

Sequence

Attach Sequence To

Creating sequences can be done from animating an object in the scene. This sequence can be attached to Hand or an Object in VR.

Hand

With sequences available in the Sequences Library, a sequence can be attached to the Hand in VR experience using this node in Dynamic Training Builder.

Example

Check this tutorial for the example below, where Boolean expressions were created and upon checking the Boolean Expression a sequence is attached to Hand.



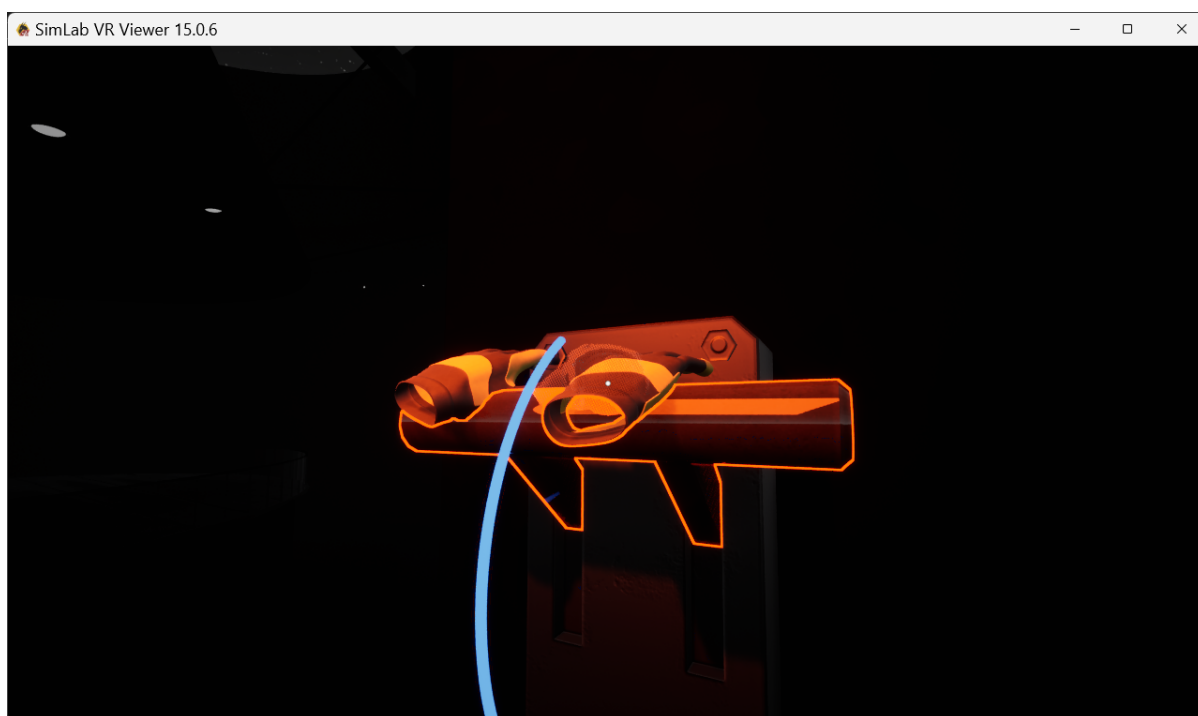
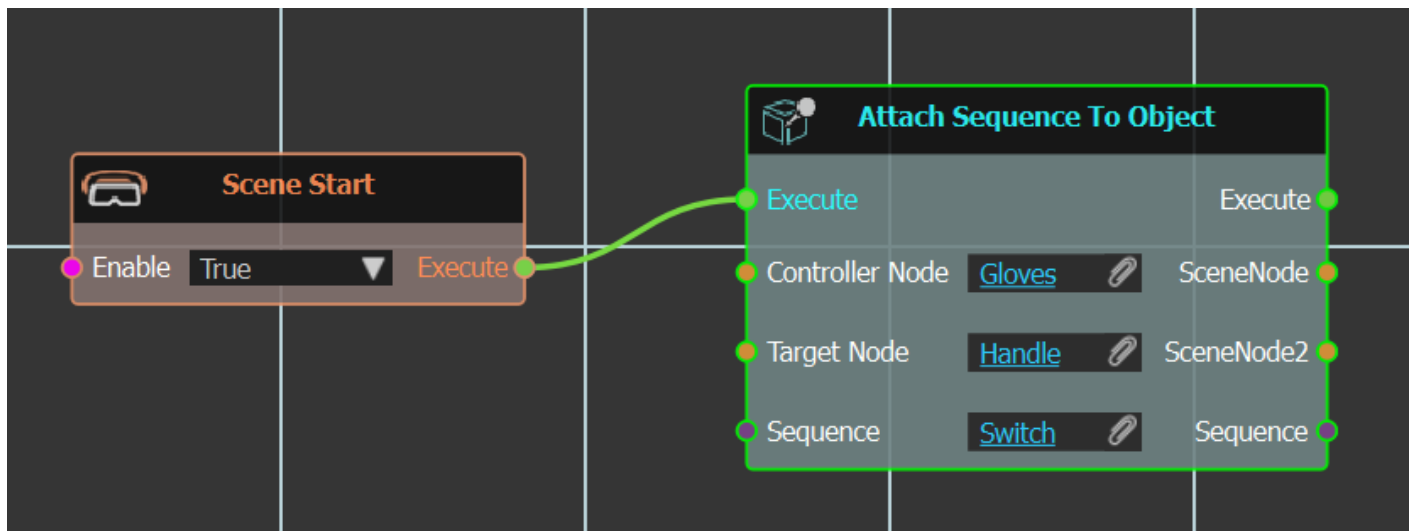
Object

