

Lenovo Secure Erase on ThinkStation

ThinkStation: P920-P720-P620-P520-P520c-P340-P348-Other Legacy Platforms



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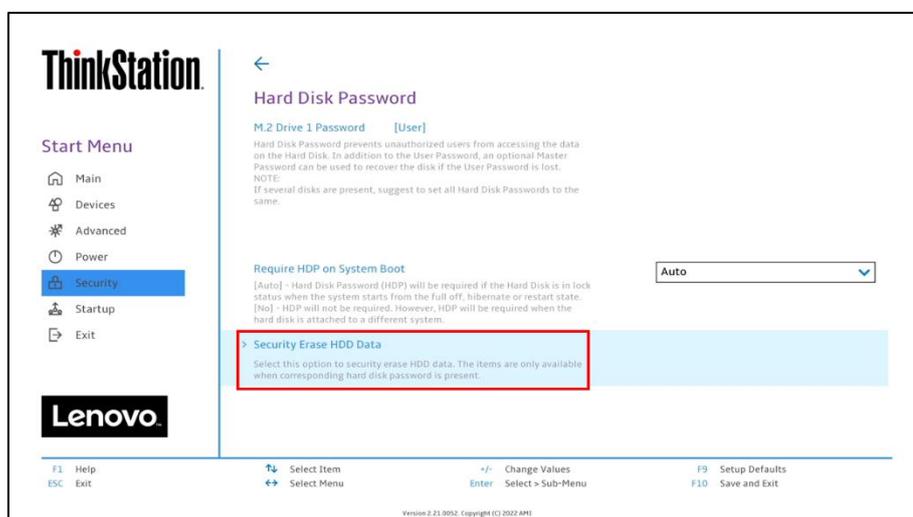


Overview

The purpose of this document is to provide guidelines for users on how to securely erase SATA and M.2 drives in Lenovo ThinkStation P920, P720, P620, P520, P520c, P340, P330 and other legacy platforms. Certain other legacy platforms may not have the Secure Erase feature.

Images in this document were taken from the latest platforms with graphical BIOS setup screens. BIOS interfaces on older platforms may appear different than the images shown.

ThinkStation users can find Secure Erase by looking in BIOS under the Security tab and entering the Hard Drive Password feature. Secure Erase is available for drives utilizing the onboard controller.



Section 1 – Prepare Drive for Secure Erase on ThinkStation

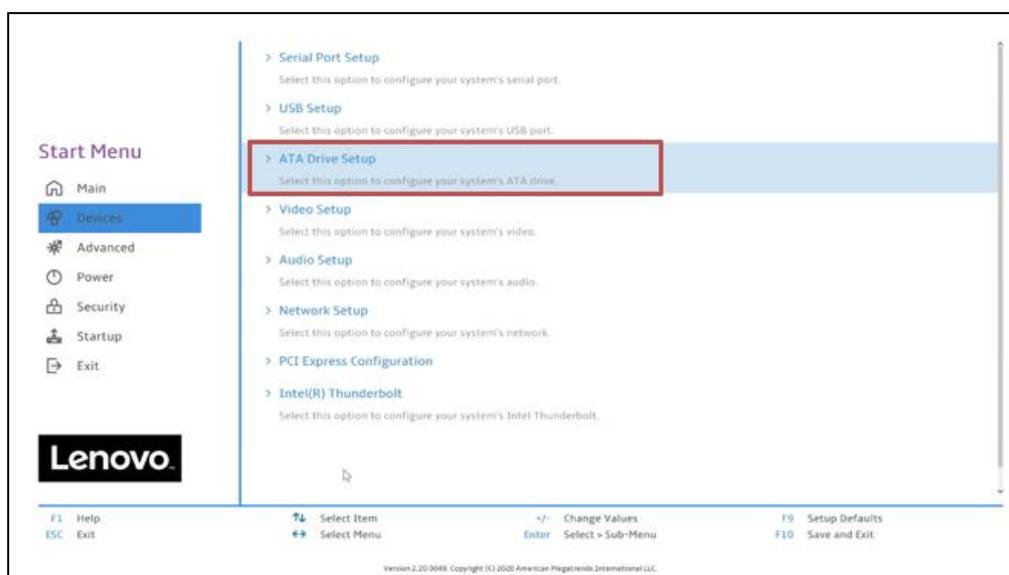
The following instructions will cover the steps to prepare SATA HDDs/SSDs and M.2 drives for secure erasure.

To use the Secure Erase feature, any drive the user wishes to be erase must be installed in the system either through onboard ports or add-in expansion card.

