

# V-Ray 6

## Build 6.20.02

*Official release, update 2.2*

**Date** - April 16, 2024

[Download V-Ray for Cinema 4D](#)

## New Features

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### V-Ray

- Use system memory for rendering with V-Ray GPU

## Modified Features

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### V-Ray

- Add animation options to V-Ray Bitmap node texture and classic shader
- Automatically set Start Node for converted materials
- Support for the Multi Shader
- Expose the phase function parameter for Environment Fog
- Add ports for user-defined output closures of OSL material nodes
- Surface properties have a too low hard limit
- Add support for the native compositing tag
- Add support for Redshift Color Layer, Material Layer, and Material Blender nodes

### VRayTextures

- Implement Batch Load feature in VRayMultiSubTex
- Add an option to reload, edit, and locate images in the classic V-Ray Bitmap shader

### VRayVolumeGrid

- Provide preset for Pyro volumes

### VRayPhysicalCamera

- Add Automatic Vertical Tilt, Guess Vertical Tilt, and Guess Horizontal Tilt parameters

## Bug Fixes

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### V-Ray

- Updates on classic materials may prevent viewport interactive updates
- Modifying imported vrs scene may break the Cinema 4D scene rendering
- Depth of Camera should utilize camera clipping values even when clipping is not enabled
- Non-default texture outputs are not working with plugin lists
- Crash when starting render without accepted EULA
- Cinema 4D 2024 crashes when loading the last file from the profiler
- Anima 4D characters texture mapping is incorrect when exporting to Chaos Cloud
- LightMix back to the scene doesn't work as expected with IES lights
- Splines and gradients cannot be imported for classic shaders
- Wrong import and export of transparency layers in native materials

### V-Ray, VRayProxy

- VRayProxyHook can leak Proxy properties nodes

### V-Ray GPU

- Cinema 4D freezes when rendering

#### **VRayTextures**

- Wrong material projection in specific scene after material update

## **Build 6.20.01**

*Official release, update 2.1*

**Date** - Feb 8, 2024

## **New Features**

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#### **V-Ray**

- Introduce an adaptivity clamp to control the sampling in overexposed regions of the image

#### **VRayTexture**

- Use a V-Ray Triplanar texture with different textures on each axis and direction

## **Modified Features**

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#### **V-Ray**

- Make V-Ray Lights non-editable
- Expose additional UV scale in Object Properties
- Add support for converting additional Redshift nodes
- Add support for Refraction and Glossiness in the Viewport editor
- Support all TexAColorOp operations on GPU
- Implement the ability to get the name for the Bitmap node from the texture filename

#### **VRayLightDome**

- Hide light preview when the light is turned off by the generator checkbox

#### **VRayTextures**

- Add option for disabling the automatic RGB primaries modification

## **Bug Fixes**

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#### **V-Ray**

- Chaos Scatter is not rendered with interactive on Cinema4D 2024 when V-Ray proxy is instanced
- Specific frames rendering black in V-Ray Standalone
- The Decal's length offset is not animated
- Negative values of Decal displacement shift the geometry instead of applying the intended displacement
- Improve the performance of rendering node material previews when opening scenes containing a large number of materials
- Chaos Vantage animation fails to start
- Warnings for invalid material evaluation with a specific scene
- Having a Post effect layer in render settings with over 98 render element "Layers" causes renders to not start

#### **V-Ray, Interactive**

- Interactive doesn't refresh when using the "Frame Geometry" option in the viewport
- Wrong focus distance when the Camera is a child in the hierarchy and focus object is used

#### **V-Ray GPU**

- Negative explicit channel IDs are causing a crash

#### **VRayLightRectangle, VRayLightSphere**

- Imported lights might be over-bright

## **Build 6.20.00**

*Official release, update 2*

**Date** - Dec 7, 2023

## **New Features**

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### **V-Ray**

- Initial support for importing V-Ray Scene files as native objects
- Support for importing the Place2D UVW generator from Maya
- Convert Cinema 4D Materials to Classic V-Ray Materials
- Convert Redshift Standard materials to V-Ray Materials
- Add import of IES lights from Cosmos
- Render animation with Vantage via Live Link
- Expose the V-Ray Node material parameters in the Classic Material Editor

