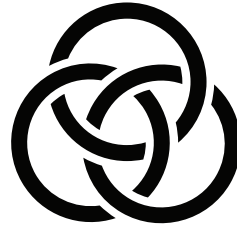




# Collaborative Seed Recovery



Blockchain Commons

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## 1. Why Do You Care?

- **Concerned about a self-sovereign key.**
- **Especially concerned about an issuer key.**
- **Know that singular hardware storage is risky.**
- **Worried about losing your 12 words.**



*Self-sovereign control of your digital assets gives you independence, but it requires responsible key management!*

## 3. What Does CSR Do?

- **Shard seeds with Shamir.**
- **Protect bigger data with Envelopes.**
- **Use platform cloud backup for first share.**
- **Store other share in share servers.**
- **Allow recovery with a variety of auth.**
- **Automate everything to make it simple!**



*Though it can be hard to protect our self-sovereign seeds alone, we can do so by working together!*

## 5. Who is Involved with CSR?

- **We want an interoperable solution for all.**
- **We are holding biweekly meetings.**
- **Discussing specs & demonstrating progress!**
- **Working with 3 hardware & software wallets.**



*The goal of Blockchain Commons is to bring the community together to build interoperable specs & infrastructure.*

## 7. Deep Dive: Envelopes

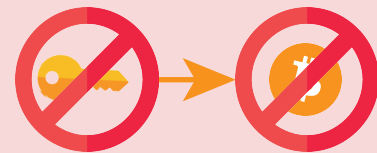
- **Envelopes are the foundation of CSR.**
- **They are Smart Documents.**
- **Encrypt secrets; store metadata.**
- **Lock with Shamir, public keys, and more.**
- **Permits allow multiple methods of access.**



*Envelopes today can encrypt data with Shamir & keypairs. They're also future-proofed to allow more access methods.*

## 2. Why is Self-Sovereign Dangerous?

- **It's easy to lose a seed.**
- **It's easy to lose backup words too!**
- **Hardware devices can become obsolete.**
- **Theft! Disaster! Loss! So many risks!**



*Self-sovereign custody reduces the risk of external attack, but you have to also reduce the risk of internal loss.*

## 4. What's Innovative in CSR?

- **Shamir can only store small amounts of data.**
  - **Envelopes solve that.**
- **Storing shares physically is risky & hard.**
  - **Platform clouds automate.**
  - **Share servers automate.**
  - **Better protection than physical copies!**
- **Recovery needs to be secure.**
  - **A variety of auth improves security.**

*The goal of CSR is to expand & automate seed backup. Users should be able to automatically protect their assets!*

## 6. Why Should You Be Involved?

- **You have single keys that need protecting.**
- **You want to spread risk & lower liability.**
- **You want to run a share server.**
- **You want to improve crypto accessibility.**
- **You want to advocate your interests.**



*Want to workshop CSR? Develop these ideas? Want to become a member of the CSR community? Talk to us!*

## 8. How is CSR Future-Proofed?

- **Uses BLAKE3, ChaChaPoly & Schnorr.**
- **Plans for VSS & distributed key generation.**
- **Future permits for multisig & crypto-scripts.**
- **Open arch supports future development!**



*CSR is carefully designed for both the present-day and future of cryptography, so that it won't become obsolete!*