[GreenPepper PRO] Tutorials

Execution of Secure Erase / Sanitize



Frozen state

In fact, most recent ATA(SATA) disk drives support Secure Erase. Select "show current disk status" [enter], on the "current disk status" page, select disk drive and press [enter]. "Detail Disk info" is shown.

"Support[*]" shows it is supported. In many cases, you will see "Frozen[*]". This indicates that the drive is in a frozen state, preventing the Secure Erase process from working.

The disk drive is in an Unfreeze state just after its power is turned on. But immediately after the PC is turned on, the PC's basic firmware (BIOS, UEFI) sends a command to the disk drive to become "Frozen".

This is, of course, for security reasons, but it is the main reason that makes the Secure Erase process difficult.



The way to Unfreeze

As mentioned before, disk drives are in Unfreeze state just after their power is turned on. So, in theory, you could return the disk drive to the Unfreeze state by turning off its power while the PC and program is running.

There are two ways to achieve this:

1. Suspend/resume your PC

This is a safe and recommended method, however some PC models may not support it.

When menu is displayed, Alt+F5 key switches to the "Utility Menu", Alt+F1 key to return to the previous Erase menu.

In the Utility menu, select "Set SecureErase Method/Unfreeze" [enter].

Next screen shows "frozen" state, supported secure erase function (Secure Erase/Enhanced Secure Erase/Sanitize).

Press [tab] key to move to "Unfreeze" and [enter] to perform Suspend/Resume. If successful, the power will be turned off once, the PC will enter a suspended state, then resume, and the same screen will be displayed again. Check if "Freeze" state has changed.

* If the suspend/resume process is not supported, a message will be displayed or the screen will remain black and will not reappear.



2. Unplug and plug the power to the disk drive while PC is running and menu state

This is a risky method, this can cause physical damage to disk drives, power supplies, etc., do it at your own risk.

Never do it with a traditional ATA power cable, only SATA power cables are possible. However, especially with SSDs, electrical shocks can cause them to become unusable. Also, most laptop PCs do not allow this operation.

If operation success, secure erase/sanitize menu is shown, so you can execute it.

```
# erase disks (4-times[AA-55-rand-00])
--- secure erase/sanitize ---
# secure erase/sanitize (1-time [sec])
# secure erase/sanitize (2-times[sec-00])
# secure erase/sanitize (3-times[sec-rand-00])
# uerify/read check
------
# uerify/read information
```