

TEAM(3M2A):

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- 5- Ahmed sobhy Alorybya



ERROR 429
TOO MANY REQUESTS





Support Troubleshooting Scenarios

Network Setup && Troublesh ooting



Network Setup and Troubleshooting

Operating System Installation, and Configuration



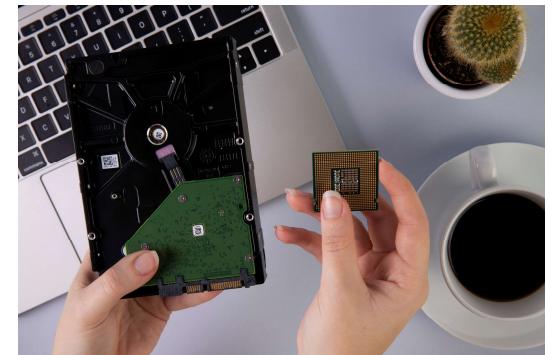
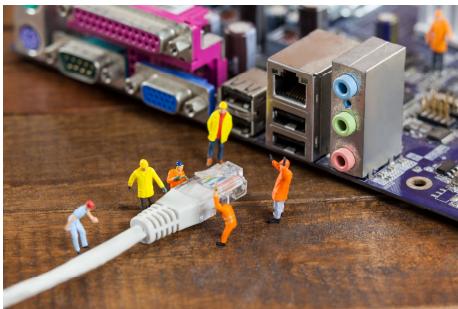
Operating System Installation and Configuration

A photograph showing two female customer service representatives in an office environment. They are wearing headsets and working on computers. One representative is in the foreground, looking down at her screen, while the other is slightly behind her, also focused on her work. The background shows large windows and office equipment.

Errors

Support Troubleshooting Scenarios

6 Problems Troubleshooting



1- Network Connectivity Problem



3- Hardware Malfunctions



4- Email Configuration Issues

5- Operating System Performance Issues

6- Peripheral Device Connectivity

1. Network Connectivity Problems

problem: User unable to connect to the internet, frequent disconnects, slow browsing.

Potential Causes: Router/modem issues, incorrect network settings, faulty cables, or ISP outages.

Resolution: Restart router/modem, check network settings (e.g., IP configuration), replace cables, or contact ISP.

Issue: A user reports that they are unable to connect to the company Wi-Fi and receive a "No Internet Access" error.

Troubleshooting Steps:

1. Ask the user if other devices are affected to isolate if it's a device or network issue.
2. Check Wi-Fi settings on the user's device to ensure they are connected to the correct network.
3. Suggest restarting the device and router/modem.
4. Verify IP configuration settings (e.g., is DHCP enabled?).



2. Software Installation Errors

problem: Software fails to install or installation is incomplete

; error messages about missing files or permissions.

Potential Causes: Insufficient disk space, missing dependencies, user permission issues, or corrupt installation

files.

Resolution: Free up disk space, run as administrator, verify installation files, and ensure system requirements are met

Issue: A user is trying to install a new CRM software but gets an error saying, "Insufficient disk space" even though there is space available.

Troubleshooting Steps:

1. Ask the user to check their disk space on the primary installation drive.
2. Check permissions: Make sure the user is running the installer with admin privileges.
3. Verify the installation file is not corrupt by downloading a fresh copy.
4. Look for temporary files or an incomplete previous installation that might be taking up space.
5. If necessary, clear disk space and try the installation again.



3. Hardware Malfunctions

problem : Printer not responding, printing gibberish,

or no print jobs appearing.

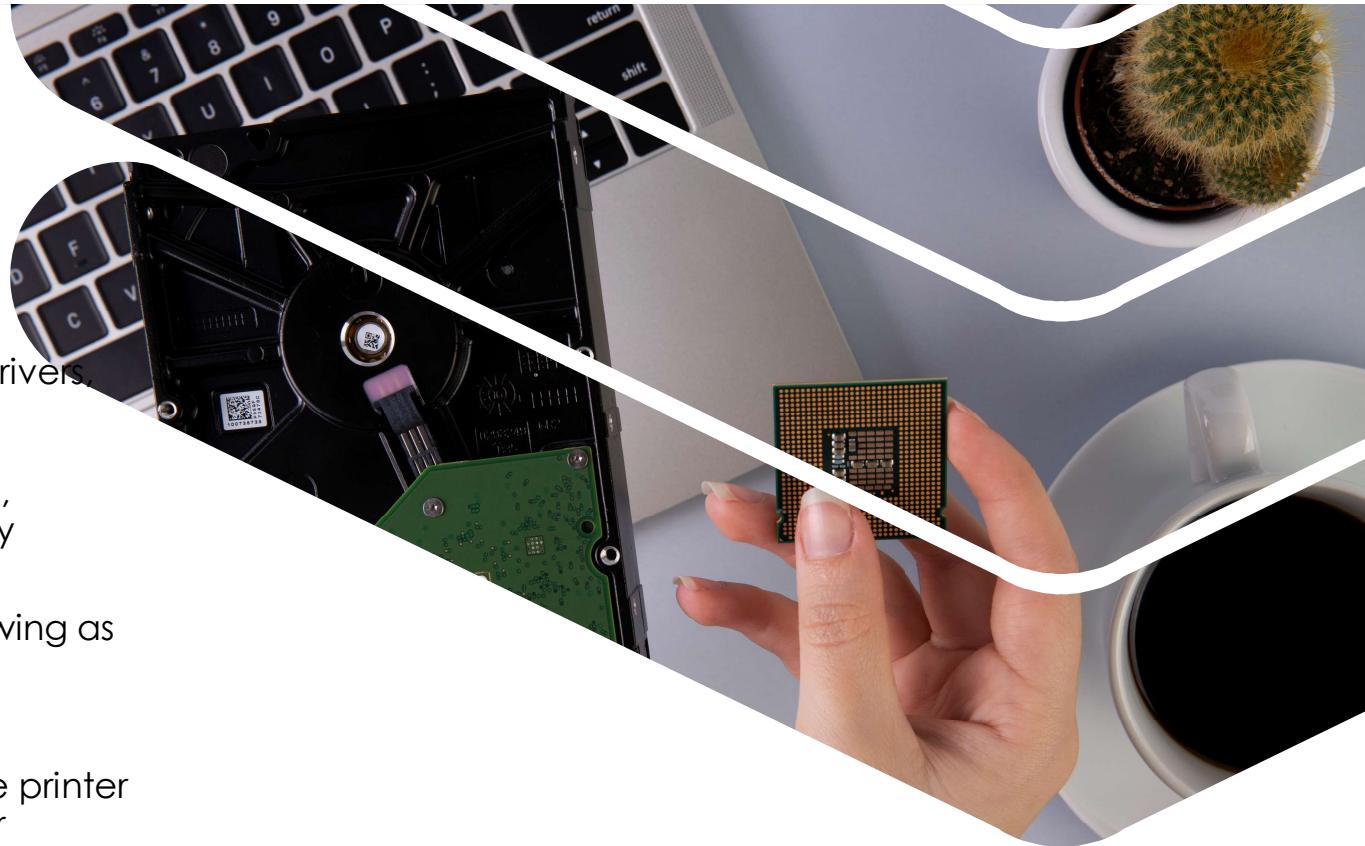
Potential Causes: Printer offline, incorrect drivers, paper jams, or connection issues.

Resolution: Check the printer's online status, reinstall drivers, clear paper jams, and verify physical connections.

Issue: A user reports that their printer is showing as "offline" and will not print documents

Troubleshooting Steps:

1. Check physical connections: Ensure the printer is properly connected to the network or computer.
2. Confirm the printer is powered on and not in sleep mode.
3. Check the printer queue to ensure there aren't any stuck print jobs.
4. Restart the printer and computer.
5. Reinstall or update the printer driver.



4. Email Configuration Issues

problem : Unable to send/receive emails, frequent login prompts, or syncing errors.

Potential Causes: Incorrect server settings (IMAP/POP3/SMTP), outdated client software, or large inbox size.

Resolution: Verify email server settings, update email client, clear out large or old emails.

Issue: A user is unable to send emails through their Outlook client and gets an error saying "Cannot connect to SMTP server."

Troubleshooting Steps:

1. Verify the outgoing mail server settings (SMTP server, port, encryption method).
2. Ask if the user recently changed their password and ensure Outlook is using the updated credentials.
3. Temporarily disable antivirus/firewall to check if they're blocking the connection.
4. Test the same email account in a web browser to isolate if it's an issue with the client or server.

Resolution: Adjusting the outgoing server settings



5. Operating System Performance Issues

problem : Slow boot-up, frequent crashes, programs not responding.

Potential Causes: Insufficient memory, malware, too many startup programs, or outdated drivers.

Resolution: Run a malware scan, reduce startup programs, update drivers, and increase memory if needed.

Issue: A user reports that their computer has become extremely slow, especially when starting up.

Troubleshooting Steps:

1. Check task manager to identify if a particular program or process is consuming too much CPU/RAM.
2. Reduce the number of startup programs by disabling unnecessary items.
3. Run a malware scan to check for infections.
4. Update drivers for the graphics card, chipset, and other essential components.
5. Consider upgrading RAM or clearing hard drive space if the system is low on resources.



6. Peripheral Device Connectivity

problem : USB device not recognized, no response from the device.

Potential Causes: Faulty ports, outdated drivers, or conflicts between devices.

Resolution: Test device on another port or computer, reinstall drivers, and check device manager for conflicts.

Issue: A user connects a USB flash drive to their laptop, but the device is not recognized, and no prompt appears.

Troubleshooting Steps:

1. Check USB Port: Ask the user to test the USB flash drive in another USB port or on a different device to rule out a defective port.
2. Device Manager Check: Have the user open Device Manager (Windows) to see if the USB drive is listed under "Universal Serial Bus Controllers" or "Disk Drives." If the device shows up with a yellow warning icon, it indicates a driver or recognition issue.
3. Update or Reinstall USB Drivers: Suggest the user right-click the device and update or reinstall the USB drivers.
4. Check for Power Issues: Recommend disconnecting other USB devices to ensure that insufficient power is not the issue.
5. Reboot the System: Restart the computer and try the flash drive again.
6. Test on Another Computer: Ask the user to test the flash drive on a different machine to confirm whether the issue is with the drive or their computer.

Resolution: After reinstalling the USB drivers and rebooting the



Back



Support Troubleshooting Scenarios

Network Setup && Troublesh ooting



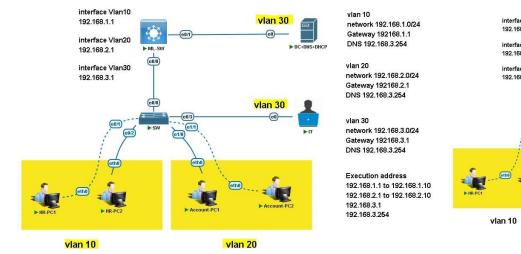
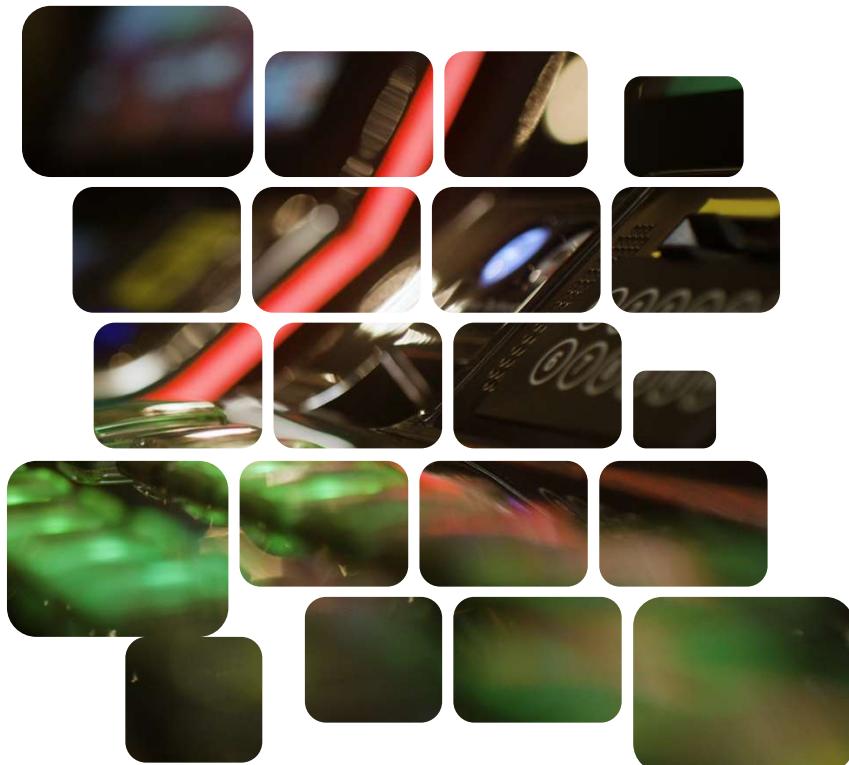
Network Setup and Troubleshooting

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Operating System Installation and Configuration

Network Setup && Troubles hooting



1- Network design plan

عندى فى الشركة أكثر من
قسم وحتاج أقسامهم لـ
 BASMAY AL-AQSAM Vlans

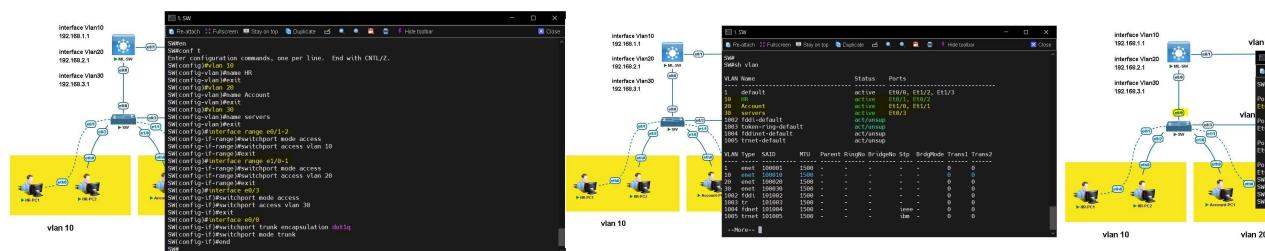
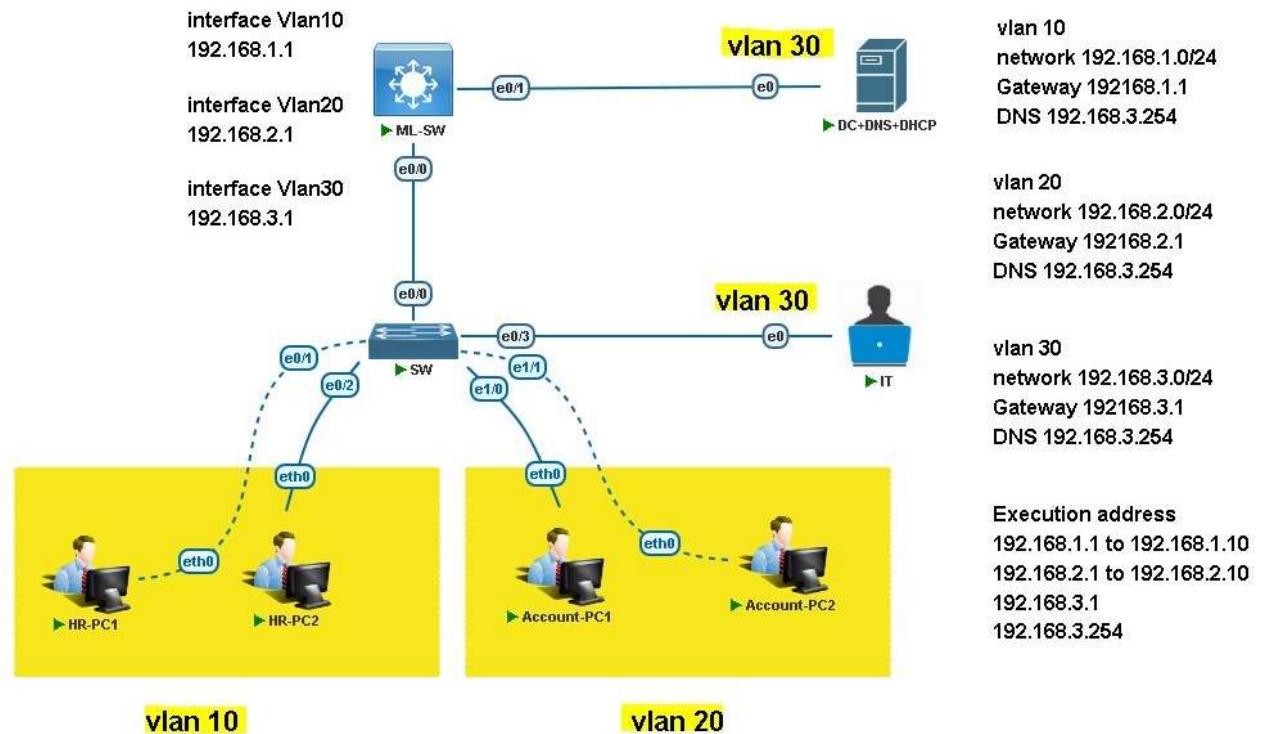
ومحتاج كل VLAN معين لكن المرة دى
 يحتاج إنى أفعل الـ DHCP
 على Server يقوم بالمهمة د

