

# CCT College Dublin

## Assessment Cover Page

*To be provided separately as a word doc for students to include with every submission*

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<b>Module Title:</b>	Operating Systems
<b>Assessment Title:</b>	Virtual Windows Active Directory / Network Server Virtualization
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<b>Assessment Due Date:</b>	Sunday 24th April 2022 - 23:50
<b>Date of Submission:</b>	Sunday 24th April 2022

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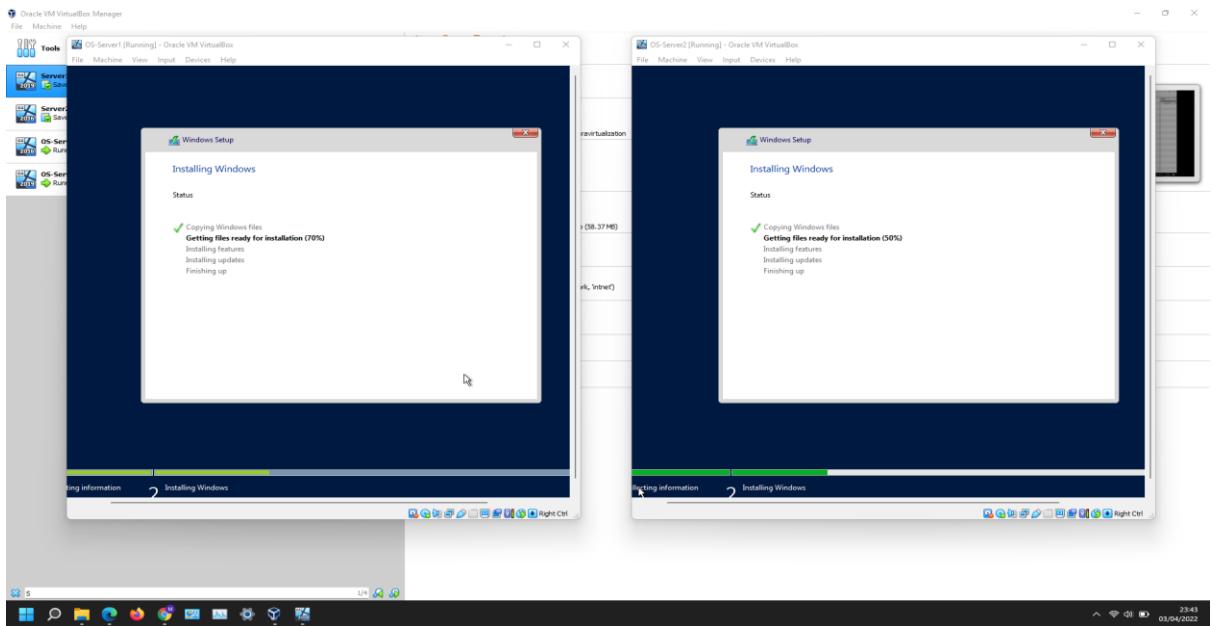
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# Part 1: Installing the network and setting up the network infrastructure:

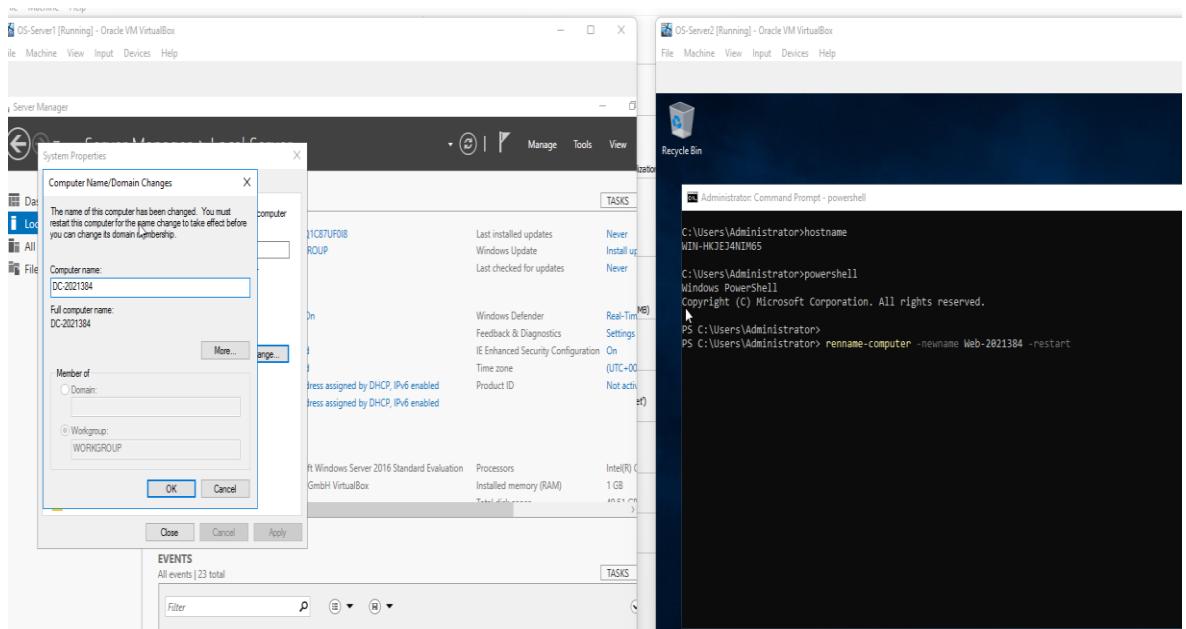
## Installing Two Virtual machines

First of all, I installed two virtual machines by using oracle virtual box. One of **OS-Server1 2016** and other one is **OS-Server2 2019**. The installation has shown below in screenshot of both machines.



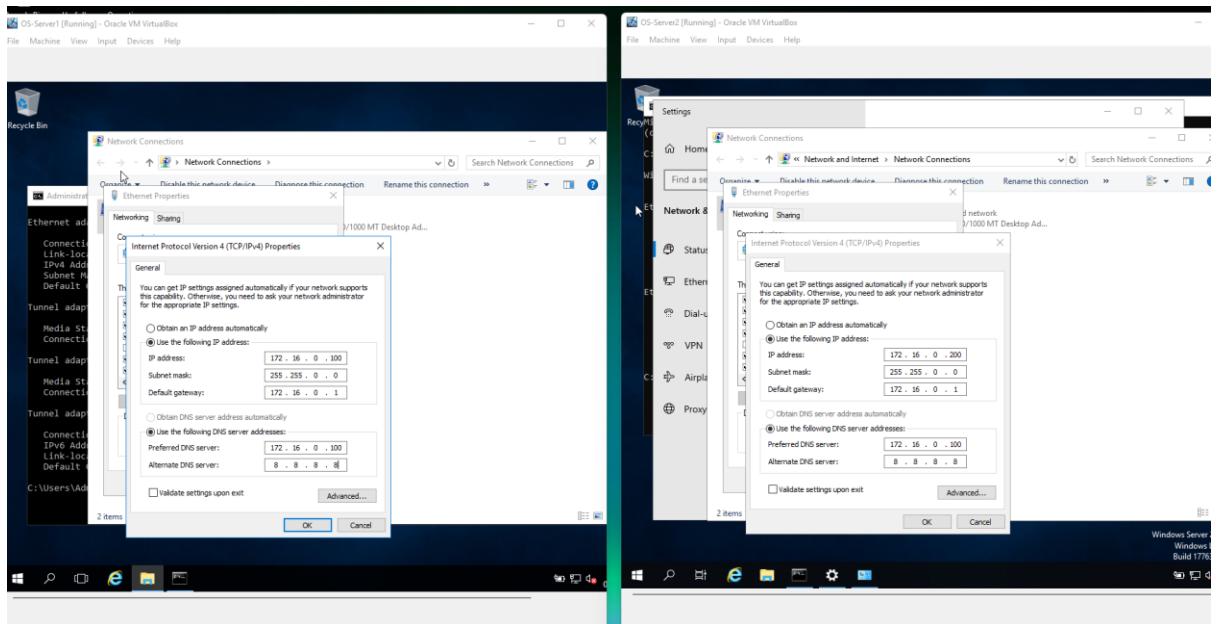
## Renaming of both machines

- Firstly, I renamed OS-Server1 machine through windows system properties and have renamed it with the **DC-2021384**.
  - Secondly, I renamed OS-Server2 machine by using Windows PowerShell and renamed it with the name of **Web-2021384**.
- Formula:** rename-computer -newname Web2021384 -restart
- Both ways as shown below for your ready reference.



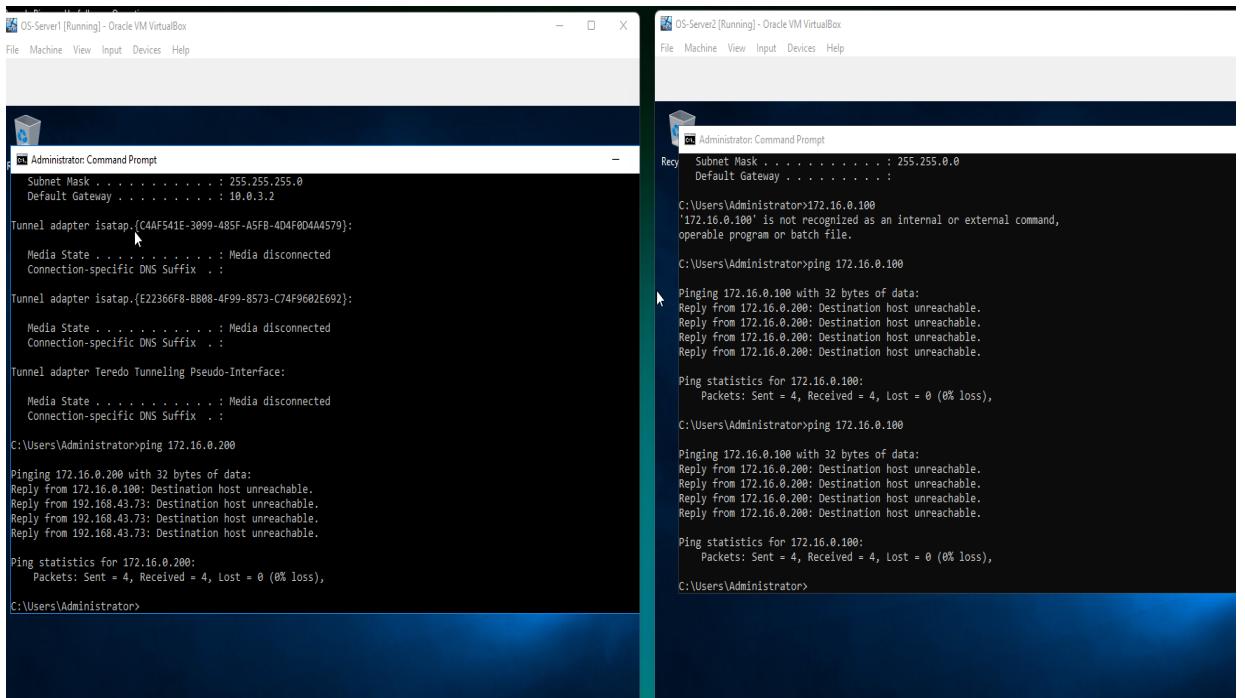
## Assigning the IP Address in both machines

- I assigned the IP Addresses on both virtual machines by using **change adapter setting**.
- I gave **same** default **gateway**, **preferred DNS** address and **alternate DNS** address to in both servers such as 172.16.0.1, 172.16.0.100 and 8.8.8.8 respectively.
- Meanwhile, I gave **different** IP Address on both Servers such as **172.16.0.100/16** in **OS-Server1** and **172.16.0.200/16** in **OS-Server2**.
- Both Servers addresses are shown below.



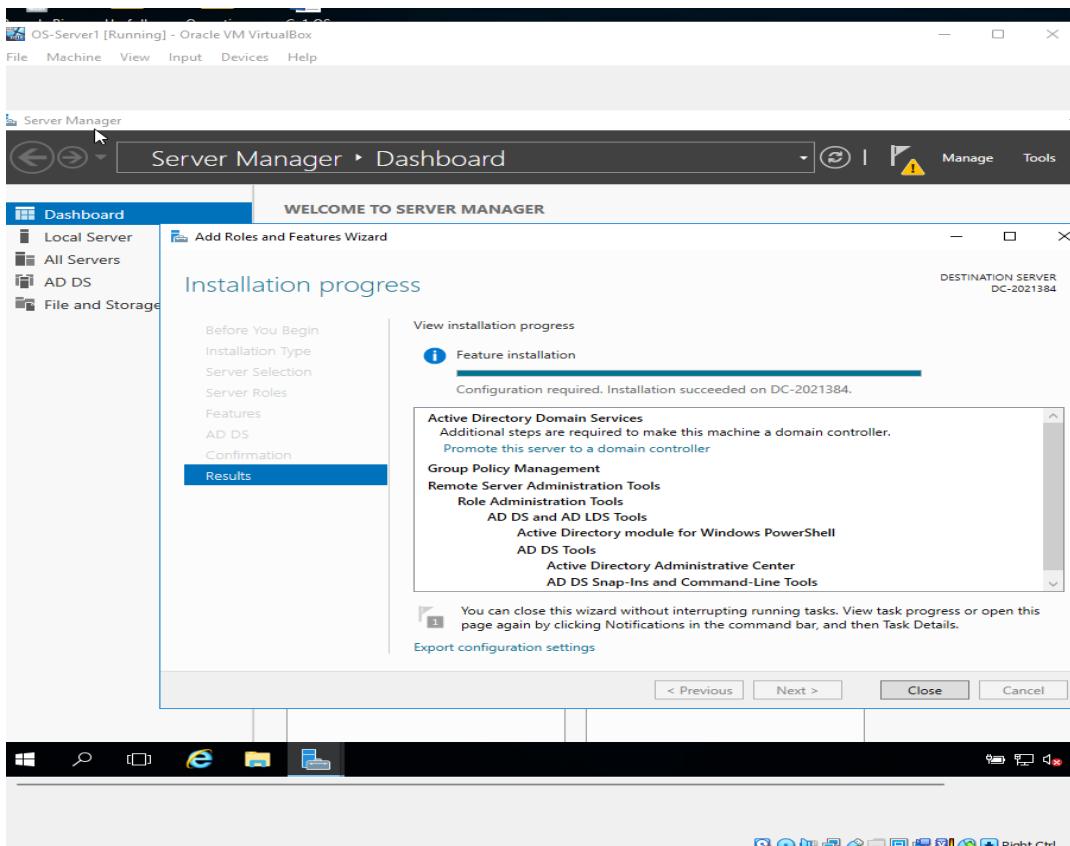
## Connectivity of Both machines

- After setting of IP Addresses, I set the **Inbound** and **Outbound** setting by using **Windows Firewall**.
- I enabled the rules of **File and Printer Sharing 'Echo Request'IPv4** in both machines.
- Then, I **ping** both machines and you can see below they can ping each other successfully.

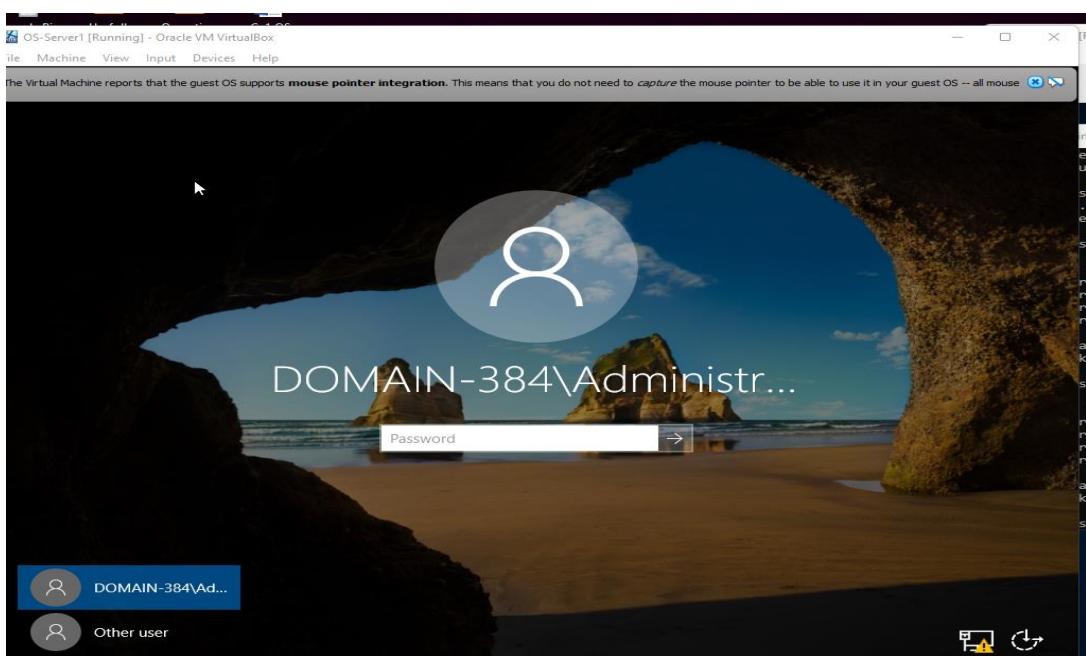
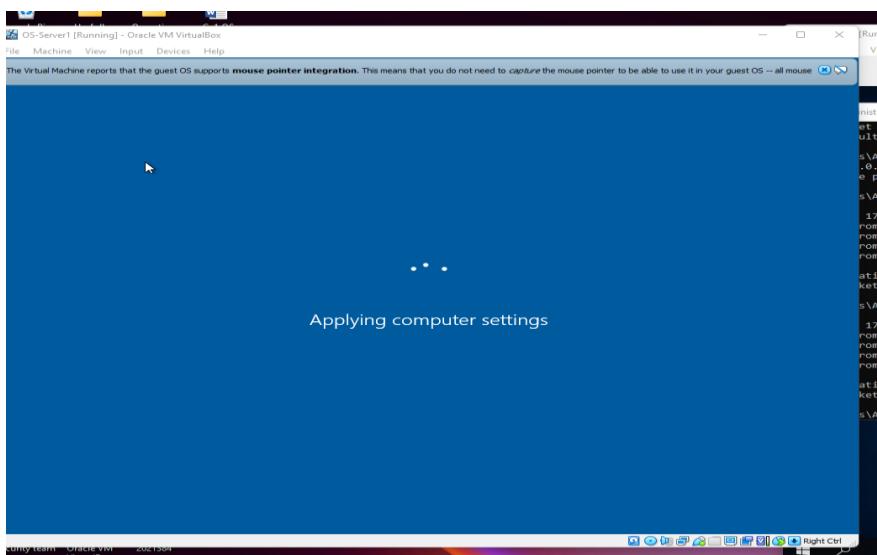
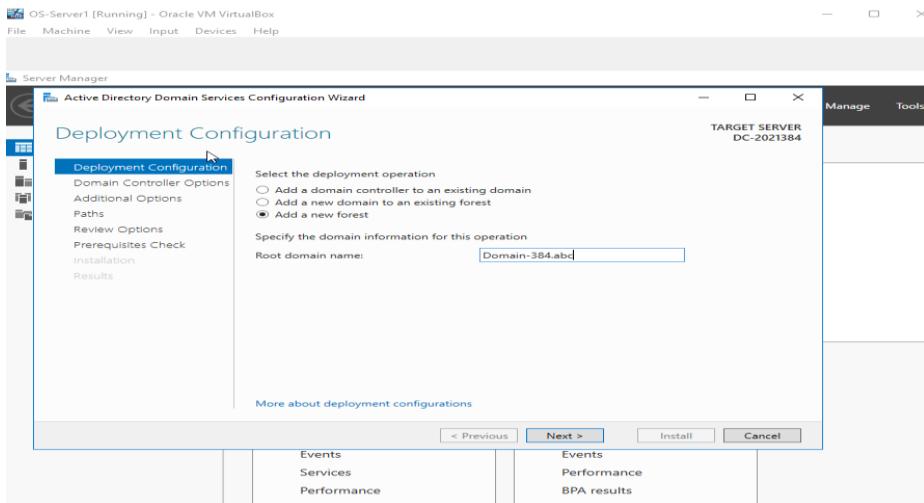


## Installation Procedure of Domain Controller in OS-Server1

- First of all, Go to **Server manager** and click on **Add role and features**.
- The page will be pop up named **Before you Begin**. Just click on **Next** from the down.
- The next step will be just click on **Role-based installation** and Click **Next**.
- And next will have to select the **Server pool** and we only have **one** Server. So, just click on **Next**.
- Now, we have to select the second one option in **Server role** called **Active Directory Domain Services** and click on **Add features** and the box will be **ticked**.
- Next two steps will be **Features** and **AD DS**. Just hit **next** in both steps.
- Now, there will be **Confirmation**, First hit the **tick box** and then click on **install** option.

