

12.1.10 Editors - Geometry Nodes Editor - Header - Add Menu - Geometry

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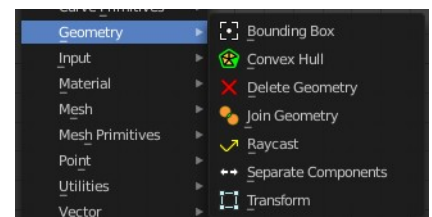
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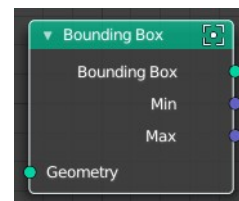
Add menu - Geometry

Here you find nodes to modify the geometry.



Bounding Box

The Bounding Box geometry node allows you to work with the values of a bounding box.



Inputs

Geometry

Standard geometry input.

Output

Bounding Box

Standard output.

Min

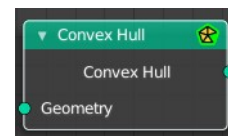
The minimum values of the bounding box.

Max

The maximum values of the bounding box.

Convex Hull

The node allows you to work with the values of a convex hull of this object.



Inputs

Geometry

Standard geometry input.

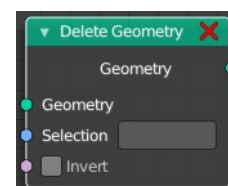
Output

Convex Hull

Standard output.

Delete Geometry

Allows to delete geometry.



Inputs

Geometry

Standard geometry input.

Selection

A selection of a geometry.

Invert

Invert the selection of the geometry.

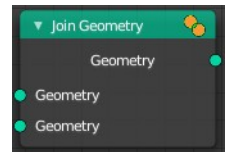
Output

Geometry

Standard geometry output.

Join Geometry

The Join Geometry enables you to merge separately generated pieces of geometry into a single one. In case that the inputted pieces contain different types of geometry, the output will contain multiple types of geometry.



Inputs

Geometry

Standard geometry input.

Output

Geometry

Standard geometry output.

Raycast

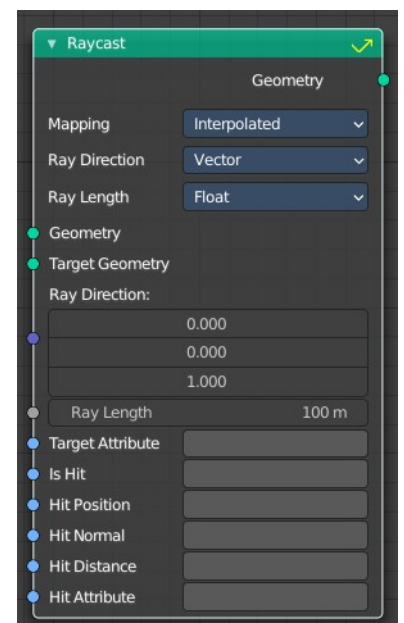
Casts rays from one geometry to another. When the ray hits something within its maximum ray length, then you can retrieve several different data sets.

Hit Position, Hit Normal and Hit Distance are the properties of the target mesh at the intersection point. Additionally a Target Attribute can be specified that is interpolated at the hit point and the result stored in Hit Attribute.

Inputs

Geometry

Rays are created at the geometry points.



Target Geometry

Geometry that rays are tested against.

Ray Direction

Direction of each ray from the starting position.

Ray Length

Maximum distance a ray can travel before being considered „no hit“.

Target Attribute

An optional attribute of the Target Geometry that will be interpolated at the hit points. The resulting values are stored in the output attribute named by Hit Attribute.

Is Hit

Boolean output attribute that is true for each ray which has hit the Target Geometry.

Hit Position

Output attribute storing the intersection point with the target mesh.

Hit Normal

Output attribute storing the surface normal vector at the hit location.

Hit Distance

Output attribute storing distance from the ray origin to the hit point.

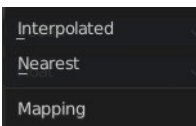
Hit Attribute

Output Attribute storing interpolated values of the Target Attribute at the hit positions.

Properties

Mapping

How the attributes of the target mesh are mapped to the attribute values on the result geometry.



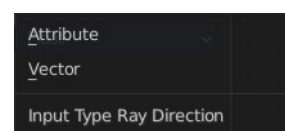
Nearest

uses the attribute from the nearest geometry.

Interpolated

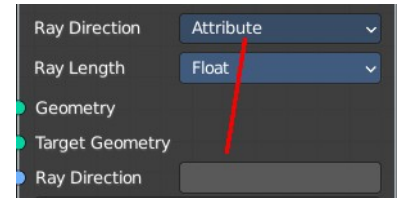
uses the attribute from the corners of the hit face.

Ray Direction



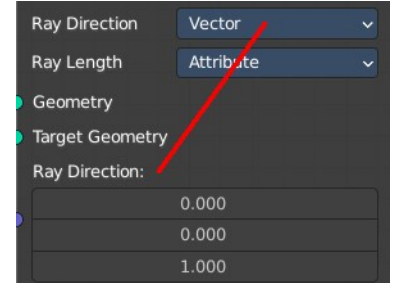
Attribute

Use an attribute instead of a vector for the ray direction.



Vector

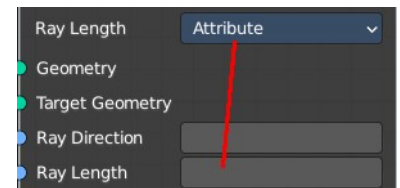
Use a vector for the ray direction.



Ray Length

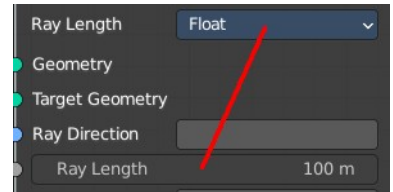
Attribute

Use an attribute instead of a float value for the ray length.



Vector

Use a float value for the ray length.



Outputs

Geometry

The geometry that contains output attributes for each ray.

Separate Components

Splits a geometry into its components.

Inputs

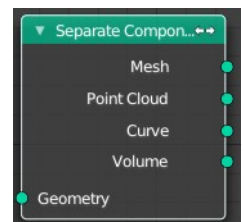
Geometry

Geometry input.

Outputs

Mesh

Mesh component of the input geometry.



Point Cloud

Point cloud component of the input geometry.

Curve

Curve component of the input geometry.

Volume

Volume component of the input geometry.

In case that the input contains multiple volume instances, only the first volume component will be calculated.

Transform

Move, rotate or scale the geometry. The transformation is applied to the entire geometry, and not per element. For example, you can not rotate individual point cloud points with this node.

Inputs

Geometry

Standard geometry input.

Translation

Translates the geometry in local space of the modified object.

Rotation

Euler rotation in local space.

Scale

Scale to transform the geometries in local space.

Output

Geometry

Standard geometry output.