### **VRayVolumeGrid, V-Ray**

- Native support for rendering Pyro

### **V-Ray, Interactive**

- Add support for OSL Material and Texture

### **V-Ray, Interactive, VRayPhysicalCamera**

- Add support for Stereoscopic rendering

### **V-Ray, LegacySceneConverter**

- Separate the Environment settings to a new V-Ray Environment Object

### **VRayVolumeGrid**

- Integrate VolumeInstancingTree and VolumeGrid instancing optimizations into V-Ray Standalone CPU

## **Modified Features**

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### **V-Ray**

- Support for the Pin Material tag
- Better import of raw texture buffers
- Add support for the "Solo" mode in the Node Editor
- Modify Light Mesh options to have a similar layout to other lights
- Update Chaos Scatter to version 4
- Add LPE labels to materials and lights
- Implement the Stochastic Flakes as a node material
- Hide deprecated option "Inverted Normal" from UI of V-Ray Dirt texture
- Add the ability to show the current texture from Light Lister in the Active Object Manager
- Filter exported plugins for animation and interactive
- Add profiler events for export durations by categories
- Skip the import of TexMaxGamma plugin whenever possible

### **V-Ray, V-Ray GPU**

- V-Ray GPU shouldn't load already loaded bitmaps from files when rendering an animation
- Support for V-Ray Enmesh rendering on V-Ray GPU

### **V-Ray, VRayPhysicalCamera**

- Parallel physical camera rendering requires additional setup
- Support for per camera overrides

#### **V-Ray, VRayPhysicalCamera, Interactive**

- Ability to transfer Auto Exposure and White Balance to the camera

#### **V-Ray, VRayLightDome, VRayLightIES, VRayLightRectangle, VRayLightSphere, VRaySun**

- Add viewport light previews

#### **VRayLightDome, VRayLightIES, VRayLightRectangle, VRayLightSphere, VRaySun**

- Add the ability to change the wire color for the V-Ray lights in the viewport

#### **VRayLightRectangle**

- Expose the new directionality strength parameter

#### **V-Ray, VRayProxy, V-Ray GPU, VRayTextures**

- Support for rendering Particle colors based on different channels

#### **V-Ray GPU, VRayTextures**

- Add support for more Sampler Info outputs

#### **VRayMtl, V-Ray**

- Double click in Material Manager should create V-Ray Node material as a default material
- Add the option to select V-Ray Material as the default material

#### **VRayTextures**

- Automatically set the RGB primaries to the current active color space when creating V-Ray bitmaps

#### **Displacement and Subdivision**

- Compile geometry is slow for subdivision surface objects on high core count machines

## **Bug Fixes**

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#### **V-Ray**

- Viewport Interactive is blocking Cinema 4D when OCIO color management is used
- Cinema 4D Freezes when Blend Material is added to its own Base Material Slot
- Fix a deadlock in GeomParticleSystem in streaks mode when no velocity channel is present
- The "Use Default Lights" global override parameter does not work
- User attributes are not working for the VRayBitmap filename text field
- Wrong label in the Max Gamma shader
- Wrong import of TexCombineColor and TexCombineFloat
- VR Mat could not fetch the name of Material X automatically
- Unpack installation may not unpack the V-Ray plugin and docs
- Fix the typo in the Light Lister units settings

#### **V-Ray, VRayMtl**

- Unable to convert native C4D materials if unsupported native shaders are present in the material

#### **V-Ray, V-Ray GPU, VRayTextures**

- Rendering animation stops in the middle of the "Loading bitmaps" stage

#### **Render Elements**

- When trying to add a render element during interactive rendering in Cinema 4D, the application crashes

#### **VRayVolumeGrid**

- Volume grid loads mirrored .vdb cache, simulated with the Pyro engine

#### **V-Ray GPU**

- Bump mapping in V-Ray GPU is inverted
- Bump type 5 is not working with procedural textures
- Bump mapping doesn't work correctly on a plane
- Cryptomatte render element doesn't work for objects behind glass
- VRaySphere is not rendered with RTX
- Select object and Pick object material functionality in VFB is broken with V-Ray GPU IPR

