

Installation Guide and Getting Started with Autodesk Ecotect Analysis

This document describes how to install and activate Autodesk® Ecotect™ Analysis 2010 software on your computer. This guide also includes some basic introductions to the user interfaces and the operation of these tools.

Contents

Introduction.....	4
System Requirements	4
Minimum Software System Requirements	4
Minimum Hardware System Requirements	4
Product Serial Number.....	4
Installation	5
Administrator Rights.....	5
The Installation Wizard	5
Setup—Welcome Page	5
Setup—Software/Utilities to Install	5
Setup—Autodesk License Agreement.....	6
Setup—User and Product Information.....	6
Setup—Select Destination Location	7
Setup—Select Components	7
Setup—Select Start Menu Folder.....	7
Setup—Select Additional Tasks	8
Setup—Product Licensing Method	8
Setup—Network License Details.....	8
Setup—Ready to Install.....	9
Setup—Installing	9
Setup—Required Components	9
Setup—Final Page	9
Activating Your License	10
Running in Trial Mode	10
Selecting the Activate Option	10
Changing Your Product Serial Number.....	12
Working with Autodesk Ecotect Analysis 2010.....	13
Pages.....	13
Project Page.....	13
3D Editor Page.....	13
Visualize Page	14
Analysis Page	14
Summary Page	14
Panels.....	14

Accessing the Web Service Tools for Whole Building Analysis.....	15
Appendix A: Installer Command Line Options.....	16
Appendix B: Uninstaller Command Line Options.....	19

Introduction

Autodesk® Ecotect™ Analysis 2010 software is a comprehensive concept-to-detail sustainable design analysis tool, providing a wide range of simulation and analysis functionality through desktop and web-service¹ platforms. Powerful web-based whole-building energy, water, and carbon analysis capabilities converge with desktop tools for visualizing and simulating performance of the building model within the context of its environment.

Use the desktop tools and web-service functionality together to help create more sustainable designs.

System Requirements

Autodesk Ecotect Analysis 2010 is a Windows® application. While it will run on quite modest hardware, some of its analysis functions can be processor-intensive, and many of its advanced graphical display abilities are best viewed using a hardware-accelerated graphics card. The following are the minimum requirements for running this software.

Minimum Software System Requirements

- Windows® 95 operating system (or later)
- Windows NT® 3.5x operating system
- Windows® XP operating system

Minimum Hardware System Requirements

- Intel® Pentium® II processor or equivalent, 300 MHz or faster
- 128 MB RAM or higher
- 85 MB free hard disk space or higher
- OpenGL® hardware accelerated video card
- 1,024 x 768 high-color (16-bit) screen resolution or higher

Product Serial Number

You will need a valid serial number to use Autodesk Ecotect Analysis without restrictions. The serial number is located on a label on the product packaging. Transfer the detachable sticker to a safe location to keep this information for future transactions. A software license manager embedded into the product prevents unauthorized use of the product and will require you to input your serial number in order to register and activate your copy of Autodesk Ecotect Analysis.

If you do not yet have your Autodesk Ecotect Analysis serial number, or are not yet ready to activate, you can still install the software and run in a fully functioning trial mode for 30 days from date of installation. After 30 days the software will run in Demo Mode, without the ability to save or print. You can still activate the software as described in the *Activating Your License* section below and even change the product serial number you wish to use for activation.

¹ Customers who add subscription to their Autodesk Ecotect Analysis license can access whole building analysis capabilities via the Autodesk® Green Building Studio® web-based service for the duration of their subscription, subject to the terms of use that accompanies the service.

Installation

Installing Autodesk Ecotect Analysis 2010 is best done directly from the product CD-ROM. Depending on your operating system and its settings, the installer for the software will usually run automatically after inserting the CD-ROM into your computer. If it does not, you can run it manually by locating the *setup.exe* file in the top directory of your CD-ROM drive. If you are using Microsoft® Internet Explorer®, simply double-click the left mouse button on this file when you locate it.

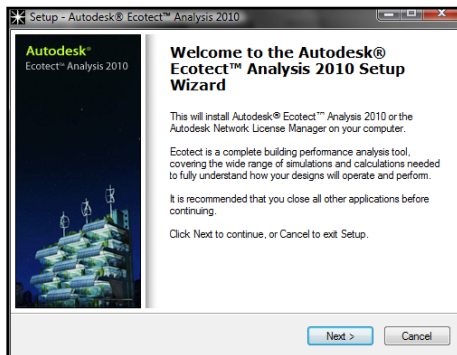
Administrator Rights

As the installation of this software also includes secure licensing features, it needs access to areas of the system registry and file system that only users with administrative privileges can go. Thus, in order to properly install this software and its licensing components, you must first log on to the computer with an account that has administrative privileges. If you do not, the installer will issue a warning and not let you continue.

The Installation Wizard

The installer will first prompt you with a series of wizard pages, many of which will require you to make choices or interact in some way. If you are an administrator, it is possible to use a range of command-line options to automate the installation process or create a *setup.inf* file to assign preferred default settings. For more information, see *Appendix A: Installer Command Line Options*.