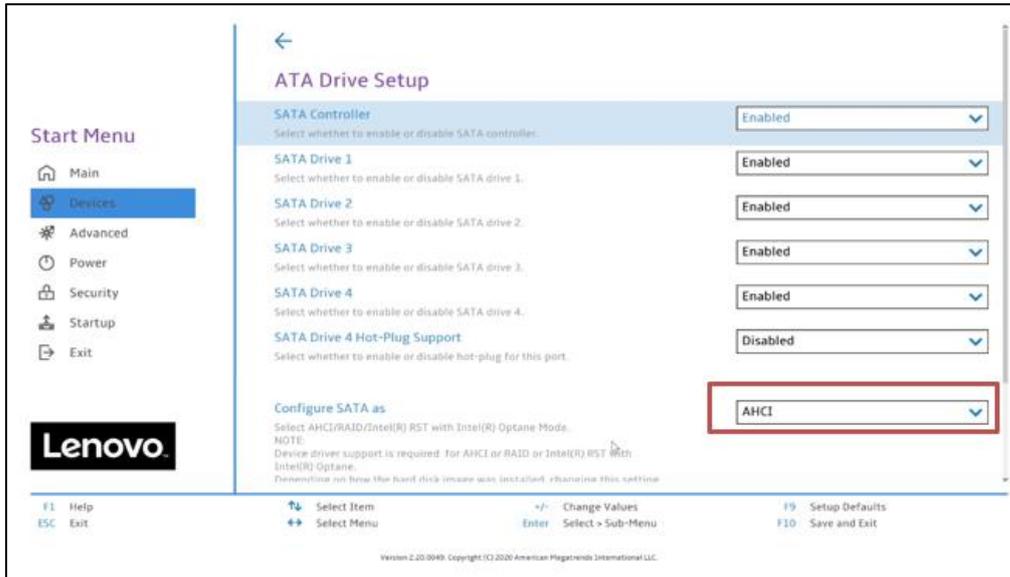
To avoid erasing incorrect drives, Lenovo recommends users remove any drives not targeted for erasure to ensure only the intended drive is erased. If the user does not wish to remove any drives from the system, it is highly recommended to externally back up data from non-targeted drives to avoid accidental loss of data.

Lenovo recommends setting the system's storage mode to AHCI when performing Secure Erase. Complications may arise while attempting to erase RAID array member drives. For this reason, targeted drives should be removed from their RAID arrays and the system set to AHCI mode before beginning the Secure Erase Procedure. Secure Erase is available for drives utilizing the onboard controller.

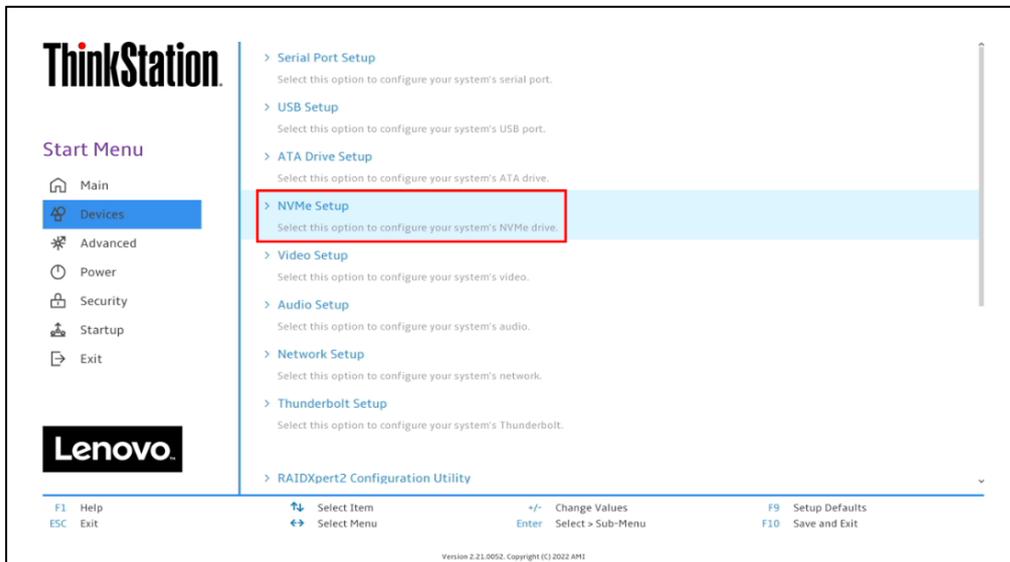
1. With the target drive connected to the system, power on the system and press "F1" at the Lenovo splash screen to enter the BIOS setup. Navigate to the "Devices" tab and select the "ATA Drive Setup". This may appear as "PCH SATA Configuration" on some systems. Press enter.



