



# Collaborative Seed Recovery



## 1. Why Do You Care?

- **Holding Bitcoin, Ethereum, or other assets.**
- **Concerned about a self-sovereign 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?

- **Divides seed; recover w/threshold of “shares”.**
- **Backs up first share in platform cloud.**
- **Stores other shares in share servers.**
- **Allows recovery with a variety of auth.**
- **Automates 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?

- **Working with Bitmark, Foundation, Proxy.**
- **The goal is an interoperable solution for all.**
- **We are holding biweekly meetings.**
- **Discussing specs & demonstrating progress!**



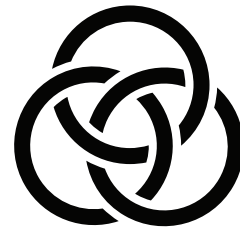
*The goal of Blockchain Commons is to bring the community together to build interoperable specs & infrastructure.*

## 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.*



Blockchain Commons

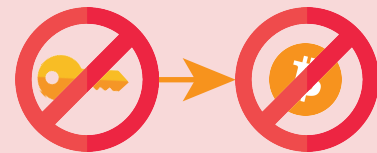
Christopher Allen  
Wolf McNally  
Shannon Appelcline

ChristopherA@lifewithalacrity.com



## 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?

- **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.**
- **Classic shares store small amounts of data.**
  - **Envelopes will solve that.**

*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?

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



*We want to work with more developers & hardware vendors. Want to be 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 works for many chains!**



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