



VE-Pro User Guide

IES Virtual Environment 6.4

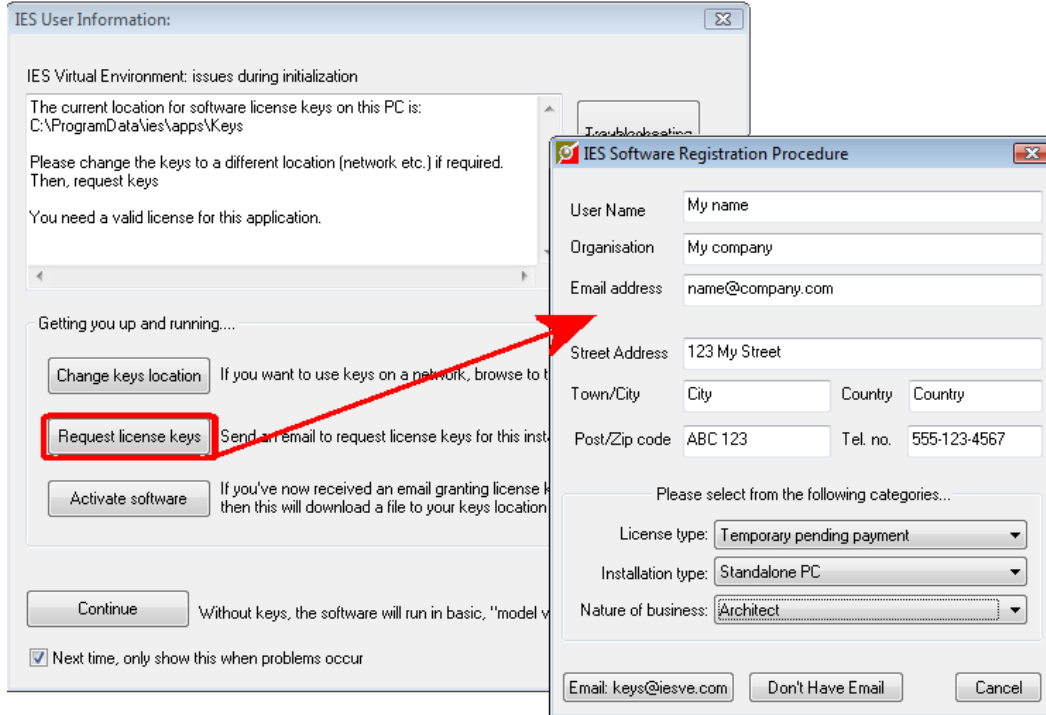
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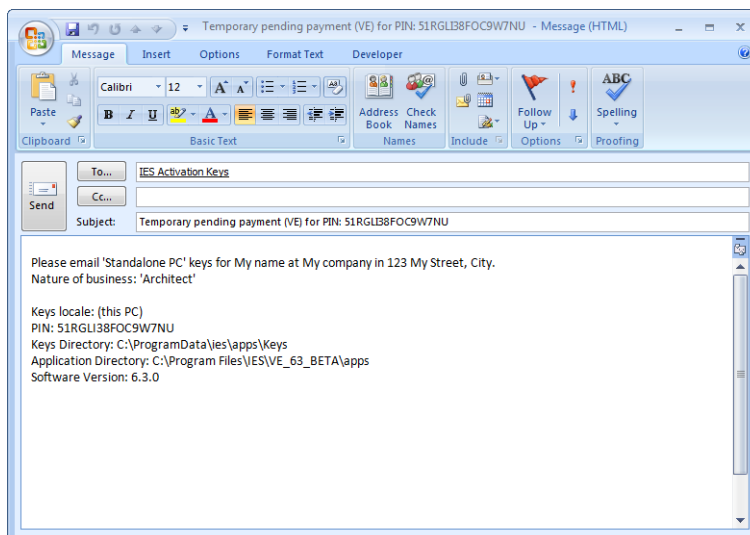
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1 Registration

The first time you run your software, you will be presented with the IES User Information dialog that will allow you to request license keys to register the <Virtual Environment> for your installation.



Once complete, the user can click the button labelled **Email: keys@iesve.com** which will generate an automatic keys request email.



Once the email is sent to keys@iesve.com the team will process the request and send out a confirmation email to you (generally within 1 working day) and then you are ready to **Activate software...**

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1.1 Activate Software

1.1.1 Receive confirmation email

Once you receive the email from our keys department it will read:

"Hi

Your IES <Virtual Environment> software keys are ready for download.

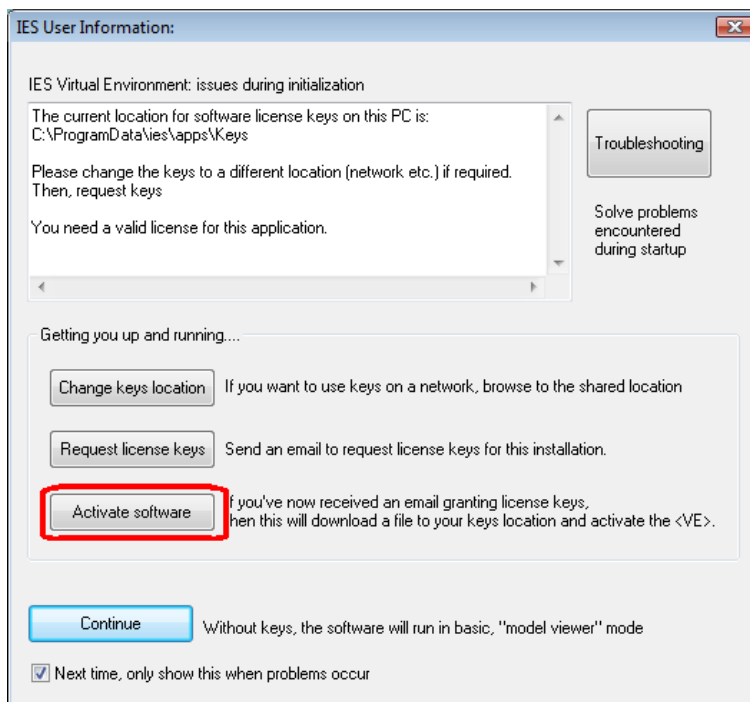
To use the new software keys, please open the <Virtual Environment> and 'Activate software' either from the first dialog window or via the VE "Help" >"Activate Software" menu. The keys file will be downloaded and registered onto your pc, enabling you to immediately begin using the <Virtual Environment>."

If you encounter internet connection problems, you can manually download your keys file to disk by using use the link below:

...

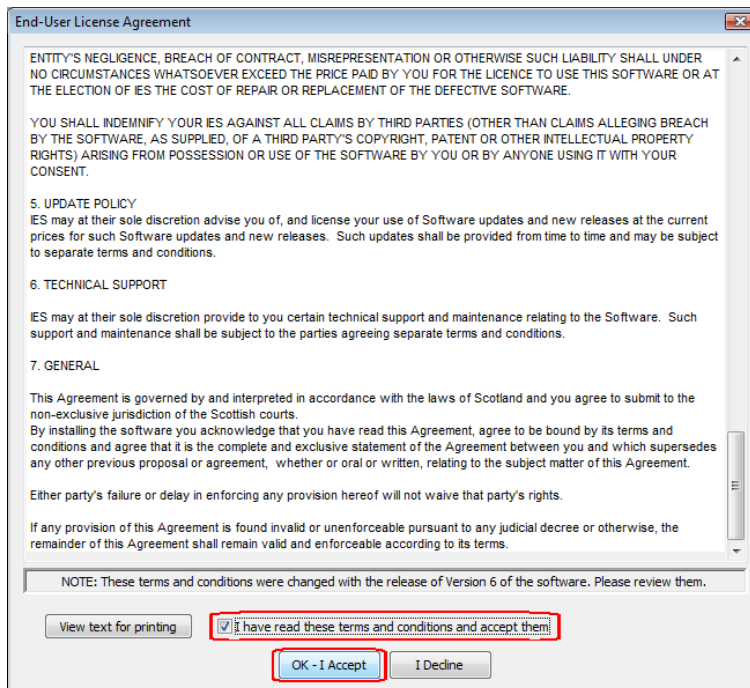
1.1.2 Click Activate software

When you open up the software the following dialogue box will appear – click Activate software in order to register the <Virtual Environment>.



