3.00.01 to 3.05.04

Build 3.05.04

Beta 3 release

Date - December 11, 2013

New Features

General

VRaySkinMtl material

VRayProxy

o Initial support for particles in Alembic files

VFB

o New color corrections - contrast, HSL, color balance

VRayOrnatrixMod / VRayHairFarmMod

 $^{\circ}\;$ Added options for dynamic view-dependent hair tesselation

VRayOptionRE

° Added an option to save three-channel alpha in deep OpenEXR 2 files for compatibility with Houdini

VRayUserColor / VRayUserScaler

o Reading data directly from a Node's User Properties

VRayRT

Support for RailClone instancing

Modified Features

General

- ° Right-click on a UI switcher allows to switch all rollups to Basic/Advanced/Expert views
- O Updated to Embree 2.0
- V-Ray will now print a performance warning in the messages window if the 3ds Max bitmap pager is enabled
- Support for %d and %0nd tags in file names for irradiance maps, light caches, photon maps and caustics maps

VRayOCIOTex

o Added an "auto" option to try and automatically convert textures to linear space

VRayVRmatMtl

- o Added a preview of the currently selected .vrmat/.vismat material in the Open File dialog when browsing for a file
- O Added .tx and .tex as valid texture file names

VRayMultiSubTex

O Added an option to preserve the alpha of the sub-textures

VRayFur

o Ability to specify face material ID for the hairs

VRayClipper

o Added an option to exclude the light coming in result of cutted geometry

.vrscene Exporter

o Make .vrscene exporter's Export and render button render the whole sequence

VRayOrnatrix / VRayHairFarmMod

o Implement global hair tree support

VRayLight

More robust sampling of small rectangle lights

VRayHairMtl

O Reduced noise on transparent hairs

VRayGLSLMtl / VRayGLSLTex

Added the ability to type a shader directly in the Material Editor

VRayGLSL

Added a __VRAY_HOST__ macro that expands to the version of vray.dll

Quick Settings

Added the possibility to save custom presets

VFB

o Multithreaded file save with the "Split channels" option is disabled due to instabilities

VRayFakeFresnel

 $^{\circ}$ $\,$ Now exposed in the UI

V-Ray RT

o Improved refresh rate and responsiveness

Bug Fixes

General

- $^{\circ}~$ 3.0 slower than 2.4 in some cases
- $^{\circ}\;$ Unnecessary repeated asset transfer after a texture is changed once
- VRayLightMtl is black in MultiMatte render element when using material ID
- Reflection/Refraction exclude lists in the V-Ray object properties didn't work with groups
- o Fixed rare crash with progressive sampler
- Some bake elements have duplicate class names of other plugins
- Render mask did not work with the VRayStereoscopic helper
- Artifacts with motion blur and shutter efficiency less than 1.0

VFB

- O Color clamp button selection state not saved when button not pushed
- The UI colors should match the 3ds Max color scheme
- $^{\circ}$ When opening a scene with bloom/glare masks turned on, lens effects were not applied after the first rendering

VRayDistanceTex

Setting tex_inside_separate_on:true for a VRayDistanceTex constructor from MaxScript causes system exception

VRayCarPaintMtl / VRayFlakeMtl

o Wrong material name in info message in 3ds Max 2013 and later

VRayHairInfoTex

o Did not work properly with Hair&Fur

Distributed Rendering

o Render servers failed to join a DR render

VRayBPTracer

o Image rendered with BDPT turns black when Glare effect is applied

Hair & Fur

• The "Visible to camera " option for distribution object was not inherited by Hair&Fur

VRayVRMatMtl

- o Fixed issues with non latin characters in VRMat material
- O Correct default values for TexCloth
- $^{\circ}$ Loading some .vrmat files in scene caused 3ds Max to crash
- The vrmat editor preview should have gamma 2.2 applied

VRayLight

 $^{\circ}\;$ Fixed issues with targets when creating new lights

VRayIES

o Fixed a rare crash when loading scenes with VRayIES

VRayProxy

o Fixed issues with Alembic with dynamic topology and visibility lists

VRayMtl

o "Affect all channels" didn't work with glossy reflections for some render elements

VRayClipper

o Strange result when used on Editable Poly with intersecting attached elements

VRaySun

Should return the true intensity in the viewport if VRayExposureControl is active in Nitrous

VRayFur

o Fixed crash when accidentally rendering with the scanline renderer

Render Mask

 $^{\circ}\,$ Drag and drop of textures to the render mask button was not working

VRayMetaball

Negative particles rendered as positive

V-Ray RT

- Swirl texture prevented V-Ray RT from starting
 Rendering production while RT was running in VFB would lock RT properties until VFB is closed
- Saving images from V-Ray RT as production renderer didn't work with the V-Ray VFB enabled
- Fixed issues with Multi/Sub-object materials on dynamic geometry (instances)

Build 3.05.03

Beta 2 release

Date - October 14, 2013

New Features

General

- o Added a new camera type "Spherical panorama" for equirectangular panoramas (similar to "Spherical" but allows manual control of the vertical
- The full version of V-Ray Standalone is now included in the installation

