

MERLINCRYPTION®

Solution Overview

Dynamic Versatile Advanced Encryption Security

MerlinCryption's patent pending Embedded Encryption Platform overcomes two critical flaws in today's key management systems and commonly used encryption algorithms.

Advanced Key Approach

- ASBE keys are randomly generated, are longer, and scale in size. *Compare variable ASBE 2008-bit to 2 GB keys to 256-bit key, which is used in most solutions*
- ASBE's *smallest* encryption key is 10^{522} more powerful than the AES 256-bit key
- Unlike other encryptions, ASBE keys are created, used, and destroyed, on demand, at each end-point.
- *Keys are never transferred. Never stored.* The key is never found with the data
- Eliminates PKI, CAs, and Key Depositories, along with their associated risks. Saves significant money and labor.
- Keys are layered with variable length internal passwords up to 64K

Advanced Algorithm Complexity

- The Anti-Statistical Block Encryption (ASBE) algorithm defeats cryptanalysis and statistical analysis.
- No two encryptions are alike.
- Output is dynamic. Behaviors cannot be predicted and therefore not attacked
- ASBE is twice as fast as AES.

Patent Pending Platform

- The only comprehensive embedded encryption platform system in the marketplace,
- Miniscule memory overhead
- Top-down security control. The platform's unique "independent control" circumvents inside espionage.
- All encryption, decryption, and authentication processes happen "under the hood." *Users cannot see or change the security in error or by malicious intent.*
- Features encrypted authentication with four categories of factors. *Compare to the typical one or two factors used in most solutions*
- Quickly and easily integrate into of other solution's programs and apps. Assimilates to all security systems.
- The client's software engineers attend a 2 or 3-day training.
- End-user experience remains unchanged...no user training is required.

TECHNOLOGY HIGHLIGHTS

COMPANY CAPABILITIES

- Embedded Encryption Platforms
- Encryption: Anti-Statistical Block Encryption (ASBE)
- Authentication: Four-Factor Encrypted
- Random Data Generator Patented

MARKET INDUSTRIES & APPLICATIONS

- Military • Healthcare • Financial • Law
- Cloud • VoIP • eCommerce
- Data Storage • Virtualization • Communications • Network Management
- IoT • M2M • Device • Embedded Connectivity

FAST FACTS & STATS

- ASBE is more than twice as fast as AES
- Highly efficient code with minimal overhead:
 - Platform = 200K
 - Low Overhead Platform = 55K
 - Encryption Engine as small as 22K
- Portable to any CPU
- Encrypted Payloads transmitted by any communications protocol and on any network
- Keys scale from 2008-bit to 2 GB. Supported by variable passwords to 64KB
- Eliminates PKI, Cert Authorities, Key Depository
- 1 Patent, 1 Patent Pending
- Approved for export NLR, OFAC compliant
- Provides compliance with HIPAA, HITECH, & other regulatory guidelines