NSNotificationQueue Class Reference

Cocoa > Events & Other Input

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NSNotificationQueue Class Reference

Inherits from	NSObject
Conforms to	NSObject (NSObject)
Framework	/System/Library/Frameworks/Foundation.framework
Availability	Available in Mac OS X v10.0 and later.
Companion guide	Notification Programming Topics for Cocoa
Declared in	NSNotificationQueue.h
Related sample code	Link Snoop

Overview

NSNotificationQueue objects (or simply notification queues) act as buffers for notification centers (instances of NSNotificationCenter). Whereas a notification center distributes notifications when posted, notifications placed into the queue can be delayed until the end of the current pass through the run loop or until the run loop is idle. Duplicate notifications can also be coalesced so that only one notification is sent although multiple notifications are posted. A notification queue maintains notifications (instances of NSNotification) generally in a first in first out (FIFO) order. When a notification rises to the front of the queue, the queue posts it to the notification center, which in turn dispatches the notification to all objects registered as observers.

Every thread has a default notification queue, which is associated with the default notification center for the task. You can create your own notification queues and have multiple queues per center and thread.

Tasks

Creating Notification Queues

`- initWithNotificationCenter:` (page 8)
Initializes and returns a notification queue for the specified notification center.

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Getting the Default Queue

`+ defaultQueue` (page 6)
Returns the default notification queue for the current thread.

Managing Notifications

`- enqueueNotification:postingStyle:` (page 7)
Adds a notification to the notification queue with a specified posting style.

`- enqueueNotification:postingStyle:coalesceMask:forModes:` (page 7)
Adds a notification to the notification queue with a specified posting style, criteria for coalescing, and runloop mode.

`- dequeueNotificationsMatching:coalesceMask:` (page 6)
Removes all notifications from the queue that match a provided notification using provided matching criteria.

Class Methods

defaultQueue

Returns the default notification queue for the current thread.

```
+ (NSNotificationQueue *)defaultQueue
```

Return Value
Returns the default notification queue for the current thread. This notification queue uses the default notification center.

Availability
Available in Mac OS X v10.0 and later.

Related Sample Code
Link Snoop

Declared In
`NSNotificationQueue.h`

Instance Methods

dequeueNotificationsMatching:coalesceMask:

Removes all notifications from the queue that match a provided notification using provided matching criteria.

```
- (void)dequeueNotificationsMatching:(NSNotification *)notification
    coalesceMask:(NSUInteger)coalesceMask
```


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Parameters

notification

The notification used for matching notifications to remove from the notification queue.

coalesceMask

A mask indicating what criteria to use when matching attributes of *notification* to attributes of notifications in the queue. The mask is created by combining any of the constants `NSNotificationNoCoalescing`, `NSNotificationCoalescingOnName`, and `NSNotificationCoalescingOnSender`.

Availability
Available in Mac OS X v10.0 and later.

Declared In
`NSNotificationQueue.h`

enqueueNotification:postingStyle:

Adds a notification to the notification queue with a specified posting style.

```
- (void)enqueueNotification:(NSNotification *)notification
    postingStyle:(NSPostingStyle)postingStyle
```

Parameters

notification

The notification to add to the queue.

postingStyle

The posting style for the notification. The posting style indicates when the notification queue should post the notification to its notification center.

Discussion
Notifications added with this method are posted using the runloop mode `NSDefaultRunLoopMode` and coalescing criteria that will coalesce only notifications that match both the notification's name and object.

This method invokes `enqueueNotification:postingStyle:coalesceMask:forModes:` (page 7).

Availability
Available in Mac OS X v10.0 and later.

Related Sample Code
Link Snoop

Declared In
`NSNotificationQueue.h`

enqueueNotification:postingStyle:coalesceMask:forModes:

Adds a notification to the notification queue with a specified posting style, criteria for coalescing, and runloop mode.

```
- (void)enqueueNotification:(NSNotification *)notification
    postingStyle:(NSPostingStyle)postingStyle coalesceMask:(NSUInteger)coalesceMask
     forModes:(NSArray *)modes
```


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Parameters

notification

The notification to add to the queue.

postingStyle

The posting style for the notification. The posting style indicates when the notification queue should post the notification to its notification center.

coalesceMask

A mask indicating what criteria to use when matching attributes of *notification* to attributes of notifications in the queue. The mask is created by combining any of the constants `NSNotificationNoCoalescing`, `NSNotificationCoalescingOnName`, and `NSNotificationCoalescingOnSender`.

modes

The list of modes the notification may be posted in. The notification queue will only post the notification to its notification center if the run loops is in one of the modes provided in the array. May be `nil`, in which case it defaults to `NSDefaultRunLoopMode`.

Availability
Available in Mac OS X v10.0 and later.

Declared In
`NSNotificationQueue.h`

initWithNotificationCenter:

Initializes and returns a notification queue for the specified notification center.

```
- (id)initWithNotificationCenter:(NSNotificationCenter *)notificationCenter
```

Parameters

notificationCenter

The notification center used by the new notification queue.

Return Value
The newly initialized notification queue.

Discussion
This is the designated initializer for the NSNotificationQueue class.

Availability
Available in Mac OS X v10.0 and later.

Declared In
`NSNotificationQueue.h`

Constants

NSNotificationCoalescing

These constants specify how notifications are coalesced.

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```
typedef enum {
    NSNotificationNoCoalescing = 0,
    NSNotificationCoalescingOnName = 1,
    NSNotificationCoalescingOnSender = 2
} NSNotificationCoalescing;
```

Constants

`NSNotificationNoCoalescing`

Do not coalesce notifications in the queue.

Available in Mac OS X v10.0 and later.

Declared in `NSNotificationQueue.h`.

`NSNotificationCoalescingOnName`

Coalesce notifications with the same name.

Available in Mac OS X v10.0 and later.

Declared in `NSNotificationQueue.h`.

`NSNotificationCoalescingOnSender`

Coalesce notifications with the same object.

Available in Mac OS X v10.0 and later.

Declared in `NSNotificationQueue.h`.

Discussion

These constants are used in the third argument of `enqueueNotification:postingStyle:coalesceMask:forModes:` (page 7). You can OR them together to specify more than one.

Availability

Available in Mac OS X v10.0 and later.

Declared In

`NSNotificationQueue.h`

NSPostingStyle

These constants specify when notifications are posted.

```
typedef enum {
    NSPostWhenIdle = 1,
    NSPostASAP = 2,
    NSPostNow = 3
} NSPostingStyle;
```

Constants

`NSPostASAP`

The notification is posted at the end of the current notification callout or timer.

Available in Mac OS X v10.0 and later.

Declared in `NSNotificationQueue.h`.

`NSPostWhenIdle`

The notification is posted when the run loop is idle.

Available in Mac OS X v10.0 and later.

Declared in `NSNotificationQueue.h`.

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`NSPostNow`

The notification is posted immediately after coalescing.

Available in Mac OS X v10.0 and later.

Declared in `NSNotificationQueue.h`.

Discussion

These constants are used in both `enqueueNotification:postingStyle:` (page 7) and `enqueueNotification:postingStyle:coalesceMask:forModes:` (page 7).

Availability

Available in Mac OS X v10.0 and later.

Declared In

`NSNotificationQueue.h`

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Document Revision History

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

Date	Notes
2007-04-02	Update for Mac OS X v10.5.
2006-06-28	Updated the Constants section to conform to reference consistency guidelines.
2006-05-23	First publication of this content as a separate document.

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