Leading-Edge Cloud Security

Embedded Encryption Delivers Total Data Protection

Cloud vendors and providers grapple with the 'fear of data breaches,' which deters 41% of their potential customers from moving to the Cloud.[1] To ensure Cloud adoption, users must have confidence that the data is safe.

Protecting data processing in the Cloud is problematic. When data is decrypted to open and view, sensitive data, such as financial reports, trade secrets, and client information is exposed, and therefore at-risk...a showstopper for businesses and IT Security decision-makers.

To date, best practice has dictated that users encrypt data locally, and then send to or through the Cloud. To view or modify data, the user must retrieve it from the Cloud; decrypt it, process it, re-encrypt, and return. This laborious exercise defeats the very advantages users seek from using the Cloud.

MerlinCryption cuts through this cumbersome practice with a breakthrough technique, which allows users to securely open, view, and process data at the end-point, while the data-in-use is not exposed on the Cloud. Encryption automation is under-the-hood...user experience remains identical.

Because MerlinCryption's embedded encryption platform never exposes sensitive data in unencrypted form, users can work with their favorite Cloud applications, processing medical records, legal contracts, and trade secret documents without fear of compromise.

Cloud vendors and service providers reinforce value and increase their competitive edge, while leveraging client productivity, satisfaction, and loyalty.

ADVANCED TECHNOLOGY

SOFTWARE & HARDWARE SOLUTIONS

- Embedded Encryption Platform SDKs
- Advanced Strong Encryption
- Four-Factor Encrypted Authentication
- Patented Random Data Generator
- Encrypted Storage Media: USB, SSD, other

SECURES ALL DATA TYPES

- Date-at-Rest
- Data-in-Transit
- Data-in-Use
- Data-in-Change

TECHNOLOGY SPECS & STATS

- Encryption speed more than twice as fast as AES
- Highly efficient minimal overhead code:
  - 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
- 1 Patent, 1 Patent Pending, multiple patents in process
- Eliminates PKI, Cert Authorities, Key Depository
- Written C & C++ for Linux, Windows, DOS, & custom
- Approved for export NLR & OFAC compliant
- Provides compliance with HIPAA, HITECH, & other regulatory guidelines

Outmaneuver Attack: Dynamic 4-Factor Authentication

MerlinCryption's dynamic, variable, changeable, smart-authentication empowers Cloud service providers and vendors to take control of security. Authentication is typically based on something you know, something you have, and/or something you are. MerlinCryption's embedded encryption platform secures authentication to the next level by incorporating an additional category based on dynamic "temporary" factors. This unexpected category includes non-linear factors, aptly detecting more subtle attacks. The indomitable power behind this 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 business environment. Competing 1- and 2-factor offerings pale to MerlinCryption's 4-factor options.

Key Advantage: *Stay Ahead of the Curve*

MerlinCryption's patented random data generator outputs keys and passwords that are 'generated-used-destroyed-recreated' on demand, making key/password transfer between end points unnecessary. There is no key storage or certificates required. PKI is eliminated.

The Embedded Encryption Platform is fortified with Anti-Statistical Block Encryption, which utilizes variable key length. Each key scales in size between 2008 bits and 2 GB and enforces scalable passwords up to 64 KB. The patent pending Embedded Encryption Platforms defeat attack by Cryptanalysis, supporting secure critical infrastructures, 3rd party applications, data warehousing, and real-time data processing software.

WARNING!

Cloud encryption solutions are NOT alike!
Data is typically encrypted locally and transferred to or through the Cloud. MerlinCryption secures all types of data, including real-time data processing in the Cloud.

Data in the Cloud	MerlinCryption	Other Solutions
Data **Stored** in the Cloud	Secure	Secure
Data **Transferred** through the Cloud	Secure	Secure
Data **Viewed** in the Cloud	Secure	**Exposed** *(Data is at Risk)*
Data **Processed** in the Cloud	Secure	**Exposed** *(Data is at Risk)*

Game Changers

- ASBE is more than twice as fast as AES
- Encryption engine as small as 22KB, low overhead platform is 55KB, platform is 200KB
- Encrypted Payloads are transmitted by *any* communications protocol and on *any* network
- The encryption software is portable to any CPU
- Two Embedded Encryption Platform SDKs streamline easy implementation

THE SMART-WORLD'S SMART-ENCRYPTION®

MerlinCryption develops invincible smart-world solutions that protect against data theft and man-in-the-middle attack in the Cloud. Leading edge technology secures dynamic end-to-end encryption for data storage, transfer, and data processing use.

Unprecedented Embedded Encryption Platforms protect data as it is created, viewed, edited, shared, stored and securely moved across communications channels and through the Cloud.

MerlinCryption Is Changing The Way The World Protects Data

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CapGemini "Business Cloud: The State of Play Shifts Rapidly"