

Experience Players: 3D Office Player

Easily Provide "3D for All" Interactive Experiences



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Developed with the Product/Context/Scenario approach in mind, the 3D Office Player is a standalone player enabling users to share life-like experiences on virtual products created with 3D modeling software throughout your company. The 3D Office Player comes with a simple and intuitive user interface and easy-to-use navigation scenario. The player can also be embedded in applications such as Microsoft Office PowerPoint, Word, Excel or Internet Explorer.

Bring life-like Interactivity to 3D Models

The 3D Content Capture Tools that come with 3DVIA Virtools enable developers to easily create interactivity from their 3D models. Thanks to the 3D XML Virtools Plugin, PLM users are now able to reuse their CAD models in the Virtools platform to create interactive 3D applications and make them accessible in the 3D Office Player for an intuitive product experience.

Key Features

Natively read 3DXML files for seamless CAD interoperability

Intuitive navigation system and predefined manipulation tools for accessible experience

Experience exports (images, videos) for easily recording and sharing experiences

Office integration for sharing rich interactive presentations

PCS Model for a simplified vision of the 3D experience

Share your Experience

The 3D Office Player has been designed to make it easier for developers to share rich interactive presentations throughout your company. The 3D Office Player can also be integrated in Microsoft Office applications (PowerPoint, Word, Excel). Experiences can be exported to both pictures (at very high resolutions if necessary) and video to easily record and share experiences.

The PCS model

The 3D Office Player is based on a new paradigm in which interactive 3D is based on a Product-Context-Scenario approach. This concept has been created to offer a simplified vision of the 3D experience of a product in a given context, following a given scenario.

The PCS model used in the Virtools platform organizes the resources needed to create an interactive experience in three categories:



- **Product:** composed of various assets (3d geometry, textures, sound, animations or any other metadata) and potentially intrinsic behaviors. It is the 3D object that is selected by the user, the object that is the focal point for the user or the scenario. For example, it could be a car with behaviors attached to open the door, rotate the wheels...

- **Context:** the environment where the interactions take place, such as a simple image, video, or full 3D scene.

- **Scenario:** relates to the user interactive experience. It always involves the user point of view (via the camera), and the user interaction with the Product, within the Context. The user can load different Products/Contexts/Scenarios to create as many experiences as needed to evaluate the business goals of the product being designed. PCS package can be prepared with 3DVIA Virtools and saved within a 3D XML file that contains PCS Resources, which may include a single product, context or scenario, or, alternatively aggregate multiple products or contexts, albeit with only one scenario. The Products and Contexts are described in the product structure of the 3D XML file, while the Scenario is an NMO saved into the 3D XML file.

An Intuitive Graphical User Interface and a Flexible Architecture

The 3D Office Player is based on a custom intuitive GUI that allows for simpler interaction while improving usability and learning curve for users. An intuitive navigation and manipulation system is provided by default if there is no scenario in the loaded file (cameras, mouse). The left tab sheets (PCS ribbon) makes it possible to switch the product, context, or scenario defined in the .3dxml file.

Experience Players: 3D XE Player

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Based on the 3D Office Player, the 3D XE Player extends its capabilities for more specific and complex usages.

The 3D XE Player enables 3DVIA Virtools developers to create richer, more customized applications. All features and building blocks of the 3D Office Player are also available to 3D XE Player developers.

The 3D XE Player Architecture

The 3D XE Player is based on an ActiveX architecture embedded in a custom interface.

If you do not wish to develop a whole application on top of the ActiveX control, the standalone player will provide an application that is simple yet directly customizable from the composition defined in 3DVIA Virtools.



Customize your Application

The customizable User Interface feature allows for customization of the interface without recompiling the stand-alone player itself. Virtools developers will be able to update menus and toolbars and open dialogs through a simple XML configuration (created directly in the composition with the XML Building Blocks).

3D XE ActiveX control offers a complete API (Application Programming Interface) so that Visual Studio .NET developers can also embed it in their own custom applications in C#, VB or C++.

The 3D XE Player architecture allows the use of custom DLLs created with Virtools SDK for development of more advanced applications. Moreover, the 3D XE Player allows publishing Virtools compositions using the Behavior Libraries (Physics, AI, Multiuser).

Share your Content

The 3D Office Player provides a messaging and communication system using XML files to exchange data and events with the composition in play. Thus, all the experience's logic is defined in 3DVIA Virtools, and the player is only acting as a front-end.

The player supports loading and saving of 3DXML files. These files can either define a single product or a PCS package. The 3D XE Player allows you to edit the scene (change positioning of objects or materials, etc.) depending on your usage, and then save the modifications to either a 3D XML or NMO file for later use in the player, for maximum simplicity in sharing experiences.

The 3D XE ActiveX XML API allows .NET developers to create applications connected to any organization Information System. The 3D XE Player also provides developers with the capability to protect your data with a password, making it possible to secure confidential data.

3D XE Player: the Core Component for your Vertical Specific Applications

The 3D XE Player open-ended architecture makes it possible to support a large variety of industry-specific interfaces and scenarios for 3D interactive user experience. Seamlessly develop and design shopping or driving experiences, design reviews, maintenance and training applications. Moreover, the 3D XE Player .NET integration allows developers to create their own application interface to suit their user interaction needs.

Key features

- Custom DLLs that can extend behaviors for specific usage
- XML API (Building blocks) to facilitate application integration (COM architecture)
- Extended saving capabilities (3DXML, NMO, XML files) to create and share experiences
- File protection to secure assets for exchange
- Availability of additional packs (Physics, AI, Multi-user) for specific uses
- Open architecture for integration with external information system

Technical requirement

Minimum System Requirements

- Microsoft Windows® 2000 SP4, Microsoft Windows® XP Professional Edition SP2, Vista.
- A 1 gigahertz (GHz) processor or faster.
- 256 MB of RAM.
- DirectX 9.0 capable accelerated graphic card with at least 64 MB RAM.
- DirectX 9.0C or more recent, with latest available graphic card drivers.
- Internet Explorer 6.0+

Recommended System

- Microsoft Windows® XP Professional Edition SP2, Microsoft Vista.
- A 1.5 gigahertz (GHz) processor or faster.
- 1 Gigabyte (GB) RAM.
- DirectX 9.0 capable accelerated graphic card with at least 256 MB RAM.
- DirectX 9.0C or more recent, with latest available graphic card drivers.
- DirectX sound compatible soundcard.
- Internet Explorer 6.0+