

## Exercise 2 - Configuring a Virtual Machine in Hyper-V.

Hyper-V is a Microsoft machine virtualization framework that lets you install and run multiple 32-bit or 64-bit operating systems in parallel on a single physical machine.

Hyper-V lets you create a virtual machine, and then you can install the OS

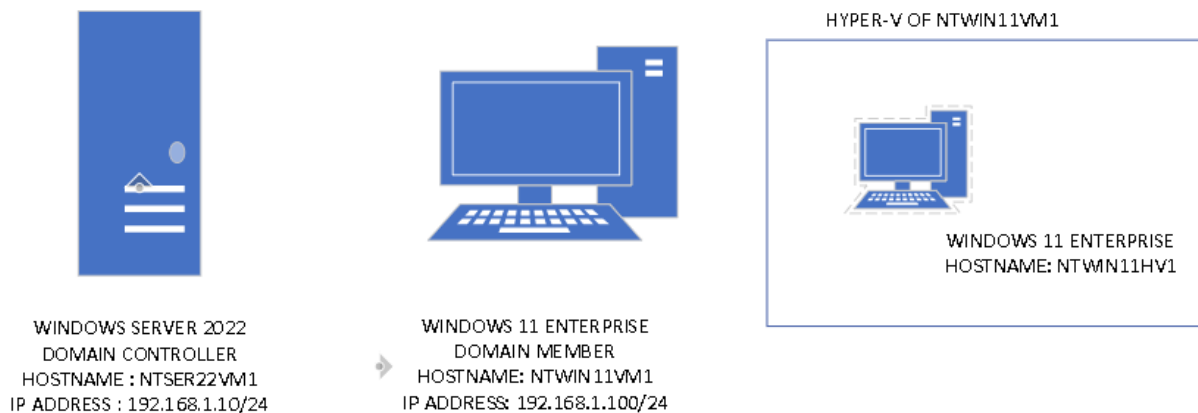
**Note:** Please read the Microsoft official docs for [Hyper-V system requirement](#)

**Note:** Please read the Microsoft Support for [Windows 11 system requirement](#)

In this exercise,

1. Installation to create a virtual machine
2. Installing Windows 11 on the virtual machine

### Topology



DOMAIN = networktute.com

NTSER22VM1 = Windows Server 2022 – Domain Controller

NTWIN11VM1 = Windows 11 – Domain Member

NTWIN11HV1 = Windows 11 Hyper-V VM

### Prerequisite

- *VMware Workstation 16 Pro*
  - When making this tutorial, we used the “Windows Server 2019” VM Template and “Windows 10 & later” VM Template. Since VMware didn’t have the updated templates.
- *Microsoft Windows Server 2022*
- *Microsoft Windows 11*

## Task 1: Create a Virtual Machine

In this task, we will create a virtual machine on NTWIN11VM1 where the Hyper-V feature is pre-installed.

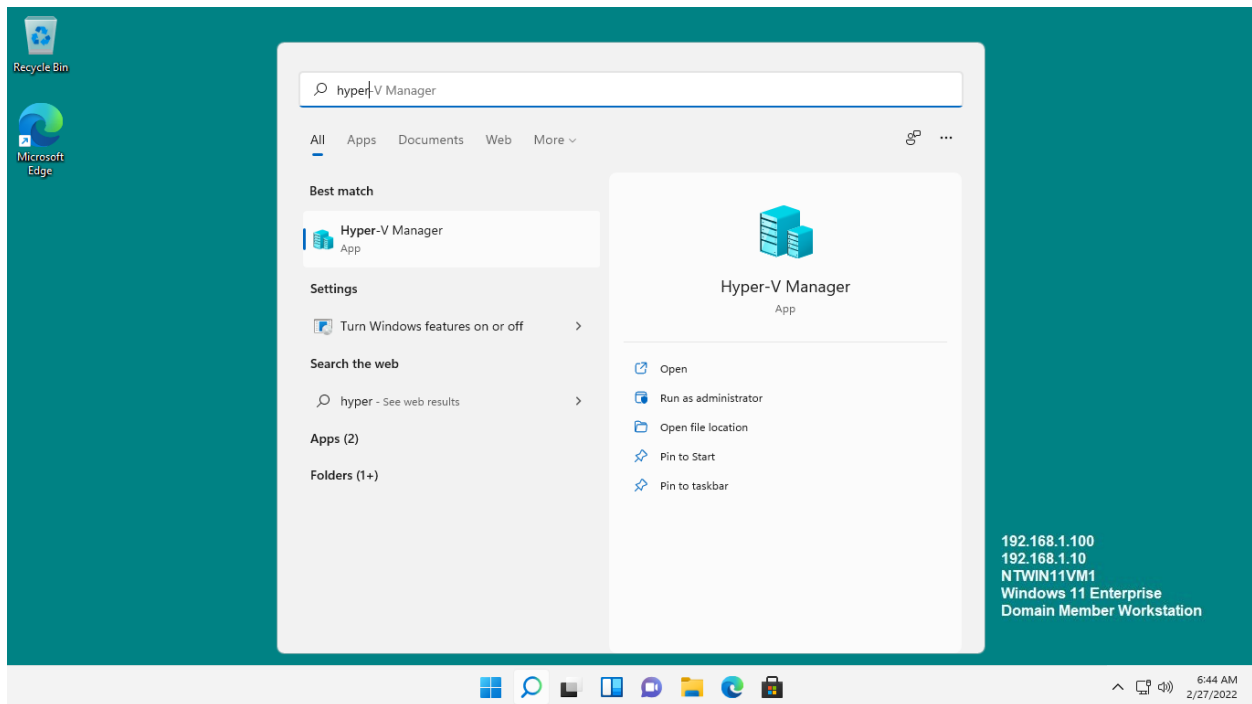
### Step 1:

Make sure all of the devices listed in the exercise introduction are turned on.

Connect to **NTWIN11VM1**.

Click in the **Type here to search box** icon and type: **hyper-v**

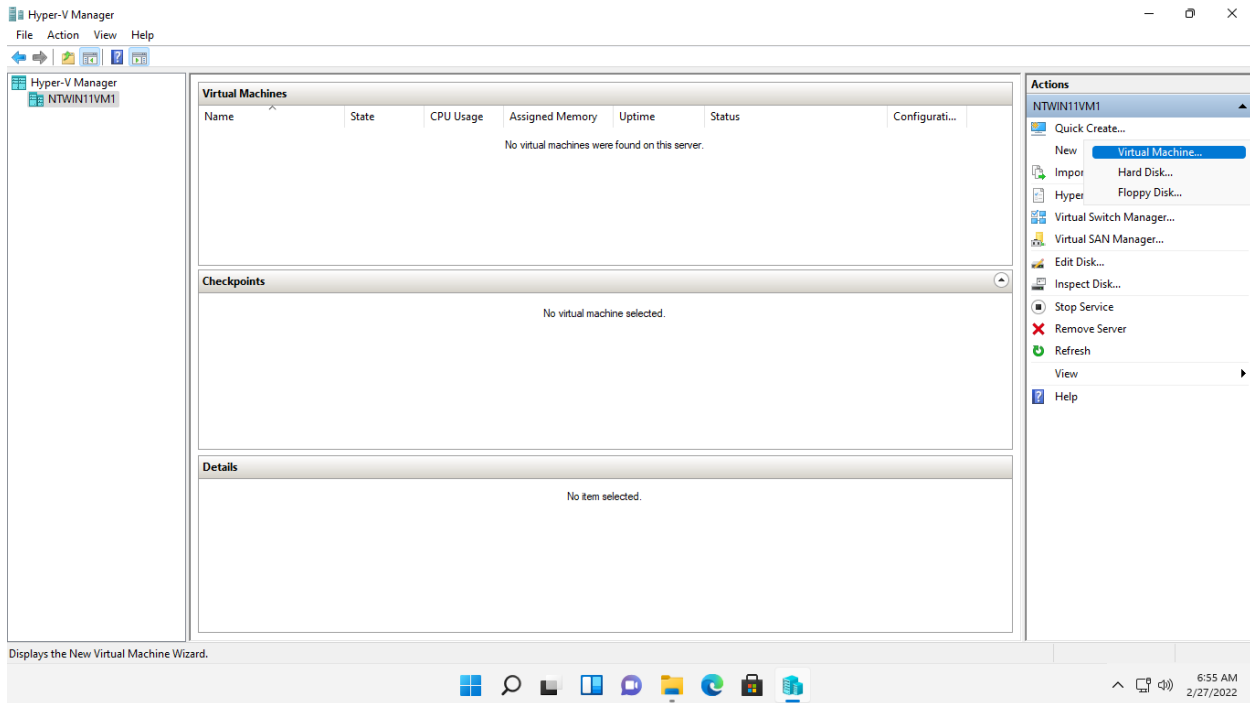
Click **Hyper-V Manager** on the **Best match** pop-up menu.



### Step 2:

On the **Hyper-V Manager** console, navigate to the **Actions** pane.

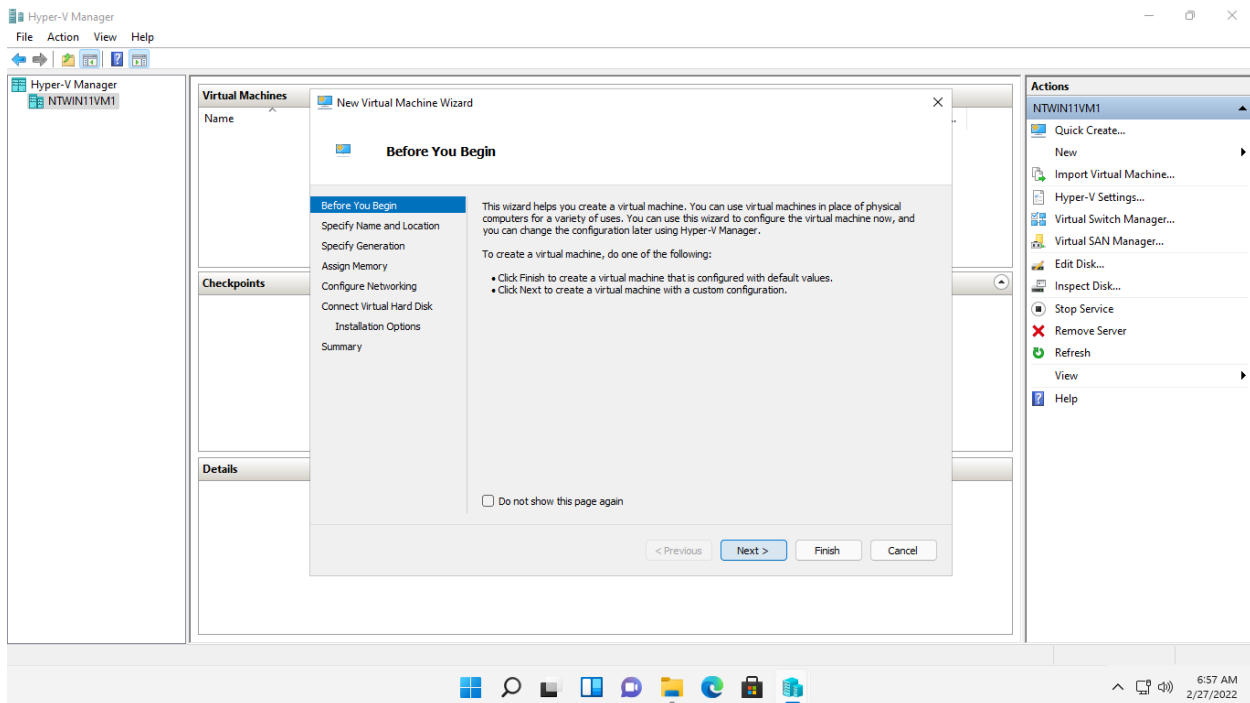
Click **New > Virtual Machine**.