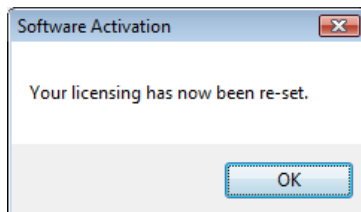
1.1.3 Read and accept license agreement

You will be presented with the End-user license agreement that you must accept in order to run the software.



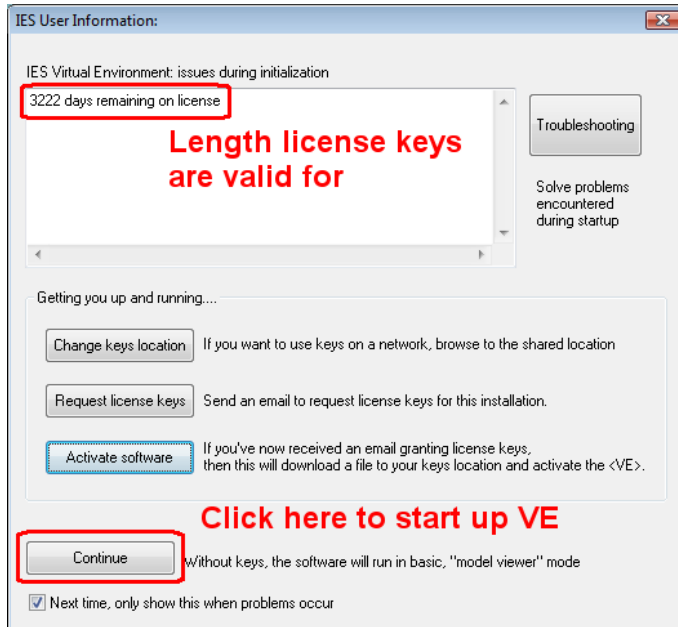
1.1.4 Dismiss confirmation message

When we accept the agreement we will see that the licensing has completed.



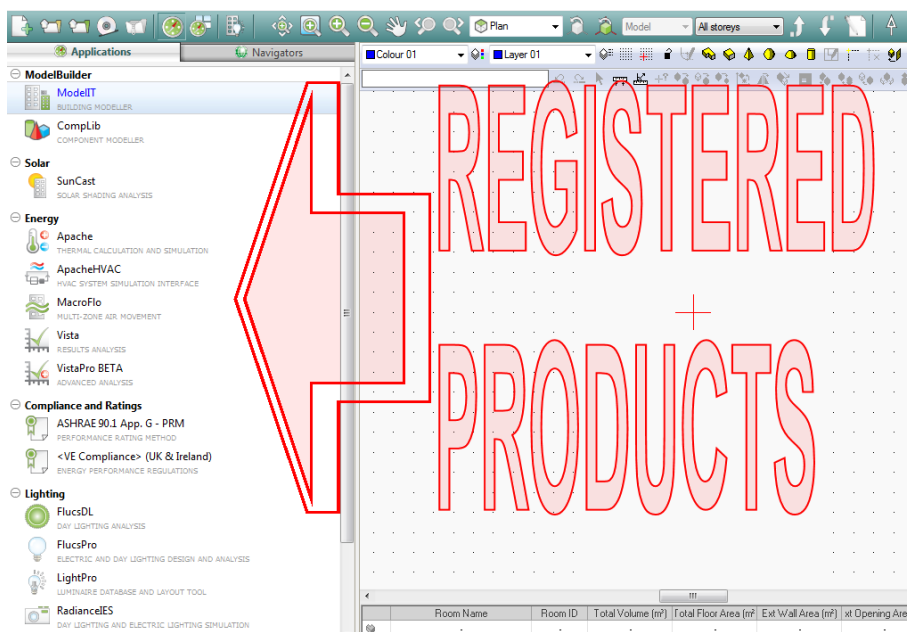
1.1.5 Check license period and continue to software

At this point the license keys have been downloaded from the IES Server to the local installation and the software can now be run. The window will now show the days remaining on the license and allow you to click **Continue** to launch the VE.



1.1.6 Enter the <Virtual Environment>

The <Virtual Environment> will now start up and we can see the registered products available to select from the Application Selector.



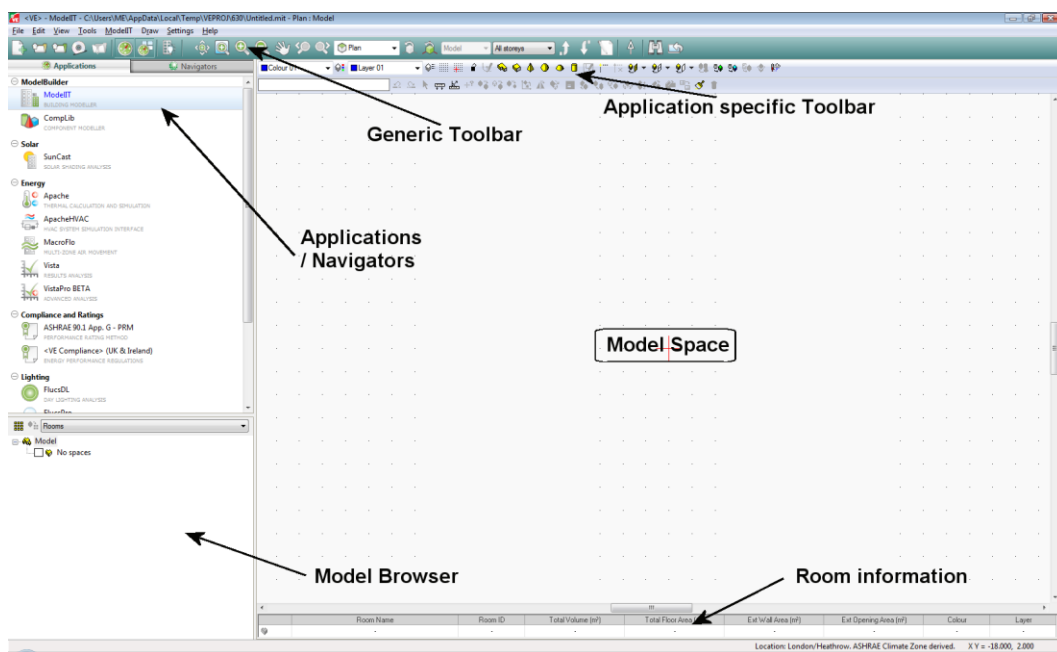
2 Introducing the <Virtual Environment>

2.1 What is the <Virtual Environment>?

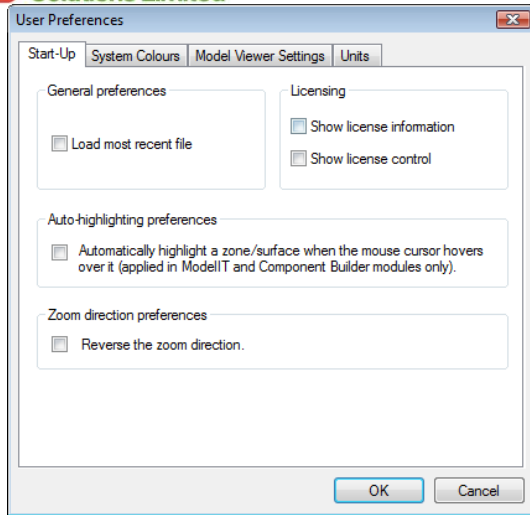
The <Virtual Environment> is an integrated suite of applications linked by a Common User Interface (CUI) and a single Integrated Data Model (IDM). This means that all the applications have a consistent “look and feel” and that data input for one application can be used by the others. Modules such as “ApacheSim” for thermal simulation, “Radiance” for lighting simulation, and “SunCast” for solar shading analysis. “ModelIT” is the application used for input of 3D geometry used to describe the model.