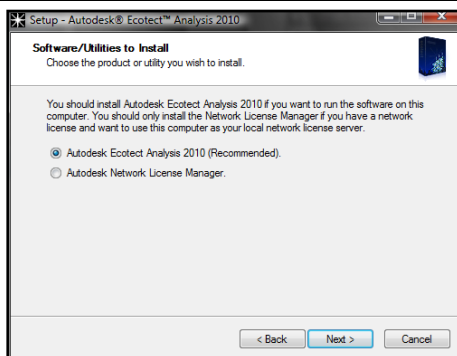
Setup—Welcome Page



This page is displayed when the installer is first run. Its aim is to show which software it is about to install and provide a brief description of it.

Click the Next > button to continue.

Setup—Software/Utilities to Install



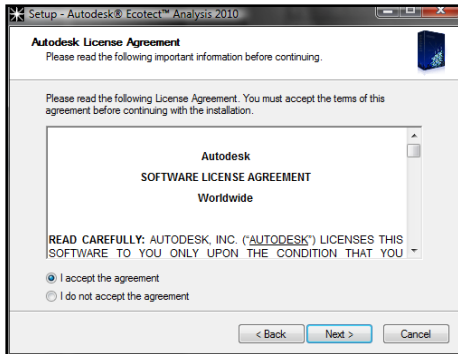
By default, the actual Autodesk Ecotect Analysis 2010 software is installed. This is the typical, and recommended, option for this page.

However, if you are an administrator setting up a local license server, you can choose to install the Autodesk Network License Manager instead. You must have a network license to use this option, something that is only available from an Autodesk sales partner but *not available* when purchasing online.

Select your option and click the Next >

button to continue.

Setup—Autodesk License Agreement



A printed license agreement is not included in your product packaging. Instead, the license agreement is displayed here during the installation process. When you accept the license agreement and complete the installation, you can find a copy of your license agreement in the *EULA.rtf* file in the install directory of your product.

If you choose the “I Do Not Accept the Agreement” option after reviewing the terms of the license agreement, the installation will be canceled. If you reject the license agreement, you have 30 days from your date of purchase to return this software. To receive a full refund, return this software along with the software package, all other items in this package, and dated proof of purchase to the location where you acquired it.

In order to continue with the installation, you must accept the terms and conditions within the Autodesk License Agreement.

Select the “I Accept the Agreement” option and click the Next > button to continue.

Setup—User and Product Information

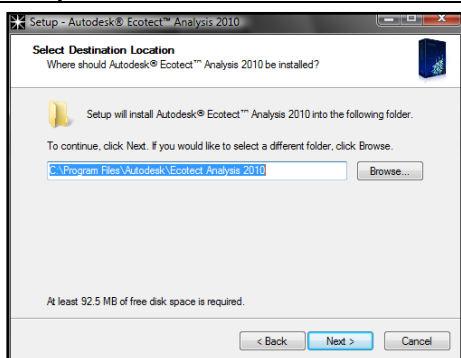
A screenshot of the 'User and Product Information' window from the 'Setup - Autodesk® Ecotect™ Analysis 2010' installer. The window has a title bar with the installer name and standard Windows window controls. The main content area is titled 'User and Product Information' and contains the text: 'Enter your user and product license details.' Below this are several input fields: 'Your First or Given Name:', 'Your Surname:', 'Your Organization:', 'Your Product Serial Number (xxx-xxxxxxx):', and 'Product Code (XXXXXX):'. At the bottom are three buttons: '< Back', 'Next >', and 'Cancel'.

Use this page to enter your name and organization, as well as the product details you will find either on the cover of your CD-ROM or in the electronic receipt you received after purchase.

It is important that you take care entering the product serial number and product code as these will be used later in the license activation process.

Enter all your details and click the Next > button to continue.

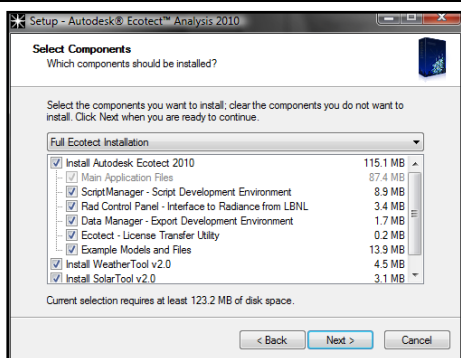
Setup—Select Destination Location



You use this page to select the folder into which the software will be installed. It is recommended that you use the default value as this will locate the software with any other Autodesk products you may have installed. However, the software itself can be installed anywhere on your system.

Ensure the installation folder is where you want it and click Next > to continue.