### Step 3:

The **New Virtual Machine Wizard** is displayed.

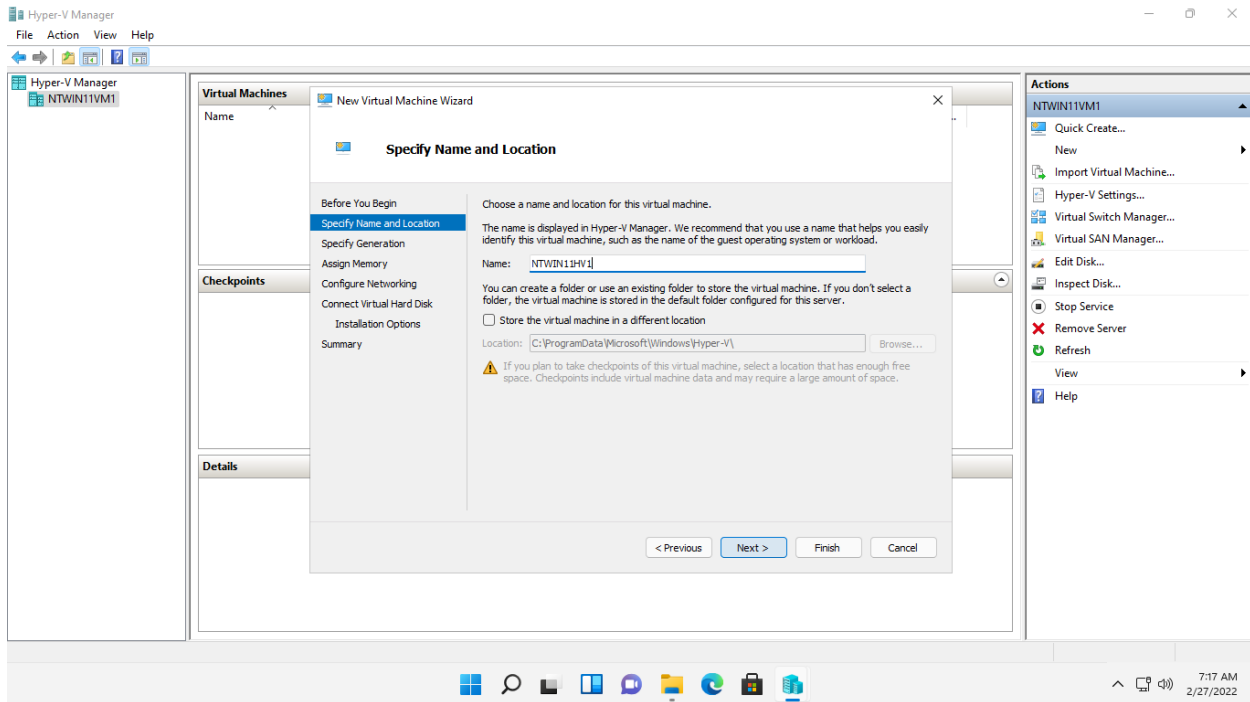
On the **Before You Begin** page, click **Next**.



## Step 4:

On the Specify Name and Location page, click in the Name box and type over the suggested name, with the following: **NTWIN11HV1**

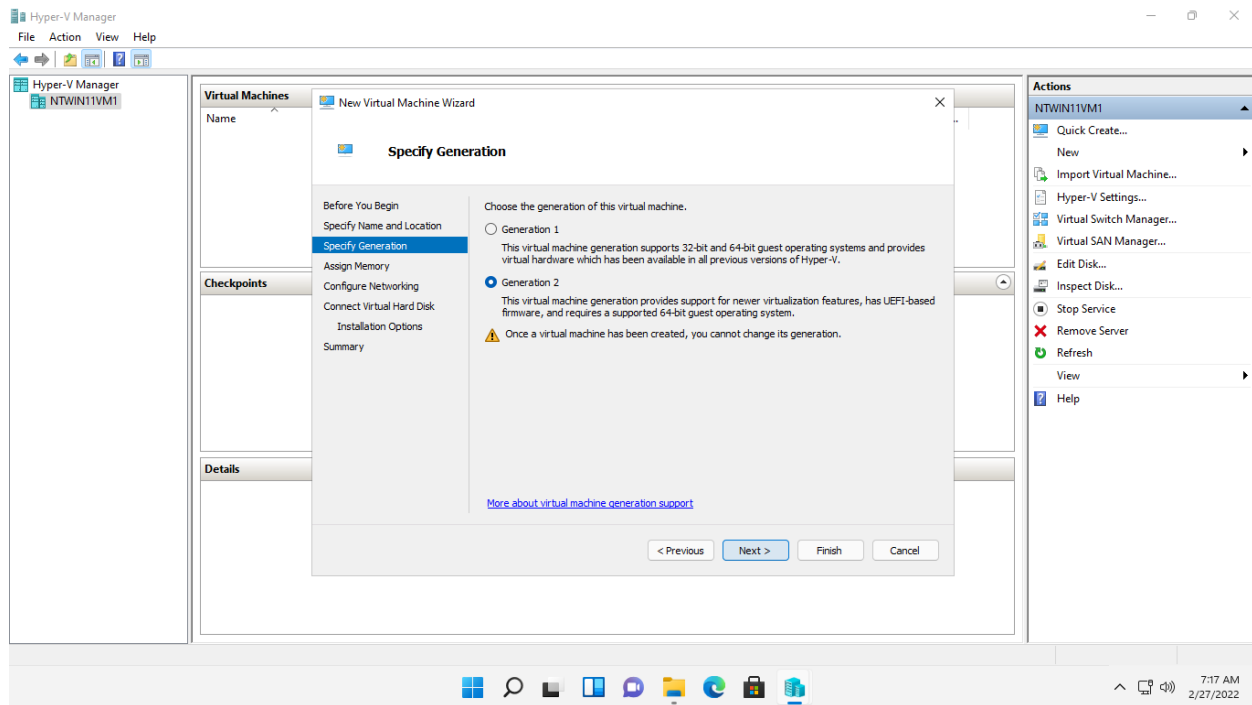
Click **Next**.



## Step 5:

On the **Specify Generation** page, ensure that the **Generation 2** radio button is selected.

Click **Next**.

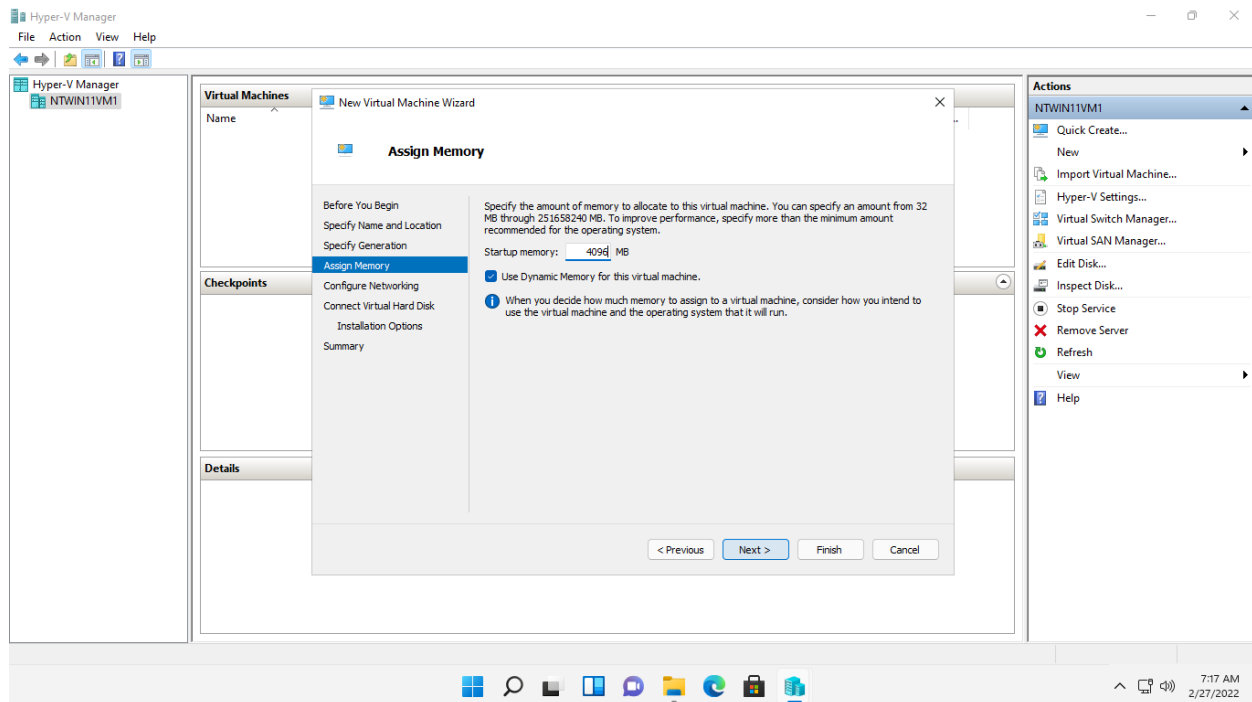


## Step 6:

On the **Assign Memory** page, set the **Startup memory** to: **4096**

Ensure that the **Use Dynamic Memory for this virtual machine** checkbox is ticked.