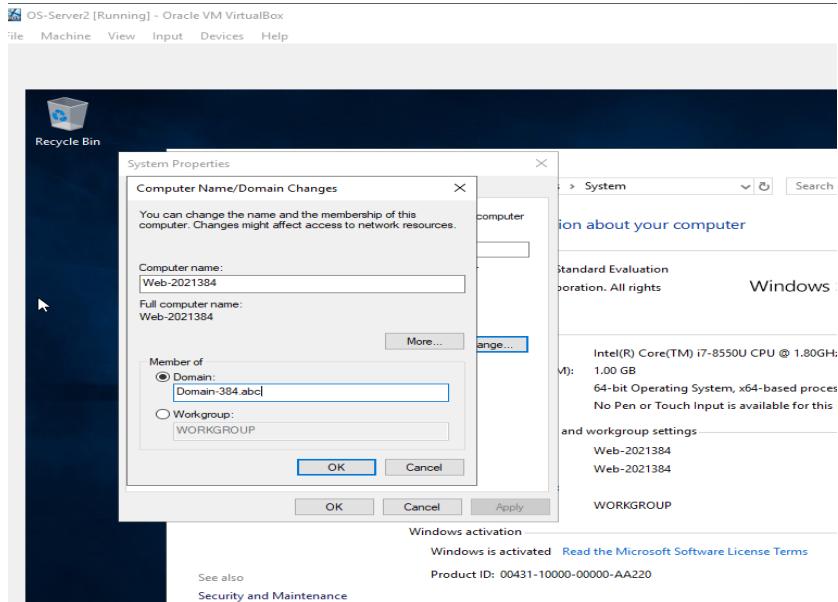


- Now, have to click on the **yellow flag mark** and then click on **blue line** like **Promote this server to a domain controller.**
- In next popping up screen, just select the **third** option **Add new forest** and I gave the root **domain name is Domain-384.abc**. Hit **next**.
- Now in **domain controller**, I gave the password **Pass1234!** and hit **next**.
- In next four steps just hit **next** such as in **DNS** options, **Additional** options, **Paths** and **Review** options.
- The next option is **Prerequisites Check**. Just click on **Install**.
- It will take some time and then will be automatically **restart**.
- Screen will show the **Applying computer settings** as shown below.
- Finally, OS-Server1 is working as Domain Controller as shown below:

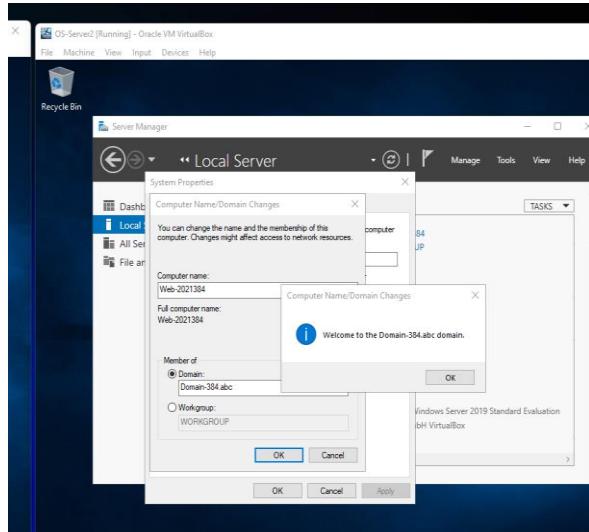


## Joining the Web Server to the Domain

- Now, Go to **OS-Server2** and **right click** on start button and go to **System** in **Control Panel**.
- Click on **change setting** beside of **computer name**.
- Then, click on **Change** and hit on **Domain** option.
- I gave **Domain-384.abc** and click on **ok** as shown below.

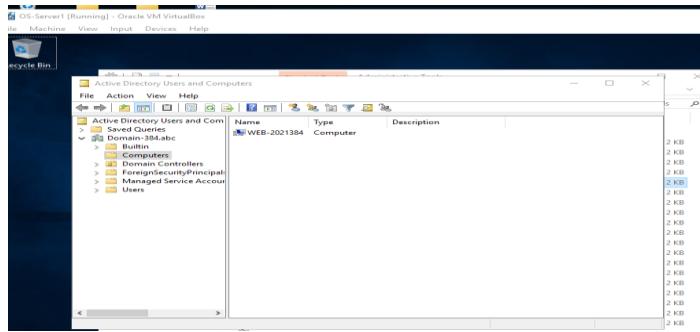


- A small message pop up saying that **Welcome to Domain-384.abc**.



- Go on **OS-Server1** and go to **Server Manager**.
- Click on **tools** and choose **Active directory users and Computers**.

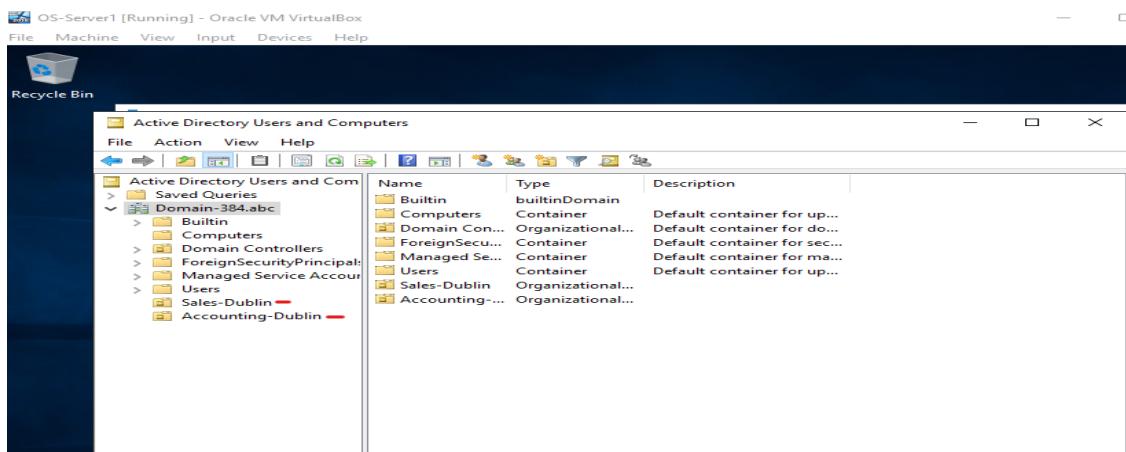
- Click on **Domain-384.abc** and open **Computers**.
- There you can see the name of **OS-Server2** as **Web-2021384** as shown blow:



## Part 2: Setting up the resources and network users:

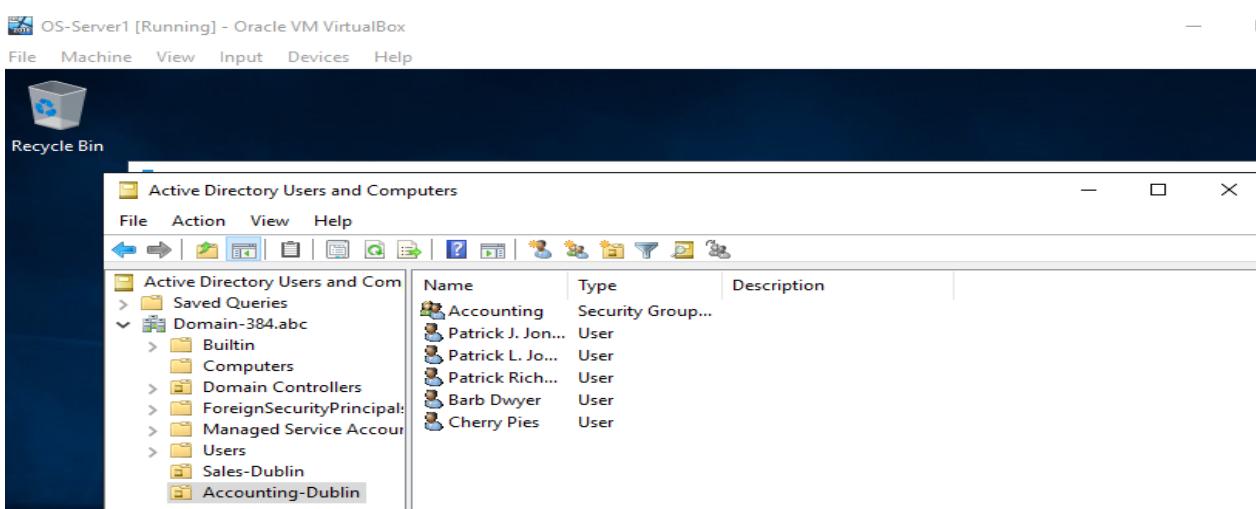
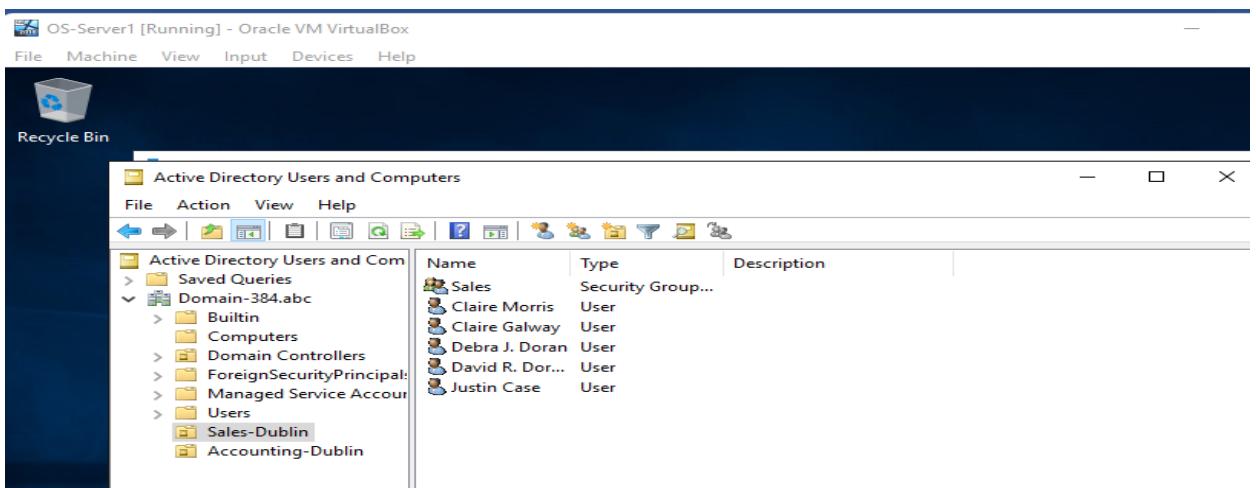
Creation of 2 departments (Organizational Units) and inside the departments the user accounts, and network groups

- Go on **OS-Server1** and go to **Server Manager**.
- Click on **tools** and choose **Active directory users and Computers**.
- Right click on **Domain-384.abc** and go to **new** and select **organizational unit**.
- I made two organizational units such as **Accounting-Dublin** and **Sales-Dublin** as shown below with a red mark in shot.



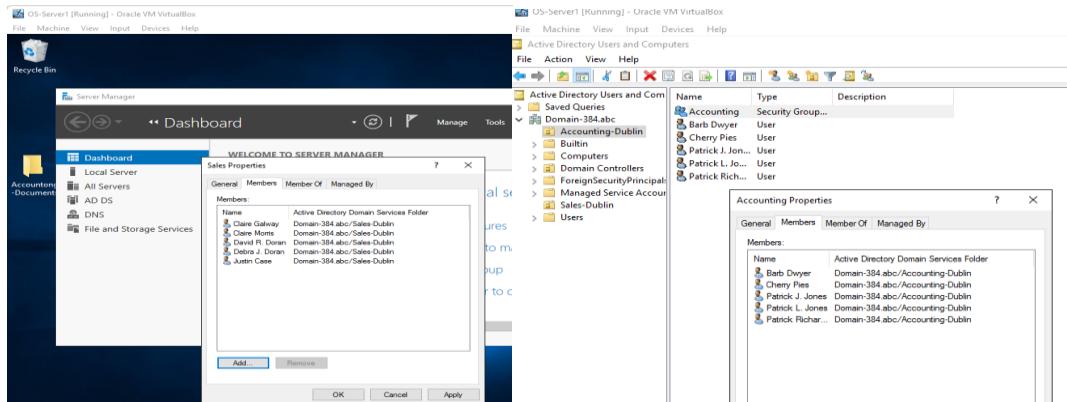
## Creation of user accounts, and network groups inside the Organizational Units

- Right click on **Sales-Dublin** or **Accounting-Dublin** and go to **new** and select **User**.
- Then I gave **First** and **Last name** of users and some Users have **initials** as well such as **Debra J Doran**.
- Then, I gave **User logon name** such as **djdoran**.
- Next, I gave password **Pass1234!** And click on **third** option **Password never expires** then click on **next** and then **finish**.
- In this way, I made **five** user accounts in **Sales-Dublin** and in **Accounting-Dublin**.
- And as I made user accounts, I also made two Global Security Groups in **Sales-Dublin** and in **Accounting-Dublin** such as Sales and Accounting. The below screenshot is for your ready reference.



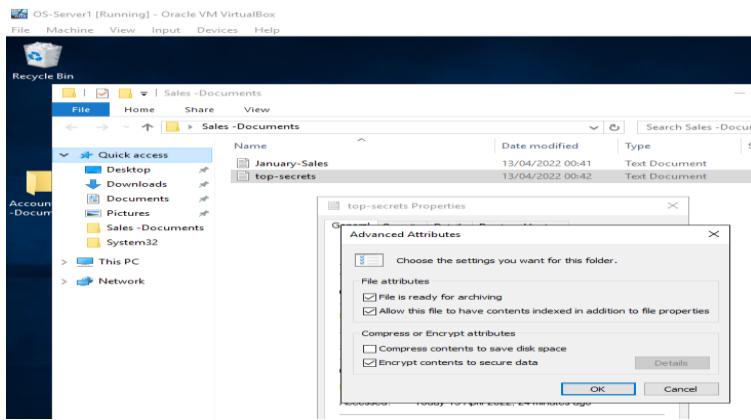
## Addition of users to their groups

- Now, Right click on security group named **Sales** which is inside the organizational unit named **Sales-Dublin** and same for the **Accounting** inside the **Accounting-Dublin**.
- Go to **properties** and click on **Members**.
- Then, click on **Add** and go to **Advance** and click on **Find now**.
- Now I clicked on one **user name** and hold **control key** and select all the user names of **Sales** and **Accounting** group, separately.
- Click **ok** and you can see all the users are member of their groups in shots below:

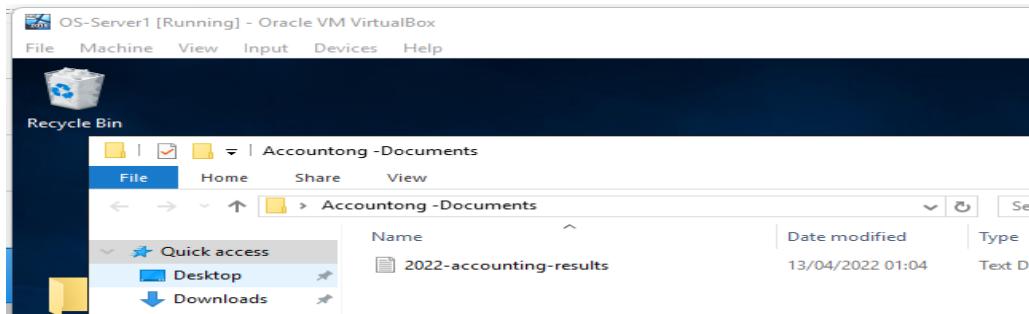


## Creation and Sharing of Folders (one for each department)

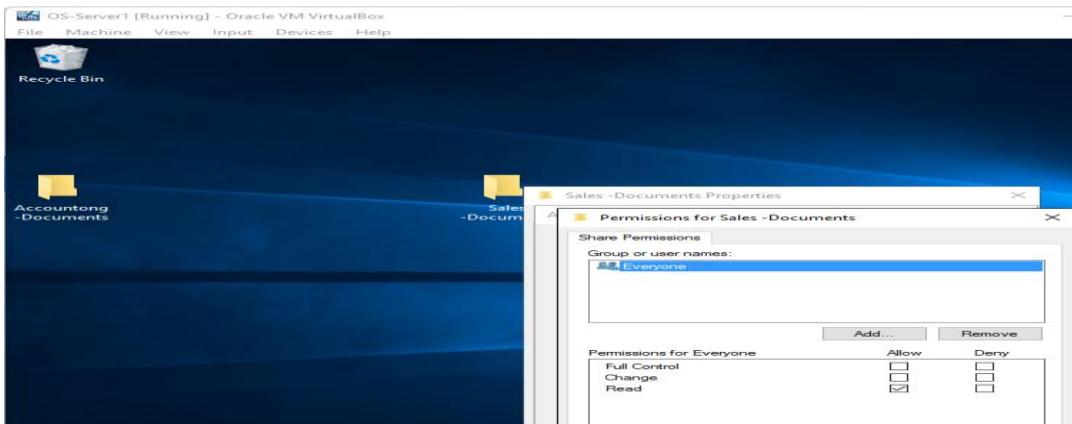
- Firstly, in **OS-Server1**, Create two folders for each department such as **Sales-Documents** for Sales-Dublin and **Accounting-Documents** for Accounting-Dublin, respectively.
- Then, I created **two text files** in **Sales-Documents** folder.
- One of is **January-sales** and the other one is **top-secrets**.
- I wrote my **name** inside the **January-sales** text file and student **number** inside **top-secrets** text file.
- Then, go to **properties** of top-secret text file and click on **Advance** on bottom and tick the **Encrypt content to secure the data**.
- A message will pop up saying that Encrypt the whole folder or files only, So, click on **Encrypt files only**.



