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### Lab #3

Setting up A SOHO network

Week #4/5

NACT-262 Fundamentals of System Administration

2025-2026 Fall Semester

Submitted by Jibreal Id-deen

Due by September 28, 2025

Professor Mark Jeremy

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# Lab #2- IPMI and Microsoft Window Server

## **OBJECTIVE**

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As independent working on this, I set up a SOHO LAN with a router and a Windows Server 2019 providing DNS/DHCP on 192.168.2XX.0/24 and deploy IIS on PC1 and PC2, then verify site access and A/PTR DNS lookups from a wired laptop.

# NETWORK DIAGRAM



Setting up a SOHO Network

NACT-262 Fundamentals of Systems  
Administration

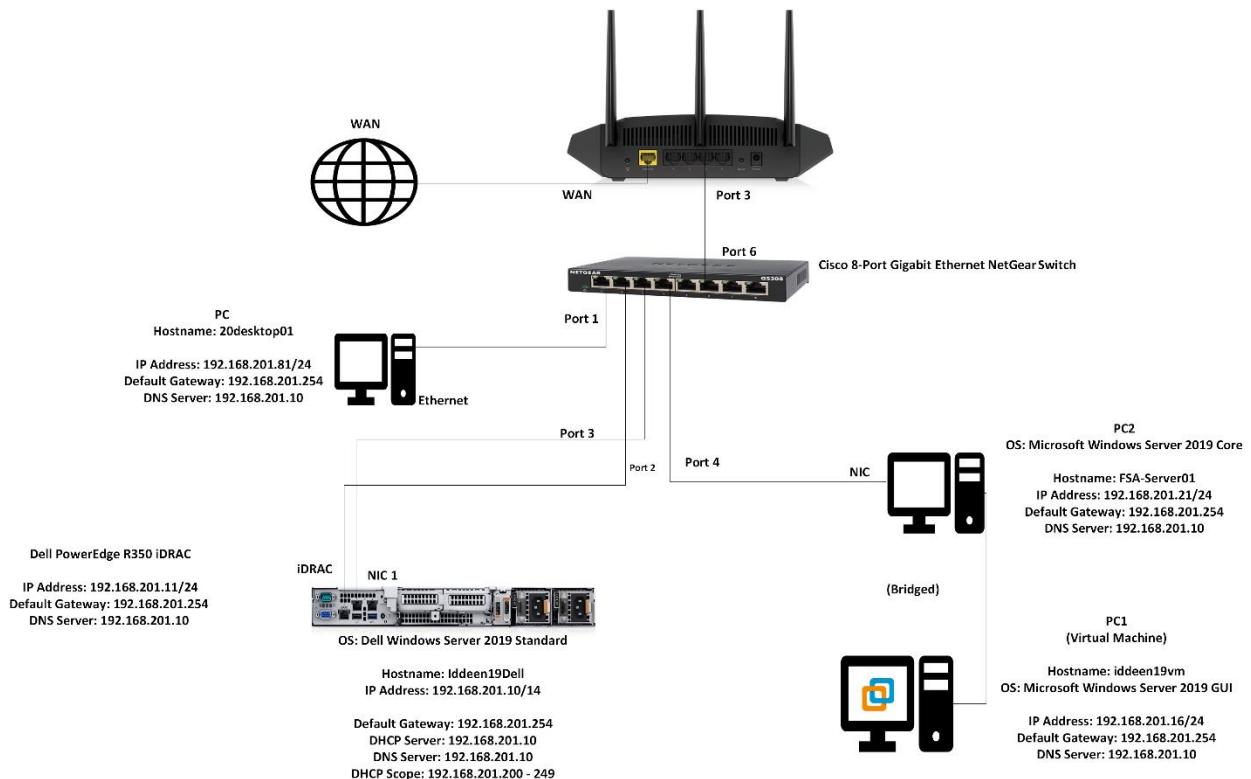
September 14, 2025

Jibreal Id-deen

Professor Mark Jeremy

NetGear AX1800 Wi-Fi Router

WAN IP Address: DHCP  
LAN IP Address: 192.168.201.254/24



Hostname	Iddeen19Dell
Virtual Machine or Physical?	Physical
Operating System	Windows Server 2019 Standard (GUI)
RAM size	128GB
HD size	4TB
IPMI IP Address (if none – remove line)	192.168.201.11
IPMI Gateway IP address (if none – remove line)	192.168.201.254
Ethernet #1 IP Address (if none – remove line)	192.168.201.10
Ethernet Gateway IP Address (if none – remove line)	192.168.201.254
Primary DNS IP Address (if none – remove line)	192.168.201.10
Network Services (if none – remove line)	DHCP Server, DNS Server

Hostname	iDRAC
Virtual Machine or Physical?	Physical
Operating System	iDRAC9 firmware
RAM size	128GB
HD size	4TB
IPMI IP Address (if none – remove line)	192.168.201.11
IPMI Gateway IP address (if none – remove line)	192.168.201.254
Primary DNS IP Address (if none – remove line)	192.168.201.10
Network Services (if none – remove line)	Remote Management

Hostname	Iddeen19vm
Virtual Machine or Physical?	Virtual Machine (VMware Workstation, Bridged)
Operating System	Windows Server 2019 Standard (GUI)
RAM size	32GB
Ethernet #1 IP Address (if none – remove line)	192.168.201.16
Ethernet Gateway IP Address (if none – remove line)	192.168.201.10
Primary DNS IP Address (if none – remove line)	192.168.201.10
Network Services (if none – remove line)	IIS (custom homepage)

Hostname	FSA-Server01
Virtual Machine or Physical?	Physical
Operating System	Windows Server 2019 Standard Core
RAM size	32GB
HD size	950GB
Ethernet #1 IP Address (if none – remove line)	192.168.201.21
Ethernet Gateway IP Address (if none – remove line)	192.168.201.254
Primary DNS IP Address (if none – remove line)	192.168.201.10
Network Services (if none – remove line)	IIS (custom homepage)

## **PROCEDURE**

---



**FIGURE 1 - TYPE THE ROUTER'S LOGIN WEBSITE**

**For the fastest set up, download the Nighthawk app  
from [Nighthawk-App.com](http://Nighthawk-App.com)**

Go to Nighthawk-App.com and download the Nighthawk app on your mobile phone or tablet device using a mobile data connection to complete your Wi-Fi network set up.



**FIGURE 2 - CLICK HERE TO PROCCED**

# NETGEAR® AX1800 WiFi Router R6700AX



## Welcome

Let's set up your router.

Make sure that your router is connected to Internet with an Ethernet cable to continue.

NEXT

**FIGURE 3 - CLICK "NEXT"**

## Admin Account Settings

The admin password is used to log in to your router's web interface. Secure your Network by changing the admin password.

Username	<input type="text" value="admin"/>	New Password	<input type="password" value="*****"/>	
			<input type="password" value="*****"/>	
		Confirm New Password	<input type="password" value="*****"/>	
			<input type="password" value="*****"/>	

**FIGURE 4 - SET THE NEW PASSWORD**

# **NETGEAR® AX1800 WiFi**

## Router R6700AX



Firmware Updating



Please Wait

**FIGURE 5 - FIRMWARE UPDATING**

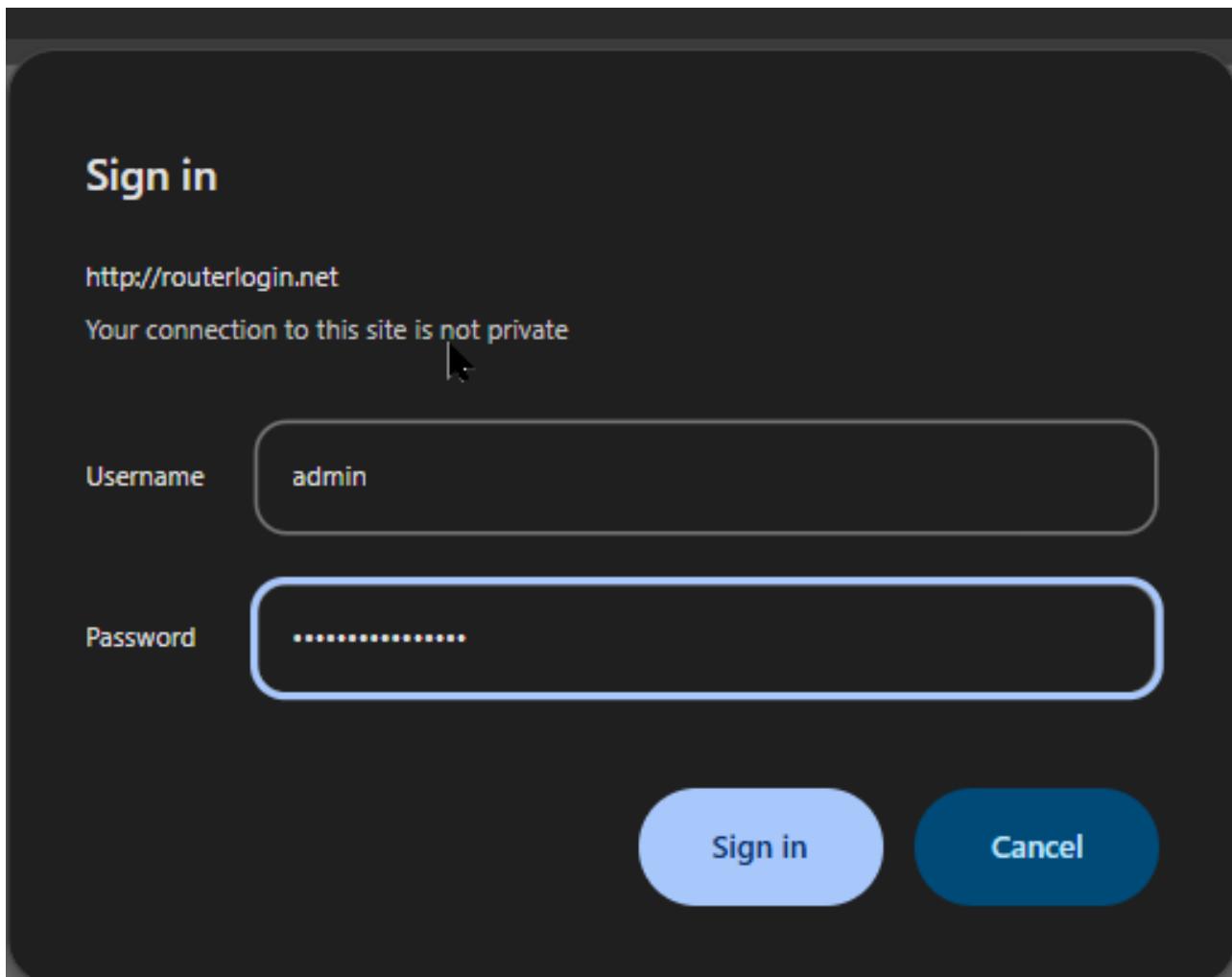


FIGURE 6 - LOG IN THE ROUTER ACCOUNT

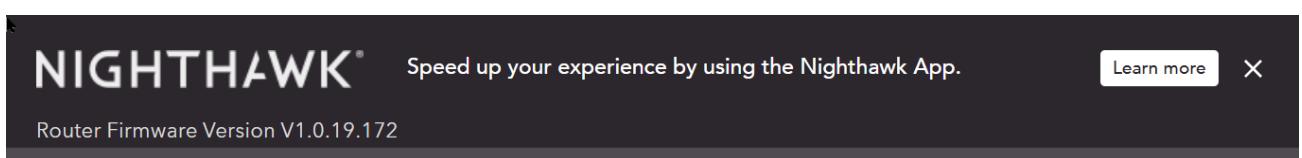
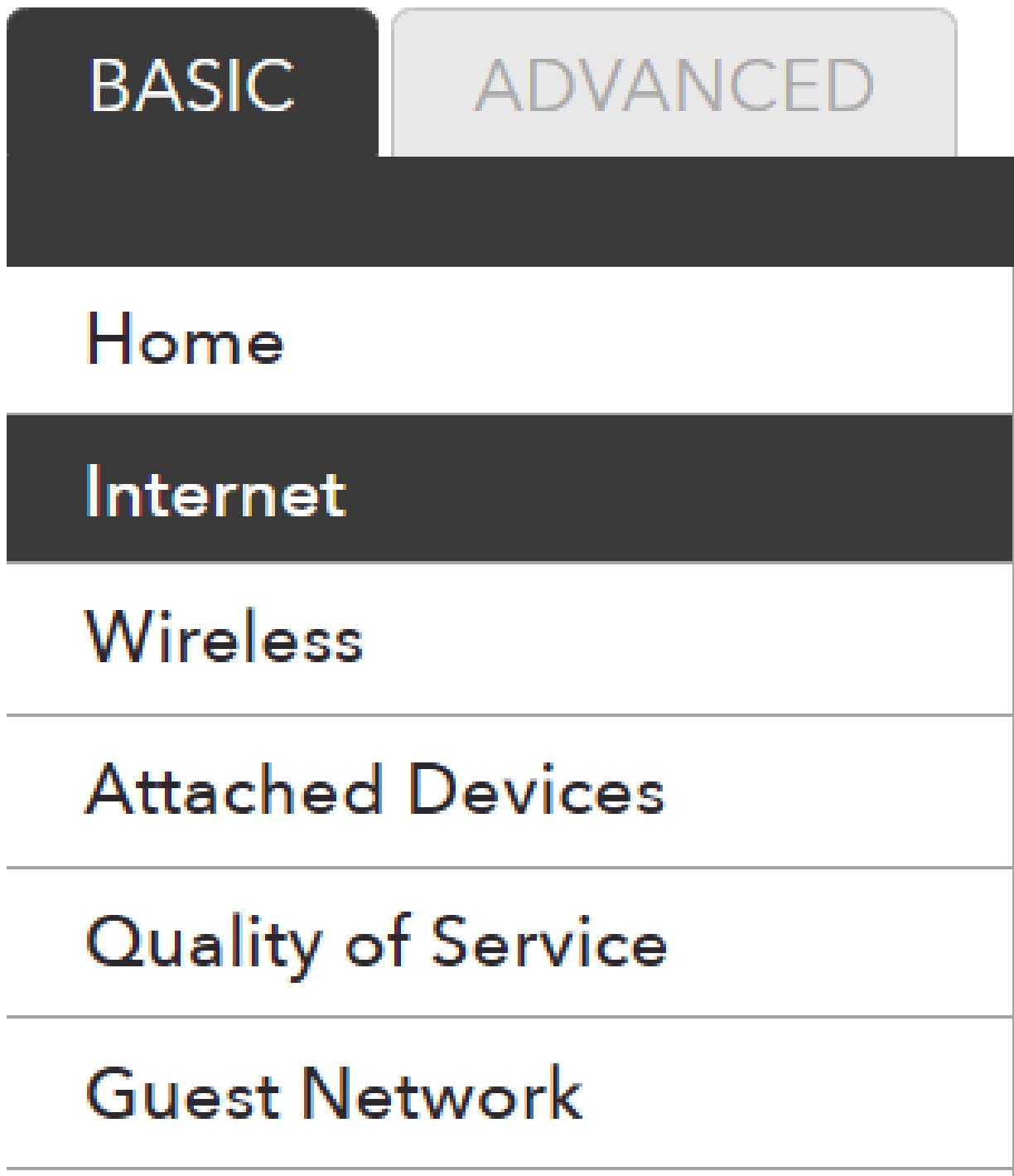


FIGURE 7 - THE OVERVIEW OF THE ROUTER DASHBOARD



**FIGURE 8 - CLICK "BASIC" THEN "INTERNET"**

- Get Dynamically from ISP

- Use Static IP Address

IP Address:

10 . 1 . 20 . 174

**FIGURE 9 - CHECK THE ROUTER'S WAN IP ADDRESS**

---

Setup

---



Internet Setup

Wireless Setup

Guest Network

WAN Setup

LAN Setup

QoS Setup

Device Name

---

**FIGURE 10 - CLICK "LAN SETUP"**

# LAN TCP/IP Setup



IP Address:

192 . 168 . 1 . 1

\_\_\_\_\_

IP Subnet Mask:

255 . 255 . 255 . 0

\_\_\_\_\_

**FIGURE 11 - CHECK THE ROUTER'S LAN IP TO CHANGE**

## LAN TCP/IP Setup

IP Address:

192 . 168 . 201 . 254

\_\_\_\_\_

IP Subnet Mask:

255 . 255 . 255 . 0

\_\_\_\_\_

**FIGURE 12 - DONE CHANGING THE LAN IP ADDRESS**



Use Router as DHCP Server



**FIGURE 13 - DISABLE THE DHCP SERVER**



Apply

**FIGURE 14 - APPLY IT**

**BASIC**

**ADVANCED**

**Home**

**Internet**

**Wireless**

**Attached Devices**

**Quality of Service**

**Guest Network**

**FIGURE 15 - CLICK "WIRELESS"**

## Wireless Network (2.4GHz b/g/n/ax)

- Enable SSID Broadcast
- Enable 20/40 MHz Coexistence

**FIGURE 16 - DISABLE WI-FI (2.4GHz)**

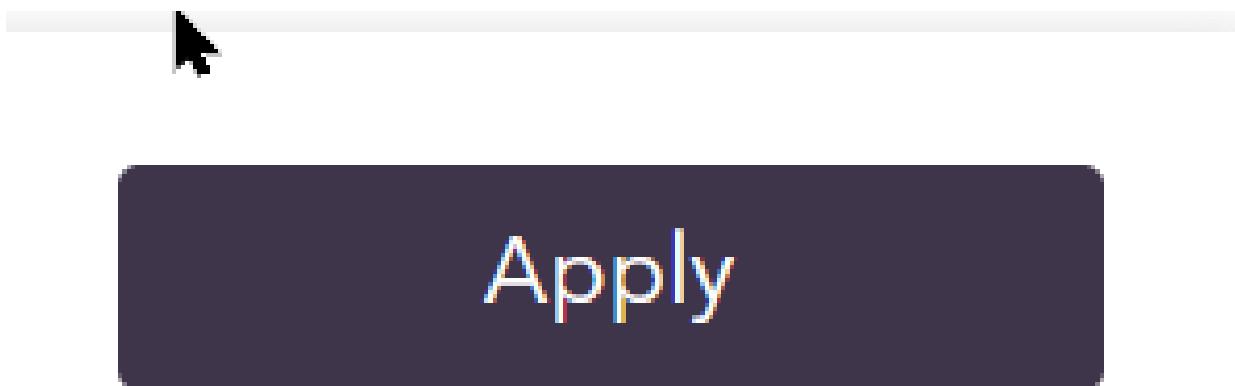
## Wireless Network (5GHz 802.11a/n/ac/ax)

- Enable SSID Broadcast

Name (SSID):

NETGEAR17-5G

**FIGURE 17 - DISABLE WI-FI (5GHZ)**



**FIGURE 18 - APPLY IT**

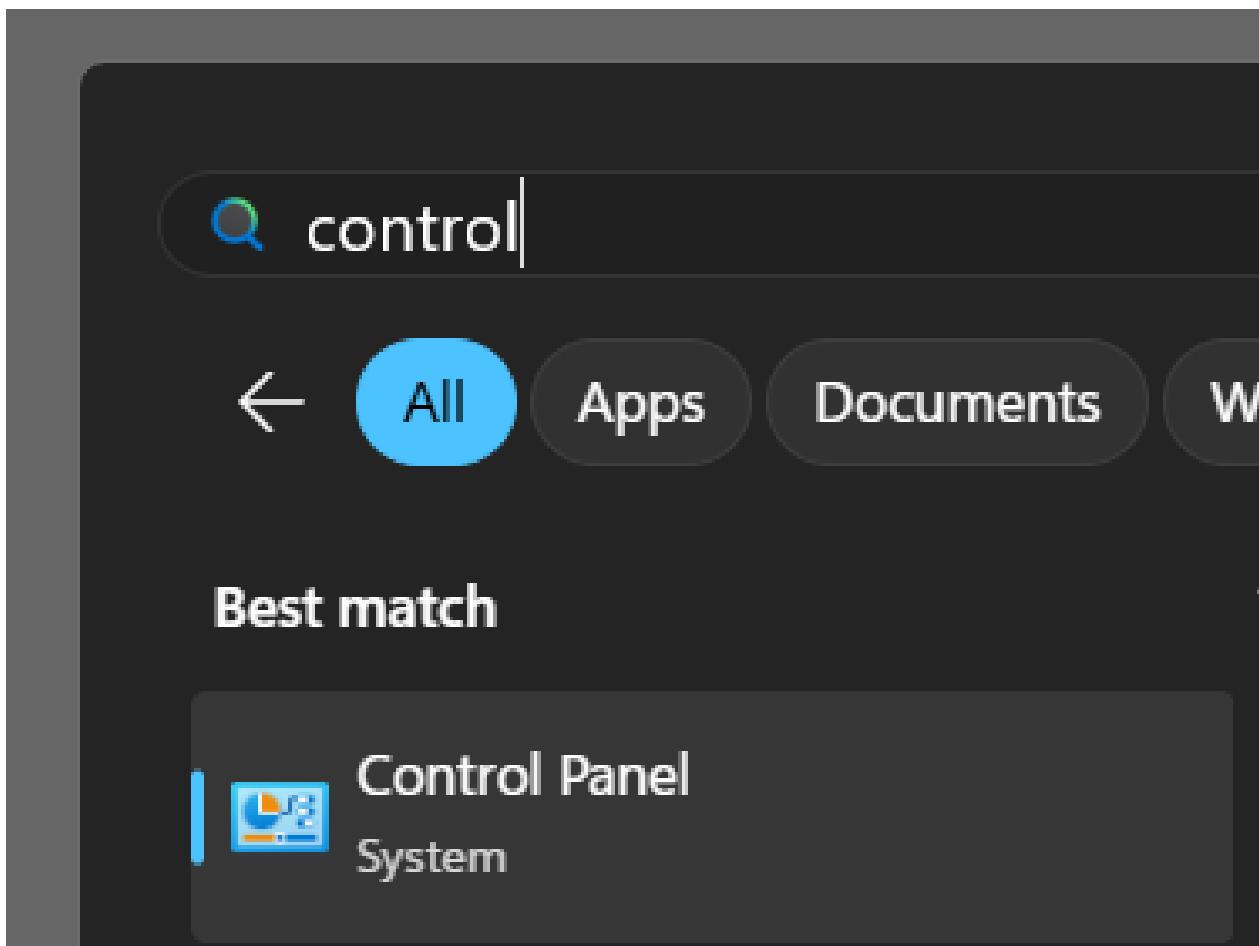


FIGURE 19 - TYPE "CONTROL PANEL" TO ENTER

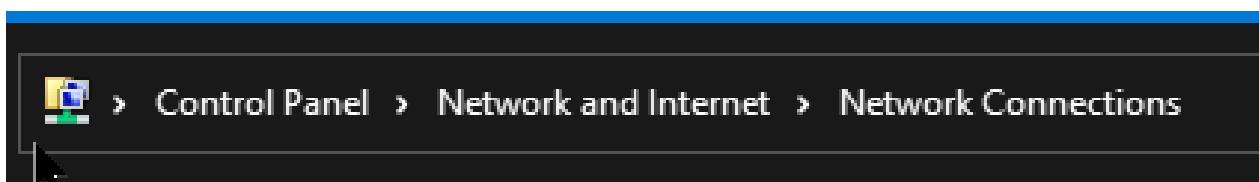


FIGURE 20 - FOLLOW THE PROCESS TO NETWORK CONNECTIONS

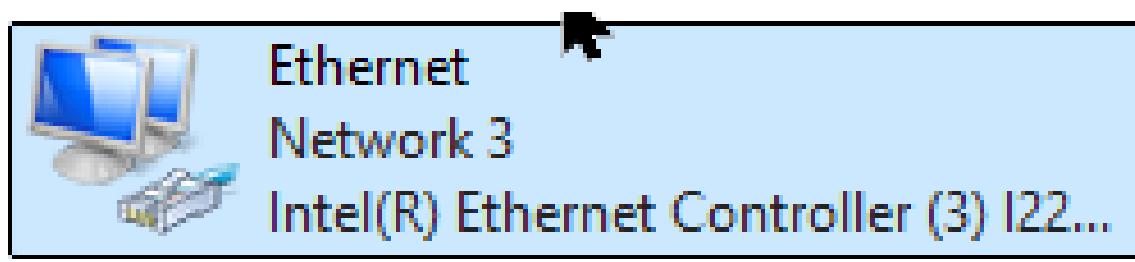


FIGURE 21 - CLICK THIS "ETHERNET"

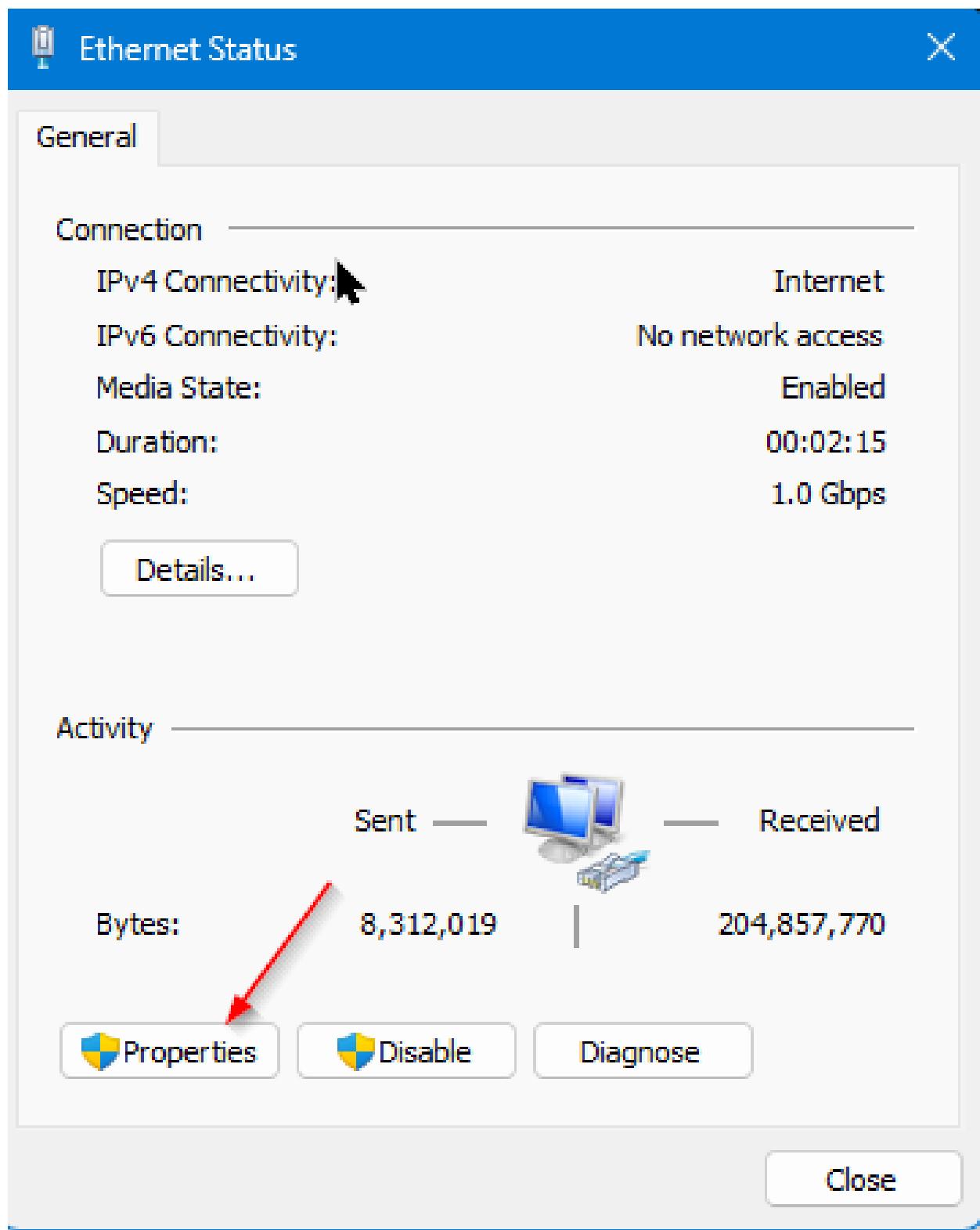


FIGURE 22 - CLICK "PROPERTIES"

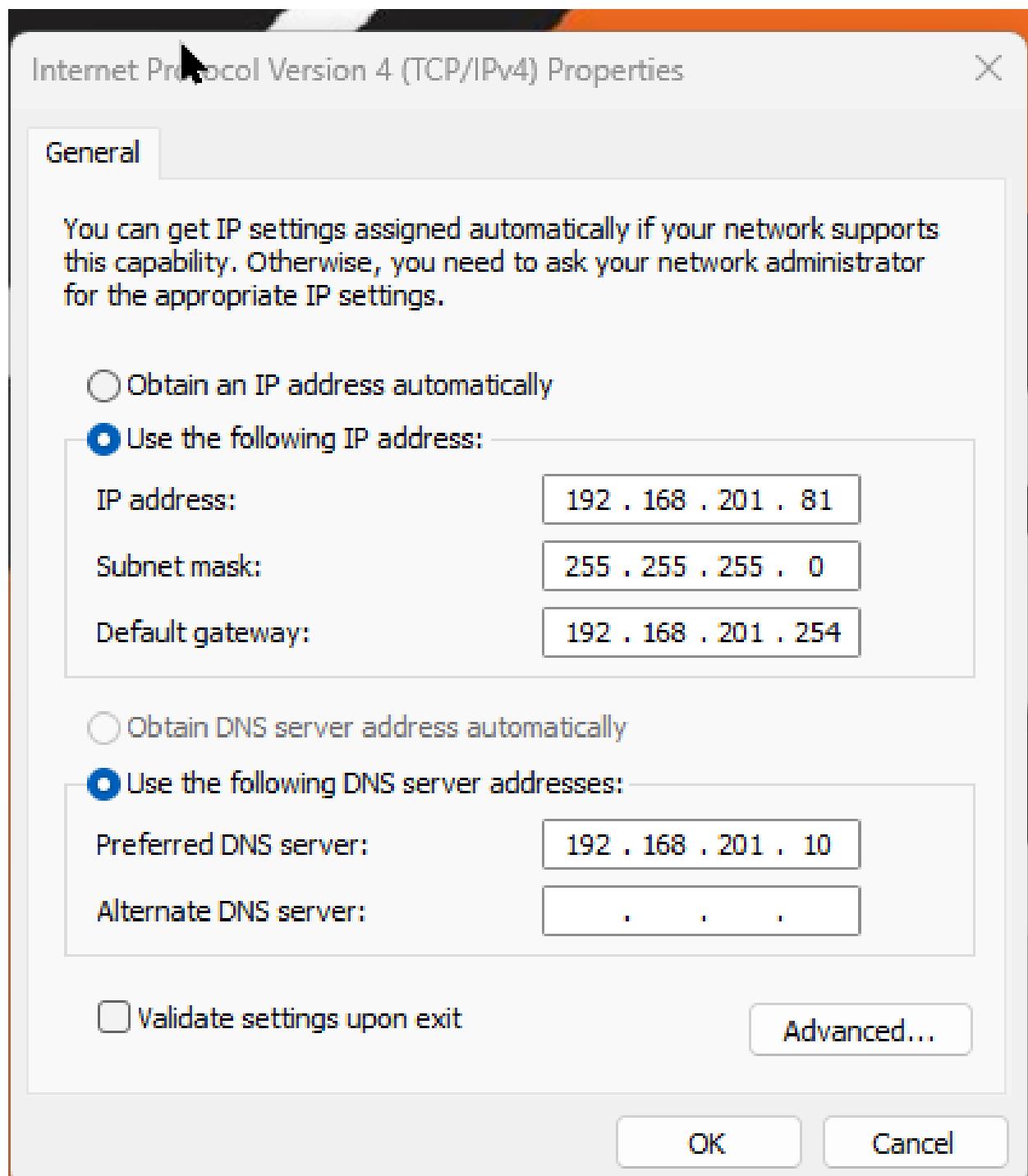
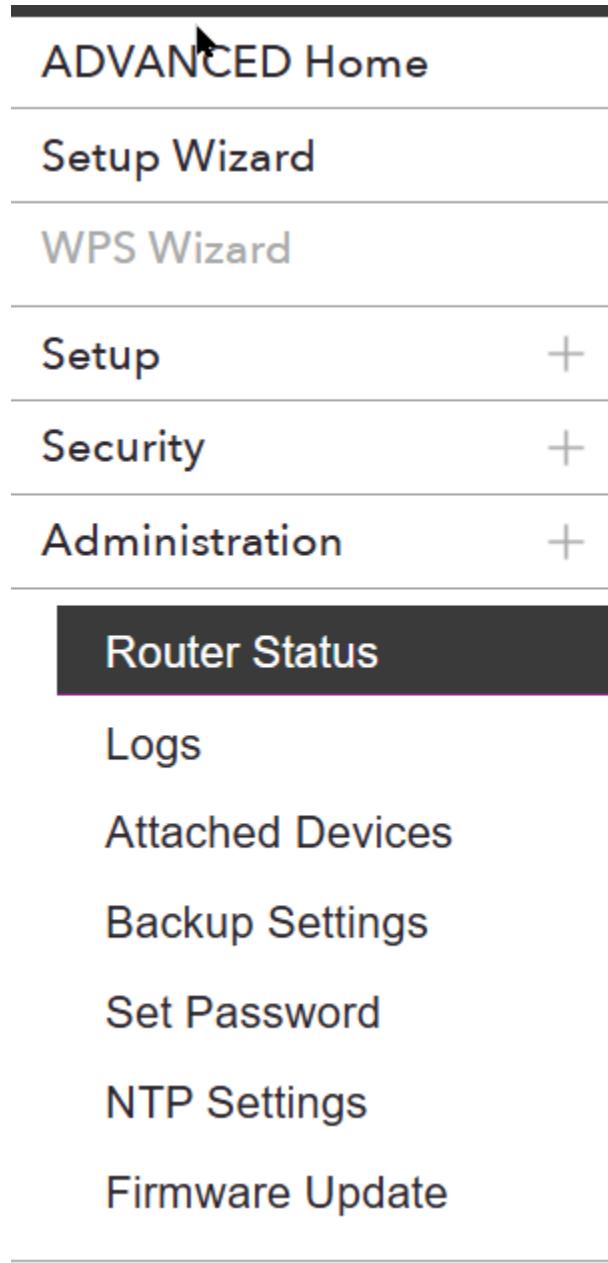