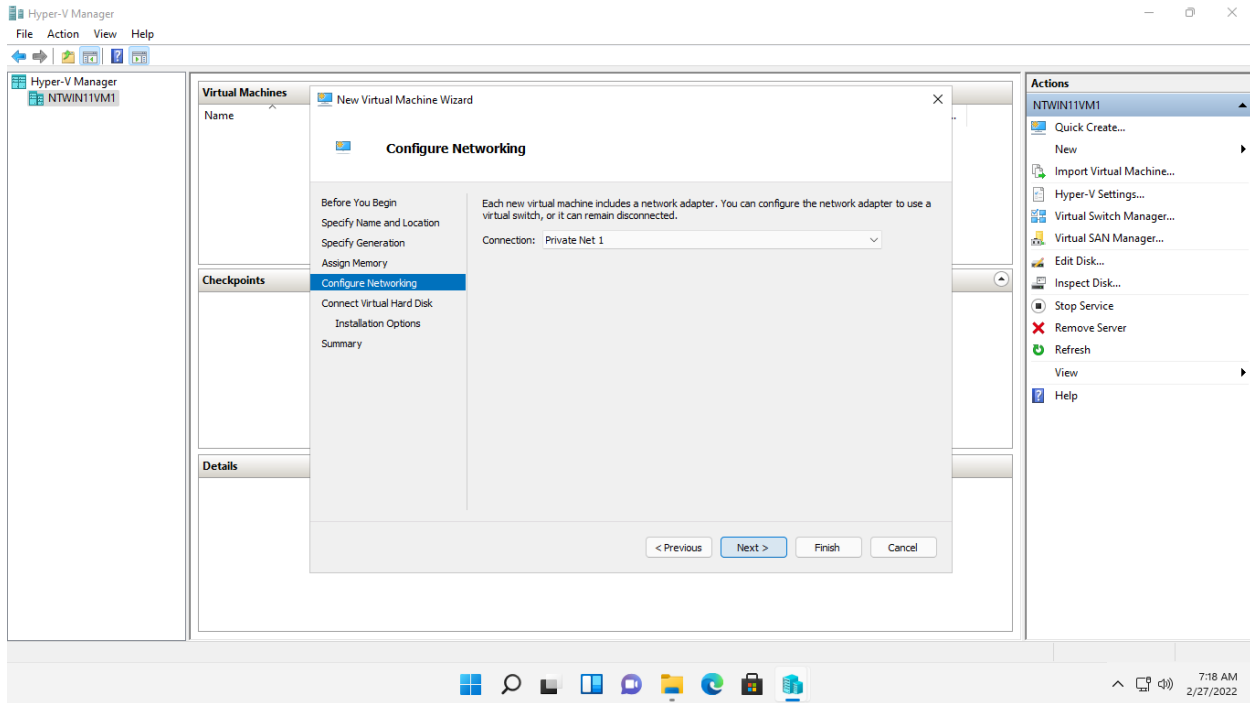
Click **Next**.



## Step 7:

On the **Configure Networking** page, change the **Connection** drop-down list to **Private Net 1**.

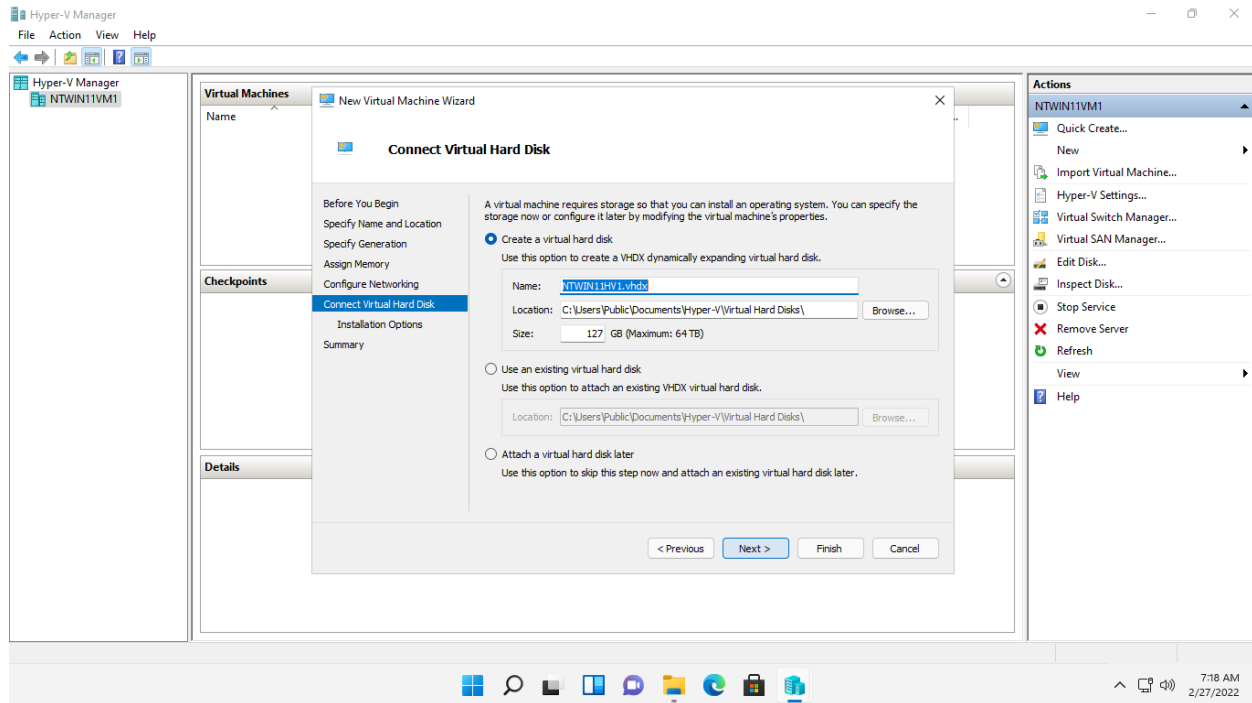
Then click **Next**.



## Step 8:

On the **Connect Virtual Hard Disk** page, ensure the **Create a virtual hard disk** option is selected.

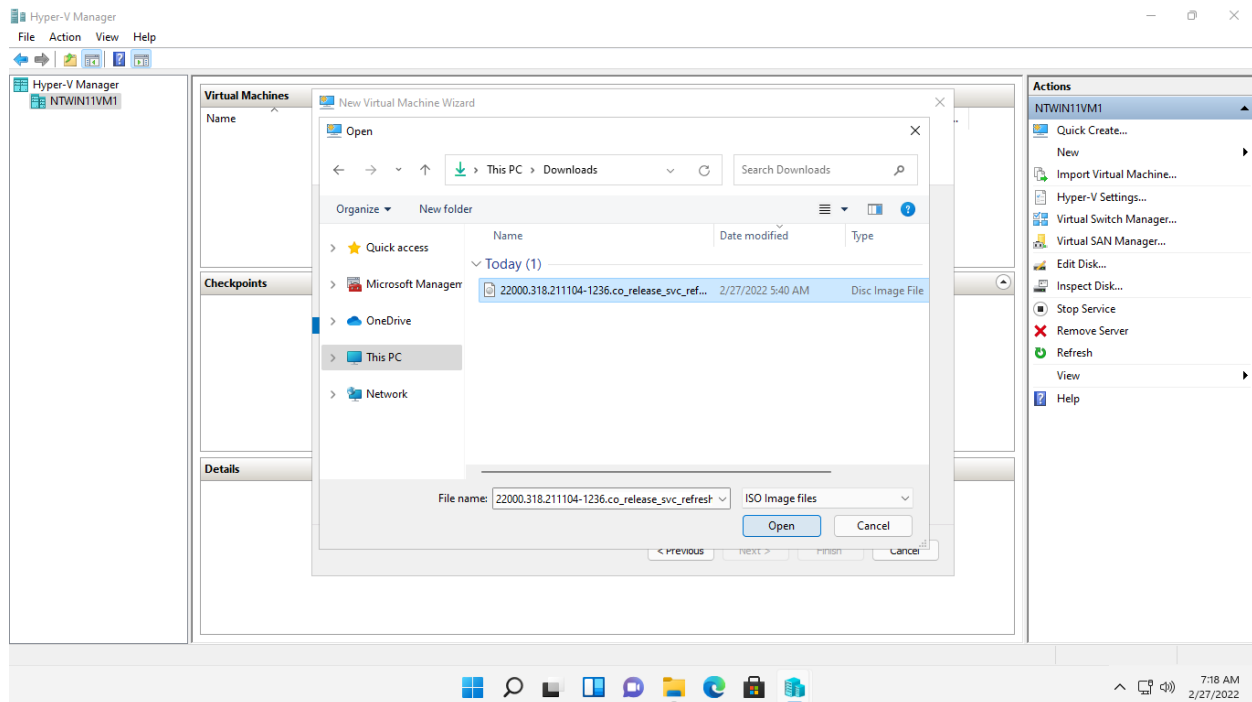
Keep the default settings and click **Next**.



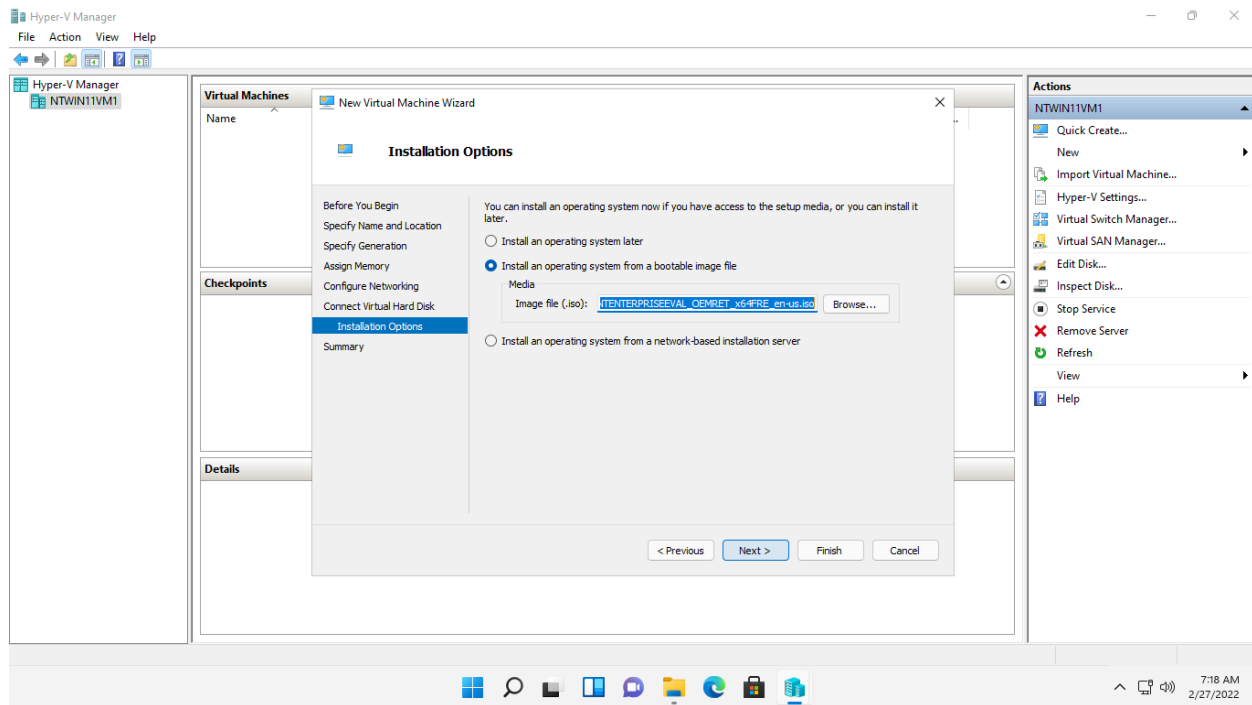
## Step 9:

On the **Installation Options** page, click **Install an operating system from a bootable Image File** option.

Browse and Verify that the correct path of your **Image File** has been selected and click **OPEN**.