Distributed Rendering

- Option to exclude the local machine from DR rendering
- Options to automatically transfer and cache render assets to the DR servers (3ds Max 2010 and later)

VRayFastSSS2

Raytraced mode for multiple scattering

VRayHDRI

O Added an option for ground environment projection

VRayProxy

- o Support for Alembic 1.5
- Ability to specify starting path in Alembic files

VRayDisplacementMod

o Support for Ptex object-space vector displacement

Lens Analyzer

O Ability to analyze distortion in arbitrary images

Render Mask

O Added two new modes: include/exclude list and by layer name

VFB

Option to automatically save each render in the history (enabled from the VFB history options dialog)

Modified Features

General

- o "Reinhard" color mapping is now the default color mapping mode
- Added per-object motion blur duration setting in the V-Ray object properties dialog

VRayHDRI

O Faster shutting down of 3ds Max when "clear on render end" for tiled textures is disabled

VRayMtl/VRayFastSSS2

o Print information about which materials require prepass interpolation maps

VRayIES

o The light dimensions are now shown in scene units in the UI

VRayPhysicalCamera

○ Newly created objects are named "VRayCam001" etc

V-Ray RT

- $^{\circ}$ $\,$ Now uses the V-Ray VFB when enabled in the production renderer
- Up to 5x faster initial scene transfer to render servers
- Automatic asset transfer to the render servers

V-Ray RT GPU

Reduced noise on VRayBlendMtl materials

VRayProxy

o The default preview mode is "preview from file (faces)" as it's faster in Nitrous

Embree

O Now is always compiled with pure SSE2 so that it works on older hardware

Bug Fixes

General

- The V-Ray caustics Auto save option is errorneously named casutics_autoSave in MaxScript
- Fixed override issue with V-Ray object properties when selecting multiple objects
- The V-Ray log file was not redirected properly when loading a scene with modified log file path
- No shadows behind glass with "cast shadows" disabled
- VRScene exporter didn't work for SSS2 materials
- O Deep OpenEXR 2 files continued to be written even after a render has been cancelled
- O Distributed rendering didn't work after rendering with V-Ray RT
- Fixed crash with multi-threaded saving of render elements when using the "split render channels" option

Hair & Fur

- o Multiple Hair&Fur materials swap randomly between different modifier instances in the same stack
- · Crashes with VRayLightMtl material

VRayProxy

- Preview was always as faces instead of edges in Nitrous
- Alembic hair preview could not be selected in the viewport
- Convert file paths to UNC option didn't work for VRayProxy

VRayPhysicalCamera

o Greyed out "Autogrid" in latest builds

Quick Settings

o Slow update when changing the shading quick settings if Render Globals are open

VRayOSLMtl / VRayOSLTex

o Problems with OSL shaders with ',' as the system decimal symbol

VRayHDRI

- Onvert file paths to UNC option didn't work for VRayHDRI
- The Browse button does not work if the texture file name contains <UVTILE> tag
- $^{\circ}~$ The "Show Map in Viewport" button was not working

VRayFastSSS2

○ Phase Function = 1 produced NaN pixels

VRayBPTracer

- O Crash when rendering VRayMetaball objects
- Materials with glossiness less than 1.0 rendered incorrectly

VRayStereoScopic

 $^{\circ}$ Stereoscopic rendering through shade maps was not working in beta 1.1

VRayMetaball

- o Fixed crashes when rendering with the V-Ray VFB
- o Incorrect renders with the irradiance map
- Incorrect surface normals in some cases
- Fixed incorrect motion blur in some cases

VRayRenderID

o VRayRenderID render element: XML output was not correct in 3ds Max 2013 and later due to Unicode

V-Ray Object Properties

o Fixed incorrect setting of properties when multiple objects are selected

VFB

o The entire history was reloaded when saving an image into the history

Build 3.05.02

Beta 1.1 release

Date - October 14, 2013

Modified Features

VRayVRMatMtl

o The material can now read and render materials from .vrscene files

VRayHDRI

o Can now load unlimited number of OpenEXR tiled texture files

VRayMtl

 $^{\circ}$ $\,$ The default value for the cutoff parameter is now 0.005 $\,$

O Added option to disable initial image under-sampling

Bug Fixes

General

- V-Ray didn't load on Windows XP and Windows Vista
- Fixed increased noise compared to V-Ray 2.x in specific situations
- Fixed darker GI compared to V-Ray 2.x in specific situation
- o Fixed darker reflections compared to V-Ray 2.x in specific situations
- Fixed freeze or crash with "Separate render channels" option
- The "separate channels" file name box did not update correctly
 Fixed horizontal line artifacts with the Progressive sampler
- o Fixed issues with texture baking
- Fixed issues with render subset and objects with visibility less than 1.0
- Fixed occasional corrupted deep image files
- Fixed crash after loading scenes with VRayEnvironmentFog
- Fixed render hang with materials using the Raytrace map
- o Fixed noise threshold issue with the Progressive sampler
- Fixed a crash with probabilistic lights in certain situations involving VRayLightMtl materials;