FIGURE 23 - PUT THE MANUALLY IP ADDRESS AND THE REQUIRED STUFFS ON IT

```
Ethernet adapter Ethernet:
```

```
Connection-specific DNS Suffix . . . . .
Description . . . . . : Intel(R) Ethernet Controller (3) I225-V
Physical Address. . . . . : D8-5E-D3-88-B2-16
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::a5a3:81ed:36e2:af0a%3(Preferred)
IPv4 Address. . . . . : 192.168.201.81(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.201.254
DHCPv6 IAID . . . . . : 198729427
DHCPv6 Client DUID. . . . . : 00-01-00-01-30-0B-15-AA-D8-5E-D3-88-B2-16
DNS Servers . . . . . : 192.168.201.10
NetBIOS over Tcpip. . . . . : Enabled
```

**FIGURE 24 - TYPE "IPCONFIG" ON DESKTOP PC AND SEE THE REST OF THE ETHERNET ADAPTER**



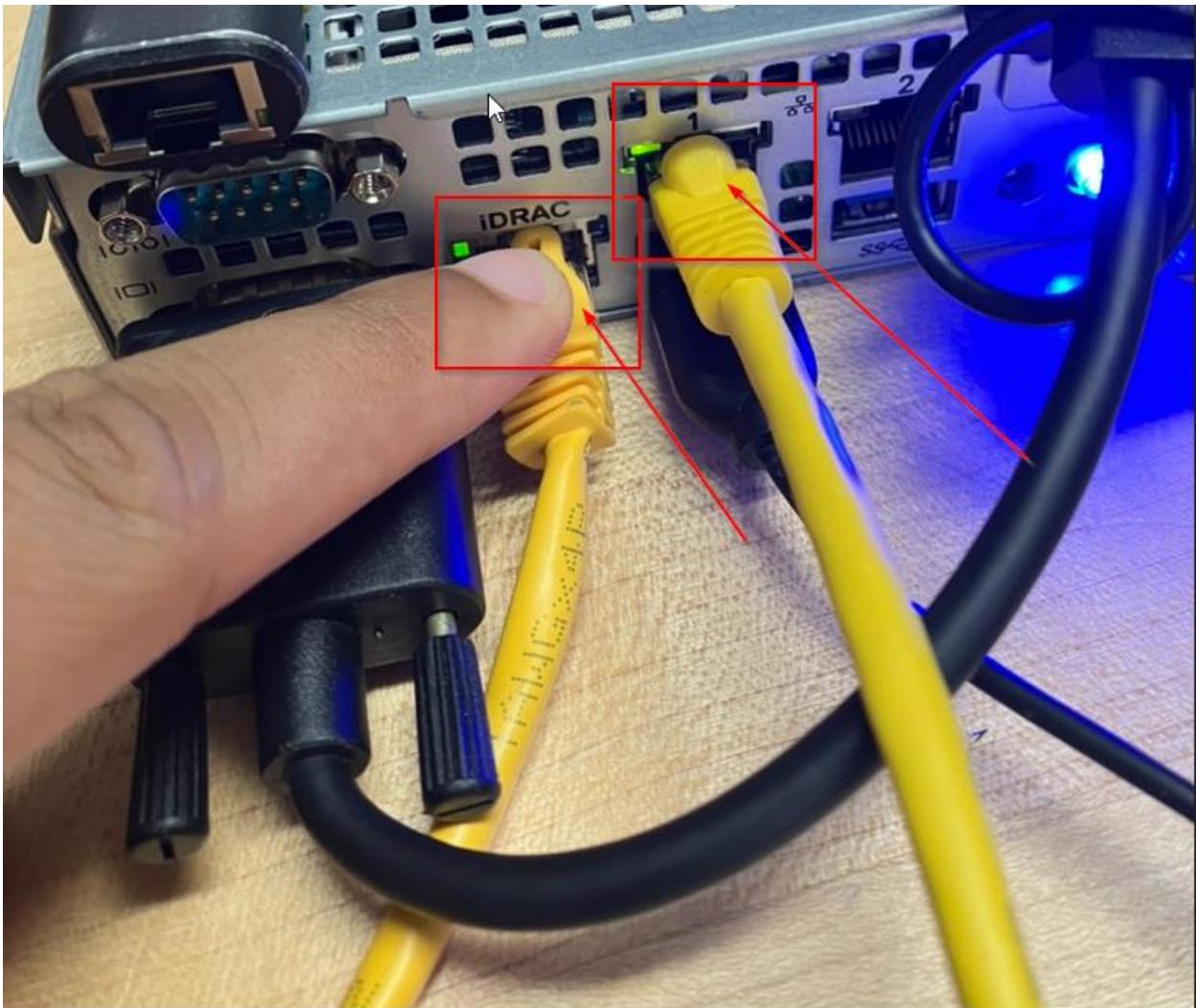
**FIGURE 25 - CLICK "ROUTER STATUS" THEN CLICK "SET PASSWORD"**

## Change Password

Change the router's local management password.

Old Password:	<input type="text"/>	
New Password:	<input type="text"/>	
Confirm New Password:	<input type="text"/>	

**FIGURE 26 - SET NEW PASSWORD AND CONFIRM IT**



**FIGURE 27 - CONNECT TO IDRAC AND NIC 1 WITH ETHERNET FROM THE ROUTER**



FIGURE 28 - MAKE SURE TO REMEMBER THE BENCH NUMBER FOR IP ADDRESS

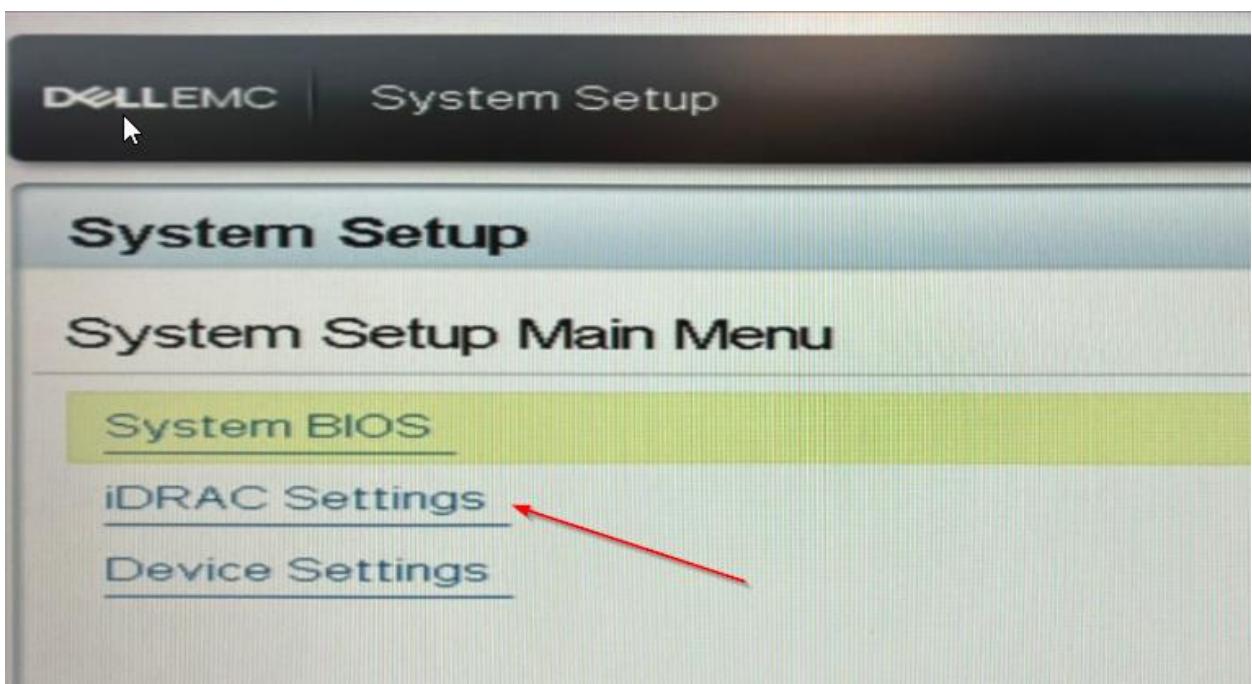


FIGURE 29 - IN IDRAC SETTING, CLICK "SYSTEM BIOS"

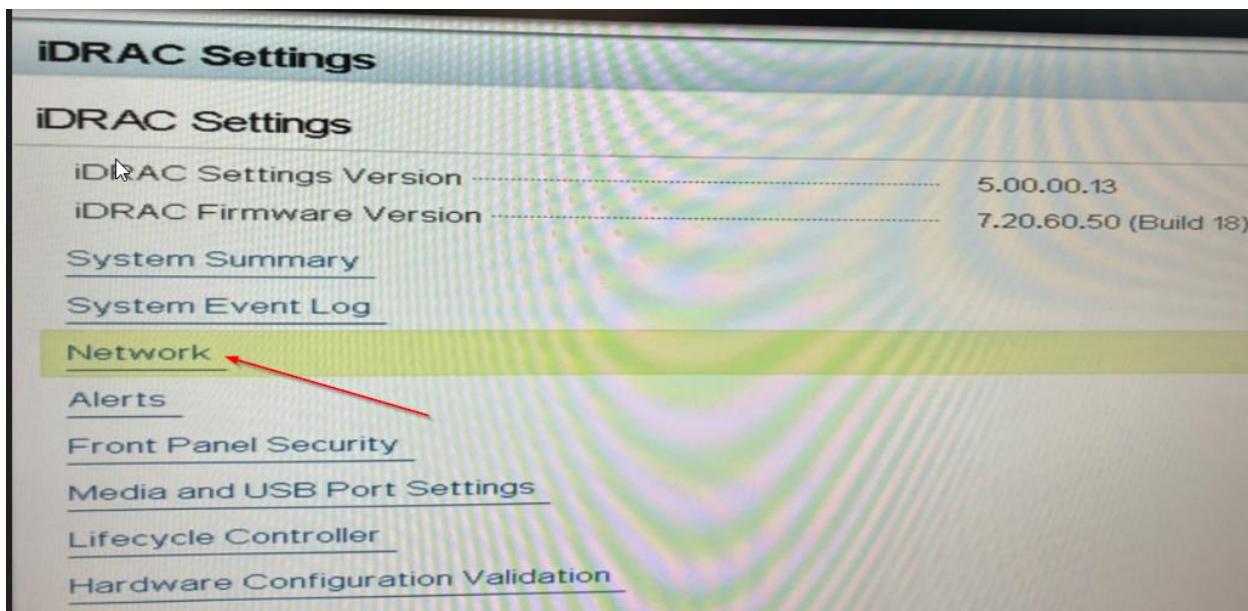


FIGURE 30 - CLICK "NETWORK"

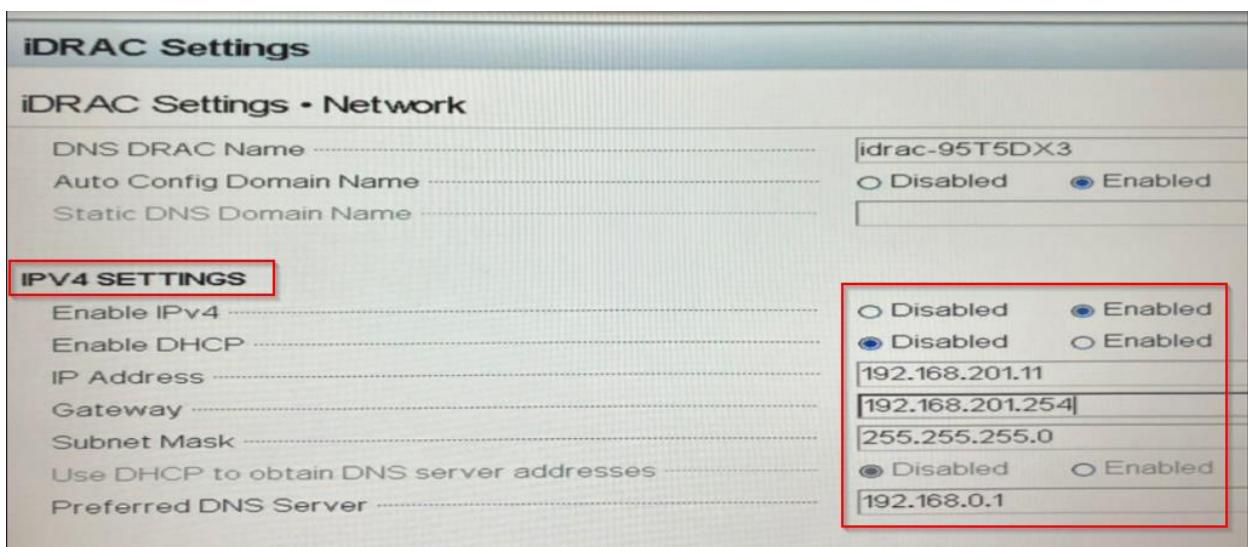


FIGURE 31 - PUT THE MANUALLY IP ADDRESS AND THE REQUIRED STUFF ON IT

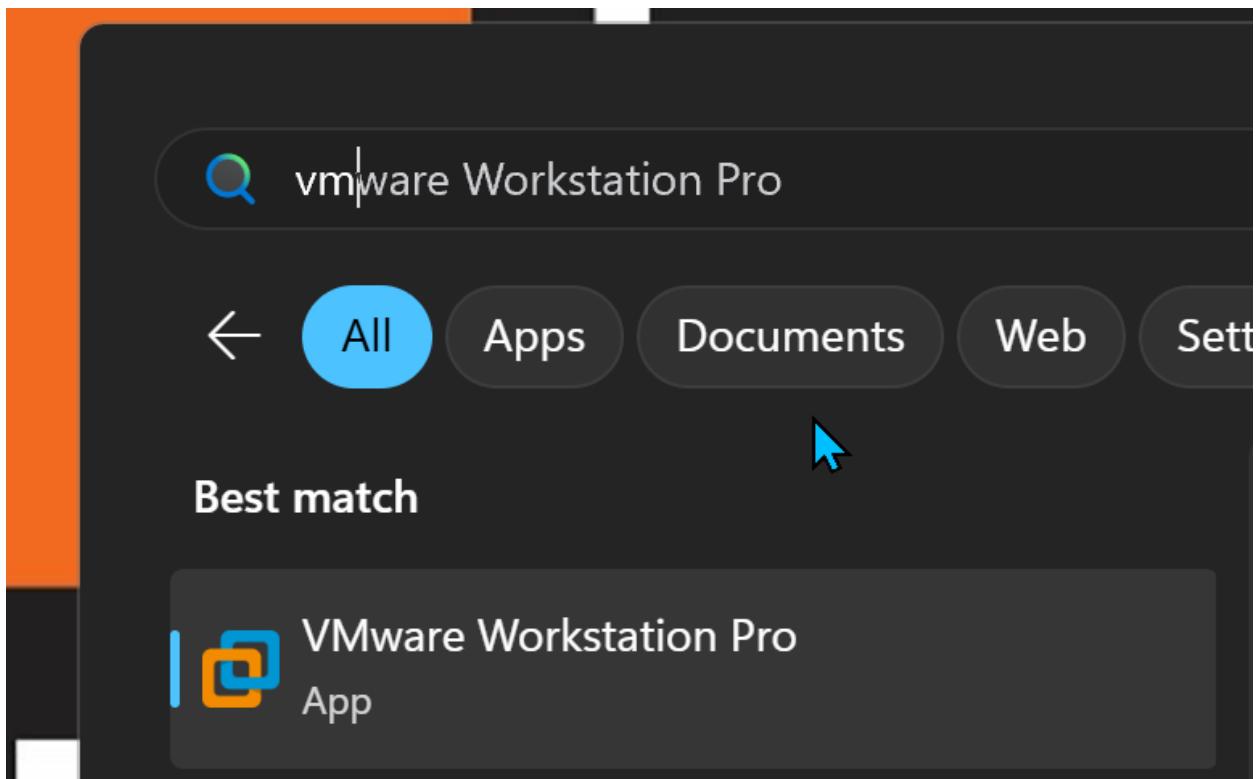


FIGURE 32 - OPEN THE VMWARE WORKSTATION PRO



FIGURE 33 – PROCCED

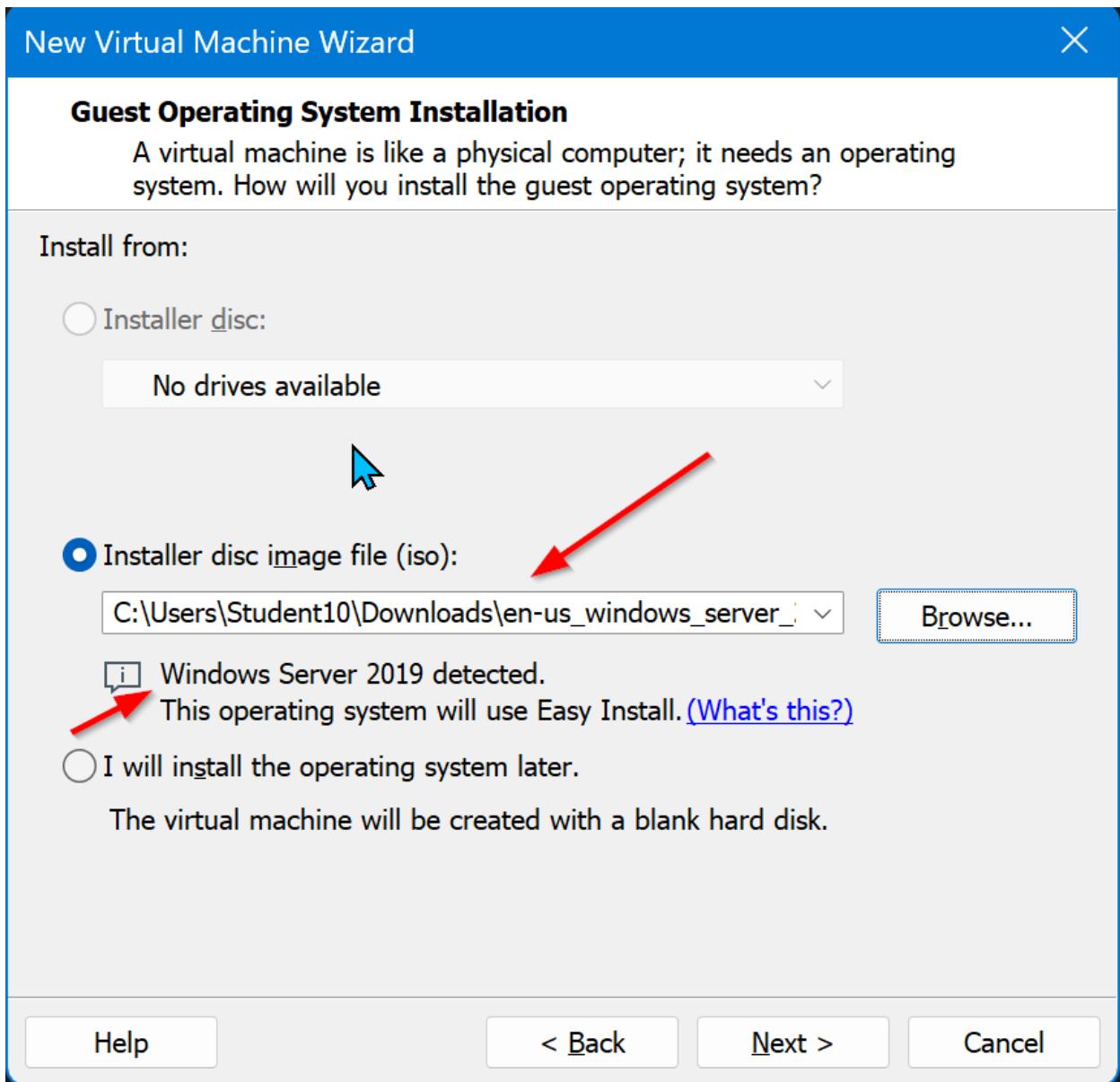


FIGURE 34 - MAKE SURE TO SELECT THE WINDOWS SERVER 2019 TO BE DETECTED

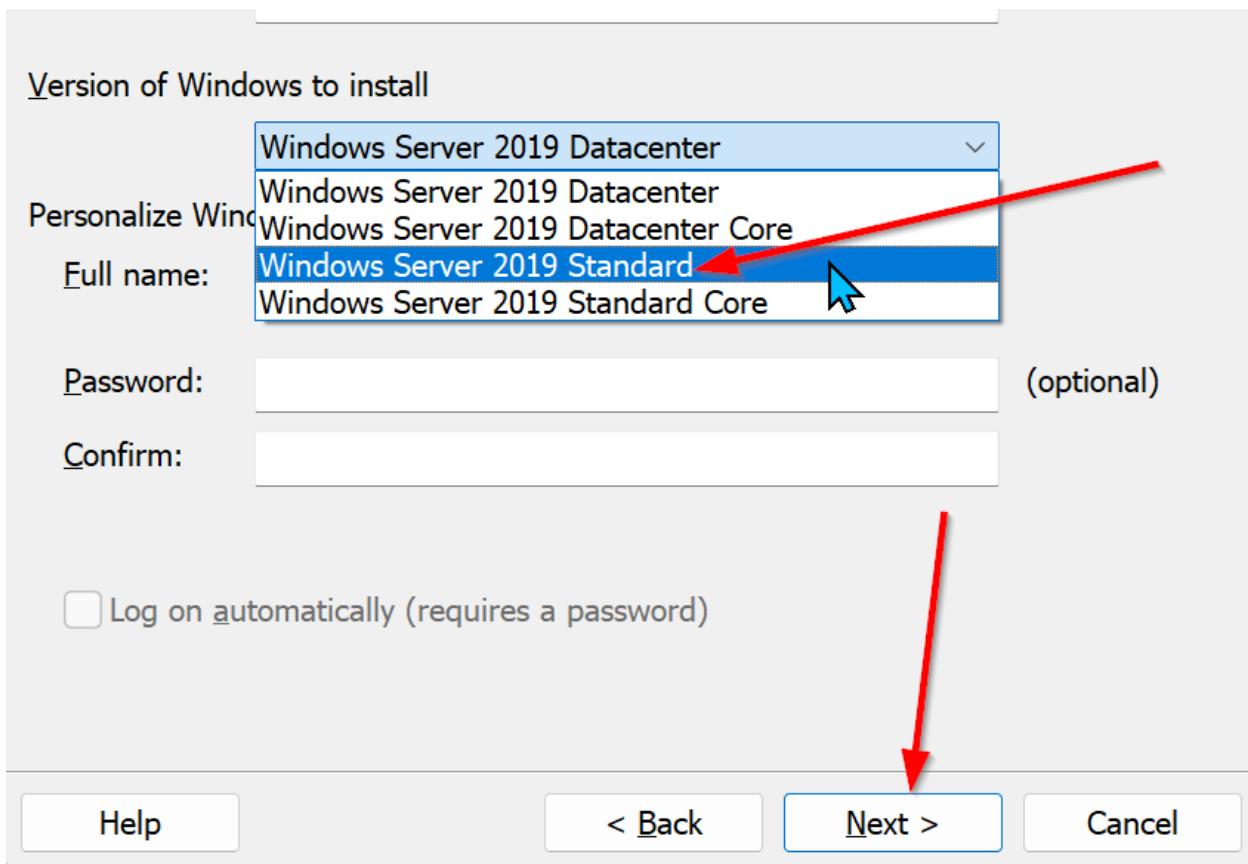


FIGURE 35 - SELECT WS 2019 STANDARD FOR VM

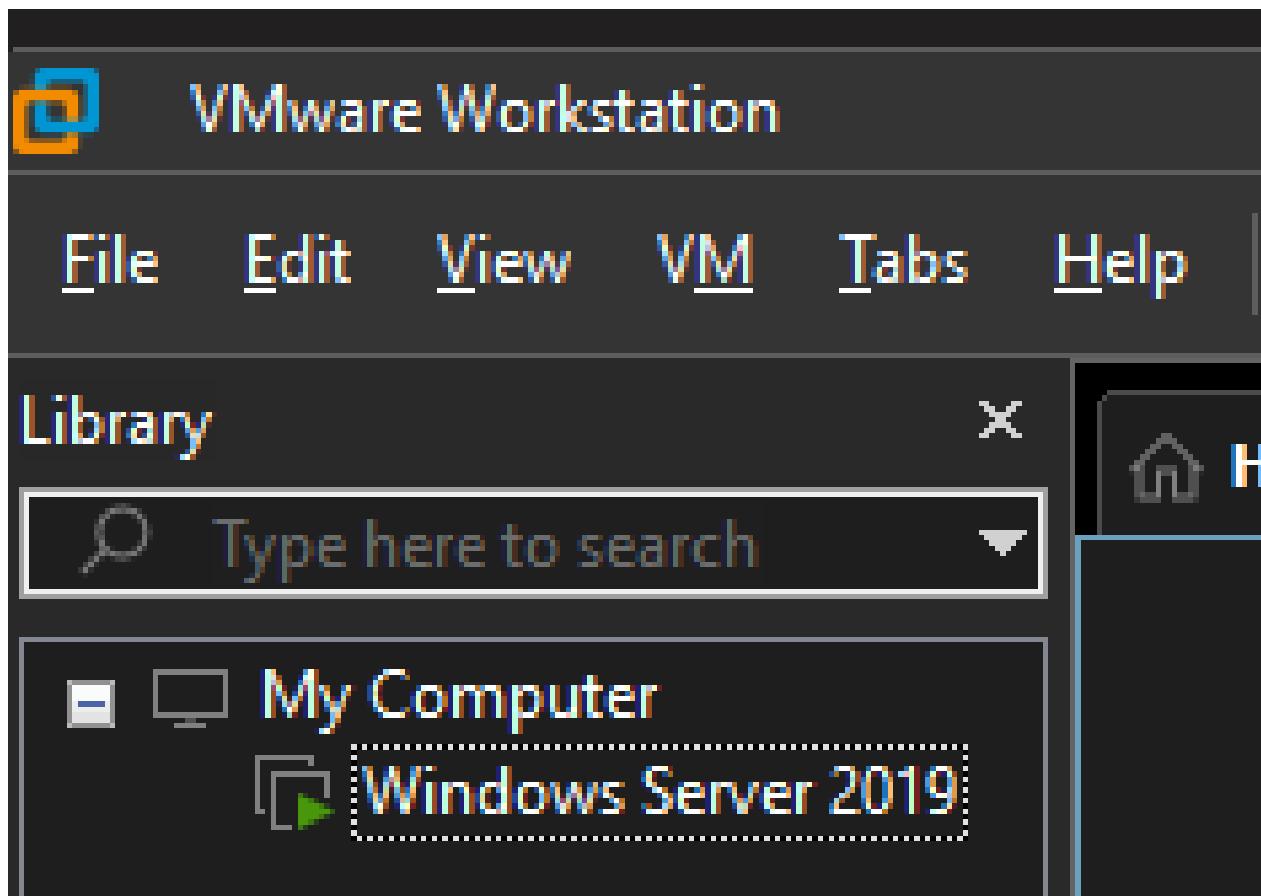
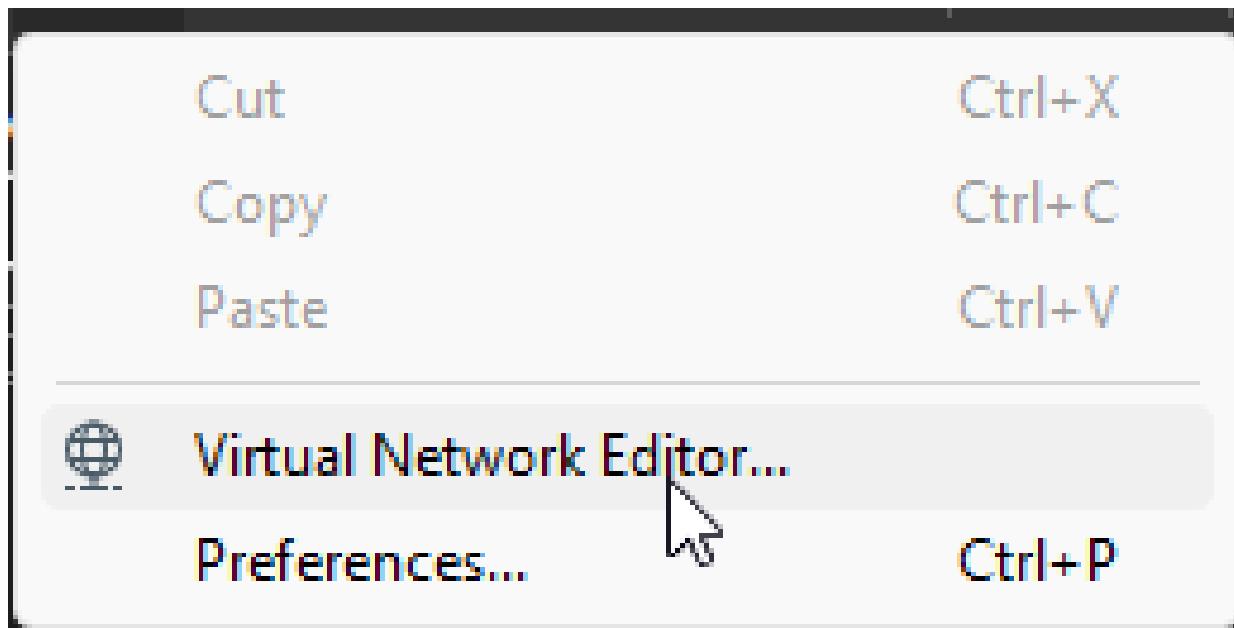
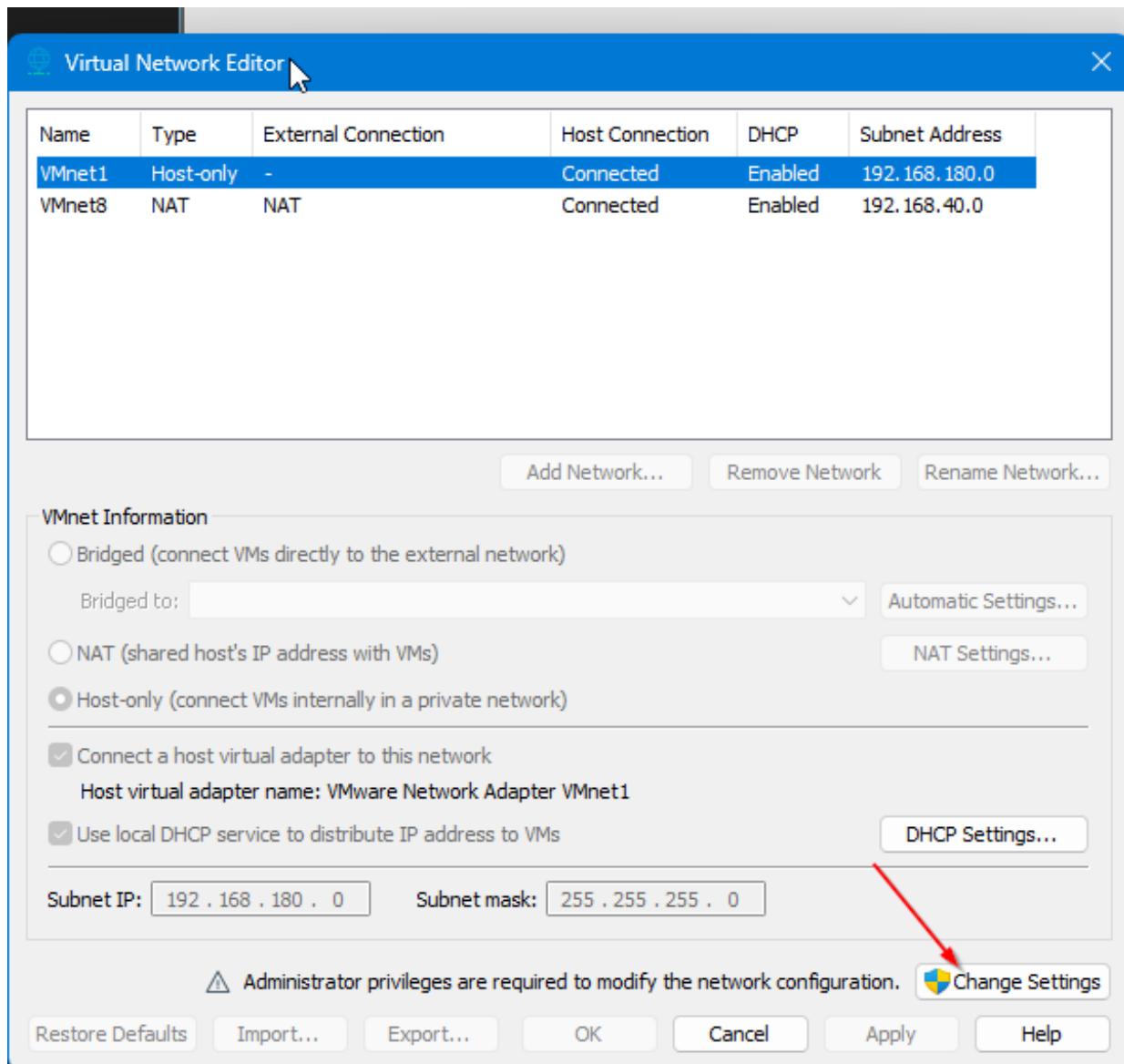


