

Migrating from 21.x to 22.x

The user experience in RfK 22 is very similar to what was available in RfK 21, but there are some changes that are necessary to transition.

Light Filters

The `PrmanLightFilterCreate` macro has also been removed. It reads in args files for use with any light filters found on the `$RMAN_RIXPLUGINPATH` and can share light filters between lights. In Katana 2.6 and newer, you can create light filters directly in GafferThree.

Environment Variables

The default RfK `KATANA_RESOURCES` location has changed in 22. Now the default install location is (Linux): `/opt/pixar/RenderManForKatana-22.0-katana3.0/plugins/Resources/PRMan22`.

PrmanGlobalStatements and PrmanObjectStatements

`PrmanGlobalStatements` and `PrmanObjectStatements` have been reorganized. This will allow future upgrades to PRMan options and attributes to happen seamlessly under the hood without breaking compatibility.

In addition, the `PrmanObjectStatements` node in RfK21 had only a single "attributes" section for all RenderMan attributes. For RenderMan 22 this section has been divided according to "attributes", "primAttributes", and "primvars" in order to align with their usage and affect on the object to which the node is assigned. As a result several RenderMan attributes have a new attribute hierarchy in 22. See the tables below for a list of attributes which have changed from 21 to 22.

Note: attribute names shown are the relevant partial attribute for brevity. For the full attribute name simply prefix the noted name with the base "prmanStatements".

Moved from top-level to the "attributes" group:

RfK 21 Attribute Name	RfK 22 Attribute Name
<code>.matte</code>	<code>.attributes.Matte</code> ¹
<code>.sides</code>	<code>.attributes.Sides</code> ¹
<code>.scopedCoordinateSystem</code>	<code>.attributes.scopedCoordinateSystem</code>

Moved from top-level to the "primAttributes" group:

RfK 21 Attribute Name	RfK 22 Attribute Name
<code>.geometricApproximation.motionfactor</code>	<code>.primAttributes.geometricApproximation.motionfactor</code>
<code>.geometricApproximation.focusfactor</code>	<code>.primAttributes.geometricApproximation.focusfactor</code>
<code>.geometry.flip_t</code>	<code>.primAttributes.geometry.flip_t</code>
<code>.subdivisionMesh.scheme</code>	<code>.primAttributes.subdivisionMesh.scheme</code>
<code>.orientation</code>	<code>.primAttributes.Orientation</code> ^{1,2}

Moved from "attributes" to "primAttributes":

RfK 21 Attribute Name	RfK 22 Attribute Name
<code>.attributes.curve.basis</code>	<code>.primAttributes.curve.basis</code> ³
<code>.attributes.derivatives.extrapolate</code>	<code>.primAttributes.derivatives.extrapolate</code>
<code>.attributes.dice.micropolygonlength</code>	<code>.primAttributes.dice.micropolygonlength</code>
<code>.attributes.dice.minlength</code>	<code>.primAttributes.dice.minlength</code>
<code>.attributes.dice.minlengthspace</code>	<code>.primAttributes.dice.minlengthspace</code>
<code>.attributes.dice.offscreenstrategy</code>	<code>.primAttributes.dice.offscreenstrategy</code>
<code>.attributes.dice.pretessellate</code>	<code>.primAttributes.dice.pretessellate</code>

.attributes.dice.rasterorient	.primAttributes.dice.rasterorient
.attributes.dice.referencecamera	.primAttributes.dice.referencecamera
.attributes.dice.strategy	.primAttributes.dice.strategy
.attributes.dice.watertight	.primAttributes.dice.watertight
.attributes.dice.worlddistancelength	.primAttributes.dice.worlddistancelength
.attributes.displacementbound.sphere	.primAttributes.displacementbound.sphere
.attributes.displacementbound.coordinatesystem	.primAttributes.displacementbound.coordinatesystem
.attributes.displacementbound.offscreen	.primAttributes.displacementbound.offscreen
.attributes.polygon.smoothnormals	.primAttributes.polygon.smoothnormals
.attributes.procedural.immediatesubdivide	.primAttributes.procedural.immediatesubdivide
.attributes.procedural.reentrant	.primAttributes.procedural.reentrant
.attributes.trace.autobias	.primAttributes.trace.autobias
.attributes.trace.bias	.primAttributes.trace.bias
.attributes.trace.displacements	.primAttributes.trace.displacements
.attributes.trace.samplemotion	.primAttributes.trace.samplemotion
.attributes.trimcurve.sense	.primAttributes.trimcurve.sense

1. Capitalization changed.
2. The RenderMan21 string param orientation settings of "lh", "rh" have been deprecated in RenderMan 22 in favor of "inside/outside". In addition the 21 string value "reverse" has been deprecated in favor of the boolean parameter ReverseOrientation.
3. In 21, curve basis could be set on u or v. In 22, it is just one master attribute basis. When converting legacy scenes we use the v basis to set the new attribute (major axis of curve).