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TRNSYS 16

a TRaNsient SYstem Simulation program

Installation Guide



Solar Energy Laboratory, Univ. of Wisconsin-Madison
<http://sel.me.wisc.edu/trnsys>



TRANSSOLAR Energietechnik GmbH
<http://www.transsolar.com>



CSTB – Centre Scientifique et Technique du Bâtiment
<http://software.cstb.fr>



TESS – Thermal Energy Systems Specialists
<http://www.tess-inc.com>

About This Manual

The information presented in this installation guide is intended to provide a simple guide to help you during the TRNSYS 16 installation process. This manual is not intended to provide detailed reference information about the TRNSYS simulation software and its utility programs. More details can be found in other parts of the TRNSYS documentation set. The latest version of this manual is always available for registered users on the TRNSYS website (see here below).

Revision history

- 2004-10 For TRNSYS 16.00

Where to find more information

Further information about the program and its availability can be obtained from the TRNSYS website or from the TRNSYS coordinator at the Solar Energy Lab:

TRNSYS Coordinator Solar Energy Laboratory, University of Wisconsin-Madison 1500 Engineering Drive, 1303 Engineering Research Building Madison, WI 53706 – U.S.A.	Email: trnsys@engr.wisc.edu Phone: +1 (608) 263 1586 Fax: +1 (608) 262 8464
TRNSYS website: http://sel.me.wisc.edu/trnsys	

Notice

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1. INSTALLATION GUIDE

1.1.1. *System requirements*

1.1.1.1. *Software*

OPERATING SYSTEM

TRNSYS requires Windows 95/98, NT 4.0, 2000, ME or Windows XP. Windows 2000 or XP are recommended due to known issues in resource management in previous Windows versions (those issues are not related to TRNSYS nor its utility programs).

COMPILERS

Thanks to the drop-in DLL technology, no compiler is required to add components to TRNSYS if you obtain them as a precompiled DLL.

If you wish to debug TRNSYS or to add components for which you received the Fortran code, you will need a Fortran compiler (Please see the Programmer's Guide for supported compilers). If you wish to create your own components, you will need a compiler capable of creating a DLL. This includes any recent Windows-compatible compiler for C++, Delphi, Fortran or other languages.

OTHER

Viewing the documentation requires the free Acrobat reader (Version 6.0 or higher is recommended to benefit from advanced searching capabilities).

1.1.1.2. *Hardware*

TRNSYS requirements will mostly depend on the simulations you want to run. The specifications here below list the basic requirements and the recommended configuration. The latter should allow you to run yearly simulations with a 0.1 sec time step using the full capabilities of the online plotter, while the basic configuration will allow you to run more typical simulations.

MINIMUM CONFIGURATION

- Pentium III processor or equivalent
- 128 MB of RAM
- 200 MB of available disk space (up to 2 GB if you install all the optional weather data files)

RECOMMENDED CONFIGURATION

- Pentium IV processor 2.0 GHz or equivalent
- 512 MB of RAM
- 1 GB of available disk space (up to 3 GB if you install all the optional weather data files)

1.1.2. Installing TRNSYS 16

Run the Setup program (trnsys16-setup-16-xx-xxxx.exe), where xx.xxxx is the exact release number. The Setup program will guide you through a series of dialog boxes with simple options. You will be prompted to accept the license agreement to continue the installation.