Setup—Select Components

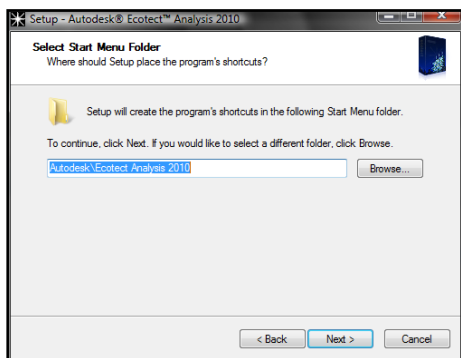


This wizard page allows you to select the individual components of the software to install. You can select from a series of default setups using the large drop-down list at the top, or manually check/uncheck the individual components you need.

All the components absolutely required for the software to run should be grayed out as these must always be installed.

Click the Next > button to continue.

Setup—Select Start Menu Folder



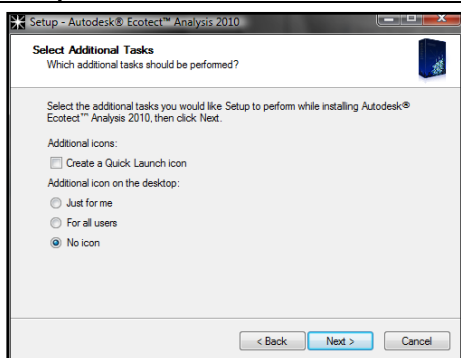
In addition to copying all the software and license files to the destination folder, the installer also creates a series of links in your Start Menu. You can use this page to enter the folder and subfolder(s) in which to place these links.

It is recommended that you manage your folders here instead of manually moving them later as the uninstaller will likely be unable to find or delete the moved links when you come to uninstall the software.

You can create subfolders by simply using a backslash (\) character between the names making up each folder.

Click the Next > button to continue.

Setup—Select Additional Tasks

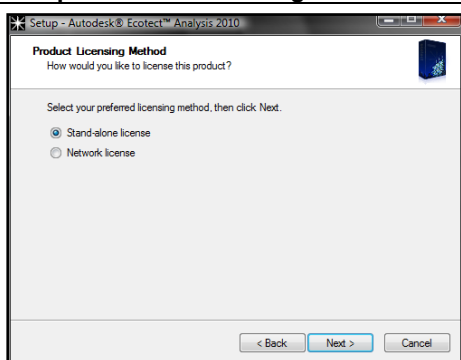


In addition to the links in the Start Menu, the installer can also create links on your desktop and in the Quick Launch area of your application bar.

When creating a desktop icon, you can choose to create this just for yourself or, as you must be an administrator to do this install, every user. You should be judicious in your use of the For All Users option as some people take great care of their personal desktop layouts.

Choose the additional icons you wish to create and click Next > to continue.

Setup—Product Licensing Method

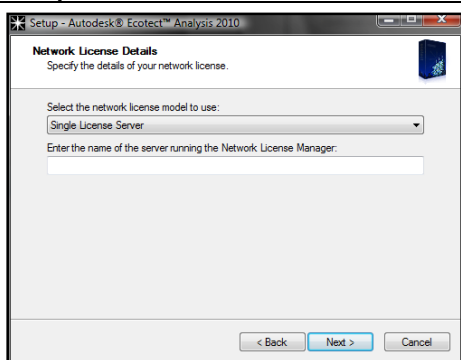


Network licenses are only available through Autodesk authorized resellers. Stand-alone licenses may be purchased only through the Autodesk Website.

Thus, even though this option is available, you can only choose the one that matches the specific license you have purchased. Choosing the wrong one will mean that the wrong license files will be included and you will likely have to completely reinstall to obtain your correct license.

Select the appropriate license method and click the Next > button to continue.

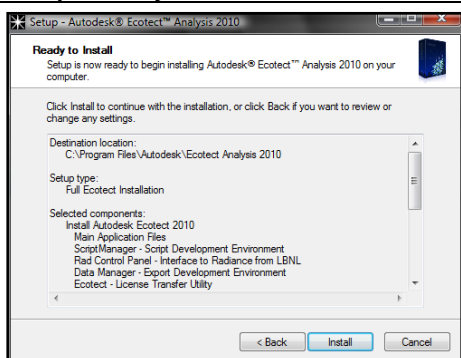
Setup—Network License Details



If you selected the Network License method in the preceding wizard page, you will be prompted to enter the name of your local license server. This should have been set up prior to installing this software by your local systems administrator on a machine of their choosing. You only need to enter the actual network name of the server here, without any leading backslashes.

Click the Next > button to continue.

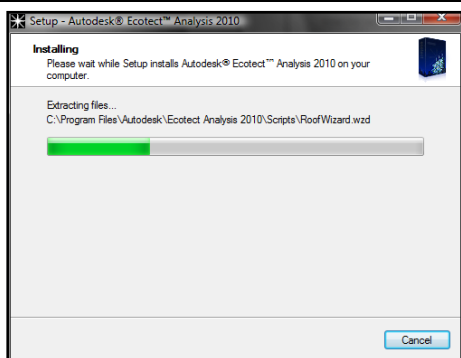
Setup—Ready to Install



Once you have answered all the questions required by the installer, a summary of all your decisions will be shown here. This gives you an opportunity to review the installation before actually proceeding with all the required tasks.

