Humberto Gonzalez

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Class#202402-02

Instructor - Fialishia O'Loughlin

# Microsoft PowerShell

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# Part 1: Setting Up

## Assign IP Address using PowerShell

We need to assign the following address configurations using PowerShell:

a. IP: 192.168.50.5

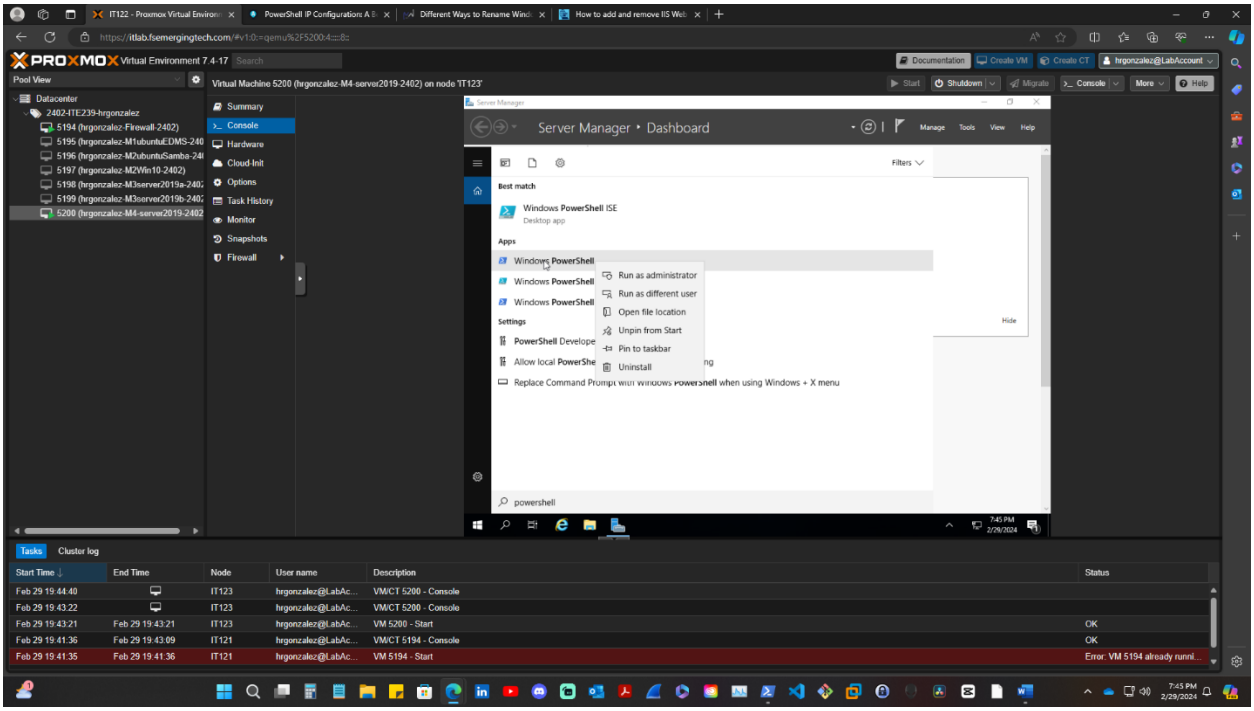
b. Subnet: 255.255.255.0

c. Gateway: 192.168.50.1

d. DNS: 192.168.50.1

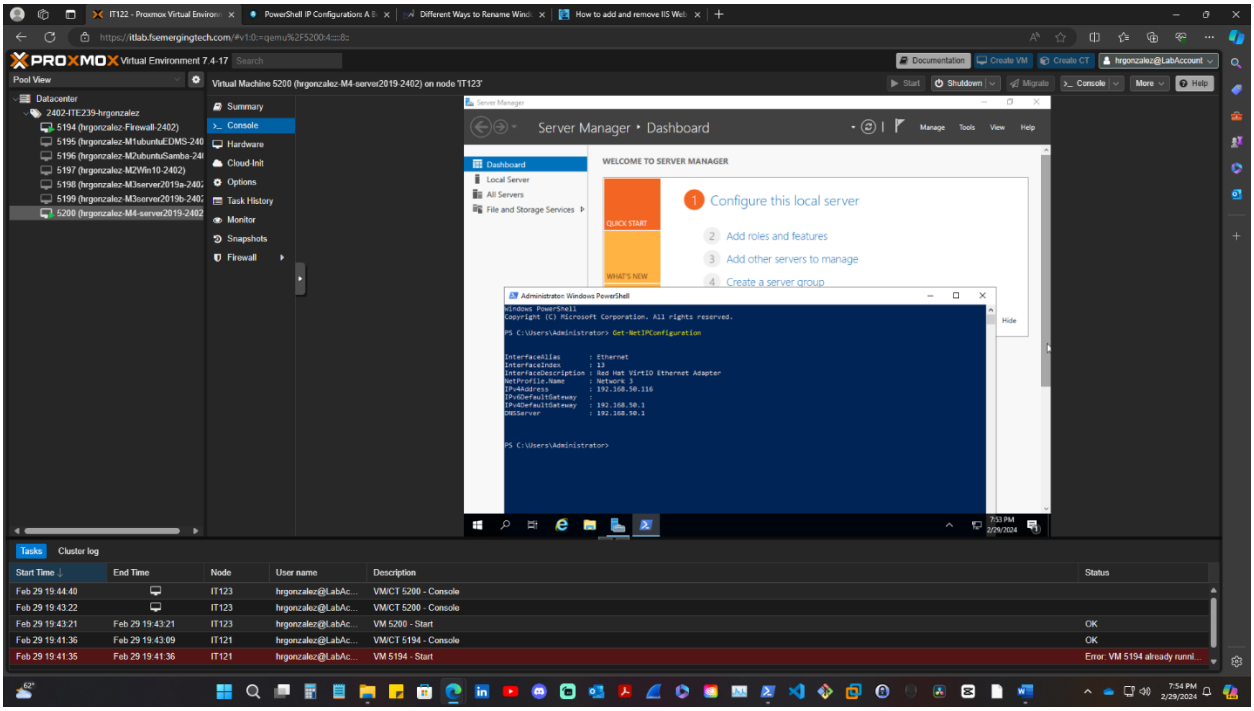
## Open PowerShell

First, we need to open PowerShell and run it as administrator. To do this click on the magnifying glass icon > type in PowerShell > under Apps right-click Windows PowerShell and select Run as administrator.