This node can be used to connect a controller grabbable object to a sequence in VR.

Example

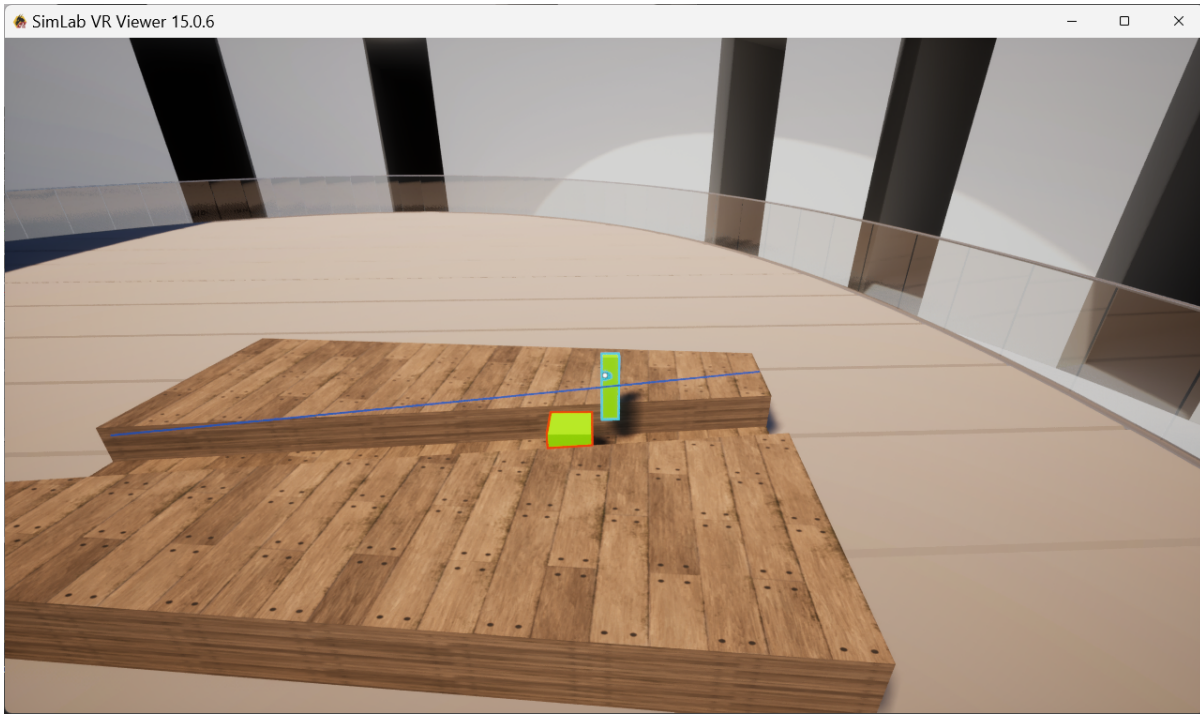
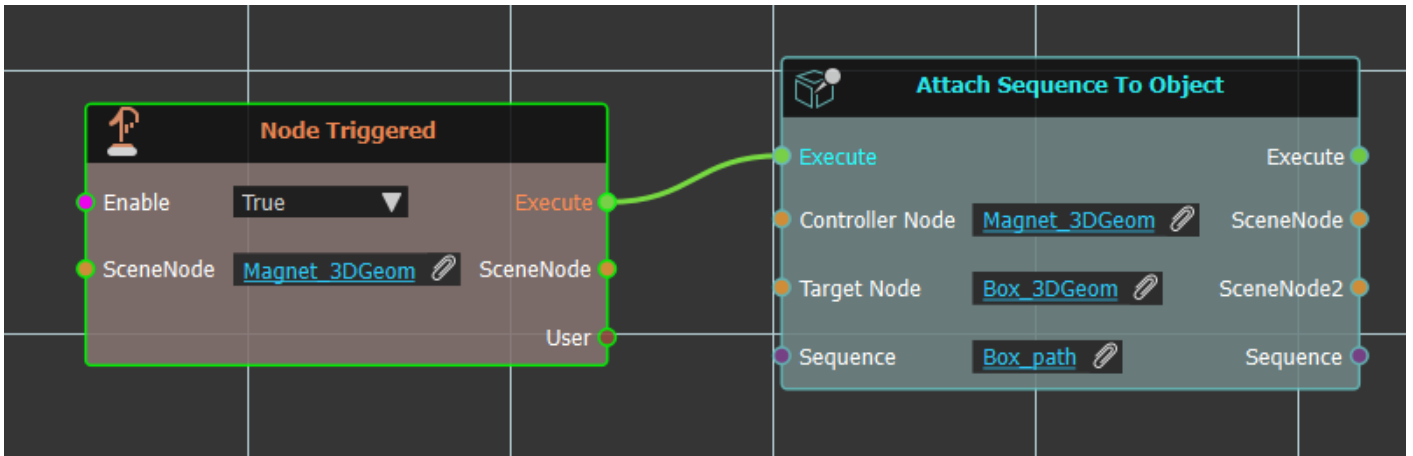
In the example below the "Switch" sequence is attached to "Handle" object, when Controller "Gloves" geometry moves it. In this example a simple grabbable sequence can

