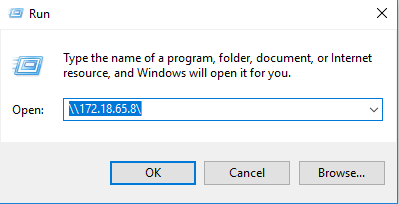
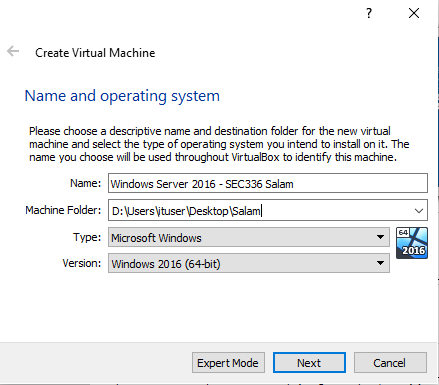
**Lab 2**

**Setting Up Windows Server 2016 Virtual Machine**

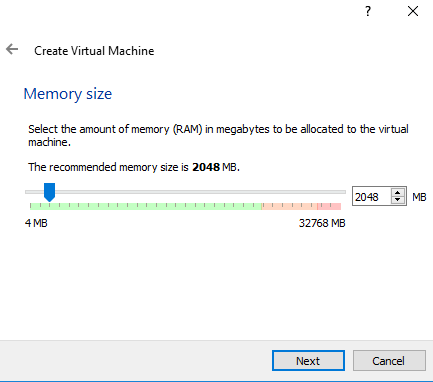
1. Using one of the lab computers, open the Start menu and type run
2. In the run app, type the following [\\172.18.65.8](file:///\\172.18.65.8) as shown in the screenshot below and hit enter



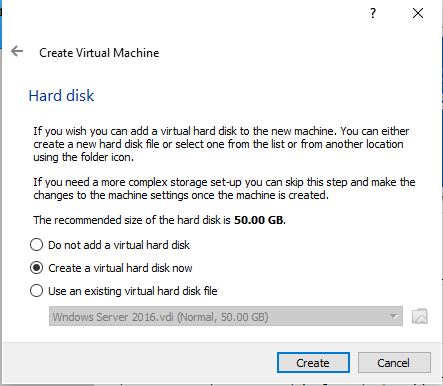
1. Open the *ctishare folder*, then *NET335*, and copy the *Windows Server 2016 Standard 64-bit* to your folder that you have created on desktop.
2. **You may skip steps from 1-3 if you downloaded Windows Server 2016 iso image from:** [**https://drive.google.com/file/d/1yUOFb2t2iXXvMFcAUFXUf0iV3Np2pQgK/view?usp=sharing**](https://drive.google.com/file/d/1yUOFb2t2iXXvMFcAUFXUf0iV3Np2pQgK/view?usp=sharing)
3. Start Oracle VM VirtualBox application
4. Click on New
5. Create a new VM as shown in the screenshot below and click on Next. Make sure to use your name and section number and for the Machine Folder type, browse to your created folder.



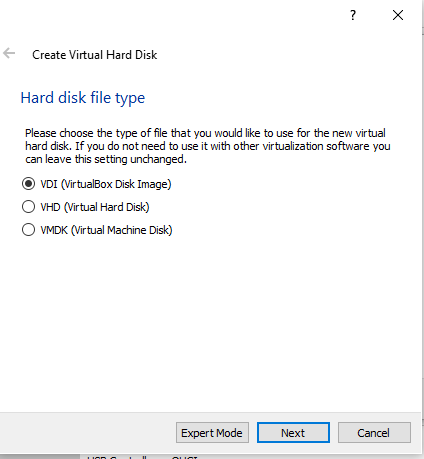
1. For the memory, keep the default value and click Next



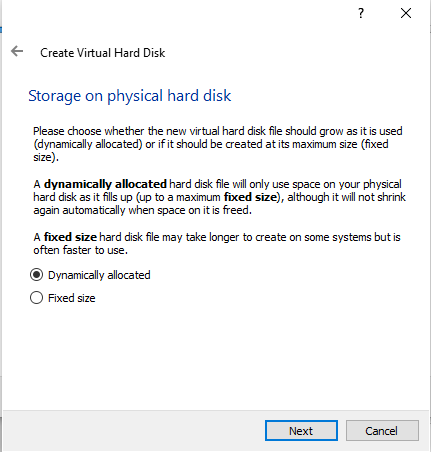
1. for the Hard disk, select *Create a virtual hard disk now* and then press create.