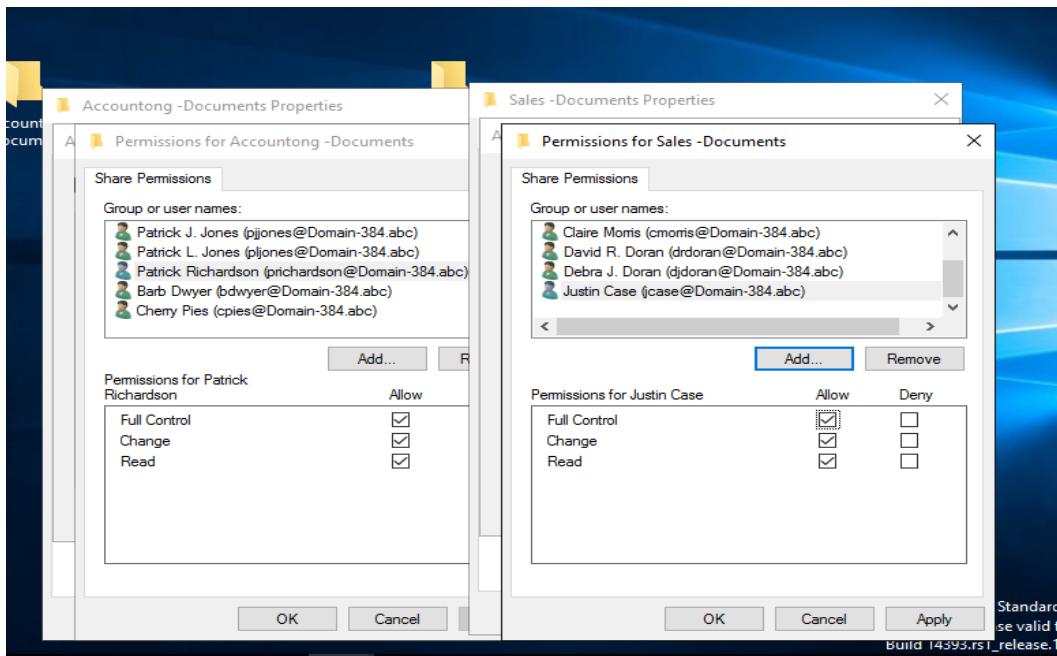
- After that, I made a new text file inside the **Accounting-Documents** folder with the name of **2022-accounting-results**.
- I wrote inside the **grade 30%**.



- Now, go to **Desktop** and right click on **Accounting-Documents** folder and go to **properties** and click on **Security** and same for the **Sales-Documents**.
- Then, click on **Edit** and click on **Add** and go to **Advance** and click on **Find now**.
- Now, I again selected the all users according to their **folders** and add them same as I did for **security group**.
- And then click **ok** and **allow** by ticking on **Full Control** and **modify** option for **each user**.
- Now I have to **Sharing** beside the Security and click on **Advance sharing** in **both** folders.
- **Tick the share the folder option.**
- Click the option of **Permission**.
- I **deleted** the **Everyone Group** for both folders by clicking on **Remove**.

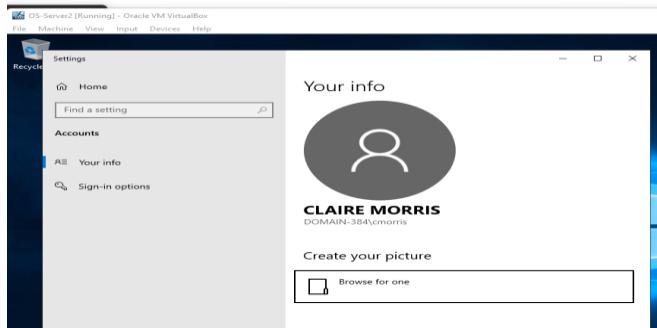


- Now, again I did same as I added **all users** according to their folders in the **same way** as I did before for **security**.
- But the **main** thing, I have **allowed** the **full control, change** and **Read** permissions for **each user** separately for **both folders** as shown below:

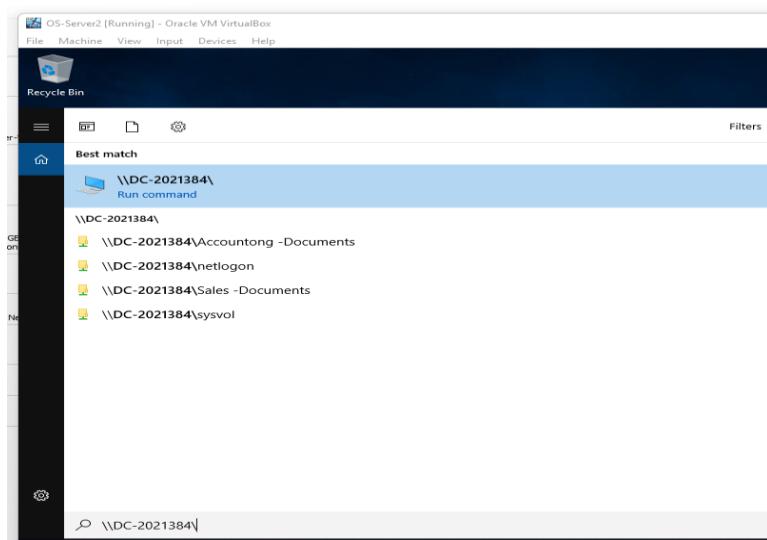


## Testing the permissions

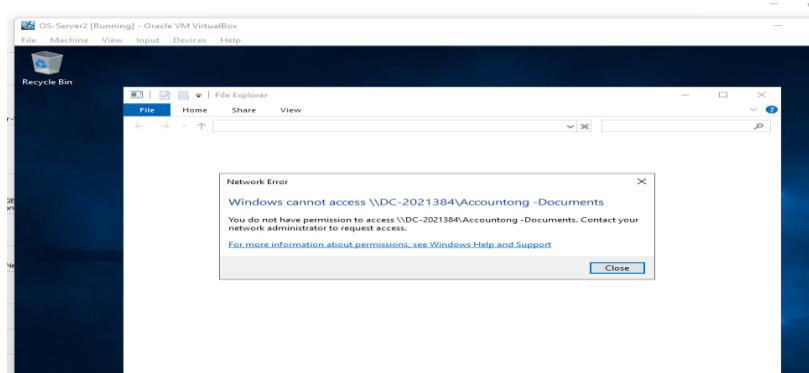
- Now, Go to **OS-Server2** and in administrator **start page**, Click on **Switch User**.
- Then, used short key **Ctrl+Alt+Del** and click on **Other users**.
- Turned on with the **username** of **cmorris** of the user **Claire Morris** Which is the user of **Sales-Documents** folder and gave **password** Pass1234!



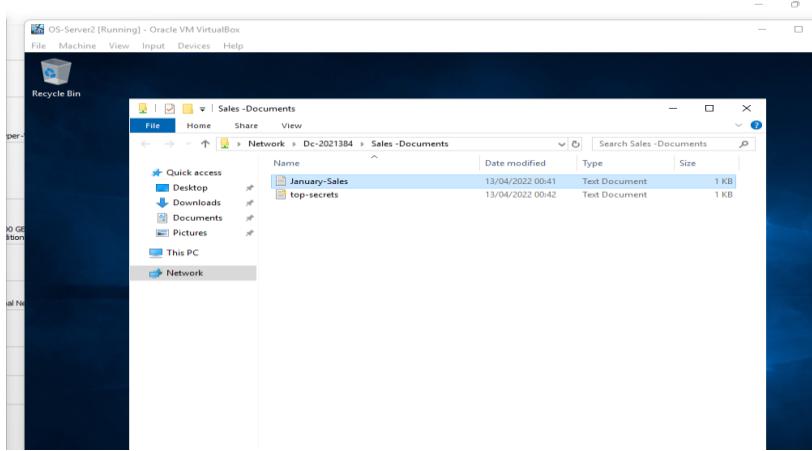
- Now, go to **magnifying glass** and search by using **UNC** format like <\\DC-2021384> and it showed all the things in it as shown below:



- As **Claire Morris** is the member of **Sales**, So, if I click on **Accounting-Document**, I will **not** have **access** as shown below:



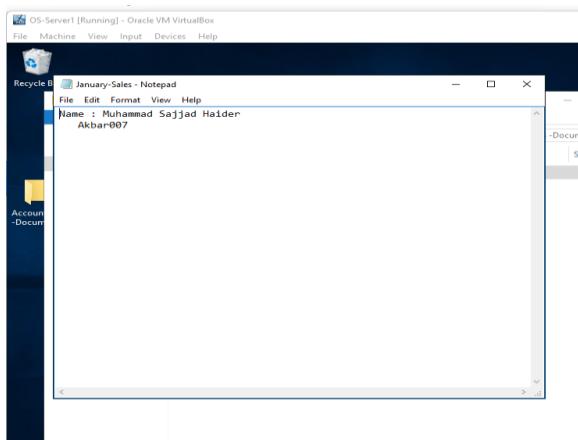
- But if I click on **Sales-Document**. It has access as shown below in **OS-Server2**:



- Let's see inside the **January-Sales** text file.



- If I made **changes** in **January-sales** like I wrote **Akbar007** below my name.
- Let's **test** it,
- Go to **OS-Server1** and check that **what is inside** the **January-Sales** text file as shown below:

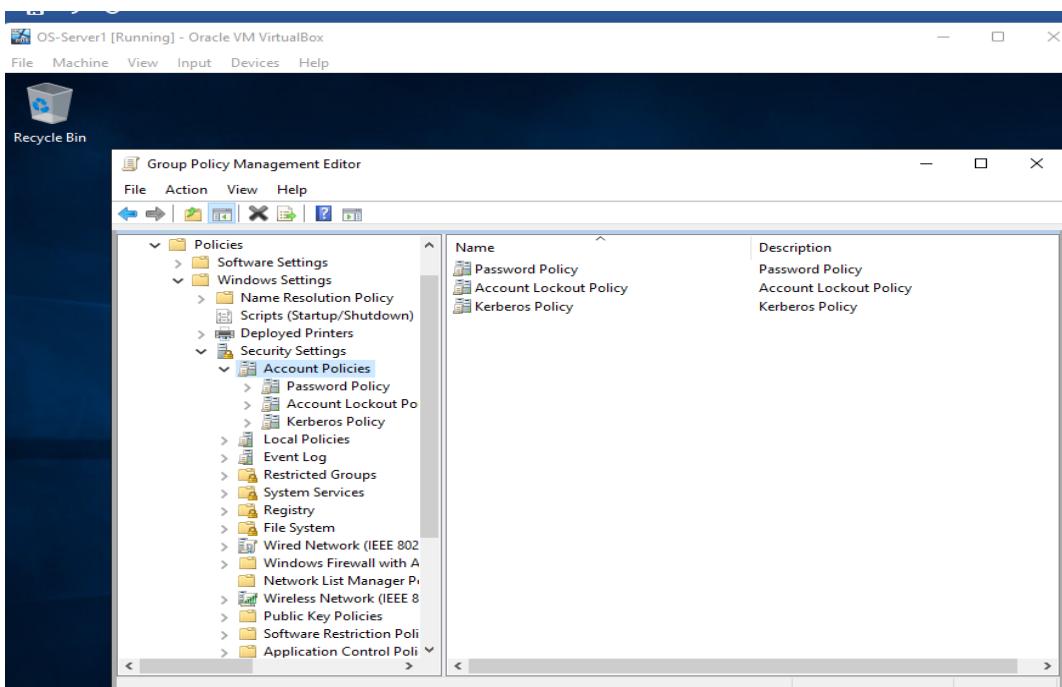


- It has **successfully** changed the text inside the January-Sales file in **OS-Server1**.

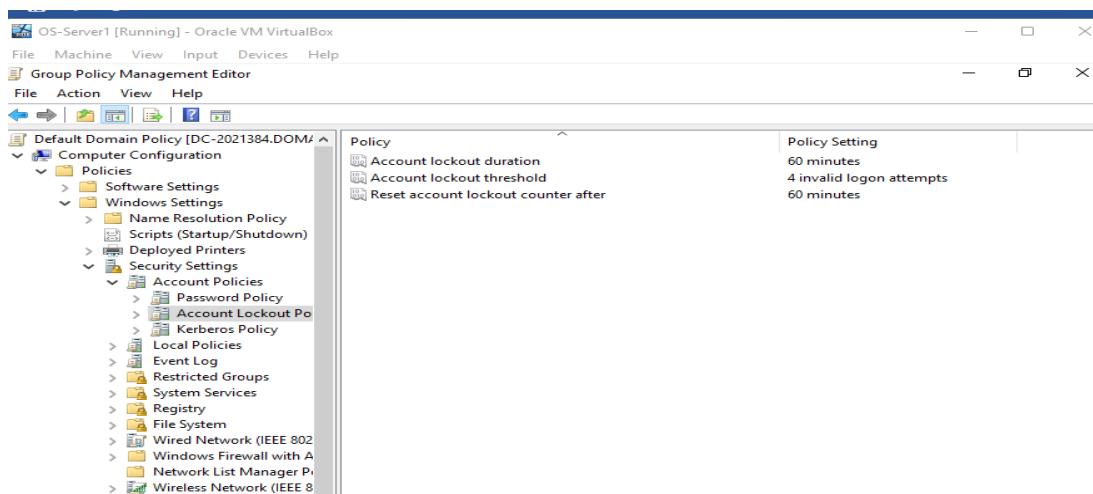
- I tried with each user and it worked successfully for Accounting-Documents as well.

## Setting of password policy and an account lockout policy

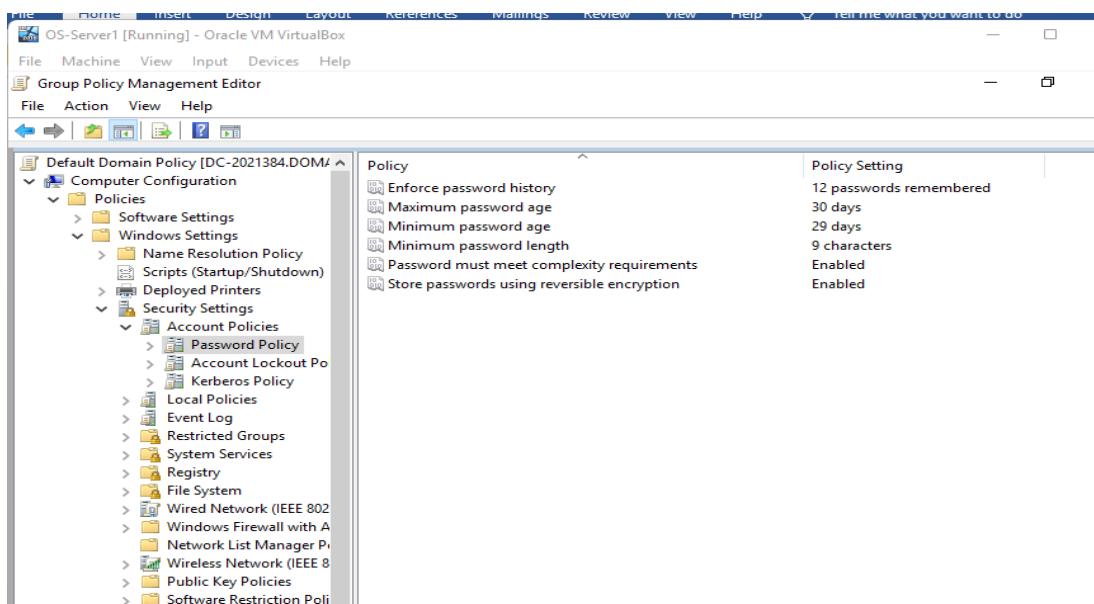
- Firstly, go to **Server manager** in **OS-Server1** and click on **tools**. Go to **Group policy management (GPMC)**.
- Click on **Forest Domain-384.abc** and then click on **Domains**. Now again click on **Domain-384.abc**.
- Now, we have to click on **Default Domain** and a **message** will pop up just ignore it by clicking on **Ok**.
- What we need to do now? We have to **right click** on Default Domain and select **Edit**.
- We will see **Computer Configuration** and **User Configuration**.
- Go to **Policies** in **Computer Configuration**, Click on **Windows Settings** and then Click on **Security Settings**.
- Now, go to **Account Policies** and you will see three different policies such as **Password**, **Account Lockout** and **Kerberos**. As shown below:



- Firstly, I have set the **Account Lockout policy**.
- Click on **Account Lockout policy** and you will see three options. For instance, **Account lockout duration**, **Account Lockout threshold** and **Reset account Lockout counter after**.
- I have set the **4 bad attempts** while using **Account Lockout threshold**.
- Now, I have set **Account lockout duration** and **Reset account Lockout counter after** for **one hour (60 minutes)**. The below screenshot for your consideration.



