QCCompositionLayer Class Reference

Graphics & Imaging > Quartz



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QCCompositionLayer Class Reference

Inherits from CAOpenGLLayer : CALayer : NSObject

Conforms to QCCompositionRenderer

NSCoding (CALayer) CAMediaTiming (CALayer) NSObject (NSObject)

Framework /System/Library/Frameworks/Quartz.framework/Frameworks/QuartzComposer.framework

Availability Available in Mac OS X v10.5 and later.

Declared in QCCompositionLayer.h

Companion guides Core Animation Programming Guide

Quartz Composer Programming Guide

Related sample code CALayerEssentials

Overview

The QCCompositionLayer class loads, plays, and controls Quartz Composer compositions in a Core Animation layer hierarchy. The composition tracks the Core Animation layer time and is rendered directly at the current dimensions of the QCCompositionLayer object.

An archived <code>QCCompositionLayer</code> object saves the composition that's loaded at the time the layer is archived. It detects layer usage and pauses or resumes the composition appropriately. A <code>QCCompositionLayer</code> object starts rendering the composition automatically when the layer is placed in a visible layer hierarchy. The layer stops rendering when it is hidden or removed from the visible layer hierarchy.

You can pass data to the input ports, or retrieve data from the output ports, of the root patch of a composition by accessing the patch attribute of the <code>QCCompositionLayer</code> instance using methods provided by the <code>QCCompositionRenderer</code> protocol.

Overview 2007-12-11 | © 2007 Apple Inc. All Rights Reserved. **Note:** You must not modify the asynchronous property of the superclass CAOpenGLLayer.

Tasks

Creating the Layer

+ compositionLayerWithFile: (page 7)

Creates and returns an instance of a composition layer using the Quartz Composer composition in the specified file.

+ compositionLayerWithComposition: (page 6)

Creates and returns an instance of a composition layer using the provided Quartz Composer composition.

- initWithFile: (page 8)

Initializes and returns a composition layer using the Quartz Composer composition in the specified file.

initWithComposition: (page 7)

Initializes and returns a composition layer using the provided Quartz Composer composition.

Getting the Composition

- composition (page 7)

Returns the composition associated with the layer.

Class Methods

compositionLayerWithComposition:

Creates and returns an instance of a composition layer using the provided Quartz Composer composition.

 $+ ({\tt QCCompositionLayer*}) \textbf{compositionLayerWithComposition:} ({\tt QCComposition*}) \textbf{\it composition}$

Parameters

composition

The Quartz Composer composition to use as content.

Return Value

An autoreleased, initialized QCCompositionLayer object or nil if initialization is not successful.

Availability

Available in Mac OS X v10.5 and later.

See Also

+ compositionLayerWithFile: (page 7)

Declared In

QCCompositionLayer.h

compositionLayerWithFile:

Creates and returns an instance of a composition layer using the Quartz Composer composition in the specified file.

+ (QCCompositionLayer*)compositionLayerWithFile:(NSString*)path

Parameters

path

A string that specifies the location of a Quartz Composer composition.

Return Value

An autoreleased, initialized QCCompositionLayer object or nil if initialization is not successful.

Availability

Available in Mac OS X v10.5 and later.

See Also

+ compositionLayerWithComposition: (page 6)

Related Sample Code

CALayerEssentials

Declared In

QCCompositionLayer.h

Instance Methods

composition

Returns the composition associated with the layer.

- (QCComposition*) composition

Return Value

The composition object associated with the layer or nil if there is none.

Availability

Available in Mac OS X v10.5 and later.

Declared In

QCCompositionLayer.h

initWithComposition:

Initializes and returns a composition layer using the provided Quartz Composer composition.

Instance Methods 2007-12-11 | © 2007 Apple Inc. All Rights Reserved. - (id)initWithComposition:(QCComposition*)composition

Parameters

composition

The Quartz Composer composition to use as content.

Return Value

The initialized QCCompositionLayer object or nil if initialization is not successful.

Availability

Available in Mac OS X v10.5 and later.

See Also

```
- initWithFile: (page 8)
```

Declared In

QCCompositionLayer.h

initWithFile:

Initializes and returns a composition layer using the Quartz Composer composition in the specified file.

```
- (id)initWithFile:(NSString*)path
```

Parameters

path

A string that specifies the location of a Quartz Composer composition.

Return Value

The initialized QCCompositionLayer object or nil if initialization is not successful.

Availability

Available in Mac OS X v10.5 and later.

See Also

```
- initWithComposition: (page 7)
```

Declared In

 ${\tt QCCompositionLayer.h}$

Document Revision History

This table describes the changes to QCCompositionLayer Class Reference.

Date	Notes
2007-12-11	Corrected outdated Core Animation class and protocol names.
2007-10-31	New document that describes the class used to display a Quartz Composer composition in a Layer Kit layer.

REVISION HISTORY

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composition instance method 7
compositionLayerWithComposition: class method 6
compositionLayerWithFile: class method 7

initWithComposition: instance method 7
initWithFile: instance method 8
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