## Checking Old Configurations

Now, let's check the current IP address configurations. We are going to use the shell command Get-NetIPConfiguration *keep this information in hand as it is going to be used in the following steps*

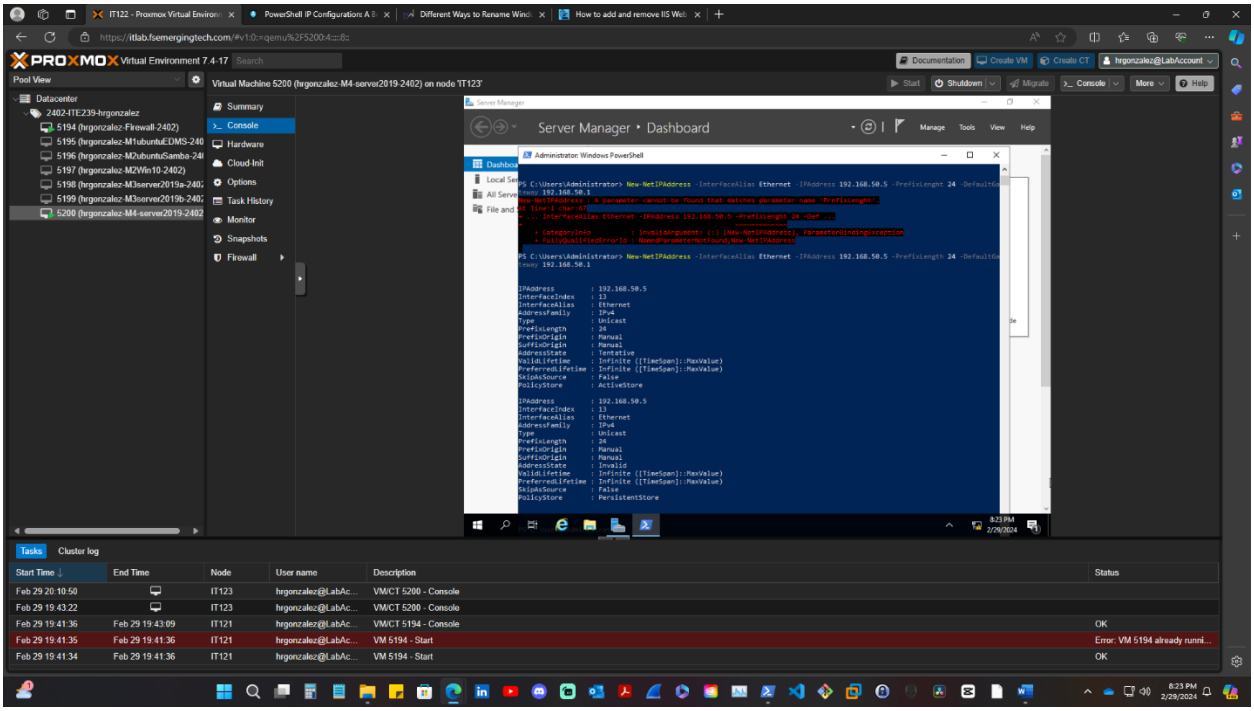


## Changing IP Address and Gateway Address

Now that we know our old configurations let's make changes and add our new IP addresses.

Make sure to replace "[AdapterName]" with the InterfaceAlias you got from the old configurations, also replace [ServerAddress] and [GatewayAddress] with the one given to you. ServerAddress is your new IP Address. The GatewayAddress should be your new provided address.

To do this we are going to use the shell command line New-NetIPAddress -InterfaceAlias "[AdapterName]" -IPAddress [ServerAddress] -PrefixLength 24 -DefaultGateway [GatewayAddress] then hit enter. Your windows should look like the one below.

