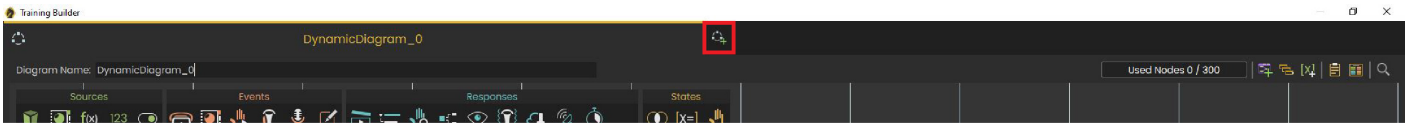
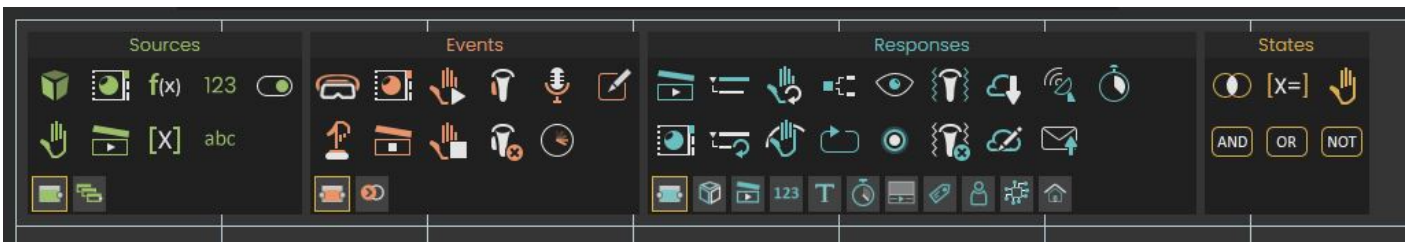
Dynamic Builder

In template diagrams, a user was able to define logic for a group of objects based on name, or attribute criteria. Dynamic diagrams take this to the next level, they allow defining interaction between multiple templates, in a dynamic way. What this mean is that a user can set a dynamic criteria for triggering actions and responses mainly by defining multiple queries using multiple scene nodes.

When you have access to the Dynamic Builder, the default diagram will be a Dynamic diagram, and to add a new one, click the highlighted Add a new dynamic diagram button at the top right side of Training Builder diagram.



A new Dynamic Diagram will open, and the Dynamic Diagram menu will appear.

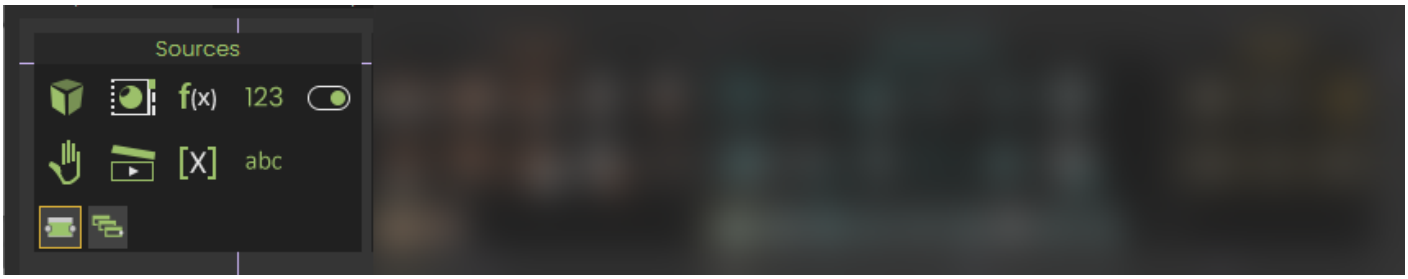


Dynamic training builder menu is divided into four groups:

Sources

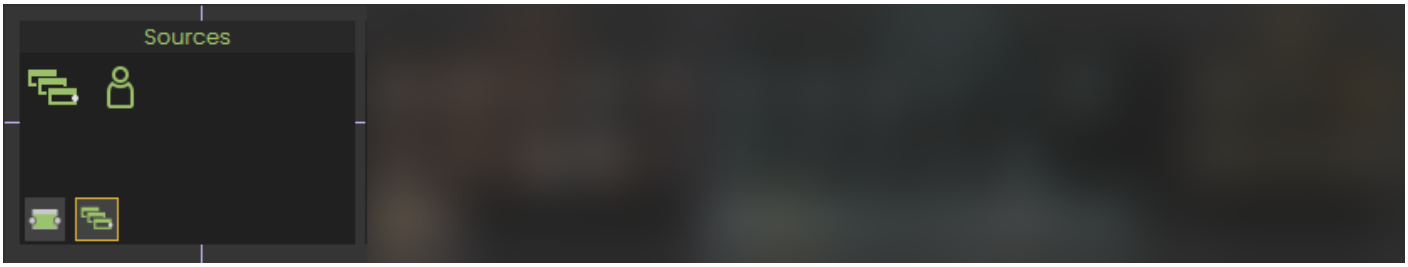
A source is an expression that will generate a value that can be used to trigger an event in the Dynamic Builder. Sources are divided into two tabs, Main Sources and Template Sources.