Ip address

192.168.1.0-

192.168.2.0-

192.168.3.0



2- On SW

SW#conf t

SW(config)#vlan 10

SW(config-vlan)#name HR

SW(config-vlan)#exit

SW(config)#vlan 20

SW(config-vlan)#name Account

SW(config-vlan)#exit

SW(config)#vlan 30

SW(config-vlan)#name servers

SW(config-vlan)#exit

SW(config)#

SW(config)#interface range e0/1-2

SW(config-if-range)#switchport mode access

SW(config-if-range)#switchport access vlan 10

SW(config-if-range)#exit

SW(config)#interface range e1/0-1

SW(config-if-range)#switchport mode access

SW(config-if-range)#switchport access vlan 20

#SW(config-if-range)exit

SW(config)#interface e0/3

SW(config-if)#switchport mode access

SW(config-if)#switchport access vlan 30

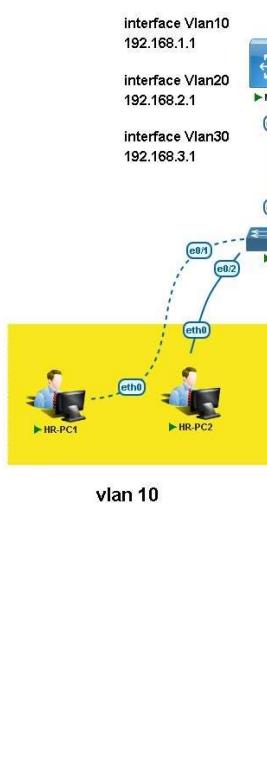
SW(config-if)#exit

SW(config)#interface e0/0

SW(config-if)#switchport trunk encapsulation dot1q

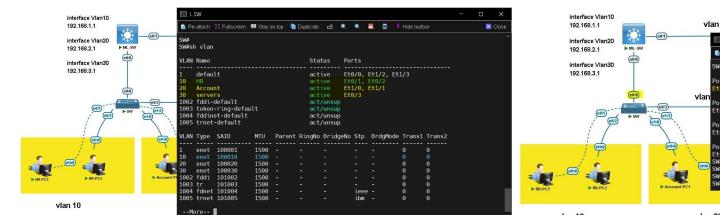
SW(config-if)#switchport mode trunk

SW(config-if)#end

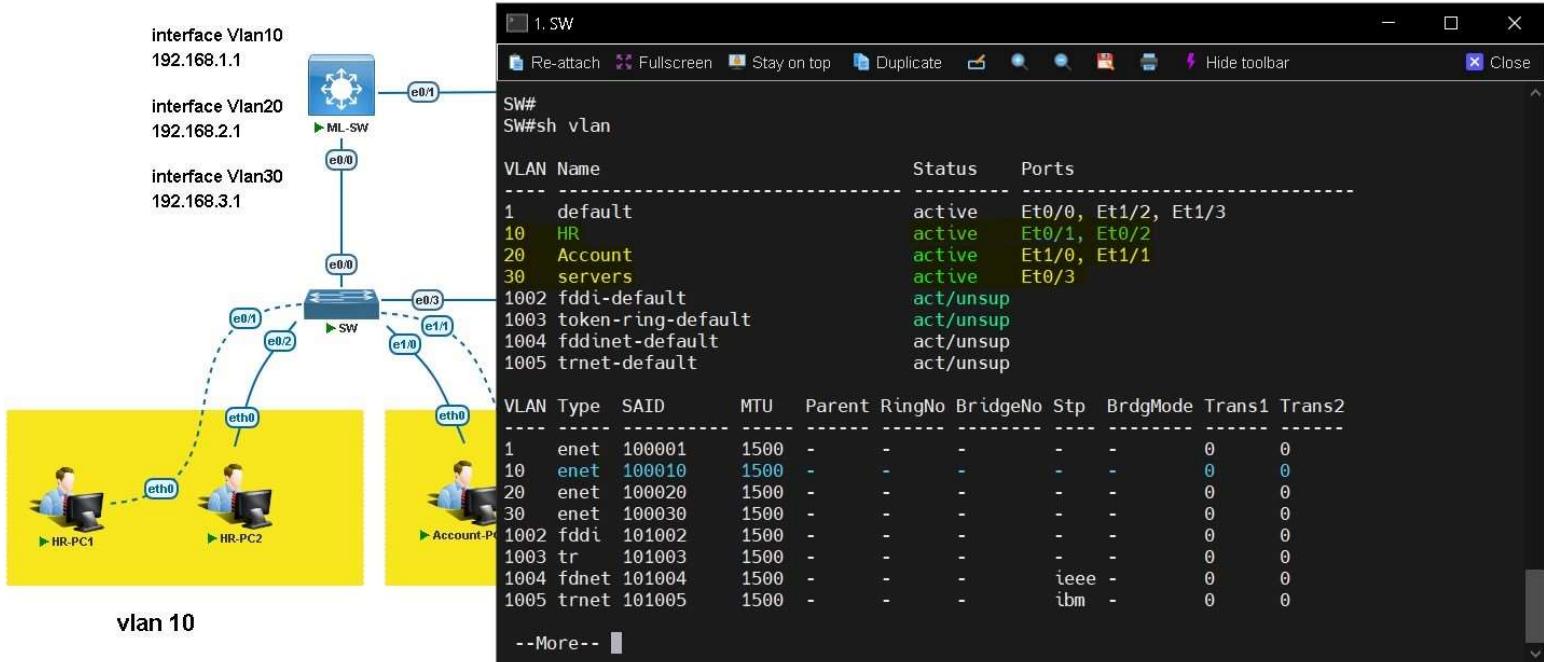


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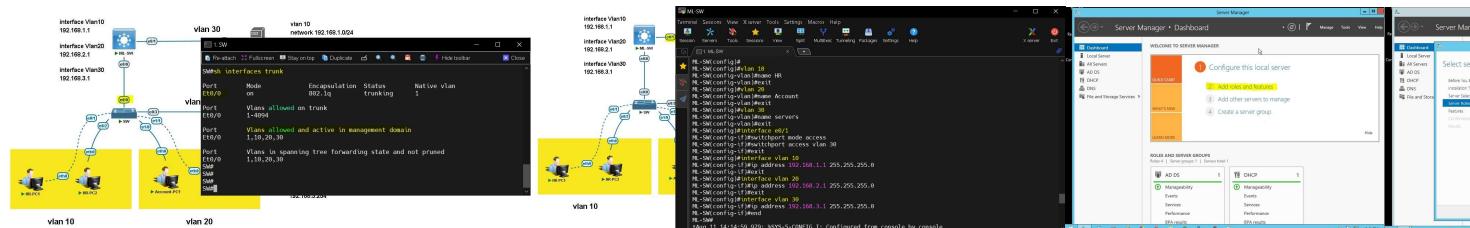
    1. SW
      Re-attach Fullscreen Stay on top Duplicate Hide toolbar Close
      SW#en
      SW#conf t
      Enter configuration commands, one per line. End with CNTL/Z.
      SW(config)#vlan 10
      SW(config-vlan)#name HR
      SW(config-vlan)#exit
      SW(config)#vlan 20
      SW(config-vlan)#name Account
      SW(config-vlan)#exit
      SW(config)#vlan 30
      SW(config-vlan)#name servers
      SW(config-vlan)#exit
      SW(config)#interface range e0/1-2
      SW(config-if-range)#switchport mode access
      SW(config-if-range)#switchport access vlan 10
      SW(config-if-range)#exit
      SW(config)#interface range e1/0-1
      SW(config-if-range)#switchport mode access
      SW(config-if-range)#switchport access vlan 20
      SW(config-if-range)#exit
      SW(config)#interface e0/3
      SW(config-if)#switchport mode access
      SW(config-if)#switchport access vlan 30
      SW(config-if)#exit
      SW(config)#interface e0/0
      SW(config-if)#switchport trunk encapsulation dot1q
      SW(config-if)#switchport mode trunk
      SW(config-if)#end
      SW#
    
```

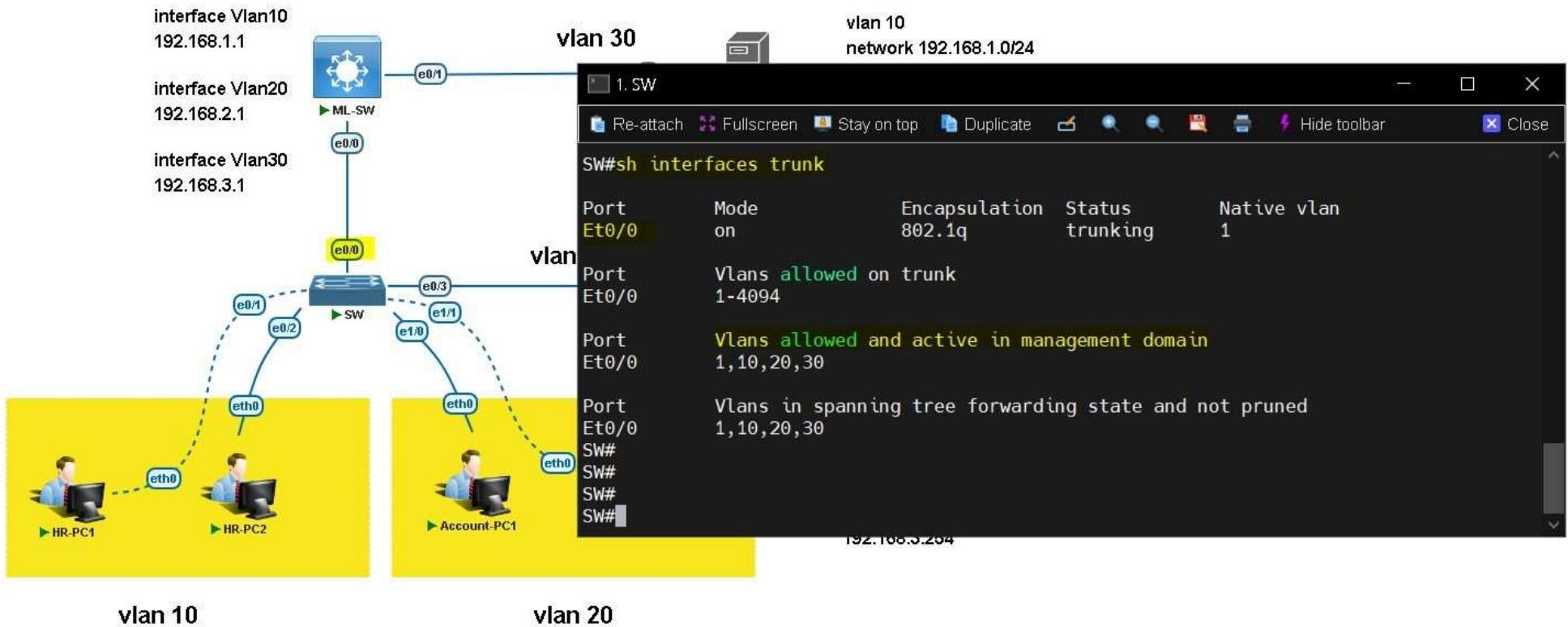


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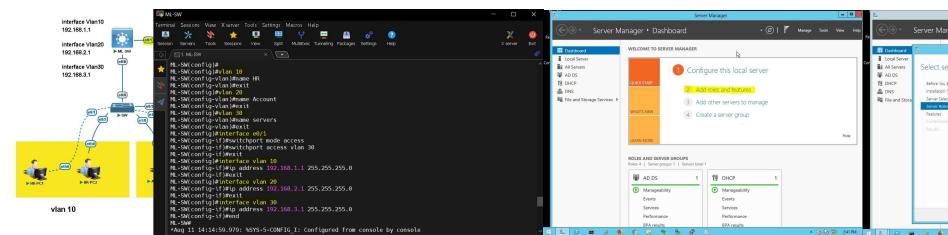


vlan 10





4-



5- On ML-SW :

```
ML-SW(config)#
```

```
ML-SW(config)#vlan 10
```

```
ML-SW(config-vlan)#name HR
```

```
ML-SW(config-vlan)#exit
```

```
ML-SW(config)#vlan 20
```

```
ML-SW(config-vlan)#name Account
```

```
ML-SW(config-vlan)#exit
```

```
ML-SW(config)#vlan 30
```

```
ML-SW(config-vlan)#name servers
```

```
ML-SW(config-vlan)#exit
```

```
ML-SW(config)#interface e0/1
```

```
ML-SW(config-if)#switchport mode access
```

```
ML-SW(config-if)#switchport access vlan 30
```

```
ML-SW(config-if)#exit
```

```
ML-SW(config)#interface vlan 10
```

```
ML-SW(config-if)#ip address 192.168.1.1 255.255.255.0
```

```
ML-SW(config-if)#ip helper-address 192.168.3.254
```

```
ML-SW(config-if)#exit
```

```
ML-SW(config)#interface vlan 20
```

```
ML-SW(config-if)#ip address 192.168.2.1 255.255.255.0
```

```
ML-SW(config-if)#ip helper-address 192.168.3.254
```

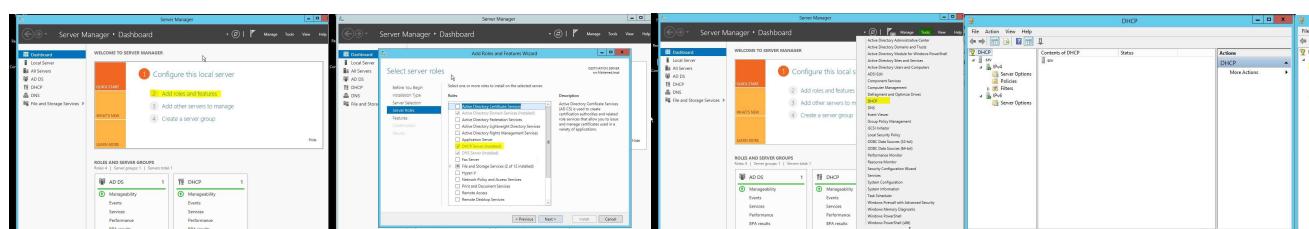
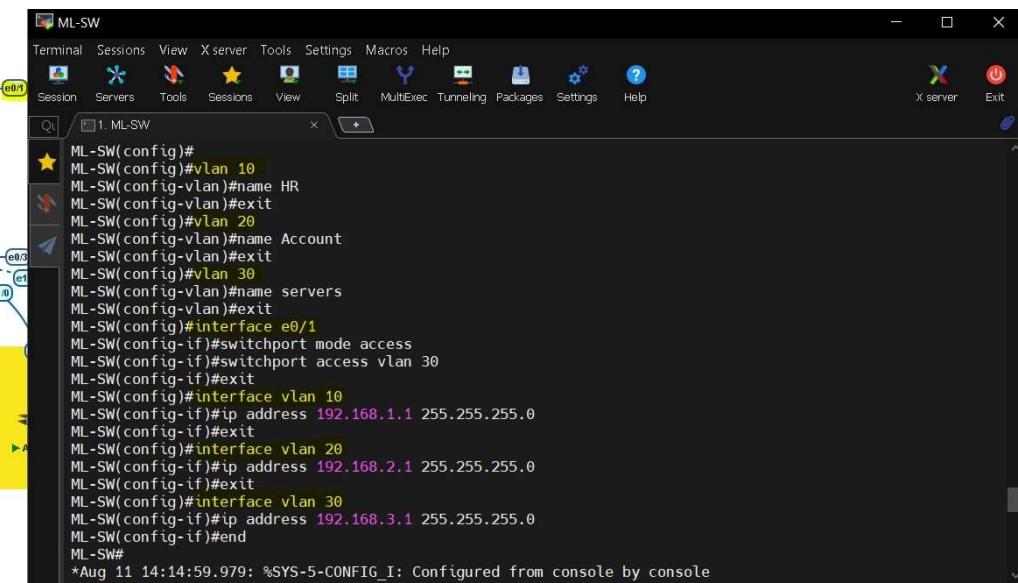
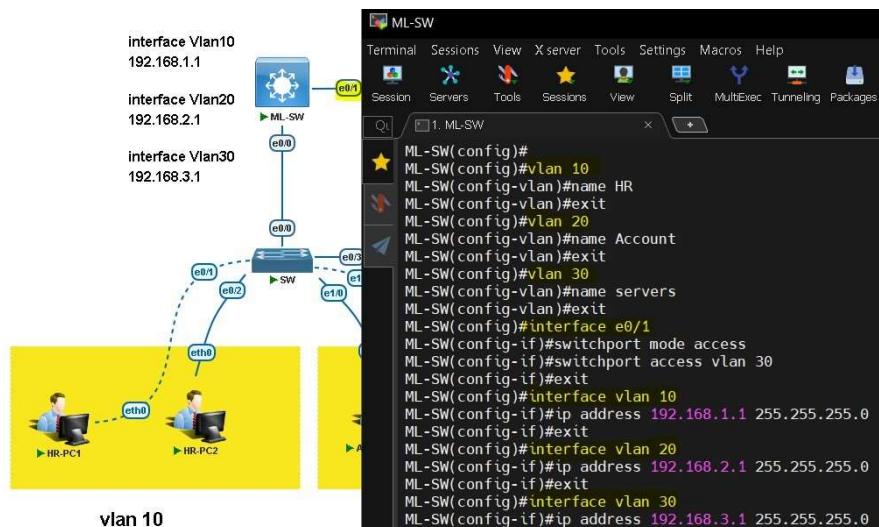
```
ML-SW(config-if)#exit
```

