Sepior™
Key Management & Protection

SEPIOR ADVANCED MPC™

Sepior is the industry's most experienced and trusted supplier of secure Multiparty Computation (MPC) technology for cryptographic key management and protection services. Acquired by Blockdaemon in 2022, Sepior's MPC technology is widely deployed by hundreds of institutions to secure critical infrastructure and digital assets for many of the world's largest traditional and crypto native banks, exchanges, custodians and enterprises, as well as major blockchain and security infrastructure providers.

Sepior can provide you with cutting edge MPC technology to deliver industry leading key management and protection services, built upon decades of expertise and experience, without the impossible task of hiring your own dedicated cryptographers and security experts. Let our team be an extension of your team and help you accelerate your path to product innovation and profitable services.

World Renowned Cryptographers

When it comes to foundational, mission critical technologies like MPC, practical developer experience and expertise are essential. Sepior's founders are cryptographers with world renowned credentials, experience, patents, publications and unrivaled track records of engineering and delivering real-world MPC solutions. Our team of cryptographers led the world's first production use of MPC in 2008. They went on to support countless deployments of key management and privacy use cases, including the world's first and only cloud-native, key management as a service – resulting in the formation of Sepior in 2014.


Sepior's team of cryptographers are considered by many to be the preeminent experts in the field of MPC.

In 2018, Sepior was approached by a major financial services and banking conglomerate seeking to develop a digital asset with the security of a cold wallet and the liquidity of a hot wallet in anticipation of post custody and exchange services. After searching for the best MPC experts globally they selected Sepior as their MPC technology partner to build the world's first MPC wallet. Since those early days, Sepior's cryptographers and business development team have been partnering with leading blockchain infrastructure and digital asset service providers to create purpose-built, Advanced MPC, which is optimized to provide industry leading key security, performance, and accessibility.

Visit Blockdaemon.com or Sepior.com

Sepior™ Advanced MPC

Sepior™ Advanced MPC represents years of application focused, purpose-built development and optimization of MPC algorithms for threshold cryptography. The result is the industry's most secure and highest performance key protection, wallet, and threshold signing technology available.

Eliminate Complete Private Keys – Eliminate Single Points of Failure
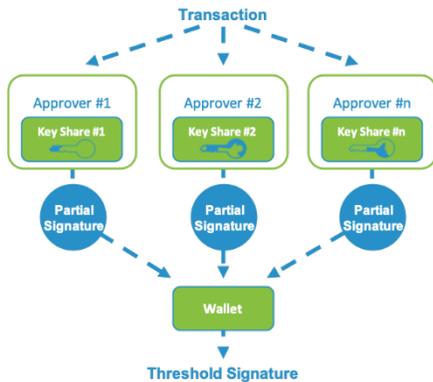

- Private keys are locally generated, stored, and used in the form of distributed key shares using Advanced MPC

- A complete key never exists on any device

- No single party can become corrupted or hacked to yield a private key – eliminating single points of failure

- Universal **m** of **n** approval for every DA type, on any blockchain

Sepior™ Advanced MPC For Industry Leading Security, Flexibility, Performance, and Scale

- Patented Sepior Advanced MPC algorithms for industry leading security & performance

- Millions of keys, thousands of TPS, cloud-native scaling and load balancing

- Any physical or virtual machine: mobile phone… cloud

- Any wallet type or custody model: hot, cold, operational

- Order of magnitude faster key generation and transaction signing

- Third party attestations by nccgroup CRYPTO EXPERTS

Innovative Key Share Replacement, Secure Backup, and ERS Provides Sustainability
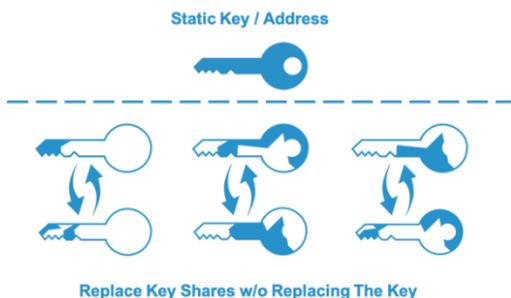
- Generate new key shares (without changing wallet address) to resolve lost devices, changes, and attrition

- High Availability: recover lost nodes with MPC secured backup

- Recover from catastrophic failures with ERS – recovery service provider never sees the key

- Ideal for digital asset wallet security and any application requiring secure cryptographic keys

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