VRayOCIO

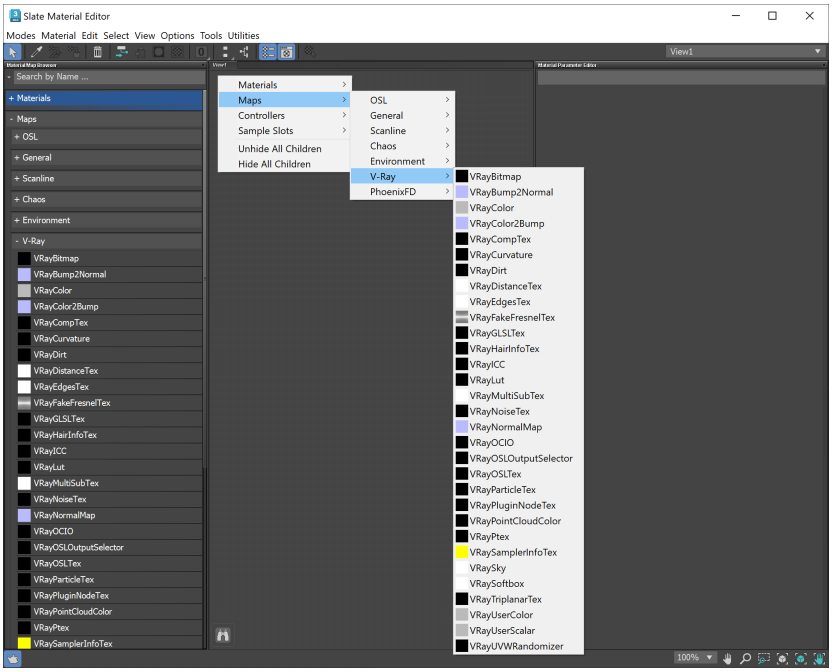
This page provides information on the OCIO Map.

Overview

VRayOCIO is a texture that allows users to apply OpenColorIO (OCIO) color transformations to textures in 3ds Max to manage their look.

In the example shown, an aces_1.0.3.ocio file is used to define the output colors of the texture.

UI Path: ||Material Editor|| > Material/Map Browser > Maps > V-Ray > VRayOCIO



Parameters

Basemap – The base texture that will be corrected.

OCIO config – Manually specifies an OCIO configuration. If not specified, the OCIO environment variable is used.

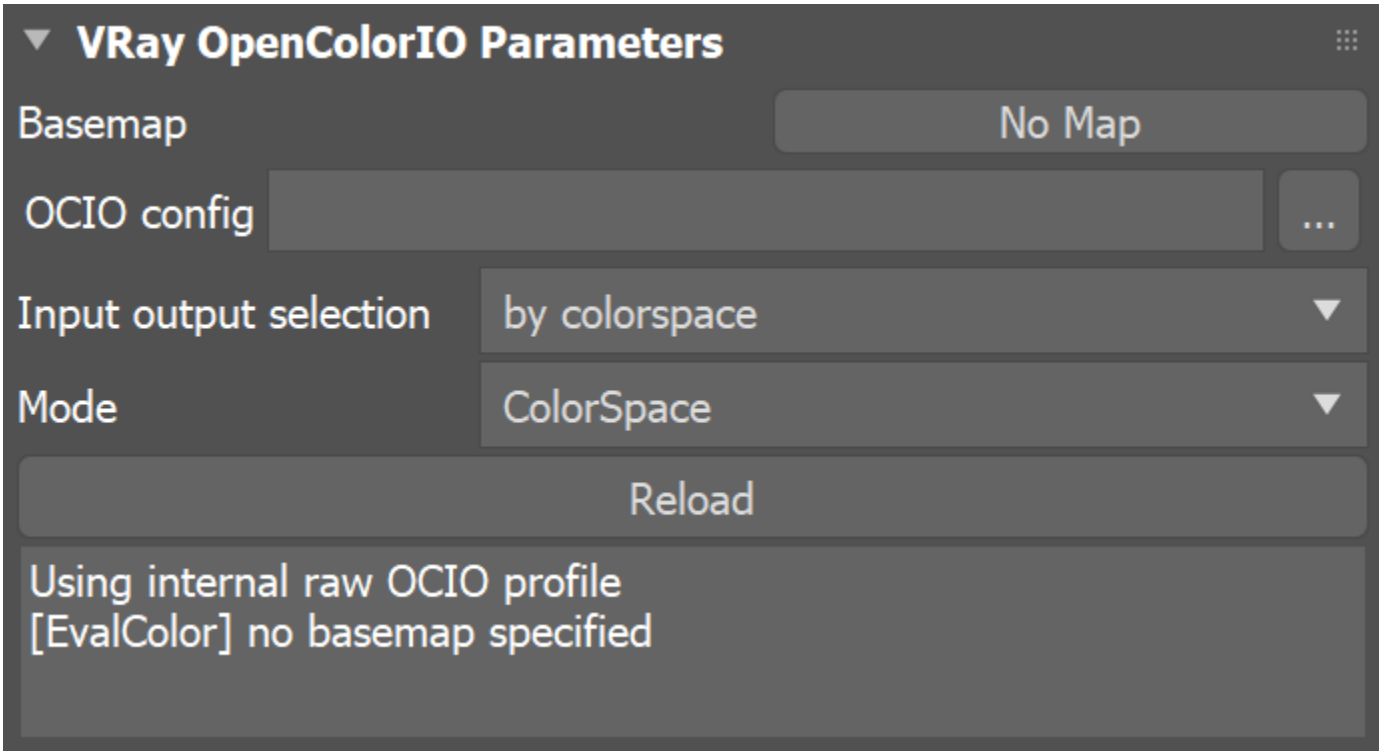
Input output selection – Determines how the input and output color spaces are specified:

