



V-RAY – Novidades da versão 1.5

08, Aug, 2006 - Chaos Group is pleased to announce that the first release candidate for version 1.5 of the V-Ray rendering engine for Autodesk® 3dsmax® is now available for download. Below is a summary of the changes since the last official version.

New features

Renderer

- Support for motion blur on Particle Flow systems with both translational and rotational motion blur.
- True instance rendering for motion blur with Dynamic default geometry for drastic reduction of memory requirements when 3d motion blur is used.
- New Reinhard color mapping mode.
- Sub-pixel and per-pixel color mapping modes.
- More intelligent ray sampling to reduce noise when combining multiple blurry effects (e.g. area light illumination seen in glossy reflections etc).
- Full floating-point output support in 3dsmax 8 and higher.
- Support for unlimited number of render channels.
- "Overbright" or invalid colors produced by shaders are much less likely to affect render quality.
- Fully compatible with Autodesk® VIZ®.

Global illumination

- Detail enhancement for the irradiance map. This works similar to an integrated ambient occlusion pass, but is more physically correct, rather than just producing a "dirty" effect, since it calculates correct light bouncing.
- Adaptive path tracing mode for the light cache can concentrate samples in important areas to reduce noise in difficult situations (e.g. GI caustics)

Render elements

- The 3dsmax Render Elements interface is now supported by V-Ray. The old G-Buffer settings have been removed. V-Ray supports nearly 30 render elements including z-depth, render ID, material ID, velocity, reflections, specular, diffuse etc.
- VRayMtlSelect render element allows the user to extract a given material to a separate render element. This can be either a top-level V-Ray material, or a sub-material of VRayBlendMtl.
- VRayWireColor render element allows the user to create masks with specified colors.

- Color mapping per render element. Color mapping can be turned on or off on a per-element basis.
- Render elements are fully supported in distributed rendering mode.

Materials

- V-RayBlendMtl material allows the layering of several different V-Ray materials. This is a lot faster than the regular 3dsmax Blend/Shellac/Composite materials and generates correct V-Ray render elements. The different layers of a V-RayBlendMtl can be extracted to different render elements through the V-RayMtlSelect render element.
- V-Ray2SidedMtl material allows the simulation of thin translucent surfaces like paper, cloth etc.
- V-RayFastSSS material for simulating the sub-surface scattering in materials like human skin. Works best if layered with a regular diffuse/specular V-RayMtl through V-RayMtlBlend.
- V-RayOverrideMtl material allows the user to specify different materials for reflections/refractions/GI.

Textures

- V-RayDirt texture for simulating dirt or ambient occlusion.
- V-RaySky environment texture works either with V-RaySun or regular direct lights to simulate the natural sky illumination of the Sun. For best results, use with the V-Ray physical camera.
- V-RayCompTex texture for combining textures in additional ways not available in 3dsmax (e.g. difference, division etc).
- V-RayColor texture for specifying precise floating-point RGB color values.

Lights

- V-RaySky light for simulating the natural illumination of the Sun. Works in conjunction with the V-RaySky texture. For best results, use with the V-Ray physical camera.

Cameras

- V-RayPhysicalCamera simulates an actual photographic camera with real-world settings.
- V-RayDomeCamera can be used to render images to be projected on hemispheric dome screens.

Render to texture

- V-Ray has its own texture baking elements, which must be used instead of the standard 3dsmax ones.
- Color mapping can be applied on a per-element basis.

V-Ray frame buffer (VFB)

- Enhanced stability, user interface improvements.
- sRGB option for display in 2.2 gamma space.
- Support for pixel aspect ratio different than 1.0.

MaxScript

- Direct export of V-Ray proxy meshes from MaxScript without a GUI dialog.

V-Ray SDK

- Allows the implementation of V-Ray specific materials, lights, atmospheric effects, geometric primitives, cameras etc.
- Allows the replacement of nearly every aspect of the render engine (raycast acceleration, GI solutions, image samplers etc).
- The V-Ray SDK is supported on the following platforms: Microsoft® Windows® NT4/2000/XP/Vista 32-bit and 64-bit, Linux, OSX 10.

64-bit ready

- V-Ray is already running natively under 64-bit operating systems.
- A 64-bit version for Autodesk® 3dsmax® will be available together with or shortly after the official release of 3dsmax® 9.

Modified features

VRayLight

- Support for IBL (image-based lighting) - VRayLight in "dome" mode can be mapped with a HDR image with optimized importance sampling for both diffuse and specular lighting.
- The dome light can be made spherical or hemi-spherical.
- Accurate light emission units (lumens, watts etc). For best results, use this feature with the V-Ray physical camera.
- Separate "affect diffuse" and "affect specular" options.

VRayFur

- Added mapping for many parameters - fur direction, density etc.
- Optimized performance.

VRayToon

- Support for including/excluding objects from the toon effect.

VRayDisplacementMod

- Better displacement for meshes with large triangles.

Distributed rendering

- Improved stability.
- Render elements and G-Buffer channels are now supported in DR mode.
- Animation is supported in DR mode.
- Support for X-Ref'd scenes.

Licensing system

- **Based on a hardware lock** for convenient transportation of the V-Ray licenses.
- Floating license system for distributing the available licenses in the local area network.

About Chaos Group

Chaos Group is a leading software solutions provider for the visual effects industry and computer generated imagery. It is famous for its award-winning rendering solutions used in many high-end projects around the world as well as fluid-based simulation products.

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