
SafariEvent Class Reference

User Experience



2010-07-02



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Apple Inc.
1 Infinite Loop
Cupertino, CA 95014
408-996-1010

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SafariEvent Class Reference

Technology area: Safari Extensions

Overview

The `SafariEvent` class is a base class used to encapsulate events. Developers who are familiar with DOM events will notice many similarities in design and behavior.

Events are sent to their target and its ancestors in three phases. In order, they are as follows:

1. **Capturing.** The event is sent to every ancestor of the its target, starting with the most distant ancestor, and ending with the parent of the event's target.
2. **Targeting.** The event is sent to its target.
3. **Bubbling.** The event is sent to every ancestor of its target, starting with the parent of the event's target, and ending with its most distant ancestor.

You can tell which phase an event is in from its `eventPhase` property. When you register for an event notification, you specify whether you want to be notified during the capturing phase or not, so you may not always need to check what phase the event is in.

Tasks

Targeting Events

`type` (page 7)

The type of the event.

`target` (page 7)

The target of the event.

`currentTarget` (page 6)

The object that the event is currently being sent to.

`timeStamp` (page 7)

The time and date that the event was created.

Interacting with Event Propagation

[eventPhase](#) (page 7)

A number that indicates which event-handling phase the event is in.

[bubbles](#) (page 6)

A Boolean value that indicates whether the event goes through the bubbling phase.

[cancelable](#) (page 6)

A Boolean value that indicates whether the event can be canceled.

[stopPropagation](#) (page 8)

Prevents the event from any further propagation.

Preventing the Default Action

[preventDefault](#) (page 7)

Prevents the browser from performing the default action for the event.

[defaultPrevented](#) (page 7)

A Boolean value that indicates whether the default action has been prevented.

Properties

bubbles

A Boolean value that indicates whether the event goes through the bubbling phase.

readonly attribute boolean bubbles

cancelable

A Boolean value that indicates whether the event can be canceled.

readonly attribute boolean cancelable

See Also

[stopPropagation](#) (page 8)

currentTarget

The object that the event is currently being sent to.

readonly attribute SafariEventTarget currentTarget

Discussion

This attribute varies as the event progresses through the phases, changing as the event moves through the event-dispatch hierarchy.

defaultPrevented

A Boolean value that indicates whether the default action has been prevented.

```
readonly attribute boolean defaultPrevented
```

eventPhase

A number that indicates which event-handling phase the event is in.

```
readonly attribute unsigned short eventPhase
```

Discussion

The values for this property are the same as the values used by Webkit to identify the event-handling phases.

target

The target of the event.

```
readonly attribute SafariEventTarget target
```

Discussion

This attribute stays the same as the event moves through the event-dispatch hierarchy. Its value is the same as the object that the event is sent to during the targeting phase.

timeStamp

The time and date that the event was created.

```
readonly attribute DOMTimeStamp timeStamp
```

type

The type of the event.

```
readonly attribute DOMString type
```

Discussion

The string used to identify a particular type of event is documented in the reference for that class.

Methods

preventDefault

Prevents the browser from performing the default action for the event.

```
void preventDefault()
```

Discussion

Use this method to indicate that your extension has already fully handled the event; you don't want the browser to do anything. Note that preventing the default action does not stop an event from propagating.

In the current implementation, there are no Safari Extensions events that have default actions associated with them.

stopPropagation

Prevents the event from any further propagation.

```
void stopPropagation()
```

Discussion

Propagation can only be stopped if an event is can be canceled. After propagation is stopped, the event is not sent to any other targets.

See Also

[cancelable](#) (page 6)

Document Revision History

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

Date	Notes
2010-07-02	Minor editorial changes throughout.
2010-06-14	New document that describes a base class used to encapsulate Safari Extension events.

REVISION HISTORY

Document Revision History