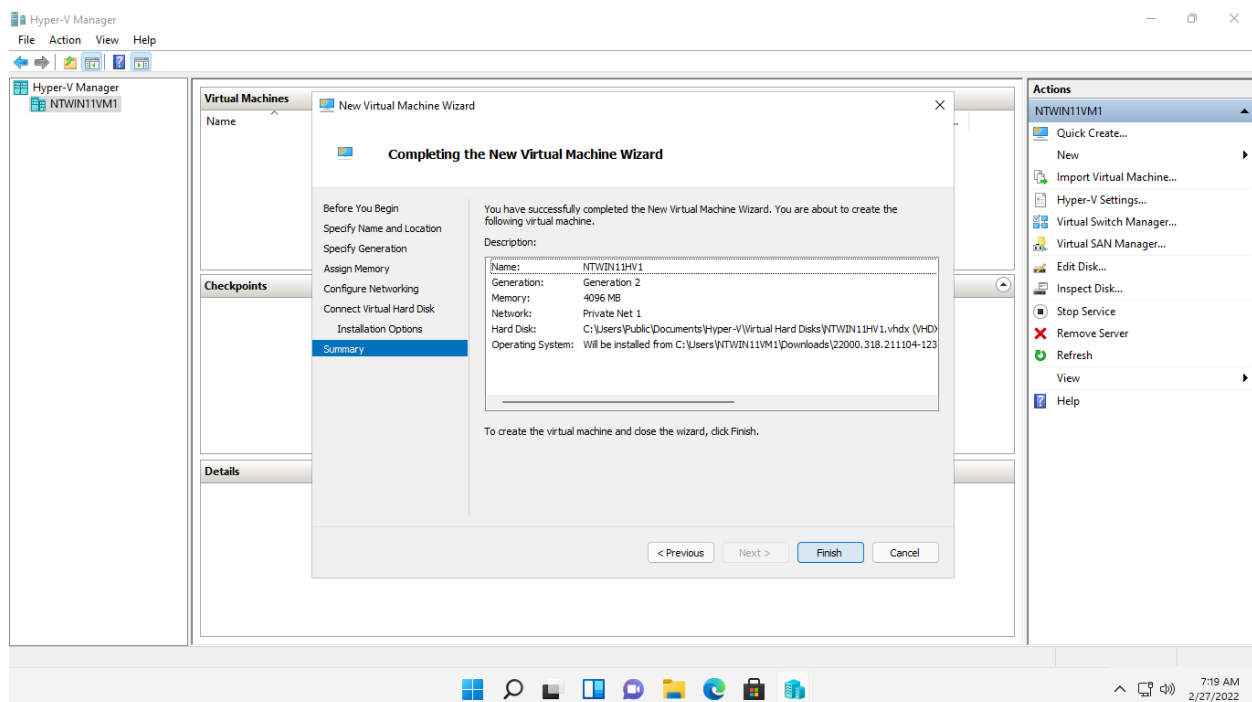
Click **Next**



## Step 10:

The **Completing the New Virtual Machine Wizard** page presents you with a summary of specifications about the new virtual machine.

Click **Finish**.

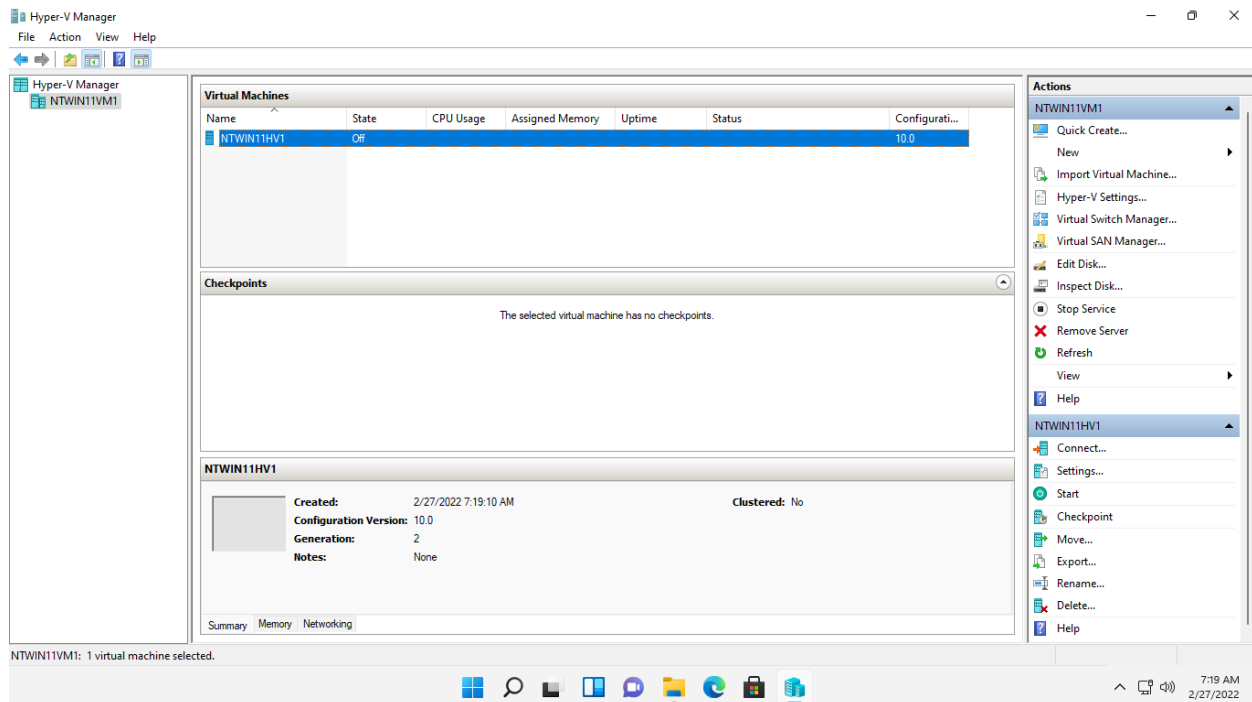




## Step 11:

Please wait while the virtual machine is created.

Back on the **Hyper-V Manager** console, notice the newly created **NTWIN11HV1** virtual machine is now listed.



Keep the **Hyper-V Manager** console open

## Task 2: Install Windows 11 on a Virtual Machine

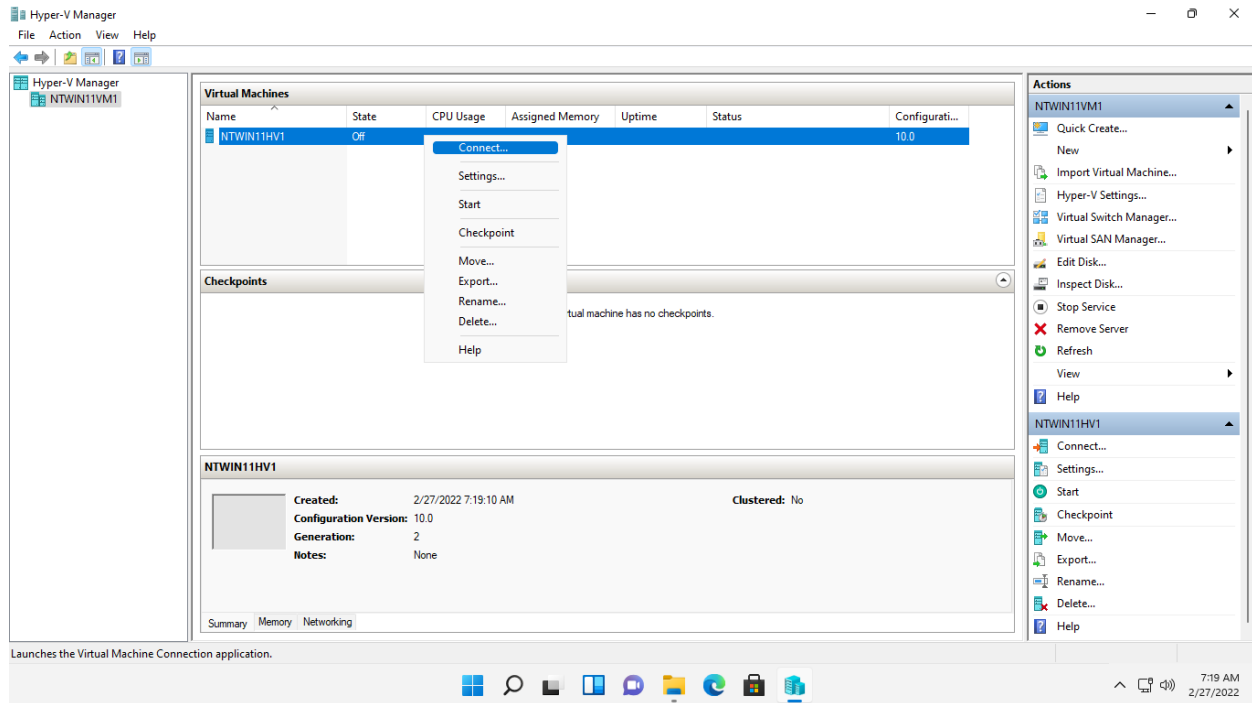
You will have to install the particular operating system to make the virtual machine you created on Hyper-V so that the machine is usable.

In this task, we will install Windows 11 on the newly created **NTWIN11HV1** virtual machine.

### Step 1:

Make sure your connected to **NTWIN11VM1**

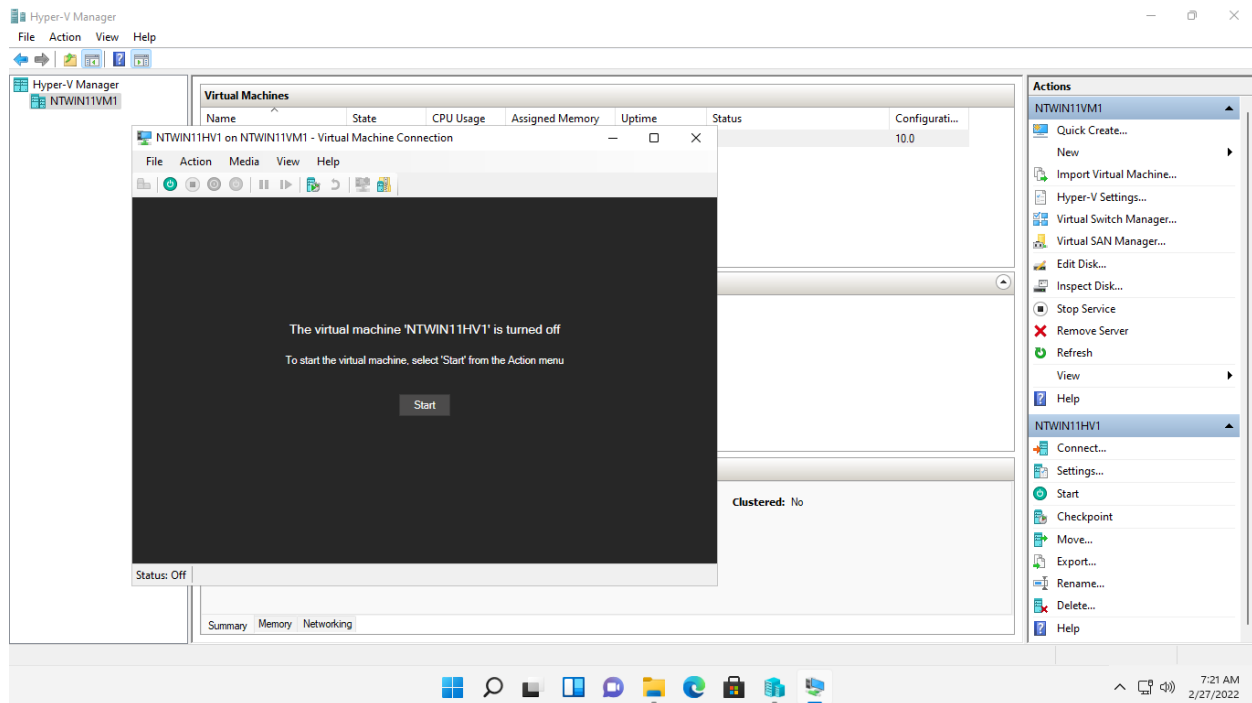
On the **Hyper-V Manager** console, right-click **NTWIN11HV1** and select Connect....



