

## 12.1.13 Editors - Geometry Nodes Editor - Header - Add Menu - Geometry - Operations

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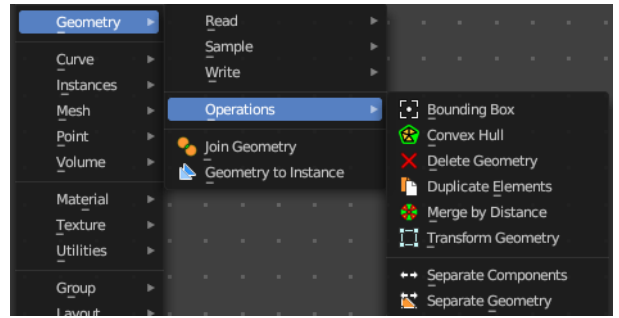
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## Add menu - Geometry - Operations

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**

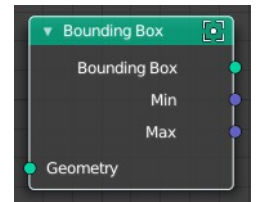
Standard output.

##### **Min**

The minimum values of the bounding box.

##### **Max**

The maximum values of the bounding box.



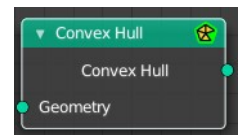
### Convex Hull

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

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

## Inputs

### **Geometry**

Standard geometry input.

### **Selection**

A selection of the geometry

## Properties

### **Domain**

What element to delete.

### **Mode**

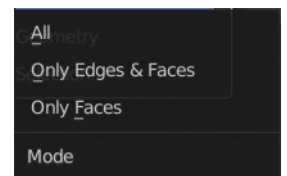
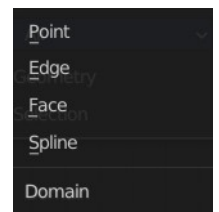
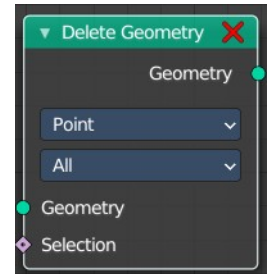
Delete mode. Names should be self explaining.

## Output

### **Geometry**

Standard output.

---



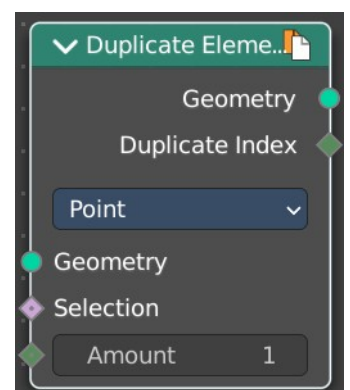
## Duplicate Elements

Duplicates a part of a geometry a dynamic number of times.

## Inputs

### **Geometry**

Standard geometry input.



## ***Selection***

A selection of the geometry.

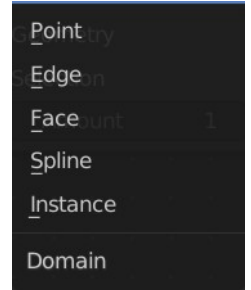
## ***Amount***

Number of times the geometry should be duplicated.

## **Properties**

### ***Domain***

What element to duplicate.



## **Output**

### ***Geometry***

Standard output.

### ***Duplicate Index***

The index of the duplicated elements.

## **Merge by Distance**

Welds the selected geometry below a given distance into one vertice.

## **Input**

### ***Geometry***

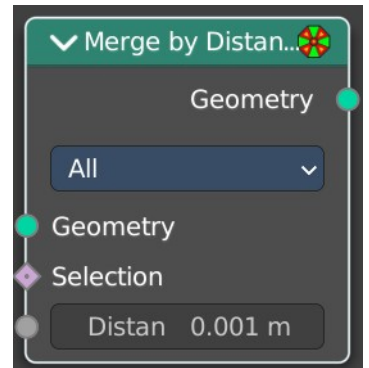
The input geometry.

### ***Selection***

A selection of the input geometry.

### ***Distance***

The merge distance. Everything below this distance will be merged into one vertice.



## Properties

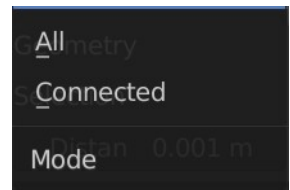
### Mode

#### All

Merges all vertices in reach.

#### Connected

Merges just vertices that are connected by edges.



## Output

### Geometry

The output geometry.

---

## Transform Geometry

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.

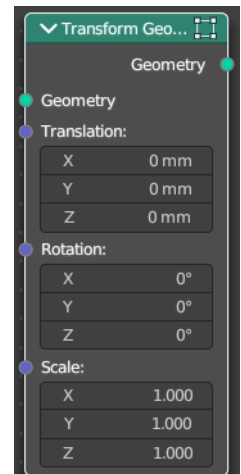
### Scale

Scale to transform the geometries in local space.

## Output

### Geometry

Standard geometry output.



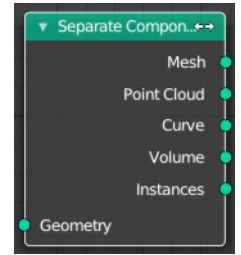
## Separate Components

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.

#### **Instance**

The single instances of the geometry.

## Separate Geometry

Separates a selection of a geometry into its own object.

Tip: when you combine it with the Compare Floats node then you get a more precise control of which parts are separated to a given output geometry.

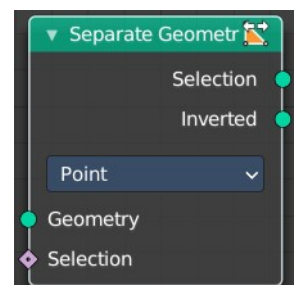
### Inputs

#### **Geometry**

Geometry input.

#### **Selection**

Selection input.

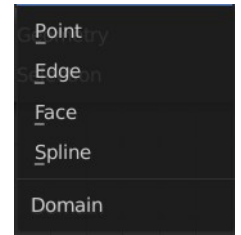


## Properties

### ***Domain***

What kind of geometry to separate.

Note that when selecting a domain that doesn't modify all components, the unmodified components will appear in both outputs.



### **Outputs**

#### **Selection**

Separated selection.

#### ***Inverted***

The inverted separated selection.