

< Virtual Environment >

NEW CONNECTION BETWEEN ARCHICAD AND IES

ALLOWING GREATER INTEROPERABILITY AND EASE OF USE FOR ARCHITECTS

Joint collaborative development work between Graphisoft® and IES has resulted in the establishment of a tight connection between the 3D Building Information Modelling (BIM) tool ArchiCAD® and the IES <Virtual Environment> suite of sustainable building energy and performance analysis tools.

“ArchiCAD users will benefit greatly in the later, more detailed, design phases from the in-depth energy analysis capabilities of IES. Compliance with local energy codes makes the IES connection a great asset in the building approval process. The IES <Virtual Environment> suite is a great complement to Graphisoft’s “green” solutions.”

Miklos Szovenyi-Lux, Graphisoft

Globally, buildings account for a massive 40% of total greenhouse gas emissions. So it's not surprising that building design and performance are under scrutiny in just about every country in the world. With IES <Virtual Environment>, 'green design' is within everyone's reach. And we're extending our product range all the time to make it even easier for you - enhancing the way you work within an integrated project team.

ArchiCAD users can now benefit greatly from the sustainable performance analysis capabilities of IES. The ArchiCAD connection to IES, via gbXML, has been greatly enhanced to provide a tried and tested connection. This connection is available in version 12 onwards of ArchiCAD and version 5.9.1 onwards of the <Virtual Environment>. It enables you to quickly prepare an ArchiCAD model ready for analysis in IES.

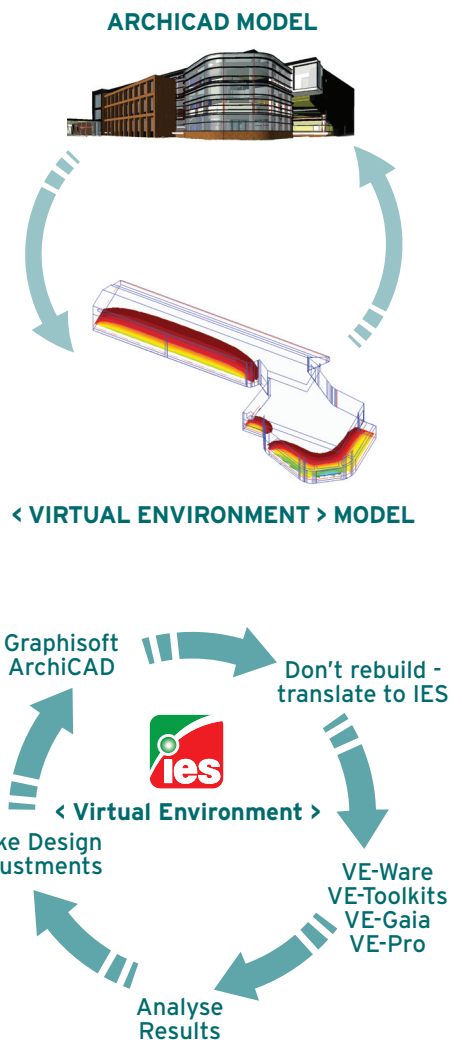
“IES was set up to take the sustainable design power of academic building performance tools and deliver them to the general building design market. A key part of this is interoperability and ease of connectivity between key 3D CAD modelling tools and our software. I'm delighted that through joint collaboration we can now boast tight connectivity with ArchiCAD.”

Dr. Don Mclean, founder and CEO of IES

ArchiCAD's functions can now be integrated with IES' four-tier suite of powerful building performance assessment tools. The data generated by IES' software can be used, for example, to demonstrate to the client why different design options have been chosen, quantify the energy savings expected and aid in the design of Building Management Systems. As such, the technical capabilities of IES's software, also offer substantial market differentiation opportunities.

BEYOND BIM

Building Information Modelling is a significant move towards integrated design - but if you really want to strive towards carbon neutral and energy saving, you need to integrate performance analysis right from the start. IES <Virtual Environment> does exactly that - ensuring that architectural elements and engineering systems work effectively together from concept stage onwards; optimising the collaborative workflow and putting sustainability right at the centre of the discussion. And with our range of links and plug-ins - including our direct link to Google SketchUp™ and Autodesk's® Revit® platform and now, this connection to Graphisoft's ArchiCAD via gbXML - it really is achievable to take advantage of everything 3D design tools have to offer and raise the bar towards the true definition of sustainability.



