

Install Windows Server 2019 in virtual box.

### Step 1: Setting Up Windows Server 2019 in VMWare

Download VMWare: Ensure VMWare is installed on your system. If not, download and install it from the VMWare website.

Download Windows Server 2019 ISO: Obtain the ISO file for Windows Server 2019 from the official Microsoft website.

Create a New Virtual Machine:

Open VMWare and click on “Create a New Virtual Machine.”

Select “Custom (advanced)” and click Next.



Choose the “I will install the operating system” option.

The screenshot shows a 'New Virtual Machine Wizard' window with a yellow title bar. The main heading is 'Guest Operating System Installation'. Below it, a text box explains: 'A virtual machine is like a physical computer; it needs an operating system. How will you install the guest operating system?'. The 'Install from:' section has three radio button options. The first, 'Installer disc:', has a dropdown menu showing 'No drives available'. The second, 'Installer disc image file (iso):', has a text box with a file path and a 'Browse...' button. The third, 'I will install the operating system later.', is selected with a blue radio button and is highlighted by a dashed rectangular box. Below this option, a note states: 'The virtual machine will be created with a blank hard disk.' At the bottom, there are four buttons: 'Help', '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a blue border.

New Virtual Machine Wizard

**Guest Operating System Installation**

A virtual machine is like a physical computer; it needs an operating system. How will you install the guest operating system?

Install from:

☐ Installer disc:

No drives available

☐ Installer disc image file (iso):

D:\cyber security\Level-5\INFO5127 - Win Sec Adv\s\ Browse...

☒ I will install the operating system later.

The virtual machine will be created with a blank hard disk.

Help < Back Next > Cancel

Follow the prompts to configure the virtual machine settings (e.g., name, location, disk size).

New Virtual Machine Wizard

**Select a Guest Operating System**  
Which operating system will be installed on this virtual machine?

Guest operating system

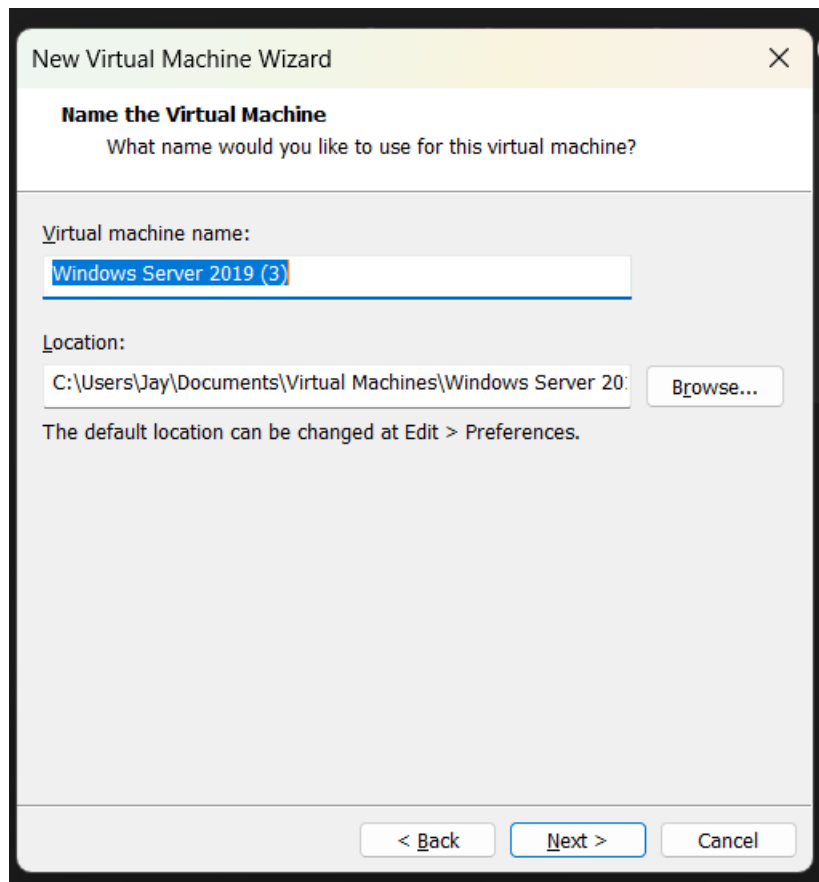
☒ Microsoft Windows  
☐ Linux  
☐ VMware ESX  
☐ Other

Version

Windows Server 2019

Help < Back Next > Cancel

Give the virtual machine new and location to store the virtual machine.



