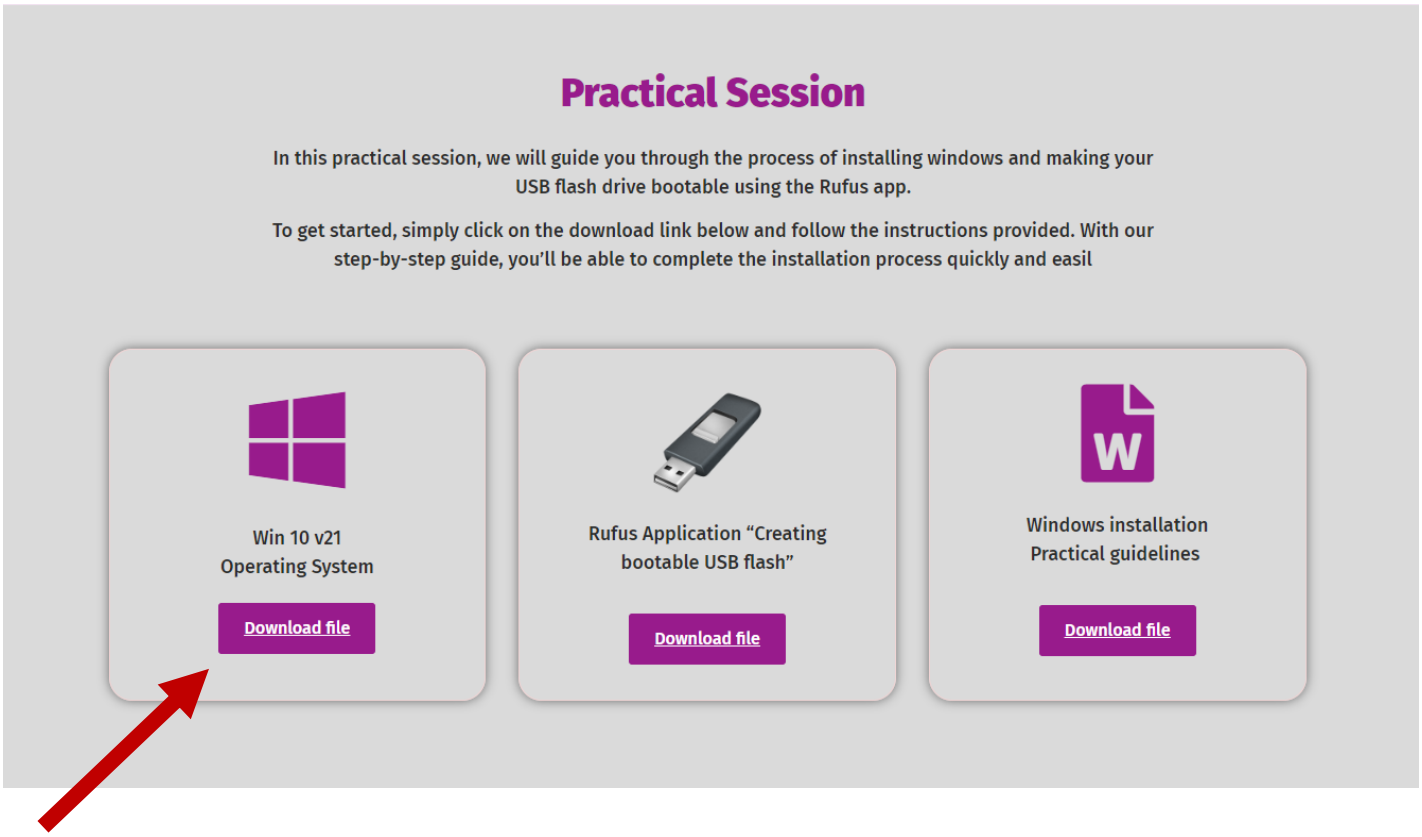
How to Create a Bootable Windows 10 USB Flash Drive using RUFUS utility.

Step 1. Download Windows 10 in an ISO file.

First of all, proceed and download a legally copy of Windows 10 in an ISO file. To do that, follow the instructions below.

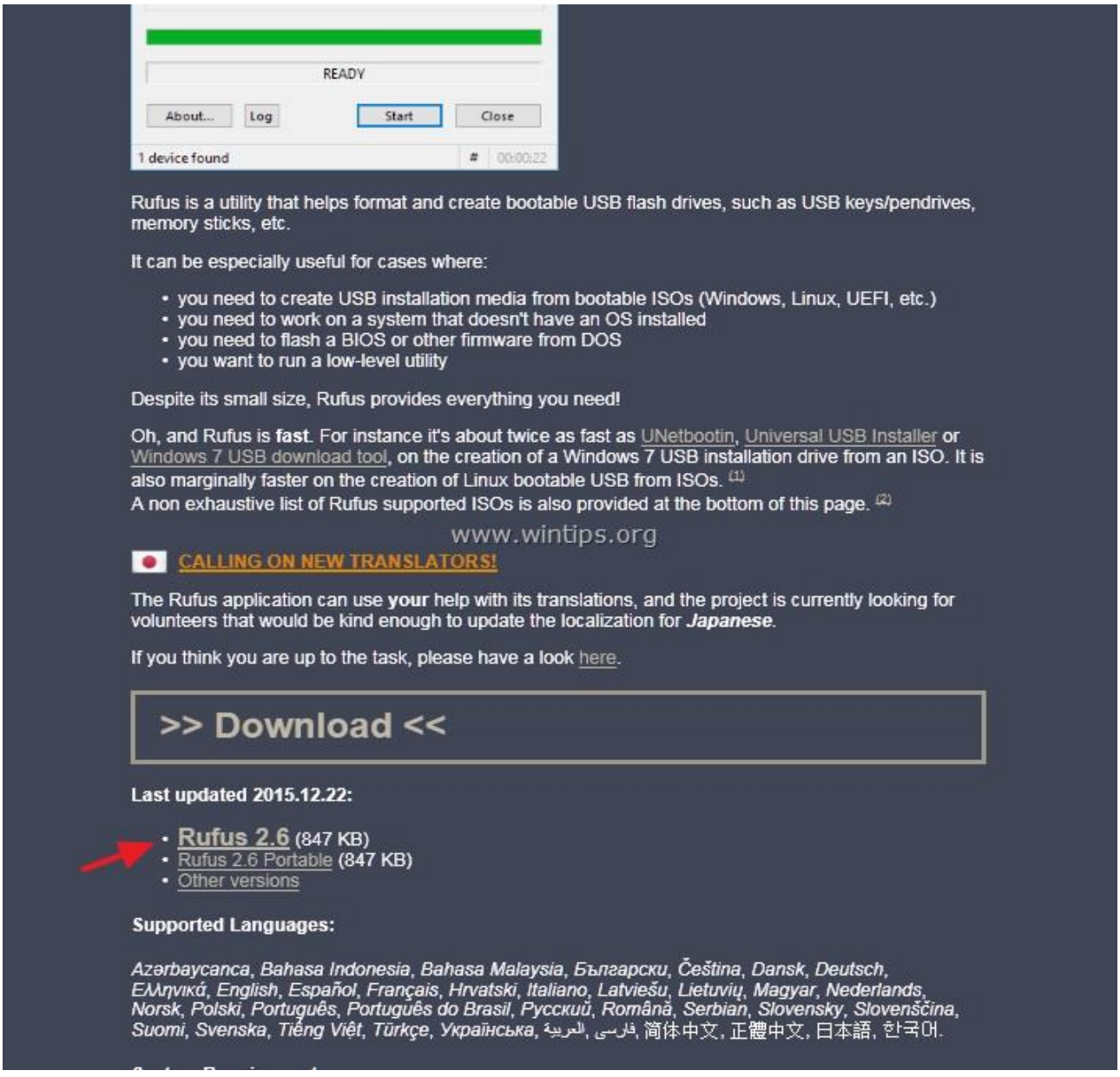
- Go to https://akramdesign.com/os
- The click on win 10 **OS** to download the **.iso** file



Step 2: Download RUFUS USB Boot Creator Utility.

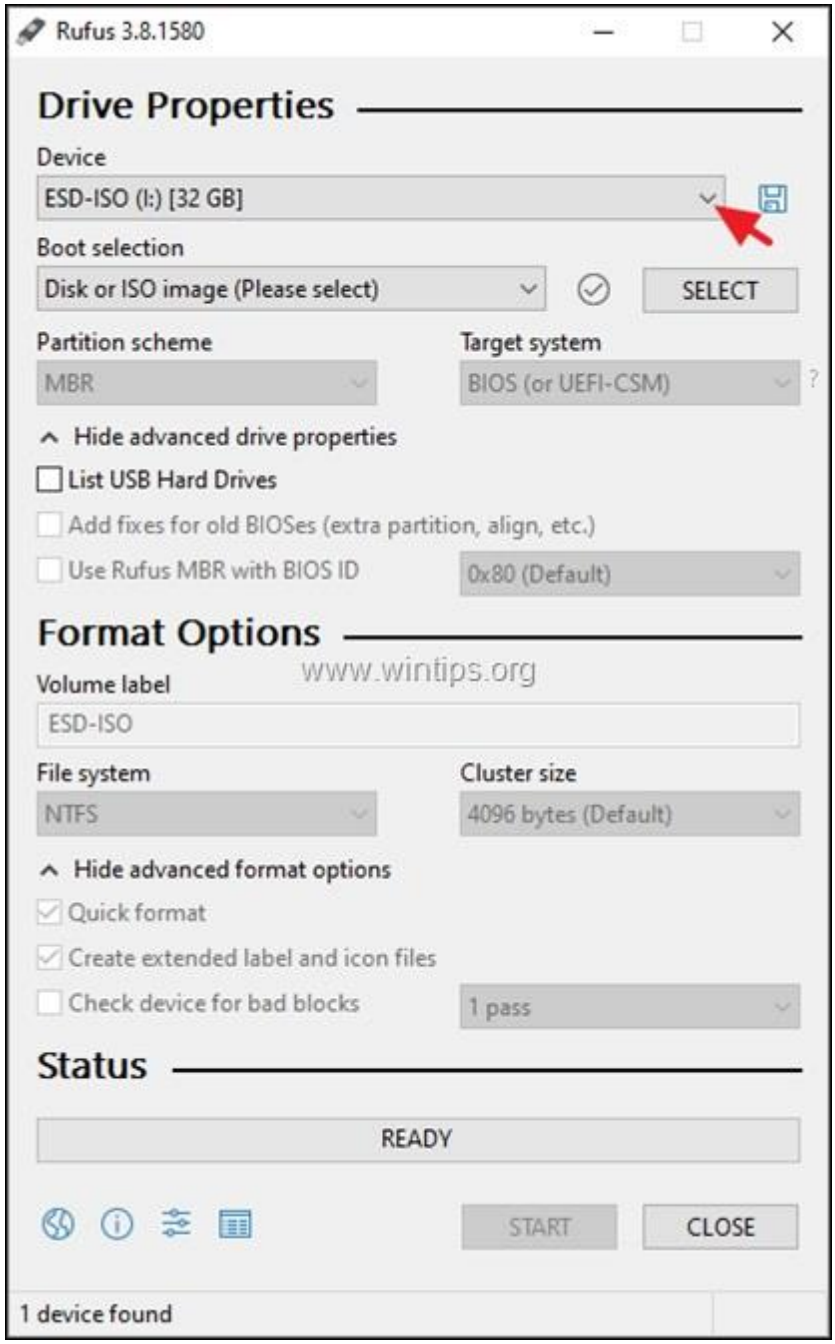
The next step is to download the **Rufus** USB creator utility, which is an excellent tool to create a Windows bootable USB flash drive, to install or to repair Windows.

