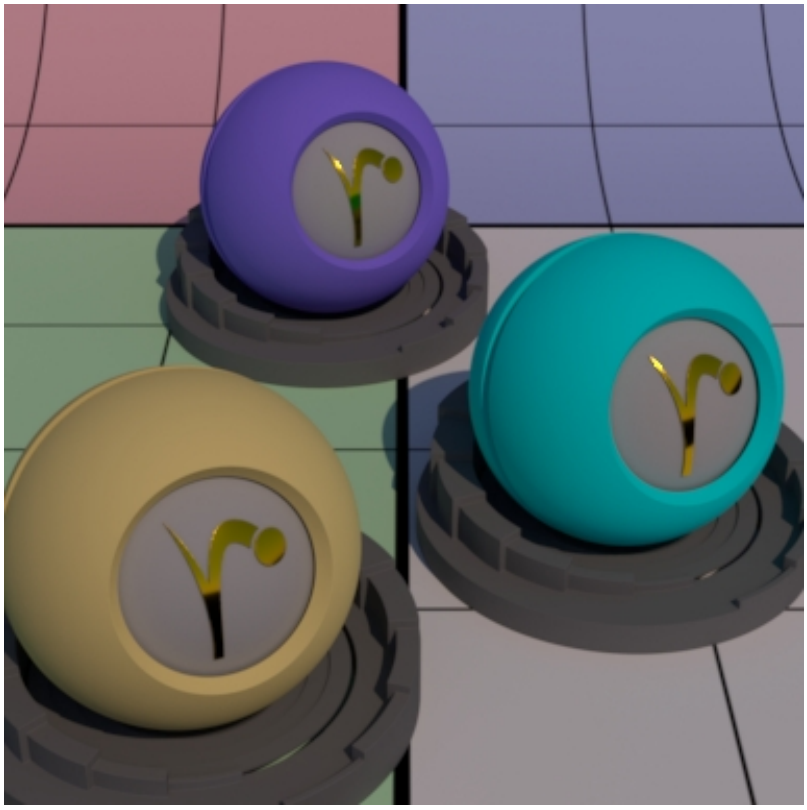
PxrAttribute

PxrAttribute allows the user to read attributes attached to (stored) on a node. Such an example would be to add a color attribute to a set of objects to be read by a material later. In this way, a material can change its result based on the object being rendered instead of a different material. Below there are color attributes attached to the sphere's of the shader ball. A single PxrSurface material renders with a different diffuse color as specific by each shape's defined attribute. Examples on usage are below.



There may be a performance penalty for using this node in many places in your scene. Efficiency is key to avoid too many evaluations of user attributes if not necessary.

Input Parameters

Variable name

This field takes a string that identifies the attribute. The string should include the namespace for the attribute and the attribute name separated by a colon. For example, trace:maxdiffusedepth or user:Ball.

Variable Type

This specifies the type of variable to read and must match what was specified above on the other nodes.

- Integer
- Float
- Float 2
- Color
- Point
- Vector
- Normal

Default Float

If there is an error when retrieving an attribute of type float, this is the value that will be used.

Verbosity

Diagnostic output levels for scene debugging

- Silent
- Warnings
- Info

Output Parameters

resultF

A float result.

resultRGB

The color result.

Example Usage

DCC applications may use a different mechanism for applying a user attribute. Below are two examples for applying a color user attribute named "Ball" to a shape:

Maya:

Add a user attribute from the Maya Attribute editor transform node, Name: Ball Type: color Color: Light Pink. The resulting export is below, note that we assume a User attribute from the Maya Editor automatically and does not need to be specified.

```
RiAttribute "user" "color Ball" 1 0.2 0.65
```

Katana:

The below is an OpScript example of the same attribute in Katana

```
gb = GroupBuilder()
gb:set("value", FloatAttribute({1.0, 0.2, 0.65}, 3))
gb:set("type", StringAttribute("color"))
Interface.SetAttr("prmanStatements.attributes.user.Ball", gb:build())
```

Houdini:

See Using PxrMatteID as an example of how to add user attribute in Houdini.