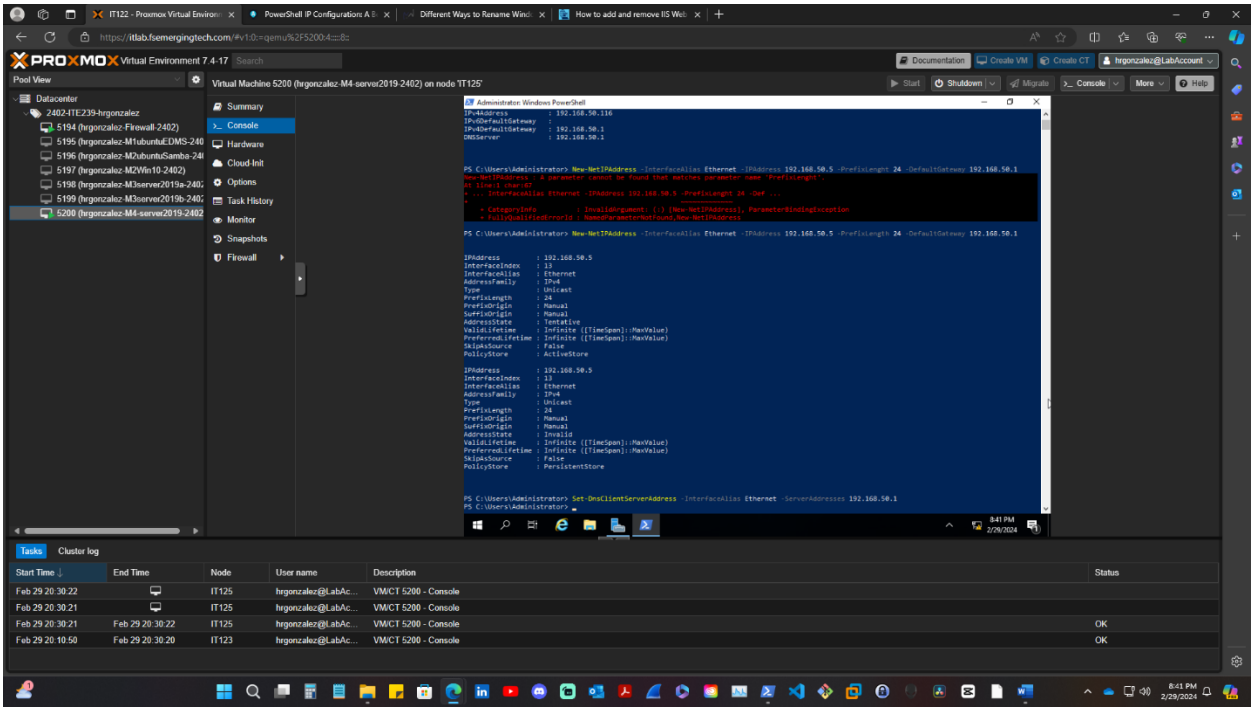


## Configuring DNS

Let’s configure our DNS. In the Shell command window use the command prompt:

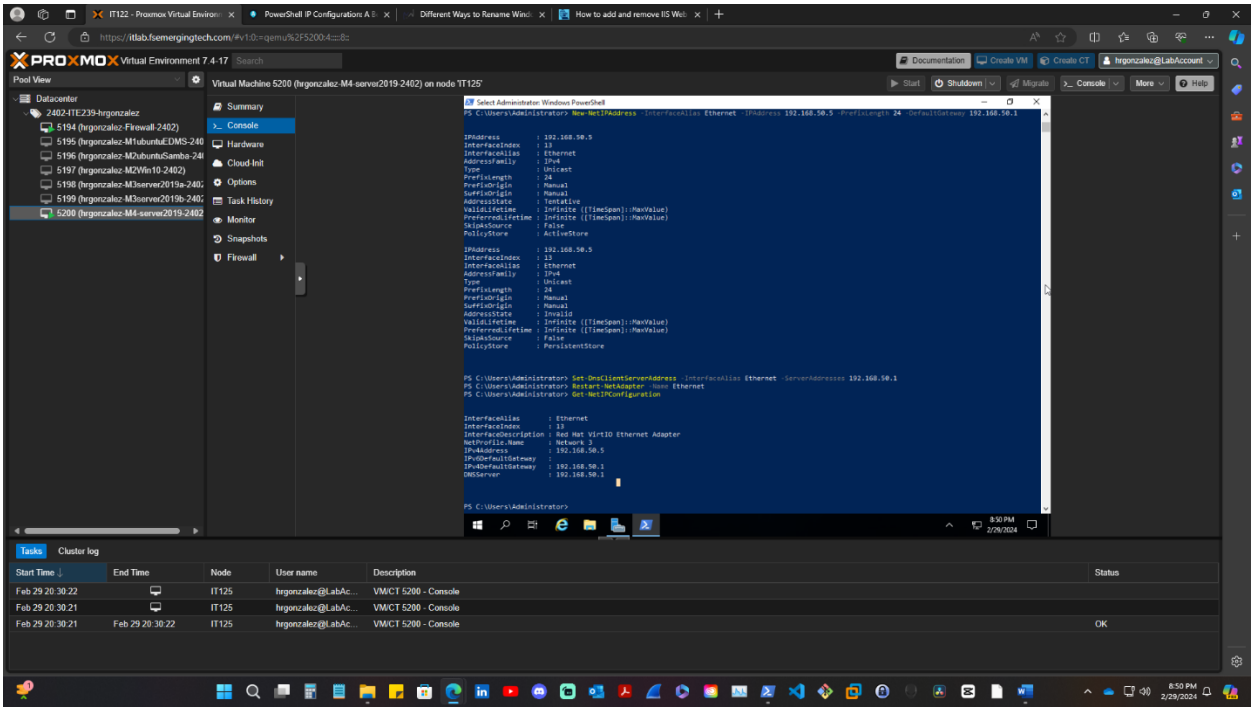
Set-DnsClientServerAddress -InterfaceAlias "[AdapterName]" -ServerAddresses [8.8.8.8, 8.8.4.4]

