

Windows Server 2022 | Active Directory Lab | Abyan Ahmed

Author: Abyan Ahmed

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Description: This document logs my installation of a windows server so I can set up my own active directory. I want to gain hands-on experience on using active directory to give me more insight on how help desk environments are and just to be more familiar with it in general as it is imperative to know how to maneuver in an active directory within the IT space.

Installing Windows Server 2022 in VBOX

TL;DR

Windows Server 2022 is basically Microsoft's server operation system, entailing many types of features such as more enhanced security and it being more flexible, having more performance and scalability. It is an OS that is building on its predecessor, the Windows Server 2019 version.

Overview / Goal

In this document, I will be noting my journey of installing Windows Server 2022 so I can then implement an active directory within it.

Tools & Environment

- VPN / Lab: VBox

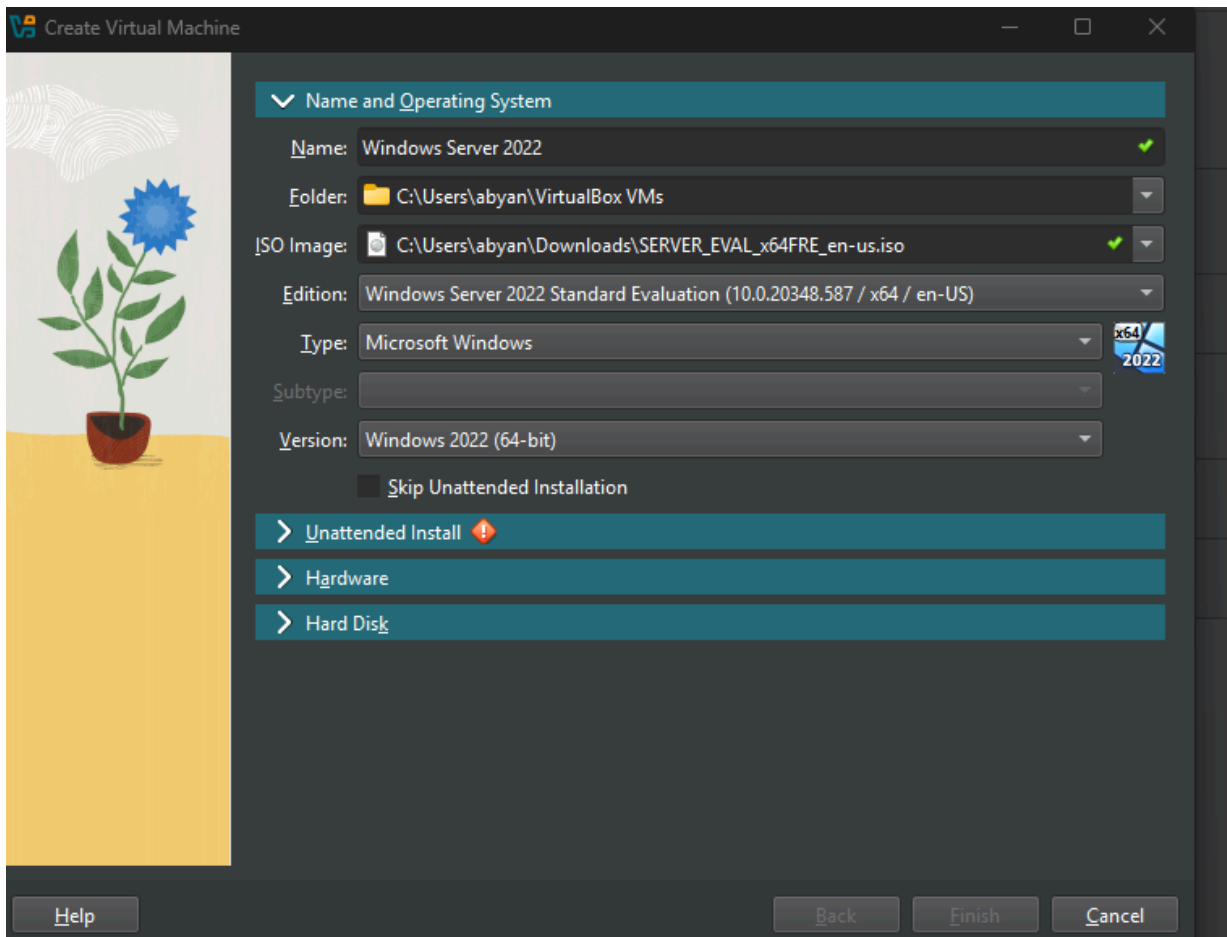
Download

Please select your Windows Server 2022 download

English (United States)	ISO downloads 64-bit edition >	VHD download 64-bit edition >
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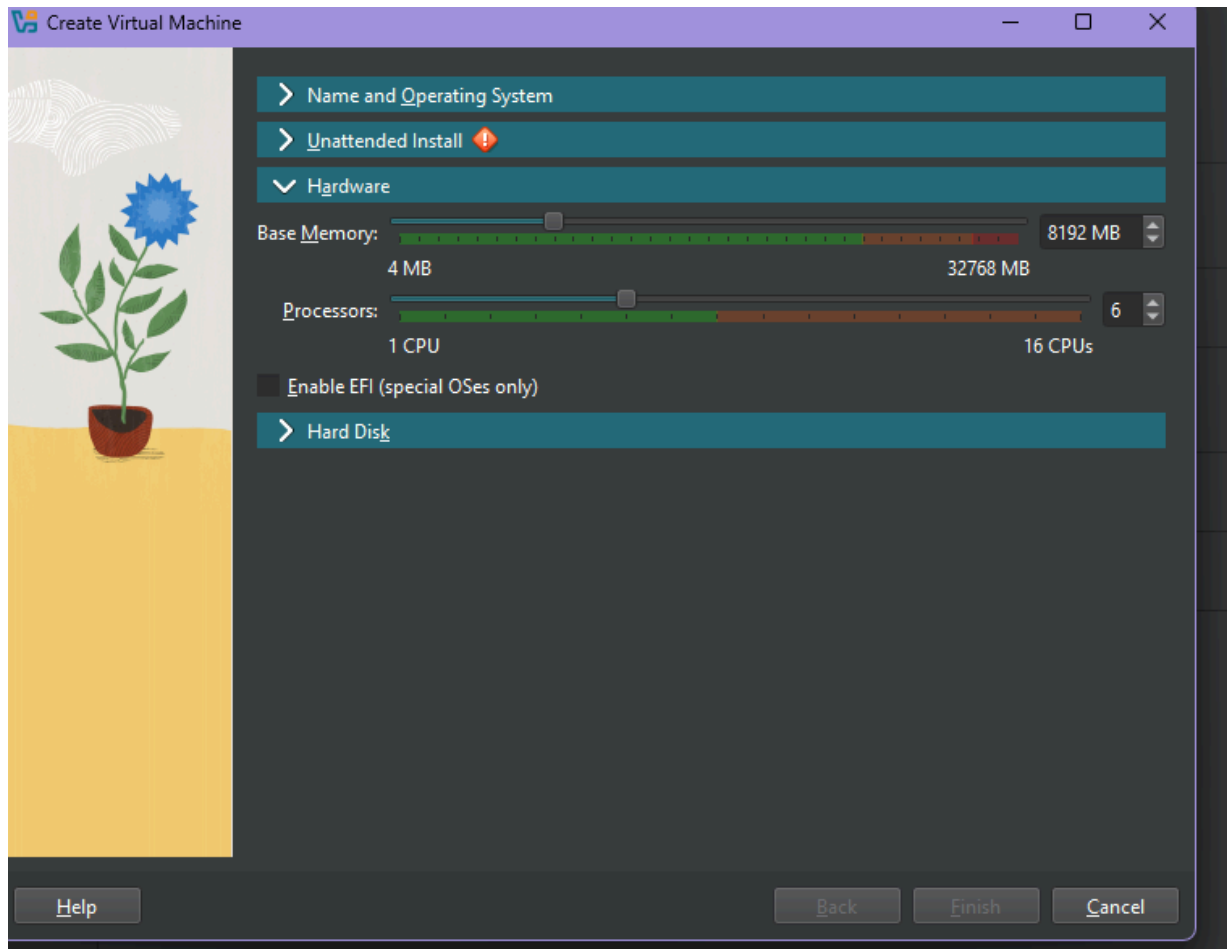
I searched up windows 2022 server download, and clicked on the official link provided by microsoft. Over here, I am going to make sure that I download the 64 bit edition ISO as this is the compatible one for my machine. (quite a hefty download, about 4.7 GB, but expected as it is an ISO.)

Setup VIA Oracle Virtual Box

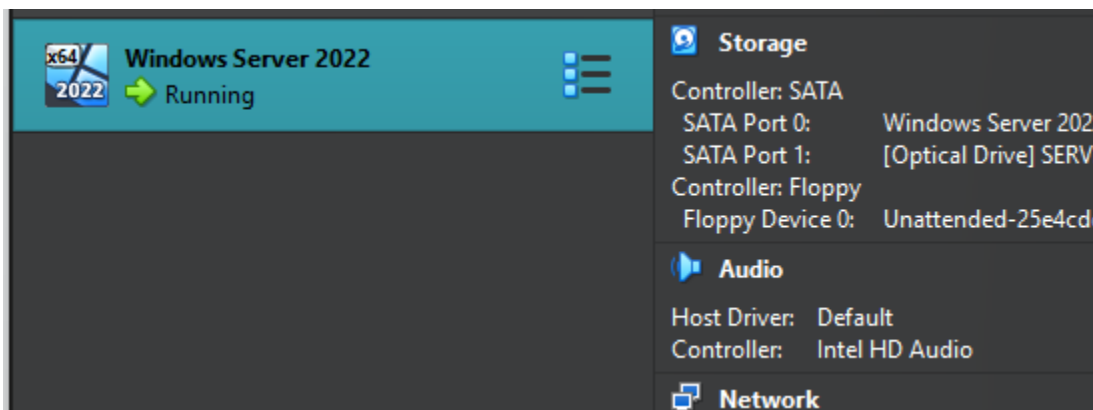


I clicked on the new button on the top pane, and now I am setting up the specific VM I am about to create.

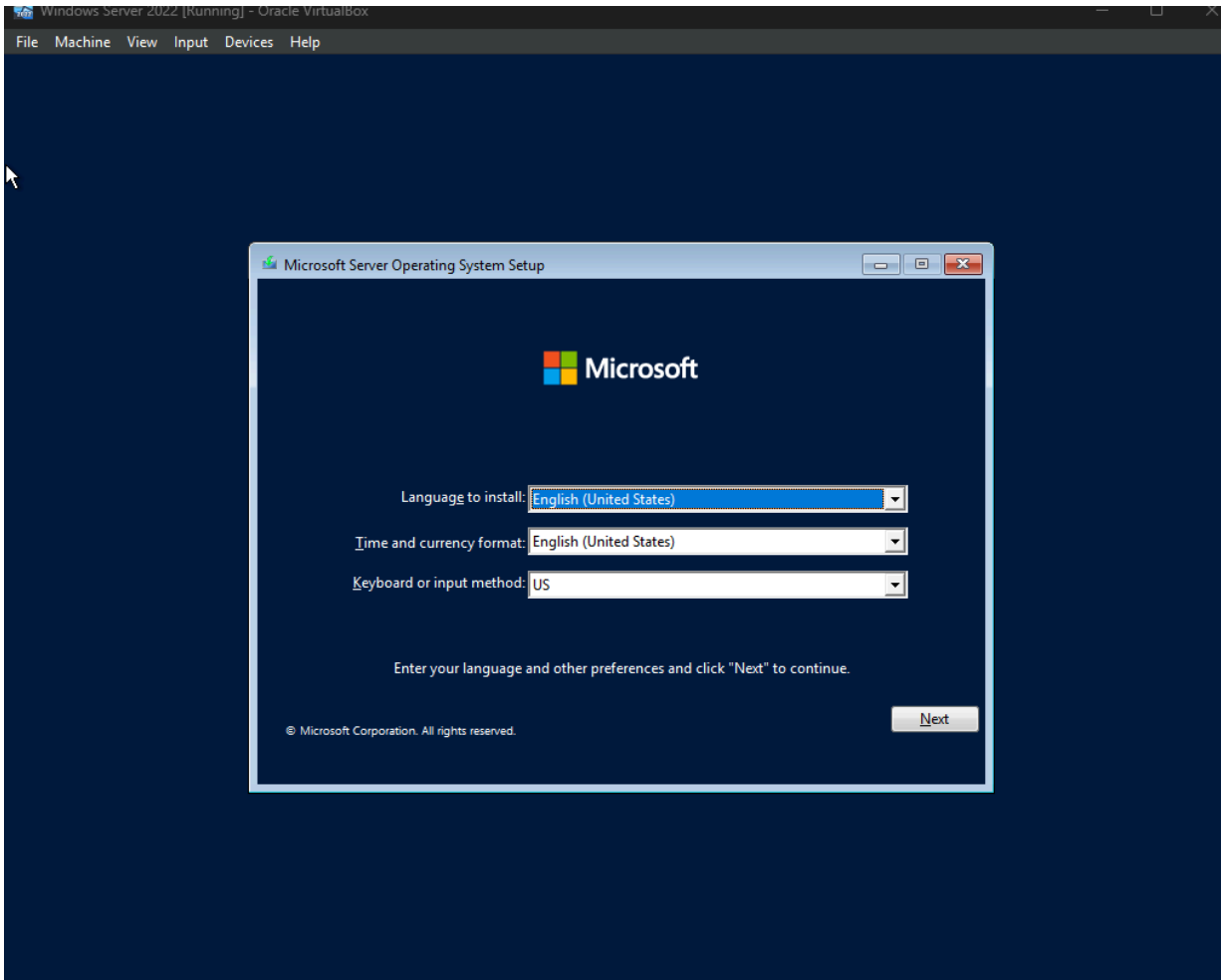
Note, I made sure to check the unattended installation, just forgot to check that before screenshotting. I also just named it "Windows Server 2022". I can always change it later, but this is fine for now. Version is of course Windows 2022, with the correct Bit, 64,