- Rendering stuck when using the Bucket image sampler and Textured render mask
- MultiMatte does not consider material IDs nested in VRayBlendMtl with a blend amount
- Crash when scenes containing Image sequences and V-Ray Sky are rendered with CUDA and then with the RTX engine
- Render freezes when rendering animated objects with RTX, motion blur, and V-Ray Denoiser
- GPU Light cache freezes when rendering animation with specific scene on machine with multiple GPU devices
- Phoenix Particle Shader in Point mode randomly disappears on a test scene with OptiX
- Print a warning for CUDA 12 min driver version
- Emissive material does not appear in VRaySelfIllumination behind refractive object
- VRayProxy with assigned Multi/Sub-Object material in V-Ray GPU has incorrect shading with material override
- VRayClipper does not have correct material IDs when rendering with V-Ray GPU
- Bump mapping differs when comparing small objects between V-Ray and V-Ray GPU
- MultiMatte does not work with material IDs within VRayBlendMtl
- MultiMatteID is not propagated through nested materials
- GPU interactive prints warnings on material changes

#### V-Ray GPU, VRayTextures

- GPU rendering performance is slower when some of the VRam is occupied

#### VRayLightDome, VRayLightIES, VRayLightRectangle, VRayLightSphere, VRaySun, V-Ray GPU, VRayTextures

- Regression of spot/direct lights intensity

#### VRayVolumeGrid

- Enabling the Only If Selected preview option of the Cinema 4D VolumeGrid and then deselecting and selecting the grid leaves it empty
- Changing the preview Detail Reduction in Cinema 4D always resets back to a certain value
- Crash when basing the Smoke Color on the Speed channel of VDBs whose bounding box does not start at 0,0,0
- Wrong Grid-based Volumetric Motion Blur with VDBs whose bounding box does not start at 0,0,0

## Build 6.10.02

*Official release, update 1.2*

**Date** - Sept 20, 2023

## New Features

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### V-Ray

- Build V-Ray for Cinema 4D 2024
- Implement Switch material
- Support for emissive materials in LightSelect and LightMix
- Add option for moving pivot point of UVW Transform Node

### V-Ray, Render Elements

- Add Distributed Rendering Render element

## Modified Features

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### V-Ray

- Add Legacy lights group to the Light Lister
- Set the state for the color picker to be expanded by default for some materials and lights
- Add support for importing Switch Node Material
- Improvements to parameter steps and defaults
- Disable generating previews for some utility textures to increase performance
- Collapse the Output rollout for V-Ray Bitmaps by default on creation
- Uvwgen option replaced with Map Channel in Stochastic Flakes Material

### VRayProxy

- Improve proxy animation detection and reduce redundant file reads

### VRayVolumeGrid

- Increase the hard limit of the Heat Haze parameter in the Volume grid

#### Chaos Cloud

- Support for texture baking in Chaos Cloud

## Bug Fixes

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#### V-Ray

- Buckets rendering incorrectly with Distributed Rendering
- V-Ray Light Mesh visibility does not consider parent object visibility during animation
- Crash during interactive rendering of Boole object with complex hierarchy
- Can't hide a sun light from Sun with Sky in interactive
- Scenes from Windows to Mac don't properly relink Cosmos assets
- Resumable rendering doesn't show an error when used with the Cinema 4D file output system.
- Enmesh crash with non-polygon references or source
- Hide the V-Ray viewport menu when V-Ray is not the current render engine

## Build 6.10.01

*Official release, update 1.1*

**Date** - Jun 28, 2023

## New Features

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#### V-Ray

- Support importing Scatter Presets from Cosmos in Cinema4D
- Add Viewport preview for instanced geometry from V-RayParticles object

#### V-Ray, Render Elements

- Implement SamplerInfo RE

## Modified Features

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#### V-Ray

- Add brightness and mix type for self-illumination of V-RayMtl
- Expose the length offset parameter of V-RayDecal
- Show progress bar dialog for downloading Cosmos assets
- Add download/relink button in cosmos objects
- Material previews using document color management

#### V-RayProxy

- Add button for recreating material assignment tags
- Improve Enmesh Cosmos import in Cinema4D

## Bug Fixes

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#### V-Ray

- Instanced geometry with different nsamples crashes during compile geometry
- Using OCIO color management produces darker material previews in Cinema 4D 2023.2
- Proxy exported from Cinema 4D does not render properly with decal
- Resumable rendering is not disabled for VFB interactive rendering