You will need to replace "[AdapterName]" with the InterfaceAlias from before and [8.8.8.8, 8.8.4.4] with your proper DNS address. Once you have inputted the command hit enter, it is not going to give you an output but redirect you back to the command prompt. *look at the picture for reference*



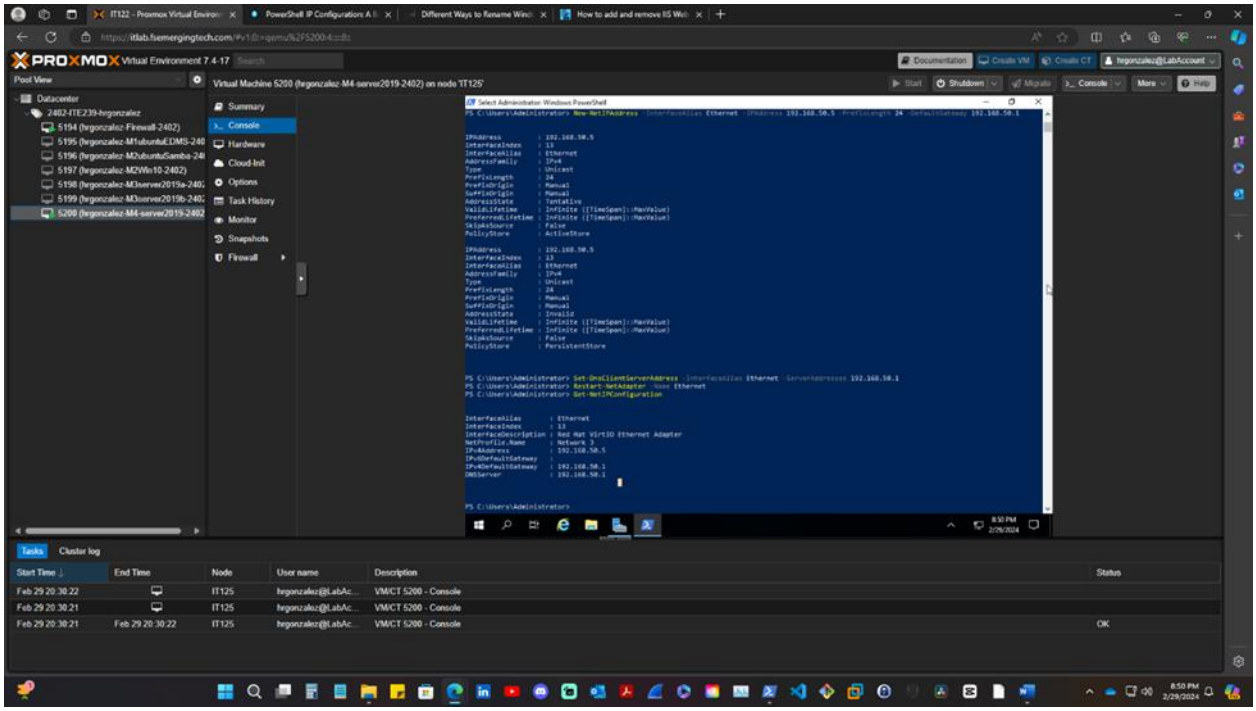
## Restart Network Adapter

For your changes to take place you need to do a network restart. Let's use the command prompt Restart-NetAdapter -Name Ethernet (remember the name is whatever name you acquired from old configurations, mine was Ethernet).