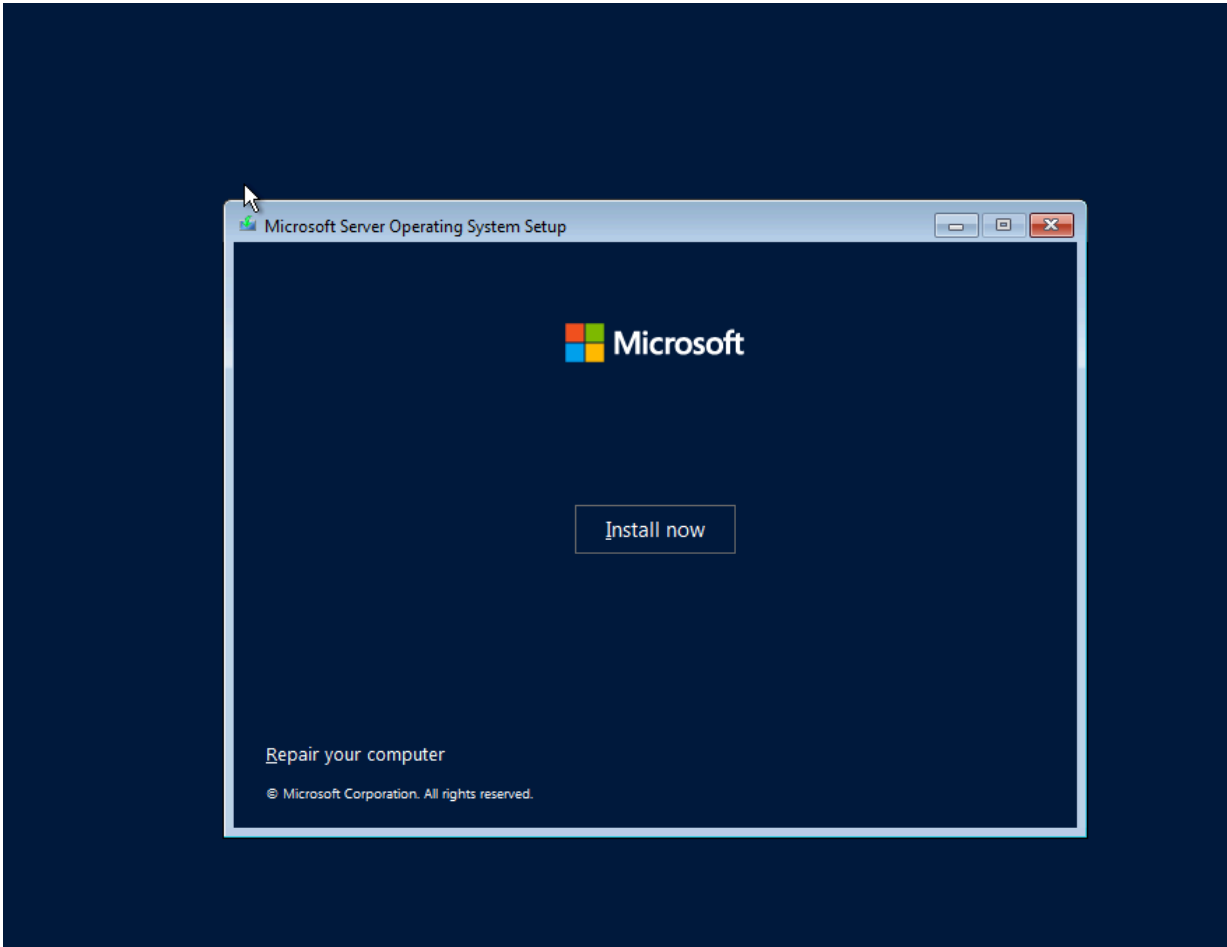
These are the specs/hardware I am running. Suitable for my machine, always a good idea to stay in the green region of the bar.



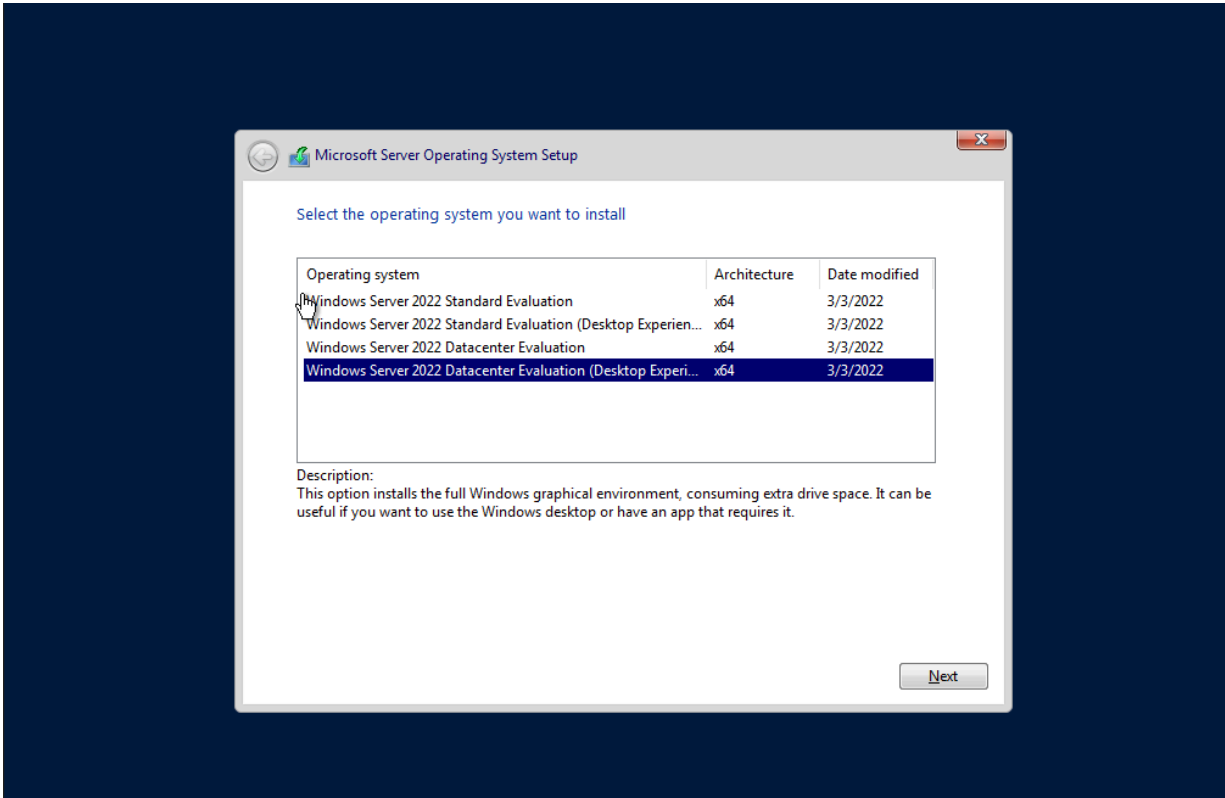
Starting the machine to see if everything is working properly.



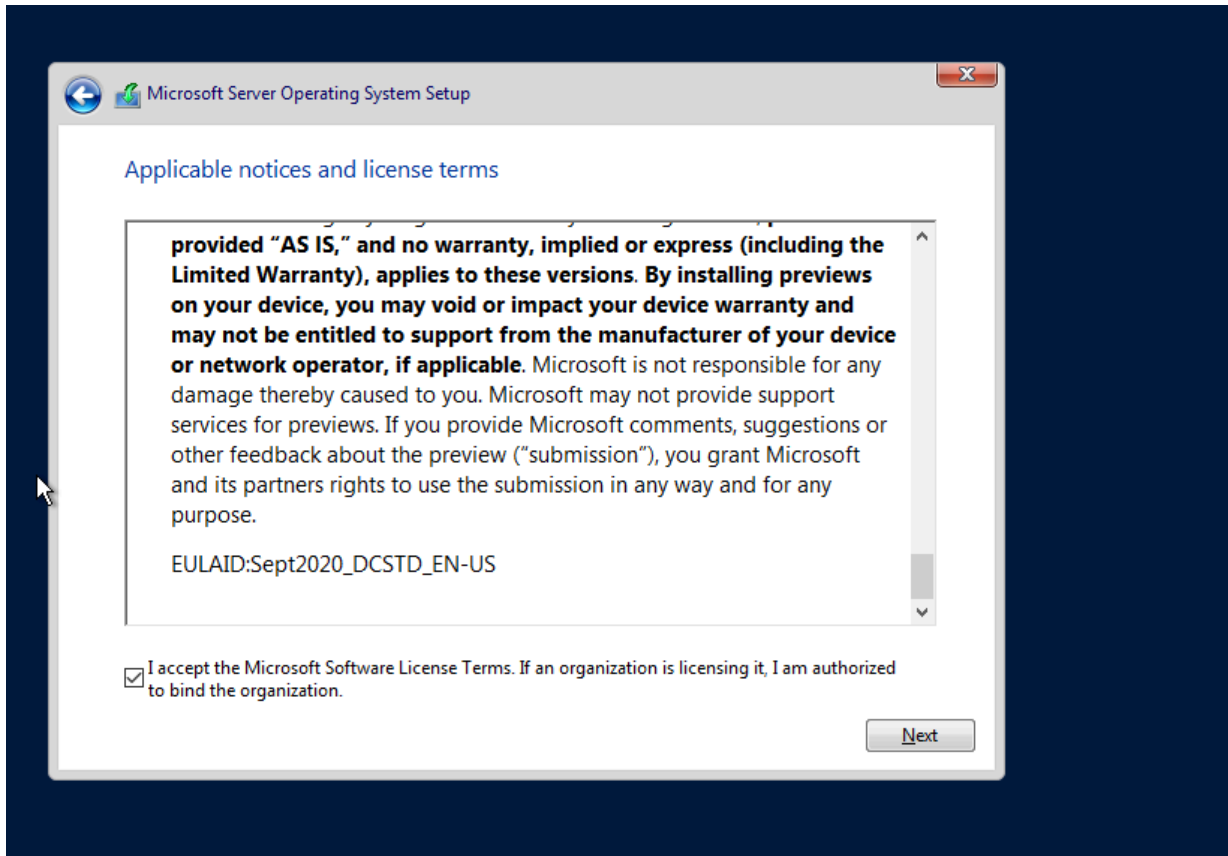
Setting up the server! I kept these default as these were fine for me.



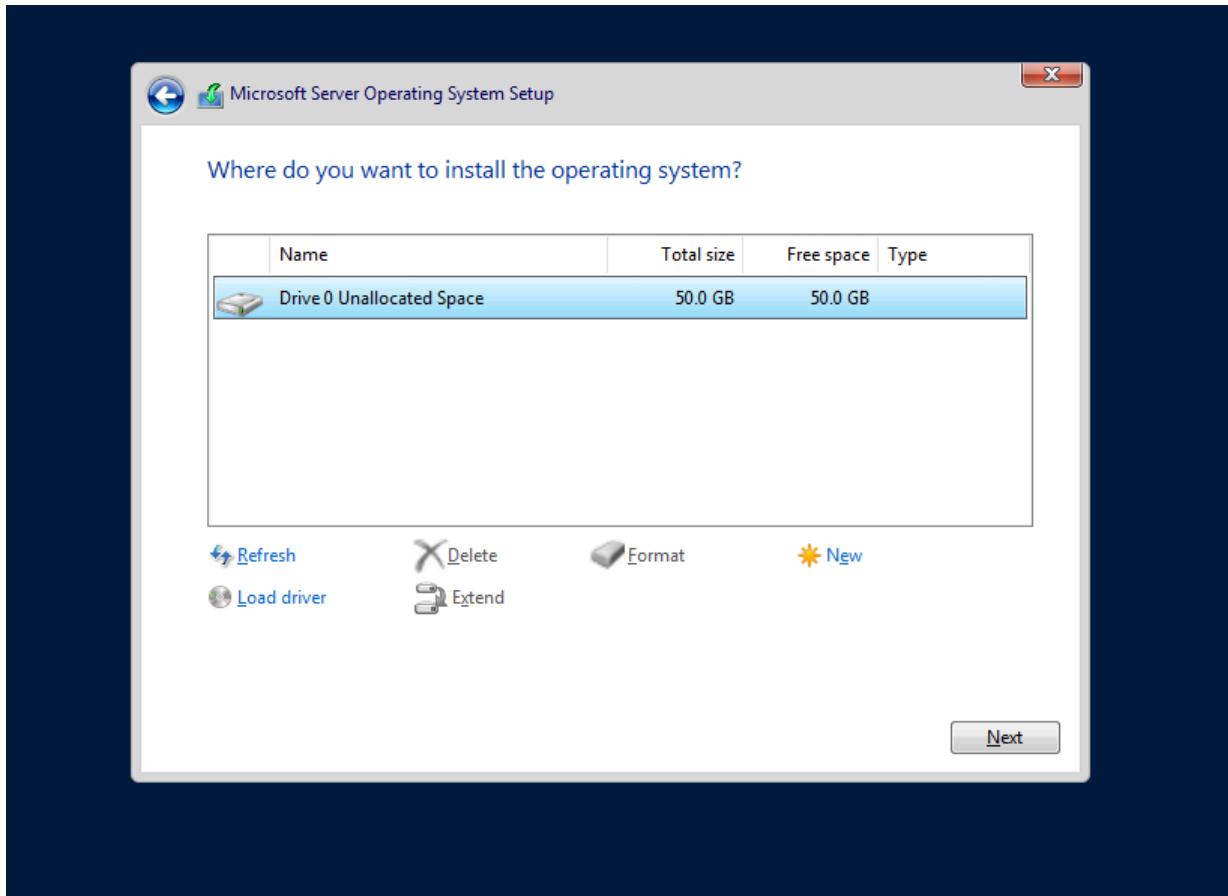
Over here I click on "Install Now"



