How To Securely Wipe An SSD In A Dell Computer

Article Content

Symptoms

Dell Data Wipe is a feature in Dell Enterprise Client BIOS that gives our customers the ability to invoke a data wipe of the internal storage devices in their system. This allows efficient erasure for re-purpose or redeployment using industry standard data wipe capabilities already supported by Dell storage devices.

Since customer data is a priority for Dell we designed this feature for maximum compatibility and minimal potential for unintentional data erase.

- Supports internal storage devices only: SATA HDD, SSD, and eMMC depending on the device types supported by the system.
- Uses industry standard approved methods for data wipe such as Secure Erase for SATA and Sanitize for eMMC. See NIST Special Publication 800-88 Guidelines for Media Sanitization for more details.
- Only accessible by a physically present user. User must be physically present until drive wipe begins. (Customers can use Dell vPro Extensions for remote erase, see **Managing Dell Business Client Systems Out of Band using Intel AMT vPro** for more info on remote erase.)
- All internal drives in the system are wiped, no option to wipe only certain storage devices.

The Data Wipe feature is invoked from within BIOS Setup. At the Dell splash screen press F2 to enter BIOS Setup.

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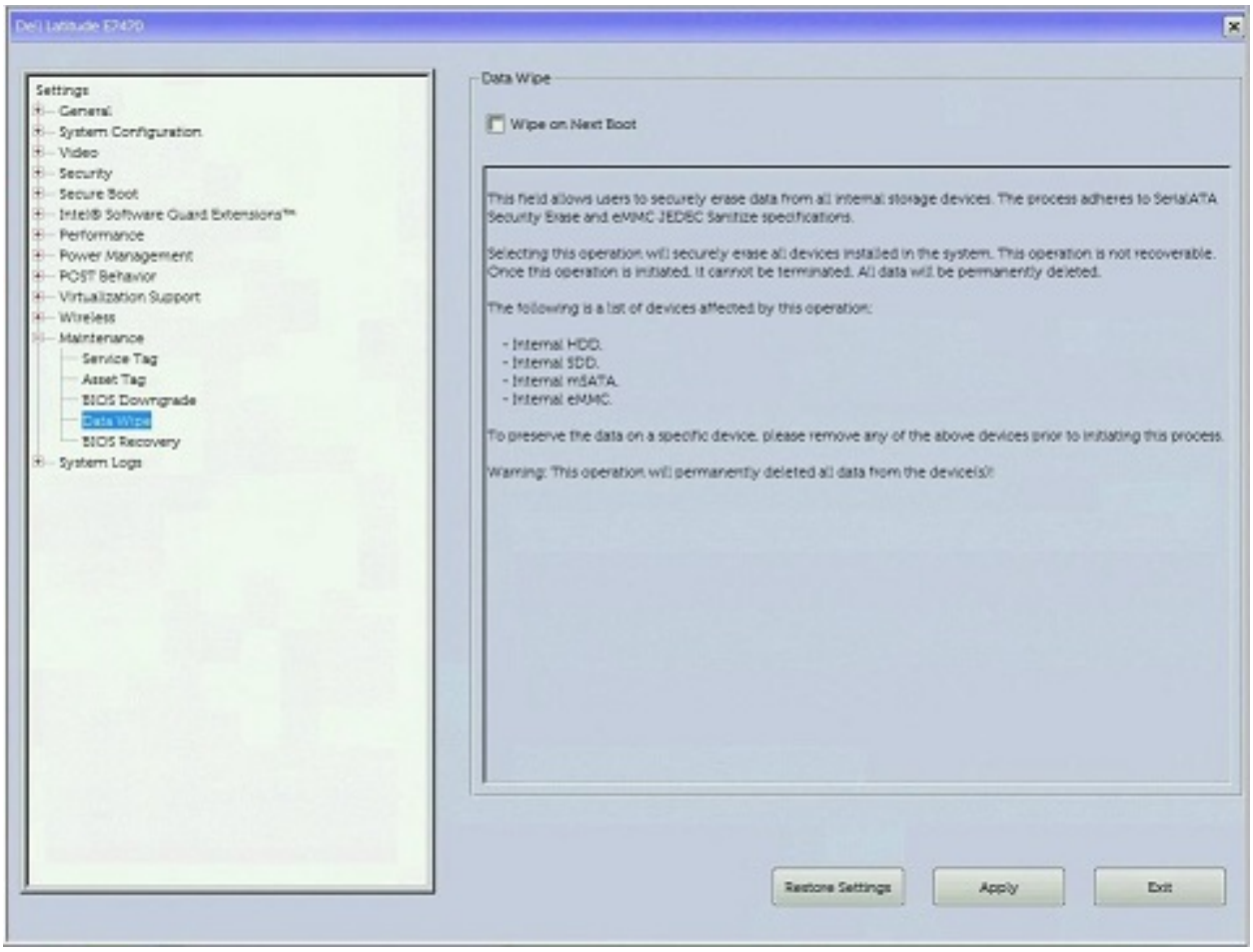

