SafariExtension Class Reference

User Experience

2010-08-03

Apple Inc.
© 2010 Apple Inc.
All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, electronic, photocopying, recording, or otherwise, without prior written permission of Apple Inc., with the following exceptions: Any person is hereby authorized to store documentation on a single computer for personal use only and to print copies of documentation for personal use provided that the documentation contains Apple's copyright notice.

The Apple logo is a trademark of Apple Inc.

Use of the "keyboard" Apple logo (Option-Shift-K) for commercial purposes without the prior written consent of Apple may constitute trademark infringement and unfair competition in violation of federal and state laws.

No licenses, express or implied, are granted with respect to any of the technology described in this document. Apple retains all intellectual property rights associated with the technology described in this document. This document is intended to assist application developers to develop applications only for Apple-labeled computers.

Every effort has been made to ensure that the information in this document is accurate. Apple is not responsible for typographical errors.

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

Apple, the Apple logo, Pages, and Safari are trademarks of Apple Inc., registered in the United States and other countries.

Simultaneously published in the United States and Canada.

Even though Apple has reviewed this document, APPLE MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS DOCUMENT, ITS QUALITY, ACCURACY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. AS A RESULT, THIS DOCUMENT IS PROVIDED "AS IS," AND YOU, THE READER, ARE ASSUMING THE ENTIRE RISK AS TO ITS QUALITY AND ACCURACY.

IN NO EVENT WILL APPLE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT OR INACCURACY IN THIS DOCUMENT, even if advised of the possibility of such damages.

THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. No Apple dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Contents

SafariExtension Class Reference 5

Overview 5
Tasks 5
- Working with Extensions 5
- Adding and Removing Scripts and Style Sheets 6
- Storing Settings 6

Properties 6
- bars 6
- baseURI 7
- globalPage 7
- secureSettings 7
- settings 7
- toolbarItems 7

Methods 8
- addContentScript 8
- addContentScriptFromURL 8
- addContentStyleSheet 9
- addContentStyleSheetFromURL 9
- removeContentScript 10
- removeContentScripts 10
- removeContentStyleSheet 10
- removeContentStyleSheets 11

Document Revision History 13

2010-08-03 | © 2010 Apple Inc. All Rights Reserved.

2010-08-03 | © 2010 Apple Inc. All Rights Reserved.

SafariExtension Class Reference

Technology area:	Safari Extensions
Availability	Available in Safari 5.0 and later.

Overview

The `SafariExtension` class represents your extension outside of the web content; an instance of the class is accessible as `safari.extension`. Its counterpart class for scripts running within the web content is `SafariContentExtension`.

Adding and removing style sheets and scripts. Adding or removing a content style sheet applies to pages immediately. Adding or removing a content script applies only to pages opened or reloaded after that point. Removing a style sheet or a script that is in the `Info.plist` file only removes it from the current browser session.

Whitelists and blacklists. A content script or style sheet may specify a blacklist and a whitelist; both are optional. See "The Extension Builder Interface" in *Safari Extensions Development Guide* for a description of the pattern format. The script or style sheet will be applied to a page only in the following cases:

- The whitelist and blacklist are both empty.
- The whitelist is empty, and the page's URL does not match anything on the blacklist.
- The page's URL matches a pattern on the whitelist, and the blacklist is empty.
- The page's URL matches a pattern on the whitelist and it does not match anything on the blacklist.

Tasks

Working with Extensions

`bars` (page 6)
All of the extension's bars.

`baseURI` (page 7)
The URI that corresponds to the root of the extension's bundle.

`globalPage` (page 7)
The extension's global page, or `null` if the extension doesn't have a global page.

`toolbarItems` (page 7)
All of the extension's toolbar items.

2010-08-03 | © 2010 Apple Inc. All Rights Reserved.

Adding and Removing Scripts and Style Sheets

`addContentScript` (page 8)
Adds a content script from a string.

`addContentScriptFromURL` (page 8)
Adds a content script from a URL.

`addContentStyleSheet` (page 9)
Adds a content style sheet from a string.

`addContentStyleSheetFromURL` (page 9)
Adds a content style sheet from a URL.

`removeContentScript` (page 10)
Removes the specified content script.

`removeContentScripts` (page 10)
Removes all content scripts added by this extension.

`removeContentStyleSheet` (page 10)
Removes the specified content style sheet.

`removeContentStyleSheets` (page 11)
Removes all content style sheets added by this extension.

Storing Settings

`settings` (page 7)
A storage object for the extension's normal settings.

`secureSettings` (page 7)
A storage object for the extension's secure settings.

Properties

bars

All of the extension's bars.

```
readonly attribute array bars
```

Discussion
If there are no bars, the array is empty.

If multiple windows are open, there might be duplicates. Each bar appears separately for every window it appears in. When updating a bar, you should usually update it in every window.

Availability
Available in Safari 5.0 and later.

2010-08-03 | © 2010 Apple Inc. All Rights Reserved.

baseURI

The URI that corresponds to the root of the extension's bundle.

```
readonly attribute DOMString baseURI
```

Availability
Available in Safari 5.0 and later.

globalPage

The extension's global page, or `null` if the extension doesn't have a global page.

```
readonly attribute SafariExtensionGlobalPage globalPage
```

Availability
Available in Safari 5.0 and later.

secureSettings

A storage object for the extension's secure settings.

```
readonly attribute SafariExtensionSecureSettings secureSettings
```

Discussion
Use `settings` (page 7) for normal settings.