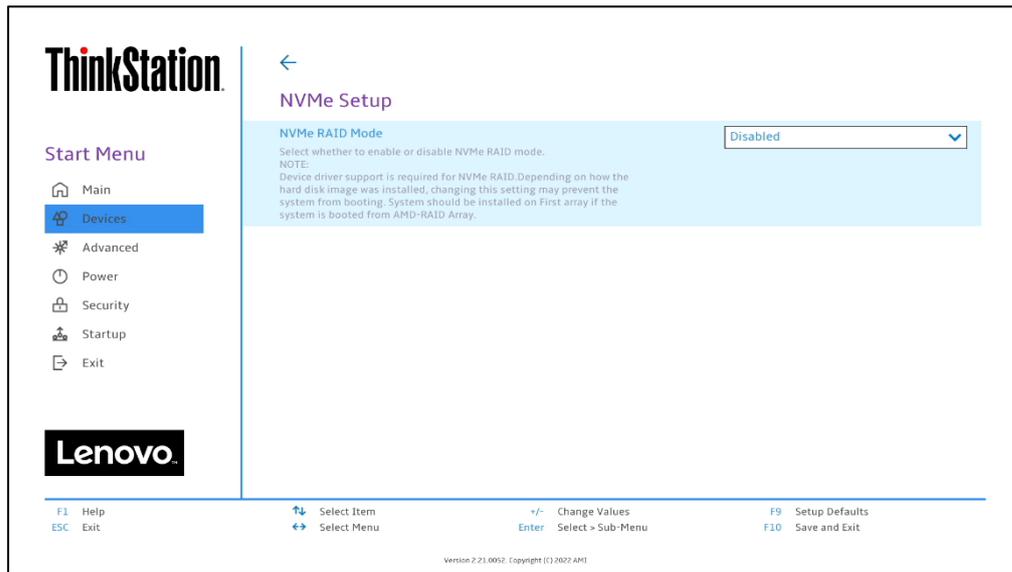
2. Make sure the “Configure SATA as” option is set to “AHCI”.



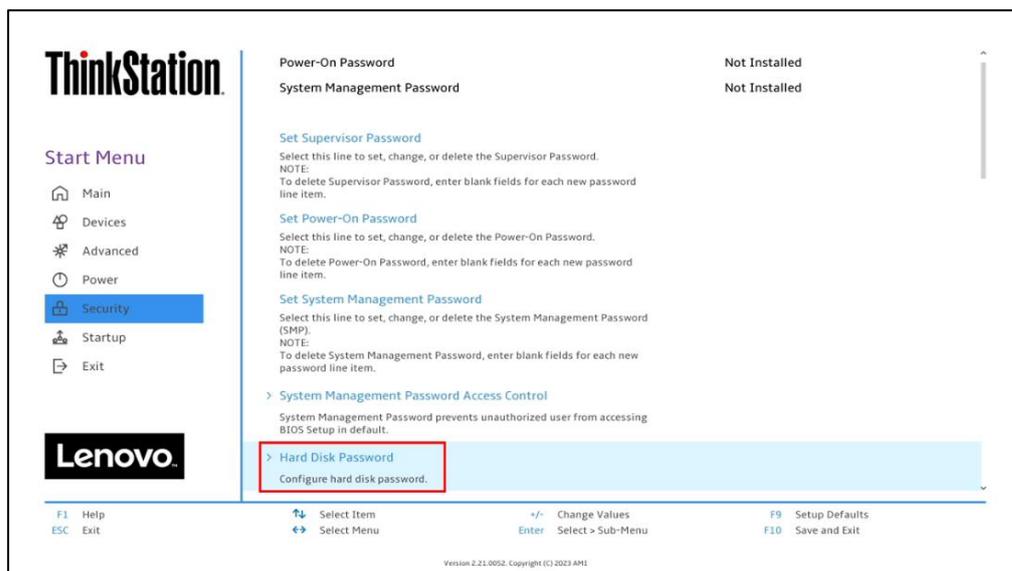
3. [P620] P620 users will also need to navigate to the “Devices” tab and select the “NVMe Setup”.