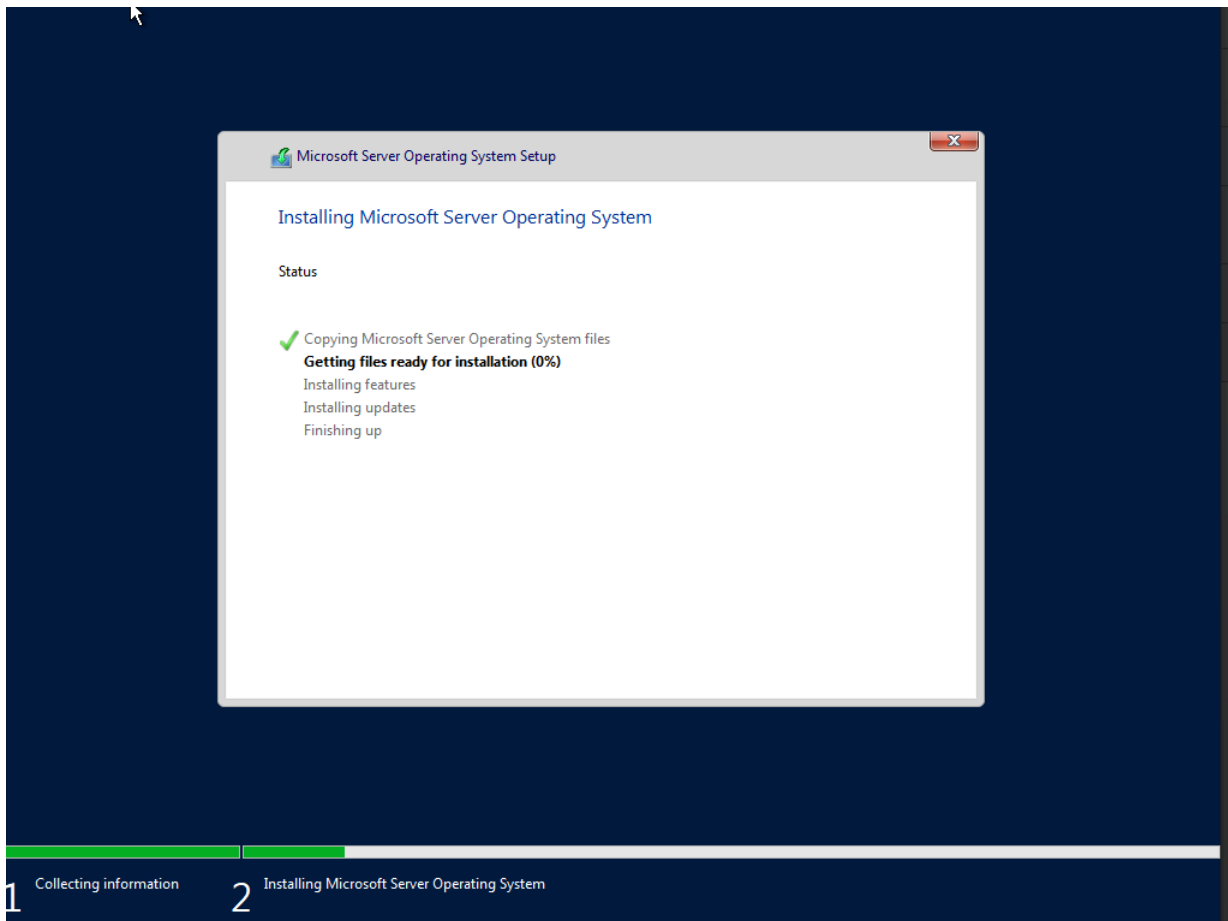
I clicked on the last option, the Datacenter evaluation option which gives a desktop experience. This one gives a GUI interface rather than a CLI interface.



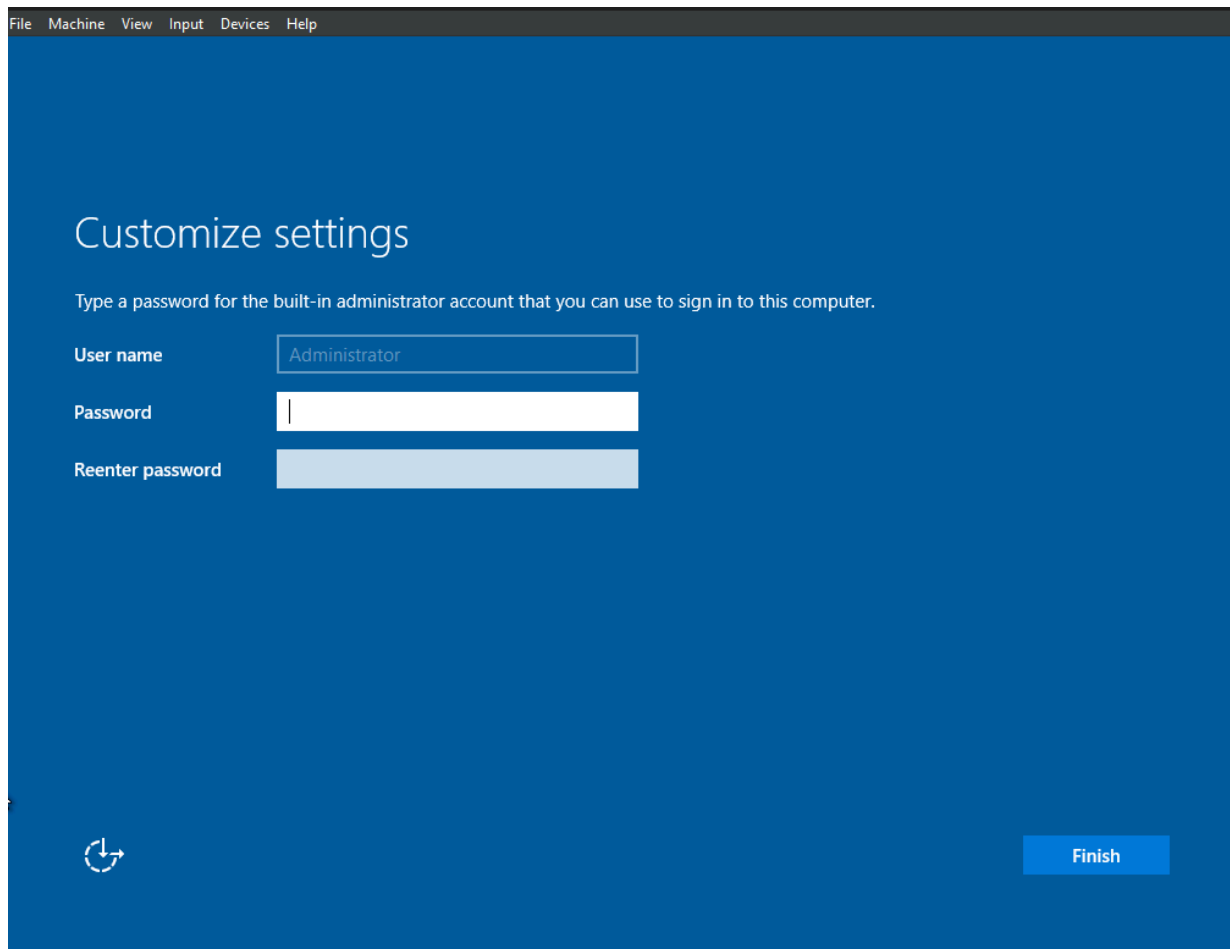
License and terms.



Over here I made sure to click the drive 0 as I allocated 50 GB for it. (NOTE, I skipped a screenshot previously, but it was asking if I wanted to do a custom installation or not, so I made sure to click on that one!)



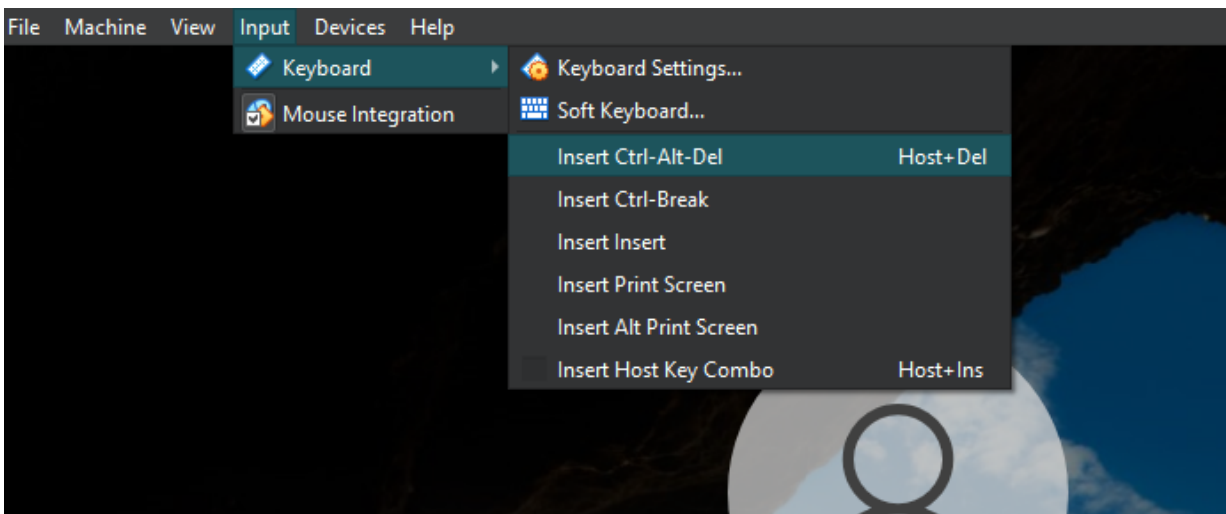
Installation. I need to restart.

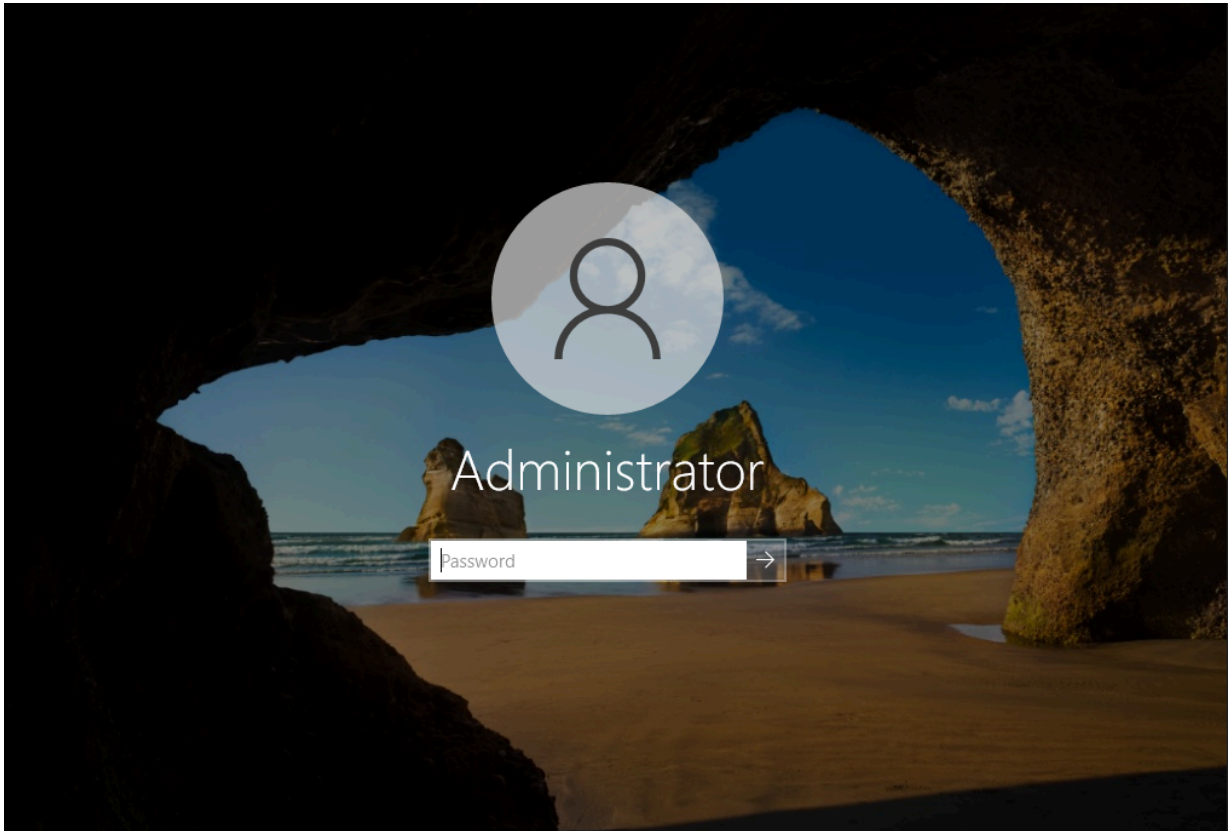


Now I am prompted to make our password. Username by default is Administrator. Don't worry, I always make my passwords strong!