1. Go to the official Rufus download page (https://rufus.ie/en/) and download the latest version of **RUFUS USB Bootable Creator Utility** on your computer.

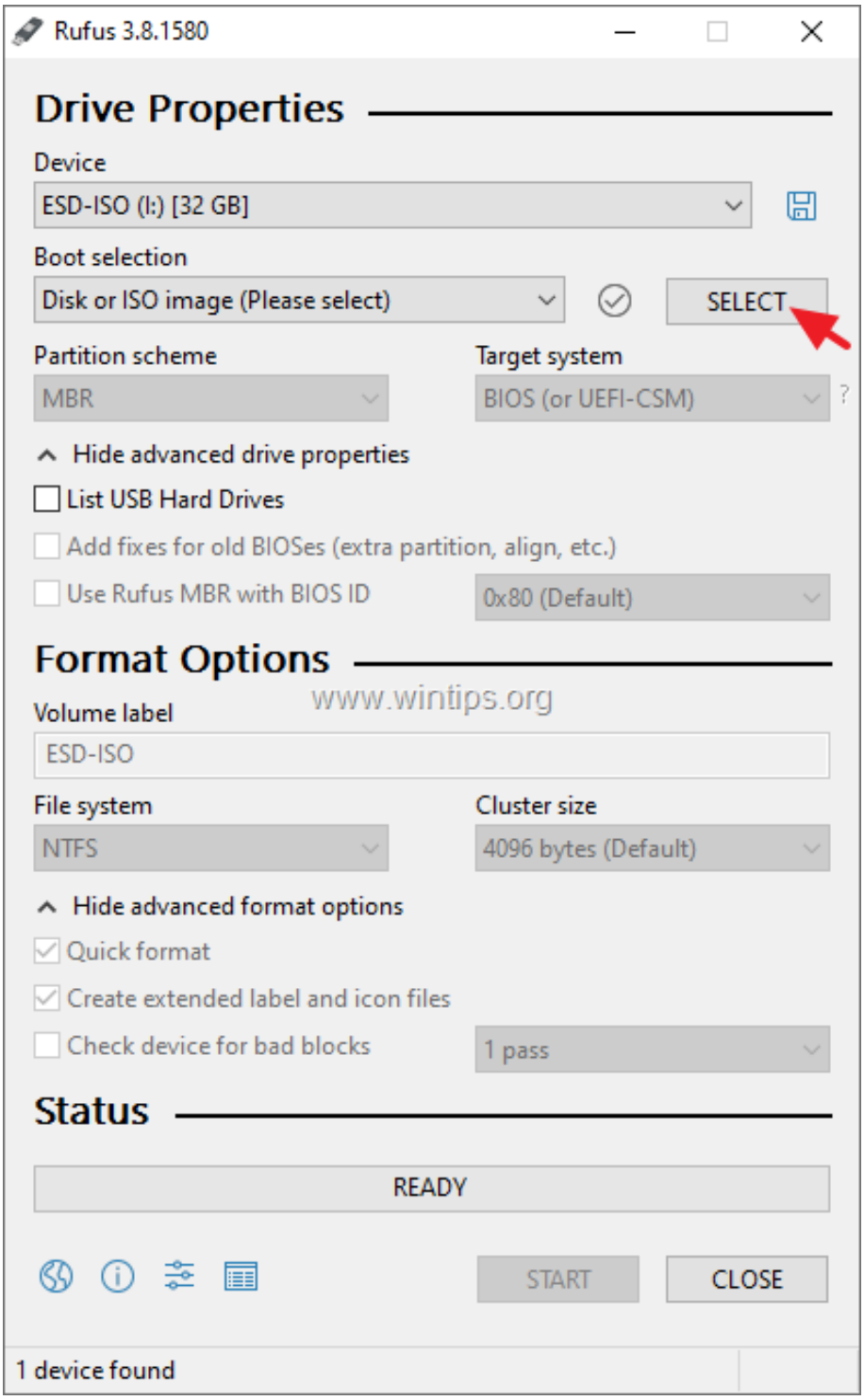


Step 3. Burn Windows 10 ISO to USB with RUFUS utility.

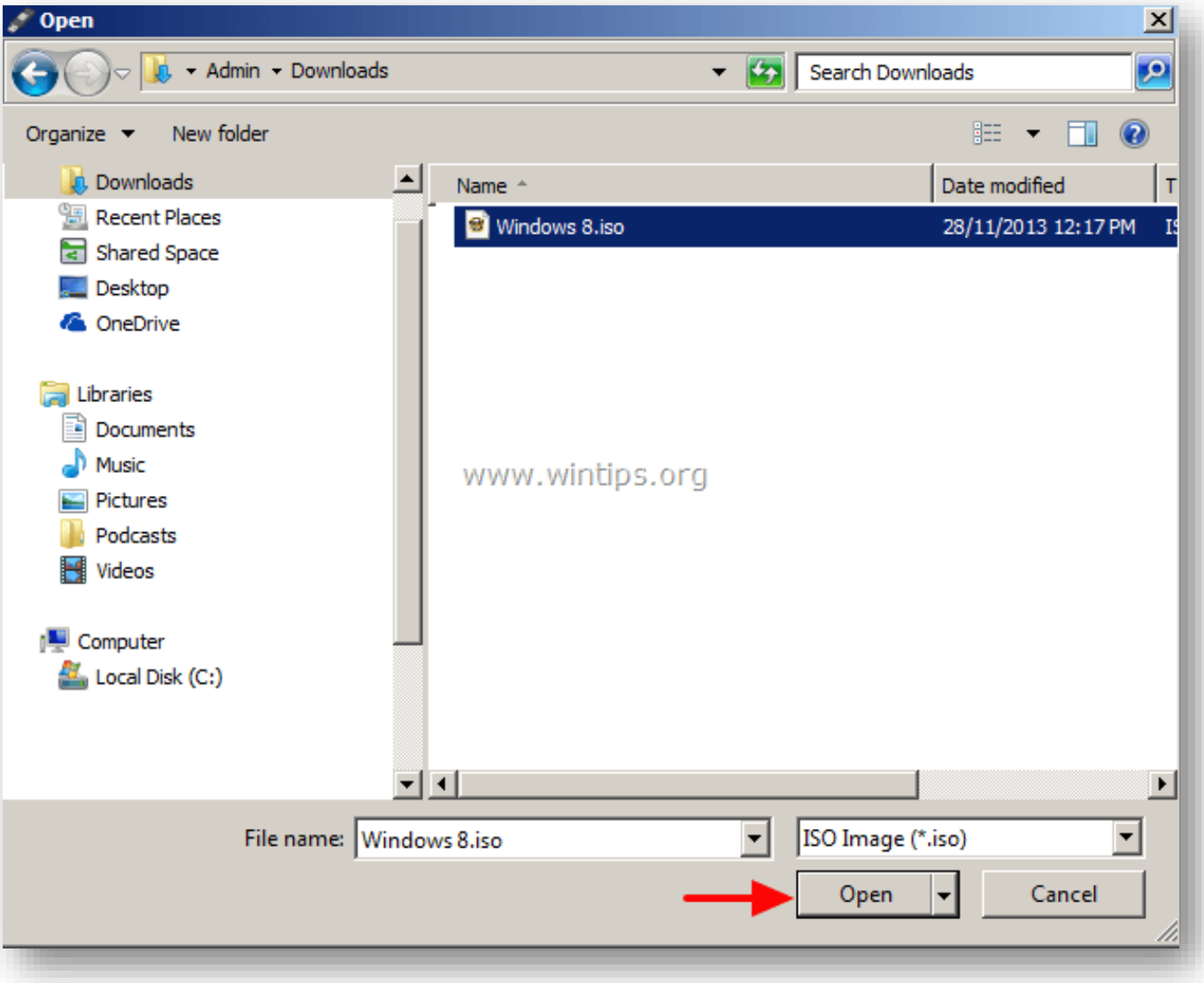
1. Remove all USB storage drives from your computer and plug an **EMPTY*** USB stick (minimum 8GB) to an empty USB port.
Attention: DO NOT leave your files on the USB stick, because **all files will be erased during this operation.**
2. Now **double-click** to run "*rufus*" application. (When Rufus utility starts…)
3. Choose the empty USB stick that you plugged in your computer.



4. Click **SELECT**.



5. Select the Windows 10 ISO file from your computer (e.g. Windows.iso) and choose "**Open**".



6. Now click on open, proceed as follows according your case:

Please pay attention to the following instructions before clicking on start:

1. There are certain rules that you need to follow in order to make a USB flash bootable.

If your computer supports **LEGACY** (or UEFI is Disabled), then apply the following settings in RUFUS (see *Screenshot 2*):