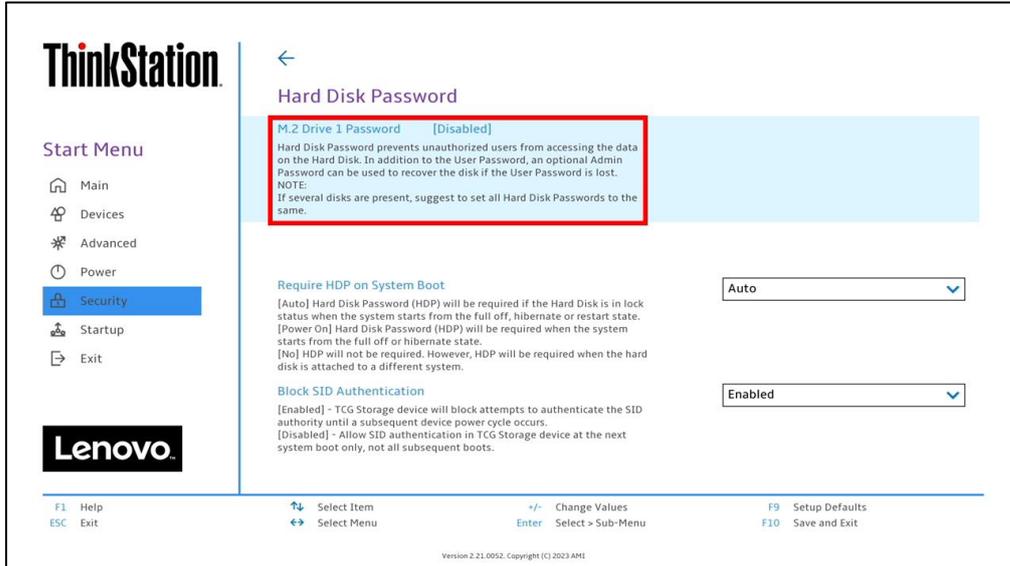
4. [P620] Make sure the “NVMe RAID Mode” is set to “Disabled”.



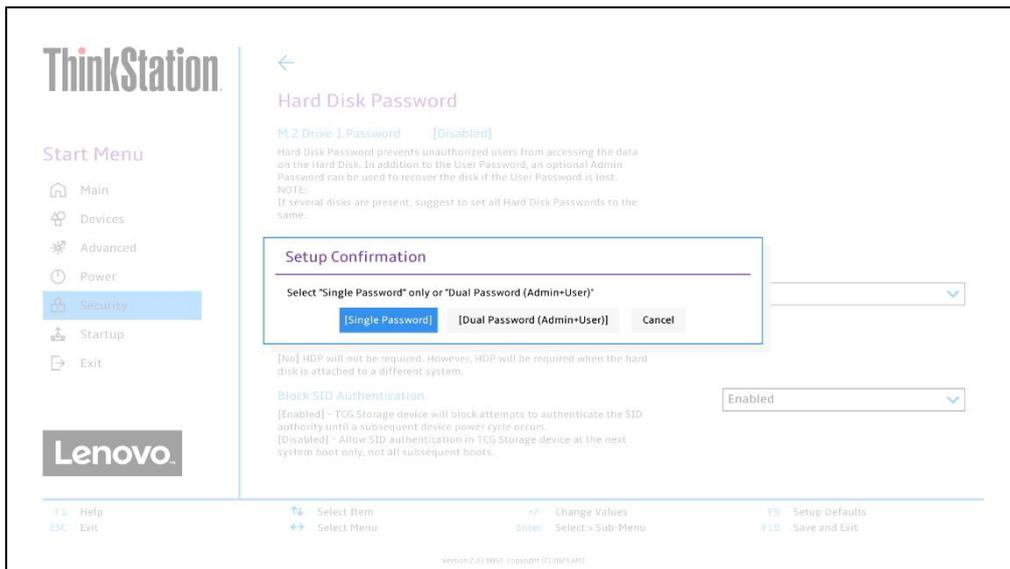
5. Navigate the “Security” tab. Select the “Hard Disk Password” option, then press enter.



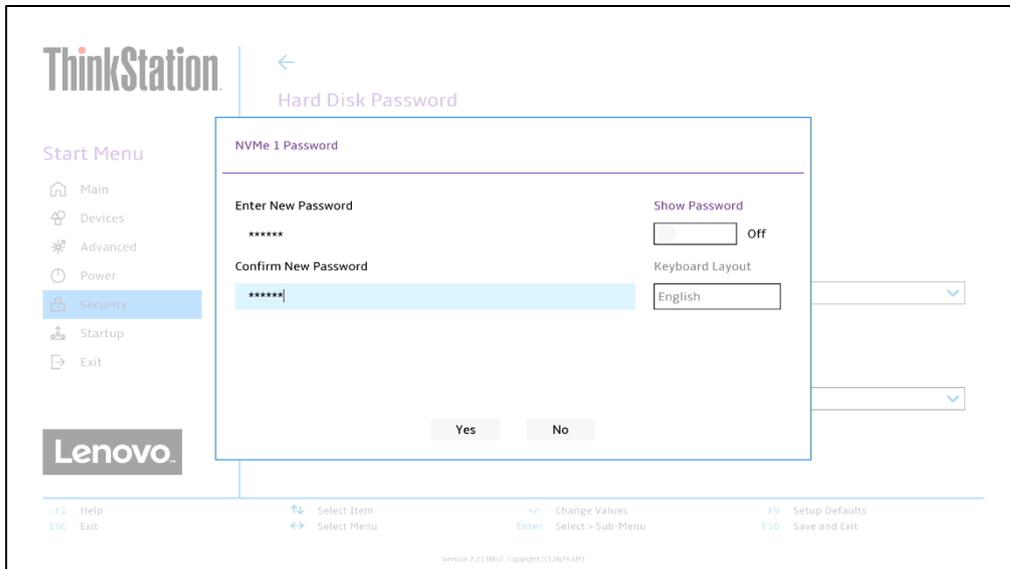
- To perform Secure Erase, a password must be assigned to the drive. If a password is already assigned to the drive, the rest of this Section can be skipped. Otherwise, highlight “SATA Drive X Password” or “M.2 Drive X Password” (Where X = drive number to be erased, based on the port where it is installed) and press enter.