Embree

o Fixed artifacts with transparent surfaces

VRayHairInfoTex

O Support for hair colors from Alembic files

VRayOpenColorIO Texture

Various fixes

VRayBPTracer

- Buckets started where they were last cancelled
- Fixed black pixels in certain situations

VRayHDRI

- Fixed a viewport display issue with Alembic hair in 3ds Max 2011
- Added multiplier for hair width from Alembic files
- o Fixed issues with Alembic files containing meshes with changing topology

V-Ray RT

- o scene exporter: fixed a problem when exporting VRayFastSSS2 material
- o Fixed issues with the noise threshold not working correctly

Build 3.05.01

Beta 1 release

Date - August 20, 2013

New Features

General

- $^{\circ}$ $\,$ New progressive image sampler
- Simplified main renderer user interface: basic/advanced/expert views for some rollouts; help shortcut buttons
- Extensive optimizations for render speed, especially when using brute force GI

- The Intel Embree library is now integrated into the V-Ray core for static and motion-blurred geometry
- o Probabilistic light sampling for scenes with many lights
- Support for render texture mask and render subset from selected objects
- Added reflection/refraction trace sets in the V-Ray object settings dialog
- New streamlined installer
- New "Max ray intensity" parameter to help deal with fireflies in glossy reflections
 New VRayLUT, VRayICC and VRayOpenColorIO textures

VRayPhysicalCamera

o Support for bitmap aperture and optical vignetting

VFB

- Ability to write deep images (OpenEXR 2/vrst/vrsm)
 Support for OpenColorIO color correction
- Lens effects can be applied directly in the VFB

VRayHDRI

- Support for <UDIM> and <UVTILE> tags
- Support for tags in the bitmap file name based on the node user properties

VRayOrnatrixMod

Optimized rendering and reduced memory usage

VRayProxy

O Ability to render hair from Alembic .abc files

VRayOSLMtl / VRayOSLTex

New material and texture with support for the Open Shading Language

VRayVRmatMtl

VRayVRmatMtl material for rendering .vrmat/.vismat files

VRayFastSSS2

Option for geometry-based sampling for the illumination map

VRayMetaBalls

o New geometric object

VRayClipper

o New geometric object

VRay Quick Presets

° V-Ray toolbar with a button that shows the Quick Presets window

VRay RT GPU

Support for most render elements

VRayBPTracer

Initial support for vertex merging

Modified Features

General

- Updated the OpenEXR library to OpenEXR 2
- Optimized the loading of irradiance map files over the network
- The irradiance map prepass now uses the same render region sequence as the main renderer
- Removed the light cache "Number of passes" parameter; this is now handled internally
- o "Right Click vrscene exporter" now uses the V-Ray RT translator instead of MaxScript
- Dynamic bucket splitting towards the end of the image
- Ocrrect "raw" elements for easier compositing (needs the regular and the filter elements to be present too)
- O Added "shutter efficiency" option for motion blur
- Multi-threaded saving of images when using "Split render channels" option
- V-Ray lights now support external atmospherics renderers (AfterBurn/FumeFX)

VRayPtex

- Updated the Ptex library to the latest version
- Rewritten the Ptex library texture cache for better multithreading on many-core machines

VFB

- O Ability to switch between the most recent images in the history using the 1-9 keys
- Ability to switch between render elements in the VFB using PageUp and PageDown
- The history thumbnails in the VFB now have sRGB color correction if the sRGB setting is enabled
- O Support for the "track mouse" option in the VFB for stereo renders
- o "Compare" button to toggle comparison view on/off
- O Add right-click menu on the border for custom border color selection

VRayExposureControl

Affect the Nitrous viewports in 3ds Max 2013 and later

VRayMtl

o The "fix dark edges" option is now "on" by default for newly created materials

VRayPhysicalCamera

- The "Show cone" option now respects the pixel aspect ratio
- Added an "auto guess vert. shift" option to keep the vertical shift when moving the camera

VRayDisplacementMod

- O Added support for hidden faces for displaced and subdivision surfaces
- Added "static geometry" and UV smoothing options, as well as option to use fast displaced normals

VRayHDRI

- Added "View map" and "Reveal in explorer" buttons
- Ability to automatically generate .ifl files when picking a frame from an image sequence

VRayEdgesTex

 $^{\circ}$ Added "Show subtriangles" option to show tesselation of displaced and subdivision surfaces

VRayHairInfoTex

• The "Random by strand index" option is now supported for VRayFur

VRayHairMtl

- The "Simpify for GI" option is now enabled by default
- o Faster rendering of transparent VRayHairMtl material

VRayOptionRE

o Added an option to group g-buffer fragments by Z-depth rather than render ID

VRayColor2Bump

 $^{\circ}\;$ Added a "bump delta scale" parameter

VRayColor

o Added a "color gamma" option that allows correction of the actual color used for rendering

