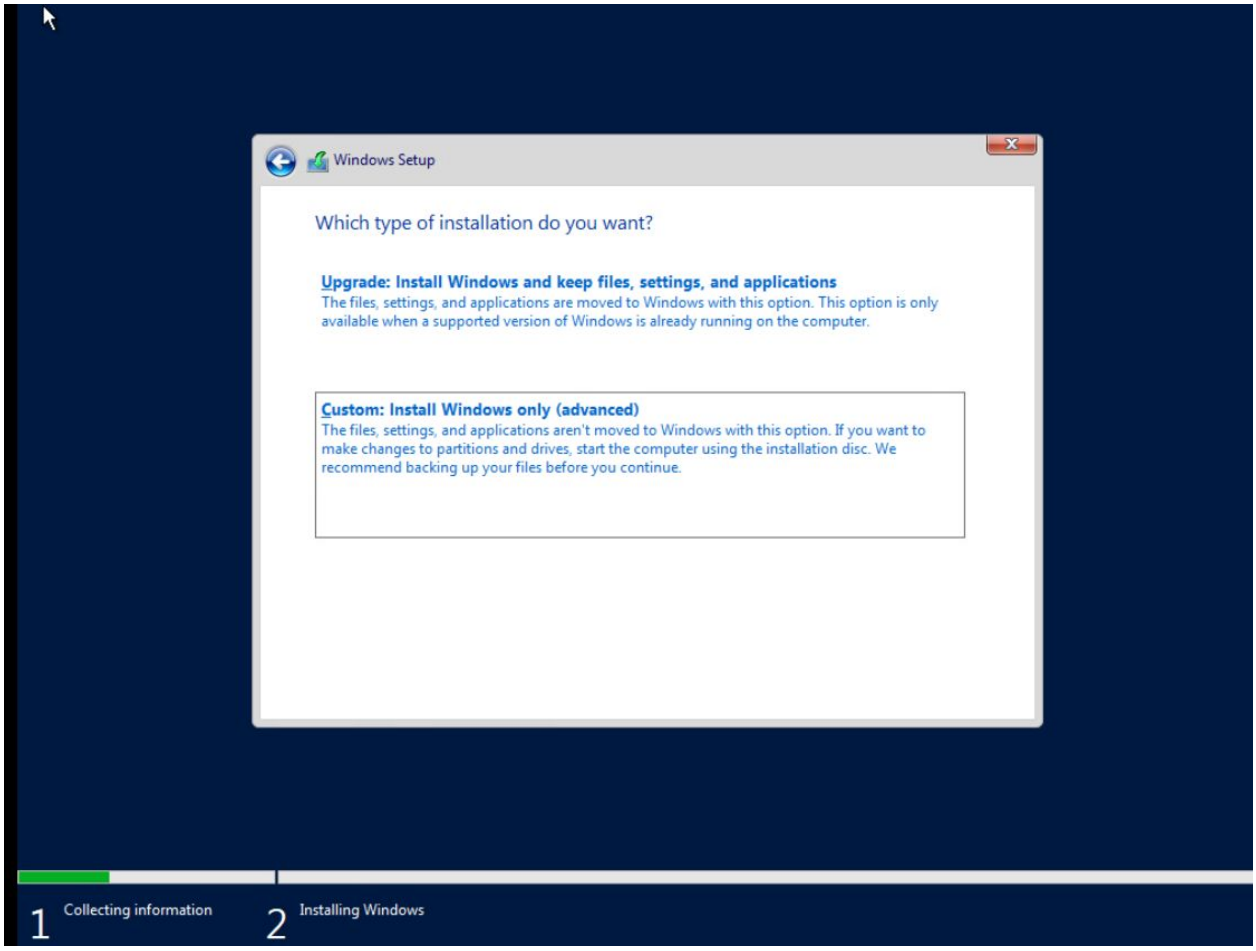


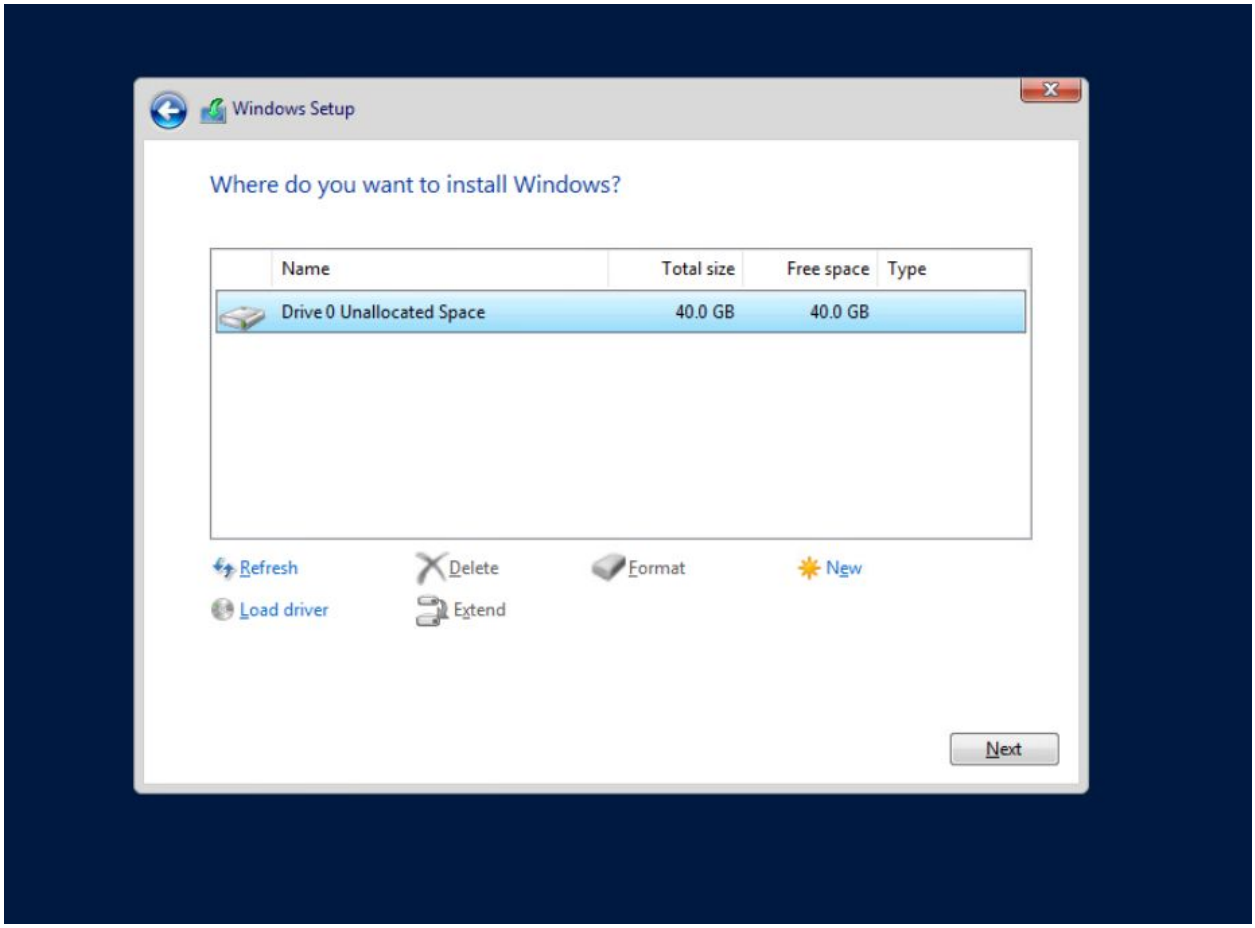
3. Follow the Configuration steps as shown in the following figures.

