

# What's New

## Release Notes for V-Ray 5 for Unreal, update 1

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*Official Release*

**Date** – January, 2022

[Download Build 5.10.01](#)

### New Features

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#### Unreal Engine

- Support for Unreal Engine 4.27



#### Geometry

- Initial support for Skeletal Meshes



#### Render element

- Implemented Light Mix render element and LightMix Source in VFB



### Modified Features

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#### Performance

- Optimized Interactive rendering performance and responsiveness

## Fixes

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### Installer

- Bug with auto detection the Unreal Engine's installation directory

# Release Notes for V-Ray 5 for Unreal

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*Official Release*

**Date** – August, 2021

## New Features

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### V-Ray

- Updated V-Ray core to version 5.10.03
- Blue Noise Sampling
- Initial Out of core support (only V-Ray proxy geometry)
- Improved Trace depth for reflection and refraction rays

### New VFB

- New implementation of VFB with integrated Layers compositing



## Denoiser

- Implemented Intel® Open Image Denoise

### Geometry

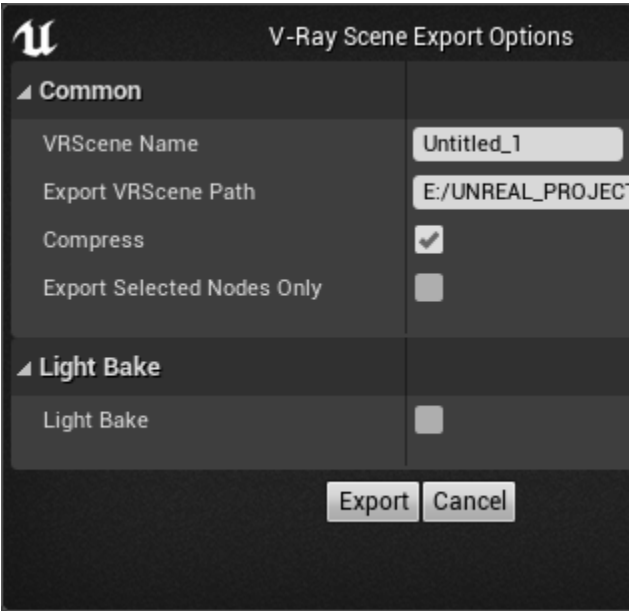
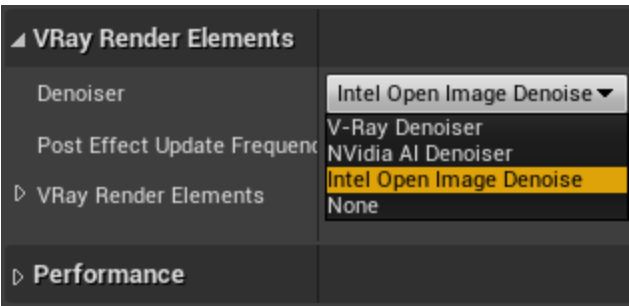
- Support for geometry pivot offset

### Materials

- Support for Coat layer in VRayMtl

### Export .vrscene

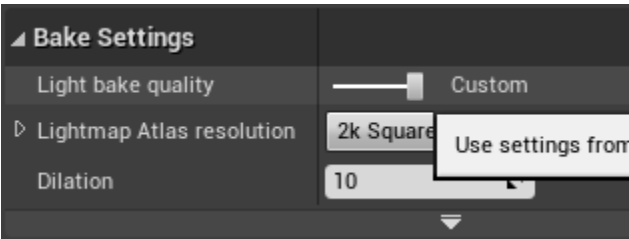
- Added export only selected nodes to .vrscene



## Modified Features

### V-Ray Bake

- Implemented Custom preset that takes settings from **V-Ray Settings** tab



### Installer

- Updated Installer







#### License Server

- Updated Online License Server in installer to 5.5.4

#### Chaos Cloud

- Updated Chaos Cloud Client in installer to 1.13.0

## Release Notes for V-Ray Next for Unreal, update 3.2

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*Official Release*

**Date** – March, 2021

### New Features

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#### Unreal Engine

- Support for Unreal Engine 4.26



## Modified Features

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### License Server

- Updated Online License Server in installer to 5.5.3

### Chaos Cloud

- Updated Chaos Cloud Client in installer to 1.1.0

## Release Notes for V-Ray Next for Unreal, update 3.1

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### Official Release

**Date** – October, 2020

## Modified Features

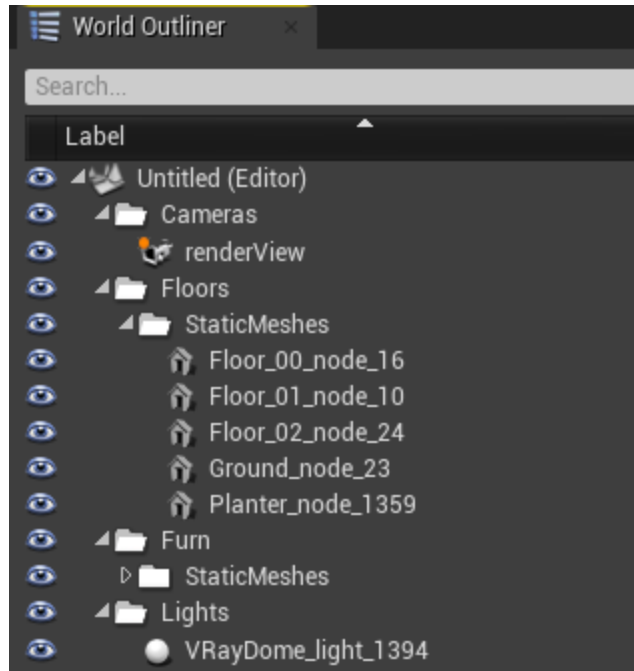
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### Installer