VRayLight

- O Added an "affect alpha" option for the dome lights
- Added an option to lock the dome light texture to the orientation of the light icon in the viewports
- Added the ability to change the wire color

VRayIES

o Support for motion blurred lights

VRayColor

O Added a "Temperature" color mode

ply2vrmesh

O Added support for material IDs in .obj files

vrimg2exr

O Added an option to truncate channel names to 32 symbols

Bug Fixes

General

- o Fixed truncated error messages in the V-Ray log for missing textures in 3ds Max 2013 and later
- Some message boxes in 3ds Max 2013 did not display proper Unicode strings
- Set sensible limits to some parameters in 3ds Max
- o Increase the max stdio file handles to the maximum possible (2048) on 3ds Max startup
- V-Ray loses its license when RPManager is running
- $^{\circ}\,$ Low CPU utilization when the irradiance map prepass is calculating background
- The parameters of some render elements did not have proper names in Track View
- Crash/hang when checking/unchecking "V-Ray VFB" option in VRayMtlReflectGlossiness Render Element
- Hang on "Unloading geometry" when cancelling a render during "Presampling displacement"

VRayMtl

- o Fixed incorrect (brighter) GI with glass objects with "affect shadows" enabled when they are in front of an area light
- Fixed rare bug with refractions due to precision loss

VRaySphereFade

o Could not edit the gizmo objects list through MaxScript

VRayToon

- O Could not edit the exclude list through MaxScript
- Fixed various issues with the include/exclude UI

VRayLightMtl

 $^{\circ} \ \ \text{Fixed random lighting between renderings with Direct Illumination and Compensate Exposure on}$

VRayLight

- o Ability to set higher values for dome light texture resolution
- The light preview in the Nitrous viewport disappeared when the light size if very large
- Brighter glossy reflections of light portals
- o Incorrect (brighter) GI with glass objects with "affect shadows" enabled when they are in front of an area light
- o Inconsistency between GI on/off when an invisible sphere light intersects geometry
- Dome light looked pixelated in glossy reflections and refractions (light needs to be recreated for the fix)

VRayEnvironmentFog

o Fixed crash after deleting environment fog gizmo and rendering

VRayPtex

o Fixed issue on duplicated objects with modifiers

VFB

- ° The V-Ray LUT .cube textures does not load if the system decimal symbol is not "."
- Comments section of the VFB history changed the information when it was in Korean

VRayHDRI

o "RGB Offset" and "RGB Level" in the Output rollout had no effect until the Material Editor is opened

VRayDisplacementMod

o If model using the VrayDisplacementMod was X-Ref'd, the displacement is not considered

VRayMultiSubTex

o Issue with drag and drop on the texture button

VRayBlendMtl

- Fixed incorrect diffuse render element with blend material in additive mode inside a 2-sided material
- $^{\circ}$ The "Use irradiance map" option from the base material is now used

VRayStereoscopic

 $^{\circ}\,$ The helper should append .vrst extension to file names if no extension is specified

Build 3.00.08

Official release

Date - September 16, 2014

Download - Build 3.00.08

Modified Features

V-Ray Scene Converter

o Added option to convert the standard cameras to VRayPhysicalCamera

V-Ray Quick Settings

o Added preset delete button

VRayDistanceTex

o Replaced the texmap preview in the material editor slot with a generic but faster rendering one

VRayFastSSS2

O Added color mode control

VRayHairMtl

Added light_multiplier parameter

VRayMeshGeom

Updated V-Ray SDK example project

VRayOSLMtl/VRayOSLTex

- Added support for tweak parameters tooltips display in material editor
- Made .osl the default file extension

VRayProxy

o Added support for UV channels with negative indices

Bug Fixes

V-Ray

- Added "facesPerVoxel" and "oneVoxelPerMesh" parameters to the .vrmesh exporter
- Fixed a crash when reading mip-map levels for non-square textures
- Fixed a crash when rendering geometry with incorrect faces
- Fixed a crash when rendering objects with Linked XForm and motion blur
- Fixed a crash when rendering with empty layer as render selection mask
- Fixed a crash when switching RT and Production after changing VRayColor parameters while RT was running
- Fixed a crash with XMesh having very large surface normals
- Fixed a random crash in scenes saved with region rendering enabled
- Fixed artifacts when rendering with mapped IOR
- Fixed crash with VRayPtex due to incorrect mesh data
- Fixed memory allocation for non-tiled bitmaps
- Fixed rare crash with progressive image sampling initialization
- Fixed rare crash with progressive image sampling and noise threshold greater than 0.0
- Fixed Embree rendering on machines with lower versions of SSE support
- o Fixed export of multiple splines to .vrmesh through MaxScript
- Optimized geometry traversing on multi-core machines
- Fixed "No GI on other mattes" option
- o Fixed "Max ray intensity" not working for the first glossy reflection
- Fixed rendering of "Matte for reflect/refraction" objects