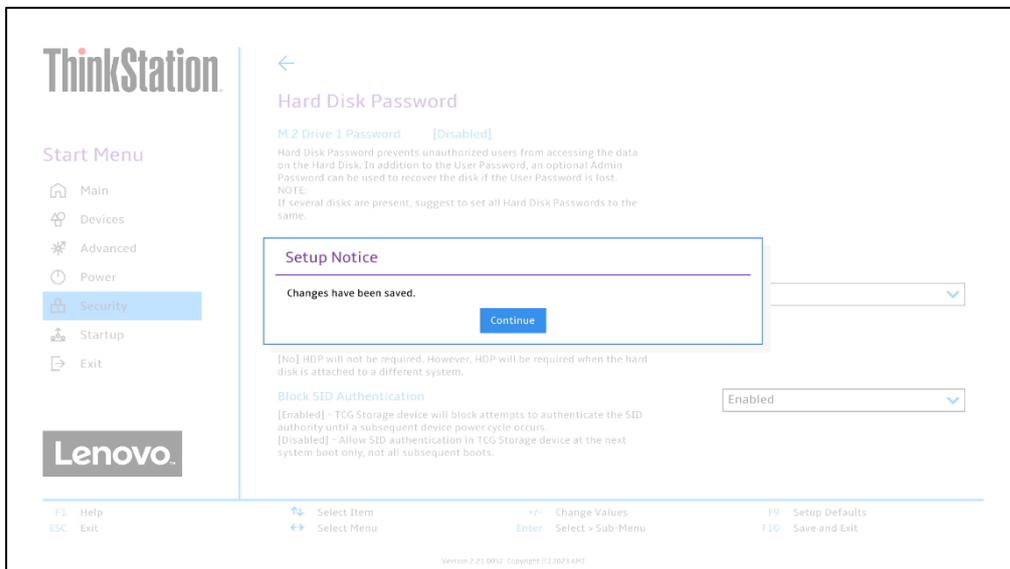
- A “Setup Confirmation” box will appear. Select “User” or “Single Password” and press enter. The dual password option may also be selected, however only the single user password is required for the Secure Erase feature.



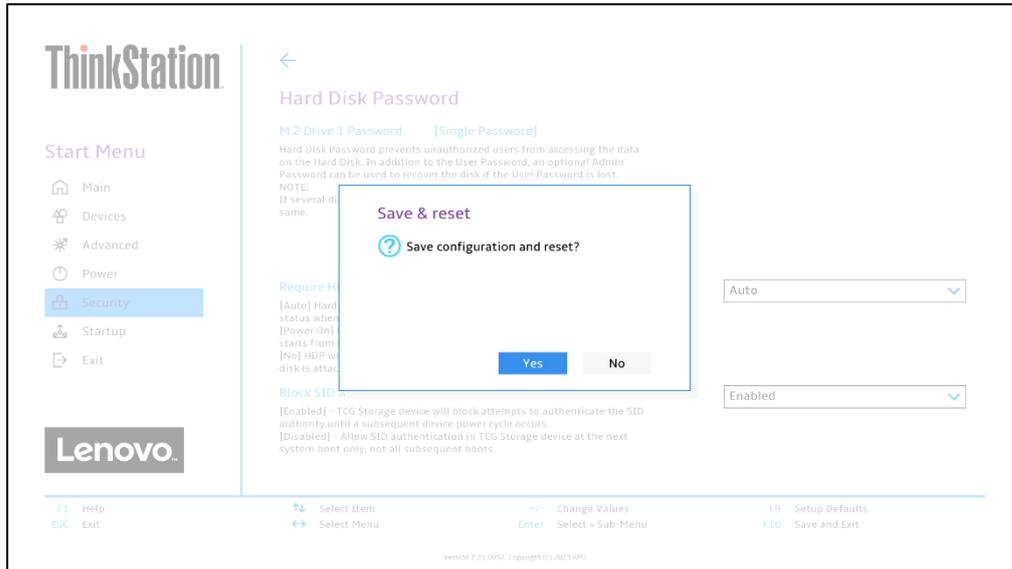
- Choose a temporary password and confirm it. **Write down this password as it will be needed later.** Select “Yes” to continue. This password will also be erased alongside all data on the drive.