```
ML-SW(config)#interface vlan 30
```

```
ML-SW(config-if)#ip address 192.168.3.1 255.255.255.0
```

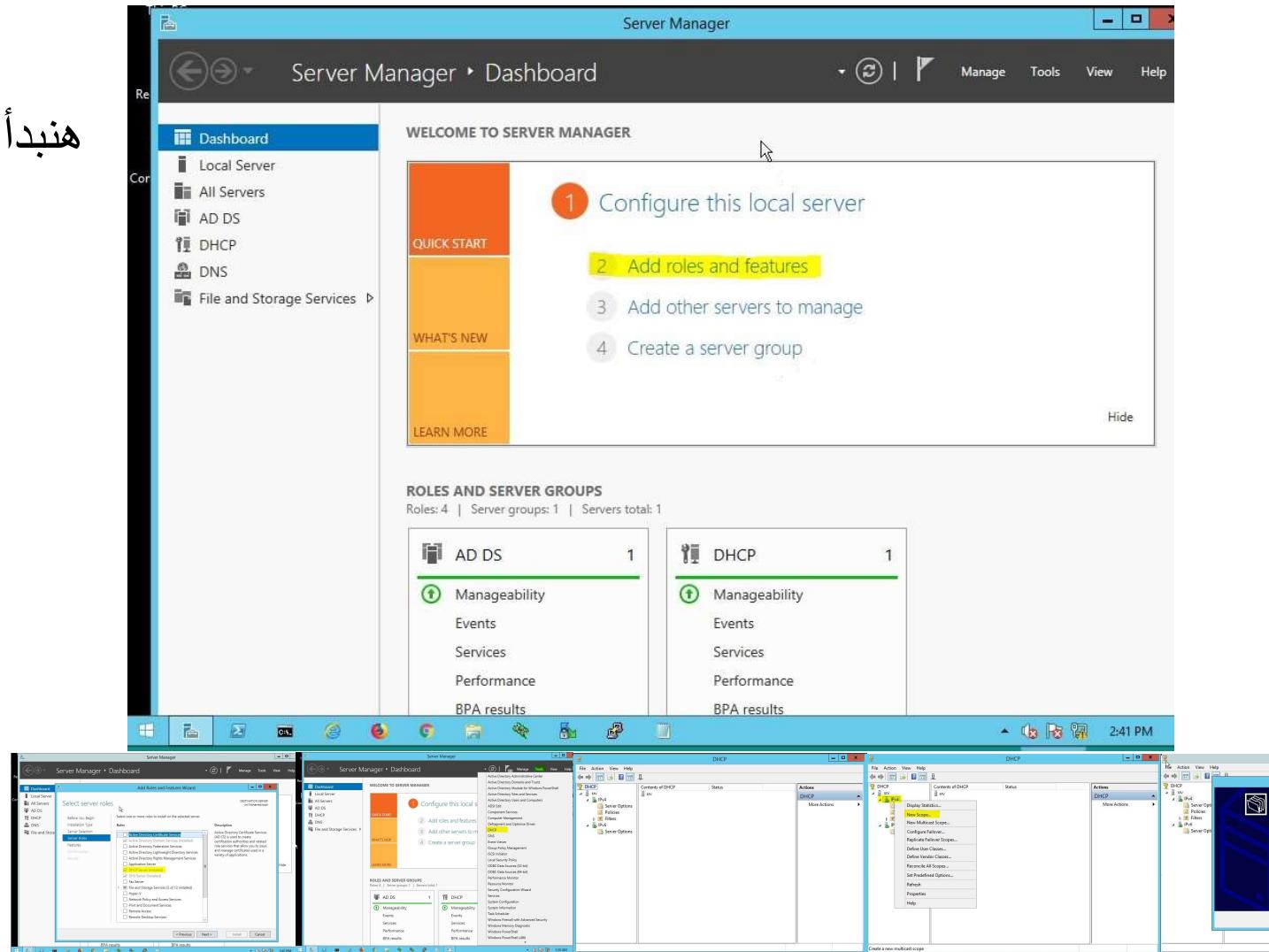
```
ML-SW(config-if)#ip helper-address 192.168.3.254
```

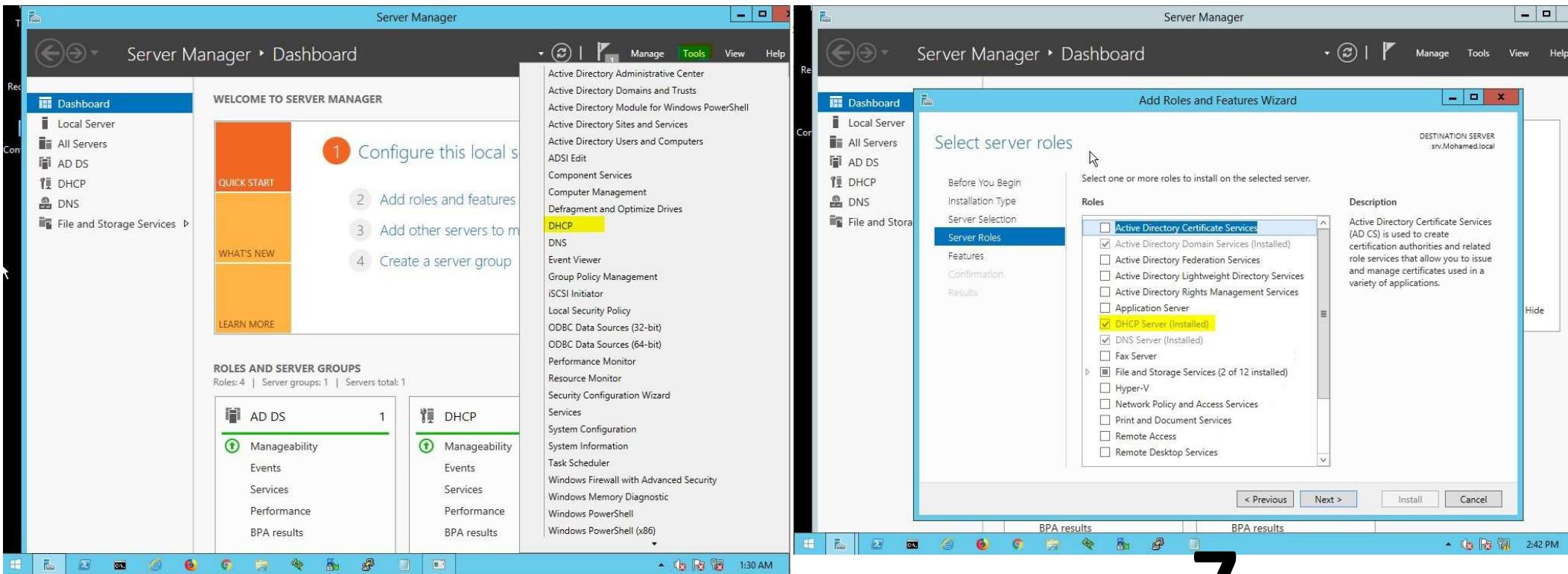
```
ML-SW(config-if)#end
```



6- On DHCP Server

هندأ نضيف الـ Role DHCP

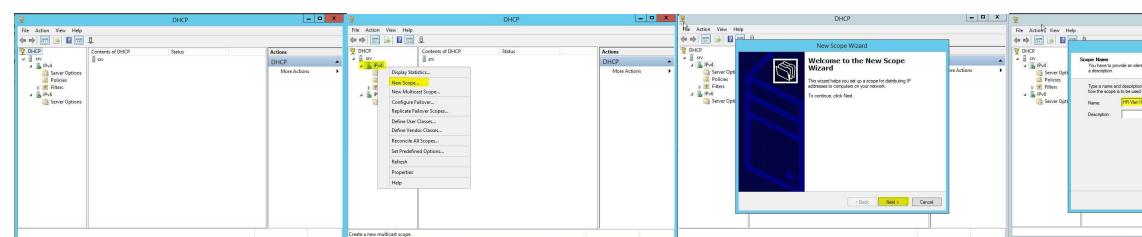


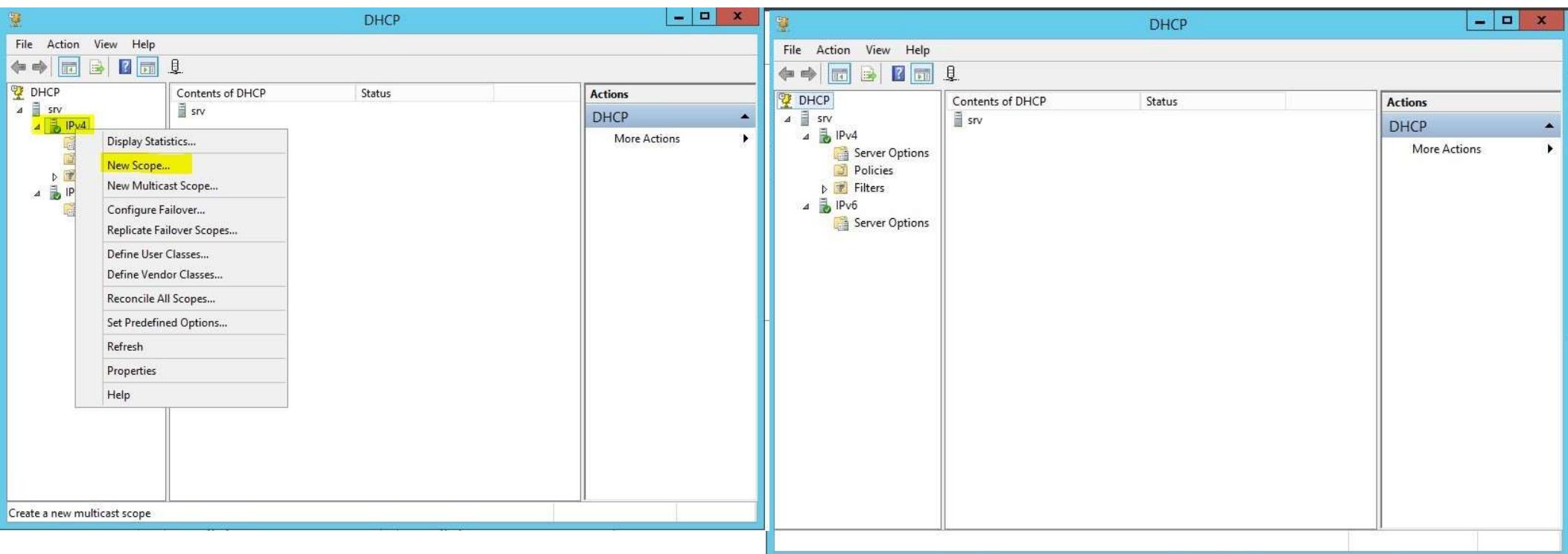


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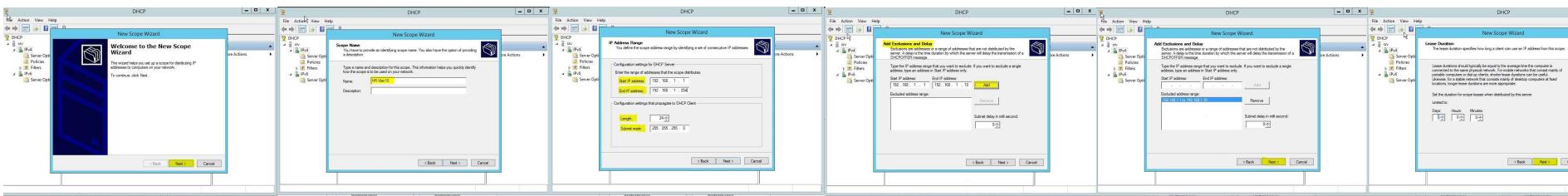
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بعد الإضافة هنبدأ ننشئ الـ vlangs على الـ server

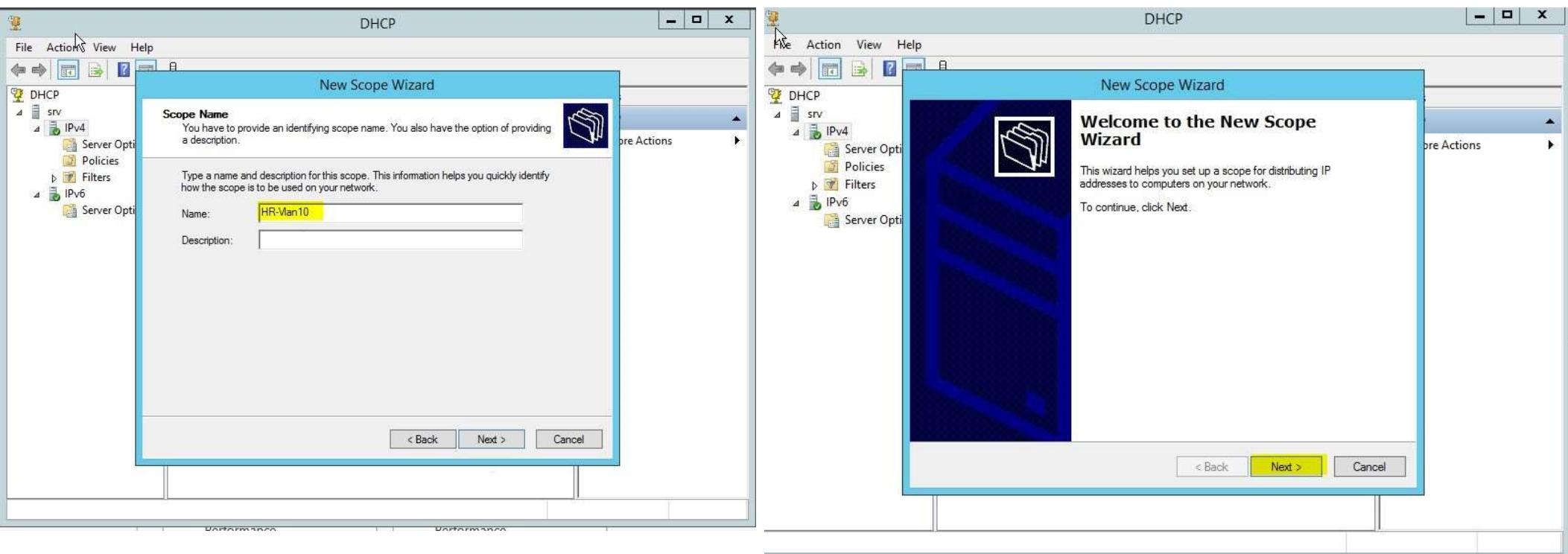




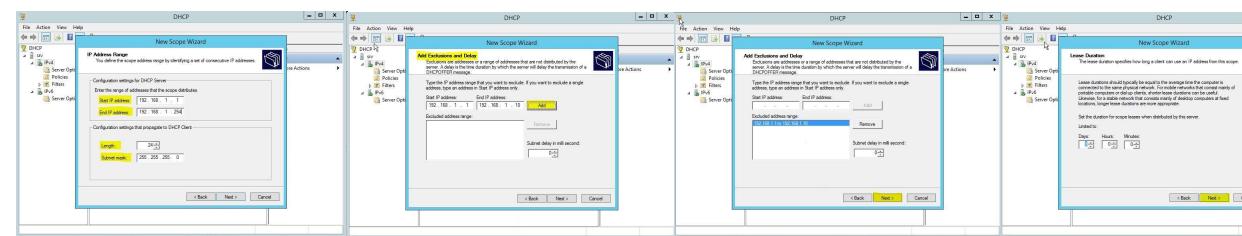
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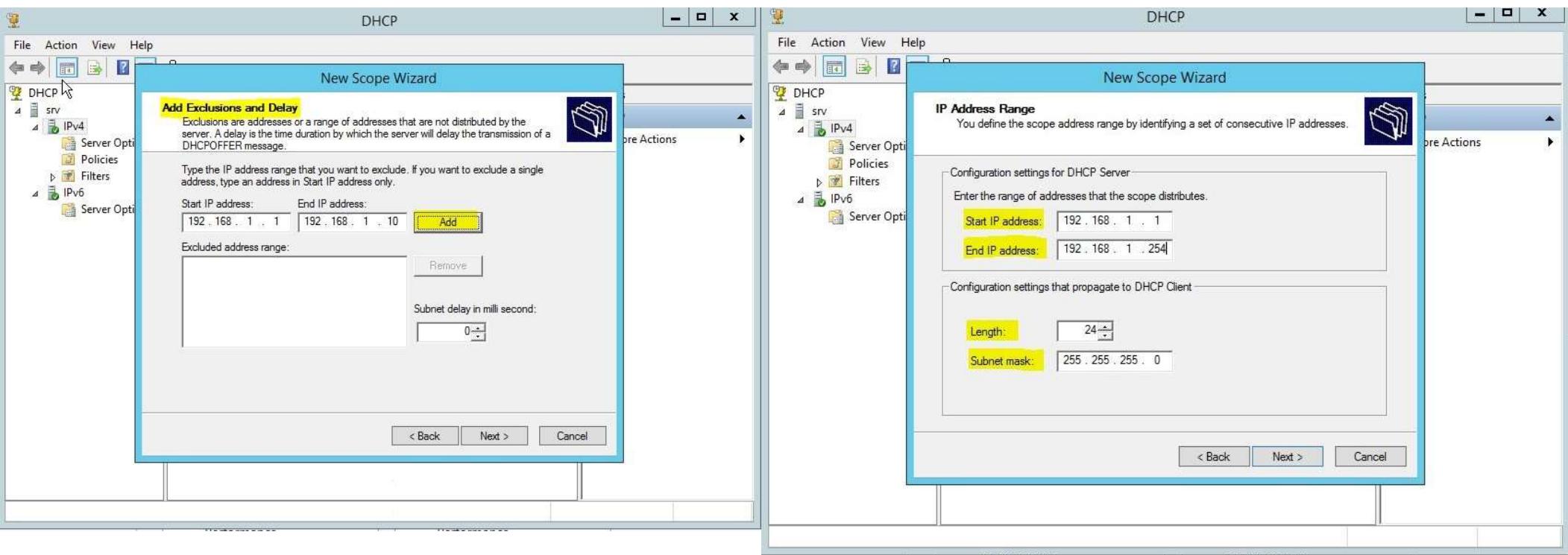
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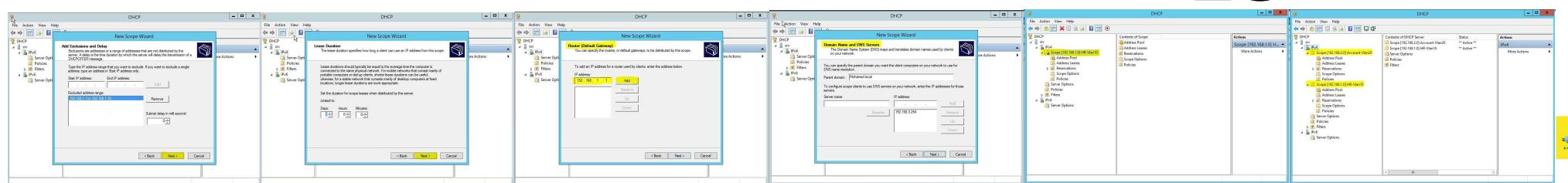


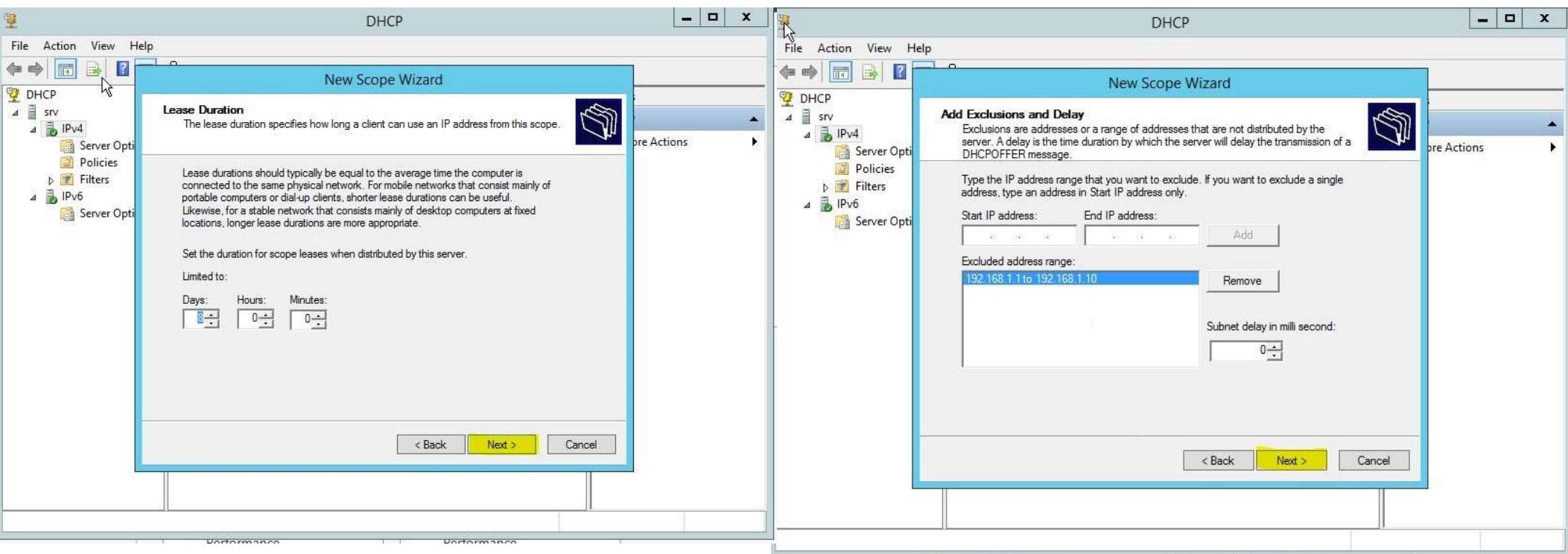
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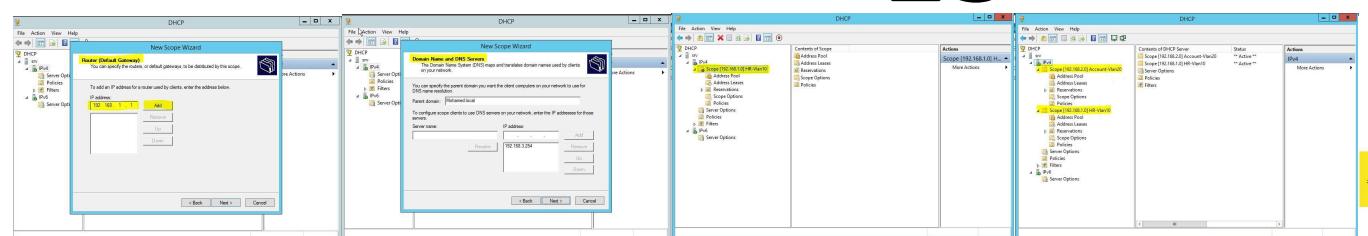
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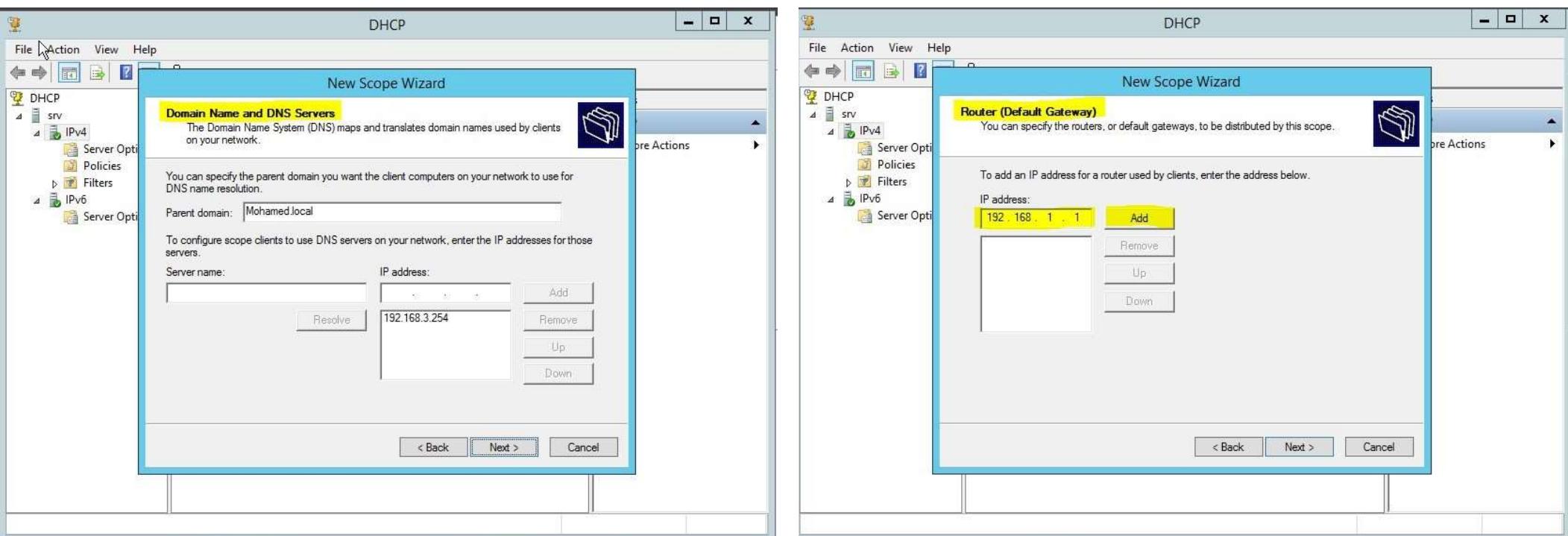




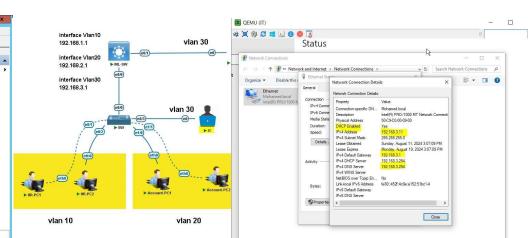
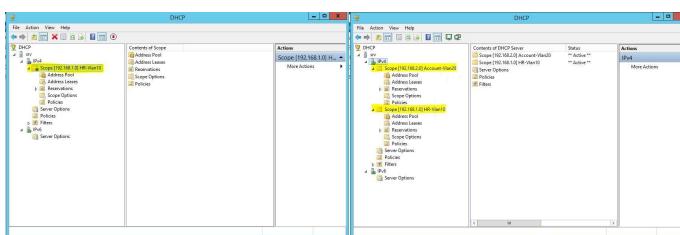
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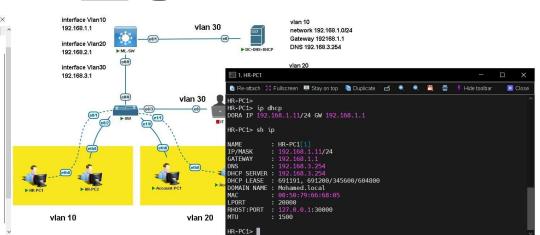


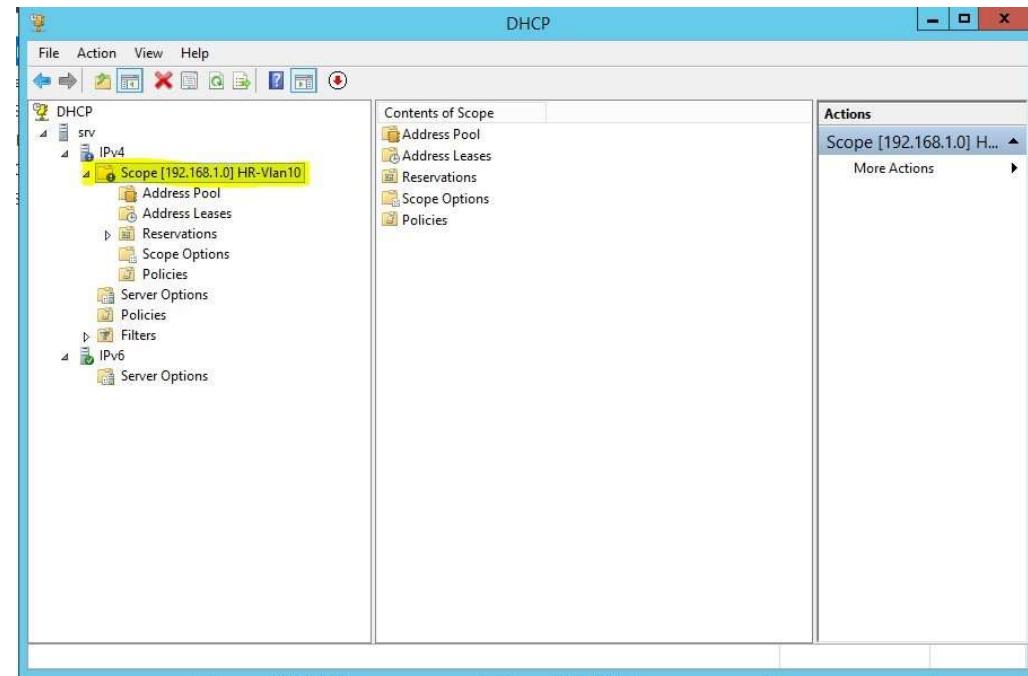
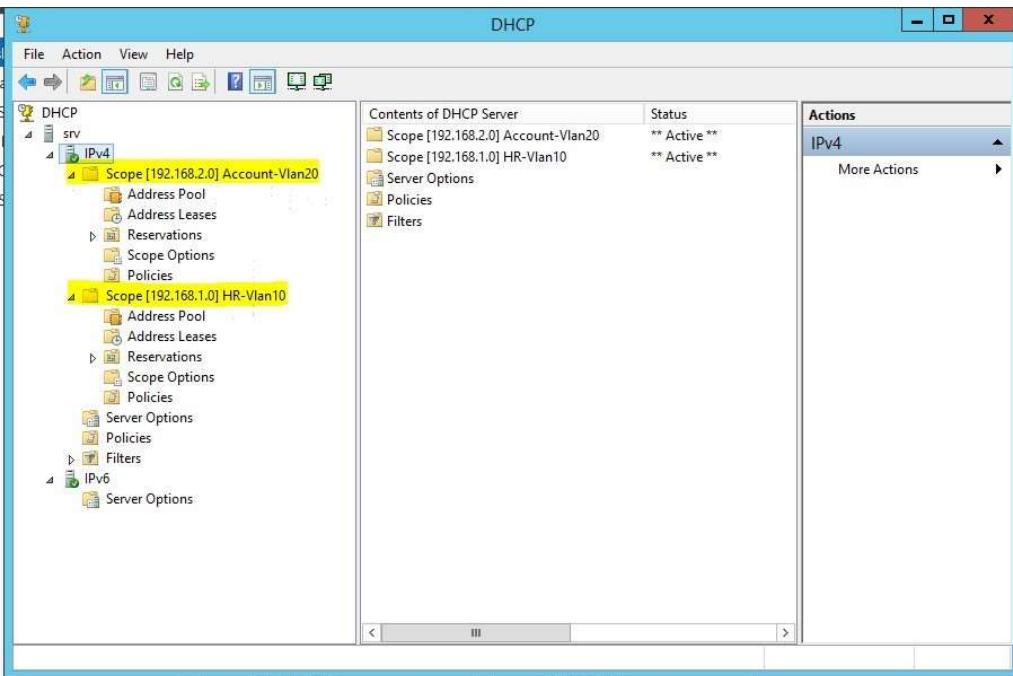


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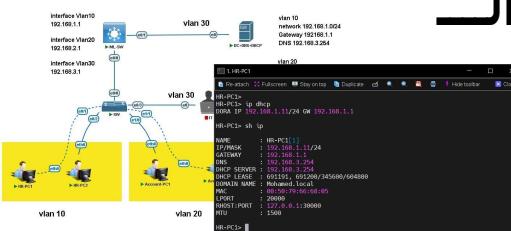
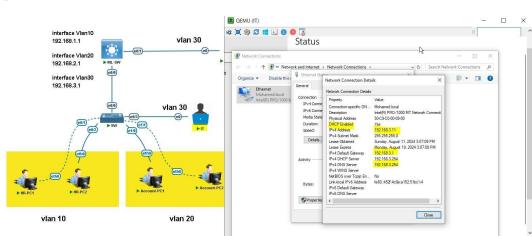


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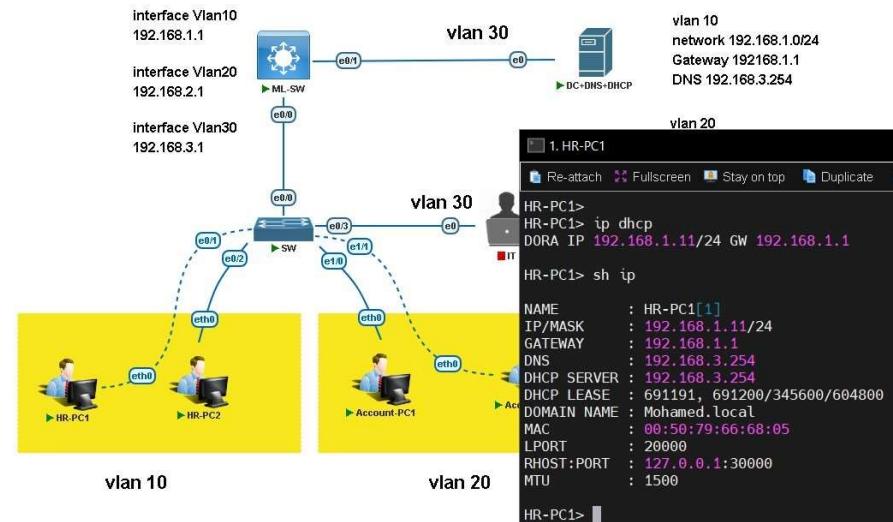