.vrscene exporter

- Added point cloud export parameters
- Fixed animation settings persistence between export sessions
- Frame range is not written into .vrscene files when exporting animations
- The "Strip paths" option didn't affect VRayProxy objects
- Some options didn't work as expected
- $^{\circ}~$ Fixed the On parameter support for 3ds Max lights

V-Ray RT

- o Animated "focus distance" parameter was not exported
- ° Fixed a crash when ActiveShade is rendering simultaneously with material editor's swatches
- Fixed color mapping improperly applied twice when sub-pixel was enabled
- Make V-Ray RT Animation Preview" command to save images when rendering with VFB
- Fixed rendering sequence through animated camera, subsequent frames were wrong

V-Ray RT GPU

- Fixed a crash with animated meshes, during ActiveShade session
- Fixed a crash with animated proxies, during ActiveShade session
- Fixed an issue causing lights disappearance when moving dynamic geometry during ActiveShade rendering
- Fixed slow "Compiling geometry" with Forest Pro
- o "Trace depth" parameter was ignored

V-Ray RT CPU

VRayFastSSS2 with raytraced single scattering and Direct light renders differently from production renderer

V-Ray Quick Settings

VFB history autosave was always enabled

o Fixed non-Quick Settings custom presets handling

VFB

- $^{\circ}~$ Ability to set the bloom "shape" parameter for the lens effects to larger values that 40 $\,$
- Add a #hide keyword to the vfbControl() command to close the VFB after a command is executed

VRayClipper

o Fixed include/exclude with grouped objects and hairs

VRaySSS2

o Fixed incorrect results with raytraced multiple scattering and raytraced single scattering

HairFarmMod

Fixed a crash when rendering multiple hair instances

VRayLight

• Fixed artifacts occurring with irradiance map and "affect reflections" in certain situations

VRayLightMeter

Fixed viewport representation in 3ds Max 2015

VRayOrnatrixMod/VRayHairFarmMod

o Fixed velocity render element

VRayOSLMtl/VRayOSLTex

 $^{\circ}~$ Fixed not-working "Open in External Editor" command for 3ds Max 2012 and previous

VRayPhysicalCamera

○ Fixed undo of "Guess vert/horiz tilt" buttons

VRayProxy

- Fixed artifacts when rendering with motion blur
- Prevent unneeded reading proxy particle widths for preview

VRayStereoScopic

° Render elements were outputting left channel only image files through 3ds Max rendered image window

VRayBPTracer

o Fixed a crash in a specific scene

miscellaneous fixes

o Fixed artifacts in certain situations with irradiance map and area lights with "Affect reflections" turned off

Build 3.00.07

Official release

Date - May 22, 2014

Download - Build 3.00.07

Bug Fixes

V-Ray

- o "Direct visualization" of the caustics photon map does not work properly with VRayEnvironmentFog
- o Freeze at render start with memory frame buffer and very large resolutions

VRayProxy

 $^{\circ}~$ Fixed crash with Nitrous in 3ds Max 2015 with a scene created with an older version of V-Ray

VRayStereoscopic

o Fixed crash when outputting Deep EXR with "Previous render" set to anything but "Unchanged"

Build 3.00.06

Official release

Date - May 5, 2014

Download - Build 3.00.06

New Features

V-Ray

- O Support for 3ds Max 2015
- o Added VRayPointParticleMtl material for shading point particles from .vrmesh/Alembic files

Modified Features

V-Ray

o Added option to the .vrmesh exporter to automatically create a Multi/Sub-Object material when exporting multiple objects in a single file

V-Ray RT

- O Added lights include/exclude lists support
- Added statistics when using the VFB
- o Implemented showing Safe Frame when rendering in a viewport

VRayProxy

- Added option to render particles as points
- Added option to enable/disable Alembic full names support in the visibility lists
- Added support for hair and particles color channels from Alembic
- Make the "Animation offset" parameter animatable

VRayBump2Normal

VRayBump2Normal is now included in the V-Ray installation

VFB

- $^{\circ}~$ Added support for the "track mouse" option while rendering for progressive sampling and V-Ray RT
- The Lens Effects 3ds Max Effect plugin settings are now applied only when the 3ds Max rendered image window is used, as it clashes with the VFB Lens Effects settings
- Lens effects the default glare type changed to "From render camera"
- When the "mono" button of the VFB is pressed, the computed intensity is now based on the selected R/G/B components only

VRayVRmatMtl

- Material exporter support for VRayBlendMtl
- Material exporter support for Checker and Falloff textures

Bug Fixes

V-Ray

- o Prevent raw image output, when enabled but empty path is provided
- Reflection/Refraction trace sets' Clear button was cleaning both of the lists
- o Reflection/Refraction trace sets were not working in inclusive mode

V-Ray RT

- Fixed a crash when undoing delete of Forest Pro geometry while Active Shade rendering
- Fixed support of Material Frequency Particle Flow operator when rendering as production renderer
- Progressive sampler settings were not exported in .vrscene files
- VRayParticleTex was not translated
- Region rendering with the V-Ray VFB did not work when using V-Ray RT as production renderer
- The translucency parameters of VRayMtl are not exported

