



MERLINCRYPTION®
Protect Your Privates

How to Reduce Key Cost to Pocket Change

Managing the crib-to-grave life cycle of any encryption key system is complex and costly. Research shows that organizations spend between \$47 and \$598 for the creation, distribution, and maintenance of each key in use, based on operational efficiency.¹

MerlinCryption's radically different key management approach leverages efficiency across the business organization, driving down cost and labor of key production to *a fraction of PKI cost*.

ADVANCED ENCRYPTION SECURITY:

- Eliminates PKI, Protocol, and Validation
- "Encryption-enables" any process
- Streamlines ability to accommodate distinct internal and external policies, complex access rights, and varying levels of end-user sophistication
- Facilitates framework flexibility and greater control of secured environments for employees, business partners, vendors, and clients while decreasing vulnerabilities

Using MerlinCryption's pioneering software developer kits (SDKs), IT departments easily transform the excessively complicated processes of intricate key administration to a simplified procedure.

End the IT Nightmare!

Protecting the increasing volume and the runaway mobility of confidential business information is more critical, more complicated, and more costly than ever. **The annual cost of PKI ownership is \$770,000 to \$1,480,000 spread across 5000 users³**

Beyond key-in-use cost, the cost of a 5000-user PKI system is an additional \$150 to \$296 per user, per year². MerlinCryption's innovative key approach completely eradicates PKI program costs, nullifies limitations of current key exchange, and streamlines problematic key management.

- NO Public Key Infrastructure (PKI)
 - NO Certificates
 - NO Registration Authority
 - NO Directory Management
 - Digital Signatures Optional
- NOT NEEDED: Key Protocol
- NOT NEEDED: Key Validation
- NOT NEEDED: Central Key Deposit

Key Advantage

Outmaneuver Attack...for Good!

Short, fixed-length, identifiable keys and detectable, predictable key transfer represent two major weaknesses in encryption key security, making keys the primary target of today's attacks.

MerlinCryption's patented Random Data Generator's key and password method eliminates these major weaknesses:

1. Keys are variable-length, which scale between 2008 bits and 2GB. Keys are underscored by variable-length passwords, scaling up to 64KB.
2. The patented random data generator outputs keys and passwords, which are 'generated-destroyed-recreated' on demand, makes key/password transfer between end points unnecessary. The communication and storage of encryption keys and passwords are not needed, circumventing criminal interception.

The Anti-Statistical Block Encryption (ASBE) algorithm is twice as fast as AES and is not subject to attack models and methods of Cryptanalysis. Standard statistical analysis and any attempt at byte frequency cannot crack it. No two encryptions are alike: Each encryption process always results in a different cyphertext, even when repeating the same key, password, and plaintext to encrypt. ASBE is ECCN 5D992c approved for export without a license, OFAC compliant, and enables clients with HIPAA/HITECH compliance.

Security In Action

People >Process >Protection >Success

MerlinCryption's patent-pending Embedded Encryption Platform secures clients with a complete encryption solution. The pioneering SDK streamlines easy implementation integrated on individual security needs and business structure. The cutting-edge approach successfully positions impenetrable security with affordability.

- Rapid integration: Upgrade from a PKI system or launch an original ASBE embedded platform with uninterrupted security and seamless change management. (No more PKI. No more risky CAs)
- Small footprint, as small as 200KB for the Embedded Encryption Platform, and 55KB for the Low-Overhead Embedded Encryption Platform satisfies restricted memory requirements
- Efficient implementation and acculturation: *No laborious design phase needed.* MerlinCryption's design-efficient SDK solution assimilates easily to existing security ecosystems, strengthening the organization now, as well as securing its future.

MerlinCryption develops infrastructure security software, delivering advanced encryption, authentication, and patented random data generator, for Cloud, VoIP, eCommerce, M2M, and storage media hardware.

Unprecedented patent-pending embedded encryption platforms protect the integrity of data-at-rest, data-in-motion, data-in-use, and data-in-change as it is created, viewed, edited, shared, stored, and moved across communications channels and through the Cloud.