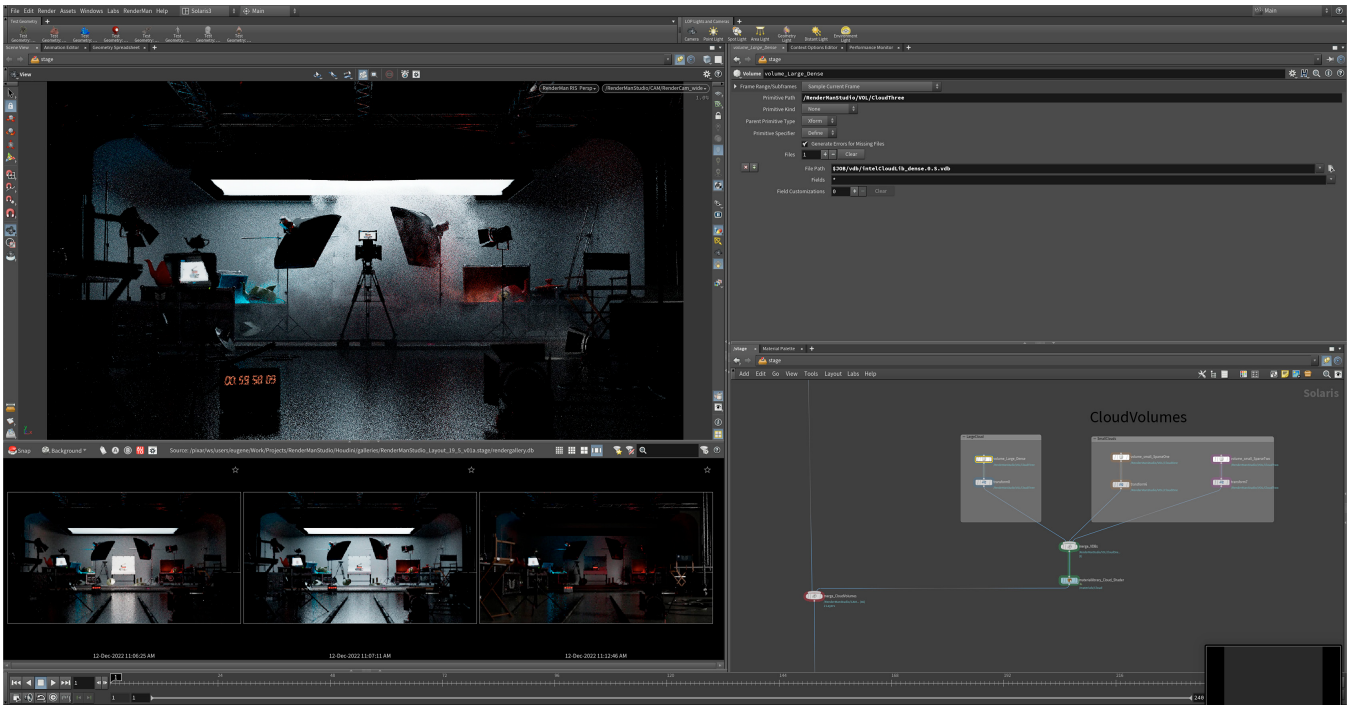
Installation of RenderMan for Houdini



RenderMan for Houdini (RfH) only provides support for the following production Houdini versions:

- RenderMan for Houdini 25.0 supports: 19.5.569, 19.0.720, 18.5.696
- RenderMan for Houdini 25.1 supports: 19.5.605, 19.5.569, 19.0.720, 18.5.696
- RenderMan for Houdini 25.2 supports: 19.5.640, 19.5.605, 19.5.569, 19.0.720, 18.5.696

Other important information:

- RenderMan for Houdini will not operate with a mismatched python version. Be careful to install the same python version for Houdini and RfH.
- Rendering with RenderMan will not operate on Houdini Apprentice editions, see Side FX's website for options that allow Third Party Rendering
- RenderMan for Houdini for 19.0 requires macOS 12.x Monterey and higher or CentOS 7.7 and higher.