## Step 2:

On the **NTWIN11HV1** on **NTWIN11VM1- Virtual Machine Connection** window.

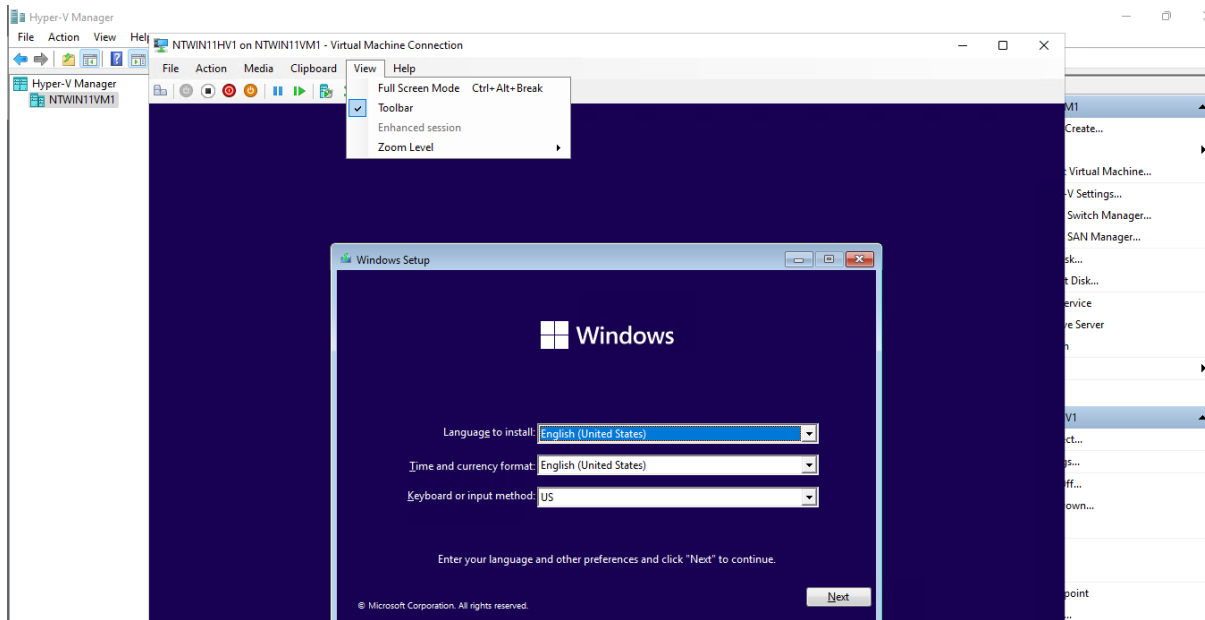
Click the **Start** button.



### Step 3:

Please wait for the Windows setup to initialize.

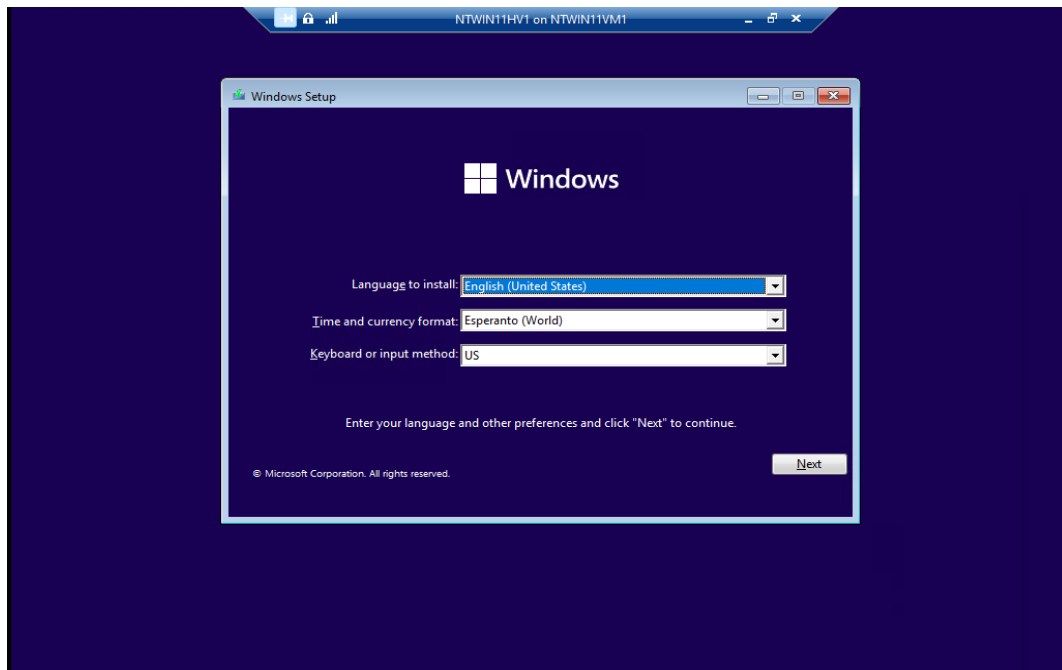
If you want to Maximize **NTWIN11HV1** virtual machine window for a bigger work area.



### Step 4:

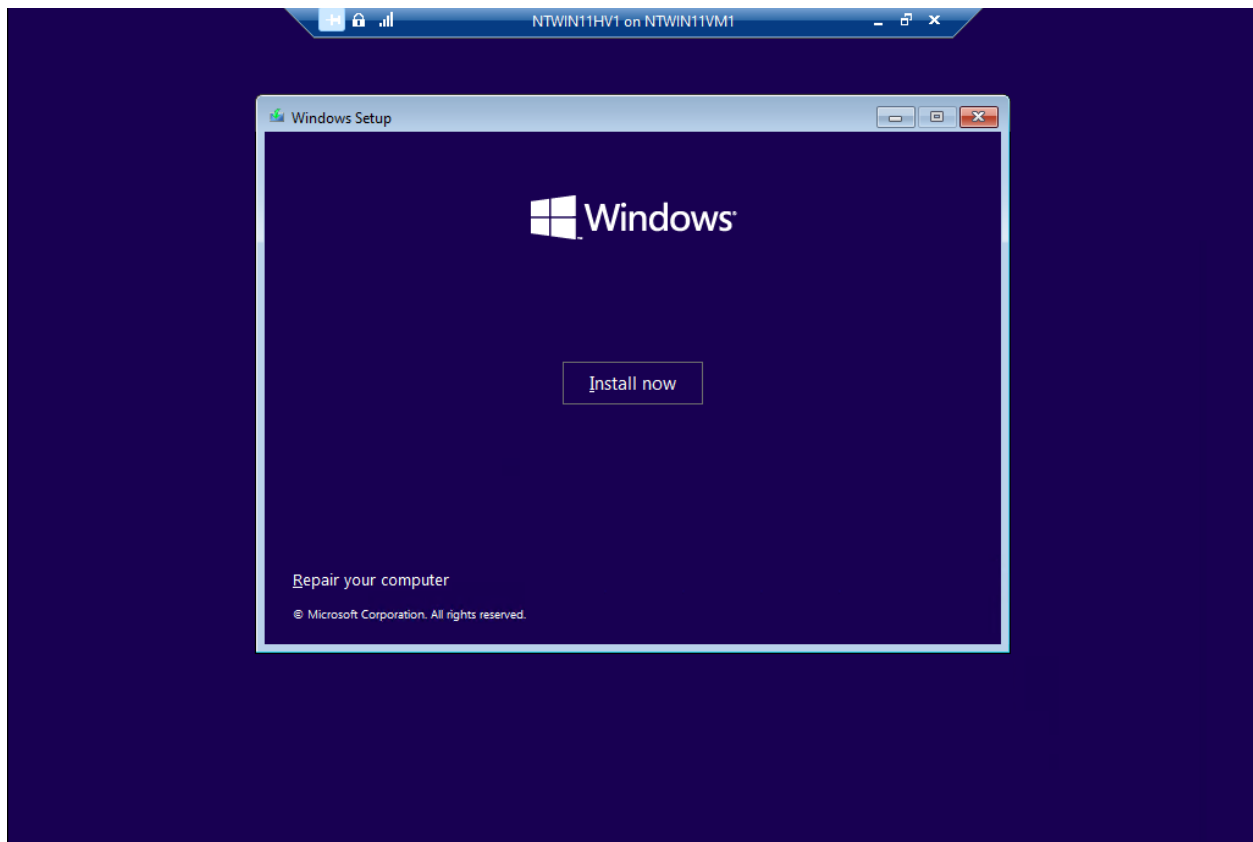
**NTWIN11HV1** virtual machine window is now marked by the **NTWIN11HV1** on **NTWIN11VM1** connection bar at the top.

On the **Windows Setup** window, click **Next** to continue.



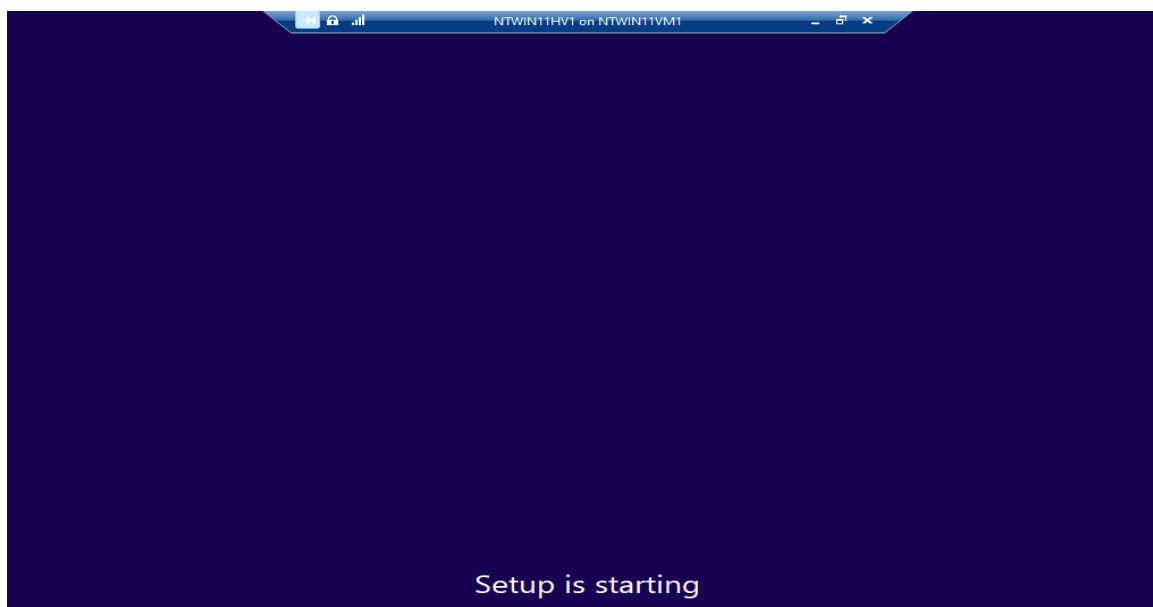
### Step 5:

On the next **Windows Setup** screen, select **Install now** to proceed.



