



## Update Instructions for the Academic Versions of EES (2016-17)

*Please read these instructions carefully as the update process has changed from that used in previous years.*

You are receiving this message because our records indicate that you are the administrator of the Academic EES license for your department. If you no longer are the administrator, or if you plan to transfer your responsibility to another person, please inform us by e-mail to [info@fchart.com](mailto:info@fchart.com). Doing so will ensure that your department receives updates in the future.

**You MUST update EES before midnight, August 31, 2016 or your existing version of EES will expire. If you do not update before this date, you will not be able to use any version of EES, new or old. If this happens, see the Special Instructions for Expired Versions below.**

This message provides instructions to download the new Academic version of EES. There is no cost to update an Academic license. Do not distribute this message, login name or password to anyone. **Access to our server is intended only for EES administrators.** Do not provide the download information to students or other faculty as this may result in blocking access to our website.

**NOTE:** There are both 32-bit and 64-bit Academic EES programs. Most of the existing Academic licenses are for the 32-bit Commercial or Professional versions, which are designed to work on both 32 and 64-bit Microsoft Windows operating systems. The 64-bit Academic Professional version requires an optional 64-bit EES license file (EES.dft64). If your department has not purchased this license file, you will not be able to use the 64-bit version. The 64-bit program is only provided as a Professional Academic version. (There is no 64-bit Commercial version.). See <http://www.fchart.com/ees/64-bit.php> for more information about the 64-bit version. Separate directions follow for the 32-bit (Commercial & Professional versions) and for the 64-bit Professional version.

### **Downloading and Installing the 32-bit Commercial or Professional EES Version**

Using your internet browser program, go to <http://fchart.com>. Click on the "EES Instant Update" link at the right of the page to bring up the EES Instant Update & Technical Service (IUTS) page. Then click on the orange Download Latest EES button and enter the following information in the EES Instant Update Login screen.

Login Name: EES\_XXXX

Password: d1EESel

Email: administrator email address

**You must replace XXXX in the above login name with your 4-digit EES license number.** This number is displayed in the first window that appears when EES is started. It is also provided on the receipt that was emailed to you when the program was purchased.

After entering the login information, you will be able to download Setup\_EES\_Acad.exe. EES is designed to operate on computers running the 32 or 64-bit Microsoft Vista, XP, and Windows 7/8/10 operating systems. (There is no Macintosh version. See <http://www.fchart.com/ees/mac-linux.php> for options regarding the use of EES on Macintosh computers.) Run the Setup\_EES\_Acad.exe file to install the new version. You will be prompted to select a directory in which the EES program will be installed. We recommend that you install the program into your existing EES folder. If you install EES into a different folder, you will need to copy the EES.dft file from your current EES folder into the folder where the new version has been placed. After installation, start EES and ensure that the expiration date displayed on the startup screen is 9/01/2017. Keep these instructions and periodically check our server to see if a new version of EES is available. We often provide updates during the year.

### **Downloading and Installing the 64-bit Academic Professional EES Version**

*Use these directions only if your department has purchased the EES 64-bit license file.*

Using your internet browser program, go to <http://fchart.com>. Click on the "EES Instant Update" link at the right of the page to bring up the EES Instant Update & Technical Service (IUTS) page. Then click on the orange Download Latest EES button and enter the following information in the EES Instant Update Login screen.

Login Name: EES64\_XXXX

Password: d1EESel

Email: administrator email address

**You must replace XXXX in the above login name with your 4-digit EES license number.** This number is displayed in the first window that appears when EES64 is started. It is also provided on the receipt that was emailed to you when the program was purchased.

After entering the login information, you will be able to download Setup\_EES64\_Acad.exe. EES64 is designed to operate on computers running Microsoft Windows 7/8/10 64-bit operating systems. Run the Setup\_EES64\_Acad.exe file to install the new version. You will be prompted to select a directory in which the EES64 program will be installed. We recommend that you install the program into your existing EES64 folder. If you install into a different folder, you will need to copy the EES.dft64 file from your current EES64 folder into the folder where the new version has been placed. After installation, start EES64 and ensure that the expiration date displayed on the startup screen is 9/01/2017. Keep these instructions and periodically check our server to see if a new version of EES64 is available. We often provide updates during the year.

### **File Distribution**

The Academic license agreement allows the setup and license files and the EES manual (EES\_MANUAL.pdf) to be made available to colleagues and students in your department and to your network systems administrator for installation on your network, if necessary. You may place these files on a server for access by students and faculty in your department. **However, the setup and license files must not be made available to anyone outside of your department.** If you place the EES setup file, EES application or license file on a server, you must ensure that no one outside of your students and faculty in your department can access the files. Failure to meet this or other requirements of our End User License Agreement (<http://fchart.com/ees/eula.php>) will result

in suspension of your EES license. Please take care to ensure that you and your users do not put the Setup\_EES\_Acad.exe, Setup\_EES64\_Acad.exe, EES.dft or EES.dft64 files on an internet site or make them available to persons outside of your department, as this will also cause a suspension of your license.

### **Special Instructions for Expired Versions**

If EES displays the expiration notice, you may be able to recover use of the program as follows: First, download and install the 2016-17 version into your existing EES directory, as explained above. Then replace the license (EES.dft or EES.dft64) file with one that has not displayed the "expired" message. You may be able to find one on a computer that has not been used to run EES after August 31. If you cannot find a valid copy of the license file, it will be necessary to purchase a new license file (\$100, credit card payment only) from our website on page <http://fchart.com/ees/order.php>. A purchase order or bank wire transfer will not be accepted for a replacement license file.

