

12.1.12 Editors - Geometry Nodes Editor - Header - Add Menu - Input

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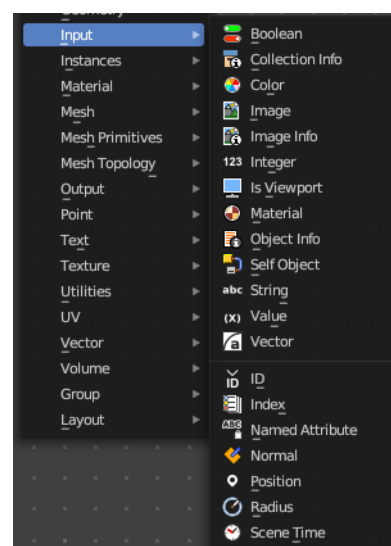
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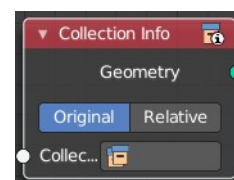
Add menu - Input

Here you find input nodes.



Collection Info

The Collection Info node retrieves information from collections. This can be useful to use an external collection to control parameters in the geometry node tree.



Inputs

Collection

Collection to get the properties from.

Properties

Transform Space

The transformation of the geometry outputs.

Original

Output the geometry relative to the collection offset.

Relative

Bring the input collection geometry into the modified object, maintaining the relative position between the objects in the scene.

Outputs

Geometry

Geometry of the collection in world space with all its modifiers applied.

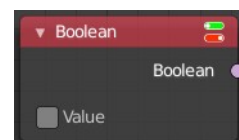
Boolean

Inputs a boolean value.

Properties

Value

The input boolean.



Outputs

Boolean

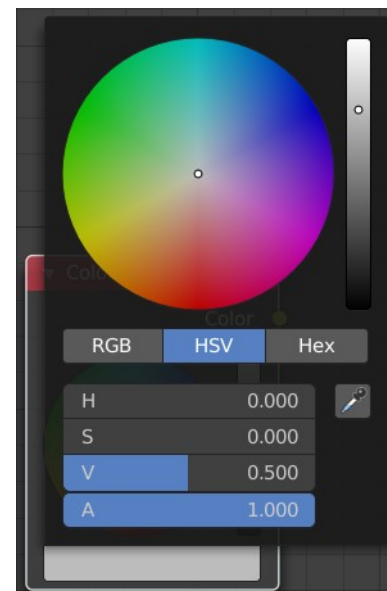
The boolean state.

Color

Define a input color.

This node is a color wheel.

Clicking at the color field at the bottom will reveal the standard Blender color dialog, where you can input numeric values.



Outputs

Color

Standard color output.

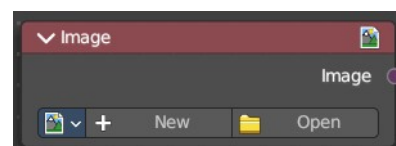
Image

Add a input image.

Properties

Image

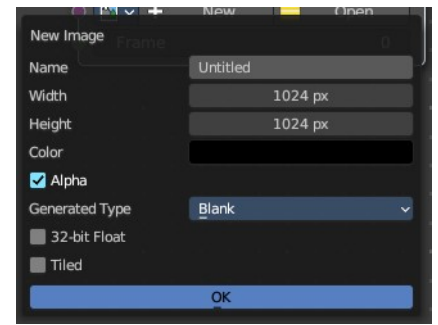
Load or connect a image.



New

Create a new image.

Opens a new image dialog where you can adjust the color, size and further settings.



Open

Open an existing image.

Image prop

Image browser

A list of available images

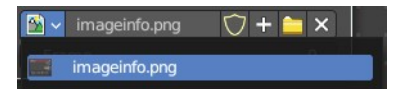


Image name

The name of the image

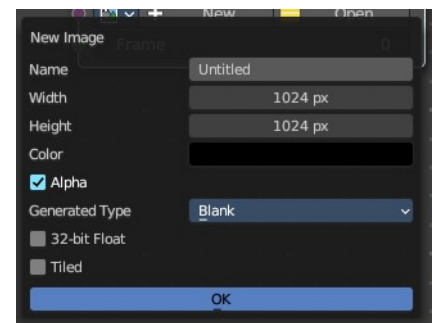
Fake user

Add a fake user to this asset.