> **by color space** – The user specifies the input and output color spaces directly.
> **by role** – The user specifies the input and output color space depending on the task that they want to perform as defined in the OCIO configuration.

Mode – Specifies what color transformations to be performed:

> **ColorSpace** – The texture performs color space conversions.
> **CDL** – The texture performs an ASC CDL transformation. CDL stands for "Color Decision List" which is a color grading information exchange format developed by the ASC (American Society of Cinematographers).
> **FileTransform** – The texture performs a color transformation based on another file (i. e. .3dl, .lut, .cube etc).
> **LogConvert** – The texture performs log2lin or lin2log conversion.
> **Display** – The texture performs color space conversion for display.
> **Look** – The texture performs a look transform. The OCIO config must define looks for this mode to work.

Reload – Reloads the OCIO configuration.



Mode-Specific Parameters

Depending on the chosen **mode**, different parameters are available.

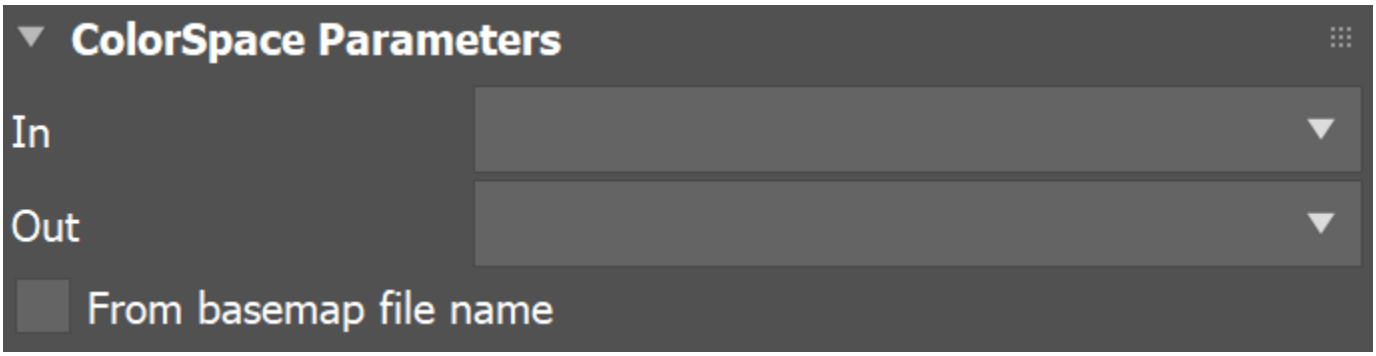
ColorSpace Parameters

These parameters are available when the **Mode** is set to **ColorSpace.**

In – Specifies the input color space (the color space that the input texture is in).

Out – Specifies the output color space (for rendering, this would typically be a linear color space).

From basemap file name – When enabled, the texture tries to determine the correct in/out color spaces based on the file name from the base texture (assuming it is a Bitmap or VRayBitmap texture).



