



MerlinCryption®

PROTECT YOUR PRIVATES

Leading-Edge Encryption

Embedded Security At-A-Glance

Overcoming the precarious deficiencies of existing encryption and authentication, the dynamic MerlinCryption Encryption Security Platform resolves the security industry's increasing inability to protect data and secure connectivity.

Key Advantage:

Absolute Stealth For Today's Precarious Environment

Static encryptions, such as DES, RSA, and AES, produce simple short key strands, which continually repeat in cyphertext.

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

MerlinCryption's key method eliminates these two major weaknesses:

1. Variable-length keys that scale between 2008 bits and 2GB, and are underscored by variable-length passwords up to 64KB.
2. A patent pending random data generator that 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.

ADVANCED TECHNOLOGY

ENCRYPTION INNOVATION

- Keys scale from 2008 bits to 2 GB in length
- Passwords scale up to 64KB
- Flexible >10 multi-factor authentication
- No two encryptions are alike, even using the same input
- Parameter-controlled customized key generation
- ASBE algorithm not subject to attack models and methods of Cryptanalysis
- NSA reviewed/BIS approved for export
- OFAC compliant
- Enables partners with HIPAA, HITECH, and FDA compliance
- Scrubs memory before exiting
- Upon decryption, performs multiple-stage checking of version, password, and key

IN-MEMORY AUTOMATION

- In-Memory small footprint <25KB
- Sub-second automation

The Smart-World's Smart-Encryption™

Encrypted Authentication: >10 Interchangeable Customizable Factors

MerlinCryption's dynamic, variable, changeable, Smart-Authentication Platform empowers industrial control, retailers, manufacturers, enterprise, and security providers to take control with "under-the-hood" scripted security elements, resulting in paramount protection.

Most authentication is programmed in-house and based on something you know, something you have, and/or something you are. MerlinCryption secures authentication to the next level by incorporating additional methods

based on dynamic "temporary" factors. This unexpected category includes non-linear and environmental factors, which better prevent compromise by innovative design.

The indomitable power behind MerlinCryption's solution is not only in the *number* of factors available, but also in the ability to customize each client with factors that are unique to their company and business environment. These confidential, interchangeable factors are unlike other client's factors and cannot be predicted by criminals.

Breakthrough Security: *It's All In The Script*

MerlinCryption's security platform runs a scripted controller, which integrates end-to-end processes into a tightly customized and impenetrable sequence of execution. The controller automates each machine node during end-to-end encryption, decryption, and authentication processes. Scripting is uniquely designed based upon the individual organization's security needs and product structure.

User-defined scripts dynamically calculate and feed parameters to the scripted programs. This calculation algorithm is changeable and runs any sequence of programs, uses any parameters, and uses data from multiple sources. *The script, which runs programs, can itself, be encrypted.*

*MerlinCryption
Security Platform
contains special components
that dynamically alter the
generated data, exponentially
increasing security.*

Algorithmic Innovation: *Outmaneuvers Attack*

Unlike failing encryptions, the superior Anti-Statistical Block Encryption (ASBE) algorithm 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 with varying length, even when repeating the same key, password, and plaintext to encrypt. Customization of each encryption engine, which is distinctive to each particular company's system, is not interoperable with any other custom engine.

Game Changing Details

- In-Memory M2M Solution, with efficient small footprint of less than 25KB satisfies restricted memory requirements
- The encryption software is portable to any device
- Payloads can be transmitted by any communications protocol and on any network
- Written in C# for Windows and in C for DOS, Linux, and QNX

THE SMART-WORLD'S SMART-ENCRYPTION™

MerlinCryption develops invincible smart-world solutions that protect against cyber theft, cloning, and compromise in embedded and diverse M2M environments. Breakthrough technology secures dynamic end-to-end data for smart-grid, SCADA, medical device, industrial systems control, and POS.

The unprecedented encryption platform protects data as it is created, viewed, edited, shared, stored and moved across communications channels and through The Cloud.

MerlinCryption Is Changing The Way The World Protects Data



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