RenderMan for Houdini is installed using the RenderMan Installer, which manages the downloading, installation, and licensing of the RenderMan Pro Server (the actual renderer) along with all bridge products.

Package Installation

For Houdini 19.0 and beyond, RenderMan for Houdini can be installed with a packages file, found in the RfH installation director.

Copy the packages json file to one of the following locations for Houdini to find on startup. Advanced package instructions by SideFX are here.

- `$HOUDINI_USER_PREF_DIR/packages`
- `$HFS/packages`
- `$HSITE/houdinimajor.minor/packages` (for example, `$HSITE/houdini19.0/packages`)
- `$HOUDINI_PACKAGE_DIR`

For Houdini 18.5, please see the manual installation below.

Manual Installation

The environment variable for RfH must be listed first in the houdini.env file. (Windows requires a semi-colon) For example:

HOUDINI_PATH=$RFHTREE/3.7/19.0.383:&

RenderMan for Houdini with Solaris requires an additional line in the configuration file to be able to render in-memory vdbs:

RMAN_PROCEDURALPATH = $RFHTREE/3.7/19.0.383/openvdb:&

RenderMan for Houdini on **Windows** requires an additional line in the configuration file:

PATH=$RMANTREE\bin;&

Additional instructions and details are found below in this document.

After installing the plugin, Houdini requires a modification to the Houdini environment in your home directory to load the RenderMan plugin. Houdini specific environment variables can also be set in the houdini.env, found in the following locations for each operating system:

```
Windows: %HOME%\Documents\houdiniXX.X\houdini.env
Mac: ~/Library/Preferences/houdini/YY.Y/houdini.env
Linux: ~/houdiniZZ.Z/houdini.env
```

NOTE: When you run a new version of Houdini for the first time, you may have to run it twice before the houdini.env files appear in the locations mentioned above, once created you can add the lines mentioned below.

You need to edit the houdini.env file with a text editor and place the following lines below in that file before you start Houdini. This only has to be done once for each new major version of Houdini that is being used.

EXAMPLES

For example on Linux, one would edit this file in: $HOME/houdini19.5/houdini.env:

```
RMANTREE=/opt/pixar/RenderManProServer-25.0
RFHTREE=/opt/pixar/RenderManForHoudini-25.0
RMAN_PROCEDURALPATH=$RFHTREE/3.9/19.5.569/openvdb:&
HOUDINI_PATH=$RFHTREE/3.9/19.5.569/:&
```

On Windows, one would edit the file in: \Users*myself*\Documents\houdini19.5\houdini.env:

NOTE: Windows uses a semi-colon instead of a colon to separate the HOUDINI_PATH!

```
RMANTREE="C:\Program Files\Pixar\RenderManProServer-25.0"
RFHTREE="C:\Program Files\Pixar\RenderManForHoudini-25.0"
RMAN_PROCEDURALPATH=$RFHTREE\3.9\19.5.569\openvdb;&
HOUDINI_PATH=$RFHTREE\3.9\19.5.569;&
PATH=$RMANTREE\bin;&
```

Finally an example on macOS, one would edit this in: /Users/*myself*/Library/Preferences/houdini/19.5/houdini.env:

```
RMANTREE=/Applications/Pixar/RenderManProServer-25.0
RFHTREE=/Applications/Pixar/RenderManForHoudini-25.0
RMAN_PROCEDURALPATH=$RFHTREE/3.9/19.5.569/openvdb:&
HOUDINI_PATH=$RFHTREE/3.9/19.5.569:&
```

Lama Parameter Name Changes

Some parameters on Lama nodes were changed in RenderMan 25. The parameters "color" and "normal" have been changed to be node-specific. For example, color is now diffuseColor on the LamaDiffuse node. This was done in preparation for making the nodes compatible with XPU in the future. For scenes with version of RfH older than 25, you need to run once manually top menu "RenderMan" > "Update Lama Nodes" if using a Houdini version older than H19.5.501 (it's automated otherwise). You will also need to update your custom locked HDAs manually.