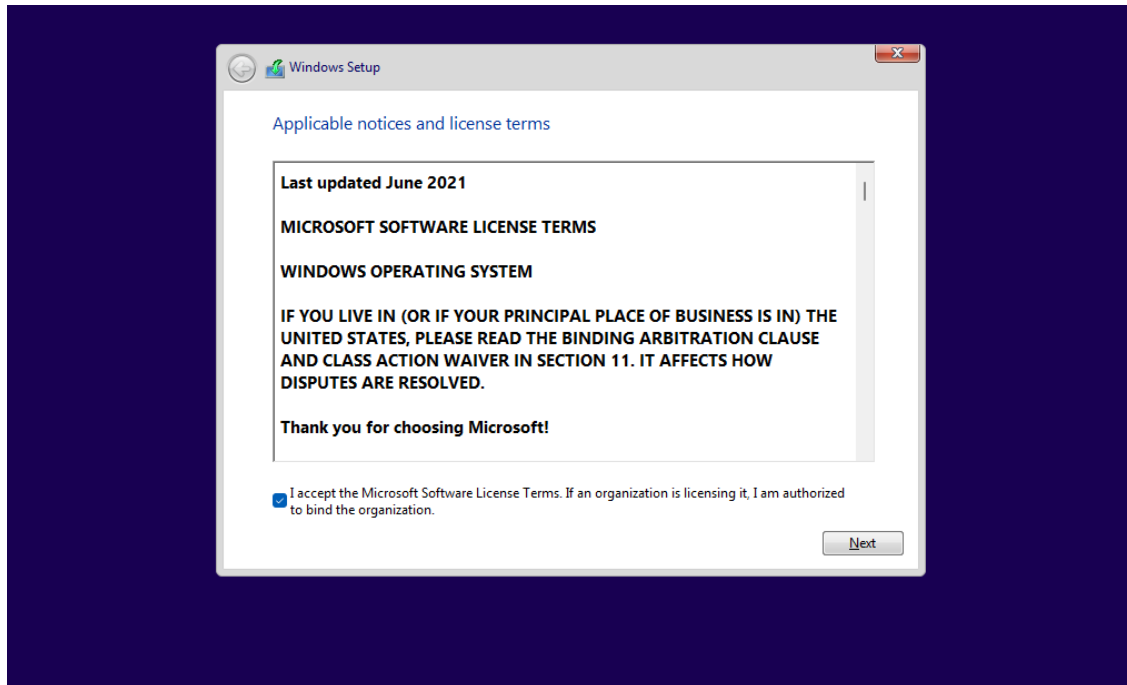
### Step 6:

Please wait while **Setup** is in progress.



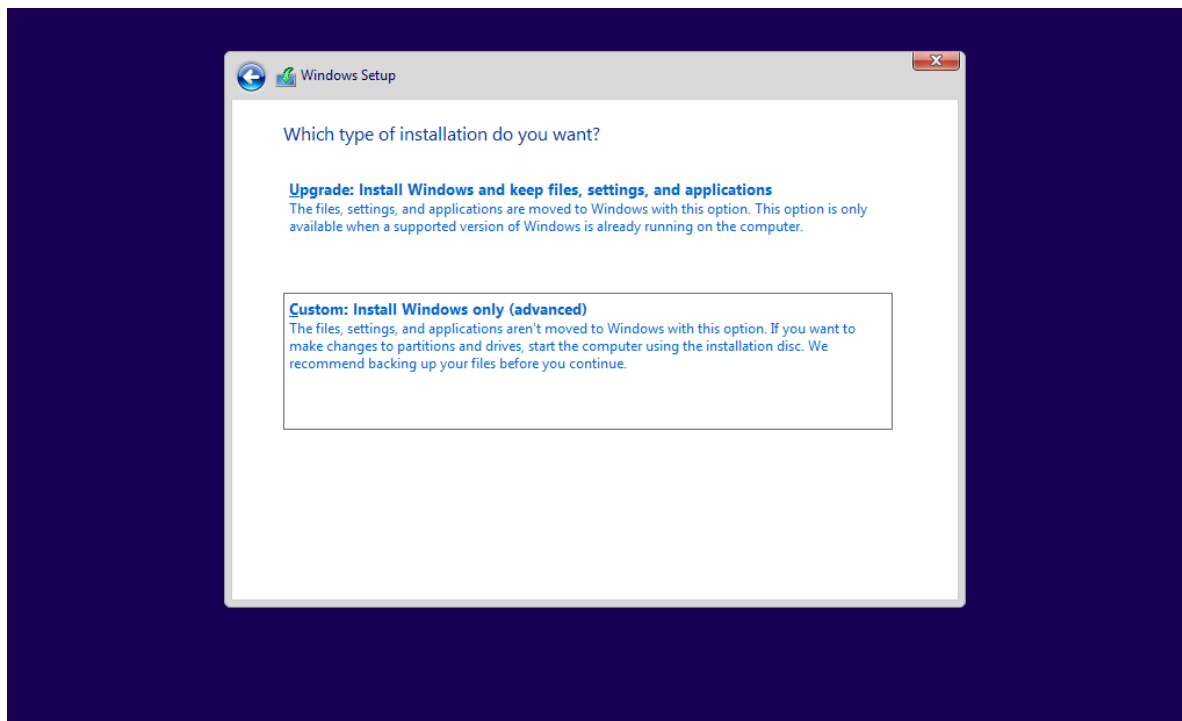
## Step 7:

On the **Applicable notices and license terms**, tick the **I accept the license terms** checkbox and click **Next**.



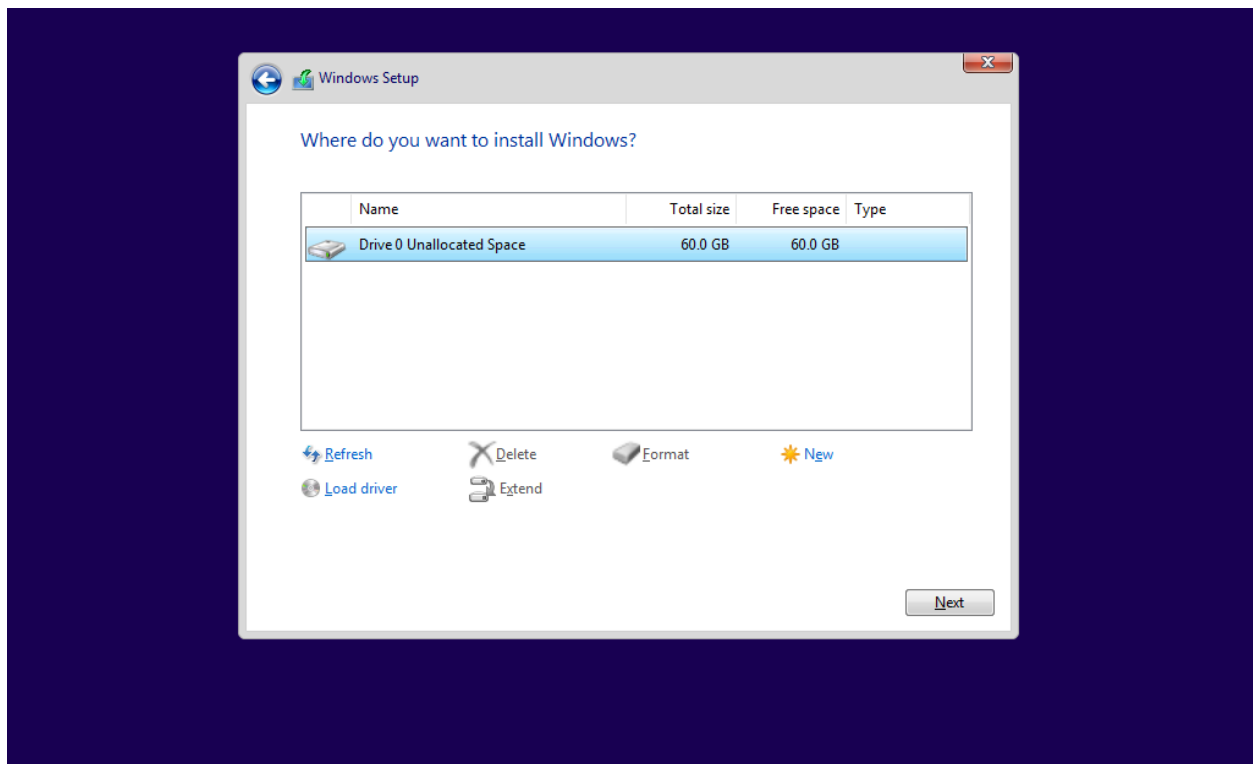
## Step 8:

On the **Which type of installation do you want?** page, select **Custom: Install Windows only (advanced)**.



## Step 9:

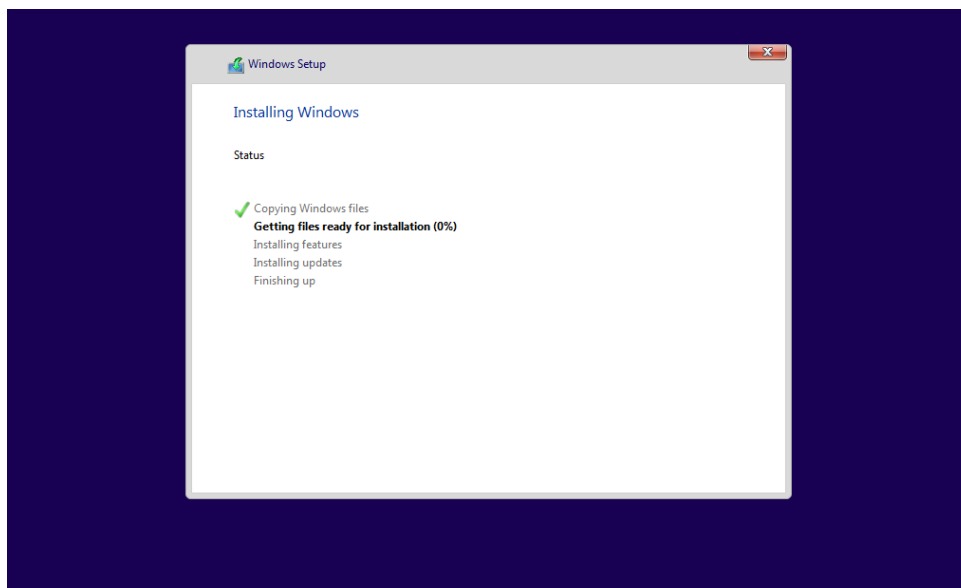
On the **Where do you want to install Windows?** page, select **Drive 0 Unallocated Space** and click **Next**.