Once you are happy with all the options selected, click the Install button to continue.

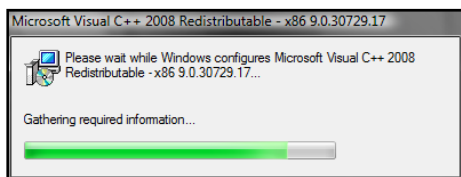
Setup—Installing



As the installation proceeds, a message line is updated with each task being undertaken and the progress bar indicates the relative percentage complete.

You will need to wait for all tasks to complete, which could take a couple of minutes.

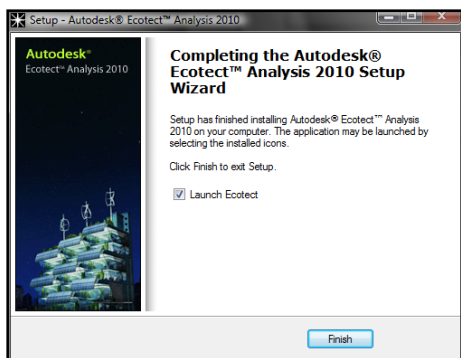
Setup—Required Components



Depending on your operating system, the installation may need to install additional Windows system components. These are widely used components that should not affect your system or other software.

Again, you will need to wait for each of these components to complete its own separate installation.

Setup—Final Page



Once all files and components have been copied and installed correctly, the installer will display this final page. If you would like to run the software immediately, make sure the Launch Ecotect option is selected.

Click the Finish button to close and complete the installation.

Activating Your License

Product activation is a software-based license management technology incorporated into many Autodesk® products, including Autodesk Ecotect Analysis. It is a secure and hassle-free process that authenticates licensed users running Autodesk software. The process verifies that the serial number is legitimate and has not been activated on more computers than are eligible. This is an automated, electronic process that requires an Internet connection.

Autodesk Ecotect Analysis can be run immediately after installation. Upon first use, a licensing wizard similar to that shown in Figure 1 will be displayed.

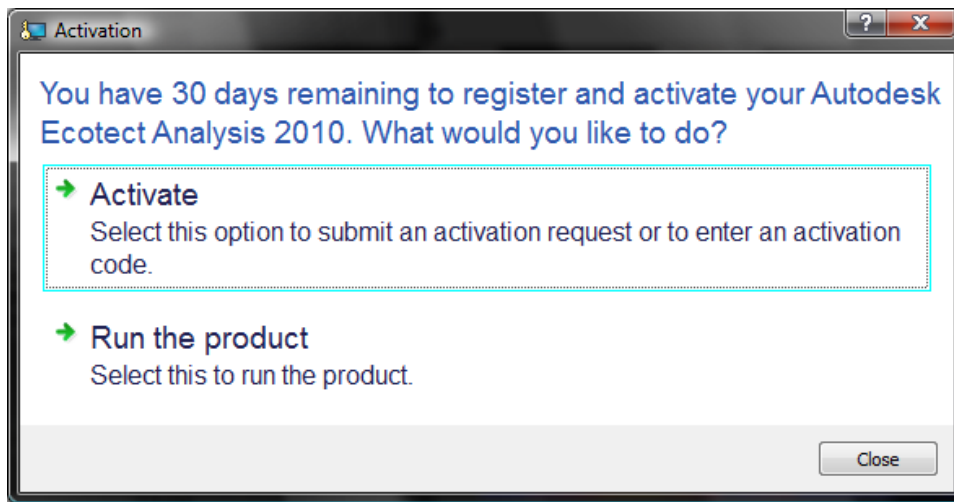


Figure 1—The first page of the licensing wizard displayed when Autodesk Ecotect Analysis is first run.

Running in Trial Mode

To run in trial mode, select the Run the Product option. The full application will then launch. This option will be displayed each time you run the software for the next 30 days.

Selecting the Activate Option

When you choose the Activate option, a larger pop-up window will appear similar to that shown in Figure 2. This will contain the serial number you entered during the install process as well as a newly generated request code. These two numbers are used by the license activation server to generate an activation code that authorizes the particular computer you are currently using to run the software.

If you do not already have an activation code for the displayed combination of serial number and request codes, select the Get an Activation Code option and click the Next >> button.