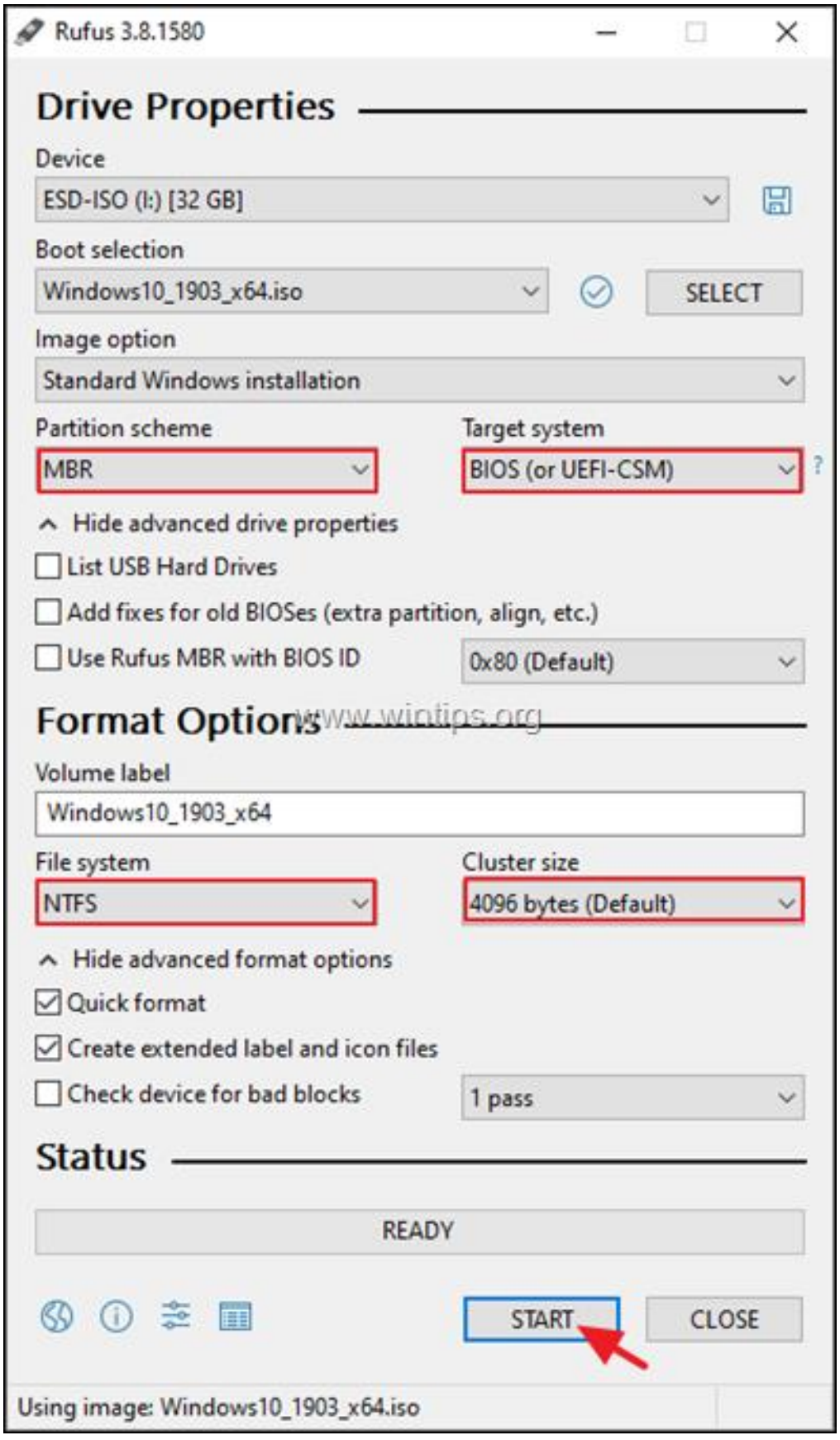
- At **Partition scheme** select **MBR.**
- At **Target system**, select **BIOS (or UEFI-CSM).**
- At **File system** select: **NTFS**.
- At **Cluster size**, leave the: **4096 bytes (default)**.
- Under **New Volume Label**, you can enter any volume name for the USB disk.
- Press the **Start** button.

* Notes:

BIOS configuration

1. Non UEFI (legacy) supports both 32- & 64-bit Windows.
2. In order to boot from a non UEFI USB flash drive, you must apply the following setting in **BIOS:**

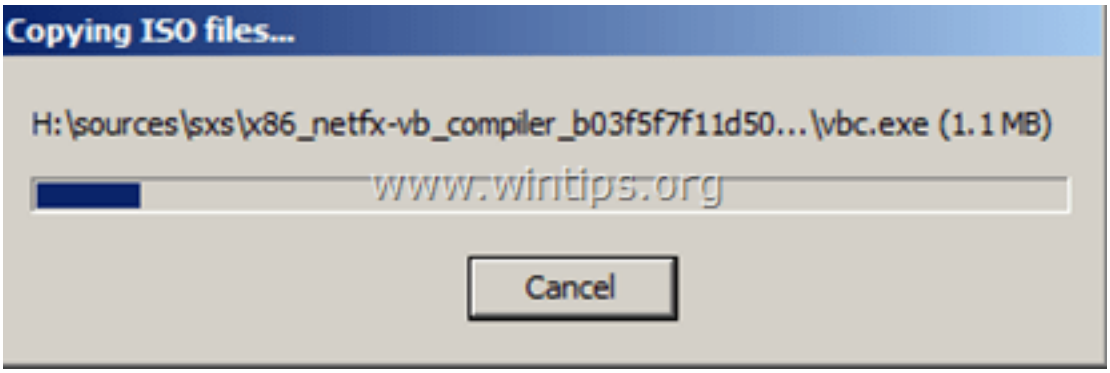
a. Set the Boot configuration to: Legacy.


Rufus 3.8.1580
Drive Properties
Device
ESD-ISO (I:) [32 GB]
Boot selection
Windows10_1903_x64.iso
SELECT
Image option
Standard Windows installation
Partition scheme
MBR
Target system
BIOS (or UEFI-CSM)
Hide advanced drive properties
List USB Hard Drives
Add fixes for old BIOSes (extra partition, align, etc.)
Use Rufus MBR with BIOS ID
0x80 (Default)
Format Options
www.wintips.org
Volume label
Windows10_1903_x64
File system
NTFS
Cluster size
4096 bytes (Default)
Hide advanced format options
Quick format
Create extended label and icon files
Check device for bad blocks
1 pass
Status
READY
START
CLOSE
Using image: Windows10_1903_x64.iso

8. Read carefully the warning message and press “OK”.



(Wait until Rufus utility erases your USB stick and transfers Windows 10 ISO files)



9. When Rufus operation is completed, close Rufus utility, unplug the USB stick and use it to troubleshoot Windows 10 or to perform a clean OS installation.

Windows operating system

Clean Install Windows 10 ISO

After downloading and creating a Windows 10 bootable, it’s time to install it on the computer or a server stack through a network.

Before moving forward, we need to load the Windows 10 installation files when the computer boots up or restarts. You can boot through the BIOS settings or the shortcut boot menu, as both vary according to the manufacturer.

Laptops

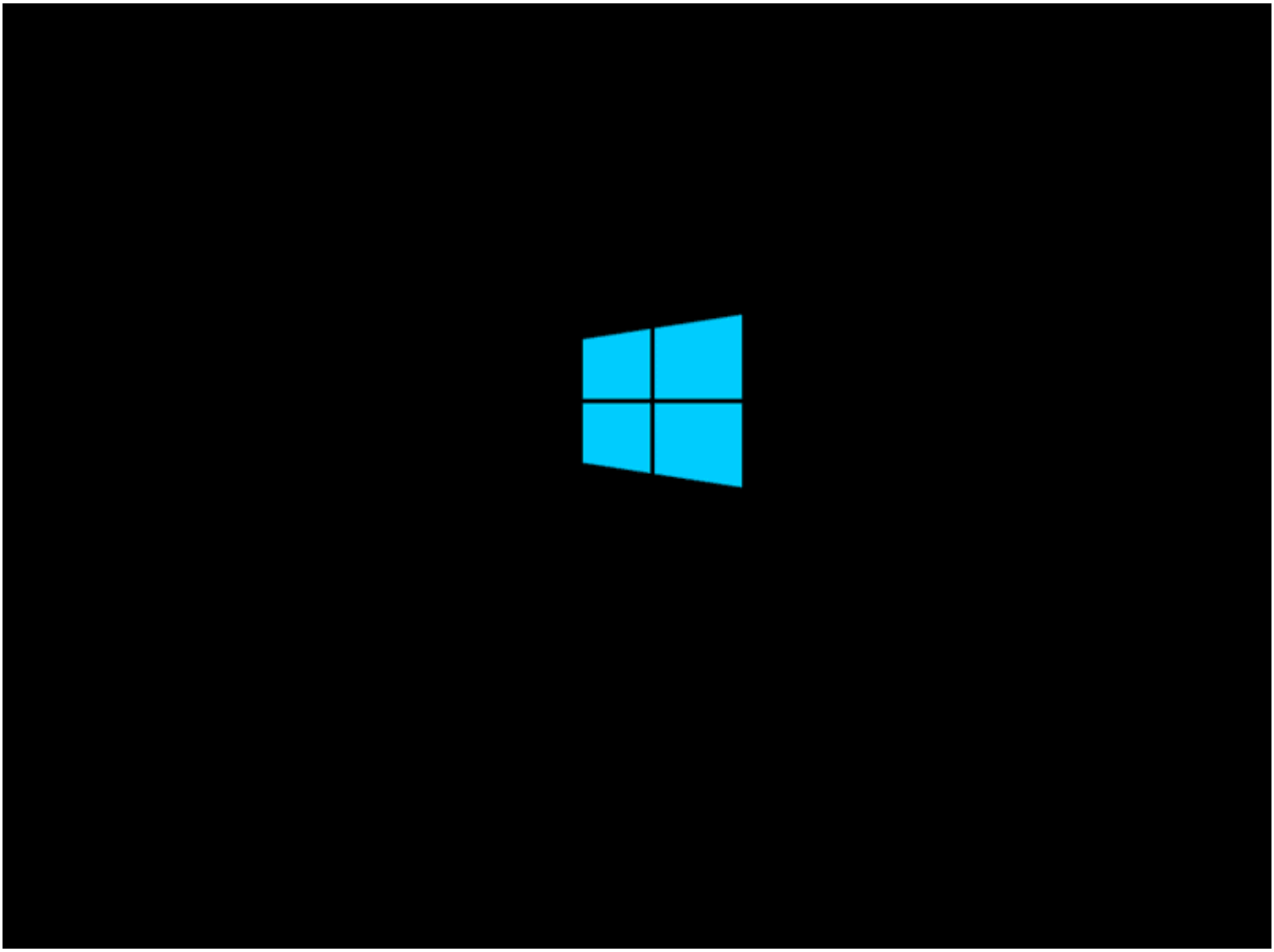
Brand	**Boot Menu Key**
ASUS	F8
Acer	F12
Dell	F12
HP	F9
Lenovo	F8, F10, F12