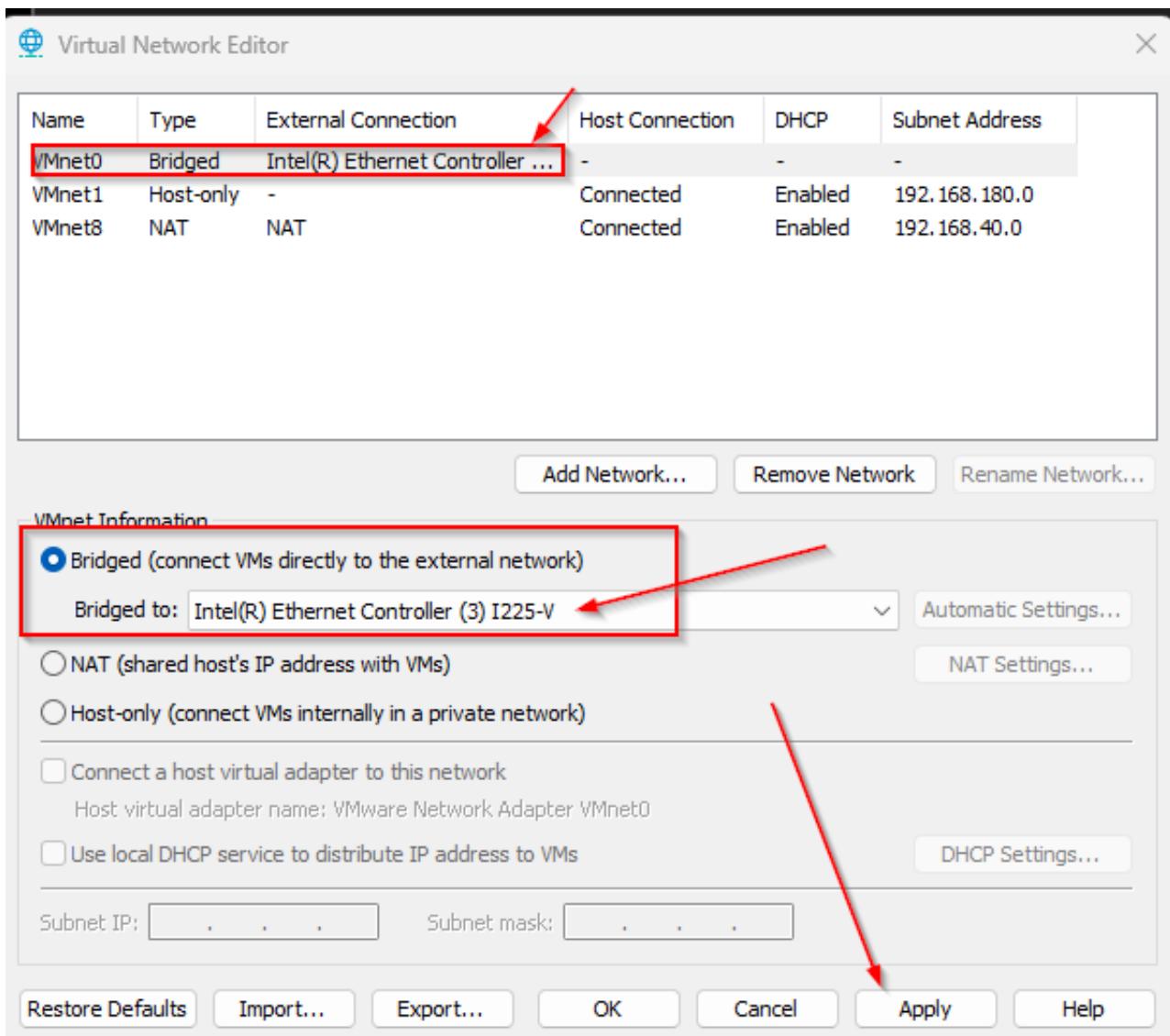
FIGURE 36 - CLICK "EDIT"



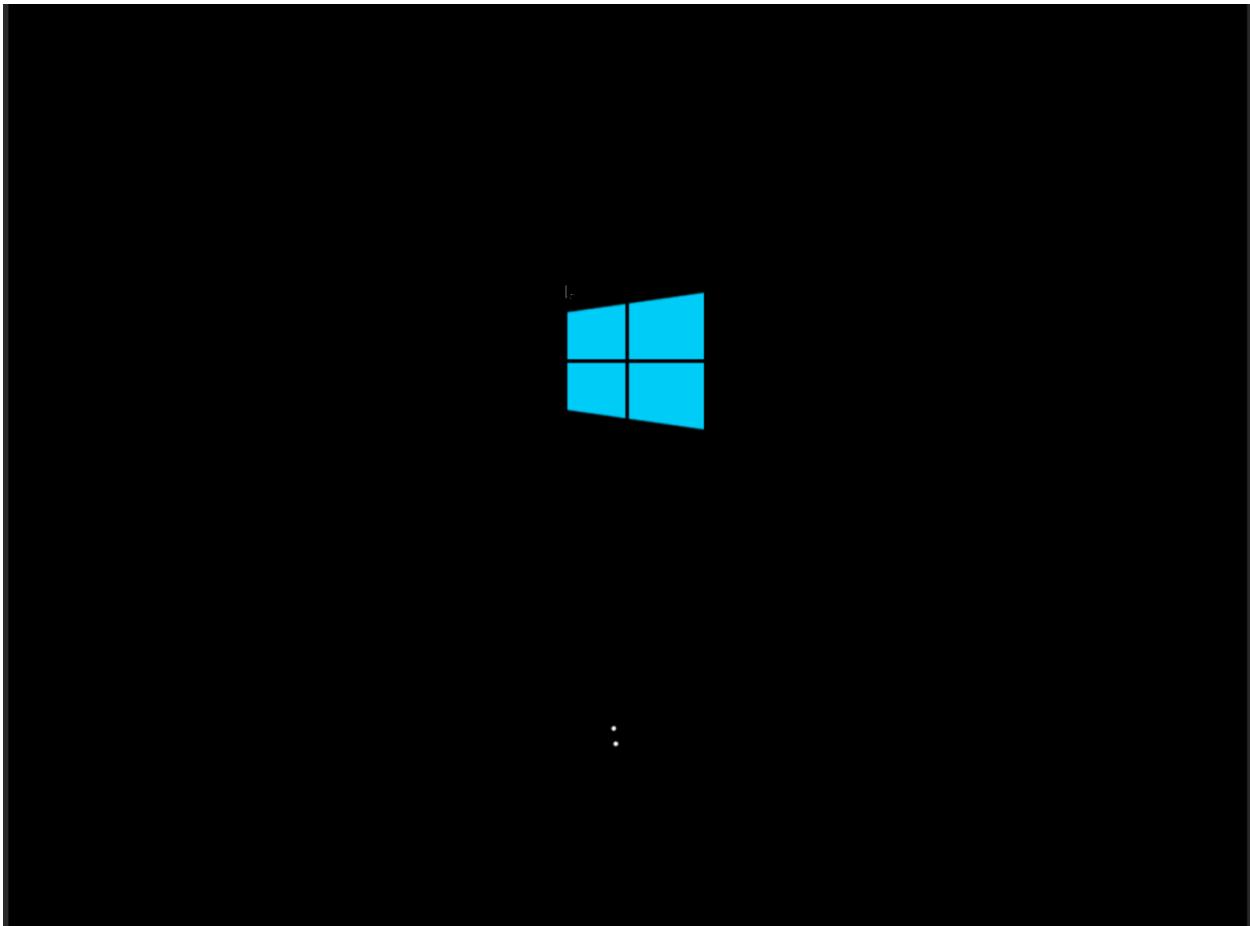
**FIGURE 37 - CLICK "VIRTUAL NETWORK EDITOR"**



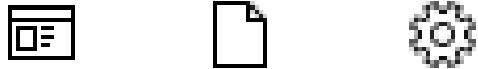
**FIGURE 38 - CLICK "CHANGE SETTINGS"**



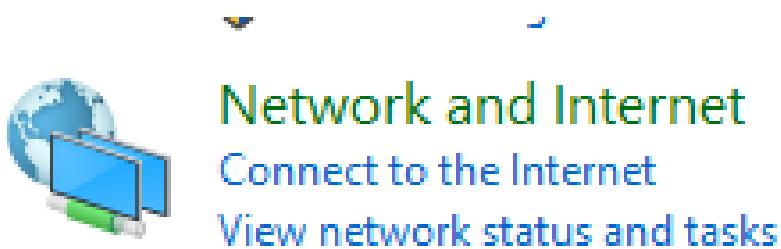
**FIGURE 39 - CHANGE THE VMNET INFORMATION TO BRIDGE TO THE ETHERNET CONTROLLER**



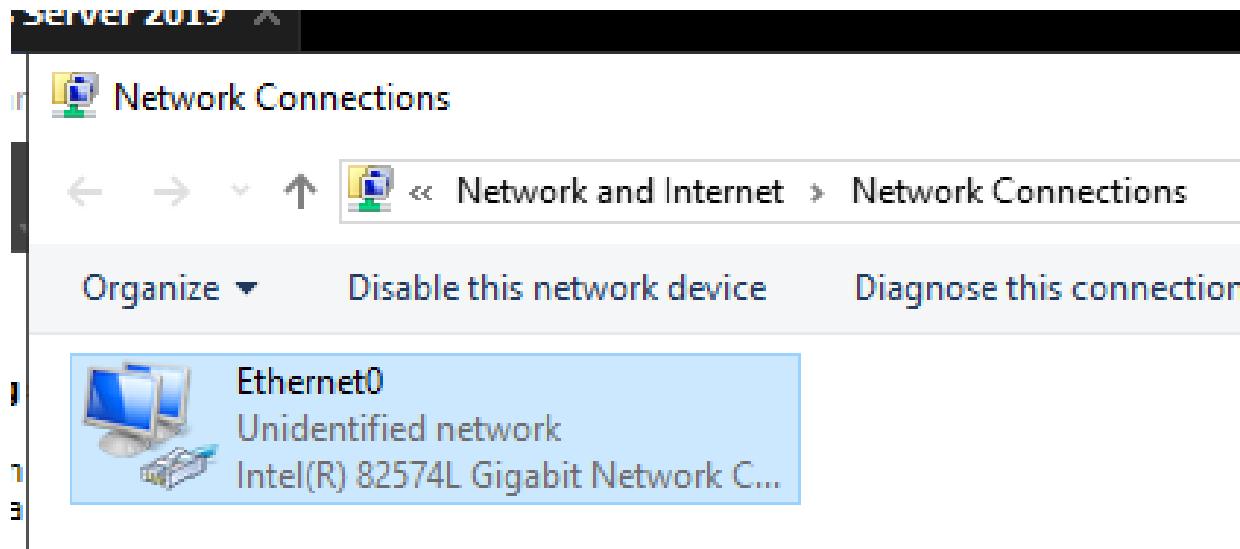
**FIGURE 40 - REBOOT INTO WINDOWS SERVER 2019**



**FIGURE 41 - OPEN THE CONTROL PANEL**



**FIGURE 42 - CLICK THE "NETWORK AND INTERNET"**



**FIGURE 43 - CLICK "ETHERNET0"**

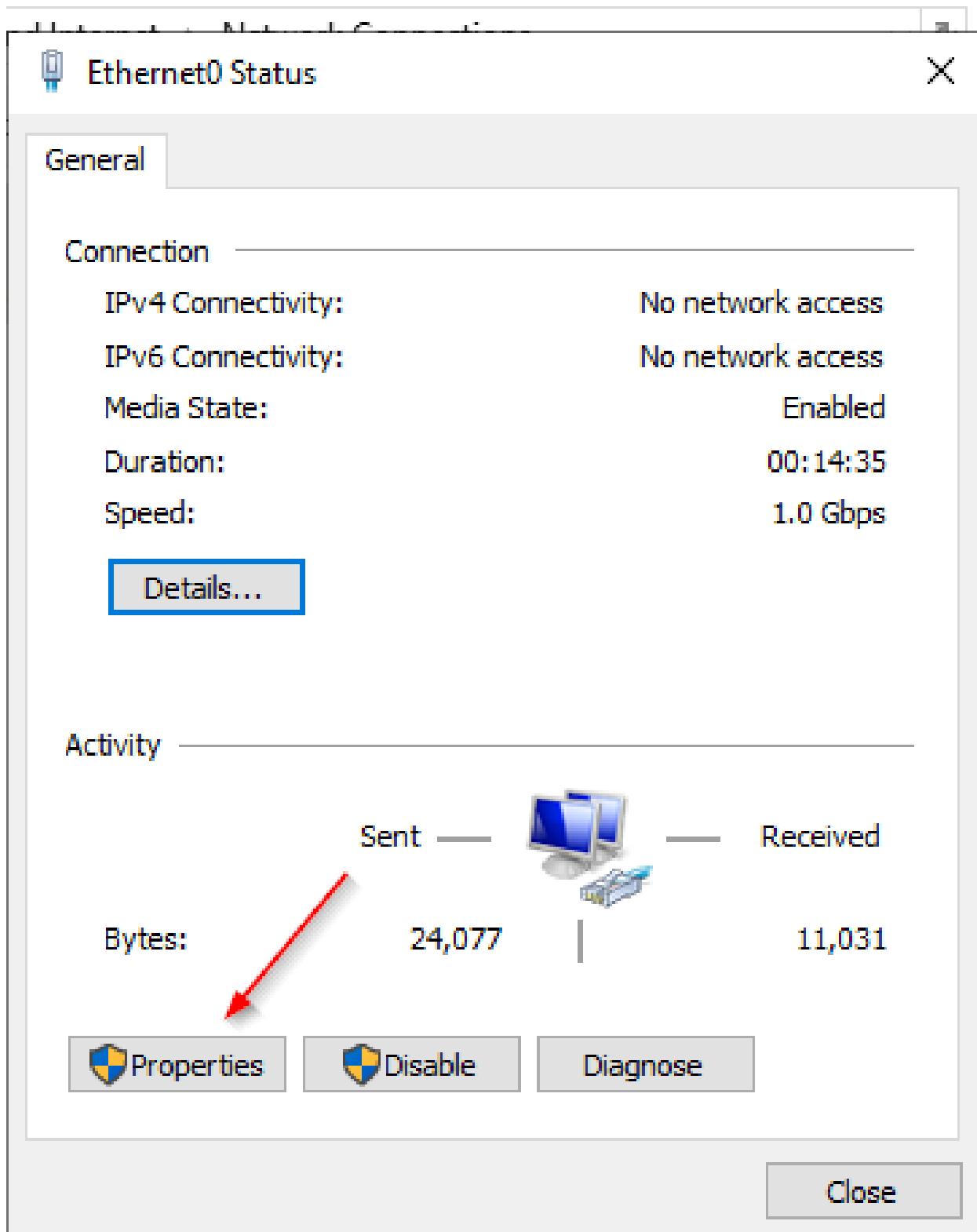


FIGURE 44 - CLICK "PROPERTIES"

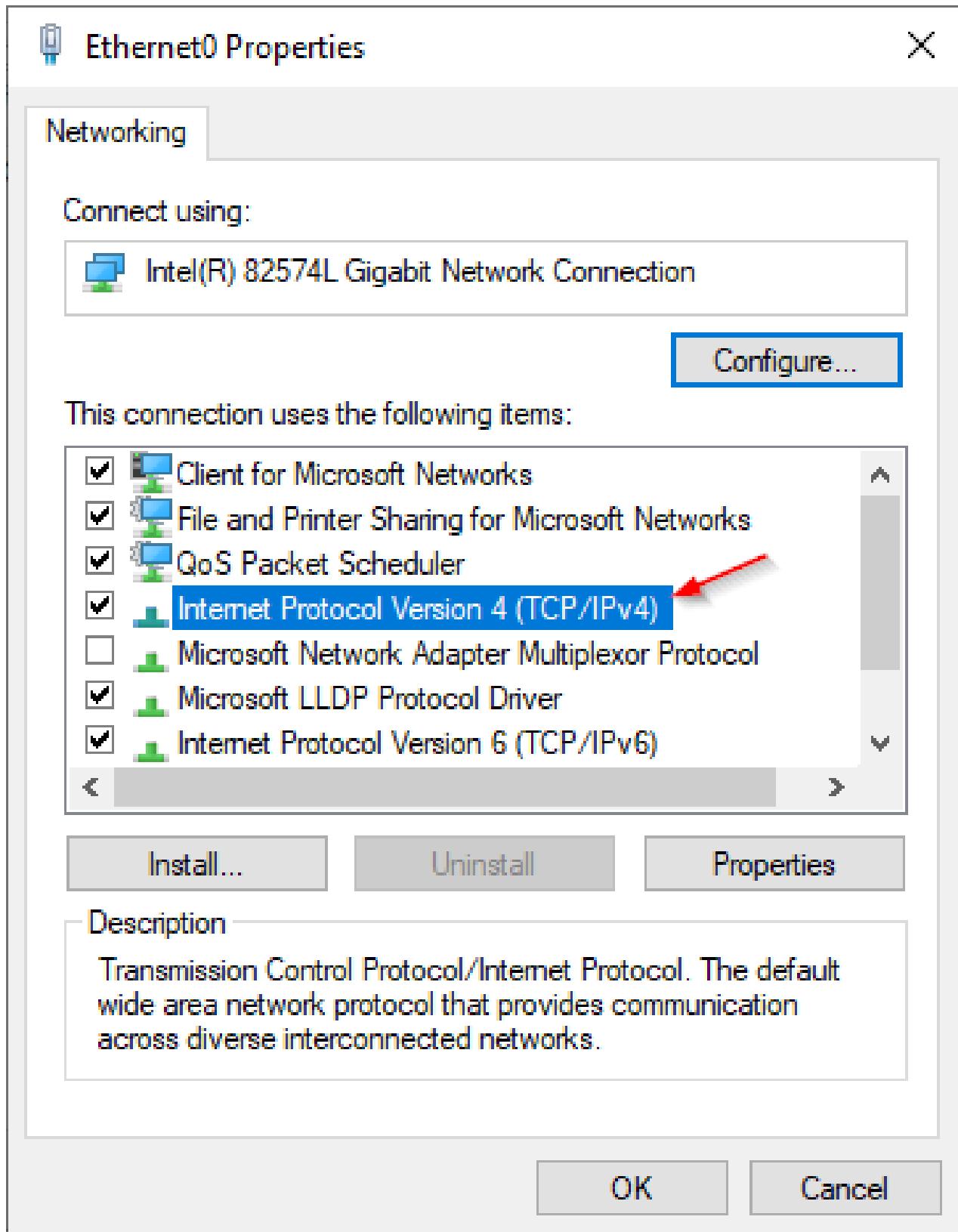


FIGURE 45 - CLICK THIS IPv4

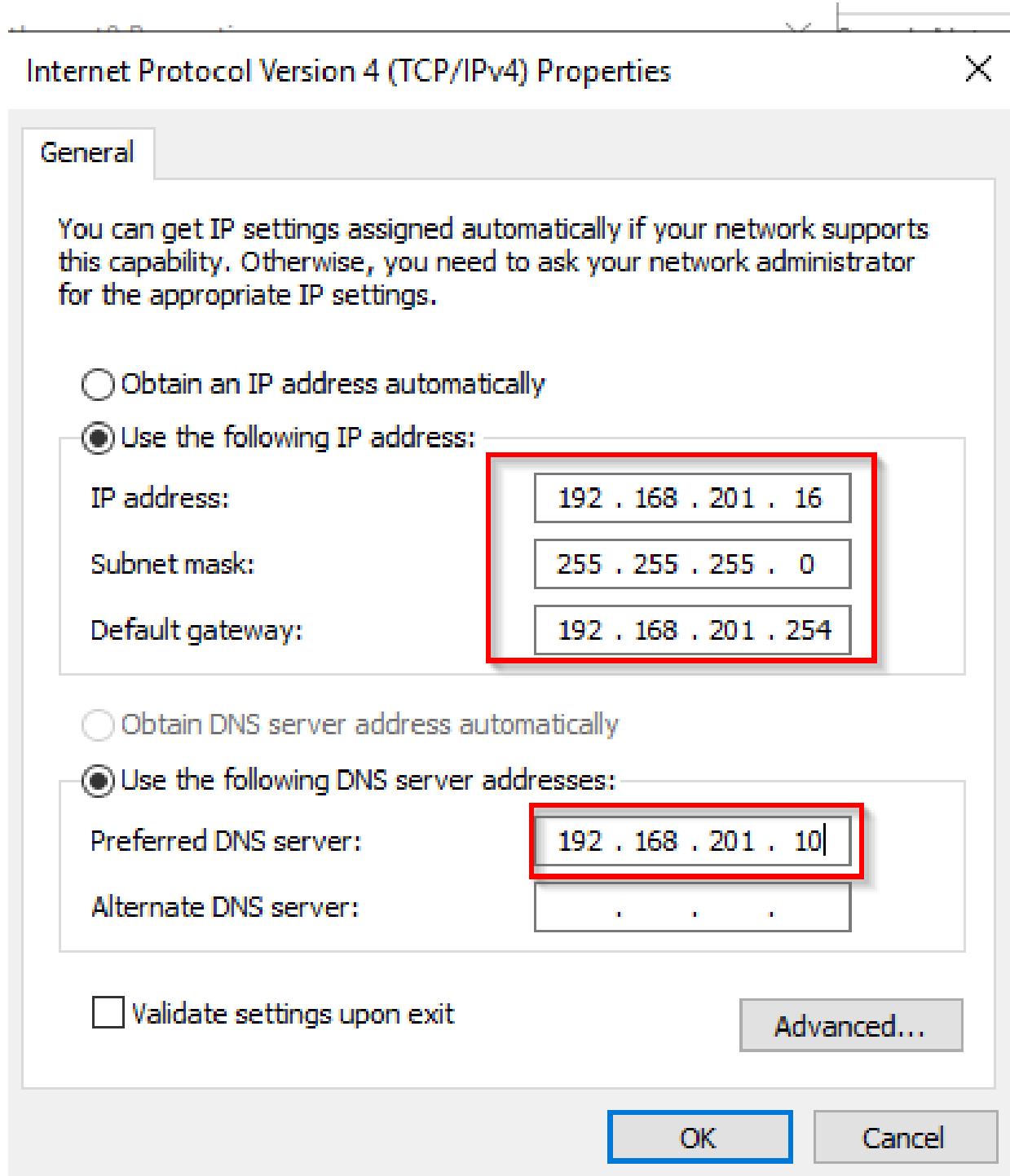


FIGURE 46 - PUT THE MANUALLY IP ADDRESS AND THE REQUIRED STUFF ON IT

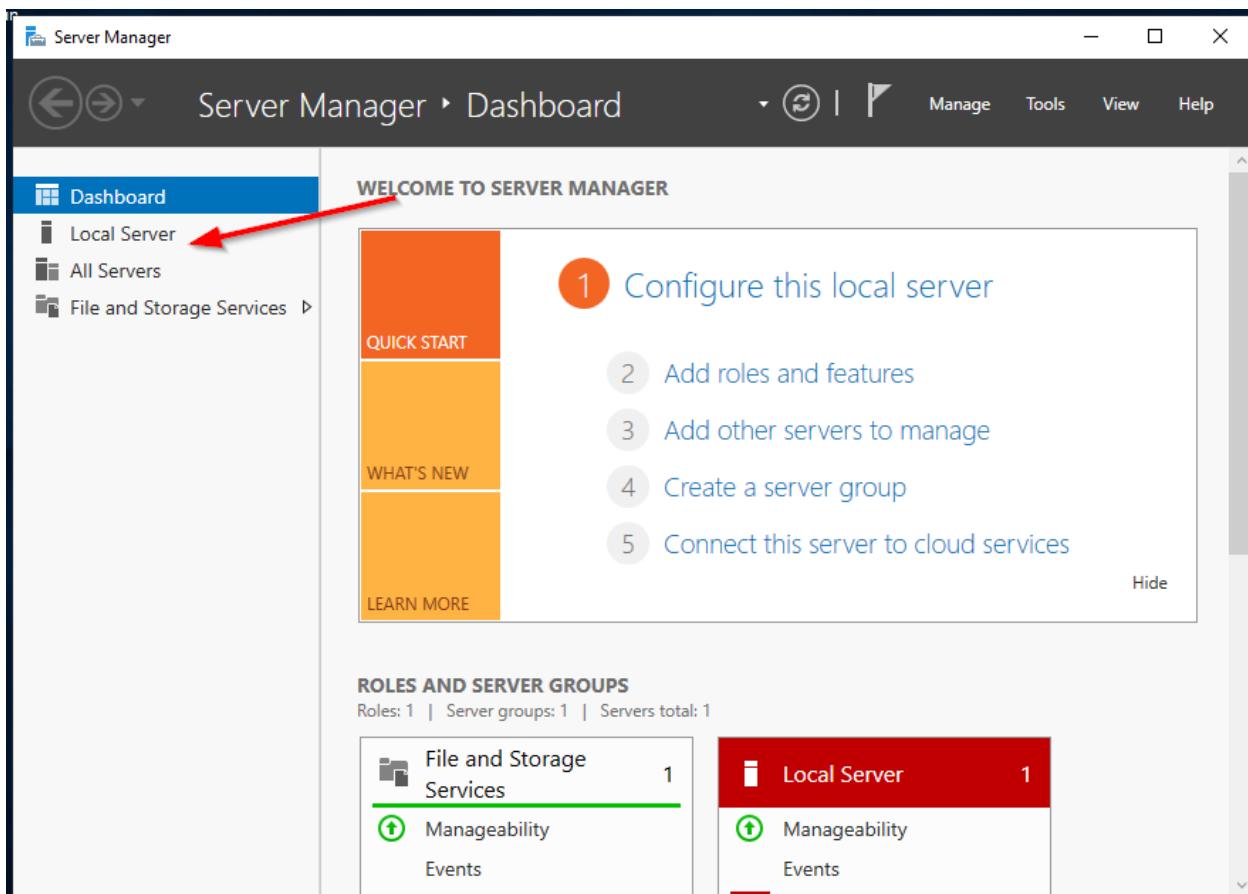


FIGURE 47 - OPEN THE SERVER MANAGER THEN CLICK "LOCAL SERVER"

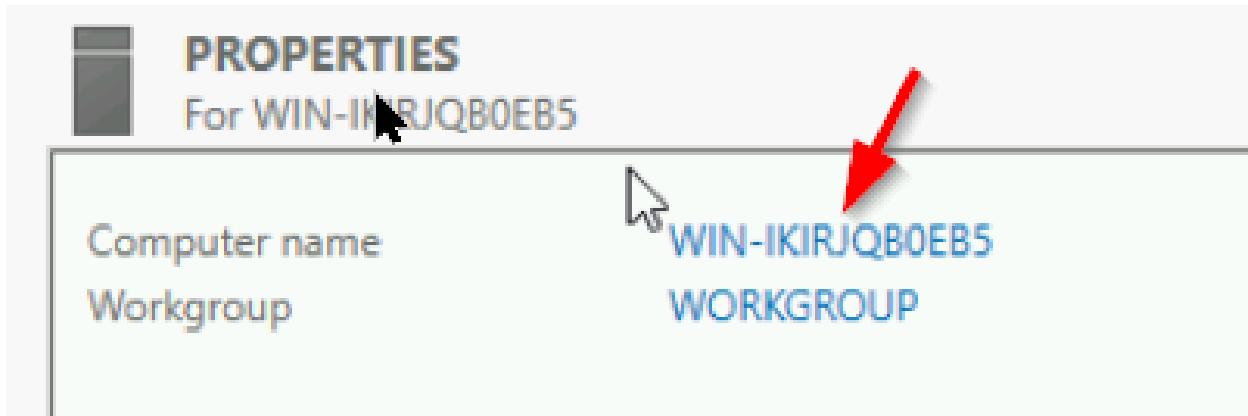


FIGURE 48 - CHANGE THE COMPUTER NAME

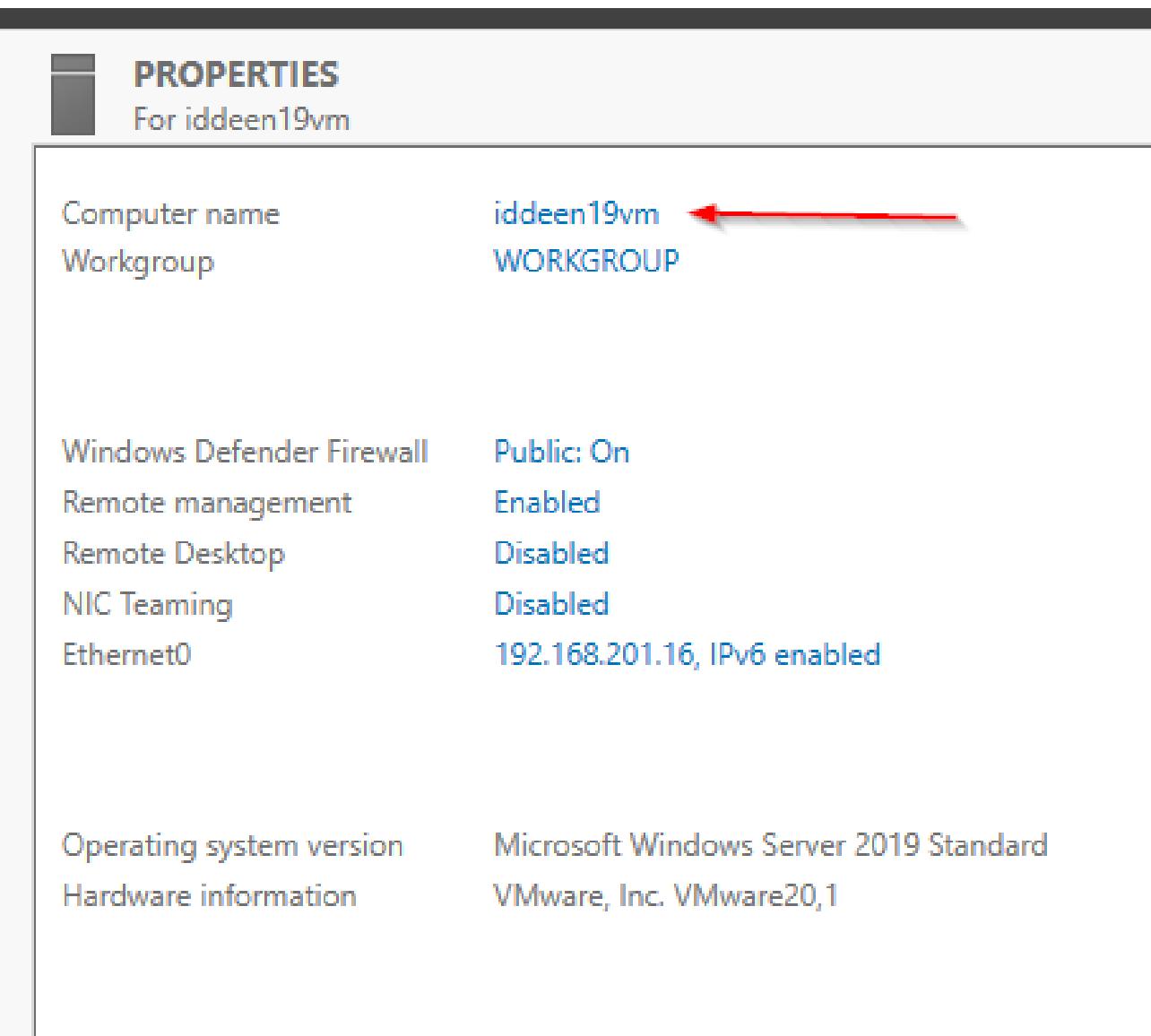


FIGURE 49 - DONE CHANGING COMPUTER NAME

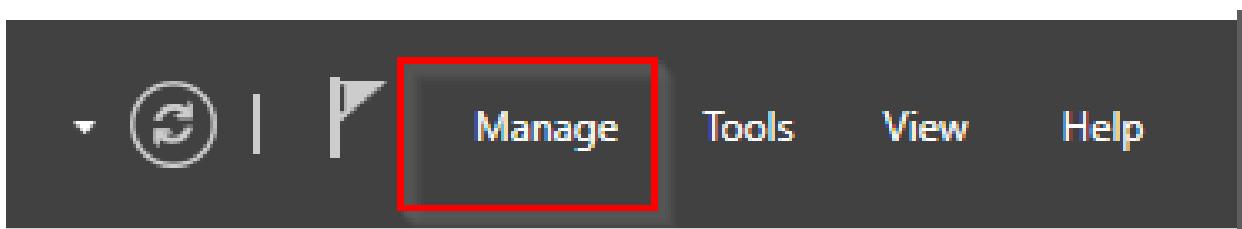


FIGURE 50 - CLICK MANAGE

# Add Roles and Features

FIGURE 51 - CLICK " ADD ROLES AND FEATURES"

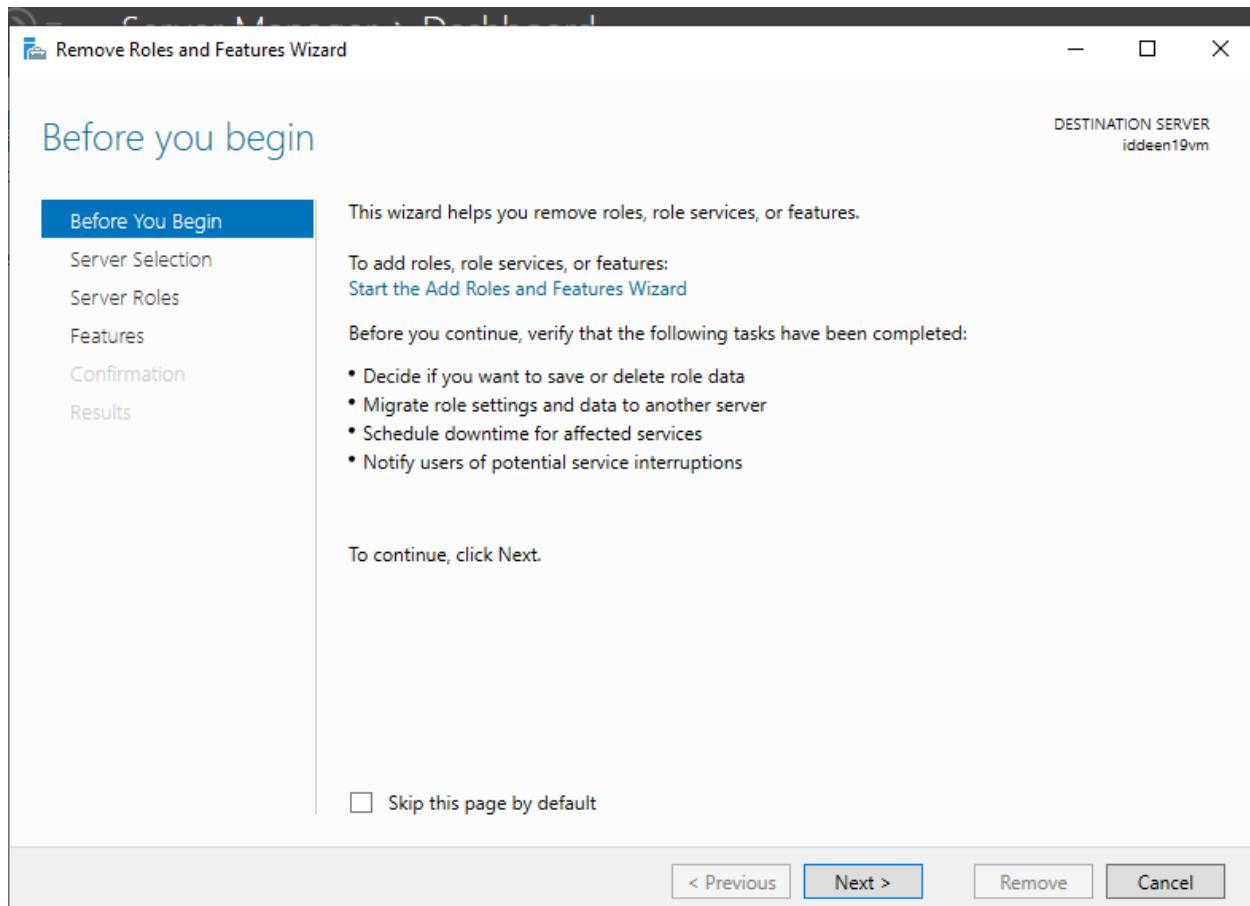


FIGURE 52 - PROCEED!