2.2 Starting the <Virtual Environment>

By default when you start the <Virtual Environment> a blank model space is initialised, and the “ModelIT” workspace is active.



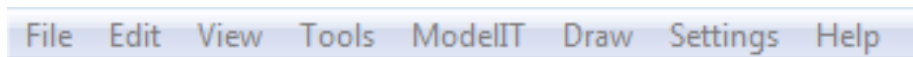
Other possible start-up options can be selected by ticking the required box from the “User Preferences” window obtained from the “Tools” > “Preferences” menu. (See section 3.2 & 4.1 for information on these options)



2.3 Components of the <Virtual Environment>

The “Common User Interface” consists of the following components:

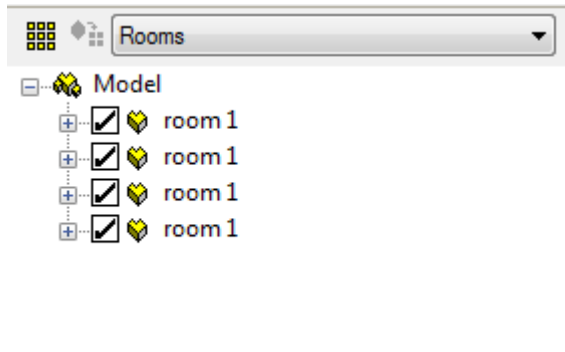
2.3.1 Pull-down Menu Bar



The titles on this menu bar change depending on the application that you are using at the time

2.3.2 Model Browser

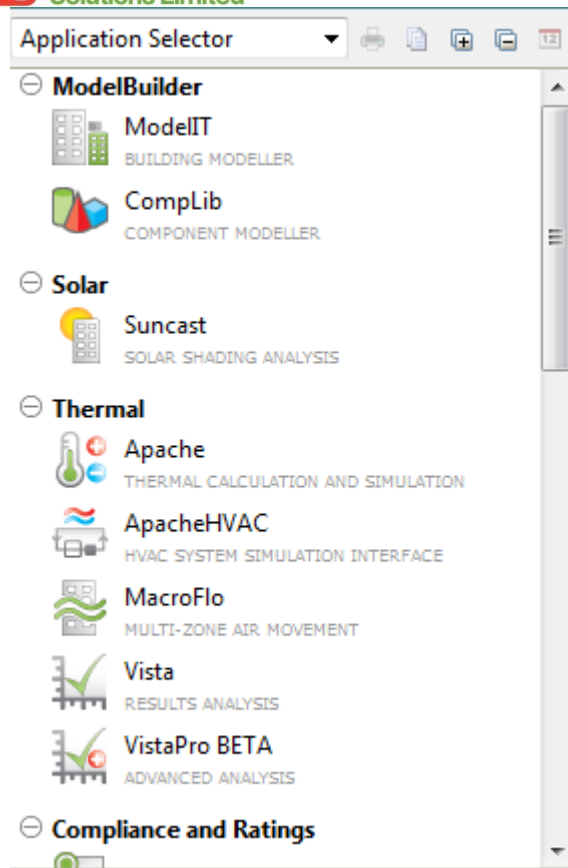
The main function of the model browser is that it allows you to organise your model for a faster work flow.



2.3.3 Application Tabs

This area of the screen allows you to select the required application within the <Virtual Environment>

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2.3.4 Application Generic Toolbar

Each application tab has the same toolbar shown below.



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New Project
Open Project
Import gbXML File
Save Project
Archive Project
Navigator
Browser
BTM- Template Manager



Fit View.
Zoom Window.
Zoom In.
Zoom Out.
Pan.
Zoom Previous View.
Zoom Next View.
Select View.
Set Axonometric View.
Rotate View.

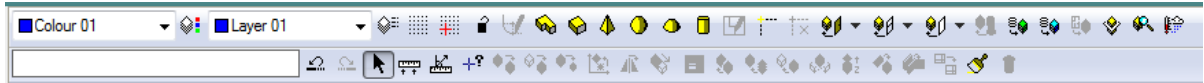


Select Display Mode for
Current Level
Select the Storey to
Display
Move Up One Level
Move Down One Level
Object List
Edit Site Rotation
Model Viewer
Refresh Display

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2.3.5 Application Specific Toolbar

Each application tab has a different set of tools relevant to the module. The image below shows the buttons relevant to ModelIT. For more information on these and other application specific tools please refer



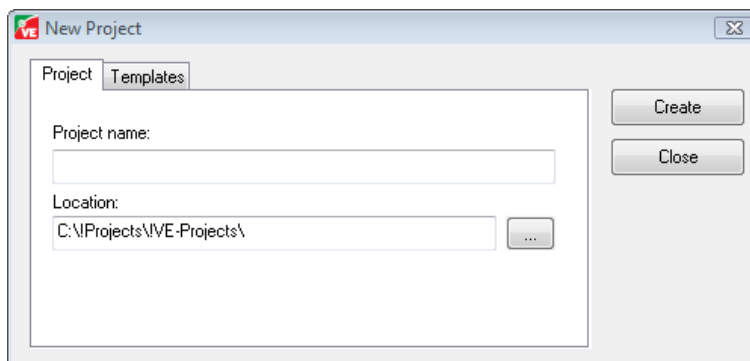
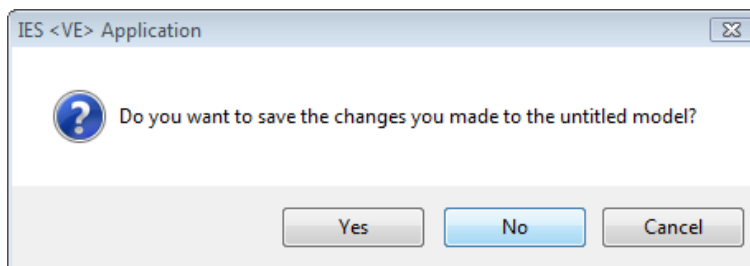
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3 File Menu

3.1 Starting a New Project

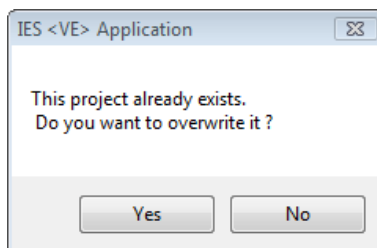


The default scenario is to initialise a new project, labelled “untitled”. When the user closes this, after creating some geometry, the user is prompted to give this project a name.



The user can browse to the required location and give the project an appropriate name. Using the “File” > “Save” or “File” > “Save As” options will also have this effect.

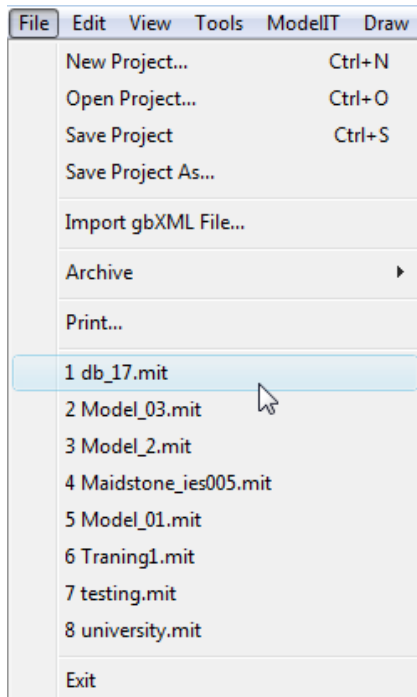
If the named project exists, then the following prompt is displayed –



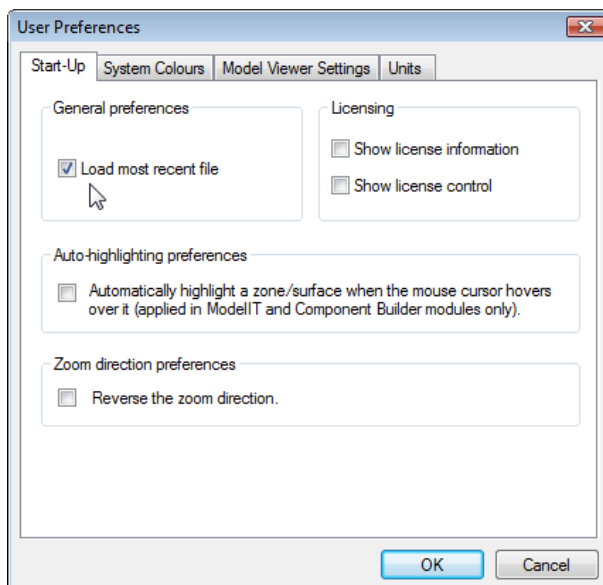
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3.2 Activating a Recent Project

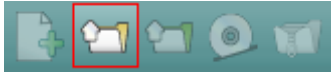
A list of recently active projects can be viewed in the “File” pull-down menu.



