

VRayMtlWrapper

This page provides some details on the settings available for the utility Material Wrapper in V-Ray.

Overview

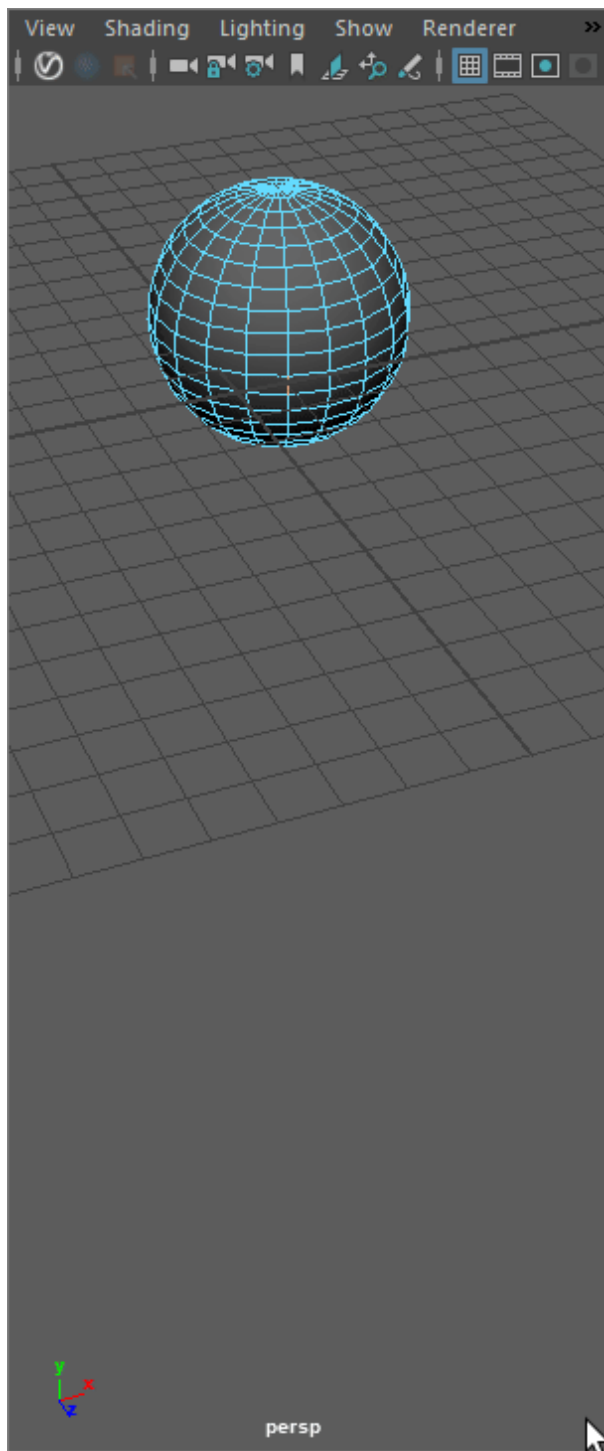
The VRayMtlWrapper can be used to specify additional surface properties per material. These properties are also available with the [VRayObjectProperties](#) node.

Learn more about how to turn objects into Matte objects that receive shadows with VRayMtlWrapper here: [V-Ray Shadow Catcher](#).