do the job, but this is just to demonstrate use of this node.



Example 2

In this example we have a path for a box to walk along being controlled by a magnet.

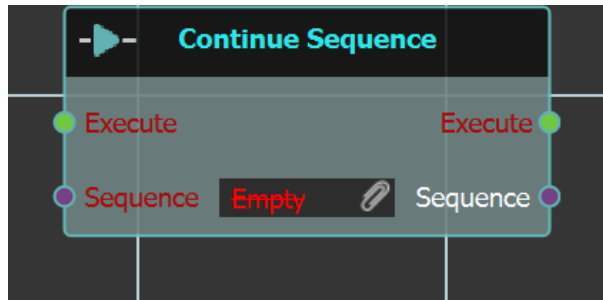


Playback Controls

Used to control sequence behavior.

Continue

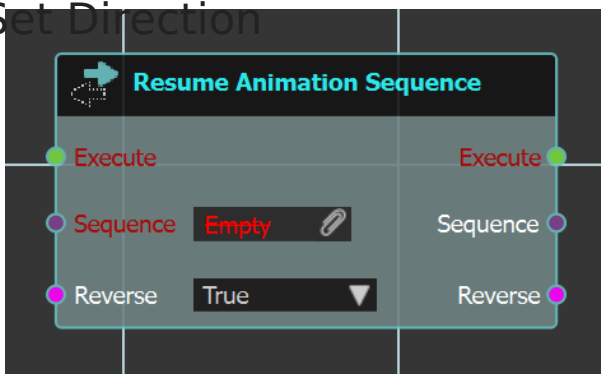
Same Direction



The selected sequence will continue

to play in the same direction.