Select one or more roles to install on the selected server.

## Roles

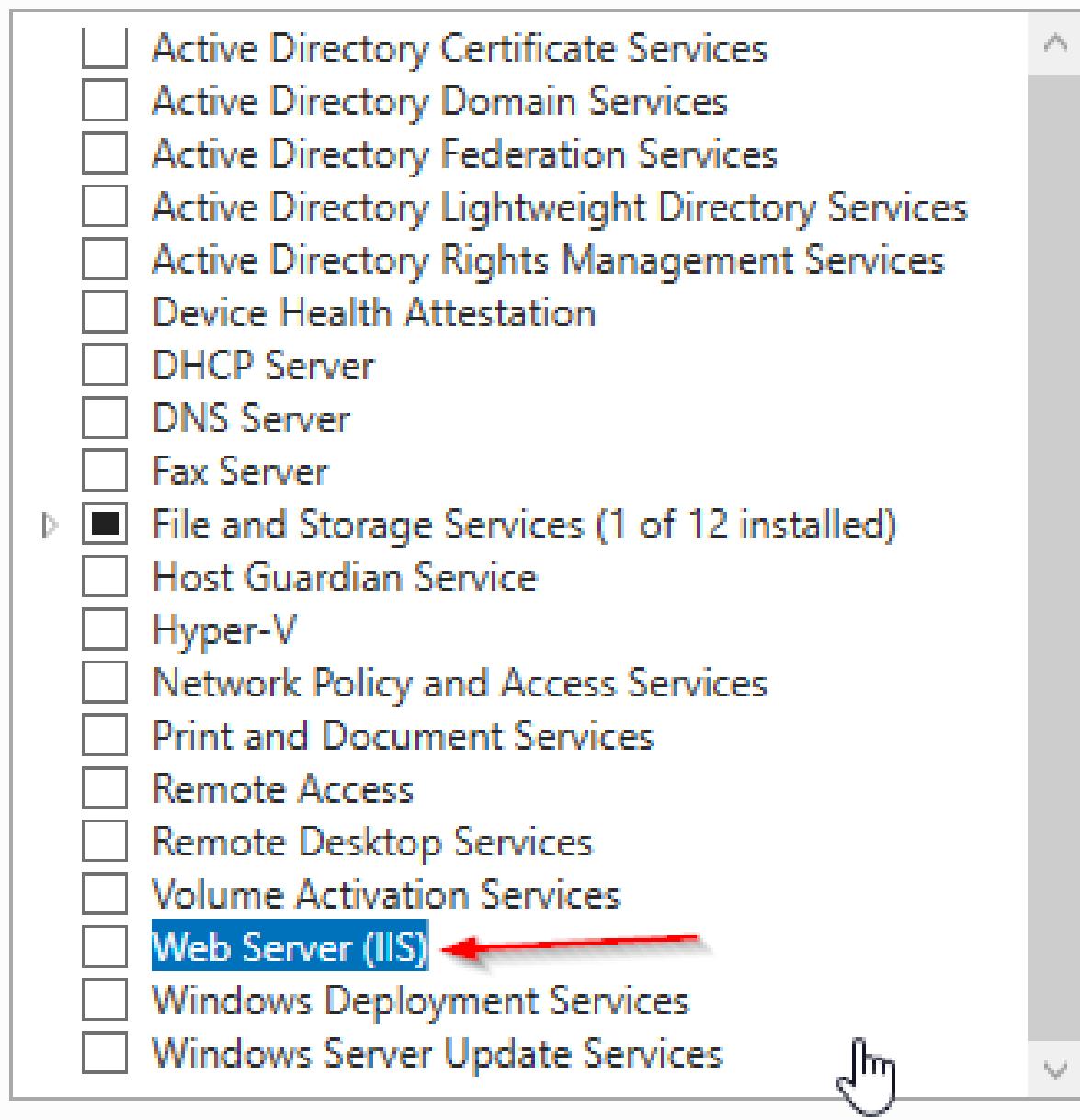
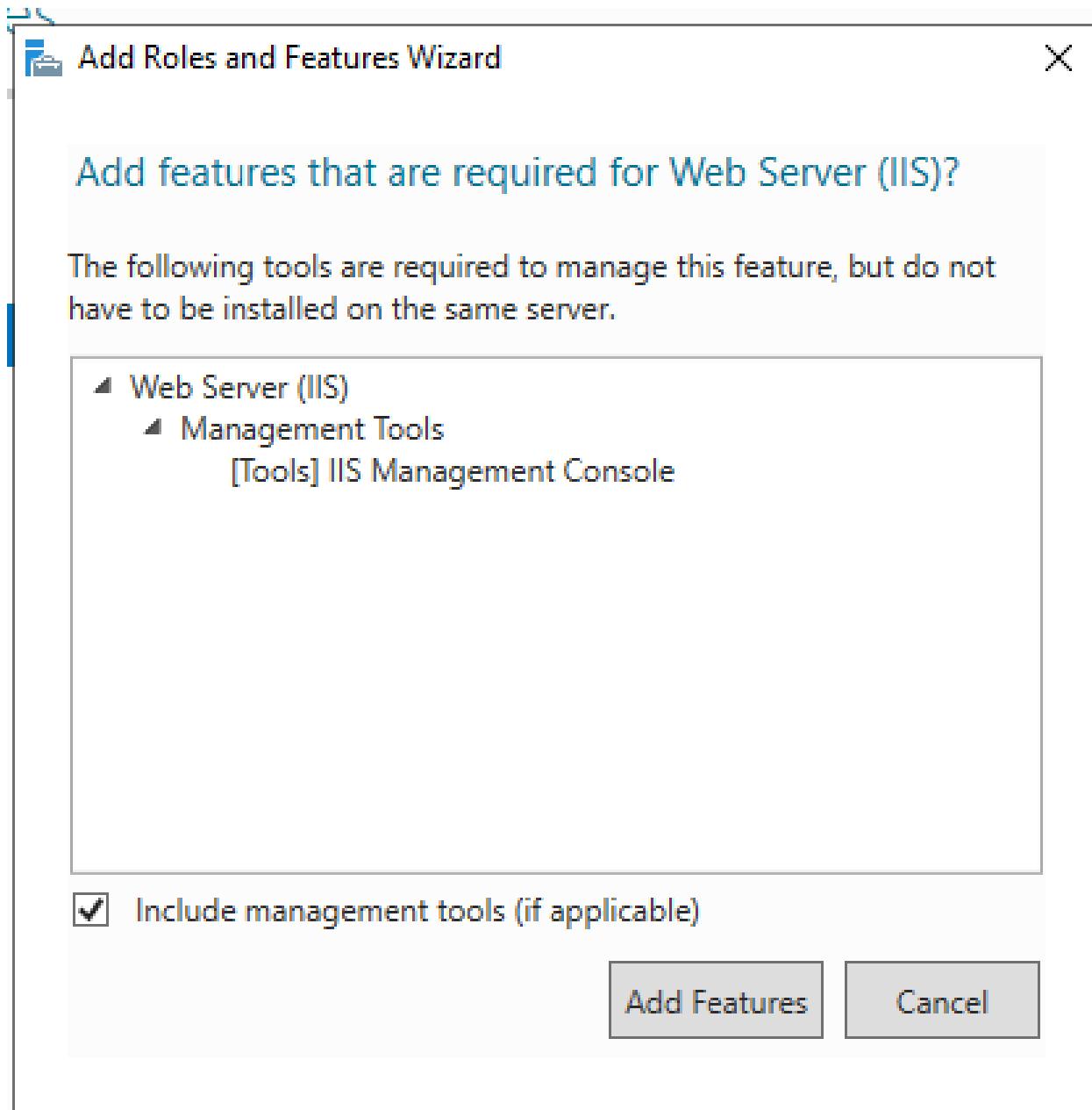
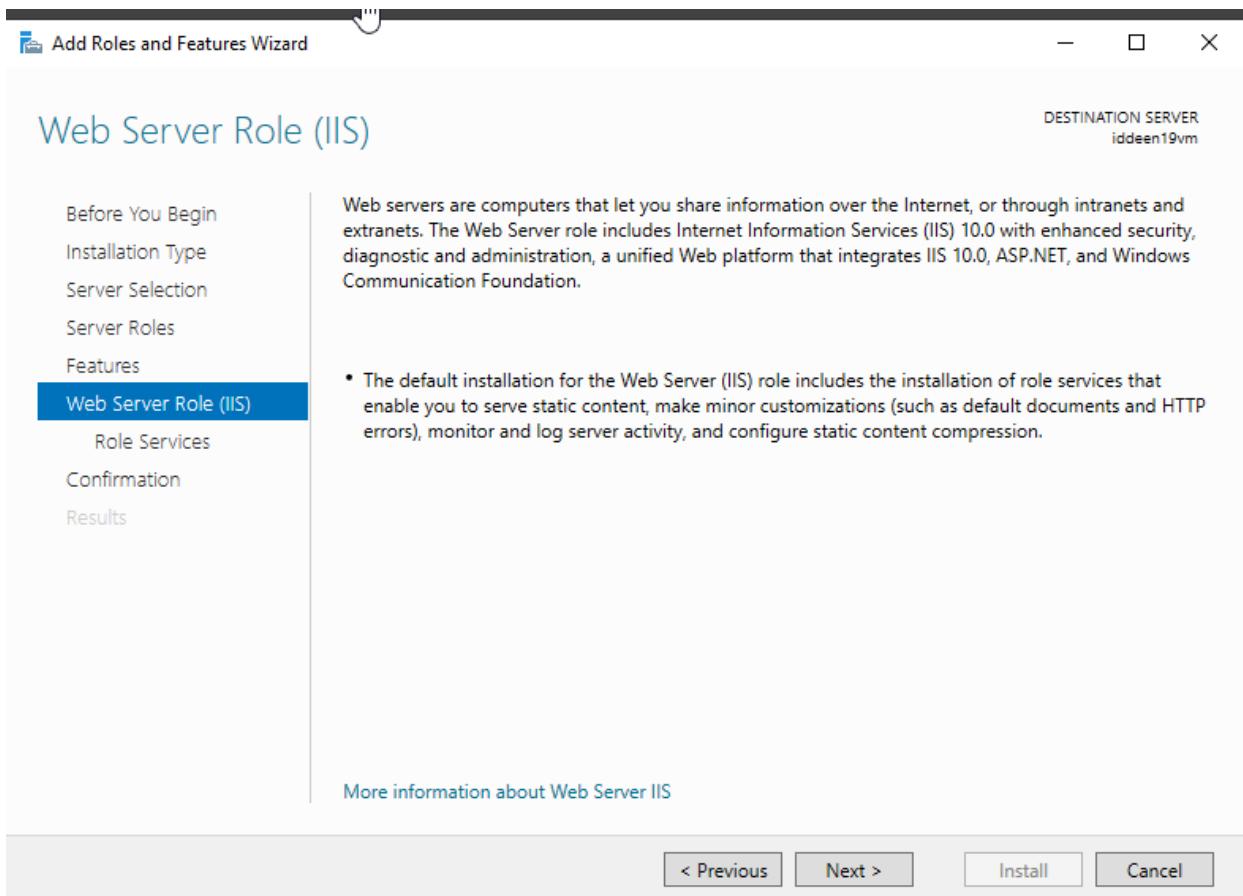


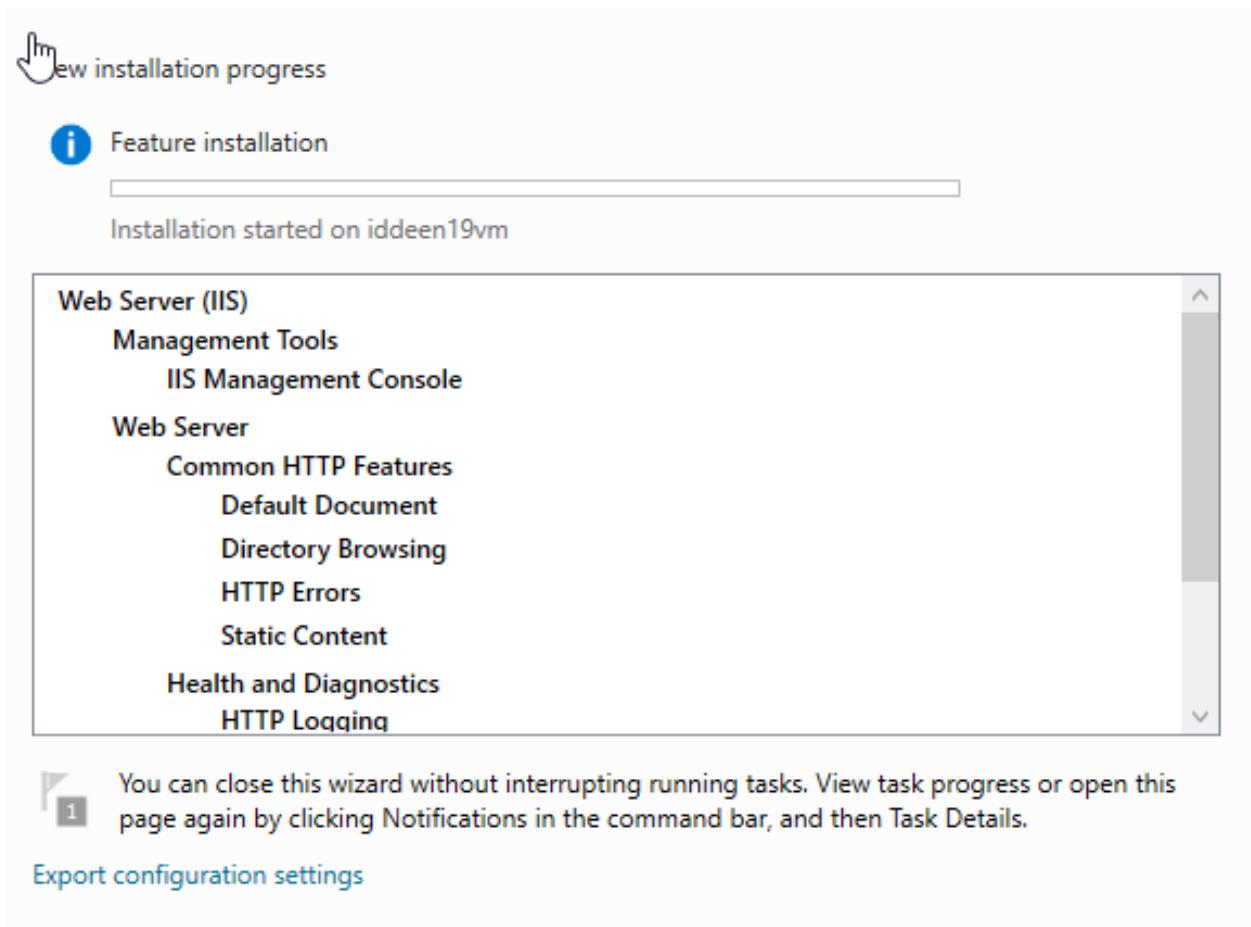
FIGURE 53 - CLICK "WEB SERVER (IIS)"



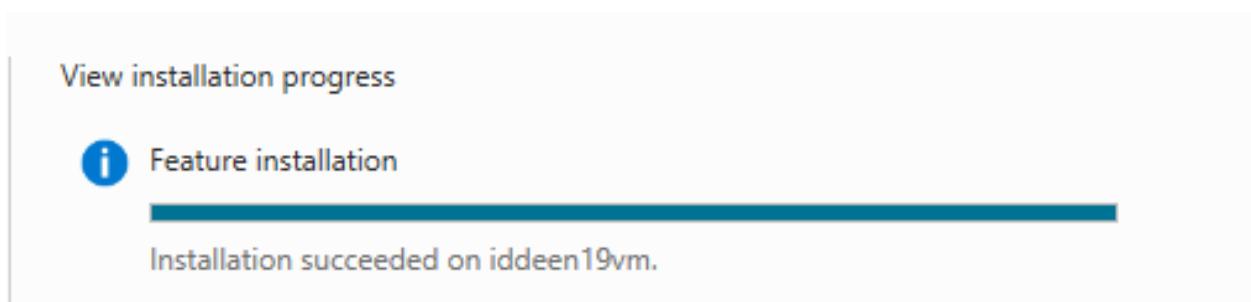
**FIGURE 54 - CLICK "ADD FEATURES"**



**FIGURE 55 - INSTALL THE WEB SERVER ROLE**



**FIGURE 56 - INSTALLATION STARTED**



**FIGURE 57 - INSTALLATION SUCCESSFULLY**

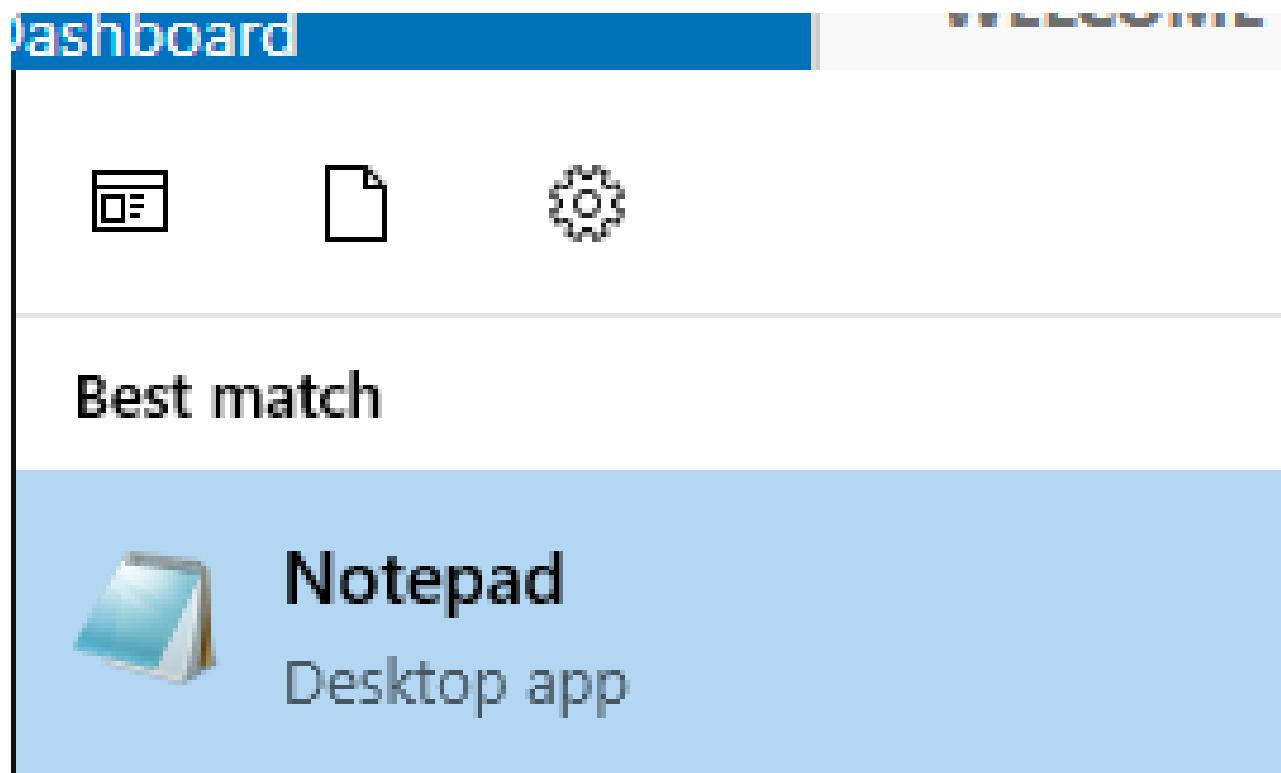


FIGURE 58 - OPEN NOTE PAD

A screenshot of a Microsoft Notepad window. The title bar shows the file name "Untitled - Notepad". The menu bar includes "File", "Edit", "Format", "View", and "Help". The main content area contains the following HTML code:

```
>h1<iddeen19vm</h1>
<p>Name: Cold Id-deen</p>
<p>Class: NACT-262</p>
<p>Professor: Professor Mark Jeremy</p>
<p>Lab: Lab 3 Setting up SOHO Network</p>
```

FIGURE 59 - MAKE AN HTML CODING ON NOTE PAD

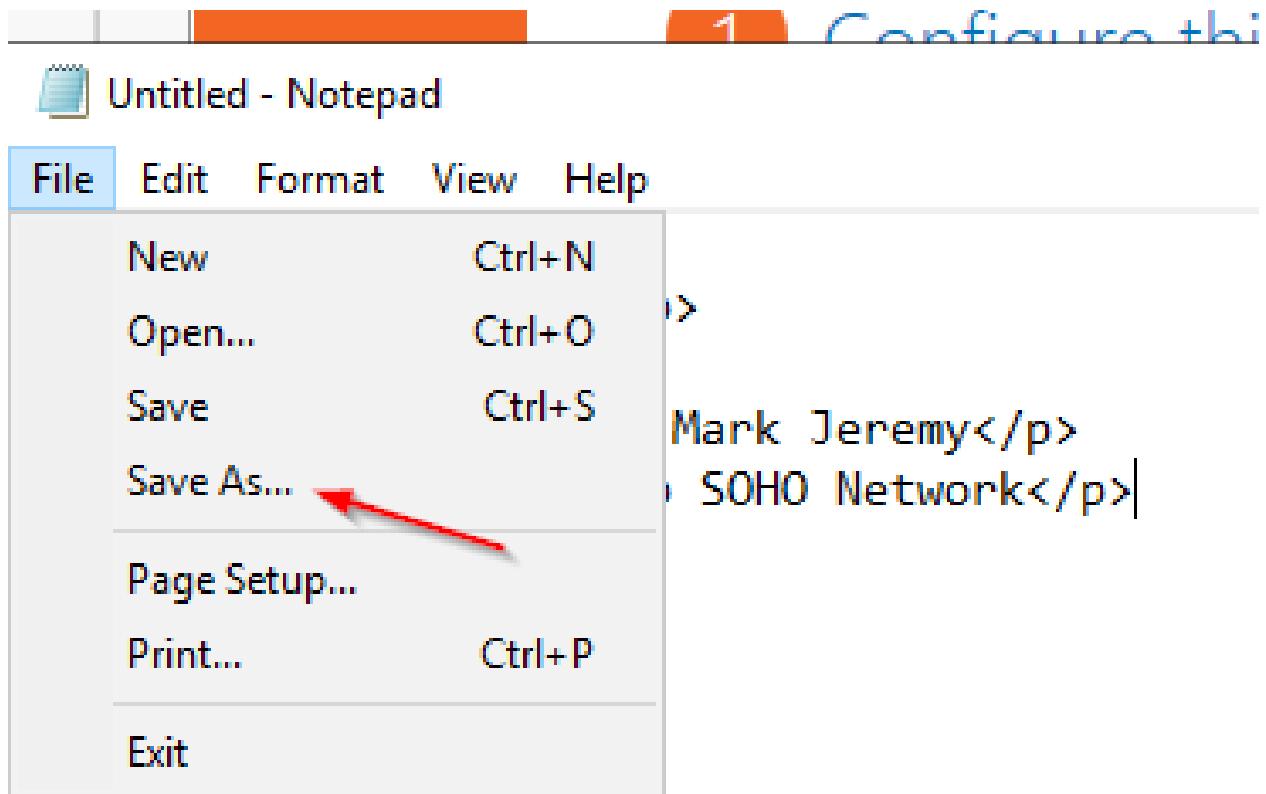


FIGURE 60 - CLICK "SAVE AS"

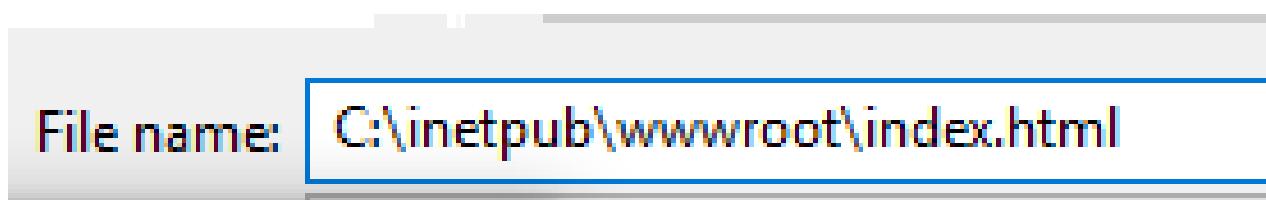


FIGURE 61 - TYPE THE REQUIRED FILE NAME TO PUT IN

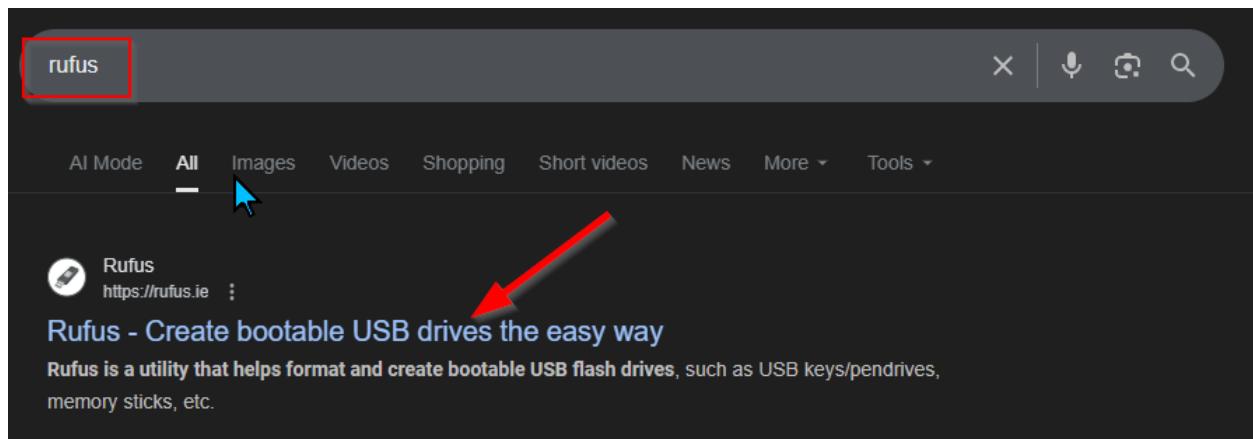


FIGURE 62 - TYPE "RUFUS" AND CLICK THIS LINK

Download				
Latest releases:				
Link	Type	Platform	Size	Date
<a href="#">rufus-4.9.exe</a>	Standard	Windows x64	2 MB	2025.06.15
<a href="#">rufus-4.9p.exe</a>	Portable	Windows x64	2 MB	2025.06.15
<a href="#">rufus-4.9_x86.exe</a>	Standard	Windows x86	1.9 MB	2025.06.15
<a href="#">rufus-4.9_arm64.exe</a>	Standard	Windows ARM64	6 MB	2025.06.15
<a href="#">rufus-4.10_BETA.exe</a>	BETA	Windows x64	1.8 MB	2025.09.10

FIGURE 63 - DOWNLOAD RUFUS.EXE

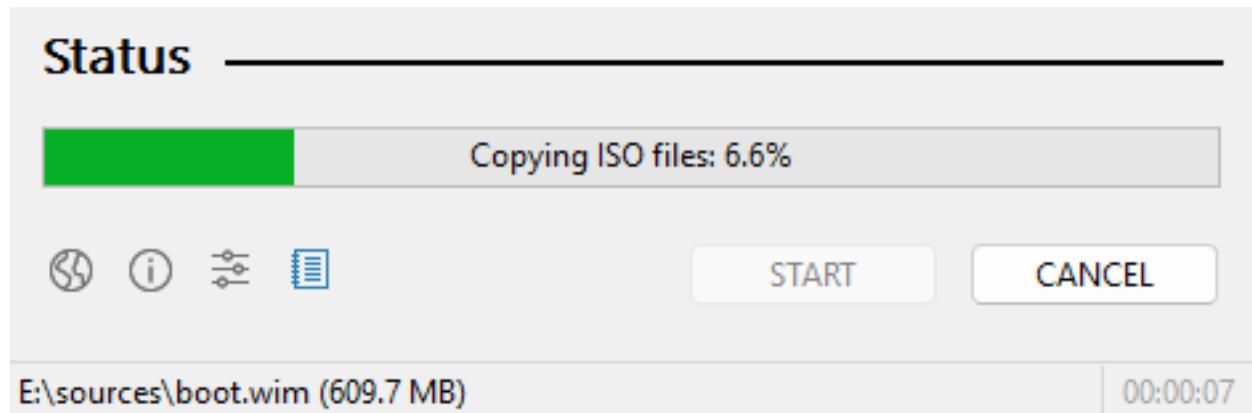


FIGURE 64 - COPYING ISO FILES

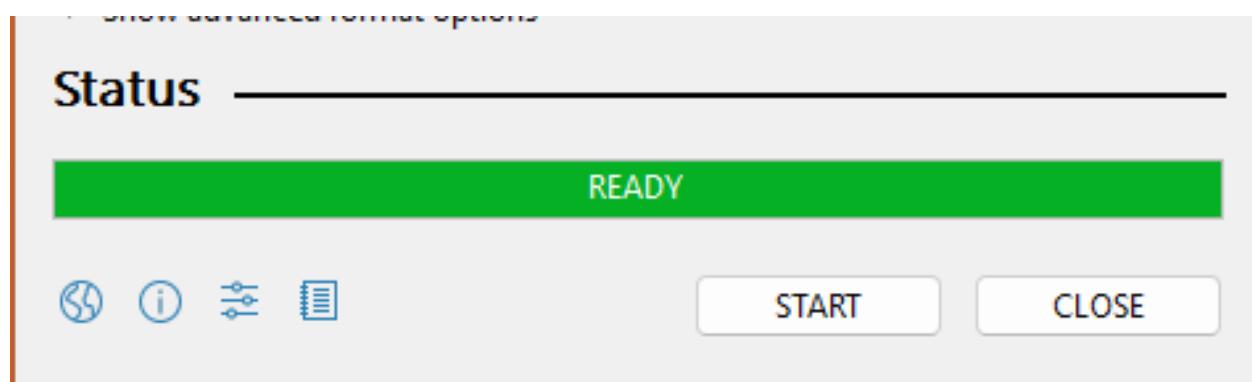


FIGURE 65 - READY TO GO!

