

Verification process / Verification level of 1%

Blancco Driver Eraser user can select the level of verification of the erasure. The idea is to read sectors throughout the drive in order to make sure that the erasure's overwriting patterns were written correctly.

- Before the v6.2.0, the verification process reads data at identical intervals across the whole drive's surface.
- Starting with v6.2.0, the drive is split in several subsections and the verification process reads data at sectors picked randomly across each subsection. This is compliant with the verification defined by NIST (more information in the dedicated chapter in the Blancco Drive Eraser user manual).

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). There is an exception though: the NIST standards "NIST 800-88 Purge" and "NIST 800-88 Clear" always perform by design a verification of at least 10% of the surface of the drive.

Taking samples across the drive's surface can efficiently detect any problems in the erasure, while being faster than reading all the overwritten data. Blancco Driver Eraser user 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 (overwriting patterns are missing), it will alert the user that the erasure process has failed.

Different verifications for different erasure steps:

- In case the erasure step that needs to be verified is an overwriting round, the verification will read the overwritten sectors in search of the pattern that was overwritten. Finding unexpected patterns will fail the verification.
- In case the erasure step that needs to be verified is a firmware-based erasure round, the verification will read the overwritten sectors in search of a periodic pattern (e.g. firmware commands usually fill the drive with zeroes). If no periodic pattern is found, the verification will fall back to checking whether previously existing patterns are still found on the drive (they should not be present anymore). Not finding periodic patterns or finding previously existing patterns will fail the verification.

A systematic verification step is always enforced after the last erasure round. In addition, starting with v6.2.0, quick verification steps are carried out between overwriting rounds.