New

Create a new image.

Opens a new image dialog where you can adjust the color, size and further settings.



Open Image

Open an existing image.

Remove

Removes the image as the active image.

Frame

For videos. Which frame to use.

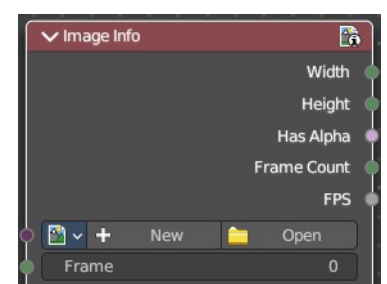
Outputs

Image

The output image.

Image Info

Retrieve infos from an image.



Input

Image

Load or connect a image.

New

Create a new image.

Opens a new image dialog where you can adjust the color, size and further settings.

Open

Open a existing image.

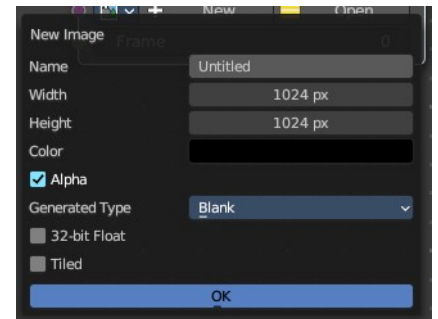


Image prop

Image browser

A list of available images

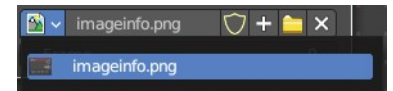


Image name

The name of the image

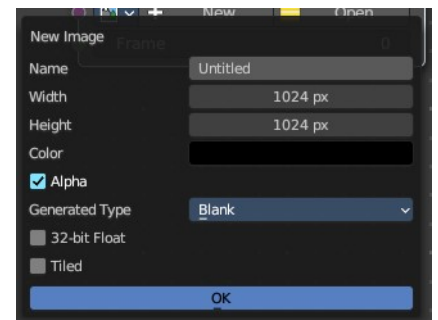
Fake user

Add a fake user to this asset.

New

Create a new image.

Opens a new image dialog where you can adjust the color, size and further settings.



Open Image

Open a existing image.

Remove

Removes the image as the active image.

Frame

For videos. Which frame to use.

Outputs

Width

The width of the image.

Height

The height of the image

Has Alpha

Returns true if the image has an alpha channel

Frame Count

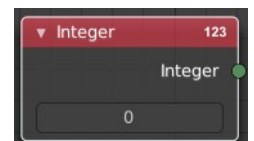
For movies. How many frames.

FPS

For movies, what FPS rate.

Integer

Inputs a integer value.



Properties

Value

The input integer.

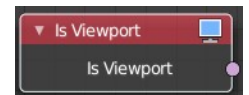
Outputs

Integer

The integer value.

Is Viewport

The Is Viewport node outputs true when geometry nodes is evaluated for the viewport. For the final render the node outputs false.



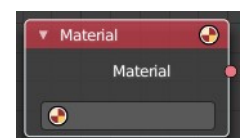
Outputs

Is Viewport

A booleeran that indicates if the geometry nodes is evaluated for preview.

Material

Retreive a material.



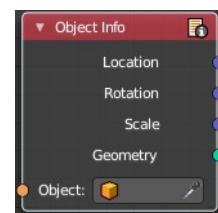
Outputs

Material

The material output.

Object Info

The Object Info node retrieves information from objects. And outputs it then.



Inputs

Object

Object to get the properties from.

Outputs

Location

Location of the object in world space.

Rotation

Rotation of the object in world space.

Scale

Scale of the object in world space.

Geometry

Geometry of the object in world space with all its modifiers applied.

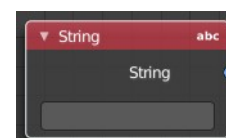
Self Object

Retrieves the parent object of the geometry nodes.



String

Input a string.



Properties

String

The string that you want to input.