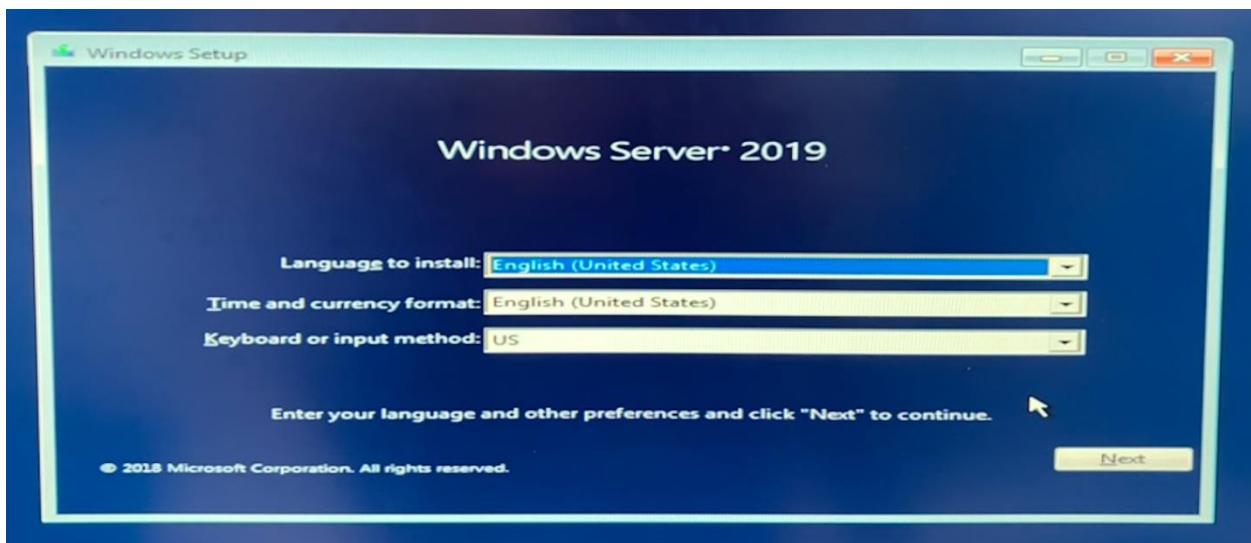


FIGURE 66 - INSTALL WINDOWS SERVER 2019 IN PC-B

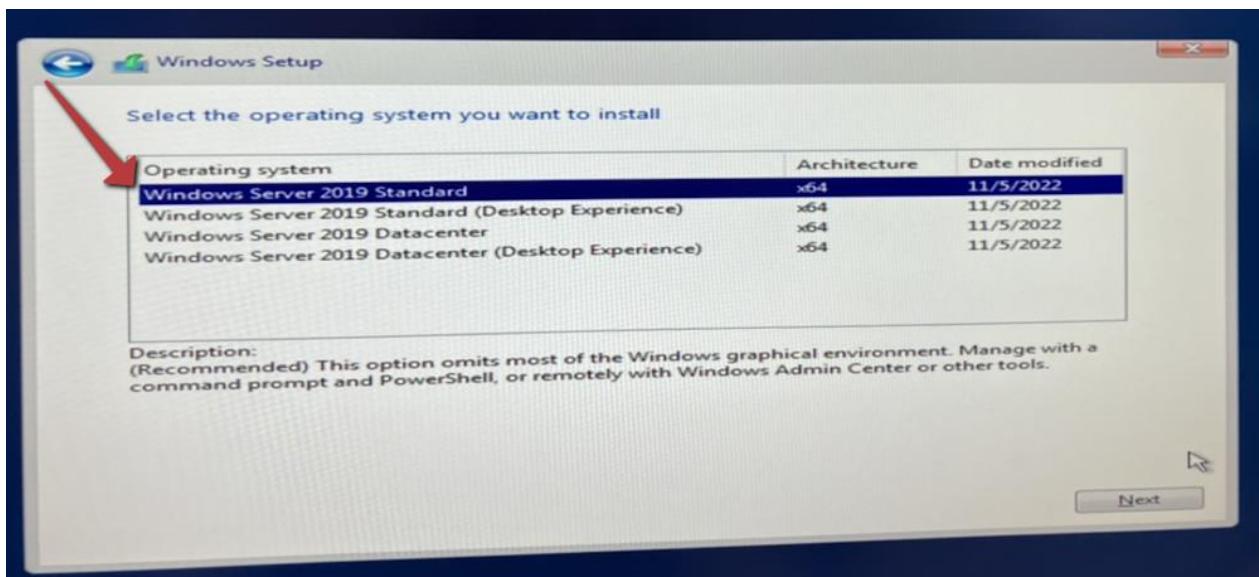


FIGURE 67 - CLICK THIS WS 2019 STANDARD

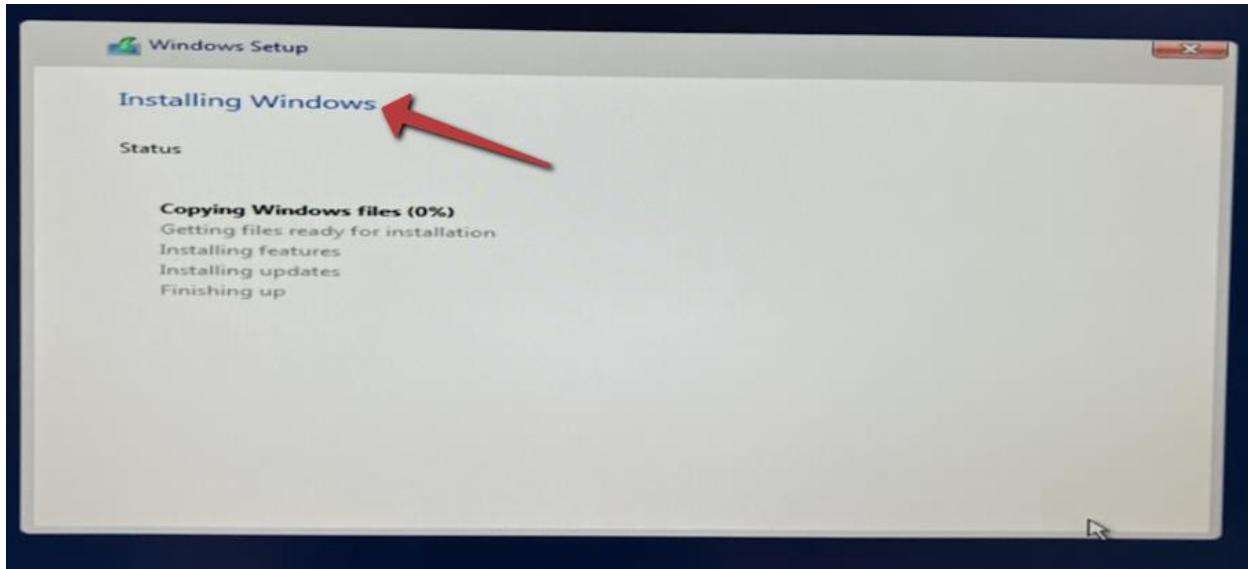


FIGURE 68 - INSTALLING WINDOWS

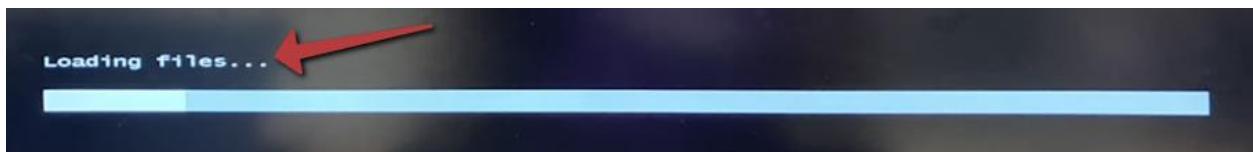


FIGURE 69 - LOADING FILES

```
Administrator: C:\Windows\system32\cmd.exe -sconfig
Microsoft (R) Windows Script Host Version 5.812
Copyright (C) Microsoft Corporation. All rights reserved.

Inspecting system...

----- Server Configuration -----
1) Domain/Workgroup: Workgroup: WORKGROUP
2) Computer Name: WIN-SCCO9SPG8GR
3) Add Local Administrator
4) Configure Remote Management
5) Windows Update Settings: Enabled
6) Download and Install Updates DownloadOnly
7) Remote Desktop: Disabled
8) Network Settings
9) Date and Time
10) Telemetry settings Unknown
11) Windows Activation
12) Log Off User
13) Restart Server
14) Shut Down Server
15) Exit to Command Line

Enter number to select an option:
```

FIGURE 70 - CHANGE THE COMPUTER NAME BY PRESSING TWO NUMBER

```
----- Server Configuration -----
1) Domain/Workgroup: Workgroup: WORKGROUP
2) Computer Name: FSA-SERVER01
3) Add Local Administrator
4) Configure Remote Management
5) Windows Update Settings: Enabled
6) Download and Install Updates DownloadOnly
7) Remote Desktop: Disabled
```

FIGURE 71 - DONE CHANGING THE COMPUTER NAME

```
Administrator: C:\Windows\system32\cmd.exe
C:\Users\Administrator>sconfig
```

FIGURE 72 - TYPE "SCONFIG"

```
Administrator: C:\Windows\system32\cmd.exe
IP Address           169.254.39.48   fe80::9396:d2
C:\Windows\System32\cscript.exe

Network Adapter Settings

NIC Index          1
Description        Realtek PCIe GBE Family Controller
IP Address         169.254.39.48   fe80::9396:d2
Subnet Mask        255.255.0.0
DHCP enabled       True
Default Gateway    192.168.201.254
Preferred DNS Server 192.168.201.254
Alternate DNS Server

1) Set Network Adapter Address
2) Set DNS Servers
3) Clear DNS Server Settings
4) Return to Main Menu

Select option: 1

Select (D)HCP, (S)tatic IP (Blank=Cancel): S

Set Static IP
Enter static IP address: 192.168.201.21
Enter subnet mask (Blank = Default 255.255.255.0):
Enter default gateway: 192.168.201.254
```

FIGURE 73 - CHANGE THE IP ADDRESS AND PUT THE REQUIRED STUFFS ON IT

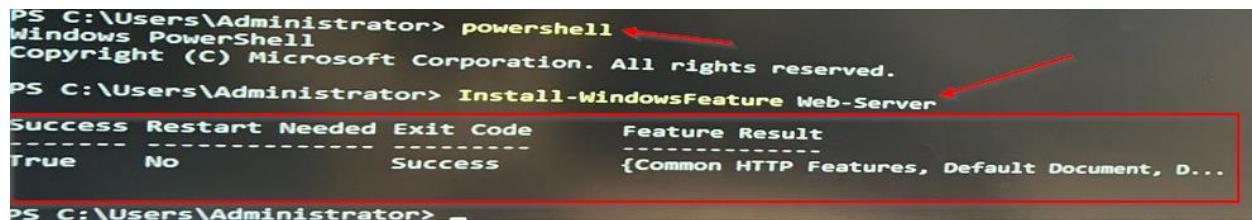
```
NIC Index          1
Description        Realtek PCIe GBE Family Controller
IP Address         192.168.201.21   fe80::9396:d2f4:959f:3d69
Subnet Mask        255.255.255.0
DHCP enabled       False
Default Gateway   192.168.201.254
Preferred DNS Server
Alternate DNS Server

1) Set Network Adapter Address
2) Set DNS Servers
3) Clear DNS Server Settings
4) Return to Main Menu

Select option: 2
DNS Servers

Enter new preferred DNS server (Blank=Cancel): 192.168.201.10
```

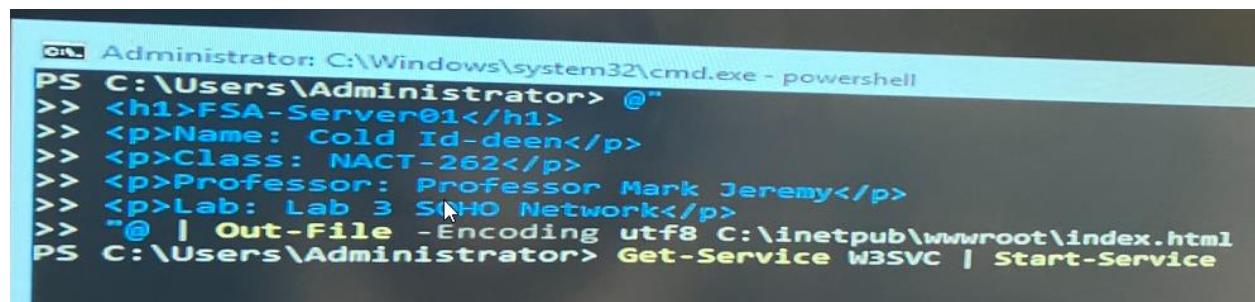
FIGURE 74 - SET THE NEW DNS SERVER



```
PS C:\Users\Administrator> powershell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

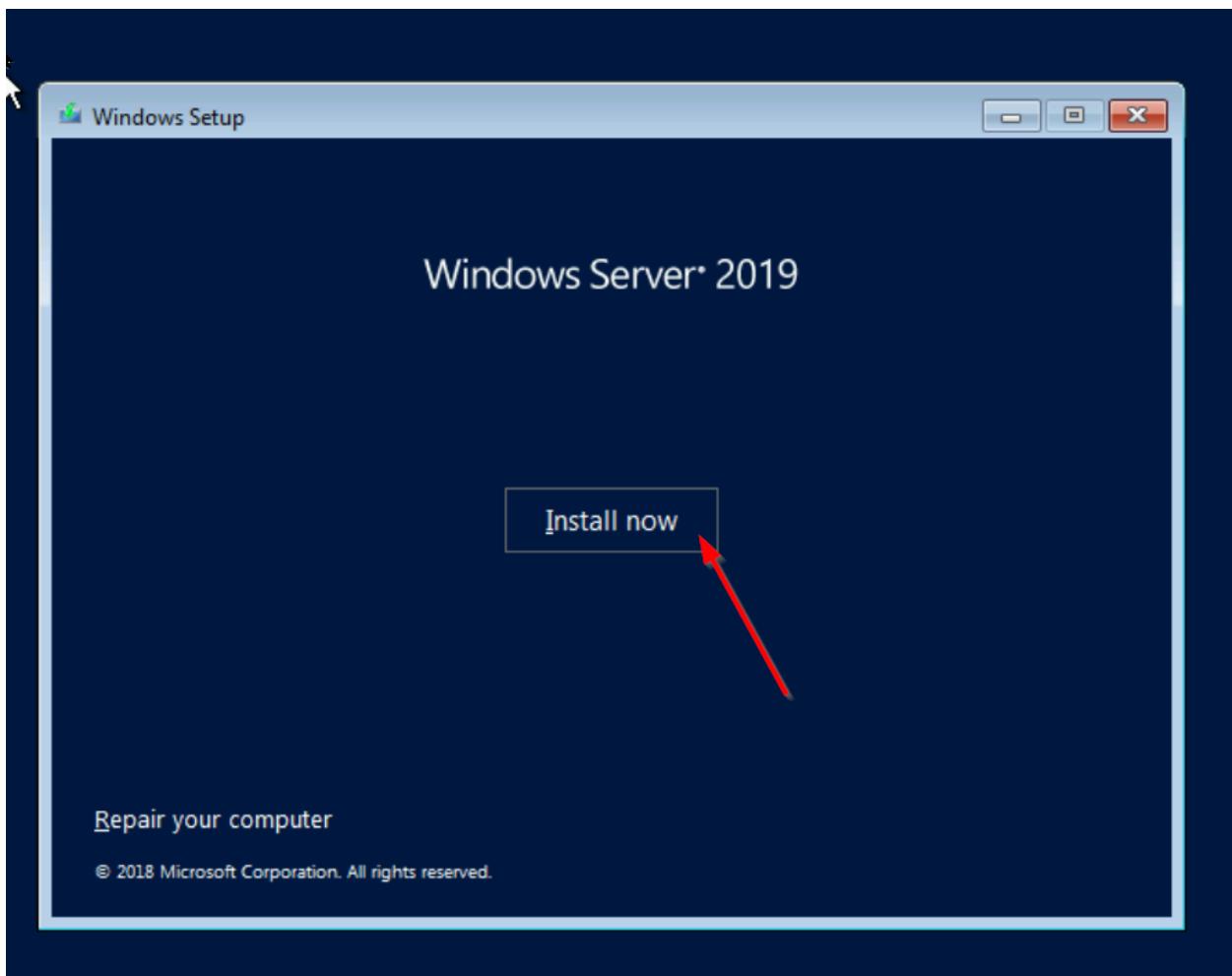
PS C:\Users\Administrator> Install-WindowsFeature Web-Server
Success Restart Needed Exit Code      Feature Result
----- ----- ----- ----- {Common HTTP Features, Default Document, D...
True    No        Success           {Common HTTP Features, Default Document, D...
```

FIGURE 75 - USE POWERSHELL AS COMMAND THEN TYPE THE REQUIRED COMMAND

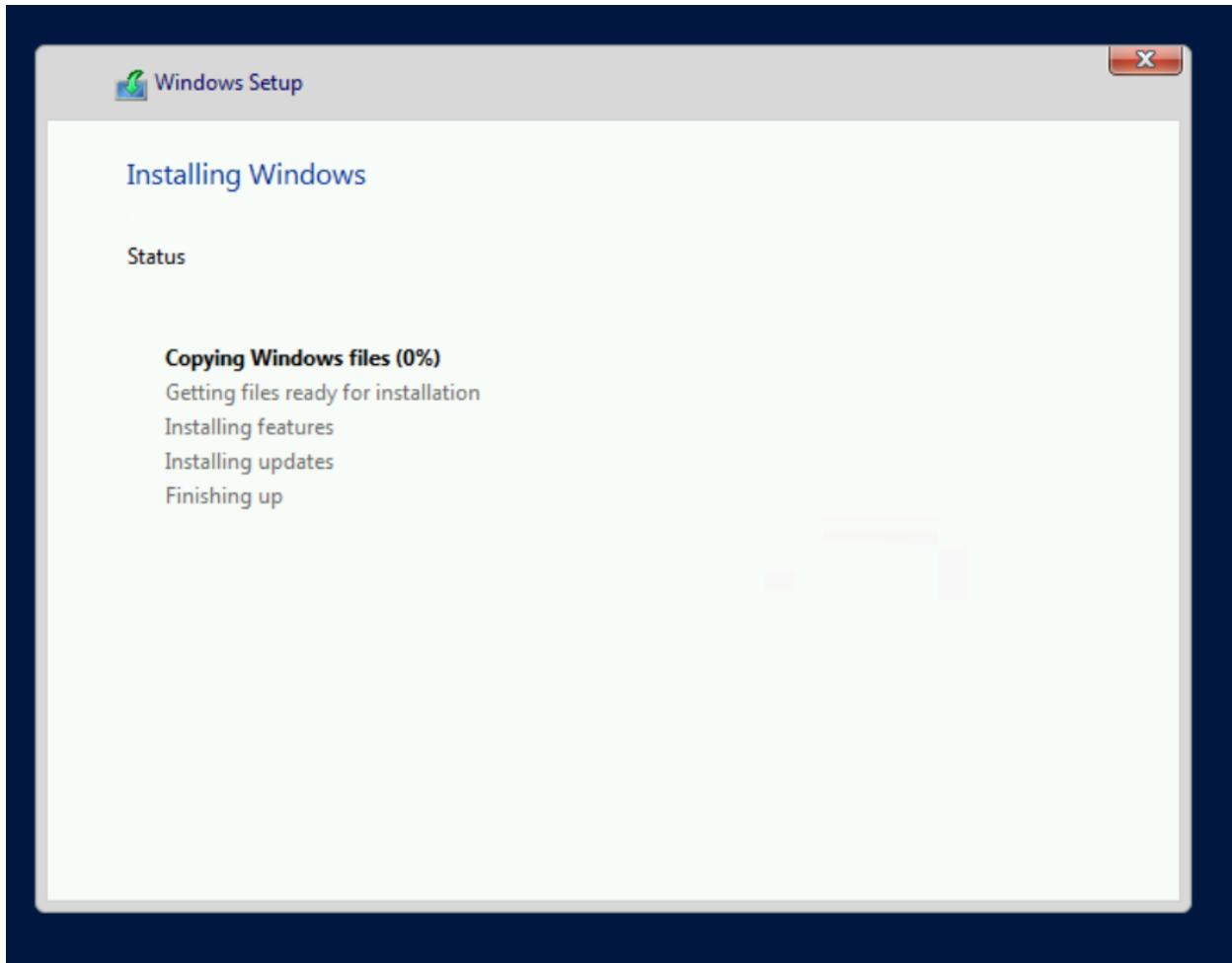


```
Administrator: C:\Windows\system32\cmd.exe - powershell
PS C:\Users\Administrator> @"
>> <h1>FSA-Server01</h1>
>> <p>Name: Cold Id-deen</p>
>> <p>Class: NACT-262</p>
>> <p>Professor: Professor Mark Jeremy</p>
>> <p>Lab: Lab 3 SNAO Network</p>
>> @" | Out-File -Encoding utf8 C:\inetpub\wwwroot\index.html
PS C:\Users\Administrator> Get-Service W3SVC | Start-Service
```

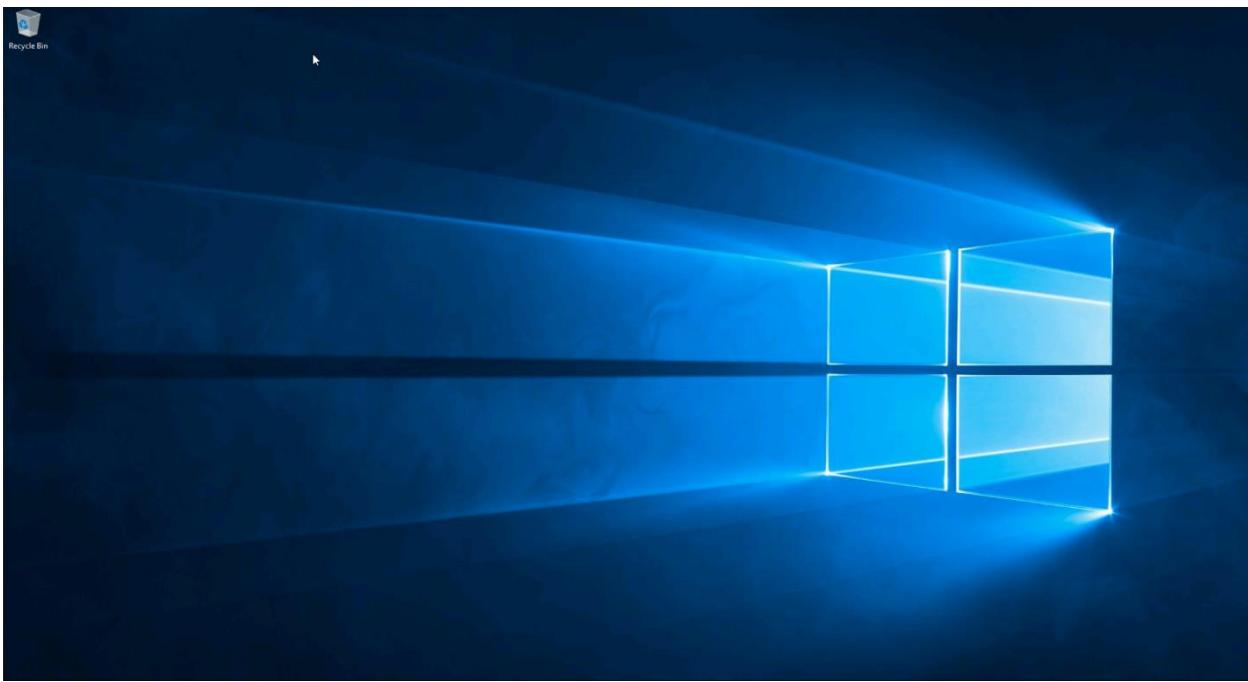
FIGURE 76 - TYPE THE HTML LANGUAGE AS CODING TO CREATE A WEBSITE AND START THE WEB SERVICE



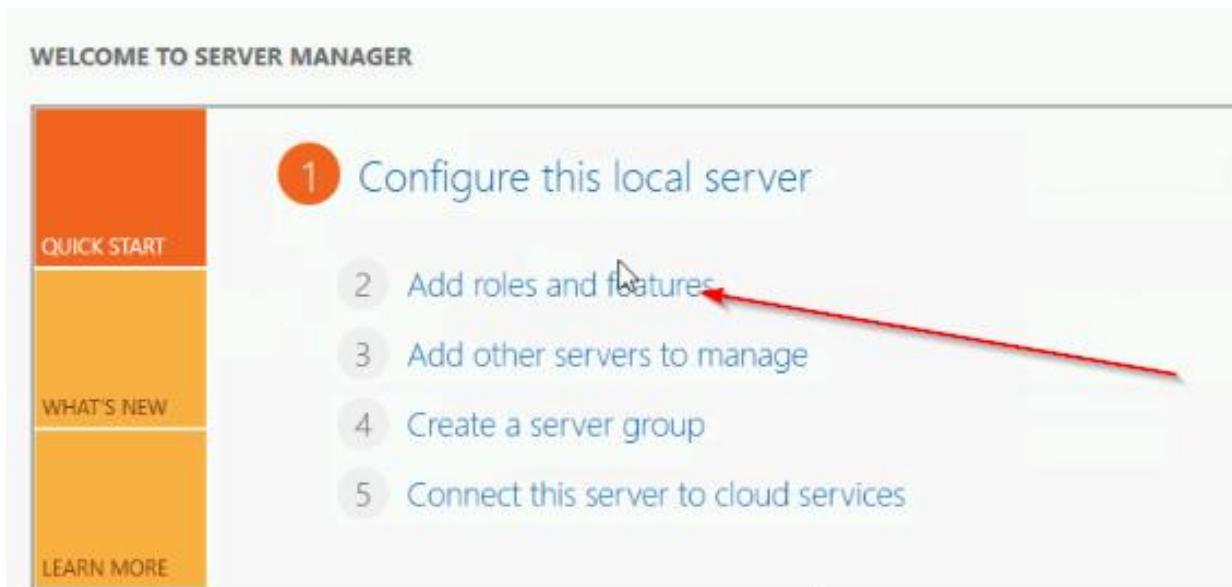
**FIGURE 77 - INSTALL WS 2019 IN THE DELL SERVER**



**FIGURE 78 - INSTALLING WINDOWS**



**FIGURE 79 - THE OVERVIEW OF THE WS 2019 IN DELL SERVER**



**FIGURE 80 - CLICK "ADD ROLES AND FEATURES"**

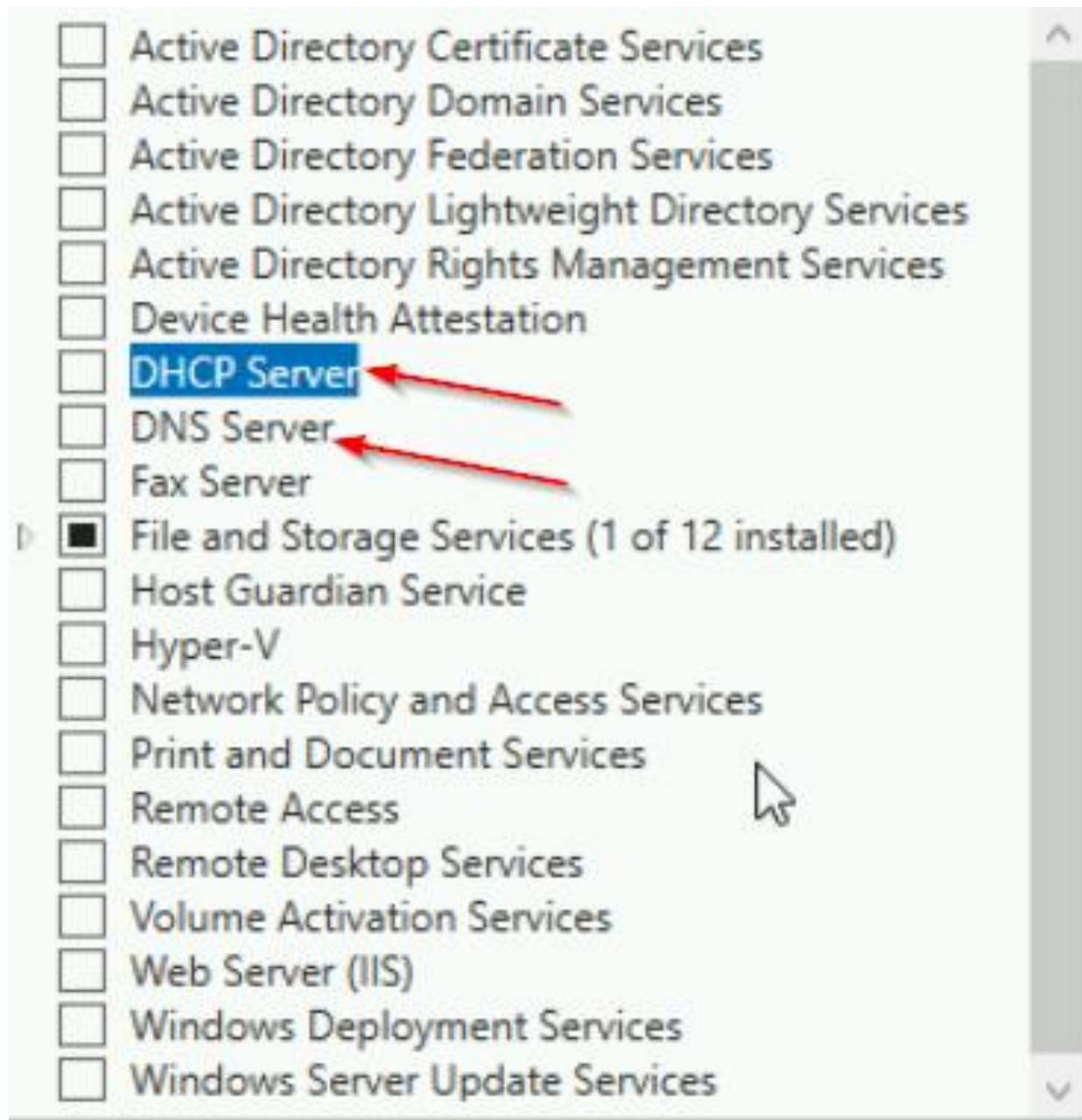


FIGURE 81 - SELECT DHCP AND DNS SERVER



## Add features that are required for DHCP Server?

The following tools are required to manage this feature, but do not have to be installed on the same server.

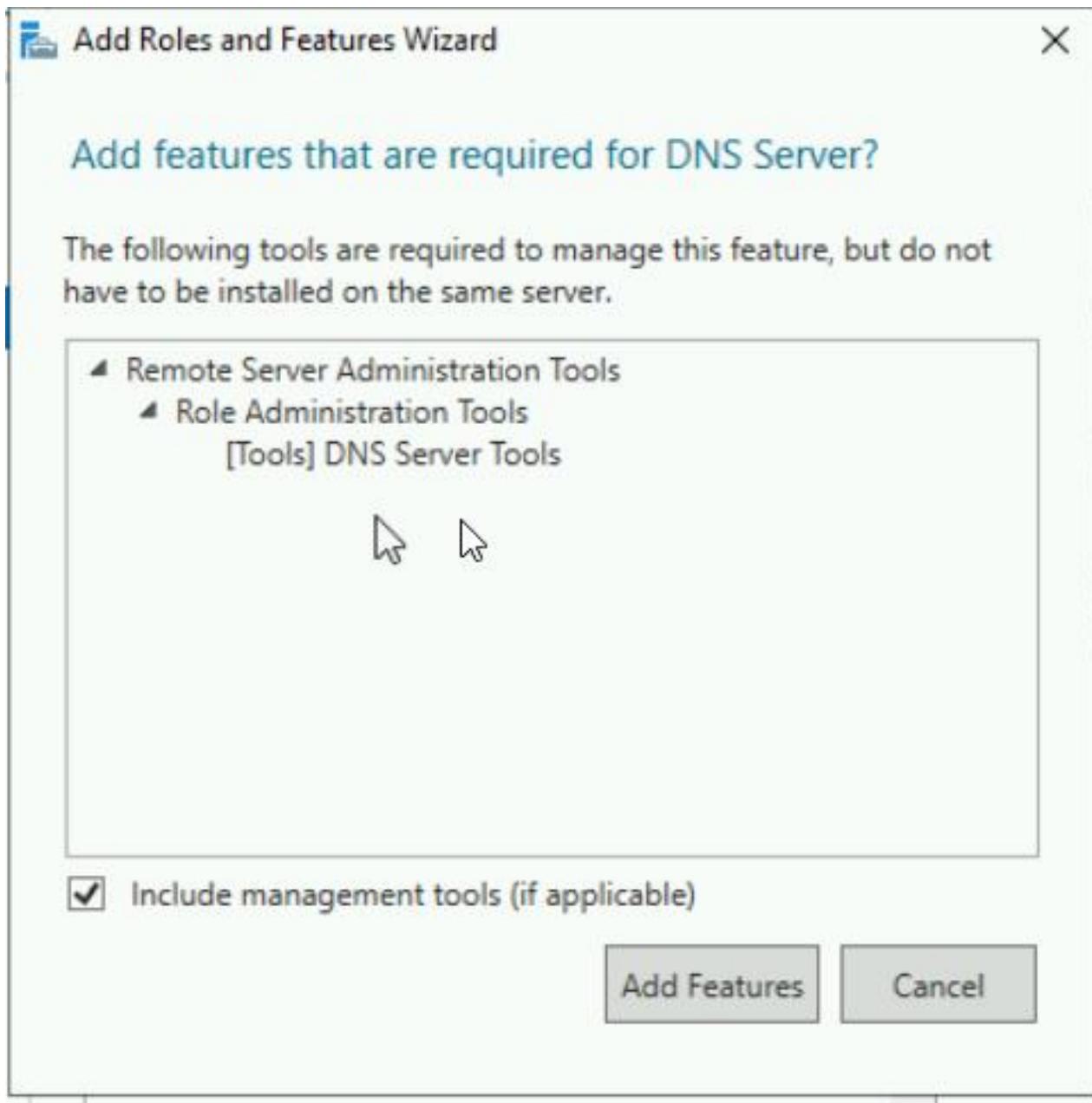
- ◀ Remote Server Administration Tools
  - ◀ Role Administration Tools
    - [Tools] DHCP Server Tools



- Include management tools (if applicable)

Add Features

Cancel



**FIGURE 82 - ADD FEATURES FOR DHCP AND DNS**

To install the following roles, role services, or features on selected server, click Install.

Restart the destination server automatically if required

Optional features (such as administration tools) might be displayed on this page because they have been selected automatically. If you do not want to install these optional features, click Previous to clear their check boxes. 