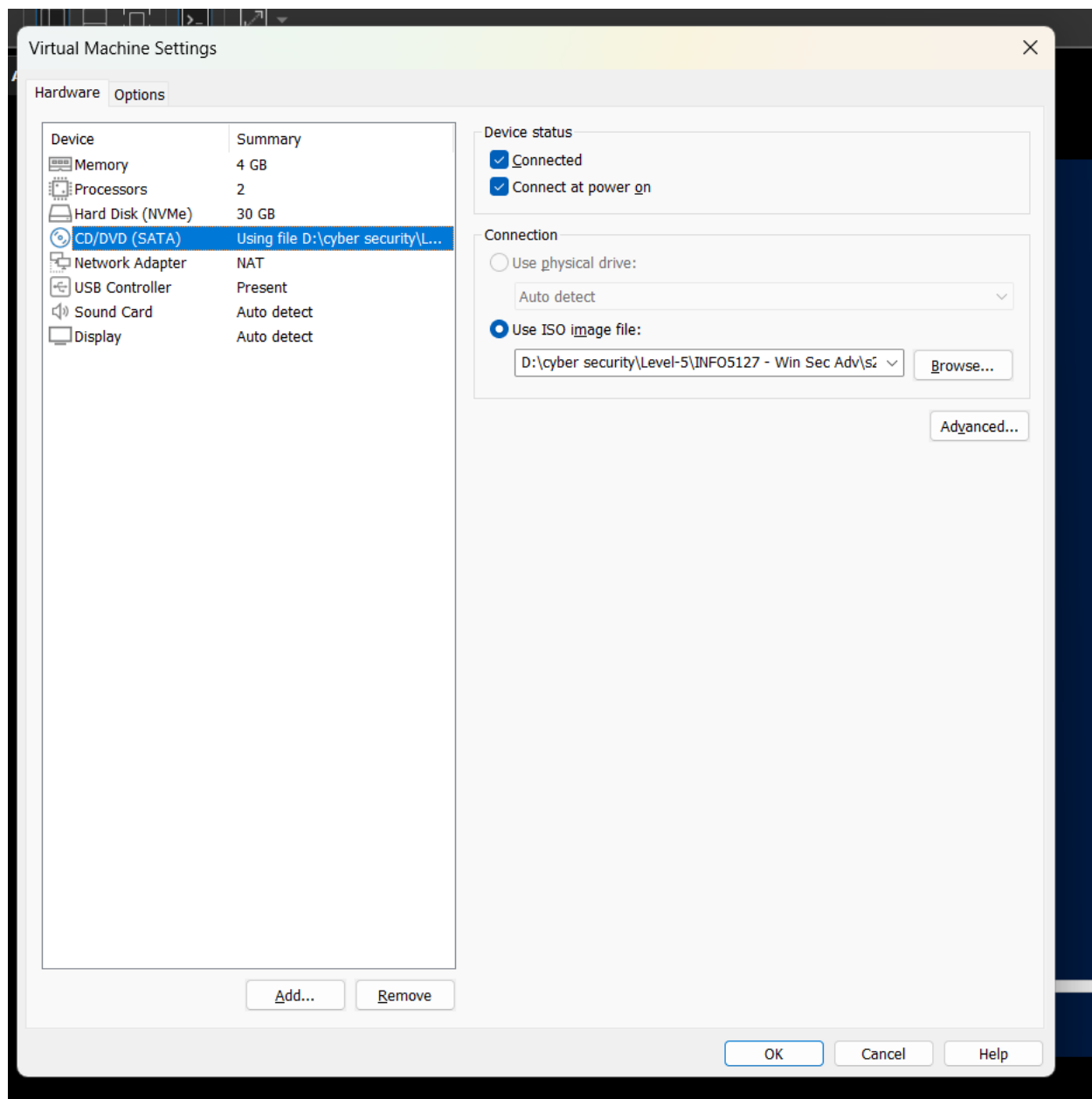
Choose the UEFI as a firmware type.

Choose the processor as 2.

Ram as a 4GB.

Network Connection as the NAT. Give other thing as default.

Give 30 GB storage and head over the customize hardware.