- Improved installer initialization speed

### .vrscene Import

- Grouping of objects in World Outliner based on type and layers in host DCC



#### **.vrscene Export**

- Improved exported .bat file when exporting light bake atlas .vrscenes

## **Bug Fixes**

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#### **V-Ray Bake**

- Light map EXRs modified in Photoshop import as black
- **Process Atlases** not extracting EXRs from a very long path
- Failed to export EXRs to a non-latin name path

#### **.vrscene Import**

- Crash on reimport of Light mesh in UE 4.25

#### **.vrscene Export**

- Port number doesn't export correctly in generated .bat file

## **Release Notes for V-Ray Next for Unreal, update 3**

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*Official Release*

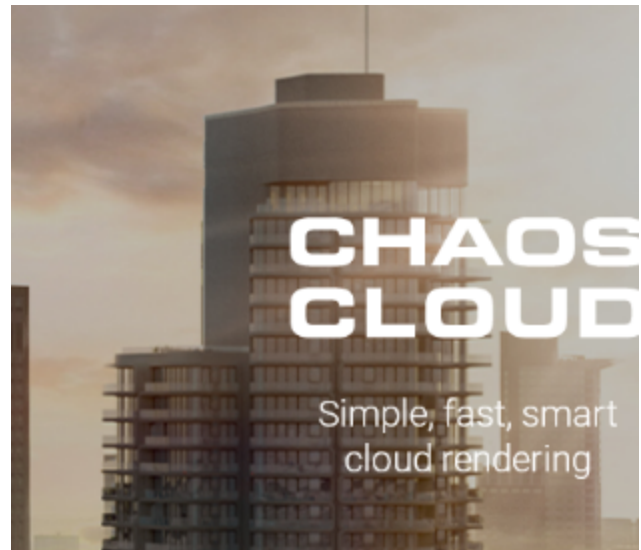
**Date** – June, 2020

## **New Features**

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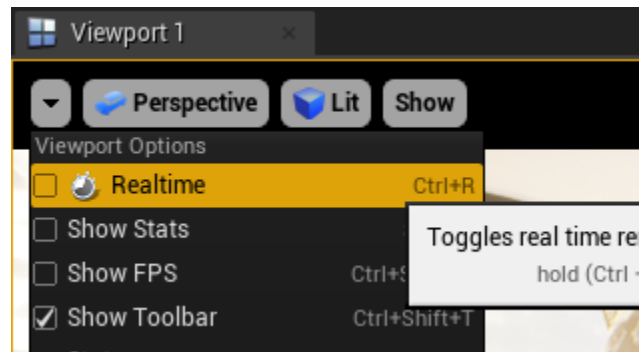
## Chaos Cloud

- Support for Chaos Cloud - Rendering and Light baking [i](#)



## UX

- Notification if the user is rendering in the viewport with disabled realtime option

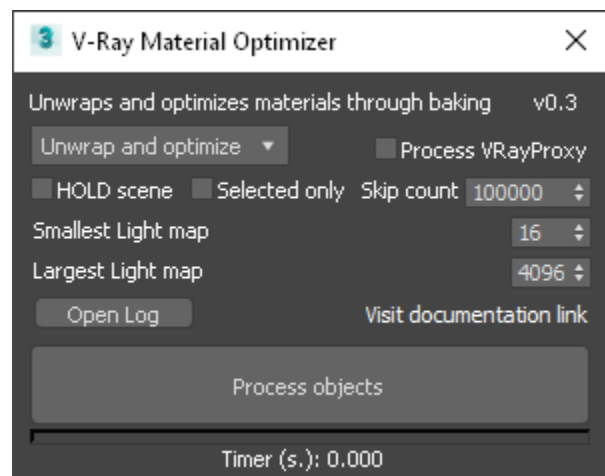


## Materials

- Added SideColor option representing Fresnel in VRayMtl [i](#)

## MAX Script

- V-Ray Material Optimizer MAX script for texture baking and material simplification [i](#)



## Modified Features

### License Server

- Updated Online License Server in installer to 5.5.0

## Bug Fixes

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### Materials

- Serialization mismatch crash in certain situations with **Alpha Composite** blend mode in **V-RayMtl**
- Refraction input clamping colors above 1.0

### Lights

- LightMesh not exporting correctly when set to "Invisibl"

### Installer

- Standalone Render Server installation fails to locate vray.exe

## Release Notes for V-Ray Next for Unreal, update 2.7

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*Official Release*

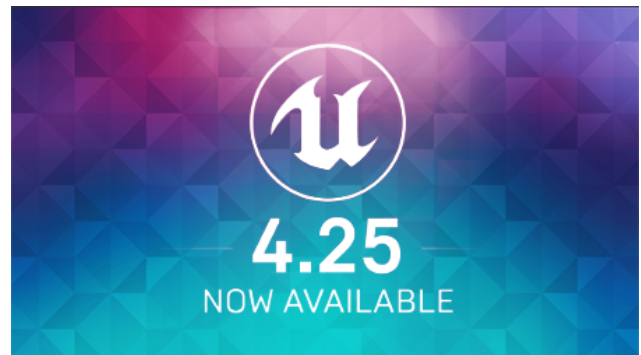
**Date** – May, 2020

## New Features

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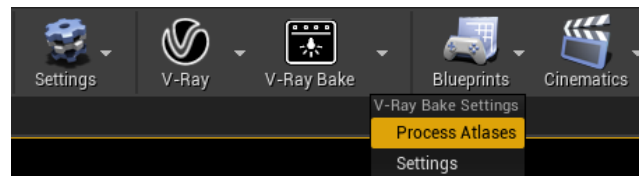
### Unreal