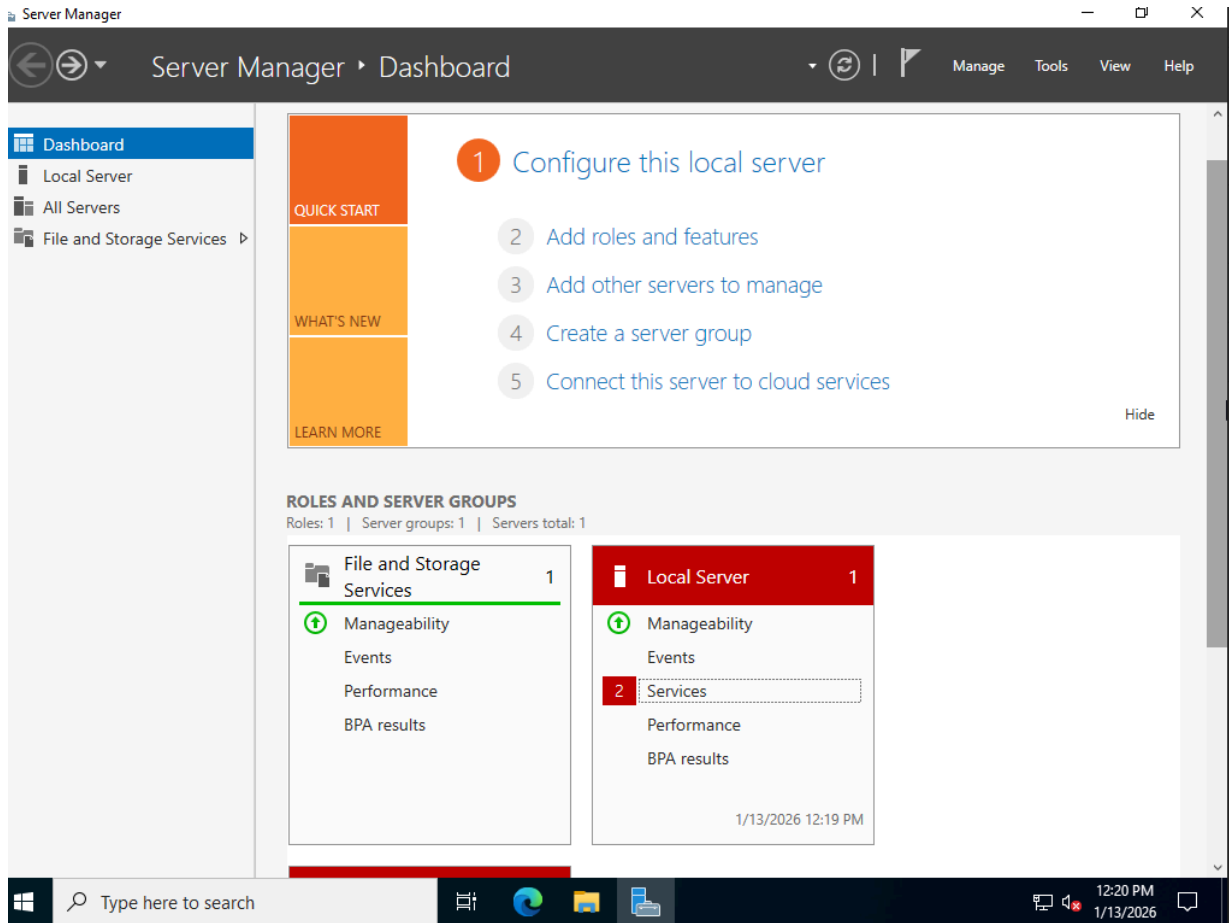


Now I am in the lock screen of a regular windows 10 one. Nostalgic.

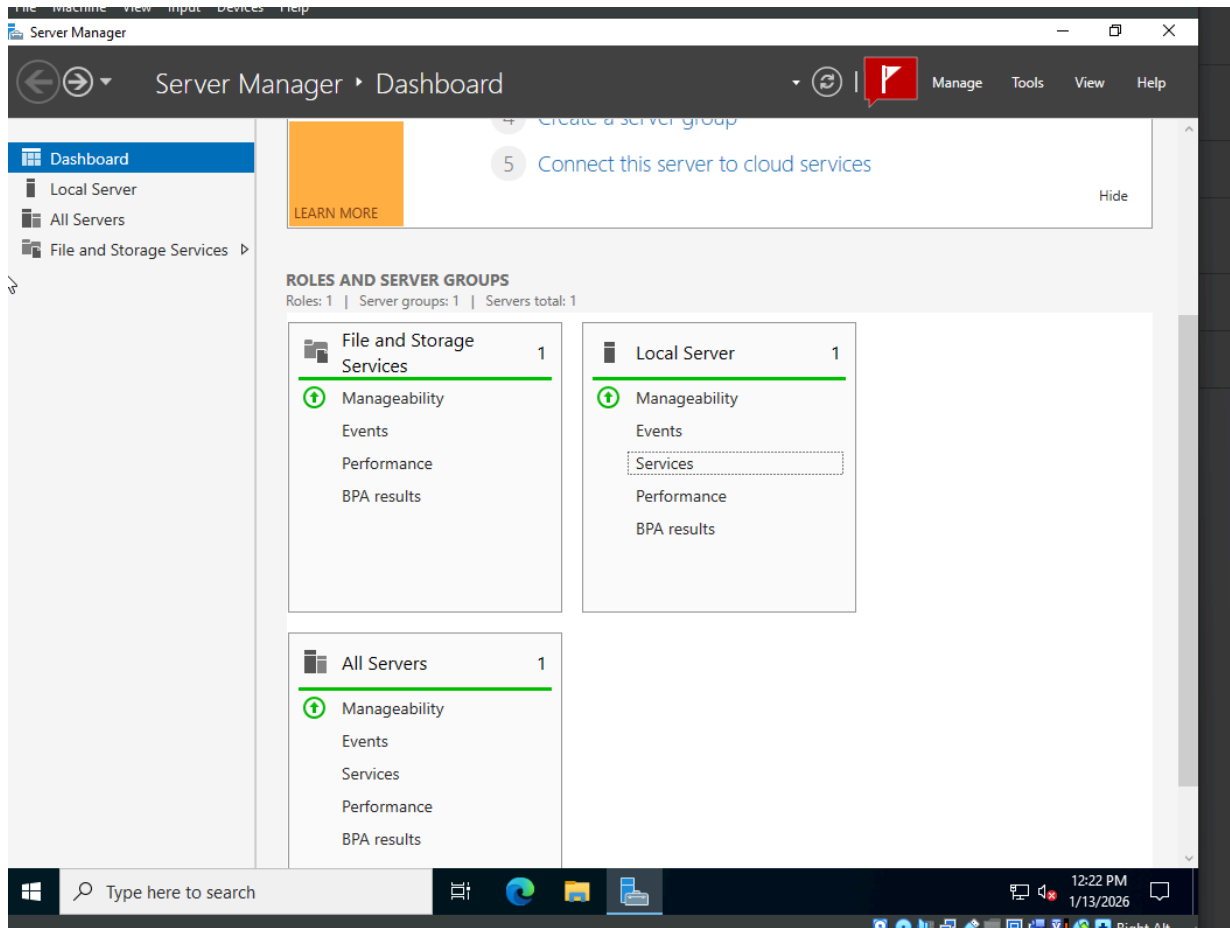




I maneuvered over input, keyboard, and then insert ctrl alt delete to prompt me to the sign in area.



Now we are in the server manager!



Of course in the earlier screenshot we can see some services were red, that just meant some services stopped. I made sure to resume the ones that were stopped.

With that being said! Windows server is now set up, we can now continue with Active Directory!

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Active Directory Setup

TL;DR

In this section, I am going to use the windows server 2022 I just implemented in Vbox to finally now setup Active Directory

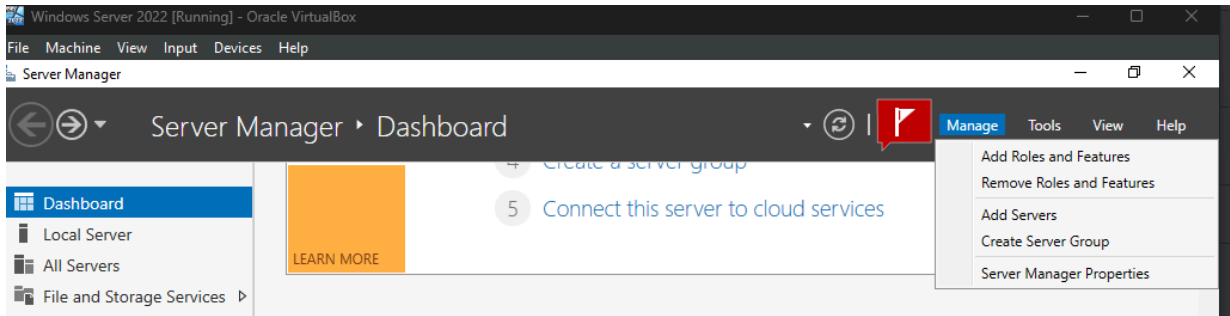
Overview / Goal

My main goal is to get familiar with setting up Active Directory and knowing how to maneuver within it. I want to learn how to set up group policies and much more! I want to gain confidence within the realm of IT helpdesk, which involves the usage of Active Directory.