V-Ray RT GPU

Lens effects source channel was incorrect when re-rendering as production renderer

Hair&Fur/VRayOrnatrixMod/VRayHairFarmMod

Fixed assigned materials order when rendering with multiple hair nodes and having some of them hidden

Embree

o Fixed a crash with XMesh and motion blur

Distributed Rendering

- o Rendering in DR mode with "Use local host" unchecked demanded a render node license
- The "Save hosts in scene" option was not always working correctly when rendering with DR through Backburner

VRayBPTracer

o Bucket outlines left in VFB after rendering end

VRayDisplacementMod

 $^{\circ}\,\,$ Fixed a very slow rendering when Noise texture with animated parameter was used

VRayGLSLMtl / VRayGLSLTex

- $^{\circ}\;$ Fixed smoothstep output values outside the interpolation range
- Newly opened shaders were not added to the recent files history after clearing history
- o Ensure all user defined global variables are initialized to zero
- o Shader source files were not shown in the Asset Tracker

VRayOSLMTL / VRayOSLTex

- Newly opened shaders were not added to the recent files history after clearing history
- Fixed crash when assigned to dome VRayLight
- O Shader source files were not shown in the Asset Tracker

VRayProxy

- o Fixed crash with corrupt .vrmesh files with large number of voxels
- o Fixed wrong rendering of multiple instances with particles/hairs
- Optimized loading of scene with many Alembic proxies
- Optimized preview voxel loading routine
- Skip proxy preview calculations if zero number of faces/hairs/particles is provided

VRayPtex

- O Changing PTex cache size had no effect on rendering, 100 MB was always used
- Added an option for turning off anisotropic filtering for PTex textures

VRayStereoscopic

O Rendering shade map sequences could cause crashes

VRayLightIES

o Fixed crash after VRayIES light was created in 3D snap mode and 3ds Max was Reset

V-RayLight

 $^{\circ}\;$ Fixed "Lock to dome orientation" option to work for nested textures

VFB

- o V-Ray did not write .vrimg/.exr files if "Generate preview" was enabled, and "Memory frame buffer" was turned off
- The progressive sampler was not creating a raw .vrimg/.exr file
- The Lens Effects were not applied to images loaded from the history
- The Lens Effects were not stored in the output file

VRayExtraTex

o Cloning VRayExtraTex element didn't clone the include/exclude list

vrimg2exr

o Fixed batch conversion output names generation

miscellaneous fixes

- $^{\circ}\,\,$ Global subdivs multiplier should be able to go down to zero
- Fixed a MaxScript system exception error when cancelling the creation of a VRayLight from the V-Ray toolbar
- Fixed issues with VRayLights and FumeFX with illumination map

Build 3.00.05

Official release

Date - April 7, 2014

Download - Build 3.00.05

Bug Fixes

V-Ray RT GPU

OpenCL engine was not working

VRayPhysicalCamera

o Fixed camera creation unhides hidden lights

miscellaneous fixes

- o Fixed more cases of stuck buckets with GI
- $^{\circ}\,$ Wrong render results when using camera DOF and motion blur at the same time

Build 3.00.04

Official release

Date - March 3, 2014

Download - Build 3.00.04

Modified Features

O The lens effects sliders position can be set by mouse click

VRayLight

O Added Affect alpha option for the dome lights

Bug Fixes

VRay RT CPU

- O Phoenix FD did not update in mesher mode when changing frames
- O Stereo mode did not work correctly

VRay RT GPU

- o Crash when trying to render an object with GLSL material
- Fixed bump mapping with Fresnel reflections
- Fixed bump mapping with tiled texture

VRayOrnatrixMod/VRayHairFarmMod

o Fixed different dynamic tessellation with and without motion blur

VRayPhysicalCamera

LENS files were not auto-transferred for DR

VFB

- O Apply inverse gamma correction when loading an image with 8-bit colors
- Color balance and HSL corrections were applied after display corrections like sRGB instead of before
- Fixed crash with curve color correction when there were NaN pixels in the image
- Color balance correction could produce strange results with HDR colors
- Fixed crash with deep output in certain situations
- Fixed global presets loading the sRGB/ICC button state
- Fixed a crash when loading image after 3ds Max reset
- $^{\circ}\,$ Lens effects were applied twice when changing the Mode and Type settings
- Lens effects were not applied on images loaded from the VFB history

VRayHairMtl

 $^{\circ}\;$ Fixed cut-off look of the material in the Material Editor

VRayClipper

O Fixed unexpected behavior when linked to other objects

VRayMap

o Artifacts with environment override in the texture

miscellaneous fixes

- $^{\circ}\;$ Fixed stuck buckets due to long GI paths in certain cases
- o Fixed stuck buckets with dynamic geometry with mixed static and motion-blurred geometry
- Fixed texmap slots of some of the V-Ray texmaps did not refresh immediately when a new map is connected to them
- Fixed NaN pixels in certain cases with Noise texture used as displacement map on a large plane
- $^{\circ}\;$ Fixed NaN pixels in certain scenes with 3ds Max Fog atmospheric effect
- Fixed NaN pixels when a bump texture returned a NaN normal
- Updated DLL version numbers
- Improved motion blur raycast accelerator for fast rotating objects
- Fixed rare crashes when preparing scenes with many mesh lights