Figure 1: Data Lattitude E7470

Once in the BIOS Setup application the user can select "Wipe on Next Boot" from the ***Maintenance->Data Wipe*** option to invoke data wipe for all internal drives after the reboot.

The BIOS will ask for user confirmation twice before allowing the user to exit setup with the "Wipe on Next Boot" option selected to ensure that the user intends to erase all storage devices.

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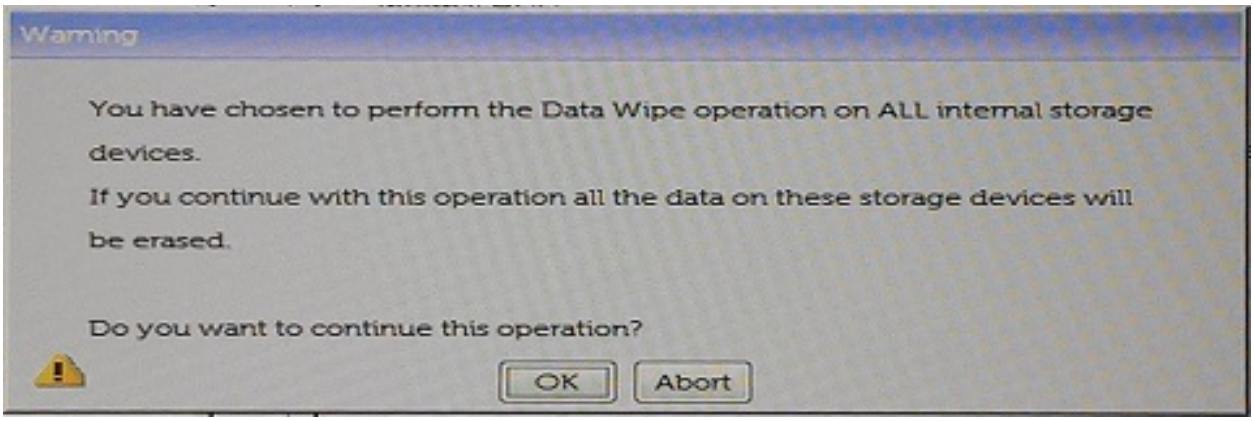

Figure 2: Data Wipe operation

As an added safety measure the BIOS will adjust the default selection for the final prompt to further enforce direct user acceptance of this operation.

