

## Product Overview

### Encryptionizer<sup>®</sup> for SQL Server

**NetLib<sup>®</sup> Encryptionizer<sup>®</sup> for SQL Server** offers the ability to add an additional layer of security separate from Windows and SQL security. It can be deployed without programming and without adding any administrative overhead, which will be greatly appreciated by today's over-stressed database and security administrators.

**Automatic Whole Database Encryption** – The purpose of whole database encryption is to make a database unusable if it is stolen, copied, downloaded, lost, or otherwise improperly accessed. It is fast, unobtrusive, requires no programming, no administration, and can usually be deployed in a couple of hours or less. Whole database encryption uses completely on-the-fly, dynamic encryption and decryption. Data is never decrypted on disk, only in memory as requested by SQL Server. In addition, data is automatically encrypted before being written back to disk.

**Column-Level Encryption** – Column Encryption protects specific columns from users/groups that normally need access to the underlying table. It can be used to protect data even from the SQL System Administrator. Encryptionizer Column Encryption supports Repeating Values Protection (RVP), the ability to mask the occurrence of frequently repeating values such as salaries, PIN's and test scores.

Column Encryption can be implemented one of two ways, or a combination of both:

**Col-E Manager** - The Encryptionizer Column Encryption Manager (Col-E) utilizes a point-and-click interface that allows users to quickly set up column encryption that in most cases can be transparent to existing applications. The Col-E Manager allows users to encrypt a column and specify the groups of users that are allowed to view the encrypted data through the use of database roles.

**Column Encryption APIs** – Column encryption APIs allow users to incorporate encryption functions into their applications directly. Column encryption APIs are extremely easy to use in SQL 2000, SQL 2005 and SQL 2008. They can be used anywhere built-in SQL functions can be used, including views, triggers, procedures, user defined functions, jobs, in-line SQL commands, etc. (In SQL 7, APIs can be used in triggers, procedures and jobs, but not in views or in-line SQL commands.)

In addition to column encryption, there are APIs for encrypting and decrypting simple files. For example, a log file can be encrypted before it is attached and sent with xp\_sendmail.

#### **Benefits/Features**

- *Quick and easy to deploy*
- *No administration*
- *No programming (optional APIs for column encryption)*
- *Extremely fast with very small memory footprint*
- *Multi-processor and cluster safe*
- *Industry-standard encryption algorithms*
- *Allows separation of roles*
- *Scalable across the enterprise*
- *Seamless and flexible*
- *Easy to bundle with SQL based applications*

## Scalability

All three versions of Encryptionizer secure data all the way from the primary server down to the desktop/laptop. For example, a mobile sales-force might have portions of a database replicated on a laptop that is later synchronized with a database on the server. Databases can even be securely distributed on CD/DVD or the Internet. Encryptionizer can easily be bundled into an application. Developers can protect their own intellectual property (in many cases users can even protect against the sysadmin), while enterprise users can create their own customized installation scripts for easy, enterprise-wide deployment.

## Algorithms Supported

- AES (up to 256 bits – 128 bits int'l)
- DES
- Triple DES (3DES) with two keys
- Triple DES (3DES) with three keys (US only)
- Blowfish (up to 256 bits – 128 bits int'l)

### ***Why only a few algorithms?***

*Some encryption products advertise long lists of algorithms. We plan to support only the few that have gained wide acceptance in business, finance, industry and government.*

*We also consider special requests from customers.*

## Performance

- **Whole database encryption** – negligible impact in most multiprocessor servers.
- **Column encryption** – 5-6% slower on accessing/updating an encrypted column versus plaintext column in typical transactions.
- Memory footprint – very small: non-paged portion less than 12K.

## System Requirements

### **Encryptionizer® for SQL Server**

*(supported on x86 & x64 operating systems)*

#### **SQL Server Versions**

- SQL Server 2008 R2  
(Enterprise, Standard, Workgroup, Express)
- SQL Server 2008  
(Enterprise, Standard, Workgroup, Express)
- SQL Server 2005  
(Enterprise, Standard, Workgroup, Express)
- SQL Server 2000  
(Enterprise, Standard, MSDE)

#### **Windows Versions**

- Windows 2008 R2 Server
- Windows 2008 Server
- Windows 2003 Server
- Windows 2000 Server
- Windows 2000 Professional
- Windows 7
- Windows Vista
- Windows XP

## General

### File Systems Supported

- FAT
- FAT32
- NTFS
- CDROM/DVD
- RAW

### Maximum Supported Data File Size (up to Microsoft SQL Server Edition limits)

- NTFS - SQL Edition limits supported
- 4 GB (other)

## Other Encryptionizer® Products

### Encryptionizer for DE (Desktop Edition)

Transparent, client-side file encryption software for applications with files and data on servers, workstations, laptops, CDs, DVDs, and backup media. Supports applications developed in most workstation-based software platforms, e.g. MS Access, Microsoft Office, Delphi, .NET, Visual Basic (VB), Visual FoxPro (VFP), C/C++, etc.

### Encryptionizer for Application Developers

Our developer-friendly transparent encryption software can help protect client data accessed and stored by your applications as well as the code of your applications. Developers who build applications for commercial or internal distribution can easily layer Encryptionizer over their databases providing transparent data encryption protection for those databases, as well as for the intellectual property built into their applications.

## Certifications

- FIPS 140-2 Validated (FIPS 140-2 Validated edition)
- Microsoft Certified Partner.
- Adheres to ANSI X9.52 for Triple DES Data Encryption Algorithm, and FIPS 46-3 for Data Encryption Standard (DES) Algorithm.

### **NetLib Encryptionizer® Release History**

- 1989 *DOS Version (file & field encryption)*
- 1992 *First Windows Version*
- 1996 *First Windows Server Version*
- 1998 *DE (Desktop Edition)*
- 2000 *SQL Server Version*
- 2005 *Column Encryption Manager*
- 2009 *FIPS 140-2 Validation for SQL Server Version*
- 2011 *FIPS 140-2 Validation for DE Version*

## Customers

Our customers are representative of a broad range of industries including:

- Financial Services
- Payments/Credit
- Information Technology
- Human Resources
- Insurance
- Healthcare
- Manufacturing
- Retail
- Government
- Education
- Professional & Business Services

## Support

Our **Gold** level of support includes direct contact with a support engineer via telephone and email, 24x7 emergency response services as well as software patches and updates.

Our **Silver** level of support includes direct contact with a support engineer via email, as well as software patches and updates.

## Pricing

Pricing is available upon request.

## About NetLib

Since 1986 NetLib has been producing award-winning data security, connectivity and productivity-enhancing software for database developers and enterprise users.

Our software is used by thousands of organizations worldwide. These include Fortune 1000 corporations, governmental agencies, independent consultants and numerous small and medium-sized businesses. NetLib is dedicated to providing top-notch software and technical support for mission-critical applications.

### **What our Customers are Saying...**

- *“Everything went well. HR loves their ‘super-secret’ database”*
- *“Specifically, I setup 100 concurrent connections that repeatedly either inserted (1,000,000) or selected records with encrypted data. At the same time I ran encrypt\_column against a table with 100,000 records. The processes worked flawlessly.”*
- *“I was starting to think that implementing Encryptionizer, in the [short] amount of time we have left to wrap up this project, wasn't going to be feasible. Things are looking up.”*
- *“It is really a great product, maybe only one on the market [of its kind]”*
- *“Your product worked perfectly as advertised. It was easy to install and use.”*

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US Pat. 7,069,591. International patents pending.