- VFB Menu button state is not updated when switching scenes
- Luminance from native material is ignored
- Mark missing Cosmos assets option is not updated during active document when using Relink option from "Project Asset Inspector"
- Cinema 4D freezes when moving or undocking Qt based windows
- The standalone V-Ray GPU Device Select tool is not working because of missing Qt libraries
- Using multi-instance cloner prints redundant messages

#### **V-Ray, Interactive**

- Render Region disappears when a render is started
- Wrong VFB render region when switching from one opened file to another

#### **V-Ray, Render Elements**

- Light Select render element does not work with Cloner

#### **V-Ray, VRayProxy**

- Cinema 4D crashes with displacement from V-Ray decal over Cloner

#### **VRayProxy**

- Cinema 4D may crash if relinked with "Download missing assets" without logging in

## **Build 6.10.00**

*Official release, update 1*

**Date** - May 18, 2023

## **New Features**

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#### **V-Ray**

- Chaos Scatter in V-Ray for Cinema 4D
- Implement V-Ray Toon Node and Classic Material
- Implement V-Ray Profiler
- Add Support For Cylindrical Decal
- Support V-Ray Interactive rendering in the Viewport editor
- Add support for Geometry Instancing in VRayParticles object
- Expose the path guiding light cache options
- Add support for importing V-Ray Enmesh assets from Chaos Cosmos
- Add Download and Relink of missing Cosmos Assets
- Add support for user attribute textures and the MoGraph Color Shader
- Add light decay options to V-Ray Lights
- Implement Resumable Rendering
- Implement the "Test resolution" functions for the V-Ray Frame Buffer
- Add support for Ornatix hair system
- Integrate NVidia AI denoiser upscaling mode

#### **V-Ray, VRayMtl**

- Implement Bump To Glossiness shaders

#### **V-Ray GPU, VRayTextures**

- Add support for Compressed Textures on V-Ray GPU

#### **Chaos Cloud, V-Ray**

- Add support for exporting sidecar vrsce files

#### **Render Elements**

- Add a Metalness render element

#### **V-Ray, Interactive**

- Implement "Object Selection" inside the V-Ray Frame Buffer

### **V-Ray, Render Elements**

- Add support for V-Ray Toon render element

### **VRaySun**

- Add the new Sky clouds parameters for density, seed and contrails

### **VRayVolumeGrid, V-Ray, V-Ray GPU**

- Integrate VolumeInstancingTree and VolumeGrid instancing optimizations into V-Ray Standalone

## **Modified Features**

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### **V-Ray**

- Improve the UI for V-Ray Decal and add additive bump options
- Add support for Matrix object as particle source in V-Ray Particles
- Add support for native OCIO management in Cinema 4D 2023
- Add the ability to lock the aspect ratio for V-Ray Enmesh Crop Box sizes and UV tiling
- Add include exclude list for affected lights in environment fog
- Add extra material options to BRDF nodes
- Rearrange the Tools menu
- Mark missing Cosmos assets with an icon
- Expose the Flat and Frontal and Camera projection types for the V-Ray projection node
- Expose the legacy lights in the V-Ray menu
- Replace "Face ID" labels with "Polygon Selections"
- Update the Fog Distance and Fog Height default value
- Update Environment Fog Raymarching params
- Add an option to save only the RGB Channel when Denoiser or Lens Effects are active
- UI changes to the V-Ray Softbox texture
- Deprecate the Standalone zip Installations and allow extracting files from the V-Ray Installer
- Hide V-Ray Enmesh in viewport when the object's "Enable" parameter is off
- Change the stepsize for V-Ray Decal dimensions
- Intermediate render output should have final color corrections
- Preserve the existing layer for converted materials
- Change the stepsize for the Displacement amount in V-Ray Decal
- Add the new Affect Alpha parameters to Volumetrics
- Add selections as input objects when creating Fur or Enmesh
- Notarize the V-Ray for Cinema 4D installation for macOS

