

# [SafeGuard® Easy]

[Encryption and Access Control for Laptops and Workstations]



Product Description

SafeGuard® Easy provides total company-wide protection for sensitive information on laptops and workstations. Boot protection, pre-boot user authentication and hard disk encryption using powerful algorithms guarantee against unauthorized access and hacker attacks. SafeGuard® Easy is both simple to install and operates transparently in the background.

What's new with SafeGuard® Easy:

Speedier encryption reduces total cost of ownership (TCO)

Faster initial encryption – time reduced by half, per computer



Encrypted boot-up for several Microsoft operation systems at the same time

Strong AES encryption

Support of Windows 2000 and Windows XP

Key Benefits:

Numerous installations worldwide

References from several leading international organizations

Reliable and established usage

Simple company-wide installation without user intervention

Global support via Utimaco Safeware subsidiaries and distributors

No end-user training required

Easy implementation of company-wide security policy

No maintenance needed – thus low TCO

#### [The Challenge]

Laptop computers are becoming vital business accessories for mobile employees and executives. However, with laptop theft topping \$1 billion per year worldwide, company sensitive information stored on laptops is becoming increasingly vulnerable to malicious attack. The value of the stolen information often far exceeds that of the hardware.

Companies and institutions need security solutions to provide maximum protection, not only against loss of their sensitive information (e-assets) but more crucially still, against unauthorized access when their hardware is lost or stolen.

Typical operating systems of user-based security such as Windows platforms are unable to provide boot protection as their user-based security works only after starting the operating system.

#### [The Product]

SafeGuard® Easy not only supplies vital boot protection on Windows platforms, but also protects sensitive data using strong hard disk encryption.

Using SafeGuard® Easy, unauthorized access to sensitive information on laptops or desktops is effectively prevented, because:

Without correct authentication, all data remains encrypted (boot protection).

Unauthorized persons are prohibited from accessing the system because pre-boot authentication (PBA) requires the authentication of the user before the operating

system is started. PBA cannot be manipulated and therefore guarantees maximum security.

Many other protection programs are ineffective because they permit the readout of the keys or passwords from the hard disk. SafeGuard® Easy prevents this by generating the code key required for boot-up from the typed password. Even hard disk analysis tools become ineffective against SafeGuard® Easy.

Unlike other solutions which encode only selected files or directories, SafeGuard® Easy encodes the entire content of the hard disk. This means that all the information on the hard disk is protected – regardless of where the data is stored.

Utimaco Safeware uses powerful algorithms and encryption methods to ensure that operating processes are executed efficiently and without delays.

SafeGuard® Easy provides boot virus protection to resist boot sector viruses – hazardous sabotage tools that operate by interfering with the Master Boot Record and allowing hackers to gain control over the PC.

SafeGuard® Easy lives up to its name within all organizations regardless of their size. The software can be installed conveniently throughout the company using configuration files without user intervention. SafeGuard® Easy also allows user-specific privileges to be defined (e.g. disabling disk encryption).

A secure challenge/response procedure is available to re-issue passwords that have been entered incorrectly or forgotten.



### [Characteristics]

The most significant features of SafeGuard® Easy are:

- Boot protection – allows boot-up of the operating system only after correct authentication
- Strong hard disk encryption to protect information
- Encryption of external data media (e.g. floppy disk, ZIP, JAZ etc.)

Easy handling, full scalability, distribution via network and central administration confirm SafeGuard® Easy as the security solution of choice for every organization whatever the size.

#### Pre-Boot Authentication

The user is authenticated by means of pre-boot authentication (PBA) before the system is started and therefore before the operating system is booted. Neither keys nor passwords are stored on the hard disk.

#### Hard Disk Encryption

SafeGuard® Easy encrypts the entire hard disk or individual parts, irrespective of the file system (e.g. NTFS, FAT etc.) – sector by sector, including the operating system, temporary files and all information. SafeGuard® Easy effectively closes the security gaps left open by arbitrary file encryption. Data that has been encrypted using SafeGuard® Easy is securely protected from unauthorized access, even if the hard disk is removed.

#### Algorithms

SafeGuard® Easy supports the newly designated advanced encryption standard, AES, with 256 and 128 bit key length, Rijndael 256 bit as well as IDEA

128 bit. This powerful and globally accepted algorithm guarantees maximum protection.

#### Encryption of External Data Media

SafeGuard® Easy supports the secure exchange of data between individual company offices by using configurable data media encryption (such as floppy disk, ZIP, JAZ etc.).

#### Tested Security

The latest version of SafeGuard® Easy is already certified in accordance with the Common Criteria guidelines at test level EAL1. The certification process for the even more demanding test level, EAL3 is already in process.

The certification procedure for checking quality and security of implementation is carried out by an independent institution: The Common Criteria for Information Technology Security Evaluation (CC) have been established between the USA (Orange Book, TCSEC), Canada (CTCPEC) and Europe (ITSEC) for the evaluation and certification of the security of IT systems.

SafeGuard® Easy has been available since the launch of Windows platform 95 and is certified as one of the first security products for Windows NT worldwide.

### Key Features:

Boot protection

Pre-Boot authentication

Full or partial hard disk encryption, automatic, transparent, on the fly

Single sign on facility

Complete “power off” protection i.e. unauthorized users are prohibited from starting up the PC

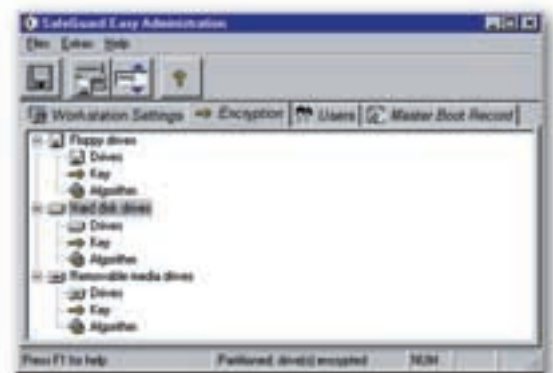
Secure key management

Interface to central administration

Smartcard support

Secure challenge/response procedure

User-specific rights





## [Specifications]

### [System Requirements]

<b>Platform</b>	PC with Intel Pentium processor or similar CD-ROM drive for installing on standalone computers Other distribution methods can be used when installing via a network.
<b>Operating Systems</b>	Microsoft Windows 95b, 95c, Microsoft Windows 98, Microsoft Windows NT version 4.0, Microsoft Windows 2000, Microsoft Windows XP
<b>Required Hard Disk Space</b>	Max. 15 MB
<b>Free RAM</b>	16 MB of RAM
<b>Network</b>	All Microsoft-supported networks
<b>Administration</b>	Central configuration possible
<b>[Security Features]</b>	
<b>Authentication</b>	Pre-boot authentication: Login before starting the operating system Multiple OS boot support
<b>Encryption</b>	AES (256 and 128 bit), Rijndael (256 bit), IDEA (128 bit), single DES (56 bit), Blowfish-16 (256 bit), Blowfish-8 (256 bit), Stealth-40 (48-64 bit), XOR (64 bit)
<b>Certification</b>	Level EAL1 according to Common Criteria (EAL3 in evaluation)
<b>Remark</b>	All other marks mentioned are the property of their respective owners.



Utimaco Safeware AG  
P.O. Box 20 26  
DE-61410 Oberursel  
Phone +49 (61 71) 88-0  
Fax +49 (61 71) 88-10 10  
info.pds@utimaco.com  
www.utimaco.com

**utimaco**<sup>®</sup>  
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