



Rhino

# WHAT'S NEW IN V-RAY NEXT FOR RHINO

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## PRODUCT DESCRIPTION

V-Ray for Rhino is a highly accurate renderer for McNeel Rhinoceros, enabling designers to predict and present their designs with the highest level of realism and reduce the need of physical prototypes. V-Ray greatly increases Rhino's ability to handle large scenes and can be used directly within Grasshopper.

V-Ray Next for Rhino is much more than a do-it-all renderer that creates gorgeous images of your designs. It's also a full suite of tools to help you accomplish more in Rhino than ever before. V-Ray Next makes it easier to manage everything in your scene — even the crazy complex ones.

V-Ray Next is smart, too. It learns from your scene to make lighting faster. And it can set your camera exposure and white balance automatically. It's fast. V-Ray Next for Rhino is 50% faster overall. GPU rendering is 2x faster. And it's up to 7x faster with the new Adaptive Dome Light. V-Ray Next for Rhino extends what is possible in Grasshopper even further - now you can animate Grasshopper definitions as well as cameras and sunlight, and measure real-world illumination values — all right in Grasshopper.

V-Ray Next for Rhino is compatible with Rhino 5 and Rhino 6. V-Ray for Rhino is supported on Windows only.

## WHAT'S NEW

### SUPERCHARGE RHINO



#### DO MORE IN RHINO THAN EVER BEFORE

Maximum creative control, minimum effort

**Automating snapshots & batch renders.** Now V-Ray Batch lets you schedule and render jobs to V-Ray Swarm or Chaos Cloud, making it easy to render snapshots from the same project or views from multiple Rhino files all at once.

**Power up with scripts.** Use RhinoScript and Python to program V-Ray Next to do even more for you, like automating scene management or accessing parameters not shown in the UI.

**Easy to resize lights.** Adjust the size and shadow softness of lights without affecting their intensity. Change the size of instanced lights by changing just one.

**Better management of V-Ray Objects.** A simple new UI makes it easy to create, edit and manage V-Ray objects like lights, section clippers and fur.

**More accurate viewport previews.** Get a more accurate preview of your materials in the Rhino viewport with improved reflections, refractions, bump maps and more.



## SUPERIOR GRASSHOPPER SUPPORT

Powerful capabilities that maximize value

### Animated sun and cameras in Grasshopper.

Now in Grasshopper, you can animate sunlight and cameras using the V-Ray timeline. Then it's just a quick export back to Rhino for final rendering.

### Measuring illumination in Grasshopper.

The new lighting analysis render element makes it easy to visualize and evaluate the real-world illumination levels of your Grasshopper scene.

**Directional Light.** Create stylized lighting schemes to render non-realistic, stylized light. Use multiple directional light sources, for example, to demonstrate how light accumulates throughout the day.

**Familiar Grasshopper workflow.** Working with V-Ray Next in Grasshopper is simple. You hook up V-Ray components exactly the same as Grasshopper's native ones. So it's easy to get the results you're looking for.

**Real-world cameras in Grasshopper.** Use real-world camera settings for aperture, shutter speed and ISO. Together with the sun and sky system, you'll be able render your Grasshopper scene accurately for lighting analysis.

**Animated Grasshopper definitions.** Animate and render parametric designs via the V-Ray timeline to explore conceptual or photorealistic versions of your models.

## WORK FASTER



### NEW MATERIALS AND TEXTURES

More control over the look of your scenes

**Material metalness.** The V-Ray Material adds native support for metallic reflections (Metalness) for greater compatibility with PBR materials from applications like Substance Designer.

**Curve color corrections.** Fine-tune the colors of any texture map using RGB or HSV curve controls.



### POWERFUL ASSET MANAGEMENT

Keep track of everything all in one place

**Universal asset preview.** Preview your materials, lights, textures and render elements in a single viewer. Observe how parameter changes affect the appearance of the asset in a specific isolated setting.

**Asset outliner.** Manage all of your assets including lights, materials, textures, geometry and render elements all in one place.

**Intuitive asset creation.** Quickly create new assets in the Asset Editor from the footer. Create menu, outliner filter icons or from the library Create section.

**Asset library UI.** Manage assets of any type in an intuitive customizable folder structure. Quickly search through huge number of assets in either the built-in library or in any other library location.

**Texture instancing.** Map multiple material parameters with the same source texture to simplify the shader structure and management.

**UI display levels.** Use either the Basic set of asset parameters or activate the Advanced mode to list all options.



**Multi-selection.** Select multiple scene or library assets as well as multiple toolbar filters to speed up your workflow.



### SIMPLIFIED RENDER CONTROLS

Click less, render more with new and improved UI controls

**Simplified render settings.** A refined and updated UI makes render setup easier than ever.

**Refined camera controls.** A new intuitive layout for the camera controls lets you manipulate the quick and advanced parameters at the same time.

**Custom output resolution.** Specify custom pixel resolutions without bothering with the aspect ratio.



### ENHANCED LIGHTING WORKFLOWS

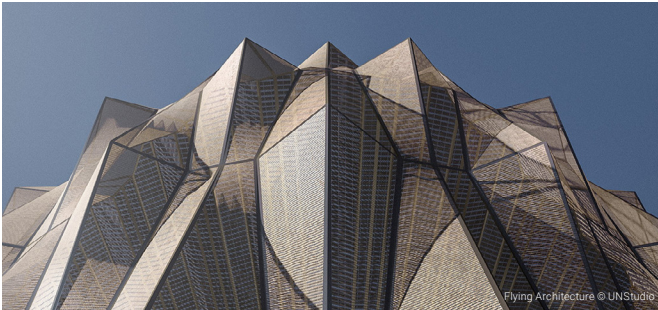
Get the perfectly exposed image with automatic analysis of your scene

**Automatic exposure & white balance.** Capture the perfect exposure every time. The new Auto Exposure and Auto White Balance camera controls make rendering as simple as point and shoot.

**Lighting analysis tool.** The new Lighting Analysis render element makes it easy to visualize the real-world illumination (Lux) values of any scene.

**Adaptive Dome Light.** Render faster, cleaner and more accurate image-based lighting that's up to 7x faster. The new Adaptive Dome Light also removes the need to set up Portal lights for interiors.

## RENDER FASTER



### NEXT LEVEL PERFORMANCE

Faster renders across the board

**Render speed.** V-Ray Next has been optimized to render 50% faster overall — and up to 7x faster with the new Adaptive Dome Light.

**Scene intelligence.** Automatically analyzes your scene to optimize rendering so you get the best quality in less time.

**Optimized materials.** V-Ray materials have been fine-tuned for faster render speeds, improved GPU rendering, and Chaos Cloud compatibility.

**2x faster GPU.** Cuts rendering time in half again when using GPUs (as compared to V-Ray for Rhino 3.6).



### NEW DENOISER

Get cleaner renders in an instant

**Viewport rendering and denoising.** Look at the denoised image while rendering in the Rhino viewport.

**AI denoiser.** With the new NVIDIA AI Denoiser, V-Ray delivers instant feedback with less noise. So you get cleaner images while you design.

**Denoised render elements.** Denoise individual render elements for added control in compositing.

**CHAOSGROUP**