Official release

Date - February 17, 2014

Download - Build 3.00.03

Bug Fixes

Render Masks

Improved performance with threads number scaling

VRayHDRI

o did not work with the Default Scanline renderer with mapping channels different from 1

V-Ray RT

- o Fixed issue where rendering particle systems was breaking the rendering of motion blur
- VRayHDRI was not working as bump map

V-Ray RT GPU

- o Fixed crash in V-Ray standalone when moving dynamic geometry with motion blur enabled
- Fixed driver crash with dynamic motion blurred geometry
- Fixed artifacts with area lights

VRayUserColor/VRayUserScaler

User properties for standalone plugin were not read correctly

VRayVRmatMtl

• Fixed crash in the VRMat editor in certain builds when previewing materials in the editor

VRayLightMtl

o A helper meshlight was not created in the same layer as the object's when "Direct illumination" was on

VRayObjectSelect

o Fixed displaying of include/exclude lists editor on vrayVFB check/uncheck

miscellaneous fixes

- $^{\circ}~$ Fixed slower rendering of scenes with dynamic meshes on many-core machines compared to V-Ray 2.4
- Fixed updating of texmap buttons on some V-Ray texmaps when connecting them in slate material editor
- Fixed crash when rendering with 3ds Max frame buffer, V-Ray Stereoscopic's "Adjust resolution" enabled and DR
- Fixed crash with the "Previous render" option in the render settings when render elements were enabled
- Fixed issue where the "Check for missing maps" option was breaking the animation export for particle systems
- $^{\circ}~$ Fixed NaN pixels in certain cases when a 3ds Max Bitmap is used as a spherical environment
- o Fixed long irradiance map calculation times in specific cases with matte objects and "Retrace" light cache option enabled

Build 3.00.02

Official release

Date - February 7, 2014

Download - Build 3.00.02

Modified Features

vrimg2exr

o Increase the default buffer size to 100 MB to speed up conversions

Bug Fixes

V-Ray

- o Fixed handling of tiled textures with mip-map levels that fit into one tile as produced by txmake
- Fixed rare crash when cancelling a render with tiled textures
- ° The render region height parameter was not always updated correctly when locked to the width

Render Mask

o Fixed rendering with DR

VFB

O Quad menu command was not showing the VFB in ActiveShade mode

VRayHDRI

- o Fixed slower reading of OpenEXR files compared to previous V-Ray versions
- Fixed a crash with PSD textures with all layers hidden

VRayMtlWrapper

o Fixed crash when a Multi/Sub-Object material is used as a base material

VRayBPTracer

o Fixed rendering of camera motion blur

VRayGLSLMt / VRayGLSLTex

o Fixed crash with "discard" statement when using uniform global variables

VRayOSLMtl / VRayOSLTex

 $^{\circ}$ Reverted to OSL 1.3 as some input parameters were not updated properly

VRayLightSelect

° Fixed erroneously disabled Remove button when more than one VRayLightSelect render elements were present

VRayFakeFresnel

Moved to the V-Ray category for textures

VRayProxy

o Fixed proxy selection in viewport, objects behind were selected instead

VRay RT

o Fixed rendering of animated materials attached to Multi/Sub-Object material

VRay RT GPU

- o Fixed incorrect mapping of baked procedural textures
- VRayDirt in VRayExtraTex render element did not render properly

imapViewer

o Reduced the number of messages that are printed to the standard output when merging large irradiance map files

Installer

o Fixed previous installation license settings acquisition, local license was assumed always

Build 3.00.01

Official release

Date - January20, 2014

Download - Build 3.00.01

New Features

General

- O Redirected all help links to the new official help web site
- A V-Ray toolbar provides quick access to common V-Ray features

VRay RT GPU

o Support for VRayDirt, VRayFastSSS2, VRaySkinMtl materials

VRayEnvironmentFog

o Added an option for deep output to OpenEXR 2 and .vrst files

ply2vrmesh

O Added ability to convert particles from Alembic files to .vrmesh files

Modified Features

General

- ° For 3ds Max 2014, all related V-Ray files have been renamed to xxxx2014 (e.g. vrender2014.dlr, vray2014.dll etc)
- Added a "Divide shading subdivs" parameter in the image sampler to prevent V-Ray from balancing shading subdivs vs AA subdivs for those
 users that find it confusing
- Exposed in the UI the option for direct visualization of caustics calculations
- Added an option to control DOF/moblur subdivisions for the Adaptive subdivision image sampler
- O When the maximum transparency level is reached, return the environment color rather than black

Hair & Fur

o Hair&Fur properties are taken from the source object (except the "Renderable" property)

