

Self-custody is an important sub-sector of the field of custody which aims to have the users take full control over their assets. Generally, the single private key is held by the users themselves instead of the custody platforms. But, the single private key can be at high risk held by an individual with a lack of sufficient protection. In case of falling victim to a variety of cyber attacks, users will consider a custody platform to secure their keys, which means that the platform also has the access to users' assets. Thus, when trust is built between the platform and users, it seems like no issue will happen. However, we see that one distinct born nature of blockchain is that we can trust the technology itself that no trusted third party is needed. And, these years have witnessed thousands of tragedies of people crying over their unexpected losses due to a minor click, a mistake, a mistrust, a manipulation, etc. So, self-custody has been a vital aspect of enhancing asset security whose ultimate goal is to have everyone own their inborn right - your keys, your coins. Users use one self-custody platform where depositing their assets, but the platform has no access to users' assets and only provides enhanced security protection over their assets and can never interfere in the operation of assets. Self-custody faces a lot of challenges among which one of the most vital points is how to guarantee the platform itself is secure and compliant. Utilizing Secure Multi-Party Computation (MPC) and Trusted Execution Environment (TEE) technology is one of the most popular trends recently. This is also the core of Safeheron. As an open-source self-custody platform, we implement our proprietary MPC and TEE technology and zero-trust architecture into our platform, facilitating multi-people asset governance in a hardware-level environment with no original private key generated and tailored transaction policies, using key shards held by users to sign transactions. So, we make sure our clients can have complete control over their private keys and their business can be significantly secured with a robust efficiency. For self-custody, technology is a critical aspect to consider with a strong development capability to integrate it into products. And, open-source development is more transparent and can help in trust building. Additionally, as the blockchain industry is shaping itself, we see security standards/certification is still an important factor for a self-custody platform to be reliable. That's why Safeheron has been obtaining the highest security certifications.