

Windows 11 Installation

Lenovo ThinkStation P4



Table of Contents

Overview	3
Section 1 – Booting to Windows Installation Media	4
Section 2 – Windows Installation.....	8
Section 3 – RAID Driver Installation	15
Section 4 – Revision History	22



Overview

The purpose of this document is to provide guidance for users on how to install a Windows 11 retail operating system on the ThinkStation P4 system.

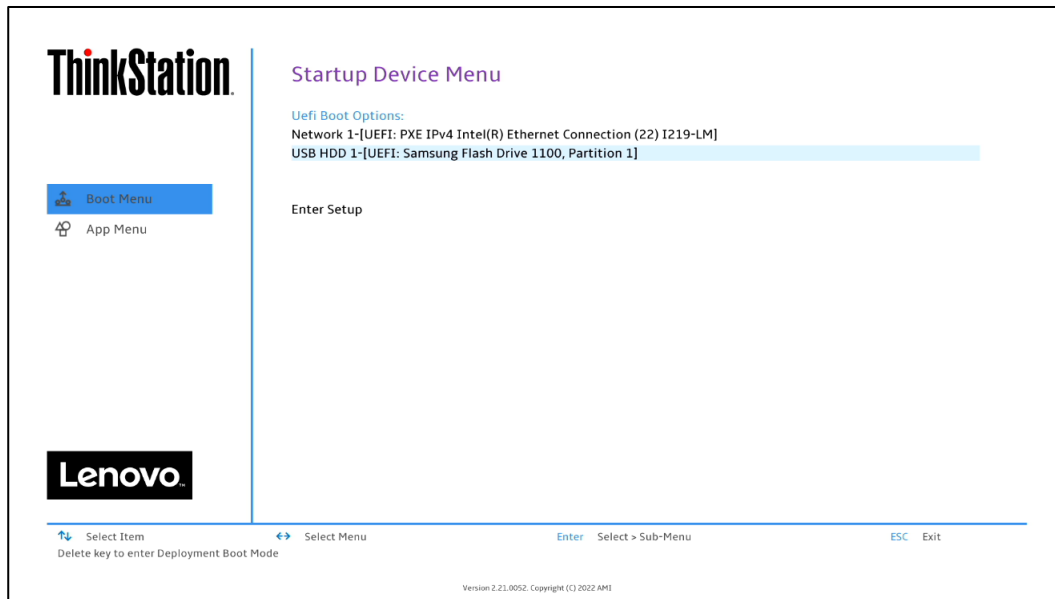
Section 1 – Booting to Windows Installation Media

The first step before installing Windows is to create an installation media. This media can be created using Microsoft's Windows Installation Assistant Tool, which can be found on Microsoft's support website.

1. Insert the Windows installation media (either through USB or CD/DVD) and power on the system. Press the F12 key whenever the following Lenovo splash screen appears.

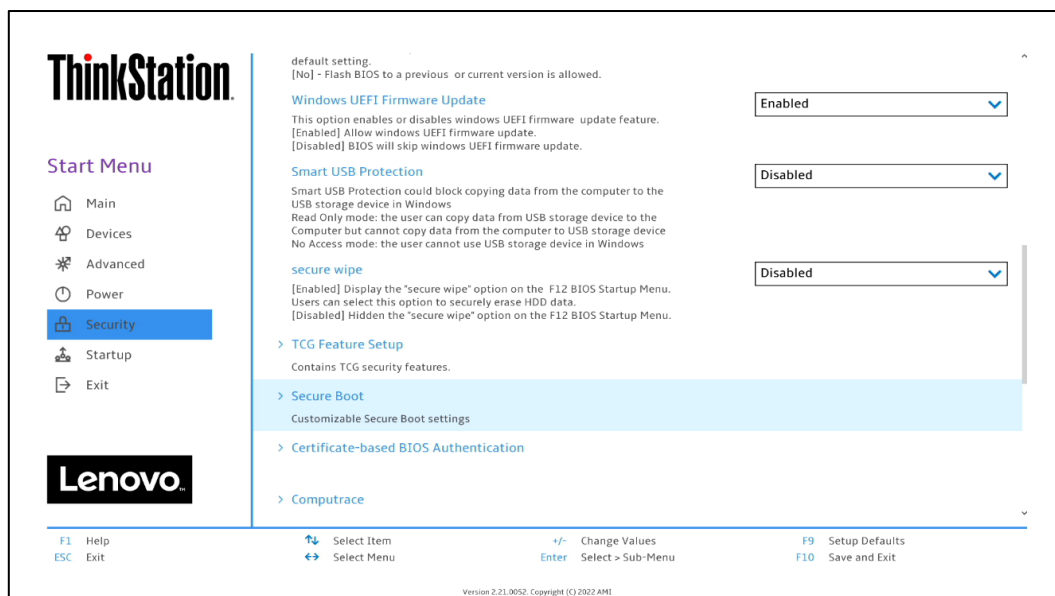


2. Select the proper Windows bootable installation media option from the F12 boot menu. Only bootable drives will be visible in this menu. If the system successfully boots to the installation media, proceed to [Section 2](#).

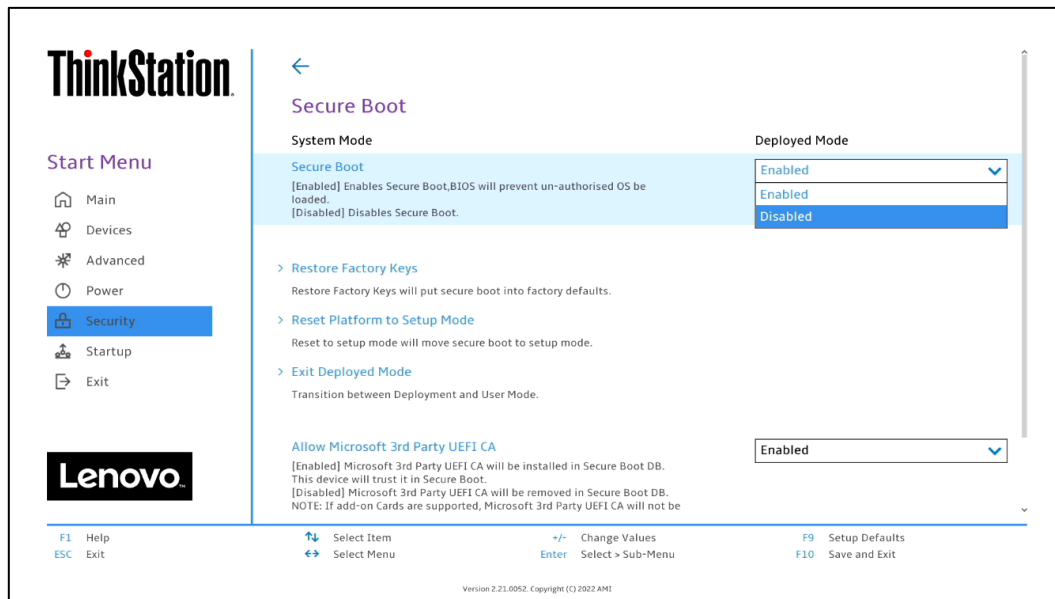


Note: Legacy boot is not supported on P4. Only UEFI bootable options will be available.