### **Correcting EES Installation Problems**

1. If the expired message appears, first ensure that you have installed the 2016-17 version as described above. The start-up screen should briefly display the version and expiration data before the program closes. If the 2016-17 version is installed, check to ensure that your computer clock is displaying the correct date. Correct the date if necessary. After the expiration message has been displayed it is necessary to replace the EES.dft (or EES.dft64) file.
2. If an error occurs while the 32-bit version of EES is starting, the problem may be caused by a video driver that is incompatible the EES 3D plotting capability. If this problem occurs, reinstall EES, but this time, be sure to uncheck the Install 3D plotting capability box.
3. Contact F-Chart Software at [info@fchart.com](mailto:info@fchart.com) for any other problems. Attach a copy of the EES license file (EES.dft) and the EES file that is causing a problem..

### **New Features and EESy Solutions Newsletter**

A short description of the new features in EES can be seen by selecting the New Features menu item in the Help menu of the new version or from <http://fchart.com/ees/new-features.php>. Note that only new features are listed here. There have been many minor changes and bug fixes and these are not reported. You may also wish to download recent issues of the EESy Solutions Newsletter (<http://fchart.com/ees/eesy-solutions-newsletter.php>) which describes some of the new features as well as providing tips on using EES.

### **Component Library**

The Component Library is the newest application library provided, joining the Heat Transfer and Mechanical Design libraries. This library is only available in the 32 and 64-bit Professional versions. The Component Library provides access to a set of EES functions and procedures that simulate components in thermal-fluid systems. Currently there component models for Combustors, Compressors, Turbines, Fans & Blowers, Pumps, Heat Exchangers, Heat & Mass Exchangers, Nozzles & Diffusers, and Flow Control Devices. The use of the Component Library enables the user to quickly develop system models with fewer system level convergence issues.

## **Manual**

The latest EES manual can be downloaded from the EES Manual link at the lower right of page <http://fchart.com/ees/>. Right click on this link and select Save Link As... to download the manual as a .PDF file. You need Adobe Acrobat to read the PDF file - a free copy of Adobe Acrobat is available from <http://www.adobe.com/>. If you copy the EES\_Manual.PDF file into the folder in which EES is installed, it will be accessible from the EES Help menu.

## **Mastering EES Book**

***Mastering EES*** is a 775 page book written by S.A. Klein and G.F. Nellis that provides a comprehensive presentation of all of the features in the Commercial and Professional versions of EES. ***Mastering EES*** differs from the EES manual in its organization, reading style and detail. It also provides many more examples than the manual. The book is intended both for those who have never used EES as well as for advanced users. It is available as an electronic download in .PDF format for \$25 from <http://fchart.com> for a single-user copy. A purchase of five versions (\$125) allows the ebook to be posted on your network so that it is accessible for all users in your department. If you copy Mastering\_EES.pdf into the EES directory, it can be accessed from the Mastering EES menu item in the Help menu without having to enter a password. Also, when accessed from the Mastering EES menu, EES will provide an option to download the latest copy.

## **Upgrades**

There are two versions of the 32-bit EES Academic license: Commercial and Professional. The additional capabilities provided by the Professional version are listed on our web site at: <http://fchart.com/ees/pro-comm-versions.php>. As noted above, the Component Library is available in the Professional version. You may update an Academic Commercial license to an Academic Professional license at any time by contacting F-Chart Software at [info@fchart.com](mailto:info@fchart.com). You will receive full credit for the original license payment. The 32-bit Academic Professional version can be further upgraded to the 64-bit Academic Professional version by purchase of the 64-bit license file (\$750). The purchase can be made directly from our website (<http://www.fchart.com/ees/order.php>) or with a purchase order submitted to [info@fchart.com](mailto:info@fchart.com). See <http://fchart.com/ees/64-bit.php> for information about the 64-bit version of EES.

## **Heat Transfer Textbook and Library**

An extensive library of functions useful for solving heat transfer problems is included with all academic versions of EES. This library has been extended with additional heat transfer correlations and also provides correlations for fluid flow minor losses and measurement. Select Function Information (Options menu) and click on the Heat Transfer radio button to view these functions. Detailed help files including examples are provided with these functions. The heat transfer library was developed to accompany the book:

### ***Heat Transfer***

G.F. Nellis and S.A. Klein  
Cambridge University Press, 2009  
ISBN 978-0-521-88107-4

<http://www.cambridge.org/us/engineering/author/nellisandklein/>

Example problems can be downloaded from <http://fchart.com/ees/books.php>

## **Thermodynamics Textbook**

EES was originally developed for use in thermodynamics courses. A thermodynamics textbook written by S.A. Klein (the author of EES) and colleague G.F. Nellis was published in 2012. This book is tightly integrated with EES and it provides detailed instruction relating to solving thermodynamics problems using EES and many advanced examples and interesting problems.

### ***Thermodynamics***

S.A. Klein and G.F. Nellis

Cambridge University Press, 2012

ISBN 978-0-521-19570-6

<http://www.cambridge.org/us/thermodynamics/>

Example problems can be downloaded from <http://fchart.com/ees/books.php>

## **LaTeX/PDF Report**

In order to generate PDF copies of EES programs, solutions and plots, the MikTeX Latex package (<http://miktex.org>) needs to be installed on the computer. There is no cost to download this program. Click the help button in the Create LaTeX/PDF Report dialog (File menu) or view the online help (<http://www.fchart.com/ees/eeshelp/3x07t4m.htm>) for instructions.