Set Direction

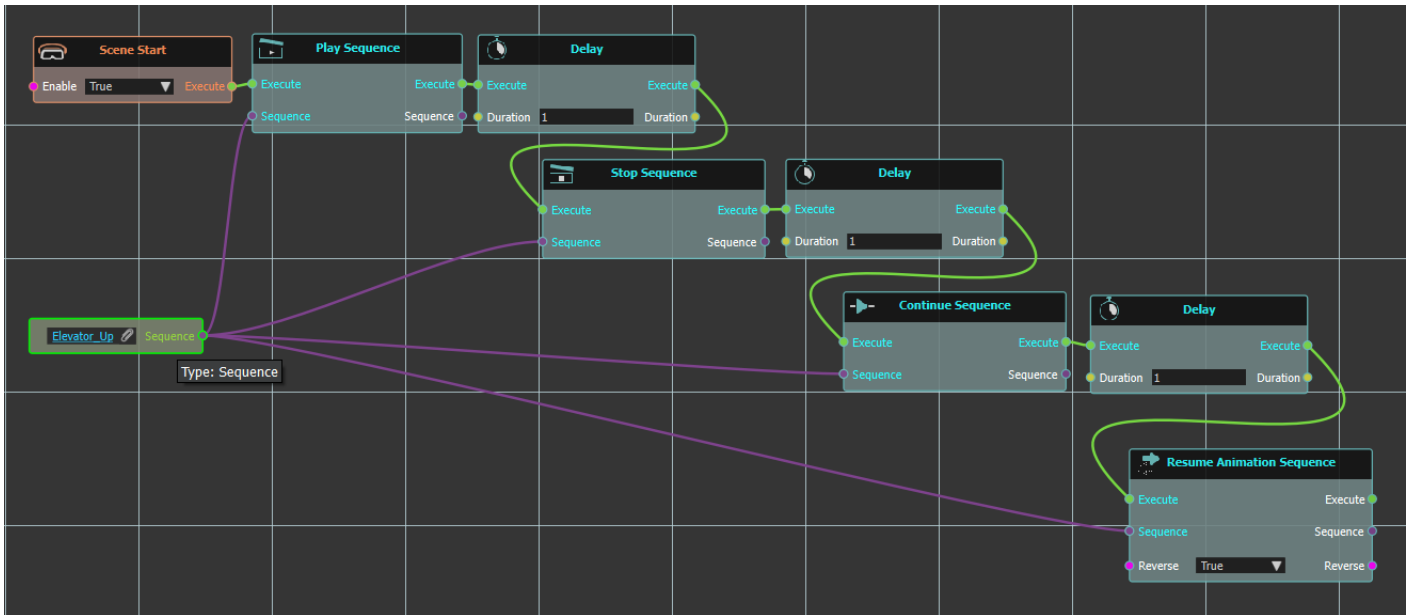


With this node the user can change the selected

sequence direction, by selecting Reverse to True.

Example

In the below example a number of the above Playback Controls are used. Here on "**Scene Start**", "**Play Sequence**" response is executed for "Elevator_Up" sequence. Followed by a 1 second "**Delay**", then "**Stop Sequence**" for another one second "**Delay**". Then the sequence is continued, followed by another "**Delay**" then "**Resume Animation Sequence**" from start.



Play

Play Sequence/Play Sequence From Start

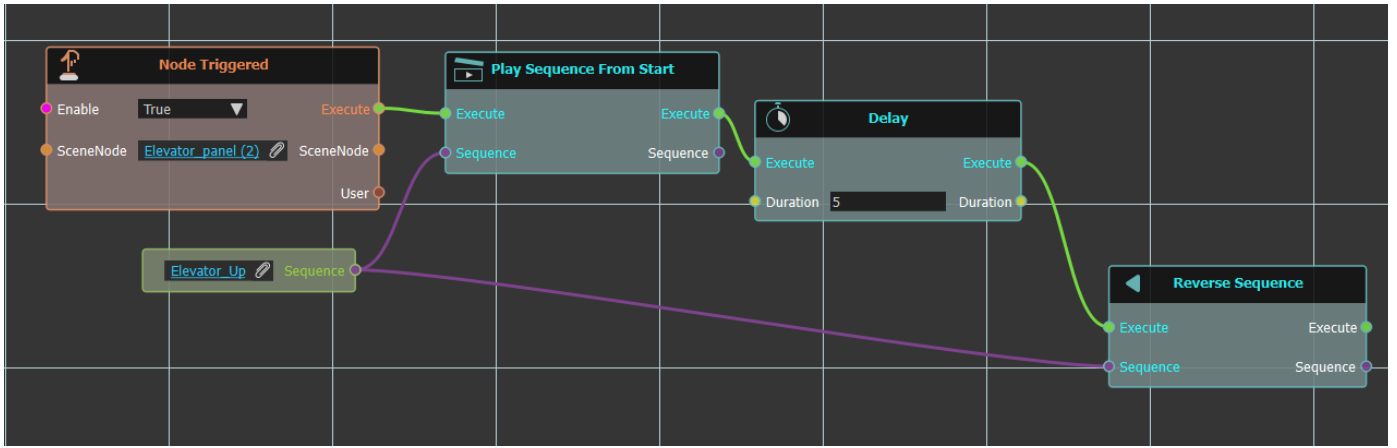
Both controls will play animation sequence, one from current position, and the other -as the name implies- will play it from start.