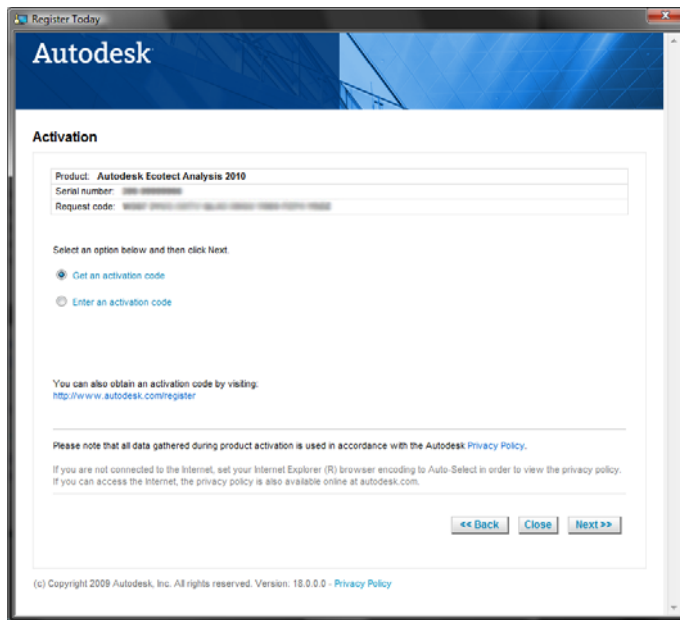


Figure 2—The Activation page of the licensing wizard.

If you already have an activation code, select the Enter an Activation Code option. This will display an additional area within the window into which you can copy/paste or type it.

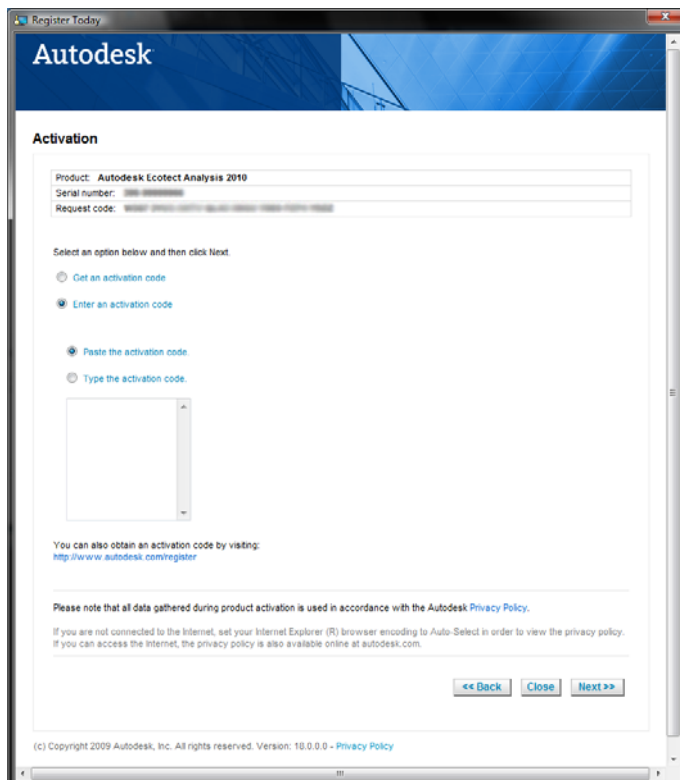


Figure 3—Pasting in your activation code.

Once you have entered your activation code, select the Next >> button to continue.

From this point on, simply follow the detailed instructions on each page.

Changing Your Product Serial Number

You can change the product serial number you entered during the install process by using either the Product and License Information item in the main Help menu or the Product Information link in the About dialog box, as shown in Figure 4.

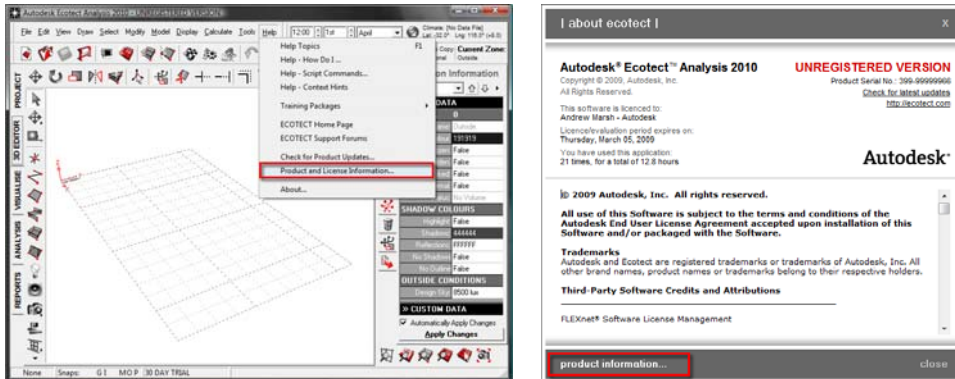


Figure 4—Ways to display your Product License Information.

Both of these methods will display the Product License Information dialog box, as shown in Figure 5. This dialog box shows a range of information about both your product and the computer you are currently running it on. To change the entered serial number, locate and click the Update... button immediately to the right of it.

