

Shape Design & Styling
Photo Studio 2 (PHS)

CATIA V5R19





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Photo Studio

Generate high quality photo-realistic images and movies of a digital mock-up, by using a powerful ray-tracing engine

Product overview

Photo Studio 2 (PHS) generates high quality photo-realistic images and movies of a digital mock-up, by using a powerful ray-tracing engine. This engine drastically enhances the realism of the resulting images by computing real soft shadows as well as accurate reflections and refractions of light. PHS manages reusable scene settings and delivers powerful animation capabilities. By giving a physically realistic simulation of the model appearance, it can also provide final validation of the design. Photo Studio 2 (PHS) product is thus able to give a competitive advantage to companies that want to present their products in context to their own customers

Product Highlights

- ❑ High rendering quality far beyond graphic cards capability
- ❑ Ability to easily take a highly realistic "photo" of a product
- ❑ Ability to define reusable scene settings (Stickers application, Creation of animations)
- ❑ Instant graphical feedback of any setting modification
- ❑ Simple and powerful animation capabilities
- ❑ Surface verification capability
- ❑ Intuitive customizable Windows native User Interface reducing training requirements

Product Key Customers Benefits

High rendering quality...

Photo studio 2 rendering capabilities are based on state-of-the-art ray-tracing technologies that surpasses graphic card capabilities:

by providing real shadow computation and reflection effects.

by enabling anti-aliased images by computing images bigger than the full screen resolution

Photo Studio 2 is based on mental image's last generation rendering software component, mental ray. mental ray is widely acknowledged to be the industry leading rendering core system in the Digital Content Creation and CAD/CAM markets.

Easily take a "photo" of a product...

Users can create a photo-realistic image of a product as easily as loading the model and clicking the rendering icon. In order to better communicate on their ideas, users can put their models on stage using common object representation (such as cameras, light sources...). Since they will get a constant feedback on their choices through an instant graphical preview, Photo Studio 2 becomes very easy and intuitive to use. The images can be saved in several formats like .rgb, .jpeg, .tif and .bmp .

Reusable scene configurations...

Users can put their models on stage using the following object representation:
- Light sources - User can define as many light sources, of different types (punctual,

surfacic) as he wishes. Light specifications (color, position, intensity, and ability to cast shadows and source definition) are common to all source types.

- **Cameras** - Thanks to the camera, the user can specify the chosen viewpoint to take the image. The available camera specifications include position, projection type (conical or cylindrical) and zooming factor

- **Materials** - The user can apply materials to the geometry using the functionality's defined in Real Time Rendering 1 (RT1)

- **Stickers** - The user can apply Stickers to a Product or Part's ; He can therefore apply his company's logo on a future product, create special effects on a surface by playing with textures' colors

- **Environments** - In order to place models in their "real-life" context, the users can create 3 different types of environments: spherical, cylindrical and cubical. It thus enables to simulate interior as well as exterior scenes. Since this dress up is done through existing material library functionality's, users accustomed to the Real Time Rendering 1 (RT1) product will create an environment in a second.

- **Shooting** - Enables the user to define all the rendering objects involved in the shooting. Different shooting can be created and automatically saved as specifications in the tree. The user can also control the rendering quality and thus the time spent to compute the image.

- **Catalog** - User-defined rendering objects like environments, lights, cameras, shooting or complete scenes can be stored in a catalog and thus enable the user to reapply a successful anterior solution in any future project. A default catalog containing several samples is also delivered.

- **Intuitive and time-saving management** of the scene specifications through the tree editor

The scene specifications are displayed on the tree editor and can therefore be easily understood, changed and reused. By activating a specific shooting, the user can easily make images to test different aesthetical or technical options.

Simple and powerful animation

capabilities...

Simple model animation can easily be performed thanks to the turntable preview that includes the environment reflection preview for quick realistic animation. A realistic sequence of images can also be generated from the animation specifications.

- Turntables enable to generate a sequence of images representing model rotation around a user-defined axis.

- Videos can be easily created by playing with such parameters like cameras, lights (for instance to simulate the day light evolution) and environment (include animation sequence as backgrounds images), materials (facing ageing), Videos (AVI, MOV and MPEG formats) .

Powerful surface verification tool...

Using the pre-defined neon showroom, the user can compute a faithful image of a neon ramp lighting the model and thus see the surface defaults. Intuitive customizable Windows native User Interface reducing training requirements

ABOUT CATIA V5R19

CATIA is Dassault Systemes' PLM solution for digital product definition and simulation.

www.3ds.com/products/catia

