

MerlinCryption™

Protect Your Privates

White Paper

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 solution leverages efficiency across the business organization, driving down cost and labor of key production to *a fraction of PKI cost*.

ADVANCED KEY APPROACH:

- 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 architecture, IT departments easily transform the excessively complicated processes of intricate key administration to a simplified procedure.

Enterprise Security

ENVIRONMENT

Small to large conglomerate business

CHALLENGE

Protect all confidential data as it rests and travels in unsecured environments and on vulnerable devices or media.

SOLUTION

MerlinFusion™ with FLEX Options

BENEFITS

- Eliminates PKI
- Significantly reduces key cost
- Incorporates stronger encryption
- Enables encryption for any application
- Easy and timely deployment
- Adapts and scales to any business structure



TM

512-348-SAFE

www.MerlinCryption.com

PO Box 341133 | Austin, TX 78734

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. 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 CryptoFile™ 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

Make it Easy... It's in the Script

- *MerlinCryption's automation produces mass-quantity, sub-second file encryption using command line switches with batch mode or shell scripting.*
- *IT has the ability to control all keys or designate key initiation to specific departments and/or individual users.*
- *Management can independently use the encryption process or collaborate with IT departments for automated use. User control versus application constraint*
- *Program flexibility boosts company-wide productivity while fortifying data security for both novice and sophisticated users.*

Simplify Key Management to Drive Down Costs

Key management is one of the most important aspects of an encryption strategy. MerlinCryption fine-tunes it to a straightforward process while fortifying against key detection and data breach.

SOLUTION SNAPSHOT: Mechanism and Process Basics

1. MerlinFusion™ encryption software with FLEX Options - *Do More With Less*
 - Combines user-initiated keys, key parameters, and password variables to make every encryption unique and unpredictable
 - Enables security leadership to control access rights, dictate policy, and establish process design.
2. MerlinCryption File Generators – *Empower Stealth Action*
 - Initiates keys that scale in size from 2000 bits to 2GB and passwords that scale to 64KB in length
 - Originates billions of keys from a single file – the Key-in-a-File CryptoFile™ solution
 - Produces millions of passwords from each and every file - the Password-in-a-File security innovation
3. Strategic Integration Blueprint - *Build Your Own Fortress*
 - Efficiently and securely manages crib-to-grave life cycle for all encryption keys
 - Bridges company security requirements to effective, practical, and relevant encryption architecture.

The powerful MerlinCryption algorithm behind this simplified key approach delivers paramount security with time-saving labor-saving cost-saving manageability.

Ongoing Value...It All Adds Up

Save Money, Increase Productivity, Get Better Encryption

While security professionals appreciate the value of eliminating PKI for a simplified key system, the compelling reason for utilizing the MerlinCryption solution is to gain a superior product with immediate and ongoing enterprise savings.

- **SHOW ME THE MONEY**
 - Terminates all costs associated with PKI, Validating, Protocol, and Central Key Deposit
 - MerlinCryption enterprise blueprint can be designed and scripted in hours to days of engineering time-labor
 - Post-integration requires minimal cost of time-labor investment
 - Eliminates need for additional hardware and storage costs
 - Minimal licensing costs: One time purchase, No renewals.
 - Minimal usage costs: Fast and efficient execution time
- **MAKE MY JOB EASIER**
 - Elimination of PKI, Validation, and Protocol drastically simplifies scope of work and time management
 - Efficient implementation with existing programs
 - Dispersal of each CryptoFile™ multiplies available keys-for-use by up to billions of keys at a time.
 - Initiates up to millions of available passwords with each Password-in-a-File
 - MerlinFusion's FLEX options simplifies and augment role-based security architecture, impacting easier IT control and strategy
 - Redirecting key initiation and ownership to users as appropriate, decreases unnecessary IT tasking and supports priority focus.
- **IMPROVE MY ENTERPRISE**
 - Compliant with relevant legal and regulatory requirements.
 - Supports Windows, Linux, and DOS
 - Safe on any server: web, application, database, or customized
 - Runs simultaneously with different and multiple applications
 - "Click and Go" GUIs, quick guides, and IT handbooks make user self-training an intuitive snap.

Build A Better Mousetrap

- *MerlinCryption uses a proprietary algorithm. Source not published or sold*
- *Encryption is not based on mathematical technique; not subject to statistical analysis*
- *Intrinsic validation maximizes security and productivity while minimizing costs*
- *Key-in-a-File and Password-in-a-File approach introduce scalable keys (2000 bits to 2GBs) and scalable passwords (up to 64KB) in length*
- *Sheer magnitude of keys and passwords exponentially increase security*
- *Keys are designed to "hide in plain site" or self-destruct upon encryption, then reconstruct at decryption*
- *User-initiation and control leverage unpredictability and avoids detection*
- *User choice of key exchange can't be anticipated or tracked*
- *User-initiated (Bring Your Own) keys and passwords maximizes the security industry's shift to BYO Identity, BYO Device, and other user-ownership trends*

The annual cost of PKI ownership is \$770,000 to \$1,480,000 spread across 5000 users³

Cut the total expenditure with MerlinCryption's CryptoFile™ solution



The Best of Class Enterprise People >Process >Technology >Success

MerlinCryption establishes a complete encryption solution utilizing uncomplicated software mechanisms in tandem with strategic process, designed upon the individual organization's security needs and business structure. This cutting-edge approach successfully positions impenetrable security with affordability and ease.

START-UP AND DEPLOYMENT

- Rapid integration: Upgrade from a PKI system or launch an original CryptoFile™ system with uninterrupted security and seamless change management.
- Efficient implementation and acculturation: *No laborious design phase needed.* MerlinCryption's forward-thinking solution assimilates easily to existing security ecosystems, strengthening the organization as it is... and as it evolves in the future.
 - The enterprise structure is strategically mapped with desired security paths, aligning organizational scenarios and various authorized user group nuances with airtight security.
 - Relevant mechanisms are determined and scripted to interface with MerlinCryption solution software
 - Once the enterprise security map is established, the key lifecycle operates with minimal time investment
 - Minimal training supports easy commercialization into the business environment while ease of use expedites favorable adoption by leadership, employees, vendors, clients, and other business partners.

SCALE OPPORTUNITY

- The MerlinCryption secured enterprise leverages encryption security at a significant scale
 - Increases encryption-enabled application capability with minimal deployment cost
 - Vastly expands keys in use with significant efficiency
- MerlinCryption's astute "application-blueprint" solution adapts and scales from small businesses, without dedicated IT staffs, to large conglomerates with extensive geographies, business units, and functional areas supporting multiple priorities, objectives and agendas.

Data-In-Use • Data-In-Motion • Data-At-Rest

MERLINFUSION: Business versatility and client solutions

MERLINEZ: Data file storage and transfer... simply

MERLINEYE: Password and on-screen activity

MERLIN4CHAT: Instant messaging, email, and broadcast

Customization and unique solutions for individual specification



Experience how MerlinCryption's innovative encryption architecture is changing the way the world protects and manages data communications. Contact us, today.

512-348-SAFE

www.MerlinCryption.com

PO Box 341133 | Austin, TX 78734

¹ http://www.nymity.com/Free_Privacy_Resources/Previews/ReferencePreview.aspx?guid=8539fba5-9d92-4293-b3ea-d10bf4b52cf0

^{2, 3} <http://www.msctrustgate.com/pdf/TCO%20for%20PKI.pdf>