



Rhino

FEATURE SET COMPARISON

V-Ray for Rhino Versions 2.0, 3.6





Rhino

FEATURE SET COMPARISON

V-Ray for Rhino Versions 2.0, 3.6

CONTENTS

p1  RHINO VERSIONS

p2  RENDERING

p4  GEOMETRY

p6  USER INTERFACE

p8  GPU (CUDA)

p10  ADDITIONAL

p12  VFB

p13  MATERIALS

p14  TEXTURES

WEB RESOURCES

Help Index

Videos Showing New Features

V-Ray Tutorials

Amazing Support

News and Everything V-Ray

<https://docs.chaosgroup.com/display/VRAYRHINO>

<https://www.youtube.com/playlist?list=PLm2Irfq-UvZ28tLimgLvBsC7uJGghNkD8>

<https://www.youtube.com/playlist?list=PLm2Irfq-UvZ22K5sup59JF63D4s3Ua08g>

support@chaosgroup.com

chaosgroup.com



RHINO VERSION COMPATIBILITY



Rhino

Version	V-RAY 2.0 2013	V-RAY 3.6 2018
Rhino 5	✓	✓
Rhino 4	✓	



RENDERING FEATURES



Rhino

Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
Bucket Rendering	✓	✓
Progressive Rendering		✓
Interactive CPU Rendering	✓	✓
Interactive GPU Rendering (CUDA)	✓	✓
Interactive GPU Rendering (OpenCL)	✓	
Interactive Render Elements		✓
Non-Interactive (Production) GPU Rendering		✓
Hybrid Rendering (CUDA)		✓
Viewport Rendering	✓	✓
Viewport Region Rendering	✓	✓
Speed Improvements		✓
Distributed Rendering	✓	✓
V-Ray Swarm		✓
Denoiser		✓
Standalone Denoiser		✓
Denoising without re-rendering		✓
Hardware Accelerated Denoising		✓
Min Shading Rate Control		✓
Variance Based Image Sampling		✓
V-Ray Standalone		✓
Faster Hair Rendering		✓
Use of Embree		✓
Embree for Hair		✓



RENDERING FEATURES



Rhino

Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
Faster Proxy/Instances Rendering		✓
Faster Fur Rendering		✓
Probabilistic Lights		✓
Adaptive Lights		✓
Max Ray Intensity		✓
Light Cache DR		
Add/Remove DR machines on the go		✓
DR Automatically Cache render assets		✓
DR Use/Don't use local machine	✓	
DR Limit local machine CPU usage		✓
VR Scene Export	✓	✓
Optimized VR Scene size		✓
Faster Scene loading		✓



Feature	V-RAY 2.0 2011-2016	V-RAY 3.6 2017
V-Ray Proxy	✓	✓
V-Ray Proxy in Interactive	✓	✓
V-Ray Proxy Alembic files support	✓	✓
V-Ray Proxy Animation support		✓
V-Ray Proxy Export options	✓	✓
V-Ray Proxy Low-poly preview mesh generator modes		✓
V-Ray Proxy Mesh Preview modes		✓
V-Ray Proxy preview update upon file change		✓
VRayScene Importer		✓
VRayScene Mesh Preview modes		✓
VRayScene Light Sources control		✓
Mesh Viewer		✓
Render unbaked Grasshopper geometry		✓
V-Ray Fur		✓
V-Ray Fur Curl Map		✓
V-Ray Fur in Interactive		✓
V-Ray Fur CUDA Support		✓
Displacement	✓	✓
2D Displacement		✓
Displacement CUDA Support		✓
Plane Clipper		✓
Mesh Clipper		✓
Mesh Clipper Intersection mode		✓



GEOMETRY FEATURES



Rhino

Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
Block operation support during Interactive rendering		✓
Improved V-Ray data handling within Block instances		✓
Object ID support		✓
V-Ray Object properties		✓



USER INTERFACE FEATURES



Rhino

Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
New optimized user interface		✓
V-Ray Toolbar	✓	✓
V-Ray Light Lister		✓
V-Ray Light Lister quick controls		✓
V-Ray Geometry Lister		✓
Material Library UI		✓
GPU Device Select UI		✓
Quick Settings		✓
Quality Presets	✓	✓
Material Quick Settings		✓
Material multi-export	✓	
Material Swatch Preview Scenes		✓
Improved Material preview performance		✓
Sub-materials quick navigation		✓
Improved Texture Creation UI		✓
Simplified UI Levels		✓
Dockable VFB windows		✓
UI Tooltips	✓	✓
File Path Editor		✓
Save Image file-specific options		✓
V-Ray Color Picker		✓
Vector Toolbar Icons		✓
Object ID controls		✓

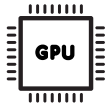


USER INTERFACE FEATURES



Rhino

Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
Viewport Render blending controls		✓
4K Display support		✓



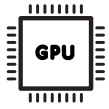
GPU (CUDA)

Since v3.60, CUDA rendering can be performed on Fermi-, Kepler-, Maxwell-, and Pascal- based NVIDIA cards as well as CPUs



Rhino

Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
QMC sampling		✓
Displacement		✓
UDIM		
Render Elements		✓
Edges Texture		
Texture Baking		
Anisotropy		✓
Spherical Panorama		✓
Light Cache		✓
Fur		✓
Dirt		✓
Light Select Render Element with GI		✓
Orthographic Camera		✓
Procedural textures in Environment		✓
VRayPlane		✓
Aerial Perspective		✓
Shadow Catcher		✓
VRay Stochastic Flakes material		✓
Mip-map textures		✓
Memory optimizations		✓
Render Mask		
Low thread priority		✓
Additive mode on Blend Material		✓



