

V-Ray for Houdini

Product document

June 2021

Product description

V-Ray brings VFX to life. From heroes and creatures to vehicles and environments, V-Ray helps artists deliver invisible and blockbuster effects for Emmy-winning television and over 150 feature films.

V-Ray for Houdini is a production-proven CPU & GPU rendering for high-end VFX and animation, built to handle users' biggest scenes and most demanding projects. It comes with all the tools artists need to render amazing-looking procedural effects. Seamlessly integrated in Houdini, it enables smooth scene exchange and iterations between Houdini and other DCC applications.

V-Ray for Houdini users

V-Ray for Houdini is designed for artists working in 3D animation and VFX for film, TV, video games and virtual reality.

Key benefits for users

Academy Award-winning ray tracing technology. V-Ray's performance is production-proven. It's been used by the world's leading studios to render over 300 television series and feature films. In 2017, V-Ray received a Sci-Tech Academy Award for its contribution to photorealistic visual effects.

Smart integration for a smooth workflow. V-Ray works seamlessly with Houdini and enables smooth scene exchange with other DCC applications. USD support is new in V-Ray 5, joining other industry standards like ACEScg, Alembic, OpenVDB, and OpenColorIO.

Fast and scalable to help you meet tight deadlines. V-Ray's adaptive ray tracing is highly optimized for superior speed and scalability. You can take full advantage of your hardware rendering on multiple CPUs, GPUs, or both. With V-Ray's distributed rendering, you can render a single image across multiple machines.

Creative control to render anything imaginable. Bring your projects to life with the right tools for the job. V-Ray equips you with a complete set of lighting, shading, and rendering tools. It's the most full-featured 3D rendering software available.

V-Ray workflow across DCC products.

- V-Ray for Houdini can further enhance 3ds Max, Maya, and Katana workflows with the addition of V-Ray for 3ds Max, Maya, and Katana
- More lighting and shading options can be added during the compositing stage by using V-Ray for Nuke
- V-Ray for Houdini supports Chaos Scans which allows for the most physically accurate materials to be used

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, GPU or hybrid rendering, Distributed rendering, Cloud rendering, Denoising, Debug shading, Memory tracking, Light mixing, Layered compositing

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, 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, Physical 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 or non-photoreal toon shading.

- Physically based materials, Unique shaders, AISurface material, Physical Hair material, Metalness, Shading languages, 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, Texture randomizations, Texture baking

Geometry

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

- Improved alembic support, VRayscene assets, Hair & Fur, Rounded corners, 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, OpenVDB, Chaos Phoenix caches.

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.

- Light Path Expressions, Light Select, Render Elements, Cryptomatte

What's new in V-Ray 5 for Houdini?

V-Ray 5 brings a redesigned V-Ray Frame Buffer to Houdini with tools for light mixing and basic compositing built in. The new, streamlined UI, native ACEScg support and Light Path Expressions speed up rendering and optimize users' workflow for faster results — both on the CPU or GPU. The new V-Ray Hydra delegate and texture baking improvements simplify the collaboration and design process.

Efficient collaboration

With V-Ray 5 users can now transfer large amounts of data smoothly, without extra optimizations. The V-Ray Hydra delegate is now fully featured and ready to help them work smarter.

Added with update 1

- V-Ray for Solaris beta

Optimized workflow

Artists can focus on designs and worry less about creating materials and textures. A new Sun & Sky analytical model dramatically improves lighting at sunrise and sunset. The texture baking and UI improvements simplify the design process. Plus, users can achieve more realistic whitewater results with the Chaos Phoenix Foam Shader.

- Native ACEScg support
- Coat and Sheen layers, Texture randomization, Stochastic texture tiling, Extended V-Ray Dirt
- New Sun and Sky model

Added with update 1

- Improved texture baking
- Chaos Phoenix Foam Shader
- Simplified UI

Post-processing and extra compositing with V-Ray

With V-Ray 5 users 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.](#)

Why should users choose V-Ray 5 for Houdini?

- 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.
- 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 with a new streamlined UI.
- Artists can now explore different lighting scenarios interactively and even after rendering, without having to render again.
- Users can easily avoid seams in their textures with stochastic texture tiling.
- Users have extensibility and customization options to fit the needs of any production pipeline.
- Output any lighting contributions with Light Path Expressions for fine-grained control in compositing.
- Render natively in the industry-standard ACEScg color space.
- Collaborate more efficiently with the V-Ray for Solaris beta.

Norsk leverandør:



Create your world.

chaos.com