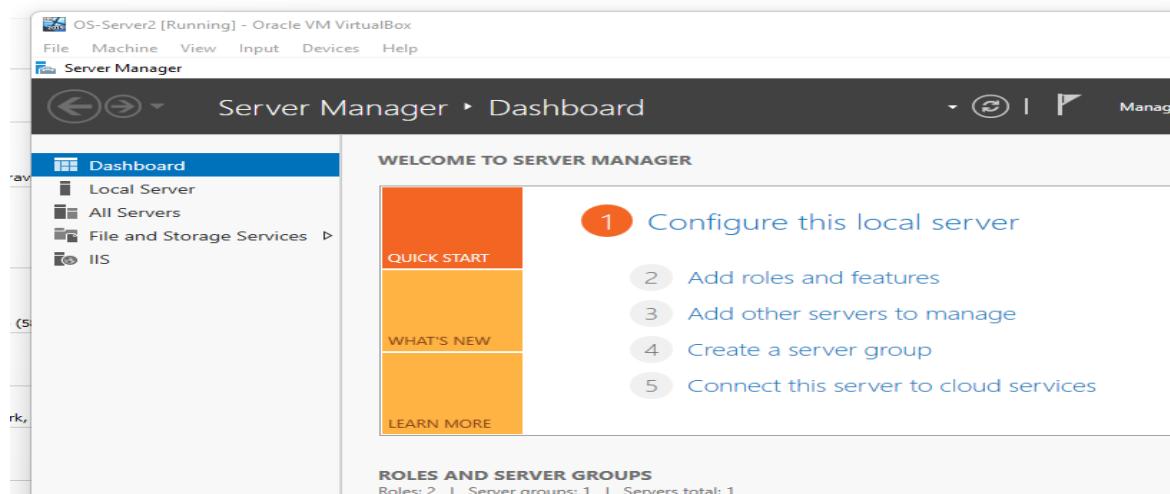
- After that I have set the **Password Policy**.
- I have set the **12 remembered passwords** in **Enforce password history**. So, I can use my password for **12 months**.
- Next, I gave the **Maximum password age** and **Minimum password age** as **30 days** and **29 days**, respectively.
- Then, I set the **Minimum password length** up to **9 characters**.
- I also **enabled** the Password must meet complexity requirements and Store passwords using reversible encryption options as shown below:



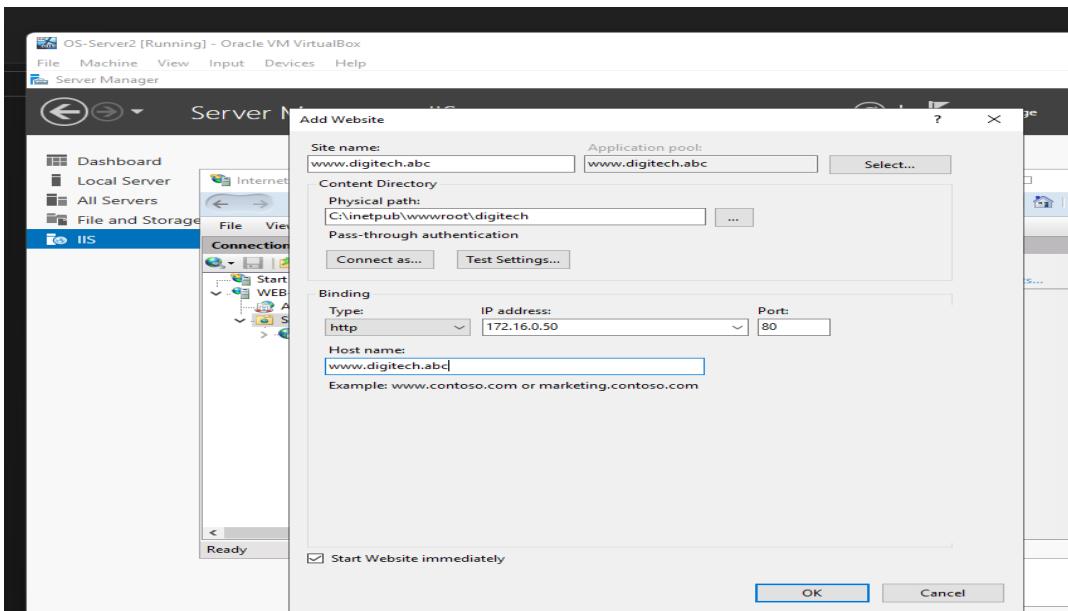
## Part 3: Setting up and testing a simple website

### Setting up of Website in Web Server

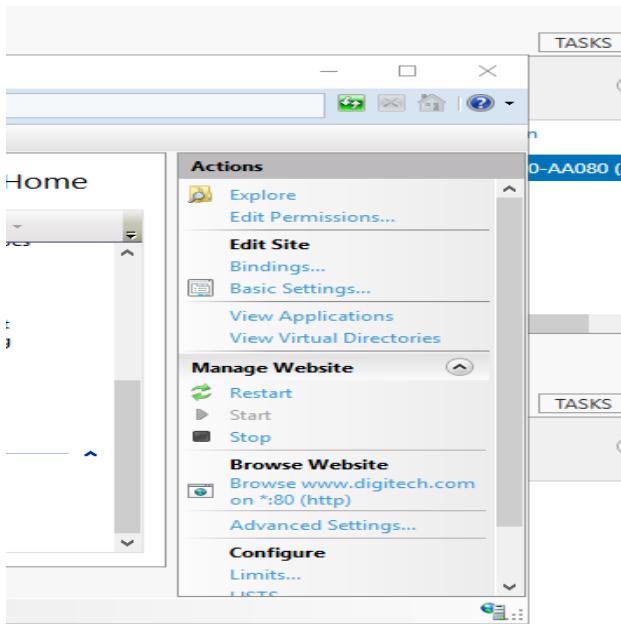
- For this, we have to do **same procedure** again as we did in **Installation Procedure of Domain Controller in OS-Server1**. But this **should be** done now in **OS-Server2 (Web Server)** for **IIS**.
- And now, we have to select the option in **Server role** called **Web Server (IIS)** and click on **Add features** and the box will be **ticked**.
- And **install** it at the end.
- You can see **IIS** on left side the very last option below:



- Now, we have to select **IIS**, right click your server and select **Internet Information Services (IIS) Manager**.
- Right-click on **Sites** in connection pane on left, and then click on **Add Website**.
- Then I gave **my site** information as shown below in screen shots.

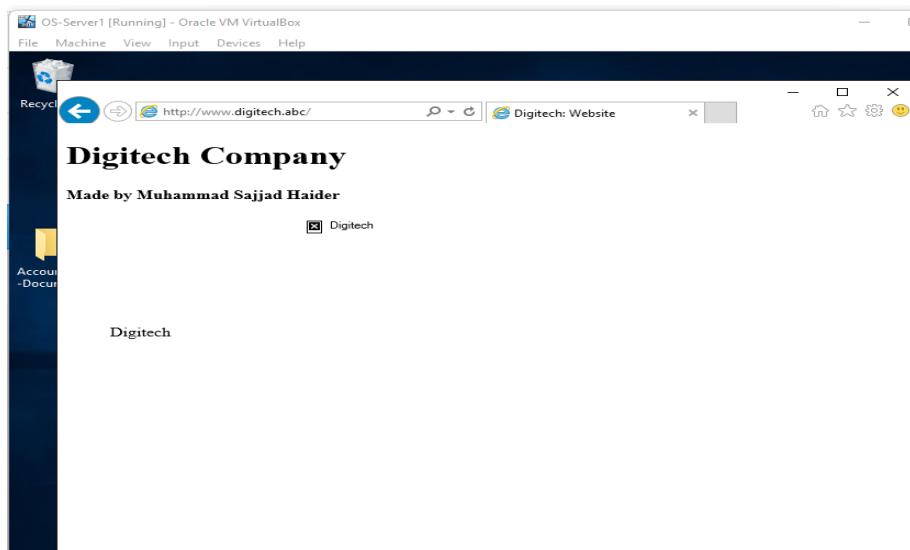


- Now in **Features View** of IIS Manager, double-click **Authentication**.
- Then, right click on **Anonymous Authentication** and select **Edit**.
- After that open **Default Document**. In the Actions pane, click **Add**.
- Enter the **file name** that you want to add to the list of default documents and then click **OK**.
- This file name is added to the **top** of the default document list.
- Now, double-click on **Compression**. Select **Enable static content compression**.
- Then, click **Apply Static Content Compression**.
- Click** on your **site** and in the Action, pane select **Browse \*:80 (http) View your website**.

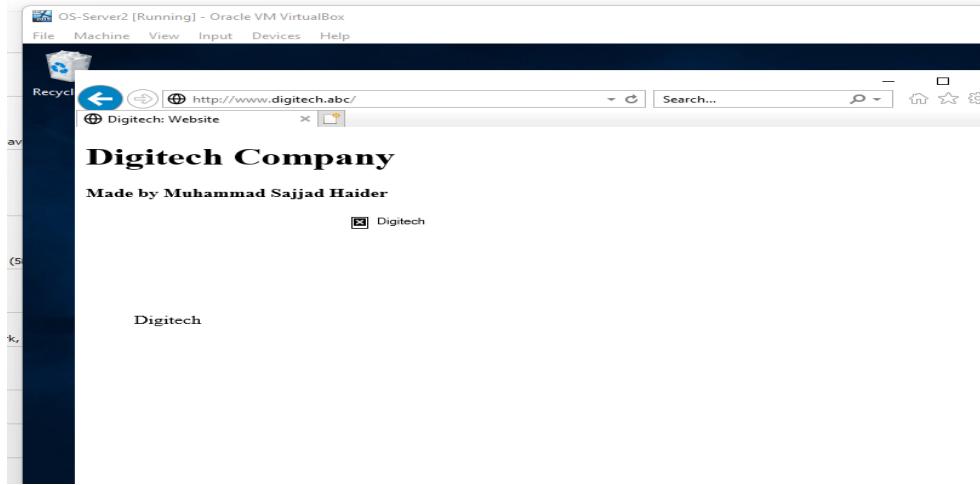


## Testing of website in OS-Server1 (DNS) and in OS-Server2(Web Server)

- First, I test the website in **DNS** server (**OS-Server1**) and it is working successfully. You can see in screen shot below:



- Then, I tested it on **Web server (OS-Server2)** itself and its successfully worked.

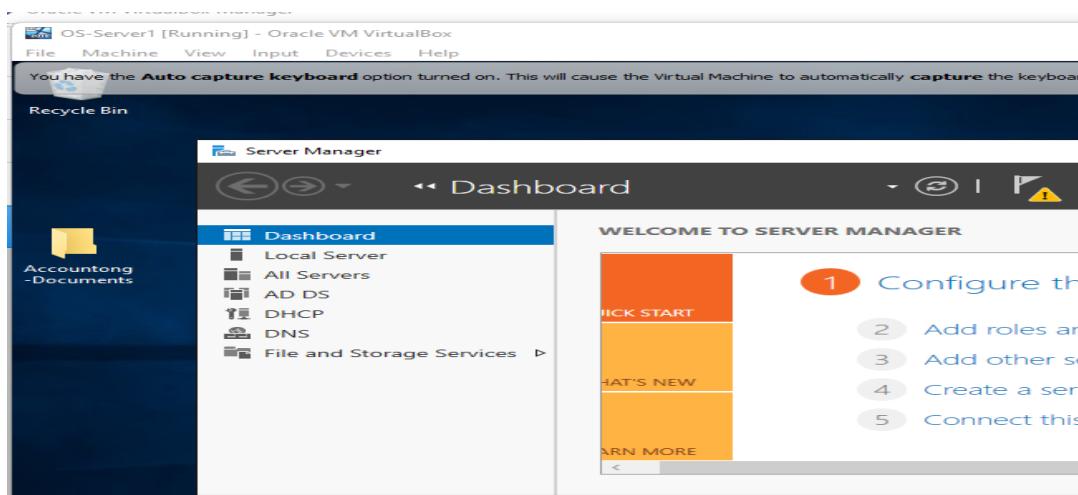


- Although, the **image** is **not for working** because of any **link address issue** and I **tried many times** to solve this issue but it's still showing issue.
- Any how the **website** is **working** in **both** virtual machines **properly**.

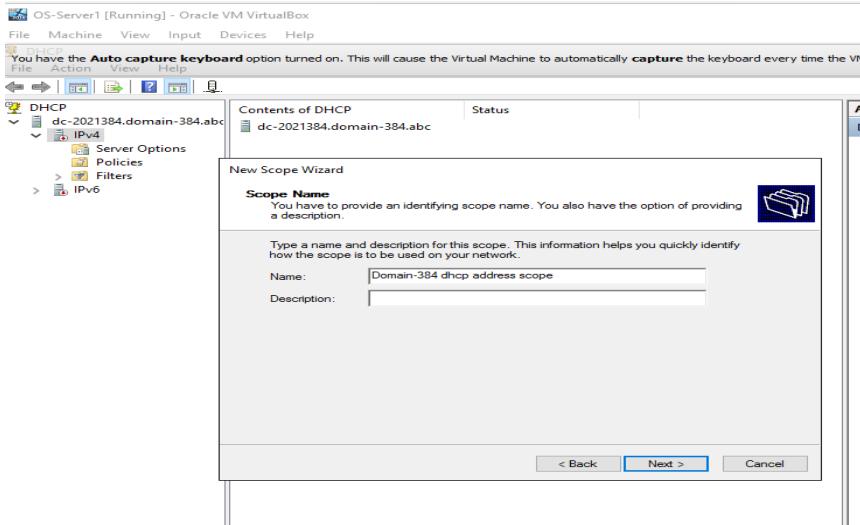
## Part 4: Setting Up a DHCP Server for the Domain

### Addition and Configure of DHCP server role

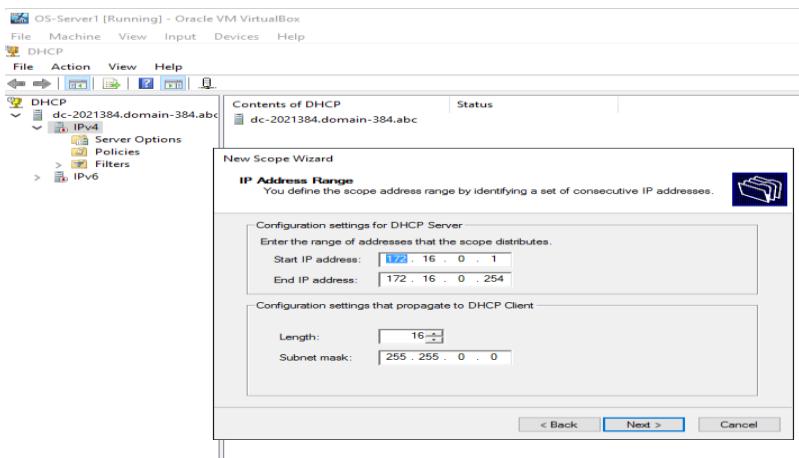
- Firstly, I did **same procedure** again as I did in **Installation Procedure of Domain Controller in OS-Server1**.
- But now, we have to select the **seventh** option in **Server role** called **DHCP Server** and click on **Add features** and the box will be **ticked**.
- And **install** it at the end.
- You can see **DHCP** on left side above the **DNS** below:



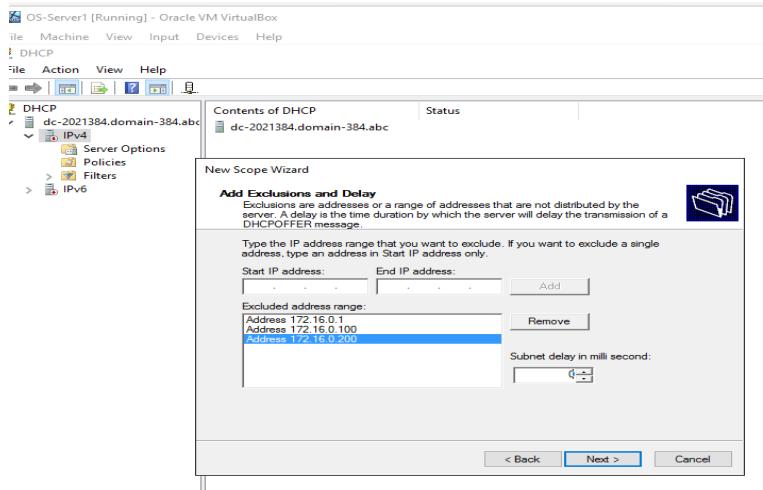
- Go to **Administrator Tool** and select **DHCP**.
- Click on **dc-2021384.domain-384.abc**.
- Right click on **IPv4** and click on **New Scope**.
- I gave **scope name Domain-384 dhcp address scope**.



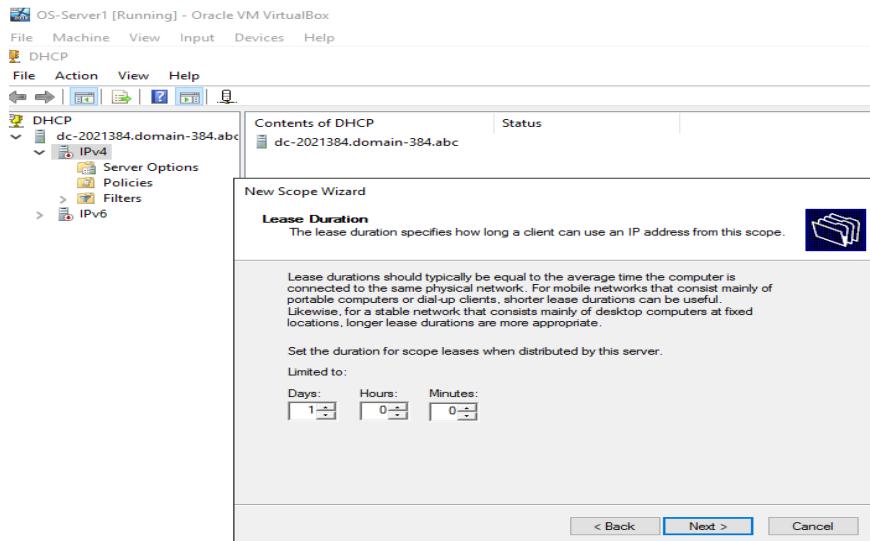
- I gave my **start Ip** and **End Ip** addresses are **172.16.0.1** and **172.16.0.254**, respectively.
- I gave **subnet mask** for **/16**.
- Then, click on **Next**.