For a video demonstrating and explaining the ArchiCAD to IES linkage, please visit our YouTube channel at <http://www.youtube.com/iesve>

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VE-WARE

FREE ENERGY, CARBON AND 2030 CHALLENGE ANALYSIS

VE-Ware is a free tool which uses the 3D model, a choice of typical building properties and real climate data to assess the annual energy and carbon usage of a building using a sophisticated dynamic thermal simulation. In North America it compares the results to Architecture 2030 Challenge targets, while UK users can access VE-SBEM for UK compliance and EPC creation generation.

VE-Ware can analyse both new and existing buildings of all types and across all global locations, allowing anyone involved in building design or refurbishment to compare at the click of a few buttons how different designs, layouts and system options affect energy performance. At IES, we believe passionately about sustainability and released VE-Ware as a way for everyone to have the capability to understand “how well does my building perform?”

VE-TOOLKITS

EARLY STAGE ANALYSIS FOR QUICK, ITERATIVE ASSESSMENTS

“At early design stages, key decisions – usually made by the architect – can greatly influence the subsequent opportunities to reduce building energy use,”

(IPCC Climate Change Report, 2007)

The IES VE-Toolkits are ideal for use at the very early stages of the design process, when time is short, and feedback needs to be rapid. A variety of VE-Toolkits offer different capabilities - automatically running the chosen analysis and generating interactive visual and rich-text reports within minutes, and all at the press of a few buttons.

> **SUSTAINABILITY VE-TOOLKIT** Detailed energy, carbon and daylight assessments, solar shading animations, climate, water, LZCT (Low & Zero Carbon Technologies) and ASHRAE/CIBSE loads calculations

> **VE-TOOLKIT FOR LEED®** LEED capability that covers daylighting, comfort, water and renewables across LEED NC 3.0 and 2.2, LEED Schools, LEED Core and Shell

> **BREEAM VE-TOOLKIT** (available soon)

> **GREEN STAR VE-TOOLKIT** (available soon)

Quick, effective feedback direct from early architectural models helps VE-Toolkit users build an important understanding of how the proposed design responds to the environment, and what strategies are candidates for further investigation. Answering the, “am I moving in the right direction?” question, the IES VE-Toolkits help the design team establish the most appropriate sustainable and energy efficient approach - one that can be finalised in detail using VE-Gaia and VE-Pro.

VE-GAIA

STEP-BY-STEP SMART NAVIGATION WORKFLOWS

A revolution in building performance analysis, VE-Gaia offers a complete analysis workflow environment from modelling to reportage, which defines different processes and weaves a clear route through the IES <Virtual Environment>. Thus, enabling designers to undertake complex advanced simulation easily and with significantly less performance analysis familiarity.

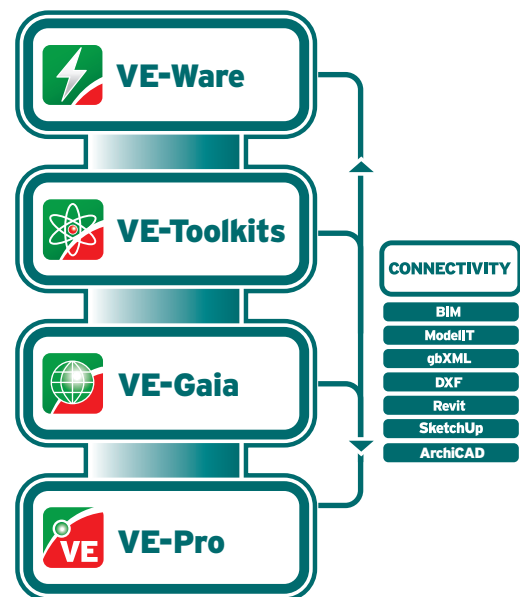
The smart navigation takes users through a range of different analysis tasks with the ability to input and manipulate exact building data within an integrated central data model. Designers can track progress, control quality, iterate workflows, trigger simulations, filter results and produce automated visual reports. The baseline VE-Gaia can be enhanced by the addition of extra navigator functionality, such as for LEED and sustainability analysis.

VE-PRO

IES' MOST POWERFUL, FLEXIBLE AND IN-DEPTH SUITE OF INTEGRATED TOOLS

VE-Pro provides the detailed high-end analysis required at later stages of the design process in order to finalise the optimum design. However, the variety of different interconnected modules and capabilities available can be used at any stage of the design process so users can build the suite to meet their needs. The central data model allows all analysis to be undertaken in an integrated manner, so results can be easily shared amongst applications to further inform and refine simulations.

Modules are available within energy, light/daylighting, solar, UK compliance, value/cost, CFD, egress and mechanical categories. 'VE-Gaia' style workflow navigator functionality is also available, offering additional capabilities and guidance.



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