- Support for Unreal Engine 4.25

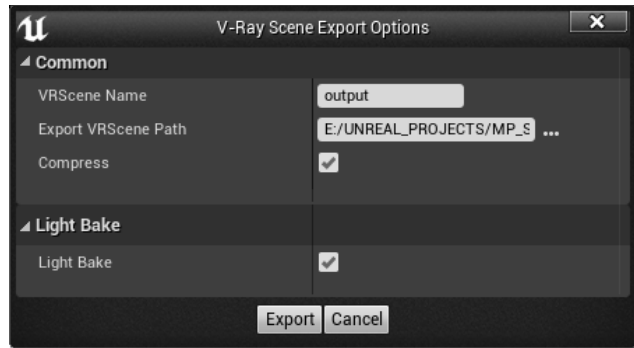


### V-Ray Bake


- Process Atlases - Extract light maps from single or multiple atlases saved in .exr files [!\[\]\(9cc0308e647881098efb3200229312e5\_img.jpg\)](#)

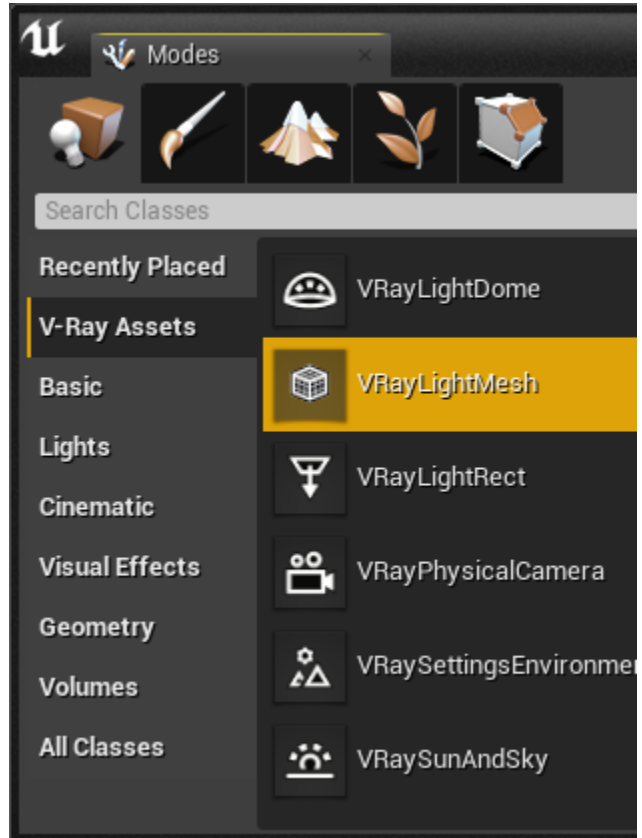



- Export Light bake .vrscenes from the **V-Ray Scene Export Options** [!\[\]\(2810827b83541c0dce997fe5e3a41ea5\_img.jpg\)](#)