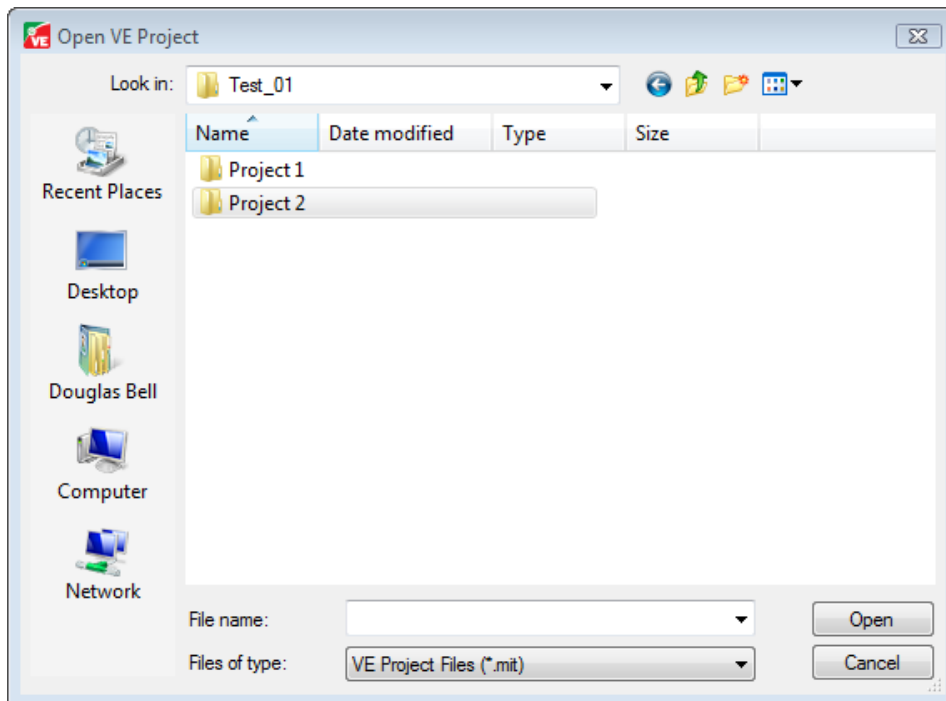
Alternatively, if you are going to be working with one project for a prolonged period of time you can go to your Tools>Preferences menu and tick the ‘Load most recent file’ option so that your project loads automatically every time you start the software. (For information on the other options see section 4.1)



3.3 Opening an Existing Project



You can click on the “Open project” icon on the toolbar or by clicking on the “File” > “Open Project...” item pops-up the “Project Browser” window:



3.4 Copying Projects

When you want to copy a project to another folder or to an external drive, you should use “File” > “Save As” rather than attempting to copy files through Explorer. This ensures that all the data files in the sub-directories are created in the new location.

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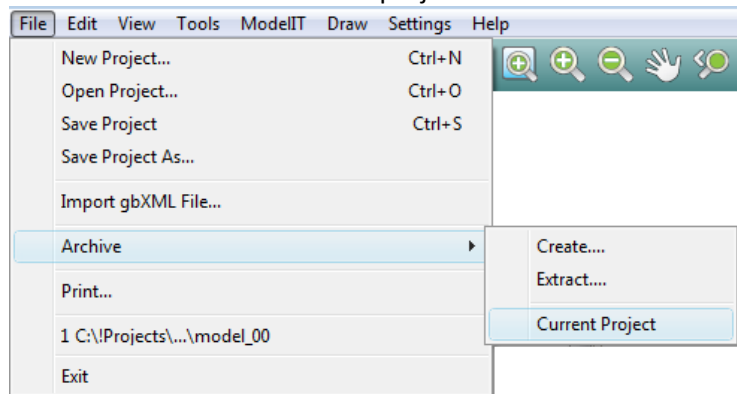
3.5 Archiving Projects

Archiving a project is used to compress the project for back-up purposes and also allows a model to be sent via email to colleagues or clients. The VE project archives are in CAB format which are basically compressed folders containing the project data. It is good practice to make regular CAB archives of your project so that you can freeze the model in its current state, make backups and recover projects than may have been corrupted.

3.5.1 Create Archive – Current Project

To create a simple archive of the currently loaded project use :

“Archive>current project” from the menu



or click the highlighted icon  on the generic toolbar.

A window will then open asking the user where they wish to save the *.cab file. The user can select the name of the .cab file at this same time.

3.5.2 Create Archive – Any project

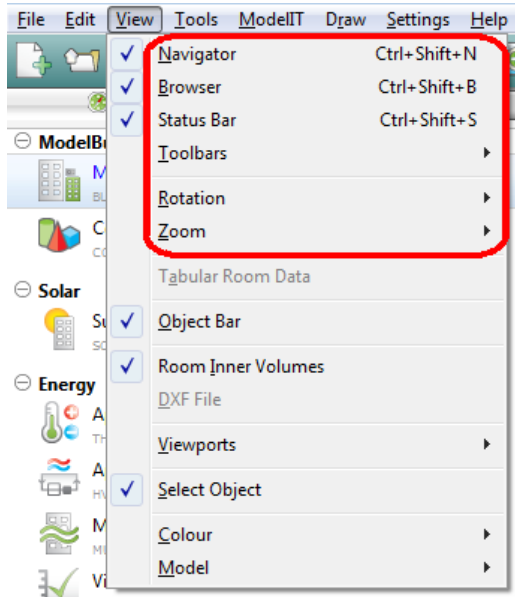
The user can also create an archive of any project at any time by selecting “File” > “Archive” > “Create Archive” and then selecting the *.mit (ModellIT) file of the project they wish to select in the pop-up window.

3.5.3 Extract Archive

In order to extract an archive the user must select “File” > “Archive” > “Extract Archive” and in the pop-up window that appears, select the *.cab file of interest, click “Extract (Browse)” and then choose the desired location of the project. The project can then be opened in the normal manner. “Extract to Folder” extracts the model to the same folder as the .cab file.

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4 View Menu



The first six options on the list in the “View” drop down menu are commands common to all modules. Options below this point are module specific and will change to suit the application you are using.

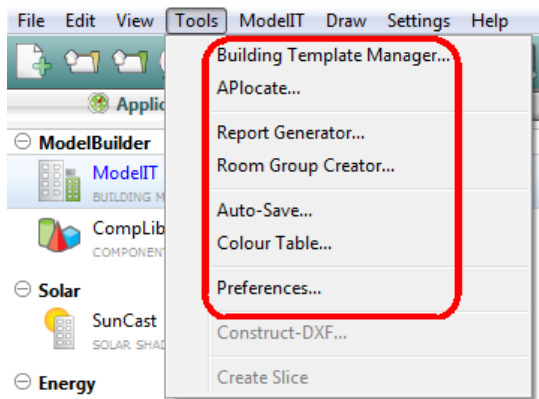
These options that are common to all applications allow you to set the toolbars to your preference and also allow you to manipulate the actual view of your model. The first four options (Navigator/Browser/Status Bar/Toolbars) allow you switch toolbars on and off.

The rotation and zoom options allow you to manipulate the model space view itself.

