Is there any self check (verification) method when erasing SSD or HDD?

Created date	Updated date	Affects version	Fix version
20 Aug 2021	20 Aug 2021	Drive Eraser - All versions	N/A

We provide the Hexviewer on the Blancco Drive Eraser.

Hexviewer is a type of an tool which allows users to access binary computer data. Blancco's Hexviewer allows users to read the binary contents of a drive before and after the erasure. Hexviewer is used to check the contents of the storage in hexadecimal format. Whenever the drive is overwritten with Blancco Drive Eraser, it uses a pattern (static or random). The hexadecimal format of this pattern (e.g. 0x00, 0xAA, 0x924924...) is visible in Hexviewer and thus it can be used for a visual verification of the erasure result.

The software also has built-in procedure for the verification on the software level.

The user of Blancco Drive Eraser can select the level of verification of the erasure. The verification process reads data at identical intervals across the whole drive's surface and makes sure that the erasure's overwriting patterns were written correctly. The minimum verification corresponds to checking 1% of the surface of the drive (fast process), while the full verification corresponds to checking 100% of the surface of the drive (slower process).

Taking samples at identical intervals across the drive's surface can efficiently detect any problems in the erasure, while being faster than reading all the overwritten data. The user of Blancco Drive Eraser can increase the level of verification from the default 1% all the way up to 100% (full verification) when higher level of security is required. If the verification finds any data left on the drive (e.g. overwriting patterns are missing) or if sectors in the drive cannot be read, it will alert the user that the erasure process has failed.

A systematic verification step is always enforced after the last overwriting pass. All verification algorithms are based on the NIST guidelines (see more details from the Blancco Drive Eraser user manual). In case of Blancco SSD erasure algorithm full verification is chosen and there will be no samples taken as the whole user addressable area is checked.