SOLIDWORKS Visualize 2016 SP1 Release Notes

This document provides general information about the SOLIDWORKS® Visualize releases.

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System Requirements

System Specifications

- Windows® 7 or newer (64-bit)
- Dual core CPU; Quad core recommended
- 8GB RAM; 16GB recommended
- 2GB free disk space; 5GB recommended
- 2GB or more GPU RAM; 4GB recommended
- NVIDIA® graphics card: NVIDIA Quadro®/NVIDIA GeForce®/Tesla with at least NVIDIA Fermi chip; Dual-GPU setup with at least NVIDIA Kepler™ cards recommended
- NVIDIA driver version 354.56
- HDR Light Studio connection: HDR Light Studio v5.3.3 or newer

Installation

The installation requires administrator privileges.

Double-click the `SWVizInstaller.msi` installation package and follow the instructions in the installation wizard. The installation wizard chooses the appropriate language based on the region settings of the Windows system.

Licensing

Activation

SOLIDWORKS Visualize supports a node-locked license model that is based on an online activation of a SOLIDWORKS serial number.

To activate SOLIDWORKS Visualize, enter a SOLIDWORKS serial number that supports the SOLIDWORKS Visualize 2016 feature and click **Activate**. Activation requires an Internet connection. When activation finishes, an Internet connection is no longer required, but recommended.

Licenses can be perpetual or time-bound based on how you purchased the application. Licenses that are issued as part of a SOLIDWORKS CAD Professional or Premium subscription expire with the expiration of the subscription service and need to be reactivated after this date. See **Help** > **About** in SOLIDWORKS Visualize for further information on your license.

Deactivation

After activation, you can deactivate a license using **Tools** > **Deactivate** in SOLIDWORKS Visualize. The deactivation process requires an Internet connection. This frees up the seat that is bound to the SOLIDWORKS serial number and you can use it to activate SOLIDWORKS Visualize on another computer.

Trial Licenses

The installation comes with a complimentary trial license of SOLIDWORKS Visualize Professional 2016, the full product without any limitations. You can activate the trial license only once per machine, and it is valid for 15 days.

Product Notes

- The maximum render output is limited to 536,870,911 pixels (roughly 500 megapixels).
- There is no support of SNL (floating) licenses at this time. For clients with existing floating licenses, the equivalent quantity of transferrable node-locked licenses will be provided.
- There is no support for offline (machines unable to connect to the Internet during the licensing process) license activation.
- The network rendering capabilities (**Boost** and **PowerBoost**) are currently not supported by this version.

Service Pack 1.0

Features

- HDR Light Studio is included in SOLIDWORKS Visualize Standard.
- You can hide serial number from the About dialog box per ENV (SWV_HIDE_SN=1).
- There are links to online documentation.
- You cannot load projects saved with newer major versions.

- There are more specific licensing error messages to streamline the support process.
- You can import the camera view in SOLIDWORKS files.
- The DPI value is correctly written into the metadata of exported images.
- You can select a render device (**GPU**, **CPU**, **Hybrid**) for exporting images in **Fast** mode.
- **Accurate** rendering is continued when you switch from **Accurate** to **Preview** and back without changing the camera or rendered data.
- Restored tessellation options for STEP import.
- Added support for legacy Bunkspeed 2011 projects.

Improvements

- Fixed decal import from SOLIDWORKS with **Appearance Part grouping** mode during import.
- Fixed when decals were lost when copying and pasting models.
- Fixed rendering error with HDR Light Studio environments.
- Fixed an issue where you could not delete appearances from projects.
- Fixed numeric instabilities with color input.
- Fixed backplate and **Background Color** shining through non-solid transparent objects.
- Fixed discrepancy of environment reflections with backplates or **Background Color** and **Floor Shadow**.
- Fixed possible occurrence of NaNs with camera **Distance/Dolly** slider.
- Fixed **Home** keyboard shortcut for look-at function when pointer focus was in the Palette or Objects tab.
- Fixed application error with split parts.
- Fixed problems with duplicating configurations.
- Improved **Multi Viewport** performance.
- Improved decal mapping on small scale objects.
- Improved trial licensing.
- Docked the Animation timeline at the bottom of the window.
- Optimized appearance import for SOLIDWORKS files.
- Camera **Latitude** slider respects **Keep Above Floor** setting.