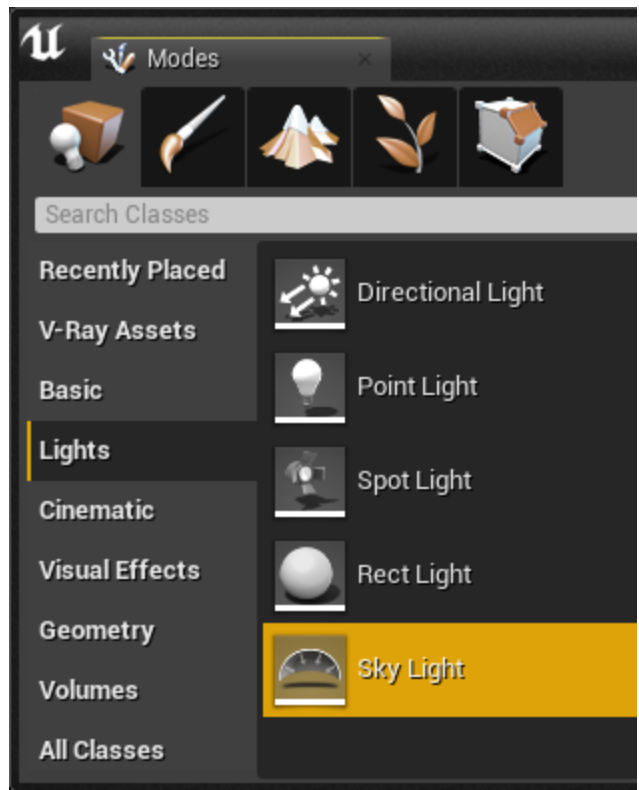


## Lights

- Support for V-Ray mesh lights 

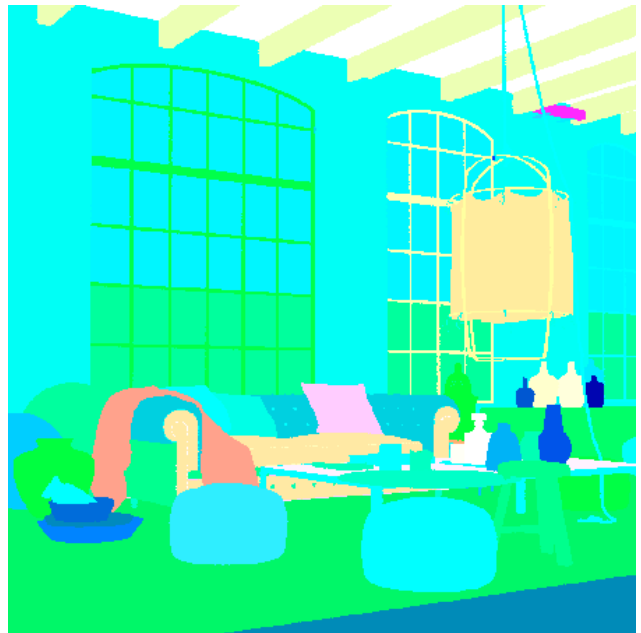


- Support for Unreal Sky light 



## Render Elements

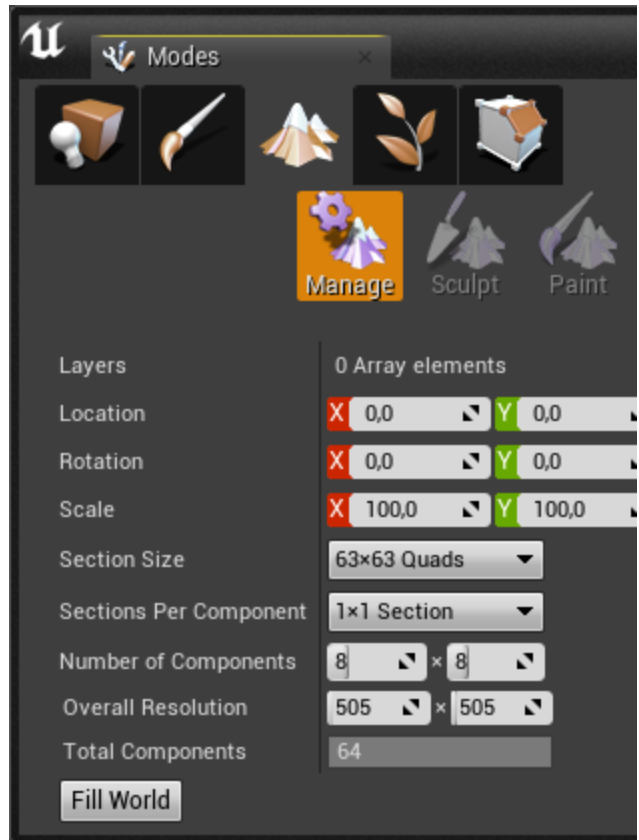
- Support for Cryptomatte render element [i](#)



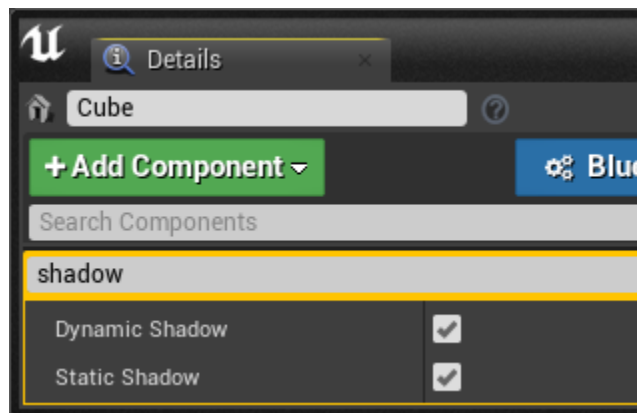
## Geometry

- Initial support for Unreal Landscape Actor [i](#):
  - Landscape specific material expressions: LandscapeLayerBlend, LandscapeLayerCoords, LandscapeLayerSwitch, LandscapeLayerWeight, LandscapeVisibilityMask are not yet supported.





- Support for Static and Dynamic Shadow casting for Actors



## Packaging

- V-Ray materials can now be packaged for mobile platforms

## Modified Features

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### .vrscene Import

- Imported static meshes have assigned materials

## Bug Fixes

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### V-Ray Bake

- Crash when aborting light bake

### Geometry

- Error when hidden Brush geometry

## Release Notes for V-Ray Next for Unreal, update 2.6

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*Official Release*

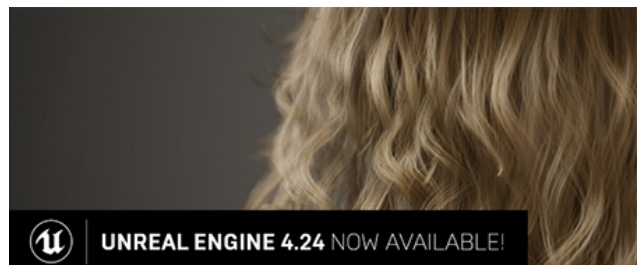
**Date** – January, 2020

### New Features

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#### Unreal

- Support for Unreal Engine 4.24



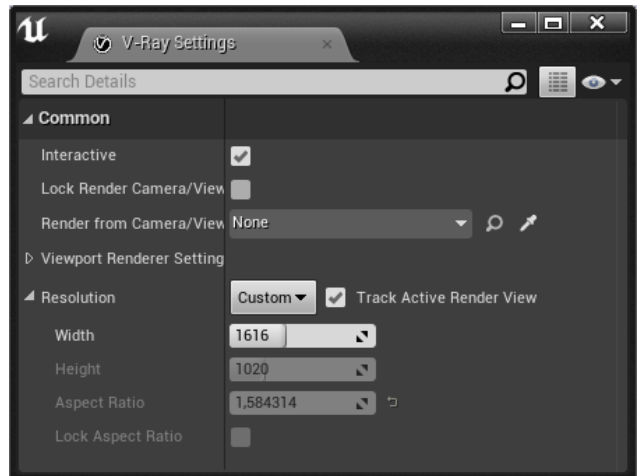
#### Geometry

- Support for Unreal Brushes geometry



## UI

- Track Active Render View option to get the current render view aspect ratio being it either camera filmback settings or viewport in **V-Ray Settings** [i](#)