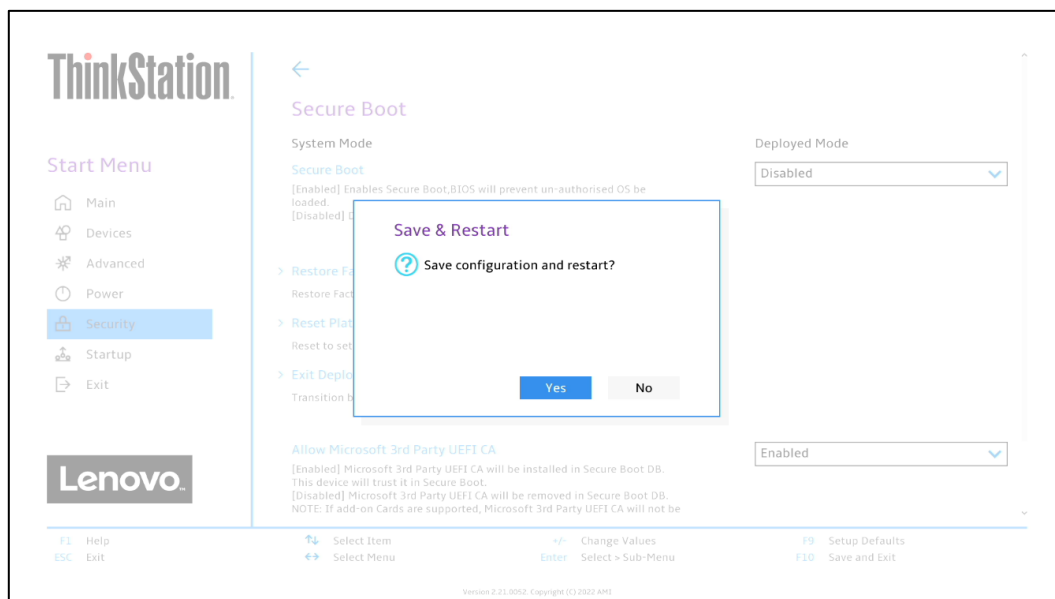
3. If the system fails to boot to the selected startup device, it may be necessary to disable Secure Boot. BIOS can be accessed by pressing “F1” on the Lenovo splash screen. From the main menu, select “Security”, then scroll down the list on the right and select “Secure Boot”.



4. In the drop-down box select “Disabled”. It is highly recommended to turn this option back to “Enabled” once the Windows installation is completed.

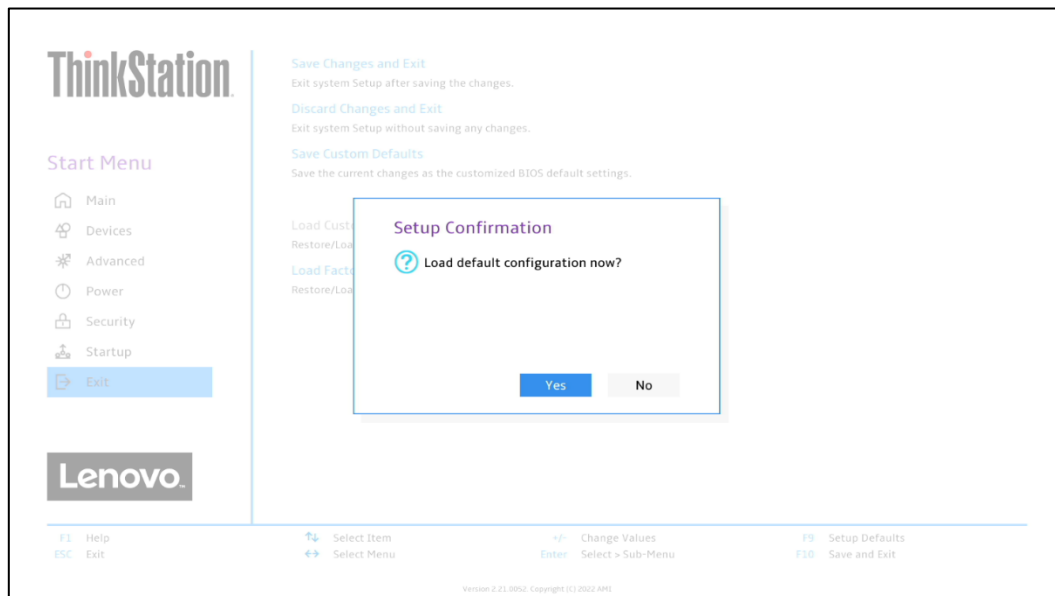
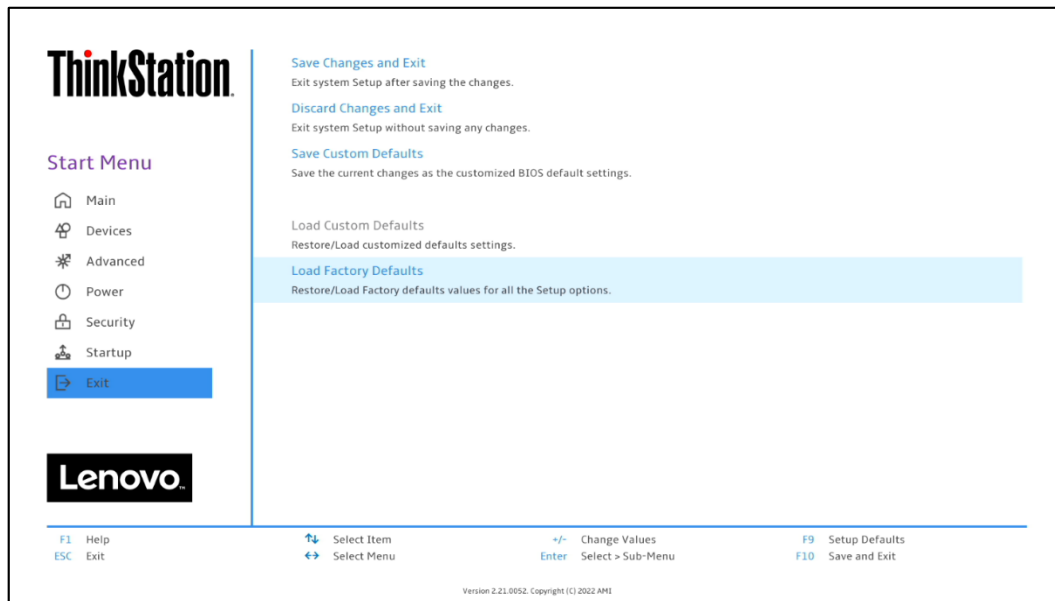


5. Select F10 to “Save and Exit” BIOS.



- If the user is still encountering issues booting into the Windows Installation Media, enter BIOS on startup and press F9 to load the factory default BIOS settings or select the “Exit” menu option along the left column and then select “Load Factory Defaults” and select “Yes” at the prompt. Save the change by pressing F10.

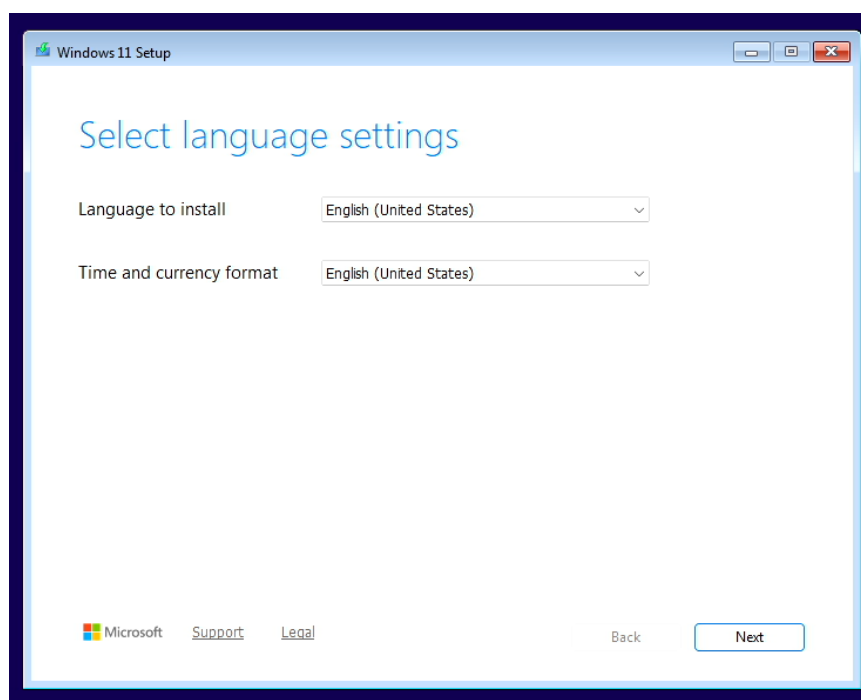
Note: This will reset any BIOS setting changes made by the user.