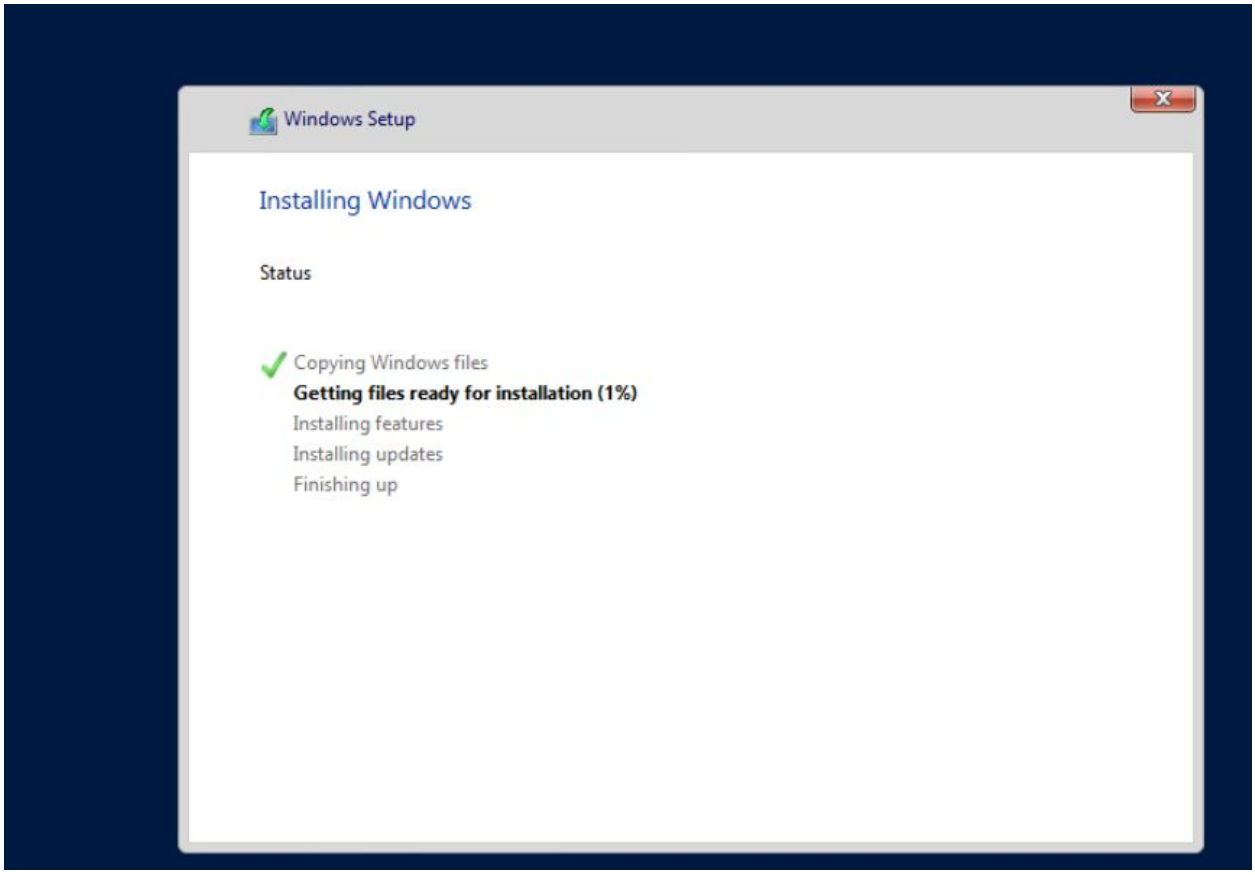




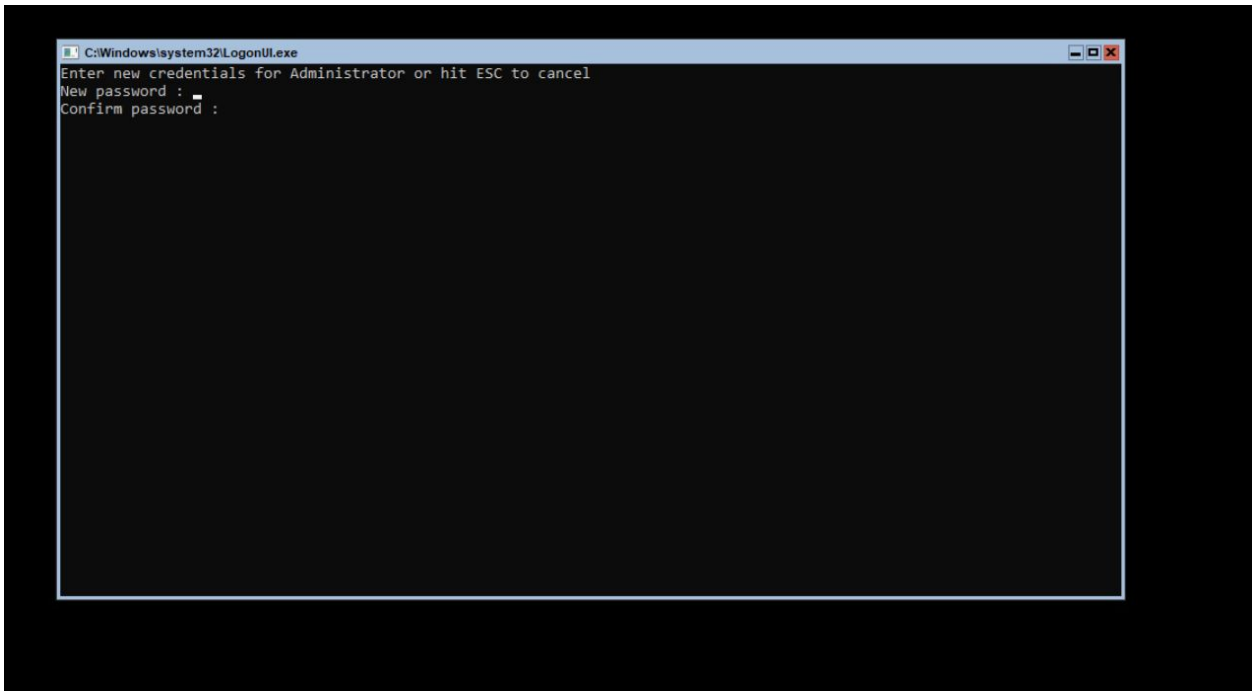

Windows Setup
Applicable notices and license terms
IMPORTANT NOTICE (followed by LICENSE TERMS)
Diagnostic and Usage Information. Microsoft automatically collects this information, which may be associated with your organization, over the internet, and uses it to help improve your installation, upgrade, and user experience, and the quality and security of Microsoft products and services. Windows Server has four (4) information collection settings (Security, Basic, Enhanced, and Full), and uses the "Enhanced" setting by default. The Enhanced level includes information required to: (i) run our anti-malware and diagnostic and usage information technologies; (ii) understand device quality, and application usage and compatibility; and (iii) identify quality issues in the use and performance of the operating system and applications.
Choice and Control: Administrators can change the level of information
I accept the license terms
Next


Windows Setup
Which type of installation do you want?
Upgrade: Install Windows and keep files, settings, and applications
The files, settings, and applications are moved to Windows with this option. This option is only available when a supported version of Windows is already running on the computer.
Custom: Install Windows only (advanced)
The files, settings, and applications aren't moved to Windows with this option. If you want to make changes to partitions and drives, start the computer using the installation disc. We recommend backing up your files before you continue.
1 Collecting information
2 Installing Windows

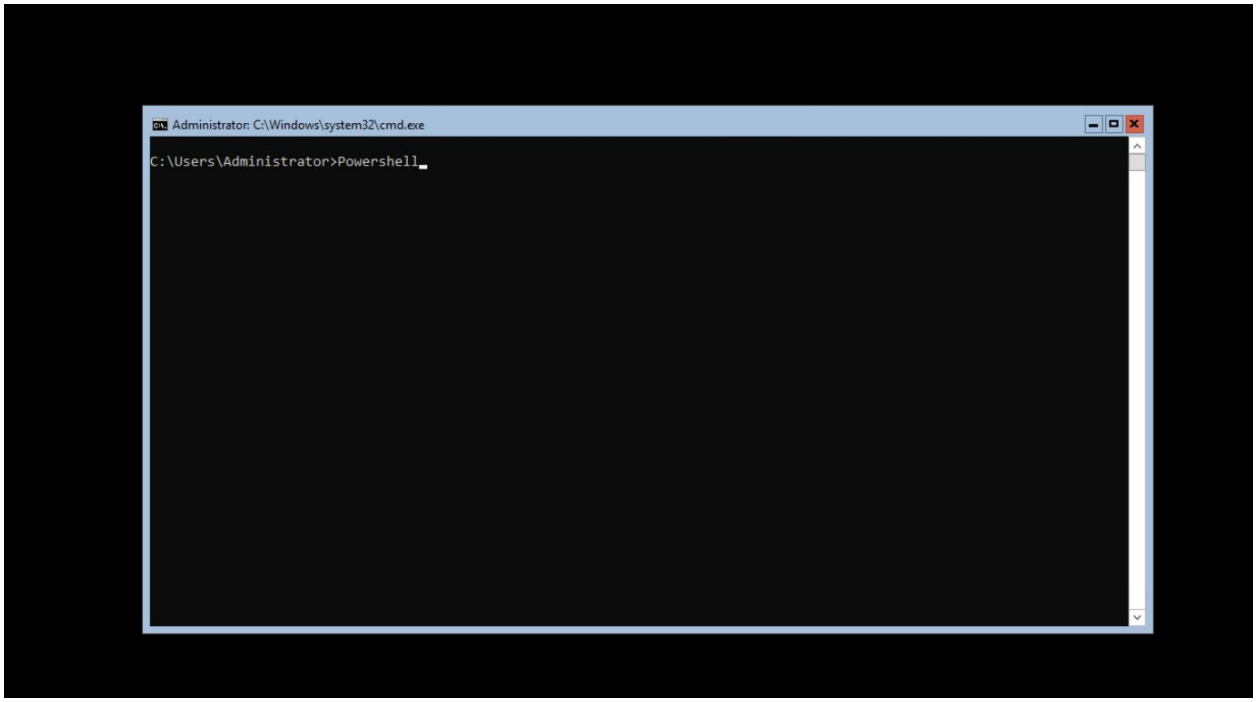

Windows Setup
Where do you want to install Windows?
Name
Total size
Free space
Type
Drive 0 Unallocated Space
40.0 GB
40.0 GB
Refresh
Delete
Format
New
Load driver
Extend
Next



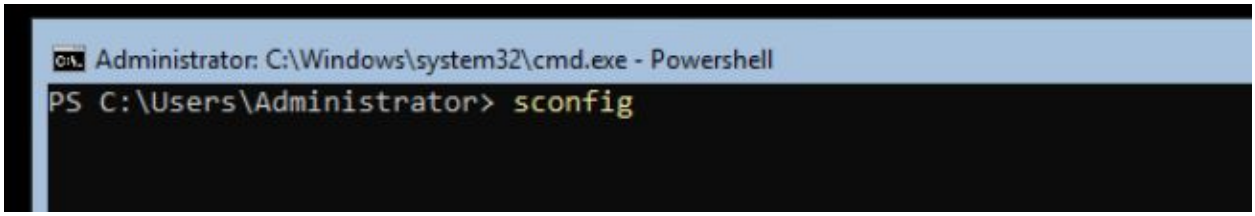
4. Enter a New Password for the machine and confirm it.



