Currently, more than 90% of top (non-)games publishers trust SecuROM™ copy control to protect their intellectual property. SecuROM has protected over 250 million discs to date and offers a security concept for both the physical as well as electronic sales channel. This document provides more information on the *SecuROM™ Product Activation* concept developed to protect media independent software. Visit www.securom.com for more information.
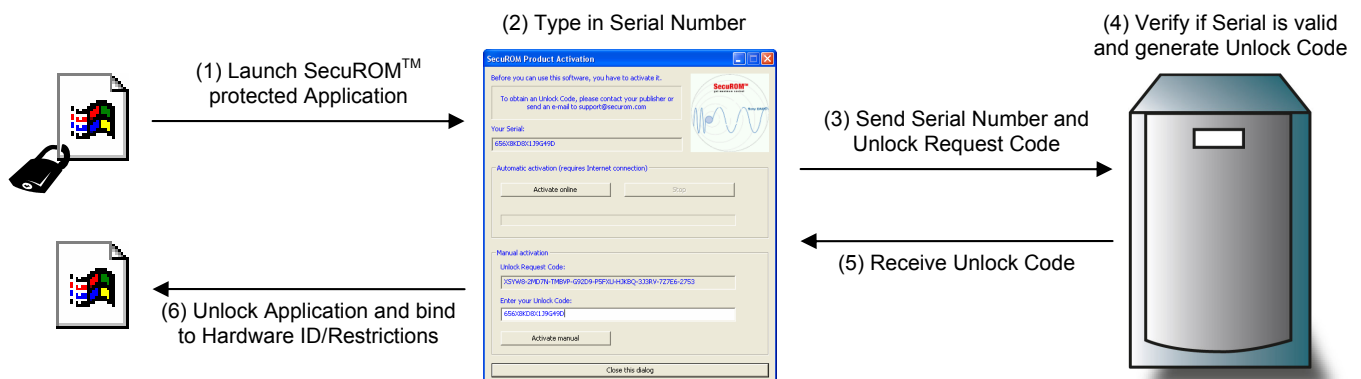
SecuROM™ – one copy control solution for the physical and electronic distribution channel

With SecuROM™'s Product Activation concept, Sony DADC offers software publishers the possibility to secure their content either distributed via the physical or electronic sales channel with one solution. Only legitimate customers who have purchased the product are able to unlock the program which is bound to the hardware after activation. This ensures that once activated, it cannot be transferred to another PC and therefore not being mass pirated. SecuROM™'s Product Activation can be easily combined with Sony DADC's n-CD solution. Let your end-customers register first and collect important market information prior allowing them to use your software products. See www.n-cd.com for more information.

SecuROM™ Product Activation – how does it work?

It's so easy. Launch the software, activate, and use the purchased product! The activation scenario will most likely look as follows.

- (1) End-customers launch the protected application. This application can be located on any storage device such as HDD, CD/DVD-ROM, etc. It doesn't matter where the software comes from, either downloaded from the Internet/any server or purchase on e.g. CD/DVD-ROM.
- (2) If not activated yet, a window will pop up showing an Unlock Request Code and asking the user to type in his serial number. Inserting the Serial - which users received most likely after purchasing the software - can be either done manually or automatically.
- (3) Both the (a) Serial and (b) the Unlock Request Code (contains the hardware ID) are sent to the SecuROM™ Product Activation server. Depending on online or offline activation, this information is transferred automatically via the Internet or entered by a customer service operator via a web interface.
- (4) The SecuROM™ Product Activation server will perform various checks prior generating an Unlock Code. The creation of an unlock code depends on the result of the verification if (1) the serial number and (2) the unlock request code is valid and numerous activations are left.
- (5) End-customers can receive the unlock code either manually, e.g. via a hotline, or automatically via the Internet.
- (6) Upon receipt of the Unlock Code, a license is generated on the end-customer system ensuring the software is only launch-able on the activated system. Once the product has been activated, the application is bound to the hardware ID as well as restrictions (optional) and can therefore not be copied to another PC.


(1) Launch SecuROM™ protected Application

(2) Type in Serial Number

(3) Send Serial Number and Unlock Request Code

(4) Verify if Serial is valid and generate Unlock Code

(5) Receive Unlock Code

(6) Unlock Application and bind to Hardware ID/Restrictions

SecuROM^{TM} Product Activation – chose one out of two implementation methods

Different software publishers/developers have different requirements. Therefore, SecuROM^{TM} Product Activation offers various features and methods. Basically, SecuROM^{TM} Product Activation can be implemented/added to your software in two different ways.

- Integrated in the *Application* itself wherein the SecuROM^{TM} Product Activation API is part of the actual source code and must be integrated during the development. This implies that (1) the application will not run if not protected with SecuROM^{TM}, and (2) the application cannot be distributed unprotected.