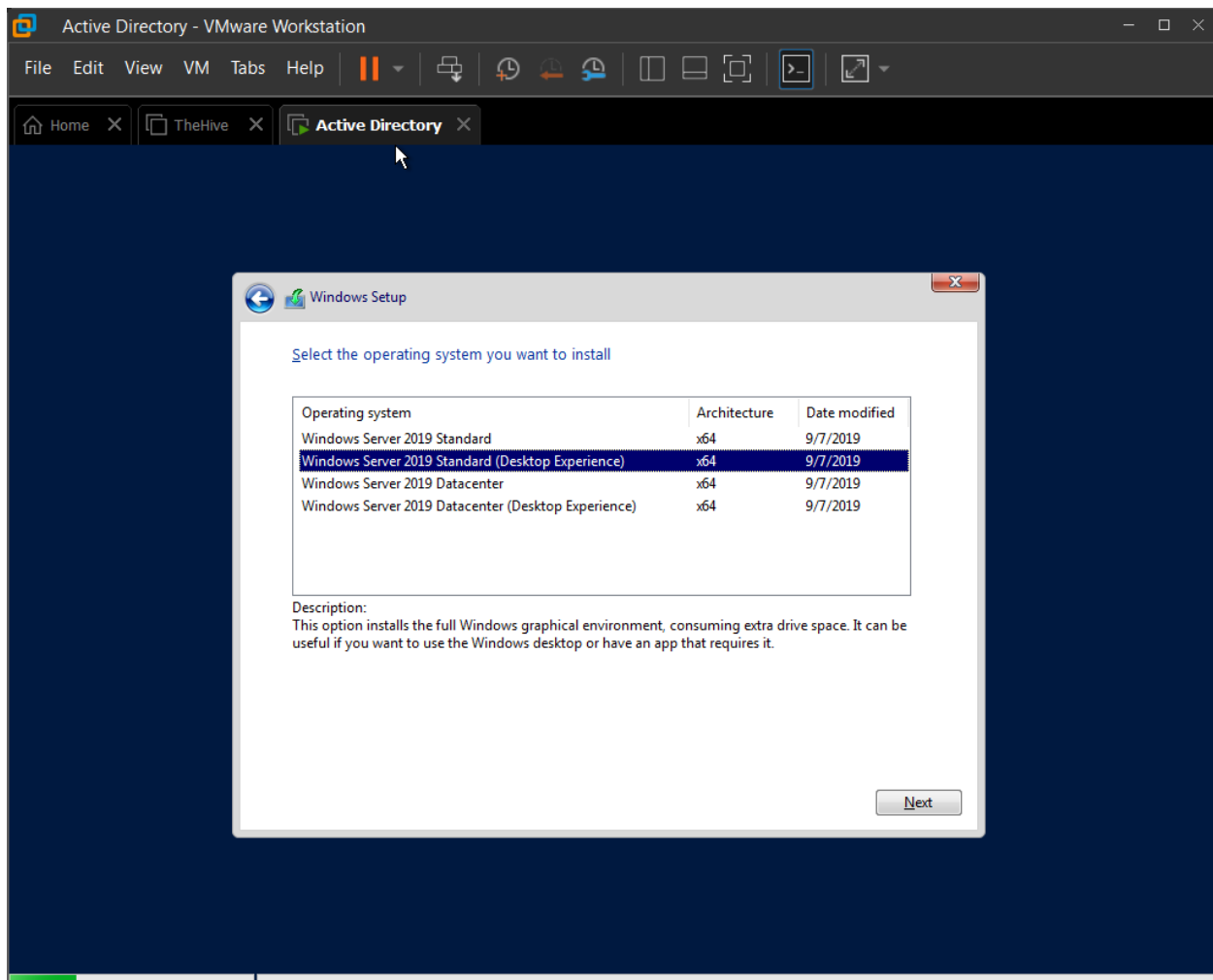


Go the hardware then to CD/DVD and add windows server 2019 iso we have downloaded earlier.

Start the new virtual machine.

Follow the on-screen instructions to install Windows Server 2019.

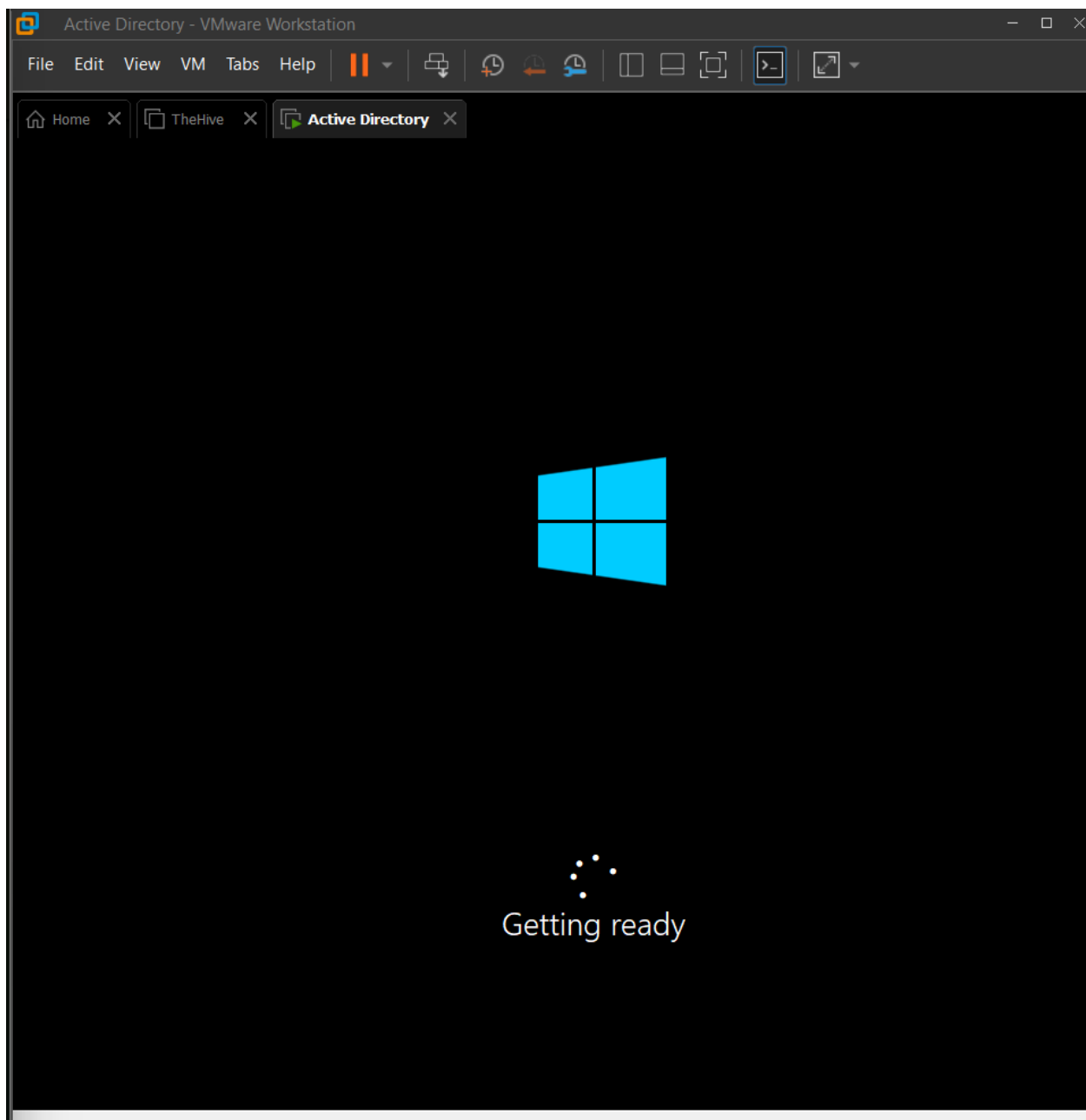
Click the next. And I accept the license terms. Click the custom install.



Click the Drive 0 Unallocated space. The installing windows tab will appear.

Wait for 15-30 minutes.

A windows logo will appear saying getting ready.