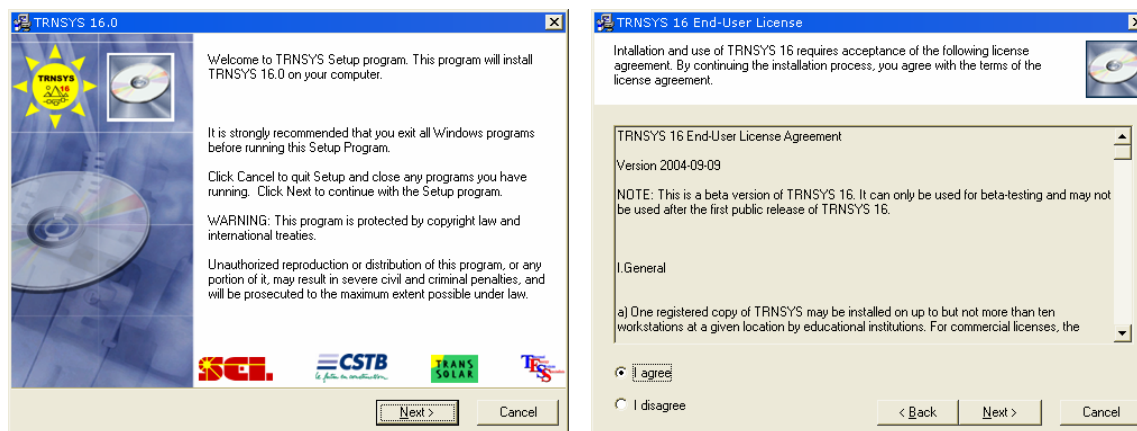


Figure 1-1: Installing TRNSYS 16 - Part 1

You can navigate between the dialog boxes using the Back and Next Buttons. You will go through a few basic options.

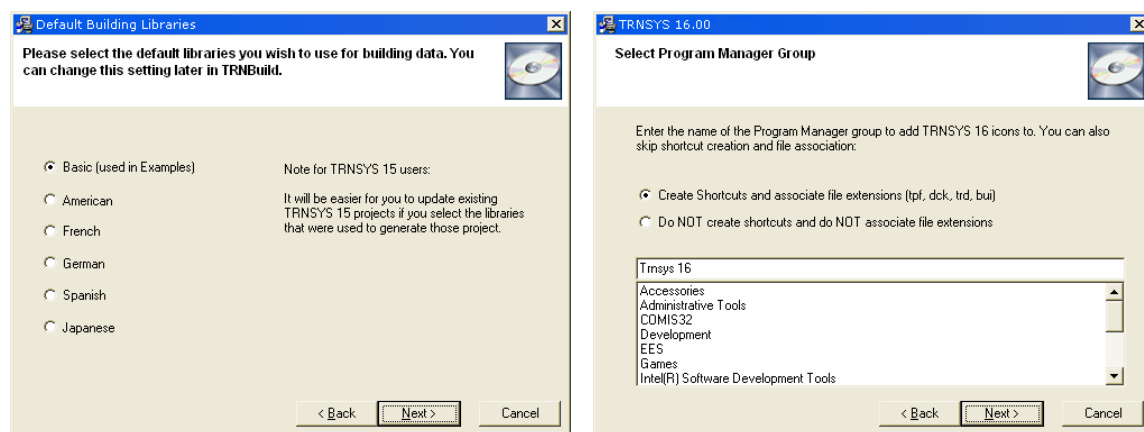


Figure 1-2: Installing TRNSYS 16 - Part 2

You will be asked to choose a default set of libraries for building data (materials and glazing). If you have many TRNSYS 15 projects that you need to update, choose the libraries that you were using in TRNSYS 15. If your country is listed, use those libraries (they were created by local distributors and are often in languages other than English). If you do not know what to do, keep the default choice (Basic). Note that you can always change the default libraries later in TRNBuild. You will then be asked if you want to create shortcuts and associate file extensions with TRNSYS. You should select that option unless you have already installed TRNSYS 16 and you have customized your shortcuts or associations.

When you have selected a few options such as the destination directory, Setup will ask your confirmation to start the installation.

