

# Abstract

In today's digital age, where our identities and assets are just a speck in the vast ocean of information called the Internet, protecting them is as important as, if not more, putting a lock on our bank locker. Identity theft and information leak can have dire consequences. And at a time like this every institution and organization; be it a bank, an email account, an online wallet or a social profile; requires us to manage a different way of authenticating our identities. Often via hard to remember, complex strings of alphanumeric characters. And in enterprise environments, long private keys. On top of this, these keys and passphrases are required across different environments; and on the go. Management of these keys in itself is a problem and any complacency in their handling can expose the entire content of the underlying asset. It also dramatically increases the surface area for potential cyber attacks and unauthorized access.

The solution proposed is simple, yet effective. A Secure Vault, which can rest anywhere on cloud, yet can only be read by the owner. The vault is encrypted using a master passphrase with high entropy and yet is easy to remember. [Relevant xkcd](#) :

