

## V-Ray for Maya 1.50.SP1 available for download

### New features

- Support for V-Ray Fur
- Support for Maya Hair
- Reflection occlusion in V-Ray Dirt texture
- V-Ray Light Dome texture and environment textures to be visible in Maya's viewport
- Add a V-Ray Bump Mtl that allows to add bump to any other material

### Feature requests

- Implement an easy interface to add render elements through MEL commands
- Implement velocity output for Maya hair
- Add support for the motion blur switch in shape nodes
- Implement the camera pre-scale, film translate, film roll pivot, film roll value, film roll order, post-scale parameters
- Add option in the V-Ray object properties whether to override the Object ID as set by the Object ID dynamic attribute, or not
- Add reflection and refraction exit colors
- Add extra V-Ray attributes for gamma correction to File textures
- Support for streak and multistreak particle render types
- Add shadow color for the dome light
- Add a checkbox to lock the threshold of the adaptive DMC image sampler to the threshold of the DMC sampler
- Consider moving the swatch rendering option to Window/Rendering Editors/V-Ray
- Save the render elements on a "Save Settings as Preset" command from the "Render Settings" dialog

- Support for point and multipoint particle render types
- Add Cook variable antialiasing filters
- Antialiasing filter enable/disable option
- Add a V-RAY\_TEXTURES\_LOAD\_16BIT\_AS\_8BIT to control loading of 16-bit TIFF and PNG textures
- Implement the camera pre-scale, film translate, film roll pivot, film roll value, film roll order, post-scale parameters
- Add an option to specify displacement bounds in the V-Ray "Displacement control" attributes for an object
- Add V-RaySphereFade to V-Ray for Maya
- Ability to add extra information to OpenEXR files
- Add diffuse and specular contribution multipliers to V-Ray lights
- The batch camera name should be appended to the end of the image filename when there are multiple renderable cameras
- DR Bucket Element
- Option for z-depth render element to take the z-boundaries from the camera
- Add the "Affect matte objects" option to the Multi Matte render element
- Add the cutoff threshold to the V-Ray Light Mtl material for the direct illumination option
- Vector Displacement
- Support sprite particle type
- Option to clear the previous image in the Render view
- Option to allow negative shader colors
- Support for the uvCoord, rayDirection, tangentUCamera, tangentVCamera, pixelCenter outputs of the sampler Info node
- Ability to connect textures to the attributes of a 2D placement node
- Ability to change the color of the shadows for the V-Ray Sun
- Add Start Menu options to (un)register the V-Ray render server as a Windows service
- Option for the V-Ray Sun to not cast shadows from atmospherics

- Possibility to change the background of the material swatches to a solid color or another environment texture
- When creating a mesh from a proxy, polygons should be emitted instead of triangles
- Request licenses from the alternate license servers when the primary has run out of licenses
- Add V-Ray User Attributes on NURBS surfaces as well
- Option to install the license server as a service (demon) on Linux
- Implement 2D displacement mode
- Check for V-Ray Proxy objects with the same parameters and export them only once
- Support for Ramp Shaders
- When changing intensity units of V-Ray lights, the intensity should be converted so as to produce the same visual result
- Have an estimated time remaining added to the feedback
- Change the default values for "Reflection amount" and "Refraction amount" to 0.0 in V-Ray Object Properties/Mtl Wrapper
- Print a time stamp in the log file, like in the 3ds Max and standalone versions
- Node that support switch on place3dTexture node
- Include caustics and diffuse multipliers for the lights
- Correct velocity channel through refractions for materials with "Affect channels" set to "All channels"
- Add displacement node for controlling displacement map separately from shader nodes
- Print an error or warning if a light cache or photon map or caustics map file cannot be loaded
- Replace column character ':' with double underscore instead of single one in the exported .vrscene file
- Projection texture for the spot lights
- Hide Maya render window, while rendering in VFB
- When rendering fails for some reason in batch mode, we should return an error code through Render.exe implement Decay regions options for Maya spot lights

- Environment texture override per shading group
- Add the "optLevel" option for Settings Raycaster to the Maya UI
- Implement camera Near Clip Plane and camera Far Clip Plane of the sampler Info node
- Ability to attach custom string attributes to shapes
- Option in the V-Ray proxy export dialog to specify the sampling interval for motion blur
- FacesPerVoxel option for ply2vrmesh
- PreviewFaces option for ply2vrmesh to specify the number of faces in the preview
- Option in V-Ray Light Mtl material to compensate for the camera exposure
- Give the user the ability to specify additional paths where V-Ray plug-ins are loaded from
- Possibility to use a sequence of .vrmesh files for a proxy object (e.g. "myFile\_%04d.vrmesh")
- Add an option to choose which fragment to use for unfiltered render elements (best coverage or closest)
- Support for Spot light dropoff attribute
- BRDF Soften
- Ray distance parameter for the dome light
- Time and date features to the physical sun and sky
- Try to remove any calls to Maya MEL commands when rendering in batch mode
- Add a dynamic attribute for transforms that can tell the exporter to skip that node and everything below it in the DAG
- Kelvin temperature settings for the color of V-Ray Lights
- Option for the V-Ray Proxy object to display the entire geometry instead of the preview
- Camera distortion based on .lens files for the physical camera
- Ray distance parameter for GI rays
- Implement CIE sky model
- Render slave only installation type