Reverse

Reverse

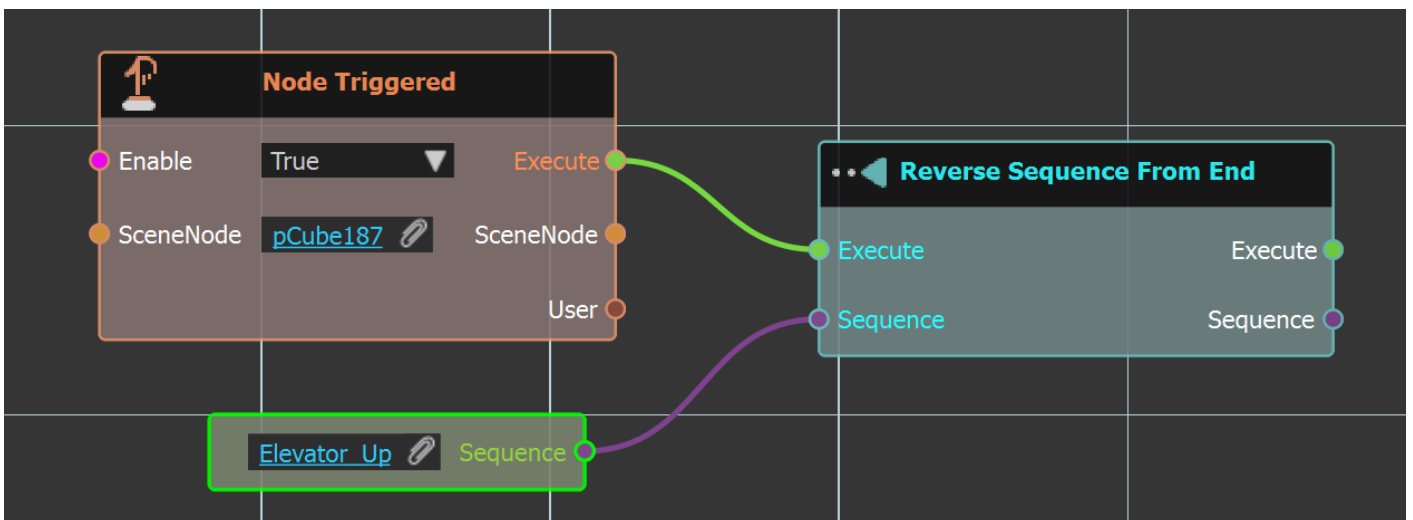
Reverse sequences starts the animation sequence in the reverse mode (from the last frame). The reverse control will start from the last frame not from the current (because it reverses the overall animation)

In the below example the "Elevator_Up" sequence upon clicking "Elevator_panel(2)" geometry will be played from start. So if the elevator at that time was at the top position, it would go down then -as the sequence implies- would go up, then wait for 5 seconds, then "Reverse Sequence" that is go down from last frame.



Reverse From End

This control will start the sequence from the end, even if it hasn't been played yet.



Flip

Flip sequences flips current animation (that is, forward animation will be backward, backward animation will be forward). Think about it like we are opening a door and we

pause the animation in the middle, flip control will return the door back from the current frame to original start position.

Stop

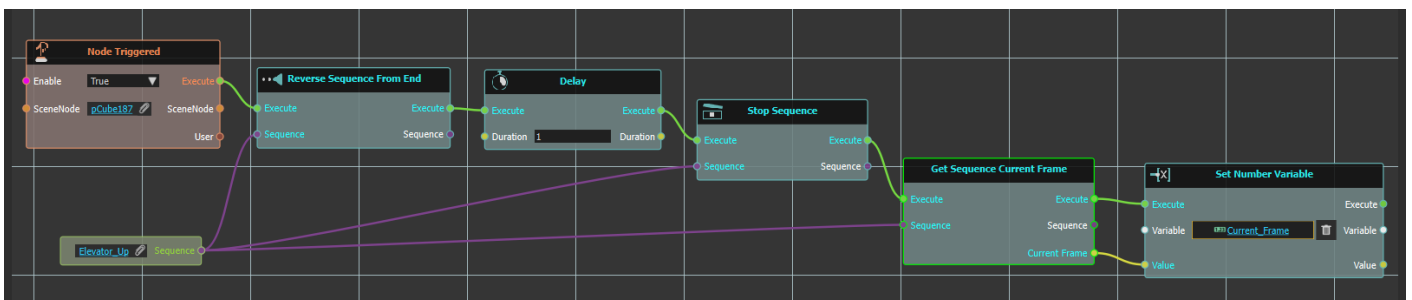
Stops the animation sequence, as shown in examples presented in this section.