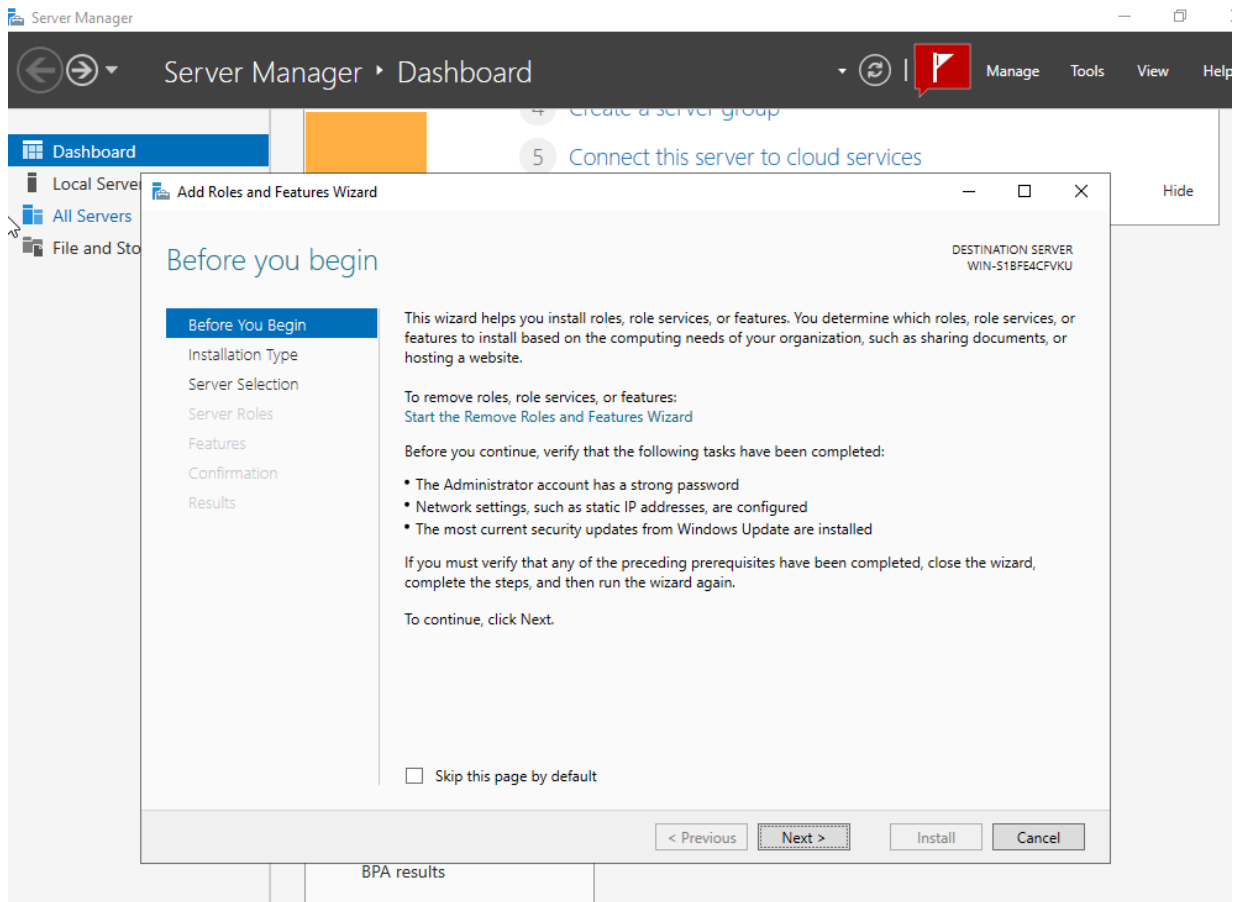
Tools & Environment

- VPN / Lab: VBox
- Windows Server 2022

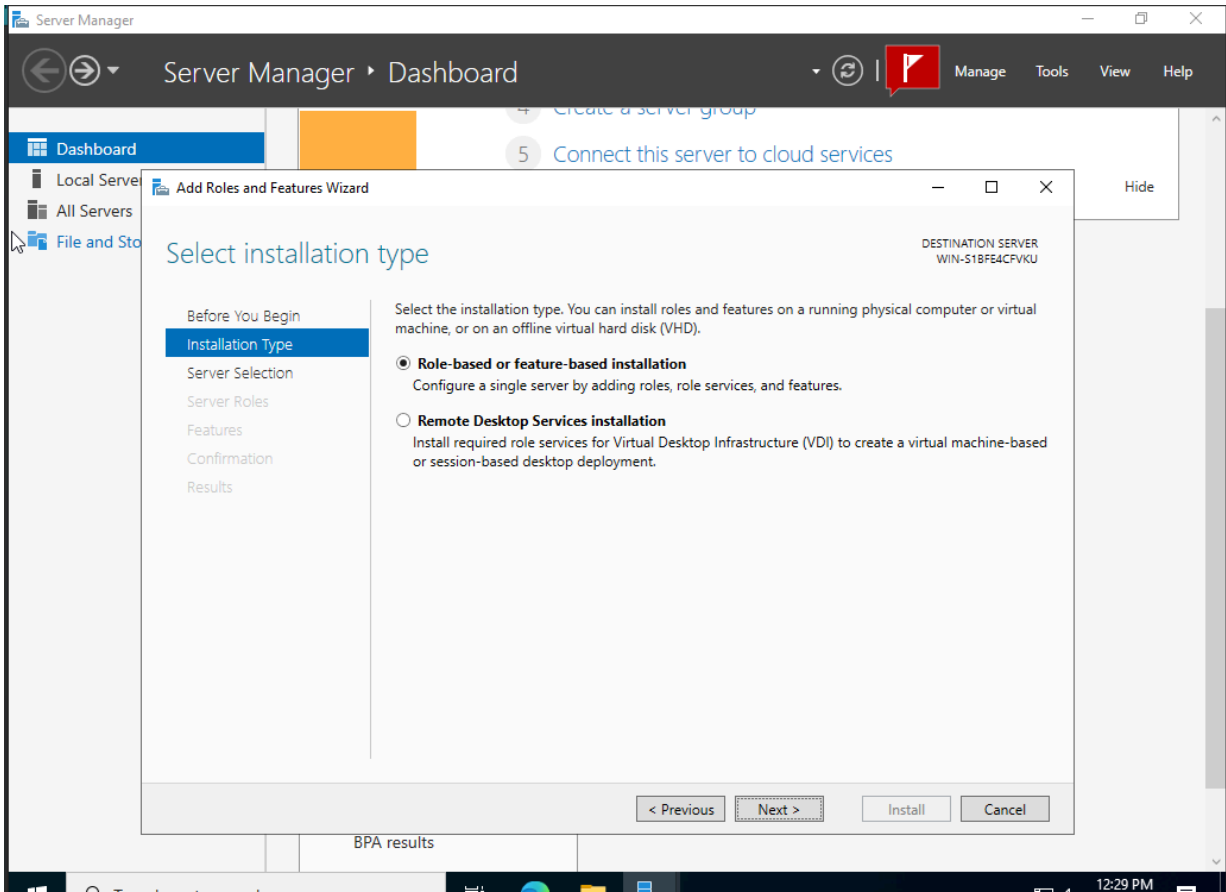
Setting up AD



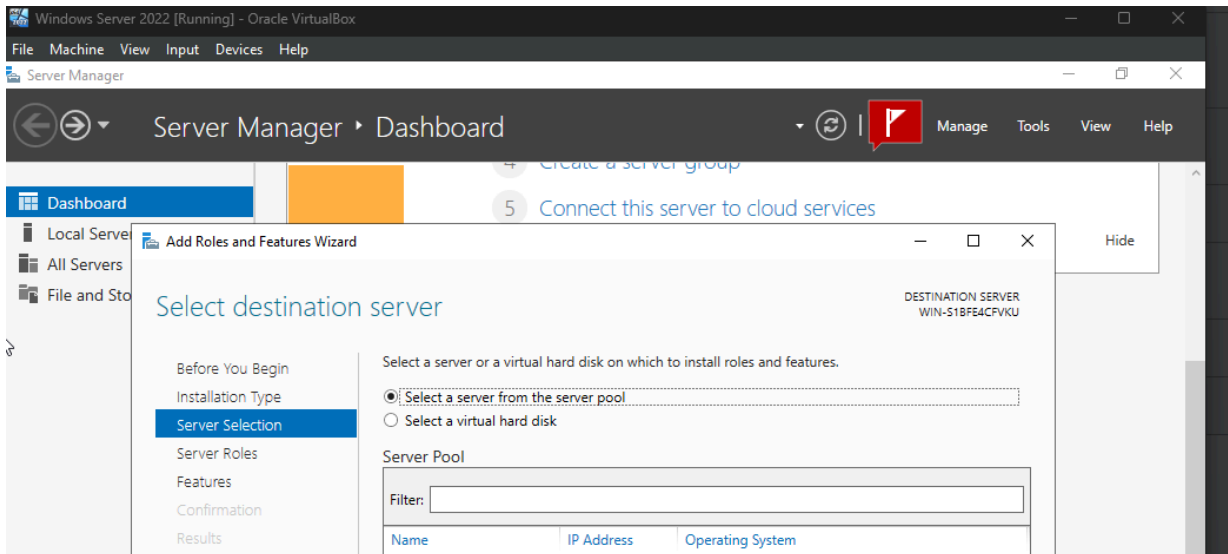
I went to the top right of the pane and clicked on mange, then to add roles and features.



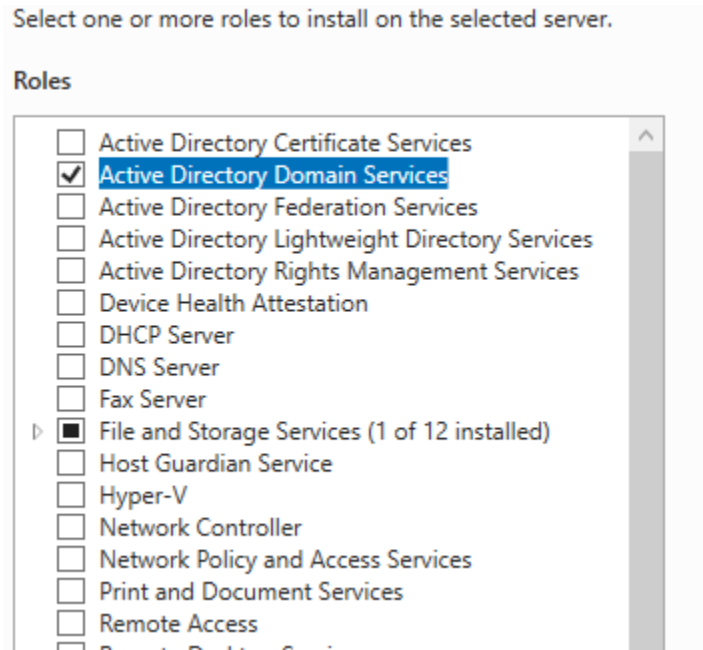
Doing so brings me to this page



I made sure to click on the next, when you are here, keep this default as we can to have role based installation.

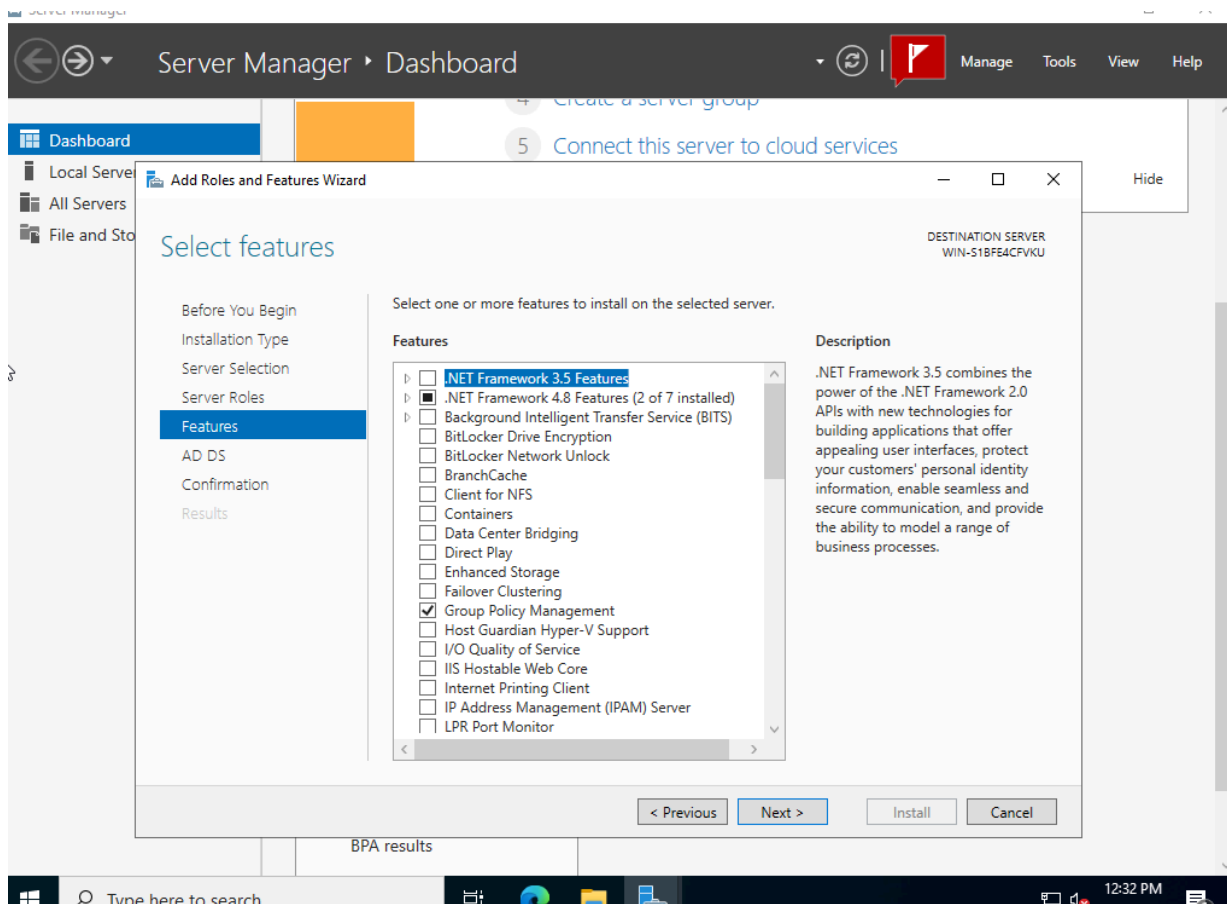


I made sure to click the correct server. Of course, I only have one right now setup so this was easy to locate.

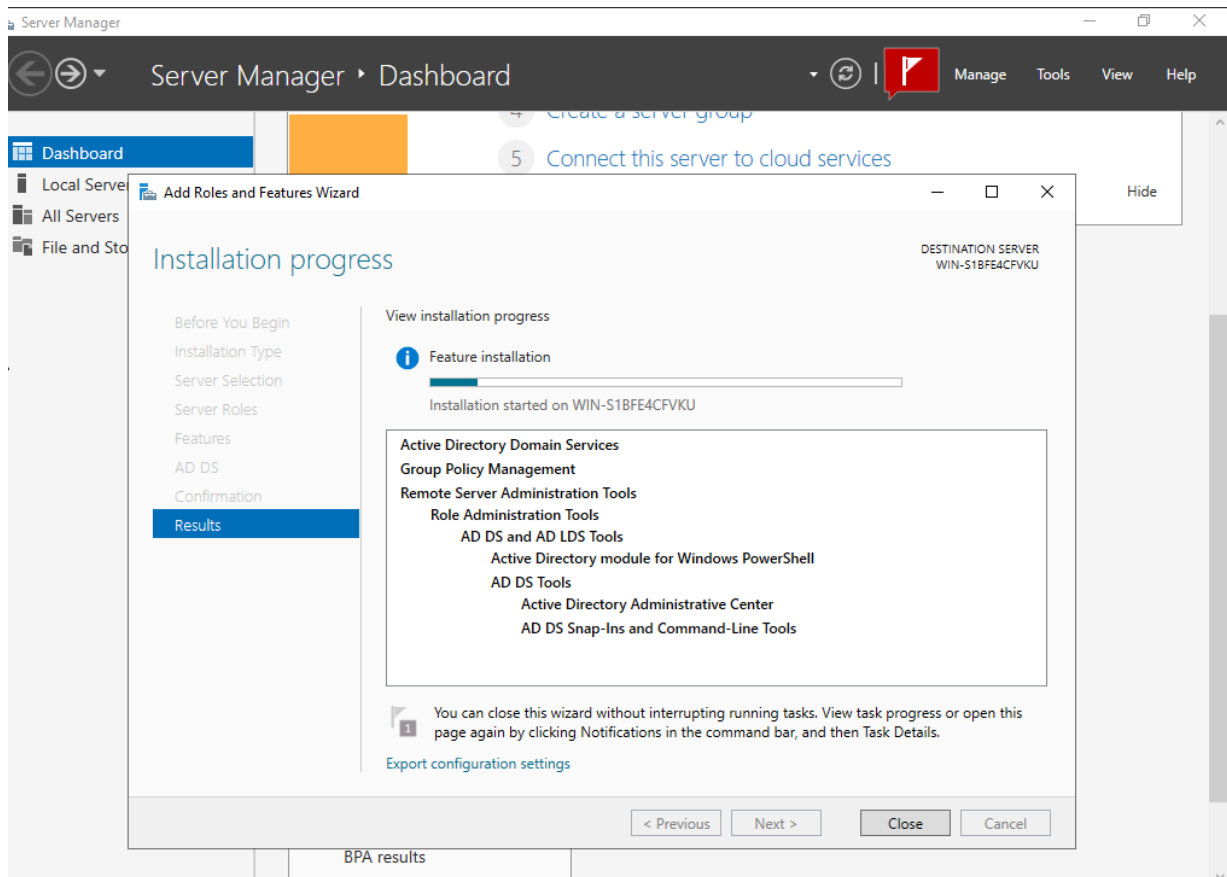


On the next page I made sure to click on Active Directory Domain Services, or AD DS. Critical for Active Directory