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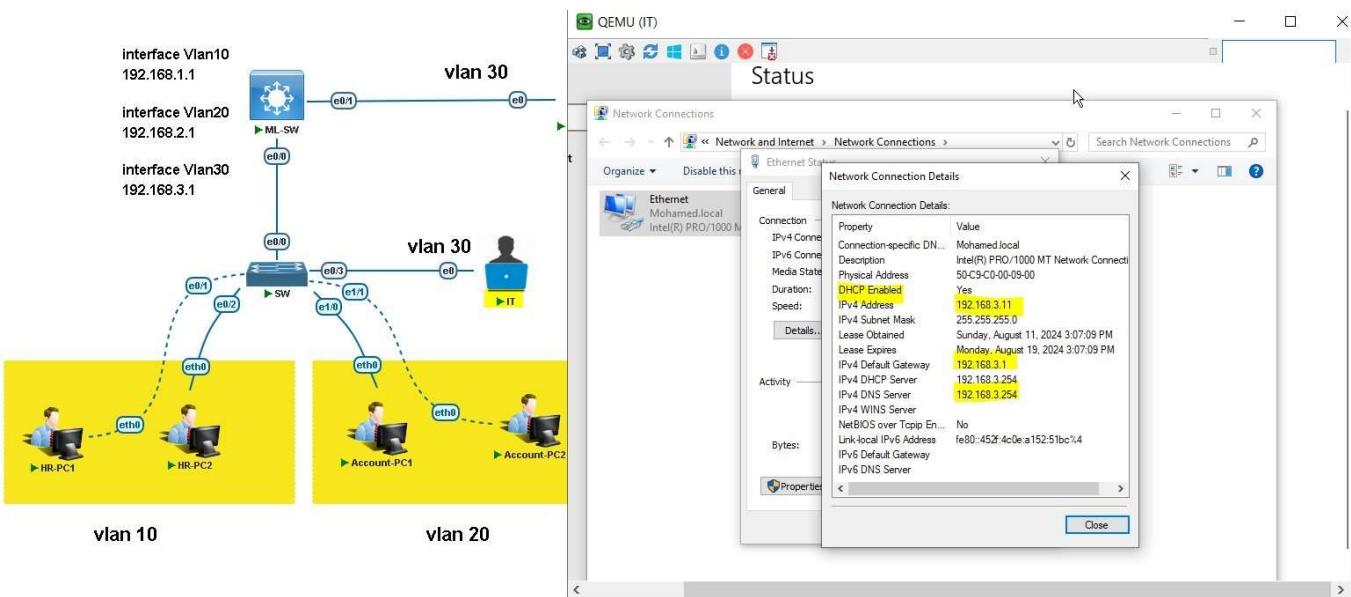


أيضاً لـ Scope ملحوظة : تم إضافة أيضاً-19
والنتيجة على جهاز DHCP على الـ 30 VLAN على الـ 30 VLAN التابع لـ VLAN

21-



-22

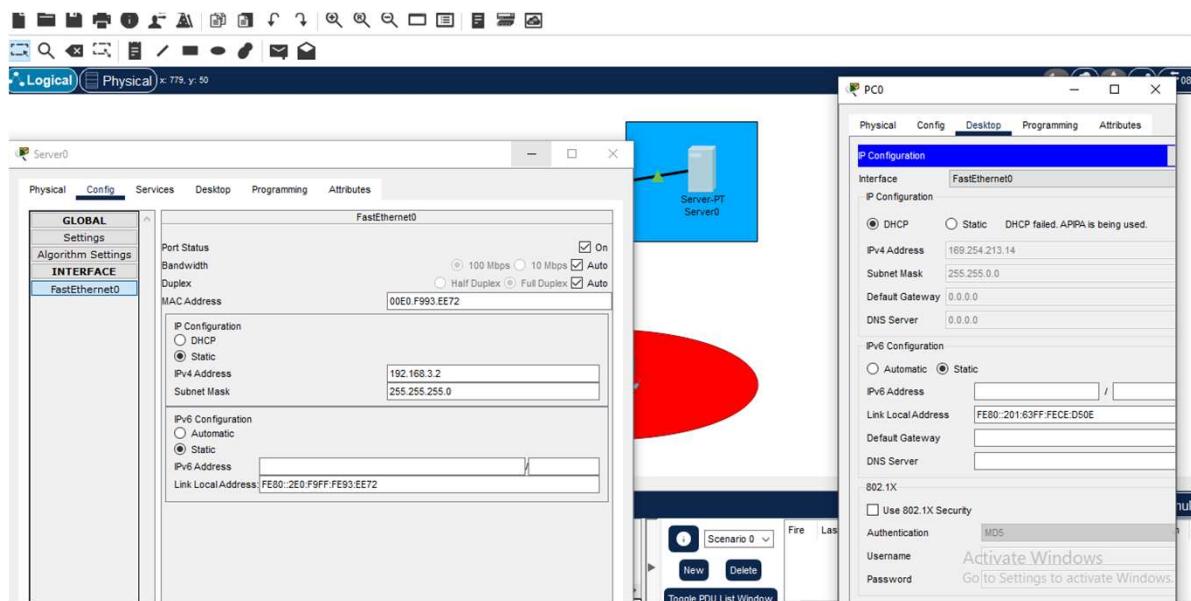


بعض المشاكل أثناء العمل وتشغيل الشبكة

1- عدم مقدرہ الجہاز PC0 علی
DHCP SERVER الی
لاخذ عنوان IP الحل الوحیل
pc0 هو الاستعانه بعنوان
APIPA

الحل

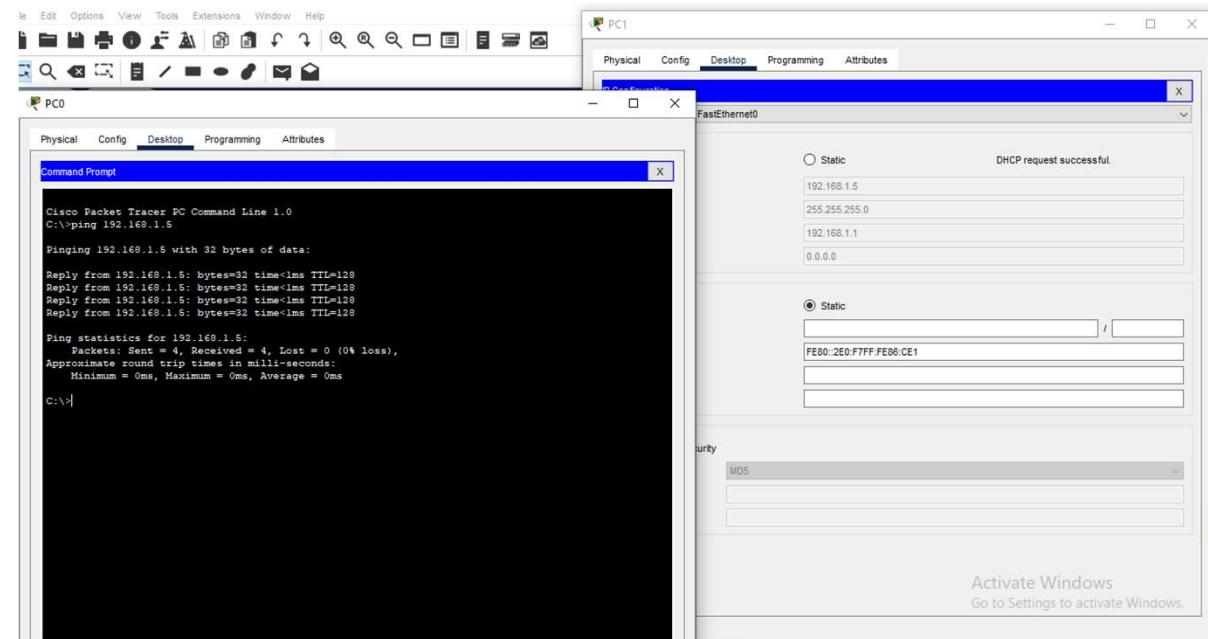
التاکد من جهاز السيرفر ان خدمه
تعمل التاکد من ان السيرفر
قد حصل على عنوان IP ستاتك
ومن نفس نطاق الشبکه



2- الهدف الاساسي لاي شبكة محلية هو مشاركه البيانات في هذه الحاله يحتاج الي ملفات من جهاز PC0 ولكن PC1 لا يستطيع رؤيه PC1
الحل

سوف نتأكد من ان PC1 قد حصل على عنوان IP من نفس الشبكة ونقوم بعمل PING من PC0 على PC1

نقوم بعمل PING على جهاز PC1 لنتأكد من رايته



** بفاد عناوين: IP**

-المشكلة: قد ينفد نطاق عناوين IP المتاحة على سيرفر DHCP ، مما يمنع الأجهزة الجديدة من الحصول على عنوان IP.
** الحل**

(Lease): توسيع نطاق عناوين IP المتاحة أو تقليل مدة تأجير العناوين
لتصبح العناوين غير المستخدمة متاحة بسرعة أكبر.

IP**-تعارض عناوين: 4.

-المشكلة: قد يحدث تعارض بين عناوين IP إذا كان هناك جهازان يحصلان على نفس العنوان.
** الحل**

: التأكد من أن جميع الأجهزة تستخدم DHCP للحصول على عناوين IP
وعدم تعيين عناوين IP ثابتة (Static IP) داخل نفس النطاق.

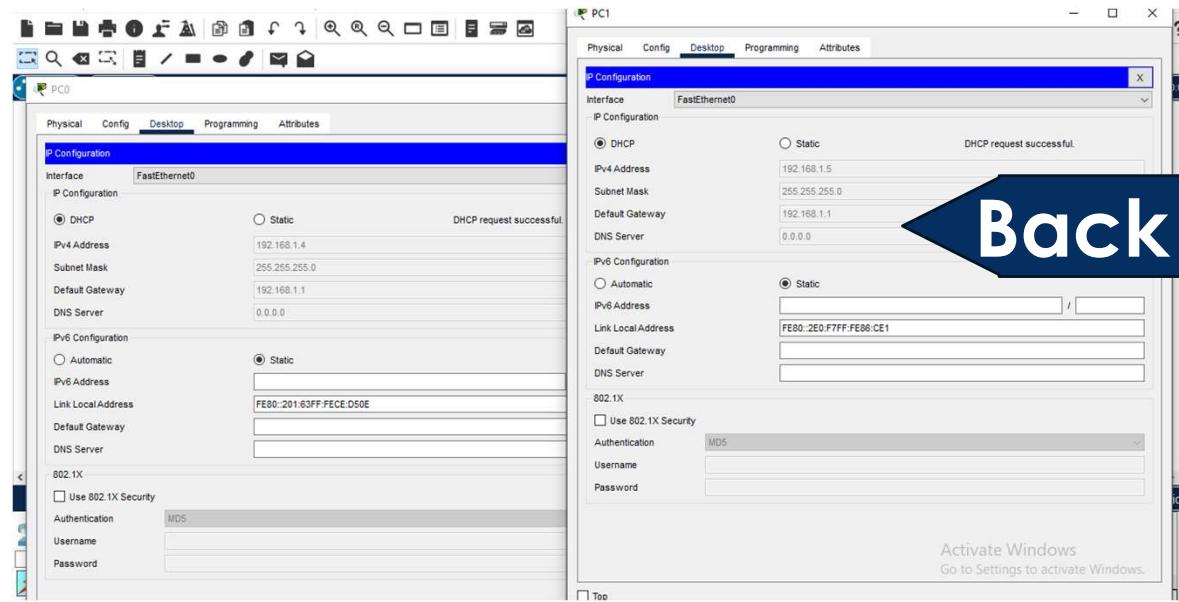
5.-عدم استجابة سيرفر: DHCP**

-المشكلة: قد يتوقف سيرفر DHCP عن الاستجابة بسبب مشاكل في الشبكة أو في السيرفر نفسه.
** الحل**

: التحقق من حالة السيرفر وإعادة تشغيله إذا لزم الأمر، والتأكد من أن السيرفر متصل بشكل صحيح بالشبكة.

6.-إعدادات DHCP غير صحيحة: **