VRaySkinMtl

 $^{\circ}$ The material now respects the global "Linear workflow" option

VRayMetaballTex / VRayParticleTex

° VRayMetaballTex renamed to VRayParticleTex and can be used to read colors from Alembic particles

VRayLight

- o Removed the "Ignore light normals" from the UI
- Dome lights are now always created with intensity 1.0 instead of the default 30

V-Ray RT CPU

o Internally uses the production renderer core running in progressive mode

V-Ray RT GPU

- Use different GPU code depending on the features used in the scene
- Faster loading of textures

VRayPhysicalCamera

- O Bitmap aperture now has "affect exposure" option
- o Renamed the "offset" and "shift" parameter to the more correct photographic terms "shift" and "tilt" respectively
- Added an option to prevent custom bitmap aperture from affecting exposure

VRayProxy

Added an option to force remap mapping channels so that they always start from 1

VRayHDRI

- $^{\circ}\;$ Added a "View image" button that opens a 3ds Max bitmap buffer with the texture
- Added support for single-channel TIFF and .tx/.tex files

VFB

- o The numpad 1-9 keys can also be used to switch between recent images
- Ability to load arbitrary file formats
- Olicking on a slider for HSL, color balance or brightness/contrast now sets the value
- o A color correction rollout can now be hidden or expanded by clicking on its title

Bug Fixes

General

- o Different buckets with probabilistic lights and DR
- The "Max ray intensity" parameter could introduce color shifts
- o Fixed rare crashes with tiled textures and dynamic geometry when the dynamic memory limit was reached
- O Some V-Ray materials did not generate proper material IDs; Fixed crash with FumeFX render elements
- Added support for alpha channel from FumeFX render elements

V-Ray RT

- o Fixed mixed up materials with RailClone objects
- Fixed issues with animated proxy objects
- Support for VRayBumpMtl
- Fixed crashes and corrupted 3ds Max window after closing ActiveShade in 3ds Max 2014 with Enhanced Menus enabled
- Right-click menu in ActiveShade could be flooded with "Missing" entries
- $^{\circ}\,$ The scene translation time was counted as render time
- $^{\circ}$ $\,$ Wrong Z-depth render element with the "invert z-depth" option enabled

V-Ray RT CPU

- o Fixed a crash with animated displacement
- $^{\circ}~$ Fixed incorrect results with <UDIM> tags

V-Ray RT GPU

- o Fixed crashes when starting rendering
- ForestPro did not work correctly
- ° Reflection environment and background were added randomly to a light select element
- Invisible lights affected the Z-Depth render element
- Fixed artifacts with Multi/Sub material and VRayNormalMap on ForestPro objects
- o The "compensate camera exposure" option for the VRayLightMtl material didn't work

VRayLight

- o Fixed an issue with spherical lights when "Use texture" was enabled
- The options for previewing the directional parameter were not grayed out for non-rectangle lights
- Fixed a glitch when creating dome lights
- o Incorrect rendering of non-uniformly scaled lights with directionality greater than 0.0
- When looking through a sphere light, black parts of the geometry could appear
- Fixed issues with dome lights with the "Lock to dome orientation" option enabled
- $^{\circ}\,$ Textured dome lights could appear pixelated to the camera and in reflections

VRayProxy

- O Alembic particles didn't work correctly with irradiance map and motion blur
- Alembic particles rendered black with light cache enabled
- Velocity render element didn't work with Alembic hair and particles

Distributed Rendering

- Saving of servers inside the scene file did not work
- Fixed multiple transfers of assets with Unicode characters
- Missing assets could incorrectly prevent other assets from being transferred to the render servers

VRayHDRI

- $^{\circ}$ Modified bitmaps were not transferred properly to DR servers when "Transfer missing assets" was enabled
- Lists all supported image formats by default

VRayMetaBall

• Fixed a crash when a velocity render element was present in the scene;

Render Mask

 $^{\circ}\,$ Irradiance map was calculated even for parts of the image not covered by the mask

Hair&Fur

O Mapped scale of Hair&Fur could take the entire RAM

VRayHairFarmMod

• Fixed flickering with motion blur when the hairs change the number of knots between frames

Embree

o V-Ray failed to load when 3ds Max was started with an affinity mask set from the command prompt

VRayIES

- O Lights with different power from the default could produce different buckets in DR
- Fixed slow rendering compared to V-Ray 2.x

VRaySkinMtl

o The primary reflection glossiness map didn't work, just the numeric value

VFB

- $^{\circ}\,$ Fixed a crash when trying to apply lens effects to an image loaded from the VFB history
- The HSL and color balance corrections were not saved in the 3ds Max scene
- Some of the new color corrections were not taken in account when displaying corrected pixel info
- The curves were not updated properly if the numerical input fields were used
- O HSL color correction didn't work unless there is at least one other correction enabled

VRayOCIO

 $^{\circ}\,$ The .ocio file was not read correctly if the system decimal symbol was comma

VRayLightMeter

o Fixed incorrect results due to probabilistic light sampling