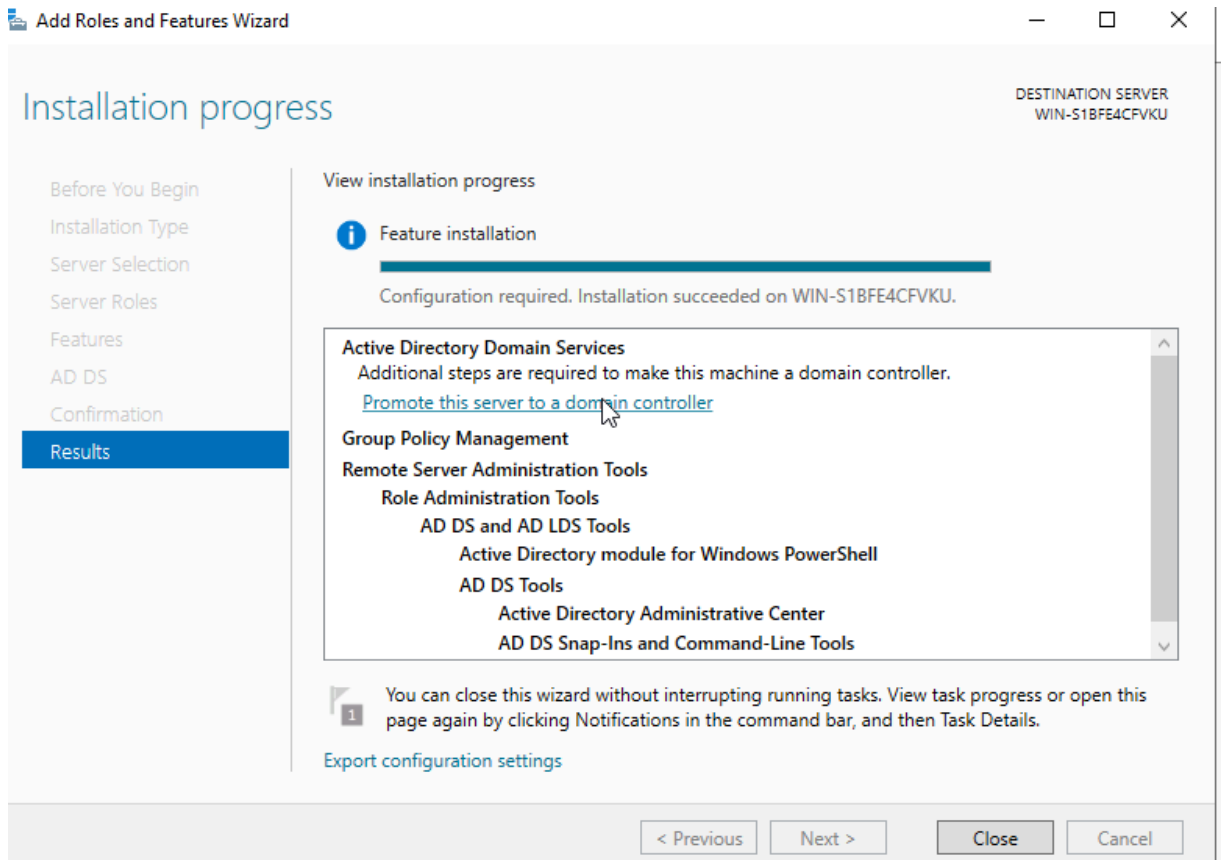
It will prompt a bunch of things that need to be added, just clicked on Ok



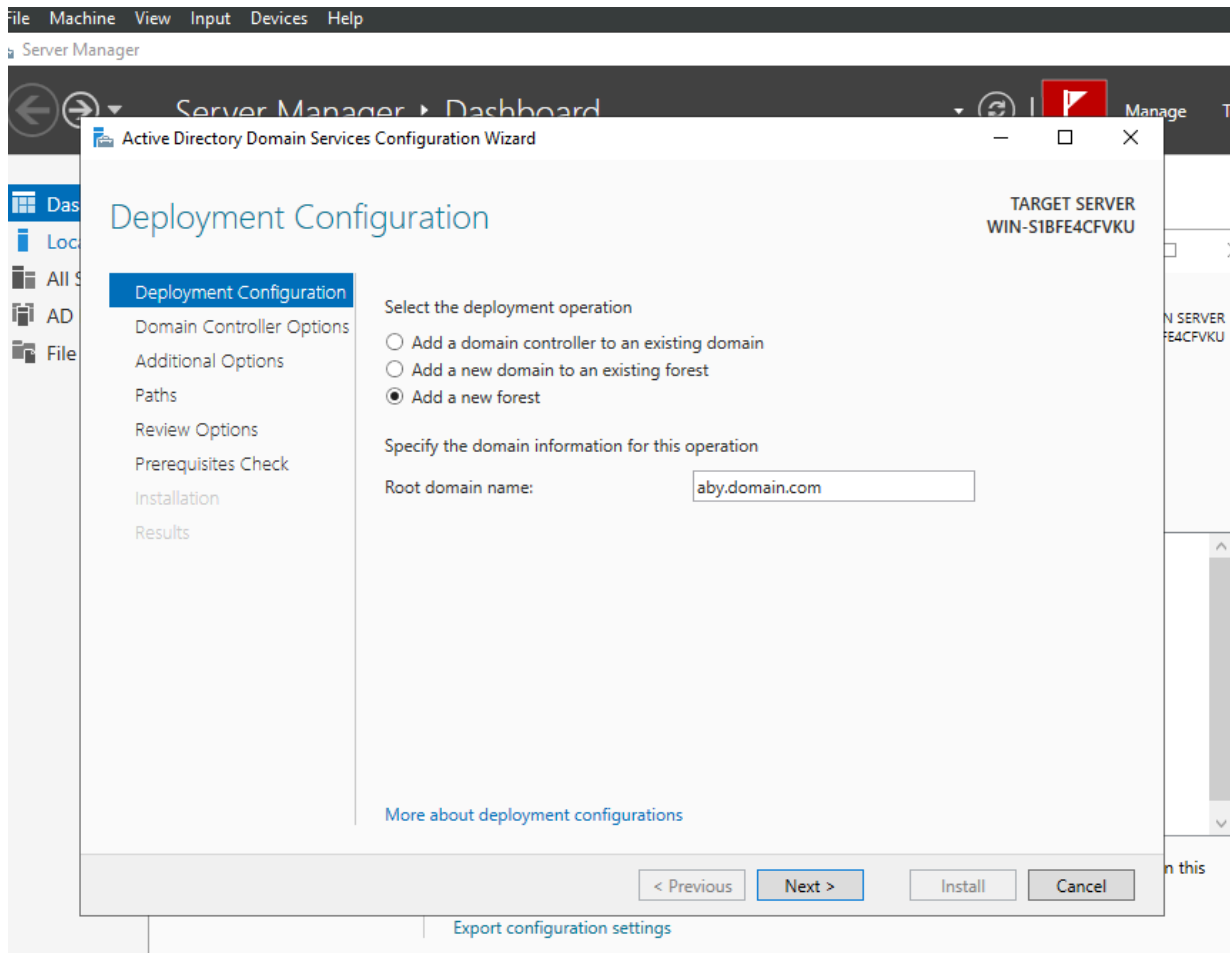
Over here, you just want to leave these on default, these are fine for the purposes of this lab.



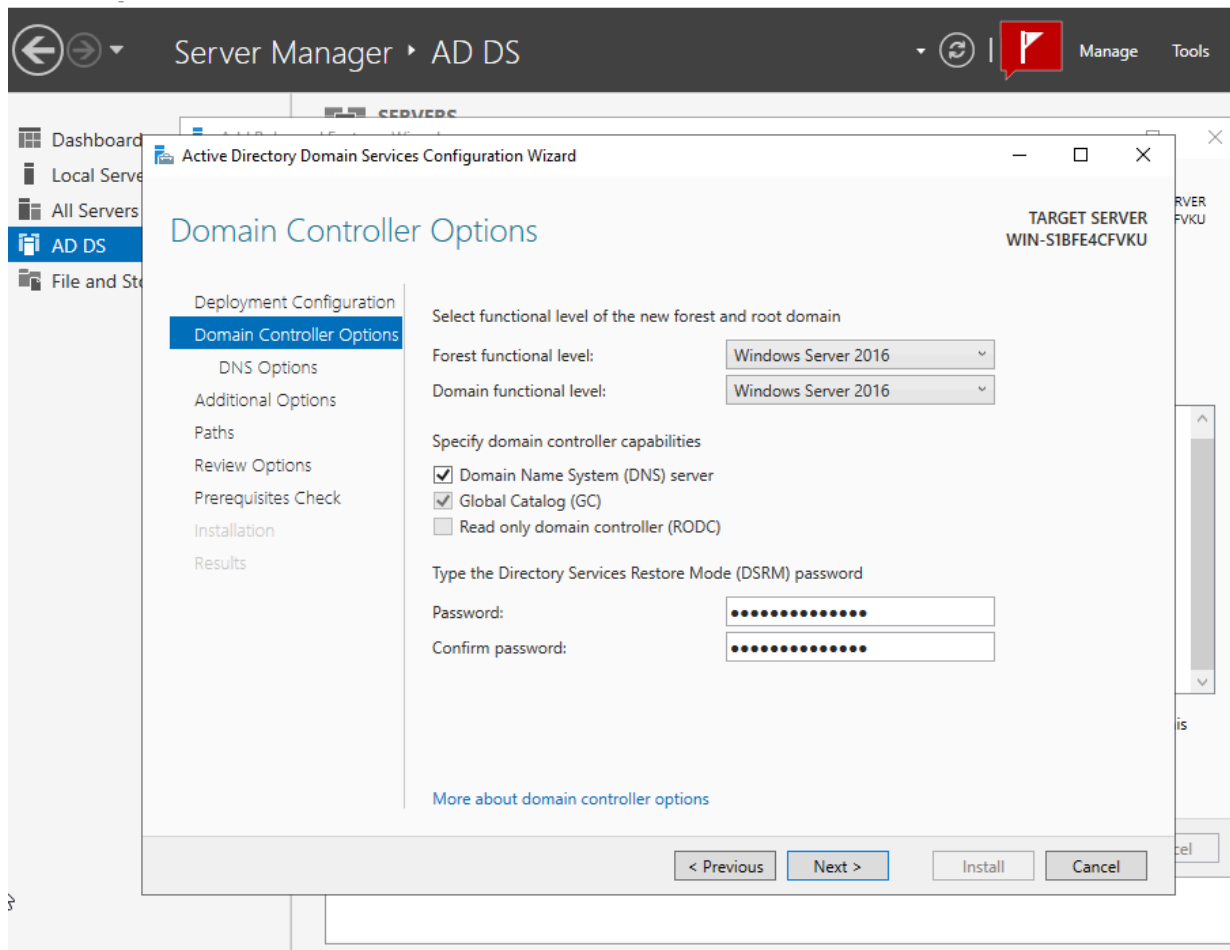
After clicking next on a couple of the sections, I can finally begin the installation.



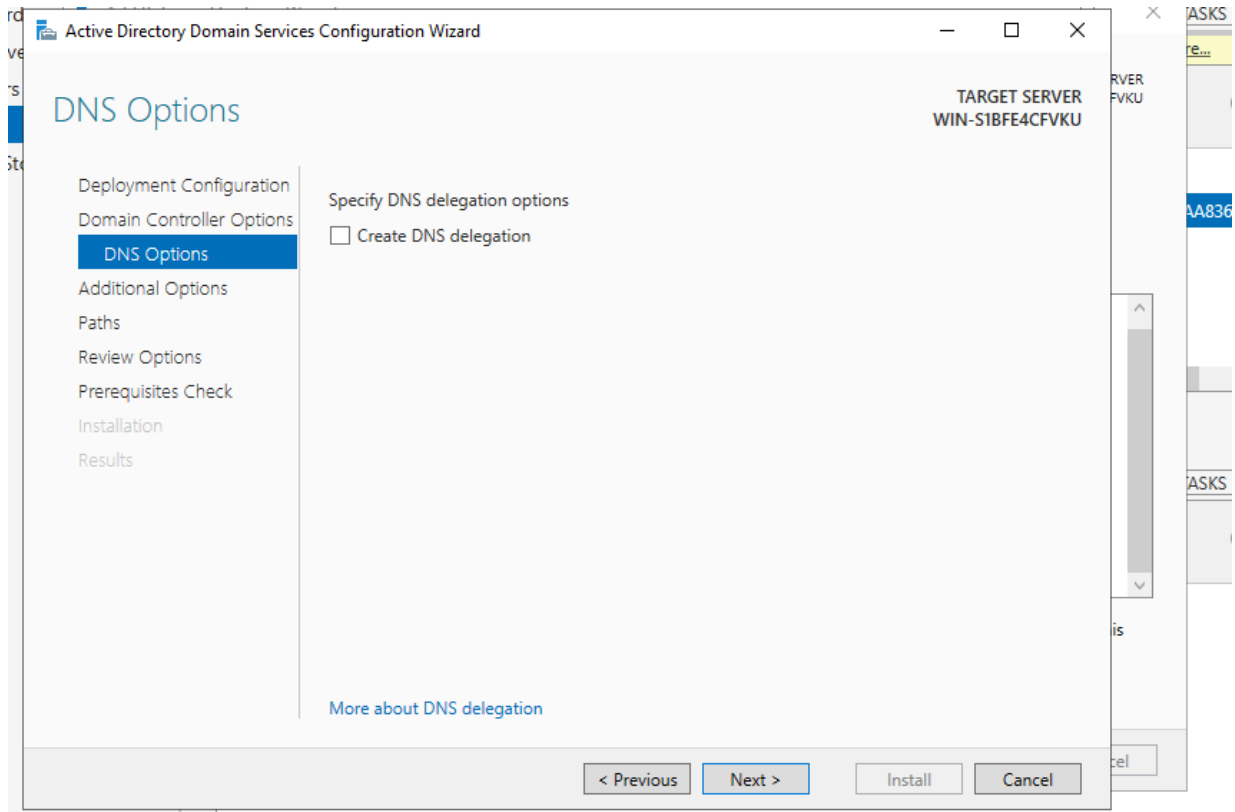
Once the installation is complete, I can then click on “Promote this server to a domain controller”



