
NSAnimationContext Class Reference

Graphics & Animation: Animation



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NSAnimationContext Class Reference

Inherits from	NSObject
Conforms to	NSObject (NSObject)
Framework	/System/Library/Frameworks/AppKit.framework
Availability	Available in Mac OS X v10.5 and later.
Declared in	NSAnimationContext.h
Related sample code	BasicCocoaAnimations CocoaSlides MethodReplacement QuickLookDownloader TrackBall

Overview

`NSAnimationContext` is analogous to `CATransaction` and are similar in overall concept to `NSGraphicsContext`. Each thread maintains its own stack of nestable `NSAnimationContext` instances, with each new instance initialized as a copy of the instance below (so, inheriting its current properties).

Multiple `NSAnimationContext` instances can be nested, allowing a given block of code to initiate animations using its own specified duration without affecting animations initiated by surrounding code.

```
[NSAnimationContext beginGrouping];
// Animate enclosed operations with a duration of 1 second
[[NSAnimationContext currentContext] setDuration:1.0];
[[aView animator] setFrame:newFrame];
...
    [NSAnimationContext beginGrouping];
    // Animate alpha fades with half-second duration
    [[NSAnimationContext currentContext] setDuration:0.5];
    [[aView animator] setAlphaValue:0.75];
    [[bView animator] setAlphaValue:0.75];
    [NSAnimationContext endGrouping];
...
// Will animate with a duration of 1 second
[[bView animator] setFrame:secondFrame];
[NSAnimationContext endGrouping];
```

Tasks

Grouping Transactions

- + [beginGrouping](#) (page 6)
Creates a new animation grouping.
- + [endGrouping](#) (page 7)
Ends the current animation grouping.

Getting the Current Animation Context

- + [currentContext](#) (page 7)
Returns the current animation context.

Modifying the Animation Duration

- [setDuration:](#) (page 8)
Sets the duration used by animations created as a result of setting new values for an animatable property.
- [duration](#) (page 7)
Returns the duration used when animating object properties that support animation.

Class Methods

beginGrouping

Creates a new animation grouping.

```
+ (void)beginGrouping
```

Availability

Available in Mac OS X v10.5 and later.

Related Sample Code

AnimatedTableView
BasicCocoaAnimations
CocoaSlides
MethodReplacement
QuickLookDownloader

Declared In

NSAnimationContext.h

currentContext

Returns the current animation context.

```
+ (NSAnimationContext *)currentContext
```

Return Value

The current animation context.

Availability

Available in Mac OS X v10.5 and later.

Related Sample Code

BasicCocoaAnimations

CocoaSlides

QuickLookDownloader

TrackBall

UIElementInspector

Declared In

NSAnimationContext.h

endGrouping

Ends the current animation grouping.

```
+ (void)endGrouping
```

Availability

Available in Mac OS X v10.5 and later.

Related Sample Code

BasicCocoaAnimations

CocoaSlides

MethodReplacement

QuickLookDownloader

TrackBall

Declared In

NSAnimationContext.h

Instance Methods

duration

Returns the duration used when animating object properties that support animation.

```
- (NSTimeInterval)duration
```

Return Value

The duration in seconds.

Availability

Available in Mac OS X v10.5 and later.

Declared In

`NSAnimationContext.h`

setDuration:

Sets the duration used by animations created as a result of setting new values for an animatable property.

- (void)setDuration:(NSTimeInterval)*duration*

Parameters

duration

The duration in seconds.

Discussion

Any animations that occur as a result of setting the values of animatable properties in the current context will run for this duration.

Availability

Available in Mac OS X v10.5 and later.

Related Sample Code

BasicCocoaAnimations

CocoaSlides

QuickLookDownloader

TrackBall

UIElementInspector

Declared In

`NSAnimationContext.h`

Document Revision History

This table describes the changes to *NSAnimationContext Class Reference*.

Date	Notes
2008-02-08	Corrected typos.
2006-07-13	New document that describes the class that provides nested transaction support for animating views.

REVISION HISTORY

Document Revision History