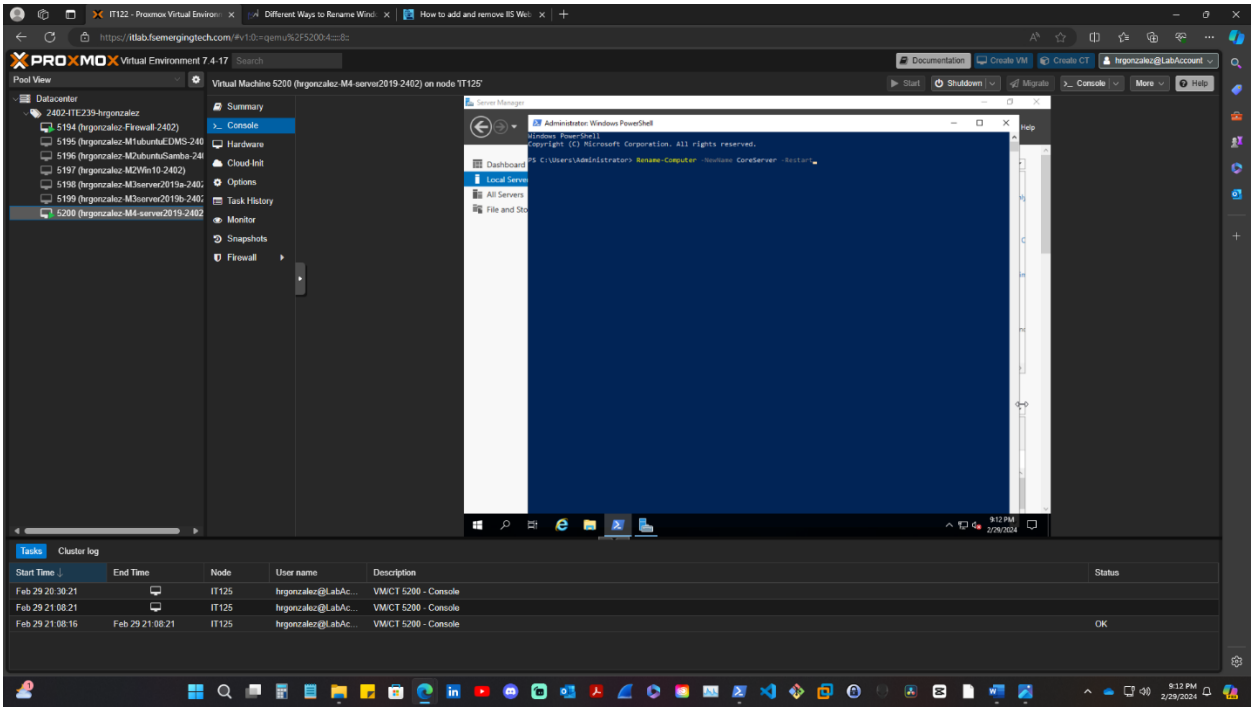
## Verifying New IP Address Configuration

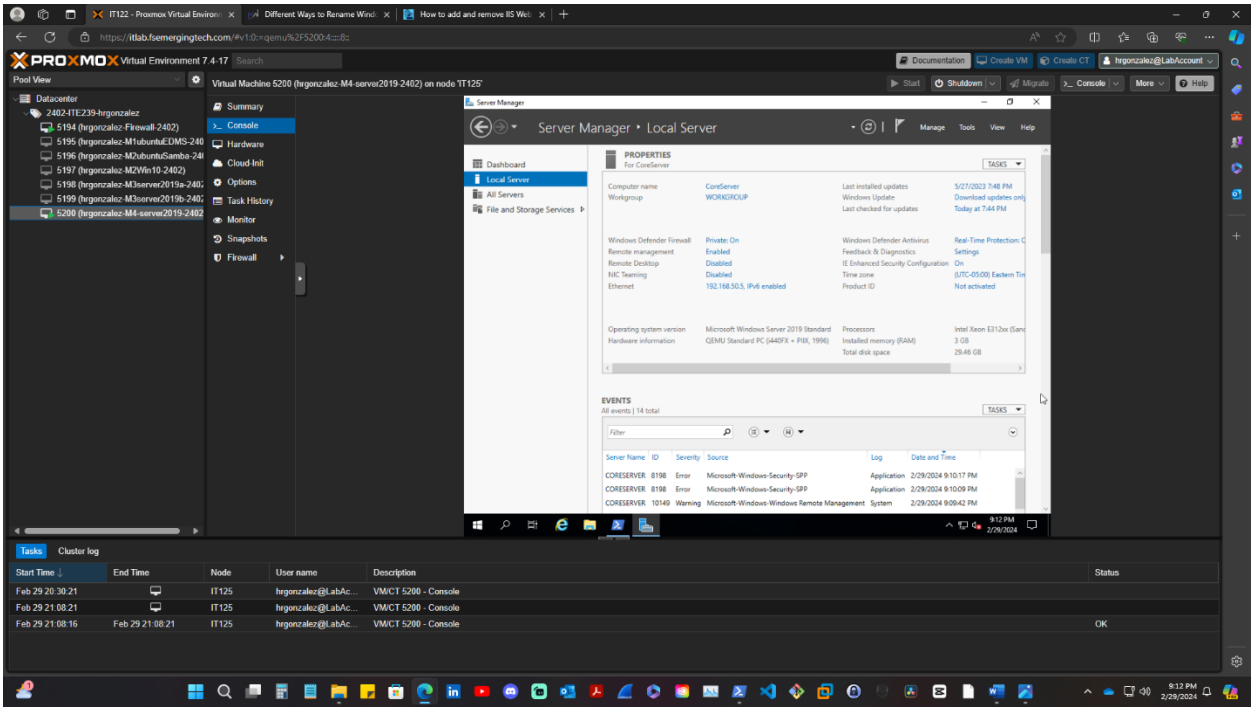
We need to make sure our changes take place. We are going to use our shell command Get-NetIPConfiguration. The configurations should look similar to the picture below depending on your network IP information.



