User Data

These nodes can be used to retrieve attributes from the attached geometry. These can be viewed by middle clicking on geometry in the network editor. See the examples below.

When the scene is translated to Arnold, attributes are not exported automatically. They must be named in the **Attributes** tab of Arnold Geo Properties . On export, HtoA translates them into user attributes on the Arnold geometry. To retrieve these a node is then required of the correct type. While there are more types than listed below, these should cover the type dimensions, (int, string, 1,3 and 4 floats). In Arnold, the attribute is selected by name only, (rather than declaring class, etc, as in Houdini). The nodes below are very accepting of inputs. If, for example, an attribute is named in ***user_data_rgb*** but the input passed is actually an integer, then it will still work and just convert the integer to float and pass it to each of the R, G & B values. See the Data Types page for more information.

It is now possible to read user data fields from volumetric shapes, allowing things like per-particle user data on volumetric spherical point clouds to affect the result of volumetric shading.

User Data Float

Attribute

Read float value from shape user data, at the current shading point on the surface.

Default

Output value to use if user data with the specified name is not available.

User Data Int

Attribute

Read integer value from shape user data, at the current shading point on the surface.

Default

Output value to use if user data with the specified name is not available.

User Data RGB

Attribute

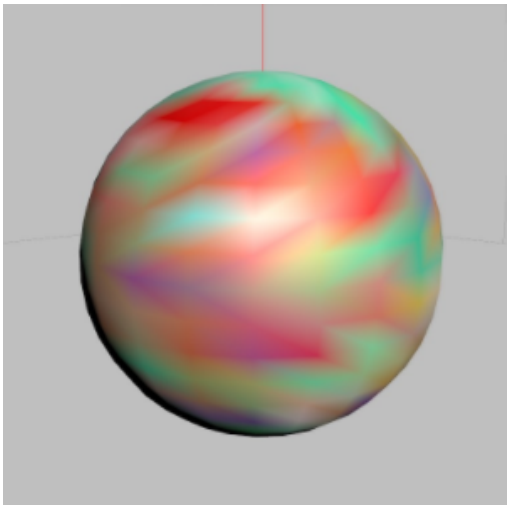
Read RGB color from shape user data, at the current shading point on the surface.

Default

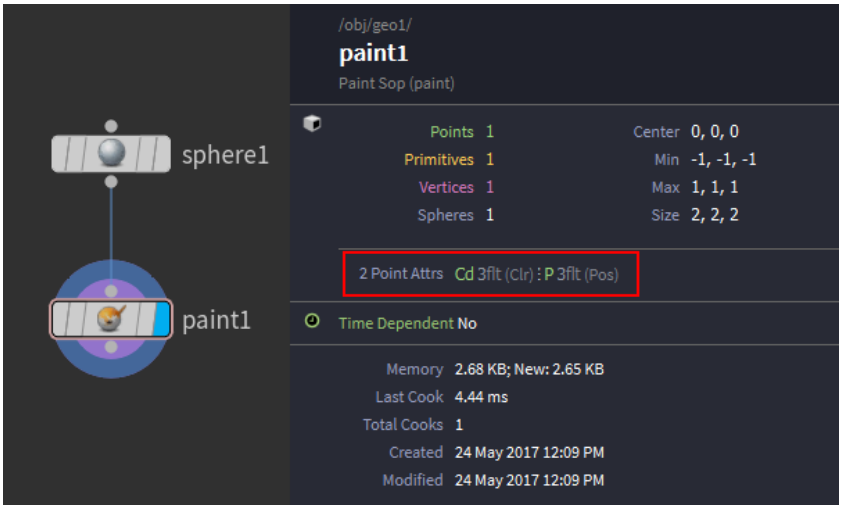
Output value to use if user data with the specified name is not available.

Example

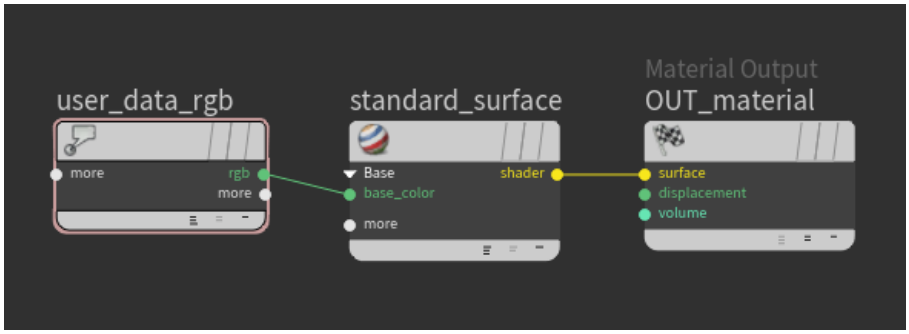
- Create a polygon sphere, add a paint node and give it some color.



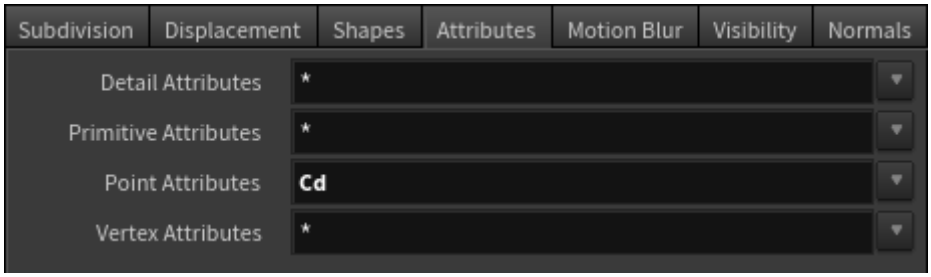
- By middle clicking on the paint node, the attributes can be checked. The sphere has 2 point attributes called "P" and "Cd".



- In an arnold_material, add a Standard Surface shader and **user_data_rgb** node. In the *Attribute* name add "Cd".



- Before rendering, the *Cd* attribute needs to be passed to the .ass file. Add Arnold Properties to the sphere (**tab > Arnold > Add Arnold Properties**). Go to the **Attributes** tab and type **Cd** into ***Point Attributes***.



- When rendered, the sphere will be coloured from the paint node.

User Data RGBA

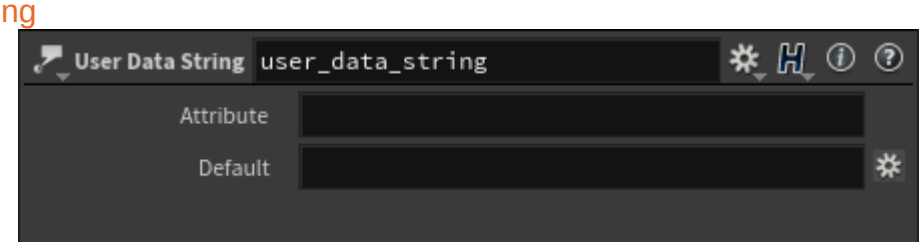
Attribute

Read RGB color and alpha from shape user data, at the current shading point on the surface.

Default

Output value to use if user data with the specified name is not available.

User Data String



Attribute

Reads the string from shape user data.

Default

Output value to use if user data with the specified name is not available.