Desktops

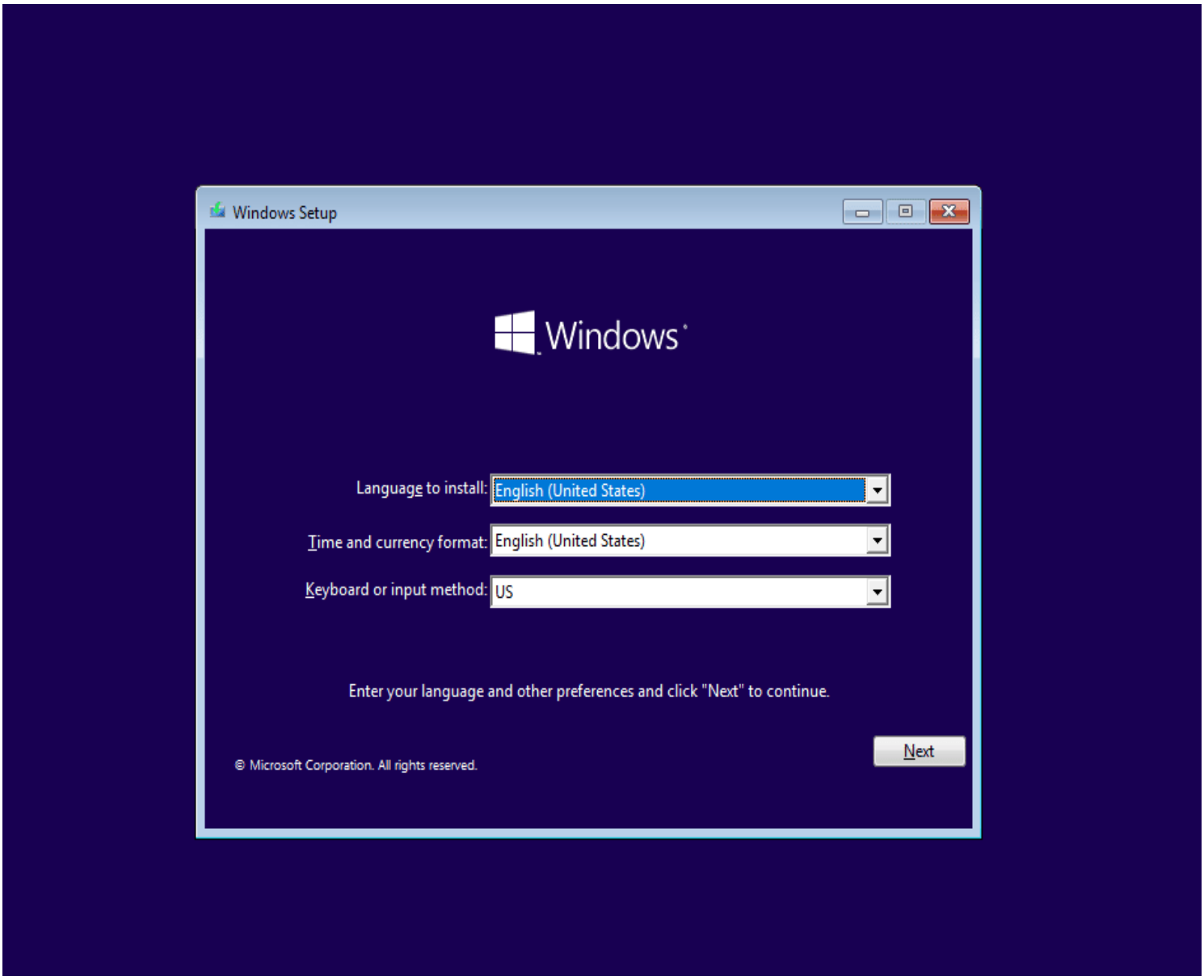
Motherboard Brand	**Boot Menu Key**
ASUS	F8
Gigabyte	F12
MSI	F11
Intel	F10
ASRock	F8, F11
Biostar	F9

Let us plug in the bootable USB or DVD and then boot it on the computer to proceed with the installation.

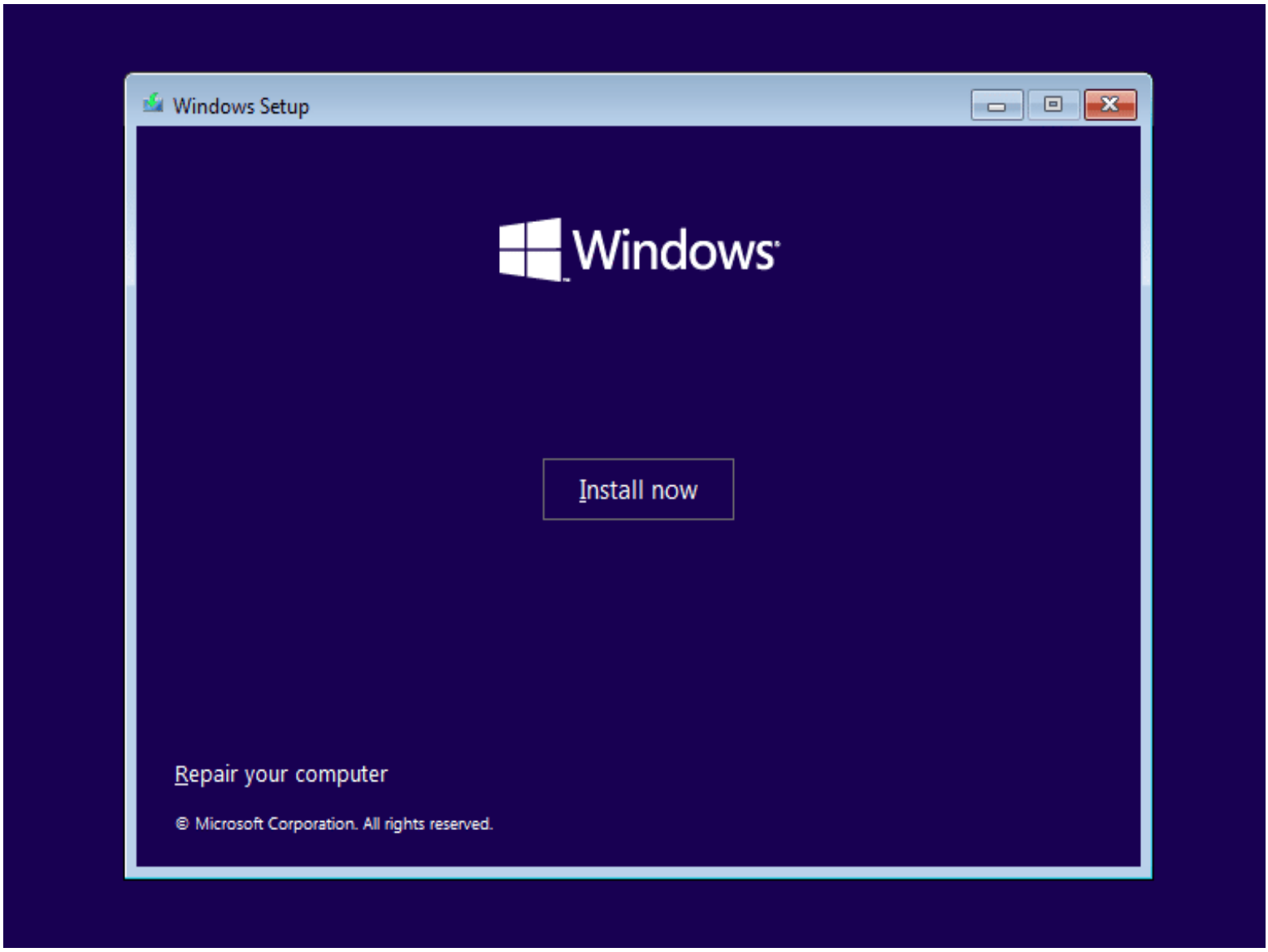
1. The Windows 10 logo will appear as files are read and loaded from the bootable media.



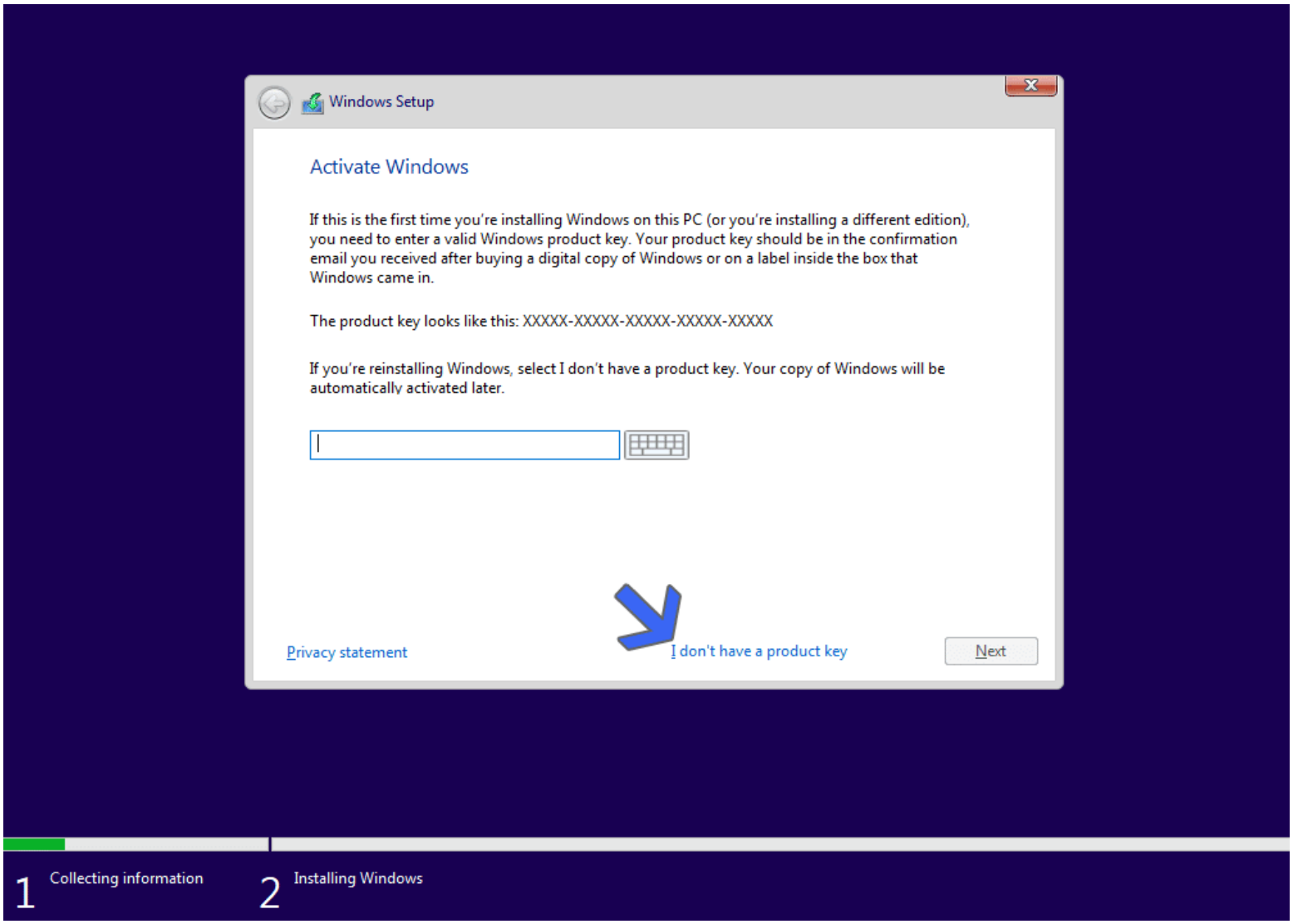
2. Select the language, time and currency formats, and keyboard input method on this screen. Click on **Next** to move forward.



