

SecuROM™

SecuROM™ Disc Check



The SecuROM™ disc-based Digital Rights Management ensures that only authorized users can enjoy and use your valuable intellectual property.

To ensure highest convenience and satisfaction, the authentication process is completely transparent to legitimate consumers who have an original disc in a local CD/DVD-ROM drive.

If the inserted disc is verified as an original, the game or software starts seamlessly. If SecuROM™ determines that the disc is a copy, the application - depending on fully configurable settings - either

- Terminates the application and displays an information dialog informing the consumer to purchase the product via retail or online.
- Allows the consumer to try out the product for a predefined period of time. Once the trial period has expired, the consumer is asked to obtain the product via retail or convert his illegitimate copy to a legal version by purchasing a valid license online.

With over 300 million discs on the market since 1997, the SecuROM™ disc-based Digital Rights Management solution is the proven market leader.

1. Highest security with best compatibility

SecuROM™ is the only digital rights management solution that effectively combats all three major piracy threats: digital clones, emulation, and cracks.

Digital Clones are discs that are copied onto CD-R, DVD-R or hard disk. Also known as 1:1, friend-to-friend, or casual copies, digital cloning is the most widely used piracy method. Therefore, it represents the biggest threat to your business. SecuROM™ ensures only legitimate users with an original disc can use your software. SecuROM™ protected applications can only be launched with an original disc.

Emulation tools are programs designed to bypass digital rights management solutions. These tools attempt to emulate the keycode required to unlock an encrypted application. The SecuROM™ Data Rights Management mechanism employs several highly developed algorithms that detect emulation tools and prevent them from working, thereby safeguarding your intellectual property.

Cracks are applications that have been modified to work without an original disc. To create cracks, hackers remove or modify the copy protection of an encrypted application, thereby allowing illegal users to start the application without the original disc. SecuROM™ uses various advanced encryption features to prevent cracks and protect your profits.

High security is pointless without high compatibility. Unlike other Digital Rights solutions, SecuROM™ places as much emphasis on usability as on strong protection. This focus gives SecuROM™ the highest compatibility rate in the industry. Please ask your local sales representative for more detailed information

2. Two strong components create one powerful solution

The SecuROM™ digital rights management solution consists of two main components:

A unique, uncopyable electronic keycode is added during the glass mastering process for CD-ROM and DVD-ROM replication. Unlike other digital rights management solutions on the market, the SecuROM™ keycode is fully within the CD/DVD-ROM specification, thereby ensuring the highest possible compatibility.

An authentication mechanism verifies the unique SecuROM™ keycode and unlocks the encrypted software. The authentication mechanism is entirely keyless, meaning no serial numbers, stickers, or artwork modifications are required.



Figure 1 Verification of keycode

The SecuROM™ authentication process is completely transparent to original disc users. If SecuROM™ verifies the disc is an original, the encrypted application starts normally. If SecuROM™ determines that the disc is a copy, the application terminates and a customizable error message is displayed.

3. Hard on hackers, easy on you

SecuROM™ can be implemented in two different ways. Sony DADC the worldwide leading manufacturer of optical storage media, and inventor of additional services such as SecuROM™, will be happy to encrypt your software. Simply send us your master disc and let us know which application (according to the specifications described in the SecuROM™ Software File Format Support section) you wish to protect. Sony DADC will take care of the encryption and replication of discs holding a valid, non-copyable SecuROM™ keycode.

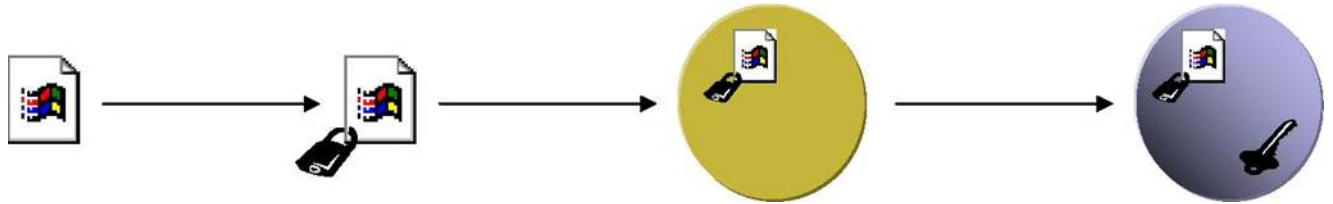


Figure 2 Software Release at Encryption of the Executable File Creation of the Goldmaster Replication of Final Discs Publisher's Studio at Sony DADC or Publisher side containing the encrypted EXE(s) containing the Keycode