Main Sources



Icon	Source Name
	Scene Node
	Scene State
	Expression
	Number
	Boolean
	Hand
	Sequence
	Variable
	String

Template Sources

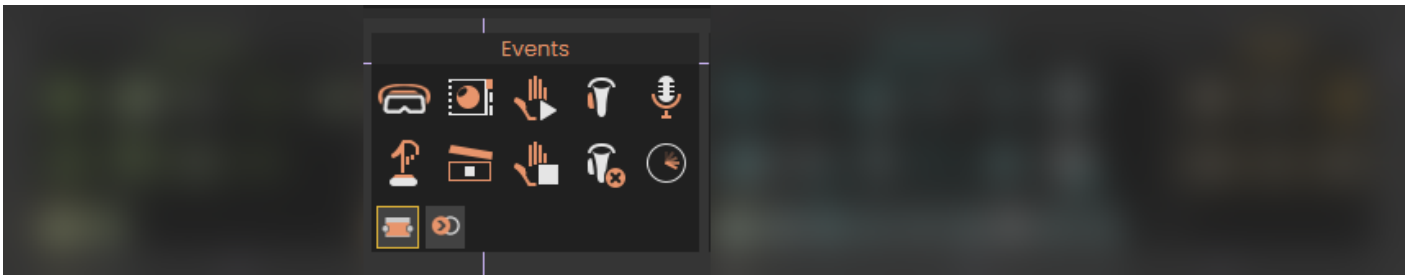


Icon	Source Name
	Scene Node Query
	User Query

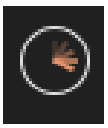
Events

Events are triggered when something happens in the VR Experience. They are arranged into two tabs Main Events and Object Interactions

Main Events



Icon	Event Name
	Scene Start
	Node Triggered
	Scene State Applied

	Sequence Ended
	Node Grab Started
	Node Grab Ended
	Grip Pressed
	Grip Released
	Voice Command Recognized
	Ticker

Object Interactions

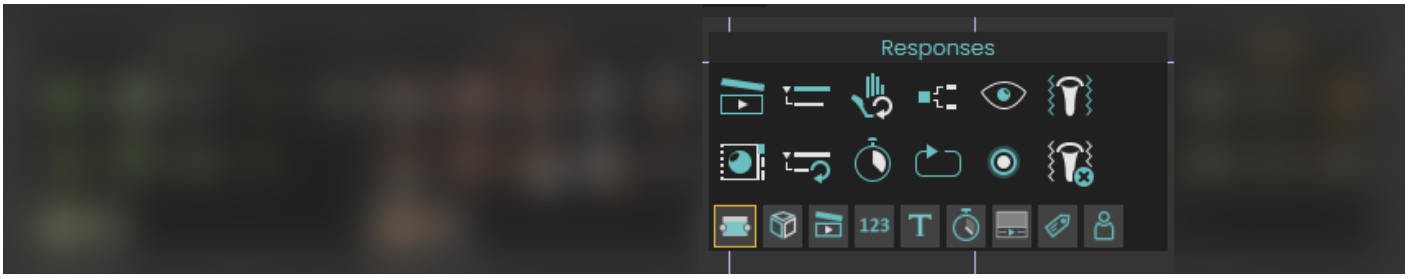
Icon	Event Name
	Node Enter Node
	Node Exited Node
	User Enter Node

	User Exited Node
	Node Hover Started
	Node Hover Ended
	Hand Enter Node
	Hand Exited Node
	Hand Entered Hand
	Hand Exited Hand

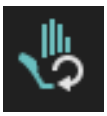
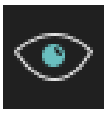
Responses

Responses in SimLab Dynamic Builder are arranged in a number of tabs to make it easier to use.

Main Responses



Icon	Event Name

	Play Animation Sequence
	Apply Scene State
	Set Parent Node
	Reset Parent Node
	Set Node Grabbable State
	Delay
	Branch on Expression
	Loop
	Show/Hide
	Set Node Glow State
	Enable Controller Vibration
	Disable Controller Vibration