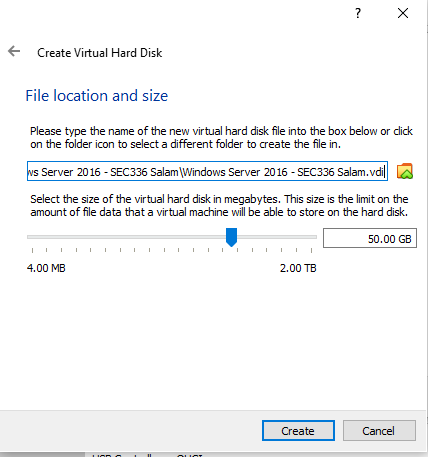
1. Select *VDI* as a hard disk file type



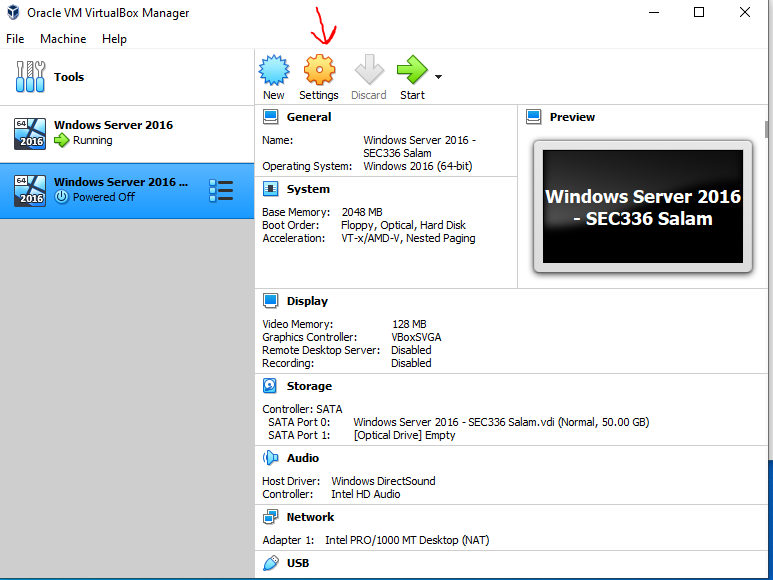
1. Select *Dynamically allocated* for Storage on physical hard disk



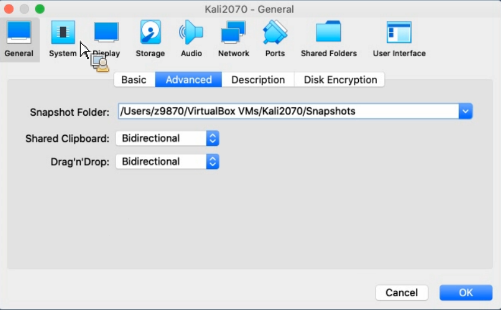
1. Keep the file location and size default (50.00 GB) and press create