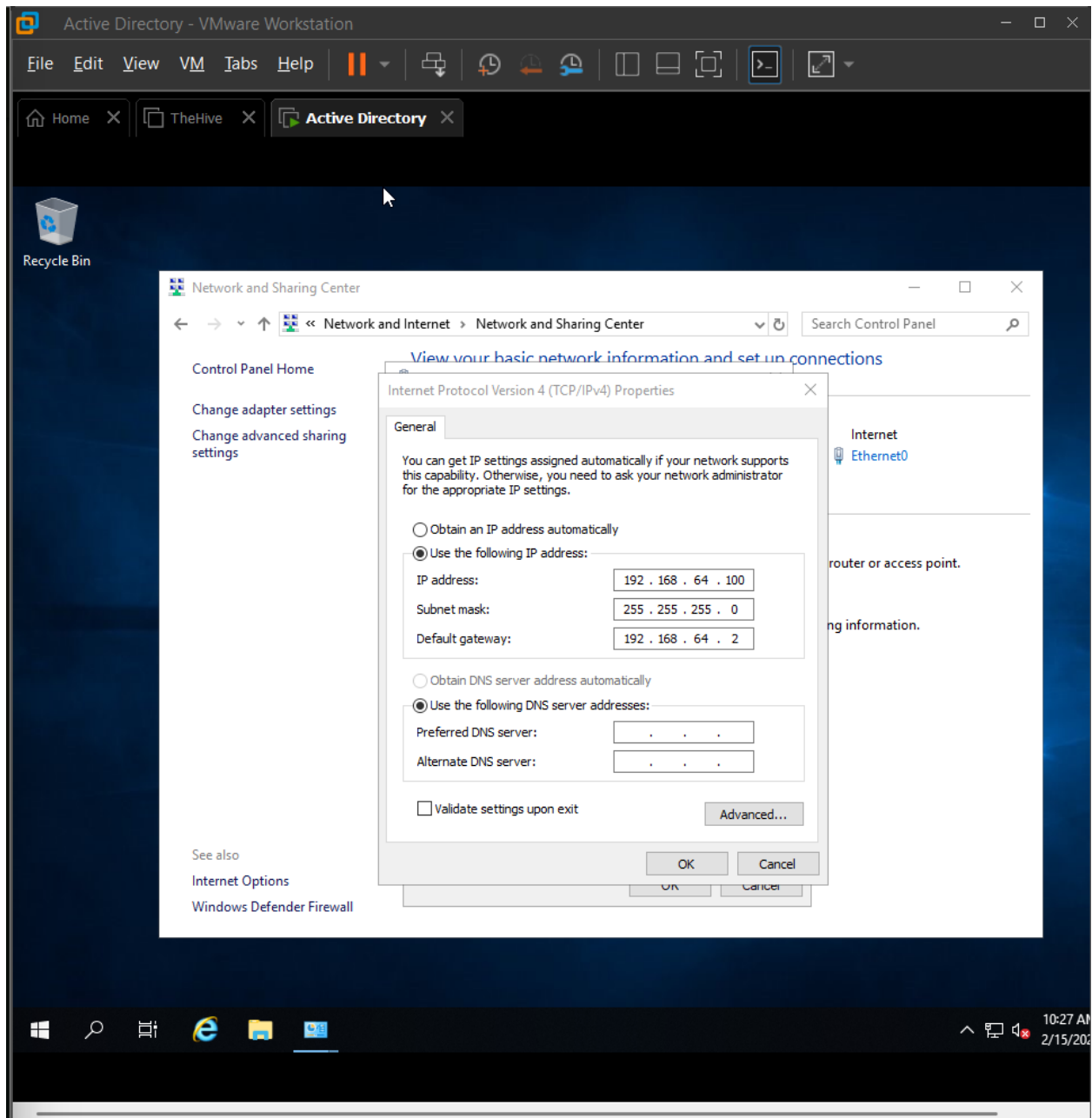


Choose the Administrator Password, choose something you can remember. Later we will try to exploit the administrator attack so. .

Now log in as the Administrator.

So first I will change my ip address. If you have chosen Nat network so the ip will be something like 192.168.x.y where x is third octet of the ip according to your pc and y is last octet of the ip. So, I will the y the last bit of my ip to 100.

So, to the ip open control panel > network and internet > Network and sharing center > click the ethernet0 > Properties > Disable the ipv6 by uncheck the Internet protocol version 6 > after that click the internet protocol version 4.



For DNS server use the default gateway ip. Check the configuration by ping the google.com so that we are connected to internet.

Open Server Manager:

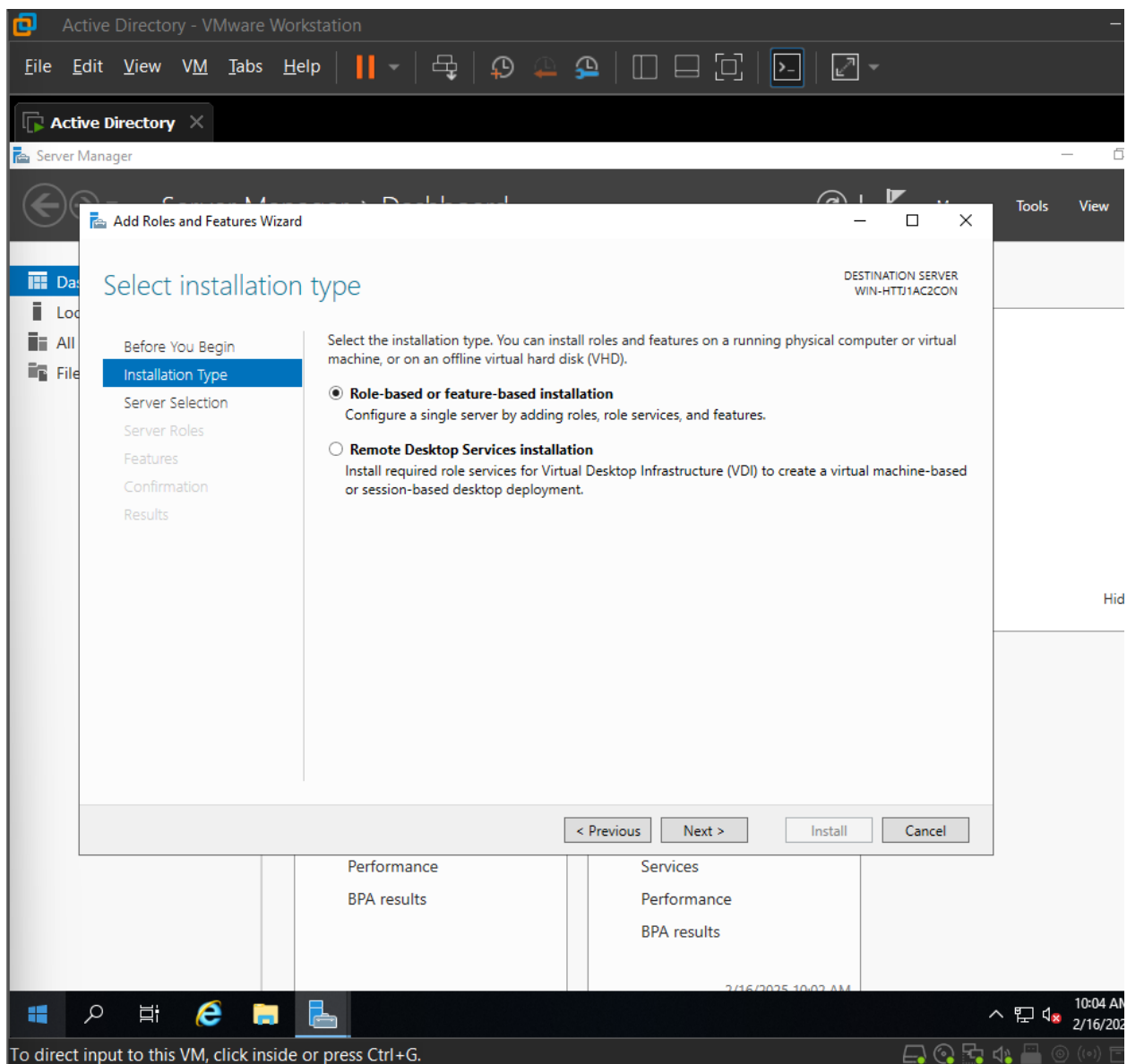
Click on “Manage” and then “Add Roles and Features.”

Add Roles and Features Wizard:



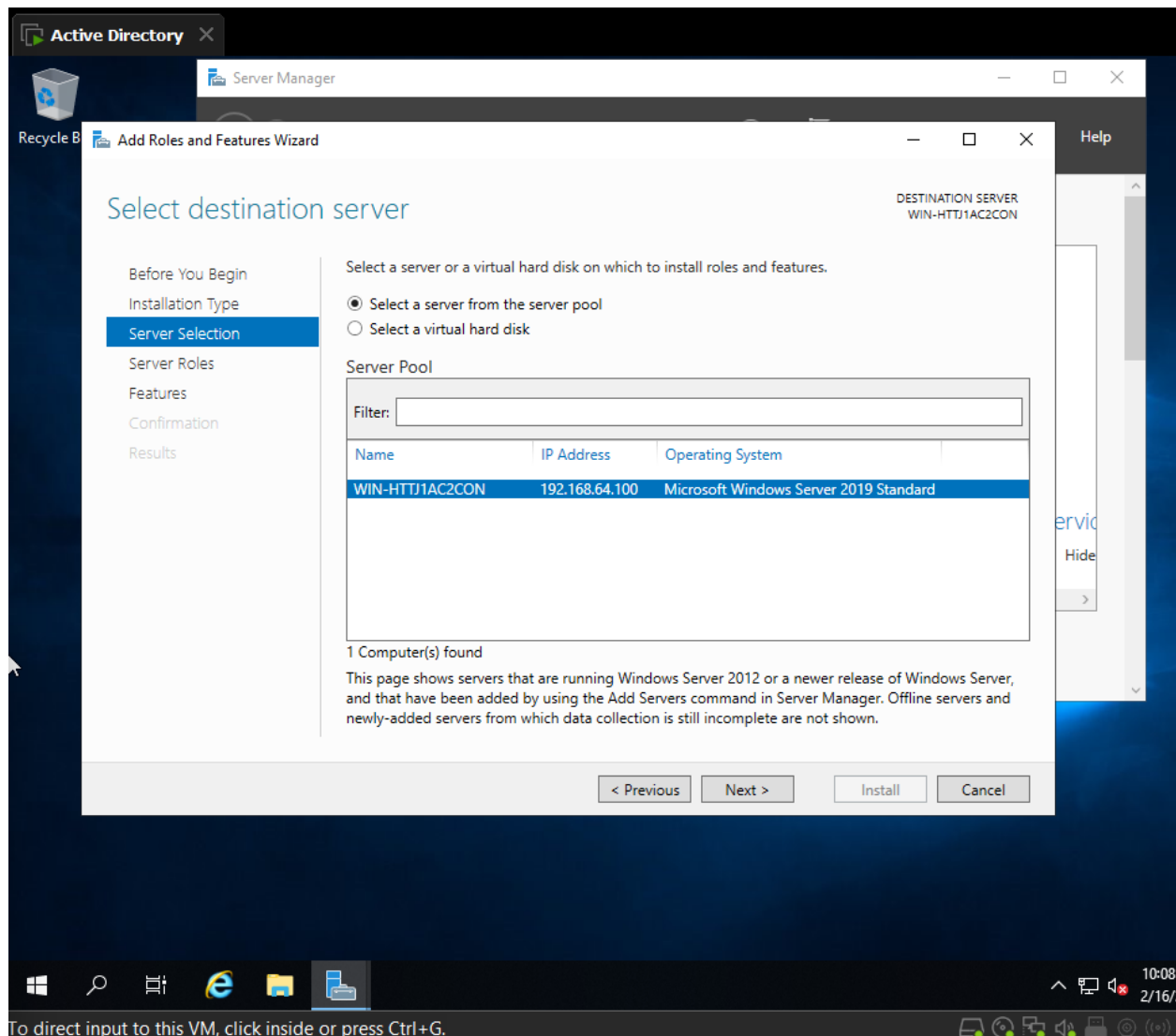
Click Next through the Wizard until you reach the “Select Installation Type” screen.

