V-Ray 5 for 3ds Max

Product document

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Product description

V-Ray for 3ds Max is an Academy Award-winning, industry-standard, production-proven rendering software. Known for its versatility and ability to handle any type of project — from scenes with massive geometry and many lights to a single building or simple interiors — V-Ray is preferred by many 3D artists. It is used by 95% of the top AEC firms worldwide and in countless films.

V-Ray's modern and efficient material library workflow, faster look-development with material presets, and flexible post-processing features can save users time, take them beyond just rendering and help them focus on artistic exploration — from a single creation tool.

V-Ray for 3ds Max is the world's most complete 3D rendering software for high-end visualization and production.

What it's used for

Architectural visualization

Game cinematics

Automotive and product design

Visual effects in film & television

Industrial design

Virtual reality

V-Ray for 3ds Max users

The majority of V-Ray for 3ds Max users are arch-viz artists and product designers.

- They are usually highly technical and can work well with advanced settings in 3ds Max and V-Ray.

- These artists have a good understanding of space, form and function.

- They deliver high-quality designs that go beyond customers' expectations.

- They are also responsible for multiple visualization projects at a time and are looking to develop an efficient, streamlined workflow.

- They usually have too much to do within a limited time period.

- Software quality, and the efficiency and reliability it brings to workflows, is more important to these users than cost.

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Key benefits for users

Easily handle their toughest scenes. V-Ray is built to handle the biggest projects and scenes with massive geometry and thousands of lights. Users can render anything and everything with V-Ray.

Utilize their hardware for maximum performance. V-Ray helps users deliver projects faster and meet the tightest deadlines. V-Ray's GPU and CPU rendering capabilities bring a speed boost to any production and lets users cut render times.

Create interactive experiences in real-time — in a 100% raytraced environment. With Chaos Vantage users can present their ideas in 100% ray-traced quality without the need of extra optimizations and conversions. Make project changes directly in 3ds Max and validate your designs on the spot.

Post-process their renders without the need for a separate tool. The redesigned V-Ray Frame Buffer with light mixing and layered compositing means users only need to use one tool for rendering and post-processing — no need to go back and forth between different apps.

Free up their machine with quick and easy cloud rendering. Users can turn their computers into supercomputers with Chaos Cloud — the cloud rendering built right into V-Ray. They can keep working on their designs while rendering on the cloud.

Streamline their pipeline across different platforms. With the wide range of platforms that V-Ray supports, it's easy to merge assets or exchange projects for material coordination and consistency across platforms. For example, users can share materials or render geometry from V-Ray for Rhino to V-Ray for 3ds Max, or vice versa.

Interoperability with other V-Ray products

▪ V-Ray for 3ds Max can further enhance a Rhino or SketchUp workflow with the addition of V-Ray for Rhino or V-Ray for SketchUp.

▪ Fluid, fire and smoke simulations can be added with Chaos Phoenix.

▪ More lighting and shading options can be added during the compositing stage by using V-Ray for Nuke.

▪ Professional image sequencing can be added with PdPlayer.

▪ V-Ray for 3ds Max supports Chaos Scans which allows for the most physically accurate materials to be used.

▪ V-Ray supports many tools and provides optimized support for numerous third-party plugins.

▪ Chaos Cloud gives one-click access to cloud rendering directly from V-Ray's UI.

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Features list

Rendering

V-Ray's powerful CPU and GPU rendering is built to handle the toughest projects and demands of high-end production.

- CPU rendering, GPU rendering, Resumable rendering, Denoising, Debug shading, Progressive caustics

Lighting & illumination

V-Ray helps users create the highest quality renders possible. It analyzes a design according to its actual lighting and the true reflections and refractions of its materials. You can choose from a variety of lights.

- Adaptive lights, Lighting Analysis tools, Accurate lights, Global Illumination

Cameras & optical effects

V-Ray supports any commonly used camera type options. V-Ray also has additional advanced controls for camera effects.

