



## Excels in 3D!

Interactive 3D files within an Excel document? whatever next? Actify brings CAD 2D and 3D viewing capability within the realms of Microsoft Office

If there's one thing we have to thank Bill Gates for it's the almost universal preponderance of Microsoft Office - Word, Excel, PowerPoint and Outlook. Like it or not, it is now the de facto set of tools for word processing, spreadsheets, presentations and sending and receiving emails. Nearly everybody has it, uses it and is familiar with its capabilities. If you don't, one would have to ask why not? It is now the basic mode of communication for the majority of computer users. One would also have to ask whether you champion the use of Welsh as a mainstream language.

The software is the bedrock of office interoperability; from administration to marketing, sales and accounting. It has even hastened the demise of the typing pool, and few people can survive in an office environment without MS Office computer skills. But in spite of its widespread usage Microsoft Office lacked, until recently, some attributes that would have made it the perfect tool for widening its area of influence - namely the capability of handling 2D and 3D CAD graphics.

The sharp end of the CAD business - design engineers, production managers, technical sales managers -

works on a totally different platform. Their CAD-based environment is principally a graphics or drawing based system that has an equal need for sharing data; for design reviews, presentation of design ideas, collaboration between different CAD disciplines and so on. To handle this they use dedicated document and drawing managements systems that come with a host of file filters, translators and viewers to enable collaborators with alternative CAD packages to receive, view, act upon and return the projects they are working together on.

Unfortunately, many of the intended collaborators (sales and marketing, planning, etc.) are not CAD trained, don't have CAD software on their servers, and wouldn't have the foggiest idea how to use a standard Viewer. They do, though, know Microsoft Office.

### CUE ACTIFY!

Actify has just announced SpinFire, its digital design communication software for Microsoft Office. SpinFire for Microsoft Office is a plug-in that allows users to leverage Actify's .3d file format to share 2D and 3D design data right across the enterprise. In plain English

that means that the sales rep can open up a 2D drawing, or an interactive 3D model from within his PowerPoint presentation to show his client how a product works. Alternatively, a clerk in the purchasing department can drop a model of a component right onto the spreadsheet that he is using, to accumulate costs and highlight each component as he adds them up - so that he fully understands what he is doing!

Design information can now be exchanged throughout the enterprise for the production of quotations, estimates, technical documents, manufacturing specifications etc. by anybody familiar with Microsoft office. The breakthrough is also appreciated at Microsoft. "SpinFire for Microsoft Office brings a new level of collaboration to the enterprise and is a great example of how ISV's are leveraging the Microsoft Office platform to allow product design information to be exchanged easily within the context of an already familiar application suite," according to Don Richardson, director of Microsoft's manufacturing industry,

SpinFire for Microsoft Office adds another important element to Actify's range of digital design communication products. The software is based around Actify's .3D file system, handled by Actify's Publisher 2005 (also recently announced), which is the automated creator of .3D files - an advanced file publishing tool that allows users to centralise and automate the conversion of native 2D/3D CAD files into Actify's proprietary .3D file format.



With the release of Actify Publisher 2005, users can now define and manage each aspect of the publishing process, including which source CAD files to automatically publish, where to post the newly published files, who to notify of the completed process, and more. Users with large amounts of old, inaccessible legacy CAD data, as well as new CAD data, will spend little to no time managing the conversion of these files, making them more quickly and easily accessible to the entire design chain, ultimately saving time and money.

Included in the Publisher suite are a number of specific tools, such as Actify Server which manages and shares the .3D files, and SpinFire professional, which is used to view, measure and mark-up CAD files within the .3D format. SpinFire Reader is a free viewer that allows users to share .3D files created with SpinFire professional in view-only mode.

SpinFire for Microsoft Office rounds out the range, and breaks down the communication barriers between the specialist and the office. Besides providing wider access to design data across the enterprise and the supply chain, and direct access to product data and metadata stored in CAD files, it improves the accuracy of product support from the administrative arms of the enterprise.

### INTERACTIVE 3D

You probably didn't notice the brief reference to interactive 3D models above - or perhaps note its significance. As we said in our article on Interactive PDF, embedding interactive 3D models directly into Microsoft Office software is an outstanding development that could revolutionise the way in which we produce technical manuals, sales literature, presentations and so on.

Not only will the reader be able to rotate and zoom in and out of the model, but he will also have access to other commands that allow for closer examination of the model - removing covers, extracting parts, and sectioning the model to peer inside.

Rendered elements of the model can be changed, and different finishes or colours applied to the surface to reflect a range of options in a sales catalogue.

Most interesting of all, however, is the ability to link the model to text on the page - to enable the reader to click on an action described textually and see the appropriate action being performed interactively on the 3D model. The parts explosion that would be needed to create this effect would, obviously, have to be created by the designer - an everyday task for a design engineer, who would then publish the part to the page with the accompanying instructions.

It sounds simple enough; but the implications are enormous. Mechanics could browse through an online technical manual and pick up far more than they would from a flat 2D image. They could actually witness the job being carried out before them as an interactive 3D model - not just a passive AVI - and as a result they would be more in control of their tuition.

Actify isn't stopping with just the four main Microsoft Office applications though, and has already developed a Visio plug-in for Microsoft Japan for use in a pilot program with a large Japanese manufacturing customer. It was created so manufacturers could embed 3D models directly into Visio to allow the shop floor, in Japanese manufacturing companies, to easily access and review 2D and 3D product designs, ensuring that the correct tools and parts are created.

Actify places a large amount of emphasis on ease-of-use, and providing a secure method of distributing and communicating with multiple 2D/3D file formats and related documents. Introducing SpinFire for Microsoft Office extends the capability throughout the enterprise in the simplest and most convenient way possible. The motivation for the paperless office just got stronger! CU  
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