- DHCP Server
- DNS Server
- Remote Server Administration Tools
  - Role Administration Tools
  - DHCP Server Tools
  - DNS Server Tools

Export configuration settings  
Specify an alternate source path

< Previous

Next >

**Install**

Cancel

**FIGURE 83 - INSTALL BOTH OF IT**

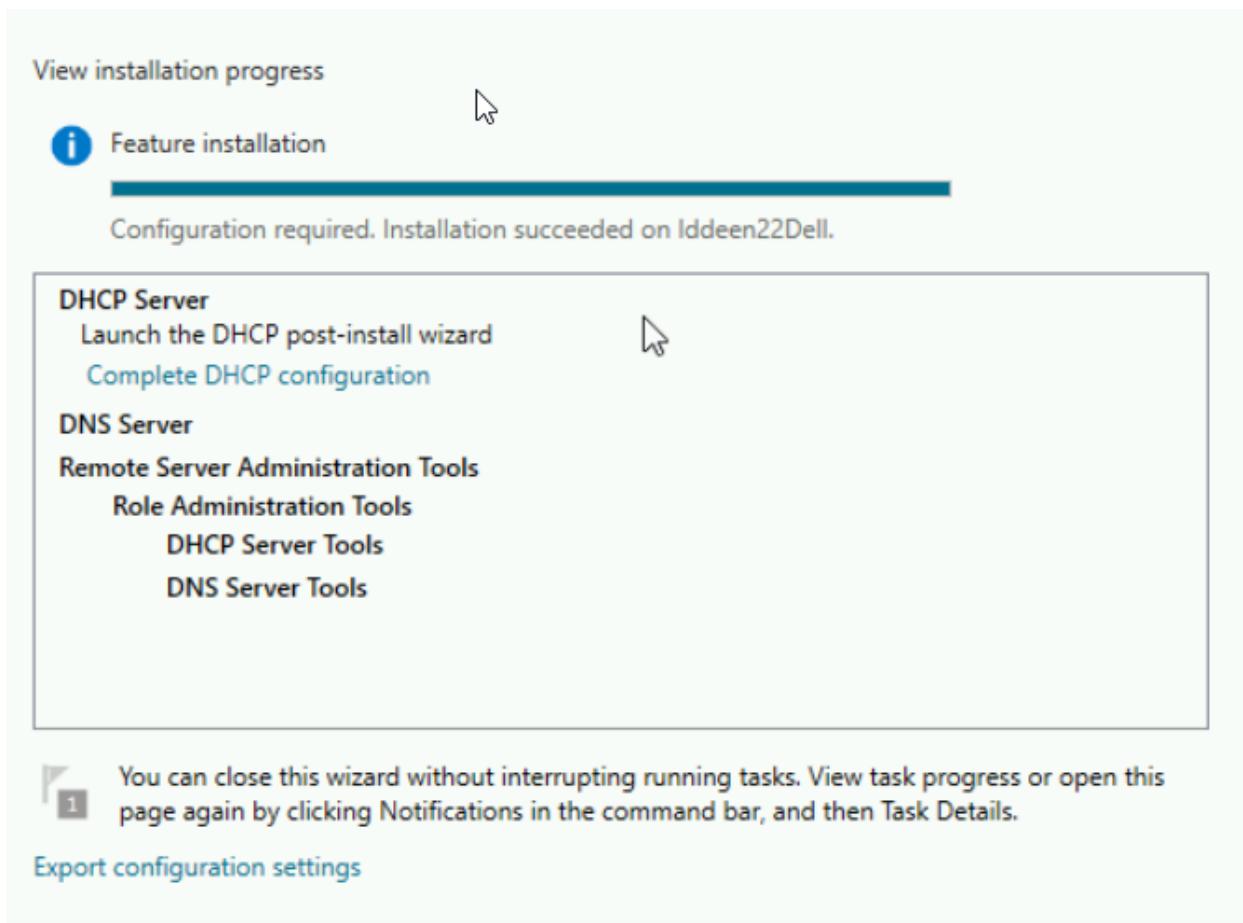


FIGURE 84 - INSTALLATION COMPLETED

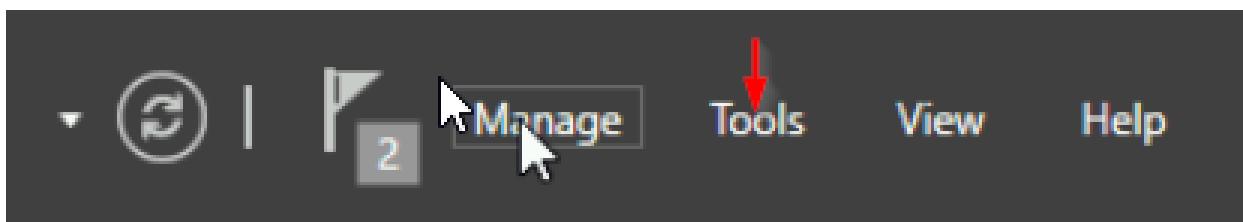


FIGURE 85 - CLICK "TOOLS"

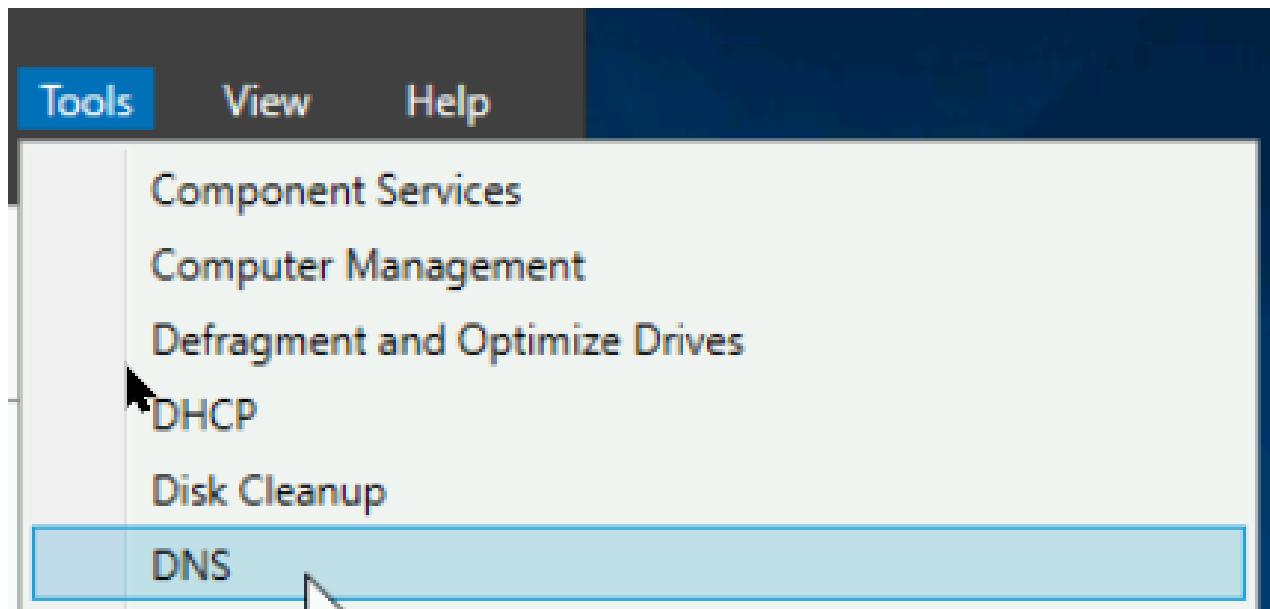
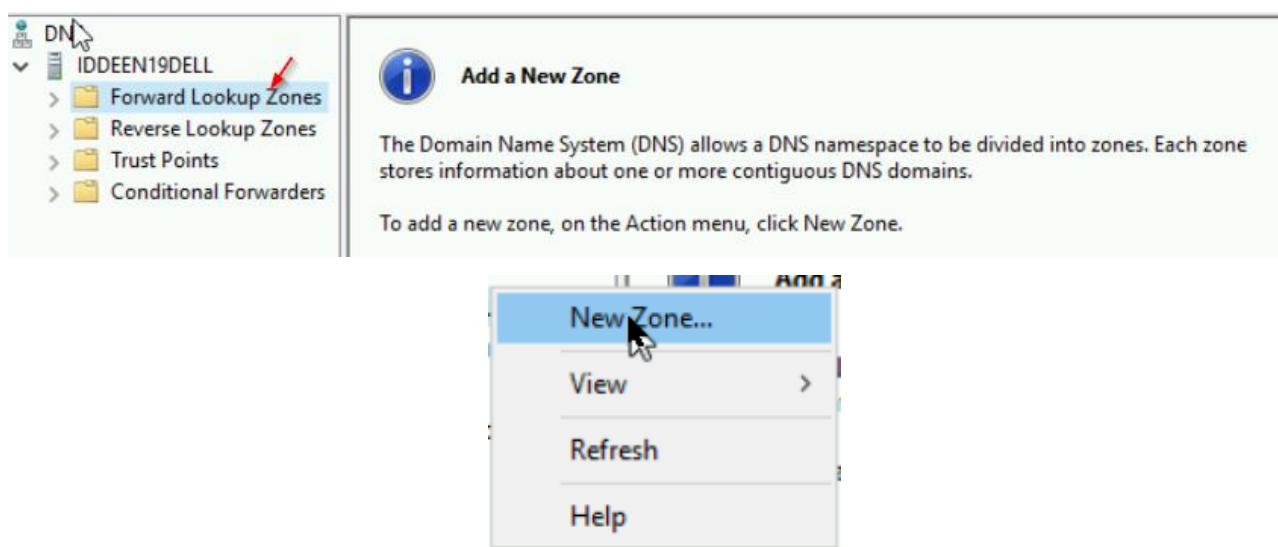


FIGURE 86 - CLICK "DNS"

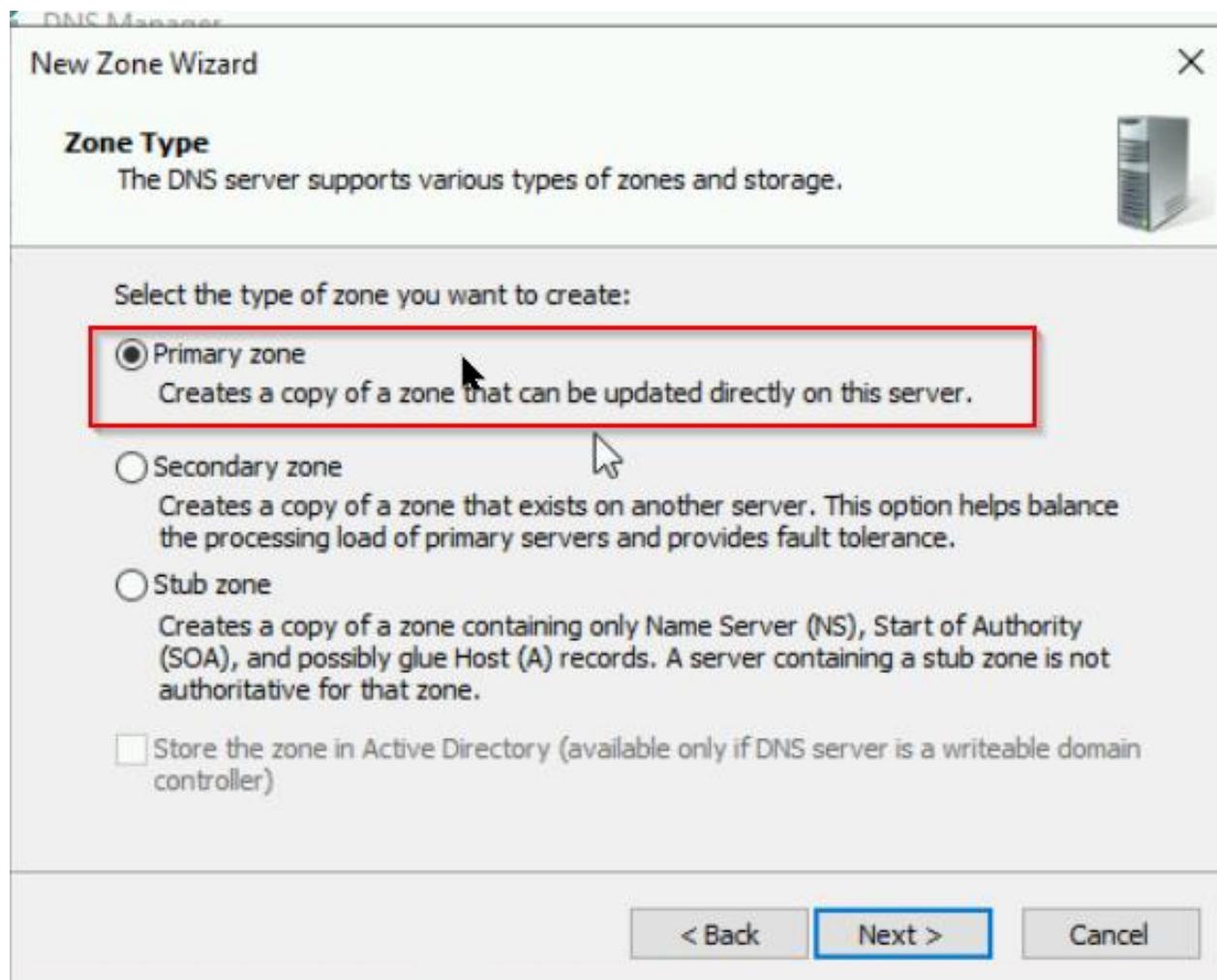


FIGURE 87 - SEE THE OVERVIEW OF THE DNS MANAGER

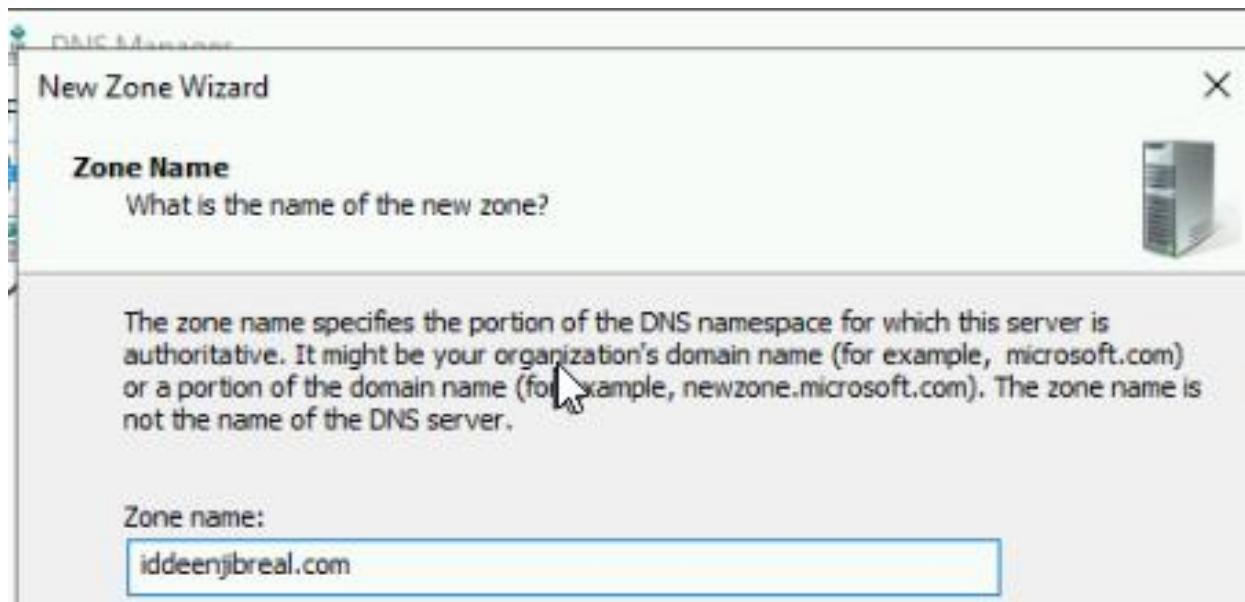


**FIGURE 88 - ADD A NEW ZONE**

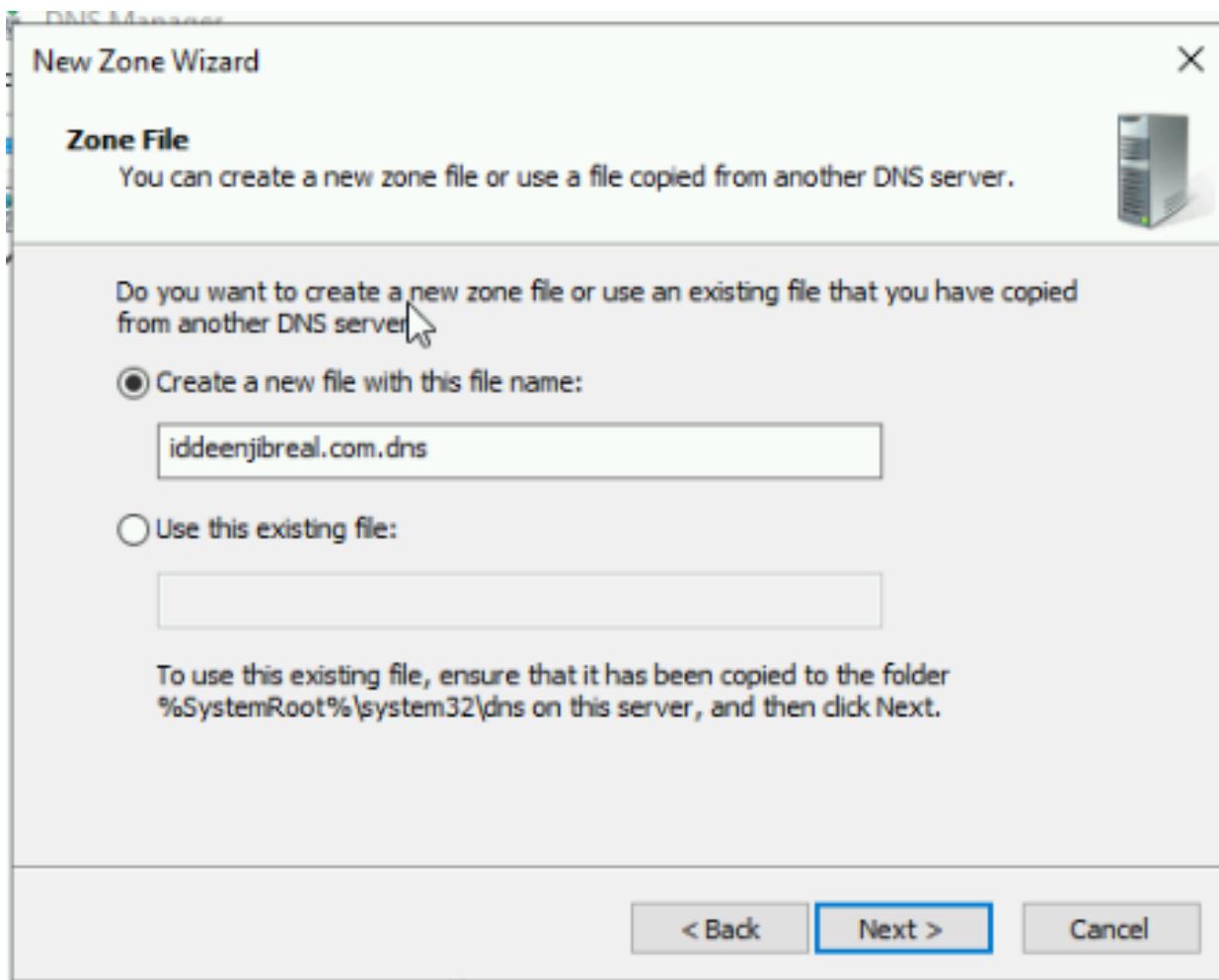




**FIGURE 89 - PROCED THE ZONE WIZARD**



**FIGURE 90 - TYPE THE REQUIRED TEXT ON ZONE NAME**



**FIGURE 91 - CREATE A NEW FILE WITH THIS FILE NAME**

DNS Manager

## New Zone Wizard

### Dynamic Update

You can specify that this DNS zone accepts secure, nonsecure, or no dynamic updates.

Dynamic updates enable DNS client computers to register and dynamically update their resource records with a DNS server whenever changes occur.

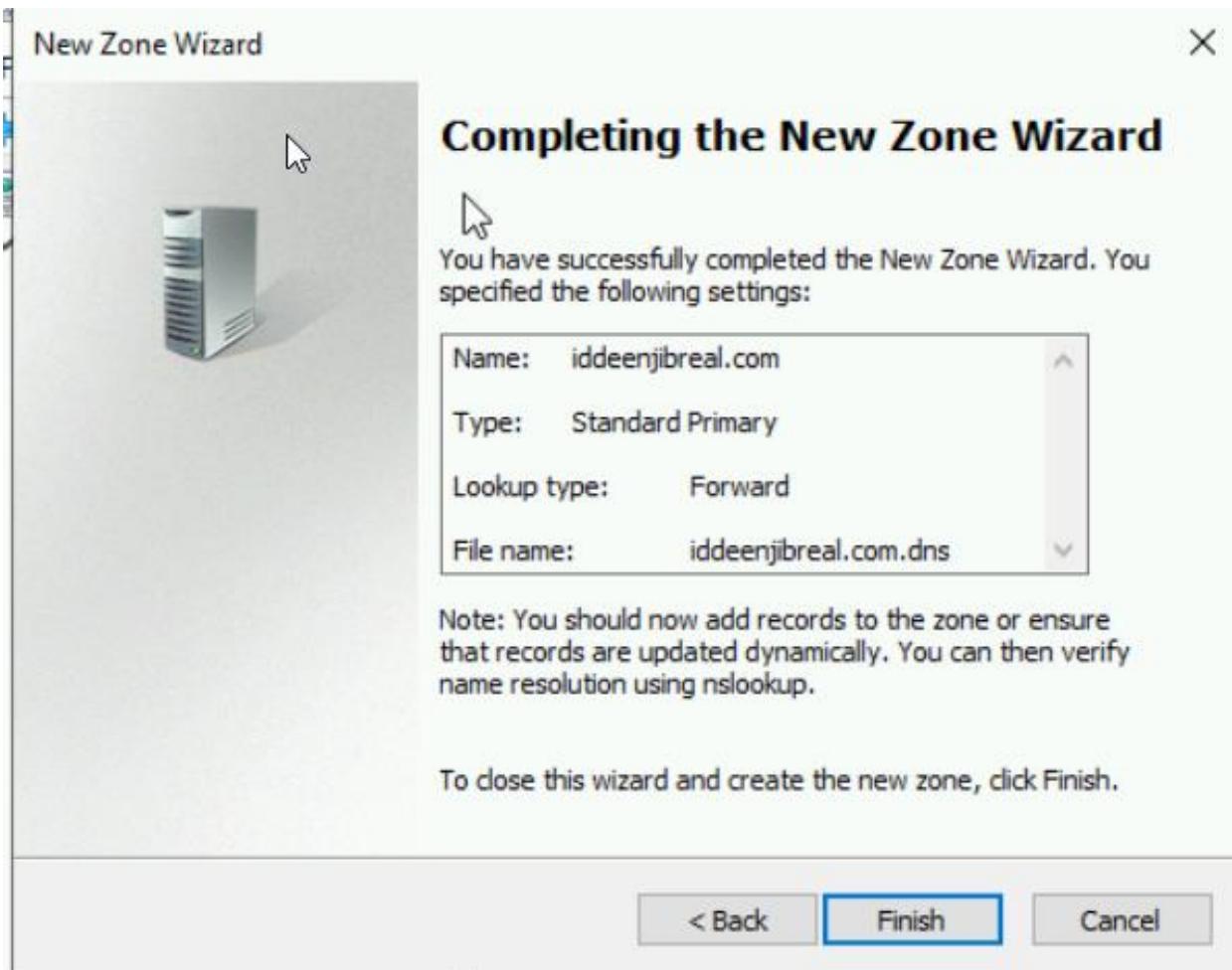
Select the type of dynamic updates you want to allow:

Allow only secure dynamic updates (recommended for Active Directory)  
This option is available only for Active Directory-integrated zones.

Allow both nonsecure and secure dynamic updates  
Dynamic updates of resource records are accepted from any client.  
 This option is a significant security vulnerability because updates can be accepted from untrusted sources.

Do not allow dynamic updates  
Dynamic updates of resource records are not accepted by this zone. You must update these records manually.

< Back      Next >      Cancel



**FIGURE 92 - PROCED TO COMPLETE THE NEW ZONE WIZARD**

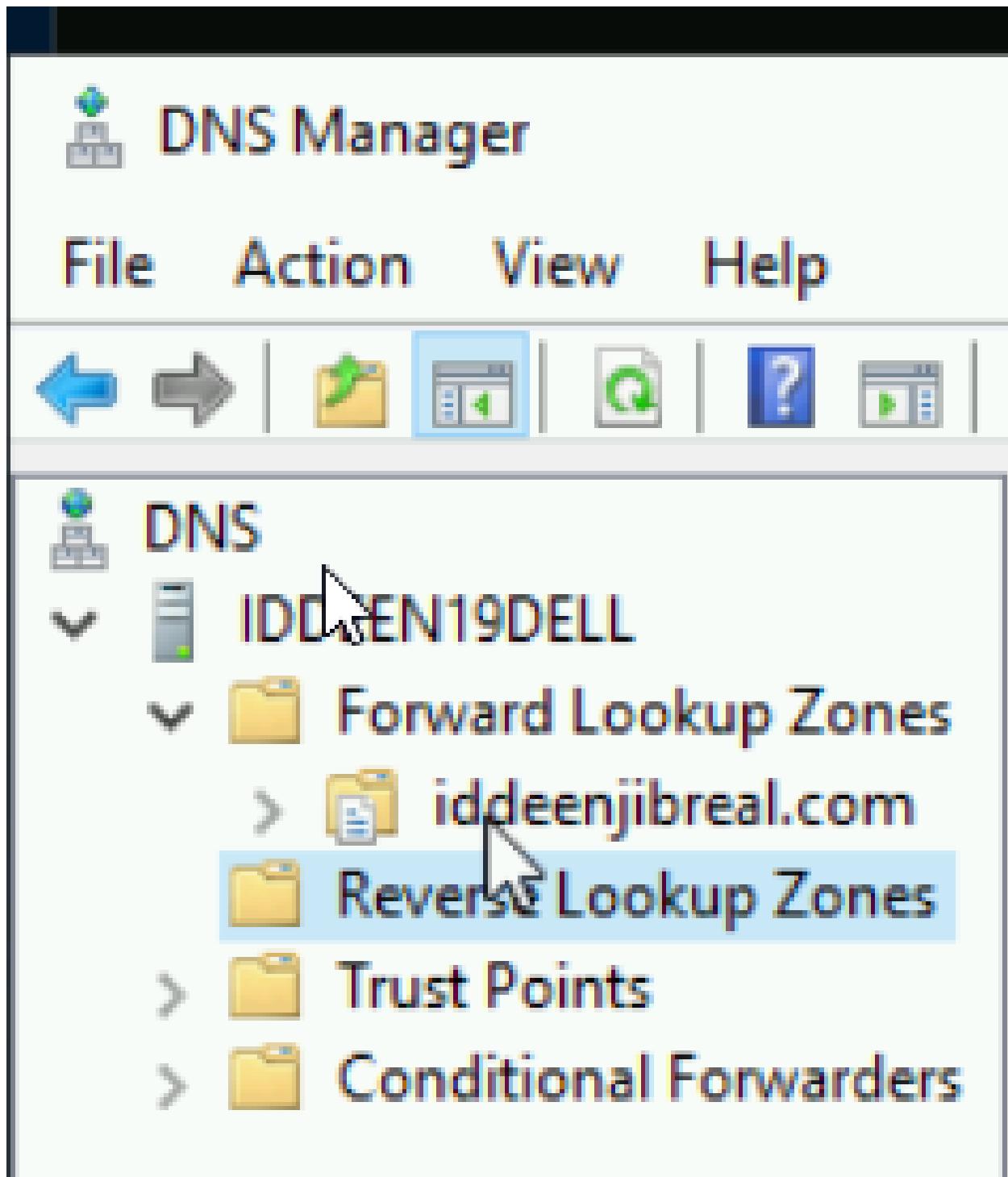


FIGURE 93 - CLICK "REVERSE LOOKUP ZONES" TO CREATE ANOTHER ZONE

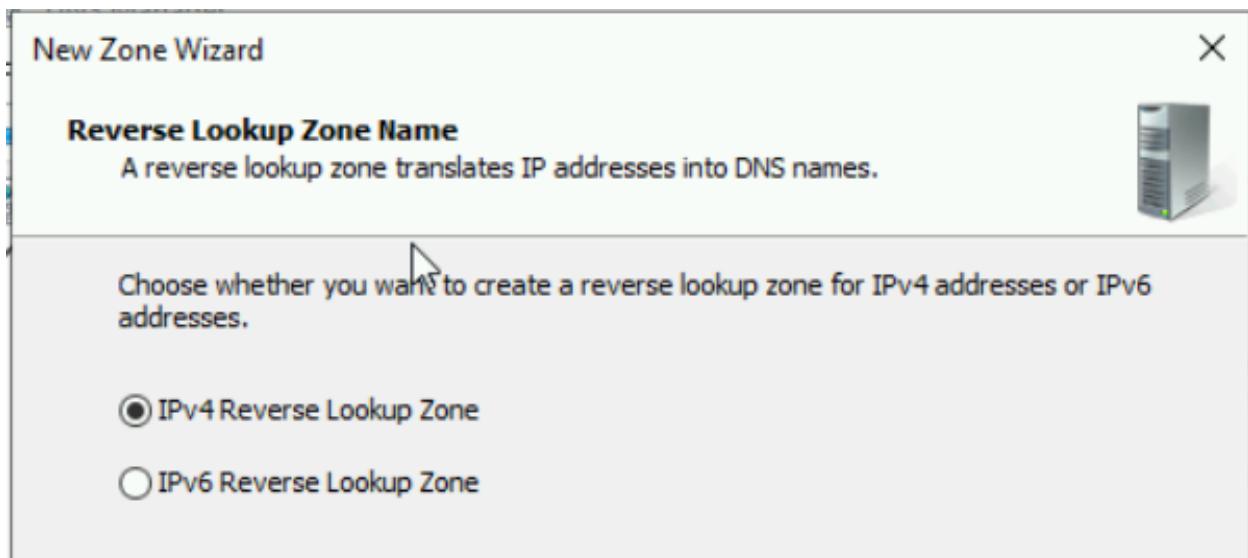


FIGURE 94 - PROCCED UNTIL CLICK "IPv4 REVERSE LOOKUP ZONE"

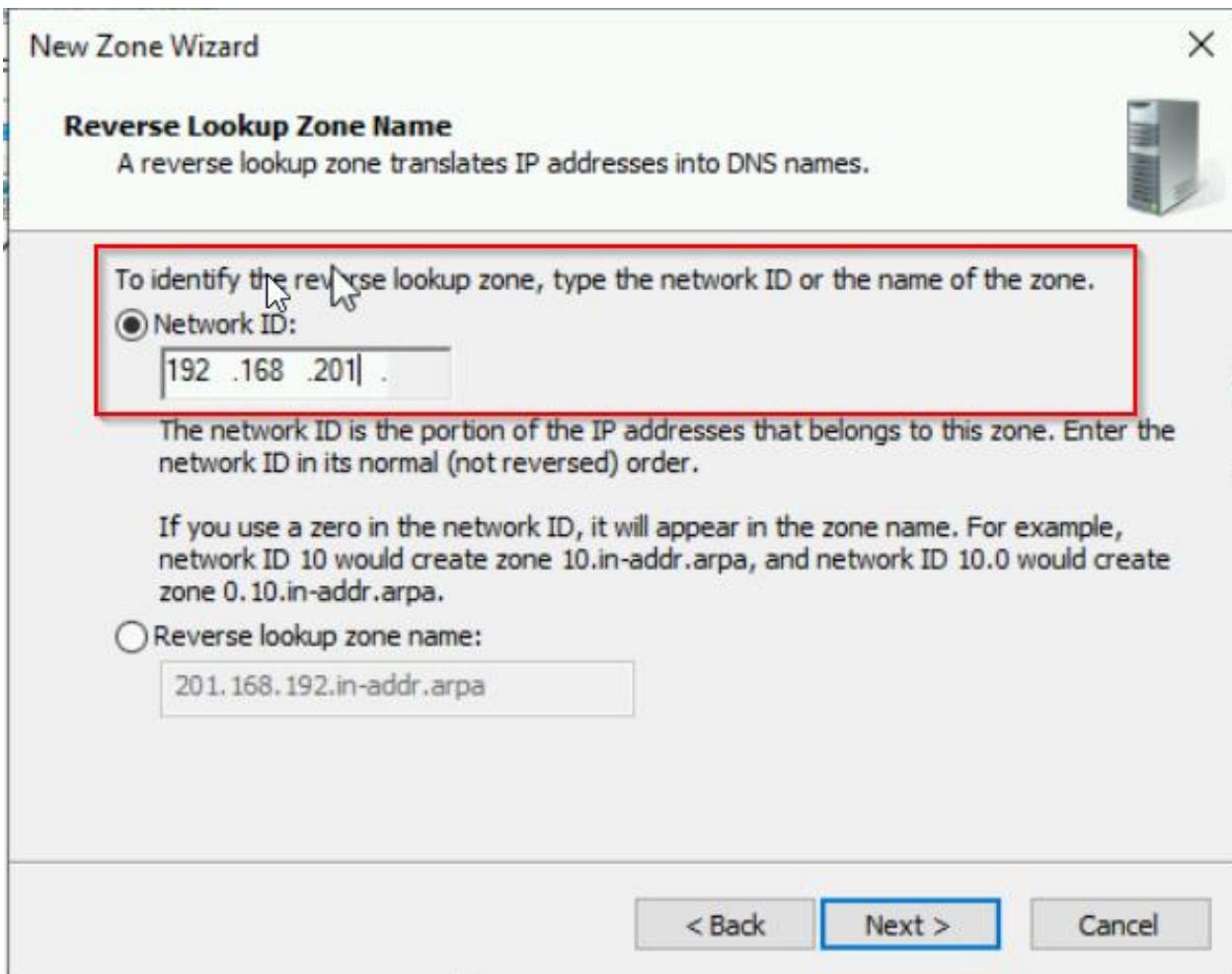
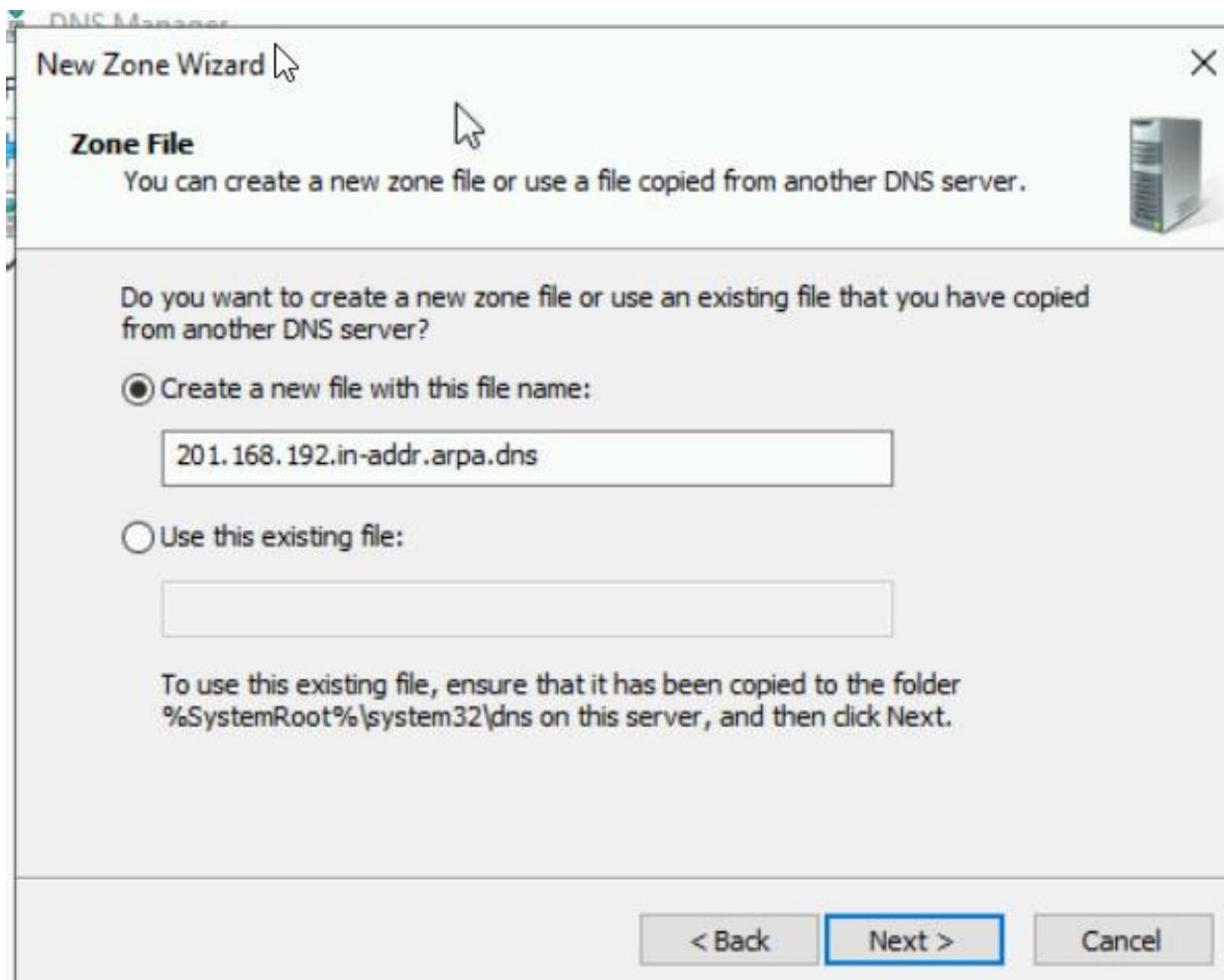