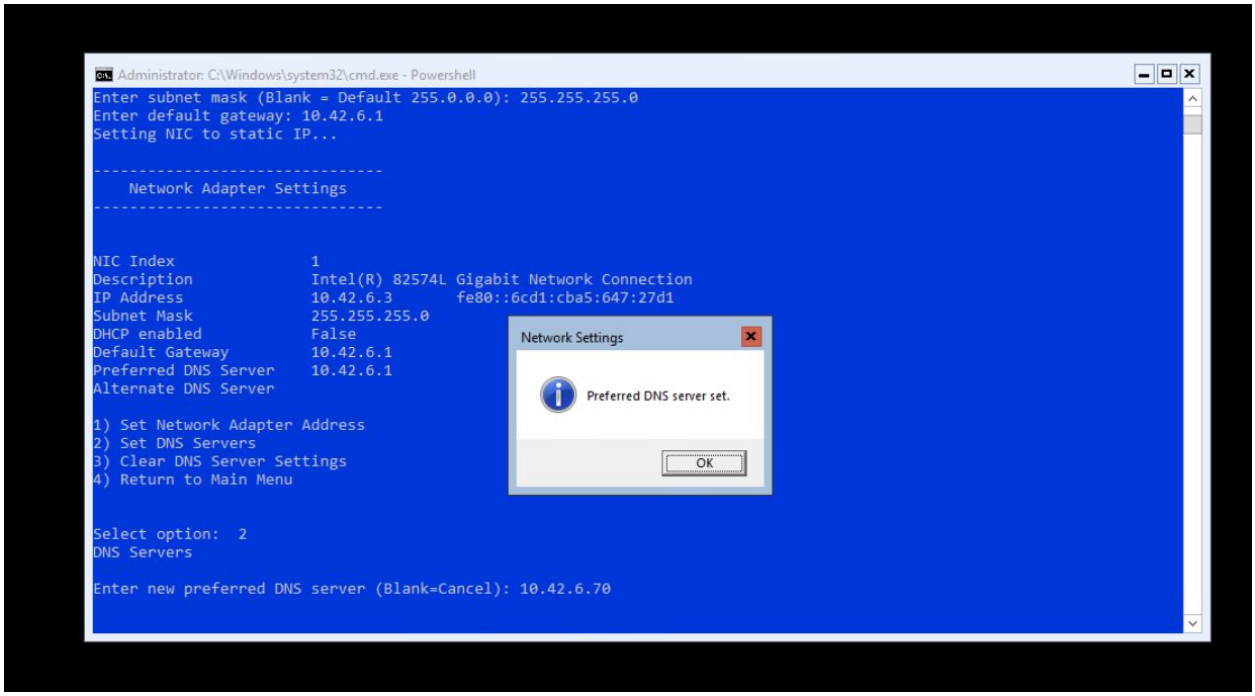
5. After you are into the system, type powershell to activate Powershell as shown below.



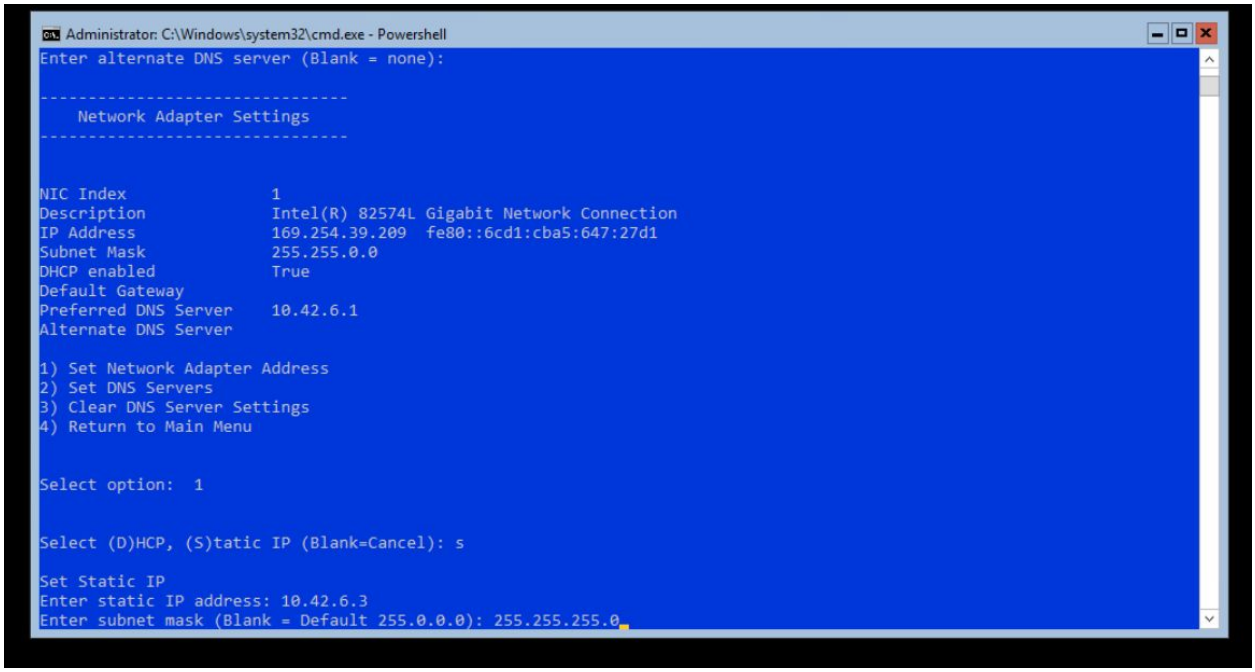
6. Type command sconfig and hit enter.



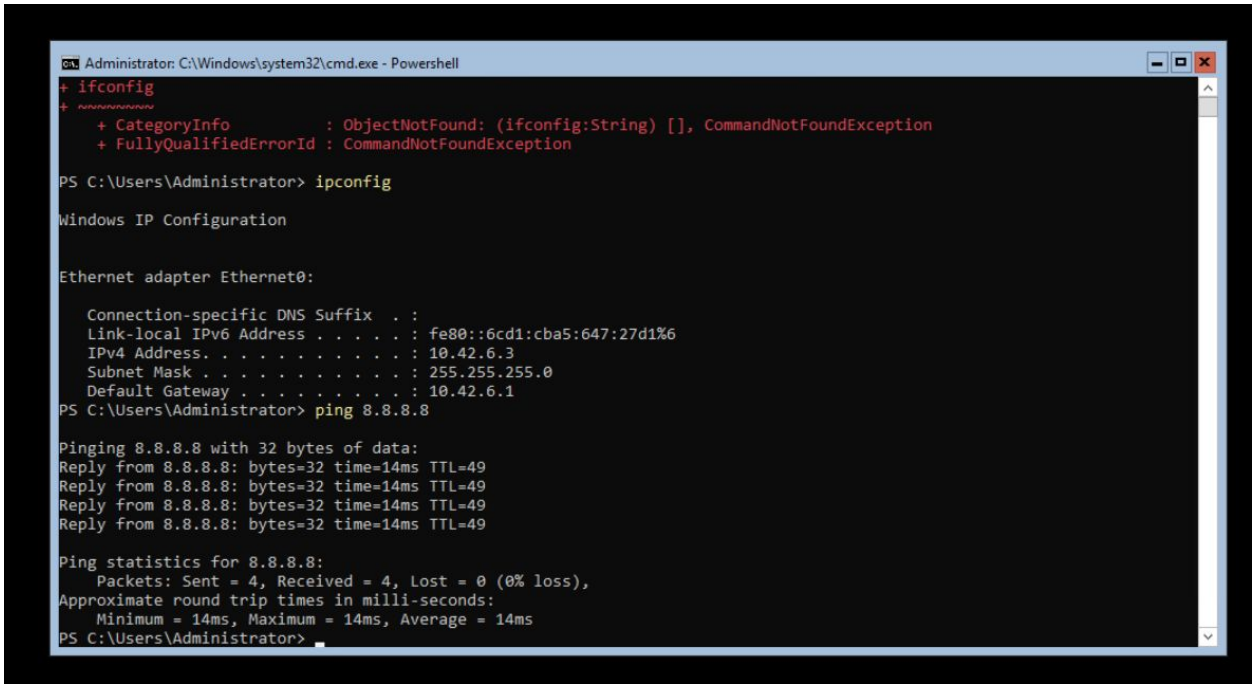
7. From the new menu select Network Settings option, and then DNS Setting and set DNS to 10.42.6.1, which is your AD.



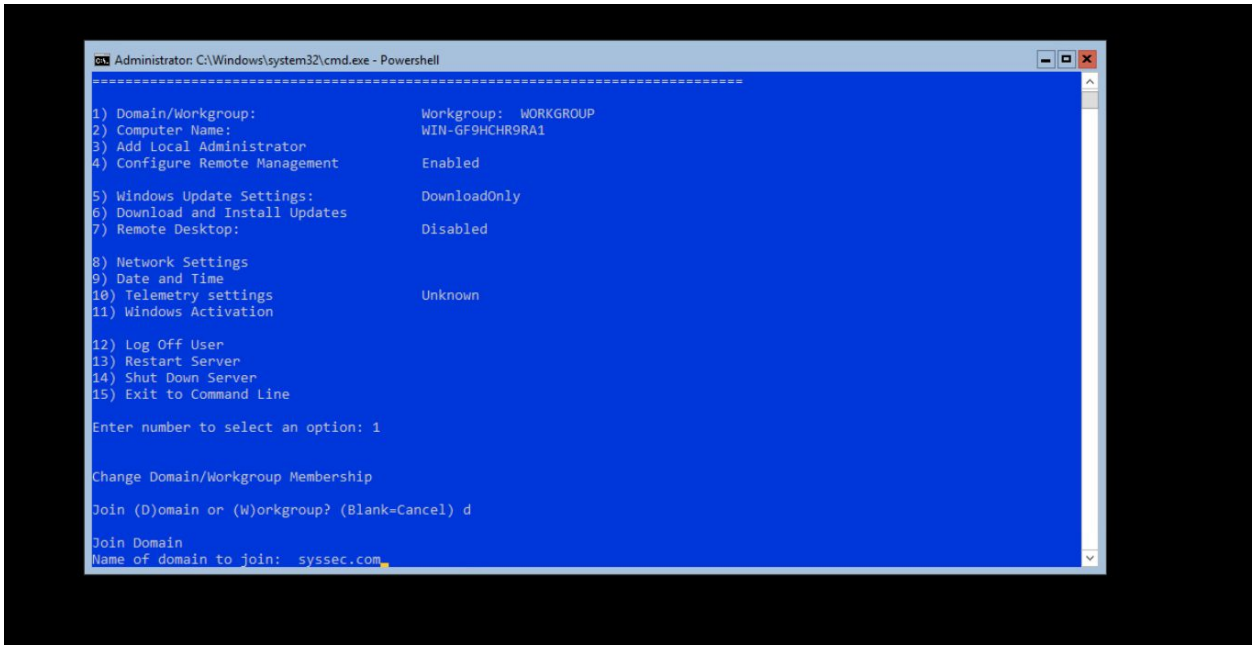
8. Now in the Network Settings menu select the Network Address Settings option and set IP of machine which in my case is 10.42.6.3 and subnet mask as 255.255.255.0.