## Step 10:

On the **Installing Windows** page, please wait while the installation continues.

This will take a while to finish and then Windows will restart automatically when the setup is successfully completed.

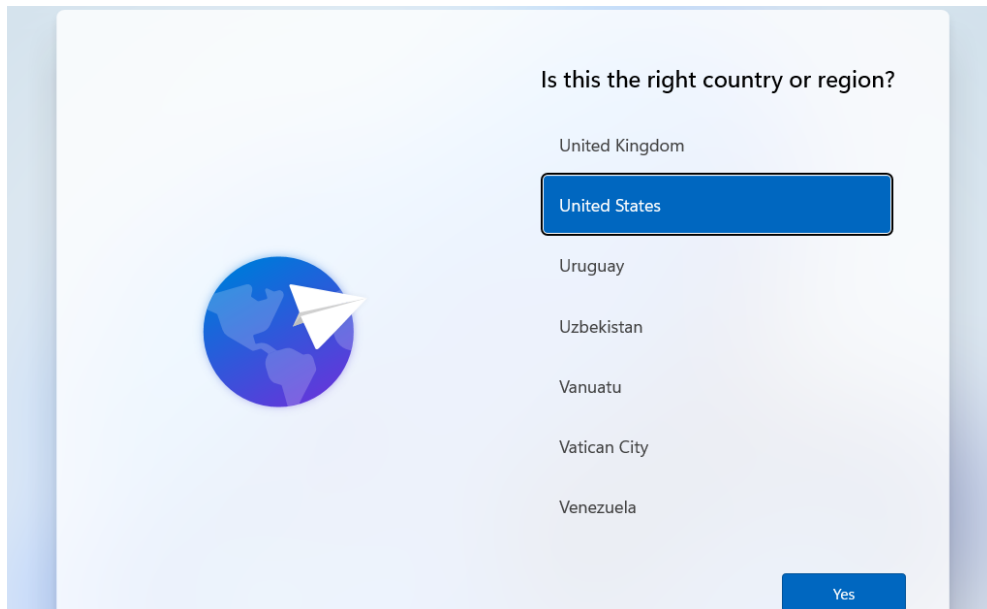


### Step 11:

Let **NTWIN11HV1** restart. The computer may restart a few times to complete the installation.

### Step 12:

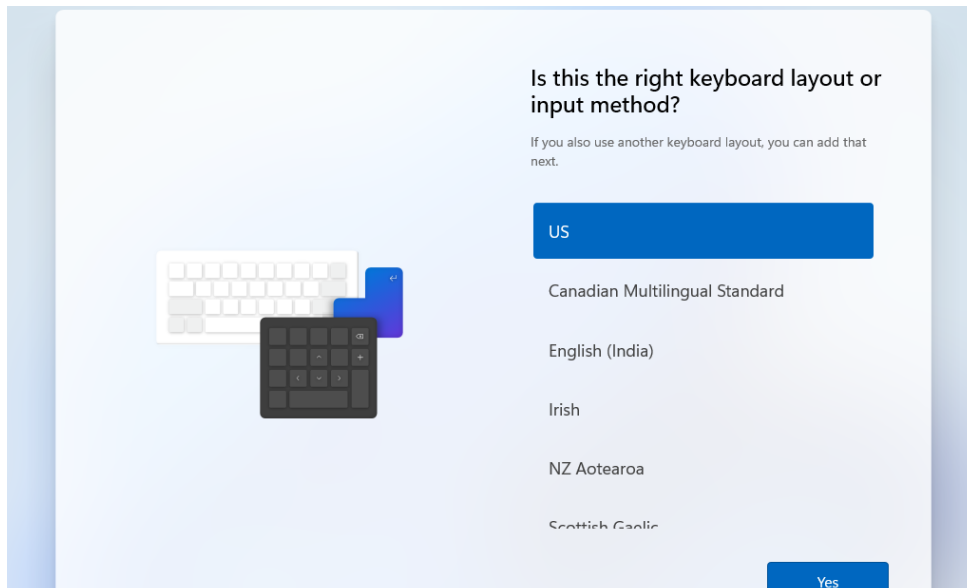
On the **Region** page, select "Your region" then click **Yes**.



### Step 13:

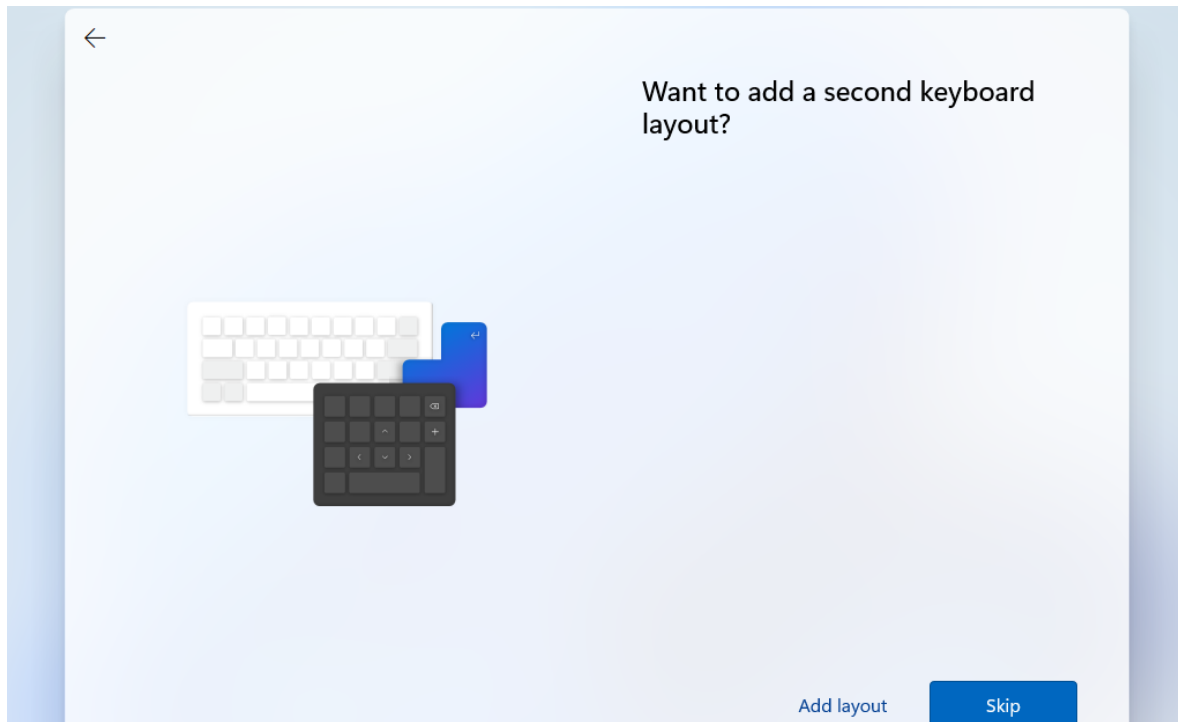
On the **Keyboard layout**, ensure the **US** option is selected.

Click **Yes**.



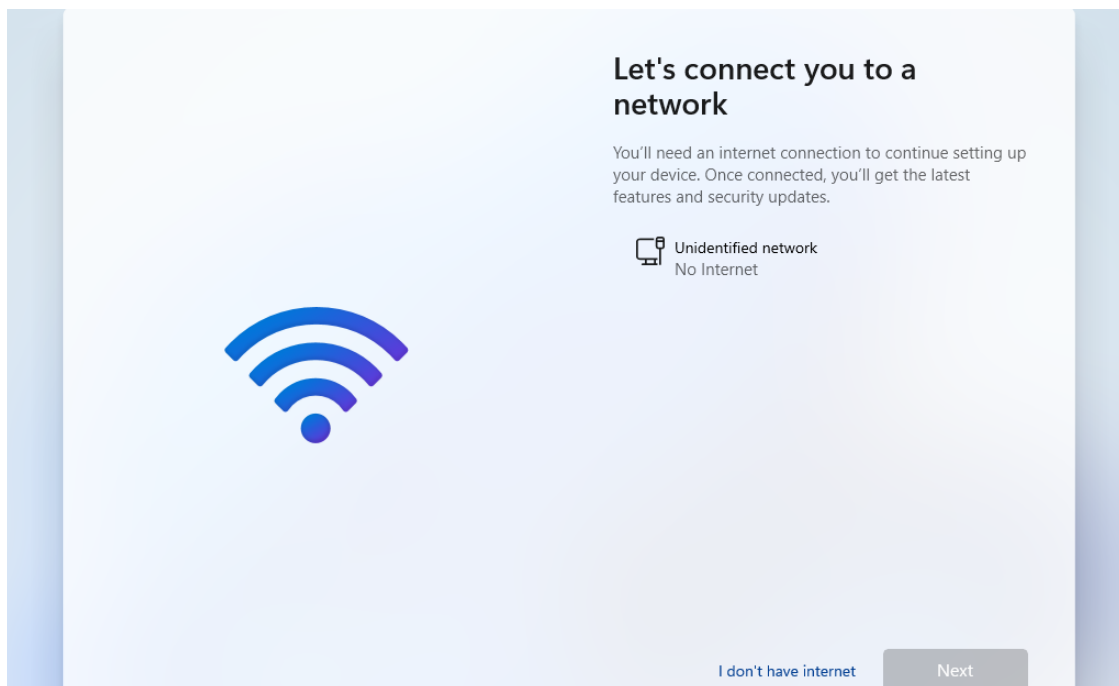
### Step 14:

On the screen prompting for a second keyboard layout, click **Skip**.