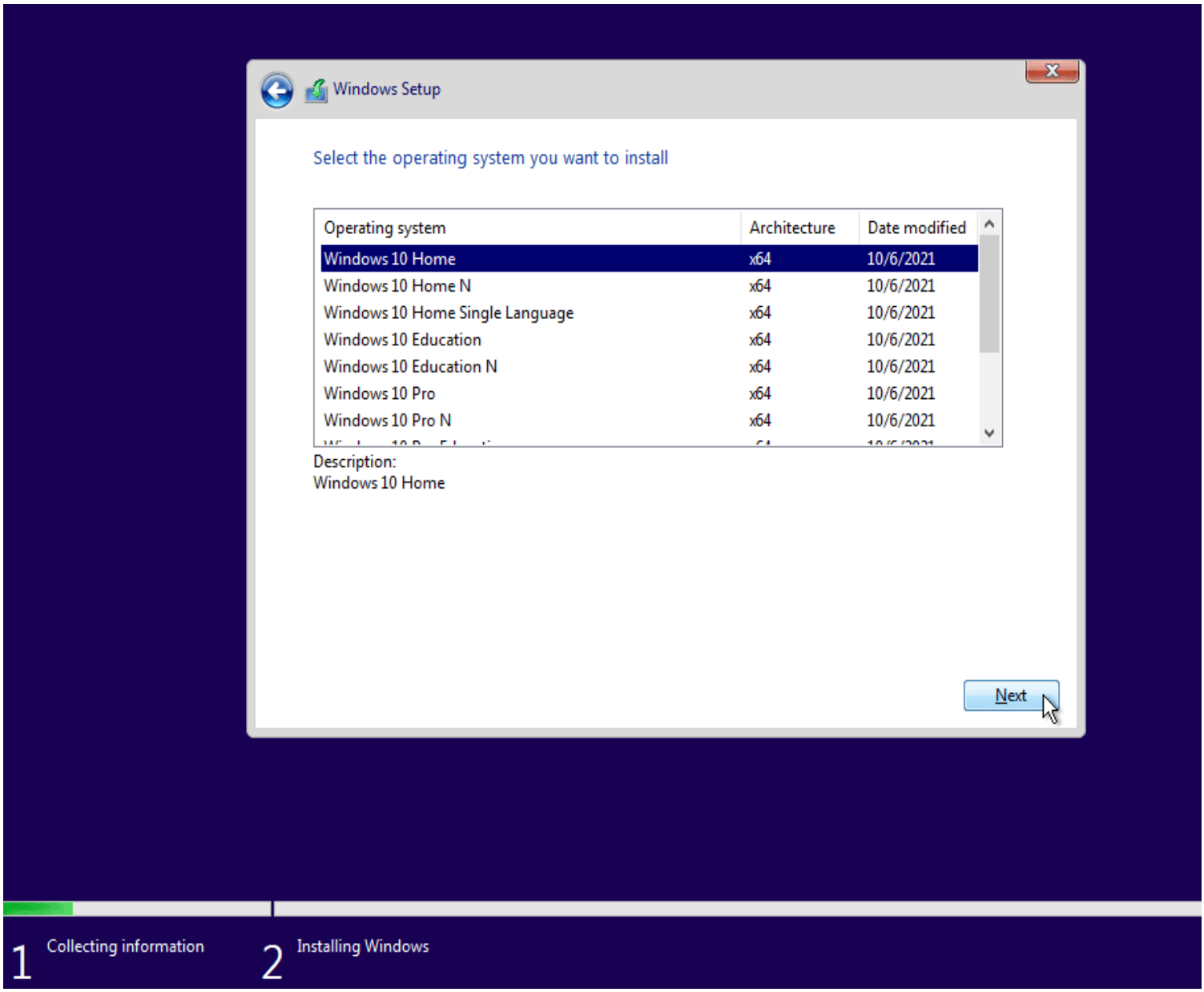
3. Click the **Install Now** button on the next screen to begin the Windows 10 installation process.



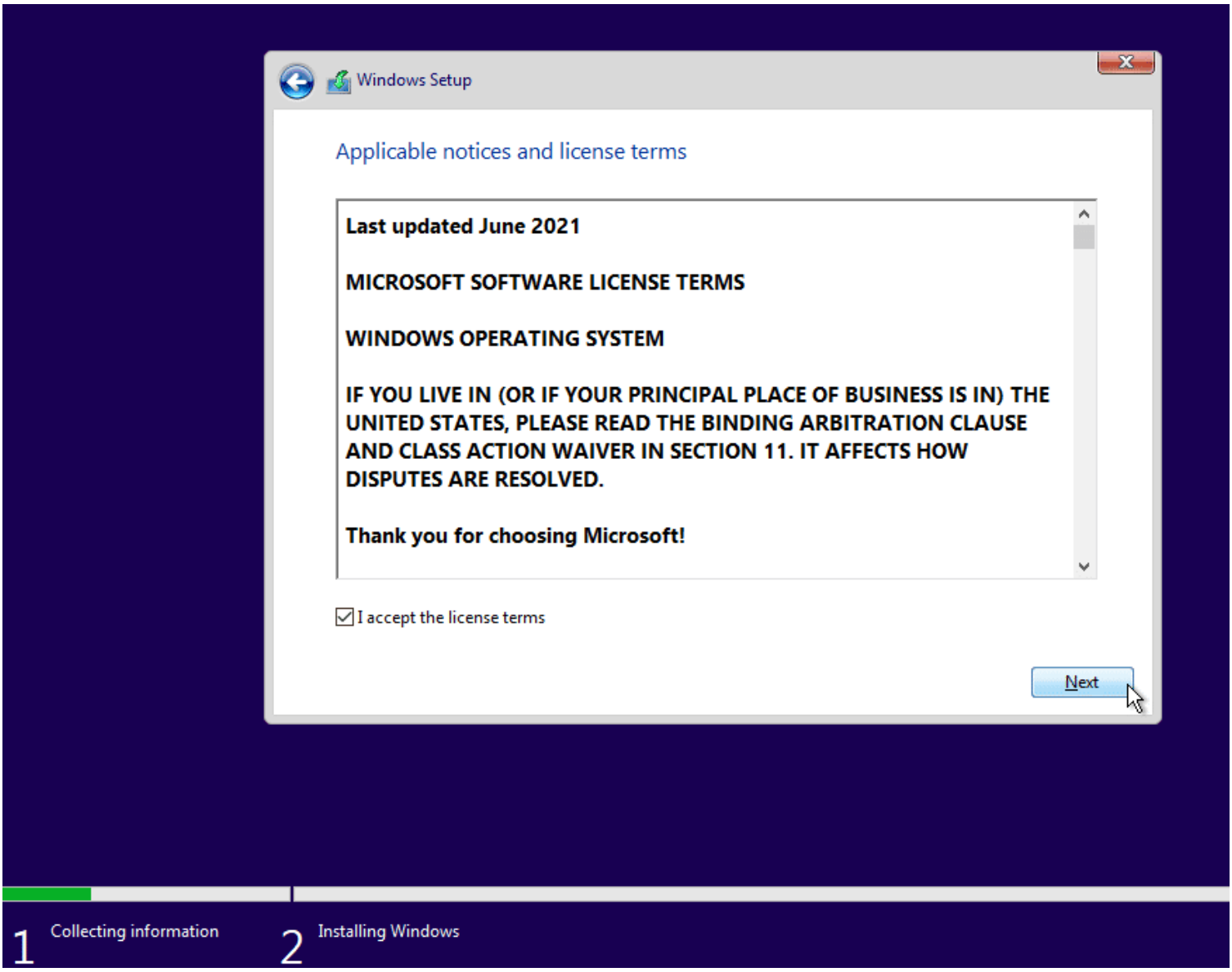
4. In this section, enter your Windows 10 product key. If you don’t have one, click on the **I don’t have a product key** to proceed.



5. Select the Windows 10 version you want to install and click **Next**. Some ISOs will have a single version, so choose accordingly.

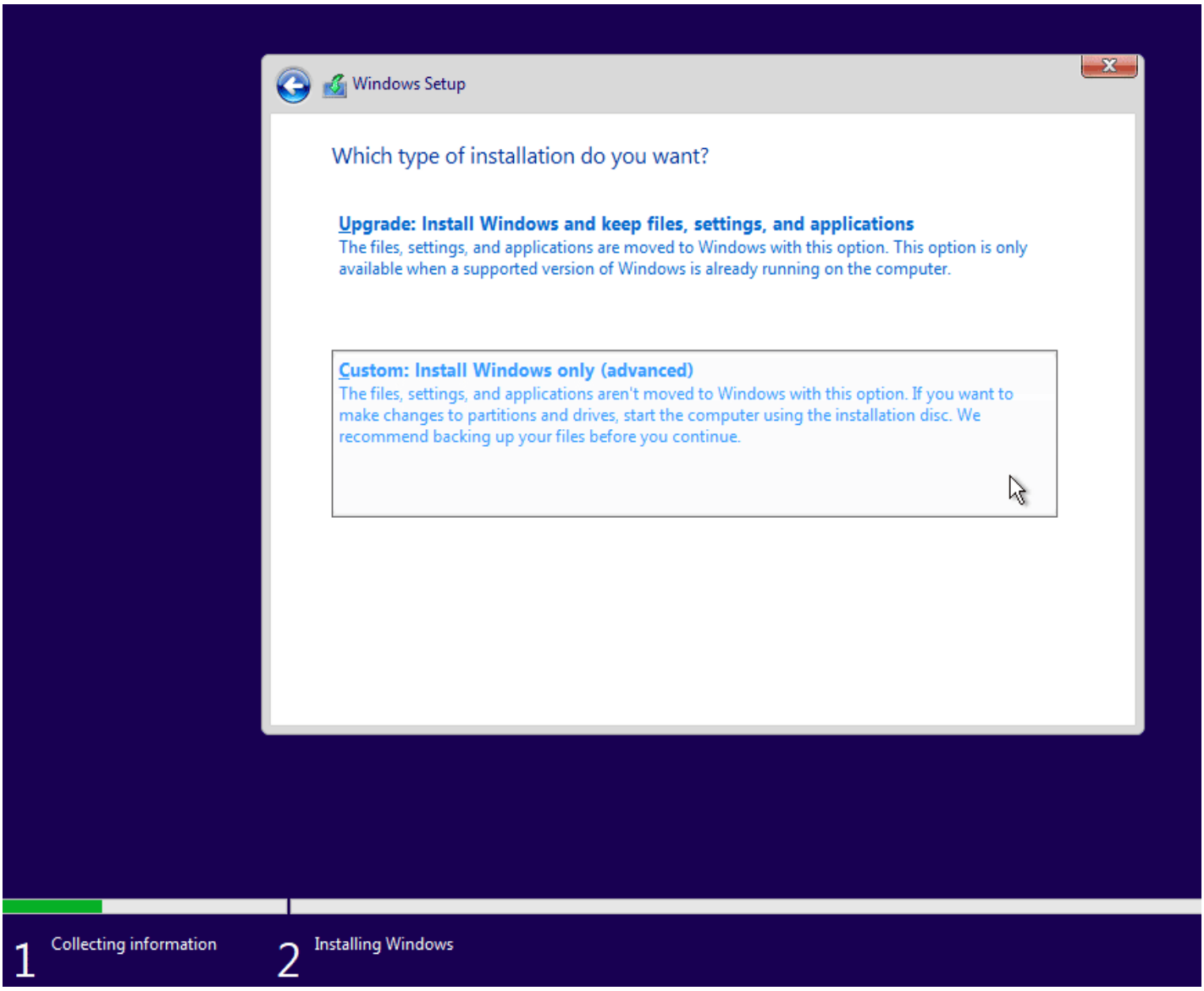


6. Accept the license terms on this page by ticking the box **I accept the license terms** and click on **Next** to proceed.

