

# Environment Variables in Katana

## Installation Path Variables

You will need to set a few environment variables to get RfK up and running with PRMan and Katana. RfK looks for RenderMan on the \$RMANTREE environment variable. As long as \$RMANTREE is set correctly, RfK will find the appropriate PRMan libraries and commands. Katana finds RfK in the same way it would find any other plugin - through the \$KATANA\_RESOURCES environment variable. The paths for these environment variables will depend on whether you install RfK/PRMan in the default locations or not.

Environment Variable	Default Installation Paths
<b>RMANTREE</b>	/opt/pixar/RenderManProServer-23.5
<b>KATANA_RESOURCES</b>	/opt/pixar/RenderManForKatana-23.5-katana4.0/plugins/Resources/PRMan23

Default shader search paths for RenderMan match the default paths in the rendermn.ini file. If additional search paths are needed then you will need to set up the `RMAN_SHADERPATH` and/or `RMAN_RIXPLUGINPATH` environment variables to include your specific paths. These environment variables replace rather than append to the default paths, so you will need to include the default paths as well.

## Output Path Variable

You can direct the render log output to another location if necessary using the following environment variable: `RFK_REDIRECT_OUTPUT`  
You can also use `RFK_OVERRIDE_RENDER_ACTION` When set, this overrides the default processing for render outputs to always render directly to the renderLocation specified in the RenderOutputDefine node without any copying or processing from Katana.

## Shader Discovery

During startup RenderMan for Katana will automatically load all "discoverable" shaders. Shaders are discoverable if they are found in a search path and (for non-OSL shaders) have an associated Args file. The standard shader search path mechanism is used when searching for shaders on the specified environment variable search paths:

ShaderType	Environment Variable	Default Path
<b>OSL</b>	<code>RMAN_SHADERPATH</code>	<code>\$RMANTREE/lib/shaders</code>
<b>Plugin (C++)</b>	<code>RMAN_RIXPLUGINPATH</code>	<code>\$RMANTREE/lib/plugins</code>

If both the environment variable and the search path attribute in `PrmanGlobalStatements` are set, the resulting search path will be the union of the two strings with the environment variable taking precedence.

## Recursion

RfK will automatically recurse down a shader path to find shaders in subdirectories. By default it will recurse down 3 subdirectories. This is configurable using the `shaderPathRecursionLimit` setting in the RfK config file, `config.xml`.

## Args Files

The args files need to be in an Args directory. See the setup in `RMANTREE/lib/plugins` for an example. Something like this:

`RMAN_RIXPLUGINPATH` directory:

<code>\$RMAN_RIXPLUGINPATH/pattern_remap.so</code>
<code>\$RMAN_RIXPLUGINPATH/Args/pattern_remap.args</code>

You can find out more about Args files in the developer docs [download](#).