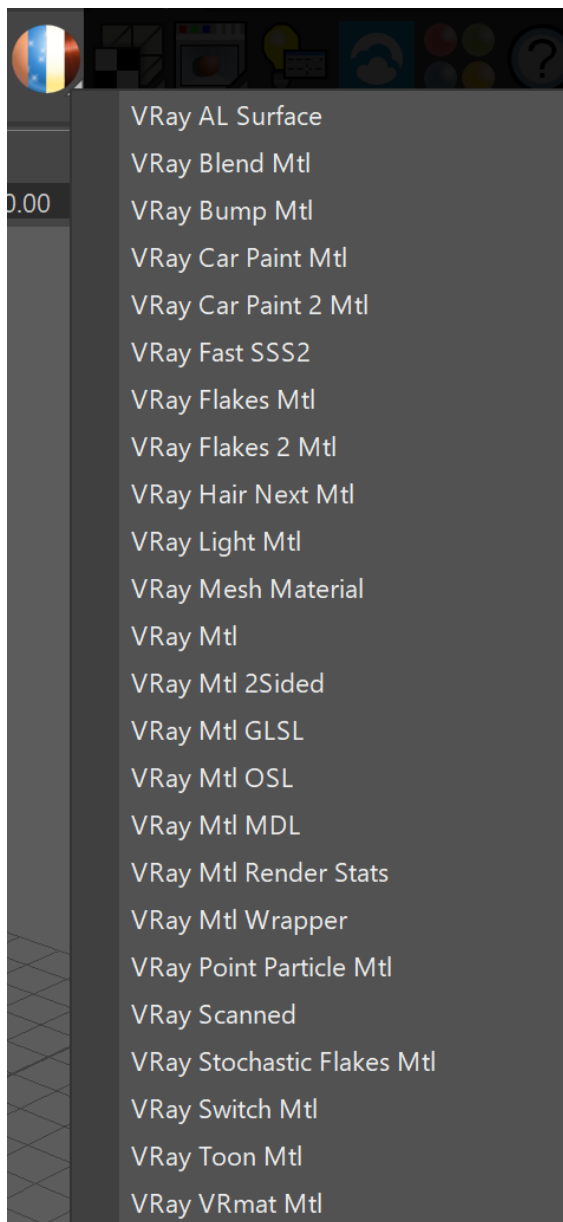


UI Path: ||Right-click on the geometry|| > Assign New Material...

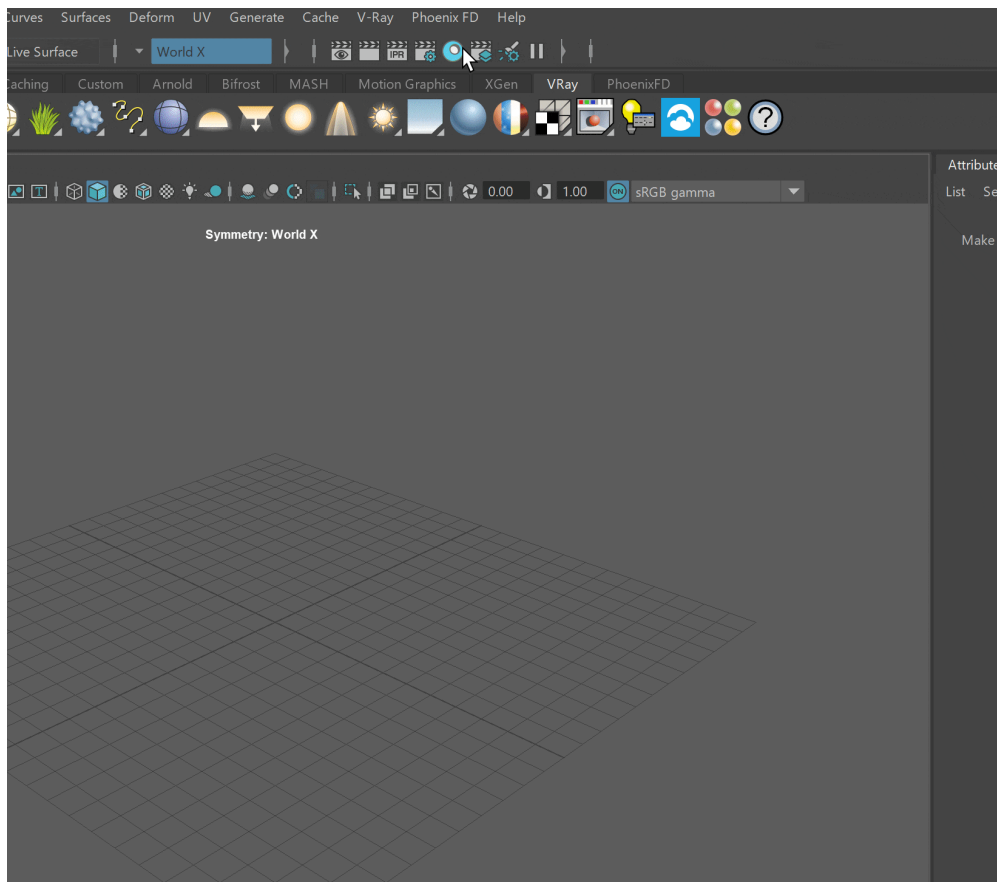
||Right-click on the geometry|| > Assign New Material... > **VRay**
section > **VRay Mtl Wrapper**



||V-Ray Shelf|| > Right-click to **Create V-Ray Materials** button
> **VRay Mtl Wrapper**



||Hypershade|| > **Window** tab > **Create...** > **VRay** section > **VRay Mtl Wrapper**



Base Material

Base material – Specifies the actual surface material.



Matte Properties

Matte surface – Makes the material appear as a matte material, which shows the background, instead of the base material, when viewed directly. Note that the base material is still used for things like GI, caustics, reflections etc.

Alpha contribution – Determines the appearance of the object in the alpha channel of the rendered image. A value of 1.0 means the alpha channel is derived from the transparency of the base material. A value of 0.0 means the object does not appear in the alpha channel at all and shows the alpha of the objects behind it. A value of -1.0 means that the transparency of the base material cuts out from the alpha of the objects behind. Matte objects are typically given an alpha contribution of -1.0. Note that this option is independent of the Matte surface option (i.e. a surface can have an alpha contribution of -1.0 without being a matte surface). V-Ray GPU works with a value of either 1 or -1.