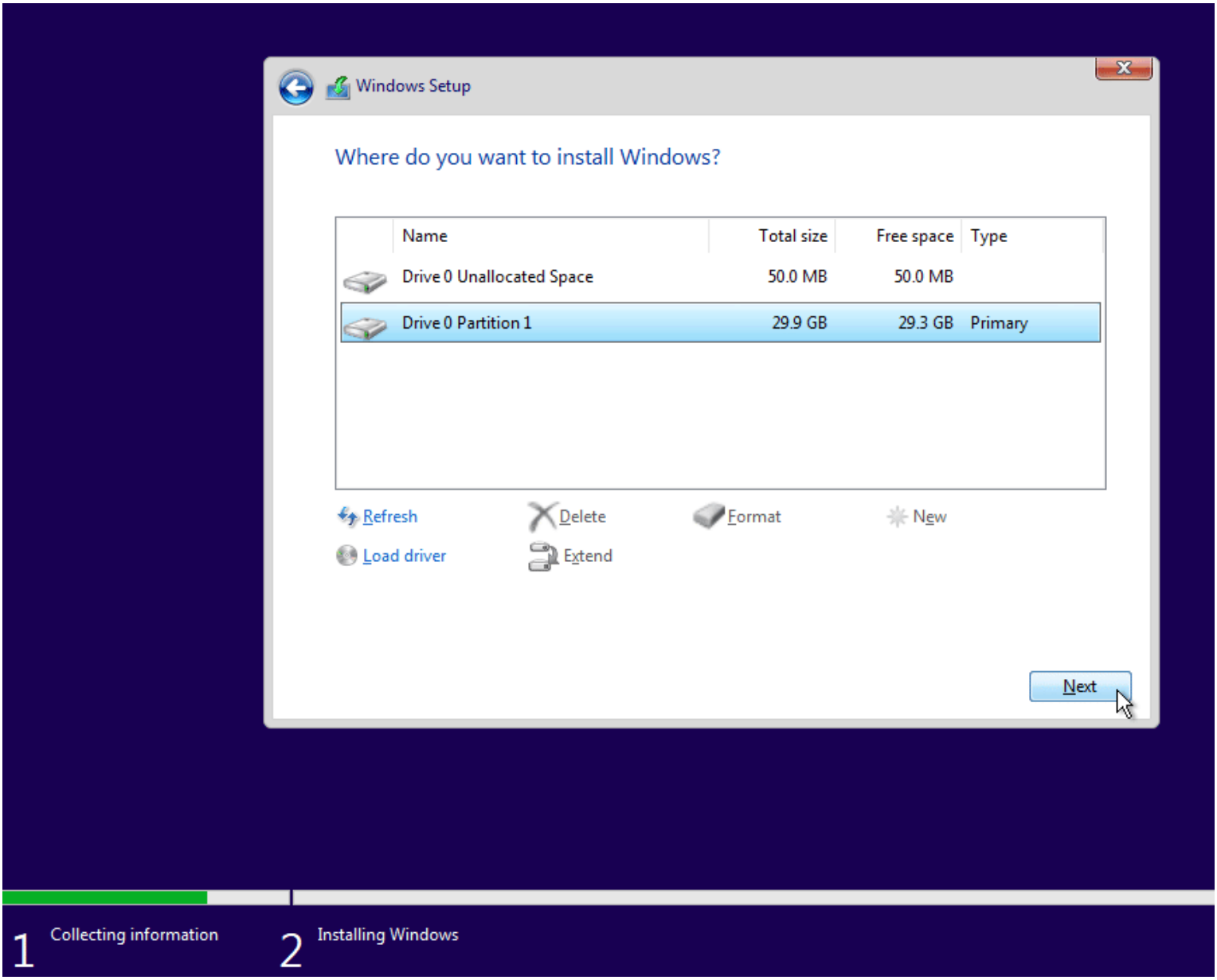


7. On this screen of installations, select the second option **Custom: Install Windows only(advanced)**.

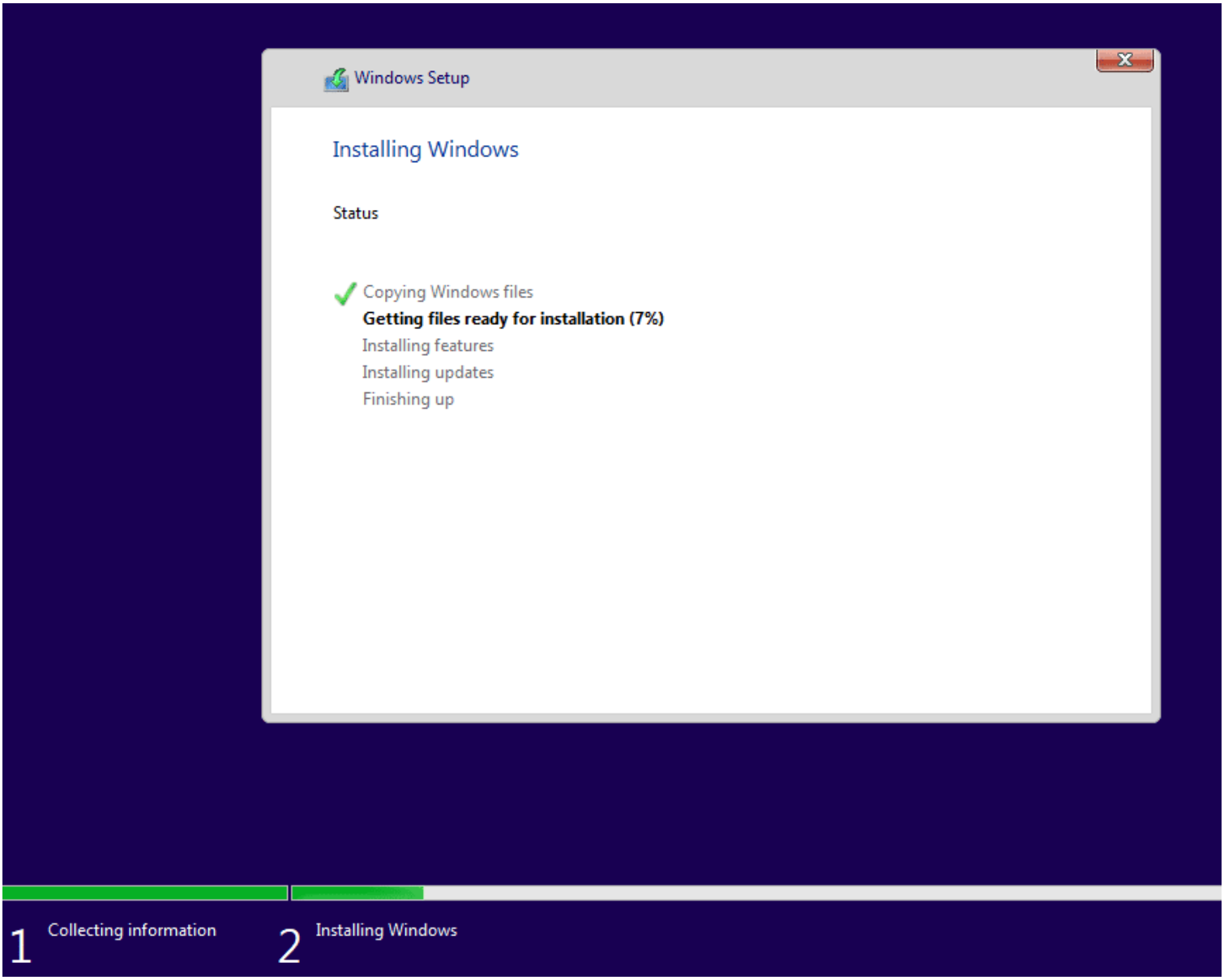
The first option can also work if you currently have a recent Windows version such as 8, 8.1, or even 7.



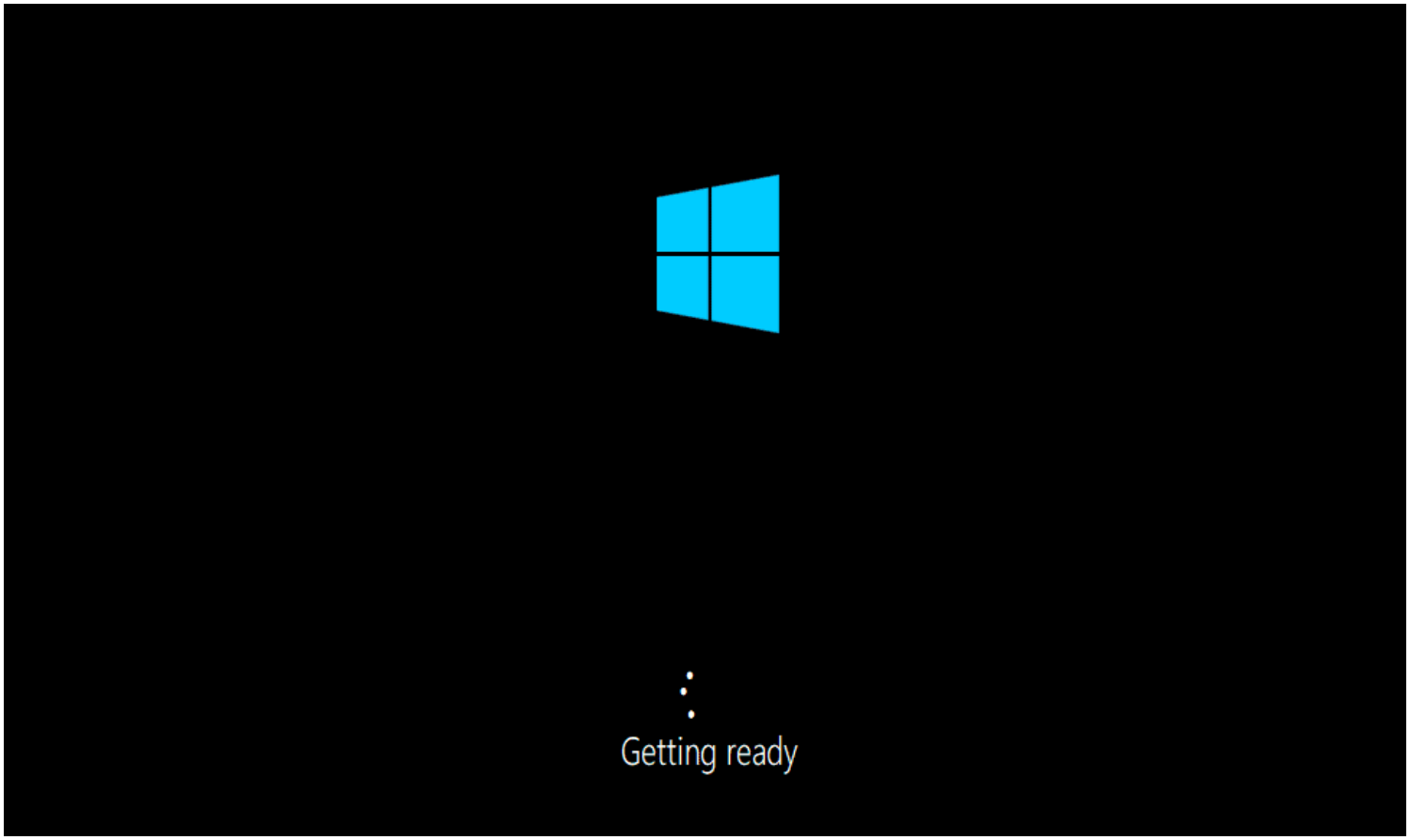
8. Here, we will select the partition for installing Windows 10. You can select an existing drive or choose an unallocated space as we did. Click on **Next** after selection to start the installation process.