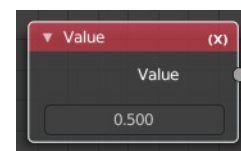
Outputs

Value

The value set in the node properties.

Value

Input numerical values to other nodes in the tree.



Properties

Value

Single numerical value (floating point).

Outputs

Value

The value set in the node properties.

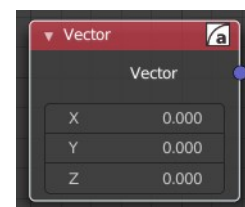
Vector

Creates a single vector of three values that can be used as an input.

Properties

X Y Z

The values of the vector.



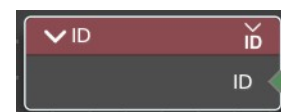
Output

Vector

Standard vector output.

ID

Retrieve the ID of the object.



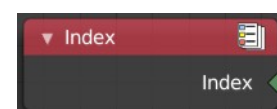
Outputs

ID

The ID of the object.

Index

Retrieves an integer value indicating the position of each element in the list. This list depends on the internal order of the data in the geometry, which is not necessarily visible in the 3D Viewport. However, the index value is visible in the left-most column in the Spreadsheet Editor.



Outputs

Index

Integer value which enumerates each point on the geometry.

Named Attribute

Adds a field input.

Input

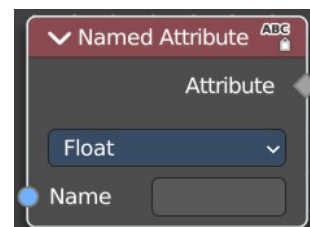
Name

The input name for the field.

Input

Data Type

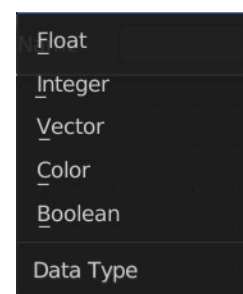
What data type to use.



Output

Attribute

The output attribute name.



Normal

Returns a vector for each evaluated point indicating the normal direction. The output can depend on the attribute domain used in the node evaluating the field, but the output is always a normalized unit vector.

The output depends on where you plug in the normal node.

Face

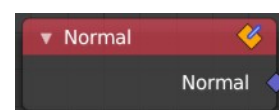
On the face domain, the normal is the “up” direction of the face.

Mesh Vertices

For mesh vertices, the normal is an average of the surrounding face normals. If the vertex does not have any connected faces, the output is simply the normalized position of that vertex.

Edge

The normal output for each edge is the average of the edge’s two vertex normals.



Face Corner

The output for each face corner is the same as the face normal of the corresponding face.

Curve Control Points

The output of this node when used for curve geometry is the evaluated normal of the curve, which depends on the twist method. The normal vector is always perpendicular to the direction of the curve's path at every point.

Warning!

Please keep in mind that for NURBS and Bézier spline curves the value retrieved from this node is the value at every control point. Which may not correspond to the visible evaluated points. For NURBS splines the difference may be even more pronounced and the result may not be as expected. A Resample Curve Node can be used to create a poly spline, where there is a control point for every evaluated point.

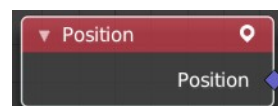
Outputs

Normal

The normal vector output.

Position

The Position node outputs a vector of each point of the geometry the node is connected to.



The node can work on geometry domains besides points. In that case, the position data will be automatically interpolated to the new domain. For example, when used as part of the input to the mesh edge split node, the position for each edge will be the average position of the edges two vertices.

For instances, the output is the origin of each instance. However, if the node is for a geometry node that adjusts data inside instances, the position output of this node will be in the local space of each instance.

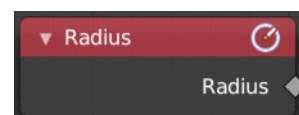
Outputs

Position

The position vector output.

Radius

Retrieve the radius of the object.



Outputs

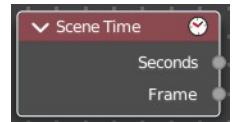
Radius

The radius output.

Scene time

Outputs the current scene time in seconds or in frames.

The Frame output is a float value to make subframe rendering for motion blur possible.



Outputs

Seconds

Output in seconds.

Frame

Output in Frames.