9. Do ipconfig and ping to check your network as shown below.

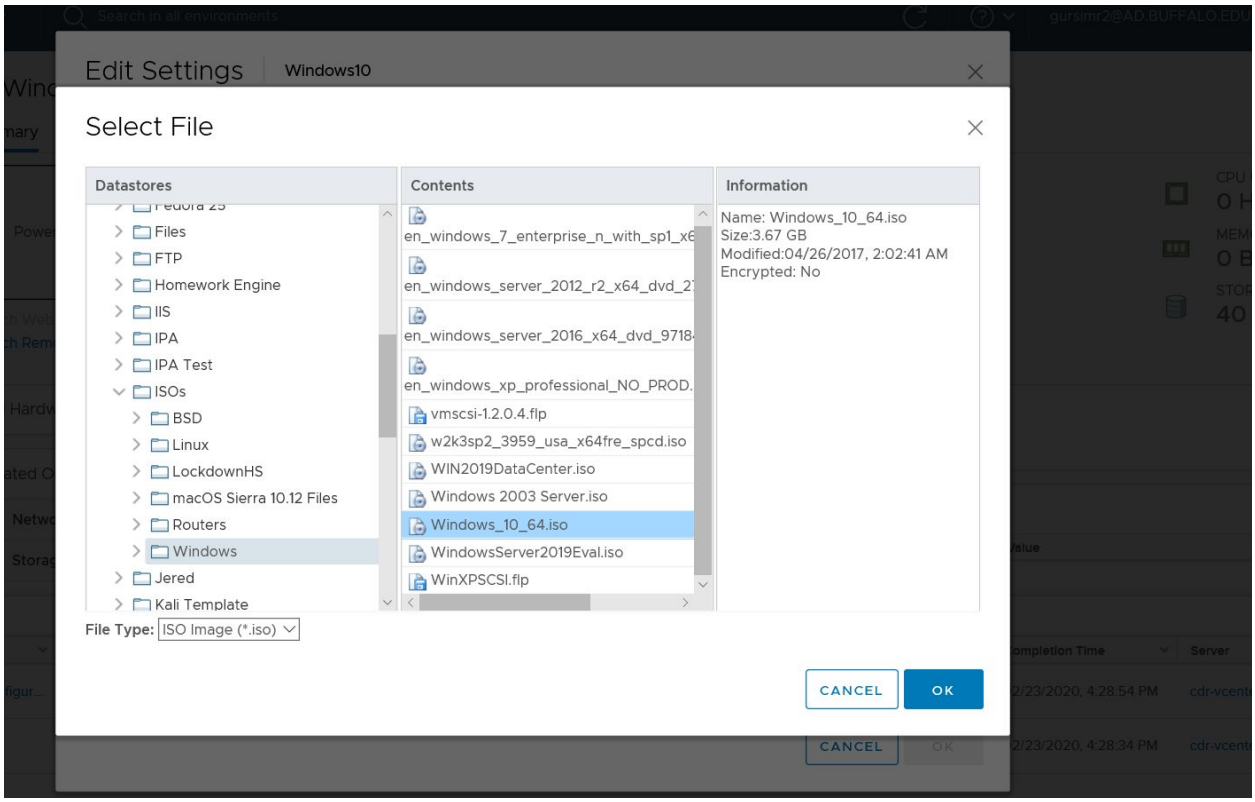


10. Now goto the main menu in sconfig and select option 1 and then d for domain and type the domain name you want your machine to join, which is syssec.com in my case.

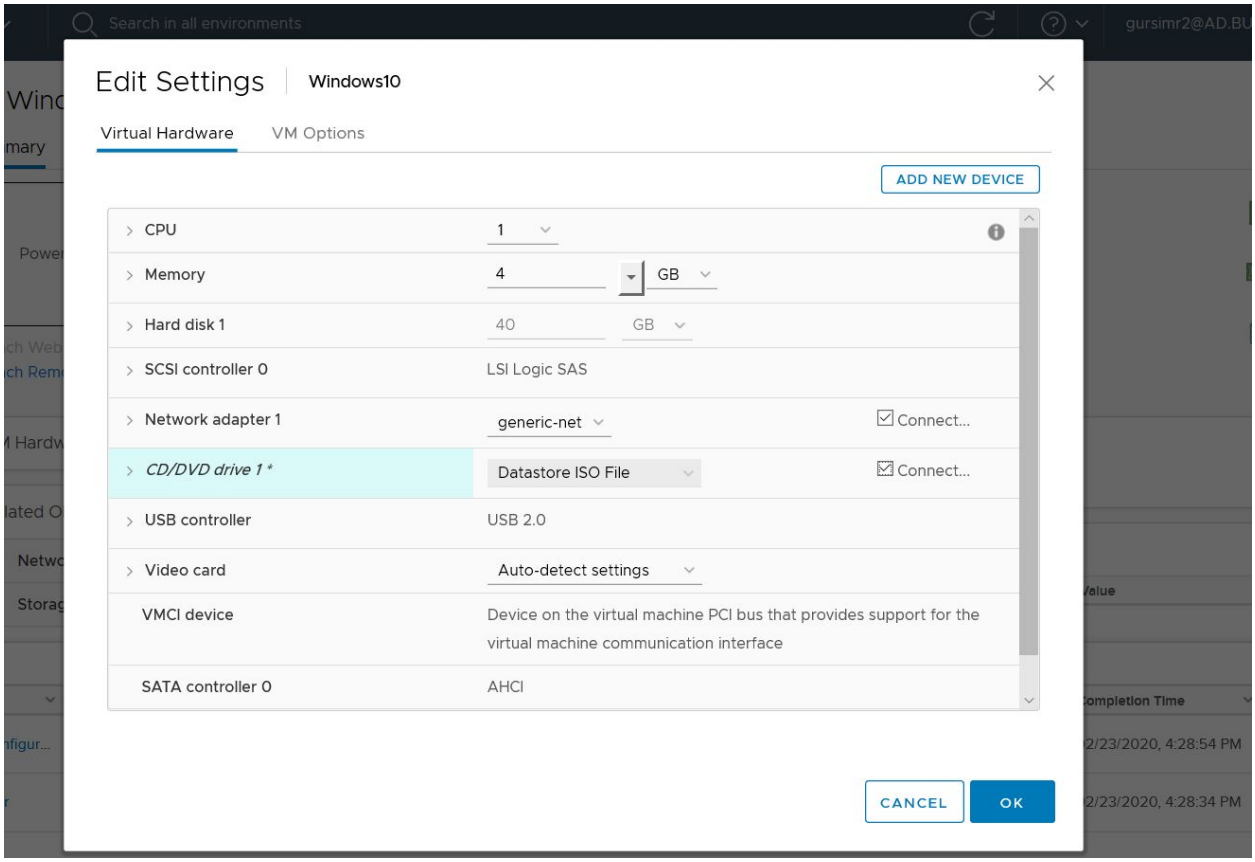


Windows 10 Setup and Configuration

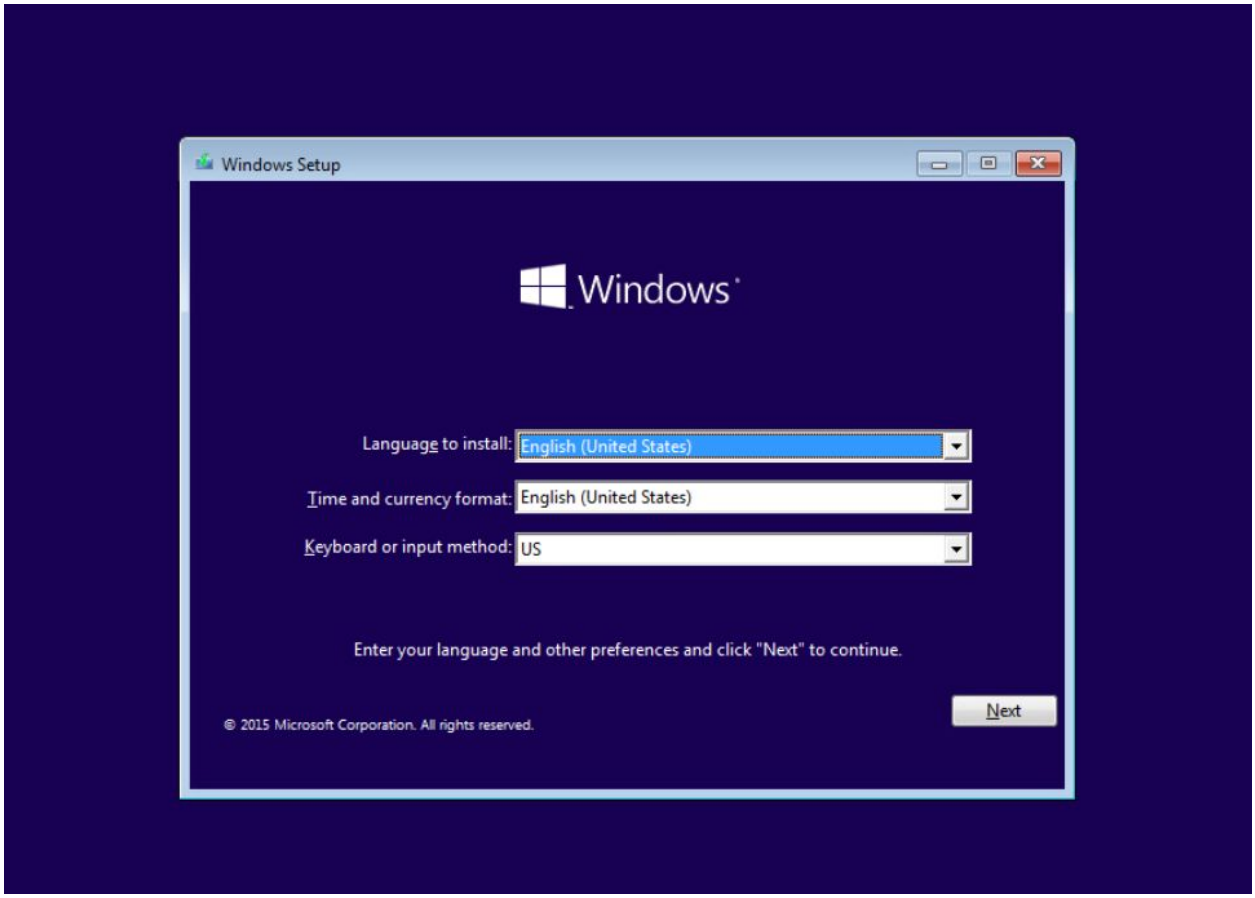
1. Now again goto vSphere Client and right click on Windows 10 VM option on the left side bar and select Edit. Change the CD/DVD Drive option to Data ISO and goto cdr-iscsi1>ISO>Windows and Select Windows 10 option as shown below.

