

# Workflow Changes

This page provides information on how the latest version of V-Ray handles scenes saved with previous versions of V-Ray.

## Overview

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**V-Ray 6** adds a number of rendering optimization features. However, for compatibility reasons, some features and workflows have been adjusted and are discussed in detail below.

V-Ray for SketchUp is not forward-compatible, meaning projects done with **V-Ray 6** are not guaranteed to work with V-Ray Next or older versions. If a project is opened using an older V-Ray version than the one it was created with, a prompt message will offer wiping all V-Ray data to ensure file stability.

## Lights

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The **Portal Light option** in V-Ray Rectangle light is now a legacy option and is no longer exposed in the UI. This is done because with the introduction of the adaptive sampling for dome lights and environments, the Skylight portals are not needed anymore.

Rectangle lights in files saved with previous V-Ray versions and with Portal Light option enabled will still have it available. Regardless, for best performance consider disabling it and using the Adaptive Dome Light option instead.

## Materials

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**PBR layers** are now automatically converted to regular V-RayMtl layers. This is made in order for the PBR material to have all other parameters available - refraction, anisotropy, sheen, coat, etc. The conversion to V-RayMtl also makes it possible to import PBR materials from other host apps.

A new **Surface Control option** (metalness control) is added to the Reflection rollout. It serves as a switch from Glossiness to Roughness and affects Coat, Reflection, and Sheen.

The **V-RayMtl** now has **built-in Bump** parameters. This allows users to set up linear shaders that are more optimal for rendering. It also keeps the workflow up to date with other host apps, such as 3ds Max and Maya. Materials previously using the Bump attribute now use the built-in Bump.

**Preset Material Library** materials previously using Reflection Coat layer now use the **built-in Coat**. The old workflow was to create a base material and a separate Coat material and use a Blend shader to blend them together. The new Coat layer is easier to set up and faster to render. It is suitable for materials that have a reflecting coating similar to a varnished wood floor or a coated plastic. The Coat layer is also more compatible with cloud rendering, vrsce files, and V-Ray Standalone.

**Preset Material Library fabric** materials previously using Diffuse Coat layer now use the **built-in Sheen**. The new Sheen layer helps to make soft fabric materials like velvet, satin, and silk. Now that it is built into the V-Ray material, it can be used directly with cloud rendering and it makes it more compatible with vrsce files and V-Ray Standalone.

The **Toon material** workflow from V-Ray Next is now deprecated and replaced with a new workflow composed of a global volumetric Toon and per material overrides. This allows you to set a global effect faster.

A new material attribute called **Contour** is added, which replaces the old Toon material that is no longer supported in V-Ray 5.

Toon materials from previous V-Ray versions are now automatically migrated to **Toon Override** materials. The Toon Override material is basically a Generic material with enabled Contour and without a base.

The **Highlight Glossiness parameter** of the V-RayMtl layer is deprecated, as it makes the material look more complicated and inaccurate. Highlight Glossiness is migrated from previous versions; however, if it is disabled, the row is hidden and its value is set to 1.

The **Glossy Fresnel option** is hidden from the UI and enabled by default, even for old scenes. This way it represents physical materials more accurately.

A new **Displacement object modifier** is implemented. The Displacement material attribute is now deprecated. Note that the displacement effect no longer appears in the Preview Swatch. The Displacement material attribute was unreliable - it was working only if the material is a top-most shader applied to the geometry. The new Displacement object modifier can be applied directly to geometries no matter the applied material, so multiple objects can use the same displacement but different materials.

The legacy **Subsurface Scattering material** is removed and migrated. Materials created with previous versions are migrated to Raytraced by default. It is done because this method is physically accurate and produces the best results.

Materials with **Normal** opacity mode are now calculated with the **Stochastic** opacity mode. Stochastic is now the default mode and replaces Normal in old scenes, as it gives the same results but is faster. The **Clip** mode calculates faster and gives better and more accurate results when there is only pure white and pure black in the opacity map.

Starting with V-Ray, 6 the Fresnel formula is now calculated more precisely. As a result, some materials, mainly metallic ones, may render slightly differently (with more physically-accurate reflections).

Starting with V-Ray 6, the V-Ray Preset Material Library is part of the Chaos Cosmos Browser. Materials that have already been downloaded with any earlier V-Ray version remain unchanged and can still be loaded as a custom folder.

## Enscape Compatibility

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Scenes set up using Enscape will now render in V-Ray. Materials and even the Enscape assets will be automatically handled by V-Ray providing a great starting point when transitioning from the Enscape design stage to the high-end visualization in V-Ray. For more information, go to [Enscape Compatibility](#).

## Settings

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A new **Contours rollout** is added to the Settings. The rollout exposes a toggle that enables or disables global Contours.

## Render Elements

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A new **Contours Render Element** is added. This render element stores a mask for both the global and individual material contours. It can be used for compositing. Note that **Contours** will only appear in a Contours render element and not in the RGB/Beauty image.

## Textures

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The **Double-sided mode** is hidden from the Texture Placement parameters. Double-sided mode can be controlled by material assignment of each individual face. The option is now handled entirely by SketchUp for more consistent results between the Viewport and V-Ray.

## V-Ray Frame Buffer

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**Color Corrections** saved as `.vccglb` files with V-Ray Next cannot be loaded in V-Ray 5.

## Migration from Previous Versions

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**V-Ray 6** for SketchUp licenses also work with V-Ray 5, allowing anyone who purchases an upgrade, to complete unfinished projects using V-Ray 5 if needed.

Please note that customer support is available only for V-Ray 6 and V-Ray 5. Earlier versions are no longer supported.

**Materials and other V-Ray data saved with V-Ray older than v2.0 will not be read.**

If you need to migrate an outdated scene, you will need to perform a 2-step migration - the first one to V-Ray 3.6 and the second one to V-Ray 5.

To do so, first, visit [download.chaosgroup.com](https://download.chaosgroup.com), enable the **Show older versions** checkbox, and download V-Ray 3.6.

Then, uninstall your current version of V-Ray for SketchUp and install v 3.6 instead.

Open your outdated project, inspect the scene materials through the V-Ray Asset Editor, and save the project. This will trigger automatic V-Ray data migration. Repeat the steps for V-Ray 5.

Note that in order to work with V-Ray 5 builds, you need to have the proper License Server. For more information about the License Server, see [Installing the License Server](#).