- Primary Visibility option in the V-Ray Object Properties
- Add log rotation support to the license server under \*nix
- Light material direct illumination option
- Use the data window specified in OpenEXR files to place the bitmap
- Add a global switch to enable glossy reflections/refractions like in 3ds Max
- Add verbose messages level for the output window in Maya
- Need "affect channels" option for V-Ray mtl refraction the way that it exists in Max
- Possibility to set the FOV of the physical camera
- Add Object ID extra attribute to geometry nodes (mesh, nurbs, transform, etc)
- The V-Ray Dome Light target and emit distances needs to be visible in the viewport
- Support for the Stencil node
- When rendering subdivision surfaces, UV coordinates should be subdivided as well
- Better precision when rendering large scenes
- The license server exits silently when the listening port is busy
- Add an option to the V-Ray object properties to ignore them
- Implement motion blur for UVWGenMayaPlace2dTexture parameters

#### **Modified features**

- Move the render element separator character option to the Render Elements tab
- Option to turn "Hide Render View" off
- Optimize shadow calculations for materials with bump mapping
- Speed up light linking export
- Have an option to turn off all swatch updates but still be able to turn on the update on some of the materials
- Add a multiplier to the V-Ray Light Mtl

- When creating a Maya mesh from a proxy, shaders should be properly assigned to faces
- Add some sanity checks for the DR hosts and "Resolve Servers" button
- When making proxies place pivot of proxy at location of pivot of last object selected
- Render Settings UI improvement
- The Mtl Wrapper implementation should call shade () on the original material, if possible
- Remove the "text" prefix from the create texture from V-Ray plug-in
- V-Ray Mtl tweak
- V-Ray Sun should be created with "Manual position" turn on
- Batch rendering should send progress messages back to the main Maya process
- Consider creating the Render elements nodes as normal dependency nodes, not shading ones
- Implement the "Use irradiance map" option for V-Ray Mtl (vasil\_velikov)
- Option for simple sky portal in V-Ray Light
- Rework switch utilities to work at render time, instead of at export
- Importing V-Ray blend mtl from file

#### **Bugs fixed**

- Bitmaps for texture-mapped lights (rectangle, dome, mesh light) are loaded even if lights are disabled
- The color of a light is updated only when temperature is changed through the Attribute editor
- Issue with light linking and multiple dome lights in the scene
- The V-Ray common tab does not work when V-Ray is used as a renderer override for the current layer
- Crash with "Import mesh" feature of V-Ray Proxy when the proxy is moved to another folder
- Scene hangs on compiling geometry with a certain NURBS surface
- Crash with textured mesh light and motion blur

- Ramp texture interpolation bump is not correct
- V-Ray Dirt not working with transparent objects even if "Work with transparency" is enabled
- Bitmaps for texture-mapped lights (rectangle, dome, mesh light) are loaded even if lights are disabled
- Issue when adding V-Ray attributes to an object from a loaded scene that already has V-Ray attributes
- Crash when using tiled OpenEXR files for displacement
- Textures from 16-bit PNG files render as 8-bit
- The license server under Linux crashes with two or more dongles with overlapping licenses
- V-Ray Shading nodes icons in Hypershade Maya 2011 are not visible
- Blend material does not support 2 sided material
- The camera name should not be added to the name of the exported .vrscene file
- The viewport update of the physical camera does not work
- V-Ray Fur doesn't support V-Ray Vertex Colors texture
- The "V-Ray Common" tab of the settings is not described in the help index
- NaN values passed to Bitmap Buffer plugins\
- Some channels not correct when using "All channels" for the "Affect channels" option for refraction in V-Ray Mtl
- When the camera name contains ':' and the file name includes the <camera> tag, V-Ray fails to create the output image on Windows
- UV coordinates used for displacement of subdivision surfaces are not smoothed
- Bump in the base material of a V-Ray Blend Mtl material influences the coat material too
- Doing a region render while saving to a multichannel EXR file causes exceptions
- Problem with motion blur samples override in object properties and switch textures
- V-Ray light material in mesh light mode does not support textures
- Filtering a 2d texture near the edges of UV space always wraps the texture around