Select “Role-based or feature-based installation” and click Next.



Choose your server from the server pool and click Next.

You can change the name of computer; I have changed but haven't restart yet. Before proceeding make sure your administrator user has a password set. Now in the server roles check boxes click Active Directory Domain services.



Install Active Directory Domain Services:

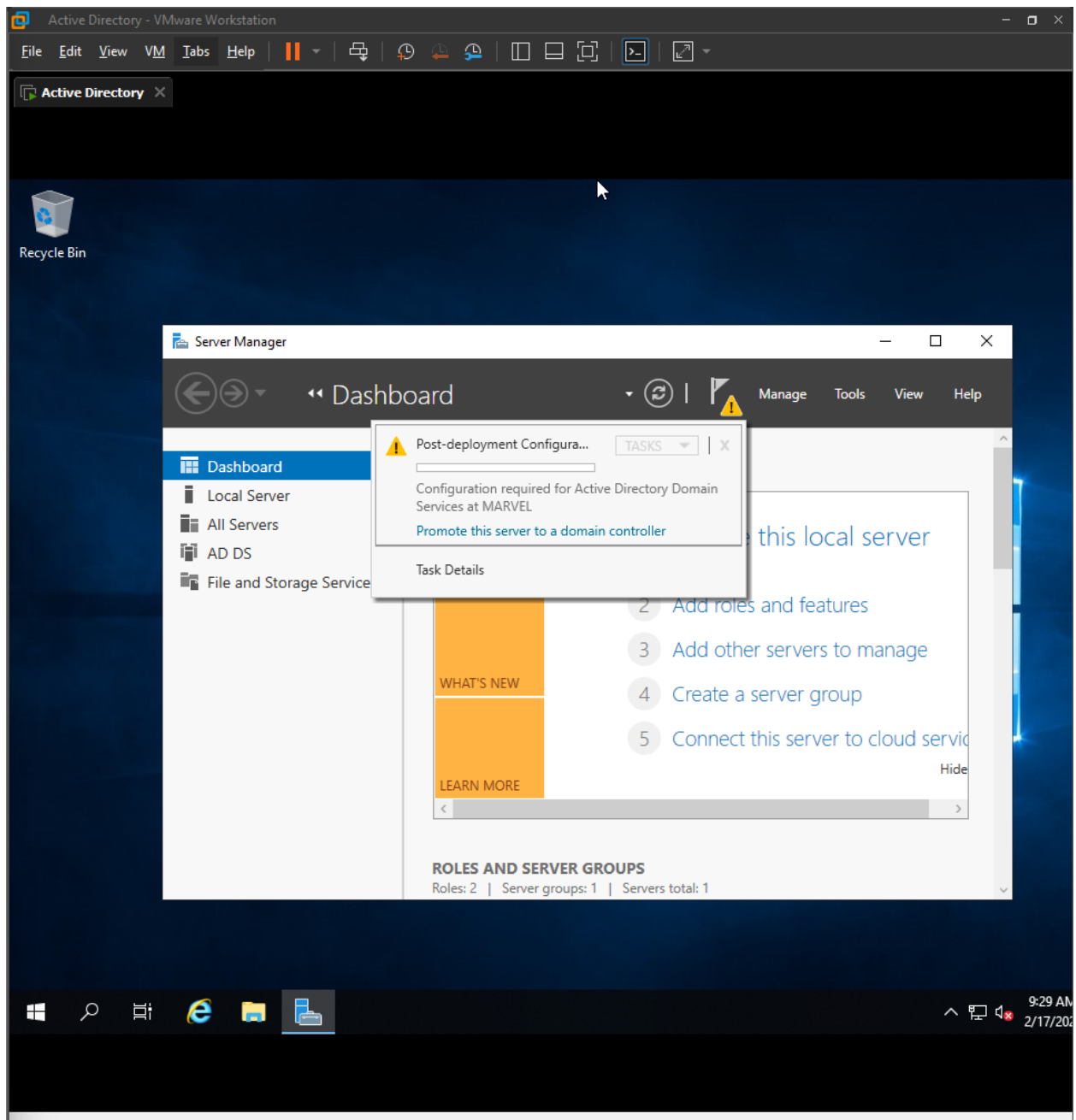
In the “Select Server Roles” screen, check “Active Directory Domain Services.”

Click “Add Features” when prompted, and then click Next.

