Preset Browser in Maya

Introduction

> **Error rendering macro 'html5-video'**
>
> null

- You can open the Preset Browser using the shelf button or the RenderMan menu.
- Presets include categories for light rigs, environment lights, and materials.
- You can search for assets by name, usage category, or metadata.
- You can choose two sizes of preset images.

Saving and Using

> **Error rendering macro 'html5-video'**
>
> null

- Saving/Exporting a material is easy!
    - Select the BxDF (the export will recognize connected nodes)
    - Choose the category you want from the Preset Browser
    - Choose the Save icon (the material ball+ icon underneath the preview image)
    - Give it a useful name and any desired metadata for your pipeline
    - RenderMan will generate a preview swatch render, this will auto-populate in the Preset Browser
- Importing/Using a saved asset
    - Simply right-click and choose "Import and Assign" to a selected object
    - Make any adjustments for your object as needed!

Environment Maps

> **Error rendering macro 'html5-video'**
>
> null

- You can save an Environment Map using the image icon+ underneath the large preview swatch in the Preset Browser
    - Select the Environment cagtegory in the Preset Browser
    - Choose the desired OpenEXR or .HDR file from the file browser window
    - You can add/change metadata in the dialog or change the name.
    - Then we convert the image to a compatible .tex format. This may take time depending on the original image size.
    - A preview render is then performed and automatically populated in the browser category.
- Using a saved map is easy.
    - Right-click the asset and import.
    - Changing the map is as easy as double-clicking another environment map asset!

Asset Dependencies

When an asset is saved to disk, all its dependencies are saved to disk too.

These include :

- **Textures** : stored in tex format, UDIM is supported.
- **HDRI environment maps** : stored in tex format. We use a specific combination of flags to compress the texture as efficiently as possible.
- **OSL shaders** : stored in oso format to protect your IP, but you can manually add the osl file in the asset directory if you want to share the source code.

These dependencies can increase the size of a preset on disk and you should bear that in mind if you want to distribute them over the internet.

Cross-Application Materials

RenderManAssets have been designed to be easily transferable from one application (like Maya) to another (Katana, Houdini, Blender, etc) and vice-versa.

Compatibility Issues

Still, it is possible to run into compatibility issues if your material contains native Maya nodes. RenderMan for Maya automatically converts a number of native Maya nodes which won't be available in other applications, e.g. the file node or Maya's Cloud pattern. To mitigate these problems, each RenderManAsset maintains a list of used nodes and use it to evaluate the preset's compatibility with the current host application and display a warning if it is not compatible.

The system will check :

- if the asset contains host-specific nodes
- if the asset's renderer version is superior or equal to the current version
- if the asset contains host-specific nodes, make sure the current host version is superior or equal to the asset's host version.

Best Practice

If you want to ensure cross-application compatibility, avoid non-Pixar BxDFs and Patterns.

Library Configuration

RenderMan ships with a standard library that can be found in : `$RMANTREE/lib/RenderManAssetLibrary`

> ⓘ We recommend that you copy the standard library to a location of your choice and leave the default library untouched as a backup. The new copy should be readable and writable. The asset browser will not allow you to create new assets if it points to a non-writable location.

The location of the asset library can be set through an environment variable or a Maya preference.

Maya Preferences

The path to the asset library can be set through Maya's preference dialog :

1. Open Maya's preference dialog
2. Select the **Asset Browser** preference under **RenderMan**
3. Click the **Select** button to open a directory chooser.
4. Navigate the RenderManAssetLibrary folder of your choice and click the **Select Library** button.
5. The asset browser will refresh and display all available presets.

> ✓ You can shift-click the preset browser's shelf icon to directly open the library selection dialog !

Environment variable

The location of the asset library can be set through the `RMAN_ASSET_LIBRARY` environment variable.

It can be set using different methods :

Maya.env

Maya.env is a configuration file read by Maya at startup to configure a number of environment variables. If this file doesn't exist, you can create a new one in one of the standard locations. This method works on all platforms : Linux, OSX, and Windows.

Type the following line at the end of Maya.env and Maya should find the standard library the next time it starts up :

Linux / OS X
`RMAN_ASSET_LIBRARY = $RMANTREE/lib/RenderManAssetLibrary`

Windows
`RMAN_ASSET_LIBRARY = %RMANTREE%/lib/RenderManAssetLibrary`

System commands

Linux

On all Posix platforms (Linux & OSX), you can either define the environment variable in the shell you will launch Maya from or append it to your shell configuration file (`.cshrc` for csh/tcsh, `.profile` or `.bashrc` for bash).

csh / tcsh
`setenv RMAN_ASSET_LIBRARY $RMANTREE/lib/RenderManAssetLibrary`

bash
`export RMAN_ASSET_LIBRARY=$RMANTREE/lib/RenderManAssetLibrary`

OSX

- If you are running Maya from the shell, you can setup your environment variables like Linux.
- If you are running Maya from the dock, we recommend you use the Maya.env method instead.

Windows

- Right-click My Computer and choose Properties (or double-click System in the control panel), then click the Advanced tab, and click Environment Variables.