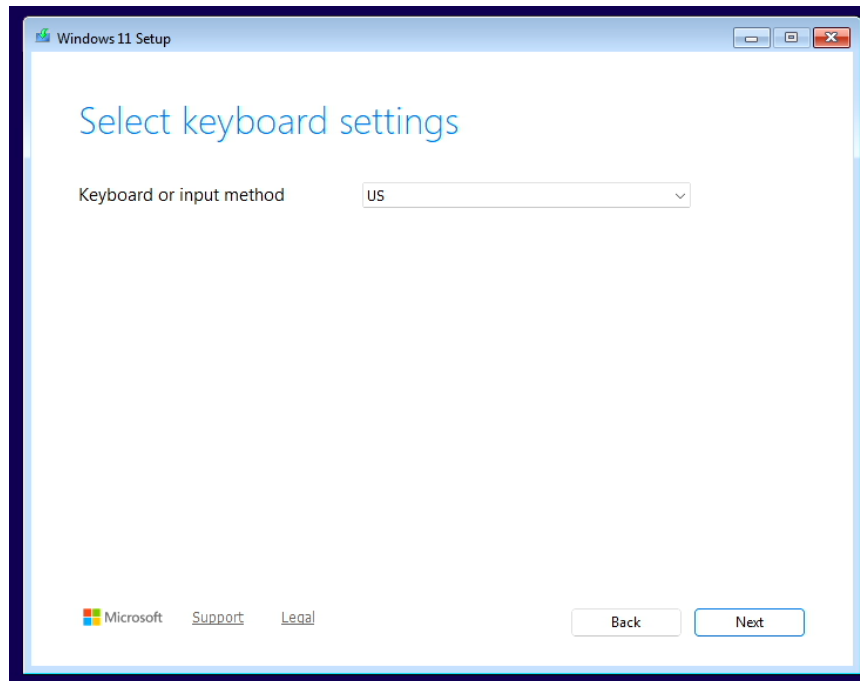
Section 2 – Windows Installation

Follow the steps below to proceed with the Windows 11 installation. The steps below use the Windows 25H2 Installation Media available from [Microsoft](https://www.microsoft.com/software-download/windows11).

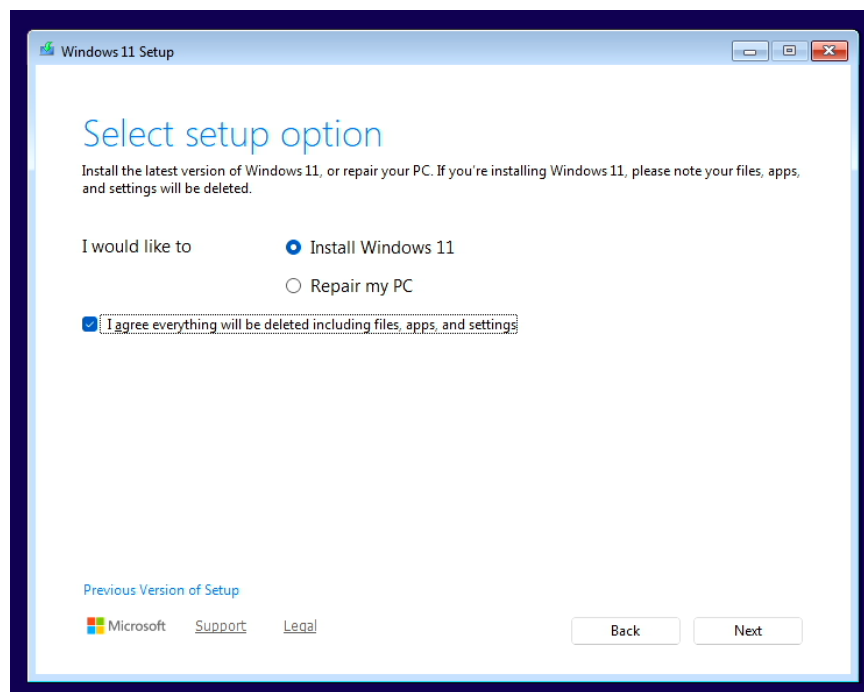
1. Select the preferred Language and Time, then select “Next”.



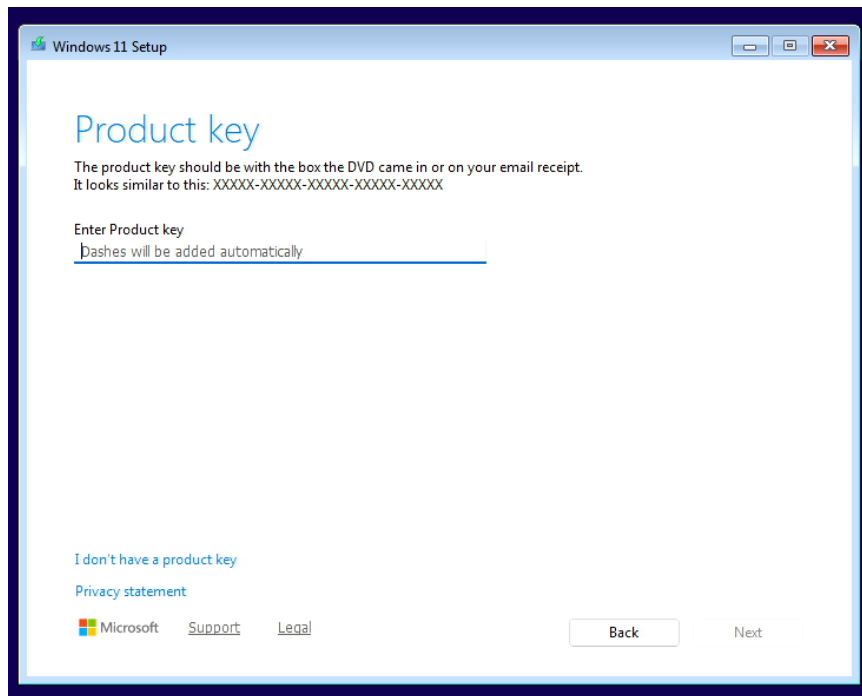
2. Select the preferred keyboard layout, then select “Next”



