

# TridentBuilder

TridentBuilder is a Groovy builder for the open source [Trident](#) animation library

## Description

The goal of this project is to provide a powerful and extensible animation library for Java applications.

## Download

[tridentbuilder-0.6](#)

## Installing

Drop tridentbuilder-0.5 into \$GROOVY\_HOME/lib along with its dependencies

- [Trident 7.0](#)

All these dependencies can be downloaded from [this directory](#) too.



### Warning

Trident and TridentBuilder require Jdk6 to be installed.

## Maven

```
<repository>
  <id>codehaus-release</id>
  <name>Codehaus</name>
  <url>http://repository.codehaus.org</url>
</repository>

<dependency>
  <groupId>org.codehaus.griffon</groupId>
  <artifactId>tridentbuilder</artifactId>
  <version>0.6</version>
</dependency>
```

## Gradle

```
repositories {
    mavenRepo name: 'Codehaus', urls: 'http://repository.codehaus.org'
    mavenCentral()
}

dependencies {
    compile 'org.codehaus.griffon:tridentbuilder:0.6'
}
```

## Pre-requisites

Groovy 1.8.6 is the required minimum version to run TridentBuilder 0.6  
It is recommended that you upgrade to the 1.8.x series in order to take advantage of

- @Bindable and ASTTransformations
- short binding syntax
- numerous enhancements made to SwingBuilder and FactoryBuilderSupport

## Documentation

These are the nodes currently supported by TridentBuilder 0.6, they are listed in groups. Component groups are a good way to organize nodes, they also serve another purpose when used with [Griffon's CompositeBuilder](#).



### Properties

The following table summarizes the properties required by the node factories, there are other properties that can be set on the built nodes, refer to Trident's javadocs to know more about them.

Trident						
Node	Property	Type	Default	Required	Bindable	Notes
timeline [Timeline]	start	boolean		✗	✗	
	loop	Timeline.RepeatBehavior		✗	✗	alternative values are [tl "loop", "revel
	target	Object		✗	✗	also can be s as the node's value
timelineCallback [TimelineCallbackFactory]	timelinePulse	Closure		✗	✗	can be defin as a nested closure args are (flo durationFrac float timelinePosit
	timelineStateChanged	Closure		✗	✗	can be defin as a nested closure args are (TimelineSta oldState, TimelineStat newState, flc durationFrac float timelinePosit
interpolatedProperty	property	String		✓	✗	or set the property's as node's value
	from	Object		✓	✗	
	to	Object		✗	✗	
	interpolator	PropertyInterpolator		✗	✗	
keyFrames [List]	property	String		✓	✗	or set the property's as node's value
	interpolator	PropertyInterpolator		✗	✗	
keyFrame	offset	float			✓	✗
	value	Object			✓	✗
	ease	TimelineEase			✗	✗

linearEase [Linear]						
sineEase [Sine]						
splineEase [Sine]	amount	float		✓	✗	must be in the range [0..1]
timelineScenario [TimelineScenario]						
parallelScenario [TimelineScenario.Parallel]						
sequenceScenario [TimelineScenario.Sequence]						
rendevouzScenario [TimelineScenario.RendezvousSequence]						
timelineScenarioCallback [TimelineScenarioCallbackFactory]	onDone	Closure		✗	✗	can be defined as a nested closure
swingRepaintTimeline [SwingRepaintTimeline]	start	boolean		✗	✗	
	loop	Timeline.RepeatBehavior		✗	✗	alternative values are ["loop", "reverse"]
	target	Object		✗	✗	also can be set as the node's value
	zone	Rectangle		✗	✗	
timelineRunnable [TimelineRunnable]						
<b>Triggers</b>						
Node	Property	Type	Default	Required	Bindable	Notes
actionTrigger						node value will be used as the event source
focusTrigger	event	FocusTriggerEvent	GAINED	✗	✗	values can be literal too ["gained", "lost"]
	autoReverse	boolean	false	✗	✗	
						node value will be used as the event source
mouseTrigger	event	MouseTriggerEvent	CLICK	✗	✗	values can be literal too ["enter", "exit", "press", "release", "click"]
	autoReverse	boolean	false	✗	✗	
						node value will be used as the event source

An additional synthetic property is available too:

- **actionTriggerFor** - its value must be a Timeline reference. This attribute makes the owner the source of the trigger event.

Example:

```
button("One", id: "button", foreground: Color.BLUE)
    timeline(button, duration: 2500, id: 't') {
        interpolatedProperty("foreground", from: Color.BLUE, to: Color.RED)
        mouseTrigger(event: 'enter', autoReverse: true)
    }
    button('Two', id: 'b1', actionTriggerFor: t)
```

Hovering the mouse over button 'One' will trigger the animation. Moving the mouse outside of the button's boundaries will reverse the animation. Clicking on the second button triggers the animation too.

## Developers

Andres Almiray

## Source Control

<https://github.com/griffon/tridentbuilder>

## Building

TridentBuilder uses [Gradle](#) as its build tool.

## Contributing

Please contact the Griffon team members by e-mail.

## Mailing List(s)

<http://griffon.codehaus.org/Mailing+Lists>

## Issue tracker

<http://jira.codehaus.org/browse/GRIFFON>