Availability
Available in Safari 5.0 and later.

settings

A storage object for the extension's normal settings.

```
readonly attribute SafariExtensionSettings settings
```

Discussion
Do not store sensitive information with this method, such as passwords or credit card numbers. Use `secureSettings` (page 7) instead.

Availability
Available in Safari 5.0 and later.

toolbarItems

All of the extension's toolbar items.

```
readonly attribute array toolbarItems
```

Discussion
If there are no toolbar items, this is an empty array.

2010-08-03 | © 2010 Apple Inc. All Rights Reserved.

If multiple windows are open, there might be duplicates. Each toolbar item appears separately for every window it appears in. When updating a toolbar item, you should usually update it in every window.

Availability
Available in Safari 5.0 and later.

Methods

addContentScript

Adds a content script from a string.

```
DOMString addContentScript (in DOMString  source, in array  whitelist, in array
    blacklist, in boolean  runAtEnd);
```

Parameters

source
The source code of the script.

whitelist
A list of patterns matching URLs of pages that the script should be run on.

blacklist
A list of patterns matching URLs of pages that the script should not be run on.

runAtEnd
If `true`, the script waits until the page is fully loaded before running.

Return Value
If the script was successfully added, a generated URL that can be used to remove the script; otherwise, `null`.

Discussion
If `runAtEnd` is `true`, the script is run as soon as the page has completely finished loading. Otherwise, it is run as soon as the DOM is ready, before loading subresources such as images and the contents of frames, which allows you to block resources from being loaded.

Availability
Available in Safari 5.0 and later.

addContentScriptFromURL

Adds a content script from a URL.

```
DOMString addContentScriptFromURL (in DOMString  url, in array  whitelist, in array
     blacklist, in boolean  runAtEnd);
```

Parameters

url
The URL of the script.

whitelist
A list of patterns matching URLs of pages that the script should be run on.

2010-08-03 | © 2010 Apple Inc. All Rights Reserved.

blacklist

A list of patterns matching URLs of pages that the script should not be run on.

runAtEnd

If `true`, the script waits until the page is fully loaded before running.

Return Value
If the script was successfully added, the supplied URL; otherwise, `null`.

Discussion
If `runAtEnd` is `true`, the script is run as soon as the page has completely finished loading. Otherwise, it is run as soon as the DOM is ready, before loading subresources such as images and the contents of frames, which allows you to block resources from being loaded.

Availability
Available in Safari 5.0 and later.

addContentStyleSheet

Adds a content style sheet from a string.

```
DOMString addContentStyleSheet (in DOMString  source, in array  whitelist, in array
      blacklist);
```

Parameters

source

The source code of the style sheet.

whitelist

A list of patterns matching URLs of pages that the script should be applied to.

blacklist

A list of patterns matching URLs of pages that the script should not be applied to.

Return Value
If the style sheet was successfully added, a generated URL that can be used to remove it; otherwise, `null`.

Discussion
The style sheet behaves like a user-level style sheet. It is loaded after user-level style sheets, so it can override them, as well as overriding page-level style sheets.

Pages that are already loaded are updated to use the style sheet after it is added.

Availability
Available in Safari 5.0 and later.

addContentStyleSheetFromURL

Adds a content style sheet from a URL.

```
DOMString addContentStyleSheetFromURL (in DOMString  url, in array  whitelist, in
     array  blacklist);
```

Parameters

url

The URL of the style sheet.

2010-08-03 | © 2010 Apple Inc. All Rights Reserved.

whitelist

A list of patterns matching URLs of pages that the script should be applied to.

blacklist

A list of patterns matching URLs of pages that the script should not be applied to.

Return Value
If the style sheet was successfully added, the supplied URL; otherwise, `null`.

Discussion
The style sheet behaves like a user-level style sheet. It is loaded after user-level style sheets, so it can override them, as well as overriding page-level style sheets.

Pages that are already loaded are updated to use the style sheet after it is added.

Availability
Available in Safari 5.0 and later.

removeContentScript

Removes the specified content script.

```
void removeContentScript (in DOMString  url);
```

Parameters

url

The URL of the script being removed.

Discussion
Content scripts specified in the `Info.plist` are removed only for the current browser session.

Availability
Available in Safari 5.0 and later.

removeContentScripts

Removes all content scripts added by this extension.

```
void removeContentScripts (void);
```

Discussion
Content scripts specified in the `Info.plist` are removed only for the current browser session.

Availability
Available in Safari 5.0 and later.

removeContentStyleSheet

Removes the specified content style sheet.

```
void removeContentStyleSheet (in DOMString  url);
```


2010-08-03 | © 2010 Apple Inc. All Rights Reserved.

Parameters

url

The URL of the style sheet being removed.

Discussion

Content style sheets specified in the `Info.plist` are removed only for the current browser session.

Availability

Available in Safari 5.0 and later.

removeContentStyleSheets

Removes all content style sheets added by this extension.

```
void removeContentStyleSheets (void);
```

Discussion

Content style sheets specified in the `Info.plist` are removed only for the current browser session.

Availability

Available in Safari 5.0 and later.

2010-08-03 | © 2010 Apple Inc. All Rights Reserved.

2010-08-03 | © 2010 Apple Inc. All Rights Reserved.

Document Revision History

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

Date	Notes
2010-08-03	Minor editorial changes throughout.
2010-05-27	New document that describes a class that represents a Safari Extension to scripts outside of the web content.

2010-08-03 | © 2010 Apple Inc. All Rights Reserved.

Document Revision History

2010-08-03 | © 2010 Apple Inc. All Rights Reserved.