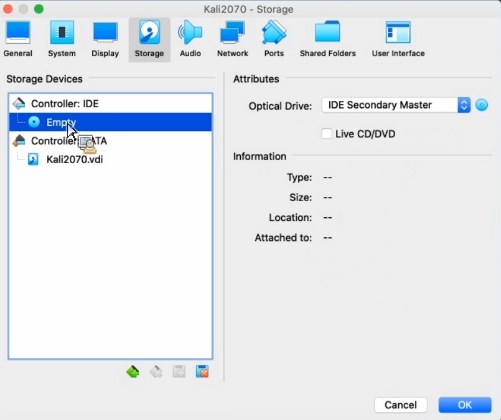
1. Open Windows Server 2016 settings



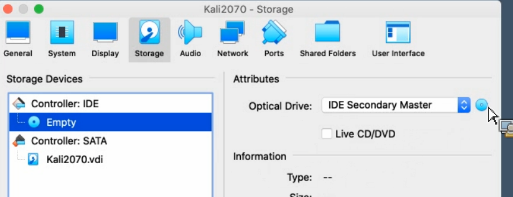
1. Right click on your newly created VM and click on Settings. Click on the Advanced tab and change the options for the Shared Clipboard and the Drag’n’Drop to Bidirectional as shown below



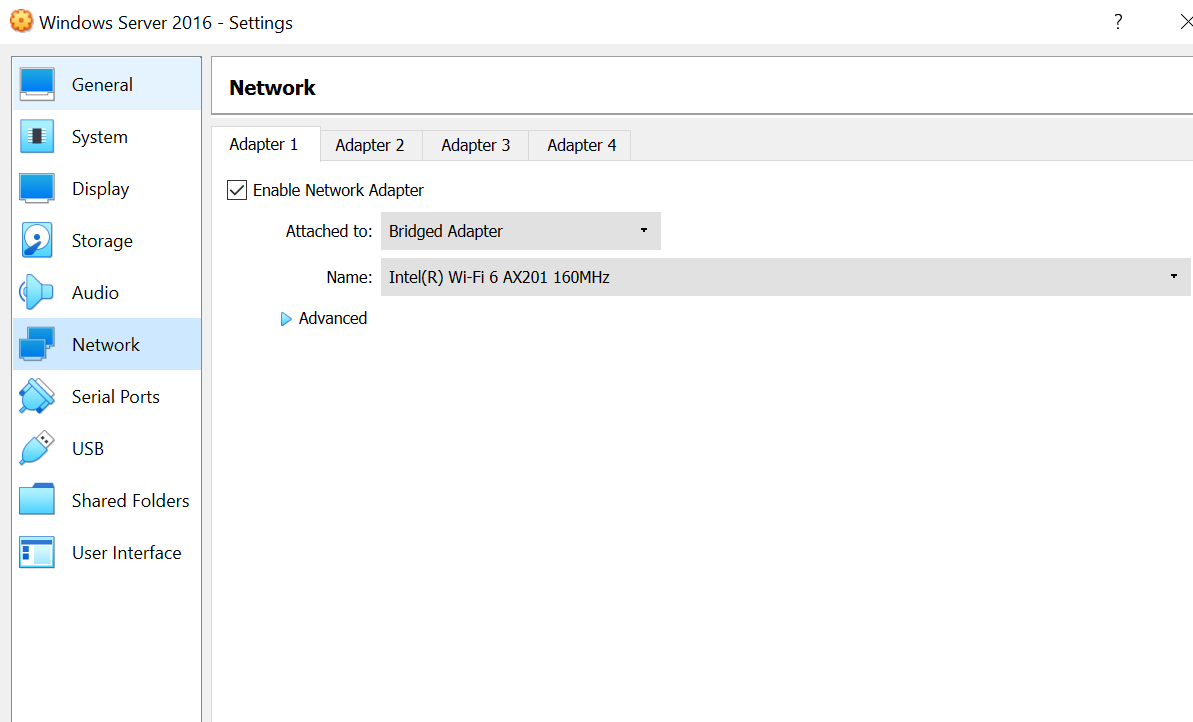
1. Next click on the Storage tab, and click on the empty cd as shown below