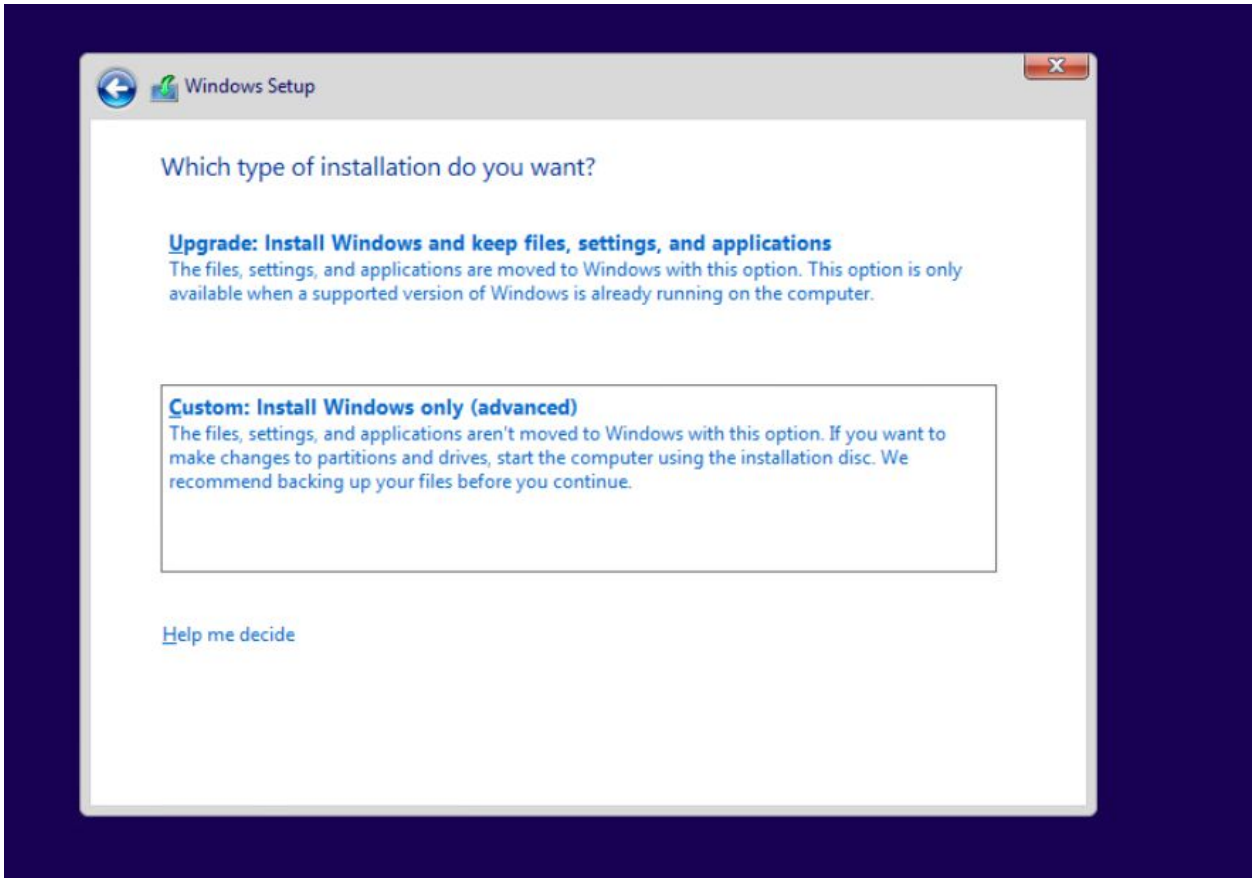


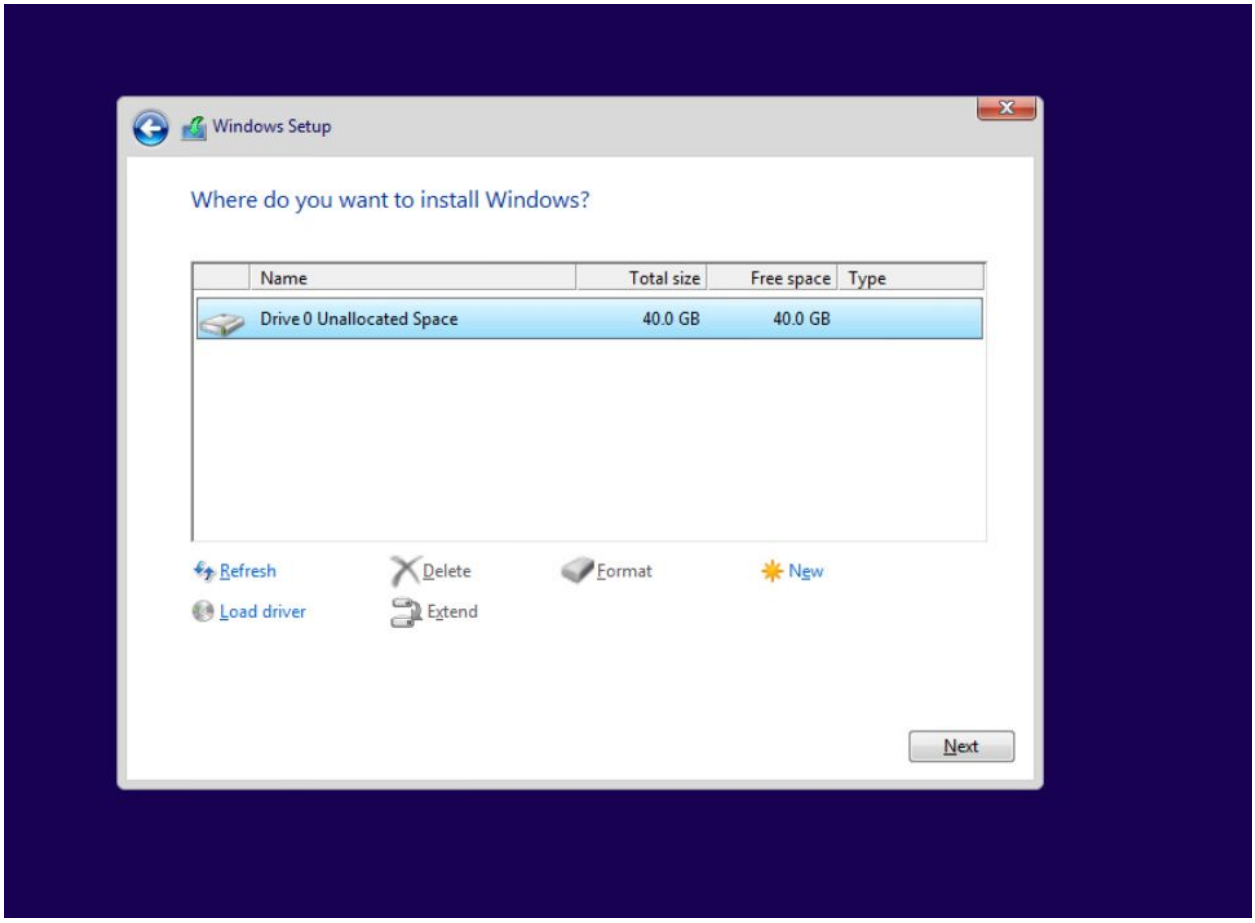
2. Check the Connected checkbox and click OK.