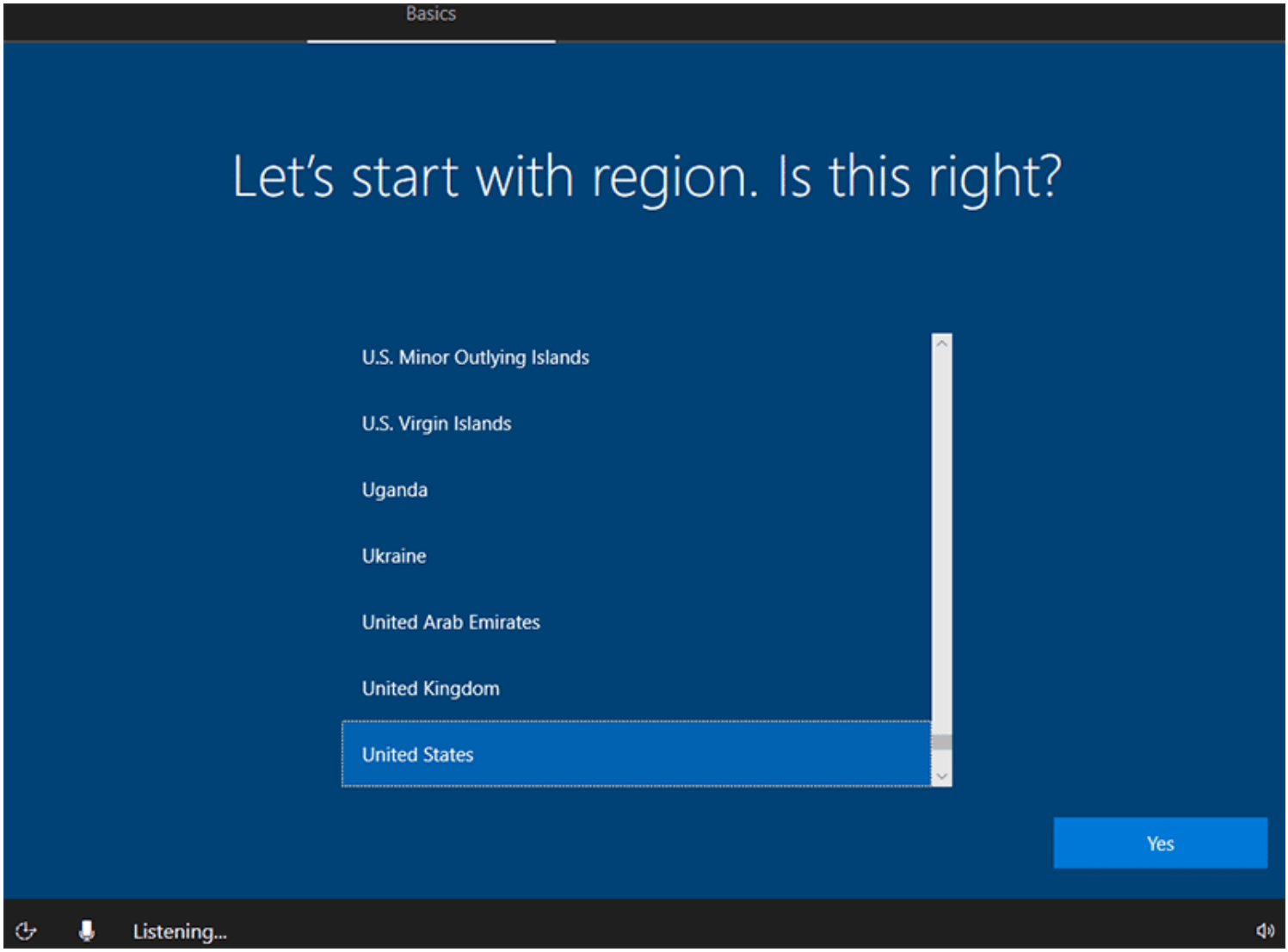
The installation will take a couple of minutes, depending on your hard drive's space. SSDs (Solid State Drives) are the fastest, followed by single platter hard drives.