The Navigator and Browser options have icons on the generic toolbar (Section 2.3.4) allowing you to switch them off without having to go into the drop down menu. Similarly, the Rotation and Zoom options are available as icons on the View tools area of the Generic toolbar.

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5 Tools Menu



The first seven options on the list in the “Tools” drop down menu are commands common to all modules. The options after these first seven are module specific and will change to suit the current application that you are using.

5.1 Building Template Manager



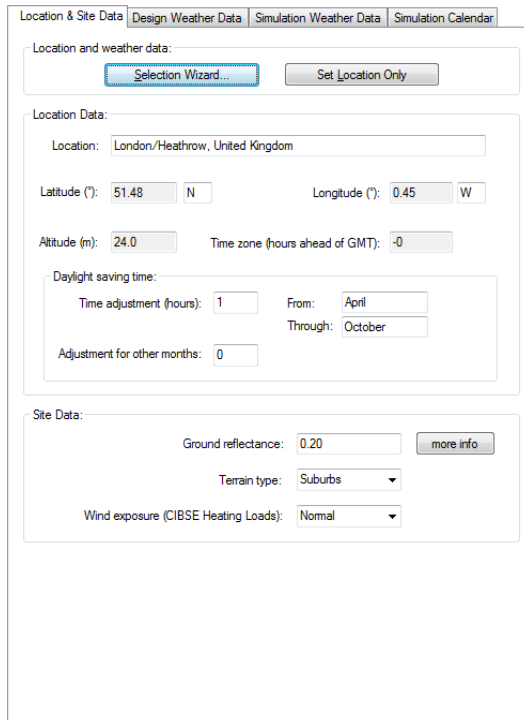
This option opens the Building Template Manager which controls templates to be assigned to the model.

Please refer to the Building Template Manager User Guide for a detailed overview on this section.

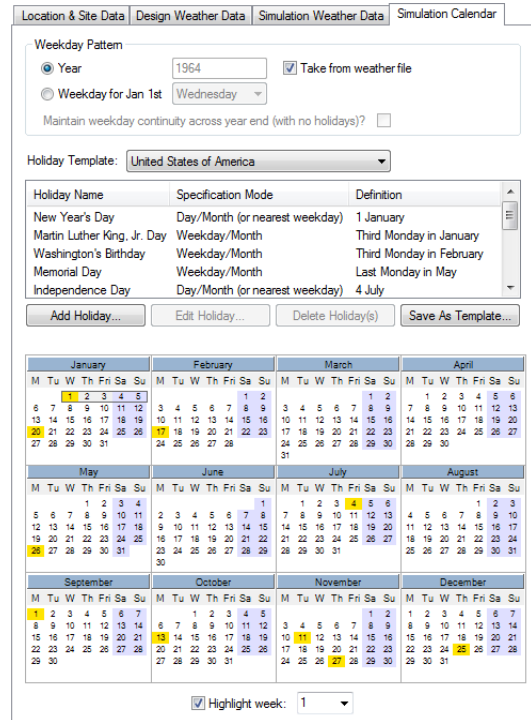
5.2 APLocate

This button activates the APLocate module which allows the user to edit data related to the site location of the model. Within APLocate we can:

- Set the site location detail
- Define design weather conditions for sizing calculations
- Select an hourly weather file for dynamic simulations
- Define holidays for scheduling profiles



Site location



Simulation Calendar

For more information please refer to the **APLocate User Guide**.

5.3 Report Generator

The ShowMe Tool provides a fast way of generating reports. Reports can include information relating to a single room or the entire model. Please refer to the “Show me” user guide for more information.

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VE ShowMe Report Generator

File Report Help

Report Section

- ☒ Header
- ☐ Location
- ☐ Templates
- ☒ Room Settings

Header and project information

☒ Header information

IES Ltd
Helix Building, Kelvin Campus
West of Scotland Science Park
Glasgow G20 0SP

Change Logo...

☒ Project information block

Project Name: My Project

Consultant: My Name

Phone number: 555-123-4567

E mail: my.name@company.com

☒ Illustration image

Load Image...

Load settings Generate Report

Save settings Cancel

Check Model Rooms User Guide

Report generated by settings above:

IES Report

File Edit

IES Ltd Helix Building, Kelvin Campus West of Scotland Science Park Glasgow G20 0SP

Project contact details

Project: My Project
Consultant: My Name
Phone: 555-123-4567
Email: my.name@company.com

Report date: 12/20, 04 Feb 2011

Room Settings

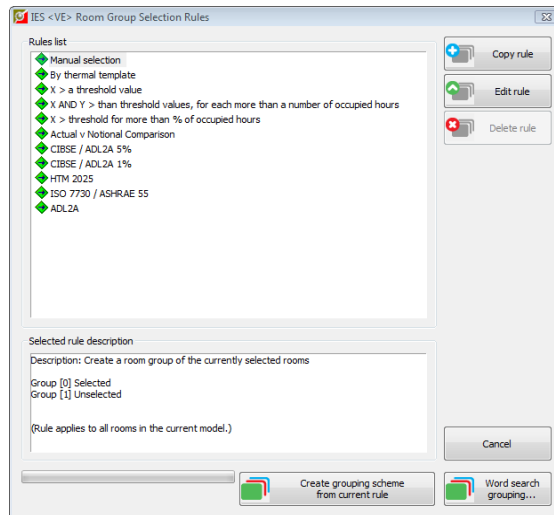
Room ID	Room Name	Floor Area (m ²)	Volume (m ³)	Template
TEST0001	TEST	64.6	107.4	default

5.4 Room Group Creator

The Room Group Creator allows the automated rules based creation of room groups using expressions and the results from an analysis. For example, this allows the user to automatically group all rooms with overheating during summertime.

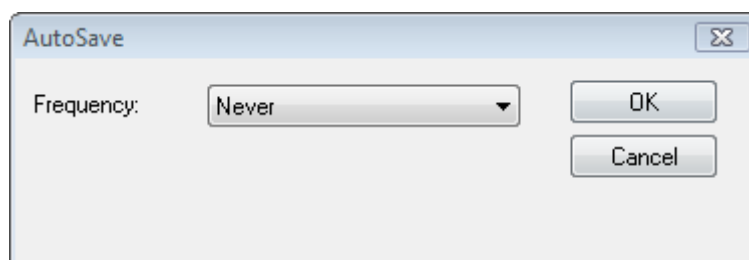
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A new feature of this tool is that it allows room groups to be created and sorted using strings that the user defines. Previously rooms had to be manually selected in the model browser and dropped into the appropriate room group. Now using this tool, after the initial set up, rooms can be moved into the appropriate group by the click of a button. For more information on how to use this tool please refer to the ShowMe user guide.



5.5 Auto-Save

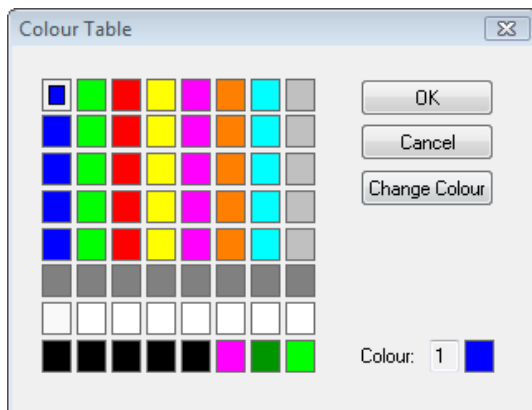
This allows the user to select a time interval for the automatic saving of changes to the active project. The default is “never”, but novice users should perhaps consider if there is any advantage in having this set to update their project at one of the other time intervals.