FIGURE 95 - TYPE THE REQUIRED NETWORK ID TO PROCCED



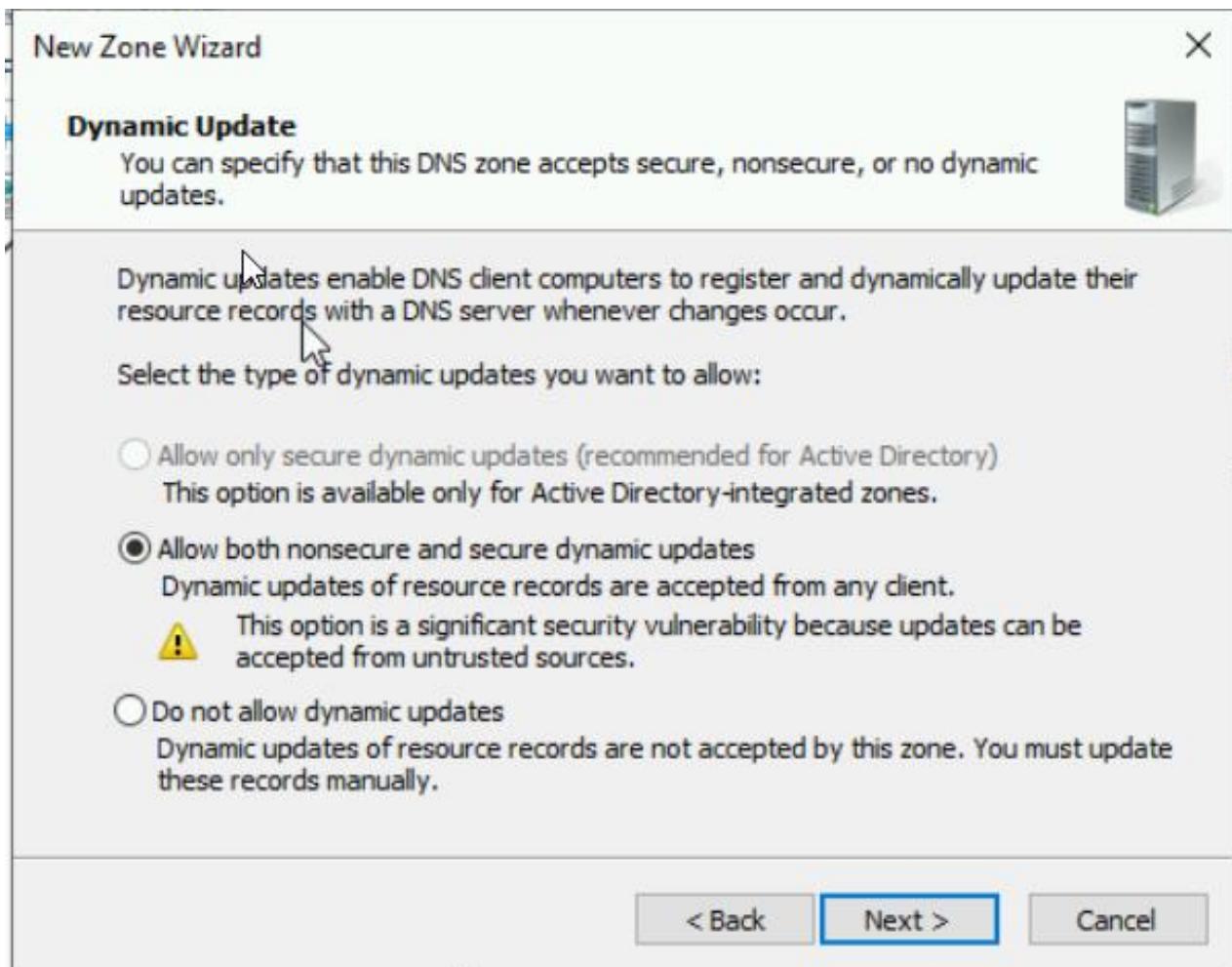
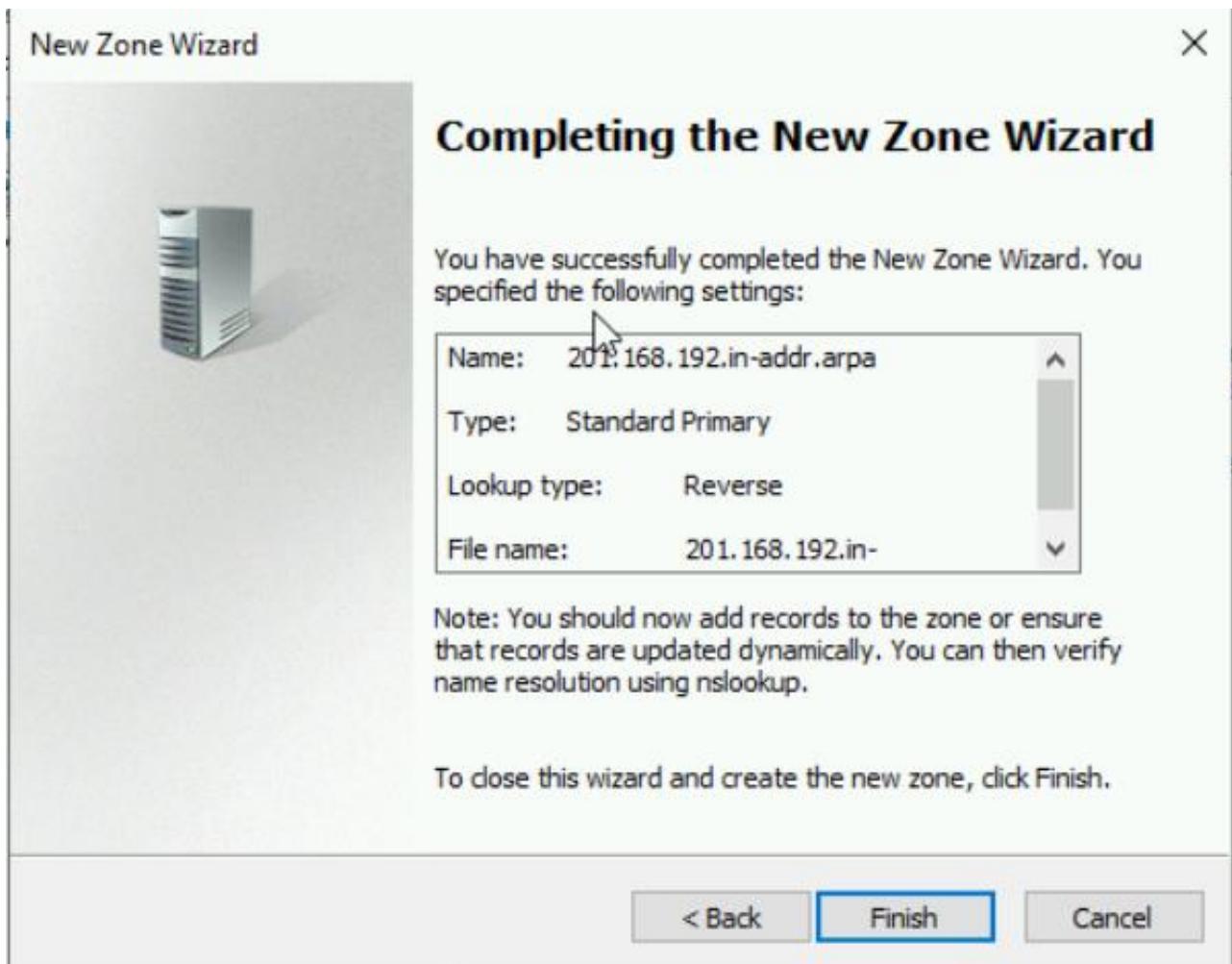


FIGURE 96 - PROCED TO DO THE SAME THING AS FOR FORWARD ZONE



**FIGURE 97 - CLICK "FINISH"**

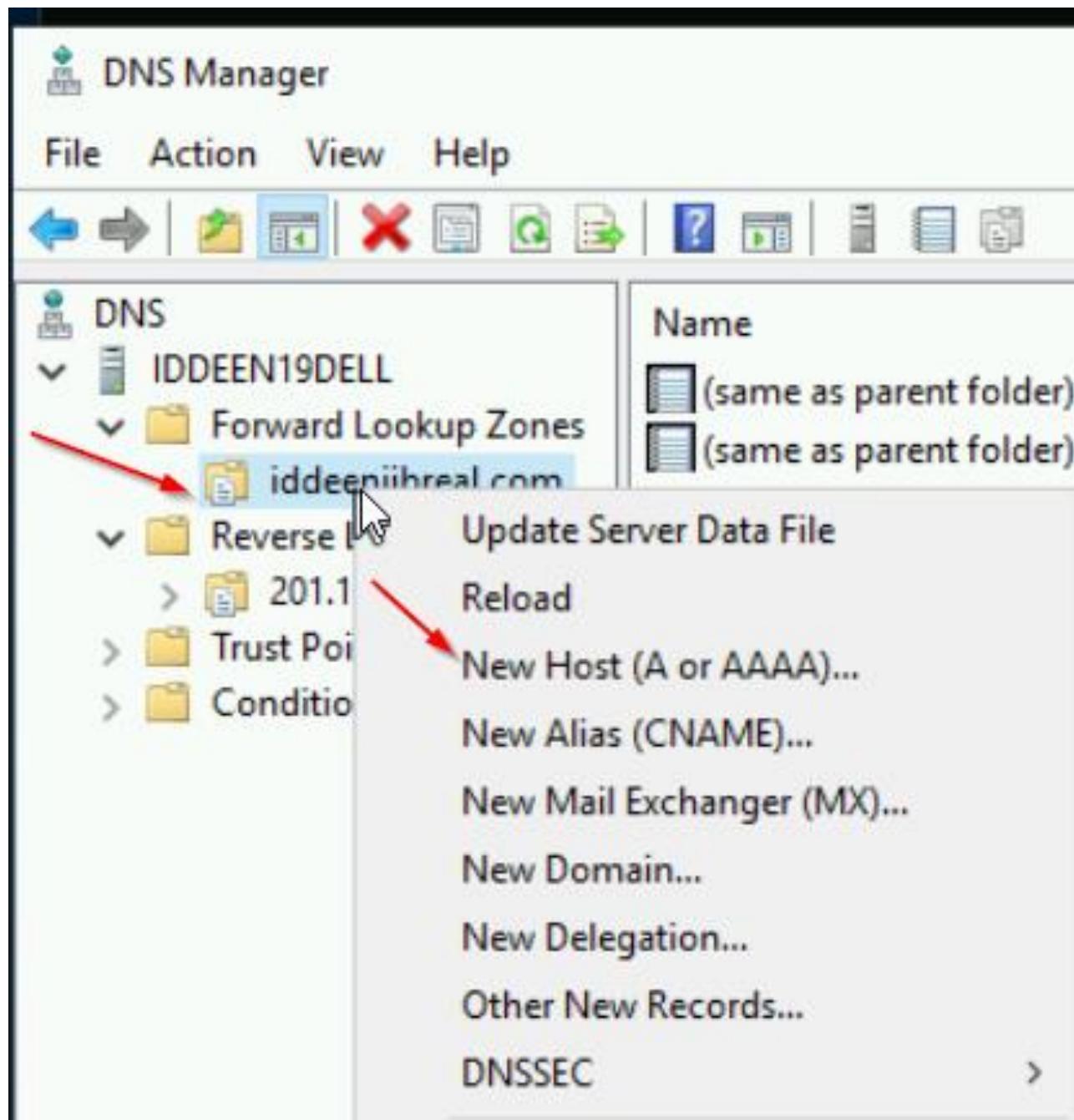


FIGURE 98 - CLICK "NEW HOST (A OR AAAA)"

### New Host

Name (uses parent domain name if blank):  
router01

Fully qualified domain name (FQDN):  
router01.iddeenjibreal.com.

IP address:  
192.168.201.254

Create associated pointer (PTR) record

**Add Host** **Cancel**

New Host X

Name (Uses parent domain name if blank):

Fully qualified domain name (FQDN):

IP address:

Create associated pointer (PTR) record

Add Host Done

New Host X

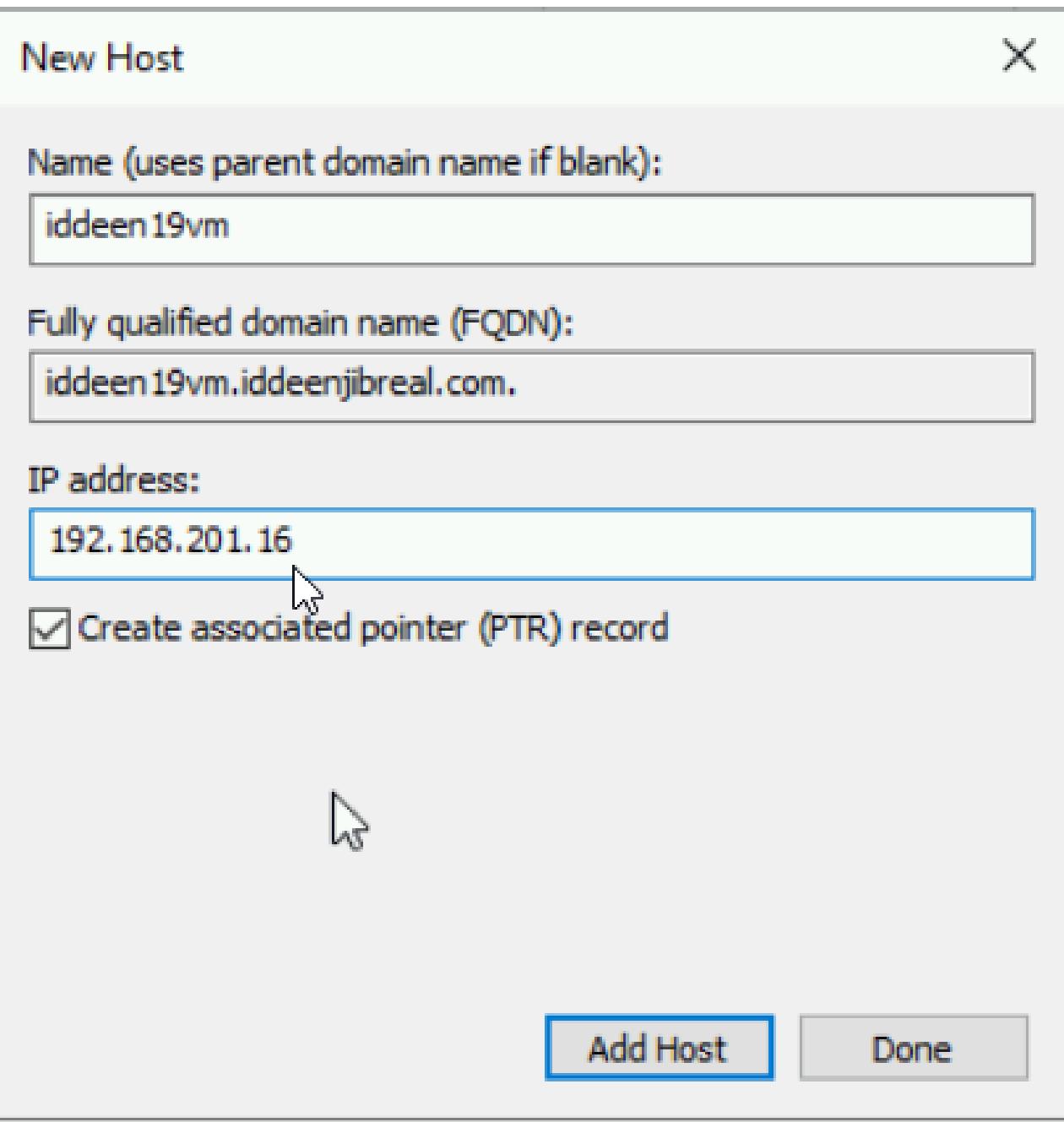
Name (uses parent domain name if blank):  
idrac01

Fully qualified domain name (FQDN):  
idrac01.iddeenjibreal.com.

IP address:  
192.168.201.11

Create associated pointer (PTR) record

Add Host Done



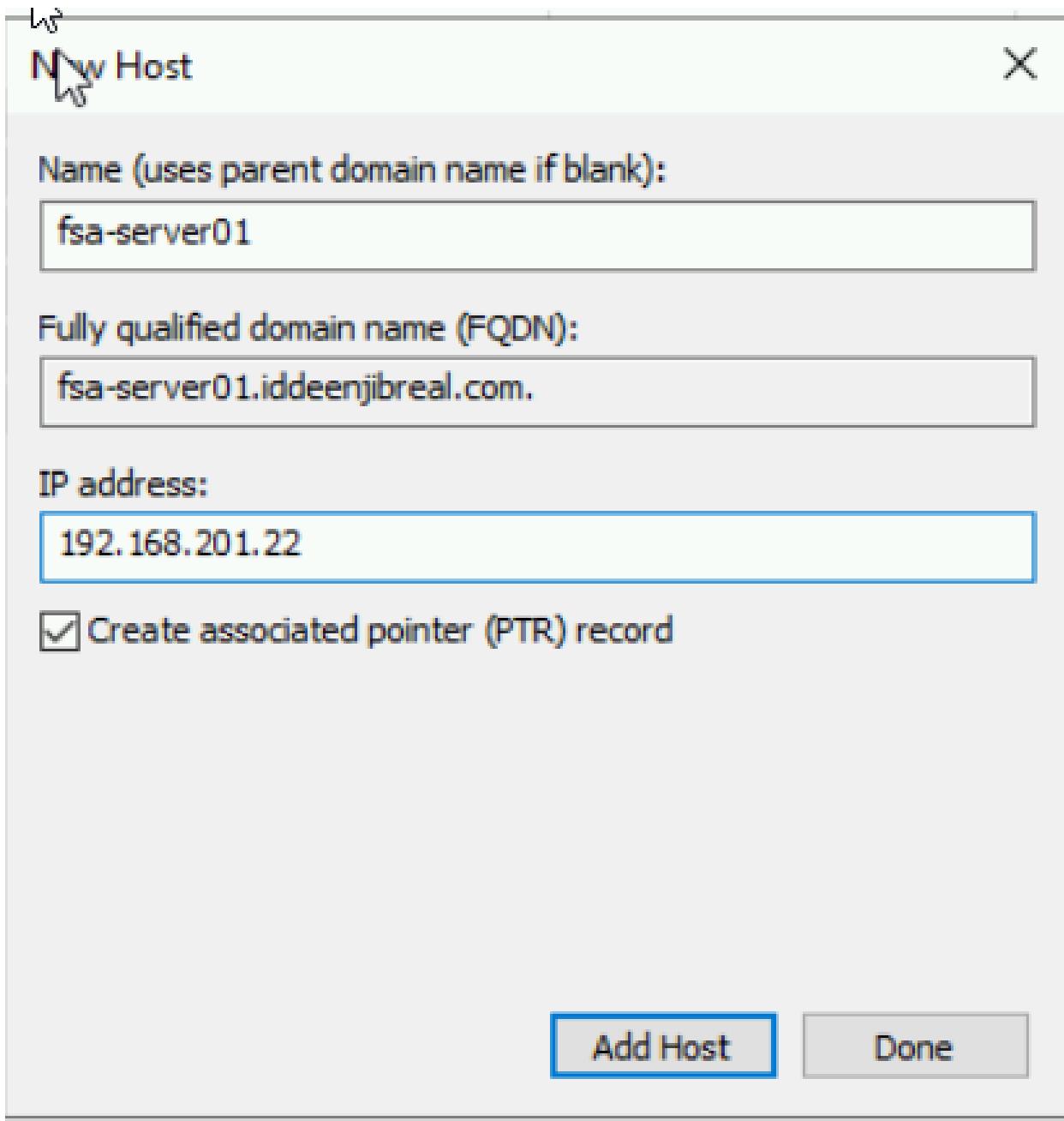


FIGURE 99 - ASSIGN DNS A RECORD FOR ALL OF THE DEVICES

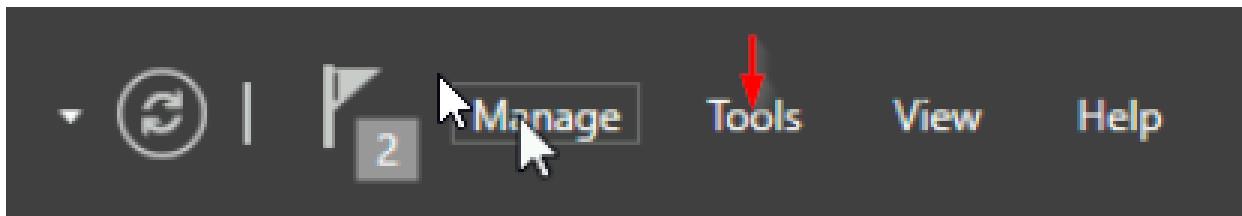


FIGURE 100 - GO BACK TO THE DASHBOARD, AND CLICK "TOOLS"

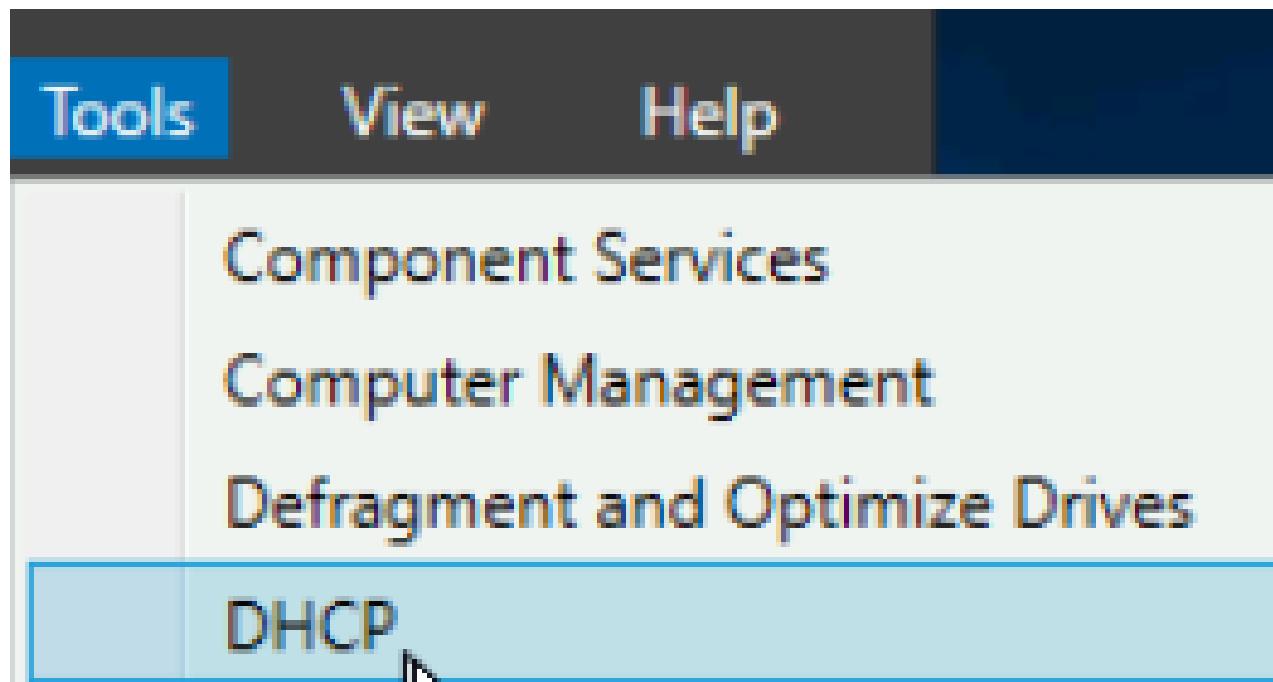
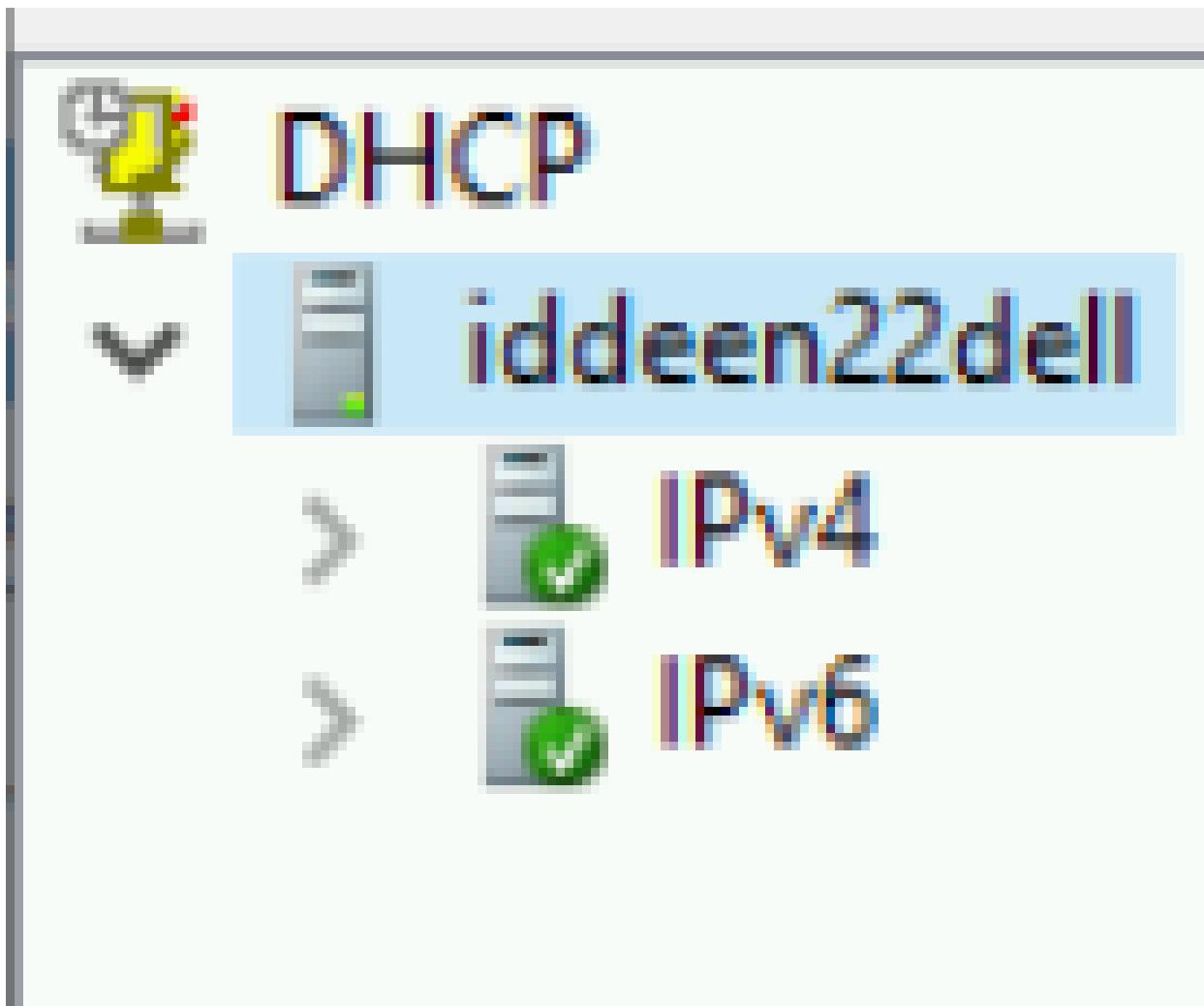
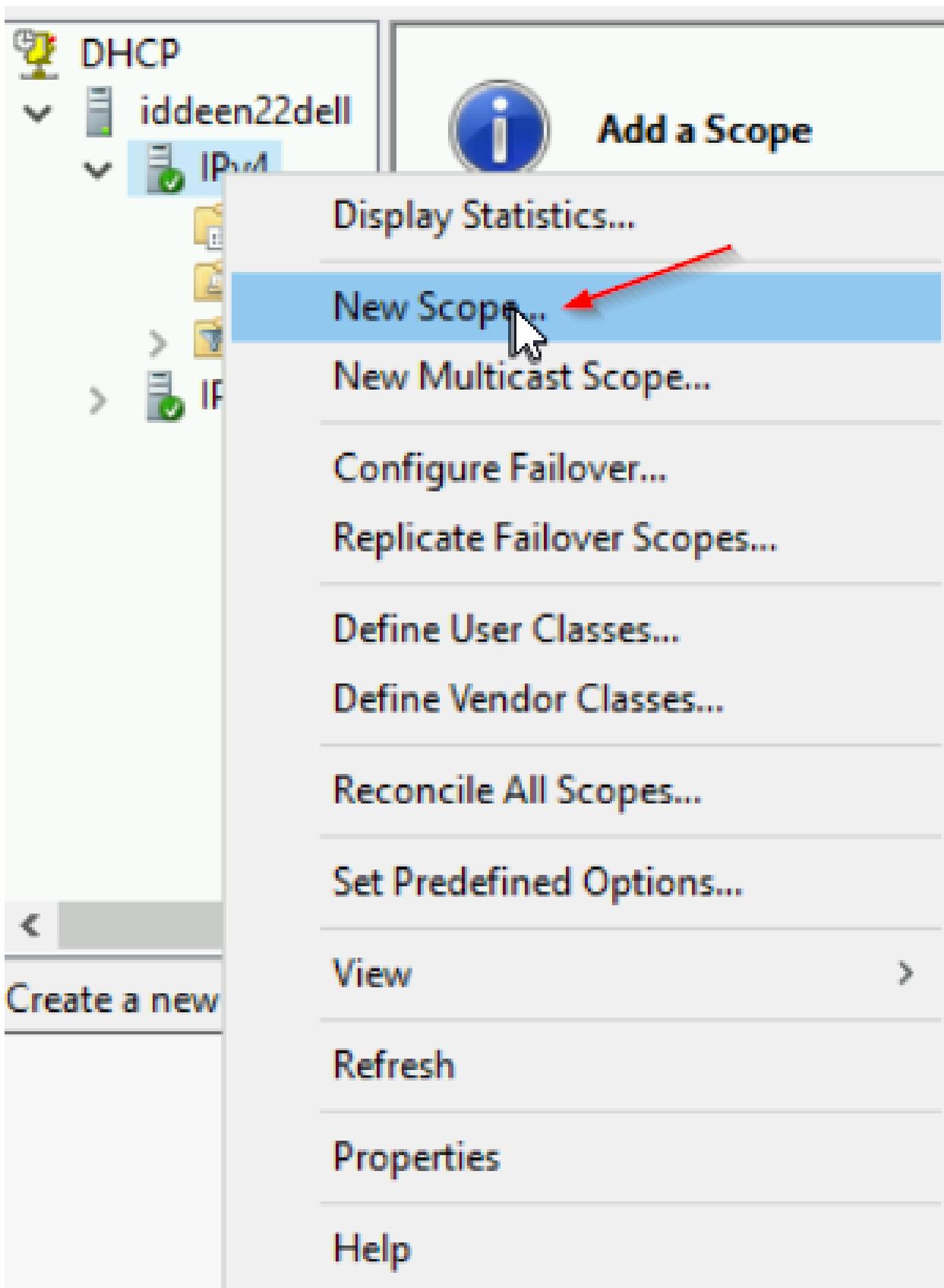