### **VRayMtl, V-Ray GPU**

- Port the "Uniform" illumination mode of the VRayMtl translucency on GPU

### **Chaos Cloud, Interactive, V-Ray**

- Add a window with EULA agreement for zip installations

### **V-Ray, VRayTextures**

- Expose the nearest filtering to interface of Bitmaps
- Material previews using document color management

### **Render Elements**

- Support for ObjectID as a new ID type in the Cryptomatte render element

### **V-Ray, V-Ray GPU**

- LightMix during LC building and progressive undersampling

### **V-Ray, Displacement and Subdivision**

- Change the Min/Max Displacement bound parameter type from Color to Float

### **V-Ray GPU**

- Implement auto bump mapping for smoothed and displaced meshes

### **VRaySun**

- Improve the viewport locator for the V-Ray Sun to display the sun vector



### **VRayVolumeGrid**

- Speed up grid volume rendering by substituting PreLin() with GridSampling::prepareLerpVoxelWeights/Indices()
- Speed up the rendering of grid volumetrics by removing needless reading from the grid

## **Bug Fixes**

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### **V-Ray**

- Alpha is used in some of the node slots as default color
- Material IDs for the Blend and 2Sided V-Ray materials are not inherited from the submaterials
- Material ID doesn't create correct masks when multiple materials with opacity maps are blended together
- Override camera options step amount is too large
- Stage animation of cameras and camera projections not working as expected
- Texture slots import redundant color shader
- Low CPU utilization with Intel Alder Lake CPUs on Windows 11
- The text spline object is not rendering with animation when deleting the text on the second frame
- V-Ray Enmesh allows the use of non-geometry items as a reference object
- Crash when using the Set Active Object as Camera button

### **V-Ray GPU**

- Dynamic geometry doesn't update during Interactive rendering when deformed
- Memory leak with textures when rendering animation
- Cryptomatte render element doesn't work for objects behind glass
- "CUDA error 700" appears when toggle off/on the Volumetric Environment set to Fog during Interactive render with GPU
- VRayMultiSubTex in Random By Element mode with dynamic geometry produces incorrect results
- Crash in V-Ray GPU IPR with BF+BF and refractive glossy VRayMtl when changing translucency modes
- Difference between CPU and GPU with VRayMultiSubTex Random By Element and non-default motion blur geometry samples

### **V-Ray, Interactive**

- Preview object disappears when switching extra options on and off

### **VRayLightIES**

- Once changed, IES Light Shape option can not get back IES From file parameter.

### **VRayProxy, VRayVolumeGrid**

- Making a Proxy/Decal/Volume Grid editable results in deleting any object in the hierarchy under them

### **V-Ray, VRayTextures**

- Bitmap filtering doesn't work

### **VRayLightRectangle, VRayLightSphere**

- Cryptomatte masks for lights are not working in V-Ray GPU

### **VRayVolumeGrid**

- The user attributes assigned to the simulator/volume grid aren't accessible through the VRayUserXXXX textures
- Render artifacts with Adaptive dome light and Particle Shader in Fog mode in a specific scene

## **Build 6.00.05**

*Official release, hotfix 4*

**Date** - Apr 26, 2023

## **New Features**

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## V-Ray

- Light is selectable via Light lister name

## Modified Features

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## V-Ray

- Create V-Ray Tags submenu in Cinema 4D 2023
- Update End User License Agreement

## Bug Fixes

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## V-Ray

- Preview object disappears when switching extra options on and off
- V-Ray interactive only utilize half of the threads on AMD 3990x
- Team Render doesn't save single frame render output
- TX Textures stop the rendering process
- Node Light Material uses transparency instead of opacity
- Node material assets are not renamed from Project Asset Inspector

## V-Ray GPU

- Render stuck when specific nodes are used for 2D displacement

## V-Ray GPU, VRayTextures

- Rendering animation stops in the middle of the "Loading bitmaps" stage

## VRayTextures

- VRayDirt's "Ignore Self Occlusion" does not work

## Build 6.00.04

*Official release, hotfix 3*

**Date** - Feb 08, 2023

## New Features

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## V-Ray

- Add support for the TriPlanar Mapping option for the Cosmos materials

## Modified Features

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## V-Ray

- Help links for the Node Materials
- Add the Phase Function parameter to V-Ray VolumeGrid

## V-Ray Volume Grid

- Change the default of the 'Scatter Depth' to 0 in the VolumeGrid for Cinema 4D for better cloud rendering

