



# **SOLIDWORKS VISUALIZE**

## **OBJECTIVE**

SOLIDWORKS® Visualize enables anyone to create professional, photo-quality images, animations and other 3D content in the fastest and easiest way possible, enabling designers, engineers and content creators to enhance their 3D decision making experience. Users will design and market products with more impact by turning imagination into reality with SOLIDWORKS Visualize as the "camera" for their CAD data.

#### **OVERVIEW**

SOLIDWORKS Visualize helps organizations and nontechnical users leverage 3D CAD data to create photoquality marketing content that is print and web-ready in minutes. From static images to animations, interactive web content and immersive Virtual Reality (VR), SOLIDWORKS Visualize delivers graphical content that depicts products in the real world and elevates the design process.

By improving concepts throughout the design, development and marketing phases, SOLIDWORKS Visualize help users select, validate, improve and sell the best and most robust design concepts before committing expensive engineering, prototyping and marketing resources to the project. It helps reduce errors and ensure that products get to market faster than ever before.

#### **BENEFITS**

- See what your products look like in the real world—in seconds.
- Improve internal design, engineering and sales reviews.
- Reduce the cost and number of physical prototypes.
- Make more educated decisions earlier in the development process, saving valuable time and money.
- Create immersive VR content for enhanced internal reviews and viral consumer experiences.
- Picture-perfect content allows your design pitch to stand out from the crowd and close more business.
- Create content faster and more efficiently with integrated productivity tools.
- Deliver photo-quality imagery and content to marketing teams much earlier to help create final marketing layouts, well before the first prototype is produced.
- Maximize design time, achieve a better final product and get products to market faster—beating your competition.

#### **COMPETITIVE ADVANTAGES**

# Graphics Processing Unit (GPU) Accelerated Rendering

SOLIDWORKS Visualize can leverage one or many GPUs in a single machine or across a network, which dramatically increases rendering performance over CPU hardware. Utilizing NVIDIA® graphics cards for rendering is much faster than competitor CPU technology and helps users speed up their daily workflow, generating more content.

#### Artificial Intelligence (AI) Denoiser

SOLIDWORKS Visualize uses Artificial Intelligence to decipher and eliminate noise from your renders with a single checkbox. The result is a dramatic 10x faster render speed increase! Use this 10x increase for final renders and to prepare Visualize projects faster than ever before.

### Physically Based Raytracing

Using NVIDIA's Iray® render engine inside of SOLIDWORKS Visualize, users view a precise and physically correct representation of their CAD model, as if they had physically produced it. Lighting, materials and form all come together realistically without sacrificing visual quality. Physically-based raytracing is more than just pretty pictures—it is critical digital accuracy that shows what designs will look like in the real world.

#### **Intuitive User Interface**

SOLIDWORKS Visualize lets users work like they would in a photo studio, moving the camera around their product and easily "taking pictures" of their CAD data. SOLIDWORKS Visualize's interface, with integrated viewport and its lack of complex node-based materials, is designed for those who do not have time to learn a complex new tool.



### Support for 25+ CAD File Formats

No matter what CAD package companies use to model their projects, SOLIDWORKS Visualize has them covered. Users can import over 25 different CAD file formats, including common generic formats such as IGES, STEP and OBJ. They can choose from several Part Grouping types upon import, making it easier than ever to go from fresh import to final render.

#### **CAPABILITIES**

#### **SOLIDWORKS Visualize Standard**

SOLIDWORKS Visualize Standard is the fastest and easiest route to photo-quality images for anyone who needs to take "photos" of their 3D data, cutting costs and accelerating the time to market.

- Create photo-quality images at unlimited resolution
- Advanced multi-layer materials
- Accurate simulation of real-world lighting with High Dynamic Range (HDR) support, for photorealism without cumbersome manual lighting techniques
- Show off inner complexity with cut planes (section views) and fading the opacity of parts and models
- · Support for real-world measured materials (NVIDIA MDL and PBR)
- Integrated connection to the SOLIDWORKS online Community of over 1000 free assets
- Decals (interactive stickers) support and real-life placement
- · Support for professional texture maps (bump/normal, specular, alpha and color)
- · Interactive part splitter for separating surfaces without going back to CAD modeling tool
- Integrated Automatic Data Recovery to minimize any loss of work
- Preset camera filters to enhance images and make them pop off the screen
- · SOLIDWORKS Visualize Standard is included at no cost with each active SOLIDWORKS CAD Professional or Premium subscription!

#### **SOLIDWORKS Visualize Professional**

SOLIDWORKS Visualize Professional allows users to tell a deeper story with their CAD data by generating photo-quality imagery, animations, interactive web content, 360-degree spins and immersive Virtual Reality (VR) to effectively communicate the most complex design details.

- · Reduce scene setup time with integrated Physics Engine while adding natural touches
- Advanced Vehicle Driving Simulator to create life-like driving footage and dramatic images
- PowerBoost real-time network rendering: stream raytracing directly to your viewport from your Visualize Boost render farm
- · Full animation suite: parts, models, appearances, environments and cameras
- Integrated animation ribbon for easy camera animation setup
- Rapidly generate colorways and product variations by using configurations
- Import Video Decals for LED screen animation playback
- Two types of interactive web content (interactive image and panoramas)
- Instantly increase productivity with the integrated render queue
- · Create immersive 360-VRs (Virtual Reality) images and animations for playback on HMDs and smartphones
- · Customizable camera filters and post-processing
- Integrated advanced lighting techniques of Sun & Sky and Sun studies
- Customizable Area Lights and easy click-to-position interactivity
- Present photo-quality designs in real-time with Presentation Mode and adjustable baked lighting

## **SOLIDWORKS Visualize Boost (Add-on to Visualize** Professional)

SOLIDWORKS Visualize Boost instantly increases render speed and content productivity by sending render jobs to a dedicated cluster of machines.

- One seat of Visualize Boost is included at **no cost** with each seat of Visualize Professional on active Subscription!
- · Stack up multiple render jobs in your Render Queue and offload your local machine, to keep using Visualize, CAD or other demanding applications.
- Create and manage your Visualize Boost render farm from an easy-to-use webpage.
- Leverage both CPUs and GPUs across your network.

## Our **3D**EXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3DEXPERIENCE®** Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 220,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com.



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