-المشكلة: قد تكون إعدادات DHCP غير صحيحة، مثل نطاق العناوين أو إعدادات البوابة الافتراضية (Gateway) أو خوادم DNS.



: مراجعة إعدادات DHCP والتأكد من أنها تتوافق مع متطلبات الشبكة.

7.-مشاكل في الاتصال بالشبكة: **

-المشكلة: قد تواجه الأجهزة مشاكل في الاتصال بالشبكة بسبب مشاكل في الكابلات أو نقاط الوصول (Access Points).
** الحل**

: التتحقق من سلامة الكابلات والأجهزة المتصلة بالشبكة، وإعادة ضبط نقاط الوصول إذا لزم الأمر.

8.-تحديثات البرامج الثابتة: **(Firmware)

-المشكلة: قد تكون هناك مشاكل في البرامج الثابتة للأجهزة أو السيرفر.
** الحل**: التأكد من أن جميع الأجهزة وسيرفر DHCP محدثة بأحدث إصدارات البرامج الثابتة.



Support Troubleshooting Scenarios

Network Setup && Troublesh ooting



Network Setup and Troubleshooting

Operating System Installation, and Configuration



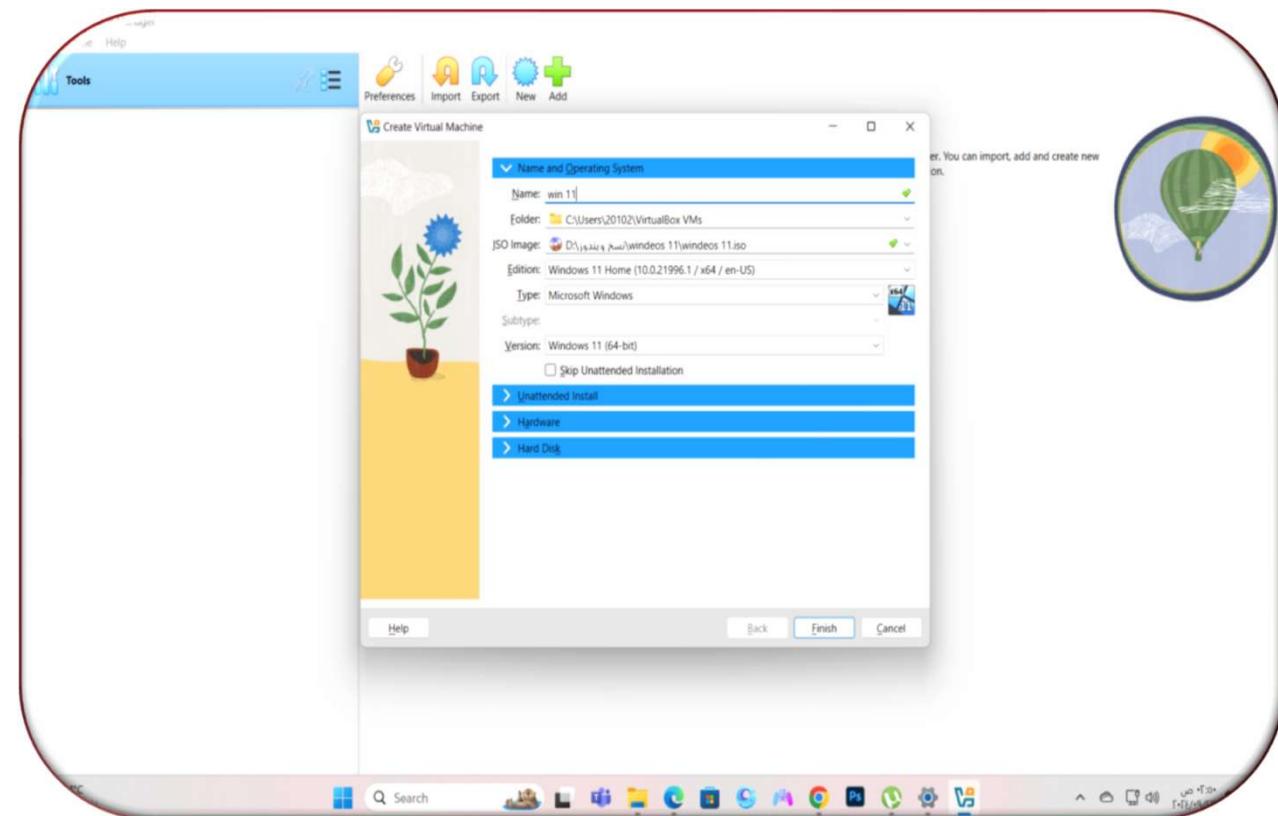
Operating System Installation and Configuration

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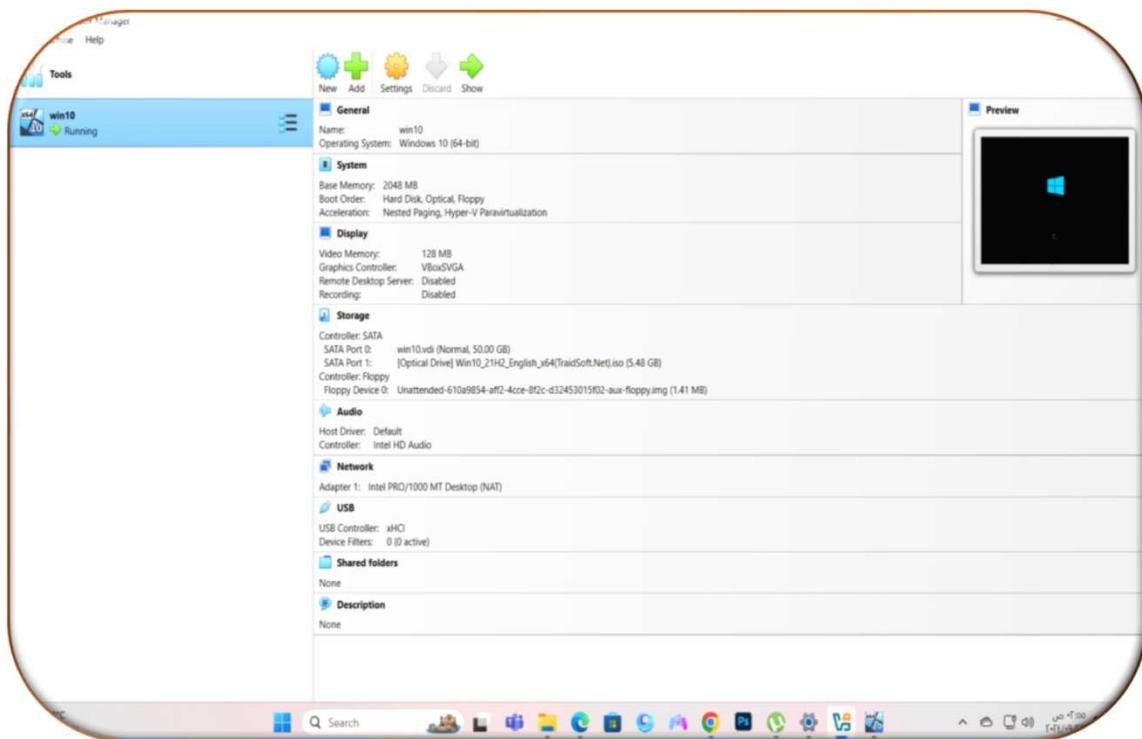


Windows 10 installation stages (vms) :

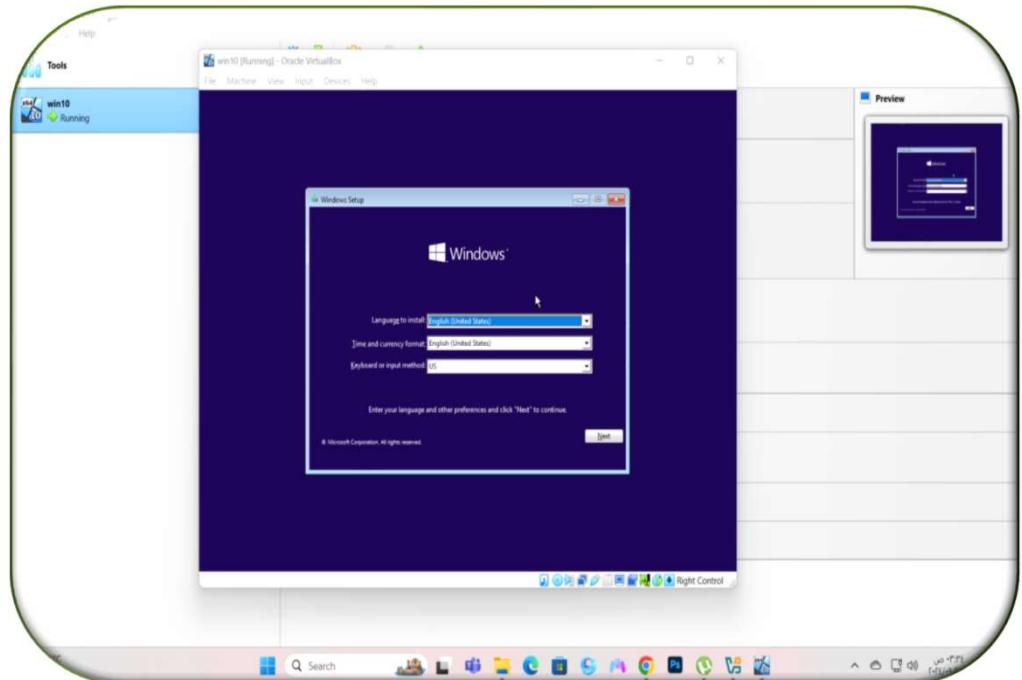
1- Select the ISO file from the files.



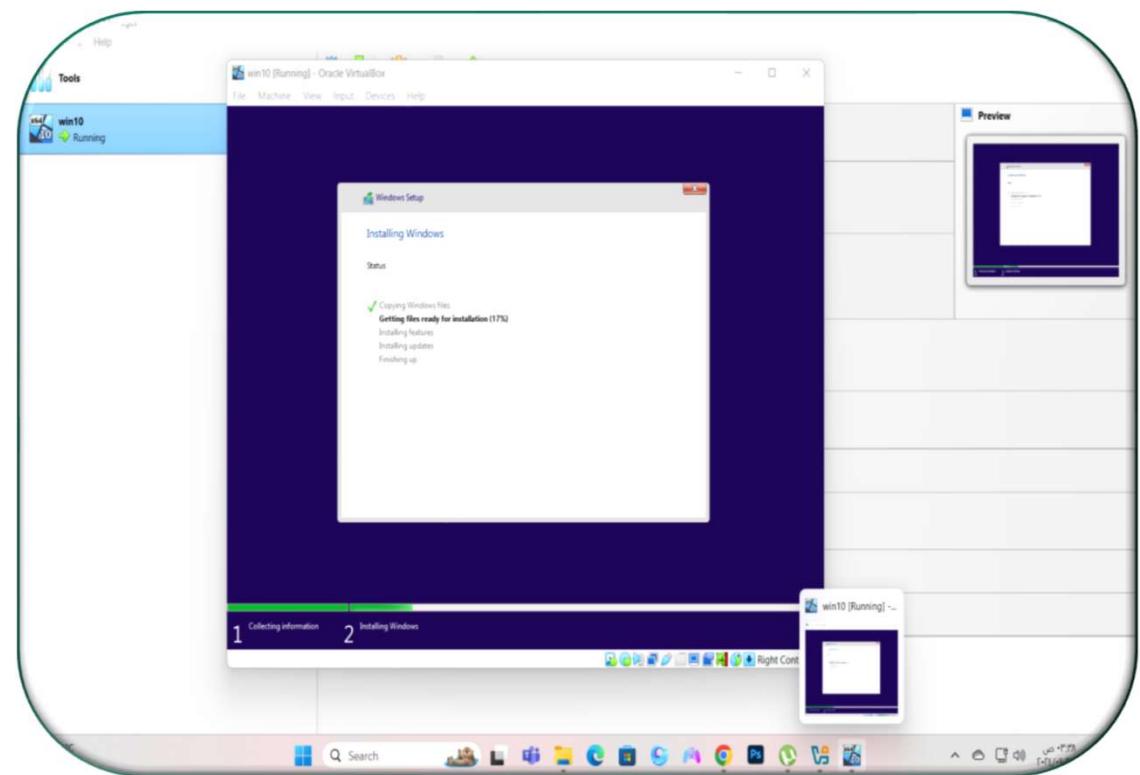
2- Adjust system settings



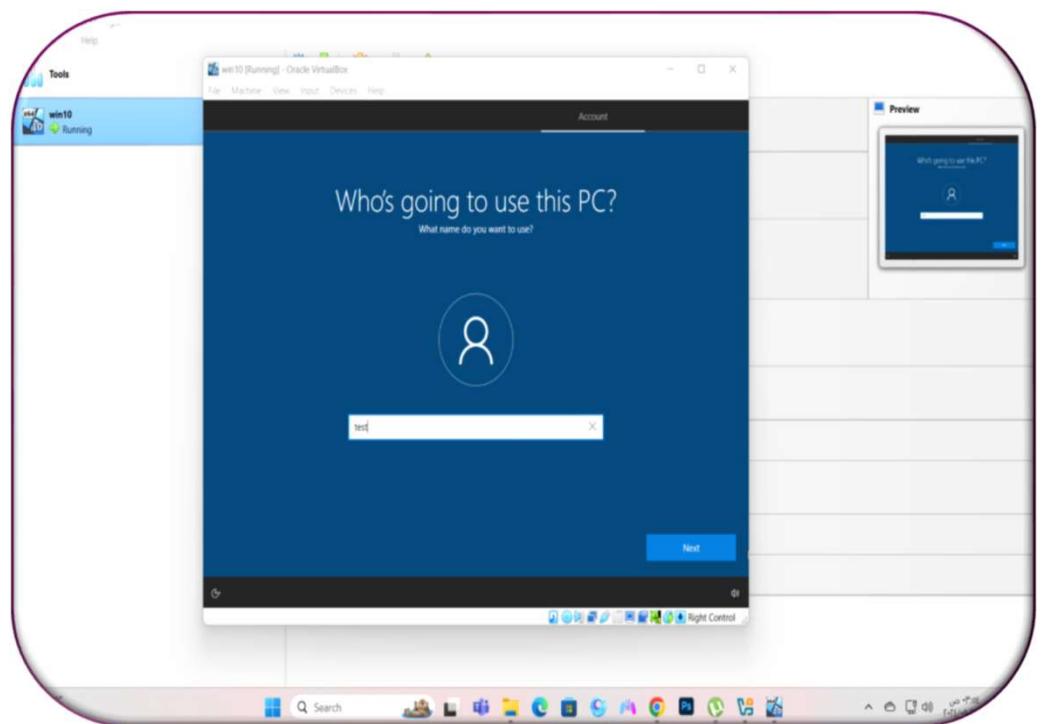
3- Select system languages



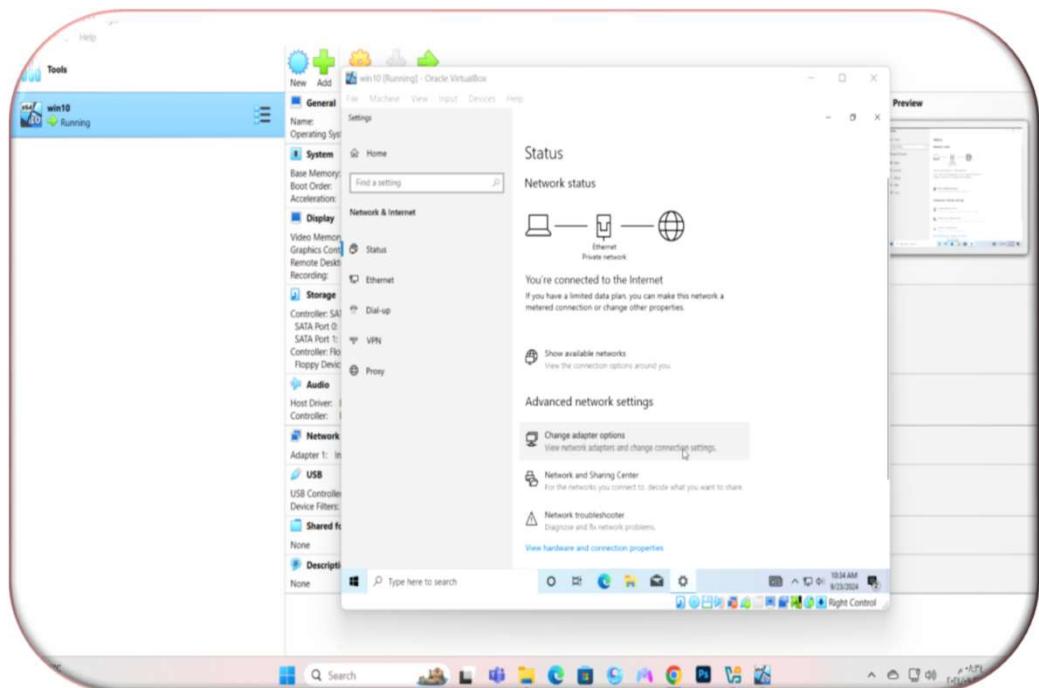
4- Start installing Windows



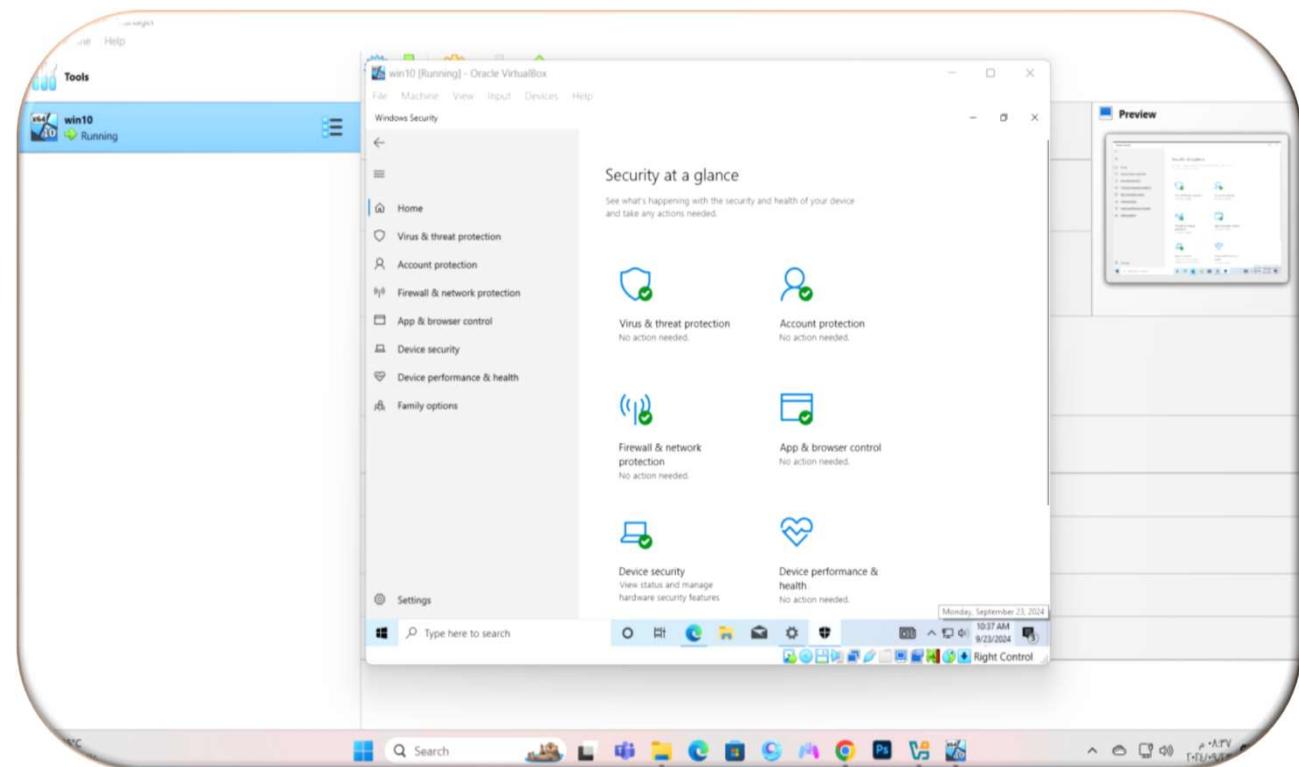
5- Choose an account name



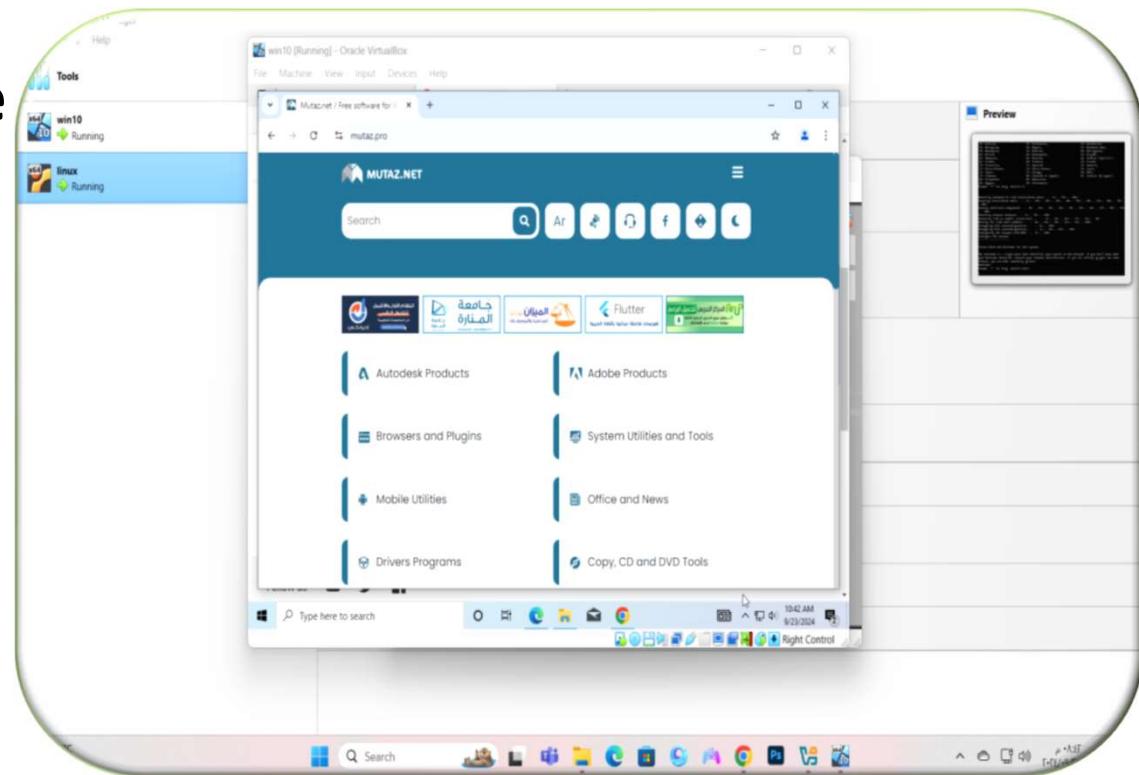
6- Check network settings



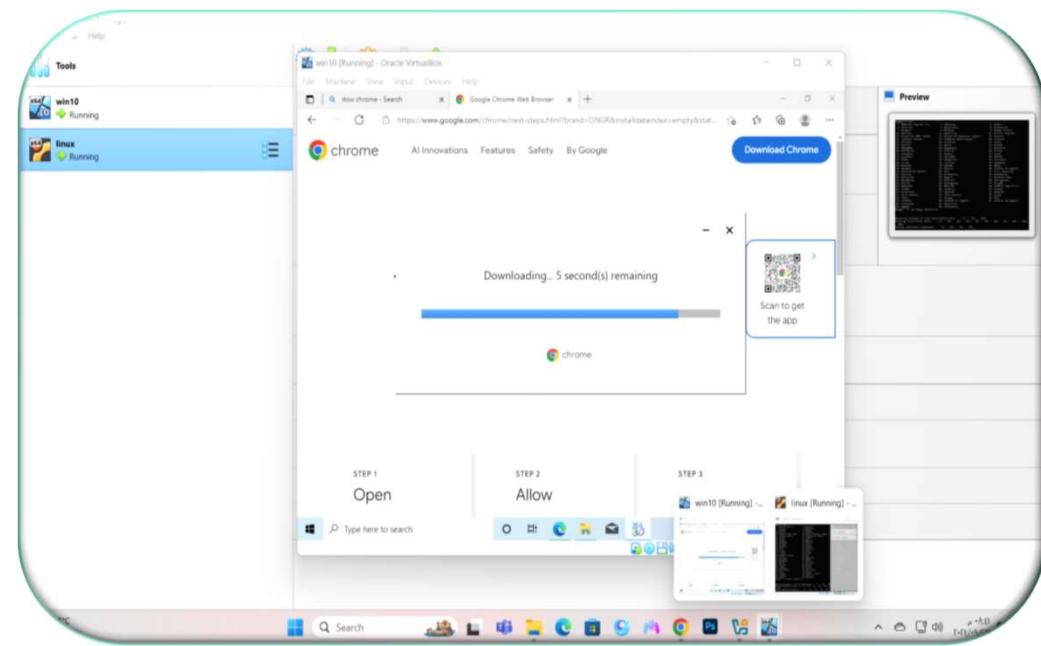
7- Check the protection system



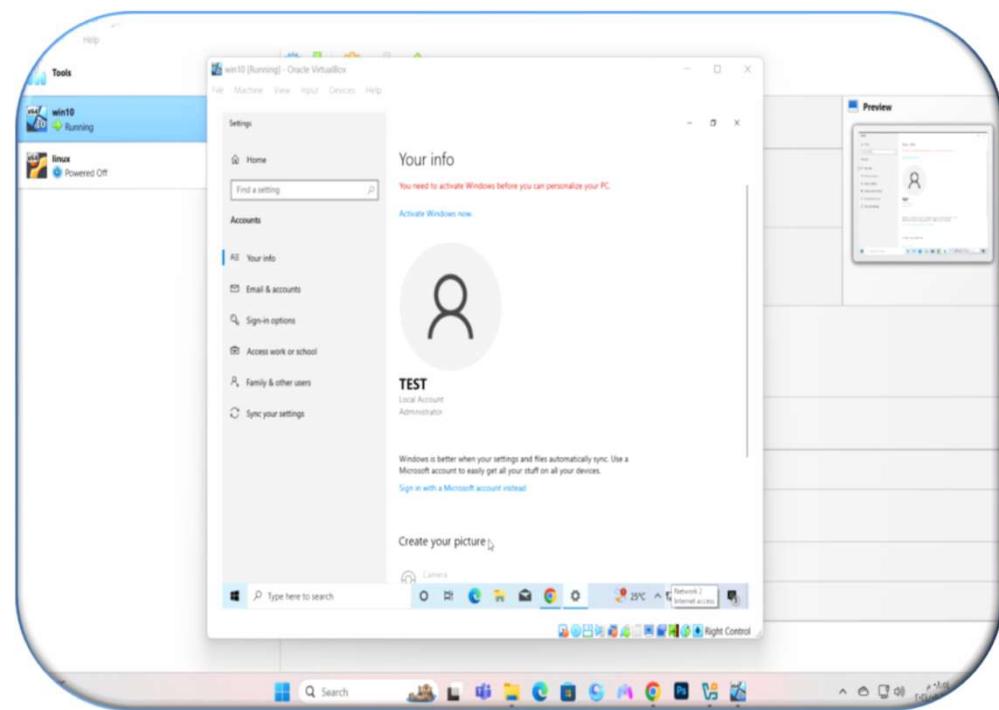
8- Download programs from the Internet to the system