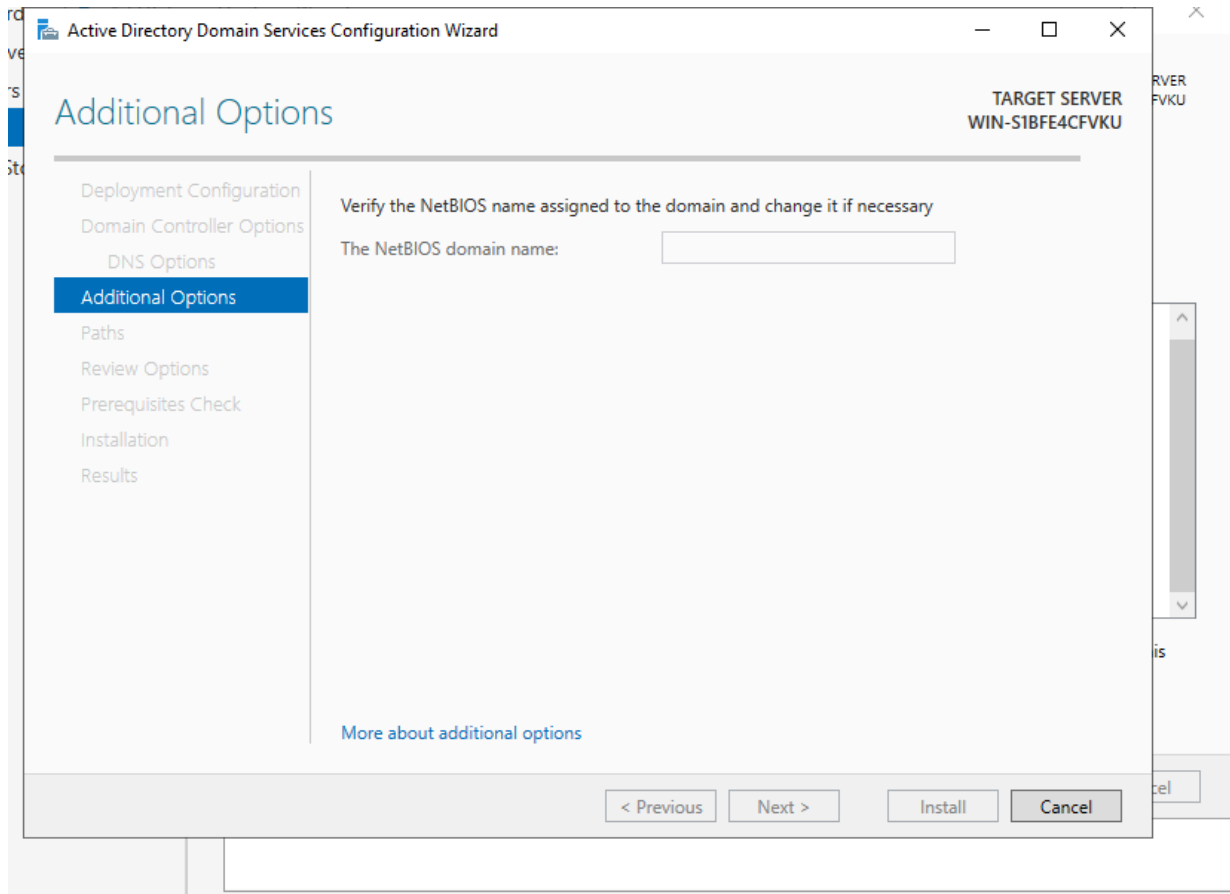
Over here, I can click on "add new forest". Then I inputted my own root domain name, which is just aby.domain.com



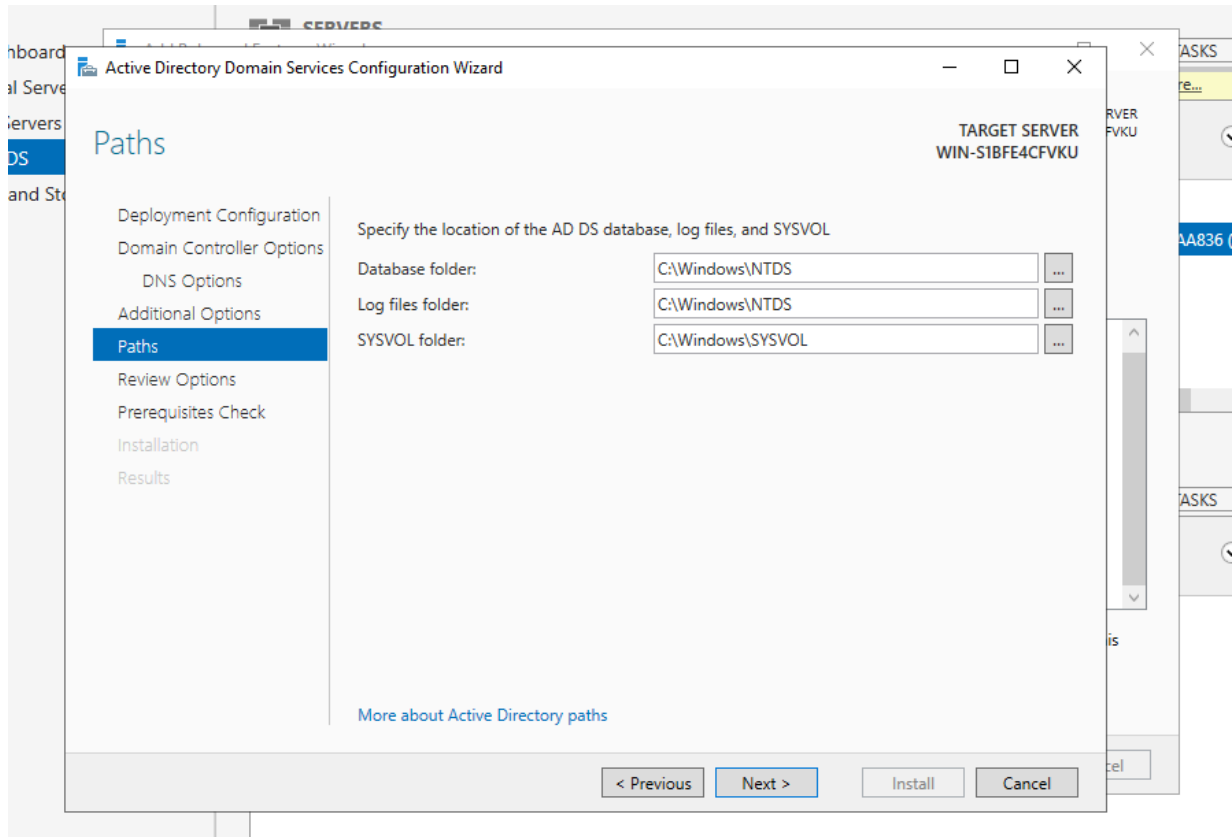
Over here I just want to set my password for the DSRM