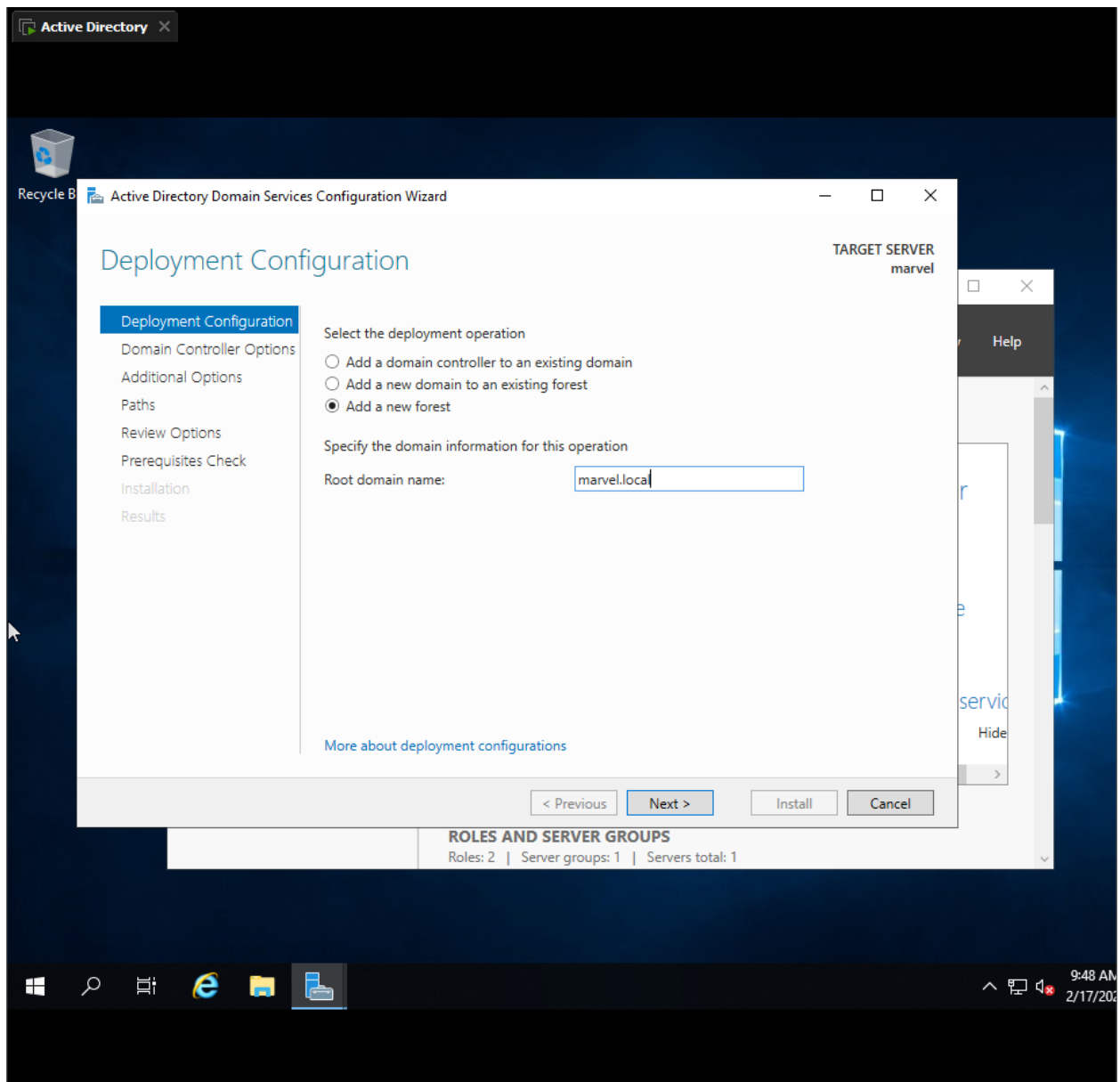
Follow the prompts to install the role and features, and then click Install.

**Promote the Server to a Domain Controller:**

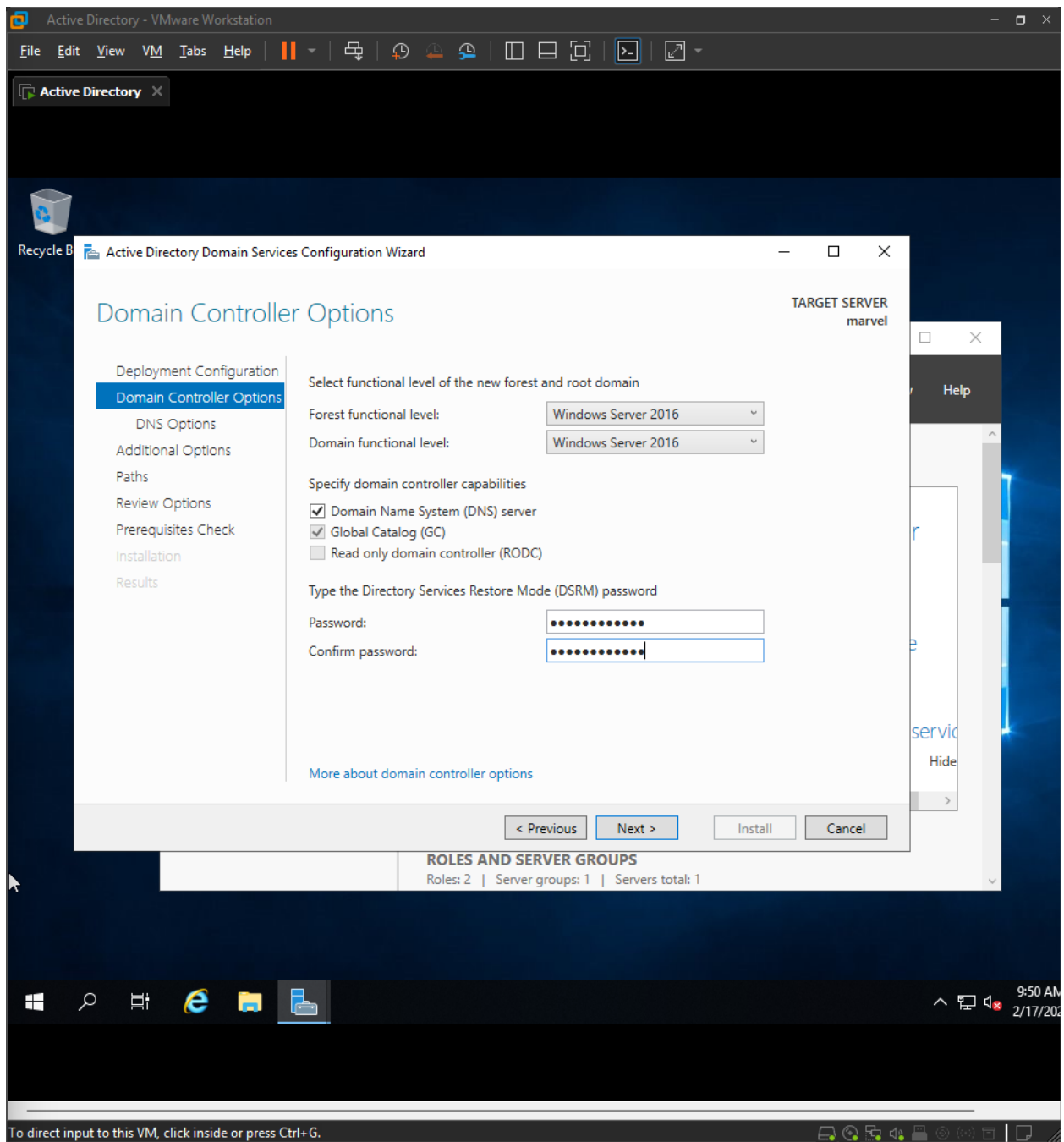
Once the installation is complete, click on the notification flag in Server Manager and select “Promote this server to a domain controller.”