GPU (CUDA)

Since v3.60, CUDA rendering can be performed on Fermi-, Kepler-, Maxwell-, and Pascal- based NVIDIA cards as well as CPUs



Rhino

Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
Transparency for layers in Blend Material		✓
VRayAtmosphere RE support		✓
Irradaince map from file		✓
VRayRenderID RE		✓
VRayObjectID RE		✓
VRayMtlID RE		
Ground Projection for environment textures		✓
Optimized Gradient Ramp support		✓
Adaptive Lights		✓
VRayClipper		✓
Bump textures optimiztaions		✓
Subsurface Scattering material		✓
2D Texture transformations		✓
Improved procedural textures support		✓
Rectangle Light Directionality		✓
Texture Placement support		✓
VRayBRDF and RefractionBRDF Fog Color		✓
Matte Surface and Matte Shadows		✓
Denoiser		✓



ADDITIONAL FEATURES



Rhino

Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
Grasshopper integration		✓
Cubic 6x1 Camera	✓	✓
Spherical Camera	✓	✓
Stereo Camera mode		✓
Aerial Perspective		✓
Environment Fog		✓
Ground Environment Projection		✓
Ground Albedo Color		✓
Sky Horizon offset and blend control		✓
Light instancing		✓
Synchronized V-Ray and Rhino light parameters		✓
Rectangle Light ellipse shape		✓
Control for Specular/Diffuse contribution in Lights		✓
Rectangle Light Directionality		✓
Denoiser and Lens effects update frequency controls		✓
Depth-of-field	✓	✓
Depth of Field pick from scene	✓	✓
Blend Material editable layer ordering		✓
Material Reflection Dim Distance		✓
ColorCorrection texture's Lift/Gamma/Gain parameters		✓
Color Manipulation options for all textures		✓
Updated V-Ray commands		✓



ADDITIONAL FEATURES



Rhino

Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
Lens analysis tool	✓	✓
img2tiledexr tool	✓	✓
Free trial	✓	✓
Unlimited Trial Functionality		✓
Online Licensing		✓



VFB FEATURES



Rhino

Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
Lens Effects in VFB	✓	✓
No re-render for Lens Effects	✓	✓
Color Balance in VFB		✓
Exposure in VFB	✓	✓
White Balance in VFB		✓
Hue/Saturation in VFB		✓
Levels in VFB	✓	✓
Curve in VFB	✓	✓
Bitmap Background VFB		✓
Contrast in VFB		✓
Highlight Burn CC		✓
LUT in VFB	✓	✓
ICC in VFB	✓	✓
OCIO in VFB		✓
Save CC from VFB - LUT and .vccglb		✓
Load CC from History		✓
Auto save finished render		✓
Hardware acceleration for lens effects		✓
Render resolution update during Interactive		✓
Store Color Corrections data in project file		✓
"Use Project Path" History setting		✓
Progress and messages display bar		✓



Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
Free Material Library		✓
VRScan Material		✓
Angle Blend	✓	✓
V-Ray Curvature map		✓
V-Ray MultiSubTex	✓	✓
V-Ray 2Sided Material	✓	✓
V-Ray 2Sided Material Multiply by Front Mtl		✓
V-Ray Blend Material		✓
V-Ray Bump Material		✓
V-Ray Car Paint Material		✓
V-Ray Fast SSS	✓	
V-Ray Fast SSS2		✓
V-Ray Hair Material		✓
V-Ray Light Material	✓	✓
V-Ray Material	✓	✓
V-Ray Material GTR/GGX BRDF option		✓
V-Ray Material Wrapper	✓	✓
V-Ray Override Material		✓
V-Ray Stochastic Flakes Material		✓
V-Ray Vrmat Material	✓	✓
Material ID controls		✓



TEXTURES FEATURES



Rhino

Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
V-Ray Temperature		✓
V-Ray Ramp (Gradient)		✓
V-Ray Bmp Filter	✓	✓
V-Ray Bump2Normal		
V-Ray Color	✓	✓
V-Ray Color2Bump		
V-Ray Curvature		✓
V-Ray Dirt	✓	✓
V-Ray Distance Texture		
V-Ray Edges Texture		✓
Raytraced Rounded Corners		✓
V-Ray Multi Sub Texture	✓	✓
V-Ray Multi Sub Texture Randomization		✓
V-Ray Sky	✓	✓
V-Ray Sky Hosek		✓
Ground Albedo		✓
V-Ray Triplanar Texture		✓
V-Ray Cellular	✓	✓
V-Ray Cloth	✓	✓
V-Ray Granite	✓	✓
V-Ray Speckle	✓	✓
V-Ray Splat	✓	✓
V-Ray Stucco	✓	✓



TEXTURES FEATURES



Rhino

Feature	V-RAY 2.0 2013	V-RAY 3.6 2018
V-Ray Snow	✓	
V-Ray Leather	✓	✓
V-Ray Marble	✓	✓
V-Ray Smoke	✓	✓
V-Ray Fresnel	✓	✓
V-Ray Falloff	✓	✓
V-Ray Blend	✓	✓
V-Ray Bulge	✓	✓
V-Ray Checker	✓	✓
V-Ray Color Correction	✓	✓
V-Ray UVW	✓	✓
V-Ray Water	✓	✓
V-Ray Wood	✓	
V-Ray Noise	✓	✓
V-Ray Noise B		✓
V-Ray Tiles	✓	✓
V-Ray Composite	✓	✓
V-Ray Grid	✓	✓

CHAOSGROUP