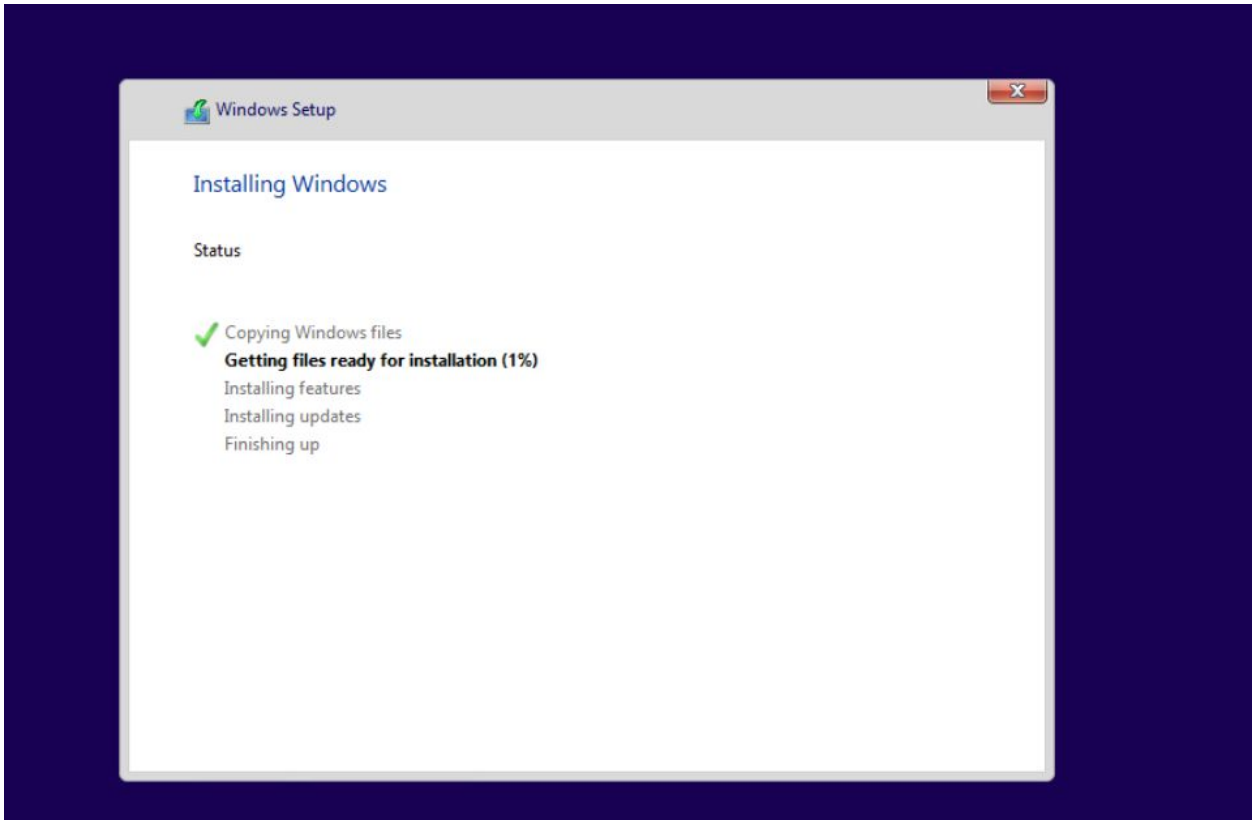


3. Follow the Configuration steps as shown in the following figures.

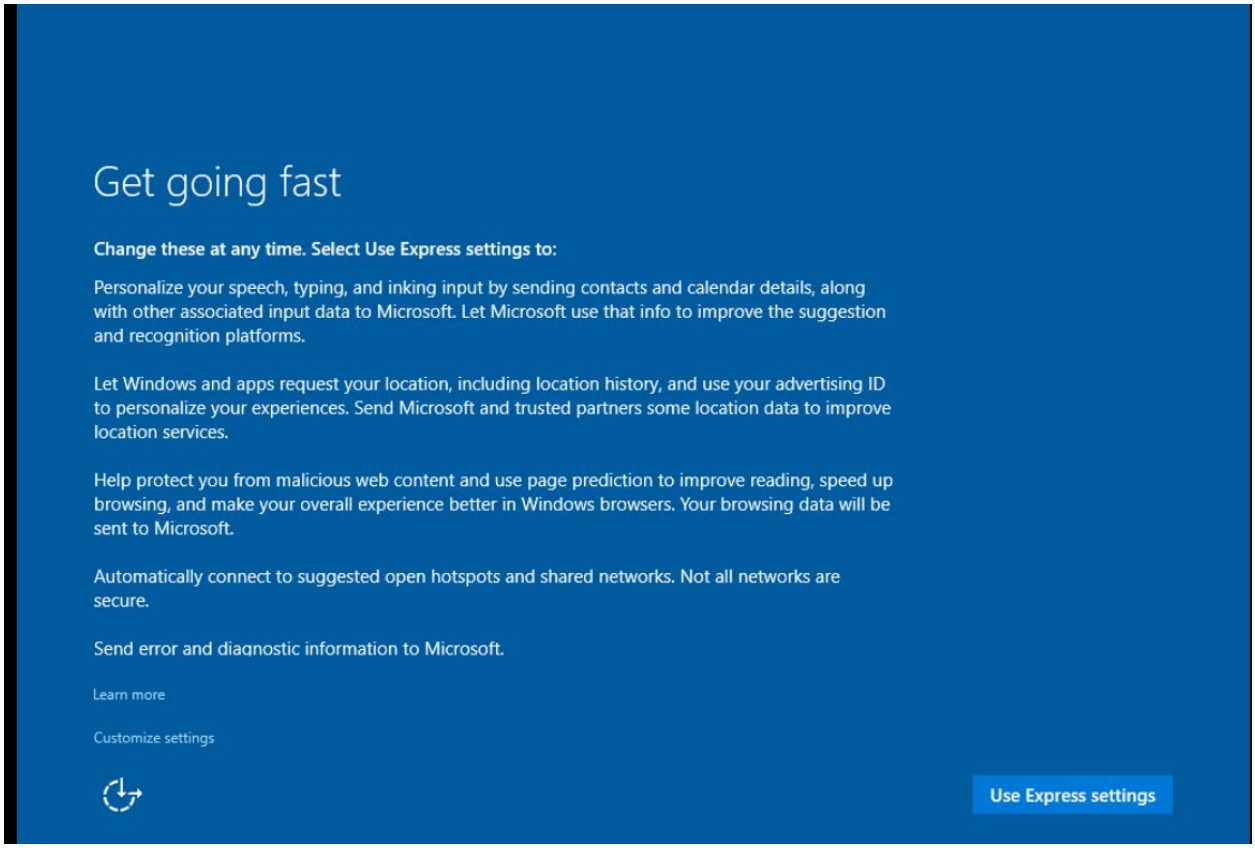


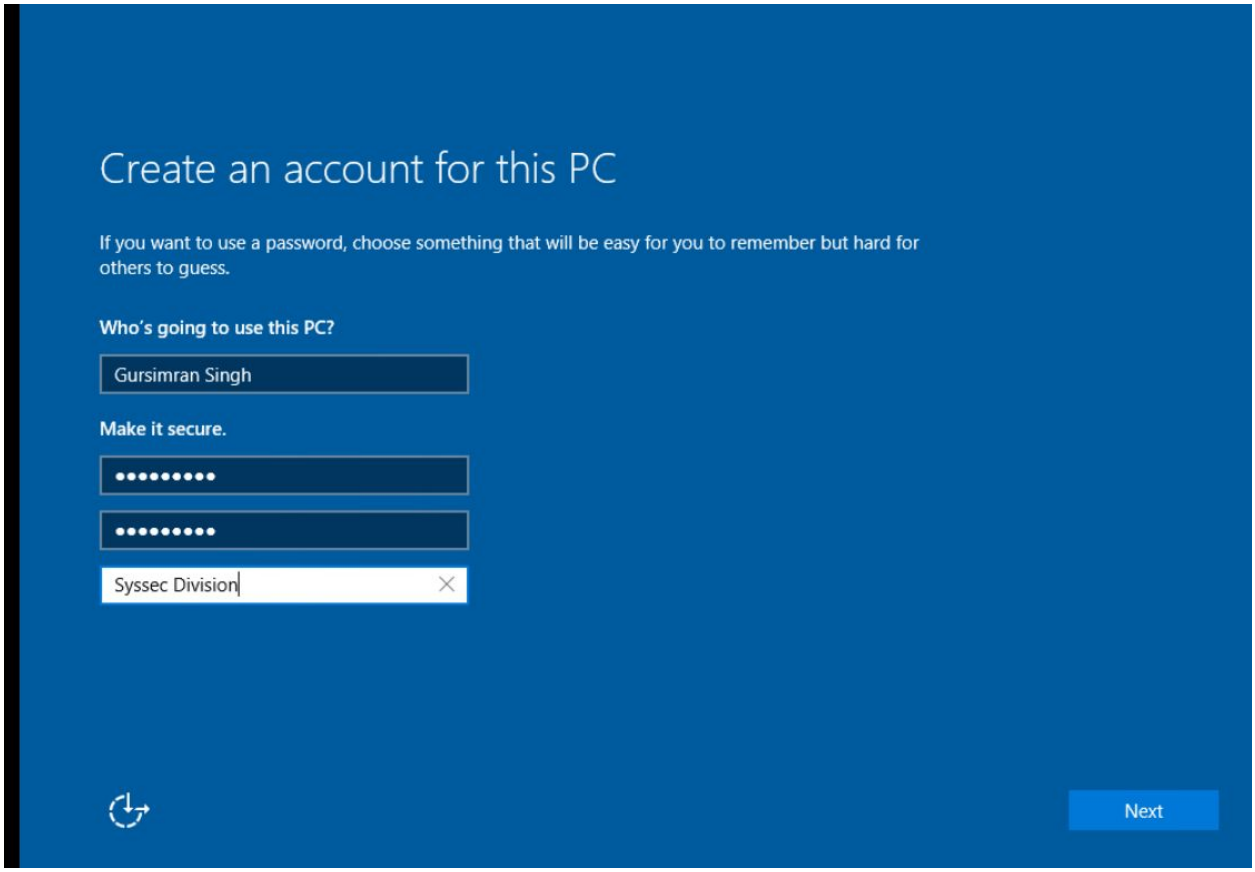

Windows Setup
Which type of installation do you want?
Upgrade: Install Windows and keep files, settings, and applications
The files, settings, and applications are moved to Windows with this option. This option is only available when a supported version of Windows is already running on the computer.
Custom: Install Windows only (advanced)
The files, settings, and applications aren't moved to Windows with this option. If you want to make changes to partitions and drives, start the computer using the installation disc. We recommend backing up your files before you continue.
Help me decide