### Step 15:

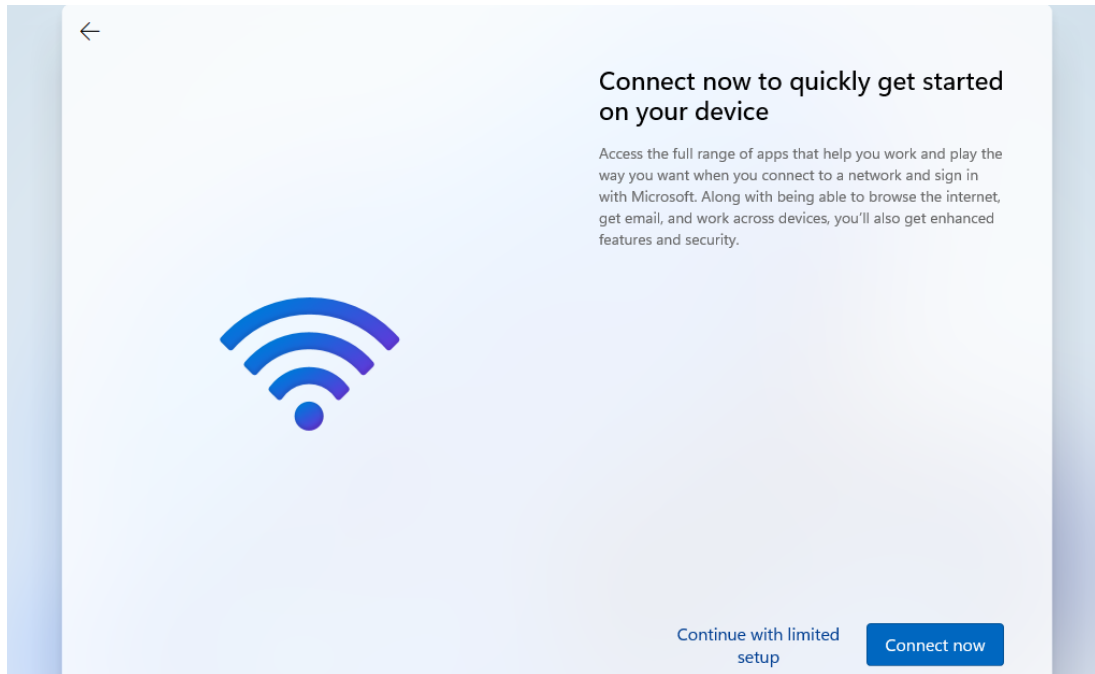
On the **Let's connect you to a network** page, click the **I don't have internet** for now link on the lower right.





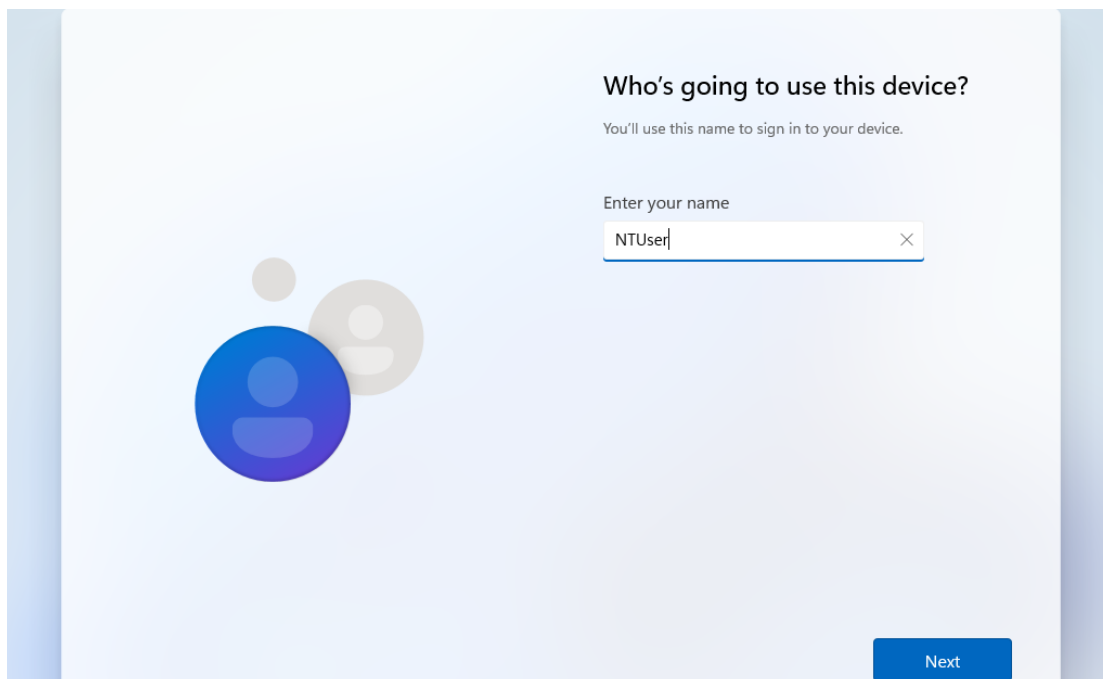
## Step 16:

In **Connect now to quickly get started on your device**, Click **Continue with limited setup** link on the lower right.



## Step 17:

In the **Who's going to use this PC?** textbox type: **NTUser**. Click **Next**.



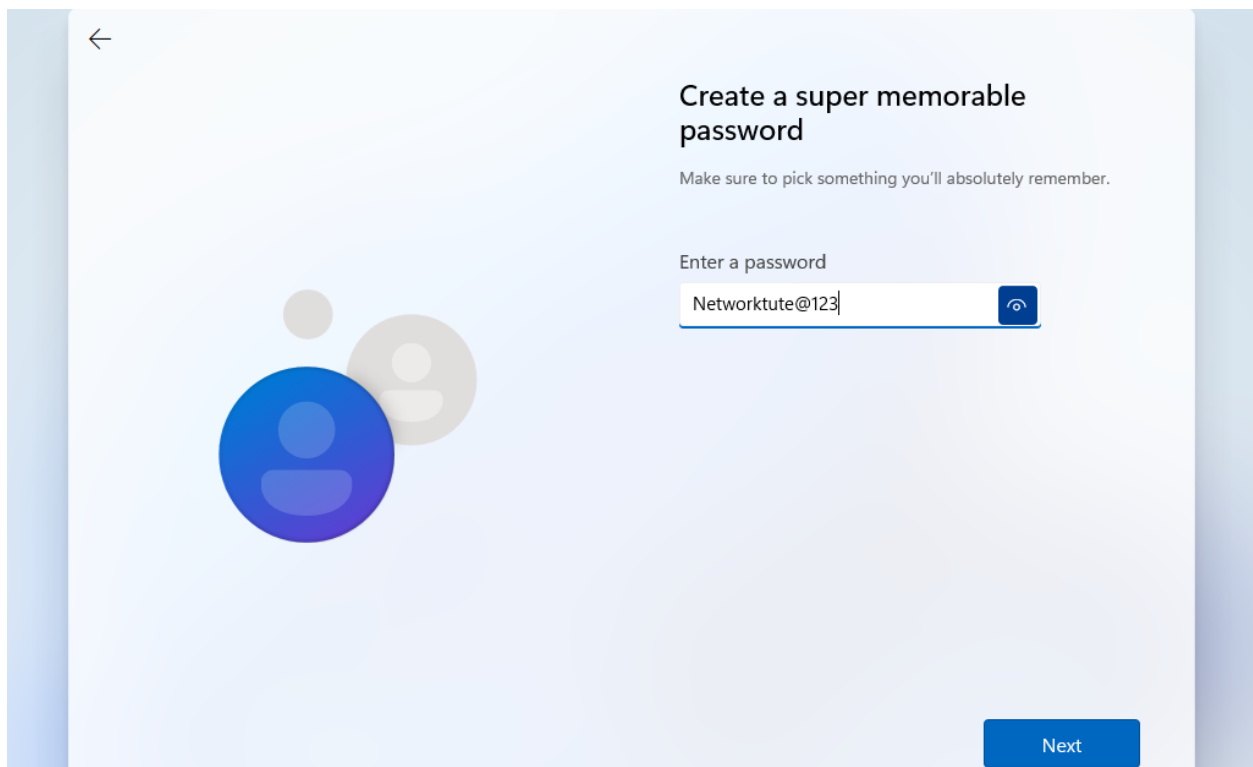
### Step 18:

In the **Create a super memorable password** textbox, type: **Networktute@123**

Click **Next**.


In the **Confirm your password** textbox, type: **Networktute@123**

Click **Next**.



### Step 19:

In the **Now add Security Questions**, you can select your personal question you want and type the answers. You have to pick 3 Questions compulsory.



## Now add security questions

Just in case you forget your password, choose 3 security questions. Make sure your answers are unforgettable.

Security question (1 of 3)

What was your first pet's name?


scooby

Next

### Step 20:

On the **Choose privacy settings for your device** page, keep the default settings.

Click **Accept**.



## Choose privacy settings for your device

Microsoft puts you in control of your privacy. Choose your settings, then select **Accept** to save them. You can change these settings at any time.

**Location**

You won't be able to get location-based experiences like directions and weather or enjoy other services that require your location to work.

☒ No

**Find my device**

Windows won't be able to help you keep track of your device if you lose it.

☒ No

**Diagnostic data**

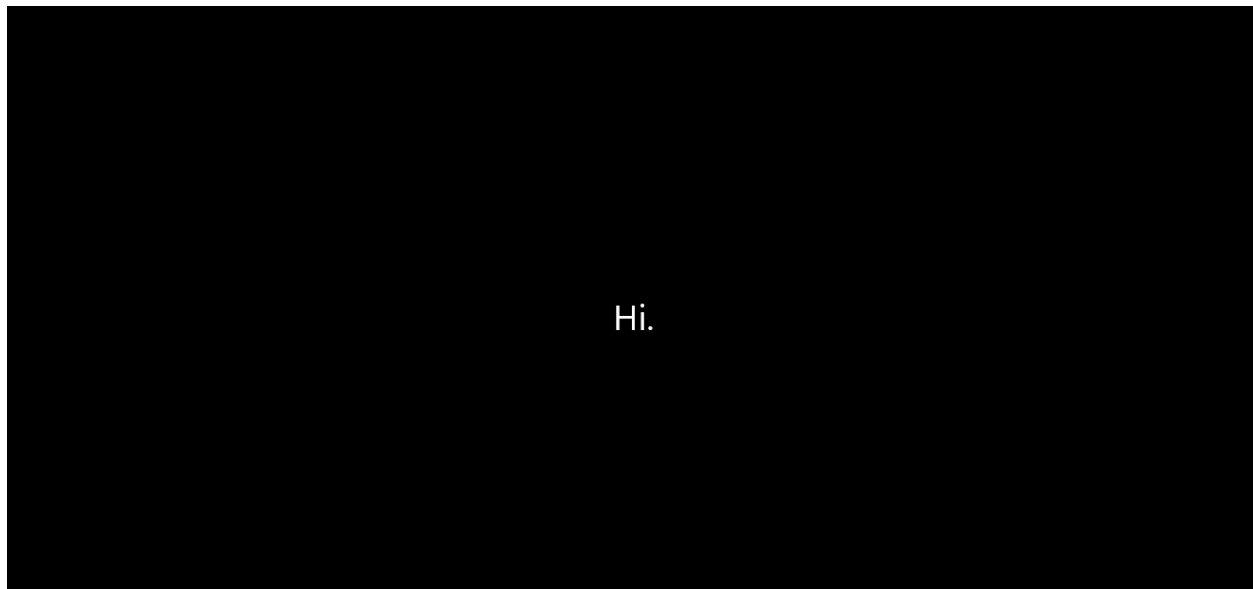
Send only info about your device, its settings and capabilities, and whether it is performing properly. Diagnostic data is used to help keep Windows secure and up to date, troubleshoot problems, and make product improvements.

[Learn more](#)

Accept

## Step 21:

Please wait while **Windows** prepares your desktop. This will take a few minutes.



You are now signed in as **NTUser**.

Keep **NTWIN11HV1** running for the next exercise.