- Issues with normal mapping
- Issue with double slashes in plug in paths
- IPR related bugs
- Invisible lights behave differently in refractions seen through reflections since rev. 10661
- Problem with the SSS2 material in Raytraced (refractive) mode
- The cosine power of the Phong material works in a reverse way in V-Ray
- Slow rendering of tiled Open EXR textures
- The "date" tag should be expanded internally, like the other tags, not in the UI
- Incorrect subdivision amount with motion blur and fast camera movement
- The camera space output attributes in sampler Info don't work with motion blur and a moving camera
- Possible discrepancy between V-Ray Sun position and the Maya Geo Sun
- The alpha contribution of the Mtl Wrapper material doesn't work when the object is not matte
- AA artifacts with thin bright lines when using Adaptive DMC image sampler
- Problems with vrlservice on Mac OSX
- Crash with preview of dome light/environment in batch mode
- Warnings with mesh lights with zero scale
- No message is printed for successful save of a .vrimg file
- VFB - fatal error
- Mesh lights ignore cutoff (vasil\_velikov)
- Correct ray differentials for refraction
- Secondary visibility does not work for objects with V-Ray Light Mtl material with "Direct light" option enabled
- Layer Override option for "Treat as Physical Camera"
- Batch render camera in the V-Ray Common tab cannot have a per-render layer override
- In V-Ray Object Properties/Mtl Wrapper, the "GI amount" slider should be enabled only when "Shadows" is also enabled

- Issue with proxy objects and V-RAY\_ASSETS\_PATH on Linux
- Support for \*.psd file textures (vasil\_velikov)
- The "Emit distance" parameter of the V-Ray Sun should be calculated automatically from the sun position
- Camera projection does not work with texture reference object
- Objects with primary visibility off in their V-Ray Object Properties still show up in render elements
- The "File name" in V-Ray Common is not updated when changing the current render layer
- Crash with subdivision surfaces
- "Generate GI" and "Receive GI" options in the wrapper material and object properties have no effect
- Issue with objects with primary visibility off and V-Ray Light Mtl material with direct illumination enabled
- The sun is created below the horizon by default; should be above
- The V-Ray configuration settings are in a directory that the user may have restricted access to
- Motion blur doesn't work for NURBS objects
- Wrong displacement when using plus Minus Average utility node
- "Pause IPR" button doesn't work as expected
- Error message when using IPR
- Crash with the "Affect channels" option and image planes
- Animated bitmap textures with the same file name but different offsets are exported as the same texture
- Proxy loses shaders in proxy V-Ray mesh nodes on import of a Maya scene
- Artifacts with smoothed UV coordinates for subdivision surfaces
- Incorrect motion blur for mesh lights
- Projection texture does not work correctly with motion blur and moving camera
- The Indirect illumination UI is broken in Maya 2011 (private)
- The browse buttons are much larger than the edit box associated with them in Maya 2011 (private)

- The V-Ray Object Properties UI is broken in Maya 2011 (private)
- Crash with matte material in specific scene
- V-Ray Sun Swatch does not work
- OpenEXR files with negative coordinates for the data window fail to load
- The test resolution affects the exported vrscene files
- Problem with the update on the attributes panel for V-Ray attributes
- Maya hangs after render in heavy scenes
- Issue with "Affect matte objects" in the Extra Tex element when an object has both V-Ray Object Properties and a wrapper material
- When a texture is assigned to V-Ray dome light, V-Ray Place Env Tex is not always created
- V-Ray IES lights may show incorrect shape in the viewports
- Motion Blur support for V-Ray Lights
- When in batch mode the <Scene> tag does not work as expected
- Crash when trying to create a V-Ray IES Light under Linux
- Bump maps flipped in reflections
- The Maya ambient light does not work with V-Ray

vrimg2exr fails to convert channels with names longer than the allowable in an .exr file (32 chars); instead it should truncate

- The standalone crashes on OS X if it cannot find the scene file
- Problem with saving images from the VFB of the standalone on Linux
- Stopping the IPR rendering while rendering is still in progress will not work
- Environment variable script does not specify shell on Linux
- The physical camera parameters are not motion blurred
- Issues when a bitmap file extension does not match the actual file format
- If a manual sun position is ON, the file does not save the sun position
- Edges texture does not work correctly with NURBS surfaces
- Some geometry can freeze Maya when exporting proxies

- Using tiled exr files results in lots of redundant file open/read/close operations which slows down the rendering
- Wrong names for render elements written in .vrimg files (since rev. 9278)
- ply2vrmesh should not skip empty frames when creating .vrmesh files
- Crash when rendering certain .vrmesh files generated by ply2vrmesh with motion blur enabled
- Using certain words for the name of a node confuses the vrscene parser
- V-Ray 4 Maya crashes when the license server is on a Linux machine
- Light mesh with Render layers do not work properly
- V-Ray Rect Lights direction arrow does not scale up when raising U V size
- Artifacts with motion blur and displacement
- VRLService automatic startup doesn't work on some Macs
- Maya crashes when saving a scene after a combined vrmesh was auto created