- Separately from the application through an external *DLL (dynamic link library)* file whereas the SecuROM^{TM} Product Activation API is implemented in a DLL. The DLL file can either be developed by the application developers themselves, or by the publisher, or by any other party applying SecuROM^{TM} to this application. This method is especially useful in the following cases.

  a. For protection of back catalog titles, where only the unprotected application is available anymore, meaning without the possibility to implement SecuROM^{TM} in the application source code.
  b. Whenever a flexible authentication method and/or user interface are needed (e.g. different e-shops, different countries, different brandings)

Sony DADC will provide implementation manuals containing more detailed information on the usage of the SecuROM^{TM} Product Activation APIs. In case of the DLL solution, Sony DADC delivers the source code including a standard GUI which can be fully customized by the developers, publisher, or any other party.
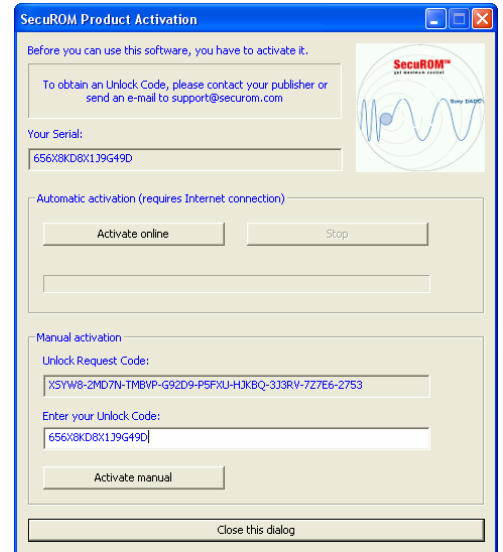
SecuROM^{TM} Product Activation – set specific usage restrictions & limitations

Once activated, the application can either run forever without any further authentication on subsequent launches, or it can be limited to expire. SecuROM^{TM} Product Activation supports the following types of expiration.

- No expiry (i.e. once activated, a user can use the software forever)
- Expire after *n* calendar days after the first launch
- Expire after *n* launches
- Expire at a certain fixed date
- Expire after being used for a certain amount of time (in days, hours and minutes)

Note that all checks related to dates can also be enforced online, requesting the exact date and/or time from the SecuROM time server.

SecuROM^{TM} Product Activation – try before buy

The *Grace Period* defines the period during which the software is functional without activation. This permits the user to launch the software without the need to activate. SecuROM^{TM} Product Activation supports the following types of grace period.

- No grace period (i.e. users must activate in order to launch the application at all)
- Permit to use the software for *n* calendar days after the first launch
- Permit to use the software for *n* launches
- Permit to use the software for a certain amount of time (in days, hours and minutes)
- Permit to use the software until a certain fixed date (e.g. until May 1st 2006)

Note that all checks related to dates can also be enforced online, requesting the exact date and/or time from the SecuROM^{TM} time server.

Solutions by **Sony DADC**

SecuROM™ Product Activation – also perfect for software distributed on CD/DVD-ROM

In case your software is distributed on CD/DVD-ROM, SecuROM™ Product Activation supports beside the activation itself various methods to verify the inserted disc as an original or illegal copy. The following options are available.

- Don't check for an original disc (i.e. require product activation only)
- Check for an original disc as long as the application has not been activated. If the user activates on the very first launch, there will be no disc check. However, activation is essential after the grace period, independent whether or not the user has an original disc.
- Always check for an original disc, i.e. on every launch, regardless whether the application has been activated or not.

Different publishers have different security requirements – choose your encryption level

Publishers have different security requirements. SecuROM™ therefore offer various encryption levels to protect your intellectual property.

- *SecuROM™ Automatic Encryption*
  The Automatic Encryption level is implemented with a single mouse click. The encryption is completed within minutes without the need to involve your programmers.

- *SecuROM™ Customized Encryption Level*
  GUI based encryption settings allow you to customize the protection.

- *SecuROM™ Advanced Encryption Level*
  Our new API links SecuROM™ to your game code for the strongest defense against sophisticated cracks and reverse engineering. Implementation only takes half a day, but requires programming knowledge and access to the software code (works with C or C++).

SecuROM™ Product Activation - Software File Format Support

The following *Windows application formats* are supported by SecuROM™ Product Activation. During the encryption process, approximately 4 Mega Bytes will be added 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 Authorware applications (version 7.0.2.0 without load library)
- 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)

If your development environment is not mentioned above, please send a sample to support@securom.com for encryption evaluation.

SecuROM™ Product Activation - Operating System Support

Microsoft Operating Systems

- Windows 98 2nd Edition (SE)
- Windows Millenium (ME)
- Windows 2000
- Windows XP Home
- Windows XP Professional

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Need more information?

Please visit the official SecuROM™ website at www.securom.com for more information. For any technical questions, please contact our SecuROM™ support team at support@securom.com. For customer references or sales related questions do not hesitate to contact your local SecuROM™ sales representative or securom-sales@securom.com.

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