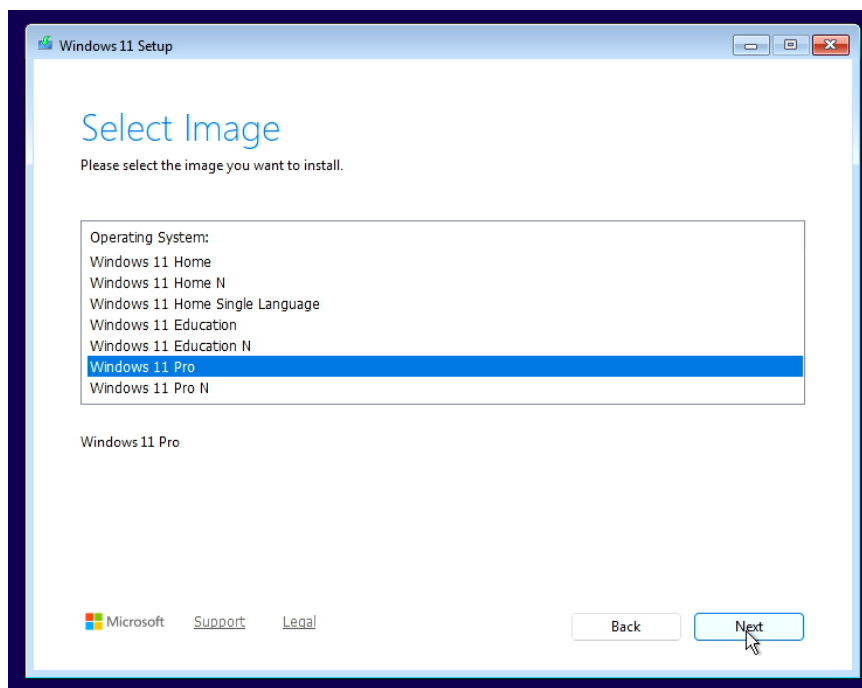
3. For “Select Setup Option”, select “Install Windows 11” and agree to the checkbox. At this step it is also possible to load the previous version of Windows setup at the user’s preference. This document will continue with the updated version.



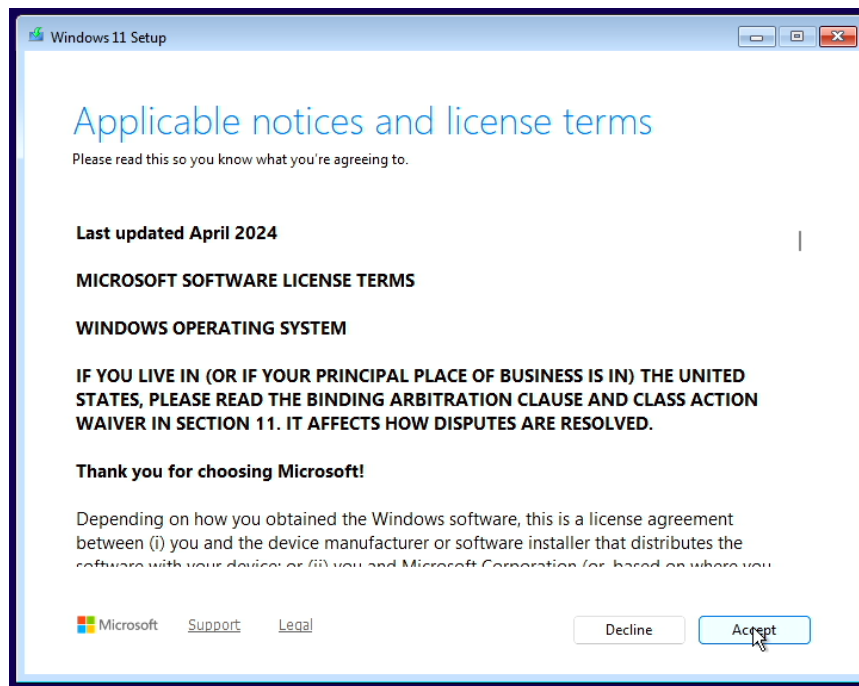
4. Enter the product key to activate Windows and press “Next”, or press “I don’t have a product key” to enter a valid product key later after the operating system has been installed.



5. Some Windows installation media may have the option to select which edition should be installed.

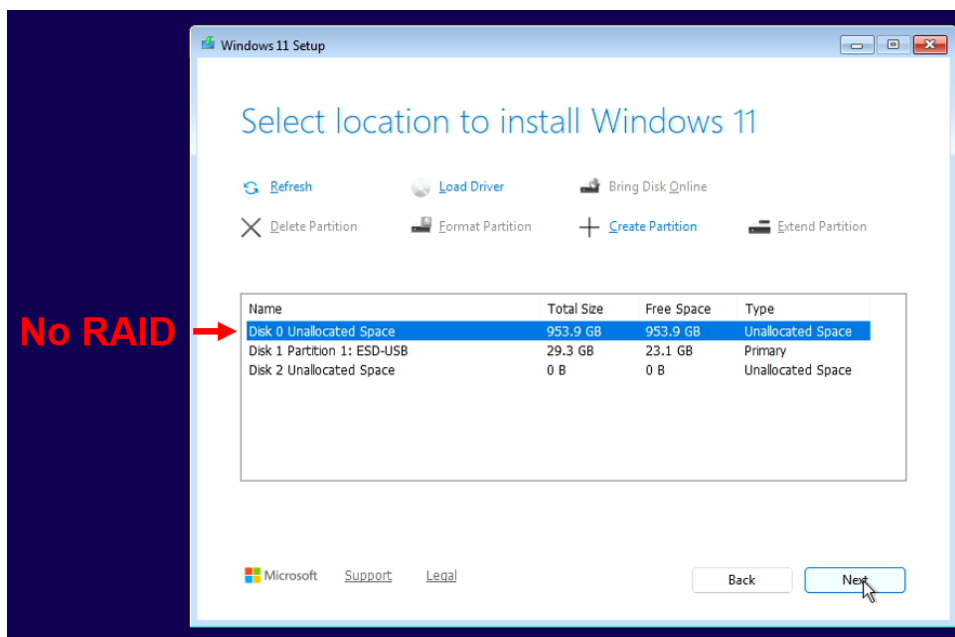
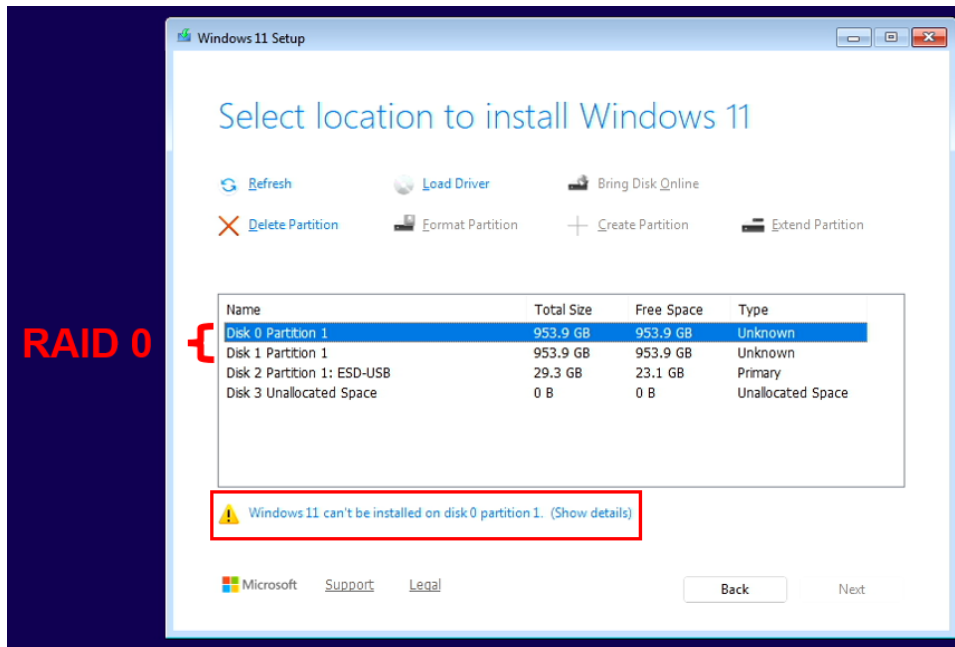


