Color Management

RenderMan 24 introduces robust support for the industry-standard ACES color management system, and other color spaces, such as the popular Filmic Blender, in all bridge products, including the interactive RenderMan Image Tool.

OCIO Configurations

RenderMan 24 ships with a number of OCIO configurations :

LINEAR-sRGB
The original Sony Pictures Imageworks configuration, which has been used since the dawn of time.

The visual effects standard Academy Colour Encoding System for filmmaking and computer graphics.

A popular BT.709-based configuration providing a high dynamic range and other effects typical in film stock. Developed by Troy Sobotka.

Configuration selection

- $OCIO: Use the color space defined by your systems environment variable. Typically sRGB.
- Off: Scene Linear is defined as the scene-wide color space.

- **ACES1.2**: Use the ACES 1.2 color encoding system that ships with RenderMan 24.
- **Filmic Blender**: Use the popular BT.709 color space.
- **Custom**: Allows for a custom color space file to be specified.

> ⓘ Please note that you will need to close and re-open IT when switching between OCIO configurations for the new color space to be correctly displayed in IT

Color managed items

- UI color values
    - All DCC apps provide a color-managed color picker that will return a color in the rendering colorspace. RenderMan simply uses them as-is.
- Lights
    - Color Temperature was computed in Rec.709 before 24.0 and is now color-managed.
    - PxrEnvDayLight is also color-managed and relies on the **srgb_linear** role.
- Textures
    - Textures MUST be converted to the **rendering** color space before usage. This task can be accomplished by the Texture Manager.
    - It is also possible to use the PxrColorSpace pattern to convert a texture color, but at a performance cost.
- Patterns
    - PxrBlackBody is color-managed.
    - PxrHairColor is color-managed.
    - PxrColorSpace allows artists to convert from one color space to the **rendering** space.