CATiledLayer Class Reference

Graphics & Animation: Animation

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CATiledLayer Class Reference

Inherits from	CALayer : NSObject
Conforms to	NSCoding (CALayer) CAMediaTiming (CALayer) NSObject (NSObject)
Framework	/System/Library/Frameworks/QuartzCore.framework
Availability	Available in iOS 2.0 and later.
Declared in	CATiledLayer.h
Companion guides	Core Animation Programming Guide Core Animation Cookbook

Overview

`CATiledLayer` is a subclass of `CALayer` providing a way to asynchronously provide tiles of the layer's content, potentially cached at multiple levels of detail.

As more data is required by the renderer, the layer's `drawLayer:inContext:` method is called on one or more background threads to supply the drawing operations to fill in one tile of data. The clip bounds and CTM of the drawing context can be used to determine the bounds and resolution of the tile being requested.

Regions of the layer may be invalidated using the `setNeedsDisplayInRect:` method however the update will be asynchronous. While the next display update will most likely not contain the updated content, a future update will.

Tasks

Visual Fade

`+ fadeDuration` (page 7)

The time, in seconds, that newly added images take to "fade-in" to the rendered representation of the tiled layer.

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Levels of Detail

`levelsOfDetail` (page 6) *property*
The number of levels of detail maintained by this layer.

`levelsOfDetailBias` (page 6) *property*
The number of magnified levels of detail for this layer.

Layer Tile Size

`tileSize` (page 7) *property*
The maximum size of each tile used to create the layer's content.

Properties

For more about Objective-C properties, see "Properties" in *The Objective-C Programming Language*.

levelsOfDetail

The number of levels of detail maintained by this layer.

```
@property size_t levelsOfDetail
```

Discussion
Defaults to 1. Each level of detail is half the resolution of the previous level. If too many levels are specified for the current size of the layer, then the number of levels is clamped to the maximum value (the bottom most level of detail must contain at least a single pixel in each dimension.)

Availability
Available in iOS 2.0 and later.

Declared In
`CATiledLayer.h`

levelsOfDetailBias

The number of magnified levels of detail for this layer.

```
@property size_t levelsOfDetailBias
```

Discussion
Defaults to 0. Each previous level of detail is twice the resolution of the later. For example, specifying a value of 2 means that the layer has two extra levels of detail: 2x and 4x.

Availability
Available in iOS 2.0 and later.

Declared In
`CATiledLayer.h`

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tileSize

The maximum size of each tile used to create the layer's content.

```
@property CGSize tileSize
```

Discussion
Defaults to (256.0, 256.0).

Availability
Available in iOS 2.0 and later.

Declared In
`CATiledLayer.h`

Class Methods

fadeDuration

The time, in seconds, that newly added images take to "fade-in" to the rendered representation of the tiled layer.

```
+ (CFTimeInterval)fadeDuration
```

Discussion
The default implementation returns 0.25 seconds.

Availability
Available in iOS 2.0 and later.

Declared In
`CATiledLayer.h`

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Document Revision History

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

Date	Notes
2007-07-24	New document that describes the class that simplifies rendering large image layers.

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Document Revision History

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