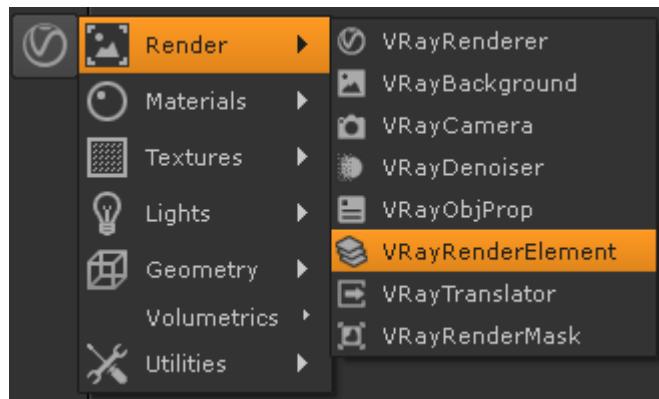


# VRayRenderElement

## Overview

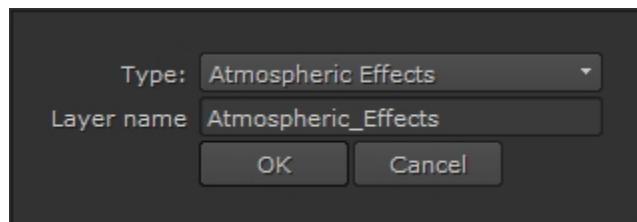
The VRayRenderElement node allows the user to add different render elements to the render output that can be later used for compositing. To use the VRayRenderElement node, connect it to the Scene node and pick the render element you want from the drop down menu.

UI Path: ||Toolbar|| > V-Ray Menu icon > Render > VRayRenderElement



## Render Element Types

When creating a VRayRenderElement node, a prompt allows users to specify which render element to create.



**Layer name** – Specify the name for the render element that will show up in the channels list.

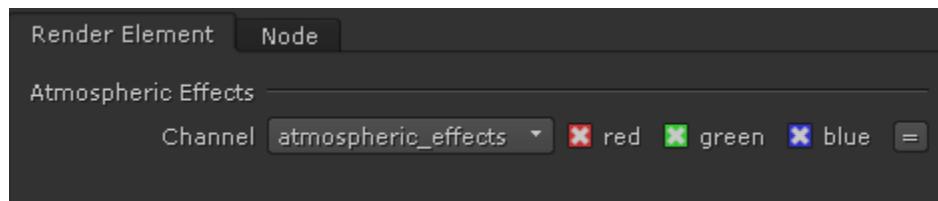
The following render elements can be created:

Render Element Name	Category	Description
Atmospheric Effects	Beauty	Atmospheric effects such as <a href="#">VRayEnvironmentFog</a> .
Background	Beauty	Image background, such as any background textures specified using the <a href="#">Environment Settings   VRayBackground</a> .
Bump Normals	Geometry	Normals generated by bump maps from the camera view.

<b>Caustics</b>	Beauty	The caustics of the material. These caustics are present only when the <a href="#">Caustics</a> option is enabled. This channel does not include GI caustics.
<b>Coverage</b>	Utility	For each pixel, the final values for the render element are taken from the object that makes the largest contribution to that pixel.
<b>Cryptomatte</b>	Matte	Uses the Cryptomatte convention by Psypop to encode mattes into multichannel OpenEXRs
<b>Diffuse</b>	Beauty	Pure diffuse surface color.
<b>Denoiser</b>	Utility	Used to apply a denoising operation to an existing render after the image is completely rendered out.
<b>ExtraTex</b>	Utility	Renders the entire scene with one texture mapped on all objects.
<b>GI</b>	Beauty	The diffuse surface global illumination. Only present if <a href="#">Global illumination</a> is enabled.
<b>GI Raw</b>	Beauty	Raw diffuse global illumination (not multiplied by the diffuse surface color). Only present if <a href="#">Global illumination</a> is enabled.
<b>Light Select</b>	Beauty	Extracts the contribution of a light or a set of lights to the scene to a separate render element.
<b>Lighting</b>	Beauty	Diffuse direct surface lighting.
<b>Light Raw</b>	Beauty	Raw diffuse direct illumination before it's multiplied by the diffuse surface color.
<b>Light Total</b>	Beauty	Total lighting in the scene, both direct and indirect.
<b>Light Raw Total</b>	Beauty	Sum of all raw lighting, both direct and indirect.
<b>Matte Shadow</b>	Beauty	Matte shadow part of the image.
<b>Multi Matte</b>	Matte	Creates selection masks based on an <a href="#">object ID</a> or <a href="#">material ID</a> .
<b>Normals</b>	Geometry	Surface normals in camera space.
<b>Object ID</b>	Matte	Object ID (set through the <a href="#">VRayObjProp</a> node).
<b>Reflection</b>	Beauty	Reflections on the surface.
<b>Reflection Raw</b>	Beauty	Pure surface reflection before it is multiplied by the reflection filter color.
<b>Reflection Filter</b>	Beauty	Reflection filter (the color by which the raw reflections are multiplied to give the final surface reflection). This can be considered an alpha channel for reflections.
<b>Reflection Glossiness</b>	Beauty	Returns a float value that corresponds with the Reflection Glossiness value of an object's material.
<b>Reflection Highlight Glossiness</b>	Beauty	Returns a float value that corresponds with the Highlight Glossiness value of an object's material.
<b>Refraction</b>	Beauty	Refractions of a surface.
<b>Refraction Raw</b>	Beauty	Pure surface refraction before it is multiplied by the refraction filter color.
<b>Refraction Filter</b>	Beauty	The refraction filter mitigates the raw refraction layer. This render element returns the color by which the raw refractions are multiplied to give the final surface refraction. This can be considered an alpha channel for refractions.
<b>Refraction Glossiness</b>	Beauty	Returns a float value that corresponds to the Refraction Glossiness value of an object's material.
<b>Render ID</b>	Matte	Node render ID of the object that contributes most to the pixel value.
<b>SSS</b>	Beauty	Renders just the subsurface part of the VRaySSS2 material on a separate layer.
<b>Sample Rate</b>	Utility	Displays the work being done on the image as it is rendering, and will show the job done when the render completes.
<b>Self Illum</b>	Beauty	Self-illumination of the surface.
<b>Shadow</b>	Beauty	Diffuse light blocked by other objects.
<b>Shadow Raw</b>	Beauty	Raw light blocked by other objects.
<b>Specular</b>	Beauty	Surface specular highlights.
<b>Velocity</b>	Geometry	Surface velocity of an object. This render element is useful for generating motion blur in post-production.
<b>ZDepth</b>	Geometry	Z-depth of the surface.

## Parameters

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**Channel** – Specifies the channel to store the render element.

Additional parameters become available depending on the current render element. See the individual render element pages for additional information.