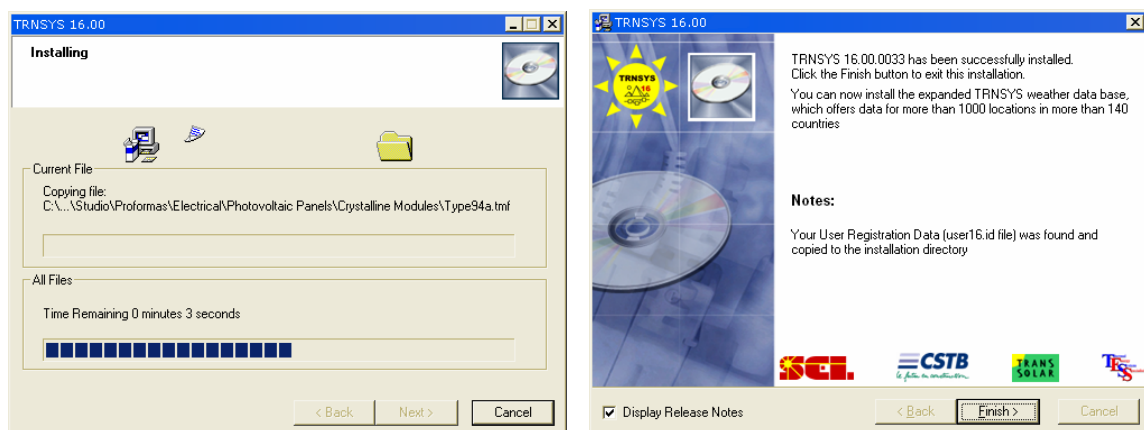


Figure 1–3: Installing TRNSYS 16 – Part 3

When the installation is complete, the Setup program will attempt to copy your user registration data (the "user16.id" file) to the destination folder. If you install from a CD provided by your distributor, Setup should be able to locate the file. If it is not the case (e.g. if you are installing a downloaded version), you should copy the "user16.id" file provided by you distributor according to the message displayed on the last screen of the Setup program.

When you click "Finish", Setup will exit and launch your default browser to display the release notes of the version you have just installed. You can skip this by unchecking the "Display Release Notes" checkbox on the last screen of the Setup program (this is not recommended as the Release Notes have important information on the program you have just installed).

1.1.3. *Installing the expanded weather data*

After installing TRNSYS 16, the setup program will try to copy your user registration data to the destination directory. The registration information is contained in a small text file, user16.id. If you install from a CD obtained from your distributor, Setup should find the user16.id file and install it. If you downloaded TRNSYS from the web, Setup will inform you in case it can't find the user16.id file. In that case you just need to copy that file to the installation directory (C:\Program Files\Trnsys16 by default). Please contact your distributor if you cannot locate your registration information.

The TRNSYS Setup installs a few weather data files that will show you an example of the available data sources and data formats. However, TRNSYS 16 comes with a comprehensive set of weather data files including more than 1000 locations in more than 140 countries. Please refer to Volume 6 of the documentation (Weather Data) for more information on the available data sources and locations.

If you wish to proceed with the installation of the expanded weather data base, just run the weather data Setup program, trnsys16-weather-16-xx-xxxx.exe (where xx-xxxx is the release number). The Setup program is very similar to the TRNSYS 16 installation program and will lead you through a few steps with dialog boxes.

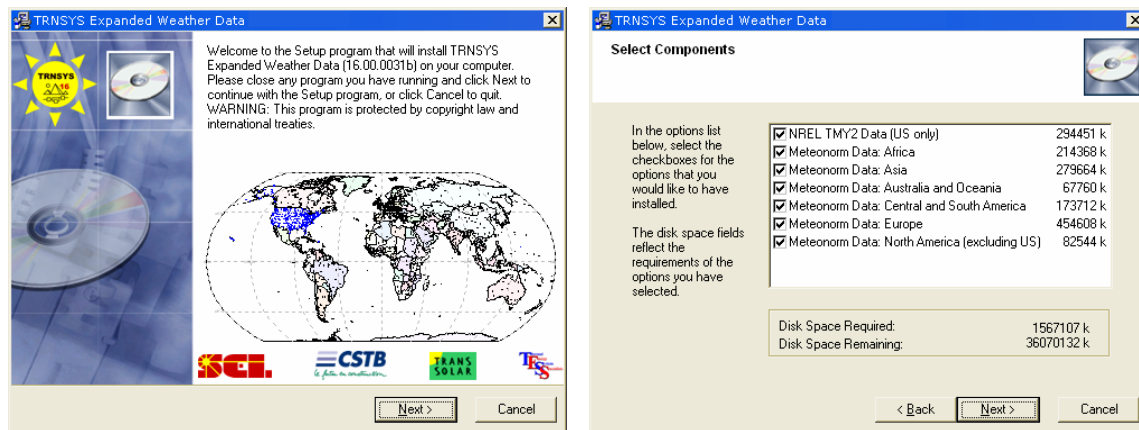


Figure 1–4: Installing the expanded weather data

You can choose which datasets to install or not (the available packages may not match the screenshot here below depending on your version). Please note that installing all the data files will require more than 1.5 GB of available disk space on your computer.

When the weather data installation is completed, you are ready to use TRNSYS.