## Bug Fixes

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### Legacy Scene Converter

- Converted legacy scene is corrupted and crashes after render

### Render Elements

- Render elements are exported with the same name, causing issues with Chaos Cloud rendering

### V-Ray

- Fix deadlock in GeomParticleSystem in streaks mode, when no velocity channel is present
- Some quick help links are not working correctly
- Incorrect alpha and specular conversion of native Cinema 4D materials

### V-Ray GPU

- UVW mapping for Scanned materials is not working properly with V-Ray GPU

### V-Ray Layered Tex

- VRayLayeredTex shader adds a new layer in incorrect order

## Build 6.00.03

*Official release, hotfix 2*

**Date** - Dec 21, 2022

### Modified Features

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#### V-Ray, Render Elements

- Improve the user interface of the MultiMatte render element

## Bug Fixes

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#### Chaos Cloud, V-Ray

- VFB animation outputs different number of frames when having custom framerate

#### V-Ray

- V-Ray MultiSubTex node doesn't work in Cinema4D S22 and R23
- Error message when creating V-Ray Node Blend material
- Orthogonal cameras do not work with V-Ray GPU interactive in Cinema4D
- Improve responsiveness for multithreaded CPUs

## Build 6.00.02

*Official release, hotfix 1*

**Date** – Dec 08, 2022

### Modified Features

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#### V-Ray

- Expose TriPlanar reference object parameter
- Add support for importing TexEdges shaders
- Support Max procedural textures that are being used in Cosmos in Cinema4D
- Import flakes material from Cosmos library
- Viewport editor preview for V-Ray Decal
- Import Decals from the Chaos Cosmos library
- Add "Fit aspect ratio" buttons in V-Ray Decal
- V-Ray Fur for Cinema 4D should have Enable/Disable Checker
- Support for Isometric Camera

## V-Ray Interactive

- Read material max depth override settings

## V-Ray GPU

- Support for Affect All Channels
- Implement auto bump mapping for smoothed and displaced meshes

## Bug Fixes

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### V-Ray

- Standard instances of deforming geometry do not update in animation
- Animated instances and particles may not update in animation
- LightMix Back-To-Scene does not work with MeshLight
- Save Project with Assets doesn't save the Cosmos Asset vrmeshes from the scene
- Importing a 2-sided material from Cosmos results in duplicated materials
- Interactive renderer crashes with decal while deleting assigned material
- Making changes to a Cinema 4D standard material or light causes 5 to 10 second freeze during Interactive Rendering
- Materials for the recently added Cosmos assets are imported incorrectly
- Import VRayCarPaint2 materials from the Cosmos library
- Spherical camera selected with Stage may not consider Physical camera tag
- Stage animation of cameras lost in Vantage
- V-Ray proxies lose their assigned material after the scene is saved with all assets
- Use "Camera focus distance" option from Overrides settings does not affect the render
- Low CPU utilization with Intel Alder Lake CPUs on Windows 11

### V-Ray, Interactive

- Crash when tweaking lights during interactive rendering and LightMix enabled

### V-Ray GPU

- Fix broken Samples limit value when opening scenes saved with V-Ray 6
- Light Cache crash with a specific scene

### LegacySceneConverter

- The V-Ray scene converter doesn't convert a specific scene in V-Ray 6
- Scene conversion dialog isn't displayed on scene open with Cinema 4D S26

### VRayProxy

- Longer render and load time with Alembic compared to Vrmesh
- Compile geometry is slow when there are 735 proxy files referencing the same vrmesh file

## Build 6.00.01

*Official release*

**Date** - Sep 28, 2022

## New Features

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### V-Ray

- Support for ACEScg
- Implement V-Ray Decal
- Implement V-Ray Enmesh
- Implement V-Ray Mesh Light
- Procedural clouds for V-Ray Sun and Sky
- Finite Dome and ground projection for the V-Ray Dome light
- Add Thin Film layer to V-Ray Material
- Implement V-Ray MultiSubTex for Node materials