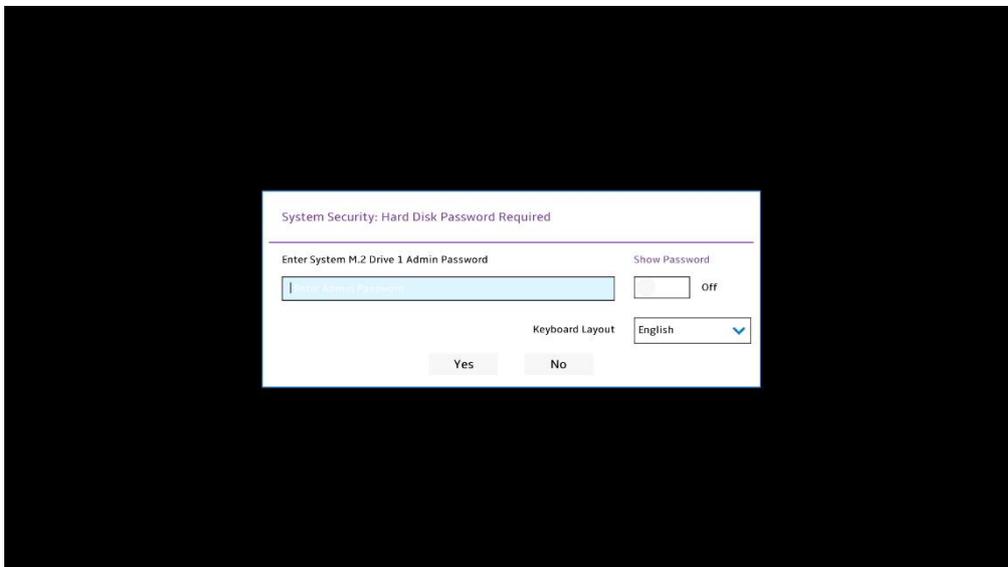
- A “Setup Notice” box will be prompted, displaying that the changes have been saved. Press “Continue”.



10. At this point, the system needs to be rebooted for the changes to take effect. Press “F10” function key to save and exit the BIOS setup.



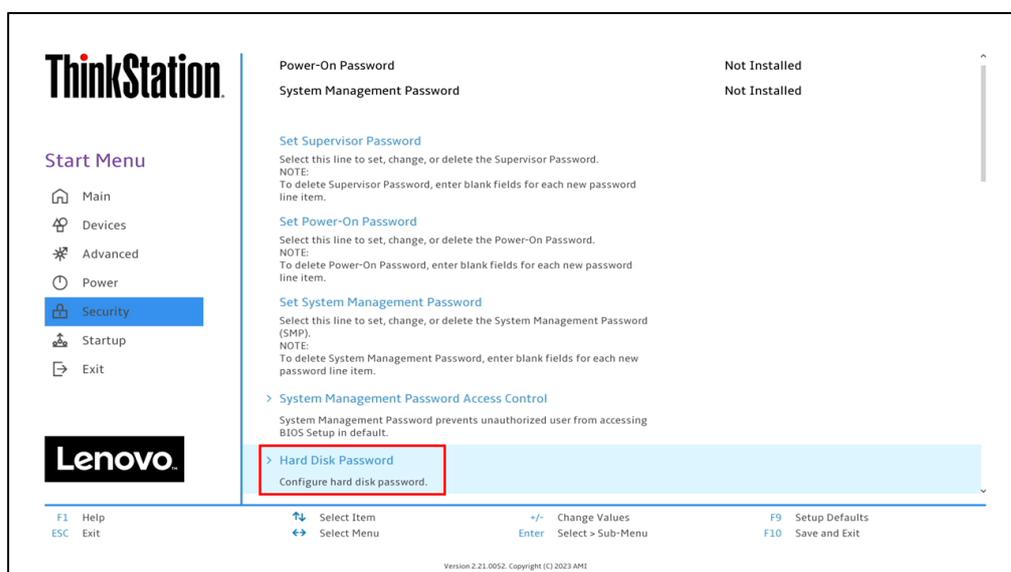
11. Once the system starts to reboot, press “F1” at Lenovo splash screen to enter the BIOS setup again. If the system prompts to enter the “Hard Disk Password”, enter the assigned password.