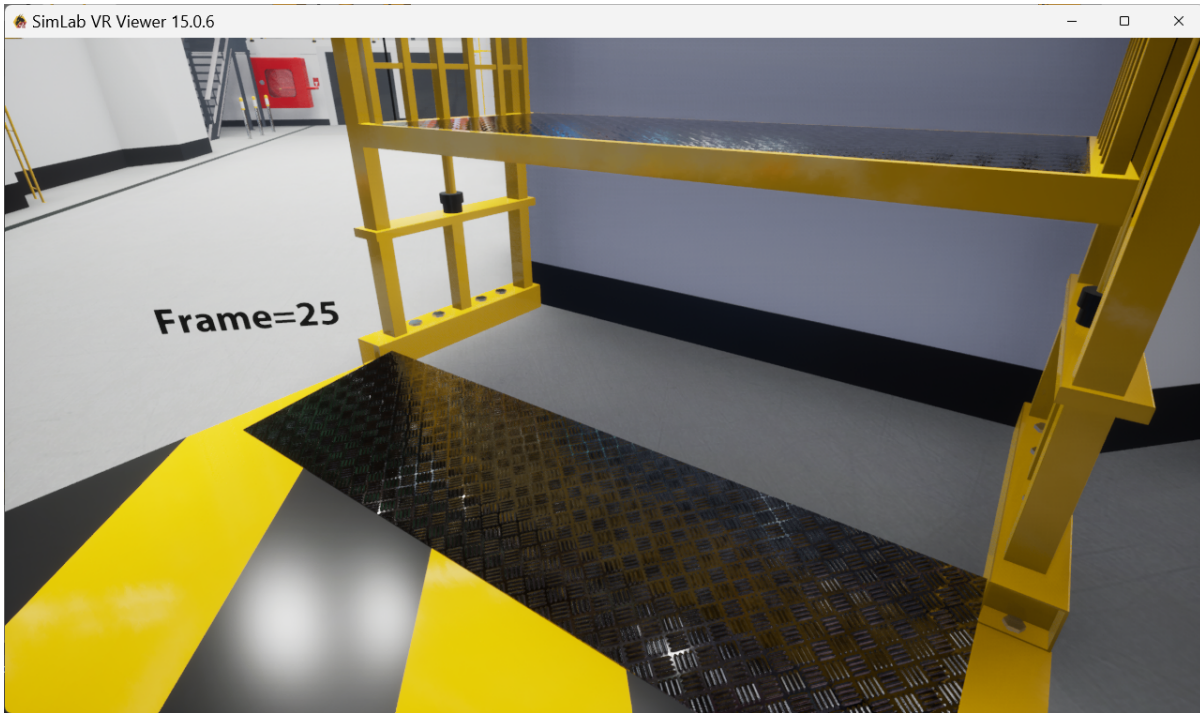
Playback Properties

Current Frame

Get Sequence Current Frame

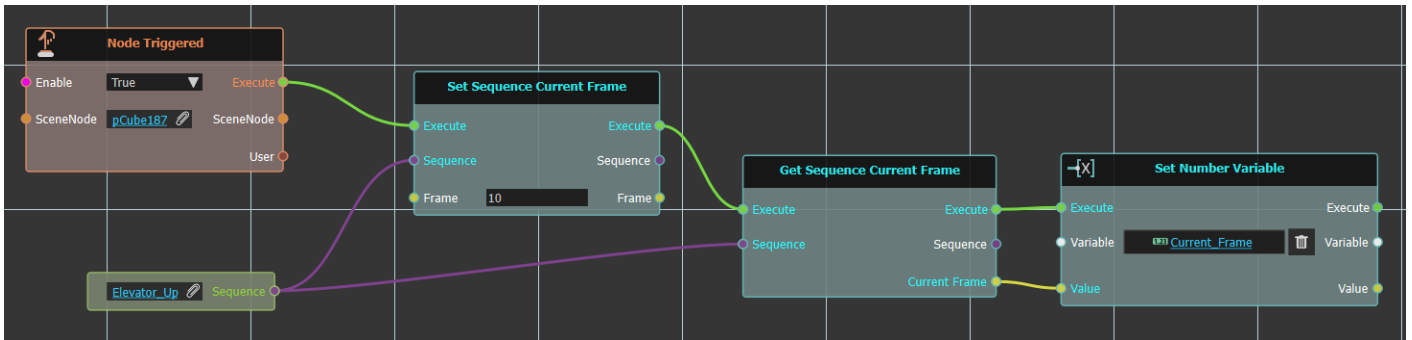
This node will get the value of the current sequence frame, the user can then use this value in any operation. In the example below the value of the current sequence frame is stored in "Current_Frame" variable, which is set to the "VR Variable Writer" in the scene to display its value.