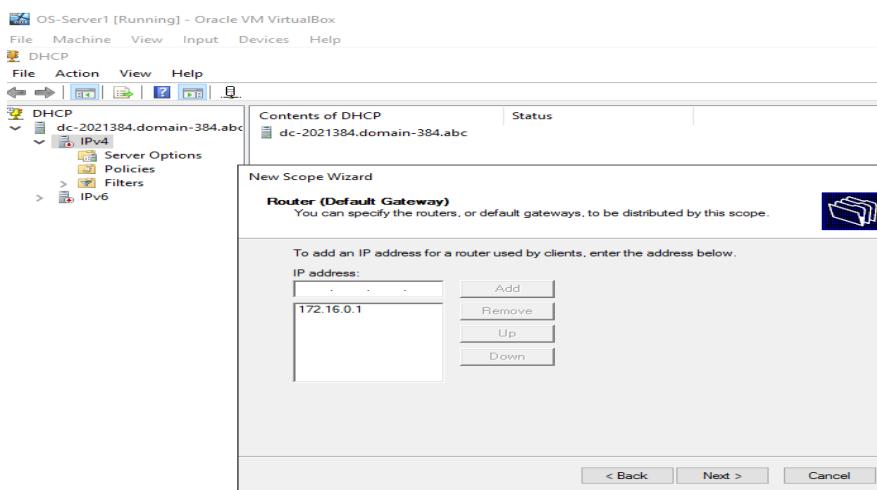
- Then, In **Add Exclusion and Delay**, I gave add two more Ip address of **both virtual machines** which are **172.16.0.100** and **172.16.0.200**.



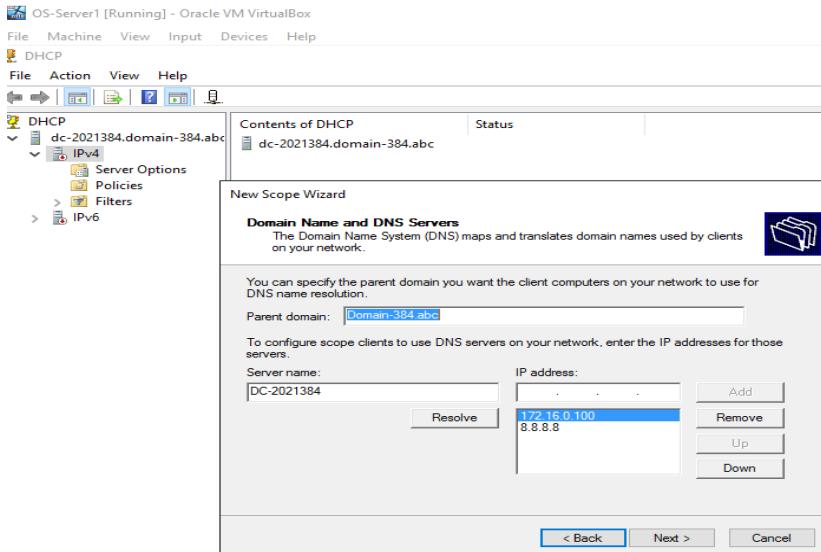
- In **Lease Duration**, I gave **1 Day** lease (24 hours).
- And hit **Next**.



- Then I gave **Router (Default Gateway)** is **172.16.0.1**.



- Now, I gave my **Domain** name and **Server** name and also add my **Domain controller Ip address**.



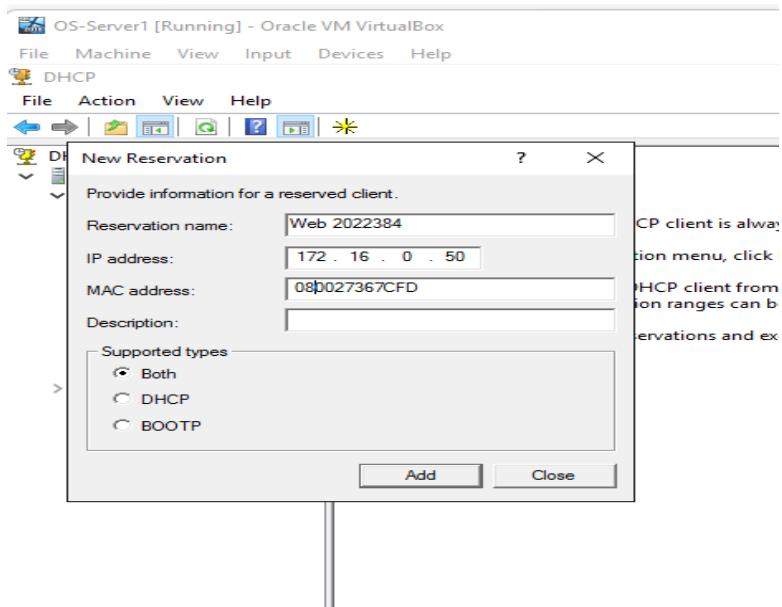
- Then, **Right click** on dc-2021384.domain-384.abc and click on **Authorise**.

## Creation of four DHCP address exclusions and an address reservation for the Web computer

- Firstly, I made four DHCP address as shown below:

Start IP Address	End IP Address	Description
172.16.0.1	172.16.0.254	Address range for distribution
172.16.0.1	172.16.0.1	IP Addresses excluded from distribution
172.16.0.100	172.16.0.100	IP Addresses excluded from distribution
172.16.0.200	172.16.0.200	IP Addresses excluded from distribution
172.16.0.50	172.16.0.50	IP Addresses excluded from distribution

- Then, **GO to OS-Server2** and **remove** its Ip address.
- After that, **Copy the Mac address** of this machine.
- And go to **OS-Server1** and **Right click** on **Reservation** in DHCP console.
- Click on New reservation.**
- I gave Reservation name as **Web 2022384** and Ip address as **172.16.0.50**.
- And Mac address of OS-server2.



Dynamically receive the IP address from the reservation in Web Server

- Go to **OS-Server2** and go to **Command Prompt**.
- Check **ipconfig**.
- After write the code **ipconfig /release** and check again.
- If it will not give reservation Ip address, write **ipconfig /renew**.
- So, it will send network to everywhere and you can see in screenshot below that it's giving the **Ip address of reservation**.

```
OS-Server2 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Administrator: Command Prompt
C:\Users\Administrator>ipconfig /release
Windows IP Configuration

Ethernet adapter Ethernet:
  Connection-specific DNS Suffix . . .
  Link-local IPv6 Address . . . . . fe80::e965:36cb:e3ee:f0e0%3
  Default Gateway . . . . .

C:\Users\Administrator>ipconfig
Windows IP Configuration

Ethernet adapter Ethernet:
  Connection-specific DNS Suffix . . .
  Link-local IPv6 Address . . . . . fe80::e965:36cb:e3ee:f0e0%3
  Autoconfiguration IPv4 Address . . . . . 169.254.240.224
  Subnet Mask . . . . . 255.255.0.0
  Default Gateway . . . . .

C:\Users\Administrator>ipconfig /renew
Windows IP Configuration

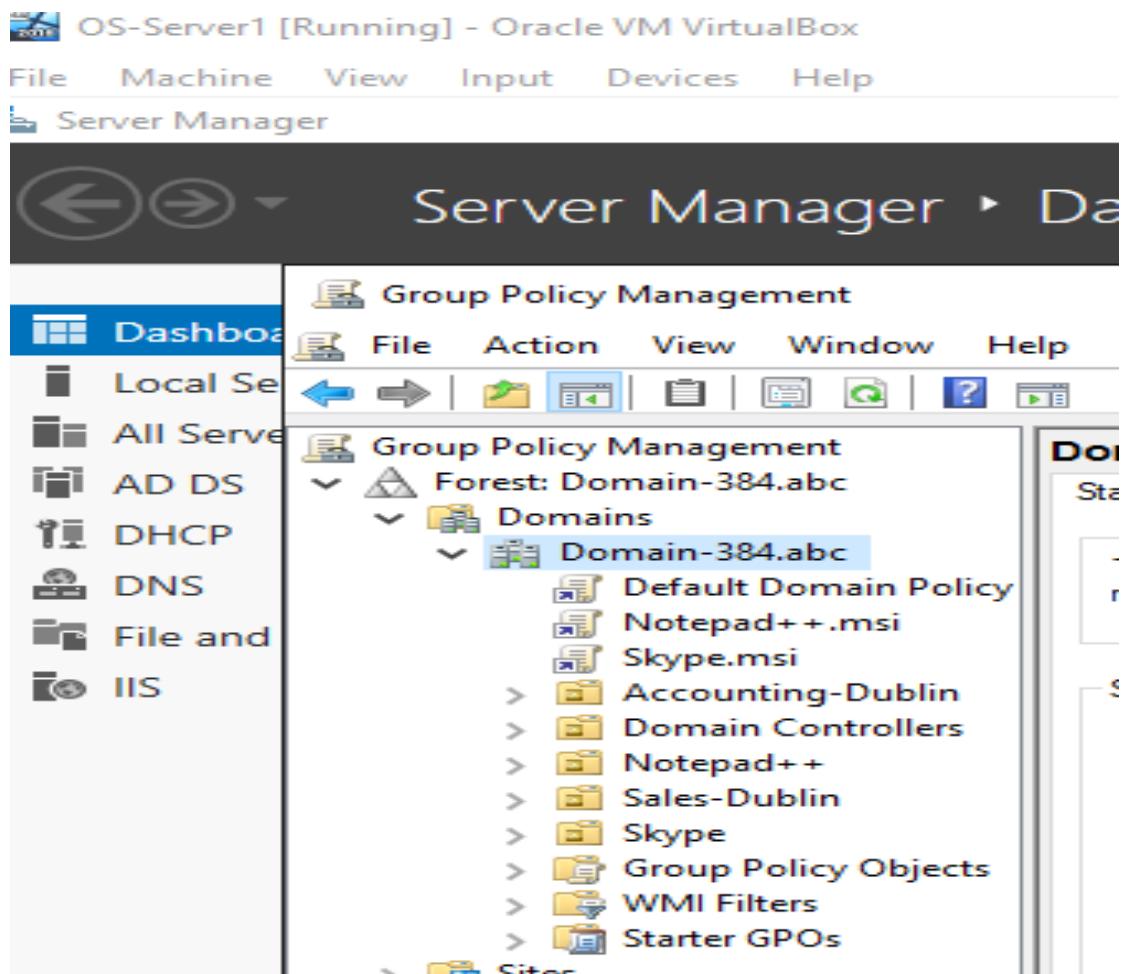
Ethernet adapter Ethernet:
  Connection-specific DNS Suffix . . . Domain-384.abc
  Link-local IPv6 Address . . . . . fe80::e965:36cb:e3ee:f0e0%3
  IPv4 Address . . . . . 172.16.0.50
  Subnet Mask . . . . . 255.255.0.0
  Default Gateway . . . . . 172.16.0.1

C:\Users\Administrator>
```

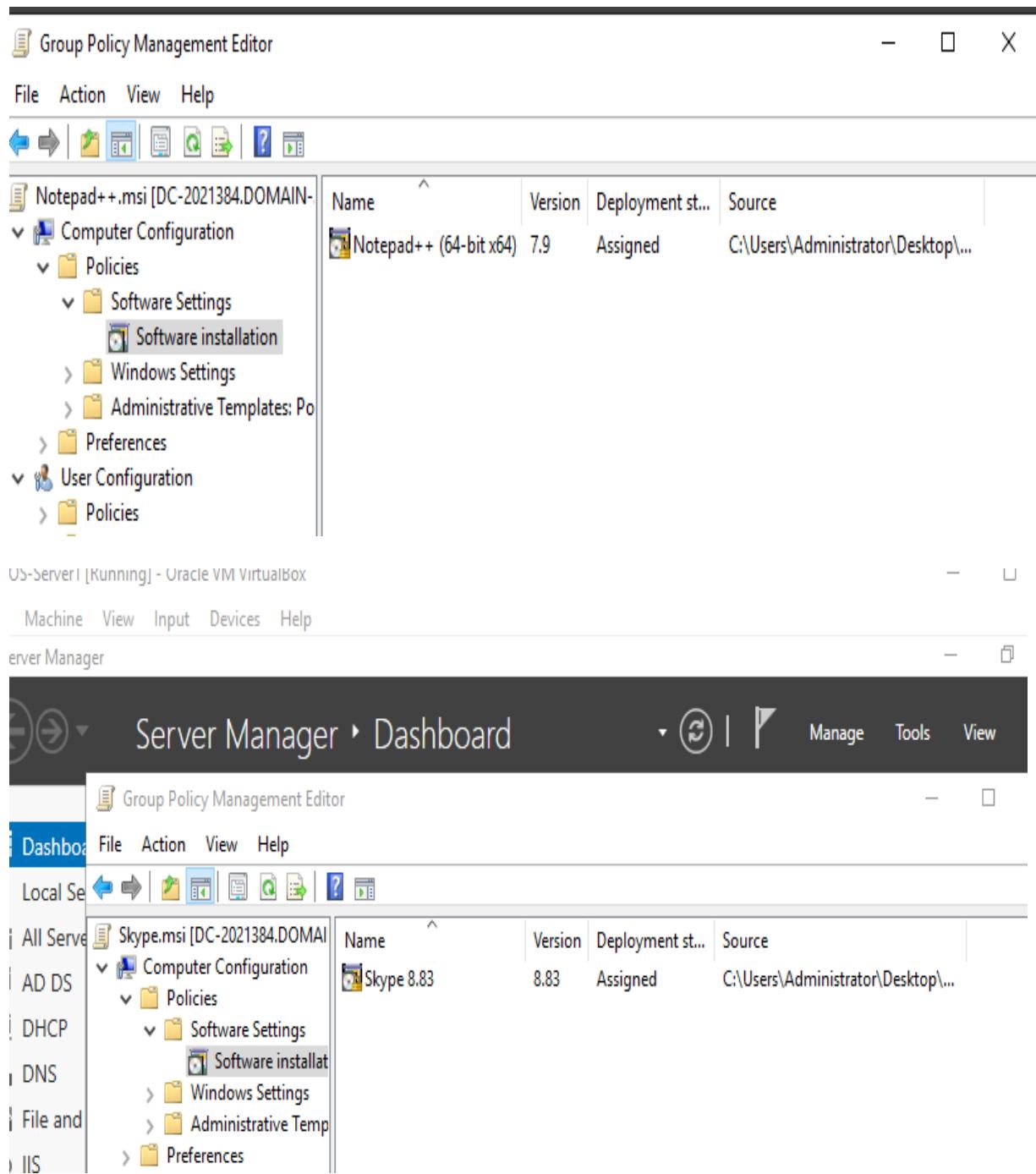
## Part 5: Challenge tasks

### Part5a: Notepad++.msi and Skype.msi

- I made two new **Group policy objects** one of it is **Notepad++.msi** and second one is **Skype.msi** as shown below:



- I gave **folder root** for **installing** the software of notepad++ and skype by using software settings in policies as shown below for both:



- Then I **updated** the **group policy** by using **command prompt** with the command  
**gpupdate /force**
- And machine required to **restart** as seen below:

OS-Server1 [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Administrator: Command Prompt - gpupdate /force

```
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>gpupdate /force
Updating policy...

-Computer Policy update has completed successfully.

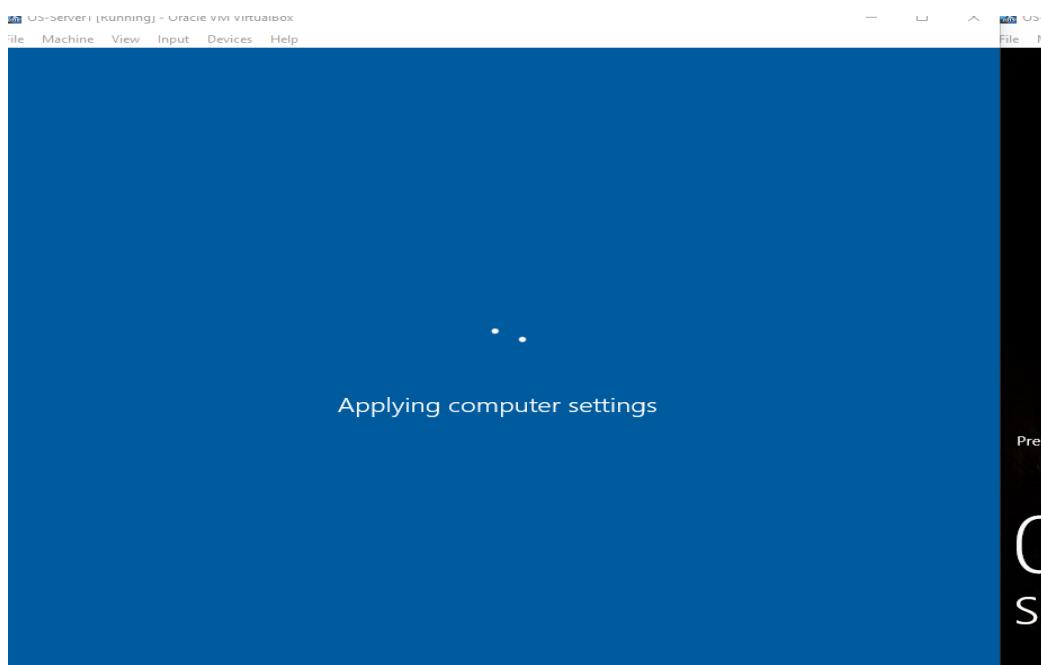
The following warnings were encountered during computer policy processing:

The Group Policy Client Side Extension Software Installation was unable to apply one or more settings because the changes must be processed before system startup or user logon. The system will wait for Group Policy processing to finish completely before the next startup or logon for this user, and this may result in slow startup and boot performance.
User Policy update has completed successfully.

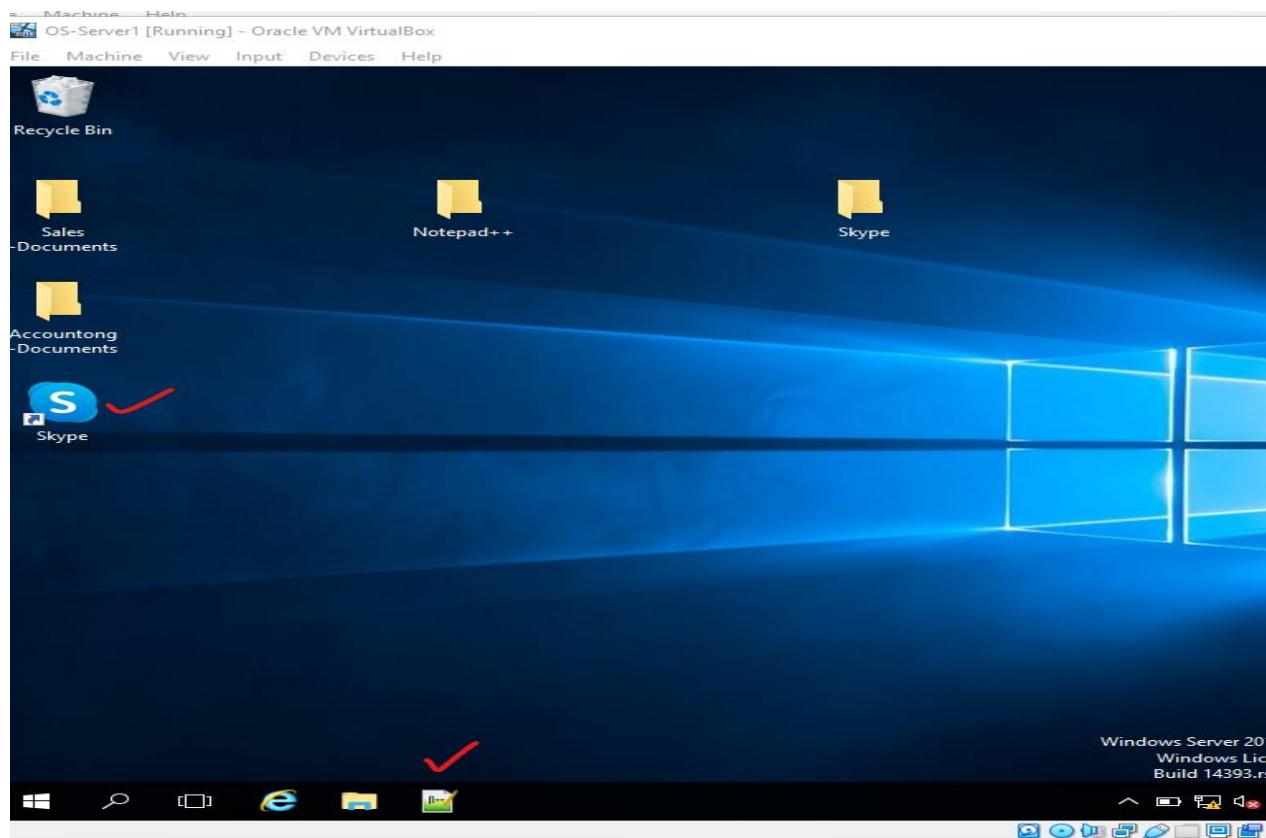
For more detailed information, review the event log or run GPRESULT /H GPRReport.html from the command line to access information about Group Policy results.

Certain Computer policies are enabled that can only run during startup.

OK to restart? (Y/N)
```