Windows Setup
Where do you want to install Windows?
Name
Total size
Free space
Type
Drive 0 Unallocated Space
40.0 GB
40.0 GB
Refresh
Delete
Format
New
Load driver
Extend
Next



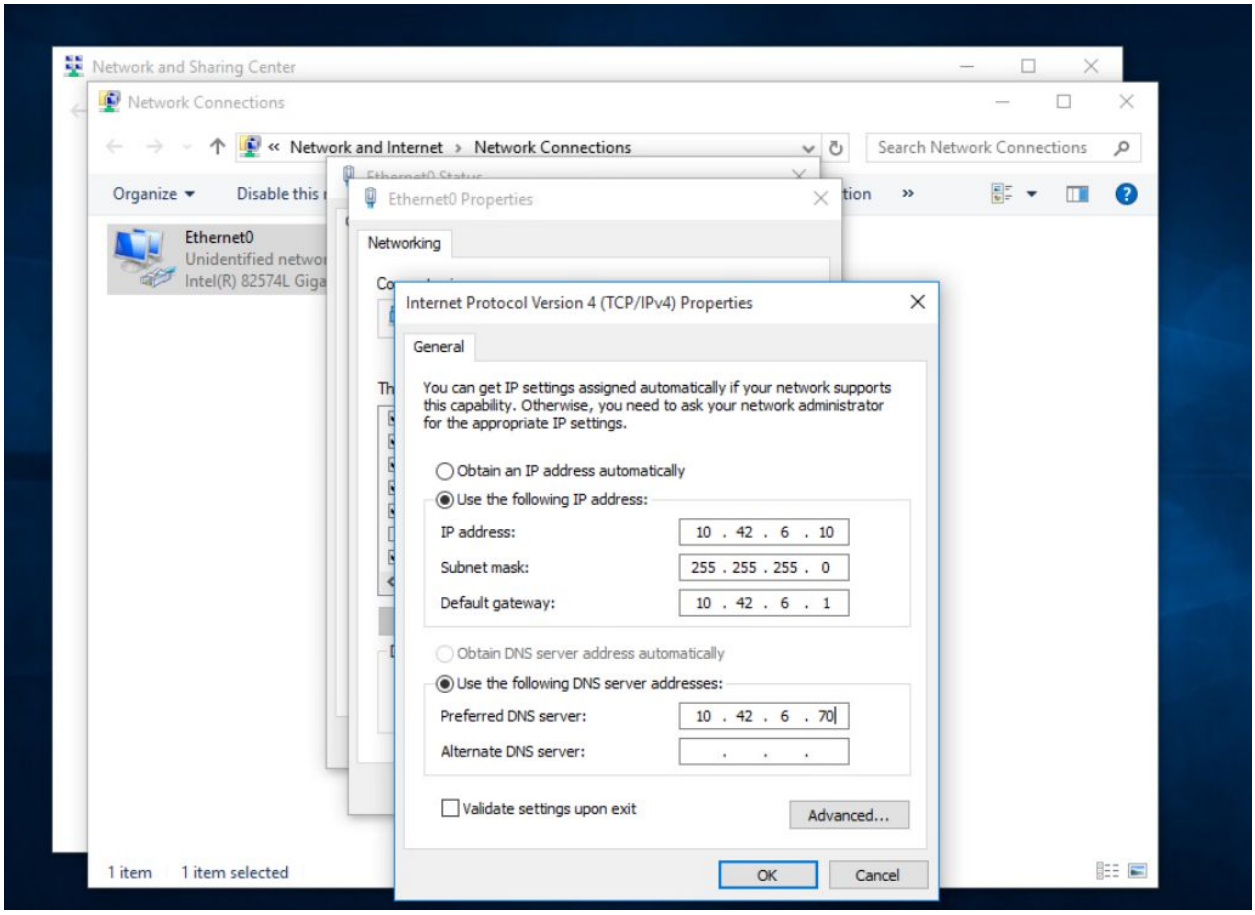
4. Click use Express settings and create and account by entering a username and password. This account doesn't matter because later you will use the domain account to login.


Get going fast
Change these at any time. Select Use Express settings to:
Personalize your speech, typing, and inking input by sending contacts and calendar details, along with other associated input data to Microsoft. Let Microsoft use that info to improve the suggestion and recognition platforms.
Let Windows and apps request your location, including location history, and use your advertising ID to personalize your experiences. Send Microsoft and trusted partners some location data to improve location services.
Help protect you from malicious web content and use page prediction to improve reading, speed up browsing, and make your overall experience better in Windows browsers. Your browsing data will be sent to Microsoft.
Automatically connect to suggested open hotspots and shared networks. Not all networks are secure.
Send error and diagnostic information to Microsoft.
Learn more
Customize settings
Use Express settings

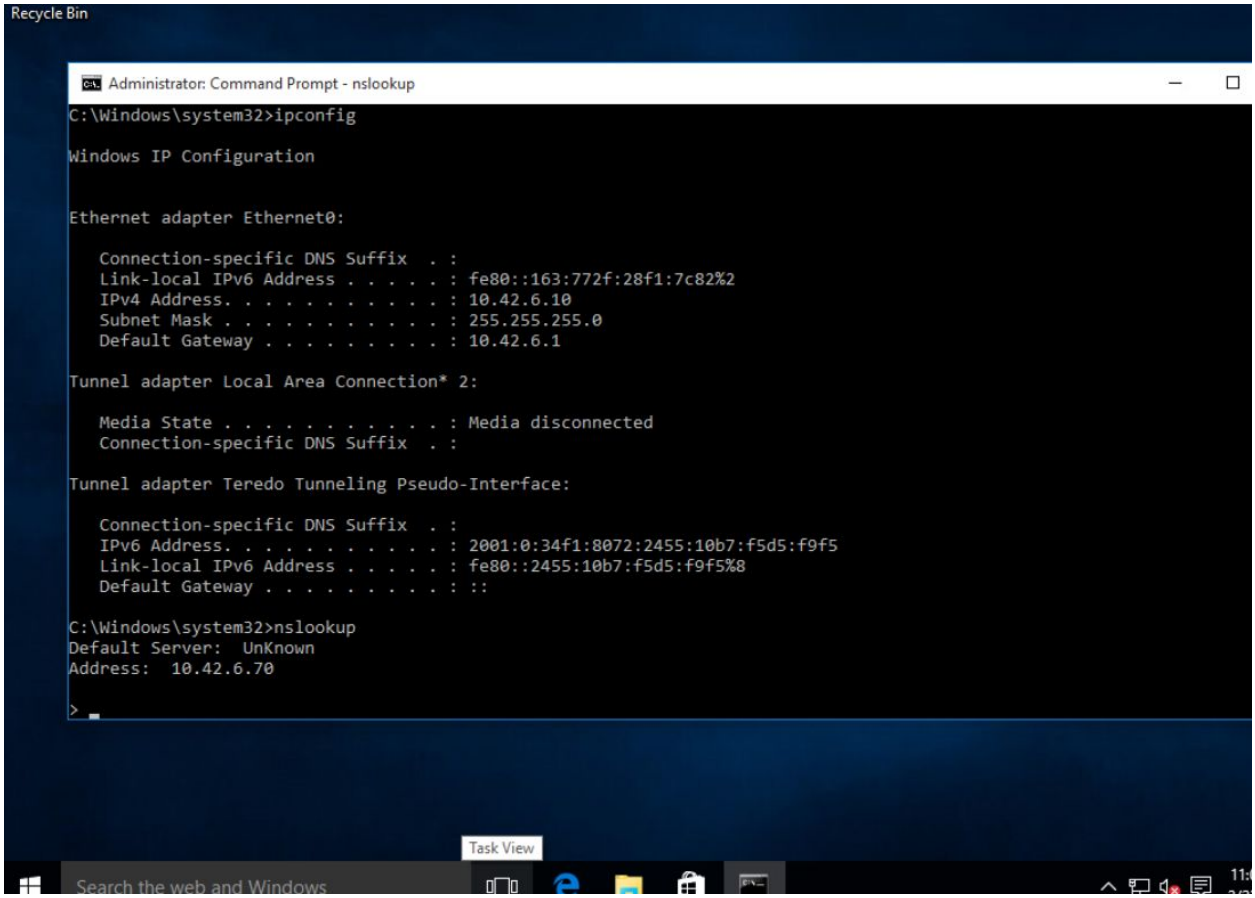


5. After signing in goto Network and Sharing Center > Network Connections > Ethernet(or your Adapter) Status > Properties > Ipv4 > properties and enter IP address, subnet mask, default

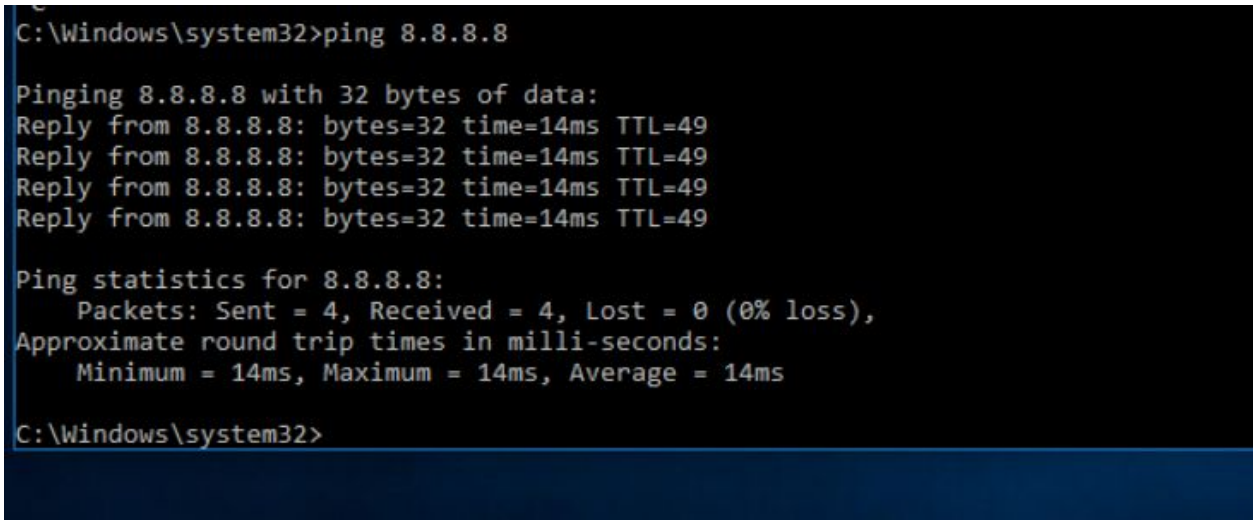
gateway and preferred DNS Server for the machine.