# Renaming the server

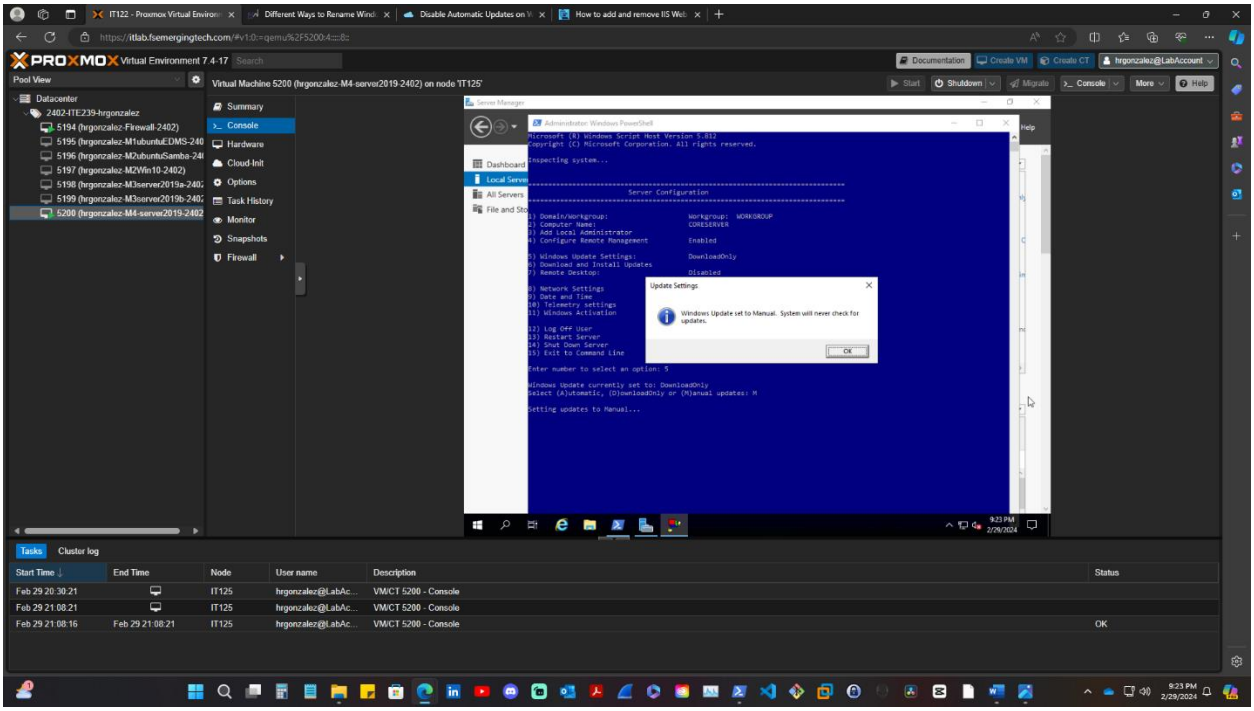
Let's try and rename our server from PowerShell. To do this we need to run PowerShell as administrator again if you don't have it open. We will use the command line Rename-Computer -NewName [namehere] -Restart. After the restart, the computer name on the Windows Server should have changed.



## Using the sconfig command

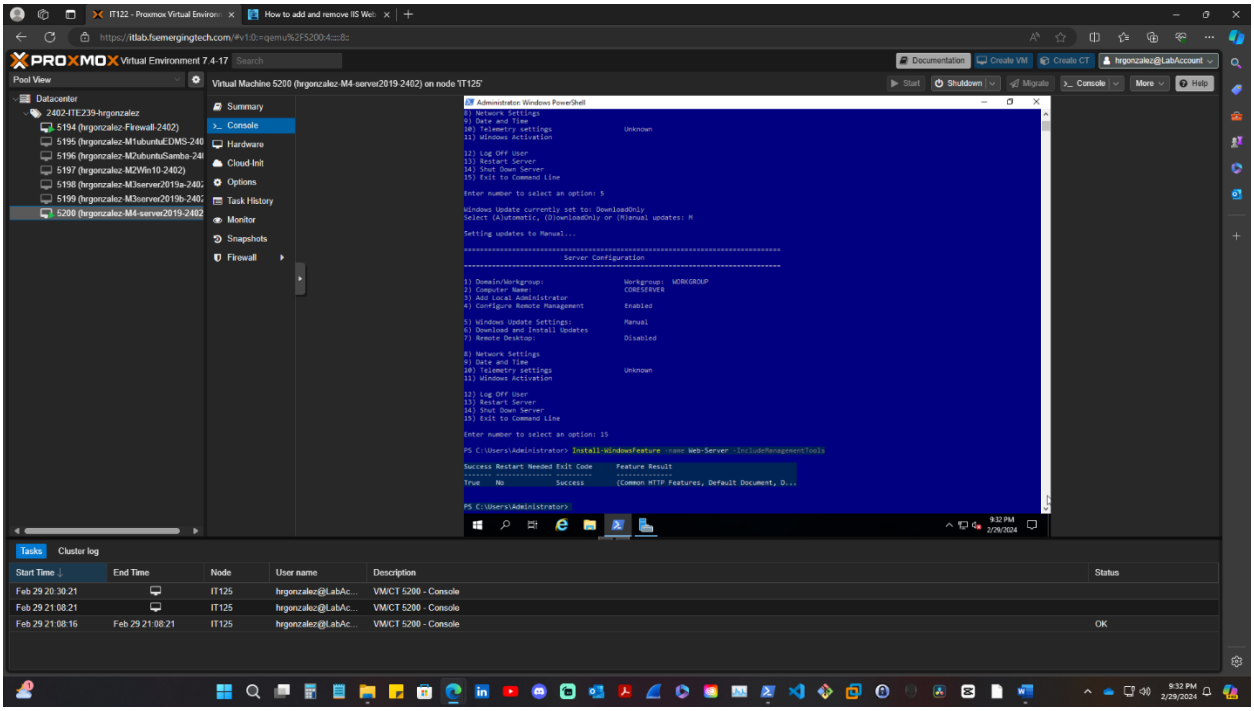
The command sconfig can be used to change multiple things on our machine. We are going to use it to disable automatic updates. You need to open PowerShell as administrator, use the command sconfig, and press enter > After you need to press 5 and hit enter, and type M so updates can be done manually.