1. Then click on the cd icon, where the cursor is placed in the screenshot below:



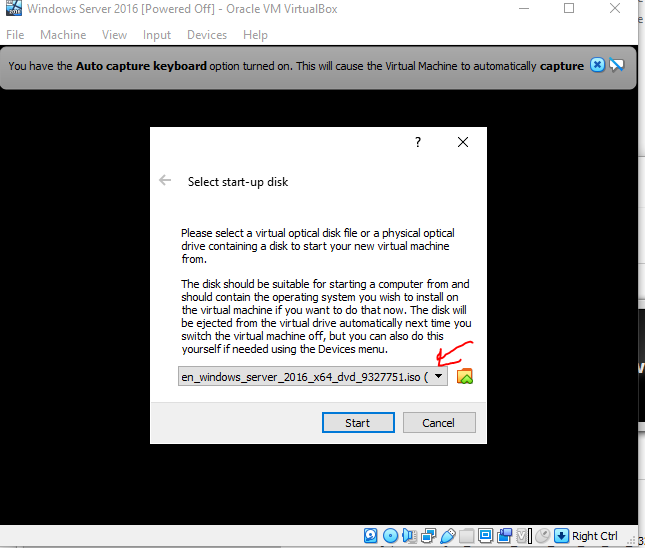
1. Next, attach the Windows Server 2016 image from the folder you have copied from the ctishare folder
2. Select network tap, then select Bridged adapter, and then press ok to close the settings page.