9. After a couple of restarts, the Windows loading screen will appear.

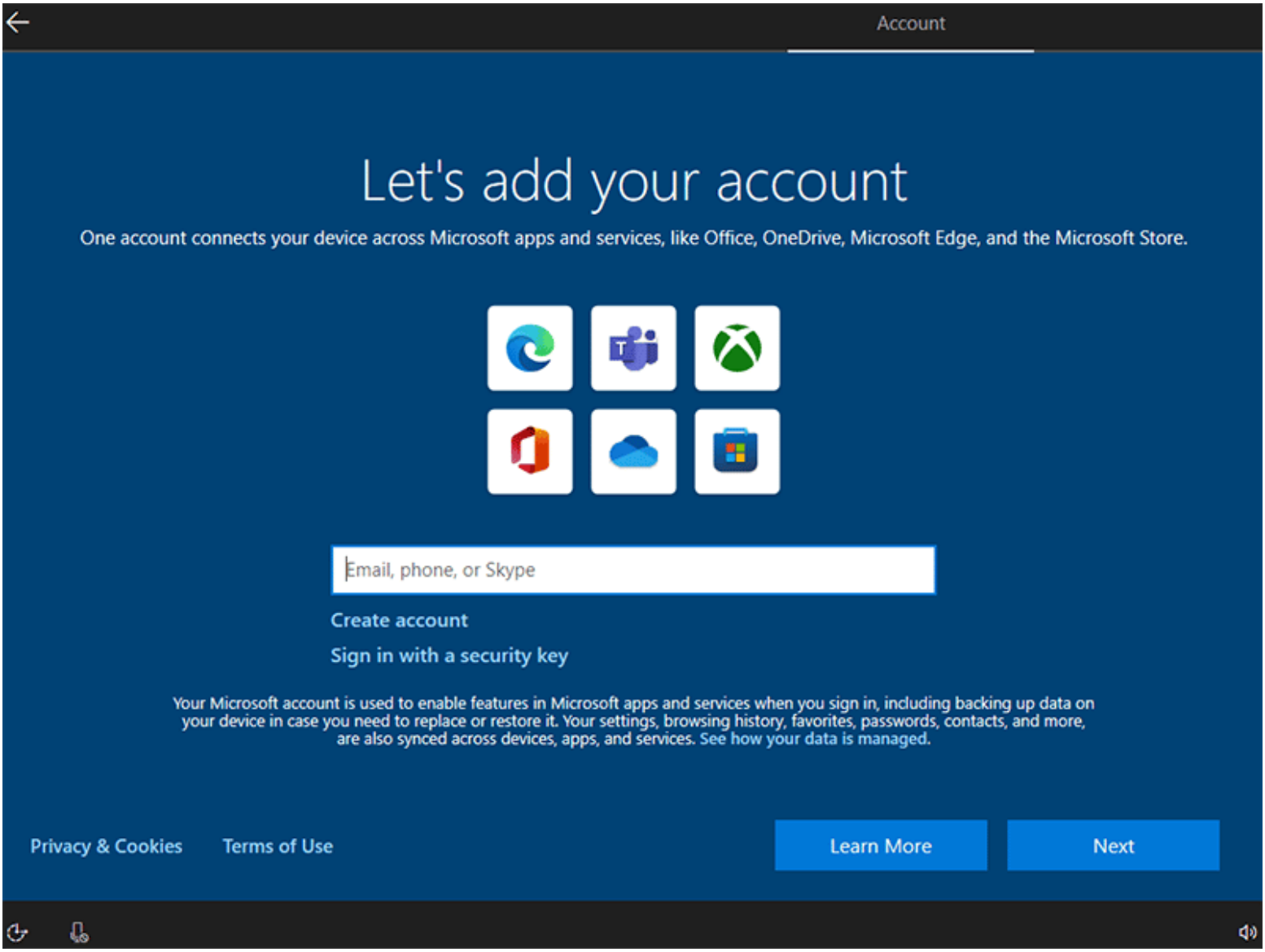


10. Select your region and click **YES** to proceed forward.

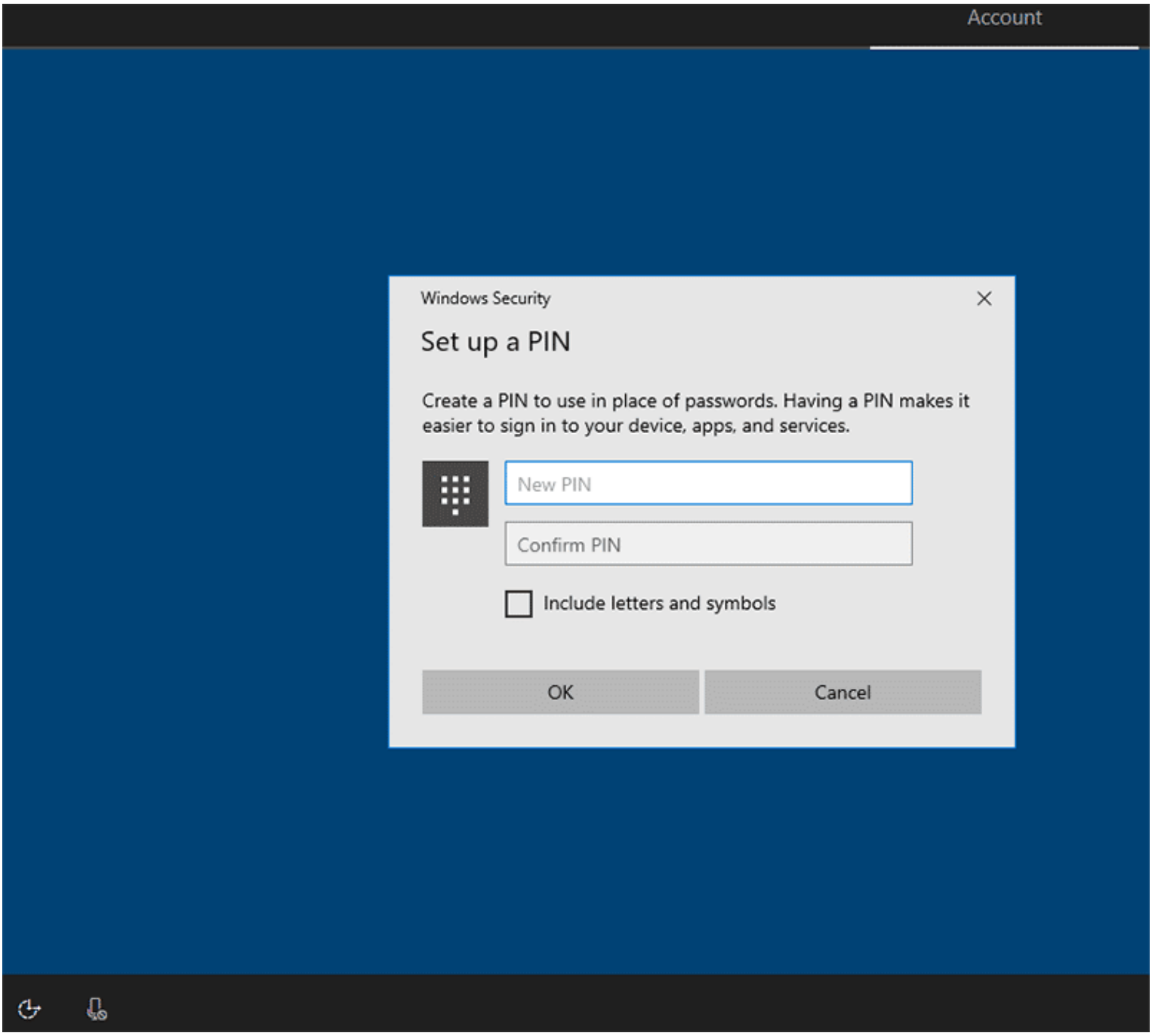


11. Select the keyboard language layout on this page and click **YES** to move forward. Skip the option for a secondary keyboard if you don't have a second one connected.

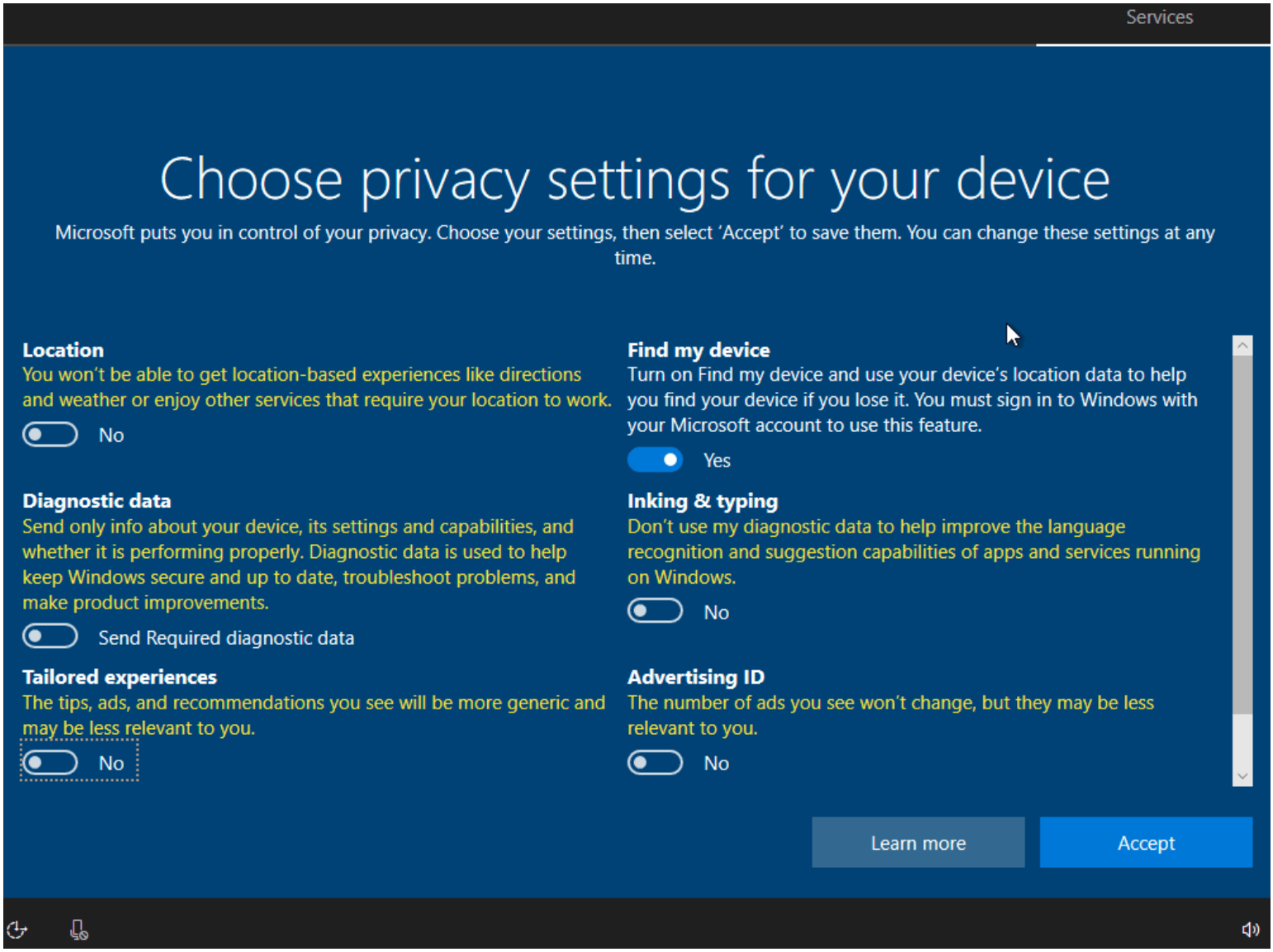
12. Sign in to your existing outlook, live, or any account registered with the mentioned Microsoft product. Else, create a new account using a phone number or an email.



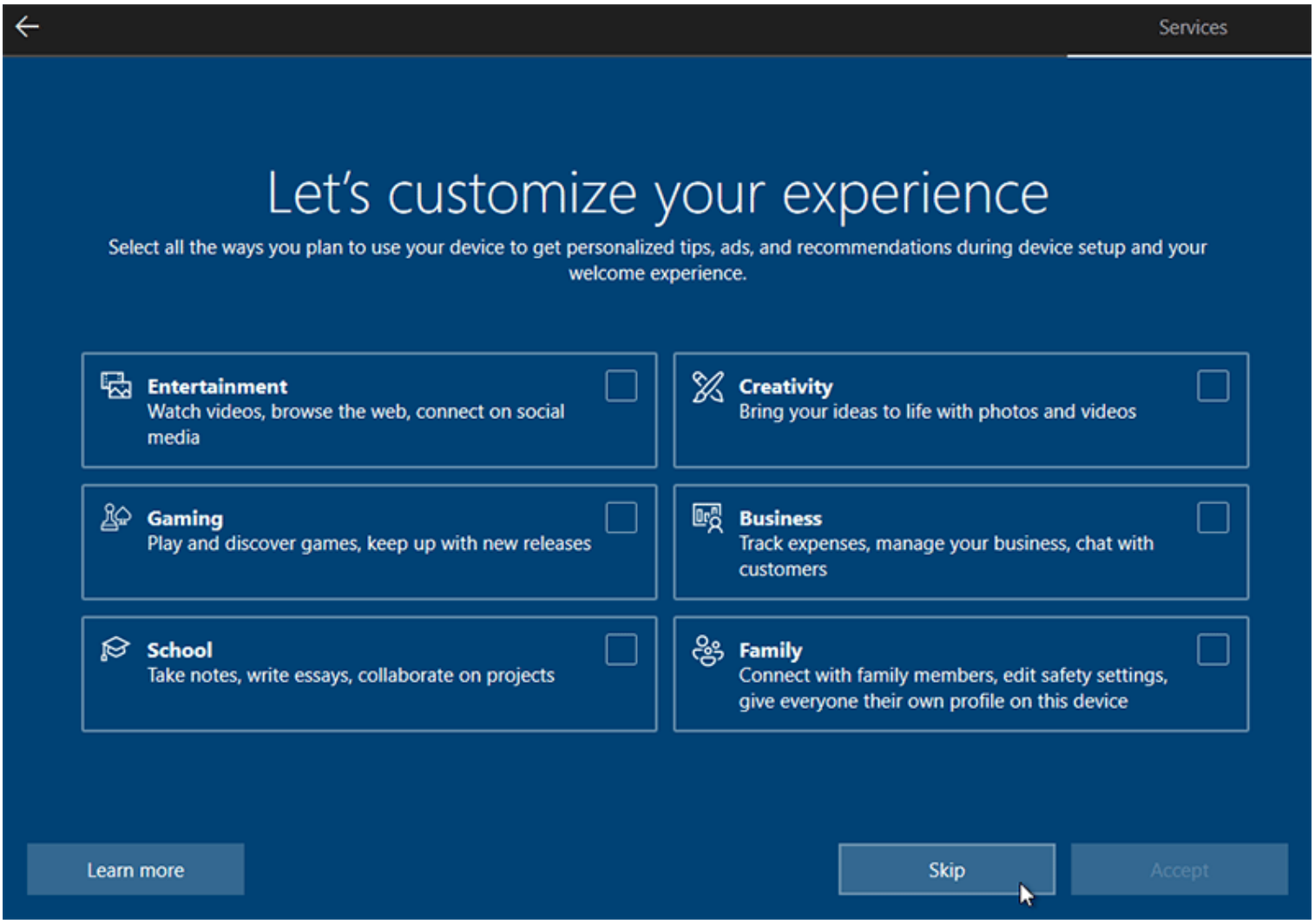
13. Windows will ask you to create a PIN. It will be used to log in on every start instead of the account's password.



14. Choose your privacy options according to the data you want to share. Click **Accept** to proceed.



15. If you don’t want recommendations, ads, and tips, then ignore this section through the **Skip** button.



In the next three screens, you will be asked to opt for the trials of Microsoft 365, Xbox, and enable Cortana. Proceed according to your preferences, and then Windows 10 will start setting up for the final time before bringing you to the desktop.



You will land on the desktop after the settings are done. Certain Windows updates will be downloaded and installed if you are connected to the internet.



THE END

Did you enjoy your practical session?

_____

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(IT specialist expert)
www.akramdesign.com/os