## Modified Features

### V-Ray

- Improved speed on render and `.vrscene` export initialization

### .vrscene Export

- Generates `.bat` file to be used in standalone rendering 

## VFB

- Improved speed when opening VFB

## Bug Fixes

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### V-Ray

- VFB history and adjustments settings resets when closing
- Unreal material with Unlit shading model not generating GI
- Export failed for Cube Texture with Default compression settings
- Rendering expressions in different Normal spaces
- Crash when rendering substance materials

# Release Notes for V-Ray Next for Unreal, update 2.5

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*Official Release*

**Date** – December, 2019

## New Features

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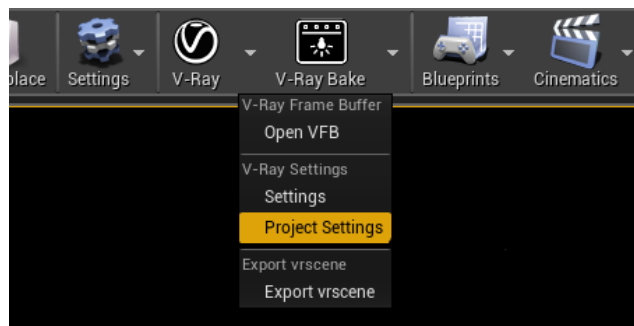
### Texture

- Support for Color Corrections in Unreal texture asset editor
  - Brightness
  - Brightness Curve
  - Vibrance
  - Saturation
  - RGBCurve
  - Hue

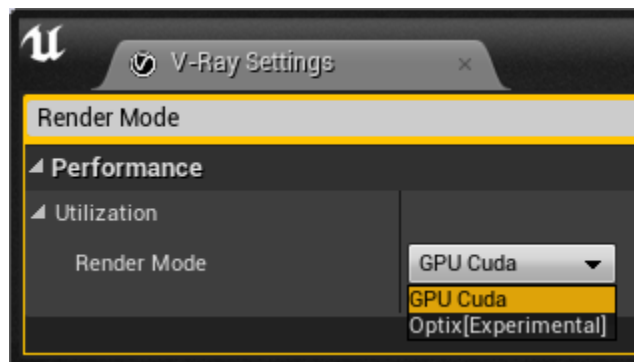


## UI

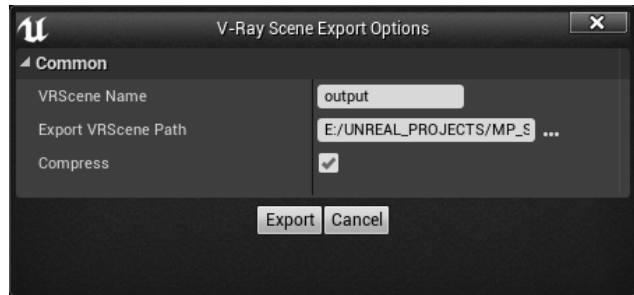
- Added shortcut from V-Ray drop-down menu to in Project settings



- OptiX render mode (Experimental) in V-Ray Settings tab



- Dedicated button and dialogue window to save .vrscene file



## V-Bake

- Support for generating low quality(mobile) lightmaps when lightbaking

## Modified Features

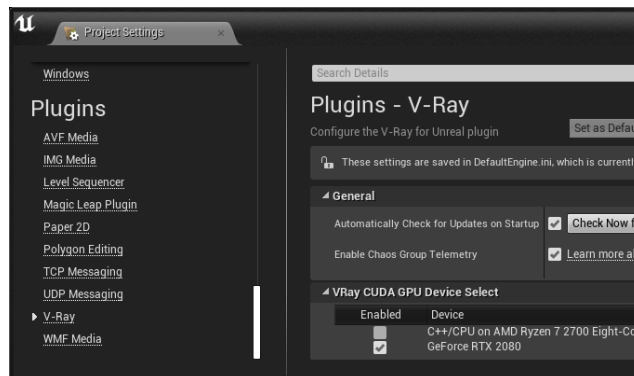
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### V-Ray

- Improved speed when using Unreal materials in render and lightbake

### UI

- Moved **VRay CUDA GPU Device Selection** to V-Ray category in **Project Settings** 



### .vrscene Import

- Better .vrscene import progress reporting and monitoring

## Bug Fixes

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### .vrscene Import

- Crash when importing meshes without normal data

### V-Ray

- Bugs with Normal map input producing incorrect shading
- "Affects World" property in Unreal lights not updating in IPR
- Bug with Dome light texture rotation in interactive does not update properly

- Crash when switching levels while rendering using V-RayPhysicalCamera
- Bug "Use Custom Start Frame" option in Sequencer not exporting properly
- Exposure not exporting correctly in Sequencer animation when using "3d Max Compatible" in V-RayPhysicalCamera
- Exception in CORE when network error occurs and bitmaps fail to load
- Directional light renders black with certain color values
- V-Ray material thumbnail preview mesh might randomly disappear