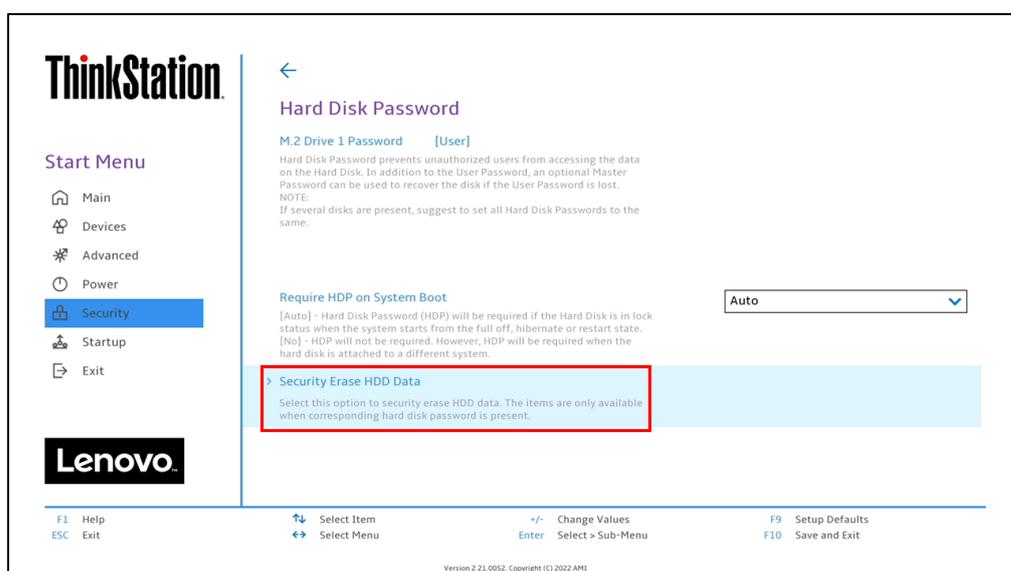
Section 2 – Secure Erase on ThinkStation

The following instructions will cover the steps required to use ThinkStation BIOS to securely erase SATA HDD/SSD and M.2 SSD.

1. In the BIOS setup, navigate to the “Security” tab and open “Hard Disk Password” option.

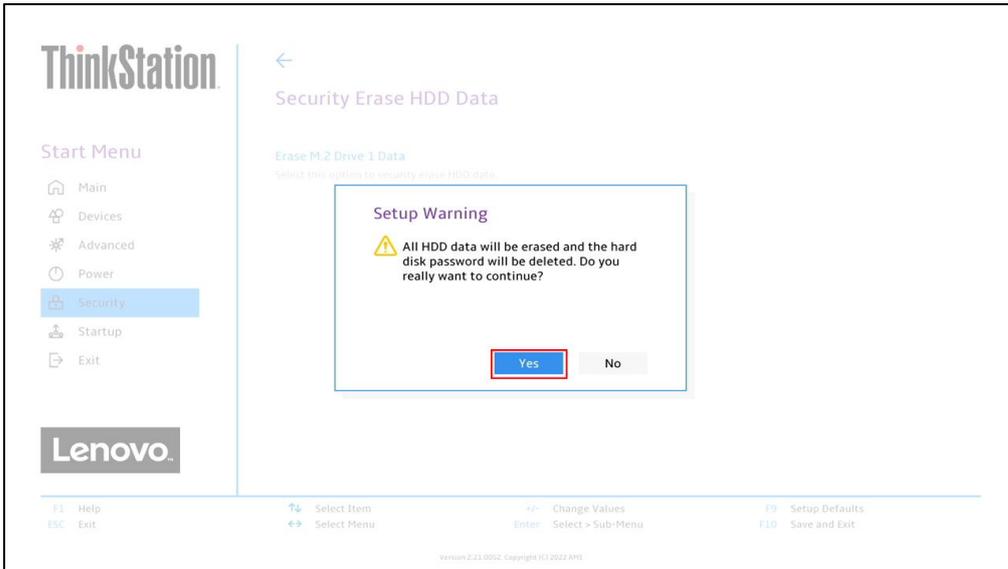


2. Highlight the “Security Erase HDD Data” and press enter. Select “Erase SATA Drive X Data” to wipe the drive.





3. A “Setup Warning” box will appear as a final warning to the user before erasing the data from the drive permanently. Select “Yes” to proceed.