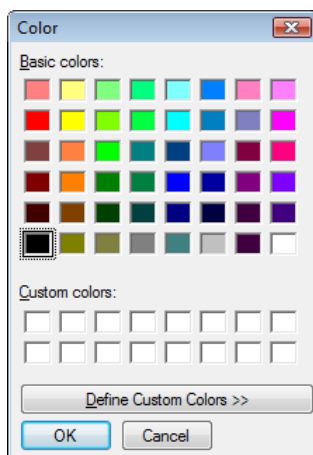
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5.6 Colour Table

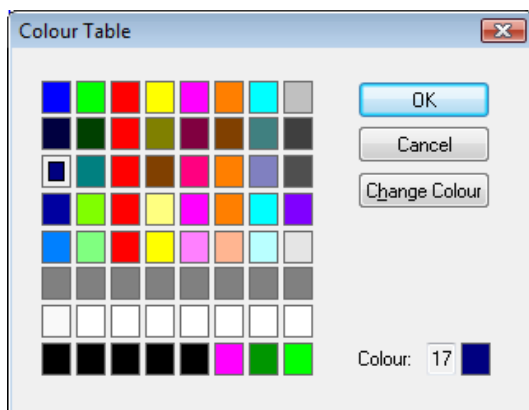
This allows the user to adjust the default colour palette to their preference. By default each project will have the following colours set up.



To change any colour one can either select the colour and click the Change Colour button or more simply just double-click on any of the colours to bring up the standard windows colour dialog:



Using this we can quickly define a whole custom set of colours for our project.

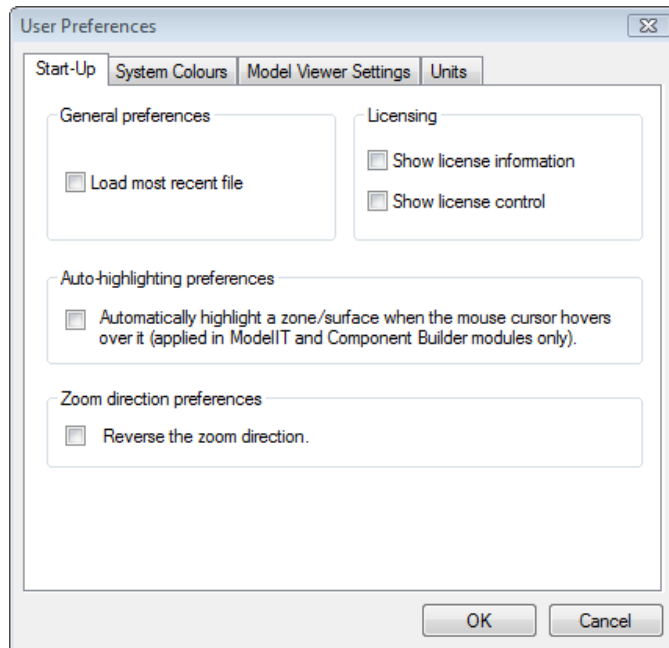


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5.7 User Preferences

5.7.1 Start-Up

This allows the user to select some start-up options.



General Preferences

- **Load most recent file:** When checked this will force the VE to load the project that was open when the software was last closed. See section 3.2 for more detail.

Licensing

- **Show License information:** This shows you what modules you have active in relation to your software keys. Each module you have purchased keys for will have a tick in the box indicating it is active.
- **Show License control:** This is for use when you are running network license keys to allow you to assess how many are in use and also who is using them.

Auto-highlighting preferences

- This changes the layer colour of a room to pink when you hover over it with the cursor. It is best utilised in the axonometric view when a model is very busy to allow you determine if you are going to select the required room.

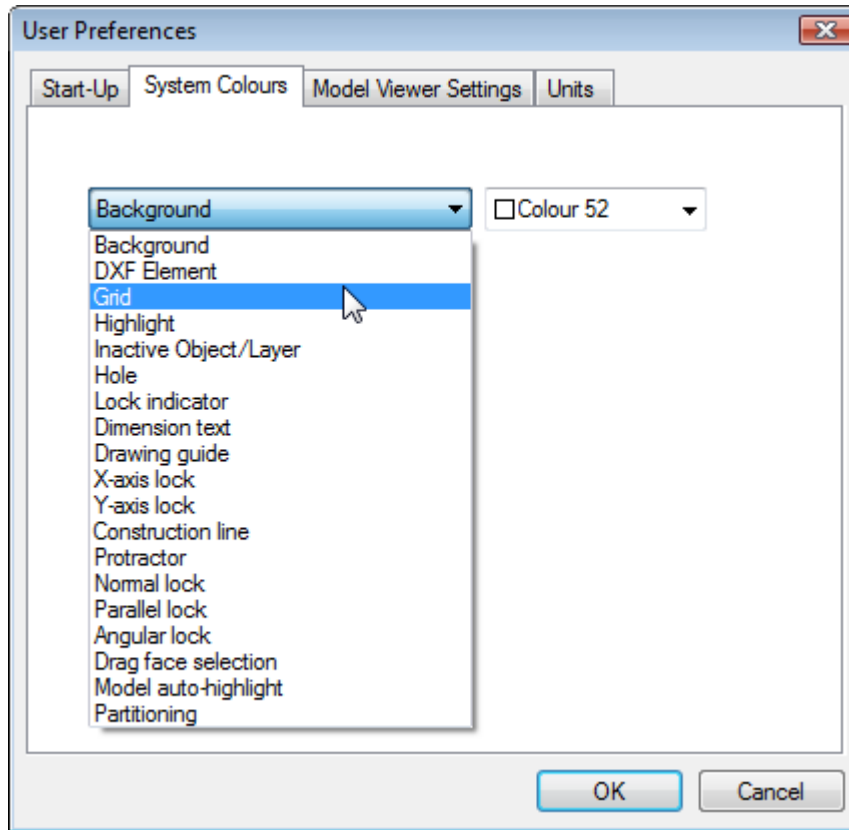
Zoom direction preferences

- This option allows you to determine the set up for the scroll wheel on your mouse so that when you zoom in and out when in the model space or in the model viewer it goes in the direction you wish.

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5.7.2 System Colours

This allows the user to select which colours are active when using the software. The main use is to change the default canvas colour from white to black (and grid from black to white), but there are a number of other elements that are listed that you can change to what you prefer.

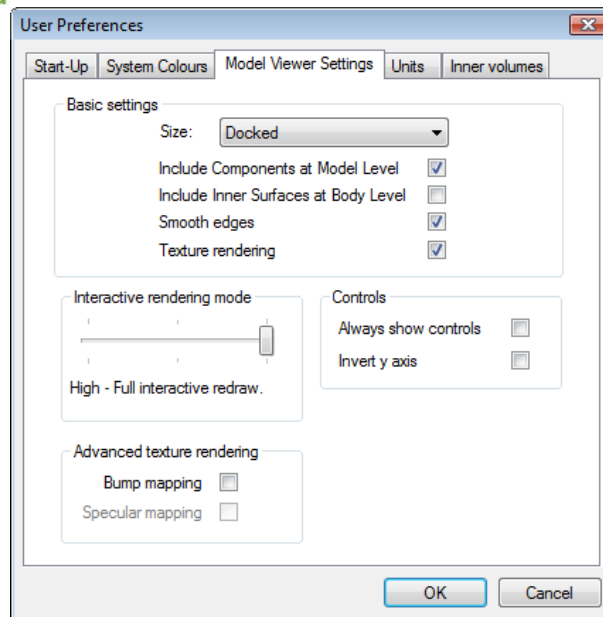


To use assign a colour it must first have been defined in the colour table (See section 5.6 above).


5.7.3 Model Viewer Settings

The model view has some basic general preferences that the user can set up to their preferred requirements. To access these go to the Tools>preferences> and select the Model Viewer Settings tab.

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Basic Settings

- **Size** allows the user to select whether to view the Model in “Normal”, “Full size” or “Docked” mode when the model viewer window opens up.
- **Include Components at model level** will allow you to view any components that have been placed in your model from the component library. (NB components placed in a model are mainly used for lighting projects and will have no thermal impact on a model.)
- **Include inner Surfaces at Body level** feature
- **Smooth edges** option refers to how the rooms render when in the model viewer.
-  **Texture rendering** tick box allows the user to choose if they want the option of textures when in the model viewer. (For more information please refer to the modelIT user guide section 5 – Model viewer)

Interactive rendering mode

This option refers to how the software renders the user's model when using the cameras in the model viewer.

