

**Recommended troubleshooting steps for a SecuROM wrapped application experiencing the following:**

Situation: A SecuROM encrypted application will not launch after the original disc is inserted into the drive.

Q: Is the drive a Kenwood multibeam drive?

- These drives can have older firmware which have problems reading a disc with a SecuROM key-code. A Firmware update has been available from <http://www.kenwoodtech.com/downloads.html> since Sept. of 2000. If version for Kenwood UCR-412 is less than firmware 132 or Kenwood UCR-401 upgrades to firmware 132.

Please try and answer the following questions below to ascertain non drive related issues.

Q: Are real-mode drivers being used for the drive?

- Real-mode drivers are not compatible with SecuROM. If there is an entry in the config.sys file, have it remarked out, i.e., REM DEVICEHIGH = C:\TATUNGCD\TATUNGCD.SYS /D:TA\_CDROM /P:170,0. Install the plug-n-play driver instead.

Q: Is the sound card a PCI64 using ES1371 drivers version 4.05.1127 or 4.05.1129?

- If so, obtain the newest driver for the card or disable the on-board joystick port.

Q: Is the customer using Windows 2000?

- Windows 2000 needs administrator rights to run a SecuROM protected application unless the User Access Service is installed and the versions of SecuROM used is 4.68 or greater. SecuROM uses well documented low-level commands to access a CD/DVD-ROM drive. When Microsoft developed Windows 2000 they made security levels more restrictive and also disallowed low-level commands without having administrator rights. Starting a SecuROM protected application leads to a 'No disc inserted.' or 'Wrong disc inserted.' message when started on a PC running Windows 2000 without administrator rights. The access rights may need to be changed accordingly.

Q: Is the customer using a Dell 4100/4300 series computer and Windows 2000?

- Some software running on these systems, including SecuROM, that communicated with the IO subsystem Ultra ATA hardware and drivers, could potentially encounter a problem. Intel identified a problem independently and offered an update on their site after the initial driver release. The resolution involves downloading the proper drivers for the storage controllers from the Intel site at [http://appsr.intel.com/scripts-df/Product\\_Filter.asp?ProductID=182](http://appsr.intel.com/scripts-df/Product_Filter.asp?ProductID=182) and running a setup program.

Q: Are there two drives installed on the PC?

- Run the SecuROM protected disc in both drives and report the result. If there is just one drive installed, is another available to install and test? Or, can the drive be installed on another PC to test?

Q: Does the no disc inserted (or equivalent) message come up if the disc is taken out?

- This is a simple check for possible file corruption of an installed SecuROM encrypted application. If no message comes up when it should, the file could be corrupted and should be re-installed.

Q: Are they trying to use a backup of the original disc?

- This may seem obvious to most people, but in some cases, due to the fact that some copies are so close to an original, SecuROM does not provide the 'Wrong disc' or equivalent message and instead aborts the launch. If it is difficult to determine whether or not the original is being used, send our "analysis" tool to them and the report it produces back to us for further evaluation of the problem.

Q: Are there enough system resources available to launch the application?

- First, ensure that no other applications are running; Especially debugger programs, decompilers, emulators and the like. Re-boot if necessary to clear any residual application memory. Close any tray applications that load and stay resident (icon on the task bar), if necessary. Disable from loading at startup if necessary. Some tray applications are difficult to disable from loading at startup. If necessary, delete Start Up (Start Menu) shortcuts, or delete references to the tray applications stored in either the registry ..\CurrentVersion\Run, RunOnce, RunOnceEx or ..\Services\VxD for example, or the win.ini file.

Q: Do General Protection or Invalid Page Faults appear with some regular frequency?

- If these occur during or after the launch of an application, check for the application vendor's reporting of a bug that could require an update (IE 5.0/5.5 for example) and un-install the application and re-boot, if necessary. If the errors are related to User.exe, Explorer.exe, Kernel32.exe, or GDI.exe, run system diagnostic software, and or re-install Windows, if necessary.

Please inquire about drives connected to the system, and provide instructions for collecting the model and firmware for the OS in question. This information can be checked against the list of drives tested in our lab to reduce the likelihood that the problem is drive related. To better identify drive related issues, have the end user run the analysis.exe program for each drive in question and return the .bin file. Send the file to [support@securom.com](mailto:support@securom.com). We will immediately return the status of the drive and any other pertinent information.

Remember to always distribute patches that contain the latest version of SecuROM, available via [www.securom.com](http://www.securom.com)!