

# ReTime



Time rewinding asset

## Guide

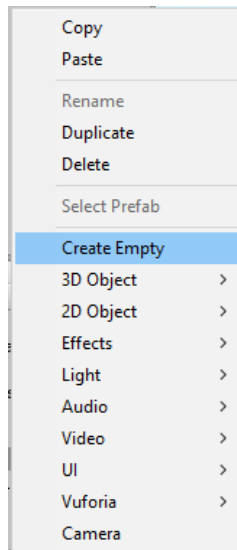
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## Introduction:

ReTime is a **FREE** time rewinding system that enables you to rewind time in a specified amount of seconds and speed. It's easy and puts you in full control of time. Supports rewinding character animations, physics and transforms.

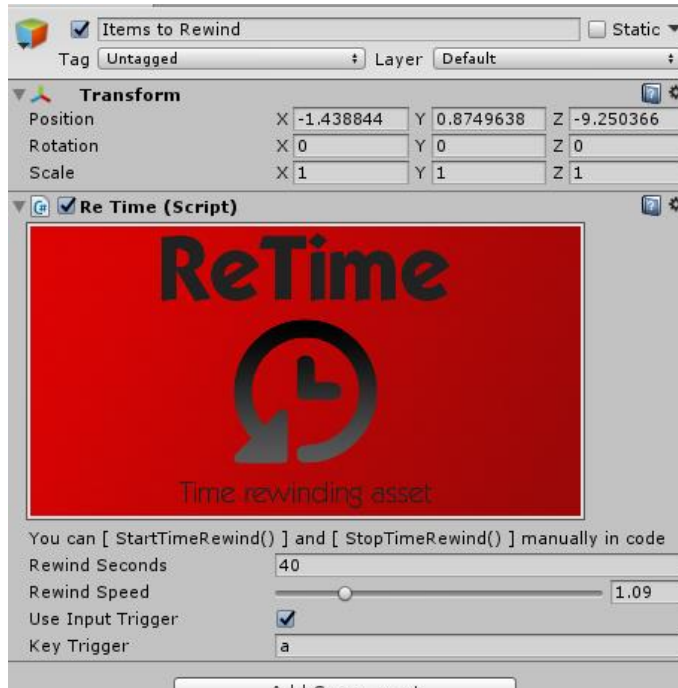
## How to use?

1. Create an empty [game object] and call it “Items to Rewind”



2. Make several cubes with **Rigidbody** and **Box Collider** components and place their position above the ground so that when you press play THE CUBES FALL TO THE GROUND.
3. Now that the cubes act accordingly, we are ready to make them rewind!

4. Select all the cubes from the heirarchy and drag and drop them to the empty **Items to Rewind** object (inside the heirarchy) to make all the cubes the children of **Items to Rewind**. In other words Items to Rewind will no longer be empty, but the parent of all the said cubes.
5. Now Add Component to **Items to Rewind** and add **ReTime**.



6. Set [Rewind Seconds] to: 40
7. Set [Rewind Speed] to: 1.09
8. Check on [Use Input Trigger]
9. Type **a** in [Key Trigger]
10. Now press play, the cubes should fall to the ground like they normally should.
11. Hold A on your keyboard. All the cubes should start rewinding to their original position above the plane.

## How it Works?

*ReTime replicates itself using a bottom bubbling technique during runtime. Meaning, as long as the individual object at the moment is a parent, ReTime will go deeper down to the children and replicate itself with all the already defined parameters.*

*In the example made earlier. ReTime was only added to the [Items to Rewind](#) parent object. But, all the cubes were able to rewind. During run time, ReTime replicated itself to all the children of [Items to Rewind](#), the cubes!*

## Parameters:

[Rewind Seconds] is the amount to rewind back in seconds. If it's set to 40 for example, then that means you can go back 40 seconds in time.

[Rewind Speed] is the speed of the rewind. The smaller the number, the slower the rewind speed. It's a slider with min and max values as floats. Min: 0.1 and Max: 5.

[Use Input Trigger] enables you to rewind time using a keyboard trigger. When checked you can assign a keyboard key code for rewind.

[Key Trigger] takes a string value, the keyboard key code which you want to use for rewind when held. Type in the same key code as Unity's standard. It works as: `Input.GetKey( [KeyTrigger] )`. So Example:

Keyboard | Keycode to type

A		a
Z		z
Enter		return
Ctrl		left ctrl / right ctrl

For more control over time and input. ReTime exposed the two methods: `StartTimeRewind()` and `StopTimeRewind()`. You can use them both to build even finer control over your rewinds. Enabling you to use mouse inputs, events, collisions, etc..

### *Important Notes:*

Individual Rewinding: To rewind some individual objects only, simply add ReTime to these objects individually, and if they're children to a parent object, remove ReTime from the parent. Because as discussed earlier. ReTime replicates downwards.

So lets say we have lots of cubes from A to Z. Cubes A, B and C are the only ones that should rewind and the rest of the cubes shouldn't. If all these cubes have a parent object called Parent, and Parent has ReTime added, then during run time, ReTime will be added to all cubes from A to Z. So to fix this: remove ReTime from Parent and add ReTime only to the individual game objects, cubes A, B and C.

Second way to fix this is to make a new empty game object and make cubes A, B and C the children of this new object. Then add ReTime to this new parent ONLY.

Grouping: Using parents and children you can make up lots of grouping of which items you want rewinded and which you don't.

Manual Rewinding: You can GET COMPONENT ReTime and trigger the methods `StartTimeRewind()` and/or `StopTimeRewind`, using your own inputs and events.

Feeding: ReTime introduces what is known as feeding. It is basically checkpoints for when/what you want to stop recording and re-enable recording. It is done via triggering the `StopFeeding()` and `StartFeeding()`. Check the included demos for more info on how it works.

Demos: The demos showcase lots of different ways to use ReTime. Make sure you check them out.