- Lens effects, Point & Shoot camera, Photorealistic cameras, VR

Materials

V-Ray supports a versatile selection of materials to achieve different looks — from simulating simple surface properties like plastics and metals to complex uses such as translucent objects, subsurface materials like skin and light-emitting objects.

- Physically based materials, physical V-Ray Hair material, Metalness, V-Ray Toon Shader, Chaos Scans

Textures

A wide variety of memory-efficient textures are also available to use with V-Ray materials. V-Ray has all the texturing capabilities required for production rendering.

- Memory-efficient textures, Triplanar mapping, Rounded corners

Geometry

There are different ways V-Ray can create and modify geometry objects in a scene, including primitives and procedural geometry, modifiers, proxy objects, particle instancing, volume grids, etc.

- Proxy geometry, V-Ray Clipper with render-time booleans, Hair and Fur, Specialty geometry

Atmospheric & volumetric effects

The atmospheric and environment effects in V-Ray simulate fog, atmospheric haze and participating media for a number of image effects.

- Volume rendering, Aerial Perspective

Render Elements

With V-Ray, users can choose from nearly 40 unique beauty, utility and matte passes to give them more control over their rendered images in compositing.

- Render Elements, Cryptomatte

What's new in V-Ray 5 for 3ds Max?

V-Ray 5 for 3ds Max is the most complete 3D rendering software for artists and designers.
V-Ray 5 for 3ds Max's modern and efficient material library workflow, faster look-development with material presets, and flexible post-processing features can save users time, take them beyond just rendering and help them focus on artistic exploration — from a single creation tool.

Post-processing with V-Ray

With V-Ray 5 you can now use one tool for more than just rendering. There's no need to go back and forth between different apps.

- Light mixing, Layered compositing, Light Path Expressions Learn more about the Light Mix in V-Ray 5.

Added with Update 1
- Masking in V-Ray Frame Buffer
- Multiple additive Dome Lights

Added with Update 2

- Sharpen and Blur in V-Ray Frame Buffer

Optimized lighting & shading workflow

Artists can focus on designs and worry less about creating materials and textures. Access to the material library means users can initiate their custom materials in no time. A new Sun & Sky analytical model dramatically improves lighting at sunrise and sunset.

- Material Library and Browser, Material presets, Material previews, Coat and Sheen layer, Texture randomization, Stochastic texture tiling, Extended V-Ray Dirt

- New Sun and Sky model

- Native ACEScg support

Added with Update 1
- Chaos Cosmos
- Advanced material override
- Auto-translation of Physical Materials
- New V-Ray Material translucency
- Improved V-Ray Material in viewport

Added with Update 2

- Chaos Cosmos materials
- Extended material override
- V-Ray Instancer lights distribution
- Atmospheric light contribution control
- Extended V-Ray Dirt
- Initial support for Pixar's USD format

Superior quality, extra fast

V-Ray is known for its physically-accurate, photorealistic results. With the latest update, artists can achieve real-world reflections and refractions in less time with progressively calculated caustics.

Added with Update 1

- Progressive caustics

Added with Update 2

• Chaos Cloud and GPU updates

Why should users choose V-Ray 5 for 3ds Max?

- The redefined V-Ray Frame Buffer means users can now use one tool for rendering and basic compositing without going back and forth between different apps.

- From a single render, users can simulate many light environments and instantly tweak specific parts of their scene.

- Access to the material library means users can jump-start their custom materials in no time.

- Users can automate their lighting and shading process with a selection of tools and presets for faster results with fewer clicks.

- The latest V-Ray GPU enhancements in V-Ray 5 allow users to fully utilize their hardware for maximum performance.

- V-Ray 5 introduces even quicker ways to handle tasks, such as with the newly added material presets.

- Artists can now manipulate different lighting scenarios interactively and even after rendering, without having to render again.

- Users can easily avoid seams in their textures with texture randomizations.

- Achieve real-world reflections and refractions in less time with progressively calculated caustics.

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