Service Pack 0.0

Changes

- Rebranding from Bunkspeed to SOLIDWORKS Visualize.
- New Product Portfolio. Introduction of SOLIDWORKS Visualize Standard and SOLIDWORKS Visualize Professional replaces Bunkspeed Shot, Bunkspeed Pro, Bunkspeed Zoom, and Bunkspeed Drive.
- New File Types. Introduction of new SOLIDWORKS Visualize file types:
    - `.svpj` – SOLIDWORKS Visualize Project.
    - `.svap` – SOLIDWORKS Visualize Appearance.
    - `.svcm` – SOLIDWORKS Visualize Camera.

Compatibility and support for previous file types (`.bif`, `.bcf`, `.bmf`) remains.

Features

- New, industry-leading import of SOLIDWORKS CAD data (SOLIDWORKS 2016 SP0 and older), with support for: parts, assemblies, appearances, textures, scenes, backgrounds, environments, and decals (projection mode only).
- Significant performance increases and rendering stability with the introduction of NVIDIA Iray® 2015 with support for NVIDIA Fermi - Maxwell GPU microarchitecture.
- Support for 14 languages (Chinese-Simplified, Chinese-Traditional, Czech, English, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Turkish).
- Support for HDR Light Studio 5.
- Automatic render device selection (**GPU**, **CPU**, and **Hybrid**) based on available hardware.
- Dynamic switching of render device (**GPU**, **CPU**, and **Hybrid**) during runtime.
- Support for **Fast** render mode on CPU render device.
- New dispersive Caustic and Architectural samplers in **Accurate** render mode.
- New and improved interactivity acceleration modes (Downscaled, Blended).
- Bloom (Glow) filters in **Fast** and **Accurate** render modes for artistic and emotional effects.
- Animation of model, group, and part visibility state.
- Ability to clean project of unreferenced resources.
- Usage of alpha channel in color textures for transparency information.
- Ability to globally disable rendered thumbnails.
- Appearance tab – **Color Density**:
  - In the Appearance tab, the **Thickness** property has been renamed to **Color Density**. This name change applies to the transparent appearance types of **Glass**, **Plastic**, **Generic**, **Gem**, and **Subsurface**.
  - The default slider range and the default parameter value have been adjusted for better usability with these appearance types.
- Scenes tab – **Caustics**:
  - In the Scenes tab, the option to set **Caustics** in **Accurate** render mode has moved from the **Scene Settings** section to the **Background Settings** section. Additionally, the **Architecture** option in the **Scene Settings** section has been renamed to **Interior**. These Scenes tab changes apply to all environments properties (HDR Environment, HDR Light Studio Environment, and Sunlight Environment).
  - To highlight the dependency of caustic effects on the floor plane and other parameters, an additional element called **Floor Caustics** is available. If you turn on **Caustics**, the **Floor Caustics** slider is locked to the **Floor Roughness** and **Floor Reflection** sliders. For best results of **Caustics** on the floor plane, move all three sliders to their maximum value.
- **Scenes** tab – HDR Light Studio:
  - If you installed HDR Light Studio, you can create or edit an HDRI in HDR Light Studio. Edits you make in HDR Light Studio update the lighting in SOLIDWORKS Visualize in real time.
  - The Scenes tab has controls for running HDR Light Studio when you have SOLIDWORKS Visualize Professional and HDR Light Studio installed. The controls include:

- **Start**. Starts the HDR Light Studio software.
- **Pause**. Hides HDR Light Studio without closing the software. When you click **Start** again, the software appears.
- **Stop**. Closes HDR Light Studio and exits the software.

- The **Light Paint Mode** menu lets you move the light in the **Render** view. The following modes are available:

  - **Reflection**. Positions the light to reflect at the point on the surface where you click.
  - **Illumination**. Calculates the normal to the surface of the object at the point where you click, and positions the light source along that normal. This method is best for lighting diffuse objects where you are not concerned about reflections and want to shine light directly on a surface.
  - **Rim**. Ignores the object, allowing you to position lights behind the object.

Improvements

- Newly supported file types include: NX™, Pro/ENGINEER®/Creo, Autodesk Inventor®, Solid Edge®, CATIA®, ANSYS® ICEM, VDA, and STL.
- Access to geometric data (Breps, NURBS) for the following additional formats: CATIA V4, CATIA V5/6, ICEM, Autodesk Inventor, Parasolid®, Pro/ENGINEER/Creo, Alias, and Solid Edge.
- New and improved tessellation engine for increased triangle count/visual quality ratio, reliability, healing, and stitching capabilities. Also features simplified user interface.
- Improvements to automatic CAD update (Live Update) functionality and addition of new feature to manually update CAD file reference and trigger geometry update.
- Massive performance improvements to the Baked Lighting feature by leveraging multithreading and GPU support.
- New and improved installation system (`.msi`).
- Improvements to usability, performance, stability, and reliability.