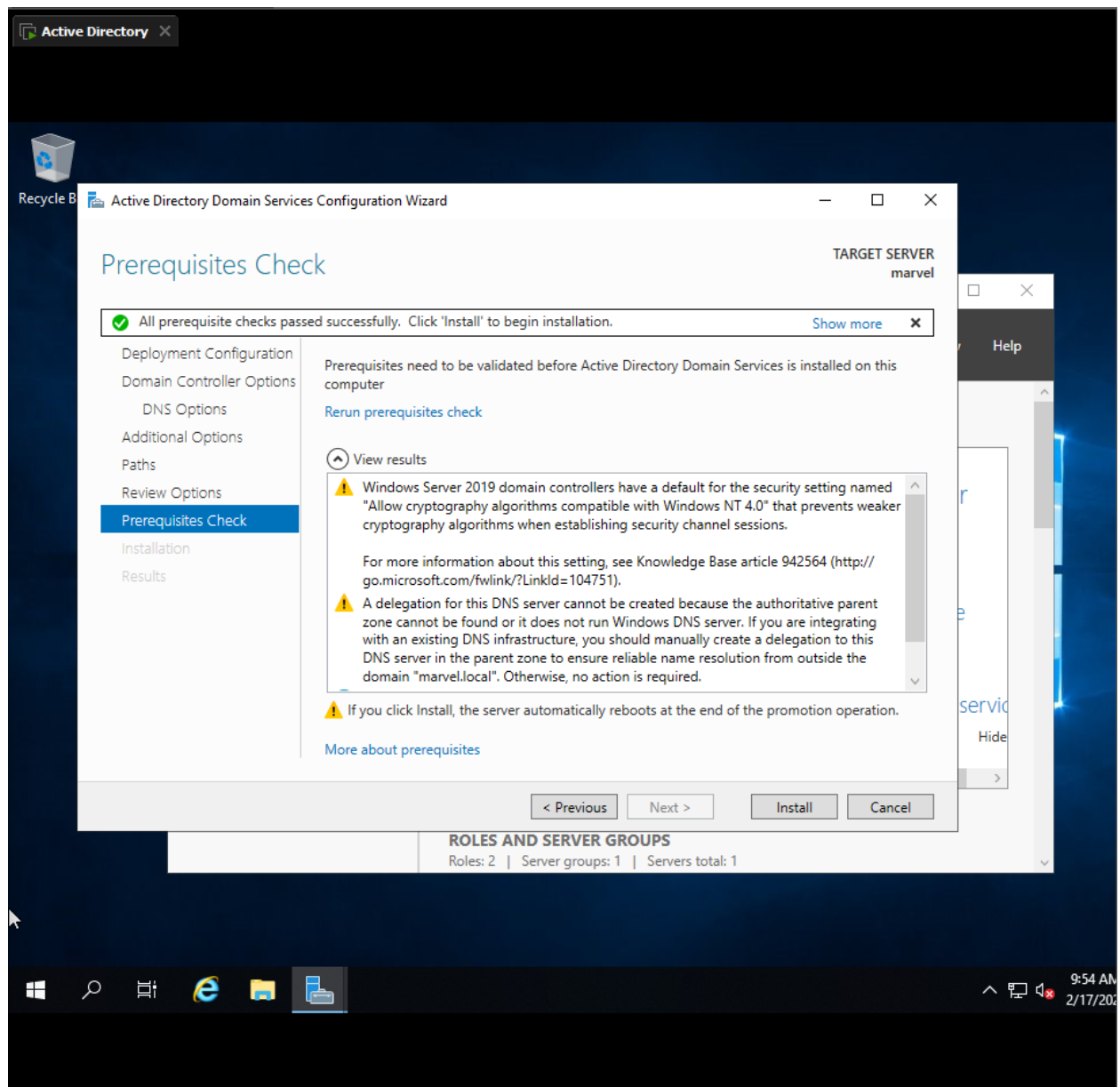
In the “Deployment Configuration” screen, select “Add a new forest” and enter your root domain name (e.g., marvel.local).



Follow the prompts to configure the domain controller options, including creating a DSRM password.



Review the selections and click Install.



Installation will be started. Restart the server.

So, the next step is to add the user and review some security settings.