9- Start installing software on the system

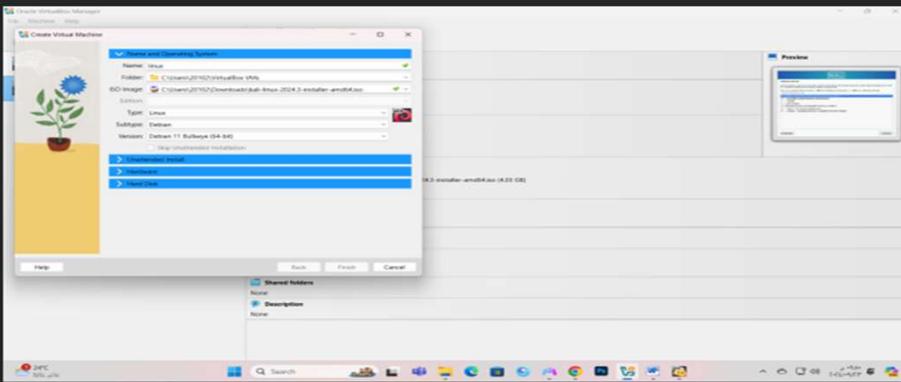


10- Log in to account settings

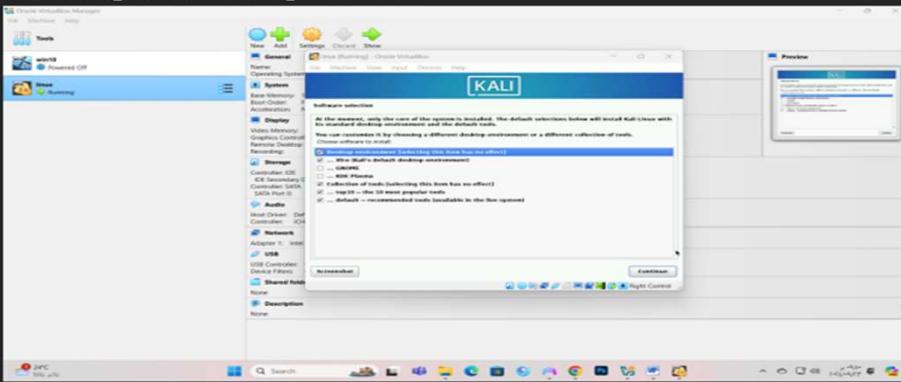


Kali linux Installation

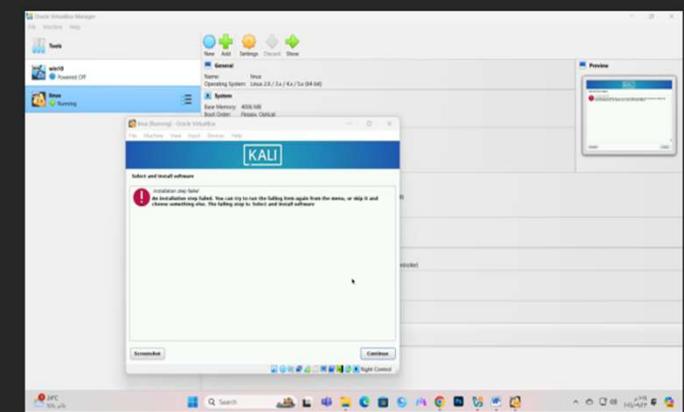
1 – Select the ISO file to start installing Linux



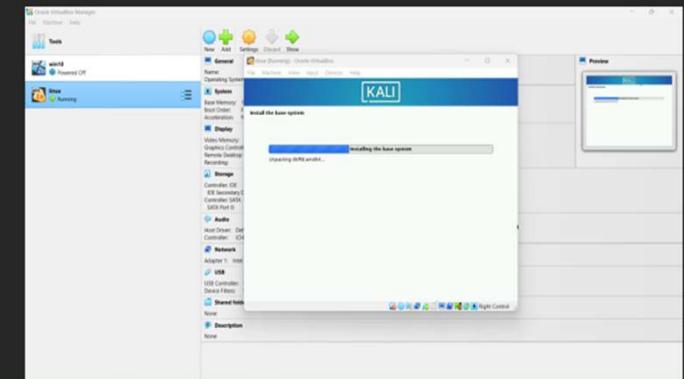
2 – Setting default settings for Linux



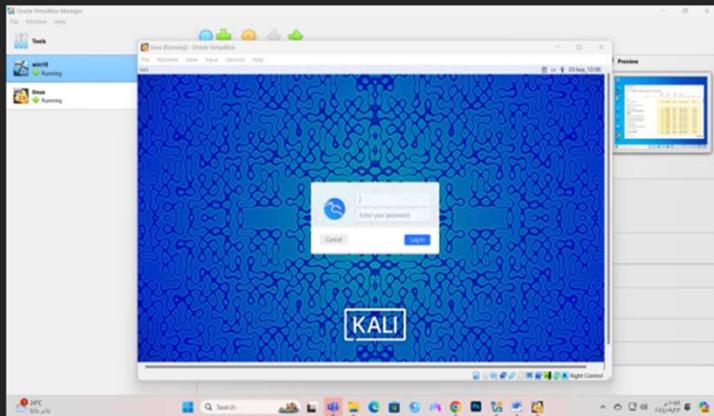
3 – Some problems that you may encounter while installing Linux are due to a problem with the space or RAM settings.



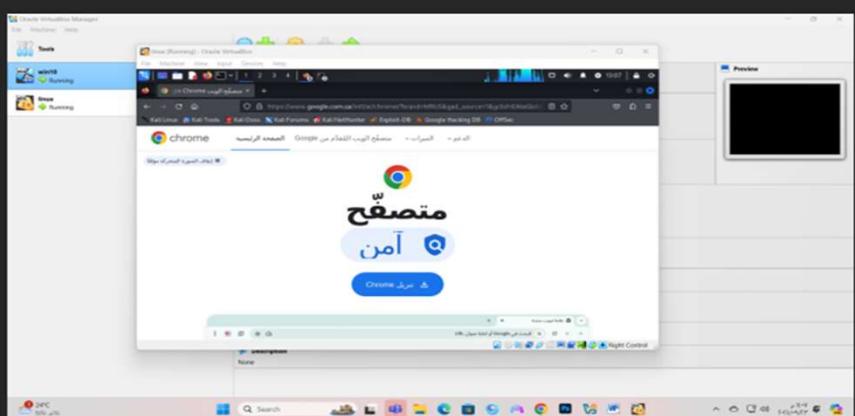
4- Waiting for the installation process after solving the previous problem.



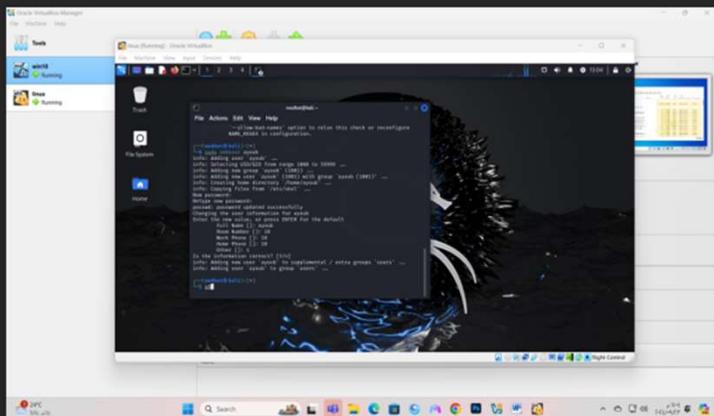
5- Linux login interface with username and password after installation.



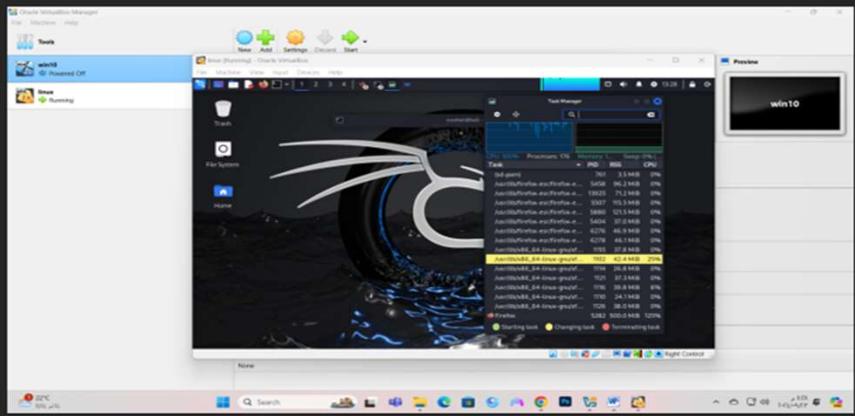
7- The process of downloading software from the Internet.



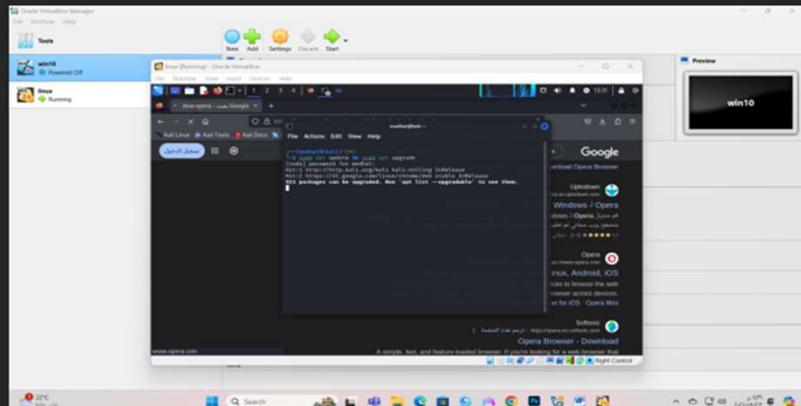
6- Start creating another account through the terminal.



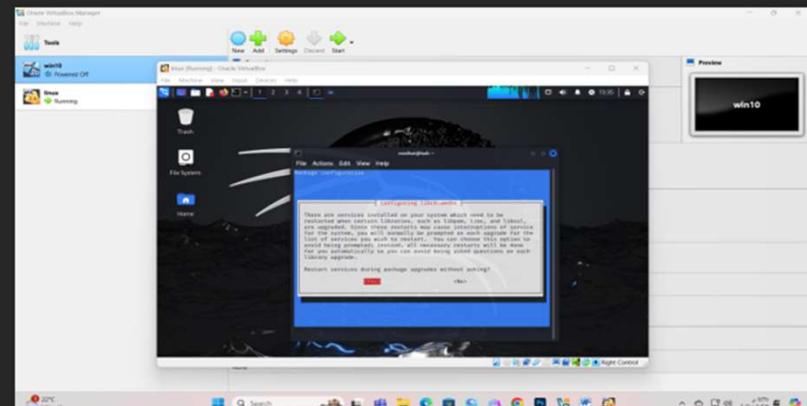
8- Verify system operation and check memory and processor.



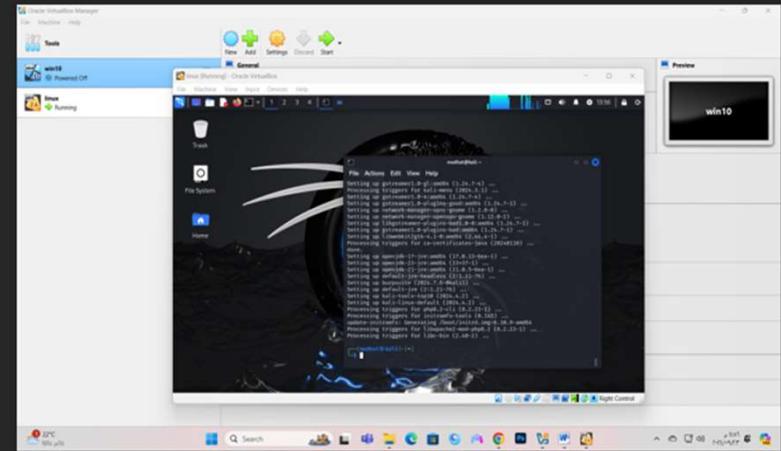
9- Give commands on the terminal to check for system and software updates.



10- Complete the software installation process.



11- System update check completed.



Project Overview

As the Senior Project Manager, I will lead the creation of user guides for operating system (OS) installation and configuration. The documentation will be split into three key deliverables:

1. Comprehensive OS Installation and Configuration User Guides
 2. Troubleshooting Guide for Common Setup Issues