- **High Full** - interactive rendering mode
- **Medium** – Wireframe mode persists for low frame rates
- **Low** – Wireframe mode persists during interaction

Controls

- **Always show controls:** if you choose to have this option on, when you open the model viewer there will be a graphical user interface (GUI) displayed in the bottom right hand corner of the viewer window which will show the controls of the cameras. This can be toggled on and off using the F2 function.
- **Invert Y axis:** This option refers to when using the first person cameras. When you push up with the mouse it goes up, but if you invert this it will go down when you push up.

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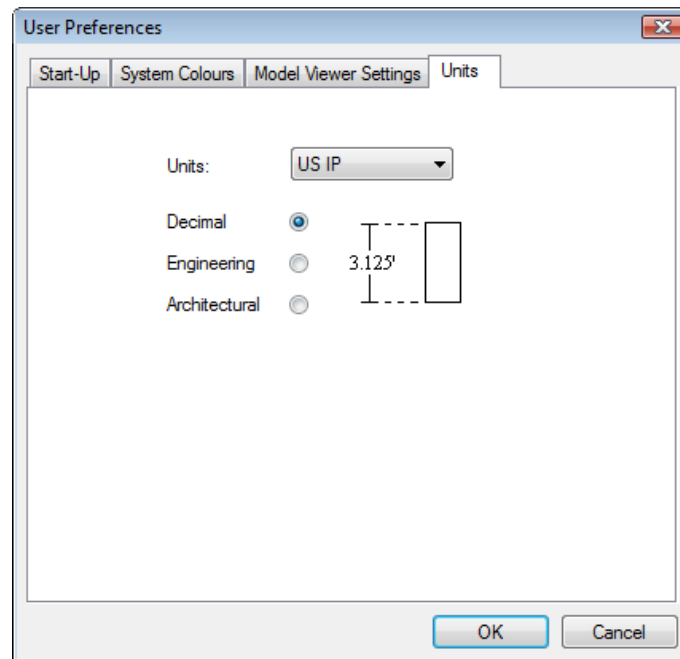
Advanced texture rendering

- Bump mapping
- Specular mapping

These two options give a more realistic display of textures when the texture option is applied in the model viewer.

5.7.4 Units

This allows the user to select the type of units used for data input and output, Metric or US IP (Inch-Pound / Imperial).



If US IP units are selected, the user must additionally specify the format used to display lengths in feet-and-inches:

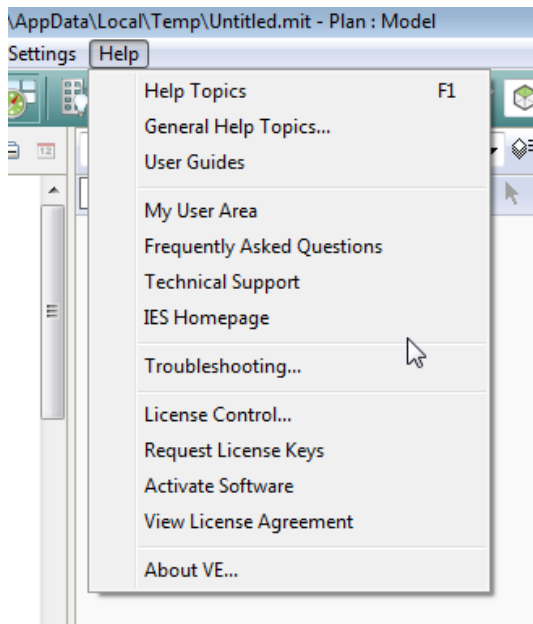
- Decimal - Display feet as a decimal number, with no separate inches part:
 - e.g. 3.125'
- Engineering - Display feet and inches, with the inches part displayed as a decimal fraction:
 - e.g. 3'-1.5"
- Architectural - Display feet, inches, and fractions of an inch (longhand):
 - e.g. 3'-1 ½"

Note that the user can enter feet-and-inches in any of the above formats, regardless of the display format selected.

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6 Help Menu

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6.1 Help Topics

This section allows the user to load up the online help section that relates to the application they are using at the time.

6.2 General Help Topics...

This is a basic over view of the <Virtual Environment> and common commands that are found in the majority of the applications.

6.3 User Guides

This area allows you chose specific user guides from a list of user guides.

6.4 My User Area

This option takes the user to their 'User Area' on the IES website (www.iesve.com) and where they can view their software keys.

6.5 Frequently Asked Questions

You will be taken to the IES Support Centre Knowledge Base where you can search through a large database of problems and solutions which will help you solve any issues you may be having.

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IES Support Centre

[Forum](#)
[Knowledge Base](#)
[Download Centre](#)
[Submit a Query](#)
[Your Account](#)

Forum

Knowledge Base

[IES VE on Macs](#)
[Installation-Support](#)
[Web-FAQs](#)
[Compliance Advice](#)
[Download Centre](#)
[Submit a Query](#)
[Your Account](#)

Knowledge Base

Your first line of support using the <Virtual Environment>. Here you'll find installation support, frequently asked questions and helpful advice to assist you with your projects.

From here you can browse the Frequently Asked Questions using the following search facilities:

Search by Keyword
 AND / OR
 Search by Category
 AND / OR
 Search by Module

[Submit Query](#)

Please use the form above to find your answers

Knowledge Base (Feb 2011)

To search the knowledge base effectively try to use a relevant keyword:

Knowledge Base

Your first line of support using the <Virtual Environment>. Here you'll find installation support, frequently asked questions and helpful advice to assist you with your projects.

From here you can browse the Frequently Asked Questions using the following search facilities:

Search by Keyword
 AND / OR
 Search by Category
 AND / OR
 Search by Module

[Submit Query](#)

Results

Displaying page 1 of 1 for 'Watermark'

Question.

[Why does my EPC still have a watermark?](#)

Why does my EPC still have a watermark?

The updated version of SBEM v3.5.b in 6.1.1.1 won't generate unwatermarked EPCs, if the assessor details are entered you will get the xml. When this is submitted by an assessor they can get the unwatermarked EPC from the registry.

[Text from BRE website](#)

EPC and Recommendation Report without watermarks (England & Wales and Northern Ireland)

Version 3.5.b produces always watermarked PDF documents in the assessor's computer. The assessor can obtain the unwatermarked PDF documents (EPC and Recommendation Report) after lodgement in the Landmark registry through the standard report retrieval system. For further clarifications contact your accreditation scheme provider.

To access the knowledge base from your usual web browser simply navigate to:

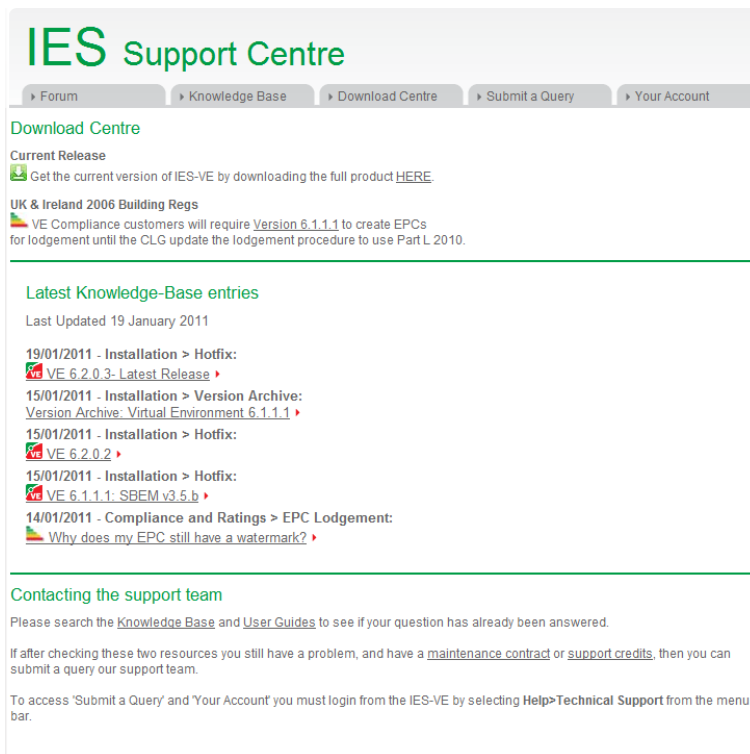
<http://www.iesve.com/support/knowledge-base>

You may wish to bookmark/favourite this link!