6. Check the box next to “I accept the license terms” and select “Next”.

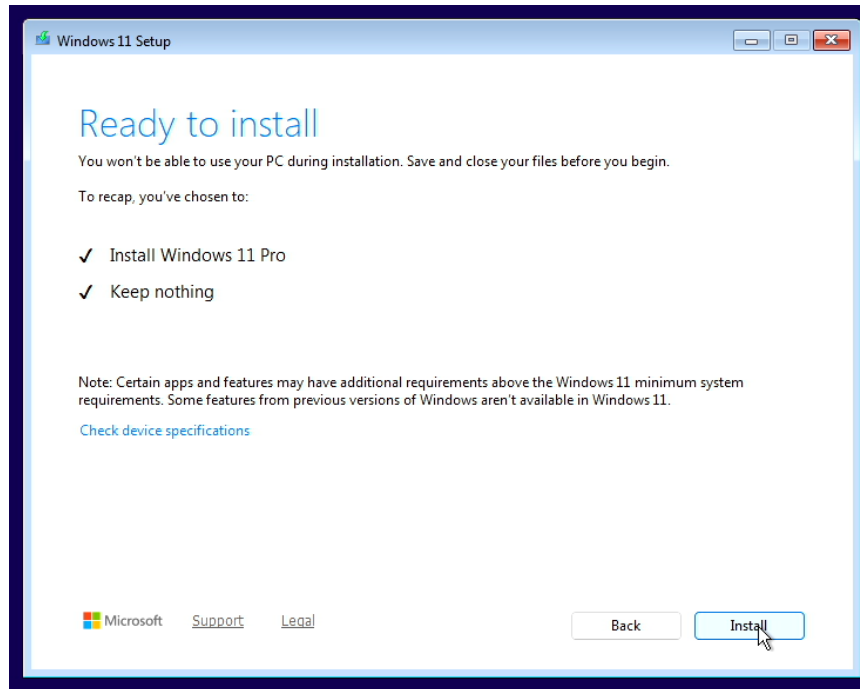


- If the user wishes to install Windows on drives configured in RAID, they may encounter missing or unselectable volumes, as seen below. Jump to [Section 3](#) for instruction on how to download & install supported RAID drivers to allow Windows to see the RAIDed volumes.

If the target drive is not RAIDed, select the unallocated space, and click “Next”.



8. Confirm the selections that have been previously chosen to proceed with the installation.

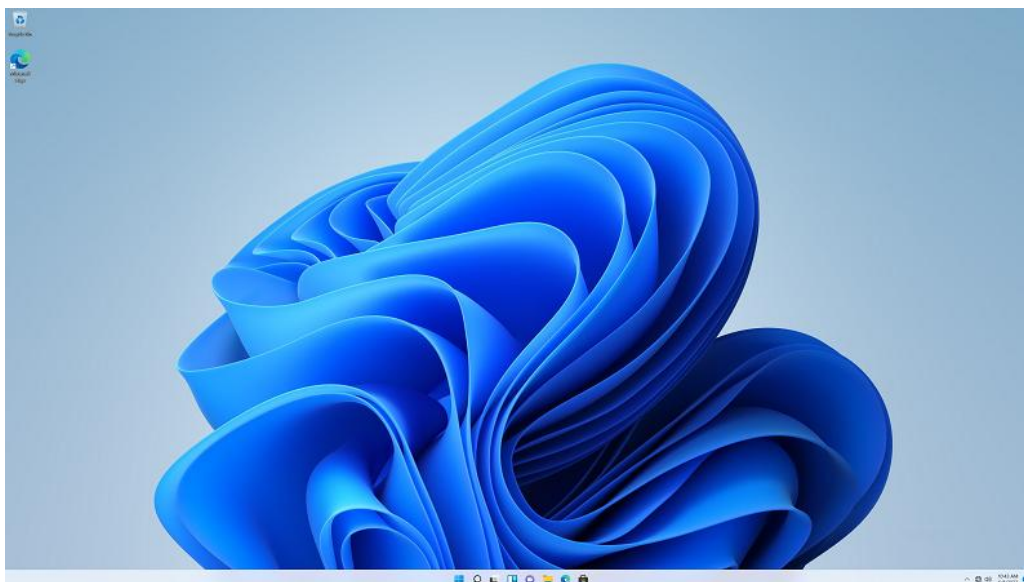


9. After the installation completes, the system will automatically reboot. The system should boot into Windows setup for the user to select regional and privacy preferences. The screens for this process can change periodically as newer versions of Windows are released. Make the appropriate personal choices for each selection to complete the Windows setup.

Note: It may be necessary to remove the installation media to prevent the system from restarting the Windows installation.

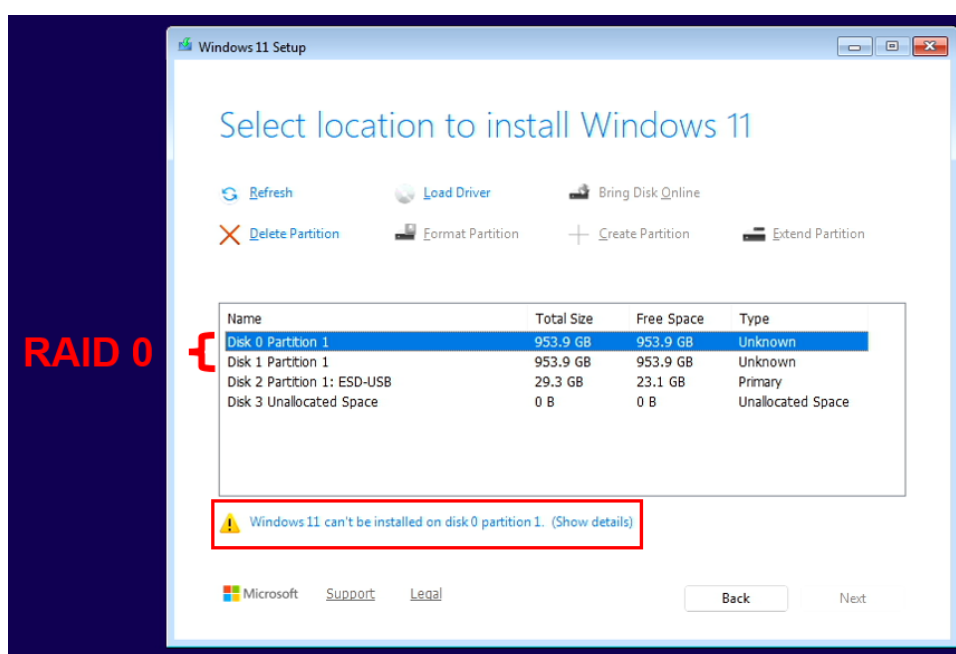
At this point, it will be necessary to download and install the appropriate device specific drivers. With a clean Windows installation these will typically include the chipset device driver, GPU video driver, and the appropriate network device driver. The user can check Window's Device Manager for any unidentified devices that need drivers. Any additional peripherals added to the system should also be configured with the proper device drivers. The device drivers for all Lenovo systems and supported peripherals can be found on the Lenovo Support website.