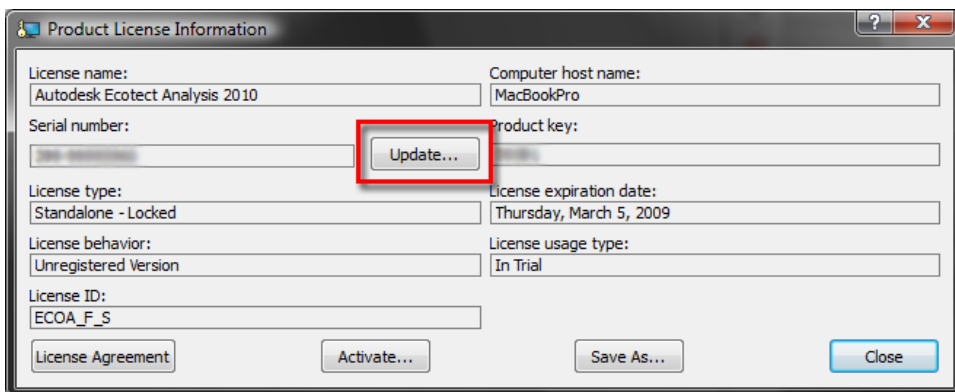


Figure 5—Using the Update... button to change your product serial number.

This will display the Update the Serial Number dialog box. Simply enter your new serial number and click the OK button.

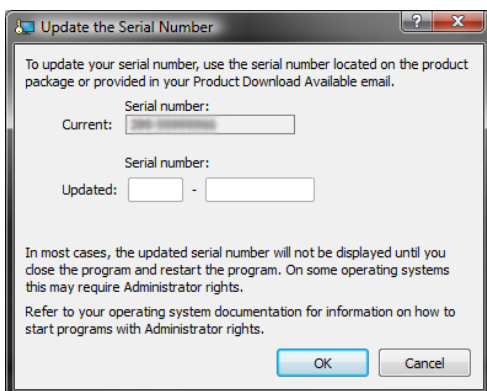


Figure 6—Updating your product serial number.

Working with Autodesk Ecotect Analysis 2010

When you first run Autodesk Ecotect Analysis 2010, the main application window will be displayed. This is a single-document application, meaning that you can only work on one model file at a time. However, you can simultaneously run as many copies of the desktop software as you'd like, opening a different model in each.

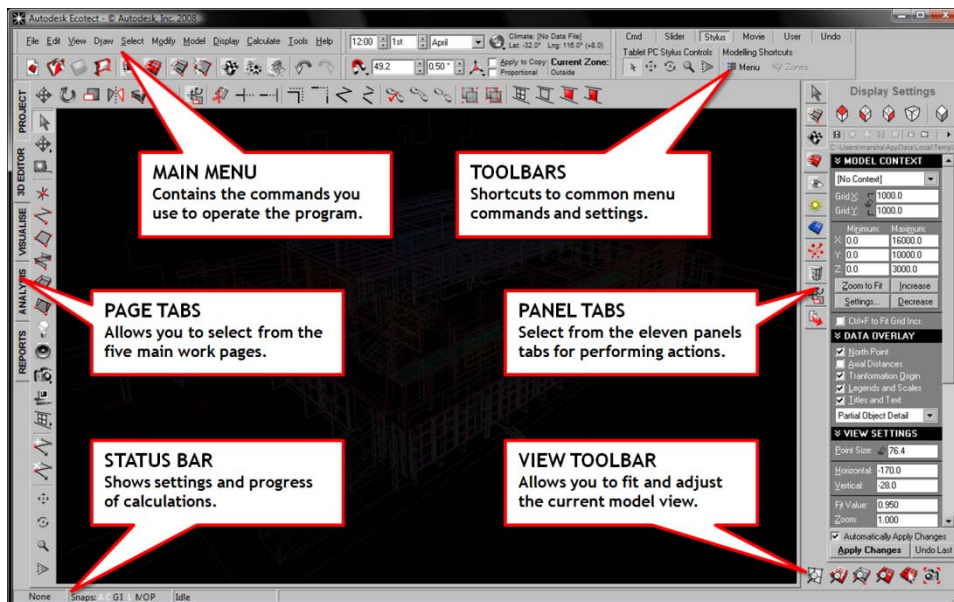


Figure 1—The components of the main Ecotect application window.

As you will spend a lot of time in the main window when using Ecotect Analysis, an attempt has been made to shape the program so that it does not rely on a labyrinth of cascading dialog boxes to perform actions and adjust parameters. To this end, the interface is laid out in different pages and a series of panels for operating on selected objects and zones.

Pages

Pages represent the main work areas in Ecotect Analysis, entered using the tabs running down the left-hand side of the main window. Each page allows you to work on a different aspect of the model, including its embedded data, geometric modeling, data visualization, analysis graphs, or tabulated summaries.

Project Page

This page allows you to add information about the project that will be stored along with the model. This information is also useful for archival and quality assurance purposes. The Notes section is entirely flexible and can contain any amount of formatted text.

3D Editor Page

This page is where the actual geometric building model is generated and edited. It consists of a main editable drawing area surrounded by edit toolbars. The drawing toolbar along the left-hand side is where all the object generation tools are found, while the model manipulation tools are found along the top in the editor toolbar.