## Release Notes for V-Ray Next for Unreal, update 2.4

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*Official Release*

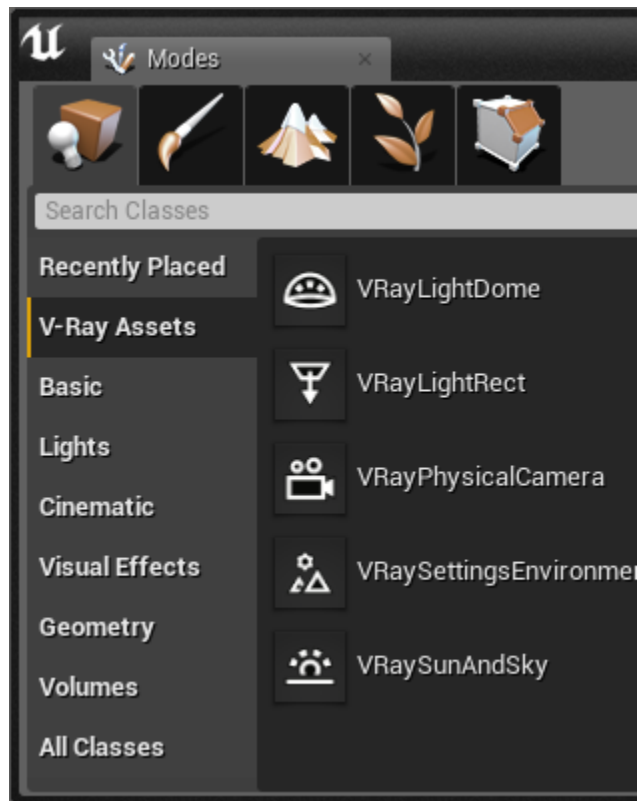
**Date** – November, 2019

### New Features

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#### UI

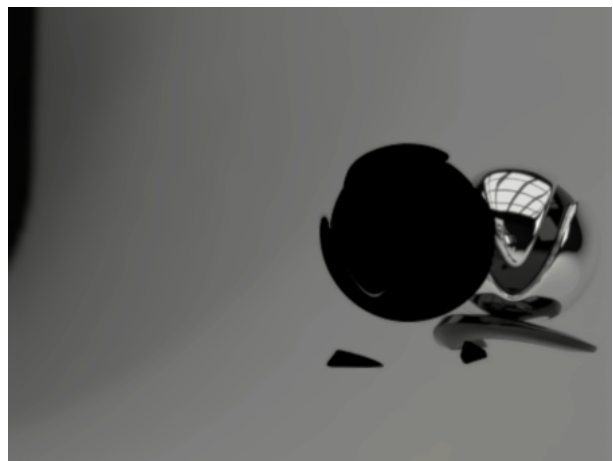
- Added V-Ray Icons in **Modes** panel to **V-Ray Assets** [i](#)



#### Camera

- Added Near Clip Plane functionality to V-RayPhysicalCamera [i](#)

100  
300



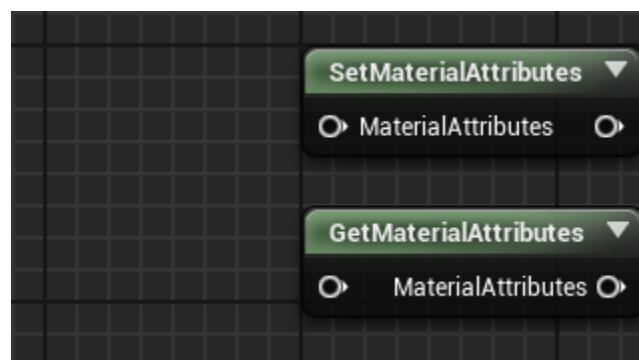
VRayPhysicalCamera Near Clip Plane Value

## Modified Features

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### V-Ray

- Support for Unreal expressions – SetMaterialAttributes, GetMaterialAttributes [i](#)
- Improved speed when using Unreal materials in render and lightbake



### V-Ray Bake

Before



## Current

- Improved visual quality of shadows when lightbaking



## Bug Fixes

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### V-Ray Bake

- Fixed crash when rebaking actors and loading lightmaps

## Release Notes for V-Ray Next for Unreal, update 2.3

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*Official Release*

**Date** – October , 2019

## New Features

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### V-Ray

- Support for Unreal Engine 4.23 (Recommended use after 4.23.1)
- Support for import automation of vrscene via python script [i](#)

- Automatic saving of rendered still images in Unreal viewport when in non interactive mode ⓘ
- In-product update notifier ⓘ

## Lights

- Support for Temperature parameter in native Unreal lights

## UI

- Functionality to cancel vrs scene import ⓘ

## Modified Features

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### UI

- Modified UI of V-Ray Scene Import Options dialog ⓘ
- Animated render states for V-Ray Bake icon ⓘ

### V-Ray

- Support for Unreal expressions – RotateAboutAxis ⓘ

### Installer

- Updated Online License Server in installer to 5.2.3

### V-Ray Bake

- Improved speed processing and storing of rendered lightmap atlases ⓘ

## Bug Fixes

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### V-Ray

- Missing V-Ray CUDA GPU Device Select from UI
- Actors with same ID Names not exporting correctly
- Incorrect render elements settings when rendering sequencer animation
- Crash when closing Unreal while rendering
- Crash when Render Element Light Select has listed lights that are hidden in the level
- V-Ray Settings are empty when Project Startup Map is set to None