Windows 11 Default Desktop



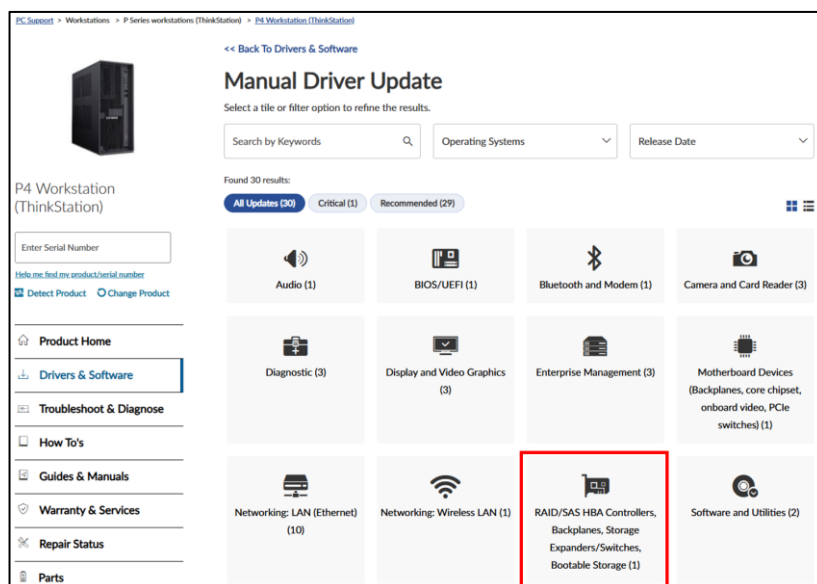
Section 3 – RAID Driver Installation

This section will provide instructions on how to install supported AMD RAID drivers during the Windows Installation process, which would allow RAIDed drive volumes to be selectable during the OS install. If the user is using an unsupported RAID controller, they will need to acquire the driver from the controller vendor or manufacturer.

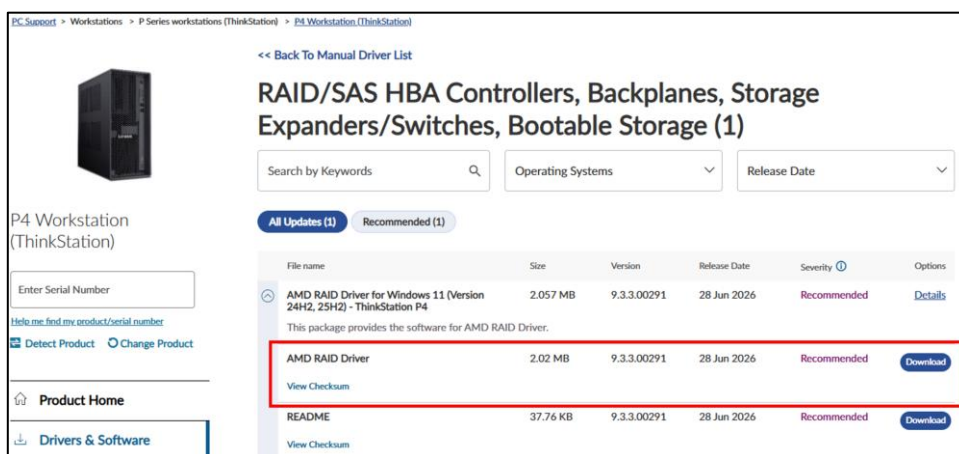


For this process, the user will need a second system with a working OS and internet connection to download the driver package from the Lenovo Support site. A working USB drive will also be required. The Windows installation USB can be used if a second USB is not available, though it will require the original system to be safely turned off before removing the USB. Furthermore, the install process will restart from the beginning once the USB is reinserted & booted to later.

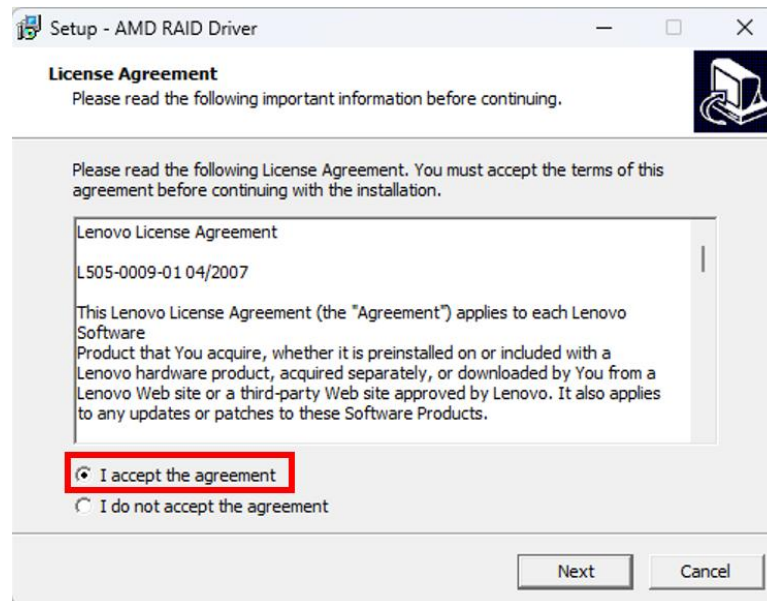
1. On the second system, use a web browser and go to the Lenovo Support site, search for the correct system by name and machine type (MT, typically combinations of four numbers and/or letters). Once found, select “Drivers & Software” and “Manual Driver Update”. Select “RAID/SAS HBA Controllers, Backplanes, Storage Expanders/Switches, Bootable Storage”.



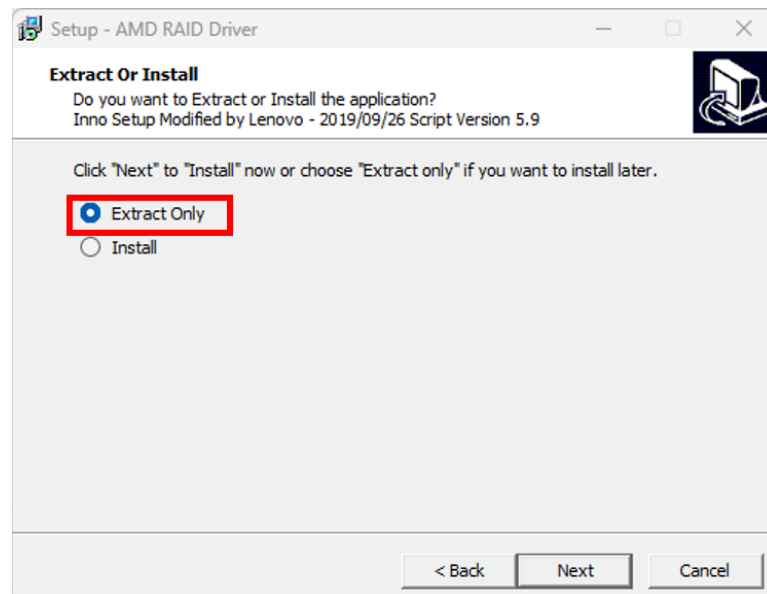
2. Select the corresponding driver for the Operating System (Windows 11 in this case) being installed.



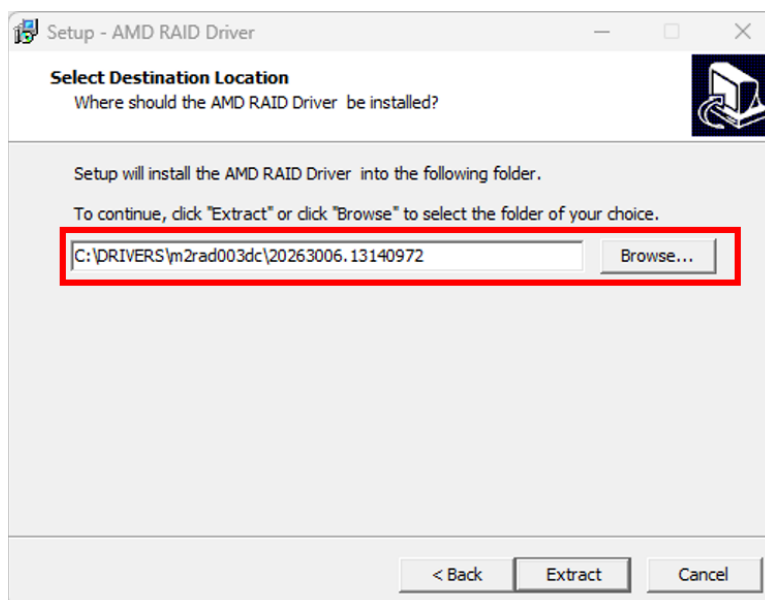
3. Run the driver executable and select “I accept the agreement”, then click Next.



