THE WORLD'S ONLY
EAL4+ COMMON CRITERIA
DISK WIPING SOFTWARE

Compliance Background

The NIST "Special Publication 800-88 Revision 1" document contains the latest guidelines for media sanitization. First published in 2006, the NIST SP 800-88 document was updated in 2014 to include information for sanitizing newer types of media, including SSD, NVMe and other drives. WipeDrive 8.2 adds support for the "NIST 800-88r1 purge/clear" wipe pattern that meets these guidelines.

WHAT IS NIST?

The National Institute of Standards and Technology (NIST) is a measurement standards laboratory and a non-regulatory agency of the United States Department of Commerce.

PURGE VS CLEAR

The NIST SP 800-88 Revision 1 document describes varying levels of media sanitization:

CLEAR: Makes data inaccessible through a drive's interface with an operating system. This typically involves overwriting all user-accessible sectors of the media with a known pattern, like all zeros.

PURGE: Makes data inaccessible through any means, including "sophisticated laboratory techniques". This level of media sanitization requires firmware-based wiping methodologies, like built-in "block erase" commands. The selected command must wipe all user data from the device.

WipeDrive 8.2 attempts to do a purge-level wipe if the media supports it, and a clear-level wipe if a purge isn't supported by the media.

HOW DOES WIPEDRIVE COMPLY?

WipeDrive 8.2's "NIST 800-88r1 purge/clear" wipe pattern removes any device configuration that prevents access to the full drive, including Device Configuration Overlay (DCO), Host Protected Area (HPA), or Accessible Max Address. WipeDrive then wipes the media with the strongest wiping technique available. These will include:

- Firmware-based "sanitize" ("block erase" or "overwrite EXT") commands for ATA and SCSI devices

- Firmware-based "secure-erase" command for ATA devices

After the wipe, WipeDrive verifies 10%+ of the media (spanning the entire drive) to ensure that the wipe is successful. If needed, additional in-depth verifications are available. WipeDrive will then categorize the wipe as "Purge", "Clear", or "Unknown", based on the level of the wiping technique that is used.

CONCLUSION

WipeDrive provides an approved and certified "NIST 800-88r1 purge/clear" wipe pattern which will securely erase all information from media devices. This wipe pattern supports ATA and SCSI drives (both HDD and SSD media), NVMe drives, USB thumbdrives and various memory cards.

Clients have seen the benefits of decreased wipe time, certified data deletion and increased efficiency when switching to the NIST Overwrite pattern.