Shadows – When enabled, makes shadow visible on the matte surface.

Affect alpha – When enabled, makes shadows affect the alpha contribution of the matte surface. Areas in perfect shadow produce white alpha, while completely unoccluded areas produce black alpha. Note that GI shadows (from skylight) are also computed, however GI shadows on matte objects are not supported by the light cache GI engine, when used as primary engine. You can safely use it with matte surfaces as secondary engines.

Shadow Tint Color – An optional tint for the shadows on the matte surface.

Shadow Brightness – An optional brightness parameter for the shadows on the matte surface. A value of 0.0 makes the shadows completely invisible, while a value of 1.0 show the full shadows.

Reflection Amount – Shows the reflections from the base material. V-Ray GPU always renders this parameter with a value of 1.

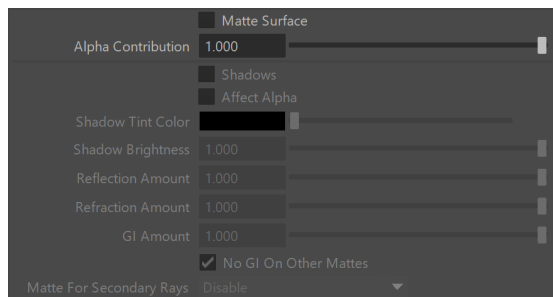
Refraction Amount – Shows the refractions from the base material. V-Ray GPU always renders this parameter with a value of 1.

GI Amount – Determines the amount of GI shadows. V-Ray GPU always renders this parameter with a value of 0.

No GI On Other Mattes – Causes the object to appear as a matte object in reflections, refractions, GI etc for other matte objects. Note that if this is on, refractions for the matte object might not be calculated (the object appears a matte object to itself and is not able to "see" the refractions on the other side). *Not available with V-Ray GPU.*

Matte For Secondary Rays – Normally the base material is used when an object with a V-RayMtlWrapper is seen through reflections/refractions. Turn this option on, if you want the V-RayMtlWrapper to show the environment when seen through reflections/refractions. V-Ray can also do projection mapping to increase the realism.

Adding a **V-Ray material override** as an Extra V-Ray Attribute to the Shading Group of the material, allows for a custom environment to be used. For more information, see the [Shading Group Attributes](#) page.



Additional Surface Properties

The options from this rollout are inactive when the render engine is set to V-Ray GPU.

Use Irradiance Map – When enabled, the Irradiance Map approximates diffuse indirect illumination for the material. If this is off, brute force GI is used. You can use this for objects in the scene which have small details and are not approximated very well by the Irradiance Map.

Generate GI – Controls the GI generated by the material.

Generate GI Multiplier – A multiplier for the amount GI generated by the material.

Receive GI – Controls the GI received by the material.

Receive GI Multiplier – A multiplier for the amount GI received by the material.

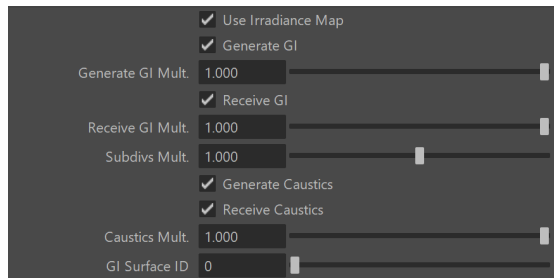
Subdivs Mult. – A multiplier for the subdivisions of all secondary ray tracing done for the particular surface.

Generate caustics – When disabled, the material does not generate caustics.

Receive caustics – When disabled, the material does not receive caustics.

Caustics multiplier – Determines the effect of caustics on the material.

GI surface ID – This number can be used to prevent the blending of [light cache](#) samples across different surfaces. If two objects have different **GI surface IDs**, the light cache samples of the two objects are not blended. This can be useful for preventing light leaks between objects of vastly different illumination.



Miscellaneous

This option is not active when using the V-Ray GPU engine.

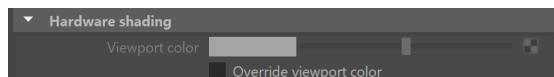
Generate Render Elements – When enabled, V-Ray will generate zDepth, velocity, extra tex and multi matte render element for matte objects. When this checkbox is disabled V-Ray does not generate any render elements for matte objects.



Hardware shading

Viewport color – Specifies the color used in the viewport.

Override viewport color – When enabled, it allows you to specify the viewport color of the material. This option helps visualize more complex shaders in the viewport.



Notes

When creating a matte object with VRayMtlWrapper and using the V-Ray GPU engine, please note the following:

- **Alpha Contribution** should be set to -1.0;
- The **Matte Surface**, **Affect Alpha** and **Shadows** options should be enabled.