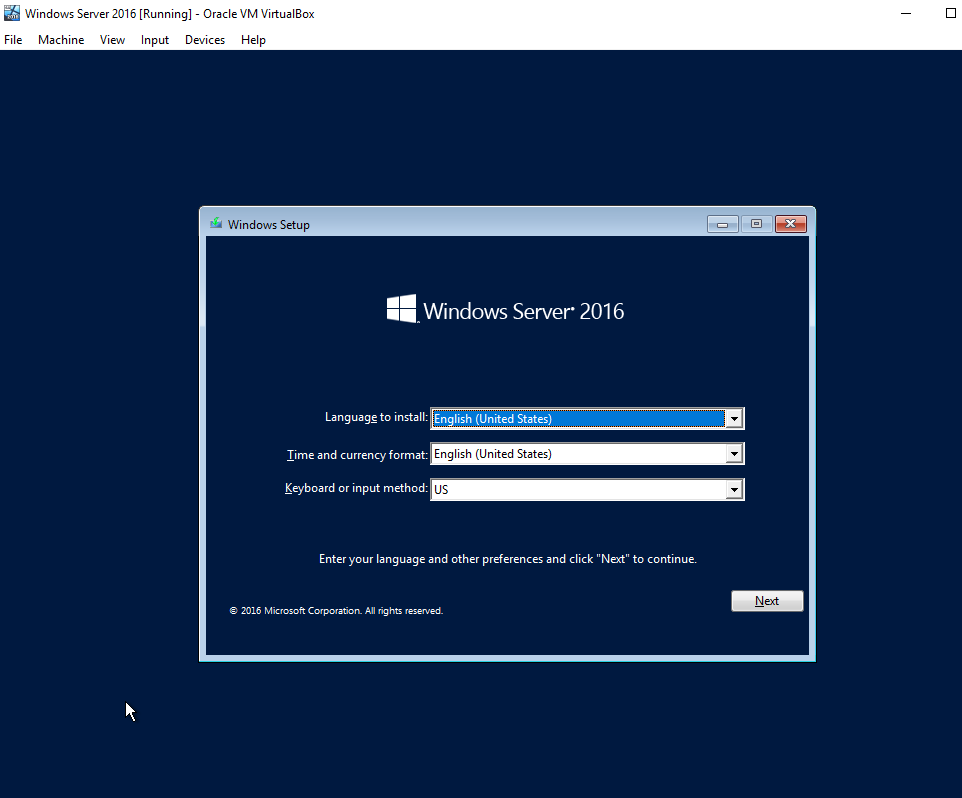
1. Run Windows Server 2016 VM

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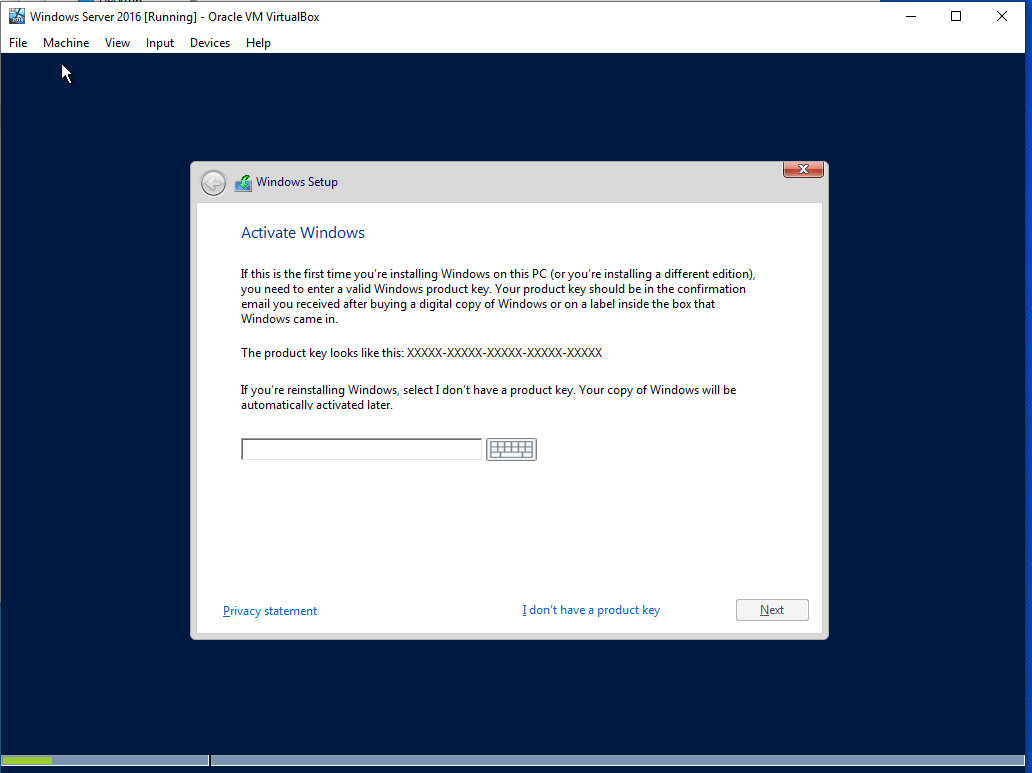
1. Select Windows Server 2016 iso image from the drop-down menu just as in the picture and then press start



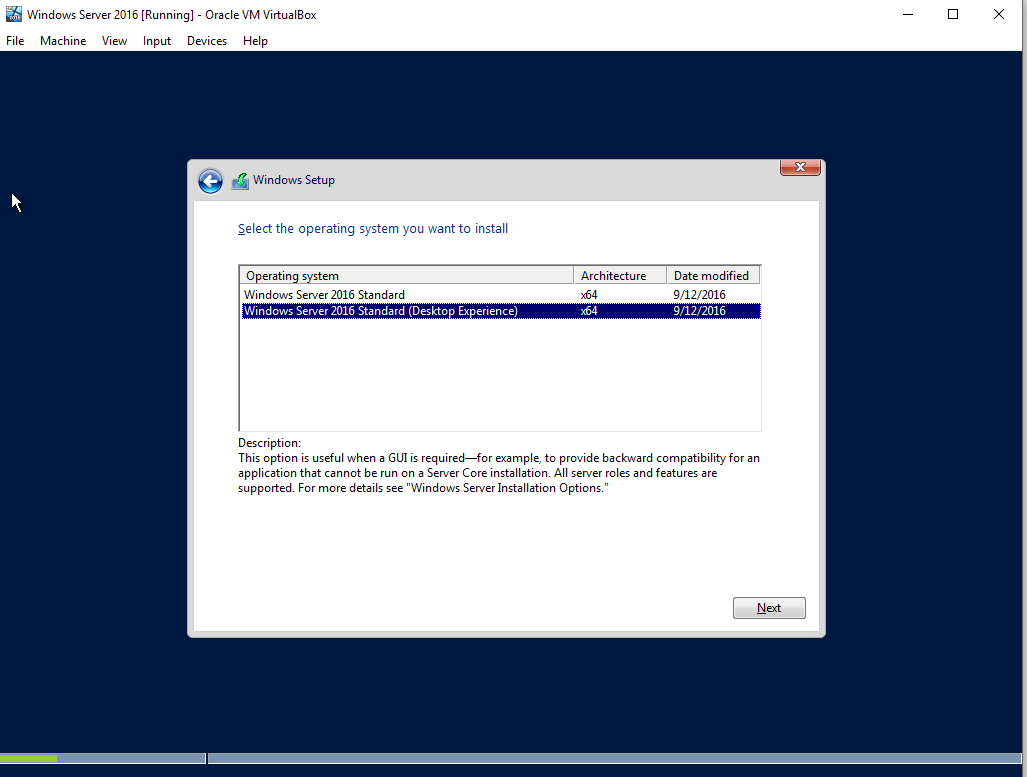
1. The installation wizard will pop-up, press next

