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Absolutely no hardware or Operating system lock. Combine data from different sources; model them together or separately. Use your preferred measurement hardware and operating system.

TFC Companion installation instructions

(last updated July 20, 2008)

TFC Companion is the software for thin film data analysis that supports Ellipsometry, Reflectance and Transmittance measurement. It can be used as a standalone desktop application, TCP server or integrated with selected hardware. There are several versions of TFC Companion - please refer to TFC Companion brochure for further information.

Evaluation copy of TFC Companion is fully functional, limited time version – the main limitation is that evaluation copy does not allow saving new records (materials, filmstacks, projects, etc) to the database and saving/exporting the results of the calculation/measurement. *Evaluation copy* of TFC Companion requires an *evaluation key* that you can request after installation (please send email to evaluation@semiconsoft.com). Evaluation key -file “evaluation.zip” or ”evaluation” - will need to be placed in the /init directory of TFC Companion installation on your computer .

Licensed copy of TFC Companion requires USB dongle (hardware license key). Please follow instructions for Hardware key installation.

I. Download and installation of TFC Companion

There are two separate installers: for standalone (used without hardware) and hardware integrated version.

1. Download TFC Companion installer specific for your operating system (installers are available for Windows (win32), Linux, Mac (OSX10.x) and generic java installer for other systems). Installer can be downloaded from <http://www.semiconsoft.com/html/Download.htm> or from the installation CD. Execute the installer and follow the directions.

Note 1. Application requires Java Runtime Environment (JRE) installed on the target computer - JRE ver. 1.4.2 or higher. Installer will try to locate Java installation on your computer, if a proper version is not found – installer will install it on Windows. If you are using other OS - please download and install JRE specific for this system.

2. You can now start using TFC Companion. You will be asked to login (user: Administrator (for standalone operation) or Admin_hw (hardware integrated))

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password: psw). *Evaluation copy does not allow changing the password or creating a new user.* With licensed copy one can create new user accounts.

Note. Evaluation copy is TFCompanion –RE Imaging version that can work in the standalone or hardware integrated mode (depending on the installer used)

II. Configuration of TFCompanion launcher (optional).

Current version of TFCompanion (as of build 08.10.2005) is compatible with latest JRE 1.5 and is tested with JRE 1.6. Most of configuration parameters of the Java Virtual Machine (JVM) that is used to run TFCompanion are defined in configuration file: **TFCompanion.lax** or **TFCompanion.ini** (on Windows system). This file is located in the installation directory of TFCompanion. TFCompanion.lax (ini) is a text file. Since build 02152006 special utility to change TFCompanion.lax settings is available at Configuration/ Launcher Configuration (from the main menu).

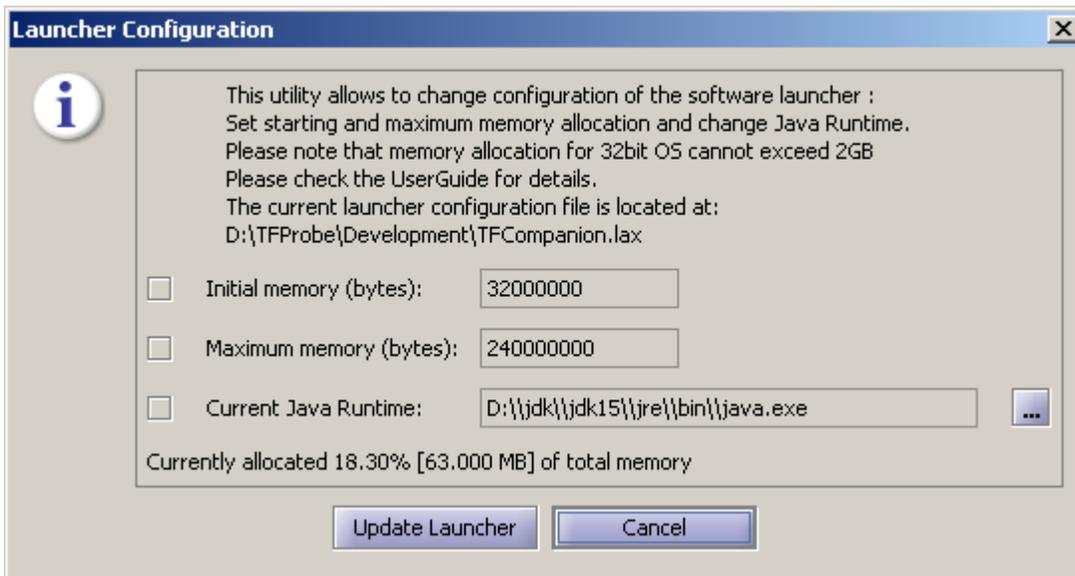


Fig. Launcher Configuration utility

To change parameter – check the box next to this parameter and edit the field. When Update Launcher button is selected – TFCompanion.lax file is updated (only parameter with enabled checked boxes will be updated). A copy of configuration file will be saved as TFCompanion.lax.org (backup copy). If TFCompanion.lax.org is already exist - TFCompanion.lax.org_1 file will be created, this way TFCompanion.lax.org file will always contain a copy of the original configuration.

Note. Default memory allocation 32MB(min), 200MB(max) is normally adequate for most case. However, if you are using large image files or do heavy repeated calculations it is recommended to increase max allocated memory. Please note that this is the memory that software is potentially allowed - by Operating system - to use on request. Software will normally use only portion of this memory, so allocation serves as an insurance for peak memory uses.

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III. Problems trouble shooting.

1. **Problem.** Screen seems to be frozen and does not respond to the mouse clicks.
Solution. The problem maybe that the current active window is “hiding” behind inactive window that is blocking the view. This problem can normally happen in MS Windows or Linux when you switch between different dialogs or leave TFCompanion and switch to another application and return back. Try using Alt-Tab (hold Alt key and toggle Tab key) to browse through the open applications and select another TFCompanion window that is active.
2. **Problem.** Response to user action is very slow, e.g. opening of a dialog, etc..
Solution. Try to check currently available memory (Help/Memory monitor from the main menu). If the amount of free memory is low (e.g. 1MB) – you need to change memory allocation of the launcher (see section II above).
3. **Problem.** Part of the screen is not re-painting and response to user action is very slow.
Solution. Some of your actions may have caused an exception – check the log file /log/TFCompanion.log in TFCompanion installation directory. If there is no relevant records in the log file, there maybe a OutOfMemory error problem. Check the memory allocation and increase it if needed.

If you experience any problems please send email to leo@semiconsoft.com with description of the problem (please attach screenshot or log