CDLTransform Parameters

These parameters are available when the **Mode** is set to **CDLTransform.**

Slope rgb – Multipliers for the red/green/blue color components.

Offset rgb – Offset values for the red/green/blue color components.

Power rgb – Gamma values for the red/green/blue color components.

Saturation – The saturation value; 0.0 makes the image grayscale.

Use file – When enabled, the CDL parameters are read from a *.cc* or a *.ccc* file instead of specified directly.

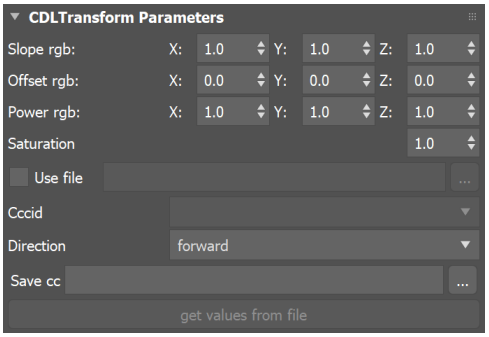
File – Specifies a *.cc* or *.ccc* file to read.

Cccid – Color correction id as specified in the color correction file.

Direction – Specifies whether the forward or the inverse CDL transformation is applied.

Save cc – Allows the CDL parameters to be saved in a *.cc* file.

get values from file – When **Use file** is enabled, this button copies the parameters from the file into the texture parameters so that they can be adjusted if needed.



FileTransform Parameters

These parameters are available when the **Mode** is set to **FileTransform.**

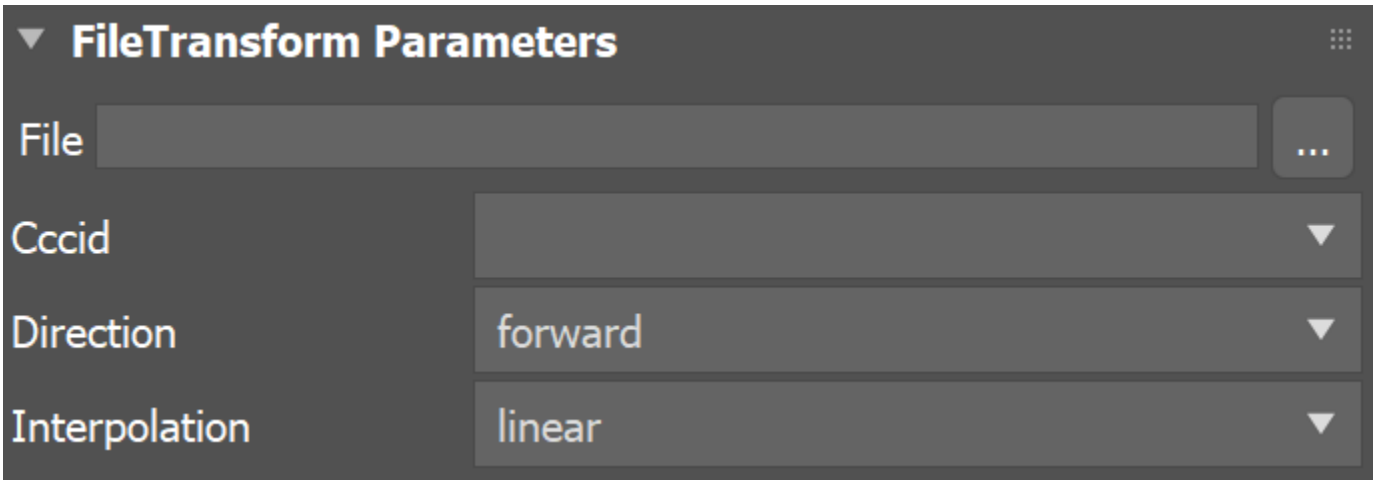
File – Specifies a color transformation file (*.3dl*, *.cube*, *.lut,* etc).

Cccid – Color correction id if present in the file.

Direction – Specifies whether forward or inverse color transformation should be applied. Not all file formats support inverse transformations.

Interpolation – If the file contains tabulated LUT data (i.e. *.cube* files), specifies how this data is interpolated.