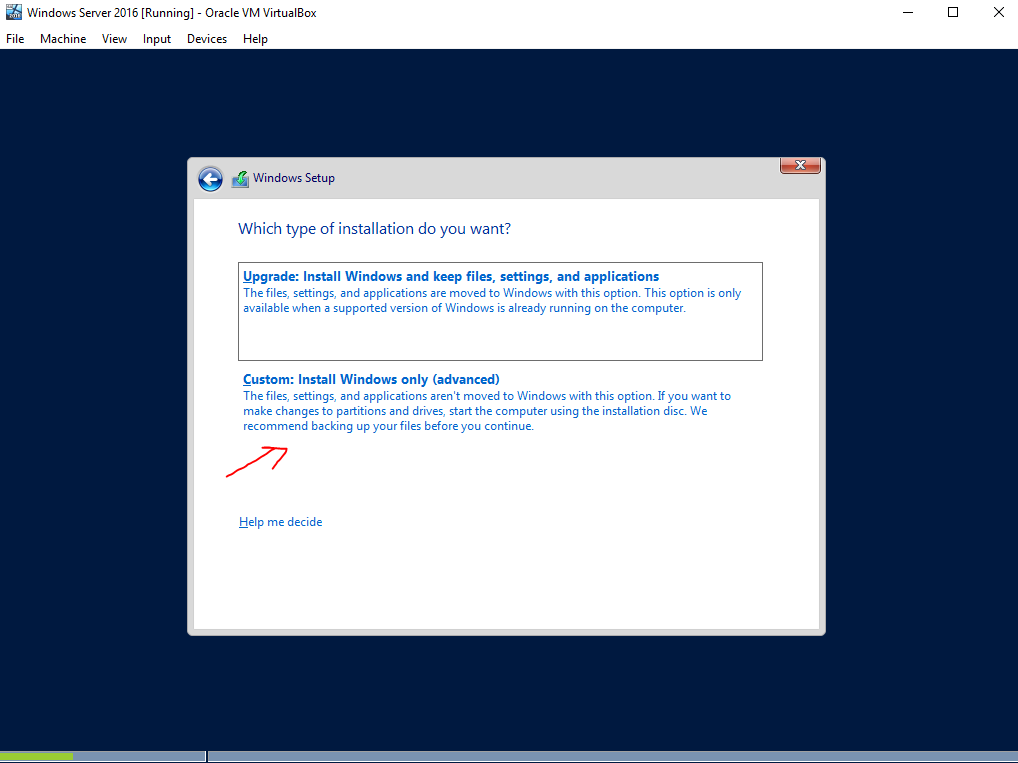


1. Next, it will ask you for the activation key, open the folder you copied, and then open the word document where the activation key is written inside.