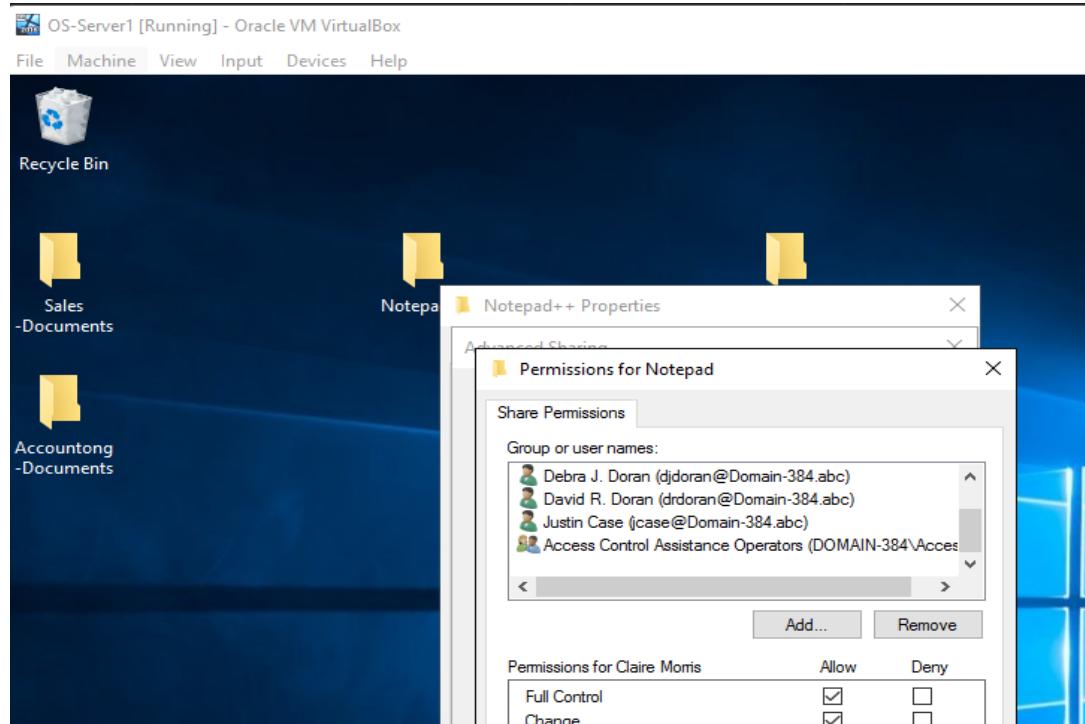


- Both Software's have **installed successfully** in domain controller and **running properly** as shown below their **icons** on **desktop** with the **red tick**.

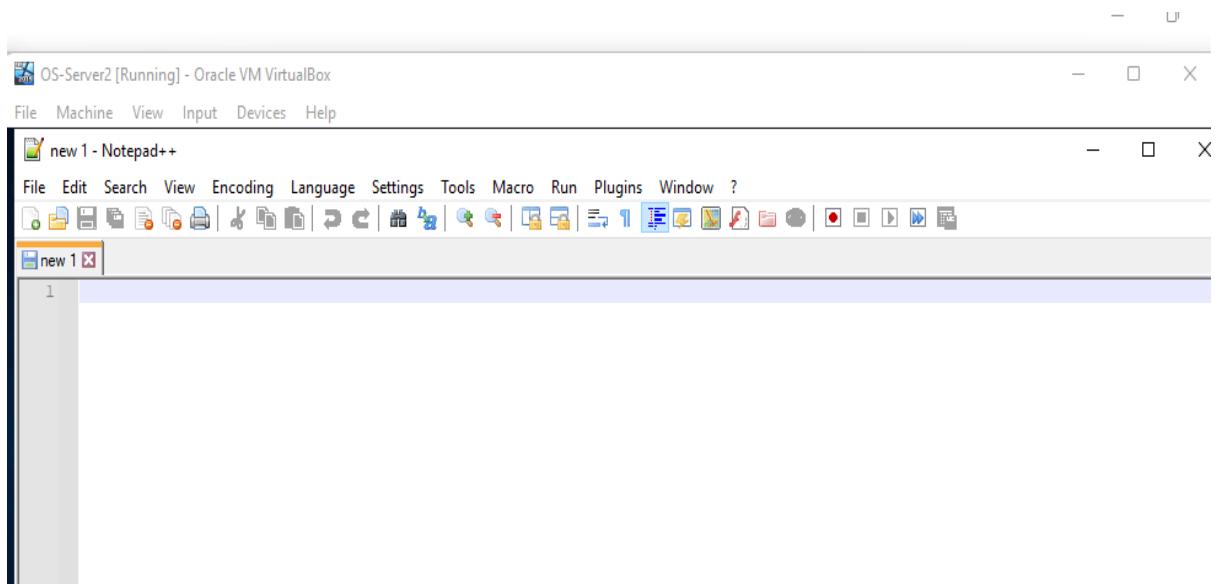


## Assigning the Notepad++ with Sales department users

- Assigning the notepad by **sharing the folder** and **security the with users of sales** department as shown below:

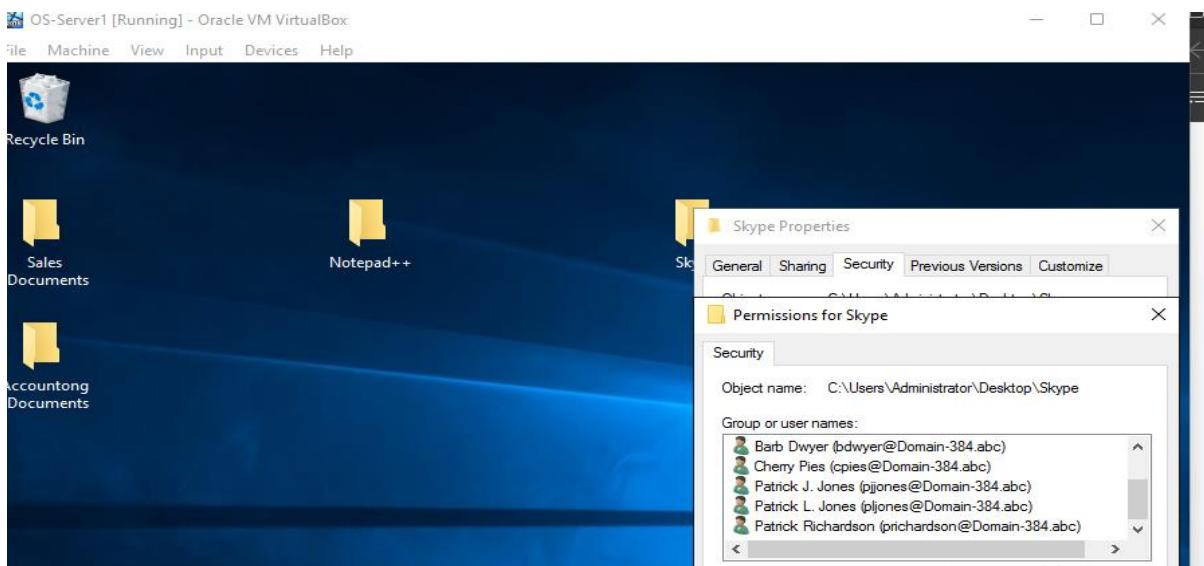


- **Notepad++** is **working** properly with the **sales user** such as **Claire Morris**.

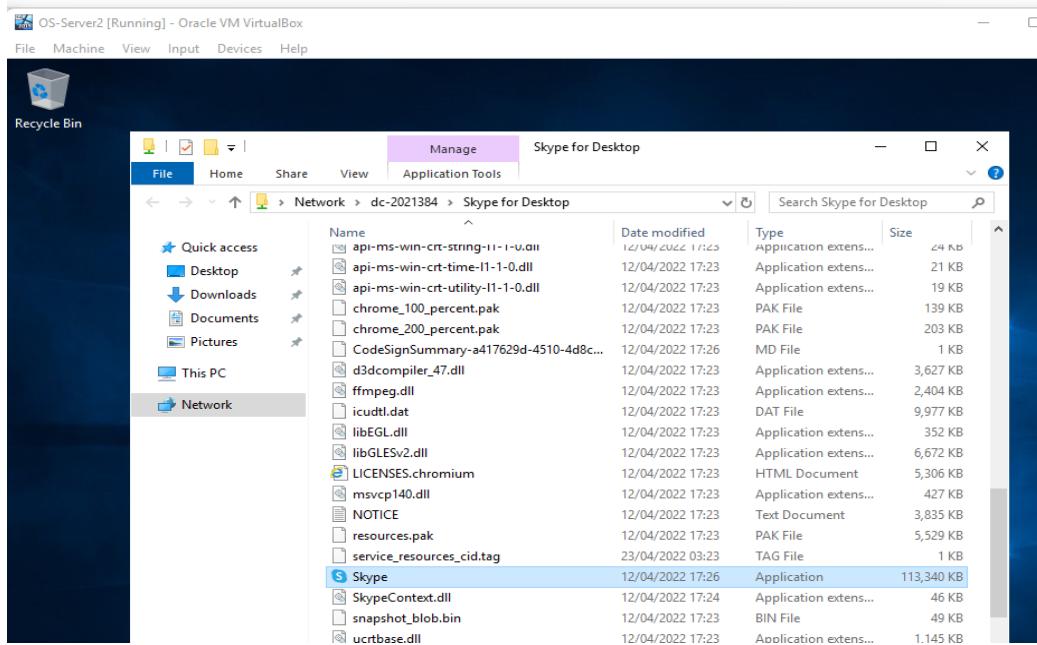


#### Assigning the Skype with Accounting department users

- Assigning the notepad by **sharing the folder** and **security the with users of accounting** department as shown below:



- **Skype** is **working** properly with the **accounting user** such as **Patrick Richardson**.



## Reference

<b>Author</b>	Robert Allen
<b>Article title:</b>	How to Deploy Software using Group Policy
<b>Website title:</b>	Active Directory Pro
<b>URL:</b>	<a href="https://activedirectorypro.com/deploy-software-using-group-policy/">https://activedirectorypro.com/deploy-software-using-group-policy/</a>

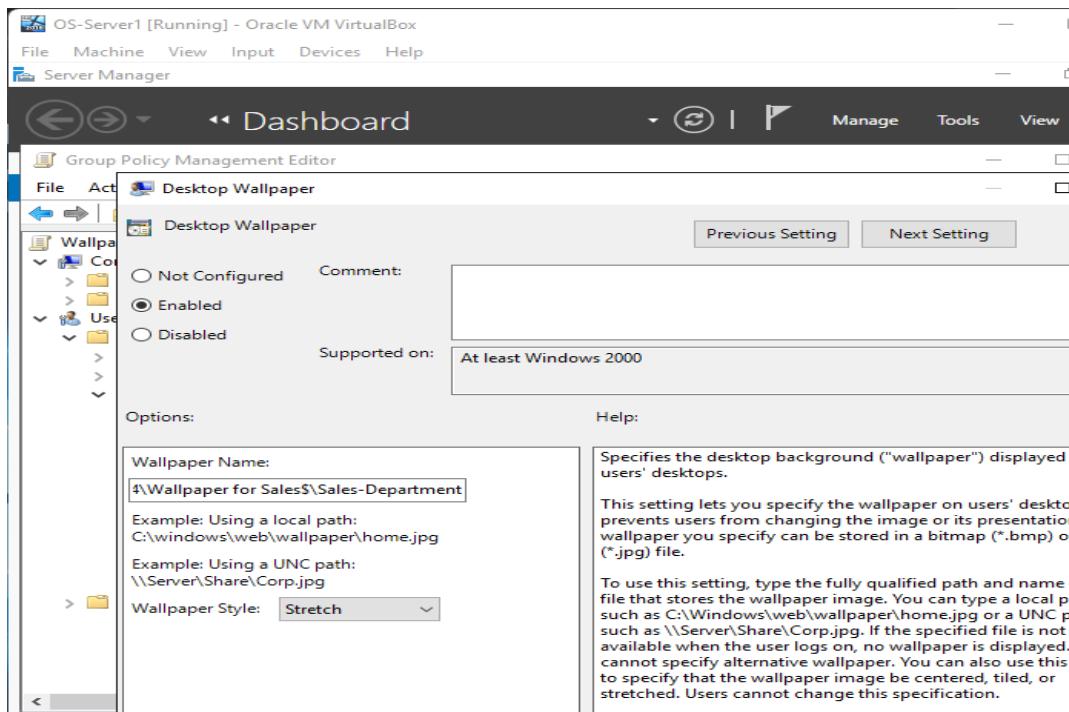
## Part 5b: Setting of Wallpapers for different departments

- Group policy object for wallpapers of Sales and Accounting departments.**

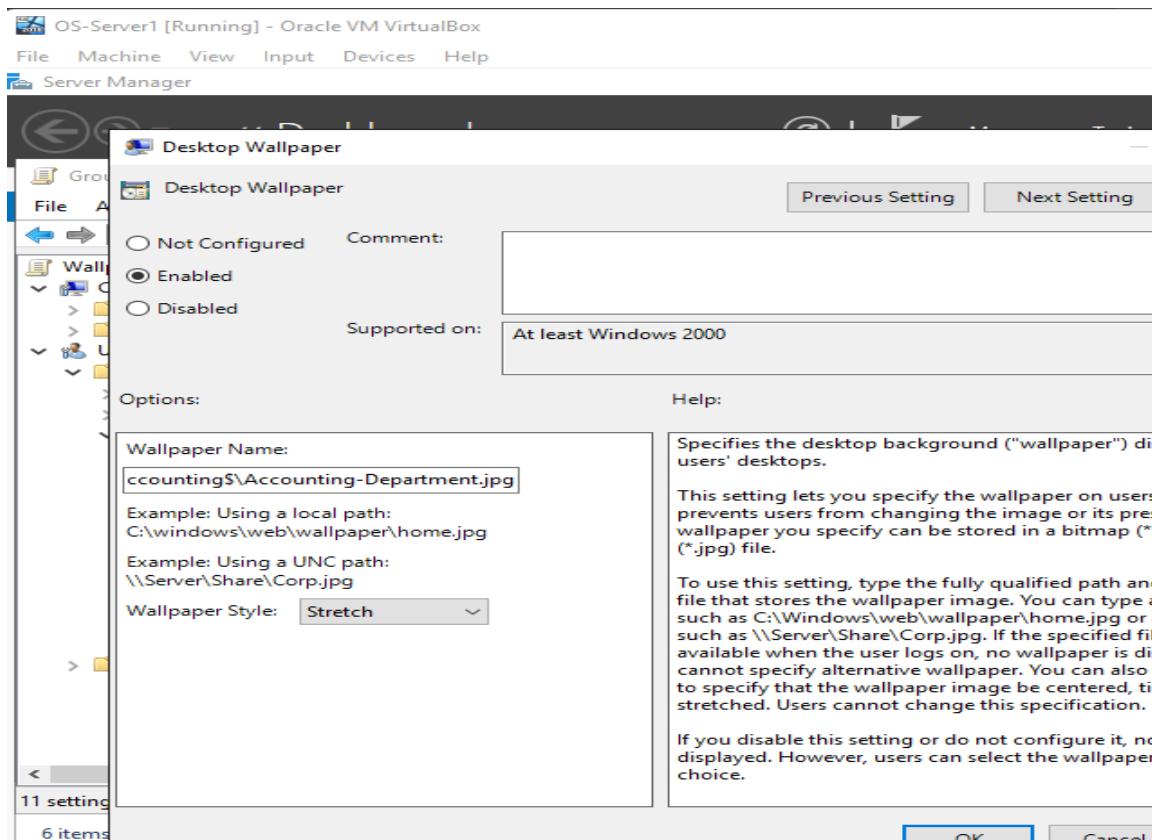
The screenshot shows the Group Policy Management console with the following details:

- Group Policy Management** node expanded.
- Forest: Domain-384.abc** node expanded.
- Domains** node expanded.
- Domain-384.abc** node expanded.
- Group Policy Objects** node expanded.
- Visible GPOs include:
  - Default Domain Controllers Policy
  - Default Domain Policy
  - Desk-print-User
  - New Group Policy Object
  - Notepad++ .msi
  - Restrick access for Control Panel
  - Skype.msi
  - Wallapers for both departments
  - Wallpaper for Accounting users
  - Wallpaper for Sales
- Domain-384.abc** node selected.
- Status** tab selected in the right pane.
- Message: "This page shows the status of Active Directory and SYSVOL (DFSR) replication for this domain. It relates to Group Policy."
- Status Details** section:
  - DC-2021384.Domain-384.abc is the baseline domain controller for this domain.
- No Infrastructure Status information exists for this domain.**
- Click the Detect Now button below to gather infrastructure status from all of the domain controllers in this domain.**

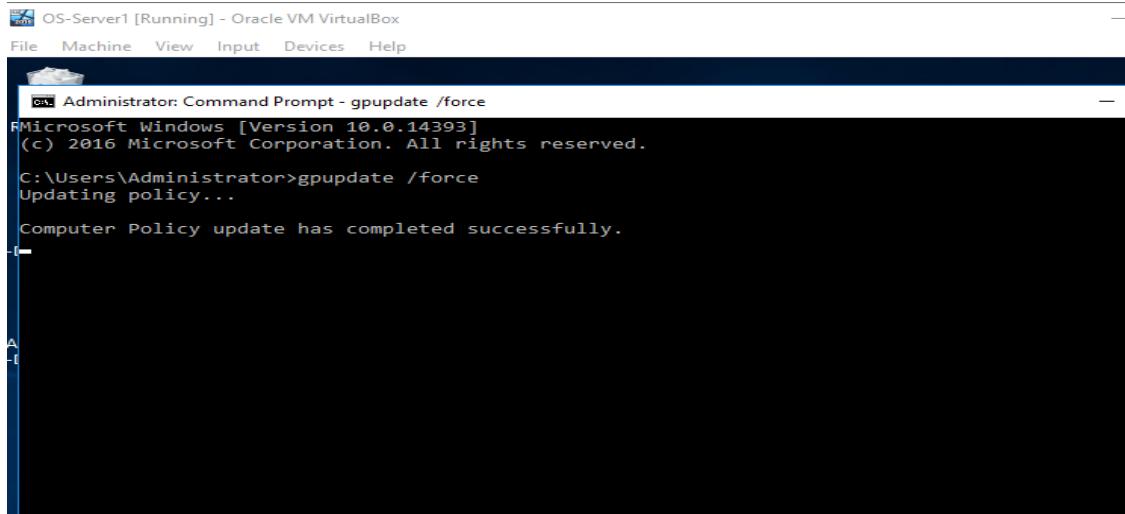
- Configuring of Desktop Wallpaper for **Sales department**.



- Configuring of Desktop Wallpaper for **Accounting department**.



- **Group policy update** for GPO of wallpapers by using the command **gpupdate /force** .



```
OS-Server1 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Administrator: Command Prompt - gpupdate /force
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>gpupdate /force
Updating policy...
Computer Policy update has completed successfully.
```

- **Different wallpapers** have set **successfully** for **both** departments as shown below:





## Reference

Website title: Youtube.com

URL: <https://www.youtube.com/watch?v=GWe1xZr0llc>

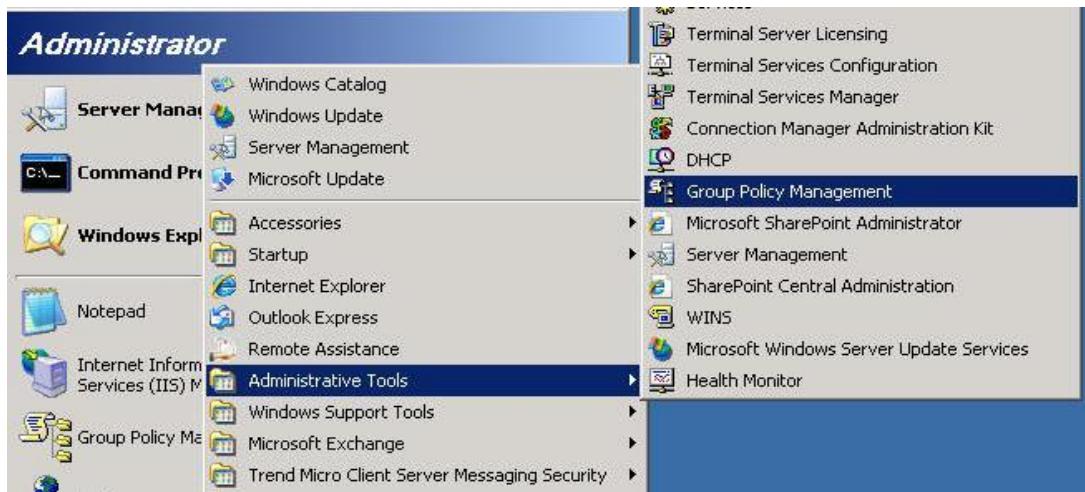
## Part5c: Research assignment

### Group policy and its role in network administrator

In a lively Directory environment, Group Policy is a simple thanks to configure computer and user settings on computers that are a part of the domain. a lively Directory environment means you want to have a minimum of one server with the Active Directory Domain Services installed. Group Policy allows you to centralize the management of computers on your network without having to physically attend and configure each computer individually. If you would like to manage computers during a large company, it's almost impossible without using Group Policy. so as to use Group Policy editor during a domain environment, you want to use an administrator account. a typical domain user account isn't within the local Administrators group and cannot have the right permissions to configure Group Policies.

- For **Group Policy Management Tool**, Go to **Start button**.

- Select **All Programs** and then open **Administrative Tools**.
- And you can see in figure Group Policy Management.



Group Policy setting at automatically affects each level underneath it. If needed, you'll prevent inheritance. another default behaviour to think about are that domains, OUs, and child OUs inherit settings from their parents, but duplicate settings in GPOs linked to child OUs have precedence over an equivalent setting in GPOs linked to parent OUs. Any policy geared for a website Controller is refreshed within five minutes.

#### *Examples:*

- You can **map drives** and also **denied access** it for users by using group policy.
- You can also set the **power options** like sleeping time, stand-by mode time and circumstances happen while hitting the power button.
- All aspects of power can be configured, but some of these are user preferences, which can be changed by the user.
- We can also **redirect** our data from one location to another location. Several types of folders can also be redirected such as Documents, Pictures, Videos etc.
- Around 2,000 items can be configured in Internet Explorer with the use of Group Policy such as Configure Toolbar Buttons, Pop-up allow list etc.

#### *Reference*

**Article title:** Group Policy Fundamentals in Active Directory -- Redmondmag.com

**Website title:** Redmondmag

**URL:** <https://redmondmag.com/articles/2016/01/12/group-policy-fundamentals.aspx>

Advantages of group policy in a Domain environment

#### *Ease of Management*

We can manage the networks in a very easy way via group policy if all users are connected with group policy. For instance, If a company needs to have same wallpapers and screen savers etc so that can be happened through group policy.

#### *Security*

Network Security is very first and most important priority for all business companies. We can set a strong password by using group policy when users set their passwords such as we have to use upper and lowercase letters, numbers or symbols etc.

#### *Cost and Time*

Suppose, there is the task for you to install a new software in 500 computers as a network administrator of a company, that's seems to be very nauseous to going through from each machine for this purpose and its not only the virulent difficult for the administrator but will also engender the wastage of a lots of hours. With the use group policy, we can install that software from a one machine and will install in every machine simultaneously.

#### *Reference*

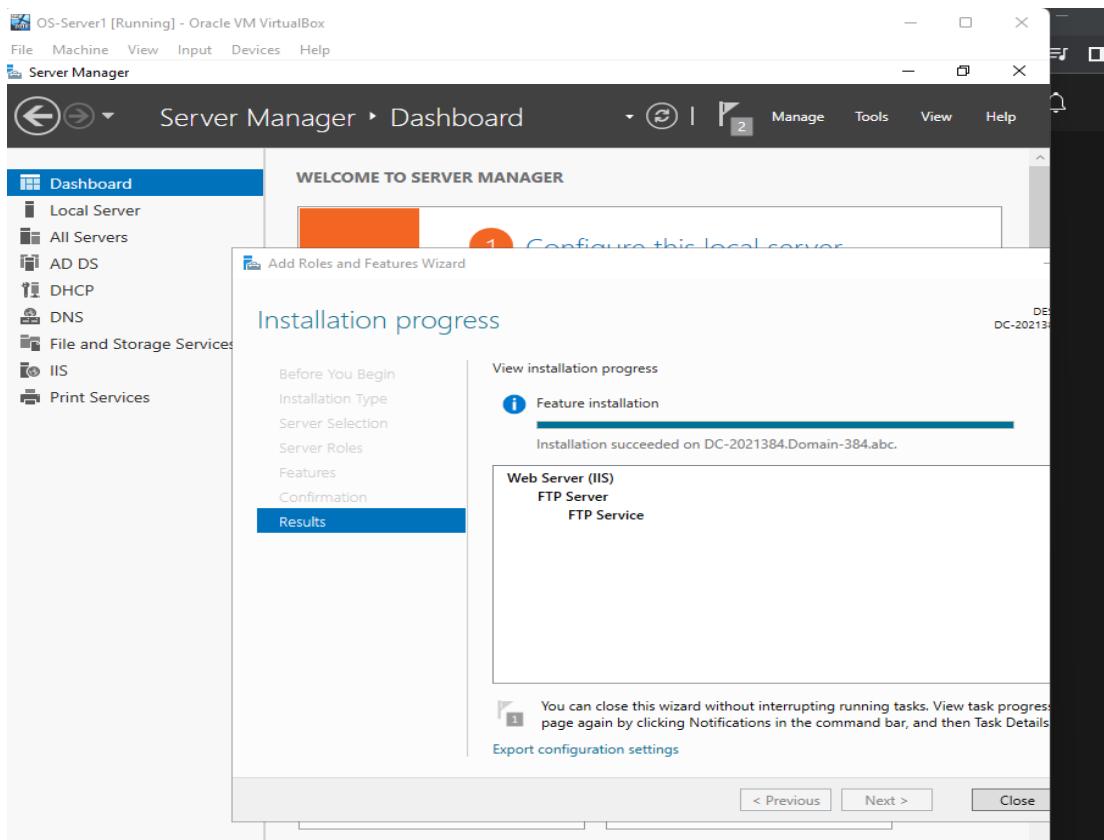
**Article title:** The Benefits of Group Policy | TCI Technologies

**Website title:** TCI Technologies

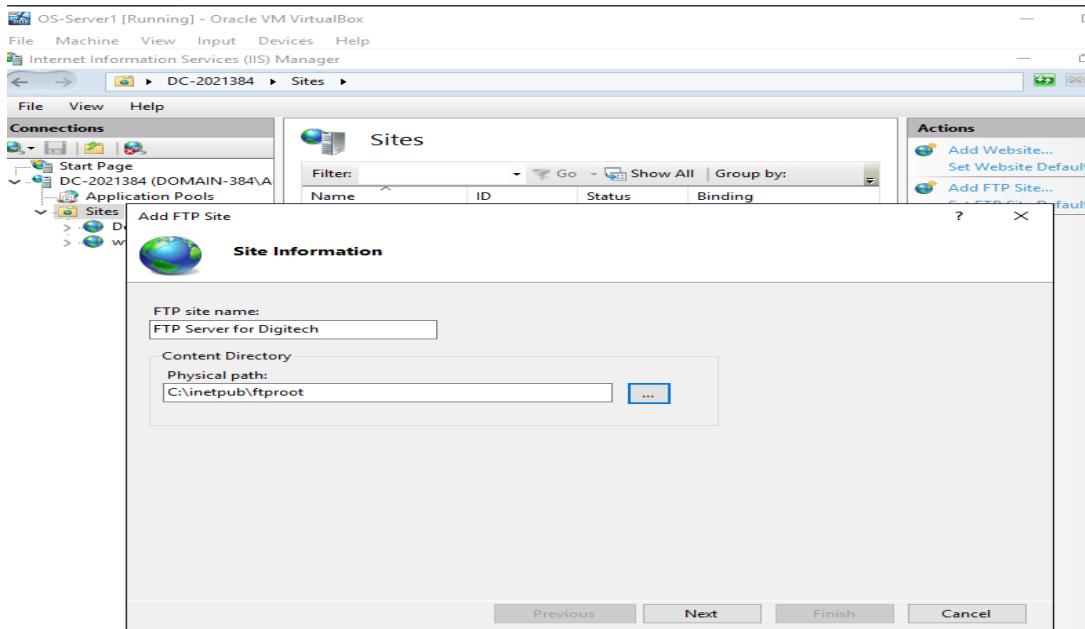
**URL:** <https://blog.tcitechs.com/blog/benefits-group-policy/>

## Part 5d: Add the FTP server feature to the DigiTech

- **Installation of FTP server through IIS.**



- I gave sit name is **FTP Server for Digitech**.
- And folder path for **ftp root**.



- Now it can be seen in screen capture that **FTP server site** has **created successful**.

Name	ID	Status	Binding
Default Web Site	1	Started (ht...)	*:80 (http)
FTP Server for D...	3	Started (ftp)	172.16.0.100:21 (ftp)
www.digitech.a...	2	Started (ht...)	www.digitech.abc on *:80

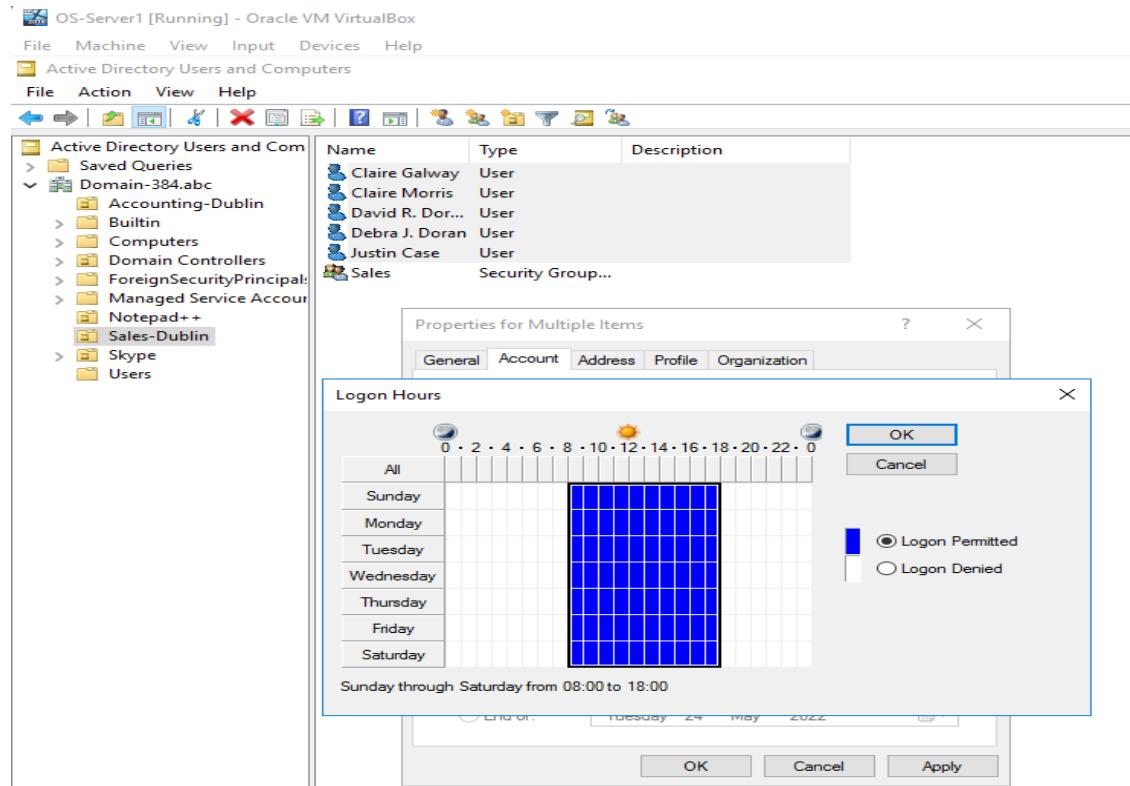
- The .txt file for FTP server can be **open and copy** from **OS-Server2** with the **users of both** departments such as **Justin Case** the user of Sales department.

## Reference

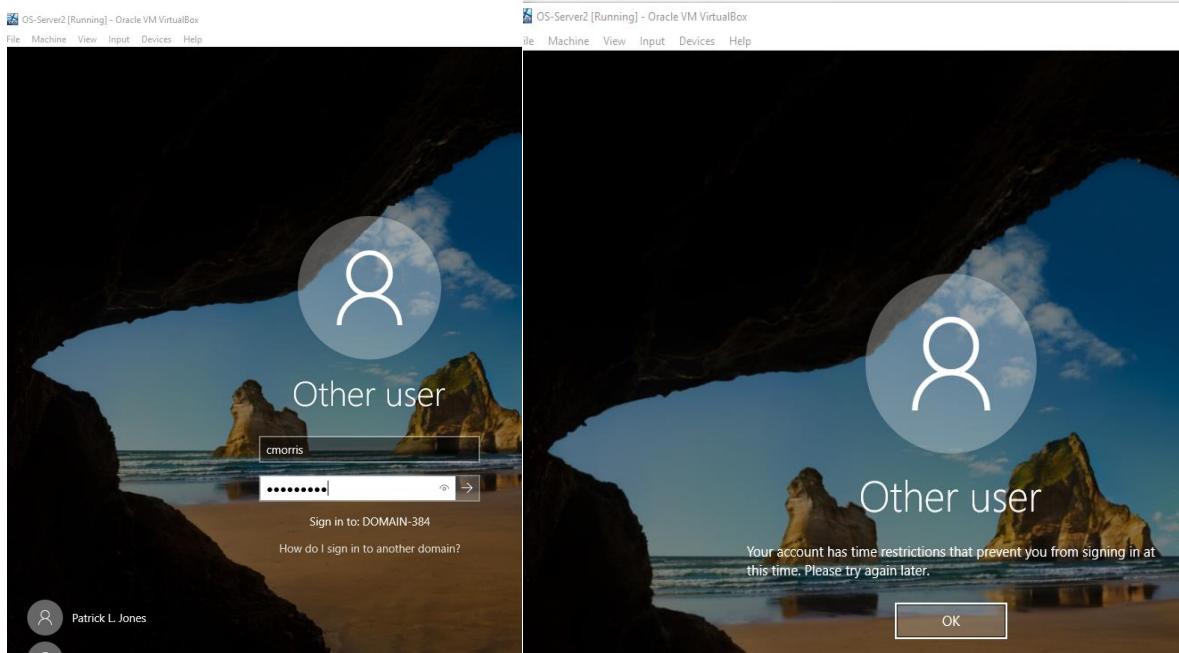
Website title: Youtube.com  
URL: <https://www.youtube.com/watch?v=dGEiwyBkS3w>

## Part 5e: Setting of logging hours for both departments

- Setting of logging hours for **Sales users**.