Visualize Page

This page contains the OpenGL canvas, which uses hardware accelerated graphics to display hidden-line and rendered views of the current model. In this canvas you can store and manipulate the various camera views within the model as well as display a range of spatial analysis information.

Analysis Page

This page provides calculation functions for a wide range of analysis to be carried out on the model. These fall into different categories, each represented by a separate tab section beneath the main graph.

Summary Page

This page contains an integrated utility canvas for displaying data tables, HTML pages, and summary information about the current model. If you open an HTML or MHT file in Ecotect Analysis software, it will be displayed here. Similarly, if you run a script that uses the Report Generator, its output will also be displayed here.

Panels

A series of control panels are located on the right side of the main application window. Each panel contains controls for different aspects of the model and its analysis. Many of these panels allow you to perform operations on the current selection set, be it an object, node, or zone.

- **Selection Information**
Information and settings for the currently selected object or node. The information in this panel can be quite diverse, such as zone data, occupancy information, and measurement distances.
- **Zone Management**
A list of zones in the current model.
- **Material Assignment**
Displays and assigns the primary and alternate material assignment of the selected object(s).
- **Display Settings**
Tools for controlling what is displayed in the 3D model.
- **Visualization Settings**
Visualization controls for the OpenGL hardware rendering engine.
- **Shadow Settings**
Controls for displaying shadows and shading functions.
- **Analysis Grid**
Controls for positioning and calculating the analysis grid.
- **Rays and Particles**
Controls for spraying acoustic rays and particles within the model.
- **Scripts and Wizards**
Quick access to scripts and user-created utilities as well as controls for positioning and creating simple parametric geometry.
- **Object Transformation**
Controls for numerically transforming selected objects and nodes.
- **Export Manager**
Quick access to model export options.

Accessing the Web Service Tools for Whole Building Analysis

Customers who add Subscription to their Autodesk Ecotect Analysis license can gain access to web-based whole building energy, water, and carbon analysis tools. Using the Autodesk Green Building Studio technology, the web-based service provides a user-friendly front end to powerful building energy analysis software. All of the computationally intensive simulations are carried out on remote servers, and the results are provided to you in a web browser.

You will need to set up your web-service account as a separate process. For details, please refer to the *Getting Started with Green Building Studio* guide found in the support section of the Autodesk Ecotect Analysis product center at www.autodesk.com/ecotect-analysis

Appendix A:

Installer Command Line Options

The Setup program accepts optional command line parameters. These can be useful to system administrators, and to other programs calling the Setup program.

/SP-

Disables the This Will Install... Do You Wish to Continue? prompt at the beginning of Setup.

/SILENT, /VERYSILENT

Instructs Setup to be silent or very silent. When Setup is silent, the wizard and the background window are not displayed but the installation progress window is. When a setup is very silent, this installation progress window is not displayed. Everything else is normal, so, for example, error messages during installation are displayed.

/SUPPRESSMSGBOXES

Instructs Setup to suppress message boxes. Only has an effect when combined with /SILENT and /VERYSILENT.

The default response in situations where there is a choice is:

- Yes in a Keep Newer File? situation.
- No in a File Exists, Confirm Overwrite situation.
- Abort in Abort/Retry situations.
- Cancel in Retry/Cancel situations.
- Yes (=continue) in a DiskSpaceWarning / DirExists / DirDoesntExist / NoUninstallWarning / ExitSetupMessage / ConfirmUninstall situation.
- Yes (=restart) in a FinishedRestartMessage / UninstalledAndNeedsRestart situation.

Five message boxes are not suppressible:

- The About Setup message box.
- The Exit Setup? message box.
- The FileNotInDir2 message box displayed when Setup requires a new disk to be inserted and the disk was not found.
- Any (error) message box displayed before Setup (or Uninstall) could read the command line parameters.
- Any message box displayed by the support function MsgBox.

/LOG

Causes Setup to create a log file in the user's TEMP directory detailing file installation and [Run] actions taken during the installation process. This can be a helpful debugging aid. For example, if you suspect a file is not being replaced when you believe it should be (or vice versa), the log file will tell you if the file was really skipped, and why.

The log file is created with a unique name based on the current date. (It will not overwrite or append to existing files.)

The information contained in the log file is technical in nature and therefore not intended to be understandable by end users. Nor is it designed to be machine-parseable; the format of the file is subject to change without notice.

/LOG="filename"

Same as /LOG, except it allows you to specify a fixed path/filename to use for the log file. If a file with the specified name already exists it will be overwritten. If the file cannot be created, Setup will abort with an error message.

/NOCANCEL

Prevents the user from cancelling during the installation process, by disabling the Cancel button and ignoring clicks on the close button. Useful along with /SILENT or /VERYSILENT.

/NORESTART

Instructs Setup not to reboot even if it is necessary.

/RESTARTEXITCODE= *exit code*

Specifies the custom exit code that Setup is to return when a restart is needed. Useful along with /NORESTART.

