

# Animatable Properties

Many of the properties in `CALayer` and `CIFilter` can be animated. This article lists those properties, along with the animation used by default.

## CALayer Animatable Properties

The following `CALayer` class properties can be animated by Core Animation. See `CALayer` for more information.

- `anchorPoint`  
Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).
- `backgroundColor`  
Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86). (subproperties are animated using a basic animation)
- `backgroundFilters`  
Uses the default implied `CATransitionAnimation` described in [Table 2](#) (page 86). Sub-properties of the filters are animated using the default implied `CABasicAnimation` described in [Table 1](#) (page 86).
- `borderColor`  
Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).
- `borderWidth`  
Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).
- `bounds`  
Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).
- `compositingFilter`  
Uses the default implied `CATransitionAnimation` described in [Table 2](#) (page 86). Sub-properties of the filters are animated using the default implied `CABasicAnimation` described in [Table 1](#) (page 86).
- `contents`
- `contentsRect`  
Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).
- `cornerRadius`

Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

- `doubleSided`

No default implied animation is set.

- `filters`

Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86). Sub-properties of the filters are animated using the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

- `frame`

The frame property itself is not animatable. You can achieve the same results by modifying the `bounds` and `position` properties instead.

- `hidden`

Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

- `mask`

Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

- `masksToBounds`

Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

- `opacity`

Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

- `position`

Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

- `shadowColor`

Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

- `shadowOffset`

Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

- `shadowOpacity`

Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

- `shadowRadius`

Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

- `sublayers`

Uses the default implied `CATransitionAnimation` described in [Table 2](#) (page 86).

- `sublayerTransform`

Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

- `transform`  
Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).
- `zPosition`  
Uses the default implied `CABasicAnimation` described in [Table 1](#) (page 86).

**Table 1** Default Implied Basic Animation

Description	Value
Class	<code>CABasicAnimation</code>
duration	.25 seconds, or the duration of the current transaction
keyPath	Dependent on layer property type

**Table 2** Default Implied Transition

Description	Value
Class	<code>CATransition</code>
duration	.25 seconds, or the duration of the current transaction
type	Fade ( <code>kCATransitionFade</code> )
startProgress	0.0
endProgress	1.0

## CIFilter Animatable Properties

Core Animation adds the following animatable properties to Core Image’s `CIFilter` class. See `CIFilter` [Core Animation Additions](#) for more information. These properties are available only on OS X.

- `name`
- `enabled`