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6.6 Technical Support

This will take us to the IES Support Centre where we can access the Knowledge Base (see previous section) and other support resources such as the Version Archive and the User Forum.



IES Support Centre

[Forum](#)
[Knowledge Base](#)
[Download Centre](#)
[Submit a Query](#)
[Your Account](#)

Download Centre

Current Release

Get the current version of IES-VE by downloading the full product [HERE](#).

UK & Ireland 2006 Building Regs

VE Compliance customers will require [Version 6.1.1.1](#) to create EPCs for lodgement until the CLG update the lodgement procedure to use Part L 2010.

Latest Knowledge-Base entries

Last Updated 19 January 2011

19/01/2011 - Installation > Hotfix:
[VE 6.2.0.3- Latest Release](#)

15/01/2011 - Installation > Version Archive:
[Version Archive: Virtual Environment 6.1.1.1](#)

15/01/2011 - Installation > Hotfix:
[VE 6.2.0.2](#)

15/01/2011 - Installation > Hotfix:
[VE 6.1.1.1: SBEM v3.5.b](#)

14/01/2011 - Compliance and Ratings > EPC Lodgement:
[Why does my EPC still have a watermark?](#)

Contacting the support team

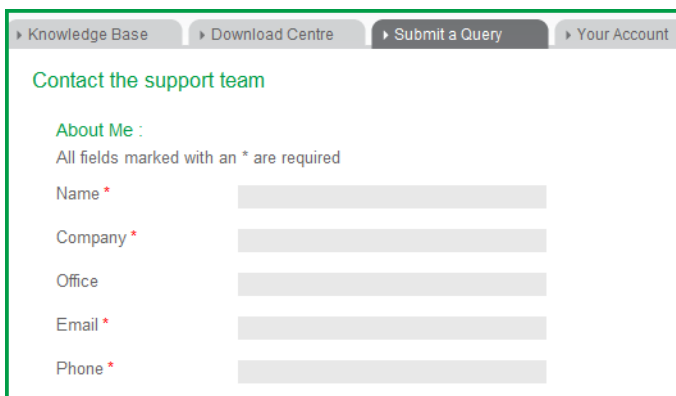
Please search the [Knowledge Base](#) and [User Guides](#) to see if your question has already been answered.

If after checking these two resources you still have a problem, and have a [maintenance contract](#) or [support credits](#), then you can submit a query our support team.

To access 'Submit a Query' and 'Your Account' you must login from the IES-VE by selecting **Help>Technical Support** from the menu bar.

Contacting the IES support team

If you have purchased a maintenance and support contract they you will be able to Submit a Query to our dedicated team of support engineers.



[Knowledge Base](#)
[Download Centre](#)
[Submit a Query](#)
[Your Account](#)

Contact the support team

About Me :

All fields marked with an * are required

Name *

Company *

Office

Email *


Phone *

This option will not be available unless you enter the Support Area via the VE Help menu and have a current maintenance and support contract.

6.7 IES Homepage

A link to the IES homepage (www.iesve.com) where the user can access information on IES; these being the software products, IES Consultancy services, the clients area latest news and contact details.

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Founded in 1994, IES is now a proven force within the green building movement. Described as "the leading vendor in the performance analysis field," and an "industry pioneer," the company is setting the standard for zero-carbon, low-energy, high-performance buildings. Our software was created to make analysis for every design stage accessible to all. We also have an international team of expert simulation consultants, whose work includes Wal-Mart Store Optimisation and Heathrow T5.

IES strives always to push forward at the cutting edge of building science and performance analysis. [Read more...](#)

Latest News...

15/12/2010
[News from IES Virtual Environment - ...](#)
 Got these updates in a post AU email from the folks at IES - I'm downl...


15/12/2010
[AEC Exhibitor Highlights from Autodesk University 2010...](#)
 Last week, we took an extended look at the highlights of the general s...



Software

Award winning powerful performance analysis tools. Choose what's best for you...


[Discover the VE...](#)



Consultancy

Maximise your project's sustainable potential. Work with our international team of experts.


[What we offer...](#)



Training

Become an expert VE user. Browse options and select the course to meet your needs.

[Book a course...](#)



Support

Need quick answers to your technical queries? Access our friendly support team.

[Get help now...](#)

IES Homepage (Feb 2011)

To visit the homepage manually using your favourite browser navigate to: <http://iesve.com>.

The homepage is specific to your world region so you will always get IES news and articles relevant to your area.

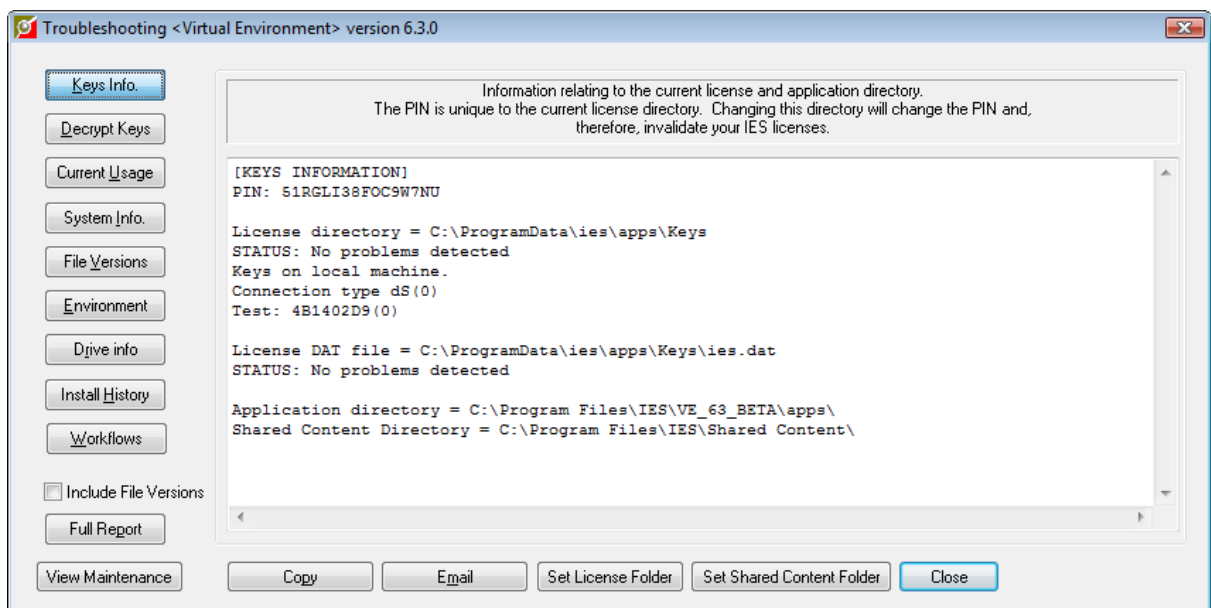
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6.8 Troubleshooting

The troubleshooting window (Tools > Troubleshooting...) allows the user to view current system information relevant to the proper running of the virtual environment.

From here we can see:

- **Keys Info:** Where our license keys are stored
- **Decrypt Keys:** What products we have licensed
- **Current Usage:** Who's currently using the VE on our network
- **System Info:** Some information about our PC
- **File Versions:** Version detail on VE components
- **Environment:** System Environment variables
- **Drive Info:** Space available on the local hard drive(s)
- **Install History:** Info on the installations
- **Workflows:** What Navigator workflows are available to us



If you are experiencing problems and wish to contact IES for assistance, it would be advisable to generate a full report using the button provided. Once generated, you can include this report in the email.

6.9 License Control

Indicates the views available to the user based on their <VE> software keys.

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6.10 Request License Keys

See section 1 on Registration.

6.11 Activate Software

For more information on this topic please refer to section 1.1

6.12 View License Agreement

This section Lists the Terms and conditions of using the <Virtual Environment>

6.13 About VE...

Shows you which version of the software you have installed.



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