# Part 2: Install and uninstall server roles using PowerShell

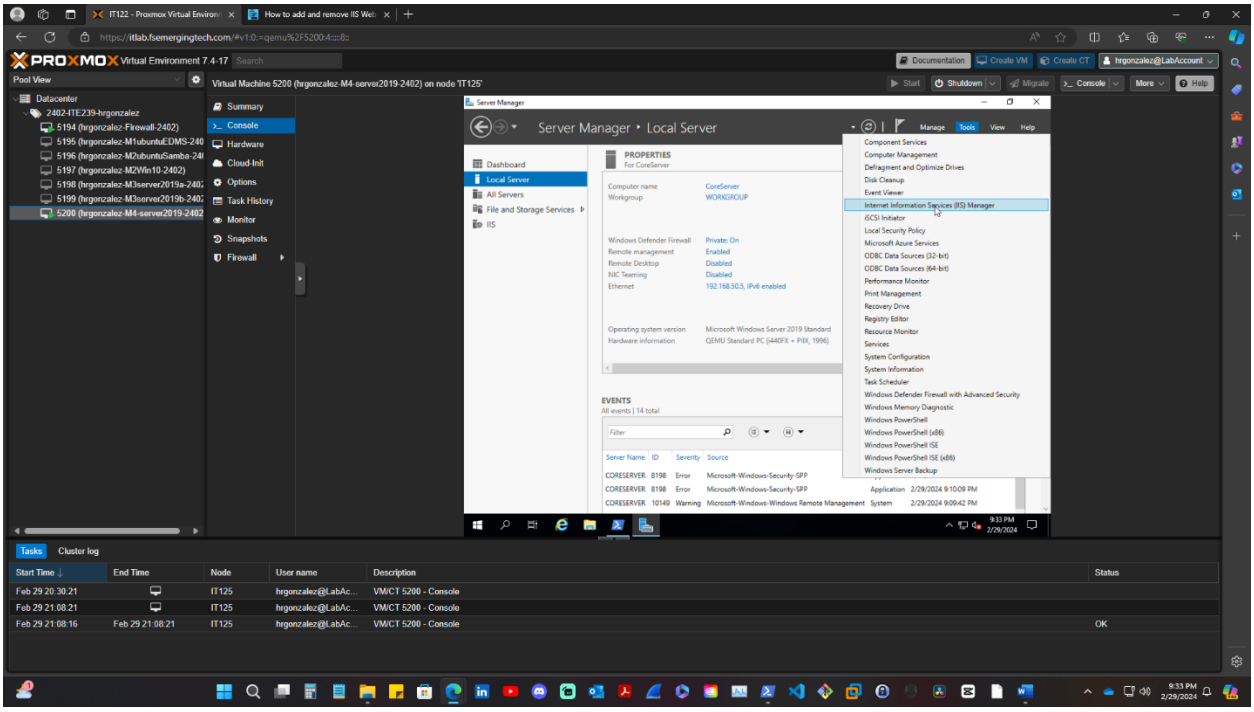
## Install Web Server (IIS) Role

To install Web Server Role (IIS) we need to open PowerShell in administrator mode and use the command prompt Install-WindowsFeature -name Web-Server -IncludeManagementTools.



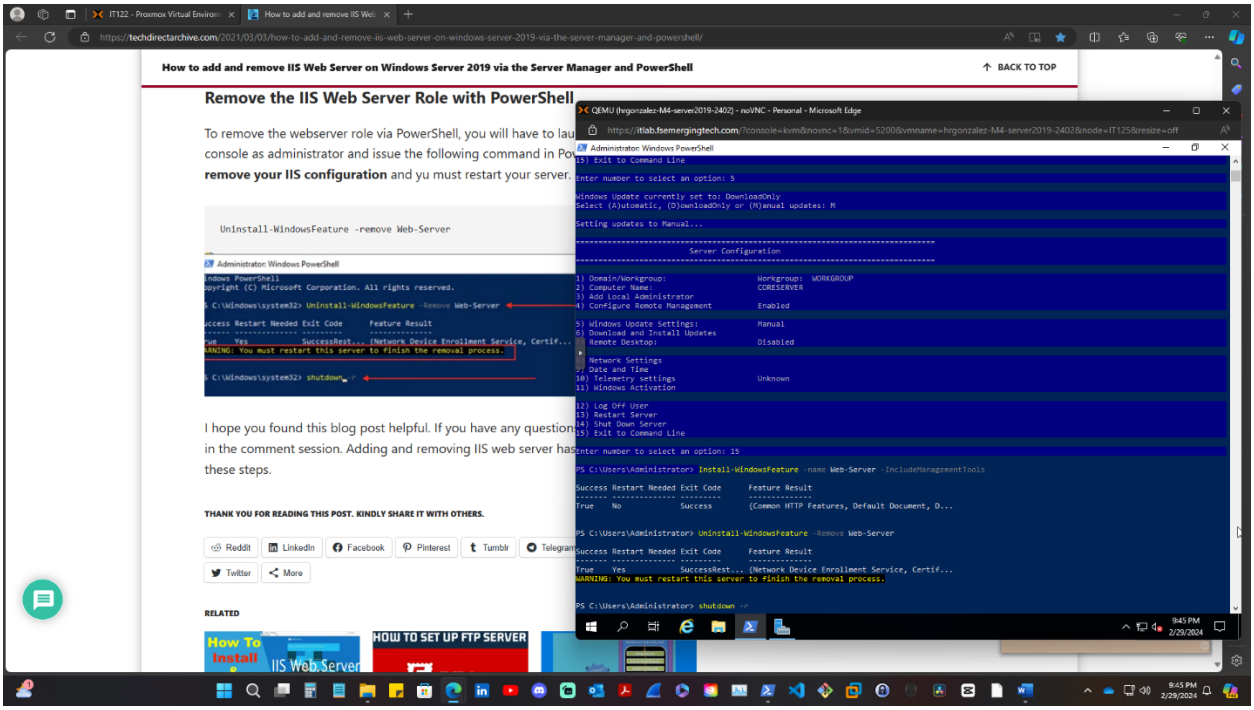
## Verifying the role has been added through the GUI