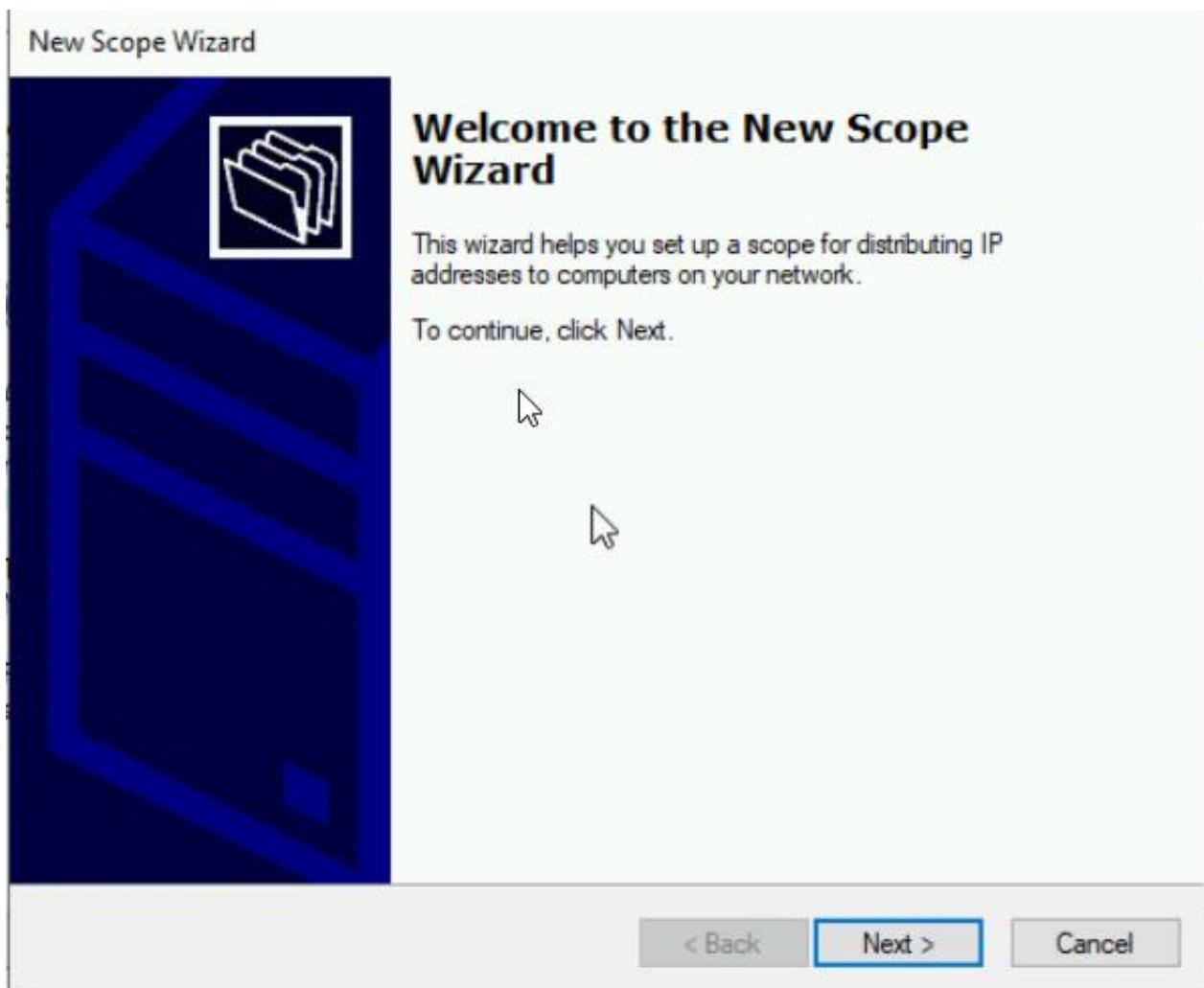
FIGURE 101 - CLICK "DHCP"



**FIGURE 102 - SEE THE OVERVIEW OF THE DHCP MENU**



**FIGURE 103 - CLICK "NEW SCOPE"**



**FIGURE 104 - "CLICK NEXT"**

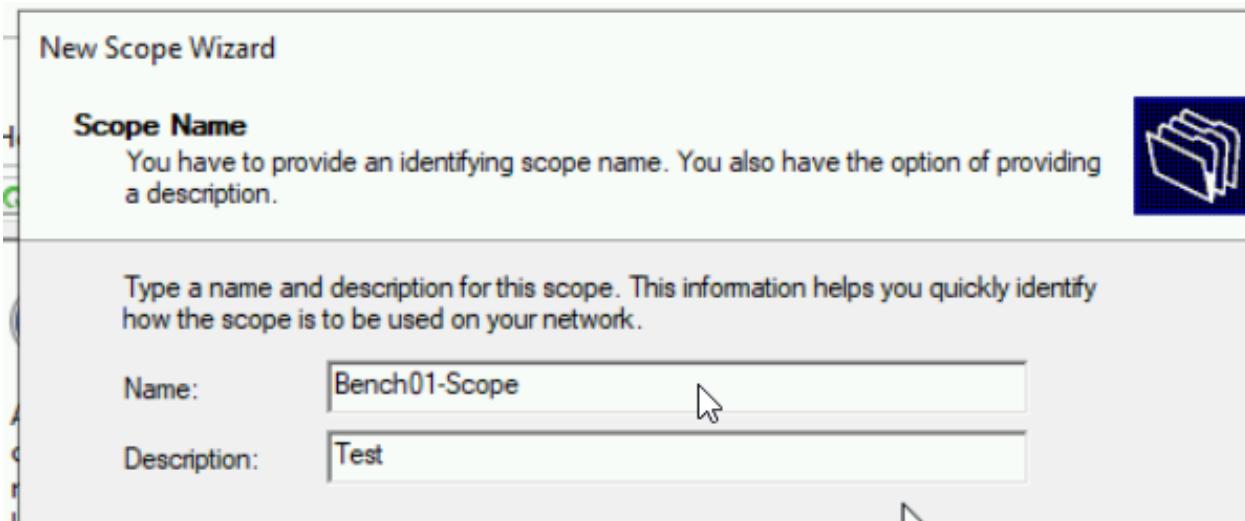


FIGURE 105 – PROCCED

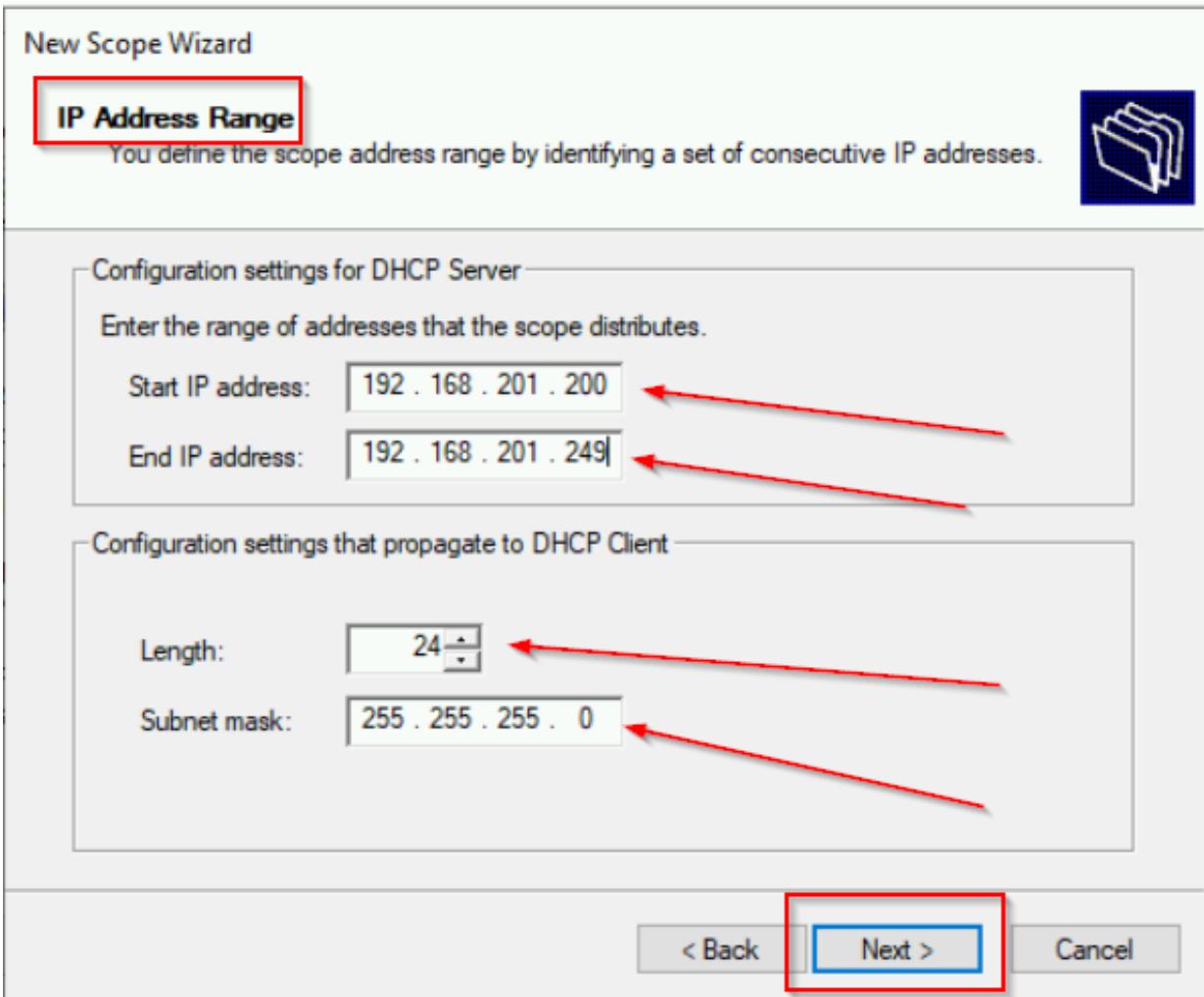


FIGURE 106 - PUT THE STARTING IP ADDRESS AND THE END TO CLICK "NEXT"

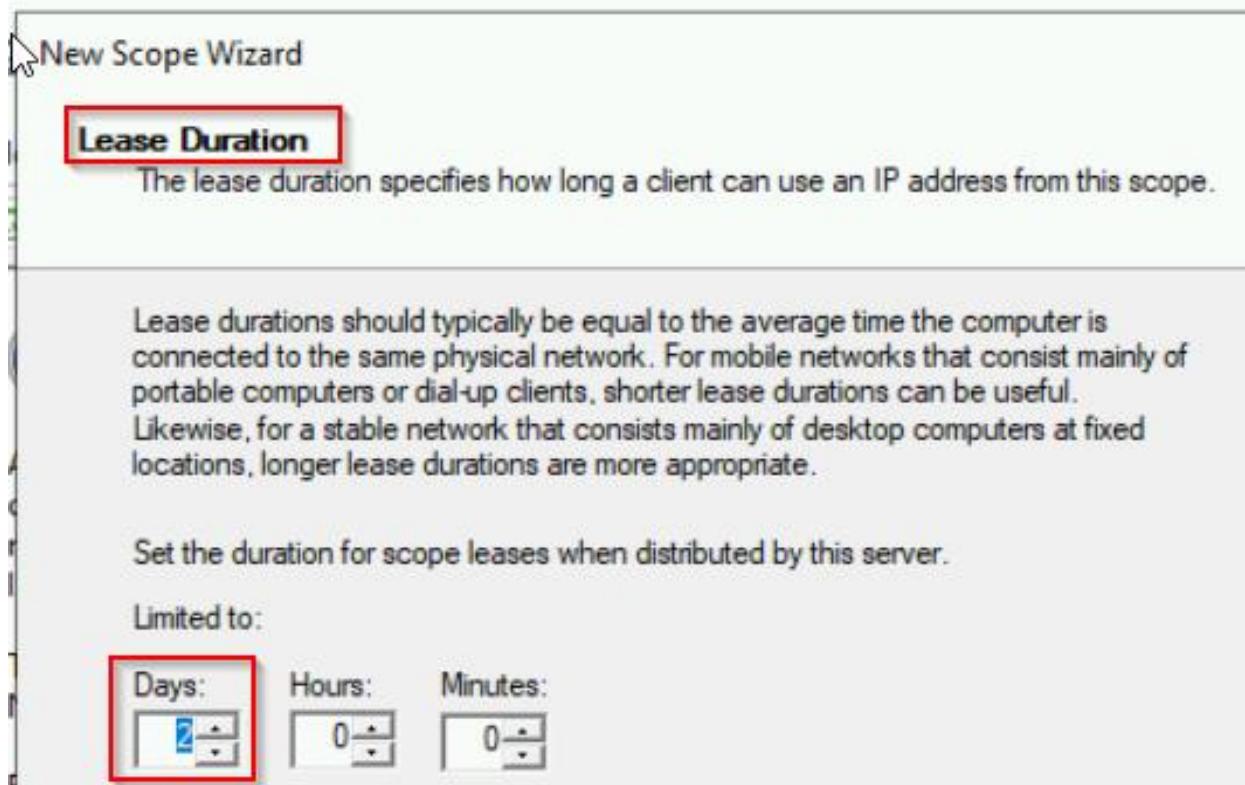


FIGURE 107 - SET THE LEASE DURATION

## New Scope Wizard

### Configure DHCP Options

You have to configure the most common DHCP options before clients can use the scope.



When clients obtain an address, they are given DHCP options such as the IP addresses of routers (default gateways), DNS servers, and WINS settings for that scope.

The settings you select here are for this scope and override settings configured in the Server Options folder for this server.

Do you want to configure the DHCP options for this scope now?

- Yes, I want to configure these options now  
 No, I will configure these options later

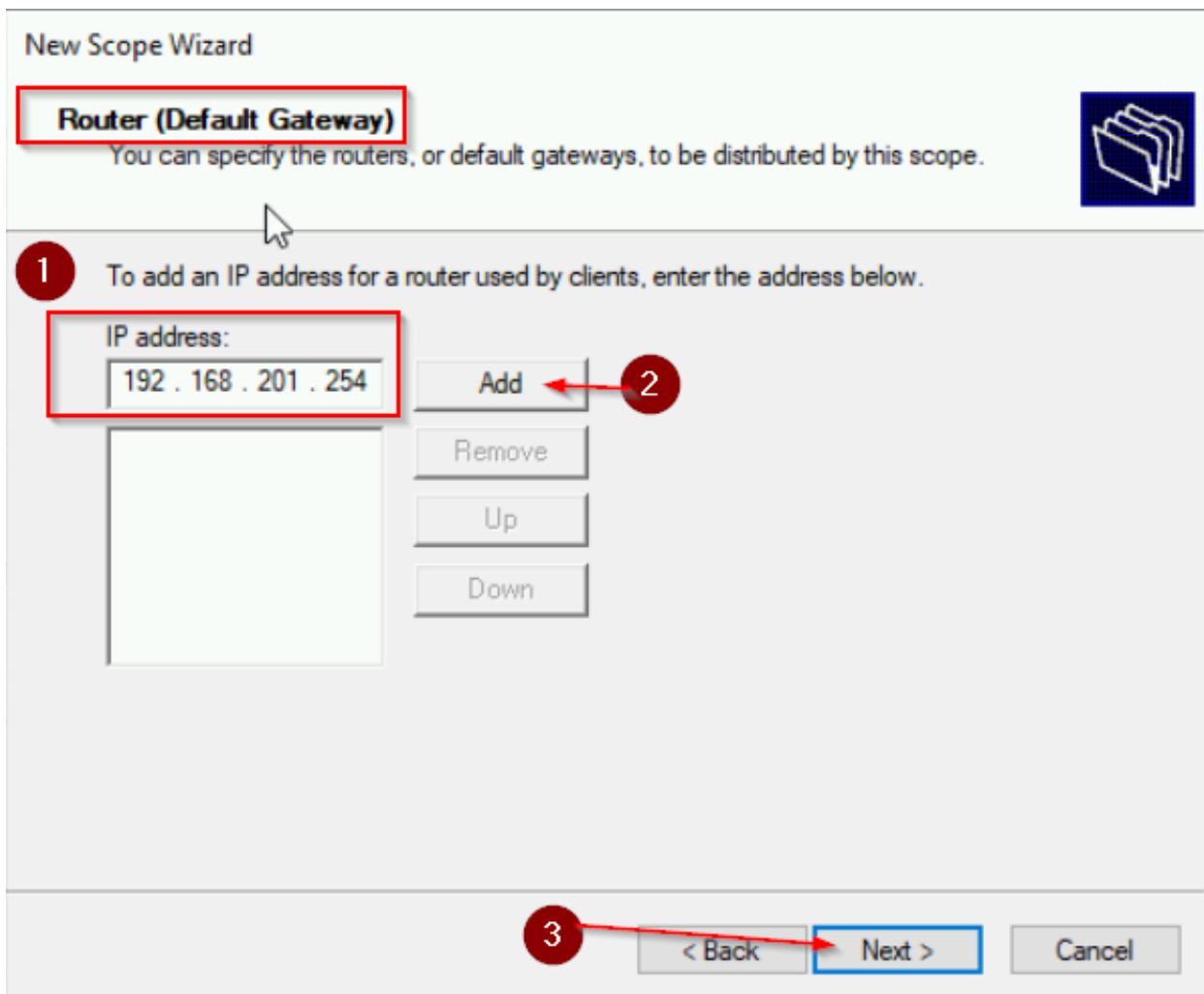


< Back

Next >

Cancel

FIGURE 108 - CONFIGURE DHCP OPTIONS



**FIGURE 109 - ADD THE ROUTER DEFAULT GATEWAY**

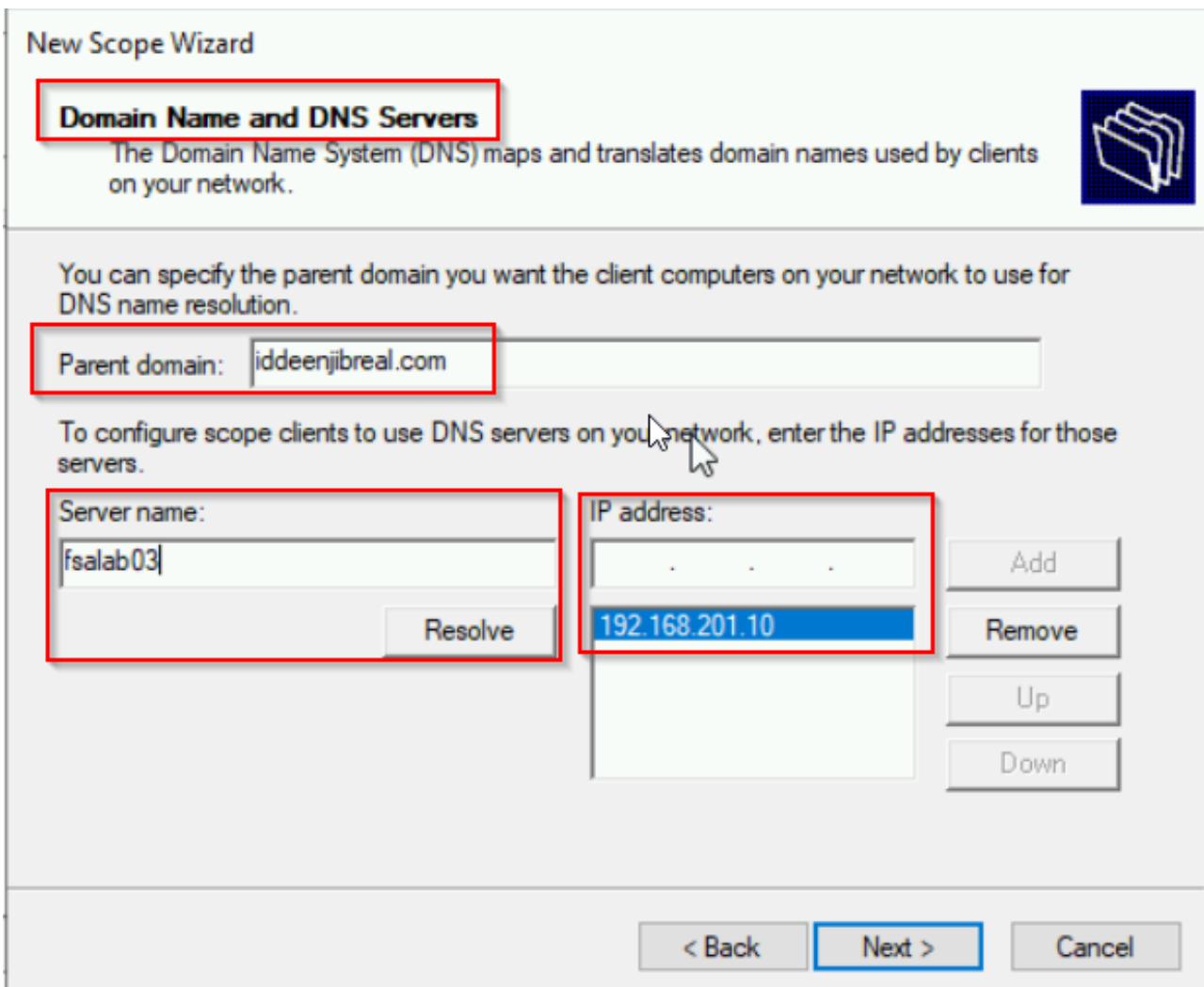


FIGURE 110 - SET THE PARENT DOMAIN AND EDIT THE STUFF, THEN CLICK "NEXT"

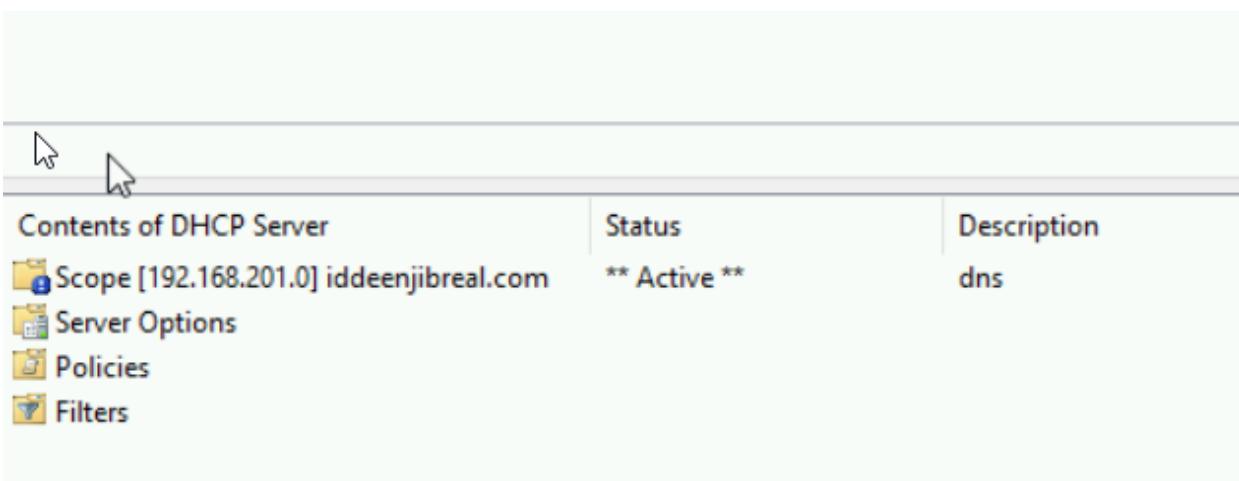


FIGURE 111 - SEE THE SCOPE BEING ACTIVE!

```
C:\Users\Student24>ipconfig /all
```

Windows IP Configuration

```
Host Name . . . . . : 00LAPTOP24
Primary Dns Suffix . . . . . :
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : iddeenjibreal.com
```

Ethernet adapter Ethernet:

```
Connection-specific DNS Suffix . : iddeenjibreal.com
Description . . . . . : Realtek USB GbE Family Controller
Physical Address. . . . . : 00-E0-4C-68-17-59
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . . : Yes
IPv4 Address. . . . . : 192.168.201.200(Preferred) ←
Subnet Mask . . . . . : 255.255.255.0 ←
Lease Obtained. . . . . : Friday, September 19, 2025 11:31:08 AM ←
Lease Expires . . . . . : Monday, September 29, 2025 11:31:07 AM ←
Default Gateway . . . . . : 192.168.201.254
DHCP Server . . . . . : 192.168.201.10
DNS Servers . . . . . : 192.168.201.10 ←
```

FIGURE 112 - SEE THE LAPTOP GETTING IP ADDRESS FROM DHCP SERVER

⚠ Not secure

iddeen19vm.iddeenjibreal.com

FIGURE 113 - TYPE THE IIS WEBSITE ON LAPTOP

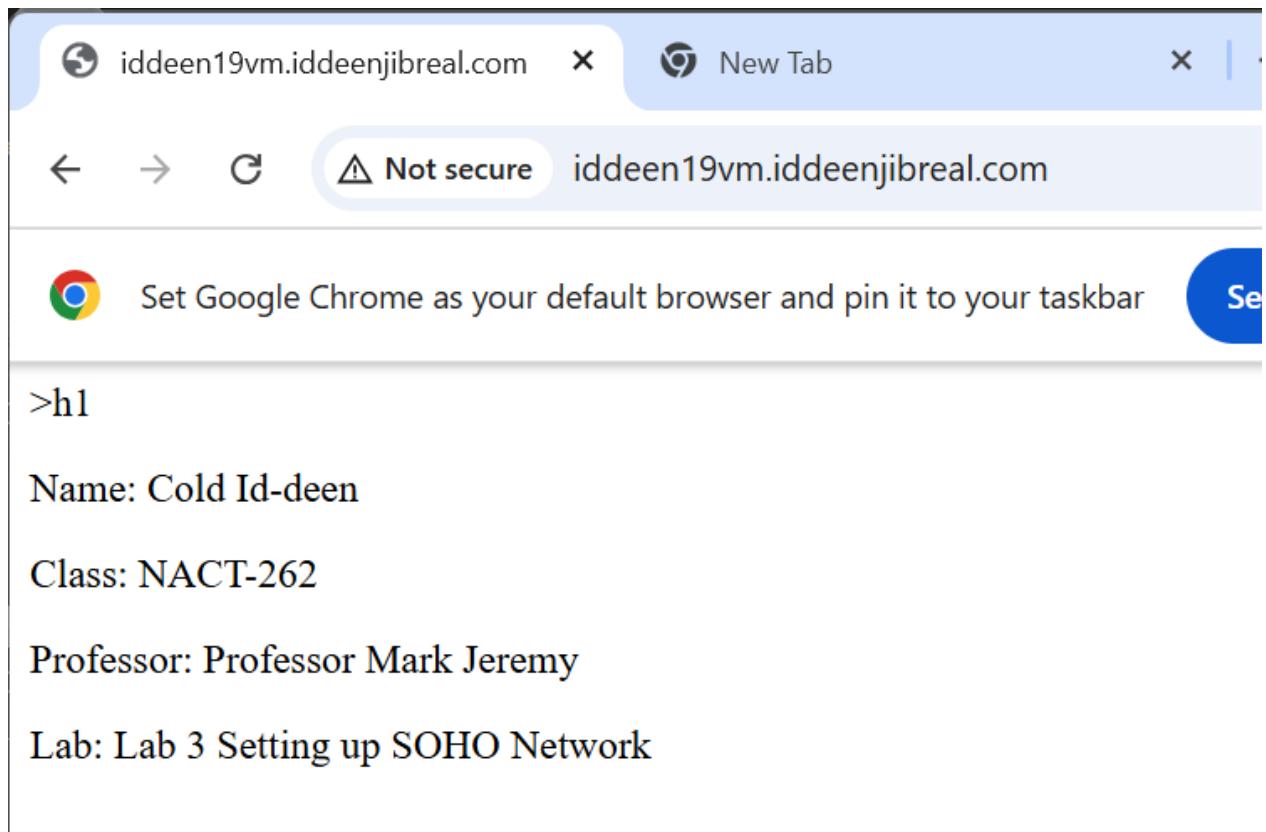


FIGURE 114 - SEE YOUR OWN IIS WEBSITE FROM THE PCA

⚠ Not secure fsa-server01.iddeenjibreal.com

FIGURE 115 - TYPE ANOTHER IIS WEBSITE ON THE LAPTOP

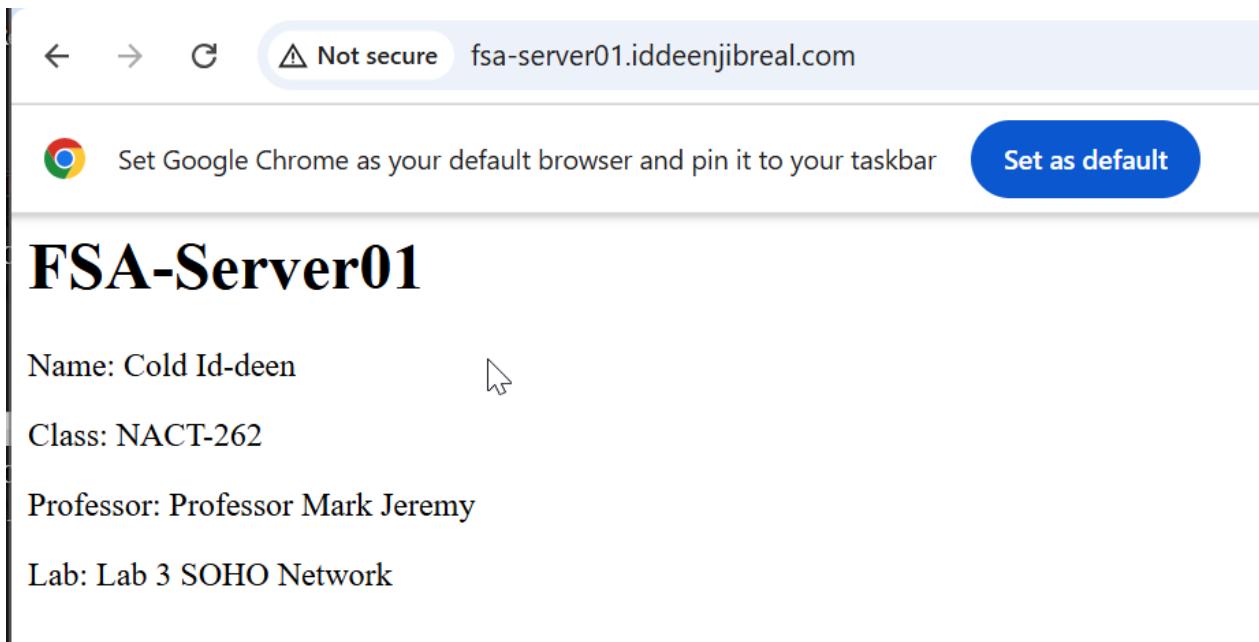


FIGURE 116 - SEE YOUR OWN IIS WEBSITE FROM THE PCB CORE!

```
C:\Users\Student24>nslookup router01.iddeenjibreal.com
Server: dell01.iddeenjibreal.com
Address: 192.168.201.10

Name: router01.iddeenjibreal.com
Address: 192.168.201.254
```

```
C:\Users\Student24>nslookup 192.168.201.254
Server: dell01.iddeenjibreal.com
Address: 192.168.201.10

Name: router01.iddeenjibreal.com
Address: 192.168.201.254
```

FIGURE 117- NSLOOKUP ON DNS A AND REVERSE IP RECORDS FOR ROUTER

```
C:\Users\Student24>nslookup iddeen19vm.iddeenjibreal.com
Server: dell01.iddeenjibreal.com
Address: 192.168.201.10

Name:    iddeen19vm.iddeenjibreal.com
Address: 192.168.201.16
```

```
C:\Users\Student24>nslookup 192.168.201.16
Server: dell01.iddeenjibreal.com
Address: 192.168.201.10

Name:    iddeen19vm.iddeenjibreal.com
Address: 192.168.201.16
```

FIGURE 118 - NSLOOKUP ON DNS A AND REVERSE IP RECORDS FOR PCA VM

```
C:\Users\Student24>nslookup fsa-server01.iddeenjibreal.com
Server: dell01.iddeenjibreal.com
Address: 192.168.201.10

Name:    fsa-server01.iddeenjibreal.com
Address: 192.168.201.21
```

```
C:\Users\Student24>nslookup 192.168.201.21
Server: dell01.iddeenjibreal.com
Address: 192.168.201.10

Name:    fsa-server01.iddeenjibreal.com
Address: 192.168.201.21
```

FIGURE 119 - NSLOOKUP ON DNS A AND REVERSE IP RECORDS FOR PCB CORE

```
C:\Users\Student24>nslookup dell01.iddeenjibreal.com
Server: dell01.iddeenjibreal.com
Address: 192.168.201.10

Name: dell01.iddeenjibreal.com
Address: 192.168.201.10
```

```
C:\Users\Student24>nslookup 192.168.201.10
Server: dell01.iddeenjibreal.com
Address: 192.168.201.10

Name: dell01.iddeenjibreal.com
Address: 192.168.201.10
```

**FIGURE 120 - NSLOOKUP ON DNS A AND REVERSE IP RECORDS FOR DELL SERVER**

## **QUESTIONS AND ANSWERS**

---

- In which part of the lab activity did you find the most challenging?
  - Getting the VM truly bridged to the wired LAN while chasing the rogue router DHCP and fixing DNS/forwarders was the most painful part I struggled with.

## OBSERVATIONS

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Well, it was excellent learning for me to do this type of stuff, it was really cool. I made big mistake that I added the “Excluded and Delay” to block any incoming DHCP IP Address while it was not supposed to happen! Good experience.