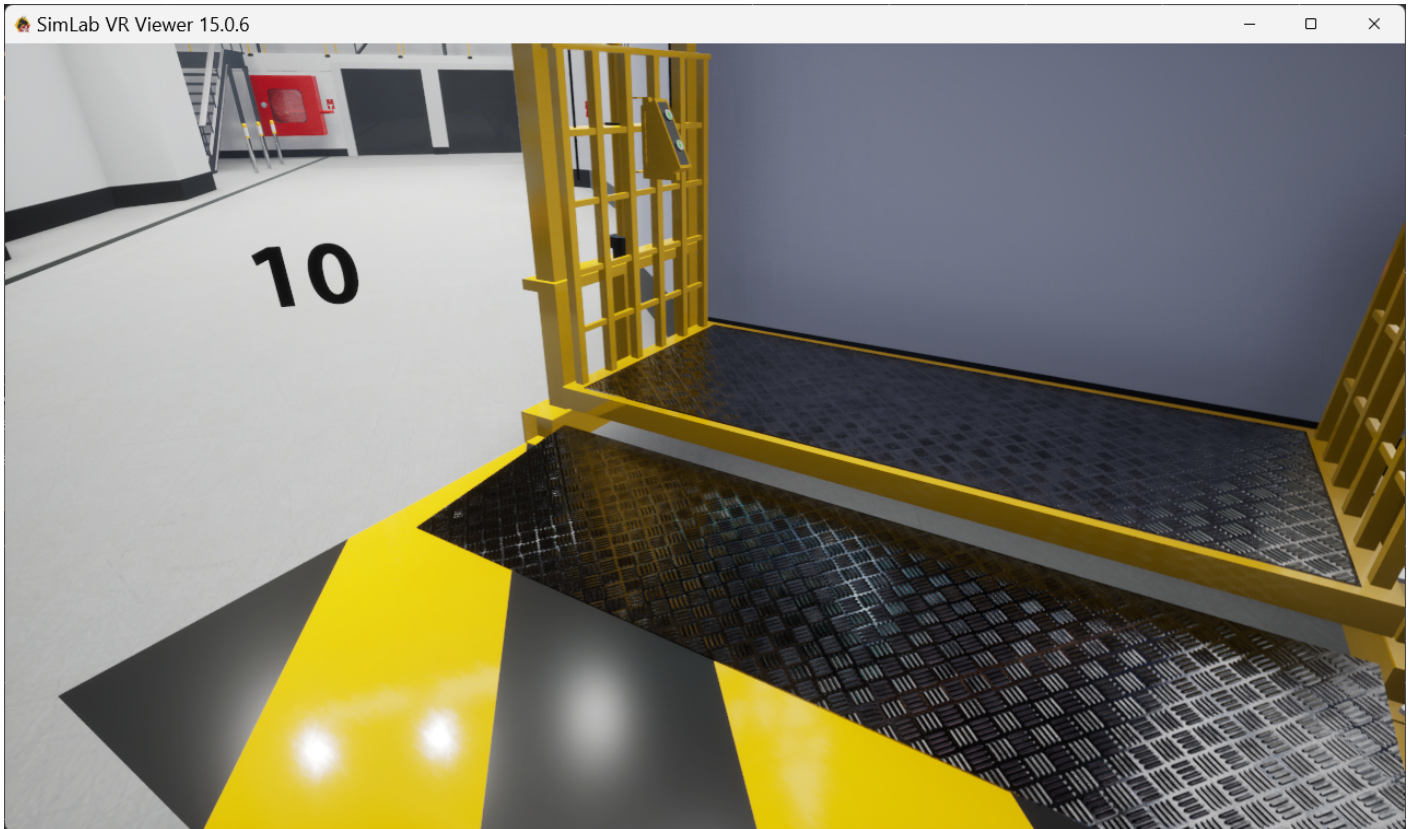


Set Sequence Current Frame

If the user wants to go to a specific frame in the sequence this is the function to use. In the below example upon clicking node the sequence current frame is set to 10.