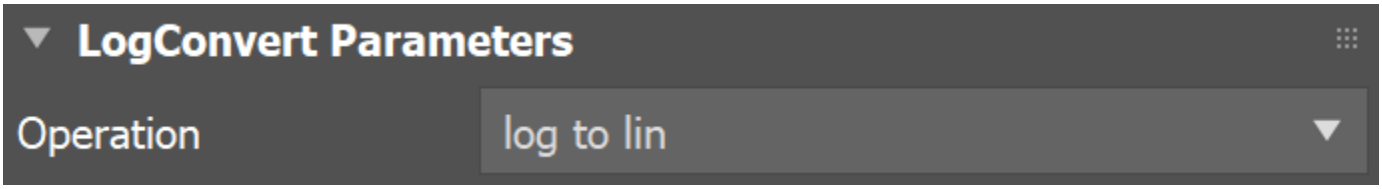
nearest – Nearest neighbor in all dimensions. This method is fast, but may introduce artifacts, especially in textures with smooth gradients.
linear – Linear interpolation in all dimensions . This is a smooth method, but is slower than **nearest**.
tetrahedral – Tetrahedral interpolation in all directions.
best – Chooses the best interpolation type for the requested context. Currently the same as **linear.**



LogConvert Parameters

These parameters are available when the **Mode** is set to **LogConvert.**

Operation – Specifies whether to convert from linear to log space or vice versa.



Display Parameters

These parameters are available when the **Mode** is set to **Display**.

In – Specifies the color space of the base texture.

Device – Specifies a viewing device from the devices listed in the OCIO configuration.

View transform – Specifies the desired view transformation.

Look Parameters

These parameters are available when the **Mode** is set to **Look.**

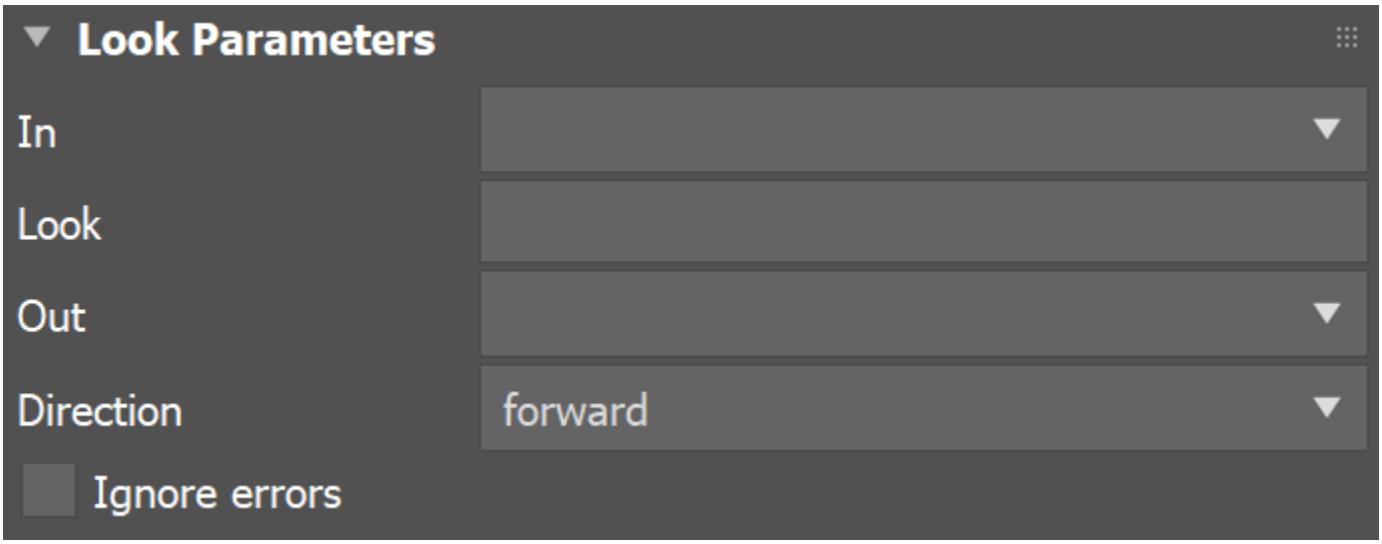
In – The color space of the base texture.

Look – The name of the look if the OCIO configuration defines looks.

Out – The output color space.

Direction – Specifies whether to apply forward or inverse transformation.

Ignore errors – When enabled, attempts to perform color corrections even if there are errors.



Context

See the OCIO library documentation for more information.

References

The official OpenColorIO web page: http://opencolorio.org/