### Materials

- Missing Shader Balls preview in Content Browser for V-Ray Materials

## Release Notes for V-Ray Next for Unreal, update 2.2

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*Official Release*

**Date** – August 29, 2019

## New Features

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### V-Ray

- Moved to CORE version 4.20
- Render resolution and Lightmap Atlas resolution presets
- Lightmap baking progress bar

#### Geometry

- Support for Cast Shadows option for Static Mesh Actors

#### Textures

- Support for "Flip Green Channel" option in Normal textures

## Modified Features

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#### Import

- Improved the import of GeomMeshFile with identical vmeshes

#### Installer

- Removed the check for running Epic Games launcher when installing the plugin

#### Materials

- Improved support for Unreal expressions - VertexColor, ObjectRadius, ObjectPositionWS

## Bug Fixes

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#### V-Ray

- Static Meshes with zero area UVs cause an Exception in CORE error when light baking
- Camera rotation bug when orbiting around mesh with ALT+Mouse
- Resolution capped to 11585
- Assertion crash with viewport rendering when using DX12
- Preparing scene progress goes above 100%
- Switching between level maps does not stop rendering or baking process
- Two Sided option not exporting correctly with V-RayMtl, V-RayCarpaintUberMtl, V-RayPBRMtl

## Release Notes for V-Ray Next for Unreal, update 2.1

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*Official Release*

**Date** – July 18, 2019

## Bug Fixes

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#### V-Ray

- V-Ray Light Bake memory leak
- Issue with support of multiple GPUs
- Issue with transparent native materials in Light bake

# Release Notes for V-Ray Next for Unreal, update 2

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*Official Release*

**Date** – June 26, 2019

## New Features

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### V-Ray

- Export/import functionality of lightmaps

### Lights

- Rendering of DatasmithAreaLight

### Camera

- Quadratic and Cubic distortion types to VRayPhysicalCamera

## Modified Features

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### V-Ray

- Project path is new default directory for "Export VRScene Path" option

### Lights

- Point Light Source radius working in IPR

### Materials

- Improved support for Unreal expressions - TwoSidedSign, Time

## Bug Fixes

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### V-Ray

- Static meshes with identical names in different folders do not render correctly
- Lights in Blueprints are exported at BP pivot point
- "Use Local Host" option not working in Light bake
- "Cannot send asset" error when in DR
- Incorrect Lightmaps is applied when some level actors are hidden
- CUDA Error 700 when "Export failed for the ... texture"
- CUDA error 700 when baking TwoSidedFoliage material
- "Error in last lightbake: File write error"

# Release Notes for V-Ray Next for Unreal, update 1

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*Official Release*

Date – May 28, 2019

## New Features

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### V-Ray

- Support for Unreal Engine 4.22
- Toggle option for sky in V-RaySunAndSky
- Option to remove local host from DR
- "Transfer Missing Assets" option in DR
- Progress report logging when computing long task
- Directional parameter in V-RayLightRect
- Light options to V-Ray Lights - Affect Diffuse, Affect Specular, Affect Reflections
- Support for Specular Scale for Unreal lights

## Modified Features

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### V-Ray

- Viewport rendering with Translucent shading model
- Speed and memory utilization when V-Ray Light Bake
- Support for Unreal shading models - Subsurface, Two Sided Foliage
- Support for Unreal expressions - Pixel Depth
- UI layout in V-Ray Settings and V-Ray Light Bake Settings

## Bug Fixes

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### V-Ray

- Bug with lightmaps having offset
- Performance slow down during UV tree preparation in V-Ray Light Bake
- Crash in cooked games packaged in Shipping configuration
- Issues with metallic or highly reflective materials to appear black after V-Ray Light Bake
- Intensity mismatch between viewport and render when using Directional Light

## Release Notes for V-Ray Next for Unreal, update

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*Official Release*

Date – March 13, 2019

## New Features

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### V-Ray

- Viewport rendering functionality
- Support for Unreal tonemapper and post effects (in viewport rendering only)
- Dedicated V-Ray Bake settings
- Telemetry

## Modified Features

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### V-Ray

- Dome Tex Resolution parameter in VRayLightDome blueprint
- Functionality for creating, deleting and hiding actors in the level while in IPR rendering
- Support for "Tangent Space Normal" checkbox option in Material
- Support for Unreal expressions: Arccosine, Arcsine, Arctangent, Arctangent2, Logarithm2, Tangent, World Position

### Installer

- Updated Online License Server in installer to 5.2.2

## Bug Fixes

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### V-Ray

- "Launch V-Ray Render Server (Unreal)".exe file path
- Issue with Sky texture not updating in IPR
- Issues when using Normal maps in Materials

## Release Notes for V-Ray Next for Unreal, Hotfix 3

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*Official Release*

**Date** – February 01, 2019

## New Features

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### V-Ray

- Support for rendering Unreal materials with V-Ray Hybrid rendering on both CPU and GPU
- Added the VRayMtl, VRayPBRMtl and VRayCarPaintMtl to the V-Ray Category in the Add New drop down menu in the Content Browser

## Modified Features

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### V-Ray

- Support for Unreal Shading Models: Clear Coat
- Interactive update for native Unreal materials.
- Support for Unreal expressions: Bump Offset, CameraPositionWS, ConstantBiasScale, ReflectionVectorWS, Screen Position, SphereMask, TransformVector, VertexNormalWS, ViewProperty
- Error reporting for unsupported Unreal materials, expressions, blend modes and shading models