To show the result we got the valued of the current frame and assign it to "Current_Frame" variable that is displayed in the variable writer as shown below.

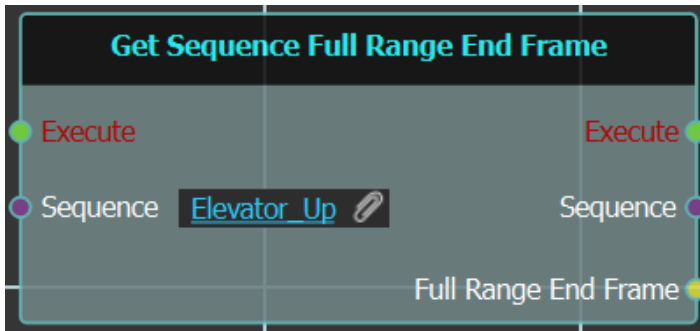


Full Range

This node can be used to calculate the full range of a sequence.

Get End

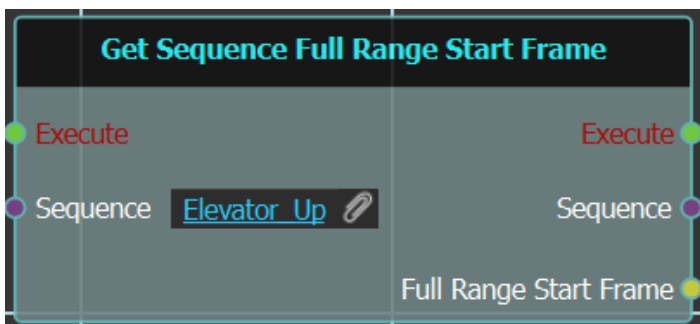
Gets and outputs the end frame of the selected



sequence, when triggered.

Get Start

Gets and outputs the start frame of the selected

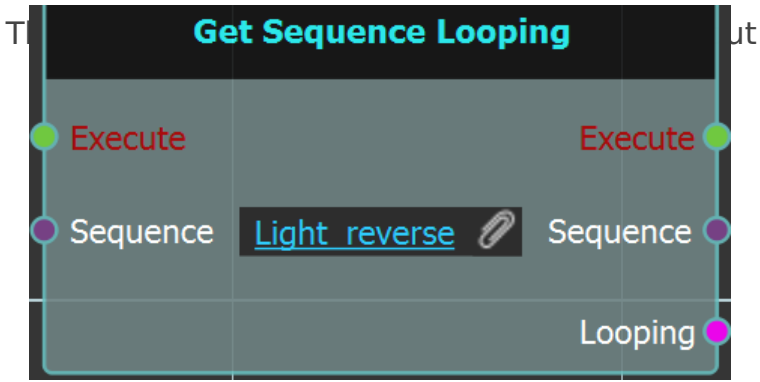


sequence, when triggered.

Looping

Sequences can be set to loop after finishing.

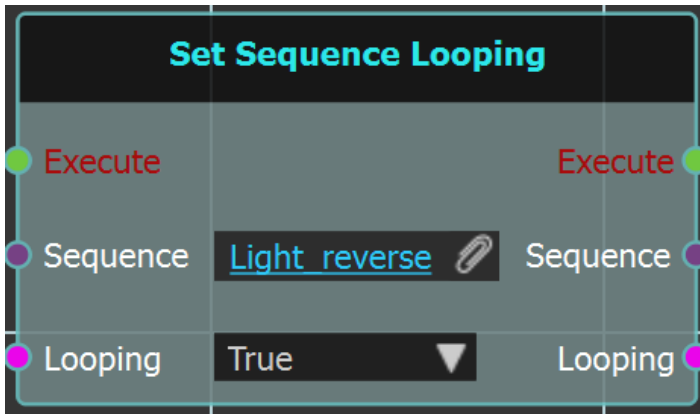
Get Sequence Looping



sequence, whether true or false.

Set Sequence Looping

This node will set the looping status for the input




sequence to either true or false.

Play Range

Get Sequence Play Range End Frame


Execute

Sequence Light reverse 

End Frame

Set Sequence Play Range End Frame


Execute

Sequence Light reverse 

End Frame 0

Set Sequence Play Range Start Frame


Execute

Sequence Empty 

Start Frame 0

Get Sequence Play Range Start Frame

Execute

Sequence Empty 

Start Frame

Play Rate (Speed)

Swing

Is Playing

Is Reversing

Find By Name

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