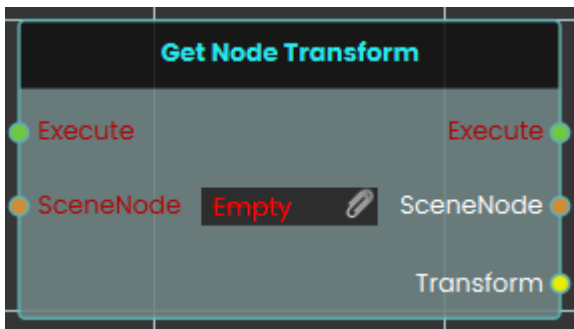


# SceneNode \ Transform

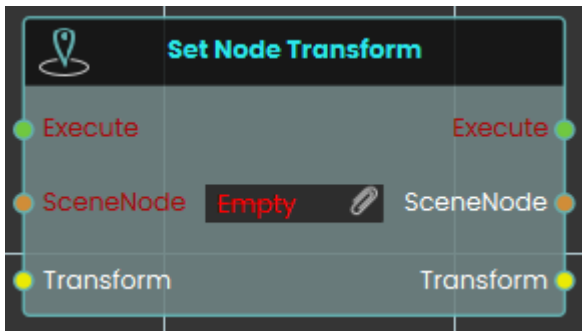
## Get Node Transform



The **Get Node Transform node** retrieves the complete spatial data—including the exact location, rotation, and scale values—of a specific 3D object in the scene. When activated, the node takes the targeted SceneNode input, extracts its current transform matrix, and outputs this combined information through the Transform pin.

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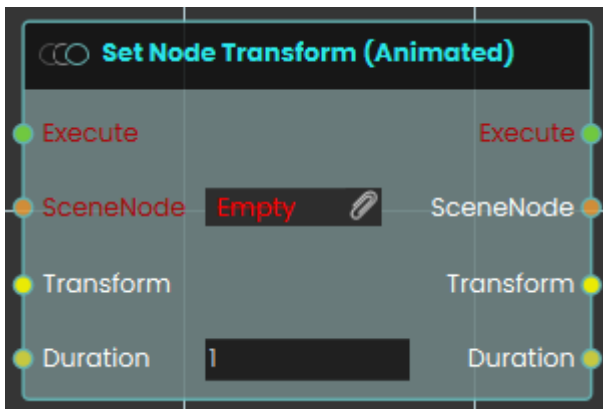
## Set Node Transform



The **Set Node Transform node** instantly applies a complete set of spatial data—encompassing location, rotation, and scale—to a specific 3D object. Once activated, the node evaluates the targeted SceneNode and immediately updates its physical presence in the scene to perfectly match the data provided through the Transform input.

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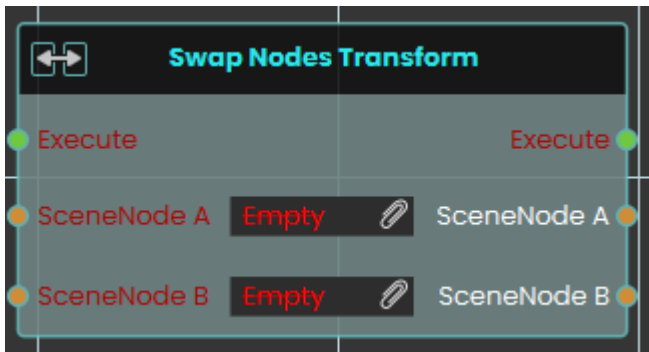
## 🔗 Set Node Transform (Animated)



The **Set Node Transform (Animated) node** functions similarly to the standard set transform node, but it smoothly transitions the 3D object to the new location, rotation, and scale over a defined period. When activated, the node takes the targeted SceneNode and seamlessly tweens its spatial data to match the provided Transform input over the specific amount of time defined by the numerical Duration input (measured in seconds).

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## ⇄ Swap Nodes Transform



**The Swap Nodes Transform node** instantly exchanges the complete spatial data—including location, rotation, and scale—between two distinct 3D objects in the scene. When activated, the node evaluates the targeted objects provided in the SceneNode A and SceneNode B inputs and simultaneously swaps their placements, rotations, and proportions.

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## Transform Node to Node (Animated)

Smoothly moves one or more objects so they end up exactly where a second object is — same position, rotation, and size — over a set number of seconds.

### What it does

This node takes a target object and reads its full placement in the scene — its position, its rotation, and its size. It then animates your chosen object(s) so that, over the time you set, they smoothly travel to that same placement and come to rest matching the target exactly.

The movement is measured in absolute scene coordinates, so your object lands at the target's real position in the scene regardless of any groups either one belongs to. The target object itself is never changed — it stays put, and only the object(s) you pointed at the **SceneNode** input move. The non-animated version of this node snaps the object into place instantly; this version eases it there over the **Duration** you choose.

## Inputs

Port	Type	What to connect
<b>Execute</b>	Trigger	Wire this from the previous node's Execute output to start the movement.
<b>SceneNode</b>	Scene node	The object (or objects) you want to move. Each one will travel to match the target.
<b>ToNode</b>	Scene node	The target object whose place you want to match. This object is read only — it doesn't move.
<b>Duration</b>	Number	How many seconds the smooth movement should take. Leave it at <input type="text" value="2"/> for a gentle two-second glide, or set a smaller number to make it faster.

## Outputs

Port	Type	What you get
<b>Execute</b>	Trigger	Fires once the node has finished.
<b>SceneNode</b>	Scene node	The same object(s) you moved, passed straight through so you can connect more nodes after this one.
<b>ToNode</b>	Scene node	The same target object, passed through unchanged.
<b>Duration</b>	Number	The same number of seconds you set, passed through so you can reuse it.

## Example

<b>SceneNode</b> input	The <code>Drone</code> object
<b>ToNode</b> input	The <code>Landing Pad</code> object
<b>Duration</b> input	<code>3</code> (the drone glides onto the landing pad over three seconds)
<b>SceneNode</b> output	The <code>Drone</code> , now resting in the landing pad's place — ready to chain into the next node

## Tips

- Because the object matches the target's rotation and size as well as its position, you can use an empty or hidden helper object as a “marker” to define exactly how and where something should arrive.
- Set **Duration** to `0` for an instant jump, or use the non-animated version of this node if you never want the smooth motion.

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Revision #3

Created 31 March 2026 08:04:04 by Ahmad Qasim

Updated 10 June 2026 12:09:49 by Rafat