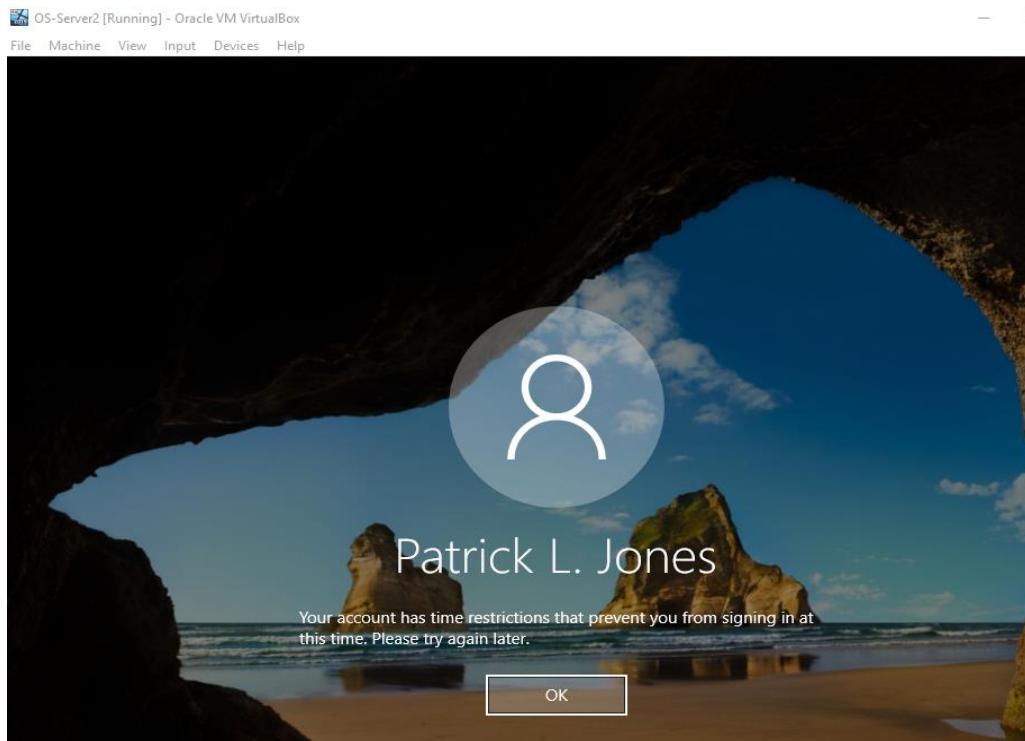


- Testing of log policy for **Sales users** such as **Claire Morris**.



- Setting of logging hours for **Accounting users**.

- **Testing of log policy for Accounting users such as Patrick L. Jones.**

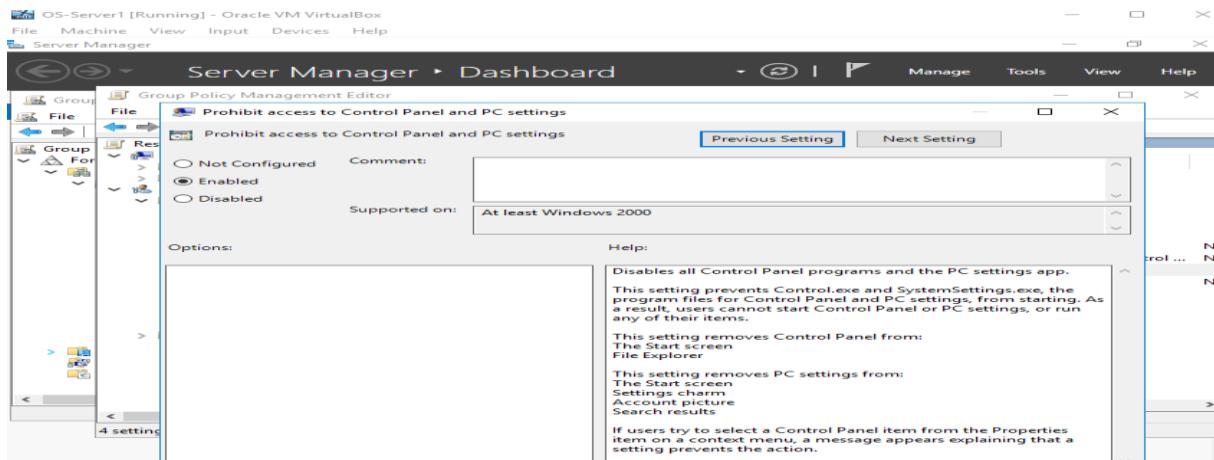


## Reference

**Website title:** Youtube.com  
**URL:** <https://www.youtube.com/watch?v=umwxMaDwVk8>

## Part 5f: Restrict the access of Control panel for users

- Configuring the GPO for denying the access of control panel for all users.



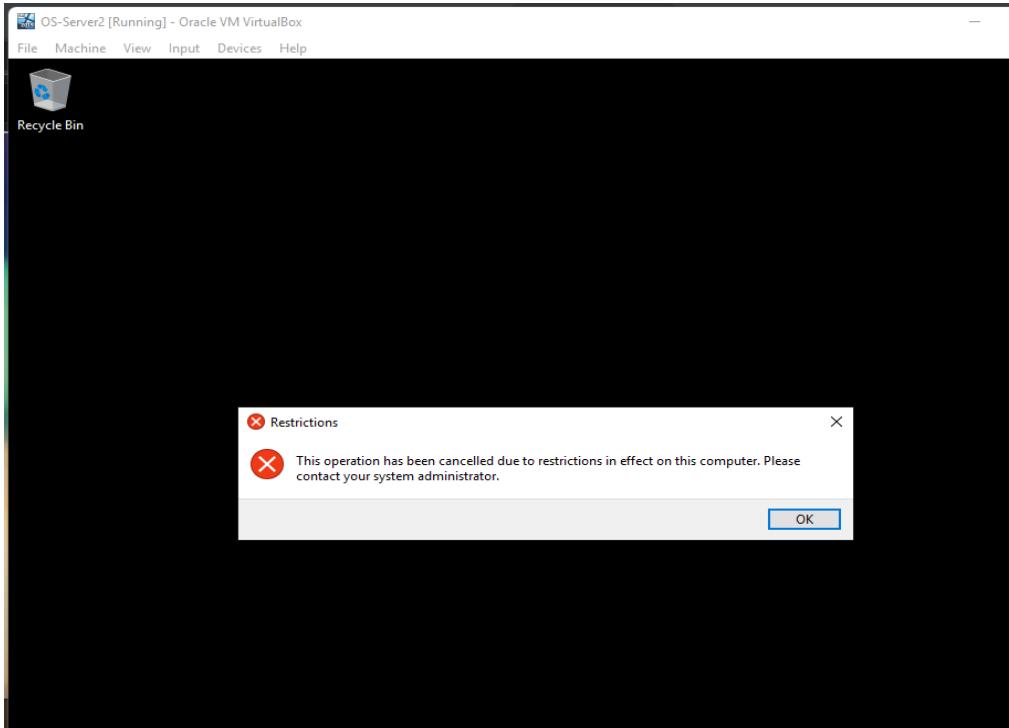
- Link of group policy with Sales-Dublin.

Link Order	GPO	Enforced	Link Enabled	GPO Stat.
1	Wallpaper for Sales ...	No	Yes	Enabled
2	Restrict access for ...	No	Yes	Enabled
3	Starter GPOs	No	Yes	Enabled

- Link of group policy with Accounting-Dublin.

Link Order	GPO	Enforced	Link Enabled	GPO Stat.
1	Wallpaper for Accou...	No	Yes	Enabled
2	Restrict access for ...	No	Yes	Enabled

- **Testing that users don't have access** to use control panel as shown below:



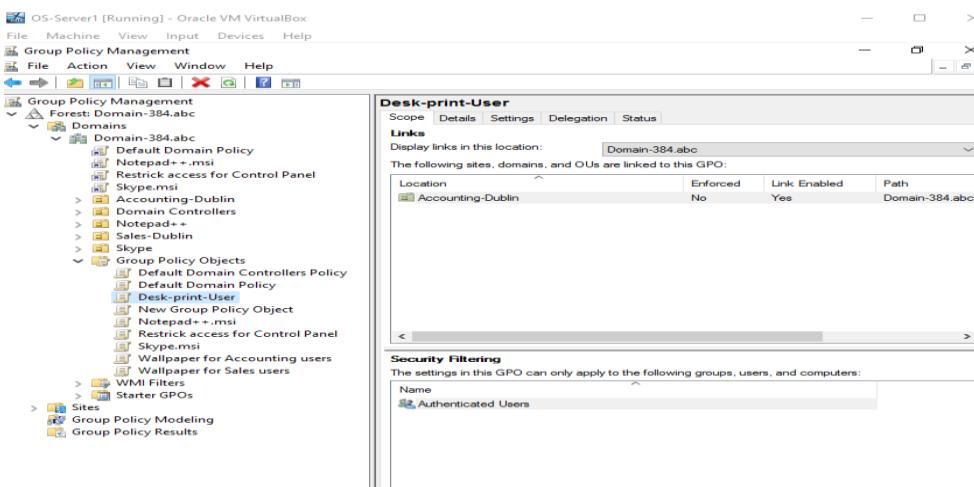
## Reference

**Website title:** Youtube.com

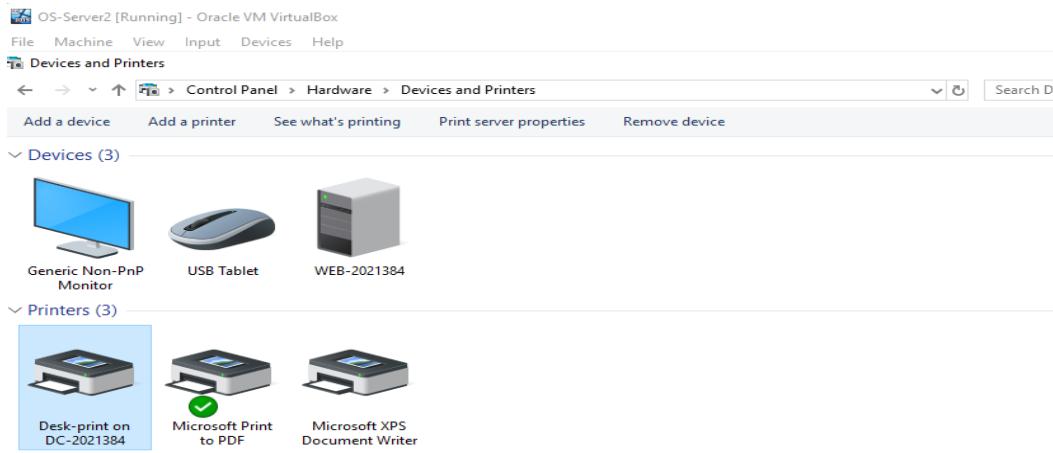
**URL:** <https://www.youtube.com/watch?v=XsoFo5uqZTM>

## Part 5g: Addition of a shared printer for Accounting Users

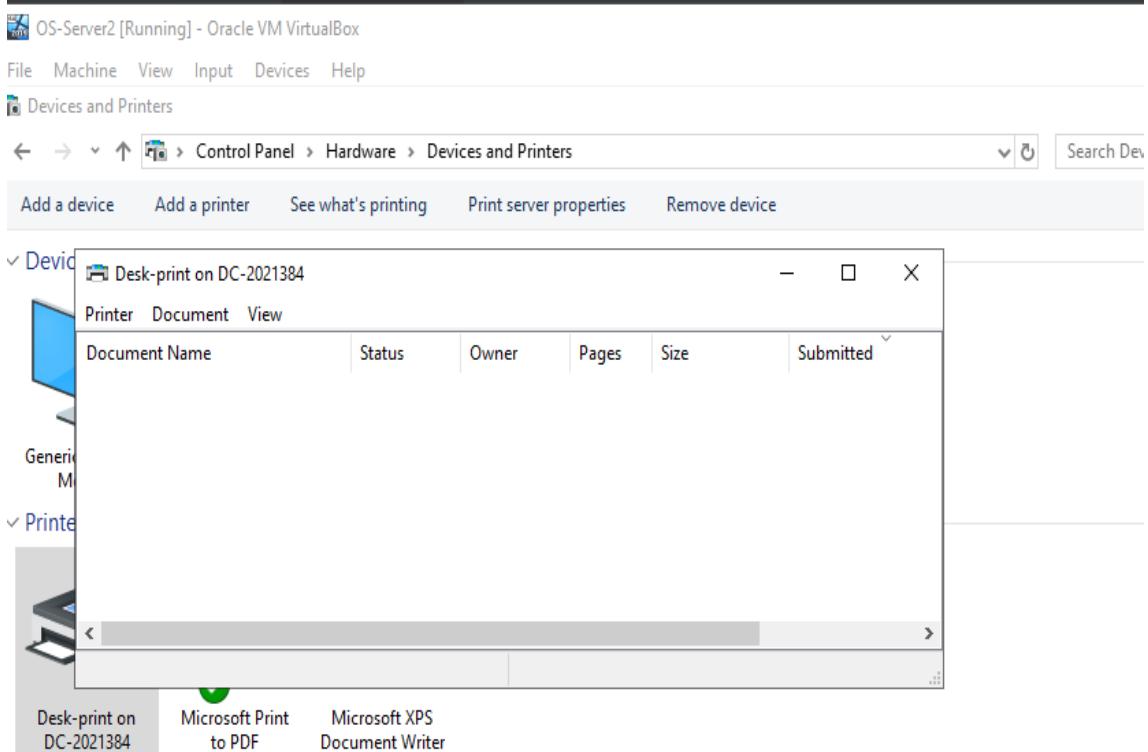
- **Desk-print-User GPO link with the Accounting department users** after the **installation of printer.**



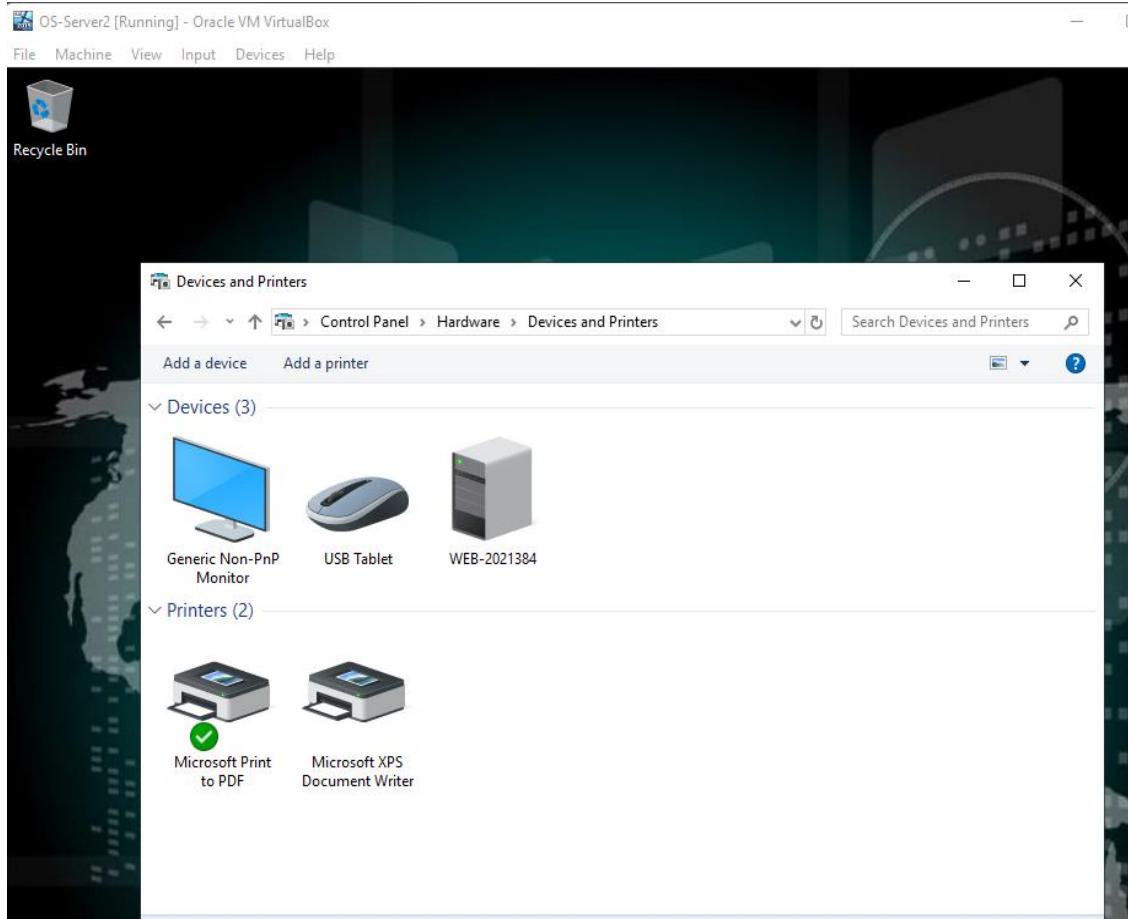
- You can see in screen shot, the **printer** with the name **Desk-print on DC-2021384** through the user of **Accounting** department such as **Patrick L Jones**.



- It can be seen that **printer** is also **working properly** through **Patrick L Jones**.



- You can see **Users** of **Sales** department **doesn't** have the access of **Printer**.  
So, that it's **not** giving the **display** of **printer** through **Sales user** such as **Justin Case**.



## Reference

**Website title:** Youtube.com  
**URL:** <https://www.youtube.com/watch?v=iZqcruTEXAk>