

# The glass vault

Authorship numbers are comparable to a transparent vault meant to sit out in public view. Those who watched you install your vault can trust that it's yours. Any data displayed inside the vault is open to observation yet only you can manipulate that data.

Technically, when you change something in your vault, you actually build a new one just before that, then shatter the old one in such a way so as to point a portion of its fragments at the new vault—leaving an exact numerical representation of the new vault fingerprint. Meanwhile, remaining fragments point at your new message for that authentication event, representing it symbol-for-symbol.

This makes Authorship the first *symmetric* public key cryptography in the world. Here, super-flexibility is not limited to security. It is the key “presence and absence” which in combination gives symbolic meaning to cryptographic relationships, not some asymmetric property inherent to the function. Simply put, Authorship can assemble any list of problems—even riddles—and give you the same authentication power.

## Canary update authentication

A canary is a message updated monthly by some party or service on the internet. For every new canary message, the service user-base may rest assured that no abusive power demanded user data, otherwise canary updates terminate. Authorship can ensure that no canary is updated without special keys, even if—as seen before—such abusive powers seize personal and company property.

## Data, author, and version control authentication

For every authentication event, the user may insert any message, text, or data such as a piece of work or its hash. Those relying on cryptographic tools may need to verify that some work was written by or updated by the trusted author of their choice. Authorship allows any author and those maintaining software to authenticate releases and version control because—as seen before—abusive powers have admitted to modifying and undermining cryptographic systems not of their own work.

## Multi-way functions with regulated solution quantity

Number modification needs not necessarily binary-based representation. You can have some multi-way function whose multiple solutions represent a single digit—per solution. This would help save on space and computation time compared to the use of nine whole Authorship functions just to represent a digit pair. One example function is the hash to which multiple expected strings purposely correspond.