You need to hit the refresh button on the top right next to the flag icon if IIS is not visible on the left side of the dashboard.



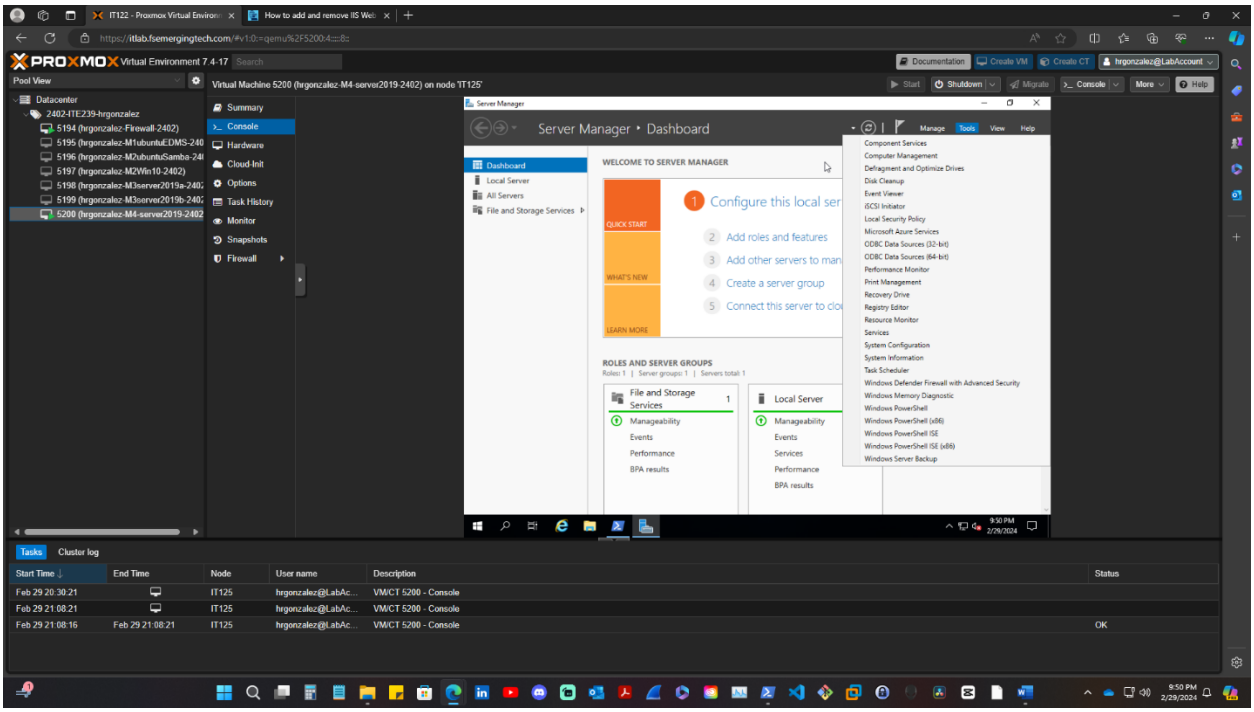
## Uninstalling web server (IIS) as a role

To uninstall the web server IIS role we need to be running PowerShell as administrator and use the shell command Uninstall-WindowsFeature -Remove Web-Server and hit enter followed by the shell command shutdown -r then hit enter to restart the system.




## Verify the role has been removed through the GUI

To verify changes were made using the GUI go to Windows Server dashboard and see if IIS is on there.



# References

How to add and remove IIS Web Server on Windows Server 2019 via the Server Manager and PowerShell - TechDirectArchive

Different Ways to Rename Windows Server 2019 (msftwebcast.com)

PowerShell IP Configuration: A Beginner's Guide to Windows Settings (adamtheautomator.com)

Disable Automatic Updates on Windows Servers | Gillian Stravers