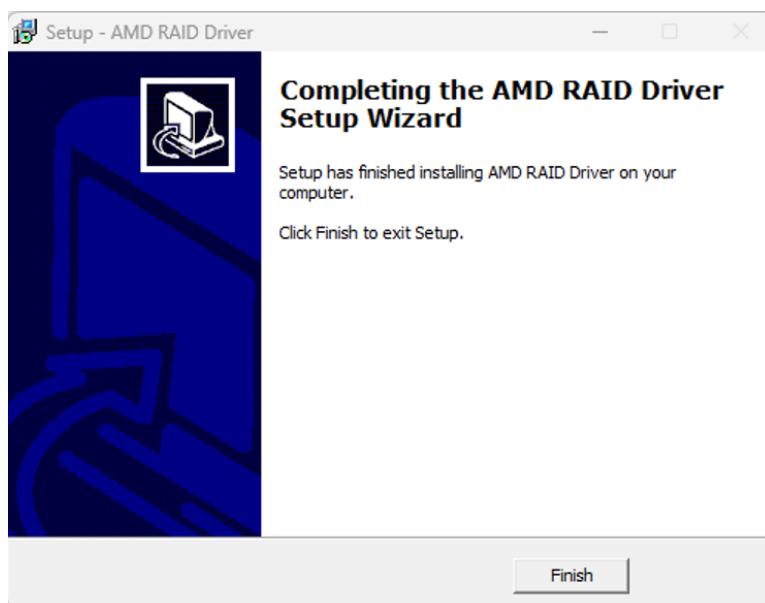
4. Select “Extract Only”, then Next.



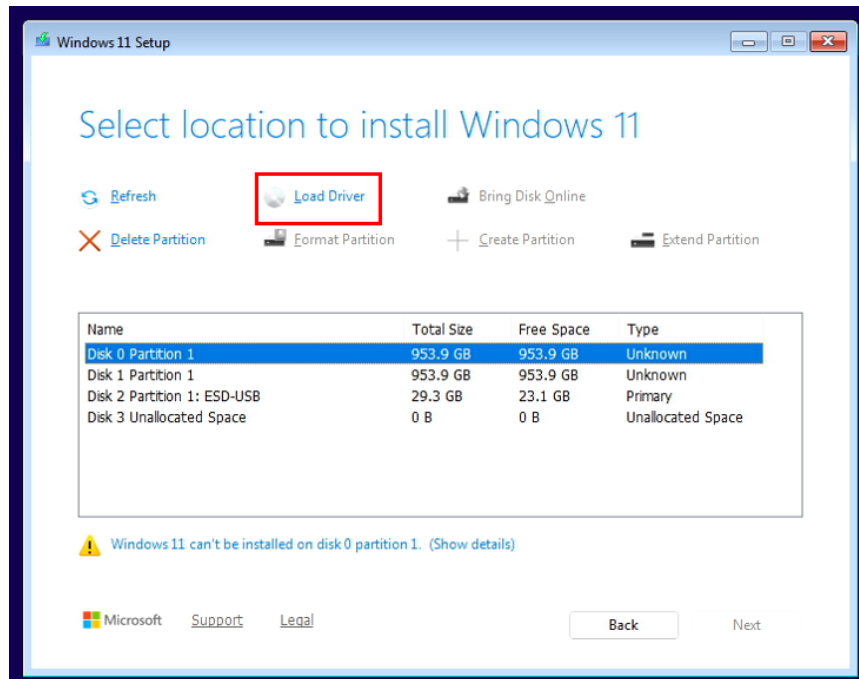
5. If not done already, insert a USB into the second system. If one is not available, the original system can be shut down and the Windows Installation USB then ejected and inserted into the second computer. Click "Browse" to select the root or another directory to save the drivers to. Once the file path is selected, click "Extract".



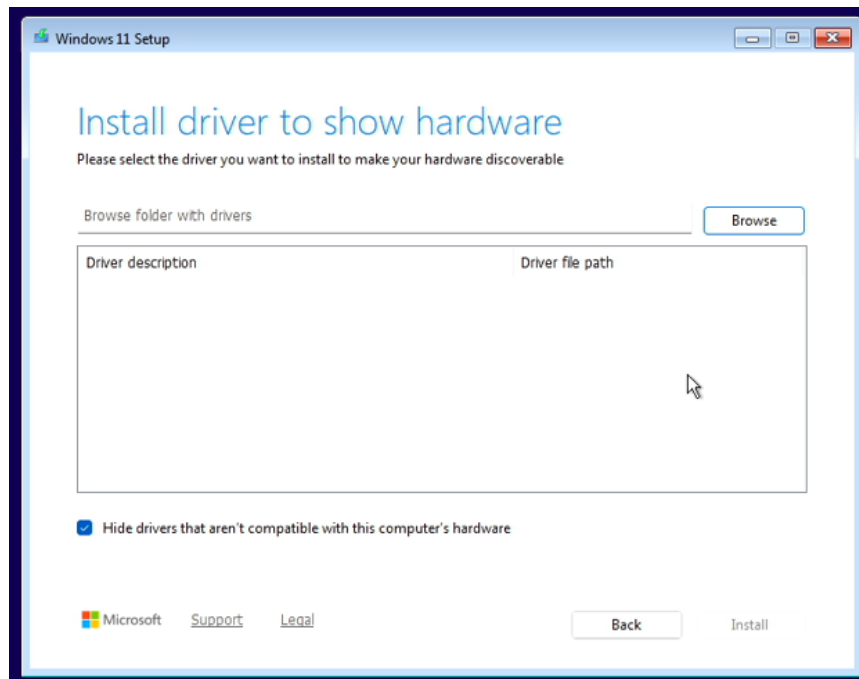
6. Click Finish. The USB key can be ejected from the second system.



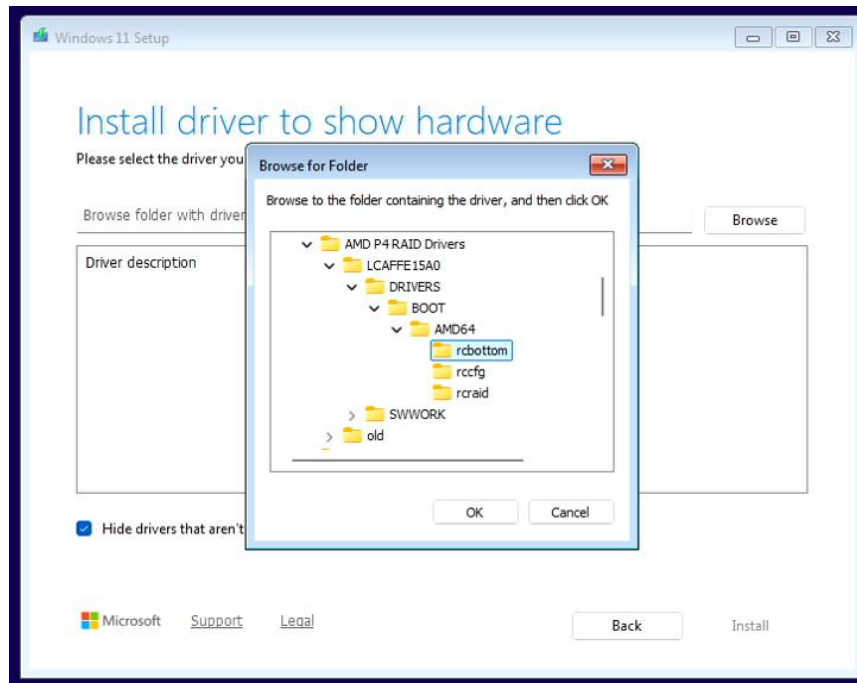
7. Insert the USB into the original system. If necessary restart the installation process with the Windows Installation Media to reach this screen again, then select “Load Driver”.