Objects Behavior

Animation Sequences

Numbers

String

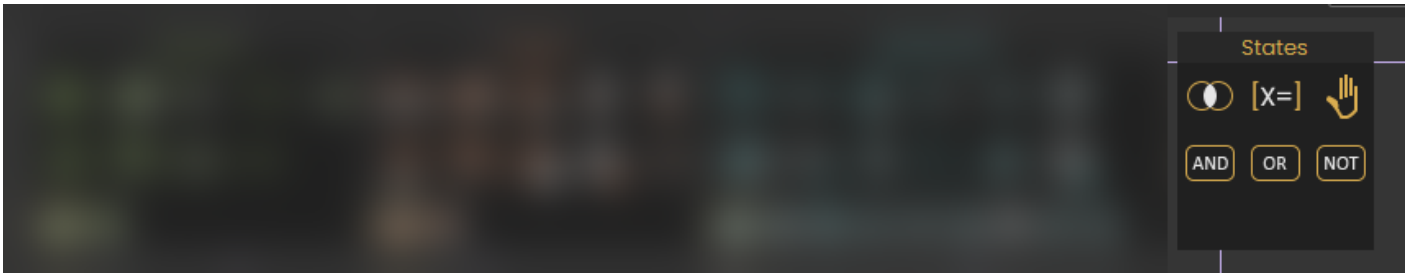
Time Variable

Media

Attributes

User

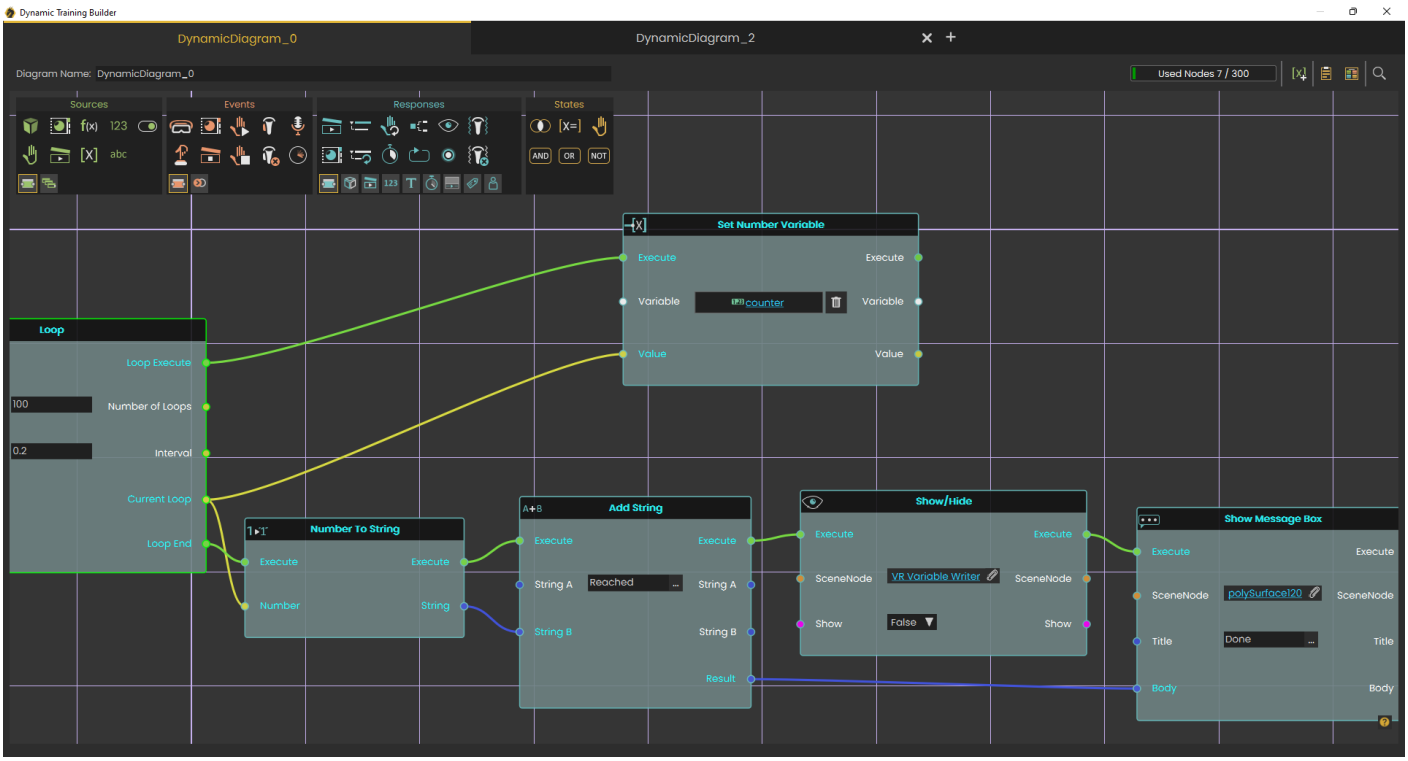
States



The following video shows the behavior in action, if you do not get why this is useful, do not worry about it for now.
In the future when you create more dynamic experiences, you will be glad to have this at your disposal.

https://www.youtube.com/embed/cJ_ib2JSKno

The following diagram shows how loop end is used, it is combined with the fact that in Dynamic Builder the show message strings can also be dynamic, so we can show a message depending on the execution of the experience



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