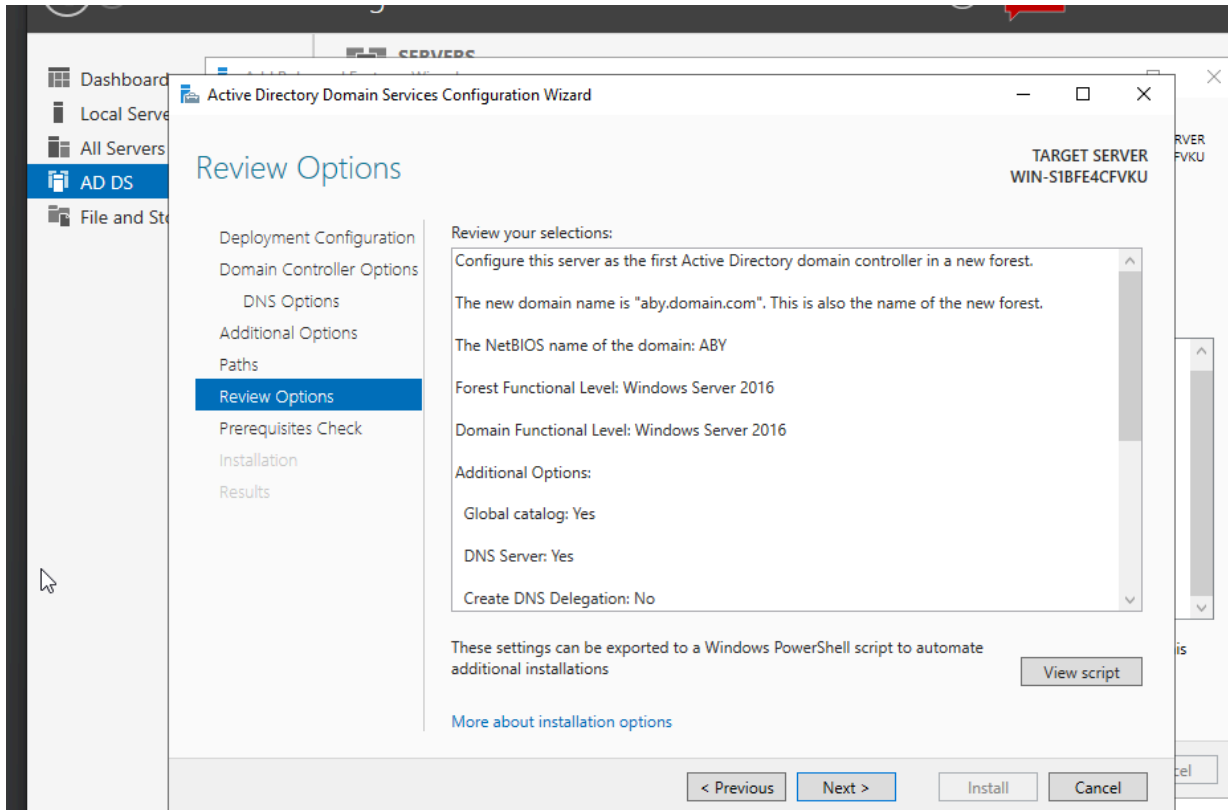


Leave this unchecked

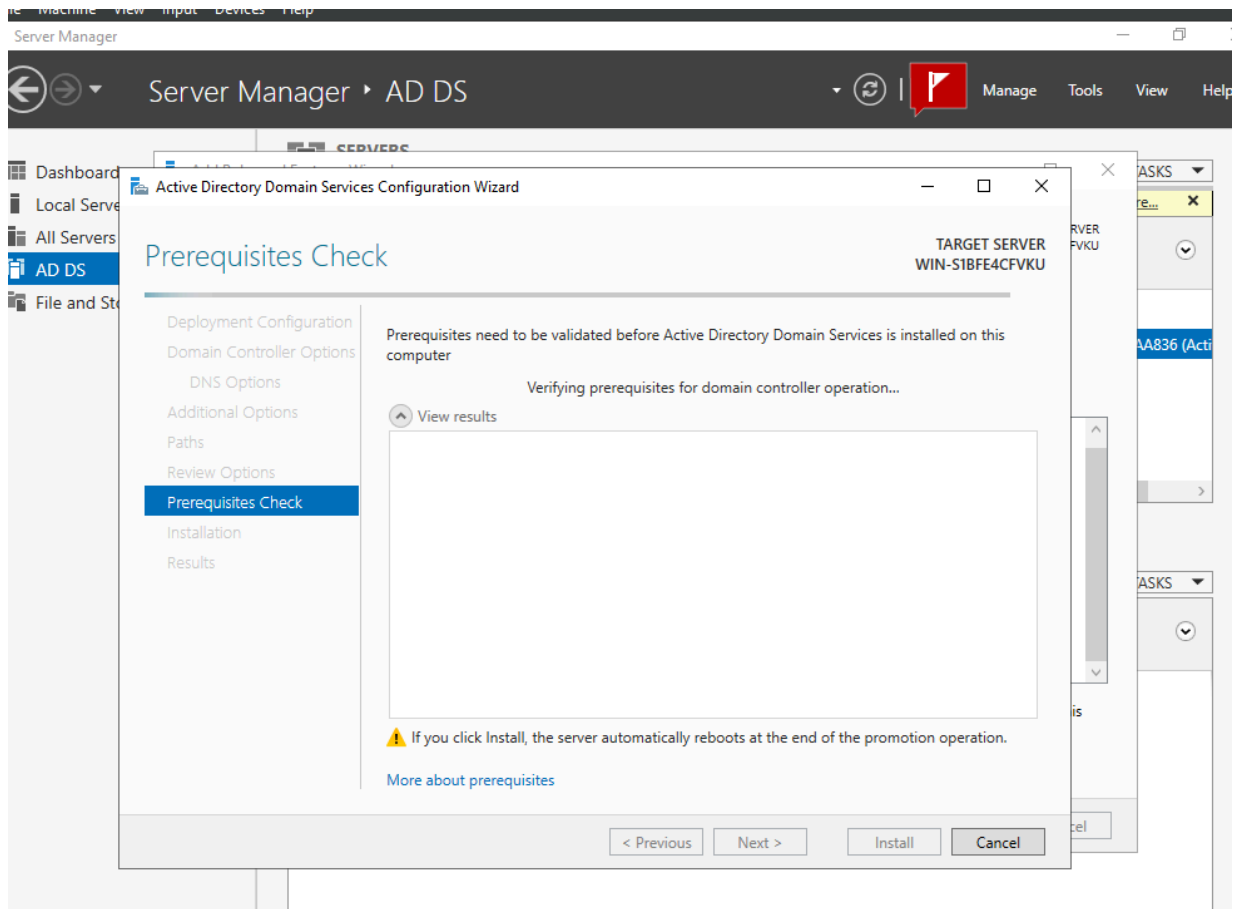


I left this default should return ABY for me



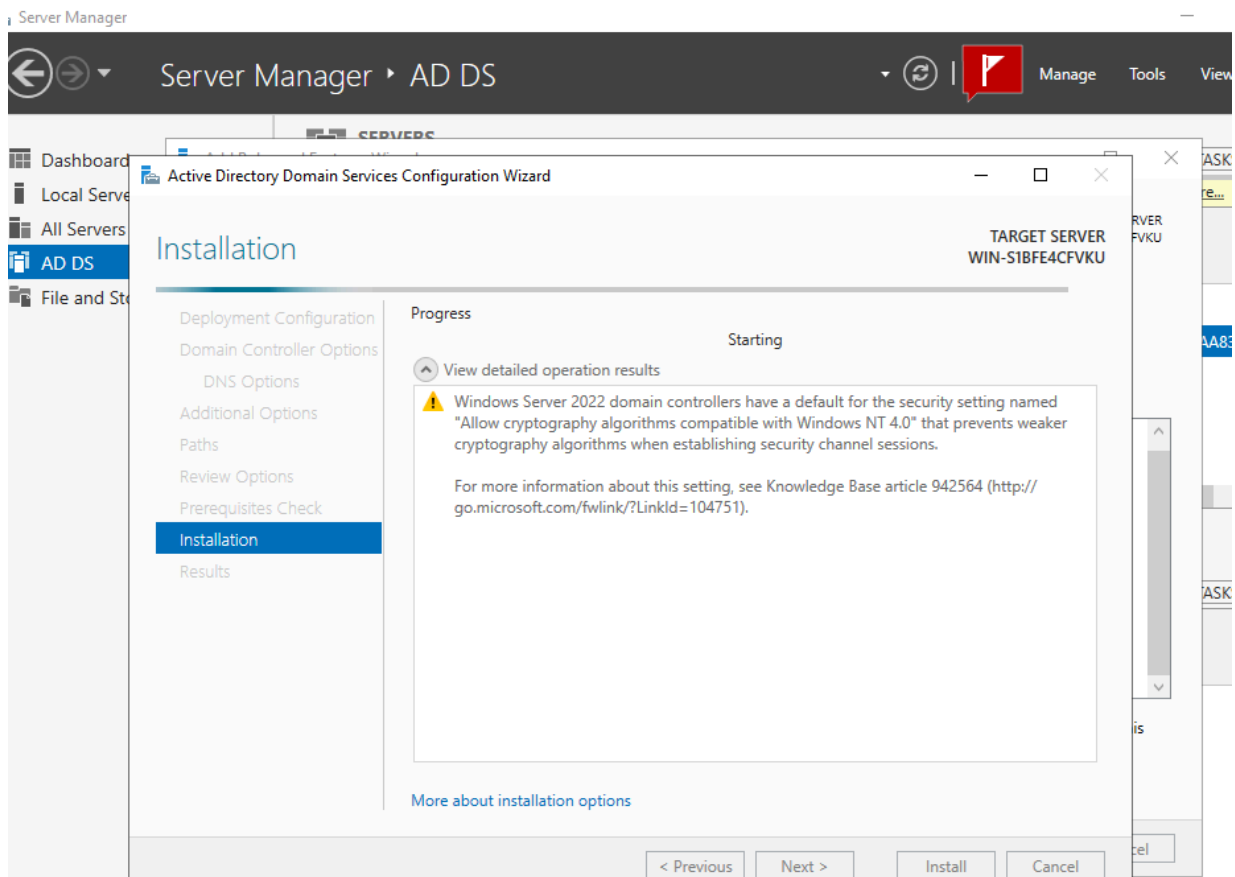


These were all left default.

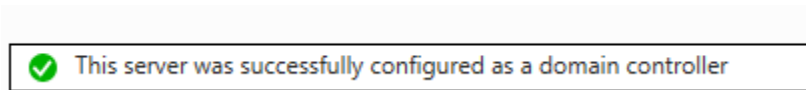


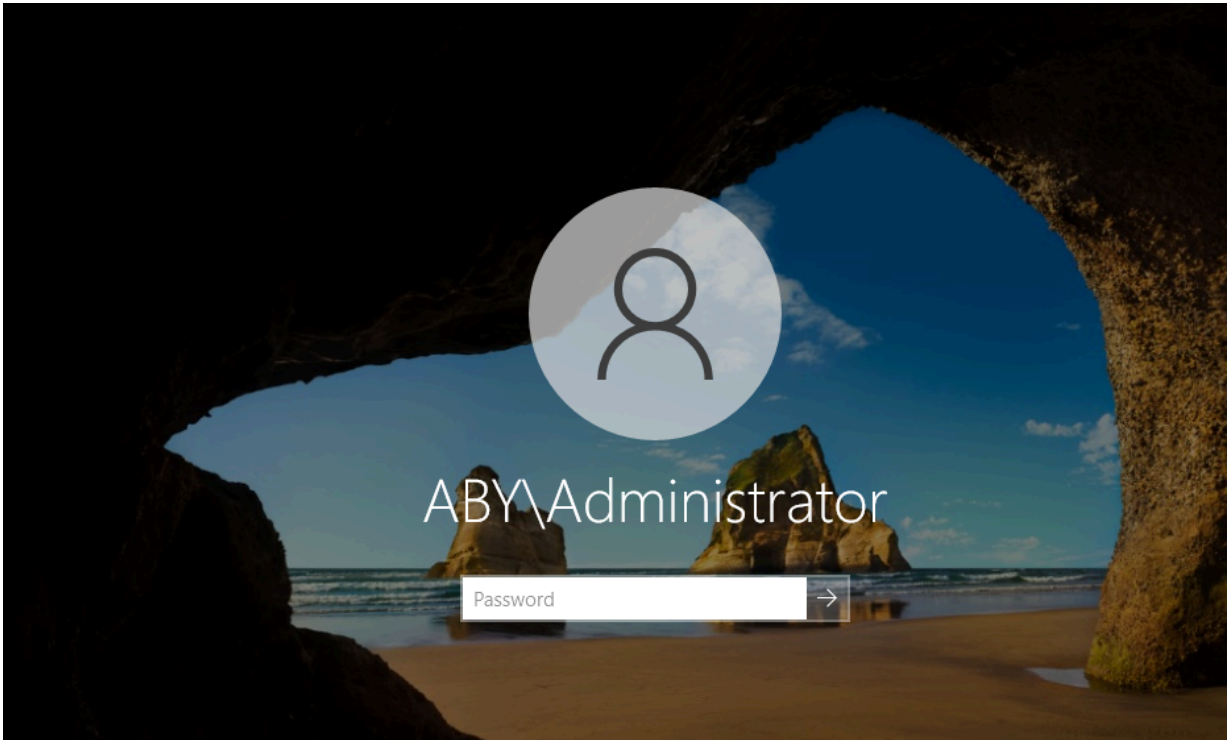
Prereq check.

After all of the prereq checks, I clicked on install.



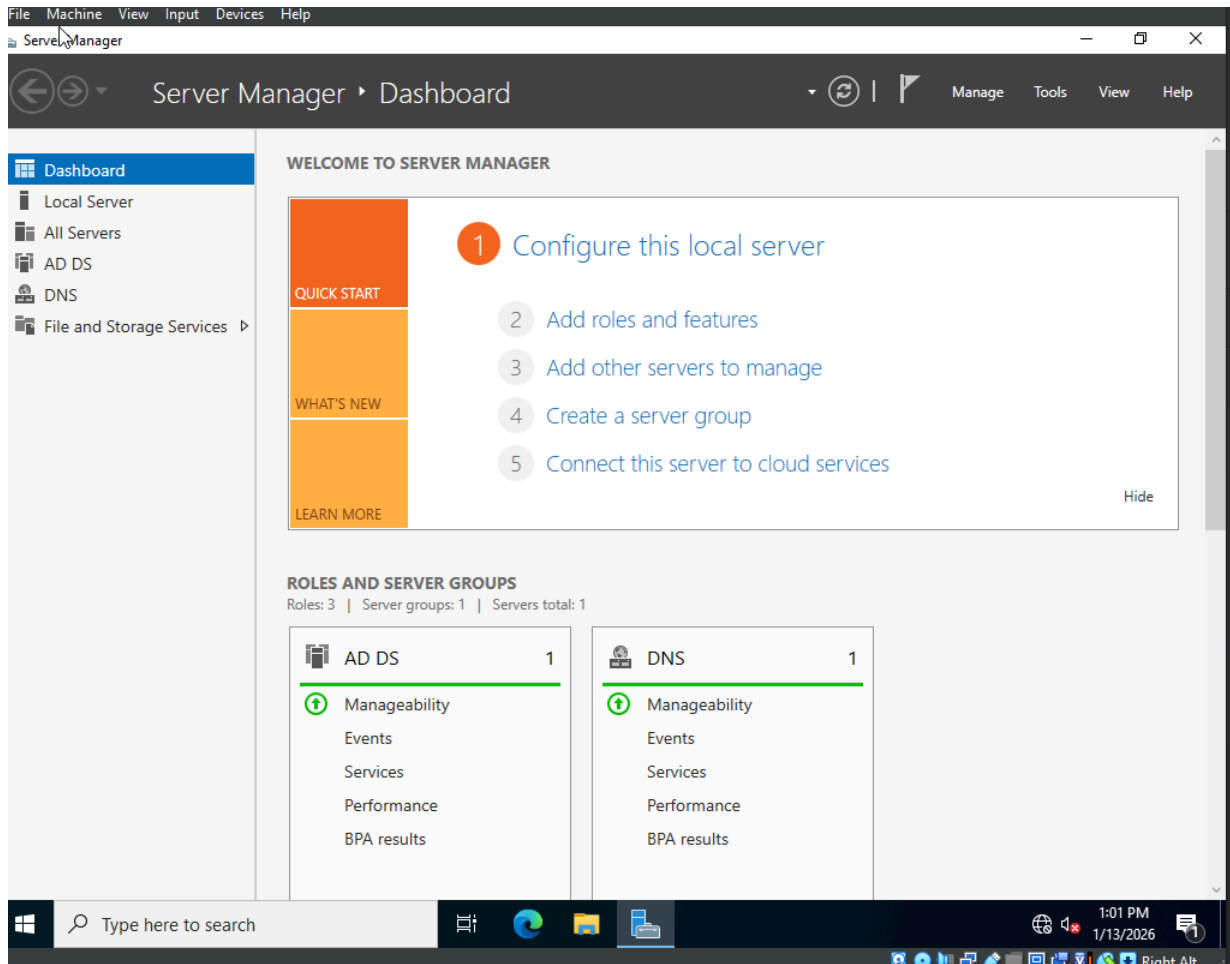
After this is completed, my computer should restart.



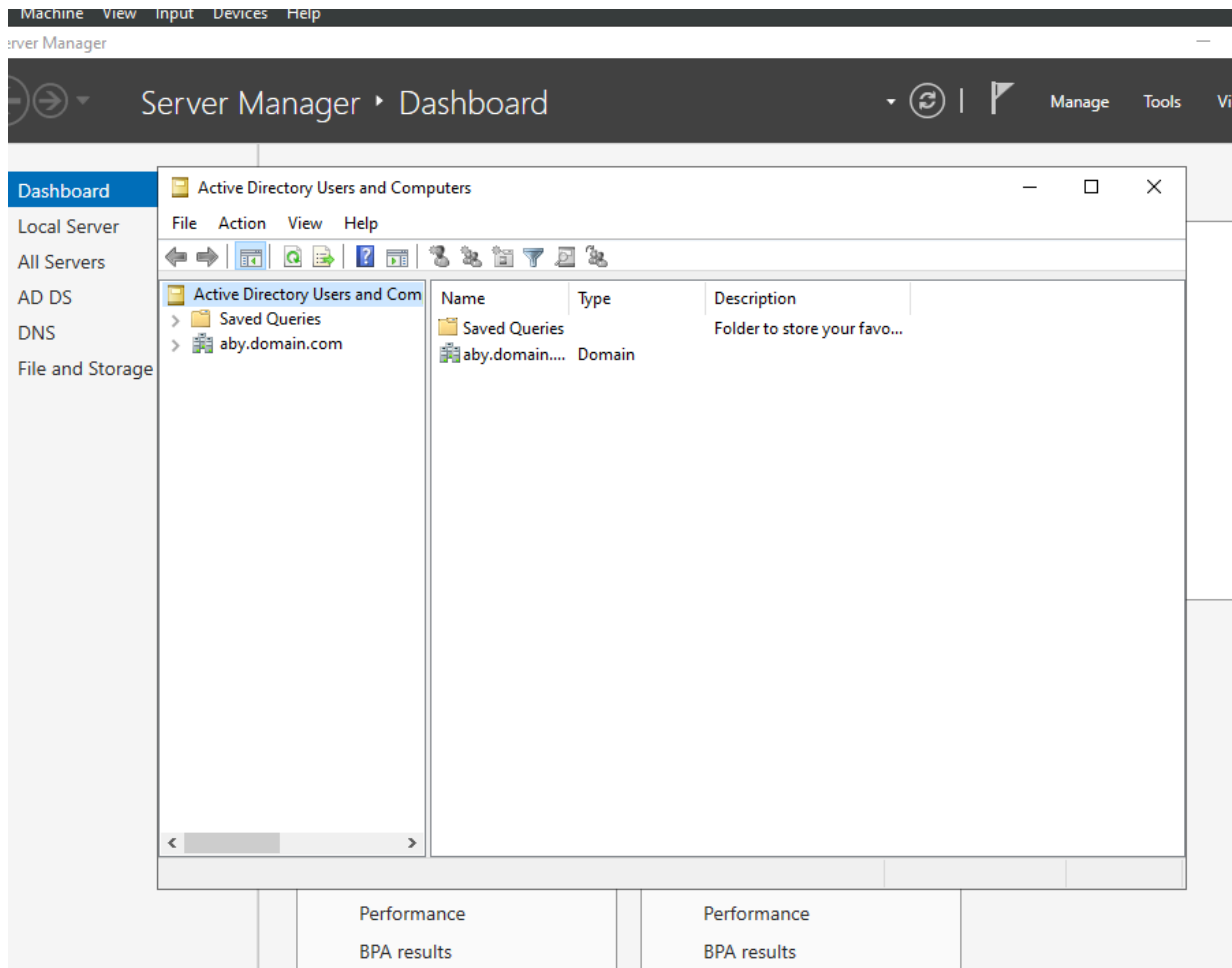


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After the restart we can now sign back in!



As you can see, Active Directory and DNS are there at the bottom and we can now verify that everything is working properly after the installation.



And now we can access active directory users and computers! My domain name is also there, which is neat!

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