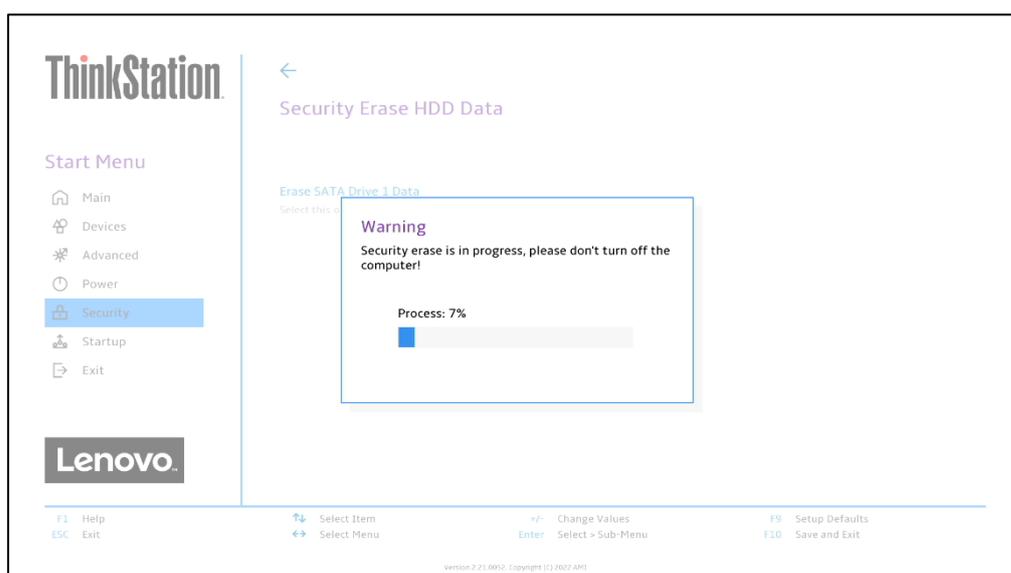
- Input the temporary password, and press enter.

Warning: Proceeding with this step will erase all data from the selected drive and cannot be undone.

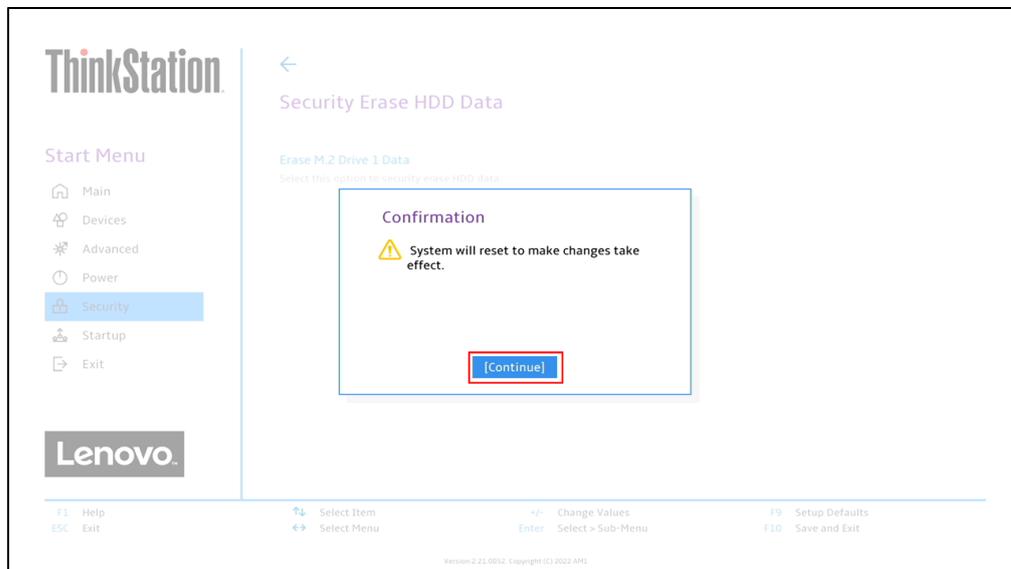


- A progress bar will appear to display the secure erase progress. The process should be relatively quick for M.2 and SATA SSDs. Spinning HDDs will take much longer. Total capacity of the drive will also affect duration.

Note: Users should not unplug the system during this process.



- Once the Secure Erase process completes, a new confirmation box will be prompted stating “System will reset to make changes take effect”. Press “Continue” to reboot the system.



- At this point, the erase procedure is complete. The temporary password on the drive is now erased. The system can be powered down, and the drive can safely be removed from the system. Repeat the process for any additional drives that might need to be securely erased.

Section 3 – Revision History

Version	Date	Author	Updates
1.0	03/22/2021	SP	Initial launch release
1.1	7/26/2023	Chris C.	Updated information