- Conversion from Standard and Classic V-Ray materials to V-Ray Node materials
- Add V-Ray Shadow Catcher command in the V-Ray menu
- Add TexParticleSampler shader
- Implement V-Ray SoftBox node and shader
- Add support for Cinema 4D Team Render
- Support for rendering Particles and X-Particles in Cinema 4D
- Implement Hair and Fur sampler for strand variations
- Support for calculating Light Cache with the Interactive renderer
- Calculate Light Cache on the GPU device for the V-Ray GPU engine
- Support for Cinema 4D 2023
- Add support for TexOCIO plugin
- Implement Texture Baking
- Toolbar for V-Ray for Cinema 4D
- Add SamplerInfo shader and node

#### **V-Ray, Interactive**

- Implement Object, Material and Focus picker inside the V-Ray Frame Buffer

## **Modified Features**

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#### **V-Ray**

- Support for the "Render Perfect" option for the Cinema 4D Sphere
- Add option to respect displaced surfaces in TexTriPlanar
- Add the affect alpha option to Volumetric objects
- Rework the Object Properties icon to support displaying more than 9 ObjectID numbers
- Automatically flip coordinate system handedness for vrscenes exported from a host app with different coordinate system
- Replace min and max subdivs with samples limit for V-Ray GPU
- Remove trace and GI depth from interactive tab
- Intermediate render output should have final color corrections
- Material preview quality improvements
- Add support of include/exclude lists for reflection and refraction in object properties
- Add ID input texture to MultiSubTex
- Convert DropDown menus to QuickTab Buttons for some parameters
- Ability to add the current selection as input objects when creating V-Ray Fur or V-Ray Enmesh
- Ability to denoise the Alpha channel with the V-Ray Denoiser
- Temporal denoise mode for NVidia AI Denoiser
- Rename the "Use Mtl Id" to "Use Multimatte ID" checkboxes
- Create scene importer for scanned materials

#### **V-Ray, VRayProxy**

- Add support for multi sub tex plugins from Cosmos Assets

#### **VRayMtl**

- Change coat and sheen glossiness name to roughness when "use roughness" is enabled

#### **VRaySun**

- Improve the viewport locator for the V-Ray Sun to display the sun vector

#### **V-Ray GPU**

- Autovoxelize dynamic geometry in V-Ray GPU

#### **V-Ray GPU, VRayTextures, Displacement and Subdivision**

- Implement auto bump mapping for smoothed and displaced meshes

#### **VRayProxy**

- Shader set generation option in proxy export

#### **VRayVolumeGrid**

- Enable Probabilistic Volumetrics by default for new scenes

## **Bug Fixes**

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#### **V-Ray**

- Object leftovers between frames in animation
- V-Ray clipper doesn't work for more than 1 frame in animation in mesh mode
- Diffuse artifacts with anisotropic reflections and sheen or diffuse roughness
- Reflections computed in fully diffuse VRayMtl materials
- Issues with Anti-aliasing when using VRayCryptomatte mask on objects with multiple materials
- Missing values in exported vscenes
- Imported Sphere and Rectangle Lights have wrong intensity
- Cosmos browser asks for cookies on each process restart
- Scanned material should be able to work with relative paths
- Change the step size for the "Multiplier" and "Burn Value" in Color Mapping
- Cinema 4D crashes in Interactive Rendering with Subdivision and Fur
- Crash when V-Ray Fur is a hierarchy added to object
- Darker Buckets appear on M1 Mac Machines with Adaptive lights
- Crash when adding modifiers to geometry with Fur in Interactive
- Identical meshes with different polygon selection names export the same geometry
- Changing the V-Ray physical camera focus distance from the Cinema 4D focus picker doesn't work
- Material link parameters can't be cleared in interactive rendering
- Implicit focus distance may result in inverted camera render

## **V-Ray, Render Elements**

- Add input options for Material Select RE

## **V-Ray GPU**

- V-Ray Sun disk is not rendered with V-Ray GPU
- Instanced textured V-Ray lights don't share loaded textures
- Clipped light geometry when 'Clip lights geometry' option is disabled and non-light geometry is in front of lights
- Wrong fog color alpha results when refraction set to affect all channels
- The alpha of a transparent VRayMaterial is not working correctly
- Some threads never finish with "Low GPU thread priority" set to 1
- Wrong V-Ray Clipper material on clipped V-Ray Light objects when set to Use object material