12.1.41 Editors - Geometry Nodes Editor - Header - Add Menu - Utilities

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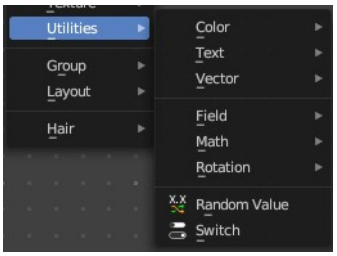
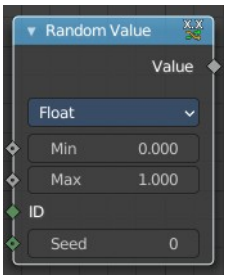
Add menu - Utilities

Utility nodes are mainly for mathematical operations.



Random Value



Generates a random value.

Input

Min

The minimum value of the range. This input is only available for Float, Integer, and Vector types.

Max

The maximum value of the range. This input is only available for Float, Integer, and Vector types.

ID

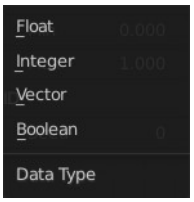
An ID to drive the random number generator seed. By default, this input uses the same value as if the ID Node, which is the id attribute of the context geometry if it exists, and otherwise the index.

Seed

The random seed for the random number generation.

Properties

Data Type



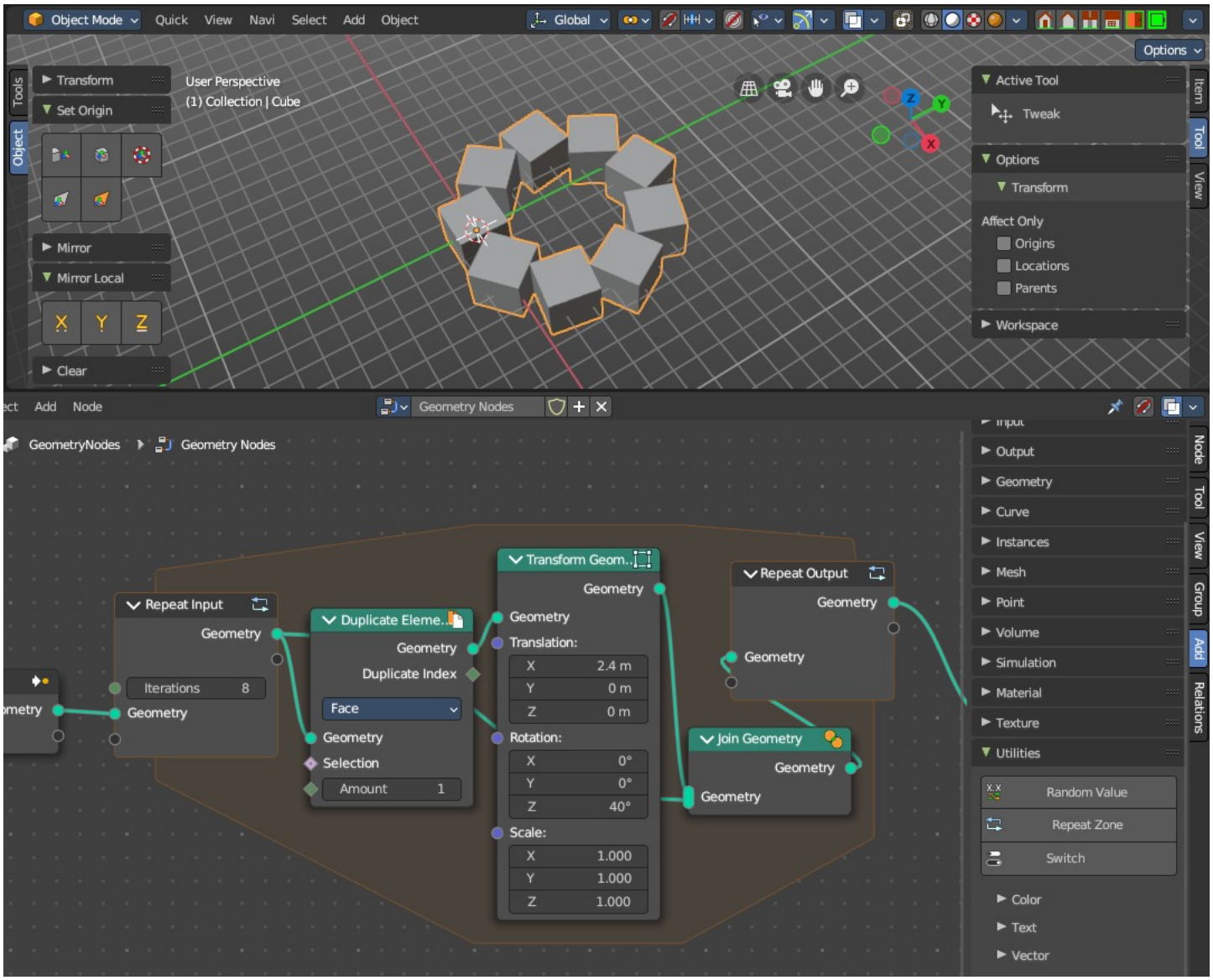
What kind of random value to create. The items should be self explaining.

Output

Value

The output value.

Repeat Zone



When adding a repeat zone, two nodes are added with a “zone” set between them. The inputs connected to the *Repeat Input* node reads and gets data at the beginning of the loop before starting the looping - then the data is processed within the zone, here you can set any changes to the data to then repeat the execution again at the beginning of the chain for the next iteration of the loop. This chain of operations is repeated the specified number of times in the *Repeat Input* node.

In the example in the image above, we duplicate the cube, transform it with a rotation, then join it together again. We do this 8 times in a loop, creating a circular array.

Note: *It is not possible to set data outside the Repeat Zone, you can only get data from outside the Repeat Zone. Any data connected from the outside of the zone are constant throughout every iteration based on their*

value at the current frame. The result of the looping can only be accessed via the Repeat Output node.

Repeat Zone Input

The beginning of the iteration or loop.

Input

Iterations

Number of repetitions or loops.

Geometry

Standard geometry input.

Output

Geometry

Standard geometry output.

Repeat Zone Output

The result and output of the iteration or loop. You can define custom attributes outputs here from the

Input

Geometry

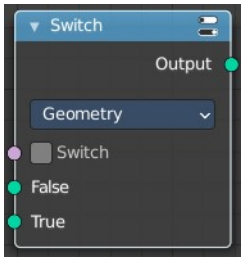
Standard geometry output.

Output

Geometry

Standard geometry output.

Switch



Switch between two inputs values based on a boolean.

Inputs

Switch

The boolean switch.

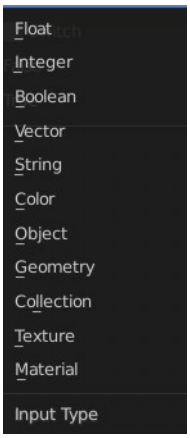
A

The input value A. Used when the switch is off.

B

The input value B. Used when the switch is on.

Properties



Input Type

What input type the values are, which defines what type to output then.

Outputs

Output

Numerical value output.