 3. Final Review and Compilation into a Complete OS Installation and Configuration Package
-

1. User Guides for OS Installation and Configuration Objective

To create detailed, easy-to-follow guides that assist users in the complete installation and configuration of various operating systems.

Steps

Identify Target Operating Systems:

Determine the OS types (e.g., Windows, Linux, macOS) that will be included in the guide.

Document Pre-installation Requirements:

Include hardware requirements, necessary software tools (e.g., installation media), and preparatory steps such as backups.

Step-by-Step Installation Process:

Booting from Installation Media

Guide on creating bootable USB drives or CDs.

How to configure BIOS/UEFI settings to boot from installation media.

OS Installation Walkthrough

Screenshots and detailed instructions on each installation screen.

Language, time zone, disk partitioning, user account creation.

Initial OS Setup

Post-installation setup like updates, drivers, security settings, and performance tuning.

Deliverable

A User Guide for each OS, available in both PDF and online formats, complete with visuals, screenshots, and troubleshooting FAQs.

2. Troubleshooting Guide for Common Setup Issues

Objective

To provide users with a reference for resolving common issues during OS installation and configuration.

Steps

Identify Common Issues:

Gather data on the most frequent installation problems (e.g., partition errors, installation freezes, hardware compatibility issues).

Create Problem-Solution Scenarios:

Issue: Installation media not recognized.

