



V-Ray for Maya

Product document

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Product description

V-Ray for Maya is the world's most complete 3D rendering software for animation and visual effects. It's a production-proven ray traced renderer with a full suite of tools to create professional photoreal 3D imagery, animations and visual effects. Its extensible customization options and powerful lighting, look-development and quick post-processing features save users time, let them go beyond just rendering and help them explore their creative ideas without limits.

What it's used for



Visual effects in film and television



Automotive and product design



Game cinematics

V-Ray for Maya users

The majority of V-Ray for Maya users work in medium or big studios in the M&E sector on visual effects and product design projects.

- Works on animations for ads and feature films.
- Creates both stills and video content for product presentations and marketing materials.
- Responsible for multiple visualization projects and looking to develop a simplistic, streamlined workflow.
- Needs to continuously share and update information between departments; expects consistent and reliable rendering solutions that are compatible with multiple media.
- Technically-savvy, needs a robust, customizable and reliable rendering solution that produces very high-quality results in a consistent manner.
- Needs to recreate very specific look and feel, match real footage, replicate real-life lighting and materials.
- Often scripts custom shaders and complex production workflows.
- Always pressured by tight deadlines.
- Needs lots of render power and fast results, but not at the expense of quality.
- Price sensitive, but very demanding.

Key benefits for users

Academy Award-winning rendering technology.

Whatever the users' creative vision, V-Ray gives them the technology to render elaborate visual effects. From heroes and creatures to mind-blowing environments - projects of all sizes can rely on lightning-fast interactive and heavyweight production rendering.

Gives easy access to 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.

Fast and scalable to meet any production deadline.

V-Ray is optimized for speed, scaling across all your machine's CPUs and/or GPUs. Rendering times are further slashed with Distributed Rendering, leveraging multiple machines on your network for even faster decision making. The bundled V-Ray Standalone renders scenes directly with V-Ray.

Customizable and extensible for ultimate control.

V-Ray supports Windows, Linux and MacOS, is network deployable, and uses floating licenses that can be centrally served or locally checked out. The bundled SDK and AppSDK allow custom tools for extending and automating pipelines.

Seamlessly integrates in users' pipeline. Natively integrated with Maya, V-Ray works with all the most popular plugins - Golaem, Massive, Ornatix, Chaos Phoenix, Yeti and more. It fits easily into studio pipelines with support for open standards like Alembic, OpenVDB, OSL, OpenColorIO, ACEScg and now USD, making your workflow and collaboration easier.

Streamlines users' 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 Maya to V-Ray for Houdini or 3ds Max, and vice versa.

Interoperability with other Chaos products

- Add fluid, fire and smoke simulations with Chaos Phoenix.
- More lighting and shading options can be added during the compositing stage with V-Ray for Nuke.
- Add professional image sequencing with Chaos Player.
- V-Ray for Maya supports Chaos Scans, which allows for the most physically accurate materials to be used.
- V-Ray Standalone renders scenes directly with V-Ray.
- Chaos Cloud Rendering gives one-click access to cloud rendering directly from V-Ray's UI.
- Chaos Cloud Collaboration lets you work together within a team, or even with clients, sharing rendered results and allowing for comments, mark-up, and more.
- V-Ray supports many tools and provides optimized support for numerous third-party plugins.

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, Resumable rendering, Denoising, Debug shading, Memory tracking, Light mixing, Layered compositing, Deep Image Output, ACEScg Color Management, USD support, Chaos Cloud batch rendering, Intel® Open Image Denoise, GPU Light cache and improved Out-of-core, 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, Accurate lights, Global Illumination, New Sun and Sky model, Chaos Cosmos HDRIs.

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, V-Ray Toon shader, Shading languages, Chaos Scans, Material presets, Chaos Cosmos materials, Coat, Sheen and Thin Film layers, New Car paint material, New V-Ray Material translucency.

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, Texture randomizations, Texture baking, Stochastic texture tiling, Extended V-Ray Dirt.

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. The new V-RayProxy object adds speed to both the workflow and the rendering.

- Proxy objects, Layered alembic support, VRayscene assets, V-Ray Fur, Rounded corners, Specialty geometry, Chaos Cosmos 3D models, Opacity Cutout Conversion, V-Ray Decal.

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, Field3D, Chaos Phoenix caches, VRayEnvironmentFog color transparency.

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.

Post-processing & compositing

Use V-Ray for more than just rendering. There's no need to go back and forth between different apps.

- Light mixing, V-Ray Lens Effects (also available as a plugin for Nuke), Layered compositing, Light Path Expressions, Masking in the V-Ray Frame Buffer, Multiple additive Dome Lights, Blur and Sharpen layer in VFB, batch image processing.

What's new in V-Ray 6 for Maya?

V-Ray 6 for Maya packs in a number of powerful, new tools that enable users to create without limits. They can now generate complex surfaces for stunning close-up shots at no extra memory cost. Craft just the right sky for their environment in just a few clicks. Take their product design and HDRI renders to the next level, and more.

With V-Ray 6, users can also fast-forward their projects' reviews and approvals with Chaos Cloud Collaboration as well as easily monitor and manage rendering performance with V-Ray Profiler. Plus, they can experience a number of other workflow enhancements including identical results from IPR and the production renderer, enhanced USD support, faster and more efficient rendering, background Chaos Cloud Rendering submissions, and much more.

Create without limits.

Powerful, new tools allow you to build anything imaginable.

- V-Ray Enmesh, Finite Dome light mode, Procedural clouds, V-Ray Decal with Displacement.

Streamline your workflow.

Fast-forward your project's reviews and approvals. Easily monitor and manage rendering performance, and so much more.

- Chaos Cloud Collaboration, V-Ray Profiler, Light Cache in IPR, enhanced USD support, faster and more efficient rendering, Background Chaos Cloud Rendering submissions.

Shade faster and better.

Speed up shading and create even more physically accurate materials.

- Thin Film Layer, Enhanced V-Ray Material energy preservation.

And more.

You can now do even more in the V-Ray Frame Buffer.

- Composition Guides Layer in VFB, VFB Panorama Viewer.

Why should users choose V-Ray 6 for Maya?

- V-Ray is the renderer that does it all, allowing users to create without limits. No need to switch applications and interrupt their creative process.
- Users can easily create complex surfaces with lots of detail for realistic close-up shots at no extra memory cost.
- V-Ray 6 speeds up shading and allows users to create even more physically accurate reflective materials.
- V-Ray 6 for Maya also enables users to easily monitor their scene's shaders and volumes rendering performance and locate hot spots for optimization.
- Customers now have a fast and efficient way to share their renders, collect feedback and collaborate with their team or customers.
- They can also create custom skies for their environments in just a few clicks and render powerful time-lapse videos.
- V-Ray 6 introduces a number of enhancements that streamline users' workflows, including consistent results between IPR and the production renderer, enhanced USD support, faster and more efficient rendering, and more.
- V-Ray 6 adds even more functionality to the V-Ray Frame Buffer and enables users to further streamline their workflow and make better decisions as they review their work.
- Users can now render with V-Ray in any host application and benefit from the powerful suite of Chaos products and services with just a single license.



Create your world.