

# Installation of RenderMan for Houdini



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

- RenderMan for Houdini 24.2 supports: 18.0.597, 18.5.633, 18.5.672, 18.5.696, and 19.0.383
- RenderMan for Houdini 24.3 supports: 18.0.597, 18.5.672, 18.5.696, 18.5.759, 19.0.383, and 19.0.455
- RenderMan for Houdini 24.4 supports: 18.0.597, 18.5.672, 18.5.696, 18.5.759, 19.0.455, 19.0.561, and 19.0.589

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 10.14 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 RenderMan Pro Server (the actual renderer) along with all bridge products.

## Package Installation

RenderMan for Houdini versions 24.2 and later come installed with a packages directory. 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 versions before 24.2, please see 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/19.0.383;&
```

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

```
RMAN_PROCEDURALPATH = $RFHTREE/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/houdini18.0/houdini.env`:

```
RMANTREE=/opt/pixar/RenderManProServer-24.2
RFHTREE=/opt/pixar/RenderManForHoudini-24.2
RMAN_PROCEDURALPATH=$RFHTREE/19.0.383/opencvdb:&
HOUDINI_PATH=$RFHTREE/19.0.383:&
```

On Windows with 18.0, one would edit the file in: `\Users\myself\Documents\houdini18.0\houdini.env`:

**NOTE:** Windows uses a semi-colon instead of a colon to separate the HOUDINI\_PATH!

```
RMANTREE="C:\Program Files\Pixar\RenderManProServer-24.2"
RFHTREE="C:\Program Files\Pixar\RenderManForHoudini-24.2"
RMAN_PROCEDURALPATH=$RFHTREE\19.0.383\opencvdb:&
HOUDINI_PATH=$RFHTREE\19.0.383;&
PATH=$RMANTREE\bin:&
```

Finally an example on OS-X with 18.0, one would edit this in: `/Users/myself/Library/Preferences/houdini/18.0/houdini.env`:

```
RMANTREE=/Applications/Pixar/RenderManProServer-24.2
RFHTREE=/Applications/Pixar/RenderManForHoudini-24.2
RMAN_PROCEDURALPATH=$RFHTREE/19.0.383/opencvdb:&
HOUDINI_PATH=$RFHTREE/19.0.383:&
```