Solution: Recreate bootable USB using recommended tools (e.g., Rufus), check BIOS settings.

Issue: Disk partitioning errors.

Solution: Use disk management tools to fix partition tables.

Issue: Drivers missing post-installation.

Solution: Guide to finding and installing drivers manually.

Escalation Tips:

Include steps for when issues cannot be resolved (e.g., contacting support or advanced recovery methods).

Deliverable

A Troubleshooting Guide in PDF format, categorized by error type and solution, with links to relevant sections of the User Guide.

3. Final Review and Compilation

Objective

To finalize all documentation, ensuring consistency, accuracy, and ease of use.

Steps

Internal Review:

Conduct a thorough review with the technical writing team and IT specialists to ensure all instructions are clear and accurate.

User Testing:

Have selected users test the guides to ensure usability and completeness.

Format Standardization:

Ensure consistent formatting across all guides (fonts, headings, visuals).

Compilation of Package:

Combine all guides (installation, configuration, and troubleshooting) into a cohesive OS Installation and Configuration Package.

PDF version.

Interactive online guide (optional).

Deliverable

A Complete OS Installation and Configuration Package, which includes:

Installation Guides

Troubleshooting Guide

Configuration Settings

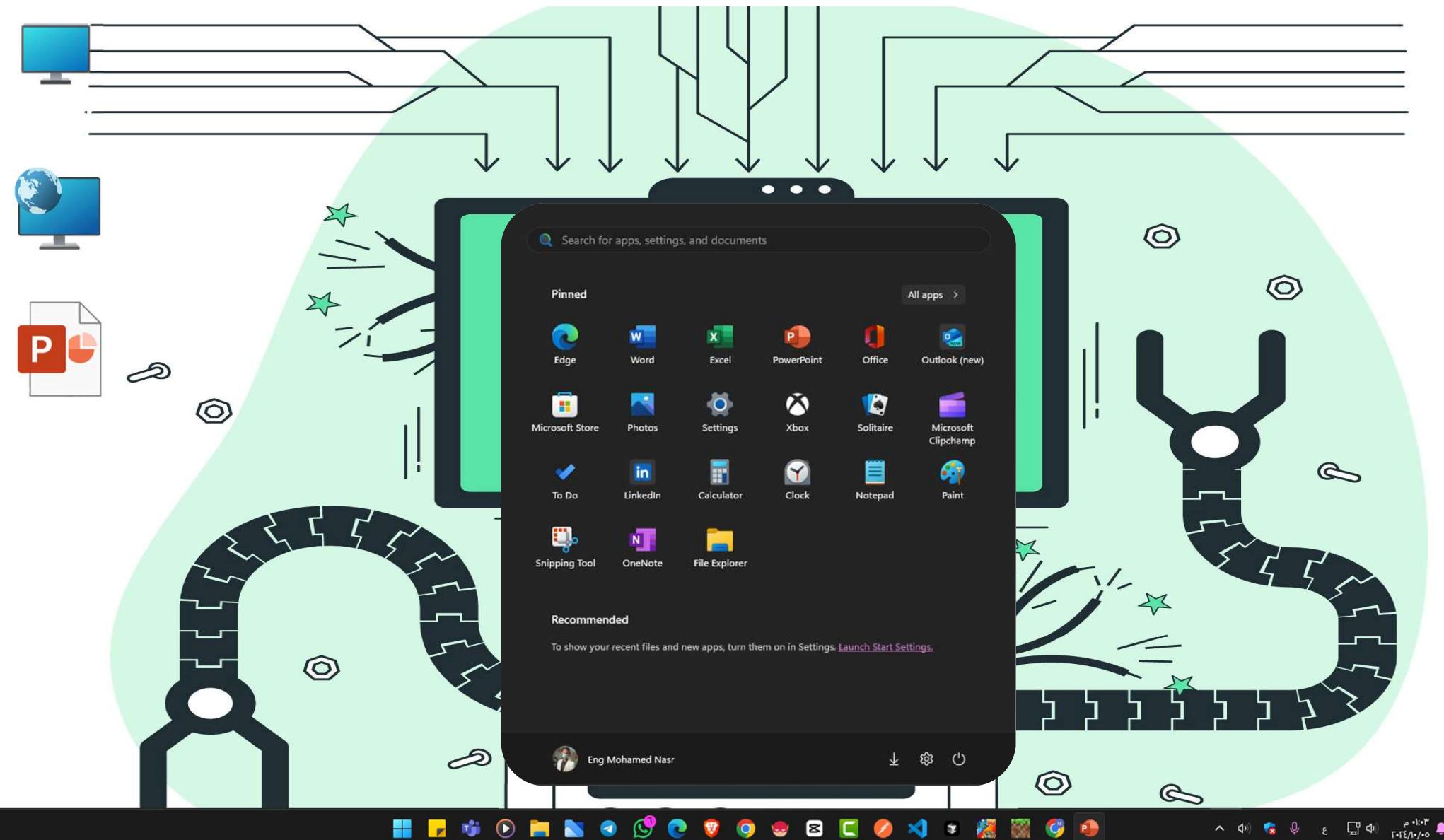
All files will be neatly organized, indexed, and accessible both offline and online.

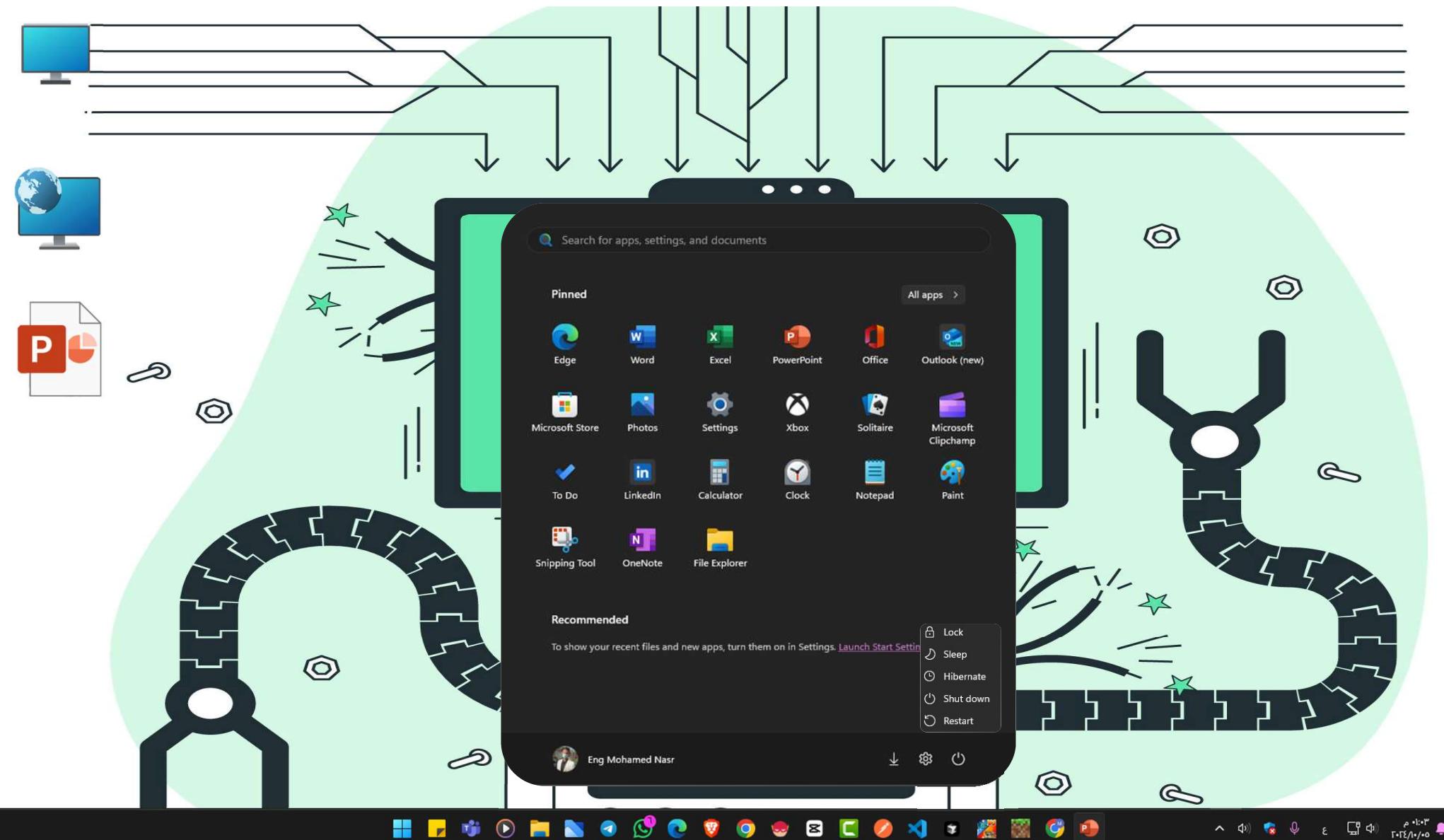
Exit



ERROR 429
TOO MANY REQUESTS







**Don't Turn Off Your
Computer Installing Updates**