With the SecuROM™ Online Encryption Toolkit (OETK), customers can encrypt and test their application themselves in minutes. The OETK is provided to high potential or regular customers free of charge and is available online 24/7. After encryption, the master can be sent to any of over 60 licensed SecuROM™ replication plants worldwide. Please ask your local sales representative for more detailed information.

4. Different publishers have different security requirements – choose your encryption level

Publishers have various security requirements. SecuROM™ therefore offers two encryption levels:

SecuROM™ Basic

The Automatic Encryption level is implemented with a single mouse click. The encryption is completed within minutes without programmer involvement. SecuROM™ Basic is easy to implement via the Online Encryption Toolkit.

SecuROM™ Advanced

The SecuROM™ API links SecuROM™ to your game code for the strongest defense against sophisticated cracks and reverse engineering. Implementation can take as little as half a day, but requires programming knowledge and access to the software code.

SecuROM™ Disc-Based DRM can also be combined with other SecuROM™ solutions such as Product Activation, PreView & ReView, Release Control and Data File Activation. Please see our other factsheets for more details on these solutions.

5. Software File Format Support

Executables Files

The following Windows application formats are supported by SecuROM™ and can be encrypted at Sony DADC or by software publishers and/or developers directly by using the SecuROM™ Online Encryption Toolkit. During encryption, SecuROM™ will add approximately 4 Mega Bytes to your application.

- Standard PE 32-bit Windows applications
- MacroMedia Director applications (version 8.5.0, 8.5.1, and 9.0.0)
- MacroMedia Director MX applications (version 10.0.0, and 10.1.0)
- Macromedia Shockwave applications (version 8.5.x)
- Macromedia Flash applications (version 5.0.30, 6.0.21_CWS/FWS, 7.0.19.0)
- Installshield Installer applications (version 9.x, 10.x)
- NullSoft Installer applications (with disabled self-CRC check)
- Wise Installer applications (version 9)
- PowerBuilder applications (version 3.3.7.0)
- Tcl/Tk applications (version 8.3.2.2)
- Beside Windows applications, the following Macintosh application formats are supported by SecuROM™. Please be aware that encryption of Macintosh applications needs to be performed at Sony DADC and is currently not supported by the SecuROM™ Online Encryption Toolkit.
- Macromedia Director MX (OS 10.1 or higher)
- Carbon Applications (OS 10.1 or higher)
- Mach-O (OS 10.2 or higher)

DLL (Dynamic Link Library) Files

In addition to executable files, SecuROM™ now also offers the protection of Win32 DLL (dynamic link library) files. To unlock encrypted DLL files, a SecuROM™ protected executable is essential (.Net DLL files not supported).

6. Operating System Support

Microsoft Operating Systems

- Windows 2000
- Windows XP Home
- Windows XP Professional
- Windows XP 64 Bit, Edition Version 2003
- Windows Vista

Macintosh Operating Systems

OSX (OS 10.1 or higher) If the protected application is started under OS Classics (OS 8.6 to 9.x) the digital rights management solution is switched off.

7. Optical Storage Media Support

- CD-Recordable (0.7Giga Byte)
- CD-ROM (0.7 Giga Byte)
- DVD-ROM-5 (4.7 Giga Byte) and DVD-ROM-9 (8.5 Giga Byte)

If the gold master does not contain more than 150 MB of data for CD-ROM or 600 MB of data for DVD-ROM, please add dummy data to meet the above-mentioned minimums.

8. For more information

Please visit the official SecuROM™ website at www.securom.com for more information. For customer references or sales related questions do not hesitate to contact our SecuROM™ sales team at sales@securom.com.