/LOADINF="filename"

Instructs Setup to load the settings from the specified file after having checked the command line. This file can be prepared using the /SAVEINF= command as explained below.

Do not forget to use quotes if the filename contains spaces. As shown in the example above, it is usually best to always enclose the filename in quotes.

/SAVEINF="filename"

Instructs Setup to save installation settings to the specified file.

Do not forget to use quotes if the filename contains spaces. As shown in the example above, it is usually best to always enclose the filename in quotes.

/LANG=*language*

Specifies the language to use: *language* specifies the internal name of the language as specified in a [Languages] section entry.

When a valid /LANG parameter is used, the Select Language dialog will be suppressed.

/DIR="x:\dirname"

Overrides the default directory name displayed on the Select Destination Location wizard page. A fully qualified pathname must be specified.

/GROUP="folder name"

Overrides the default folder name displayed on the Select Start Menu Folder wizard page. If the [Setup] section directive DisableProgramGroupPage was set to *yes*, this command line parameter is ignored.

/NOICONS

Instructs Setup to initially check the Don't Create a Start Menu Folder check box on the Select Start Menu Folder wizard page.

/TYPE=*type name*

Overrides the default setup type.

If the specified type exists and is not a custom type, then any /COMPONENTS parameter will be ignored.

/COMPONENTS="comma separated list of component names"

Overrides the default component settings. Using this command line parameter causes Setup to automatically select a custom type. If no custom type is defined, this parameter is ignored.

Only the specified components will be selected; the rest will be deselected.

If a component name is prefixed with an asterisk (*) character, any child components will be selected as well (except for those that include the *dontinheritcheck* flag). If a component name is prefixed with an exclamation mark (!) character, the component will be deselected.

This parameter does not change the state of components that include the fixed flag.

Example: Deselect all components, then select the Help and Plugins components:

```
/COMPONENTS="help,plugins"
```

Example: Deselect all components, then select a parent component and all of its children with the exception of one:

```
/COMPONENTS="*parent,!parent\child"
```

/TASKS="comma separated list of task names"

Specifies a list of tasks that should be initially selected.

Only the specified tasks will be selected; the rest will be deselected. Use the /MERGETASKS parameter instead if you want to keep the default set of tasks and only select/deselect some of them.

If a task name is prefixed with an asterisk (*) character, any child tasks will be selected as well (except for those that include the *dontinheritcheck* flag). If a task name is prefixed with an exclamation (!) character, the task will be deselected.

Example: Deselect all tasks, then select the *desktopicon* and *fileassoc* tasks:

```
/TASKS="desktopicon,fileassoc"
```

Example: Deselect all tasks, then select a parent task and all of its children with the exception of one:

```
/TASKS="*parent,!parent\child"
```

/MERGETASKS="comma separated list of task names"

Like the /TASKS parameter, except the specified tasks will be merged with the set of tasks that would have otherwise been selected by default.

Example: Keep the default set of selected tasks, but additionally select the *desktopicon* and *fileassoc* tasks:

```
/MERGETASKS="desktopicon,fileassoc"
```

Example: Keep the default set of selected tasks, but deselect the *desktopicon* task:

```
/MERGETASKS="!desktopicon"
```

/PASSWORD=password

Specifies the password to use. If the [Setup] section directive *password* was not set, this command line parameter is ignored.

When an invalid password is specified, this command line parameter is also ignored.

Appendix B:

Uninstaller Command Line Options

The uninstaller program (*unins??? .exe*) accepts optional command line parameters. These can be useful to system administrators, and to other programs calling the uninstaller program.

/SILENT, /VERYSILENT

When specified, the uninstaller will not ask the user for Startup confirmation or display a message stating that uninstall is complete. Shared files that are no longer in use are deleted automatically without prompting. Any critical error messages will still be shown on the screen. When /VERYSILENT is specified, the uninstallation progress window is not displayed.

If a restart is necessary and the /NORESTART command is not used (see below) and /VERYSILENT is specified, the uninstaller will reboot without asking.

/SUPPRESSMSGBOXES

Instructs the uninstaller to suppress message boxes. Only has an effect when combined with /SILENT and /VERYSILENT. See /SUPPRESSMSGBOXES under *Setup Command Line Parameters* for more details.

/LOG

Causes Uninstall to create a log file in the user's TEMP directory detailing file uninstallation and UninstallRun actions taken during the uninstallation process. This can be a helpful debugging aid.

The log file is created with a unique name based on the current date (it will not overwrite or append to existing files).

The information contained in the log file is technical in nature and therefore not intended to be understandable by end users. Nor is it designed to be machine-parseable; the format of the file is subject to change without notice.

/LOG="filename"

Same as /LOG, except it allows you to specify a fixed path/filename to use for the log file. If a file with the specified name already exists it will be overwritten. If the file cannot be created, Uninstall will abort with an error message.

/NORESTART

Instructs the uninstaller not to reboot even if it is necessary.

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