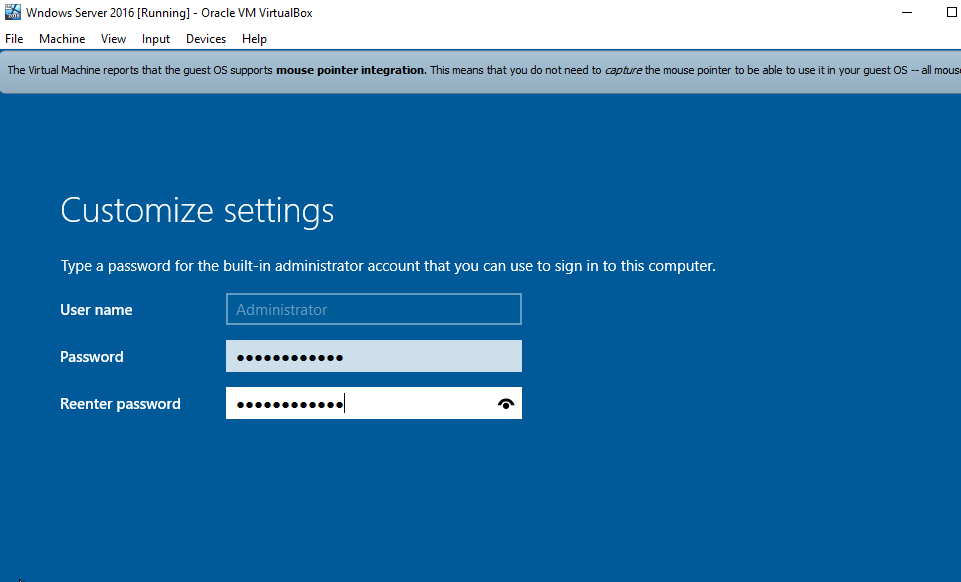


1. Select Windows Server 2016 Standard (Desktop Experience) to install and then select custom installation





1. Once the install finishes, you will be prompted to enter a password for the Administrator account. Use Zayed1234 as your password.



**Install and Configure Active Directory (AD)**

1. Start the Windows Server VM using Oracle Virtual Box
2. Log in to Windows Server using the credentials

Username: Administrator

Password: Zayed1234

1. From the start menu, Open Server Manager and then click on *Add Roles and Features.*
2. This will launch the Add Roles Wizard, read the information provided and Click Next.
3. Select *Role-based or feature-based* installation and click Next.
4. Check A server from the server pool and click Next.
5. Next, select the Active Directory Domain Services option.
6. Click Add Required Features; then click Next to continue. Click Next to continue.
7. *Check the box to restart the destination server automatically if required.* Confirm that you want to install AD DS and then click Install.
8. After the installation is completed, you should see a success confirmation page. Verify whether the install was successful, then click Close.
9. Now that the AD role has been installed, you will proceed to step 12 where you need to promote the server to a domain controller (DC).



1. Reopen the server manager, and click the alert in the upper right.
2. In that window click *Promote this server to a domain controller*
3. You are now at the ‘Active Directory Domain Configuration Wizard Services’ page.
4. You must now choose whether this DC will be part of an existing forest or used to establish a new forest. Select Add a new forest.
5. You now need to enter the fully qualified root domain name for the new domain (enter for example - company.com). Enter it into the text box, then click Next. The wizard will then verify that the chosen domain does not already exist on the network.
6. Enter a password (with capital, alpha-numeric symbol) Zayed1234
7. Click Next
8. Keep the default netbios name as it is. Click next – next – next and install.
9. Wait while the ‘prerequisites are validated before AD Domain services are installed on the computer’. It may take a while. You will be asked to restart, or the machine will restart automatically
10. By this time, you should have installed ‘AD DS’ and ‘DNS’ which will be shown on the left pane
11. After the restart is complete, you might be required to login again and change the password as shown in the screenshot below