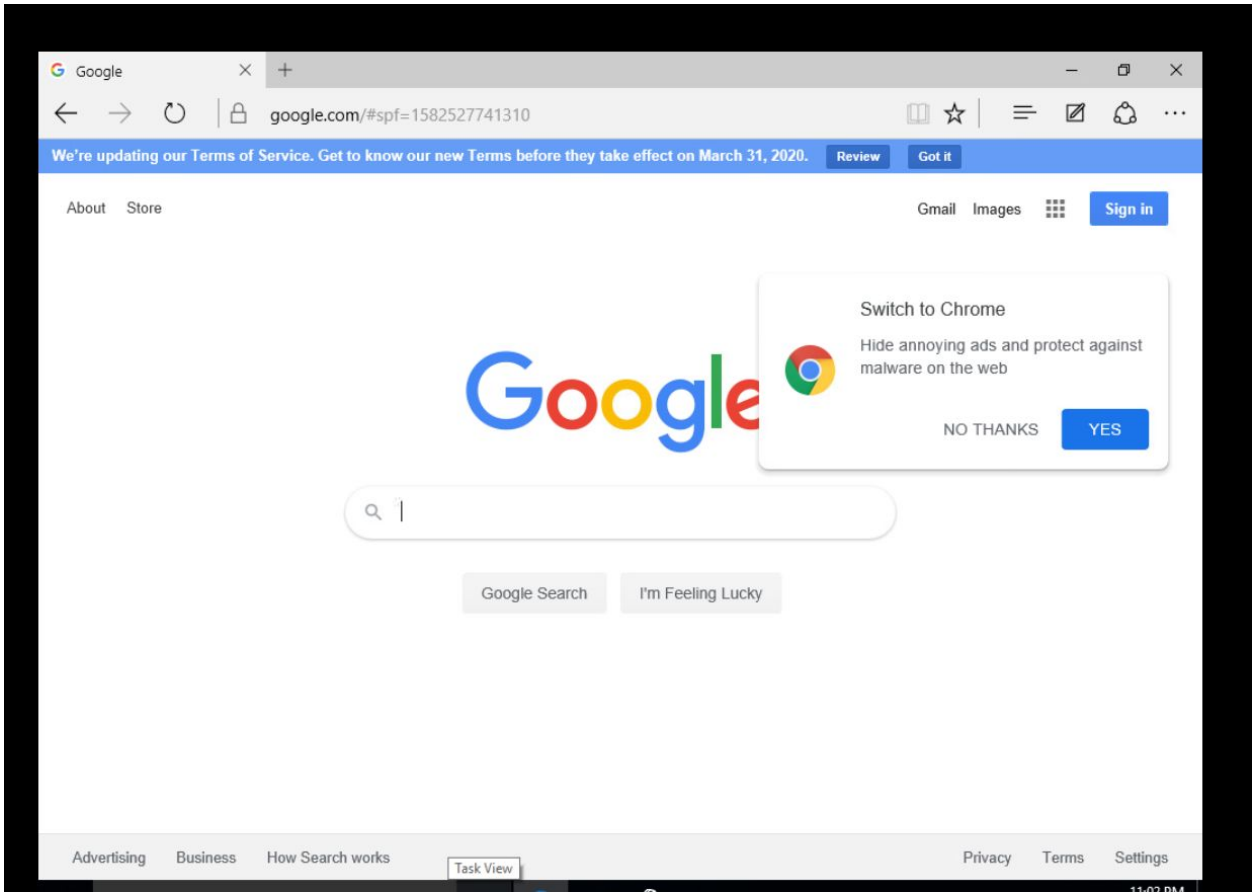


6. Check the above by using commands ipconfig and nslookup.

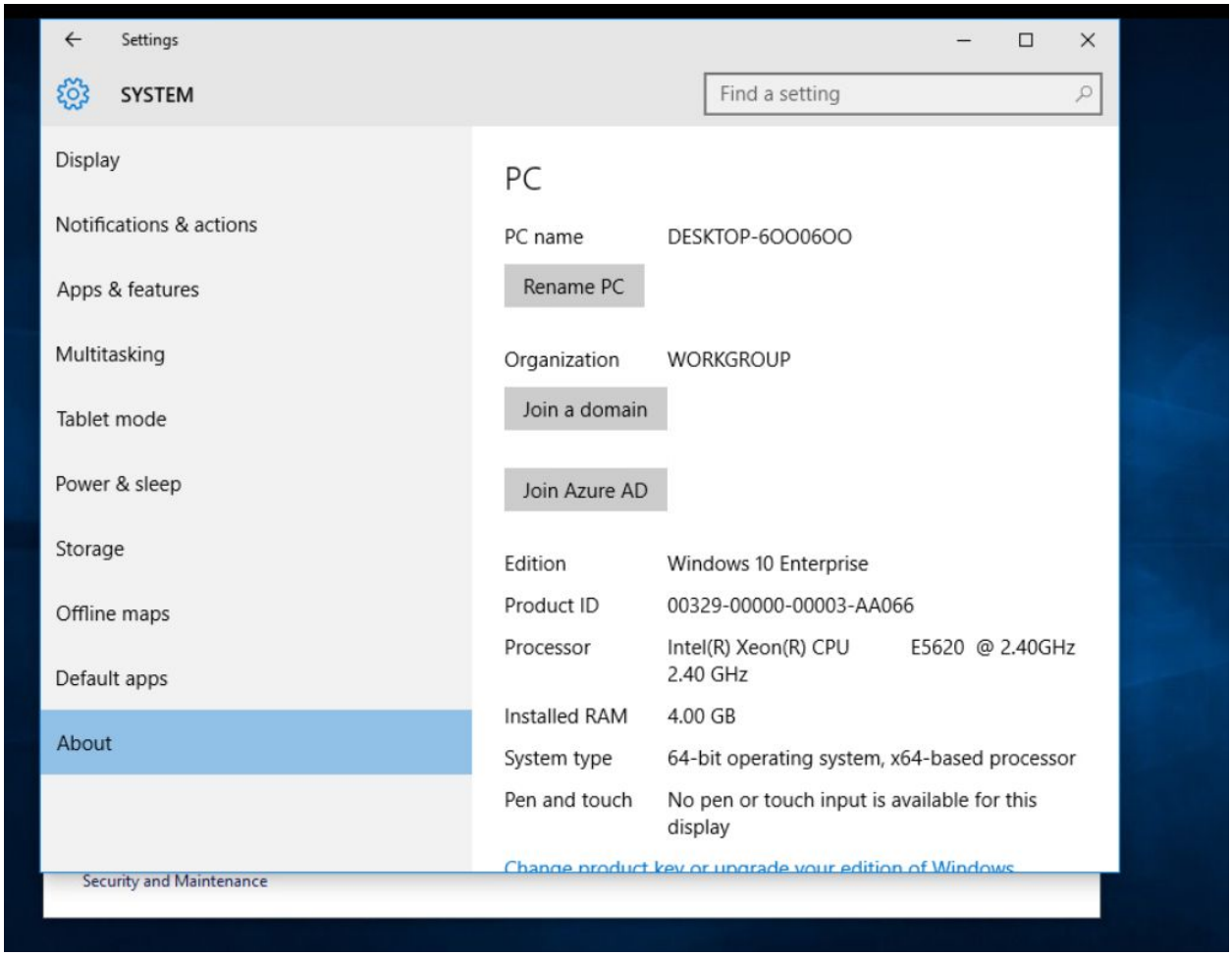


7. Check internet connection using ping or opening google.com on the browser.

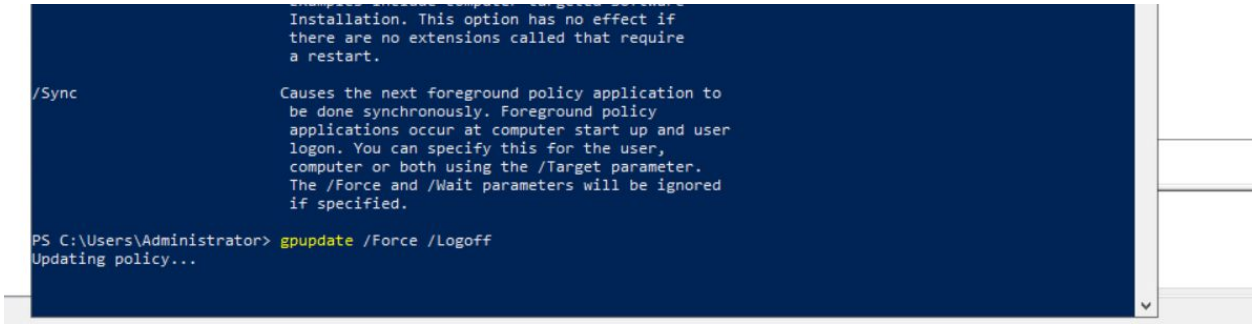




8. Now go to Settings > System > About > Join a domain and enter the domain name you want to join and login with a username you created in the Active Directory in Server 2019.



Note - You can also run gpupdate command on the server 2019 machine in the end.



You will be able to see the changed wallpaper on the windows 10 machine after restart as shown below.