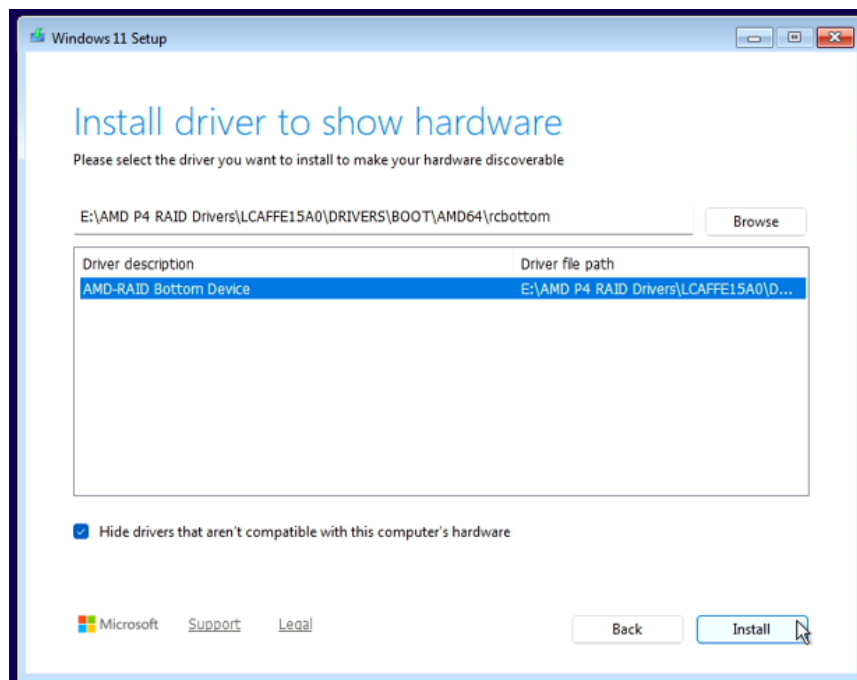
8. Select “Browse” to find the driver.



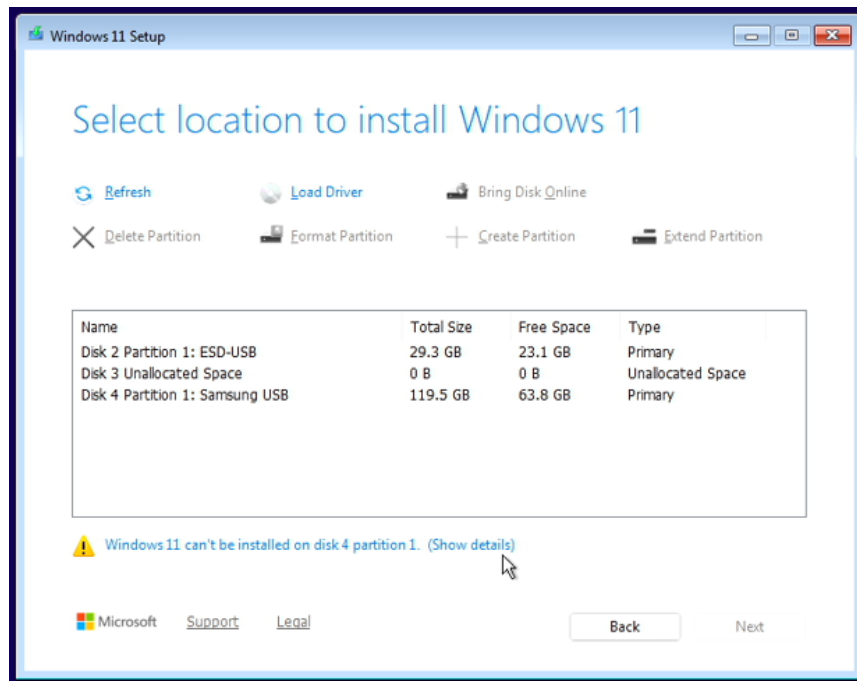
9. Expand the USB drive and select the directory that has the AMD RAID folder “**rcbottom**”. Directory names may vary based on driver versions.



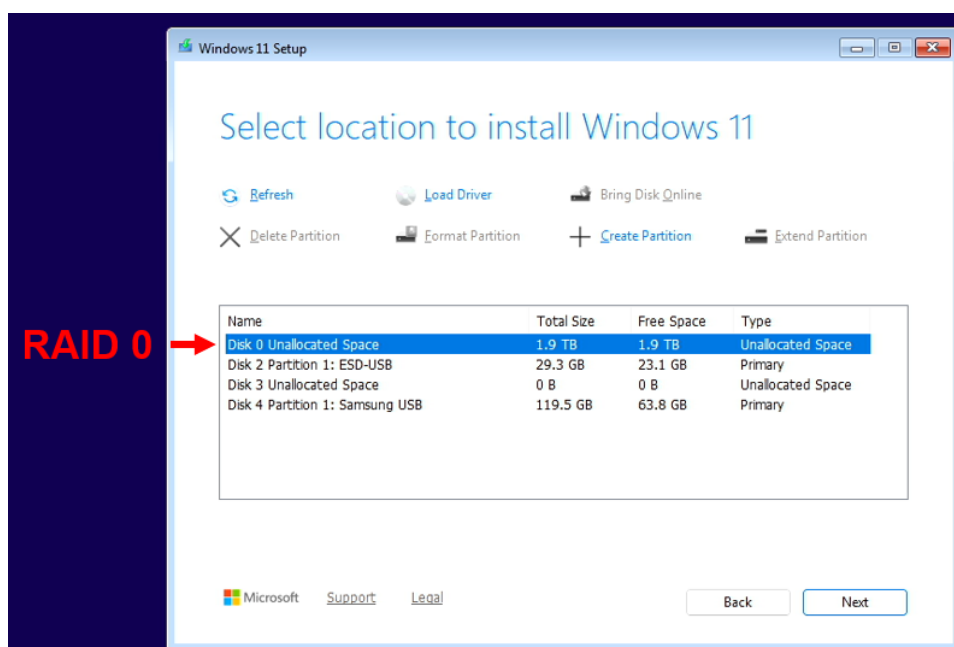
10. Verify that the system has identified the drivers necessary for the RAID array and select “Next”. Exact driver names may vary based on the system and driver version.



11. The installation process should return to the drive selection screen, however the target drives may disappear. Repeat the “Load Driver” process again with the “rcraid” folder, then again with “rccfg”. The drivers should be loaded in this order!



12. If the drivers were installed in the correct order, the RAID volume should now display as a selectable installation location. Return to Section 2 to finish the Windows installation. If the drive cannot be seen, repeat the steps in this section using a different driver if others are available.



Section 4 – Revision History

Version	Date	Author	Changes/Updates
v1.0	6/30/26	Chris C.	Initial Release