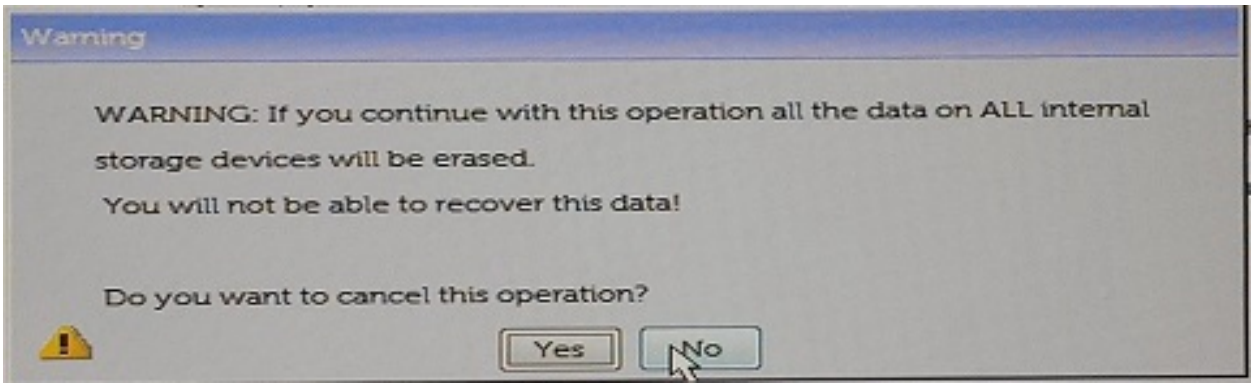

Figure 3: Internal storage devices

Once the option is successfully selected and the prompts have been confirmed, the user will exit BIOS Setup to force a reboot of the system and begin the data wipe process.

After the reboot the BIOS will once again prompt for several confirmations before sending the data wipe instructions to the customer storage devices.

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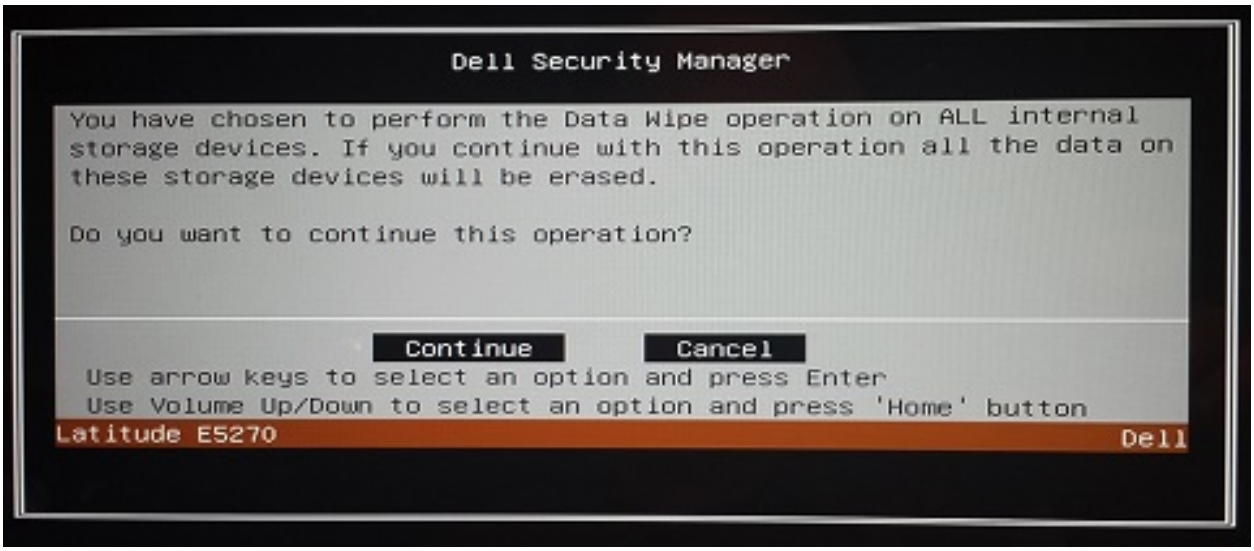

Figure 4: Dell Security Manager

The user can select to cancel the drive wipe procedure at either of these prompts and the data wipe trigger will be reset. The process must be re-initiated from BIOS Setup to restart the erase procedure, if desired.

Figure 5: Lattitude E5270

Once the user acknowledges all prompts the BIOS will begin to erase the internal drives. A progress bar is included since some drive technologies may take several minutes to hours to erase the drive.

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Figure 6: Internal SATA devices

A successful erase procedure will be reported by a green dialog and the "Data Wipe Completed Successfully" message. If there are any failures they will be presented instead of the success dialog.

Figure 7: Reboot the system