### Installer

- Updated Online License Server in installer to 5.2.1

## Bug Fixes

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### V-Ray

- Errors due to NVidia driver dependencies
- Crashes if unsupported expressions, blend modes and shading models are used

## Release Notes for V-Ray Next for Unreal, Hotfix 2

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*Official Release*

**Date** – December 05, 2018

## Modified Features

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### V-Ray

- Support for Unreal Engine 4.21
- Interactive update for native Unreal materials.
- Support for Unreal expressions - Ceil, Floor, FMod, Frac, If, Min, Round, Sign, Truncate expressions

### Light Bake

- Improved speed of light bake

## Bug Fixes

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### V-Ray

- V-Ray exporter in sequencer
  - Export for custom start frame
  - Export for sequencer camera cuts using multiple cameras
  - Difference in color space in VFB and saved image
  - VRay CUDA GPU Device Select not working with sequencer animation

## Release Notes for V-Ray Next for Unreal, Hotfix 1

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*Official Release*

**Date** – November 15, 2018

## Modified Features

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### V-Ray

- Responsiveness of UI during interactive render

## Light Bake

- Improved speed of light bake

## Installer

- Updated Online License Server in installer to 5.1.2

## Teleport Blueprint

- Updated Teleport BP to get exposure from listed cameras

## Bug Fixes

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### V-Ray

- V-Ray not loading in Unreal if no supported devices are set in device select
  - Fallback to using CPU device if no supported devices are set in device select
- Render Server shortcut not pointing to correct file path

### Light Bake

- Light bake not using devices set in V-Ray CUDA GPU Device Select
- CUDA error during light baking

# Release Notes for V-Ray Next for Unreal

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*Official Release*

**Date** – November 08, 2018

## New Features

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### V-Ray

- Log V-Ray messages in Unreal's Message Log
- **Basic support for importing Displaced Static Meshes**
- **Output a list of the Static Meshes in the atlas currently baked**

## Modified Features

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### V-Ray

- Support for Unreal Materials - Masked, Translucent, Alpha Composite Blend Modes and Unlit Shading Model



## Bug Fixes

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### Light Bake

- Crash when light baking Static Meshes with overlapping UVs

## Release Notes for V-Ray Next for Unreal, beta 2

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*Beta release*

**Date** – October 30, 2018

## New Features

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### Light Bake

- Initial implementation of V-Ray Bake

### Materials

- Initial support for Unreal native materials

### Geometry

- Support for Foliage system

### Render

- Initial support for Sequencer animation

## Modified Features

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### Installer

- Request confirmation about version being uninstalled during installation process

### UI

- Reworked UI
- Integrated GPU device select tool in V-Ray Settings
- Global Shadow Bias parameter
- Fallback material for use when rendering unsupported materials
- Quick settings quality presets slider
- Export VRScene path option
- Auto Exposure and Auto White Balance options
- Undersampling option

### Camera

- Support for Depth of Field in VRayPhysicalCamera

### Materials

- Improve parity for V-RayMtl material
- Support for SelfIllumination material
- V-Ray Materials are now included in the packaging/cooking process

## Lights

- Updated V-RaySunAndSky sky model
- Support for Unreal Intensity Units in Lights
- Support for 4.20 RectLight
- Support for Light Source Angle in Directional Light
- Support for default intensity unit at import for Spotlight, Omni, Sphere Light, Rectangle Light

## Geometry

- Improved support for V-Ray Proxy (vrmesh)

## Render

- Update responsiveness and speed of IPR
- Support for interactive mesh material update
- Support for interactive material parameters update
- Stop renderer when noise threshold is reached in non-interactive session

## Render Elements

- Added :
  - NVidia AI Denoiser
  - Background, GI, Lighting, Reflection, Refraction, Specular, Self Illumination, Sub Surface Scattering
  - Diffuse Filter, Reflection Filter, Refraction Filter, Shadows, Atmosphere
  - RenderID
  - Normals, Bump Normals, Sampler Info, Velocity, ZDepth
  - Light Select
  - Sample Rate, Unclamped Color, Noise Level

## VFB

- Dedicated button for opening the VFB
- Always on top VFB

## VR

- V-Ray Teleport Blueprints separated in an additional plugin

# Release Notes for V-Ray Next for Unreal, beta

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*Beta release*

**Date** – April 05, 2018

## New Features

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### vrscene Support

- Automatic convert of materials and lights into real-time equivalents for UE workflows
- Keeping original materials from the imported vrscene connected to their real-time versions and are using them for raytraced rendering

## Camera

- Support for the V-RayPhysicalCamera
- Support for the 3ds Max's Physical Camera
- Initial implementation of exposure and color mapping

## Materials

- Support for V-RayMtl material (including partial V-Ray2SidedMtl)
- Initial implementation of a PBR material
- Initial implementation of an easy to use car paint material
- V-Ray materials are supported natively in UE and are working with Lightmass baking, Lights, Reflection probes, Post process materials, Blueprints

## Lights

- Support for V-RayLightDome, V-RayLightRectangle, V-RayLightSphere, V-RayLightIES, UE Spot light, UE Point light, UE Direct light
- Initial implementation of the V-Ray Sun&Sky system

## Render

- Initial implementation of interactive rendering
- V-Ray Hybrid rendering on both GPU and CPU
- Using the V-Ray Next GPU engine

## Distributed Rendering

- Support for DR

## Render Elements

- Support for the V-Ray Denoiser

## Textures

- Support for V-RayTriplanarTex

## VFB

- Support for the VFB
- Render History window implemented

## VR Mode

- Support for the VR mode in the Unreal Editor